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## Revised Draft Supplemental Environmental Impact Report

# East Dublin Properties Stage 1 Development Plan and Annexation

Volume 1: Draft Supplemental EIR

SCH No. 2001052114

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# East Dublin Properties Stage 1 Development Plan and Annexation

SCH No. 2001052114

City of Dublin  
Planning Department  
100 Civic Center Plaza  
Dublin, CA 94568  
(925) 833-6610

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## SUMMARY

This Draft Supplemental Environmental Impact Report (Supplemental EIR or SEIR) chapter includes a summary description of the proposed Project, a list of environmental issues to be resolved, and a summary identification of each associated supplemental impact and mitigation measure.

This summary should not be relied upon for a thorough understanding of the details of the Project, its individual impacts, and related mitigation needs. Please refer to Chapter 2 for a complete description of the Project, to Chapter 3 for a complete description of Project supplemental impacts and associated mitigation measures, to Chapter 4 for a discussion of alternatives, and to Chapter 5 for a complete evaluation of CEQA-required discussions.

## INTRODUCTION

The City circulated a Notice of Preparation to interested public and private parties, including LAFCO as a responsible agency with approval authority over the requested annexations and a related park district detachment. The City prepared a 2-volume Draft Supplemental EIR (DSEIR) dated July 2001. Written responses to comments received during the 45-day comment period were prepared and published in a Final SEIR dated October 2001. Through September and October, the Planning Commission and City Council held public hearings on the Project. At the November 6, 2001 City Council hearing, staff recommended that the DSEIR be revised and recirculated for public review. The Council accepted staff's recommendation, and this Revised DSEIR was prepared in response to the Council's direction.

## PROJECT DESCRIPTION

The Project area is approximately 1,120 acres in area and is located in an unincorporated area of Alameda County bounded by Interstate 580 (I-580) to the south and Fallon Road to the west. The area abuts the eastern city limit boundary of the City of Dublin. The entire Project area is located within the City of Dublin's General Plan Planning Area and Sphere of Influence. Approximately 472 acres of the Project area also are included within the City's Eastern Dublin Specific Plan area. The Project area consists of thirteen (13) different parcels under eleven (11) separate ownerships.

The proposed Project includes annexation of the Project area to the City of Dublin and the Dublin San Ramon Services District (DSRSD), prezunging the area to the City of Dublin PD-Planned Development Zoning District, and considering a related Stage 1 Development Plan to guide future development of the Project area. Development under the proposed prezunging and Stage 1 Planned Development would include a mix of residential uses at a variety of densities, employment-generating uses such as retail, service, office and light industrial, parks, open spaces, community facilities, roadways and similar land uses. The Stage 1 Development Plan proposes retail, office and light industrial land uses located primarily within the southern portion of the Project area along the freeway and major arterials, with residential uses located in the more northern and eastern portions of the Project area. The Project also would provide a complement of neighborhood parks, school sites, open space, and a multi-use trail system to link the developed areas with the parks and trails within Project open space.

The entire Project area is within the Sphere of Influence for DSRSD. The property immediately to the west of the Project area was annexed into the City in 1995 and is now

being developed in phases and urban infrastructure is being extended to a point approximately 3,000 feet west of the Project area.

## ENVIRONMENTAL ISSUES

As provided for in the California Environmental Quality Act (CEQA) statutes and guidelines, the environmental focus of this supplement to the 1993 Eastern Dublin Final EIR (inclusive of the Draft EIR and Response to Comments, hereinafter referred to as the Eastern Dublin EIR), is limited to those areas of controversy or environmental issues known to the City of Dublin (the Lead Agency). These issues include those identified in the Initial Study, raised by the public and by other agencies in response to the City's Notice of Preparation. As described in the Introduction to this Draft SEIR, these areas of environmental concern include:

- Agricultural Resources
- Air Quality
- Biological Resources
- Noise
- Schools
- Transportation/Circulation
- Utilities/Service Systems

## SUMMARY OF SUPPLEMENTAL IMPACTS AND MITIGATIONS

Each significant supplemental impact and associated mitigation measure(s) identified in this SEIR is summarized in the Summary of Supplemental Impacts and Mitigations table which follows. The summary chart has been organized to correspond with the more detailed supplemental impact and mitigation discussions in Chapter 3 of this SEIR. The chart is arranged in three columns: 1) identified significant adverse supplemental environmental impact and its level of impact significance prior to implementation of recommended supplemental mitigation measures; 2) recommended supplemental mitigation measures; and 3) level of impact significance after implementation of the mitigation measure(s).

In those instances where more than one measure may be required to mitigate a supplemental impact to a less-than-significant level, a series of mitigation measures is listed. For a complete description of the environmental setting, supplemental impacts, and supplemental mitigation measures associated with each topic of concern, please refer to Chapter 3 of this Draft SEIR.

## ALTERNATIVES

This SEIR analyzes three new alternatives in addition to those previously considered in the Eastern Dublin EIR. These are; 1) a Mitigated Traffic Alternative (Reduced Density), 2) a No-Project (ECAP) Alternative, and 3) a No Development Alternative.

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES			
Impact	Topic/Impact	Mitigation Measure	Level of Impact After Mitigation
AQ 1	<b>Mobile Source Emissions:</b> Reactive Organics (RO), Nitrogen Oxide (Nox), and Particulate Matter (PM-10): Mobile source emissions for RO and NOx (precursors to ozone formation) are expected to exceed the Bay Area Air Quality management District's significance thresholds by two- to almost four-fold. These precursors would result in the formation of substantial quantities of ozone, which already exceeds both state and federal standards in the Tri-Valley area ( <i>significant impact; potentially significant cumulative impact</i> ).	Implementation of the mitigation measures in the Eastern Dublin EIR (Mitigation Measures 3.11/5.0 – 11.0) will reduce emissions but not below the significance threshold; no feasible mitigation measures are available that would achieve less than significant impact.	Significant and unavoidable
AQ 2	<b>Mobile Source Emissions - CO:</b> CO concentrations calculated for the 19 intersections within and around the Project area will not exceed the California hourly standard of 20 ppm or the state/federal 8-hour standard of 9 ppm ( <i>less than significant</i> ).	No mitigation is required	Less than Significant
BIO 1	<b>Direct and Indirect Habitat Loss:</b> The project would result in direct and indirect loss, degradation, and disturbance to habitat types not previously identified in the Eastern Dublin EIR: seasonal wetland and, intermittent streams. Also, thirteen additional plant species and eight additional wildlife species have been identified as occurring or potentially occurring on the site. Although other species addressed in this supplemental EIR were addressed in the Eastern Dublin EIR,	SM-BIO-1: A Resource Management Plan (RMP) shall be prepared for the Project area for the City of Dublin's review and approval prior to or concurrent with submittal of any land use entitlement requests. The RMP shall include all properties in the Project area and any necessary off-site mitigation lands, and address consistency with local policies, such as the Stream Restoration Program and the Grazing Management Plan and mitigation measures contained in the Eastern Dublin EIR and this SEIR (for the full text of this mitigation measure, see	Less than Significant

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES			
Impact	Topic/Impact	Mitigation Measure	Level of Impact After Mitigation
	additional new information regarding the species habitat or a change in its regulatory status (change in listing status or change in regulation of the species or its habitat) could create impacts not addressed in the Eastern Dublin EIR ( <i>potentially significant; cumulatively significant</i> ).	Chapter 3.3).	
BIO 2	<p><b>Loss of Special Status Plant Species:</b> No special status plant species were identified in the Eastern Dublin EIR. More recent observations and documentation show the occurrence, or potential for the occurrence, of at least five rare plants within the Project area: the San Joaquin spearscale, Congdon's tarplant, palmate bird's beak, and caper-fruited tropidocarpum, and Livermore tarplant (<i>Deinandra bacigalupii</i>), a newly described plant species within the Project area. Other plants listed in Table 3.3-1B also may be present but have not yet observed. Direct loss of individuals and associated microhabitats could occur as a result of development of the Project (<i>potentially significant</i>)</p> <p>On-going or planned development within the cumulative impact area identified for this project is resulting in a loss of available habitat and total population size of Congdon's tarplant, San Joaquin spearscale and potentially other species identified above, that could combine with loss of habitat and plant</p>	<p><b>SM-BIO-2:</b> Plant surveys, as outlined in USFWS and CDFG survey protocols (CDFG 1996), shall be conducted within the Project area in early spring, late spring, and late summer to confirm presence or absence of special-status plant species. Results of these surveys shall be included with subsequent development applications.</p> <p><b>SM-BIO-3:</b> Once presence is determined for a special status plant species, areas supporting the species should be avoided.</p> <p><b>SM-BIO-4:</b> If a special-status plant species cannot be avoided, then the area containing the plant species must be measured and one of the following steps must be taken to ensure replacement on a 1:1 ratio (by acreage):</p> <ul style="list-style-type: none"> <li>a. permanently preserve, through use of a conservation easement or other similar method, an equal amount of acreage either within the Project area or off-site that contains the plant;</li> <li>b. Harvest seeds from the plants to be lost, or</li> </ul>	Less than Significant

Best Case II

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES			
Impact	Topic/Impact	Mitigation Measure	Level of Impact After Mitigation
	species within the project area. ( <i>potentially significant cumulative</i> ).	<p>use seeds from another source within the Tri-valley area, and seed an equal amount of area suitable for growing the plant either within the Project area or off-site. Such area shall be preserved and protected in perpetuity. If the plants fail to establish after a five year period, then step "a" above must be implemented</p> <p>Prior to submittal of a Stage 2 development plan or tentative map, the developer shall submit a written report to the City for its review and approval demonstrating how the developer will comply with this mitigation measure, including the steps it will take to ensure that transplanting or seeding will be successful.</p>	
BIO 3	<b>Loss or Degradation of Botanically Sensitive Habitats:</b> Impact 3.7C of the Eastern Dublin EIR identified potentially significant direct and indirect impacts to Arroyo Willow Riparian Woodland and Freshwater Marsh due to development, grading, road construction, and culvert crossings. This supplemental analysis identifies seasonal wetlands and intermittent streams as additional botanically sensitive habitats that could be affected by direct and indirect impacts of development of the Project area ( <i>potentially significant; potentially significant cumulative</i> ).	SM-BIO-5: To the extent feasible, implementation of the Project shall be designed and constructed to avoid and minimize adverse effects to waters of the United States within the Project area. Examples of avoidance and minimization include (1) reducing the size of the Project or any future individual development projects within the Project area, (2) design future development projects within the Project area so as to avoid and/or minimize impacts to waters of the United States, and (3) establish and maintain wetland or upland vegetated buffers to protect open waters such as streams. Also, in order to protect the particularly sensitive Arroyo willow riparian woodland and red-legged frog habitat found in the Fallon Road drainage from Fallon Road upstream to its terminus, to the maximum extent	These mitigation measures would reduce project impacts to a less than significant level; however, cumulative impacts would remain significant

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES			
Impact	Topic/Impact	Mitigation Measure	Level of Impact After Mitigation
		<p>feasible future development projects within the Project area either shall completely avoid this drainage or limit impacts to bridge crossings (as opposed to fill) or other such minimally impacting features.</p> <p><b>SM-BIO-6:</b> To the extent that avoidance and minimization are not feasible and wetlands or other waters will be filled, such impacts shall be mitigated at a 2:1 ratio (measured by acreage) within the Project area, through the creation, restoration or enhancement of wetlands or other waters. Prior to submittal of a Stage 2 development plan or tentative map, the developer shall submit a written report to the City for its review and approval demonstrating how the developer will comply with this mitigation measure.</p> <p><b>SM-BIO-7:</b> If mitigation within the Project area is not feasible, then the developer shall mitigate the fill of wetlands or other waters at a 2:1 ratio (measured by acreage) at an off-site location acceptable to the City. Such mitigation area shall be preserved and protected in perpetuity. Prior to submittal of a Stage 2 development plan or tentative map, the property owner shall submit a written report to the City for its review and approval demonstrating how the owner will comply with this mitigation measure.</p> <p><b>SM-BIO-8:</b> Botanically sensitive habitats shall be included in and shall be protected and enhanced by implementation of the Resource Management Plan,</p>	<u>and</u> <u>unavoidable.</u>

GCR 10/20/2023

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES			
Impact	Topic/Impact	Mitigation Measure	Level of Impact After Mitigation
		as outlined in Mitigation Measure BIO-SM-1, above.	
BIO 4	San Joaquin Kit Fox: The Eastern Dublin EIR identified potentially significant impacts due to construction of new roads and facilities that could: destroy potential dens or bury foxes occupying dens at the time of construction; modify natural habitat to reduce available prey and den sites; lead to direct mortality or disturbance to foxes due to increased vehicle traffic, human presence and domestic dogs in the area; and directly harm kit fox or reduce prey due to the use of poisons for rodent control. There are no new impacts and no increased impacts to the San Joaquin kit fox or its habitat beyond those identified in the Eastern Dublin EIR. The City adopted kit fox mitigation measures as set forth in Appendix E of Resolution 53-93. However, updated survey and pre-construction protection measures have been adopted since 1993 which should be incorporated into the existing adopted Eastern Dublin San Joaquin Kit Fox Protection Plan to ensure that the latest protocols and standards are implemented in future development of the Project area.	<p><b>BIO-SM-9</b> Future development of the Project shall comply with the amended Eastern Dublin San Joaquin Kit Fox Protection Plan (Appendix E) which reflects the latest protocols for kit fox habitat evaluations, presence/absences surveys, pre-construction surveys and precautionary construction measures.</p> <p><b>BIO-SM-10</b> San Joaquin kit fox habitat shall be included in and shall be protected and enhanced by implementation of the Resource Management Plan, as outlined in Mitigation Measure BIO-SM-1, above.</p>	Less than Significant
BIO 5	California Red-legged Frog (CRLF): Impact 3.7 F of the Eastern Dublin EIR identified potentially significant impacts due to the destruction and alteration of small water impoundments and stream courses on the	<b>BIO-SM-11:</b> Focused surveys following USFWS survey protocol shall be conducted in habitat considered suitable for CRLF which have not already been surveyed. The current protocol (USFWS 1997b) requires that two daytime and two nighttime	Less than Significant

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SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES			
Impact	Topic/Impact	Mitigation Measure	Level of Impact After Mitigation
	<p>Project site which could eliminate habitat for the CRLF. In March 2001, the USFWS adopted critical habitat for the CRLF; all of Dublin and Eastern Dublin are within the designated critical habitat. The critical habitat for CRLF still focuses on water and riparian features but it is now known also to include adjacent upland areas for potential aestivation and dispersal. Reflecting this new information, proposed development under the Project could have a broader impact on CRLF habitat and on the individual frog than previously analyzed (<i>potentially significant</i>).</p> <p>On a cumulative level, policies protecting wetlands and other aquatic habitat have reduced the rate of loss of these habitats since adoption of the Eastern Dublin EIR. Similar policies do not exist for upland areas and, as a result, cumulative growth impacts are greatest for upland components of red-legged frog habitat. While aquatic habitat has preserved the ability of frogs to move between areas of aquatic habitat, upland habitat is reduced or lost when development occurs which may affect overall population numbers. (<i>potentially significant cumulative</i>)</p>	<p>surveys be performed over a suitable four-day period, or, the most recent USFWS approved focused survey protocol should be followed. Results of these surveys shall be sent to the City for review.</p> <p><b>BIO-SM-12:</b> Specific California red-legged frog habitat areas, including the drainage upstream and east of the current Fallon Road alignment, shall be included in and protected and enhanced by implementation of a Resource Management Plan, as outlined in Mitigation Measure BIO-SM-1, above.</p> <p><b>BIO-SM-13:</b> To the extent feasible, development of individual properties within the Project area shall avoid all areas of identified suitable California red-legged frog aquatic and dispersal habitat. Specifically, development should avoid such aquatic habitat and provide a 300 to 500-foot buffer on each side of any stream which provides red-legged frog habitat. Limited permanent development may occur within this buffer zone (such as a trail through the length of the buffer zone, or a bridge crossing across the buffer zone), so long as it will have only minor impacts on the habitat. Limited temporary development activity may occur within this buffer zone to create trails, install bridges, etc., and to allow for grading activities along the edge of the buffer zone, so long as such activity will have only minor impacts on the habitat.</p> <p><b>BIO-SM-14:</b> If avoidance is infeasible, then mitigation lands providing similar or better habitat</p>	

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SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES			
Impact	Topic/Impact	Mitigation Measure	Level of Impact After Mitigation
		<p>for CRLF at a 3:1 replacement ratio or suitable ratio determined by the USFWS, shall be preserved and protected in perpetuity. This mitigation, to be proposed in a mitigation and monitoring plan submitted to the City, shall be required prior to submittal of Stage 2 Development Plans and tentative maps for any specific property within the Project area. In selecting off-site mitigation lands, preference shall be given to preserving large blocks of habitat rather than many small parcels, linking preserved areas to existing open space and other high-quality habitat, and excluding or limiting public use within preserved areas. If the identified mitigation lands have been approved by the City, the following guidelines implemented prior to and during construction would reduce impacts individual CRLF and preserved CRLF habitat:</p> <p><b>BIO-SM-15:</b> The following construction-related CRLF avoidance and protection measures shall be followed for all future development activity in the Project area, on a property-by-property basis:</p> <ul style="list-style-type: none"> <li>• Prior to construction, a map shall be prepared to delineate upland areas from preserved wetland areas.</li> <li>• The wetland construction boundary shall be fenced to prohibit the movement of CRLF into the construction area and control siltation and disturbance to wetland habitat. Following installation of fencing, its proper</li> </ul>	

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES			
Impact	Topic/Impact	Mitigation Measure	Level of Impact After Mitigation
		<p>location shall be verified by a qualified biologist. The biologist shall ensure that at no time during construction is vegetation removed inside of the fenced area. If construction necessitates the removal of vegetation within the fenced area, additional mitigation will be required. Additionally, the biologist shall walk the length of the fence once each construction day to ensure that CRLF are not trapped within the enclosure. The biologist shall walk the length of the fence more than once a day in areas where CRLF are most abundant.</p> <ul style="list-style-type: none"> <li>• Pre-construction surveys within the construction zone shall be conducted by a qualified biologist with appropriate permits to handle CRLF. If no CRLF are detected during these surveys then construction activities may proceed. If CRLF are found within the construction disturbance zone they shall immediately be moved passively, or captured and moved, to suitable upstream sites.</li> <li>• All construction employees shall participate in an endangered species/special-status habitat education program to be presented by a qualified biologist prior to construction activities. The program shall cover such topics as identifying wetland habitat and areas used by CRLF, identification of CRLF</li> </ul>	

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SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES			
Impact	Topic/Impact	Mitigation Measure	Level of Impact After Mitigation
		<p>by photos, the state and federal Endangered Species Acts, and the consequences of violating the terms of these acts.</p> <ul style="list-style-type: none"> <li>• All construction adjacent to wetlands shall be regularly monitored to ensure that impacts do not exceed those included within the protective standards of the mitigations. Work performed within 500 feet of aquatic habitat shall be monitored by the biologist, who shall document pre-project and post-project conditions to ensure compliance.</li> <li>• During construction, the biologist shall be on site whenever construction within any aquatic habitats is to occur. Any construction activity within ordinary high water shall be photo-documented by the biologist. In addition, a biologist with the appropriate permits to relocate CRLF shall be available for consultation as needed.</li> </ul>	
BIO 6	<p><b>Special Status Invertebrates Impact</b> 3.7/S of the Eastern Dublin EIR identified potentially significant impacts on special status invertebrates including vernal pool fairy shrimp and longhorn fairy shrimp. Two additional special status invertebrate species, the Conservancy fairy shrimp and the vernal pool tadpole shrimp, could be affected by development within the Project area and disturbance of potential habitat such as</p>	<p>MM 3.7/28.0 of the Eastern Dublin EIR was adopted to reduce the previously identified impact. That mitigation is supplemented by the following additional mitigation measures</p> <p><b>SM-BIO-16:</b> Special-status invertebrate habitat shall be included in and shall be protected and enhanced by implementation of a Resource Management Plan, as outlined in Mitigation Measure SM-BIO-1.</p>	Less than Significant

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES			
Impact	Topic/Impact	Mitigation Measure	Level of Impact After Mitigation
	seasonal wetlands. ( <i>potentially significant</i> ).	<p><b>SM-BIO-17:</b> The following vernal pool habitat surveys and mitigation shall be implemented for each property within the Project area:</p> <ul style="list-style-type: none"> <li>• Surveys of potential habitat for special status invertebrates are required. If suitable habitat is identified, then such habitat shall be surveyed to determine whether it is occupied by special-status invertebrates. If impacts to occupied habitat will occur (including direct impact as a result of habitat destruction, and indirect impact due to disturbance of areas within 250 feet of occupied habitat), the following measures shall be followed:           <ul style="list-style-type: none"> <li>(a) Preservation: For every acre of habitat directly impacted at least two vernal pool credits shall be dedicated within a USFWS-approved mitigation bank or, in accordance with USFWS evaluation of site-specific conservation values, three acres of vernal pool habitat may be preserved within the Project area or off-site as approved by the USFWS.</li> <li>(b) Creation: For every acre of habitat</li> </ul> </li> </ul>	

### SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact	Topic/Impact	Mitigation Measure	Level of Impact After Mitigation
		<p>indirectly impacted, at least one vernal pool credit shall be dedicated within a USFWS-approved mitigation bank or, in accordance with USFWS evaluation of site-specific conservation values, two acres of vernal pool habitat may be created and monitored within the Project area or on off-site as approved by the USFWS.</p> <ul style="list-style-type: none"> <li>• Vernal pool habitat and associated upland areas which are preserved onsite shall be preserved and managed in perpetuity.</li> <li>• All avoided habitat on site shall be monitored by a qualified biologist during the time of construction. The monitoring biologist shall have authority to stop all activities that may result in destruction or take of listed invertebrate species or destruction of their habitat. Resumption of construction shall occur after appropriate corrective measures have been taken. The biologist shall report any unauthorized impacts to USFWS.</li> <li>• Fencing shall be placed and</li> </ul>	

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES			
Impact	Topic/Impact	Mitigation Measure	Level of Impact After Mitigation
		<p>maintained around any and all preserved vernal pool habitat.</p> <ul style="list-style-type: none"> <li>• All on-site construction personnel shall receive instruction regarding the presence of listed species and their habitat.</li> </ul>	
BIO 7	<p><b>California Tiger Salamander:</b> Impact 3.7/G of the Eastern Dublin EIR identified potentially significant impacts on the California tiger salamander (CTS) similar to many of the impacts on the red-legged frog. Since preparation of the Eastern Dublin EIR, the CTS has been made a formal candidate for Federal listing under the ESA. It has been recognized that upland areas of previously-defined CTS aquatic habitat provide suitable aestivation habitat. In addition, the presence of CTS was confirmed in the southern portion of the Project area and suitable habitat is present throughout the Project area. Direct and indirect loss of individuals in breeding ponds and newly recognized upland habitat occur from the Project. (<i>potentially significant</i>).</p>	<p><b>SM-BIO-18:</b> California tiger salamander habitat shall be included in and shall be protected and enhanced by implementation of a Resource Management Plan, as outlined in Mitigation Measure SM-BIO-1.</p> <p><b>SM-BIO-19:</b> If avoidance is infeasible, mitigation lands, providing similar or better aquatic and upland habitat for California tiger salamander (CTS) at a 1:1 ratio shall be set aside in perpetuity. Upland habitat shall be mitigated by preserving upland on-site or, if necessary, by preserving currently-occupied upland tiger salamander habitat off-site. Aquatic habitat shall be mitigated by creating an equal number (or acreage) of new aquatic California tiger salamander breeding areas within the preserved upland habitat. This mitigation, included in a mitigation and monitoring plan, shall be submitted to the City prior to submittal of Stage 2 development plans and tentative maps. In selecting off-site mitigation lands, preference shall be given to preserving large blocks of habitat rather than many small parcels, linking preserved areas to existing open space and other high-quality habitat, and excluding or limiting</p>	Less than Significant

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES			
Impact	Topic/Impact	Mitigation Measure	Level of Impact After Mitigation
		public use within preserved areas.	
BIO 8:	<b>Nesting Raptors.</b> The Eastern Dublin EIR identified potentially significant impacts to several species of nesting raptors. Since certification of the Eastern Dublin EIR, an additional special status raptor species, the short-eared owl, has been identified as potentially nesting within the Project area. Removal or disturbance of an active raptor nest would constitute a supplemental <u>potentially significant impact</u> .	<p><b>SM-BIO-20:</b> A qualified biologist shall conduct pre-construction surveys for nesting raptors. If an active nest is found the following mitigation measures shall also be implemented.</p> <p><b>SM-BIO-21:</b> If construction must occur during the nesting season, all potential nesting trees within the footprint of development should be removed prior to the nesting season to prevent occupied nests from being present when construction begins.</p> <p><b>SM-BIO-22:</b> Construction should occur between August 31 and February 1 to avoid disturbance of owls during the nesting season. This construction window could be adjusted if monitoring efforts determine that the owls do not nest in a given year or that nesting was completed before August 1.</p> <p><b>SM-BIO-23:</b> If removal of nesting trees is infeasible and construction must occur within the breeding season, a nesting raptor survey shall be performed by a qualified biologist prior to tree disturbance.</p> <p><b>SM-BIO-24:</b> All active nests shall be identified by flagging and a buffer zone, depending on the species, shall be established around the nesting tree. Buffer zones shall be no smaller than 200 feet.</p> <p><b>SM-BIO-25:</b> If construction is scheduled when young birds have not yet fledged, an exclusion zone</p>	Less than Significant

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SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES			
Impact	Topic/Impact	Mitigation Measure	Level of Impact After Mitigation
		<p>around the nest shall be established or construction shall be delayed until after the young have fledged as determined by a qualified biologist.</p> <p><b>SM-BIO-26:</b> Nesting raptor habitat shall be included in and shall be protected and enhanced by implementation of the Resource Management Plan as outlined in SM-BIO-1.</p>	
BIO 9	<p><b>Golden Eagle - Elimination of Foraging Habitat:</b> As discussed in Impact 3.7/K of Eastern Dublin EIR, the conversion of grasslands and the consequent reduction of potential prey are expected to reduce the amount and quality of foraging habitat for golden eagles. Additional data on eagle foraging habitat gathered since preparation of the Eastern Dublin EIR indicates that the northern portion of the Project area is used by an identified breeding pair of eagles for foraging (<i>potentially significant</i>).</p>	<p><b>SM-BIO-27:</b> The territory of the golden eagle nesting pair shall be included in and protected and enhanced by implementation of a Resource Management Plan, as outlined in Mitigation Measure SM-BIO-1. The protected golden eagle foraging territory affects areas in the northern portion of the Project area designated for Rural Residential/Agricultural uses. Development standards and uses for these areas shall incorporate the following measures:</p> <ul style="list-style-type: none"> <li>• Homesites in this portion of the Project area shall be located in valley bottoms adjacent to existing or planned residential development.</li> <li>• Permitted agricultural uses shall be limited to grazing to maintain suitable golden eagle foraging habitat.</li> <li>• Rodent control in this portion of the Project area shall be prohibited.</li> </ul> <p>Any additional portion of the Project area that is within the viewshed of all nest sites used by this pair</p>	Less than Significant

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### SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact	Topic/Impact	Mitigation Measure	Level of Impact After Mitigation
		shall also be managed in a similar manner.	
BIO 10	Burrowing Owl: Eastern Dublin EIR Impact 3.7/M found that development in Eastern Dublin could result in the loss of potential breeding habitat and/or the disturbance of nests for this special-status species. While this impact has not changed, the California Department of Fish and Game has developed new guidelines for mitigating impacts to this species since preparation of the Eastern Dublin EIR. ( <i>potentially significant</i> ).	<p><b>SM-BIO-28:</b> If construction is scheduled during the nesting season (February 1 – August 31), pre-construction surveys should be conducted on the entire Project area and within 150 meters (500 feet) of the Project area prior to any ground disturbance. To avoid take of over-wintering birds, all burrows should be surveyed 30 days prior to ground disturbance between the months of September 1 and January 31. If ground disturbance is delayed or suspended for more than 30 days after the pre-construction survey, the site should be resurveyed.</p> <p><b>SM-BIO-29:</b> If over-wintering birds are present no disturbance should occur within 150 feet of occupied burrows. If owls must be moved away from the disturbance area, passive relocation techniques, following CDFG 1995 guidelines, should be used rather than trapping. If no over-wintering birds are observed, burrows may be removed prior to the nesting season</p> <p><b>SM-BIO-30:</b> Maintain a minimum buffer (at least 250 feet) around active burrowing owl nesting sites identified by pre-construction surveys during the breeding season to avoid direct loss of individuals (February 1- September 1).</p> <p><b>SM-BIO-31:</b> If removal of unoccupied potential nesting burrows prior to the nesting season is infeasible and construction must occur within the</p>	Less than Significant

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES			
Impact	Topic/Impact	Mitigation Measure	Level of Impact After Mitigation
		<p>breeding season, a nesting burrowing owl survey shall be performed by a qualified biologist within 30 days prior to construction. Owls present on site after February 1 will be assumed to be nesting on site or adjacent to the site. All active burrows shall be identified.</p> <p><b>SM-BIO-32:</b> All active nesting burrows shall have an established 250-foot exclusion zone around the burrow.</p> <p><b>SM-BIO-33:</b> If construction is scheduled during summer, when young are not yet fledged, a 250-foot exclusion zone around the nest shall be established or construction shall be delayed until after the young have fledged, typically by August 31.</p> <p><b>SM-BIO-34:</b> When destruction of occupied burrows is unavoidable, existing unsuitable burrows should be enhanced (enlarged or cleared of debris) or new burrows created (by installing artificial burrows) at a 2:1 ratio on protected lands, as provided for below.</p> <p><b>SM-BIO-35:</b> A minimum of 6.5 acres of foraging habitat per pair or unpaired resident bird, shall be acquired and permanently protected. The protected lands shall be adjacent to occupied burrowing owl habitat and at a location acceptable to CDFG.</p> <p><b>SM-BIO-36:</b> The project proponent shall provide funding for long-term management and monitoring of the protected lands. The monitoring plan should</p>	

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SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES			
Impact	Topic/Impact	Mitigation Measure	Level of Impact After Mitigation
		<p>include success criteria, remedial measures, and an annual report to CDFG.</p> <p><b>SM-BIO-37:</b> Burrowing owl habitat shall be included in and shall be protected and enhanced by implementation of the Resource Management Plan as outlined in Mitigation Measure BIO-SM-1.</p>	
BIO 11	<p>Nesting Passerines: The Eastern Dublin EIR identified potentially significant impacts on riparian and freshwater habitat of tri-colored blackbird. The Project area provides potentially suitable nesting habitat, including grassland, arroyo willow riparian woodland, and freshwater marsh habitat, for two additional nesting passerines, the loggerhead shrike and the California horned lark. A breeding colony of tri-colored blackbirds was observed in the southern portion of the Project area. Potential destruction of nesting habitats or disturbance to or loss of these nesting passerines could result from the project. (<i>potentially significant</i>).</p>	<p><b>SM-BIO-38:</b> If construction is scheduled to occur during the nesting season (February 1- August 15), all potential nesting sites and structures (i.e., shrubs and tules) within the footprint of development should be removed prior to the beginning of the nesting season. However, because the removal of grassland habitat is infeasible, mitigation for impacts to California horned lark are addressed more particularly in Mitigation Measures SM-BIO-39 to SM-BIO-41, below.</p> <p><b>SM-BIO-39:</b> If removal of nesting trees and shrubs within the footprint of development is infeasible and construction must occur within the breeding season, a nesting bird survey should be performed by a qualified biologist within 30 days prior to construction. These surveys shall cover grassland habitat for potential nesting California horned lark. Birds present on site after February 1 will be assumed to be nesting onsite or adjacent to the site.</p> <p><b>SM-BIO-40:</b> All active nests shall be identified by flagging and a buffer zone, depending on the species, shall be established around the nest site.</p>	Less than Significant

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES			
Impact	Topic/Impact	Mitigation Measure	Level of Impact After Mitigation
		<p>Buffer zones can range between 75 feet to 100 feet.</p> <p><b>SM-BIO-41:</b> If construction is scheduled during summer, when young have not yet fledged, an exclusion zone around the nest shall be established or construction shall be delayed until after the young have fledged, typically by July 15.</p> <p><b>SM-BIO-42:</b> Habitat for nesting passerines shall be included in and shall be protected and enhanced by implementation of the Resource Management Plan as outlined in SM-BIO-1.</p>	
BIO 12	<p><b>Bat Species:</b> Special status bat species potentially occurring on the site, including the pallid bat, Townsend's big-eared bat, and the Yuma myotis bat have been identified since certification of the Eastern Dublin EIR. Destruction of roosting habitat for these bat species could occur as a result of the project (<i>potentially significant</i>).</p>	<p><b>SM-BIO-43:</b> A qualified bat biologist shall conduct occupancy surveys of the Project area to determine whether any mature trees, snags or suitable buildings that would be removed during future project construction provide hibernacula or nursery colony roosting habitat.</p> <p><b>SM-BIO-44:</b> If presence is observed, removal of roost habitat should be conducted at specific times of the year. Winter roosts are generally occupied between October 15 through January 30 and maternity colonies are generally occupied between February 15 and July 30. If bats are using roost sites that need to be removed, the roosting season of the colony shall be determined and the removal shall be conducted when the colony is using an alternate roost.</p> <p><b>SM-BIO-45:</b> Habitat for these bat species shall be</p>	Less than Significant

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SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES			
Impact	Topic/Impact	Mitigation Measure	Level of Impact After Mitigation
		included in and shall be protected and enhanced by implementation of the Resource Management Plan as outlined in Mitigation Measure SM-BIO-1.	
NOISE 1	Exposure of proposed and existing housing to noise levels in excess of standards established in the General Plan. (potentially significant)	Mitigation Measures 3.10/1.0 and 2.0 of the Eastern Dublin EIR require acoustical studies for new residential development within the 60 dBA CNEL noise contour and require mitigation for outdoor living areas of existing residences. However, even with mitigation, previously identified traffic noise impacts on existing residences could not be reduced to insignificance.	Significant Unavoidable
NOISE 2:	Exposure of future commercial, office and industrial uses to noise levels in excess of standards established in the General Plan. (potentially significant)	SM-NOISE-1: Require a noise insulation plan for general commercial (including any proposed office-type uses) and industrial land uses to be submitted for all such development projects located within the future CNEL 70 dbA contour. The plan shall show how interior noise levels would be controlled to acceptable levels. The acceptable level will depend on the type of use as set forth in the noise insulation plan. Interior noise levels could be controlled adequately by using sound-rated windows in windows closest to the streets and the freeway.	Less than Significant
NOISE 3	Exposure of people to or generation of excessive ground borne vibration or ground borne noise levels. (potentially significant)	SM-NOISE-2: Except for local deliveries, restrict heavy truck traffic to designated arterial roadways and truck routes within the Project area and limit the hours of local deliveries to daytime hours as established by the City. This mitigation will reduce ground borne vibration from increased levels of heavy traffic to less than significant.	Less than Significant

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES			
Impact	Topic/Impact	Mitigation Measure	Level of Impact After Mitigation
TRAFFIC 1	Unacceptable LOS at Hacienda Drive/I-580 eastbound ramps ( <i>potentially significant</i> ).	<b>SM-TRAFFIC-1:</b> Project developers shall contribute a pro-rata share to the widening of the I-580 eastbound off-ramp approach at Hacienda Drive to add a third eastbound left turn lane. The City of Dublin shall implement this mitigation measure in coordination with the City of Pleasanton and Caltrans. This improvement shall occur when traffic impacts from individual projects are determined to trigger the need for this improvement based on traffic impact studies of the individual projects.	Less than Significant
TRAFFIC 2	Unacceptable LOS at Hacienda Drive/I-580 westbound ramps ( <i>potentially significant</i> ).	<b>SM-TRAFFIC-2:</b> Project developers shall contribute a pro-rata share to the widening of the northbound Hacienda Drive overcrossing from 3 lanes to 4 lanes including three through lanes and one auxiliary lane that leads exclusively to the I-580 westbound loop on-ramp. The westbound loop on-ramp shall be modified as necessary to meet Caltrans' standards and design criteria. Project developers also shall contribute to widening the westbound off ramp approach to add a third westbound left-turn lane.  The City of Dublin shall implement this mitigation measure in coordination with the City of Pleasanton and Caltrans. This improvement shall occur when traffic impacts from individual projects are determined to trigger the need for this improvement based on traffic impact studies of the individual projects.	Less than Significant

### SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact	Topic/Impact	Mitigation Measure	Level of Impact After Mitigation
TRAFFIC 3	Unacceptable LOS at Santa Rita Road/I-580 eastbound ramps ( <i>potentially significant</i> ).	<p><b>SM-TRAFFIC-3:</b> Project developers shall contribute a pro-rata share to construction which converts the eastbound Santa Rita off-ramp through lane to a shared left turn/through lane. Project developers also shall contribute to a traffic signal upgrade which includes a westbound right-turn overlap from Pimlico Drive.</p> <p>The City of Dublin shall implement this mitigation measure in coordination with the City of Pleasanton and Caltrans. This improvement shall occur when traffic impacts from individual projects are determined to trigger the need for this improvement based on traffic impact studies of the individual projects.</p>	Less than Significant
TRAFFIC 4	The new project intersection of Dublin Boulevard/Street D would operate at an unacceptable level of service during the PM peak hour ( <i>potentially significant</i> ).	<p><b>SM-TRAFFIC-4:</b> The Project developers shall install a traffic signal at the Dublin Boulevard/Street D intersection at the time development occurs in this area utilizing this intersection.</p> <p>Project developers shall implement this mitigation measure when the traffic signal installation at Dublin Boulevard/Street D becomes warranted based on the estimated additional trips from individual projects, as determined by traffic impact studies of the individual projects.</p>	Less than Significant
TRAFFIC 5	The new project intersection of Fallon Road/Project Road would operate at an unacceptable level of service during the AM and PM peak hours. ( <i>potentially significant</i> ).	<b>SM-TRAFFIC-5:</b> The Project developers shall install a traffic signal at the Fallon Road/Project Road intersection at the time development occurs in this area utilizing this intersection.	Less than Significant

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SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES			
Impact	Topic/Impact	Mitigation Measure	Level of Impact After Mitigation
		Project developers shall implement this mitigation measure when the traffic signal installation at Fallon Road/Project Road becomes warranted based on the estimated additional trips from individual projects, as determined by traffic impact studies of the individual projects.	
TRAFFIC 6	In the Year 2025 Cumulative Buildout with Project scenario, the Dougherty Road/Dublin Boulevard intersection would operate at unacceptable levels of service during the AM and PM peak hours. ( <i>potentially significant</i> ).	SM-TRAFFIC-6: Project developers shall contribute a pro-rata share to configure the eastbound Dublin Boulevard approach to include 1 left-turn lane, three through lanes and two right turn lanes. Project developers shall contribute a pro-rata share to configure the west bound Dublin Boulevard approach to include three left-turn lanes, two through lanes, and one shared through/right-turn lane. Project developers shall contribute a pro-rata share to configure the northbound Dougherty Road approach to include three left-turn lanes, three through lanes and two right-turn lanes. Project developers shall contribute a pro-rata share to configure the southbound Dougherty Road approach to include two left turn lanes, three through lanes, and one shared through/right-turn lane. The I-580 westbound diagonal on-ramp from Dougherty Road shall be widened as necessary to include two single-occupancy vehicle lanes. In addition, the City will monitor the intersection for peak hour volumes on a periodic basis, as described below, and will apply appropriate Project conditions based on the results of such monitoring, as suggested below.	Significant Unavoidable

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES			
Impact	Topic/Impact	Mitigation Measure	Level of Impact After Mitigation
		The Project developers shall pay their pro-rata share of the cost to construct these improvements through payment of the Eastern Dublin Traffic Impact Fee. The City will implement these improvements.	
TRAFFIC 7	The Hacienda Drive/Dublin Boulevard intersection would operate at an unacceptable level of service during the PM peak hour in the Year 2025 Cumulative Buildout with Project scenario, ( <i>potentially significant</i> ).	No mitigations are feasible to reduce this impact to less than significant	Significant Unavoidable
TRAFFIC 8	The Fallon Road/Dublin Boulevard intersection would operate at LOS F (1.11) during the PM peak hour in the Year 2025 Cumulative Buildout with Project scenario ( <i>potentially significant</i> ).	<p>SM-TRAFFIC-7: The Project developers shall construct an additional through lane on northbound Fallon Road (for a total of four through lanes), construct an additional left-turn lane on westbound Dublin Boulevard (for a total of three left-turn lanes) and construct an additional through lane on southbound Fallon Road (for a total of four through lanes). In addition, the City will monitor the intersection for peak hour volumes on a periodic basis, as described below, and will apply appropriate Project conditions based on the results of such monitoring, as suggested below.</p> <p>Project developers shall implement this mitigation measure when traffic impacts from individual projects are determined to trigger the need for this improvement based on traffic impact studies of the individual projects.</p> <p>SM-TRAFFIC-8: In addition to the above additional lane configurations (in Supplemental Mitigation</p>	Significant Unavoidable

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES			
Impact	Topic/Impact	Mitigation Measure	Level of Impact After Mitigation
		<p>Traffic 7), the Project developers shall pay for studies to assess the feasibility of locating the Fallon Road/Dublin Boulevard intersection farther north to allow for a signalized Project intersection between the I-580 westbound ramps/Fallon Road intersection and the Fallon Road/Dublin Boulevard intersection (the “auxiliary intersection”). This new Project auxiliary intersection should consist of seven northbound Fallon Road lanes (2 left, 4 through, 1 right), seven southbound Fallon Road lanes (2 left turn, 4 through, 1 right turn), and 4 lanes for the new Project street; in the westbound direction three left turn lanes and a shared through/right turn lane; and in the eastbound direction, two right-turn lanes, one through and two left turn lanes. If the studies show that a new Project auxiliary intersection in such location is feasible, the Project developers shall construct such intersection.</p> <p>Project developers shall implement this mitigation measure when traffic impacts from individual projects are determined to trigger the need for this improvement based on traffic impact studies of the individual projects.</p> <p>This “auxiliary” intersection, identified as XX in Table 3.6-6 would provide for three left-turn lanes onto southbound Fallon Road to absorb some of the Project-generated southbound left-turns at the Fallon Road/Dublin Boulevard intersection. Construction of this auxiliary intersection would require modifications to the planned Fallon Road and</p>	

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES			
Impact	Topic/Impact	Mitigation Measure	Level of Impact After Mitigation
		Dublin Boulevard alignments to provide the necessary 750 feet distance between intersections. Land uses and planned building locations on the west side of Fallon Road may have to be modified to accommodate this new intersection.	
TRAFFIC 9	Fallon Road will be overloaded at planned interim lane configurations in the Future Base with Project scenario ( <i>potentially significant</i> ).	<p><b>SM-TRAFFIC-9:</b> The Project developers shall be responsible for widening Fallon Road between I-580 and Dublin Road to its ultimate eight lanes and shall be responsible for widening Fallon Road between Dublin Boulevard and Central Parkway to its ultimate six-lane width. The Project developers shall be responsible for widening Fallon Road between Central Parkway and Project Road to four lanes. The Project developers also shall be responsible for widening the Fallon Road overcrossing (between the eastbound and westbound I-580 ramps) from four lanes to six lanes.</p> <p>Project developers shall implement this mitigation measure when traffic impacts from individual projects are determined to trigger the need for this improvement based on traffic impact studies of the individual projects.</p>	Less than Significant
TRAFFIC 10	Central Parkway will be overloaded at planned interim lane configurations in the Future Base with Project Scenario ( <i>potentially significant</i> ).	<p><b>SM-TRAFFIC-10:</b> The Project developers shall be responsible for widening Central Parkway between Tassajara Road and Fallon Road from two lanes to four lanes. Project developers shall implement this mitigation measure when traffic impacts from individual projects are determined to trigger the need for this improvement based on traffic impact</p>	Less than Significant

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SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES			
Impact	Topic/Impact	Mitigation Measure	Level of Impact After Mitigation
		studies of the individual projects.	
TRAFFIC 11	In the Year 2025 Cumulative Buildout with Project Scenario, freeway segments on I-580 and I-680 in the Project area would operate at unacceptable levels of service during the AM and PM peak hours ( <i>potentially significant</i> ).	No additional mitigation measures are feasible beyond those identified in the Eastern Dublin EIR	Significant Unavoidable
UTS 1	<b>Uncertain Energy Supply:</b> The current energy crisis makes PG&E's ability to serve currently unserved territory with gas and electric service somewhat uncertain. Until PG&E emerges from bankruptcy some uncertainty concerning the provision of gas and electricity services to new and existing PG&E customers exists ( <i>potentially significant</i> ).	<b>SM-UTS-1:</b> Require discretionary City review prior to the installation and use of distributed generators, including emergency generators.  <b>SM-UTS-2:</b> Prior to approval of future subdivision maps or Site Development Review applications (as may be applicable) by the City of Dublin, project developers shall submit "will serve" letters from PG&E indicating that adequate electricity and natural gas services are available to serve the proposed development project.	Less than Significant
UTS 2	<b>Local Electrical Distribution Constraints:</b> Local electrical distribution constraints limit PG&E's ability to serve the Project area. PG&E has stated that it is able to adequately serve the Tri-Valley with existing facilities until approximately June 2002; however, service reliability may be problematic after that point. If the Tri-Valley 2002 Capacity Increase Project or a functionally equivalent project is not constructed, PG&E would be forced to respond to growing demand by expanding its existing system to the extent	Mitigations SM-UTS-1 and SM-UTS-2, above also mitigate this impact	Less than Significant

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### **SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

<b>Impact</b>	<b>Topic/Impact</b>	<b>Mitigation Measure</b>	<b>Level of Impact After Mitigation</b>
	that it is possible and by curtailing service if growth in demand exceeds the transmission system's capacity or reliability requirements for essential services (such as hospitals) ( <i>potentially significant</i> ).		

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## 1.0 INTRODUCTION

### 1.1 EIR REQUIREMENT

On May 10, 1993, the City of Dublin approved the Eastern Dublin General Plan Amendment and Specific Plan, a comprehensive planning effort which established land use designations, densities and development patterns for Dublin's Eastern Extended Planning Area. The City Council declined to approve the original General Plan Amendment for a 6,920 acre development area. Instead, the Council approved a reduced development area of approximately 3,368 acres and a rural residential area of approximately 806 acres located outside the then-existing City limits but entirely within the City's Sphere of Influence. The approval anticipated future annexation and rezoning of the reduced development area and its development with a mix of uses in compact villages and with commercial uses along major arterials and I-580. Open space would be provided in parks, along stream corridors and in the rural residential area with its 100-acre minimum parcel size. The original General Plan Amendment was analyzed in an Environmental Impact Report ("EIR") as required by the California Environmental Quality Act ("CEQA"). The approved Eastern Dublin project was a modified version of the Reduced Planning Area Alternative analyzed in the EIR and in a related Addendum.

The Eastern Dublin Property Owners have now requested annexation, rezoning and related approvals for a 1,120 acre Project area. (See Chapter 2.0.) The Project area is within the previously approved development area; the Project is within the scope of the project analyzed in the EIR. Consistent with the City's practice for projects in Eastern Dublin, the City prepared an initial study to determine if the annexation and rezoning requests would require additional environmental review beyond the previous EIR. (See Appendix A.) The initial study disclosed that many of the anticipated impacts of the annexation and rezoning were addressed in the EIR. This was not an unusual result given the comprehensive planning for the development area, the previous EIR analysis of buildout under the general plan and specific plan land use designations and policies, the long term 20-30 year focus of the general plan and EIR analyses, the fact that annexation and rezoning actions were specifically contemplated in the EIR, and the fact that the request proposed the same land uses analyzed for the Project area in the EIR. Although the initial study concluded that the previous EIR adequately analyzed most of the potential environmental impacts of the proposed Project, it also identified the potential for some new significant impacts or substantially intensified impacts beyond those analyzed in the EIR. The City determined that the potential new and/or substantially intensified impacts required review at an EIR level and concluded that a Supplemental EIR should be prepared.

As required by CEQA, the City circulated a Notice of Preparation to interested public and private parties, including LAFCO as a responsible agency with approval authority over the requested annexations and a related park district detachment. The City considered all responses to the Notice of Preparation and prepared a 2-volume Draft Supplemental EIR (DSEIR) dated July 2001. The DSEIR was circulated for the required 45-day public review period. Written responses to comments received during this period were prepared and published in a Final SEIR dated October 2001. Several comment letters on the DSEIR and the Project were received after the public review period. Through September and October, the Planning Commission and City Council held public hearings on the Project. At the November 6, 2001 City Council hearing, staff recommended that the DSEIR be revised and recirculated for public review. Through the revised DSEIR, City staff wish to clarify the CEQA environmental review issues as well as the land use and planning issues raised through the comments on the DSEIR. Staff also wish to provide additional opportunity for public review of the clarifications. Finally, City staff wish to clear up what they perceive

from the comments as possible misunderstanding of the past planning approvals for the Project area, of the relation between past approvals and the proposed Project, and of CEQA's presumption against further review once an EIR has been certified for a project except in specified circumstances. The Council accepted staff's recommendation, and this Revised DSEIR was prepared in response to the Council's direction.

## 1.2 SCOPE OF SUPPLEMENTAL EIR

Once an EIR is certified for a project, CEQA prohibits lead agencies from requiring a supplemental or subsequent EIR except in specified circumstances. According to CEQA Guidelines section 15162, additional EIR level review may be required only when substantial changes to the project would cause new or substantially increased significant effects, or when substantial changes in circumstances would cause new or substantially increased significant effects, or when substantial new information shows the project would cause new or substantially increased significant effects, or shows that previously infeasible mitigation measures would now be feasible but the project proponent declines to adopt them.

As reflected in the City's initial study, the Project is unchanged from the project analyzed in the Eastern Dublin EIR. The land use types, densities and patterns proposed in the rezoning and Stage 1 Development Plan are the same as approved in the Eastern Dublin General Plan Amendment and Specific Plan. Similarly, the annexation, rezoning, park district detachment, and other related actions currently requested are identified as implementing actions in the previous approvals. As further reflected in the initial study, however, the following new information and changed circumstances since certification of the Eastern Dublin EIR could result in new or intensified significant impacts:

1. New sensitive biological species have been identified.
2. The long distance commuting trends identified in the 1993 approvals may have substantially increased regional traffic and related congestion beyond levels anticipated in the Eastern Dublin EIR.
3. The above potential for substantially increased regional traffic may cause related substantial increases in noise and air quality impacts.
4. Williamson Act properties in the Project area may request cancellation rather than non-renewal of contracts.
5. There may be potentially substantial changes in the provision of public services and utilities.

The initial study identified the impact categories of Agricultural Resources, Air Quality, Biological Resources, Noise, Schools, Transportation/Circulation, and Utilities/Service Systems for further EIR level review. This Revised DSEIR describes the degree to which the Project's potential impacts in these categories were adequately covered in the previously certified Eastern Dublin EIR. It further describes the type and extent of potential significant impacts beyond those analyzed in the previous EIR. Where supplemental significant impacts are identified, related mitigation measures are also proposed to reduce the impacts to less than significant.

CEQA also requires that an EIR identify a reasonable range of alternatives. The Eastern Dublin EIR provided and analyzed such a reasonable range of alternatives, one of which

was adopted in modified form in the 1993 approvals. However, to address the potential for new and/or substantially intensified significant impacts of the Project, this Revised DSEIR identifies an additional alternative for the Project area that could avoid or substantially lessen those impacts.

Like the existing Eastern Dublin EIR, this Revised DSEIR is a program-level document that focuses on the new or substantially increased significant impacts of continued development pursuant to the General Plan and Specific Plan, as proposed in the Stage 1 Development Plan. The Eastern Dublin EIR and this Revised DSEIR together fully identify and assess all of the potential significant impacts of the Project area development potential. As provided in CEQA, and as discussed in the Eastern Dublin EIR and this Revised DSEIR, additional environmental review of future individual development projects may be required prior to approval of future land use entitlements. The Eastern Dublin EIR is available for review at the City of Dublin Community Development Department, 100 Civic Plaza, Dublin, CA 94568.

### **1.3 LEGAL BASIS FOR SUPPLEMENTAL EIR**

Several comments on the July 2001 Draft SEIR questioned why a Supplemental EIR had been prepared rather than a Subsequent EIR or a "new" EIR. As noted above, CEQA strictly limits the circumstances under which cities may require additional EIRs of any kind when a previous EIR has been certified for a project. The current Project requests are subject to these strictures since the Project is within the scope of the previous EIR and the project it analyzed.

The City carefully reviewed the Project applications through the initial study process to determine what if any additional review was required. Such initial studies are routine and some level of additional review is common for implementing projects in Eastern Dublin because ultimate development of Eastern Dublin has and continues to require multiple layers of discretionary land use approvals - from the previously approved General Plan Amendment and Specific Plan through annexation and zoning level approvals to permit level approvals – before building permits may be issued. For the adjacent Dublin Ranch annexation in 1995, and the nearby Quarry Lane annexation in 2000, for example, the City adopted Mitigated Negative Declarations which addressed potential site-specific impacts of future development on those sites. Other implementing projects in Eastern Dublin have required no additional review beyond the previous EIR, or have required Negative Declarations. The current Project is the first that has required additional EIR review beyond the previous EIR.

Based on the nature of the Project requests, the extent of previous EIR analysis, and considering the requirements of CEQA Guidelines sections 15162 and 15163, the City determined that a Supplemental EIR should be prepared rather than a Subsequent EIR. Subsequent and Supplemental EIRs are similar in both substantive and procedural respects. First, both types of EIRs build upon a previously certified EIR. Second, both types of EIRs analyze substantial changes to the project and/or environmental circumstances when those changes would cause a new significant impact or would substantially increase the severity of previously identified impacts. Change alone is not determinant; nor is the passage of time. The critical factor in both types of EIRs is substantial change from the analysis in the previously certified EIR. Third, both types of EIRs require the same notice and public review. Fourth, both types of EIRs are circulated by themselves, without the previously certified EIR.

With the above similarities, the choice between a Subsequent and Supplemental EIR is a matter of the degree of additions or modifications to the previous EIR needed to analyze the new or substantially increased significant impact. Neither is a "new" EIR; both types of EIRs analyze the substantial changes from the previous analysis. Based on the Project initial study, the City determined that a Supplemental EIR is appropriate for the following reasons.

1. The Project is unchanged as to uses, density types and locations analyzed in the previous EIR.
2. There are no new impact categories from the previous EIR. All of the potential additions or modifications involve impact categories that were analyzed in the previous EIR.
3. The additions or modifications needed to update the previous EIR analysis do not require full re-analysis of a particular impact. In some cases, previously identified impacts or previously identified mitigation measures require updating or refinement. None of the modifications, however, introduces an entirely new environmental topic not addressed in the previous EIR.
4. The previously certified EIR was prepared for a major General Plan Amendment for a 6,920 acre development area. The EIR projected and analyzed potential environmental change over an estimated buildout period of 20-30 years. (See 1993 Final EIR, Response 25-1.) The current Project is consistent with the General Plan land uses and densities analyzed for the Project area in the previous EIR.
5. The previously certified EIR project also included a Specific Plan with more detailed land use development concepts. Thus, the EIR included more detailed analysis in the Specific Plan area than is usual in a General Plan EIR. The current Project development area is located largely within the Specific Plan area and is consistent with the Specific Plan.
6. The current Project includes actions explicitly identified in the previously certified EIR as implementing actions.

For the above reasons, the City determined that the current Project does not raise new policy issues as to the type, location, direction or extent of growth. Further, the range of potential impacts identified in the Project initial study is the same range as previously analyzed. Finally, the nature of the potential changes identified in the Project initial study requires updating and/or refinement of the previous EIR analyses, rather than full re-analysis. Irrespective of the label, and consistent with both Subsequent and Supplemental EIR provisions of CEQA Guidelines sections 15162 and 15163, the City will not approve the Project without first certifying an EIR which comprehensively addresses the potential for significant environmental impacts of the current Project beyond those addressed in the previous EIR.

#### **1.4 ORGANIZATION OF REVISED DRAFT SUPPLEMENTAL EIR**

This Revised Draft Supplemental EIR ("Revised DSEIR") consists of two bound volumes, and supplements the program EIR and Addenda certified by the City of Dublin for the Eastern Dublin General Plan Amendment and Specific Plan. (SCH 91103064, "Eastern Dublin EIR", or "EDEIR", incorporated herein by reference.)

This Revised DSEIR is organized as follows:

**Chapter 1 – Introduction.** Chapter 1 describes the organization and review of this document as a Revised DSEIR which will be recirculated for public review.

**Chapter 2 – Project Description.** Chapter 2 describes the proposed Project, Project area location and general existing conditions. It also describes Project objectives, the use of this document and future approvals required for the Project.

**Chapter 3 – Environmental Setting, Impacts and Mitigation Measures.** Chapter 3 contains the impact and mitigation analysis for the Project. Each environmental topic includes existing conditions (setting); potential supplemental environmental impacts and their level of significance; and mitigation measures recommended to mitigate identified significant impacts.

**Chapter 4 – Alternatives.** Chapter 4 evaluates a Mitigated Traffic Alternative, and updates the No Project and No Development Alternatives from the Eastern Dublin EIR as applied to the Project area. Based on comments on the July 2001 DSEIR, Chapter 4 also discusses an intensified development alternative. The environmentally superior alternative is discussed in this chapter.

**Chapter 5 – References.** Chapter 5 provides full references for all documents used in this Revised DSEIR environmental analysis.

**Chapter 6 – Report Authors.** Chapter 6 lists the authors of this EIR and organizations and persons consulted in its preparation.

**Appendices –** The appendices contain the Notice of Preparation and Initial Study; Resolution No. 53-93 approving the Eastern Dublin General Plan Amendment and Specific Plan, and including the mitigation findings, overriding considerations and mitigation monitoring plan; background data referenced in this Revised DSEIR including, but not limited to, an evaluation of Project area prime agricultural land, air quality data, an addendum to the Kit Fox Protection Plan in Appendix E of the Eastern Dublin EIR, noise data, and detailed intersection volume/capacity tables.

## **1.5 REVISED DRAFT SUPPLEMENTAL EIR REVIEW PROCESS**

This Revised DSEIR will be circulated for public review and comment pursuant to CEQA. Written responses will be prepared to all relevant comments on environmental issues received during the public review period. The public comments and responses will be compiled in a Revised Final SEIR. The Revised Draft and Final SEIRs will be presented to the City Council for certification. After certification, the City will consider the requested Project approvals and make appropriate findings based on the certified SEIR.

## **1.6 FUTURE ENVIRONMENTAL ANALYSIS**

Future specific plan and zoning actions, as well as site development review, tentative map and other permit level entitlements will be required for individual development sites within the Project area. Further environmental review will be required for these future projects, and additional documentation may be required as appropriate under CEQA and the CEQA Guidelines for activities not examined in the Eastern Dublin EIR or this Supplemental EIR.

## 2.0 PROJECT DESCRIPTION

### 2.1 PROJECT LOCATION

The Project area is approximately 1,120 acres in size, located in an unincorporated area of Alameda County bounded by Interstate 580 (I-580) to the south and Fallon Road to the west. Figure 2-A shows the Project location in relation to the general Bay Area. The Project area abuts the eastern boundary of the City of Dublin (Figure 2-B). The entire Project area is located within the City of Dublin's General Plan Planning Area and Sphere of Influence (SOI). Approximately 472 acres of the Project area are included within the City's Eastern Dublin Specific Plan boundary (Figures 2-B, 2-C). The Project area consists of thirteen (13) different parcels of land under eleven (11) separate ownerships (Figure 2-D).

### 2.2 PROJECT AREA FEATURES

#### TOPOGRAPHY

The topography of the area ranges from relatively flat at the southern portion near the freeway, to gently rolling hills at the center of the area, to relatively steep slopes, some exceeding 30%. A series of low knolls trending from northwest to southeast bisects the southern portion of the property and provides a backdrop to the flatter portions of the area near the freeway. A few drainages flow in a north to south orientation, generally draining towards Fallon Road and Croak Road. Figure 2 - E shows the topography of the Project area. Few trees exist in the Project area beyond those planted around existing homesteads and scattered in the drainages.

#### EXISTING LAND USES

The Project area is used primarily for agriculture and grazing, with rural residences and associated outbuildings scattered throughout the area. A horse ranch is located on the approximately nine-acre Campbell parcel north of I-580 east of Croak Road. (See Figure 2-D.) Other land uses in the Project area include excavation and landscape company corporation yards, horse boarding and training facilities, trucking/delivery/storage facilities, and an abandoned quarry pit.

#### ADJACENT LAND USES

Current land uses surrounding the Project area include a major transportation corridor (I-580 freeway) to the south, rural residential and grazing lands to the north and east, and Dublin Ranch to the west. Dublin Ranch is a mixed-use development adjacent to the Project area. Like the Project area, Dublin Ranch was planned in the 1993 Eastern Dublin General Plan Amendment and Specific Plan approvals discussed below and is currently undergoing phased development. Dublin Ranch underwent a prezoning similar to the current Project proposal upon annexation in 1995. Through the Dublin zoning ordinance development plan processes, some development projects have been approved on individual sites. Land uses for Dublin Ranch are similar to those designated for the Project area. Dublin Ranch includes low density residential, medium density residential, medium-high density residential, high density residential, general commercial, campus office, approximately 54 acres of a total 68-acre community park, a portion of an elementary school site, rural residential/agriculture designated areas, and open space.

Agricultural lands to the north and east of the Project area are designated as Future Study Area-Agriculture in the General Plan. These lands were deleted from the Eastern Dublin development area upon approval of the Eastern Dublin General Plan Amendment in 1993, as further discussed below. Under the Future Study Area designation these lands would require additional study by the City to determine whether they are appropriate for development or preservation. However, no such studies have been undertaken since 1993.

Land uses south of I-580 include grazing and agricultural farming uses; however, land southwest of I-580 west of El Charro Road is in the City of Pleasanton's adopted Stoneridge Drive Specific Plan and is slated for future light industrial and commercial use, and a community park.

### **OWNERSHIP**

The Project area contains thirteen parcels owned by eleven landowners. Ownerships and parcel sizes are shown in Table 2.4-1 below, and on Figure 2-D.

**TABLE 2.4-1  
PROPERTY OWNERSHIPS AND ACREAGES\***

Property Owner	Acreage	Applicable Dublin Plan
First American Title Guarantee Co. (FATCo.) (2 parcels)	189.1	GP/SP
Chen	135.6	GP/SP
EBJ Partners L.P.	0.8	GP/SP
Pleasanton Ranch Investments	0.2	GP/SP
Anderson Second Family Limited Partnership	48.9	GP/SP
Righetti Partners	48.7	GP/SP
Branaugh	39.8	GP/SP
Campbell	8.8	GP/SP
Braddock and Logan	159.5	GP
Croak (2 parcels)	164	GP
Fallon Enterprises	313.8	GP
<b>TOTAL</b>	<b>1,109.2</b>	<b>1,109.2 ac GP/472 ac SP</b>

\* See Figure 2-D for specific parcel acreages

### **2.3 PRIOR PLANNING APPROVALS: 1993 EASTERN DUBLIN GENERAL PLAN AMENDMENT AND SPECIFIC PLAN PROJECT**

#### **EASTERN DUBLIN GENERAL PLAN AMENDMENT**

In 1993, the City Council approved the Eastern Dublin General Plan Amendment and Specific Plan (hereafter, "Eastern Dublin project"). The approved project was a modified version of the original General Plan Amendment (hereafter, "GPA") for a 6,920 acre planning area generally known as Eastern Dublin.<sup>1</sup> The original GPA proposed to change commercial land use designations on County property in the southwest portion of the GPA area and agriculture/open space designations elsewhere in the planning area to a range of urban uses, as shown on Figure 2-E of the Eastern Dublin Draft EIR. Within the nearly 7,000 acre planning area, a new Eastern Dublin Specific Plan proposed land use policy at a greater level of detail in order to "bridge" general plan policy and zoning for individual development projects. Intended for both policy and regulatory use, the Specific Plan addressed 3,328 acres, supplementing the GPA with more detailed land use designations, policies, programs and regulations. (Eastern Dublin Draft EIR, hereafter, "DEIR", p. 2-4.)

<sup>1</sup> The use of the term "original" in this section refers to the "project" described in the Eastern Dublin EIR. The EIR also included alternatives to the "project" and it was one of the alternatives which the Council approved. (See Resolution 53-93 in Appendix B and later discussion in this Chapter under "Eastern Dublin Project Approval".)

The GPA planning area was located east of the City of Dublin. The planning area was characterized by a relatively flat plain along I-580, which gave way to rolling foothills and increasingly steep slopes to the northeast. Apart from facilities on County property in the southwest portion of the planning area (former Santa Rita Rehabilitation Center, U.S. Naval Hospital), the Eastern Dublin project area consisted primarily of open grasslands used for grazing and dry farming, and with scattered residences. (DEIR p. 2-3.)

The original GPA land use plan proposed to replace the undeveloped planning area with a mixed-use urban community. The project concept is set forth in the following excerpt from the Eastern Dublin EIR.

Residential and employment-generating uses will be balanced to enable residents to live near work. Employment-generating uses include retail, service, office, governmental, research and development ("R and D"), and light industrial. Residential designation [sic] range from Rural Residential to High Density multi-family. Higher density housing has been located near the future BART station and along a key transit corridor. Higher densities have also been located close to commercial centers where the concentration of population will contribute to that center's social and economic vitality.

The Project provides a full complement of regional office and retail land uses located near freeway interchanges, local-serving commercial centers are envisioned as pedestrian- and transit-oriented mixed-use concentrations which include retail, service, office, and residential uses, and are carefully integrated with surrounding residential neighborhoods.

Open space is a major component of the Project's land use plan, giving form and character to the urban development pattern. The open space concept envisions a community ringed by undeveloped ridgelines. Urban and open space areas will be linked by an open space network structured along enhanced stream corridors. The circulation concept calls for an integrated, multi-modal system that reduces potential traffic impacts by providing area residents with choices for a preferred mode of transportation. (DEIR pp. 2-4; Eastern Dublin Responses to Comments, hereafter, "FEIR" p. 66.)

At buildout, the GPA planning area was projected to provide 17,970 new residences on 4,993 acres, including 2,672 acres designated for Rural Residential with a 100 acre minimum parcel size. Approximately 10.6 million square feet of new commercial space, 25 parks on 287 acres, 571 acres of designated open space, and 12 new schools were also planned. (DEIR p. 2-7.) Buildout was expected to occur over a 20 – 30 year period from the start of construction. (DEIR p. 2-6, FEIR p. 8.) The major policies of the GPA are summarized on pages 2-9, -10 of the Eastern Dublin Draft EIR.

The GPA planning area was comprised of two subareas. The Eastern Dublin Specific Plan area encompassed 3,328 acres in the western portion of the planning area. Most of the urban level development was planned for this area. The eastern portion of the planning area was known as the General Plan Increment Area. The General Plan Increment Area planned for low and medium density residential development in Doolan Canyon with a small neighborhood commercial site. (DEIR Figure 2-E.) The Doolan Canyon residential land uses were surrounded by Rural Residential designations.

#### **EASTERN DUBLIN SPECIFIC PLAN**

The Eastern Dublin Specific Plan addressed 3,328 acres in the western portion of the GPA planning area. Seventy percent of the GPA residential development and 94% of the new commercial space was planned for the Specific Plan area. (DEIR p. 2-8.) The land use plan called for compact villages with residential and neighborhood serving uses. Employment-generating commercial uses were provided

along arterials with transit access. (*Id.*) The major policies of the Specific Plan are set forth on pages 2-10 to 2-14 of the Eastern Dublin Draft EIR.

### EASTERN DUBLIN EIR

The City of Dublin prepared a Program EIR for the Eastern Dublin project based on the original 6,920 acre GPA planning area and land use designations, and 3,328 acre Specific Plan area, both as described above. (SCH 91103064.) The EIR also identified a third component of Project Implementation. (DEIR p. 2-4.) This component included "procedural steps ... to be undertaken for full implementation of the [GPA and Specific Plan] Project; Alameda County Local Agency Formation Commission (LAFCO) determinations on annexation to the City of Dublin and the Dublin San Ramon Services District (DSRSD), detachment from the Livermore Area Recreation and Park Department (LARPD), and sphere-of-influence boundary changes; rezoning, and review and approval of specific development projects." (*Id.*)

The City initiated the Eastern Dublin project in 1988 after several separate development projects were proposed for the area. The goal of the project was to provide comprehensive planning for development types, locations and patterns in Eastern Dublin which would be implemented through future individual development projects. As noted in the Eastern Dublin EIR statement of project objectives, the project was intended to preserve visually-sensitive and biologically-sensitive habitat areas, encourage development patterns that support transit on local and regional levels, and maintain balanced employment and housing opportunities to reduce traffic congestion and air pollution. (DEIR p. 2-5.)

The EIR analyzed the potential environmental effects of adopting and implementing the GPA and Specific Plan project. The EIR also analyzed the cumulative effects of the Eastern Dublin project, that is, the project "within the context of regional development." (DEIR p. 5.0-1.) As required by CEQA, the EIR included a list of ongoing and future development projects that, together with the Eastern Dublin project, might "compound subregional (i.e. Tri-Valley) environmental problems." (*Id.*) Reflecting a surge of development interest at the time, the cumulative projects in Dublin alone included 924 units, plus another 3,133 units on 3,140 acres in Western Dublin, and the potential intensification of uses at Camp Parks. The Dougherty Valley Specific Plan projected 11,000 units; while the City of Livermore was considering the North Livermore General Plan Amendment with potential buildout between 3,713 and 16,513 units. The various cumulative projects also proposed millions of square feet of non-residential development. The list of cumulative projects from the Eastern Dublin EIR is shown on Figure 5-A of the DEIR and also in Figure 5-A in Chapter 5.0 of this EIR. Virtually all of the potential new development areas in the list of cumulative projects was undeveloped land, primarily in agriculture and/or open space uses, as evidenced by the aerial photographs which form the base maps for Figures 2-B and 2-D of the Eastern Dublin DEIR.

As would be expected for a major general plan level project during a time of dramatic development activity, the Eastern Dublin EIR identified many potential significant impacts on both a project (GPA and Specific Plan) level and a cumulative (regional, subregional) level. Mitigation measures were proposed and adopted for most of the significant impacts to reduce them to less than significant. The City of Dublin would implement some of the mitigation measures directly; examples include but are not limited to adopting a stream corridor restoration program, designating substantial areas within the project area as Open Space or Rural Residential where low density development will also provide foraging habitat, and continuing to participate in regional studies of future transportation requirements, improvements and funding. Other mitigations would be implemented through conditions or development standards for future development projects; examples include but are not limited to proportionate-share contributions to roadway improvements and transit service extensions, and compliance with the Kit Fox Protection Plan. Many of the mitigation measures also included policies and action programs identified in the Eastern Dublin GPA and Specific Plan documents.

Even with mitigation, however, some of the identified significant impacts could not be reduced to less than significant. Several of these impacts were cumulative level impacts, such as loss of agriculture and open space, I-580 and other traffic impacts, and air quality impacts. As required by CEQA, the Draft EIR identified project alternatives, including No Project and No Development alternatives, a Reduced Land Use Intensities alternative, and a Reduced Planning Area alternative, and analyzed whether the alternatives would avoid any of the otherwise unavoidable impacts. As further discussed below, the City Council adopted a modified version of the Reduced Planning Area alternative after certifying the EIR as adequate and in compliance with CEQA on May 10, 1993. (Resolution 51-93.) The City Council also certified an Addendum dated May 4, 1993 which assessed the modifications to the Reduced Planning Area alternative and concluded that this alternative "will have no environmental impacts not addressed in the Draft Environmental Impact Report for the Eastern Dublin General Plan Amendment and Specific Plan." (May 4, 1993 Addendum p. 1.) The Addendum further concluded that no subsequent or supplemental EIR was required under CEQA Guidelines section 15162 or 15163 for approval of the modified alternative.

A second Addendum was later prepared. Dated August 22, 1994, the second Addendum updated plans for disposal of treated wastewater from Eastern Dublin. The May 10, 1993 certified EIR, the May 4, 1993 Addendum and the August 22, 1994 Addendum are collectively referred to hereafter as the Eastern Dublin EIR, or the "EDEIR" and are incorporated herein by reference.

#### **EASTERN DUBLIN PROJECT APPROVAL**

The Eastern Dublin planning process spanned some four years beginning in 1988. The City identified a preferred alternative in 1991 and prepared a draft GPA for the 6,920 acre planning area and a Specific Plan for 3,228 acres in 1992. A Draft EIR was prepared and circulated for public review in August of 1992. After numerous Planning Commission and City Council hearings, the City Council declined to approve the original 6,920 acre GPA. Instead, the City Council approved a modified version of the Draft EIR's Alternative 2: Reduced Planning Area. (Resolution 53-93, see Appendix B of this DSEIR.)

Alternative 2 reduced the GPA area by 2,744 acres, a nearly 40% reduction in project area. More specifically, Alternative 2 provided for buildup of the Specific Plan area, buildup of the GPA area only within the Dublin Sphere of Influence, but no annexation and no GPA for Doolan Canyon. (DEIR p. 4-9.) Intended as a "midpoint" between development and environmental concerns,

Doolan Canyon would not develop and its current agricultural land uses and rural character would be maintained. The importance of this area's function as a "green" community separator between Dublin, Livermore and the Tassajara Valley would increase as development occurred in eastern Dublin, and North Livermore, and lands east of San Ramon. (Id.)

The beneficial effect of Alternative 2 is reflected in a comment letter on the Eastern Dublin EIR from the City of Livermore. By letter dated October 26, 1992, Livermore stated that Alternative 2

has the affect [sic] of less urban sprawl while not reducing overall intensities of land use. This may be an environmentally superior alternative to the current proposed project. Alternative 2 allows buildup as proposed in the Specific Plan, and buildup of the General Plan Amendment within the current SOI for Dublin. Equally important, it explicitly allows for the preservation of Doolan Canyon as an important "green community separator between Dublin, Livermore, and the Tassajara Valley..." (page 4-9). (FEIR, Comment 17-11.)

Rather than urban land uses, the area outside the City's Sphere of Influence was designated a Future Study Area with an underlying Agriculture land use on 100 acre minimum parcel sizes, consistent with the Alameda County General Plan. (May 4, 1993 Addendum p. 12.) Upon approval of the modified

alternative, the City Council adopted mitigation findings and a mitigation monitoring program for identified significant impacts that could be reduced to less than significant. (Resolution 53-93.) The City Council also adopted a Statement of Overriding Considerations for identified significant impacts that could not be reduced to less than significant even with mitigation. (*Id.*) Through the Statement of Overriding Considerations, the City Council considered the decision to allow urbanization of Eastern Dublin and found that overriding economic, social, environmental, land use and other considerations supported approval of the project.

Following certification of the Eastern Dublin EIR and approval of the modified Reduced Planning Area alternative, a lawsuit was filed challenging the validity of the EIR and the Council's approval of the GPA and East Dublin Specific Plan. (*Pleasanton v. Dublin*, San Mateo Sup. Ct. No. 385533). The Court upheld the EIR, finding it in compliance with CEQA and the CEQA Guidelines. The City has since implemented the mitigation monitoring program adopted by the Council (Resolution 53-93), as interpreted by the Court's Memorandum of Decision. Copies of Resolution 53-93 and the Court's Memorandum of Decision may be obtained from the City Clerk.

A referendum qualified for the ballot following the Council's adoption of Resolution 53-93 approving the GPA and Eastern Dublin Specific Plan. An election was held in January 1994 at which time the voters of Dublin approved Resolution 53-93 and the GPA and Specific Plan.

The Future Study Area that was deleted from the original GPA development area is shown in Figure 2-B. In 1995, the City amended its General Plan Circulation Element maps to delete Central Parkway as a through-roadway to Doolan Canyon, consistent with the approval of Alternative 2. (Figure 5-1b, Dublin General Plan.) Since the Council's 1993 approval of the Eastern Dublin project, no land use studies have been initiated nor considered in the Future Study Area.

## **2.4 PROJECT APPLICATIONS**

The Eastern Dublin Property Owners have requested to annex the Project area to the City of Dublin and to the Dublin San Ramon Services District (DSRSD), to prezone the Project area to the PD-Planned Development Zoning District and adopt a related Stage 1 Development Plan to guide future development of the Project area, to detach the Project area from the Livermore Area Recreation and Park District and other related actions. The Eastern Dublin General Plan Amendment and Specific Plan approved in 1993 established the general development patterns, land uses and densities for the Project area. The current applications are the next step in the implementation of the 1993 Eastern Dublin approvals. All were specifically identified in the Eastern Dublin EIR and represent an intermediate step in the ultimate development process. The requested approvals from the City would be legislative actions at a planning level. Subsequent applications would be required to complete the planning and zoning for the site through approval of Specific Plans where required and through Stage 2 PD rezonings for individual development sites. Upon completion of the zoning approvals, permit level approvals would be sought for Site Development Review, tentative maps and other permit approvals as appropriate. The Project includes the following requests.

### **ANNEXATION TO THE CITY OF DUBLIN**

The Project area is currently located in unincorporated Alameda County and is subject to the Alameda County East County Area Plan (ECAP). Upon annexation to the City, the Project area would be subject to the City's General Plan and other land use controls. The Project is already within the City's Sphere of Influence so no amendment to the Sphere is necessary for the annexation. (See Figure 2-F.) The westerly adjacent Dublin Ranch site was annexed to the City in 1995. The Project area is contiguous with the current City limits along its border with Dublin Ranch.

## **ANNEXATION TO DSRSD**

DSRSD would provide public water and sewer services to the Project area upon annexation to the district. The Project area is already within the DSRSD Sphere of Influence so no amendment to the Sphere is necessary for the annexation.

## **DETACHMENT FROM THE LIVERMORE AREA RECREATION AND PARK DISTRICT (LARPD)**

The 1993 Eastern Dublin approvals contemplated that neighborhood and community parks will be provided by the City and regional parks will be provided by the East Bay Regional Parks District. The Project area is currently in both LARPD and the East Bay Regional Parks District. The Eastern Dublin project included future detachment from LARPD. There are no LARPD facilities existing or planned in the Eastern Dublin area.

## **PREZONING TO PD-PLANNED DEVELOPMENT DISTRICT AND STAGE 1 DEVELOPMENT PLAN**

The PD rezoning request includes a Stage 1 Development Plan as required by Chapter 8.32 of the Dublin Zoning Ordinance. The intent of the PD District is to plan development sites as a unit with maximum flexibility to achieve efficient land uses that accommodate development, environmental protections and creative design. A Stage 1 Development Plan must identify land uses, densities and development standards, and must include a master landscape plan and development phasing plan. All land uses within the Stage 1 Development Plan must be consistent with the General Plan and Specific Plan.

The proposed Stage 1 Development Plan covers the entire Project area and reflects the land use types, densities and locations established in the 1993 Eastern Dublin project approvals. (See Figures 2-G, 2-H.) It also allows development standards and mitigation measures to be applied to the entire Project area for implementation through future individual projects. More specifically, the Stage 1 Development Plan includes a mix of residential uses at a variety of densities; employment-generating uses such as retail, service, office and light industrial; parks, open spaces, community facilities, roadways and similar land uses. Retail, office and light industrial land uses are located primarily in the southern portion of the Project area along the freeway and major arterials. Residential uses are located in the more northern and eastern portions of the Project area. The Project also provides a complement of neighborhood parks, school sites, open space, and a multi-use trail system to link the developed areas of the Project with the parks, trails and open space areas of the Project.

If approved, the Stage 1 Development Plan would be the basis for future applications leading to development of the Project area. As required by General Plan Implementing Policy 2.1.4 (B), a Specific Plan(s) will be required for the approximately 638 acre portion of the Project area which is outside of the current Eastern Dublin Specific Plan. Pursuant to the PD-Planned Development district zoning regulations, Stage 2 Development Plans are required for subsequent site-specific development projects and must be consistent with the approved Stage 1 Development Plan. Adopted by ordinance, the Stage 2 Development Plans would complete the PD zoning process for the related sites. The City will require application for the required specific plan(s) prior to submittal of Stage 2 development plans. Future development applications following the required specific plan and zoning actions could include entitlements such as Site Development Reviews, tentative subdivision maps, use permits, development agreements and similar requests. These future development applications will be subject to further environmental review as appropriate under CEQA and the CEQA Guidelines.

## **PRE-ANNEXATION AGREEMENTS**

The project applicant and City will enter into a pre-annexation agreement to specify certain funding obligations following annexation. These include funding any deficit between revenues from the Project

area and expenses for fire services; advance of Fire Facilities Impact Fees (due to construction of a fire station); advance of Eastern Dublin Traffic Impact Fees (for funding for I-580/Fallon Road interchange improvements); and related funding issues. The pre-annexation agreement will not address the Project's obligation for funding infrastructure inasmuch as project conditions will require such funding.

## **2.5 PROJECT OBJECTIVES**

The objectives of the Eastern Dublin project are set forth in the Eastern Dublin EIR. (See DEIR p. 2-5.) All of the identified objectives for the Eastern Dublin project remain objectives of the current Project as it implements the comprehensive land use plan adopted in 1993. Additional objectives of the annexation and rezoning Project include the following.

- Complete the planned expansion of the City's corporate boundaries to the east as provided for by LAFCO in adopting the City's Sphere of Influence, and in the General Plan and Eastern Dublin Specific Plan.
- Initiate a zoning level framework to guide future development projects within the Project area consistent with the General Plan and Eastern Dublin Specific Plan.
- Facilitate the cohesive and cooperative planning of lots under separate ownership in the Project area.
- Implement the City's objectives for Eastern Dublin as set forth in the General Plan, Eastern Dublin Specific Plan, and Eastern Dublin EIR.
- Implement the City's long term programmatic planning approach for Eastern Dublin as set forth in the Eastern Dublin EIR.

## **2.6 CURRENT PROJECT: EASTERN DUBLIN PROPERTY OWNERS ANNEXATION AND REZONING**

### **LAND USES, DENSITIES, AND INTENSITIES**

The Stage 1 Development Plan identifies land uses and intensities for the Project area consistent with the General Plan and Eastern Dublin Specific Plan. (See Figures 2-G, 2-H.) Proposed for development in two phases, the first phase will include approximately 702 acres in the west, central and southern portion of the Project area. (See Figures 2-G, and 2-I) This portion is easily accessible to utilities, can easily provide services, jobs, and other needed land uses for adjacent Project area neighborhoods, and already has good freeway access. Looped traffic flow and necessary infrastructure will be provided. The second phase of development would involve the remaining lands in the north and northeast portions of the Project area and in the higher elevations. Timing for the Project phasing will depend upon market demand. All necessary roadways, site grading, and utility backbone improvements are expected to occur in a timely manner with each development phase.

Future residential development under the proposed Stage 1 Development Plan would be a maximum of 2,526 units. A wide range of residential unit types would be allowed within the proposed densities. Single family residential densities would permit lots from 4,000 square feet up to one acre. Medium density residential densities would typically be small lot development such as z-lots, zippers, small lots, clusters, or townhomes. Medium-high densities allow for units such as apartments or stacked flats. The minimum lot size in rural residential designations is 100 acres; a residential unit could be built on less than 100 acres only on an existing legal lot.

The maximum square footage of potential commercial and industrial uses is approximately 581,090 square feet and 840,360 square feet respectively, for a total of 1,421,450 square feet maximum. (See Table 2.4-2.) The maximum proposed floor area ratios (FAR) for general and neighborhood commercial and industrial park uses are 0.25 (General Commercial), 0.30 (Neighborhood Commercial) and 0.28 (Industrial). Industrial uses constructed at this FAR are typically one and two story buildings; typical

commercial buildings are one to two stories; typical office buildings (permitted in some commercial zoning designations) are two to three stories. These standards are reflected in the proposed Stage 1 Development Plan.

A portion of the Project area within the Airport Protection Area (APA) of the Livermore Municipal Airport. (Figure 2-H.) Although the General Plan and Eastern Dublin Specific Plan provided for potential residential development in the APA, the Airport Land Use Plan (ALUP) for the airport prohibits new residential land use designations or intensification of existing residential land uses within the APA. This policy is further stated by the Airport Land Use Commission in its letter dated November 27, 2000. Anticipating conflict between the APA policies and potential future residential development, the Eastern Dublin General Amendment and Specific Plan provide that residential designations that are inconsistent with the APA at the time of rezoning will convert to Future Study Area with an underlying Rural Residential/Agriculture designation. In accordance with these provisions, residentially designated lands in the Project area that are also within the APA are identified in the proposed Stage 1 Development Plan as "Future Study Area – Rural Residential/Agriculture." This designation neither creates a new residential land use designation nor would result in the intensification of existing residential land uses; the designation is consistent with the existing Alameda County land use designation and with the City's existing land use designations and no intensification of uses will result inasmuch as the existing uses are rural residential/agricultural. Because lands within the APA cannot be developed as residential given the current policies, these areas are designated Rural Residential/Agricultural for purposes of assessing Project impacts in this DSEIR.

The proposed development plan also includes approximately 14.1 acres to be added to a planned community park which straddles the Project area and Dublin Ranch. (Figure 2-H.) Consistent with the City's standard of five acres of neighborhood and community parkland per 1,000 residents, the Stage 1 development plan provides approximately 24 acres of neighborhood parks and 2.7 acres of neighborhood squares, reserves a maximum of 32 acres for schools (or as otherwise determined by the City and the Dublin Unified School District), and retains approximately 77 acres as permanent open space. These acreages are consistent with the acreages for such uses under the General Plan Amendment and Specific Plan. Regional park facilities continue to be provided by the East Bay Regional Park District.

The Stage 1 development plan for the Project area (Figure 2-G) follows the intent and general layout of the General Plan and Specific Plan with the following refinements and clarifications:

The City's General Plan identifies arterials in the Eastern Dublin Planning Area. The PD zoning regulations require that collector streets also be shown in the Stage 1 Development Plan. Accordingly, collector streets are planned consistent with the City of Dublin's street standards. These alignments, however, split some General Plan/Specific Plan land use bubbles and create unusable pieces of land. In an effort to maintain the intent of the General Plan and Specific Plan, some land use bubbles have been adjusted to match the alignment of these collectors. Within the Specific Plan area, some portions of the arterials have been realigned to better conform to the existing terrain. With these refinements, the proposed development plan remains substantially consistent with the Eastern Dublin General Plan and Specific Plan.

The APA extends into the Project area to just north of Dublin Boulevard (Figure 2-J.) As noted above, potential residential uses in the APA do not conform to ALUP policies. Land uses in these areas are shown as "Future Study Area -- Rural Residential/Agriculture" as required by the General and Specific Plans. A junior high school site shown on the Specific Plan also encroaches into the APA. The Stage 1 Development Plan moves this site northward out of the APA according to ALUC policies, and adjusts adjacent land uses accordingly.

Low Density Residential and Rural Residential/Agriculture bubbles in the northern and eastern portions of the area have been adjusted to follow existing topographic conditions more closely and to avoid more sensitive biological areas. All urban development areas will occur below the 770' elevation contour in conformance with the General Plan Development Elevation Cap for Eastern Dublin.

### **PARKS AND RECREATION**

The Project proposes detachment from the Livermore Area Recreation and Park District (LARPD), consistent with General Plan Policy 3.3 (I) and the City's Parks and Recreation Master Plan (p. 7). Upon detachment, the County will reallocate property taxes received by LARPD to reflect the shifted obligation for park and recreational services.

The Parks and Recreation Master Plan establishes the City's standard for community and neighborhood parks at 3.5 and 1.5 acres per 1,000 population, respectively, for a total of 5 acres per 1,000. The City's Public Facilities Fee will apply to future development within the Project area. The fees are used to fund community and neighborhood park land and improvements, as well as community facilities such as a second community center, a recreation center, a community theater, a second aquatic center, a senior center and a new library.

A number of comments were received regarding park and recreational uses when the July 2001 DSEIR was circulated. Appendix I includes copies of the responses to those comments which relate to park and recreational uses. This information is included in this Revised DSEIR to provide as much information as possible regarding the Project even though the Initial Study did not identify any issues related to parks and recreation.

### **AFFORDABLE HOUSING**

The PD zoning provisions require Stage 1 Development Plans to address compliance with the City's Inclusionary Zoning regulations. The City's current ordinance requires five-percent of all developed housing to be affordable to very low, low, and moderate incomes, or, payment of an in-lieu fee to allow the City to facilitate construction of such housing. The City Council recently directed staff to prepare an amendment to the current ordinance to change the inclusionary requirement to 15%, with at least half of the requirement to be fulfilled through construction of affordable units.

The Project proposes to comply with the Inclusionary Zoning requirements by paying an in-lieu fee, providing land, constructing housing, or a combination of these options. Compliance with the Inclusionary zoning provisions will be required at the time tentative subdivision maps or other entitlements are prepared and submitted for individual development projects.

### **ACCESS AND CIRCULATION**

Primary access to and through the Project area would be via Fallon Road, Dublin Boulevard and Central Parkway. Collector streets located throughout the Project would provide secondary access and ensure through-circulation. This proposed street network is comparable to that shown in the General Plan and Eastern Dublin Specific Plan. Proposed street sections would be comparable to those already approved or built in other areas of the General Plan and Eastern Dublin Specific Plan. Each street in the Project area would be designed with safety, convenience, and visual quality in mind and would address pedestrian and bicyclist needs. (See Figure 2-K.)

In accordance with the General Plan and Eastern Dublin Specific Plan policies, numerous multi-use trails are planned to provide pedestrian and bicycle access through the Project area, connecting urban areas with open space trails and regional trails.

## UTILITY SERVICES

Proposed utilities in the Project area are shown the Master Infrastructure Plan (Figure 2-L). The Master Infrastructure Plan addresses water, wastewater, stormwater, and recycled water infrastructure requirements and services. Dublin San Ramon Services District (DSRSD) would provide water, wastewater and recycled water infrastructure and service to the Project area. The entire Project area is within the Sphere of Influence for the DSRSD. These services were planned in accordance with the DSRSD Eastern Dublin Facilities Plan Update, which includes planned service for the proposed Project. The water and recycled water, and wastewater infrastructure requirements described in the DSRSD Eastern Dublin Facilities Plan Update have since been updated in the DSRSD September 2000 Water Master Plan and December 2001 Final Revised Water Service Analysis for Eastern Dublin, and February 2000 Wastewater Collection System Master Plan Update, respectively. It is anticipated that water storage reservoirs and turnouts from Zone 7 mains would be sufficient to provide water service for the Project area through buildout. Water mains would be located in all streets. According to DSRSD's updated Water Master Plan, it is anticipated that one new pump station would be located within the Project area. The Project Master Infrastructure Plan is based on the most current study provided by DSRSD and differs slightly from the Specific Plan's conceptual backbone and facilities system plans, as further discussed in Section 3.7. Final locations and sizing of all water service facilities would comply with the standards and recommendations of DSRSD.

Sewer service for the Project area would require connection to DSRSD's existing sanitary sewer system and sewer treatment would occur at DSRSD's existing treatment plant. Gravity sewer mains would be extended easterly in Dublin Boulevard to the Project area. Sewer mains would be installed in all streets in accordance with the February 2000 Wastewater Collection System Master Plan and as necessary. Final sizing and location of sewer facilities would be determined in conjunction with DSRSD. Force mains may also be utilized in the interim.

When available from the DSRSD wastewater treatment plant, recycled water would be provided for irrigation of large landscaped areas, thereby reducing potable water demand. Final location and sizing of recycled water facilities would be per the updated Water Master Plan prepared by DSRSD. This main would remain in service and additional recycled water distribution mains would be constructed to serve large landscaped areas within the Project area as required.

The Project area is within the adopted Alameda County Flood Control District Zone 7 Drainage Study Area, hence its expected flows are anticipated and planned for by Zone 7 and Project facilities would be sized appropriately. The storm drain system for the Project area would consist of major backbone facilities and local facilities. The backbone facilities would generally consist of larger diameter pipes networked throughout the area. These larger collector pipes would connect to open channels or box culverts that would direct the flows toward the existing G-3 channel located in Dublin Ranch Area H, along the freeway frontage road, an Zone 7 facility. Local facilities would generally consist of smaller diameter pipes connecting individual sites or areas to the collector system. The actual sizes and locations of proposed storm drain facilities would be determined with individual project improvement plans.

## CONSISTENCY WITH GENERAL PLAN AND EASTERN DUBLIN SPECIFIC PLAN

The Project area is located in the General Plan Eastern Extended Planning Area; approximately half of the Project area is also in the Eastern Dublin Specific Plan area. (See Figures 2-B, 2-C, and Table 2.4-1.) The General Plan and the Eastern Dublin Specific Plan identify the type and density of land uses and future development contemplated for the Project area upon annexation to the City. (See Figures 2-H, 2-G.) The Project is consistent with the type, location and densities of use established in the General Plan and Specific Plan. Consistent with the General Plan and Specific Plan policies, the Eastern Dublin EIR

evaluated potential development of the Project area at the mid-point density of each land use category (except for Rural Residential/Agriculture). Table 2.4-2, below, indicates the mid-point development densities anticipated for the Project area under the General and Specific Plans. These densities are proposed for the Project through the Stage 1 Development Plan, with the exception of the two Future Study Areas, (Doolan Canyon, APA) for which the Project and this DSEIR assume no new development.

## **2.7 REGULATORY SETTING**

The Project area is currently located in the unincorporated area of Alameda County. The County regulates land use for the area pursuant to the East County Area Plan (ECAP). The Project area is currently within the Dublin Sphere of Influence. (See Figure 2-F.) If the Project is approved, the Project area would be annexed to the City of Dublin and land use would be regulated by the Dublin General Plan, the Eastern Dublin Specific Plan, the approved PD zoning and the City's other zoning and development regulations. (See Figure 2-M.)

Since approval of the Eastern Dublin project in 1993, local and state measures affecting the Project have been enacted. On the local level, the City of Dublin enacted a Development Elevation Cap for Eastern Dublin, and Alameda County voters approved Measure D which established new development regulations that would apply to the Project area if it remains in the County. On a state level, the statute regulating annexations was updated in 2000 as the Cortese-Knox-Hertzberg Local Government Reorganization Act. Each of these measures is discussed below.

### **EASTERN DUBLIN DEVELOPMENT ELEVATION CAP**

In 1998, the City of Dublin amended its General Plan to establish a Development Elevation Cap for the Eastern Extended Planning Area. The development cap limits urban development to locations below the 770' elevation contour. The intent of the cap is to identify areas where orderly and logical growth may occur adjacent to existing development, incorporating open space systems and preserving Eastern Dublin's visual resources. The Project area is subject to the Development Elevation Cap restrictions, which are reflected in the Stage 1 Development Plan.

### **MEASURE D**

Alameda County voters approved Measure D in November 2000. The effect of Measure D on the Project is discussed in the Initial Study under Land Use and Planning. As noted in the Initial Study, Measure D restricts development in the unincorporated portions of the County. It does not limit development within cities, nor does it create or impose urban growth boundaries on those cities. Thus, Measure D has no effect on the City's existing growth boundaries, the Development Elevation Cap in Eastern Dublin and the Urban Limit Line in Western Dublin. Measure D would also not restrict development of the Project area if it is annexed to the City. In addition, Measure D is not a factor that LAFCO would consider when evaluating the Project annexation request. The new annexation law, further discussed below, allows LAFCO to consider growth goals and policies only as established by elected officials. In approving the new annexation statute, the legislature deleted proposed language that would have allowed a LAFCO to also consider growth boundaries adopted by the voters.

### **CORTESE-KNOX-HERTZBERG LOCAL GOVERNMENT REORGANIZATION ACT**

Alameda County's Local Agency Formation Commission (LAFCO) is responsible for reviewing and acting upon requests for annexation to, or detachment from, cities or districts, such as the Project request for annexation to the City and DSRSD and for detachment from LARPD. LAFCO powers were authorized in the Cortese-Knox Act of 1985, which was comprehensively revised in the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 ("Act"). The purpose of the Act is to

encourage planned, efficient urban development patterns with appropriate consideration to preserving open space and prime agricultural lands, to discourage urban sprawl, and to encourage efficient extension of governmental services based upon local conditions and circumstances. (Government Code Sections 56001 and 56301; all citations in this subsection are to the Government Code unless otherwise noted.)

The Act further recognizes that providing housing at all income levels is an important factor in promoting orderly development. The Act prefers additional growth within, or through the expansion of, the boundaries of those local agencies which can provide necessary governmental services and housing for all incomes. (Section 56001.)

LAFCOs have the specific authority to review, among other things, annexations to or detachment from cities or districts. The Act now requires that annexation areas be prezoned and provides for annexation approvals consistent with the planned and probable use of the property based on the general plan and prezunging designations. (Sections 56375(a), (e).) Annexation requests are reviewed for consistency with adopted spheres of influence (Sections 56375.5, 56668), and for guiding development toward non-prime agricultural lands unless such development would not be orderly or efficient. (Section 56377.) Additionally, the Act sets forth a lengthy list of factors to be considered by LAFCO. (Section 56668.) The factors include but are not limited to land use and policy considerations such as population, density, land uses, growth projections for a ten-year period and fair share housing needs; social and economic interests; the physical and economic integrity of agricultural lands; consistency with applicable general and specific plans and spheres of influence. The factors also include environmental considerations such as topography, drainage basins, public services and facilities including timely availability of water supplies. The Project annexation application to LAFCO will address all of the listed factors. To the extent that such factors involve potential environmental impacts, appropriate analysis will be provided through the Eastern Dublin EIR as supplemented by this Revised DSEIR.

As noted earlier, annexation and future development of the Project area was assumed in the Eastern Dublin EIR. Therefore, the EIR analyzed the potential environmental impacts not only of the Eastern Dublin General Plan Amendment and Specific Plan, but also of annexation of the planning area to Dublin and DSRSD as applicable. Consistent with similar LAFCO policies, orderly and efficient growth and extension of services were stated objectives of the 1993 Eastern Dublin project. The 1993 approvals ultimately limited potential development to the City's Sphere of Influence, consistent with LAFCO goals.

The Eastern Dublin approvals provided for a significant housing component at varying densities and anticipated income levels to help the City meet its share of regional housing needs. The Eastern Dublin project also emphasized mixed use communities to provide not only a diverse housing stock, but also a balance of housing and employment opportunities. Even in 1992, the Specific Plan recognized that the

absence of adequate and affordable housing has resulted in a workforce that commutes longer and longer distances. More and more frequently people who work in the Bay Area must reside in communities as far away as Tracy and Modesto in order to find suitable housing. The resulting commute patterns have detrimental side effects on the entire population in the form of increased traffic congestion on major freeways such as I-580 and I-680, reduced air quality, and decreased quality of life. As more and more employment is planned for the Tri-Valley area, it is critical that housing be provided to offset the new demand. (Eastern Dublin Specific Plan p. 30.)

The Project area proposed for annexation includes the same residential and employment-generating land uses and densities adopted through the Eastern Dublin project and analyzed on a project and cumulative level in the Eastern Dublin EIR. As the Specific Plan excerpt above notes, traffic congestion

and reduced air quality are the primary environmental effects of long distance commuting. These impacts are updated in this Revised DSEIR.

Efficient provision and extension of public services and infrastructure was an important issue in the 1993 approvals and continues to be an important issue for the proposed annexation. The Project proposes annexation to DSRSD as well as the City, and is located within the adopted Spheres of Influence for both agencies. Future development of the Project area is contemplated not only in the City's General Plan but also in DSRSD's Eastern Dublin Facilities Master Plan. Development and extension of services in Eastern Dublin has generally proceeded from west to east. With development of the Dublin Ranch property to the west of the Project area and extension of public service facilities and infrastructure to the northern portion of the western Project area boundary and within approximately 3,000 feet of the southern portion of the western Project area boundary, annexation of the Project area is a logical and orderly progression of development. The Project proposal includes a detailed Plan for Services as required by LAFCO and by the City's PD zoning regulations as part of a Stage 1 Development Plan.

## 2.8 INTENDED USES OF THIS SUPPLEMENTAL EIR

This SEIR was prepared by the City of Dublin as Lead Agency for action on the Project Applications described earlier in this Chapter. LAFCO is a Responsible Agency under CEQA for the requested annexation and detachment actions.

In addition to the above approvals, the SEIR may also be used by local, regional or state agencies in their review of other approvals required for the Project. Such approvals could include, but are not limited to, CDFG Streambed Alteration Agreements, California Endangered Species Act permits, Water Quality Certification or waiver by the Regional Water Quality Control Board under the Clean Water Act, Alameda County Flood Control District/Zone 7 for approval of the G3 storm drain channel. The SEIR may also be used by the Alameda County County Committee or Alameda County Board of Education (if it acts as the County Committee) as the lead agency for approval to detach the Project area from the Livermore Valley Joint Unified School District (LVJUSD) and annex it to the Dublin Unified School District (DUSD). (A reorganization of school district boundaries is not subject to LAFCO jurisdiction.) Section 2.7 of the Eastern Dublin EIR also identifies other potential future agency approvals that could rely on the SEIR.

**TABLE 2.4-2**  
**PROPOSED PROJECT ACREAGES AND DENSITIES**

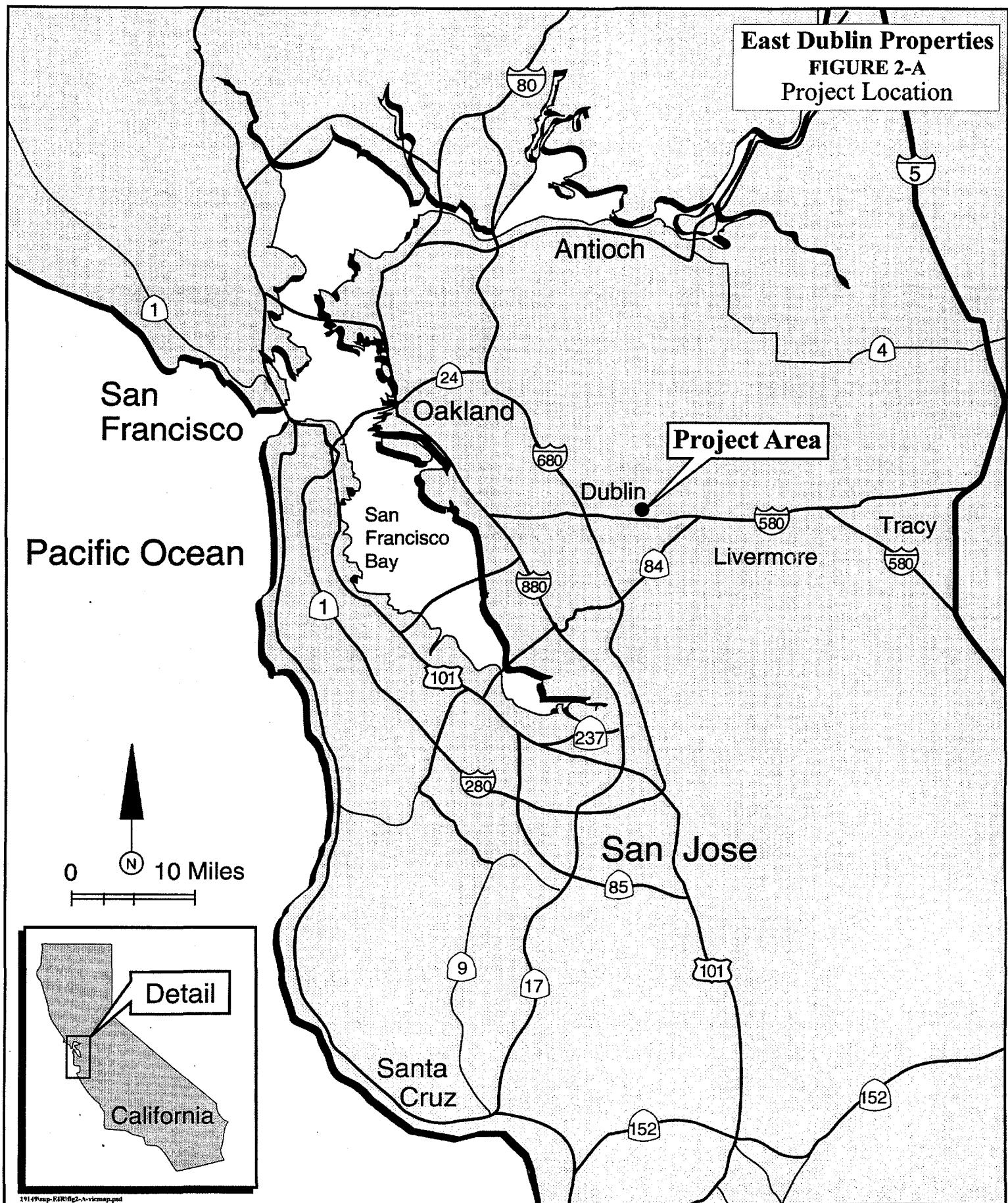
Land Use Type	Gross Acres	Proposed Project (Midpoint)
Single Family Residential (0.9 - 6 du/acre)	433.5	1,734 dwellings
Medium Density Residential (6.1 - 14 du/acre)	9.4	94 dwellings
Medium / High Density Residential (14.1 - 25 du/acre)	34.8	696 dwellings
Rural Residential/Agriculture (1 du/100 acres or parcel)	269.1	2 dwellings
Future Study Area <sup>1</sup>	92.6	No development assumed
General Commercial (0.25 FAR)	41.0	446,490 sq. ft.
Neighborhood Commercial (0.30 FAR)	10.3	134,600 sq. ft.
Industrial Park (max. 0.28 FAR)	68.9	840,360 sq. ft.
Junior High School	14.6	N/A
Elementary School	17.3	N/A
Community Park	14.1	N/A
Neighborhood Park	24.0	N/A
Neighborhood Square	2.7	N/A
Open Space	76.9	N/A
<b>Totals</b>	<b>1,109.2<sup>2</sup></b>	<b>2,526 du</b> <b>1,421,450 sq. ft.</b>

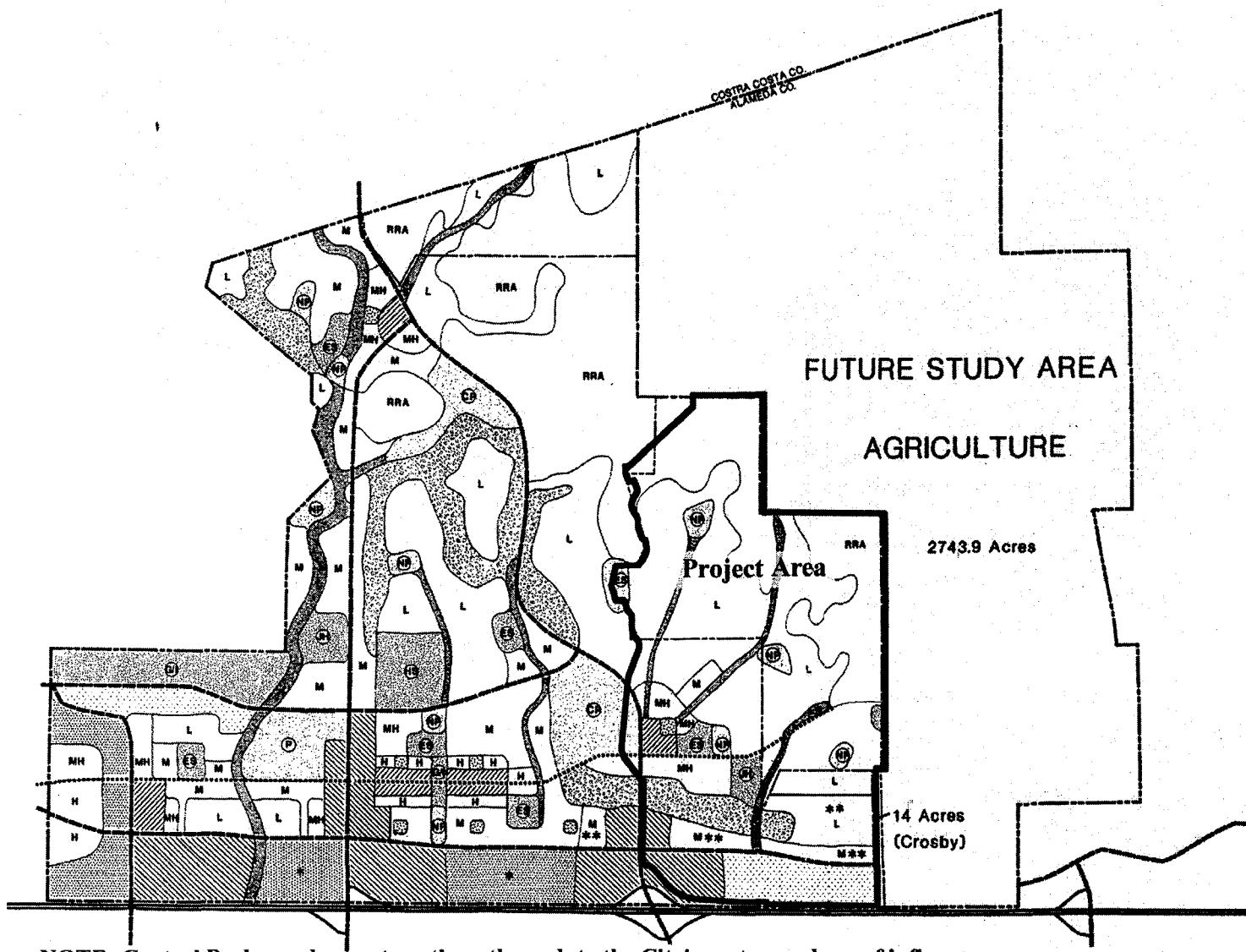
Notes:

<sup>1</sup>Future Study Area indicates a land use designation for properties located within the Airport Protection Area. These areas will require future additional City review and action to determine appropriate land uses.

<sup>2</sup>Acreage total is less than the 1,120-acre Project area because it omits acreage utilized for public rights of way.

**East Dublin Properties**  
**FIGURE 2-A**  
**Project Location**





**NOTE:** Central Parkway does not continue through to the City's eastern sphere of influence.

(Please refer to Figure 5.1B of the Dublin General Plan).

\*General Commercial may be permitted by a Planned Development Zoning Process (see text for complete discussion)

\*\* Will convert to Future Study Area/Agriculture where determined inconsistent with APA (see text for complete discussion)

## General Plan -Eastern Extended Planning Area

### LAND USE MAP

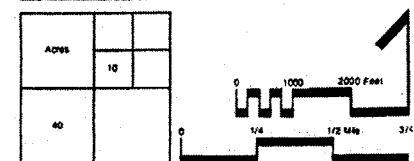
#### Legend

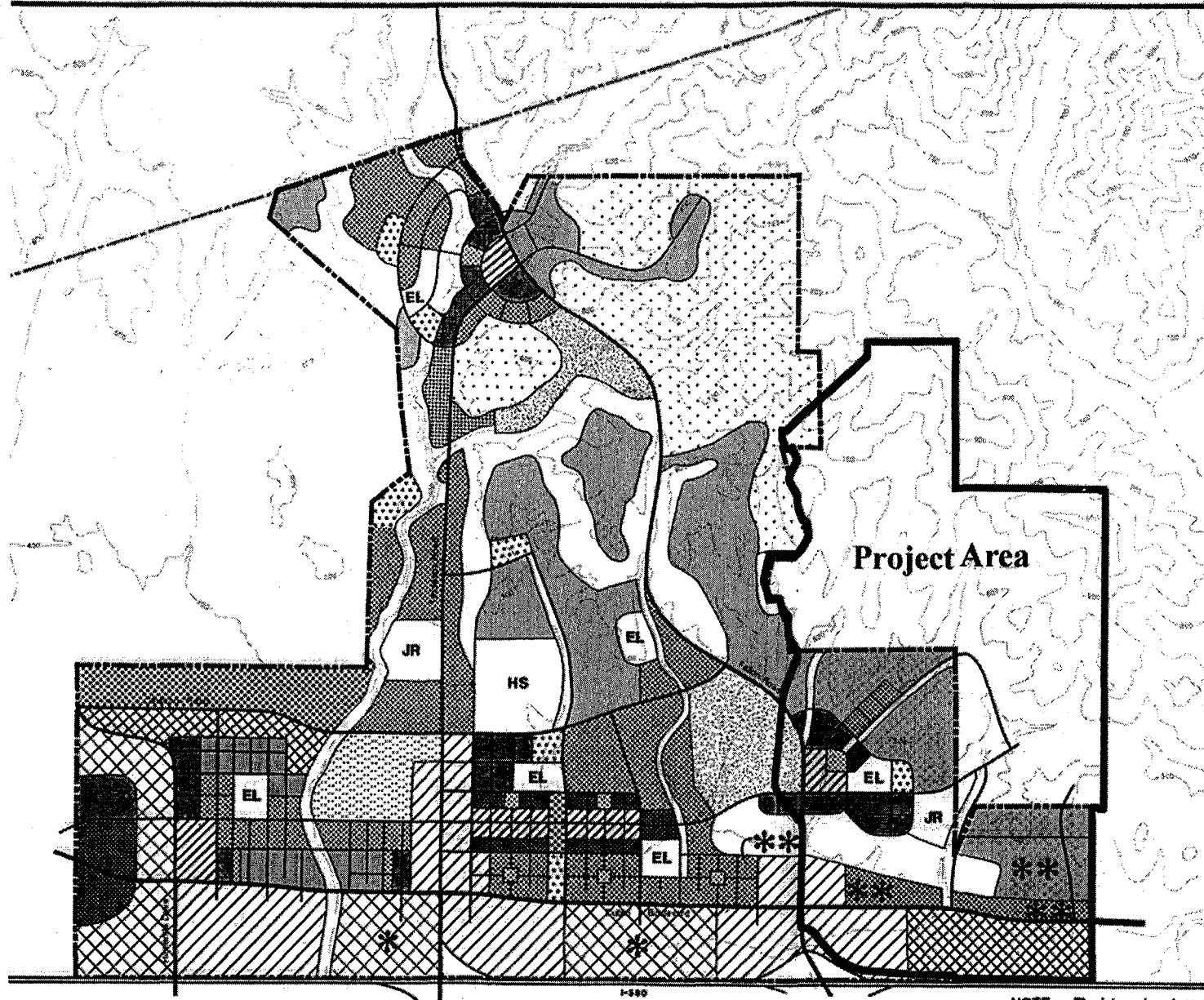
<b>COMMERCIAL</b>	
	Neighborhood Commercial
	General Commercial
	Campus Office
	Industrial Park
<b>RESIDENTIAL</b>	
H	High Density 25 du/ac
MH	Medium-High Density 14-25 du/ac
M	Medium Density 6-14 du/ac
L	Low Density 0-6 du/ac
RRA	Rural Residential/Agriculture 1 du/100 ac
<b>PUBLIC/SEMI-PUBLIC/OPEN</b>	
	Public/Semi-Public Facility
(E)	Elementary School
(JH)	Junior High School
(HS)	High School
(PS)	Public/Semi-Public
	Parks & Recreation
(C)	City Park
(CP)	Community Park
(NP)	Neighborhood Park
	Neighborhood Square
	Open Space
	Stream Corridor
<b>CIRCULATION</b>	
	Arterial Street
	Collector Street
	Transit Spine
	SOI Boundary
	General Plan Amendment Study Area
	Specific Plan Study Area

May 10, 1993

## EASTERN DUBLIN

Wallace Roberts & Todd





## Land Use Map

### Legend

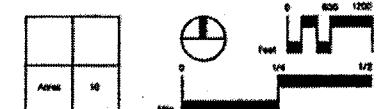
	Roads
<b>RESIDENTIAL</b>	
	Rural Residential/ Agriculture .01 du/ac
	Single Family 0.9-6.0 du/ac
	Medium Density 6.1-14.0 du/ac
	Med-Hi Density 14.1-25.0 du/ac
	High Density 25.1 + du/ac
<b>COMMERCIAL/INDUSTRIAL</b>	
	General Commercial
	Neighborhood Commercial
	Campus Office
	Industrial Park
<b>PUBLIC/SEMI-PUBLI</b>	
	Public/Semi-Public
	Elementary School
	Junior High School
	High School
<b>PARKS AND OPEN SPACE</b>	
	Neighborhood Square
	Neighborhood Park
	Community Park
	City Park
	Open Space

## EASTERN DUBLIN Specific Plan

Wallace Roberts & Todd

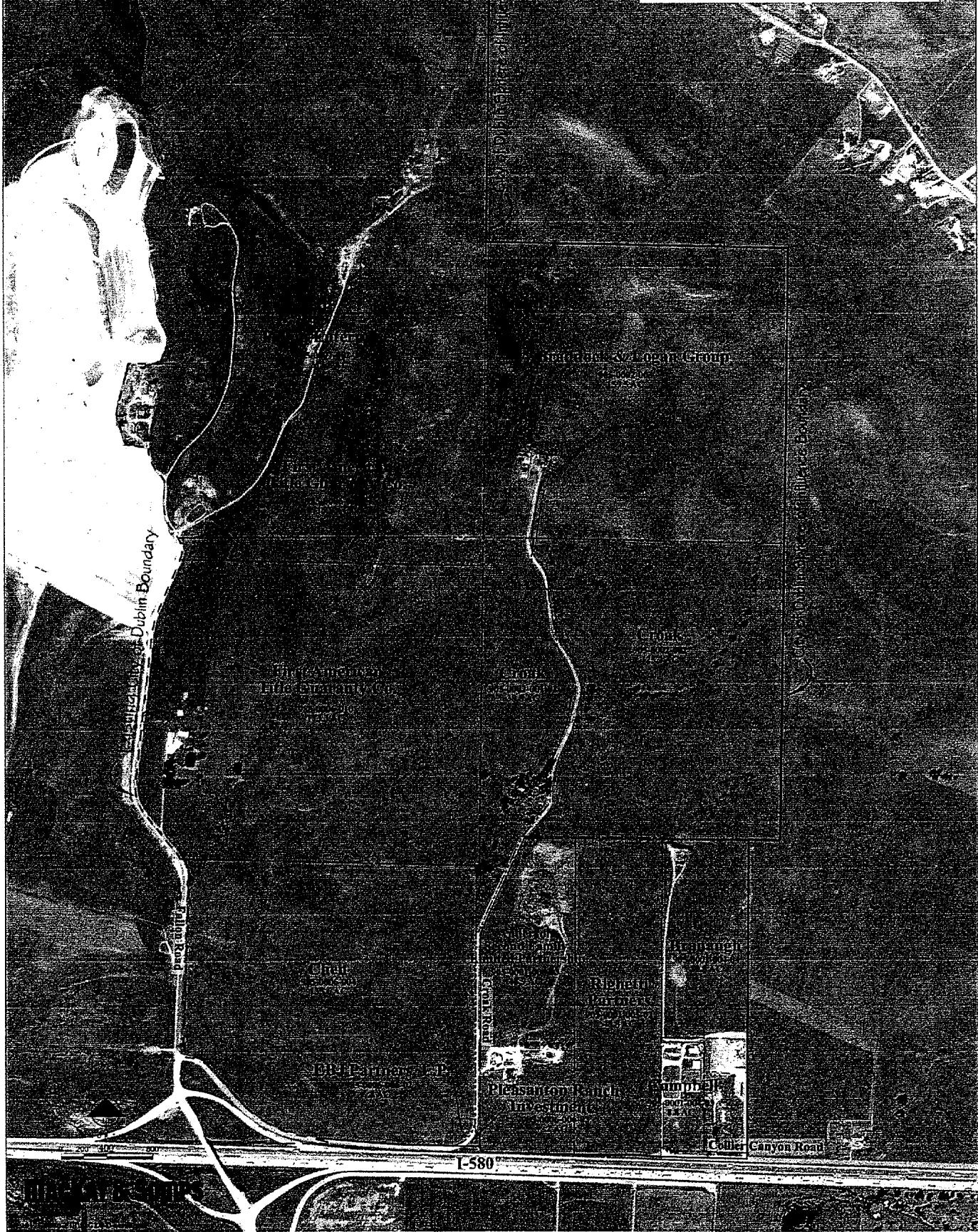
Urban and Environmental Planners  
121 Second Street, 7th Floor  
San Francisco, CA 94105  
(415) 541-0830

January 7, 1994

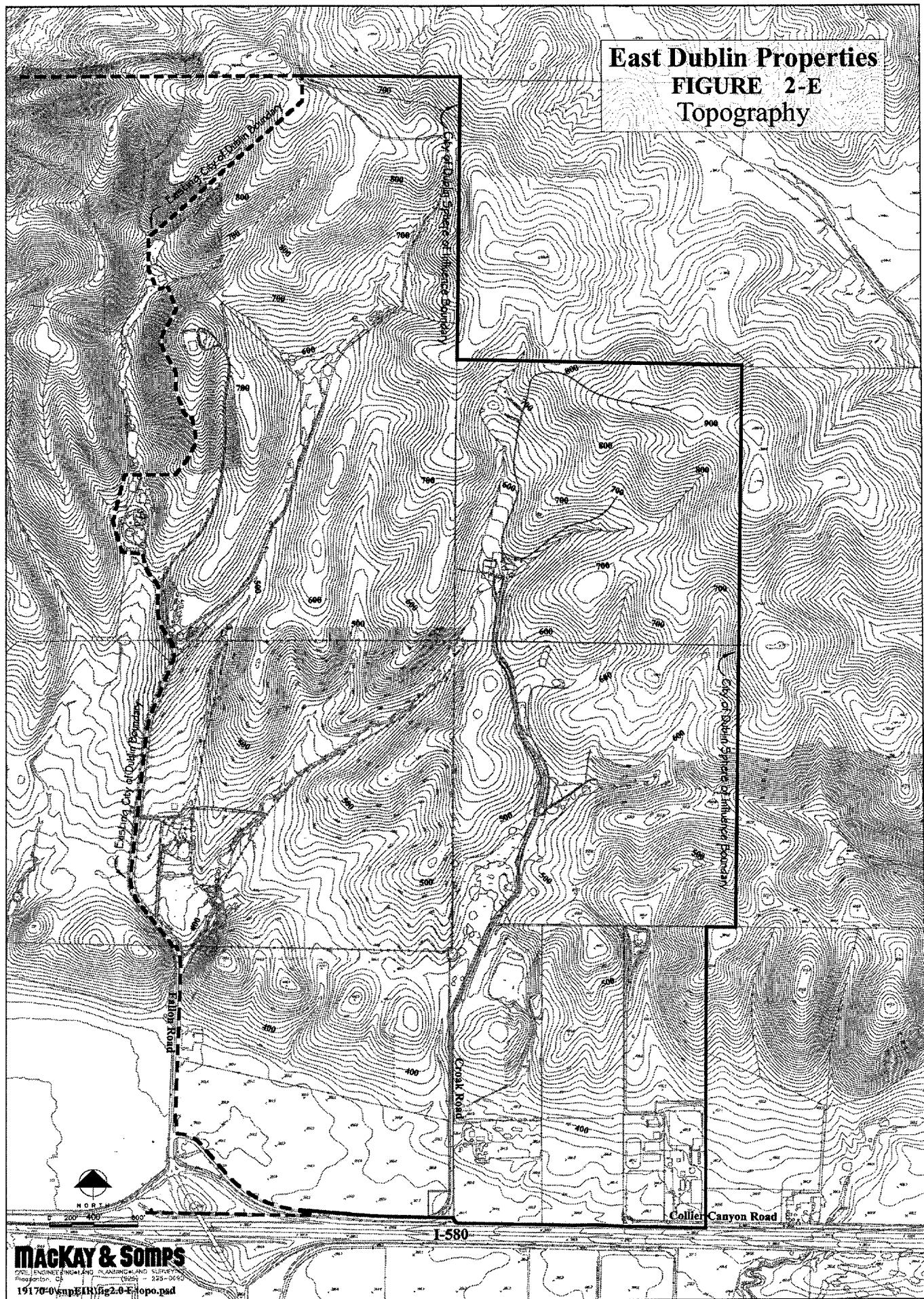


East Dublin Properties  
FIGURE 2-C

**East Dublin Properties**  
**FIGURE 2-D**  
Parcel Ownership-Aerial View

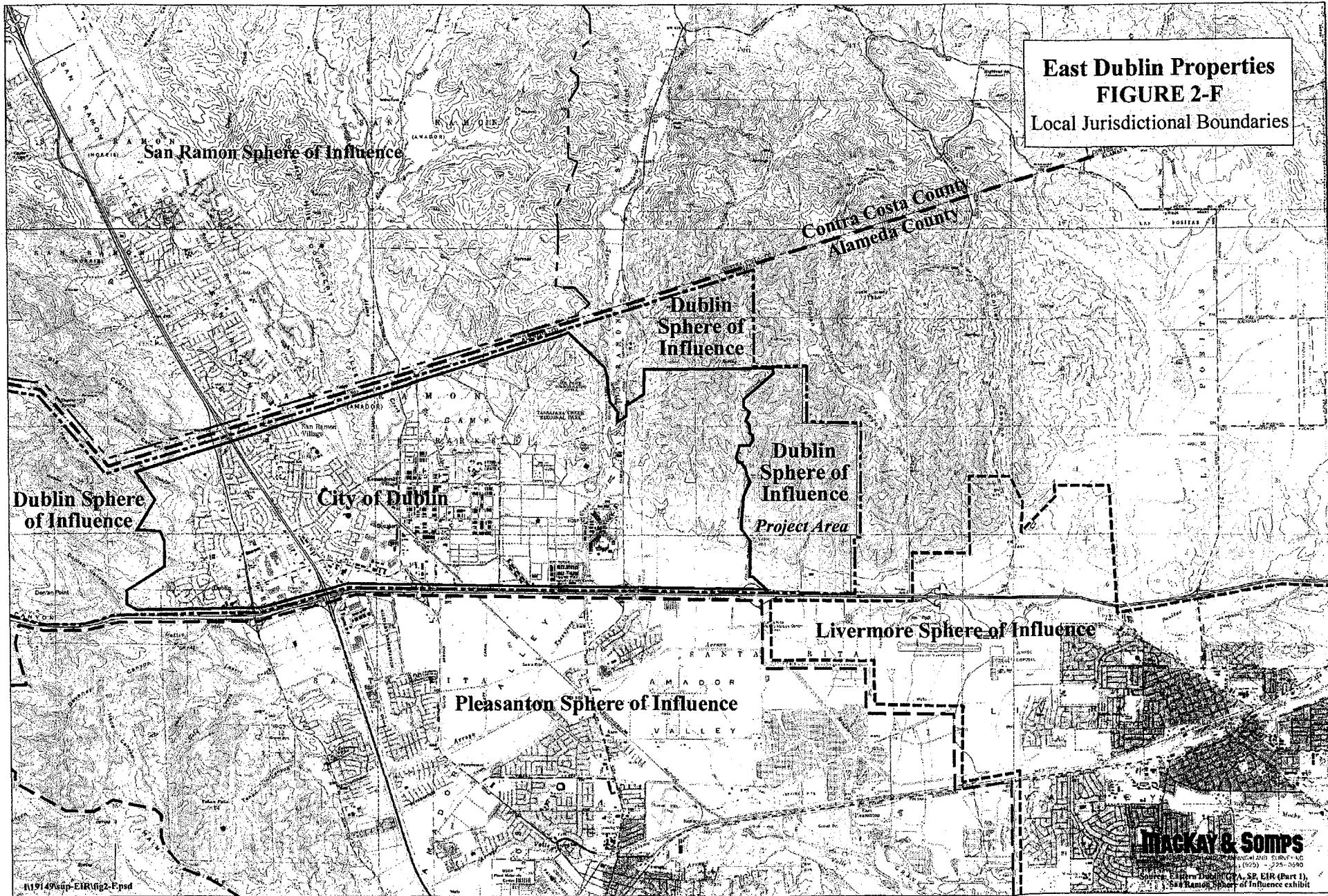


**East Dublin Properties**  
**FIGURE 2-E**  
**Topography**

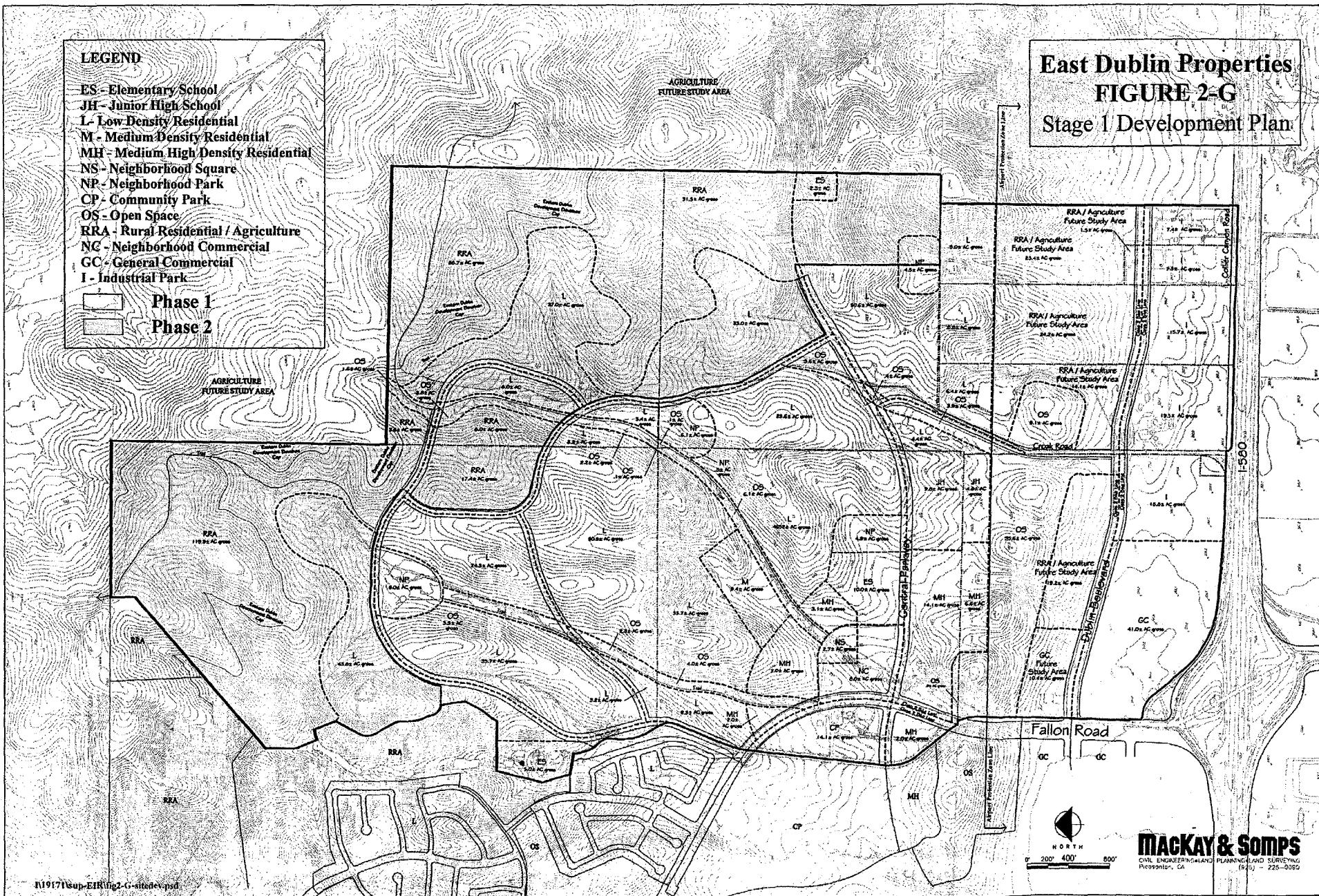


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**East Dublin Properties**  
**FIGURE 2-F**  
Local Jurisdictional Boundaries



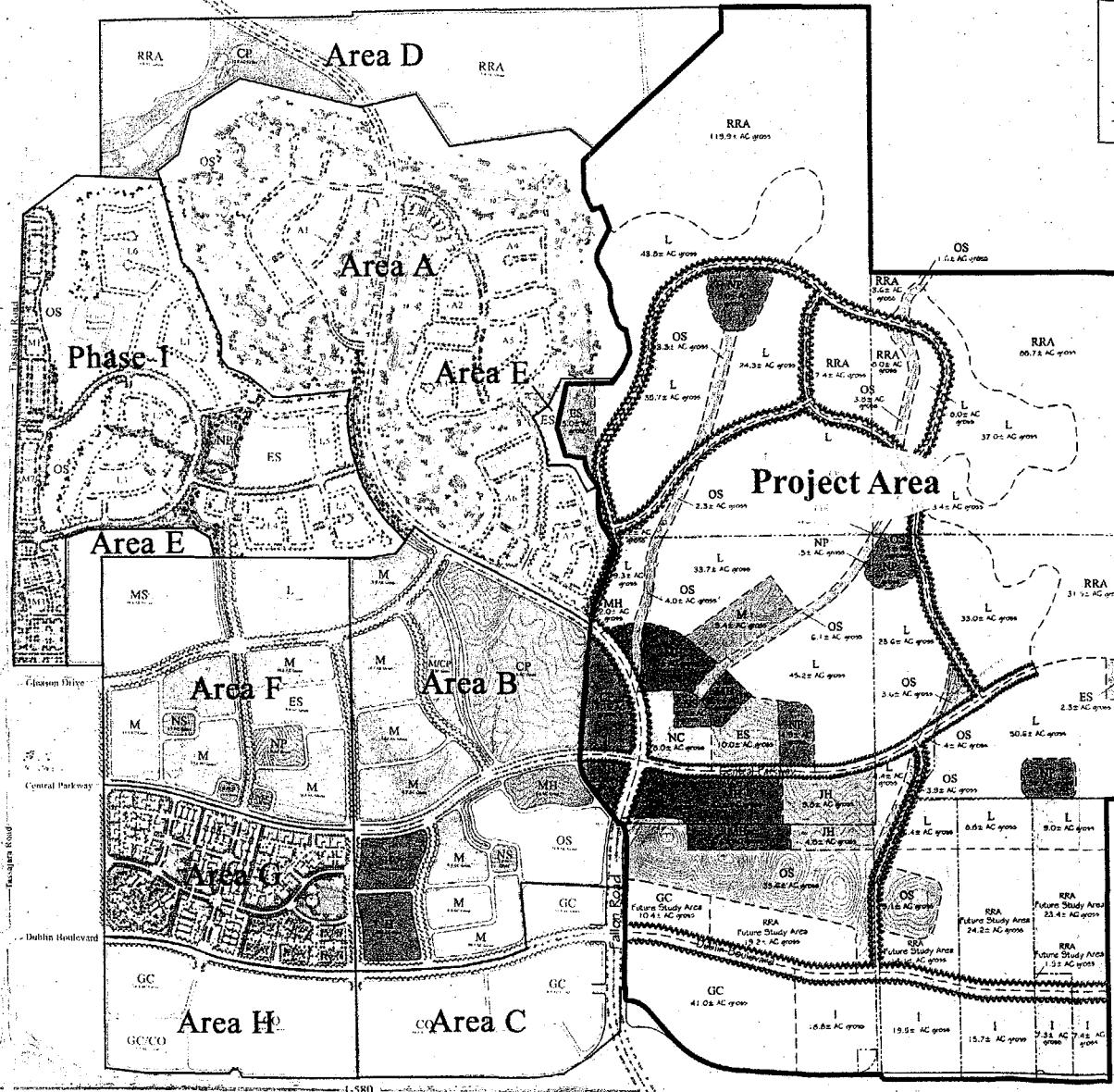
63 of 238



64 of 238

**East Dublin Properties  
FIGURE 2-H  
Project Site and Dublin Ranch**

Legend
High Density Residential
Medium High Density Residential
Medium Density Residential
Low Density Residential
Rural Residential/ Agriculture
Neighborhood Commercial
General Commercial
Industrial
Public/ Semi-Public
Elementary School
Middle School
High School
Community Park
Neighborhood Park
Neighborhood Square
Open Space

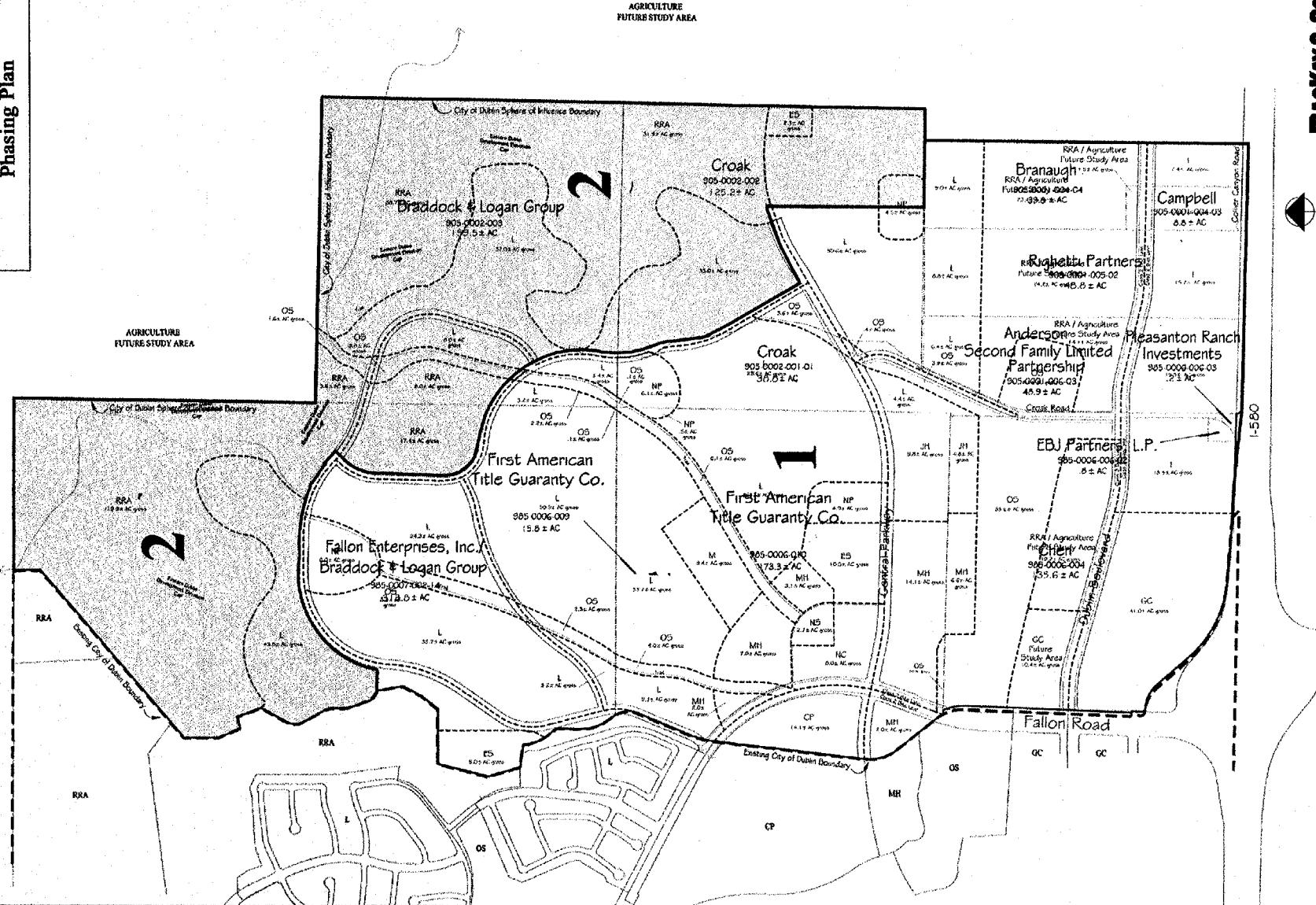


**MACKAY & SONS**  
LAND PLANNING & DEVELOPMENT

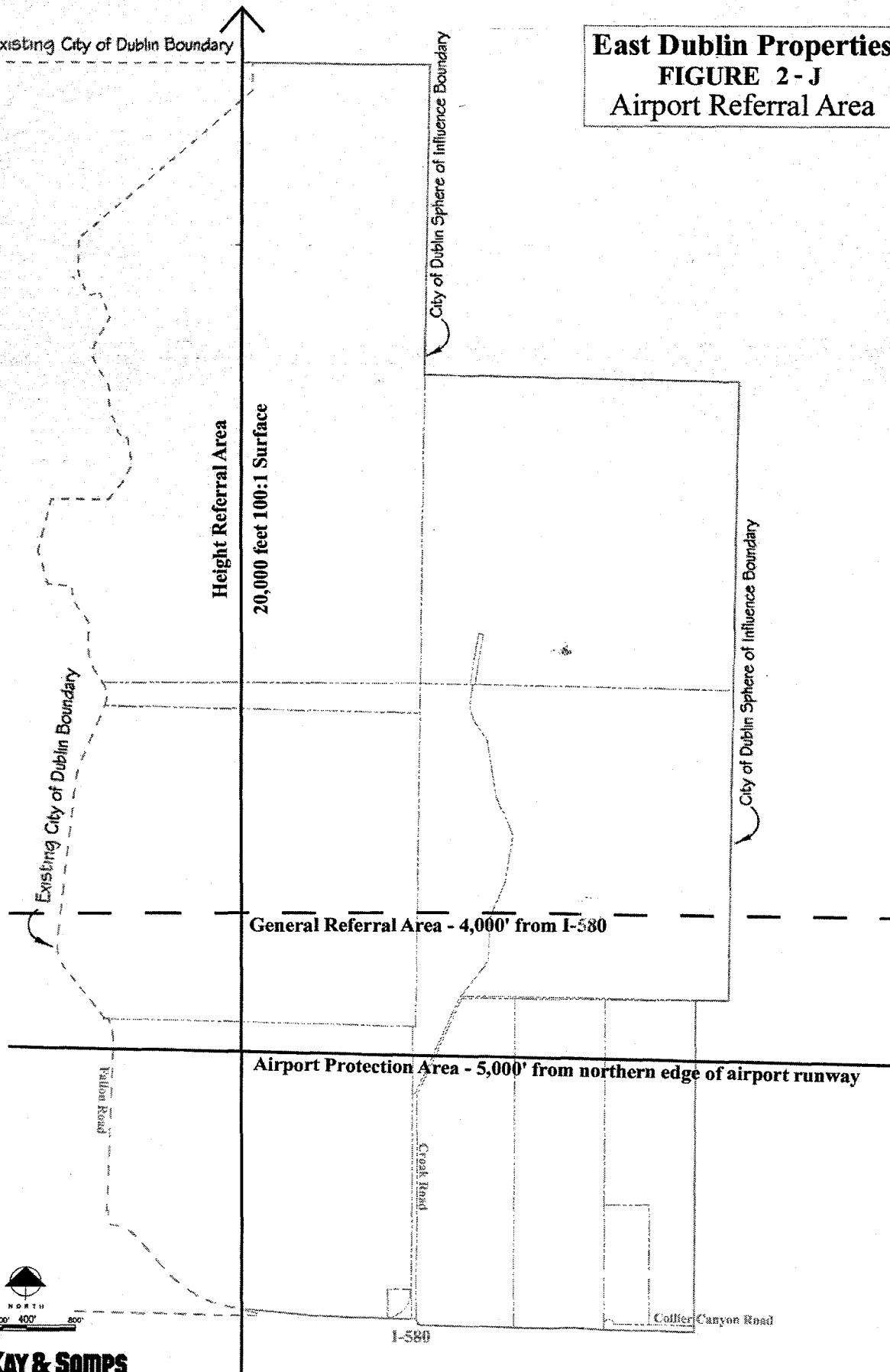
## **East Dublin Properties**

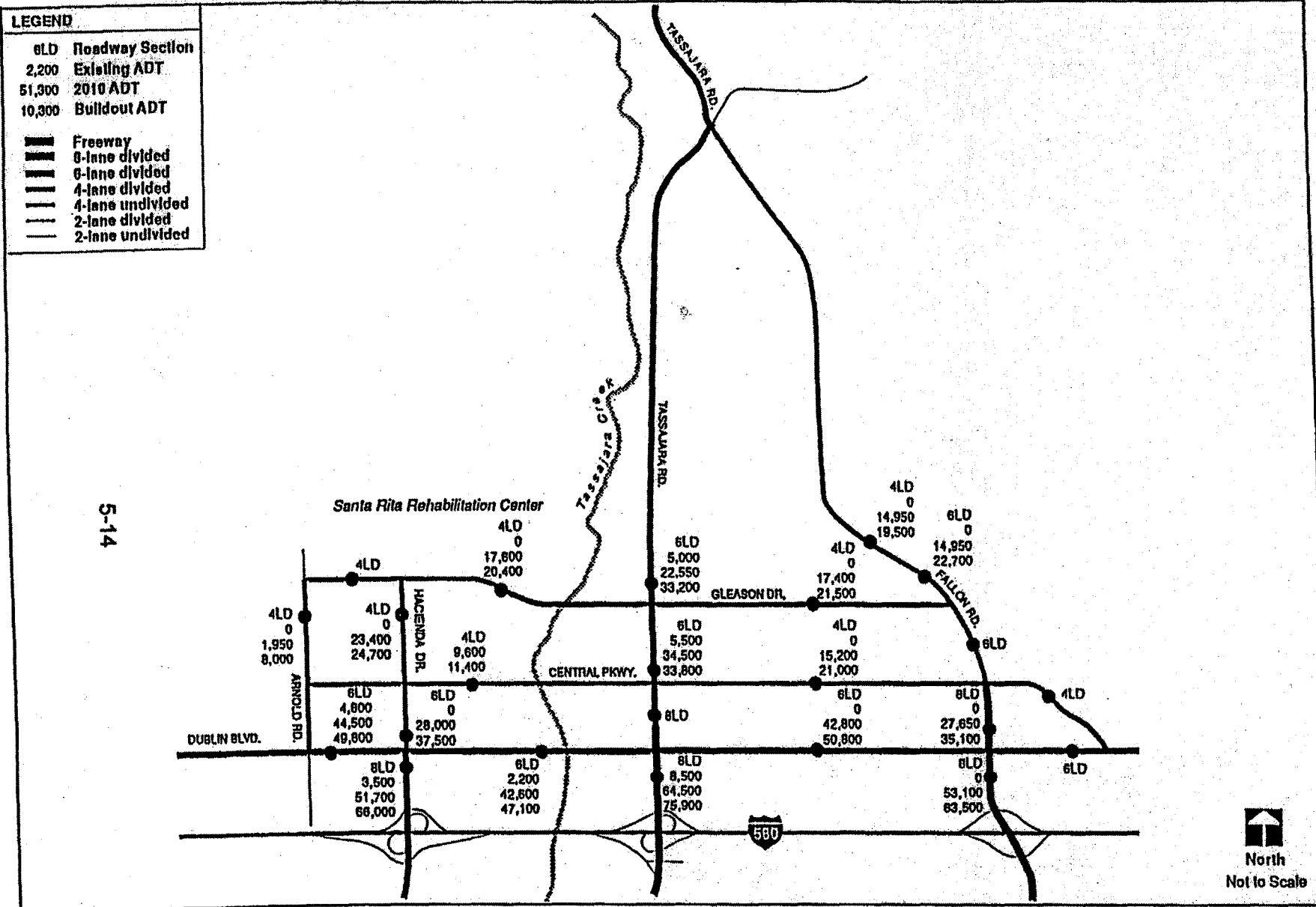
### **FIGURE 2-1**

#### **Phasing Plan**



**East Dublin Properties**  
**FIGURE 2 - J**  
**Airport Referral Area**



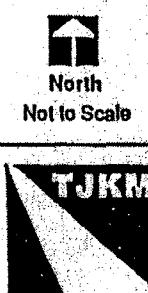


Dublin General Plan  
East Dublin Existing and 2010 Projected Traffic Volumes—  
2010 and Beyond Network

47-001-T54-B97-NA

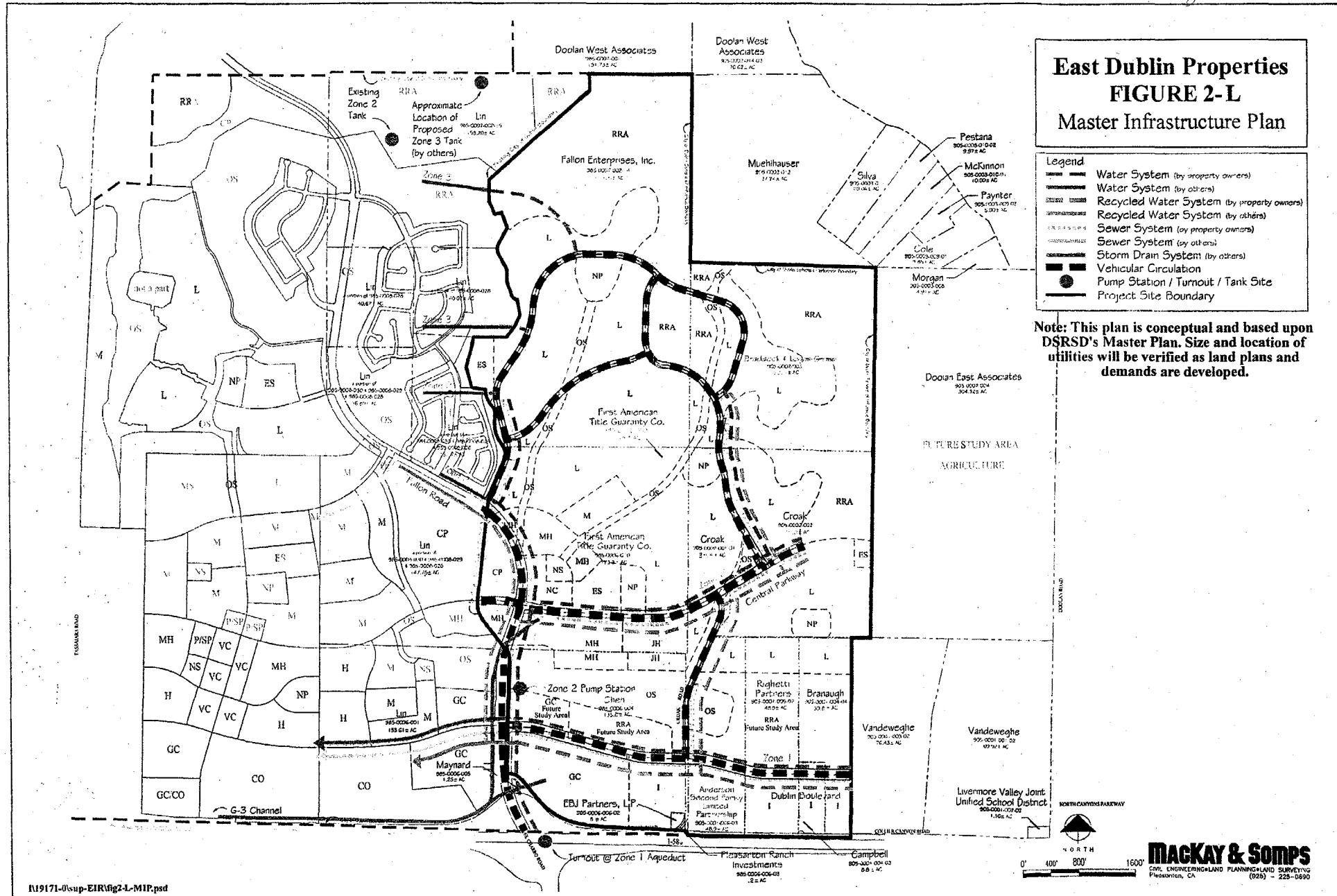
Figure  
5-1b

East Dublin Properties  
FIGURE 2-K



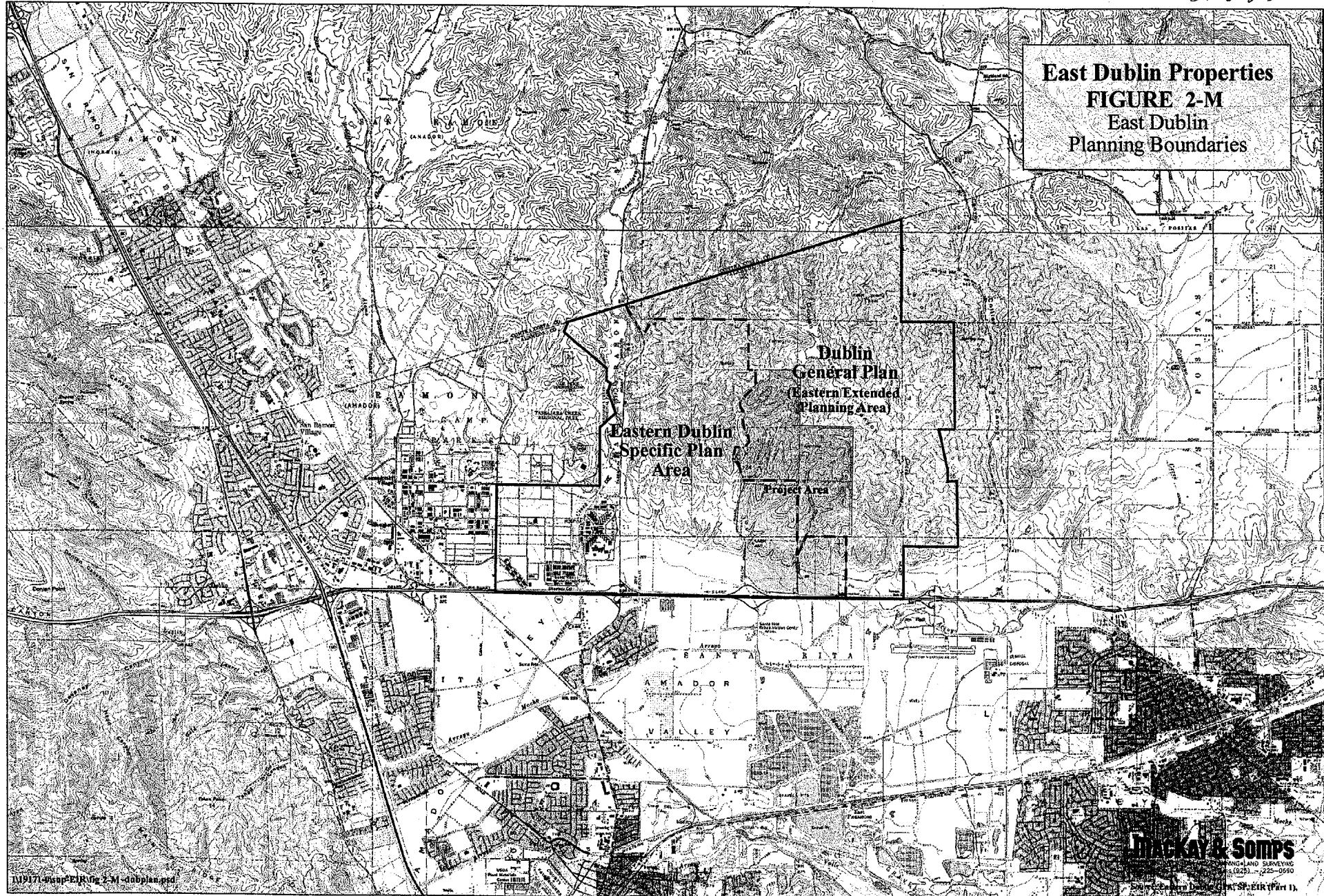
5-1b  
2010  
Projected  
Traffic  
Volumes

68 of 238



69 & 238

**East Dublin Properties**  
**FIGURE 2-M**  
East Dublin  
Planning Boundaries



### 3.0 ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

The Initial Study determined that there was the potential for new or substantially increased significant impacts in the impact categories Agricultural Resources, Air Quality, Biological Resources, Noise, Schools, Transportation/Circulation, and Utilities/Service Systems; all of which are addressed in this chapter.

### 3.1 AGRICULTURAL RESOURCES

Agricultural resources were analyzed in Chapter 3.1, Land Use, of the Eastern Dublin EIR. In 2000, the Cortese-Knox-Hertzberg Local Government Reorganization Act (AB 2838) extensively modified the state's annexation law. Among the modifications was a new definition of "prime" agricultural lands. This supplement to the Eastern Dublin EIR examines whether previously identified agricultural conversion impacts would be increased substantially under the recently enacted definition of prime agricultural lands. It also examines whether the potential for cancellation of Project area Williamson Act contracts would result in new or substantially increased significant impacts.

#### ENVIRONMENTAL SETTING

The Eastern Dublin EIR contains a description of agricultural resources on and around the Project area at the time of certification. Agricultural and grazing uses predominated within the Project area and throughout the GPA/SP area. While urban development has commenced pursuant to the adopted GPA/SP in lands west of the Project area, the annexation and rezoning area remains largely in agriculture, grazing and rural residential use.

Approximately one-half of the area within the Project area is subject to Williamson Act contracts and Notices of Non-Renewal have been filed on all such lands. The contracts will expire beginning in 2006, with the last expiration in 2010. Table 3.1-1 and Figure 3.1-A identify the contract status for the parcels that have filed for Non-Renewal. The remaining parcels in the Project area and immediately adjacent to the area are not under Williamson Act contract. Some Project property owners are expected to request cancellation of their contracts prior to expiration. None of these parcels contain "prime agricultural land." (Compare SEIR, Figure 3.1-A with Figure 3.1-B.)

**TABLE 3.1-1**  
**PROJECT AREA WILLIAMSON ACT CONTRACTS OWNERSHIP AND CONTRACT STATUS**

Assessor's Parcel Number	Owner	Acres	Non-Renewal Year	Expiration
985-0007-002-14	Fallon Enterprises	313.8	1996	2-20-06
905-0002-002	Croak	124.2	2000	1-01-10
905-0002-001-01	Croak	37.8	2000	1-01-10

Source: Alameda County Community Development Agency

Source: Eastern Dublin GPA/SP EIR, 1992; Alameda County Recorders Office, 2001.

Future development of the Project area will implement the land uses and densities approved for the area through the Eastern Dublin GPA/SP. As future implementing projects are approved and built, the current agricultural lands will convert to urban uses, as anticipated in the GPA/SP and analyzed in the Eastern Dublin EIR.

#### IMPACTS AND MITIGATIONS FROM THE EASTERN DUBLIN EIR

The Eastern Dublin EIR analyzed conversion of agricultural lands to urban uses, focusing on farmlands of local importance, prime agricultural lands, and lands subject to Williamson

Act contract. Much of the Project area supports farmlands "of local importance" (see Figure 3.1-B). Farmlands "of local importance" are defined as those that contribute to local production of food, feed, fiber, forage and oilseed crops. The agricultural lands in the Project area are of local importance for grazing. Generally, areas of locally important farmland on the Project area occur in the flatter or gently sloped portions while lands designated as "Other" on Figure 3.1-B are located in the northern, steeper portions. "Other" soils include all soils not of local or statewide importance.

The Eastern Dublin EIR also identified approximately 200 acres of prime agricultural land in the southern portion of the GPA/SP area, based on the then-applicable definition (for annexation purposes) of "prime agricultural lands" contained in Section 56064 of the Cortese-Knox Act (Eastern Dublin EIR, response to comment 24-3; Figure 3.1). Impact 3.1/D assumed the complete loss of farmlands of local importance throughout the GPA/SP area, including the loss of prime agricultural lands. The Eastern Dublin EIR determined that the loss of agricultural lands was not a significant impact because: 1) the area of prime farmland comprises a relatively small portion of a much larger area of non-prime farmland; 2) maintaining this land in agricultural uses would deter the orderly and efficient development of the area; 3) the area's conversion would not threaten any other prime farmland with urbanization; 4) none of the three affected landowners had any intention of farming the land; and 5) the area of prime agricultural soils already lie within the City's sphere of influence (Eastern Dublin EIR, response to comment 24-3.).

Addressing conversion to urban uses more generally, the Eastern Dublin EIR noted that approximately one-half of the GPA/SP area agricultural activity would be lost to future development. Because 61% of Williamson Act lands already had filed for non-renewal and with the "relatively limited value of the non-prime soil," Impact 3.1/C identified discontinuation of agricultural uses as less than significant. Although finding GPA/SP-wide loss of agricultural lands less than significant, the Eastern Dublin EIR identified cumulative loss of agricultural and open space lands as a significant unavoidable impact. (Eastern Dublin EIR, response to comment 34-9, Impact 3.1/F.) Upon approval of the Eastern Dublin GPA/SP, the City adopted a Statement of Overriding Considerations for this impact (Appendix B).

Impact 3.1/E examined the indirect effects of Williamson Act non-renewal on agricultural lands and found them less than significant. Cancellation rather than non-renewal of Williamson Act contracts is not addressed separately in the EIR discussions although it was anticipated as a potential future activity that would require a formal petition, public hearings, findings and a resolution (Eastern Dublin DEIR 2-15 to -17).

Finally, the Eastern Dublin EIR reviewed the policies to be considered by LAFCO pursuant to the Cortese/Knox Act (section 56377) and found that the GPA/SP was not in conflict with either of those policies.<sup>1</sup> Those policies were (1) that development should be guided away from prime agricultural lands unless such action would not promote the planned, orderly, efficient development of the area; and (2) that existing vacant or non-prime agricultural lands within the existing sphere of influence should be developed before any proposal is approved which would allow for the development of open space lands outside the existing sphere of influence. (Response to Comment 24-3.)

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<sup>1</sup> It should also be noted that with respect to an earlier Eastern Dublin annexation proposal (that included the prime agricultural lands discussed in the Eastern Dublin EIR), LAFCO found that preserving the lands would not promote planned and orderly development and therefore conversion was consistent with Cortese-Knox. (See Alameda LAFCO November 10, 1994 Agenda Report, Item 9, p. 11; Alameda LAFCO Resolution 94-21.)

## SUPPLEMENTAL IMPACTS AND MITIGATION MEASURES

The Cortese-Knox Act (Gov. Code sections 56000 et seq. governed annexations when the Eastern Dublin EIR was certified. The Act recently was amended by AB 2838 (Stats. 2000, chap. 761) to, among other things, revise the definition of prime agricultural lands. Pursuant to the Initial Study for the annexation and rezoning Project, this supplement examines whether the revised definition of prime agricultural lands would result in more lands qualifying as prime than at the time of the Eastern Dublin EIR certification. It also examines whether expiration of Williamson Act contracts on the Project area through cancellation rather than non-renewal would be a new significant impact.

### Significance Criteria

Agricultural resource impacts would be significant if the Project would convert prime agricultural land to non-agricultural use or impair the productivity of prime agricultural land to a substantially greater degree than analyzed in the Eastern Dublin EIR.

**Supplemental Impacts.** No supplemental impacts are expected from the revised definition of prime agricultural lands or from cancellation of Project area Williamson Act contracts.

**Prime Agricultural Lands.** Under AB 2838, soils are considered prime agricultural land if they meet any of the following criteria:

- NRCS rating of Class I or Class II, if irrigated, provided irrigation is feasible
- Storie Index rating of 80-100
- Supports livestock used for food or fiber and has an annual carrying capacity of at least one animal-unit per acre
- Planted with fruit or nut trees, or other unprocessed agricultural plant products with production of \$400/acre or more in the past five years

A soils report prepared for the Project proponents evaluated the potential for prime agricultural lands on the area based on the newly enacted definition (Appendix C, Berloger Prime Agricultural Land Evaluation (February 7, 2001). It determined that the Project soils fail in each of the specific tests required for classification of prime agricultural lands.

Specifically, as to the first criterion, while there are about 100 acres of Class I and II soils in the Project area, the area could not feasibly be irrigated by either surface or groundwater supplies. As demonstrated in the Berloger Prime Agricultural Land Evaluation (February 7, 2001), the Berloger Report (October 3, 2001, Letter to Ms. Connie Goldade, MacKay and Somps), and the MacKay and Somps Draft Agricultural Lands Irrigation Cost Estimate (January 11, 2002) [all included in Appendix C], irrigation using ground, surface, reclaimed, and/or potable water is not feasible within the Project area.

Inasmuch as the Project includes annexation of the Project area to DSRSD, it is logical to assume that water to irrigate the area would come from DSRSD and not from other water retailers, such as Livermore. DSRSD's high cost associated with installation of infrastructure necessary to provide reclaimed water to an area currently not served by reclaimed water and DSRSD's rate structure which prices reclaimed water similar to potable water would make it economically infeasible to irrigate the lands. Zone 7's new transmission facility (North Valley Pipeline) is a treated water pipeline. Because of the cost of treated water, it would be infeasible to use water from this facility for agriculture.

The City of Dublin commissioned a review of the potential of prime agricultural soils within the Project area by an independent consultant. Dr. Ronald Amundsen, a professor of soil

science at UC Berkeley. Dr. Amundsen's report (dated December 17, 2001), included in the DSEIR in Appendix C, concludes that there is one soil type (Rincon clay loam) that has a Land Capability class of II, if irrigated. The acreage of potential Class II soil is 70 acres. The 70 acres are part of the 100 acres identified by the Berloger report. However, as discussed above, it is not economically feasible to provide irrigation water to the Project area. Therefore no prime agricultural soils are located within the Project area based on the first of the four criterion of AB 2838.

The other three classification criteria within the new definition are not met. The Berloger report identified Storie Index ratings of 16 to 65 on the area, below the 80 rating required to qualify for prime agricultural soils. The report also found that the grazing capacity of the lands is approximately one animal-unit per 10 acres, and that the land has not been used for fruits, nuts, or other unprocessed agricultural plant products in the past five years.

Thus, there are no additional prime agricultural lands in the Project area beyond those at the time the Eastern Dublin EIR was certified.

Since no new significant impacts related to prime agricultural lands have been identified in this DSEIR, no mitigations are needed.

Mitigation measures for loss of agricultural lands, including use of conservation easements, adding new lands to agricultural production and requiring a per-acre mitigation fee, have been considered by other public agencies. Because no new or additional significant impacts have been identified in this DSEIR no new mitigation measures are needed. Mitigation measures of the type described above are considered land use regulatory tools and, as such, are not required to be addressed in this document.

***Cancellation of Existing Williamson Act Contracts.*** Some Williamson Act contracts have expired since certification of the Eastern Dublin EIR. Notices of non-renewal have been filed on all other contracted lands within the Project area. As noted in Impact 3.1/F of the Eastern Dublin EIR, non-renewal of Williamson Act contracts is not considered an environmental impact under CEQA, although it is a planning concern.

Some property owners within the Project area may request cancellation of their Williamson Act contracts. Such cancellations would accelerate the expiration of the contracts and likely accelerate the conversion of agricultural lands to urban uses. However, the result of expiration or cancellation would be the same either way, in that existing agricultural uses would be converted to urban uses as provided for in the adopted General Plan and Specific Plan. The Eastern Dublin EIR thoroughly analyzed the conversion of agricultural uses throughout the GPA/SP area. The Eastern Dublin EIR assessed the conversion of agriculture to urban uses. The fact that the conversion may occur sooner as a result of cancellation of the Williamson Act contracts does not change the analysis, nor result in additional significant impacts beyond those assessed in Eastern Dublin EIR. Therefore, requests for cancellation of Williamson Act contracts on the Project area is not a significant new impact or a substantially increased significant impact, beyond those analyzed in the Eastern Dublin EIR.

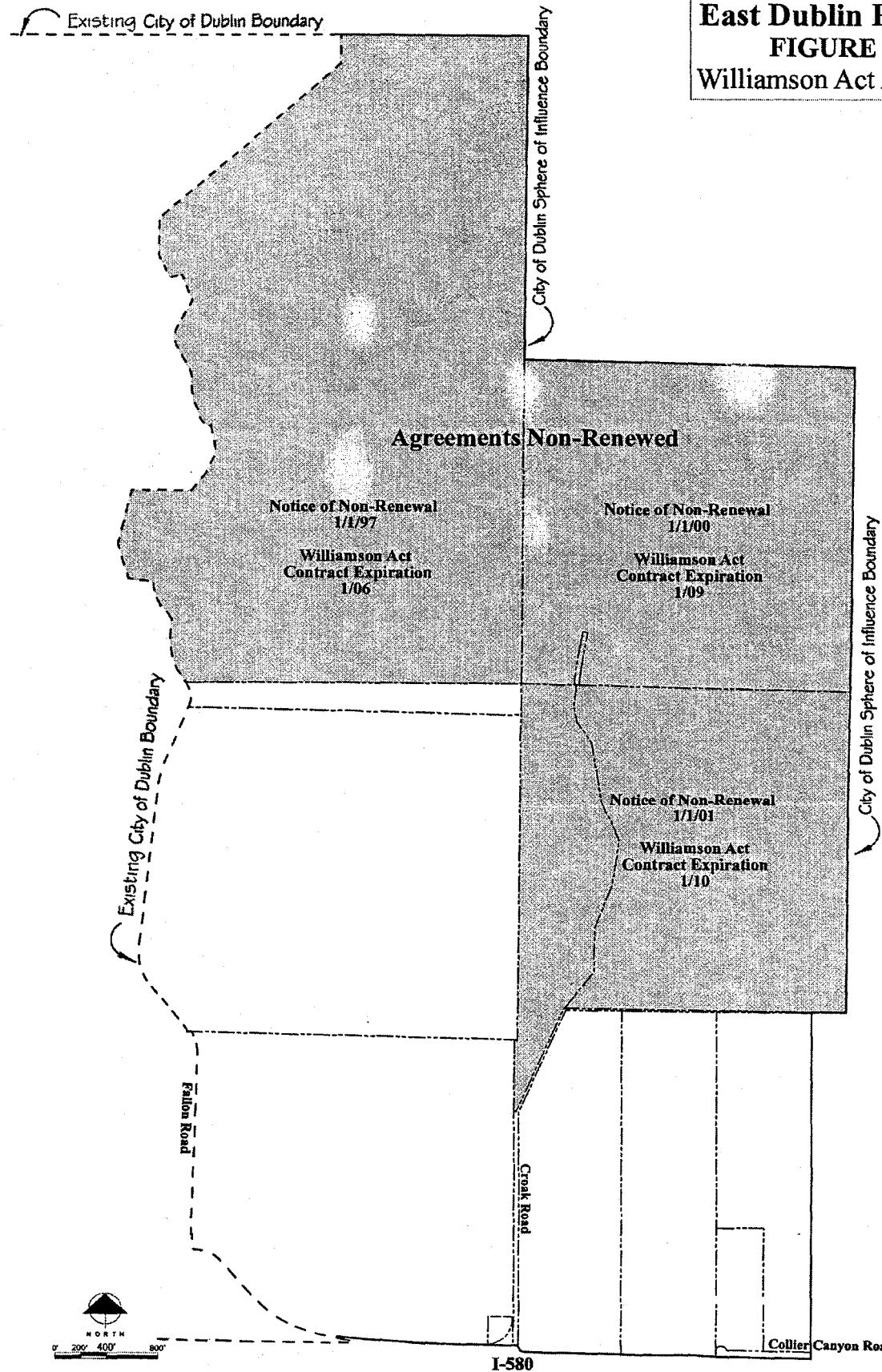
In the event a cancellation request eventually were submitted to the City, the request would be subject to the procedures noted in the Eastern Dublin EIR. Any approval of the request is subject to strict findings requirements of Government Code section 51282, including the following: 1) that the cancellation is consistent with the purposes of the Williamson Act; or, 2) that cancellation is in the public interest. In order for the City to find that the cancellation is consistent with the purposes of the Williamson Act it must find that the cancellation is

for land on which a notice of non-renewal has been served, that cancellation is not likely to result in the removal of adjacent lands from agricultural use, that cancellation is for an alternative use which is consistent with the applicable provisions of the city or county general plan, that cancellation will not result in discontiguous patterns of urban development, that there is no proximate non-contracted land which is both available and suitable for the use to which it is proposed the contracted land be put, or, that development of the contracted land would provide more contiguous patterns of urban development than development of proximate non-contracted land. Similarly strict findings are required to find cancellation in the public interest.

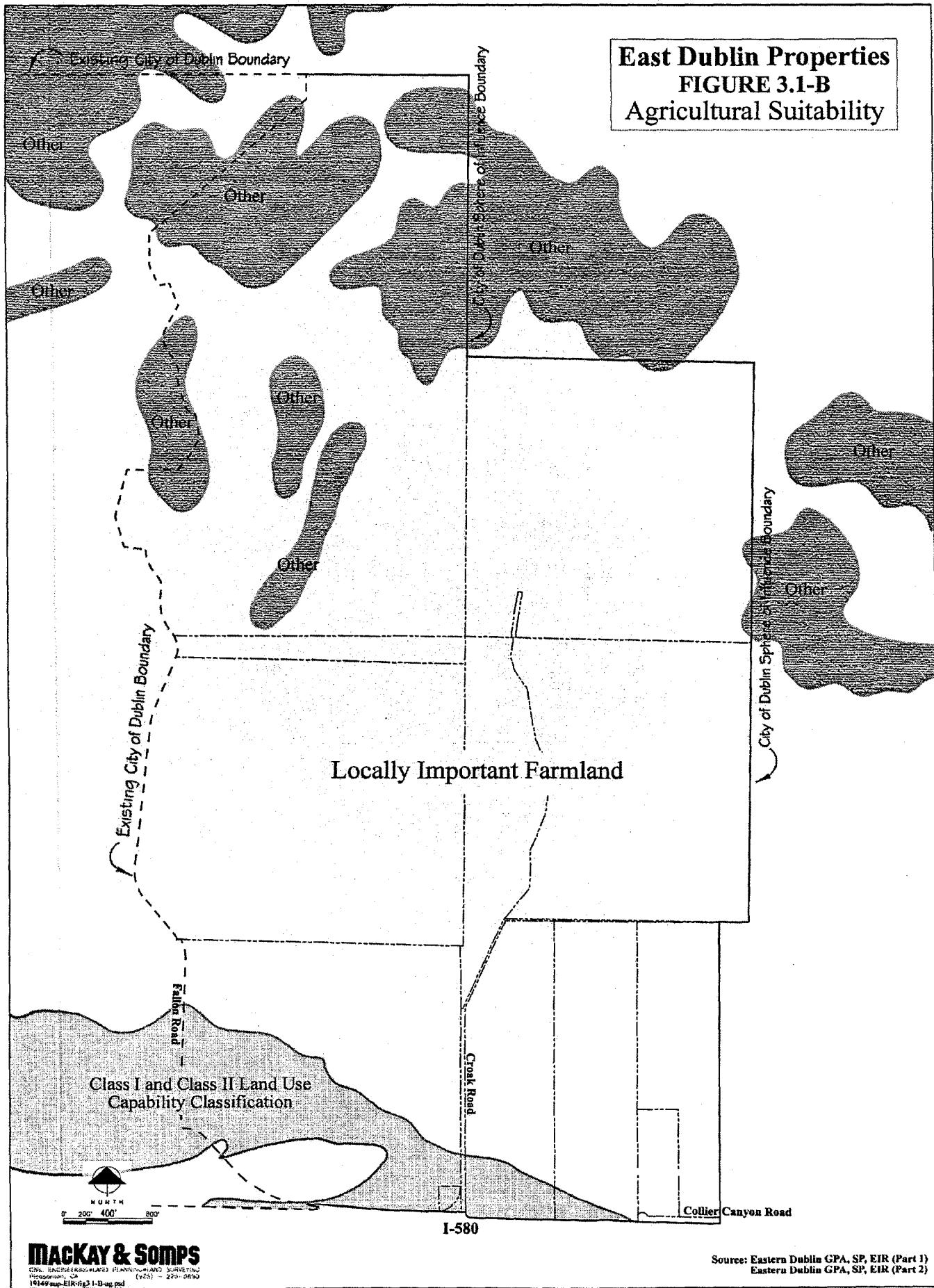
Any cancellation request to the City would also be subject to Dublin General Plan Policy 3.2.A regarding Agricultural Open Space in the Extended Planning Areas as follows.

*Lands currently in the Williamson Act agricultural preserve can remain as rangeland as long as the landowner(s) wish to pursue agricultural activities. The City does not support the cancellation of Williamson Act contracts, unless some compelling public interest would be served.*

**East Dublin Properties**  
**FIGURE 3.1-A**  
**Williamson Act Agreements**



**East Dublin Properties**  
**FIGURE 3.1-B**  
**Agricultural Suitability**



### 3.2 AIR QUALITY

Air Quality was analyzed in Chapter 3.11 of the Eastern Dublin EIR. This supplement to the EIR examines compliance with applicable air basin plans and regulatory standards in light of increases in regional traffic and changes in commute patterns since certification of the Eastern Dublin EIR. This supplement also examines changes in the regulatory standards since the previous EIR (Initial Study pp. 24, 29).

### ENVIRONMENTAL SETTING

The Project area is located in the Tri-Valley Air Basin. Prevailing daytime onshore winds often occur in conjunction with regional capping inversions that trap air pollution within a shallow layer near the ground. Over time, substantial reductions in pollutant emissions throughout the Basin have improved air quality in the Project area and the Tri-Valley region to a point where almost all clean air standards are met on almost every day of the year. Within the Tri-Valley Air Basin state and federal emission standards for nitrogen dioxide, sulfur dioxide and lead are met. However, the Tri-Valley Basin also receives emissions from upwind Bay Area sources. Hence, standards for other airborne pollutants including ozone, carbon monoxide and suspended particulate matter (PM-10) are not met in at least a portion of the Basin some of the time.

### IMPACTS AND MITIGATIONS FROM THE EASTERN DUBLIN EIR

The Eastern Dublin EIR identified significant impacts related to construction, mobile source and stationary source emissions (Impacts 3.11/A, B, C, E). Mitigation measures were adopted to control construction dust and exhaust emissions, and to minimize mobile and stationary source emissions through, among other things, cooperative transportation and air quality planning and transportation demand management. All mitigation measures adopted upon approval of the Eastern Dublin GPA/SP continue to apply to implementing actions and projects such as the proposed annexation and prezoning. Even with mitigation, however, significant cumulative construction, mobile source and stationary source impacts remained. (Impacts 3.11A, 3.11B, 3011C, and 3.11E). Upon approval of the Eastern Dublin GPA/SP, the City adopted a Statement of Overriding Considerations for these significant unavoidable impacts. (Resolution No. 53-93.)

The proposed annexation and prezoning includes the same land uses and densities analyzed in the Eastern Dublin EIR. Therefore, there are no new or intensified air quality impacts regarding the level and type of construction activity required for potential development of the Project area.

### SUPPLMENTAL IMPACTS AND MITIGATION MEASURES

The Project proposes the same type and density of potential development assumed in the Eastern Dublin EIR. While emissions related to potential development of the Project site are not expected to differ from the previous EIR, regional traffic has increased substantially over previously assumed levels. Section 3.6 of this SEIR analyzes the impacts of this increased traffic. As reflected in the Initial Study, increased regional traffic also could create new or intensified air quality impacts. Also, since certification of the previous EIR, the Basin is no longer in attainment status for ozone. Pursuant to Guidelines section 15162 and 15163, this supplement assesses whether new or intensified air quality impacts will result from increased regional traffic and changed regulatory standards.

### Significance Criteria

Based on the Initial Study, Project or cumulative air quality impacts are considered significant if they result in conflict with applicable air quality plans or violation of air quality standards beyond levels analyzed in the previous EIR.

### Regulatory Setting

The California Air Resources Board (CARB) is the State agency responsible for regulating air quality in California. CARB responsibilities include establishing State Ambient Air Quality Standards, emissions standards and regulations for mobile emissions sources (e.g., autos, trucks, etc.), and overseeing the efforts of county-wide and multi-county air pollution control districts, which have primary responsibility over stationary sources. The Bay Area Air Quality Management District (BAAQMD) is the regional agency responsible for air quality regulation within the San Francisco Bay Area Air Basin. The BAAQMD regulates air quality through its permit authority over most types of stationary emission sources and through its planning and review activities.

The federal Clean Air Act Amendments of 1970 established national ambient air quality standards, however, individual states retained the option to adopt more stringent standards and to include other pollution sources. At that time, California already had established its own air quality standards. State and federal standards currently in effect in California are shown in Table 3.2-1. The BAAQMD operates a regional monitoring network which measures the ambient concentrations of six criteria air pollutants: ozone ( $O_3$ ), carbon monoxide (CO), inhalable particulate matter (PM-10), lead (Pb), nitrogen dioxide ( $NO_2$ ), and sulfur dioxide ( $SO_2$ ). Existing and probable future levels of air quality in Eastern Dublin can be readily inferred from ambient air quality measurements conducted by the BAAQMD at its Livermore air monitoring station.

**Federal Requirements.** In 1995, after several years of minimal violations of the federal one-hour ozone standard, the U.S. Environmental Protection Agency (EPA) revised the designation of the Bay Area Air Basin from "non-attainment" to "attainment" for this standard. However, with less favorable meteorology in subsequent years, violations of the one-hour ozone standard again were observed in the basin, particularly at the Livermore monitoring station. Effective August 1998, the EPA downgraded the Bay Area's classification for this standard from a "maintenance" area to an "unclassified non-attainment" area. In response to the EPA's redesignation of the basin for the one-hour federal ozone standard, the BAAQMD and regional metropolitan planning and transportation agencies were required to develop an ozone attainment plan to meet this standard. The BAAQMD currently is preparing a 2001 Ozone Attainment Plan for compliance with the federal Clean Air Act. Also in 1998, after many years without violations of any carbon monoxide (CO) standards, the attainment status for CO was upgraded to "attainment."

**State Requirements.** California's Clean Air Act, like its federal counterpart, calls for designation of areas as attainment or non-attainment based on State Ambient Air Quality Standards rather than federal standards. The Act also requires development of air quality plans and strategies to meet State air quality standards. The Act classifies the Bay Area as a serious non-attainment area for ozone. This classification triggers various plan submittal requirements and transportation performance standards, and requires the local clean air plan to be updated every three years to reflect progress in meeting the air quality standards and to incorporate new information regarding the feasibility of control measures and new

emission inventory data. The Bay Area 1991 Clean Air Plan (1991 CAP) included a comprehensive strategy to reduce air pollutant emissions and focused on control measures to be implemented during the 1991 to 1994 period. It also included control measures to be implemented from 1995 through 2000 and beyond. The Bay Area 1994 Clean Air Plan (1994 CAP) included changes in the organization and scheduling of some 1991 CAP measures and also included eight new stationary and mobile source control measures. The updated 1997 CAP contains every control measure deemed feasible for implementation as required by State law. Even with all reasonable and feasible measures, however, the 1997 CAP did not predict near-term attainment of the State ozone standard. The CAP was again updated in December 2000. The goal of the 2000 CAP is to reduce emissions of ozone precursors (Reactive Organics, Nitrogen Oxide and Particulate Matter (PM-10)). The 2000 CAP indicates regional improvements in ozone concentrations, but still shows ozone standard exceedences in the Livermore valley and, therefore, continues to include "all feasible measures" to reduce ozone (BAAQMD 2000). The CAP and Ozone Attainment Plan implement state and federal Clean Air Act ozone standards, respectively.

### **Monitoring Results for Criteria Pollutants**

Table 3.2-2 is a five-year summary of monitoring data (1995-1999) from the Livermore station. Table 3.2-2 compares measured pollutant concentrations with both state and federal ambient air quality standards, as further described below.

**Ozone ( $O_3$ ).**  $O_3$  is not emitted directly into the atmosphere but is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving hydrocarbons and nitrogen oxides ( $NO_x$ ).  $O_3$  is a regional air pollutant because its precursors are transported and diffused by wind concurrently with  $O_3$  production by the photochemical reaction process.  $O_3$  causes eye and respiratory irritation, reduces resistance to lung infection, and may aggravate pulmonary conditions in persons with lung disease. Table 3.2-2 shows that the State standard was exceeded on an average of 14 days per year between 1995 and 1999. The less stringent federal standard of 0.12 ppm for one hour was exceeded an average of eight times per year.

**Carbon Monoxide (CO).** CO is an odorless, invisible gas usually formed as the result of incomplete combustion of organic substances. Approximately 80 percent of the CO emitted in Alameda County comes from on-road motor vehicles (CARB, 1999). High levels of CO can impair the transport of oxygen in the bloodstream and thereby aggravate cardiovascular disease and cause fatigue, headaches, and dizziness. Table 3.2-2 shows that no State CO standards were exceeded between 1995 and 1999. Measurements of carbon monoxide (CO) show low baseline levels with the hourly maximum averaging 25 percent or less of the allowable State standard. Similarly, maximum eight-hour CO levels are at least six parts per million (ppm) below the 8-hour exposure level of nine ppm considered unhealthful for sensitive receptors.

**Suspended and Inhalable Particulate Matter (PM-10 and PM-2.5).** PM-10 consists of fine grained inhalable particulates that can cause adverse health effects. PM-10 can include certain substances, such as sulfates and nitrates, that can cause lung damage directly, or can contain absorbed gases (e.g., chlorides or ammonium) that may be injurious to health. Table 3.2-2 shows that exceedances of the State PM-10 standard occur relatively infrequently. State PM-10 standards were exceeded in only nine measurements out of 304 measurement days (PM-10 is not monitored every day) in the last five years. Federal PM-10 standards have never been exceeded at the Livermore monitoring station.

Since certification of the Eastern Dublin EIR, federal standards for PM-2.5 (an even finer particulate size than PM-10) have been adopted. California has not yet proposed a state standard for PM-2.5, although the existing State standard for PM-10 is more stringent than the new federal standard for PM-2.5 and therefore already provides a higher level of public health protection for PM-2.5 than the new federal standard. The BAAQMD currently is monitoring PM-2.5 at the Livermore station but the period of record is too brief to establish any meaningful patterns or trends. In a few PM-2.5 samples taken in late 1999, however, none exceeded the federal 24-hour standard for PM-2.5. Because the new federal standard is less stringent than applicable state standards, this new standard does not have the potential for new significant impacts beyond those analyzed in the previous EIR.

**Other Air Pollutants Criteria.** The standards for NO<sub>2</sub>, SO<sub>2</sub>, and lead are being met in the Bay Area, and the latest pollutant trends information suggests that these standards will not be exceeded in the foreseeable future (ABAG and BAAQMD, 2000).

#### **SUPPLEMENTAL IMPACTS AND MITIGATION MEASURES**

Unanticipated increases in regional traffic and related increases in vehicular emissions beyond those assumed in the Eastern Dublin EIR could conflict with the BAAQMD Clean Air Plan, could contribute to violations of other State and Federal standards, and could contribute to cumulative pollutants.

##### ***Supplemental Impact AQ 1: Mobile Source Emissions: Reactive Organics (RO), Nitrogen Oxide (NOx), and Particulate Matter (PM-10)***

Since 1993, the BAAQMD has set CEQA-type thresholds of significance for certain pollutants – Reactive Organics (RO), Carbon Monoxide (CO), Nitrogen Oxide (Nox) and Particulate Matter (PM-10). The BAAQMD Plan considers any project which may be expected to generate mobile sources emissions exceeding 80 pounds per day of ROG, NOx or PM-10 as having a potentially significant impact. Buildout of the Project will cause 54,071 daily automobile trips to be generated within the air basin (see also Table 3.6-3). Table 3.2-3 shows that the Project's expected Mobile Source Emissions will be 156 pounds per day of RO, 335 pounds per day of Nox, and 316 pounds per day of PM-10. Mobile source emissions for RO and NOx as precursors to ozone formation are expected to cause the significance thresholds to be exceeded two- to almost four-fold. Because these precursors would result in the formation of substantial quantities of ozone, which already exceeds both state and federal standards in the Tri-Valley area (see Table 3.2-2), mobile source emissions for these pollutants are considered a significant impact. In addition, mobile source emissions may result in regional impacts through emissions of ozone precursor pollutants. This impact also is a potentially significant cumulative impact.

Implementation of the mitigation measures in the Eastern Dublin EIR (Mitigation Measures 3.11/5.0 – 11.0 together with the monitoring, transportation measures and advanced traffic signal timing identified in Chapter 3.6/Traffic and Circulation), will not achieve the 50-80% reduction in Project-related traffic which would be needed to reduce emissions below the current ozone precursor significance threshold, and no additional feasible mitigation measures could achieve that level of reduction in Project-related traffic. Residual air quality impacts will remain significant.

##### ***Supplemental Impact AQ 2: Mobile Source Emissions: CO***

Table 3.2-3 indicates that CO emissions are projected to exceed substantially the BAAQMD threshold of potential significance of 550 pounds per day. This threshold is

used to determine whether further micro scale (e.g. intersection) CO analyses are warranted. Significance under BAAQMD standards, however, is determined by whether Project traffic creates any new violation of CO standards. CO emissions were calculated for the 19 intersections within and around the Project area (see also section 3.6, Traffic and Circulation). Table 3.2-4 shows that microscale CO concentrations, in conjunction with a 3-5 ppm non-local hourly "background" in the Dublin Ranch area will not exceed the California hourly standard of 20 ppm. Table 3.2-5 indicates that anticipated Project traffic CO emissions also would not exceed the state/federal 8-hour standard of 9 ppm at any of the 19 intersections. Therefore, CO impacts are less than significant and no mitigation is required.

**TABLE 3.2 -1**  
**AMBIENT AIR QUALITY STANDARDS**

Pollutant	Averaging Time	California Standards		Federal Standards			
		Concentration	Method	Primary	Secondary	Method	
Ozone ( $O_3$ )	1 Hour	0.09 ppm (180 $\mu\text{g}/\text{m}^3$ )	Ultraviolet Photometry	0.12 ppm (235 $\mu\text{g}/\text{m}^3$ )	Same as Primary Standard	Ethylene Chemiluminescence	
	8 Hour	—		0.08 ppm (157 $\mu\text{g}/\text{m}^3$ )			
Respirable Particulate Matter ( $PM_{10}$ )	Annual Geometric Mean	30 $\mu\text{g}/\text{m}^3$	Size Selective Inlet Sampler ARB Method P (8/22/85)	—	Same as Primary Standard	Inertial Separation and Gravimetric Analysis	
	24 Hour	50 $\mu\text{g}/\text{m}^3$		150 $\mu\text{g}/\text{m}^3$			
	Annual Arithmetic Mean	—		50 $\mu\text{g}/\text{m}^3$			
Fine Particulate Matter ( $PM_{2.5}$ )	24 Hour	No Separate State Standard		65 $\mu\text{g}/\text{m}^3$	Same as Primary Standard	Inertial Separation and Gravimetric Analysis	
	Annual Arithmetic Mean			15 $\mu\text{g}/\text{m}^3$			
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/ $\text{m}^3$ )	Non-dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/ $\text{m}^3$ )	None	Non-dispersive Infrared Photometry (NDIR)	
	1 Hour	20 ppm (23 mg/ $\text{m}^3$ )		35 ppm (40 mg/ $\text{m}^3$ )			
	8 Hour (Lake Tahoe)	6 ppm (7 mg/ $\text{m}^3$ )		—			
Nitrogen Dioxide ( $NO_2$ )	Annual Arithmetic Mean	—	Gas Phase Chemiluminescence	0.053 ppm (100 $\mu\text{g}/\text{m}^3$ )	Same as Primary Standard	Gas Phase Chemiluminescence	
	1 Hour	0.25 ppm (470 $\mu\text{g}/\text{m}^3$ )		—			
Lead	30 days average	1.5 $\mu\text{g}/\text{m}^3$	AIHL Method 54 (12/74) Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption	
	Calendar Quarter	—		1.5 $\mu\text{g}/\text{m}^3$	Same as Primary Standard		
Sulfur Dioxide ( $SO_2$ )	Annual Arithmetic Mean	—	Fluorescence	0.030 ppm (80 $\mu\text{g}/\text{m}^3$ )	—	Pararosoaniline	
	24 Hour	0.04 ppm (105 $\mu\text{g}/\text{m}^3$ )		0.14 ppm (365 $\mu\text{g}/\text{m}^3$ )	—		
	3 Hour	—		—	0.5 ppm (1300 $\mu\text{g}/\text{m}^3$ )		
	1 Hour	0.25 ppm (655 $\mu\text{g}/\text{m}^3$ )		—	—		
Visibility Reducing Particles	8 Hour (10 am to 6 pm, PST)	In sufficient amount to produce an extinction coefficient of 0.23 per kilometer—visibility of ten miles or more (0.07—30 miles or more for Lake Tahoe) due to particles when the relative humidity is less than 70 percent. Method: ARB Method V (8/18/89).	No Federal Standards				
Sulfates	24 Hour	25 $\mu\text{g}/\text{m}^3$	Turbidimetric Barium Sulfate-AIHL Method 61 (2/76)				
Hydrogen Sulfide	1 Hour	0.03 ppm (42 $\mu\text{g}/\text{m}^3$ )	Cadmium Hydroxide STRactan				

**TABLE 3.2 - 2**  
**PROJECT AREA AIR QUALITY SUMMARY**  
**DAYS EXCEEDING REGULATORY STANDARDS**

Standards	1995	1996	1997	1998	1999
<b>Ozone</b>					
1-Hour > 0.09 ppm (S)	20	22	3	21	14
1-Hour > 0.12 ppm (F)	11	16	0	8	7
Max. 1-Hour (ppm)	0.16	0.14	0.11	0.15	0.15
<b>PM-10<sup>8</sup></b>					
Days > 50 microg/m <sup>3</sup> (S)	1/61	1/61	2/61	2/61	3/60
Days > 150 microg/m <sup>3</sup> (F)	0/61	0/61	0/61	0/61	0/60
Max. 24-Hour ( microg/m <sup>3</sup> )	52	71	62	62	87
<b>Carbon Monoxide</b>					
1-Hour > 20 ppm (S)	0	0	0	0	0
8-Hour > 9 ppm (S,F)	0	0	0	0	0
Max. 1-Hour (ppm)	5	5	5	4	5
Max. 8-Hour (ppm)	2.4	2.6	2.9	2.4	2.9
<b>Nitrogen Dioxide</b>					
1-Hour > 0.25 ppm (S)	0	0	0	0	0
Max. 1-Hour (ppm)	0.08	0.09	0.08	0.07	0.09

<sup>8</sup> = Ratio = Days Exceeding/Days with Monitoring

(PM-10 monitored only one day in six)

(S) = State Standard

(F) = Federal Standard

Source: BAAQMD, Livermore (Old Fire Station) Monitoring Site

**TABLE 3.2 - 3**  
**EAST DUBLIN PROPERTIES**  
**MOBILE SOURCE EMISSIONS**

EMISSIONS IN POUNDS PER DAY				
Analysis Year	Reactive Organics	Carbon Monoxide	Nitrogen Oxides	Particulate Matter
	156	1,824	335	315
Bay Area Significance Threshold	80	550*	80	80
East Dublin Share of Threshold (2020)	195%	332%	419%	394%

\* A CO microscale impact analysis is recommended by BAAQMD if this threshold is exceeded.

Source: URBEMIS7 Computer Emissions Model; BAAQMD CEQA Guidelines, rev. Dec. 1999.

**TABLE 3.2 - 4**  
**MICROSCALE IMPACT ANALYSIS**  
**HOURLY CO CONCENTRATIONS (ppm) above non-local**  
**BACKGROUND AT 25 FEET FROM EDGE OF EACH INDICATED ROADWAY**

	Intersection	Existing	Existing + Approved + Pending	Existing + Approved + Pending + Project
1	Dougherty Road/Dublin Boulevard	7	8	8
2	Hacienda Drive/I-580 Eastbound Ramps	6	9	9
3	Hacienda Drive/I-580 Westbound Ramps	5	8	8
4	Hacienda Drive/Dublin Boulevard	5	7	7
5	Santa Rita Road/I-580 Eastbound Ramps <sup>1</sup>	7	9	9
6	Tassajara Road/I-580 Westbound Ramps	7	8	8
7	Tassajara Road/Dublin Boulevard	5	8	8
8	Tassajara Road/Central Parkway	--	6	6
9	Tassajara Road/Gleason Drive	5	6	6
10	Grafton Street/Dublin Boulevard	--	6	6
11	Grafton Street/Central Parkway	--	5	5
12	Grafton Street/Gleason Drive	--	5	5
13	El Charro Road/I-580 Eastbound Ramps	5	6	6
14	Fallon Road/I-580 Westbound Ramps	5	5	6
15	Fallon Road/Dublin Boulevard	--	6	6
16	Fallon Road/Central Parkway	--	5	5
17	Fallon Road/Gleason Drive	--	5	5
18	Croak Road/Dublin Boulevard	--	--	5
19	Fallon Road/ Residential	--	--	5

Note: Standard = 20 ppm, including 4.4 ppm (existing), 3.5 ppm (future)

**TABLE 3.2 - 5**  
**MICROSCALE IMPACT ANALYSIS**  
**8-Hour CO CONCENTRATIONS (ppm) above non-local**  
**BACKGROUND AT 25 FEET FROM EDGE OF EACH INDICATED ROADWAY**

	Intersection	Existing	Existing + Approved + Pending	Existing + Approved + Pending + Project
1	Dougherty Road/Dublin Boulevard	4.1	4.8	4.8
2	Hacienda Drive/I-580 Eastbound Ramps	3.4	5.0	5.2
3	Hacienda Drive/I-580 Westbound Ramps	2.8	4.4	4.5
4	Hacienda Drive/Dublin Boulevard	2.6	3.8	3.9
5	Santa Rita Road/I-580 Eastbound Ramps <sup>1</sup>	3.8	5.1	5.1
6	Tassajara Road/I-580 Westbound Ramps	3.6	4.6	4.8
7	Tassajara Road/Dublin Boulevard	2.7	4.3	4.4
8	Tassajara Road/Central Parkway	--	3.2	3.2
9	Tassajara Road/Gleason Drive	2.6	3.2	3.2
10	Grafton Street/Dublin Boulevard	--	3.1	3.2
11	Grafton Street/Central Parkway	--	2.4	2.4
12	Grafton Street/Gleason Drive	--	2.2	2.2
13	El Charro Road/I-580 Eastbound Ramps	2.4	2.8	3.2
14	Fallon Road/I-580 Westbound Ramps	2.2	2.7	3.5
15	Fallon Road/Dublin Boulevard	--	3.1	3.9
16	Fallon Road/Central Parkway	--	2.7	3.4
17	Fallon Road/Gleason Drive	--	2.2	2.3
18	Croak Road/Dublin Boulevard	--	--	2.4
19	Fallon Road/ Residential	--	--	2.5

Note: Standard = 9 ppm, including 2.1 ppm (existing), 1.7 ppm (future)

### 3.3 BIOLOGICAL RESOURCES

#### INTRODUCTION

Biological Resources were analyzed in Chapter 3.7 of the 1993 Eastern Dublin EIR, a program EIR. This SEIR is likewise a program-level (as opposed to a project-level) environmental impact report. It is intended to update the 1993 EIR with respect to the Project and the Project area. The actions that may be taken upon completion of this SEIR are annexation of the Project area properties into the City of Dublin, rezoning the properties, and approval of a Stage 1 Planned Development plan which assigns general land use designations to the properties and establishes a conceptual master infrastructure plan, as depicted in Revised DSEIR Figures 2-G and 2-J. This SEIR analyzes potential environmental impacts of these actions at a program level, as did the 1993 EIR which it supplements. Approval of the actions described above would not constitute approval for any specific development. Consequently, detailed biological information for each of the properties within the Project area is not necessary for this program SEIR (though as explained below, such information is included where it is available). Rather, before any development can occur on any of the properties within the Project area, detailed development proposals must subsequently be prepared on a property-by-property basis and be presented to the City. Such proposals will be subject to additional environmental review that must analyze the specific proposed development and any associated environmental impacts, all at a level of detail which is greater than for this program-level analysis.

Although detailed, property-specific biological resource information is not required for this program SEIR, some property owners within the Project area have conducted detailed surveys of certain biological resources on their property since certification of the 1993 EIR and have provided the results of such surveys to the City. Based on these recent surveys, and other more general information such as aerial photographs, the City has identified in this Revised DSEIR all of the habitat types which occur in the Project area. Also, to the extent currently known or reasonably inferred based on existing information, this Revised DSEIR identifies the location of all such habitats and specific sensitive species. This, in conjunction with the proposed general land use designations and master infrastructure plan in Figures 2-G and 2-J, enable this Supplement to identify and analyze potential impacts to biological resources in the Project area to a greater degree than was possible in the 1993 EIR. In turn, even though not every location of every sensitive habitat or species throughout the Project area is known, this Revised DSEIR establishes specific mitigation requirements and standards that will apply to all impacts to such resources within the Project area. These mitigation requirements will be implemented through a Resource Management Plan that must be prepared for the entire Project area before any property within the Project area may be developed, and through the property-specific, project-level environmental review that must occur before any property may be developed.

This Supplement to the EIR also examines habitat types that were not previously anticipated to occur in the Project area and regulatory changes since certification of the 1993 EIR which have resulted in the identification of new sensitive species. This Supplement also examines the supplemental effects of changes in regulatory standards since the EIR, such as the designation of critical habitat for the California red legged frog in 2001. Cumulative impacts to biological resources are also addressed.

#### ENVIRONMENTAL SETTING

##### General Project Area Characteristics

The Project area occurs within a regional transitional area with respect to topography, habitat, and land use practices. Topographic relief generally decreases from north to south and, to a lesser extent, from east to west. Habitats adjacent to the Project area are, for the most part, contiguous with relatively undeveloped private property to the north and east on which cattle grazing occurs. To the

east of the Project area, habitat is predominantly annual grasslands interspersed with small inclusions of riparian woodland. To the north and northeast, oak savannah, mixed woodlands, and chaparral increase with increases in elevation. Lands to the west are being developed for residential housing (Dublin Ranch). Development (urban, industrial, and cultivation) is greatest in the south. Thus, the habitat of the Project area is influenced by adjacent agricultural and urban development. (See also Eastern Dublin EIR Figure 3.7-A showing habitat types in Eastern Dublin).

The Project area itself is relatively flat in its southern portions, and hilly with some intermittent north-south drainages and steep slopes to the north. Grazing of non-native grasslands, and dry farming of grain crops, are the predominant current habitats and land uses. Site topography and characteristics are more fully described in Section 2.4.

The Project area is part of a larger region characterized by grassland habitat with patches or strips of other habitat types intermixed. These other habitat types include riparian woodland, oak savanna, seasonal freshwater wetland, and alkali wetland. Stock ponds are also common in this landscape. The boundaries of this overall grassland landscape are defined by the foothills of Mount Diablo to the north and northeast, Highland Ridge and the Altamont Hills to the northeast and east, Interstate 580 to the south, and the existing developed portions of Dublin and San Ramon to the west. Development within this overall area has been occurring around its perimeter with the greatest concentration along the southern and western sides in east Dublin, the Dougherty Valley area in Contra Costa County, and north Livermore. This analysis of cumulative impacts assesses potential development, and consequent impacts on biological resources, across this overall area.

### **Specific Project Area Habitat Types and Locations**

The Eastern Dublin EIR identified nine different habitats and showed intermittent streams on Figure 3.7-A. Based upon recent studies and review of aerial photographs, eight of these habitats are known or assumed to occur within the Project area and are considered to provide moderate to high values for a number of special-status species. One additional habitat type, seasonal wetlands, was not identified in the Eastern Dublin EIR but is known to occur within the Project area. As indicated in the Eastern Dublin EIR and further confirmed by recent studies, intermittent streams, shown but not previously identified as a habitat type in the Eastern Dublin EIR, are known to exist within the Project area. The seasonal wetland habitat and these intermittent streams may, in turn, provide moderate to high habitat values for special status species.

A majority of the Project area consists of cultivated lands used for dry rotational croplands, and non-native grassland used for grazing. Several drainages within the Project area support intermittent streams and, to a lesser extent, arroyo willow riparian woodland. The southern portion of the Project area supports ruderal field and developed lands. Seasonal wetlands also are known to occur in some low-lying portions of the Project area, although not all properties within the Project area have been surveyed in detail so additional occurrences of seasonal wetlands are possible. All of these specific habitat types are described below in order of dominance with their estimated acreages. The known locations of these habitat types are shown in Figure 3.3-A.

**Dry Farming Rotational Cropland.** Approximately 535 acres; see Figure 3.3-A. Farming within the Project area primarily consists of grain crops of wheat and barley. These croplands occur on the lower elevation hillsides and bottomlands in the southern half of the Project area. These fields are typically cropped at various seasonal and annual rotations followed by fallow years at a rate of one in every five. Grain crops are not irrigated. In fallow years, vegetation is characterized by introduced weedy herbs and grasses along with remnant individuals of the previous grain crop species. Planted barley was identified as the current rotation crop on the Project area.

**Non-native Grassland.** Approximately 500 acres; see Figure 3.3-A. Non-native grassland supports a wide array of native and non-native grasses and herbs. Characteristic introduced grass species

include slender wild oat (*Avena barbata*), ripgut grass (*Bromus diandrus*), soft chess (*Bromus mollis*), farmer's foxtail (*Hordeum leporinum*), and rattle tail fescue (*Vulpia myuros*). Occasional stands of the native bunchgrass, nodding stipa (*Nasella pulchra*), were observed on the north-facing slopes of some of the rolling hills.

**Ruderal Field.** Approximately 40 acres; see Figure 3.3-A. As a result of continued disturbance and compaction, fallow fields support dense stands of ruderal species (defined by Frenkel, 1977, "as a broad category of plant life closely related to man and consisting of native and alien elements which occupy disturbed habitats and waste places"). In the Project area, these species are predominantly introduced weeds such as thistles, mustards, and grasses.

**Developed.** Approximately 35 acres; see Figure 3.3-A. Developed land occurs around homes, barns, and existing facilities. These areas are typically characterized by ruderal or horticultural plant cover with little or no native vegetation. Isolated stands of blue gum (*Eucalyptus globulus*) are typically found associated with developed sites throughout the GPA area.

**Intermittent Streams.** Approximately 31,000 linear feet; see Figure 3.3-A. Hydrology of the Project area is influenced by direct precipitation, headwater flows, and surface runoff from surrounding areas. These small tributaries are each characterized by shallowly incised channels with an obvious bed and bank. These intermittent streams flow predominantly through non-native grassland and rotational croplands. Many intermittent streams support in-channel ponds or pooling water. These areas typically dry up by early spring.

**Springs, Seeps and Impoundments.** Two ponds, four in-stream pools; see Figure 3.3-A. Most of these habitat areas support species characteristic of freshwater marsh habitat or alkali grassland habitat. Impoundments are typically small ponds created for livestock, adjacent to perennial springs or intermittent drainages. Larger artificial ponds support perennial, emergent vegetation around their banks. Most ponds are dry by summer, and therefore, support vegetation indicative of progressively drying, disturbed habitats. The Project area contains one stock pond located on the northern portion of the Project area and one man-made pond located at the southwest portion of the Project area. Four additional areas of pooling water are located along the western half of the Project area within the intermittent streams.

**Arroyo Willow Riparian Woodland.** Approximately 10 acres; see Figure 3.3-A. This habitat is characterized by a dense thicket of arroyo willow (*Salix lasiolepis*) along a narrow intermittent drainage that crosses lower Fallon Road. Associated with the 5 to 10 meter tall stand of arroyo willows are an open understory of ruderal herbs, predominantly poison hemlock. The understory of the arroyo willows northeast of Fallon Road has been heavily grazed.

**Seasonal Wetlands.** Present, but not all occurrences have been identified and thus total acreage not quantified. Seasonal wetlands consist of annual and perennial native and non-native wetland indicator species. This plant association typically resembles a wetland community only following the wet season; it dries up rapidly with the onset of summer and the wetland indicator species go dormant. During the dry season, such sites may not be readily recognizable as wetlands as wetland species go to seed and typical upland grasses and forbs become established. Although not identified in the Eastern Dublin EIR as a habitat type and hence not indicated for the Project area, this habitat type has been observed within the Project area.

**Freshwater Marsh.** Present, but not all occurrences have been identified and thus total acreage not quantified. Freshwater marsh typically occurs in low-lying sites that are permanently flooded with fresh water and lack significant current. It is found on nutrient-rich mineral soils that are saturated for all or most of the year. This vegetation community is most extensive where surface flow is slow or stagnant or where the water table is so close to the surface as to saturate the soil from below. Freshwater marsh is distributed along the coast and in coastal valleys near river mouths and around

the margins of lakes, springs, and streams (Holland 1986). This vegetation community characteristically forms a dense vegetative cover dominated by perennial, emergent monocots 1-15 feet high that reproduce by underground rhizomes. Freshwater marsh has been observed on the southern portion of the Project area.

**Alkali Grassland.** Present, but not all occurrences have been identified and thus total acreage not quantified. This habitat is similar to non-native grassland, but is found only in areas of alkaline-rich clay soils with moderate to saturated soil water content. Alkali grassland supports an array of introduced grasses similar to that found in the non-native grassland throughout the Eastern Dublin area. Several additional species are indicative of alkaline conditions. These include salt grass (*Distichlis spicata* var. *nana*), alkali rye grass (*Elymus triticoides*), Mediterranean barley (*Hordeum hystrich*), brass buttons (*Cotula coronopifolia*), and alkali mallow (*Sida hederacea*). This habitat type was considered potential habitat for five species of rare plants: palmate bird's beak (*Cordylanthus palmatus*), caper-fruited tropidocarpum (*Tropidocarpum capparideum*), San Joaquin spearscale (*Atriplex joaquiniana*), Congdon's tarplant (*Hemizonia parryi* ssp. *congdonii*) and a newly described species, Livermore tarplant (*Deinandra bacigalupii*) (CNPS 2000).

### Special Status Species

Special status plants and wildlife with potential to occur within the Project area are described below and summarized in Tables 3.3-1 A and B, and Tables 3.3-2 A and B. The descriptions also include information from background research and studies conducted since certification of the Eastern Dublin EIR. Locations of observed special status species are mapped on Figure 3.3-B: Sensitive Species in the Eastern Dublin Area. For properties within the Project area for which species surveys and mapping has not yet occurred, the potential presence of species and habitat is inferred based on habitat type and suitability, field reconnaissance, and local knowledge of species occurrences on nearby parcels.

#### Special Status Species: Botanical

The Eastern Dublin EIR evaluated 12 special-status plants (Table 3.7-1). Of those 12 species, the great valley gumplant is no longer listed as a California Native Plant Society (CNPS) rare plant species and is therefore not considered in this Supplement. Based on a review of the California Natural Diversity Data Base (CNDDB 2000) and the CNPS (2000) for this Supplement, 13 special status plant species not addressed in the Eastern Dublin EIR may have some potential to occur within the Project area. This potential is based on suitable habitat present onsite and/or proximity to known occurrences in the area. These additional species include two rare plants, the San Joaquin spearscale (*Atriplex joaquiniana*) and Congdon's tarplant (*Hemizonia parryi* ssp. *congdonii*) that were found within the Project area during botanical surveys conducted in 2001 (Sycamore Assoc., in prep.) The Livermore tarplant (*Deinandra bacigalupii*) is a newly described rare plant species that has been observed in two areas in Alameda County. Alkali grasslands throughout the Project area provide potentially suitable habitat for this new species (CNPS 2000). Based on reported occurrences of these species near the Project area, these special-status species may occur in the Project area. Preliminary botanical surveys conducted in 2001 for the Project also identified the potential presence of big-scale balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*), big tarweed (*Blepharizonia plumosa* ssp. *plumosa*), showy madia (*Madia radiata*), rayless ragwort (*Senecio aphanactis*), hairless popcorn-flower (*Palgiobothrys glaber*), heartscale (*Atriplex cordulata*), crownscale (*Atriplex coronata* var. *coronata*), brittlescale (*Atriplex depressa*), and alkali milk-vetch (*Astragalus tener* var. *tender*), based on available habitat.

#### Botanically Sensitive Habitats

The habitat types in the Project area are described above. Five of the habitat types are botanically sensitive communities, recognized by the CDFG Natural Diversity Database (CNDDB 2000a) as rare and declining in the state. These communities, which provide potential habitat for special-status

species, are arroyo willow riparian woodland, seasonal wetlands, intermittent streams, freshwater marsh and alkali grassland.

### **Special-Status Species: Wildlife**

The Eastern Dublin EIR evaluated 27 special-status wildlife species (Table 3.7-2). Ten of these species no longer have state or federal special status, or there is no suitable habitat in the Project area. These species include American badger, Ricksecker's water scavenger beetle, curved-foot hygrotus diving beetle, bay checkerspot butterfly, Callippe silverspot butterfly, Bridges' coast range shoulderband, San Francisco forktail damselfly, Lum's micro-blind harvestman and California linderiella. These species will not be addressed further in this Supplement.

Based on a review of the Natural Diversity Database (CNDDDB 2000), habitat available within the 1,120-acre Project area, the proximity of the Project area to known species occurrences, and the contiguity of their habitats to the Project area, eight additional species are evaluated in this Supplement and are considered to have the potential to occur in the Project area (Table 3.3-2B). These species include merlin, loggerhead shrike, California horned lark, pallid bat, Townsend's big-eared bat, Yuma myotis bat, conservancy fairy shrimp and vernal pool tadpole shrimp. Some species evaluated for their potential to occur within the 1,120-acre Project area may only be occasional visitors, migrants, or transients, if they occur at all.

### **Threatened and Endangered Wildlife Species**

**Invertebrates.** The Eastern Dublin EIR identified potentially significant impacts for special status invertebrates such as the longhorn fairy shrimp and the vernal pool fairly shrimp. Since then, these species as well as the conservancy fairy shrimp and the vernal pool tadpole shrimp have become federally-listed as Endangered under the Endangered Species Act (ESA). These species live within strict habitat requirements, and can be found in vernal pools and other small seasonal bodies of water that allow the appropriate desiccation of the cysts (eggs).

Vernal pool fairy shrimp have been reported approximately four, five and 11 miles east of the Project area (CNDDDB 2000). Longhorn fairy shrimp have been reported approximately seven and eight miles east of the Project area (CNDDDB 2000). The Project area may provide suitable habitat for these species in the seasonal wetlands on site (see Figure 3.3-A).

In 2001 a habitat assessment survey for special status invertebrates was conducted on the Braddock and Logan property. This assessment concluded that these species are not likely to occur on the property. (Entomological Consulting Services, September 12, 2001).

**California Red-Legged Frog (*Rana aurora draytonii*).** The Eastern Dublin EIR identified impacts to the California red-legged frog (CRLF) as potentially significant (IM 3.7/F). Since certification of the Eastern Dublin EIR, CRLF has been federally listed as Threatened under the ESA. In addition, on March 13, 2001 the U.S. Fish and Wildlife Service (USFWS) designated critical habitat for CRLF. The Project area is included within the designated critical habitat. Critical habitat receives protection from destruction or adverse modification through required consultation under Section 7 of the ESA for actions carried out, funded or authorized by a Federal agency. The USFWS published a draft Recovery Plan for the CRLF in January 2000. The Project area is located within the Mt. Diablo core area Unit 23 (Draft Recovery Plan for the CRLF (USFWS 2000a)). The CRLF is a California species of special concern.

Additional surveys conducted between 1993 and 2000 detected CRLF in several locations throughout the Eastern Dublin planning area and adjacent to the Project area (H.T. Harvey and Associates 2000b). Seventeen reported CRLF observations within five miles of the GPA/SP area encompassed by the Eastern Dublin EIR were reported between 1981 and 1997 (CNDDDB 2000). Specific locations of

frogs, especially along linear waterways, vary from year to year, and season to season, as habitat quality and availability fluctuate.

Within the Project area, CRLF have been reported in the unnamed drainage adjacent to Fallon Road, approximately 2000 feet north of I-580. They have also been reported breeding upstream in the same drainage approximately 600 feet east of Fallon Road (H.T. Harvey & Associates). In 2001, Sycamore Associates conducted a site assessment for CRLF on the Fallon Enterprises and Braddock and Logan Group properties. Four adult CRLF were observed on the Fallon Enterprises property, and one adult was observed on the Braddock and Logan property. These properties are considered to contain suitable CRLF breeding habitat in certain aquatic features, and suitable dispersal and upland refugia habitat. (Sycamore Assoc.; July 14, 2001 Site Assessment Report). In 2001 a site assessment and a focused survey for CRLF was performed on the Chen, Anderson, Righetti, Branaugh and Campbell properties. No CRLF were detected, nor was any evidence of CRLF breeding (egg masses, larvae) observed. Nevertheless, the quarry pond on the Anderson property is considered to provide suitable breeding habitat, and suitable dispersal and upland aestivation habitat are present in isolated wetland areas and uplands adjacent to aquatic features. (Sycamore Associates, August 16, 2001 Letter Report, August 14, 2001 Site Assessment Report).

Thus, the Project area does contain breeding habitat for CRLF in some intermittent streams, and also contains dispersal habitat along and adjacent to those streams.

**Alameda Whipsnake (*Masticophis lateralis euryxanthus*).** The Eastern Dublin EIR identified impacts to Alameda whipsnake as less than significant due to the lack of suitable habitat (IM 3.7/E). Since certification of the Eastern Dublin EIR, the Alameda whipsnake has been Federally-listed as Threatened under the ESA. The species has been listed as Threatened under the California Endangered Species Act since 1971. In October 2000, the USFWS designated critical habitat for this species, however, the 1,120-acre Project area does not occur within the designated critical habitat. Primary habitats for Alameda whipsnake include east, southeast, south and southwest facing slopes containing coastal scrub and chaparral, with rock outcrops (Swaim 1994; Swaim, pers.com. 1996). Several observations north of the Eastern Dublin area have been reported between 1972 and 1999. However, appropriate habitat does not occur in Eastern Dublin, including the 1,120-acre Project area. Based on the above information, this species is not considered to occur within the Project area.

**Peregrine Falcon (*Falco peregrinus anatum*).** The Eastern Dublin EIR identified impacts to peregrine falcon as insignificant due to the lack of appropriate habitat (IM 3.7/E). Since certification of the Eastern Dublin EIR this species was federally de-listed (August 25, 2000) but remains state-listed as Endangered. Historic nesting locations are known from the region north of the Eastern Dublin area. Peregrine falcons have been reintroduced to these historic sites on Mt. Diablo and are known to be nesting on Mt. Diablo (Sproul, pers. comm.). The Project area does not contain suitable cliffs for nesting and does not represent important foraging habitat for the peregrine falcon.

**Bald Eagle (*Haliaeetus leucocephalus*).** Since certification of the Eastern Dublin EIR, the bald eagle was reclassified from federally Endangered to Threatened. It remains state-listed as Endangered, as identified in the Eastern Dublin EIR. The bald eagle also is protected under the federal Bald Eagle Protection Act. The historic breeding range of the bald eagle in California extended from southern coastal areas through much of the central and northern portions of the state. Bald eagles nest approximately 12 miles southeast of the Project area at Lake Del Valle (CNDDDB 2000). The Project area does not provide suitable nesting habitat for bald eagles because there are no appropriate cliffs or trees for nesting and no foraging habitat. Several birds are known to winter in the Altamont area and thus may occasionally pass through the Project area.

**San Joaquin Kit Fox (*Vulpes macrotis mutica*).** The Eastern Dublin EIR identified impacts to the kit fox as potentially significant (IM 3.7/D). The San Joaquin kit fox remains federally-listed as Endangered and state-listed as Threatened. Since certification of the Eastern Dublin EIR, the USFWS

has updated its recommendations for survey protocols and protection measures (USFWS 1997 and 1999).

A number of surveys for kit fox have been conducted in the Eastern Dublin area (H.T. Harvey & Associates 1997a) and the adjacent North Livermore Valley (H.T. Harvey & Associates 1997b). None of these surveys detected kit fox with the exception of a single kit fox detected on two separate nights while spotlighting approximately 2 miles north of the North Livermore site in Contra Costa County on Morgan Territory Road approximately 5 1/2 miles northeast of the Project area (1996).

Despite more intense efforts to detect kit fox in the Eastern Dublin and North Livermore Valley areas since 1997, none have been detected. Based on negative results within the Eastern Dublin area and the surrounding areas, kit fox appear to be absent from the Eastern Dublin area (see analysis presented in H.T. Harvey & Associates 1997c).

Despite the lack of any observations, the Project area supports habitat that could be considered suitable for kit fox. Therefore, kit fox have a potential to occur within the Project area although that potential is low.

#### Federal Candidates for Listing - Wildlife Species

**California Tiger Salamander (*Ambystoma californiense*).** The Eastern Dublin EIR identified impacts to the California tiger salamander (CTS) as potentially significant (IM 3.7-G). The CTS is a candidate for listing under the ESA. Since certification of the Eastern Dublin EIR, CTS has been observed adjacent to and within the Project area. California tiger salamanders were detected on the Dublin Ranch site in 1998 (H.T. Harvey & Associates 1998, 2000), approximately 1,000 feet from the Project area western boundary.

A CTS adult was recently detected onsite during 2001 winter/spring surveys in the quarry pond on the Anderson property, and one adult was observed in a burrow on the Branaugh property. No CTS larvae were observed during aquatic surveys on those properties. (Sycamore Assoc., August 20, 2001 Letter Report). During 2001 site visits to the Braddock and Logan Group property and the Fallon Enterprises property no CTS larvae or adults were observed, but potentially suitable breeding ponds, suitable dispersal (intermittent drainages), and upland aestivation habitat (ground squirrel burrows) were observed. (Sycamore Assoc., July 14, 2001 Site Assessment Report). Based on the known occurrence on the Anderson and Branaugh properties, and the available habitat, California tiger salamander are considered to occur in suitable habitat in the Project area (ponds and adjacent drainages and uplands).

#### California Species of Special Concern and Other Special-Status Wildlife Species

**Western Pond Turtle (*Clemmys marmorata*).** The Eastern Dublin EIR identified impacts to the western pond turtle as potentially significant (3.7/H). Since certification of the Eastern Dublin EIR, western pond turtle was reclassified from a federal candidate species to a federal Special Concern Species. In addition to being a California Species of Special Concern, as identified in the Eastern Dublin EIR, this species also is protected under California Fish and Game Code Section 5050. Several documented occurrences of the western pond turtle have been recorded in the vicinity of the Project area (CNDDB 2000). Three occurrences were reported within five miles of the Project area (CNDDB 2000). Western pond turtles were also found at two locations along Cottonwood Creek (Figure 3.7-C of the Eastern Dublin EIR), east of the Project area. No Western pond turtles have been observed within the Project area. However, based on occurrences in the vicinity of the Project area, and on the presence of suitable habitat onsite such as ponds and streams, Western pond turtle has the potential to occur within the Project area.

**California Horned Lizard (*Phrynosoma coronatum frontale*).** The Eastern Dublin EIR identified impacts to the California horned lizard as insignificant due to their extensive distribution (3.7/R). Since certification of the Eastern Dublin EIR, the horned lizard has been listed as a fully protected species under the California Fish and Game Code. Horned lizards have been documented approximately 11 and 12 miles south and approximately 13 miles east of the Project area (1994) (CNDDDB 2000). Marginal habitat for the lizard probably occurs on portions of the Project area. However, the California horned lizard is unlikely to occur within the Project area based on the marginality of on-site habitat and the lack of contiguity with occupied habitat off-site.

**Northern Harrier (*Circus cyaneus*).** The Eastern Dublin EIR identified impacts to the Northern Harrier as potentially significant due to the potential loss of habitat (3.7/O). Since certification of the Eastern Dublin EIR, marginally suitable nesting habitat was identified in the grassland portions of the Project area (see Figure 3.3-A)

**Burrowing Owl (*Athene cunicularia hypugea*).** The Eastern Dublin EIR identified impacts to the burrowing owl as potentially significant (IM 3.7/M). In addition to being a California Species of Special Concern, as indicated in the Eastern Dublin EIR, this species is protected under the federal Migratory Bird Treaty Act and Fish and Game Code Section 3503.5.

Since certification of the Eastern Dublin EIR burrowing owl individuals and sign have been observed within Eastern Dublin (Biosystems Analysis 1989, H.T. Harvey & Associates 2000b). One individual was observed on the Braddock and Logan Group property located in the northeastern portion of the Project area in October 2000 (Sycamore, in prep.). Suitable breeding habitat, in the form of ground squirrel burrows, has been observed during recent site visits within the Project area (Sycamore, in prep). Based on the available habitat and the known occurrences in the Project area and the vicinity, burrowing owl are considered to occur within the Project area.

**Short-eared Owl (*Asio flammeus*).** The Eastern Dublin EIR identified impacts to the short-eared owl as insignificant due to the lack of appropriate habitat (IM 3.7/Q). In addition to being a California Species of Special Concern, as indicated in the Eastern Dublin EIR, this species is protected under the federal Migratory Bird Treaty Act and Fish and Game Code Section 3503.5. Since certification of the Eastern Dublin EIR, localized field observations have identified marginally suitable foraging and nesting habitat in the grassland portion of the Project area.

**Cooper's Hawk (*Accipiter cooperii*).** The Eastern Dublin EIR identified impacts to the Cooper's hawk as potentially significant (IM 3.7/P). In addition to being a California Species of Special Concern, this species is protected under the federal Migratory Bird Treaty Act and Fish and Game Code Section 3503.5.

Since certification of the Eastern Dublin EIR, Cooper's hawk have been observed within Eastern Dublin (Townsend, pers. comm. 2000), however suitable nesting habitat does not occur within the Project area. It is likely that dispersing birds and winter migrant birds occasionally use the Project area.

**Golden Eagle (*Aquila chrysaetos*).** The Eastern Dublin EIR identified a significant impact to a nesting site for a pair of breeding eagles (IM 3.7/J), potentially significant project and cumulative impacts to foraging habitat (3.7/K), and a potentially significant impact due to electrocutions (3.7/L). Since certification of the Eastern Dublin EIR, an active eagle's nest has been identified adjacent to the Dublin Ranch Phase 1 and Area A, northwest of the Project area (H.T. Harvey & Associates 2000c). Portions of Dublin Ranch adjacent to the Project area are part of a golden eagle mitigation site for this nesting pair of eagles. These birds are known to forage in the northern portion of the Project area (Hunt, pers. comm. 2001). Several reconnaissance-level site visits indicate that suitable nest sites are not present within the Project area.

**Merlin (*Falco columbarius*).** The merlin is a small falcon that breeds in wooded areas of the Pacific Northwest, Canada and Alaska. Although it does not nest in California, the species winters in grasslands, savannas and other open habitats throughout the state from October through March. Once a common winter resident in California, numbers have declined markedly since the 1960's (Remsen 1978). It preys almost exclusively on small birds, although it also takes small mammals and insects. In California, wintering merlins are concentrated along the coast and in the Central Valley. Merlins may only be occasional visitors, migrants, or transients, if they occur at all. This species has been observed in the general vicinity of the Project area as a wintering species (Townsend pers. comm. 2000).

**Prairie Falcon (*Falco mexicanus*).** The Eastern Dublin EIR identified impacts to the prairie falcon as potentially significant (IM 3.7/O). Since certification of the Eastern Dublin EIR, Prairie falcons have been found to nest several miles north of Eastern Dublin, on Mt. Diablo and near Brushy Peak (Sproul, pers. comm.). No suitable nesting habitat occurs in the Eastern Dublin area; however, most of the area is high quality potential foraging habitat. Prairie falcons have been commonly observed during the winter in recent years within Eastern Dublin (Townsend pers. comm. 2000) and likely forage in the Project area.

**Sharp-shinned Hawk (*Accipiter striatus*).** The Eastern Dublin EIR identified impacts to the sharp-shinned hawk as potentially significant (IM 3.7/P). Since certification of the Eastern Dublin EIR, it has been determined that suitable winter foraging habitat may occur within the arroyo willow riparian habitat that occurs within the Project area (see Figure 3.3-A). Suitable breeding habitat is not present.

**Tricolored Blackbird (*Agelaius tricolor*).** The Eastern Dublin EIR identified impacts to the tricolored blackbird as potentially significant (IM 3.7/I). The species has been reported to the north and south of the Eastern Dublin area (CNDDB 2000). Since certification of the Eastern Dublin EIR, a tricolored blackbird breeding colony was observed in the spring of 1999 in the southern portion of the Project area (Townsend and Lenihan, pers. comm.). See Figure 3.3-B.

**Loggerhead Shrike (*Lanius ludovicianus*).** Loggerhead shrike is a wide-ranging species that occupies open habitats including grassland, scrub and open woodland communities. The species typically nests in densely vegetated, isolated trees and shrubs and occasionally man-made structures. Loggerhead shrikes feed on a variety of small prey including arthropods, mammals, amphibians, reptiles and birds (Yosef 1996). In California, the species does not migrate and is resident year-round. Declines in numbers have been noted across a broad geographical range in the United States.

Nesting habitat for this species occurs near riparian habitat and coyote brush habitat in Eastern Dublin. Loggerhead shrike has been observed in the Eastern Dublin area (Townsend, pers. comm. 2000). Sycamore Associates biologists observed a loggerhead shrike during a reconnaissance-level survey on October 4, 2000 and again on January 16, 2001, just east of the Project area on the east side of Doolan Road (Tatarian, pers. ob. 2000, 2001). Suitable breeding habitat for this species occurs within the Project area in the arroyo willow riparian woodland off of Fallon Road (see Figure 3.3-A). Based on these known occurrences and the suitable habitat available, loggerhead shrike is considered to occur within the Project area.

**California Horned Lark (*Eremophila alpestris actia*).** This species, a California Species of Special Concern, breeds in open grasslands throughout the Central Valley and adjacent foothills and along the central and southern California coast region. It is a ground-nesting species that prefers shorter, less dense grasses and areas with some bare ground.

Breeding habitat for this species occurs in grassland habitat portions of the Project area. This species has been documented in the vicinity of the Project area approximately 0.75 miles north of the Project area (1992), and approximately 1.5 miles north of the Project area at the Tassajara and Highland Road intersection (1992) (CNDDB 2000). Based on these known occurrences and the suitable habitat available, California horned lark is considered to occur within the Project area.

**Pallid bat (*Antrozous pallidus*).** This species, a California Species of Special Concern, prefers arid, low elevation regions with roosting available in deep crevices on rock faces, buildings, bridges and tree hollows, especially oaks. Pallid bats obtain prey such as crickets, grasshoppers, June beetles, ground beetles, and sometimes scorpions. This species obtains and feeds on its prey primarily on the ground.

Within the Project area, habitat for this species includes, but is not limited to, all trees and old buildings. There have been no surveys for this species in the Project area; however, based on the available suitable roosting habitat, Pallid bat have a high potential to occur within the Project area.

**Townsend's Big-eared Bat (*Corynorhinus townsendii townsendii*).** Townsend's big-eared bat, a California Species of Special Concern, occurs throughout California. Inhabiting mesic habitats, it will roost in colonies in caves, mines, tunnels, or buildings. This species forages along habitat edges, gleaning insects from bushes and trees. Once abundant throughout California, Townsend's big-eared bat has decreased in population numbers due to sensitivity to human disturbance of roosting sites.

Within the Project area, habitat for this species includes, but is not limited to, large snags and old buildings. There have been no surveys for this species in the Project area; however, based on the available suitable roosting habitat, Townsend's big-eared bat have a high potential to occur within the Project area.

**Yuma Myotis (*Myotis yumanensis*)** Yuma myotis, a California Species of Special Concern, is found everywhere in California except the Mojave and Colorado Desert Regions. This species typically feeds on small insects over water sources. Diverse roosting structures are used, including buildings, mines, caves or crevices.

Within the 1,120 acre Project area, habitat for this species includes all trees and old buildings. There have been no surveys for this species in the Project area; however, based on the available suitable roosting habitat, Yuma myotis have a high potential to occur within the Project area.

#### Other Protected Species

**Red-tailed Hawk (*Buteo jamaicensis*), Red-shouldered Hawk (*Buteo lineatus*), white-tailed kite (*Elanus caeruleus*) (referred to as black-shouldered kite in the Eastern Dublin EIR), American Kestrel (*Falco sparverius*), Great Horned Owl (*Bubo virginianus*), barn owl (*Tyto alba*), and Western Screech Owl (*Otus kennicottii*).** With the exception of the white-tailed kite, these species were not evaluated in the Eastern Dublin EIR. These raptors are federally protected under the Migratory Bird Treaty Act (MBTA) and under California Department of Fish and Game Code Section 3503.5. Often edge species, these raptors will forage in grasslands, open meadows, and emergent wetlands adjacent to woodlands, forests or riparian areas. Nesting substrates for these species vary between dense riparian foliage near permanent water to isolated trees and human structures. All are year-round residents. These species are expected to forage on site and may occupy suitable nesting habitat present within the Project area.

#### IMPACTS AND MITIGATIONS FROM THE EASTERN DUBLIN EIR

The Eastern Dublin EIR included a comprehensive assessment of habitat and wildlife resources in the GPA/SP planning area. Table 3.3-1A shows special status plant species and Table 3.3-2A shows special status wildlife species the Eastern Dublin EIR identified as potentially occurring in Eastern Dublin (also see Eastern Dublin EIR Tables 3.7-1 and 3.7-2). The EIR identified potential impacts related to the general effects of potential development in Eastern Dublin including direct habitat loss, indirect habitat loss due to vegetation removal for construction and development activities, and loss or degradation of sensitive habitat (Impacts 3.7/A, B, and C). The Eastern Dublin EIR also identified potential impacts related to wildlife species such as San Joaquin kit fox, California red-legged frog,

California tiger salamander, and others (Impacts 3.7/D – S). Mitigation measures were adopted to, among other things, provide for resource management plans, avoid development in sensitive areas and revegetate disturbed areas (generally Mitigation Measures 3.7/1.0 – 28.0).

All mitigation measures adopted upon approval of the Eastern Dublin GPA/SP continue to apply to implementing actions and projects such as the proposed annexation and rezoning of the Project area. Even with mitigation, the City concluded that the cumulative loss or degradation of botanically sensitive habitat was significant and unavoidable. Upon approval of the Eastern Dublin GPA/SP, the City adopted a Statement of Overriding Considerations for this significant unavoidable impact (Resolution No. 53-93).

The Eastern Dublin EIR analyzed cumulative impacts on biological resources within the area described above. At that time, Contra Costa County had an Urban Limit Line which functioned as a growth boundary. That Urban Limit Line placed all of the Dougherty and Tassajara valleys inside the growth boundary (i.e., allowing development of those areas), and placed lands to the east of Tassajara Valley and north of the County line outside the growth boundary. Alameda County had no comparable growth boundaries; instead, planning for the Alameda County portions of this region was performed by the cities of Dublin and Livermore.

The Eastern Dublin EIR identified three significant cumulative biological impacts. These are listed below:

1. Habitat loss on the project site will contribute to the ongoing loss of wildlife habitat in the Tri-Valley region (IM 3.7/A).
2. The project will contribute to the continued loss and deterioration of botanically sensitive habitat, particularly riparian habitat (IM 3.7/C).
3. The project will contribute to the cumulative loss of foraging habitat for golden eagle and other raptors (IM 3.7/K).

#### **SUPPLEMENTAL IMPACTS AND MITIGATION MEASURES**

The Project proposes the same type and density of potential development that was assumed in the Eastern Dublin EIR. The Initial Study for the Project determined that species and/or habitats not previously identified or analyzed in the Eastern Dublin EIR could occur in the Project area. The Initial Study also determined that the recent designation by USFWS of critical habitat for the California red-legged frog and changed regulatory standards for this and other species could create new potentially significant impacts that should be analyzed in this Supplement.

#### **Significance Criteria**

Impacts to biological resources are considered significant if species that could occur in the Project area and could be substantially affected by the Project have been listed as threatened or endangered since the Eastern Dublin EIR, or if changes in the regulatory status of species previously identified show substantially more extensive potential impacts on habitats. Significant supplemental impacts could occur if sensitive habitat described in the Eastern Dublin EIR is newly identified within the Project area.

#### **Regulatory Setting**

Special-status plant species include those listed as Endangered, Threatened, Rare, species proposed for listing, and candidates for listing under the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA) (United States Fish and Wildlife Service (USFWS) 1996, 1998; California Department of Fish and Game (CDFG) 2000c). The California Native Plant Society

(CNPS) also maintains lists of plants of special concern (CNPS 2000). The CNPS lists are recognized by the CDFG and serve essentially as their list of "candidate" plant species. The CDFG generally states that all taxa on CNPS lists 1B and 2 should be addressed in California Environmental Quality Act (CEQA) documents and recommends that taxa on CNPS lists 3 and 4 also be considered.

Special-status animal species include those listed by the United States Fish and Wildlife Service (USFWS 1996, 1998) and the California Department of Fish and Game (CDFG 2000b). The USFWS officially lists species as either Threatened or Endangered, and also identifies candidates for listing. Certain species also receive federal protection under the federal Bald Eagle Protection Act (e.g., bald eagle, golden eagle), the federal Migratory Bird Treaty Act (MBTA), and state protection under CEQA Section 15380(d). In addition, many other species are considered by the CDFG to be species of special concern; these are listed in Remsen (1978), Williams (1986), and CDFG (2000b). Although such species are afforded no official legal status, they may receive special consideration during the planning stages of certain development projects. State statutes further classify some species under the following categories: "fully protected", "protected fur-bearer", "protected amphibian", and "protected reptile." The designation "protected" indicates that a species may not be taken or possessed except under special permit from the CDFG; "fully protected" indicates that a species can be taken for scientific purposes by permit only (CDFG 2000b). Raptors and passerines are protected under California Fish and Game Code 3503.5 and 3503, respectively, in which all nests, eggs, and birds are protected (CDFG 2000b).

This chapter identifies potential impacts to special-status plant and animal species and their habitat, and identifies specific mitigation measures to address such impacts. Several species listed as threatened or endangered under the ESA or CESA or otherwise classified as protected are or may be present in the Project area. Depending on the circumstances, approval of the project, and eventual implementation in the form of future development of individual properties within the Project area (which developments will require site-specific development proposals and additional, site-specific environmental review), may require permits from the state and federal agencies that implement the ESA, CESA and other resource protection laws, including laws to protect aquatic habitat areas. The City recognizes that those state and federal agencies may require mitigation measures in those permits, and that such mitigation measures could exceed the level of mitigation required by the City in this supplement. It is recognized that all future development activity within the Project area as well as the cumulative impact area must comply fully with the ESA, CESA and other applicable resource laws. When future development is planned, any proponent who wishes to develop within the Project area will identify which other permits are necessary, if any. All future development will comply with all mitigation requirements contained in any applicable permits obtained from other agencies, which mitigation measures may differ from the mitigation measures imposed by the City.

Since the 1993 EIR, land use and development policies for the overall cumulative impact area have changed. Contra Costa County has revised its Urban Limit Line, moving it to the west and thereby placing all of the Tassajara Valley outside of the Urban Limit Line. Consequently, the Tassajara Valley is no longer considered to be available for urban development. Also, Alameda County adopted an Urban Growth Boundary. This line places the southern and western portions of the Project area within the growth boundary (i.e., allowing development of those areas), and places the northern and eastern portions outside of the growth boundary. This Urban Growth Boundary would guide any land use development proposed to occur on unincorporated lands subject to Alameda County jurisdiction. However, the Project area is entirely within the City of Dublin's General Plan planning area and Sphere of Influence, and for this analysis is therefore still considered to be available for urban development. The Urban Growth Boundary also places large portions of North Livermore outside of the growth boundary. Again, however, those areas are within the City of Livermore's planning area and for this analysis are still considered to be available for urban development.

As a result of these changes in land use policies and rules, the amount of land within the overall area described above which is available for development has decreased since the 1993 EIR was prepared.

This is primarily the result of the change in the Contra Costa Urban Limit Line in the Tassajara Valley region. As a result, cumulative impacts on biological resources, while still cumulatively significant, are less today than when analyzed in the 1993 EIR.

## Methodology

The biological analysis contained in this Supplement is based on surveys and assessments conducted for the Eastern Dublin EIR as well as subsequent and ongoing surveys for biological resources within the Project area. The location of habitat types for this Supplement is based on field reconnaissance and focused surveys, verification of the Eastern Dublin EIR habitat mapping, and review of aerial photographs (2000).

Special status plants and wildlife with potential to occur within the Project area are described above and summarized in Tables 3.3-1 A and B, and Table 3.3-2 A and B. The descriptions also include information from background research and studies conducted since certification of the Eastern Dublin EIR. Locations of observed sensitive species are mapped on Figure 3.3-B: Sensitive Species in the Eastern Dublin EIR. For properties within the Project area on which species surveys and mapping have not been performed, the potential presence of species and habitat is inferred based on habitat type and suitability, field reconnaissance, and local knowledge of species occurrences on nearby parcels.

## Supplemental Impacts

### *Supplemental Impact BIO 1: Direct and Indirect Habitat Loss*

The Project, and subsequent development which will be subject to detailed property-by-property development proposals and additional project-level environmental review, would result in direct and indirect habitat loss, degradation, and disturbance across the overall Project area as described in Impacts 3.7A and 3.7B of the Eastern Dublin EIR. Not all of these impacts were analyzed in the Eastern Dublin EIR, due to the subsequent development of new information and new regulatory activities as described above. Also, many impacts may not be adequately addressed solely through subsequent property-by-property development proposals and project-level environmental review.

For example, since preparation of the Eastern Dublin EIR one new habitat type not previously identified in the EIR, i.e., seasonal wetland, has been identified as occurring within the Project area. Figure 3.3-C shows the Project's proposed general land use designations and roadways, in conjunction with the mapped habitat areas described above and depicted on Figure 3.3-A, such as seasonal wetlands. Under these proposed general designations, a portion of the newly-identified seasonal wetlands would be preserved within open space, while other seasonal wetland areas would be filled for development purposes. Second, intermittent streams, shown but not identified as habitat in the Eastern Dublin EIR, have been identified as a habitat type and are known to occur within the Project area as shown on Figure 3.3-A. Some portions of the intermittent streams would be located within open space corridors or open space areas designated in the GPA/SP and the Project, while other portions would not. Third, thirteen additional plant species and eight additional wildlife species have been identified as occurring or potentially occurring on the site, as compared to the Eastern Dublin EIR. Two of these plants, the San Joaquin spearscale and Congdon's tarplant, have been observed within the Project area. Suitable habitat for two other plant species, palmate bird's beak and caper-fruited tropidocarpum, has been observed within the Project area. Whether these species exist in the Project area, and where, will not be known until property-specific, detailed development proposals are later prepared and project-level environmental review is performed. Finally, the potential impacts to any particular biological resource will likely occur on two or more of the individual properties within the Project area. Analyzing and mitigating for such impacts solely on a property-by-property basis will not adequately address the collective impact across the Project area. Consequently, while each property owner in their subsequent development proposals and project-level environmental review

must follow the impact-specific mitigation standards set forth in this chapter, a more comprehensive approach to these impacts which cuts across property boundaries is also warranted.

The potential loss of seasonal wetlands and intermittent streams not previously analyzed in the EIR, the potential loss of sensitive species habitat not previously analyzed, and the collective impacts to biological resources across the entire Project area, result in supplemental potentially significant impacts and a potentially significant cumulative impact.

#### ***Supplemental Mitigation Measures***

**SM-BIO-1:** In order to address newly analyzed impacts, and in order to address impacts to biological resources in a coordinated manner across the entire Project area (as opposed to addressing them solely on a property-by-property basis), the Project proponents shall prepare and implement a Resource Management Plan (RMP) as described below. Following approval of the Project, but prior to subsequent submittal to the City for discretionary review of any specific development proposal for any property within the Project area, the applicant shall prepare and submit to the city for its review and approval an RMP encompassing all properties within the Project area. The RMP will analyze biological impacts in more detail and more comprehensively than can this program-level SEIR, and such impacts will in turn be analyzed to an even greater, project-level degree when Stage 2 development plans are submitted by individual property owners within the Project area to the City for discretionary review.

The RMP shall address all properties within the Project area and any necessary off-site mitigation lands. As noted below, it must apply and comply with all biological resource mitigation measures contained in this SEIR (SM-BIO-2 through SM-BIO-45) and in the Eastern Dublin EIR.

The RMP must address the following special status species and habitats:

1. Botanically sensitive communities: arroyo willow riparian woodland, seasonal wetlands, intermittent streams, freshwater marsh and alkali grasslands.
2. Special Status plant species: San Joaquin spearscale, Congdon's tarplant, palmate bird's beak, caper-fruited *tropidocarpum* and Livermore tarplant.
3. Special status invertebrates: conservancy fairy shrimp, longhorn fairy shrimp, vernal pool fairy shrimp, and vernal pool tadpole shrimp.
4. Special status amphibians: California red-legged frog and California tiger salamander.
5. Special status raptors and passerines: golden eagle, burrowing owl, short-eared owl, tricolored blackbird, loggerhead shrike and California horned lark.
6. Special status mammals: San Joaquin kit fox, pallid bat, Townsend's big-eared bat and Yuma myotis bat.

The RMP shall consist of the following:

- Overview
- Discussion of existing conditions of soil, geology, adjacent and proposed land uses, creeks and drainages, wetlands, vegetation, and special status plants and animals across the entire Project area
- For each special status species and sensitive habitat listed above, a detailed discussion as follows:
  1. General description of the resource – biology, life history and regional distribution
  2. Specific description and mapping of occurrence across the Project area (to be based on property-by-property surveys)

- 3. Potential direct, indirect and cumulative impacts per the Eastern Dublin EIR and Supplemental EIR
- 4. Description of applicable local, state and federal regulatory requirements.
- A comprehensive and detailed plan for managing these resources consistent with the following requirements and principles:
  1. Each of the biological resource mitigation measures in the Eastern Dublin EIR and this SEIR
  2. All applicable local, state and federal regulatory requirements
  3. Local resource protection policies (e.g., Stream Restoration Program, Grazing Management Plan)
  4. To the greatest extent feasible, and consistent with applicable mitigation measures and regulatory requirements, impacts to sensitive biological resources shall be avoided, and such resources shall be preserved and managed on-site (i.e., within the Project area)
  5. To the extent impacts to sensitive biological resources cannot be avoided, those impacts shall be mitigated off-site consistent with the applicable mitigation measures.
  6. Sensitive biological resources which are preserved either through avoidance or mitigation shall be permanently protected and managed. The means to accomplish this shall be specified in the plan.
  7. Management efforts shall employ principles of adaptive management, and shall be monitored regularly.
  8. Funding for such preservation, management and monitoring work must be assured.

Implementation of this mitigation measure will reduce the identified impacts, including cumulative impacts, to a less than significant level.

#### ***Supplemental Impact BIO 2: Loss of Special Status Plant Species***

No special status plant species were identified in the Eastern Dublin EIR. More recent observations and documentation show the potential for the occurrence of at least five special status plants within the Project area. The San Joaquin spearscale and the Congdon's tarplant were documented within the Project area since preparation of the Eastern Dublin EIR (Sycamore Associates, in prep.). Suitable habitat for palmette bird's beak (*Cordylanthus palmatus*) and caper-fruited tropidocarpum (*Tropidocarpum capparideum*) was observed in the upper reaches of Doolan Canyon to the east of the Project area, and such suitable habitat known to occur within the Project area. Additionally, suitable habitat (alkali grasslands) may be available for Livermore tarplant (*Deinandra bacigalupii*), a newly described plant species within the Project area. Whether these or other plants listed in Table 3.3-1B are present in the Project area will not be known until individual properties within the Project area are surveyed for these plants. Given the presence of suitable habitat, and the known occurrence of two of these species, direct loss of individuals and associated microhabitats could occur as a result of future development in the Project area. This could result in a supplemental potentially significant impact.

On-going or planned development within the cumulative impact area identified for this project is resulting in a loss of available habitat and total population size of Congdon's tarplant, San Joaquin spearscale and potentially other species identified above. Combined with loss of habitat and plant species within the project area, a supplemental cumulative impact is anticipated with regard to special status plant species.

#### **Supplemental Mitigation Measures**

**SM-BIO-2:** Plant surveys, as outlined in USFWS and CDFG survey protocols (CDFG 1996), shall be conducted across the Project area in early spring, late spring, and late summer to confirm presence or

absence of special-status plant species. Results of these surveys shall be addressed in the RMP (SM-Bio-1) and in project-level environmental review of all subsequent development applications in the Project area.

**SM-BIO-3:** Once presence is determined for a special status plant species, areas supporting the species should be avoided to the extent feasible.

**SM-BIO-4:** If a special-status plant species cannot be avoided, then the area containing the plant species must be measured and one of the following steps must be taken to ensure replacement on a 1:1 ratio (by acreage):

- a. Permanently preserve, through use of a conservation easement or other similar method, an equal amount of acreage either within the Project area or off-site that contains the plant; or
- b. Harvest seeds from the plants to be lost, or use seeds from another source within the Tri-valley area, and seed an equal amount of area suitable for growing the plant either within the Project area or off-site. Such area shall be preserved and protected in perpetuity. If the plants fail to establish after a five year period, then step "a" above must be implemented

Prior to submittal of a Stage 2 development plan or tentative map, the developer shall submit a written report to the City for its review and approval demonstrating how the developer will comply with this mitigation measure, including the steps it will take to ensure that transplanting or seeding will be successful.

Implementation of these mitigation measures will reduce both project and cumulative impacts to a less than significant level.

#### *Supplemental Impact BIO 3: Loss or Degradation of Botanically Sensitive Habitats*

Impact 3.7C of the Eastern Dublin EIR identified potentially significant direct and indirect impacts to Arroyo Willow Riparian Woodland, and Freshwater Marsh due to development, grading, road construction, and culvert crossings. This supplemental analysis identifies seasonal wetlands and intermittent streams as additional botanically sensitive habitats that could be affected by direct and indirect impacts of development of the Project area. Figure 3.3-C shows the Project's proposed general land use designations and roadways in conjunction with the habitat areas as shown in Figure 3.3-A. A small portion of the newly-identified seasonal wetlands would be protected in open space, while the remainder would be filled for development. Portions of the intermittent streams and other previously-identified habitat types would be located within open space corridors or open space areas designated in the GPA/SP and the Project, while other portions would be filled for development. Other locations of seasonal wetland could later be identified when property-specific development proposals are prepared, and could be affected by development. This could result in a supplemental potentially significant impact and cumulative significant impact.

#### *Supplemental Mitigation Measures*

Mitigation measures 3.7/6.0 and 3.7/7.0 of the Eastern Dublin EIR apply to this impact but do not mitigate it to less than significant.

**SM-BIO-5:** To the extent feasible, implementation of the Project through subsequent preparation of Stage 2 development proposals on a property-by-property basis shall be designed to avoid and minimize adverse effects to waters of the United States (which include seasonal wetlands and intermittent streams) within the Project area. Examples of avoidance and minimization include (1) reducing the size of future individual development projects within the Project area, (2) design future

development projects within the Project area so as to avoid and/or minimize impacts to waters of the United States, and (3) establish and maintain wetland or upland vegetated buffers to protect open waters such as streams. In order to protect the particularly sensitive Arroyo willow riparian woodland and red-legged frog habitat found in the Fallon Road drainage from Fallon Road upstream to its terminus, future development projects within the Project area either shall completely avoid this drainage or limit impacts to bridge crossings (as opposed to fill) or other such minimally impacting features.

**SM-BIO-6:** To the extent that avoidance and minimization are not feasible and wetlands, intermittent streams or other waters will be filled, such impacts shall be mitigated at a 2:1 ratio (measured by acreage) within the Project area if feasible, through the creation, restoration or enhancement of wetlands, intermittent streams or other waters. Such mitigation area shall be preserved and protected in perpetuity. Prior to submittal of a Stage 2 development plan or tentative map for any property within the Project area, the property owner shall submit a written report to the City for its review and approval demonstrating how the owner will comply with this mitigation measure.

**SM-BIO-7:** If mitigation within the Project area is not feasible, then the developer shall mitigate the fill of wetlands or other waters at a 2:1 ratio (measured by acreage) at an off-site location acceptable to the City. Such mitigation area shall be preserved and protected in perpetuity. Prior to submittal of a Stage 2 development plan or tentative map, the property owner shall submit a written report to the City for its review and approval demonstrating how the owner will comply with this mitigation measure.

**SM-BIO-8:** Botanically sensitive habitats shall be included in and shall be protected and enhanced by implementation of the Resource Management Plan, as outlined in Mitigation Measure BIO-SM-1, above.

Implementation of these mitigation measures would reduce impacts to a less than significant level; however, cumulative impacts would remain significant and unavoidable due to the loss of additional botanically sensitive habitat.

#### ***Supplemental Impact BIO4: San Joaquin Kit Fox***

The Eastern Dublin EIR identified potentially significant impacts due to construction of new roads and facilities that could: destroy potential dens or bury foxes occupying dens at the time of construction; modify natural habitat to reduce available prey and den sites; lead to direct mortality or disturbance to foxes due to increased vehicle traffic, human presence and domestic dogs in the area; and directly harm kit fox or reduce prey due to the use of poisons for rodent control. There are no new impacts and no increased impacts to the San Joaquin kit fox or its habitat beyond those identified in the Eastern Dublin EIR. The City adopted kit fox mitigation measures as set forth in Appendix E of Resolution 53-93. However, updated survey and pre-construction protection measures have been adopted since 1993 which should be incorporated into the existing adopted Eastern Dublin San Joaquin Kit Fox Protection Plan to ensure that the latest protocols and standards are implemented in future development of the Project area.

#### ***Supplemental Mitigation Measures***

**SM-BIO-9** Future development of properties within the Project area shall comply with the amended Eastern Dublin San Joaquin Kit Fox Protection Plan (Appendix E) which reflects the latest protocols for kit fox habitat evaluations, presence/absences surveys, pre-construction surveys and precautionary construction measures.

**SM-BIO-10** San Joaquin kit fox habitat shall be included in and shall be protected and enhanced by implementation of the Resource Management Plan, as outlined in Mitigation Measure BIO-SM-1, above.

Implementation of these mitigation measures would reduce impacts to a less than significant level.

#### *Supplemental Impact BIO 5: California Red-legged Frog (CRLF)*

Impact 3.7/F of the Eastern Dublin EIR identified potentially significant impacts due to the destruction and alteration of small water impoundments and stream courses which could eliminate habitat for the CRLF. Increased sedimentation from run-off into small riparian zones or water impoundments could reduce the water quality and threaten breeding and larval habitat. Removal or modification of the vegetation in the stream courses could reduce the suitability of habitat for adult frogs. Additionally, increased vehicle traffic and construction of new roads could increase direct mortality. Harassment and predation by pets and urban wildlife, especially raccoons, is an existing problem and could increase with residential development. Mitigation measures were adopted for these identified impacts.

In March 2001, the USFWS adopted critical habitat for the CRLF comprised of approximately 4.1 million acres across the State. All of the Project area is within the designated critical habitat. The USFWS published a draft Recovery Plan for the CRLF in January 2000. The Project area is located within the Mt. Diablo core area Unit 23 (Draft Recovery Plan for the CRLF (USFWS 2000a)). Based on studies and observations conducted since certification of the Eastern Dublin EIR, the habitat for CRLF still focuses on water and riparian features but is now known also to include adjacent upland areas for potential aestivation and dispersal. As described above, since certification of the Eastern Dublin EIR, CRLF have been observed at several locations within the Project area. However the full extent of their distribution within the Project area has not been determined. Reflecting this new information, potential development of the Project area could have a broader impact on CRLF habitat and on individual frogs than previously analyzed. This is a potentially significant supplemental project impact.

On a cumulative level, policies protecting wetlands and other aquatic habitat have reduced the rate of loss of these habitats since adoption of the Eastern Dublin EIR. Similar policies do not exist for upland areas and, as a result, cumulative growth impacts are greatest for upland components of red-legged frog habitat. While aquatic habitat has preserved the ability of frogs to move between areas of aquatic habitat, upland habitat is reduced or lost when development occurs which may affect overall population numbers. This represents a potentially significant cumulative impact.

#### *Supplemental Mitigation Measures*

In light of the new information on the extent of potential CRLF habitat since the previous EIR, Mitigation Measure 3.7/20.0 and 3.7/22 .0 of the Eastern Dublin EIR must be supplemented through the following additional mitigations.

**SM-BIO-11:** Focused surveys following USFWS survey protocol shall be conducted in habitat considered suitable for CRLF on properties within the Project area which have not already been surveyed. The current protocol (USFWS 1997b) requires that two daytime and two nighttime surveys be performed over a suitable four-day period. Results of these surveys shall be sent to the City for review.

**SM-BIO-12:** Specific California red-legged frog habitat areas, including the drainage upstream and east of the current Fallon Road alignment, shall be included in and protected and enhanced by

implementation of the Resource Management Plan, as described in Mitigation Measure BIO-SM-1, above.

**SM-BIO-13:** To the extent feasible, development of individual properties within the Project area shall avoid all areas of identified suitable California red-legged frog aquatic and dispersal habitat. Specifically, development should avoid such aquatic habitat and provide a 300 to 500-foot buffer on each side of any stream which provides red-legged frog habitat. Limited permanent development may occur within this buffer zone (such as a trail through the length of the buffer zone, or a bridge crossing across the buffer zone), so long as it will have only minor impacts on the habitat. Limited temporary development activity may occur within this buffer zone to create trails, install bridges, etc., and to allow for grading activities along the edge of the buffer zone, so long as such activity will have only minor impacts on the habitat.

**SM-BIO-14:** If avoidance is infeasible, then mitigation lands providing similar or better habitat for CRLF at a 3:1 replacement ratio or suitable ratio determined by the USFWS, shall be preserved and protected in perpetuity. This mitigation, to be proposed in a mitigation and monitoring plan submitted to the City, shall be required prior to submittal of Stage 2 Development Plans and tentative maps for any specific property within the Project area. In selecting off-site mitigation lands, preference shall be given to preserving large blocks of habitat rather than many small parcels, linking preserved areas to existing open space and other high-quality habitat, and excluding or limiting public use within preserved areas. If the identified mitigation lands have been approved by the City, the following guidelines implemented prior to and during construction would reduce impacts to individual CRLF and preserved CRLF habitat:

**SM-BIO-15:** The following construction-related CRLF avoidance and protection measures shall be followed for all future development activity in the Project area, on a property-by-property basis:

- Prior to construction, a map shall be prepared to delineate upland areas from preserved wetland areas.
- The wetland construction boundary shall be fenced to prohibit the movement of CRLF into the construction area and control siltation and disturbance to wetland habitat. Following installation of fencing, its proper location shall be verified by a qualified biologist. The biologist shall ensure that at no time during construction is vegetation removed inside of the fenced area. If construction necessitates the removal of vegetation within the fenced area, additional mitigation will be required. Additionally, the biologist shall walk the length of the fence once each construction day to ensure that CRLF are not trapped within the enclosure. The biologist shall walk the length of the fence more than once a day in areas where CRLF are most abundant.
- Pre-construction surveys within the construction zone shall be conducted by a qualified biologist with appropriate permits to handle CRLF. If no CRLF are detected during these surveys then construction activities may proceed. If CRLF are found within the construction disturbance zone they shall immediately be moved passively, or captured and moved, to suitable upstream sites.
- All construction employees shall participate in an endangered species/special-status habitat education program to be presented by a qualified biologist prior to construction activities. The program shall cover such topics as identifying wetland habitat and areas used by CRLF, identification of CRLF by photos, the state and federal Endangered Species Acts, and the consequences of violating the terms of these acts.

- All construction adjacent to wetlands shall be regularly monitored to ensure that impacts do not exceed those included within the protective standards of the mitigations. Work performed within 500 feet of aquatic habitat shall be monitored by the biologist, who shall document pre-project and post-project conditions to ensure compliance.
- During construction, the biologist shall be on site whenever construction within any aquatic habitats is to occur. Any construction activity within ordinary high water shall be photo-documented by the biologist. In addition, a biologist with the appropriate permits to relocate CRLF shall be available for consultation as needed.

Implementation of these mitigation measures will reduce this project and cumulative impact to a less than significant level.

#### *Supplemental Impact BIO 6: Special Status Invertebrates*

Impact 3.7/S of the Eastern Dublin EIR identified potentially significant impacts on special status invertebrates including vernal pool fairy shrimp and longhorn fairy shrimp. Two additional special status invertebrate species, the Conservancy fairy shrimp and the vernal pool tadpole shrimp, could be affected by development within the Project area and disturbance of potential habitat such as seasonal wetlands. This is a supplemental potentially significant impact.

#### **Supplemental Mitigation Measures**

MM 3.7/28.0 of the Eastern Dublin EIR was adopted to reduce the previously identified impact. That mitigation is supplemented by the following additional mitigation measures.

**SM-BIO-16:** Special-status invertebrate habitat shall be included in and shall be protected and enhanced by implementation of a Resource Management Plan, as outlined in Mitigation Measure SM-BIO-1.

**SM-BIO-17:** The following vernal pool habitat surveys and mitigation shall be implemented for each property within the Project area:

- Surveys of potential habitat for special status invertebrates are required. If suitable habitat is identified, then such habitat shall be surveyed to determine whether it is occupied by special-status invertebrates. If impacts to occupied habitat will occur (including direct impact as a result of habitat destruction, and indirect impact due to disturbance of areas within 250 feet of occupied habitat), the following measures shall be followed:
  - (a) Preservation: For every acre of habitat directly impacted at least two vernal pool credits shall be dedicated within a USFWS-approved mitigation bank or, in accordance with USFWS evaluation of site-specific conservation values, three acres of vernal pool habitat may be preserved within the Project area or off-site as approved by the USFWS.
  - (b) Creation: For every acre of habitat indirectly impacted, at least one vernal pool credit shall be dedicated within a USFWS-approved mitigation bank or, in accordance with USFWS evaluation of site-specific conservation values, two acres of vernal pool habitat may be created and monitored within the Project area or on off-site as approved by the USFWS.

- Vernal pool habitat and associated upland areas which are preserved onsite shall be preserved and managed in perpetuity.
- All avoided habitat on site shall be monitored by a qualified biologist during the time of construction. The monitoring biologist shall have authority to stop all activities that may result in destruction or take of listed invertebrate species or destruction of their habitat. Resumption of construction shall occur after appropriate corrective measures have been taken. The biologist shall report any unauthorized impacts to USFWS.
- Fencing shall be placed and maintained around any and all preserved vernal pool habitat.
- All on-site construction personnel shall receive instruction regarding the presence of listed species and their habitat.

Implementation of these mitigation measures would reduce impacts to a less than significant level.

#### ***Supplemental Impact BIO 7: California Tiger Salamander***

Impact 3.7/G of the Eastern Dublin EIR identified potentially significant impacts on the California tiger salamander (CTS) similar to many of the impacts on the red-legged frog. Since preparation of the Eastern Dublin EIR, the CTS has been made a formal candidate for Federal listing under the ESA. It has been recognized that upland areas of previously-defined CTS aquatic habitat provide suitable aestivation habitat. In addition, the presence of CTS was confirmed in the southern portion of the Project area and suitable habitat is present throughout the Project area. Direct and indirect loss of individuals in breeding ponds and newly recognized upland habitat is a supplemental potentially significant impact.

#### **Supplemental Mitigation Measures**

**SM-BIO-18:** California tiger salamander habitat shall be included in and shall be protected and enhanced by implementation of a Resource Management Plan, as outlined in Mitigation Measure SM-BIO-1.

**SM-BIO-19:** If avoidance is infeasible, mitigation lands, providing similar or better aquatic and upland habitat for California tiger salamander (CTS) at a 1:1 ratio shall be set aside in perpetuity. Upland habitat shall be mitigated by preserving upland on-site or, if necessary, by preserving currently-occupied upland tiger salamander habitat off-site. Aquatic habitat shall be mitigated by creating an equal number (or acreage) of new aquatic California tiger salamander breeding areas within the preserved upland habitat. This mitigation, included in a mitigation and monitoring plan, shall be submitted to the City prior to submittal of Stage 2 development plans and tentative maps. In selecting off-site mitigation lands, preference shall be given to preserving large blocks of habitat rather than many small parcels, linking preserved areas to existing open space and other high-quality habitat, and excluding or limiting public use within preserved areas.

Implementation of these mitigation measures would reduce this impact to a less than significant level.

#### ***Supplemental Impact BIO 8: Nesting Raptors***

The Eastern Dublin EIR identified potentially significant impacts to several species of nesting raptors. Since certification of the Eastern Dublin EIR, an additional special status raptor species, the short-

eared owl, has been identified as potentially nesting within the Project area. Removal or disturbance of an active raptor nest would constitute a supplemental potentially significant impact.

#### ***Supplemental Mitigation Measures***

**SM-BIO-20:** A qualified biologist shall conduct pre-construction surveys for nesting raptors. If an active nest is found the following mitigation measures shall also be implemented.

**SM-BIO-21:** If construction must occur during the nesting season, all potential nesting trees within the footprint of development should be removed prior to the nesting season to prevent occupied nests from being present when construction begins.

**SM-BIO-22:** Construction should occur between August 1 and February 1 to avoid disturbance of nesting raptors during the nesting season. This construction window could be adjusted if monitoring efforts determine that nesting was completed before August 1.

**SM-BIO-23:** If removal of nesting trees is infeasible and construction must occur within the breeding season, a nesting raptor survey shall be performed by a qualified biologist prior to tree disturbance.

**SM-BIO-24:** All active nests shall be identified by flagging and a buffer zone, depending on the species, shall be established around the nesting tree. Buffer zones shall be no smaller than 200 feet.

**SM-BIO-25:** If construction is scheduled when young birds have not yet fledged, an exclusion zone around the nest shall be established or construction shall be delayed until after the young have fledged as determined by a qualified biologist.

**SM-BIO-26:** Nesting raptor habitat shall be included in and shall be protected and enhanced by implementation of the Resource Management Plan as outlined in SM-BIO-1.

Implementation of these mitigation measures would reduce potential impacts to a less than significant level.

#### ***Supplemental Impact BIO 9: Golden Eagle - Elimination of Foraging Habitat***

As discussed in Impact 3.7/K of Eastern Dublin EIR, the conversion of grasslands and the consequent reduction of potential prey are expected to reduce the amount and quality of foraging habitat for golden eagles. Additional data on eagle foraging habitat has been gathered since preparation of the Eastern Dublin EIR. That data indicates that the northern portion of the Project area is used by an identified breeding pair of eagles for foraging (Granger Hunt, pers. comm.). This is a supplemental potentially significant impact.

**SM-BIO-27:** The territory of the golden eagle nesting pair shall be included in and protected and enhanced by implementation of a Resource Management Plan, as outlined in Mitigation Measure SM-BIO-1. The protected golden eagle foraging territory affects areas in the northern portion of the Project area designated for Rural Residential/Agricultural uses. Development standards and uses for these areas shall incorporate the following measures:

- Homesites in this portion of the Project area shall be located in valley bottoms adjacent to existing or planned residential development.
- Permitted agricultural uses shall be limited to grazing to maintain suitable golden eagle foraging habitat.

- Rodent control in this portion of the Project area shall be prohibited.

Any additional portion of the Project area that is within the viewshed of all nest sites used by this species shall also be managed in a similar manner.

Implementation of this measure would reduce this impact to a less than significant level.

#### *Supplemental Impact BIO 10: Burrowing Owl*

Eastern Dublin EIR Impact 3.7/M found that development in Eastern Dublin could result in the loss of potential breeding habitat and/or the disturbance of nests for this special-status species. While this impact has not changed, the California Department of Fish and Game has developed new guidelines for mitigating impacts to this species since preparation of the Eastern Dublin EIR. Without the following supplemental mitigation, this could be a supplemental potentially significant impact.

#### *Supplemental Mitigation Measures (adapted from CDFG 1995)*

**SM-BIO-28:** If construction is scheduled during the nesting season (February 1 – August 31), pre-construction surveys should be conducted on the entire Project area and within 150 meters (500 feet) of the Project area prior to any ground disturbance. To avoid take of over-wintering birds, all burrows should be surveyed 30 days prior to ground disturbance between the months of September 1 and January 31. If ground disturbance is delayed or suspended for more than 30 days after the pre-construction survey, the site should be resurveyed.

**SM-BIO-29:** If over-wintering birds are present no disturbance should occur within 150 feet of occupied burrows. If owls must be moved away from the disturbance area, passive relocation techniques, following CDFG 1995 guidelines, should be used rather than trapping. If no over-wintering birds are observed, burrows may be removed prior to the nesting season.

**SM-BIO-30:** Maintain a minimum buffer (at least 250 feet) around active burrowing owl nesting sites identified by pre-construction surveys during the breeding season to avoid direct loss of individuals (February 1- September 1).

**SM-BIO-31:** If removal of unoccupied potential nesting burrows prior to the nesting season is infeasible and construction must occur within the breeding season, a nesting burrowing owl survey shall be performed by a qualified biologist within 30 days prior to construction. Owls present on site after February 1 will be assumed to be nesting on site or adjacent to the site. All active burrows shall be identified.

**SM-BIO-32:** All active nesting burrows shall have an established 250-foot exclusion zone around the burrow.

**SM-BIO-33:** If construction is scheduled during summer, when young are not yet fledged, a 250-foot exclusion zone around the nest shall be established or construction shall be delayed until after the young have fledged, typically by August 31.

**SM-BIO-34:** When destruction of occupied burrows is unavoidable, existing unsuitable burrows should be enhanced (enlarged or cleared of debris) or new burrows created (by installing artificial burrows) at a 2:1 ratio on protected lands, as provided for below.

**SM-BIO-35:** A minimum of 6.5 acres of foraging habitat per pair or unpaired resident bird, shall be acquired, and permanently preserved and protected. The protected lands shall be adjacent to occupied burrowing owl habitat and at a location acceptable to CDFG.

**SM-BIO-36:** The project proponent shall provide funding for long-term management and monitoring of the protected lands. The monitoring plan should include success criteria, remedial measures, and an annual report to CDFG.

**SM-BIO-37:** Burrowing owl habitat shall be included in and shall be protected and enhanced by implementation of the Resource Management Plan as outlined in Mitigation Measure BIO-SM-1.

Implementation of these mitigation measures would reduce this impact to a less than significant level.

#### *Supplemental Impact BIO 11: Nesting Passerines*

The Eastern Dublin EIR identified potentially significant impacts on riparian and freshwater habitat of tri-colored blackbird. The Project area provides potentially suitable nesting habitat, including grassland, arroyo willow riparian woodland, and freshwater marsh habitat, for two additional nesting passerines, the loggerhead shrike and the California horned lark. A breeding colony of tri-colored blackbirds was observed in the southern portion of the Project area. Potential destruction of nesting habitats or disturbance to or loss of these nesting passerines is a supplemental potentially significant impact. The following supplemental mitigation is identified for these species.

#### *Supplemental Mitigation Measures*

**SM-BIO-38:** If construction is scheduled to occur during the nesting season (February 1- August 15), all potential nesting sites and structures (i.e., shrubs and tules) within the footprint of development should be removed prior to the beginning of the nesting season. However, because the removal of grassland habitat is infeasible, mitigation for impacts to California horned lark are addressed more particularly in Mitigation Measures SM-BIO-39 to SM-BIO-41, below.

**SM-BIO-39:** If removal of nesting trees and shrubs within the footprint of development is infeasible and construction must occur within the breeding season, a nesting bird survey should be performed by a qualified biologist within 30 days prior to construction. These surveys shall cover grassland habitat for potential nesting California horned lark. Birds present on site after February 1 will be assumed to be nesting onsite or adjacent to the site.

**SM-BIO-40:** All active nests shall be identified by flagging and a buffer zone, depending on the species, shall be established around the nest site. Buffer zones can range between 75 feet to 100 feet.

**SM-BIO-41:** If construction is scheduled during summer, when young have not yet fledged, an exclusion zone around the nest shall be established or construction shall be delayed until after the young have fledged, typically by July 15.

**SM-BIO-42:** Habitat for nesting passerines shall be included in and shall be protected and enhanced by implementation of the Resource Management Plan as outlined in SM-BIO-1.

Implementation of these mitigation measures would reduce impacts to a less than significant level.

#### *Supplemental Impact BIO 12: Bat Species*

Special status bat species potentially occurring on the site, including the pallid bat, Townsend's big-eared bat, and the Yuma myotis bat have been identified since certification of the Eastern Dublin EIR. Destruction of roosting habitat for these bat species is a potentially significant supplemental impact.

### ***Supplemental Mitigation Measures***

**SM-BIO-43:** A qualified bat biologist shall conduct occupancy surveys of the Project area to determine whether any mature trees, snags or suitable buildings that would be removed during future project construction provide hibernacula or nursery colony roosting habitat.

**SM-BIO-44:** If presence is observed, removal of roost habitat should be conducted at specific times of the year. Winter roosts are generally occupied between October 15 through January 30 and maternity colonies are generally occupied between February 15 and July 30. If bats are using roost sites that need to be removed, the roosting season of the colony shall be determined and the removal shall be conducted when the colony is using an alternate roost.

**SM-BIO-45:** Habitat for these bat species shall be included in and shall be protected and enhanced by implementation of the Resource Management Plan as outlined in Mitigation Measure SM-BIO-1.

Implementation of these mitigation measures would reduce impacts to a less than significant level.

**TABLE 3.3 -1A**  
**SPECIAL STATUS PLANT SPECIES POTENTIALLY OCCURRING**  
**WITHIN THE PROJECT AREA (Eastern Dublin EIR)**

Species (1)	CNPS Status (2)	Federal/State Status (3, 4)	Habitat (5)	Flowering Period (5)
<i>Amsinkia grandiflora</i> Large-flowered fiddleneck	1B	CE/FE	Grassy slopes below 1200 ft	Apr-May
<i>Cordylanthus mollis</i> ssp. <i>hispidus</i> Hispid birds-beak	1B		Alkaline places in grassland	Jun-Sept.
<i>Cordylanthus palmatus</i> Palmate birds-beak	1B	CE/FE	Alkaline overflowed lands; grassland	June-Sept.
<i>Cryptantha hooveri</i> Hoover's cryptantha	1B	CR	Course sandy areas in grassland	Apr-May
<i>Eriogonum truncatum</i> Mt. Diablo buckwheat	1A		Dry grassy slopes; 1000-1500 ft. chaparral, grassland	Apr-Jun
<i>Eschscholtzia rhombipetala</i> Diamond-petaled California poppy	1B		Dry, gravelly, or grassy slopes	Mar-Apr
<i>Fritillaria agrestis</i> Stinkbells	4		Heavy adobe soils at low elevations; grassland, cismontane woodland	Mar-Apr
<i>Fritillaria liliacea</i> Fragrant fritillary	1B		Heavy soil in open hills and fields near coast; coastal scrub; grassland; often on serpentine	Feb-Apr
<i>Grindelia camporum</i> Var. <i>parviflora</i> Great Valley gumplant	4 No longer has Special-Status		Dry grassy slopes; perhaps alkaline areas	May-Oct
<i>Lasthenia conjugens</i> Contra Costa Goldfields	1B	FE	Grassland; vernal pools	Apr-May

<i>Ranunculus lobii</i> Lobb's aquatic buttercup	4		Shallow vernal ponds, mesic sites; redwood or mixed evergreen forests, northern oak woodland	Feb-Apr
<i>Tropidocarpum capparideum</i> Caper-fruited tropidocarpum	1A		Grassy, alkaline hills below 500 ft.	Mar-Apr

**TABLE 3.3 -1B**  
**NEW SPECIES - SPECIAL STATUS PLANT SPECIES POTENTIALLY OCCURRING**  
**WITHIN THE PROJECT AREA**

Potential To Occur in the Project area in SEIR.	Species (1)	CNPS Status (2)	Federal/State Status (3, 4)	Habitat (5)
<i>Atriplex joquiniana</i> San Joaquin spearscale	1B	FSC	Chenopod scrub, valley /foothill grasslands/alkaline meadows	Apr-Sept.
<i>Atriplex depressa</i> Brittlescale	1B		Chenopod scrub, valley foothill grasslands/alkaline meadows	May-Oct.
<i>Atriplex cordulata</i> Heartscale	1B	FSC	Chenopod scrub, valley /foothill grasslands/ somewhat alkaline meadows	May-Oct.
<i>Atriplex coronata</i> var. <i>coronata</i> Crownscale	4		Chenopod scrub, valley /foothill grasslands/alkaline meadows	April-Oct.
<i>Astragalus tener</i> var. <i>tener</i> Alkali milk-vetch	1B		Playas, valley /foothill grasslands, alkaline vernal pools	March-June
<i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i> Big-scale balsamroot	1B		Cismontane woodland/valley /foothill grassland, sometimes serpentinite	March-June

<i>Blepharizonia plumose</i> ssp. <i>plumose</i> Big tarweed	1B		Valley /foothill grasslands	July-Oct.
<i>Calochortus pulchellus</i> Mount Diablo fairy lantern	1B		Chaparral, cismontane woodland, valley/ foothill grassland	April-June
<i>Deinandra bacigalupii</i> Livermore tarplant	1B		Meadow on alkaline soils.	June-October
<i>Hemizonia parryi</i> ssp. <i>congdonii</i> Congdon's tarplant	1B		Valley/foothill grasslands on alkaline soils.	June-Nov
<i>Madia radiata</i> Showy madia	1B		Valley/foothill grassland below 250 feet, and cismontane woodland	March-May
<i>Palgiobothrys glaber</i> Hairless popcorn-flower	1A		Alkaline meadows and vernal coastal saltmarshes	April-May
<i>Senecio aphanactis</i> Rayless ragwort	2		Coastal scrub and cismontane woodland on alkaline soils	January-April

1 Species names and nomenclature follow California Native Plant Society (1988)

2 California Native Plant Society (2000):

1A = Presumed Extinct in California

1B = Rare, Threatened or Endangered in California and elsewhere

2 = Rare, Threatened or Endangered in California, but more common elsewhere

3 = Plants for which more information is needed -A Review List

4 = Plants of limited distribution -A Watch List

3 California Department of Fish and Game (2000c):

CE = State listed, endangered

CR = State listed, rare

4 U.S. Fish and Wildlife Service (1998):

FE = Federally listed, endangered

FSC = Federal Special Concern Species

5 Munz and Keck (1968)

**TABLE 3.3 - 2A**  
**SPECIAL STATUS WILDLIFE SPECIES POTENTIALLY OCCURRING**  
**WITHIN THE PROJECT AREA (Eastern Dublin EIR)**

SPECIES	STATUS
<b>AMPHIBIANS</b>	
California red-legged frog <i>Rana aurora draytonii</i>	FT/Critical Habitat DFG: CSC DFG: Protected (Full species)
California tiger salamander <i>Ambystoma californiense</i>	FC DFG: CSC DFG: Protected
<b>REPTILES</b>	
Western Pond Turtle <i>Clemmys marmorata</i>	DFG: CSC DFG: Protected
Alameda whipsnake <i>Masticophis lateralis euryxanthus</i>	CT/FT/Critical Habitat DFG: Protected
California horned lizard <i>Phrynosoma coronatum frontale</i>	DFG: CSC DFG: Protected (Full species)
<b>BIRDS</b>	
Bald Eagle <i>Haliaeetus leucocephalus</i>	CE/FT, FPD CDF Sensitive DFG Fully protected BEPA
Golden eagle <i>Aquila chrysaetos</i>	DFG: CSC (Fully protected) BEPA
White-tailed kite <i>Elanus caeruleus</i>	DFG: Fully protected DFG: Code 3503.5
Northern Harrier <i>Circus cyaneus</i>	DFG: CSC DFG: Code 3503.5
Sharp-shinned hawk <i>Accipiter striatus</i>	DFG: CSC DFG: Code 3503.5
Cooper's hawk <i>Accipiter cooperii</i>	DFG: CSC DFG: Code 3503.5
Prairie falcon <i>Falco mexicanus</i>	DFG: CSC DFG: Code 3503.5
American Peregrine falcon <i>Falco peregrinus anatum</i>	CE/Federally delisted CDF: Sensitive DFG: Fully protected, Code 3503.5
Burrowing owl <i>Athene cunicularia hypugea</i>	DFG: CSC DFG: Code 3503.5
Short-eared owl <i>Asio flammeus</i>	DFG: CSC, Code 3503.5
Tricolored blackbird <i>Agelaius tricolor</i>	DFG: CSC, Code 3503 FSC
<b>MAMMALS</b>	

San Joaquin kit fox <i>Vulpus macrotis mutica</i>	CT/FE
<b>INVERTEBRATES</b>	
Longhorn fairy shrimp <i>Branchinecta longiantenna</i>	FE
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT

**TABLE 3.3 - 2B**  
**NEW SPECIES - SPECIAL STATUS WILDLIFE SPECIES POTENTIALLY OCCURRING**  
**WITHIN THE PROJECT AREA**

<b>BIRDS</b>	
Merlin <i>Falco columbarius</i>	DFG: CSC DFG: Code 3503.5
Loggerhead Shrike <i>Lanius ludovicianus</i>	DFG: CSC, Code 3503
California horned lark <i>Eremophila alpestris actia</i>	DFG: CSC, Code 3503
<b>MAMMALS</b>	
San Joaquin kit fox <i>Vulpus macrotis mutica</i>	CT/FE (not a new species, but new mitigation)
Pallid bat <i>Antrozous pallidus</i>	DFG: CSC
Townsend's big-eared bat <i>Corynorhinus townsendii townsendii</i>	DFG: CSC (Full species)
Yuma myotis bat <i>Myotis yumanensis</i>	DFG: CSC
<b>INVERTEBRATES</b>	
Conservancy fairy shrimp <i>Branchinecta conservatio</i>	FE
Vernal pool tadpole shrimp <i>Lepidurus packardi</i>	FE

The wildlife status definitions and governing agencies follow:

U.S. Fish And Wildlife Service (1998)

- FE Endangered: Any species which is in danger of extinction throughout all or a significant portion of its range
- FT Threatened: Any species that is likely to become an endangered species within the foreseeable future
- FC Federal candidate species
- FPE Federally Proposed Endangered: Taxa already proposed to be listed as endangered
- FSC Federal Special Concern Species

FPD Federally Proposed for delisting

BEPA Bald Eagle Protection Act: This act contains numerous protection measures relating to bald eagles and golden eagles

California Department of Fish and Game (2000a, 2000b, 2000c)

CE Endangered: A native species or subspecies of animal, which is in serious danger of becoming extinct throughout all, or a significant portion of its range

CR Listed as Rare by the State of California

CT Threatened: A native species or subspecies that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of special protection and management efforts

CPE Proposed for listing as Endangered

CSC California Species of Special Concern: taxa that are restricted in distribution, declining throughout their range, or associated with habitats that are declining in California

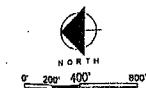
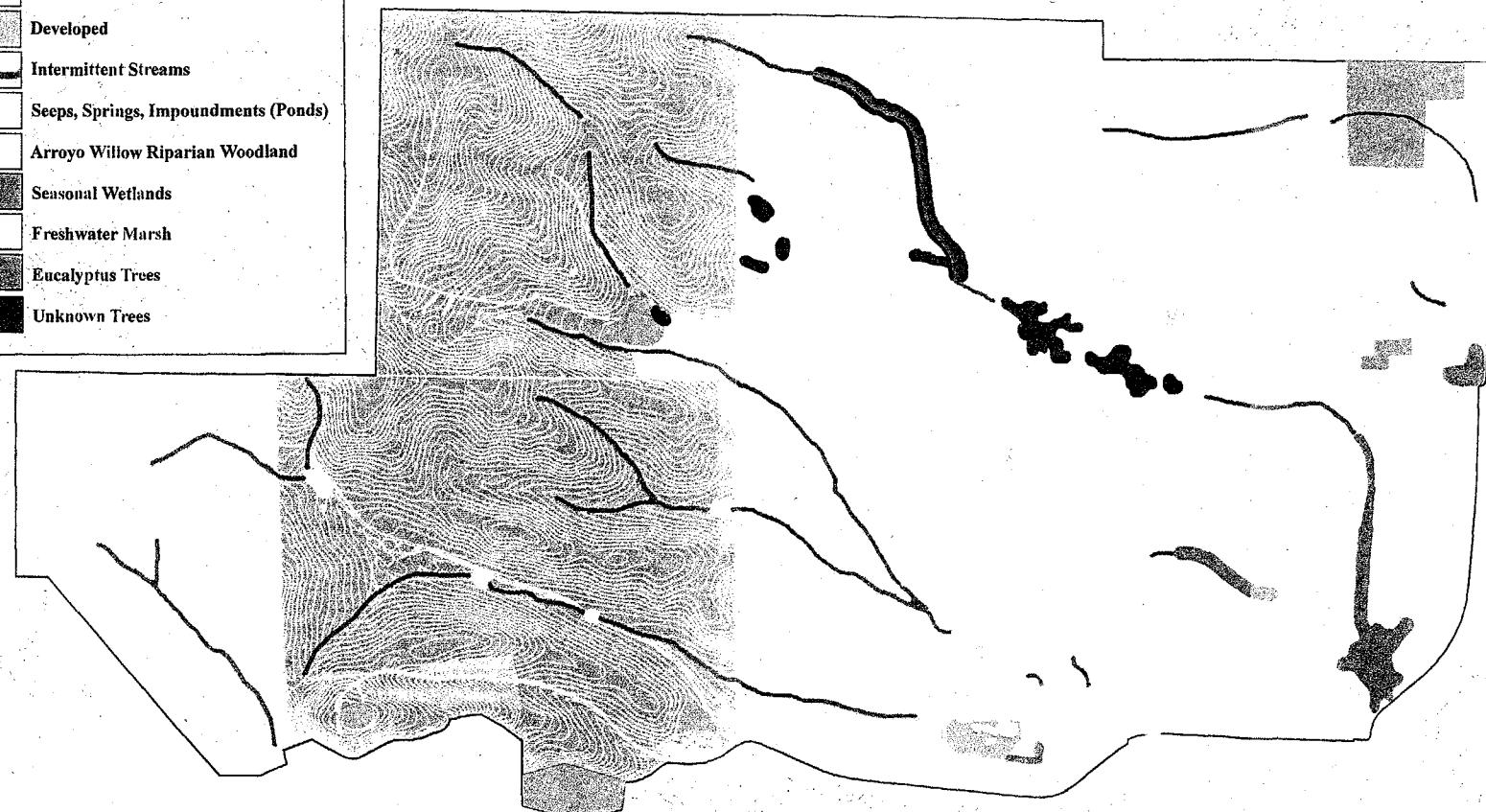
Fish and Game Code (CDFG 1998)

DFG Protected and fully protected under the California Fish and Game Code. Fully protected and protected species may not be taken or possessed without a permit from the Fish and Game Commission and/or the Department of Fish and Game. Information on fully protected and protected species can be found in the Fish and Game Code, (birds at § 3511, mammals § 4700, reptiles and amphibians at § 5050, and fish at § 5515).

**East Dublin Properties**  
**FIGURE 3.3-A**  
Habitat Types

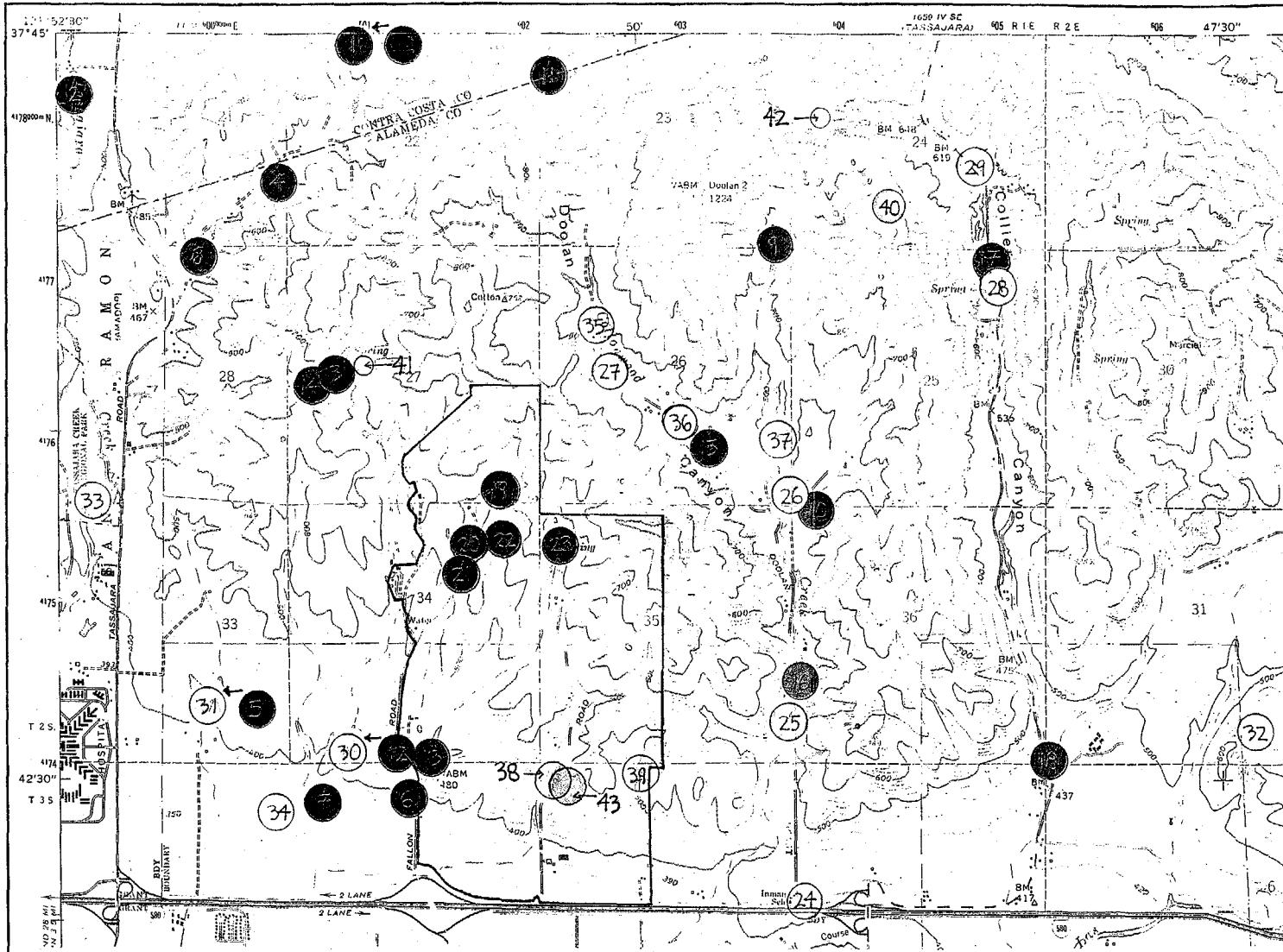
**LEGEND**  
Habitat Types

- Dry Farming: Barley Fields
- Non-native Grassland
- Ruderal
- Developed
- Intermittent Streams
- Seeps, Springs, Impoundments (Ponds)
- Arroyo Willow Riparian Woodland
- Seasonal Wetlands
- Freshwater Marsh
- Eucalyptus Trees
- Unknown Trees



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Civil Engineering, Land Planning, and Surveying  
Pleasanton, CA

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**Figure 3.3-B: Site Vicinity for East Dublin Properties Stage 1 Development Plan and Annexation  
East Dublin, Alameda County, California  
Occurrences of Special-status Animal Species  
Sycamore Associates LLC, 2001**

**East Dublin Properties**  
**FIGURE 3.3-B**  
Sensitive Species in the  
Eastern Dublin Area

#### LEGEND

### San Joaquin kit fox



### California red-legged frog



### California tiger salamander



### **Golden eagle nest**



### Tricolored blackbird colony



#### **Base Map:**

USGS 7.5 Minute Topographic  
Quadrangle, Livermore, California



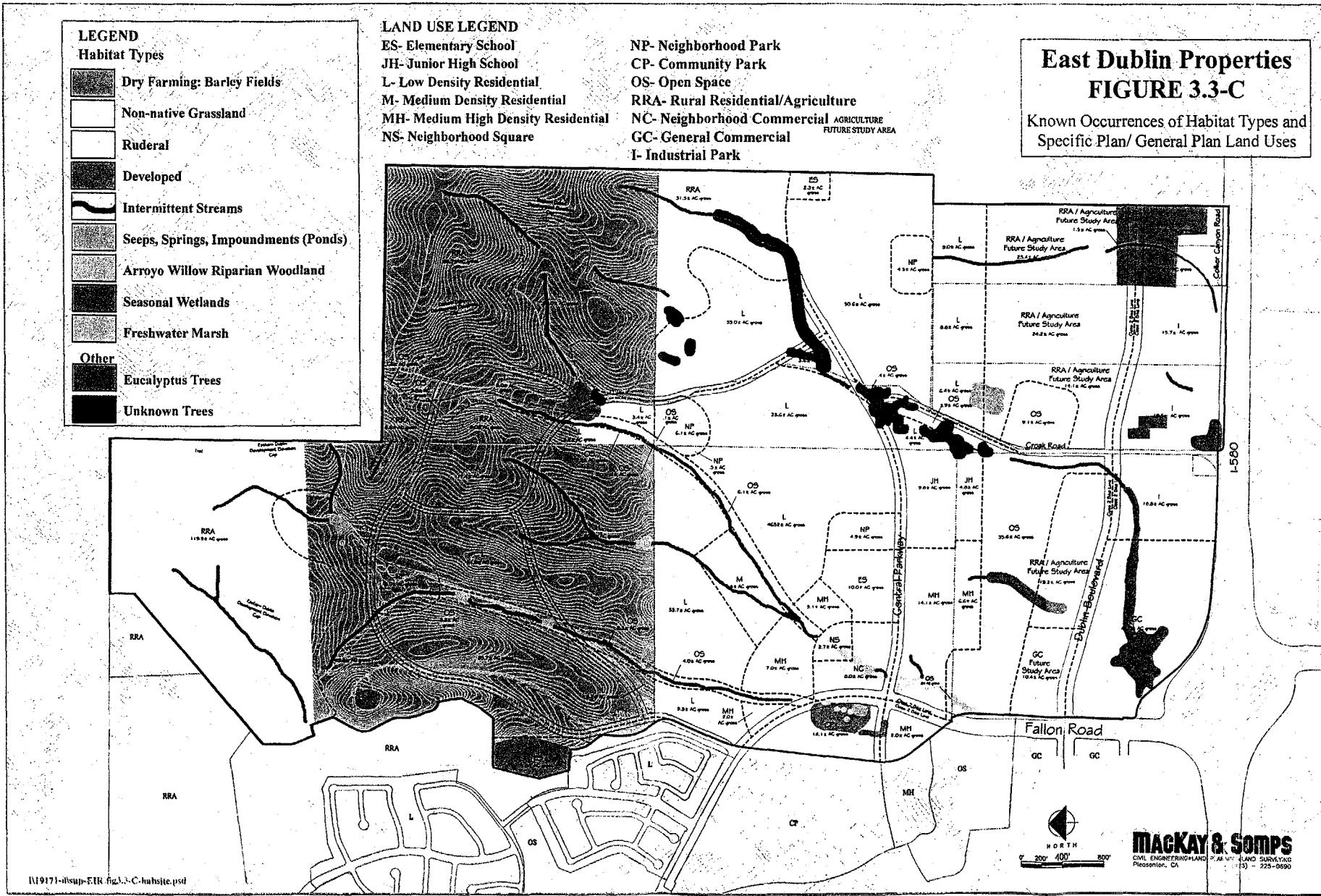
NORTH

**SCALE**

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## **East Dublin Properties**

### Known Occurrences of Habitat Types and Specific Plan/ General Plan Land Uses



### 3.4 NOISE

Noise was analyzed in Chapter 3.10 of the Eastern Dublin EIR. This supplement to the EIR examines whether new significant or substantially increased noise impacts could occur in light of increases in regional traffic and changes in commute patterns since certification of the EIR.

#### **ENVIRONMENTAL SETTING**

The Eastern Dublin EIR contains a detailed discussion of the noise conditions that existed on and around the Project area in 1992-3. Then, as now, the major noise source affecting the Project area is traffic on Interstate 580 (I-580). Measurements conducted along I-580 since 1992, primarily as part of the bi-annual City of Pleasanton noise monitoring survey, have indicated that noise levels have increased only slightly since 1992 (less than 1 dBA) (Illingworth and Rodkin, Bi-Annual Citywide Noise Monitoring in the City of Pleasanton, 1995 and 1998). This minimal noise level increase between 1992 and now is because the freeway was operating at peak-noise generating conditions in 1992. Increased traffic tends to slow traffic speeds thereby decreasing noise generation, although the increased traffic may shift the timing of peak noise occurrence. The increased traffic volume on I-580 between 1992 and now has reduced traffic speed and noise levels. Therefore, the traffic noise contours contained in the Eastern Dublin EIR accurately represent the existing noise conditions on the site and the existing conditions noise contour map included in the Eastern Dublin EIR is reproduced in this study as Figure 3.4-A.

Other noise sources on and adjacent to the Project area include noise generated by traffic on arterial roadways near and within the Project area and aircraft flyovers, mainly from aircraft utilizing the Livermore Municipal Airport. The Eastern Dublin EIR also mentioned the Camp Parks Reserves Forces Training Area (RFTA), located about 1-1/2 miles west of the site near Tassajara Road, as a potential noise source. Only the sound of occasional helicopter flyovers is audible in the Project area. While maximum noise levels generated by individual helicopter flyovers may reach 70 to 80 dBA, the level of helicopter activity at Camp Parks does not generate a Community Noise Equivalent Level (CNEL) (a time-averaged noise descriptor; please refer to the Eastern Dublin EIR p. 3.10-1 for a full description), of 60 dBA in the Project area due to the infrequency of helicopter flyovers. The Project area has been deemed to be outside the area of concern for noise as described in the Environmental Noise Management Plan, Parks Reserve Forces Training Area, California (U.S Army, December 2000).

As reflected in the Eastern Dublin EIR, major arterials would be constructed nearby and within the Project area. These include Fallon Road, a major north-south arterial providing access from the Project area and beyond to I-580, and Dublin Boulevard, a major east-west arterial providing a local arterial street parallel to I-580 from the Project area westward through the City of Dublin. These arterials, along with new roads to be constructed within the Project area, are potential traffic noise sources.

The Livermore Municipal Airport is located southeast of the study area on the south side of I-580. The Livermore Municipal Airport Master Plan includes projected noise contours for noise levels due to Livermore Airport aircraft activity. The projected year-2011 55 dBA CNEL contour line crosses the site on its southern edge, just north of Dublin Boulevard (see Figure 3.4-B for the location of the 55 dBA CNEL contour for Livermore Airport). The 60 dBA CNEL contour does not reach the Project area.

#### **IMPACTS AND MITIGATIONS FROM THE EASTERN DUBLIN EIR**

The Eastern Dublin EIR identified potential impacts related to noise. The impacts applicable to the Project area included exposure of existing and future residences to future roadway noise and to construction noise. Compatibility impacts for mixed uses were also identified (Impacts 3.10/A, B, E, F). Mitigation measures were adopted to require acoustical studies for all residential projects within the future 60 dBA CNEL contour and to provide noise barriers for then-existing residences where feasible. Adopted mitigation measures also require construction noise management programs, compliance with local noise standards, and review of noise management programs in future mixed use projects. All mitigation measures adopted upon approval of the Eastern Dublin GPA/SP continue to apply to implementing actions and projects such as the proposed annexation and rezoning. Even with mitigation, however, potentially significant impacts remained for exposure of then-existing residents to future roadway noise. Upon approval of the Eastern Dublin GPA/Sp, the City adopted a Statement of Overriding Considerations for this significant unavoidable impact (Resolution No. 53-93).

The proposed annexation and rezoning include the same land uses and densities analyzed in the Eastern Dublin EIR. Therefore, there are no new or intensified construction noise or mixed use compatibility impacts.

#### **SUPPLEMENTAL IMPACTS AND MITIGATION MEASURES**

The Project proposes the same type and density of potential development as assumed in the Eastern Dublin EIR. Therefore, noise expected to be generated by Project traffic has not increased from the previous EIR. However, better defined roadway locations indicate potential additional noise impacts may occur beyond those assessed in the Eastern Dublin EIR and additional developed areas may be subject to unacceptable or conditionally acceptable noise impacts.

##### **Significance Criteria**

Noise impacts are considered significant under the City's Noise and Land Use Compatibility Guidelines if they cause exposure of existing and proposed housing (including hotels) to a CNEL of more than 60 dBA. For increases in ambient noise, the Eastern Dublin EIR utilized as significance criteria noise standards established by the U.S. Department of Transportation in *Guidelines for Preparing Environmental Assessments*, U.S. Department of Transportation, Circular UMTA 5620.1. These standards consider a traffic-generated noise increase of 3 dBA or less as insignificant, an increase of 4 to 5 dBA as potentially significant, and an increase of 6 dBA or more as significant.

##### **City of Dublin Noise Standards**

Pursuant to the Dublin General Plan Noise Element, a CNEL of 60 dBA or less is considered normally acceptable for residential development (See Table 3.4-1, excerpted from the General Plan.) Title 24 of the California Code of Regulations requires all multi-family residential dwellings, hotels, and motels exposed to a CNEL of 60 dBA or greater to have an acoustical study that shows how an interior CNEL of 45 dBA will be achieved in habitable rooms. Consistent with Eastern Dublin EIR mitigation measure 3.10/1.0, the City also applies this standard to single-family homes. The City has been applying a standard for outdoor noise levels not to exceed an Ldn (day/night average sound level) of 65 dBA in backyards or common outdoor areas for other projects in the East Dublin Specific Plan Area.

***Supplemental Impact NOISE 1: Exposure of proposed and existing housing to noise levels in excess of standards established in the General Plan.***

In some cases, land uses proposed within the Project area would be exposed to noise levels that would be considered conditionally acceptable under the City of Dublin's Noise Element. This is considered a supplemental potentially significant impact.

The noise contours for Project buildout are shown in Figure 3.4-B. These contours do not take into account acoustical shielding due to existing or future buildings or topography. Consequently, actual noise levels may be less than that shown on the map. The noise contours for the Project area are more detailed than they were in 1993 because a roadway system has been identified and more precise noise contours could be developed. Residential development proposed along Central Parkway would be exposed to a CNEL of over 65 dBA, as would residential development along Fallon Road and the internal loop roads. This would be a potentially significant impact.

These areas would require an acoustical study during Project development to determine how interior levels could be controlled to the City and State goal of 45 dBA and how outdoor noise levels in residential use areas would be controlled to a CNEL of 65 dBA. Although the noise exposure information is more detailed and allows a more accurate determination of where mitigation will be required, the mitigation measures in the Eastern Dublin EIR remain applicable.

Adopted Mitigation Measures 3.10/1.0 and 2.0 of the Eastern Dublin EIR require acoustical studies for new residential development within the 60 dBA CNEL noise contour and require mitigation for outdoor living areas of existing residences. These mitigations will continue to apply within the 60 dBA contour as adjusted and will reduce increased traffic noise impacts on new housing to less than significant. No additional mitigation measures are recommended beyond those previously adopted.

However, even with mitigation, previously identified traffic noise impacts on existing residences could not be reduced to insignificance. Therefore, upon approval of the Eastern Dublin GPA/SP, the City adopted a Statement of Overriding Considerations (Resolution No. 53-93). To the extent that increased traffic noise would intensify this impact, the intensified impact also would be potentially significant and unavoidable.

***Supplemental Impact NOISE 2: Exposure of future commercial, office and industrial uses to noise levels in excess of standards established in the General Plan.***

As reflected in the noise contours for I-580 and Project area roadways, the general commercial and industrial commercial land uses proposed between Dublin Boulevard and Interstate 580 would be exposed to a CNEL of up to 75 dBA, which is considered conditionally acceptable for these land uses under the guidelines of the Noise Element of the General Plan. This is considered a potentially significant impact.

**SM-NOISE-1:** Require a noise insulation plan for general commercial (including any proposed office-type uses) and industrial land uses to be submitted for all such development projects located within the future CNEL 70 dBA contour. The plan shall show how interior noise levels would be controlled to acceptable levels. The acceptable level will depend on the type of use as set forth in the noise insulation plan. Interior noise levels could be controlled adequately by using sound-rated windows in windows closest to the streets and the freeway.

This mitigation will reduce noise impacts on future commercial, office, and industrial uses to less than significant.

***Supplemental Impact NOISE 3: Exposure of people to or generation of excessive ground borne vibration or ground borne noise levels.***

Increased traffic on I-580 and Project area roadways also could increase ground borne vibrations caused by the passage of heavy trucks or equipment along nearby streets. Like noise, the effects of vibrations are more noticeable during the quieter times of the day -- early morning, evenings and nighttime hours. Also like noise, vibrations are considered to be more of an impact in residential areas, which typically are more sensitive receptors than other land uses.

The discussion of increased noise levels in Supplemental Impact Noise 1, above, applies generally to ground borne noise, since both are generated by vehicular traffic, the main source of current and future noise on and within the Project area. Therefore, no additional supplemental impact or mitigation measures are required for ground-borne noise. Ground borne vibration from increased levels of heavy traffic could be a potentially significant impact.

**SM-NOISE-2:** Except for local deliveries, restrict heavy truck traffic to designated arterial roadways and truck routes within the Project area and limit the hours of local deliveries to daytime hours as established by the City.

This mitigation will reduce ground borne vibration from increased levels of heavy traffic to less than significant.

**TABLE 3.4 -1**  
**LAND USE COMPATIBILITY FOR COMMUNITY NOISE ENVIRONMENTS**  
**COMMUNITY NOISE EXPOSURE (dBA)**

Land Use Category	Normally Acceptable	Conditionally Acceptable (Noise Insulation Features Required)	Normally Unacceptable	Clearly Unacceptable
Residential	60 or less	60 - 70	70 - 75	Over 75
Motels, hotels	60 or less	60 - 70	70 - 80	Over 80
Schools, churches, nursing homes	60 or less	60 - 70	70 - 80	Over 80
Neighborhood parks	60 or less	60 - 65	65 - 70	Over 70
Offices: retail commercial	70 or less	70 - 75	75 - 80	Over 80
Industrial	70 or less	70 - 75	Over 75	
Conditionally acceptable exposure requires noise insulation features in building design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.				
Source: California Office of Noise Control, 1976, as modified by Charles M. Salter Associates, Inc.				

Existing Noise  
Contours

Legend

General Plan Amendment Area

Specific Plan Area

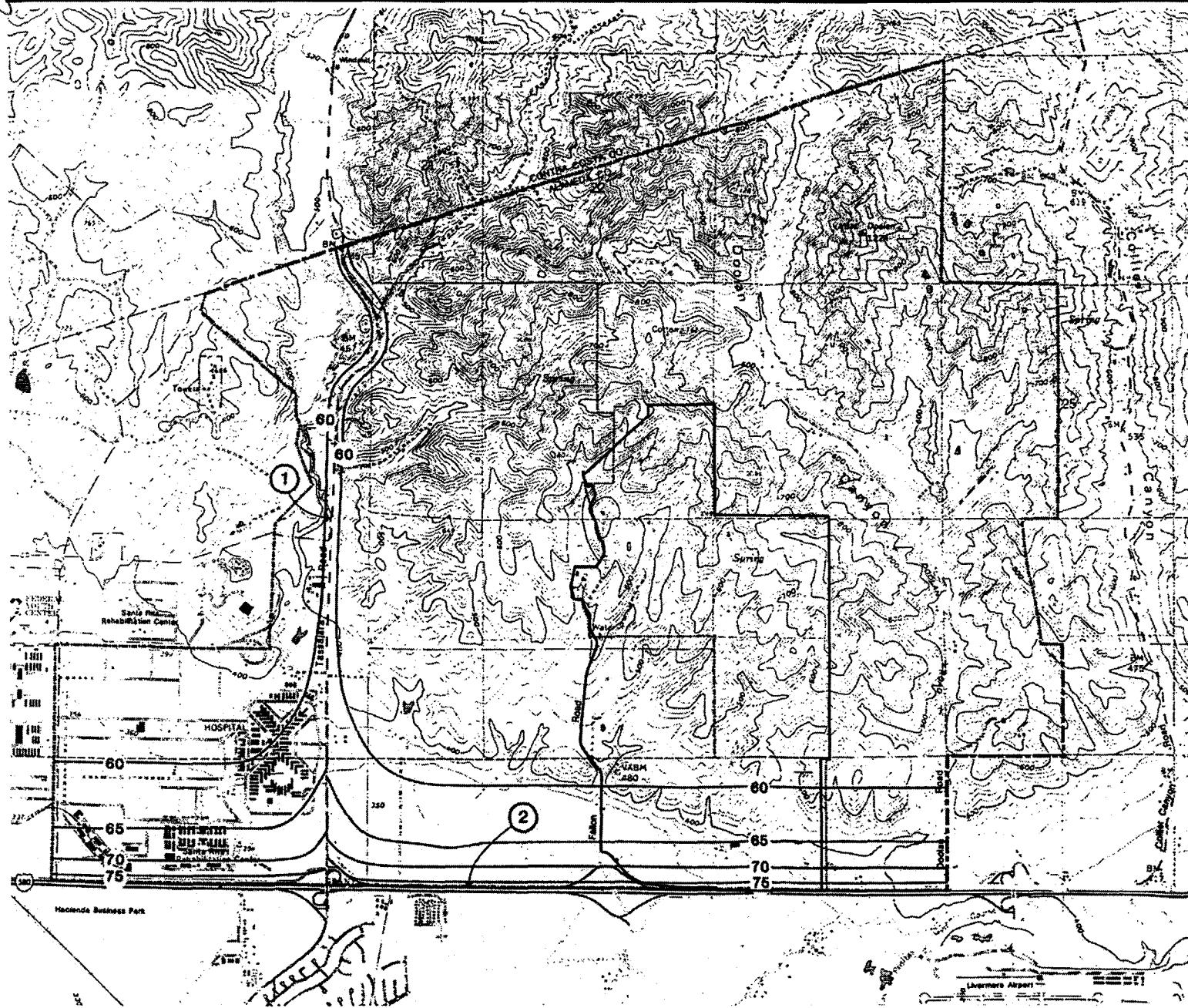
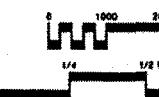
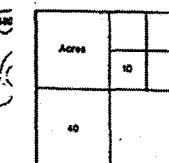
-60- CNEL (Community Noise  
Equivalent Level)

① Noise Measurement  
Location

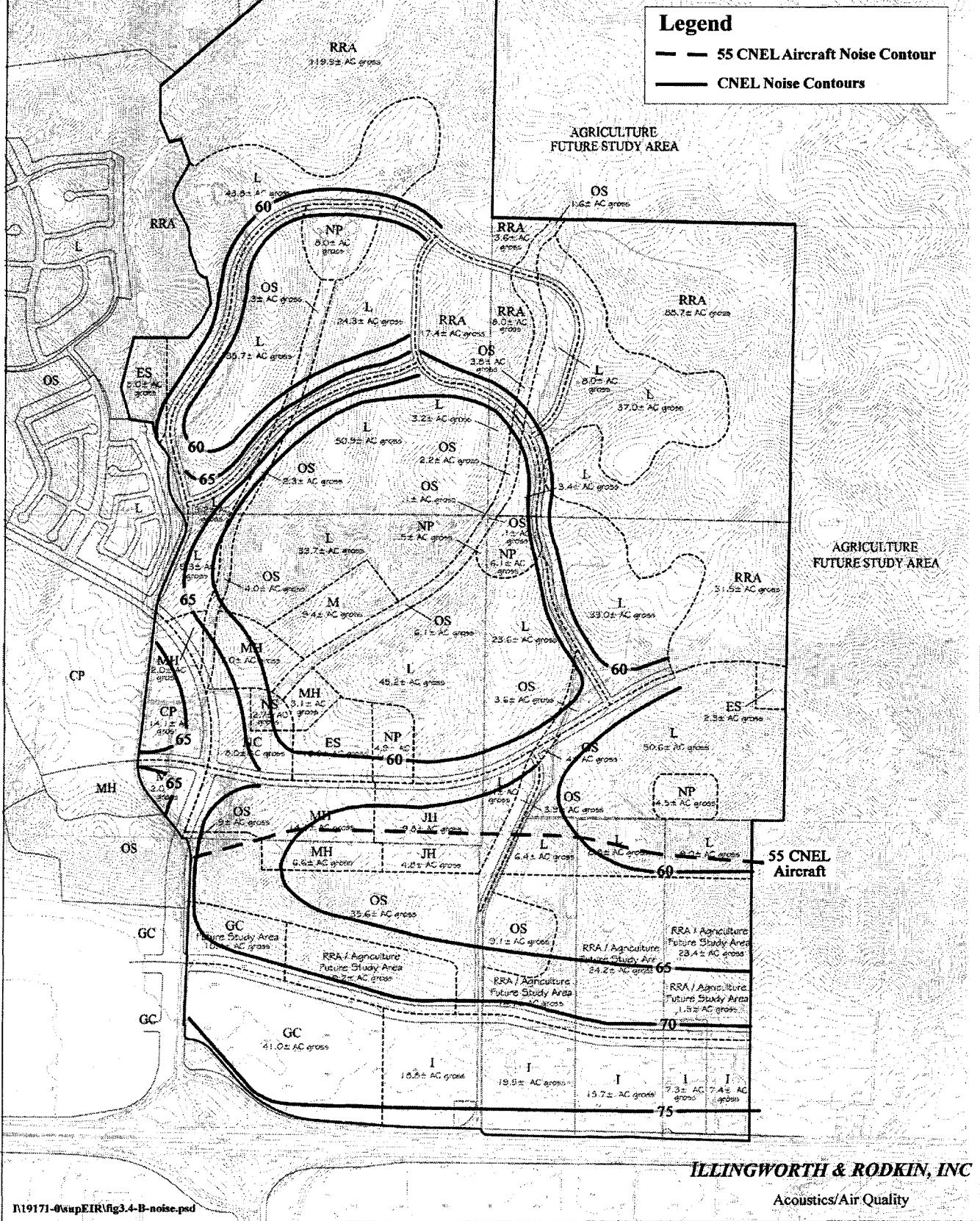
Source: Charles Salter and  
Associates Inc.

EASTERN DUBLIN  
GPA • SP • EIR

Wallace Roberts & Todd Figure 3.1



**East Dublin Properties**  
**FIGURE 3.4-B**  
Build-out Noise Contours



**ILLINGWORTH & RODKIN, INC**

## **Acoustics/Air Quality**

### 3.5 SCHOOLS

The need for new school facilities was analyzed in Chapter 3.4 of the Eastern Dublin EIR. This supplement to the EIR examines whether student generation rates and the related need for different levels of school facilities to accommodate future development of the Project area have changed substantially since certification of the EIR. The supplement also examines the effect of Senate Bill (SB 50), enacted in 1998, on school mitigation and funding.

#### ENVIRONMENTAL SETTING

The Project area currently is within the Livermore Valley Joint Unified School District (LVJUSD) boundary. As a companion request to the proposed annexation, the Project proponents propose to detach from the LVJUSD and attach to the Dublin Unified School District (DUSD). (Provisions of the Education Code govern the liability of property when it is detached from one school district and annexed to another.) The proposed reorganization is consistent with Dublin General Plan Policies 4.1.B and 4.1.F that the DUSD provide school facilities in the Extended Planning Area and that schools located within the City limits be operated by DUSD.

Enrollment in DUSD schools in October 2000 was 4,082 kindergarten through 12<sup>th</sup> grade students (*Dublin Unified School District Study of Demographic Projections and School Construction Revenue Analysis, DRAFT*, Shilts Consultants, Inc., June 2001). DUSD maintains five elementary schools, a middle school, a high school, and a continuation high school. The high school and middle school levels have experienced the highest levels of growth over the past five years with an average annual increase of 3.6 percent per year. In total, the DUSD experienced an average growth rate of 2.26 percent over the past five years.

#### IMPACTS AND MITIGATIONS FROM THE EASTERN DUBLIN EIR

The Eastern Dublin EIR projected the demand for school facilities that would be generated by development under the GPA/SP. At the time the EIR was certified, the DUSD had not adopted student generation standards for all levels of school facilities. The LVJUSD, however, recently had adopted increased generation rates for single- and multi-family development at all school levels from kindergarten through 12<sup>th</sup> grade. (Eastern Dublin EIR response to comment 16-12.) These rates were used in the EIR analysis to ensure a conservative and consistent projection of new student yield from future development of the GPA/SP area.

Based on projected student generation, the Eastern Dublin EIR identified potentially significant impacts related to the demand for new school facilities and the potential for overcrowding if the demand was not met (Impacts 3.4/F, G, H). The EIR also identified impacts on financing school facilities (Impacts 3.4/I and J). Mitigation measures were adopted to reserve school sites on the GPA/SP land use maps, to coordinate new development with school district facilities planning, and to encourage the broadest possible funding mechanisms for new school facilities (MM 3.4/13.0 – 19.0). These mitigation measures reduced the impacts to a level of insignificance. All mitigation measures adopted upon approval of the Eastern Dublin GPA/SP continue to apply to implementing actions and projects such as the proposed prezoning and annexation of the Project area.

#### SUPPLEMENTAL IMPACTS AND MITIGATION MEASURES

The Project proposes the same type and density of potential development assumed in the Eastern Dublin EIR. Pursuant to the Initial Study, this supplement analyzes whether

demand for new school facilities has changed significantly since certification of the Eastern Dublin EIR and assesses the ability to fund new facilities given changes in the law occurring since certification of the Eastern Dublin EIR.

### Significance Criteria

Schools impacts are considered significant if student generation rates have increased such that the demand for new school facilities substantially would exceed the demand identified in the Eastern Dublin EIR. School financing impacts would be significant if the Project failed to comply with SB 50.

**Supplemental Impacts.** No supplemental impacts are expected due to revised student generation rates or the enactment of SB 50.

**Student Generation Rates.** Table 3.5-1 compares student generation rates used in the Eastern Dublin EIR to student generation rates currently used by the DUSD. DUSD generation rates are used because it is assumed that the proposed reorganization will be approved given the approval of a similar reorganization for the 1995 annexation to Dublin of 1,538 acres. Table 3.5-1 shows that at all levels current student generation rates are well below the rates used in the Eastern Dublin EIR analysis and do not result in new significant impacts. The Eastern Dublin EIR generation rates indicate that the Project would have generated some 1,587 students based upon the unit counts indicated in Table 3.5-1, below. Under the proposed DUSD student generation rates the Project would generate 1,095 students, only 69% of the 1993 projections. Under current LVJUSD rates, the Project would generate 1,478 students, 93% of the 1993 projections.

**TABLE 3.5 – 1**  
**COMPARISON OF EASTERN DUBLIN EIR STUDENT GENERATION RATES**  
**AND CURRENT STUDENT GENERATION RATES**

Residential Use	Grade Level	EIR Rates <sup>1</sup>	DUSD Rates <sup>2</sup>	LVJUSD Rates <sup>3</sup>
Single Family (1,736 units)	K-5	.33	.280	.30
	6-8	.16	.125	.15
	9-12	.21	.155	.17
Multi-Family (790 units)	K-5	.22	.085	.30
	6-8	.11	.035	.10
	9-12	.14	.035	.11

Sources:<sup>1</sup> Eastern Dublin EIR, response to comment 16-17, Table 3.4-2 (revised).

<sup>2</sup> Based on a study commissioned by the DUSD Board, entitled *Dublin Unified School District Study of Demographic Projections and School Construction Revenue Analysis*, DRAFT (Shilts Consultants, Inc., June 2001). The rates indicated above for each grade classification are an average of rates for large lot and small lot single-family detached units, and an average of the rates for townhomes and multi-family residential for the multi-family category.

<sup>3</sup> LVJUSD, Notice of Preparation Response to Comments, dated June 27, 2001.

School sites to meet projected demand were provided in the GPA/SP and through implementation of adopted mitigation measures. The Eastern Dublin EIR recognized, however, that "movement" in the size, number and location of designated school sites could occur over the course of development (Eastern Dublin EIR response to comment 15-30). This movement has in fact occurred with development in Eastern Dublin as the type and location of school facilities and sites have been shifted as needed to meet the demand identified by the DUSD. Through such planning, the City and the DUSD have implemented the EIR mitigations to ensure that school facilities are available to meet projected demand. No school facility impacts are expected beyond those identified in the Eastern Dublin EIR.

*SB 50 (The "Leroy F. Greene School Facilities Act of 1998").* Senate Bill 50 became effective on November 4, 1998 as a result of the California voters approving Proposition 1A. SB 50 provided a \$9.3 billion bond measure for school construction and revised the limitation on developer fees for school facilities. The statute allowed an increase in the statutory limit on the amount of school mitigation fees and applied the limit to all development approvals, overturning prior case law exempting certain approvals from the previous statutory limits.

SB 50 establishes an amount of allowable developer fees, which is known as a Level 1 fee. The statute allows a school district to exceed the base Level 1 fees and impose higher Level 2 fees if the district 1) is determined to be eligible for State funding; 2) adopts a school facilities needs analysis; and 3) satisfies other criteria of SB 50. Statutory provisions establish a maximum amount of Level 2 fees for all projects within a particular school district. The statute also allows a district to impose Level 3 fees if Level 2 fees have been imposed and state funding is no longer available. Currently, the DUSD collects Level 2 fees from developers.

Under SB 50, payment of the permitted school fees is deemed to be full and complete mitigation of school facilities impacts for CEQA and other purposes. SB 50 limits the amount of fees a school district may legally impose on new development. Both DUSD and the LVJUSD impose these fees on new development; therefore, there is no new significant impact related to funding of school facilities.

### 3.6 TRAFFIC AND CIRCULATION

Traffic and Circulation was analyzed in Chapter 3.3 of the Eastern Dublin EIR. This supplement to the EIR examines compliance with the City of Dublin's established standards for intersection levels of service (LOS) in light of increases in regional traffic and changes in commute patterns since certification of the Eastern Dublin EIR in 1993.

The analysis also considers the cumulative (year 2025) growth of the entire region by utilizing the Tri-Valley Transportation Model to examine future conditions with the proposed Project and cumulative conditions. The Tri-Valley Transportation Model was developed with and adopted jointly by the Tri-Valley cities after certification of the Eastern Dublin EIR. It assumes General Plan build-out for the Tri-Valley cities and completion of each of the city's road networks to their ultimate geometries.

### ENVIRONMENTAL SETTING

The Project area is located on the eastern edge of the City of Dublin's planned urbanized area and almost in the middle of the Livermore-Amador Valley's Interstate 580 (I-580) corridor. I-580 is a major Bay Area east-west commuter route from communities as far east as the San Joaquin Valley to job centers as far west as San Francisco and Redwood City and more local job centers in Walnut Creek, Bishop Ranch (San Ramon), Dublin and Pleasanton. I-580 also provides commuter access to Interstate 680 (I-680). I-680 lies several miles west of the Project area and is a major north-south freeway and commuter route from the Tri-Valley area and communities farther north to the technology job centers in Santa Clara County and San Jose (the "Silicon Valley").

#### Existing Roadway Network

**Interstate 580 (I-580):** I-580 is an eight lane east-west freeway that connects Dublin with local cities such as Livermore and Tracy to the east and Oakland and other East Bay cities and San Francisco to the west. In the vicinity of the Project area, I-580 carries approximately 170,000 vehicles per day (vpd) based on the 1998 Traffic Volumes on California State Highways prepared by the California Department of Transportation (Caltrans). Interchanges near the Project area include (west to east) Dougherty/Hopyard Roads, Hacienda Drive, Tassajara/Santa Rita Roads, Fallon/El Charro Roads, and Airway Boulevard. The I-580/I-680 interchange is under construction and improvements are expected to be completed by the late summer of 2002. The new interchange will consist of: an I-680 southbound to I-580 eastbound flyover, improvements to the I-680 northbound to I-580 eastbound movement, I-680 southbound off- and on-ramps and an I-680 northbound on-ramp (completed) to provide direct freeway access from Dublin Boulevard.

I-580 is congested during peak periods. During the morning commute, the freeway is overloaded in the westbound direction, primarily between Vasco Road and Airway Boulevard. During the evening commute, the primary eastbound bottleneck is at the Santa Rita Road/Tassajara Road interchange. The evening peak hour traffic backs up to I-680 or points westerly on a regular basis.

**Dublin Boulevard:** Dublin Boulevard is a major east-west arterial roadway in the City of Dublin. Between San Ramon Road and Village Parkway it is a six-lane road. From Village Parkway east to Dougherty Road it generally maintains a four-lane width. Various roadway projects currently under construction or planned will result in Dublin Boulevard being improved to six lanes between Village Parkway and Tassajara Road. It is currently being extended as an initial four-lane road for approximately 3,400 feet east of Tassajara

Road to serve impending development in that area (Dublin Ranch Area G). The existing average daily traffic (ADT) varies from 33,600 vpd east of San Ramon Road (based on a current daily count performed by the City of Dublin) to 9,700 vpd at its current eastern end just west of Tassajara Road (estimated based on existing PM peak hour turning movement counts at Dublin Boulevard/Tassajara Road).

The Eastern Dublin Specific Plan and Dublin General Plan indicate Dublin Boulevard as a planned six-lane arterial with a median from Tassajara Road to the City's Sphere of Influence limits at the eastern boundary of the Project area. Dublin Boulevard is identified by the Tri-Valley Transportation Council (TVTC) as a major Tri-Valley east-west parallel arterial to I-580 and is anticipated to provide local traffic relief when I-580 becomes congested. It is designated in the General Plan as a "Route of Regional Significance." The General Plan anticipates extension easterly to connect to North Canyons Parkway. The ultimate improvement of Dublin Boulevard is part of Dublin's Eastern Dublin Traffic Impact Fee program (referred to sometimes as the Traffic Impact Fee) (see below).

**Central Parkway:** Central Parkway (referred to as the Transit Spine in the Eastern Dublin EIR) is an east-west collector that currently extends from Arnold Drive to Tassajara Road as a parallel two-lane collector to Dublin Boulevard. It is currently being extended easterly from Tassajara Road for a distance of about 3,400 feet to serve a portion of the Dublin Ranch development (Area G). The Eastern Dublin Specific Plan and Dublin General Plan indicate that Central Parkway will extend as a four-lane road from Tassajara Road easterly to Fallon Road. East of Fallon Road it is planned as a four-lane road which turns south to connect with Dublin Boulevard within the Project area.<sup>1</sup>

**Gleason Drive:** Gleason Drive is a four-lane east-west arterial serving the Santa Rita Rehabilitation Center, the Federal Correctional Institution and other public and private developments. The Eastern Dublin Specific Plan indicates that it will extend east of Tassajara to serve portions of Dublin Ranch and eventually will extend eastward to terminate at future Fallon Road. It currently carries 4,100 vpd west of Tassajara Road (estimated based on existing PM peak hour turning movement counts at Tassajara Road/Gleason Drive). The ultimate improvements are part of the Traffia Impact Fee Program.

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<sup>1</sup> Some City planning maps erroneously show Central Parkway extending easterly and ending at the sphere of influence boundary. The "Project" that was analyzed in the 1993 Eastern Dublin EIR included development in Doolan Canyon and the easterly extension of the Transit Spine (now called Central Parkway) to connect with Doolan Road which was to extend north and connect with Tassajara Road. However, the Council did not adopt this "Project," but, rather, adopted the 1993 Eastern Dublin EIR's "Alternative 2" (Reduced Planning Area Alternative) with some modifications. Alternative 2 did not include development in Doolan Canyon. The modifications to Alternative 2 were included in an Addendum to the Eastern Dublin EIR, dated May 4, 1993; these modifications to Alternative 2 included changes to the Transit Spine. The Transit Spine was changed from a 2-lane road to a 4-lane road and the text noted that Figure 5.1 of the Specific Plan should be revised to show four lanes for the Transit Spine between Tassajara Road and Fallon Road. Consistent with this, when the City adopted its Eastern Dublin Traffic Impact Fee, although it included Central Parkway easterly to Fallon Road, it did not include construction of Central Parkway east of Fallon Road in its fee program. Thereafter, in 1997, the Council made amendments to the General Plan and Eastern Dublin Specific Plan; one of those changes was to show Central Parkway as a 4-lane road extending easterly of Fallon Road and turning south to connect with Dublin Boulevard within the Eastern Extended Planning Area. Figures 5-1B of both the General Plan and Eastern Dublin Specific Plan reflect this configuration of Central Parkway. Only two of the four lanes of Central Parkway east of Fallon Road are proposed as part of the proposed Project; right-of-way for the additional two lanes will be reserved for the future ultimate 4-lane width.

**Dougherty Road:** Dougherty Road is a north-south inter-city connector linking Crow Canyon Road in San Ramon with I-580 in Dublin. Dougherty Road has four lanes between the Alameda County/Contra Costa border and Dublin Boulevard and six lanes between Dublin Boulevard and I-580. South of I-580 it continues as Hopyard Road, a six-lane arterial in the City of Pleasanton. The ADT is about 38,000 vpd south of Dublin Boulevard (estimated based on existing PM peak hour turning movement counts at Dublin Boulevard/Dougherty Road). Dougherty Road is designated in the General Plan as a "Route of Regional Significance." The General Plan indicates it will be 6 lanes north of Dublin Boulevard and 8 lanes between I-580 and Dublin Boulevard. Eastern Dublin developers pay for their proportionate share of improvements through the Traffic Impact Fee.

**Hacienda Drive:** Hacienda Drive is a north-south arterial designed to provide access to I-580 from both Dublin and Pleasanton. North of I-580 to Dublin Boulevard, it is currently constructed with six through lanes. North of Dublin Boulevard it is four lanes to its terminus at Gleason Drive (with some turn lanes). South of I-580 it continues as an eight-lane arterial in the City of Pleasanton. The existing ADT south of Dublin Boulevard is 11,200 vpd. The Eastern Dublin Specific Plan and Dublin General Plan indicate Hacienda Drive as an eight-lane arterial from I-580 to Dublin Boulevard, as a six-lane arterial from Dublin Boulevard to Central Parkway, and as a four-lane collector north of Central Parkway. The ultimate improvements are part of the Traffic Impact Fee program.

**Tassajara Road:** Tassajara Road is a north-south arterial designed to provide access to I-580 for Dublin and Pleasanton. It extends northerly from Dublin to the Contra Costa County line and beyond to Danville. North of the County line the road is two lanes and is named Camino Tassajara. From the County line south to North Dublin Ranch Parkway it remains two lanes wide. From North Dublin Ranch Parkway to Dublin Boulevard it currently has four lanes of an ultimate six-lane width. South of Dublin Boulevard, it has been widened to six lanes of an ultimate eight lanes. The current traffic volumes south of Dublin Boulevard are 19,000 vpd (based on a recent daily count performed by the City of Dublin); near the County line are 10,500 vpd (estimated based on existing PM peak hour turning movement counts at Tassajara Road/Gleason Drive). South of I-580 in Pleasanton the road continues as a six-lane arterial named Santa Rita Road. Tassajara Road is designated in the General Plan as a "Route of Regional Significance." The ultimate improvements are part of the Traffic Impact Fee program.

**Fallon Road:** Fallon Road currently is a two-lane County road providing access to existing ranches and homesteads in the Project Area and to as-yet undeveloped areas of Dublin Ranch, terminating about 1.1 miles from I-580. The Eastern Dublin Specific Plan indicates that Fallon Road will be realigned and extended to Tassajara Road, which would provide regional congestion relief along Tassajara Road. The Eastern Dublin Specific Plan indicates that Fallon Road eventually will be an 8-lane arterial from I-580 to Dublin Boulevard, a six-lane arterial from Dublin Boulevard to north of Gleason Drive, and a four-lane arterial north to Tassajara Road. It currently has very low traffic volumes. The ultimate improvements are part of the Traffic Impact Fee program.

#### Transit

**Altamont Commuter Express (ACE):** The Altamont Commuter Express operates three trains per day between Stockton and San Jose. The trains provide westbound service in the morning and eastbound service in the evening. The trains have Tri-Valley stations at Vasco Road in Livermore and near the downtowns of Livermore and Pleasanton, the latter of which is most likely to serve Dublin commuters. The ACE trains provide service to the

Pleasanton station at 5:40, 6:52 and 7:53 each morning and at 5:10 and 6:39 each evening. The ACE train was not in operation at the time the Eastern Dublin Specific Plan and General Plan Amendment were approved and the Eastern Dublin EIR was certified.

**Livermore – Amador Valley Transit Authority (LAVTA -- Wheels):** The Livermore-Amador Valley Transit Authority provides bus service to the communities of Dublin, Pleasanton and Livermore. Several bus lines currently provide service to east Dublin, including lines 12, 12X, 10A, 1A, 1B, 20X and the ACE connector. Line 20, 12 and 12X provide service along I-580 in the immediate vicinity of the Project area. Lines operate on approximately 30-minute headways. It is expected that these lines will be expanded further as additional homes and businesses are constructed in the east Dublin area. There is a Wheels bus connection between each ACE train and the Dublin/Pleasanton BART station with intermediate stops.

**BART:** The Bay Area Rapid Transit (BART) District operates trains between the Dublin-Pleasanton station near Hacienda Drive and the Oakland-San Francisco area. The trains operate on 15-minute headways on weekdays. The Dublin-Pleasanton station is accessible by private auto, taxicabs, buses, and private shuttles as well as by pedestrians and bicyclists. The parking lot has a capacity of approximately 3,000 parking stalls.

A new West Dublin-Pleasanton station is in the planning stages and is expected to be operational within about two years. Dublin, Pleasanton and BART are parties to a Memorandum of Understanding for financial commitments to fund the West Dublin/Pleasanton BART station. In addition, long-range planning studies of potentially extending BART lines to Livermore are underway. The studies also will examine alternative means of improving transit service to Livermore in the BART corridor until funds are available to construct the BART extension. At the time the Eastern Dublin GPA/SP were approved and the Eastern Dublin EIR certified, BART had not yet been extended to Dublin. The extension to Dublin had, however, been approved by BART.

## **IMPACTS AND MITIGATIONS FROM THE EASTERN DUBLIN EIR**

### **Freeways**

The Eastern Dublin EIR identified significant, significant cumulative, and significant unavoidable adverse impacts related to daily traffic volumes on I-580 with and without build-out of the Eastern Dublin Specific Plan and General Plan Amendment and under a Year 2010 cumulative build-out scenario (Impacts 3.3/A, B, C, D, and E). The significance criteria for freeway segments consisted of operations that exceed level of service (LOS) E. Mitigation measures (3.3/1.0 and 3.3/4.0) were adopted which reduced impacts on I-580 between Tassajara Road and Fallon Road and on I-680 north of I-580 to a level of insignificance. Other mitigations (3.3/2.0, 2.1, 3.0 and 5.0) were adopted to reduce impacts on the remaining I-580 freeway segments and the I-580/680 interchange. Even with mitigations, however, significant cumulative impacts remained on I-580 freeway segments between I-680 and Dougherty Road and, at the build-out scenario of 2010, on other segments of I-580. Upon certification of the Eastern Dublin EIR and approval of the Eastern Dublin GPA/SP, the City adopted a Statement of Overriding Aonsiderations (Resolution No. 53-93), for these significant unavoidable cumulative impacts (Impacts 3.3/B and E).

All mitigation measures adopted upon approval of the Eastern Dublin GPA/SP continue to apply to implementing actions and projects such as the proposed pre-zoning and annexation.

## Intersections and Roads

The Eastern Dublin EIR evaluated levels of service and PM peak hour traffic volumes at 18 intersections with roads and I-580 ramps for cumulative buildout without the GPA/SP project and cumulative buildout with the Project. The significance criteria for intersections were operations that exceed LOS D. Mitigation measures were identified for each intersection that was projected to exceed the LOS D standard in each scenario. Mitigation measures (3.3/6.0 – 9.0 and 11.0) for Impacts 3.3/F, G, H, I and K were adopted to reduce impacts to each of these intersections to a level of insignificance. These mitigations include construction of additional lanes at intersections, coordination with Caltrans and the neighboring cities of Pleasanton and Livermore to re-stripe, widen or modify on-ramps and off-ramps and interchange intersections, and coordination with Caltrans to modify certain interchanges. The GPA/SP project contributes a proportionate share to the multi-jurisdictional improvements through payment of traffic impact fees or construction of the required improvements for a credit against payment of such fees.

Other mitigations (3.3/13.0 and 14.0) were adopted to reduce impacts on other identified intersections with Dublin Boulevard and Tassajara Road (Impacts 3.3/M, N).

Mitigation also was included (3.3/12.0) to address delays on El Charro Road (Impact 3.3/L).

All mitigation measures adopted upon approval of the Eastern Dublin GPA/SP continue to apply to implementing actions and projects such as the proposed pre-zoning and annexation. The GPA/SP project contributes a proportionate share to funding these improvements through payment of traffic impact fees or construction of the required improvements for a credit against payment of such fees. Even with mitigations, however, significant cumulative impacts remained on several identified intersections: Santa Rita Road/I-580 Eastbound ramps (Impact 3.3/I), Dublin Boulevard/Hacienda Drive and Dublin Boulevard/Tassajara Road (Impact 3.3/M). Upon certification of the Eastern Dublin EIR and approval of the Eastern Dublin GPA/SP, the City adopted a Statement of Overriding Consideration (Resolution No. 53-93), for these significant unavoidable year 2010 and cumulative impacts.

## Transit, Pedestrians and Bicycles

The Eastern Dublin EIR identified significant impacts related to transit service extensions and the provision of safe street crossings for pedestrians and bicycles (Impacts 3.3/O and P). Mitigation measures 3.3/15.0 – 15.3 and 16.0 – 16.1 were adopted which reduced these impacts to a level of insignificance. These mitigations generally require coordination with transit providers to extend transit services (for which the GPA/SP projects contribute a proportionate share through payment of traffic impact fees) and coincide pedestrian and bicycle paths with signals at major street crossings. All mitigation measures adopted upon approval of the Eastern Dublin GPA/SP continue to apply to implementing actions and projects such as the proposed pre-zoning and annexation.

## Fee Program

Prior to approval of any development in Eastern Dublin, in January 1995 the City adopted (and has since updated) the Eastern Dublin Traffic Impact Fee which consisted of three "categories": Category 1 was, in general, to pay for required transportation improvements in the SP/GPA project area; Category 2 was, in general, to pay for required improvements in other areas of Dublin; and Category 3 was to pay for regional improvements to which development in Eastern Dublin should contribute. The improvements for which the fee are

collected included those improvements assumed in the Eastern Dublin EIR, those improvements necessary for Eastern Dublin to develop, and those improvements identified in the Eastern Dublin EIR as mitigation measures. The Eastern Dublin Traffic Impact Fee was last updated by the Council in 1999 by Resolution 225-99. It is applicable to all of Eastern Dublin (all of the area within the "General Plan Amendment Study Area" shown on the General Plan land use map, except for the area designated as "Future Study Area/Agriculture").

In June 1998, the City adopted the Tri-Valley Transportation Development Fee, in conjunction with the cities of Pleasanton, Livermore, San Ramon and Danville and the Counties of Alameda and Contra Costa to fund regional improvements. (Resolution 89-98, as revised by Resolution 85-99.) This fee replaced the Category 3 fee. It is applicable citywide. It funds eleven regional improvements which are listed in the resolution.

In addition, the City has adopted a Freeway Interchange Fee to reimburse Pleasanton for funding construction of certain interchanges on I-580 (Hacienda Drive interchange and Tassajara/Santa Rita Road interchange) that also benefit Eastern Dublin. This fee applies to the same area as the Eastern Dublin Traffic Impact Fee. It was adopted by Resolution 11-96 and was amended by Resolution 155-98.

All development projects in Eastern Dublin are required to pay these three fees at building permit or construct the improvements included in the fee programs.

#### **SUPPLEMENTAL IMPACTS AND MITIGATION MEASURES**

The Project proposes the same type and density of potential development assumed in the Eastern Dublin EIR. Table 3.6-1 summarizes the proposed Project land uses and trip generation. While traffic volumes related to potential development of the Project area are not expected to differ from the Eastern Dublin EIR, regional traffic has increased substantially over previously assumed levels, and commute patterns are somewhat different than those occurring in 1993. For example, a greater volume of traffic originating in the Tri-Valley and especially areas to the east now moves through the area on I-580 westbound to I-680 southbound to reach the Silicon Valley, and utilizes local streets to avoid localized congestion on I-580 during peak commute hours. In addition, the Tri-Valley Transportation Model ("Tri-Valley Model"), adopted to reflect full General Plan build-out of the Tri-Valley jurisdictions (including the Cities of Dublin, Livermore, Pleasanton and San Ramon, the Town of Danville, and the unincorporated areas of Contra Costa and Alameda Counties), now extends cumulative development to the Year 2025. The Tri-Valley model assumes construction of roadway improvements which may bring additional traffic into Dublin and impact study intersections to a greater degree than previously expected. Pursuant to CEQA Guidelines Section 15162 and 15163, this section of the Supplemental EIR assesses whether significant new or intensified traffic impacts may result from increased regional traffic, changed commute patterns and different assumptions of the Tri-Valley Model.

#### **Significance Criteria**

**Intersections.** An impact would be significant if an intersection previously mitigated to an acceptable level would now exceed acceptable levels. In addition, an impact would be significant if a new intersection is identified as exceeding acceptable levels and if such intersection was not previously identified in the Eastern Dublin EIR as a study intersection. The General Plan standard requires that the City strive for LOS D at intersections. (General Plan Circulation and Scenic Highways Guiding Policy F).

**Roadway Segments.** With respect to routes of regional significance, an impact would be significant if a road has been identified since certification of the Eastern Dublin EIR as such a route and such route would fail to comply with the applicable standard of the General Plan. The General Plan requires the City to make a good faith effort to maintain Level of Service D on arterial segments of, and at intersections of, routes of regional significance (Dublin Boulevard, Dougherty Road, Tassajara Road and San Ramon Road) or implement transportation improvements or other measures to improve the level of service. If such improvements are not possible or sufficient, and the Tri-Valley Transportation Council cannot resolve the matter, the City may modify the level of service standard if other jurisdictions are not physically impacted (General Plan Circulation and Scenic Highways Guiding Policy E [e.g. Level of Service D]).

The maximum ADT threshold standards of the General Plan for four-lane roadways (30,000 vpd) and six-lane roadways (50,000 vpd) are used to determine the width of streets.

**Hazards.** An impact would be significant if Project-generated traffic would cause new significant safety hazards or would cause safety hazards previously mitigated to an acceptable level to become hazardous.

**Freeways.** Freeway impacts are significant if the amount of traffic is increased substantially beyond the levels anticipated in the Eastern Dublin EIR so as to exceed Alameda County Congestion Management Agency (ACCMA) standards. ACCMA has established LOS standard of E for the Congestion Management Program (CMP) roadway network, except where F was the level of service originally measured, in which case the standard shall be F. Although the LOS E standard was established for the purpose of monitoring existing level of service conditions for the Alameda County CMP Designated Roadway System, this standard provides a standard of significance for determining potential project environmental impacts on adjacent freeway systems within Alameda County. Specifically, the CMP identifies a specific system of freeways and roadways that must be monitored for conformance to the ACCMA LOS standards. These roadways, identified as Metropolitan Transportation System (MTS) routes are designated as "key routes" and include highways and principal arterials. For arterials to be considered MTS routes, the following criteria must be met:

- Must carry 30,000 vehicles per day for at least one mile;
- Must be a four lane (or more) roadway;
- Must be a major cross-town connector;
- Must connect at both ends to another CMP route.

In the project area, ACCMA has identified I-580, I-680, SR 84, Dublin Boulevard, Tassajara Road/Santa Rita Road and Fallon Road/El Charro Road as MTS routes. Since the City's standard is LOS D for Dublin Boulevard, Tassajara Road and Fallon Road, the LOS E standard (except where F is the level of service without Project traffic, in which case the standard is F) is applicable only to freeways.

In addition to LOS roadway standards, ACCMA guidelines also specify that any proposed project generating 100 PM peak hour trips over existing conditions must conduct a traffic analysis of the project using the Countywide Transportation Model for the base years 2005 and 2020. However, the guidelines also allow for other transportation models / projections to be used and Year 2025 must be compared to the Countywide Transportation Model to ensure that the more conservative of the two traffic projections are used for CEQA purposes. Discussions with ACCMA staff in November 2000 indicate that Year 2025 analysis using the Tri-Valley Transportation Model is appropriate to use for the proposed

Dublin Transit Center project (Draft EIR for Dublin Transit Center, SCH No. 20001120395 [July 2001], available at City of Dublin). Additional discussions with ACCMA staff in August 2001 confirmed that Year 2005 and 2025 analysis for the proposed Project can be done using the generally more conservative traffic volumes from models other than the Countywide Transportation Demand Model. Therefore, the use of the generally more conservative Year 2025 Tri-Valley Transportation Model to analyze impacts of the proposed Project should be appropriate. Compared to the Countywide Transportation Demand Model, the Tri-Valley Transportation Model represents a more specific and focused travel demand-forecasting tool for the Tri-Valley area of Alameda County.

#### **Level of Service Analysis Methodology and Description of Dublin Model and Tri-Valley Model**

The City has conducted a number of traffic studies upon which this current analysis draws. In addition to the traffic analysis conducted for the Eastern Dublin EIR, the City has since commissioned dozens of traffic studies for individual development proposals within the Eastern Dublin area. Each of the traffic studies builds upon previous ones by accumulating traffic from each development and evaluating the cumulative effects of the growth in the Eastern Dublin area. This traffic impact analysis continues that approach by considering the potential traffic that could be generated by the proposed Project in conjunction with the full build-out of the Eastern Dublin Specific Plan area west of the Project area, and then in conjunction with expected full build-out in the Tri-Valley area.

The intersection level of service analysis was conducted by TJKM using two separate models: the "Dublin Model" and the Tri-Valley Model. The Dublin Model forecasts traffic generated locally within the East Dublin area. This model represents the conditions of proposed, pending, or approved projects in Eastern Dublin without the Project, as well as approved projects within the City of Pleasanton. The Dublin Model, which uses the TRAFFIX software to distribute traffic to the study intersections, was developed by TJKM to analyze Eastern Dublin projects. This model was developed in order to better understand traffic on a local level, such as at key intersections and local streets, which a regional model like the Tri-Valley Model does not consider. However, the Dublin Model is less precise at evaluating regional traffic patterns; the Tri-Valley Model can be used for this purpose. In the Dublin Model, the trip distribution and assignment of traffic for each of the individual projects is developed based on the type of land use, existing counts, and knowledge of the study area. The estimated trip generation of East Dublin projects has been updated as projects change in size or use. The output from the Dublin Model is shared with other consultants to maintain consistency in the City of Dublin.

The Dublin Model is used for the near-term analysis and evaluates traffic volumes without and with the Project. This model does not consider regional traffic that potentially would utilize City streets; rather, it evaluates only traffic generated locally within the vicinity of the Project area. The Dublin Model is typically used in standard traffic analyses for the City of Dublin to assess traffic impacts. A future "baseline" of the Dublin Model was developed, which did not include the proposed Project but included all other proposed, pending or approved projects in Eastern Dublin, as well as approved projects within the City of Pleasanton, and a second analysis included Project-generated traffic.

The Tri-Valley Model (sometimes called the "TVTM Model") is used to assess cumulative traffic volumes for build-out conditions in the Tri-Valley area to the year 2025. All land uses assumed in the TVTM Model are consistent with the city and county control totals as shown in the ABAG Projections '98. The Tri-Valley Model assumes build-out of the North Livermore Specific Plan as proposed, so it accounts for possible maximum cumulative

development. The TVTM Model "baseline" assumes build-out conditions within the Tri-Valley exclusive of the proposed Project. Similar to the Dublin Model, the TVTM Model was used in the analysis with and without the Project for ready comparison between intersection LOS with and without the Project, so that Project impacts can be more easily identified.

Under both models, peak hour intersection conditions are reported as volume-to-capacity (v/c) ratios with corresponding levels of service. Levels of service ratings are qualitative descriptions of intersection operations and are reported using an A though F letter rating system to describe travel delay and congestion. Level of Service (LOS) A indicates free flow conditions with little or no delay, while LOS F indicates jammed conditions with excessive delays and long back-ups.

The operating conditions at signalized study intersections were evaluated using the Intersection Capacity Utilization (ICU) methodology adopted by the Contra Costa Transportation Authority (CCTA). This method provides an overall intersection LOS. At STOP-controlled intersections, LOS was evaluated using the 1994 Highway Capacity Manual (HCM) methodology. This method ranks LOS on an A through F scale similar to that used for signalized intersections, but it uses average delay in seconds for stopping movements as its measure of effectiveness.

The levels of service calculations and background traffic information are in Appendix H to this document.

### **TVTM Model Assumptions**

The latest version of the TVTM Model was used to evaluate the proposed Project. It is based on ABAG's Projections 98. All Tri-Valley agencies, including Dublin, Pleasanton, Livermore, San Ramon, Danville, Alameda County and Contra Costa County participated in the review and development of the updated TVTM Model. The network and land use assumptions utilized in the model were approved by all seven of these agencies. The same model, with the same assumptions, has been used in all major Livermore traffic analyses, including the North Livermore project and EIR, South Livermore, and the various traffic studies associated with proposed I-580 improvements in Livermore.

For many years, the ABAG Projections have directly taken into account the explosion of new job growth in the Tri-Valley area and the I-580/I-680 corridor. The TVTM Model and ABAG forecasts also take into account the amount of housing that would be produced in all areas included in the projections (including Brentwood, Tracy and areas easterly) that serves trips to the Tri-Valley area. The TVTM Model accounts for the effects that housing outside the region has on the I-580 corridor. In some cases, I-580 traffic volumes are lessened in the "with Project" scenario as compared with the "no Project" scenario, precisely because of more convenient housing supplied by the proposed Project.

Circumstances have changed in the Tri-Valley area since 1993, including the extension of BART service to the East Dublin/Pleasanton BART Station, I-580 widening and auxiliary lane improvements in the vicinity of the Project, the I-580/I-680 interchange improvements, the extension of Dublin Boulevard as a key six-lane arterial from Dougherty Road to Tassajara Road, the Isabel Avenue Expressway improvement in Livermore (SR 84), and the expansion of LAVTA operations. Every change in circumstances noted above is mentioned and accounted for in the Eastern Dublin Specific Plan and in this DSEIR. Although each of these changes in circumstances has occurred since

1993, each was anticipated in the 1993 Eastern Dublin EIR (see "Future Road Improvement Assumptions" discussion in Eastern Dublin EIR).

The land use in the TVTM Model includes approximately 12,500 dwelling units in North Livermore, as included in the North Livermore Specific Plan and EIR. This assumption is also included in the analysis of the proposed Project. This land use has been contained in the TVTM Model for several years and will continue to be included until the City of Livermore directs the Tri-Valley Transportation Council Technical Advisory Committee to remove it. An alternative for North Livermore land use different than the current land use contained in the TVTM Model or the Livermore General Plan would have to be initiated and analyzed by Livermore, not by this DSEIR.

### Existing Intersection Operations

TJKM evaluated intersection operating conditions at ten existing intersections, all of which also were analyzed in the Eastern Dublin EIR. These intersections were selected for analysis due to their proximity to the proposed Project and heavy traffic use. Figure 3.6-A shows the location of these ten intersections and the existing AM and PM peak-hour turning movement volumes. All of the ten existing intersections evaluated currently operate at acceptable levels of service of LOS D or better. Table 3.6-2 summarizes the existing intersection LOS for the AM and PM peak hours.

### Future Baseline Conditions / Dublin Model and Tri-Valley Model

Additional study intersections were selected for the baseline analyses. Seven additional intersections were included in the baseline analyses of the Dublin Model and the TVTM model to reflect road improvements for approved or pending projects. These additional intersections are planned to be installed and signalized along Dublin Boulevard, Central Parkway, Gleason Drive, and Fallon Road at buildout of Eastern Dublin. Future baseline intersection traffic volumes during the AM and PM peak hours are shown in Figure 3.6-B, Dublin Model and Figure 3.6-C, Tri-Valley Model. Thus, the future baseline analyses evaluate 17 intersections.

The additional intersections were derived from Dublin planning documents. To implement the Circulation and Scenic Highways Element of the General Plan and the Traffic Chapter of the Eastern Dublin Specific Plan, the City of Dublin has undertaken a comprehensive program of transportation improvements in the community. The purpose of this program is to accommodate anticipated traffic from the Eastern Dublin area based upon the Eastern Dublin EIR assumed 2010 base network and roadway and transit improvement projects specified in the EIR as mitigations. Overall, the program includes upgrades to I-580 interchanges, construction of new roads and improvements to existing roads. Traffic Impact Fees were established by City Council resolutions to fund the program of ultimate improvements required for build-out of the Eastern Dublin General Plan Amendment and Specific Plan areas, and any impacts created by such development. (Eastern Dublin Traffic Impact Fee; Freeway Interchange Fee and Tri-Valley Transportation Fee, hereinafter collectively "Traffic Impact Fees" or "TIF Fees.") New developments are required to dedicate land for the ultimate expected road rights-of-way and construct those improvements needed for the development. TIF fees are levied on all new development in Eastern Dublin, and TIF credits are provided for developments that dedicate land or construct improvements in the TIF Fee programs. None of the projects described below are funded by Measure B (a ballot measure approved by the voters of Alameda County to provide increased funding for certain road improvement projects in Alameda County).

Planned improvements in the Project area included as a part of the Traffic Impact Fees program are listed below:

- Santa Rita/Tassajara Roads: The northbound overcrossing over I-580 will be widened to three lanes and lane additions will be made to the eastbound off-ramp approach to Santa Rita Road.
- El Charro/Fallon Roads: the existing two-lane overcrossing over I-580 will be widened to four lanes, the intersections involving the eastbound and the westbound ramps will be signalized, and the ramps will be improved near the new signals. Included in this project are new auxiliary freeway lanes on I-580 between El Charro/Fallon Roads and Santa Rita/Tassajara Roads.
- Street improvements to:
  1. Dublin Boulevard between Dougherty Road and North Canyons Parkway at Airway Boulevard
  2. Central Parkway between Arnold Drive and Fallon Road
  3. Gleason Drive between Arnold Drive and Fallon Road
  4. Arnold Drive between Dublin Boulevard and Gleason Drive
  5. Hacienda Drive between I-580 and Gleason Drive
  6. Tassajara Road between I-580 and the Contra Costa County line
  7. Fallon Road between I-580 and Tassajara Road

All of these roadways ultimately will be either four or six lanes in width, except those segments of Hacienda Drive, Tassajara Road, and Fallon Road between Dublin Boulevard and I-580 which will be eight lanes in width.

- Intersection improvements at virtually all intersections involving the arterial and collector roadways listed above.

All of these improvements are assumed to be constructed in the Dublin Model Baseline and TVTM Model Baseline.

#### Funding of Planned Improvements

As explained on pages 3.6-6 and 3.6-12 of this DSEIR, the City has adopted several traffic impact fees that are imposed on developers within the GPA/SP area to fund improvements that were assumed in the Eastern Dublin EIR, improvements necessary for Eastern Dublin to develop and improvements which were required as mitigation measures of the Eastern Dublin EIR. Page 3.6-12 includes a general description of the type of improvements to be funded with the impact fee revenues and lists improvements in the Project area that are part of the City's Traffic Impact Fee programs (Eastern Dublin Traffic Impact Fee; Freeway Interchange Fee and Tri-Valley Transportation Fee). The City conducts a project-specific traffic study for each project and requires construction of those improvements that are needed for the project, both on-site and off-site, to maintain the City's level of service standards. Some improvements have been or will be constructed by developers as a condition of project approval or as part of a development agreement; some improvements have been or will be constructed by the City through its Capital Improvement Program; and some improvements are within the jurisdiction of another entity and will be constructed by that entity (e.g. Caltrans) or on behalf of that entity by the City. If a project will be constructed by a developer as a condition of project approval or as part of a development agreement, the City enters into an improvement agreement with the developer for such

construction and requires bonds to secure the timely construction. If a project will be constructed by the City, the City assures that it has the funds available prior to awarding a contract for construction. Funding for City-constructed projects may come from several sources, including Traffic Impact Fees and state or federal grants. The City assures that improvements will be constructed and in place when needed to maintain level of service standards through "triggering" studies that analyze when required improvements must be in place.

Some of the improvements listed on page 3.6-12 have already been constructed either to the ultimate width or to the width required by current development (e.g., Dublin Boulevard to approximately 3,450 feet east of Tassajara Road; Central Parkway from Arnold Road to Tassajara Road; Gleason Drive between Arnold Road and Tassajara Road; Arnold Road between Dublin Boulevard and Gleason Drive; Hacienda Drive between I-580 and Gleason Drive; and Tassajara Road north of I-580 to North Dublin Ranch Drive). Improvements to the overcrossings at Santa Rita/Tassajara Road and I-580 and El Charro/Fallon Road and I-580 will be constructed by the City; funding for these improvements will be through advances of Traffic Impact Fees from developers in Eastern Dublin who are parties to agreements with the City to advance funds as needed for such construction.

Through the above funding, construction (to satisfy project conditions or a development agreement) and triggering mechanisms, the City ensures that necessary roadway improvements are in place to accommodate traffic from individual projects. These mitigation measures and processes will also apply to future development projects in the Project area.

#### **Future Baseline Level of Service Analysis**

Table 3.6-3 (existing plus approved plus pending projects [Dublin Model], without a Dublin Boulevard connection east to North Canyons Parkway) indicates the levels of service at the 17 analyzed intersections in the Dublin Baseline Model, and Figure 3.6-B indicates the turning movement volumes at these same intersections. The levels of service with the above improvements are presented under the "unmitigated" column. The levels of service with any further mitigation are presented under the "mitigated" column. All intersections operate at acceptable levels except: 1) Hacienda Drive/I-580 eastbound ramps (LOS E in AM peak hour); 2) Hacienda Drive/I-580 westbound ramps (LOS F in AM peak hour); and 3) Santa Rita/I-580 eastbound ramps (LOS E in AM and PM peak hours). However, these three intersections will operate at acceptable levels of service when mitigated, as described above.

Table 3.6-4 (Cumulative Year 2025 No Project) indicates the levels of service at the 17 analyzed intersections based on the TVTM Baseline Model. Figure 3.6-C (Tri-Valley Model, Cumulative Year 2025) indicates the turning movement volumes at these same intersections. All intersections operate at acceptable levels in this year 2025 model except: 1) Dougherty Road/Dublin Boulevard (LOS E in both AM and PM peak hours); 2) Hacienda Drive/I-580 Westbound ramps (LOS E in PM peak hour); and 3) Hacienda Drive/Dublin Boulevard (LOS E in PM peak hour). Only the Hacienda Drive/I-580 westbound ramps can be mitigated to an acceptable level. Mitigation for the other two intersections would require additional lanes and road-widening that is not feasible given the physical constraints at these intersections, as described below.

Thus, even without the Project, traffic impacts at two of these intersections (Dougherty Road/Dublin Boulevard and Hacienda Drive/Dublin Boulevard) are cumulatively significant. Given that these two intersections function at acceptable levels of service

without mitigation in the near-term Dublin model, traffic impacts at these intersections likely are created by regional traffic traveling through City of Dublin intersections based on a direct comparison between intersection LOS resulting from the Dublin Model versus the TVTM Model, without Project traffic (refer to Tables 3.6-3 and 3.6-4 of this DSEIR for future baseline conditions). The Baseline Dublin Model assumes the full build-out of the Eastern Dublin Specific Plan area west of the Project area, without a Dublin Boulevard connection in place east to North Canyons Parkway. Under the Dublin Model Baseline conditions, the intersections of Dougherty Road/Dublin Boulevard and Hacienda Drive/Dublin Boulevard are expected to operate at acceptable levels of service during the AM and PM peak hours. (See Table 3.6-3.)

In contrast, the Tri-Valley Model evaluates regional traffic patterns and assesses cumulative traffic volumes for build-out conditions in the Tri-Valley area to the year 2025, including build-out of the North Livermore Specific Plan as proposed, and assuming Dublin Boulevard is extended to North Canyons Parkway. Under the Tri-Valley Model Baseline conditions, the intersections of Dougherty Road/Dublin Boulevard and Hacienda Drive/Dublin Boulevard would deteriorate to unacceptable levels of service during the AM and/or PM peak hours. (See Table 3.6-4.) Therefore, it can be said that these two intersections are likely to be impacted to unacceptable levels of service by regional traffic growth anticipated by year 2025, as Dublin Boulevard will likely serve the Tri-Valley region as an alternate reliever route to I-580 during congested commute periods.

#### **Comparison of Traffic Volumes to the Countywide Transportation Model**

Under Year 2005, all of the "Dublin Model" volumes within the study area are higher than the Countywide Transportation Model (see page 3.6-8 for discussion of Countywide Transportation Model), except at three locations where the volumes are shown in bold in Table 3.6-11. Please note that the Dublin Model assumes that Dublin Boulevard does not extend east of Fallon Road without the Project and, hence, no volumes are reported for Dublin Boulevard east of Fallon Road under the Dublin Model.

Under Year 2025, the reported traffic volumes from the TVTM Model within the study area are generally higher than the Countywide Transportation Model, except at some locations where the volumes are shown in bold in Table 3.6-12. The Countywide Transportation Model segments that have higher volumes than the other two models include:

- Hacienda Drive south of Dublin Boulevard (2005)
- Dougherty Road south of Dublin Boulevard (2005)
- Dougherty Road north of Dublin Boulevard (2005 & 2025)
- I-580 between Hacienda Drive and Tassajara Road (2025)
- I-580 between Dougherty Road and Hacienda Drive (2025)
- Dublin Boulevard between Dougherty Road and Hacienda Drive (2025)
- Fallon Road between Dublin Boulevard and Central Parkway (2025)
- Tassajara Road between Dublin Boulevard and Central Parkway (2025)
- Hacienda Drive between Dublin Boulevard and Central Parkway (2025)

The higher volumes forecasted by the 2025 Countywide Model on Fallon Road, Tassajara Road, and Hacienda Drive appear to be concentrated within the blocks between Dublin Boulevard and Central Parkway. However, the volumes on these roadways decrease more than expected north of Central Parkway in the Countywide Model. The Countywide Transportation Model has a regional focus, larger traffic analysis zones and fewer centroid connectors. Therefore, it can be expected that traffic loading onto specific segments of roadways will be more variable than in more refined models such as the TVTM Model and

the Dublin Model. Traffic volumes generated from the more refined models are more conservative on surrounding segments and, therefore, those volumes have been used.

### **Intersection Conditions with the Project**

Four new intersections were added to the "Baseline Plus Project" analyses to account for new Project roads intersecting Fallon Road, Dublin Boulevard, and Central Parkway (Figure 3.6-D, Dublin Model and Figure 3.6-E, TVTM Model). These new intersections are being proposed with the Project to provide direct access to the Project. Thus, the "Baseline Plus Project" analyses evaluate 21 intersections. The "Baseline Plus Project" analyses assume that all major roadways within or adjacent to the Project are constructed in their ultimate configuration as anticipated by the Eastern Dublin Specific Plan and General Plan, and that all internal Project roads are constructed. In addition, both "Baseline Plus Project" models assume that Dublin Boulevard has been extended to North Canyons Parkway as assumed in the 1993 EIR's "Future Road Improvement Assumptions."

Traffic generation rates for each of the Project land uses and trip volumes for the Project are presented in Table 3.6-1. These trip volumes were added to each of the models to determine the contribution of Project traffic. Estimated daily traffic volumes with and without the Project also are indicated in Figure 3.6-F. Figure 3.6-F also indicates the number of lanes required on each roadway due to future baseline and Project traffic.

In determining the need for supplemental mitigations, both models were utilized. If a greater significant Project impact is identified in one model, the mitigation needed to reduce that impact to a less than significant level is required, even if a mitigation might not be triggered by the other model.

#### **"Dublin" Model**

Table 3.6-5 (existing plus approved plus pending plus Project) indicates the expected levels of service at the 21 analyzed intersections in the Dublin Baseline Model with Project-generated traffic. Figure 3.6-D indicates the turning movement volumes at these same intersections. The levels of service with the above improvements are presented under the "unmitigated" column. The levels of service with any further mitigation are presented under the "mitigated" column.

The Dublin model (Table 3.6-5) identifies five intersections that would operate at unacceptable LOS – intersections 2, 3, 5, 18 and 19. An unacceptable LOS is considered a significant impact.

Three intersections *outside* of the Project area are at unacceptable levels of service and can be mitigated. As with the Dublin Baseline Model without the Project, the existing intersections which would operate at unacceptable levels with the Project are: 1) Hacienda Drive/I-580 eastbound ramps (LOS E in AM peak hour); 2) Hacienda Drive/I-580 westbound ramps (LOS F in AM peak hour); and 3) Santa Rita/I-580 eastbound ramps (LOS E in AM and PM peak hours). The Hacienda Drive/I-580 eastbound ramp AM LOS (0.93) does not change between the Baseline and Project analyses. The LOS with Project traffic increases only at the latter two intersections and only by 0.01.

***Supplemental Impact TRAFFIC 1: Unacceptable LOS at Hacienda Drive/I-580 eastbound ramps.***

**SM- TRAFFIC-1:** Project developers shall contribute a pro-rata share to the widening of the I-580 eastbound off-ramp approach at Hacienda Drive to add a third eastbound left turn lane.

The City of Dublin shall implement this mitigation measure in coordination with the City of Pleasanton and Caltrans. This improvement shall occur when traffic impacts from individual projects are determined to trigger the need for this improvement based on traffic impact studies of the individual projects.

With this mitigation, this intersection will operate at acceptable levels of service. This impact will be reduced to a level of insignificance.

**Supplemental Impact TRAFFIC 2: Unacceptable LOS at Hacienda Drive/I-580 westbound ramps.**

**SM-TRAFFIC-2:** Project developers shall contribute a pro-rata share to the widening of the northbound Hacienda Drive overcrossing from 3 lanes to 4 lanes including three through lanes and one auxiliary lane that leads exclusively to the I-580 westbound loop on-ramp. The westbound loop on-ramp shall be modified as necessary to meet Caltrans' standards and design criteria. Project developers also shall contribute to widening the westbound off ramp approach to add a third westbound left-turn lane.

The City of Dublin shall implement this mitigation measure in coordination with the City of Pleasanton and Caltrans. This improvement shall occur when traffic impacts from individual projects are determined to trigger the need for this improvement based on traffic impact studies of the individual projects.

With this mitigation, this intersection will operate at acceptable levels of service. This impact will be reduced to a level of insignificance.

**Supplemental Impact TRAFFIC 3: Unacceptable LOS at Santa Rita Road/I-580 eastbound ramps.**

**SM- TRAFFIC-3:** Project developers shall contribute a pro-rata share to construction which converts the eastbound Santa Rita off-ramp through lane to a shared left turn/through lane. Project developers also shall contribute to a traffic signal upgrade which includes a westbound right-turn overlap from Pimlico Drive.

The City of Dublin shall implement this mitigation measure in coordination with the City of Pleasanton and Caltrans. This improvement shall occur when traffic impacts from individual projects are determined to trigger the need for this improvement based on traffic impact studies of the individual projects.

With this mitigation, this intersection will operate at acceptable levels of service. This impact will be reduced to a level of insignificance.

**Supplemental Impact TRAFFIC 4: The new Project intersection of Dublin Boulevard/Street D would operate at an unacceptable level of service during the PM peak hour.**

The new Dublin Boulevard/Street D intersection would operate at an unacceptable level of service during the PM peak hour (LOS F) with one-way STOP sign control. This is

considered a significant impact under the Dublin Model Baseline and TVTM Model, with Project.

**SM-TRAFFIC-4:** The Project developers shall install a traffic signal at the Dublin Boulevard/Street D intersection at the time development occurs in this area utilizing this intersection.

Project developers shall implement this mitigation measure when the traffic signal installation at Dublin Boulevard/Street D becomes warranted based on the estimated additional trips from individual projects, as determined by traffic impact studies of the individual projects.

Implementation of this mitigation measure reduces this impact to a level of insignificance.

**Supplemental Impact TRAFFIC 5:** *The new project intersection of Fallon Road/Project Road would operate at an unacceptable level of service during the AM and PM peak hours.*

The new Fallon Road/Project Road intersection would operate at unacceptable levels of service during the AM and PM peak hours (LOS F) with one-way STOP sign control. This is considered a significant impact under the Dublin Model Baseline and TVTM Model, with Project.

**SM-TRAFFIC-5:** The Project developers shall install a traffic signal at the Fallon Road/Project Road intersection at the time development occurs in this area utilizing this intersection.

Project developers shall implement this mitigation measure when the traffic signal installation at Fallon Road/Project Road becomes warranted based on the estimated additional trips from individual projects, as determined by traffic impact studies of the individual projects.

Implementation of this mitigation measure reduces this impact to a level of insignificance.

### Tri-Valley Transportation Model

Table 3.6-6 (cumulative plus Project, year 2025) indicates the levels of service at the 21 analyzed intersections in the TVTM Model with the expected Project-generated traffic. Figure 3.6-E indicates the turning movement volumes at these same intersections. The levels of service with the above improvements are presented under the "unmitigated" column. The levels of service with any further mitigation are presented under the "mitigated" column.

In addition to the impacted intersections indicated by the Dublin Model, the TVTM Model identifies three additional intersections that would operate at unacceptable levels under the cumulative analysis.

**Supplemental Impact TRAFFIC 6:** *In the Year 2025 Cumulative Buildout with Project scenario, the Dougherty Road/Dublin Boulevard intersection would operate at unacceptable levels of service during the AM and PM peak hours.*

The Dougherty Road/Dublin Boulevard intersection (No. 1 on Table 3.6-6) would operate at LOS E (0.93) in the AM peak hour and LOS F (1.03) in the PM peak hour. However, this

intersection operates at LOS E in the AM and PM peak hours even without the Project. These LOS represent a significant cumulative impact.

The Dougherty Road/Dublin Boulevard intersection shows a 0.01 decrease in the AM level of service and a 0.03 increase in the PM level of service between the TVTM Baseline, Year 2025 and the Cumulative (with Project) analysis. Development of the Project creates only a 0.03 impact at this intersection during the PM peak hour and improves the intersection very slightly in the AM peak hour.

**SM-TRAFFIC-6:** Project developers shall contribute a pro-rata share to configure the eastbound Dublin Boulevard approach to include 1 left-turn lane, three through lanes and two right turn lanes. Project developers shall contribute a pro-rata share to configure the west bound Dublin Boulevard approach to include three left-turn lanes, two through lanes, and one shared through/right-turn lane. Project developers shall contribute a pro-rata share to configure the northbound Dougherty Road approach to include three left-turn lanes, three through lanes and two right-turn lanes. Project developers shall contribute a pro-rata share to configure the southbound Dougherty Road approach to include two left turn lanes, three through lanes, and one shared through/right-turn lane. The I-580 westbound diagonal on-ramp from Dougherty Road shall be widened as necessary to include two single-occupancy vehicle lanes. In addition, the City will monitor the intersection for peak hour volumes on a periodic basis, as described below, and will apply appropriate Project conditions based on the results of such monitoring, as suggested below.

The Project developers shall pay their pro-rata share of the cost to construct these improvements through payment of the Eastern Dublin Traffic Impact Fee. The City will implement these improvements.

However, these improvements will not be able to reduce the intersection impacts to an acceptable LOS. Additional improvements to reduce the intersection impacts to an acceptable LOS would require adding a fourth northbound left turn lane and other improvements. Allowing four lanes of traffic to perform a left turn movement simultaneously would raise major concerns regarding the safety of such an operation. In addition, these additional improvements to reduce this impact are not feasible given the physical constraints at the Dougherty Road/Dublin Boulevard intersection. Adjacent properties to the intersection are already built out and efforts are now being made to acquire additional right-of-way to implement the above improvements (in Supplemental Mitigation Traffic 6) in the future. It is recommended that the City monitor the intersection for peak hour volumes on a periodic basis and continue to obtain updated volume forecasts for future horizon years (i.e., Year 2025). Such monitoring will be done to assist the City and Project developer to comply with General Plan Policies requiring implementation of transportation measures to improve levels of service. Such transportation measures to be considered at the Stage 2 Development Plan include requiring a comprehensive transportation demand program; ride sharing; free or discounted BART or other transit passes for employees; vanpools; staggered work hours; and other trip reduction programs as specified in Chapter 5 (Travel Demand Management Element) of the ACCMA Congestion Management Program. In addition, current and future phases of the I-580 Smart Corridor Project (i.e., state-of-the-art systems deployment for traffic monitoring, incident management, and regional traffic coordination among the cities of Dublin, Livermore and Pleasanton, Alameda County, and Caltrans) would likely relieve some congestion at the Dougherty Road/Dublin Boulevard intersection through ITS (Intelligent Transportation Systems) measures and discourage traffic from diverting off the freeway due to congestion or incidents.

Therefore, the impact at the Dougherty Road/Dublin Boulevard intersection remains a significant cumulative impact.

*Supplemental Impact TRAFFIC 7: In the Year 2025 Cumulative Buildout with Project scenario, the Hacienda Drive/Dublin Boulevard intersection would operate at an unacceptable level of service during the PM peak hour.*

The Hacienda Drive/Dublin Boulevard intersection was identified in the Eastern Dublin EIR as exceeding the applicable LOS under the cumulative buildout with Project analysis (Impact 3.3M). Mitigation Measure 3.3/13.0 remains applicable. This SEIR analyzed this intersection and found it still to operate at an unacceptable level in the cumulative analysis.

The Hacienda Drive/Dublin Boulevard intersection (No. 4 in Table 3.6-6) would operate at LOS E (1.00) during the PM peak hour with the Project, and would operate at LOS E (0.97) during the PM peak hour even without the Project. These LOS represent a significant cumulative impact.

Given the existing right-of-way and improvements at this intersection, there is no opportunity to provide additional mitigation beyond the existing intersection geometries. Given that the Dublin Model indicates that this intersection operates at acceptable levels, the impacts at this intersection that create an unacceptable level of service are created in part by regional traffic volumes and movements. Again, the difference between the TVTM Baseline and TVTM Baseline Plus Project indicates a 0.02 decrease in the AM peak hour and only a 0.03 increase in the PM peak hour attributable to Project generated traffic. Additional improvements to reduce the intersection impacts to an acceptable LOS would require adding a fourth northbound left turn lane and other improvements. Allowing four lanes of traffic to perform a left turn movement simultaneously would raise major concerns regarding the safety of such an operation. In addition, these additional improvements to reduce this impact are not feasible given the physical constraints at the Hacienda Drive/Dublin Boulevard intersection. Adjacent properties to the east of the intersection are already built out. The Sybase Headquarters project which is currently under construction will occupy the northwest corner of the intersection. The southwest corner of the intersection is presently undeveloped, however, a pending application exists to construct an office complex by Cisco Systems, which would occupy this corner. It is recommended that the City monitor the intersection for peak hour volumes on a periodic basis and continue to obtain updated volume forecasts for future horizon years (i.e., Year 2025). Such monitoring will be done to assist the City and Project developer to comply with General Plan Policies requiring implementation of transportation measures to improve levels of service. Such transportation measures to be considered as part of the Stage 2 Development Plan include requiring a comprehensive transportation demand program; ride sharing; free or discounted BART or other transit passes for employees; vanpools; staggered work hours; and other trip reduction programs as specified in Chapter 5 (Travel Demand Management Element) of the ACCMA Congestion Management Program. In addition, current and future phases of the I-580 Smart Corridor Project would likely relieve some congestion at the Hacienda Drive/Dublin Boulevard intersection through ITS measures and discourage traffic from diverting off the freeway due to congestion or incidents.

Therefore, the impact at the Hacienda Road/Dublin Boulevard intersection remains a significant cumulative impact. However, as part of the above ITS deployment along the I-580 corridor, the City of Dublin will implement advanced traffic signal timing techniques (e.g., adaptive signal timing) along Dublin Boulevard and Hacienda Drive to improve the operation of this intersection by utilizing the intersection's throughput capacity more efficiently.

*Supplemental Impact TRAFFIC 8: In the Year 2025 Cumulative Buildout with Project scenario, the Fallon Road/Dublin Boulevard intersection would operate at LOS F (1.11) during the PM peak hour.*

The Fallon Road/Dublin Boulevard intersection (No. 15 on Table 3.6-6) would operate at LOS F (1.11) in the PM peak hour. This represents an increase from the TVTM Baseline Model of 0.23. However, this analysis also assumed that Dublin Boulevard would be extended beyond the Project boundaries to North Canyons Parkway, a scenario not utilized in the TVTM Baseline model. The indicated increases in turning movements and traffic volumes at this intersection could be attributed to the Project and regional traffic utilizing Dublin Boulevard as an "escape" route from PM peak hour congestion on I-580. The analysis indicates large turning movement volumes from Dublin Boulevard westbound to southbound Fallon Road (2,095 vehicles) and large volumes of northbound Fallon Road vehicles (1,748) during the PM peak hour. Even with intersection geometries allowing for three Dublin Boulevard westbound to southbound Fallon Road left-turn lanes and four northbound Fallon Road through lanes cannot accommodate the intersection volumes. This LOS is a significant cumulative impact.

**SM-TRAFFIC-7:** The Project developers shall construct an additional through lane on northbound Fallon Road (for a total of four through lanes), construct an additional left-turn lane on westbound Dublin Boulevard (for a total of three left-turn lanes) and construct an additional through lane on southbound Fallon Road (for a total of four through lanes). In addition, the City will monitor the intersection for peak hour volumes on a periodic basis, as described below, and will apply appropriate Project conditions based on the results of such monitoring, as suggested below.

Project developers shall implement this mitigation measure when traffic impacts from individual projects are determined to trigger the need for this improvement based on traffic impact studies of the individual projects.

Construction of these additional lanes at the intersection will aid in moving vehicles through the intersection and will reduce the impacts to the intersection. However this mitigation cannot reduce the impacts to an acceptable level (LOS D), so this impact remains a significant cumulative impact.

**SM-TRAFFIC-8:** In addition to the above additional lane configurations (in Supplemental Mitigation Traffic 7), the Project developers shall pay for studies to assess the feasibility of locating the Fallon Road/Dublin Boulevard intersection farther north to allow for a signalized Project intersection between the I-580 westbound ramps/Fallon Road intersection and the Fallon Road/Dublin Boulevard intersection (the "auxiliary intersection"). This new Project auxiliary intersection should consist of seven northbound Fallon Road lanes (2 left, 4 through, 1 right), seven southbound Fallon Road lanes (2 left turn, 4 through, 1 right turn), and 4 lanes for the new Project street; in the westbound direction three left turn lanes and a shared through/right turn lane; and in the eastbound direction, two right-turn lanes, one through and two left turn lanes. If the studies show that a new Project auxiliary intersection in such location is feasible, the Project developers shall construct such intersection.

Project developers shall implement this mitigation measure when traffic impacts from individual projects are determined to trigger the need for this improvement based on traffic impact studies of the individual projects.

This "auxiliary" intersection, identified as XX in Table 3.6-6 would provide for three left-turn lanes onto southbound Fallon Road to absorb some of the Project-generated southbound left-turns at the Fallon Road/Dublin Boulevard intersection. Construction of this auxiliary intersection would require modifications to the planned Fallon Road and Dublin Boulevard alignments to provide the necessary 750 feet distance between intersections. Land uses and planned building locations on the west side of Fallon Road may have to be modified to accommodate this new intersection. This new intersection is anticipated to function at LOS B in the AM peak hour and LOS C in the PM peak hour. However, even with this new auxiliary intersection, the Fallon Road/Dublin Boulevard intersection would operate at LOS E (0.91) in the PM peak hour, just above the acceptable standard of LOS D (0.90). Even with this mitigation then, this impact remains a significant cumulative impact.

Additional improvements to reduce the impacts at the Fallon Road/Dublin Boulevard intersection to an acceptable LOS would require adding a fourth westbound left turn lanes. Allowing four lanes of traffic to perform a left turn movement simultaneously would raise major concerns regarding the safety of such an operation. It is recommended that the City monitor the intersection for peak hour volumes on a periodic basis and continue to obtain updated volume forecasts for future horizon years (i.e., Year 2025). Such monitoring will be done to assist the City and Project developer to comply with General Plan Policies requiring implementation of transportation measures to improve levels of service. Such transportation measures to be considered at the Stage 2 Development Plan include requiring a comprehensive transportation demand program; ride sharing; free or discounted BART or other transit passes for employees; vanpools; staggered work hours; and other trip reduction programs as specified in Chapter 5 (Travel Demand Management Element) of the ACCMA Congestion Management Program. In addition, current and future phases of the I-580 Smart Corridor Project would likely relieve some congestion at the Fallon Road/Dublin Boulevard intersection through ITS measures and discourage traffic from diverting off the freeway due to congestion or incidents.

As part of the future phases of the I-580 Smart Corridor project, the City of Dublin will implement advanced traffic signal timing techniques (e.g., adaptive signal timing) along Dublin Boulevard and Fallon Road to improve the operation of this intersection by utilizing the intersection's throughput capacity more efficiently.

Therefore, the impact at the Fallon Road/Dublin Boulevard intersection remains a significant cumulative impact.

#### Roadway Segment Conditions with the Project

*Supplemental Impact TRAFFIC 9: Future Base with Project scenario, Fallon Road will be overloaded at planned interim lane configurations.*

Figure 3.6-F indicates the future traffic volumes with and without Project traffic volumes on roadway segments. The Dublin Model provides comprehensive daily traffic volume forecasts on roadway segments adjacent to the Project. Based on the Dublin Model, Fallon Road between I-580 and Dublin Boulevard is expected to carry an increase of 16,600 ADT due to Project traffic over future baseline traffic of 36,500 ADT, for a total of 53,100 vpd, between I-580 eastbound and westbound off-ramp intersections an increase of 16,200 ADT (over 17,500 ADT baseline for a total of 33,700 ADT), between Dublin Boulevard and Central Parkway an increase of 22,200 ADT (over 19,000 ADT baseline for a total of 41,200 ADT), and Fallon Road between Central Parkway and Project Road and increase of 18,200 ADT (over 4,000 ADT baseline for a total of 22,200 ADT).

Project traffic volumes will require that certain segments of Fallon Road be widened to accommodate expected average daily traffic volumes. This increase in ADT is considered a significant impact.

Dublin Boulevard east of Fallon Road to Street D is expected to reach an ADT of 45,800 vpd and 34,100 vpd west of Fallon Road, based on the TVTM model with Project traffic.

**SM- TRAFFIC-9:** The Project developers shall be responsible for widening Fallon Road between I-580 and Dublin Road to its ultimate eight lanes and shall be responsible for widening Fallon Road between Dublin Boulevard and Central Parkway to its ultimate six-lane width. The Project developers shall be responsible for widening Fallon Road between Central Parkway and Project Road to four lanes. The Project developers also shall be responsible for widening the Fallon Road overcrossing (between the eastbound and westbound I-580 ramps) from four lanes to six lanes.

Project developers shall implement this mitigation measure when traffic impacts from individual projects are determined to trigger the need for this improvement based on traffic impact studies of the individual projects.

With this mitigation, Fallon Road will be wide enough to carry the expected traffic volumes at an acceptable level. This impact will be reduced to a level of insignificance.

*Supplemental Impact TRAFFIC 10: Future Base with Project Scenario, Central Parkway will be overloaded at planned interim lane configurations.*

Based on the Dublin Model, Central Parkway between Fallon Road and Tassajara Road is expected to carry an increase of 1,300 ADT due to Project traffic over future baseline traffic, for a total of 16,800 vpd. This increase in ADT is considered a significant impact.

**SM-TRAFFIC-10:** The Project developers shall be responsible for widening Central Parkway between Tassajara Road and Fallon Road from two lanes to four lanes.

Project developers shall implement this mitigation measure when traffic impacts from individual projects are determined to trigger the need for this improvement based on traffic impact studies of the individual projects.<sup>2</sup>

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<sup>2</sup> The first time the City circulated the DSEIR for comments, a comment questioned the need to reserve right-of-way for the future ultimate width on Central Parkway east of Fallon Road, considering the low ADT volume of 1,900 vehicles estimated for this roadway segment based on the Dublin Model. The near-term ADT forecasted for Central Parkway east of Fallon Road ranges between 1,900 and 6,100 vehicles per day based on the Dublin Model with Project traffic (see Figure 3.6-F). In the long-term, this ADT is expected to range between 7,300 and 9,200 vehicles per day based on the Year 2025 TVTM Model with Project traffic. Based on these ADTs, Figure 3.6-F shows two lanes being required on this roadway segment as part of the proposed Project. Figure 5-1b of the General Plan and the Eastern Dublin Specific Plan reflects a four-lane divided roadway configuration for Central Parkway between Arnold Road and Dublin Boulevard, including the segment extending easterly of Fallon Road and turning south to connect with Dublin Boulevard within the Eastern Extended Planning Area. Central Parkway is intended to connect the intensively developed areas in Eastern Dublin with the existing Eastern Dublin BART station located approximately 2-3 miles west of the Project area. Furthermore, when Eastern Dublin is fully developed, Dublin Boulevard is expected to be extended to North Canyons Parkway in Livermore. At that time, Central Parkway will likely be used as a key alternate route to bypass congestion on Dublin Boulevard west of Fallon Road. This congestion would be the result of traffic diverting from I-580 due to heavy commute

With this mitigation, Central Parkway will be wide enough to carry the expected traffic volumes at an acceptable level. This impact will be reduced to a level of insignificance.

### **Freeway Segment Conditions with the Project**

#### ***Year 2005 With and Without Project***

In order to include I-580, I-680 and SR 84 in the MTS route analysis for Year 2005 conditions, Table 3.6-7 is presented in this DSEIR to show the volume-to-capacity ratio and the corresponding level of service with and without the proposed Project during the PM peak hour in Year 2005. The PM peak hour volume projections were obtained from the 2005 Countywide Transportation Model since the Dublin Model does not include freeway volumes. Based on this analysis and as shown in Table 3.6-7, the proposed Project is not expected to cause levels of service on I-580, I-680 and SR 84 to change during the PM peak hour under Year 2005 conditions.

#### ***Year 2025 Without Project***

Mainline AM and PM peak hour directional volumes on Interstates 580 and 680 and on State Route 84 have been evaluated for the Year 2025 without the Project, based on the TVTM Model. As shown in Table 3.6-8, ten mainline freeway segments were analyzed along I-580, I-680 and SR 84 in the Project study area. These include the following segments:

I-580: West of I-680

- I-680 to Dougherty Road
- Dougherty Road to Hacienda Drive
- Hacienda Drive to Tassajara Road
- Tassajara Road to Fallon Road
- Fallon Road to Airway Boulevard
- East of Airway Boulevard

I-680: North of I-580

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traffic or unexpected freeway incidents. Therefore, the forecasted ADTs on Central Parkway from the TVTM Model could be exceeded in the future as a result of regional travel needs through the Tri-Valley area. This is especially true if Central Parkway is extended in the future from Arnold Road to Dougherty Road to make for a more efficient regional circulation system in Dublin. The Class I Collector Street classification for Central Parkway is consistent with the street designations described in the City of Dublin General Plan and the Eastern Dublin Specific Plan and fulfills all possible future needs to accommodate local trips within Dublin, as well as regional travel patterns within the Tri-Valley area in general. Central Parkway has been constructed between Arnold Road and Tassajara Road as an interim two-lane roadway with right-of-way reserved for the ultimate four-lane width. This DSEIR includes a supplemental mitigation measure (SM-TRAFFIC-10) on page 3.6-24, which requires the Project developers to widen Central Parkway between Tassajara Road and Fallon Road from two lanes to four lanes. East of Fallon Road, Central Parkway will have two lanes as part of the proposed Project, but, consistent with the rest of Central Parkway, right-of-way will be reserved for the future ultimate four-lane width. Page 2-9 of this DSEIR notes, under "Project Access and Circulation," that primary access through the project site will be via Fallon Road, Dublin Boulevard and Central Parkway and that secondary access will be via collector streets located throughout the Project. The location of the collector streets and the possibility of using Croak Road as the connector for Central Parkway to Dublin Boulevard will be determined by the tentative map and site development review stages when lotting patterns are known.

## South of I-580

### SR 84: South of I-580

As shown in Table 3.6-8, the I-580 segment west of I-680 in the westbound commute direction is projected to operate at LOS E during the AM peak hour in Year 2025 without Project volumes. The other six segments analyzed on I-580 between I-680 and east of Airway Boulevard are projected to operate at LOS F in the westbound commute direction during the AM peak hour. During the PM peak hour, the three I-580 segments between Tassajara Road and east of Airway Boulevard and the I-680 to Dougherty Road segment would be operating at LOS F in the eastbound commute direction. The I-580 segments west of I-680, Dougherty Road to Hacienda Drive, and Hacienda Drive to Tassajara Road would be operating at LOS E, D and E, respectively in the eastbound commute direction during the PM peak hour.

As shown in Table 3.6-8, the I-680 segment north of I-580 is projected to operate at LOS E in both directions of travel during the AM peak hour in Year 2025 without Project volumes. During the PM peak hour, the I-680 segment north of I-580 is projected to operate at LOS F and E in the northbound and southbound directions, respectively. The I-680 segment south of I-580 is projected to operate at LOS E in the southbound direction during the PM peak hour.

Roadway improvements currently under planning for SR 84 were assumed to be in place for this analysis; these improvements are included in the Tri-Valley Transportation Development (TVTD) Fee Strategic Expenditure Plan as one of eleven most regionally significant projects that have been given priority for funding with revenues from the TVTD Fee program. The Project Study Report (PSR) for the SR 84 improvement project is currently underway and is evaluating a number of roadway configuration alternatives, including a possible ultimate configuration of six lanes on Isabel Avenue from I-580 to Vineyard Avenue and four lanes from Vineyard Avenue to I-680. The total length of the project is approximately ten miles. As shown in Figure 3.6-8, SR 84 south of I-580 is anticipated to operate at LOS A without the proposed project during the AM and PM peak hours under Year 2025 conditions.

### **Year 2025 With Project**

*Supplemental Impact TRAFFIC 11: In the Year 2025 Cumulative Buildout with Project Scenario, freeway segments on I-580 and I-680 in the Project area would operate at unacceptable levels of service during the AM and PM peak hours.*

With the proposed Project traffic added to Year 2025 No Project mainline freeway volumes, projected LOS for eastbound and westbound commute directions on I-580 would remain unchanged. However, with a projected LOS F in the AM westbound commute direction between east of Airway Boulevard and I-680, the proposed Project trips would be adding to an already deficient condition. During the PM peak hour, Project trips also would be adding to a deficient condition between Tassajara Road and east of Airway Boulevard and between I-680 and Dougherty Road in the eastbound commute direction. These specific segments of I-580 would not meet the ACCMA standard of LOS E during the AM or PM peak hour, even without the Project trips. This is considered a significant cumulative impact.

The only mainline freeway improvement identified in the Eastern Dublin Specific Plan is the widening of the I-580 freeway to provide a fifth auxiliary lane in each direction between

Tassajara Road and Fallon Road. Although efficiency improvements (such as HOV Lanes) and expanded public transportation could be added in this corridor, little or no additional capacity for single-occupant vehicles is planned. Actions to encourage alternative travel modes include advocating HOV lanes on I-580, extending BART to Livermore, implementing the I-580 Smart Corridor approach (including adaptive signal timing, transit priority systems, incident management, and possibly ramp metering), and supporting other major investments in transit.

In advocating HOV lanes on I-580 and other projects listed above, the City of Dublin will coordinate with other local jurisdictions and attempt to obtain additional funds (e.g., from State and federal sources) to implement these projects. Moreover, the City of Dublin will support advancing the funding priority of the HOV lanes on I-580 through participation in the Tri-Valley Transportation Council.

Mitigation Measure 3.3/2.0 of the Eastern Dublin EIR, which is applicable to the Project, requires participation in a Transportation Systems Management program, which would include strategies to reduce single-occupant vehicles. Moreover, as part of Mitigation Measures 3.3/3.0 and 3.3/5.0 of the Eastern Dublin EIR, the Project shall contribute a proportionate share to the construction of auxiliary lanes on I-580 by paying a regional fee, which the City has implemented through Category 3 Eastern Dublin Traffic Impact Fee, followed by the TVTD Fee (see pages 3.6-6 and 3.6-12). Both the Category 3 Eastern Dublin Traffic Impact Fee and the TVTD Fee (which has substituted for the Category 3 Eastern Dublin Traffic Impact Fee) include HOV lanes on I-580 from Tassajara Road to Vasco Road, as specified in the TVTD Fee Strategic Expenditure Plan.

As discussed above, the Project will be required to pay for its proportionate share of impacts to I-580 improvements, by payment of TVTD Fees. The Project will also pay its proportionate share toward transit improvements in the Tri-Valley Area (which includes Livermore) by payment of the TVTD Fee; one of the improvements to be funded by the TVTD Fees is express bus service in the Tri-Valley area. (See Resolution 89-98, adopting TVTD Fee [available in the City Clerk's office].)

With the proposed Project traffic added to Year 2025 No Project mainline freeway volumes, projected LOS for both directions of travel on I-680 would remain unchanged during the AM and PM peak hours. With a projected LOS F in the PM peak hour northbound direction north of I-580, the proposed Project trips would be adding to an already deficient condition. However, the I-680 segment north of I-580 would not meet the ACCMA standard of LOS E in the PM peak hour northbound direction, even without the Project trips.

Mitigation Measure 3.3/3.0 of the Eastern Dublin EIR remains applicable to this impact. This mitigation measure requires the City of Dublin to coordinate with Caltrans and the City of Pleasanton to construct auxiliary lanes (for a total of 10 lanes) on I-580 between Tassajara Road and Airway Boulevard. Mitigation Measure 3.3/5.0 of the Eastern Dublin EIR is also applicable to this impact but, even with this mitigation, the impact remains a significant cumulative impact, and a statement of overriding considerations will need to be adopted. This mitigation measure requires the Project to contribute a proportionate share to the construction of auxiliary lanes (for a total of 10 lanes) on I-580 east of Airway Boulevard, as implemented by Caltrans. This mitigation measure also requires local jurisdictions to require that all future development projects participate in regional transportation mitigation programs as determined by the Tri-Valley Transportation Council study. In June 1998, the City of Dublin adopted Resolution No. 89-98 establishing a Tri-Valley Transportation Development (TVTD) Fee for future developments within the City of Dublin. TVTD Fees paid by project developers pay for regional improvements to the freeway system.

Therefore, the impact on the freeway system of I-580 and I-680 in the Project area remains a significant cumulative impact.

As shown in Table 3.6-8, with the proposed Project traffic added to Year 2025 No Project volumes, projected LOS for both directions of travel on SR 84 would remain unchanged at LOS A during the AM and PM peak hours under Year 2025 conditions. Therefore, the project is not expected to have a significant impact on SR 84 under Year 2025 conditions.

### **Transit Operations Impacts**

#### **BART (Bay Area Rapid Transit)**

The impact on BART was evaluated by estimating increased ridership with the development of the proposed Project. Future ridership projections used in the Eastern Dublin EIR were based on the assumption that the East Dublin/Pleasanton station would be the only station constructed in the Tri-Valley area. However, it is expected that the currently planned West Dublin/Pleasanton BART station would also be available in the Tri-Valley area at the time when the proposed Project is constructed. The Project consists of residential, commercial, and industrial uses. It is anticipated that a small percentage of commercial and retail employees/visitors would use BART to and from the site. These riders would be in the reverse commute direction (eastbound) coming to the Project and capacity would be available to accommodate the added riders generated by these uses.

Additional riders generated by the residential uses were calculated based on the methodology used in the DEIR for the Dublin Transit Center, July 2001. For the Transit Center, it is assumed that 32.1 percent of households would use BART since the residential portion of that project is located within the Transit Center area (Draft EIR for Dublin Transit Center, SCH No. 20001120395 [July 2001], available at the City of Dublin). However, since the proposed Project would not be in the immediate vicinity of a BART station, it is assumed that approximately two percent of the Project households would use BART, which is consistent with current BART ridership estimates within the Tri-Valley area containing the cities of Dublin, Pleasanton, Livermore, and part of San Ramon. The traffic-consulting firm of TJKM Transportation Consultants calculated this two percent ridership estimate, and the calculation sheets are available at the City of Dublin. Approximately 50 additional riders are estimated to use BART due to the proposed Project as calculated below.

Residential: 2,526 dwelling units  $\times$  1 Adult/unit  $\times$  2%  $\times$  2 trips per day = 100 trips/day (50 riders inbound to BART during the AM/50 riders outbound to BART during the PM)

Currently, BART runs four 8-car trains to/from the Dublin/Pleasanton Station during the peak hours. Each train has a capacity of 560 seats, which translates into 2,240 seats during the peak hour. At this station, approximately 1,063 riders enter the station during the AM peak hour and 325 exit the station (total of 1,388 riders). BART assumes a ridership load capacity of 1.35 persons per seat during the peak commute periods to account for sitting and standing passengers. During the PM peak hour, BART ridership is lower with a total of 1,266 riders (entering and exiting).

Adding 50 more entering riders during the AM peak hour would result in 1,113 riders to the peak commute direction (westbound). With the added ridership from the proposed project, it is determined that the seating capacity would be 0.50 persons per seat (1,113 riders/2,240 seats), which is below BART's load capacity. During the PM peak hour, the capacity would be even lower with the additional 50 riders generated by the proposed project.

This analysis is conservative in that it assumes that all of the riders would use BART during the peak one hour in the AM and PM.

The Eastern Dublin EIR concluded that the GPA/SP Project would create a need for substantial expansion of existing transit systems (BART and LAVTA), resulting in a significant impact (IM 3.3/O). The impact of the Project on BART was adequately analyzed in the Eastern Dublin EIR. Mitigation measures of the Eastern Dublin EIR remain applicable to the Project (MM 3.3/15.2 and 3.3/15.3). The Project will contribute towards the construction of park and ride lots, through payment of the Eastern Dublin Traffic Impact Fee and to improvements to transit service through payment of the TVTD Fee.

#### *LAVTA (Livermore -Amador Valley Transit Authority) -- Wheels*

Several bus lines currently provide service to east Dublin, including lines 12, 12X, 10A, 1A, 1B, and 20X. None of these lines, however, provide service immediately adjacent to the proposed project (Fallon Road and Dublin Boulevard) simply because roadways do not exist. It is assumed that LAVTA would introduce new bus lines or reroute existing bus lines to accommodate the riders from the Project as it becomes built. It is also expected that LAVTA would provide sufficient capacity to accommodate riders, as needed.

A calculation is provided to estimate the number of monthly riders estimated to be generated by the proposed project. Two percent of the residential uses are expected to use transit:

$$2,526 \text{ dwelling units} \times 2\% \times 2 \text{ trips/day} \times 20 \text{ working days per month} = 2,020 \text{ monthly riders.}$$

It is expected that the commercial and industrial employees/visitors would generate a minimal number of riders.

The impacts of the GPA/SP, of which the Project is a part, on the need for expanded transit were adequately analyzed in the Eastern Dublin EIR (see Chapter 3.3 of Eastern Dublin EIR) and, as noted above, mitigation measures were imposed to reduce the impact to a less than significant level. (See MM 3.3/15.0 [provide transit service within 0.25 mile]; MM 3.3/15.1 [provide transit service at minimum frequency of 30 minutes during peak hours]; MM 3.3/15.2 [GPA/SP Project to contribute to capital and operating costs of transit service extensions]; and MM 3.3/15.3 [coordinate with BART and LAVTA to provide bus service to BART station].) These mitigation measures remain applicable to the Project and no additional mitigation measures are required.

#### **Increase in Hazards/Inadequate Emergency Access**

The Initial Study identified two other impacts where the Project may have a potential impact greater than that identified in the Eastern Dublin EIR: 1) the potential to increase hazards due to a design feature or incompatible use; and 2) emergency access so that access to property or structures is inadequate.

Approval of the proposed Project and future development of the Project area would add new driveways, sidewalks and other vehicular and pedestrian travel ways. Construction of new residences and commercial development within the Project area could increase the need for emergency service and related access to new residences and commercial establishments. The Eastern Dublin EIR anticipated and addressed these impacts and

suggested mitigation measures to reduce such impacts. The Initial Study noted that changes in Tri-Valley commute patterns and traffic intensities might have the potential to increase those impacts above levels anticipated in the Eastern Dublin EIR.

Although additional cumulative traffic will occur within the Project area, the location of land uses and roadways and the intensity of development will not change from that analyzed in the Eastern Dublin EIR. The location of land uses already has been determined to be compatible in the Project area, since mixed-use development is not planned. As Stage 2 development plans, tentative maps and Site Development Review applications are submitted for review and approval, each development will be reviewed for compliance with City standards which dictate street safety standards such as sight distance, vertical and horizontal curves, gradient, intersection geometries, distance between intersections, driveway locations, etc. Conformance with these City standards will ensure that potential traffic-related hazards will be minimized to a level of insignificance. Similarly, all development projects will be reviewed to ensure that adequate emergency access is maintained to properties and structures. Where necessary, the City may require emergency vehicle access in accordance with City standards and Project-specific conditions may be imposed to ensure City standards for adequate emergency access is provided. These impacts are insignificant and no supplemental mitigations are required.

#### **Supplemental Information to Clarify Issues of Concern with Previous DSEIR**

Through the revised DSEIR, the City has attempted to provide clarification on issues raised regarding the previous DSEIR. The following information is provided in addition to the analyses in this revised DSEIR to provide further information on related issues.

#### *Proposed Access to the Project Site*

It is noted on page 2-9 of this DSEIR under "Project Access and Circulation" that primary access through the project site will be via Fallon Road, Dublin Boulevard and Central Parkway and that secondary access will be via collector streets located throughout the Project. The location of collector streets will be determined by the tentative map and site development review stages when lotting patterns are known and a collector street, such as a residential collector or residential street, will serve the elementary school proposed at the eastern edge of the Project site. The design of the easterly end of Central Parkway will similarly be determined by the tentative map stage. Central Parkway could serve, for example, as a "T" intersection with collector streets connecting to it to serve the low-density residential properties to the north and south, as well as the school.

Footnote 1 on page 3.6-2 of this DSEIR explains that, as approved in 1993, the Transit Spine (now called Central Parkway) ran west to east from Tassajara Road to Fallon Road (May 4, 1993 Addendum to Eastern Dublin EIR). General Plan Figure 5-1b, added by the 1997 amendment to the General Plan following approval of a negative declaration (Council Resolution 77-97), is the same as Figure 2-I of this DSEIR. Although not to scale, it is clear from both figures that Central Parkway loops south-east to connect to Dublin Boulevard within the project site and not within the Future Study Area/Agriculture areas shown on the General Plan Land Use Map for the Eastern Extended Planning Area (generally referred to as Doolan Canyon but shown on the General Plan Land Use Map for the Eastern Extended Planning Area as "Future Study Area/Agriculture"; see Figure 2-B of this DSEIR and Figure 5.1b of the General Plan). A number of maps and figures in this DSEIR show Central Parkway terminating west of the Future Study Area/Agriculture area (Doolan Canyon) (see Figure 2-D; Figure 2-F; Figure 2-G; Figure 2-I; Figure 2-J; Figure 3.3-C; Figure 3.4-B; Figure 3.6-A, -B, -C, -D, -E, and -F).

Because the Project does not propose the extension of Central Parkway into Doolan Canyon, an analysis of environmental impacts of such an extension is not required. The impacts of extending Dublin Boulevard through this area were addressed in the Eastern Dublin EIR (Revisions to DEIR Text, pages 3.3-16 to 3.3-18 [Dec. 15, 1992 letter from DKS Associates] and IM 3.3/J and MM 3.3/10.0 of Eastern Dublin EIR, finding an impact at the intersection of Airway Boulevard with Dublin Boulevard/North Canyons Parkway and finding the impact could be mitigated to a level of insignificance through payment of a regional transportation fee).

As shown in Figure 3.6-F of this DSEIR and based on the TVTM Model, the estimated daily volume for this segment of Central Parkway is 8,700 vehicles per day under cumulative 2025 No Project conditions and 9,200 vehicles per day under cumulative 2025 plus Project conditions. In the TVTM Model, Central Parkway does not extend east to Doolan Canyon; instead, it extends easterly from Fallon Road for a short distance, then loops southerly to intersect with Dublin Boulevard. The 8,700-vehicle volume represents the forecasted amount of traffic that would occur if the Central Parkway to Dublin Boulevard loop were actually constructed. This volume would occur even if the proposed Project was not developed, and is made up of two components: 1) traffic using Central Parkway to reach destinations in Eastern Dublin, and 2) traffic bypassing congested Dublin Boulevard. In reality, the Central Parkway loop likely would not be constructed if the proposed Project were not developed. However, this volume represents what would occur if the street were actually in place but without any project development. With the development of the proposed Project, the daily traffic volume on this segment of Central Parkway would be expected to increase to 9,200 vehicles per day, based on the Year 2025 TVTM Model.

The issue of the location of Central Parkway, growth-inducing effects and any environmental impacts associated with such location were adequately addressed in the Eastern Dublin EIR, the negative declaration approved for the 1997 General Plan amendments and this DSEIR. No additional analysis is required. The issues relating to access to the elementary school and the design of Central Parkway at its easterly terminus will be analyzed in connection with tentative map approval or site development review approval of specific development projects.

#### *Freeway Segment Operational Analysis*

Additional freeway segment operational analysis was conducted using the Highway Capacity Manual 2000 methodology for basic freeway sections under Cumulative Year 2025. The levels of service are based on density and speeds. Table 3.6-9 is provided to show the change in speeds without and with the project at the study freeway segments. "Speed" as a measure of effectiveness was chosen for presentation since the general public is more familiar with this parameter. Delay is not a standard measurement in freeway analysis.

Speeds below 51.1 mph correspond to Level of Service (LOS) F, and are not computable. Under these conditions traffic is assumed to be stop and go since the volumes are near or exceed capacity. As shown in Table 3.6-9, without and with the project, I-580 experiences congestion (LOS F) in the westbound peak commute direction between I-680 and east of Airway during the AM peak hour.

During the PM peak hour, I-580 is forecasted to operate at LOS F in the eastbound peak commute direction between I-680 and east of Airway, except between Dougherty and Tassajara where there are more lanes. This segment would operate at LOS D and E with

speeds between 53.0 and 59.7 mph without and with the project. I-680 is projected to operate at LOS D, E and F, and SR-84 is projected to operate at LOS A south of I-580 during the AM and PM peak hours without and with the project. Westbound I-580 between Tassajara and Fallon Roads is expected to experience the greatest reduction in speed of 3.2 mph due to Project traffic during the PM peak hour; although the speed is reduced, the LOS remains the same, however. The above Project traffic impact results are consistent with the discussion of Freeway Segment Conditions with and without the Project (pp. 3.6-25 to 28).

As shown in Table 3.6-9, the Project tends to result in increased traffic in the off-peak directions of I-580 and have minimal impacts in the peak directions. For example, Table 3.6-9 shows an 11 percent and a 13 percent increase in project-related mainline volumes on I-580 in the AM peak hour in the eastbound direction between Hacienda Drive and Tassajara Road and between Tassajara Road and Fallon Road, respectively. The TVTM Model assigns these additional trips in the AM peak hour because of the relatively uncongested freeway lanes in the non-peak direction. In the peak directions, project-related volume increases are either much smaller or, in some cases, negative. In the case of the negative numbers, more traffic is assigned to the surface street system or is reduced because of the improved proximity of jobs and housing caused by the Project.

The above analysis provides information on Project traffic impacts on I-580, I-680 and SR 84 mainline segments. Based on this analysis, the added traffic by the proposed Project would not cause a change in operational levels of service.

#### *Project Impacts on I-580 On- and Off- Ramps*

Table 3.6-10 provides a summary of the trips that are expected to use the on- and off-ramps on I-580 at Hacienda Drive, Santa Rita Road/Tassajara Road, and Fallon Road/El Charro Road during the AM and PM peak hours under Year 2025 conditions. The peak hour volumes were obtained from the TVTM Model.

As shown in Table 3.6-10, most of the project trips will use the Fallon Road/El Charro Road interchange to access the Project site. With the minimal number of additional trips, the City determined that the additional trips would not result in significant traffic impacts at this interchange. No mitigations beyond the improvements identified in the Eastern Dublin EIR and this DSEIR are required. All of the intersections near this interchange, including the overcrossing, are being sized and reconfigured to accommodate added traffic. The Project will contribute its proportionate share to the cumulative widening of Fallon Road and improvements to the I-580/Fallon/El Charro Road interchange improvements through payment of Eastern Dublin Traffic Impact Fees (see p. 3.6-6 of this DSEIR).

Separate traffic operations studies have been prepared by TJKM Transportation Consultants for the I-580 off-ramps at Hacienda Drive, Tassajara/Santa Rita Roads and Fallon/El Charro Roads to ensure that queuing onto mainline I-580 would not occur under cumulative conditions. These studies were conducted as part of the Project Study Reports (PSR) for the I-580 interchange improvement projects at these three locations. These PSR traffic studies include both the effects of the interchange improvements and the effects of the proposed Project.

The land uses specified for the proposed project are the same land uses that were included in the Eastern Dublin Specific Plan. These land uses have been included in the TVTM Model that was used to analyze the interchanges in the PSR studies. (To make the "with Project" analysis in this DSEIR, the TVTM model was used as is; to make the "no Project" analysis, the land use in the Project area was zeroed out.) Consequently, the PSR studies and their analyses include the full traffic effects of

the proposed Project. Thus, the 393 vph for the westbound I-580 Fallon Road on-ramp in the PM and the 335 vph for the eastbound I-580 El Charro Road off-ramp in the AM shown in Table 3.6-10 are not additional trips, but are in fact included in the PSR analyses. (In these examples, the specific volumes affect the uncongested direction of the freeway.)

In addition, continuous auxiliary lanes are planned along I-580 between Hacienda Drive and Fallon Road in both directions to eliminate traffic weaving as vehicles enter the freeway. The auxiliary lanes provide adequate distance to allow vehicles to merge into the traffic stream. Therefore, added traffic due to the proposed project at the on- and off-ramps is not expected to result in significant traffic impacts.

The above information shows that Project traffic added to the ramps will not cause significant traffic impacts.

#### *Impact of New Housing Opportunities on I-580 Traffic Conditions*

In most cases, traffic volumes increase slightly on I-580 in the 2025 With Project scenario as compared with the 2025 No Project scenario. However, it is clear that additional housing provided near the Pleasanton, Dublin and Livermore job centers will have the effect of displacing future regional traffic otherwise traveling from more distant points (such as the San Joaquin Valley) to reach Tri-Valley jobs. A very similar effect was propounded in the North Livermore Specific Plan DEIR, April 2000, prepared for the City of Livermore and the County of Alameda.

The TVTM Model does not arbitrarily assign new housing opportunities throughout the modeled network in order to achieve a match between jobs and housing. The TVTM Model does recognize proposed housing such as contained in the Project, and does reorganize its forecasted trips throughout the region to reflect the improved travel consequences of jobs and housing being placed in closer proximity. Such assignments reflect real-world conditions that closely parallel the traffic and related benefits resulting from in-fill projects within cities.

Table 3.6-8 discloses traffic volumes and impacts along the I-580 corridor. The proposed Dublin Boulevard extension through the Project is expected to carry over 40,000 vehicles per day, with or without the Project. However, the Project is expected to facilitate the construction of Dublin Boulevard. This roadway provides immense benefits to the I-580 corridor and is expected to allow the freeway itself to continue operating at reasonable levels with modest planned freeway improvements by creating significant arterial capacity increases.

#### *Summary of Transportation Improvements at Impacted Intersections and Roadways*

Further mitigations of Project traffic impacts beyond those identified in the Eastern Dublin EIR are included in this DSEIR, including ten supplemental mitigation measures listed on pages 3.6-16 to 3.6-24. These mitigation measures are identified in this DSEIR to the best extent possible to mitigate traffic impacts beyond those identified in the Eastern Dublin EIR. Questions were raised when the DSEIR was previously circulated regarding the impacts and the mitigation measures at certain intersections; regarding mitigation for air quality and traffic impacts; and regarding the availability of mitigation measures to encourage carpools and public transit. The following addresses those concerns.

This DSEIR identified significant cumulative impacts at the Dougherty Road/Dublin Boulevard intersection (Supplemental Impact TRAFFIC 6, p. 3.6-18), Hacienda Drive/Dublin Boulevard intersection (Supplemental Impact TRAFFIC 7, p. 3.6-20) and Fallon Road/Dublin Boulevard intersection (Supplemental Impact TRAFFIC 8, p. 3.6-21), but found that physical improvements, beyond those identified, to widen these intersections to achieve LOS D were not feasible due both to safety concerns of additional turn lanes and the physical constraints of the intersections.

The Eastern Dublin EIR found the GPA/SP project would create a need for expansion of existing transit systems. (Impact 3.3/O.) Mitigation Measures 3.3/15.0 [coordinate with LAVTA, the transit server, to provide transit service within .25 mile of 95% of population], 15.1 [provide transit service at LAVTA's frequency standards], 15.2 [contribute towards costs of transit service extensions which is done through the Tri-Valley Transportation Development Fee] and 15.3 [City to coordinate with BART and LAVTA to provide feeder bus service to the BART station] were included in the Eastern Dublin EIR to mitigate the impact to a level of insignificance. These mitigation measures remain applicable to the Project. HOV lanes on City arterials would not be feasible, as this measure would impede traffic flow on City streets and deteriorate intersection levels of service to unacceptable levels during the peak periods due to the limited lane capacity available on surface streets.

In order to reduce cumulative traffic impacts and improve levels of service at City intersections and on the freeway system in the vicinity of the Project, this DSEIR identified transportation measures that could be required as part of the Stage 2 Development Plans for individual projects, as appropriate to the project. The transportation measures identified in this DSEIR include comprehensive transportation demand program, ride-sharing, free or discounted BART or other transit passes for employees, vanpools, staggered work hours, and other trip reduction programs specified in Chapter 5 of ACCMA's Congestion Management Program. In addition, this DSEIR specifies implementing the I-580 Smart Corridor approach (currently under Phase 1 installation) to include adaptive signal timing, transit priority systems, incident management, and freeway ramp metering.

Furthermore, Mitigation Measure 3.3/2.0 of the Eastern Dublin EIR, which is applicable to the Project, requires participation in a Transportation Systems Management program, which would include strategies to reduce single-occupant vehicles. Moreover, as part of Mitigation Measures 3.3/3.0 and 3.3/5.0 of the Eastern Dublin EIR, the Project shall contribute a proportionate share to the construction of auxiliary lanes on I-580 by paying a regional fee, which the City has implemented through Category 3 Eastern Dublin Traffic Impact Fee, followed by the TVTD Fee (see pages 3.6-6 and 3.6-27). Both the Category 3 Eastern Dublin Traffic Impact Fee and the TVTD Fee (which has substituted for the Category 3 Eastern Dublin Traffic Impact Fee) include installing HOV lanes on I-580 from Tassajara Road to Vasco Road, as specified in the TVTD Fee Strategic Expenditure Plan.

#### ***Funding of Regional Transportation Improvements***

Mitigation Measure 3.3/5.0 of the Eastern Dublin EIR corresponding to Impact 3.3/E states:

"The City shall coordinate with other local jurisdictions to require that all future development projects participate in regional transportation mitigation programs as determined by the current Tri-Valley Transportation Council study."

The City is an active participant in the development and funding of regional transportation mitigations, in compliance with adopted Eastern Dublin mitigation measures.

The TVTD Fee Resolution No. 89-98 was adopted by the City of Dublin pursuant to the provisions of the Joint Powers Agreement that Dublin entered into with Livermore, Pleasanton, San Ramon, Danville, Alameda County and Contra Costa County in which all the parties agreed to impose TVTD Fees on development that receives a land use entitlement. (Refer to page 3.6-6 of this DSEIR for a description of the current Fee Program in the City of Dublin.) The TVTD Fee Strategic Expenditure Plan identifies eleven planned projects as being the most regionally significant, including installation of HOV lanes on I-580 between Tassajara Road and Vasco Road. These projects have been given priority for funding with revenues from the TVTD Fee program.

In September 2001, the City adopted Resolution No. 168-01 supporting the I-580 Smart Corridor Management Plan that was previously approved by the I-580 Smart Corridor Policy Advisory Committee. The Plan supports the phased implementation of a Ramp Metering Plan on I-580 from I-880 to the Altamont Pass. The member jurisdictions of the I-580 Smart Corridor project, including Dublin, Livermore, Pleasanton, and Alameda County, are committed to petition the Metropolitan Transportation Commission (MTC) and Caltrans to elevate the priority funding for the next phase of the I-580 Smart Corridor project to implement a coordinated system of ramp metering on I-580.

**Table 3.6-1****East Dublin Properties Trip Generation: Proposed Project**

Use	FAR	Size	Daily		AM Peak Hour					PM Peak Hour				
			Rate	Trips	Rate	In:Out	In	Out	Total	Rate	In:Out	In	Out	Total
<b>Residential</b>														
L	--	1,734 du	9.57	16,594	0.75	25:75	325	975	1,300	1.01	64:36	1,121	630	1,751
M	--	94 du	9.57	900	0.75	25:75	18	53	71	1.01	64:36	61	34	95
MH	--	696 du	6.63	4,615	0.51	16:84	57	298	355	0.62	67:33	289	143	432
RRA	--	2 du	9.57	19	0.75	25:75	1	1	2	1.01	64:36	1	1	2
<i>Sub Total</i>	--	<i>2,526 du</i>		<i>22,128</i>			<i>401</i>	<i>1,327</i>	<i>1,728</i>			<i>1,472</i>	<i>808</i>	<i>2,280</i>
<b>Commercial</b>														
GC*	0.25	446.5 ksf	39.96	17,842	0.87	61:39	237	151	388	3.78	48:52	810	878	1,688
NC	0.30	134.6 ksf	61.31	8,252	1.42	61:39	117	74	191	5.68	48:52	367	397	764
<i>Sub Total</i>				<i>26,094</i>			<i>354</i>	<i>225</i>	<i>579</i>			<i>1,177</i>	<i>1,275</i>	<i>2,452</i>
<b>Industrial</b>														
I	0.28	840.4 ksf	6.96	5,849	0.89	82:18	613	135	748	0.92	21:79	162	611	773
<b>Total</b>														
<b>Future Study Area (GC and I)</b>	0.0	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>GRAND TOTAL</b>				<b>54,071</b>			<b>1,368</b>	<b>1,687</b>	<b>3,055</b>			<b>2,811</b>	<b>2,694</b>	<b>5,505</b>

Notes:

Du = dwelling units

Ksf = 1,000 square feet

L = Low Density Residential

M = Medium Density Residential

MH = Medium High Density Residential

RRA = Rural Residential / Agriculture

GC\* = General Commercial (Large Shopping Center)

GC = General Commercial

NC = Neighborhood Commercial

I = Industrial Park

See page 91

Table 3.6-2

## Peak Hour Intersection Levels of Service - Existing Conditions

Intersection	Control	Unmitigated			
		A.M. Peak Hour		P.M. Peak Hour	
		*	LOS	*	LOS
1 Dougherty Road/Dublin Blvd	Signal	0.68	B	0.81	D
2 Hacienda Drive/I-580 Eastbound Ramps	Signal	0.44	A	0.27	A
3 Hacienda Drive/I-580 Westbound Ramps	Signal	0.28	A	0.13	A
4 Hacienda Drive/Dublin Boulevard	Signal	0.18	A	0.26	A
5 Santa Rita Road/I-580 Eastbound Ramps	Signal	0.65	A	0.68	B
6 Tassajara Road/I-580 Westbound Ramps	Signal	0.38	A	0.48	A
7 Tassajara Road/Dublin Blvd	Signal	0.23	A	0.24	A
9 Tassajara Road/Gleason Drive**	Signal	0.49	A	0.36	A
13 El Charro Road/I-580 Eastbound Ramps	One-Way STOP	5.2	B	4.6	A
14 Fallon Road/I-580 Westbound Ramps	One-Way STOP	3.1	A	3.1	A

Note: \* = Volume-to-Capacity (V/C) Ratio for signalized intersections;

Average Delay in Seconds for stopping and yielding movements at 1-way STOP-controlled intersections.

\*\* = The signal at Tassajara Road/Gleason Drive is currently under construction, and is not operational at this time.

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Table 3.6-3

## Peak Hour Intersection Levels of Service - Existing plus Approved plus Pending (Dublin Model) – No Project

Intersection	Control	Unmitigated				Mitigated			
		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
		*	LOS	*	LOS	*	LOS	*	LOS
1 Dougherty Road/Dublin Boulevard (w/Scarlett Drive Bypass)	Signal	0.74	C	0.86	D				
2 Hacienda Drive/I-580 Eastbound Ramps	Signal	<b>0.93</b>	E	0.86	D	0.74	C	0.73	C
3 Hacienda Drive/I-580 Westbound Ramps	Signal	<b>1.20</b>	F	0.74	C	0.86	D	0.56	A
4 Hacienda Drive/Dublin Boulevard	Signal	0.63	B	0.82	D				
5 Santa Rita Road/I-580 Eastbound Ramps	Signal	<b>0.98</b>	E	<b>0.97</b>	E	0.83	D	0.90	D
6 Tassajara Road/I-580 Westbound Ramps	Signal	0.79	C	0.81	D				
7 Tassajara Road/Dublin Boulevard	Signal	0.61	B	0.84	D				
8 Tassajara Road/Central Parkway**	Signal	0.42	A	0.50	A				
9 Tassajara Road/Gleason Drive**	Signal	0.52	A	0.58	A				
10 Grafton Street/Dublin Boulevard**	Signal	0.55	A	0.65	B				
11 Grafton Street/Central Parkway**	Signal	0.22	A	0.23	A				
12 Grafton Street/Gleason Drive**	Signal	0.06	A	0.05	A				
13 El Charro Road/I-580 Eastbound Ramps**	Signal	0.17	A	0.31	A				
14 Fallon Road/I-580 Westbound Ramps**	Signal	0.23	A	0.38	A				
15 Fallon Road/Dublin Boulevard**	Signal	0.42	A	0.48	A				
16 Fallon Road/Central Parkway**	Signal	0.29	A	0.39	A				
17 Fallon Road/Gleason Drive**	Signal	0.09	A	0.09	A				

Note: \* = Volume-to-Capacity (V/C) Ratio for signalized intersections;  
 Average Delay in Seconds for stopping and yielding movements at 1-way STOP-controlled intersections.  
 \*\* = Traffic signals at these intersections are either under construction or are anticipated to be installed in the future.

8/26/2011

**Table 3.6-4**  
**Peak Hour Intersection Levels of Service – Tri-Valley Transportation Model Cumulative Year 2025 (No Project)**

Intersection	Control	Unmitigated				Mitigated			
		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
		*	LOS	*	LOS	*	LOS	*	LOS
1	Dougherty Road/Dublin Boulevard	Signal	<b>0.94</b>	<b>E</b>	<b>1.00</b>	<b>E</b>	--	--	--
2	Hacienda Drive/I-580 Eastbound Ramps	Signal	0.73	C	0.84	D			
3	Hacienda Drive/I-580 Westbound Ramps	Signal	0.84	D	<b>0.93</b>	<b>E</b>	0.66	B	0.72
4	Hacienda Drive/Dublin Boulevard	Signal	0.84	D	<b>0.97</b>	<b>E</b>	--	--	--
5	Santa Rita Road/I-580 Eastbound Ramps	Signal	0.85	D	0.77	C			
6	Tassajara Road/I-580 Westbound Ramps	Signal	0.71	C	0.75	C			
7	Tassajara Road/Dublin Boulevard	Signal	0.72	C	0.88	D			
8	Tassajara Road/Central Parkway	Signal	0.71	C	0.63	B			
9	Tassajara Road/Gleason Drive	Signal	0.59	A	0.50	A			
10	Grafton Street/Dublin Boulevard	Signal	0.31	A	0.41	A			
11	Grafton Street/Central Parkway	Signal	0.06	A	0.09	A			
12	Grafton Street/Gleason Drive	Signal	0.44	A	0.36	A			
13	El Charro Road/I-580 Eastbound Ramps	Signal	0.47	A	0.54	A			
14	Fallon Road/I-580 Westbound Ramps	Signal	0.57	A	0.69	B			
15	Fallon Road/Dublin Boulevard	Signal	0.67	B	0.88	D			
16	Fallon Road/Central Parkway	Signal	0.54	A	0.72	C			
17	Fallon Road/Gleason Drive	Signal	0.42	A	0.28	A			

Note: \* = Volume-to-Capacity (V/C) Ratio for signalized intersections.

See pg 6.91

**Table 3.6-5**  
**Peak Hour Intersection Levels of Service - Existing plus Approved plus Pending plus Project (Dublin Model)**

Intersection	Control	Unmitigated				Mitigated			
		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
		*	LOS	*	LOS	*	LOS	*	LOS
1 Dougherty Road/Dublin Boulevard (w/Scarlett Drive Bypass)	Signal	0.75	C	0.88	D				
2 Hacienda Drive/I-580 Eastbound Ramps	Signal	<b>0.93</b>	<b>E</b>	0.87	D	0.75	C	0.74	C
3 Hacienda Drive/I-580 Westbound Ramps	Signal	<b>1.21</b>	<b>F</b>	0.76	C	0.86	D	0.57	A
4 Hacienda Drive/Dublin Boulevard	Signal	0.67	B	0.90	D				
5 Santa Rita Road/I-580 Eastbound Ramps	Signal	<b>0.99</b>	<b>E</b>	<b>0.98</b>	<b>E</b>	0.84	D	0.90	D
6 Tassajara Road/I-580 Westbound Ramps	Signal	0.80	C	0.82	D				
7 Tassajara Road/Dublin Boulevard	Signal	0.66	B	0.85	D				
8 Tassajara Road/Central Parkway**	Signal	0.44	A	0.54	A				
9 Tassajara Road/Gleason Drive**	Signal	0.52	A	0.60	A				
10 Grafton Street/Dublin Boulevard**	Signal	0.55	A	0.72	C				
11 Grafton Street/Central Parkway**	Signal	0.23	A	0.25	A				
12 Grafton Street/Gleason Drive**	Signal	0.06	A	0.06	A				
13 El Charro Road/I-580 Eastbound Ramps**	Signal	0.38	A	0.81	D				
14 Fallon Road/I-580 Westbound Ramps**	Signal	0.42	B	0.75	C				
15 Fallon Road/Dublin Boulevard**	Signal	0.54	A	0.83	D				
16 Fallon Road/Central Parkway**	Signal	0.60	A	0.67	B				
17 Fallon Road/Gleason Drive**	Signal	0.13	A	0.13	A				
18 Street D/Dublin Boulevard	One-Way STOP	13.4	C	<b>140.1</b>	<b>F</b>				
Street D/Dublin Boulevard – Mitigated	Signal	--	--	--	--	0.22	A	0.31	A
19 Fallon Road/ "Project Road"	One-Way STOP	<b>60.7</b>	<b>F</b>	<b>50.0</b>	<b>F</b>				
Fallon Road/ "Project Road"**	Signal	--	--	--	--	0.42	A	0.41	A
20 Street D/Central Parkway	One-Way STOP	3.3	A	3.9	A				
21 Street B/Central Parkway	One-Way STOP	3.2	A	3.2	A				

Note: \* = Volume-to-Capacity (V/C) Ratio for signalized intersections;

Average Delay in Seconds for stopping and yielding movements at 1-way STOP-controlled intersections.

\*\* = Traffic signals at these intersections are either under construction or are anticipated to be installed in the future.

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**Table 3.6-6**  
**Peak Hour Intersection Levels of Service –Tri-Valley Transportation Model Cumulative Year 2025 plus Project**

Intersection	Control	Unmitigated				Mitigated			
		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
		*	LOS	*	LOS	*	LOS	*	LOS
1	Dougherty Road/Dublin Boulevard	Signal	<b>0.93</b>	<b>E</b>	<b>1.03</b>	<b>F</b>	--	--	--
2	Hacienda Drive/I-580 Eastbound Ramps	Signal	0.72	C	0.81	D			
3	Hacienda Drive/I-580 Westbound Ramps	Signal	0.83	D	<b>0.96</b>	<b>E</b>	0.65	B	0.75
4	Hacienda Drive/Dublin Boulevard	Signal	0.82	D	<b>1.00</b>	<b>E</b>	--	--	--
5	Santa Rita Road/I-580 Eastbound Ramps	Signal	0.86	D	0.74	C			
6	Tassajara Road/I-580 Westbound Ramps	Signal	0.69	B	0.73	C			
7	Tassajara Road/Dublin Boulevard	Signal	0.74	C	0.86	D			
8	Tassajara Road/Central Parkway	Signal	0.70	B	0.61	B			
9	Tassajara Road/Gleason Drive	Signal	0.56	A	0.47	A			
10	Grafton Street/Dublin Boulevard	Signal	0.35	A	0.44	A			
11	Grafton Street/Central Parkway	Signal	0.10	A	0.12	A			
12	Grafton Street/Gleason Drive	Signal	0.44	A	0.37	A			
13	El Charro Road/I-580 Eastbound Ramps	Signal	0.60	A	0.63	B			
14	Fallon Road/I-580 Westbound Ramps	Signal	0.63	B	0.76	C			
15	Fallon Road/Dublin Boulevard	Signal	0.88	D	<b>1.11</b>	<b>F</b>	--	--	--
15A	Fallon Rd./Dublin Blvd. w/ New Int.	Signal	--	--	--	--	0.77	C	<b>0.91</b>
XX	Fallon Road/New Intersection	Signal	--	--	--	--	0.62	B	0.71
16	Fallon Road/Central Parkway	Signal	0.83	D	0.84	D			
17	Fallon Road/Gleason Drive	Signal	0.51	A	0.31	A			
18	Street D/Dublin Boulevard	One-Way STOP	>120	F	>120	F			
	Street D/Dublin Boulevard - Mitigated	Signal	--	--	--	--	0.80	C	0.83
19	Fallon Road/"Project Road"	One-Way STOP	>120	F	>120	F			
	Fallon Road/ "Project Road" - Mitigated	Signal	--	--	--	--	0.55	A	0.49
20	Street D/Central Parkway	One-Way STOP	7.6	B	7.6	B			
21	Street B/Central Parkway	One-Way STOP	7.7	B	4.9	A			

Note: \* = Volume-to-Capacity (V/C) Ratio for signalized intersections;  
 Average Delay in Seconds for stopping and yielding movements at 1-way STOP-controlled intersections.

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**Table 3.6-7**  
**Peak Hour Mainline Freeway Levels of Service – Cumulative Year 2005 (ACCMA Model)**

Location	Capacity	Year 2005 No Project			Year 2005 + Project		
		P.M. Peak			P.M. Peak		
		Vol.	V/C	LOS	Vol.	V/C	LOS
<b>I-580, west of I-680</b>							
Eastbound	9,200	7,438	0.81	D	7,489	0.81	D
Westbound	9,200	6,999	0.76	D	7,121	0.77	D
<b>I-580, I-680 to Dougherty</b>							
Eastbound	9,200	6,347	0.69	D	6,402	0.70	D
Westbound	9,200	6,899	0.75	D	7,134	0.78	D
<b>I-580, Dougherty to Hacienda</b>							
Eastbound	13,800	8,684	0.63	C	8,786	0.64	C
Westbound	9,200	5,361	0.59	C	5,629	0.61	C
<b>I-580, Hacienda to Tassajara</b>							
Eastbound	11,500	8,048	0.70	D	8,228	0.72	D
Westbound	9,200	5,361	0.58	C	5,766	0.63	C
<b>I-580, Tassajara to Fallon</b>							
Eastbound	9,200	8,267	0.90	E	8,530	0.93	E
Westbound	9,200	6,033	0.66	D	6,626	0.72	D
<b>I-580, Fallon to Airway</b>							
Eastbound	9,200	8,475	0.92	E	8,579	0.93	E
Westbound	9,200	6,016	0.65	D	6,198	0.67	D
<b>I-580, East of Airway</b>							
Eastbound	9,200	9,181	1.00	F	9,631	1.05	F
Westbound	9,200	5,927	0.64	D	6,058	0.66	D
<b>I-680, North of I-580</b>							
Northbound	6,900	6,404	0.93	E	6,440	0.93	E
Southbound	6,900	5,027	0.73	D	4,992	0.72	D
<b>I-680, South of I-580</b>							
Northbound	6,900	6,033	0.87	E	5,967	0.86	E
Southbound	6,900	4,447	0.64	D	4,453	0.65	D
<b>SR 84, South of I-580</b>							
Northbound	6,900	2,066	0.30	B	2,080	0.30	B
Southbound	6,900	1,385	0.20	A	1,400	0.20	A

Notes: Levels of service calculated based on *Highway Capacity Manual 1997* by the Transportation Research Board, Chapter 3, Table 3-1, LOS Criteria for Basic Freeway Sections. Assumes maximum service flow rate of 2,300 passenger cars per hour per lane.

Peak hour volumes were based on the ACCMA Model Year 2005.

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**Table 3.6-8**  
**Peak Hour Mainline Freeway Levels of Service – Cumulative Year 2025 (Tri-Valley Model)**

Location	Capacity	Year 2025 No Project						Year 2025 + Project					
		A.M. Peak			P.M. Peak			A.M. Peak			P.M. Peak		
		Vol.	V/C	LOS	Vol.	V/C	LOS	Vol.	V/C	LOS	Vol.	V/C	LOS
<b>I-580, west of I-680</b>													
Eastbound	9,200	5,320	0.58	C	8,261	0.90	E	5,437	0.59	C	8,351	0.91	E
Westbound	9,200	8,126	0.88	E	6,749	0.73	D	8,192	0.89	E	6,871	0.75	D
<b>I-580, I-680 to Dougherty</b>													
Eastbound	9,200	8,047	0.87	E	10,084	1.10	F	8,232	0.89	E	10,139	1.10	F
Westbound	9,200	10,387	1.13	F	9,442	1.03	F	10,554	1.15	F	9,677	1.05	F
<b>I-580, Dougherty to Hacienda</b>													
Eastbound	13,800	7,460	0.54	C	9,722	0.70	D	7,728	0.56	C	9,824	0.71	D
Westbound	9,200	10,042	1.09	F	8,714	0.95	E	10,473	1.14	F	8,944	0.97	E
<b>I-580, Hacienda to Tassajara</b>													
Eastbound	11,500	6,154	0.54	C	9,897	0.86	E	6,823	0.59	C	10,077	0.88	E
Westbound	9,200	10,665	1.16	F	7,706	0.84	E	10,425	1.13	F	8,111	0.88	E
<b>I-580, Tassajara to Fallon</b>													
Eastbound	9,200	5,747	0.62	C	10,219	1.11	F	6,499	0.71	D	10,482	1.14	F
Westbound	9,200	10,353	1.13	F	7,277	0.79	D	10,237	1.11	F	7,870	0.86	E
<b>I-580, Fallon to Airway</b>													
Eastbound	9,200	6,888	0.75	D	11,145	1.21	F	7,285	0.79	D	11,249	1.22	F
Westbound	9,200	10,731	1.17	F	7,785	0.85	E	10,453	1.14	F	7,967	0.87	E
<b>I-580, East of Airway</b>													
Eastbound	9,200	6,472	0.70	D	10,465	1.14	F	6,922	0.75	D	10,512	1.14	F
Westbound	9,200	10,437	1.13	F	7,272	0.79	D	10,306	1.12	F	7,500	0.82	E
<b>I-680, North of I-580</b>													
Northbound	6,900	6,038	0.88	E	7,053	1.02	F	6,017	0.87	E	7,089	1.03	F
Southbound	6,900	6,000	0.87	E	5,676	0.82	E	6,075	0.88	E	5,641	0.82	E
<b>I-680, South of I-580</b>													
Northbound	6,900	4,674	0.68	D	5,436	0.79	D	4,572	0.66	D	5,370	0.78	D
Southbound	6,900	5,565	0.81	D	5,647	0.82	E	5,586	0.81	D	5,653	0.82	E
<b>SR 84, South of I-580</b>													
Northbound	6,900	735	0.11	A	1,137	0.16	A	721	0.10	A	1,133	0.16	A
Southbound	6,900	1,015	0.15	A	792	0.11	A	1,030	0.15	A	778	0.11	A

Notes: Levels of service calculated based on *Highway Capacity Manual 1997* by the Transportation Research Board, Chapter 3, Table 3-1, LOS Criteria for Basic Freeway Sections. Assumes maximum service flow rate of 2,300 passenger cars per hour per lane.

Peak hour volumes were based on the Tri-Valley Transportation Model Year 2025 without and with the Proposed Project. The Proposed Dublin Transit Center peak hour trips were manually added into the volumes based on the traffic study conducted by Omni Means in April 2001.

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**Table 3.6-9**  
**Peak Hour Mainline Freeway Operational Levels of Service – Cumulative Year 2025**

Location	Cap.	No Project						Plus Project						Change in Speed <sup>3</sup> (mph)	
		AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour				
		Vol.	Speed <sup>1</sup> (mph)	LOS <sup>2</sup>	Vol.	Speed <sup>1</sup> (mph)	LOS <sup>2</sup>	Vol.	Speed <sup>1</sup> (mph)	LOS <sup>2</sup>	Vol.	Speed <sup>1</sup> (mph)	LOS <sup>2</sup>	AM	PM
<b>580, west of I-680</b>															
Eastbound	9,200	5,320	60.0	C	8,282	<51.1	F	5,437	60.0	C	8,351	<51.1	F	0.0	n/a
Westbound	9,200	8,126	52.5	E	6,749	59.2	D	8,192	51.9	E	6,871	58.9	D	(0.6)	(0.3)
<b>580, I-680 to Dougherty</b>															
Eastbound	9,200	8,047	53.1	E	10,084	<51.1	F	8,232	51.5	E	10,139	<51.1	F	(1.6)	n/a
Westbound	9,200	10,387	<51.1	F	9,442	<51.1	F	10,554	<51.1	F	9,677	<51.1	F	n/a	n/a
<b>580, Dougherty to Hacienda</b>															
Eastbound	13,800	7,460	60.0	C	9,722	59.7	D	7,728	60.0	C	9,824	59.6	D	0.0	(0.1)
Westbound	9,200	10,042	<51.1	F	8,714	<51.1	F	10,473	<51.1	F	8,944	<51.1	F	n/a	n/a
<b>580, Hacienda to Tassajara</b>															
Eastbound	11,500	6,154	60.0	C	9,897	54.1	E	6,823	60.0	C	10,077	53.0	E	0.0	(1.1)
Westbound	9,200	10,665	<51.1	F	7,706	55.5	E	10,425	<51.1	F	8,111	52.6	E	n/a	(2.9)
<b>580, Tassajara to Fallon</b>															
Eastbound	9,200	5,747	60.0	D	10,219	<51.1	F	6,499	59.6	D	10,482	<51.1	F	(0.4)	n/a
Westbound	9,200	10,353	<51.1	F	7,277	57.6	E	10,237	<51.1	F	7,870	54.4	E	n/a	(3.2)
<b>580, Fallon to Airway</b>															
Eastbound	9,200	6,888	58.9	D	11,145	<51.1	F	7,285	57.9	D	11,249	<51.1	F	(1.0)	n/a
Westbound	9,200	10,731	<51.1	F	7,785	55.0	E	10,453	<51.1	F	7,967	53.7	E	n/a	(1.3)
<b>580, East of Airway</b>															
Eastbound	9,200	6,472	59.7	D	10,465	<51.1	F	6,922	58.8	D	10,512	<51.1	F	(0.9)	n/a
Westbound	9,200	10,437	<51.1	F	7,272	57.6	E	10,306	<51.1	F	7,500	56.6	E	n/a	(1.0)
<b>680, North of I-580</b>															
Northbound	6,900	6,038	53.1	E	7,053	<51.1	F	6,017	53.3	E	7,089	<51.1	F	0.2	n/a
Southbound	6,900	6,000	53.5	E	5,676	56.3	E	6,075	52.7	E	5,641	56.5	E	(0.8)	0.2
<b>680, South of I-580</b>															
Northbound	6,900	4,674	59.9	D	5,436	57.7	D	4,572	60.0	D	5,370	58.1	D	0.1	0.4
Southbound	6,900	5,565	57.0	E	5,647	56.5	E	5,586	56.9	E	5,653	56.4	E	(0.1)	(0.1)
<b>I-84, South of I-580</b>															
Northbound	6,900	735	60.0	A	1,137	60.0	A	721	60.0	A	1,133	60.0	A	0.0	0.0
Southbound	6,900	1,015	60.0	A	792	60.0	A	1,030	60.0	A	778	60.0	A	0.0	0.0

Notes: 1) The maximum speed for LOS E is 51.1 mph. Speeds less than 51.1 mph correspond to LOS F. Under these conditions it is assumed that traffic is stop and go since the estimated volumes near or exceed capacity.

2) LOS = Level of service. Levels of service are calculated based on *Highway Capacity Manual 2000* by the Transportation Research Board.

3) Parentheses ( ) indicate that speeds are slower with the development of the proposed project.

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**Table 3.6-10**  
**Year 2025 Traffic Impacts at I-580 On- and Off-ramps between Hacienda and Fallon**

Location	Year 2025 No Project		Year 2025 + Project		Change in traffic*	
	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
<b>I-580 On-ramps at:</b>						
Hacienda – Eastbound	1,075	1,748	1,169	1,810	94	62
Hacienda – Westbound	1,397	2,347	1,258	2,237	(139)	(110)
Santa Rita – Eastbound	706	1,146	746	1,157	40	11
Tassajara – Westbound	1,519	1,568	1,483	1,432	(36)	(136)
El Charro – Eastbound	851	977	931	963	80	(14)
Fallon – Westbound	1,051	1,334	1,354	1,727	303	393
<b>I-580 Off-ramps at:</b>						
Hacienda – EBL	681	636	701	717	20	81
Hacienda – EBR	1,186	1,100	1,200	1,056	14	(44)
Hacienda – WBL	645	692	606	675	(39)	(17)
Hacienda – WBR	1,017	990	1,000	1,096	(17)	106
Santa Rita – EBL	831	530	805	418	(26)	(112)
Santa Rita – EBT	104	208	102	203	(2)	(5)
Santa Rita – EBR	181	113	181	110	0	(3)
Tassajara – WBL	474	493	512	508	38	15
Tassajara – WBR	743	650	731	679	(12)	29
El Charro – EBL	798	895	1,133	1,077	335	182
El Charro – EBR	103	48	100	46	(3)	(2)
Fallon – WBL	693	747	643	715	(50)	(32)
Fallon – WBR	806	1,254	855	1,299	49	45

Note: \*Parentheses indicate a reduction in traffic. The peak hour volumes are generated based on the Tri-Valley Transportation Model. Reductions are possible with the development of the proposed project as background traffic may be reassigned to other locations as new traffic is introduced. The reassigned background traffic may be replaced with less project traffic resulting in overall reductions.

**Table 3.6-11**  
**DUBLIN AND COUNTYWIDE MODELS:**  
**YEAR 2005 PEAK HOUR VOLUMES (NO PROJECT)**

Location	Dublin Model PM Peak hour	ACCMA Model PM peak hour	% Difference from ACCMA Model
	(1)	(2)	$\{(1)-(2)\} \div (2) \times 100$
<b>Dublin Boulevard</b>			
<b>East of Fallon</b>			
-eastbound	--	778	--
-westbound	--	2	--
<b>Between Tassajara and Fallon</b>			
-eastbound	1,260	446	183%
-westbound	1,960	--	--
<b>Between Hacienda and Tassajara</b>			
-eastbound	2,384	183	1,203%
-westbound	1,686	11	15,227%
<b>Between Dougherty and Hacienda</b>			
-eastbound	1,356	731	85%
-westbound	2,254	264	754%
<b>West of Dougherty</b>			
-eastbound	1,876	936	100%
-westbound	2,017	1,724	17%
<b>Fallon Road</b>			
<b>South of Dublin Boulevard</b>			
-northbound	1,547	311	397%
-southbound	1,506	138	991%
<b>Between Dublin and Central</b>			
-northbound	1,133	235	382%
-southbound	729	410	78%
<b>Between Central and Gleason</b>			
-northbound	216	45	380%
-southbound	185	127	46%
<b>North of Gleason</b>			
-northbound	94	6	1,467%
-southbound	86	12	617%
<b>Tassajara Road</b>			
<b>South of Dublin Boulevard</b>			
-northbound	2,629	921	185%
-southbound	3,416	747	357%
<b>Between Dublin and Central</b>			
-northbound	2,084	827	152%
-southbound	1,285	926	39%
<b>Between Central and Gleason</b>			
-northbound	1,860	377	393%
-southbound	1,245	276	351%
<b>North of Gleason</b>			
-northbound	1,787	167	970%
-southbound	1,111	60	1,752%

**Table 3.6-11 (Cont.)**  
**DUBLIN AND COUNTYWIDE MODELS:**  
**YEAR 2005 PEAK HOUR VOLUMES (NO PROJECT)**

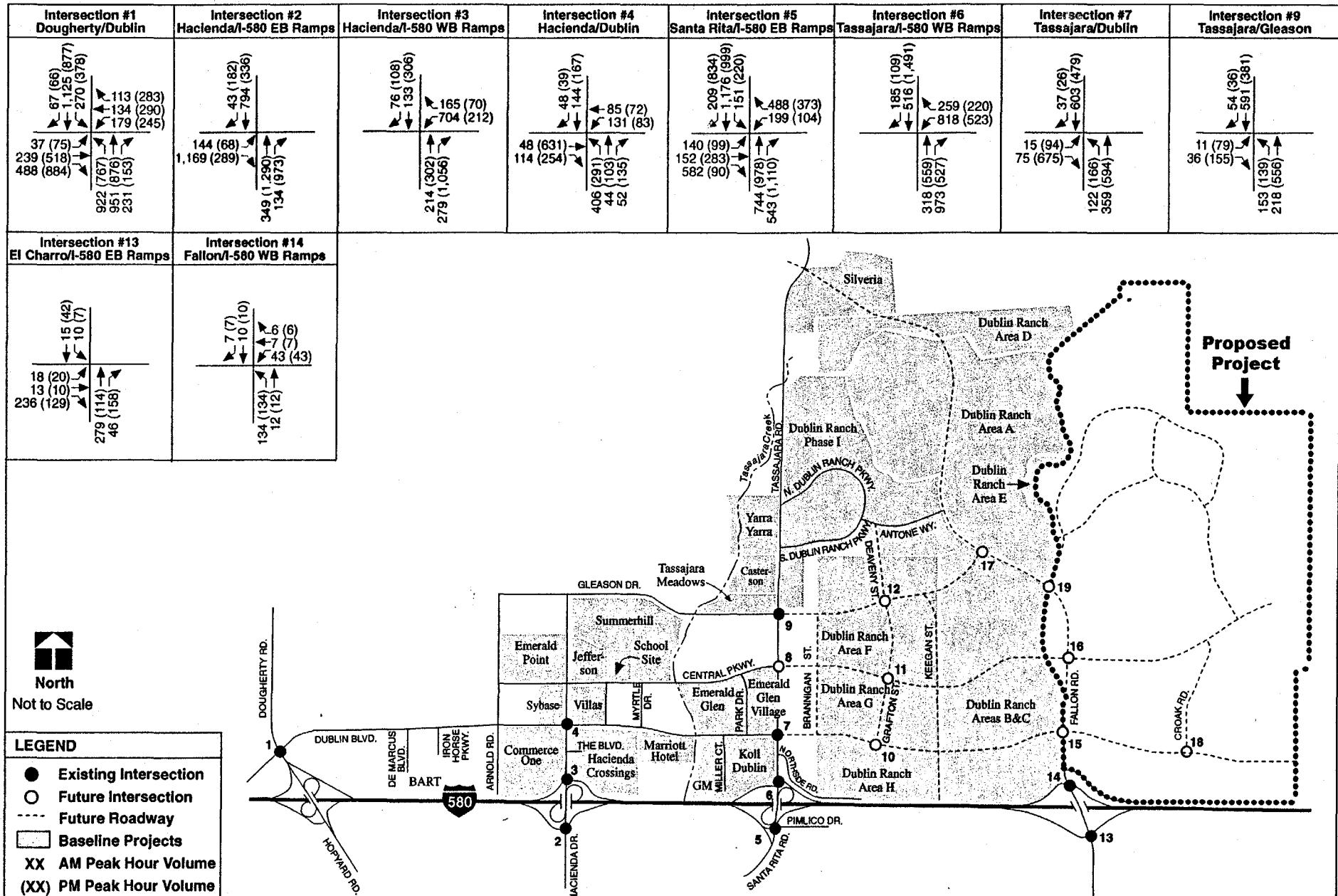
Location	Dublin Model PM peak hour	ACCMA Model PM peak hour	% Difference from ACCMA Model
	(1)	(2)	{[(1)-(2)]÷(2)}_100
<b>Hacienda Drive</b>			
<b>South of Dublin Boulevard</b>			
-northbound	1,546	746	107%
-southbound	1,178	1,375	-14%
<b>Between Dublin and Central</b>			
-northbound	1,027	436	136%
-southbound	1,197	826	45%
<b>Between Central and Gleason</b>			
-northbound	558	144	288%
-southbound	650	347	87%
<b>Dougherty Road</b>			
<b>South of Dublin Boulevard</b>			
-northbound	2,709	3,136	-14%
-southbound	3,064	2,598	18%
<b>North of Dublin Boulevard</b>			
-northbound	1,681	2,040	-18%
-southbound	1,279	1,170	9%

**Table 3.6-12**  
**TRI-VALLEY TRANSPORTATION AND COUNTYWIDE MODELS:**  
**YEAR 2025 PEAK HOUR VOLUMES (NO PROJECT)**

Location	Tri-Valley Trans. Model		ACCMA Model		% Difference from ACCMA Model $\{[(1)-(2)] \div (2)\} \cdot 100$
	AM peak hour	PM peak hour (1)	AM peak hour	PM peak hour (2)	
<b>I-580</b>					
<b>East of Fallon</b>					
-eastbound	6,740	10,696	--	9,222	16%
-westbound	10,201	7,623	--	7,011	9%
<b>Between Tassajara and Fallon</b>					
-eastbound	5,599	9,770	--	9,564	2%
-westbound	9,823	7,115	--	6,643	7%
<b>Between Hacienda and Tassajara</b>					
-eastbound	6,036	9,483	--	9,573	-1%
-westbound	10,178	7,562	--	6,047	25%
<b>Between Dougherty and Hacienda</b>					
-eastbound	6,904	9,558	--	10,324	-7%
-westbound	9,907	8,240	--	7,838	5%
<b>West of Dougherty</b>					
-eastbound	7,145	9,813	--	7,464	31%
-westbound	10,166	8,674	--	7,455	16%
<b>Dublin Boulevard</b>					
<b>East of Fallon</b>					
-eastbound	1,608	2,632	--	1,013	160%
-westbound	2,405	1,999	--	20	9,895%
<b>Between Tassajara and Fallon</b>					
-eastbound	892	1,767	--	750	136%
-westbound	1,385	501	--	--	--
<b>Between Hacienda and Tassajara</b>					
-eastbound	1,079	2,534	--	1,048	142%
-westbound	2,031	1,346	--	86	1,465%
<b>Between Dougherty and Hacienda</b>					
-eastbound	1,502	2,179	--	2,127	2%
-westbound	1,920	1,837	--	2,770	-34%
<b>West of Dougherty</b>					
-eastbound	1,905	2,612	--	1,590	64%
-westbound	2,517	2,704	--	2,349	15%
<b>Fallon Road</b>					
<b>South of Dublin Boulevard</b>					
-northbound	2,243	2,879	--	1,137	153%
-southbound	2,849	3,007	--	743	305%
<b>Between Dublin and Central</b>					
-northbound	411	1,165	--	1,341	-13%
-southbound	1,259	460	--	1,190	-61%
<b>Between Central and Gleason</b>					
-northbound	582	1,329	--	283	370%
-southbound	1,364	697	--	322	116%
<b>North of Gleason</b>					
-northbound	603	1,350	--	115	1,074%
-southbound	1,399	709	--	50	1,318%

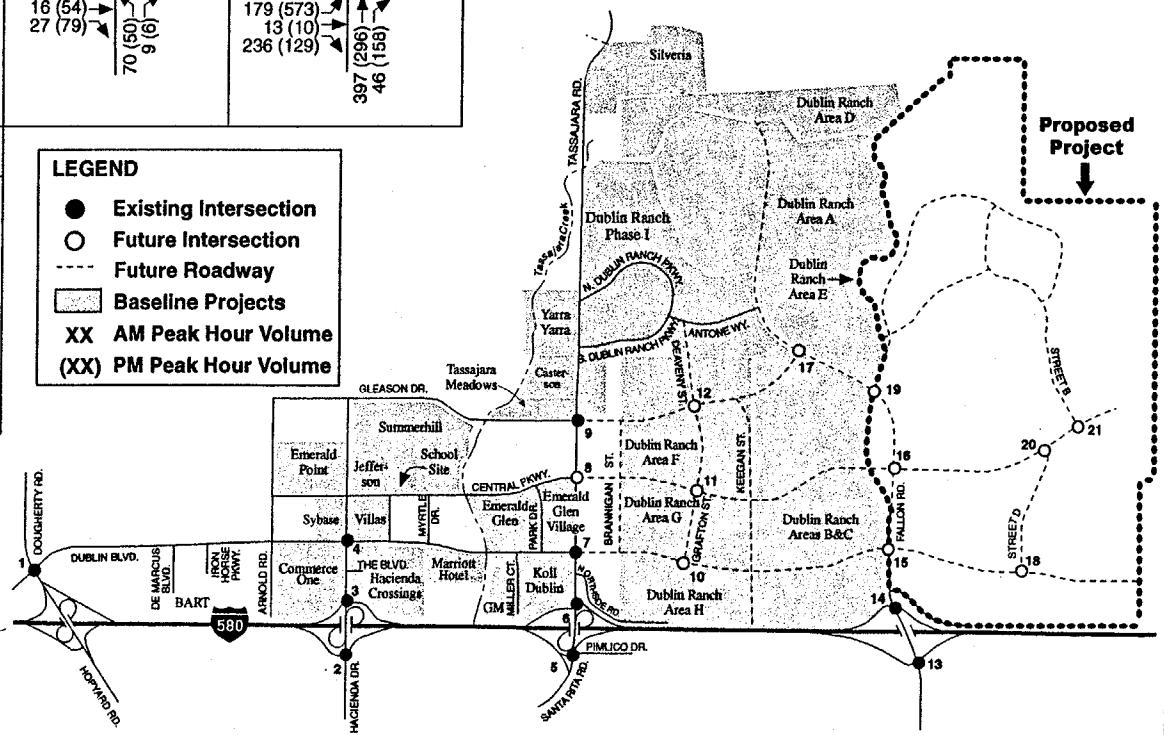
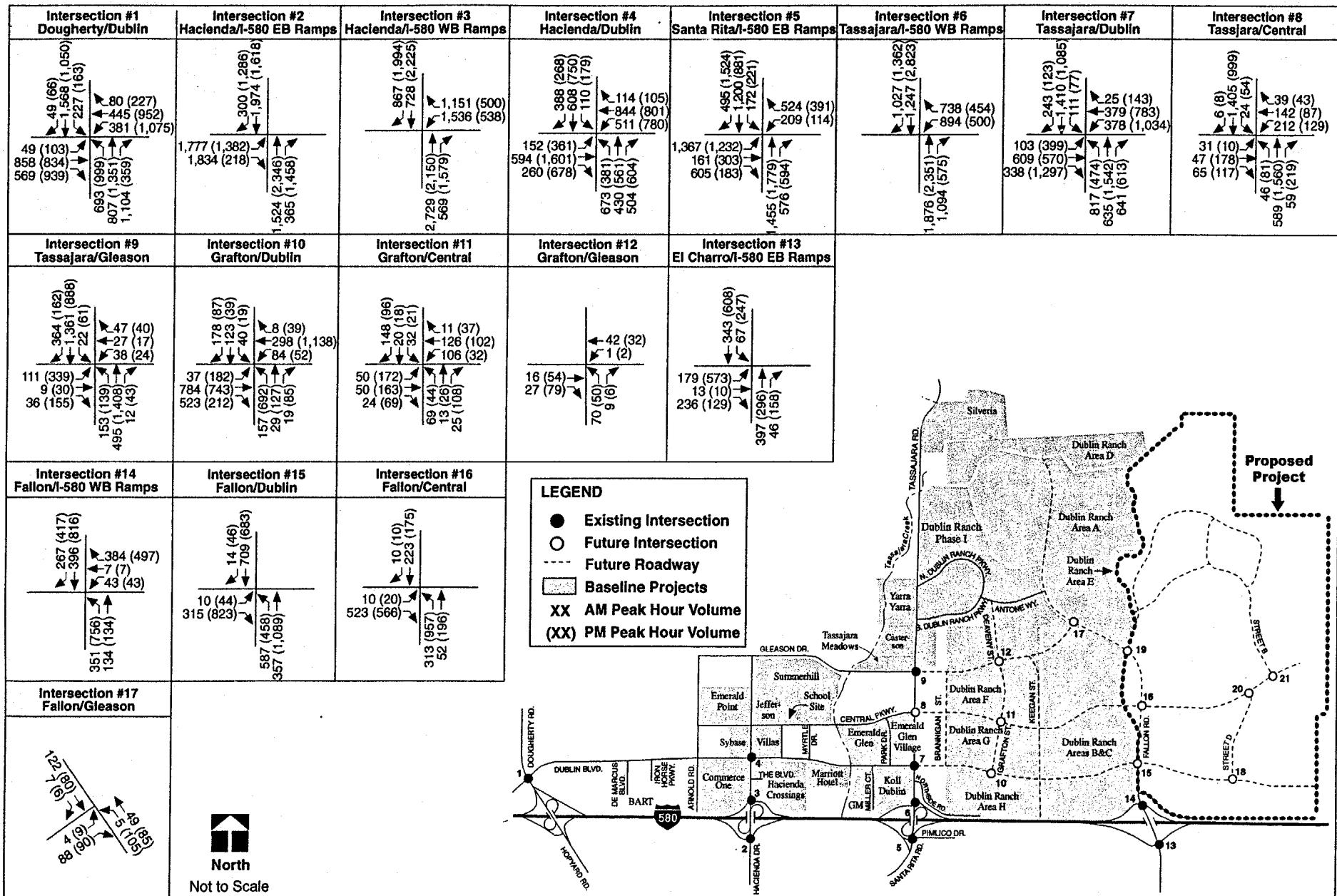
**Table 3.6-12 (Cont.)**  
**TRI-VALLEY TRANSPORTATION AND COUNTYWIDE MODELS:**  
**YEAR 2025 PEAK HOUR VOLUMES (NO PROJECT)**

Location	Tri-Valley Trans. Model		ACCMA Model		PM peak hour % Difference from ACCMA Model $\{[(1)-(2)] \div (2)\} \cdot 100$
	AM peak hour	PM peak hour (1)	AM peak hour	PM peak hour (2)	
<b>Tassajara Road</b>					
<b>South of Dublin Boulevard</b>					
-northbound	2,521	2,633	--	2,403	10%
-southbound	2,461	2,982	--	1,838	62%
<b>Between Dublin and Central</b>					
-northbound	1,643	2,494	--	2,933	-15%
-southbound	2,773	1,815	--	2,156	-16%
<b>Between Central and Gleason</b>					
-northbound	876	1,832	--	1,252	46%
-southbound	2,215	1,125	--	738	52%
<b>North of Gleason</b>					
-northbound	563	1,856	--	595	212%
-southbound	2,137	738	--	213	246%
<b>Hacienda Drive</b>					
<b>South of Dublin Boulevard</b>					
-northbound	2,935	3,269	--	1,861	76%
-southbound	2,215	3,456	--	2,222	56%
<b>Between Dublin and Central</b>					
-northbound	672	759	--	1,054	-28%
-southbound	1,063	759	--	1,430	-47%
<b>Between Central and Gleason</b>					
-northbound	327	854	--	497	72%
-southbound	509	722	--	578	25%
<b>Dougherty Road</b>					
<b>South of Dublin Boulevard</b>					
-northbound	2,441	4,291	--	4,246	1%
-southbound	3,692	3,406	--	3,333	2%
<b>North of Dublin Boulevard</b>					
-northbound	767	2,157	--	2,944	-27%
-southbound	2,283	1,560	--	2,148	-27%



City of Dublin  
East Dublin Properties

## Existing Turning Movement Volumes

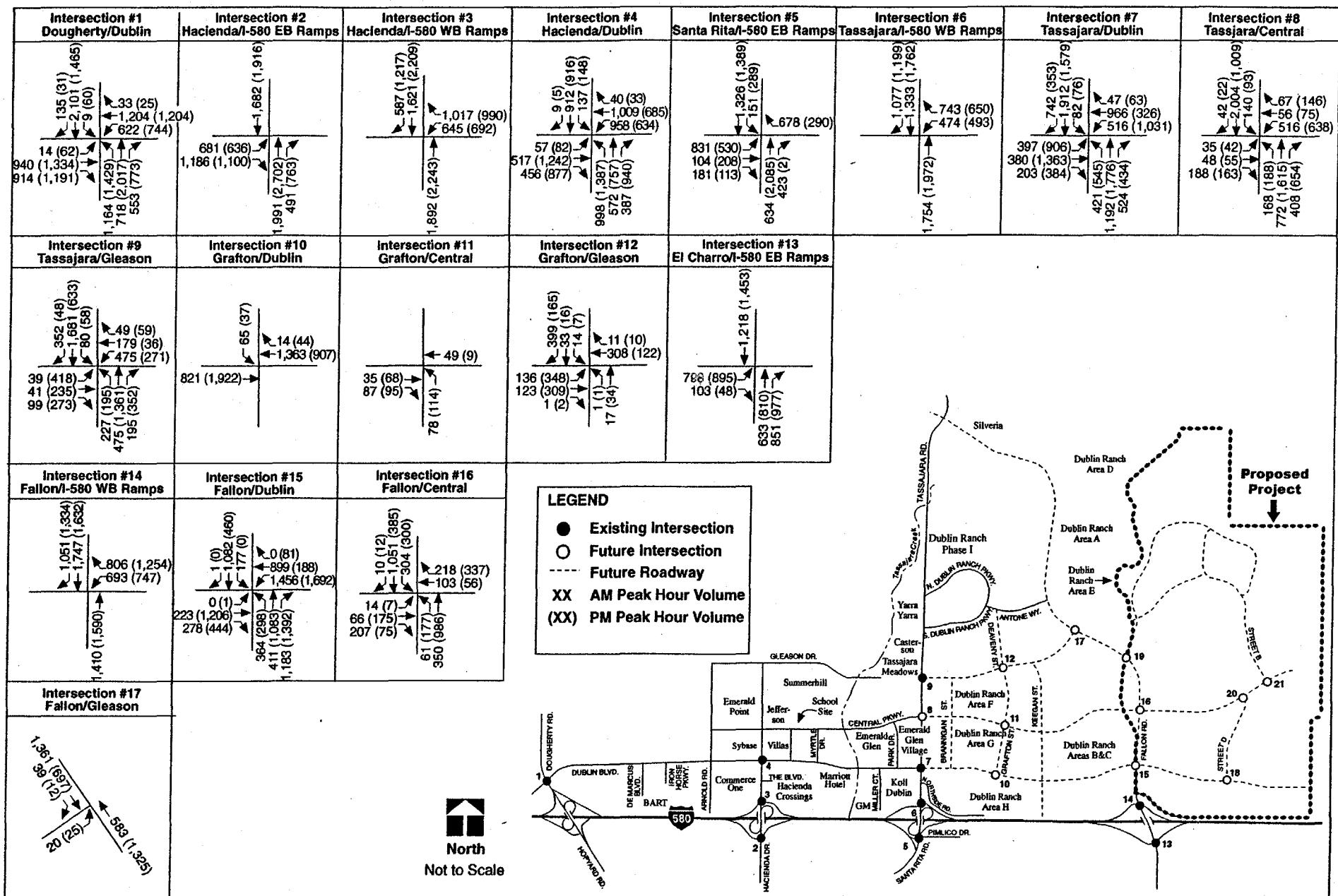


City of Dublin  
East Dublin Properties

Existing + Approved + Pending Turning Movement Volumes (Dublin Model)

East Dublin Properties  
FIGURE 3.6-B

TJKM



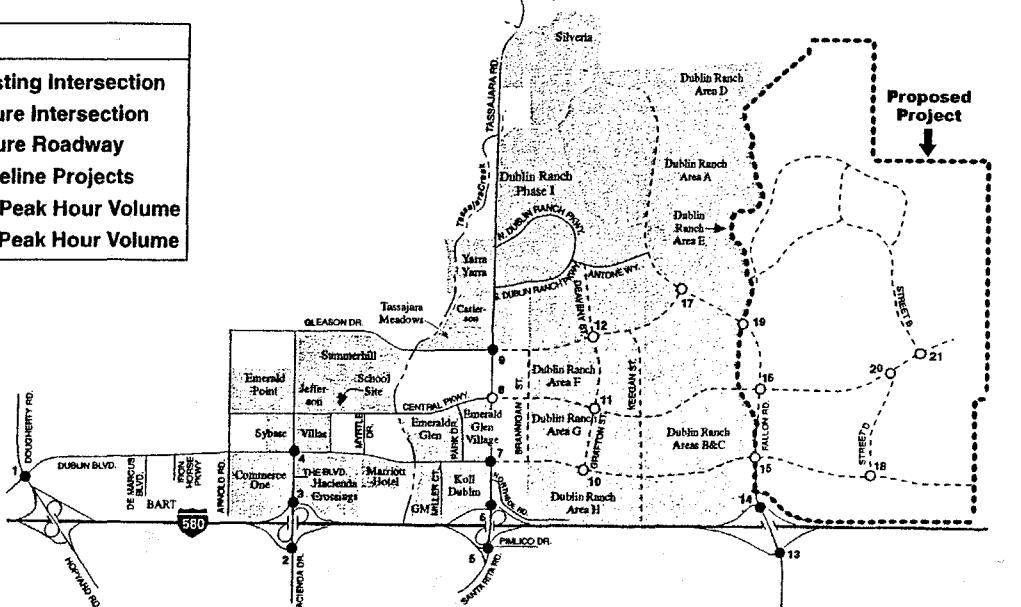
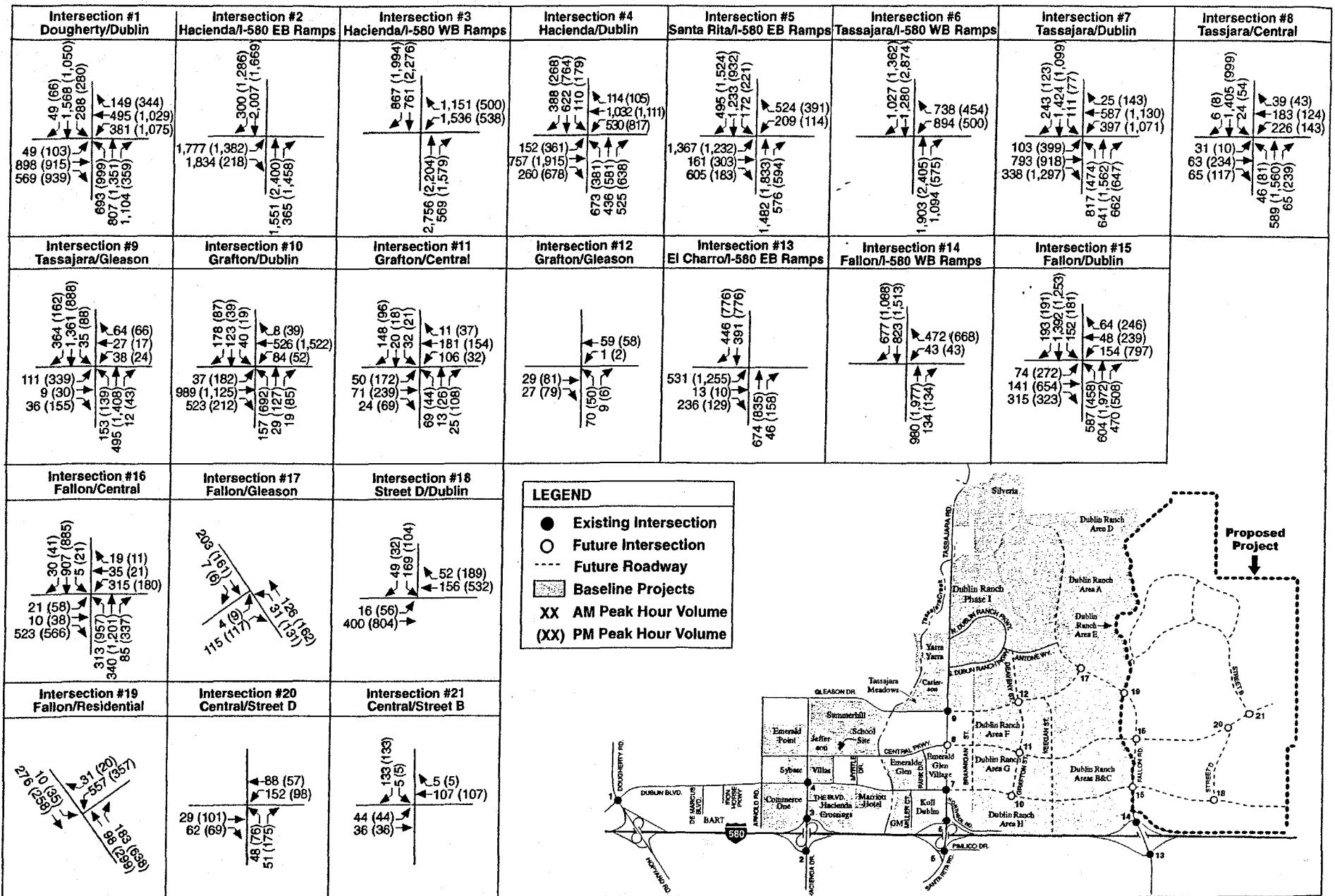
City of Dublin - East Dublin Properties

## **Tri-Valley Transportation Model Cumulative Year 2025 Turning Movement Volumes**

# **East Dublin Properties**

## **FIGURE 3.6-C**



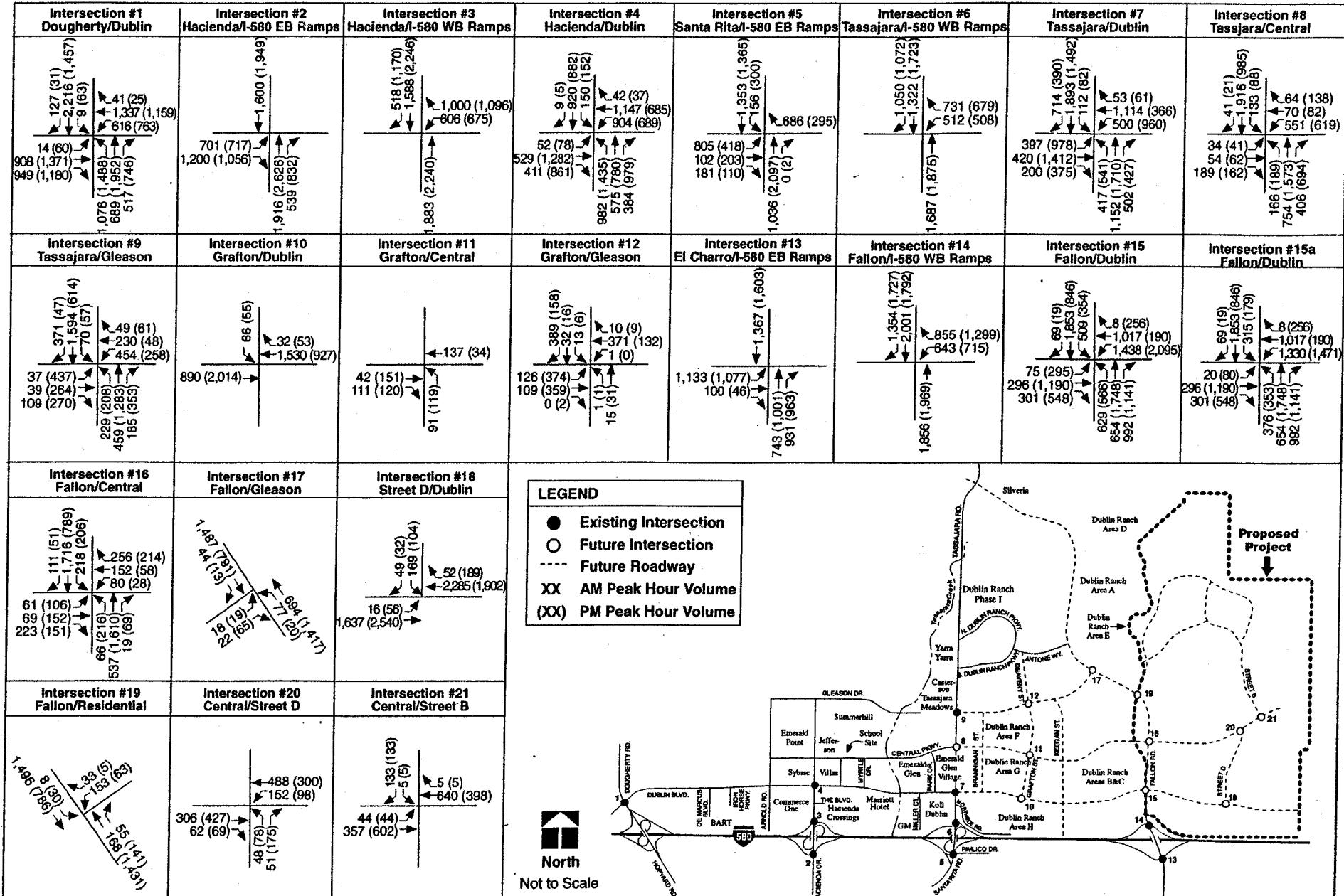


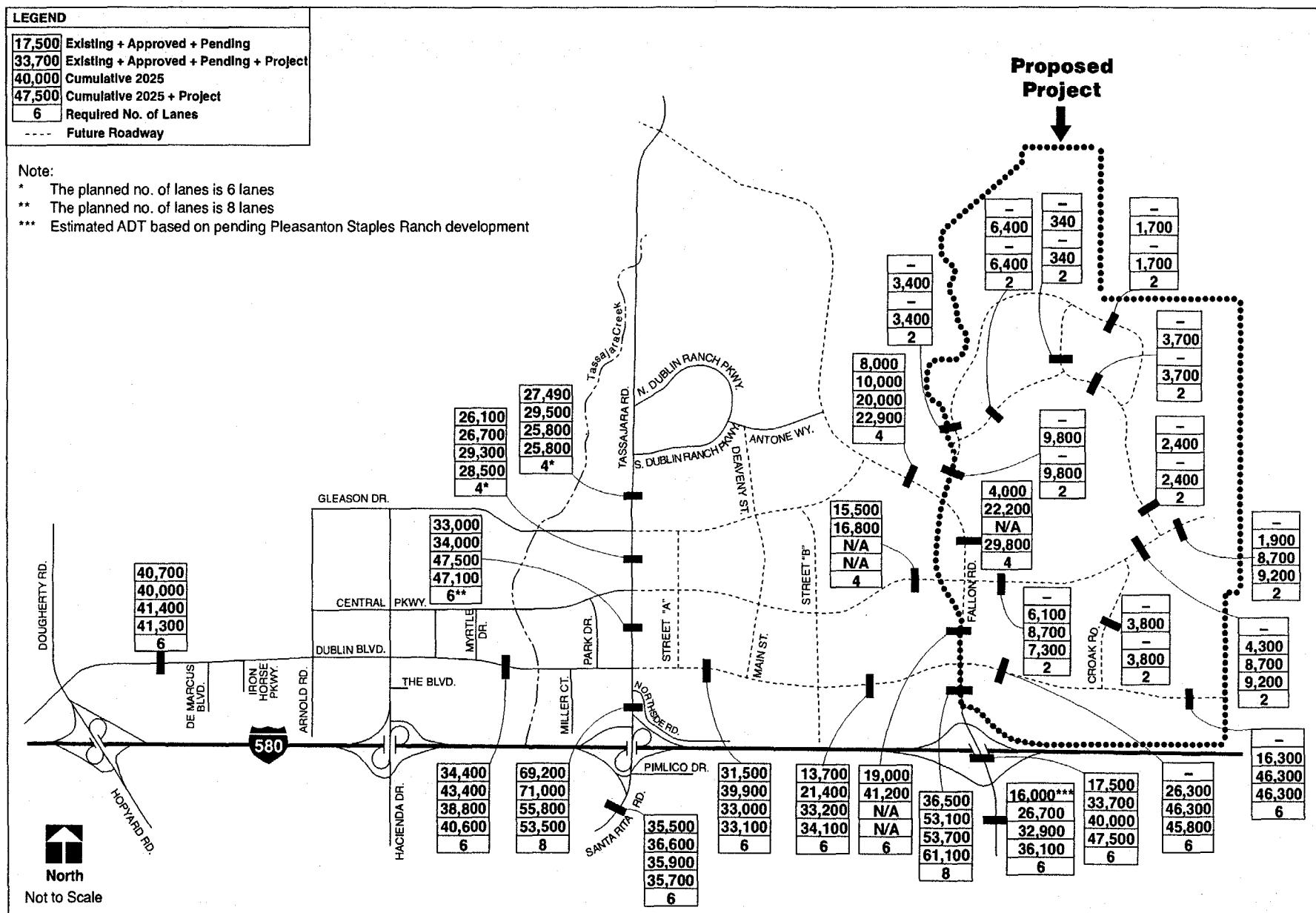
City of Dublin - East Dublin Properties  
**Existing + Approved + Pending + Project**  
 Turning Movement Volumes (Dublin Model)



East Dublin Properties  
**FIGURE 3.6-D**







**City of Dublin  
East Dublin Annexation  
Estimated Daily Volumes**

157-143 - 10/01 - LH

## **East Dublin Properties**



### 3.7 UTILITIES AND SERVICE SYSTEMS

Sewer, water, storm drainage, electricity and natural gas, and solid waste were analyzed in Chapter 3.4 and Chapter 3.5 of the Eastern Dublin EIR; in 1994, an addendum to the Chapter 3.5 analysis of sewer treatment and disposal (dated August 22, 1994) was approved by the City Council.

#### **SEWER**

Sewer issues (also referred to as "wastewater") were analyzed in Chapter 3.5 of the Eastern Dublin EIR and a 1994 Addendum to the Eastern Dublin EIR. This supplement to the EIR examines the effect of recent planning for additional wastewater disposal capacity in the Tri-Valley area. It also examines the impact of faster-than-expected growth in the Tri-Valley area and the impact on planned expansion of DSRSD's treatment plant facilities.

#### **ENVIRONMENTAL SETTING**

The Eastern Dublin EIR thoroughly examined wastewater collection, treatment, and disposal issues for the Project area. The Project area currently is not served by a wastewater service provider and would require wastewater collection facilities. The Dublin San Ramon Services District (DSRSD), which owns and operates a treatment plant in Pleasanton, was identified as the future provider of collection and treatment services for the Project area. Disposal was to be provided by the Livermore Amador Valley Water Management Agency (LAVWMA), a joint powers authority composed of Livermore, Pleasanton and DSRSD, which operates a pipeline that carries treated wastewater over the Dublin grade and into East Bay Dischargers Authority (EBDA) facilities for eventual discharge into San Francisco Bay, and by the Tri-Valley Wastewater Authority (TWA), a joint powers authority which at the time was planning for necessary disposal capacity beyond that provided by LAVWMA. At the time of the Eastern Dublin EIR, TWA was proposing to transport untreated wastewater through the Central Contra Costa Sanitary District system for treatment and disposal in Martinez. In 1994, TWA transferred authority over acquiring/constructing additional disposal capacity to LAVWMA and LAVWMA later chose as its preferred alternative the construction of a second disposal pipeline over the Dublin Grade for discharge into San Francisco Bay using EBDA facilities (1994 Addendum to the Eastern Dublin EIR).

#### **IMPACTS AND MITIGATION FROM THE EASTERN DUBLIN EIR**

The Eastern Dublin EIR identified numerous potential impacts related to wastewater. The lack of a collection system was identified as a significant impact and Mitigation Measures 3.5/1.0 – 5.0 generally preventing development until such facilities are constructed by developers were adopted to mitigate this impact to less than significant. Potential growth-inducing impacts of pipeline construction were mitigated by preventing the construction of facilities greater than those required for the GPA/SP project. Inadequate treatment plant capacity in DSRSD's treatment plan and inadequate disposal capacity were identified as significant impacts: both were mitigated to a less-than-significant level by mitigation measures requiring developers to obtain "will-serve" letters from DSRSD prior to issuance of grading permits; DSRSD will not issue a "will-serve" letter in the absence of treatment-plant and disposal capacity. An additional mitigation measure requires Eastern Dublin developers to prepare detailed wastewater capacity investigations. Other mitigation measures supported DSRSD, TWA and, subsequently, LAVWMA in efforts to expand treatment and disposal capacity (along with recycled water projects). Other impacts to the planned TWA disposal systems and the recycled water systems related to noise, odors and potential spills also were identified and mitigated to levels of insignificance. The impact of

the use of recycled water on the main groundwater basin was identified as a potential impact and a mitigation measure requiring coordination of recycled water projects with Zone 7's salt mitigation program mitigated this impact to insignificance. Even with mitigation measures, significant impacts related to increased energy use for the sewer systems (Impact 3.5/F, H, V) and growth-inducement (Impact 3.5/T) remained significant and unavoidable. Upon approval of the GPA/SP, the City adopted a Statement of Overriding Considerations for these impacts (Resolution No. 53-93).

### **SUPPLEMENTAL IMPACTS AND MITIGATION MEASURES**

The Project proposes the same type and density of development assumed in the Eastern Dublin EIR. However, the Initial Study identified potentially significant changes since the Eastern Dublin EIR due to subsequent planning for additional wastewater treatment and disposal capacity.

**Significance Criteria.** Wastewater treatment and disposal impacts are considered significant if they would require new or expanded wastewater treatment facilities beyond what was anticipated in the Eastern Dublin EIR or if there would be inadequate treatment and/or disposal capacity to serve the Project.

**Supplemental Impacts.** Since improvements identified in the Eastern Dublin EIR will accommodate potential development of the Project area, no supplemental significant impacts are anticipated.

**Treatment Plant Capacity.** There continues to be limited available treatment capacity at the DSRSD wastewater treatment plant. DSRSD wastewater is directed to the District's Wastewater Treatment Plant (WWTP) located north of Stoneridge Drive in Pleasanton. The WWTP serves the cities of Dublin and Pleasanton. It currently has an average dry weather flow (ADWF) capacity of 11.5 million gallons per day (mgd). Anticipating that additional disposal capacity will be available following completion of the second LAVWMA pipeline (described below), DSRSD has embarked on the first stage of its planned expansion to serve additional growth in its service area. The first expansion will add 5.5 mgd ADWF to the treatment plant for a total of 17.0 mgd ADWF. This expansion is consistent with Mitigation Measure 3.5/9.0 of the Eastern Dublin EIR, which anticipated the expansion of DSRSD's treatment plant in stages, as capacity needs increased. DSRSD approved a negative declaration for the WWTP expansion on August 17, 1999 (Webb, pers. comm. 2001). Plant expansion is expected to be complete on or before November 2003 and is expected to provide sufficient capacity to accommodate development under the proposed rezoning and annexation. In any event, the mitigation measures in the EIR and DSRSD's inclusion of Eastern Dublin in its long-range wastewater planning ensure that the limited treatment plant capacity is not a new significant impact.

Therefore, there is no new significant impact due to treatment plant capacity.

**Disposal Capacity.** As was noted in the Eastern Dublin EIR the increase in wastewater flows resulting from the GPA/SP requires an increase in wastewater disposal capacity. As noted above, LAVWMA, rather than TWA, is the agency charged with increasing wastewater disposal capacity for the Tri-Valley area. LAVWMA needs disposal capacity above and beyond its current pipeline to serve Eastern Dublin and other development within the Livermore/Amador Valley. In addition, LAVWMA's existing pipeline is deteriorating. Therefore, LAVWMA is repairing its existing export pipeline, constructing a new parallel pipeline, and/or replacing the existing pipeline to create additional disposal capacity and connecting it to the EBDA outfall. When completed the LAVWMA system will have a capacity of 41.2 MGD (8.7 Livermore, 16.25 Pleasanton and 16.25 DSRSD).

Livermore may decide to pay into the expansion portion of the pipeline project in the next five years. If Livermore does participate, capacity will be allocated as 12.4 MGD to Livermore, 14.4 MGD to Pleasanton and 14.4 MGD to DSRSD. Through the LAVWMA contract, ADWF is limited to 11.1 MGD from Livermore, 10.3 MGD from Pleasanton and 10.4 MGD from DSRSD. LAVWMA and EBDA agreed to terms for the new connection on March 18, 1998, but the proposal was subject to ratification by the voters of Livermore and Pleasanton. On November 3, 1998, Pleasanton voters approved the proposal but Livermore voters rejected it. In December 2000, Pleasanton's City Council approved the financing plan for the LAVWMA pipeline. Under the terms of the LAVWMA agreement, the citizens of Livermore may vote on the Project again and have until the election of November 2005 to approve it.

Design of all phases is nearly complete. A portion of the project -- the pump station and force main from the pump station to the top of the Dublin Grade -- is under construction. Once the expansion is completed, the disposal capacity needed to serve the Project area would be available. Since LAVWMA's capacity expansion project has been approved by the LAVWMA Board, is adequately financed, and portions are under contract, adequate wastewater capacity is anticipated to be available when the Project area is developed. In any event, mitigation measures in the Eastern Dublin EIR ensure that development will not take place if there is insufficient wastewater disposal capacity. Therefore, there is no new significant impact due to disposal capacity.

## **WATER**

Water service was analyzed in Chapter 3.5 of the Eastern Dublin EIR. This supplement to the EIR examines whether new water supply contracts and litigation concerning the sufficiency of DSRSD and Zone 7's water supplies to serve future development are significant new impacts beyond what was analyzed in the Eastern Dublin EIR.

## **ENVIRONMENTAL SETTING**

No public water service currently is provided to the Project area. The residences and other land uses in the Project area use well water. The Eastern Dublin EIR identifies DSRSD as the provider of water service to Eastern Dublin. DSRSD's long-range water planning for Eastern Dublin includes the Project area. DSRSD obtains its water supplies from Zone 7 of the Alameda County Flood Control and Water Conservation District (Zone 7), which wholesales treated local surface water, groundwater and imported water from the State Water Project to retail water agencies.

## **IMPACTS AND MITIGATION FROM THE EASTERN DUBLIN EIR**

The Eastern Dublin EIR identified significant impacts related to the supply of water to the GPA/SP area. Mitigation measure 3.5/23.0 addresses possible salinity in the groundwater basin. Mitigation measures 3.5/24.0 – 40.0 were adopted to prevent overdraft of ground water resources by requiring or encouraging annexation and connection to DSRSD; to minimize the effect of additional demand for water by encouraging water recycling and conservation and by encouraging the development of new facilities and supplies; and to ensure the development of a water distribution system by generally preventing development until such facilities are constructed by developers. Other mitigations (3.5/41.0 – 43.0) were adopted to deal with the potential for reservoir failures, the potential for loss of system pressure, and noise from water system pump stations. The Eastern Dublin EIR noted that the General Plan and Specific Plan would increase demand to serve development at build-out under the then-applicable general plans and required an additional 25,000 acre-feet annually (AFA). Mitigation Measure 3.5/28.0 relied on Zone 7's planning to acquire

additional supplies. Impact 3.5/T, Inducement of Substantial Growth, was deemed to be significant even after mitigation. Impact 3.5/S found a lack of a water distribution system and required a "will serve" letter prior to grading permit (mitigation measure 3.5/3.8.0). Upon approval of the GPA/SP, the City adopted a Statement of Overriding Consideration for this significant unavoidable impact (Resolution No. 53-93).

### **SUPPLEMENTAL IMPACTS AND MITIGATION MEASURES**

The proposed Project envisions the same type and density of proposed development assumed in the Eastern Dublin EIR. Thus, water use related to potential development of the Project area is not expected to differ from the Eastern Dublin EIR. This supplement examines whether new water supply contracts and settlement of litigation concerning the legality of a 1998 amendment to a 1994 water supply agreement between DSRSD and Zone 7 to serve future development in Dougherty Valley would affect the sufficiency of water available to serve the project area.

**Significance Criteria.** Water supply impacts are considered significant if there would be insufficient water supplies for the Project.

**Supplemental Impacts.** No supplemental significant impacts are expected due to new water supply contracts or the settlement of the Dougherty Valley litigation concerning the sufficiency of DSRSD's water supplies to serve future development.

**Water Supply Contracts.** Pursuant to its 1994 contract with DSRSD, Zone 7 is obligated to supply water requested by DSRSD, subject to its availability. In 1994, DSRSD renegotiated its water supply contract with Zone 7. The renewed contract is for a term of 30 years and is renewable upon expiration. The agreement also provides DSRSD with the ability to secure alternative sources of water. Alternatives include: water transfers, construction of wells and pumps from the groundwater basin that Zone 7 manages, and recycled water.

Zone 7 has, consistent with its contractual obligation to provide water to DSRSD and other retailers and the mitigation measures in the Eastern Dublin EIR, obtained additional supplies and entitlements to water necessary to serve its service area. Zone 7's Water Supply Planning Program sets forth its long-term water supply and facility needs through the year 2020. A twenty-year water-supply planning horizon customarily is used in the industry (see Water Code section 10631). Zone 7's *Water Supply Planning Study Update* (Water Transfer Associates, February 1999) identified Zone 7's water supply acquisition program. Based on input from the water retailers, cities, and agricultural users within its service area, Zone 7 estimated that by the year 2020 (near buildout of Zone 7's service area), it would need an additional average year water supply of approximately 40,400 AFA. To meet projected demands, Zone 7 identified water supply options based on average, wet and dry year scenarios. The planning program addresses potential water supply options, groundwater management, and conveyance and treatment facilities. Zone 7 has secured or is in the process of securing the identified water supplies and is planning the necessary facilities, as evaluated in the *Zone 7 Water Agency Water Supply Planning Program EIR* (Wong, pers. comm. 2001). Zone 7's long-term and drought-year protection water sources are shown in Table 3.7-1 below. DSRSD's *Final Water Service Analysis for Eastern Dublin* (December 2001) demonstrates that Zone 7 already has secured sufficient supplies to serve the 5,620 AFA demand of all of Eastern Dublin.

Therefore, there is no supplemental significant impact due to new water supply contracts.

**Water Supply Litigation.** In 1998, DSRSD and Zone 7 entered into an amendment to their water supply agreement that permitted DSRSD to expand its service area to include the

Dougherty Valley Service Area. The expansion process included various approvals by Zone 7 and DSRSD and the purchase from third parties of State Water Project entitlements. Following the approvals, Citizens for Balanced Growth ("Citizens") and the City of Livermore ("Livermore") filed separate lawsuits challenging the legality of the amendment to the water supply agreement. The litigation was concluded by a multi-party settlement agreement (the "Settlement Agreement"). DSRSD also entered into a "Memorandum of Understanding Regarding Cooperative Implementation of Agreement to Settle Water Litigation" with the City of Dublin in December 1999.

Although the City was not a party to the litigation or the Settlement Agreement and the litigation did not concern Dublin or the territory in the Eastern Dublin GPA/SP area, Section 4 of the Settlement Agreement obligates DSRSD upon receipt of a Notice of Preparation of an EIR concerning a project in Eastern Dublin, to prepare a preliminary water service analysis and a preliminary impact analysis which analyzes the water-related impacts of the proposed project. Two of the parties to the Settlement Agreement, Citizens and Livermore, may comment on the adequacy of the documents and may engage DSRSD in a dispute-resolution process pursuant to the Settlement Agreement. The Settlement Agreement anticipates that, at the conclusion of the dispute-resolution process, final analyses will be produced. The information provided by DSRSD to the City pursuant to this Settlement Agreement process is intended to assist the City in its CEQA review and land use approval process for development projects in Eastern Dublin. The level of analysis required by the Settlement Agreement is significantly more detailed than is required under CEQA or any other state or local law. The City rezoning and LAFCO annexation processes are independent of the requirements of the Settlement Agreement, which is binding on the parties to the agreement only.

As required by the Settlement Agreement, DSRSD prepared and submitted to the City, in June 2001, a Programmatic Water Service Analysis ("PWSA") and preliminary impact analysis for the proposed Project. As required by the Settlement Agreement, the PWSA demonstrates that:

- The water demand for the Project area is set forth in DSRSD's most recently adopted *Urban Water Management Plan* (adopted May 2000);
- Total firm sustainable water supplies (as defined in the Settlement Agreement) that reasonably may be expected to be available to DSRSD will meet the projected water demand associated with the Project, together with all other existing uses and uses under build-out of the applicable general plans for all areas lying within DSRSD's water service area, as and when demand is expected to arise. This conclusion is based on Zone 7's contractual obligation to provide DSRSD with sufficient water to serve DSRSD's customers, along with an analysis of Zone 7's available resources in the future;
- During a "credible worst case drought scenario" (as defined in the Settlement Agreement), providing water to the Project area will not significantly and adversely affect the reliability of water service to DSRSD's existing customers; and
- During a "credible worst case drought scenario" (as defined in the Settlement Agreement), providing water to the Project area will not significantly and adversely affect the quality of water service to DSRSD's existing customers.

After the issuance of the PWSA, Citizens and Livermore challenged the adequacy of the PWSA under the terms of the Settlement Agreement. As required by the Settlement Agreement, the parties, this fall, engaged in a mediation process concerning the adequacy of

the PWSA. (After the initiation of the mediation, in October 2001, DSRSD issued a Revised Water Service Analysis ("Revised WSA"), incorporating revisions to the document agreed to by the parties in informal discussions to that point.) The process included the appointment of a Technical Panel to advise the mediator on the adequacy of the PWSA. After receiving a recommendation from the Technical Panel, the mediator issued his decision on December 3, 2001. He concluded that with minor revisions and the formation of a "Retail Water Supply Council" made up initially of Livermore and DSRSD, the Revised WSA met the requirements of the Settlement Agreement. The mediator's approval of the Revised Water Service Analysis became final after Livermore and DSRSD executed a memorandum of understanding committing to the formation of the Retail Water Supply Council and the technical panel's approval of the Revised water service analysis, incorporating the revisions required by the mediator's decision. The Final Revised Water Service Analysis for Eastern Dublin is dated December 2001. The memorandum of understanding is dated January 2, 2002.

With the issuance of the Final Revised WSA and execution of the memorandum of understanding, DSRSD has complied with the terms of the Settlement Agreement, and there is no supplemental significant impact due to water supply litigation.

#### **STORM DRAINAGE**

Storm drainage was analyzed in Chapter 3.5 of the Eastern Dublin EIR. This supplement analyzes whether storm drainage facilities needed to serve the Project area will exceed those previously identified.

#### **ENVIRONMENTAL SETTING**

The Project area is within the Alameda Creek watershed, which drains to the San Francisco Bay. Zone 7 is responsible for master planning, overseeing construction coordination and maintaining major storm drain channels and culverts for this area. The City has jurisdiction and maintenance responsibility over local storm drains that discharge to the Zone 7 flood control system and would be responsible for the approval of local storm drainage facilities. Drainage on the Project area drains southerly toward I-580 and leaves the area through Zone 7's Line G-3. Line G-3 is a major Zone 7 drainage channel south of I-580 that discharges into Arroyo Mocho. Drainage from the Project area reaches Line G-3 through an existing culvert approximately 2000 feet east of Tassajara Road. To serve new development in Eastern Dublin, Zone 7 and the City in the Eastern Dublin Specific Plan have designated drainage courses that will require upgraded drainage facilities. These include drainage facilities that will be funded by developers of projects in Eastern Dublin.

To serve development on the Project area, a drainage channel or pipeline needs to be extended easterly from the culvert beneath I-580 connecting to Line G-3 (the "Line G-3 extension"). In an application to Zone 7, the City (with the assistance of the developer of Dublin Ranch), has proposed that Line G-3 extension be installed underground in a box culvert to Fallon Road. As anticipated in the Eastern Dublin EIR, this segment of the Line G-3 extension would be constructed to have sufficient capacity to serve the Project area at build-out. The developer of Dublin Ranch has proposed that this segment of the Line G-3 extension be funded by a benefit assessment district to which the Project area eventually would be annexed. As identified in the Eastern Dublin EIR (see Figure 3.5-A), the Line G-3 extension would need to be extended further east to serve the Project area.

## IMPACTS AND MITIGATION FROM THE EASTERN DUBLIN EIR

The Eastern Dublin EIR identified potential flooding related to increased runoff to creeks (IM 3.5/Y). Adopted mitigation measures required the construction of drainage facilities designed to minimize erosion and flooding and requiring the preparation of storm drainage master plans for all development applications in Eastern Dublin (MM 3.5/44.0–48.0). The potential for reduced groundwater recharge due to increased impervious surfaces (IM 3.5/Z) was mitigated by water quality planning and Zone 7 recharge programs (MM 3.5/49.0–50.0). The potential for increased non-point source pollution due to development (IM 3.5/AA) was addressed in mitigations requiring compliance with storm water quality programs (MM 3.5/51.0–55.0).

## SUPPLEMENTAL IMPACTS AND MITIGATION MEASURES

The proposed Project envisions the same type and density of potential development assumed in the Eastern Dublin EIR. Therefore, the proposed project is not anticipated to contribute substantially greater quantities of stormwater runoff than originally analyzed. Pursuant to the Initial Study, this supplement analyzes whether new storm drainage facilities required to serve the Project area exceed those analyzed in the Eastern Dublin EIR.

**Significance Criteria.** Storm drainage impacts are considered significant if the Project area would require new storm drainage facilities substantially in excess of those that were anticipated in the Eastern Dublin EIR.

**Supplemental Impacts.** No supplemental impacts are anticipated. Storm drainage facilities described in the Eastern Dublin EIR will accommodate potential development of the Project area.

## SOLID WASTE

Solid waste was analyzed in Chapter 3.4 of the Eastern Dublin EIR. This supplement analyzes whether rapid development in the Tri-Valley area would have a significant impact on the availability of solid waste services.

## ENVIRONMENTAL SETTING

Livermore Dublin Disposal Service/Valley Waste Management (LDDS/VWM) provides solid waste collection and recycling service to the Project area. The 1995 franchise agreement between LDDS/VWM and the City of Dublin expires in 2003 and is subject to renewal for three years (Borges, pers. comm. 2000). The franchise agreement states that LDDS/VWM has sufficient capacity in the Altamont Landfill and Resource Recovery Facility to account for development within the Eastern Dublin Specific Plan and the General Plan Amendment areas.

Solid waste collected by LDDS/VWM is transported to the Altamont Landfill and Resource Recovery Facility in unincorporated Alameda County. The landfill is receiving approximately 6,000 tons of solid waste from the LDDS/VWM service area per day. The estimated remaining capacity at the landfill is approximately 9 million cubic yards. This is anticipated to provide landfill capacity for 7 or 8 more years. In 2000, the Alameda County Board of Supervisors and the Alameda County Waste Management Authority approved expansion of the landfill. The expansion would add an additional 40 million cubic yards of capacity which would provide about 25 additional years of service (Thompson, pers. comm. 2000).

## **IMPACTS AND MITIGATION FROM THE EASTERN DUBLIN EIR**

The Eastern Dublin EIR addressed the impact of increased solid waste production and the impact on solid waste disposal facilities. (See IM 3.4/O and IM 3.4/P.) It was specifically noted that the project could accelerate the closing schedule for the Altamont Landfill. The Eastern Dublin EIR found the impacts to be potentially significant. The impacts were reduced to the level of insignificance by mitigation measures that required the preparation of a comprehensive solid waste management plan for Eastern Dublin and that prevent approvals of development unless sufficient or a reasonable expectation of adequate landfill capacity is available to accommodate project wastes. Mitigation measures 3.4/38.0 – 40.0 requiring preparation of a Solid Waste Management Plan were adopted to reduce these impacts to a level of insignificance. All mitigation measures adopted upon approval of the GPA/SP continue to apply to implementing actions and projects such as the proposed rezoning and annexation. Since there is no new solid waste production associated with the project, there are no supplemental impacts.

## **SUPPLEMENTAL IMPACTS AND MITIGATION MEASURES**

**Significance Criteria.** Solid waste impacts are considered significant if the project requires disposal capacity in excess of the current solid waste management capacity.

**Supplemental Impacts.** No supplemental impacts on solid waste disposal capacity are anticipated from the rapid development of the Tri-Valley area. When the previous EIR was certified, expansion of the Altamont landfill had not yet been permitted. Since the previous EIR expansion of the landfill has been approved to provide long-term disposal for development under the Eastern Dublin GPA/SP, including the current Project area.

LDDS/VWM does not foresee any problems in collecting or disposing of the solid waste generated by the proposed Project (Borges, pers. comm. 2000). In addition, the increase in solid waste and recyclable materials would be accommodated at the Altamont Landfill and Resource Recovery Facility (Thompson, pers. comm. 2000). Thus, there are no significant impacts beyond those analyzed in the Eastern Dublin EIR.

## **ELECTRICITY AND NATURAL GAS**

Electricity and natural gas service was analyzed in Chapter 3.4 of the Eastern Dublin EIR. This supplement to the EIR analyzes whether the current energy crisis and other local factors prevent an adequate supply of electricity.

## **ENVIRONMENTAL SETTING**

Pacific Gas & Electric Company (PG&E) provides electricity and natural gas to the Project area. At the statewide level, California is in the midst of an energy crisis resulting from its deregulation of electricity markets. The crisis appears to be related to the regulatory factors and a lack of an adequate supply of electricity. At the local level, PG&E's ability to provide electricity service to new customers in the Tri-Valley area is constrained by inadequate capacity in its transmission and distribution facilities. Planning for future growth, PG&E has begun a project to increase Tri-Valley capacity.

## **IMPACTS AND MITIGATION FROM THE EASTERN DUBLIN EIR**

The Eastern Dublin EIR identified three potential significant impacts related to electricity and natural gas. Two of these impacts, Impact 3.4/Q Demand for Utility Extensions and 3.4/S Consumption of Non-Renewable Natural Resources, were deemed to be potentially

significant impacts that would remain significant even with mitigation. Upon approval of the Eastern Dublin GPA/SP, the City adopted a Statement of Overriding Considerations for these significant unavoidable impacts (Resolution No. 53-93).

### **SUPPLEMENTAL IMPACTS AND MITIGATION MEASURES**

The Project proposes the same type and density of potential development assumed in the Eastern Dublin EIR. The Initial Study for this project identifies the current uncertainty regarding supply of energy, including electricity and natural gas, to serve the proposed project as a potentially significant impact.

**Significance Criteria.** Energy consumption impacts are considered significant if gas and electricity supplies are insufficient to serve the Project from existing entitlements and resources.

#### *Supplemental Impact UTS 1: Uncertain Energy Supply.*

The current energy crisis makes PG&E's ability to serve currently unserved territory with gas and electric service somewhat uncertain. Currently, California is experiencing an energy crisis that appears to be caused by a lack of sufficient electricity generation facilities. Due to the electricity crisis as a whole and the transmission constraints in the Tri-Valley area, a potential exists for increased use of distributed generation (i.e., small electricity generators fired by natural gas and diesel) to ensure reliability for commercial and industrial users.

However, several major power plants have come on-line in the last several weeks and a number of new power plants shortly will begin operations. In 1999 and 2000, the California Energy Commission (CEC) approved nine new power plants, which would provide approximately 6,270 megawatts (MW). Numerous power plant proposals currently are before the CEC, which would generate approximately 5,915 MW (CEC 2001), and could lessen the energy shortfall. In addition, PG&E has declared bankruptcy because of billion of dollars of debt owed to generators of electricity for power purchased in California's deregulated markets. Until PG&E emerges from bankruptcy some uncertainty concerning the provision of gas and electricity services to new and existing PG&E customers exists. Until the crisis is resolved the uncertainty created by the crisis is a new potentially significant impact.

#### *Supplemental Impact UTS 2: Local Electrical Distribution Constraints*

Local electrical distribution constraints limit PG&E's ability to serve the Project area. PG&E has stated that it is able to adequately serve the Tri-Valley with existing facilities until approximately June 2002; however, service reliability may be problematic after that point. PG&E's Tri-Valley electrical system was loaded at 98.6% of capacity in 1999 (Jones, pers. comm. 2000). Because of these issues, PG&E has begun the process of seeking California Public Utilities Commission (CPUC) approval for the Tri-Valley 2002 Capacity Increase Project. It filed a Proponent's Environmental Assessment (PEA), with the CPUC, which is the CEQA lead agency. The CPUC will determine the siting of the proposed PG&E system enhancements. PG&E is requesting that its Tri-Valley 2002 Capacity Increase Project be in operation by June 2002. Delays in the CPUC process would delay implementation of the Tri-Valley 2002 Capacity Increase Project until 2003 (Jones, pers. comm. 2000). The CPUC released the EIR for the Tri-Valley 2002 Capacity Increase Project on December 26, 2000 (copies may be obtained from the City Clerk). Public hearings were held in February 2001.

PG&E proposes to increase electric service by adding substations in Dublin and North Livermore, expanding the Vineyard Substation in Pleasanton, and installing approximately

23.5 miles of 230 kilovolt (kV) transmission lines to serve the substations (CPUC, 2000). PG&E is proposing construction of a 5-acre, 230/21 kV substation with four 45 megawatt transformers in Eastern Dublin (same as described below for the D2 alternative). The proposed transmission line would come from the east through open space in North Livermore and possibly from areas to the northwest from Contra Costa County. The Tri-Valley 2002 Capacity Increase Project EIR provides mitigation measures, which, if adopted by the CPUC or other responsible agencies, would avoid or minimize the environmental impacts identified. The EIR identifies two alternatives in Dublin, the D1 Alternative and the D2 Alternative. Under the D1 Alternative, the South Dublin Substation would be located in Dublin Ranch between Fallon Road and Tassajara Road, north of Interstate 580 (I-580). The 230 kV transmission line connection would be from the Vineyard Substation, south of I-580, through quarry lands from Stanley Boulevard north to the vicinity of El Charro Road. Under the D2 Alternative, the Dublin Substation would be fed from the west from PG&E's existing San Ramon Substation, at the edge of the City of San Ramon, along the south side of the Windemere development and other housing developments, and across Tassajara Road.

If the Tri-Valley 2002 Capacity Increase Project or a functionally equivalent project is not constructed, PG&E would be forced to respond to growing demand by expanding its existing system to the extent that it is possible and by curtailing service if growth in demand exceeds the transmission system's capacity or reliability requirements for essential services (such as hospitals). It is possible that if the Tri-Valley 2002 Capacity Increase Project were delayed then other alternatives would be identified. For example, development of local, small power generation facilities partially could address the Tri-Valley region's transmission constraints. However, a number of these generation facilities would be required to supply the power needed to address effectively the present limits on electric service. The impacts of thermal power generation, even small-scale, also can be significant (air quality impacts, noise, and use of hazardous substances), although often mitigable (CPUC 2000).

Until the Tri-Valley 2002 Capacity Increase Project or a functional equivalent alternative is approved, the impact would be significant. With construction and operation of the Tri-Valley 2002 Capacity Increase Project or an equivalent alternative and project phasing as described in the supplemental mitigation below the proposed annexation and rezoning would result in a less than significant impact.

**SM-UTS-1:** Require discretionary City review prior to the installation and use of distributed generators, including emergency generators.

**SM-UTS-2:** Prior to approval of future subdivision maps or Site Development Review applications (as may be applicable) by the City of Dublin, project developers shall submit "will serve" letters from PG&E indicating that adequate electricity and natural gas services are available to serve the proposed development project.

Implementation of these supplemental mitigation measures will reduce supplemental impacts UTS 1 and UTS 2 to less than significant.

#### **Supplemental Information to Clarify Issues of Concern with Previous DSEIR**

Through the revised DSEIR, the City has attempted to provide clarification on issues raised regarding the previous DSEIR. The following information is provided in addition to the analyses in this revised DSEIR to provide further information on related issues.

### *Storage of Recycled Water*

Storage of recycled water to serve much of Eastern Dublin, including the Project area, will be located in enclosed water tank(s) which will be located in an off-site storage facility within Dublin Ranch.

### *Salt Loading to Main Basin*

The salt loading from project development within the annexation area to the main ground water basin is caused mainly by the use of reclaimed water irrigation systems. (David Lund, Zone 7, pers. comm.). Salt loading to the Main Basin from this project development is considered by Zone 7 to be "minimal, to no" impact. This impact is more of a regional salt-water management problem, because it results from the accumulation of all existing and proposed irrigation system improvements of the entire region. In 1999, Zone 7 adopted a Salt Management Plan that will completely offset salt loading that would otherwise take place. Zone 7 is actively implementing the Salt Management Plan over the next several years. The plan includes demineralizing shallow groundwater with high salt content and reinjecting it into the groundwater basin; the resulting salty brine is to be piped out of the basin through the LAVWMA disposal facility. (Zone 7, Salt Balance Annual Report, June 20, 2001.) Zone 7 has addressed the salt loading impacts to the main groundwater basin and the mitigations needed in a joint ACWD-DERWA study. Based on this study Zone 7 has included the construction of brine processing facilities as part of their Capital Improvement Program that is currently being funded by Zone 7 fees. The City will continue to work with Zone 7 and with the other agencies to resolve impacts of the problem. The funding for mitigations of salt loading will be paid for with increased water and sewer rates of Zones 7 and DSRSD. All development of the proposed projects within the annexation area will pay for mitigation of increased salt loading impacts through the payment of their water and sewer hook up fees and water rates. This complies with Eastern Dublin EIR MM 3.5/23.0, which required recycled water projects to be coordinated with any salt mitigation requirements of Zone 7.

### *Water Planning*

The Eastern Dublin EIR analyzed the adequacy of the water supply to serve the project and relied on mitigation measures requiring Zone 7 and DSRSD planning for adequate water supplies to serve future development. Since the proposed Project envisions the same type and density of proposed development analyzed in the Eastern Dublin EIR for the Project site, there is no additional demand beyond what was analyzed in 1993, and no further CEQA analysis of that issue is required. However, LAFCO will consider whether adequate water supplies will be available for projected needs. Since this Project has been included in the City's General Plan since 1994, this is not a new project for which water supply planning has not taken place. DSRSD and the City have cooperatively been engaged in facilities planning for Eastern Dublin, and DSRSD's currently planned facilities will be adequate to serve the project.

### *Water Demand*

Water demand figures used in this DSEIR and the FWSA are inconsistent. The demand figure from the Eastern Dublin EIR for the approved project (Reduced Planning Area Alternative in the Eastern Dublin EIR) was 6.4 MGD without recycled water for irrigation and 5.5 MGD with recycled water for irrigation. The Reduced Planning Area Alternative was approved with modifications that actually reduced the number of residential units by approximately 625, which accordingly would reduce the demand numbers slightly. [See 1993 Addendum to the Eastern Dublin EIR]. The 7.7 MGD demand factor for the Project

that was studied in the 1993 EIR is greater than that of the project (modified Reduced Planning Area Alternative) that was actually approved. DSRSD, in its Final Revised WSA, uses a demand figure for all of Eastern Dublin of 5620 acre feet annually, which comes from Appendix C to DSRSD's Urban Water Management Plan (May 2000). DSRSD's demand figure assumes that landscaping would use recycled water. DSRSD informs the City that the noticeable reduction in Eastern Dublin potable water demand between the 1993 EIR, and the May 2000 UWMP (and subsequently the Final Revised WSA and this DSEIR), is due to the District's progressive recycled water program and water conservation program. Furthermore, DSRSD states that the total water demands (potable and recycled water) actually increased when one compares the 1993 EIR estimates to the 2000 UWMP estimates but that potable water demands decreased. This is due primarily to the increase in park acreage and the addition of a golf course in Eastern Dublin, requiring greater usage of recycled water and correspondingly reducing potable water demands. It is also due to a decrease in residential densities. In any event, since demand has not increased, the water supply impacts are no greater than the impacts studied in the Eastern Dublin EIR.

### ***Water Supplies***

Long term planning and monitoring of water supplies is the responsibility of DSRSD and Zone 7. Mitigation Measure 3.5/38.0, requiring a will serve letter prior to issuance of grading permits, is the principal control to ensure adequate water supplies are available to serve new development. (Eastern Dublin EIR, responses to comments, pp. 23-24, comment #3-14.) Zone 7 and DSRSD continue to plan for adequate water supplies to serve their respective service areas.

### ***Zone 7 Channels and Fees***

Zone 7 completed a Special Drainage Area 7-1 program update of channel improvement cost by Schaaf & Wheeler Consulting Civil Engineers dated June 30, 2000. The report took into consideration the increase of peak flood flows of all storm drainage channels within Zone 7. This drainage basin covers all of eastern Alameda County, including the Project area. It identified the peak flows, cost estimates of needed mitigations of all channels, and fees needed to be collected in order to mitigate the needed improvements. Zone 7 is in the process of establishing new fees pursuant to this report. The fees would be applied to all new development including future development of the Project. The project's contributions to projected future flood flows are accounted for through the report. Future development of the project would pay its fair share contribution of the cost of adequate regional flood control facilities through the Zone 7 service area fees.

### ***Dublin Ranch Drainage Master Plan***

Consistent with the Eastern Dublin EIR's mitigation 3.5/46, the City of Dublin is currently working with Zone 7 on the adoption of a new and more detailed drainage analysis of annexation project area titled "Dublin Ranch Drainage Master Plan" that includes the drainage area of the project. This was completed by MacKay and Samps Infrastructure Group in August 2001. This document describes the needed improvements to the G-3 flood control channels down stream of the annexation project in order adequately to serve development in accordance with Zone 7 flood control criteria. Downstream mitigations within the Dublin Ranch development are currently under design and part of the master development agreement between the Lins and City of Dublin for the Dublin Ranch Development.

**TABLE 3.7-1**  
**ZONE 7 WATER SUPPLY ACQUISITION PROJECTS**

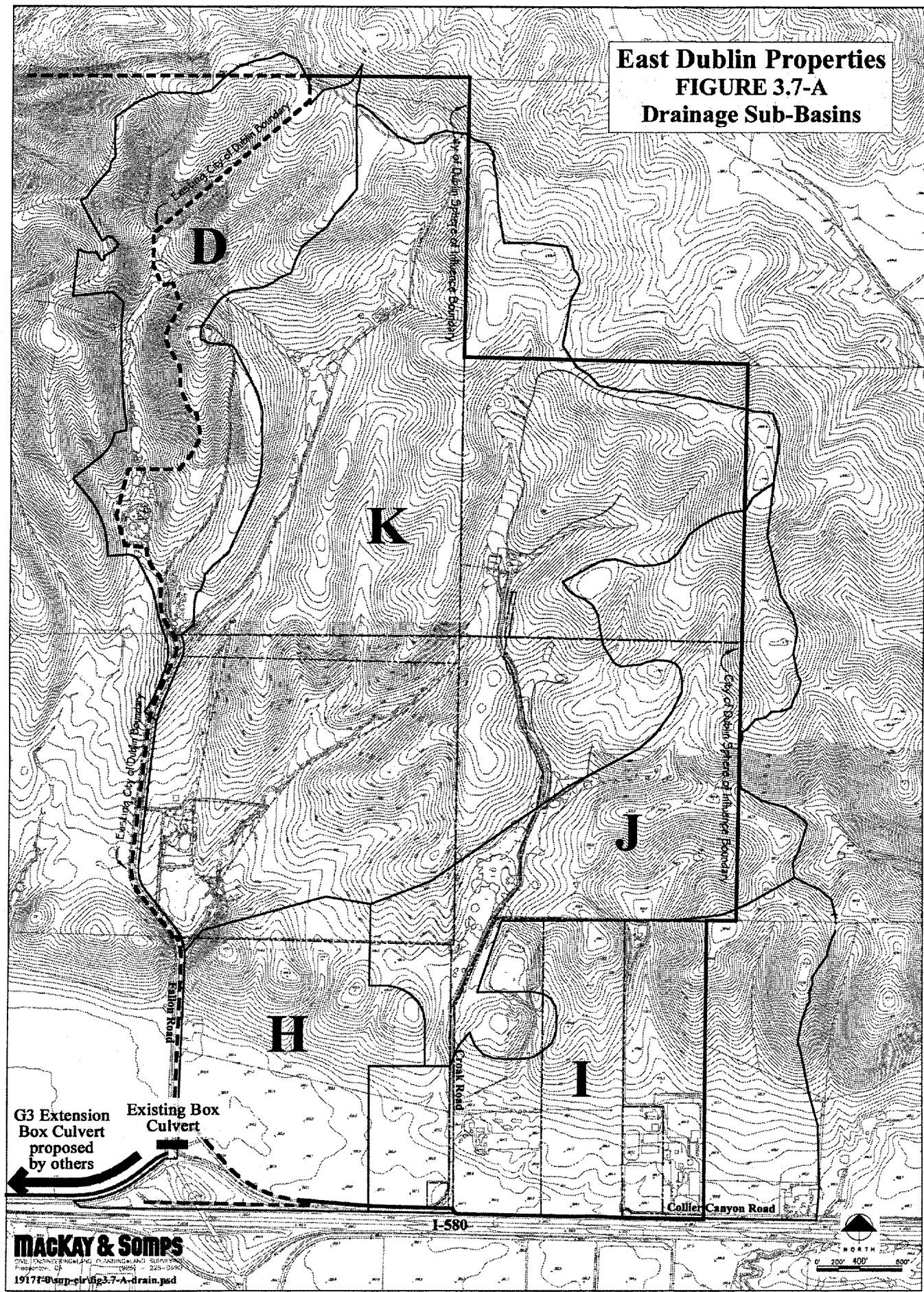
Project Name	Amount	Funding Source	Status	Term/Expiration
<b>Long-Term Water Supply Sources</b>				
Byron-Bethany Irrigation District	2 - 5,000 afa	Zone 7 Connection Fee Program	Completed 1998 Agt. No. A98-03-BYR	15 years, renewable
Berrenda Mesa SWP Entitlement Transfer	7,000 afa (920 afa) (Net to Zone 7)	Dougherty Valley Developers	Completed Dec 1999 SWC Amendment 19	Until 11/20/36
Lost Hills SWP Entitlement Transfer	15,000 afa	Zone 7 Connection Fee Program	Completed Dec 1999 SWC Amendment 20	Until 11/20/36
Belridge SWP Entitlement Transfer	10,000 afa	Connection Fee Pre-payment from North Livermore Developers	Completed Dec 2000 SWC Amendment 21	Until 11/20/36
<b>Drought Year Protection</b>				
Semitropic Water Storage Bank (43,000 af)	3,870 afa, min	Dougherty Valley Developers	Implemented 1998 Agt. No. A98-07-SEM	Until 12/31/35
Semitropic Water Storage Bank (22,000 af)	1,980 afa min	Zone 7 Connection Fee Program	Implemented 1999 Agt. No. A98-07-SEM Amendment	Until 12/31/35
Semitropic Increased Pumpback Project	13,000 afa min	Zone 7 Connection Fee Program	Semitropic to Draft Agreement	
Dry-Year Options	15,000 afa	Zone 7 Connection Fee Program	May not be needed w/ Semitropic Pumpback	

**TABLE 3.7-1**  
**ZONE 7 WATER SUPPLY ACQUISITION PROJECTS (continued)**

Project Name	Amount	Funding Source	Status	Term/Expiration
Import Water Conveyance				
First 7/22nds of Future SBA Contractor's Share	7,000 afa	Zone 7 Connection Fee Program	Completed Dec 1999 SWC Amendment 19	Until 11/20/36
Next 15/22nds of Future SBA Contractor's Share	15,000 afa	Zone 7 Connection Fee Program	Completed Dec 1999 w/ 5-yr opt-out SWC Amendment 20	Until 11/20/36 w/ opt out in 2005
SBA Conveyance Alternatives, including Upgrades & Line B-4A (SBA Parallel Pipe); In-Valley Pipeline	10-50,000 afa	Zone 7 Connection Fee Program	CDM & ESA Study Completed DWR Study Agreement and Near Term SBA Improvements (\$7,035,000) approved 5-2-01	
*Cost excludes pumping cost into Zone 7 area (\$15-20/af)				
SBA = South Bay Aqueduct				
SWC = State Water Contract				
SWP = State Water Project				

Source: Alameda County Flood Control and Water Conservation District, 2001

**East Dublin Properties**  
**FIGURE 3.7-A**  
**Drainage Sub-Basins**



## 4.0 ALTERNATIVES

CEQA Guidelines Section 15126.6 requires that EIRs describe a reasonable range of alternatives to the Project that feasibly would attain most of the basic project objectives and would avoid or substantially lessen any of the project's significant effects. The purpose of the analysis is to determine if the basic Project objectives can be met at a lesser environmental cost.

### 4.1 ALTERNATIVES IDENTIFIED IN THE EASTERN DUBLIN EIR

The Eastern Dublin EIR was prepared for a major General Plan Amendment encompassing 6,920 acres and for a new Specific Plan for 3,328 acres within the General Plan Amendment area. The General Plan Amendment and Specific Plan (GPA/SP) proposed a comprehensive land use plan for an urban mixed use community. The land use plan included a variety of types and densities of housing, as well as employment-generating commercial, office and other uses. Portions of the planning area were designated for parks, schools, open space and other community facilities. Protection for natural features of the planning area, including riparian corridors and principal ridgelands, was provided through restrictive land use designations and policies. The land use plan reflected the GPA/SP project objectives as set forth in the Eastern Dublin EIR Section 2.5.

As required by CEQA, the Eastern Dublin EIR identified project alternatives that could eliminate or reduce significant impacts of the GPA/SP project. The four identified alternatives included No Project, Reduced Planning Area, Reduced Land Use Intensities, and No Development, as follows:

**No Project Alternative.** The No Project Alternative evaluated potential development of the GPA/SP area under the then-applicable General Plan of Dublin for the incorporated portion of the planning area and under the Alameda County General Plan for the unincorporated portion of the planning area. This alternative also discussed other jurisdictional scenarios including potential future annexations to Dublin and/or Livermore, but without the GPA/SP project.

**Reduced Planning Area Alternative.** The Reduced Planning Area Alternative evaluated development of the Specific Plan area as proposed, but assumed development beyond the Specific Plan only to the Dublin Sphere of Influence boundary. The effect of this alternative was to exclude Upper and Lower Doolan Canyon from the project.

**Reduced Land Use Intensities Alternative.** The Reduced Land Use Intensities Alternative evaluated potential development of the entire GPA/SP area, but reduced some higher traffic generating commercial uses in favor of increased residential uses.

**No Development.** The No Development Alternative assumed no development would occur in the GPA/SP planning area other than the agriculture/open space uses under the County General Plan.

The City Council certified the Eastern Dublin EIR on May 10, 1993 (Resolution No. 51-93). The City Council found the No Project, Reduced Land Use Intensities and No Development alternatives infeasible and then approved a modification of the Reduced Planning Area

Alternative rather than the GPA/SP project as proposed (Resolution No. 53-93). The Council approved this alternative based on findings that this alternative land use plan would reduce land use impacts, would not disrupt the Doolan Canyon community, would reduce growth-inducing impacts on agricultural lands and would reduce traffic, infrastructure, and noise impacts of the original proposed GPA/SP project. Even with the alternative project, however, significant unavoidable impacts would remain. Therefore, upon approval of the GPA/SP, the City Council adopted a Statement of Overriding Considerations (Resolution No. 53-93). As discussed in this section, the "GPA/SP" refers to the modified Reduced Planning Area Alternative approved by the City, unless otherwise specified.

#### **4.2 ALTERNATIVES IDENTIFIED IN THE SUPPLEMENTAL EIR**

The current Project proposes annexing the Project area to the City of Dublin, rezoning the Project area to the PD, Planned Development District, and other related changes and applications as described in Chapter 2, Project Description. The annexation and rezoning request includes the same land use designations and densities as analyzed and approved in the GPA/SP. Even with the same land uses and densities, the Initial Study prepared for the Project (Appendix A) determined that there was the potential for new or substantially intensified significant impacts beyond those identified in the Eastern Dublin EIR pursuant to CEQA Guidelines sections 15162 and 15163. The potential new or intensified significant impacts primarily derive from increased regional traffic along I-580. To the extent that air quality and noise impacts are a function of traffic, the Initial Study determined that these impact areas also could be significantly affected. These and other impact areas are further discussed in Chapter 3 and supplemental significant impacts have been identified together with supplemental mitigation measures. Even with mitigation, some of the supplemental impacts will be significant and unavoidable. Most of these impacts are traffic-related, such as impacts which create unacceptable levels of service at intersections in the cumulative build-out year of 2025.

With the potential for traffic-induced supplemental impacts, this supplement identifies a new alternative for the Project area -- the Mitigated Traffic Alternative. The following discussion describes the new alternative and compares it to the potential effects of the proposed Project. Although the No Project and No Development alternatives in the Eastern Dublin EIR were found infeasible upon approval of the GPA/SP, this chapter will also update those alternatives with respect to the Project area to assist in the comparative evaluation of the Project's impacts. All mitigation measures from the Eastern Dublin EIR and all mitigation measures proposed in this supplement are assumed to apply to the alternatives (as applicable), unless otherwise stated.

Although this supplemental EIR only analyzes the seven impact categories identified by the Initial Study, this alternatives discussion evaluates each alternative according to all of the impact categories identified in the Eastern Dublin EIR in an effort to adequately compare the previous alternatives to the proposed alternatives in relation to the Project.

#### **MITIGATED TRAFFIC ALTERNATIVE**

The Mitigated Traffic Alternative reduces traffic-generating residential and commercial/industrial ("commercial") land use intensities within the Project area. Both the number of

residential units and the commercial floor area are reduced by 25% compared with the Project. Potential development under the Mitigated Traffic Alternative would occupy the same area and create the same development "footprint" as the Project. The number of residential units would be reduced from 2,526 to 1,895 units. General Commercial, Neighborhood Commercial and Industrial land use Floor Area Ratios (FARs) would be reduced to approximately 0.19, 0.23 and 0.21, respectively. The resulting total floor area of approximately 1.06 million square feet compared to 1.4 million square feet for the Project. Table 4-1 lists land use acreages and development intensities for the Project and the Mitigated Traffic Alternative (as well as the following alternatives), and Table 4-2 compares the FARs of the alternatives with the Project. The following discussion compares the impacts of the Mitigated Traffic Alternative to the Project impacts as set forth in the Eastern Dublin Eastern Dublin EIR and this supplement. Unless otherwise noted, mitigation measures identified for the Project in Chapter 3 also would be required for potential development under the Mitigated Traffic Alternative.

**Aesthetics.** The effects of potential development in the Project area on visual and scenic resources, and on light and glare, is discussed in the Eastern Dublin EIR and the Project Initial Study. The Initial Study determined that the Project would have no impacts beyond those identified in the Eastern Dublin EIR because the development footprint and intensity of development was the same as previously analyzed. Similarly, the Mitigated Traffic Alternative proposes the same footprint of development with land uses distributed in the same fashion. At buildout, the visual character of the Mitigated Traffic Alternative may be somewhat less intense than the Project due to the decrease in density across the Project area. However, the Project area still would be an urban landscape. Therefore, impacts to the Project area's visual resources under the Mitigated Traffic Alternative would be similar to those of the Project. Adopted City policies and Eastern Dublin EIR mitigation measures protecting the area's hillsides, ridgelines, scenic corridors, and watercourses would continue to apply to future development of the Project area.

**Agricultural Resources.** The Project area is largely agricultural and grazing land at present. This supplement examines the effects of the revised definition of prime agricultural lands for the purposes of annexation, and of potential cancellation of Williamson Act contracts. The supplement identifies no new significant impacts beyond the agricultural conversion impacts of the Eastern Dublin EIR. Under the Mitigated Traffic Alternative, the types and locations of land uses would be the same as for the Project. Land use impacts related to conversion of agricultural land would be similar to the Project since the same location and amount of Project area could potentially be developed. Therefore, impacts to the Project area's agricultural resources under the Mitigated Traffic Alternative would be the same as for the Project.

**Air Quality.** As discussed in Section 3.2, the Bay Area air basin has been downgraded to non-attainment status for ozone since certification of the Eastern Dublin EIR. In response, new mobile source emissions standards for ozone precursors have been adopted. Project emissions would exceed the new standards. Based on the non-attainment status in the local air basin and the Project's exceedance of the new emissions standards, this supplement identifies significant unavoidable Project and cumulative impacts on air quality. The Mitigated Traffic Alternative would reduce daily traffic by approximately 25% compared with the Project, with corresponding reductions in daily emissions of ROG, NOx, and PM-10 compared to the Project (see Table 4-3). Even with these reductions, emissions of the

Mitigated Traffic Alternative would remain substantially greater than the BAAQMD significance threshold of 80 pounds per day. This alternative would reduce the air quality impact compared to the Project, but not enough to avoid the identified significant impact. Air quality would remain a significant unavoidable project-level and cumulative impact for the Mitigated Traffic Alternative.

**Biological Resources.** Section 3.3 describes regulatory and other changes affecting biological resources since certification of the Eastern Dublin EIR. Supplemental impacts and related mitigations are identified to reflect additional sensitive habitats and special status species beyond those in the Eastern Dublin EIR.

The Mitigated Traffic Alternative would decrease potential development densities, however, the development areas would be the same as for the Project. The resulting disturbance to habitat and special status species would also be similar to the Project. Mitigation measures have been identified for the supplemental habitat and species impacts. Even with mitigation, however, loss of newly described botanically sensitive habitat would be a significant unavoidable cumulative impact for the Mitigated Traffic Alternative as well as for the Project.

**Cultural Resources.** The Initial Study determined that the Project would not have supplemental impacts beyond those identified in the Eastern Dublin EIR because the development footprint and intensity of development was the same as previously analyzed. Although the Mitigated Traffic Alternative would decrease development intensities, it proposes the same footprint of development with land uses distributed in the same fashion as the Project. The Mitigated Traffic Alternative would have the same impacts to cultural resources as the Project.

**Geology and Soils.** The Initial Study identified no potential supplemental impacts for geology and soils because the potential development of the Project area is the same as assumed in the Eastern Dublin EIR. The Mitigated Traffic Alternative would decrease development intensity but the development footprint would remain unchanged. Similarly, construction activities, such as grading, to prepare for and support development would be the same as for the Project. With the same distribution of land uses as the Project, geology and soils impacts from the Mitigated Traffic Alternative would be the same as for the Project.

**Hazards and Hazardous Materials.** The Mitigated Traffic Alternative would involve the same kind and distribution of land uses as described for the Project in the Initial Study. Lower residential and commercial densities would similarly decrease the already low potential for hazardous materials impacts.

**Hydrology and Water Quality.** The Mitigated Traffic Alternative would involve the same development footprint as the Project. Potential development under the Mitigated Traffic Alternative would require the same type of construction activities as the Project and would also be subject to the same protective water quality regulations, such as erosion and sedimentation controls. The overall network of storm drainage improvements for the Mitigated Traffic Alternative would generally be the same as for the Project since the development footprint would be unchanged. There could be some localized changes to storm drain size due to lower intensity of development, but overall, the required channel

improvements would remain the same. The Mitigated Traffic Alternative would have approximately the same potential for increases in storm water runoff and non-point source pollution as the Project since each would ultimately develop the same total number of acres of land.

**Land Use and Planning.** The type and distribution of land uses in the Mitigated Traffic Alternative would be the same as for the Project. Land use impacts would be similar to those of the Project as identified in the Initial Study to the extent that no established communities exist within the Project area and the area is not subject to any existing adopted HCP or NCCP. The type and location of land uses would be consistent with the City's adopted General Plan and Specific Plan for the Project area.

**Mineral Resources.** The Project area contains no known mineral resources. Like the Project, the Mitigated Traffic Alternative would have no impact on mineral resources.

**Noise.** This supplement analyzes noise impacts related to increased traffic on I-580 and related increases in traffic on local Dublin roadways. While regional traffic levels would likely be unchanged, less intense development within the Project area under the Mitigated Traffic Alternative would result in fewer vehicle trips, fewer mobile noise sources, and fewer stationary noise sources. Thus, this alternative could reduce the noise levels along internal streets, possibly reducing noise mitigation requirements such as soundwall heights. In other respects, however, the noise impacts would be similar to the Project since the streets and land uses would be in similar locations. Noise impacts on land uses adjacent to the freeway generally would not change. Noise impacts on existing residences may be reduced somewhat from the Project as local traffic and related roadway noise is reduced, but not enough to reduce this impact to less than significant.

**Population, Housing, Employment.** The Mitigated Traffic Alternative would decrease development intensity but would not eliminate urbanization of the Project area. Thus, the effect of the Mitigated Traffic Alternative on growth inducement and existing housing would be similar to the Project. The residential population under the Mitigated Traffic Alternative would be 5,351 residents, which is 1,784 fewer residents than the Project. New jobs under the Mitigated Traffic Alternative would decrease to 1,931 from the Project's projected 2,575 jobs due to a reduction in the intensity of commercial development. This alternative would have fewer residential units than the Project, resulting in 3,069 employed residents and 1,895 total dwelling units. The ratio of jobs to employed residents for the Mitigated Traffic Alternative would be .63:1, the same as the Project, since both residential and commercial uses would be reduced by 25%. An excess of jobs would remain under both the Project and the Mitigated Traffic Alternative.

**Public Services (Schools).** This supplement analyzes the potential impacts of the Project on school facilities since the Initial Study determined that the Project would not have any impact on other community services or facilities. The Mitigated Traffic Alternative would generate 25% fewer elementary, junior high, and high school students than the Project. The reduced number of future students could affect the timing of new school facility construction. The reduction could potentially reduce the future number of facilities needed to accommodate development, however, the proposed land use plan for the Mitigated Traffic Alternative still retains the school sites shown in the Specific Plan.

**Recreation.** The Mitigated Traffic Alternative proposes the same type and distribution of land uses as the Project. Park sites would be provided generally in the same location as for the Project. Future development of parks would be based on the City's adopted 5 acres/1,000 population standard.

**Transportation/Circulation (Traffic).** The Mitigated Traffic Alternative evaluates a 25% reduction in the number of residential units and the floor area of commercial uses. The reduction in residential units and commercial floor area results in fewer vehicle trips, although vehicles would be using the same roadway systems and would similarly affect intersections during peak hours. As with the Project analysis, the Future Study Areas were not included in this analysis of the Mitigated Traffic Alternative because no development is assumed in those areas. The Tri-Valley Cumulative Year 2025 traffic model was used to compare traffic impacts of the Project and the Mitigated Traffic Alternative because significant unavoidable Cumulative Year 2025 impacts were identified for the Project. The Mitigated Traffic Alternative was analyzed to determine if it would avoid any of the Project's unavoidable impacts.

The Mitigated Traffic Alternative is expected to generate approximately 43,000 daily trips, including 2,300 AM peak hour trips, and 4,300 PM peak hour trips. Figure 4-A shows the peak hour turning movement volumes for the Mitigated Traffic Alternative. Table 4-4 summarizes the project levels of service at key intersections. Under this scenario, the levels of service at intersections are generally the same as for the Project. As with the Project, the intersections of Dougherty Road/Dublin Boulevard, Hacienda Drive/I-580 Westbound Ramps, Hacienda Drive/Dublin Boulevard and Fallon Road/Dublin Boulevard would operate at unacceptable levels of service during one or both peak hours under the Mitigated Traffic Alternative.

Under the Mitigated Traffic Alternative, however, the intersection of Fallon Road/Dublin Boulevard would improve to acceptable levels of service with the construction of a new intersection midway between the I-580 westbound ramps and Dublin Boulevard, as required by Supplemental Mitigation Traffic 8. By comparison, even with the new intersection, the Fallon Road/Dublin Boulevard intersection would operate at unacceptable levels with development of the Project as proposed. Thus, the Mitigated Traffic Alternative would avoid the Project's significant unavoidable cumulative impact at the Fallon Road/Dublin Boulevard intersection.

**Utilities.** The Mitigated Traffic Alternative would require infrastructure similar to the Project since it consists of potential development of the same area and with similar uses. The geographic extent of the infrastructure networks also would be similar to the Project since the development footprint of the Mitigated Traffic Alternative is the same as the Project. Table 4-5 presents the estimated impact of the Mitigated Traffic Alternative on water, sewer, and recycled water demand compared to the Project. As reflected in the table, the decreased land use development intensity with the Mitigated Traffic Alternative would similarly decrease the demand for water, sewer, and recycled water.

**Domestic Water System.** The water demand for the Mitigated Traffic Alternative is estimated at 0.70 MGD, which is approximately 25% less than the Project demand of 0.93 MGD. The network of water pipelines would be similar to the Project, but some pipeline diameters may be downsized where the decreased land use intensities result in decreased

demand. The number of water storage reservoirs needed to meet fire flow requirements would be similar to the Project.

**Sewer System.** The estimated wastewater flow for the Mitigated Traffic Alternative is 0.60 MGD, approximately 23% less than the Project flows of 0.78 MGD. Impacts on the DSRSD collection and treatment system would be somewhat less than for the Project. DSRSD still would have to expand its wastewater treatment plant to handle flows from potential development under the Mitigated Traffic Alternative as well as from the Project, although the expansion would not be as great as for the Project. As shown in Table 4-5, there is a potential recycled water demand of approximately 0.22 MGD, the same as the Project, generally because the footprint of development is the same as the Project. Recycled water is used primarily for irrigation of public and common area landscaping.

**TABLE 4 -5**  
**MITIGATED TRAFFIC ALTERNATIVE: WATER, SEWER, AND RECYCLED WATER IMPACTS**

Item	Estimated Average Daily Water Demand (MGD)	Estimated Average Daily Wastewater Flow (MGD)	Estimated Average Daily Recycled Water Demand (MGD)
Project	0.93	0.78	0.22
Mitigated Traffic Alternative	0.70	0.60	0.22

**Solid Waste.** As discussed in this supplement, there are adequate solid waste facilities to accommodate the Project. The reduced density of the Mitigated Traffic Alternative would reduce the demand on waste disposal facilities and could potentially extend the useful life of the facilities.

**Electricity and Natural Gas Supply.** Development under the Mitigated Traffic Alternative could potentially be subject to the recent energy supply shortfalls described in this supplement. Reduced densities under the Mitigated Traffic Alternative would reduce related energy demand compared to the Project, and would thus reduce the energy supply needed to accommodate Project area development.

#### **NO PROJECT (ECAP) ALTERNATIVE**

The purpose of the No Project Alternative is "to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project" (CEQA Guidelines section 15126.6). The Eastern Dublin EIR analyzed the No Project Alternative for the entire GPA/SP area. Upon approval of the GPA/SP, the City found the No Project Alternative infeasible. The Project proposes the same land uses and densities as proposed for the Project area in the GPA/SP. This supplement updates the No Project Alternative discussion as it applies specifically to the Project.

Under the No Project Alternative, there would be no rezoning or annexation of the Project area to the City of Dublin. The Project area would remain subject to the jurisdiction of Alameda County and the County's adopted General Plan and East County Area Plan (ECAP). If development of the Project area were to occur it would be according to the existing ECAP. Hence, this No Project alternative addresses impacts which could be generated by development of the Project area according to the ECAP.

At the November 2000 General Election, Alameda County's voters adopted Measure D, a significant amendment to the County's 1994 East County Area Plan, the applicable County General Plan document for the Project area. The ECAP had previously adopted an urban growth boundary, which prohibited "urban development" outside the urban growth boundary. (ECAP, p.5.) "Urban development" was defined as designations having densities greater than 1 unit per acre, including such land uses as low-, medium-, and high-density residential, industrial, major commercial business park, and supporting uses. Measure D altered the urban growth boundary in Eastern Dublin to track the eastern boundary of the Eastern Dublin Specific Plan. (See Text of Measure D [amending Policy 1]; a copy of Measure D may be obtained from the City Clerk.) Thus, only the Project area outside of the Eastern Dublin Specific Plan is affected by Measure D. However, prior to the adoption of Measure D, much of the area was beyond the urban growth boundary and was designated "resource management."

The County's intent in adopting the ECAP was to be consistent with applicable city plans in eastern Alameda County, including the Eastern Dublin Specific Plan (see Figure 2-B: Alameda County Land Use Designations). The ECAP specifies land uses and densities for the Specific Plan portion of the Project area which are similar to those of the Specific Plan except that the number of commercial acres is higher (see Table 4-1) and the non-residential land use types in the ECAP (Major Commercial and Mixed Use) would have higher employment generation than the Project. The approximately 637 acre portion of the Project area outside of the Specific Plan boundary is designated as Resource Management in the ECAP. This land use designation has a minimum parcel size of 100 acres and a maximum building intensity of 0.01 FAR (1 residential unit per every 100 acres). This County designation would permit approximately six residential units in this portion of the Project area rather than the approximately 1,286 dwelling units that potentially could be developed under the Project's proposed residential designations. As discussed in the Initial Study and above, Measure D would prohibit urban development of the area outside of the Specific Plan if the Project area were to be developed in the County rather than annexed to the City.

Development of the Project area could occur under the ECAP only if the required services, including water and sewage collection and treatment, are provided. Water and sewage treatment for the existing uses in the Project area currently are provided by wells and septic systems, respectively. While it is technically possible that water and sewage treatment for the full development permitted under ECAP could be provided by wells and septic systems, this probably is not feasible due to salinity problems associated with water wells and water quality problems associated with widespread use of septic systems. The entire Project area is within the Sphere of Influence of the Dublin San Ramon Services District (DSRSD). If wells and/or septic systems are not feasible, annexation to the DSRSD and extension of services would be necessary to serve the Project area before the Specific Plan portion of the Project area could be developed under the ECAP. Because of the low service requirements of rural residential development, the portion of the Project area outside of the Specific Plan

could be developed with the six potential units without annexation to, or provision of services by, the DSRSD.

**Aesthetics.** Impacts to the Project area's visual resources under the No Project /ECAP Alternative would be less than the Project because the northern portion of the Project area would retain most of its existing rural character. Development, and related visual character, of the Specific Plan portion of the Project area would be similar to the Project as it changes from a rural/agricultural to an urban landscape. Development would not be subject to Eastern Dublin Specific Plan policies and EIR mitigations tailored to protection of the area's hillsides, ridgelines, and watercourses. County development policies would be applicable.

**Agricultural Resources.** Development of the Specific Plan portion of the Project area would be similar to the Project and would convert existing agricultural and grazing uses to urban uses, as described in the Initial Study. Outside the Specific Plan portion of the Project area, areas that are shown as low density and rural residential/agricultural in the Project would be designated Resource Management, a non-urban designation with 100 acre minimum parcel sizes. Thus, the ECAP, as amended by Measure D would prohibit urban development outside the Specific Plan area. Compared to the Project, overall development would be reduced under this alternative. Related agricultural conversion impacts would be similarly reduced from those identified for the Project.

**Air Quality.** The No Project /ECAP Alternative would generate approximately 80 percent more trips than the Project, primarily because of the increased potential for commercial/mixed use development. This alternative would generate 64.1 pounds per day more of ROG, 133.3 pounds more of NO<sub>x</sub> and 88.7 pounds more of PM-10 than the Project (Table 4-3). Like the Project, the emissions of this alternative would be substantially greater than the BAAQMD significance threshold of 80 pounds per day. If the demand for single-family housing is not met by this alternative and housing is shifted farther into the Livermore Valley or even into the Central Valley, longer commuting distances may generate additional emissions. This alternative would not avoid the Project's significant unavoidable mobile source emissions impact. Instead, it would substantially increase that impact. Air quality would be a significant unavoidable impact of this alternative.

**Biological Resources.** The No Project Alternative would produce less intense overall impacts on biological resources than the Project because substantially less development could occur in the 637-acre area outside of the Specific Plan. Not only the development footprint, but also the intensity of development would be less than the Project. The northern portion of the Project area would remain largely undeveloped and hence, impacts to sensitive biological resources in this area would be substantially less. Development of residential and commercial land uses in the Specific Plan portion of the Project area would have the same impacts to special status species and sensitive habitat as the Project since the development footprint would be the same in this portion of the Project area. This alternative would reduce biological resources impacts compared to the Project, but not enough to avoid significant cumulative impacts related to the loss of botanically sensitive habitat. This impact would be a significant unavoidable cumulative impact of this alternative.

**Cultural Resources.** The No Project/ECAP Alternative could reduce potential impacts to cultural resources in the northern portion of the Project area since no urban level

development and related ground disturbance would occur. Impacts in the Specific Plan portion of the Project area would be similar to the Project since the development footprint in the Specific Plan area would be similar to the Project.

**Geology and Soils.** The No Project/ECAP Alternative would involve similar geology and soils impacts to the Project in the Specific Plan area since the development footprint would be similar to the Project. Impacts outside of the Specific Plan area would be eliminated or substantially reduced in comparison to the Project since no urban level development and related ground disturbance would occur.

**Hazards and Hazardous Materials.** Development under the No Project Alternative would be the same kind and distribution of uses as the Project and would result in similar impacts. Development in the area outside the Specific Plan would be under the ECAP Resource Management designation, and would generally be similar to existing agricultural and grazing uses. The Project's already low hazards and hazardous materials impacts described in the Initial Study would be further reduced with the No Project Alternative.

**Hydrology and Water Quality.** The No Project Alternative would involve the same development footprint as the Project in the Specific Plan area. Potential development in the Specific Plan area would require the same type of construction activities as the Project and would also be subject to the same protective water quality regulations, such as erosion and sedimentation controls. The overall network of storm drainage improvements for the No Project/ECAP Alternative essentially would be the same as for the Project in the Specific Plan portion of the Project area. No improvements would be necessary outside the Specific Plan area.

**Land Use and Planning.** Potential development under the ECAP would be similar to the Project for the Specific Plan portion of the Project area. This alternative would potentially allow 281 low density units, 175 medium high density units and 1,300 high density residential units resulting in a total of 1,764 residential units, which is about 44 percent fewer dwelling units than the Project. However, the ECAP allows for greater commercial/mixed use development of up to 3.4 million square feet over 144 acres compared to the Project development of 1.4 million square feet in 120 acres. About 724 acres would be designated for Resource Management and 94 acres for agriculture uses. The ECAP Resource Management designations would be retained for the areas outside the Specific Plan which are shown as low density and rural residential/agriculture in the Project. If developed without annexation, both ECAP and Measure D would prohibit urban development outside the Specific Plan area. Compared to the Project, overall development would be reduced under this alternative, and any land use impacts would be similar to the Project as identified in the Initial Study to the extent that no established communities exist in the Project area. The Project area is not subject to any existing HCP or NCCP.

**Mineral Resources.** The Project area contains no known mineral resources. Like the Project, the No Project Alternative would have no impact on mineral resources.

**Noise.** When the Eastern Dublin EIR was prepared, the County was updating its General Plan, including revisions to what is now known as the ECAP. The EIR recognized that development could occur under the No Project alternative depending on the outcome of the County General Plan revisions. Under the ECAP adopted since the Eastern Dublin EIR, the

No Project Alternative would result in less residential development within the Project area than the Project. This could reduce the noise levels along internal streets, possibly reducing the required soundwall heights. However, this alternative permits substantially greater commercial and mixed use development, thereby potentially increasing noise levels in the Specific Plan portion of the Project area to levels higher than the Project. These increased noise levels could exceed applicable noise standards, which would be a potentially significant impact requiring future development to provide appropriate noise mitigation to acceptable standards. Other noise impacts, such as freeway noise, would be similar to the Project. To the extent that existing residences occur in the Specific Plan area, noise impacts would be the same or greater than the Project; the No Project Alternative would not reduce this impact to less than significant.

**Population, Housing, Employment.** The No Project Alternative would eliminate urbanization outside the Specific Plan portion of the Project area but not within the Specific Plan area. Thus, the effect of this alternative on growth inducement and existing housing would be similar to the Project for the Specific Plan area. This alternative would reduce growth inducement outside of the Specific Plan area. The projected residential population in the Project area under the No Project Alternative would be 3,875. This is 3,260 fewer residents than the 7,135 new residents estimated for the Project. New jobs would increase to 7,898, from the Project projected level of 2,575 due to an increase in commercial acreage and change in intensity and types of use. This alternative would reduce residential units resulting in 1,764 total dwelling units compared to 2,526 for the Project and 2,858 employed residents in the No Project/ECAP Alternative compared to 4,092 for the Project. The ratio of jobs to employed residents for the No Project Alternative would be 2.76:1, substantially greater than the 0.63: 1 ratio of the Project. As such, this alternative would increase the existing excess of jobs over employed residents in Dublin and the Tri-Valley area.

**Public Services (Schools).** This supplement analyzed the potential impacts of the Project on school facilities since the Initial Study determined that the Project would not have any impact on other community services or facilities. The No Project Alternative would have more commercial and less residential development than the Project, and would generate approximately 45 percent fewer elementary, junior high, and high school students. In contrast to the Project, areas outside of the Specific Plan area would not provide schools sites. Demand for other community services and facilities would be similar or somewhat less than those of the Project.

**Recreation.** Under the No Project Alternative, urban development similar to the Project could occur in the Specific Plan area. The mix of uses would be different, however, with reduced residential and increased commercial uses. This reduced potential for residential uses in the Specific Plan area, together with reduced development potential outside the Specific Plan area also decreases the potential demand for parks and other recreational resources compared to the Project.

**Transportation/Circulation (Traffic).** The No Project Alternative consists of 281 low density units, 175 medium high density units and 1,300 high density residential units resulting in a total of 1,764 residential units, which is about 44 percent fewer dwelling units than the Project. In general, there would be more high density residential units and less low density residential units than the Project. The No Project Alternative consists mostly of major commercial and mixed uses totaling 3,441,240 (3.4 million) square feet over a

combined 144 acres. This alternative evaluates a reduced number of residential units and an increased floor area of commercial and industrial uses.

The Cumulative Year 2025 traffic model was used to determine traffic impacts. This alternative would generate approximately 80 percent more trips than the Project and more than twice the trips of the Mitigated Traffic Alternative due to the increased commercial/mixed use development. Figure 4-B shows the peak hour turning movement volumes for this No Project/ACAP Alternative. Table 4-6 summarizes the levels of service at the study intersections. Under this scenario, the levels of service are generally the same as the Project. Similar to the Project, the No Project Alternative results in unacceptable levels of service at the intersections of Dougherty Road/ Dublin Boulevard, Hacienda Drive/I-580 Westbound Ramps, Hacienda Drive/Dublin Boulevard, and Fallon Road/Dublin Boulevard.

Under the No Project Alternative, the intersection of Fallon Road/Dublin Boulevard would improve to acceptable levels of service with the construction of a new intersection midway between the I-580 westbound ramps and Dublin Boulevard, as recommended by SM-TRAFFIC-8 in Section 3.6 of this supplement. However, this new intersection on Fallon Road still would be anticipated to operate unacceptably at LOS E during the PM peak hour and still represents a significant unavoidable cumulative impact.

**Utilities.** The No Project/ECAP Alternative would require infrastructure similar to the Project for the Specific Plan area since the footprint of development would be similar. Land uses outside the Specific Plan area would be non-urban. Related land use intensities would be substantially lower, reducing or eliminating the need for infrastructure networks as compared to the Project. Table 4-7 presents the estimated impacts of the No Project/ECAP Alternative on water, sewer, and recycled water as compared to the Project. As reflected in the table, the decreased land use development intensity with the No Project Alternative would similarly decrease the demand for water, sewer, and recycled water.

**Domestic Water System.** The water demand for the No Project Alternative is estimated to be 0.68 MGD, approximately 27 percent less than the Project demand of 0.93 MGD. This alternative has lower overall intensities of potential development which would reduce the water demand. Extension of pipelines to the northern portion of the Project area where rural residential and low density residential uses predominate may not be required. Smaller water storage reservoirs than for the Project would be adequate to meet fire flow requirements.

**Sewer System.** The estimated wastewater flow for the No Project Alternative is 0.67 MGD, which would be 14 percent less than that estimated for the Project (0.78 MGD). DSRD would need to expand its wastewater treatment plant to handle these flows, although the expansion could be approximately 14 percent less than for the Project. As shown in Table 4-7, there is a potential recycled water demand of 0.11 MGD, 50 percent less than for the Project. Because of the decrease in extent of residential development outside the Specific Plan area, extension of sewer pipelines to the northern portion of the Project area would not be required.

**TABLE 4-7**  
**NO PROJECT ALTERNATIVE: WATER, SEWER, AND RECYCLED WATER IMPACTS**

Item	Estimated Average Daily Water Demand (MGD)	Estimated Average Daily Wastewater Flow (MGD)	Estimated Average Daily Recycled Water Demand (MGD)
Project	0.93	0.78	0.22
No Project Alternative	0.68	0.67	0.11

**Solid Waste.** As discussed in this supplement, there are adequate solid waste facilities to accommodate the Project. The reduced overall density of the No Project Alternative would reduce the demand on waste disposal facilities and could potentially extend the useful life of the facilities.

**Electricity and Natural Gas.** Development under the No Project Alternative could potentially be subject to the recent energy supply shortfalls described in this supplement. Reduced overall densities under the No Project Alternative would reduce related energy demand compared to the Project, and would thus reduce the energy supply needed to accommodate Project area development.

#### **NO DEVELOPMENT ALTERNATIVE**

The purpose of the No Development Alternative is to compare the effects of approving the Project against the existing physical character of the Project area. The Eastern Dublin EIR analyzed the No Development Alternative for the entire GPA/SP area. Upon approval of the GPA/SP, the City found the No Development Alternative infeasible. The Project proposes the same land uses and densities as the GPA/SP. As described in the Initial Study and this supplement, the existing character of the Project area is low-intensity agricultural and grazing uses with some existing residences, agricultural buildings, and miscellaneous other uses. Under the No Development Alternative, no development beyond the existing uses would occur. All of the Project's impacts would be avoided, including the Project's significant unavoidable impacts on mobile source emissions, traffic, loss of botanically sensitive habitat, and noise, as these impacts are described in Sections 3 and 5. This supplement updates the No Development Alternative discussion as it applies specifically to the Project.

**Aesthetics, Agricultural Resources.** The existing agricultural, grazing and rural residential character of the Project area would be maintained. There would be no disturbance or alteration of the Project area's visual resources, such as its hillsides, ridgelines and watercourses. There would be no conversion of agricultural lands to other uses.

**Air Quality.** No new vehicle trips and mobile source emissions or stationary sources of air emissions would be generated. Any air quality impacts would be limited to emissions related to existing uses.

**Biological Resources.** Existing agriculture and grazing uses could continue on the Project area. No new development would occur, so there would be no related disturbance or alteration of ground surfaces, vegetation or watercourses, and no related impacts on existing habitat, plants and wildlife. Any impacts to biological resources would be related to existing uses.

**Cultural Resources, Geology and Soils, Hydrology and Water Quality.** Existing uses and landforms would be maintained. No new development would occur so there would be no related excavation, grading or other alteration of ground surfaces or watercourses. No cultural resources would be unearthed, nor any erosion or sedimentation impacts created. Any impacts would be related to existing uses and agricultural practices.

**Hazards and Hazardous Materials.** No new hazards or hazardous materials would be introduced to the Project area. Any impacts would be related to existing uses of the Project area as further described in the Initial Study's Environmental Setting for this topic.

**Land Use and Planning.** Continuing existing use would maintain the undeveloped nature of the Project area and would not divide an established community. There are no adopted HCPs or NCCPs in the Project area. This alternative could be inconsistent with the Dublin General Plan, the Eastern Dublin Specific Plan and the ECAP to the extent that these documents anticipate future urbanization of the Project area to one degree or another.

**Mineral Resources.** The Project area contains no known mineral resources. Like the Project, the No Development Alternative would have no impact on mineral resources.

**Noise.** There would be no new noise generating uses. Any noise impacts would be related to existing uses.

**Population, Housing, Employment.** The No Development Alternative would not generate new residences or new jobs and thus, would not affect the current jobs/housing ratio. The residential population for the Project area would be unchanged compared to the 7,135 new residents estimated for the Project. This alternative would result in no new jobs in the City as compared to the Project's 2,575 new jobs.

**Public Services (Schools), Recreation, Utilities.** Under the No Development Alternative, there would be no increased demand for public utilities, including water distribution and storage systems, sewage collection and treatment facilities, and recycled water distribution systems. There would be no additional impacts on sewer, water, storm drainage, or fire flow requirements, and there would be no increase in storm water runoff and non-point source water pollution. No utility infrastructure would be constructed within the Project area and existing uses would continue to utilize wells and septic systems. There would be no storm drain improvements. There would be no increased demand for community services and facilities, parks and schools. No parks and schools would be developed within the Project area.

**Transportation/Circulation (Traffic).** Under the No Development Alternative, there would be no traffic generation and no change in levels of service at the existing intersections in and near the Project area. The proposed roads and intersections would not be constructed. None of the significant adverse traffic impacts of the proposed Project or the Mitigated

Traffic Alternative would occur, although significant cumulative 2025 impacts could still occur since 2025 impacts are expected to occur even without development of the Project area.

#### **ENVIRONMENTALLY SUPERIOR ALTERNATIVE**

CEQA Guidelines Section 15126.6 requires that an EIR identify the environmentally superior alternative other than the No Project (or in this case the No Development) alternative. The certified Eastern Dublin EIR ranked the identified alternatives based on the greatest reduction of impacts from the GPA/SP project. (DEIR p. 4-10-20.) The No Development and No Project alternatives ranked first and second. These alternatives did not fulfill the Eastern Dublin project objectives, and were found infeasible upon approval of the Eastern Dublin project. (Resolution 53-93.) The next alternative in the Eastern Dublin EIR was the Reduced Planning Area Alternative, which the City Council approved in a modified version rather than the original project. As noted earlier in this chapter, this Revised DSEIR identifies and analyzes an additional Mitigated Traffic Alternative based on the current Project's potential for traffic-induced supplemental significant impacts. Compared to the alternatives ranking in the Eastern Dublin EIR, this new alternative would rank between the No Project and Reduced Planning Area alternatives, primarily because the reduced densities would also reduce traffic and air quality impacts. The new alternative would not, however, fulfill the City's objectives for Eastern Dublin.

Consistent with prior discussion in this chapter, the Mitigated Traffic Alternative and the No Project and No Development alternatives are compared in this section as well. The development scenarios in the Mitigated Traffic, No Project and No Development alternatives all reduce some potential environmental impacts of the Project. The relative impacts of the alternatives are shown in Table 4-8 and discussed in the list below:

The No Development Alternative would achieve the greatest reduction of environmental impacts compared to the Project. The Project area would remain in its existing rural/agricultural condition. The impacts associated with the Project including impacts on land use, traffic, biological resources, visual resources, and air quality would not occur. This alternative would not fulfill the Project objectives or the City of Dublin's objectives for Eastern Dublin.

The No Project/ECAP Alternative would achieve a substantial reduction of visual impacts and impacts on biological resources because the portion of the Project area outside the Specific Plan would not be developed. Noise impacts would be similar to those of the Project but could be somewhat increased in the Specific Plan portion of the Project area due to the potential for increased commercial development compared to the Project. Compared to the Project, this alternative would have similar significant traffic impacts at several intersections, and could have even greater impacts at the Fallon Road/Dublin Boulevard intersections because of the greater intensity of commercial and industrial land uses. This alternative would generate greater mobile and stationary source air emissions than the Project. Development would be limited to the southern portion of the Project area and the northern portion, approximately 637 acres or more than half of the Project area, would remain in its existing rural/agricultural condition. This alternative partially would fulfill the City's objectives as to the Specific Plan portion of the Project area, but would not meet the City's General Plan goals for its Sphere of Influence. In addition, it would exacerbate the

City's existing excess of jobs compared to employed residents

The Mitigated Traffic Alternative would reduce impacts on traffic and air quality but would not substantially reduce visual, noise, or biological impacts compared with the Project. The impacts of this alternative would be greater than the No Development Alternative, but less than the Project. Compared to the No Project/ECAP Alternative, this alternative would have greater impacts on visual and biological resources and lesser impacts on traffic and air quality. This alternative would reduce the City's ratio of jobs to employed residents but to a lesser degree than the Project, and would provide a smaller share of Dublin's contribution to regional housing needs.

#### **ALTERNATIVES NOT SELECTED**

Comments on the July 2001 DSEIR suggested the City should identify additional alternatives, primarily involving reduced development areas. The EIR need not consider every possible alternative to the Project, and the Mitigated Traffic Alternative is a reasonable alternative which directly responds to the potential for significant supplemental impacts due to increased regional traffic, air quality and traffic noise, as described in the Initial Study for the annexation/prezoning Project. Through the Eastern Dublin EIR, as supplemented by the Revised DSEIR, the City has identified a reasonable and comprehensive range of alternative land uses and densities throughout Eastern Dublin, and across the Project site. The City reviewed the range of alternatives when it considered the Eastern Dublin project in 1993, and ultimately adopted a modified version of Alternative 2, the Reduced Planning Area Alternative. This alternative is substantially reflected in the General Plan and Eastern Dublin Specific Plan, and in the proposed Project and was a significant reduction in the development potential analyzed through the Eastern Dublin EIR.

In the course of reviewing comments on the July 2001 DSEIR, however, the City considered the suggested alternatives but has not chosen them for further analysis. The alternatives suggested in the comments generally include either Project or reduced densities and a reduced development area. Each of these variations is addressed below.

**Reduced Density-Reduced Development Area.** The suggested alternative would reduce both the project density and development area by approximately 25% as a way to avoid grading and runoff impacts and to locate development away from sensitive resources. Under CEQA, the purpose of a project alternative is to identify ways to avoid significant impacts that cannot otherwise be mitigated to less than significant. (CEQA section 21002.) Neither grading nor runoff was identified as a significant impact in the Initial Study or this Revised DSEIR, so neither would be a basis for identifying a CEQA alternative. This alternative would, however, reduce density across the Project by 25%, and would respond to the potential for significantly increased traffic, air quality and noise impacts. This is the same reduction as the Mitigated Traffic Alternative, so this alternative would provide the same avoidance of significant traffic, air quality and traffic noise impacts as the Mitigated Traffic Alternative.

This alternative would also reduce the development area to avoid sensitive biological and habitat areas. For the purposes of this discussion, the Project development area is assumed to be approximately 758 acres (1120 acre Project area minus 362 acre Rural Residential areas); a 25% reduction would be approximately 190 acres. This discussion

further assumes that the reduction in area would not be taken from the southwest corner of the Project area or the lands along I-580. These lands are the flattest part of the Project area and the most accessible from the freeway and roadways. A reduction virtually anywhere else in the assumed development area would reduce biological and habitat impacts, since most of the Project area contains sensitive resources and/or habitat. (See Section 3.3.) In this respect, this alternative is similar to the No Project/ECAP Alternative that would prohibit development outside the Specific Plan area. The ECAP Alternative would remove more development area than the subject alternative, but would still not avoid the Project's identified unavoidable biological effects. Under these circumstances, the subject alternative would not avoid the Project's unavoidable impacts sufficiently to be identified and analyzed further.

**Project Density-Reduced Development Area.** This suggested alternative would retain the Project density for both residential and non-residential development, but would reduce the development footprint by 25%. This alternative was suggested to avoid impacts to biological resources, geologic hazards, loss of topsoil and agricultural resources. This alternative is not further analyzed because, as noted above, a 25% reduction in development area will reduce but not avoid the Project's significant cumulative biological impact. Geologic hazards, loss of topsoil and agricultural resources were not identified as significant impacts in the Initial Study or this Revised DSEIR. With densities the same as the Project, this alternative would generally have the same potential for significant regional, traffic, air quality and traffic noise impacts as the Mitigated Traffic Alternative.

The practical effect of this alternative would be to "densify" the project by concentrating development in smaller, more intense development areas. At least some of the intensification could be expected to occur in the southwest portion of the Project area along I-580. Buildings adjacent to I-580 would likely be taller than the Project's potential 1-3 story buildings in order to achieve similar land use intensities. Taller buildings could block views from I-580 to the foothills in the northerly Project area. In addition, traffic impacts to local, internal streets could increase significantly since greater peak hour traffic would need to be accommodated. Intensifying development in other areas of the Project would necessarily change the mix of future residential development densities and types, with increased higher density housing as Project densities are accommodated in smaller development areas. Such intensification is not consistent with the Project objectives and would require a significant amendment to both the General Plan and Eastern Dublin Specific Plan.

**TABLE 4-1**  
**ALTERNATIVES BY LAND USE**

Land Use Designation	Project	No Project (a)	Mitigated Traffic (b)
COMMERCIAL/INDUSTRIAL (Acres)	120.2	144.3	120.2
Square Feet	1,421,450	3,441,240	1,066,088
Jobs	2,575	7,898	1,931
RESIDENTIAL (Acres)	746.8	954.9	746.8
Units (low density)	1,734	281	1,301
Units (medium density)	94	175	71
Units (medium/high density)	696	1,300	522
Units (rural/agriculture)	2	6	2
Total Units	2,526	1,764	1,895 (c)
Population	7,135	3,875	5,351
Employed Residents (d)	4,092	2,858	3,069
SCHOOLS (Acres)	31.9	0	31.9
Elementary (acres)	17.3	0	17.3
Junior High (acres)	14.6	0	14.6
Jobs	565	0	424
PARKS (Acres)	40.8	10	40.8
OPEN SPACE (Acres)	76.9	0	76.9
FUTURE STUDY AREAS (Acres)	92.6	0	92.6
<b>TOTAL ACRES</b>	<b>1,109.2</b>	<b>1,109.2</b>	<b>1,109.2</b>

NOTES:

- (a) No Development Alternative not included in table above because it would involve no development.
- (b) Mitigated Traffic Alternative consists of a 25 percent reduction in development from the proposed Project.
- (c) Total residential units does not equal sum of components due to rounding.
- (d) Projections assume a ratio of 1.62 employed residents per household based on ABAG's Projections 1990.

**TABLE 4-2**  
**FLOOR AREA RATIOS OF ALTERNATIVES**

Land Use Designation	Project	No Project (ECAP) (a)	Mitigated Traffic
General Commercial	0.25	--	0.1875
Neighborhood Commercial	0.30	--	0.225
Industrial	0.28	--	0.21
Major Commercial	--	0.60	--
Mixed Use	--	0.50	--

NOTE:

(a) No Development Alternative not included because it would involve no development.

<b>TABLE 4-3</b>					
<b>REGIONAL VEHICULAR EMISSIONS COMPARISON</b> <b>(Year = 2020)</b>					
<b>EMISSIONS</b>					
<i>Scenario</i>	<u>ADT</u>	<u>ROG</u>	<u>NOx</u>	<u>CO *</u>	<u>PM-10</u>
Project	54,071	156.6	334.6	1,824.3	+314.5
Mitigated Traffic Alternative vs. Project	40,553	117.5	251.0	1,368.2	235.9
No Project/ECAP Alternative vs. Project	-25%	-25%	-25%	-25%	-25%
	97,400	220.7	467.9	2,467.4	+403.2
BAAQMD Threshold	80%	41%	40%	35%	28%
		80	80	550	80

Source: URBEMIS7 Computer Model

\* = requires microscale analysis if 550 lb/day is exceeded.

**Table 4-4**  
**Peak Hour Intersection Levels of Service -Tri-Valley Transportation Model Cumulative Year 2025 plus Mitigated Traffic Alternative**

Intersection	Control	Unmitigated				Mitigated			
		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
		*	LOS	*	LOS	*	LOS	*	LOS
1 Dougherty Road/Dublin Boulevard	Signal	<b>0.94</b>	E	<b>1.02</b>	F	--	--	--	--
2 Hacienda Drive/I-580 Eastbound Ramps	Signal	0.72	C	0.82	D				
3 Hacienda Drive/I-580 Westbound Ramps	Signal	0.83	D	<b>0.96</b>	E	0.65	B	0.75	C
4 Hacienda Drive/Dublin Boulevard	Signal	0.84	D	<b>1.01</b>	F	--	--	--	--
5 Santa Rita Road/I-580 Eastbound Ramps	Signal	0.86	D	0.76	C				
6 Tassajara Road/I-580 Westbound Ramps	Signal	0.71	C	0.73	C				
7 Tassajara Road/Dublin Boulevard	Signal	0.73	C	0.88	D				
8 Tassajara Road/Central Parkway	Signal	0.72	C	0.61	B				
9 Tassajara Road/Gleason Drive	Signal	0.58	A	0.47	A				
10 Grafton Street/Dublin Boulevard	Signal	0.34	A	0.44	A				
11 Grafton Street/Central Parkway	Signal	0.09	A	0.12	A				
12 Grafton Street/Gleason Drive	Signal	0.45	A	0.37	A				
13 El Charro Road/I-580 Eastbound Ramps	Signal	0.58	A	0.63	B				
14 Fallon Road/I-580 Westbound Ramps	Signal	0.62	B	0.75	C				
15 Fallon Road/Dublin Boulevard	Signal	0.86	D	<b>1.04</b>	F	--	--	--	--
15A Fallon Rd./Dublin Blvd. w/ New Int.	Signal	--	--	--	--	0.75	C	0.87	D
XX Fallon Road/New Intersection	Signal	--	--	--	--	0.60	A	0.68	B
16 Fallon Road/Central Parkway	Signal	0.76	C	0.85	D				
17 Fallon Road/Gleason Drive	Signal	0.50	A	0.31	A				

Note: \* = Volume-to-Capacity (V/C) Ratio for signalized intersections

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**Table 4-6**  
**Peak Hour Intersection Levels of Service –Tri-Valley Transportation Model Cumulative Year 2025 plus ECAP Alternative**

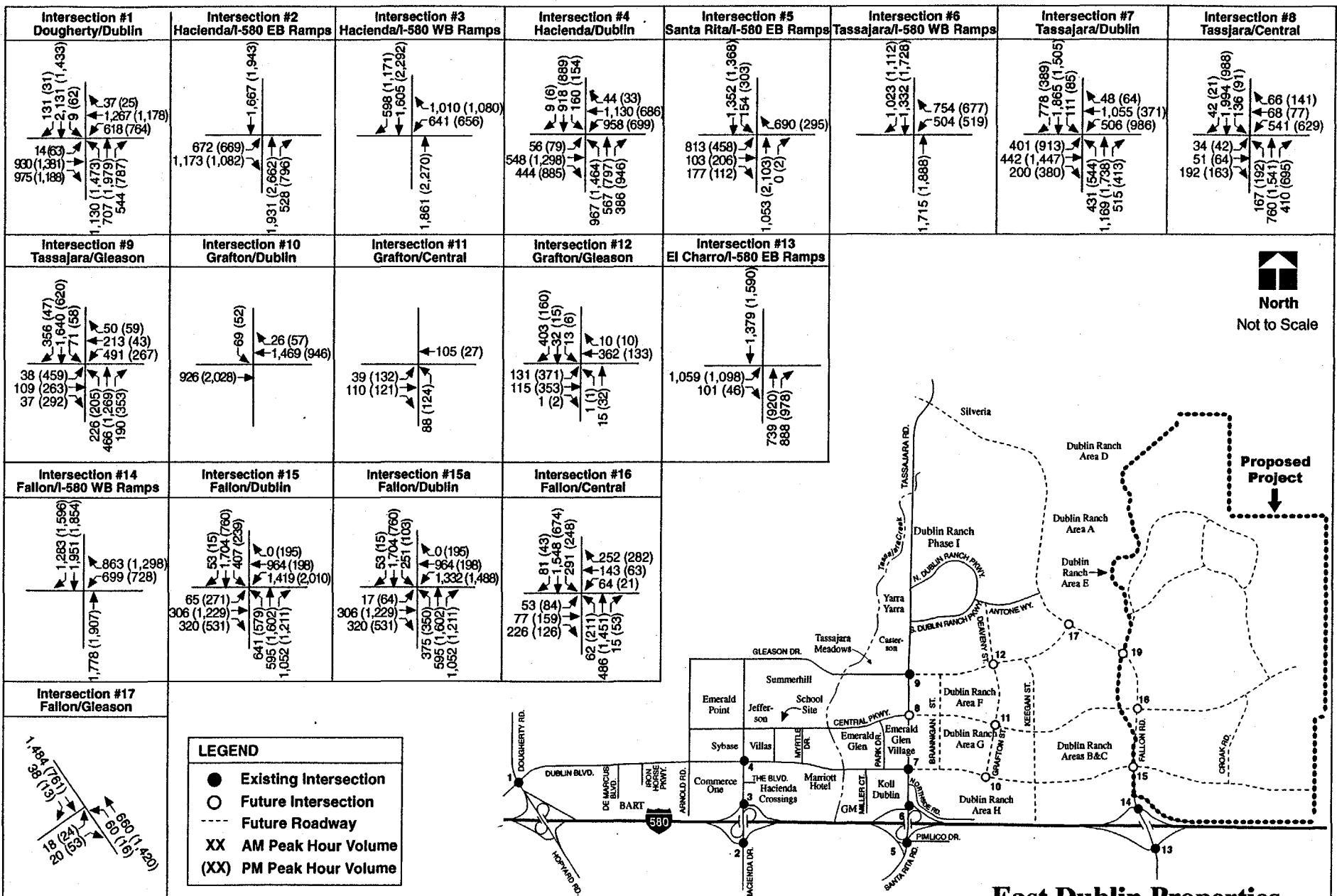
Intersection	Control	Unmitigated				Mitigated			
		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
		*	LOS	*	LOS	*	LOS	*	LOS
1	Dougherty Road/Dublin Boulevard	Signal	<b>0.93</b>	E	<b>1.03</b>	F	--	--	--
2	Hacienda Drive/I-580 Eastbound Ramps	Signal	0.71	C	0.81	D			
3	Hacienda Drive/I-580 Westbound Ramps	Signal	0.80	D	<b>0.93</b>	E	0.65	B	0.76
4	Hacienda Drive/Dublin Boulevard	Signal	0.82	D	<b>1.03</b>	F	--	--	--
5	Santa Rita Road/I-580 Eastbound Ramps	Signal	0.84	D	0.77	C			
6	Tassajara Road/I-580 Westbound Ramps	Signal	0.72	C	0.73	C			
7	Tassajara Road/Dublin Boulevard	Signal	0.72	C	0.87	D			
8	Tassajara Road/Central Parkway	Signal	0.71	C	0.62	B			
9	Tassajara Road/Gleason Drive	Signal	0.57	A	0.47	A			
10	Grafton Street/Dublin Boulevard	Signal	0.33	A	0.45	A			
11	Grafton Street/Central Parkway	Signal	0.10	A	0.13	A			
12	Grafton Street/Gleason Drive	Signal	0.41	A	0.35	A			
13	El Charro Road/I-580 Eastbound Ramps	Signal	0.70	B	0.67	B			
14	Fallon Road/I-580 Westbound Ramps	Signal	0.74	C	0.84	D			
15	Fallon Road/Dublin Boulevard	Signal	0.89	D	<b>1.35</b>	F	--	--	--
15A	Fallon Rd./Dublin Blvd. w/ New Int.	Signal	--	--	--	--	0.74	C	0.86
XX	Fallon Road/New Intersection	Signal	--	--	--	--	0.78	C	<b>0.96</b>
16	Fallon Road/Central Parkway	Signal	0.84	D	0.89	D			
17	Fallon Road/Gleason Drive	Signal	0.54	A	0.33	A			

Note: \* = Volume-to-Capacity (V/C) Ratio for signalized intersections

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**TABLE 4-8**  
**IMPACTS OF ALTERNATIVES**

<b>ENVIRONMENTAL IMPACT</b>	<b>LEVEL OF IMPACT RELATIVE TO PROPOSED PROJECT:</b>		
	<b>No Development</b>	<b>No Project</b>	<b>Mitigated Traffic</b>
<b>Land Use</b>	No Impact	Less	Similar
<b>Population, Housing, and Employment</b>	No Change	Increase in Jobs/Housing Imbalance	Smaller Reduction in Jobs/Housing Imbalance
<b>Traffic and Circulation</b>	No Impact	Additional significant impact at one intersection; significant impact eliminated at one intersection	Significant impact eliminated at one intersection
<b>Community Services and Facilities</b>	No Impact	Similar	Similar
<b>Public Utilities</b>	No Impact	Less	Less
<b>Soils, Geology and Seismicity</b>	No Impact	Same	Same
<b>Biological Resources</b>	No Impact	Less	Same
<b>Visual Resources</b>	No Impact	Less	Similar
<b>Cultural Resources</b>	No Impact	Possibly Less	Same
<b>Noise</b>	No Impact	Similar	Similar
<b>Air Quality</b>	No Impact	Increased Emissions	Fewer Emissions, Still Significant



City of Dublin - East Dublin Properties

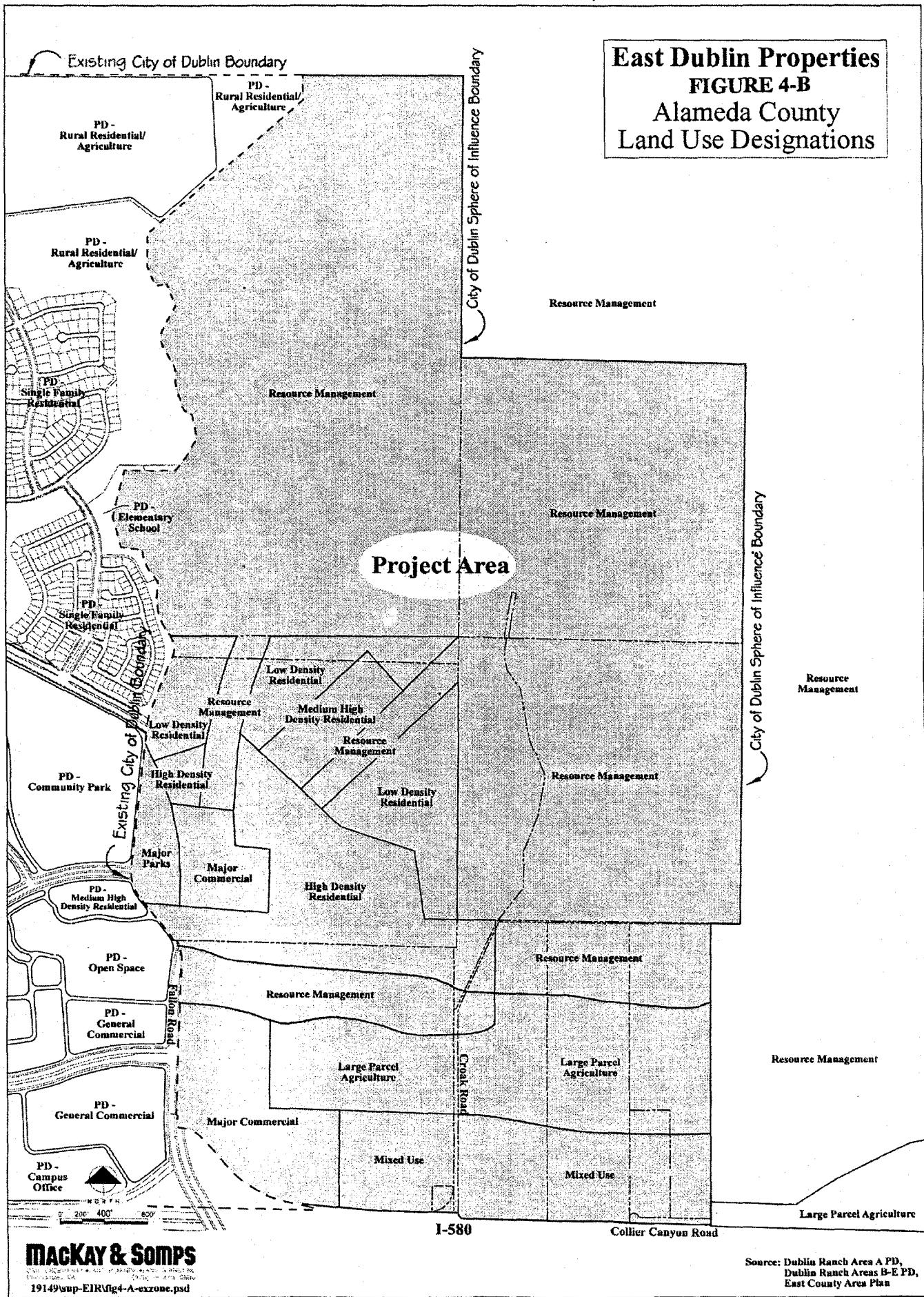
Tri-Valley Transportation Model Cumulative Year 2025 + Mitigated Traffic  
Land Use Alternative Turning Movement Volumes

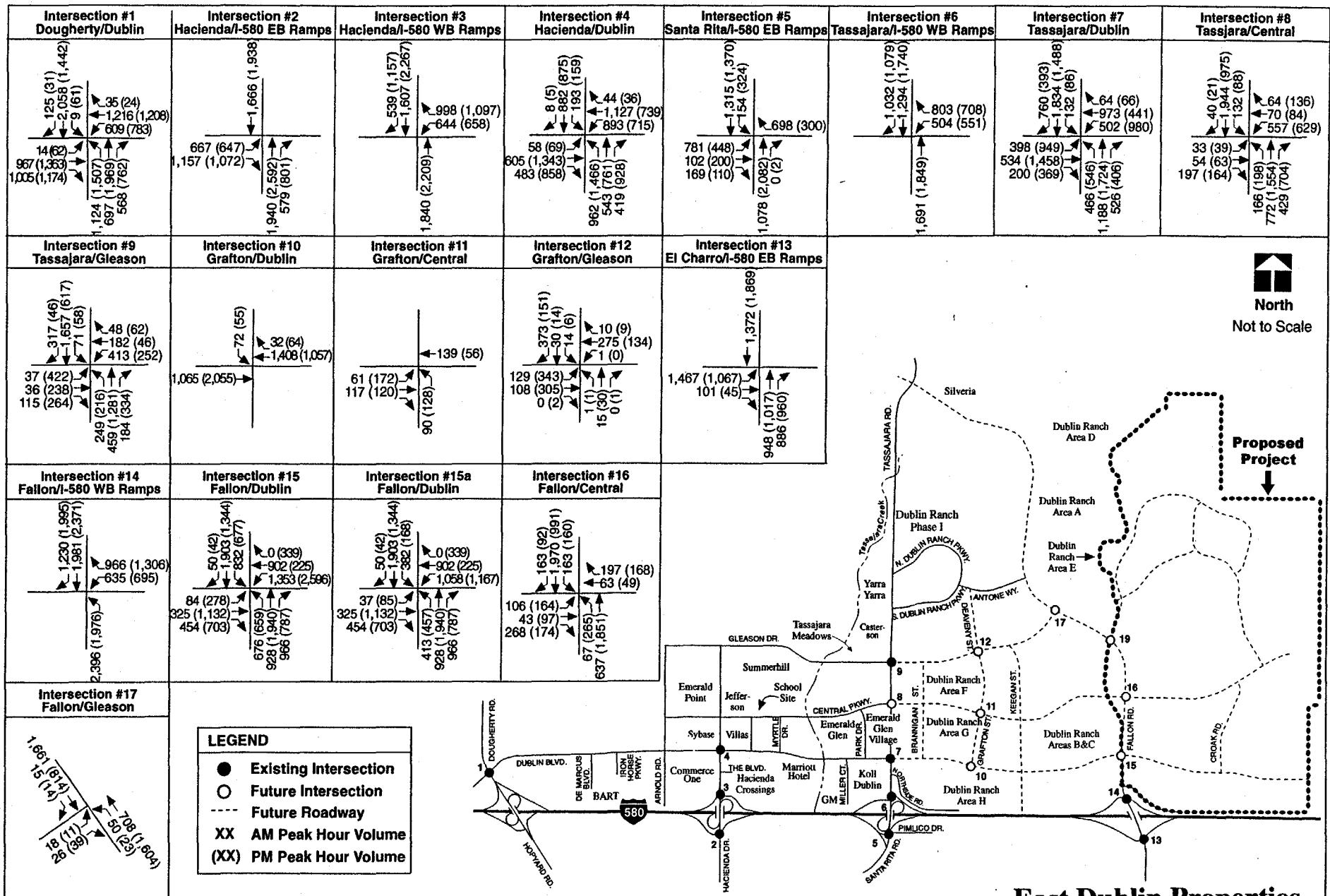
East Dublin Properties

FIGURE 4-A



**East Dublin Properties**  
**FIGURE 4-B**  
**Alameda County**  
**Land Use Designations**





City of Dublin - East Dublin Properties

Tri-Valley Transportation Model Cumulative Year 2025 + ECAP Alternative  
Turning Movement Volumes

FIGURE 4-C



## 5.0 CEQA-REQUIRED DISCUSSIONS

CEQA Guidelines section 15126.2 mandates discussion of the following topics in an EIR in addition to those addressed in the project and alternatives impact assessment: cumulative impacts; unavoidable significant adverse impacts; significant irreversible environmental changes; and, growth inducing impacts. These topics are addressed in Section 5.0 of the Eastern Dublin EIR. Eastern Dublin EIR discussions of growth-inducing impacts and significant irreversible changes are unchanged by the Project. Therefore, this section summarizes the Supplemental EIR (SEIR) findings regarding the Project's identified significant unavoidable and cumulative impacts, beyond those impacts identified in the Eastern Dublin EIR.

### 5.1 SUPPLEMENTAL CUMULATIVE IMPACTS

CEQA Guidelines Section 15355 defines "cumulative impacts" as "... two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Reasonably foreseeable development projects in the area were fully considered in the Eastern Dublin EIR. A number of associated cumulative impacts were identified in the Eastern Dublin EIR for the GPA/SP project. The cumulative impacts addressed in the Eastern Dublin EIR, that are related to the impacts analyzed in this Supplement are summarized below.

- Cumulative loss of agricultural and open space lands (Impact 3.1/F)
- Cumulative degradation of I-580 freeway operations between Tassajara Road and Fallon Road (Impact 3.3/A)
- Cumulative degradation of I-580 freeway operations between I-680 and Dougherty Road (Impact 3.3/B)
- Cumulative degradation of I-580 freeway operations between Tassajara Road and Airway Boulevard (Impact 3.3/C)
- Cumulative degradation of I-680 freeway operations north of I-580 (Impact 3.3/D)
- Cumulative degradation of I-580 east of Airway Boulevard and between Dougherty and Hacienda (Impact 3.3/D)
- Cumulative degradation of Dublin Boulevard intersections with Hacienda Drive and Tassajara Road (Impact 3.3/M)
- Cumulative degradation of Tassajara Road intersections with Gleason Road, Fallon Road, and Transit Spine (Impact 3.3/N)
- Increased solid waste production and impact on solid waste disposal facilities (Impacts 3.4/O, P)
- Future lack of wastewater treatment plant capacity (Impact 3.5/E)
- Lack of current wastewater disposal capacity (Impact 3.5/G)
- Increase in demand for water (Impact 3.5/Q)
- Increase in potential flooding (Impact 3.5/Y)
- Increase in non-point sources of surface- and ground-water pollution(Impact 3.5/AA)
- Direct habitat loss (Impact 3.7A)
- Loss or degradation of botanically sensitive habitat (Impact 3.7/C)
- Exposure of existing residence to future roadway noise (Impact 3.10/B)
- Dust deposition soiling nuisance from construction activity (Impact 3.11/A)
- Construction equipment/vehicle emissions ((Impact 3.11/B)
- Mobile source emissions of reactive organic gases and oxides of nitrogen (Impact 3.11/C)
- Stationary source emissions (Impact 3.11/E)

The Project would create supplemental significant cumulative impacts beyond those already addressed in the Eastern Dublin EIR. The supplemental cumulative impacts identified in this Supplement and further discussed in related impact analysis in Chapter 3 are:

**AQ 1: Mobile Source Emissions.** The Project and cumulative development would result in mobile source emissions of Reactive Organics (RO), Nitrogen Oxide (Nox), and Particulate Matter (PM-10) substantially exceeding Bay Area Air Quality Management District significance thresholds and contribute to continued exceedences of state and federal Clean Air Act ozone standards. This impact was identified as cumulatively significant and unavoidable in the eastern Dublin EIR. Mitigation measures identified in this Supplement would reduce this impact; however it would remain cumulatively significant.

**BIO 1: Direct and Indirect Habitat Loss.** The Project and cumulative development would significantly reduce habitat not previously identified for special status species in the Eastern Dublin area. The mitigation measures proposed in this Revised DSEIR would reduce the Project's contribution to this impact to less than significant.

**BIO 2: Loss of Special Status Plant Species.** The Project and cumulative development would cumulatively and significantly impact up to 13 species of rare plants not previously identified as occurring or potentially occurring on the site. The mitigation measures proposed in this Revised DSEIR would reduce the Project's contribution to this impact to less than significant.

**BIO 3: Loss or Degradation of Botanically Sensitive Habitats.** This supplemental analysis identifies seasonal wetlands and intermittent streams as additional botanically sensitive habitats that could be affected by direct and indirect impacts of development of the Project area beyond those identified in the Eastern Dublin EIR. This impact was identified as cumulatively significant and unavoidable in the Eastern Dublin EIR. Mitigation measures identified in this Supplement would reduce this impact; however it would remain cumulatively significant.

**BIO 5: California Red-Legged Frog.** The Eastern Dublin EIR identified potentially significant impacts to this species from development affecting aquatic habitat. Information developed since then recognizes the need to protect upland habitat as well. Mitigation measures proposed in this Supplement would reduce the Project's contribution to this impact to less than significant.

**TRAFFIC-6: Dougherty Road/Dublin Boulevard Intersection Operations in Year 2025 Cumulative Buildout with Project Scenario.** In this scenario, the Dougherty Road/Dublin Boulevard intersection would operate at unacceptable levels of service during the AM and PM peak hours. This impact was identified as cumulatively significant and unavoidable in the Eastern Dublin EIR. Mitigation measures identified in this Supplement would reduce this impact; however it would remain cumulatively significant.

**TRAFFIC-7: Hacienda Drive/Dublin Boulevard Intersection Operations in Year 2025 Cumulative Buildout with Project Scenario:** In this scenario, the Hacienda Drive/Dublin Boulevard intersection would operate at unacceptable levels of service during the AM and PM peak hours. This impact was identified as cumulatively significant and unavoidable in the Eastern Dublin EIR. Mitigation measures identified in this Supplement would reduce this impact; however it would remain cumulatively significant.

**TRAFFIC-8: Fallon Road/Dublin Boulevard Intersection Operations in Year 2025 Cumulative Buildout with Project Scenario:** In this scenario, the Fallon Road/Dublin

Boulevard intersection would operate at unacceptable levels of service (LOS F [1.11]) during the PM peak hour. This impact was identified as cumulatively significant and unavoidable in the Eastern Dublin EIR. Mitigation measures identified in this Supplement would reduce this impact; however it would remain cumulatively significant.

**TRAFFIC-11: I-580 and I-680 Operations in Year 2025 Cumulative Buildout with Project Scenario.** Under this scenario, freeway segments in the Project area would operate at unacceptable levels of service during the AM and PM peak hours. This impact was identified as cumulatively significant and unavoidable in the Eastern Dublin EIR. Mitigation measures identified in this Supplement would reduce this impact; however it would remain cumulatively significant.

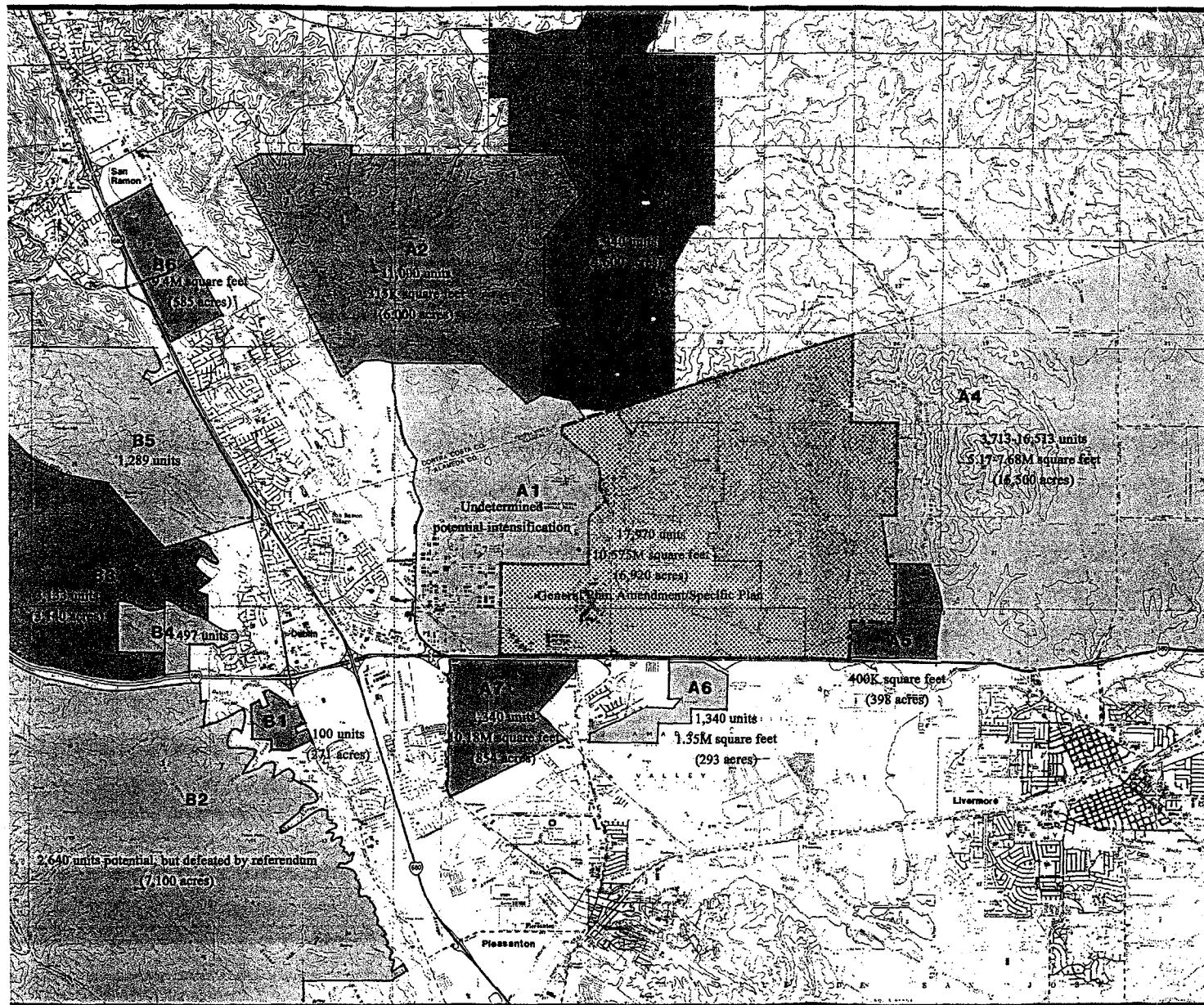
## 5.2 SIGNIFICANT AND UNAVOIDABLE IMPACTS

Unavoidable significant adverse impacts are those impacts that cannot be mitigated to a less than significant level. The Eastern Dublin EIR identified nine unavoidable significant adverse impacts (section 5.2). These are summarized below:

- Cumulative degradation of I-580 freeway operations between I-680 and Dougherty Road (Impact 3.3/B)
- Under the Cumulative Buildout with Project scenario, cumulative freeway LOS will exceed City significance thresholds (Impact 3.3/E).
- By the year 2010, development with the project will cause LOS F operations at the intersection of Santa Rita Road with I-580 eastbound ramps (Impact 3.3/I).
- Under the Cumulative Buildout with Project scenario, LOS will exceed City significance thresholds at Dublin Boulevard/Hacienda Drive and Dublin Boulevard/Tassajara Road (Impact 3.3/E).
- Project impacts on LOS at Tassajara Road intersections (Impact 3.3/N).
- Project contribution to regional ozone precursor emissions (Impact 3.11/C)
- Noise impacts on existing residents (Impact 3.10/B)
- Change in the area's visual character (Impact 3.8/B)

Significant and Unavoidable impacts identified in this Supplement all are cumulative impacts. These impacts were also previously identified as cumulatively significant and unavoidable in the Eastern Dublin EIR. These impacts are summarized in Section 5.1, above. They are:

- **AQ 1:** Mobile Source Emissions;
- **BIO 3:** Loss or Degradation of Botanically Sensitive Habitats;
- **TRAFFIC-6:** Dougherty Road/Dublin Boulevard Intersection Operations in Year 2025 Cumulative Buildout with Project Scenario;
- **TRAFFIC-7:** Hacienda Drive/Dublin Boulevard Intersection Operations in Year 2025 Cumulative Buildout with Project Scenario;
- **TRAFFIC-8:** Fallon Road/Dublin Boulevard Intersection Operations in Year 2025 Cumulative Buildout with Project Scenario; and,
- **TRAFFIC-11:** I-580 and I-680 Operations in Year 2025 Cumulative Buildout with Project Scenario.



**East Dublin Properties**  
**FIGURE 5-A**  
1992 Cumulative Projects

## Subregional Land Use Planning and Development

### Legend

- General Plan Amendment Area
- Specific Plan Area

### Adjacent to the Project Site

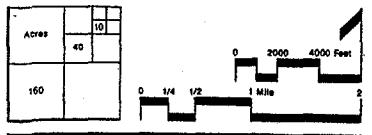
- Camp Parks
- Dougherty Valley
- Tassajara Valley
- North Livermore GPA
- Triad Business Park
- Stoneridge Drive Business Park
- Hacienda Business Park

### Other Nearby Subregional Projects

- Laurel Creek
- West Pleasanton
- Western Dublin SP/GPA
- Hansen Hill/Donlan Canyon
- San Ramon Westside SP
- Bishop Ranch Business Park

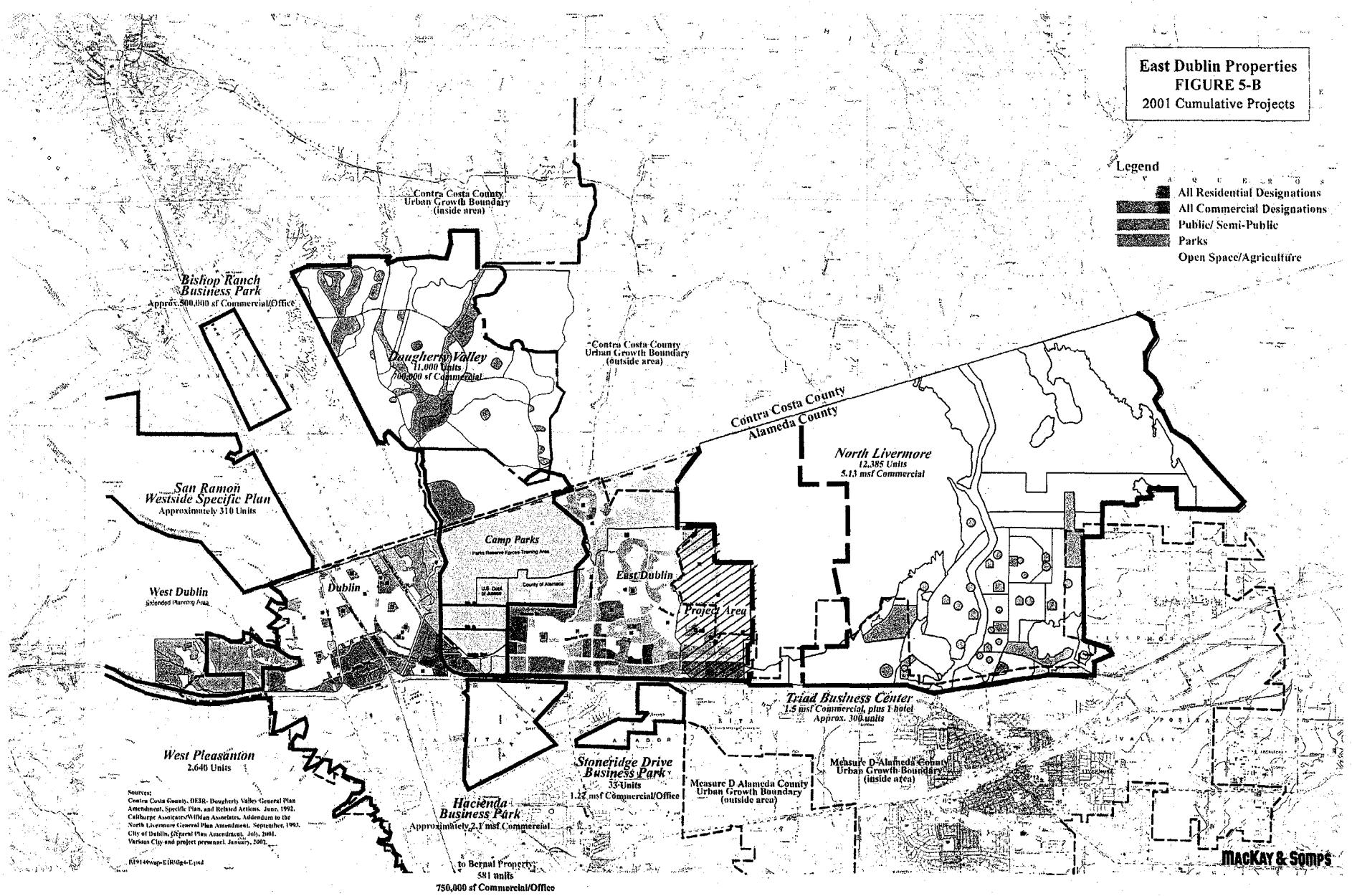
## EASTERN DUBLIN GPA • SP • EIR

Wallace Roberts & Todd Figure 5 - A



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**East Dublin Properties**  
**FIGURE 5-B**  
2001 Cumulative Projects



## 6. REFERENCES

### 6.1 ORGANIZATIONS AND PERSONS CONSULTED

#### *EIR Preparers*

The following individuals participated in the preparation of this document.

Kim Briones, Biologist, Sycamore Associates, LLC

Lori Cheung, Environmental Planner, Cheung Environmental Consulting

Hans Giroux, Air Quality Specialist, Giroux & Associates

Connie Goldade-Erickson, MacKay & Somps

Richard Grassetti, Grassetti Environmental Consulting

Marylee Guinon, Sycamore Associates, LLC

Jerry Haag, Urban Planner

Lori Hileman, Transportation Engineer, TJKM Transportation Consultants

Rich Illingworth, Illingworth & Rodkin, Inc.

Michael Kent, Technical Associate, Michael Kent & Associates

Ki Kim, Transportation Engineer, TJKM Transportation Consultants

Chris Kinzel, P.E., Transportation Engineer, TJKM Transportation Consultants

Phyllis Potter, Land Use Planner, SAIC

Malcolm Sproul, Biologist, LSA Associates, Inc.

Jim Templeton, Engineer, MacKay & Somps

#### *City of Dublin Staff*

John Bakker, Assistant City Attorney

Kathleen Faubion, Assistant City Attorney

Andy Byde, Senior Planner

Ray Kuzbari, P.E., Traffic Engineer

Eddie Peabody, Jr., AICP, Community Development Director

Elizabeth Silver, City Attorney

Kevin Van Katwyck, P.E., Senior Civil Engineer

*Other Agencies and Organizations Consulted*

Lisa Asche, Alameda CDA, January 2002

Chris Bazar, 2000. Assistant Planning Director, Planning Department, Alameda County, December 2000.

Gary Beeman, 2001. Wildlife Biologist, June 14, 2001.

Douglas Bell, General Manager, Livermore Area Parks District

Annette Borges, 2000. District Manager, Livermore Dublin Disposal Services/Valley Waste Management, November 2000.

John Brode. See *Biosystems Analysis* 1989.

Debbie Chamberlain, 2001. Senior Planner, City of San Ramon Planning Department, February 2001.

Ken Craig, Parks Superintendent, Livermore Area Parks District

Paul Fassinger, 2000. Research Director, Association of Bay Area Governments, November 2000.

Vivian Housen, 2001. General Manager, Livermore Amador Valley Water Management Agency.

Grainger Hunt, 2001. Wildlife Biologist. June 28, 2001.

Buck Jones, 2000. Planning and Compliance Department, Pacific Gas & Electric, Co., November 2000.

Ray Kuzbari, 2000. Associate Engineer, City of Dublin, December 2000.

Colleen Lenihan, 2000. Wildlife Biologist, M.S., November 8, 2000.

John Sugiyama, Dr., 2001. Superintendent, Dublin Unified School District.

Karen Swaim, 1996. Biologist, Swaim Biological Consulting, October 27, 1996.

Bob Thompson, 2000. Altamont Landfill and Resource Recovery Facility, November 2000.

Susan E. Townsend, Ph.D., 2000. Wildlife Biologist, November 8, 2000.

Kevin Van Katwyk, 2000. Senior Civil Engineer, City of Dublin, December 2000.

Bruce Webb, 2000. Senior Planner, Dublin San Ramon Sanitary District, November 2000 and February 2001.

Scott Wilson, 2001. Wildlife Biologist, California Department of Fish and Game, January 29, 2001.

Vince Wong, 2000 and 2001. Assistant General Manager, Alameda County Flood Control and Water Conservation District (Zone 7), November 2000 and February 2001.

## 6.2 REFERENCES

- Arnold, R. 2001. *Bankead and Mandeville Properties in Eastern Dublin (Alameda County, CA) Habitat Assessment Report for the Threatened Vernal Pool Fairy Shrimp and Endangerd Longhorn Fairy Shrimp*. Report Prepared for Braddock and Logan 12. Entemological Consulting Services, Pleasant Hill CA.
- Abrams, L.R., 1944, 1951. *See Biosystems Analysis 1989*.
- Alameda County Flood Control and Water Conservation District (Zone 7), 1999. *Zone 7 Water Agency Water Supply Planning Program Draft Program Environmental Impact Report*, January 1999. Prepared by Environmental Science Associates.
- Alameda County Flood Control and Water Conservation District (Zone 7), 2000. *Urban Water Management Plan Update*. October 2000.
- Bass, R.E., A.I., Herson, K.M. Bogdan, 1999. *CEQA Deskbook: A Step-by-step Guide on how to Comply with the California Environmental Quality Act*. Solano Press Books, Point Arena, California. 414 pp.
- BioSystems Analysis, Inc., 1989. *East Dublin General Plan Amendment and Specific Plan Draft Biological Assessment*. 73 pp.
- California Department of Fish and Game (CDFG), 1979. *See Biosystems Analysis 1989*.
- California Department of Fish and Game (CDFG), 1980. *See Biosystems Analysis 1989*.
- California Department of Fish and Game (CDFG), 1988. *Special Animals*. Natural Diversity Data Base.
- California Department of Fish and Game (CDFG), 1995. *Staff Report on Burrowing Owl Mitigation*. Sacramento, CA.
- California Department of Fish and Game (CDFG), 1998. *Fish and Game Code 1998: Unabridged California Edition*. LawTech Publishing Co. LTD. San Clemente, California. 548 pp.
- California Department of Fish and Game (CDFG), 2000a. *Special Plants*. Natural Diversity Database. January.
- California Department of Fish and Game (CDFG), 2000b. *Special Animals*. Natural Diversity Data Base. January.
- California Department of Fish and Game (CDFG), 2000c. *State and Federally Listed Endangered, Threatened, and Rare Plants of California*. Natural Diversity Data Base. January.
- California Department of Fish and Game (CDFG), 2000d. *State and Federally Listed Endangered and Threatened Animals of California*. Natural Heritage Division, Natural Diversity Data Base. January.

California Natural Diversity Database (CNDDDB), 1988. California Department of Fish and Game. Sacramento, California.

California Natural Diversity Database (CNDDDB), 1991; California Department of Fish and Game. Sacramento, California.

California Natural Diversity Database (CNDDDB), 1999. California Department of Fish and Game. Sacramento, California.

California Natural Diversity Data Base (CNDDDB), 2000. *Data Base Print-out for the Livermore, Tassajara, Byron Hot Springs, Altamont, Mendenhall Springs, La Costa Valley, Niles, Dublin, and Diablo Quads.*

California Native Plant Society (CNPS), 2000. *Electronic Inventory of Rare and Endangered Vascular Plants of California*. Version 1.5.1. Sacramento, California.

California Public Utilities Commission, 2000. *Tri-Valley 2002 Electric Power Capacity Increase Project Environmental Impact*.

Camp, Dresser, & McKee Inc., West Yost & Associates Consulting Engineers, and Jerome B. Gilbert, Consulting Engineer, 2001. *Programmatic Water Service Analysis for Eastern Dublin*. Prepared for Dublin San Ramon Services District, June 2001.

Cheatham and Haller, 1975. See *Biosystems Analysis* 1989.

Chuang and Constance, 1969. See *Biosystems Analysis* 1989.

Chuang and Heckard, 1973. See *Biosystems Analysis* 1989.

City of Dublin, 1998. *Dublin General Plan*. Adopted in February 1985 and revised in July 1998.

City of Dublin, 1992. *Eastern Dublin General Plan Amendment and Specific Plan Draft Environmental Impact Report*, August 28, 1992.

City of Dublin, 1992. *Eastern Dublin General Plan Amendment and Specific Plan Final Environmental Impact Report*, Part I, December 7, 1992.

City of Dublin, 1992. *Eastern Dublin General Plan Amendment and Specific Plan Final Environmental Impact Report*, Part II, December 21, 1992.

City of Dublin, 1993. *Addendum to the Draft Environmental Impact Report for the Eastern Dublin General Plan Amendment and Specific Plan*, May 4, 1993.

City of Dublin, 1994. *Final Eastern Dublin Specific Plan*, January 7, 1994.

City of Dublin, 1994. *Final Eastern Dublin General Plan Amendment*, January 7, 1994.

City of Dublin, 1994. *Addendum to the Eastern Dublin General Plan Amendment and Specific Plan Final Environmental Impact Report*, Update to Provide Sewer Service, August 22, 1994.

City of Dublin, 1997. *City of Dublin Zoning Ordinance*, Title 8 of the City of Dublin Municipal Code, Ordinance Number 20-97, Adopted September 2, 1997.

- City of Dublin, 1998. *Final Eastern Dublin Specific Plan*, June 6, 1998.
- Csuti and Kleinsmith, 1982. *See Biosystems Analysis 1989*.
- Dublin San Ramon Services District, 1993. *Eastern Dublin Facilities Plan Final Report*, December 1993.
- Dublin San Ramon Services District, 2000. *Draft Urban Water Management Plan*, May 2000.
- Dublin San Ramon Services District, 2001. *Preliminary Water Service Analysis and Preliminary Impact Analysis for East Dublin Properties Stage 1 Development Plan and Annexation to City of Dublin and Dublin San Ramon Services District*, June 24, 2001.
- Dublin San Ramon Services District, 2001. *Wastewater Master Plan*.
- Frenkel, R.E., 1977. *Ruderal Vegetation Along Some California Roadsides*, University of California Press, Berkeley, California. 163 pp.
- Garret and Dunn, 1981. *See Biosystems Analysis 1989*.
- Hegdal et al., 1986. *See Biosystems Analysis 1989*.
- Hitchcock, 1951. *See Biosystems Analysis 1989*.
- Hoffman, 1952. *See Biosystems Analysis 1989*.
- Holland, R. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. California Department of Fish and Game, The Resources Agency. 156 pp.
- Holland, R. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. California Department of Fish and Game, The Resources Agency. 156 pp.
- Hood, 1975-1977. *See Biosystems Analysis 1989*.
- Howell, 1972. *See Biosystems Analysis 1989*.
- H.T. Harvey and Associates, 1990. *Rare Plant Survey of the East Dublin Property, Alameda County*. 9 pp.
- H.T. Harvey and Associates, 1997a. (Revised). *Dublin Ranch San Joaquin kit Fox Survey*.
- H.T. Harvey and Associates, 1997b. *San Joaquin Kit Fox Surveys, Dublin Ranch, Alameda County: Phase I, 1993 USFWS Protocol, Fall 1996*.
- H.T. Harvey and Associates, 1997c. *Dublin Ranch San Joaquin Kit Fox Preliminary Report and Results from Earlier Phases of Kit Fox Surveys*.
- H.T. Harvey and Associates, 1998. *Dublin Ranch: Special-Status Amphibian and Reptile Surveys*. 15 pp.
- H.T. Harvey and Associates, 2000a. *Dublin Ranch Golden Eagle Nest Buffer-Zone Analysis*. 8 pp.

H.T. Harvey and Associates, 2000b. *Project Area Biological Assessment for the California Red-legged Frog*. 40 pp.

H.T. Harvey and Associates, 2000c. *Dublin Ranch Area A Golden Eagle Report*. 10 pp.

H.T. Harvey and Associates, 2000b. *Botanical Surveys*, April 17. April 1990, June and October 1998, March 1999

Ingles, 1965. *See Biosystems Analysis 1989*.

Institute of Transportation Engineers, 1997. *Trip Generation*.

Jenkins and Harris-Haller, 1981. *See Biosystems Analysis 1989*.

Kartesz and Kartesz, 1980. *See Biosystems Analysis 1989*.

Kruckeberg, 1957, 1958. *See Biosystems Analysis 1989*.

Leonard and Gould, 1974. *See Biosystems Analysis 1989*.

Luckenbach, 1975. *See Biosystems Analysis 1989*.

McMinn, 1939. *See Biosystems Analysis 1989*.

Monk and Associates, 1997. *Vernal Pool Crustacean Surveys. Stonechase Project Site, Alameda County, California*. 50 pp + appendices.

Munz and Keck, 1959. *See Biosystems Analysis 1989*.

Murie, 1954. *See Biosystems Analysis 1989*.

Murie, 1965. *See Biosystems Analysis 1989*.

Orloff S., L. Spiegel, and F. Hall. 1986. *Distribution and Habitat Requirements of the San Joaquin Kit Fox in the Northern Extreme of its Range*; Wildlife Society – (CAL-NEV) Trans. West. Sec. Wild. Soc. 22:60-70.

Orloff et. al., 1976. *See Biosystems Analysis 1989*.

Orloff, S., F. Hall, and L. Speigal. 1986. *Distribution and Habitat Requirements of the San Joaquin Kit Fox in the Northern Extreme of Their Range*. Transactions of the Western Section of the Wildlife Society 22:60-70.

Orloff in press. *See Biosystems Analysis 1989*.

Orloff, S., A.W. Flannery, and K.C. Belt. 1993. *Identification of San Joaquin Kit Fox (*Vulpes macrotis mutica*) Tracks on Aluminum Tracking Plates*. Calif. Fish and Game 79(2):45-53.

Remsen, J. V., 1978. *Bird Species of Special Concern in California*. An Annotated List of Declining or Vulnerable Bird Species; California Department of Fish and Game Wildlife Management Branch Admin. Rept. No. 78-1.

Schemnitz, 1980. See *Biosystems Analysis* 1989.

Shilts Consultants, Inc., 2001. *Draft Dublin Unified School District Study of Demographic Projections and School Construction Revenue Analysis*, June 2001.

Schitoskey, 1975. See *Biosystems Analysis* 1989.

Snow, 1973. See *Biosystems Analysis* 1989.

Stebbins and Major, 1985. See *Biosystems Analysis* 1989.

Swaim, Karen, 1994. *Aspects of the Ecology of the Alameda Whipsnake (Masticophis lateralis euryxanthus)*. Masters Thesis, Hayward State University. 140 pp.

Sycamore Associates LLC, Balance Hydrologics, dk Associates. 1996. *Eastern Dublin Comprehensive Stream Restoration Program*. Technical report prepared for the City of Dublin. June.

Sycamore Associates LLC. 2001a. *Site Assessment for California Red-legged Frog and California Tiger salamander at the Bankhead/Mandeville Properties*. Technical report prepared for the Braddock and Logan Group. July.

Sycamore Associates LLC. 2001b. *Site Assessment for California Red-legged Frog at the Dublin Corporate Center, Dublin, Alameda County, CA*. Technical report prepared for the Foster Enterprises, Matt Righetti and Michael Tseng. July.

Sycamore Associates LLC. 2001c. *California Red-legged Frog Focused Surveys, Dublin Corporate Center Project Site, Dublin Alameda County, CA*. Technical report prepared for the Foster Enterprises, Matt Righetti and Michael Tseng. August.

Sycamore Associates LLC. 2001d. *California Tiger Salamander Focused Surveys, Dublin Corporate Center Project Site, Dublin Alameda County, CA*. Technical report prepared for the Foster Enterprises, Matt Righetti and Michael Tseng. August.

The Habitat Restoration Group. 1992. *Surveys for San Joaquin Kit Fox, Amphibians and Other Wildlife Species of Concern*. 37pp.

Thomas, J.W. (Tech. Ed), 1979. *Wildlife Habitats in Managed Forest: The Blue Mountains of Oregon and Washington*; U.S. Dept. Agriculture, Forest Service. Agriculture Handbook No. 553, Washington, D.C. 512 pp.

TJKM, 2000. *A Traffic Study for the Proposed Dublin Ranch Areas F-H Development*.

TJKM, 2000. *A Traffic Study for the Proposed Emerald Glen Apartments Development*.

TJKM, 2000. *A Traffic Study for the Proposed Sybase Headquarters*.

TJKM, 2000. *A Traffic Study for the Proposed Marriott Hotel*.

TJKM, 2001. *A Traffic Study for the Proposed Residential Development on the Silveria Property on Tassajara Road*.

- Townsend, Susan PhD, 2002. *Early Evaluation for the San Joaquin Kit Fox, Bankhead and Mandeville Properties, Dublin, CA.* Report prepared for Braddock and Logan Group by Susan E. Townsend and Sycamore Associates, Walnut Creek, CA.
- U.S. Army Corps of Engineers (USCOE), 2000. *Final Notice of Issuance and Modification of Nationwide Permits.* Federal Register Vol. 65 (47): 12818-12899.
- U.S. Fish and Wildlife Service (USFWS), 1993. *San Joaquin Kit Fox Survey Protocol For the Northern Range.* U.S. Fish and Wildlife Service, Sacramento Field Office, Sacramento, California.
- U.S. Fish and Wildlife Service (USFWS), 1996a. *Endangered and Threatened Plant and Animal Taxa; Proposed Rule.* 50 CFR part 17. February 28.
- U.S. Fish and Wildlife Service (USFWS), 1996b. *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants.* September 23.
- U.S. Fish and Wildlife Service (USFWS), 1996c. *Programmatic Formal Endangered Species Act Consultation on Issuance of 404 Permits for Projects with Relatively Small Effects on Listed Vernal Pool Crustaceans within the Jurisdiction of the Sacramento Field Office, California.* February 28.
- U.S. Fish and Wildlife Service (USFWS), 1997. *San Joaquin Kit Fox Survey Protocol For the Northern Range.* U.S. Fish and Wildlife Service, Sacramento Field Office, Sacramento, California.
- U.S. Fish and Wildlife Service (USFWS), 1997a. *Standardization Recommendations For Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance.* U.S. Fish and Wildlife Service, Sacramento Field Office, Sacramento, California.
- U.S. Fish and Wildlife Service (USFWS), 1997b. *Interim Guidance on Site Assessment and Field Surveys for California Red-Legged Frog.* Sacramento, California.
- U.S. Fish and Wildlife Service (USFWS), 1998. *Endangered and Threatened Wildlife and Plants.* 50 CFR 17.11 & 17.12. December 31.
- U.S. Fish and Wildlife Service (USFWS), 1999. *Survey Protocol for the San Joaquin Kit Fox for the Northern Range.* June 1999.
- U.S. Fish and Wildlife Service (USFWS), 2000. *Endangered and Threatened Wildlife and Plants; Proposed Determination and Critical Habitat for the Alameda Whipsnake (*Masticophis lateralis euryxanthus*).* March 8.
- U.S. Fish and Wildlife Service (USFWS), 2000a. *Draft Recovery Plan for the California Red-legged Frog (*Rana aurora draytonii*).* U.S. Fish and Wildlife Service, Portland, Oregon. 258 pp.
- Wallace, 1976. See Biosystems Analysis 1989.
- Wallace Roberts & Todd. 1992. *Eastern Dublin Draft EIR, A. Section 3.7 – Biological Resources. Figure 3.7-C Sensitive Species.* August.
- Weinstein, 1978. See Biosystems Analysis 1989.

Water Transfer Associates, 1999. *Water Supply Planning Study Update*. Prepared for Alameda County Flood Control and Water Conservation District (Zone 7). February 1999.

West Yost & Associates, 2000. *Water Master Plan*, September 2000. Prepared for the Dublin San Ramon Services District.

Williams, D.F. 1986. *Mammal Species of Special Concern in California*. California Department of Fish and Game. 111 pp.

Yosef, R. 1996. *Loggerhead shrike (Lanius ludovicianus)*. In A. Poole and F. Gill [eds], *The Birds of North America*, No. 231. Acad. Nat. Sci. Philadelphia ; and Amer. Onithol. Union, Washington, D. C.

Zander Associates. 2000. *Request for Jurisdictional Determination for the Jordan Ranch*, April 11.

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**Revised Draft Supplemental Environmental Impact Report**

**East Dublin Properties  
Stage 1 Development Plan and Annexation**

**Volume 2: Appendices**

**SCH No. 2001052114**

## Revised Draft Supplemental Environmental Impact Report

# East Dublin Properties Stage 1 Development Plan and Annexation

Volume 2: Appendices

SCH No. 2001052114

Lead Agency  
City of Dublin

January 2002



# CITY OF DUBLIN

100 Civic Plaza, Dublin, California 94568

Website: <http://www.ci.dublin.ca.us>

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## Notice of Preparation

**To:** Distribution List (see attached)

**Subject:** Notice of Preparation of a Draft Supplemental Environmental Impact Report

**Date:** May 25, 2001

**Lead Agency:**

*City of Dublin  
Planning Department  
100 Civic Plaza  
Dublin CA 94568*

*Contact: Anne Kinney, AICP, Planning Department, (925) 833 6610*

The City of Dublin will be the Lead Agency and hereby invites comments on the proposed scope and content of the Environmental Impact Report for the project identified below. Your agency may need to use the EIR prepared by the Lead Agency when considering follow-on permits or other approvals for this project.

**Project Title:** East Dublin Properties (PA 00-025).

**Project Location:** Unincorporated area of Alameda County, adjacent to City of Dublin eastern city limits, immediately north of Interstate 580 and east of Fallon Road. See attached project location map. The site encompasses approximately 1,120 acres of land.

**Project Description:** Planned Development Prezone / Stage 1 Development Plan and Annexation/Detachment application to facilitate the annexation of approximately 1,120 acres of land to the City of Dublin and attachment to and detachment from various service districts. The Planned Development (PD) Prezone / Stage 1 Development Plan would provide zoning for various land uses including commercial, industrial and residential development, parks, schools, open space and other uses.

The attached Initial Study identifies potential environmental effects anticipated to be discussed in the Supplemental Environmental Impact Report.

Due to time limits mandated by State law, your response must be returned at the earliest possible time but not later than June 27, 2001. Please send your response to the contact person identified above.

Signature: Anne Kinney  
Title: Associate Planner  
Telephone: 833-6610 (925)

Area Code (925) • City Manager 833-6650 • City Council 833-6650 • Personnel 833-6605 • Economic Development 833-6650  
Finance 833-6640 • Public Works/Engineering 833-6630 • Parks & Community Services 833-6645 • Police 833-6670  
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East Dublin Property Owners

APPENDIX A: INITIAL STUDY

**INITIAL STUDY - SUPPLEMENTAL EIR  
East Dublin Properties**

**City of Dublin**

**Environmental Checklist/  
Initial Study**

## **Introduction**

This Initial Study has been prepared in accordance with the provisions of the California Environmental Quality Act (CEQA, as amended), and assesses the potential environmental impacts of implementing the proposed project described below.

The Initial Study consists of a completed environmental checklist and a brief explanation of the environmental topics addressed in the checklist. Because the proposed project is based on the land use designations, circulation patterns, etc. assigned to the project area by the City of Dublin's General Plan and Eastern Dublin Specific Plan, this Initial Study relies upon a Program EIR certified by the City of Dublin in 1993 for the Eastern Dublin General Plan Amendment and Specific Plan (the "Eastern Dublin General Plan Amendment and Specific Plan Environmental Impact Report", State Clearinghouse No. 91103064). That EIR, which is referred to in this Initial Study as the "Eastern Dublin EIR", evaluated the following impacts: Land Use; Population, Employment and Housing; Traffic and Circulation; Community Services and Facilities; Sewer, Water and Storm Drainage; Soils, Geology and Seismicity; Biological Resources; Visual Resources; Cultural Resources; Noise; Air Quality; and Fiscal Considerations.

Some of the potentially significant impacts identified in the Eastern Dublin EIR apply to the proposed project and, therefore, the adopted mitigation measures also apply and are included in this Initial Study by reference. However, as indicated in the environmental checklist, conditions related to Agricultural Resources, Air Quality, Biological Resources, Noise, Public Services (schools), Transportation/Circulation, and Utilities/Service Systems may have changed enough since the EIR was certified that new potentially significant environmental impacts may exist for those topics, or a potentially substantial increase in the severity of the previously identified significant effects for those topics may exist. However, because only minor additions or changes are necessary to make the Eastern Dublin EIR adequate in light of those changed circumstances, a focused Supplemental Environmental Impact Report (SEIR) will be prepared for the proposed project.

## Applicant/Contact Person

East Dublin Property Owners  
c/o Shea Homes, Kathryn Watt  
2580 Shea Center Drive  
Livermore, CA 94550  
Phone: (925) 245-3600  
FAX: (925) 245-8833

## Project Location and Context

The project site is approximately 1,110 acres in area and is located in an unincorporated area of Alameda County bounded by Interstate 580 (I-580) to the south and Fallon Road to the west. Exhibit 1 shows the project location in relation to the general Bay Area. The area abuts the eastern city limit boundary of the City of Dublin (please refer to Exhibit 2). The entire project area is located within the City of Dublin's General Plan Planning Area and Sphere of Influence. Approximately 472 acres of the project area also are included within the City's Eastern Dublin Specific Plan area (please refer to Exhibit 4). The project site consists of thirteen (13) different parcels under eleven (11) separate ownerships (please refer to Exhibit 7).

The topography of the site ranges from relatively flat at the southern portion near the freeway, to gently rolling hills at the center of the site, to relatively steep slopes, some exceeding 30% in some places. A series of low knolls trending from northwest to southeast bisect the southern portion of the property and provide a backdrop to the flatter portions of the site near the freeway. A few drainages flow in a north to south orientation, transecting the project area along its length. Exhibit 3 shows the topography of the project site. A small number of trees exist beyond those planted around existing homesteads and scattered in the drainages.

The project properties currently are used primarily for dryland farming and cattle grazing with rural residences, a horse ranch and associated outbuildings scattered throughout the site. Improvements to the agricultural lands generally consist of paved and unpaved roads, fences, barns, corrals, wells, water tanks, ponds, single-family homes and various outbuildings.

In 1994 the City of Dublin adopted a General Plan Amendment and a Specific Plan which addressed long-term development of approximately 4,200 acres of land east of the central portion of Dublin. The entire project site is located in the easternmost portion of that General Plan Amendment area and a portion of the site (approx. 472 acres) is located within the Specific Plan area. The proposed project would implement the easternmost portion of the Eastern Dublin Specific Plan and General Plan. For the portion of the project area located within the Eastern Dublin Specific Plan (EDSP), the Specific Plan identifies land uses, circulation patterns, infrastructure requirements, and programs and policies which. At build-out, this portion of the project's 472 acres would provide

approximately 1,240 dwelling units and almost 1.4million square feet of office, commercial and industrial floor space at the mid-point densities contemplated by the EDSP. This represents approximately 10% of the total EDSP residential units and 11% of the total office, commercial, industrial and institutional floor space (Eastern Dublin Specific Plan, page 16). This portion of the project site also provides 103 acres for schools, public parks and open space, approximately 11% of the total EDSP acreage designated for such uses (Eastern Dublin Specific Plan, pp. 24-25). The other 637 acres of the project site have been designated by the General Plan for residential land uses and would provide 1,286 dwelling units at mid-point densities for low density and rural residential/agriculture uses indicated by the General Plan, with 34.5 acres dedicated to schools, parks and open space.

## Project Description

All of the subject property is located within the unincorporated area of Alameda County. The proposed project consists of: a Stage 1 Development Plan application to the City of Dublin requesting a pre-zoning of the site in accordance with the City's General Plan and Eastern Dublin Specific Plan; annexation of the project area to the City of Dublin and the Dublin San Ramon Services District (DSRSD); execution of a Pre-Annexation Agreement between the City of Dublin and the project proponents/property-owners; detachment from the Livermore Area Recreation and Park District (LARPD) upon annexation of the project area to the City of Dublin; and, post-annexation, probable cancellation of Williamson Act contracts for several of the properties within the project area. Although not requiring City action, the project proponents also are requesting detachment of the project area from the Livermore Valley Joint Unified School District (LVJUSD) and attachment to the Dublin Unified School District (DUSD). This Initial Study evaluates all of those actions.

### *Stage 1 Planned Development (Prezoning)*

State law requires property to be prezoned before annexation can take place. Prezoning is an action to indicate what city zoning will take effect once the annexed property becomes part of the city. The City of Dublin uses a Stage 1 Planned Development (PD) under Chapter 8.32 of its zoning ordinance to prezone property in accordance with the City's General Plan and, in this case, Eastern Dublin Specific Plan land use designations. Under the City's zoning ordinance a Stage 1 development plan must establish: a plan of proposed land use by type and density of use; the maximum number of dwelling units and commercial/office/industrial areas; a master landscape plan; and a preliminary development phasing plan. Once the site is annexed, project proponents will apply for a Stage 2 PD for site-specific zoning and development plan approval. City approval of a Stage 2 development plan must be received to complete the PD zoning process.

Table 1 indicates the land uses and development intensities proposed for the project site. Proposed land uses, residential densities and development intensities are consistent with the City's recommended midpoint densities of the General Plan and Eastern Dublin Specific Plan. The project proposes a maximum of 2,526 dwelling units and

approximately 1.4 million square feet of neighborhood commercial, general commercial and industrial park development. Also included in the plan are approximately 32 acres for school sites, 41 acres for parks, and a minimum of 77 acres of open space. Residential densities range from Low (0.9 - 6 du/acre) to Medium High (14-25 du/acre), although 270 acres of the project area is designated for Rural Residential density which allows only 1 unit for every one hundred acres.

Exhibit 6 shows the proposed land uses and pre-zoning designations for the project area. Commercial and industrial uses are located generally along the freeway corridor where noise would overly impact residential uses and where access is easiest for such uses. Residential uses are located in the northern two thirds of the project area. Parks and schools are distributed throughout the project site as indicated by the Specific Plan and General Plan: two elementary schools, one junior high school, four neighborhood parks, and a neighborhood square with additional acreage to be dedicated to a large planned community park just west of the proposed project. The EDSP anticipated that the Alameda County Airport Land Use Commission might adopt an Airport Protection Area (APA) for the Livermore Municipal Airport which would prohibit residential uses within 5000 feet of the airport runways. Some areas of the EDSP designated for residential land uses and which were anticipated to be within the future APA, also are designated in the EDSP as Future Study Area, requiring additional review and action by the City to determine the most appropriate land use (see also page 16 of the Eastern Dublin Specific Plan). This designation affects 92.6 acres of the project site.

As part of the proposed project, the project developers would construct all major roadways and public infrastructure such as water, wastewater, recycled water, and storm drainage facilities. Major roadways would be constructed to and through the project area with project proponents utilizing assessment districts, Mello Roos districts or other appropriate financing mechanisms to help fund construction.

Grading activities would occur within the project area to accommodate planned land uses, roads and utilities, although the amount of grading will not be established until the Stage 2 Planned Development when detailed site and grading plans are developed. Water, sewer and recycled water services would be provided to the area by DSRSD in accordance with plans formulated by DSRSD and the City's General Plan and Eastern Dublin Specific Plan. As development in Dublin continues expanding eastward to Fallon Road and the project site, public utilities will be extended concomitantly. The project developers would continue the extension of these services throughout the project site as it is developed.

Water distribution mains are planned to be located in all major streets. Construction of water storage reservoirs are not anticipated to be part of this project. Sewer service for the project would be provided through connection to the DSRSD sewer system once it is extended through Dublin Ranch, located to the west of the project area. Gravity flow sewer mains would be installed along Central Parkway and Dublin Boulevard. Temporary pumping stations may be needed in the initial stages of development. When and where available, DSRSD would provide recycled water for irrigation purposes, reducing the need for potable water.

The storm drainage system would consist of underground pipes and culverts throughout the site connecting to box culverts and/or open channels that would flow southerly and westerly along I-580 to the existing G-3 drainage channel, an Alameda County Flood Control and Water Conservation District facility.

The City of Dublin's inclusionary zoning ordinance requires that 5% of a project's dwelling units must be affordable to very low, low and moderate income households. Compliance could consist of constructing the required number of inclusionary units or paying an in-lieu fee to the City. The project proponents will be required to comply with the ordinance, although the specific method generally would not be determined until the Stage 2 PD and related subdivision maps are reviewed.

The project applicants indicate that land uses and infrastructure would be phased over a number of years to ensure that roads and other infrastructure facilities would be available to support land uses as they are needed. As indicated in the applicants' Stage 1 PD submittal to the City, preliminary development of the first phases could commence in two years with project build-out anticipated to be completed over the ensuing five to ten years.

#### *Proposed Reorganization (annexations and detachments)*

The project site is contiguous with the City of Dublin and all of its 1,120 acres lie within Dublin's Sphere of Influence and within the Sphere of Influence of the Dublin San Ramon Services District (DSRSD). The City's General Plan and the Eastern Dublin Specific Plan (which addresses 472 acres of the project area), contemplated the eventual annexation and development of the project site in accordance with the land use designations, programs and policies of each Plan. The annexation of the project site by Dublin would complete the expansion of the City in this area per its current Sphere of Influence.

Similarly, the project area is within the expected service area of DSRSD and all of DSRSD's master plans for the provision and distribution of water, wastewater service, and recycled water include the annexation of, and service to, the project site. Because the water, wastewater, and recycled water services are provided to the City of Dublin by DSRSD, the City and DSRSD have concurred in policy that their boundaries and Spheres of Influence will be coterminous (except for that portion of DSRSD's service area which extends to portions of Contra Costa County). Hence, annexation of the area to the City also requires annexation of the area to DSRSD to provide needed services.

One of the City's General Plan Guiding Policies (3.3 A) is to expand park area to serve new development. Both the City's General Plan and Eastern Dublin Specific Plan contemplate the expansion of park services to the project site and indicated preferred park locations within the project area. However, the project site currently is within the boundaries of LARPD. Detachment of the project area from the LARPD service area is a logical step once annexation of the project area to the City of Dublin is assured, particularly since Dublin has planned for the expansion of its park services. A similar

detachment was carried out when the property immediately to the west was annexed to the City.

The project site is located within the City's General Plan Eastern Extended Planning Area. A City of Dublin Guiding Policy (4.1 B) promotes cooperation with the Dublin Unified School District to ensure provision of school facilities in the Extended Planning Area, thereby ensuring that all incorporated areas of the City are served by one school district. The General Plan and Eastern Dublin Specific Plan have indicated potential school sites within the project area which are to be offered for dedication to DUSD. Dublin Unified School District has considered the project area for service since adoption of the Eastern Dublin General Plan and the Eastern Extended Planning Area. However, as above, the project area currently is within the boundaries of the Livermore Valley Joint Unified School District. Deannexation of the project area from the LVJUSD service area is a logical step once annexation of the project area to the City of Dublin is assured, particularly since DUSD and the City have planned for school service to the project area. A similar reorganization of school district boundaries occurred when property immediately to the west was annexed.

A reorganization of school district boundaries, however, does not require a City action or LAFCO action, but does require approval by the two involved school boards. The project applicant already has been in contact with the staff's of both school districts and will make a request for reorganization to the two boards.

#### *Pre-annexation Agreement/Development Agreements*

The City requires that the project proponents and property owners enter into pre-annexation and development agreements with the City. Pre-annexation agreements encourage project proponents and the City to meet certain mutual obligations while the area proposed for annexation is proceeding through entitlement processes and ensure that the proposed project will not be a financial burden to the City. Development agreements vest development approvals for a specified period of time so that developers of large, time extensive projects have the ability to construct such projects in a time frame and under mutual obligations beneficial to the City and the project proponent. Issues typically addressed in development agreements include, but are not limited to: density and intensity of land use; timing of development; financing methods and timing of infrastructure; determination of traffic, noise, public facility and other impact fees; and obligations for construction of streets and roads. Development agreements would be part of a later City action generally occurring with City approval of a Stage 2 Planned Development, Site Development Review and tentative subdivision map..

#### *Williamson Act Cancellation*

Four of the thirteen parcels, approximately 637 acres, are under Williamson Act contracts (please refer to Exhibit 8). Under the Williamson Act, the landowner agrees to limit the use of land to agriculture and compatible uses for a minimum period of ten years. In turn, the county in which the land is located agrees to tax the land at a lower rate based upon its agricultural use rather than its real estate market value. To withdraw

from a contract, the land-owner must notify the county with a Notice of Non-Renewal. Withdrawal involves a ten-year period of tax adjustments based upon full market value before land can be removed from the preserve program. Notices of non-renewal have been filed on the four parcels noted above, with contracts expiring in 2006, 2009 and 2010. It is anticipated that at least several of the property-owners of these four parcels will request early cancellation of these contracts upon annexation to the City.

- |                                      |  |
|--------------------------------------|--|
| <b>1. Project description</b>        | Application for a Stage 1 PD (rezoning), request for annexation to the City of Dublin and DSRSD, detachment from LARPD, request to enter into pre-annexation agreements; and potential Williamson Act contract cancellation for the four parcels in Exhibit 8.   |
| <b>2. Lead agency:</b>               | City of Dublin<br>100 Civic Plaza<br>Dublin, CA 94583  |
| <b>3. Contact person:</b>            | Anne Kinney, Dublin Planning Department<br>(925) 833-6610  |
| <b>4. Project location:</b>          | North of I-580 and east of Fallon Road   |
| <b>5. Project contact person:</b>    | East Dublin Property Owners<br>c/o Shea Homes, Kathryn Watt<br>2580 Shea Center Drive<br>Livermore, CA 94550<br>(925) 245 3600   |
| <b>6. General Plan designations:</b> | Low Density Residential (0.9-6.0 du/ac), Medium Density Residential (6.1-14.0 du/ac), Medium High Density Residential (14.1-25.0 du/ac), Rural Residential/Agriculture (0.01 du/ac), Neighborhood Commercial (.25-.60 FAR), General Commercial (.20-.60 FAR), Industrial Park (.35 FAR maximum), Elementary School, Junior High School, Neighborhood Park, Community Park, Neighborhood Square, Open Space and Stream Corridor |
| <b>7. Proposed Pre-zoning:</b>       | PD-Single Family Residential, PD-Medium Density Residential, PD-Medium High Density Residential, PD-Neighborhood Commercial, PD-General Commercial, PD-Industrial Park, PD - Future Study Area (Rural Residential/Agriculture and General Commercial), PD-Elementary School, PD-Junior   |

High School, PD-Neighborhood Park, PD-Neighborhood Square, PD-Community Park, PD-Rural Residential/Agriculture, and PD-Open Space.

**8. Other public agency required approvals:**

- Annexation (City of Dublin)
- Annexation (DSRSD)
- Referral to Alameda County Airport Land Use Commission (ALUC)
- Detachment (LVJUSD)
- Detachment (LARPD)
- Attachment (DUSD)
- Stage 2 Development Plans (City of Dublin)
- Development Agreement
- Vesting tentative and final subdivision maps (Dublin)
- Site Development Review
- Grading and building permits (City of Dublin)
- Sewer and water connections (DSRSD)
- Encroachment permits (City of Dublin)
- Potentially:
  - Notice of Intent (Water Resources Control Board)
  - 404 Permit (US Army Corps of Engineers)
  - Streambed Alteration Permit (California Department of Fish and Game)
  - Permits from San Francisco Bay Region Water Quality Control Board
  - Permits from U.S. Fish and Wildlife Service
- Encroachment or other permits from CalTrans

## Environmental Factors Potentially Affected

The environmental factors checked below may be potentially affected by this project, involving at least one impact that is a "potentially significant impact" as indicated by the checklist on the following pages.

	Aesthetics	X	Agricultural Resources	X	Air Quality
X	Biological Resources		Cultural Resources		Geology/Soils
	Hazards and Hazardous Materials		Hydrology/Water Quality		Land Use/Planning
	Mineral Resources	X	Noise		Population/Housing
X	Public Services		Recreation	X	Transportation/Circulation
X	Utilities/Service Systems	X	Mandatory Findings of Significance		

### Determination (to be completed by Lead Agency)

On the basis of this initial evaluation:

       I find that the proposed project could not have a significant effect on the environment and a **Negative Declaration** will be prepared.

       I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A **Negative Declaration** will be prepared.

X I find that although the proposed project may have a potentially significant effect, or a potentially significant effect unless mitigated, on the environment, but at least one effect: 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards; and 2) has been addressed by mitigation measures based on the earlier analysis as described on the attached sheets. A **focused Supplemental Environmental Impact Report** is required, but it must only analyze the effects that remain to be addressed.

       I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because all potentially

significant effects: a) have been analyzed adequately in an earlier EIR pursuant to applicable standards; and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed on the proposed project.

Signature: Anne Kinney Date: May 24, 2001

Printed Name: Anne Kinney For: \_\_\_\_\_

## Evaluation of Environmental Impacts

- 1) A brief explanation is required for all answers except "no impact" answers that are supported by the information sources a lead agency cites in the parenthesis following each question. A "no impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone), or, in this case, there is no impact of the proposed project beyond that which was considered previously in the Eastern Dublin EIR and/or for which a Statement of Overriding Consideration was adopted by the City Council at the time the Eastern Dublin EIR was certified. A "no impact" answer should be explained where it is based on project-specific factors as well as general factors (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect is significant. If there are one or more "potentially significant impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Potentially Significant Unless Mitigation Incorporated" implies elsewhere the incorporation of mitigation measures has reduced an effect from "potentially significant effect" to a "less than significant impact". The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level.

**Environmental Impacts** (Note: Source of determination listed in parenthesis. See listing of sources used to determine each potential impact at the end of the checklist.)

## Issues:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>I. AESTHETICS -- Would the project:</b>				
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, within a state scenic highway?			X	
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

**II. AGRICULTURE RESOURCES:**

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	X
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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?		X		
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?		X		
<b>III. AIR QUALITY --</b> Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?		X		
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?		X		
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?		X		
d) Expose sensitive receptors to substantial pollutant concentrations?				X
e) Create objectionable odors affecting a substantial number of people?				X

**IV. BIOLOGICAL RESOURCES --**

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?		X		
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		X		
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		X		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		X		
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?		X		

Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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**V. CULTURAL RESOURCES --**

Would the project:

- a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5? X
- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5? X
- c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? X
- d) Disturb any human remains, including those interred outside of formal cemeteries? X

**VI. GEOLOGY AND SOILS --** Would the project:

- a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. X
  - ii) Strong seismic ground shaking? X
  - iii) Seismic-related ground failure,

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
including liquefaction?			X	
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X

## VII. HAZARDS AND HAZARDOUS MATERIALS--Would the project:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? X
- b) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? X
- c) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			X	
d) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?			X	
e) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?			X	
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			X	
<b>VIII. HYDROLOGY AND WATER QUALITY -- Would the project:</b>				
a) Violate any water quality standards or waste discharge requirements?			X	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
level which would not support existing land uses or planned uses for which permits have been granted)?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			X	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			X	
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			X	
f) Otherwise substantially degrade water quality?			X	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
j) Inundation by seiche, tsunami, or mudflow?			X	
<b>IX. LAND USE AND PLANNING - Would the project:</b>				
a) Physically divide an established community?			X	
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			X	
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?			X	
<b>X. MINERAL RESOURCES -- Would the project:</b>				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			X	
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?			X	
<b>XI. NOISE -- Would the project result in:</b>				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
noise ordinance, or applicable standards of other agencies?		X		
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?		X		
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				X
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		X		
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

## XII. POPULATION AND HOUSING

-- Would the project:

- a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?
- b) Displace substantial numbers of existing housing, necessitating the

X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

### XIII. PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- a) Fire protection? X
- b) Police protection? X
- c) Schools? X
- d) Maintenance of public facilities, including roads? X

### XIV. RECREATION --

- a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? X
- b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
might have an adverse physical effect on the environment?			X	
<b>XV. TRANSPORTATION/TRAFFIC</b>				
-- Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?		X		
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?		X		
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?			X	
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?		X		
e) Result in inadequate emergency access?		X		
f) Result in inadequate parking capacity?			X	
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?			X	

**XVI. UTILITIES AND SERVICE SYSTEMS** -- Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?		X		
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?		X		
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?		X		
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?		X		
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments?		X		
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?		X		
g) Comply with federal, state, and local statutes and regulations related to solid waste?			X	
h) Have sufficient gas and electricity supplies available to serve the project from existing entitlements and resources?		X		

Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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## XVII. MANDATORY FINDINGS OF SIGNIFICANCE --

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

X

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

X

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

X

### Sources used to determine potential environmental impacts:

1. City of Dublin General Plan (Revised July 7, 1998)
2. Final Eastern Dublin Specific Plan, City of Dublin (June 6, 1998)
3. Certified Environmental Impact Report (State Clearinghouse No. 91103064), Eastern Dublin General Plan Amendment and Specific Plan (including the Draft and Final EIRs, Addenda, etc.)

These documents are available for review at:

City of Dublin Community Development Department  
100 Civic Plaza  
Dublin, CA 94568

## XVII. Earlier Analyses

This Initial Study is being prepared to determine whether an earlier EIR (the EIR prepared for the Eastern Dublin General Plan Amendment and Specific Plan, State Clearinghouse No. 91103064) may be used to evaluate the proposed project pursuant to CEQA Guidelines (Section 15063 (c)(7)).

- a) **Earlier analyses used.** Identify earlier analyses and state where they are available for review.

Portions of the environmental setting, project impacts and mitigation measures for this Initial Study refer to environmental information contained in the 1992 Eastern Dublin General Plan Amendment and Specific Plan Environmental Impact Report (State Clearinghouse No. 91103064), hereinafter referred to as the Eastern Dublin EIR. The Eastern Dublin EIR is a Program EIR which was prepared for the Eastern Dublin General Plan Amendment and Specific Plan of which this Project is a part. It was certified by the Dublin City Council on May 10, 1993. As part of the certification the Council adopted a Statement of Overriding Considerations for the following impacts: cumulative traffic, extension of certain community facilities (natural gas, electric and telephone service), regional air quality, noise and visual.

The Eastern Dublin EIR contains a large number of mitigation measures which apply to this Project and which would be applied to any development within the Project area. Specific mitigation measures identified in the certified Eastern Dublin EIR for potential impacts are referenced in the text of this Initial Study.

Since certification of the Eastern Dublin EIR, several changes in circumstances in which the Project will take place have occurred and which could effect the impacts and/or mitigations analysis of the Project. Such changes in circumstances include, but are not limited to: 1) additions of species to the California and/or Federal Endangered or Threatened Species Lists; 2) continued development in the Tri-Valley area and beyond with potential changes in commute patterns and traffic intensities, which also may affect air quality and noise within or on the project area; 3) changes in California law regarding annexations (i.e., adoption of AB 2838) which may affect the designation of portions of the project site as prime agricultural soils; and 4) changes in the provision and distribution of some public services (schools) and public utilities (water, wastewater, storm drainage and gas and electricity).

Pursuant to CEQA Guidelines Section 15162 and 15163, this Initial Study is intended to identify the potential for any new or substantially increased significant impacts on or of

the Project which were not evaluated in the Eastern Dublin EIR and which would require additional environmental review.

## Attachment to Initial Study

### Discussion of Checklist

<b>Legend</b>	<b>PS:</b> Potentially Significant
	<b>LS:</b> Less Than Significant; or Less Than Significant due to the previously adopted mitigation measures of the Eastern Dublin EIR
	<b>NI:</b> No Impact; or No Additional Impact beyond that which was previously identified in the Eastern Dublin EIR and/or for which a Statement of Overriding Consideration was adopted

### I. AESTHETICS

#### Environmental Setting

The project site is vacant except for nine residences and some scattered agricultural buildings. The Eastern Dublin EIR classifies the project site mainly as "dry-farming rotational cropland" covering approximately the southern two-thirds of the site and "non-native grassland" covering the northern one third. Where agricultural activity, including grazing, historically has taken place, the visual image of the land is formed by patterns of the soil that have been furrowed by mechanical means or livestock.

The Eastern Dublin Specific Plan (pp. 71-72) identifies certain ridgelines and ridgelines within the Project area as "visually sensitive". The lower spur ridges may be developed consistent with Specific Plan land use designations as long as they meet certain requirements specified in the Specific Plan. These include the lower, southern series of east-west trending foothills and three other ridgelines behind these at a general elevation of 500 feet. Development is prohibited on other ridgelines further to the east and north (please refer to Figure 6.3 of the Eastern Dublin Specific Plan). The City's General Plan also identifies an elevation "cap" above which certain development is prohibited and provides guidelines for sensitive development at certain elevations and slopes.

#### Project Impacts and Mitigation Measures

- a) *Have a substantial adverse impact on a scenic vista?*

**LS.** Approval and construction of the proposed Project would alter the character of existing scenic vistas and could obscure important sightlines if not mitigated.

This impact was addressed in the Eastern Dublin EIR (Impacts 3.8/C, 3.8/D, 3.8/E, 3.8/G and 3.8/I)) and with implementation of mitigation measures the identified impacts on scenic vistas are *less-than-significant*.

These mitigation measures include: 3.8/3.0, 3.8/4.0-4.5, 3.8/5.0-5.2, 3.8/6.0, 3.8/7.0 and 3.8/7.1 (pages 3.8-4 through 3.8-9 of the Eastern Dublin EIR). These mitigation measures encourage preservation of important visual resources, minimized grading for development; grading and building to preserve natural contours; prohibition of development along identified ridgelines; and preservation of views of designated open spaces. These mitigation measures apply to the entire project area.

In addition, Policies 6-29 through 6-38 and text discussion within the Specific Plan provide direction for the type of development which may occur in "visually sensitive" areas. These policies are directed towards preserving scenic vistas and view corridors and provide guidelines for grading and building design and apply in addition to the above-listed mitigation measures, to the 472-acre of the project within the Specific Plan area.

The adopted mitigation measures would continue to apply to the entire project and the Specific Plan policies would continue to apply to the 472-acre portion within the Specific Plan. There are no impacts beyond those analyzed in the Eastern Dublin EIR and therefore no additional review or analysis is necessary.

b) *Substantially damage scenic resources, including state scenic highways?*

LS. Development of the project site will alter the visual experience of travelers on scenic routes in eastern Dublin. Interstate 580 has been designated as a scenic corridor by Alameda County. The Eastern Dublin Specific Plan anticipates that the proposed Fallon Road, which borders the Project area to the west, may be designated by the City as a scenic corridor.

This potential impact (Impact 3.8/J) was identified and addressed in the Eastern Dublin EIR and implementation of mitigation measures 3.8/8.0 and 3.8/8.1 (page 3.8-9) reduce this impact to a *less-than-significant* level. These mitigation measures encourage the City to adopt certain roads as scenic corridors (including Fallon Road), and encourage the City to require detailed visual analyses with development project applications (i.e., Stage 2 Planned Development applications). These mitigation measures apply to the entire project area. Additionally, Policies 6-30 and 6-31 of the Eastern Dublin Specific Plan provide guidance for areas of the Project visible from a scenic corridor. These policies, in addition to the above-listed mitigation measures, apply to the 472-acre of the project within the Specific Plan area.

The adopted mitigation measures would continue to apply to the entire project and the Specific Plan policies would continue to apply to the 472-acre portion within the Specific Plan. There are no impacts beyond those analyzed in the Eastern Dublin EIR and therefore no additional review or analysis is necessary.

c) *Substantially degrade existing visual character or the quality of the site?*

NI. This impact was addressed in the Eastern Dublin EIR (Impact 3.8/B - Alteration of Rural/Open Space Visual Character and Impact 3.8/F - Alteration of Visual Character of Flatlands). Development of the Project area would alter the existing rural and open space qualities and alter the existing visual character of valley grasses and agricultural fields. The EIR concluded that no mitigation measures could be identified to either fully or partially reduce this impact to a less than significant level. Therefore, the EIR concluded this impact would be a potentially significant unavoidable impact and an irreversible change and, pursuant to CEQA, the City of Dublin adopted a Statement of Overriding Consideration for this impact. The proposed project would not change the scale of development anticipated in the Eastern Dublin EIR for the project area and would not change the level of intensity of impact, therefore, no additional discussion or analysis is necessary.

d) *Create light or glare?*

LS. Construction of the proposed project would increase the amount of light and glare due to new street lighting and building security lighting. In some instances the additional lighting could result as perceived negative aesthetic impacts through the "spill over" of unwanted lighting onto adjacent properties, parks and other areas that are not intended to be lighted. The anticipated light and glare generated by the proposed Project would not be unique or sufficiently different from other development projects within the City or the Eastern Dublin planning area. In addition, development within a portion of the proposed Project area is subject to review by the Airport Land Use Commission for the Livermore Municipal Airport: all potential light sources must meet the criteria established by the ALUC prior to development. The City of Dublin has adopted regulations which limit the amount of "spill-over" lighting and conditions of approval also are routinely adopted with each project which address potential light and glare impacts. The City's zoning ordinance, adopted site development review guidelines, and conditions of approval become part of the project, if approved and the project would have impacts that are *less-than-significant*.

Because light and glare created by the proposed Project would be typical of development elsewhere in the City, and due to standard City regulations, light and glare impacts would be *less-than-significant*.

## II. AGRICULTURAL RESOURCES

### Environmental Setting

Historically the Project site has been used for grazing, dry-land farming, a horse ranch, and other non-intensive agricultural endeavors. The Eastern Dublin EIR characterizes the majority of the area as farmland "of local importance" (Figure 3.1-B), which is defined as those farmlands which contribute to the local production of food, feed, fiber, forage and oilseed crops (p. 3.1-2). The Eastern Dublin EIR considered the discontinuation of

agricultural uses as an insignificant impact due to the high percentage of Williamson Act contracts which were non-renewed and the limited value of the non-prime soils. And, because the farmlands on the Project site were not considered "prime", their loss was judged to be insignificant.

However, since certification of the Eastern Dublin EIR, the evaluation of soils considered as "prime" for annexation purposes has been modified through adoption of criteria established by the Cortese-Knox-Hertzberg Local Government Reorganization Act (Government Code Section 56064, referred to as Assembly Bill 2838). Soils which previously would not have been considered as "prime agricultural soils" and land which was not considered significant or important for agricultural purposes may now be considered as such by the new law.

#### Project Impacts and Mitigation Measures

*a, c) Convert prime farmland to a non-agricultural use or involve other changes which could result in conversion of farmland to a non-agricultural use?*

**PS.** According to the Agricultural Suitability Map for the Project area prepared by the Natural Resources Conservation Service, much of the site supports farmlands of "local importance" since it contributes to the production of feed (grazing). Almost 59 acres of the site are shown as containing Class I and II soils in the Land Use Capability Classification system of the Natural Resources Conservation Service. Under Assembly Bill 2838, Class I and II soils are considered "prime" as long as they have not been developed with non-agricultural uses. Since the proposed Project includes annexation to the City of Dublin and the Project area contains Class I and II soils, the effect of conversion of the property from grazing use to non-agricultural, planned urban uses may be a *potentially significant* environmental impact.

*b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?*

**PS.** Four of the thirteen parcels, approximately 637 acres, are under Williamson Act contracts (please refer to Exhibit 8). Under the Williamson Act, the landowner agrees to limit the use of land to agriculture and compatible uses for a minimum period of ten years. In turn, the county in which the land is located agrees to tax the land at a lower rate based upon its agricultural use rather than its real estate market value. To withdraw from a contract, the land-owner must notify the county with a Notice of Non-Renewal. Withdrawal involves a ten-year period of tax adjustments based upon full market value before land can be removed from the preserve program. Notices of non-renewal have been filed on the four parcels noted above, with contracts expiring in 2006, 2009 and 2010. It is anticipated that several of the property-owners of these four parcels will request cancellation of these contracts. With recent amendments to annexation statutes regarding the definition of prime agriculture lands further investigation of this potential impact is warranted to determine if this will be significant.

### III. AIR QUALITY

#### Environmental Setting

Dublin is located in the Tri-Valley Air Basin. Within the Basin, state and federal standards for nitrogen dioxide, sulfur dioxide and lead are met. Standards for other airborne pollutants, including ozone, carbon monoxide and suspended particulate matter (PM-10) are not met in at least a portion of the Basin.

#### Project Impacts and Mitigation Measures

- a) *Would the project conflict or obstruct implementation of an air quality plan?*

PS. Although the project itself may not contribute any more pollutants than originally anticipated by the Eastern Dublin EIR, as a result of more rapid urbanization in the Tri-Valley area than originally expected, an increase in traffic through the Tri-Valley from other areas, and changing commute patterns, the environment in which the project would occur may have changed enough such that the project could contribute to emissions exceeding Bay Area Air Quality Management District (BAAQMD) significance thresholds. This may be a *potentially significant* impact.

- b) *Would the project violate any air quality standards?*

PS. For the reasons noted above (i.e., changed environmental setting of the project), the project could contribute to emissions exceeding BAAQMD significance thresholds. This may be a *potentially significant* impact.

- c) *Would the project result in cumulatively considerable air pollutants?*

PS. For the reasons noted in a) above (i.e., the changed environmental setting of the project), the project could contribute to emissions exceeding BAAQMD significance thresholds. This may be a *potentially significant* impact.

- d, e) *Expose sensitive receptors to significant pollutant concentrations or create objectionable odors?*

NI. Development of the Project area with urban uses will create emissions from a variety of miscellaneous stationary (non-vehicular) sources such as fuel combustion in power plants or water heaters, industrial and commercial uses, evaporative emissions from paints and cleaning products, etc. The Eastern Dublin EIR noted that although such emissions would be extremely small for any individual resident, they could be substantial when summed over the entire scope of the project (Eastern Dublin EIR, p. 3.11-6). The Eastern Dublin EIR identified this impact as a potentially significant cumulative impact which could not be mitigated to achieve the eight-fold reduction in stationary source emissions needed to meet the insignificant threshold and, pursuant to CEQA, the City of Dublin adopted a Statement of Overriding Consideration for this impact. The proposed project would not change the scale of development anticipated in the Eastern Dublin EIR

for the project area and would not change the level of intensity of impact, therefore, no additional discussion or analysis is necessary

#### IV. BIOLOGICAL RESOURCES

##### Environmental Setting

Figure 3.7-A of the Eastern Dublin EIR indicates that the Project area is dominated by dry-farming rotational cropland and non-native grasslands. A small area of arroyo willow riparian woodland is located just to the east of Fallon Road. Several intermittent streams and stock ponds also are indicated in this figure. Fields utilized for dry-farming typically are cropped through various seasonal and annual rotations followed by fallow years. Crops and croplands are not irrigated. The site is traversed generally north to south by several drainages which may contain sensitive plant and/or animal species.

##### Project Impacts and Mitigation Measures

- a) *Have a substantial adverse impact on a candidate, sensitive, or special-status species?*

PS. The Eastern Dublin EIR identified twelve special status plant species, seventeen special status amphibian, reptile, bird and mammal species, and ten special status invertebrate species which could potentially occur within the entire Eastern Dublin planning area (Tables 3.7-1 and 3.7-2, pp. 3-7.19-21), based upon the U.S. Fish and Wildlife Service and the California Fish and Game Commission listings at that time. Since certification of the Eastern Dublin EIR, the regulatory status of some of these species may have changed.

The Eastern Dublin Specific Plan includes policies to protect special status species (Policies 6-17 and 6-20). Although the proposed Project would adhere to the adopted mitigation measures and Specific Plan policies, changes in regulatory circumstances such as the adoption of the California red-legged frog (*Rana aurora draytonii*) critical habitat area and its recommendations for habitat preservation and creation, could create a *potentially significant environmental impact if not re-addressed*.

- b, c) *Have a substantial adverse impact on riparian habitat or federally protected wetlands?*

PS. Figure 3.7 – B of the Eastern Dublin EIR identifies areas within the Project area which potentially contain riparian habitat and springs based upon the location of intermittent streams, stock ponds, seeps, etc. Utilizing Figure 3.7-B, it is estimated that at least 14,000 linear feet of potential riparian habitat could exist within the Project area. Although the EIR identifies mitigation measures and the Eastern Dublin Specific Plan contains policies to address stream corridors and riparian and wetland areas (Policies 6-9 through 6-13 and 6-15), regulatory standards for such riparian habitats may have changed since certification of the EIR (e.g., new standards for the California red-legged frog

identified in the recently approved critical habitat designation may require different treatment of riparian and upland habitats). Although the proposed Project would adhere to the adopted mitigation measures and Specific Plan policies, due to a change in regulatory circumstances, the Project could have a *potentially significant* environmental impact.

d) *Interfere with movement of native fish or wildlife species?*

PS. As noted above, the Eastern Dublin EIR identified a number of special status wildlife species. Although mitigation measures in the Eastern Dublin EIR and policies within the Eastern Dublin Specific Plan (Policies 6-18 through 6-20) address potential impacts to the movement of wildlife species, and this Project would be required to adhere to those mitigation measures and policies, the Project may still have a *potentially significant* impact due to changed regulatory standards regarding the movement of wildlife. For example, recent approval of the critical habitat designation for the California red-legged frog could require refinement of the impacts and/or mitigations analyzed in the Eastern Dublin EIR.

e, f) *Conflict with local policies or ordinances protecting biological resources or any adopted Habitat Conservation Plans or Natural Community Conservation Plans?*

PS. The Project would be required to comply will all local policies and ordinances imposed by the City of Dublin. The Eastern Dublin Specific Plan contains policies and programs intended to protect biological resources and habitat areas and restore and revegetate habitat where necessary and appropriate (Policies 6-15 through 6-23; Programs 6K-6O). However, the Project site lies within the boundaries of the approximately 5.3 million acres in California recently approved as critical habitat for the California red-legged frog . The proposed designation of the Project area as critical habitat is a changed regulatory circumstance which could impact local policies and implementation of the project as contemplated by the Eastern Dublin EIR. Hence, the changed regulatory circumstance would result in a *potentially significant* environmental impact.

## V. CULTURAL RESOURCES

### Environmental Setting

Chapter 3.9 of the Eastern Dublin EIR addresses the potential impacts on cultural resources which may be located within the Project area. A field inspection of the entire Eastern Dublin areas was performed in 1988. Three potential pre-historic sites (two of them isolated locales) and two historic sites were identified within the proposed Project area (see pp. 3.9-4 – 3.9-6 of the Eastern Dublin EIR). Maps of these sites were not included in the EIR to protect them from possible vandalism. The Eastern Dublin EIR mandated additional project-level archeological surveys.

## Project Impacts and Mitigation Measures

### a) *Cause substantial adverse change to significant historic resources?*

LS. Only two historic sites (a 1940's-era barn and an early 20<sup>th</sup>-century ranch/homestead complex) were identified in the Project area. Due to the expected level of development within the Project area, the Eastern Dublin EIR assumed that all historic sites would be disturbed or altered in some manner, even those located in areas designated for Open Space. This potential impact was identified and addressed in the Eastern Dublin EIR Impact 3.9/C) and mitigation measures 3.9/7.0 through 3.9/12.0 (page 3.9-8) will reduce this impact to a *less-than-significant* level. These mitigation measures require detailed archival research for each structure to assess the structure's significance; encourage adaptive re-use where feasible; and encourage the City to develop a preservation program for historic sites which qualify under CEQA guidelines. Additionally, mitigation measures 3.9/5.0 and 3.9/6.0 (page 3.9-7) also would apply to the project. These mitigations require cessation of all construction activities upon discovery of any previously-unidentified historic sites.

Additionally, Policies 6-26 and 6-27 of the Eastern Dublin Specific Plan require in-depth archival research to determine the significance of any resource prior to alteration and encourage the adaptive re-use or restoration of historic structures whenever feasible.

The adopted mitigation measures would continue to apply to the entire project and the Specific Plan policies would continue to apply to the 472-acre portion within the Specific Plan. There are no impacts beyond those analyzed in the Eastern Dublin EIR and therefore no additional review or analysis is necessary.

### b, c) *Cause a substantial adverse impact or destruction to archeological or paleontological resources?*

LS. There is a remote but potentially significant possibility that construction activities, including site grading, trenching and excavation, may uncover significant archeological and/or paleontological resources on the site. The Eastern Dublin EIR categorized these resources as pre-historic cultural resources. Three potential pre-historic sites were identified by the EIR within the proposed Project area. The Eastern Dublin EIR assumed that all pre-historic sites would be disturbed or altered in some manner. This potential impact was identified and addressed in the Eastern Dublin EIR (Impact 3.9/A) and implementation of mitigation measures 3.9/1.0 through 3.9/4.0 (page 3.9-6 – 3.9-7) reduce this impact to a *less-than-significant* level. These mitigation measures require subsurface testing for archeological resources; recordation and mapping of such resources; and development of a protection program for resources which qualify as "significant" under Appendix K of CEQA. Mitigation measures 3.9/5.0 and 3.9/6.0, described above, also were adopted to address the potential disruption of any previously unidentified pre-historic resources and these mitigation measures reduce the potential impact to a *less-than-significant* level.

The Eastern Dublin Specific Plan also contains policies (Policies 6-24 and 6-25) requiring research of archaeological resources prior to construction and determination of the significance and extent of any resources uncovered during grading and construction.

The adopted mitigation measures would continue to apply to the entire project and the Specific Plan policies would continue to apply to the 472-acre portion within the Specific Plan. There are no impacts beyond those analyzed in the Eastern Dublin EIR and therefore no additional review or analysis is necessary.

d) *Disturb any human resources?*

LS. A remote possibility exists that historic or pre-historic human resources could be uncovered on the site during construction activities. Implicit in the mitigation measures of the Eastern Dublin EIR and Eastern Dublin Specific Plan policies is the potential for discovery of human resources near or within the identified pre-historic and historic sites. With implementation of the above-mentioned mitigation measures adopted with certification of the Eastern Dublin EIR (mitigation measures 3.9/1.0 – 12) and adherence to the Eastern Dublin Specific Plan policies relating to cultural resources (Policies 6-24 and 6-25), this impact is *less-than-significant*.

The adopted mitigation measures would continue to apply to the entire project and the Specific Plan policies would continue to apply to the 472-acre portion within the Specific Plan. There are no impacts beyond those analyzed in the Eastern Dublin EIR and therefore no additional review or analysis is necessary.

## V. GEOLOGY AND SOILS

### Environmental Setting

This section of the Initial Study addresses seismic safety issues, topography and landforms, drainage and erosion and the potential impacts of localized soil types.

#### *Seismic*

The Project area is a part of the San Francisco Bay area, one of the most seismically active regions in the nation. The Eastern Dublin EIR notes the presence of several nearby significant faults, including the Calaveras Fault, Greenville Fault, Hayward Fault and San Andreas Fault (pp. 3.6-1 – 3.6-2 and Figures 3.6-A and 3.6-B). The likelihood of a major seismic event on one or more of these faults within the near future is believed to be high. However, no active faults are known to traverse the Project site and the site is not identified as located within an Alquist-Priolo Special Studies Zone as determined by the California Division of Mines and Geology.

A second thrust fault system has been inferred in the Coast Ranges of the Bay Area that may be seismically active. A belt of faults and folds has been mapped in sedimentary rocks south of Mount Diablo, including one identified as the "leading edge-blind thrust,

Mount Diablo Domain". Further investigation of this inferred fault has concluded that the risk of ground rupture from this inferred fault is low within the Project area.

#### *Site Geology and Soils*

The site is underlain by the Tassajara geologic formation on the south and extensive landslide deposits to the north. The Tassajara Formation consists of undifferentiated claystone and siltstone, locally undifferentiated into sandstone, conglomerate and siltstone-claystone members.

#### *Landforms and Topography*

The project area is part of a broad north-south trending plain known as the Livermore-Amador Valley. Elevations of the subject site range from approximately 350 feet to 910 feet above sea level. Much of the property is gently rolling to almost flat but the extreme northern and northeastern portions are steeply sloping terrain.

Geotechnical reports cited in the Eastern Dublin EIR indicate a history of landslides on the site. The more steeply sloping northern and northeastern portions of the site contain landslide areas. Many of these slides are relatively shallow and it is estimated that all can be repaired or mitigated in the areas slated for urban development.

#### *Drainage*

Existing drainage patterns on the site includes a series of small, unnamed intermittent streams. These streams are shown in Figures 3.7-A and -B in the Eastern Dublin EIR. These intermittent streams generally follow a north-to-south direction, consistent with the overall topography of the Eastern Dublin area. These streams are not delineated drainages and do not terminate in other local creeks (such as Tassajara Creek) or modified natural drainages (such as the Arroyo Mocho).

#### Project Impacts and Mitigation Measures

- a) *Expose people or structures to potential substantial adverse impacts, including loss, injury or death related to ground rupture, seismic ground shaking, ground failure or landslides?*

LS. Similar to many areas of California, the site could be subject to ground shaking caused by the regional faults identified above. Under moderate to severe seismic events which are probable in the Bay Area over the next 30 years, buildings, utilities and other improvements constructed in the project area would be subject to damage caused by ground shaking. However, since the Project area is not located within an Alquist-Priolo Special Studies Zone, the potential for ground rupture is anticipated to be minimal.

The Eastern Dublin EIR identified that the primary and secondary effects of ground-shaking (Impacts 3.6/B and 3.6/C) could be potentially significant impacts. With implementation of mitigation measure 3.6/1.0 the primary effects of ground-shaking

(Impact 3.6/B - damage to structures and infrastructure, potential loss of life) are reduced to a *less-than-significant* level by using modern seismic design for resistance to lateral forces in construction, which would reduce the potential for structure failure, major structural damage and loss of life.

Mitigation measures 3.6/2.0 through 3.6/8.0 will be implemented to reduce the secondary effects of ground-shaking (Impact 3.6/C - seismically induced landslides, differential compaction/settlement, etc.), to a *less-than-significant* level. These mitigation measures require: stabilization of unstable landforms where possible or restriction of improvements from unstable landforms; appropriate grading in hillside areas; utilization of properly engineered retention structures and fill; design of roads and infrastructure to accommodate potential settlement; and completion of design-level geotechnical investigations (pp. 3.6-8 through 3.6-9).

Adherence to Mitigation Measures MM 3.6/1.0 through 8.0 will ensure that new structures and infrastructure built within the project area will comply with generally recognized seismic safety standards so that effects due to ground shaking will be *less-than-significant*.

The majority of the Project area contains gently to steeply sloping hillsides. The northern and northeastern portions have a history of landslides. As part of the development of the area the site is proposed to be graded and re-contoured to accommodate building pads, roads, infrastructure, parks, schools, parking areas and other development features. The Eastern Dublin EIR noted that development of the Project site could result in permanent changes in existing landforms, particularly if substantial grading occurs. Two mitigation measures reduce this impact to *less-than-significant*.

Mitigation measure 3.6/9.0 states that grading plans which adapt improvements to natural landforms, use retaining structures and steeper cut and fill slopes where appropriate, and construction of roads on ridges reduce impacts to landforms. Mitigation measure 3.6/10.0 states that specific project lot and infrastructure alignment should be based on the identification of geotechnically feasible building areas, clustering structures, and avoiding adverse conditions by utilizing lower density development in the hillside areas.

The Eastern Dublin Specific Plan also contains policies aimed at reducing impacts related to landform changes and reducing potential impacts related to landslides. Policies 6-40 through 6-42 restrict structures on slopes of 10-30% and generally preclude structures on slopes of greater than 30%.

The adopted mitigation measures would continue to apply to the entire project and the Specific Plan policies would continue to apply to the 472-acre portion within the Specific Plan. There are no impacts beyond those analyzed in the Eastern Dublin EIR and therefore no additional review or analysis is necessary.

b) *Is the site subject to substantial erosion and/or the loss of topsoil?*

LS. The Eastern Dublin EIR notes that development of the Project site will modify the existing ground surface and alter patterns of surface runoff and infiltration and could result in a short-term increase in erosion and sedimentation caused by grading activities (Impact 3.6/K). Long-term impacts could result from modification of the ground-surface and removal of existing vegetation (Impact 3.6/L). With implementation of Mitigation Measures 3.6/27.0 and 28.0 (pp. 3.6-14 – 3.6-15) these impacts are *less-than-significant*.

These mitigation measures specify and require the preparation and implementation of erosion control measures to be utilized on a short-term and long-term basis. In addition to these measures, the Project would be subject to erosion control and water quality control measures implemented by the state Regional Water Quality Control Board. The Eastern Dublin Specific Plan also contains a policy (Policy 6-43) which requires that new development be designed to provide effective control of soil erosion as a result of construction activities.

The adopted mitigation measures would continue to apply to the entire project and the Specific Plan policies would continue to apply to the 472-acre portion within the Specific Plan. There are no impacts beyond those analyzed in the Eastern Dublin EIR and therefore no additional review or analysis is necessary.

c, d) *Is the site located on soil that is unstable or expansive or will result in potential lateral spreading, liquefaction, landslide or collapse?*

LS. Portions of the Project area are underlain by soil types with high shrink-swell potential which have the potential to cause damage to foundations, slabs, and pavement (Impact 3.6/H). With adherence to Mitigation Measures 3.6/14.0 through 16.0 (pp. 3.6-11 – 12) and by requiring appropriate structural foundations and other techniques to overcome shrink-swell effects, potential shrink-swell impacts will be *less-than-significant*.

The Eastern Dublin EIR also notes that impacts of slope instability are considered to be potentially significant (Impacts 3.6/I and 3.6/J), but can be reduced to a *less-than-significant* level with implementation of Mitigation Measures 3.6/17.0 – 26.0 (pp. 3.6-12 – 3.6-14). These mitigation measures require the preparation of site-specific soils and geotechnical studies minimizing grading on steep slopes and the formulation of appropriate design criteria; removal/reconstruction of unstable materials; construction of surface and subsurface drainage improvements; reduction of cut-and-fill; maintaining 3:1 cut slopes unless retained; maintaining minimum 2:1 fill slopes unless properly benched, keyed or treated with a geo-grid; utilizing engineered fill; and adherence to the Uniform Building Code and other City requirements for grading.

The adopted mitigation measures would continue to apply to the entire project. There are no impacts beyond those analyzed in the Eastern Dublin EIR and therefore no additional review or analysis is necessary.

- e) *Have soils incapable of supporting on-site septic tanks if sewers are not available?*

NI. All new development within the Project area would be connected to a public sanitary sewer system installed by the Project developer and maintained by the Dublin San Ramon Services District which serves all of the City of Dublin. No septic systems are proposed. Therefore, *no impact* is anticipated with regard to septic tanks.

## VII. HAZARDS AND HAZARDOUS MATERIALS

### Environmental Setting

The site is primarily open grasslands and currently contains nine single family residences and some agricultural out-buildings. Historically, the Project site has been used for agriculture, primarily as grazing land and limited dry-farming of crops. Much of the Project area currently is utilized for grazing. Some pesticide and organicide use may be associated with these agricultural uses and some petroleum-based products probably have been used to run and maintain farm equipment. Similar types of petroleum-based products may be in use at a limited trucking and truck storage use located on one of the parcels. A Phase I Environmental Site Assessment has been performed for each parcel comprising the Project site and typical levels of organicides, pesticides and limited amounts of petroleum-based products have been identified in localized areas around outbuildings. Additionally, one of the parcels was discovered to have been used as a gasoline service station but this use was discontinued in the 1960's and no structures remain. No parcels within the Project area have been listed as a hazardous site or as a hazardous materials generator.

Based upon the results of the Phase I Environmental Site Assessments performed for each property within the Project area, a Phase II Environmental Site Assessment would be required for some of those parcels to further identify any potential hazardous materials. Policy 11-1 of the Eastern Dublin Specific Plan requires that prior to the issuance of building permits for sites in the project area, such environmental site assessments are required. If applicable, remediation measures would be recommended and required prior to development in accordance with State law.

### Project Impacts and Mitigation Measures

- a, b) *Create a significant hazard through transport of hazardous materials or release or emission of hazardous materials?*

LS. Proposed uses of the site would include residential, general and retail commercial, industrial park, schools, and parks. Only minor *less-than-significant* quantities of potentially hazardous materials such as lawn chemicals, household solvents, etc., would be associated with the majority of the proposed uses. The Project's proposed Industrial Park designation and the Project's proposed uses relate most closely to the City of Dublin's M-1 or Light Industrial District, although the types of industrial uses permitted

under the zoning ordinance include light and heavier industrial uses with some manufacturing. Some potentially hazardous materials may be utilized by these industrial type uses but the storage, use and disposal of such materials would be controlled through a hazardous materials business plan required to be filed by any such user with the Alameda County Fire Department which provides such service to the City of Dublin. With the expected minimal use of hazardous materials and the requirement for adhering to a hazardous materials business plan, this impact is *less-than-significant*.

c) *Is the site listed as a hazardous materials site?*

LS. None of the parcels comprising the Project area have been listed as a hazardous materials site. As noted above, Phase I Environmental Site Assessments have been completed for each individual parcel comprising the Project area. Levels of organicides, pesticides, and petroleum-based products typical of agricultural uses have been discovered near existing agricultural outbuildings but these levels are *less-than-significant*. Should the Project be approved, Phase II Environmental Site Assessments will be performed on each parcel prior to construction. Remediation measures, if needed, would be recommended and completed in accordance with State and Federal requirements. This impact is considered to be *less-than-significant*.

d) *Is the site located within an airport land use plan of a public airport or private airstrip?*

LS. The Livermore Municipal Airport is located to the south of the Project area across I-580 and south of the Los Positas Golf Course. The Federal Aviation Administration classifies the airport as a "general transport" airport and the airport can accommodate turbojets under 60,000 pounds and general aviation aircraft of lesser weight.

The Alameda County Airport Land Use Commission (ALUC) adopted an Alameda County Airport Land Use Policy Plan in 1986 which defines "General Referral and Height Referral Areas" for the Livermore Municipal Airport. Portions of the Project area fall within these referral areas. The General Referral Area extends 4,000 feet north of I-580. Proposed land uses and activities subject to review under State ALUC law must be referred to the County ALUC. The Height Referral area encompasses an area 20,000 feet from the runways in all directions (approximately 15,000 feet north of I-580) and 200 feet above ground level in the Height Referral area.

The ALUC amended the Policy Plan in 1993 to create an Airport Protection Area (APA) around the Livermore Airport. Development or expansion of residential uses within the APA is prohibited. At the time the Eastern Dublin Specific Plan and Eastern Dublin EIR were adopted, this APA had not yet been established. However, the Specific Plan anticipated that some residentially-designated land within the Eastern Dublin area would be located within the future APA. The Eastern Dublin Specific Plan indicates that residentially-designated lands so affected by adoption of the APA must be designated "Future Study Area" (p.16). The APA does affect approximately 22 percent of the southern portion of the Project area. Approximately 96 acres of the project area, originally slated for potential residential development, now are designated as Future

Study Area with an underlying designation of rural residential/agriculture, a designation which essentially will not allow for any intensity of land use greater than what is existing. The project is not proposing any changes to this land use designation and hence, is in compliance with the established APA. Since the Specific Plan already anticipated land use changes which might occur as a result of the ALUC's actions, and designated the land accordingly, this is a *less-than-significant* impact.

- e) *Represent a safety hazard to persons if located within two miles of a private airstrip?*

NI. The project is not located within two miles of a private airstrip.

- f) *Interference with an emergency evacuation plan?*

LS. The proposed Project would be developed in phases, as is feasible with the extension of services and utilities to the area. Adequate emergency access to all portions of the Project site under construction would be required to be provided per the City of Dublin's ordinances and policies. Emergency access requires that structures and occupants of structures can be accessed by emergency vehicles and personnel and also requires that residents are able to evacuate an area in case of some form of hazard or threat of hazard. Adequate water service for fire-fighting and installation of hydrants or other approved alternative water supply systems would be required per City policy as the project develops.

The Eastern Dublin EIR indicated a mitigation measure (3.4/9.0) to address access, water pressure, fire safety and prevention to reduce this potential impact to a *less-than-significant* level. This mitigation measure requires that certain design standards are incorporated into Project approvals such as: available capacity of 1,000 GPM at 20 PSI fire flow from project fire hydrants on public mains; installation of a buffer zone along the backs of homes contiguous with wildland open space areas; and compliance with minimum road widths, maximum street slopes, parking requirements, and secondary access road requirements. Policy 8-6 of the Eastern Dublin Specific Plan also requires provision of emergency vehicle access from subdivisions to open space areas among other fire prevention methods to address concerns with emergency access and evacuation.

The adopted mitigation measures would continue to apply to the entire project and the Specific Plan policy would continue to apply to the 472-acre portion within the Specific Plan. There are no impacts beyond those analyzed in the Eastern Dublin EIR and therefore no additional review or analysis is necessary.

- g) *Expose people and structures to a significant risk of loss, injury or death involving wildland fires or where residences are intermixed with wildlands?*

LS. The proposed project includes a significant amount of open space intermixed with proposed residential uses in accordance with the land use designations of the General Plan and Eastern Dublin Specific Plan. However, the relationship of wildland open space to urbanized uses has the potential to increase the risk of wildland fires spreading to

urban areas. The Eastern Dublin EIR identified the risk of constructing new communities in proximity to high fire hazard open space areas since it would pose an increasing wildfire hazard to people and property if open space areas were not maintained for fire safety (Impact 3.4/E). Mitigation measures 3.4/6.0 – 13.0 (pp. 3.4-5 – 3.4-7) will reduce this impact to a *less-than-significant* level. These mitigation measures require construction of new facilities to coincide with new service demands; establishment of funding mechanisms for construction of such facilities; incorporation of Dougherty Regional Fire Authority (and, implicitly, any other fire authority which would service the area), requirements into the project design; integration of fire trails and fire breaks into the open space trail system; and preparation and implementation of a wildfire management plan for the area.

The Eastern Dublin Specific Plan also contains two policies (Policy 8-5 and 8-6, p. 125) which address the construction of new facilities and requirements to minimize the potential for impacts from wildland fires.

The adopted mitigation measures would continue to apply to the entire project and the Specific Plan policies would continue to apply to the 472-acre portion within the Specific Plan. There are no impacts beyond those analyzed in the Eastern Dublin EIR and therefore no additional review or analysis is necessary.

## VIII. HYDROLOGY AND WATER QUALITY

### Environmental Setting

The Project area is located within the Alameda Creek watershed which drains to the San Francisco Bay. The Project area is located within the jurisdiction of Zone 7 of the Alameda County Flood Control and Water Conservation District (Zone 7). The northern portion of the site is hilly and transitions to relatively flat areas immediately adjacent to the I-580 freeway. Three intermittent streams flowing in a north-south direction transect the Project area. These drainages appear to originate in the northern, hilly portions of the site but do not drain into any distinct creek or channel. In some locations these drainages have been impounded for use as stock ponds. These drainages do not carry water consistently year-round and are more apparent during the spring season.

Based on the Flood Insurance Rate Map (FIRM) published by the Federal Emergency Management Agency (FEMA) [Community Panel No. 115 of 325, 060001-0115-C, Alameda County, dated September 17, 1997], none of the Project area is located within a 500-year or 100-year flood plain.

### Project Impacts and Mitigation Measures

- a) *Violate any water quality standards or waste discharge requirements?*

LS. Site grading (cut and fill) will occur to construct roadways, building pads, utilities connections and similar improvements. Proposed grading could increase the potential of

erosion and increase the amount of sediments carried by storm water run-off into creeks and other bodies of water, on and off the Project site. These impacts were identified in the Eastern Dublin EIR (Impacts 3.5/Y and 3.5/AA). With adherence to mitigation measures 3.5/44.0 - 46.0, 49.0, 51.0 and 52.0 of the Eastern Dublin EIR (pp. 3.5-35 – 3.5 – 27) these impacts would be *less-than-significant*.

These mitigation measures require: drainage facilities to minimize any increased potential for erosion; channel improvements consisting of natural creek bottoms and side slopes with natural vegetation where possible; preparation of a Master Drainage Plan for each development prior to development (Stage 2 Planned Development) approval; facilities and management practices which protect and enhance water quality; specific water quality investigations which address water quantity and quality of run-off; and community-based programs to educate local residents and business on methods to reduce non-point sources of pollutants.

Additionally, development of individual parcels within the Project area will be required to prepare Stormwater Pollution Prevention Plans (SWPPP), listing Best Management Practices which reduce the potential for water quality degradation during construction and post-construction activities. These measures can include revegetation of graded areas, silt fencing and use of biofilters within parks and other landscaped areas. These individual SWPPPs must conform to standards adopted by the Regional Water Quality Control Board and City of Dublin and shall be approved by the City of Dublin prior to issuance of grading permits. Both agencies monitor construction and post-construction activities according to the SWPPP and adjustments are made during project construction as necessary to erosion control methods and water quality protection as field conditions warrant. Specific development projects containing five acres or more are also required to submit a Notice of Intent from the State Water Resources Control Board prior to commencement of grading.

The Eastern Dublin Specific Plan also contains policies which reflect the mitigation measures of the Eastern Dublin Specific Plan listed above. Policies 9-7 through 9-9 and Programs 9T through 9X (pp. 133-134) address the potential for erosion and changes in water quality, storm water run-off and storm drainage due to development of the Project area.

The adopted mitigation measures would continue to apply to the entire project and the Specific Plan policies would continue to apply to the 472-acre portion within the Specific Plan. There are no impacts beyond those analyzed in the Eastern Dublin EIR and therefore no additional review or analysis is necessary.

- b) *Substantially deplete groundwater recharge areas or lower the local groundwater table?*

LS. Current uses of the property depend upon wells (groundwater), irrigation wells (groundwater) and impounded surface waters (stock ponds) for domestic use and agricultural uses. As development of the Project area occurs, public water systems would be extended to serve the area, reducing the direct need for individual wells to service each

property. The Eastern Dublin EIR noted that development of the Project could have an impact on local ground water resources and groundwater recharge due to an increase in the amount of impervious surfaces within the Project site (Impact 3.5/Z). With implementation of Mitigation Measures 3.5/49.0 and 3.5/50.0 (page 3.5-26), this impact is *less-than-significant*. The Eastern Dublin EIR also noted that the Project is located in an area of minimal groundwater recharge stating that groundwater reserves and the majority of the Tri-Valley's groundwater resources are in the Central Basin, south of the Project area. Mitigation measure 3.5/50.0 notes that Zone 7 supports on-going groundwater recharge programs for the Central Basin.

The adopted mitigation measures would continue to apply to the entire project. There are no impacts beyond those analyzed in the Eastern Dublin EIR and therefore no additional review or analysis is necessary.

- c) *Substantially alter drainage patterns, including stream courses, such that substantial siltation or erosion would occur?*

LS. Development of the project site could change existing natural drainage patterns in the area. Approval of the proposed Project and implementation of individual development projects within the Project area could increase stormwater runoff from the site due to construction and post-construction activities and thereby increase the potential for erosion. These impacts were identified in the Eastern Dublin EIR (Impacts 3.5/Y and 3.5/AA) in relation to item a) above. With implementation of Mitigation Measures 3.5/44.0 - 46.0, 49.0, 51.0 and 52.0 of the Eastern Dublin EIR (pp. 3.5-35 – 3.5 – 27) these impacts are *less-than-significant*. The Eastern Dublin Specific Plan also contains policies and programs (Policies 9-7 through 9-9 and Programs 9T through 9X , pp. 133-134) which reduce these impact to a *less-than-significant* level.

Please refer to item a) above for a discussion of these mitigation measures and policies.

With implementation of other mitigation measures enacted to reduce erosion due to grading activities (Mitigation Measures 3.6/27.0 and 28.0), these impacts would be *less-than-significant*. Please refer to the previous section entitled **Geology and Soils** for a discussion of these mitigation measures.

The adopted mitigation measures would continue to apply to the entire project and the Specific Plan policies would continue to apply to the 472-acre portion within the Specific Plan. There are no impacts beyond those analyzed in the Eastern Dublin EIR and therefore no additional review or analysis is necessary.

- d) *Substantially alter existing drainage patterns or result in flooding, either on or off the project site?*

LS. Approval of the proposed project and construction of new housing units and other land uses envisioned in the proposed project would change drainage patterns within the project area. This impact was identified in the Eastern Dublin EIR (Impact 3.5Y) and with implementation of Mitigation Measures 3.5/44.0 – 3.5/48.0 it is *less-than-*

*significant.* These mitigation measures require drainage facilities to minimize flooding; channel improvements consisting of natural creek bottoms and side slopes with natural vegetation where possible; a Master Drainage Plan for each development prior to development approval; facilities to alleviate potential downstream flooding due to project development; and the construction of backbone storm drainage facilities.

The adopted mitigation measures would continue to apply to the entire project. There are no impacts beyond those analyzed in the Eastern Dublin EIR and therefore no additional review or analysis is necessary.

- e) *Create stormwater runoff that would exceed the capacity of drainage systems or add substantial amounts of polluted runoff?*

**LS.** Development of the Project area and post-construction activities unrelated to Project construction could lead to greater quantities of stormwater runoff and could include pollutants in the runoff. These potential impacts were identified in the Eastern Dublin EIR (Impacts 3.5/Y and 3.5/AA). With implementation of mitigation measures 3.5/44.0-49.0 and 3.5/51.0 of the Eastern Dublin EIR this impact is *less-than-significant*. Policies of the Eastern Dublin Specific Plan (Policies 9-7 through 9-9 and Programs 9T through 9X , pp. 133-134) also would be implemented and, as such, these impacts would be *less-than-significant*.

Please refer to item a) above for a discussion of these mitigation measures and policies.

The adopted mitigation measures would continue to apply to the entire project and the Specific Plan policies would continue to apply to the 472-acre portion within the Specific Plan. There are no impacts beyond those analyzed in the Eastern Dublin EIR and therefore no additional review or analysis is necessary.

- f) *Substantially degrade water quality?*

**LS.** Construction activities related to development of the Project area and post-construction activities could degrade water quality through improper construction practices and poor control of storm water runoff resulting in additional sedimentation and potential pollutants in on-site or down-stream waters. These impacts were identified in the Eastern Dublin EIR (Impacts 3.5/Y and 3.5/AA). With mitigation measures 3.5/44.0-49.0 and 51.0 adopted in the Eastern Dublin EIR this impact is *less-than-significant*. Policies of the Eastern Dublin Specific Plan (Policies 9-7 through 9-9 and Programs 9T through 9X , pp. 133-134) also would be implemented and, as such, these impacts would be *less-than-significant*.

Please refer to item a) above for a discussion of these mitigation measures and policies.

The adopted mitigation measures would continue to apply to the entire project and the Specific Plan policies would continue to apply to the 472-acre portion within the Specific Plan. There are no impacts beyond those analyzed in the Eastern Dublin EIR and therefore no additional review or analysis is necessary.

g, i) *Place housing within a 100-year flood hazard area as mapped by a Flood Insurance Rate Map or expose people or structures to a significant risk due to flooding or failure of a levee or dam?*

**NI.** None of the project area is located within a 100-year flood plain as mapped by FEMA and no new dwellings would be located in a flood hazard area. There are no upstream dams in the Project area which would place people or structures within the project area in flood danger due to dam failure. There would be *no impact* in regard to flooding hazards.

h) *Place within a 100-year flood hazard area structures which would impede or redirect flood flow?*

**NI.** As noted in the response to "g" above, none of the project area is located within a 100 year flood hazard area as defined by FEMA. Development of the Project site is not expected to impede or redirect flood flows and *no impact* is anticipated.

j) *Result in inundation by seiche, tsunami or mudflows?*

**LS.** The site is not located near a major body of water that could result in a seiche or tsunami. The risk of potential mudflow is considered low. With mitigation measures adopted in the Eastern Dublin EIR (measures 3.6/17.0 – 28.0, pp. 3.6-12 – 3.6-15), potential impacts of natural and engineered slope stability, and erosion and sedimentation impacts which could create mudflows would be *less-than significant*. These mitigation measures require the preparation of site-specific soils and geotechnical studies minimizing grading on steep slopes and the formulation of appropriate design criteria; removal/reconstruction of unstable materials; construction of surface and subsurface drainage improvements; reduction of cut-and-fill; maintaining 3:1 cut slopes unless retained; maintaining minimum 2:1 fill slopes unless properly benched, keyed or treated with a geo-grid; utilizing engineered fill; and adherence to the Uniform Building Code and other City requirements for grading.

The adopted mitigation measures would continue to apply to the entire project. There are no impacts beyond those analyzed in the Eastern Dublin EIR and therefore no additional review or analysis is necessary.

## **IX. LAND USE AND PLANNING**

### Environmental Setting

The Project area abuts the eastern city limit boundary of the City of Dublin (please refer to Exhibit 2). The entire project area is located within the City of Dublin's General Plan Planning Area and Sphere of Influence. Approximately 472 acres of the project area also are included within the City's Eastern Dublin Specific Plan area (please refer to Exhibit 4). The project site consists of thirteen (13) different parcels under eleven (11) separate

ownerships (please refer to Exhibit 7). The proposed land use designations of the Project reflect the General Plan and Specific Plan land use designations for the Project area. The proposed residential densities and non-residential development intensity are consistent with the mid-point density and development intensity (floor area ratio) ranges listed in the General Plan and Specific Plan. The proposed land uses associated with each of the proposed land use designations are consistent with the City zoning districts which would implement those land uses and they are consistent with the types of uses approved and/or developed within other areas of the Eastern Dublin Specific Plan and General Plan.

#### Measure D

In November of 2000, voters in Alameda County adopted a local land use initiative known as "Measure D." This initiative created a County Urban Growth Boundary within the Alameda County East County Planning Area (ECAP). One of the purposes of this initiative is to "focus urban-type development in and near existing cities where it will be efficiently served by public facilities, thereby avoiding high costs to taxpayers and users as well as to the environment". The initiative is designed to prohibit the County government from considering urban development outside the "Growth Boundary." The 472-acre portion of the project site that is within the City's Specific Plan is located within the Urban Growth Boundary adopted by Measure D. The remainder of the project site, although within the City's adopted and recognized Sphere of Influence and within the City's General Plan Planning Area, appears to lie outside of the Measure D Urban Growth Boundary Limit. [NOTE: Review of Measure D indicates a discrepancy between the Urban Growth Boundary Limit Map and the text describing which areas are within the Urban Growth Boundary Limit. This potential discrepancy does not change the analysis, below.]

Measure D restricts development in the County, but it does not limit development by cities that are within the County, nor does it create or impose any urban growth boundaries on those cities. Because the entire project site is within the City's Sphere of Influence and the proposed development within the project area is addressed by the General Plan, the project is not constrained or otherwise limited by Measure D. The County recognized that, in the case of Eastern Dublin, the area already has been planned for development and eventual annexation is anticipated. (Alameda County Community Development Agency Report to Board of Supervisors dated July 25, 2000.)

Measure D also contains language that limits the County's ability to cancel Williamson Act contracts. Upon annexation of the project area to the City, the Williamson Act contracts would be assigned to and assumed by the City. The City would then have the discretion whether or not to cancel the contracts should cancellation be requested for the proposed Project. Measure D does not restrict the City's actions regarding Williamson Act contracts, however, any requested cancellation would be processed in accordance with statutory provisions and procedures.

Measure D provides that the County encourage Zone 7 to pursue new water supply sources and storage facilities only to the extent necessary to serve the rates and levels of growth established by Measure D and by the general plans of the cities within the service

area. Since the City's General Plan provides for the development proposed, any additional water supply sources or facilities required to serve the Project are consistent with Measure D. Measure D's restriction on the County's ability to provide or authorize public facilities in excess of that needed for permissible development consistent with Measure D does not limit the ability to provide the services needed to serve the project area.

Hence, Measure D does not contain any language which would create a changed circumstance or potential for new impacts not already addressed or analyzed by the Eastern Dublin EIR.

#### Project Impacts and Mitigation Measures

- a) *Physically divide an established community?*

NI. All parcels which comprise the Project site are contiguous and are not separated by freeways, arterial roadways, or natural barriers. The Project area is adjacent to the City of Dublin's eastern boundary and current urban development area; land to the east of the Project area is as-yet undeveloped. Development of the Project area with the urban uses designated in the City's General Plan and Eastern Dublin Specific Plan would be a continuation of Dublin as a community. Development of the project site would not divide any established communities or neighborhoods and hence, there would be *no impact..*

- b) *Conflict with any applicable land use plan, policy or regulation?*

NI. The Project as proposed is consistent with the land use designations of the General Plan and Eastern Dublin Specific Plan. The project's proposed "pre-zoning" designations are consistent with the General Plan and Specific Plan land use designations. The Eastern Dublin EIR evaluated the potential land use impacts of the project based upon the assumption that residential development would occur at the mid-point of the residential development densities, and commercial, office and industrial development would occur at the mid-range of the floor area ratios designated for each of those land uses. The project does not propose densities or land use intensities different from that anticipated in the Eastern Dublin EIR. The project is required to adhere to all policies and programs of the General Plan and, as applicable to the 472 acres, the Eastern Dublin Specific Plan. The project is required to adhere to all City ordinances and regulations in effect at the time of project development.

- c) *Conflict with a habitat conservation plan or natural community conservation plan?*

NI. No habitat conservation plan or natural community conservation plan has been adopted by the City or other agency. The Project area recently has been included in the approximately 5.4 million acres in California proposed by the United States Fish and Wildlife Service as critical habitat for the red-legged frog. Although this may not be a potentially significant land use impact, land uses within the Project area could be affected

by this designation and, as such, the location and intensity of land uses indicated in the City's General Plan and Eastern Dublin Specific Plan could be impacted by this changed circumstance. There would be *no impact* to a habitat conservation plan or natural community conservation plan, but changed circumstances due to other agencies' potential regulatory action could create an impact. This impact, however, is related to biologic resources and has been identified as a potentially significant impact under the Biologic Resources section of this Initial Study.

## X. MINERAL RESOURCES

### Environmental Setting

The subject area currently contains no known mineral resources although a now-defunct gravel pit is located within the Project area on the Fallon Enterprises property just to the east of Fallon Road. The gravel pit has not been in operation for a number of years and is not currently extracting, producing, or processing any resources.

### Project Impacts and Mitigation Measures

- a, b) *Result in the loss of availability of regionally or locally significant mineral resources?*

NI. The former quarry is not currently extracting resources and there is no indication that the current property-owners wish to renew quarry operations. In any case, the Eastern Dublin Specific Plan and General Plan land uses designations for the area do not specifically permit such use. There are no other known significant mineral resources located within the Project. Development of the Project as proposed (or modified) would have *no impact* on mineral resources.

## XI. NOISE

### Environmental Setting

Major sources of noise on and adjacent to the project area include noise generated by vehicles on I-580, noise generated by traffic on arterial roadways near the project area, and aircraft flyovers, mainly from aircraft utilizing the Livermore Airport.

### Project Impacts and Mitigation Measures

- a, d) *Would the project expose persons to generation of noise levels in excess of standards established by the General Plan or other applicable standard or to substantial temporary or periodic increases in ambient noise levels?*

PS. Vehicle noise from I-580 would be most apparent to new land uses immediately adjacent to the freeway. Development of the project as proposed and in accordance with

the land use designations of the General Plan and Specific Plan would include the construction of new arterial roadways and streets. Traffic would be introduced into new residential neighborhoods and urban noise associated with commercial, industrial and other uses would be introduced to the Project area. Although the Eastern Dublin EIR addresses impacts due to this type of noise (Impacts 3.10/A and 3.10/F) and adopted mitigation measures to reduce those impacts to a less-than-significant level (Mitigation Measures 3.10/1.0, 3.10/6.0), changed environmental circumstances related to urbanization in the Tri-valley and beyond with potential changes in commute patterns and increased traffic along I-580 – may create a *potentially significant* impact.

b) *Exposure of people to excessive groundborne vibration or groundborne noise levels?*

PS. Groundborne vibrations could be caused primarily by heavy traffic along the freeway and along new arterial streets from heavy vehicles traveling primarily to the commercial or industrial sites within the project area. These ambient vibrations would increase permanently due to the proposed change in land use from primarily agriculture to urban uses, and the traffic associated with them. The Eastern Dublin EIR identified permanent impacts related to vehicular traffic increases (and implicitly, impacts due to urban noise and vibration), as an unavoidable and unmitigatable impact and a Statement of Overriding Considerations was adopted by the City Council for this impact. The proposed project would not change the scale or type of development anticipated in the Eastern Dublin EIR for areas within the project area and would not change the level of intensity of impact; therefore, no additional discussion or analysis is necessary.

However, as noted above, development of the Project area according to the General Plan and Specific Plan includes construction of arterial roads and local streets. These arterial roadways have the potential to create excessive groundborne noise to the volume of daily and peak hour traffic. Similarly, construction activities within the Project area could create temporary vibrations and noise in localized areas. Although the Eastern Dublin EIR addresses impacts related to ground-borne noise (Impact 3.10/A and F) and indicates mitigation measures which could reduce these impacts to a less-than-significant level, changed circumstances due to the level of urbanization within the Tri-Valley and beyond which has changed commute patterns and traffic intensities and could change the expected level of groundborne noise anticipated by the Eastern Dublin EIR. This changed circumstance could result in a *potentially significant* impact.

c) *Substantial permanent increases in ambient noise levels?*

NI. Development of the Project area with urban uses will introduce noise to the Project area. Ambient noise levels would increase permanently due to the proposed change in land use from primarily agriculture to urban uses. The Eastern Dublin EIR identified permanent noise impacts related to vehicular traffic increases (and implicitly urban noises) as an unavoidable and unmitigatable impact and a Statement of Overriding Considerations was adopted by the City Council for this impact; no additional discussion or analysis is necessary. The proposed project would not change the scale of

development anticipated in the Eastern Dublin EIR for the project area and would not change the level of intensity of impact.

- e, f) *Expose people residing or working within two miles of a public airport or in the vicinity of a private airstrip to excessive noise levels?*

NI. There is no private airstrip in the vicinity of the proposed project, therefore, *no impact* would result. The project area is located near the Livermore Airport and new residents and workers within the project area could be exposed to aircraft noise from aircraft traveling to and from the airport. The Eastern Dublin EIR determined that aircraft noise was a *less-than-significant* impact (Impact 3.10/C, p. 3.10-4) and no mitigation measure was proposed.

## XII. POPULATION AND HOUSING

### Environmental Setting

Data from Projections 2000, published by the Association of Bay Area Governments (ABAG), expects the nine-county San Francisco Bay Region to add approximately 1,096,300 new residents by the year 2020. This represents an increase of about 16 percent over the 20-year forecast period from 2000 – 2020. ABAG expects approximately 401, 750 new households in the region by year 2020. ABAG estimates that Dublin's population (including its Sphere of Influence) was 31,500 in the year 2000 and is projected to grow to 66,600 by 2020, and increase of 111%. ABAG estimates that the increase in new households will create a demand for at least 20,000 new dwellings each year. The City of Dublin is expected to provide 21,290 dwellings by the year 2020.

The Eastern Dublin EIR anticipated that the Eastern Dublin area would create 12,458 new dwelling units (Table 3.2-5, page 3.2-7), generating a new resident population of 27,794.

### Project Impacts and Mitigation Measures

- a) *Induce substantial population growth in an area, either directly or indirectly?*

NI. Development of the project area according to the City's General Plan and as expected by the Eastern Dublin Specific Plan would increase population in the project area but not beyond that anticipated or planned-for according to the City's General Plan or as anticipated or evaluated by the Eastern Dublin EIR. The City's General Plan contains Guiding and Implementing policies (6.3.A, 2.1.2.C, 2.1.3.A, 2.1.4.A, 6.4B, and 6.4E) to provide a range of housing types. The Eastern Dublin Specific Plan contains policies to provide a diversity of housing opportunities that meets the social, economic and physical needs of future residents (policies 4-2 through 4-6).

b, c) *Would the project displace substantial numbers of existing housing units or people?*

**NI.** The project area contains nine existing residences and various agricultural out-buildings and land uses. Current residents and uses could remain in place until such time as development of those particular parcels occurs over time. Due to the limited number of current residents, the Project would not displace substantial numbers of existing housing units or people and *no impact* is expected.

### XIII. PUBLIC SERVICES

#### Environmental Setting

**Water, Sewer.** The project area currently is located within the jurisdiction of Alameda County. The County has limited abilities to provide water or wastewater services to the project area: current residents and land uses rely upon private wells and septic systems for these services. The City of Dublin and the Dublin San Ramon Services District (DSRSD) have worked jointly to ensure that areas annexed to the City also are annexed to DSRSD. The Eastern Dublin EIR and the Eastern Dublin Specific Plan and General Plan anticipated that the Project area would be serviced by DSRSD. Additionally, DSRSD's master utilities plans for water, wastewater and recycled water include the Project area. The Project area must be annexed into the DSRSD service area.

**Fire Protection.** Fire protection services for the project area are provided by the Alameda County Fire Department (ACFD). Since the City of Dublin contracts with ACFD for services, upon annexation to the City, the ACFD would continue service to the Project area.

**Police Protection.** The Alameda County Sheriff's Office and the California Highway Patrol (CHP) currently provide police services to the project area. Upon annexation, Dublin Police Services would provide services to the area including enforcement of traffic laws which the CHP currently provides and enforcement of city ordinances and state law. Dublin Police Services is under contract with the Alameda County Sheriff's office: the City of Dublin owns the department's facilities and equipment but the personnel are employed by the Sheriff's Office. Police and security protection includes 24 hour security patrols throughout the community in addition to crime prevention, crime suppression and traffic safety.

**Schools.** The Livermore Valley Joint Unified School District (LVJUSD) provides educational services to the project area. However, a request is being prepared to detach from the LVJUSD and attach it to the service area of the Dublin Unified School District. The City of Dublin and the Dublin Unified School District (DUSD) prefer that all areas within the City of Dublin be served by DUSD schools. In this case, the Project area is more readily served by DUSD than LVJUSD since the project area is adjacent to DUSD.

**Maintenance.** Other than limited County roads within the project area (Fallon Road and Croak Road), the County provides limited maintenance service to the Project area. Upon annexation to the City of Dublin maintenance of streets, roads and other public facilities within the project area would be the responsibility of the City of Dublin Public Works Department.

**Solid Waste Service.** The County does not currently provide solid waste disposal service: property-owners must dispose of waste at local transfer stations. Upon annexation to the City of Dublin, solid waste service would be provided by the Livermore/Dublin Disposal Company.

**Other services.** The project area utilizes the Alameda County library services and other government services provided to Alameda County residents. Upon annexation to the City of Dublin, many of these services would be provided by the City.

#### Project Impacts and Mitigation Measures

Although the Eastern Dublin EIR addressed the impacts of development of the project area on services and mitigation measures were adopted to reduce the identified impacts to a less than significant level, some of these impacts still may be *potentially significant* for the project area due to changed circumstances.

a) *Fire protection?*

LS. The project proposes approximately 2,526 new residences and a little over 1.4 million square feet of commercial and industrial building area to be developed in phases. The number of new residences and amount of commercial, industrial and institutional floor space was evaluated by the Eastern Dublin EIR for the project area. Demand for fire services and fire response to outlying areas were considered significant impacts (IM 3.4/D and 3.4/E) and with implementation of mitigation measures (MM 3.4/6.0 – MM3.4/11), these impacts are *less-than-significant*. These mitigation measures require construction of new facilities timed to coincide with development; require appropriate funding mechanisms for capital improvements; identify and acquire new fire station sites; and incorporate fire safety measures into project design.

The adopted mitigation measures would continue to apply to the entire project. There are no impacts beyond those analyzed in the Eastern Dublin EIR and therefore no additional review or analysis is necessary.

b) *Police protection?*

LS. Development of the project as proposed could result in almost 6,000 new residents and almost 3,000 new employees in the Project area. The number of new residents and amount of commercial, industrial and institutional floor space was evaluated by the Eastern Dublin EIR for the project area. Demand for police services and police services accessibility were considered significant impacts (IM 3.4/A and 3.4/B) and with implementation of mitigation measures (MM 3.4/6.0 – MM3.4/11), these impacts are

*less-than-significant.* These mitigation measures include provision of additional personal and facilities; coordination of development timing to services can be expanded; incorporation of police department recommendations into project design; and preparation of budget strategies for personnel and facilities as annexing areas become served by Dublin's Police Department.

The adopted mitigation measures would continue to apply to the project. There are no impacts beyond those analyzed in the Eastern Dublin EIR and therefore no additional review or analysis is necessary.

c) *Schools?*

**PS.** Up to 1,400 new K-12 students could be generated by the project. Changes in student generation rates due to changed regional economic circumstances may have a different impact on the number and age distribution of students originally anticipated and evaluated by the Eastern Dublin EIR. In addition, the type of schools originally expected to have been constructed according to the Eastern Dublin EIR may have changed. Also, the level of funding and amount of school fees which may be charged according to State law may have changed so that the project could have a different impact on the provision of school facilities and programs. This could be a *potentially significant* impact.

d) *Maintenance of public facilities, including roads?*

**LS.** Numerous arterial, collector and local streets and roads will be constructed in the project area. All such streets and public facilities would be constructed by the project developers. Maintenance of these facilities was anticipated by the Eastern Dublin EIR and considered a significant impact (IM 3.12/A and 3.12/B). Implementation of mitigation measures (MM 3.12/1.0 – 8.0) reduce this impact to a level of *insignificance*. These mitigation measures encourage development agreements; adoption by the City of an area of benefit ordinance; creation of Special Assessment of Mello Roos Community Facilities Districts; City evaluation of Marks-Roos bond pooling; and consideration of City-wide developer and builder impact fees.

The adopted mitigation measures would continue to apply to the entire project. There are no impacts beyond those analyzed in the Eastern Dublin EIR and therefore no additional review or analysis is necessary.

## XIV. RECREATION

### Environmental Setting

Since the project area is not currently developed with urban uses the area contains no parks or other recreational facilities. Nearby community and regional parks include Emerald Glen Park, a 50-acre city park now being developed by the City of Dublin immediately west of Tassajara Road, and two community parks slated for development elsewhere in the Eastern Dublin area. The combined area of the two community parks is

126 acres. Each of these parks would allow for organized sports activities and individual sports as well as for passive recreation. Numerous neighborhood parks and neighborhood squares have been included in the Eastern Dublin Specific Plan and General Plan planning areas. The East Bay Regional Park District also has developed a staging area on the west side of Tassajara Road as part of a regional recreational trail system.

The Project proposes adding approximately 14 acres to one of the community parks listed above and several neighborhood parks and squares to serve the new residents and employees generated by project development.

#### Project Impacts and Mitigation Measures

##### a) *Would the project increase the use of existing neighborhood or regional parks?*

LS. The proposed development would cause an increase in demand for neighborhood, community and regional park facilities due to an increase in the number of people within the project area. The Eastern Dublin EIR identified the demand for park facilities as a potentially significant impact (IM 3.4/K). Implementation of the mitigation measures as policies within the General Plan and the Eastern Dublin Specific Plan (MM 3.4/20.0 – 28.0) reduce this impact to a level of *insignificance*. These mitigation measures and policies encourage expanding park areas; maintaining and improving outdoor facilities in conformance with the City's Park and Recreation master Plan; acquire and improve parklands; require land dedication and improvements for parks; designate sites in the General Plan and Specific Plan areas; and implement Specific Plan policies for the provision and maintenance of open space.

The Eastern Dublin EIR also identified park facilities as a fiscal impact (IM 3.4/L). Implementation of the three mitigation measures (MM 3.4/29.0 – 31.0) reduce this impact to a level of *insignificance*.

The adopted mitigation measures and General Plan policies would continue to apply to the entire project and the Specific Plan policies would continue to apply to the 472-acre portion within the Specific Plan. There are no impacts beyond those analyzed in the Eastern Dublin EIR and therefore no additional review or analysis is necessary.

##### b) *Does the project include recreational facilities or require the construction of recreational facilities?*

LS. The project includes neighborhood parks, open space and an addition to a planned community park in accordance with the General Plan and Specific Plan. The Eastern Dublin EIR identified the construction of park facilities and the cost of those facilities as impacts (IM 3.4/k and 3.4/L) and, with implementation of the mitigation measures listed above, these impacts are *less-than-significant* (please see a) above for a full discussion).

The adopted mitigation measures would continue to apply to the entire project. There are no impacts beyond those analyzed in the Eastern Dublin EIR and therefore no additional review or analysis is necessary.

## XV. TRANSPORTATION/TRAFFIC

### Environmental Setting

The project site is served by a number of regional freeways and sub-regional arterial and collector roadways, including: Interstate I-580, Dougherty Road, Dublin Boulevard, Hacienda Drive, Arnold Road, Gleason Drive, Tassajara Road, Santa Rita Road and Fallon Road. Development of the Project as proposed or modified would introduce new arterial roadways and collector streets into the Project area. The Project is proposing a minor change in the location of one collector street by removing it from a potentially sensitive intermittent stream area. Other roadways are proposed in the General Plan planning area which were not considered as part of the Eastern Dublin EIR (residential collector streets which could occur in the General Plan planning area were not addressed in the Eastern Dublin EIR).

### Project Impacts and Mitigation Measures

The Eastern Dublin EIR addressed the traffic and transportation impacts of development of the project area and mitigation measures were adopted to reduce some of the identified impacts to a less than significant level. Due to increased urban development in the Tri-Valley area and beyond which may impact roadways within the project area, there could be the potential for additional transportation/traffic impacts.

- a) *Cause an increase in traffic which is substantial to existing traffic load and street capacity?*

PS. The Eastern Dublin EIR considered the development of the project area with the proposed 2,526 dwelling units and 1.4 million square feet of commercial/industrial floor space, and indicated mitigation measures to address the impacts thereof. However, changes in Tri-Valley commute patterns and traffic intensities in addition to the anticipated Project traffic, may cause *potentially significant* impacts not anticipated by the Eastern Dublin EIR. These impacts could include traffic impacts within the project area, or at Project intersection, or on freeways, roads, etc. which the project may utilize.

- b) *Exceed, either individually or cumulatively, a LOS standard established by the County CMA for designated roads?*

PS. As noted above, the addition of approximately 2,526 dwelling units and 1.4 million square feet of commercial/industrial building area in the project area were anticipated and addressed in the Eastern Dublin EIR but the impacts of development on regional freeways and local roadways in conjunction with changing commute patterns and traffic intensities unrelated to the project may cause *potentially significant* impacts not anticipated by the Eastern Dublin EIR.

c) *Change in air traffic patterns?*

NI. The Livermore Airport is located to the south of the project Area. The Airport Land Use Commission of Alameda County has established land use policies for areas within the Airport Protection Area and the General Referral and Height Referral area of the airport. Development of the project area is subject to the policies of the ALUC. Development of the project area is not expected to create a change in air traffic patterns at the airport and hence would have *no impact* on air traffic patterns.

d) *Substantially increase hazards due to a design feature or incompatible use?*

PS. Approval of the proposed project and future development of the site would add new roads, driveways, sidewalks and other vehicular and pedestrian travel ways where none currently exist. The Eastern Dublin EIR anticipated and addressed these potential impacts and suggested mitigation measures to reduce such impacts. However, changes in Tri-Valley commute patterns and traffic intensities in addition to the anticipated project traffic may cause *potentially significant* impacts not anticipated by the Eastern Dublin EIR. These impacts could include traffic impacts within the project area, or at project intersection, or on freeways, roads, etc. which the project may utilize, such that traffic-related hazards to pedestrians or bicyclists using the new roads and other circulation features could increase.

e) *Result in inadequate emergency access?*

PS. The present need for emergency access is low, since there are few current residents or visitors to the site. Construction of new residences and commercial development within the project area could increase the need for emergency services and related access to new residences and commercial establishments. The Eastern Dublin EIR anticipated and suggested mitigation measures to reduce such impacts. However, changes in Tri-Valley commute patterns and traffic intensities in addition to the anticipated project traffic may cause *potentially significant* impacts not anticipated by the Eastern Dublin EIR. For example, potential increased volumes of traffic unrelated to the project may create a potentially significant impact on emergency access capability on project streets or intersections during peak traffic hours.

f) *Inadequate parking capacity?*

NI. Parking for individual projects within the project area would be reviewed by the City of Dublin at the time such proposals are submitted to ensure consistency with City parking requirements. *No impact* is anticipated.

g) *Conflict with adopted policies, plans or programs for alternative transportation?*

NI. Individual projects within the subject site will be designed with sidewalks, pedestrian walkways and bicycle routes to minimize potential hazards to pedestrians and bicyclists and to support these alternative transportation modes. In accordance with the Eastern Dublin Specific Plan, bicycle routes and pedestrian trails are included as part of the

proposed Project. The City and Eastern Dublin Specific Plan have standards by which bus turn-outs, bicycle paths, trails and sidewalks must be planned and constructed. Bus turn-outs are required to be installed by project developers in accordance with City requirements and bus service plans. These improvements will be confirmed at the time each individual development project is reviewed by the City.

## XVI. UTILITIES AND SERVICE SYSTEMS

### Environmental Setting

The project area currently is served by the Alameda County Flood Control District Zone 7 as a regional water supplier and distributor and for storm drain facilities. The Dublin San Ramon Services District (DSRSD) would serve the project area as the water retailer; would provide wastewater collection and treatment; and would provide opportunities for the use of recycled water for landscape purposes. Since the project area is mainly undeveloped except for nine residences and scattered outbuildings, current services to the Project area are minimal.

Upon annexation of the project area to the City of Dublin, project developers would be required to extend new services to the area to provide a public water supply for domestic and fire flow use, a recycled water service for irrigation of public medians and parks, and a public wastewater treatment system, all of which would connect with existing facilities maintained and controlled by DSRSD. Project developers would be required to install new storm drainage facilities which would connect with existing facilities maintained and controlled by the Alameda County Flood Control and Water Conservation District, Zone 7. Although most of these infrastructure facilities would be installed by Project developers, all of these systems would be public and would be maintained by public agencies such as the City of Dublin and the Dublin San Ramon Services District. Cable TV utilities also would be extended to the project area.

### Gas and Electricity (current setting)

Pacific Gas & Electric Company (PG&E) provides electricity and natural gas to the project site. Existing service to the project area includes minor low voltage distribution feeders at 21 kilovolts (kV) and service within the project vicinity is provided by PG&E distribution lines along Fallon, Croak, and Collier Canyon roads. There are no transmission lines within the project area. A natural gas main is proposed to be extended along Dublin Boulevard eastward from its current terminus to within 2,812 feet of the Project Site when PG&E and Pacific Bell install a joint trench in Dublin Ranch Area G in late 2001 or early 2002.

Currently, California is experiencing an energy shortfall. PG&E declared bankruptcy in April, 2001; it is unknown if this will have any effect on the company's ability to continue to provide service.

### Project Impacts and Mitigation Measures

The Eastern Dublin EIR addressed the provision and extension of services and utilities to the project area and mitigation measures were adopted to reduce some of the identified impacts to a less than significant level. However, additional or new potential impacts may be *potentially significant* for the Project area due to changed circumstances (increased urban development in the Tri-Valley area, changes in water purveyor and distributor contracts, changes in the handling and disposal of wastewater, changes in supply and distribution of gas and electricity, etc.)

- a) *Exceed wastewater treatment requirements of the RWQCB?*

**PS.** Changes in circumstances due to regional policy changes, funding mechanisms and timing of infrastructure improvements may create a *potentially significant* impact.

- b) *Require new water or wastewater treatment facilities or expansion of existing facilities?*

**PS.** As noted above, changes in circumstances due to regional policy changes, funding mechanisms and timing of wastewater infrastructure improvements may create a *potentially significant* impact.

- c) *Require new storm drainage facilities?*

**PS.** New facilities will be needed as a result of development and may exceed those previously analyzed. This may be a *potentially significant* impact.

- d) *Are sufficient water supplies available?*

**PS.** DSRSD, which would provide water service and supply to project area has included the project within its master plans and projections. However, water supplier contracts and recent litigation may have an impact on how, when and how much water is supplied to the project. This may be a *potentially significant* impact.

- e) *Adequate wastewater capacity to serve the proposed project?*

**PS.** Approval of the proposed project and development of the site could result in an increased demand for wastewater treatment over present conditions. Due to increased and more rapid development in the Tri-Valley area there may be a potential need to expand the capacity of the treatment plant earlier than originally anticipated by the Eastern Dublin EIR. This could be a *potentially significant* impact.

- f) *Solid waste disposal?*

**PS.** Development of the project as proposed could incrementally increase the generation of solid waste. Although this impact was addressed in the Eastern Dublin EIR, changed circumstances due to more rapid development in the Tri-Valley area in combination with

the anticipated project could have a *potentially significant* impact on the availability of solid waste disposal services.

- g) *Comply with federal, state and local statutes and regulations related to solid waste?*

**NI.** The City of Dublin and the solid waste hauler would ensure that developers of individual projects constructed in the Project area would adhere to federal, state and local solid waste regulations; therefore, *no impact* would result.

- h) *Gas and electricity?*

**PS.** Prior to the current state-wide energy crisis, PG&E had the ability to adequately serve the Tri-Valley with existing facilities until approximately June 2002. PG&E has proposed the Tri-Valley 2002 Capacity Project to increase electric service by adding substations in Dublin and North Livermore, expanding the Vineyard Substation in Pleasanton and installing approximately 23.5 miles of 230 kilovolt (kV) transmission lines to serve the substations (CPUC, 2000). PG&E is proposing construction of a 5-acre, 230/21 kV substation with four 45 megawatt transformers in eastern Dublin. If the Tri-Valley 2002 Capacity Increase Project or a functional equivalent project is not constructed, PG&E would be forced to respond to growing demand by expanding its existing system to the extent that is possible and by curtailing service if growth in demand exceeds the transmission system's capacity or reliability requirements for essential services (such as hospitals). It is possible that if the Tri-Valley 2002 Capacity Increase Project is delayed, then other alternatives would be identified.

However, given that PG&E has declared bankruptcy and the that there is an apparent energy provision shortfall within the state and from out-of-state providers, it is unclear whether PG&E would or could pursue the Tri-Valley 2002 Capacity Increase Project or, even if approved and constructed, whether there would be energy available to supply the new facilities.

The impacts of the project on the consumption of non-renewable resources is identified in the Eastern Dublin EIR (IM 3.4/S) and mitigation measures (MM 3.4/45.0 – 3.4/46.0) are adopted as part of the project in an effort to reduce natural resource consumption and encourage energy conservation, the impact was determined to be unavoidable and adverse. Pursuant to CEQA, a Statement of Overriding Consideration was adopted by the City Council for this impact. However, the current uncertainty of the supply of energy to the state as a whole, the potential bankruptcy of the electricity and gas service provider, and the potential lack of new energy-providers/power facilities may have a *potentially significant* impact.

## XV. MANDATORY FINDINGS OF SIGNIFICANCE

- a) *Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or*

wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number of or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

YES. Please refer to the discussion in the Biological Resources section above (Section IV) regarding changes regulatory circumstances and the adoption of the critical habitat for the California red-legged frog..

- b) *Does the project have impacts that are individually limited, but cumulatively considerable?*

("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects and the effects of possible future projects.)

YES. The project constitutes about 25 percent of the overall Eastern Dublin planning area. Other parts of this area have been or are being developed in accordance with the Eastern Dublin Specific Plan. Although the Eastern Dublin EIR addressed the cumulative impacts of development of the Project area within its evaluation of the overall Eastern Dublin planning area, changed circumstances mentioned throughout this Initial Study may contribute to changed cumulative impacts which should be further analyzed.

- c) *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

YES. The Eastern Dublin EIR addressed the potentially significant adverse impacts of the proposed Project through its evaluation of the proposed Eastern Dublin Specific Plan and General Plan Amendment. The Eastern Dublin EIR suggested mitigation measures which reduce many such impacts to a less-than significant level and where such impacts could not be reduced or otherwise had a cumulative adverse impact, the City Council adopted a Statement of Over-riding Consideration pursuant to CEQA Guidelines.

As discussed previously in this document, however, changes in circumstances since the Eastern Dublin EIR was certified have the potential for significant effects beyond those analyzed in the Eastern Dublin EIR.

### Initial Study Preparer

Anne Kinney, Associate Planner, City of Dublin

### References

Eastern Dublin General Plan Amendment and Specific Plan Environmental

Impact Report, Wallace Roberts and Todd, 1994.

Eastern Dublin Specific Plan, June 6, 1998

City of Dublin General Plan, revised July 7, 1998

Projections 2000, Association of Bay Area Governments, December 1999

**Persons/Agencies Contacted in Preparation of this Document**

Grassetti Environmental Consulting

City of Dublin, Public Works Department

City of Dublin, Planning Department

Dublin San Ramon Services District

Alameda County Flood Control District Zone 7

MacKay and Somp

**TABLE 1: PROPOSED STAGE 1 DEVELOPMENT PLAN  
ACREAGES, LAND USES AND DEVELOPMENT**

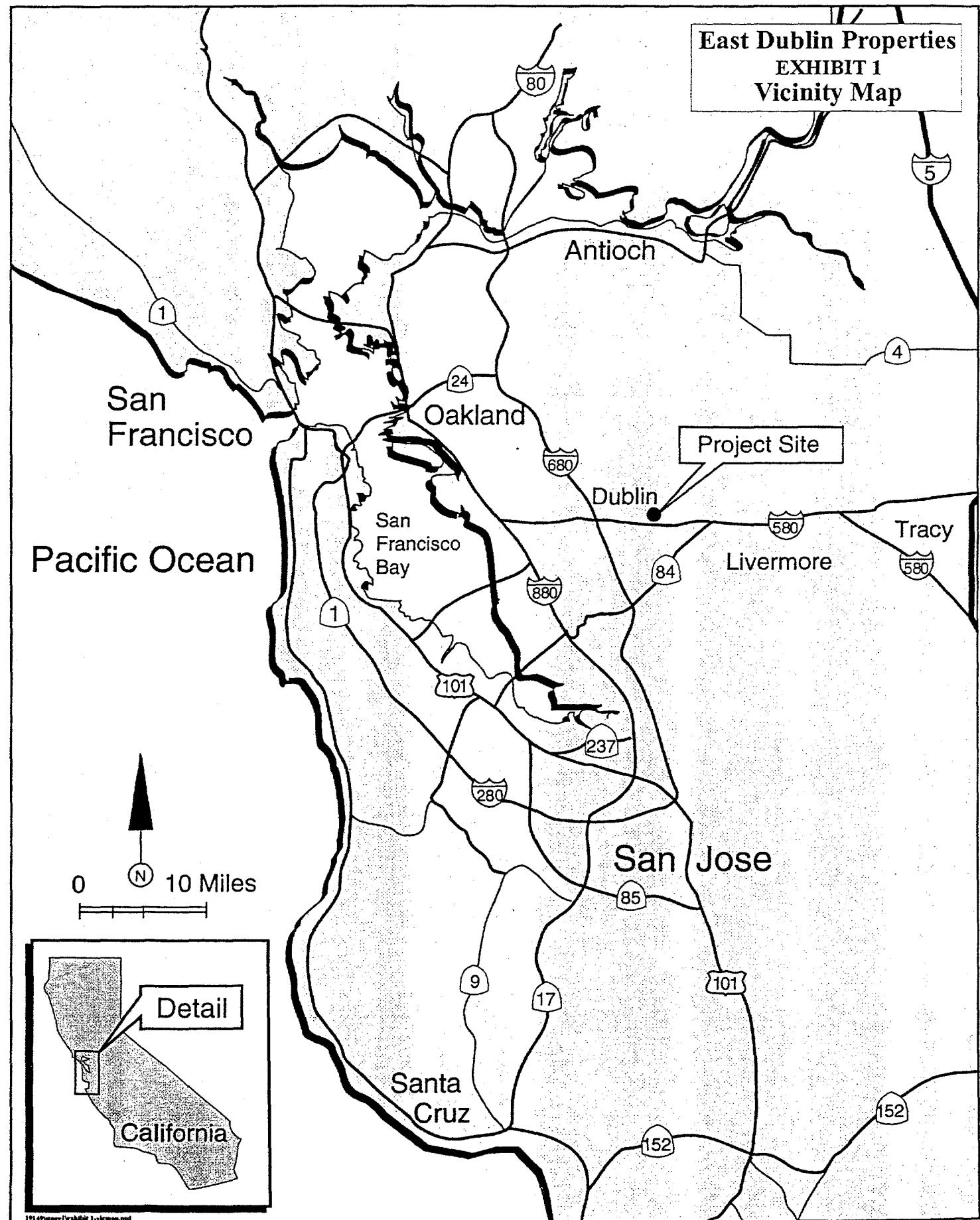
Land Use Type	Gross Acres	Proposed Project (Midpoint Density per City Policy) density units or square feet
Low Density Residential (0.9 - 6 du/acre)	433.5	1,734
Medium Density Residential (6.1 - 14 du/acre)	9.4	94
Medium/High Density Residential (14.1 - 25 du/acre)	34.8	696
Rural Residential/ Agriculture (1 du/100 acres or parcel)	269.1	2
Future Study Area <sup>1</sup>	92.6	0
General Commercial (0.25 FAR)	41.0	446,490
Neighborhood Commercial (0.30 FAR)	10.3	134,600
Industrial Park (max. 0.28 FAR)	68.9	840,360
Junior High School	14.6	N/A
Elementary Schools	17.3	N/A
Community Park	14.1	N/A
Neighborhood Parks	24.0	N/A
Neighborhood Square	2.7	N/A
Open Space	76.9	N/A
<b>Totals</b>	<b>1109.2<sup>2</sup></b>	<b>2,526 du 1,421,450 sf</b>

Notes:

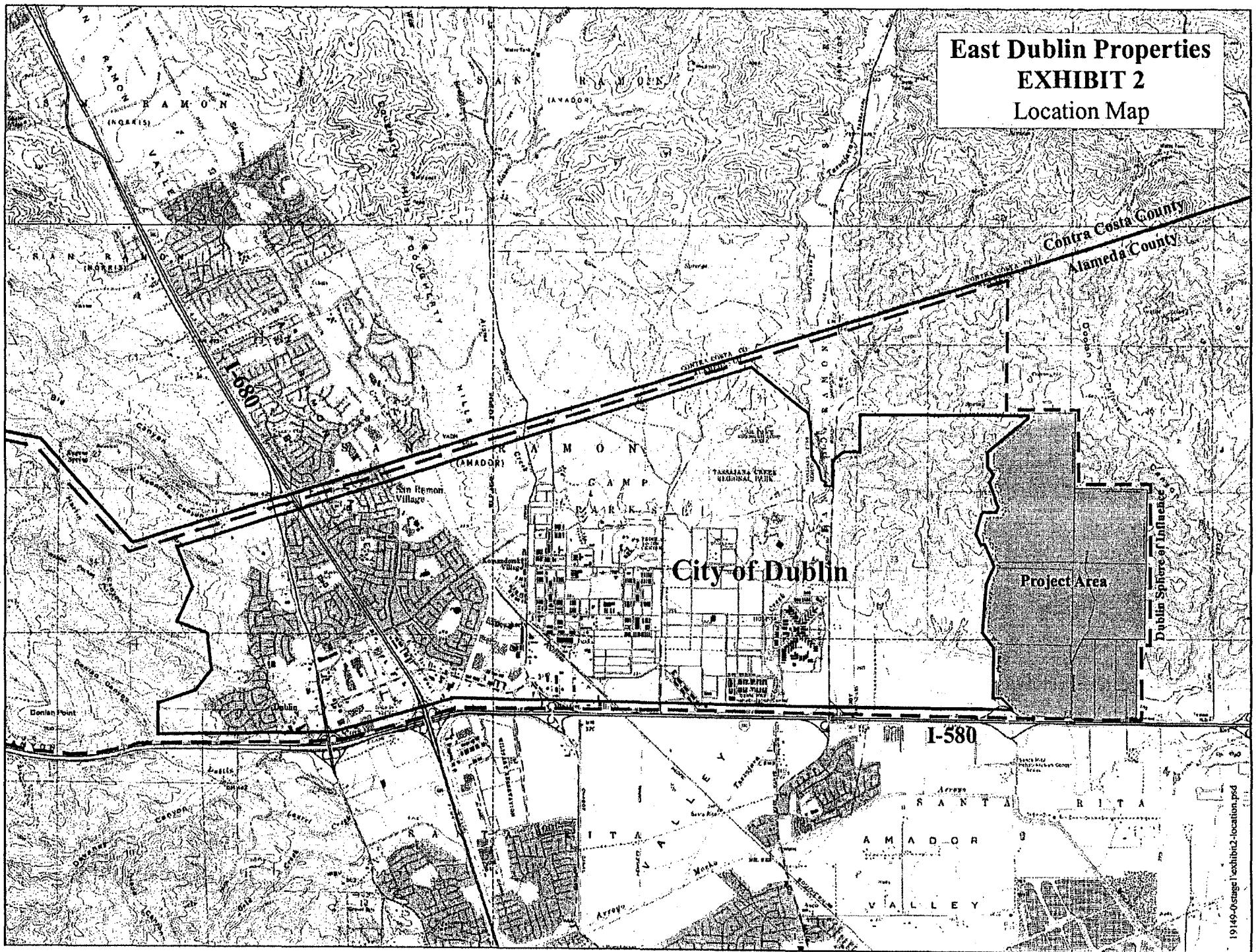
<sup>1</sup> Future Study Area indicates a land use designation for properties located within the Airport Protection Area. These areas will require future additional City review and action to determine appropriate land uses.

<sup>2</sup> This acreage total is less than the 1,120 acre project area because it omits acreage utilized for public rights of way.

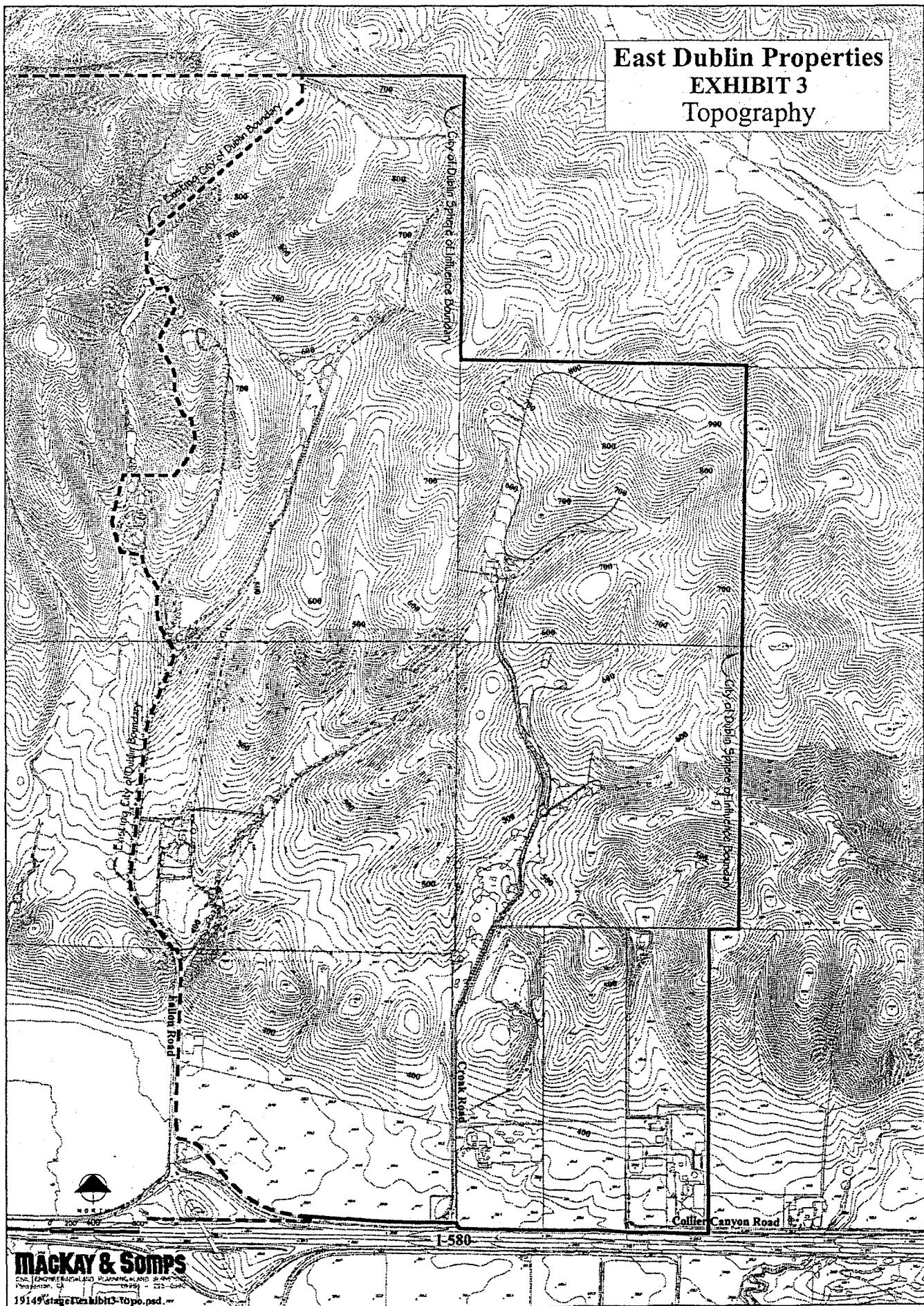
**East Dublin Properties  
EXHIBIT 1  
Vicinity Map**



**East Dublin Properties**  
**EXHIBIT 2**  
Location Map



East Dublin Properties  
EXHIBIT 3  
Topography

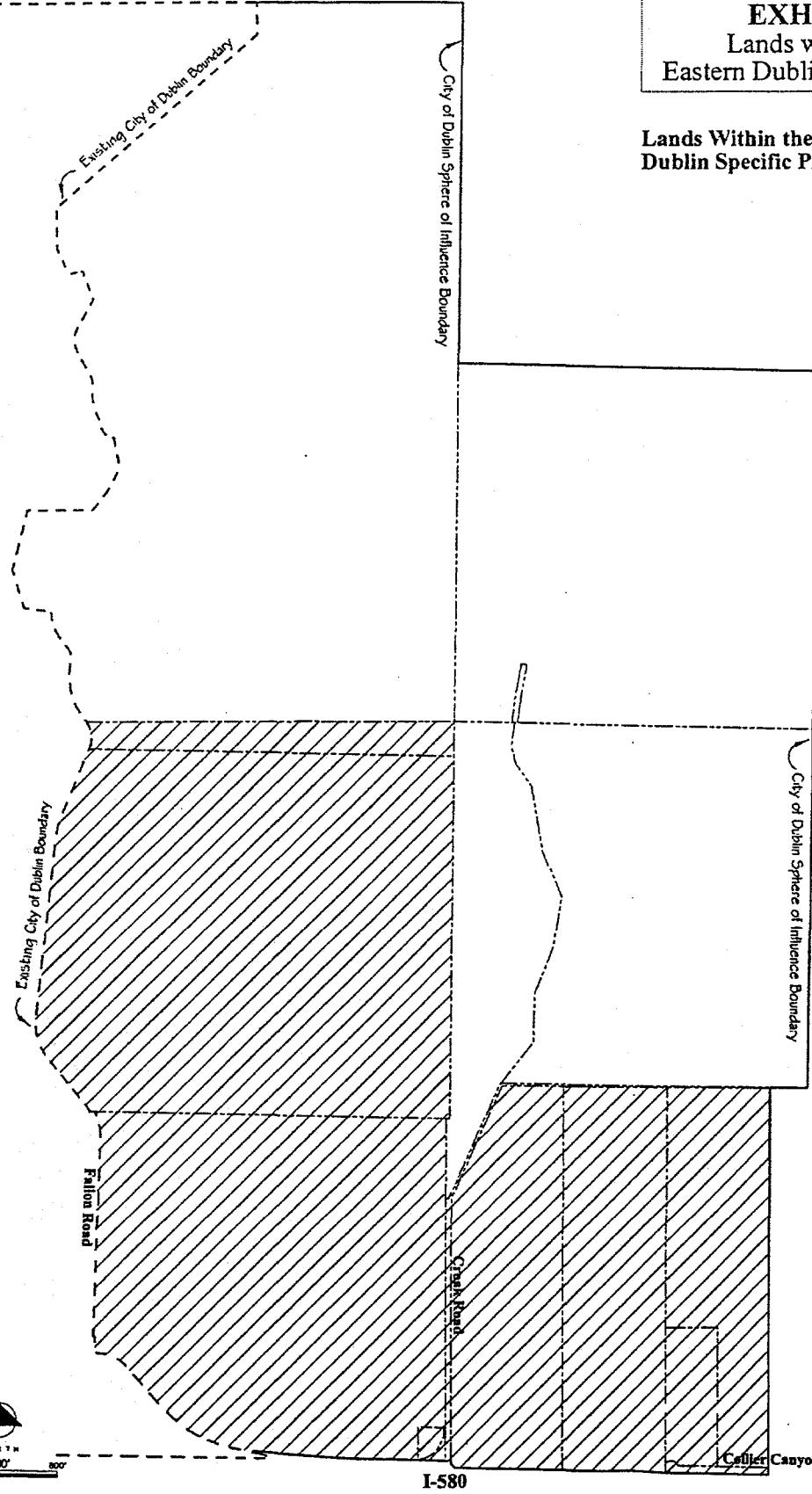
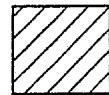


## East Dublin Properties

### EXHIBIT 4

Lands within the  
Eastern Dublin Specific Plan

Lands Within the Eastern  
Dublin Specific Plan Area



**General Plan**  
**-Eastern Extended Planning Area**

**LAND USE MAP**

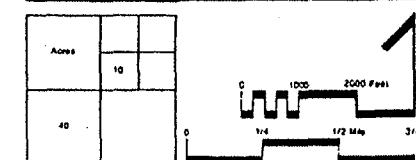
**Legend**

<b>COMMERCIAL</b>		
	Neighborhood Commercial	
	General Commercial	
	Campus Office	
	Industrial Park	
<b>RESIDENTIAL</b>		
	High Density	25 du/ac
	Medium-High Density	14-25 du/ac
	Medium Density	6-14 du/ac
	Low Density	0-6 du/ac
	Rural Residential/Agriculture	1 du/100 ac
<b>PUBLIC/SEMI-PUBLIC/OPEN</b>		
	Public/Semi-Public Facility	
	Elementary School	
	Junior High School	
	High School	
	Public/Semi-Public	
	Parks & Recreation	
	City Park	
	Community Park	
	Neighborhood Park	
	Neighborhood Square	
	Open Space	
	Stream Corridor	
<b>CIRCULATION</b>		
	Arterial Street	
	Collector Street	
	Transit Spine	
	SOI Boundary	
	General Plan Amendment Study Area	
	Specific Plan Study Area	

May 10, 1993

**EASTERN DUBLIN**

Wallace Roberts & Todd

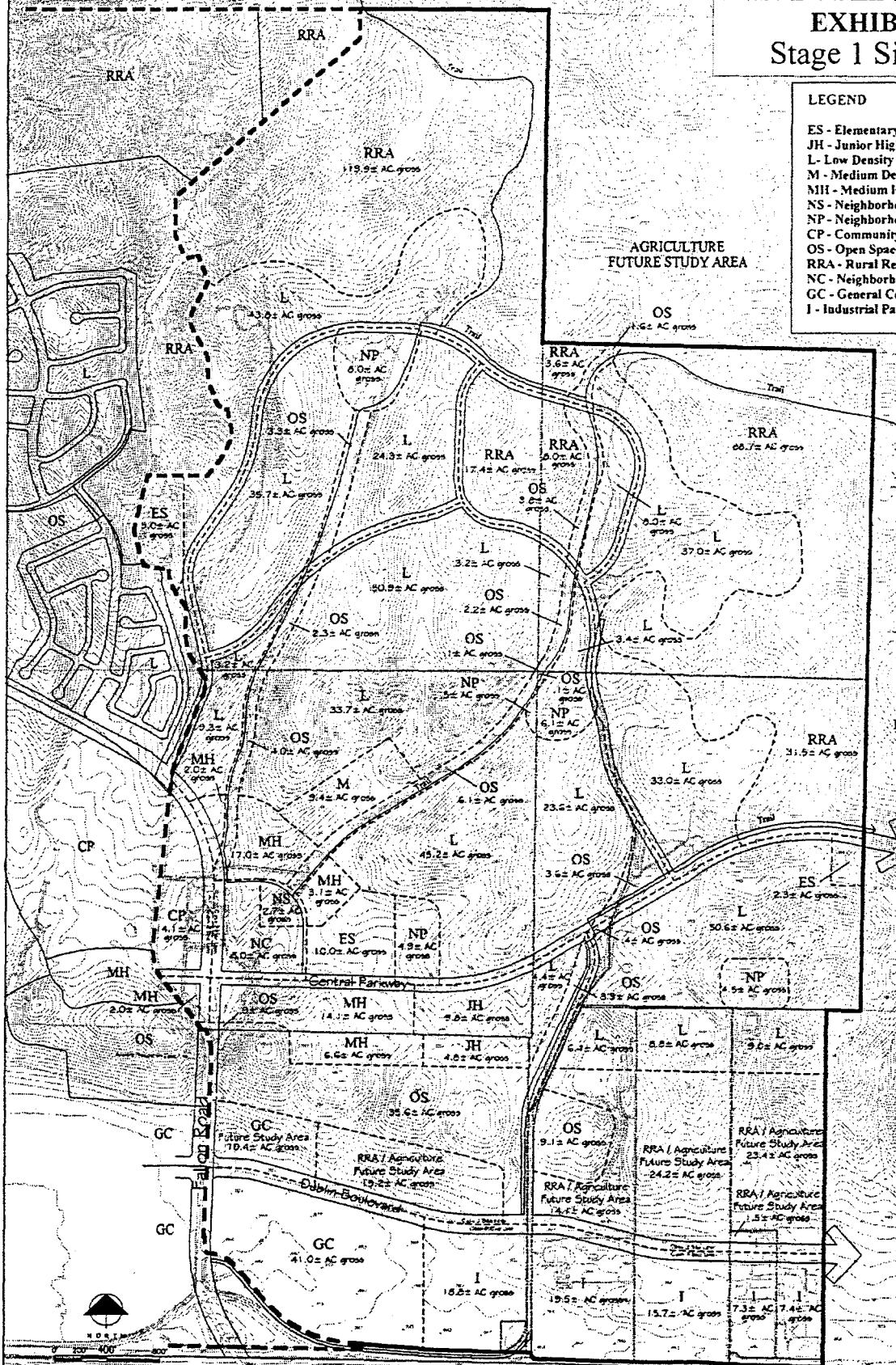


\* General Commercial may be permitted by a Planned Development Zoning Process (see text for complete discussion)  
\*\* Will convert to Future Study Area/Agriculture where determined inconsistent with APA (see text for complete discussion)

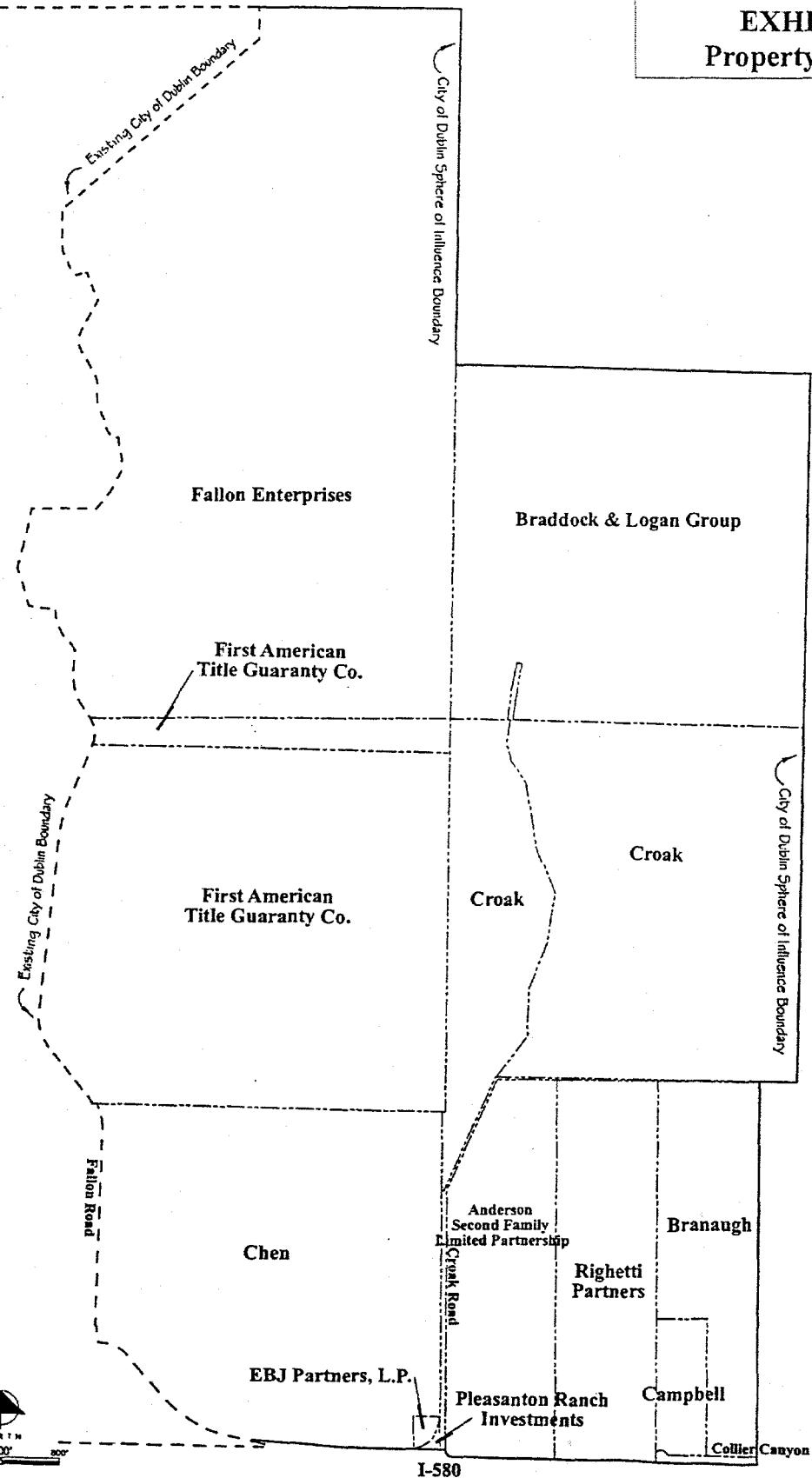
**East Dublin Properties  
EXHIBIT 6  
Stage 1 Site Plan**

**LEGEND**

- ES - Elementary School
- JH - Junior High School
- L - Low Density Residential
- M - Medium Density Residential
- MH - Medium High Density Residential
- NS - Neighborhood Square
- NP - Neighborhood Park
- CP - Community Park
- OS - Open Space
- RRA - Rural Residential / Agriculture
- NC - Neighborhood Commercial
- GC - General Commercial
- I - Industrial Park

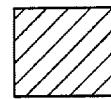


**East Dublin Properties**  
**EXHIBIT 7**  
**Property Owners**



**East Dublin Properties**  
**EXHIBIT 8**  
Williamson Act Agreements

Agreements Non-Renewed

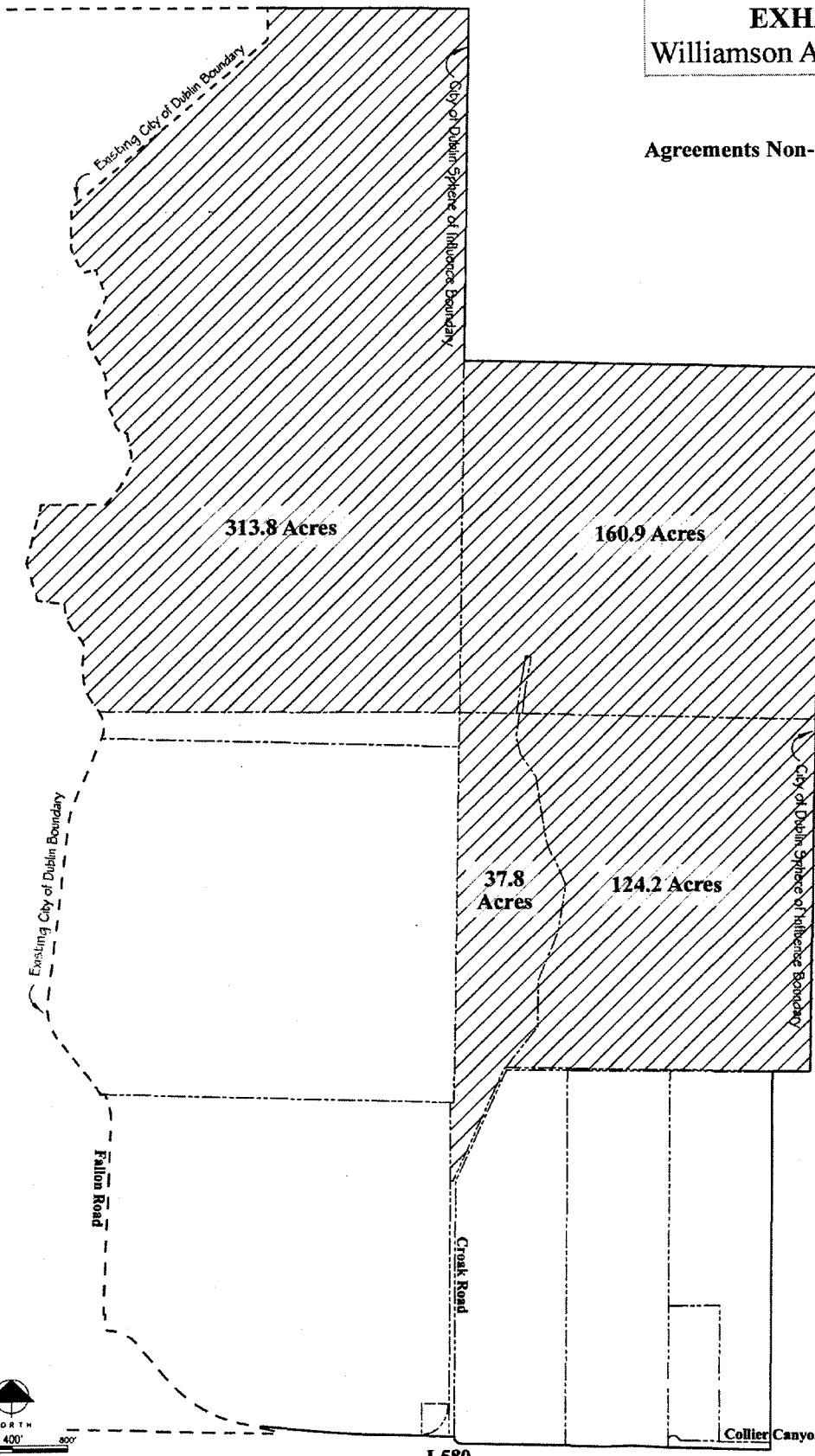


313.8 Acres

160.9 Acres

37.8  
Acres

124.2 Acres



APPENDIX B: CITY OF DUBLIN RESOLUTION NO. 53-93

RESOLUTION NO.

53

-93

A RESOLUTION OF THE CITY COUNCIL  
OF THE CITY OF DUBLIN

RESOLUTION ADOPTING THE EASTERN DUBLIN GENERAL PLAN AMENDMENT AND EASTERN DUBLIN SPECIFIC PLAN; MAKING FINDINGS PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT AND ADOPTING A STATEMENT OF OVERRIDING CONSIDERATIONS FOR THE EASTERN DUBLIN GENERAL PLAN AMENDMENT AND SPECIFIC PLAN; AND ADOPTING A MITIGATION MONITORING PROGRAM FOR THE EASTERN DUBLIN GENERAL PLAN AMENDMENT AND SPECIFIC PLAN

Recitals

1. In response to a proposal for residential development of the Dublin Ranch property, the City of Dublin undertook the Eastern Dublin Study to plan for the future development of the eastern Dublin area.

2. The City Council and Planning Commission conducted three joint public study sessions and three workshops relating to planning issues in eastern Dublin.

a. The April 18, 1990, study session considered a land use concept report containing four land use scenarios and the consistency of each land use concept with existing general plan policies. Alternative #4 was considered the preferred land use concept for environmental study by informal consensus.

b. The August 22, 1990, study session considered Alternative #4 and a fifth concept (based on the 1986 annexation agreement with Alameda County). The "Town Center" concept, types of streets, location and types of parks were discussed.

c. The November 15, 1990, workshop solicited comments from the public regarding the existing and desired life style qualities in Dublin and what the public wanted to see in a new community.

d. The December 6, 1990, workshop continued with a similar discussion of desired types of commercial development and discussed circulation systems and parks and open space.

e. The December 18, 1990, workshop presented a preliminary conceptual land use plan. Input was received on the transit spine, location of civic center, types of residential uses, location of commercial uses, the concentration of high density residential uses, and jobs/housing balance.

f. The February 14, 1991, study session considered a land use plan that incorporated comments made at the three workshops and included a discussion of major issues, such as the location of a high school, connection to existing Dublin, size of streets and types of parks.

3. With the identification of a preferred alternative on February 14, 1991, the City prepared a Draft General Plan Amendment for approximately 6,920 acres to plan for future development of a mixed use community of single- and multiple-family residences, commercial uses (general commercial, neighborhood commercial, campus office and industrial park), public and semi-public facilities (including schools), parks and open space.

#### Draft General Plan Amendment

4. The Draft General Plan Amendment, dated May 27, 1992, designates the proposed general distribution and general location and extent of the uses of Eastern Dublin for residential, commercial, industrial, public, open space and parks, and other categories of public and private uses of land.

5. The Draft General Plan Amendment includes a statement of standards of population density and standards of building intensity for Eastern Dublin.

6. Pursuant to the provisions of State Planning and Zoning Law, it is the function and duty of the Planning Commission of the City of Dublin to review and recommend action on proposed amendments to the City's General Plan.

7. The Planning Commission held a duly noticed public hearing on the Eastern Dublin Draft General Plan Amendment on October 1, 1992, which hearing was continued to October 6, 1992, October 12, 1992, and October 15, 1992.

8. Based on comments received during the public hearing, related text revisions, dated December 21, 1992, were made to the Draft General Plan Amendment and were reviewed by the Planning Commission on December 21, 1992.

9. The Draft General Plan Amendment was reviewed by the Planning Commission in accordance with the provisions of the California Environmental Quality Act through the preparation and review of an Environmental Impact Report. On December 21, 1992, by Resolution No. 92-060, the Planning Commission recommended certification of the Final Environmental Impact Report.

10. On December 21, 1992, the Planning Commission, after considering all written and oral testimony submitted at the public hearing, adopted of Resolution No. 92-061, recommending City

Council adoption of the Draft General Plan Amendment, as revised December 21, 1992.

#### Draft Specific Plan

11. The Draft Specific Plan, dated May 27, 1992, implements an approximately 3,328-acre portion of the Eastern Dublin General Plan Amendment by providing a detailed framework, including policies, standards and implementation programs, for evaluation of development projects proposed in the portion of eastern Dublin covered by the Draft Specific Plan.

12. Pursuant to State Law, the Eastern Dublin Draft Specific Plan was prepared and reviewed in the same manner as a general plan amendment.

13. The Planning Commission held a duly noticed public hearing on the Eastern Dublin Draft Specific Plan on October 6, 1992, which hearing was continued to October 12, 1992, and October 15, 1992.

14. Based on comments received during the public hearings, related text revisions, dated December 21, 1992, were made to the Draft Specific Plan and were reviewed by the Planning Commission on December 21, 1992.

15. The Draft Specific Plan was reviewed by the Planning Commission in accordance with the provisions of the California Environmental Quality Act through the preparation and review of a Final Environmental Impact Report. On December 21, 1992, by Resolution No. 92-060, the Planning Commission recommended certification of the Final Environmental Impact Report.

16. On December 21, 1992, the Planning Commission, after considering all written and oral testimony submitted at the public hearing, adopted Resolution No. 92-062, recommending City Council adoption of the Draft Specific Plan, dated May 27, 1992, as revised December 21, 1992.

#### Council Public Hearing

17. The City Council held a duly noticed public hearing on the Eastern Dublin Draft General Plan Amendment and Draft Specific Plan on January 14, 1993, which hearing was continued to January 21, 1993, February 23, 1993, March 30, 1993, and April 27, 1993.

18. On April 27, 1993, the City Council, by Resolution No. 45-93, voted to refer Alternative 2: Reduced Planning Area ("Alternative 2") with modifications back to the Planning Commission for its recommendation, pursuant to Government Code section 65356.

19. The Planning Commission held a public hearing on May 3, 1993, to consider Alternative 2 with modifications and has reported back to the City Council by Planning Commission Resolution No. 93-013.

20. The City Council considered all written and oral testimony submitted at the public hearing and all written testimony submitted prior to the public hearing and the recommendation of the Planning Commission as set forth in Planning Commission Resolution Nos. 92-061, 92-062 and 93-013.

21. On May 10, 1993 the Council held duly noticed a public hearing to hear testimony regarding the Planning Commission's recommendation as set forth in Planning Commission Resolution No. 93-013.

22. On May 10, 1993, the City Council adopted Resolution No. 51-93, certifying the Addendum to the Draft EIR and the Final Environmental Impact Report ("Final EIR") as adequate and complete. The Final EIR identified significant adverse environmental impacts which can be mitigated to a level of insignificance through changes or alterations in the project. Therefore, pursuant to CEQA, findings adopting the changes or alterations are required and are contained in this resolution. Some of the significant impacts cannot be mitigated to a level of insignificance and a statement of overriding considerations is therefore required pursuant to CEQA and is also contained in this resolution.

23. Upon consideration of the land use and environmental effects of the project, as described in the Final EIR, the Council has determined to adopt Alternative 2, as described in the Final EIR, with certain modifications which are described in the Addendum to the Draft EIR ("Alternative 2 With Modifications"). Alternative 2 With Modifications reduces land use impacts, does not disrupt the existing rural residential community in Doolan Canyon, potentially reduces growth-inducing impacts on agricultural lands, reduces certain traffic impacts to a level of insignificance, produces less demand for infrastructure, reduces the noise impacts for Doolan Road to a level of insignificance and will have a positive fiscal impact on the City.

24. Alternative 2 was considered by the Planning Commission at its hearings, in testimony at the public hearings, in staff reports presented to the Commission at its hearings, in the EIR reviewed by the Planning Commission at its hearings and in its deliberations.

25. Alternative 2 With Modifications includes several substantial modifications to Alternative 2, as Alternative 2 is described in the Draft EIR. Although several of these modifications were considered by the Planning Commission at its hearings, the Planning Commission has considered Alternative 2 With

Modifications and has reported back to the Council with its recommendation regarding Alternative 2 With Modifications. The Council has determined to follow the Planning Commission's recommendation as set forth in its Resolution No. 93-013, except with respect to the width of the Transit Spine and with the addition of the phrase "or other appropriate agreements" on page 160 of the Draft Specific Plan (§ 11.3.1, first sentence).

Findings/Overriding Considerations/  
Mitigation Monitoring Program

26. Public Resources Code section 21081 requires the City to make certain findings if the City approves a project for which an environmental impact report has been prepared that identifies significant environmental effects.

27. Section 15093 of the State CEQA Guidelines requires adoption by the City Council of a statement of overriding considerations if the Council approves a project which will result in unavoidable significant effects on the environment.

28. Public Resource Code section 21085 and section 15092 of the State CEQA Guidelines require the City to make certain determinations if it approves a project which reduces the number of housing units considered in the environmental impact report.

29. The Final EIR for the Eastern Dublin General Plan Amendment and Specific Plan identifies certain significant adverse environmental effects.

30. Certain of the significant adverse environmental effects can be reduced to a level of insignificance by changes or alterations in the project.

31. Certain of the significant adverse environmental effects cannot be mitigated to a level of insignificance.

32. The Council has selected Alternative 2 identified in the Final EIR with modifications described in the Addendum to the Draft EIR, reducing the number of housing units for such property from the project as reviewed by the Final EIR for the Eastern Dublin General Plan Amendment and Specific Plan.

33. Public Resources Code section 21081.6 requires the City to adopt a reporting or monitoring program for changes in a project or conditions imposed to mitigate or avoid significant environmental effects in order to ensure compliance during project implementation.

34. Government Code section 65300 authorizes a city council to adopt a general plan for land outside its boundaries which in the Planning Commission's judgment bears relation to its planning.

35. The Planning Commission has considered whether land outside the City's boundaries bears relation to the City's planning.

36. The City has referred Alternative 2 With Modifications to the Alameda County Airport Land Use Commission ("ALUC") pursuant to Public Utilities Code section 21676 (b). The City has not received a determination from the ALUC. The 60-day time period for the ALUC to make a determination has not yet run.

NOW, THEREFORE, BE IT RESOLVED THAT

A. The Dublin City Council does hereby approve "Alternative 2: Reduced Planning Area" as the Eastern Dublin General Plan Amendment, with the Revisions dated December 21, 1992, and with the Modifications described in the Addendum to Draft EIR, dated May 4, 1993.

B. The Dublin City Council finds the Eastern Dublin Specific Plan, as described in the Final EIR as "Alternative 2: Reduced Planning Area," with Revisions dated December 21, 1992, and with the modifications described in the Addendum to Draft EIR dated May 4, 1993, to be consistent with the Dublin General Plan, as revised by the Eastern Dublin General Plan Amendment.

C. The Dublin City Council does hereby approve the Eastern Dublin Specific Plan, with the Revisions dated December 21, 1992, and with the Modifications described in the Addendum to Draft EIR, dated May 4, 1993 and with the revision to page 160 referred to in paragraph 25 above.

D. The Dublin City Council does hereby direct the Staff to edit, format, and print the up-to-date Dublin General Plan with all City Council approved revisions and without any other substantive changes.

E. The Dublin City Council does hereby direct the Staff to edit, format, and print the Eastern Dublin Specific Plan with all City Council approved revisions and without any other substantive changes.

BE IT FURTHER RESOLVED THAT the Dublin City Council does hereby make the findings set forth in Sections 1, 2, 3, 4 and 5 of Exhibit A, attached hereto and incorporated herein by this reference, for the Eastern Dublin General Plan Amendment and Specific Plan.

BE IT FURTHER RESOLVED THAT the Dublin City Council finds and declares that the rationale for each of the findings set forth in Sections 1, 2, 3, 4 and 5 of its findings (Exhibit A) is contained in the paragraph entitled "Rationale for Finding" in Exhibit A.

The Council further finds that the mitigation measures for each identified impact in Exhibit A make changes to, or alterations to, the Eastern Dublin General Plan Amendment and Specific Plan, or are measures incorporated in the Eastern Dublin Specific Plan that, once implemented as described in the Mitigation Monitoring Program (Exhibit B hereto), will avoid or substantially lessen the significant effects of the Eastern Dublin General Plan Amendment and Specific Plan on the environment.

**BE IT FURTHER RESOLVED THAT** the Dublin City Council does hereby adopt the Statement of Overriding Considerations set forth in Section 6 of Exhibit A, attached hereto, which statement shall be included in the record of the project approval.

**BE IT FURTHER RESOLVED THAT** the Dublin City Council does hereby adopt the "Mitigation Monitoring Program: Eastern Dublin Specific Plan/General Plan Amendment" attached hereto and incorporated herein as Exhibit B, as the reporting and monitoring program required by Public Resources Code section 21081.6 for the Eastern Dublin General Plan Amendment and Specific Plan.

**BE IT FURTHER RESOLVED THAT** the Dublin City Council does hereby direct that the Applicants for land use approvals in the Specific Plan area shall pay their pro rata share of all costs associated with the implementation of the Mitigation Monitoring Program.

**BE IT FURTHER RESOLVED THAT** the Dublin City Council does hereby direct that all fees established pursuant to Government Code Section 65456, to recover costs of preparation of the Specific Plan, shall include the cost of preparation, adoption and administration of the Specific Plan plus interest on such costs based upon the City of Dublin's average monthly weighted investment yield calculated for each year or fraction thereof that such costs are unpaid.

**BE IT FURTHER RESOLVED THAT** the Dublin City Council does hereby direct the City Clerk to file a Notice of Determination for the Eastern Dublin General Plan Amendment and Specific Plan project with the Alameda County Clerk and the State Office of Planning and Research.

**BE IT FURTHER RESOLVED THAT** the Dublin City Council does hereby direct the City Clerk to make available to the public, within one working day of the date of adoption of this resolution, copies of this resolution (including all Exhibits) and the Eastern Dublin General Plan Amendment, dated May 27, 1992, with the Revisions dated December 21, 1992, and the modifications described in the Addendum to Draft EIR dated May 4, 1993, and the Eastern Dublin Specific Plan, dated May 27, 1992, with the Revisions to Draft Specific Plan, dated December 21, 1992, and the modifications

described in the Addendum to Draft EIR, all as modified by this resolution.

**BE IT FURTHER RESOLVED THAT** this resolution shall become effective thirty (30) days from the date of passage.

**BE IT FURTHER RESOLVED THAT** if, on the effective date of this resolution or within the remaining 60-day period for ALUC action, the ALUC has found that Alternative 2 With Modifications is not consistent with the ALUC's Alameda County Airport Land Use Policy Plan, the City shall submit all regulations, permits or other actions implementing the Eastern Dublin General Plan Amendment and Specific Plan to the ALUC for review until such time that the City Council revises the Eastern Dublin General Plan Amendment and Specific Plan to be consistent with the ALUC's Alameda County Airport Land Use Policy Plan or adopts specific findings by a two-thirds vote that the General Plan Amendment and Specific Plan are consistent with the purposes of Article 3.5 of Chapter 4 of Part 1 of Division 9 of the Public Utilities Code as stated in section 21670 of such Code.

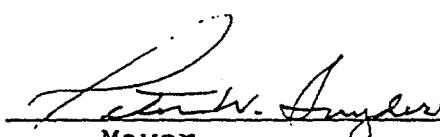
**PASSED, APPROVED, AND ADOPTED** this 10th day of May, 1993, by the following vote:

**AYES:** Councilmembers Burton, Houston, Howard, Moffatt & Mayor Snyder

**NOES:** None

**ABSENT:** None

**ABSTAIN:** None

  
\_\_\_\_\_  
Peter W. Snyder  
Mayor

**ATTEST:**

  
\_\_\_\_\_  
Kay Keck  
City Clerk

114\RESOL\29\RESOLUTION

## Section 1

### FINDINGS CONCERNING SIGNIFICANT IMPACTS AND MITIGATION MEASURES

Pursuant to Public Resources Code section 21081, the City Council hereby makes the following findings with respect to the Project's<sup>1</sup> potential significant environmental impacts and means for mitigating those impacts. Findings pursuant to section 21081, subdivision (c), as they relate to "project alternatives," are made in Section 3.

#### Section 3.1 -- Land Use

**IMPACT 3.1/F. Cumulative Loss of Agricultural and Open Space Lands.** Agricultural grazing land and open space in Alameda and Contra Costa counties will be converted to urban uses by proposed projects such as Dougherty Valley, Tassajara Valley, North Livermore, and Eastern Dublin. Because it would result in the urbanization of a large area of open space, the proposed Project would contribute to this cumulative loss of agricultural land and open space in the Tri-Valley area. This is considered a significant unavoidable cumulative impact. Response to Comments ("RC") # 34-9.

**Finding.** No mitigation measures are proposed to reduce this impact to a level of insignificance. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

**Rationale for Finding.** The total amount of open space within the RPA that will be urbanized will be cumulatively significant, in light of numerous other open space areas within the region that is also anticipated for urbanization.

**IMPACT 3.1/G. Potential Conflicts with Land Uses to the West.** The Parks Reserve Forces Training Area ("Camp Parks") is located due west of the Specific Plan area. Existing and future Army training activities, such as the use of high velocity weapons and helicopters, could result in noise and safety conflicts with adjacent open space and single-family residential areas of the Specific Plan. The extent of future army activity is unknown and

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<sup>1</sup>The "Project" is Alternative 2 described in the DEIR at pages 4-9 through 4-14 with the modifications described in the May 4, 1993 Addendum to the EIR. Alternative 2 calls for development in the Reduced Planning Area (the portion of eastern Dublin within its sphere-of-influence) (hereafter "RPA").

the Army has not yet completed its Camp Parks Master Plan. DEIR page 3.1-13.

Mitigation Measure 3.1/1.0. The City of Dublin should coordinate its planning activities with the Army to achieve compatibility with adjacent Camp Parks land uses, to solve potential future conflicts, and to reconcile land use incompatibilities. The City should consult with the Army for any specific development proposals within the RPA. DEIR pages 3.1-13, -22.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Coordinated planning activities will allow the City and Army to identify potential noise and safety impacts before they occur and will allow specific mitigation measures, including redesign, to be incorporated into development in the Project Area.

### Section 3.3 -- Traffic and Circulation

When a mitigation measure referenced in this section requires development projects within the RPA to pay for a proportionate cost of regional transportation programs and/or traffic and circulation improvements, the proportion shall be as determined by regional transportation studies, such as the current study by the Tri-Valley Transportation Council.

**IMPACT 3.3/A. I-580 Freeway, Tassajara-Fallon.** Year 2010 growth without the Project would cause cumulative freeway volumes to exceed Level of Service E on I-580 between Tassajara Road and Fallon Road. DEIR pages 3.3-21 (as revised), 5.0-3.

Mitigation Measure 3.3/1.0. Caltrans, in cooperation with local jurisdictions, could construct auxiliary lanes on I-580 between Tassajara Road and Fallon Road to create a total of ten lanes, which would provide Level of Service D operations, consistent with the Caltrans Route Concept Report for I-580. DEIR pages 3.3-21 (as revised), 5.0-3.

Finding. Approval of the construction of the auxiliary lanes, and cooperation by jurisdictions other than the City of Dublin, are within the responsibility and jurisdiction of other public agencies and not the City of Dublin. Such actions can and should be taken by other agencies. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. This mitigation measure provides acceptable Level of Service D operations during peak hours on the freeway.

**IMPACT 3.3/B. I-580 Freeway, I-680 to Hacienda.** Year 2010 growth with the Project would cause I-580 between I-680 and Dougherty Road to exceed Level of Service E. This is also a significant cumulative impact. DEIR pages 3.3-21 (as revised), 4-11, 5.0-3.

Mitigation Measure 3.3/2.0. Consistent with Specific Plan Policy 5-21<sup>2</sup>, all non-residential projects with 50 or more employees in the RPA shall participate in a Transportation Systems Management (TSM) program to reduce the use of single occupant vehicles through strategies including but not limited to encouraging public transit use, carpooling, and flexible work hours. DEIR pages 3.3-21 (as revised), 5.0-3.

Mitigation Measure 3.3/2.1. All projects within the RPA area shall contribute a proportionate share of the costs of regional transportation mitigation programs, as determined by regional transportation studies. Such regional mitigation programs may include enhanced public transit service and/or upgrading alternate road corridors to relieve demand on I-580 or I-680. DEIR page 3.3-21 (as revised).

Finding. Changes or alterations have been required in, or incorporated into the Project. However, even with these changes, the impact might not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. Approval of Alternative 2 reduces to a level of insignificance the impact on I-580 between Dougherty Road and Hacienda Drive. DEIR page 4-11. The TSM program strategies will reduce single car occupancy, thereby reducing the number of cars expected to use the subject stretch of I-580. Regional actions may focus not only on reducing auto use by reducing single occupant vehicles, but also on increasing Project area road capacities through

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<sup>2</sup> This policy appears in the Eastern Dublin Specific Plan, which plan applies only to the identified Specific Plan area. The provisions of this policy provide useful mitigation outside the Specific Plan area as well. Therefore, the EIR and these findings adopt these provisions for the entire RPA. Hereinafter, those Specific Plan goals, policies, and action programs whose provisions are similarly adopted for the RPA throughout these findings will be indicated by an asterisk.

construction of routes providing convenient alternatives to I-580 and I-680. Given the overall expected increase in traffic, however, these measures are not sufficient to reduce the cumulative impacts on I-580 between I-680 and Dougherty Road to insignificance.

**IMPACT 3.3/C. I-580 Freeway, Tassajara-Fallon-Airway.** Year 2010 growth with the Project would cause freeway volumes to exceed Level of Service E on I-580 between Tassajara Road and Airway Boulevard. This is also a significant cumulative impact. DEIR page 3.3-21 (as revised), 5.0-3.

**Mitigation Measure 3.3/3.0.** The City shall coordinate with Caltrans and the City of Pleasanton to construct auxiliary lanes on I-580 between Tassajara Road and Airway Boulevard. All projects within the RPA shall contribute a proportionate share of the costs of these improvements. DEIR pages 3.3-22 (as revised), 5.0-3; RC #7-6

**Finding.** Changes or alterations have been required in, or incorporated into the Project that avoid or substantially lessen the significant effects identified in the Final EIR. Freeway construction actions are within the ultimate responsibility and jurisdiction of Caltrans, who can and should take such actions. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

**Rationale for Finding.** The auxiliary lanes will provide sufficient additional capacity on I-580 to provide Level of Service D between Fallon Road and Airway Boulevard, and Level of Service E between Tassajara Road and Fallon Road. Both Level of Service D and E are acceptable during peak freeway hours. DEIR pages 3.3-2, -18. Development in the RPA will be required to contribute its fair share to the auxiliary lane improvements so that when such improvements are needed, they will be provided by new development generating the need. State law authorizes the City to enter into a cooperative agreement with Caltrans to make the freeway improvements (see, e.g., Streets & Highways Code §§ 113.5, 114).

**IMPACT 3.3/D. I-680 Freeway, North of I-580.** Year 2010 growth with the Project would cause freeway volumes to exceed Level of Service E on I-680 north of the I-580 interchange. This is also a significant cumulative impact. DEIR page 3.3-22, 5.0-4.

**Mitigation Measure 3.3/4.0.** All projects in the RPA shall contribute a proportionate share of the costs of Caltrans' planned improvements at the I-580/I-680 interchange, including a new two-lane freeway-to-freeway flyover with

related hook ramps to the City of Dublin. DEIR page 3.3-22 (as revised) (see also page 3.3-17 (as revised)).

Finding. Changes or alterations have been required in, or incorporated into the Project that avoid or substantially lessen the significant effects identified in the Final EIR. Freeway interchange improvement actions are within the responsibility and jurisdiction of Caltrans, who can and should take such actions. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The expected interchanges and related improvements will provide sufficient additional capacity on I-680 to provide Level of Service D north of the I-580 interchange. Development in the RPA will be required to contribute its fair share to the interchange and related improvements so that when such improvements are needed, they will be provided by new development generating the need.

IMPACT 3.3/E. Cumulative Freeway Impacts. Cumulative buildup with the Project would cause additional freeway sections, including I-580 east of Airway Boulevard, and the segment of I-580 between Dougherty and Hacienda to exceed level of service E. DEIR pages 3.3-22 (as revised), 5.0-4.

Mitigation Measure 3.3/5.0. The Project shall contribute a proportionate share to the construction of auxiliary lanes (for a total of 10) on I-580 east of Airway Boulevard, for implementation by Caltrans. The City shall coordinate with other local jurisdictions to require that all future development projects participate in regional transportation mitigation programs as determined by the current Tri-Valley Transportation Council study. DEIR pages 3.3-22 (as revised), 5.0-4.

Finding. Changes or alterations have been required in, or incorporated into, the Project. Actions by other agencies and Caltrans to implement this mitigation measure are within the responsibility and jurisdiction of those other agencies and not the City of Dublin. Such actions can and should be taken by the other agencies. However, even with these changes the impact will not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted.

Rationale for Finding. The auxiliary lanes will provide sufficient additional capacity to provide acceptable level of service on part of I-580 widening to ten lanes is consistent with the Route Concept Report. DEIR page 3.3-22 (as revised). Regional transportation mitigations can

reduce cumulative impacts through measures to decrease single occupant vehicle use and increase public transit use to further decrease traffic impacts. However, even with these improvements, part of I-580 (between I-680 and Hacienda Drive) will still be beyond acceptable LOS E. DEIR pages 3.3-20, 3.3-21 (as revised), 4-11.

**IMPACT 3.3/F. Dougherty Road and Dublin Boulevard.** Year 2010 development with the Project would cause Level of Service F operations at the intersection of Dougherty Road with Dublin Boulevard. DEIR page 3.3-25.

**Mitigation Measure 3.3/6.0.** The City of Dublin shall monitor the intersection and implement construction of additional lanes when required to maintain LOS D operations. All projects within the RPA shall contribute a proportionate share of the improvement costs. DEIR page 3.3-25 (as revised).

**Finding.** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

**Rationale for Finding.** The additional lanes at the Dougherty Road/Dublin Boulevard intersection will provide sufficient capacity for Level of Service D operations, which is acceptable at street intersections in Dublin (DEIR pages 3.3-2, -18 (as revised)). Development in the RPA will be required to contribute its fair share of the intersection improvements so that, when such improvements are needed, they will be provided by new development generating the need.

**IMPACT 3.3/G. Hacienda Drive and I-580 Eastbound Ramps.** Year 2010 development with the Project would cause Level of Service F operations at the intersection of Hacienda Drive with the I-580 eastbound ramps. DEIR page 3.3-25 (as revised).

**Mitigation Measure 3.3/7.0.** The City of Dublin shall implement improvements in coordination with the City of Pleasanton and Caltrans to widen the eastbound off-ramp to provide a second left turn lane. All projects in the RPA shall contribute a proportionate share of the improvement costs. DEIR page 3.3-25 (as revised); RC # 7-9.

**Finding.** Changes or alterations have been required in, or incorporated into the Project, that avoid or substantially lessen the significant effect identified in the Final EIR. Off-ramp widening actions are within the ultimate responsibility and jurisdiction of Caltrans. Such actions can and should be taken by Caltrans. If taken, such actions would

avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The additional lanes at the east-bound off-ramp will provide acceptable Level of Service C operations. Development in the Project area will be required to contribute its fair share of the intersection improvements, so that when such improvements are needed, they will be provided by new development generating the need. State law authorizes the City to enter into a cooperative agreement with Caltrans to make the off-ramp improvements (see, e.g., Streets & Highways Code §§ 113.5, 114).

**IMPACT 3.3/H. Tassajara Road and I-580 Westbound Ramps.** Year 2010 development with the Project would cause Level of Service F operations at the intersection of Tassajara Road with the I-580 westbound ramps. DEIR page 3.3-25 (as revised).

Mitigation Measure 3.3/8.0. The City of Dublin shall implement improvements in coordination with Caltrans to widen the I-580 westbound off-ramp and to modify the northbound approach to provide additional turn and through lanes. All projects in the RPA shall contribute a proportionate share of the improvement costs. DEIR page 3.3-26 (as revised).

Finding. Changes or alterations have been required in, or incorporated into the Project, that avoid or substantially lessen the significant effect identified in the Final EIR. Coordinating and ramp widening actions are within the ultimate responsibility and jurisdiction of Caltrans, which can and should take such actions. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The reconfigured lanes at the east-bound off-ramp will provide acceptable Level of Service B operations. Development in the Project area will be required to contribute its fair share of the intersection improvements so that when such improvements are needed, they will be provided by new development generating the need. State law authorizes the City to enter into a cooperative agreement with Caltrans to make the off-ramp improvements (see, e.g., Streets & Highways Code §§ 113.5, 114).

**IMPACT 3.3/I. Santa Rita Road and I-580 Eastbound Ramps.** Year 2010 development with the Project would cause Level of Service F operations at the intersection of Santa Rita Road with the I-580 eastbound ramps. DEIR page 3.3-26.

Mitigation Measure 3.3/9.0. The City of Dublin shall implement improvements in coordination with the City of Pleasanton and Caltrans to widen the I-580 eastbound off-ramp to provide two left-turn lanes, one through lane, and one right-turn lane to provide Level of Service E at this intersection. All projects in the RPA shall contribute a proportionate share of the improvement costs. The City of Dublin shall continue to work with the City of Pleasanton to monitor level of service at this intersection and participate in implementing improvements which may be identified in the future to improve traffic operations. DEIR page 3.3-26 (as revised); RC # 7-11.

Finding. Changes or alterations have been required in, or incorporated into the Project. Ramp widening actions are within the ultimate responsibility and jurisdiction of Caltrans, which can and should take such actions. However, even with these changes and actions, the impact will not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. The off-ramp widening will provide LOS E operations, which is still significant. Development in the Project area will be required to contribute its fair share of the intersection improvements, so that when such improvements are needed, they will be provided by new development generating the need.

**IMPACT 3.3/K. Airway Boulevard and I-580 Westbound Ramps.** Year 2010 development with the Project would cause Level of Service F operations at the intersection of Airway Boulevard with the I-580 westbound ramps. DEIR page 3.3-27 (as revised).

Mitigation Measure 3.3/11.0. The City of Dublin shall implement improvements in coordination with the City of Livermore and Caltrans to replace or widen the Airway Boulevard overcrossing of I-580 and to widen the offramp for additional turn lanes. All projects within the RPA shall contribute a proportionate share of the improvement costs. DEIR page 3.3-27 (as revised); RC #17-2

Finding. Changes or alterations have been required in, or incorporated into the Project, that avoid or substantially lessen the significant effect identified in the Final EIR. Road and ramp widening actions are within the ultimate responsibility and jurisdiction of Caltrans, which can and should take such actions. If taken such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The Airway Boulevard and I-580 improvements will provide an acceptable Level of Service D. Development in the Project area will be required to contribute its fair share of the improvements so that when such improvements are needed, they will be provided by new development generating the need. State law authorizes the City to enter into a cooperative agreement with Caltrans to make the road and ramp improvements (see, e.g., Streets & Highways Code §§ 113.5, 114).

**IMPACT 3.3/L. El Charro Road.** Project traffic could introduce stops and delays for loaded trucks from the quarries on El Charro Road south of I-580. DEIR page 3.3-27 (as revised).

Mitigation Measure 3.3/12.0. The City of Dublin shall implement improvements in coordination with Caltrans, the City of Pleasanton, and Alameda County to ensure that modifications to the I-580 interchange at Fallon Road/El Charro Road include provisions for unimpeded truck movements to and from El Charro Road. All projects in the RPA shall contribute a proportionate share of improvement costs. DEIR page 3.3-27 (as revised).

Finding. Changes or alterations have been required in, or incorporated into the Project, that avoid or substantially lessen the significant effect identified in the Final EIR. Freeway interchange modification actions are within the ultimate responsibility and jurisdiction of Caltrans, which can and should take such actions. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Providing unimpeded access for the quarry trucks will prevent other traffic from backing up behind the heavily laden trucks with their slow starts and stops. Development in the Project area will be required to contribute its fair share of the improvements so that when such improvements are needed, they will be provided by new development generating the need. State law authorizes the City to enter into a cooperative agreement with Caltrans to make the off-ramp improvements (see, e.g., Streets & Highways Code §§ 113.5, 114).

**IMPACT 3.3/M. Cumulative Impacts on Dublin Boulevard.** Cumulative buildout with the Project would cause Level of Service F operations at the intersection of Hacienda Drive with Dublin Boulevard and Level of Service E operations at the intersection of Tassajara Road with Dublin Boulevard. DEIR page 3.3-27 (as revised), 5.0-4.

Mitigation Measure 3.3/13.0. The City shall continue to participate in regional studies of future transportation requirements, improvement alternatives, and funding programs. Buildout of proposed projects outside Eastern Dublin would require the City to build grade-separated interchanges on Dublin Boulevard and/or establish alternate routes to redistribute traffic flow. All projects in the RPA shall contribute a proportionate share of improvement costs. DEIR pages 3.3-27 (as revised), 5.0-4.

Finding. Changes or alterations have been required in, or incorporated into the Project. However, even with these changes, the impact might not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. Regional transportation programs will attempt to reduce the amount of future traffic and associated impacts. Even with these efforts, however, the cumulative traffic impacts on Dublin Boulevard might not be reduced to insignificance.

IMPACT 3.3/N. Cumulative Impacts on Tassajara Road. Cumulative buildout with the Project would cause Level of Service F operations at the intersections of Tassajara Road with Fallon Road, Gleason Road, and the Transit Spine. These impacts would be caused primarily by traffic from the Tassajara connection to Dougherty Valley, and full buildout of the Tassajara Valley. DEIR page 3.3-28 (as revised), 5.0-4.

Mitigation Measure 3.3/14.0. The City shall reserve sufficient right-of-way to widen Tassajara Road to six lanes between Dublin Boulevard and the Contra Costa County line and monitor traffic conditions and implement widening projects as required to maintain LOS D operations on Tassajara Road. All projects in the RPA shall contribute a proportionate share of the improvement costs. DEIR pages 3.3-28 (as revised), 5.0-4 and -5; RC #5-2, 7-13, 8-2

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Allowing for the widening of Tassajara Road to six lanes, if needed, will allow the City to maintain an acceptable LOS D. Development in the Project area will be required to contribute its fair share of the improvements so that when such improvements are needed, they will be provided by new development generating the need.

**IMPACT 3.3/O. Transit Service Extensions.** The Project would introduce significant development in an area not currently served by public transit, creating the need for substantial expansion of existing transit systems. DEIR page 3.3-28.

**Mitigation Measure 3.3/15.0.** Specific Plan Policy 5-10\* requires the City of Dublin to coordinate with LAVTA to provide transit service within one quarter mile of 95% of the population, in accordance with LAVTA service standards. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.3-28.

**Mitigation Measure 3.3/15.1.** Specific Plan Policy 5-11\* requires the City of Dublin to coordinate with LAVTA to provide at least one bus every 30 minutes during peak hours, to 90% of employment centers with 100 or more employees, in accordance with LAVTA service standards. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.3-28.

**Mitigation Measure 3.3/15.2.** All projects in the RPA shall contribute a proportionate share to the capital and operation costs of transit service extensions. DEIR page 3.3-28.

**Mitigation Measure 3.3/15.3.** The City shall coordinate with BART and LAVTA to provide feeder service to the planned BART stations. Until the BART extension is completed (projected for 1995), the City shall coordinate with BART to ensure that BART express bus service is available to eastern Dublin residents. DEIR page 3.3-28.

**Finding.** Changes or alterations have been required in, or incorporated into the Project. Some of the transit service coordination actions are within the responsibility and jurisdiction of Bart and LAVTA agencies and not the City of Dublin. Such actions can and should be taken by those agencies. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

**Rationale for Finding.** The mitigations provide for expansion of existing transit systems to meet Project demand, not only on the local level through LAVTA but also on a local and regional level through BART.

**IMPACT 3.3/P. Street Crossings for Pedestrians and Bicycles.** Pedestrians and bicycles would cross major streets with high projected traffic volumes, such as Dublin Boulevard, Tassajara Road and Fallon Road, introducing potential safety hazards for pedestrians and bicyclists. DEIR page 3.3-29.

Mitigation Measure 3.3/16.0. Specific Plan Policy 5-15\* and Specific Plan Figure 5.3\* require a Class I paved bicycle/pedestrian path along Tassajara Creek and trails along other stream corridors in the Project area. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.3-29.

Mitigation Measure 3.3/16.1. The City shall locate pedestrian and bicycle paths to cross major arterial streets at signalized intersections. DEIR page 3.3-29.

Finding. Changes or alterations have been required in, or incorporated into the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Placing a major bicycle/pedestrian path along Tassajara Creek and using trails along other stream corridors allows bicycles and pedestrians to avoid traveling on major streets with their high traffic volumes. Where the paths must cross a major arterial street, requiring the crossing at a signalized intersection minimizes path and traffic conflicts by stopping traffic on a regular basis to let path travelers cross the street safely.

#### Section 3.4 -- Community Services and Facilities

IMPACT 3.4/A and B. Demand for Increased Police Services and Police Services Accessibility. The Project will increase demand for police services from the Dublin Police Department's administrative and sworn staff, and will require reorganization of the police operations to provide new patrol beats in the Project area. The hilly topography of most of the Project site may present some accessibility and crime-prevention problems. DEIR page 3.4-2.

Mitigation Measure 3.4/1.0. Pursuant to Specific Plan Policy 8-4,\* the City shall provide additional personnel and facilities and revise beats as needed in order to establish and maintain City standards for police protection service in Eastern Dublin. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.4-2.

Mitigation Measure 3.4/2.0. Pursuant to Specific Plan Action Program 8D,\* the City shall coordinate with the City Police Department regarding the timing of annexation and proposed development, so that the Department can adequately plan for the necessary expansion of services in the RPA. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.4-2

Mitigation Measure 3.4/3.0. Pursuant to Specific Plan Action Program 8E,\* the City shall incorporate into the requirements of project approval Police Department recommendations on project design that affect traffic safety and crime prevention. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.4-2.

Mitigation Measure 3.4/4.0. Upon annexation of the RPA, the City of Dublin Police Department will be responsible for police services. The City will prepare a budget strategy to hire the required additional personnel and implement a beat system. DEIR page 3.4-2.

Mitigation Measure 3.4/5.0. As part of the development review process for residential and non-residential projects, the Police Department shall review development projects' design and circulation for visibility, security, safety, access, and emergency response times and any other police issues. DEIR pages 3.4-2 to -3.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The five mitigations identified will ensure that additional police will be hired and that other administrative measures will be employed to provide adequate protection for Project area residents. Police Department input into design of Project development will insure that police services are efficiently provided.

IMPACT 3.4/C. Demand for Increased Fire Services. Buildout of the Project will substantially expand the DRFA service area and increase demand for new fire stations and firefighting personnel. This will significantly increase response times and reduce service standards unless new facilities and personnel are added. DEIR page 3.4-5.

Mitigation Measure 3.4/6.0. Pursuant to Specific Plan Policy 8-5,\* the City shall time the construction of new facilities to coincide with new service demand in order to avoid periods of reduced service efficiency. The first station will be sited and will begin construction concurrent with initial development in the planning area. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.4-5.

Mitigation Measure 3.4/7.0. Pursuant to Specific Plan Action Program 8F,\* the City shall establish appropriate funding mechanisms to cover up-front costs of capital improvements. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.4-5.

Mitigation Measure 3.4/8.0. Pursuant to Specific Plan Action Program 8G,\* the City shall coordinate with DRFA to identify and acquire specific sites for new fire stations, with the westernmost site in the Specific Plan area assured prior to approval of any development plans. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.4-5; RC # 15-26.

Mitigation Measure 3.4/9.0. Pursuant to Specific Plan Action Program 8H,\* the City shall incorporate DRFA recommendations on project design relating to access, water pressure, fire safety and prevention into development approvals. Require compliance with DRFA design standards such as non-combustible roof materials, minimum fire hydrant flow requirements, buffer zones along open space areas, fire alarm and sprinkler systems, road access, and parking requirements. (\*Specific Plan provisions adopted throughout RPA.) DEIR pages 3.4-5 to -6.

Mitigation Measure 3.4/10.0. Pursuant to Specific Plan Action Program 8I,\* the City shall ensure, as a requirement of Project approval, that an assessment district, homeowners association, or some other mechanism is in place that will provide regular long-term maintenance of the urban/open space interface. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.4-6.

Mitigation Measure 3.4/11.0. Pursuant to Specific Plan Action Program 8J,\* the City shall ensure that fire trails and fire breaks are integrated into the open space trail system. And that fire district standards for access roads in these areas are met while environmental impacts are minimized. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.4-6.

Mitigation Measure 3.4/12.0. The City of Dublin, in consultation with DRFA and a qualified wildlife biologist, shall prepare a wildfire management plan for the RPA to reduce open land wildfire risks consistent with habitat protection and other open space values. The plan shall specify ownership, maintenance, use, brush control, and fire-resistant landscaping measures, as well as periodic review of these measures, for RPA open lands. Any park districts or other open space agencies with jurisdiction over lands within the RPA shall be encouraged to participate in the preparation of the plan. DEIR pages 3.4-6 to -7.

Mitigation Measure 3.4/13.0. The City shall consult with DRFA to determine the number, location and timing of additional fire stations for areas within the RPA outside

the specific plan when such areas are proposed for annexation to the City. DEIR page 3.4-7.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR. Actions to determine the number and location of fire stations are within the responsibility and jurisdiction of DRFA and not the City of Dublin. Such actions can and should be taken by DRFA. If taken, such actions can and would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. New fire facilities will be constructed to meet the needs of Project residents; DRFA input into Project design features will enable additional and efficient provision of fire services. The wildfire management plan should further limit the Project fire protection impacts by reducing the risk of wildfires.

**IMPACT 3.4/D. Fire Response to Outlying Areas.** Based on DRFA's preliminary locations for new fire stations, the northern-most portions of the RPA would be outside the District's standard response area. Development in these areas (especially the north end of Tassajara Road) could experience adverse fire hazard exposure and emergency response impacts. DEIR page 3.4-5.

Mitigation Measures. Mitigation measures 3.4/6.0 to 13.0 as described above. DEIR pages 3.4-5 to -7.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR. Actions to determine the number and location of fire stations are within the responsibility and jurisdiction of DRFA and not the City of Dublin. Such actions should be taken by DRFA. If taken, such actions can and would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. New fire facilities will be constructed to meet the needs of all Project residents, including those in the outerlying areas; DRFA input into project design features will enable additional and efficient provision of fire services. The wildfire management plan should further limit the Project fire protection impacts by reducing the risk of wildfires.

**IMPACT 3.4/E. Exposure to Wildfire Hazards.** Settlement of population and construction of new communities in proximity to high fire hazard open space areas with difficult access poses an

increasing wildfire hazard to people and property if open space areas are not maintained for fire safety. This is also a significant cumulative impact in that increased development in steep grass and woodlands around the edges of the Tri-Valley's core communities may reduce response times and strain fire-fighting resources for regional firefighting services, many of whom participate in mutual aid systems. DEIR pages 3.4-5, 5.0-5.

Mitigation Measures 3.4/6.0 to 13.0. Mitigation measures 3.4/6.0 to 13.0, as described above. DEIR pages 3.4-5 to -7, 5.0-5; RC #26-26.

Finding. Changes or alterations have been required in, or incorporated into the Project, that avoid or substantially lessen the significant effect identified in the Final EIR. Actions to determine the number and location of fire stations are within the responsibility and jurisdiction of DRFA agencies and the City of Dublin. Such actions should be taken by DRFA. If taken, such actions can and would substantially lessen the significant effect identified in the Final EIR. DEIR pages 3.4-4 to -7.

Rationale for Finding. New fire facilities will be constructed to meet the needs of all Project residents, including those near open space areas; DRFA input into project design features will enable additional and efficient provision of fire services. The wildfire management plan should further limit the Project wildfire exposure impacts through fire safety planning and open space management.

IMPACT 3.4/F, G. Demand for New Classroom Space; Demand for Junior High Schools. Buildout of the Project will increase the demand for new classroom space and school facilities beyond current available capacity. At the junior high school level, classroom demand may exceed both current and planned capacity levels. DEIR page 3.4-11 to -12.

Mitigation Measure 3.4/13.0. Pursuant to Specific Plan Policy 8-1,\* the City shall reserve school sites within the RPA designated on the Specific Plan and General Plan Amendment Land Use Maps. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.4-12.

Mitigation Measure 3.4/14.0. The City shall ensure that the two proposed junior high schools are designed to accommodate the projected number of junior high school students. DEIR page 3.4-12.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially

lessen the significant effect identified in the Final EIR. Some actions to determine junior high school siting and design are within the responsibility and jurisdiction of other public agencies and not the City of Dublin. Such actions can and should be taken by such other agencies. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Providing elementary, junior high, and high school sites will accommodate classroom demand generated by Project residents. Mitigation Measures 3.4/17.0 through 3.4/19.0 will ensure sufficient funding for such development.

**IMPACT 3.4/H. Overcrowding of Schools.** Existing schools may be overcrowded if insufficient new classroom space is provided for new residential development. DEIR page 3.4-12.

Mitigation Measures 3.4/13.0 to 14.0. Mitigation Measures 3.4/13.0 to 14.0, as described above.

Mitigation Measure 3.4/15.0. Pursuant to Specific Plan Policy 8-2,\* the City shall promote a consolidated development pattern that supports the logical development of planning area schools, and in consultation with the appropriate school district(s), ensure that adequate classroom space is available prior to the development of new homes. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.4-12.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR. Some actions to site and design schools are within the responsibility and jurisdiction of other public agencies and not the City of Dublin. Such actions can and should be taken by such other agencies. If taken, such actions would avoid or substantially lessen the significant effects identified in the Final EIR.

Rationale for Finding. Providing elementary, junior high, and high school sites will accommodate classroom demand generated by Project residents, while a consolidated development pattern ensures that the classroom space will be available when it is needed. Mitigation Measures 3.4/17.0 through 3.4/19.0 will ensure sufficient funding for such development.

**IMPACT 3.4/I. Impact on School Financing District Jurisdiction.** Development of the RPA under existing jurisdictional boundaries would result in the area being served by two different school

districts and would adversely affect financing of schools and provision of educational services. DEIR page 3.4-12.

Mitigation Measures 3.4/16.0. Pursuant to Specific Plan Action Program 8A,\* the City shall work with the school districts to resolve the jurisdictional issue to best serve student needs and minimize the fiscal burden of the service providers. (\*Specific Plan provisions adopted throughout RPA.) DEIR pages 3.4-12 to -13.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR. Some actions to resolve the jurisdictional issue are within the responsibility and jurisdiction of other public agencies and not the City of Dublin. Such actions can and should be taken by such other agencies. If taken, such actions would avoid or substantially lessen the significant effects identified in the Final EIR.

Rationale for Finding. Resolving the school district jurisdiction issue will limit conflicts and ensure that school services are efficiently provided.

IMPACT 3.4/J. Financial Burden on School Districts. The cost of providing new school facilities could adversely impact local school districts by creating an unwieldy financial burden unless some form of financing is identified. DEIR page 3.4-13.

Mitigation Measures 3.4/17.0 to 19.0. Pursuant to Specific Plan Policy 8-3\* and Action Program 8B, ensure that adequate school facilities are available prior to development in the RPA to the extent permitted by law, for example, by requiring dedication of school sites and/or payment of developer fees by new development. Pursuant to Specific Plan Action Program 8C,\* the City shall work with school districts to establish appropriate funding mechanisms to fund new school development and encourage school districts to use best efforts to obtain state funding for new construction. (\*Specific Plan provisions adopted throughout RPA.) DEIR p. 3.4-13; RC #15-31.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR. Some actions to fund new school development are within the responsibility and jurisdiction of other public agencies and not the City of Dublin. Such actions can and should be taken by such other agencies. If taken, such actions would avoid or substantially lessen the significant effects identified in the Final EIR.

Rationale for Finding. Through these mitigations, development creating school facilities demand will have primary responsibility for accommodating that demand, with the school districts being provided with back-up financial support from other sources.

**IMPACT 3.4/K. Demand for Park Facilities.** Without the addition of new parks and facilities, the increased demand for new park and recreation facilities resulting from buildout of the Project would not be met, resulting in deterioration of the City's park provision standard and of the City's ability to maintain existing services and facilities. This is also a significant cumulative impact. DEIR pages 3.4-16, 5.0-5.

Mitigation Measures 3.4/20.0 to 24.0. General Plan Amendment Guiding Policies A, B, and G and Implementing Policy D require the City of Dublin to provide and maintain parks and related facilities adequate to meet Project and citywide needs and in conformance with the City's Park and Recreation Master Plan 1992. Implementing Policy K specifically requires dedication and improvements for the 20 parks designated in the RPA with collection of in-lieu fees as required by City standards. DEIR pages 3.4-16 to -17, 5.0-5.

Mitigation Measures 3.4/25.0 to 27.0. Sufficient parkland shall be designated and set aside in the RPA to satisfy the City's Park and Recreation Master Plan 1992 and its park provision and phasing standards. DEIR pages 3.4-17, 5.0-5.

Mitigation Measure 3.4/28. The City shall implement Specific Plan Policies 6-1 to -6\* to establish large, continuous natural open space areas with convenient access for users, and adequate access for maintenance and management; to preserve views of designated open space areas; and to establish a mechanism for open space ownership, management, and maintenance. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.4-18 to -19.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. These mitigations provide added new parks and facilities to meet increased demand from Project residents, and require compliance with phasing plans in the Park and Recreation Master Plan 1992, to ensure that new parks and facilities construction will keep pace with new residential construction.

**IMPACT 3.4/L. Park Facilities Fiscal Impact.** Acquisition and improvement of new park and recreation facilities may place a financial strain on existing City of Dublin revenue sources unless adequate financing and implementation mechanisms are designed. DEIR page 3.4-18.

**Mitigation Measures 3.4/20.0 to 31.0.** Pursuant to Specific Plan Policy 4-29\* and Action Program 4N,\* the City shall ensure that development provides its fair share of planned open space; for example, through in-lieu fees under the City's parkland dedication ordinance. Pursuant to Specific Plan Program 4M,\* the City shall develop a Parks Implementation Plan identifying phasing, facilities priorities and location, and design and construction responsibilities. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.4-18.

**Finding.** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

**Rationale for Finding.** These mitigations ensure that needed park facilities will be provided by developers at the time of development, thereby avoiding the use of existing revenue sources to build new parks for Project area residents.

**IMPACT 3.4/M, N. Impact on Regional Trail System and Impact on Open Space Connections.** Without adequate provisions for trail easements and without adequate design and implementation, urban development along stream corridors and ridgelines would obstruct formation of a regional trail system and an interconnected open space system. DEIR page 3.4-18 to -19.

**Mitigation Measure 3.4/32.0.** Pursuant to General Plan Amendment Guiding Policy H,\* establish a trail system with regional and subregional connections, including a trail along the Tassajara Creek corridor. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.4-19.

**Mitigation Measures 3.4/23.0 and 33.0 to 36.0.** Pursuant to General Plan Amendment Guiding Policy I, Implementation Policy D, Specific Plan Policies 6-1,\* 6-3,\* Action Program 4O,\* and consistent with the City's Parks and Recreation Master Plan 1992, use natural stream corridors and major ridgelines as the basis for a trail system with a continuous, integrated open space network, emphasizing convenient user access, pedestrian and bicycle connections between developed and open space areas, and developer dedication of ridgetop and stream corridor public access easements. (\*Specific Plan provisions adopted throughout RPA.) DEIR pages 3.4-17, -19.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Establishing a Project area trail system incorporating planned regional connections contributes to development of a regional trail system and allows the trail planning to be considered and incorporated into individual Project area developments in the RPA. By requiring that open space and trail planning be based on continuous physical features such as stream corridors and ridgelines, and that public access be provided along these features, these mitigations avoid a disconnected open space system.

**IMPACT 3.4/O, P: Increased Solid Waste Production and Impact on Solid Waste Disposal Facilities.** Increased population and commercial land use will cause a proportional increase in the total projected amount of solid waste and household hazardous waste generated by the City of Dublin. This increase creates the need for additional capacity, personnel, and vehicles to dispose of the wastes. It can create public health risks from improper handling. The increased solid waste and household hazardous waste generated by the Project may accelerate the closing schedule for Altamont landfill unless additional capacity is developed or alternate disposal sites are identified. This impact on the Altamont landfill is also a potentially significant cumulative impact. DEIR pages 3.4-21 to -22, 5.0-6.

Mitigation Measures 3.4/37.0 to 40.0. Pursuant to Specific Plan Action Program 8K\* and other EIR mitigations, adopt a Solid Waste Management Plan for the RPA, including waste reduction programs such as composting and curbside and other collection of recyclables. Include goals, objectives, and programs necessary to integrate with the diversion targets of the City's Source Reduction and Recycling Element and Household Hazardous Waste Element. New development in the RPA shall demonstrate adequate available landfill capacity for anticipated wastes. (\*Specific Plan provisions adopted throughout RPA.) DEIR pages 3-4.22 to -23, 5.0-6.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. These mitigations minimize the amount of solid waste production and related needs and risks through compliance with AB 939 solid waste planning. Reducing the amount of Project-generated waste will also avoid an accelerated closing schedule for the Altamont landfill. In addition, these mitigations require that new

development anticipate and provide for adequate waste disposal before the development is approved.

**IMPACT 3.4/Q. Demand for Utility Extensions.** Development of the Project site will significantly increase demand for gas, electric and telephone services. Meeting this demand will require construction of a new Project-wide distribution system. This is a significant growth-inducing impact. DEIR pages 3.4-24, 5.0-14 to -15.

**Mitigation Measures.** None proposed. DEIR page 3.4-2.4.

**Finding.** No changes or alterations are available to avoid or substantially lessen this impact. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

**IMPACT 3.4/R. Utility Extension Visual and Biological Impacts.** Expansion of electrical, gas, and telephone lines could adversely affect visual and biological resources if not appropriately sited. DEIR page 3.4-24.

**Mitigation Measures 3.4/41.0 to 44.0.** Pursuant to Specific Plan Action Program 8L\* and other identified mitigation measures, development within the RPA must document the availability of electric, gas, and telephone service and must place utilities below grade or, preferably, underground and routed away from sensitive habitat and open space lands. A development project service report shall be reviewed by the City prior to improvement plan approval. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.4-24 to -25.

**Finding.** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

**Rationale for Finding.** Undergrounding utilities will avoid visual effects by placing the utility extensions where they cannot be seen. Routing the utility extensions away from sensitive habitat and open space areas will avoid impacts on biological resources by avoiding the resources themselves.

**IMPACT 3.4/S. Consumption of Non-Renewable Natural Resources.** Natural gas and electrical service would increase consumption of non-renewable natural resources. DEIR page 3.4-25.

**Mitigation Measures 3.4/45.0 to 46.0.** Major developers in the Project area shall provide demonstration projects on cost-effective energy conservation techniques including but not limited to solar water and space heating, landscaping

for water conservation, and shading. All development projects in the RPA shall prepare an energy conservation plan as part of their proposals. The plan shall demonstrate how site planning, building design, and landscaping will conserve use of energy during construction and long term operation. DEIR page 3.4-25.

Finding. Changes or alterations have been required in, or incorporated into the Project. However, even with these changes, the impact will not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. Through the demonstration projects, developers can educate themselves and Project residents about available and feasible techniques to reduce consumption of energy resources. Requiring energy conservation plans forces both developers and the City to actively consider various techniques to reduce energy consumption and to build those techniques directly into the Project. These actions cannot, however, fully mitigate the impact.

**IMPACT 3.4/T. Demand for Increased Postal Service.** The Project will increase the demand for postal service. DEIR page 3.4-26.

Mitigation Measures 3.4/47.0 to 48.0. Pursuant to Specific Plan Policy 8-10 and Action Program 8M, the City shall encourage the U.S.P.S. to locate a new post office in the Eastern Dublin town center. DEIR page 3.4-26; RC # 15-37.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR. Actions to site a new post office within the town center are within the ultimate responsibility and jurisdiction of the USPS and not the City of Dublin. Such actions can and should be taken by the USPS. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. A post office conveniently located in the town center area will provide postal service to meet the Project generated demand.

**IMPACT 3.4/U. Demand for Increased Library Service.** Without additional library facilities and staff, the increase in population resulting from the Project would adversely affect existing library services and facilities DEIR page 3.4-27.

Mitigation Measures 3.4/49.0 to 51.0. Pursuant to Specific Plan Policy 8-11\* and Action Program 8N\* and other identified mitigation measures, the City shall encourage and assist the Alameda County Library System to provide adequate library service in eastern Dublin, considering such factors as location, phasing, and funding of needed library services. (\*Specific Plan provisions adopted throughout RPA.) DEIR pages 3.4-27 to -28; RC #15-38.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR. Actions to provide library facilities are within the ultimate responsibility and jurisdiction of the Alameda County Library system and not the City of Dublin. Such actions can and should be taken by the Alameda County Library System. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Providing library services to the RPA will meet Project generated demand. Planning how and when to provide those services will ensure that they are efficient and convenient to the maximum number of users.

#### Section 3.5 -- Sewer, Water, and Storm Drainage

**IMPACT 3.5/A. Indirect Impacts Resulting from the Lack of a Wastewater Service Provider.** Although Specific Plan Policy 9-4 (page 127) calls for the expansion of DSRSD's service boundaries to include the Specific Plan area, the Project does not provide for wastewater service to areas in the RPA outside the specific plan area. This could result in uncoordinated efforts by future developers in this area to secure wastewater services. DEIR page 3.5-5, RC # 32-18.

Mitigation Measure 3.5/1.0a. Pursuant to Specific Plan Policy 9-4,\* the City shall coordinate with DSRSD to expand its service boundaries to encompass the entire RPA. (\*Specific Plan provisions adopted throughout RPA.) RC # 32-18.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR. Actions to expand DSRSD's service boundaries are within the ultimate responsibility and jurisdiction of the DSRSD and not the City of Dublin. Such actions can and should be taken by the DSRSD. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rational for Finding. Expanding DSRSD's service boundaries to include the entire RPA will ensure that securing wastewater services will be coordinated through one agency.

**IMPACT 3.5/B. Lack of a Wastewater Collection System.** Estimated wastewater flow for the RPA is 4.6 MGD; however, there currently is no wastewater collection system adequate to serve the Project area. DEIR page 3.5-5.

Mitigation Measures 3.5/1.0 to 5.0. Pursuant to Specific Plan Action Programs 9P,\* 9I,\* 9O,\* 9M,\* and 9N,\* all development in the RPA shall be connected to public sewers and shall obtain a "will-serve" letter prior to grading permits; on-site package plants and septic systems shall be discouraged. The City shall request that DSRSD update its collection system master plan to reflect Project area proposed land uses, with the cost of the plan to be borne by future development in the RPA. All wastewater systems shall be designed and built in accordance with DSRSD standards.  
(\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.5-6; RC # 32-19, 32-20.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. These mitigations will provide a wastewater collection system adequate to meet Project generated demand, and will ensure the system meets design and construction standards of DSRSD.

**IMPACT 3.5/C. Extension of a Sewer Trunk Line with Capacity to Serve New Developments.** Construction of a wastewater collection system could result in development outside the RPA that would connect to the Project's collection system. This is also a potentially significant growth-inducing impact. DEIR pages 3.5-6, 5.0-15.

Mitigation Measure 3.5/6.0. The proposed wastewater system shall be sized only for the RPA area. DEIR pages 3.5-6, 4-11, 5.0-15.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. By sizing the planned wastewater collection system only to serve the RPA, growth inducing impacts on lands outside that area are avoided.

**IMPACT 3.5/D. Allocation of DSRSD Treatment and Disposal Capacity.** There is limited available capacity at the DSRSD Treatment Plant, limiting the number of sewer permits available for new developments. It is very unlikely that any of the presently remaining DUE's will be available for the Eastern Dublin Area. DEIR page 3.5-7; RC #32-21.

**Mitigation Measure 3.5/7.0.** Pursuant to Specific Plan Action Program 9L,\* development project applicants in the RPA shall prepare a design level water capacity investigation, including means to minimize anticipated wastewater flows and reflecting development phased according to sewer permit allocation. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.5-7.

**Mitigation Measure 3.5/7.1.** Development project applicants in the RPA shall obtain a wastewater "will-serve" letter from DSRSD before receiving a grading permit. RC #32-22.

**Finding.** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

**Rationale for Finding.** The required investigation will allow development to be phased to ensure there are adequate wastewater facilities available to meet Project generated demand. The requirement of a "will-serve" letter will insure that adequate wastewater facilities will exist for all new development. If capacity is not available, DSRSD will not issue a will-serve letter. RC #32-22.

**IMPACT 3.5/E. Future Lack of Wastewater Treatment Plant Capacity.** Development of the Project require an increase in wastewater treatment plant capacity within DSRSD to adequately treat the additional wastewater flows to meet discharge standards. This is also a potentially significant cumulative impact in that increased demand on area wastewater treatment facilities exceeds current remaining capacity. DEIR page 3.5-7 to -8, 5.0-6.

**Mitigation Measures 3.5/7.1, 8.0, 9.0.** Pursuant to Specific Plan Policy 9-6\* and mitigations identified in the EIR, ensure that wastewater treatment and disposal facilities are available for future development in the RPA through compliance with DSRSD's master plan to fund, design, and construct wastewater treatment plant expansion once export capacity is available (unless TWA approves export of raw wastewater, in which case DSRSD's wastewater treatment plant expansion will not be necessary). Also, development project applicants in the RPA shall obtain a wastewater "will-serve" letter from DSRSD before receiving a grading permit.

(\*Specific Plan provisions adopted throughout RPA.) DEIR pages 3.5-7 to -8, 5.0-6; RC #32-23.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Compliance with DSRSD's master plan will ensure that adequate wastewater treatment plant capacity will be available in the future to serve Project generated demand once export capacity of treated wastewater is provided (see Mitigation Measure 3.5/11.0). Alternatively, expanded treatment capacity will not be necessary if export of raw wastewater is approved. The requirement of a "will-serve" letter will insure that adequate wastewater facilities will exist for all new development. If capacity is not available, DSRSD will not issue a will-serve letter. RC #32-22.

**IMPACT 3.5/F. Increase in Energy Usage Through Increased Wastewater Treatment.** Development of the Project will result in increased wastewater flows and will require increased energy use for treatment of wastewater. DEIR page 3.5-8; RC #32-24.

Mitigation Measure 3.5/10.0. Include energy efficient treatment systems in any wastewater treatment plant expansion and operate the plant to take advantage of off-peak energy. DEIR page 3.5-8; RC #32-24.

Finding. Such actions are within the responsibility and jurisdiction of other public agencies and not the City of Dublin. Such actions can and should be taken by other agencies. However, even if such actions are taken, this impact will not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. Use of energy efficient treatment systems and plant operations will reduce the amount of energy use but these actions cannot fully mitigate the impact.

**IMPACT 3.5/G. Lack of Wastewater Current Disposal Capacity.** The increase in wastewater flows from the Project and other sub-regional development will exceed available wastewater disposal capacity until additional export capacity is developed. This is also a significant cumulative impact. DEIR page 3.5-8, 5.0-6.

Mitigation Measures 3.5/7.1, 11 to 14.0. Pursuant to Specific Plan Policy 9-5\* and Action Programs 9H,\* 9J,\* and 9K,\* the City shall support current efforts to develop

additional export capacity. The City shall require use of recycled water for landscape irrigation in accordance with DSRSD's Recycled Water Policy and require development within the RPA to fund a recycled water distribution system model to reflect proposed land uses. Also, development project applicants in the RPA shall obtain a wastewater "will-serve" letter from DSRSD before receiving a grading permit.  
(\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.5-9, 5.0-6 to -7, RC #32-22, 32-25, 32-26, 32-27.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR. Actions to develop additional export capacity are within the responsibility and jurisdiction of other public agencies, and not the City of Dublin. Such actions can and should take by such agencies. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. These mitigations will provide the additional wastewater disposal capacity necessary to meet Project generated demand. The requirement of a "will-serve" letter will insure that adequate wastewater facilities will exist for all new development. If capacity is not available, DSRSD will not issue a will-serve letter. RC #32-22.

IMPACT 3.5/H. Increase in Energy Usage Through Increased Wastewater Disposal. Development of the Project will result in increased wastewater flows and will require increased energy use for disposal of wastewater; more specifically, for (1) pumping raw wastewater to CCCSD for treatment under the TWA proposed project; and/or (2) operation of an advanced treatment and distribution system for recycled water. DEIR page 3-5.9.

Mitigation Measures 3.5/15.0 to 16.0. The City shall encourage off peak pumping to the proposed TWA export system. The City shall plan, design, and construct the Project recycled water treatment system for energy efficient operation including use of energy efficient treatment systems, optimal use of storage facilities, and pumping at off peak hours. DEIR pages 3.5-10 to -11.

Finding. Such actions are within the responsibility and jurisdiction of other public agencies and not the City of Dublin. Such actions can and should be taken by other agencies. However, even if such actions are taken, this impact will not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. The proposed mitigations will reduce the amount of energy used for wastewater disposal but these actions cannot fully mitigate the impact.

**IMPACT 3.5/I. Potential Failure of Export Disposal System.** A failure in the operation of the proposed TWA wastewater pump stations would adversely affect the overall operation of the wastewater collection system for the Tri-Valley subregion, as well as the Eastern Dublin Project. DEIR page 3.5-10.

Mitigation Measure 3.5/17.0. Engineering redundancy will be built into the TWA pump stations, which will also have provisions for emergency power generators. DEIR page 3.5-10.

Finding. Such actions are within the responsibility and jurisdiction of other public agencies and not the City of Dublin. Such actions can and should be taken by other agencies. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Engineering redundancy will minimize the risk of pump station system failure; providing emergency power generators will ensure that any system failure which does occur will be short lived, thereby avoiding the effects of such failure. RC #32-28.

**IMPACT 3.5/J. Pump Station Noise and Odors.** The proposed TWA wastewater pump stations could generate noise during their operation and could potentially produce odors. DEIR page 3.5-10.

Mitigation Measure 3.5/18.0. TWA's pumps and motors will be designed to comply with local noise standards and will be provided with odor control equipment. DEIR page. 3.5-10.

Finding. Such actions are within the responsibility and jurisdiction of other public agencies and not the City of Dublin. Such actions can and should be taken by other agencies. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Requiring compliance with local noise standards will ensure that any noise produced not exceed acceptable levels. Odor control equipment will ensure that odor production effects are avoided. RC #32-28.

**IMPACT 3.5/K. Storage Basin Odors and Potential Failure.** The proposed TWA Emergency Wastewater Storage Basins could potentially emit odors and/or the basins could have structural failure

due to landslides, earthquakes, or undermining of the reservoir from inadequate drainage. DEIR page 3.5-10.

Mitigation Measure 3.5/19.0. TWA's basins will be covered, buried tanks with odor control equipment and will be designed to meet current seismic codes. DEIR page 3.5-11.

Finding. Such actions are within the responsibility and jurisdiction of other public agencies and not the City of Dublin. Such actions can and should be taken by other agencies. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. These mitigations ensure that any odors related to the TWA basins are contained and controlled within the basins so as not to be detectable beyond the basins. Compliance with seismic codes will ensure that the basins are properly constructed to withstand landslides and earthquakes and are provided with adequate drainage to avoid structural failure. RC #32-28.

**IMPACT 3.5/L. Recycled Water System Operation.** The proposed recycled water system must be constructed and operated properly in order to prevent any potential contamination or cross-connection with potable water supply systems. DEIR page 3.5-11.

Mitigation Measure 3.5/20.0. Construction of the recycled water distribution system will meet all applicable standards of the Department of Health Services (DHS) and San Francisco Bay Regional Water Quality Control Board (RWQCB). DEIR page 3.5-11.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Applicable regulations of the DHS and RWQCB are designed to prevent cross-connection contamination; compliance with these regulations will therefore avoid the contamination impact.

**IMPACT 3.5/M. Recycled Water Storage Failure.** Loss of recycled water storage through structural damage from landslide, earthquake, and undermining of the reservoir through inadequate drainage. DEIR page 3.5-11.

Mitigation Measure 3.5/21.0. The City shall require reservoir construction to meet all applicable DSRSD and other health standards and shall require preparation of soils and geotechnical investigations to determine potential

landslide and earthquake impacts. Reservoirs shall be designed to meet current seismic codes and to provide adequate site drainage. DEIR page 3.5-11.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Soils and geotechnical studies will ensure that reservoirs will be designed and constructed to comply with current seismic, DSRSD, and other applicable health standards, the purpose of which is to avoid structural failure.

**IMPACT 3.5/N. Loss of Recycled Water System Pressure.** Loss of pressure in the proposed recycled water distribution systems could result in the system being unable to meet peak irrigation demand, which could result in loss of vegetation through lack of irrigation water. DEIR page 3.5-12; RC #32-30.

Mitigation Measure 3.5/22.0. The recycled water pump stations shall meet all applicable DSRSD standards. DEIR page 3.5-12; RC #32-31.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Compliance with DSRSD standards will minimize the risk of pressure being lost.

**IMPACT 3.5/O. Secondary Impacts from Recycled Watersystem Operation.** Failure to identify and implement treatment plant improvements related to recycled water use may increase salinity in the groundwater basin. DEIR page 3.5-12.

Mitigation Measures 3.5/20.0. Recycled water projects shall incorporate salt mitigation required by Zone 7. DEIR page 3.5-12.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Compliance with salt mitigation requirements will reduce the salinity of the recycled water, thereby avoiding the risk of increased salinity in the groundwater basin.

**IMPACT 3.5/P. Overdraft of Local Groundwater Resources.** If the Project area is not annexed to DSRSD and development projects are

not required to connect to DSRSD's water distribution system, development projects may attempt to drill their own wells, causing overdraft of existing limited groundwater supplies. DEIR page 3.5-17.

Mitigation Measures 3.5/24.0 to 25.0. Pursuant to Specific Plan Policy 9-2\* and other EIR mitigations, the City shall coordinate with DSRSD to expand its service boundaries to include the Project area and to develop annexation conditions encouraging water conservation and recycling. The City shall encourage all developments in the RPA to connect to DSRSD's system and discourage the use of groundwater wells. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.5-17; RC #14-4.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR. Actions to expand DSRSD's service boundaries are within the responsibility and jurisdiction of the DSRSD and not the City of Dublin. Such actions can and should be taken by the DSRSD. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Annexation to DSRSD and connection to its water distribution system will eliminate the need for development projects to drill their own wells and will therefore avoid the risk of groundwater overdrafting.

IMPACT 3.5/Q. Increase in Demand for Water. Estimated average daily water demand for the RPA is 6.4 MGD, which demand could exceed available supply. This is also a potentially significant cumulative impact in that ongoing urban development in the Tri-Valley is resulting in a cumulative increase in water demand at a time when water supplies and delivery are uncertain. DEIR page 3.5-18, 5.0-7 to -8.

Mitigation Measures 3.5/26.0 to 31.0. Pursuant to Specific Plan Action Programs 9A\* and 9B,\* the City shall require development projects in the RPA to include water conservation measures within structures as well as in public and other improvements. Require developments to comply with DSRSD and Zone 7 recommendations for developing and using recycled water. Pursuant to other EIR mitigations, implement Zone 7 and DSRSD water supply and water quality improvements and interconnect Project area water systems with existing surrounding water systems for increased reliability. (\*Specific Plan provisions adopted throughout RPA.) DEIR pages 3.5-18 to -19; 5.0-9; RC #13-9, 32-43.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR. Some actions to improve water supply and quality are within the responsibility and jurisdiction of other public agencies and not the City of Dublin. Such actions should be taken by such other agencies. If taken, such actions can and would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Through required water conservation and water recycling mitigations, the Project reduces the magnitude of the impact by reducing the demand for water using recycled water for irrigation reduces the estimated average daily water demand in the RPA to 5.5 MGD. (RC #32.52.) The remaining water quality and water supply mitigations will result in an increased water availability from Zone 7 and DSRSD to meet Project generated demand.

**IMPACT 3.5/R. Additional Treatment Plant Capacity.** The increase in water demand through development of the Project will require an expansion of existing water treatment facilities in order to deliver safe and potable water. DEIR page 3.5-19.

Mitigation Measures 3.5/32.0 to 33.0. Implement Zone 7's planned water treatment system improvements. DSRSD should construct two new chlorination/fluoridation stations at the two proposed Zone 7 turnouts to eastern Dublin, with the construction phased west to east as anticipated in the General Plan Amendment. DEIR page 3.5-19.

Finding. Such actions are within the responsibility and jurisdiction of other public agencies and not the City of Dublin. Such actions can and should be taken by other agencies. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Proposed water treatment system improvements will insure that Project water supply meets all applicable water quality requirements.

**IMPACT 3.5/S. Lack of a Water Distribution System.** There currently is no water distribution system to provide water service for the RPA. DEIR page 3.5-20.

Mitigation Measures 3.5/34.0 to 38.0. Pursuant to Specific Plan Policy 9-1\* and Action Programs 9C,\* 9D,\* 9E,\* and 9G,\* the City shall provide an adequate water supply system with related improvements and storage facilities for all development, in compliance with applicable DSRSD standards. The

City shall request that DSRSD update its water system masterplan to reflect the proposed land uses, and require a "will-serve" letter from DSRSD prior to grading permits for any Project area development. The City shall encourage the proposed water system to coordinate and combine with existing neighboring water systems. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.5-20.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. These mitigations will provide a water distribution system adequate to meet Project-generated demand, and will insure the system meets design and construction standards of DSRSD.

**IMPACT 3.5/T. Inducement of Substantial Growth and Concentration of Population.** The proposed water distribution system will induce growth in the Project area and has been sized to potentially accommodate the Dougherty Valley Development to the north. However, if DSRSD does not provide water to the Dougherty Valley Development, the pipes will be sized to only accommodate the RPA. The impact is also a potentially significant growth-inducing impact. DEIR page 3.5-20, 5.0-15, RC #32-41, 32-55.

Finding. No feasible mitigation measures are identified to reduce this impact. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

**IMPACT 3.5/U. Increase in Energy Usage Through Operation of the Water Distribution System.** Development of the Project will result in increased water demand and will require increased energy use to operate a water distribution system, especially for pumping water to the system and to storage. DEIR page 3.5-21.

Mitigation Measure 3.5/40. Plan, design, and construct the water distribution system for energy efficient operation. Design pump stations to take advantage of off-peak energy. DEIR page 3.5-21.

Finding. Changes or alterations have been required in, or incorporated into the Project. However, even with these changes, the impact will not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. Use of energy efficient water distribution systems and operations will reduce the amount of energy used, but these actions cannot fully mitigate the impact.

**IMPACT 3.5/V. Potential Water Storage Reservoir Failure.** Loss of storage in proposed water distribution reservoirs from landslides, earthquakes, and/or undermining of the reservoir through inadequate drainage would adversely affect the ability of the water supply system to maintain water pressures and to meet fire flows. DEIR page 3.5-21.

**Mitigation Measure 3.5/41.0.** Require water reservoir construction to meet all applicable DSRSD standards. Prepare soils and geotechnical investigations to determine potential landslide and earthquake impacts. Design the reservoirs to meet current seismic codes, and to provide adequate site drainage. DEIR page 3.5-21.

**Finding.** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

**Rationale for Finding.** Soils and geotechnical studies will insure that reservoirs will be designed and constructed to comply with current seismic, DSRSD, and site drainage standards, thereby avoiding the risk of structural damage or failure.

**IMPACT 3.5/W. Potential Loss of System Pressure.** Loss of pressure in the proposed water distribution systems could result in contamination of the distribution system and would not allow adequate flows and pressures essential for fire flow. DEIR page 3.5-22.

**Mitigation Measure 3.5/42.0.** The proposed water pump stations shall meet all applicable standards of DSRSD and shall include emergency power generation back-up. DEIR page 3.5-22.

**Finding.** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

**Rationale for Finding.** Compliance with DSRSD standards will minimize the risk of pressure being lost. Providing emergency power generators will insure the pumps will continue operating, thereby avoiding the risk of contamination in the distribution system and insuring that adequate water flows are available for fire protection.

**IMPACT 3.5/X. Potential Pump Station Noise.** Proposed water system pump stations would generate noise during their operation that could adversely affect the surrounding community. DEIR page 3.5-22.

Mitigation Measure 3.5/43.0. Design pump stations to reduce sound levels from operating pump motors and emergency generators. DEIR page 3.5-22.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Reducing sound levels of the mechanical equipment will reduce the amount of noise perceivable by surrounding residents, thereby avoiding the impact.

**IMPACT 3.5/Y. Potential Flooding.** Development of the Project and development of former agricultural, rural, and open space lands throughout the Tri-Valley will result in an increase in runoff to creeks and will result in an increased potential for flooding. This is also a potentially significant cumulative impact. DEIR page 3.5-25, 5.0-9.

Mitigation Measure 3.5/44.0 to 48.0. Pursuant to Specific Plan Policies 9-7\* and 9-8,\* Action Programs 9R\* and 9S,\* and other EIR mitigations, require a master drainage plan for each development project in the RPA to provide drainage facilities adequate to prevent increased erosion or flooding, including channel improvements with natural creek bottoms, and side slopes with natural vegetation. This design level plan shall include studies of the development project area hydrology, potential impacts of the development project, and proposed design features to minimize runoff flows and their effects on erosion and riparian vegetation. Development projects shall also address potential downstream flooding, and shall include retention/detention facilities and/or energy dissipators to minimize and control runoff, discharge, and to minimize adverse biological and visual effects. Construct storm drainage facilities in accordance with approved storm drainage master plan. (\*Specific Plan provisions adopted throughout RPA.) DEIR 3.5-25 to -26, 5.0-9.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Through planning and implementation of storm drainage master plans, development projects will minimize the amount of runoff to creeks and will provide drainage facilities to control the rate and location of runoff that does discharge into creeks. These measures will minimize the increase in runoff, thereby avoiding increased flooding potential.

**IMPACT 3.5/Z. Reduced Groundwater Recharge.** Increasing the amount of impervious surfaces in the Project area could reduce the area's already minimal groundwater recharge capabilities. This is also a potentially significant cumulative impact, as impervious surfaces increase throughout the Tri-Valley. DEIR page 3.5-26, 5.0-9 to -10.

**Mitigation Measure 3.5/49.0 to 50.0.** Pursuant to Specific Plan Policy 9-9\* and other EIR mitigations, plan facilities and operations that protect and enhance water quality; support Zone 7's ongoing groundwater recharge program for the nearby Central Basin, which contains the majority of the Tri-Valley's groundwater resources. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 2.5-26, 5.0-9.

**Finding.** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

**Rationale for Finding.** These mitigation measures protect and enhance what minimal groundwater recharge capability exists in the Project area.

**IMPACT 3.5/AA. Non-Point Sources of Pollution.** Development of the Project could result in a deterioration of the quality of stormwater due to an increase in non-point sources of pollution including (1) urban runoff; (2) non-stormwater discharges to storm drains; (3) subsurface drainage; and (4) construction site runoff (erosion and sedimentation). This is also a potentially significant cumulative impact as other projects in the subregion are developed. DEIR page 3.5-26.

**Mitigation Measure 3.5/52.0 to 55.0.** The City shall develop a community based education program on non-point sources of pollution, coordinating such programs with current Alameda County programs. The City shall require all development to meet the requirements of the City's "Best Management Practices", the City's NPDES permit, and the County's Urban Runoff Clean Water Program to mitigate stormwater pollution. DEIR 3.5-27, 5.0-10, Addendum.

**Finding.** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

**Rationale for Finding.** Education programs will acquaint all Project area residents with the issue of non-point pollution, and will suggest ways residents can avoid such pollution. Existing City, County, and State regulatory programs will insure that potential impacts of non-point

sources of pollution or stormwater quality will be mitigated to a level of insignificance.

### Section 3.6 -- Soils, Geology, and Seismicity

#### IMPACT 3.6/B. Earthquake Ground Shaking: Primary Effects.

Earthquake ground shaking resulting from large earthquakes on active fault zones in the region, could be strong to violent, and could result in damage to structures and infrastructure and, in extreme cases, loss of life. DEIR page 3.6-7.

Mitigation Measure 3.6/1.0. Use modern seismic design for resistance to lateral force in construction of development projects, and build in accordance with Uniform Building Code and applicable county and city code requirements. DEIR page 3.6-7.

Finding. Changes or alterations have been required in, or incorporated into the Project. However, even with these changes, the impact will not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. Modern seismic design and compliance with applicable building codes will reduce the risk of structural failure, major structural damage, and loss of life from the effects of ground-shaking. These actions will not, however, completely avoid the impact.

IMPACT 3.6/C. Earthquake Ground Shaking: Secondary Effects. The secondary effects of ground shaking include seismically-induced landsliding, differential compaction and/or settlement. This is also a significant cumulative impact in that further development in the area could expose residents to significant safety hazards and could strain emergency response systems. DEIR page 3.6-8, 5.0-10.

Mitigation Measure 3.6/2.0. In relatively flat areas, development should be set back from unstable and potentially unstable land or these landforms should be removed, stabilized, or reconstructed. Where improvements are located on unstable land forms, use modern design, appropriate foundation design, and comply with applicable codes and policies. DEIR page 3.6-8, 5.0-10.

Mitigation Measure 3.6/3.0. In hillside areas, where development may require substantial grading, require appropriate grading and design to completely remove unstable and potentially unstable materials. DEIR page 3.6-8, 5.0-10.

Mitigation Measures 3.6/4.0 to 5.0. Use engineering techniques and improvements, such as retention structures, surface and subsurface drainage improvements, properly designed keyways, and adequate compaction to improve the stability of fill areas and reduce seismically induced fill settlement. DEIR page 3.6-8, 5.0-10.

Mitigation Measure 3.6/6.0. Design roads, structural foundations, and underground utilities to accommodate estimated settlement without failure, especially across transitions between fills and cuts. Remove or reconstruct potentially unstable stock pond embankments in development areas. DEIR page 3.6-8, 5.0-10.

Mitigation Measure 3.6/7.0. Require all development projects in the Project area to perform design level geotechnical investigations prior to issuing any permits. The investigations should include stability analysis of natural and planned engineered slopes, and a displacement analysis to confirm the effectiveness of mitigation measures proposed in the investigation. DEIR page 3.6-9, 5.0-10.

Mitigation Measure 3.6/8.0. Earthquake preparedness plans should be developed by the City and all Project site residents and employees should be informed of appropriate measures to take in the event of an earthquake. DEIR page 3.6-9, 5.0-10.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Mitigations 3.6/2.0 to 6.0 provide specific engineering techniques for reducing the effects of ground shaking throughout development in the Project area. Mitigation 3.6/7.0 requires development projects to apply these and other available engineering techniques at a design level, to identify specifically the effects that can occur on a particular site, to propose mitigations specific to those effects and the site, and to provide a means for evaluating the likely success of those measures. Through these engineering, planning, and design mitigations, development projects will be able to anticipate and avoid or reduce ground shaking effects before the development is built.

**IMPACT 3.6/D. Substantial Alteration to Project Site Landforms.** Development of the Project area could result in permanent change to the Project site's existing topography, particularly in hillside areas. This is also a significant cumulative impact as the hillsides and ridgeland of surrounding Tri-Valley cities are

graded and excavated for development projects. DEIR page 3.6-9,  
5.0-10.

Mitigation Measures 3.6/9.0 to 10.0. Adapt improvements to natural landforms in order to minimize required cuts and fills through such techniques as construction of partial pads and use of retaining structures and steeper cut and fill slopes where appropriate and properly designed. Further reduce landform alteration by carefully siting individual improvements on specific lots after identifying geotechnically feasible building areas and alignments. Site improvements to avoid adverse geotechnical conditions and the need for remedial grading and use techniques such as clustering where appropriate to minimize grading and/or avoid adverse geotechnical conditions. DEIR page 3.6-9.  
5.0-10.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. These mitigation measures provide design and engineering techniques which maintain natural landforms to the greatest degree possible, and thereby minimize alteration of those landforms. The mitigations also require that geotechnical conditions be identified for development projects, allowing individual projects to identify and reduce, or in some cases completely avoid, the condition which might otherwise require alteration.

IMPACT 3.6/F, G. Groundwater Impacts. Groundwater Impacts Associated with Irrigation. Shallow groundwater conditions occur in places throughout the RPA and could be caused by irrigation associated with development of the RPA. These conditions can adversely affect the performance of foundation and pavements, particularly in areas with expansive soils and bedrock. In addition, shallow groundwater can cause slope instability, including landsliding and fill settlement, and can lead to liquefaction of RPA soils. DEIR page 3.6-10.

Mitigation Measures 3.6/11.0 to 13.0. Prepare detailed design level geotechnical investigations on development projects within the RPA, to locate and characterize groundwater conditions and formulate design criteria and measures to mitigate adverse conditions. Control groundwater by construction of subdrain systems, remove stock pond embankments and drain reservoirs in development areas. (See MM 3.6/4, 6, 15, 18, 23, and 27 for additional techniques to control soil moisture and maintain slope stability. DEIR page 3.6-8, -11 through -14.) DEIR page 3.6-10 through -11; RC #15-43.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The geotechnical investigation will identify areas which have groundwater, and development will proceed in accordance with measures to protect structures and improvements from slope and soil instability due to shallow groundwater.

**IMPACT 3.6/H. Shrinking and Swelling of Expansive Soils and Bedrock.** The Project site contains expansive soils and bedrock, which tend to shrink upon drying and swell upon wetting. This process can cause distress to overlying structures and infrastructure, causing damage to foundations, slabs, and pavements. DEIR page 3.6-11.

Mitigation Measures 3.6/14.0 to 16.0. Prepare design level geotechnical investigations for development projects in the Project area to characterize site-specific soils and bedrock conditions, and to formulate appropriate design criteria and mitigation measures for those conditions. Such responsive measures include, but are not limited to, controlling moisture in the soils and bedrock, and designing foundations and pavements to be built either below the zone of seasonal moisture change, or upon structurally supportive floors and after removal of the expansive materials. DEIR page 3.6-11 to -12.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The design level geotechnical evaluation will identify expansive soils and bedrock and insure that special techniques are used in these areas to reduce the risk of structure and infrastructure damage.

**IMPACT 3.6/I. Natural Slope Stability.** The Project area contains active and dormant landslides, as well as steep slopes and colluvium-filled swales, which are subject to potential slope instability, and could cause damage to structures and infrastructure located in these areas. DEIR page 3.6-12.

Mitigation Measures 3.6/17.0 to 19.0. Development projects within the Project area should prepare design level geotechnical investigations to characterize site-specific slope stability conditions and to formulate appropriate design criteria and mitigation measures in response to those conditions. Such design measures and mitigations include siting development away from unstable landforms and from

slopes greater than about 30%, and providing lower density development in steep, unstable areas. Where unstable areas cannot be avoided, design measures and mitigations include removing the unstable material, reconstructing or repairing the unstable area, or engineering structural responses, including subsurface drainage improvements. (See also MM 3.6/26.0, recommending maintenance and inspection plans for drainage systems. DEIR page 3.6-14.) DEIR page 3.6-12 to -13.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The design level geotechnical investigation will disclose areas which may be susceptible to slope instability. Special techniques, such as siting of structure and improvements, removing the unstable materials, and providing structural remediation, will improve slope stability.

IMPACT 3.6/J. Cut and fill Slope Stability. Potentially unstable cut and fill slopes may fail or settle, causing damage to structures and infrastructure. DEIR page 3.6-13.

Mitigation Measures 3.6/20.0 to 21.0. Require grading plans for hillside areas, which plans minimize grading and required cuts and fills by adapting roads to natural landforms, stepping structures down steeper slopes, and demonstrating compliance with applicable building code and other applicable City and County requirements. DEIR page 3.6-13.

Mitigation Measures 3.6/22.0 to 25.0. Detailed design level geotechnical investigations such as that required by mitigation measure 3.6/17.0 should describe and evaluate cut and fill slopes proposed for development projects in the RPA. Retaining structures, reinforcement and drainage measures should be provided on cut slopes as determined by code requirements and the specific conditions identified in the geotechnical investigation. Unretained cut slopes should generally not exceed 3:1. Filled slopes steeper than 5:1 should be keyed and benched into competent material and provided with subdrainage prior to placing engineered fill. DEIR pages 3.16-13 to -14.

Mitigation Measure 3.6/26.0. Development projects in the Project area should prepare plans for the periodic inspection and maintenance of subsurface drainage features, and the removal and disposal of materials deposited in surface drains and catch basins. (See also measures

described in MM 3.6/28.0.) The plans should include inspection and disposal procedures, schedule and reporting requirements, and a responsible party, and should emphasize overall long-term Project monitoring and maintenance. DEIR page 3.6-14.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The detailed design level geotechnical investigation will identify areas where cut and fill slopes are proposed. Specific grading plans affecting these conditions would be required to show how each development project will minimize cut and fill slopes, and how the remaining slopes will be stabilized through siting or engineering features. Long-term monitoring and maintenance plans will ensure that the design facilities and engineered features effectively protect the cut and fill slopes over the long term.

**IMPACT 3.6/K, L. Erosion and Sedimentation: Construction-Related and Long-Term.** Construction of development projects in the RPA will modify the ground surface and its protective vegetative cover and will alter surface runoff and infiltration patterns, causing short-term erosion and sedimentation during construction, and long-term erosion and sedimentation once permanent structures and improvements are in place. The long-term impact is also a significant cumulative impact as similar sites are developed throughout the Tri-Valley. DEIR page 3.6-14, 5.0-11.

Mitigation Measure 3.6/27.0. Time grading activities to avoid the rainy season as much as possible, and implement interim control measures, including but not limited to, providing water bars, mulch and net blankets on exposed slopes, straw bale dikes, temporary culverts and swales, sediment traps, and/or silt fences. DEIR page 3.6-14.

Mitigation Measure 3.6/28.0. Reduce long-term erosion and sedimentation impacts through appropriate design, construction, and continued maintenance of surface and subsurface drainage. Appropriate measures include, but are not limited to, constructing sediment catch basins, adequate storm sewer systems, stabilizing creek banks, revegetating and maintaining wooded slopes, constructing facilities to control drainage and runoff, and emphasizing periodic homeowner/landowner maintenance. (See also MM 3.6/26.) DEIR page 3.6-15, 5.0-11.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.  
Rationale for Finding. These mitigations include measures to prevent concentration of runoff, control runoff velocity, and trap silts on both a short-term and long-term basis, thereby minimizing the identified impact.

### Section 3.7 -- Biological Resources

**IMPACT 3.7/A. Direct Habitat Loss.** Under Alternative 2, the Project will result in the loss, degradation, or disturbance of 1900 acres of existing vegetation. No unique or rare plant species occur in the Project area; however, urbanization will substantially reduce the habitat and range for botanical and wildlife species which are resident or migratory users of the RPA. The Project contributes to the cumulative, ongoing loss of natural habitat in the Tri-Valley region, and is also a potentially significant cumulative impact. DEIR page 3.7-9, 5.0-11, Addendum.

Mitigation Measures 3.7/1.0 to 3.0. Pursuant to Specific Plan Policies 6-21\* and 6-23,\* and Action Program 60,\* direct disturbance of trees or vegetation should be minimized and restricted to those areas actually designated for construction of improvements. Development projects should include vegetation enhancement/management plans for all open space areas identifying ways to enhance the biological potential of the area as wildlife habitat and focusing on such measures as reintroducing native species to increase vegetative cover and plant diversity. Development projects shall also be required to prepare a detailed revegetation/restoration plan, developed by a qualified revegetation specialist, for all disturbed areas that are to remain undeveloped. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.7-9, 5.0-11.

Mitigation Measure 3.7/4.0. The City shall develop and implement grazing management plans to protect riparian and wetland areas, increase plant diversity, and encourage the recovery of native plants, especially perennial grasses. DEIR page 3.7-9, 5.0-11.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Restricting direct disturbance to actual construction areas will reduce the amount of habitat lost. The vegetation and grazing plans will protect and restore disturbed areas to minimize the amount of habitat

loss and to enhance the value of the habitat area remaining.

**IMPACT 3.7/B. Indirect Impacts of Vegetation Removal.**

Construction activities on the Project site may cause dust deposition, increased soil erosion and sedimentation, increased potential for slope failures, and alteration of surface and subsurface drainage patterns. DEIR page 3.7-9 to -10.

Mitigation Measure 3.7/5.0. Pursuant to Specific Plan Policy 6-22,\* all disturbed areas should be revegetated as quickly as possible with native trees, shrubs, herbs, and grasses, to prevent erosion. The City shall determine specific physical characteristics of proposed revegetation areas to evaluate the long-term feasibility of the proposed mitigation and to identify potential conflicts at the site. Plants used for revegetation will be native to the Tri-Valley Area. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.7-10; RC # 13-18.

Mitigation Measures 3.6/18.0, 22.0, 23.0, and 3.11/1.0. Development should avoid siting on steep slopes and should observe special design and engineering mitigation features where construction occurs on 3:1 or steeper slopes. The City of Dublin shall require dust deposition mitigations during construction, including but not limited to, watering the construction site, daily clean-up of mud and dust, replanting and repaving and other measures to reduce wind erosion. DEIR pages 3.6-12 to -13, 3.7-10, 3.11-3 to -4.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Requiring construction to avoid siting on steep slopes will protect hillside vegetation and reduce erosion impacts. Where disturbance is necessary, engineering and other techniques to reduce erosion and sedimentation and promote slope stability will also ensure that revegetation efforts to control erosion will be more efficient and successful.

**IMPACT 3.7/C. Loss or Degradation of Botanically Sensitive Habitat.** Direct loss and degradation from grading, road construction, and culvert crossings could adversely affect the Project area's unique and sensitive Northern Riparian Forest, Arroyo Willow Riparian Woodland, and Freshwater Marsh habitats. Indirect impacts could result from increased sedimentation or spoil deposition affecting stream flow patterns and damaging young seedlings and the roots of woody plants. This impact is also a potentially significant cumulative impact. DEIR page 3.7-10, 5.0-11.

Mitigation Measures 3.7/6.0, 7.0, and 11.0, Riparian and Wetland Areas. Pursuant to Specific Plan Policies 6-9,\* 6-10,\* and Action Program 6E,\* natural riparian and wetland areas shall be preserved wherever possible. All development projects in the RPA shall consult with the Army Corps of Engineers (COE) and the California Department of Fish and Game (DFG) to determine these agencies' jurisdiction over the riparian or wetland area. These areas shall be incorporated into project open space areas. Any lost riparian habitat shall be replaced as required by DFG. Any lost wetlands shall be mitigated per COE's "no net loss" policy. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.7-10, and -11, 5.0-12.

Mitigation Measures 3.7/8.0 to 10.0, 12.0 to 14.0. Pursuant to Specific Plan Policies 6-11 to 6-13,\* and Action Programs 6F to 6H,\* the City shall require revegetation of natural stream corridors with native plant species and preservation and maintenance of natural stream corridors in the Project area, through measures including, but not limited to, avoiding underground drainage systems in favor of natural open-stream channels and retention basins. The City shall establish a stream corridor system (see Specific Plan Figure 6.1) to provide multi-purpose open space corridors for pedestrian and wildlife circulation. The City should also work with Zone 7 and DFG to develop a stream corridor restoration program, with standards for grading, stabilization, and revegetation, and long-term management of RPA stream channels. Development projects in the RPA are to be reviewed against, and any approval shall be consistent with, the program standards. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.7-10 to -12, 5.0-12; RC #14-7, 35-25.

Mitigation Measure 3.7/15.0. Pursuant to Specific Plan Action Program 6K,\* the City of Dublin shall establish and maintain a liaison with state and federal resource management agencies throughout the planning and development process of individual development projects, in order to avoid violations of state and federal regulations and insure that specific issues and concerns are recognized and addressed. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.7-12, 5.0-12.

Mitigation Measures 3.7/16.0 to 17.0. Existing sensitive habitats shall be avoided and protected where feasible. Construction near drainages shall take place during the dry season. DEIR page 3.7-12, 5.0-12.

Finding. Changes or alterations have been required in, or incorporated into the Project. These changes will avoid or

substantially lessen the Project-related significant effects identified in the final EIR. However, these changes will not avoid the cumulative effects of lost or degraded biologically sensitive habitat. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. Requiring compliance with "no net loss" policies will ensure that the amount of habitat shall remain constant. By incorporating wildlife corridors into Project plans, wildlife habitats will be enhanced and will not become isolated because wildlife will be able to migrate through these corridors as necessary. Disturbance of natural stream corridors can reduce the habitat value of these areas, but will be minimized by requirements to preserve and maintain these corridors in a natural, open condition, and by requiring construction to take place in the dry season. Any disturbed streams shall be rebuilt, reconstructed and revegetated according to the stream corridor plan, which will further enhance and protect habitat values in the RPA. Even with these protections for the RPA's biologically sensitive resource, the cumulative impact cannot be fully mitigated.

**IMPACT 3.7/D. San Joaquin Kit Fox.** Construction of new roads and facilities could adversely impact kit fox by destroying potential dens or burying foxes occupying dens at the time of construction. Modification of natural habitat could reduce available prey and den sites. Increased vehicle traffic, the presence of humans and domestic dogs, and resident use of poison for rodent control could kill or disturb foxes or reduce their prey populations. DEIR page 3.7-12 to -13.

Mitigation Measure 3.7/18.0. The City shall require all development in the RPA to comply with the East Dublin San Joaquin Kit Fox Protection Plan outlined in Appendix E, DEIR Part II. Extensive mitigation measures stress siting urban development to avoid kit fox habitat where possible, and protecting and enhancing the habitat which remains primarily in the Open Space and Rural Residential areas. Mitigations include measures for pre-construction and construction conditions, and address steps to be taken if potential or known dens are identified. DEIR page 3.7-13, DEIR Appendix E (as revised following RC #20-7.)

Mitigation Measure 3.7/18.1. The City of Dublin shall work with other agencies to develop a management plan that identifies measures to protect viable habitat for the kit fox in the Tri-Valley area. RC #20-5.

Mitigation Measure 3.7/19.0. Pursuant to Specific Plan Action Program 6N,\* the City shall restrict rodenticide and herbicide use. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.7-13.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Appendix E provides a comprehensive protection plan addressing several phases of kit fox protection, from avoidance of potential dens to maintenance of habitat. Through this plan, the Project will avoid most direct and indirect adverse effects on any kit fox that might be present in the Project area.

IMPACTS 3.7/F to I. Red-legged Frog, California Tiger Salamander, Western Pond Turtle, Tri-Colored Blackbird. The destruction and alteration of water impoundments and stream courses in the RPA threatens to eliminate habitat for these species. Increased sedimentation into the riparian areas could reduce water quality and threaten breeding and larval habitat. Disturbance of the already minimal vegetation in the stream courses could reduce habitat opportunity for adult species. Increased vehicle traffic and new road construction could increase direct mortality. Harassment and predation by feral dogs and cats already occurs, and would increase with increased residential development. DEIR page 3.7-13 to -14.

Mitigation Measures 3.7/20.0 to 22.0. Pursuant to Specific Plan Action Program 6L\* and other EIR mitigations, development projects in the RPA shall prepare open space plans to enhance and preserve existing habitat and revegetation plans for any disturbed open space or habitat areas and shall preserve and protect riparian, wetland, and stream corridor areas whenever possible. (See MMs 3.7/2.0 to 3.0.) Maintain a minimum buffer of at least 100 feet around breeding sites of the red-legged frog, California tiger salamander, and Western pond turtle. Development projects in the RPA shall conduct a pre-construction survey within sixty days prior to habitat modification to verify the presence of sensitive species. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.7-14.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Open space protection, revegetation, and restoration planning, as well as planning to protect and enhance wetland and riparian areas will also protect and

minimize impacts to the riparian habitat necessary for the species identified in this impact.

**IMPACTS 3.7/K. Golden Eagle:** The conversion of grasslands and the consequent reduction of potential prey could reduce the amount and quality of foraging habitat for golden eagles. Noise and human activity associated with development could also disrupt foraging activities. Elimination of golden eagle foraging habitat is also a potentially significant cumulative impact which contributes to the overall regional loss of foraging habitat for this species. DEIR page 3.7-15, 5.0-12.

**Mitigation Measure 3.7/25.0.** Designate substantial areas of land in the Project area as Open Space or Rural Residential (including future study areas), providing open space protection and low intensity development that will also provide a suitable foraging habitat. DEIR page 3.7-15, 5.0-12.

**Finding.** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

**Rationale for Finding.** Providing a natural open space zone around the existing golden eagle nest avoids destruction of the nesting site; providing an additional buffer during the golden eagle reproductive period further protects the integrity of the existing nesting site. The natural open space zone, together with the over \_\_\_\_\_ acres of open space and low intensity development across the Project site provides ample opportunity to maintain effective foraging habitat for golden eagles.

**IMPACT 3.7/L. Golden Eagle and Other Raptor Electrocutions.** Golden eagles and other raptors which perch or fly into high-voltage transmission lines may be electrocuted. DEIR page 3.7-15.

**Mitigation Measures 3.7/26.0 and 3.4/42.0.** Require all utilities to be located below grade where feasible. Pursuant to Specific Plan Action Program 6M,\* require all transmission lines to be undergrounded where feasible. Where not feasible, design specifications to protect raptors from electrocution shall be implemented. These specifications include, but are not limited to, spacing dangerous components; insulating conductors, using non-conductive materials, or providing perch guards on cross arms; and avoiding grounded steel cross arm braces. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.4-24, 3.7-15 to -16.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Undergrounding utilities, including all transmission lines, avoids the electrocution hazard. Where the hazard cannot be avoided through undergrounding, the design specifications identified in the mitigations reduce the electrocution hazards by neutralizing and/or covering the features that provide opportunities for electrocution.

**IMPACT 3.7/M, N. Burrowing Owl and American Badger.** Annual grasslands in the RPA provide suitable habitat for burrowing owls. Development and related construction activity could destroy both burrowing owl and American badger burrows. Harassment by feral dogs and cats, as well as use of poisons for rodent control, could harm these species and/or reduce their prey populations. DEIR page 3.7-16 to -17.

Mitigation Measures 3.7/20.0 and 27.0. Pursuant to Specific Plan Action Program 6L\* and other EIR mitigations, development projects in the RPA shall conduct a pre-construction survey within sixty days prior to habitat modification to verify the presence of sensitive species. The projects shall maintain a minimum buffer of at least 300 feet around the breeding sites of the American badger during the breeding season (March to September) to avoid direct loss of individuals. Also, projects shall maintain a minimum buffer of at least 300 feet around known or identified nesting sites of the burrowing owl, or implement other mitigation actions pursuant to standardized protocol now under development, including relocation of nesting sites in coordination with the USFWS and the CDFG. (\*Specific Plan provisions adopted throughout RPA.) DEIR pages 3.7-14, and -17; RC #15-60.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The pre-construction survey and required buffer zone around known nesting and breeding sites preserves these species' burrows by allowing them to be avoided during the construction and development process.

**IMPACT 3.7/O. Prairie Falcon, Northern Harrier, and Black-Shouldered Kite.** Development in the RPA could cause loss of foraging habitat. DEIR page 3.7-17.

Mitigation Measure 3.7/25.0. Substantial areas of land in the Project area are designated for Open Space and low intensity Rural Residential land uses (including future study areas). DEIR pages 3.7-15 and -17.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The designated open space and low intensity rural residential uses provide adequate foraging habitat for these species.

**IMPACT 3.7/P.** Sharp-Shinned Hawk and Cooper's Hawk. Development in the RPA could cause loss of foraging habitat. DEIR page 3.7-17.

Mitigation Measures 3.7/6.0 through 17.0 and 21.0. Establish protective buffer zones for riparian and freshwater marsh habitats to protect and enhance sensitive habitats. Preserve riparian, wetland, and stream corridor areas; where avoidance of these areas is not feasible, prepare and implement habitat restoration, enhancement and maintenance plans. DEIR pages 3.7-10 to -12, -14, -17.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The mitigations provide preservation, enhancement and maintenance features for riparian and freshwater marsh habitats upon which these species rely for forage. Protecting and enhancing this habitat avoids the impact of lost habitat.

**IMPACT 3.7/S.** Special Status Invertebrates. Impacts to special status invertebrates cannot be estimated at this time. DEIR page 3.7-18.

Mitigation Measure 3.7/28.0. Species-specific surveys shall be conducted in appropriate riparian/wetland habitats prior to approval of specific projects in the RPA. DEIR page 3.7-18, Addendum.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Any potential impacts to Special Status Invertebrates will be addressed during CEQA review of specific development projects in the RPA.

### Section 3.8 -- Visual Resources

**IMPACT 3.8/A. Standardized "Tract" Development.** Generic "cookie-cutter" development could obscure the specific natural features of the RPA, such as its landforms, vegetation, and watercourses, that make it a unique place with its own identity. DEIR page 3.8-4.

**Mitigation Measure 3.8/1.0.** Pursuant to the goal statement in Specific Plan Section 6.3.4,\* establish a visually distinctive community which preserves the character of the natural landscape by protecting key visual elements and maintaining views from major travel corridors and public spaces. Implement the extensive design guidelines for development as described in Chapter 7\* of the Specific Plan. These guidelines provide a flexible design framework, but do not compromise the community character as a whole.

(\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.8-5.

**Finding.** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

**Rationale for Finding.** By protecting key natural and visual elements, the Project maintains the natural features of the RPA, which make it unique. The general design guidelines for the Project, including a village center, town center, mixed use orientation, and varying lot sizes, provide a varied development pattern, which avoids the look of standard cookie-cutter tract developments.

**IMPACT 3.8/B. Alteration of Rural/Open Space Visual Character.** Urban development of the RPA will substantially alter the existing rural and open space qualities that characterize eastern Dublin. This is also a significant cumulative impact as the natural rural character of the Tri-Valley subregion is replaced by urban development. DEIR page 3.8-5, 5.10-12.

**Mitigation Measure 3.8/2.0.** Implement the land use plan for the RPA, which plan emphasizes retaining the predominant natural features, such as ridgelines and watercourses, and preserves the sense of openness that characterizes Eastern Dublin. DEIR page 3.8-5, 5.0-12.

**Finding.** Changes or alterations have been required in, or incorporated into the Project. However, even with these changes, the impact will not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. Maintaining predominant natural features minimizes the alteration of the RPA's current rural open space character; however, it does not fully mitigate this impact.

**IMPACT 3.8/C. Obscuring Distinctive Natural Features.** The characteristic unvegetated landscape of the RPA heightens the visual importance of existing trees, watercourses, and other salient natural and cultural features. The Project has the potential to obscure or alter these existing features and thereby reduce the visual uniqueness of the site. DEIR page 3.8-5.

Mitigation Measure 3.8/3.0. Pursuant to Specific Plan Policy 6-28,\* preserve the natural open beauty of the hills and other important visual resources, such as creeks and major stands of vegetation. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.8-5.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. This mitigation measure calls for preservation of the RPA's important visual resources, thereby avoiding the impact of obscured or altered visually important features.

**IMPACT 3.8/D. Alteration of Visual Quality of Hillsides.** Grading and excavation of building sites in hillside areas will severely compromise the visual quality of the RPA. DEIR page 3.8-6.

Mitigation Measures 3.8/4.0 to 4.5. Pursuant to Specific Plan Policies 6-32,\* and 6-34 to -38,\* grading and excavation throughout the RPA should be minimized, by using such grading features as gradual transitions from graded areas to natural slopes, by revegetation of graded areas, by maintaining natural contours as much as possible and grading only the actual development areas. Building pads in hillside areas should be graded individually or stepped, wherever possible. Structures and roadways should be designed in response to the topographical and geotechnical conditions. Structures should be designed to blend in with surrounding slopes and topography and the height and grade of cut and fill slopes should be minimized wherever feasible. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.8-6.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The various grading techniques identified, together with revegetation and sensitive building design will avoid the impact by minimizing physical alteration throughout the RPA.

**IMPACT 3.8/E. Alteration of Visual Quality of Ridges.**

Structures built in proximity to ridges may obscure or fragment the profile of visually-sensitive ridgelines. DEIR page 3.8-6.

Mitigation Measures 3.8/5.0 to 5.2. Pursuant to Specific Plan Policy 6-29,\* development is not permitted on the main ridgeline that borders the Specific Plan area to the north and east, but may be permitted on the foreground hills and ridgelands. Minor interruptions of views of the main ridgeline by individual building masses may be permitted only where all other remedies have been exhausted. Pursuant to Specific Plan Policy 6-30\* and General Plan Amendment Guiding Policy E, structures shall not obstruct scenic views and shall not appear to extend above an identified scenic ridgetop when viewed from scenic routes. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.8-7.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Prohibiting development along the main ridgeline in the RPA preserves the visual quality of this resource. Limiting development so that structures are not silhouetted against other scenic ridgetops, as well as requiring that a backdrop of natural ridgeline remain visible, minimizes the obstruction or fragmentation of visually sensitive ridgelines.

**IMPACT 3.8/F. Alteration of Visual Character of Flatlands.**

Commercial and residential development of the RPA's flatlands will completely alter the existing visual character resulting from valley grasses and agricultural fields. DEIR page 3.8-7.

Mitigation Measures. None identified. DEIR page 3.8-7.

Finding. No changes or alterations are available to substantially lessen this impact. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. Development of the Project site's flatter areas is regarded as a "trade-off" measure designed to preserve slopes, hillsides, and ridgelines.

**IMPACT 3.8/G. Alteration of the Visual Character of Watercourses.** Urban development of the Project site in proximity to watercourses may diminish or eliminate their visibility and function as distinct landscape elements. DEIR page 3.8-7.

**Mitigation Measure 3.8/6.0.** Pursuant to Specific Plan Policy 6-39,\* protect the visual character of Tassajara Creek and other stream corridors from unnecessary alteration or disturbance. Adjoining development should be sited to maintain visual access to the stream corridors. Implement earlier identified mitigation measures 3.7/8.0, 12.0, and 13.0, to revegetate stream corridors to enhance their natural appearance, to prepare a comprehensive stream corridor restoration program, and to establish dedication of land along both sides of stream corridors. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.8-7 to -8, 3.7-10 to -11.

**Finding.** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

**Rationale for Finding.** Preserving the RPA watercourses will retain both their visibility and function as distinct landscape elements. Special attention to stream corridors through revegetation, restoration, and dedication of land along both sides, will further enhance this distinct landscape element.

**IMPACT 3.8/I. Scenic Vistas.** Development on the RPA will alter the character of existing scenic vistas and may obscure important sightlines. DEIR page 3.8-8.

**Mitigation Measure 3.8/7.0 to 7.1.** Pursuant to Specific Plan policy 6-5\* and other EIR mitigations, preserve views of designated open space areas. The City will conduct a visual survey of the RPA to identify and map viewsheds of scenic vistas. (\*Specific Plan provisions adopted throughout RPA.)

**Finding.** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

**Rationale for Finding.** Identifying and mapping critical viewsheds allows the City to consider specific ways of preserving those views when reviewing development projects within the RPA.

**IMAGE 3.8/J. Scenic Routes.** Urban development of the RPA will significantly alter the visual experience of travelers on scenic

routes in eastern Dublin. As quiet rural roads become major suburban thoroughfares, foreground and distant views may be obstructed. DEIR page 3.8-8 to -9.

Mitigation Measure 3.8/8.0. Pursuant to Specific Plan Action Program 6Q,\* the City should officially adopt Tassajara Road, I-580, and Fallon Road as designated scenic corridors, should adopt scenic corridor policies, and should establish development review procedures and standards to preserve scenic vistas. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.8-9.

Mitigation Measure 3.8/8.1. Pursuant to Specific Plan Action Program 6R,\* the City should require that projects with potential impacts on scenic corridors submit detailed visual analysis with development project applications. The analysis shall include graphic simulations and/or sections drawn from affected travel corridors and representing typical views from scenic routes. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.8-9.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Establishing scenic corridor policies will insure that the visual experience of travelers along scenic routes be maintained as much as possible. Requiring visual analyses will allow the City to specifically review development projects for their visual impacts and to review how locations of structures and associated landscaping can be used to adjust the project design to minimize its visual impacts from scenic routes.

### Section 3.9 -- Cultural Resources

IMPACT 3.9/A. Disruption or Destruction of Identified Prehistoric Resources. Due to the level of development proposed in the RPA, it is assumed that all prehistoric sites identified in the 1988 inventory will be disturbed or altered in some manner. DEIR page 3.9-6.

Mitigation Measures 3.9/1.0 to 4.0. Develop a testing program to determine the presence or absence of hidden deposits in all locations of prehistoric resources. All locations containing these components shall be recorded with the State of California and their borders will be staked so that professional survey teams may develop accurate location maps. If any of these recorded and mapped locations are affected by future construction or increased access to the areas, evaluative testing, consisting of collecting and

analyzing any surface concentration of materials, shall be undertaken in order to prepare responsive mitigation measures. The City shall hire a qualified archaeologist to develop a protection program for prehistoric sites containing significant surface or subsurface deposits of cultural materials in areas where development will alter the current condition of the resource. DEIR page 3.9-6 to -7.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Through these mitigations, prehistoric resources can be identified and mapped, and specific mitigation plans prepared as part of review of development projects that will affect the resources.

**IMPACT 3.9/B. Disruption or Destruction of Unidentified Pre-Historic Resources.** Previously unidentified pre-historic resources may exist in the RPA and would be subject to potential disruption or destruction by construction and development activities associated with the Project. DEIR page 3.9-7.

Mitigation Measures 3.9/5.0 to 6.0. Pursuant to Specific Plan Policy 6-25\* and Action Program 6P,\* cease any grading or construction activity if historic or prehistoric remains are discovered until the significance and extent of those remains can be ascertained by a certified archaeologist. Development projects in the RPA shall prepare an archaeological site sensitivity determination and detailed research and field reconnaissance by a certified archaeologist, and develop a mitigation plan. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.9-7.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. These mitigations will insure that any significant prehistoric resources which are discovered during development activities are not disrupted or destroyed.

**IMPACT 3.9/C. Disruption or Destruction of Identified Historic Resources.** Due to the level of development proposed in the RPA, it is assumed that all historic sites identified in the 1988 inventory will be disturbed or altered in some manner. Even cultural resources in the proposed Open Space and Rural Residential areas will potentially be disturbed or altered due to the presence of new residential population in the area. DEIR page 3.9-8.

Mitigation Measures 3.9/7.0 to 12.0. Pursuant to Specific Plan Policies 6-26\* and 6-27\* and other mitigations identified in the EIR, all properties with historic resources and all standing structural remains shall be evaluated by an architectural historian as part of in-depth archival research to determine the significance of the resource prior to any alteration. All historic locations in the 1988 inventory shall be recorded on official State of California historical site inventory forms. These records should be used to make sure that historical locations are recorded onto development maps by professional surveyors. Where the disruption of historical resources is unavoidable, encourage the adaptive reuse or restoration of the structures whenever feasible. A qualified architectural historian shall be hired to develop a preservation program for historic sites found to be significant under Appendix K of the CEQA guidelines. (\*Specific Plan provisions adopted throughout RPA.) DEIR page 3.9-8.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Archival research and recordation of historical sites on state inventory forms will insure that historical resources are identified throughout the Project area. Encouraging adaptive reuse or restoration of historic structures and development of a preservation program for historic sites will insure that identified resources are not disturbed or destroyed.

**IMPACT 3.9/D. Disruption or Destruction of Unidentified Historic Resources.** Previously unidentified historic resources may exist in the RPA and would be subject to potential disruption or destruction by construction and development activities associated with the Project. DEIR page 3.9-8.

Mitigation Measures 3.9/5.0 to 7.0, 9.0, 10.0, and 12.0. These previously identified mitigation measures will be used to ascertain the presence of unidentified historic resources on a development project site in the RPA. If a historic resource is identified, archival research shall be performed to determine the significance of the resource or structure. The City shall hire a qualified architectural historian to develop a preservation program for significant historic sites. DEIR page 3.9-7 to -9.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Mitigations will ensure that any significant historic resources which are discovered during development activities are not disrupted or destroyed.

### Section 3.10 -- Noise

IMPACT 3.10/A. Exposure of Proposed Housing to Future Roadway Noise. Proposed residential housing along Dublin Boulevard, Tassajara Road, Fallon Road, and Hacienda Drive will be exposed to future noise levels in excess of 60 dB CNEL. DEIR page 3.10-2.

Mitigation Measure 3.10/1.0. Require acoustical studies for all residential development projects within the future CNEL 60 contour to show how interior noise levels will be reduced to 45 dB.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The required acoustical studies must show how interior noise exposures are reduced to 45 dB CNEL, the minimum acceptable noise level.

IMPACT 3.10/B. Exposure of Existing Residences to Future Roadway Noise. Increased traffic noise on local roads would result in significant cumulative noise level increases along Tassajara (4 dB), Fallon (6dB), and Hacienda Roads of 6 dB. This is a potentially significant cumulative impact in that small individual Project noise increases considered together and over the long term, will substantially increase overall noise levels. DEIR page 3.10-3, 5.0-13.

Mitigation Measures 3.10/2.0. All development projects in the RPA shall provide noise barriers or berms near existing residences to control noise in outdoor use spaces. DEIR page 3.10-3.

Mitigation Measure 3.10/7.0. To mitigate cumulative noise impacts, the City shall develop a noise mitigation fee to pay for on- and off-site noise mitigations, including but not limited to, noise barriers, earthen berms, or retrofitting structures with sound-rated windows. DEIR page 5.0-13.

Finding. Changes or alterations have been required in, or incorporated into the Project. However, even with these changes, the impact will not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. Providing noise barriers or berms will reduce noise exposure for existing residences; however, mitigation may not be feasible at all locations because of site constraints such as driveways and proximity to roadways. Furthermore, while developers will provide funding for noise mitigations to reduce overall noise levels, funds derived from the experimental program may not adequately mitigate the cumulative impact. Therefore, this noise impact cannot be fully mitigated.

**IMPACT 3.10/D. Exposure of Proposed Residential Development to Noise from Future Military Training Activities at Parks Reserve Forces Training Area (Camp Parks RFTA) and the County Jail.** Residential development on the Project site within 6000 feet of Camp Parks RFTA and the County Jail could be exposed to noise impacts from gunshots and helicopter overflights. DEIR page 3.10-4.

Mitigation Measure 3.10/3.0. The City shall require an acoustical study prior to future development in the Foothill Residential, Tassajara Village Center, County Center, and Hacienda Gateway subareas (as defined in Figure 4.2 of the Specific Plan) to determine whether future noise impacts from Camp Parks and the county jail will be within acceptable limits. This study should identify and evaluate all potential noise generating operations. DEIR page 3.10-4.

Finding. Changes or alterations have been required in, or incorporated into the Project. However, even with these changes, the impact will not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. The required acoustical study will identify noise sensitive areas in the Project site and noise generating operations at Camp Parks and the jail and will propose mitigation to reduce noise impacts to acceptable limits. However, mitigation may not be possible at all critical locations, so the impact may not be fully mitigated.

**IMPACT 3.10/E. Exposure of Existing and Proposed Residences to Construction Noise.** Construction would occur over years on the Project site and will be accompanied by noise from truck activity on local roads, heavy equipment used in grading and paving, impact noises during structural framing, and pile driving. Construction impacts will be most severe near existing residential uses along Tassajara Road and near existing uses in the southern portion of the Project area. DEIR page 3.10-4.

Mitigation Measures 3.10/4.0 to 5.0. Development projects in the RPA shall submit a Construction Noise Management Program that identifies measures proposed to minimize construction noise impacts on existing residents. The Program shall include a schedule for grading and other major noise-generating activities, limiting these activities to the shortest possible number of days. Other noise mitigation measures include, but are not limited to, restricting hours of construction activity, developing construction vehicle access routes which minimize truck traffic through residential areas, and developing a mitigation plan for construction traffic that cannot be avoided in residential areas. In addition, all development-related operations should comply with local noise standards, including limiting activity to daytime hours, muffling stationary equipment, and locating that equipment as far away from sensitive receptors as possible. DEIR page 3.10-4 to -5.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Through these mitigation measures, developers will limit the intensity and duration of noise exposure experienced by existing residences in construction areas. Other mitigations will limit noise exposure by moving the noise-generating equipment as far away from residential uses as possible.

IMPACT 3.10/F. Noise Conflicts due to the Adjacency of Diverse Land Uses Permitted by Plan Policies Supporting Mixed-Use Development. The presence of different land use types within the same development creates the possibility of noise impacts between adjoining uses, particularly when commercial and residential land uses abut. DEIR page 3.10-5.

Mitigation Measure 3.10/6.0. Development projects in the RPA shall prepare noise management plans to be reviewed as part of the development application for all mixed use projects involving residential uses and non-residential uses. To be prepared by a qualified acoustical consultant, the plan should aim to provide a high quality acoustic environment for residential and non-residential users and should propose steps to minimize or avoid potential noise problems. The plan should address the concerns of residents, non-residential users, and maintenance personnel, and should make maximum use of site planning to avoid noise conflicts. DEIR page 3.10-5 to -6.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The required noise management plans allow both the developer and the City to anticipate possible noise conflicts in mixed-use developments and to propose specific measures to address the specific conflicts identified. Occurring at an early stage in the process and reviewed with the development application, projects can make use of the greatest array of conflict reducing techniques, including building design and site planning. Compliance with these mitigations will lessen or avoid potential noise conflicts from adjacent mixed uses.

**IMPACT 3.11/A. Dust Deposition Soiling Nuisance from Construction Activity.** Clearing, grading, excavation, and unpaved roadway travel related to project construction will generate particulate matter which may settle out near the construction sites, creating a soiling nuisance. Any additional dust pollution will worsen the air basin's non-attainment status for particulates. Dust emissions is therefore also a potentially significant cumulative impact. DEIR page 3.11-3, 5.0-13.

Mitigation Measure 3.11/1.0. Require development projects in the Project area to implement dust control measures, including but not limited to, watering construction sites, cleaning up mud and dust carried by construction vehicles, effective covers on haul trucks, planting, repaving, and other revegetation measures on exposed soil surfaces, avoiding unnecessary idling of construction equipment, limiting on-site vehicle speeds, and monitoring particulate matter levels. These measures will reduce project dust deposition to acceptable levels, but will not avoid cumulative impacts of dust generation. DEIR page 3.11-3 to -4, 5.0-13.

Finding. Changes or alterations have been required in, or incorporated into the Project. However, even with these changes, cumulative dust generation impacts will not be substantially avoided. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. The mitigation measures identify various feasible and reasonable dust control measures that developers can take during construction activity. These measures eliminate and/or minimize the amount and effect of dust deposition in construction areas. Even with these measures, however, some small amount of additional pollution will occur. Therefore, the cumulative impacts of dust emissions cannot be fully mitigated.

**IMPACT 3.11/B. Construction Equipment/Vehicle Emissions.**

Construction equipment operation generates daily exhaust emissions. Normally considered a temporary impact, buildout of the Project area over the long term will be a chronic source of equipment/vehicle emissions. This is also a potentially significant cumulative impact due to the non-attainment status of the air basin. DEIR page 3.11-4, 5.0-13.

**Mitigation Measures 3.11/2.0 to 4.0.** Minimize construction interference with regional non-Project traffic movement by scheduling and routing construction traffic to non-peak times and locations. Provide ride-sharing incentives for construction personnel. Require routine low-emission tune-ups for on-site equipment. Require development projects in the Project area to prepare a Construction Impact Reduction Plan incorporating all proposed air quality mitigation strategies with clearly defined responsibilities for plan implementation and supervision. DEIR page 3.11-4, 5.0-13.

**Finding.** Changes or alterations have been required in, or incorporated into the Project. However, even with these changes, the impact will not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

**Rationale for Finding.** The mitigations include construction timing and siting measures that will reduce equipment and vehicle emissions over the long-term buildout of the Project. Even with these mitigations, however, neither Project nor cumulative air quality impacts can be fully mitigated.

**IMPACT 3.11/C. Mobile Source Emissions: ROG or NOx.** Project implementation at full buildout will generate 500,000 daily automobile trips within the air basin. Mobile source emissions for ROG and NOx associated with these vehicle trips are precursors to ozone formation. The emissions associated with this level of vehicle use will far exceed BAAQMD thresholds for significant effect. This is also a potentially significant cumulative impact. DEIR page 3.11-5, 5.0-14.

**Mitigation Measures 3.11/5.0 to 11.0.** Exercise interagency cooperation on a subregional and regional basis to integrate local air quality planning efforts with transportation, transit and other infrastructure plans. Implement techniques, such as transportation demand management (TDM), shifting travel to non-peak periods, and encouraging mixed-use development which provides housing, jobs, goods and services in close proximity as a means of reducing vehicle trips and related emissions and congestion. At the development Project level, maintain consistency between

specific development plans and regional transportation and growth management plans, coordinate levels of growth with roadway transportation facilities and improvements, and require linkage between housing growth and job opportunities to achieve a positive subregional jobs/housing balance. DEIR page 3.11-5, 5.0-14.

Finding. Changes or alterations have been required in, or incorporated into the Project. However, even with these changes, the impact will not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. The various techniques described in the mitigation measures provide opportunities to reduce vehicle trips, and therefore reduce vehicle emissions. However, because of the size of this Project, neither Project nor cumulative impacts can be fully mitigated.

**IMPACT 3.11/E. Stationary Source Emissions.** Specific Plan buildup will create emissions from a variety of sources, including but not limited to, fuel combustion in power plants, evaporative emissions from paints, and subsurface decay of organic materials associated with solid waste disposal. This is also a potentially significant cumulative impact. DEIR page 3.11-6, 5.0-14.

Mitigation Measures 3.11/12.0 to 13.0. Minimize stationary source emissions associated with Project development where feasible, with the goal of achieving 10 percent above the minimum conservation target levels established in Title 24 of the California Code of Regulations. Include solid waste recycling in all development planning. DEIR page 3.11-6, 5.0-14.

Finding. Changes or alterations have been required in, or incorporated into the Project. However, even with these changes, the impact will not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. Focusing on reducing emissions from various sources will allow an incremental reduction in stationary source emissions. These reductions will not, however, be sufficient to avoid either Project-related or cumulative impacts.

## Section 2

### ENVIRONMENTALLY INSIGNIFICANT IMPACTS

The City Council finds that all other impacts of the proposed Project are not environmentally significant as documented in the FEIR and supported by evidence elsewhere in the record. No mitigation is required for these insignificant impacts.

### Section 3

#### FINDINGS CONCERNING ALTERNATIVES

The City Council is adopting Alternative 2 (with minor changes) described in the Final EIR in place of the originally proposed Project. The City hereby finds the remaining three alternatives identified and described in the Final EIR were considered and are found to be infeasible for the specific economic, social, or other considerations set forth below pursuant to CEQA Section 21081, subdivision (c). The City also declines to adopt the Project as originally proposed for the reasons set forth below.

##### THE ORIGINALLY PROPOSED PROJECT.

Section 21081, subdivision (c) does not require the City Council to make findings as to why the originally proposed Project was not adopted. Such findings need only be made as to project alternatives which would mitigate significant environmental effects. Alternative 2 has no significant environmental effects which could be avoided by adopting the originally proposed project in its stead. Rather, the City Council finds that Alternative 2 will pose no significant environmental effects that would not be posed at least to the same extent (and often to a greater extent) by the Project as originally proposed.

Public Resources Code section 21085 prohibits public agencies from reducing the proposed number of housing units as a project alternative pursuant to CEQA for a particular significant affect on the environment if it determines that there is another feasible specific mitigation measure or project alternative that would provide a comparable level of mitigation. The Project as adopted does indeed involve a reduction of the number of housing units than were originally proposed, both because the Project as adopted does not provide for residential development in the Livermore Municipal Airport Protection Zone and because the Project as adopted only involves residential development approximately two-thirds of the area originally proposed for development. Moreover, these reductions do result in mitigation of some significant environmental impacts, especially impacts on Doolan Canyon.

The prohibition of residential development within the Livermore Municipal Airport Protection Zone is adopted in order to comply with Public Utilities Code section 21676 and the decision of the Alameda County Airport Land Use Commission pursuant to that action to prohibit residential development in

the Zone. This prohibition is, thus, not adopted merely as a mitigation measure pursuant to CEQA.

The City also finds that no feasible alternatives or mitigation measures will provide the level of mitigation of significant environmental effects as are provided by the adoption of Alternative 2 rather than the project as originally proposed. Alternative 2 will leave Doolan Canyon in its current largely undeveloped state, thereby mitigating significant impacts involving loss of open space, and biologically sensitive habitat in a way that could not be accomplished by any mitigation measure or alternative were Doolan Canyon in fact developed as originally proposed.

ALTERNATIVE 1: NO PROJECT. DEIR pages 4-1 to 4-8, 4-20

Finding: Infeasible. This option assumes the Project as proposed would not be built on the site; instead any development would be pursuant to the existing general plan. Under that plan, a limited amount of business park/industrial development could occur on the 600 acre County property and on the 200 acre portion of the Project area south of the proposed Dublin Boulevard extension.

The No Project Alternative is found to be infeasible because the City's General Plan has designated the Eastern Dublin area for planned development, subject to the preparation of a Specific Plan. In addition, the No Project Alternative fails to provide needed housing. The need for housing is documented in the Housing Element of the City's General Plan, and in other plan documents of the City and other jurisdictions in the area.

ALTERNATIVE 3: REDUCED LAND USE INTENSITIES.

DEIR pages 4-14 to 4-19

Finding: Infeasible. This option assumes development of both the Specific Plan and the General Plan Amendment except that 285 acres of higher traffic generating commercial uses will be replaced with lower traffic generating residential uses. The Reduced Land Use Intensities alternative is found to be infeasible for the following reasons:

- (1) Airport Safety. This alternative will increase the number of housing units within the Livermore Municipal Airport Protection Zone. (p. 4-15).
- (2) Unavoidable impacts. Even with the reduced intensities of this alternative, all the unavoidable impacts identified for the Project would remain except traffic impacts at I-580, I-680/Hacienda, at I-580, Tassajara/Airway, at Airway

Boulevard/Dublin Boulevard and cumulative traffic impacts on Dublin Boulevard (Impacts 3.3/B, C, J, and M). DEIR Page 4-15.

- (3) Fiscal impacts. This alternative may have potentially significant fiscal impacts on the City budget's cost/revenue balance by reducing commercial development which generally generates less

APPENDIX C: EVALUATION OF PRIME AGRICULTURAL LANDS

PRIME AGRICULTURAL  
LAND EVALUATION  
EAST DUBLIN PROPERTIES  
FALLON ROAD  
ALAMEDA COUNTY, CALIFORNIA

FOR  
SHEA HOMES  
February 7, 2001

Job No. 2275.000



Via Hand Delivery

February 7, 2001  
 Job No. 2275.000

Ms Kathryn Watt  
 Shea Homes  
 2580 Shea Center Drive  
 Livermore, California 94550

Subject: Prime Agricultural Land Evaluation  
 East Dublin Properties  
 Fallon Road  
 Alameda County, California

Dear Ms Watt:

### INTRODUCTION

This report presents the results of our evaluation of the possible presence of "Prime agricultural land" in the East Dublin Properties site. "Prime agricultural land" is defined in Government Code 56064 as presented below:

*"Prime agricultural land" means an area of land, whether a single parcel or contiguous parcels, that has not been developed for a use other than an agricultural use and that meets any of the following qualifications:*

- (a) *Land that qualifies, if irrigated, for rating as class I or class II in the USDA Natural Resources Conservation Service land use capability classification, whether or not land is actually irrigated, provided that irrigation is feasible.*
- (b) *Land that qualifies for rating 80 through 100 Storie Index Rating.*
- (c) *Land that supports livestock used for the production of food and fiber and that has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture in the National Handbook on Range and Related Grazing Lands, July, 1967, developed pursuant to Public Law 46, December 1935.*
- (d) *Land planted with fruit or nut-bearing trees, vines, bushes, or crops that have a nonbearing period of less than five years and that will return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than four hundred dollars (\$400) per acre.*

February 7, 2001

Job No. 2275.000

Page 2

- (e) *Land that has returned from the production of unprocessed agricultural plant products an annual gross value of not less than four hundred dollars (\$400) per acre for three of the previous five calendar years.*

### ANALYSIS

To evaluate the possible presence of "Prime agricultural land" within the East Dublin Properties, we have analyzed each of the five criteria contained in Government Code 56064.

- (a) *Land that qualifies, if irrigated, for rating as class I or class II in the USDA Natural Resources Conservation Service land use capability classification, whether or not land is actually irrigated, provided that irrigation is feasible.*

Approximately 100 acres of the southern margin of the East Dublin Properties are shown to contain class I or class II soils according to the "Soil Survey, Alameda Area, California" USDA Soil Conservation Service, issued 1966. The second part of this criteria is that irrigation be feasible. Our judgement is that irrigation of this land is not feasible. With regard to existing agricultural water supply in the Livermore Valley, the South Bay Aqueduct is the only source of surface water for irrigation. The terminus of the South Bay Aqueduct is over seven miles from the East Dublin Properties. While it is unlikely that water from this source would be available for irrigation purposes on the East Dublin Properties, the distance from the terminus of the South Bay Aqueduct would make delivery of any available water volume economically unfeasible.

With regard to possible subsurface water supplies, the East Dublin Properties are situated outside the main aquifers underlying the Livermore Valley that are currently used as part of the domestic water supply for Dublin, Pleasanton and Livermore. As such, it is our judgement that undertaking to drill and develop water wells on the East Dublin Properties that would produce an adequate, sustainable and economically viable water supply for irrigation would likely be unsuccessful.

- (b) *Land that qualifies for rating 80 through 100 Storie Index Rating.*

The Storie Index Rating for soils on the East Dublin Properties are presented in the "Soil Survey, Alameda Area, California," USDA Soil Conservation Service issued 1966. The USDA Soil Conservation Service Soil Map for this area is presented on Plate 2 of this report. The soil classifications and Storie Index Rating for all soils on the East Dublin Properties are tabulated below. The highest Storie Index Rating within the East Dublin Properties is Rincon clay loam (0 to 3 percent slopes) with a Storie Index Rating of 68.

Map Symbol	Soil	Storie Index Rating
Aac	Altamont clay, 3 to 15 percent slopes	41
Cc	Clear Lake clay, 0 to 3 percent slopes	43
DbC	Diablo Clay, 7 to 15 percent slopes	44
DbD	Diablo Clay, 15 to 30 percent slopes	36
DbE2	Diablo Clay, 30 to 45 percent slopes, eroded	19
DvC	Diablo clay, very deep, 3 to 15 percent slopes	43
LaC	Linne clay loam, 3 to 15 percent slopes	51
LaD	Linne clay loam, 15 to 30 percent slopes	40
LaE2	Linne clay loam, 30 to 45 percent slopes, eroded	18
Pd	Pescadero clay	16
RdA	Rincon clay loam, 0 to 3 percent slopes	68
RdB	Rincon clay loam, 3 to 7 percent slopes	65

- (c) *Land that supports livestock used for the production of food and fiber and that has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United Sates Department of Agriculture in the National Handbook on Range and Related Grazing Lands, July, 1967, developed pursuant to Public Law 46, December 1935.*

We have contacted two of the largest cattle ranchers in the Alameda County, Gordon Rassmussen and Robert Nielsen. Both individuals expressed the opinion that the carrying capacity of the East Dublin Properties study area would be approximately one-tenth animal unit per acre.

- (d) *Land planted with fruit or nut-bearing trees, vines, bushes, or crops that have a nonbearing period of less than five years and that will return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than four hundred dollars (\$400) per acre.*

The East Dublin Properties are not planted with fruit or nut-bearing trees, vines, bushes, or crops.

- (e) *Land that has returned from the production of unprocessed agricultural plant products an annual gross value of not less than four hundred dollars (\$400) per acre for three of the previous five calendar years.*

February 7, 2001  
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Page 4

Unprocessed agricultural plant products have not, to the best of our knowledge, been produced on this property for three of the previous five calendar years.

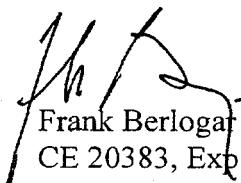
### CONCLUSION

We have evaluated the East Dublin Properties in regard to Section 56064 of the Government Code and find that the East Dublin Properties fail each of the five specific tests required for classification as "Prime agricultural land."

Please call if you have any questions or require further detail.

Respectfully submitted,

BERLOGAR GEOTECHNICAL CONSULTANTS

  
Frank Berlogar  
CE 20383, Exp. 9/30/01



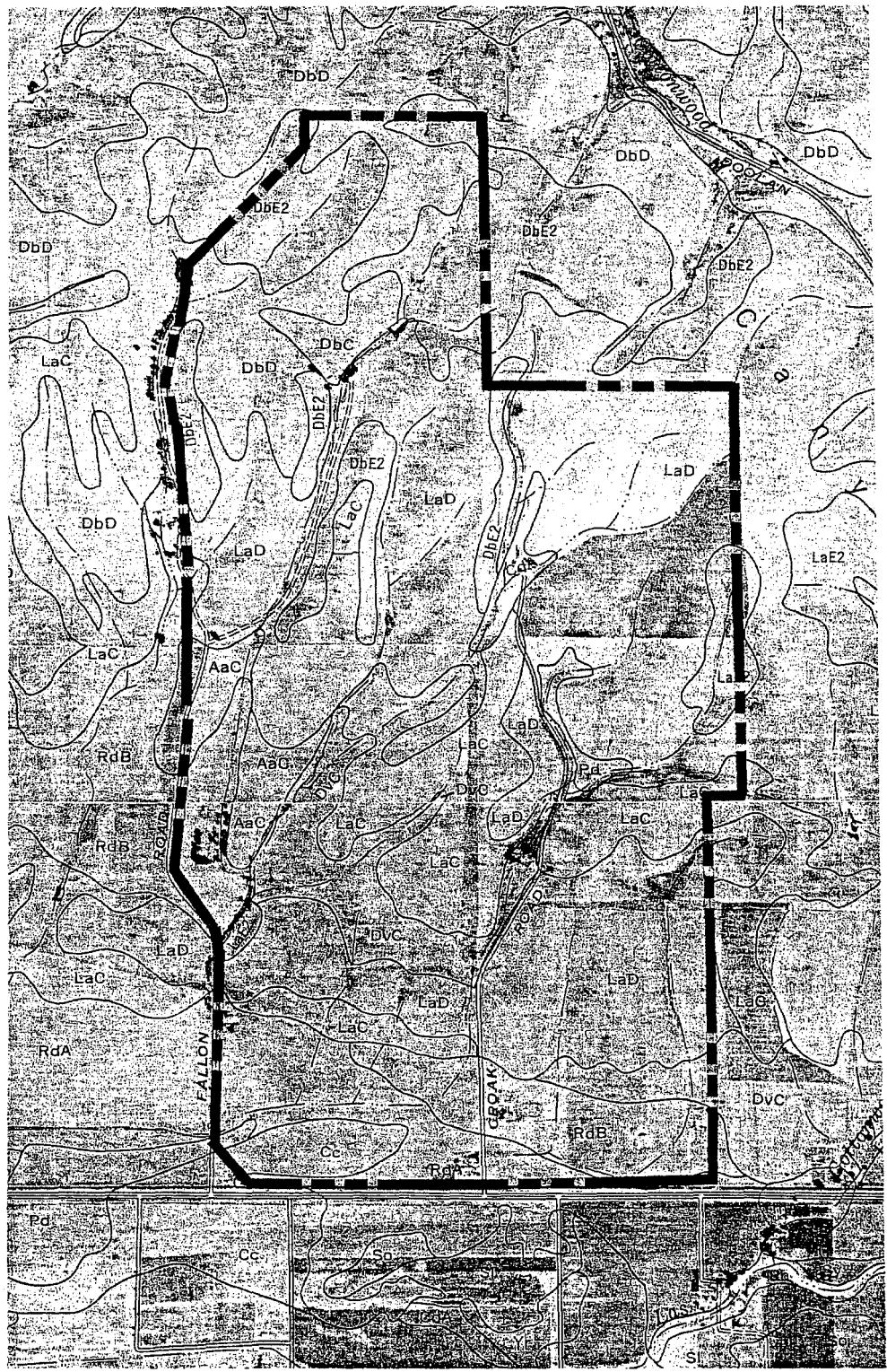
FB:pv

Attachment:

- Plate 1 - Site Plan
- Plate 2 - SCS Soil Map

Copies: Addressee (10)

wp9/letter10129



# **SCS SOIL MAP**

**EAST DUBLIN  
PROPERTIES**

ALAMEDA COUNTY, CALIFORNIA  
FOR  
SHEA HOMES

## **BERLOGAR GEOTECHNICAL CONSULTANTS**

PLATE 2

**Hand Delivery**

October 3, 2001  
Job No. 2275.002



Ms Connie Goldade  
MacKay & Somp  
5142 Franklin Drive, Suite B  
Pleasanton, California 94566

Subject: East Dublin Properties  
Fallon Road  
Alameda County, California

Dear Ms Goldade:

The purpose of this letter is to respond to several issues raised in written comments on the draft EIR for the subject project. The issues we are responding to, in general, relate to qualification (a) as included in our Prime Agricultural Land Evaluation report dated February 7, 2001. That qualification is as follows:

- (a) *Land that qualifies, if irrigated, for rating as Class I or Class II in the USDA Natural Resources Conservation Service land use capability classification, whether or not land is actually irrigated, provided that irrigation is feasible.*

**I. Issue:** Zone 7 North Valley Pipeline for the proposed Altamont Water Treatment Plant.

**Fact:** While the proposed pipeline is likely to be in close proximity to the area of Class I and Class II soil, the water will be treated (potable) water.

**Conclusion:** The use of potable water at retail prices would be unfeasible for agricultural uses.

**II. Issue:** DSRSD Reclaimed Water.

**Fact:** While final pricing for the reclaimed water has not been set, it is expected that the pricing will be comparable to the retail pricing of potable water.

**Conclusion:** The use of reclaimed water from DSRSD is expected to be priced at retail levels and would therefore be infeasible for agricultural purposes.

**III. Issue:** Zone 7 untreated water turnout close to the area of Class I and Class II soils.

**Fact:** Zone 7 reports there are no turnouts for untreated water beyond the terminus of the South Bay Aqueduct in southeast Livermore.



October 3, 2001  
 Job No. 2275.002  
 Page 2

**Conclusion:** There is no turnout for untreated water in close proximity. Therefore, the site is over 7 miles from the terminus of the South Bay Aqueduct in southeast Livermore. Use of this water source would not be feasible for agricultural purposes.

IV. **Issue:** Vertical Water Wells.

**Fact:** The approximately 80-acres of Class I and Class II soils are within the Camp subbasin as defined by Zone 7.

Department of Water Resources Bulletin No. 118-2, dated June 1974, on page 66, discusses potential yield of wells from the Camp subbasin. They conclude as follows:

*There are no data available considering ground water production in the Camp subbasin. It is estimated that domestic or stock supplies of ground water may be obtained from shallow wells nearly everywhere in the subbasin. Possible areas where supplies would be limited are adjacent to the hill front along the north edge of the subbasin. South of Highway 580 it is estimated that there is a sufficient thickness of sediment to yield irrigation supply to ground water from the valley fill materials. Because of the low permeability of the underlying Tassajara sediments, it is doubtful that the yields from wells penetrating a deeper sediment would be increased significantly.*

Miscellaneous field studies map MF-431 prepared by D.A. Webster, Department of Interior, U.S. Geologic Survey includes a map showing ranges in probable maximum well yield for Water Bearing Rocks in the San Francisco Bay Region, California. This map delineates the subject site as Map Symbol B. The ranges in probable maximum yield of wells from this document is presented below:

Map Symbol	Adequacy of Yield (at 68% level of chance)	68% chance that maximum yields will range from (gpm)	95% chance that maximum yields will range from (gpm)
A	Marginal to adequate for stock or single family domestic use	0.5 to 5	0.1 to 10
B	Adequate for stock or single family domestic use, but inadequate to marginal for light industrial use	5 to 50	1 to 100
C	Adequate for light industry, but inadequate to marginal for irrigation, heavy industry, and municipal uses.	50 to 500	10 to 1,000
D	Marginal to adequate for irrigation, heavy industry, and municipal uses.	500 to 1,500	100 to 3,000

October 3, 2001  
 Job No. 2275.002  
 Page 3

**Conclusion:** The expected range of yield from wells drilled in this area is 5 to 50 gallons per minute or less. The area of Class I and Class II soils are adjacent to the hill front area along the north ridge of the subdrain where the Department of Water Resources anticipated more limited supplies of ground water. Such limited yields will not be adequate for agricultural irrigation.

V. **Issue:** Slant drilled water wells.

**Fact:** Slant drilled wells have limitations on the maximum deviation from vertical ranging between 20 and 30 degrees depending on the particular drilling equipment utilized. Slant well drilling that extends underneath 580 into the property south of Interstate 580 would cross Caltrans right-of-way and extend southward into private property owned by others.

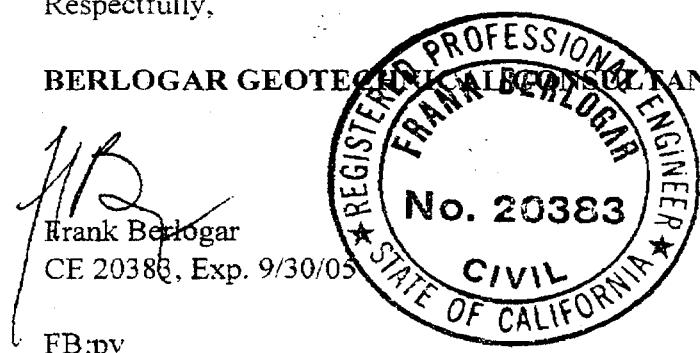
**Conclusion:** Inasmuch as the southern boundary of the Camp subbasin is approximately 500 feet south of Interstate 580, the limitations on the drilling equipment of 20 to 30 degrees from vertical would result in wells that would still be located within the Camp subbasin. We conclude that such wells are unlikely to have significantly greater yields than the Vertical Water Wells discussed in paragraph III above. It is highly likely that slant drilled water wells extending underneath Caltrans right-of-way and into private property to the south would face legal obstacles that would preclude such an undertaking for agricultural purposes.

### SUMMARY

After evaluating the issues raised in the comments to the draft EIR, we are still of the opinion that irrigation of the area of Class I and Class II soils is not feasible.

Respectfully,

BERLOGAR GEOTECHNICAL CONSULTANTS



Frank Berlogar

CE 20383, Exp. 9/30/05

FB:pv

Copies: Addressee (3)

wp/9/letter/11027

BERLOGAR GEOTECHNICAL CONSULTANTS

RONALD AMUNDSON, PHD  
5 CAMINO DEL CIELO  
ORINDA, CA 94563

Mr. Jerry Haag  
Urban Planner  
2029 University Avenue  
Berkeley, CA 94704

December 17, 2001

Subject: Prime agricultural land evaluation at East Dublin Properties, Fallon Rd

Dear Mr Haag:

This report summarizes my evaluation of the extent of prime agricultural land within the East Dublin Properties area, Fallon Road, Alameda County.

#### Site Visit

On Friday December 15, 2001, I meet with Jerry Haag and Andy Byde (senior planner, city of Dublin) at the city of Dulbin planning office. I was provided with a scope of the project, and: (1) Definition of prime agricultural land (Govt. Code 56064), (2) report by Berlogar Geotechnical Consultants "Prime Agricultural Land Evaluation, East Dublin Properties, Fallon Road, Alameda Country, California" (2/7/01), (3) report by Berlogar Consultants to Ms. Connie Goldade (MacKay and Somps) (10/3/01), and (4) Vol. 1 and 2 of "East Dublin Properties. Stage 1 Development Plan and Annexation", July 2001, City of Dublin.

A site visit was made to the property, and the area was viewed from Croak and Fallon Roads.

#### Review of "Prime Agricultural Land" Criteria

Below I list the definition of prime agricultural land that was provided to me and in the following section, provide a summary report of the agricultural suitability of the area.

From Government Code 56064:

*"Prime agricultural land" means an area of land, whether a single parcel or contiguous parcels, that has not been developed for a use other than an agricultural use and that meets any of the following qualifications:*

- (a) Land that qualifies, if irrigated, for rating as class I or class II in the USDA Natural Resources Conservation Service land use capability classification, whether or not land is actually irrigated, provided that irrigation is feasible.*
- (b) Land that qualifies for rating 80 through 100 Storie Index Rating.*
- (c) Land that supports livestock used for the production of food and fiber and that has an annual carrying capacity equivalent to at least one animal unit per acres as defined by the United States Department of Agriculture in the National Handbook on Range and Related Grazing Lands, July, 1967, developed pursuant to Public Law 46, December 1935.*
- (d) Land planted with fruit or nut-bearing trees, vines, bushes, or crops that have a nonbearing period of less than five years and that will return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than four hundred dollars (\$400) per acre.*
- (e) Land that has returned from the production of unprocessed agricultural plant products an annual gross value of not less than four hundred dollars (\$400) per acre for three of the previous five calendar years.*

#### Summary of Agricultural Suitability of Area

Here I review each of the five criteria of "Prime agricultural land" in relation to land within the East Dublin Properties Area.

- (a) Land that qualifies, if irrigated, for rating as class I or class II in the USDA Natural Resources Conservation Service land use capability classification, whether or not land is actually irrigated, provided that irrigation is feasible.*

Table 1 list the soil types (soil series and phases of soil series) in the Area as derived from (a) "Soil Survey. Alameda Area, California", UDSA Soil Conservation Service (1966) and (b) Plate 2, Berlogar Consultants Report (2/7/01), which delineates the property area on the soil map.

I note that I located one more soil mapping unit in the area than the Berlogar report (2/7/01): Clear Lake clay, drained, 0-3% slopes (CdA). However, as I report below, this addition has no bearing on the results of this report relative to those of the 2/7/01 report.

There is only one map unit (Rincon clay loam) that has an irrigated Land Capability Unit of I or II (IIs-3), which is located at the southern end of the property, just north of Interstate 580. The total area of this map unit is approximately 70 acres.

The feasibility of providing irrigation water for this one map unit was discussed in a report by Berlogar Geotechnical Consultants (10/3/01 letter to Ms. Connie Goldade, MacKay and Somps). That report concluded that the cost of reclaimed or potable water was prohibitive to agriculture. The report also concluded that the cost of transporting water from the nearest agricultural aqueduct was also prohibitive. The report also reviewed a USGS field studies map (Water Bearing Rocks in the San Francisco Bay Region, California. MF-431. D.A. Webster) that reported that the maximum ground water yield from wells had a 95% chance of falling between 1 to 100 gallons per minute, which fell below the reported limit for marginal to adequate agriculture (100 to 3,000 gallons per minute).

In summary, there is one map unit in the area that would qualify as prime farmland pending the feasibility of applying irrigation water. However, assessing the economic feasibility of providing water to this tract is beyond the scope of my expertise.

**Table 1. Listing of soils in project area, and properties relevant to designation as "Prime Farmland".**

<b>Soil Series (phase)<sup>1</sup></b>	<b>Map Unit ID<sup>2</sup></b>	<b>Land Capability Classification<sup>3</sup></b>	<b>Storie Rating Index<sup>4</sup></b>	<b>Range Capability<sup>5</sup> (animal unit months, unirrigate)<sup>6</sup> [animal unit months, irrigated and fertilized]<sup>7</sup></b>
Altamont (clay, 3-15% slopes)	AaC	IIIe-5	41	Very Good (>1) [>20]
Clear Lake (clay, 0-3 % slopes)	Cc	IIIw-5	43	Very Good (>1) [>20]
Clear Lake (clay, drained, 0-3 % slopes)	CdA	IIIs-5	49	Very Good (>1) [>20]
Diablo (clay, 7- 15 % slopes)	DbC	IIIe-5	44	Very Good (>1) [>20]
Diablo (clay, 15-30 % slopes)	DbD	IVe-5	36	Very Good (>1) [>20]
Diablo (clay, 30-45 % slopes, eroded)	DbE2	Vle-5	19	Very Good (>1) [>20]
Diablo (clay, very deep, 3 to 15 % slopes)	DvC	IIIe-5	43	Very Good (>1) [>20]
Linne (clay loam, 3-15 % slopes)	LaC	IIIe-5	51	Very Good (>1) [>20]
Linne (clay loam, 15-30 % slopes)	LaD	IVe-5	40	Very Good (>1) [>20]
Linne (clay	LaE2	Vle-5	18	Very Good

loam, 15-30 % slopes, eroded)				(>1) [>20]
Pescadero (clay)	Pd	VIw-2	16	Very Poor (not appropriate for grazing dry or irrigated)
Rincon (clay loam, 0-3 % slopes)	RdA	IIs-3	68	Very Good 
Rincon (clay loam, 3-7% slopes)	RdB	IIIe-3	65	Very Good 

<sup>1</sup> Series name refers to most detailed designation of soil profile types in USDA system.

Phase of series includes surface texture (e.g. clay), slope (e.g. 15-30 %), soil depth (e.g. deep), and erosional status (e.g. drained).

<sup>2</sup> Map units derived from sheets 9 and 15 of "Alameda Area Soil Survey".

<sup>3</sup> Land capability classification (unit) taken from Table 18 in "Alameda Area Soil Survey"

<sup>4</sup> Storie Index Ratings taken from Table 8, "Alameda Area Soil Survey"

<sup>5</sup> Grazing ratings taken from Table 9, "Alameda Area Soil Survey"

<sup>6</sup> Animal units months (# of months that one animal unit can graze one acre of land) taken from Table 10, "Alameda Area Soil Survey".

<sup>7</sup> From Table 10, "Alameda Area Soil Survey".

(b) Land that qualifies for rating 80 through 100 Storie Index Rating.

All soils in the area had Storie Indexes of less than 80 (Table 1).

(c) Land that supports livestock used for the production of food and fiber and that has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture in the National Handbook on Range and

APPENDIX D: AIR QUALITY DATA



**Giroux & Associates**  
Environmental Consultants

168 of 388

July 14, 2001

Shea Homes  
Attn: Kerri Watt  
2155 Los Positas Court, Suite T  
Livermore, CA 94550

Re: East Dublin SEIR Background Technical Materials

Dear Ms. Watt:

The following materials are attached that were used in preparing the air quality impact analysis for the above project:

1. California Air Quality Data - Voyager CD cover photocopy
2. BAAQMD CEQA Handbook - cover, update letter, TofC
3. Ozone Attainment Plan Revision Hearing Notice
4. Ozone Attainment Plan CEQA Initial Study - partial
5. Microscale CO Exposure Calculation Detail
6. URBEMIS7G Emissions Model Input/Output File Diskette

Please call me if you have any questions regarding the enclosed materials.

Sincerely,

Hans D. Giroux  
Senior Analyst  
Giroux & Associates

HDG:ai

2001  
EXISTING

(5)

$$\frac{(3894 \times 9.5 + 1885 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(36993 + 6220.5) \times 6.75}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 4.4 \quad 7.3$$

$$8\text{ HR} = \underline{\quad} (.7) + 2.1 \quad 4.1$$

INTERSECTION # 1

$$\frac{(2446 \times 9.5 + 1356 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(23237 + 4474.8) \times 6.75}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 4.4 \quad 6.3$$

$$8\text{ HR} = \underline{\quad} (.7) + 2.1 \quad 3.4$$

INTERSECTION # 2

$$\frac{(1330 \times 9.5 + 869 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(12635 + 2867.7) \times 6.75}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 4.4 \quad 5.4$$

$$8\text{ HR} = \underline{\quad} (.7) + 2.1 \quad 2.8$$

INTERSECTION # 3

$$\frac{(891 \times 9.5 + 701 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(8464.5 + 2313.3) \times 6.75}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 4.4 \quad 5.1$$

$$8\text{ HR} = \underline{\quad} (.7) + 2.1 \quad 2.6$$

INTERSECTION # 4

$$\frac{(3244 \times 9.5 + 1511 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(30818 + 4986.3) \times 6.75}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 4.4 \quad 6.8$$

$$8\text{ HR} = \underline{\quad} (.7) + 2.1 \quad 3.8$$

INTERSECTION # 5

$$\frac{(2625 \times 9.5 + 2050 \times 3.3) \times 6.75}{100,000}$$

2001  
EXISTING

EAST DUBLIN  
PROPERTIES

$$\frac{(24937.5 + 6765) \times 6.75}{100,000}$$

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$$1\text{ HR} = \underline{\quad} + 4.4$$

6.5

$$8\text{ HR} = \underline{\quad} (.7) + 2.1 \quad 3.4$$

INTERSECTION # 6

$$\frac{(1170 \times 9.5 + 250 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(11115 + 825) \times 6.75}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 4.4$$

5.2

$$8\text{ HR} = \underline{\quad} (.7) + 2.1$$

2.7

INTERSECTION # 7

$$\frac{(998 \times 9.5 + 254 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(9481 + 838.2) \times 6.75}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 4.4$$

5.1

$$8\text{ HR} = \underline{\quad} (.7) + 2.1$$

2.6

INTERSECTION # 89

$$\frac{(575 \times 9.5 + 267 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(5462.5 + 881.1) \times 6.75}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 4.4$$

4.8

$$8\text{ HR} = \underline{\quad} (.7) + 2.1$$

2.4

INTERSECTION # 13

$$\frac{(199 \times 9.5 + 56 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(1890.5 + 184.6) \times 6.75}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 4.4$$

4.5

$$8\text{ HR} = \underline{\quad} (.7) + 2.1$$

2.2

INTERSECTION # 14

$$\frac{(4898 \times 9.5 + 2916 \times 3.3) \times 6.75}{100,000}$$

2001  
+ APPROVED  
+ PENDING

EAST DUBLIN  
PROPERTIES

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$$\frac{(46531 + 9622.8) \times 6.75}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 4.4 \quad 8.2$$

$$8 \text{ HR} = \underline{\quad} (.7) + 2.1 \quad 4.8$$

INTERSECTION # 1

$$\frac{(5273 \times 9.5 + 3221 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(50093.5 + 10629.3) \times 6.75}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 4.4 \quad 8.5$$

$$8 \text{ HR} = \underline{\quad} (.7) + 2.1 \quad 5.0$$

INTERSECTION # 2

$$\frac{(4342 \times 9.5 + 2144 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(41249 + 7075.2) \times 6.75}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 4.4 \quad 7.7$$

$$8 \text{ HR} = \underline{\quad} (.7) + 2.1 \quad 4.4$$

INTERSECTION # 3

$$\frac{(2886 \times 9.5 + 2357 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(27417 + 7778.1) \times 6.75}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 4.4 \quad 6.8$$

$$8 \text{ HR} = \underline{\quad} (.7) + 2.1 \quad 3.8$$

INTERSECTION # 4

$$\frac{(5741 \times 9.5 + 2621 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(54539.5 + 8649.3) \times 6.75}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 4.4 \quad 8.7$$

$$8 \text{ HR} = \underline{\quad} (.7) + 2.1 \quad 5.1$$

INTERSECTION # 5

$$\frac{(5079 \times 9.5 + 1589 \times 3.3) \times 6.75}{100,000}$$

2001

EAST DUBLIN  
PROPERTIES+ APPROVED  
+ PENDING

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$$\frac{(48250.5 + 5243.7) \times 6.75}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 4.4 \quad 8.0$$

$$8 \text{ HR} = \underline{\quad} (.7) + 2.1 \quad 4.6$$

INTERSECTION # 6

$$\frac{(4144 \times 9.5 + 2264 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(39368 + 7471.2) \times 6.75}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 4.4 \quad 7.6$$

$$8 \text{ HR} = \underline{\quad} (.7) + 2.1 \quad 4.3$$

INTERSECTION # 7

$$\frac{(201 \times 9.5 + 523 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(21859.5 + 1725.9) \times 6.75}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 4.4 \quad 6.0$$

$$8 \text{ HR} = \underline{\quad} (.7) + 2.1 \quad 3.2$$

INTERSECTION # 8

$$\frac{(2156 \times 9.5 + 531 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(20482 + 1752.3) \times 6.75}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 4.4 \quad 5.9$$

$$8 \text{ HR} = \underline{\quad} (.7) + 2.1 \quad 3.2$$

INTERSECTION # 9

$$\frac{(1977 \times 9.5 + 935 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(18781.5 + 3085.5) \times 6.75}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 4.4 \quad 5.9$$

$$8 \text{ HR} = \underline{\quad} (.7) + 2.1 \quad 3.1$$

$$\frac{(467 \times 9.5 + 279 \times 3.3) \times 6.75}{100,000}$$

2001

EAST DUBLIN  
PROPERTIES

$$\frac{(4436.5 + 920.7) \times 6.75}{100,000}$$

+ APPROVED  
+ PENDING

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$$1 \text{ HR} = \underline{\quad} + 4.4$$

4.8

$$8 \text{ HR} = \underline{\quad} (.7) + 2.1$$

2.4

INTERSECTION # 11

$$\frac{(153 \times 9.5 + 107 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(1472.5 + 353.1) \times 6.75}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 4.4$$

4.5

$$8 \text{ HR} = \underline{\quad} (.7) + 2.1$$

2.2

INTERSECTION # 12

$$\frac{(1522 \times 9.5 + 428 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(14459 + 1412.4) \times 6.75}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 4.4$$

5.5

$$8 \text{ HR} = \underline{\quad} (.7) + 2.1$$

2.8

INTERSECTION # 13

$$\frac{(1181 \times 9.5 + 434 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(11219.5 + 1432.2) \times 6.75}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 4.4$$

5.3

$$8 \text{ HR} = \underline{\quad} (.7) + 2.1$$

2.7

INTERSECTION # 14

$$\frac{(1968 \times 9.5 + 926 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(18696 + 3055.8) \times 6.75}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 4.4$$

5.9

$$8 \text{ HR} = \underline{\quad} (.7) + 2.1$$

3.1

$$\frac{(111 \times 9.5 + 856 \times 3.3) \times 6.75}{100,000}$$

2001  
+ APPROVED  
+ PENDING

EAST DUBLIN  
PROPERTIES

$$\frac{(10554.5 + 2824.8) \times 6.75}{100,000}$$

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$$1\text{ HR} = \underline{\quad} + 4.4 \quad 5.3$$

$$8\text{ HR} = \underline{\quad} (.7) + 2.1 \quad 2.7$$

$$\frac{(264 \times 9.5 + 105 \times 3.3) \times 6.75}{100,000}$$

INTERSECTION # 16

$$\frac{(2508 + 346.5) \times 6.75}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 4.4 \quad 4.6$$

$$8\text{ HR} = \underline{\quad} (.7) + 2.1 \quad 2.2$$

INTERSECTION # 17

$$\frac{(\underline{\quad} \times 9.5 + \underline{\quad} \times 3.3) \times 6.75}{100,000}$$

$$\frac{(\underline{\quad} + \underline{\quad}) \times 6.75}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 4.4$$

$$8\text{ HR} = \underline{\quad} (.7) + 2.1$$

INTERSECTION #

$$\frac{(\underline{\quad} \times 9.5 + \underline{\quad} \times 3.3) \times 6.75}{100,000}$$

$$\frac{(\underline{\quad} + \underline{\quad}) \times 6.75}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 4.4$$

$$8\text{ HR} = \underline{\quad} (.7) + 2.1$$

INTERSECTION #

$$\frac{(\underline{\quad} \times 9.5 + \underline{\quad} \times 3.3) \times 6.75}{100,000}$$

$$\frac{(\underline{\quad} + \underline{\quad}) \times 6.75}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 4.4$$

$$8\text{ HR} = \underline{\quad} (.7) + 2.1$$

$$\frac{(4900 \times 9.5 + 3230 \times 3.3) \times 6.75}{100,000}$$

2001

EAST DUBLIN  
PROPERTIES

$$\frac{(46550 + 10659) \times 6.75}{100,000}$$

+ APPROVED  
+ PENDING  
+ PROJECT

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$$1 \text{ HR} = \underline{\quad} + 4.4$$

8.3

$$8 \text{ HR} = \underline{\quad} (.7) + 2.1$$

4.8

INTERSECTION # 1

$$\frac{(5310 \times 9.5 + 4346 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(50445 + 14341.8) \times 6.75}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 4.4 \quad 8.8$$

$$8 \text{ HR} = \underline{\quad} (.7) + 2.1 \quad 5.2$$

INTERSECTION # 2

$$\frac{(4445 \times 9.5 + 2734 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(42227.5 + 9022.2) \times 6.75}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 4.4 \quad 7.9$$

$$8 \text{ HR} = \underline{\quad} (.7) + 2.1 \quad 4.5$$

INTERSECTION # 3

$$\frac{(2971 \times 9.5 + 2843 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(28224.5 + 9381.9) \times 6.75}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 4.4 \quad 6.9$$

$$8 \text{ HR} = \underline{\quad} (.7) + 2.1 \quad 3.9$$

INTERSECTION # 4

$$\frac{(5826 \times 9.5 + 2619 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(55347 + 8642.7) \times 6.75}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 4.4 \quad 8.7$$

$$8 \text{ HR} = \underline{\quad} (.7) + 2.1 \quad 5.1$$

INTERSECTION # 5

$$\frac{(5164 \times 9.5 + 2583 \times 3.3) \times 6.75}{100,000}$$

2001

EAST DUBLIN  
PROPERTIES

$$\frac{(49058 + 8523.9) \times 6.75}{100,000}$$

+ APPROVED  
+ PENDING  
+ PROJECT

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$$1\text{ HR} = \underline{\quad} + 4.4 \quad 8.3 \quad \underline{\quad}$$

$$8\text{ HR} = \underline{\quad} (.7) + 2.1 \quad 4.8$$

$$\frac{(4229 \times 9.5 + 2823 \times 3.3) \times 6.75}{100,000}$$

INTERSECTION # 6

$$\frac{(40175.5 + 9315.9) \times 6.75}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 4.4 \quad 7.7$$

$$8\text{ HR} = \underline{\quad} (.7) + 2.1 \quad 4.4$$

INTERSECTION # 7

$$\frac{(2328 \times 9.5 + 632 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(22110 + 2085.6) \times 6.75}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 4.4 \quad 6.0$$

$$8\text{ HR} = \underline{\quad} (.7) + 2.1 \quad 3.2$$

INTERSECTION # 8

$$\frac{(2199 \times 9.5 + 541 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(20890.5 + 1785.3) \times 6.75}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 4.4 \quad 5.9$$

$$8\text{ HR} = \underline{\quad} (.7) + 2.1 \quad 3.2$$

INTERSECTION # 9

$$\frac{(2601 \times 9.5 + 935 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(24709.5 + 3085.5) \times 6.75}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 4.4 \quad 6.3$$

$$8\text{ HR} = \underline{\quad} (.7) + 2.1 \quad 3.4$$

$$\frac{(577 \times 9.5 + 257 \times 3.3) \times 6.75}{100,000}$$

2001

EAST DUBLIN  
PROPERTIES

$$\frac{(5481.5 + 848.1) \times 6.75}{100,000}$$

+ APPROVED  
+ PENDING  
+ PROJECT

$$1 \text{ HR} = \underline{\quad} + 4.4$$

4.8

$$8 \text{ HR} = \underline{\quad} (.7) + 2.1$$

2.4

INTERSECTION # 11

$$\frac{(198 \times 9.5 + 107 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(1881 + 353.1) \times 6.75}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 4.4$$

4.6

$$8 \text{ HR} = \underline{\quad} (.7) + 2.1$$

2.2

INTERSECTION # 12

$$\frac{(2485 \times 9.5 + 1412 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(23607.5 + 4659.6) \times 6.75}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 4.4$$

6.3

$$8 \text{ HR} = \underline{\quad} (.7) + 2.1$$

3.4

INTERSECTION # 13

$$\frac{(3613 \times 9.5 + 563 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(34323.5 + 1857.9) \times 6.75}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 4.4$$

6.8

$$8 \text{ HR} = \underline{\quad} (.7) + 2.1$$

3.8

INTERSECTION # 14

$$\frac{(4183 \times 9.5 + 1543 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(39738.5 + 5091.9) \times 6.75}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 4.4$$

7.4

$$8 \text{ HR} = \underline{\quad} (.7) + 2.1$$

4.2

- uncorrected 15

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$$\frac{(3099 \times 9.5 + 971 \times 3.3) \times 6.75}{100,000}$$

2001

EAST DUBLIN  
PROPERTIES

$$\frac{(29440.5 + 3204.3) \times 6.75}{100,000}$$

+ APPROVED  
+ PENDING  
+ PROJECT

$$1 \text{ HR} = \underline{\quad} + 4.4$$

6.6

$$8 \text{ HR} = \underline{\quad} (.7) + 2.1 \quad 3.6$$

INTERSECTION # 16

$$\frac{(435 \times 9.5 + 147 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(4132.5 + 485.1) \times 6.75}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 4.4 \quad 4.7$$

$$8 \text{ HR} = \underline{\quad} (.7) + 2.1 \quad 2.3$$

INTERSECTION # 17

$$\frac{(1041 \times 9.5 + 418 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(9946.5 + 1379.4) \times 6.75}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 4.4 \quad 5.2$$

$$8 \text{ HR} = \underline{\quad} (.7) + 2.1 \quad 2.6$$

INTERSECTION # 18

$$\frac{(1220 \times 9.5 + 1161 \times 3.3) \times 6.75}{100,000}$$

$$\frac{(11590 + 3831.3) \times 6.75}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 4.4 \quad 5.4$$

$$8 \text{ HR} = \underline{\quad} (.7) + 2.1 \quad 2.8$$

INTERSECTION # 19

~~$$\frac{x 9.5 + x 3.3) \times 6.75}{100,000}$$~~

~~$$\frac{( + ) \times 6.75}{100,000}$$~~

$$1 \text{ HR} = \underline{\quad} + 4.4$$

$$8 \text{ HR} = \underline{\quad} (.7) + 2.1$$

$$\frac{(6072 \times 9.5 + 4371 \times 3.3) \times 3.07}{100,000}$$

2025

EAST DUBLIN  
PROPERTIES

$$\frac{(57684 + 14424.3) \times 3.07}{100,000}$$

No Project

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$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.7$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 3.2$$

INTERSECTION # 1

$$\frac{(5350 \times 9.5 + 1867 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(50825 + 6161.1) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.2$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.9$$

INTERSECTION # 2

$$\frac{(5117 \times 9.5 + 1662 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(48611.5 + 5484.6) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.2$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.9$$

INTERSECTION # 3

$$\frac{(3336 \times 9.5 + 2038 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(31692 + 6725.4) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.7$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.5$$

INTERSECTION # 4

$$\frac{(3620 \times 9.5 + 1356 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(34390 + 4474.6) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.7$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.5$$

$$\frac{(4907 \times 9.5 + 2550 \times 3.3) \times 3.07}{100,000}$$

2025

EAST DUBLIN  
PROPERTIES

$$\frac{146616.5 + 8415}{100,000} \times 3.07$$

No Project

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$$1 HR = \underline{\quad} + 3.5 \quad 5.2$$

$$8 HR = \underline{\quad} (.7) + 1.7 \quad 2.9$$

INTERSECTION # 6

$$\frac{(4768 \times 9.5 + 3109 \times 3.3) \times 3.07}{100,000}$$

$$\frac{45296 + 10259.7}{100,000} \times 3.07$$

$$1 HR = \underline{\quad} + 3.5 \quad 5.2$$

$$8 HR = \underline{\quad} (.7) + 1.7 \quad 2.9$$

INTERSECTION # 7

$$\frac{(3132 \times 9.5 + 433 \times 3.3) \times 3.07}{100,000}$$

$$\frac{29754 + 1428.9}{100,000} \times 3.07$$

$$1 HR = \underline{\quad} + 3.5 \quad 4.5$$

$$8 HR = \underline{\quad} (.7) + 1.7 \quad 2.4$$

INTERSECTION # 8

$$\frac{(2534 \times 9.5 + 717 \times 3.3) \times 3.07}{100,000}$$

$$\frac{24073 + 2366.1}{100,000} \times 3.07$$

$$1 HR = \underline{\quad} + 3.5 \quad 4.3$$

$$8 HR = \underline{\quad} (.7) + 1.7 \quad 2.3$$

INTERSECTION # 9

$$\frac{(2263 \times 9.5 + 79 \times 3.3) \times 3.07}{100,000}$$

$$\frac{21498.5 + 260.7}{100,000} \times 3.07$$

$$1 HR = \underline{\quad} + 3.5 \quad 4.2$$

$$8 HR = \underline{\quad} (.7) + 1.7 \quad 2.2$$

$$\frac{(249 \times 9.5 + 165 \times 3.3) \times 3.07}{100,000}$$

2025

EAST DUBLIN  
PROPERTIES

$$\frac{(2365.5 + 544.5) \times 3.07}{100,000}$$

No Project

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$$1\text{ HR} = \underline{\quad} + 3.5 \quad 3.4$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 1.8$$

INTERSECTION # 11

$$\frac{(967 \times 9.5 + 610 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(9186.5 + 2013) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad \cancel{3.8}$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 1.9$$

INTERSECTION # 12

$$\frac{(2805 \times 9.5 + 901 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(26647.5 + 2973.3) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.1$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.8$$

INTERSECTION # 13

$$\frac{(5014 \times 9.5 + 1499 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(47633 + 4946.7) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.1$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.8$$

INTERSECTION # 14

$$\frac{(4774 \times 9.5 + 3938 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(45353 + 12995.4) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.3$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 3.0$$

$$\frac{(1947 \times 9.5 + 691 \times 3.3) \times 3.07}{100,000}$$

2025

EAST DUBLIN  
PROPERTIES

$$\frac{(18496.5 + 2280.3) \times 3.07}{100,000}$$

No Project

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$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.1$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.1$$

INTERSECTION # 16

$$\frac{(2003 \times 9.5 + 59 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(19028.5 + 194.7) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.1$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.1$$

INTERSECTION # 17

~~$$\frac{(\quad \times 9.5 + \quad \times 3.3) \times 3.07}{100,000}$$~~

~~$$\frac{(\quad + \quad) \times 3.07}{100,000}$$~~

$$1\text{ HR} = \underline{\quad} + 3.5$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7$$

INTERSECTION #

~~$$\frac{(\quad \times 9.5 + \quad \times 3.3) \times 3.07}{100,000}$$~~

~~$$\frac{(\quad + \quad) \times 3.07}{100,000}$$~~

$$1\text{ HR} = \underline{\quad} + 3.5$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7$$

INTERSECTION #

~~$$\frac{(\quad \times 9.5 + \quad \times 3.3) \times 3.07}{100,000}$$~~

~~$$\frac{(\quad + \quad) \times 3.07}{100,000}$$~~

$$1\text{ HR} = \underline{\quad} + 3.5$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7$$

$$\frac{(6200 \times 9.5 + 4447 \times 3.3) \times 3.07}{100,000}$$

2025

EAST DUBLIN  
PROPERTIES

$$\frac{(58900 + 14675.1) \times 3.07}{100,000}$$

+ PROJECT

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$$1 \text{ HR} = \underline{\quad} + 3.5$$

5.8

$$8 \text{ HR} = \underline{\quad} (.7) + 1.7$$

3.3

INTERSECTION # 1

$$\frac{(5239 \times 9.5 + 1841 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(49770.5 + 6075.3) \times 3.07}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 3.5$$

~~5.2~~

$$8 \text{ HR} = \underline{\quad} (.7) + 1.7$$

2.9

INTERSECTION # 2

$$\frac{(4916 \times 9.5 + 1578 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(46702 + 5207.4) \times 3.07}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 3.5$$

5.1

$$8 \text{ HR} = \underline{\quad} (.7) + 1.7$$

2.8

INTERSECTION # 3

$$\frac{(4146 \times 9.5 + 3207 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(39387 + 10583.1) \times 3.07}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 3.5$$

5.0

$$8 \text{ HR} = \underline{\quad} (.7) + 1.7$$

2.8

INTERSECTION # 4

$$\frac{(4532 \times 9.5 + 1064 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(43054 + 3511.2) \times 3.07}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 3.5$$

4.9

$$8 \text{ HR} = \underline{\quad} (.7) + 1.7$$

2.7

$$\frac{(4810 \times 9.5 + 1279 \times 3.3) \times 3.07}{100,000}$$

2025

EAST DUBLIN  
PROPERTIES

$$\frac{(45695 + 4220.7) \times 3.07}{100,000}$$

+ Project 184 of 388

$$1 \text{ HR} = \underline{\quad} + 3.5 \quad 5.0$$

$$8 \text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.8$$

INTERSECTION # 6

$$\frac{(4700 \times 9.5 + 3307 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(44650 + 10913.1) \times 3.07}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 3.5 \quad 5.2$$

$$8 \text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.9$$

INTERSECTION # 7

$$\frac{(30460 \times 9.5 + 430 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(28937 + 1419) \times 3.07}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 3.5 \quad 4.4$$

$$8 \text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.4$$

INTERSECTION # 8

$$\frac{(2466 \times 9.5 + 759 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(23427 + 2504.7) \times 3.07}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 3.5 \quad 4.3$$

$$8 \text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.3$$

INTERSECTION # 9

$$\frac{(2563 \times 9.5 + 101 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(24348.5 + 333.3) \times 3.07}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 3.5 \quad 4.3$$

$$8 \text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.2$$

$$\frac{(421 \times 9.5 + 204 \times 3.3) \times 3.07}{100,000}$$

2025

EAST DUBLIN  
PROPERTIES

$$\frac{(3999.5 + 673.2) \times 3.07}{100,000}$$

+ project 185 of 388

$$1 \text{ HR} = \underline{\quad} + 3.5 \quad 3.6$$

$$8 \text{ HR} = \underline{\quad} (.7) + 1.7 \quad 1.8$$

INTERSECTION # 11

$$\frac{(1011 \times 9.5 + 578 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(9604.5 + 1907.4) \times 3.07}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 3.5 \quad 3.9$$

$$8 \text{ HR} = \underline{\quad} (.7) + 1.7 \quad 1.9$$

INTERSECTION # 12

$$\frac{(3571 \times 9.5 + 1406 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(33924.5 + 4639.8) \times 3.07}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 3.5 \quad 4.7$$

$$8 \text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.5$$

INTERSECTION # 13

$$\frac{(6440 \times 9.5 + 1550 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(61180 + 5115) \times 3.07}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 3.5 \quad 5.5$$

$$8 \text{ HR} = \underline{\quad} (.7) + 1.7 \quad 3.1$$

INTERSECTION # 14

$$\frac{(6160 \times 9.5 + 4270 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(58520 + 14091) \times 3.07}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 3.5 \quad 5.7$$

$$8 \text{ HR} = \underline{\quad} (.7) + 1.7 \quad 3.3$$

$$\frac{(3255 \times 9.5 + 823 \times 3.3) \times 3.07}{100,000}$$

2025

EAST DUBLIN  
PROPERTIES

$$\frac{(30922.5 + 2715.9) \times 3.07}{100,000}$$

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$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.5$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.4$$

INTERSECTION # 16

$$\frac{(2414 \times 9.5 + 202 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(22933 + 666.6) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.2$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.2$$

INTERSECTION # 17

$$\frac{(289 \times 9.5 + 176 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(2745.5 + 560.8) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 3.6$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 1.8$$

INTERSECTION # 18

$$\cancel{\frac{(\quad \times 9.5 + \quad \times 3.3) \times 3.07}{100,000}}$$

$$\cancel{\frac{(\quad + \quad) \times 3.07}{100,000}}$$

$$1\text{ HR} = \underline{\quad} + 3.5$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7$$

INTERSECTION #

$$\cancel{\frac{(\quad \times 9.5 + \quad \times 3.3) \times 3.07}{100,000}}$$

$$\cancel{\frac{(\quad + \quad) \times 3.07}{100,000}}$$

$$1\text{ HR} = \underline{\quad} + 3.5$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7$$

$$\frac{(6079 \times 9.5 + 4538 \times 3.3) \times 3.07}{100,000}$$

2025

$$\frac{(57750.5 + 14975.4) \times 3.07}{100,000}$$

+  
TRAFFIC  
MITIGATED

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$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.7$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 3.3$$

INTERSECTION # 1

$$\frac{(4268 \times 9.5 + 1934 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(40546 + 6382.2) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.9$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.7$$

INTERSECTION # 2

$$\frac{(4886 \times 9.5 + 1487 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(46417 + 4907.1) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.1$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.8$$

INTERSECTION # 3

$$\frac{(4199 \times 9.5 + 3366 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(39890.5 + 1107.8) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.1$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.8$$

INTERSECTION # 4

$$\frac{(4038 \times 9.5 + 1079 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(38361 + 3560.7) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.8$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.6$$

INTERSECTION # 5

$$\frac{(4816 \times 9.5 + 1347 \times 3.3) \times 3.07}{100,000}$$

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+ TRAFFIC

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$$\frac{(45752 + 4445.1) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.0$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.8$$

INTERSECTION # 6

$$\frac{(4701 \times 9.5 + 3539 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(44659.5 + 11678.7) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.2$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.9$$

INTERSECTION # 7

$$\frac{(3113 \times 9.5 + 428 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(29573.5 + 1412.4) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.5$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.4$$

INTERSECTION # 8

$$\frac{(2471 \times 9.5 + 745 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(23474.5 + 2458.5) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.3$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.3$$

INTERSECTION # 9

$$\frac{(2547 \times 9.5 + 98 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(24196.5 + 323.4) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.3$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.2$$

$$\frac{(420 \times 9.5 + 90 \times 3.3) \times 3.07}{100,000}$$

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+

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$$\frac{(3990 + 297) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 3.6$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 1.8$$

INTERSECTION # 11

$$\frac{(1022 \times 9.5 + 584 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(9709 + 1927.2) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 3.9$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.0$$

INTERSECTION # 12

$$\frac{(3434 \times 9.5 + 1289 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(32623 + 4253.7) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.6$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.5$$

INTERSECTION # 13

$$\frac{(4707 \times 9.5 + 1544 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(44716.5 + 5095.2) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.0$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.8$$

INTERSECTION # 14

$$\frac{(6099 \times 9.5 + 4324 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(57940.5 + 14269.2) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.7$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 3.3$$

INTERSECTION # 15

$$\frac{(3179 \times 9.5 + 791 \times 3.3) \times 3.07}{100,000}$$

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+  
TRAFFIC  
MITIGATED

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$$\frac{(30200.5 + 2610.3) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.5$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.4$$

INTERSECTION # 16

$$\frac{(2382 \times 9.5 + 213 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(22629 + 702.9) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.2$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.2$$

INTERSECTION # 17

$$\frac{(\underline{\quad} \times 9.5 + \underline{\quad} \times 3.3) \times 3.07}{100,000}$$

$$\frac{(\underline{\quad} + \underline{\quad}) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7$$

INTERSECTION #

$$\frac{(\underline{\quad} \times 9.5 + \underline{\quad} \times 3.3) \times 3.07}{100,000}$$

$$\frac{(\underline{\quad} + \underline{\quad}) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7$$

INTERSECTION #

$$\frac{(\underline{\quad} \times 9.5 + \underline{\quad} \times 3.3) \times 3.07}{100,000}$$

$$\frac{(\underline{\quad} + \underline{\quad}) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7$$

INTERSECTION #

$$\frac{(6063 \times 9.5 + 4443 \times 3.3) \times 3.07}{100,000}$$

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$$\frac{(57598.5 + 14661.9) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.2$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.2$$

INTERSECTION # 1

$$\frac{(5255 \times 9.5 + 1901 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(49922.5 + 6273.3) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.2$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.9$$

INTERSECTION # 2

$$\frac{(5089 \times 9.5 + 1606 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(48345.5 + 5299.8) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.1$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.9$$

INTERSECTION # 3

$$\frac{(4176 \times 9.5 + 3256 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(39672 + 10744.8) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.0$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.8$$

INTERSECTION # 4

$$\frac{(4041 \times 9.5 + 1088 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(38389.5 + 3590.4) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.8$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.6$$

INTERSECTION # 5

$$\frac{(4790 \times 9.5 + 1293 \times 3.3) \times 3.07}{100,000}$$

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+  
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$$\frac{(45505 + 4266.9) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.0$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.8$$

INTERSECTION # 6

$$\frac{(4664 \times 9.5 + 3262 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(44308 + 10764.6) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.2$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.9$$

INTERSECTION # 7

$$\frac{(3046 \times 9.5 + 432 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(28937 + 1425.6) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.4$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.4$$

INTERSECTION # 8

$$\frac{(2579 \times 9.5 + 759 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(24500.5 + 2504.7) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.3$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.3$$

INTERSECTION # 9

$$\frac{(2518 \times 9.5 + 100 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(23921 + 330) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.2$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.2$$

INTERSECTION # 10

$$\frac{(381 \times 9.5 + 202 \times 3.3) \times 3.07}{100,000}$$

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$$\frac{(3619.5 + 666.6) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 3.6$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 1.8$$

INTERSECTION # 11

$$\frac{(996 \times 9.5 + 585 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(9462 + 1930.5) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 3.8$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 1.9$$

INTERSECTION # 12

$$\frac{(3243 \times 9.5 + 1233 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(30808.5 + 4068.9) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.6$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.4$$

INTERSECTION # 13

$$\frac{(4500 \times 9.5 + 1498 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(42750 + 4943.4) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.0$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.7$$

INTERSECTION # 14

$$\frac{(5867 \times 9.5 + 4260 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(55736.5 + 14058) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.6$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 3.2$$

INTERSECTION # 15

$$\frac{(2899 \times 9.5 + 793 \times 3.3) \times 3.07}{100,000}$$

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$$\frac{(27540.5 + 2616.9) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.4$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.3$$

INTERSECTION # 16

$$\frac{(2280 \times 9.5 + 161 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(21660 + 531.3) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.2$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.2$$

INTERSECTION # 17

$$\frac{(\underline{\quad} \times 9.5 + \underline{\quad} \times 3.3) \times 3.07}{100,000}$$

$$\frac{(\underline{\quad} + \underline{\quad}) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7$$

INTERSECTION #

$$\frac{(\underline{\quad} \times 9.5 + \underline{\quad} \times 3.3) \times 3.07}{100,000}$$

$$\frac{(\underline{\quad} + \underline{\quad}) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7$$

INTERSECTION #

$$\frac{(\underline{\quad} \times 9.5 + \underline{\quad} \times 3.3) \times 3.07}{100,000}$$

$$\frac{(\underline{\quad} + \underline{\quad}) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7$$

INTERSECTION #

$$\frac{(6162 \times 9.5 + 4451 \times 3.3) \times 3.07}{100,000}$$

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$$\frac{(58539 + 14688.3) \times 3.07}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 3.5 \quad 5.7$$

$$\underline{\quad} \quad 8 \text{ HR} = \underline{\quad} (.7) + 1.7 \quad 3.3$$

INTERSECTION # 1

$$\frac{(5242 \times 9.5 + 1824 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(49799 + 6019.2) \times 3.07}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 3.5 \quad 5.2$$

$$\underline{\quad} \quad 8 \text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.9$$

INTERSECTION # 2

$$\frac{(5184 \times 9.5 + 1642 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(49248 + 5418.6) \times 3.07}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 3.5 \quad 5.2$$

$$\underline{\quad} \quad 8 \text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.9$$

INTERSECTION # 3

$$\frac{(4182 \times 9.5 + 3243 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(39729 + 10701.9) \times 3.07}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 3.5 \quad 5.0$$

$$\underline{\quad} \quad 8 \text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.8$$

INTERSECTION # 4

$$\frac{(4026 \times 9.5 + 1052 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(38247 + 3471.6) \times 3.07}{100,000}$$

$$1 \text{ HR} = \underline{\quad} + 3.5 \quad 4.8$$

$$\underline{\quad} \quad 8 \text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.6$$

INTERSECTION # 5

$$\frac{(5324 \times 9.5 + 1307 \times 3.3) \times 3.07}{100,000}$$

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$$\frac{(50578 + 4313.1) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.2$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.9$$

INTERSECTION # 6

$$\frac{(4716 \times 9.5 + 3357 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(44802 + 11078.1) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.2$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.9$$

INTERSECTION # 7

$$\frac{(3081 \times 9.5 + 436 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(29269.5 + 1438.8) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.4$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.4$$

INTERSECTION # 8

$$\frac{(2680 \times 9.5 + 718 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(25460 + 2369.4) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.4$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.3$$

INTERSECTION # 9

$$\frac{(2583 \times 9.5 + 104 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(24538.5 + 343.2) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.3$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.2$$

INTERSECTION # 10

$$\frac{(427 \times 9.5 + 90 \times 3.3) \times 3.07}{100,000}$$

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$$\frac{(4056.5 + 297) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 3.6$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 1.8$$

INTERSECTION # 11

$$\frac{(866 \times 9.5 + 571 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(8417 + 1884.3) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 3.8$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 1.9$$

INTERSECTION # 12

$$\frac{(3787 \times 9.5 + 1568 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(35976.5 + 5174.4) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.8$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.6$$

INTERSECTION # 13

$$\frac{(5012 \times 9.5 + 1601 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(47614 + 5283.3) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.1$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.8$$

INTERSECTION # 14

$$\frac{(5642 \times 9.5 + 3633 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(53599 + 11988.9) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.5$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 3.1$$

INTERSECTION # 15

$$\frac{(3236 \times 9.5 + 710 \times 3.3) \times 3.07}{100,000}$$

2025  
+ ECAP ALTERNATIVE

$$\frac{(30742 + 2343) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.5$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.4$$

INTERSECTION #16

$$\frac{(2464 \times 9.5 + 108 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(23408 + 356.4) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.2$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.2$$

INTERSECTION #17

$$\frac{(\underline{\quad} \times 9.5 + \underline{\quad} \times 3.3) \times 3.07}{100,000}$$

$$\frac{(\underline{\quad} + \underline{\quad}) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7$$

INTERSECTION #

$$\frac{(\underline{\quad} \times 9.5 + \underline{\quad} \times 3.3) \times 3.07}{100,000}$$

$$\frac{(\underline{\quad} + \underline{\quad}) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7$$

INTERSECTION #

$$\frac{(\underline{\quad} \times 9.5 + \underline{\quad} \times 3.3) \times 3.07}{100,000}$$

$$\frac{(\underline{\quad} + \underline{\quad}) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7$$

INTERSECTION #

$$\frac{(5972 \times 9.5 + 4484 \times 3.3) \times 3.07}{100,000}$$

2025

+ STAGE 1

199 of 388  
PD

$$\frac{(56734 + 14797.2) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.7$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 3.2$$

INTERSECTION # 1

$$\frac{(5229 \times 9.5 + 1787 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(49675.5 + 5897.1) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.2$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.9$$

INTERSECTION # 2

$$\frac{(4965 \times 9.5 + 1611 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(47167.5 + 5316.3) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.1$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.8$$

INTERSECTION # 3

$$\frac{(4190 \times 9.5 + 3300 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(39805 + 10890) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.1$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.8$$

INTERSECTION # 4

$$\frac{(4028 \times 9.5 + 1053 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(38266 + 3474.9) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.8$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.6$$

INTERSECTION # 5

$$\frac{(4776 \times 9.5 + 1304 \times 3.3) \times 3.07}{100,000}$$

2025

200 of 388

$$\frac{(45372 + 4303.2) \times 3.07}{100,000}$$

+  
STAGE 1 PP

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.0$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.8$$

INTERSECTION # 6

$$\frac{(4678 \times 9.5 + 3359 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(44441 + 11084.7) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.2$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.9$$

INTERSECTION # 7

$$\frac{(3025 \times 9.5 + 430 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(28737.5 + 1419) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.4$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.3$$

INTERSECTION # 8

$$\frac{(2448 \times 9.5 + 748 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(23256 + 2468.4) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.3$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.3$$

INTERSECTION # 9

$$\frac{(2558 \times 9.5 + 99 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(24301 + 326.7) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.3$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.2$$

INTERSECTION # 10

$$\frac{(418 \times 9.5 + 89 \times 3.3) \times 3.07}{100,000}$$

2025  
+  
STAGE 1 PD

201 of 388

$$\frac{(3971 + 293.7) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 3.6$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 1.8$$

INTERSECTION # 11

$$\frac{(1003 \times 9.5 + 582 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(9528.5 + 1920.6) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 3.9$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 1.9$$

INTERSECTION # 12

$$\frac{(3778 \times 9.5 + 1536 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(35891 + 5075.4) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.8$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.6$$

INTERSECTION # 13

$$\frac{(5045 \times 9.5 + 1595 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(47927.5 + 5263.5) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.1$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.8$$

INTERSECTION # 14

$$\frac{(6336 \times 9.5 + 4332 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(60192 + 14295.6) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 5.8$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 3.3$$

INTERSECTION # 15

$$\frac{(3281 \times 9.5 + 909 \times 3.3) \times 3.07}{100,000}$$

2025

202 of 388

+  
STAGE 1 PD

$$\frac{(31169.5 + 2999.7) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5$$

4.5

$$8\text{ HR} = \underline{\quad} (.7) + 1.7$$

2.4

INTERSECTION # 16

$$\frac{(2462 \times 9.5 + 187 \times 3.3) \times 3.07}{100,000}$$

$$\frac{(23389 + 207.1) \times 3.07}{100,000}$$

$$1\text{ HR} = \underline{\quad} + 3.5 \quad 4.2$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7 \quad 2.2$$

INTERSECTION # 17

~~$$\frac{(\underline{\quad} \times 9.5 + \underline{\quad} \times 3.3) \times 3.07}{100,000}$$~~

~~$$\frac{(\underline{\quad} + \underline{\quad}) \times 3.07}{100,000}$$~~

$$1\text{ HR} = \underline{\quad} + 3.5$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7$$

INTERSECTION # 18

~~$$\frac{(\underline{\quad} \times 9.5 + \underline{\quad} \times 3.3) \times 3.07}{100,000}$$~~

~~$$\frac{(\underline{\quad} + \underline{\quad}) \times 3.07}{100,000}$$~~

$$1\text{ HR} = \underline{\quad} + 3.5$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7$$

INTERSECTION # 19

~~$$\frac{(\underline{\quad} \times 9.5 + \underline{\quad} \times 3.3) \times 3.07}{100,000}$$~~

~~$$\frac{(\underline{\quad} + \underline{\quad}) \times 3.07}{100,000}$$~~

$$1\text{ HR} = \underline{\quad} + 3.5$$

$$8\text{ HR} = \underline{\quad} (.7) + 1.7$$

INTERSECTION # 20

APPENDIX E: SUPPLEMENTAL ADDENDUM TO KIT FOX PROTECTION PLAN

## APPENDIX E

### SUPPLEMENTAL ADDENDUM TO THE EASTERN DUBLIN SAN JOAQUIN KIT FOX PROTECTION PLAN (ADDENDUM TO APPENDIX E OF THE EASTERN DUBLIN EIR)

This document is an addendum to the East Dublin San Joaquin Kit Fox Protection Plan, Appendix E from the *Eastern Dublin General Plan Amendment and the Specific Plan DEIR* (1992). This document updates the information contained in that document and updates recommendations for the survey and protection measures based on the latest protocols released by the U.S. Fish and Wildlife Service (USFWS 1997 and 1999).

Appendix E's mitigation measures are based on the assumption that the East Dublin General Plan and Specific Plan Areas support potential kit fox habitat and the impacts resulting from build out are potentially significant. The mitigation measures are divided into seven sections as follows: 1.0 Monitoring Surveys, 2.0 Land Use and Management Practices, 3.0 Pre-Construction Conditions, 4.0 Protection Measures, 5.0 Potential Dens, 6.0 Known/Natal Dens, 7.0 Interagency Coordination and 8.0 Construction Conditions.

Since that document was written and adopted, a number of surveys for kit fox have been conducted in the East Dublin area (H.T. Harvey & Associates 1997a) and the adjacent North Livermore Valley (H.T. Harvey & Associates 1997b). None of these surveys detected kit fox with the exception of one kit fox detected while spotlighting approximately 2 miles north of the North Livermore site in Contra Costa County on Morgan Territory Road (1996). In addition, no kit fox have been incidentally detected in this area in the past nine years. The survey protocols have recently been updated (USFWS 1999) and the preconstruction survey protocol and construction measures have been updated as well (USFWS 1997) since Appendix E was written.

The 1,212-acre Dublin Ranch, located just west of the subject area, was surveyed for kit fox in 1991 (H.T. Harvey & Associates 1997a). The negative results were included in the earlier GPA/SP EIR (1992). Since that time, Dublin Ranch was subject to intensive kit fox surveys in 1996 and 1997 (H.T. Harvey and Associates 1997a). The Dublin Ranch and areas within 2.5 miles of the site were subject to 32 nights of spotlighting and, the property itself, to 560 track station nights and 280 camera station nights. These survey efforts yielded negative results (that is, no kit fox or kit fox sign was detected).

Furthermore, the North Livermore project areas totaling 4,310-acres located just east of the GPA/SP area were also intensively surveyed for kit fox. The total level of survey effort resulted in 56 nights of spotlighting, 946 track station nights, and 991 camera station nights between 1992 and 1996 (H.T. Harvey & Associates 1997b). One kit fox was detected during spotlighting on Morgan Territory Road in Contra Costa County a couple miles north of the project area. No other kit fox or sign of kit fox were detected within any project area boundary or the surrounding areas.

The San Joaquin kit fox, at least during the late 80's and early 90's, were detected in areas near Frick Lake (approximately 7.5 miles to the east of the study area), in Round Valley (approximately 11 miles to the northeast), and in areas near Los Vaqueros Reservoir and the intersection of Camino Diablo and the new Vasco Road realignment (approximately 12 miles to the northeast) during surveys conducted to detect kit fox. Despite more intense efforts to detect kit fox in the East Dublin and North Livermore

Valley areas than these previous surveys, none<sup>1</sup> have been detected. Based on negative results within the GPA/SP Area and the surrounding areas, kit fox appear to be largely absent from both the North Livermore Valley and East Dublin area (see analysis presented in H.T. Harvey & Associates 1997c).

The section "1.0 Monitoring Surveys" recommends annual monitoring surveys for approved projects following the 1989 protocol developed by the CDFG. The latest *Survey Protocol for the San Joaquin Kit Fox for the Northern Range* (USFWS 1999) should replace this recommendation and should only be conducted if no other kit fox survey has preceded project approval. Yearly monitoring should only be completed if recommended on a project by project basis by a regulating agency. Sections 3.0 through 6.0 and 8.0 should be replaced by the *Standard Recommendation for the Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance* (USFWS 1997) that contains updated measures to protect the kit fox. Section 7.0 Interagency Coordination is adequate.

The following sections are provided to help ensure that no inadvertent harm to the San Joaquin kit fox will occur during project implementation. The following section contains updated versions of sections 1.0, 3.0 through 6.0 and 8.0:

#### APPE/1.0 Monitoring Surveys

**APPE/1.1** (updated) Survey protocol will follow most recent guidelines, *San Joaquin kit fox Survey Protocol for the Northern Range*, developed by the USFWS (June 1999). This survey protocol recommends that an Early Evaluation be completed by a qualified biologist prior to focused surveys. The need for further focused surveys and/or yearly monitoring should be determined during informal consultation with the Service after an early evaluation has been completed on project by project basis. An early evaluation includes the following:

- Brief description of the proposed project and map
- Compilation of sighting records within a ten-mile radius of the boundaries of the project site
- Description of vegetative communities on site
- Description of vegetative communities within a ten-mile radius of the project site
- Description of habitat suitability on the project site assessed by completing one set of walking transects
- Analysis of adverse effects of the project on kit foxes (if any)
- Preliminary recommendations for mitigation of adverse effects and an analysis of cumulative effects.

#### APPE/2.0 Land Use and Management Practices

(see original Appendix E)

#### APPE/3.0 Preconstruction Conditions

**APPE/3.1** A pre-construction survey shall be conducted not more than 30 days and not less than 14 days prior to the beginning of ground disturbance and/or construction activities or any project activity likely to impact the San Joaquin kit fox. Surveys should identify kit fox habitat features in the project area and areas within a 200-foot buffer of the project site by conducting walking surveys. The status of all dens should be

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<sup>1</sup> with the one exception of the kit fox detected on Morgan Territory Road in 1996

determined and mapped (USFWS 1997). The status of dens should be determined by monitoring them for a minimum of three nights with tracking medium and/or camera stations. The survey will be conducted by a qualified biologist. Survey results will be submitted to the City Planning Department. If the survey results are negative, project-related ground disturbance can proceed.

#### APPE/4.0 Protection Measures

**APPE/4.1** If occupied kit fox dens are detected during the preconstruction surveys, implementation of protection measures or den destruction should be conducted in consultation with the California Department of Fish and Game (CDFG) and the Service. Guidelines for protection measures and den destruction are provided in *U.S. Fish and Wildlife Service Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance* (April 1997).

#### APPE/5.0 Potential Dens

**APPE/5.1** Potential dens should be monitored a minimum of three nights in order to determine if a potential den is occupied (see APPE/1.0). Destruction of potential dens should be avoided to the greatest extent possible as these dens are used for refugia among other things by kit fox. If these potential dens are to be destroyed, they should only be destroyed if they are verified vacant by a qualified biologist. Recommendations for length of time after verification of non-use of a potential den that the den can safely be destroyed should be made by the biologist who conducted the preconstruction survey. This time period shall not exceed 30 days.

#### APPE/6.0 Known/Natal Dens

**APPE/6.1** Known dens should have an exclusion zone of at least 100 feet. If a natal or pupping den is detected, the USFWS should be contacted to determine the size of the exclusion zone. To ensure protection, the exclusion zone should be demarcated by fencing that encircles each den occupied by kit foxes. Exclusion zone fencing that allows kit fox to move through should be maintained until all construction-related or operational disturbances have been terminated. At that time, all fencing shall be removed to avoid attracting subsequent attention to the dens (USFWS 1997).

Construction-related and other project related activities should be prohibited or greatly restricted within these exclusion zones. Only essential vehicle operation on existing roads and foot traffic should be permitted. Otherwise all construction vehicle operation, material storage, or any other type of surface-disturbing activity should be prohibited within the exclusion zone.

Destruction of any known or natal/pupping dens requires take authorization/permit from the Service (USFWS 1997).

#### APPE/7.0 Interagency Coordination

(see original Appendix E: Generally, if kit fox are detected within the project boundaries, formal consultation with the USFWS for a Section 7 or Section 10 is recommended.)

#### APPE/8.0 Construction and Operational Requirements

These recommendations should be implemented during project-related construction in order to prevent kit fox or other animals from being injured or trapped during the construction phase of the project unless expressly exempted from doing so by the Service. The following recommendations with some minor modifications are taken from the *U.S. Fish and Wildlife Service Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance* (April 1997).

**APPE/8.1** To minimize temporary disturbance, all project-related vehicle traffic should be restricted to established roads, construction areas, and other designated areas. These areas should also be included in preconstruction surveys and, to the extent possible, should be established in locations disturbed by previous activities to prevent further impacts.

**APPE/8.2** Project-related vehicles should observe a 20-mph speed limit in all project areas, except on county roads and State and Federal highways; this is particularly important at night when kit foxes are most active. To the extent possible, nighttime construction should be prohibited during the rainy season, then minimized once the rainy season has ended (see below). Off-road traffic outside of designated project areas shall be prohibited.

**APPE/8.3** To prevent inadvertent entrapment of kit foxes or other animals during the construction phase of the project, all excavated, steep-walled holes or trenches more than 2-feet deep should be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals. If at any time a trapped or injured kit fox discovered, construction in that area will be halted, and a qualified biologist will be notified immediately. The qualified biologist in conjunction with a local CDFG biologist and the Service will determine how to proceed. The Sacramento Field Office and California Department of Fish and Game (CDFG) will be notified in writing within three working days of the accidental death or injured animal and any other pertinent information.

**APPE/8.4** All construction pipes, culverts, or similar structures with a diameter of 4-inches or greater that are stored at a construction site for one or more overnight periods should be thoroughly inspected for kit foxes before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a kit fox is discovered inside a pipe, that section of pipe should not be moved until the U.S. Fish and Wildlife Service (Service) (916-414-9600) has been consulted. If necessary, and under the direct supervision of the biologist, the pipe may be moved once to remove it from the path of construction activity, until the fox has escaped.

**APPE/8.5** All food related trash items such as wrappers, cans, bottles; food scraps should be disposed of in a closed container and removed at least once a week from a construction or project site.

**APPE/8.6** No firearms shall be allowed on the project site.

**APPE/8.7** To prevent harassment, mortality of kit foxes or destruction of dens by dogs or cats, no pets shall be permitted on project sites.

**APPE/8.8** Use of rodenticides and herbicides in project areas should be restricted. This is necessary to prevent primary and secondary poisoning of kit foxes and the depletion of prey populations on which they depend. All uses of such compounds

should observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other State and Federal legislation, as well as additional project-related restrictions deemed necessary by the Service.

**APPE/8.9** A representative shall be appointed by the project proponent, who will be the contact source for any employee or contractor who might inadvertently kill or injure a kit fox or who finds a dead, injured or entrapped individual. The representative will be identified during the employee education program. The representative's name and telephone number shall be provided to the Service.

**APPE/8.10** An employee education program should be conducted for any project that has expected impacts to kit fox or other endangered species. The program should consist of a brief presentation by persons knowledgeable in kit fox biology and legislative protection to explain endangered species concerns to contractors, their employees, and military and agency personnel involved in the project. The program should include the following: description of the San Joaquin kit fox and its habitat needs; address the occurrence of the kit fox in the project area; status of the species and its protection under the Endangered Species Act; and measures being taken to reduce impacts to the during project construction and implementation. A fact sheet conveying this information should be prepared for distribution to above-mentioned people and anyone else who may enter the project site.

**APPE/8.11** Upon completion of the project, all areas subject to temporary ground disturbances, including storage and staging areas, temporary roads, and pipeline corridors should be recontoured if necessary, and revegetated to promote restoration of the area to pre-project conditions. An area subject to "temporary" disturbance means any area that is disturbed during the project, but that after project completion will not be subject to further disturbance and has the potential to be revegetated. Appropriate methods and plant species used to revegetate such areas should be determined on a site-specific basis in consultation with the Service, CDFG, and revegetation experts.

**APPE/8.12** In the case of trapped animals, escape ramps or structures should be installed immediately to allow the animal(s) to escape, or the Service should be contacted for advice.

**APPE/8.13** Any contractor, employee(s) or military or agency personnel who inadvertently kills or injures a San Joaquin kit fox shall immediately report the incident to their representative. This representative shall contact the CDFG immediately in the case of a dead, injured or entrapped kit fox. The CDFG contact for immediate assistance is State Dispatch at (916) 445-0045. They will contact the local warden or biologist.

**APPE/8.14** The Sacramento Field Office and CDFG will be notified in writing within three working days of the accidental death or activities. Notification must include the date, time, location of the incident or of the finding of a dead or injured animal and any other pertinent information.

#### LITERATURE CITED

H.T. Harvey & Associates. 1997a. Dublin Ranch San Joaquin kit fox Survey. Project No. 555-13. October 9, 1997.

H.T. Harvey & Associates. 1997b. North Livermore Valley San Joaquin Kit Fox Surveys. Project No. 1037.01 (77 p.).

H.T. Harvey & Associates. 1997c. Distribution of the San Joaquin Kit Fox in the North Part of Its Range. Project No. 673.11. March 13, 1997.

United States Fish and Wildlife Service. 1997. *Standard Recommendation for the Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance*. April 7, 1997.

United States Fish and Wildlife Service. 1999. *Survey Protocol for the San Joaquin Kit Fox for the Northern Range*. June 1999.

APPENDIX F: NOISE CALCULATIONS

7-15-2001 8:04PM

FROM CHEUNG ENVIRONMENT 5105598312

211 of 388 P. 1

11:29:00 11:44  
11:29:00 11:44

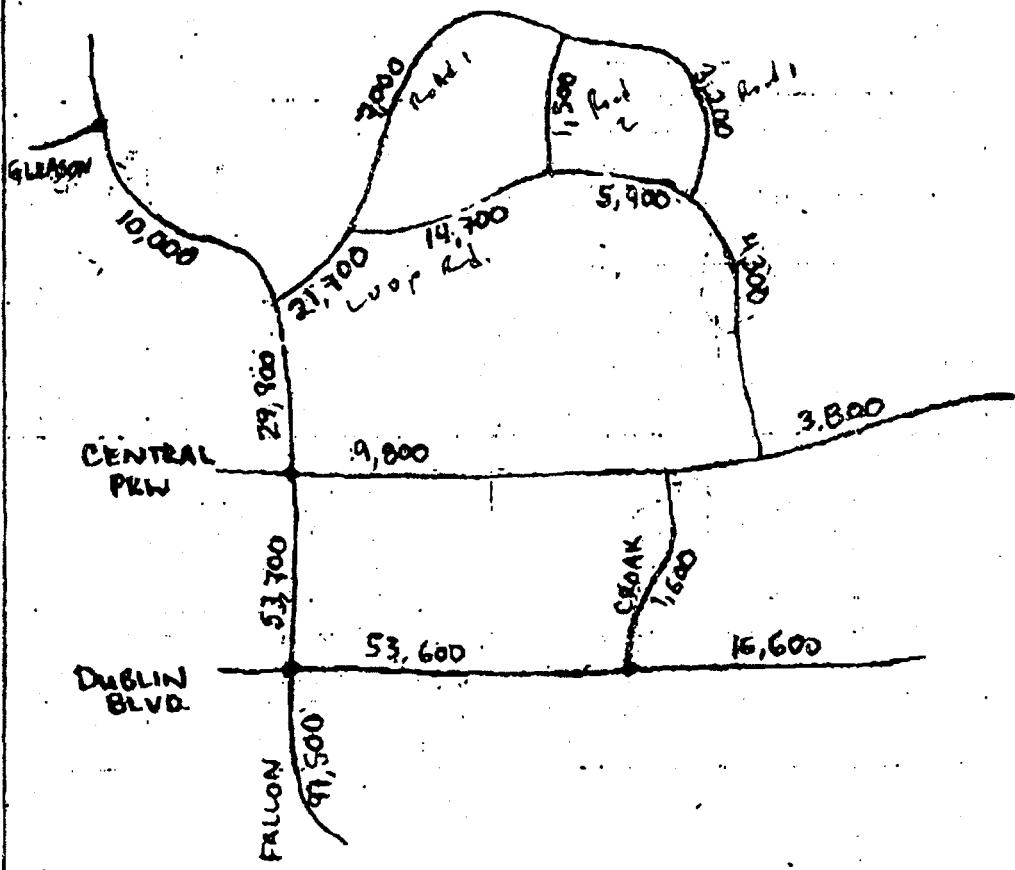
11:29:00 11:44  
11:29:00 11:44

ILLINGWORTH RUDKIN  
TJKM

PAGE 02  
02 04

No. sees  
Engineer's Computation Pad

ALVITI



To: 10/17  
Re: 10/17

#### ESTIMATED DAILY TRAFFIC

w/out DUBLIN BLVD EXTENSION - Dublin Blvd  
Public 3.0 w/ 10% inc

NOV. 29, 2000  
LN - 157-143  
TJKM

07/09/2001 16:06

17077667790

ILLINGWORTH ROCKIN

PAGE 03

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## EDUBLIN

	SPEED	TRUCK%	Ldn		
			ADT	CONTOUR DI	
				50'	80
<b>1 FALLON RD</b>					
FROM: I-580					
EXISTING	1,000	40 40 40	2.0 1.0		
FUTURE	97,500		70 65 60	57	0 0
TO: Dublin Blvd			193 416 356	77	27 85 1
FROM: Dublin Blvd					
EXISTING	1,000	40 40 40	2.0 1.0		
FUTURE	537,700		130 280 602	57	0 0
TO: Central Parkway				85	130 280 6
FROM: Central Parkway					
EXISTING	1,000	40 40 40	2.0 1.0		
FUTURE	29,900		82 189 413	57	0 0
TO: Loop Rd				72	0 26
<b>2 DUBLIN BLVD</b>					
FROM: Fallon Rd					
EXISTING	1,000	40 2 1	0.0 0.0	56	0 0
FUTURE	53,600		106 228 451	73	0 34 1
TO: Croak					
FROM: Croak					
EXISTING	1,000	40 40 40	2.0 1.0	57	0 0
FUTURE	16,600		46 128 275	70	0 0
TO: east					
<b>3 CENTRAL PARKWAY</b>					
FROM: Fallon Rd					
EXISTING	1,000	35 35 35	2.0 1.0	56	0 0
FUTURE	9,800		62 157	66	0 0
TO: Croak					
FROM: Croak					
EXISTING	1,000	35 35 35	2.0 1.0	56	0 0
FUTURE	3,800			62	0 0
TO: east			77		
<b>4 LOOP RD</b>					
FROM: Fallon Rd					
EXISTING	1,000	35 35 35	2.0 1.0	56	0 0
FUTURE	21,700		44 121 267	69	0 0
TO: Road 1					
FROM: Road 1					
EXISTING	1,000	35 35 35	2.0 1.0	56	0 0
FUTURE	14,700		30 44 206	68	0 0
TO: Road 2					
FROM: Road 2					
EXISTING	1,000	35 35 35	2.0 1.0	56	0 0
FUTURE	5,900			64	0 0
TO: Road 1			38 112		

APPENDIX G: LEVEL OF SERVICE CALCULATIONS

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## **East Dublin Properties Level of Service Calculations**

### **In the City of Dublin**

July 13, 2001

**RECEIVED**

JUL 13 2001

**PUBLIC WORKS**

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## **East Dublin Properties Level of Service Calculations**

### **In the City of Dublin**

**July 13, 2001**

**Prepared by:  
TJKM Transportation Consultants  
4234 Hacienda Drive, Suite 101  
Pleasanton, CA 94588-2721  
Tel: 925.463.0611  
Fax: 925.463.3690**

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**LEVEL OF SERVICE CALCULATIONS  
EXISTING CONDITIONS**

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Table 3.6-1

## Peak Hour Intersection Levels of Service - Existing Conditions

Intersection	Control	Unmitigated			
		A.M. Peak Hour		P.M. Peak Hour	
		*	LOS	*	LOS
1 Dougherty Road/Dublin Blvd	Signal	0.68	B	0.81	D
2 Hacienda Drive/I-580 Eastbound Ramps	Signal	0.44	A	0.27	A
3 Hacienda Drive/I-580 Westbound Ramps	Signal	0.28	A	0.13	A
4 Hacienda Drive/Dublin Boulevard	Signal	0.18	A	0.26	A
5 Santa Rita Road/I-580 Eastbound Ramps	Signal	0.65	A	0.68	B
6 Tassajara Road/I-580 Westbound Ramps	Signal	0.38	A	0.48	A
7 Tassajara Road/Dublin Blvd	Signal	0.23	A	0.24	A
9 Tassajara Road/Gleason Drive**	Signal	0.49	A	0.36	A
13 El Charro Road/I-580 Eastbound Ramps	One-Way STOP	5.2	B	4.6	A
14 Fallon Road/I-580 Westbound Ramps	One-Way STOP	3.1	A	3.1	A

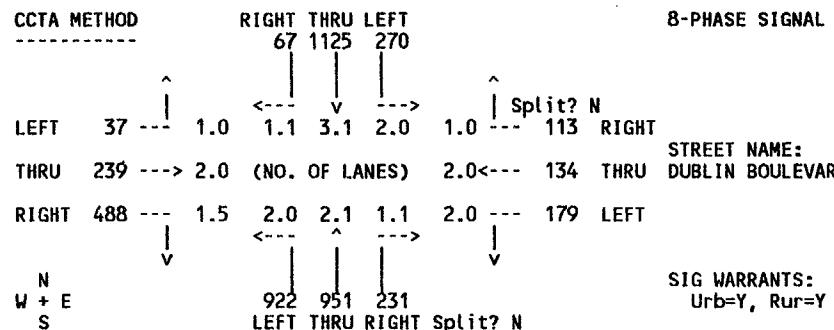
Note: \* = Volume-to-Capacity (V/C) Ratio for signalized intersections;

Average Delay in Seconds for stopping and yielding movements at 1-way STOP-controlled intersections.

\*\* = The signal at Tassajara Road/Gleason Drive is currently under construction, and is not operational at this time.

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour-Existing Conditions 11/27/00

INTERSECTION 1 DOUGHERTY ROAD/DUBLIN BOULEVARD CITY OF DUBLIN  
Count Date Time Peak Hour

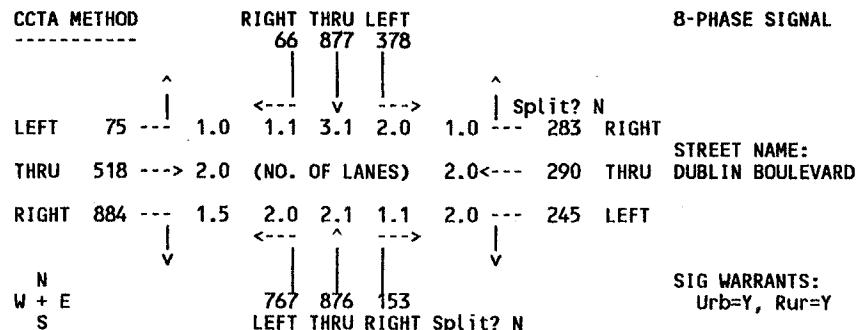
STREET NAME: DOUGHERTY ROAD

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	231	231	1650	0.1400	
THRU (T)	951	951	3300	0.2882	
LEFT (L)	922	922	3000	0.3073	0.3073
T + R		1182	3300	0.3582	
SB RIGHT (R)	67	67	1650	0.0406	
THRU (T)	1125	1125	4950	0.2273	
LEFT (L)	270	270	3000	0.0900	
T + R		1192	4950	0.2408	0.2408
EB RIGHT (R)	488	0 *	1650	0.0000	
THRU (T)	239	239	3300	0.0724	0.0724
LEFT (L)	37	37	1650	0.0224	
WB RIGHT (R)	113	0 *	1650	0.0000	
THRU (T)	134	134	3300	0.0406	
LEFT (L)	179	179	3000	0.0597	0.0597

TOTAL VOLUME-TO-CAPACITY RATIO: 0.68  
INTERSECTION LEVEL OF SERVICE: B\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=EXIST.AMV,CAP=C..:LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour-Existing Conditions 11/27/00

INTERSECTION 1 DOUGHERTY ROAD/DUBLIN BOULEVARD CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: DOUGHERTY ROAD

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	153	153	1650	0.0927	
THRU (T)	876	876	3300	0.2655	
LEFT (L)	767	767	3000	0.2557	0.2557
T + R		1029	3300	0.3118	
SB RIGHT (R)	66	66	1650	0.0400	
THRU (T)	877	877	4950	0.1772	
LEFT (L)	378	378	3000	0.1260	
T + R		943	4950	0.1905	0.1905
EB RIGHT (R)	884	462 *	1650	0.2800	0.2800
THRU (T)	518	518	3300	0.1570	
LEFT (L)	75	75	1650	0.0455	
WB RIGHT (R)	283	75 *	1650	0.0455	
THRU (T)	290	290	3300	0.0879	
LEFT (L)	245	245	3000	0.0817	0.0817

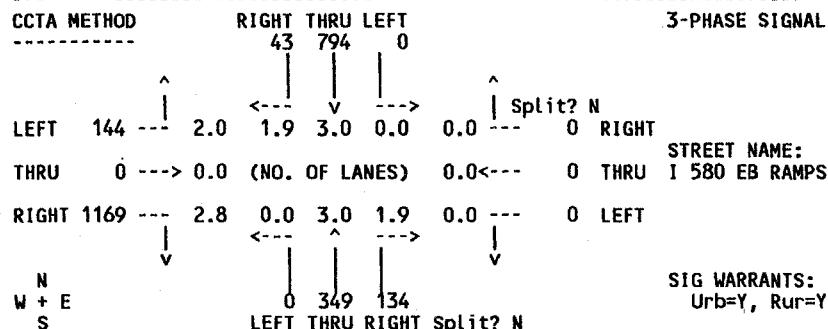
TOTAL VOLUME-TO-CAPACITY RATIO: 0.81  
INTERSECTION LEVEL OF SERVICE: D\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=EXIST.PMV,CAP=C..:LOSCAP.TAB

BBK 2/8/02

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour-Existing Conditions

11/27/00

INTERSECTION 2 HACIENDA DRIVE/I 580 EB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: HACIENDA DRIVE

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	134	134	1720	0.0779	
THRU (T)	349	349	5160	0.0676	
SB RIGHT (R)	43	43	1720	0.0250	
THRU (T)	794	794	5160	0.1539	0.1539
EB RIGHT (R)	1169	895 *	3127	0.2862	0.2862
LEFT (L)	144	144	3127	0.0461	

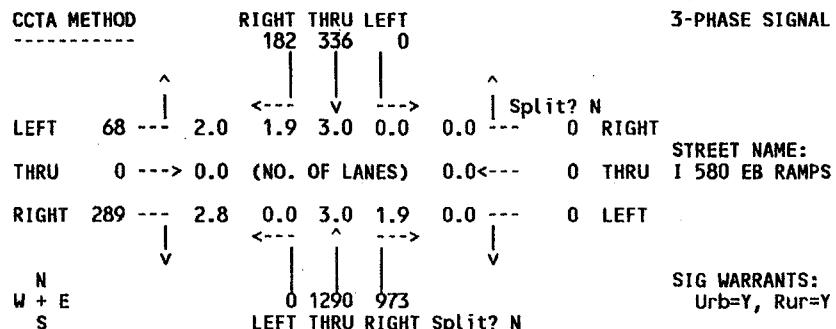
TOTAL VOLUME-TO-CAPACITY RATIO: 0.44  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=2EXIST.AMV,CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour-Existing Conditions

11/27/00

INTERSECTION 2 HACIENDA DRIVE/I 580 EB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: HACIENDA DRIVE

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	973	973	1720	0.5657	
THRU (T)	1290	1290	5160	0.2500	0.2500
SB RIGHT (R)	182	182	1720	0.1058	
THRU (T)	336	336	5160	0.0651	
EB RIGHT (R)	289	0 *	3127	0.0000	
LEFT (L)	68	68	3127	0.0217	0.0217

TOTAL VOLUME-TO-CAPACITY RATIO: 0.27  
INTERSECTION LEVEL OF SERVICE: A

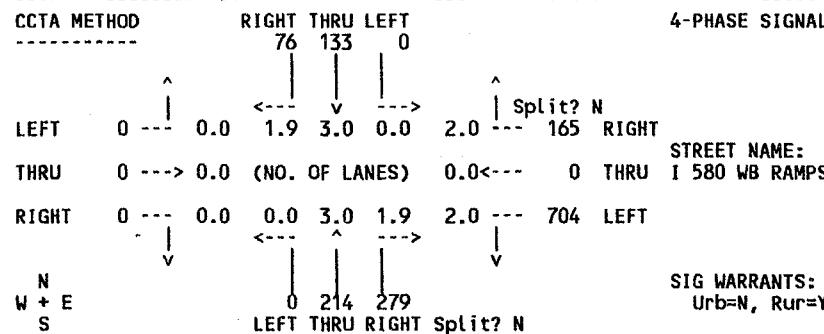
\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=2EXIST.PMV,CAP=C:..LOSCAP.TAB

8/8/08  
295

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour-Existing Conditions

11/27/00

INTERSECTION 3 HACIENDA DRIVE/I 580 WB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: HACIENDA DRIVE

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	279	279	1650	0.1691	
THRU (T)	214	214	4950	0.0432	0.0432
SB RIGHT (R)	76	76	1650	0.0461	
THRU (T)	133	133	4950	0.0269	
WB RIGHT (R)	165	165	3000	0.0550	
LEFT (L)	704	704	3000	0.2347	0.2347

TOTAL VOLUME-TO-CAPACITY RATIO:

INTERSECTION LEVEL OF SERVICE: A

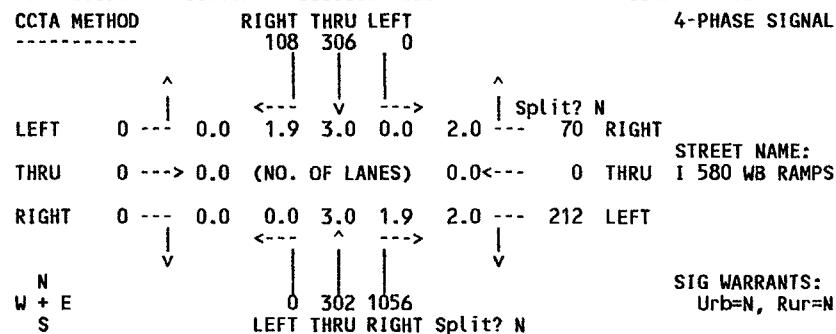
\* ADJUSTED FOR RIGHT TURN ON RED

INT=MASTER.INT,VOL=2EXIST.AMV,CAP=C..:LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour-Existing Conditions

11/27/00

INTERSECTION 3 HACIENDA DRIVE/I 580 WB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: HACIENDA DRIVE

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	1056	1056	1650	0.6400	
THRU (T)	302	302	4950	0.0610	
SB RIGHT (R)	108	108	1650	0.0655	
THRU (T)	306	306	4950	0.0618	0.0618
WB RIGHT (R)	70	70	3000	0.0233	
LEFT (L)	212	212	3000	0.0707	0.0707

TOTAL VOLUME-TO-CAPACITY RATIO:

INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED

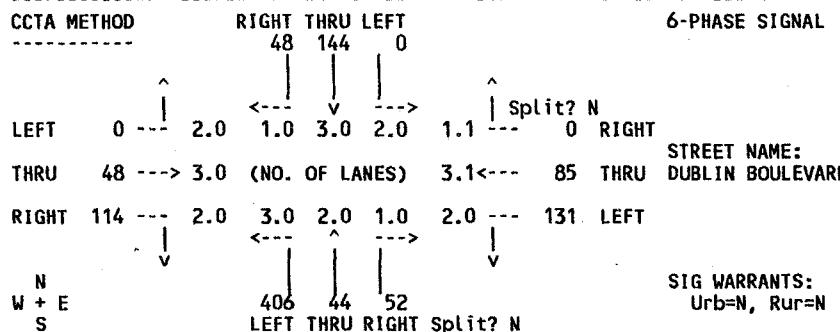
INT=MASTER.INT,VOL=2EXIST.PMV,CAP=C..:LOSCAP.TAB

See pg 008

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour-Existing Conditions

11/27/00

INTERSECTION 4 HACIENDA DRIVE/DUBLIN BOULEVARD CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: HACIENDA DRIVE

MOVEMENT	ORIGINAL	ADJUSTED	V/C	CRITICAL
	VOLUME	VOLUME*		
NB RIGHT (R)	52	0 *	1650	0.0000
THRU (T)	44	44	3300	0.0133
LEFT (L)	406	406	4304	0.0943
SB RIGHT (R)	48	48	1650	0.0291
THRU (T)	144	144	4950	0.0291
LEFT (L)	0	0	3000	0.0000
EB RIGHT (R)	114	0 *	3000	0.0000
THRU (T)	48	48	4950	0.0097
LEFT (L)	0	0	3000	0.0000
WB RIGHT (R)	0	0	1650	0.0000
THRU (T)	85	85	4950	0.0172
LEFT (L)	131	131	3000	0.0437
T + R	85	85	4950	0.0172

TOTAL VOLUME-TO-CAPACITY RATIO: 0.18

INTERSECTION LEVEL OF SERVICE: A

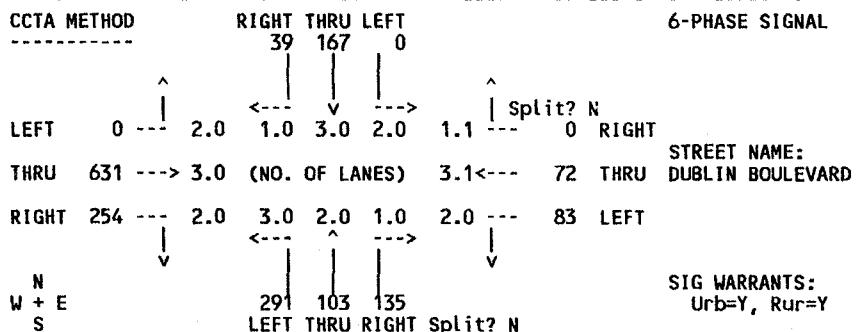
\* ADJUSTED FOR RIGHT TURN ON RED

INT=MASTER.INT,VOL=2EXIST.AMV,CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour-Existing Conditions

11/27/00

INTERSECTION 4 HACIENDA DRIVE/DUBLIN BOULEVARD CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: HACIENDA DRIVE

MOVEMENT	ORIGINAL	ADJUSTED	V/C	CRITICAL
	VOLUME	VOLUME*		
NB RIGHT (R)	135	89 *	1650	0.0539
THRU (T)	103	103	3300	0.0312
LEFT (L)	291	291	4304	0.0676
SB RIGHT (R)	39	39	1650	0.0236
THRU (T)	167	167	4950	0.0337
LEFT (L)	0	0	3000	0.0000
EB RIGHT (R)	254	142 *	3000	0.0473
THRU (T)	631	631	4950	0.1275
LEFT (L)	0	0	3000	0.0000
WB RIGHT (R)	0	0	1650	0.0000
THRU (T)	72	72	4950	0.0145
LEFT (L)	83	83	3000	0.0277
T + R	72	72	4950	0.0145

TOTAL VOLUME-TO-CAPACITY RATIO: 0.26

INTERSECTION LEVEL OF SERVICE: A

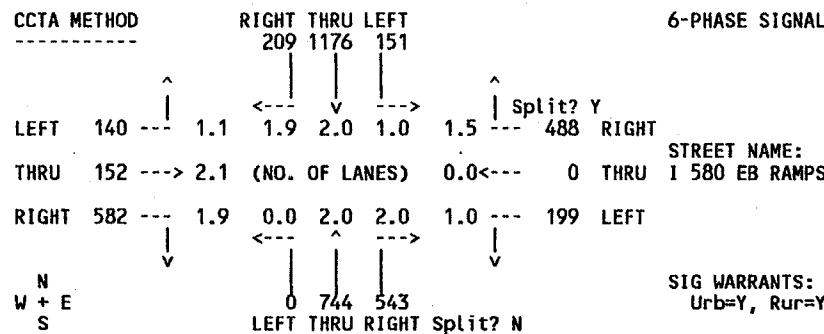
\* ADJUSTED FOR RIGHT TURN ON RED

INT=MASTER.INT,VOL=2EXIST.PMV,CAP=C:..LOSCAP.TAB

885 1st

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour-Existing Conditions 11/27/00

INTERSECTION 5 SANTA RITA ROAD/I 580 EB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

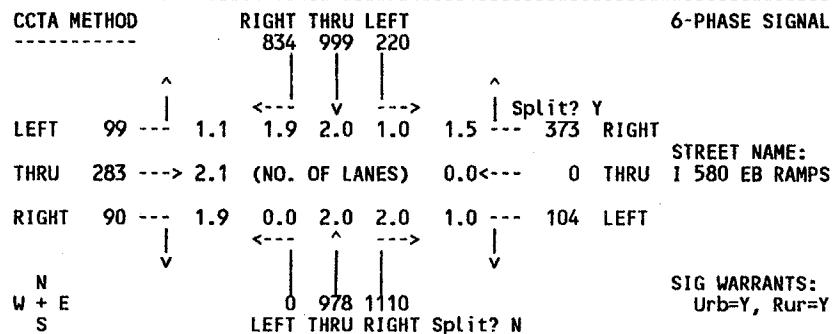
STREET NAME: SANTA RITA ROAD

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	543	344 *	3000	0.1147	
THRU (T)	744	744	3300	0.2255	
SB RIGHT (R)	209	209	1650	0.1267	
THRU (T)	1176	1176	3300	0.3564	0.3564
LEFT (L)	151	151	1650	0.0915	
EB RIGHT (R)	582	582	1650	0.3527	
THRU (T)	152	152	3300	0.0461	
LEFT (L)	140	140	1650	0.0848	
T + L	292	3300	0.0885	0.0885	
WB RIGHT (R)	488	337 *	1650	0.2042	0.2042
LEFT (L)	199	199	1650	0.1206	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.65  
INTERSECTION LEVEL OF SERVICE: B\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=2EXIST.AMV,CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour-Existing Conditions 11/27/00

INTERSECTION 5 SANTA RITA ROAD/I 580 EB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

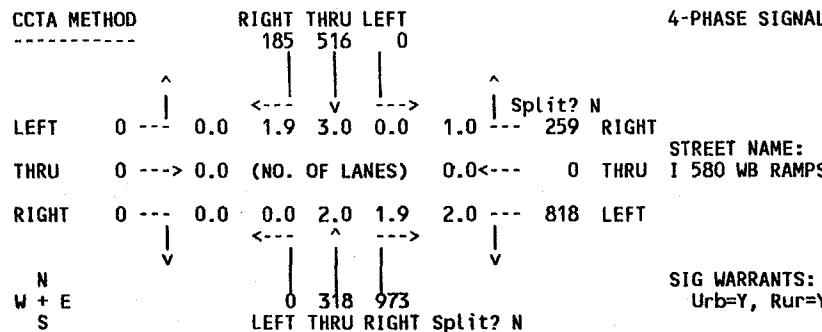
STREET NAME: SANTA RITA ROAD

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	1110	1006 *	3000	0.3353	0.3353
THRU (T)	978	978	3300	0.2964	
SB RIGHT (R)	834	834	1650	0.5055	
THRU (T)	999	999	3300	0.3027	
LEFT (L)	220	220	1650	0.1333	0.1333
EB RIGHT (R)	90	90	1650	0.0545	
THRU (T)	283	283	3300	0.0858	
LEFT (L)	99	99	1650	0.0600	
T + L	382	3300	0.1158	0.1158	
WB RIGHT (R)	373	153 *	1650	0.0927	0.0927
LEFT (L)	104	104	1650	0.0630	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.68  
INTERSECTION LEVEL OF SERVICE: B\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=2EXIST.PMV,CAP=C:..LOSCAP.TAB88E  
See back

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour-Existing Conditions 11/27/00

INTERSECTION 6 TASSAJARA ROAD/I 580 WB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: TASSAJARA ROAD

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	973	973	1650	0.5897	
THRU (T)	318	318	3300	0.0964	
SB RIGHT (R)	185	185	1650	0.1121	
THRU (T)	516	516	4950	0.1042	0.1042
WB RIGHT (R)	259	259	1650	0.1570	
LEFT (L)	818	818	3000	0.2727	0.2727

TOTAL VOLUME-TO-CAPACITY RATIO: 0.38

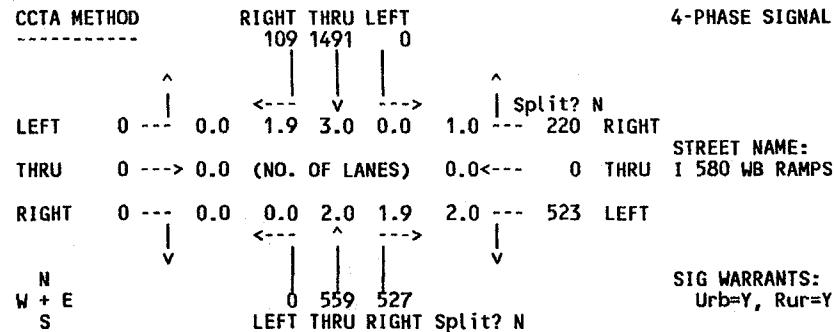
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED

INT=MASTER.INT, VOL=2EXIST.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour-Existing Conditions 11/27/00

INTERSECTION 6 TASSAJARA ROAD/I 580 WB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: TASSAJARA ROAD

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	527	527	1650	0.3194	
THRU (T)	559	559	3300	0.1694	
SB RIGHT (R)	109	109	1650	0.0661	
THRU (T)	1491	1491	4950	0.3012	0.3012
WB RIGHT (R)	220	220	1650	0.1333	
LEFT (L)	523	523	3000	0.1743	0.1743

TOTAL VOLUME-TO-CAPACITY RATIO: 0.48

INTERSECTION LEVEL OF SERVICE: A

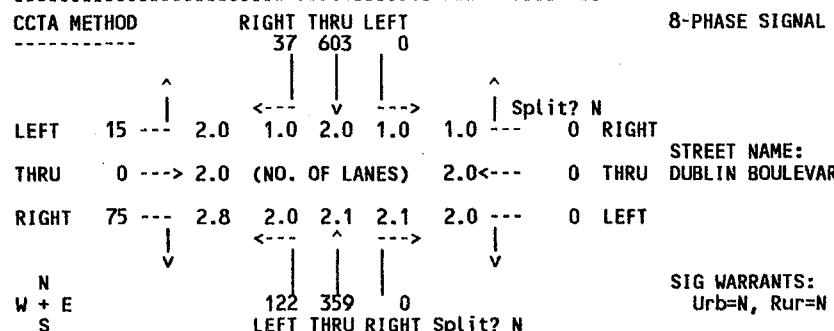
\* ADJUSTED FOR RIGHT TURN ON RED

INT=MASTER.INT, VOL=2EXIST.PMV, CAP=C:..LOSCAP.TAB

Page 6 of 6

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour-Existing Conditions 11/27/00

INTERSECTION 7 TASSAJARA ROAD/DUBLIN BOULEVARD CITY OF DUBLIN  
Count Date Time Peak Hour

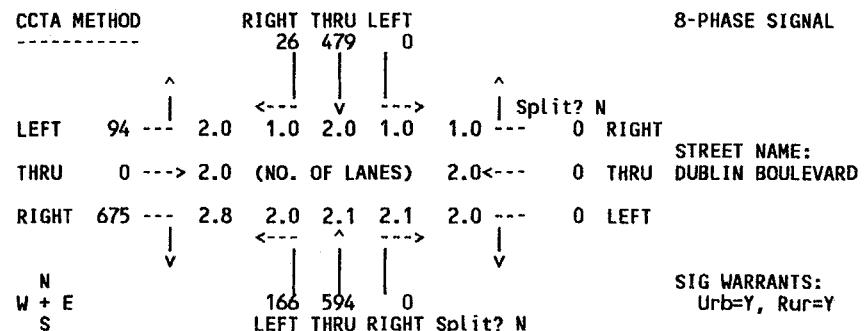
STREET NAME: TASSAJARA ROAD

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	3000	0.0000	
THRU (T)	359	359	3300	0.1088	
LEFT (L)	122	122	3000	0.0407	0.0407
T + R		359	4650	0.0772	
SB RIGHT (R)	37	29 *	1650	0.0176	
THRU (T)	603	603	3300	0.1827	0.1827
LEFT (L)	0	0	1650	0.0000	
EB RIGHT (R)	75	0 *	3000	0.0000	
THRU (T)	0	0	3300	0.0000	
LEFT (L)	15	15	3000	0.0050	0.0050
WB RIGHT (R)	0	0	1650	0.0000	0.0000
THRU (T)	0	0	3300	0.0000	
LEFT (L)	0	0	3000	0.0000	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.23  
INTERSECTION LEVEL OF SERVICE: A\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=2EXIST.AMV,CAP=C..:LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour-Existing Conditions 11/27/00

INTERSECTION 7 TASSAJARA ROAD/DUBLIN BOULEVARD CITY OF DUBLIN  
Count Date Time Peak Hour

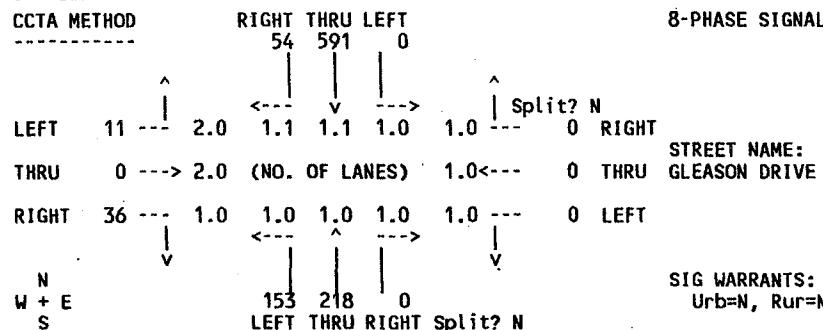
STREET NAME: TASSAJARA ROAD

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	3000	0.0000	
THRU (T)	594	594	3300	0.1800	
LEFT (L)	166	166	3000	0.0553	0.0553
T + R		594	4650	0.1277	
SB RIGHT (R)	26	0 *	1650	0.0000	
THRU (T)	479	479	3300	0.1452	0.1452
LEFT (L)	0	0	1650	0.0000	
EB RIGHT (R)	675	118 *	3000	0.0393	0.0393
THRU (T)	0	0	3300	0.0000	
LEFT (L)	94	94	3000	0.0313	
WB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	0	0	3300	0.0000	
LEFT (L)	0	0	3000	0.0000	0.0000

TOTAL VOLUME-TO-CAPACITY RATIO: 0.24  
INTERSECTION LEVEL OF SERVICE: A\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=2EXIST.PMV,CAP=C..:LOSCAP.TABSee for  
ht

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour-Existing Conditions 11/27/00

INTERSECTION 9 TASSAJARA ROAD/GLEASON DRIVE CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: TASSAJARA ROAD

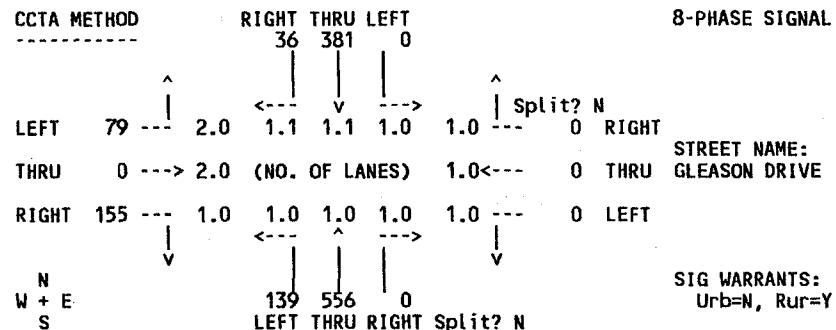
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	218	218	1650	0.1321	
LEFT (L)	153	153	1650	0.0927	0.0927
SB RIGHT (R)	54	54	1650	0.0327	
THRU (T)	591	591	1650	0.3582	
LEFT (L)	0	0	1650	0.0000	
T + R		645	1650	0.3909	0.3909
EB RIGHT (R)	36	0 *	1650	0.0000	
THRU (T)	0	0	3300	0.0000	
LEFT (L)	11	11	3000	0.0037	0.0037
WB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	0	0	1650	0.0000	
LEFT (L)	0	0	1650	0.0000	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.49  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=2EXIST.AMV,CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour-Existing Conditions 11/27/00

INTERSECTION 9 TASSAJARA ROAD/GLEASON DRIVE CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: TASSAJARA ROAD

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	556	556	1650	0.3370	0.3370
LEFT (L)	139	139	1650	0.0842	
SB RIGHT (R)	36	36	1650	0.0218	
THRU (T)	381	381	1650	0.2309	
LEFT (L)	0	0	1650	0.0000	0.0000
T + R		417	1650	0.2527	
EB RIGHT (R)	155	16 *	1650	0.0097	
THRU (T)	0	0	3300	0.0000	
LEFT (L)	79	79	3000	0.0263	0.0263
WB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	0	0	1650	0.0000	
LEFT (L)	0	0	1650	0.0000	

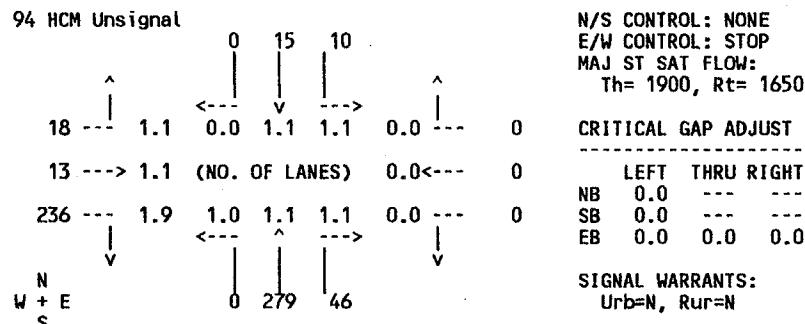
TOTAL VOLUME-TO-CAPACITY RATIO: 0.36  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=2EXIST.PMV,CAP=C:..LOSCAP.TAB

285 286  
285 286

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour-Existing Conditions 11/27/00

INTERSECTION 13 EL CHARRO ROAD/I 580 EB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

ACCEL LANE FOR LT	% SU/RV	% COMBO VEH	MOTOR CYCLE	PEAK HOUR		
				LEFT	THRU	RGHT
-	0	0	0	0.90	0.90	0.90
-	0	0	0	0.90	0.90	0.90
N	0	0	0	0.90	0.90	0.90

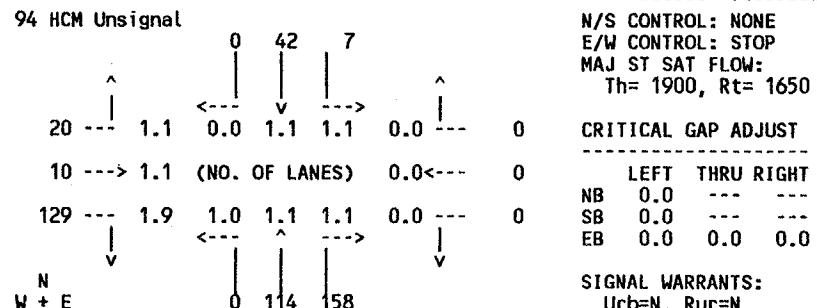
MOVEMENT	ORIG VOL	ADJ VOL	ADJ GAP	CONFL VOL	POT CAP	ACT CAP	MVMT DELAY	MVT LOS	APP	
									DELAY	LOS
NB L	0	0	5.0	17	1683	1683	0.0	A	0.0	A
T	279	341								
R	46	56								
TR	325	397								
SB L	10	12	5.0	361	1153	1153			3.2	A
T	15	18								
LT	25	30								
EB L	18	22	6.5	363	652	647			0.7	A
T	13	16	6.0	389	682	675				
R	236	288								
LT	31	38								

INT TOTAL: 0.4 A  
MINOR MOVEMENTS: ( 5.2 ) (B)

INT=MASTER.INT, VOL=2EXIST.AMV, CAP=C...LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour-Existing Conditions 11/27/00

INTERSECTION 13 EL CHARRO ROAD/I 580 EB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

ACCEL LANE FOR LT	% SU/RV	% COMBO VEH	MOTOR CYCLE	PEAK HOUR		
				LEFT	THRU	RGHT
-	0	0	0	1.00	1.00	1.00
-	0	0	0	1.00	1.00	1.00
N	0	0	0	1.00	1.00	1.00

MOVEMENT	ORIG VOL	ADJ VOL	ADJ GAP	CONFL VOL	POT CAP	ACT CAP	MVMT DELAY	MVT LOS	APP	
									DELAY	LOS
NB L	0	0	5.0	42	1637	1637	0.0	A	0.0	A
T	114	125								
R	158	174								
TR	272	299								
SB L	7	8	5.0	272	1272	1272			3.0	A
T	42	46								
LT	49	54								
EB L	20	22	6.5	242	767	763			0.9	A
T	10	11	6.0	321	740	735				
R	129	142								
LT	30	33								

INT TOTAL: 0.6 A  
MINOR MOVEMENTS: ( 4.6 ) (A)

INT=MASTER.INT, VOL=2EXIST.PMV, CAP=C...LOSCAP.TAB

889 Joe 9/6

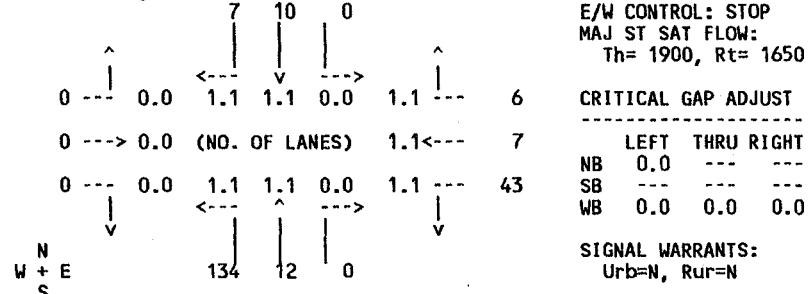
## LOS Software by TJKM Transportation Consultants

Condition: am peak hour-Existing Conditions

11/27/00

INTERSECTION 14 FALCON ROAD/I 580 WB RAMPS  
Count Date Time CITY OF DUBLIN

94 HCM Unsignal



ACCEL LANE FOR LT	% SU/RV		COMBO VEH	% MOTOR CYCLE		PEAK HOUR		
	LEFT	THRU		RIGHT	FACTOR	LEFT	THRU	RIGHT
-	0	0	0	0	0.90	0.90	0.90	
-	0	0	0	0	0.90	0.90	0.90	
N	0	0	0	0	0.90	0.90	0.90	

MOVEMENT	ORIG VOL	ADJ VOL	ADJ GAP	CONF VOL	POT CAP	ACT CAP	MVMT DELAY	MVT LOS	APP DELAY	APP LOS
NB L	134	164	5.0	19	1679	1679			2.4	A
T	12	15								
LT	146	179					2.4	A		
SB T	10	12							0.0	A
R	7	9								
TR	17	21					0.0	A		
WB L	43	53	6.5	177	836	773			4.9	A
T	7	9	6.0	181	876	790				
R	6	7	5.5	13	1363	1363				
LTR	56	69					4.9	A		

INT TOTAL: 2.8 A  
MINOR MOVEMENTS: ( 3.1 ) (A)

INT=MASTER.INT,VOL=2EXIST.AMV,CAP=C:..LOSCAP.TAB

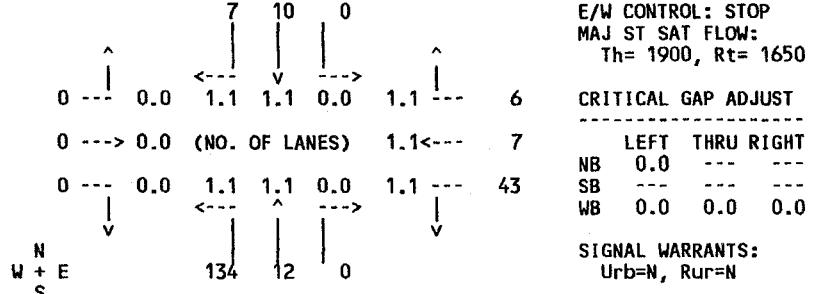
## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour-Existing Conditions

11/27/00

INTERSECTION 14 FALCON ROAD/I 580 WB RAMPS  
Count Date Time CITY OF DUBLIN

94 HCM Unsignal



ACCEL LANE FOR LT	% SU/RV		COMBO VEH	% MOTOR CYCLE		PEAK HOUR		
	LEFT	THRU		RIGHT	FACTOR	LEFT	THRU	RIGHT
-	0	0	0	0	0.90	0.90	0.90	
-	0	0	0	0	0.90	0.90	0.90	
N	0	0	0	0	0.90	0.90	0.90	

MOVEMENT	ORIG VOL	ADJ VOL	ADJ GAP	CONF VOL	POT CAP	ACT CAP	MVMT DELAY	MVT LOS	APP DELAY	APP LOS
NB L	134	164	5.0	19	1679	1679			2.4	A
T	12	15								
LT	146	179					2.4	A		
SB T	10	12							0.0	A
R	7	9								
TR	17	21					0.0	A		
WB L	43	53	6.5	177	836	773			4.9	A
T	7	9	6.0	181	876	790				
R	6	7	5.5	13	1363	1363				
LTR	56	69					4.9	A		

INT TOTAL: 2.8 A  
MINOR MOVEMENTS: ( 3.1 ) (A)

INT=MASTER.INT,VOL=2EXIST.PMV,CAP=C:..LOSCAP.TAB

See last page

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**LEVEL OF SERVICE CALCULATIONS  
EXISTING + APPROVED + PENDING CONDITIONS**

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Table 3.6-2

## Peak Hour Intersection Levels of Service - Existing plus Approved plus Pending (Dublin Model) – No Project

Intersection	Control	Unmitigated				Mitigated			
		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
		*	LOS	*	LOS	*	LOS	*	LOS
1 Dougherty Road/Dublin Boulevard (w/Scarlett Drive Bypass)	Signal	0.74	C	0.86	D				
2 Hacienda Drive/I-580 Eastbound Ramps	Signal	<b>0.93</b>	E	0.86	D	0.74	C	0.73	C
3 Hacienda Drive/I-580 Westbound Ramps	Signal	<b>1.20</b>	F	0.74	C	0.86	D	0.56	A
4 Hacienda Drive/Dublin Boulevard	Signal	0.63	B	0.82	D				
5 Santa Rita Road/I-580 Eastbound Ramps	Signal	<b>0.98</b>	E	<b>0.97</b>	E	0.83	D	0.90	D
6 Tassajara Road/I-580 Westbound Ramps	Signal	0.79	C	0.81	D				
7 Tassajara Road/Dublin Boulevard	Signal	0.61	B	0.84	D				
8 Tassajara Road/Central Parkway**	Signal	0.42	A	0.50	A				
9 Tassajara Road/Gleason Drive**	Signal	0.52	A	0.58	A				
10 Grafton Street/Dublin Boulevard**	Signal	0.55	A	0.65	B				
11 Grafton Street/Central Parkway**	Signal	0.22	A	0.23	A				
12 Grafton Street/Gleason Drive**	Signal	0.06	A	0.05	A				
13 El Charro Road/I-580 Eastbound Ramps**	Signal	0.17	A	0.31	A				
14 Fallon Road/I-580 Westbound Ramps**	Signal	0.23	A	0.38	A				
15 Fallon Road/Dublin Boulevard**	Signal	0.42	A	0.48	A				
16 Fallon Road/Central Parkway**	Signal	0.29	A	0.39	A				
17 Fallon Road/Gleason Drive**	Signal	0.09	A	0.09	A				

Note: \* = Volume-to-Capacity (V/C) Ratio for signalized intersections;

Average Delay in Seconds for stopping and yielding movements at 1-way STOP-controlled intersections.

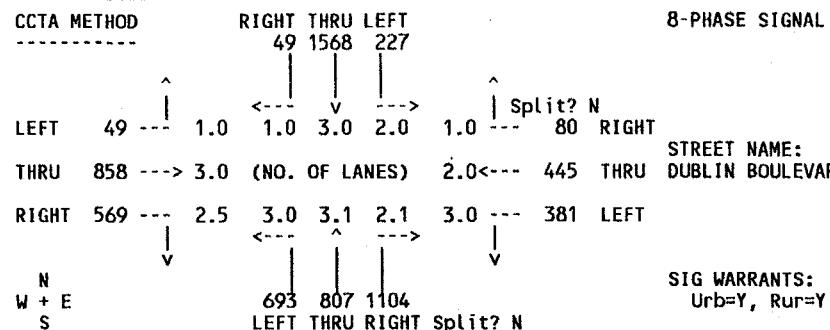
\*\* = Traffic signals at these intersections are either under construction or are anticipated to be installed in the future.

Page 6 of 6

LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base (E+App+Pend) No Proj 06/26/01

INTERSECTION 1 DOUGHERTY ROAD/DUBLIN BOULEVARD CITY OF DUBLIN  
Count Date Time Peak Hour



MOVEMENT		ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB	RIGHT (R)	1104	958 *	3000	0.3193	
	THRU (T)	807	807	4950	0.1630	
	LEFT (L)	693	693	4304	0.1610	0.1610
	T + R		1765	6300	0.2802	
SB	RIGHT (R)	49	0 *	1650	0.0000	
	THRU (T)	1568	1568	4950	0.3168	0.3168
	LEFT (L)	227	227	3000	0.0757	
EB	RIGHT (R)	569	86 *	3000	0.0287	
	THRU (T)	858	858	4950	0.1733	0.1733
	LEFT (L)	49	49	1650	0.0297	
WB	RIGHT (R)	80	0 *	1650	0.0000	
	THRU (T)	445	445	3300	0.1348	
	LEFT (L)	381	381	4304	0.0885	0.0885

TOTAL VOLUME-TO-CAPACITY RATIO: 0.74  
INTERSECTION LEVEL OF SERVICE: C

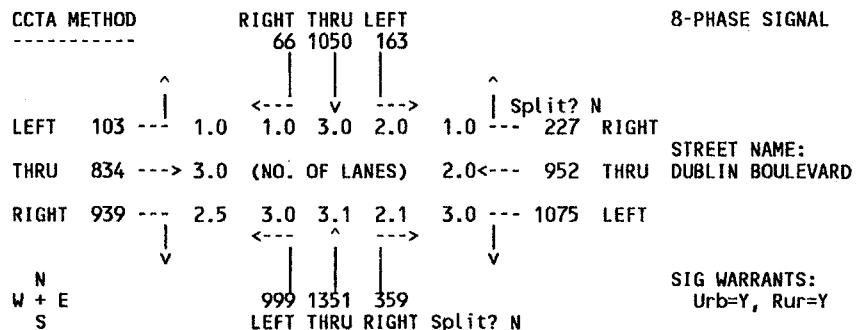
\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=BACKGRND.AMV,CAP=C:..LOSCAP.TAB

w/ By Pass

LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base (E+App+Pend) No Proj 06/26/01

INTERSECTION 1 DOUGHERTY ROAD/DUBLIN BOULEVARD CITY OF DUBLIN  
Count Date Time Peak Hour



MOVEMENT		ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB	RIGHT (R)	359	0 *	3000	0.0000	
	THRU (T)	1351	1351	4950	0.2729	
	LEFT (L)	999	999	4304	0.2321	0.2321
	T + R		1351	6300	0.2144	
SB	RIGHT (R)	66	0 *	1650	0.0000	
	THRU (T)	1050	1050	4950	0.2121	0.2121
	LEFT (L)	163	163	3000	0.0543	
EB	RIGHT (R)	939	243 *	3000	0.0810	
	THRU (T)	834	834	4950	0.1685	0.1685
	LEFT (L)	103	103	1650	0.0624	
WB	RIGHT (R)	227	137 *	1650	0.0830	
	THRU (T)	952	952	3300	0.2885	
	LEFT (L)	1075	1075	4304	0.2498	0.2498

TOTAL VOLUME-TO-CAPACITY RATIO: 0.86  
INTERSECTION LEVEL OF SERVICE: D

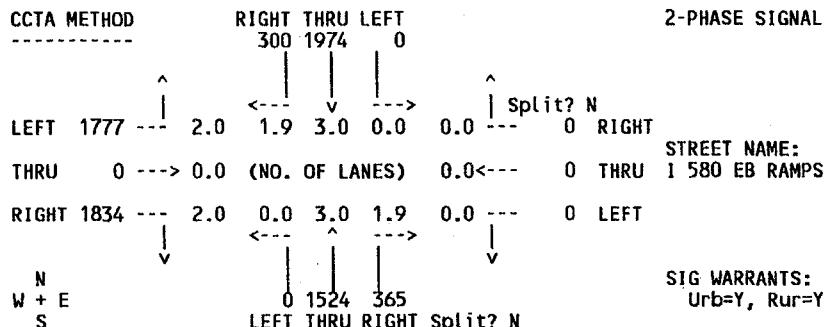
\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=BACKGRND.PMV,CAP=C:..LOSCAP.TAB

2000  
2001  
2002  
2003  
2004

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base

06/29/01

INTERSECTION 2 HACIENDA DRIVE/I 580 EB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: HACIENDA DRIVE

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB    RIGHT (R)	365	365	1800	0.2028	
THRU (T)	1524	1524	5400	0.2822	
SB    RIGHT (R)	300	300	1800	0.1667	
THRU (T)	1974	1974	5400	0.3656	0.3656
EB    RIGHT (R)	1834	1834	3273	0.5603	0.5603
LEFT (L)	1777	1777	3273	0.5429	

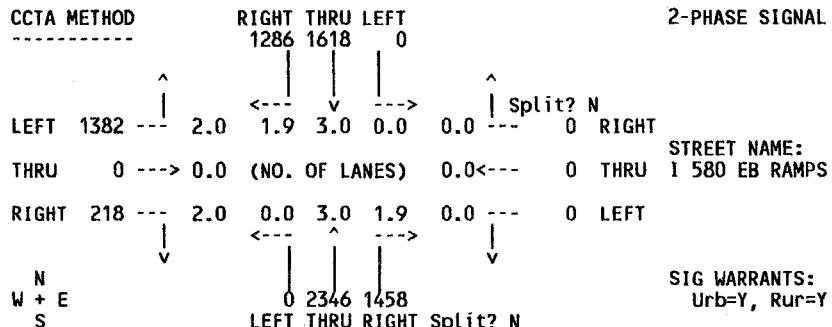
TOTAL VOLUME-TO-CAPACITY RATIO: 0.93  
INTERSECTION LEVEL OF SERVICE: E

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=BACKGRND.AMV+TRANSCTR.AMV,CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base

06/29/01

INTERSECTION 2 HACIENDA DRIVE/I 580 EB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: HACIENDA DRIVE

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB    RIGHT (R)	1458	1458	1800	0.8100	
THRU (T)	2346	2346	5400	0.4344	0.4344
SB    RIGHT (R)	1286	1286	1800	0.7144	
THRU (T)	1618	1618	5400	0.2996	
EB    RIGHT (R)	218	218	3273	0.0666	
LEFT (L)	1382	1382	3273	0.4222	0.4222

TOTAL VOLUME-TO-CAPACITY RATIO: 0.86  
INTERSECTION LEVEL OF SERVICE: D

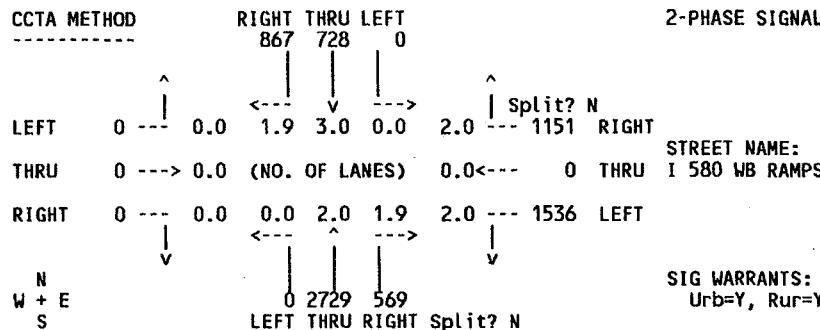
\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=BACKGRND.PMV+TRANSCTR.PMV,CAP=C:..LOSCAP.TAB

388 Joe 1st

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base

06/29/01

INTERSECTION 3 HACIENDA DRIVE/I 580 WB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: HACIENDA DRIVE

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	569	569	1800	0.3161	0.33 C
THRU (T)	2729	2729	3720	0.7581	0.7581
SB RIGHT (R)	867	867	1800	0.4817	
THRU (T)	728	728	5400	0.1348	
WB RIGHT (R)	1151	1151	3273	0.3517	
LEFT (L)	1536	1536	3273	0.4693	0.4693

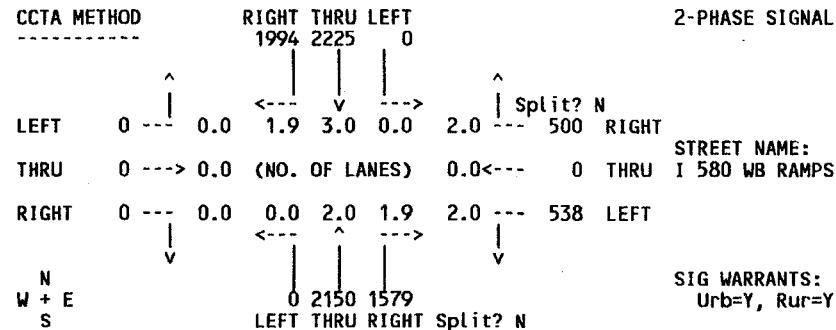
TOTAL VOLUME-TO-CAPACITY RATIO: 4.23 1.20  
INTERSECTION LEVEL OF SERVICE: F

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=BACKGRND.AMV+TRANSCTR.AMV,CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base

06/29/01

INTERSECTION 3 HACIENDA DRIVE/I 580 WB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: HACIENDA DRIVE

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	1579	1579	1800	0.8772	
THRU (T)	2150	2150	3720	0.5972	0.5972 .5780
SB RIGHT (R)	1994	1994	1800	1.1078 **	
THRU (T)	2225	2225	5400	0.4120	
WB RIGHT (R)	500	500	3273	0.1528	
LEFT (L)	538	538	3273	0.1644	0.1644

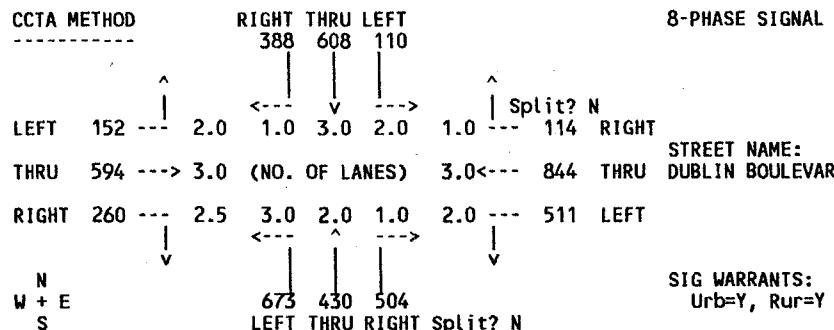
TOTAL VOLUME-TO-CAPACITY RATIO: 0.76 0.74  
INTERSECTION LEVEL OF SERVICE: C

\* ADJUSTED FOR RIGHT TURN ON RED \*\* APPROACHING OR EXCEEDING CAPACITY  
INT=MASTER.INT,VOL=BACKGRND.PMV+TRANSCTR.PMV,CAP=C:..LOSCAP.TAB

8/26/01  
SSE

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base (E+App+Pend) No Proj 07/03/01

INTERSECTION 4 HACIENDA DRIVE/DUBLIN BOULEVARD CITY OF DUBLIN  
Count Date Time Peak Hour

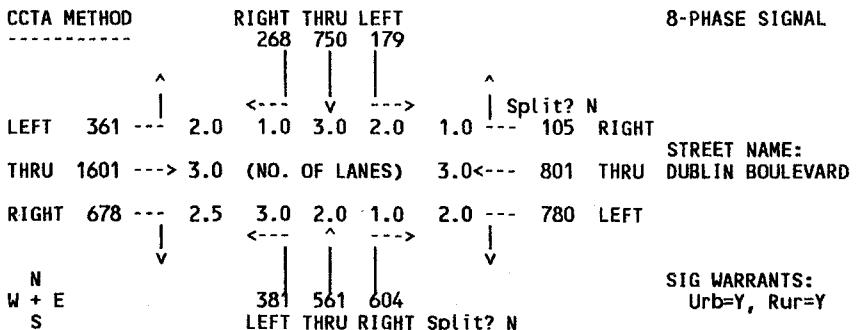
STREET NAME: HACIENDA DRIVE

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	504	223 *	1650	0.1352	
THRU (T)	430	430	3300	0.1303	
LEFT (L)	673	673	4304	0.1564	0.1564
SB RIGHT (R)	388	304 *	1650	0.1842	0.1842
THRU (T)	608	608	4950	0.1228	
LEFT (L)	110	110	3000	0.0367	
EB RIGHT (R)	260	0 *	3000	0.0000	
THRU (T)	594	594	4950	0.1200	0.1200
LEFT (L)	152	152	3000	0.0507	
WB RIGHT (R)	114	54 *	1650	0.0327	
THRU (T)	844	844	4950	0.1705	
LEFT (L)	511	511	3000	0.1703	0.1703

TOTAL VOLUME-TO-CAPACITY RATIO: 0.63  
INTERSECTION LEVEL OF SERVICE: B\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=BACKGRND.AMV+TRANSCTR.AMV,CAP=C...LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base (E+App+Pend) No Proj 07/03/01

INTERSECTION 4 HACIENDA DRIVE/DUBLIN BOULEVARD CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: HACIENDA DRIVE

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	604	175 *	1650	0.1061	
THRU (T)	561	561	3300	0.1700	
LEFT (L)	381	381	4304	0.0885	0.0885
SB RIGHT (R)	268	69 *	1650	0.0418	
THRU (T)	750	750	4950	0.1515	0.1515
LEFT (L)	179	179	3000	0.0597	
EB RIGHT (R)	678	412 *	3000	0.1373	
THRU (T)	1601	1601	4950	0.3234	0.3234
LEFT (L)	361	361	3000	0.1203	
WB RIGHT (R)	105	7 *	1650	0.0042	
THRU (T)	801	801	4950	0.1618	
LEFT (L)	780	780	3000	0.2600	0.2600

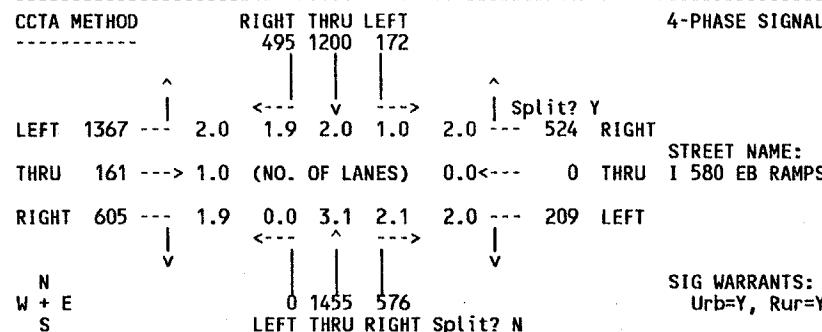
TOTAL VOLUME-TO-CAPACITY RATIO: 0.82  
INTERSECTION LEVEL OF SERVICE: D\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=BACKGRND.PMV+TRANSCTR.PMV,CAP=C...LOSCAP.TAB

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## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base

06/29/01

INTERSECTION 5 SANTA RITA ROAD/I 580 EB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: SANTA RITA ROAD

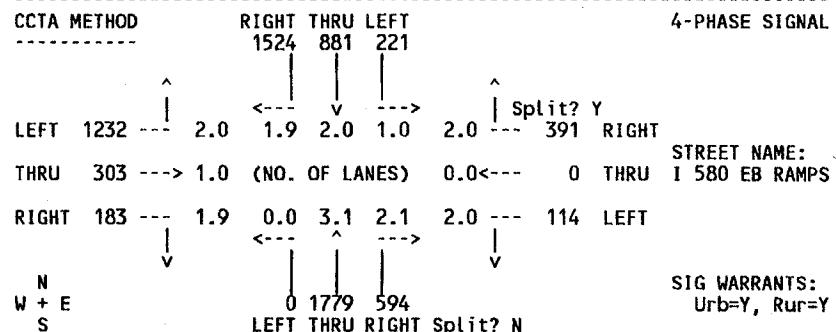
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	576	461 *	3000	0.1537	
THRU (T)	1455	1455	4950	0.2939	
T + R		1916	6300	0.3041	0.3041
SB RIGHT (R)	495	495	1650	0.3000	
THRU (T)	1200	1200	3300	0.3636	
LEFT (L)	172	172	1650	0.1042	0.1042
EB RIGHT (R)	605	605	1650	0.3667	
THRU (T)	161	161	1650	0.0976	
LEFT (L)	1367	1367	3000	0.4557	0.4557
WB RIGHT (R)	524	352 *	3000	0.1173	0.1173
LEFT (L)	209	209	3000	0.0697	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.98  
INTERSECTION LEVEL OF SERVICE: E\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=BACKGRND.AMV+TRANSCTR.AMV,CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base

06/29/01

INTERSECTION 5 SANTA RITA ROAD/I 580 EB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: SANTA RITA ROAD

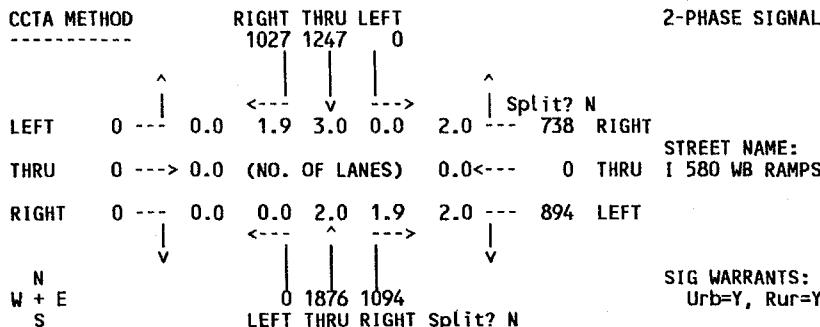
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	594	531 *	3000	0.1770	
THRU (T)	1779	1779	4950	0.3594	
T + R		2310	6300	0.3667	0.3667
SB RIGHT (R)	1524	1524	1650	0.9236 **	
THRU (T)	881	881	3300	0.2670	
LEFT (L)	221	221	1650	0.1339	0.1339
EB RIGHT (R)	183	183	1650	0.1109	
THRU (T)	303	303	1650	0.1836	
LEFT (L)	1232	1232	3000	0.4107	0.4107
WB RIGHT (R)	391	170 *	3000	0.0567	0.0567
LEFT (L)	114	114	3000	0.0380	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.97  
INTERSECTION LEVEL OF SERVICE: E\* ADJUSTED FOR RIGHT TURN ON RED \*\* APPROACHING OR EXCEEDING CAPACITY  
INT=MASTER.INT,VOL=BACKGRND.PMV+TRANSCTR.PMV,CAP=C:..LOSCAP.TAB8/16/01  
BSE

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base

06/29/01

INTERSECTION 6 TASSAJARA ROAD/I 580 WB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: TASSAJARA ROAD

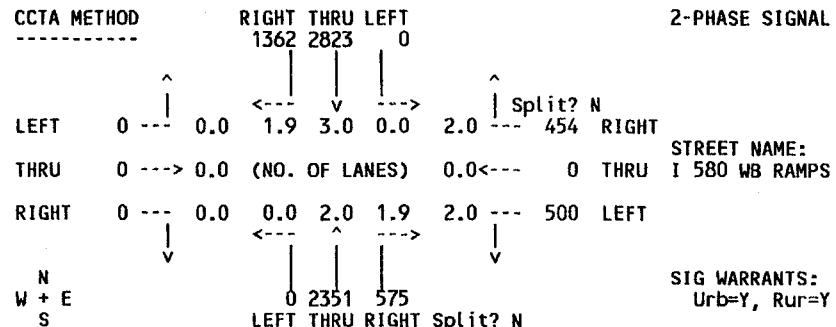
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	1094	1094	1800	0.6078	
THRU (T)	1876	1876	3600	0.5211	0.5211
SB RIGHT (R)	1027	1027	1800	0.5706	
THRU (T)	1247	1247	5400	0.2309	
WB RIGHT (R)	738	738	3273	0.2255	
LEFT (L)	894	894	3273	0.2731	0.2731

TOTAL VOLUME-TO-CAPACITY RATIO: 0.79  
INTERSECTION LEVEL OF SERVICE: C\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT, VOL=BACKGRND.AMV+TRANSCTR.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base

06/29/01

INTERSECTION 6 TASSAJARA ROAD/I 580 WB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: TASSAJARA ROAD

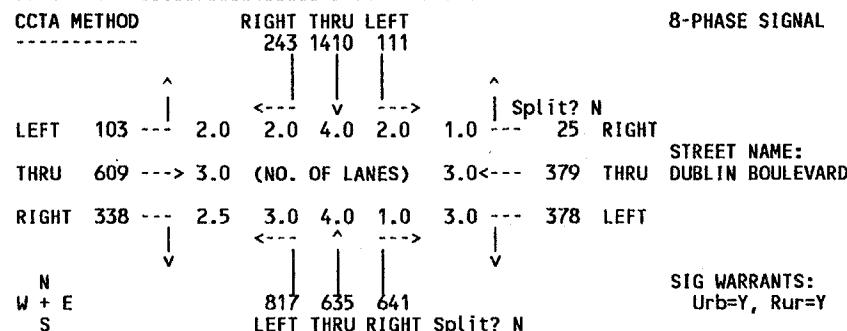
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	575	575	1800	0.3194	
THRU (T)	2351	2351	3600	0.6531	0.6531
SB RIGHT (R)	1362	1362	1800	0.7567	
THRU (T)	2823	2823	5400	0.5228	
WB RIGHT (R)	454	454	3273	0.1387	
LEFT (L)	500	500	3273	0.1528	0.1528

TOTAL VOLUME-TO-CAPACITY RATIO: 0.81  
INTERSECTION LEVEL OF SERVICE: D\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT, VOL=BACKGRND.PMV+TRANSCTR.PMV, CAP=C:..LOSCAP.TABJL 5/26/01  
988

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base

06/29/01

INTERSECTION 7 TASSAJARA ROAD/DUBLIN BOULEVARD CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: TASSAJARA ROAD

	MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB	RIGHT (R)	641	496 *	1650	0.3006	
	THRU (T)	635	635	6600	0.0962	
	LEFT (L)	817	817	4304	0.1898	0.1898
SB	RIGHT (R)	243	186 *	3000	0.0620	
	THRU (T)	1410	1410	6600	0.2136	0.2136
	LEFT (L)	111	111	3000	0.0370	
EB	RIGHT (R)	338	0 *	3000	0.0000	
	THRU (T)	609	609	4950	0.1230	0.1230
	LEFT (L)	103	103	3000	0.0343	
WB	RIGHT (R)	25	0 *	1650	0.0000	
	THRU (T)	379	379	4950	0.0766	
	LEFT (L)	378	378	4304	0.0878	0.0878

TOTAL VOLUME-TO-CAPACITY RATIO: 0.61

INTERSECTION LEVEL OF SERVICE: B

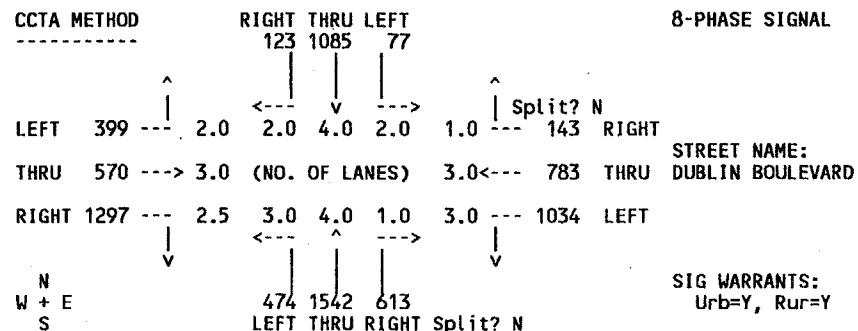
\* ADJUSTED FOR RIGHT TURN ON RED

INT=MASTER.INT, VOL=BACKGRND.AMV+TRANSCTR.AMV, CAP=C... LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base

06/29/01

INTERSECTION 7 TASSAJARA ROAD/DUBLIN BOULEVARD CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: TASSAJARA ROAD

	MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB	RIGHT (R)	613	217 *	1650	0.1315	
	THRU (T)	1542	1542	6600	0.2336	
	LEFT (L)	474	474	4304	0.1101	0.1101
SB	RIGHT (R)	123	0 *	3000	0.0000	
	THRU (T)	1085	1085	6600	0.1644	0.1644
	LEFT (L)	77	77	3000	0.0257	
EB	RIGHT (R)	1297	967 *	3000	0.3223	0.3223
	THRU (T)	570	570	4950	0.1152	
	LEFT (L)	399	399	3000	0.1330	
WB	RIGHT (R)	143	101 *	1650	0.0612	
	THRU (T)	783	783	4950	0.1582	
	LEFT (L)	1034	1034	4304	0.2402	0.2402

TOTAL VOLUME-TO-CAPACITY RATIO: 0.84

INTERSECTION LEVEL OF SERVICE: D

\* ADJUSTED FOR RIGHT TURN ON RED

INT=MASTER.INT, VOL=BACKGRND.PMV+TRANSCTR.PMV, CAP=C... LOSCAP.TAB

BBG 960

LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base 06/29/01

**INTERSECTION** 8 TASSAJARA ROAD/CENTRAL PARKWAY **CITY OF DUBLIN**  
**Count Date** **Time** **Peak Hour**

**CCTA METHOD**                    **RIGHT THRU LEFT**                    **8-PHASE SIGNAL**

The diagram illustrates a 8-phase signal control. The top row shows the phases: RIGHT (6), THRU (1405), and LEFT (24). Below this, a horizontal dashed line represents the signal cycle, divided into segments by vertical tick marks. The segments are labeled with times: 1.0, 1.0, 3.0, 1.0, 1.0, and 39. Above the first segment is an upward arrow (^), above the second is a downward arrow (v), and above the third is a double-headed arrow (<->). Above the fourth segment is a downward arrow (v), above the fifth is an upward arrow (^), and above the sixth is a double-headed arrow (<->). To the right of the segments, the text "Split? N" is written vertically. Below the segments, the word "Split?" is followed by a question mark. The bottom row shows the warrant assignments: LEFT (31), THRU (47), and RIGHT (65). The word "(NO. OF LANES)" is placed between the first two warrant numbers. The word "STREET NAME:" is followed by "CENTRAL PARKWAY". At the bottom, the warrant numbers 46, 589, and 59 are listed under their respective warrant types: N, W+E, and S. The word "SIG WARRANTS:" is followed by "Urb=Y, Rur=Y".

STREET NAME: TASSAJARA ROAD

		ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB	RIGHT (R)	59	0 *	1650	0.0000	
	THRU (T)	589	589	4950	0.1190	
	LEFT (L)	46	46	1650	0.0279	0.0279
SB	RIGHT (R)	6	0 *	1650	0.0000	
	THRU (T)	1405	1405	4950	0.2838	0.2838
	LEFT (L)	24	24	1650	0.0145	
EB	RIGHT (R)	65	19 *	1650	0.0115	
	THRU (T)	47	47	1650	0.0285	
	LEFT (L)	31	31	1650	0.0188	0.0188
WB	RIGHT (R)	39	15 *	1650	0.0091	
	THRU (T)	142	142	1650	0.0861	0.0861
	LEFT (L)	212	212	3000	0.0707	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.422  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT.VOL=BACKGRND.AMV+TRANSCTR.AMV.CAP=C:..LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base 06/29/01

**INTERSECTION 8 TASSAJARA ROAD/CENTRAL PARKWAY CITY OF DUBLIN**  
**Count Date Time Peak Hour**

STREET NAME: TASSAJARA ROAD

		ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
MOVEMENT						
NB	RIGHT (R)	219	148 *	1650	0.0897	
	THRU (T)	1560	1560	4950	0.3152	0.3152
	LEFT (L)	81	81	1650	0.0491	
SB	RIGHT (R)	8	0 *	1650	0.0000	
	THRU (T)	999	999	4950	0.2018	
	LEFT (L)	54	54	1650	0.0327	0.0327
EB	RIGHT (R)	117	36 *	1650	0.0218	
	THRU (T)	178	178	1650	0.1079	0.1079
	LEFT (L)	10	10	1650	0.0061	
WB	RIGHT (R)	43	0 *	1650	0.0000	
	THRU (T)	87	87	1650	0.0527	
	LEFT (L)	129	129	3000	0.0430	0.0430

TOTAL VOLUME-TO-CAPACITY RATIO: 0.500  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT.VOL=BACKGRND.PMV+TRANSCTR.PMV.CAP=C...LOSCLAP.TAB

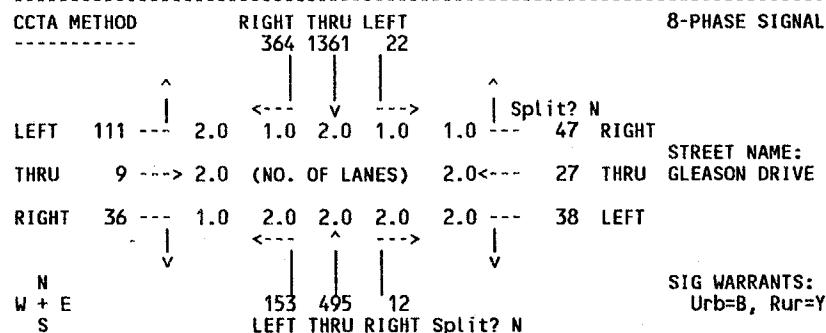
\* ADJUSTED FOR RIGHT TURN ON RED

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## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base

06/29/01

INTERSECTION 9 TASSAJARA ROAD/GLEASON DRIVE CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: TASSAJARA ROAD

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C	
NB RIGHT (R)	12	0 *	3000	0.0000		
THRU (T)	495	495	3300	0.1500		
LEFT (L)	153	153	3000	0.0510	0.0510	
SB RIGHT (R)	364	303 *	1650	0.1836		
THRU (T)	1361	1361	3300	0.4124	0.4124	
LEFT (L)	22	22	1650	0.0133		
EB RIGHT (R)	36	0 *	1650	0.0000		
THRU (T)	9	9	3300	0.0027		
LEFT (L)	111	111	3000	0.0370	0.0370	
WB RIGHT (R)	47	25 *	1650	0.0152	0.0152	
THRU (T)	27	27	3300	0.0082		
LEFT (L)	38	38	3000	0.0127		

TOTAL VOLUME-TO-CAPACITY RATIO: 0.52

INTERSECTION LEVEL OF SERVICE: A

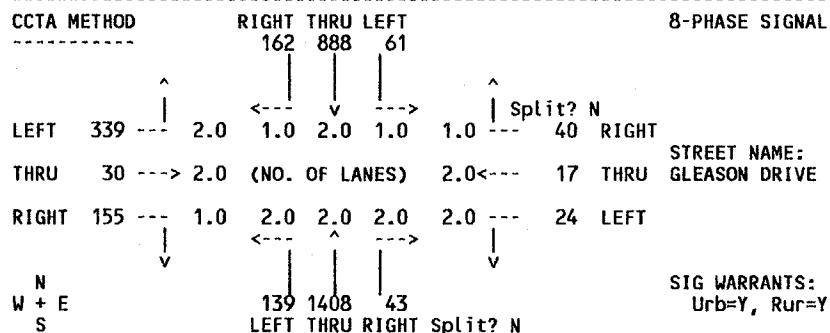
\* ADJUSTED FOR RIGHT TURN ON RED

INT=MASTER.INT, VOL=BACKGRND.AMV+TRANSCTR.AMV, CAP=C...LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base

06/29/01

INTERSECTION 9 TASSAJARA ROAD/GLEASON DRIVE CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: TASSAJARA ROAD

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C	
NB RIGHT (R)	43	30 *	3000	0.0100		
THRU (T)	1408	1408	3300	0.4267	0.4267	
LEFT (L)	139	139	3000	0.0463		
SB RIGHT (R)	162	0 *	1650	0.0000		
THRU (T)	888	888	3300	0.2691		
LEFT (L)	61	61	1650	0.0370	0.0370	
EB RIGHT (R)	155	79 *	1650	0.0479		
THRU (T)	30	30	3300	0.0091		
LEFT (L)	339	339	3000	0.1130	0.1130	
WB RIGHT (R)	40	0 *	1650	0.0000		
THRU (T)	17	17	3300	0.0052	0.0052	
LEFT (L)	24	24	3000	0.0080		

TOTAL VOLUME-TO-CAPACITY RATIO: 0.58

INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED

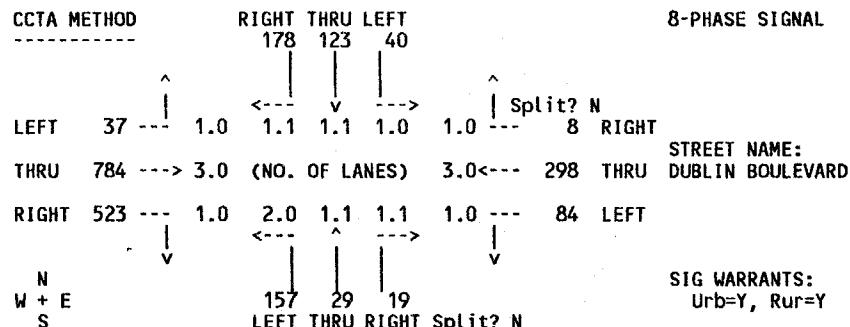
INT=MASTER.INT, VOL=BACKGRND.PMV+TRANSCTR.PMV, CAP=C...LOSCAP.TAB

See page 2

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base

06/29/01

INTERSECTION 10 MAIN STREET/DUBLIN BOULEVARD CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: MAIN STREET

MOVEMENT	ORIGINAL	ADJUSTED	CAPACITY	V/C	CRITICAL
	VOLUME	VOLUME*			
NB RIGHT (R)	19	19	1650	0.0115	
THRU (T)	29	29	1650	0.0176	
LEFT (L)	157	157	3000	0.0523	0.0523
T + R	48	1650		0.0291	
SB RIGHT (R)	178	178	1650	0.1079	
THRU (T)	123	123	1650	0.0745	
LEFT (L)	40	40	1650	0.0242	
T + R	301	1650		0.1824	0.1824
EB RIGHT (R)	523	437 *	1650	0.2648	0.2648
THRU (T)	784	784	4950	0.1584	
LEFT (L)	37	37	1650	0.0224	
WB RIGHT (R)	8	0 *	1650	0.0000	
THRU (T)	298	298	4950	0.0602	
LEFT (L)	84	84	1650	0.0509	0.0509

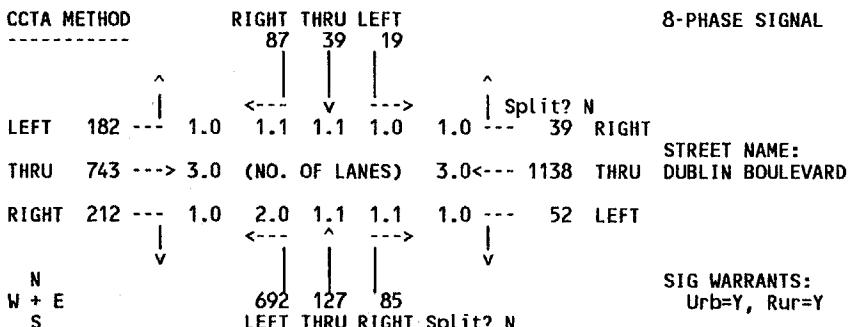
TOTAL VOLUME-TO-CAPACITY RATIO: 0.55  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT, VOL=BACKGRND.AMV+TRANSCTR.AMV, CAP=C...LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base

06/29/01

INTERSECTION 10 MAIN STREET/DUBLIN BOULEVARD CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: MAIN STREET

MOVEMENT	ORIGINAL	ADJUSTED	CAPACITY	V/C	CRITICAL
	VOLUME	VOLUME*			
NB RIGHT (R)	85	85	1650	0.0515	
THRU (T)	127	127	1650	0.0770	
LEFT (L)	692	692	3000	0.2307	0.2307
T + R	212	1650		0.1285	
SB RIGHT (R)	87	87	1650	0.0527	
THRU (T)	39	39	1650	0.0236	
LEFT (L)	19	19	1650	0.0115	
T + R	126	1650		0.0764	0.0764
EB RIGHT (R)	212	0 *	1650	0.0000	
THRU (T)	743	743	4950	0.1501	
LEFT (L)	182	182	1650	0.1103	0.1103
WB RIGHT (R)	39	20 *	1650	0.0121	
THRU (T)	1138	1138	4950	0.2299	0.2299
LEFT (L)	52	52	1650	0.0315	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.65  
INTERSECTION LEVEL OF SERVICE: B

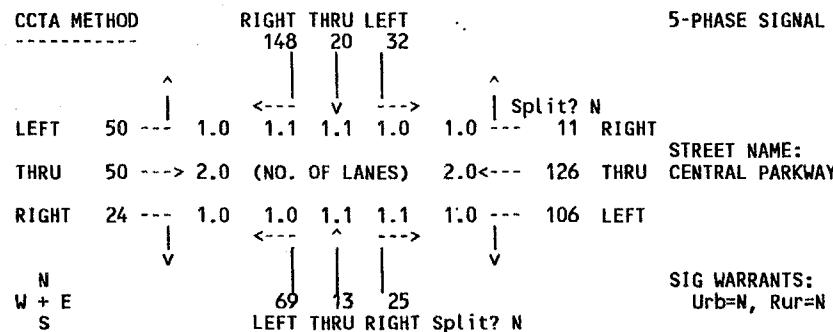
\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT, VOL=BACKGRND.PMV+TRANSCTR.PMV, CAP=C...LOSCAP.TAB

8/29/01  
8/29/01

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base

06/29/01

INTERSECTION 11 MAIN STREET/CENTRAL PARKWAY CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: MAIN STREET

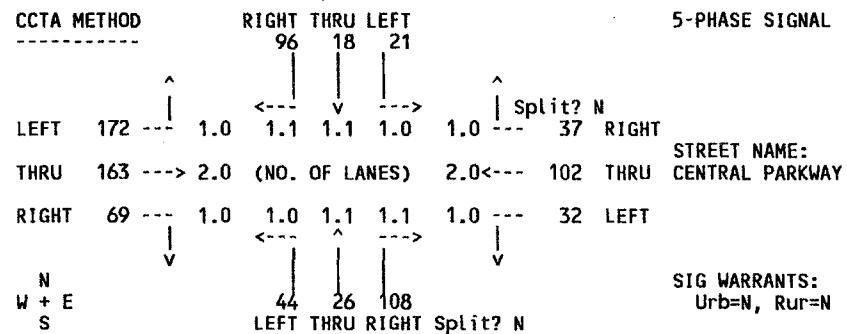
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	25	25	1650	0.0152	
THRU (T)	13	13	1650	0.0079	
LEFT (L)	69	69	1650	0.0418	0.0418
T + R	38	1650	0.0230		
SB RIGHT (R)	148	148	1650	0.0897	
THRU (T)	20	20	1650	0.0121	
LEFT (L)	32	32	1650	0.0194	
T + R	168	1650	0.1018	0.1018	
EB RIGHT (R)	24	0 *	1650	0.0000	
THRU (T)	50	50	3300	0.0152	0.0152
LEFT (L)	50	50	1650	0.0303	
WB RIGHT (R)	11	0 *	1650	0.0000	
THRU (T)	126	126	3300	0.0382	
LEFT (L)	106	106	1650	0.0642	0.0642

TOTAL VOLUME-TO-CAPACITY RATIO: 0.22  
INTERSECTION LEVEL OF SERVICE: A\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT, VOL=BACKGRND.AMV+TRANSCTR.AMV, CAP=C...LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base

06/29/01

INTERSECTION 11 MAIN STREET/CENTRAL PARKWAY CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: MAIN STREET

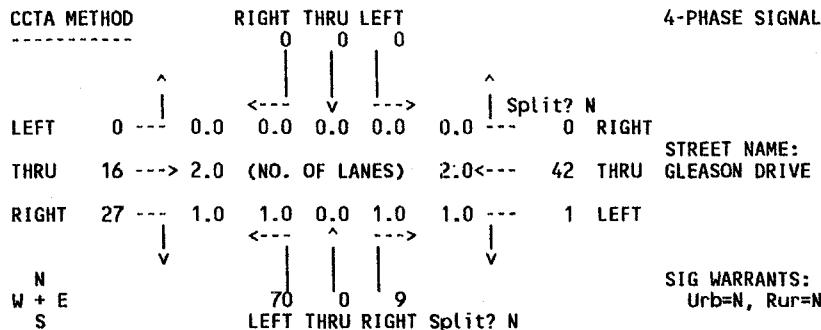
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	108	108	1650	0.0655	
THRU (T)	26	26	1650	0.0158	
LEFT (L)	44	44	1650	0.0267	0.0267
T + R	134	1650	0.0812		
SB RIGHT (R)	96	96	1650	0.0582	
THRU (T)	18	18	1650	0.0109	
LEFT (L)	21	21	1650	0.0127	
T + R	114	1650	0.0691	0.0691	
EB RIGHT (R)	69	25 *	1650	0.0152	
THRU (T)	163	163	3300	0.0494	
LEFT (L)	172	172	1650	0.1042	0.1042
WB RIGHT (R)	37	16 *	1650	0.0097	
THRU (T)	102	102	3300	0.0309	0.0309
LEFT (L)	32	32	1650	0.0194	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.23  
INTERSECTION LEVEL OF SERVICE: A\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT, VOL=BACKGRND.PMV+TRANSCTR.PMV, CAP=C...LOSCAP.TAB9/9/01  
BBG

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base

06/29/01

INTERSECTION 12 MAIN STREET/GLEASON DRIVE CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: MAIN STREET

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	9	8 *	1650	0.0048	
LEFT (L)	70	70	1650	0.0424	0.0424
EB RIGHT (R)	27	0 *	1650	0.0000	
THRU (T)	16	16	3300	0.0048	
WB THRU (T)	42	42	3300	0.0127	0.0127
LEFT (L)	1	1	1650	0.0006	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.06

INTERSECTION LEVEL OF SERVICE: A

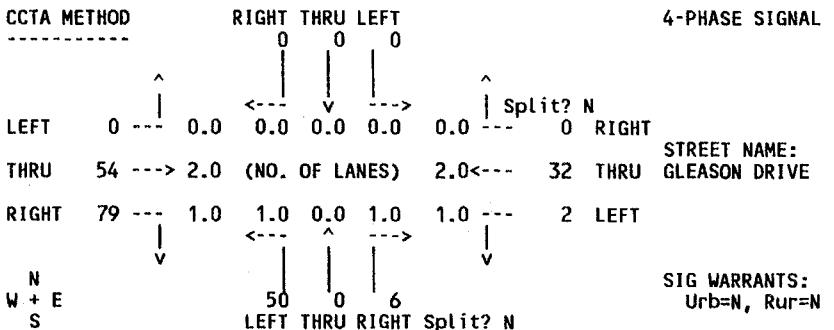
\* ADJUSTED FOR RIGHT TURN ON RED

INT=MASTER.INT, VOL=BACKGRND.AMV+TRANSCTR.AMV, CAP=C...LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base

06/29/01

INTERSECTION 12 MAIN STREET/GLEASON DRIVE CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: MAIN STREET

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	6	4 *	1650	0.0024	
LEFT (L)	50	50	1650	0.0303	0.0303
EB RIGHT (R)	79	29 *	1650	0.0176	0.0176
THRU (T)	54	54	3300	0.0164	
WB THRU (T)	32	32	3300	0.0097	
LEFT (L)	2	2	1650	0.0012	0.0012

TOTAL VOLUME-TO-CAPACITY RATIO: 0.05

INTERSECTION LEVEL OF SERVICE: A

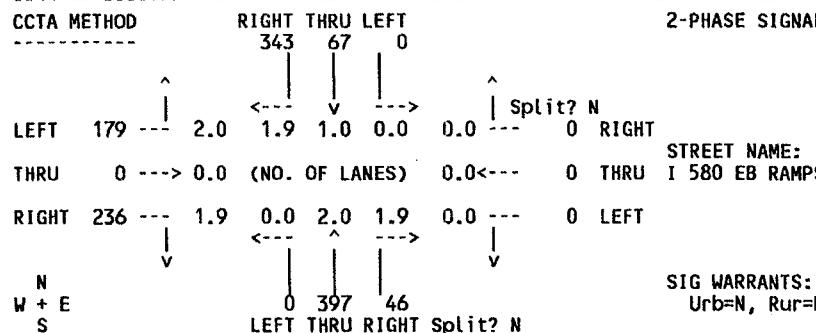
\* ADJUSTED FOR RIGHT TURN ON RED

INT=MASTER.INT, VOL=BACKGRND.PMV+TRANSCTR.PMV, CAP=C...LOSCAP.TAB

BBG 6/16/02

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base 07/02/01

INTERSECTION 13 EL CHARRO ROAD/I 580 EB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

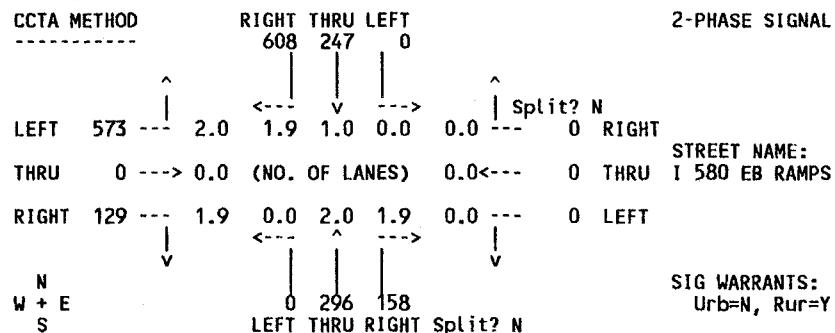
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	46	46	1800	0.0256	
THRU (T)	397	397	3600	0.1103	0.1103
SB RIGHT (R)	343	343	1800	0.1906	
THRU (T)	67	67	1800	0.0372	
EB RIGHT (R)	236	236	1800	0.1311	
LEFT (L)	179	179	3273	0.0547	0.0547

TOTAL VOLUME-TO-CAPACITY RATIO: 0.17  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT, VOL=BACKGRND.AMV+TRANSCTR.AMV, CAP=C...LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base 07/02/01

INTERSECTION 13 EL CHARRO ROAD/I 580 EB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	158	158	1800	0.0878	
THRU (T)	296	296	3600	0.0822	
SB RIGHT (R)	608	608	1800	0.3378	
THRU (T)	247	247	1800	0.1372	0.1372
EB RIGHT (R)	129	129	1800	0.0717	
LEFT (L)	573	573	3273	0.1751	0.1751

TOTAL VOLUME-TO-CAPACITY RATIO: 0.31  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT, VOL=BACKGRND.PMV+TRANSCTR.PMV, CAP=C...LOSCAP.TAB

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## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base

07/02/01

INTERSECTION 14 FALCON ROAD/I 580 WB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

CCTA METHOD		RIGHT	THRU	LEFT	2-PHASE SIGNAL		
		267	396	0			
LEFT	0	0.0	1.9	2.0	0.0	2.0	384 RIGHT
THRU	0	0.0	(NO. OF LANES)	0.0	<	0	THRU I 580 WB RAMPS
RIGHT	0	0.0	0.0	2.0	1.9	2.0	43 LEFT
N W + E S		0	351	134			SIG WARRANTS: Urb=N, Rur=Y
		LEFT THRU	RIGHT	Split? N			

STREET NAME: FALCON ROAD

MOVEMENT	ORIGINAL	ADJUSTED	V/C	CRITICAL
	VOLUME	VOLUME*		
NB RIGHT (R)	134	134	1800	0.0744
THRU (T)	351	351	3600	0.0975
SB RIGHT (R)	267	267	1800	0.1483
THRU (T)	396	396	3600	0.1100 0.1100
WB RIGHT (R)	384	384	3273	0.1173 0.1173
LEFT (L)	43	43	3273	0.0131

TOTAL VOLUME-TO-CAPACITY RATIO:

0.23

INTERSECTION LEVEL OF SERVICE:

A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT, VOL=BACKGRND.AMV+TRANSCR.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base

07/02/01

INTERSECTION 14 FALCON ROAD/I 580 WB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

CCTA METHOD		RIGHT	THRU	LEFT	2-PHASE SIGNAL		
		417	816	0			
LEFT	0	0.0	1.9	2.0	0.0	2.0	497 RIGHT
THRU	0	0.0	(NO. OF LANES)	0.0	<	0	THRU I 580 WB RAMPS
RIGHT	0	0.0	0.0	2.0	1.9	2.0	43 LEFT
N W + E S		0	756	134			SIG WARRANTS: Urb=Y, Rur=Y
		LEFT THRU	RIGHT	Split? N			

STREET NAME: FALCON ROAD

MOVEMENT	ORIGINAL	ADJUSTED	V/C	CRITICAL
	VOLUME	VOLUME*		
NB RIGHT (R)	134	134	1800	0.0744
THRU (T)	756	756	3600	0.2100
SB RIGHT (R)	417	417	1800	0.2317
THRU (T)	816	816	3600	0.2267 0.2267
WB RIGHT (R)	497	497	3273	0.1518 0.1518
LEFT (L)	43	43	3273	0.0131

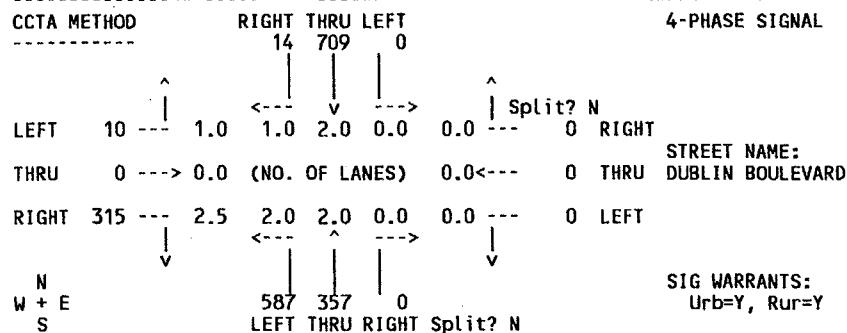
TOTAL VOLUME-TO-CAPACITY RATIO: 0.38  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT, VOL=BACKGRND.PMV+TRANSCR.PMV, CAP=C:..LOSCAP.TAB

Base Left

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base (E+App+Pend) No Proj 06/26/01

INTERSECTION 15 FALCON ROAD/DUBLIN BOULEVARD CITY OF DUBLIN  
Count Date Time Peak Hour

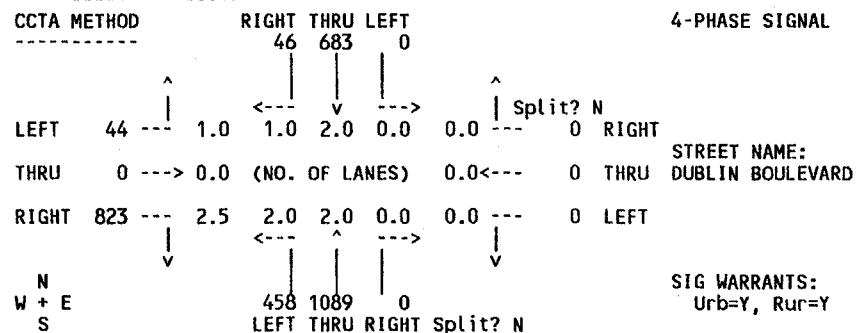
STREET NAME: FALCON ROAD

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	357	357	3300	0.1082	
LEFT (L)	587	587	3000	0.1957	0.1957
SB RIGHT (R)	14	4 *	1650	0.0024	
THRU (T)	709	709	3300	0.2148	0.2148
EB RIGHT (R)	315	0 *	3000	0.0000	
LEFT (L)	10	10	1650	0.0061	0.0061

TOTAL VOLUME-TO-CAPACITY RATIO: 0.42  
INTERSECTION LEVEL OF SERVICE: A\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=BACKGRND.AMV,CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base (E+App+Pend) No Proj 06/26/01

INTERSECTION 15 FALCON ROAD/DUBLIN BOULEVARD CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: FALCON ROAD

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	1089	1089	3300	0.3300	
LEFT (L)	458	458	3000	0.1527	0.1527
SB RIGHT (R)	46	2 *	1650	0.0012	
THRU (T)	683	683	3300	0.2070	0.2070
EB RIGHT (R)	823	365 *	3000	0.1217	0.1217
LEFT (L)	44	44	1650	0.0267	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.48  
INTERSECTION LEVEL OF SERVICE: A\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=BACKGRND.PMV,CAP=C:..LOSCAP.TAB

See pg h2

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base

06/29/01

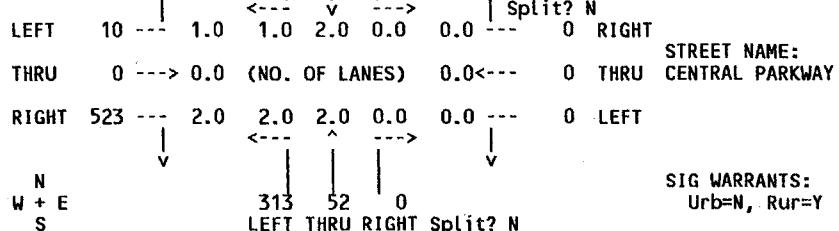
INTERSECTION 16 FALCON/CENTRAL PARKWAY  
Count DateCITY OF DUBLIN  
Time Peak Hour

CCTA METHOD

RIGHT THRU LEFT

4-PHASE SIGNAL

10 223 0



STREET NAME: FALLON

		ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB	THRU (T)	52	52	3300	0.0158	
	LEFT (L)	313	313	3000	0.1043	0.1043
SB	RIGHT (R)	10	0 *	1650	0.0000	
	THRU (T)	223	223	3300	0.0676	0.0676
EB	RIGHT (R)	523	351 *	3000	0.1170	0.1170
	LEFT (L)	10	10	1650	0.0061	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.29

INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED

INT=MASTER.INT, VOL=BACKGRND.AMV+TRANSCTR.AMV, CAP=C..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base

06/29/01

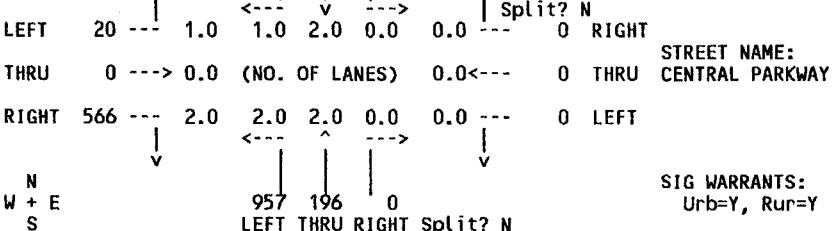
INTERSECTION 16 FALCON/CENTRAL PARKWAY  
Count DateCITY OF DUBLIN  
Time Peak Hour

CCTA METHOD

RIGHT THRU LEFT

4-PHASE SIGNAL

10 175 0



STREET NAME: FALLON

		ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB	THRU (T)	196	196	3300	0.0594	
	LEFT (L)	957	957	3000	0.3190	0.3190
SB	RIGHT (R)	10	0 *	1650	0.0000	
	THRU (T)	175	175	3300	0.0530	0.0530
EB	RIGHT (R)	566	40 *	3000	0.0133	0.0133
	LEFT (L)	20	20	1650	0.0121	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.39

INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED

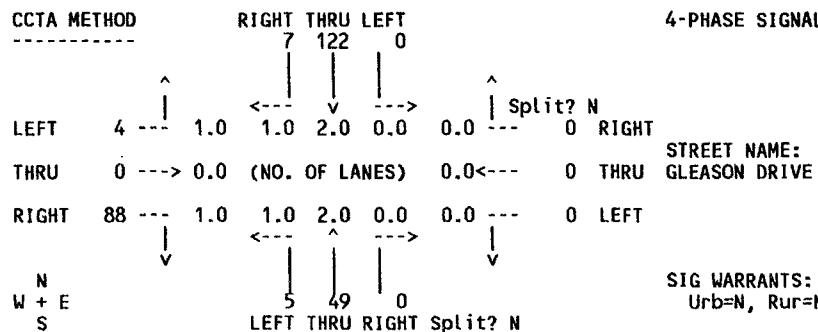
INT=MASTER.INT, VOL=BACKGRND.PMV+TRANSCTR.PMV, CAP=C..LOSCAP.TAB

BBG - Split

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base

06/29/01

INTERSECTION 17 FALCON ROAD/GLEASON DRIVE CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: FALCON ROAD

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB    THRU (T)	49	49	3300	0.0148	
LEFT (L)	5	5	1650	0.0030	0.0030
SB    RIGHT (R)	7	3 *	1650	0.0018	
THRU (T)	122	122	3300	0.0370	0.0370
EB    RIGHT (R)	88	83 *	1650	0.0503	0.0503
LEFT (L)	4	4	1650	0.0024	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.09  
INTERSECTION LEVEL OF SERVICE: A

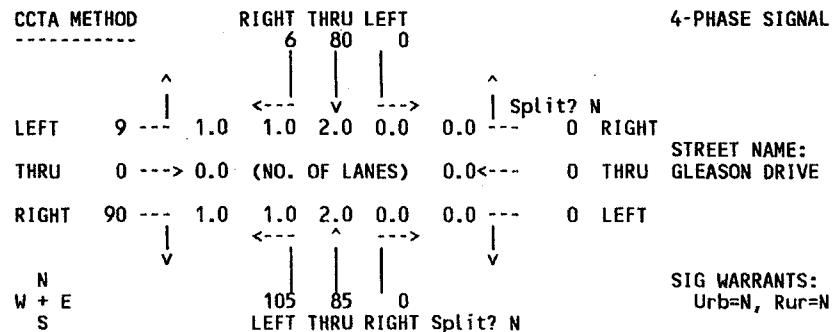
\* ADJUSTED FOR RIGHT TURN ON RED

INT=MASTER.INT,VOL=BACKGRND.AMV+TRANSCTR.AMV,CAP=C..:LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base

06/29/01

INTERSECTION 17 FALCON ROAD/GLEASON DRIVE CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: FALCON ROAD

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB    THRU (T)	85	85	3300	0.0258	
LEFT (L)	105	105	1650	0.0636	0.0636
SB    RIGHT (R)	6	0 *	1650	0.0000	
THRU (T)	80	80	3300	0.0242	0.0242
EB    RIGHT (R)	90	0 *	1650	0.0000	
LEFT (L)	9	9	1650	0.0055	0.0055

TOTAL VOLUME-TO-CAPACITY RATIO: 0.09  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED

INT=MASTER.INT,VOL=BACKGRND.PMV+TRANSCTR.PMV,CAP=C..:LOSCAP.TAB

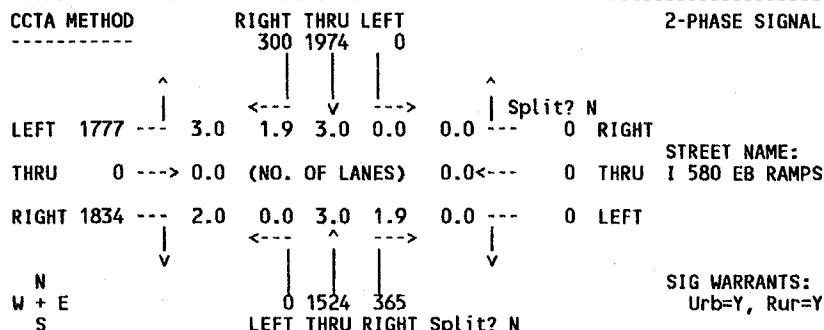
Page 1 of 2

Page 2 of 2

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base - mitigation

06/29/01

INTERSECTION 2 HACIENDA DRIVE/I 580 EB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: HACIENDA DRIVE

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	365	365	1800	0.2028	
THRU (T)	1524	1524	5400	0.2822	
SB RIGHT (R)	300	300	1800	0.1667	
THRU (T)	1974	1974	5400	0.3656	0.3656
EB RIGHT (R)	1834	1834	3273	0.5603	-0.5603
LEFT (L)	1777	1777	4695	0.3785	0.3785

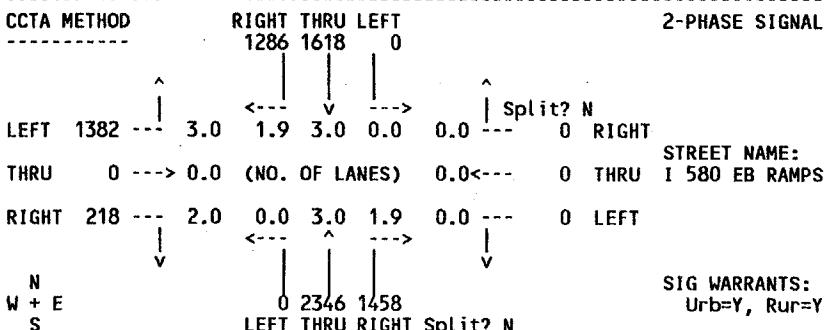
TOTAL VOLUME-TO-CAPACITY RATIO: 0.93 0.74  
INTERSECTION LEVEL OF SERVICE: C

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MITIG8.INT, VOL=BACKGRND.AMV+TRANSCTR.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base - mitigation

06/29/01

INTERSECTION 2 HACIENDA DRIVE/I 580 EB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: HACIENDA DRIVE

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	1458	1458	1800	0.8100	
THRU (T)	2346	2346	5400	0.4344	0.4344
SB RIGHT (R)	1286	1286	1800	0.7144	
THRU (T)	1618	1618	5400	0.2996	
EB RIGHT (R)	218	218	3273	0.0666	
LEFT (L)	1382	1382	4695	0.2944	0.2944

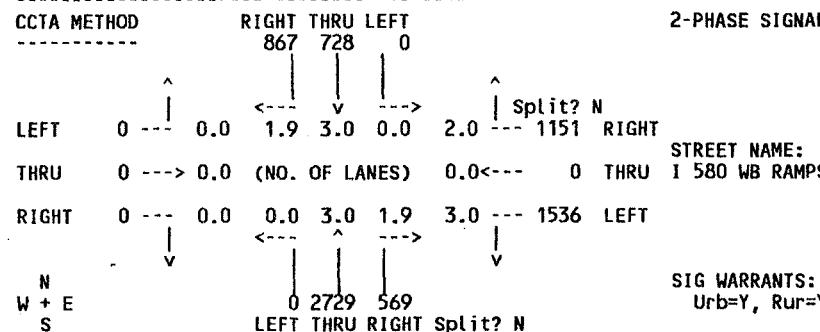
TOTAL VOLUME-TO-CAPACITY RATIO: 0.73  
INTERSECTION LEVEL OF SERVICE: C

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MITIG8.INT, VOL=BACKGRND.PMV+TRANSCTR.PMV, CAP=C:..LOSCAP.TAB

JULY 2002

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base - mitigation 06/29/01

INTERSECTION 3 HACIENDA DRIVE/I 580 WB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

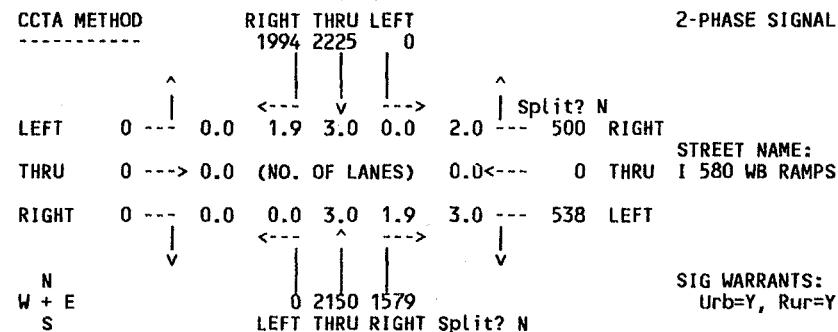
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	569	569	1800	0.3161	
THRU (T)	2729	2729	5400	0.5054	0.5054
SB RIGHT (R)	867	867	1800	0.4817	
THRU (T)	728	728	5400	0.1348	
WB RIGHT (R)	1151	1151	3273	0.3517	0.3517
LEFT (L)	1536	1536	4695	0.3272	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.86  
INTERSECTION LEVEL OF SERVICE: D

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MITIG8.INT, VOL=BACKGRND.AMV+TRANSCTR.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base - mitigation 06/29/01

INTERSECTION 3 HACIENDA DRIVE/I 580 WB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	1579	1579	1800	0.8772	
THRU (T)	2150	2150	5400	0.3981	
SB RIGHT (R)	1994	1994	1800	1.1078 **	
THRU (T)	2225	2225	5400	0.4120	0.4120
WB RIGHT (R)	500	500	3273	0.1528	0.1528
LEFT (L)	538	538	4695	0.1146	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.56  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED \*\* APPROACHING OR EXCEEDING CAPACITY  
INT=MITIG8.INT, VOL=BACKGRND.PMV+TRANSCTR.PMV, CAP=C:..LOSCAP.TAB

Page 8 of 8

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base - Mitigation 06/29/01

INTERSECTION 5 SANTA RITA ROAD/I 580 EB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

CCTA METHOD		RIGHT	THRU	LEFT	4-PHASE SIGNAL			
		495	1200	172				
LEFT	1367	3.1	1.9	2.0	1.0	2.5	524	RIGHT
THRU	161	-->	1.1	(NO. OF LANES)	0.0	<---	0	THRU I 580 EB RAMPS
RIGHT	605	-->	1.9	0.0	3.1	2.1	2.0	--- 209 LEFT
N W + E S			0	1455	576			SIG WARRANTS: Urb=Y, Rur=Y
								STREET NAME: I 580 EB RAMPS

LEFT THRU RIGHT Split? N

STREET NAME: SANTA RITA ROAD

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C		CRITICAL V/C
				RATIO	V/C	
NB RIGHT (R)	576	461 *	3000	0.1537		
THRU (T)	1455	1455	4950	0.2939		
T + R		1916	6300	0.3041	0.3041	
SB RIGHT (R)	495	495	1650	0.3000		
THRU (T)	1200	1200	3300	0.3636		
LEFT (L)	172	172	1650	0.1042	0.1042	
EB RIGHT (R)	605	605	1650	0.3667		
THRU (T)	161	161	1650	0.0976		
LEFT (L)	1367	1367	4304	0.3176		
T + L		1528	4304	0.3550	0.3550	
WB RIGHT (R)	524	211 *	3000	0.0703	0.0703	
LEFT (L)	209	209	3000	0.0697		

TOTAL VOLUME-TO-CAPACITY RATIO: 0.83  
INTERSECTION LEVEL OF SERVICE: D\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MITIG8.INT, VOL=BACKGRND.AMV+TRANSCTR.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base - Mitigation 06/29/01

INTERSECTION 5 SANTA RITA ROAD/I 580 EB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

CCTA METHOD		RIGHT	THRU	LEFT	4-PHASE SIGNAL			
		1524	881	221				
LEFT	1232	3.1	1.9	2.0	1.0	2.5	391	RIGHT
THRU	303	-->	1.1	(NO. OF LANES)	0.0	<---	0	THRU I 580 EB RAMPS
RIGHT	183	-->	1.9	0.0	3.1	2.1	2.0	--- 114 LEFT
N W + E S			0	1779	594			SIG WARRANTS: Urb=Y, Rur=Y
								STREET NAME: I 580 EB RAMPS

LEFT THRU RIGHT Split? N

STREET NAME: SANTA RITA ROAD

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C		CRITICAL V/C
				RATIO	V/C	
NB RIGHT (R)	594	531 *	3000	0.1770		
THRU (T)	1779	1779	4950	0.3594		
T + R		2310	6300	0.3667	0.3667	
SB RIGHT (R)	1524	1524	1650	0.9236 **		
THRU (T)	881	881	3300	0.2670		
LEFT (L)	221	221	1650	0.1339	0.1339	
EB RIGHT (R)	183	183	1650	0.1109		
THRU (T)	303	303	1650	0.1836		
LEFT (L)	1232	1232	4304	0.2862		
T + L		1535	4304	0.3566	0.3566	
WB RIGHT (R)	391	0 *	3000	0.0000		
LEFT (L)	114	114	3000	0.0380	0.0380	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.90  
INTERSECTION LEVEL OF SERVICE: D\* ADJUSTED FOR RIGHT TURN ON RED \*\* APPROACHING OR EXCEEDING CAPACITY  
INT=MITIG8.INT, VOL=BACKGRND.PMV+TRANSCTR.PMV, CAP=C:..LOSCAP.TAB

88E Joe bkt

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**LEVEL OF SERVICE CALCULATIONS**  
**EXISTING + APPROVED + PENDING + PROJECT CONDITIONS**

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Table 3.6-4

## Peak Hour Intersection Levels of Service - Existing plus Approved plus Pending plus Project (Dublin Model)

Intersection	Control	Unmitigated				Mitigated			
		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
		*	LOS	*	LOS	*	LOS	*	LOS
1 Dougherty Road/Dublin Boulevard (w/Scarlett Drive Bypass)	Signal	0.75	C	0.88	D				
2 Hacienda Drive/I-580 Eastbound Ramps	Signal	<b>0.93</b>	E	0.87	D	0.75	C	0.74	C
3 Hacienda Drive/I-580 Westbound Ramps	Signal	<b>1.21</b>	F	0.76	C	0.86	D	0.57	A
4 Hacienda Drive/Dublin Boulevard	Signal	0.67	B	0.90	D				
5 Santa Rita Road/I-580 Eastbound Ramps	Signal	<b>0.99</b>	E	<b>0.98</b>	E	0.84	D	0.90	D
6 Tassajara Road/I-580 Westbound Ramps	Signal	0.80	C	0.82	D				
7 Tassajara Road/Dublin Boulevard	Signal	0.66	B	0.85	D				
8 Tassajara Road/Central Parkway**	Signal	0.44	A	0.54	A				
9 Tassajara Road/Gleason Drive**	Signal	0.52	A	0.60	A				
10 Grafton Street/Dublin Boulevard**	Signal	0.55	A	0.72	C				
11 Grafton Street/Central Parkway**	Signal	0.23	A	0.25	A				
12 Grafton Street/Gleason Drive**	Signal	0.06	A	0.06	A				
13 El Charro Road/I-580 Eastbound Ramps**	Signal	0.38	A	0.81	D				
14 Fallon Road/I-580 Westbound Ramps**	Signal	0.42	B	0.75	C				
15 Fallon Road/Dublin Boulevard**	Signal	0.54	A	0.83	D				
16 Fallon Road/Central Parkway**	Signal	0.60	A	0.67	B				
17 Fallon Road/Gleason Drive**	Signal	0.13	A	0.13	A				
18 Street D/Dublin Boulevard	One-Way STOP	13.4	C	<b>140.1</b>	F				
Street D/Dublin Boulevard – Mitigated	Signal	--	--	--	--	0.22	A	0.31	A
19 Fallon Road/ "Project Road"	One-Way STOP	<b>60.7</b>	F	<b>50.0</b>	F				
Fallon Road/ "Project Road"**	Signal	--	--	--	--	0.42	A	0.41	A
20 Street D/Central Parkway	One-Way STOP	3.3	A	3.9	A				
21 Street B/Central Parkway	One-Way STOP	3.2	A	3.2	A				

Note: \* = Volume-to-Capacity (V/C) Ratio for signalized intersections;

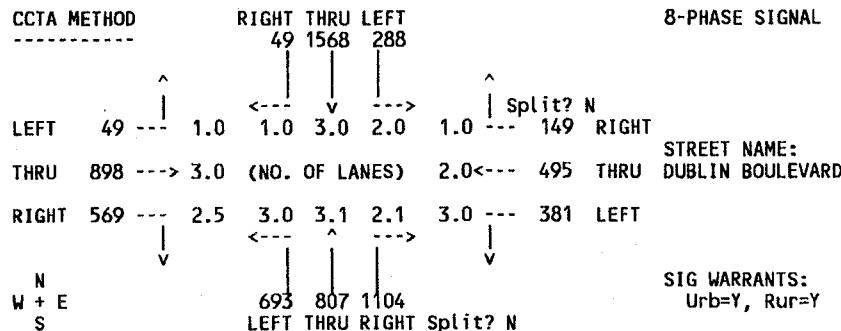
Average Delay in Seconds for stopping and yielding movements at 1-way STOP-controlled intersections.

\*\* = Traffic signals at these intersections are either under construction or are anticipated to be installed in the future.

B/E  
8/15/06

LOS Software by TJKM Transportation Consultants *w/Bypass*

Condition: am peak hour; Future Base + Project 06/26/01

INTERSECTION 1 DOUGHERTY ROAD/DUBLIN BOULEVARD CITY OF DUBLIN  
Count Date Time Peak Hour

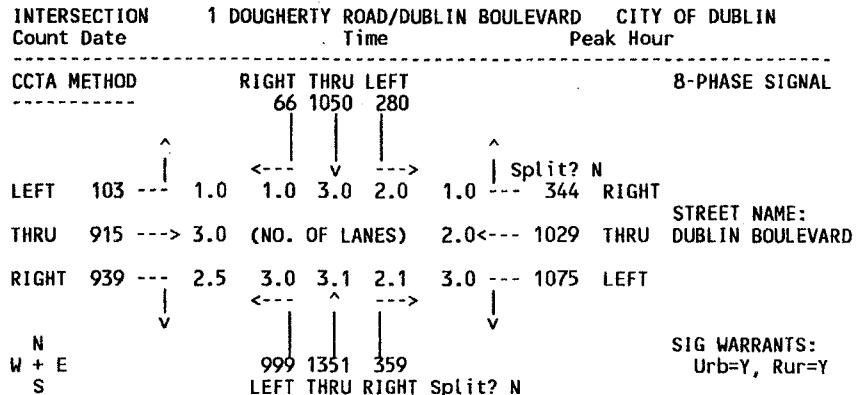
STREET NAME: DOUGHERTY ROAD

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	Critical V/C
NB RIGHT (R)	1104	958 *	3000	0.3193	
THRU (T)	807	807	4950	0.1630	
LEFT (L)	693	693	4304	0.1610	0.1610
T + R	1765	6300	0.2802		
SB RIGHT (R)	49	0 *	1650	0.0000	
THRU (T)	1568	1568	4950	0.3168	0.3168
LEFT (L)	288	288	3000	0.0960	
EB RIGHT (R)	569	86 *	3000	0.0287	
THRU (T)	898	898	4950	0.1814	0.1814
LEFT (L)	49	49	1650	0.0297	
WB RIGHT (R)	149	0 *	1650	0.0000	
THRU (T)	495	495	3300	0.1500	
LEFT (L)	381	381	4304	0.0885	0.0885

TOTAL VOLUME-TO-CAPACITY RATIO: 0.75  
INTERSECTION LEVEL OF SERVICE: C\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT, VOL=BACKGRND.AMV+MIDPT.AMV, CAP=C:.. LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base + Project 06/26/01



STREET NAME: DOUGHERTY ROAD

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	Critical V/C
NB RIGHT (R)	359	0 *	3000	0.0000	
THRU (T)	1351	1351	4950	0.2729	
LEFT (L)	999	999	4304	0.2321	0.2321
T + R	1351	6300	0.2144		
SB RIGHT (R)	66	0 *	1650	0.0000	
THRU (T)	1050	1050	4950	0.2121	0.2121
LEFT (L)	280	280	3000	0.0933	
EB RIGHT (R)	939	243 *	3000	0.0810	
THRU (T)	915	915	4950	0.1848	0.1848
LEFT (L)	103	103	1650	0.0624	
WB RIGHT (R)	344	190 *	1650	0.1152	
THRU (T)	1029	1029	3300	0.3118	
LEFT (L)	1075	1075	4304	0.2498	0.2498

TOTAL VOLUME-TO-CAPACITY RATIO: 0.88  
INTERSECTION LEVEL OF SERVICE: D\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT, VOL=BACKGRND.PMV+MIDPT.PMV, CAP=C:.. LOSCAP.TABLSL  
JG  
883

ware by TJKM Transportation Consultants w/Bypass

Condition: am peak hour; Future Base + Project 06/26/01

SECTION 1 DOUGHERTY ROAD/DUBLIN BOULEVARD CITY OF DUBLIN  
Date Time Peak Hour

THOD	RIGHT	THRU	LEFT	8-PHASE SIGNAL		
	49	1568	288			
49	1.0	1.0	3.0	2.0	1.0	149 RIGHT
898	3.0	(NO. OF LANES)	2.0	<---	495	THRU DUBLIN BOULEVARD
693	2.5	3.0	3.1	2.1	3.0	381 LEFT
	693	807	1104			SIG WARRANTS: Urb=Y, Rur=Y
LEFT THRU RIGHT Split? N						
STREET NAME: DOUGHERTY ROAD						
MENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C	
HT (R)	1104	958 *	3000	0.3193		
U (T)	807	807	4950	0.1630		
T (L)	693	693	4304	0.1610	0.1610	
R	1765	6300	0.2802			
HT (R)	49	0 *	1650	0.0000		
U (T)	1568	1568	4950	0.3168	0.3168	
T (L)	288	288	3000	0.0960		
HT (R)	569	86 *	3000	0.0287		
U (T)	898	898	4950	0.1814	0.1814	
T (L)	49	49	1650	0.0297		
HT (R)	149	0 *	1650	0.0000		
U (T)	495	495	3300	0.1500		
T (L)	381	381	4304	0.0885	0.0885	
TOTAL VOLUME-TO-CAPACITY RATIO: 0.75						
INTERSECTION LEVEL OF SERVICE: C						
TED FOR RIGHT TURN ON RED						
TER.INT,VOL=BACKGRND.AMV+MIDPT.AMV,CAP=C..LOSCAP.TAB						

LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base + Project 06/26/01

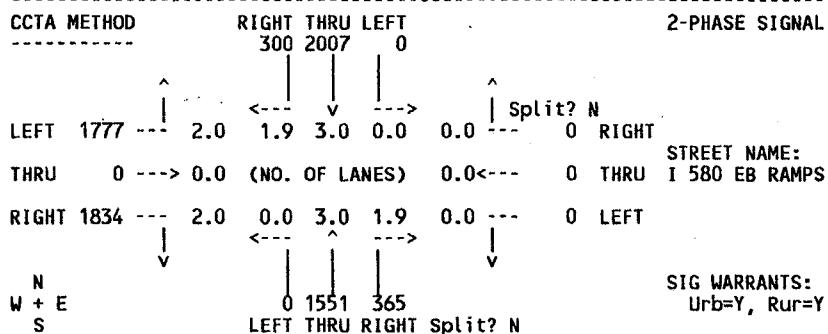
INTERSECTION 1 DOUGHERTY ROAD/DUBLIN BOULEVARD CITY OF DUBLIN  
Count Date Time Peak Hour

CCTA METHOD	RIGHT	THRU	LEFT	8-PHASE SIGNAL		
	66	1050	280			
LEFT	103	1.0	1.0	3.0	2.0	1.0 344 RIGHT
THRU	915	3.0	(NO. OF LANES)	2.0	<--- 1029	THRU DUBLIN BOULEVARD
RIGHT	939	2.5	3.0	3.1	2.1	3.0 1075 LEFT
	N	999	1351	359		SIG WARRANTS: Urb=Y, Rur=Y
	W + E	LEFT	THRU	RIGHT	Split? N	
	S					
STREET NAME: DOUGHERTY ROAD						
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C	
NB	RIGHT (R)	359	0 *	3000	0.0000	
	THRU (T)	1351	1351	4950	0.2729	
	LEFT (L)	999	999	4304	0.2321	0.2321
	T + R	1351		6300	0.2144	
SB	RIGHT (R)	66	0 *	1650	0.0000	
	THRU (T)	1050	1050	4950	0.2121	0.2121
	LEFT (L)	280	280	3000	0.0933	
EB	RIGHT (R)	939	243 *	3000	0.0810	
	THRU (T)	915	915	4950	0.1848	0.1848
	LEFT (L)	103	103	1650	0.0624	
WB	RIGHT (R)	344	190 *	1650	0.1152	
	THRU (T)	1029	1029	3300	0.3118	
	LEFT (L)	1075	1075	4304	0.2498	0.2498
TOTAL VOLUME-TO-CAPACITY RATIO: 0.88						
INTERSECTION LEVEL OF SERVICE: D						
* ADJUSTED FOR RIGHT TURN ON RED						
INT=MASTER.INT,VOL=BACKGRND.PMV+MIDPT.PMV,CAP=C..LOSCAP.TAB						

88E JRC

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base + Project 06/29/01

INTERSECTION 2 HACIENDA DRIVE/I 580 EB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

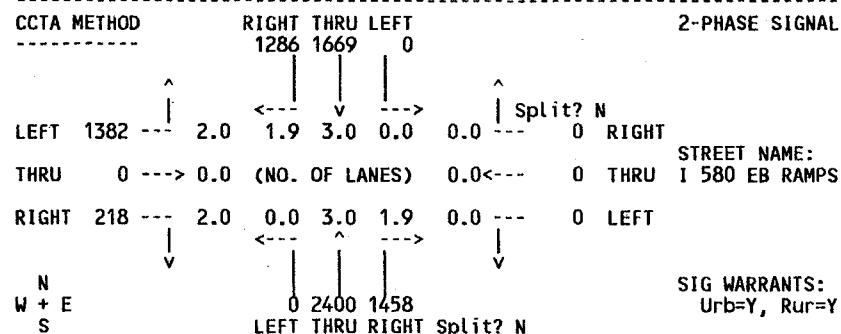
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	365	365	1800	0.2028	
THRU (T)	1551	1551	5400	0.2872	
SB RIGHT (R)	300	300	1800	0.1667	
THRU (T)	2007	2007	5400	0.3717	0.3717
EB RIGHT (R)	1834	1834	3273	0.5603	0.5603
LEFT (L)	1777	1777	3273	0.5429	
<hr/>					
TOTAL VOLUME-TO-CAPACITY RATIO: 0.93					
INTERSECTION LEVEL OF SERVICE: E					

\* ADJUSTED FOR RIGHT TURN ON RED

INT=MASTER.INT, VOL=BACKGRND.AMV+TRANSCTR.AMV+MIDPT.AMV, CAP=C...LOSCAP.

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base + Project 06/29/01

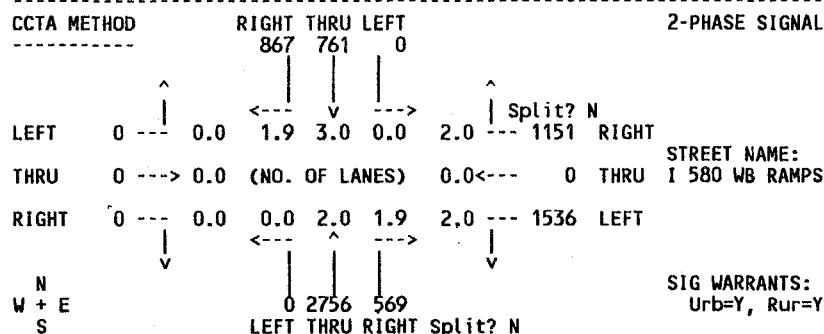
INTERSECTION 2 HACIENDA DRIVE/I 580 EB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	1458	1458	1800	0.8100	
THRU (T)	2400	2400	5400	0.4444	0.4444
SB RIGHT (R)	1286	1286	1800	0.7144	
THRU (T)	1669	1669	5400	0.3091	
EB RIGHT (R)	218	218	3273	0.0666	
LEFT (L)	1382	1382	3273	0.4222	0.4222
<hr/>					

TOTAL VOLUME-TO-CAPACITY RATIO: 0.87  
INTERSECTION LEVEL OF SERVICE: D\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT, VOL=BACKGRND.PMV+TRANSCTR.PMV+MIDPT.PMV, CAP=C...LOSCAP.Page 5 of 5  
BBE

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base + Project 06/29/01

INTERSECTION 3 HACIENDA DRIVE/I 580 WB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

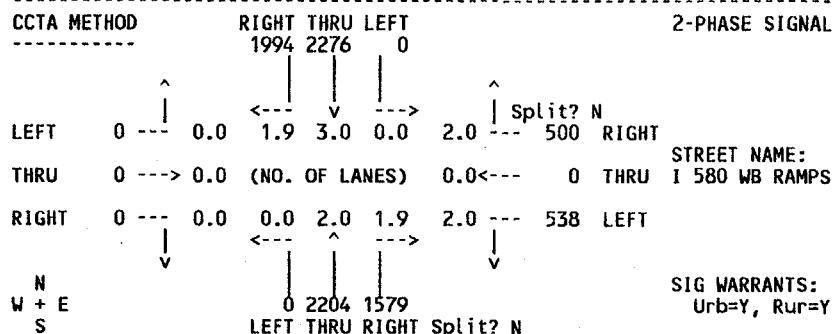
STREET NAME: HACIENDA DRIVE

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	569	569	1800	0.3161	.7409
THRU (T)	2756	2756	3600	0.7656	-0.7656
SB RIGHT (R)	867	867	1800	0.4817	
THRU (T)	761	761	5400	0.1409	
WB RIGHT (R)	1151	1151	3273	0.3517	
LEFT (L)	1536	1536	3273	0.4693	0.4693

TOTAL VOLUME-TO-CAPACITY RATIO: 1.23 (1.2)  
INTERSECTION LEVEL OF SERVICE: F\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT, VOL=BACKGRND.AMV+TRANSCTR.AMV+MIDPT.AMV, CAP=C..LOSCAP.

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base + Project 06/29/01

INTERSECTION 3 HACIENDA DRIVE/I 580 WB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: HACIENDA DRIVE

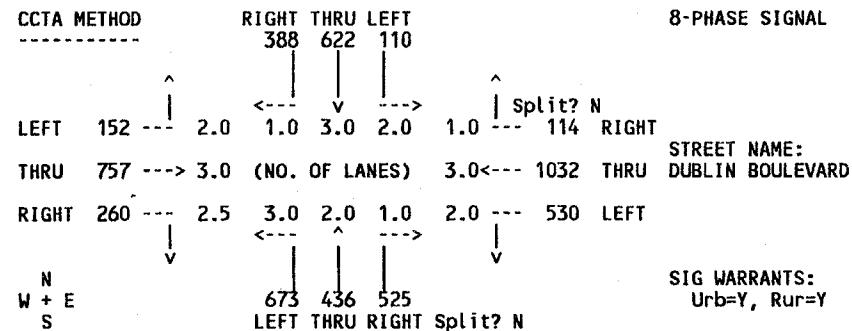
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	1579	1579	1800	0.8772	.5925
THRU (T)	2204	2204	3600	0.6122	0.6122
SB RIGHT (R)	1994	1994	1800	1.1078 **	
THRU (T)	2276	2276	5400	0.4215	
WB RIGHT (R)	500	500	3273	0.1528	
LEFT (L)	538	538	3273	0.1644	0.1644

TOTAL VOLUME-TO-CAPACITY RATIO: 0.78 (0.76)  
INTERSECTION LEVEL OF SERVICE: C\* ADJUSTED FOR RIGHT TURN ON RED      \*\* APPROACHING OR EXCEEDING CAPACITY  
INT=MASTER.INT, VOL=BACKGRND.PMV+TRANSCTR.PMV+MIDPT.PMV, CAP=C..LOSCAP.

88E JCH 25

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base + Project 07/03/01

INTERSECTION 4 HACIENDA DRIVE/DUBLIN BOULEVARD CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: HACIENDA DRIVE

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	525	234 *	1650	0.1418	
THRU (T)	436	436	3300	0.1321	
LEFT (L)	673	673	4304	0.1564	0.1564
SB RIGHT (R)	388	304 *	1650	0.1842	0.1842
THRU (T)	622	622	4950	0.1257	
LEFT (L)	110	110	3000	0.0367	
EB RIGHT (R)	260	0 *	3000	0.0000	
THRU (T)	757	757	4950	0.1529	0.1529
LEFT (L)	152	152	3000	0.0507	
WB RIGHT (R)	114	54 *	1650	0.0327	
THRU (T)	1032	1032	4950	0.2085	
LEFT (L)	530	530	3000	0.1767	0.1767

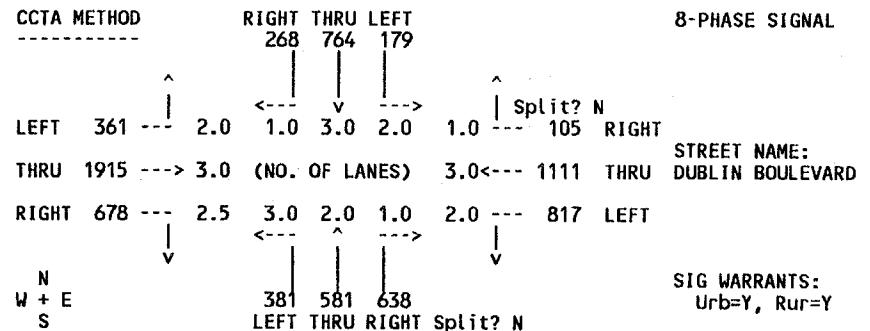
TOTAL VOLUME-TO-CAPACITY RATIO: 0.67  
INTERSECTION LEVEL OF SERVICE: B

\* ADJUSTED FOR RIGHT TURN ON RED

INT=MASTER.INT, VOL=BACKGRND.AMV+TRANSCTR.AMV+MIDPT.AMV, CAP=C...LOSCAP.

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base + Project 07/03/01

INTERSECTION 4 HACIENDA DRIVE/DUBLIN BOULEVARD CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: HACIENDA DRIVE

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	638	189 *	1650	0.1145	
THRU (T)	581	581	3300	0.1761	
LEFT (L)	381	381	4304	0.0885	0.0885
SB RIGHT (R)	268	69 *	1650	0.0418	
THRU (T)	764	764	4950	0.1543	0.1543
LEFT (L)	179	179	3000	0.0597	
EB RIGHT (R)	678	412 *	3000	0.1373	
THRU (T)	1915	1915	4950	0.3869	0.3869
LEFT (L)	361	361	3000	0.1203	
WB RIGHT (R)	105	7 *	1650	0.0042	
THRU (T)	1111	1111	4950	0.2244	
LEFT (L)	817	817	3000	0.2723	0.2723

TOTAL VOLUME-TO-CAPACITY RATIO: 0.90  
INTERSECTION LEVEL OF SERVICE: D

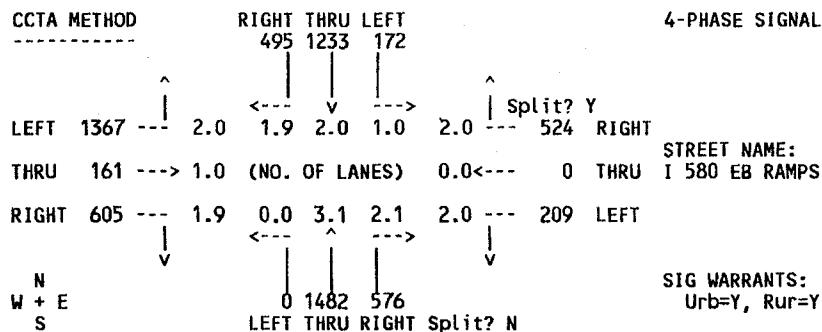
\* ADJUSTED FOR RIGHT TURN ON RED

INT=MASTER.INT, VOL=BACKGRND.PMV+TRANSCTR.PMV+MIDPT.PMV, CAP=C...LOSCAP.

BEE Geese

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base + Project 06/29/01

INTERSECTION 5 SANTA RITA ROAD/I 580 EB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

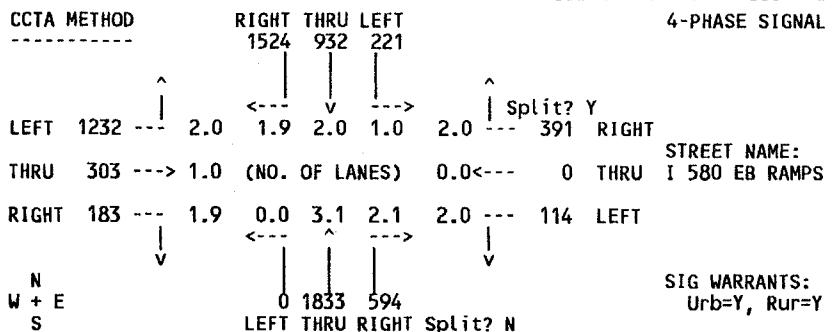
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	576	461 *	3000	0.1537	
THRU (T)	1482	1482	4950	0.2994	
T + R		1943	6300	0.3084	0.3084
SB RIGHT (R)	495	495	1650	0.3000	
THRU (T)	1233	1233	3300	0.3736	
LEFT (L)	172	172	1650	0.1042	0.1042
EB RIGHT (R)	605	605	1650	0.3667	
THRU (T)	161	161	1650	0.0976	
LEFT (L)	1367	1367	3000	0.4557	0.4557
WB RIGHT (R)	524	352 *	3000	0.1173	0.1173
LEFT (L)	209	209	3000	0.0697	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.99  
INTERSECTION LEVEL OF SERVICE: E

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT, VOL=BACKGRND.AMV+TRANSCTR.AMV+MIDPT.AMV, CAP=C...LOSCAP.

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base + Project 06/29/01

INTERSECTION 5 SANTA RITA ROAD/I 580 EB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	594	531 *	3000	0.1770	
THRU (T)	1833	1833	4950	0.3703	
T + R		2364	6300	0.3752	0.3752
SB RIGHT (R)	1524	1524	1650	0.9236 **	
THRU (T)	932	932	3300	0.2824	
LEFT (L)	221	221	1650	0.1339	0.1339
EB RIGHT (R)	183	183	1650	0.1109	
THRU (T)	303	303	1650	0.1836	
LEFT (L)	1232	1232	3000	0.4107	0.4107
WB RIGHT (R)	391	170 *	3000	0.0567	0.0567
LEFT (L)	114	114	3000	0.0380	

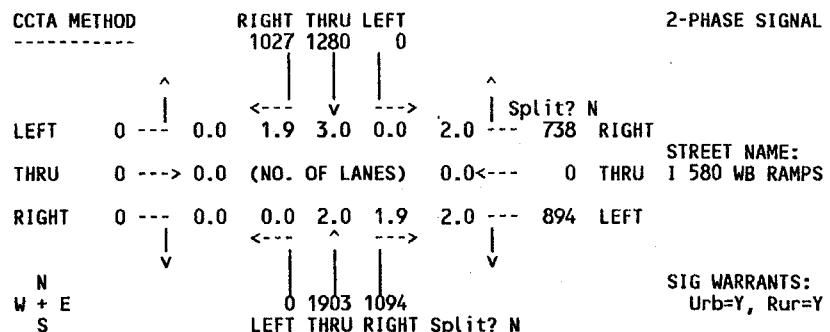
TOTAL VOLUME-TO-CAPACITY RATIO: 0.98  
INTERSECTION LEVEL OF SERVICE: E

\* ADJUSTED FOR RIGHT TURN ON RED \*\* APPROACHING OR EXCEEDING CAPACITY  
INT=MASTER.INT, VOL=BACKGRND.PMV+TRANSCTR.PMV+MIDPT.PMV, CAP=C...LOSCAP.

SEE PAGE 95

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base + Project 06/29/01

INTERSECTION 6 TASSAJARA ROAD/I 580 WB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: TASSAJARA ROAD

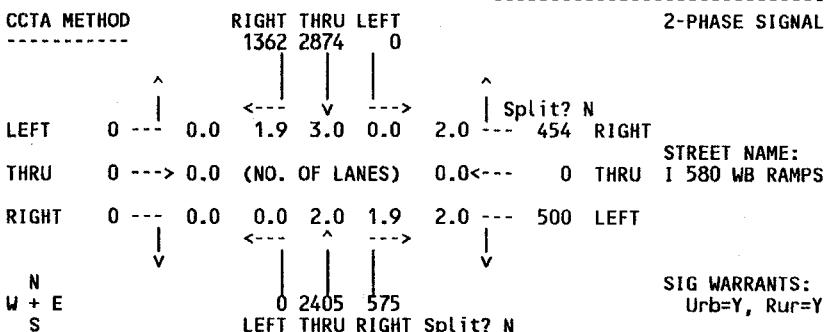
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	1094	1094	1800	0.6078	
THRU (T)	1903	1903	3600	0.5286	0.5286
SB RIGHT (R)	1027	1027	1800	0.5706	
THRU (T)	1280	1280	5400	0.2370	
WB RIGHT (R)	738	738	3273	0.2255	
LEFT (L)	894	894	3273	0.2731	0.2731

TOTAL VOLUME-TO-CAPACITY RATIO: 0.80  
INTERSECTION LEVEL OF SERVICE: C

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=BACKGRND.AMV+TRANSCTR.AMV+MIDPT.AMV,CAP=C:..LOSCAP.

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base + Project 06/29/01

INTERSECTION 6 TASSAJARA ROAD/I 580 WB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: TASSAJARA ROAD

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	575	575	1800	0.3194	
THRU (T)	2405	2405	3600	0.6681	0.6681
SB RIGHT (R)	1362	1362	1800	0.7567	
THRU (T)	2874	2874	5400	0.5322	
WB RIGHT (R)	454	454	3273	0.1387	
LEFT (L)	500	500	3273	0.1528	0.1528

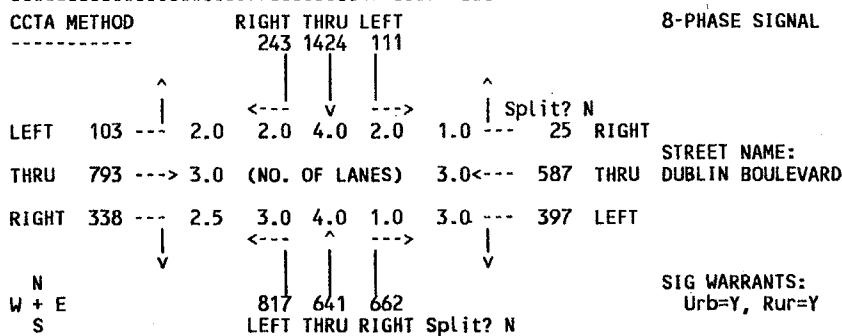
TOTAL VOLUME-TO-CAPACITY RATIO: 0.82  
INTERSECTION LEVEL OF SERVICE: D

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=BACKGRND.PMV+TRANSCTR.PMV+MIDPT.PMV,CAP=C:..LOSCAP.

251  
286  
386

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base + Project 06/29/01

INTERSECTION 7 TASSAJARA ROAD/DUBLIN BOULEVARD CITY OF DUBLIN  
Count Date Time Peak Hour

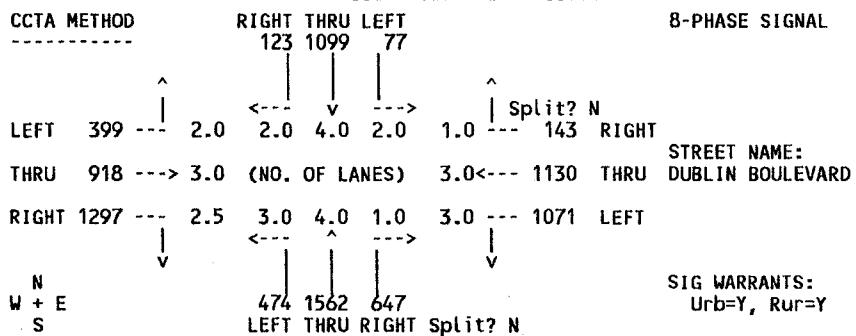
STREET NAME: TASSAJARA ROAD

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	662	510 *	1650	0.3091	
THRU (T)	641	641	6600	0.0971	
LEFT (L)	817	817	4304	0.1898	0.1898
SB RIGHT (R)	243	186 *	3000	0.0620	
THRU (T)	1424	1424	6600	0.2158	0.2158
LEFT (L)	111	111	3000	0.0370	
EB RIGHT (R)	338	0 *	3000	0.0000	
THRU (T)	793	793	4950	0.1602	0.1602
LEFT (L)	103	103	3000	0.0343	
WB RIGHT (R)	25	0 *	1650	0.0000	
THRU (T)	587	587	4950	0.1186	
LEFT (L)	397	397	4304	0.0922	0.0922

TOTAL VOLUME-TO-CAPACITY RATIO: 0.66  
INTERSECTION LEVEL OF SERVICE: B\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=BACKGRND.AMV+TRANSCTR.AMV+MIDPT.AMV,CAP=C:..LOSCAP.

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base + Project 06/29/01

INTERSECTION 7 TASSAJARA ROAD/DUBLIN BOULEVARD CITY OF DUBLIN  
Count Date Time Peak Hour

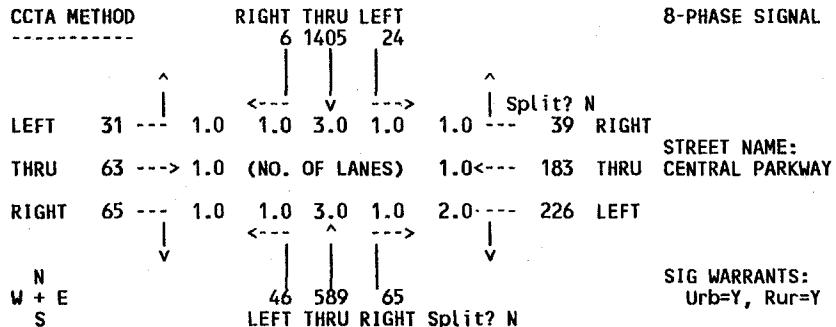
STREET NAME: TASSAJARA ROAD

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	647	236 *	1650	0.1430	
THRU (T)	1562	1562	6600	0.2367	
LEFT (L)	474	474	4304	0.1101	0.1101
SB RIGHT (R)	123	0 *	3000	0.0000	
THRU (T)	1099	1099	6600	0.1665	0.1665
LEFT (L)	77	77	3000	0.0257	
EB RIGHT (R)	1297	967 *	3000	0.3223	0.3223
THRU (T)	918	918	4950	0.1855	
LEFT (L)	399	399	4304	0.1330	
WB RIGHT (R)	143	101 *	1650	0.0612	
THRU (T)	1130	1130	4950	0.2283	
LEFT (L)	1071	1071	4304	0.2488	0.2488

TOTAL VOLUME-TO-CAPACITY RATIO: 0.85  
INTERSECTION LEVEL OF SERVICE: D\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=BACKGRND.PMV+TRANSCTR.PMV+MIDPT.PMV,CAP=C:..LOSCAP.4/28/08  
886

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base + Project 06/29/01

INTERSECTION 8 TASSAJARA ROAD/CENTRAL PARKWAY CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: TASSAJARA ROAD

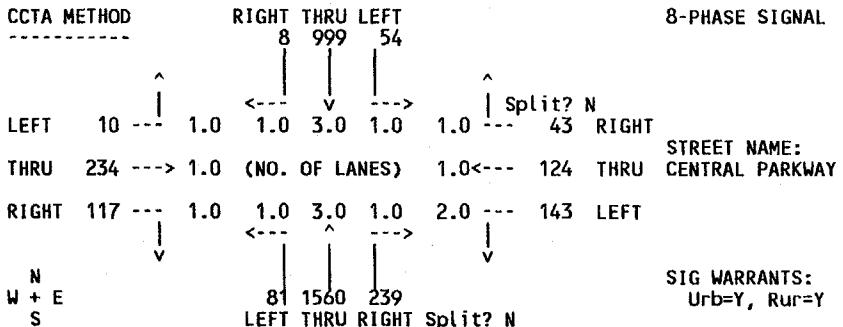
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	65	0 *	1650	0.0000	
THRU (T)	589	589	4950	0.1190	
LEFT (L)	46	46	1650	0.0279	0.0279
SB RIGHT (R)	6	0 *	1650	0.0000	
THRU (T)	1405	1405	4950	0.2838	0.2838
LEFT (L)	24	24	1650	0.0145	
EB RIGHT (R)	65	19 *	1650	0.0115	
THRU (T)	63	63	1650	0.0382	
LEFT (L)	31	31	1650	0.0188	0.0188
WB RIGHT (R)	39	15 *	1650	0.0091	
THRU (T)	183	183	1650	0.1109	0.1109
LEFT (L)	226	226	3000	0.0753	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.44  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT, VOL=BACKGRND.AMV+TRANSCTR.AMV+MIDPT.AMV, CAP=C...LOSCAP.

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base + Project 06/29/01

INTERSECTION 8 TASSAJARA ROAD/CENTRAL PARKWAY CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: TASSAJARA ROAD

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	239	160 *	1650	0.0970	
THRU (T)	1560	1560	4950	0.3152	0.3152
LEFT (L)	81	81	1650	0.0491	
SB RIGHT (R)	8	0 *	1650	0.0000	
THRU (T)	999	999	4950	0.2018	
LEFT (L)	54	54	1650	0.0327	0.0327
EB RIGHT (R)	117	36 *	1650	0.0218	
THRU (T)	234	234	1650	0.1418	0.1418
LEFT (L)	10	10	1650	0.0061	
WB RIGHT (R)	43	0 *	1650	0.0000	
THRU (T)	124	124	1650	0.0752	
LEFT (L)	143	143	3000	0.0477	0.0477

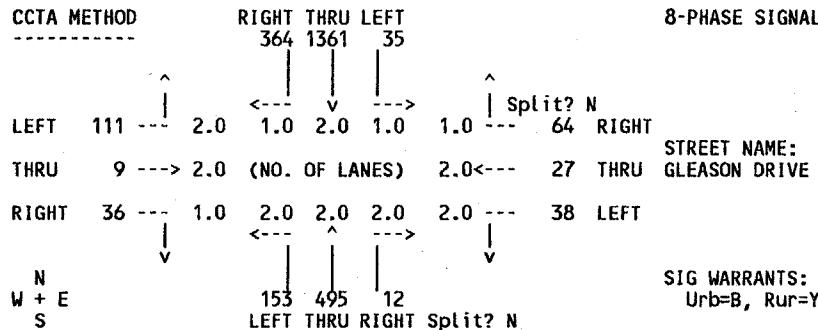
TOTAL VOLUME-TO-CAPACITY RATIO: 0.54  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT, VOL=BACKGRND.PMV+TRANSCTR.PMV+MIDPT.PMV, CAP=C...LOSCAP.

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## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base + Project 06/29/01

INTERSECTION 9 TASSAJARA ROAD/GLEASON DRIVE CITY OF DUBLIN  
Count Date Time Peak Hour

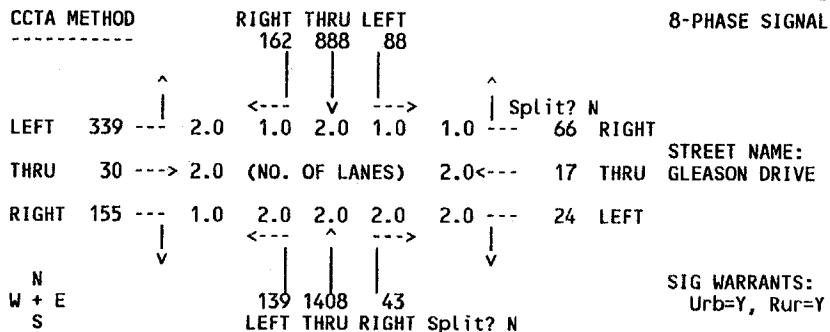
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	12	0 *	3000	0.0000	
THRU (T)	495	495	3300	0.1500	
LEFT (L)	153	153	3000	0.0510	0.0510
SB RIGHT (R)	364	303 *	1650	0.1836	
THRU (T)	1361	1361	3300	0.4124	0.4124
LEFT (L)	35	35	1650	0.0212	
EB RIGHT (R)	36	0 *	1650	0.0000	
THRU (T)	9	9	3300	0.0027	
LEFT (L)	111	111	3000	0.0370	0.0370
WB RIGHT (R)	64	29 *	1650	0.0176	0.0176
THRU (T)	27	27	3300	0.0082	
LEFT (L)	38	38	3000	0.0127	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.52  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT, VOL=BACKGRND.AMV+TRANSCTR.AMV+MIDPT.AMV, CAP=C:..LOSCAP.

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base + Project 06/29/01

INTERSECTION 9 TASSAJARA ROAD/GLEASON DRIVE CITY OF DUBLIN  
Count Date Time Peak Hour

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	43	30 *	3000	0.0100	
THRU (T)	1408	1408	3300	0.4267	0.4267
LEFT (L)	139	139	3000	0.0463	
SB RIGHT (R)	162	0 *	1650	0.0000	
THRU (T)	888	888	3300	0.2691	
LEFT (L)	88	88	1650	0.0533	0.0533
EB RIGHT (R)	155	79 *	1650	0.0479	
THRU (T)	30	30	3300	0.0091	
LEFT (L)	339	339	3000	0.1130	0.1130
WB RIGHT (R)	66	0 *	1650	0.0000	
THRU (T)	17	17	3300	0.0052	0.0052
LEFT (L)	24	24	3000	0.0080	

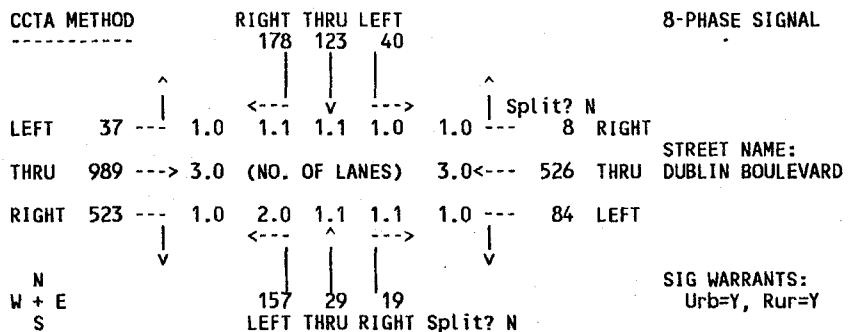
TOTAL VOLUME-TO-CAPACITY RATIO: 0.60  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT, VOL=BACKGRND.PMV+TRANSCTR.PMV+MIDPT.PMV, CAP=C:..LOSCAP.

2008-06-25

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base + Project 06/29/01

INTERSECTION 10 MAIN STREET/DUBLIN BOULEVARD CITY OF DUBLIN  
Count Date Time Peak Hour

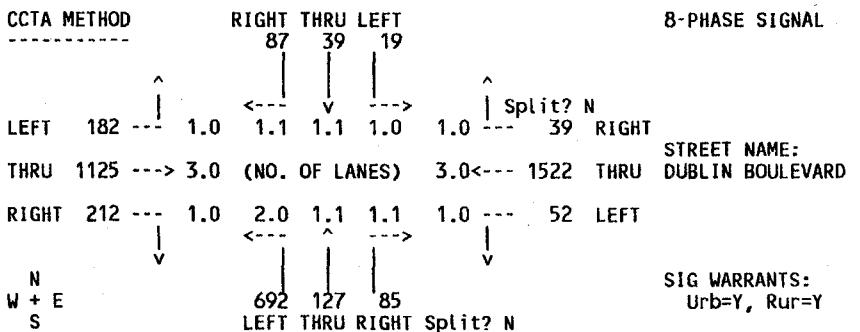
STREET NAME: MAIN STREET

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	Critical V/C
NB RIGHT (R)	19	19	1650	0.0115	
THRU (T)	29	29	1650	0.0176	
LEFT (L)	157	157	3000	0.0523	0.0523
T + R		48	1650	0.0291	
SB RIGHT (R)	178	178	1650	0.1079	
THRU (T)	123	123	1650	0.0745	
LEFT (L)	40	40	1650	0.0242	
T + R		301	1650	0.1824	0.1824
EB RIGHT (R)	523	437 *	1650	0.2648	0.2648
THRU (T)	989	989	4950	0.1998	
LEFT (L)	37	37	1650	0.0224	
WB RIGHT (R)	8	0 *	1650	0.0000	
THRU (T)	526	526	4950	0.1063	
LEFT (L)	84	84	1650	0.0509	0.0509

TOTAL VOLUME-TO-CAPACITY RATIO: 0.55  
INTERSECTION LEVEL OF SERVICE: A\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT, VOL=BACKGRND.AMV+TRANSCTR.AMV+MIDPT.AMV, CAP=C..LOSCAP.

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base + Project 06/29/01

INTERSECTION 10 MAIN STREET/DUBLIN BOULEVARD CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: MAIN STREET

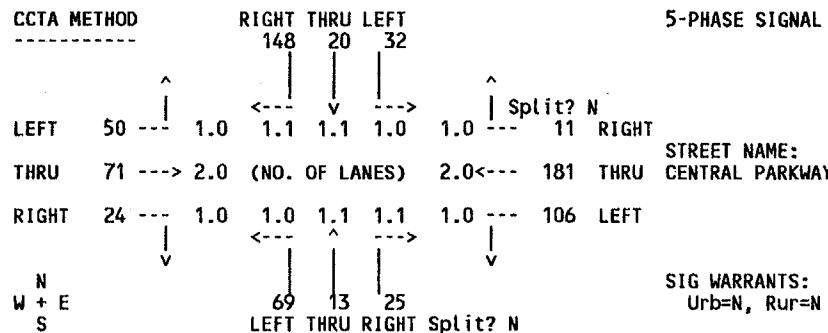
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	Critical V/C
NB RIGHT (R)	85	85	1650	0.0515	
THRU (T)	127	127	1650	0.0770	
LEFT (L)	692	692	3000	0.2307	0.2307
T + R		212	1650	0.1285	
SB RIGHT (R)	87	87	1650	0.0527	
THRU (T)	39	39	1650	0.0236	
LEFT (L)	19	19	1650	0.0115	
T + R		126	1650	0.0764	0.0764
EB RIGHT (R)	212	0 *	1650	0.0000	
THRU (T)	1125	1125	4950	0.2273	
LEFT (L)	182	182	1650	0.1103	0.1103
WB RIGHT (R)	39	20 *	1650	0.0121	
THRU (T)	1522	1522	4950	0.3075	0.3075
LEFT (L)	52	52	1650	0.0315	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.72  
INTERSECTION LEVEL OF SERVICE: C\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT, VOL=BACKGRND.PMV+TRANSCTR.PMV+MIDPT.PMV, CAP=C..LOSCAP.

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## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base + Project 06/29/01

INTERSECTION 11 MAIN STREET/CENTRAL PARKWAY CITY OF DUBLIN  
Count Date Time Peak Hour

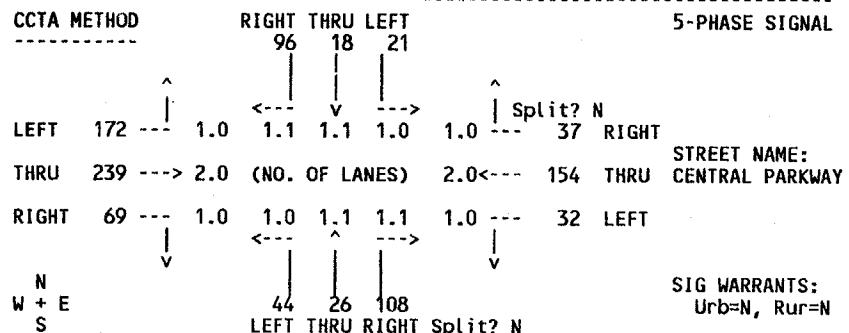
STREET NAME: MAIN STREET

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	V/C CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	25	25	1650	0.0152	
THRU (T)	13	13	1650	0.0079	
LEFT (L)	69	69	1650	0.0418	0.0418
T + R	38	1650	0.0230		
SB RIGHT (R)	148	148	1650	0.0897	
THRU (T)	20	20	1650	0.0121	
LEFT (L)	32	32	1650	0.0194	
T + R	168	1650	0.1018	0.1018	
EB RIGHT (R)	24	0 *	1650	0.0000	
THRU (T)	71	71	3300	0.0215	0.0215
LEFT (L)	50	50	1650	0.0303	
WB RIGHT (R)	11	0 *	1650	0.0000	
THRU (T)	181	181	3300	0.0548	
LEFT (L)	106	106	1650	0.0642	0.0642

TOTAL VOLUME-TO-CAPACITY RATIO: 0.23  
INTERSECTION LEVEL OF SERVICE: A\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT, VOL=BACKGRND.AMV+TRANSCR.AMV+MIDPT.AMV, CAP=C..LOSCAP.

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base + Project 06/29/01

INTERSECTION 11 MAIN STREET/CENTRAL PARKWAY CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: MAIN STREET

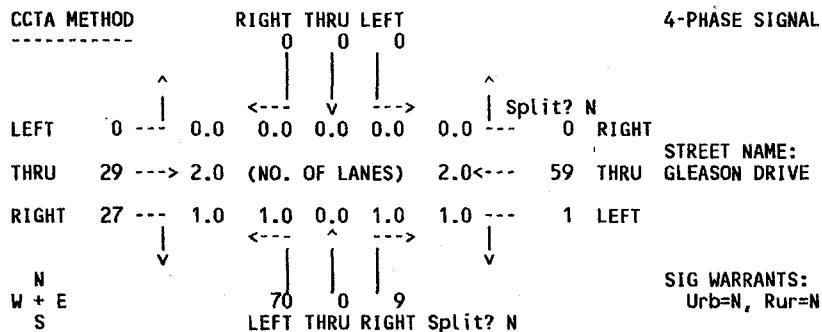
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	V/C CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	108	108	1650	0.0655	
THRU (T)	26	26	1650	0.0158	
LEFT (L)	44	44	1650	0.0267	0.0267
T + R	134	1650	0.0812		
SB RIGHT (R)	96	96	1650	0.0582	
THRU (T)	18	18	1650	0.0109	
LEFT (L)	21	21	1650	0.0127	
T + R	114	1650	0.0691	0.0691	
EB RIGHT (R)	69	25 *	1650	0.0152	
THRU (T)	239	239	3300	0.0724	
LEFT (L)	172	172	1650	0.1042	0.1042
WB RIGHT (R)	37	16 *	1650	0.0097	
THRU (T)	154	154	3300	0.0467	0.0467
LEFT (L)	32	32	1650	0.0194	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.25  
INTERSECTION LEVEL OF SERVICE: A\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT, VOL=BACKGRND.PMV+TRANSCR.PMV+MIDPT.PMV, CAP=C..LOSCAP.

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## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base + Project 06/29/01

INTERSECTION 12 MAIN STREET/GLEASON DRIVE CITY OF DUBLIN  
Count Date Time Peak Hour

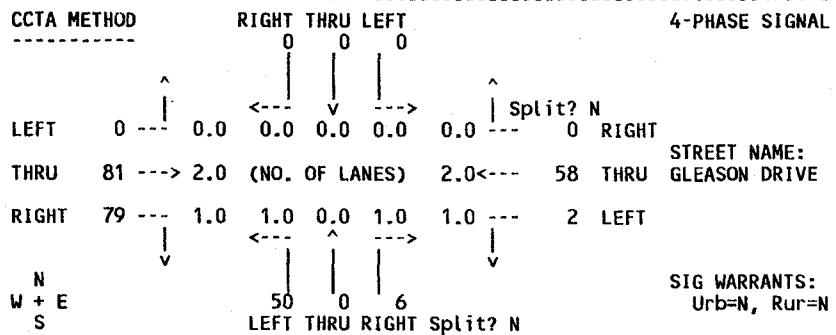
STREET NAME: MAIN STREET

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	9	8 *	1650	0.0048	
LEFT (L)	70	70	1650	0.0424	0.0424
EB RIGHT (R)	27	0 *	1650	0.0000	
THRU (T)	29	29	3300	0.0088	
WB THRU (T)	59	59	3300	0.0179	0.0179
LEFT (L)	1	1	1650	0.0006	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.06  
INTERSECTION LEVEL OF SERVICE: A\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=BACKGRND.AMV+TRANSCTR.AMV+MIDPT.AMV,CAP=C..LOSCAP.

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base + Project 06/29/01

INTERSECTION 12 MAIN STREET/GLEASON DRIVE CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: MAIN STREET

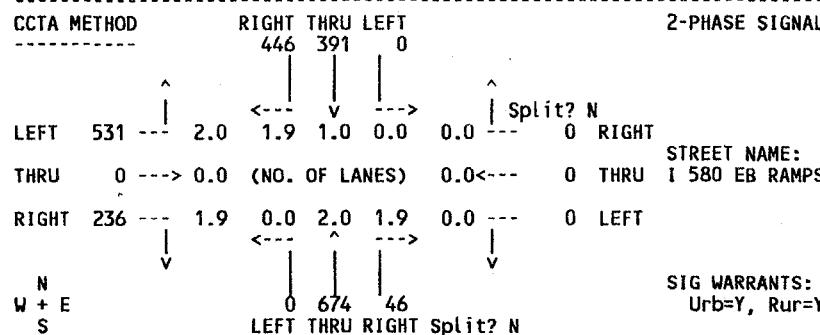
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	6	4 *	1650	0.0024	
LEFT (L)	50	50	1650	0.0303	0.0303
EB RIGHT (R)	79	29 *	1650	0.0176	
THRU (T)	81	81	3300	0.0245	0.0245
WB THRU (T)	58	58	3300	0.0176	
LEFT (L)	2	2	1650	0.0012	0.0012

TOTAL VOLUME-TO-CAPACITY RATIO: 0.06  
INTERSECTION LEVEL OF SERVICE: A\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=BACKGRND.PMV+TRANSCTR.PMV+MIDPT.PMV,CAP=C..LOSCAP.

PBC 9/9/07

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base + Project 07/02/01

INTERSECTION 13 EL CHARRO ROAD/I 580 EB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

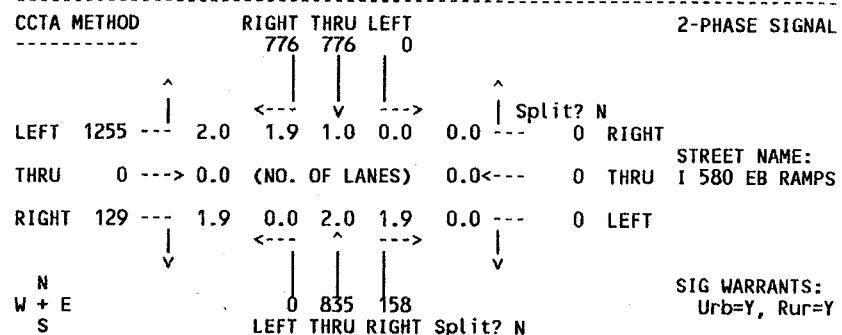
STREET NAME: EL CHARRO ROAD

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	46	46	1800	0.0256	
THRU (T)	674	674	3600	0.1872	
SB RIGHT (R)	446	446	1800	0.2478	
THRU (T)	391	391	1800	0.2172	0.2172
EB RIGHT (R)	236	236	1800	0.1311	
LEFT (L)	531	531	3273	0.1622	0.1622

TOTAL VOLUME-TO-CAPACITY RATIO: 0.38  
INTERSECTION LEVEL OF SERVICE: A\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=BACKGRND.AMV+TRANSCTR.AMV+MIDPT.AMV,CAP=C..LOSCAP.

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base + Project 07/02/01

INTERSECTION 13 EL CHARRO ROAD/I 580 EB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

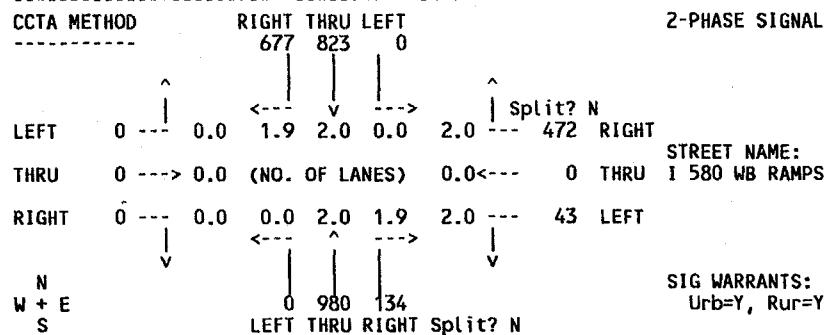
STREET NAME: EL CHARRO ROAD

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	158	158	1800	0.0878	
THRU (T)	835	835	3600	0.2319	
SB RIGHT (R)	776	776	1800	0.4311	
THRU (T)	776	776	1800	0.4311	0.4311
EB RIGHT (R)	129	129	1800	0.0717	
LEFT (L)	1255	1255	3273	0.3834	0.3834

TOTAL VOLUME-TO-CAPACITY RATIO: 0.81  
INTERSECTION LEVEL OF SERVICE: D\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=BACKGRND.PMV+TRANSCTR.PMV+MIDPT.PMV,CAP=C..LOSCAP.12/2008  
8/2008

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base + Project 07/02/01

INTERSECTION 14 FALCON ROAD/I 580 WB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

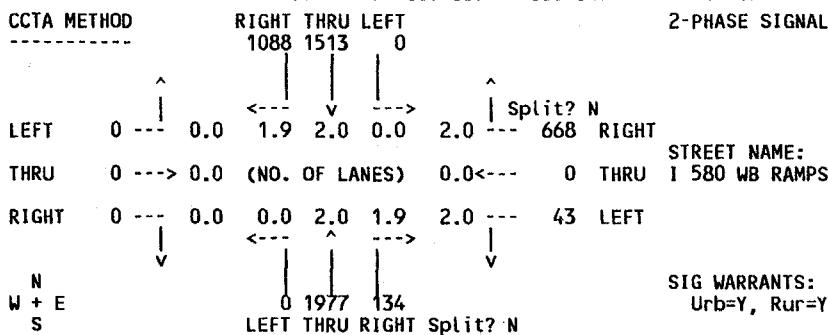
STREET NAME: FALCON ROAD

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	134	134	1800	0.0744	
THRU (T)	980	980	3600	0.2722	0.2722
SB RIGHT (R)	677	677	1800	0.3761	
THRU (T)	823	823	3600	0.2286	
WB RIGHT (R)	472	472	3273	0.1442	0.1442
LEFT (L)	43	43	3273	0.0131	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.42  
INTERSECTION LEVEL OF SERVICE: A\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT, VOL=BACKGRND.AMV+TRANSCTR.AMV+MIDPT.AMV, CAP=C:..LOSCAP.

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base + Project 07/02/01

INTERSECTION 14 FALCON ROAD/I 580 WB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: FALCON ROAD

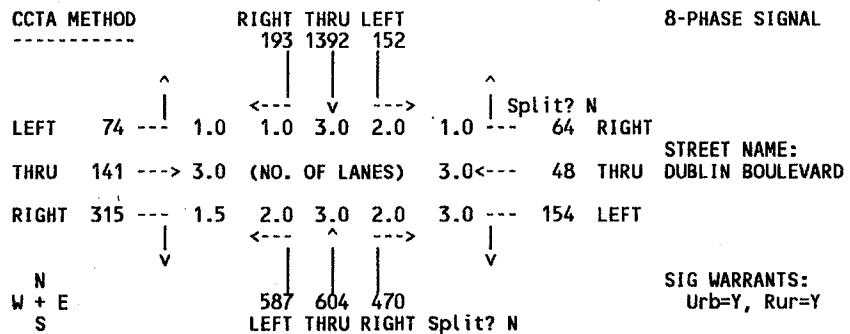
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	134	134	1800	0.0744	
THRU (T)	1977	1977	3600	0.5492	0.5492
SB RIGHT (R)	1088	1088	1800	0.6044	
THRU (T)	1513	1513	3600	0.4203	
WB RIGHT (R)	668	668	3273	0.2041	0.2041
LEFT (L)	43	43	3273	0.0131	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.75  
INTERSECTION LEVEL OF SERVICE: C\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT, VOL=BACKGRND.PMV+TRANSCTR.PMV+MIDPT.PMV, CAP=C:..LOSCAP.

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## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base + Project 07/03/01

INTERSECTION 15 FALCON ROAD/DUBLIN BOULEVARD CITY OF DUBLIN  
Count Date Time Peak Hour

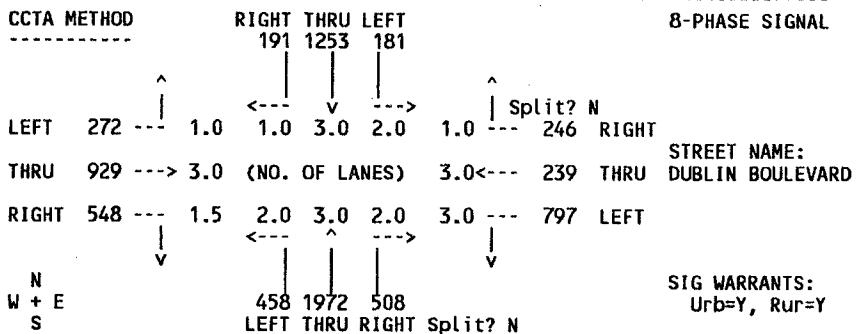
STREET NAME: FALCON ROAD

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	470	411 *	3000	0.1370	
THRU (T)	604	604	4950	0.1220	
LEFT (L)	587	587	3000	0.1957	0.1957
SB RIGHT (R)	193	119 *	1650	0.0721	
THRU (T)	1392	1392	4950	0.2812	0.2812
LEFT (L)	152	152	3000	0.0507	
EB RIGHT (R)	315	0 *	1650	0.0000	
THRU (T)	141	141	4950	0.0285	0.0285
LEFT (L)	74	74	1650	0.0448	
WB RIGHT (R)	64	0 *	1650	0.0000	
THRU (T)	48	48	4950	0.0097	
LEFT (L)	154	154	4304	0.0358	0.0358

TOTAL VOLUME-TO-CAPACITY RATIO: 0.54  
INTERSECTION LEVEL OF SERVICE: A\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=BACKGRND.AMV+TRANSTR.AMV+MIDPT.AMV,CAP=C:..LOSCAP.

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base + Project 07/03/01

INTERSECTION 15 FALCON ROAD/DUBLIN BOULEVARD CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: FALCON ROAD

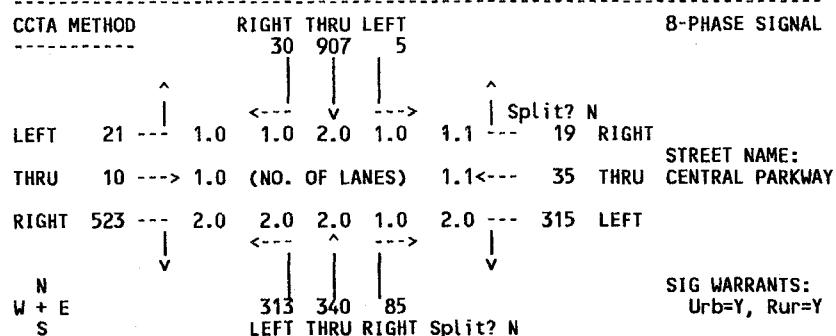
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	508	202 *	3000	0.0673	
THRU (T)	1972	1972	4950	0.3984	0.3984
LEFT (L)	458	458	3000	0.1527	
SB RIGHT (R)	191	0 *	1650	0.0000	
THRU (T)	1253	1253	4950	0.2531	
LEFT (L)	181	181	3000	0.0603	0.0603
EB RIGHT (R)	548	296 *	1650	0.1794	
THRU (T)	929	929	4950	0.1877	0.1877
LEFT (L)	272	272	1650	0.1648	
WB RIGHT (R)	246	146 *	1650	0.0885	
THRU (T)	239	239	4950	0.0483	
LEFT (L)	797	797	4304	0.1852	0.1852

TOTAL VOLUME-TO-CAPACITY RATIO: 0.83  
INTERSECTION LEVEL OF SERVICE: D\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=BACKGRND.PMV+TRANSTR.PMV+MIDPT.PMV,CAP=C:..LOSCAP.

465 8/26

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base + Project 07/02/01

INTERSECTION 16 FALCON/CENTRAL PARKWAY CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: FALCON

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	85	0 *	1650	0.0000	
THRU (T)	340	340	3300	0.1030	
LEFT (L)	313	313	3000	0.1043	0.1043
SB RIGHT (R)	30	9 *	1650	0.0055	
THRU (T)	907	907	3300	0.2748	0.2748
LEFT (L)	5	5	1650	0.0030	
EB RIGHT (R)	523	351 *	3000	0.1170	0.1170
THRU (T)	10	10	1650	0.0061	
LEFT (L)	21	21	1650	0.0127	
WB RIGHT (R)	19	19	1650	0.0115	
THRU (T)	35	35	1650	0.0212	
LEFT (L)	315	315	3000	0.1050	0.1050
T + R	54		1650	0.0327	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.60

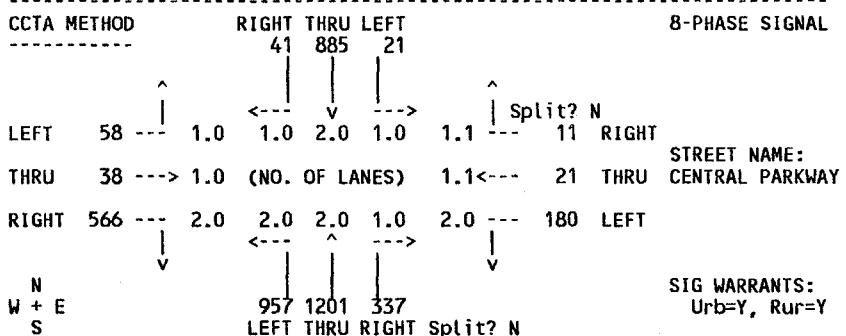
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED

INT=MASTER.INT, VOL=BACKGRND.AMV+TRANSCTR.AMV+MIDPT.AMV, CAP=C...LOSCAP.

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base + Project 07/02/01

INTERSECTION 16 FALCON/CENTRAL PARKWAY CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: FALCON

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	337	238 *	1650	0.1442	
THRU (T)	1201	1201	3300	0.3639	
LEFT (L)	957	957	3000	0.3190	0.3190
SB RIGHT (R)	41	0 *	1650	0.0000	
THRU (T)	885	885	3300	0.2682	0.2682
LEFT (L)	21	21	1650	0.0127	
EB RIGHT (R)	566	40 *	3000	0.0133	
THRU (T)	38	38	1650	0.0230	0.0230
LEFT (L)	58	58	1650	0.0352	
WB RIGHT (R)	11	11	1650	0.0067	
THRU (T)	21	21	1650	0.0127	
LEFT (L)	180	180	3000	0.0600	0.0600
T + R	32		1650	0.0194	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.67

INTERSECTION LEVEL OF SERVICE: B

\* ADJUSTED FOR RIGHT TURN ON RED

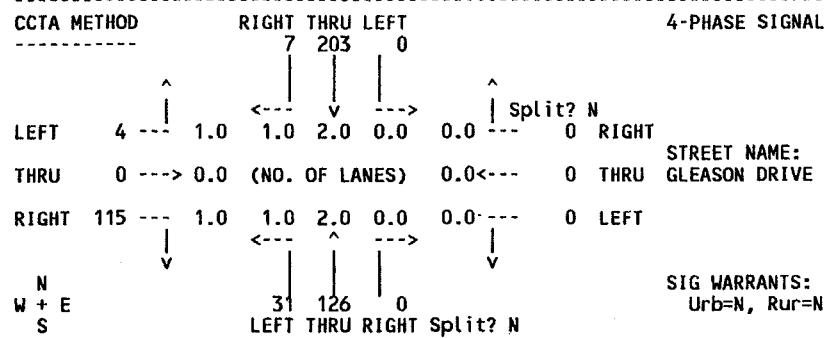
INT=MASTER.INT, VOL=BACKGRND.PMV+TRANSCTR.PMV+MIDPT.PMV, CAP=C...LOSCAP.

835 fm 992

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base + Project

06/29/01

INTERSECTION 17 FALON ROAD/GLEASON DRIVE CITY OF DUBLIN  
Count Date Time Peak Hour

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	126	126	3300	0.0382	
LEFT (L)	31	31	1650	0.0188	0.0188
SB RIGHT (R)	7	3 *	1650	0.0018	
THRU (T)	203	203	3300	0.0615	0.0615
EB RIGHT (R)	115	84 *	1650	0.0509	0.0509
LEFT (L)	4	4	1650	0.0024	

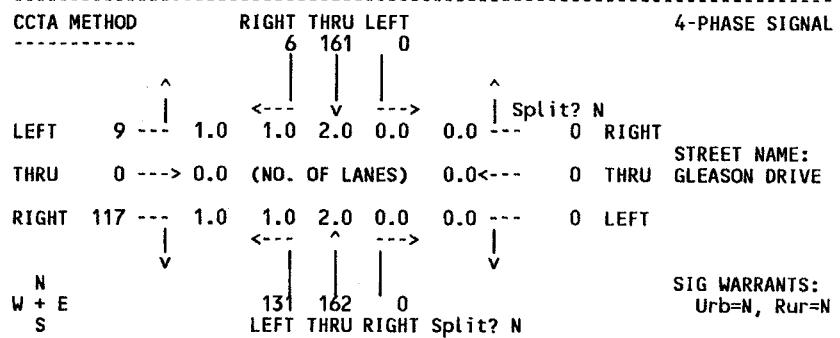
TOTAL VOLUME-TO-CAPACITY RATIO: 0.13  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=BACKGRND.AMV+TRANSCTR.AMV+MIDPT.AMV,CAP=C:.:LOSCAP.

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base + Project

06/29/01

INTERSECTION 17 FALON ROAD/GLEASON DRIVE CITY OF DUBLIN  
Count Date Time Peak Hour

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	162	162	3300	0.0491	
LEFT (L)	131	131	1650	0.0794	0.0794
SB RIGHT (R)	6	0 *	1650	0.0000	
THRU (T)	161	161	3300	0.0488	0.0488
EB RIGHT (R)	117	0 *	1650	0.0000	
LEFT (L)	9	9	1650	0.0055	0.0055

TOTAL VOLUME-TO-CAPACITY RATIO: 0.13  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=BACKGRND.PMV+TRANSCTR.PMV+MIDPT.PMV,CAP=C:.:LOSCAP.

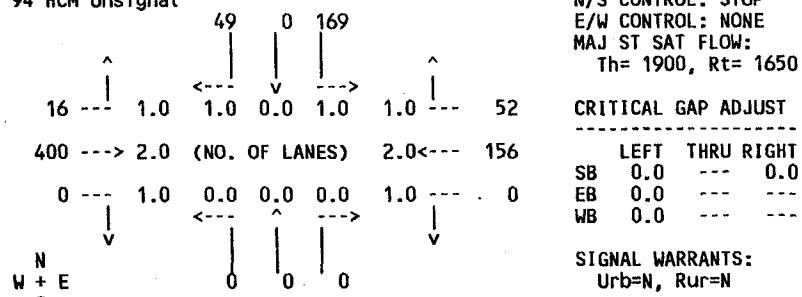
SBE Rev 0 96

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base + Project 07/02/01

INTERSECTION 18 Street D/Dublin Blvd.  
Count DateDublin  
Time Peak Hour

94 HCM Unsigned



ACCEL LANE FOR LT	% SU/RV			% COMBO VEH			% MOTOR CYCLE			PEAK HOUR		
										---FACTOR---		
	LEFT	THRU	RHT									

N	0	0	0	0.90	0.90	0.90
-	0	0	0	0.90	0.90	0.90
-	0	0	0	0.90	0.90	0.90

MOVEMENT	ORIG VOL	ADJ VOL	ADJ GAP	CONFL VOL	POT CAP	ACT CAP	MVMT DELAY	MVT LOS	APP	
									DELAY	LOS

SB L	169	207	7.0	636	415	410	17.4	C	14.1	C
R	49	60	5.5	87	1251	1251	3.0	A		

EB L	16	20	5.5	231	1288	1288	2.8	A	0.1	A
T	400	489					0.0	A		
R	0	0					0.0	A		

WB L	0	0	5.5	444	990	990	0.0	A	0.0	A
T	156	191					0.0	A		
R	52	64					0.0	A		

INT TOTAL: 3.7 A  
MINOR MOVEMENTS: ( 13.4 ) (C)

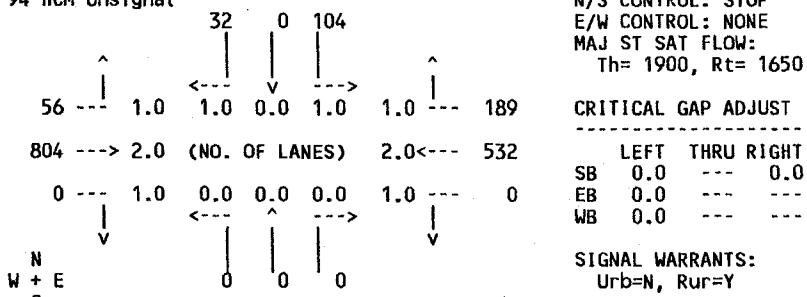
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## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base + Project 07/02/01

INTERSECTION 18 Street D/Dublin Blvd.  
Count DateDublin  
Time Peak Hour

94 HCM Unsigned



ACCEL LANE FOR LT	% SU/RV			% COMBO VEH			% MOTOR CYCLE			PEAK HOUR		
										---FACTOR---		
	LEFT	THRU	RHT									

N	0	0	0	0.90	0.90	0.90
-	0	0	0	0.90	0.90	0.90
-	0	0	0	0.90	0.90	0.90

MOVEMENT	ORIG VOL	ADJ VOL	ADJ GAP	CONFL VOL	POT CAP	ACT CAP	MVMT DELAY	MVT LOS	APP	
									DELAY	LOS

SB L	104	127	7.0	1547	109	100	254.0	F	195.2	F
R	32	39	5.5	296	981	981	3.8	A		

EB L	56	68	5.5	801	637	637	6.3	B	0.4	A
T	804	983					0.0	A		
R	0	0					0.0	A		

WB L	0	0	5.5	893	568	568	0.0	A	0.0	A
T	532	650					0.0	A		
R	189	231					0.0	A		

INT TOTAL: 15.7 C  
MINOR MOVEMENTS: (140.1) (F)

INT=MASTER.INT, VOL=MIDPT.PMV, CAP=C:..LOSCAP.TAB

8/26/08 8:27

LOS Software by TJKM Transportation Consultants

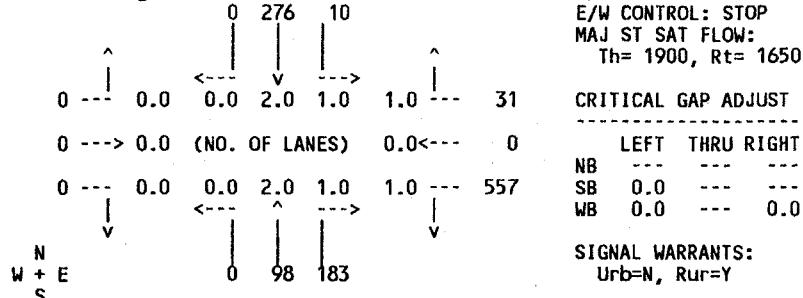
Condition: am peak hour: Future Base + Project

06/26/01

INTERSECTION 91 Fallon Rd./Project Driveway  
Count Date 19 Time

**CITY OF DUBLIN**  
**Hour**

94 HCM Unsigned



ACCEL LANE FOR LT	% SU/RV	% COMBO VEH	% MOTOR CYCLE	PEAK HOUR		
				-----FACTOR-----		
-	0	0	0	1.00	1.00	1.00
-	0	0	0	1.00	1.00	1.00
N	0	0	0	1.00	1.00	1.00

MOVEMENT	ORIG VOL	ADJ VOL	ADJ GAP	CONFL VOL	POT CAP	ACT CAP	MVMT DELAY	MVT LOS	APP DELAY	APP LOS
NB T	98	108					0.0	A	0.0	A
R	183	201					0.0	A		
SB L	18	11	5.5	281	1211	1211	3.0	A	0.1	A
T	276	304					0.0	A		
WB L	557	613	7.0	384	602	597	65.0	F	61.7	F
R	31	34	5.5	49	1308	1308	2.8	A		

INT TOTAL: 31.4 E  
MINOR MOVEMENTS: ( 60.7 ) (F)

INT=MASTER.INT,VOL=BACKGRND.AMV+MIDPT.AMV,CAP=C:..LOSCLP.TAB

LOS Software by TJKM Transportation Consultants

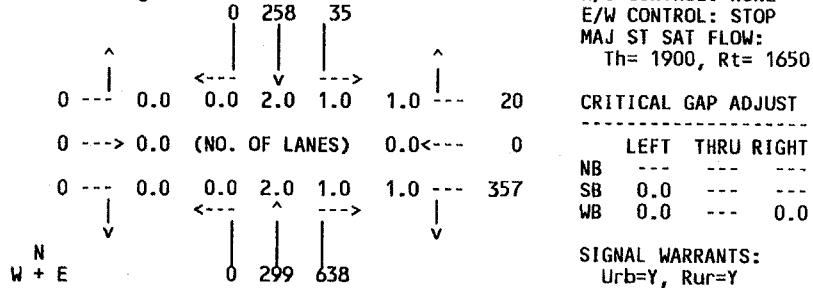
Condition: pm peak hour; Future Base + Project

06/26/01

INTERSECTION 91 Fallon Rd./Project Driveway  
Count Date 19 Time

**CITY OF DUBLIN**  
**Peak Hour**

94 HCM Unsigned



ACCEL LANE FOR LT	%	%		PEAK HOUR		
		SU/RV	COMBO VEH	MOTOR CYCLE	FACTOR	
-	0	0	0	1.00	1.00	1.00
-	0	0	0	1.00	1.00	1.00
N	0	0	0	1.00	1.00	1.00

	ORIG MOVEMENT	ADJ VOL	ADJ GAP	CONFL VOL	POT CAP	ACT CAP	MVMT DELAY	MVT LOS	APP DELAY	APP LOS
NB	T	299	329				0.0	A	0.0	A
	R	638	702				0.0	A		
SB	L	35	39	5.5	937	538	538	7.2	B	0.9
	T	258	284				0.0	A		
WB	L	357	393	7.0	592	443	418	56.8	F	54.0
	R	20	22	5.5	150	1163	1163	3.2	A	F

INT TOTAL: 12.8 C  
MINOR MOVEMENTS: ( 50.0 ) (E)

INT=MASTER.INT, VOL=BACKGRND.PMV+MIDPT.PMV, CAP=C:..LOSCLP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base + Project 07/02/01

INTERSECTION 20 Street D/Central  
Count Date Time Dublin  
Peak Hour

94 HCM Unsigned

N/S CONTROL: STOP  
E/W CONTROL: NONE  
MAJ ST SAT FLOW:  
Th= 1900, Rt= 1650

CRITICAL GAP ADJUST

0	0.0	0.0	0.0	0.0	0.0	0
0	0.0	0.0	0.0	0.0	0.0	0
29	---	1.1	(NO. OF LANES)	1.0	<--	88
62	---	1.1	1.0	0.0	1.0	1.0
						152
N	W	E	S	48	0	51

SIGNAL WARRANTS:  
Urb=N, Rur=N

ACCEL LANE FOR LT	% SU/RV		% COMBO VEH		% MOTOR CYCLE		PEAK HOUR			
	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	FACTOR	LEFT	THRU	RHT
N	0	0	0	0	1.00	1.00	1.00			
-	0	0	0	0	1.00	1.00	1.00			
-	0	0	0	0	1.00	1.00	1.00			

MOVEMENT	ORIG VOL	ADJ VOL	ADJ GAP	CONFL VOL	POT CAP	ACT CAP	MVMT DELAY	MVT LOS	APP APP	
									DELAY	LOS
NB L	48	53	6.5	300	710	651	6.0	B	4.4	A
R	51	56	5.5	60	1291	1291	2.9	A		
EB T	29	32							0.0	A
R	62	68								
TR	91	100								
WB L	152	167	5.0	91	1551	1551	2.6	A	1.6	A
T	88	97							0.0	

INT TOTAL: 1.9 A  
MINOR MOVEMENTS: ( 3.3) (A)

INT=MASTER.INT, VOL=BACKGRND.AMV+TRANSCTR.AMV+MIDPT.AMV, CAP=C:..LOSCAP.

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base + Project 07/02/01

INTERSECTION 20 Street D/Central  
Count Date Time Dublin  
Peak Hour

94 HCM Unsigned

N/S CONTROL: STOP  
E/W CONTROL: NONE  
MAJ ST SAT FLOW:  
Th= 1900, Rt= 1650

CRITICAL GAP ADJUST

0	0.0	0.0	0.0	0.0	0.0	0
0	0.0	0.0	0.0	0.0	0.0	0
101	---	1.1	(NO. OF LANES)	1.0	<--	57
69	---	1.1	1.0	0.0	1.0	1.0
						98
N	W	E	S	76	0	175

SIGNAL WARRANTS:  
Urb=N, Rur=N

ACCEL LANE FOR LT	% SU/RV		% COMBO VEH		% MOTOR CYCLE		PEAK HOUR			
	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	FACTOR	LEFT	THRU	RHT
N	0	0	0	0	1.00	1.00	1.00			
-	0	0	0	0	1.00	1.00	1.00			
-	0	0	0	0	1.00	1.00	1.00			

MOVEMENT	ORIG VOL	ADJ VOL	ADJ GAP	CONFL VOL	POT CAP	ACT CAP	MVMT DELAY	MVT LOS	APP APP	
									DELAY	LOS
NB L	76	84	6.5	290	719	677	6.1	B	4.4	A
R	175	193	5.5	135	1182	1182	3.6	A		

MOVEMENT	ORIG VOL	ADJ VOL	ADJ GAP	CONFL VOL	POT CAP	ACT CAP	MVMT DELAY	MVT LOS	APP APP	
									DELAY	LOS
EB T	101	111							0.0	A
R	69	76								
TR	170	187								

0.0 A

MOVEMENT	ORIG VOL	ADJ VOL	ADJ GAP	CONFL VOL	POT CAP	ACT CAP	MVMT DELAY	MVT LOS	APP APP	
									DELAY	LOS
WB L	98	108	5.0	170	1423	1423	2.7	A	1.7	A
T	57	63							0.0	

INT TOTAL: 2.4 A  
MINOR MOVEMENTS: ( 3.9) (A)

INT=MASTER.INT, VOL=BACKGRND.PMV+TRANSCTR.PMV+MIDPT.PMV, CAP=C:..LOSCAP.

8/26/06

8/26/06

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base + Project

07/02/01

INTERSECTION		21 Street B/Central			Dublin							
Count	Date	Time		Peak Hour								
<b>94 HCM Unsignal</b>												
133	0	5		N/S CONTROL: STOP								
				E/W CONTROL: NONE								
				MAJ ST SAT FLOW:								
				Th= 1900, Rt= 1650								
44	1.0	1.1	0.0	1.1	1.1	5	CRITICAL GAP ADJUST					
36	-->	1.0	(NO. OF LANES)	1.1<---	107		LEFT THRU RIGHT					
0	-->	0.0	0.0	0.0	0.0	0	SB 0.0 --- 0.0					
							EB 0.0 --- --					
							WB --- --- --					
N				SIGNAL WARRANTS:								
W + E		0	0	0			Urb=N, Rur=N					
S												
<b>ACCEL LANE FOR LT</b>												
	% SU/RV	% COMBO VEH	% MOTOR CYCLE	PEAK HOUR FACTOR								
				LEFT	THRU	RGHT						
N	0	0	0	1.00	1.00	1.00						
-	0	0	0	1.00	1.00	1.00						
-	0	0	0	1.00	1.00	1.00						
<b>MOVEMENT ORIG VOL</b>												
	ADJ VOL	ADJ GAP	CONFL VOL	POT CAP	ACT CAP	MVMT DELAY	MVT LOS					
SB L	5	6	6.5	190	822	803						
T	0	0	6.0	190	868	840						
R	133	146	5.5	109	1219	1219						
LTR	138	152			3.5	A						
<b>EB L VOL</b>												
	ADJ VOL	ADJ GAP	CONFL VOL	POT CAP	ACT CAP	MVMT DELAY	MVT LOS					
EB L	44	48	5.0	112	1516	1516	2.5 A					
T	36	40			0.0	A	1.3 A					
<b>WB T VOL</b>												
	ADJ VOL	ADJ GAP	CONFL VOL	POT CAP	ACT CAP	MVMT DELAY	MVT LOS					
WB T	107	118					0.0 A					
R	5	6										
TR	112	124										
INT TOTAL: 1.8 A MINOR MOVEMENTS: ( 3.2 ) (A)												

INT=MASTER.INT, VOL=BACKGRND.AMV+TRANSCTR.AMV+MIDPT.AMV, CAP=C:..LOSCAP.

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base + Project

07/02/01

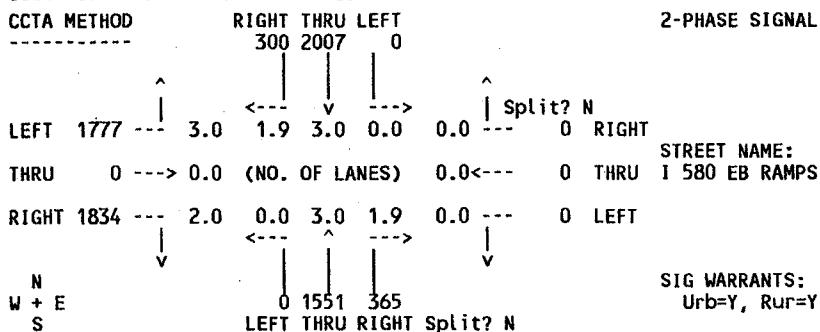
INTERSECTION		21 Street B/Central			Dublin							
Count	Date	Time		Peak Hour								
<b>94 HCM Unsignal</b>												
133	0	5		N/S CONTROL: STOP								
				E/W CONTROL: NONE								
				MAJ ST SAT FLOW:								
				Th= 1900, Rt= 1650								
44	1.0	1.1	0.0	1.1	1.1	5	CRITICAL GAP ADJUST					
36	-->	1.0	(NO. OF LANES)	1.1<---	107		LEFT THRU RIGHT					
0	-->	0.0	0.0	0.0	0.0	0	SB 0.0 --- 0.0					
							EB 0.0 --- --					
							WB --- --- --					
N				SIGNAL WARRANTS:								
W + E		0	0	0			Urb=N, Rur=N					
S												
<b>ACCEL LANE FOR LT</b>												
	% SU/RV	% COMBO VEH	% MOTOR CYCLE	PEAK HOUR FACTOR								
				LEFT	THRU	RGHT						
N	0	0	0	1.00	1.00	1.00						
-	0	0	0	1.00	1.00	1.00						
-	0	0	0	1.00	1.00	1.00						
<b>MOVEMENT ORIG VOL</b>												
	ADJ VOL	ADJ GAP	CONFL VOL	POT CAP	ACT CAP	MVMT DELAY	MVT LOS					
SB L	5	6	6.5	190	822	803						
T	0	0	6.0	190	868	840						
R	133	146	5.5	109	1219	1219						
LTR	138	152			3.5	A						
<b>EB L VOL</b>												
	ADJ VOL	ADJ GAP	CONFL VOL	POT CAP	ACT CAP	MVMT DELAY	MVT LOS					
EB L	44	48	5.0	112	1516	1516	2.5 A					
T	36	40			0.0	A	1.3 A					
<b>WB T VOL</b>												
	ADJ VOL	ADJ GAP	CONFL VOL	POT CAP	ACT CAP	MVMT DELAY	MVT LOS					
WB T	107	118					0.0 A					
R	5	6										
TR	112	124										
INT TOTAL: 1.8 A MINOR MOVEMENTS: ( 3.2 ) (A)												

INT=MASTER.INT, VOL=BACKGRND.PMV+TRANSCTR.PMV+MIDPT.PMV, CAP=C:..LOSCAP.

33C JG 1/61

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base+Proj.-mitigation 06/29/01

INTERSECTION 2 HACIENDA DRIVE/I 580 EB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

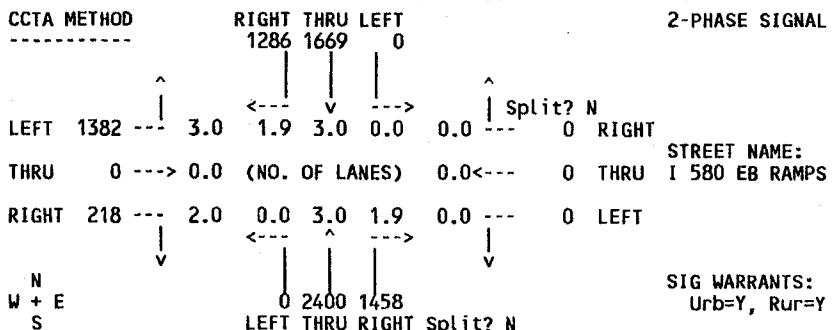
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	365	365	1800	0.2028	
THRU (T)	1551	1551	5400	0.2872	
SB RIGHT (R)	300	300	1800	0.1667	
THRU (T)	2007	2007	5400	0.3717	0.3717
EB RIGHT (R)	1834	1834	3273	0.5603	0.5603
LEFT (L)	1777	1777	4695	0.3785	0.3785

TOTAL VOLUME-TO-CAPACITY RATIO: 0.93 0.75  
INTERSECTION LEVEL OF SERVICE: E C

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MITIG8.INT, VOL=BACKGRND.AMV+TRANSCTR.AMV+MIDPT.AMV, CAP=C..:LOSCAP.

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base+Proj.-mitigation 06/29/01

INTERSECTION 2 HACIENDA DRIVE/I 580 EB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	1458	1458	1800	0.8100	
THRU (T)	2400	2400	5400	0.4444	0.4444
SB RIGHT (R)	1286	1286	1800	0.7144	
THRU (T)	1669	1669	5400	0.3091	
EB RIGHT (R)	218	218	3273	0.0666	
LEFT (L)	1382	1382	4695	0.2944	0.2944

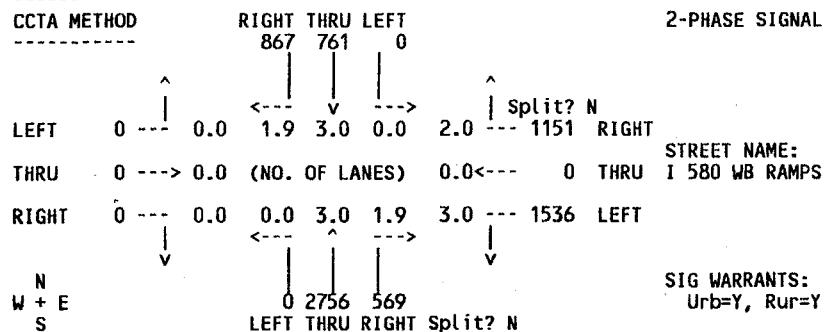
TOTAL VOLUME-TO-CAPACITY RATIO: 0.74  
INTERSECTION LEVEL OF SERVICE: C

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MITIG8.INT, VOL=BACKGRND.PMV+TRANSCTR.PMV+MIDPT.PMV, CAP=C..:LOSCAP.

11/2  
9/06  
9/06

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base+Proj.-mitigation 06/29/01

INTERSECTION 3 HACIENDA DRIVE/I 580 WB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: HACIENDA DRIVE

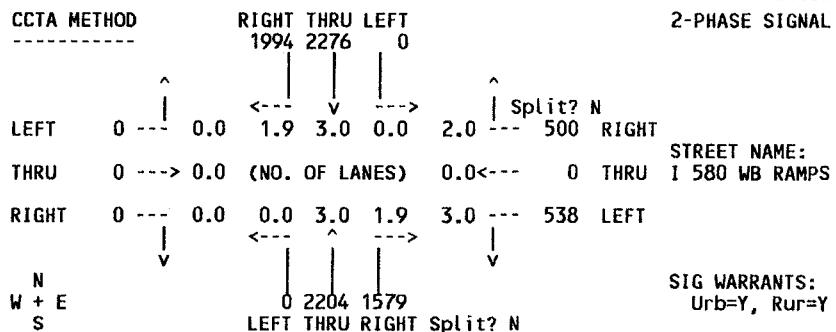
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	569	569	1800	0.3161	
THRU (T)	2756	2756	5400	0.5104	0.5104
SB RIGHT (R)	867	867	1800	0.4817	
THRU (T)	761	761	5400	0.1409	
WB RIGHT (R)	1151	1151	3273	0.3517	0.3517
LEFT (L)	1536	1536	4695	0.3272	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.86  
INTERSECTION LEVEL OF SERVICE: D

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MITIG8.INT, VOL=BACKGRND.AMV+TRANSCR.AMV+MIDPT.AMV, CAP=C..LOSCAP.

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base+Proj.-mitigation 06/29/01

INTERSECTION 3 HACIENDA DRIVE/I 580 WB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: HACIENDA DRIVE

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	1579	1579	1800	0.8772	
THRU (T)	2204	2204	5400	0.4081	
SB RIGHT (R)	1994	1994	1800	1.1078 **	
THRU (T)	2276	2276	5400	0.4215	0.4215
WB RIGHT (R)	500	500	3273	0.1528	0.1528
LEFT (L)	538	538	4695	0.1146	

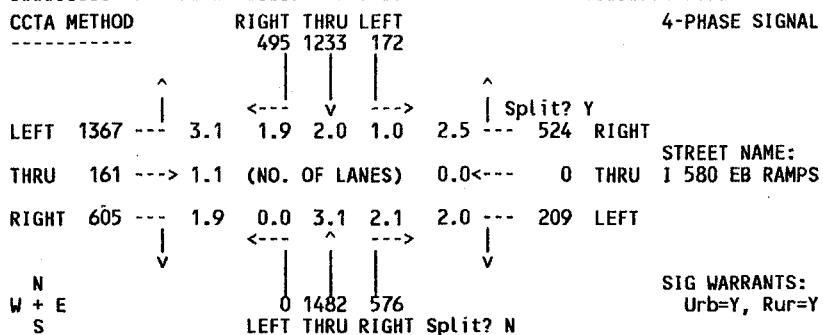
TOTAL VOLUME-TO-CAPACITY RATIO: 0.57  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED    \*\* APPROACHING OR EXCEEDING CAPACITY  
INT=MITIG8.INT, VOL=BACKGRND.PMV+TRANSCR.PMV+MIDPT.PMV, CAP=C..LOSCAP.

B36 pg 36 L

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base+Proj - Mitigation 06/29/01

INTERSECTION 5 SANTA RITA ROAD/I 580 EB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

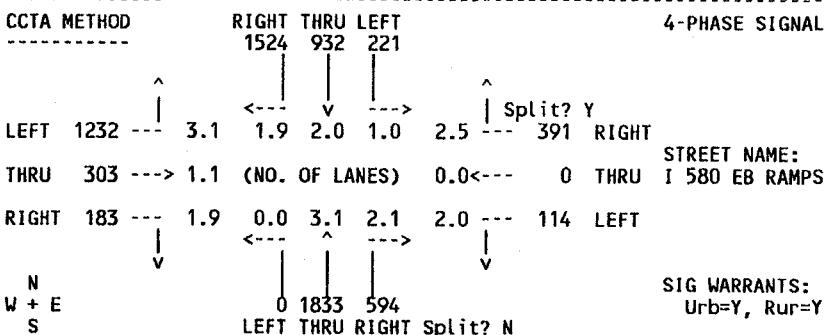
STREET NAME: SANTA RITA ROAD

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	576	461 *	3000	0.1537	
THRU (T)	1482	1482	4950	0.2994	
T + R	1943	6300	0.3084	0.3084	
SB RIGHT (R)	495	495	1650	0.3000	
THRU (T)	1233	1233	3300	0.3736	
LEFT (L)	172	172	1650	0.1042	0.1042
EB RIGHT (R)	605	605	1650	0.3667	
THRU (T)	161	161	1650	0.0976	
LEFT (L)	1367	1367	4304	0.3176	
T + L	1528	4304	0.3550	0.3550	
WB RIGHT (R)	524	211 *	3000	0.0703	0.0703
LEFT (L)	209	209	3000	0.0697	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.84  
INTERSECTION LEVEL OF SERVICE: D\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MITIG8.INT, VOL=BACKGRND.AMV+TRANSCTR.AMV+MIDPT.AMV, CAP=C:..LOSCAP.

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base+Proj - Mitigation 06/29/01

INTERSECTION 5 SANTA RITA ROAD/I 580 EB RAMPS CITY OF DUBLIN  
Count Date Time Peak Hour

STREET NAME: SANTA RITA ROAD

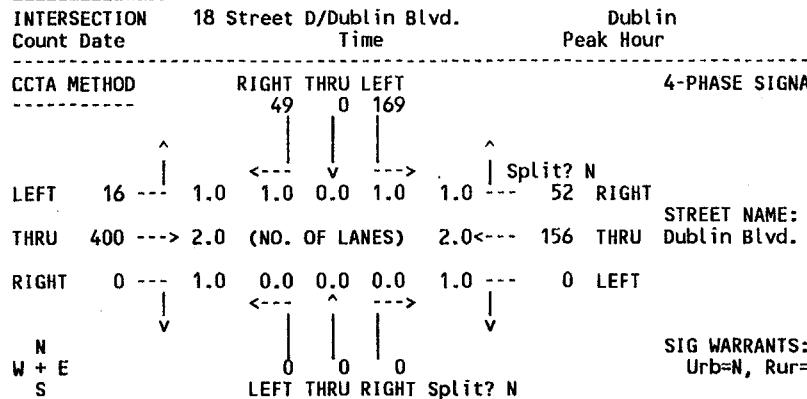
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	594	531 *	3000	0.1770	
THRU (T)	1833	1833	4950	0.3703	
T + R	2364	6300	0.3752	0.3752	
SB RIGHT (R)	1524	1524	1650	0.9236 **	
THRU (T)	932	932	3300	0.2824	
LEFT (L)	221	221	1650	0.1339	0.1339
EB RIGHT (R)	183	183	1650	0.1109	
THRU (T)	303	303	1650	0.1836	
LEFT (L)	1232	1232	4304	0.2862	
T + L	1535	4304	0.3566	0.3566	
WB RIGHT (R)	391	0 *	3000	0.0000	
LEFT (L)	114	114	3000	0.0380	0.0380

TOTAL VOLUME-TO-CAPACITY RATIO: 0.90  
INTERSECTION LEVEL OF SERVICE: D\* ADJUSTED FOR RIGHT TURN ON RED \*\* APPROACHING OR EXCEEDING CAPACITY  
INT=MITIG8.INT, VOL=BACKGRND.PMV+TRANSCTR.PMV+MIDPT.PMV, CAP=C:..LOSCAP.

204 of 300

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base + Proj - mitigation 07/02/01



STREET NAME: Street D

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
SB RIGHT (R)	49	33 *	1650	0.0200	
LEFT (L)	169	169	1650	0.1024	0.1024
EB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	400	400	3300	0.1212	0.1212
LEFT (L)	16	16	1650	0.0097	
WB RIGHT (R)	52	0 *	1650	0.0000	
THRU (T)	156	156	3300	0.0473	
LEFT (L)	0	0	1650	0.0000	0.0000

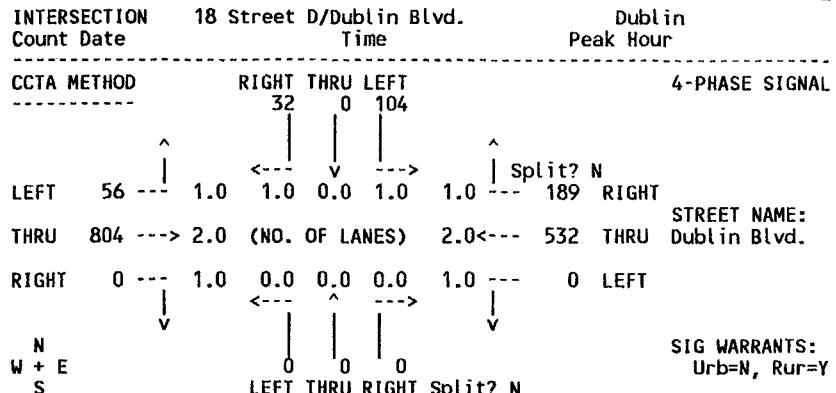
TOTAL VOLUME-TO-CAPACITY RATIO: 0.22

INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MITIG8.INT, VOL=MIDPT.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base + Proj - mitigation 07/02/01



STREET NAME: Street D

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
SB RIGHT (R)	32	0 *	1650	0.0000	
LEFT (L)	104	104	1650	0.0630	0.0630
EB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	804	804	3300	0.2436	0.2436
LEFT (L)	56	56	1650	0.0339	
WB RIGHT (R)	189	85 *	1650	0.0515	
THRU (T)	532	532	3300	0.1612	
LEFT (L)	0	0	1650	0.0000	0.0000

TOTAL VOLUME-TO-CAPACITY RATIO: 0.31

INTERSECTION LEVEL OF SERVICE: A

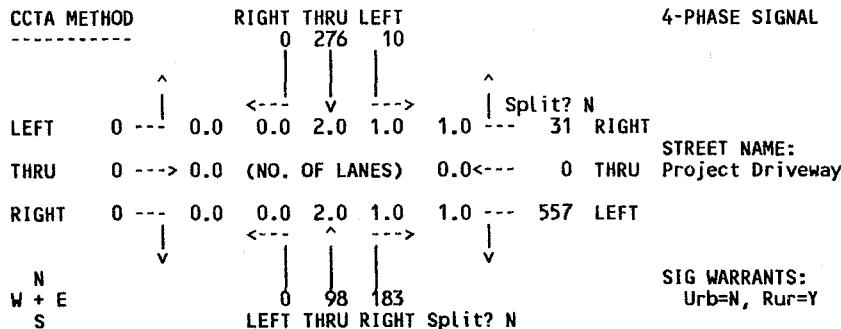
\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MITIG8.INT, VOL=MIDPT.PMV, CAP=C:..LOSCAP.TAB

115  
886  
886

LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Future Base + Project - mitigation 07/02/0

**INTERSECTION** 19 Fallon Rd./Project Driveway **CITY OF DUBLIN**  
**Count Date** **Time** **Peak Hour**



**STREET NAME:** Fallon Rd.

MOVEMENT		ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB	RIGHT (R)	183	0 *	1650	0.0000	
	THRU (T)	98	98	3300	0.0297	
SB	THRU (T)	276	276	3300	0.0836	0.0836
	LEFT (L)	10	10	1650	0.0061	
WB	RIGHT (R)	31	21 *	1650	0.0127	
	LEFT (L)	557	557	1650	0.3376	0.3376

**TOTAL VOLUME-TO-CAPACITY RATIO:** 0.4

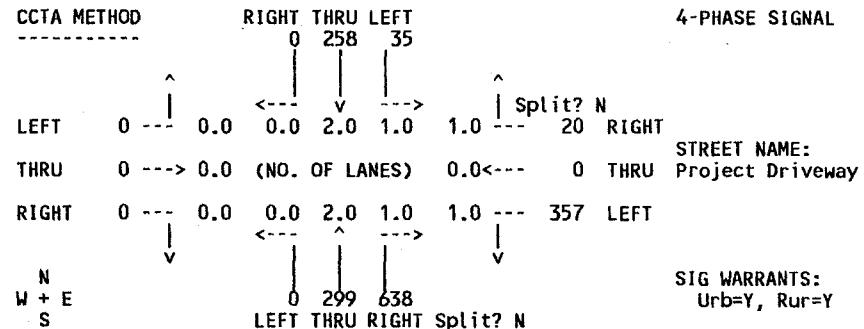
## **INTERSECTION LEVEL OF SERVICE:**

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT,VOL=BACKGRND.AMV+TRANSCTR.AMV+MIDPT.AMV,CAP=C:..,LOSCAP.

LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Future Base + Project - mitigation 07/02/01

**INTERSECTION** 19 Fallon Rd./Project Driveway **CITY OF DUBLIN**  
**Count Date** **Time** **Peak Hour**



STREET NAME: Fallon Rd.

		ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	Critical V/C
Movement						
NB	RIGHT (R)	638	281 *	1650	0.1703	0.1703
	THRU (T)	299	299	3300	0.0906	
SB	THRU (T)	258	258	3300	0.0782	
	LEFT (L)	35	35	1650	0.0212	0.0212
WB	RIGHT (R)	20	0 *	1650	0.0000	
	LEFT (L)	357	357	1650	0.2164	0.2164

TOTAL VOLUME-TO-CAPACITY RATIO: 0.41

## INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MASTER.INT, VOL=BACKGRND.PMV+TRANSCR.PMV+MIDPT.PMV, CAP=C:..LOSCAP.

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**LEVEL OF SERVICE CALCULATIONS  
CUMULATIVE YEAR 2025 - NO PROJECT**

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Table 3.6-5

## Peak Hour Intersection Levels of Service – Tri-Valley Transportation Model Cumulative Year 2025 (No Project)

Intersection	Control	Unmitigated				Mitigated			
		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
		*	LOS	*	LOS	*	LOS	*	LOS
1 Dougherty Road/Dublin Boulevard	Signal	0.94	E	1.00	E	--	--	--	--
2 Hacienda Drive/I-580 Eastbound Ramps	Signal	0.73	C	0.84	D				
3 Hacienda Drive/I-580 Westbound Ramps	Signal	0.84	D	0.93	E	0.66	B	0.72	C
4 Hacienda Drive/Dublin Boulevard	Signal	0.84	D	0.97	E	--	--	--	--
5 Santa Rita Road/I-580 Eastbound Ramps	Signal	0.85	D	0.77	C				
6 Tassajara Road/I-580 Westbound Ramps	Signal	0.71	C	0.75	C				
7 Tassajara Road/Dublin Boulevard	Signal	0.72	C	0.88	D				
8 Tassajara Road/Central Parkway	Signal	0.71	C	0.63	B				
9 Tassajara Road/Gleason Drive	Signal	0.59	A	0.50	A				
10 Grafton Street/Dublin Boulevard	Signal	0.31	A	0.41	A				
11 Grafton Street/Central Parkway	Signal	0.06	A	0.09	A				
12 Grafton Street/Gleason Drive	Signal	0.44	A	0.36	A				
13 El Charro Road/I-580 Eastbound Ramps	Signal	0.47	A	0.54	A				
14 Fallon Road/I-580 Westbound Ramps	Signal	0.57	A	0.69	B				
15 Fallon Road/Dublin Boulevard	Signal	0.67	B	0.88	D				
16 Fallon Road/Central Parkway	Signal	0.54	A	0.72	C				
17 Fallon Road/Gleason Drive	Signal	0.42	A	0.28	A				

Note: \* = Volume-to-Capacity (V/C) Ratio for signalized intersections.

See Joe Buley

**Table 3.6-6**  
**Peak Hour Intersection Levels of Service –Tri-Valley Transportation Model Cumulative Year 2025 plus Project**

Intersection	Control	Unmitigated				Mitigated			
		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
		*	LOS	*	LOS	*	LOS	*	LOS
1 Dougherty Road/Dublin Boulevard	Signal	<b>0.93</b>	E	<b>1.03</b>	F	--	--	--	--
2 Hacienda Drive/I-580 Eastbound Ramps	Signal	0.72	C	0.81	D				
3 Hacienda Drive/I-580 Westbound Ramps	Signal	0.83	D	<b>0.96</b>	E	0.65	B	0.75	C
4 Hacienda Drive/Dublin Boulevard	Signal	0.82	D	<b>1.00</b>	E	--	--	--	--
5 Santa Rita Road/I-580 Eastbound Ramps	Signal	0.86	D	0.74	C				
6 Tassajara Road/I-580 Westbound Ramps	Signal	0.69	B	0.73	C				
7 Tassajara Road/Dublin Boulevard	Signal	0.74	C	0.86	D				
8 Tassajara Road/Central Parkway	Signal	0.70	B	0.61	B				
9 Tassajara Road/Gleason Drive	Signal	0.56	A	0.47	A				
10 Grafton Street/Dublin Boulevard	Signal	0.35	A	0.44	A				
11 Grafton Street/Central Parkway	Signal	0.10	A	0.12	A				
12 Grafton Street/Gleason Drive	Signal	0.44	A	0.37	A				
13 El Charro Road/I-580 Eastbound Ramps	Signal	0.60	A	0.63	B				
14 Fallon Road/I-580 Westbound Ramps	Signal	0.63	B	0.76	C				
15 Fallon Road/Dublin Boulevard	Signal	0.88	D	<b>1.11</b>	F	--	--	--	--
15A Fallon Rd./Dublin Blvd. w/ New Int.	Signal	--	--	--	--	0.77	C	<b>0.91</b>	E
XX Fallon Road/New Intersection	Signal	--	--	--	--	0.62	B	0.71	C
16 Fallon Road/Central Parkway	Signal	0.83	D	0.84	D				
17 Fallon Road/Gleason Drive	Signal	0.51	A	0.31	A				
18 Street D/Dublin Boulevard	One-Way STOP	>120	F	>120	F				
Street D/Dublin Boulevard - Mitigated	Signal	--	--	--	--	0.80	C	0.83	D
19 Fallon Road/"Project Road"	One-Way STOP	>120	F	>120	F				
Fallon Road/"Project Road" - Mitigated	Signal	--	--	--	--	0.55	A	0.49	A
20 Street D/Central Parkway	One-Way STOP	7.6	B	7.6	B				
21 Street B/Central Parkway	One-Way STOP	7.7	B	4.9	A				

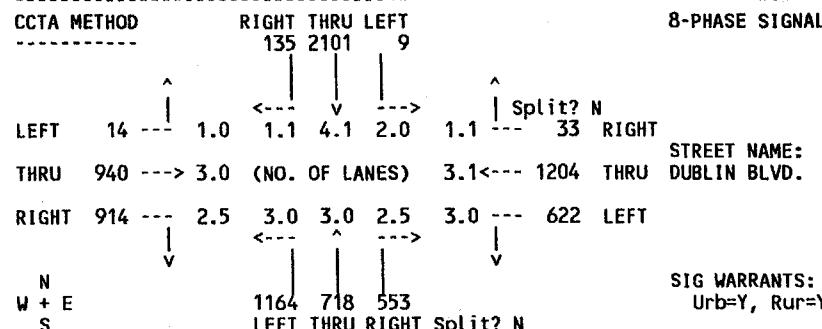
Note: \* = Volume-to-Capacity (V/C) Ratio for signalized intersections;

Average Delay in Seconds for stopping and yielding movements at 1-way STOP-controlled intersections.

2025 plus Project

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 No Project 07/03/01

INTERSECTION 3977 DOUGHERTY RD./DUBLIN BLVD. DUBLIN  
Count Date YR.2025 ANNEX Time RUN 4 W/O PRJ Peak Hour AM PEAK VOL

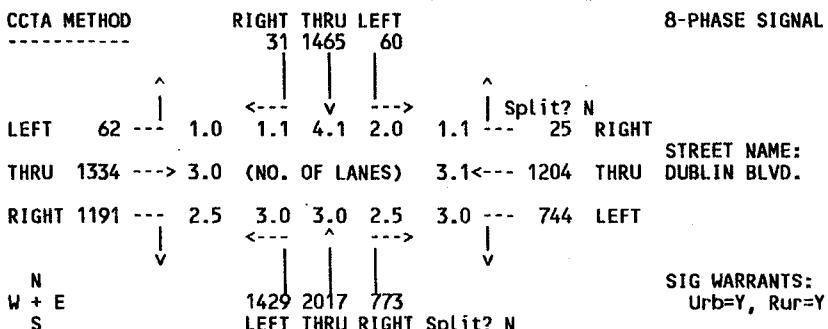
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	553	119 *	3000	0.0397	
THRU (T)	718	718	4950	0.1451	
LEFT (L)	1164	1164	4304	0.2704	0.2704
SB RIGHT (R)	135	135	1650	0.0818	
THRU (T)	2101	2101	6600	0.3183	
LEFT (L)	9	9	3000	0.0030	
T + R	2236		6600	0.3388	0.3388
EB RIGHT (R)	914	103 *	3000	0.0343	
THRU (T)	940	940	4950	0.1899	0.1899
LEFT (L)	14	14	1650	0.0085	
WB RIGHT (R)	33	33	1650	0.0200	
THRU (T)	1204	1204	4950	0.2432	
LEFT (L)	622	622	4304	0.1445	0.1445
T + R	1237		4950	0.2499	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.94  
INTERSECTION LEVEL OF SERVICE: E

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=NXRUN4.AMV, CAP=C..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 No Project 07/03/01

INTERSECTION 3977 DOUGHERTY RD./DUBLIN BLVD. DUBLIN  
Count Date YR.2025 ANNEX Time RUN 4 W/O PRJ Peak Hour PM PEAK VOL

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	773	254 *	3000	0.0847	
THRU (T)	2017	2017	4950	0.4075	
LEFT (L)	1429	1429	4304	0.3320	0.3320
SB RIGHT (R)	31	31	1650	0.0188	
THRU (T)	1465	1465	6600	0.2220	
LEFT (L)	60	60	3000	0.0200	
T + R		1496	6600	0.2267	0.2267
EB RIGHT (R)	1191	195 *	3000	0.0650	
THRU (T)	1334	1334	4950	0.2695	0.2695
LEFT (L)	62	62	1650	0.0376	
WB RIGHT (R)	25	25	1650	0.0152	
THRU (T)	1204	1204	4950	0.2432	
LEFT (L)	744	744	4304	0.1729	0.1729
T + R		1229	4950	0.2483	

TOTAL VOLUME-TO-CAPACITY RATIO: 1.00  
INTERSECTION LEVEL OF SERVICE: E

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=NXRUN4.PMV, CAP=C..LOSCAP.TAB

985 986 987 988

LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 No Project 07/02/01

(2)

INTERSECTION 8302 Hacienda Dr/I-580 EB ramp Pleasanton  
Count Date YR.2025 ANNEX Time RUN 4 W/O PRJ Peak Hour AM PEAK VOL

CCTA METHOD	RIGHT	THRU	LEFT	2-PHASE SIGNAL		
	0	1682	0			
LEFT	681	2.0	1.9	3.0	0.0	0.0
THRU	0	---	0.0	(NO. OF LANES)	0.0	---
RIGHT	1186	2.0	0.0	3.0	1.9	0.0
N W + E S						
	0	1991	491			
	LEFT	THRU	RIGHT	Split?	N	

STREET NAME: Hacienda Dr

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	491	491	1800	0.2728	
THRU (T)	1991	1991	5400	0.3687	0.3687
SB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	1682	1682	5400	0.3115	
EB RIGHT (R)	1186	1186	3273	0.3624	0.3624
LEFT (L)	681	681	3273	0.2081	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.73  
INTERSECTION LEVEL OF SERVICE: C

\* ADJUSTED FOR RIGHT TURN ON RED

INT=NEWSRP.INT, VOL=NXRUN4.AMV, CAP=C:..LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 No Project 07/02/01

INTERSECTION 8302 Hacienda Dr/I-580 EB ramp Pleasanton  
Count Date YR.2025 ANNEX Time RUN 4 W/O PRJ Peak Hour PM PEAK VOL

CCTA METHOD	RIGHT	THRU	LEFT	2-PHASE SIGNAL		
	0	1916	0			
LEFT	636	2.0	1.9	3.0	0.0	0.0
THRU	0	---	0.0	(NO. OF LANES)	0.0	---
RIGHT	1100	2.0	0.0	3.0	1.9	0.0
N W + E S						
	0	2702	763			
	LEFT	THRU	RIGHT	Split?	N	

STREET NAME: Hacienda Dr

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	763	763	1800	0.4239	
THRU (T)	2702	2702	5400	0.5004	0.5004
SB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	1916	1916	5400	0.3548	
EB RIGHT (R)	1100	1100	3273	0.3361	0.3361
LEFT (L)	636	636	3273	0.1943	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.84  
INTERSECTION LEVEL OF SERVICE: D

\* ADJUSTED FOR RIGHT TURN ON RED

INT=NEWSRP.INT, VOL=NXRUN4.PMV, CAP=C:..LOSCAP.TAB

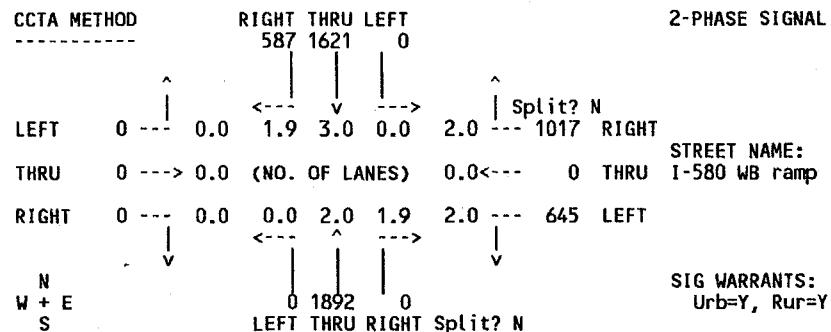
8302 Hacienda Dr  
Pleasanton, CA

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 No Project 07/02/01

INTERSECTION 8305 Hacienda Dr/I-580 WB ramp Dublin  
Count Date YR.2025 ANNEX Time RUN 4 W/O PRJ Peak Hour AM PEAK VOL

3



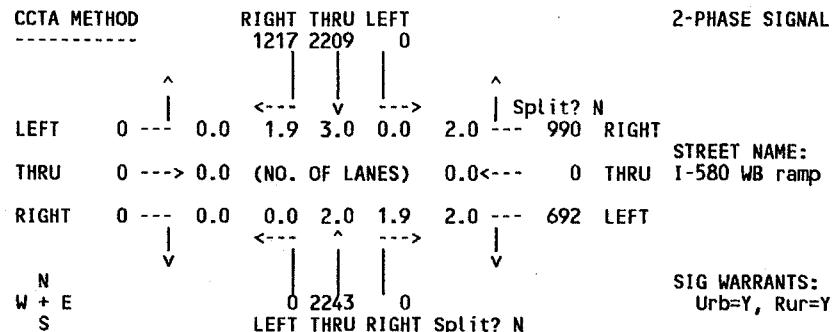
STREET NAME: Hacienda Dr

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	Critical V/C
NB RIGHT (R)	0	0	1800	0.0000	0.5087
THRU (T)	1892	1892	3720	0.5256	-0.5256
SB RIGHT (R)	587	587	1800	0.3261	
THRU (T)	1621	1621	5400	0.3002	
WB RIGHT (R)	1017	1017	3273	0.3107	0.3107
LEFT (L)	645	645	3273	0.1971	

TOTAL VOLUME-TO-CAPACITY RATIO: -0.84 0.82  
INTERSECTION LEVEL OF SERVICE: D\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=NXRUN4.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 No Project 07/02/01

INTERSECTION 8305 Hacienda Dr/I-580 WB ramp Dublin  
Count Date YR.2025 ANNEX Time RUN 4 W/O PRJ Peak Hour PM PEAK VOL

STREET NAME: Hacienda Dr

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	Critical V/C
NB RIGHT (R)	0	0	1800	0.0000	0.6231
THRU (T)	2243	2243	3720	0.6231	-0.6030
SB RIGHT (R)	1217	1217	1800	0.6761	
THRU (T)	2209	2209	5400	0.4091	
WB RIGHT (R)	990	990	3273	0.3025	0.3025
LEFT (L)	692	692	3273	0.2114	

TOTAL VOLUME-TO-CAPACITY RATIO: -0.93 0.91  
INTERSECTION LEVEL OF SERVICE: E\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=NXRUN4.PMV, CAP=C:..LOSCAP.TAB

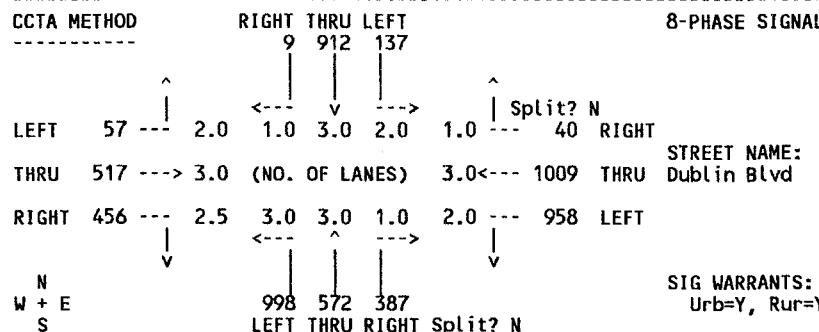
8/28/2023

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 No Project 07/02/01

INTERSECTION 8306 Hacienda Dr/Dublin Blvd Dublin  
Count Date YR.2025 ANNEX Time RUN 4 W/O PRJ Peak Hour AM PEAK VOL

4



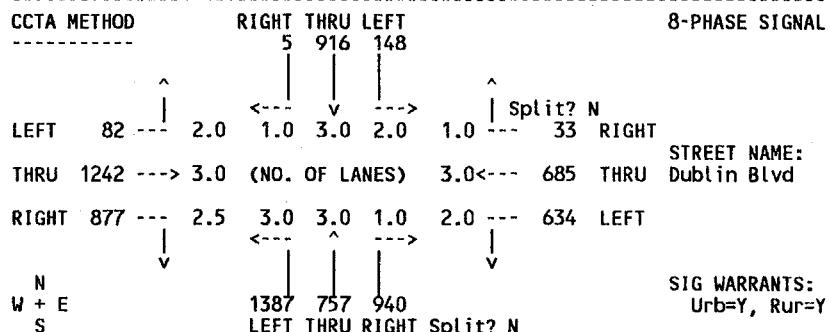
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C	
				RATIO	CRITICAL V/C
NB RIGHT (R)	387	0 *	1650	0.0000	
THRU (T)	572	572	4950	0.1156	
LEFT (L)	998	998	4304	0.2319	0.2319
SB RIGHT (R)	9	0 *	1650	0.0000	
THRU (T)	912	912	4950	0.1842	0.1842
LEFT (L)	137	137	3000	0.0457	
EB RIGHT (R)	456	0 *	3000	0.0000	
THRU (T)	517	517	4950	0.1044	0.1044
LEFT (L)	57	57	3000	0.0190	
WB RIGHT (R)	40	0 *	1650	0.0000	
THRU (T)	1009	1009	4950	0.2038	
LEFT (L)	958	958	3000	0.3193	0.3193

TOTAL VOLUME-TO-CAPACITY RATIO: 0.84  
INTERSECTION LEVEL OF SERVICE: D

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=NXRUN4.AMV, CAP=C...LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 No Project 07/02/01

INTERSECTION 8306 Hacienda Dr/Dublin Blvd Dublin  
Count Date YR.2025 ANNEX Time RUN 4 W/O PRJ Peak Hour PM PEAK VOL

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C	
				RATIO	CRITICAL V/C
NB RIGHT (R)	940	591 *	1650	0.3582	
THRU (T)	757	757	4950	0.1529	
LEFT (L)	1387	1387	4304	0.3223	0.3223
SB RIGHT (R)	5	0 *	1650	0.0000	
THRU (T)	916	916	4950	0.1851	0.1851
LEFT (L)	148	148	3000	0.0493	
EB RIGHT (R)	877	0 *	3000	0.0000	
THRU (T)	1242	1242	4950	0.2509	0.2509
LEFT (L)	82	82	3000	0.0273	
WB RIGHT (R)	33	0 *	1650	0.0000	
THRU (T)	685	685	4950	0.1384	
LEFT (L)	634	634	3000	0.2113	0.2113

TOTAL VOLUME-TO-CAPACITY RATIO: 0.97  
INTERSECTION LEVEL OF SERVICE: E

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=NXRUN4.PMV, CAP=C...LOSCAP.TAB

Bell & Howell Engineering Company

2008-08-28

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 No Project 07/02/01

5

INTERSECTION 4041 Santa Rita Rd/I-580 eb-off PLEASANTON  
Count Date YR.2025 ANNEX Time RUN 4 W/O PRJ Peak Hour AM PEAK VOL

CCTA METHOD		RIGHT	THRU	LEFT	4-PHASE SIGNAL		
		0	1326	151			
LEFT	831	2.0	1.9	2.0	1.0	2.0	678
THRU	104	---	>	1.0	(NO. OF LANES)	0.0<	---
RIGHT	181	---	1.9	0.0	3.1	2.1	0
N W + E S		0	634	423			SIG WARRANTS: Urb=Y, Rur=Y
		LEFT	THRU	RIGHT	Split? N		

STREET NAME: Santa Rita Rd

MOVEMENT		ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB	RIGHT (R)	423	423	3000	0.1410	
	THRU (T)	634	634	4950	0.1281	
	T + R		1057	6300	0.1678	
SB	RIGHT (R)	0	0	1650	0.0000	
	THRU (T)	1326	1326	3300	0.4018	0.4018
	LEFT (L)	151	151	1650	0.0915	
EB	RIGHT (R)	181	181	1650	0.1097	
	THRU (T)	104	104	1650	0.0630	
	LEFT (L)	831	831	3000	0.2770	0.2770
WB	RIGHT (R)	678	527 *	3000	0.1757	0.1757
	LEFT (L)	0	0	3000	0.0000	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.85  
INTERSECTION LEVEL OF SERVICE: D\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=NXRUN4.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 No Project 07/02/01

INTERSECTION 4041 Santa Rita Rd/I-580 eb-off PLEASANTON  
Count Date YR.2025 ANNEX Time RUN 4 W/O PRJ Peak Hour PM PEAK VOL

CCTA METHOD		RIGHT	THRU	LEFT	4-PHASE SIGNAL		
		0	1389	289			
LEFT	530	2.0	1.9	2.0	1.0	2.0	290
THRU	208	---	>	1.0	(NO. OF LANES)	0.0<	---
RIGHT	113	---	1.9	0.0	3.1	2.1	0
N W + E S		0	2085	2			SIG WARRANTS: Urb=Y, Rur=Y
		LEFT	THRU	RIGHT	Split? N		

STREET NAME: Santa Rita Rd

MOVEMENT		ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB	RIGHT (R)	2	2	3000	0.0007	
	THRU (T)	2085	2085	4950	0.4212	0.4212
	T + R		2087	6300	0.3313	
SB	RIGHT (R)	0	0	1650	0.0000	
	THRU (T)	1389	1389	3300	0.4209	
	LEFT (L)	289	289	1650	0.1752	0.1752
EB	RIGHT (R)	113	113	1650	0.0685	
	THRU (T)	208	208	1650	0.1261	
	LEFT (L)	530	530	3000	0.1767	0.1767
WB	RIGHT (R)	290	1 *	3000	0.0003	0.0003
	LEFT (L)	0	0	3000	0.0000	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.77  
INTERSECTION LEVEL OF SERVICE: C\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=NXRUN4.PMV, CAP=C:..LOSCAP.TAB

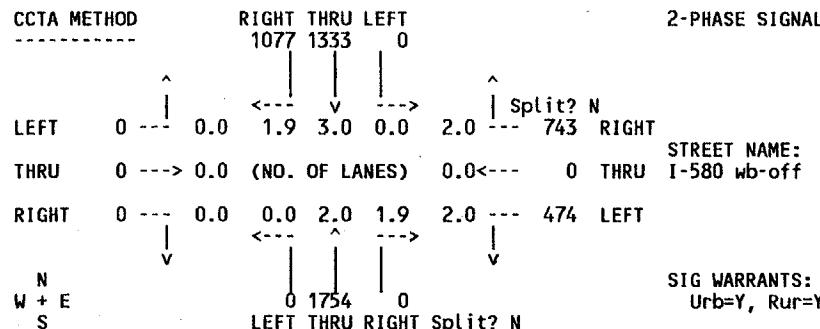
884 Go West

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 No Project 07/02/01

INTERSECTION 3988 Tassajara Rd/I-580 wb-off PLEASANTON  
Count Date YR.2025 ANNEX Time RUN 4 W/O PRJ Peak Hour AM PEAK VOL

(6)



STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	1754	1754	3600	0.4872	0.4872
SB RIGHT (R)	1077	1077	1800	0.5983	
THRU (T)	1333	1333	5400	0.2469	
WB RIGHT (R)	743	743	3273	0.2270	0.2270
LEFT (L)	474	474	3273	0.1448	

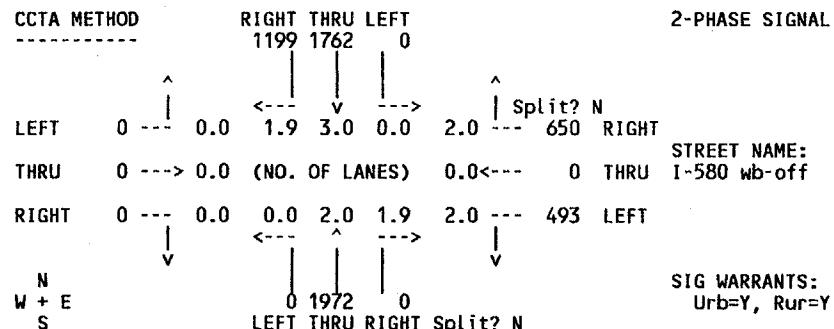
TOTAL VOLUME-TO-CAPACITY RATIO: 0.71

INTERSECTION LEVEL OF SERVICE: C

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=NXRUN4.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 No Project 07/02/01

INTERSECTION 3988 Tassajara Rd/I-580 wb-off PLEASANTON  
Count Date YR.2025 ANNEX Time RUN 4 W/O PRJ Peak Hour PM PEAK VOL

STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	1972	1972	3600	0.5478	0.5478
SB RIGHT (R)	1199	1199	1800	0.6661	
THRU (T)	1762	1762	5400	0.3263	
WB RIGHT (R)	650	650	3273	0.1986	0.1986
LEFT (L)	493	493	3273	0.1506	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.75

INTERSECTION LEVEL OF SERVICE: C

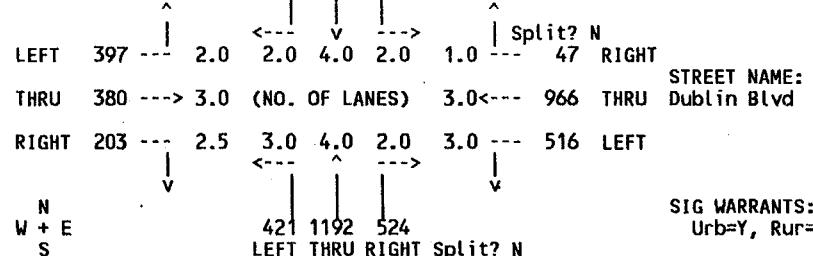
\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=NXRUN4.PMV, CAP=C:..LOSCAP.TAB

S8C

836 9e

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 No Project 07/03/01

INTERSECTION 1573 Tassajara Rd/Dublin Blvd Alameda County  
Count Date YR.2025 ANNEX Time RUN 4 W/O PRJ Peak Hour AM PEAK VOLCCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL  
----- 742 1912 82

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	524	326 *	3000	0.1087	
THRU (T)	1192	1192	6600	0.1806	
LEFT (L)	421	421	4304	0.0978	0.0978
SB RIGHT (R)	742	524 *	3000	0.1747	
THRU (T)	1912	1912	6600	0.2897	0.2897
LEFT (L)	82	82	3000	0.0273	
EB RIGHT (R)	203	0 *	3000	0.0000	
THRU (T)	380	380	4950	0.0768	
LEFT (L)	397	397	3000	0.1323	0.1323
WB RIGHT (R)	47	2 *	1650	0.0012	
THRU (T)	966	966	4950	0.1952	0.1952
LEFT (L)	516	516	4304	0.1199	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.72

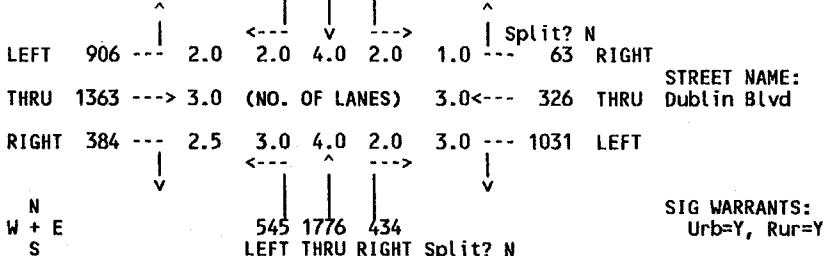
INTERSECTION LEVEL OF SERVICE: C

\* ADJUSTED FOR RIGHT TURN ON RED

INT=NEWSRP.INT, VOL=NXRUN4.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 No Project 07/03/01

INTERSECTION 1573 Tassajara Rd/Dublin Blvd Alameda County  
Count Date YR.2025 ANNEX Time RUN 4 W/O PRJ Peak Hour PM PEAK VOLCCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL  
----- 353 1579 76

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	434	39 *	3000	0.0130	
THRU (T)	1776	1776	6600	0.2691	
LEFT (L)	545	545	4304	0.1266	0.1266
SB RIGHT (R)	353	0 *	3000	0.0000	
THRU (T)	1579	1579	6600	0.2392	0.2392
LEFT (L)	76	76	3000	0.0253	
EB RIGHT (R)	384	4 *	3000	0.0013	
THRU (T)	1363	1363	4950	0.2754	0.2754
LEFT (L)	906	906	3000	0.3020	
WB RIGHT (R)	63	21 *	1650	0.0127	
THRU (T)	326	326	4950	0.0659	
LEFT (L)	1031	1031	4304	0.2395	0.2395

TOTAL VOLUME-TO-CAPACITY RATIO: 0.88

INTERSECTION LEVEL OF SERVICE: D

\* ADJUSTED FOR RIGHT TURN ON RED

INT=NEWSRP.INT, VOL=NXRUN4.PMV, CAP=C:..LOSCAP.TAB

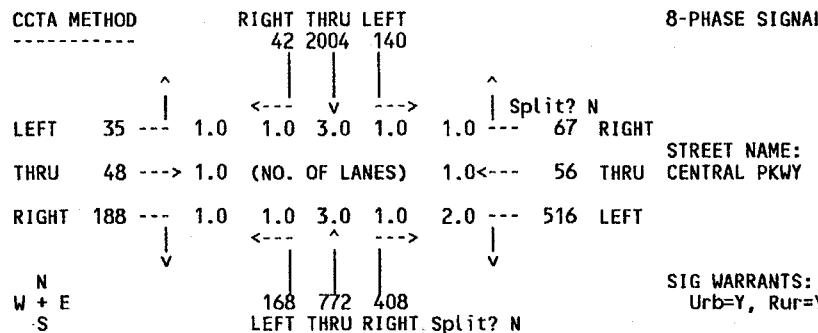
8/26/2023

LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 No Project 07/02/01

INTERSECTION 6430 TASSAJARA RD./CENTRAL PKWY DUBLIN  
Count Date FROM MODEL Time FROM MODEL Peak Hour FROM MODEL

8



STREET NAME: TASSAJARA RD.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	408	124 *	1650	0.0752	
THRU (T)	772	772	4950	0.1560	
LEFT (L)	168	168	1650	0.1018	0.1018
SB RIGHT (R)	42	7 *	1650	0.0042	
THRU (T)	2004	2004	4950	0.4048	0.4048
LEFT (L)	140	140	1650	0.0848	
EB RIGHT (R)	188	20 *	1650	0.0121	
THRU (T)	48	48	1650	0.0291	0.0291
LEFT (L)	35	35	1650	0.0212	
WB RIGHT (R)	67	0 *	1650	0.0000	
THRU (T)	56	56	1650	0.0339	
LEFT (L)	516	516	3000	0.1720	0.1720

TOTAL VOLUME-TO-CAPACITY RATIO: 0.71

INTERSECTION LEVEL OF SERVICE: C

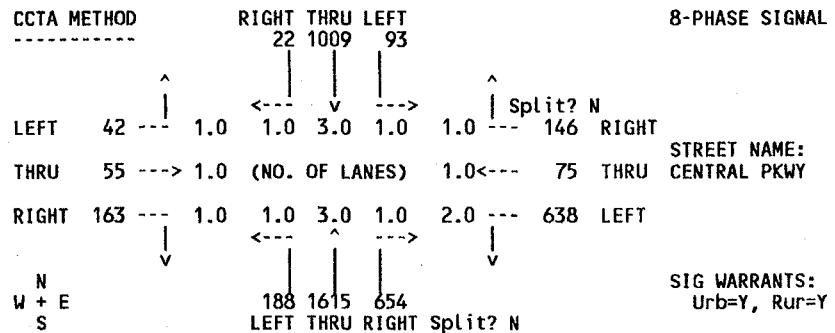
\* ADJUSTED FOR RIGHT TURN ON RED

INT=NEWSRP.INT, VOL=NXRUN4.AMV, CAP=C:..LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 No Project 07/02/01

INTERSECTION 6430 TASSAJARA RD./CENTRAL PKWY DUBLIN  
Count Date FROM MODEL Time FROM MODEL Peak Hour FROM MODEL



STREET NAME: TASSAJARA RD.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	654	303 *	1650	0.1836	
THRU (T)	1615	1615	4950	0.3263	0.3263
LEFT (L)	188	188	1650	0.1139	
SB RIGHT (R)	22	0 *	1650	0.0000	
THRU (T)	1009	1009	4950	0.2038	
LEFT (L)	93	93	1650	0.0564	0.0564
EB RIGHT (R)	163	0 *	1650	0.0000	
THRU (T)	55	55	1650	0.0333	0.0333
LEFT (L)	42	42	1650	0.0255	
WB RIGHT (R)	146	53 *	1650	0.0321	
THRU (T)	75	75	1650	0.0455	
LEFT (L)	638	638	3000	0.2127	0.2127

TOTAL VOLUME-TO-CAPACITY RATIO: 0.63

INTERSECTION LEVEL OF SERVICE: B

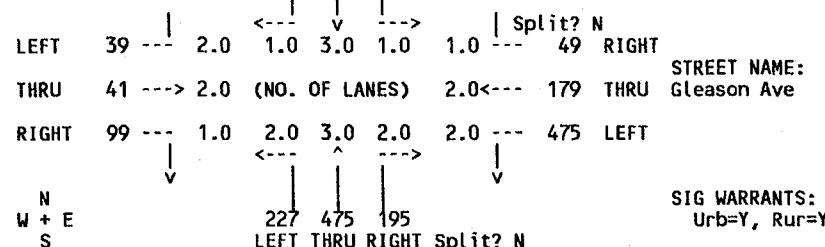
\* ADJUSTED FOR RIGHT TURN ON RED

INT=NEWSRP.INT, VOL=NXRUN4.PMV, CAP=C:..LOSCAP.TAB

888 page 13

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 No Project 07/03/01

INTERSECTION 3987 Tassajara Rd/Gleason Ave Alameda County  
Count Date FROM MODEL Time FROM MODEL Peak Hour FROM MODELCCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL  
----- 352 1681 80

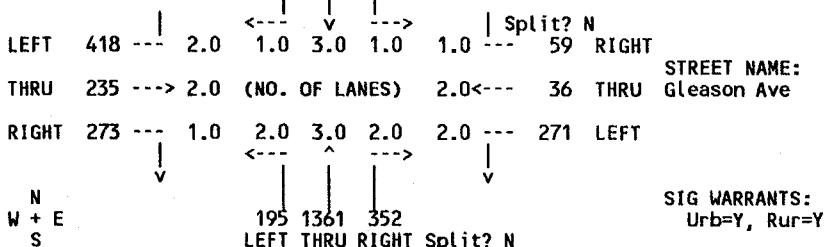
STREET NAME: Tassajara Rd

	MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB	RIGHT (R)	195	0 *	3000	0.0000	
	THRU (T)	475	475	4950	0.0960	
	LEFT (L)	227	227	3000	0.0757	0.0757
SB	RIGHT (R)	352	331 *	1650	0.2006	
	THRU (T)	1681	1681	4950	0.3396	0.3396
	LEFT (L)	80	80	1650	0.0485	
EB	RIGHT (R)	99	0 *	1650	0.0000	
	THRU (T)	41	41	3300	0.0124	0.0124
	LEFT (L)	39	39	3000	0.0130	
WB	RIGHT (R)	49	0 *	1650	0.0000	
	THRU (T)	179	179	3300	0.0542	
	LEFT (L)	475	475	3000	0.1583	0.1583

TOTAL VOLUME-TO-CAPACITY RATIO: 0.59  
INTERSECTION LEVEL OF SERVICE: A\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT,VOL=NXRUN4.AMV,CAP=C..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 No Project 07/03/01

INTERSECTION 3987 Tassajara Rd/Gleason Ave Alameda County  
Count Date FROM MODEL Time FROM MODEL Peak Hour FROM MODELCCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL  
----- 48 633 58

STREET NAME: Tassajara Rd

	MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB	RIGHT (R)	352	203 *	3000	0.0677	
	THRU (T)	1361	1361	4950	0.2749	0.2749
	LEFT (L)	195	195	3000	0.0650	
SB	RIGHT (R)	48	0 *	1650	0.0000	
	THRU (T)	633	633	4950	0.1279	
	LEFT (L)	58	58	1650	0.0352	0.0352
EB	RIGHT (R)	273	166 *	1650	0.1006	0.1006
	THRU (T)	235	235	3300	0.0712	
	LEFT (L)	418	418	3000	0.1393	
WB	RIGHT (R)	59	1 *	1650	0.0006	
	THRU (T)	36	36	3300	0.0109	
	LEFT (L)	271	271	3000	0.0903	0.0903

TOTAL VOLUME-TO-CAPACITY RATIO: 0.50  
INTERSECTION LEVEL OF SERVICE: A\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT,VOL=NXRUN4.PMV,CAP=C..LOSCAP.TAB

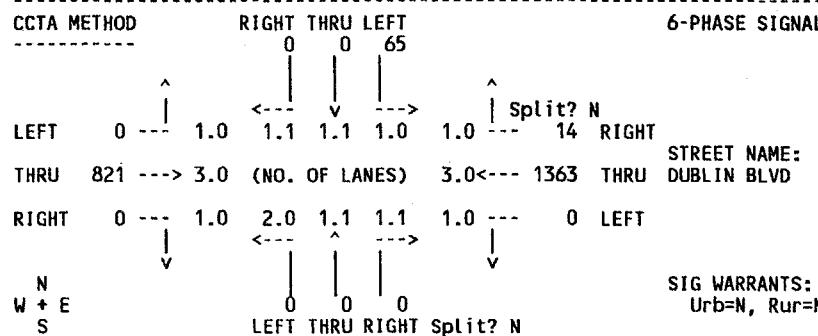
886 8882

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 No Project 07/02/01

INTERSECTION 6617 MAIN STREET/DUBLIN BLVD DUBLIN  
Count Date YR.2025 ANNEX Time RUN 4 W/O PRJ Peak Hour AM PEAK VOL

(10)

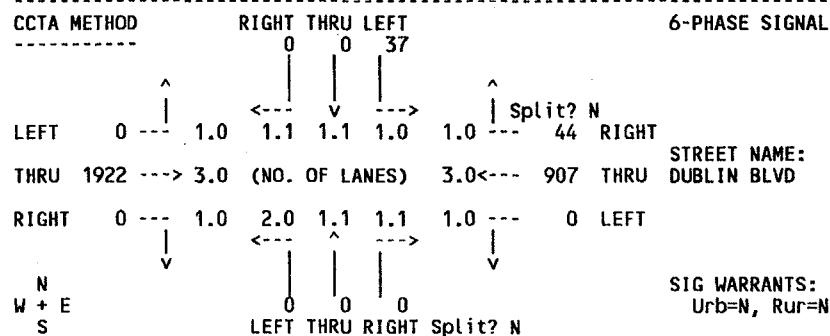


	MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB	RIGHT (R)	0	0	1650	0.0000	0.0000
	THRU (T)	0	0	1650	0.0000	
	LEFT (L)	0	0	3000	0.0000	
	T + R	0	0	1650	0.0000	
SB	RIGHT (R)	0	0	1650	0.0000	
	THRU (T)	0	0	1650	0.0000	
	LEFT (L)	65	65	1650	0.0394	0.0394
	T + R	0	0	1650	0.0000	
EB	RIGHT (R)	0	0	1650	0.0000	
	THRU (T)	821	821	4950	0.1659	
	LEFT (L)	0	0	1650	0.0000	0.0000
WB	RIGHT (R)	14	0 *	1650	0.0000	
	THRU (T)	1363	1363	4950	0.2754	0.2754
	LEFT (L)	0	0	1650	0.0000	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.31  
INTERSECTION LEVEL OF SERVICE: A\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=NXRUN4.AMV, CAP=C...LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 No Project 07/02/01

INTERSECTION 6617 MAIN STREET/DUBLIN BLVD DUBLIN  
Count Date YR.2025 ANNEX Time RUN 4 W/O PRJ Peak Hour PM PEAK VOL

	MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB	RIGHT (R)	0	0	1650	0.0000	0.0000
	THRU (T)	0	0	1650	0.0000	
	LEFT (L)	0	0	3000	0.0000	
	T + R	0	0	1650	0.0000	
SB	RIGHT (R)	0	0	1650	0.0000	
	THRU (T)	0	0	1650	0.0000	
	LEFT (L)	37	37	1650	0.0224	0.0224
	T + R	0	0	1650	0.0000	
EB	RIGHT (R)	0	0	1650	0.0000	
	THRU (T)	1922	1922	4950	0.3883	0.3883
	LEFT (L)	0	0	1650	0.0000	
WB	RIGHT (R)	44	7 *	1650	0.0042	
	THRU (T)	907	907	4950	0.1832	
	LEFT (L)	0	0	1650	0.0000	0.0000

TOTAL VOLUME-TO-CAPACITY RATIO: 0.41  
INTERSECTION LEVEL OF SERVICE: A\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=NXRUN4.PMV, CAP=C...LOSCAP.TAB

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LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 No Project 07/02/01

II  
INTERSECTION 6615 MAIN STREET/CENTRAL PARKWAY DUBLIN  
Count Date YR.2025 ANNEX Time RUN 4 W/O PRJ Peak Hour AM PEAK VOL

CCTA METHOD	RIGHT	THRU	LEFT	5-PHASE SIGNAL		
	0	0	0			
LEFT	0	1.0	1.1	1.1	1.0	Split? N
THRU	35	--->	2.0	(NO. OF LANES)	2.0<---	49 THRU CENTRAL PARKWAY
RIGHT	87	---	1.0	1.0	1.1	0 LEFT
N W + E S	78	0	0	SIG WARRANTS: Urb=N, Rur=N		
LEFT THRU RIGHT Split? N						

STREET NAME: MAIN STREET

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	0	0	1650	0.0000	
LEFT (L)	78	78	1650	0.0473	0.0473
T + R		0	1650	0.0000	
SB RIGHT (R)	0	0	1650	0.0000	0.0000
THRU (T)	0	0	1650	0.0000	
LEFT (L)	0	0	1650	0.0000	
T + R		0	1650	0.0000	
EB RIGHT (R)	87	9 *	1650	0.0055	
THRU (T)	35	35	3300	0.0106	
LEFT (L)	0	0	1650	0.0000	0.0000
WB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	49	49	3300	0.0148	0.0148
LEFT (L)	0	0	1650	0.0000	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.06

INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED

INT=NEWSRP.INT, VOL=NXRUN4.AMV, CAP=C:..LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 No Project 07/02/01

INTERSECTION 6615 MAIN STREET/CENTRAL PARKWAY DUBLIN  
Count Date YR.2025 ANNEX Time RUN 4 W/O PRJ Peak Hour PM PEAK VOL

CCTA METHOD	RIGHT	THRU	LEFT	5-PHASE SIGNAL		
	0	0	0			
LEFT	0	1.0	1.1	1.1	1.0	Split? N
THRU	68	--->	2.0	(NO. OF LANES)	2.0<---	9 THRU CENTRAL PARKWAY
RIGHT	95	---	1.0	1.0	1.1	0 LEFT
N W + E S	114	0	0	SIG WARRANTS: Urb=N, Rur=N		
LEFT THRU RIGHT Split? N						

STREET NAME: MAIN STREET

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	0	0	1650	0.0000	
LEFT (L)	114	114	1650	0.0691	0.0691
T + R		0	1650	0.0000	
SB RIGHT (R)	0	0	1650	0.0000	0.0000
THRU (T)	0	0	1650	0.0000	
LEFT (L)	0	0	1650	0.0000	
T + R		0	1650	0.0000	
EB RIGHT (R)	95	0 *	1650	0.0000	
THRU (T)	68	68	3300	0.0206	0.0206
LEFT (L)	0	0	1650	0.0000	
WB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	9	9	3300	0.0027	
LEFT (L)	0	0	1650	0.0000	0.0000

TOTAL VOLUME-TO-CAPACITY RATIO: 0.09

INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED

INT=NEWSRP.INT, VOL=NXRUN4.PMV, CAP=C:..LOSCAP.TAB

BBE 2026

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 No Project 07/02/01

INTERSECTION 6618 MAIN STREET/GLEASON DRIVE DUBLIN  
Count Date YR.2025 ANNEX Time RUN 4 W/O PRJ Peak Hour AM PEAK VOL

CCTA METHOD	RIGHT	THRU	LEFT	8-PHASE SIGNAL			
	399	33	14				
LEFT	136	1.0	1.1	1.1	1.0	1.0	11 RIGHT
THRU	123	2.0	(NO. OF LANES)	2.0	<---	308	THRU GLEASON DRIVE
RIGHT	1	1.0	1.0	1.1	1.1	1.0	0 LEFT
N W + E S							SIG WARRANTS: Urb=N, Rur=Y
							LEFT THRU RIGHT Split? N

STREET NAME: MAIN STREET

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	17	17	1650	0.0103	
LEFT (L)	1	1	1650	0.0006	0.0006
T + R		17	1650	0.0103	
SB RIGHT (R)	399	399	1650	0.2418	
THRU (T)	33	33	1650	0.0200	
LEFT (L)	14	14	1650	0.0085	
T + R		432	1650	0.2618	0.2618
EB RIGHT (R)	1	0 *	1650	0.0000	
THRU (T)	123	123	3300	0.0373	
LEFT (L)	136	136	1650	0.0824	0.0824
WB RIGHT (R)	11	0 *	1650	0.0000	
THRU (T)	308	308	3300	0.0933	0.0933
LEFT (L)	0	0	1650	0.0000	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.44

INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=NXRUN4.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 No Project 07/02/01

INTERSECTION 6618 MAIN STREET/GLEASON DRIVE DUBLIN  
Count Date YR.2025 ANNEX Time RUN 4 W/O PRJ Peak Hour PM PEAK VOL

CCTA METHOD	RIGHT	THRU	LEFT	8-PHASE SIGNAL			
	165	16	7				
LEFT	348	1.0	1.1	1.1	1.0	1.0	10 RIGHT
THRU	309	2.0	(NO. OF LANES)	2.0	<---	122	THRU GLEASON DRIVE
RIGHT	2	1.0	1.0	1.1	1.1	1.0	0 LEFT
N W + E S							SIG WARRANTS: Urb=N, Rur=N
							LEFT THRU RIGHT Split? N

STREET NAME: MAIN STREET

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	34	34	1650	0.0206	
LEFT (L)	1	1	1650	0.0006	0.0006
T + R		34	1650	0.0206	
SB RIGHT (R)	165	165	1650	0.1000	
THRU (T)	16	16	1650	0.0097	
LEFT (L)	7	7	1650	0.0042	
T + R		181	1650	0.1097	0.1097
EB RIGHT (R)	2	1 *	1650	0.0006	
THRU (T)	309	309	3300	0.0936	
LEFT (L)	348	348	1650	0.2109	0.2109
WB RIGHT (R)	10	3 *	1650	0.0018	
THRU (T)	122	122	3300	0.0370	0.0370
LEFT (L)	0	0	1650	0.0000	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.36

INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
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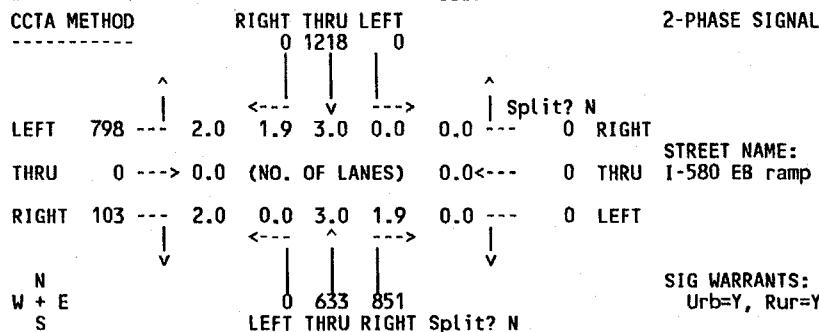
168  
809

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 No Project 07/03/01

INTERSECTION 9957 EL Charro Rd/I-580 EB ramp Alameda County  
Count Date YR.2025 ANNEX Time RUN 4 W/O PRJ Peak Hour AM PEAK VOL

13



STREET NAME: EL Charro Rd

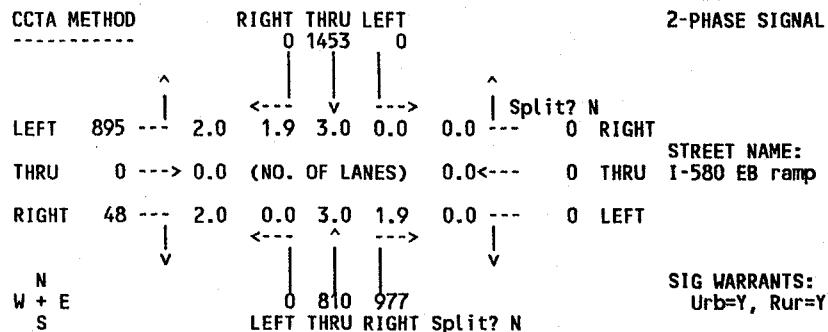
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	851	851	1800	0.4728	
THRU (T)	633	633	5400	0.1172	
SB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	1218	1218	5400	0.2256	0.2256
EB RIGHT (R)	103	103	3273	0.0315	
LEFT (L)	798	798	3273	0.2438	0.2438

TOTAL VOLUME-TO-CAPACITY RATIO: 0.47  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=NXRUN4.AMV, CAP=C...LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 No Project 07/03/01

INTERSECTION 9957 EL Charro Rd/I-580 EB ramp Alameda County  
Count Date YR.2025 ANNEX Time RUN 4 W/O PRJ Peak Hour PM PEAK VOL

STREET NAME: EL Charro Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	977	977	1800	0.5428	
THRU (T)	810	810	5400	0.1500	
SB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	1453	1453	5400	0.2691	0.2691
EB RIGHT (R)	48	48	3273	0.0147	
LEFT (L)	895	895	3273	0.2734	0.2734

TOTAL VOLUME-TO-CAPACITY RATIO: 0.54  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=NXRUN4.PMV, CAP=C...LOSCAP.TAB

262  
986 20 26

LOS Software by TJKM Transportation Consultants

Condition: am peak hour: Cumulative 2025 No Project 07/03/01

07/03/01

14

INTERSECTION 9956 Fallon Rd/I-580 WB ramp Alameda County  
Count Date YR-2025 ANNEX Time RUN 4 W/O PRJ Peak Hour AM PEAK VOL

CCTA METHOD      RIGHT THRU LEFT      2-PHASE SIGNAL

^  
 |  
 LEFT 0 --- 0.0 1.9 3.0 0.0 2.0 --- Split? N  
 THRU 0 ---> 0.0 (NO. OF LANES) 0.0<--- 0 THRU I-580 WB ramp  
 RIGHT 0 --- 0.0 0.0 3.0 1.9 2.0 --- 693 LEFT  
 N  
 W + E 0 14 10 0  
 S LEFT THRU RIGHT Split? N  
 SIG WARRANTS:  
 Urb=Y, Rur=Y

STREET NAME: Fallon Rd

		ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB	RIGHT (R)	0	0	1800	0.0000	
	THRU (T)	1410	1410	5400	0.2611	
SB	RIGHT (R)	1051	1051	1800	0.5839	
	THRU (T)	1747	1747	5400	0.3235	0.3235
WB	RIGHT (R)	806	806	3273	0.2463	0.2463
	LEFT (L)	693	693	3273	0.2117	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.57  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP, INT VOL=NXRUN4, AMV, CAP=C, LOSCAP, TAB

LOS Software by TJKM Transportation Consultants

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Condition: pm peak hour: Cumulative 2025 No Project

07/03/01

INTERSECTION 9956 Fallon Rd/I-580 WB ramp Alameda County  
Count Date YR-2025 ANNEX Time RUN 4 W/O PRJ Peak Hour PM PEAK VOL

**CCTA METHOD**      **RIGHT THRU LEFT**      **2-PHASE SIGNAL**

^  
 |  
 LEFT 0 --- 0.0 1.9 3.0 0.0 2.0 --- 1254 RIGHT  
 THRU 0 ---> 0.0 (NO. OF LANES) 0.0<--- 0 THRU I-580 WB ramp  
 RIGHT 0 --- 0.0 0.0 3.0 1.9 2.0 --- 747 LEFT  
 N  
 W + E  
 S  
 ^  
 |  
 0 1590 0  
 LEFT THRU RIGHT Split? N

**STREET NAME:** Fallon Rd

		ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB	RIGHT (R)	0	0	1800	0.0000	
	THRU (T)	1590	1590	5400	0.2944	
SB	RIGHT (R)	1334	1334	1800	0.7411	
	THRU (T)	1632	1632	5400	0.3022	0.3022
WB	RIGHT (R)	1254	1254	3273	0.3831	0.3831
	LEFT (L)	747	747	3273	0.2282	

**TOTAL VOLUME-TO-CAPACITY RATIO:** 0.69  
**INTERSECTION LEVEL OF SERVICE:** B

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP, INT VOL=NXRUN4 PMV CAP=C: - LOSCAP TAB

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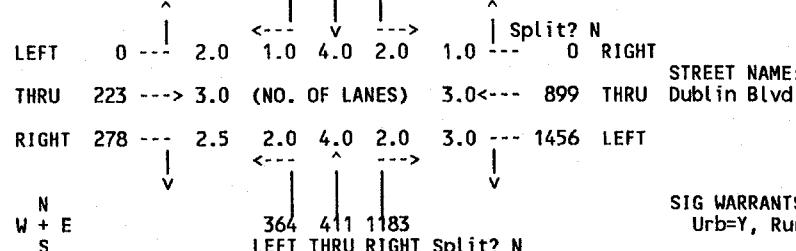
LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 No Project 07/03/01

(15) INTERSECTION 8336 Fallon Rd/Dublin Blvd Alameda County  
Count Date YR.2025 ANNEX Time RUN 4 W/O PRJ Peak Hour AM PEAK VOL

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL

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1 1082 177



STREET NAME: Fallon Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	1183	625 *	3000	0.2083	
THRU (T)	411	411	6600	0.0623	
LEFT (L)	364	364	3000	0.1213	0.1213
SB RIGHT (R)	1	1	1650	0.0006	
THRU (T)	1082	1082	6600	0.1639	0.1639
LEFT (L)	177	177	3000	0.0590	
EB RIGHT (R)	278	0 *	3000	0.0000	
THRU (T)	223	223	4950	0.0451	0.0451
LEFT (L)	0	0	3000	0.0000	
WB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	899	899	4950	0.1816	
LEFT (L)	1456	1456	4304	0.3383	0.3383

TOTAL VOLUME-TO-CAPACITY RATIO: 0.67

INTERSECTION LEVEL OF SERVICE: B

\* ADJUSTED FOR RIGHT TURN ON RED

INT=NEWSRP.INT, VOL=NXRUN4.AMV, CAP=C:..LOSCAP.TAB

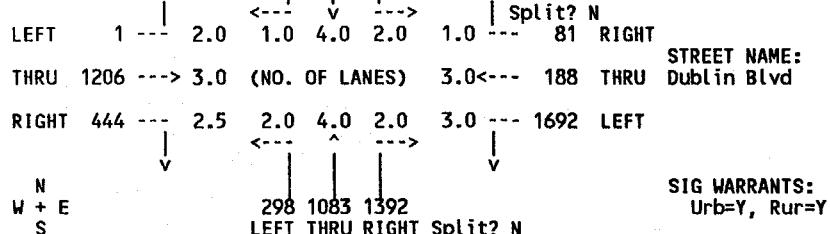
LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 No Project 07/03/01

INTERSECTION 8336 Fallon Rd/Dublin Blvd Alameda County  
Count Date YR.2025 ANNEX Time RUN 4 W/O PRJ Peak Hour PM PEAK VOL

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL

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0 460 0



STREET NAME: Fallon Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	1392	743 *	3000	0.2477	0.2477
THRU (T)	1083	1083	6600	0.1641	
LEFT (L)	298	298	3000	0.0993	
SB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	460	460	6600	0.0697	
LEFT (L)	0	0	3000	0.0000	0.0000
EB RIGHT (R)	444	146 *	3000	0.0487	
THRU (T)	1206	1206	4950	0.2436	0.2436
LEFT (L)	1	1	3000	0.0003	
WB RIGHT (R)	81	81	1650	0.0491	
THRU (T)	188	188	4950	0.0380	
LEFT (L)	1692	1692	4304	0.3931	0.3931

TOTAL VOLUME-TO-CAPACITY RATIO: 0.88

INTERSECTION LEVEL OF SERVICE: D

\* ADJUSTED FOR RIGHT TURN ON RED

INT=NEWSRP.INT, VOL=NXRUN4.PMV, CAP=C:..LOSCAP.TAB

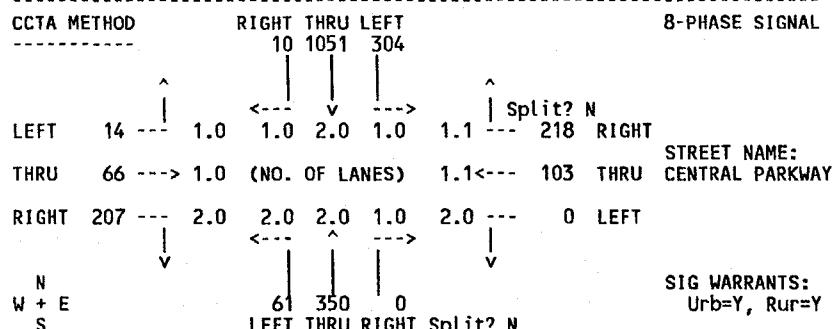
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LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 No Project 07/02/01

INTERSECTION 6438 FALCON ROAD/CENTRAL PARKWAY DUBLIN  
Count Date YR.2025 ANNEX Time RUN 4 W/O PRJ Peak Hour AM PEAK VOL

(16)



STREET NAME: FALCON ROAD

MOVEMENT	ORIGINAL	ADJUSTED	V/C	CRITICAL
	VOLUME	VOLUME*		
NB RIGHT (R)	0	0	1650	0.0000
THRU (T)	350	350	3300	0.1061
LEFT (L)	61	61	3000	0.0203
SB RIGHT (R)	10	0 *	1650	0.0000
THRU (T)	1051	1051	3300	0.3185
LEFT (L)	304	304	1650	0.1842
EB RIGHT (R)	207	173 *	3000	0.0577
THRU (T)	66	66	1650	0.0400
LEFT (L)	14	14	1650	0.0085
WB RIGHT (R)	218	218	1650	0.1321
THRU (T)	103	103	1650	0.0624
LEFT (L)	0	0	3000	0.0000
T + R	321		1650	0.1945
				0.1945

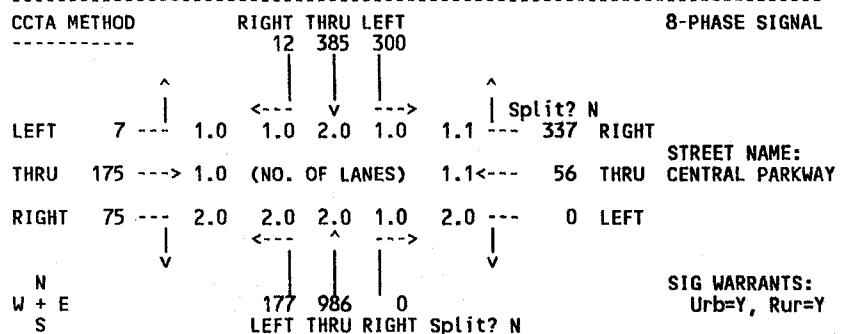
TOTAL VOLUME-TO-CAPACITY RATIO: 0.54  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=NXRUN4.AMV, CAP=C:..LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 No Project 07/02/01

INTERSECTION 6438 FALCON ROAD/CENTRAL PARKWAY DUBLIN  
Count Date YR.2025 ANNEX Time RUN 4 W/O PRJ Peak Hour PM PEAK VOL



STREET NAME: FALCON ROAD

MOVEMENT	ORIGINAL	ADJUSTED	V/C	CRITICAL
	VOLUME	VOLUME*		
NB RIGHT (R)	0	0	1650	0.0000
THRU (T)	986	986	3300	0.2988
LEFT (L)	177	177	3000	0.0590
SB RIGHT (R)	12	5 *	1650	0.0030
THRU (T)	385	385	3300	0.1167
LEFT (L)	300	300	1650	0.1818
EB RIGHT (R)	75	0 *	3000	0.0000
THRU (T)	175	175	1650	0.1061
LEFT (L)	7	7	1650	0.0042
WB RIGHT (R)	337	337	1650	0.2042
THRU (T)	56	56	1650	0.0339
LEFT (L)	0	0	3000	0.0000
T + R		393	1650	0.2382
				0.2382

TOTAL VOLUME-TO-CAPACITY RATIO: 0.72  
INTERSECTION LEVEL OF SERVICE: C

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=NXRUN4.PMV, CAP=C:..LOSCAP.TAB

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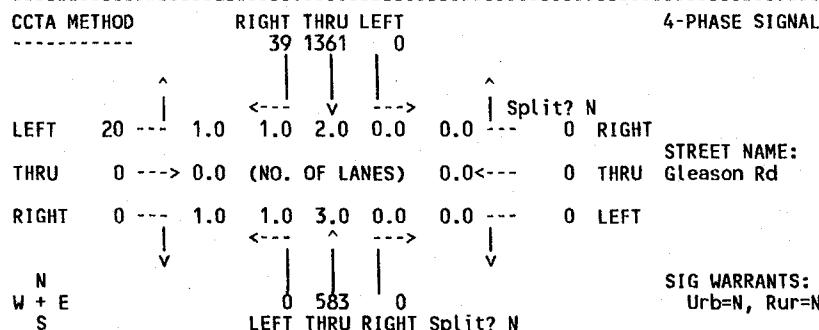
LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 No Project

07/02/01

INTERSECTION 9954 Fallon Rd/Gleason Rd Alameda County  
Count Date YR.2025 ANNEX Time RUN 4 W/O PRJ Peak Hour AM PEAK VOL

(17)



STREET NAME: Fallon Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	583	583	4950	0.1178	
LEFT (L)	0	0	1650	0.0000	0.0000
SB RIGHT (R)	39	19 *	1650	0.0115	
THRU (T)	1361	1361	3300	0.4124	0.4124
EB RIGHT (R)	0	0	1650	0.0000	
LEFT (L)	20	20	1650	0.0121	0.0121

TOTAL VOLUME-TO-CAPACITY RATIO: 0.42

INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED

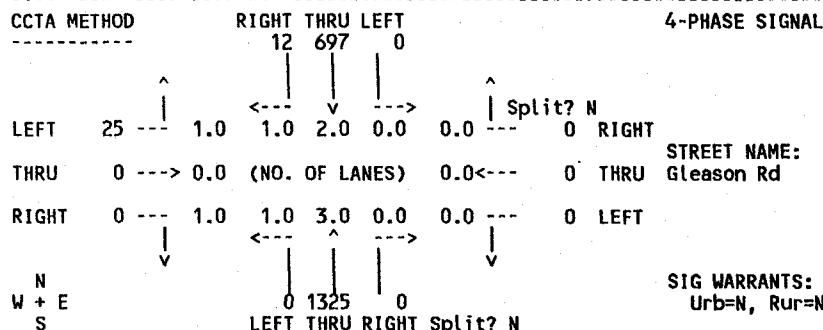
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LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 No Project

07/02/01

INTERSECTION 9954 Fallon Rd/Gleason Rd Alameda County  
Count Date YR.2025 ANNEX Time RUN 4 W/O PRJ Peak Hour PM PEAK VOL



STREET NAME: Fallon Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	1325	1325	4950	0.2677	0.2677
LEFT (L)	0	0	1650	0.0000	
SB RIGHT (R)	12	0 *	1650	0.0000	
THRU (T)	697	697	3300	0.2112	
EB RIGHT (R)	0	0	1650	0.0000	
LEFT (L)	25	25	1650	0.0152	0.0152

TOTAL VOLUME-TO-CAPACITY RATIO: 0.28

INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED

INT=NEWSRP.INT, VOL=NXRUN4.PMV, CAP=C...LOSCLP.TAB

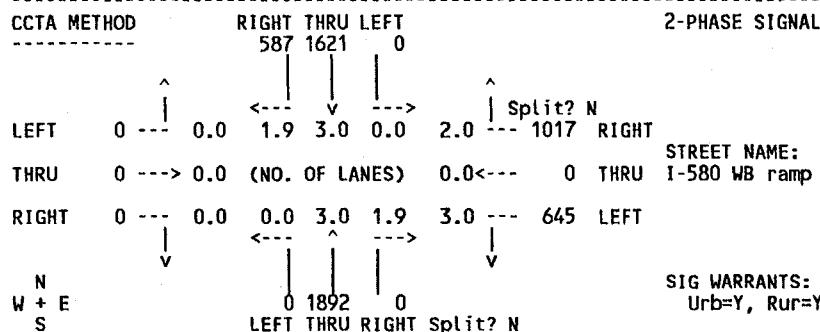
Built out geometry

2006 Joe 968

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 No Project - Mitigation 07/03/01

③ INTERSECTION 8305 Hacienda Dr/I-580 WB ramp Dublin  
 Count Date YR.2025 ANNEX Time RUN 4 W/O PRJ Peak Hour AM PEAK VOL



MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	1892	1892	5400	0.3504	0.3504
SB RIGHT (R)	587	587	1800	0.3261	
THRU (T)	1621	1621	5400	0.3002	
WB RIGHT (R)	1017	1017	3273	0.3107	0.3107
LEFT (L)	645	645	4695	0.1374	

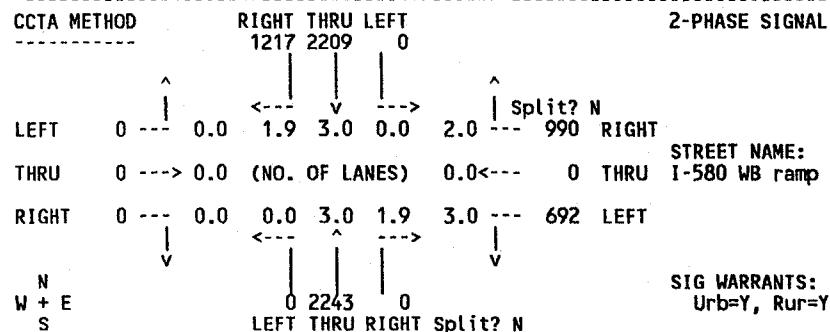
TOTAL VOLUME-TO-CAPACITY RATIO: 0.66  
 INTERSECTION LEVEL OF SERVICE: B

\* ADJUSTED FOR RIGHT TURN ON RED  
 INT=MITIG8.INT, VOL=NXRUN4.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 No Project - Mitigation 07/03/01

INTERSECTION 8305 Hacienda Dr/I-580 WB ramp Dublin  
 Count Date YR.2025 ANNEX Time RUN 4 W/O PRJ Peak Hour PM PEAK VOL



MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	2243	2243	5400	0.4154	0.4154
SB RIGHT (R)	1217	1217	1800	0.6761	
THRU (T)	2209	2209	5400	0.4091	
WB RIGHT (R)	990	990	3273	0.3025	0.3025
LEFT (L)	692	692	4695	0.1474	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.72  
 INTERSECTION LEVEL OF SERVICE: C

\* ADJUSTED FOR RIGHT TURN ON RED  
 INT=MITIG8.INT, VOL=NXRUN4.PMV, CAP=C:..LOSCAP.TAB

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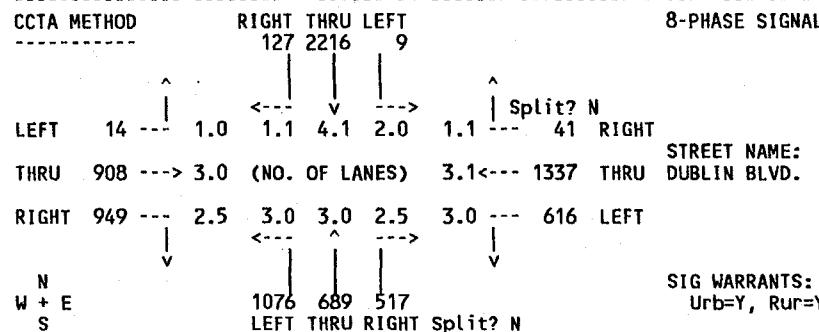
**LEVEL OF SERVICE CALCULATION  
CUMULATIVE YEAR 2025 + PROJECT**

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## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 + Project 07/03/01

**①** INTERSECTION 3977 DOUGHERTY RD./DUBLIN BLVD. DUBLIN  
Count Date Time Peak Hour



	ORIGINAL VOLUME	ADJUSTED VOLUME*	V/C CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	517	88 *	3000	0.0293	
THRU (T)	689	689	4950	0.1392	
LEFT (L)	1076	1076	4304	0.2500	0.2500
SB RIGHT (R)	127	127	1650	0.0770	
THRU (T)	2216	2216	6600	0.3358	
LEFT (L)	9	9	3000	0.0030	
T + R	2343		6600	0.3550	0.3550
EB RIGHT (R)	949	199 *	3000	0.0663	
THRU (T)	908	908	4950	0.1834	0.1834
LEFT (L)	14	14	1650	0.0085	
WB RIGHT (R)	41	41	1650	0.0248	
THRU (T)	1337	1337	4950	0.2701	
LEFT (L)	616	616	4304	0.1431	0.1431
T + R	1378		4950	0.2784	

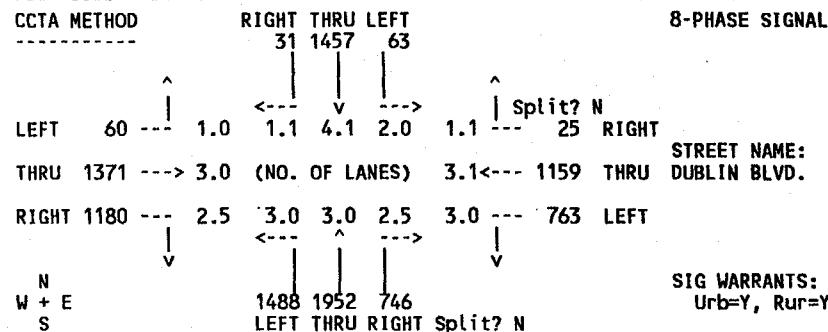
TOTAL VOLUME-TO-CAPACITY RATIO: 0.93  
INTERSECTION LEVEL OF SERVICE: E

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT,VOL=MIDNOFSA.AMV,CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 + Project 07/03/01

INTERSECTION 3977 DOUGHERTY RD./DUBLIN BLVD. DUBLIN  
Count Date Time Peak Hour



	ORIGINAL VOLUME	ADJUSTED VOLUME*	V/C CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	746	214 *	3000	0.0713	
THRU (T)	1952	1952	4950	0.3943	
LEFT (L)	1488	1488	4304	0.3457	0.3457
SB RIGHT (R)	31	31	1650	0.0188	
THRU (T)	1457	1457	6600	0.2208	
LEFT (L)	63	63	3000	0.0210	
T + R	1488		6600	0.2255	0.2255
EB RIGHT (R)	1180	143 *	3000	0.0477	
THRU (T)	1371	1371	4950	0.2770	0.2770
LEFT (L)	60	60	1650	0.0364	
WB RIGHT (R)	25	25	1650	0.0152	
THRU (T)	1159	1159	4950	0.2341	
LEFT (L)	763	763	4304	0.1773	0.1773
T + R	1184		4950	0.2392	

TOTAL VOLUME-TO-CAPACITY RATIO: 1.03  
INTERSECTION LEVEL OF SERVICE: F

\* ADJUSTED FOR RIGHT TURN ON RED  
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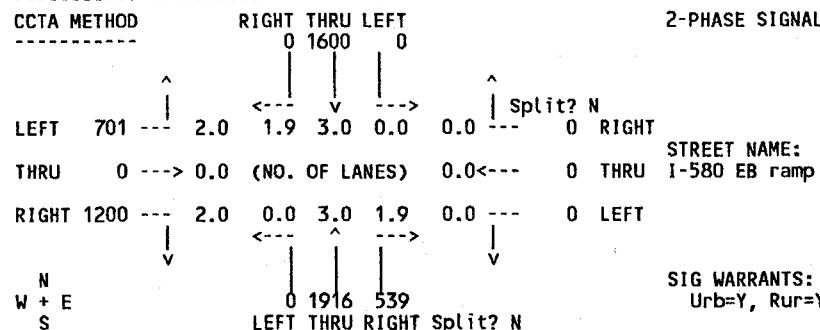
See page 66  
See page 66

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 + Project

07/02/01

2

INTERSECTION 8302 Hacienda Dr/I-580 EB ramp Pleasanton  
Count Date Time Peak Hour

STREET NAME: Hacienda Dr

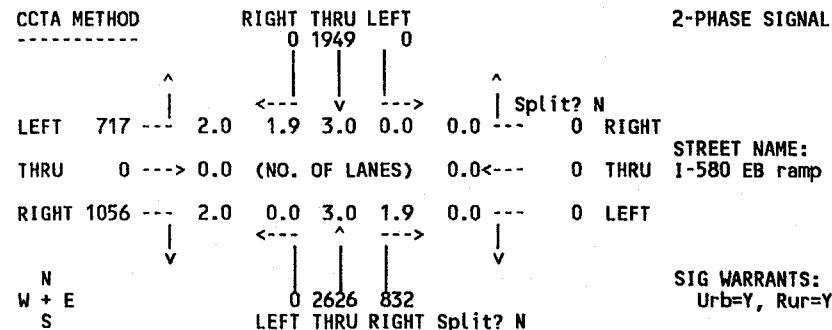
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	539	539	1800	0.2994	
THRU (T)	1916	1916	5400	0.3548	0.3548
SB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	1600	1600	5400	0.2963	
EB RIGHT (R)	1200	1200	3273	0.3666	0.3666
LEFT (L)	701	701	3273	0.2142	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.72  
INTERSECTION LEVEL OF SERVICE: C\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=MIDNOFSA.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 + Project

07/02/01

INTERSECTION 8302 Hacienda Dr/I-580 EB ramp Pleasanton  
Count Date Time Peak Hour

STREET NAME: Hacienda Dr

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	832	832	1800	0.4622	
THRU (T)	2626	2626	5400	0.4863	0.4863
SB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	1949	1949	5400	0.3609	
EB RIGHT (R)	1056	1056	3273	0.3226	0.3226
LEFT (L)	717	717	3273	0.2191	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.81  
INTERSECTION LEVEL OF SERVICE: D\* ADJUSTED FOR RIGHT TURN ON RED  
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300

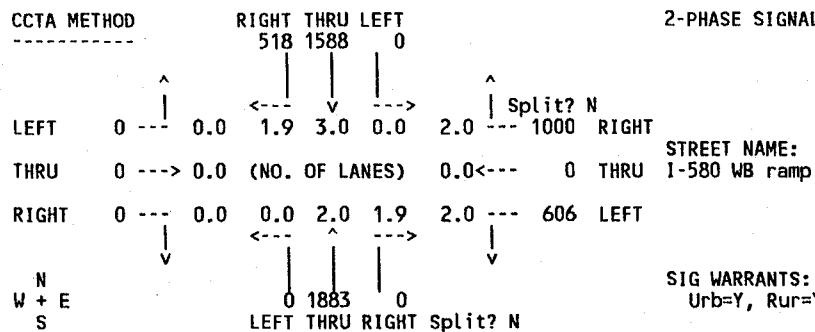
808

388

LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 + Project 07/02/01

INTERSECTION 8305 Hacienda Dr/I-580 WB ramp Dublin  
Count Date Time Peak Hour



STREET NAME: Hacienda Dr

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1800	0.0000	0.0000
THRU (T)	1883	1883	3720	0.5231	0.5231
SB RIGHT (R)	518	518	1800	0.2878	0.2878
THRU (T)	1588	1588	5400	0.2941	0.2941
WB RIGHT (R)	1000	1000	3273	0.3055	0.3055
LEFT (L)	606	606	3273	0.1852	0.1852

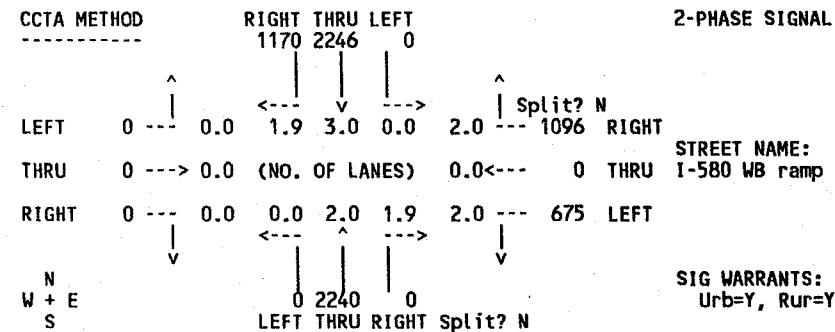
TOTAL VOLUME-TO-CAPACITY RATIO: 0.830.81  
INTERSECTION LEVEL OF SERVICE: D

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=MIDNOFSA.AMV, CAP=C:..LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 + Project 07/02/01

INTERSECTION 8305 Hacienda Dr/I-580 WB ramp Dublin  
Count Date Time Peak Hour



STREET NAME: Hacienda Dr

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1800	0.0000	0.0000
THRU (T)	2240	2240	3720	0.6222	0.6222
SB RIGHT (R)	1170	1170	1800	0.6500	0.6500
THRU (T)	2246	2246	5400	0.4159	0.4159
WB RIGHT (R)	1096	1096	3273	0.3349	0.3349
LEFT (L)	675	675	3273	0.2062	0.2062

TOTAL VOLUME-TO-CAPACITY RATIO: 0.96 0.94  
INTERSECTION LEVEL OF SERVICE: E

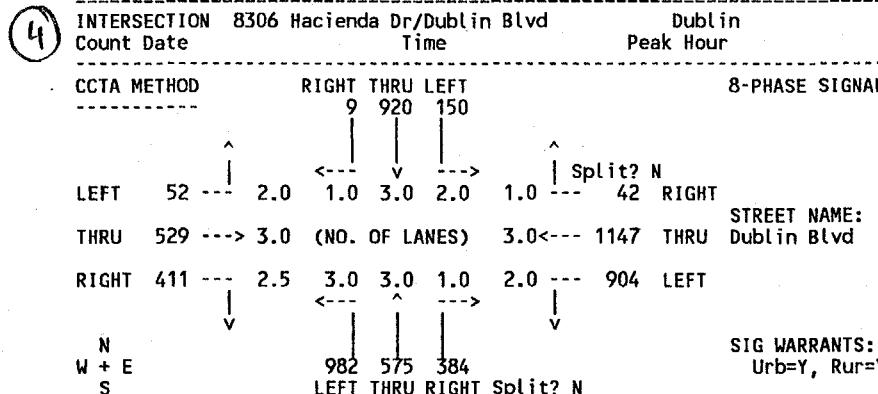
\* ADJUSTED FOR RIGHT TURN ON RED  
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301 8 308

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 + Project

07/02/01



MOVEMENT	ORIGINAL	ADJUSTED	V/C	CRITICAL
	VOLUME	VOLUME*		
NB RIGHT (R)	384	0 *	1650	0.0000
THRU (T)	575	575	4950	0.1162
LEFT (L)	982	982	4304	0.2282
SB RIGHT (R)	9	0 *	1650	0.0000
THRU (T)	920	920	4950	0.1859
LEFT (L)	150	150	3000	0.0500
EB RIGHT (R)	411	0 *	3000	0.0000
THRU (T)	529	529	4950	0.1069
LEFT (L)	52	52	3000	0.0173
WB RIGHT (R)	42	0 *	1650	0.0000
THRU (T)	1147	1147	4950	0.2317
LEFT (L)	904	904	3000	0.3013

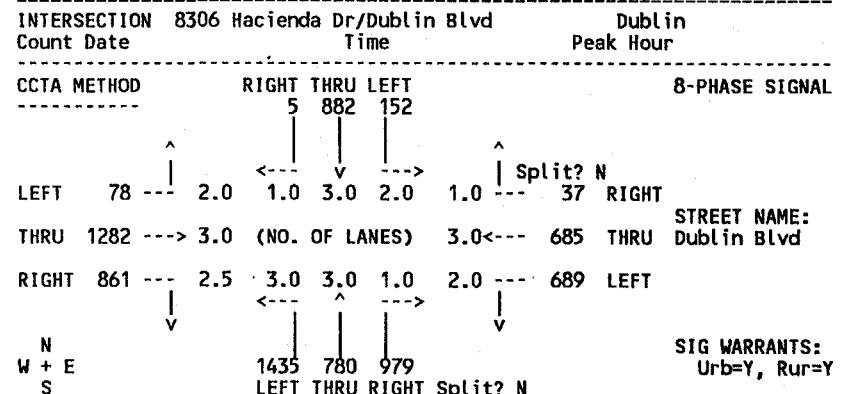
TOTAL VOLUME-TO-CAPACITY RATIO: 0.82  
INTERSECTION LEVEL OF SERVICE: D

\* ADJUSTED FOR RIGHT TURN ON RED  
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## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 + Project

07/02/01



MOVEMENT	ORIGINAL	ADJUSTED	V/C	CRITICAL
	VOLUME	VOLUME*		
NB RIGHT (R)	979	600 *	1650	0.3636
THRU (T)	780	780	4950	0.1576
LEFT (L)	1435	1435	4304	0.3334
SB RIGHT (R)	5	0 *	1650	0.0000
THRU (T)	882	882	4950	0.1782
LEFT (L)	152	152	3000	0.0507
EB RIGHT (R)	861	0 *	3000	0.0000
THRU (T)	1282	1282	4950	0.2590
LEFT (L)	78	78	3000	0.0260
WB RIGHT (R)	37	0 *	1650	0.0000
THRU (T)	685	685	4950	0.1384
LEFT (L)	689	689	3000	0.2297

TOTAL VOLUME-TO-CAPACITY RATIO: 1.00  
INTERSECTION LEVEL OF SERVICE: E

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=MIDNOFSA.PMV, CAP=C:..LOSCAP.TAB

3006

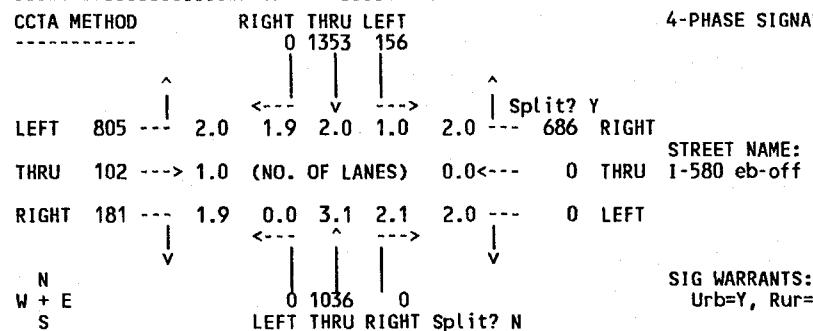
886

388

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 + Project 07/02/01

5

INTERSECTION 4041 Santa Rita Rd/I-580 eb-off PLEASANTON  
Count Date Time Peak Hour

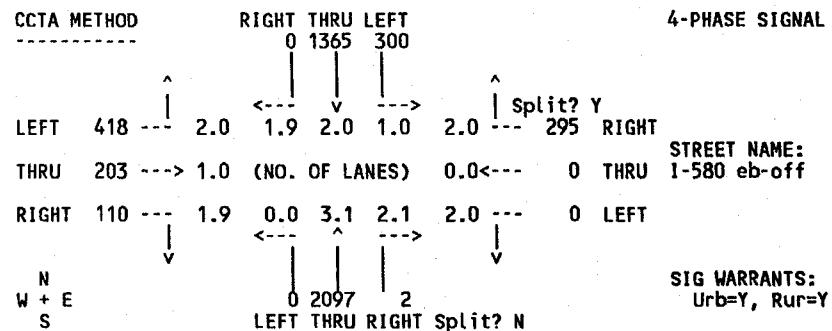
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	3000	0.0000	
THRU (T)	1036	1036	4950	0.2093	
T + R		1036	6300	0.1644	
SB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	1353	1353	3300	0.4100	0.4100
LEFT (L)	156	156	1650	0.0945	
EB RIGHT (R)	181	181	1650	0.1097	
THRU (T)	102	102	1650	0.0618	
LEFT (L)	805	805	3000	0.2683	0.2683
WB RIGHT (R)	686	530 *	3000	0.1767	0.1767
LEFT (L)	0	0	3000	0.0000	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.86  
INTERSECTION LEVEL OF SERVICE: D

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=MIDNOFSA.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 + Project 07/02/01

INTERSECTION 4041 Santa Rita Rd/I-580 eb-off PLEASANTON  
Count Date Time Peak Hour

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	2	2	3000	0.0007	
THRU (T)	2097	2097	4950	0.4236	0.4236
T + R		2099	6300	0.3332	
SB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	1365	1365	3300	0.4136	
LEFT (L)	300	300	1650	0.1818	0.1818
EB RIGHT (R)	110	110	1650	0.0667	
THRU (T)	203	203	1650	0.1230	
LEFT (L)	418	418	3000	0.1393	0.1393
WB RIGHT (R)	295	0 *	3000	0.0000	0.0000
LEFT (L)	0	0	3000	0.0000	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.74  
INTERSECTION LEVEL OF SERVICE: C

\* ADJUSTED FOR RIGHT TURN ON RED  
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## LOS Software by TJKM Transportation Consultants

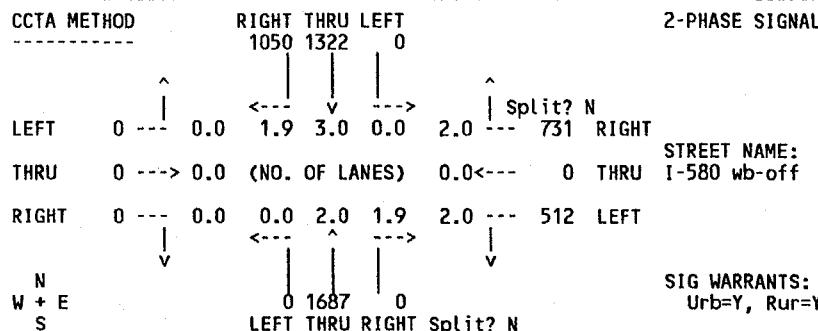
Condition: am peak hour; Cumulative 2025 + Project

07/02/01

INTERSECTION 3988 Tassajara Rd/I-580 wb-off  
Count Date Time Peak Hour

PLEASANTON

(6)



STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB    RIGHT (R)	0	0	1800	0.0000	
THRU (T)	1687	1687	3600	0.4686	0.4686
SB    RIGHT (R)	1050	1050	1800	0.5833	
THRU (T)	1322	1322	5400	0.2448	
WB    RIGHT (R)	731	731	3273	0.2233	0.2233
LEFT (L)	512	512	3273	0.1564	

TOTAL VOLUME-TO-CAPACITY RATIO:      0.69

INTERSECTION LEVEL OF SERVICE:      B

\* ADJUSTED FOR RIGHT TURN ON RED  
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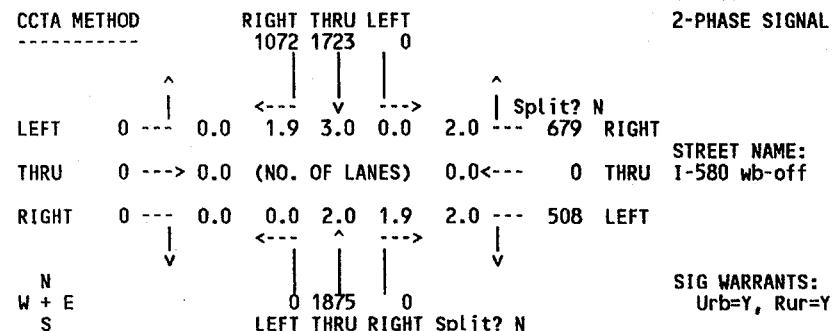
## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 + Project

07/02/01

INTERSECTION 3988 Tassajara Rd/I-580 wb-off  
Count Date Time Peak Hour

PLEASANTON



STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB    RIGHT (R)	0	0	1800	0.0000	
THRU (T)	1875	1875	3600	0.5208	0.5208
SB    RIGHT (R)	1072	1072	1800	0.5956	
THRU (T)	1723	1723	5400	0.3191	
WB    RIGHT (R)	679	679	3273	0.2075	0.2075
LEFT (L)	508	508	3273	0.1552	

TOTAL VOLUME-TO-CAPACITY RATIO:      0.73

INTERSECTION LEVEL OF SERVICE:      C

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT,VOL=MIDNOFSA.PMV,CAP=C:..LOSCAP.TAB

300  
838

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 + Project 07/03/01

(7)

INTERSECTION 1573 Tassajara Rd/Dublin Blvd Alameda County  
Count Date Time Peak Hour

CCTA METHOD	RIGHT	THRU	LEFT	8-PHASE SIGNAL			
	714	1893	112				
LEFT	397	2.0	2.0	4.0	2.0	1.0	53
THRU	420	-->	3.0	(NO. OF LANES)	3.0	<---	1114 THRU Dublin Blvd
RIGHT	200	---	2.5	3.0	4.0	2.0	500 LEFT
N W + E S	417	1152	502				SIG WARRANTS: Urb=Y, Rur=Y
	LEFT THRU	RIGHT	Split? N				

STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	V/C	Critical V/C
NB RIGHT (R)	502	310 *	3000	0.1033
THRU (T)	1152	1152	6600	0.1745
LEFT (L)	417	417	4304	0.0969
SB RIGHT (R)	714	496 *	3000	0.1653
THRU (T)	1893	1893	6600	0.2868
LEFT (L)	112	112	3000	0.0373
EB RIGHT (R)	200	0 *	3000	0.0000
THRU (T)	420	420	4950	0.0848
LEFT (L)	397	397	3000	0.1323
WB RIGHT (R)	53	0 *	1650	0.0000
THRU (T)	1114	1114	4950	0.2251
LEFT (L)	500	500	4304	0.1162

TOTAL VOLUME-TO-CAPACITY RATIO: 0.74  
INTERSECTION LEVEL OF SERVICE: C\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=MIDNOFSA.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 + Project 07/03/01

INTERSECTION 1573 Tassajara Rd/Dublin Blvd Alameda County  
Count Date Time Peak Hour

CCTA METHOD	RIGHT	THRU	LEFT	8-PHASE SIGNAL			
	390	1492	82				
LEFT	978	2.0	2.0	4.0	2.0	1.0	61
THRU	1412	-->	3.0	(NO. OF LANES)	3.0	<---	366 THRU Dublin Blvd
RIGHT	375	---	2.5	3.0	4.0	2.0	960 LEFT
N W + E S	541	1710	427				SIG WARRANTS: Urb=Y, Rur=Y
	LEFT THRU	RIGHT	Split? N				

STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	V/C	Critical V/C
NB RIGHT (R)	427	59 *	3000	0.0197
THRU (T)	1710	1710	6600	0.2591
LEFT (L)	541	541	4304	0.1257
SB RIGHT (R)	390	0 *	3000	0.0000
THRU (T)	1492	1492	6600	0.2261
LEFT (L)	82	82	3000	0.0273
EB RIGHT (R)	375	0 *	3000	0.0000
THRU (T)	1412	1412	4950	0.2853
LEFT (L)	978	978	3000	0.3260
WB RIGHT (R)	61	16 *	1650	0.0097
THRU (T)	366	366	4950	0.0739
LEFT (L)	960	960	4304	0.2230

TOTAL VOLUME-TO-CAPACITY RATIO: 0.86  
INTERSECTION LEVEL OF SERVICE: D\* ADJUSTED FOR RIGHT TURN ON RED  
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305

896

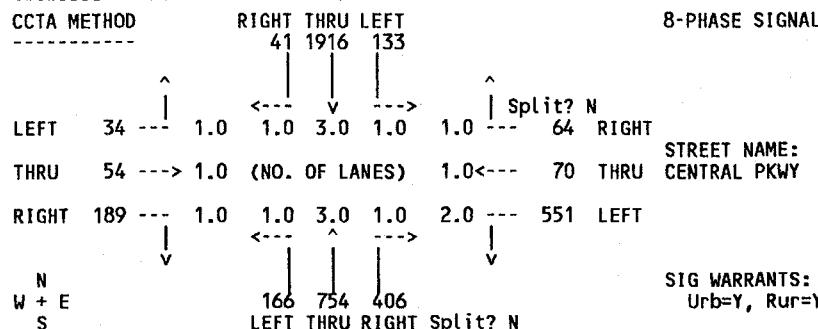
## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 + Project

07/03/01

INTERSECTION 6430 TASSAJARA RD./CENTRAL PKWY DUBLIN  
 Count Date FROM MODEL Time FROM MODEL Peak Hour FROM MODEL

8



STREET NAME: TASSAJARA RD.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	406	103 *	1650	0.0624	
THRU (T)	754	754	4950	0.1523	
LEFT (L)	166	166	1650	0.1006	0.1006
SB RIGHT (R)	41	7 *	1650	0.0042	
THRU (T)	1916	1916	4950	0.3871	0.3871
LEFT (L)	133	133	1650	0.0806	
EB RIGHT (R)	189	23 *	1650	0.0139	
THRU (T)	54	54	1650	0.0327	0.0327
LEFT (L)	34	34	1650	0.0206	
WB RIGHT (R)	64	0 *	1650	0.0000	
THRU (T)	70	70	1650	0.0424	
LEFT (L)	551	551	3000	0.1837	0.1837

TOTAL VOLUME-TO-CAPACITY RATIO: 0.70  
 INTERSECTION LEVEL OF SERVICE: B

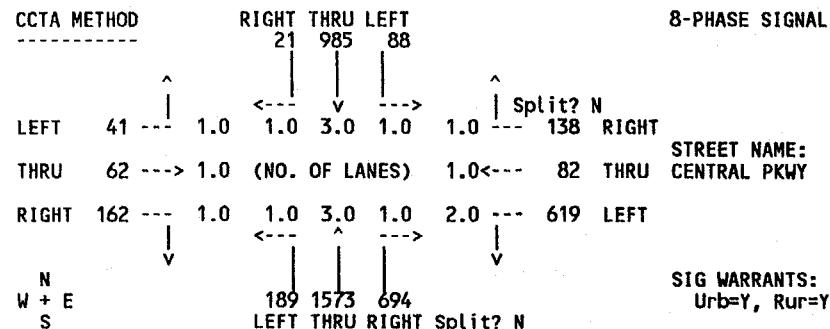
\* ADJUSTED FOR RIGHT TURN ON RED  
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## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 + Project

07/03/01

INTERSECTION 6430 TASSAJARA RD./CENTRAL PKWY DUBLIN  
 Count Date Time Peak Hour



STREET NAME: TASSAJARA RD.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	694	354 *	1650	0.2145	
THRU (T)	1573	1573	4950	0.3178	0.3178
LEFT (L)	189	189	1650	0.1145	
SB RIGHT (R)	21	0 *	1650	0.0000	
THRU (T)	985	985	4950	0.1990	
LEFT (L)	88	88	1650	0.0533	0.0533
EB RIGHT (R)	162	0 *	1650	0.0000	
THRU (T)	62	62	1650	0.0376	0.0376
LEFT (L)	41	41	1650	0.0248	
WB RIGHT (R)	138	50 *	1650	0.0303	
THRU (T)	82	82	1650	0.0497	
LEFT (L)	619	619	3000	0.2063	0.2063

TOTAL VOLUME-TO-CAPACITY RATIO: 0.61  
 INTERSECTION LEVEL OF SERVICE: B

\* ADJUSTED FOR RIGHT TURN ON RED  
 INT=NEWSRP.INT, VOL=MIDNOFSA.PMV, CAP=C:..LOSCAP.TAB

BBE 8/90

LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 + Project

07/03/01

9 INTERSECTION 3987 Tassajara Rd/Gleason Ave Alameda County  
Count Date FROM MODEL Time FROM MODEL Peak Hour FROM MODEL

CCTA METHOD	RIGHT	THRU	LEFT	8-PHASE SIGNAL		
	371	1594	70			
LEFT	37	2.0	1.0	3.0	1.0	1.0 --- 49 RIGHT
THRU	39	---> 2.0	(NO. OF LANES)	2.0<---	230 THRU	Gleason Ave STREET NAME:
RIGHT	109	--- 1.0	2.0	3.0	2.0	2.0 --- 454 LEFT
N W + E S	229	459	185			SIG WARRANTS: Urb=Y, Rur=Y
	LEFT THRU	RIGHT	Split? N			

STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	V/C CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	185	0 *	3000	0.0000	
THRU (T)	459	459	4950	0.0927	
LEFT (L)	229	229	3000	0.0763	0.0763
SB RIGHT (R)	371	351 *	1650	0.2127	
THRU (T)	1594	1594	4950	0.3220	0.3220
LEFT (L)	70	70	1650	0.0424	
EB RIGHT (R)	109	0 *	1650	0.0000	
THRU (T)	39	39	3300	0.0118	0.0118
LEFT (L)	37	37	3000	0.0123	
WB RIGHT (R)	49	0 *	1650	0.0000	
THRU (T)	230	230	3300	0.0697	
LEFT (L)	454	454	3000	0.1513	0.1513

TOTAL VOLUME-TO-CAPACITY RATIO: 0.56  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT,VOL=MIDNOFSA.AMV,CAP=C:..LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 + Project

07/03/01

INTERSECTION 3987 Tassajara Rd/Gleason Ave Alameda County  
Count Date Time Peak Hour

CCTA METHOD	RIGHT	THRU	LEFT	8-PHASE SIGNAL		
	47	614	57			
LEFT	437	2.0	1.0	3.0	1.0	1.0 --- 61 RIGHT
THRU	264	---> 2.0	(NO. OF LANES)	2.0<---	48 THRU	Gleason Ave STREET NAME:
RIGHT	270	--- 1.0	2.0	3.0	2.0	2.0 --- 258 LEFT
N W + E S	208	1283	353			SIG WARRANTS: Urb=Y, Rur=Y
	LEFT THRU	RIGHT	Split? N			

STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	V/C CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	353	211 *	3000	0.0703	
THRU (T)	1283	1283	4950	0.2592	0.2592
LEFT (L)	208	208	3000	0.0693	
SB RIGHT (R)	47	0 *	1650	0.0000	
THRU (T)	614	614	4950	0.1240	
LEFT (L)	57	57	1650	0.0345	0.0345
EB RIGHT (R)	270	156 *	1650	0.0945	0.0945
THRU (T)	264	264	3300	0.0800	
LEFT (L)	437	437	3000	0.1457	
WB RIGHT (R)	61	4 *	1650	0.0024	
THRU (T)	48	48	3300	0.0145	
LEFT (L)	258	258	3000	0.0860	0.0860

TOTAL VOLUME-TO-CAPACITY RATIO: 0.47  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT,VOL=MIDNOFSA.PMV,CAP=C:..LOSCAP.TAB

307  
886  
886

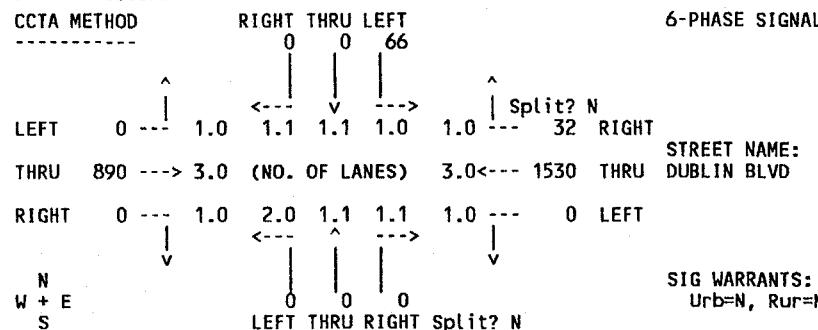
## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 + Project

07/02/01

INTERSECTION 6617 MAIN STREET/DUBLIN BLVD DUBLIN  
Count Date Time Peak Hour

(10)



STREET NAME: MAIN STREET

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1650	0.0000	0.0000
THRU (T)	0	0	1650	0.0000	
LEFT (L)	0	0	3000	0.0000	
T + R	0	1650	0.0000		
SB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	0	0	1650	0.0000	
LEFT (L)	66	66	1650	0.0400	0.0400
T + R	0	1650	0.0000		
EB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	890	890	4950	0.1798	
LEFT (L)	0	0	1650	0.0000	0.0000
WB RIGHT (R)	32	0 *	1650	0.0000	
THRU (T)	1530	1530	4950	0.3091	0.3091
LEFT (L)	0	0	1650	0.0000	

TOTAL VOLUME-TO-CAPACITY RATIO:

INTERSECTION LEVEL OF SERVICE: A

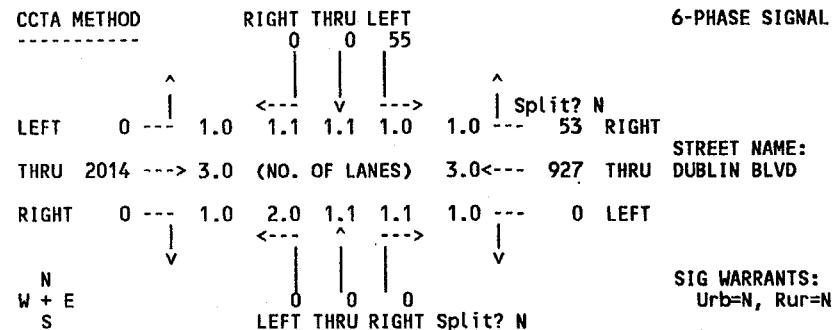
\* ADJUSTED FOR RIGHT TURN ON RED

INT=NEWSRP.INT, VOL=MIDNOFSA.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 + Project

07/02/01

INTERSECTION 6617 MAIN STREET/DUBLIN BLVD DUBLIN  
Count Date Time Peak Hour

STREET NAME: MAIN STREET

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1650	0.0000	0.0000
THRU (T)	0	0	1650	0.0000	
LEFT (L)	0	0	3000	0.0000	
T + R	0	1650	0.0000		
SB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	0	0	1650	0.0000	
LEFT (L)	55	55	1650	0.0333	0.0333
T + R	0	1650	0.0000		
EB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	2014	2014	4950	0.4069	0.4069
LEFT (L)	0	0	1650	0.0000	
WB RIGHT (R)	53	0 *	1650	0.0000	
THRU (T)	927	927	4950	0.1873	
LEFT (L)	0	0	1650	0.0000	0.0000

TOTAL VOLUME-TO-CAPACITY RATIO:

INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED

INT=NEWSRP.INT, VOL=MIDNOFSA.PMV, CAP=C:..LOSCAP.TAB

SBE 8/2005

LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 + Project 07/02/01

INTERSECTION 6615 MAIN STREET/CENTRAL PARKWAY DUBLIN

Count Date	Time	Peak Hour
CCTA METHOD		
	RIGHT THRU LEFT	5-PHASE SIGNAL
	0 0 0	
LEFT	0 1.0 1.1 1.1 1.0	1.0 -- 0 RIGHT
THRU	42 --> 2.0 (NO. OF LANES)	2.0<--- 137 THRU CENTRAL PARKWAY
RIGHT	111 --- 1.0 1.0 1.1 1.1	1.0 --- 0 LEFT
N W + E S	91 0 0	SIG WARRANTS: Urb=N, Rur=N
	LEFT THRU RIGHT Split? N	

STREET NAME: MAIN STREET

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	Critical V/C
NB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	0	0	1650	0.0000	
LEFT (L)	91	91	1650	0.0552	0.0552
T + R	0	0	1650	0.0000	
SB RIGHT (R)	0	0	1650	0.0000	0.0000
THRU (T)	0	0	1650	0.0000	
LEFT (L)	0	0	1650	0.0000	
T + R	0	0	1650	0.0000	
EB RIGHT (R)	111	20 *	1650	0.0121	
THRU (T)	42	42	3300	0.0127	
LEFT (L)	0	0	1650	0.0000	0.0000
WB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	137	137	3300	0.0415	0.0415
LEFT (L)	0	0	1650	0.0000	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.10

INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=MIDNOFSA.AMV, CAP=C:..LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 + Project 07/02/01

INTERSECTION 6615 MAIN STREET/CENTRAL PARKWAY DUBLIN

Count Date	Time	Peak Hour
CCTA METHOD		
	RIGHT THRU LEFT	5-PHASE SIGNAL
	0 0 0	
LEFT	0 1.0 1.1 1.1 1.0	1.0 -- 0 RIGHT
THRU	151 --> 2.0 (NO. OF LANES)	2.0<--- 34 THRU CENTRAL PARKWAY
RIGHT	120 --- 1.0 1.0 1.1 1.1	1.0 --- 0 LEFT
N W + E S	119 0 0	SIG WARRANTS: Urb=N, Rur=N
	LEFT THRU RIGHT Split? N	

STREET NAME: MAIN STREET

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	Critical V/C
NB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	0	0	1650	0.0000	
LEFT (L)	119	119	1650	0.0721	0.0721
T + R	0	0	1650	0.0000	
SB RIGHT (R)	0	0	1650	0.0000	0.0000
THRU (T)	0	0	1650	0.0000	
LEFT (L)	0	0	1650	0.0000	
T + R	0	0	1650	0.0000	
EB RIGHT (R)	120	1 *	1650	0.0006	
THRU (T)	151	151	3300	0.0458	0.0458
LEFT (L)	0	0	1650	0.0000	
WB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	34	34	3300	0.0103	
LEFT (L)	0	0	1650	0.0000	0.0000

TOTAL VOLUME-TO-CAPACITY RATIO: 0.12

INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=MIDNOFSA.PMV, CAP=C:..LOSCAP.TAB

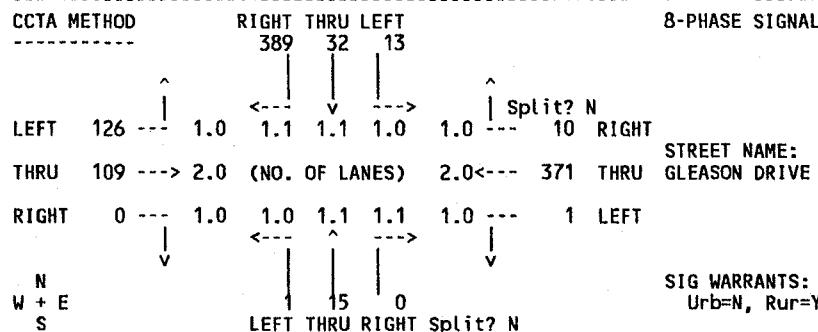
2007  
2008

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 + Project 07/02/01

INTERSECTION 6618 MAIN STREET/GLEASON DRIVE DUBLIN  
Count Date Time Peak Hour

12



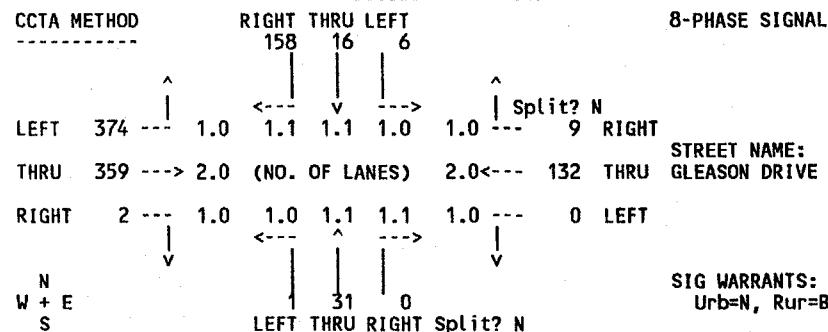
STREET NAME: MAIN STREET

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	15	15	1650	0.0091	
LEFT (L)	1	1	1650	0.0006	0.0006
T + R		15	1650	0.0091	
SB RIGHT (R)	389	389	1650	0.2358	
THRU (T)	32	32	1650	0.0194	
LEFT (L)	13	13	1650	0.0079	
T + R		421	1650	0.2552	0.2552
EB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	109	109	3300	0.0330	
LEFT (L)	126	126	1650	0.0764	0.0764
WB RIGHT (R)	10	0 *	1650	0.0000	
THRU (T)	371	371	3300	0.1124	0.1124
LEFT (L)	1	1	1650	0.0006	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.44  
INTERSECTION LEVEL OF SERVICE: A\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT,VOL=MIDNOFSA.AMV,CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 + Project 07/02/01

INTERSECTION 6618 MAIN STREET/GLEASON DRIVE DUBLIN  
Count Date Time Peak Hour

STREET NAME: MAIN STREET

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	31	31	1650	0.0188	
LEFT (L)	1	1	1650	0.0006	0.0006
T + R		31	1650	0.0188	
SB RIGHT (R)	158	158	1650	0.0958	
THRU (T)	16	16	1650	0.0097	
LEFT (L)	6	6	1650	0.0036	
T + R		174	1650	0.1055	0.1055
EB RIGHT (R)	2	1 *	1650	0.0006	
THRU (T)	359	359	3300	0.1088	
LEFT (L)	374	374	1650	0.2267	0.2267
WB RIGHT (R)	9	3 *	1650	0.0018	
THRU (T)	132	132	3300	0.0400	
LEFT (L)	0	0	1650	0.0000	0.0400

TOTAL VOLUME-TO-CAPACITY RATIO: 0.37  
INTERSECTION LEVEL OF SERVICE: A\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT,VOL=MIDNOFSA.PMV,CAP=C:..LOSCAP.TAB

JULY 2023

LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 + Project 07/03/01

(13) INTERSECTION 9957 El Charro Rd/I-580 EB ramp Alameda County  
Count Date Time Peak Hour

CCTA METHOD		RIGHT THRU LEFT			2-PHASE SIGNAL		
		0	1367	0			
LEFT	1133	2.0	1.9	3.0	0.0	0.0	0 RIGHT
THRU	0	-->	0.0	(NO. OF LANES)	0.0	<---	0 THRU I-580 EB ramp
RIGHT	100	---	2.0	0.0	3.0	1.9	0.0 --- 0 LEFT
N W + E S			0	743	931		SIG WARRANTS: Urb=Y, Rur=Y
LEFT THRU RIGHT Split? N							

STREET NAME: El Charro Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	931	931	1800	0.5172	
THRU (T)	743	743	5400	0.1376	
SB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	1367	1367	5400	0.2531	0.2531
EB RIGHT (R)	100	100	3273	0.0306	
LEFT (L)	1133	1133	3273	0.3462	0.3462

TOTAL VOLUME-TO-CAPACITY RATIO: 0.60  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=MIDNOFSA.AMV, CAP=C:..LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 + Project 07/03/01

INTERSECTION 9957 El Charro Rd/I-580 EB ramp Alameda County  
Count Date Time Peak Hour

CCTA METHOD		RIGHT THRU LEFT			2-PHASE SIGNAL		
		0	1603	0			
LEFT	1077	2.0	1.9	3.0	0.0	0.0	0 RIGHT
THRU	0	-->	0.0	(NO. OF LANES)	0.0	<---	0 THRU I-580 EB ramp
RIGHT	46	---	2.0	0.0	3.0	1.9	0.0 --- 0 LEFT
N W + E S			0	1001	963		SIG WARRANTS: Urb=Y, Rur=Y
LEFT THRU RIGHT Split? N							

STREET NAME: El Charro Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	963	963	1800	0.5350	
THRU (T)	1001	1001	5400	0.1854	
SB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	1603	1603	5400	0.2969	0.2969
EB RIGHT (R)	46	46	3273	0.0141	
LEFT (L)	1077	1077	3273	0.3291	0.3291

TOTAL VOLUME-TO-CAPACITY RATIO: 0.63  
INTERSECTION LEVEL OF SERVICE: B

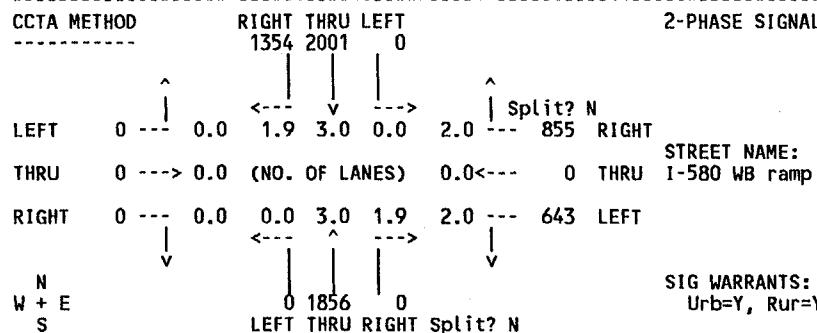
\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=MIDNOFSA.PMV, CAP=C:..LOSCAP.TAB

See pg 116

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 + Project 07/03/01

14

INTERSECTION 9956 Fallon Rd/I-580 WB ramp Alameda County  
Count Date Time Peak Hour

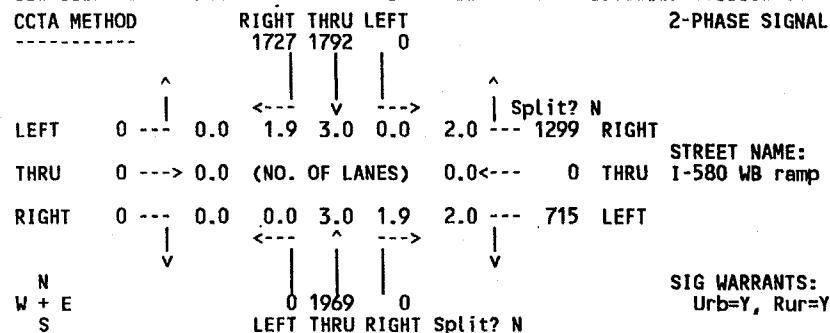
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	1856	1856	5400	0.3437	
SB RIGHT (R)	1354	1354	1800	0.7522	
THRU (T)	2001	2001	5400	0.3706	0.3706
WB RIGHT (R)	855	855	3273	0.2612	0.2612
LEFT (L)	643	643	3273	0.1965	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.63  
INTERSECTION LEVEL OF SERVICE: B

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=MIDNOFSA.AMV, CAP=C...LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 + Project 07/03/01

INTERSECTION 9956 Fallon Rd/I-580 WB ramp Alameda County  
Count Date Time Peak Hour

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	1969	1969	5400	0.3646	0.3646
SB RIGHT (R)	1727	1727	1800	0.9594 **	
THRU (T)	1792	1792	5400	0.3319	
WB RIGHT (R)	1299	1299	3273	0.3969	0.3969
LEFT (L)	715	715	3273	0.2185	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.76  
INTERSECTION LEVEL OF SERVICE: C

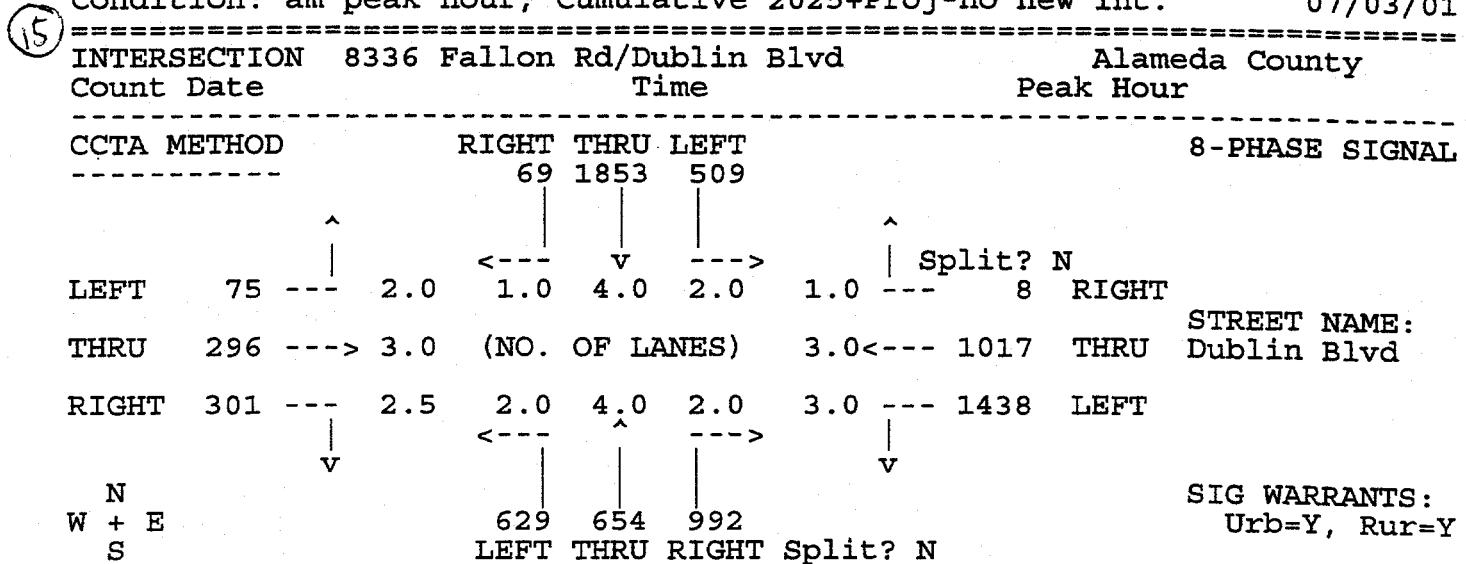
\* ADJUSTED FOR RIGHT TURN ON RED \*\* APPROACHING OR EXCEEDING CAPACITY  
INT=NEWSRP.INT, VOL=MIDNOFSA.PMV, CAP=C...LOSCAP.TAB

See page 68

LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025+Proj-no new int.

07/03/01



STREET NAME: Fallon Rd

MOVEMENT	ORIGINAL		ADJUSTED		V/C RATIO	CRITICAL V/C
	VOLUME	VOLUME*	VOLUME*	CAPACITY		
NB RIGHT (R)	992	441 *	441 *	3000	0.1470	
THRU (T)	654	654	654	6600	0.0991	
LEFT (L)	629	629	629	3000	0.2097	0.2097
SB RIGHT (R)	69	28 *	28 *	1650	0.0170	
THRU (T)	1853	1853	1853	6600	0.2808	0.2808
LEFT (L)	509	509	509	3000	0.1697	
EB RIGHT (R)	301	0 *	0 *	3000	0.0000	
THRU (T)	296	296	296	4950	0.0598	0.0598
LEFT (L)	75	75	75	3000	0.0250	
WB RIGHT (R)	8	0 *	0 *	1650	0.0000	
THRU (T)	1017	1017	1017	4950	0.2055	
LEFT (L)	1438	1438	1438	4304	0.3341	0.3341

TOTAL VOLUME-TO-CAPACITY RATIO: 0.88

INTERSECTION LEVEL OF SERVICE: D

\* ADJUSTED FOR RIGHT TURN ON RED  
 INT=NEWSRP.INT, VOL=MIDNOFSA.AMV, CAP=C... LOSCAP.TAB

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## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025+Proj-no new int. 07/03/01

(15) INTERSECTION 8336 Fallon Rd/Dublin Blvd Alameda County  
 Count Date Time Peak Hour

CCTA METHOD	RIGHT	THRU	LEFT	8-PHASE SIGNAL	
	19	846	354		
LEFT	295	2.0	1.0 4.0 2.0	1.0	256 RIGHT
THRU	1190	3.0	(NO. OF LANES)	3.0	190 THRU Dublin Blvd
RIGHT	548	2.5	2.0 4.0 2.0	3.0	2095 LEFT
N W + E S	566	1748	1141	SIG WARRANTS: Urb=Y, Rur=Y	
	LEFT	THRU	RIGHT Split? N		

STREET NAME: Fallon Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	1141	338 *	3000	0.1127	
THRU (T)	1748	1748	6600	0.2648	0.2648
LEFT (L)	566	566	3000	0.1887	
SB RIGHT (R)	19	0 *	1650	0.0000	
THRU (T)	846	846	6600	0.1282	
LEFT (L)	354	354	3000	0.1180	0.1180
EB RIGHT (R)	548	0 *	3000	0.0000	
THRU (T)	1190	1190	4950	0.2404	0.2404
LEFT (L)	295	295	3000	0.0983	
WB RIGHT (R)	256	61 *	1650	0.0370	
THRU (T)	190	190	4950	0.0384	
LEFT (L)	2095	2095	4304	0.4868	0.4868

TOTAL VOLUME-TO-CAPACITY RATIO:

1.11

INTERSECTION LEVEL OF SERVICE:

F

\* ADJUSTED FOR RIGHT TURN ON RED  
 INT=NEWSRP.INT, VOL=MIDNOFSA.PMV, CAP=C:.. LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

New

Condition: am peak hour; Cumulative 2025 + Project w/ intersected. 07/03/01

15A

INTERSECTION 8336 Fallon Rd/Dublin Blvd

Alameda County

Count Date

Time

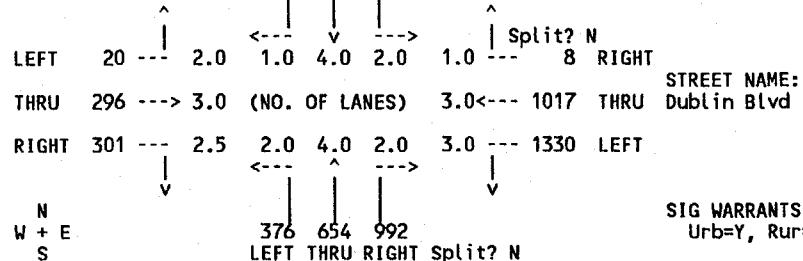
Peak Hour

CCTA METHOD

RIGHT THRU LEFT

8-PHASE SIGNAL

69 1853 315



STREET NAME: Fallon Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	V/C CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	992	482 *	3000	0.1607	
THRU (T)	654	654	6600	0.0991	
LEFT (L)	376	376	3000	0.1253	0.1253
SB RIGHT (R)	69	58 *	1650	0.0352	
THRU (T)	1853	1853	6600	0.2808	0.2808
LEFT (L)	315	315	3000	0.1050	
EB RIGHT (R)	301	0 *	3000	0.0000	
THRU (T)	296	296	4950	0.0598	0.0598
LEFT (L)	20	20	3000	0.0067	
WB RIGHT (R)	8	0 *	1650	0.0000	
THRU (T)	1017	1017	4950	0.2055	
LEFT (L)	1330	1330	4304	0.3090	0.3090

TOTAL VOLUME-TO-CAPACITY RATIO: 0.77  
INTERSECTION LEVEL OF SERVICE: C

\* ADJUSTED FOR RIGHT TURN ON RED

INT=NEWSRP.INT, VOL=MIDNOFSA.AMV, CAP=C:..LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 + Project w/ New Int. 07/03/01

INTERSECTION 8336 Fallon Rd/Dublin Blvd

Alameda County

Count Date

Time

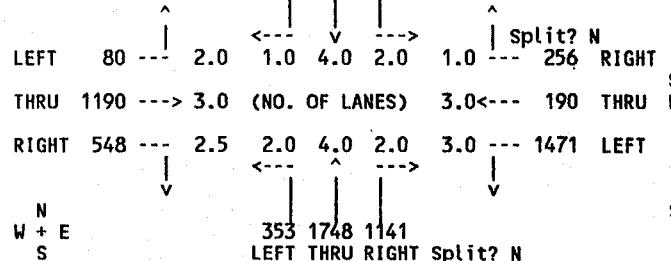
Peak Hour

CCTA METHOD

RIGHT THRU LEFT

8-PHASE SIGNAL

19 846 179



STREET NAME: Fallon Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	V/C CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	1141	577 *	3000	0.1923	
THRU (T)	1748	1748	6600	0.2648	0.2648
LEFT (L)	353	353	3000	0.1177	
SB RIGHT (R)	19	0 *	1650	0.0000	
THRU (T)	846	846	6600	0.1282	
LEFT (L)	179	179	3000	0.0597	0.0597
EB RIGHT (R)	548	195 *	3000	0.0650	
THRU (T)	1190	1190	4950	0.2404	0.2404
LEFT (L)	80	80	3000	0.0267	
WB RIGHT (R)	256	158 *	1650	0.0958	
THRU (T)	190	190	4950	0.0384	
LEFT (L)	1471	1471	4304	0.3418	0.3418

TOTAL VOLUME-TO-CAPACITY RATIO: 0.91  
INTERSECTION LEVEL OF SERVICE: E

\* ADJUSTED FOR RIGHT TURN ON RED

INT=NEWSRP.INT, VOL=MIDNOFSA.PMV, CAP=C:..LOSCAP.TAB

5/3  
838

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 + Project 07/03/01

INTERSECTION 6760 Fallon Road/New Intersection Dublin  
Count Date Time Peak Hour

CCTA METHOD	RIGHT	THRU	LEFT	8-PHASE SIGNAL			
	136	3178	171				
LEFT	49	2.0	1.0	4.0	2.0	1.1	45 RIGHT
THRU	13	--->	1.0	(NO. OF LANES)	1.1<---	13	THRU New Intersection
RIGHT	71	2.0	2.0	4.0	1.0	3.0	106 LEFT
N W + E S	252	1927	531				SIG WARRANTS: Urb=B, Rur=Y
	LEFT THRU	RIGHT	Split? N				

STREET NAME: Fallon Road

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	V/C CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	531	490 *	1650	0.2970	
THRU (T)	1927	1927	6600	0.2920	
LEFT (L)	252	252	3000	0.0840	0.0840
SB RIGHT (R)	136	109 *	1650	0.0661	
THRU (T)	3178	3178	6600	0.4815	0.4815
LEFT (L)	171	171	3000	0.0570	
EB RIGHT (R)	71	0 *	3000	0.0000	
THRU (T)	13	13	1650	0.0079	
LEFT (L)	49	49	3000	0.0163	0.0163
WB RIGHT (R)	45	45	1650	0.0273	
THRU (T)	13	13	1650	0.0079	
LEFT (L)	106	106	4304	0.0246	
T + R	58		1650	0.0352	0.0352

TOTAL VOLUME-TO-CAPACITY RATIO: 0.62  
INTERSECTION LEVEL OF SERVICE: B\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=MIDNOFSA.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 + Project 07/03/01

INTERSECTION 6760 Fallon Road/New Intersection Dublin  
Count Date Time Peak Hour

CCTA METHOD	RIGHT	THRU	LEFT	8-PHASE SIGNAL			
	119	2569	176				
LEFT	212	2.0	1.0	4.0	2.0	1.1	208 RIGHT
THRU	35	--->	1.0	(NO. OF LANES)	1.1<---	35	THRU New Intersection
RIGHT	392	2.0	2.0	4.0	1.0	3.0	558 LEFT
N W + E S	218	2822	227				SIG WARRANTS: Urb=Y, Rur=Y
	LEFT THRU	RIGHT	Split? N				

STREET NAME: Fallon Road

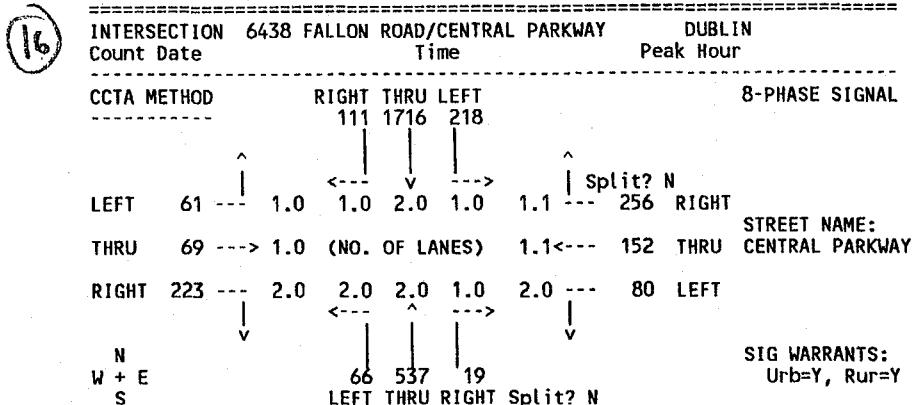
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	V/C CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	227	13 *	1650	0.0079	
THRU (T)	2822	2822	6600	0.4276	0.4276
LEFT (L)	218	218	3000	0.0727	
SB RIGHT (R)	119	2 *	1650	0.0012	
THRU (T)	2569	2569	6600	0.3892	
LEFT (L)	176	176	3000	0.0587	0.0587
EB RIGHT (R)	392	272 *	3000	0.0907	0.0907
THRU (T)	35	35	1650	0.0212	
LEFT (L)	212	212	3000	0.0707	
WB RIGHT (R)	208	208	1650	0.1261	
THRU (T)	35	35	1650	0.0212	
LEFT (L)	558	558	4304	0.1296	0.1296
T + R		243	1650	0.1473	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.71  
INTERSECTION LEVEL OF SERVICE: C\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=MIDNOFSA.PMV, CAP=C:..LOSCAP.TAB

3/26/2023

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 + Project 07/02/01



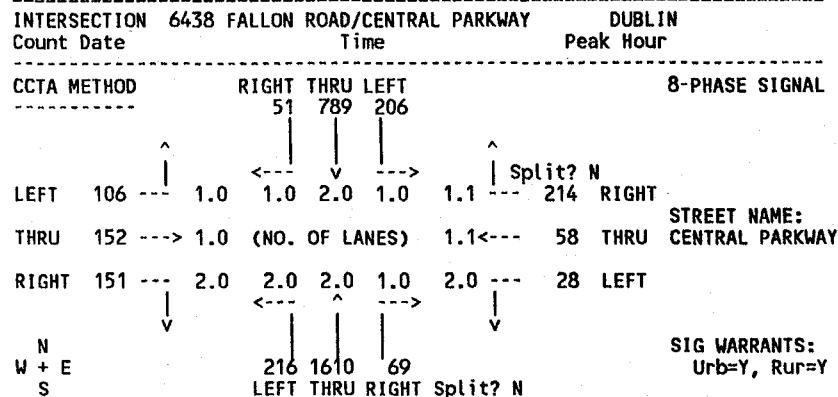
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	19	0 *	1650	0.0000	
THRU (T)	537	537	3300	0.1627	
LEFT (L)	66	66	3000	0.0220	0.0220
SB RIGHT (R)	111	50 *	1650	0.0303	
THRU (T)	1716	1716	3300	0.5200	0.5200
LEFT (L)	218	218	1650	0.1321	
EB RIGHT (R)	223	187 *	3000	0.0623	
THRU (T)	69	69	1650	0.0418	
LEFT (L)	61	61	1650	0.0370	0.0370
WB RIGHT (R)	256	256	1650	0.1552	
THRU (T)	152	152	1650	0.0921	
LEFT (L)	80	80	3000	0.0267	
T + R	408	1650	0.2473	0.2473	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.83  
INTERSECTION LEVEL OF SERVICE: D

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=MIDNOFSA.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 + Project 07/02/01



MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	69	54 *	1650	0.0327	
THRU (T)	1610	1610	3300	0.4879	0.4879
LEFT (L)	216	216	3000	0.0720	
SB RIGHT (R)	51	0 *	1650	0.0000	
THRU (T)	789	789	3300	0.2391	
LEFT (L)	206	206	1650	0.1248	0.1248
EB RIGHT (R)	151	32 *	3000	0.0107	
THRU (T)	152	152	1650	0.0921	
LEFT (L)	106	106	1650	0.0642	0.0642
WB RIGHT (R)	214	214	1650	0.1297	
THRU (T)	58	58	1650	0.0352	
LEFT (L)	28	28	3000	0.0093	
T + R		272	1650	0.1648	0.1648

TOTAL VOLUME-TO-CAPACITY RATIO: 0.84  
INTERSECTION LEVEL OF SERVICE: D

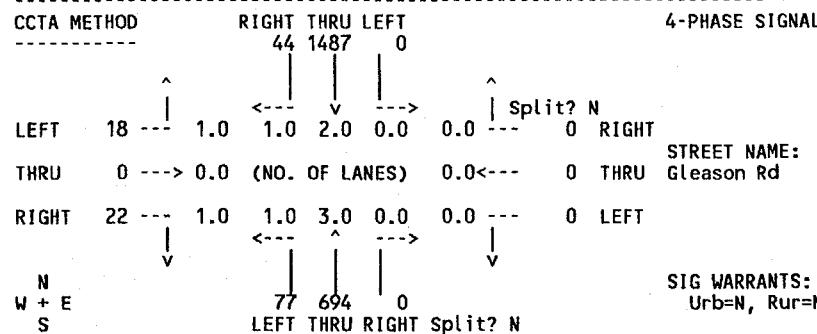
\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=MIDNOFSA.PMV, CAP=C:..LOSCAP.TAB

386 2e 6/6

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 + Project 07/02/01

17

INTERSECTION 9954 Fallon Rd/Gleason Rd Alameda County  
Count Date Time Peak Hour

STREET NAME: Fallon Rd

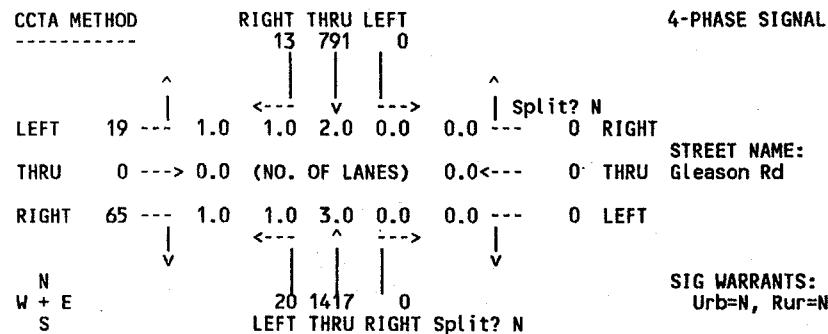
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	694	694	4950	0.1402	
LEFT (L)	77	77	1650	0.0467	0.0467
SB RIGHT (R)	44	26 *	1650	0.0158	
THRU (T)	1487	1487	3300	0.4506	0.4506
EB RIGHT (R)	22	0 *	1650	0.0000	
LEFT (L)	18	18	1650	0.0109	0.0109

TOTAL VOLUME-TO-CAPACITY RATIO: 0.51  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=MIDNOFSA.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 + Project 07/02/01

INTERSECTION 9954 Fallon Rd/Gleason Rd Alameda County  
Count Date Time Peak Hour

STREET NAME: Fallon Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	1417	1417	4950	0.2863	0.2863
LEFT (L)	20	20	1650	0.0121	
SB RIGHT (R)	13	0 *	1650	0.0000	
THRU (T)	791	791	3300	0.2397	
EB RIGHT (R)	65	45 *	1650	0.0273	0.0273
LEFT (L)	19	19	1650	0.0115	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.31  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
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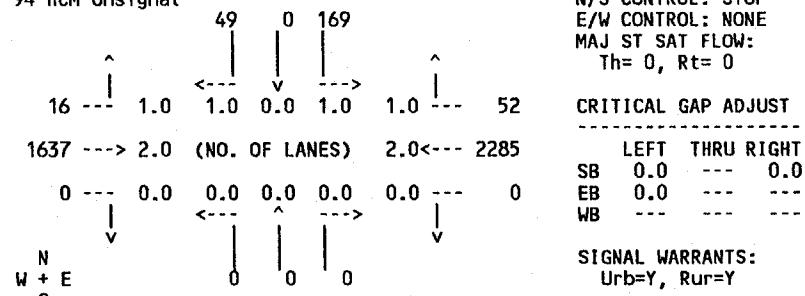
806 20 8/18

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 + Project 07/03/01

INTERSECTION 18 Street D/Dublin Blvd  
Count DateDublin  
Time Peak Hour AM PEAK

94 HCM Unsignal



ACCEL LANE FOR LT	% SU/RV		% COMBO VEH		% MOTOR CYCLE		PEAK HOUR FACTOR		
	LEFT	THRU	VEH	CYCLE	LEFT	THRU	RHT		

N	0	0	0	0.90	0.90	0.90
-	0	0	0	0.90	0.90	0.90
-	0	0	0	0.90	0.90	0.90

MOVEMENT	ORIG VOL	ADJ VOL	ADJ GAP	CONFL VOL	POT CAP	ACT CAP	MVMT DELAY	MVT LOS	APP DELAY	APP LOS
SB L R	169 49	207 60	7.0 5.5	4376 1269	2 315	1 315	999+ 14.1	F C	999+ 0.7	F A
EB L T	16 1637	20 2001	5.5	2597	69	69	71.9 0.0	F A	0.7 0.0	A
WB T R	2285 52	2793 64					0.0 0.0	A A	0.0 0.0	A A

INT TOTAL: 999+ F  
MINOR MOVEMENTS: (999+) (F)

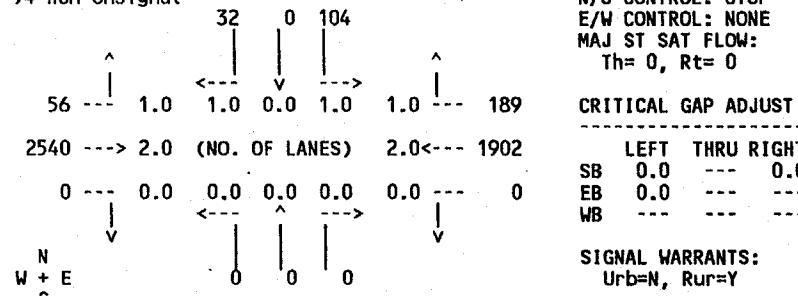
INT=NEWSRP.INT, VOL=MIDNOFS.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 + Project 07/03/01

INTERSECTION 18 Street D/Dublin Blvd  
Count DateDublin  
Time Peak Hour AM PEAK

94 HCM Unsignal



ACCEL LANE FOR LT	% SU/RV		% COMBO VEH		% MOTOR CYCLE		PEAK HOUR FACTOR		
	LEFT	THRU	VEH	CYCLE	LEFT	THRU	RHT		

N	0	0	0	0	0.90	0.90	0.90
-	0	0	0	0	0.90	0.90	0.90
-	0	0	0	0	0.90	0.90	0.90

MOVEMENT	ORIG VOL	ADJ VOL	ADJ GAP	CONFL VOL	POT CAP	ACT CAP	MVMT DELAY	MVT LOS	APP DELAY	APP LOS
SB L R	104 32	127 39	7.0 5.5	4998 1057	1 404	0 404	999+ 9.9	F B	999+ 2.1	F A
EB L T	56 2540	68 3104	5.5	2323	97	97	97.2 0.0	F A	0.0 0.0	A A
WB T R	1902 189	2325 231					0.0 0.0	A A	0.0 0.0	A A

INT TOTAL: 999+ F  
MINOR MOVEMENTS: (999+) (F)

INT=NEWSRP.INT, VOL=MIDNOFS.PMV, CAP=C:..LOSCAP.TAB

6/16

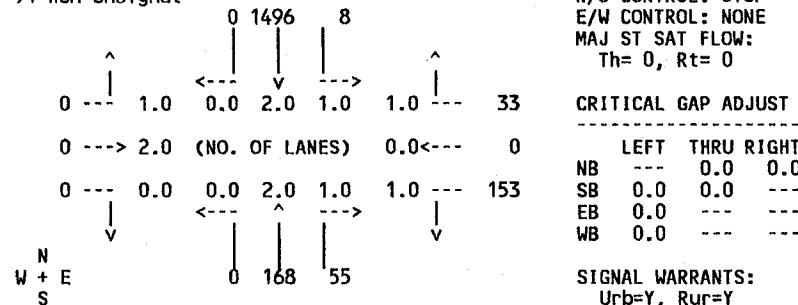
BBE 2

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 + Project 07/03/01

INTERSECTION 19 Fallon Road/Project Driveway Dublin  
Count Date Time Peak Hour AM PEAK

94 HCM Unsignal



ACCEL LANE FOR LT	% SU/RV		COMBO VEH	MOTOR CYCLE	PEAK HOUR		
	LEFT	THRU			FACTOR		
N	0	0	0	0.90	0.90	0.90	
N	0	0	0	0.90	0.90	0.90	
-	0	0	0	0.90	0.90	0.90	
-	0	0	0	0.90	0.90	0.90	

MOVEMENT	ORIG VOL	ADJ VOL	ADJ GAP	CONFL VOL	POT CAP	ACT CAP	MVMT DELAY	MVT LOS	APP DELAY	APP LOS
	FOR LT									
NB T	168	205	6.0	207	850	757	6.5	B	5.6	B
R	55	67	5.5	0	1385	1385	2.7	A		
SB L	8	10	6.5	263	745	516	7.1	B	598.6	F
T	1496	1828	6.0	170	888	791	601.8	F		
EB L	0	0	5.0	37	1647	1647	0.0	A	0.0	A
T	0	0					0.0	A		
WB L	153	187	5.0	0	1714	1714	2.4	A	1.9	A
R	33	40					0.0	A		

INT TOTAL: 471.5 F  
MINOR MOVEMENTS: (479.7) (F)

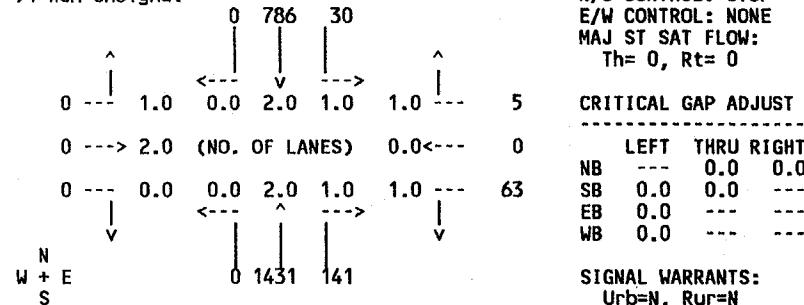
INT=NEWSRP.INT, VOL=MIDNOFS.A.MV,CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 + Project 07/03/01

INTERSECTION 19 Fallon Road/Project Driveway Dublin  
Count Date Time Peak Hour

94 HCM Unsignal



ACCEL LANE FOR LT	% SU/RV		COMBO VEH	MOTOR CYCLE	PEAK HOUR		
	LEFT	THRU			FACTOR		
N	0	0	0	1.00	1.00	1.00	
N	0	0	0	1.00	1.00	1.00	
-	0	0	0	1.00	1.00	1.00	
-	0	0	0	1.00	1.00	1.00	

MOVEMENT	ORIG VOL	ADJ VOL	ADJ GAP	CONFL VOL	POT CAP	ACT CAP	MVMT DELAY	MVT LOS	APP DELAY	APP LOS
	FOR LT									
NB T	1431	1574	6.0	68	1005	964	297.5	F	271.1	F
R	141	155	5.5	0	1385	1385	2.9	A		
SB L	30	33	6.5	779	375	0	999+	F	391.5	F
T	786	865	6.0	63	1011	970	25.0	D		
EB L	0	0	5.0	5	1705	1705	0.0	A	0.0	A
T	0	0					0.0	A		
WB L	63	69	5.0	0	1714	1714	2.2	A	2.0	A
R	5	6					0.0	A		

INT TOTAL: 303.6 F  
MINOR MOVEMENTS: (304.3) (F)

INT=NEWSRP.INT, VOL=MIDNOFS.A.PMV,CAP=C:..LOSCAP.TAB

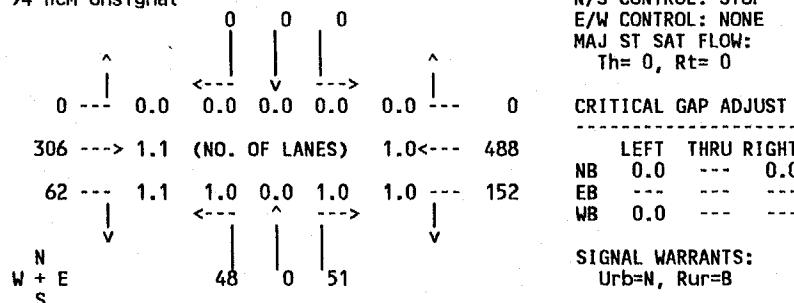
33E 96 07/01

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 + Project 07/03/01

INTERSECTION 20 Street D/Central Parkway Dublin  
Count Date Time Peak Hour AM PEAK

94 HCM Unsignal



ACCEL LANE FOR LT	% SU/RV	% COMBO VEH	% MOTOR CYCLE	PEAK HOUR FACTOR		
				LEFT	THRU	RHT

N	0	0	0	0.90	0.90	0.90
-	0	0	0	0.90	0.90	0.90
-	0	0	0	0.90	0.90	0.90

MOVEMENT	ORIG VOL	ADJ VOL	ADJ GAP	CONFL VOL	POT CAP	ACT CAP	MVMT DELAY	MVT LOS	APP DELAY	APP LOS
NB L	48	59	6.5	1086	249	217	22.7	D	13.3	C
R	51	62	5.5	374	895	895	4.3	A		
EB T	306	374							0.0	A
R	62	76								
TR	368	450								
WB L	152	186	5.0	409	1095	1095	4.0	A	0.9	A
T	488	596							0.0	

INT TOTAL: 1.7 A  
MINOR MOVEMENTS: ( 7.6 ) (B)

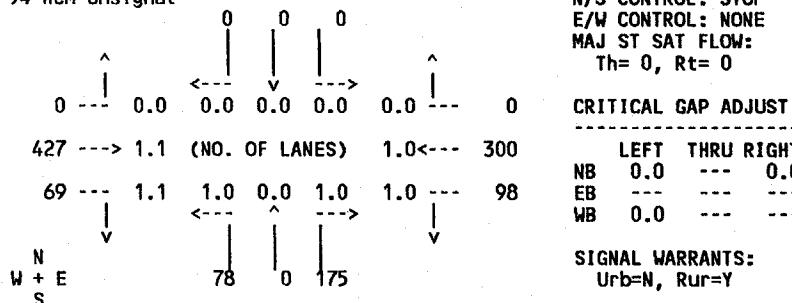
INT=NEWSRP.INT, VOL=MIDNOFSA.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 + Project 07/03/01

INTERSECTION 20 Street D/Central Parkway Dublin  
Count Date Time Peak Hour

94 HCM Unsignal



ACCEL LANE FOR LT	% SU/RV	% COMBO VEH	% MOTOR CYCLE	PEAK HOUR FACTOR		
				LEFT	THRU	RHT

N	0	0	0	1.00	1.00	1.00
-	0	0	0	1.00	1.00	1.00
-	0	0	0	1.00	1.00	1.00

MOVEMENT	ORIG VOL	ADJ VOL	ADJ GAP	CONFL VOL	POT CAP	ACT CAP	MVMT DELAY	MVT LOS	APP DELAY	APP LOS
NB L	78	86	6.5	860	337	309	16.1	C	9.0	B
R	175	193	5.5	461	808	808	5.8	B		
EB T	427	470							0.0	A
R	69	76								
TR	496	546								
WB L	98	108	5.0	496	995	995	4.1	A	1.0	A
T	300	330							0.0	

INT TOTAL: 2.3 A  
MINOR MOVEMENTS: ( 7.6 ) (B)

INT=NEWSRP.INT, VOL=MIDNOFSA.PMV, CAP=C:..LOSCAP.TAB

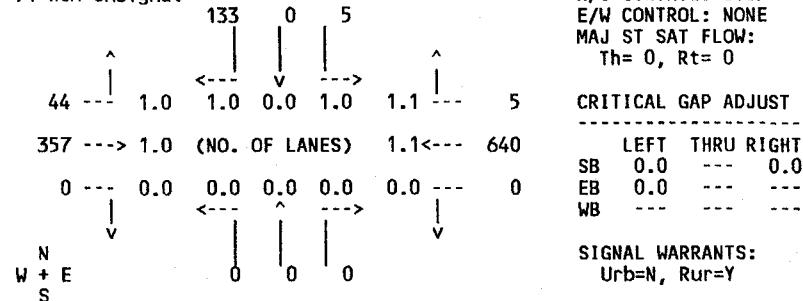
308 8/18/06

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 + Project 07/03/01

INTERSECTION 21 Street B/Central Parkway Dublin  
Count Date Time Peak Hour AM PEAK

94 HCM Unsigned



ACCEL LANE FOR LT	% SU/RV		% COMBO VEH		PEAK HOUR MOTOR CYCLE		FACTOR		
	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT
N	0	0	0	0.90	0.90	0.90			
-	0	0	0	0.90	0.90	0.90			
-	0	0	0	0.90	0.90	0.90			

MOVEMENT	ORIG VOL	ADJ VOL	ADJ GAP	CONF'L VOL	POT CAP	ACT CAP	MVMT DELAY	MVT LOS	APP DELAY	APP LOS
SB L	5	6	6.5	1159	226	214	17.3	C	8.5	B
R	133	163	5.5	714	602	602	8.2	B		
EB L	44	54	5.0	717	781	781	5.0	A	0.5	A
T	357	436					0.0	A		
WB T	640	782							0.0	A
R	5	6								
TR	645	788							0.0	A

INT TOTAL: 1.2 A  
MINOR MOVEMENTS: ( 7.7 ) (B)

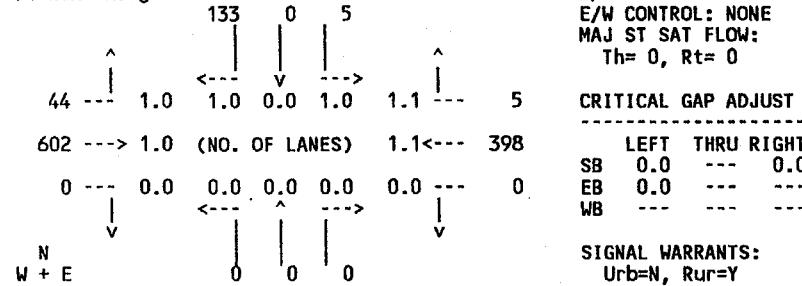
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## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 + Project 07/03/01

INTERSECTION 21 Street B/Central Parkway Dublin  
Count Date Time Peak Hour

94 HCM Unsigned



ACCEL LANE FOR LT	% SU/RV		% COMBO VEH		PEAK HOUR MOTOR CYCLE		FACTOR		
	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT
N	0	0	0	1.00	1.00	1.00			
-	0	0	0	1.00	1.00	1.00			
-	0	0	0	1.00	1.00	1.00			

MOVEMENT	ORIG VOL	ADJ VOL	ADJ GAP	CONF'L VOL	POT CAP	ACT CAP	MVMT DELAY	MVT LOS	APP DELAY	APP LOS
SB L	5	6	6.5	1047	262	254	14.5	C	5.4	B
R	133	146	5.5	400	868	868	5.0	A		
EB L	44	48	5.0	403	1102	1102	3.4	A	0.2	A
T	602	662					0.0	A		
WB T	398	438							0.0	A
R	5	6								
TR	403	444							0.0	A

INT TOTAL: 0.7 A  
MINOR MOVEMENTS: ( 4.9 ) (A)

INT=NEWSRP.INT, VOL=MIDNOFSA.PMV, CAP=C:..LOSCLP.TAB

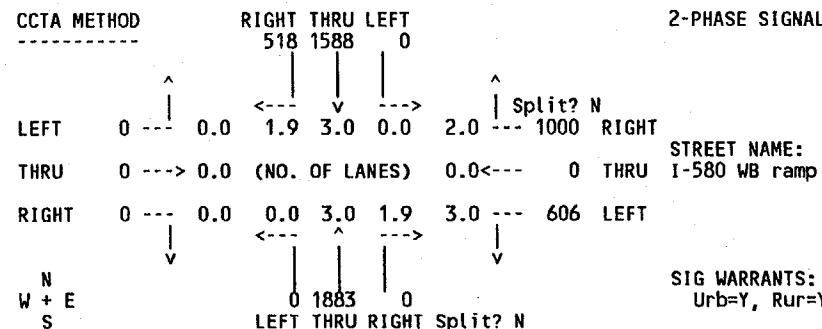
200 200

LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 + Project - mitigation 07/03/01

(3)

INTERSECTION 8305 Hacienda Dr/I-580 WB ramp Dublin  
Count Date Time Peak Hour



STREET NAME: Hacienda Dr

		ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
MOVEMENT						
NB	RIGHT (R)	0	0	1800	0.0000	
	THRU (T)	1883	1883	5400	0.3487	0.3487
SB	RIGHT (R)	518	518	1800	0.2878	
	THRU (T)	1588	1588	5400	0.2941	
WB	RIGHT (R)	1000	1000	3273	0.3055	0.3055
	LEFT (L)	606	606	4695	0.1291	

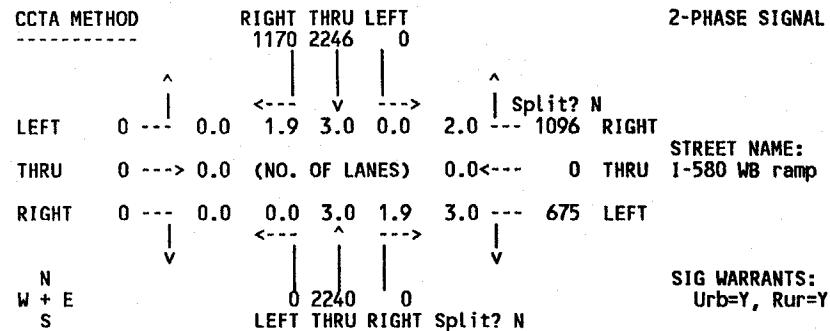
TOTAL VOLUME-TO-CAPACITY RATIO: 0.65  
INTERSECTION LEVEL OF SERVICE: B

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MITIG8.INT, VOL=MIDNOFSA.AMV, CAP=C:..LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 + Project - mitigation 07/03/01

INTERSECTION 8305 Hacienda Dr/I-580 WB ramp Dublin  
Count Date Time Peak Hour



STREET NAME: Hacienda Dr

		ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
MOVEMENT						
NB	RIGHT (R)	0	0	1800	0.0000	
	THRU (T)	2240	2240	5400	0.4148	
SB	RIGHT (R)	1170	1170	1800	0.6500	
	THRU (T)	2246	2246	5400	0.4159	0.4159
WB	RIGHT (R)	1096	1096	3273	0.3349	0.3349
	LEFT (L)	675	675	4695	0.1438	

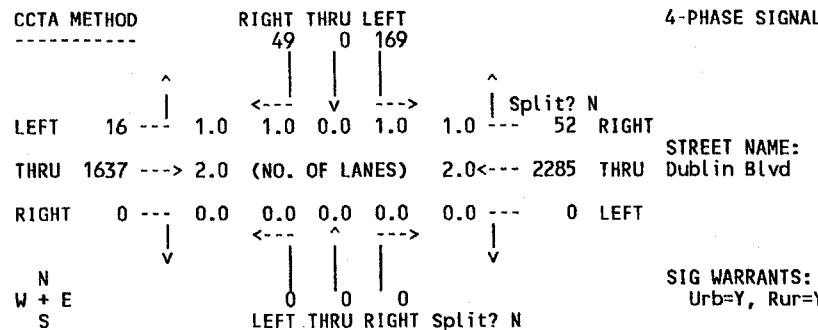
TOTAL VOLUME-TO-CAPACITY RATIO: 0.75  
INTERSECTION LEVEL OF SERVICE: C

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MITIG8.INT, VOL=MIDNOFSA.PMV, CAP=C:..LOSCAP.TAB

BBE 10/16/06

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 + Proj. mitigate 07/03/01

INTERSECTION 18 Street D/Dublin Blvd Dublin  
Count Date Time Peak Hour AM PEAK

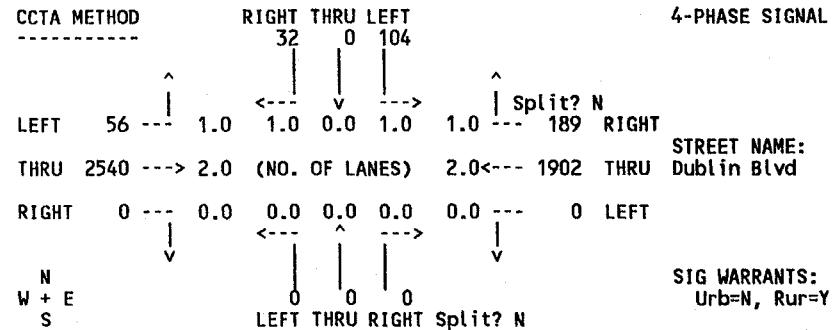
STREET NAME: Street D

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
SB RIGHT (R)	49	33 *	1650	0.0200	
LEFT (L)	169	169	1650	0.1024	0.1024
EB THRU (T)	1637	1637	3300	0.4961	
LEFT (L)	16	16	1650	0.0097	0.0097
WB RIGHT (R)	52	0 *	1650	0.0000	
THRU (T)	2285	2285	3300	0.6924	0.6924

TOTAL VOLUME-TO-CAPACITY RATIO: 0.80  
INTERSECTION LEVEL OF SERVICE: C\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MITIG8.INT, VOL=MIDNOFSA.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 + Proj. mitigate 07/03/01

INTERSECTION 18 Street D/Dublin Blvd Dublin  
Count Date Time Peak Hour AM PEAK

STREET NAME: Street D

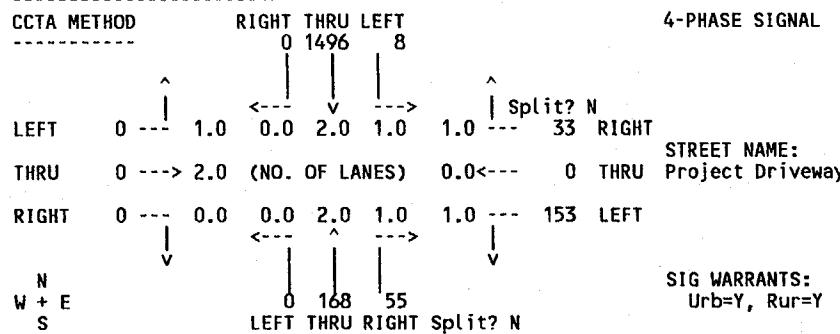
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
SB RIGHT (R)	32	0 *	1650	0.0000	
LEFT (L)	104	104	1650	0.0630	0.0630
EB THRU (T)	2540	2540	3300	0.7697	0.7697
LEFT (L)	56	56	1650	0.0339	
WB RIGHT (R)	189	85 *	1650	0.0515	
THRU (T)	1902	1902	3300	0.5764	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.83  
INTERSECTION LEVEL OF SERVICE: D\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MITIG8.INT, VOL=MIDNOFSA.PMV, CAP=C:..LOSCAP.TAB

See page 888

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Cumulative 2025 + Proj. mitigate 07/03/01

INTERSECTION 19 Fallon Road/Project Driveway Dublin  
Count Date Time Peak Hour AM PEAK

STREET NAME: Fallon Road

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	55	0 *	1650	0.0000	
THRU (T)	168	168	3300	0.0509	
SB THRU (T)	1496	1496	3300	0.4533	0.4533
LEFT (L)	8	8	1650	0.0048	
EB THRU (T)	0	0	3300	0.0000	
LEFT (L)	0	0	1650	0.0000	
WB RIGHT (R)	33	25 *	1650	0.0152	
LEFT (L)	153	153	1650	0.0927	0.0927

TOTAL VOLUME-TO-CAPACITY RATIO: 0.55

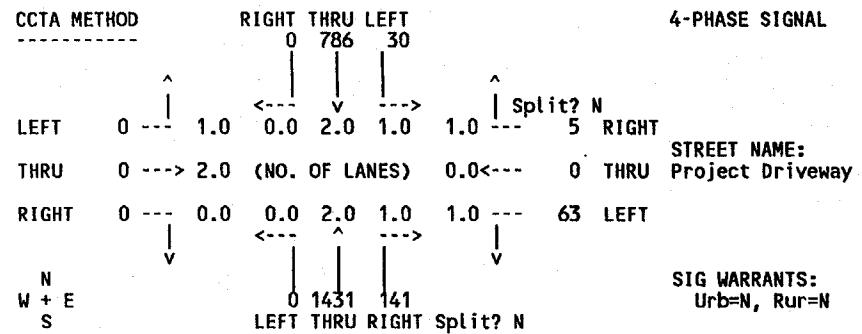
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED

INT=MITIG8.INT, VOL=MIDNOFSA.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Cumulative 2025 + Proj. mitigate 07/03/01

INTERSECTION 19 Fallon Road/Project Driveway Dublin  
Count Date Time Peak Hour

STREET NAME: Fallon Road

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	141	78 *	1650	0.0473	
THRU (T)	1431	1431	3300	0.4336	0.4336
SB THRU (T)	786	786	3300	0.2382	
LEFT (L)	30	30	1650	0.0182	0.0182
EB THRU (T)	0	0	3300	0.0000	
LEFT (L)	0	0	1650	0.0000	
WB RIGHT (R)	5	0 *	1650	0.0000	
LEFT (L)	63	63	1650	0.0382	0.0382

TOTAL VOLUME-TO-CAPACITY RATIO: 0.49

INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED

INT=MITIG8.INT, VOL=MIDNOFSA.PMV, CAP=C:..LOSCAP.TAB

See page 308

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**LEVEL OF SERVICE CALCULATIONS  
CUMULATIVE YEAR 2025 + ECAP ALTERNATIVE**

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Table 4.2-1

## Peak Hour Intersection Levels of Service –Tri-Valley Transportation Model Cumulative Year 2025 plus ECAP Alternative

Intersection	Control	Unmitigated				Mitigated			
		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
		*	LOS	*	LOS	*	LOS	*	LOS
1 Dougherty Road/Dublin Boulevard	Signal	0.93	E	1.03	F	--	--	--	--
2 Hacienda Drive/I-580 Eastbound Ramps	Signal	0.71	C	0.81	D	--	--	--	--
3 Hacienda Drive/I-580 Westbound Ramps	Signal	0.80	D	0.93	E	0.65	B	0.76	C
4 Hacienda Drive/Dublin Boulevard	Signal	0.82	D	1.03	F	--	--	--	--
5 Santa Rita Road/I-580 Eastbound Ramps	Signal	0.84	D	0.77	C	--	--	--	--
6 Tassajara Road/I-580 Westbound Ramps	Signal	0.72	C	0.73	C	--	--	--	--
7 Tassajara Road/Dublin Boulevard	Signal	0.72	C	0.87	D	--	--	--	--
8 Tassajara Road/Central Parkway	Signal	0.71	C	0.62	B	--	--	--	--
9 Tassajara Road/Gleason Drive	Signal	0.57	A	0.47	A	--	--	--	--
10 Grafton Street/Dublin Boulevard	Signal	0.33	A	0.45	A	--	--	--	--
11 Grafton Street/Central Parkway	Signal	0.10	A	0.13	A	--	--	--	--
12 Grafton Street/Gleason Drive	Signal	0.41	A	0.35	A	--	--	--	--
13 El Charro Road/I-580 Eastbound Ramps	Signal	0.70	B	0.67	B	--	--	--	--
14 Fallon Road/I-580 Westbound Ramps	Signal	0.74	C	0.84	D	--	--	--	--
15 Fallon Road/Dublin Boulevard	Signal	0.89	D	1.35	F	--	--	--	--
15A Fallon Rd./Dublin Blvd. w/ New Int.	Signal	--	--	--	--	0.74	C	0.86	D
XX Fallon Road/New Intersection	Signal	--	--	--	--	0.78	C	0.96	E
16 Fallon Road/Central Parkway	Signal	0.84	D	0.89	D	--	--	--	--
17 Fallon Road/Gleason Drive	Signal	0.54	A	0.33	A	--	--	--	--

Note: \* = Volume-to-Capacity (V/C) Ratio for signalized intersections

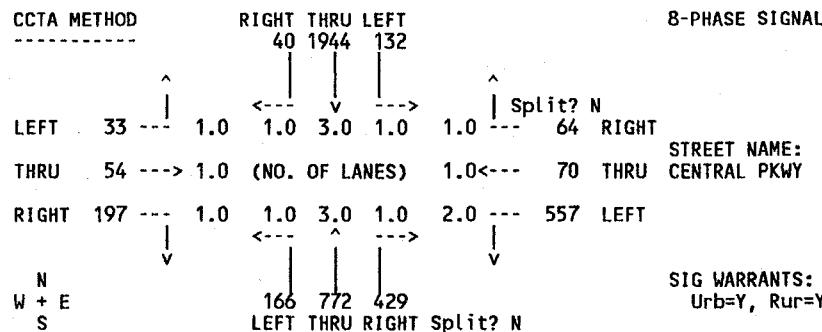
Page 108

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; ECAP Alternative

07/12/01

8  
 INTERSECTION 6430 TASSAJARA RD./CENTRAL PKWY DUBLIN  
 Count Date FROM MODEL Time FROM MODEL Peak Hour FROM MODEL



STREET NAME: TASSAJARA RD.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	429	123 *	1650	0.0745	
THRU (T)	772	772	4950	0.1560	
LEFT (L)	166	166	1650	0.1006	0.1006
SB RIGHT (R)	40	7 *	1650	0.0042	
THRU (T)	1944	1944	4950	0.3927	0.3927
LEFT (L)	132	132	1650	0.0800	
EB RIGHT (R)	197	31 *	1650	0.0188	
THRU (T)	54	54	1650	0.0327	0.0327
LEFT (L)	33	33	1650	0.0200	
WB RIGHT (R)	64	0 *	1650	0.0000	
THRU (T)	70	70	1650	0.0424	
LEFT (L)	557	557	3000	0.1857	0.1857

TOTAL VOLUME-TO-CAPACITY RATIO: 0.71  
 INTERSECTION LEVEL OF SERVICE: C

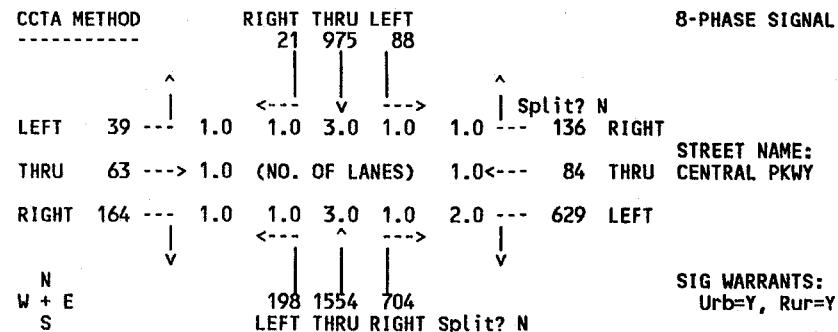
\* ADJUSTED FOR RIGHT TURN ON RED  
 INT=NEWSRP.INT, VOL=ECAP.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; ECAP Alternative

07/12/01

INTERSECTION 6430 TASSAJARA RD./CENTRAL PKWY DUBLIN  
 Count Date FROM MODEL Time FROM MODEL Peak Hour FROM MODEL



STREET NAME: TASSAJARA RD.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	704	358 *	1650	0.2170	
THRU (T)	1554	1554	4950	0.3139	0.3139
LEFT (L)	198	198	1650	0.1200	
SB RIGHT (R)	21	0 *	1650	0.0000	
THRU (T)	975	975	4950	0.1970	
LEFT (L)	88	88	1650	0.0533	0.0533
EB RIGHT (R)	164	0 *	1650	0.0000	
THRU (T)	63	63	1650	0.0382	0.0382
LEFT (L)	39	39	1650	0.0236	
WB RIGHT (R)	136	48 *	1650	0.0291	
THRU (T)	84	84	1650	0.0509	
LEFT (L)	629	629	3000	0.2097	0.2097

TOTAL VOLUME-TO-CAPACITY RATIO: 0.62  
 INTERSECTION LEVEL OF SERVICE: B

\* ADJUSTED FOR RIGHT TURN ON RED  
 INT=NEWSRP.INT, VOL=ECAP.PMV, CAP=C:..LOSCAP.TAB

8/8/08

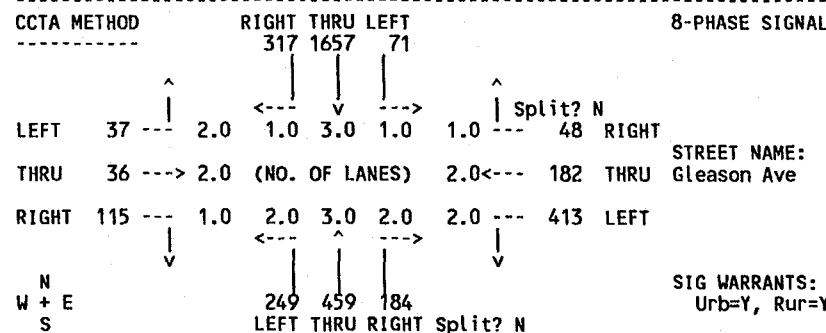
8/8/08

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; ECAP Alternative

07/12/01

(9) INTERSECTION 3987 Tassajara Rd/Gleason Ave Alameda County  
 Count Date FROM MODEL Time FROM MODEL Peak Hour FROM MODEL



STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	184	0 *	3000	0.0000	
THRU (T)	459	459	4950	0.0927	
LEFT (L)	249	249	3000	0.0830	0.0830
SB RIGHT (R)	317	297 *	1650	0.1800	
THRU (T)	1657	1657	4950	0.3347	0.3347
LEFT (L)	71	71	1650	0.0430	
EB RIGHT (R)	115	0 *	1650	0.0000	
THRU (T)	36	36	3300	0.0109	0.0109
LEFT (L)	37	37	3000	0.0123	
WB RIGHT (R)	48	0 *	1650	0.0000	
THRU (T)	182	182	3300	0.0552	
LEFT (L)	413	413	3000	0.1377	0.1377

TOTAL VOLUME-TO-CAPACITY RATIO:      0.57  
 INTERSECTION LEVEL OF SERVICE:      A

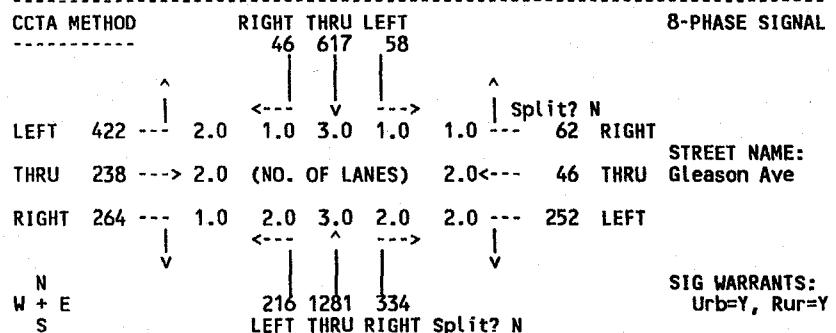
\* ADJUSTED FOR RIGHT TURN ON RED  
 INT=NEWSRP.INT, VOL=ECAP.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; ECAP Alternative

07/12/01

INTERSECTION 3987 Tassajara Rd/Gleason Ave Alameda County  
 Count Date FROM MODEL Time FROM MODEL Peak Hour FROM MODEL



STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	334	195 *	3000	0.0650	
THRU (T)	1281	1281	4950	0.2588	0.2588
LEFT (L)	216	216	3000	0.0720	
SB RIGHT (R)	46	0 *	1650	0.0000	
THRU (T)	617	617	4950	0.1246	
LEFT (L)	58	58	1650	0.0352	0.0352
EB RIGHT (R)	264	145 *	1650	0.0879	0.0879
THRU (T)	238	238	3300	0.0721	
LEFT (L)	422	422	3000	0.1407	
WB RIGHT (R)	62	4 *	1650	0.0024	
THRU (T)	46	46	3300	0.0139	
LEFT (L)	252	252	3000	0.0840	0.0840

TOTAL VOLUME-TO-CAPACITY RATIO:      0.47  
 INTERSECTION LEVEL OF SERVICE:      A

\* ADJUSTED FOR RIGHT TURN ON RED  
 INT=NEWSRP.INT, VOL=ECAP.PMV, CAP=C:..LOSCAP.TAB

888 1000  
888 1000

Table 4.2-1

## Peak Hour Intersection Levels of Service – Tri-Valley Transportation Model Cumulative Year 2025 plus ECAP Alternative

Intersection	Control	Unmitigated				Mitigated			
		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
		*	LOS	*	LOS	*	LOS	*	LOS
1 Dougherty Road/Dublin Boulevard	Signal	<b>0.93</b>	E	<b>1.03</b>	F	--	--	--	--
2 Hacienda Drive/I-580 Eastbound Ramps	Signal	0.71	C	0.81	D	--	--	--	--
3 Hacienda Drive/I-580 Westbound Ramps	Signal	0.80	D	<b>0.93</b>	E	0.65	B	0.76	C
4 Hacienda Drive/Dublin Boulevard	Signal	0.82	D	<b>1.03</b>	F	--	--	--	--
5 Santa Rita Road/I-580 Eastbound Ramps	Signal	0.84	D	0.77	C	--	--	--	--
6 Tassajara Road/I-580 Westbound Ramps	Signal	0.72	C	0.73	C	--	--	--	--
7 Tassajara Road/Dublin Boulevard	Signal	0.72	C	0.87	D	--	--	--	--
8 Tassajara Road/Central Parkway	Signal	<del>0.51</del> <b>0.57</b>	A	<del>0.34</del> <b>0.47</b>	A	--	--	--	--
9 Tassajara Road/Gleason Drive	Signal	<del>0.43</del> <b>0.57</b>	A	<del>0.40</del> <b>0.47</b>	A	--	--	--	--
10 Grafton Street/Dublin Boulevard	Signal	0.33	A	0.45	A	--	--	--	--
11 Grafton Street/Central Parkway	Signal	0.10	A	0.13	A	--	--	--	--
12 Grafton Street/Gleason Drive	Signal	0.41	A	0.35	A	--	--	--	--
13 El Charro Road/I-580 Eastbound Ramps	Signal	0.70	B	0.67	B	--	--	--	--
14 Fallon Road/I-580 Westbound Ramps	Signal	0.74	C	0.84	D	--	--	--	--
15 Fallon Road/Dublin Boulevard	Signal	0.89	D	<b>1.35</b>	F	--	--	--	--
15A Fallon Rd./Dublin Blvd. w/ New Int.	Signal	--	--	--	--	0.74	C	0.86	D
XX Fallon Road/New Intersection	Signal	--	--	--	--	0.78	C	<b>0.96</b>	E
16 Fallon Road/Central Parkway	Signal	0.84	D	0.89	D	--	--	--	--
17 Fallon Road/Gleason Drive	Signal	0.54	A	0.33	A	--	--	--	--

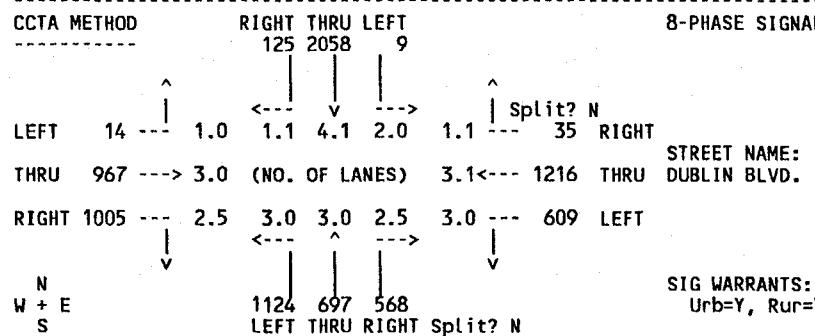
Note: \* = Volume-to-Capacity (V/C) Ratio for signalized intersections

330  
of  
888

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative ECAP

07/09/01

INTERSECTION 3977 DOUGHERTY RD./DUBLIN BLVD. DUBLIN  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour AM PEAK VOL

STREET NAME: DOUGHERTY RD.

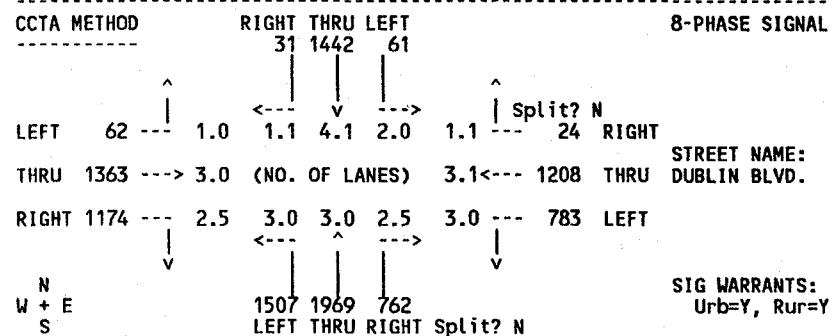
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	568	144 *	3000	0.0480	
THRU (T)	697	697	4950	0.1408	
LEFT (L)	1124	1124	4304	0.2612	0.2612
SB RIGHT (R)	125	125	1650	0.0758	
THRU (T)	2058	2058	6600	0.3118	
LEFT (L)	9	9	3000	0.0030	
T + R	2183		6600	0.3308	0.3308
EB RIGHT (R)	1005	222 *	3000	0.0740	
THRU (T)	967	967	4950	0.1954	0.1954
LEFT (L)	14	14	1650	0.0085	
WB RIGHT (R)	35	35	1650	0.0212	
THRU (T)	1216	1216	4950	0.2457	
LEFT (L)	609	609	4304	0.1415	0.1415
T + R	1251		4950	0.2527	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.93  
INTERSECTION LEVEL OF SERVICE: E\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=RUNECAP.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative ECAP

07/09/01

INTERSECTION 3977 DOUGHERTY RD./DUBLIN BLVD. DUBLIN  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour PM PEAK VOL

STREET NAME: DOUGHERTY RD.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	762	216 *	3000	0.0720	
THRU (T)	1969	1969	4950	0.3978	
LEFT (L)	1507	1507	4304	0.3501	0.3501
SB RIGHT (R)	31	31	1650	0.0188	
THRU (T)	1442	1442	6600	0.2185	
LEFT (L)	61	61	3000	0.0203	
T + R	1473		6600	0.2232	0.2232
EB RIGHT (R)	1174	124 *	3000	0.0413	
THRU (T)	1363	1363	4950	0.2754	0.2754
LEFT (L)	62	62	1650	0.0376	
WB RIGHT (R)	24	24	1650	0.0145	
THRU (T)	1208	1208	4950	0.2440	
LEFT (L)	783	783	4304	0.1819	0.1819
T + R	1232		4950	0.2489	

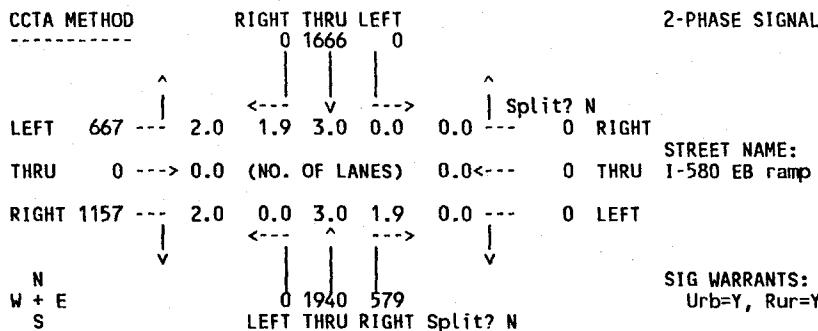
TOTAL VOLUME-TO-CAPACITY RATIO: 1.03  
INTERSECTION LEVEL OF SERVICE: F\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=RUNECAP.PMV, CAP=C:..LOSCAP.TAB

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## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative ECAP 07/09/01

(2) INTERSECTION 8302 Hacienda Dr/I-580 EB ramp Pleasanton  
 Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour AM PEAK VOL



MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R) THRU (T)	579 1940	579 1940	1800 5400	0.3217 0.3593	0.3593
SB RIGHT (R) THRU (T)	0 1666	0 1666	1800 5400	0.0000 0.3085	
EB RIGHT (R) LEFT (L)	1157 667	1157 667	3273 3273	0.3535 0.2038	0.3535

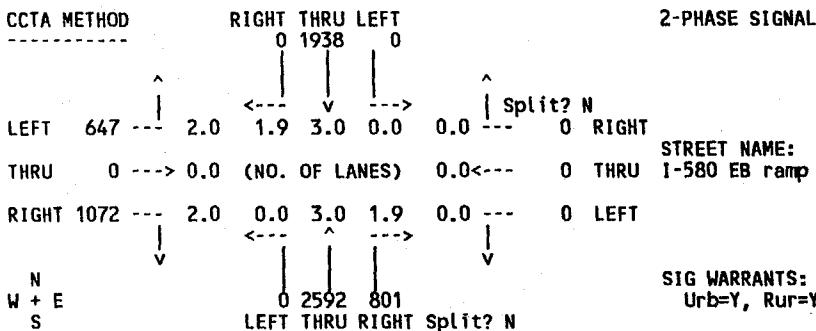
TOTAL VOLUME-TO-CAPACITY RATIO: 0.71  
 INTERSECTION LEVEL OF SERVICE: C

\* ADJUSTED FOR RIGHT TURN ON RED  
 INT=NEWSRP.INT, VOL=RUNECAP.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative ECAP 07/09/01

INTERSECTION 8302 Hacienda Dr/I-580 EB ramp Pleasanton  
 Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour PM PEAK VOL



MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R) THRU (T)	801 2592	801 2592	1800 5400	0.4450 0.4800	0.4800
SB RIGHT (R) THRU (T)	0 1938	0 1938	1800 5400	0.0000 0.3589	
EB RIGHT (R) LEFT (L)	1072 647	1072 647	3273 3273	0.3275 0.1977	0.3275

TOTAL VOLUME-TO-CAPACITY RATIO: 0.81  
 INTERSECTION LEVEL OF SERVICE: D

\* ADJUSTED FOR RIGHT TURN ON RED  
 INT=NEWSRP.INT, VOL=RUNECAP.PMV, CAP=C:..LOSCAP.TAB

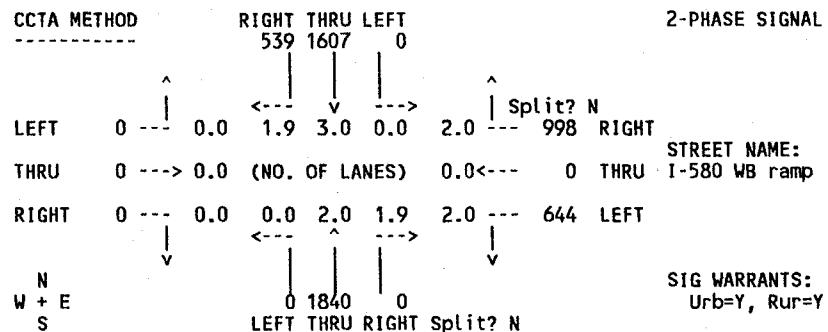
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## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative ECAP 07/09/01

INTERSECTION 8305 Hacienda Dr/I-580 WB ramp Dublin  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour AM PEAK VOL

3



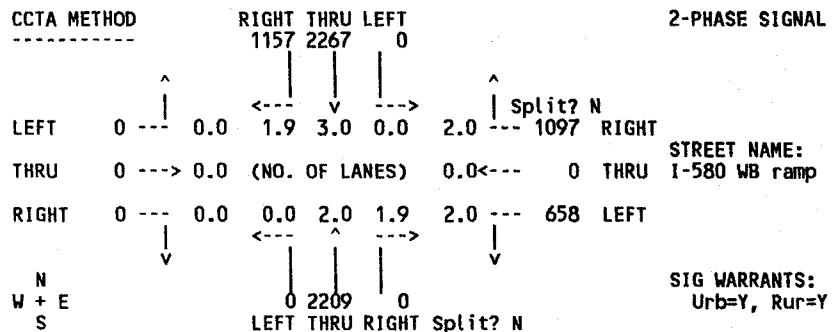
STREET NAME: Hacienda Dr

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	V/C CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1800	0.0000	0.445
THRU (T)	1840	1840	3720	0.5111	0.5111
SB RIGHT (R)	539	539	1800	0.2994	
THRU (T)	1607	1607	5400	0.2976	
WB RIGHT (R)	998	998	3273	0.3049	0.3049
LEFT (L)	644	644	3273	0.1968	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.82 O.80  
INTERSECTION LEVEL OF SERVICE: D\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=RUNECAP.AMV, CAP=C...LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative ECAP 07/09/01

INTERSECTION 8305 Hacienda Dr/I-580 WB ramp Dublin  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour PM PEAK VOL

STREET NAME: Hacienda Dr

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	V/C CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	2209	2209	3720	0.6136	0.6136
SB RIGHT (R)	1157	1157	1800	0.6428	
THRU (T)	2267	2267	5400	0.4198	
WB RIGHT (R)	1097	1097	3273	0.3352	0.3352
LEFT (L)	658	658	3273	0.2010	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.95 O.93  
INTERSECTION LEVEL OF SERVICE: E\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=RUNECAP.PMV, CAP=C...LOSCAP.TAB

33888

LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative ECAP 07/09/01

INTERSECTION 8306 Hacienda Dr/Dublin Blvd Dublin  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour AM PEAK VOL

(4)

CCTA METHOD	RIGHT	THRU	LEFT		8-PHASE SIGNAL
	8	882	193		
LEFT	58	2.0	1.0	3.0	2.0
THRU	605	--->	3.0	(NO. OF LANES)	3.0<---
RIGHT	483	2.5	3.0	3.0	1.0
N					
W + E		962	543	419	
S					
					SIG WARRANTS: Urb=Y, Rur=Y
					LEFT THRU RIGHT Split? N

STREET NAME: Hacienda Dr

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	419	0 *	1650	0.0000	
THRU (T)	543	543	4950	0.1097	
LEFT (L)	962	962	4304	0.2235	0.2235
SB RIGHT (R)	8	0 *	1650	0.0000	
THRU (T)	882	882	4950	0.1782	0.1782
LEFT (L)	193	193	3000	0.0643	
EB RIGHT (R)	483	0 *	3000	0.0000	
THRU (T)	605	605	4950	0.1222	0.1222
LEFT (L)	58	58	3000	0.0193	
WB RIGHT (R)	44	0 *	1650	0.0000	
THRU (T)	1127	1127	4950	0.2277	
LEFT (L)	893	893	3000	0.2977	0.2977

TOTAL VOLUME-TO-CAPACITY RATIO: 0.82  
INTERSECTION LEVEL OF SERVICE: D

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=RUNECAP.AMV, CAP=C:..LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative ECAP 07/09/01

INTERSECTION 8306 Hacienda Dr/Dublin Blvd Dublin  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour PM PEAK VOL

CCTA METHOD	RIGHT	THRU	LEFT		8-PHASE SIGNAL
	5	875	159		
LEFT	69	2.0	1.0	3.0	2.0
THRU	1343	--->	3.0	(NO. OF LANES)	3.0<---
RIGHT	858	2.5	3.0	3.0	1.0
N					
W + E		1466	761	928	
S					
					SIG WARRANTS: Urb=Y, Rur=Y
					LEFT THRU RIGHT Split? N

STREET NAME: Hacienda Dr

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	928	535 *	1650	0.3242	
THRU (T)	761	761	4950	0.1537	
LEFT (L)	1466	1466	4304	0.3406	0.3406
SB RIGHT (R)	5	0 *	1650	0.0000	
THRU (T)	875	875	4950	0.1768	0.1768
LEFT (L)	159	159	3000	0.0530	
EB RIGHT (R)	858	0 *	3000	0.0000	
THRU (T)	1343	1343	4950	0.2713	0.2713
LEFT (L)	69	69	3000	0.0230	
WB RIGHT (R)	36	0 *	1650	0.0000	
THRU (T)	739	739	4950	0.1493	
LEFT (L)	715	715	3000	0.2383	0.2383

TOTAL VOLUME-TO-CAPACITY RATIO: 1.03  
INTERSECTION LEVEL OF SERVICE: F

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=RUNECAP.PMV, CAP=C:..LOSCAP.TAB

888 988 988

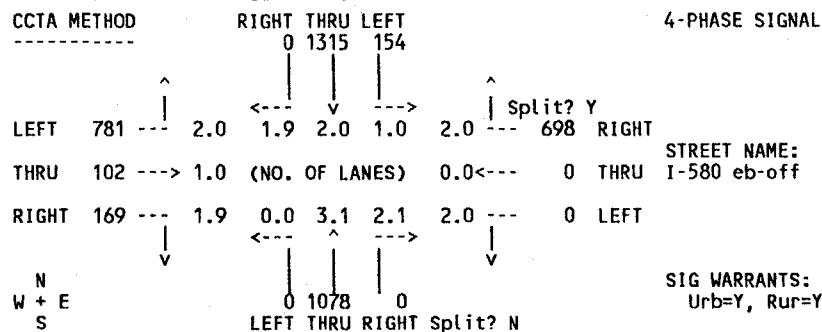
## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative ECAP

07/09/01

INTERSECTION 4041 Santa Rita Rd/I-580 eb-off PLEASANTON  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour AM PEAK VOL

5



MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	V/C CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	3000	0.0000	
THRU (T)	1078	1078	4950	0.2178	
T + R	1078	6300		0.1711	
SB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	1315	1315	3300	0.3985	0.3985
LEFT (L)	154	154	1650	0.0933	
EB RIGHT (R)	169	169	1650	0.1024	
THRU (T)	102	102	1650	0.0618	
LEFT (L)	781	781	3000	0.2603	0.2603
WB RIGHT (R)	698	544 *	3000	0.1813	0.1813
LEFT (L)	0	0	3000	0.0000	

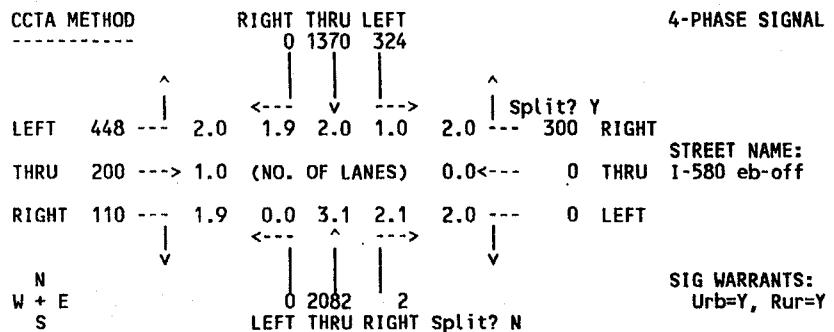
TOTAL VOLUME-TO-CAPACITY RATIO: 0.84  
INTERSECTION LEVEL OF SERVICE: D

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=RUNECAP.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative ECAP

07/09/01

INTERSECTION 4041 Santa Rita Rd/I-580 eb-off PLEASANTON  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour PM PEAK VOL

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	V/C CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	2	2	3000	0.0007	
THRU (T)	2082	2082	4950	0.4206	0.4206
T + R		2084	6300	0.3308	
SB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	1370	1370	3300	0.4152	
LEFT (L)	324	324	1650	0.1964	0.1964
EB RIGHT (R)	110	110	1650	0.0667	
THRU (T)	200	200	1650	0.1212	
LEFT (L)	448	448	3000	0.1493	0.1493
WB RIGHT (R)	300	0 *	3000	0.0000	0.0000
LEFT (L)	0	0	3000	0.0000	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.77  
INTERSECTION LEVEL OF SERVICE: C

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=RUNECAP.PMV, CAP=C:..LOSCAP.TAB

335 29 885

LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative ECAP

07/09/01

INTERSECTION 3988 Tassajara Rd/I-580 wb-off PLEASANTON  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour AM PEAK VOL

(6)

CCTA METHOD	RIGHT	THRU	LEFT		2-PHASE SIGNAL
	1032	1294	0		
LEFT	0	0.0	1.9	3.0	0.0
THRU	0	-->	0.0	(NO. OF LANES)	0.0<---
RIGHT	0	-->	0.0	2.0	1.9
N W + E S	0	1691	0		
	LEFT THRU	RIGHT	Split? N		SIG WARRANTS: Urb=Y, Rur=Y

STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	1691	1691	3600	0.4697	0.4697
SB RIGHT (R)	1032	1032	1800	0.5733	
THRU (T)	1294	1294	5400	0.2396	
WB RIGHT (R)	803	803	3273	0.2453	0.2453
LEFT (L)	504	504	3273	0.1540	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.72

INTERSECTION LEVEL OF SERVICE: C

\* ADJUSTED FOR RIGHT TURN ON RED

INT=NEWSRP.INT, VOL=RUNECAP.AMV, CAP=C:..LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative ECAP

07/09/01

INTERSECTION 3988 Tassajara Rd/I-580 wb-off PLEASANTON  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour PM PEAK VOL

CCTA METHOD	RIGHT	THRU	LEFT		2-PHASE SIGNAL
	1079	1740	0		
LEFT	0	-->	0.0	1.9	3.0
THRU	0	-->	0.0	(NO. OF LANES)	0.0<--
RIGHT	0	-->	0.0	2.0	1.9
N W + E S	0	1849	0		
	LEFT THRU	RIGHT	Split? N		SIG WARRANTS: Urb=Y, Rur=Y

STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	1849	1849	3600	0.5136	0.5136
SB RIGHT (R)	1079	1079	1800	0.5994	
THRU (T)	1740	1740	5400	0.3222	
WB RIGHT (R)	708	708	3273	0.2163	0.2163
LEFT (L)	551	551	3273	0.1683	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.73

INTERSECTION LEVEL OF SERVICE: C

\* ADJUSTED FOR RIGHT TURN ON RED

INT=NEWSRP.INT, VOL=RUNECAP.PMV, CAP=C:..LOSCAP.TAB

332  
333  
334  
335

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative ECAP

07/09/01

INTERSECTION 1573 Tassajara Rd/Dublin Blvd Alameda County  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour AM PEAK VOL

CCTA METHOD	RIGHT	THRU	LEFT	8-PHASE SIGNAL		
	760	1834	132			
LEFT	398	2.0	2.0	4.0	2.0	1.0
THRU	534	--->	3.0	(NO. OF LANES)	3.0	<---
RIGHT	200	---	2.5	3.0	4.0	2.0
N						
W + E	466	1188	526			
S	LEFT	THRU	RIGHT	SPLIT?	N	
				SIG WARRANTS:		
				Urb=Y, Rur=Y		

STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	526	334 *	3000	0.1113	
THRU (T)	1188	1188	6600	0.1800	
LEFT (L)	466	466	4304	0.1083	0.1083
SB RIGHT (R)	760	541 *	3000	0.1803	
THRU (T)	1834	1834	6600	0.2779	0.2779
LEFT (L)	132	132	3000	0.0440	
EB RIGHT (R)	200	0 *	3000	0.0000	
THRU (T)	534	534	4950	0.1079	
LEFT (L)	398	398	3000	0.1327	0.1327
WB RIGHT (R)	64	0 *	1650	0.0000	
THRU (T)	973	973	4950	0.1966	0.1966
LEFT (L)	502	502	4304	0.1166	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.72  
INTERSECTION LEVEL OF SERVICE: C\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=RUNECAP.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative ECAP

07/09/01

INTERSECTION 1573 Tassajara Rd/Dublin Blvd Alameda County  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour PM PEAK VOL

CCTA METHOD	RIGHT	THRU	LEFT	8-PHASE SIGNAL		
	393	1488	86			
LEFT	949	2.0	2.0	4.0	2.0	1.0
THRU	1458	--->	3.0	(NO. OF LANES)	3.0	<---
RIGHT	369	---	2.5	3.0	4.0	2.0
N						
W + E	546	1724	406			
S	LEFT	THRU	RIGHT	SPLIT?	N	
				SIG WARRANTS:		
				Urb=Y, Rur=Y		

STREET NAME: Tassajara Rd

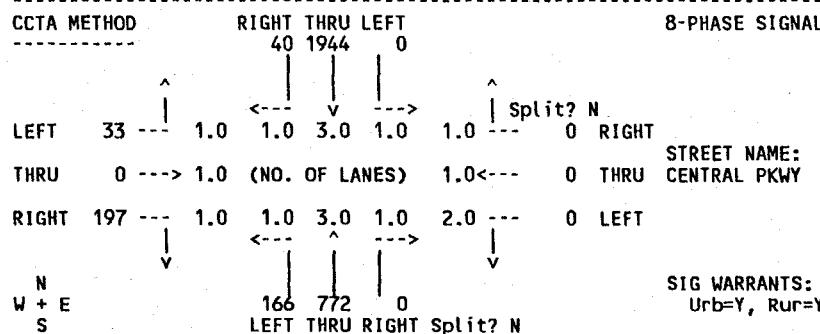
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	406	30 *	3000	0.0100	
THRU (T)	1724	1724	6600	0.2612	
LEFT (L)	546	546	4304	0.1269	0.1269
SB RIGHT (R)	393	0 *	3000	0.0000	
THRU (T)	1488	1488	6600	0.2255	0.2255
LEFT (L)	86	86	3000	0.0287	
EB RIGHT (R)	369	0 *	3000	0.0000	
THRU (T)	1458	1458	4950	0.2945	0.2945
LEFT (L)	949	949	3000	0.3163	
WB RIGHT (R)	66	19 *	1650	0.0115	
THRU (T)	441	441	4950	0.0891	
LEFT (L)	980	980	4304	0.2277	0.2277

TOTAL VOLUME-TO-CAPACITY RATIO: 0.87  
INTERSECTION LEVEL OF SERVICE: D\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=RUNECAP.PMV, CAP=C:..LOSCAP.TAB

BBG 8/16/01

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative ECAP 07/09/01

INTERSECTION 6430 TASSAJARA RD./CENTRAL PKWY DUBLIN  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour AM PEAK VOL

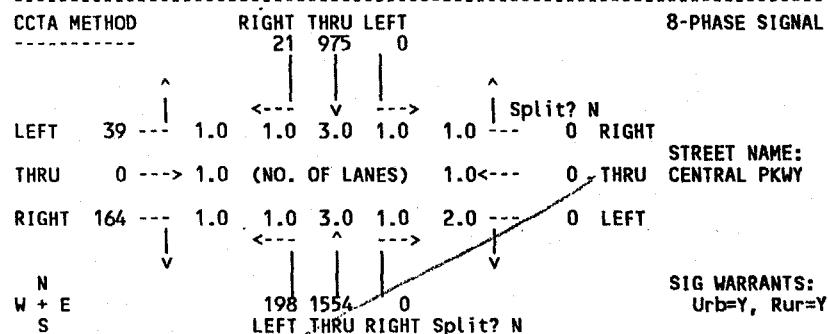
STREET NAME: TASSAJARA RD.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	772	772	4950	0.1560	
LEFT (L)	166	166	1650	0.1006	0.1006
SB RIGHT (R)	40	7 *	1650	0.0042	
THRU (T)	1944	1944	4950	0.3927	0.3927
LEFT (L)	0	0	1650	0.0000	
EB RIGHT (R)	197	31 *	1650	0.0188	
THRU (T)	0	0	1650	0.0000	
LEFT (L)	33	33	1650	0.0200	0.0200
WB RIGHT (R)	0	0	1650	0.0000	0.0000
THRU (T)	0	0	1650	0.0000	
LEFT (L)	0	0	3000	0.0000	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.51  
INTERSECTION LEVEL OF SERVICE: A\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=RUNECAP.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative ECAP 07/09/01

INTERSECTION 6430 TASSAJARA RD./CENTRAL PKWY DUBLIN  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour PM PEAK VOL

STREET NAME: TASSAJARA RD.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	1554	1554	4950	0.3139	
LEFT (L)	198	198	1650	0.1200	0.1200
SB RIGHT (R)	21	0 *	1650	0.0000	
THRU (T)	975	975	4950	0.1970	0.1970
LEFT (L)	0	0	1650	0.0000	
EB RIGHT (R)	164	0 *	1650	0.0000	
THRU (T)	0	0	1650	0.0000	
LEFT (L)	39	39	1650	0.0236	0.0236
WB RIGHT (R)	0	0	1650	0.0000	0.0000
THRU (T)	0	0	1650	0.0000	
LEFT (L)	0	0	3000	0.0000	

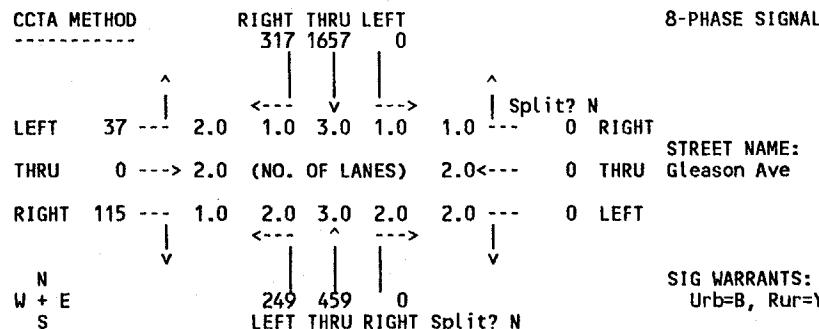
TOTAL VOLUME-TO-CAPACITY RATIO: 0.34  
INTERSECTION LEVEL OF SERVICE: A\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=RUNECAP.PMV, CAP=C:..LOSCAP.TAB

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## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative ECAP 07/09/01

INTERSECTION 3987 Tassajara Rd/Gleason Ave Alameda County  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour AM PEAK VOL

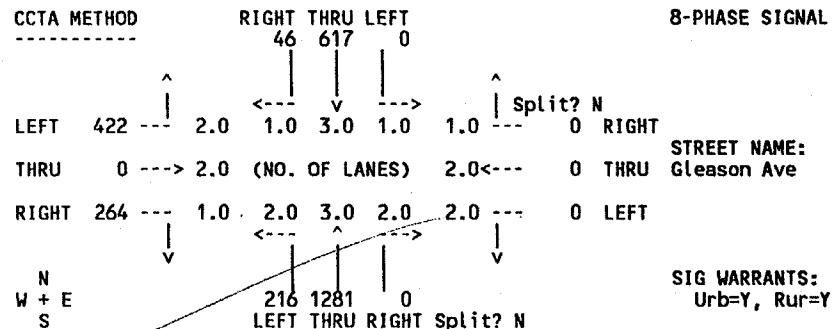
STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	3000	0.0000	
THRU (T)	459	459	4950	0.0927	
LEFT (L)	249	249	3000	0.0830	0.0830
SB RIGHT (R)	317	297 *	1650	0.1800	
THRU (T)	1657	1657	4950	0.3347	0.3347
LEFT (L)	0	0	1650	0.0000	
EB RIGHT (R)	115	0 *	1650	0.0000	
THRU (T)	0	0	3300	0.0000	
LEFT (L)	37	37	3000	0.0123	0.0123
WB RIGHT (R)	0	0	1650	0.0000	0.0000
THRU (T)	0	0	3300	0.0000	
LEFT (L)	0	0	3000	0.0000	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.43  
INTERSECTION LEVEL OF SERVICE: A\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=RUNECAP.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative ECAP 07/09/01

INTERSECTION 3987 Tassajara Rd/Gleason Ave Alameda County  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour PM PEAK VOL

STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	3000	0.0000	
THRU (T)	1281	1281	4950	0.2588	0.2588
LEFT (L)	216	216	3000	0.0720	
SB RIGHT (R)	46	0 *	1650	0.0000	
THRU (T)	617	617	4950	0.1246	
LEFT (L)	0	0	1650	0.0000	0.0000
EB RIGHT (R)	264	145 *	1650	0.0879	
THRU (T)	0	0	3300	0.0000	
LEFT (L)	422	422	3000	0.1407	0.1407
WB RIGHT (R)	0	0	1650	0.0000	0.0000
THRU (T)	0	0	3300	0.0000	
LEFT (L)	0	0	3000	0.0000	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.40  
INTERSECTION LEVEL OF SERVICE: A\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=RUNECAP.PMV, CAP=C:..LOSCAP.TAB

336

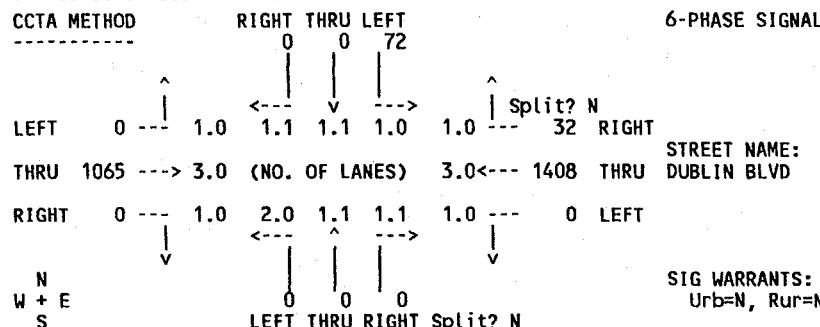
88E 8

LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative ECAP

07/09/01

INTERSECTION 6617 MAIN STREET/DUBLIN BLVD DUBLIN  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour AM PEAK VOL



	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1650	0.0000	0.0000
THRU (T)	0	0	1650	0.0000	
LEFT (L)	0	0	3000	0.0000	
T + R	0	1650	0.0000		
SB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	0	0	1650	0.0000	
LEFT (L)	72	72	1650	0.0436	0.0436
T + R	0	1650	0.0000		
EB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	1065	1065	4950	0.2152	
LEFT (L)	0	0	1650	0.0000	0.0000
WB RIGHT (R)	32	0 *	1650	0.0000	
THRU (T)	1408	1408	4950	0.2844	0.2844
LEFT (L)	0	0	1650	0.0000	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.33

INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED

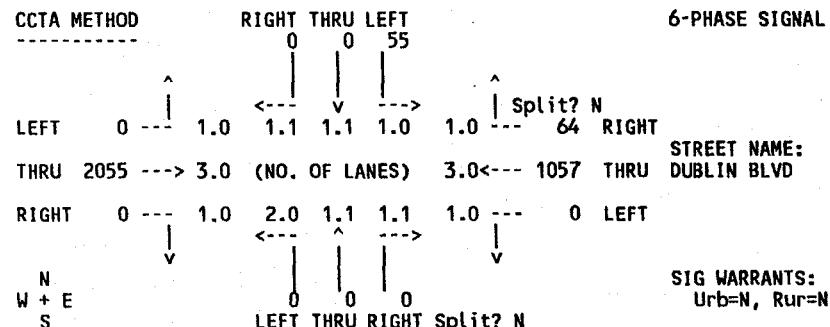
INT=NEWSRP.INT, VOL=RUNECAP.AMV, CAP=C:..LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative ECAP

07/09/01

INTERSECTION 6617 MAIN STREET/DUBLIN BLVD DUBLIN  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour PM PEAK VOL



	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1650	0.0000	0.0000
THRU (T)	0	0	1650	0.0000	
LEFT (L)	0	0	3000	0.0000	
T + R	0	1650	0.0000		
SB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	0	0	1650	0.0000	
LEFT (L)	55	55	1650	0.0333	0.0333
T + R	0	1650	0.0000		
EB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	2055	2055	4950	0.4152	0.4152
LEFT (L)	0	0	1650	0.0000	
WB RIGHT (R)	64	9 *	1650	0.0055	
THRU (T)	1057	1057	4950	0.2135	
LEFT (L)	0	0	1650	0.0000	0.0000

TOTAL VOLUME-TO-CAPACITY RATIO: 0.45

INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED

INT=NEWSRP.INT, VOL=RUNECAP.PMV, CAP=C:..LOSCAP.TAB

30  
30  
30  
30

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative ECAP 07/09/01

INTERSECTION 6615 MAIN STREET/CENTRAL PARKWAY DUBLIN  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour AM PEAK VOL

CCTA METHOD      RIGHT THRU LEFT      5-PHASE SIGNAL

	0	0	0							
LEFT	0	1.0	1.1	1.1	1.0	1.0	0	RIGHT		
THRU	61	---	2.0	(NO. OF LANES)	2.0	<---	139	THRU CENTRAL PARKWAY		
RIGHT	117	---	1.0	1.0	1.1	1.1	1.0	---	0	LEFT
N W + E S	90	0	0					SIG WARRANTS: Urb=N, Rur=N		
LEFT THRU RIGHT Split? N										

STREET NAME: MAIN STREET

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	0	0	1650	0.0000	
LEFT (L)	90	90	1650	0.0545	0.0545
T + R	0	1650	0.0000		
SB RIGHT (R)	0	0	1650	0.0000	0.0000
THRU (T)	0	0	1650	0.0000	
LEFT (L)	0	0	1650	0.0000	
T + R	0	1650	0.0000		
EB RIGHT (R)	117	27 *	1650	0.0164	
THRU (T)	61	61	3300	0.0185	
LEFT (L)	0	0	1650	0.0000	0.0000
WB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	139	139	3300	0.0421	0.0421
LEFT (L)	0	0	1650	0.0000	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.10

INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=RUNECAP.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative ECAP 07/09/01

INTERSECTION 6615 MAIN STREET/CENTRAL PARKWAY DUBLIN  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour PM PEAK VOL

CCTA METHOD      RIGHT THRU LEFT      5-PHASE SIGNAL

	0	0	0							
LEFT	0	1.0	1.1	1.1	1.0	1.0	0	RIGHT		
THRU	172	---	2.0	(NO. OF LANES)	2.0	<---	56	THRU CENTRAL PARKWAY		
RIGHT	120	---	1.0	1.0	1.1	1.1	1.0	---	0	LEFT
N W + E S	128	0	0					SIG WARRANTS: Urb=N, Rur=N		
LEFT THRU RIGHT Split? N										

STREET NAME: MAIN STREET

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	0	0	1650	0.0000	
LEFT (L)	128	128	1650	0.0776	0.0776
T + R	0	1650	0.0000		
SB RIGHT (R)	0	0	1650	0.0000	0.0000
THRU (T)	0	0	1650	0.0000	
LEFT (L)	0	0	1650	0.0000	
T + R	0	1650	0.0000		
EB RIGHT (R)	120	0 *	1650	0.0000	
THRU (T)	172	172	3300	0.0521	0.0521
LEFT (L)	0	0	1650	0.0000	
WB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	56	56	3300	0.0170	
LEFT (L)	0	0	1650	0.0000	0.0000

TOTAL VOLUME-TO-CAPACITY RATIO: 0.13

INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=RUNECAP.PMV, CAP=C:..LOSCAP.TAB

116

886 2e

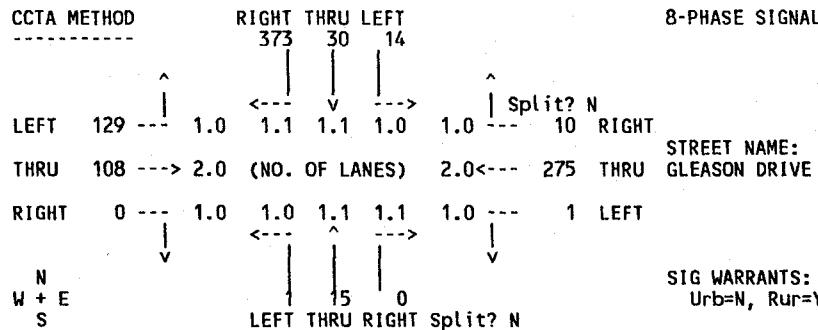
LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative ECAP

07/09/01

INTERSECTION 6618 MAIN STREET/GLEASON DRIVE DUBLIN  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour AM PEAK VOL

(12)



STREET NAME: MAIN STREET

	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
MOVEMENT					
NB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	15	15	1650	0.0091	
LEFT (L)	1	1	1650	0.0006	0.0006
T + R		15	1650	0.0091	
SB RIGHT (R)	373	373	1650	0.2261	
THRU (T)	30	30	1650	0.0182	
LEFT (L)	14	14	1650	0.0085	
T + R		403	1650	0.2442	0.2442
EB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	108	108	3300	0.0327	
LEFT (L)	129	129	1650	0.0782	0.0782
WB RIGHT (R)	10	0 *	1650	0.0000	
THRU (T)	275	275	3300	0.0833	0.0833
LEFT (L)	1	1	1650	0.0006	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.41  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED

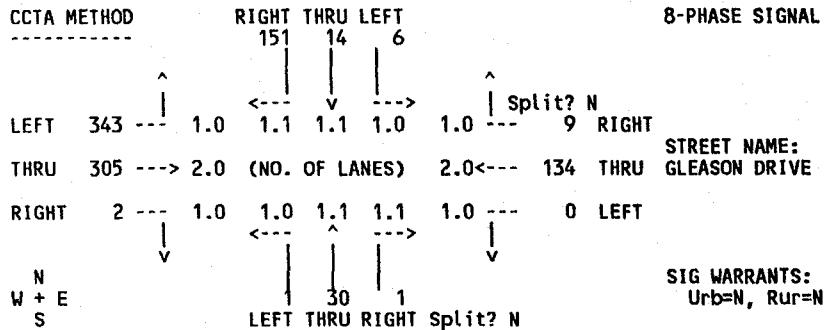
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LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative ECAP

07/09/01

INTERSECTION 6618 MAIN STREET/GLEASON DRIVE DUBLIN  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour PM PEAK VOL



STREET NAME: MAIN STREET

	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
MOVEMENT					
NB RIGHT (R)	1	1	1650	0.0006	
THRU (T)	30	30	1650	0.0182	
LEFT (L)	1	1	1650	0.0006	0.0006
T + R		31	1650	0.0188	
SB RIGHT (R)	151	151	1650	0.0915	
THRU (T)	14	14	1650	0.0085	
LEFT (L)	6	6	1650	0.0036	
T + R		165	1650	0.1000	0.1000
EB RIGHT (R)	2	1 *	1650	0.0006	
THRU (T)	305	305	3300	0.0924	
LEFT (L)	343	343	1650	0.2079	0.2079
WB RIGHT (R)	9	3 *	1650	0.0018	
THRU (T)	134	134	3300	0.0406	0.0406
LEFT (L)	0	0	1650	0.0000	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.35  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED

INT=NEWSRP.INT, VOL=RUNECAP.PMV, CAP=C:..LOSCAP.TAB

34  
386 JET 8/8

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative ECAP 07/09/01

INTERSECTION 9957 El Charro Rd/I-580 EB ramp Alameda County  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour AM PEAK VOL

13

CCTA METHOD	RIGHT	THRU	LEFT	2-PHASE SIGNAL	
	0	1372	0		
LEFT	1467	2.0	1.9	3.0	0.0
THRU	0	---	0.0	(NO. OF LANES)	0.0<---
RIGHT	101	---	2.0	0.0	3.0
				1.9	0.0
N					
W + E		0	948	886	
S					
LEFT THRU RIGHT Split? N					
STREET NAME: El Charro Rd					
ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C	
NB RIGHT (R)	886	886	1800	0.4922	
THRU (T)	948	948	5400	0.1756	
SB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	1372	1372	5400	0.2541	
EB RIGHT (R)	101	101	3273	0.0309	
LEFT (L)	1467	1467	3273	0.4482	
TOTAL VOLUME-TO-CAPACITY RATIO: 0.70					
INTERSECTION LEVEL OF SERVICE: B					

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=RUNECAP.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative ECAP 07/09/01

INTERSECTION 9957 El Charro Rd/I-580 EB ramp Alameda County  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour PM PEAK VOL

CCTA METHOD	RIGHT	THRU	LEFT	2-PHASE SIGNAL	
	0	1869	0		
LEFT	1067	2.0	1.9	3.0	0.0
THRU	0	---	0.0	(NO. OF LANES)	0.0<---
RIGHT	45	---	2.0	0.0	3.0
				1.9	0.0
N					
W + E		0	1017	960	
S					
LEFT THRU RIGHT Split? N					
STREET NAME: El Charro Rd					
ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C	
NB RIGHT (R)	960	960	1800	0.5333	
THRU (T)	1017	1017	5400	0.1883	
SB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	1869	1869	5400	0.3461	
EB RIGHT (R)	45	45	3273	0.0137	
LEFT (L)	1067	1067	3273	0.3260	
TOTAL VOLUME-TO-CAPACITY RATIO: 0.67					
INTERSECTION LEVEL OF SERVICE: B					

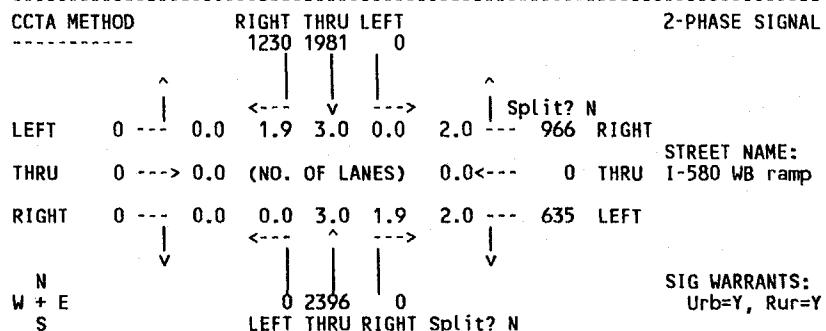
\* ADJUSTED FOR RIGHT TURN ON RED  
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346  
886 960

LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative **ECAP** 07/09/01

**(14)**  
INTERSECTION 9956 Fallon Rd/I-580 WB ramp Alameda County  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour AM PEAK VOL



STREET NAME: Fallon Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	2396	2396	5400	0.4437	0.4437
SB RIGHT (R)	1230	1230	1800	0.6833	
THRU (T)	1981	1981	5400	0.3669	
WB RIGHT (R)	966	966	3273	0.2951	0.2951
LEFT (L)	635	635	3273	0.1940	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.74

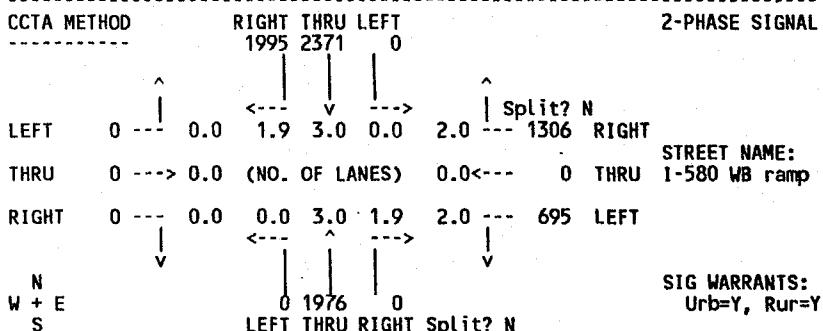
INTERSECTION LEVEL OF SERVICE: C

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=RUNECAP.AMV, CAP=C:..LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative **ECAP** 07/09/01

INTERSECTION 9956 Fallon Rd/I-580 WB ramp Alameda County  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour PM PEAK VOL



STREET NAME: Fallon Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	1976	1976	5400	0.3659	
SB RIGHT (R)	1995	1995	1800	1.1083 **	
THRU (T)	2371	2371	5400	0.4391	0.4391
WB RIGHT (R)	1306	1306	3273	0.3990	0.3990
LEFT (L)	695	695	3273	0.2123	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.84

INTERSECTION LEVEL OF SERVICE: D

\* ADJUSTED FOR RIGHT TURN ON RED \*\* APPROACHING OR EXCEEDING CAPACITY  
INT=NEWSRP.INT, VOL=RUNECAP.PMV, CAP=C:..LOSCAP.TAB

886 24th St

LOS Software by TJKM Transportation Consultants

Condition: am peak hour; ECAP Alt. no new int.

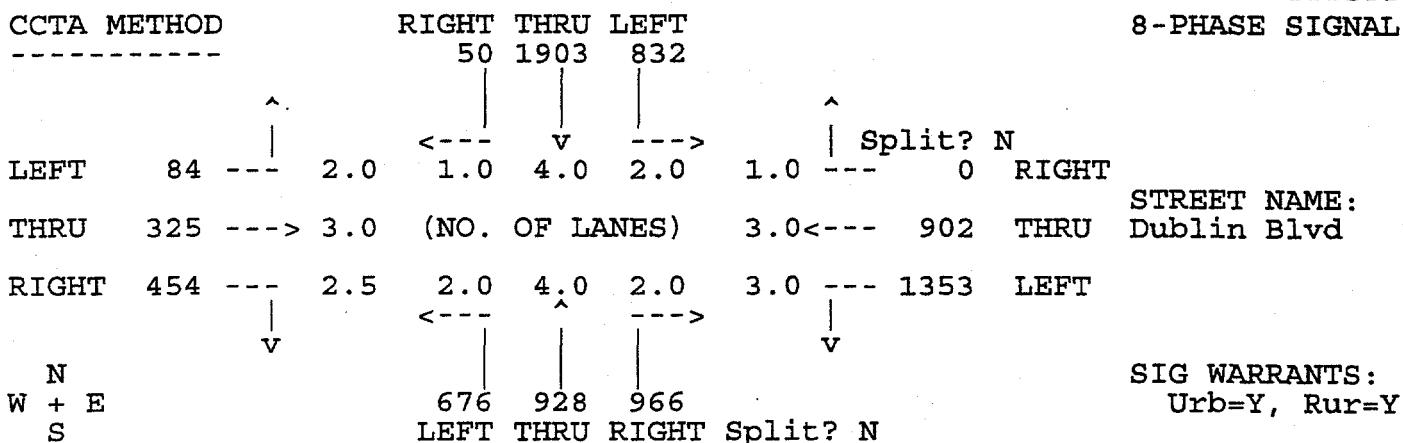
07/12/01

(15)

INTERSECTION 8336 Fallon Rd/Dublin Blvd

Alameda County

Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour AM PEAK VOL



STREET NAME: Fallon Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C	CRITICAL
				RATIO	V/C
NB	RIGHT (R)	966	447 *	3000	0.1490
	THRU (T)	928	928	6600	0.1406
	LEFT (L)	676	676	3000	0.2253      0.2253
SB	RIGHT (R)	50	4 *	1650	0.0024
	THRU (T)	1903	1903	6600	0.2883      0.2883
	LEFT (L)	832	832	3000	0.2773
EB	RIGHT (R)	454	0 *	3000	0.0000
	THRU (T)	325	325	4950	0.0657      0.0657
	LEFT (L)	84	84	3000	0.0280
WB	RIGHT (R)	0	0	1650	0.0000
	THRU (T)	902	902	4950	0.1822
	LEFT (L)	1353	1353	4304	0.3144      0.3144

TOTAL VOLUME-TO-CAPACITY RATIO:

0.89

INTERSECTION LEVEL OF SERVICE:

D

\* ADJUSTED FOR RIGHT TURN ON RED

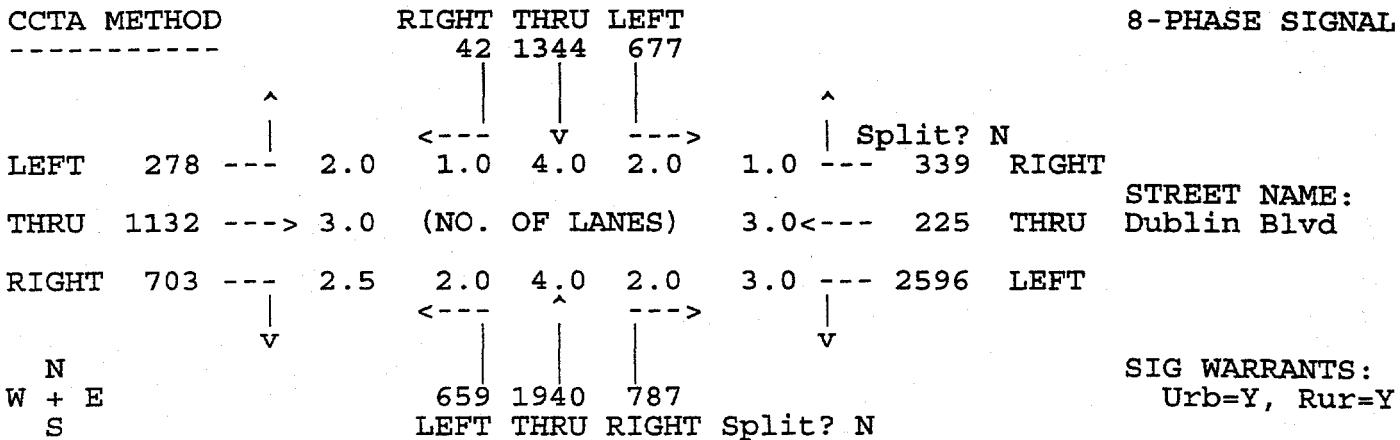
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LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; ECAP Alt. no new int.

07/12/01

(15)

INTERSECTION 8336 Fallon Rd/Dublin Blvd Alameda County  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour PM PEAK VOL

STREET NAME: Fallon Rd

		ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB	RIGHT (R)	787	0 *	3000	0.0000	
	THRU (T)	1940	1940	6600	0.2939	0.2939
	LEFT (L)	659	659	3000	0.2197	
SB	RIGHT (R)	42	0 *	1650	0.0000	
	THRU (T)	1344	1344	6600	0.2036	
	LEFT (L)	677	677	3000	0.2257	0.2257
EB	RIGHT (R)	703	44 *	3000	0.0147	
	THRU (T)	1132	1132	4950	0.2287	0.2287
	LEFT (L)	278	278	3000	0.0927	
WB	RIGHT (R)	339	0 *	1650	0.0000	
	THRU (T)	225	225	4950	0.0455	
	LEFT (L)	2596	2596	4304	0.6032	0.6032

TOTAL VOLUME-TO-CAPACITY RATIO:

1.35

INTERSECTION LEVEL OF SERVICE:

F

\* ADJUSTED FOR RIGHT TURN ON RED

INT=NEWSRP.INT, VOL=RUNECAP.PMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative ECAP 07/09/01

INTERSECTION 8336 Fallon Rd/Dublin Blvd Alameda County  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour AM PEAK VOL

CCTA METHOD	RIGHT	THRU	LEFT	8-PHASE SIGNAL	
	50	1903	382		
LEFT	37	2.0	1.0	4.0	2.0
THRU	325	--->	3.0	(NO. OF LANES)	3.0<---
RIGHT	454	---	2.5	2.0	4.0
N					
W + E	413	928	966		
S					
	LEFT	THRU	RIGHT	Split? N	

STREET NAME: Fallon Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	966	560 *	3000	0.1867	
THRU (T)	928	928	6600	0.1406	
LEFT (L)	413	413	3000	0.1377	0.1377
SB RIGHT (R)	50	30 *	1650	0.0182	
THRU (T)	1903	1903	6600	0.2883	0.2883
LEFT (L)	382	382	3000	0.1273	
EB RIGHT (R)	454	41 *	3000	0.0137	
THRU (T)	325	325	4950	0.0657	0.0657
LEFT (L)	37	37	3000	0.0123	
WB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	902	902	4950	0.1822	
LEFT (L)	1058	1058	4304	0.2458	0.2458

TOTAL VOLUME-TO-CAPACITY RATIO: 0.74  
INTERSECTION LEVEL OF SERVICE: C\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=RUNECAP.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative ECAP 07/09/01

INTERSECTION 8336 Fallon Rd/Dublin Blvd Alameda County  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour PM PEAK VOL

CCTA METHOD	RIGHT	THRU	LEFT	8-PHASE SIGNAL	
	42	1344	168		
LEFT	85	2.0	1.0	4.0	2.0
THRU	1132	--->	3.0	(NO. OF LANES)	3.0<---
RIGHT	703	---	2.5	2.0	4.0
N					
W + E	456	1940	787		
S					
	LEFT	THRU	RIGHT	Split? N	

STREET NAME: Fallon Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	787	340 *	3000	0.1133	
THRU (T)	1940	1940	6600	0.2939	
LEFT (L)	456	456	3000	0.1520	0.1520
SB RIGHT (R)	42	0 *	1650	0.0000	
THRU (T)	1344	1344	6600	0.2036	0.2036
LEFT (L)	168	168	3000	0.0560	
EB RIGHT (R)	703	247 *	3000	0.0823	
THRU (T)	1132	1132	4950	0.2287	0.2287
LEFT (L)	85	85	3000	0.0283	
WB RIGHT (R)	339	247 *	1650	0.1497	
THRU (T)	225	225	4950	0.0455	
LEFT (L)	1167	1167	4304	0.2711	0.2711

TOTAL VOLUME-TO-CAPACITY RATIO: 0.86  
INTERSECTION LEVEL OF SERVICE: D\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=RUNECAP.PMV, CAP=C:..LOSCAP.TAB

BBE Joe 1/18

LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative **ECAP** 07/09/01

**XX** INTERSECTION 6760 Fallon Road/New Intersection Dublin  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour AM PEAK VOL

CCTA METHOD	RIGHT	THRU	LEFT	8-PHASE SIGNAL		
	122	2843	450			
LEFT	47	2.0	1.0	4.0	2.0	1.1 --- 130 RIGHT
THRU	25	--->	1.0 (NO. OF LANES)	1.1 <---	25	THRU New Intersection
RIGHT	73	2.0	2.0	4.0	1.0	3.0 --- 295 LEFT
N W + E S	263	2131	968			SIG WARRANTS: Urb=Y, Rur=Y
	LEFT THRU	RIGHT	Split? N			

STREET NAME: Fallon Road

MOVEMENT	ORIGINAL	ADJUSTED	V/C	CRITICAL
	VOLUME	VOLUME*		
NB RIGHT (R)	968	855 *	1650	0.5182
THRU (T)	2131	2131	6600	0.3229
LEFT (L)	263	263	3000	0.0877
SB RIGHT (R)	122	96 *	1650	0.0582
THRU (T)	2843	2843	6600	0.4308
LEFT (L)	450	450	3000	0.1500
EB RIGHT (R)	73	0 *	3000	0.0000
THRU (T)	25	25	1650	0.0152
LEFT (L)	47	47	3000	0.0157
WB RIGHT (R)	130	130	1650	0.0788
THRU (T)	25	25	1650	0.0152
LEFT (L)	295	295	4304	0.0685
T + R	155	1650	0.0939	0.0939

TOTAL VOLUME-TO-CAPACITY RATIO: 0.78  
INTERSECTION LEVEL OF SERVICE: C

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=RUNECAP.AMV, CAP=C:..LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative **ECAP** 07/09/01

INTERSECTION 6760 Fallon Road/New Intersection Dublin  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour PM PEAK VOL

CCTA METHOD	RIGHT	THRU	LEFT	8-PHASE SIGNAL		
	115	2590	509			
LEFT	193	2.0	1.0	4.0	2.0	1.1 --- 507 RIGHT
THRU	73	--->	1.0 (NO. OF LANES)	1.1 <---	73	THRU New Intersection
RIGHT	347	2.0	2.0	4.0	1.0	3.0 --- 1429 LEFT
N W + E S	203	2482	597			SIG WARRANTS: Urb=Y, Rur=Y
	LEFT THRU	RIGHT	Split? N			

STREET NAME: Fallon Road

MOVEMENT	ORIGINAL	ADJUSTED	V/C	CRITICAL
	VOLUME	VOLUME*		
NB RIGHT (R)	597	49 *	1650	0.0297
THRU (T)	2482	2482	6600	0.3761
LEFT (L)	203	203	3000	0.0677
SB RIGHT (R)	115	9 *	1650	0.0055
THRU (T)	2590	2590	6600	0.3924
LEFT (L)	509	509	3000	0.1697
EB RIGHT (R)	347	235 *	3000	0.0783
THRU (T)	73	73	1650	0.0442
LEFT (L)	193	193	3000	0.0643
WB RIGHT (R)	507	507	1650	0.3073
THRU (T)	73	73	1650	0.0442
LEFT (L)	1429	1429	4304	0.3320
T + R	580	1650	0.3515	0.3515

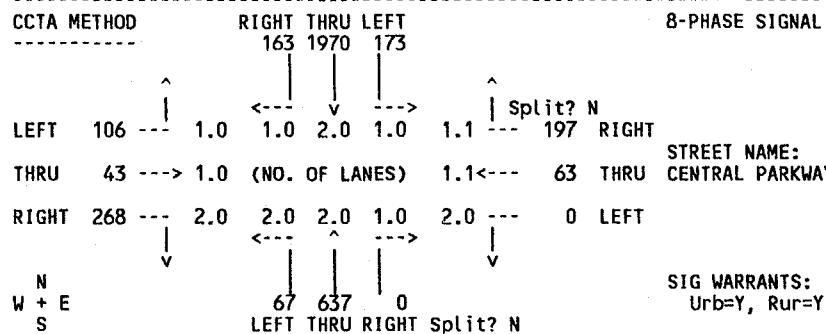
TOTAL VOLUME-TO-CAPACITY RATIO: 0.96  
INTERSECTION LEVEL OF SERVICE: E

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=RUNECAP.PMV, CAP=C:..LOSCAP.TAB

986 Joe B/E

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative ECAP 07/09/01

INTERSECTION 6438 FALCON ROAD/CENTRAL PARKWAY DUBLIN  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour AM PEAK VOL

STREET NAME: FALCON ROAD

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	Critical V/C
NB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	637	637	3300	0.1930	
LEFT (L)	67	67	3000	0.0223	0.0223
SB RIGHT (R)	163	57 *	1650	0.0345	
THRU (T)	1970	1970	3300	0.5970	0.5970
LEFT (L)	173	173	1650	0.1048	
EB RIGHT (R)	268	231 *	3000	0.0770	
THRU (T)	43	43	1650	0.0261	
LEFT (L)	106	106	1650	0.0642	0.0642
WB RIGHT (R)	197	197	1650	0.1194	
THRU (T)	63	63	1650	0.0382	
LEFT (L)	0	0	3000	0.0000	
T + R	260	1650	0.1576	0.1576	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.84

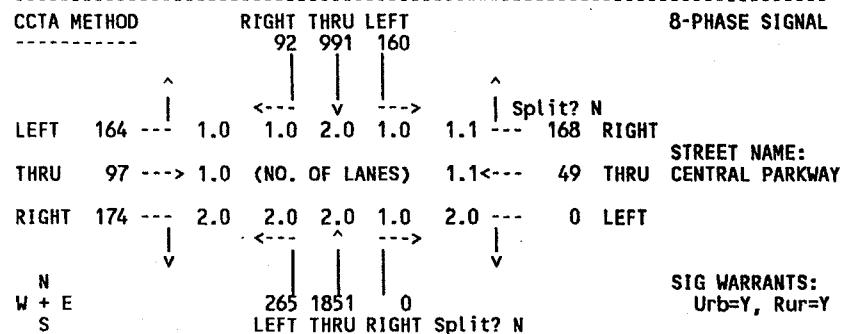
INTERSECTION LEVEL OF SERVICE: D

\* ADJUSTED FOR RIGHT TURN ON RED

INT=NEWSRP.INT, VOL=RUNECAP.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative ECAP 07/09/01

INTERSECTION 6438 FALCON ROAD/CENTRAL PARKWAY DUBLIN  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour PM PEAK VOL

STREET NAME: FALCON ROAD

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	Critical V/C
NB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	1851	1851	3300	0.5609	0.5609
LEFT (L)	265	265	3000	0.0883	
SB RIGHT (R)	92	0 *	1650	0.0000	
THRU (T)	991	991	3300	0.3003	
LEFT (L)	160	160	1650	0.0970	0.0970
EB RIGHT (R)	174	28 *	3000	0.0093	
THRU (T)	97	97	1650	0.0588	
LEFT (L)	164	164	1650	0.0994	0.0994
WB RIGHT (R)	168	168	1650	0.1018	
THRU (T)	49	49	1650	0.0297	
LEFT (L)	0	0	3000	0.0000	
T + R	217	1650	0.1315	0.1315	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.89

INTERSECTION LEVEL OF SERVICE: D

\* ADJUSTED FOR RIGHT TURN ON RED

INT=NEWSRP.INT, VOL=RUNECAP.PMV, CAP=C:..LOSCAP.TAB

885 90613

LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative ECAP 07/09/01

INTERSECTION 9954 Fallon Rd/Gleason Rd Alameda County  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour AM PEAK VOL

(17)

CCTA METHOD	RIGHT	THRU	LEFT	4-PHASE SIGNAL			
	15	1661	0				
LEFT	18	1.0	1.0	2.0	0.0	0.0	0
THRU	0	---	0.0	(NO. OF LANES)	0.0	---	0
RIGHT	26	---	1.0	1.0	3.0	0.0	0
N W + E S	50	708	0	LEFT THRU	RIGHT	SPLIT?	N
SIG WARRANTS: Urb=N, Rur=N							

STREET NAME: Fallon Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	708	708	4950	0.1430	
LEFT (L)	50	50	1650	0.0303	0.0303
SB RIGHT (R)	15	0 *	1650	0.0000	
THRU (T)	1661	1661	3300	0.5033	0.5033
EB RIGHT (R)	26	0 *	1650	0.0000	
LEFT (L)	18	18	1650	0.0109	0.0109

TOTAL VOLUME-TO-CAPACITY RATIO: 0.54  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=RUNECAP.AMV, CAP=C:..LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative ECAP 07/09/01

INTERSECTION 9954 Fallon Rd/Gleason Rd Alameda County  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour PM PEAK VOL

CCTA METHOD	RIGHT	THRU	LEFT	4-PHASE SIGNAL			
	14	814	0				
LEFT	11	1.0	1.0	2.0	0.0	0.0	0
THRU	0	---	0.0	(NO. OF LANES)	0.0	---	0
RIGHT	39	---	1.0	1.0	3.0	0.0	0
N W + E S	23	1604	0	LEFT THRU	RIGHT	SPLIT?	N
SIG WARRANTS: Urb=N, Rur=N							

STREET NAME: Fallon Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	1604	1604	4950	0.3240	0.3240
LEFT (L)	23	23	1650	0.0139	
SB RIGHT (R)	14	3 *	1650	0.0018	
THRU (T)	814	814	3300	0.2467	
EB RIGHT (R)	39	16 *	1650	0.0097	0.0097
LEFT (L)	11	11	1650	0.0067	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.33  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=RUNECAP.PMV, CAP=C:..LOSCAP.TAB

350 of 388

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; ECAP Alternative - mitigation 07/12/01

INTERSECTION 8305 Hacienda Dr/I-580 WB ramp Dublin  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour AM PEAK VOL

CCTA METHOD	RIGHT	THRU	LEFT	2-PHASE SIGNAL	
	539	1607	0		
LEFT	0	0.0	1.9	3.0	0.0
THRU	0	-->	0.0	(NO. OF LANES)	0.0<---
RIGHT	0	-->	0.0	3.0	1.9
N W + E S	0	1840	0		SIG WARRANTS: Urb=Y, Rur=Y
				Split? N	
					LEFT THRU RIGHT Split? N

STREET NAME: Hacienda Dr

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	1840	1840	5400	0.3407	0.3407
SB RIGHT (R)	539	539	1800	0.2994	
THRU (T)	1607	1607	5400	0.2976	
WB RIGHT (R)	998	998	3273	0.3049	0.3049
LEFT (L)	644	644	4695	0.1372	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.65

INTERSECTION LEVEL OF SERVICE: B

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MITIG8.INT, VOL=RUNECP.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; ECAP Alternative - mitigation 07/12/01

INTERSECTION 8305 Hacienda Dr/I-580 WB ramp Dublin  
Count Date YR.2025 E.DUBLIN Time RUN E W/ ECAP Peak Hour PM PEAK VOL

CCTA METHOD	RIGHT	THRU	LEFT	2-PHASE SIGNAL	
	1157	2267	0		
LEFT	0	0.0	1.9	3.0	0.0
THRU	0	-->	0.0	(NO. OF LANES)	0.0<--
RIGHT	0	-->	0.0	3.0	1.9
N W + E S	0	2209	0		SIG WARRANTS: Urb=Y, Rur=Y
				Split? N	
				LEFT THRU RIGHT Split? N	

STREET NAME: Hacienda Dr

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	2209	2209	5400	0.4091	
SB RIGHT (R)	1157	1157	1800	0.6428	
THRU (T)	2267	2267	5400	0.4198	0.4198
WB RIGHT (R)	1097	1097	3273	0.3352	0.3352
LEFT (L)	658	658	4695	0.1401	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.76

INTERSECTION LEVEL OF SERVICE: C

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MITIG8.INT, VOL=RUNECP.PMV, CAP=C:..LOSCAP.TAB

886 2015

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**LEVEL OF SERVICE CALCULATIONS**  
**CUMULATIVE YEAR 2025 + MITIGATED TRAFFIC ALTERNATIVE**

Table 4.3-1

## Peak Hour Intersection Levels of Service -Tri-Valley Transportation Model Cumulative Year 2025 plus Mitigated Traffic Alternative

Intersection	Control	Unmitigated				Mitigated			
		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
		*	LOS	*	LOS	*	LOS	*	LOS
1 Dougherty Road/Dublin Boulevard	Signal	<b>0.94</b>	E	<b>1.02</b>	F	--	--	--	--
2 Hacienda Drive/I-580 Eastbound Ramps	Signal	0.72	C	0.82	D	--	--	--	--
3 Hacienda Drive/I-580 Westbound Ramps	Signal	0.83	D	<b>0.96</b>	E	0.65	B	0.75	C
4 Hacienda Drive/Dublin Boulevard	Signal	0.84	D	<b>1.01</b>	F	--	--	--	--
5 Santa Rita Road/I-580 Eastbound Ramps	Signal	0.86	D	0.76	C	--	--	--	--
6 Tassajara Road/I-580 Westbound Ramps	Signal	0.71	C	0.73	C	--	--	--	--
7 Tassajara Road/Dublin Boulevard	Signal	0.73	C	0.88	D	--	--	--	--
8 Tassajara Road/Central Parkway	Signal	0.72	C	0.61	B	--	--	--	--
9 Tassajara Road/Gleason Drive	Signal	0.58	A	0.47	A	--	--	--	--
10 Grafton Street/Dublin Boulevard	Signal	0.34	A	0.44	A	--	--	--	--
11 Grafton Street/Central Parkway	Signal	0.09	A	0.12	A	--	--	--	--
12 Grafton Street/Gleason Drive	Signal	0.45	A	0.37	A	--	--	--	--
13 El Charro Road/I-580 Eastbound Ramps	Signal	0.58	A	0.63	B	--	--	--	--
14 Fallon Road/I-580 Westbound Ramps	Signal	0.62	B	0.75	C	--	--	--	--
15 Fallon Road/Dublin Boulevard	Signal	0.86	D	<b>1.04</b>	F	--	--	--	--
15A Fallon Rd./Dublin Blvd. w/ New Int.	Signal	--	--	--	--	0.75	C	0.87	D
XX Fallon Road/New Intersection	Signal	--	--	--	--	0.60	A	0.68	B
16 Fallon Road/Central Parkway	Signal	0.76	C	0.85	D	--	--	--	--
17 Fallon Road/Gleason Drive	Signal	0.50	A	0.31	A	--	--	--	--

Note: \* = Volume-to-Capacity (V/C) Ratio for signalized intersections

358  
JESSE  
886

LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Traffic Mitigated Alternative 07/12/01

**(4) INTERSECTION 6430 TASSAJARA RD./CENTRAL PKWY DUBLIN**  
Count Date FROM MODEL Time FROM MODEL Peak Hour FROM MODEL

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL  
 ----- 42 1994 136  
 LEFT 34 ^ 1.0 <----- V -----> 1.0 | Split? N  
 THRU 51 ---> 1.0 (NO. OF LANES) 1.0<--- 68 THRU STREET NAME:  
 CENTRAL PKWY  
 RIGHT 192 --- 1.0 1.0 3.0 1.0 2.0 --- 541 LEFT  
 N  
 W + E  
 S  
 167 760 410  
 LEFT THRU RIGHT Split? N SIG WARRANTS:  
 Urb=Y, Rur=Y

STREET NAME: TASSAJARA RD.

		ORIGINAL MOVEMENT VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB	RIGHT (R)	410	112 *	1650	0.0679	
	THRU (T)	760	760	4950	0.1535	
	LEFT (L)	167	167	1650	0.1012	0.1012
SB	RIGHT (R)	42	8 *	1650	0.0048	
	THRU (T)	1994	1994	4950	0.4028	0.4028
	LEFT (L)	136	136	1650	0.0824	
EB	RIGHT (R)	192	25 *	1650	0.0152	
	THRU (T)	51	51	1650	0.0309	0.0309
	LEFT (L)	34	34	1650	0.0206	
WB	RIGHT (R)	66	0 *	1650	0.0000	
	THRU (T)	68	68	1650	0.0412	
	LEFT (L)	541	541	3000	0.1803	0.1803

TOTAL VOLUME-TO-CAPACITY RATIO: 0.72  
INTERSECTION LEVEL OF SERVICE: C

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP. INT. VOL=75 ALT. AMV. CAP=C:.. LOSCAP. TAB

LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Traffic Mitigated Alternative 07/12/01

INTERSECTION 6430 TASSAJARA RD./CENTRAL PKWY DUBLIN  
Count Date FROM MODEL Time FROM MODEL Peak Hour FROM MODEL

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL  
 ----- 21 988 91  
 ^ | <-- V --> ^ | Split? N  
 LEFT 42 --- 1.0 1.0 3.0 1.0 1.0 --- 141 RIGHT STREET NAME:  
 THRU 64 ---> 1.0 (NO. OF LANES) 1.0<--- 77 THRU CENTRAL PKWY  
 RIGHT 163 --- 1.0 1.0 3.0 1.0 2.0 --- 629 LEFT  
 N  
 W + E  
 S  
 192 1541 695 SIG WARRANTS:  
 LEFT THRU RIGHT Split? N Urb=Y, Rur=Y

STREET NAME: TASSAJARA RD.

		ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB	RIGHT (R)	695	349 *	1650	0.2115	
	THRU (T)	1541	1541	4950	0.3113	0.3113
	LEFT (L)	192	192	1650	0.1164	
SB	RIGHT (R)	21	0 *	1650	0.0000	
	THRU (T)	988	988	4950	0.1996	
	LEFT (L)	91	91	1650	0.0552	0.0552
EB	RIGHT (R)	163	0 *	1650	0.0000	
	THRU (T)	64	64	1650	0.0388	0.0388
	LEFT (L)	42	42	1650	0.0255	
WB	RIGHT (R)	141	50 *	1650	0.0303	
	THRU (T)	77	77	1650	0.0467	
	LEFT (L)	629	629	3000	0.2097	0.2097

TOTAL VOLUME-TO-CAPACITY RATIO: 0.61  
INTERSECTION LEVEL OF SERVICE: B

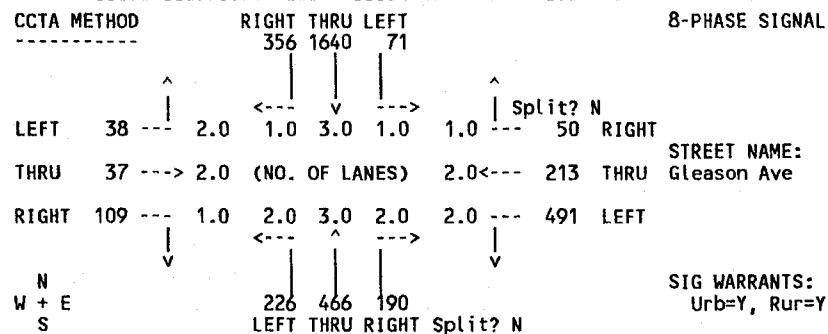
\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP. INT VOL=75 ALT=PMV CAP=C:- LOSCAP TAB

354 8 155

LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Traffic Mitigated Alternative 07/12/01

INTERSECTION 3987 Tassajara Rd/Gleason Ave Alameda County  
Count Date FROM MODEL Time FROM MODEL Peak Hour FROM MODEL



STREET NAME: Tassajara Rd

		ORIGINAL VOLUME	ADJUSTED VOLUME*	V/C CAPACITY	V/C RATIO	CRITICAL V/C
NB	RIGHT (R)	190	0 *	3000	0.0000	
	THRU (T)	466	466	4950	0.0941	
	LEFT (L)	226	226	3000	0.0753	0.0753
SB	RIGHT (R)	356	335 *	1650	0.2030	
	THRU (T)	1640	1640	4950	0.3313	0.3313
	LEFT (L)	71	71	1650	0.0430	
EB	RIGHT (R)	109	0 *	1650	0.0000	
	THRU (T)	37	37	3300	0.0112	0.0112
	LEFT (L)	38	38	3000	0.0127	
WB	RIGHT (R)	50	0 *	1650	0.0000	
	THRU (T)	213	213	3300	0.0645	
	LEFT (L)	491	491	3000	0.1637	0.1637

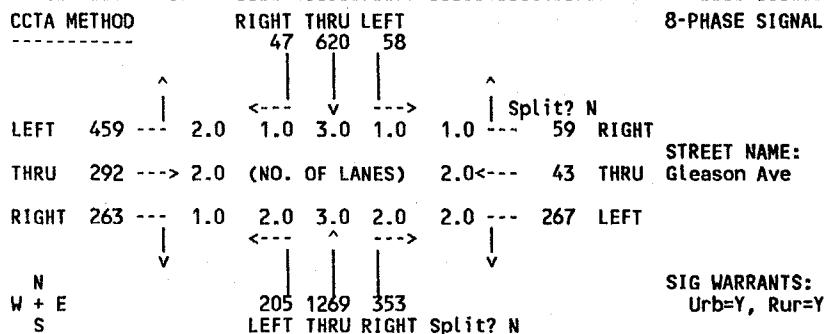
TOTAL VOLUME-TO-CAPACITY RATIO: 0.58  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=75ALT.AMV, CAP=C:..LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Traffic Mitigated Alternative 07/12/01

INTERSECTION 3987 Tassajara Rd/Gleason Ave Alameda County  
Count Date FROM MODEL Time FROM MODEL Peak Hour FROM MODEL



STREET NAME: Tassajara Rd

		ORIGINAL VOLUME	ADJUSTED VOLUME*	V/C CAPACITY	V/C RATIO	CRITICAL V/C
NB	RIGHT (R)	353	206 *	3000	0.0687	
	THRU (T)	1269	1269	4950	0.2564	0.2564
	LEFT (L)	205	205	3000	0.0683	
SB	RIGHT (R)	47	0 *	1650	0.0000	
	THRU (T)	620	620	4950	0.1253	
	LEFT (L)	58	58	1650	0.0352	0.0352
EB	RIGHT (R)	263	150 *	1650	0.0909	0.0909
	THRU (T)	292	292	3300	0.0885	
	LEFT (L)	459	459	3000	0.1530	
WB	RIGHT (R)	59	1 *	1650	0.0006	
	THRU (T)	43	43	3300	0.0130	
	LEFT (L)	267	267	3000	0.0890	0.0890

TOTAL VOLUME-TO-CAPACITY RATIO: 0.47  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=75ALT.PMV, CAP=C:..LOSCAP.TAB

SSS  
L  
SSS  
D

Table 4.3-1

## Peak Hour Intersection Levels of Service—Tri-Valley Transportation Model Cumulative Year 2025 plus Mitigated Traffic Alternative

Intersection	Control	Unmitigated				Mitigated			
		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
		*	LOS	*	LOS	*	LOS	*	LOS
1 Dougherty Road/Dublin Boulevard	Signal	<b>0.94</b>	E	<b>1.02</b>	F	—	—	—	—
2 Hacienda Drive/I-580 Eastbound Ramps	Signal	0.72	C	0.82	D	—	—	—	—
3 Hacienda Drive/I-580 Westbound Ramps	Signal	0.83	D	<b>0.96</b>	E	0.65	B	0.75	C
4 Hacienda Drive/Dublin Boulevard	Signal	0.84	D	<b>1.01</b>	F	—	—	—	—
5 Santa Rita Road/I-580 Eastbound Ramps	Signal	0.86	D	0.76	C	—	—	—	—
6 Tassajara Road/I-580 Westbound Ramps	Signal	0.71	C	0.73	C	—	—	—	—
7 Tassajara Road/Dublin Boulevard	Signal	0.73	C	0.88	D	—	—	—	—
8 Tassajara Road/Central Parkway	Signal	<del>0.52</del> 0.52	A	<del>0.61</del> 0.34	A	—	—	—	—
9 Tassajara Road/Gleason Drive	Signal	<del>0.58</del> 0.42	A	<del>0.47</del> 0.41	A	—	—	—	—
10 Grafton Street/Dublin Boulevard	Signal	0.34	A	0.44	A	—	—	—	—
11 Grafton Street/Central Parkway	Signal	0.09	A	0.12	A	—	—	—	—
12 Grafton Street/Gleason Drive	Signal	0.45	A	0.37	A	—	—	—	—
13 El Charro Road/I-580 Eastbound Ramps	Signal	0.58	A	0.63	B	—	—	—	—
14 Fallon Road/I-580 Westbound Ramps	Signal	0.62	B	0.75	C	—	—	—	—
15 Fallon Road/Dublin Boulevard	Signal	0.86	D	<b>1.04</b>	F	—	—	—	—
15A Fallon Rd./Dublin Blvd. w/ New Int.	Signal	—	—	—	—	0.75	C	0.87	D
XX Fallon Road/New Intersection	Signal	—	—	—	—	0.60	A	0.68	B
16 Fallon Road/Central Parkway	Signal	0.76	C	0.85	D	—	—	—	—
17 Fallon Road/Gleason Drive	Signal	0.50	A	0.31	A	—	—	—	—

Note: \* = Volume-to-Capacity (V/C) Ratio for signalized intersections

956  
986

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative 07/09/01

INTERSECTION 3977 DOUGHERTY RD./DUBLIN BLVD. DUBLIN  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour AM PEAK HOUR

CCTA METHOD	RIGHT	THRU	LEFT	8-PHASE SIGNAL		
	131	2131	9			
LEFT	14	1.0	1.1	4.1	2.0	1.1
THRU	930	--->	3.0	(NO. OF LANES)	3.1	<---
RIGHT	975	---	2.5	3.0	3.0	2.5
N						
W + E						
S						
	1130	707	544			
	LEFT THRU	RIGHT Split? N		SIG WARRANTS:		
				Urb=Y, Rur=Y		

STREET NAME: DOUGHERTY RD.

MOVEMENT	ORIGINAL	ADJUSTED	V/C	CRITICAL
	VOLUME	VOLUME*		
NB RIGHT (R)	544	113 *	3000	0.0377
THRU (T)	707	707	4950	0.1428
LEFT (L)	1130	1130	4304	0.2625
SB RIGHT (R)	131	131	1650	0.0794
THRU (T)	2131	2131	6600	0.3229
LEFT (L)	9	9	3000	0.0030
T + R		2262	6600	0.3427
EB RIGHT (R)	975	187 *	3000	0.0623
THRU (T)	930	930	4950	0.1879
LEFT (L)	14	14	1650	0.0085
WB RIGHT (R)	37	37	1650	0.0224
THRU (T)	1267	1267	4950	0.2560
LEFT (L)	618	618	4304	0.1436
T + R		1304	4950	0.2634

TOTAL VOLUME-TO-CAPACITY RATIO: 0.94

INTERSECTION LEVEL OF SERVICE: E

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT,VOL=75MID.AMV,CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative 07/09/01

INTERSECTION 3977 DOUGHERTY RD./DUBLIN BLVD. DUBLIN  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour PM PEAK HOUR

CCTA METHOD	RIGHT	THRU	LEFT	8-PHASE SIGNAL		
	31	1433	62			
LEFT	63	1.0	1.1	4.1	2.0	1.1
THRU	1381	--->	3.0	(NO. OF LANES)	3.1	<---
RIGHT	1188	---	2.5	3.0	3.0	2.5
N						
W + E						
S						
	1473	1979	787			
	LEFT THRU	RIGHT Split? N		SIG WARRANTS:		
				Urb=Y, Rur=Y		

STREET NAME: DOUGHERTY RD.

MOVEMENT	ORIGINAL	ADJUSTED	V/C	CRITICAL
	VOLUME	VOLUME*		
NB RIGHT (R)	787	254 *	3000	0.0847
THRU (T)	1979	1979	4950	0.3998
LEFT (L)	1473	1473	4304	0.3422
SB RIGHT (R)	31	31	1650	0.0188
THRU (T)	1433	1433	6600	0.2171
LEFT (L)	62	62	3000	0.0207
T + R		1464	6600	0.2218
EB RIGHT (R)	1188	161 *	3000	0.0537
THRU (T)	1381	1381	4950	0.2790
LEFT (L)	63	63	1650	0.0382
WB RIGHT (R)	25	25	1650	0.0152
THRU (T)	1178	1178	4950	0.2380
LEFT (L)	764	764	4304	0.1775
T + R		1203	4950	0.2430

TOTAL VOLUME-TO-CAPACITY RATIO: 1.02

INTERSECTION LEVEL OF SERVICE: F

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT,VOL=75MID.PMV,CAP=C:..LOSCAP.TAB

BBG JG USA

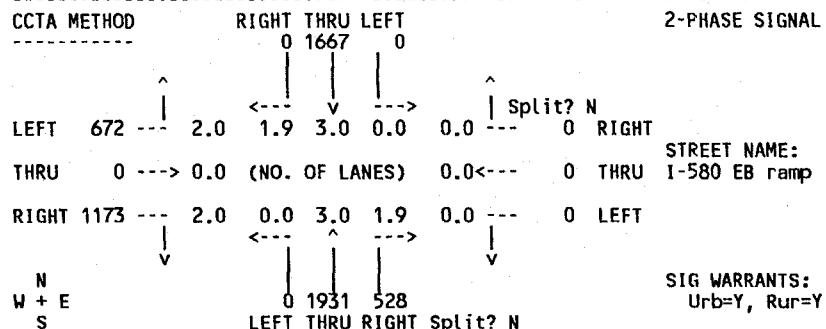
## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative

07/09/01

INTERSECTION 8302 Hacienda Dr/I-580 EB ramp Pleasanton  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour AM PEAK HOUR

(2)



STREET NAME: Hacienda Dr

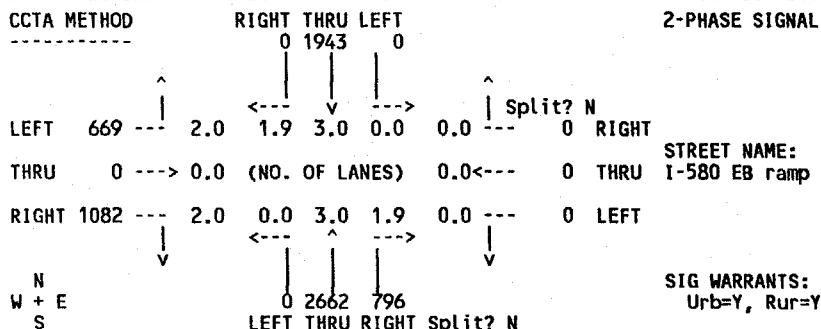
	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	528	528	1800	0.2933	
THRU (T)	1931	1931	5400	0.3576	0.3576
SB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	1667	1667	5400	0.3087	
EB RIGHT (R)	1173	1173	3273	0.3584	0.3584
LEFT (L)	672	672	3273	0.2053	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.72  
INTERSECTION LEVEL OF SERVICE: C\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=75MID.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative

07/09/01

INTERSECTION 8302 Hacienda Dr/I-580 EB ramp Pleasanton  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour PM PEAK HOUR

STREET NAME: Hacienda Dr

	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	796	796	1800	0.4422	
THRU (T)	2662	2662	5400	0.4930	0.4930
SB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	1943	1943	5400	0.3598	
EB RIGHT (R)	1082	1082	3273	0.3306	0.3306
LEFT (L)	669	669	3273	0.2044	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.82  
INTERSECTION LEVEL OF SERVICE: D\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=75MID.PMV, CAP=C:..LOSCAP.TAB85E  
89E  
88E  
88E

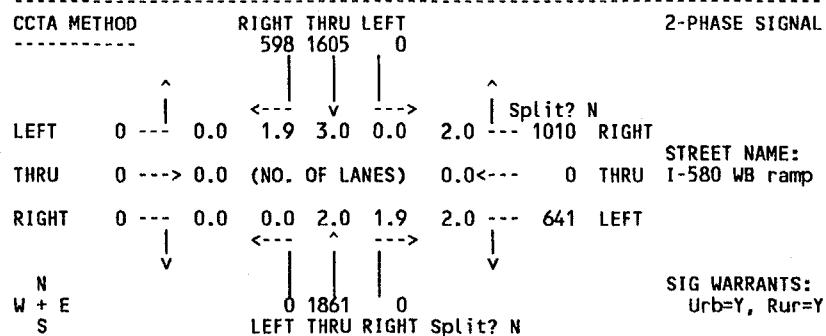
## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative

07/09/01

INTERSECTION 8305 Hacienda Dr/I-580 WB ramp Dublin  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour AM PEAK HOUR

3



STREET NAME: Hacienda Dr

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	1861	1861	3600	0.5169	0.5169
SB RIGHT (R)	598	598	1800	0.3322	
THRU (T)	1605	1605	5400	0.2972	
WB RIGHT (R)	1010	1010	3273	0.3086	0.3086
LEFT (L)	641	641	3273	0.1958	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.83

INTERSECTION LEVEL OF SERVICE: D

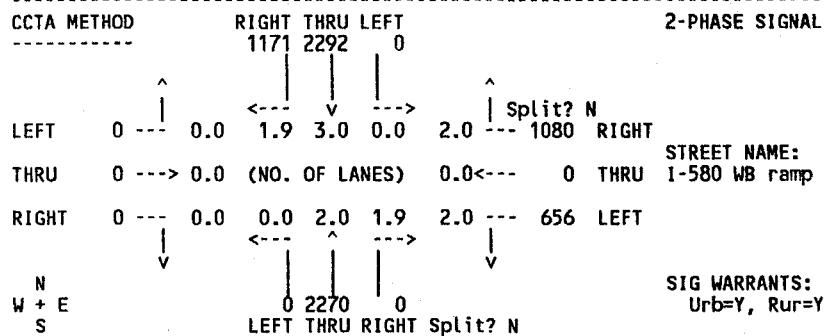
\* ADJUSTED FOR RIGHT TURN ON RED

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## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative

07/09/01

INTERSECTION 8305 Hacienda Dr/I-580 WB ramp Dublin  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour PM PEAK HOUR

STREET NAME: Hacienda Dr

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	2270	2270	3600	0.6306	0.6306
SB RIGHT (R)	1171	1171	1800	0.6506	
THRU (T)	2292	2292	5400	0.4244	
WB RIGHT (R)	1080	1080	3273	0.3300	0.3300
LEFT (L)	656	656	3273	0.2004	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.96

INTERSECTION LEVEL OF SERVICE: E

\* ADJUSTED FOR RIGHT TURN ON RED

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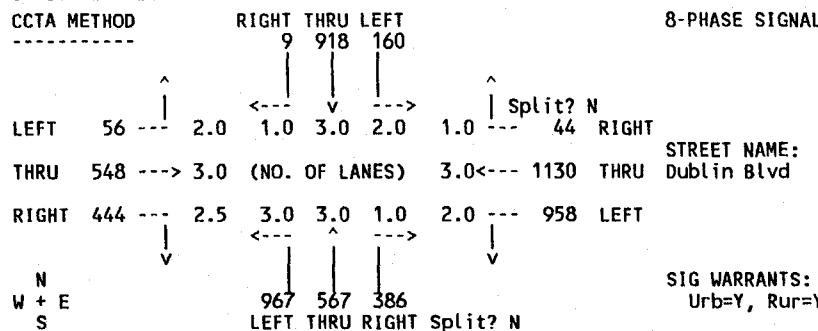
888 20 656

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative 07/09/01

INTERSECTION 8306 Hacienda Dr/Dublin Blvd Dublin  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour AM PEAK HOUR

(4)



MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	386	0 *	1650	0.0000	
THRU (T)	567	567	4950	0.1145	
LEFT (L)	967	967	4304	0.2247	0.2247
SB RIGHT (R)	9	0 *	1650	0.0000	
THRU (T)	918	918	4950	0.1855	0.1855
LEFT (L)	160	160	3000	0.0533	
EB RIGHT (R)	444	0 *	3000	0.0000	
THRU (T)	548	548	4950	0.1107	0.1107
LEFT (L)	56	56	3000	0.0187	
WB RIGHT (R)	44	0 *	1650	0.0000	
THRU (T)	1130	1130	4950	0.2283	
LEFT (L)	958	958	3000	0.3193	0.3193

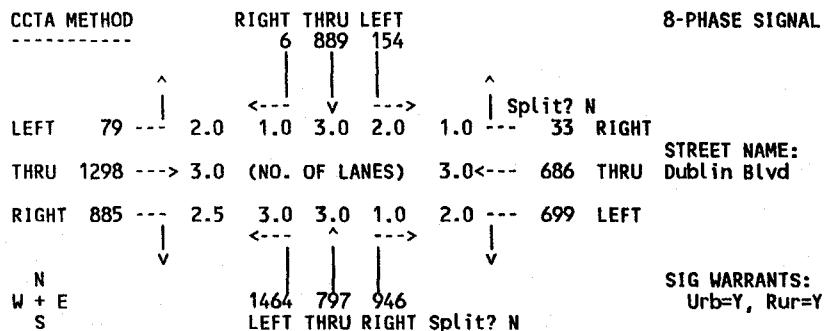
TOTAL VOLUME-TO-CAPACITY RATIO: 0.84  
INTERSECTION LEVEL OF SERVICE: D

\* ADJUSTED FOR RIGHT TURN ON RED

INT=NEWSRP.INT,VOL=75MID.AMV,CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative 07/09/01

INTERSECTION 8306 Hacienda Dr/Dublin Blvd Dublin  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour PM PEAK HOUR

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	946	562 *	1650	0.3406	
THRU (T)	797	797	4950	0.1610	
LEFT (L)	1464	1464	4304	0.3401	0.3401
SB RIGHT (R)	6	0 *	1650	0.0000	
THRU (T)	889	889	4950	0.1796	0.1796
LEFT (L)	154	154	3000	0.0513	
EB RIGHT (R)	885	0 *	3000	0.0000	
THRU (T)	1298	1298	4950	0.2622	0.2622
LEFT (L)	79	79	3000	0.0263	
WB RIGHT (R)	33	0 *	1650	0.0000	
THRU (T)	686	686	4950	0.1386	
LEFT (L)	699	699	3000	0.2330	0.2330

TOTAL VOLUME-TO-CAPACITY RATIO: 1.01  
INTERSECTION LEVEL OF SERVICE: F\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT,VOL=75MID.PMV,CAP=C:..LOSCAP.TAB

300

988

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative 07/09/01

(5) INTERSECTION 4041 Santa Rita Rd/I-580 eb-off PLEASANTON  
 Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour AM PEAK HOUR

CCTA METHOD	RIGHT	THRU	LEFT	4-PHASE SIGNAL		
	0	1352	154			
LEFT	813	2.0	1.9	<->	Split? Y	
THRU	103	-->	1.0	(NO. OF LANES)	0.0<---	STREET NAME: I-580 eb-off
RIGHT	177	1.9	0.0	3.1	2.1	2.0 --- 0 LEFT
N W + E S				0	1053	0
				LEFT THRU	RIGHT	Split? N
SIG WARRANTS: Urb=Y, Rur=Y						

STREET NAME: Santa Rita Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	3000	0.0000	
THRU (T)	1053	1053	4950	0.2127	
T + R		1053	6300	0.1671	
SB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	1352	1352	3300	0.4097	0.4097
LEFT (L)	154	154	1650	0.0933	
EB RIGHT (R)	177	177	1650	0.1073	
THRU (T)	103	103	1650	0.0624	
LEFT (L)	813	813	3000	0.2710	0.2710
WB RIGHT (R)	690	536 *	3000	0.1787	0.1787
LEFT (L)	0	0	3000	0.0000	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.86  
 INTERSECTION LEVEL OF SERVICE: D

\* ADJUSTED FOR RIGHT TURN ON RED  
 INT=NEWSRP.INT, VOL=75MID.AMV, CAP=C...LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative 07/09/01

INTERSECTION 4041 Santa Rita Rd/I-580 eb-off PLEASANTON  
 Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour PM PEAK HOUR

CCTA METHOD	RIGHT	THRU	LEFT	4-PHASE SIGNAL		
	0	1368	303			
LEFT	458	2.0	1.9	<->	Split? Y	
THRU	206	-->	1.0	(NO. OF LANES)	0.0<---	STREET NAME: I-580 eb-off
RIGHT	112	1.9	0.0	3.1	2.1	2.0 --- 0 LEFT
N W + E S				0	2103	2
				LEFT THRU	RIGHT	Split? N
SIG WARRANTS: Urb=Y, Rur=Y						

STREET NAME: Santa Rita Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	2	2	3000	0.0007	
THRU (T)	2103	2103	4950	0.4248	0.4248
T + R		2105	6300	0.3341	
SB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	1368	1368	3300	0.4145	
LEFT (L)	303	303	1650	0.1836	0.1836
EB RIGHT (R)	112	112	1650	0.0679	
THRU (T)	206	206	1650	0.1248	
LEFT (L)	458	458	3000	0.1527	0.1527
WB RIGHT (R)	295	0 *	3000	0.0000	0.0000
LEFT (L)	0	0	3000	0.0000	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.76  
 INTERSECTION LEVEL OF SERVICE: C

\* ADJUSTED FOR RIGHT TURN ON RED  
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282 2019

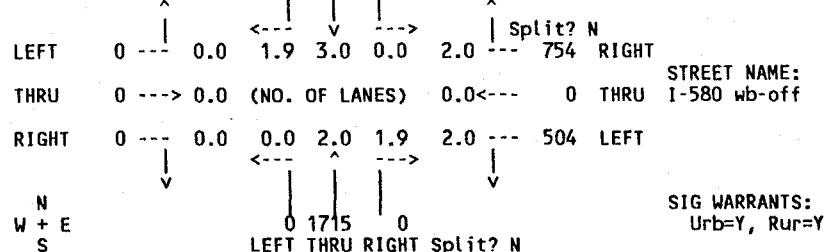
## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative

07/09/01

INTERSECTION 3988 Tassajara Rd/I-580 wb-off PLEASANTON  
 Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour AM PEAK HOUR

CCTA METHOD RIGHT THRU LEFT 2-PHASE SIGNAL  
 ----- 1023 1332 0



STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	Critical V/C
NB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	1715	1715	3600	0.4764	0.4764
SB RIGHT (R)	1023	1023	1800	0.5683	
THRU (T)	1332	1332	5400	0.2467	
WB RIGHT (R)	754	754	3273	0.2304	0.2304
LEFT (L)	504	504	3273	0.1540	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.71  
 INTERSECTION LEVEL OF SERVICE: C

\* ADJUSTED FOR RIGHT TURN ON RED  
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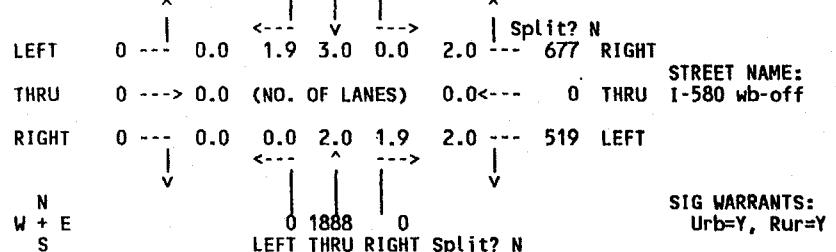
## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative

07/09/01

INTERSECTION 3988 Tassajara Rd/I-580 wb-off PLEASANTON  
 Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour PM PEAK HOUR

CCTA METHOD RIGHT THRU LEFT 2-PHASE SIGNAL  
 ----- 1112 1728 0



STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	Critical V/C
NB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	1888	1888	3600	0.5244	0.5244
SB RIGHT (R)	1112	1112	1800	0.6178	
THRU (T)	1728	1728	5400	0.3200	
WB RIGHT (R)	677	677	3273	0.2068	0.2068
LEFT (L)	519	519	3273	0.1586	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.73  
 INTERSECTION LEVEL OF SERVICE: C

\* ADJUSTED FOR RIGHT TURN ON RED  
 INT=NEWSRP.INT,VOL=75MID.PMV,CAP=C:..LOSCAP.TAB

886 of 926

## LOS Software by TJKM Transportation Consultants

(7)

Condition: am peak hour; Alternative 07/09/01

INTERSECTION 1573 Tassajara Rd/Dublin Blvd Alameda County  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour AM PEAK HOUR

CCTA METHOD	RIGHT	THRU	LEFT	8-PHASE SIGNAL		
	778	1865	111			
LEFT	401	2.0	4.0	2.0	1.0	Split? N
THRU	442	--->	3.0	(NO. OF LANES)	3.0	<--- THRU Dublin Blvd
RIGHT	200	2.5	3.0	4.0	2.0	3.0 --- 506 LEFT
N W + E S	431	1169	515	SIG WARRANTS: Urb=Y, Rur=Y		
LEFT THRU RIGHT Split? N						

STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	V/C CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	515	321 *	3000	0.1070	
THRU (T)	1169	1169	6600	0.1771	
LEFT (L)	431	431	4304	0.1001	0.1001
SB RIGHT (R)	778	557 *	3000	0.1857	
THRU (T)	1865	1865	6600	0.2826	0.2826
LEFT (L)	111	111	3000	0.0370	
EB RIGHT (R)	200	0 *	3000	0.0000	
THRU (T)	442	442	4950	0.0893	
LEFT (L)	401	401	3000	0.1337	0.1337
WB RIGHT (R)	48	0 *	1650	0.0000	
THRU (T)	1055	1055	4950	0.2131	0.2131
LEFT (L)	506	506	4304	0.1176	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.73  
INTERSECTION LEVEL OF SERVICE: C\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=75MID.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative 07/09/01

INTERSECTION 1573 Tassajara Rd/Dublin Blvd Alameda County  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour PM PEAK HOUR

CCTA METHOD	RIGHT	THRU	LEFT	8-PHASE SIGNAL		
	389	1505	85			
LEFT	913	2.0	4.0	2.0	1.0	Split? N
THRU	1447	--->	3.0	(NO. OF LANES)	3.0	<--- 371 THRU Dublin Blvd
RIGHT	380	2.5	3.0	4.0	2.0	3.0 --- 986 LEFT
N W + E S	544	1738	413	SIG WARRANTS: Urb=Y, Rur=Y		
LEFT THRU RIGHT Split? N						

STREET NAME: Tassajara Rd

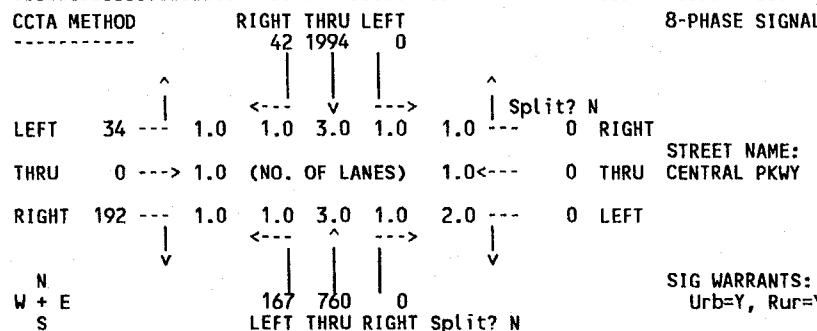
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	V/C CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	413	35 *	3000	0.0117	
THRU (T)	1738	1738	6600	0.2633	
LEFT (L)	544	544	4304	0.1264	0.1264
SB RIGHT (R)	389	0 *	3000	0.0000	
THRU (T)	1505	1505	6600	0.2280	0.2280
LEFT (L)	85	85	3000	0.0283	
EB RIGHT (R)	380	1 *	3000	0.0003	
THRU (T)	1447	1447	4950	0.2923	0.2923
LEFT (L)	913	913	3000	0.3043	
WB RIGHT (R)	64	17 *	1650	0.0103	
THRU (T)	371	371	4950	0.0749	
LEFT (L)	986	986	4304	0.2291	0.2291

TOTAL VOLUME-TO-CAPACITY RATIO: 0.88  
INTERSECTION LEVEL OF SERVICE: D\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=75MID.PMV, CAP=C:..LOSCAP.TABJUN 5 1996  
386

LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative 07/09/01

INTERSECTION 6430 TASSAJARA RD./CENTRAL PKWY DUBLIN  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour AM PEAK HOUR



MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	760	760	4950	0.1535	
LEFT (L)	167	167	1650	0.1012	0.1012
SB RIGHT (R)	42	8 *	1650	0.0048	
THRU (T)	1994	1994	4950	0.4028	0.4028
LEFT (L)	0	0	1650	0.0000	
EB RIGHT (R)	192	25 *	1650	0.0152	
THRU (T)	0	0	1650	0.0000	
LEFT (L)	34	34	1650	0.0206	0.0206
WB RIGHT (R)	0	0	1650	0.0000	0.0000
THRU (T)	0	0	1650	0.0000	
LEFT (L)	0	0	3000	0.0000	

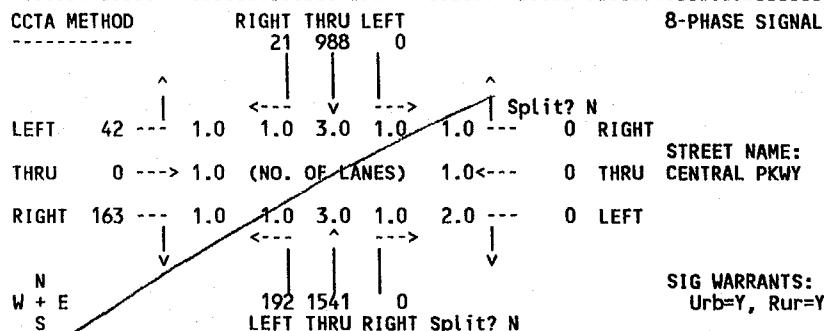
TOTAL VOLUME-TO-CAPACITY RATIO: 0.52  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
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LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative 07/09/01

INTERSECTION 6430 TASSAJARA RD./CENTRAL PKWY DUBLIN  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour PM PEAK HOUR



MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	1541	1541	4950	0.3113	
LEFT (L)	192	192	1650	0.1164	0.1164
SB RIGHT (R)	21	0 *	1650	0.0000	
THRU (T)	988	988	4950	0.1996	0.1996
LEFT (L)	0	0	1650	0.0000	
EB RIGHT (R)	163	0 *	1650	0.0000	
THRU (T)	0	0	1650	0.0000	
LEFT (L)	42	42	1650	0.0255	0.0255
WB RIGHT (R)	0	0	1650	0.0000	0.0000
THRU (T)	0	0	1650	0.0000	
LEFT (L)	0	0	3000	0.0000	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.34  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
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BBE 9/26/04

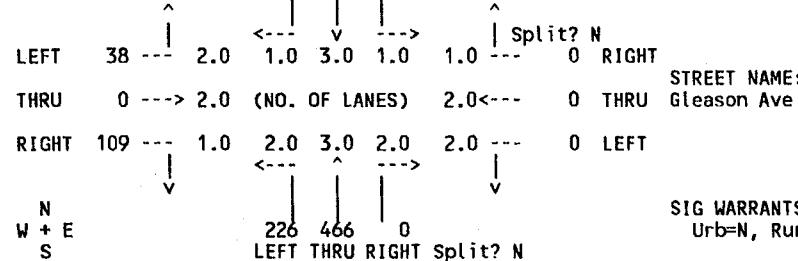
## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative

07/09/01

9  
INTERSECTION 3987 Tassajara Rd/Gleason Ave Alameda County  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour AM PEAK HOUR

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL  
356 1640 0



STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	3000	0.0000	
THRU (T)	466	466	4950	0.0941	
LEFT (L)	226	226	3000	0.0753	0.0753
SB RIGHT (R)	356	335 *	1650	0.2030	
THRU (T)	1640	1640	4950	0.3313	0.3313
LEFT (L)	0	0	1650	0.0000	
EB RIGHT (R)	109	0 *	1650	0.0000	
THRU (T)	0	0	3300	0.0000	
LEFT (L)	38	38	3000	0.0127	0.0127
WB RIGHT (R)	0	0	1650	0.0000	0.0000
THRU (T)	0	0	3300	0.0000	
LEFT (L)	0	0	3000	0.0000	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.42  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=75MID.AMV, CAP=C:..LOSCAP.TAB

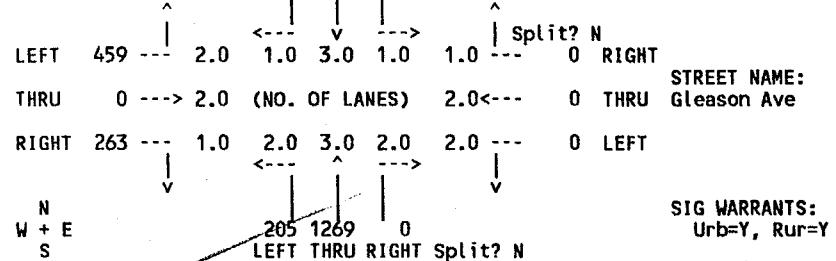
## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative

07/09/01

INTERSECTION 3987 Tassajara Rd/Gleason Ave Alameda County  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour PM PEAK HOUR

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL  
47 620 0



STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	3000	0.0000	
THRU (T)	1269	1269	4950	0.2564	0.2564
LEFT (L)	205	205	3000	0.0683	
SB RIGHT (R)	47	0 *	1650	0.0000	
THRU (T)	620	620	4950	0.1253	
LEFT (L)	0	0	1650	0.0000	0.0000
EB RIGHT (R)	263	150 *	1650	0.0909	
THRU (T)	0	0	3300	0.0000	
LEFT (L)	459	459	3000	0.1530	0.1530
WB RIGHT (R)	0	0	1650	0.0000	0.0000
THRU (T)	0	0	3300	0.0000	
LEFT (L)	0	0	3000	0.0000	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.41  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=75MID.PMV, CAP=C:..LOSCAP.TAB

365

886

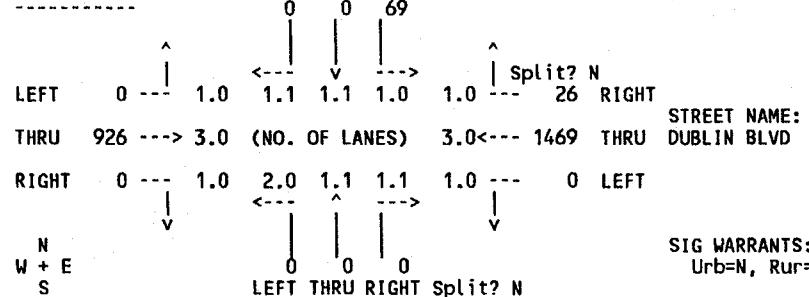
## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative

07/09/01

INTERSECTION 6617 MAIN STREET/DUBLIN BLVD DUBLIN  
 Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour AM PEAK HOUR

CCTA METHOD RIGHT THRU LEFT 6-PHASE SIGNAL

SIG WARRANTS:  
Urb=N, Rur=N

STREET NAME: MAIN STREET

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1650	0.0000	0.0000
THRU (T)	0	0	1650	0.0000	
LEFT (L)	0	0	3000	0.0000	
T + R	0	0	1650	0.0000	
SB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	0	0	1650	0.0000	
LEFT (L)	69	69	1650	0.0418	0.0418
T + R	0	0	1650	0.0000	
EB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	926	926	4950	0.1871	
LEFT (L)	0	0	1650	0.0000	0.0000
WB RIGHT (R)	26	0 *	1650	0.0000	
THRU (T)	1469	1469	4950	0.2968	0.2968
LEFT (L)	0	0	1650	0.0000	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.34  
INTERSECTION LEVEL OF SERVICE: A\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT,VOL=75MID.AMV,CAP=C:..LOSCAP.TAB

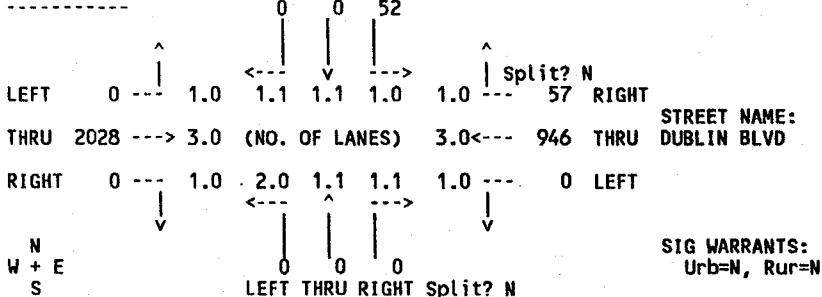
## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative

07/09/01

INTERSECTION 6617 MAIN STREET/DUBLIN BLVD DUBLIN  
 Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour PM PEAK HOUR

CCTA METHOD RIGHT THRU LEFT 6-PHASE SIGNAL

SIG WARRANTS:  
Urb=N, Rur=N

STREET NAME: MAIN STREET

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1650	0.0000	0.0000
THRU (T)	0	0	1650	0.0000	
LEFT (L)	0	0	3000	0.0000	
T + R	0	0	1650	0.0000	
SB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	0	0	1650	0.0000	
LEFT (L)	52	52	1650	0.0315	0.0315
T + R	0	0	1650	0.0000	
EB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	2028	2028	4950	0.4097	0.4097
LEFT (L)	0	0	1650	0.0000	
WB RIGHT (R)	57	5 *	1650	0.0030	
THRU (T)	946	946	4950	0.1911	
LEFT (L)	0	0	1650	0.0000	0.0000

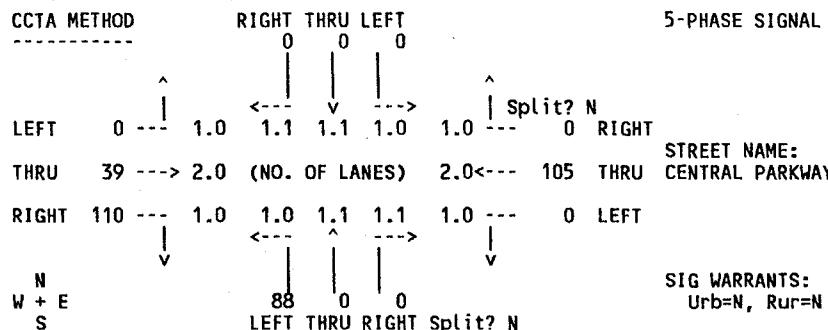
TOTAL VOLUME-TO-CAPACITY RATIO: 0.44  
INTERSECTION LEVEL OF SERVICE: A\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT,VOL=75MID.PMV,CAP=C:..LOSCAP.TAB

886 Jg 996

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative

07/09/01

INTERSECTION 6615 MAIN STREET/CENTRAL PARKWAY DUBLIN  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour AM PEAK HOUR

STREET NAME: MAIN STREET

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	0	0	1650	0.0000	
LEFT (L)	88	88	1650	0.0533	0.0533
T + R		0	1650	0.0000	
SB RIGHT (R)	0	0	1650	0.0000	0.0000
THRU (T)	0	0	1650	0.0000	
LEFT (L)	0	0	1650	0.0000	
T + R		0	1650	0.0000	
EB RIGHT (R)	110	22 *	1650	0.0133	
THRU (T)	39	39	3300	0.0118	
LEFT (L)	0	0	1650	0.0000	0.0000
WB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	105	105	3300	0.0318	0.0318
LEFT (L)	0	0	1650	0.0000	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.09

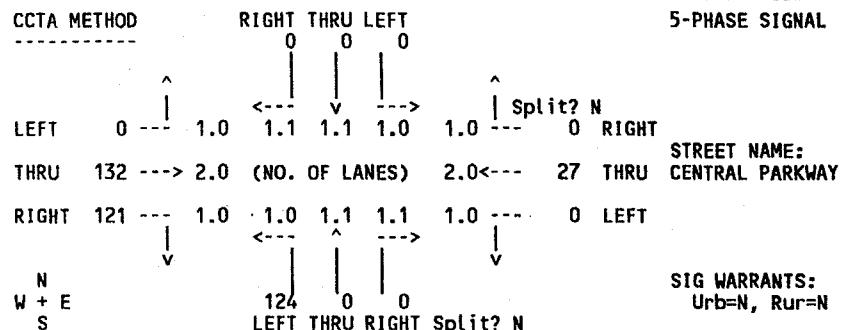
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=75MID.AMV, CAP=C...LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative

07/09/01

INTERSECTION 6615 MAIN STREET/CENTRAL PARKWAY DUBLIN  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour PM PEAK HOUR

STREET NAME: MAIN STREET

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	0	0	1650	0.0000	
LEFT (L)	124	124	1650	0.0752	0.0752
T + R	0	0	1650	0.0000	
SB RIGHT (R)	0	0	1650	0.0000	0.0000
THRU (T)	0	0	1650	0.0000	
LEFT (L)	0	0	1650	0.0000	
T + R	0	0	1650	0.0000	
EB RIGHT (R)	121	0 *	1650	0.0000	
THRU (T)	132	132	3300	0.0400	0.0400
LEFT (L)	0	0	1650	0.0000	
WB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	27	27	3300	0.0082	
LEFT (L)	0	0	1650	0.0000	0.0000

TOTAL VOLUME-TO-CAPACITY RATIO: 0.12

INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=75MID.PMV, CAP=C...LOSCAP.TAB

BBE Jg 696

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative 07/09/01

INTERSECTION 6618 MAIN STREET/GLEASON DRIVE DUBLIN  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour AM PEAK HOUR

18

CCTA METHOD      RIGHT THRU LEFT      8-PHASE SIGNAL

	403	32	13					
LEFT	131	1.0	1.1	1.1	1.0	1.0	10	RIGHT
THRU	115	2.0	(NO. OF LANES)	2.0	<---	362	THRU	GLEASON DRIVE
RIGHT	1	1.0	1.0	1.1	1.1	1.0	---	0 LEFT
N W + E S			15	0				SIG WARRANTS: Urb=N, Rur=Y
LEFT THRU RIGHT Split? N								

STREET NAME: MAIN STREET

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	15	15	1650	0.0091	
LEFT (L)	1	1	1650	0.0006	0.0006
T + R	15	1650	0.0091		
SB RIGHT (R)	403	403	1650	0.2442	
THRU (T)	32	32	1650	0.0194	
LEFT (L)	13	13	1650	0.0079	
T + R	435	1650	0.2636	0.2636	
EB RIGHT (R)	1	0 *	1650	0.0000	
THRU (T)	115	115	3300	0.0348	
LEFT (L)	131	131	1650	0.0794	0.0794
WB RIGHT (R)	10	0 *	1650	0.0000	
THRU (T)	362	362	3300	0.1097	0.1097
LEFT (L)	0	0	1650	0.0000	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.45  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=75MID.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative 07/09/01

INTERSECTION 6618 MAIN STREET/GLEASON DRIVE DUBLIN  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour PM PEAK HOUR

CCTA METHOD      RIGHT THRU LEFT      8-PHASE SIGNAL

	160	15	6					
LEFT	371	1.0	1.1	1.1	1.0	1.0	10	RIGHT
THRU	353	2.0	(NO. OF LANES)	2.0	<---	133	THRU	GLEASON DRIVE
RIGHT	2	1.0	1.0	1.1	1.1	1.0	---	0 LEFT
N W + E S			32	0				SIG WARRANTS: Urb=N, Rur=B
LEFT THRU RIGHT Split? N								

STREET NAME: MAIN STREET

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	32	32	1650	0.0194	
LEFT (L)	1	1	1650	0.0006	0.0006
T + R	32	1650	0.0194		
SB RIGHT (R)	160	160	1650	0.0970	
THRU (T)	15	15	1650	0.0091	
LEFT (L)	6	6	1650	0.0036	
T + R	175	1650	0.1061	0.1061	
EB RIGHT (R)	2	1 *	1650	0.0006	
THRU (T)	353	353	3300	0.1070	
LEFT (L)	371	371	1650	0.2248	0.2248
WB RIGHT (R)	10	4 *	1650	0.0024	
THRU (T)	133	133	3300	0.0403	0.0403
LEFT (L)	0	0	1650	0.0000	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.37  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=75MID.PMV, CAP=C:..LOSCAP.TAB

888 10 896

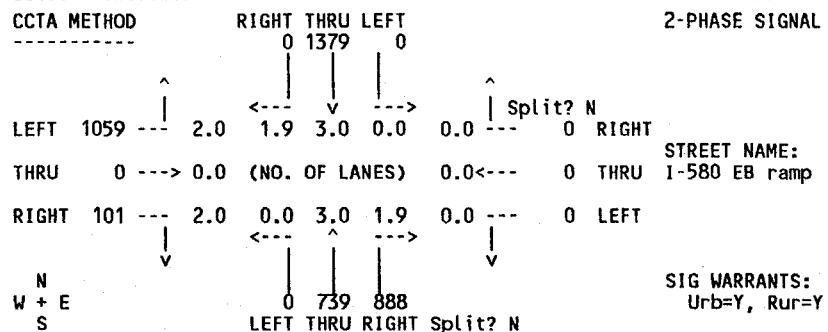
## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative

07/09/01

INTERSECTION 9957 El Charro Rd/I-580 EB ramp Alameda County  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour AM PEAK HOUR

(13)



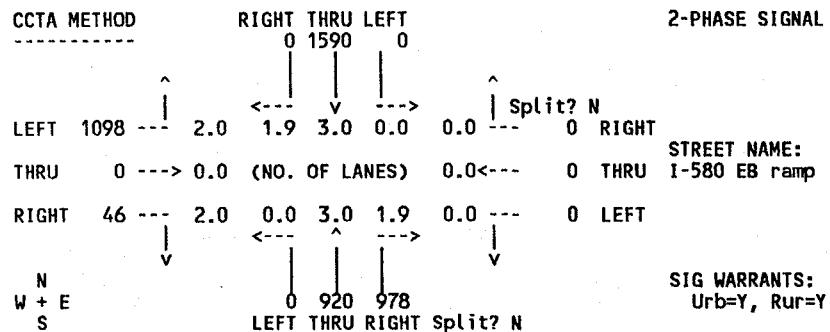
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	888	888	1800	0.4933	
THRU (T)	739	739	5400	0.1369	
SB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	1379	1379	5400	0.2554	0.2554
EB RIGHT (R)	101	101	3273	0.0309	
LEFT (L)	1059	1059	3273	0.3236	0.3236

TOTAL VOLUME-TO-CAPACITY RATIO: 0.58  
INTERSECTION LEVEL OF SERVICE: A\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=75MID.AMV, CAP=C:..LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative

07/09/01

INTERSECTION 9957 El Charro Rd/I-580 EB ramp Alameda County  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour PM PEAK HOUR

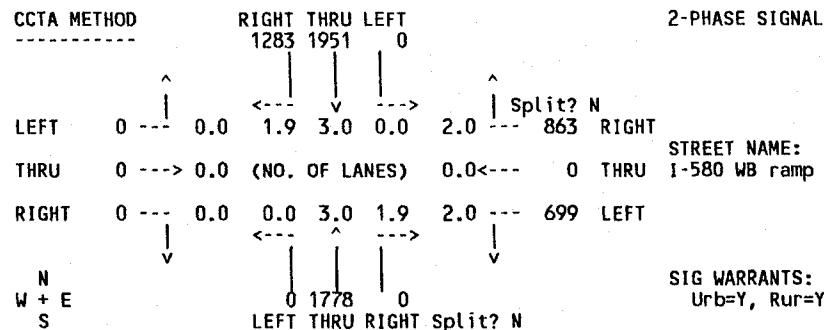
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	978	978	1800	0.5433	
THRU (T)	920	920	5400	0.1704	
SB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	1590	1590	5400	0.2944	0.2944
EB RIGHT (R)	46	46	3273	0.0141	
LEFT (L)	1098	1098	3273	0.3355	0.3355

TOTAL VOLUME-TO-CAPACITY RATIO: 0.63  
INTERSECTION LEVEL OF SERVICE: B\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=75MID.PMV, CAP=C:..LOSCAP.TAB

334 J8 6 96

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative 07/09/01

INTERSECTION 9956 Fallon Rd/I-580 WB ramp Alameda County  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour AM PEAK HOUR

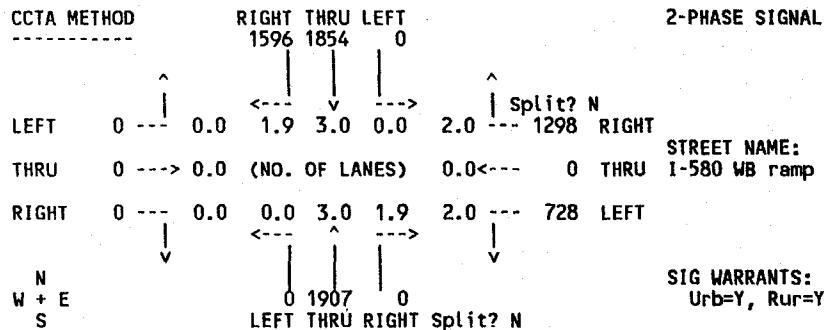
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R) THRU (T)	0 1778	0 1778	1800 5400	0.0000 0.3293	
SB RIGHT (R) THRU (T)	1283 1951	1283 1951	1800 5400	0.7128 0.3613	0.3613
WB RIGHT (R) LEFT (L)	863 699	863 699	3273 3273	0.2637 0.2136	0.2637

TOTAL VOLUME-TO-CAPACITY RATIO: 0.62  
INTERSECTION LEVEL OF SERVICE: B

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=75MID.AMV, CAP=C...LOSCLP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative 07/09/01

INTERSECTION 9956 Fallon Rd/I-580 WB ramp Alameda County  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour PM PEAK HOUR

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R) THRU (T)	0 1907	0 1907	1800 5400	0.0000 0.3531	0.3531
SB RIGHT (R) THRU (T)	1596 1854	1596 1854	1800 5400	0.8867 0.3433	
WB RIGHT (R) LEFT (L)	1298 728	1298 728	3273 3273	0.3966 0.2224	0.3966

TOTAL VOLUME-TO-CAPACITY RATIO: 0.75  
INTERSECTION LEVEL OF SERVICE: C

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT, VOL=75MID.PMV, CAP=C...LOSCLP.TAB

98E 90E  
98E 90E

LOS Software by TJKM Transportation Consultants

311 of 388

Condition: am peak hour; Traffic Mit. Alt. no new int.

07/12/01

INTERSECTION 8336 Fallon Rd/Dublin Blvd

Alameda County

Count Date YEAR 2025 E. DUB Time 75% MIDPT RUN Peak Hour AM PEAK HOUR

CCTA METHOD

RIGHT THRU LEFT

8-PHASE SIGNAL

53 1704 407

LEFT 65 --- 2.0 1.0 4.0 2.0 1.0 --- 0 RIGHT

THRU 306 ---> 3.0 (NO. OF LANES) 3.0<--- 964 THRU Dublin Blvd

RIGHT 320 --- 2.5 2.0 4.0 2.0 3.0 --- 1419 LEFT

N  
W + E  
S

641 595 1052

LEFT THRU RIGHT Split? N

STREET NAME:

SIG WARRANTS:  
Urb=Y, Rur=Y

STREET NAME: Fallon Rd

MOVEMENT	ORIGINAL		ADJUSTED		V/C RATIO	CRITICAL V/C
	VOLUME	VOLUME*	CAPACITY			
NB RIGHT (R)	1052	508 *	3000	0.1693		
THRU (T)	595	595	6600	0.0902		
LEFT (L)	641	641	3000	0.2137	0.2137	
SB RIGHT (R)	53	17 *	1650	0.0103		
THRU (T)	1704	1704	6600	0.2582	0.2582	
LEFT (L)	407	407	3000	0.1357		
EB RIGHT (R)	320	0 *	3000	0.0000		
THRU (T)	306	306	4950	0.0618	0.0618	
LEFT (L)	65	65	3000	0.0217		
WB RIGHT (R)	0	0	1650	0.0000		
THRU (T)	964	964	4950	0.1947		
LEFT (L)	1419	1419	4304	0.3297	0.3297	

TOTAL VOLUME-TO-CAPACITY RATIO:

0.86

INTERSECTION LEVEL OF SERVICE:

D

\* ADJUSTED FOR RIGHT TURN ON RED

INT=NEWSRP.INT, VOL=...75MID.AMV, CAP=C:..LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Traffic Mit. Alt. no new int.

07/12/01

(15) INTERSECTION 8336 Fallon Rd/Dublin Blvd Alameda County  
 Count Date YEAR 2025 E. DUB Time 75% MIDPT RUN Peak Hour PM PEAK HOUR

CCTA METHOD	RIGHT	THRU	LEFT			8-PHASE SIGNAL					
	15	760	239								
LEFT	271	---	2.0	1.0	4.0	2.0	1.0	---	195	RIGHT	
THRU	1229	---	>	3.0	(NO. OF LANES)		3.0	---	198	THRU	STREET NAME: Dublin Blvd
RIGHT	531	---	2.5	2.0	4.0	2.0	3.0	---	2010	LEFT	
N	579	1602	1211								SIG WARRANTS: Urb=Y, Rur=Y
W + E	LEFT	THRU	RIGHT	Split? N							
S											

STREET NAME: Fallon Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C	CRITICAL V/C
				RATIO	
NB RIGHT (R)	1211	440 *	3000	0.1467	
THRU (T)	1602	1602	6600	0.2427	0.2427
LEFT (L)	579	579	3000	0.1930	
SB RIGHT (R)	15	0 *	1650	0.0000	
THRU (T)	760	760	6600	0.1152	
LEFT (L)	239	239	3000	0.0797	0.0797
EB RIGHT (R)	531	0 *	3000	0.0000	
THRU (T)	1229	1229	4950	0.2483	0.2483
LEFT (L)	271	271	3000	0.0903	
WB RIGHT (R)	195	64 *	1650	0.0388	
THRU (T)	198	198	4950	0.0400	
LEFT (L)	2010	2010	4304	0.4670	0.4670

TOTAL VOLUME-TO-CAPACITY RATIO:

1.04

INTERSECTION LEVEL OF SERVICE:

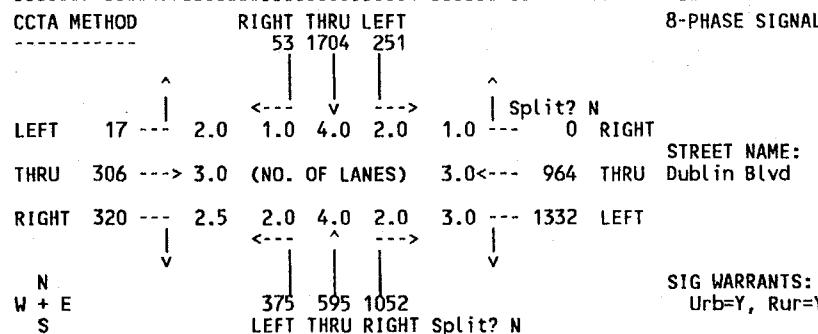
F

\* ADJUSTED FOR RIGHT TURN ON RED  
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## LOS Software by TJKM Transportation Consultants

ISA

Condition: am peak hour; Alternative 07/09/01

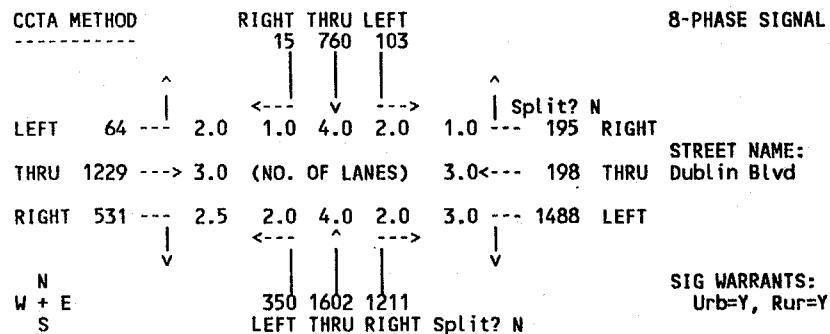
INTERSECTION 8336 Fallon Rd/Dublin Blvd Alameda County  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour AM PEAK HOUR

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	1052	541 *	3000	0.1803	
THRU (T)	595	595	6600	0.0902	
LEFT (L)	375	375	3000	0.1250	0.1250
SB RIGHT (R)	53	44 *	1650	0.0267	
THRU (T)	1704	1704	6600	0.2582	0.2582
LEFT (L)	251	251	3000	0.0837	
EB RIGHT (R)	320	0 *	3000	0.0000	
THRU (T)	306	306	4950	0.0618	0.0618
LEFT (L)	17	17	3000	0.0057	
WB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	964	964	4950	0.1947	
LEFT (L)	1332	1332	4304	0.3095	0.3095

TOTAL VOLUME-TO-CAPACITY RATIO: 0.75  
INTERSECTION LEVEL OF SERVICE: C\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT,VOL=75MID.AMV,CAP=C..:LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

07/09/01

INTERSECTION 8336 Fallon Rd/Dublin Blvd Alameda County  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour PM PEAK HOUR

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	1211	641 *	3000	0.2137	
THRU (T)	1602	1602	6600	0.2427	0.2427
LEFT (L)	350	350	3000	0.1167	
SB RIGHT (R)	15	0 *	1650	0.0000	
THRU (T)	760	760	6600	0.1152	
LEFT (L)	103	103	3000	0.0343	0.0343
EB RIGHT (R)	531	181 *	3000	0.0603	
THRU (T)	1229	1229	4950	0.2483	0.2483
LEFT (L)	64	64	3000	0.0213	
WB RIGHT (R)	195	138 *	1650	0.0836	
THRU (T)	198	198	4950	0.0400	
LEFT (L)	1488	1488	4304	0.3457	0.3457

TOTAL VOLUME-TO-CAPACITY RATIO: 0.87  
INTERSECTION LEVEL OF SERVICE: D\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT,VOL=75MID.PMV,CAP=C..:LOSCAP.TAB

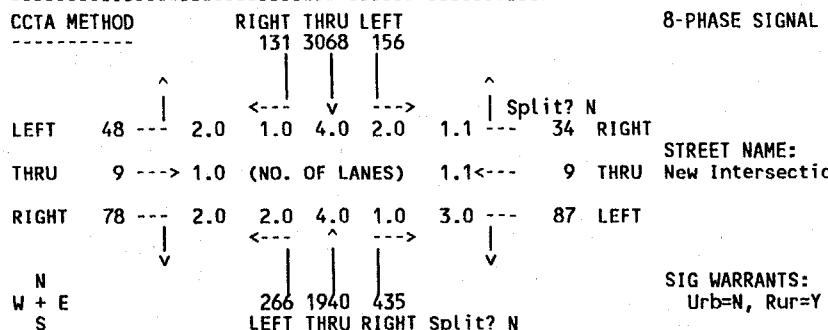
EVE

883

LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative 07/09/01

INTERSECTION 6760 Fallon Road/New Intersection Dublin  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour AM PEAK HOUR



STREET NAME: Fallon Road

MOVEMENT	ORIGINAL	ADJUSTED	V/C	CRITICAL
	VOLUME	VOLUME*		
NB RIGHT (R)	435	402 *	1650	0.2436
THRU (T)	1940	1940	6600	0.2939
LEFT (L)	266	266	3000	0.0887
SB RIGHT (R)	131	105 *	1650	0.0636
THRU (T)	3068	3068	6600	0.4648
LEFT (L)	156	156	3000	0.0520
EB RIGHT (R)	78	0 *	3000	0.0000
THRU (T)	9	9	1650	0.0055
LEFT (L)	48	48	3000	0.0160
WB RIGHT (R)	34	34	1650	0.0206
THRU (T)	9	9	1650	0.0055
LEFT (L)	87	87	4304	0.0202
T + R	43	1650	0.0261	0.0261

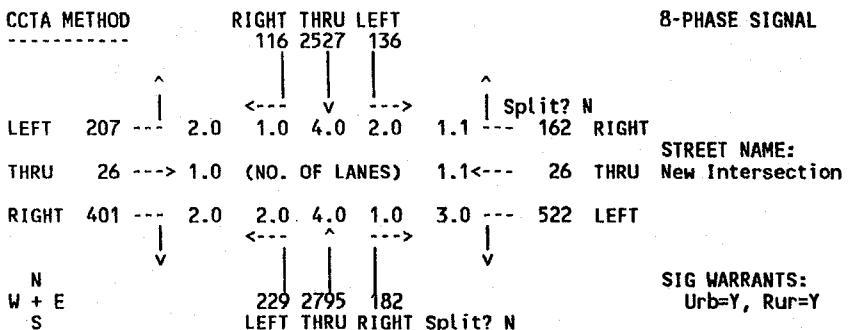
TOTAL VOLUME-TO-CAPACITY RATIO: 0.60  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
INT=NEWSRP.INT,VOL=75MID.AMV,CAP=C..:LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative 07/09/01

INTERSECTION 6760 Fallon Road/New Intersection Dublin  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour PM PEAK HOUR



STREET NAME: Fallon Road

MOVEMENT	ORIGINAL	ADJUSTED	V/C	CRITICAL
	VOLUME	VOLUME*		
NB RIGHT (R)	182	0 *	1650	0.0000
THRU (T)	2795	2795	6600	0.4235
LEFT (L)	229	229	3000	0.0763
SB RIGHT (R)	116	2 *	1650	0.0012
THRU (T)	2527	2527	6600	0.3829
LEFT (L)	136	136	3000	0.0453
EB RIGHT (R)	401	275 *	3000	0.0917
THRU (T)	26	26	1650	0.0158
LEFT (L)	207	207	3000	0.0690
WB RIGHT (R)	162	162	1650	0.0982
THRU (T)	26	26	1650	0.0158
LEFT (L)	522	522	4304	0.1213
T + R		188	1650	0.1139

TOTAL VOLUME-TO-CAPACITY RATIO: 0.68  
INTERSECTION LEVEL OF SERVICE: B

\* ADJUSTED FOR RIGHT TURN ON RED  
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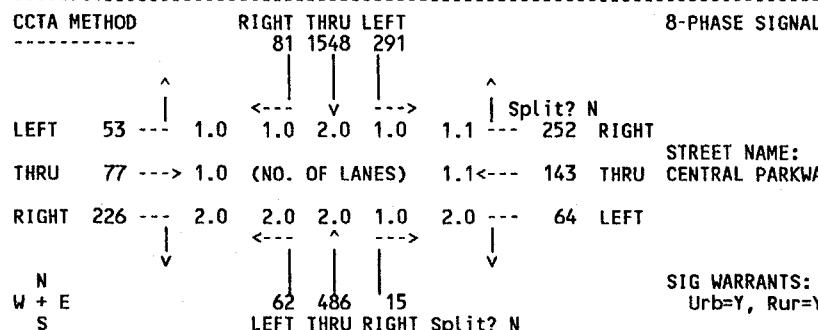
9/14/04  
988

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative

07/09/01

16

INTERSECTION 6438 FALCON ROAD/CENTRAL PARKWAY DUBLIN  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour AM PEAK HOUR

STREET NAME: FALCON ROAD

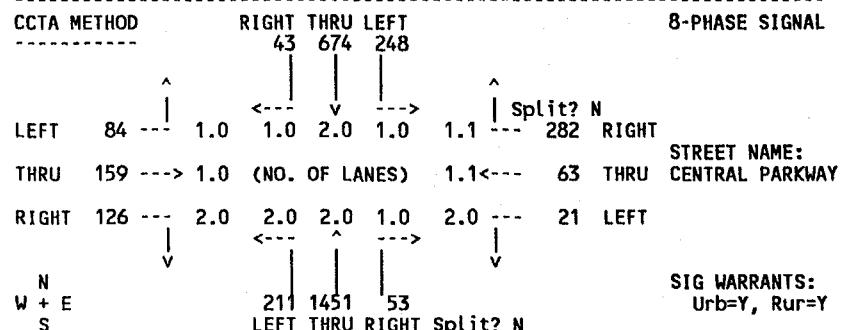
		ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
MOVEMENT						
NB	RIGHT (R)	15	0 *	1650	0.0000	
	THRU (T)	486	486	3300	0.1473	
	LEFT (L)	62	62	3000	0.0207	0.0207
SB	RIGHT (R)	81	28 *	1650	0.0170	
	THRU (T)	1548	1548	3300	0.4691	0.4691
	LEFT (L)	291	291	1650	0.1764	
EB	RIGHT (R)	226	192 *	3000	0.0660	
	THRU (T)	77	77	1650	0.0467	
	LEFT (L)	53	53	1650	0.0321	0.0321
WB	RIGHT (R)	252	252	1650	0.1527	
	THRU (T)	143	143	1650	0.0867	
	LEFT (L)	64	64	3000	0.0213	
	T + R	395		1650	0.2394	0.2394

TOTAL VOLUME-TO-CAPACITY RATIO: 0.76  
INTERSECTION LEVEL OF SERVICE: C\* ADJUSTED FOR RIGHT TURN ON RED  
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## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative

07/09/01

INTERSECTION 6438 FALCON ROAD/CENTRAL PARKWAY DUBLIN  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour PM PEAK HOUR

STREET NAME: FALCON ROAD

		ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
MOVEMENT						
NB	RIGHT (R)	53	41 *	1650	0.0248	
	THRU (T)	1451	1451	3300	0.4397	0.4397
	LEFT (L)	211	211	3000	0.0703	
SB	RIGHT (R)	43	0 *	1650	0.0000	
	THRU (T)	674	674	3300	0.2042	
	LEFT (L)	248	248	1650	0.1503	0.1503
EB	RIGHT (R)	126	10 *	3000	0.0033	
	THRU (T)	159	159	1650	0.0964	
	LEFT (L)	84	84	1650	0.0509	0.0509
WB	RIGHT (R)	282	282	1650	0.1709	
	THRU (T)	63	63	1650	0.0382	
	LEFT (L)	21	21	3000	0.0070	
	T + R	345		1650	0.2091	0.2091

TOTAL VOLUME-TO-CAPACITY RATIO: 0.85  
INTERSECTION LEVEL OF SERVICE: D\* ADJUSTED FOR RIGHT TURN ON RED  
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S63

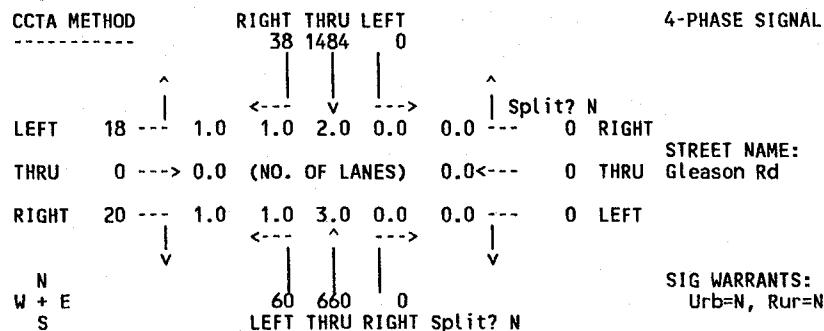
S64

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Alternative

07/09/01

(17) INTERSECTION 9954 Fallon Rd/Gleason Rd Alameda County  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour AM PEAK HOUR



MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	660	660	4950	0.1333	
LEFT (L)	60	60	1650	0.0364	0.0364
SB RIGHT (R)	38	20 *	1650	0.0121	
THRU (T)	1484	1484	3300	0.4497	0.4497
EB RIGHT (R)	20	0 *	1650	0.0000	
LEFT (L)	18	18	1650	0.0109	0.0109

TOTAL VOLUME-TO-CAPACITY RATIO: 0.50  
INTERSECTION LEVEL OF SERVICE: A

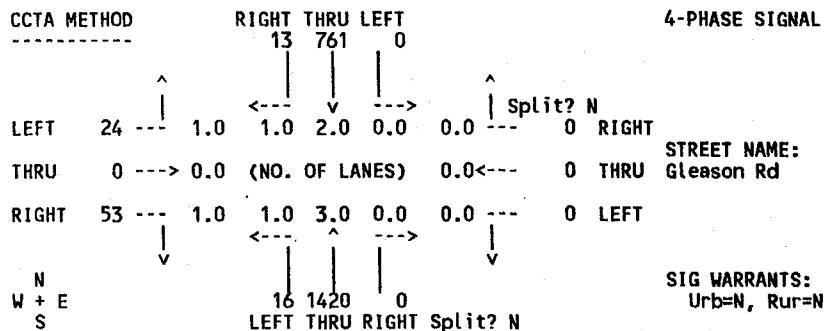
\* ADJUSTED FOR RIGHT TURN ON RED  
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## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Alternative

07/09/01

INTERSECTION 9954 Fallon Rd Alameda County  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour PM PEAK HOUR



MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	1420	1420	4950	0.2869	0.2869
LEFT (L)	16	16	1650	0.0097	
SB RIGHT (R)	13	0 *	1650	0.0000	
THRU (T)	761	761	3300	0.2306	
EB RIGHT (R)	53	37 *	1650	0.0224	0.0224
LEFT (L)	24	24	1650	0.0145	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.31  
INTERSECTION LEVEL OF SERVICE: A

\* ADJUSTED FOR RIGHT TURN ON RED  
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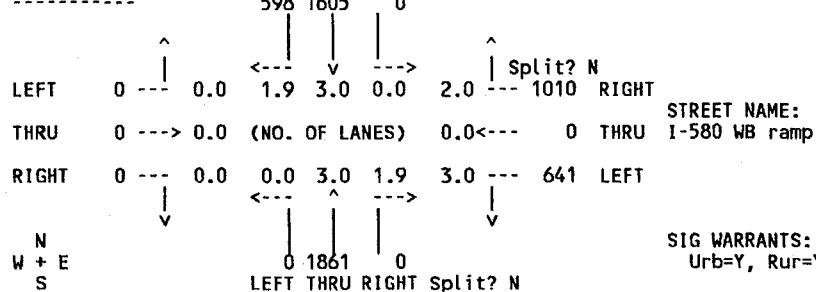
Joe 9/1/01  
384

## LOS Software by TJKM Transportation Consultants

Condition: am peak hour; Traffic Mitigated Alt.-mitigation 07/12/01

INTERSECTION 8305 Hacienda Dr/I-580 WB ramp Dublin  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour AM PEAK HOUR

CCTA METHOD RIGHT THRU LEFT 2-PHASE SIGNAL



STREET NAME: Hacienda Dr

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	1861	1861	5400	0.3446	0.3446
SB RIGHT (R)	598	598	1800	0.3322	
THRU (T)	1605	1605	5400	0.2972	
WB RIGHT (R)	1010	1010	3273	0.3086	0.3086
LEFT (L)	641	641	4695	0.1365	

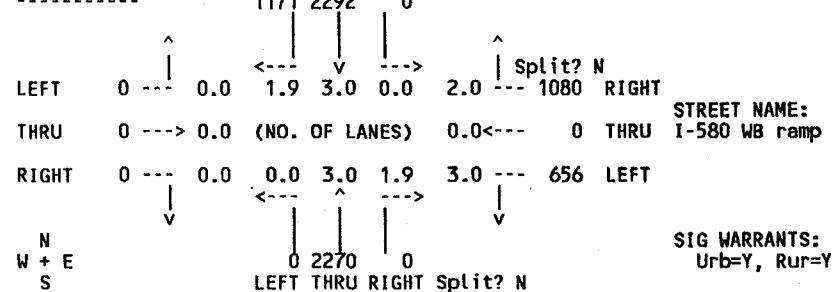
TOTAL VOLUME-TO-CAPACITY RATIO: 0.65  
INTERSECTION LEVEL OF SERVICE: B\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MITIG8.INT,VOL=...75MID.AMV,CAP=C...LOSCAP.TAB

## LOS Software by TJKM Transportation Consultants

Condition: pm peak hour; Traffic Mitigated Alt.-mitigation 07/12/01

INTERSECTION 8305 Hacienda Dr/I-580 WB ramp Dublin  
Count Date Year 2025 E. Dub Time 75% Midpt run Peak Hour PM PEAK HOUR

CCTA METHOD RIGHT THRU LEFT 2-PHASE SIGNAL



STREET NAME: Hacienda Dr

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0	1800	0.0000	
THRU (T)	2270	2270	5400	0.4204	
SB RIGHT (R)	1171	1171	1800	0.6506	
THRU (T)	2292	2292	5400	0.4244	0.4244
WB RIGHT (R)	1080	1080	3273	0.3300	0.3300
LEFT (L)	656	656	4695	0.1397	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.75  
INTERSECTION LEVEL OF SERVICE: C\* ADJUSTED FOR RIGHT TURN ON RED  
INT=MITIG8.INT,VOL=...75MID.PMV,CAP=C...LOSCAP.TAB

BSE JUN 6

**APPENDIX H: POPULATION, HOUSING, AND JOBS ANALYSIS**

## APPENDIX H: POPULATION, HOUSING AND EMPLOYMENT

### Introduction

Although no potential supplemental impacts were identified with respect to population or housing, (see Appendix A, Initial Study p. 49), several comments on the July 2001 DSEIR addressed population, housing and jobs/housing balance issues. The purpose of this appendix is to present the information generated in response to those comments for background and informational purposes. As noted in the Eastern Dublin EIR, population, employment and housing projections are not analyzed "in terms of environmental impacts because the physical environmental effects associated with population, employment and housing are addressed in the appropriate environmental analysis subject areas [in] this EIR." (Eastern Dublin DEIR, hereafter, "DEIR" p. 3.2-1.) Similarly, the Revised DSEIR does not analyze population and housing as environmental effects; the physical environmental effects are, however, addressed in the appropriate supplemental impact topic areas.

### Eastern Dublin EIR Discussion

Population, housing and employment was discussed in Chapter 3.2 of the Eastern Dublin EIR. The discussion included a "general description of expected Bay Area growth as well as more detailed population, jobs and housing development projections for the Tri-Valley subregion and for the City of Dublin ... [and] for both the Specific Plan and the General Plan Amendment." (*Id.*) Based on the 1990 U.S. Census and ABAG Projections '90, projections for the Tri-Valley area (Dublin, Pleasanton, Livermore, and San Ramon) were presented for the years 1990, 1995, 2000 and 2005 (See generally, DEIR Tables 3.2-1 to -3). Even then, ABAG described "inadequate housing production [as] the most serious persistent obstacle to a healthy regional economy." (DEIR p. 3.2-3.) Tri-Valley employees increasingly sought less expensive housing in San Joaquin communities such as Tracy and Modesto. (*Id.*, Eastern Dublin Specific Plan p. 30.)

Reflecting the Eastern Dublin project objectives to balance employment and housing and reduce traffic congestion and air pollution effects, the Eastern Dublin Specific Plan proposed land uses and development policies to emphasize affordable housing opportunities and work towards a jobs/housing balance. (DEIR pp. 3.2-9, -10.) These include Policy 4-7 (encouraging the development of affordable housing throughout the planning area), Policy 4-8 (ensure that projects developed in the plan area provide affordable housing in compliance with the City's Housing Element and other applicable housing requirements), Policy 4-9 (affordable housing to include both rental and "for sale" housing), Policy 4-10 (future developers to include affordable housing in each development), Program 4F (develop an inclusionary housing program), Program 4G (explore the possibility of an in-lieu housing fee), Program 4H (develop a monitoring program to track residential growth by unit type and price categories), Program 4I (develop a specific numerical goal for a percentage of affordable units in Eastern Dublin).

Other Specific Plan policies are cited in the Eastern Dublin EIR to assist in establishing and maintaining a city-wide jobs/housing balance. These include Policy 4-26 (maintain balanced growth of residential and employment uses), Policy 4-27 (discourage Specific Plan Amendments that would increase employment at the expense of residential), Program 4K (develop a monitoring program to track employment uses).

## Eastern Dublin Project Approval: The Reduced Planning Area Alternative

The City Council did not approve the General Plan Amendment as identified and analyzed in the Eastern Dublin EIR. Instead, the Council approved a modified version of Alternative 2, the Reduced Planning Alternative. The Eastern Dublin EIR noted that Alternative 2 would "result in a less-favorable jobs/balance ..." (p. 4-10), however, the alternative had a number of environmental benefits, including much less loss of habitat area than the original General Plan Amendment. The currently proposed annexation and rezoning Project is consistent with the land uses and patterns approved for Eastern Dublin and would have no different contribution to the jobs/housing balance than as described in the Eastern Dublin EIR discussion.

### Summary of Changes in Population, Housing and Employment Projections Since Adoption of the Eastern Dublin General Plan Amendment and Specific Plan

Analysis of supplemental impacts related to physical environmental changes from the Project is contained in Chapter 3.0 of the main text of the Revised DSEIR. The following summary of changes to population, housing and employment since adoption of the Eastern Dublin General Plan Amendment/Specific Plan is presented for informational purposes.

**Population.** Total population of the Bay Area is likely greater in 2000 and projected to be greater in 2005 than estimated in the Eastern Dublin EIR. According to ABAG's Projections 2000, total Bay Area population was 6,930,600 in 2000 and was projected to increase to 7,380,100 in 2005. The Eastern Dublin EIR included population figures of 6,610,500 in 2000 and 7,380,100 in 2005.

For the Tri-Valley area, the Eastern Dublin EIR projected a population level of 234,500 in 2000 and 265,600 in 2005 (Table 3.2-1). ABAG Projections 2000 include Tri-Valley populations of 222,800 in 2000 (approximately 11,700 fewer people) and 259,800 in 2005, which is similar, although less than the Eastern Dublin EIR projections.

For the City of Dublin, population projections contained in the Eastern Dublin EIR are less than anticipated by ABAG in Projections 2000. Specifically, the Eastern Dublin EIR anticipated a total City population of 29,500 in 1995 and 37,100 by 2005. More recent estimates from ABAG include a City population of 26,400 in 1995 and 31,500 in 2005.

**Employment.** ABAG's Projections 2000 includes estimates of employed residents for the entire Bay Area of 3,538,000 in 2000 and 3,799,000 in 2005. These numbers are slightly lower estimates than in the Eastern Dublin EIR on Table 3.2-3: 3,631,200 (2000) and 3,751,600 (2005). Thus, on a regional level, although somewhat lower, the number of employed residents estimated by ABAG is substantially the same as identified in the Eastern Dublin EIR.

For the Tri-Valley subregion, Projections 2000 anticipates the number of employed residents at 118,900 (2000) and 138,900 (2005). These more recent projections are lower than those on Table 3.2-3 of the Eastern Dublin EIR for the Tri-Valley area (129,800 in 2000 and 146,700 in 2005).

For the City of Dublin, the number of employed residents is estimated at 13,600 in 2000 by ABAG, which is lower than the Eastern Dublin EIR projection of 17,500.

**Jobs/Housing Balance.** The Eastern Dublin EIR noted that the jobs/housing balance was a major issue in the subregion. Among the difficulties cited in attempting to establish such a balance were the lack of comprehensive planning among the numerous Tri-Valley

jurisdictions; and the need for California cities to raise revenue in the post-Proposition 13 economic climate, often leading to competition for housing or employment-generating uses without considerations of regional implications. Addressing these difficulties on a policy level, the approved Eastern Dublin General Plan Amendment and Specific Plan attempt to avoid the impacts that can arise from the imbalance between jobs and housing by establishing a mix of residential and employment-generating land uses. This mixed use community concept is reflected throughout the Eastern Dublin area, and in the current Project area as well.

The Project area at buildout would generate fewer jobs than employed residents (0.63 jobs per employed resident), while the City of Dublin currently has substantially more jobs than employed residents, (1.99 jobs per employed resident), as shown in Table 1 below. If the future jobs and employed residents of the Project area are added to the existing jobs and employed residents of the City of Dublin, the combined jobs/housing balance would fall to approximately 1.67 jobs per employed resident.

**TABLE 1  
EXISTING AND PROJECTED JOBS/HOUSING BALANCE**

	Dwelling Units	Jobs (a)	Employed Residents (b)	Balance (c)	Ratio (d)
Existing City of Dublin (e)	9,230 (f)	27,050	13,600	-13,450	1.99:1.0
Project Area	2526	2,575	4,092 (g)	1518	0.63:1.0
<b>TOTAL:</b>	<b>11,756</b>	<b>29,624</b>	<b>17,692</b>	<b>-11,932</b>	<b>1.67: 1.0</b>

(a) "Jobs" is defined as jobs existing within the City of Dublin and its Sphere of Influence, regardless of the location of the workers' residence.

(b) "Employed Residents" is defined as job-holding residents of the City of Dublin and its Sphere of Influence, regardless of the location of their employment.

(c) "Balance" refers to the number of employed residents in relation to the number of jobs (i.e., a positive number means there are more employed residents than jobs).

(d) Ratio of jobs to employed residents

(e) Source: ABAG's Projections 2000.

(f) Measured by number of Households

(g) Projections assume a ratio of 1.62 employed residents per household based on ABAG's Projections 1990.

Over time, the ratio of jobs to housing will vary in Eastern Dublin EIR depending on the nature of projects that have been or are being developed at the time. Through the Eastern Dublin General Plan Amendment and Specific Plan, the City planned for the area in consideration not only of land use and housing policy but also of environmental effects. Implementing projects such as the current Project must be consistent with the comprehensive planning for development of Eastern Dublin, providing the mix of housing and jobs anticipated when the Eastern Dublin project was approved.

**APPENDIX I: RESPONSES TO PARKS COMMENTS**

**APPENDIX I: RESPONSES TO PREVIOUS COMMENTS FROM LIVERMORE AREA PARKS AND RECREATION DISTRICT AND EAST BAY REGIONAL PARK DISTRICT****Responses to Letter 6: Livermore Area Recreation and Parks District**

**Response 6.1:** The commentor notes that the District's request for an extension of time for the 45-day public review period was not granted.

The City of Dublin transmitted copies of the SEIR to all affected public agencies and organizations at the commencement of the public review period, including the LAPRD. The City did not believe that a substantial reason for granting an extension existed at the time of the District's request and therefore chose not to extend the review period.

**Response 6.2:** The commentor notes that the District is concerned that their environmental issues as expressed in response to the Notice of Preparation have not been addressed in the DSEIR.

The City of Dublin considered all responses to the Notice of Preparation in determining the scope of review for recreation and other topics. The City believes that the Initial Study prepared for the proposed Project clearly indicates that the project is consistent with the existing Eastern Dublin Specific Plan and General Plan with respect to land use and recreation facilities. Recreational impacts were fully identified in the Eastern Dublin EIR and mitigation measures were adopted to ensure that any potential recreational impacts would be less-than-significant. (See Chapter 3.4 of the Eastern Dublin EIR.) The City of Dublin has no record that the LAPRD submitted comments during the 45 day public review period for the Eastern Dublin EIR in 1993 regarding inadequacies in the analysis of recreation.

**Response 6.3:** The commentor notes that it was not consulted regarding preparation of the DSEIR.

The City determined to prepare a Supplemental EIR and no new impacts were identified in the Initial Study for the Project with respect to Parks and Recreation that have not been addressed in Chapter 3.4 of the Eastern Dublin EIR. Therefore the City of Dublin did not believe consultation with the LAPRD was required.

**Response 6.4:** The commentor notes that it is surprised at the City of Dublin's approach in assessing environmental impacts for the proposed project through preparation of a Supplemental Environmental Impact Report.

The City's reasons for preparing a Supplemental EIR are outlined in the Initial Study and in Section 2.3, Update of Prior Environmental Documentation, Project Description, of the DSEIR. That section details the background of the Project and the reason why a supplemental EIR has been prepared to comply with CEQA.

**Response 6.5:** The commentor notes that it concurs with the City of Livermore's comments on the DSEIR and states that environmental concerns have changed since the adoption of the Eastern Dublin EIR.

Please refer generally to responses to Letter 8. In addition, as noted in the Response 6.4, Section 2.0 of the DSEIR outlines in detail the changed conditions and/or new information that result in new or intensified significant impacts beyond those in the Eastern Dublin EIR, and consequently that necessitate preparation of a Supplemental EIR. These include a change in status of previously identified sensitive biological species and identification of new sensitive species not previously

identified, changes in regional traffic patterns, possible related changes in noise and air quality conditions, potential for cancellation of Williamson Act Land Conservation Agreements on certain properties, and changes in the provision and distribution of schools and other public utilities. The Initial Study prepared for the Project, contained in Volume 2 of the DSEIR, does not identify major or substantial changes to parks or recreational facilities that would require new environmental analysis, since the type, density and location of potential development pursuant to the Project is consistent with that addressed in the Eastern Dublin EIR and Addenda.

**Response 6.5a:** The commentor notes that the DSEIR fails to consider impacts to LARPD and its facilities and programs. As identified in the following Responses 6.5b, 6.7, and 6.8, the City of Dublin believes that impacts to LARPD facilities and programs would be less-than-significant based on the facts that the Eastern Dublin project plans to supply local and community parks in a manner consistent with the City of Dublin Parks and Recreation Master Plan, the close proximity of other City of Dublin community parks and facilities to the Project area (including regional park facilities in Pleasanton operated by the Eastern Dublin Park District) and the distance and inconvenience of future Project residents to LARPD facilities.

**Response 6.5b:** The commentor notes that the DSEIR fails to consider impacts to LARPD and its facilities and programs, including timing of providing parks. The City of Dublin does not believe the proposed Project would result in significant impacts to LARPD facilities or programs. This has been reflected in both the 1993 Eastern Dublin EIR and Initial Study for the Eastern Dublin Project. As noted in the response to Comment 6.7, the Stage 1 Planned Development application shows that Project would provide a greater amount of neighborhood and community park facilities than currently required by the City of Dublin. The City of Dublin has also constructed major community park and recreation facilities near the Project areas, as identified in the response to Comment 6.8. Therefore, there will be minimal need for Project residents to travel outside of Dublin in order to use park facilities so that impacts to LARPD facilities would be less than significant.

Timing of park development will be considered by the City of Dublin as part of individual Stage 2 Planned Development rezoning applications for individual projects within the Project area.

**Response 6.5c:** This comment notes that the 1993 EIR and DSEIR do not consider the proximity of proposed development to LARPD's core service area and estimated increase on District facilities. As noted in Responses 6.3, 6.5a, 6.5b, 6.7 and 6.8, the City of Dublin does not anticipate significant impacts to LARPD facilities as a result of the approval of the Project since ample park land is proposed to be provided within the Project area, consistent with City of Dublin standards, proximity of other nearby community park and recreation facilities in the Eastern Dublin area and the distance of LARPD facilities within Livermore from the Project area.

**Response 6.6:** The commentor states that the DSEIR fails to consider changes to and the addition of regional parklands in the Tri-Valley area since certification of the Eastern Dublin EIR.

The provision of new regional parklands by the LARPD is not a substantial change or significant new information. The type, density and location of development within the Project area, as detailed in the Eastern Dublin Specific Plan and General Plan, have been available to the District for planning park facilities since 1993.

The City of Dublin also notes that the location of the new LARPD facilities (Sycamore Grove Regional Park and Brushy Peak Regional Park) is sited some distance (estimated 10-12 miles) from the project site. Use of these facilities by future residents of the Project area is therefore anticipated to be limited.

due to the inconvenience of the new facilities from Eastern Dublin and the Project site, in particular. Use of other regional park and recreational facilities, such as the Iron Horse Trail and Shadow Cliffs Regional Park in the City of Pleasanton, is anticipated to be greater from project residents due to closer proximity to the Project area and associated convenience of use.

**Response 6.7:** The commentor states there will be a potential lack of sufficient parklands within the Project area and impacts to LARPD facilities.

Consistent with the Eastern Dublin General Plan Amendment and Specific Plan, the Stage 1 Development Plan for the Project provides for 40.8 gross acres of park land, of which 14.1 acres are community parks, 24 acres are neighborhood parks and 2.7 are neighborhood squares. This total acreage is equivalent to 5.72 acres of parkland per 1,000 anticipated residents within the Project area. This number exceeds the 5 acres per 1,000 resident park ratio established by the City of Dublin (see DSEIR [p. 2-8], Dublin Municipal Code Chapter 9.28 [Quimby Act Ordinance] and Resolution 60-99 [requiring payment of a Public Facilities Fee to provide a ratio of 5 acres of parks per 1,000 residents]). Therefore, there will be sufficient parklands in the Project area; no significant impacts are anticipated on LARPD park facilities, which are located 8 to 10 miles east of the Project area.

**Response 6.8:** The commentor expresses concern that development of the Project would impact demand for the District's planned Community Center and services and programs which will be offered at this facility.

The District's Community Center is located over 8 miles east of the Project area on the corner of East Avenue and Loyola Way. Users of this facility from the City of Dublin would have to use the I-580 freeway to access the site, which is sometimes congested. The City believes that future residents of the Project are more likely to use the parks and recreation facilities provided by the City of Dublin because they are closer and more easily accessible. According to the City of Dublin Parks and Community Services Department, the following services and facilities are either presently available to Dublin residents or have been funded for construction in the near term:

- *Emerald Glen Park*, is a community-level park containing 29.6 acres of land located on the west side of Tassajara Road between Central Parkway and Gleason Drive, approximately 2 miles west of the site. This park includes baseball fields, soccer fields, lighted tennis and basketball courts, a skateboard park, a children's play area, picnic and open areas. Future expansions are planned so that the ultimate size of Emerald Glen Park will encompass over 57 acres of land with a 29,000 square foot recreation/gymnasium center, 23,000 square foot community center, outdoor amphitheater, aquatic center and additional playfields. This park is such that future residents of the Project area could drive due west on Central Parkway to reach the facility.
- *Ted Fairfield Park* is a recently constructed 5-acre facility located approximately two miles due west of the Project area containing a combination baseball/soccer field, basketball court, sand volleyball court, play and picnic areas.
- *Dublin Ranch Sports/Community Park* is being developed in Dublin Ranch just west of the Project area; a portion of the park will be located within the adjacent Project area. Planned to contain approximately 68 acres, this park will provide a wide range of active

and passive activities as well as being a focus of organized activities by the Dublin Parks and Community Services Department.

- The *Dublin Senior Center* is currently located at 7437 Larkdale Avenue, but is being planned for relocation and expansion to 7600 Amador Valley Boulevard by mid-2004. The relocated Senior Center would be located approximately 5 miles west of the Project area and accessible via Dublin Boulevard and the planned extension of Central Parkway.

Recreation programs currently offered by the City of Dublin in the Eastern Dublin area (primarily at Emerald Glen Park but also at Dougherty Elementary School) include after school recreation programs, summer fun-in-the-sun programs, tennis programs, youth t-ball, Little League, the Dublin United Soccer League and on-going special events.

The City does not anticipate any significant impacts to LARPD's Community Center.

**Response 6.9:** The commentor asserts that neither the Eastern Dublin EIR nor the DSEIR addressed whether the parks planned in the Eastern Dublin General Plan Amendment and Specific Plan will meet LARPD's Master Plan if the Project area is not detached from LARPD.

The Project meets City of Dublin park requirements (see Response 6.7); all park and recreation facilities are also consistent with the Eastern Dublin General Plan Amendment and Specific Plan. The entire Project area lies within the City of Dublin's sphere of influence as approved by LAFCO. The Eastern Dublin EIR analyzed the impact of jurisdictional boundary issues with respect to parks and found that the issue was adequately addressed by General Plan Implementing Policy J which requires the City to work to revise jurisdictional boundaries. The Project includes detachment from LARPD. Should the Local Agency Formation Commission not detach the Project area from the LARPD, the City and LARPD would need to discuss ownership and maintenance of the planned park and recreational facilities.

**Response 6.10:** The commentor states that the DSEIR does not include a detailed discussion regarding overlapping jurisdictional boundaries between the LARPD and East Bay Regional Park District.

Approval of the proposed Project as proposed ensures that any overlapping jurisdictional boundaries would be eliminated between these two districts. This action is consistent with Implementing Policy J of the Eastern Dublin Specific Plan: "*Work with the LARPD to revise jurisdictional lines so that City of Dublin departments have jurisdiction over all parkland within the Dublin Sphere of Influence.*" Upon the approval of the Project, the Project area would be removed from LARPD jurisdiction but left within the East Bay Regional Park District. Thus, only one agency would be responsible for providing regional park facilities, not two districts as presently exists. Jurisdictional issues have been adequately addressed in the Eastern Dublin EIR, no further environmental analysis is required.

**Response 6.11:** The commentor states that the DSEIR fails to discuss regional park fees and states that the loss of property tax revenues if the Project area is detached from LARPD will be an impact that the LARPD cannot absorb.

The City's Public Facilities Fee will be required of all future developers of individual projects within the Project area upon approval of individual projects. As noted by the commentor, this fee is intended to cover development of neighborhood and community park facilities as well as a new community library, a new senior center and other related community facilities. Since the City does not provide

regional park facilities, this responsibility would continue to reside with the East Bay Regional Park District (EBRPD). Funding of regional facilities and services by the EBRPD is anticipated to continue to be from property taxes, assessments, bond revenues, facility use fees and other sources of funding. There would be no funding of LARPD facilities from the Project area, since the Project area would no longer be within the District unless LAFCO approves the continuation of bonded debt. However, the City and EBRPD facilities are located significantly closer to the project area than LARPD facilities, including, for example, an EBRPD staging area on the west side of Tassajara Road. As noted earlier, use of LARPD facilities by Project residents is anticipated to be minimal. The Eastern Dublin EIR and Project Initial Study have adequately addressed the environmental effects of future Project development on all levels of park facilities and are not required to address economic effects. The potential detachment of the Project area from LARPD has been a part of the City's Eastern Dublin planning since the 1993 Eastern Dublin approvals.

**Response 6.12:** The commentor states that the failure to include regional park land in the Eastern Dublin GPA/SP area will impact LARPD.

The Eastern Dublin EIR clearly identifies the East Bay Regional Parks District as the primary provider of regional parks within the Eastern Dublin planning area. No existing or future regional parks are identified on the Project area in terms of future EPRPD or LARPD park facilities, so no direct impacts would occur. Although approval and construction of the Project would likely increase usage of regional parks, this use would be offset with additional property taxes and use fees. Any impacts related to increased use of regional park facilities have been adequately addressed; no further CEQA analysis is required for this Project.

**Response 6.13:** The commentor states that the DSEIR fails to analyze the impacts of detachment of the Project from the LARPD.

The City of Dublin believes approval of the proposed project would have no significant environmental impacts on the District. Future project residents would be far more likely to use City facilities and East Bay Regional Parks District facilities that are significantly closer to the project area. As noted in Response 6.7, the City of Dublin offers a similar level and range of parks and recreational services as provided by LARPD.

In regards to child care services, the City of Dublin does not provide these services to local residents, but instead relies on local private entities within the community. Given the significant distance of LARPD child care facilities (approximately 8-10 miles from the Project area), use of LARPD child care facilities is not anticipated to be significant when competing services are available in closer proximity. Also, use of LARPD child care facilities may be limited to residents of the District. If the Project is approved, future Project residents would not be eligible to use District facilities since they would be outside of District boundaries.

**Responses to Letter 7: East Bay Regional Park District**

**Response 7.1:** The commentor is concerned with potential impacts on regional park facilities maintained by the East Bay Regional Park District (EBRPD) from the Project.

Approval of the Project would increase use of EBRPD facilities since additional population would be located in the Eastern Dublin area. However, the type, density and location of proposed housing is consistent with the 1993 Eastern Dublin Specific Plan and General Plan, which plans have been available to the EBRPD for long range planning. Given the large extent of EBRPD district facilities and services offered to East Bay residents (over 92,000 acres of park and open space lands in Alameda and Contra Costa County, including 59 regional parks, recreation areas, wilderness areas, shorelines, preserves and land bank areas, according to the District's official web site), an increase of 2,526 dwelling units within the project area would represent a less-than-significant increase in use of EBRPD facilities. Potential impacts to District facilities would be off-set by increased property tax revenues received by the District, additional assessment revenues from new housing and revenues from user fees charged by the District.

**Response 7.2:** The Commentor is concerned with impacts from the Project on the ownership, management and maintenance of open space areas within the Project area.

The proposed Stage 1 Development Plan (SDEIR Figure 2-G) indicates that steeper lands located along the northerly and westerly periphery of the project area would be designated as "RRA-Rural Residential/Agricultural." At this time and subject to refinements as part of more refined Stage 2 Planned Development actions, these properties are intended to be privately owned and managed. Options for this would include private individual ownership, ownership and management by one or more owner's associations or dedication to a land trust. No impacts are anticipated to the East Bay Regional Park District.