

SECTION 00 73 27 (REV. 1)**SPECIFIC PROJECT REQUIREMENTS****1.1 SUMMARY**

- A. This Section includes special project conditions, environmental mitigation measures, and requirements for accessibility, controlling construction noise, use of potable water for construction, excavation in the public right of way, and air and water quality to comply with City regulations affecting construction Work at the Site.
- B. All requirements in this Section are incidental work, unless specified otherwise.
- C. Any and all provisions herein shall be applicable as to all work performed within the City and County of San Francisco.
 - 1. As for work performed outside the legal and geographical boundaries of the City and County of San Francisco, Contractor shall comply with any and all applicable federal, state, and/or local regulations concerning any and all matters addressed by Section 00 73 27 herein.
 - 2. Contractor shall be solely responsible and fully liable for any and all failures to comply with the aforementioned regulations, and shall unconditionally and fully indemnify the City for any damages resulting therefrom.
- D. Refer to Section 00 31 00, paragraph "Environmental Assessment Information" for Reference Documents that may include additional construction mitigation requirements.

1.2 PROJECT CONDITIONS

- A. Contractor shall be responsible for all costs necessary to prevent its operations from violating any federal, state, or local governmental regulations and the requirements of the Contract Documents.
- B. If Contractor does not observe said regulations or the requirements specified herein, or promptly take all required remedial actions to the City's satisfaction, the City will withhold progress payments to Contractor until satisfactory compliance has been accomplished.
- C. The City will monitor Contractor's adherence to the requirements specified herein and will report on Contractor's compliance pursuant to California Assembly Bill 3180 (chapter 1232).
 - 1. Said monitoring and reporting activities may include, but are not limited to, qualitative, quantitative and video observations and data collection on the impacts of noise, air quality, traffic, street pavement damage, water quality, archaeology, and hazardous materials.
 - 2. Contractor shall cooperate with such monitoring activities, provide access to the Work Site to establish and secure monitoring stations, and make its facilities and records available to the City for performing such monitoring.
- D. Contractor shall be informed about, coordinate, schedule, and perform Work in consideration of adjacent property owners and other activities and construction work in the area.
 - 1. Contractor will be granted an equitable time extension for Unavoidable Delays caused by the City subject to the provisions of Paragraph 7.02 of the General Conditions.

1.3 CONSTRUCTION NOISE REQUIREMENTS

- A. Contractor shall comply with the City's Noise Control Ordinance (article 29 of the San Francisco Police Code, Ordinance No. 274-72).
 - 1. Contractor shall be responsible for fines or violations pertaining to these ordinances, at no cost to the City.
 - 2. Provide advance notice to residents and affected businesses in the area of the Site of times, dates and location of construction activities.
 - 3. Coordinate and schedule Contractor's construction operations to conform to all City requirements and restrictions.
 - 4. Contractor shall implement mitigation controls to ensure compliance with the construction noise levels allowed. The maximum noise level from any powered construction equipment shall not be greater than 80dBA at 100 feet. This translates to 86dBA at 50 feet (dual units not applicable, as these are specific field and instrument measurements).
- B. Use appropriate construction methods and equipment and furnish and install acoustical barriers so that noise emanating from the construction will not exceed noise levels pursuant to the City's Noise Control Ordinance.
 - 1. Muffle and shield intakes and exhausts, shroud or shield impact tools, as feasible,
 - 2. Use electric-powered rather than diesel-powered construction equipment,
 - 3. Enclose equipment such as large compressors, generators, and large de-watering pumps at a minimum in one-inch-thickness plywood sheds.
 - 4. Equip pavement breakers and jackhammers with acoustically attenuating shield or shrouds.
 - 5. Select haul routes that minimize intrusion to residential areas.
 - 6. Select construction processes and techniques that create the lowest noise levels.
- C. Prepare a written Noise Control Program to mitigate the construction noise impacts and to comply with the noise criteria specified herein, including the method of construction, the equipment to be used, and acoustical treatments as necessary. Implement the program and keep a copy at the project site to be submitted to the City Representative upon request.
- D. The City, at its own discretion, will monitor construction noise as part of the environmental monitoring process. When noise levels exceed the noise limits pursuant to article 29 of the San Francisco Police Code, Contractor shall stop work for alternate methods and equipment or place restrictions on construction operations to further limit the noise as directed by the City.

1.4 NIGHT AND WEEKEND NOISE REQUIREMENTS

- A. Except as specifically set forth in these Specifications, Contractor shall not perform work between the hours of 8:00 p.m. and 7:00 a.m. of the following day if the noise level created thereby is in excess of the ambient noise level by 5 dBA at the nearest property line, unless a noise permit therefor has been obtained pursuant to the Police Code section 2908.
 - 1. Apply for City noise permits through the City Representative at least 15 working days in advance of night (i.e., between 8:00 p.m. and 7:00 a.m.), weekend, and holiday work. The requirements of the Contract Documents, including safety requirements, shall apply for all night, weekend, and holiday work performed.
 - 2. If Contractor is directed in the Contract Documents or by special written notice from the

City Representative to perform any part of the work between the hours of 8 p.m. and 7 a.m. or on weekends or holidays, the Contractor must obtain and comply with a City noise permit prior to starting any work. The noise permit shall be obtained from and approved by Bureau of Street-Use and Mapping, 49 S. Van Ness Avenue, Suite 300, San Francisco, CA 94103.

3. Refer to Section 00 72 00 for definition of Regular Working Hours.

1.5 REQUIREMENTS FOR PLACEMENT OF BARRICADES

- A. Comply with the requirements of San Francisco Department of Public Works Guidelines for the Placement of Barricades at Construction Sites (DPW Order No. 167,840). Refer to this website for a copy of DPW Order No. 167,840: <http://www.sfpublishworks.org/services/project-manual-and-reference-documents>.
- B. Provide and maintain at least one accessible path-of-travel for pedestrians around the construction site consistent with applicable federal, state, and local laws, including the Americans with Disabilities Act and the California Building Code (Title 24, Part 2, Accessibility Standards).
- C. Contractor will be assessed liquidated damages in the amount of one thousand dollars (\$1,000.00) per calendar day for each day Contractor fails to comply with the requirements for accessibility and placement of barricades.

1.6 REQUIREMENTS FOR USING WATER FOR CONSTRUCTION

- A. Contractor shall comply with Article 21 of the San Francisco Public Works Code, which restricts the use of potable water for soil compaction and dust control activities to the extent not directly in conflict with any applicable federal, state, or local law.
- B. Contractor shall apply to the San Francisco Public Utilities Commission (SFPUC) Wastewater Enterprise (WWE) for a permit to use recycled water for soil compaction and dust control activities.
 1. Contractor shall submit a completed Recycled Water User Permit Application to the SFPUC WWE. The permit application can be downloaded at the following internet address: <http://sfwater.org/modules/showdocument.aspx?documentid=7234> . If SFPUC WWE approves the application, the Contractor will be issued a permit and provided instruction for use of the Recycled Water Fill Station.
 2. Contractor will be responsible for the handling and transportation of recycled water in accordance with the approved permit. Contractor will also be responsible for any permit and discharge fees.
 3. If the SFPUC denies the permit application because the use of recycled water falls within one or more of the restrictions of Title 22, Division 4, Chapter 3 of the California Code of Regulations, and the applicable General Order under which the SFPUC is bound at the time the application is processed, the permit application will be redirected for approval of potable water for these activities as directed in Paragraph C below.

C. Potable Water:

1. Contractors will be directed to the SFPUC, Customer Service Bureau (CSB), at 525 Golden Gate Avenue, San Francisco, to complete a potable hydrant meter application. Once the application has been completed and approved, CSB will provide Contractor with a receipt.
2. Contractor shall pay the costs of permit fees, connection fees, meters, and all water usage furnished by the SFPUC under the established water service account. The City will not reimburse these costs.
3. Contractor shall bring the receipt as proof of payment to the City Distribution Division (CDD) at 1990 Newcomb Street, San Francisco, to collect the hydrant meter. Contractor shall bring the meter to CDD monthly for readings and payments.

1.7 AIR QUALITY REQUIREMENTS

- A. The Contractor shall provide dust control measures during construction in accordance with the requirements of the Contract Documents. Prior to starting Work at the site, the Contractor shall prepare a Dust Control Program to minimize potential public health impacts associated with visible dust emissions and air quality pollutants. Said dust control program shall include measures to minimize impacts to sensitive receptors associated with exposure to respirable nuisance dust (PM10) and the following requirements to achieve a goal of "No Visible Emissions". The Contractor shall implement the dust control program for the project duration and maintain a copy at the project site to be submitted to the City Representative upon request.
- B. Comply with the following requirements in accordance with San Francisco Department of Public Works Dust Control Order (DPW Order No. 171,378). Failure to comply with DPW Order No. 171,378 shall subject Contractor to fines of \$1,000 per day for each day a violation is not corrected.
1. Minimize dust generation to reduce health risks to workers and the public.
 2. Mist the immediate demolition area with a water spray to prevent airborne dust particles.
 3. Perform continuous water spraying during dust generating activities. Mist or spray in such a way as to prevent puddling or generation of runoff.
 4. Use dust enclosures, curtains, and dust collectors as necessary to control dust. The City may request dust scrubbers installation during demolition to minimize dust migration in the project site's occupied areas.
 5. Minimize the amount of demolition debris stored at the Site. Remove demolition debris, with the exception of hazardous materials or suspected hazardous materials, from the Site no later than the end of each workday.
 6. If hazardous materials or suspected hazardous materials are stored on Site, store such materials in accordance with all applicable Cal/EPA regulations, including providing storage in proper containers and protection from exposure to the elements. Remove such materials from the Site as soon as possible for disposal or recycling in accordance with applicable laws and regulations.
 7. Keep the Site and adjacent areas clean and perform wet sweeping at the end of each shift.
 8. Load haul trucks, hauling debris, soils, sand or other such materials so that the material does not extend above the walls or back of the truck bed. Wet before covering and tightly cover the surface of each load before the haul truck leaves the loading area.
 9. Clean up spillage on City streets, whether directly or indirectly caused by Contractor's

operations.

10. Stockpiles soil, sand and other materials; shall be covered and protected at the end of the shift.
- C. Comply with the requirements of the Bay Area Air Quality Management District (BAAQMD) regulation 6 (for particulate matter and visible emissions), regulation 7 "Odorous Substances," regulation 11 "Hazardous Pollutants," and the California Health and Safety Code division 26 "Air Resource", chapter 3 "Emission Limitations", section 41700 "Prohibited Conduct," and related regulations. Notify the BAAQMD 10 working days prior to commencing demolition or hazardous materials abatement work.
1. Such notification shall include the names and addresses of operations and persons responsible; description and location of the structure to be demolished or altered including size, age and prior use, and the approximate amount of friable asbestos; scheduled starting and completion dates of demolition or abatement; nature of planned work and methods to be employed; procedures to be employed to meet BAAQMD requirements; and the name and location of the disposal site.
 2. The BBAQMD randomly inspects removal operations and will respond to any complaints received. Cooperate and facilitate all BAAQMD authorized inspections.
- D. Implement the specific air pollution controls to reduce exhaust emissions of particulate matter and other pollutants from construction and related equipment, to a less significant level, by:
1. Preventing the accumulation of toxic concentrations of chemicals.
 2. Preventing harmful or obnoxious dispersal of pollutants into the atmosphere.
 3. Limiting vehicle speed limit on unpaved roads to 15 miles per hour (mph).
 4. Prohibiting idling motors when equipment is not in use or when truck are waiting in queues. The idling time of all construction equipment used at the site shall not exceed five (5) minutes.
 5. Limit the hours of operation of heavy-duty equipment and/or amount of equipment in use to what is needed.
 6. All equipment shall be properly tuned and maintained in accordance with the manufacturer's specifications.
 7. When feasible, alternative fuel or electrical construction equipment shall be used at the project site.
 8. Load haul trucks, excavated materials, hauling debris, soils, sand or other such materials so that the material does not extend above the walls or back of the truck bed. Wet before covering and tightly cover the surface of each load before the haul truck leaves the loading area.
 9. Clean up spillage on City streets promptly, whether directly or indirectly caused by Contractor's operations.
 10. Any stockpiles of excavated materials, backfill, import materials; sand, gravel, road base and soil shall be shall be stored in staging areas approved by the City and shall be completely covered with a 10 mil (0.01 inch) polyethylene plastic or equivalent tarp and braced down and secured daily at the end of the shift. The Contractor shall maintain the covers throughout their use.
 11. During all excavation and dirt moving activities, wet sweep/vacuum the streets, sidewalks, paths and intersections where work is in progress at least three (3) times per shift per day and once at the end of the shift as directed by the City.
 12. For wet sweeping use a vacuum sweeper vehicle with sufficient suction to ensure that the

vehicle does not blow dust towards neighboring businesses or residences. The city will evaluate the effectiveness of the Contractor's vacuum sweeper and, if necessary, will require the Contractor to provide a more powerful and effective vehicle.

13. Vehicles entering or exiting construction areas shall travel at a speed of no more than 15 mph to minimize dust emissions and follow the approved traffic routes.
14. Wheel washers shall be installed and used to clean truck and equipment tires leaving the construction site. If wheel washers cannot be installed, tires and spoils trucks shall be washed off before they re-enter City streets to minimize deposition of dust-causing materials.
15. Wet down areas around soil improvement operations, visibly dry disturbed soil surface areas and visibly dry disturbed unpaved driveways at least three (3) times per shift per day or more as needed as directed by the City.

1.8 MAINTENANCE OF THE WORK AREA AND DEBRIS CONTROL

- A. Maintain work areas and adjacent public right-of-ways in orderly and safe condition. Sweep all pedestrian walkways and dispose of debris around the site perimeter on a daily basis, and as often as determined by the City.
- B. Control the accumulation of waste materials and debris; collect waste from construction areas and the project site, daily. Remove accumulations of debris surplus materials and trash from the site at the end of each working day or at frequent intervals or as directed by the City. Burying or burning of trash and debris on the site is not permitted
- C. Perform the work in a manner to minimize the generation of dust and dirt, to prevent dust and dirt from interfering with the progress of the Work, and to keep dust and dirt from accumulating in work areas and adjacent areas.
- D. Handle hazardous, dangerous, or unsanitary waste materials separately from other waste by containerizing properly. Dispose these types of materials in a lawful manner. Comply with requirements of NFPA 241 for removal of combustible waste material and debris.
- E. For storage areas, ensure that materials to be used for construction are stored in designated structures or areas by the appropriate trades. Maintain such areas or structures in a clean condition for the life of the Contract.
 1. Provide and maintain proper storage with secondary containment for lubrication oil, hydraulic fluids, waste oils, fuels, solvents and other hazardous or toxic materials and wastes.
 2. Immediately remove materials deposited outside of approved storage areas.

1.9 PARKING RESTRICTIONS

- A. Parking: Employees of the Contractor, sub-contractors, and suppliers shall not park their vehicles within the active construction area when they are currently working and where public access is prohibited. The Contractor shall provide parking for their employees at a site, which will not impact local public parking and transport employees between the parking area and the work.
- B. Vehicle Towing: When a vehicle is removed from a street at the request of the Contractor and a post-storage hearing determines that as a result of the Contractor's improper posting of required signs, reasonable grounds did not exist for removal, the responsible Contractor shall reimburse the City for cost incurred in storage and towing.

1.10 EXCAVATION REQUIREMENTS

- A. Comply with the regulations of California State Standard, CCR Title 8, Chapter 4, Section 1541, regarding coordination and safety of excavations near subsurface installations.
- B. Contractor shall obtain, review and comply with Article 2.4 "Excavation in the Public Right of Way" of the San Francisco Public Works Code as currently amended and applicable regulations of Public Works for excavating and restoring streets in the public right of way. Public Works Order No. 187,005 shall apply. Except for excavations specifically exempted by said article or by written waiver granted by Public Works, no excavation shall be performed in the public right of way under the jurisdiction of Public Works without a valid excavation permit issued by the San Francisco Public Works, Bureau of Street-Use and Mapping, telephone (628) 271-2000.
 - 1. Refer to Paragraph 3.06 of the General Conditions (Section 00 72 00) as amended in the Supplementary Conditions (Section 00 73 00) for permit procurement responsibilities.
 - 2. Keep copies of the excavation permit available at the Site for inspection by the City upon request.
 - 3. Excavation permits are not required for excavations completed within 24 hours to install parking meters, street lights, street trees, traffic signs, traffic signals, utility poles or to repair utility boxes in sidewalks; or excavations performed for the sole purpose of repairing sidewalks.
 - 4. For emergency excavations, necessary for protection of life or property, immediately notify Public Works, Bureau of Street-use and Mapping, and apply for an emergency permit within 4 hours after the department offices first open.
 - 5. Refer to the manual "Regulations for Excavating and Restoring Streets in San Francisco, DPW Order No. 187,005", for complete information about excavation code requirements. Copies of the manual may be purchased at Bureau of Street-Use and Mapping, 49 South Van Ness Avenue, Suite 300, San Francisco, California 94103, telephone (628) 271-2000.
 - 6. Coordinate with the City and other contractors working at the Site to minimize impacts of the excavation work on the community and local businesses.
- C. Public Works Order No. 187,005 shall apply. In addition, the following requirements apply:
 - 1. The depth of excavation shall not include thickness of roadway pavement section.
 - 2. For trenches 6 feet in depth or less, a compaction test shall be required at 100% of the backfill height.
 - 3. At a minimum, one compaction test shall be performed for every 150 lineal feet of main line trench length and at one (1) in four (4) service trenches (e.g. side sewer, water service, etc).
- D. Contractor shall submit to the City for review and approval all 30-Day and 10-Day public notices prior to issuance, distribution to the public, and commencement of work associated with excavations in accordance with article 2.4 of the San Francisco Public Works Code. 30 day public notices shall be distributed to property owners by U.S. mail. 10-Day public notices can be delivered or mailed. Such notices shall include the name, address, and 24-hour telephone number of Contractor's representative who will provide information to, and receive complaints from, the public concerning the excavation.

1. For excavations completed and restored in 2 to 14 calendar days, post and maintain notices every 100 feet along the block of excavation work at least 72 hours prior to starting excavation. Notices must be printed on 11-inch x 17-inch paper in letters at least 1-inch high and must contain:
 - a. The name, address, and telephone number of Contractor's representative;
 - b. A description of the project;
 - c. The start and completion dates of the project;
 - d. If cars will be towed during the entire construction period or during a specific time period.
 2. For excavations completed and restored in 15 calendar days or longer, provide written notice as follows:
 - a. Delivered by U.S. mail at least 30 calendar days but not more than 60 calendar days prior to starting excavation to:
 - (1) Property owners on the affected blocks;
 - (2) Affected neighborhood and merchant organizations listed in the City Planning Department's "Directory of Neighborhood Organization and Service Agencies;"
 - (3) San Francisco Bicycle Coalition and the San Francisco Bicycle Advisory Committee, when excavations occur on designated bicycle routes;
 - (4) Provide the City Representative with a copy of the mailing list;
 - b. At least 10 calendar days but not more than 15 calendar days prior to starting construction, post and maintain notices every 100 feet along the block to be excavated and deliver the same notices to each dwelling unit on the block of excavation work.
 - c. Notices must contain:
 - (1) The name, address, and telephone number of Contractor's representative;
 - (2) A description of the project;
 - (3) The start and completion dates of the project;
 - (4) The name, address and 24 hour telephone number of a contact person.
 3. If the Contractor has not been actively performing Work on a block or intersection for a period of 60 consecutive calendar days or more, the Contractor shall reissue written 10-Day Notices prior to recommencing Work.
 4. For emergency excavation post and maintain notices every 100 feet along the block of excavation work as soon as possible but no later than 24 hours after start of construction. Notices must be printed on 11-inch x 17-inch paper in letters at least 1-inch high and must contain.
 - a. The name, address, and telephone number of Contractor's representative;
 - b. A description of the emergency project;
 - c. The start and completion dates of the emergency project.
- E. No excavation shall be performed outside the boundaries, times, descriptions or methods set forth on the approved permit; no excavation shall be longer than 1,200 feet in length at any time without prior written approval of the City.
1. Secure permit extension prior to expiration date in the event of delays in excavation work.
 2. Should such delays be caused by the City Contractor will be granted an extension of

Contract Time or adjustment of Contract Sum as provided in Paragraph 7.02 of the General Conditions.

- F. Observe regulations concerning excavation sites including the following:
1. Cover open excavations with steel plates ramped to street grade or provide other means of protection acceptable to Public Works. Refer to Section 01 55 26, Traffic Control, for specific requirements on non-skid metal plating.
 2. Clean the Site of loose dirt and debris and remove excavated material from the Site at the end of each work day; comply with DPW Order No. 171,378 (refer to Paragraph 1.7B above).
 3. Materials and equipment to be used for excavation work within 7 calendar days may be stored at the Site, provided that fill material, sand, aggregate, and asphalt-coated material shall be stored only in covered, locked containers and provided that such storage complies with the City's traffic rules and regulations.
 4. Conform to the requirements of the Specifications for handling, removal and disposal of hazardous materials.
- G. Restore excavated street or sidewalk pavement in accordance with the requirements of the Specifications or the applicable requirements of the DPW Standard Specifications and Standard Plans (refer to Division 1 for reference standards) to the extent not in conflict with the Specifications. Comply with the following additional San Francisco Public Works Code requirements:
1. Restore trenches and pavement to a constant width equal to the widest section of the excavation, but not exceeding 13 ft.
 2. Backfill excavation within 72 hours of completing related construction.
 3. Replace pavement base within 72 hours of backfilling excavation.
 4. Complete finished pavement within 72 hours of replacing pavement base.
 5. Correct deficiencies in the restoration respecting timing or manner specified for the above items at no additional cost to the City within 24 hours of notification by the City.
 6. Should Contractor fail to timely restore, correct or repair deficiencies, Public Works will complete or cause to be completed such restoration, correction or repair deficiencies, and the completion costs will be deducted from monies due Contractor.

1.11 REQUIREMENTS FOR PROTECTION OF SEWER SYSTEM

- A. Wastewater which is transferred from the Site during this Project shall meet the pre-treatment standards of the San Francisco Municipal Code, section 123, Industrial Waste Ordinance #19-92 and DPW Order No. 158,170 prior to discharge into the City's sewage system.
- B. Should wastewater become contaminated due to Contractor's operations all costs of satisfactory remediation and disposal shall be at no cost to the City. Such costs shall include, but not be limited to, all redesign, reconstruction and pre-treatment costs necessary to satisfy the requirements of the Industrial Waste Ordinance #19-92, and DPW Order No. 158,170.
- C. Should the existing wastewater be contaminated, or should it be uncontaminated but subsequently become contaminated due to conditions other than Contractor's operations, a Change Order will be issued as provided in Article 6 of the General Conditions for additional costs or time extension will be granted as provided in Article 7 of the General Conditions to pretreat the contaminated water prior to routing the flow into the sewer system or other approved disposal at the direction of the City.

- D. Contractor shall be responsible for obtaining and paying for all water discharge permits and for paying all sewer service charges, penalties and other incidental fees and expenses resulting from discharging wastewater into the City's sewerage system by Contractor's operations.

1. The application for such wastewater discharge permit shall be sent to:

San Francisco Public Utilities Commission
Wastewater Enterprise, Collection System Division
3801 3rd Street, Suite 600
San Francisco, CA 94124
Telephone (415) 695-7321

END OF SECTION