

PROJECT LOCATION
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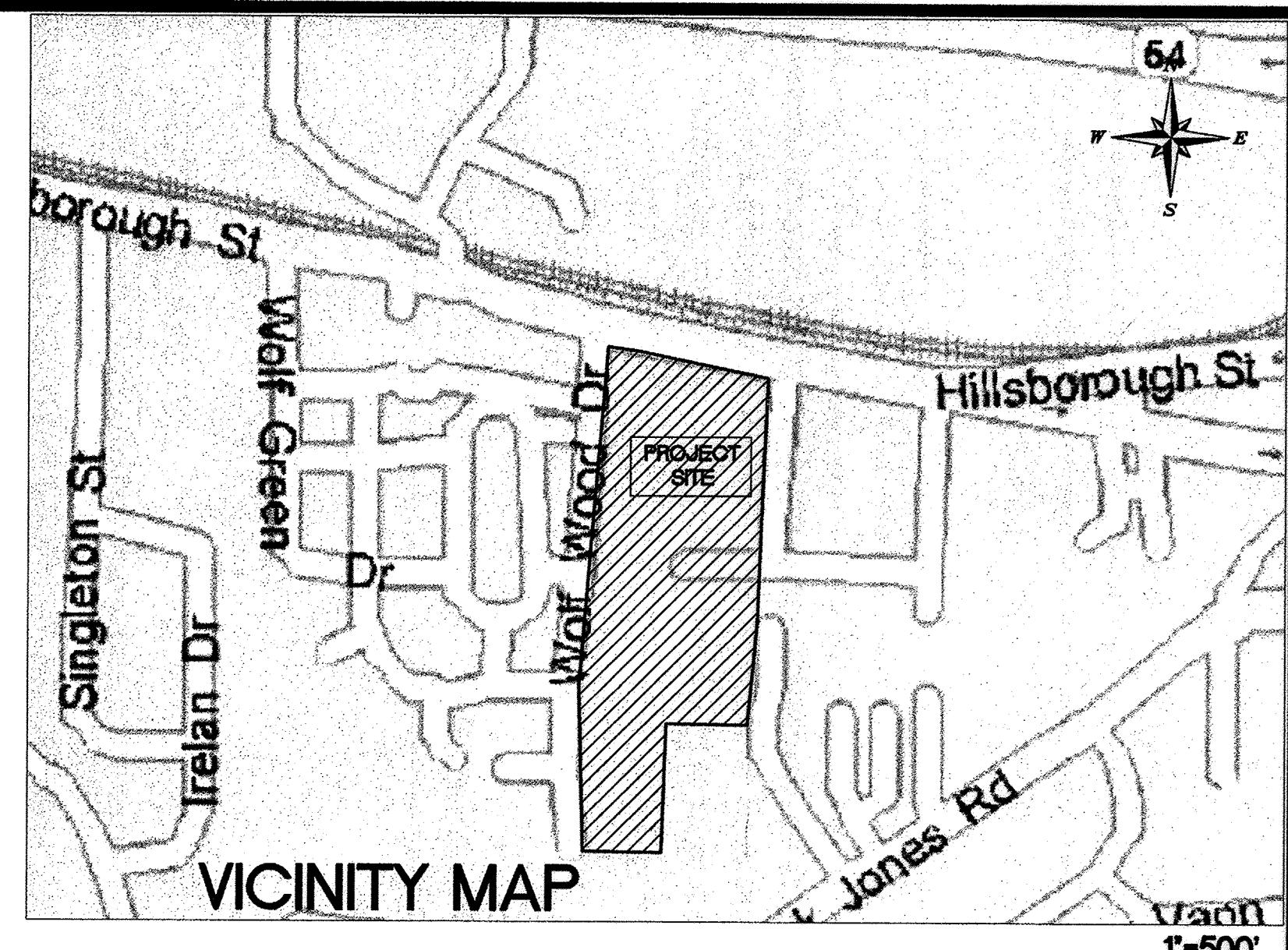
CONSTRUCTION PLANS FOR: THE RETREAT AT RALEIGH

HILLSBOROUGH STREET RALEIGH, NORTH CAROLINA

A DEVELOPMENT BY: LANDMARK PROPERTIES

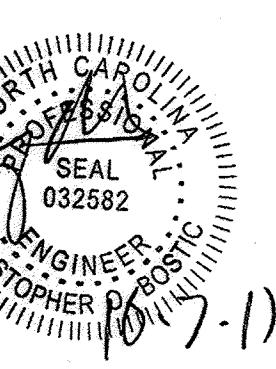
455 EPPS BRIDGE PARKWAY
ATHENS, GA 30606
Ph: (706) 543-1910

CITY OF RALEIGH CASE NUMBERS: S-5-11 (TR 297252) / GH-5-11 (TR 297251)



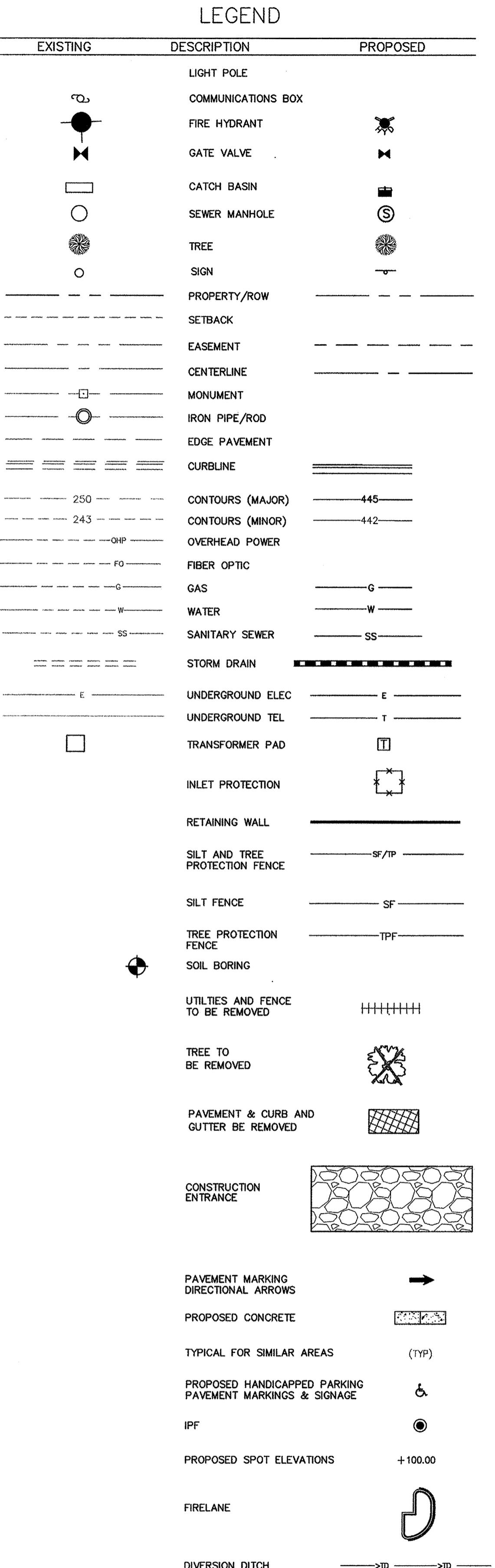
VICINITY MAP

CONTACTS		PROJECT DATA	INDEX OF SHEETS																												
DEVELOPER: LANDMARK PROPERTIES 455 EPPS BRIDGE PARKWAY BUILDING 100, SUITE 101 ATHENS, GA 30606 PHONE: (706) 543-1910 FAX: (706) 543-1909 ATTN.: JASON DOORNOS	ATTENTION CONTRACTORS <small>The Construction Contractor responsible for the extension of water, sewer, and/or reuse, as approved in these plans, is responsible for contacting the Public Works Department at (919) 996-6810 and the Public Utilities Department at (919) 877-4540 at least twenty four hours prior to beginning any of their construction.</small> <small>Failure to notify both City Departments in advance of beginning construction, will result in the issuance of monetary fines and require reinstatement of any water or sewer facilities not inspected as a result of this notification failure.</small> <small>Failure to call for inspection, install a downstream plug, have Permitted Plans on the jobsite, or any other violation of City of Raleigh Standards will result in a fine and possible exclusion from future work in the City of Raleigh.</small>	Development SERVICES CUSTOMER SERVICE CENTER One Exchange Plaza, Suite 400 Raleigh, North Carolina 27601 Phone 919-516-2495 Fax 919-516-2635 Site and Commercial Building Data Sheet GENERAL INFORMATION Development Name: The Retreat at Raleigh Proposed Use: Residential - Group Housing / Cluster Subdivision Property Address(es): Hillsborough Street & Wolf Wood Drive - See attached property information listing Wake County Property Identification Number(s) for each parcel to which these guidelines will apply P.I.N. See attached listing P.I.N. P.I.N. P.I.N. What is your project type? <table border="1"> <tr> <td>Apartment</td> <td>Bank</td> <td>Elderly Facility</td> <td>Hospital</td> <td>Hotel/Motel</td> <td>Industrial Building</td> </tr> <tr> <td>X Mixed Residential</td> <td>Non-residential Condo</td> <td>Office</td> <td>Religious Institution</td> <td>X Residential Condo</td> <td>Retail</td> </tr> <tr> <td>School</td> <td>Shopping Center</td> <td>X Single Family</td> <td>Telecommunication Tower</td> <td>Townhouse</td> <td>X Other</td> </tr> </table> Scope of Work: Mixed Residential Development with associated infrastructure. FOR MULTIFAMILY OR GROUP HOUSING PROJECTS ONLY 1. Total # Of Townhouse Lots <input type="radio"/> Detached <input checked="" type="radio"/> Attached 4. Overall Total # Of Dwelling Units (1-3 Above) 149 2. Total # Of Apartment Or Condominium Units 114 (APARTMENTS) 5. Bedroom Units 1br <input type="checkbox"/> 2br <input type="checkbox"/> 3br <input checked="" type="checkbox"/> 4br or more 107 3. Total # Of Congregate Care Or Life Care Dwelling Units N/A 6. Overall Unit(s)/Acre Densities Per Zoning District(s) 7.9 UNITS / ACRE DEVELOPMENT TYPE AND SITE DATA TABLE (Applicable to all developments) <table border="1"> <tr> <th>Zoning Information</th> <th>Building Information</th> </tr> <tr> <td>Zoning District(s): NB, SC, R-10 If more than one district, provide the acreage of each NB=1.61 / SC=1.76 / R-10 = 18.77</td> <td>Proposed building use(s): Residential and Amenity Clubhouse Existing Building(s) sq. ft. gross All existing structures to be removed</td> </tr> <tr> <td>Overlay District(s): N/A Total Site Acres 25.1 (PMSI) / 17.4 (WMSI) Inside City Limits <input checked="" type="radio"/> Yes <input type="radio"/> No</td> <td>Proposed Building(s) sq. ft. gross: 10,000 sf (Clubhouse) Total sq. ft. gross (existing & proposed): 10,000 sf (Clubhouse)</td> </tr> <tr> <td>Off street parking Required 433 Provided 557 COA (Certificate of Appropriateness) case #: N/A BOA (Board of Adjustment) case # A-18-11 CUD (Conditional Use District) case # Z : N/A</td> <td>Proposed height of building(s): Variable FAR (floor area ratio percentage): N/A Building Lot Coverage percentage N/A (site plans only)</td> </tr> <tr> <td>Stormwater Information Existing Impervious Surface 1.44 / 62,726 acres/square foot Proposed Impervious Surface 10.13 / 441,263 acres/square foot Neuse River Buffer <input checked="" type="radio"/> Yes <input type="radio"/> No Wetlands <input checked="" type="radio"/> Yes <input type="radio"/> No</td> <td>Flood Hazard Area <input type="radio"/> Yes <input checked="" type="radio"/> No If Yes, Alluvial Soils _____ Flood Study _____ FEMA Map Panel # _____ Total Disturbed Area 16.73 / 728,566 acres/square foot</td> </tr> </table> SITE AND COMMERCIAL BUILDING DATA SHEET 01.04.11 1	Apartment	Bank	Elderly Facility	Hospital	Hotel/Motel	Industrial Building	X Mixed Residential	Non-residential Condo	Office	Religious Institution	X Residential Condo	Retail	School	Shopping Center	X Single Family	Telecommunication Tower	Townhouse	X Other	Zoning Information	Building Information	Zoning District(s): NB, SC, R-10 If more than one district, provide the acreage of each NB=1.61 / SC=1.76 / R-10 = 18.77	Proposed building use(s): Residential and Amenity Clubhouse Existing Building(s) sq. ft. gross All existing structures to be removed	Overlay District(s): N/A Total Site Acres 25.1 (PMSI) / 17.4 (WMSI) Inside City Limits <input checked="" type="radio"/> Yes <input type="radio"/> No	Proposed Building(s) sq. ft. gross: 10,000 sf (Clubhouse) Total sq. ft. gross (existing & proposed): 10,000 sf (Clubhouse)	Off street parking Required 433 Provided 557 COA (Certificate of Appropriateness) case #: N/A BOA (Board of Adjustment) case # A-18-11 CUD (Conditional Use District) case # Z : N/A	Proposed height of building(s): Variable FAR (floor area ratio percentage): N/A Building Lot Coverage percentage N/A (site plans only)	Stormwater Information Existing Impervious Surface 1.44 / 62,726 acres/square foot Proposed Impervious Surface 10.13 / 441,263 acres/square foot Neuse River Buffer <input checked="" type="radio"/> Yes <input type="radio"/> No Wetlands <input checked="" type="radio"/> Yes <input type="radio"/> No	Flood Hazard Area <input type="radio"/> Yes <input checked="" type="radio"/> No If Yes, Alluvial Soils _____ Flood Study _____ FEMA Map Panel # _____ Total Disturbed Area 16.73 / 728,566 acres/square foot	Sheet Number Sheet Title C-00 COVER SHEET C-01 LEGEND AND GENERAL NOTES C-02 EXISTING CONDITIONS PLAN C-03 OVERALL DEMOLITION PLAN C-03A DEMOLITION PLAN C-03B DEMOLITION PLAN C-04 SUBDIVISION PLAN C-05 OVERALL SITE PLAN C-05A SITE PLAN C-05B SITE PLAN C-06 OVERALL GRADING AND DRAINAGE PLAN C-06A GRADING AND DRAINAGE PLAN C-06B GRADING AND DRAINAGE PLAN C-07 OVERALL UTILITY PLAN C-07A UTILITY PLAN C-07B UTILITY PLAN C-08 PLAN AND PROFILE WHITEHURST WAY C-09 PLAN AND PROFILE HARTSELL LANE C-10 PLAN AND PROFILE HEGARTY TERRACE C-11 PLAN AND PROFILE TEBELL LANE C-12 PLAN AND PROFILE GABRIEL TRAIL C-13 PLAN AND PROFILE WHITEHURST WAY C-14 PLAN AND PROFILE VAN LIEW WAY C-15 PLAN AND PROFILE FEATHERS LANE C-16 PLAN AND PROFILE CASE TERRACE C-17 PLAN AND PROFILE SHAVLIK TRAIL C-18 PLAN AND PROFILE WAYCROSS STREET C-19 SANITARY SEWER PLANS AND PROFILES C-22 SITE DETAILS C-23 SITE DETAILS C-24 STORM DRAINAGE DETAILS C-25 STORM DRAINAGE DETAILS C-26 SEWER DETAILS C-27 SEWER DETAILS C-28 WATER DETAILS C-29 WATER DETAILS C-30 WATER DETAILS C-33 WET POND DETAILS
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		9/21/11 CITY OF RALEIGH 1ST REVIEW COMMENTS																													
		NO. DATE DESCRIPTION																													
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PRIVATE STREET INSPECTION STATEMENT THE CONSTRUCTION INSPECTION OF PRIVATE STREETS WITHIN CLUSTER UNITS, CONDOMINIUMS, GROUP HOUSING, TOWNHOUSE DEVELOPMENTS AND MOBILE HOME PARKS SUBMITTED FOR CITY APPROVAL IS THE RESPONSIBILITY OF THE OWNER/DEVELOPER. COPIES OF CERTIFIED INSPECTION REPORTS INVOLVING SUB GRADE/AGGREGATE BASE PROOF ROLLS, AGGREGATE BASE AND ASPHALT DENSITIES AND THICKNESS, AND OTHER PERTINENT INFORMATION MUST BE SUBMITTED TO THE CITY'S ENGINEERING INSPECTIONS MANAGER AT P.O. BOX 590, RALEIGH, NC 27602 OR FAXED TO (919) 831-6339. CONTACT PAUL KALIAM AT (919) 516-2159 TO OBTAIN DETAILS OF THE ABOVE REQUIREMENTS.		NC CERTIFICATE OF AUTHORIZATION: F-0102 PREPARED IN THE OFFICE OF: Kimley-Horn and Associates, Inc. 333 FAYETTEVILLE STREET, SUITE 600 RALEIGH, NC 27601 PHONE: (919) 835-1494 FAX: (919) 653-5847 WITHIN THE SIGHT TRIANGLES SHOWN ON THIS PLAN, NO OBSTRUCTION BETWEEN TWO (2) FEET AND EIGHT (8) FEET IN HEIGHT ABOVE THE CURB LINE ELEVATION OR THE NEAREST TRAVELED WAY, IF NO CURBING EXISTS. <small>MINIMUM CORNER CLEARANCE FROM CURB LINE OF INTERSECTING STREETS SHALL BE AT LEAST (20) FEET FROM THE POINT OF TANGENCY.</small> <small>TRANSPORTATION SERVICES: <i>D&K 10/13/11</i> PUBLIC UTILITIES: <i>CS 10/14/11</i> CONSERVATION ENGINEER: <i>SPC 10/13/11</i> PLANNING: <i>Baker 10/13/11</i></small>																													
SOLID WASTE INSPECTIONS STATEMENT: THIS ALL RENTAL PROJECT WILL PROVIDE TWO DUMPSTER LOCATIONS TO HANDLE SOLID WASTE AND RECYCLING FOR THE RESIDENTS. AS SUCH, THE DEVELOPER/MANAGEMENT WILL CONTRACT WITH A PRIVATE HAULER.		Copyright Kimley-Horn and Associates, Inc., 2011 DATE: JULY 29, 2011 JOB NUMBER: 011170001																													



SEAL:

CHRISTOPHER BAKER (10/7/11)



GENERAL NOTES:

- CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR PRECISE BUILDING DIMENSIONS, BOUNDARIES, ENTRIES, LOCATIONS, ANGLES, LOCATIONS AND DIMENSIONS OF EXIT PORCHES, RAMPS, DOWNSPOUTS, GRAVEL AREAS ADJACENT TO BUILDING WALLS, UTILITY ENTRANCE LOCATIONS AND BOLLARDS IN BUILDING SIDEWALKS.
- ACCESSIBLE SIGNS WITH A "VAN" MARKING SHALL HAVE ADDITIONAL SIGN MOUNTED ABOVE THE SYMBOL OF ACCESSIBILITY SIGN DENOTING VAN ACCESSIBILITY.
- REFER TO DETAIL SHEET Q-22 FOR DETAILS OF ON-SITE SIGNAGE, STRIPPING, AND PAVEMENT MARKING. REFER TO SITE PLAN FOR ADDITIONAL DIMENSIONAL INFORMATION.
- ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY, COUNTY AND STATE REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
- ALL ISLANDS WITH CURB & GUTTER SHALL BE LANDSCAPED. THOSE ISLANDS ARE TO HAVE CURB & GUTTER AS SHOWN ON THE CONSTRUCTION DRAWINGS.
- SITE BOUNDARY, TOPOGRAPHY, UTILITY, TREE, AND ROAD INFORMATION TAKEN FROM FIELD SURVEYS BY MCKIM & CREED DATED DECEMBER 21, 2010.
- THE CONTRACTOR SHALL EMPLOY ALL NECESSARY BARRICADES, SIGNS, FENCES, FLASHING LIGHTS, TRAFFIC MEN, ETC. FOR MAINTENANCE AND PROTECTION OF TRAFFIC AS REQUIRED BY THE NORTH CAROLINA DEPT. OF TRANSPORTATION (NCDOT) AND CITY OF RALEIGH ENGINEERING DEPARTMENT.
- THE CONTRACTOR SHALL PROTECT ALL MONUMENTS, IRON PINS, AND PROPERTY CORNERS DURING CONSTRUCTION.
- THE CONTRACTOR SHALL REPLACE EXISTING CONCRETE CURBS, SIDEWALK, PAVING, AND GUTTER AS NECESSARY.
- APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM THE AFFECTED PROPERTY OWNERS.
- CONTRACTOR AGREES TO REPAIR ANY DAMAGE TO THE PUBLIC RIGHT-OF-WAY IN ACCORDANCE WITH THE STANDARDS OF THE NCDOT AND CITY OF RALEIGH.
- COORDINATE ALL CURB AND STREET GRADES IN INTERSECTIONS WITH INSPECTOR.
- THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE OWNER ANY DISCREPANCIES FOUND BETWEEN THE ACTUAL FIELD CONDITIONS AND THE CONSTRUCTION DOCUMENTS AND SHALL WAIT FOR INSTRUCTION PRIOR TO PROCEEDING.
- ALL SITE DIMENSIONS ARE REFERENCED TO THE FACE OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED. ALL BUILDING DIMENSIONS ARE REFERENCED TO THE OUTSIDE FACE OF THE STRUCTURE.
- THE CONTRACTOR SHALL CONSTRUCT ACCESSIBLE RAMPS AT ALL INTERSECTIONS IN ACCORDANCE WITH THE CITY OF RALEIGH STANDARD DETAIL AND NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARDS MANUAL (LATEST REVISIONS FOR ACCESSIBLE RAMP DETAILS).
- SIGHT TRIANGLES SHOWN ARE THE MINIMUM REQUIRED.
- NO TREE SHALL BE LOCATED WITHIN 15' OF A LIGHTING LOCATION.
- ALL CONSTRUCTION MUST BE PERFORMED IN ACCORDANCE WITH CURRENT NCDOT AND CITY OF RALEIGH STANDARD SPECIFICATIONS AND DETAILS.
- ALL WORK MUST COMPLY WITH NORTH CAROLINA STATE BUILDING AND HANDICAPPED ACCESSIBILITY CODE VOL. IC.
- VERTICAL DATUM FOR SURVEY IS NAVD 88.

GRADING:

- ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY OF RALEIGH AND NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT) REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
- ALL PROPOSED CONTOURS AND SPOT ELEVATIONS REFLECT FINISHED GRADES.
- ALL ELEVATIONS ARE IN REFERENCE TO THE BENCHMARK, AND THIS MUST BE VERIFIED BY THE GENERAL CONTRACTOR PRIOR TO GROUND BREAKING.
- THE CONTRACTOR SHALL IMMEDIATELY REPORT TO OWNER ANY DISCREPANCIES FOUND BETWEEN ACTUAL FIELD CONDITIONS AND CONSTRUCTION DOCUMENTS AND SHALL WAIT FOR INSTRUCTION PRIOR TO PROCEEDING.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING EXISTING UTILITIES, AND SHALL REPAIR ALL DAMAGE TO EXISTING UTILITIES THAT OCCUR DURING CONSTRUCTION.
- CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY TO TRANSITION BACK TO EXISTING GRADE.
- ALL FILL TO BE COMPAKTED PER THE RECOMMENDATIONS OF A GEOTECHNICAL ENGINEER.
- LIMITS OF CLEARING SHOWN ON GRADING PLAN ARE BASED UPON THE APPROXIMATE CUT AND FILL SLOPE LIMITS, OR OTHER GRADING REQUIREMENTS.
- THE PROPOSED CONTOURS SHOWN IN DRIVES AND PARKING LOTS AND SIDEWALKS ARE FINAL ELEVATIONS INCLUDING THOSE THAT REFER TO PAVEMENT CROSS SECTION DATA TO ESTABLISH CORRECT SUBGRADE OR AGGREGATE BASE COURSE ELEVATIONS TO BE COMPLETED UNDER THIS CONTRACT.
- CONTRACTOR SHALL INSURE POSITIVE DRAINAGE SO THAT RUNOFF WILL DRAIN BY GRAVITY FLOW ACROSS NEW PAVEMENT AREAS TO NEW OR EXISTING DRAINAGE INLETS OR SHEET OVERLAND.
- ANY GRADING, BEYOND THE LIMITS OF CONSTRUCTION AS SHOWN ON THE GRADING PLAN IS SUBJECT TO A FINE.
- TOPOGRAPHIC INFORMATION TAKEN FROM A TOPOGRAPHIC SURVEY BY MCKIM & CREED DATED DECEMBER 21, 2010.
- THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE GENERAL N.P.D.E.S. PERMIT FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
- ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE 4 INCHES TOPSOIL.
- CONTRACTOR SHALL GRASS DISTURBED AREAS UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
- CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
- THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF ALL SHEETING, SHORING, BRACING AND SPECIAL EXCAVATION MEASURES REQUIRED TO MEET OSHA, FEDERAL STATE AND LOCAL REGULATIONS PERTAINING TO THE EXECUTION OF THE WORK INDICATED ON THESE DRAWINGS. THE DESIGN ENGINEER ACCEPTS NO RESPONSIBILITY FOR THE DESIGN(S) TO INSTALL SAID ITEMS.
- THE CONTRACTOR SHALL INCLUDE IN THE CONTRACT PRICE ANY Dewatering NECESSARY TO CONSTRUCT THE PROJECT AS SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS AND EXACT UTILITY ENTRANCE LOCATIONS AND ELEVATIONS.
- ALL FILL MATERIALS, EXISTING BUILDING FOUNDATIONS, PAVEMENT AND UTILITY STRUCTURES, TOPSOIL AND ANY OTHER DETERIORATED MATERIALS SHALL BE COMPLETELY REMOVED FROM WITHIN THE BEARING ZONE BELOW THE STRUCTURE.
- ALL FOUNDATION AND UTILITY EXCAVATION SHALL BE INSPECTED BY A QUALIFIED GEOTECHNICAL REPRESENTATIVE TO DETERMINE WHETHER UNUSABLE MATERIAL MUST BE REMOVED. ALL UNDESIRABLE MATTER SHALL BE REMOVED, BACKFILLED AND COMPACTED WITH SUITABLE MATERIAL AS REQUIRED BY THE GEOTECHNICAL REPRESENTATIVE AT CONTRACTOR'S EXPENSE.
- GRADES, ELEVATIONS AND LOCATIONS SHOWN ARE APPROXIMATE. ALL DIRECTED ELEVATIONS ARE MAIN ELEVATIONS. THE APPROXIMATE ELEVATION CONDITIONS, STATIONS, OFFSETS AND ELEVATIONS REFER TO THE CENTER OF DROP INLETS, MANHOLES AND JUNCTION BOXES, AND THE MIDPOINT OF THE LIP FOR CATCH BASINS.
- CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
- EXISTING AND PROPOSED GRADE CONTOUR INTERVALS SHOWN AT 1 FOOT.
- CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES. INCLUDES REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE. UTILITIES ARE TO BE REMOVED TO THE RIGHT-OF-WAY.
- BEFORE ANY EARTHWORK IS DONE, THE CONTRACTOR SHALL STAKE OUT AND MARK THE LIMITS OF PAVEMENT AND OTHER ITEMS ESTABLISHED IN THE PLANS. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY ENGINEERING AND SURVEYING FOR LINE AND GRADE CONTROL POINTS RELATED TO EARTHWORK.
- ALL PAVEMENT SUB GRADES SHALL BE SCARIFIED TO A DEPTH OF 8 INCHES AND COMPACTED TO A MINIMUM DENSITY OF 98 PERCENT OF ASTM D-698 DENSITY TEST. THE PAVEMENT CONSTRUCTION SHALL BE SHOWN ON THE CONSTRUCTION PLANS OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER. FILL SHALL BE PLACED AND COMPACTED IN MAXIMUM 8' LIFTS. IN AREAS WHERE ROCK IS ENCOUNTERED AT FINAL SUB GRADE ELEVATION, THE EXPOSED ROCK SHALL BE TOPPED WITH A LEVELING COURSE OF SANDY CLAY OR CLAYEY SAND (P.I. BETWEEN 4 AND 15) AS NEEDED TO PROVIDE A SMOOTH SURFACE FOR PAVING.
- THE CONTRACTOR SHALL CLEAR AND GRUB THE SITE AND PLACE, COMPACT, AND MOISTURE CONDITION ALL FILL PER THE PROJECT GEOTECHNICAL ENGINEER'S SPECIFICATIONS. THE FILL MATERIAL TO BE USED SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT.
- TESTING OF MATERIALS REQUIRED FOR THE CONSTRUCTION OF THE PAVING IMPROVEMENTS SHALL BE PERFORMED BY AN APPROVED AGENCY FOR TESTING MATERIALS. THE TESTING LABORATORY AND THE PAYMENT OF SUCH TESTING SERVICES SHALL BE MADE BY THE OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO SHOW BY STANDARD TESTING PROCEDURES THAT THE WORK CONSTRUCTED DOES MEET THE REQUIREMENTS OF THE SPECIFICATIONS.
- THE LOCATIONS OF STORM SEWER STRUCTURES SHOWN ON THESE PLANS (AND PROVIDED IN ASSOCIATED CAD FILES) ARE APPROXIMATE. THE CONTRACTOR SHALL STAKE ALL CURB INLET STRUCTURES SUCH THAT INLET TOPS ALIGN HORIZONTALLY WITH PROPOSED FINISHED GRADE (PER DETAIL, IF PROVIDED). WHERE PROPOSED STORM SEWERS TIE TO EXISTING STRUCTURES, PIPES, ETC., THE CONTRACTOR SHALL FIELD ADJUST PROPOSED STORM SEWERS TO MATCH THE LOCATIONS OF THESE EXISTING FEATURES.

UTILITY NOTES:

- ALL FILL MATERIAL IS TO BE IN PLACE, AND COMPAKTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
- CONTRACTOR SHALL NOTIFY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT INSPECTORS 72-HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
- SANITARY SEWER PIPE SHALL BE AS FOLLOWS: 8" & 10" PVC SDR35 PER ASTM D-3034, FOR PIPES LESS THAN 12' DEEP BUT MORE THAN 5' DEEP. DUCTILE IRON FOR ALL OTHER INSTALLATIONS. 4" & 6" PVC SCHEDULE 40 DUCTILE IRON PIPE PER AWWA C150 AND AWWA C151.
- WATER LINES SHALL BE AS FOLLOWS: 4" AND LARGER - DUCTILE IRON PIPE PER AWWA C150 SMALLER THAN 4" - COPPER TUBE
- MINIMUM TRENCH WIDTH SHALL BE 2 FEET.
- ALL WATER JOINTS ARE TO BE MECHANICAL JOINTS WITH THRUST BLOCKING.
- ALL UTILITIES SHOULD BE KEPT TEN (10') APART (PARALLEL) OR WHEN CROSSING 24" VERTICAL CLEARANCE (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE).
- CONTRACTOR SHALL MAINTAIN A MINIMUM OF 3'-0" COVER ON ALL WATERLINES.
- IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATERLINES, SANITARY LINES, STORM AND GAS LINES (EXISTING OR PROPOSED), THE SANITARY LINE SHALL BE DUCTILE IRON PIPE WITH MECHANICAL JOINTS AT LEAST 10 FEET ON BOTH SIDES OF CROSSING. THE WATERLINE SHALL HAVE MECHANICAL JOINTS WITH APPROPRIATE THRUST BLOCKING AS REQUIRED TO PROVIDE A MINIMUM OF 24" CLEARANCE. MEETING REQUIREMENTS OF ANSI A21.10 OR ANSI 21.11 (AWWA C-151) (CLASS 50).
- LINES UNDERGROUND SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
- ALL CONCRETE FOR ENCASMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH AT 3000 P.S.I.
- THE CITY OF RALEIGH HAS THE RIGHT TO INSPECT ALL PRIVATE WATER SYSTEMS.
- EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
- REFER TO ARCHITECTURAL DRAWINGS FOR TIE-IN LOCATION AND ELEVATION OF ALL UTILITIES.
- CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT WITH REGARD TO MATERIALS, INSTALLATION, AND TESTING OF THE WATER AND SEWER LINES.
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE APPROPRIATE COMPANIES. WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD FOR A CONCRETE PAD SHALL BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES CHARTED OR UNCHARTED WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS AND/OR TESTING REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO CONSTRUCTED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICE.
- CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
- ALL UTILITY MAIN LENGTHS SHOWN ARE APPROXIMATE.
- ALL EXISTING UTILITIES PROPOSED TO BE RELOCATED ON THESE PLANS SHALL BE PLACED UNDERGROUND.
- ALL SANITARY SEWER AND WATER DISTRIBUTION SYSTEM WORK TO BE INSTALLED BY A LICENSED UTILITY CONTRACTOR.
- THE CONTRACTOR SHALL COORDINATE WITH PROGRESS ENERGY AND AT&T FOR INSTALLATION OF PRIMARY ELECTRIC SERVICE AND TELEPHONE SERVICE TO THE PROPOSED BUILDINGS.
- WHEN A WATER MAIN CROSSES OVER A SEWER MAIN, THERE MUST BE TWENTY-FOUR INCHES OF VERTICAL SEPARATION. IF THE WATER MAIN MUST GO UNDER THE SEWER MAIN, BOTH THE LINES SHALL BE DOUBLE IRON FOR A DISTANCE OF TEN FEET ON EITHER SIDE OF THE CROSSING WITH A TWENTY-FOUR INCH VERTICAL SEPARATION. THE CROSSING OF OTHER UNDERGROUND PIPE REQUIRES A MINIMUM OF TWELVE INCHES OF VERTICAL SEPARATION. ALL DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER.
- WHEN A WATER LINE PASSES OVER OR UNDER A STORM SEWER, VERTICAL SEPARATION OF 24 INCHES SHALL BE MAINTAINED UNLESS BOTH LINES ARE OF DUCTILE IRON OR ENCASED IN CONCRETE. A CONCRETE PAD SHALL BE POURED BETWEEN THE TWO. DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER.

BACKFLOW PREVENTION NOTES:

- THERE SHALL BE NO TAPS, PIPING BRANCHES, UNAPPROVED BYPASS PIPING, APPURTENANCES CONNECTED TO THE SUPPLY LINE BETWEEN ANY WATER METER AND THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT REQUIRED BACKFLOW PREVENTER.
- EACH CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT REQUIRED BACKFLOW PREVENTER ASSEMBLY IS REQUIRED TO BE TESTED BY AN APPROVED CERTIFIED TESTER PRIOR TO PLACING THE WATER SYSTEM INTO SERVICE.
- 8" DOUBLE CHECK VALVE ASSEMBLY SHALL BE INSTALLED ABOVE-GROUND WITHIN AN INSULATED ENCLOSURE PER CITY OF RALEIGH REQUIREMENTS (HEATED TO 40°F MIN.). ENCLOSURE TO INCLUDE DRAIN PORT(S) FOR DISCHARGE WATER PER CITY OF RALEIGH REQUIREMENTS.

S-5-11	
UTILITY INSTALLATIONS AND OTHER PUBLIC FACILITIES, INCLUDING SIDEWALKS AND HANDICAP RAMPS ARE TO BE CONSTRUCTED ON ALL STREETS AS SPECIFIED BY CITY CODE. THESE FACILITIES HAVE BEEN LOCATED ON THE PLANS AND SHALL BE SO INSTALLED UNLESS A CHANGE IS AUTHORIZED BY WRITTEN APPROVAL. PUBLIC SANITARY SEWER EASEMENTS ARE TO BE RECORDED PRIOR TO FINAL ACCEPTANCE.	
SIGNATURE: <i>[Signature]</i>	
TRANSPORTATION SERVICES: <i>C-10/11/11</i>	
PUBLIC UTILITIES: <i>C-10/11/11</i>	
CONSERVATION ENGINEER: <i>SPL 10/13/11</i>	
PLANNING: <i>Baker 10/13/11</i>	

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/OR NCDOT STANDARDS AND SPECIFICATIONS.	
SHEET NUMBER	
C-01	

CITY OF RALEIGH 1ST REVIEW COMMENTS			
9/21/11	WJB		
REVISIONS	DATE	BY	

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333 FAYETTEVILLE STREET, SUITE 600, RALEIGH, NC 27601
PHONE: 919-835-1494 FAX: 919-653-5847
WWW.KIMLEY-HORN.COM

NC CERTIFICATE OF AUTHORIZATION: F-0102

CHECKED BY PAB

RALEIGH

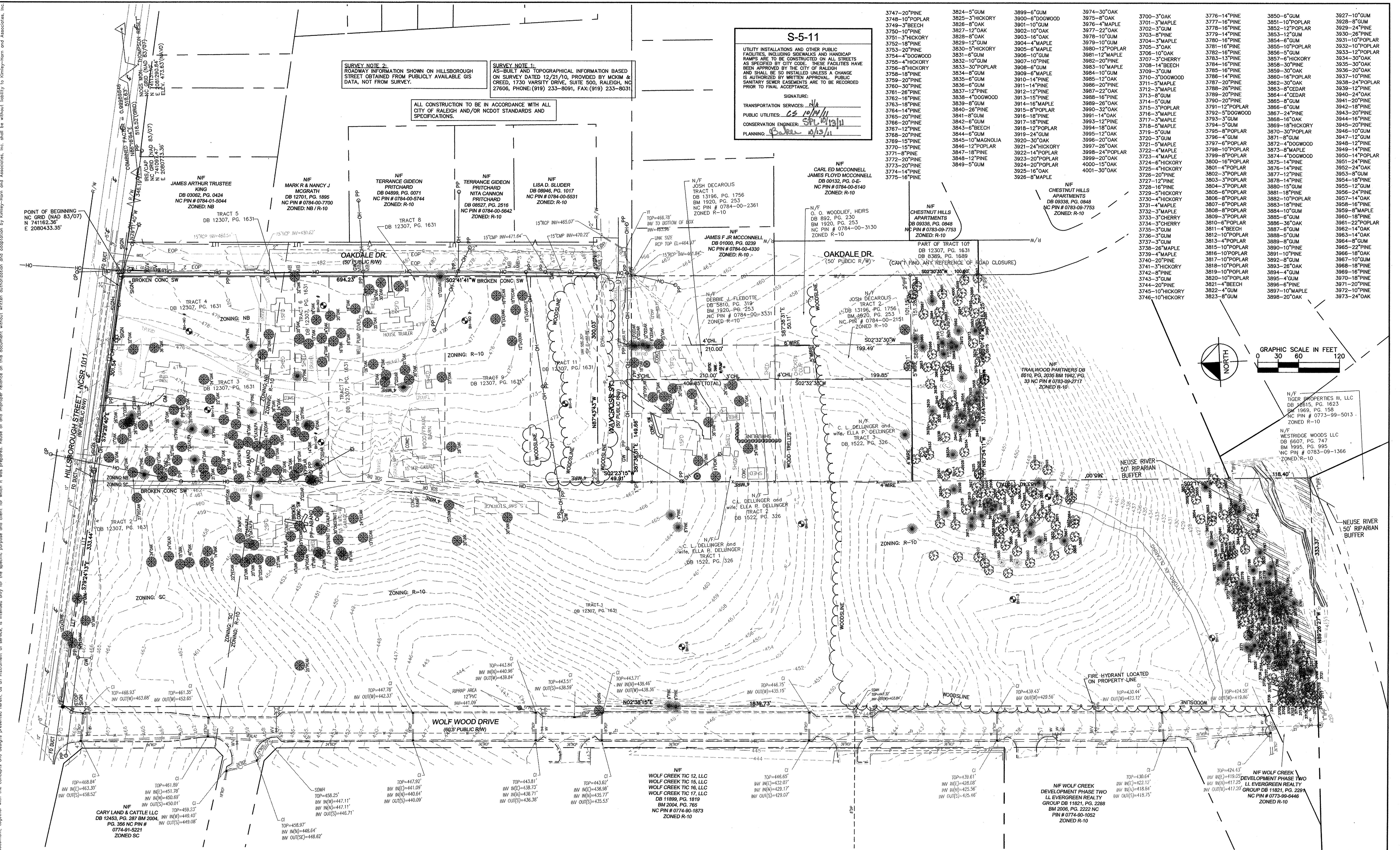
NORTH CAROLINA

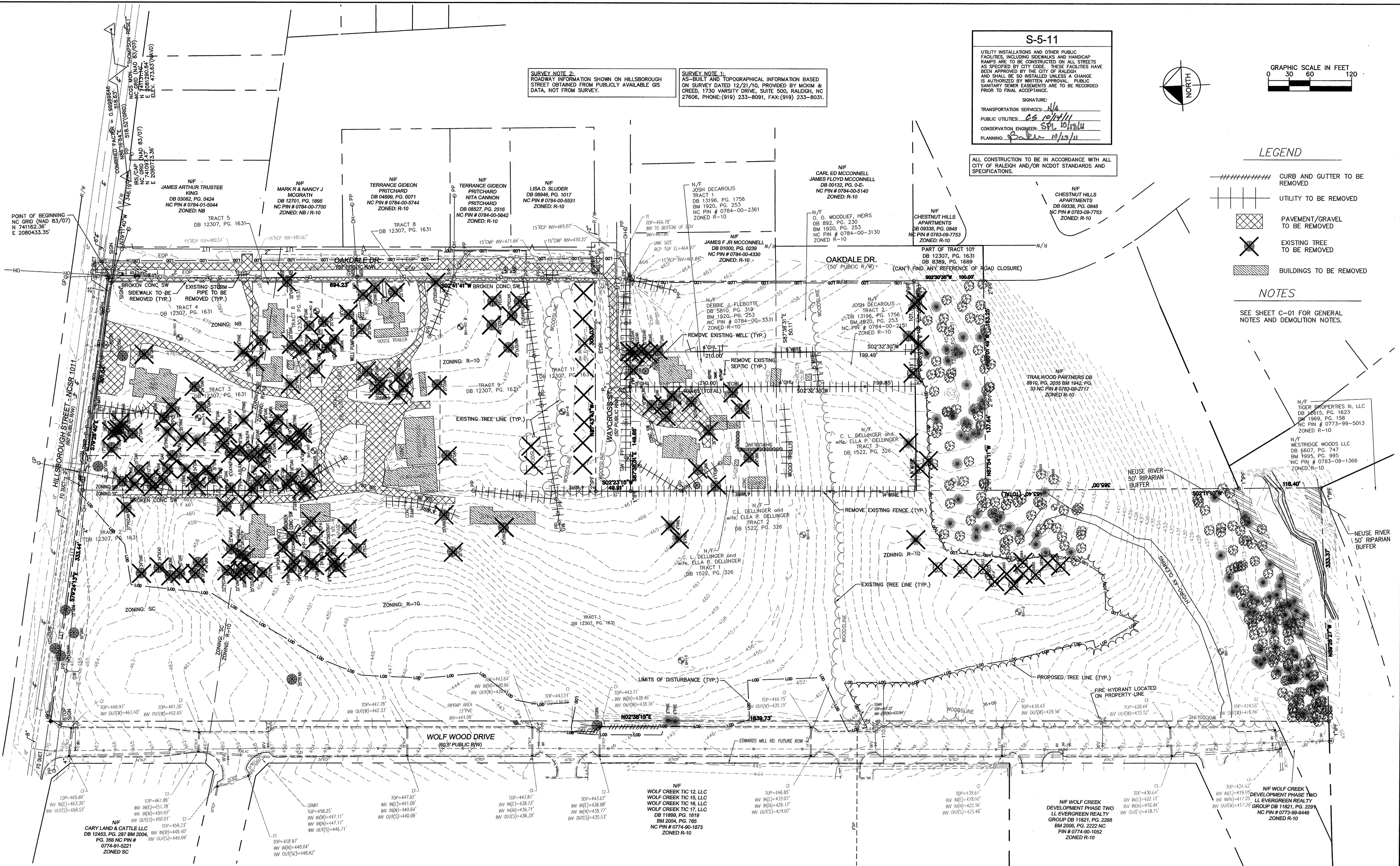
THE RETREAT AT RALEIGH

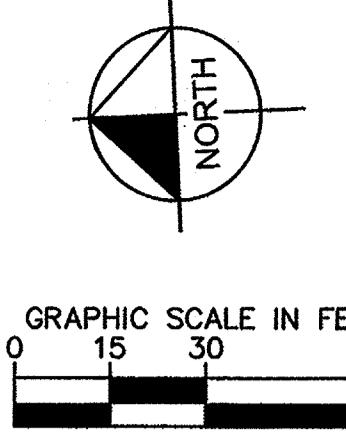
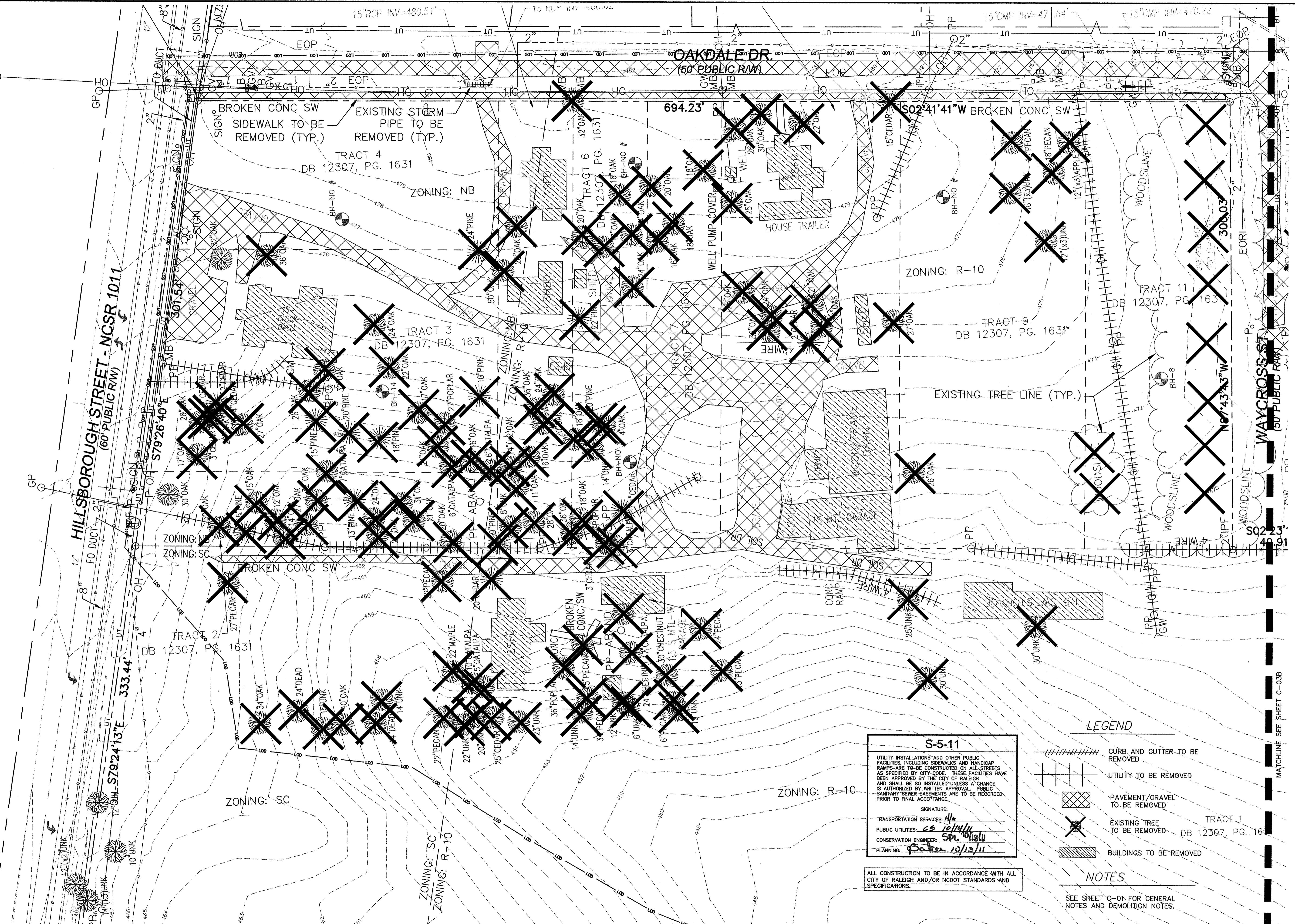
PREPARED FOR

LANDMARK PROPERTIES

THE RETREAT AT RALEIGH







The logo consists of three black squares arranged horizontally. The first square contains a white right-pointing triangle. The second square is solid black. The third square contains a white left-pointing triangle. To the right of the logo, the company name is written in a large, bold, sans-serif font.

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PHONE: 919-835-1494 FAX: 919-653-5847
WWW.KIMLEY-HORN.COM

NC CERTIFICATE OF AUTHORIZATION

KHA
01

7

SCALE

DESIGN

DRAWN

-0102 CHECK

THE RETREAT AT RALEIGH

PREPARED FOR

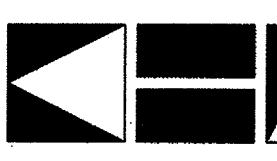
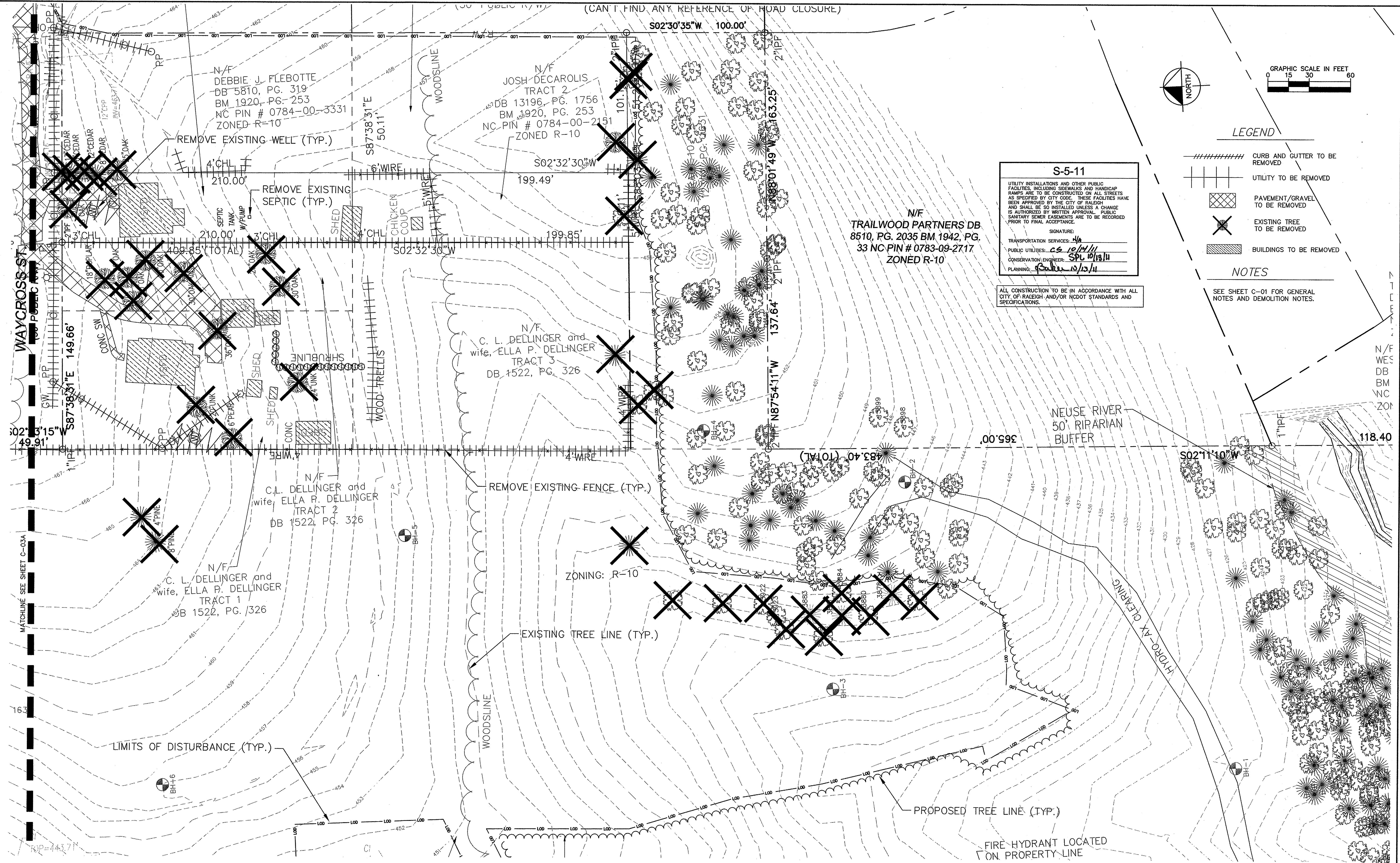
LANDMARK PROPERTIES

A circular seal with a scalloped outer edge. The words "NORTH CAROLINA" are at the top and "PROFESSIONAL" are at the bottom. In the center, it says "SEAL" above the number "032582". The bottom half contains the word "ENGINEER" and the name "CHRISTOPHER J. BOSTIC". The date "JULY 1-11" is written at the bottom right.

DEMOLITION PLAN

SHEET NUMBER
C-03A

Plotted By: Brewer, Jordan Sheet Set: Retreat at Raleigh Layout: C-03B DEMOLITION PLAN September 21, 2011 10:06:26am K:\RDT_LDEV\011170001_The Retreat at Raleigh-SP-CD\15_CAD Files\DWGs\C-03B DEMOLITION PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



The logo consists of a black square containing a white triangle pointing upwards and to the right.

**Kimley-Horn
and Associates, Inc.**

NEY-HORN AND ASSOCIATES, INC.
STREET, SUITE 600, RALEIGH, NC 27601
835-1494 FAX: 919-653-5847

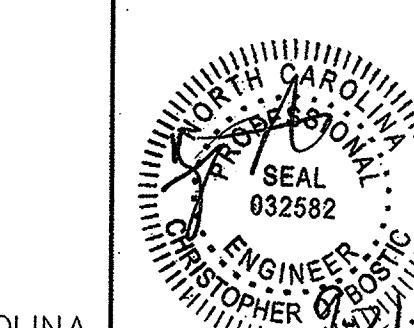
NC CERTIFICATE OF AUTHORIZATION: E-01

KHA P
0111
DA
7/2
SCALE A
DESIGNED
DRAWN BY
02 CHECKED

THE RETREAT AT RALEIGH

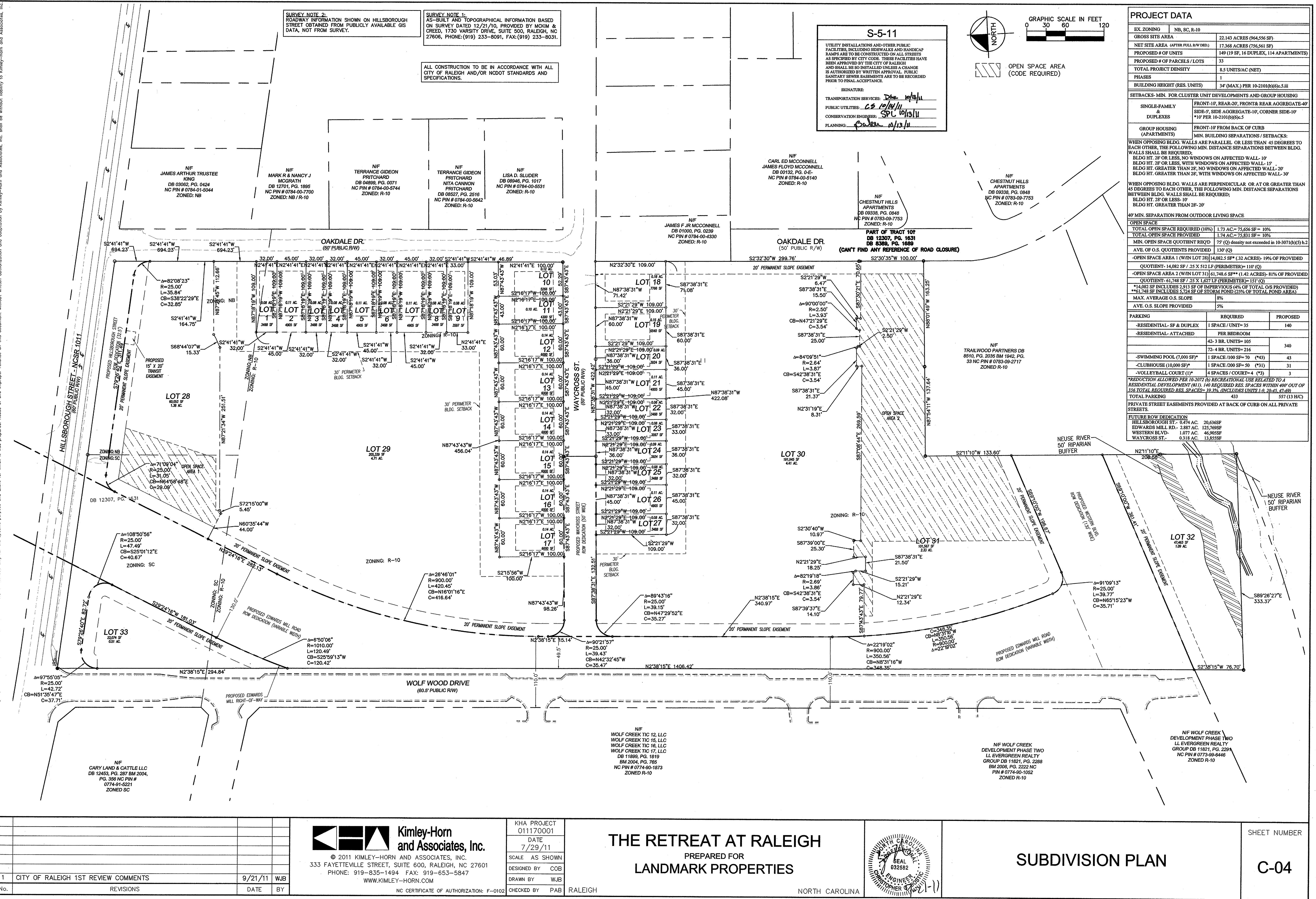
PREPARED FOR

LANDMARK PROPERTIES

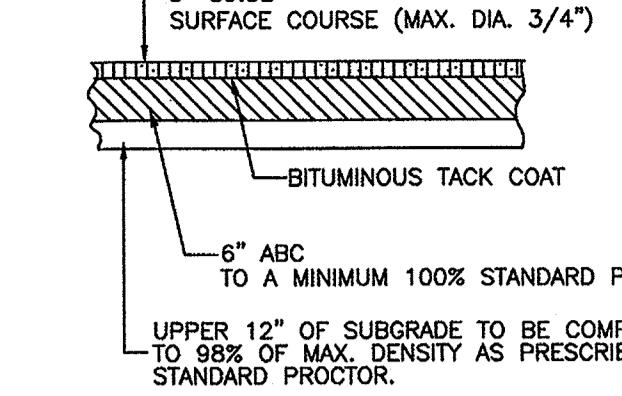
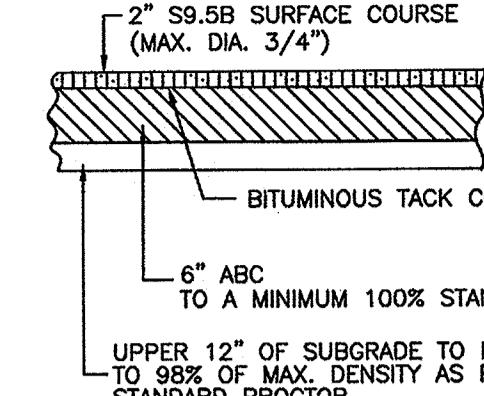
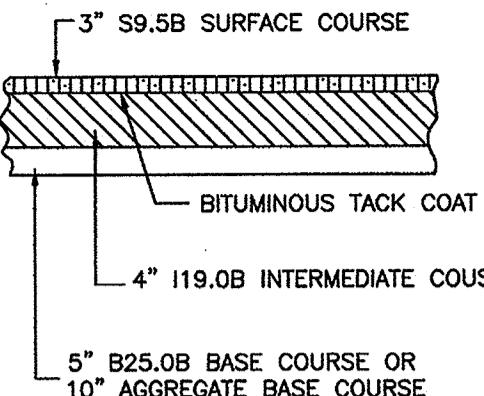


DEMOLITION PLAN

SHEET NUMBER
C-03B



SOLID WASTE INSPECTIONS STATEMENT:
THIS ALL RENTAL PROJECT WILL PROVIDE TWO DUMPSTER LOCATIONS TO HANDLE SOLID WASTE AND RECYCLING FOR THE RESIDENTS. AS SUCH, THE DEVELOPER/MANAGEMENT WILL CONTRACT WITH A PRIVATE HAULER.

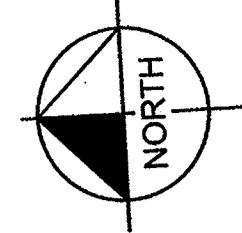


LEGEND

- HEAVY DUTY ASPHALT PAVEMENT
- LIGHT DUTY ASPHALT PAVEMENT
- CITY STREET NEW PAVEMENT (SEE DETAIL STD. #20.31 SHEET C-23)
- CONCRETE PAVEMENT
- OPEN SPACE (CODE REQUIRED)
- NCDOT NEW PAVEMENT
- UNIT NUMBER
- UNIT TYPE

SURVEY NOTE 1:
ROADWAY INFORMATION SHOWN ON HILLSBOROUGH STREET IS OBTAINED FROM PUBLICLY AVAILABLE GIS DATA, NOT FROM SURVEY.

SURVEY NOTE 2:
ASSESSMENT AND TOPOGRAPHICAL INFORMATION BASED ON SURVEY DATED 12/21/10, PROVIDED BY MCKIM & CREED, 1730 VARSITY DRIVE, SUITE 500, RALEIGH, NC 27606, PHONE: (919) 233-8091, FAX: (919) 233-8031.



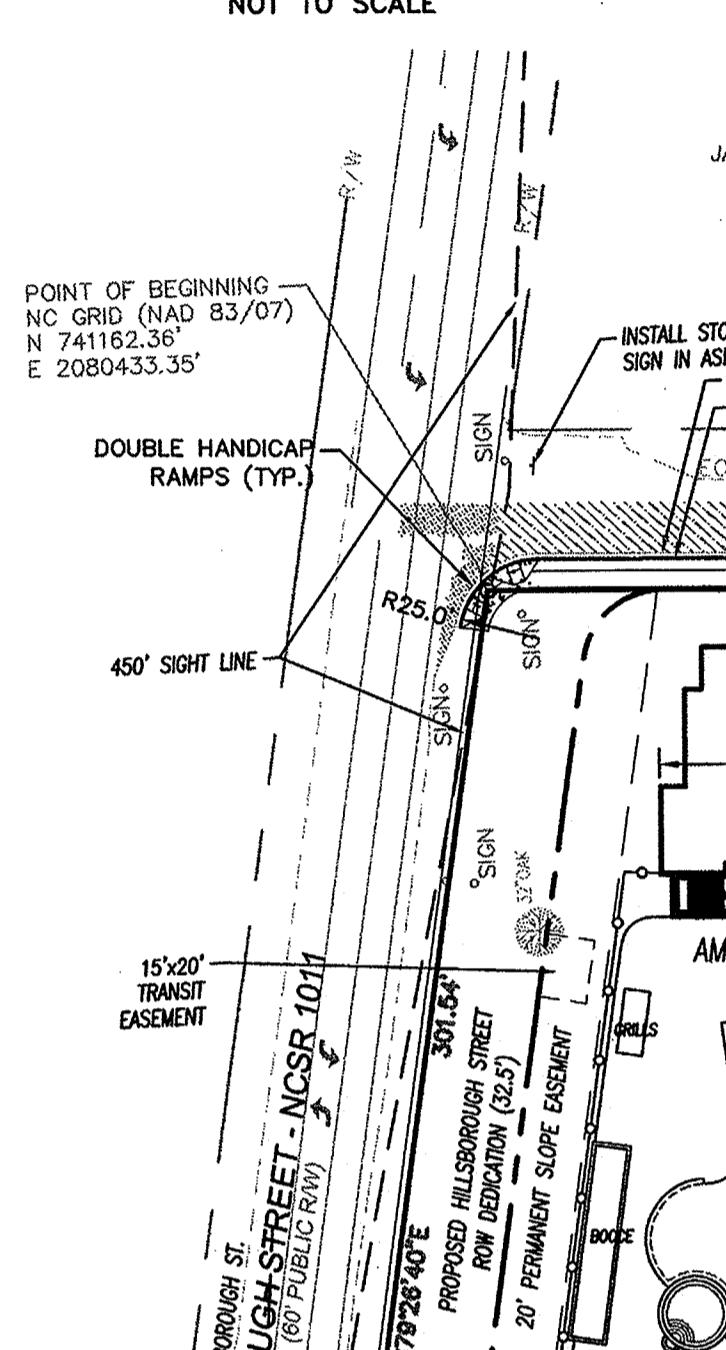
GRAPHIC SCALE IN FEET
0 30 60 120

PROJECT DATA

EX. ZONING	NB, SC, R-10
GROSS SITE AREA	22.143 ACRES (96,556 SF) 32 LOTS
NET SITE AREA (AFTER RW DED & LOT 3)	17.368 ACRES (75,561 SF)
PROPOSED # OF UNITS	149 (9 SF, 16 DUPLEX, 114 APARTMENTS)
PROPOSED # OF PARCELS / LOTS	32
TOTAL PROJECT DENSITY	8.5 UNITS/AC (NET)
PHASES	1
BUILDING HEIGHT (RES. UNITS)	34' (MAX) PER 10-210(b)(6)-5.iii
SETBACKS-MIN. FOR CLUSTER UNIT DEVELOPMENTS AND GROUP HOUSING	
SINGLE-FAMILY & DUPLEXES	FRONT-10', REAR-20', FRONT & REAR AGGREGATE-40'
GROUP HOUSING (APARTMENTS)	FRONT-10' FROM BACK OF CURB MIN. BUILDING SEPARATIONS / SETBACKS: WHEN OPPOSING BLDG. WALLS ARE PARALLEL OR LESS THAN 45 DEGREES TO EACH OTHER, THE FOLLOWING MIN. DISTANCE SEPARATIONS BETWEEN BLDG. WALLS SHALL BE PROVIDED: BLDG HT. 28' OR LESS, NO WINDOWS ON AFFECTED WALL-10' BLDG HT. 28' OR LESS, WITH WINDOWS ON AFFECTED WALL-15' BLDG HT. GREATER THAN 28', NO WINDOWS ON AFFECTED WALL-20' BLDG HT. GREATER THAN 28', WITH WINDOWS ON AFFECTED WALL-30'

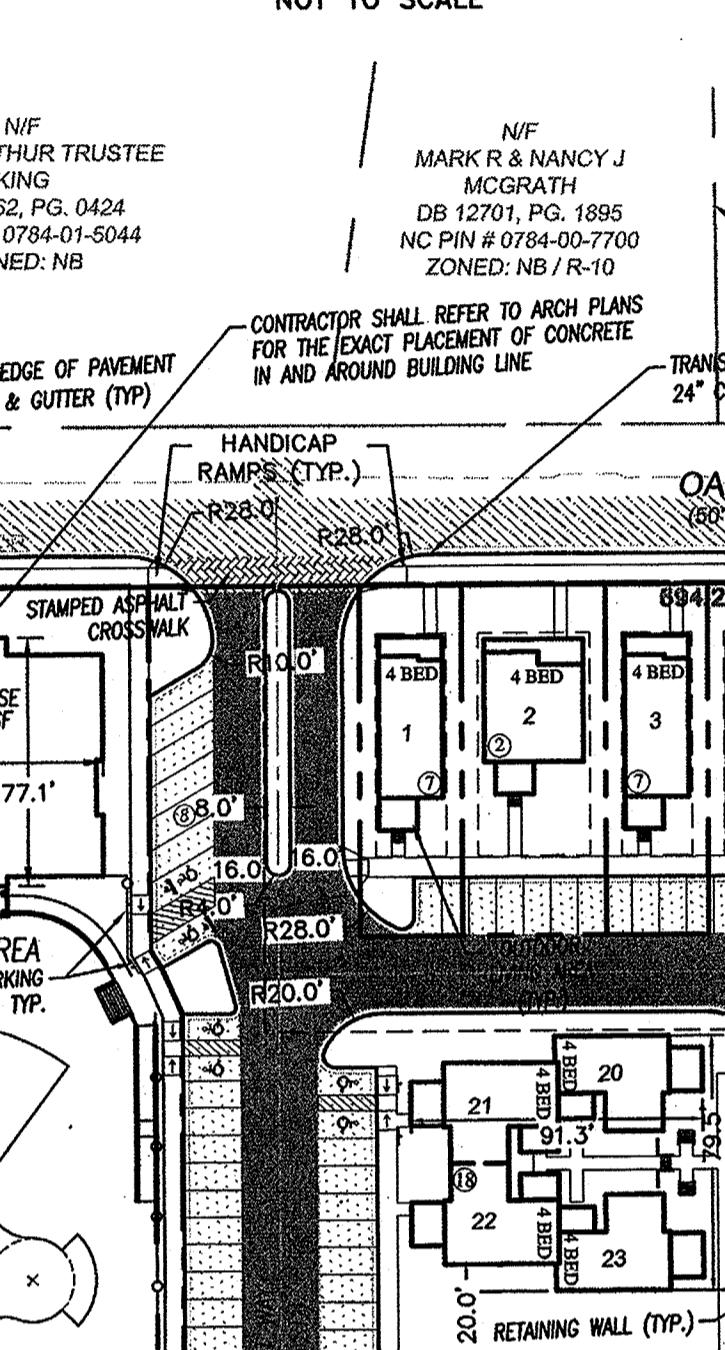
NCDOT PAVEMENT SECTION

NOT TO SCALE



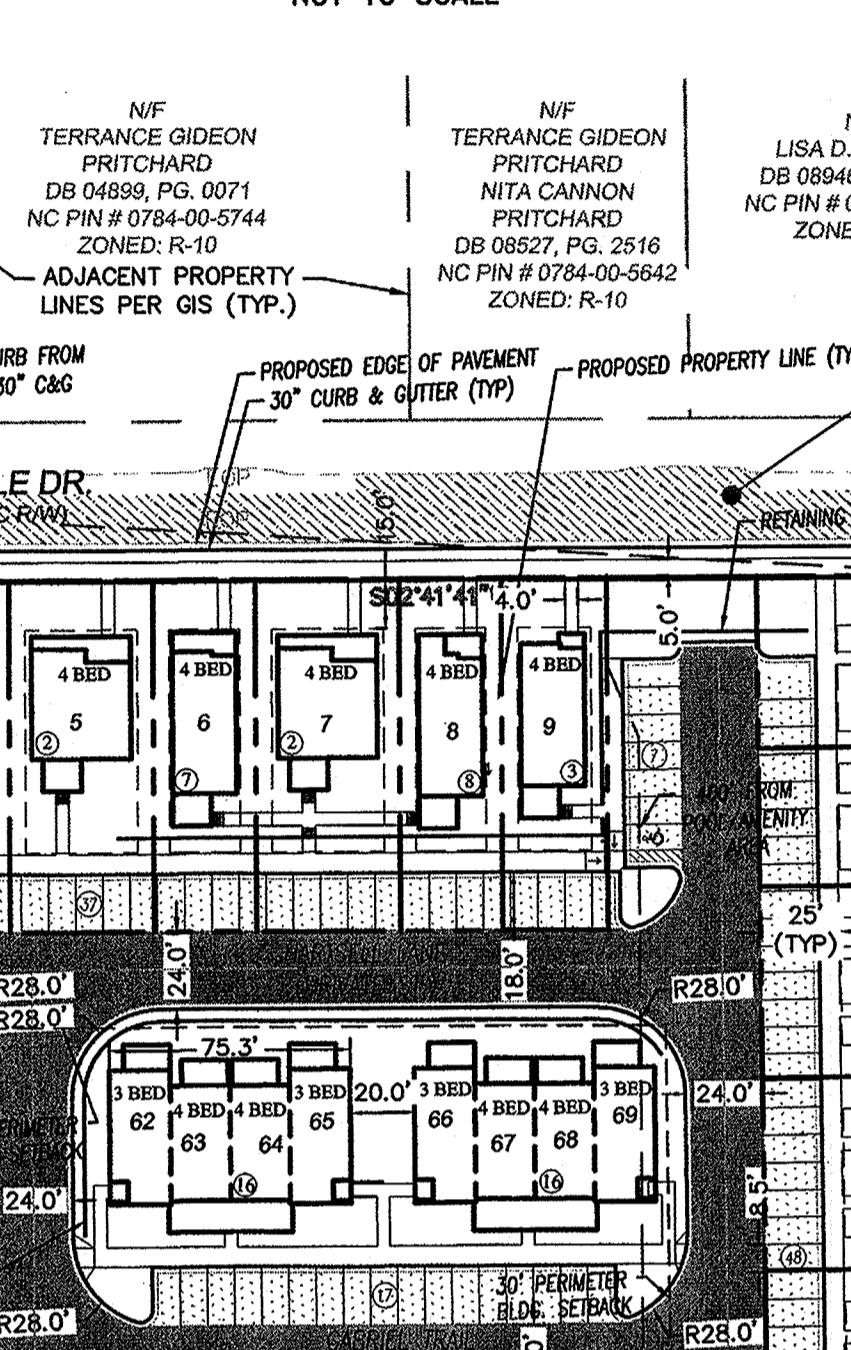
LIGHT DUTY PAVEMENT SECTION

NOT TO SCALE



HEAVY DUTY PAVEMENT SECTION

NOT TO SCALE



12

12

B-B

SEE SHEET C-23 FOR CITY STREET PAVEMENT SECTIONS

350' SIGHT LINE

DOUBLE HANDICAP RAMPS (TYP.)

ADJACENT PROPERTY LINES PER GIS (TYP.)

TIE TO EXISTING JAMES F JR MCCONNELL EDGE OF PAVEMENT

R100.0'

NC PIN # 0784-00-4330

ZONED: R-10

OAKDALE DR.
(50' PUBLIC R/W)

30' CURB AND GUTTER

RETTAINING WALL (TYP.)

20' PERMANENT SLOPE EASEMENT

100.00'

S0230/35W

100.00'

DB 00132, PG. 0-E

NC PIN # 0784-00-5140

ZONED: R-10

CHESTNUT HILLS APARTMENTS

DB 0938, PG. 0948

NC PIN # 0783-09-7753

ZONED: R-10

S-5-11

SIGNATURE

TRANSPORTATION SERVICES: *D&R 10/13/11*

PUBLIC UTILITIES: *CS 10/14/11*

CONSERVATION ENGINEER: *SPL 10/13/11*

PLANNING: *Baker 10/13/11*

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/OR NCDOT STANDARDS AND SPECIFICATIONS.

NF

TRAILWOOD PARTNERS DB

8510, PG. 2035 BM 1942, PG.

33 NC PIN # 0783-09-2717

ZONED: R-10

*REDUCTION ALLOWED PER 10-2072 (D) RECREATIONAL USE RELATED TO ROW EASEMENT (R-1). 149 REQUIREMENT SPACES WITHIN 400' OUT OF 336 TOTAL REQUIRED RES. SPACES = 93.3% (INCLUDES UNITS 1-9, 20-45, 47-69)

TOTAL PARKING: 433

557 (1 H/C)

PRIVATE STREET EASEMENTS PROVIDED AT BACK OF CURB ON ALL PRIVATE STREETS

FUTURE ROW DEDICATION

HILLSBOROUGH ST. - 0.47 AC. 20,636SF

EDWARDS MILL RD. - 2.887 AC. 125,769SF

WESTERN BLVD. - 0.77 AC. 46,900SF

WAYCROSS ST. - 0.318 AC. 13,855SF

NEUSE RIVER 50' RIPARIAN BUFFER

NEUSE RIVER 50' RIPARIAN BUFFER

118.40'

333.37'

NSP 26.27 W

333.37'

INT. STREAM

PROPOSED CONSTRUCTION LAYDOWN AREA

PROPOSED ROW EASEMENT (VARIABLE WIDTH)

38+00

39+00

38+79

39+00

38+00

36+00

35+00

34+00

33+00

32+00

31+00

30+00

29+00

28+00

27+00

26+00

25+00

24+00

23+00

22+00

21+00

20+00

19+00

18+00

17+00

16+00

15+00

14+00

13+00

12+00

11+00

10+00

9+00

8+00

7+00

6+00

5+00

4+00

3+00

2+00

1+00

0+00

110.00'

R30.0'

31+00

30+00

29+00

28+00

27+00

26+00

25+00

24+00

23+00

22+00

21+00

20+00

19+00

18+00

17+00

16+00

15+00

14+00

13+00

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7+00

6+00

5+00

4+00

3+00

2+00

1+00

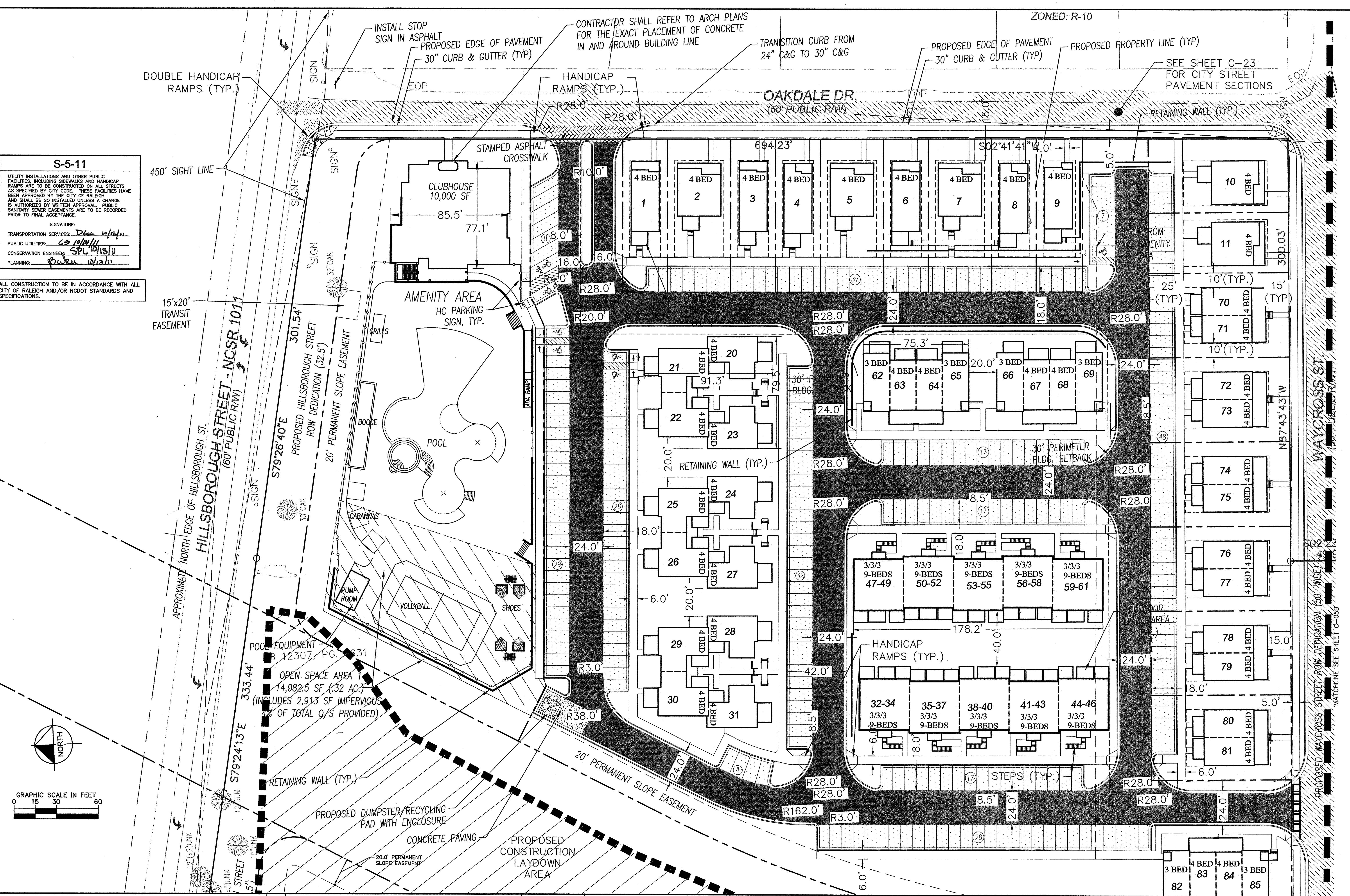
0+00

110.00'

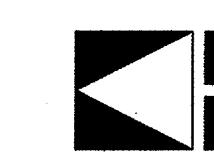
R30.0'

31+00

30+

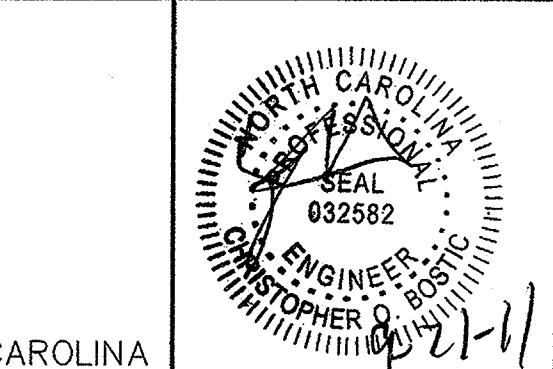


No.	CITY OF RALEIGH 1ST REVIEW COMMENTS	9/21/11	WJB
1	REVISIONS	DATE	BY

 **Kimley-Horn
and Associates, Inc.**
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333 FAYETTEVILLE STREET, SUITE 600, RALEIGH, NC 27601
PHONE: 919-835-1494 FAX: 919-653-5847
WWW.KIMLEY-HORN.COM
NC CERTIFICATE OF AUTHORIZATION: F-0102

KHA PROJECT
01170001
DATE
7/29/11
SCALE AS SHOWN
DESIGNED BY COB
DRAWN BY WJB
CHECKED BY PAB
RALEIGH

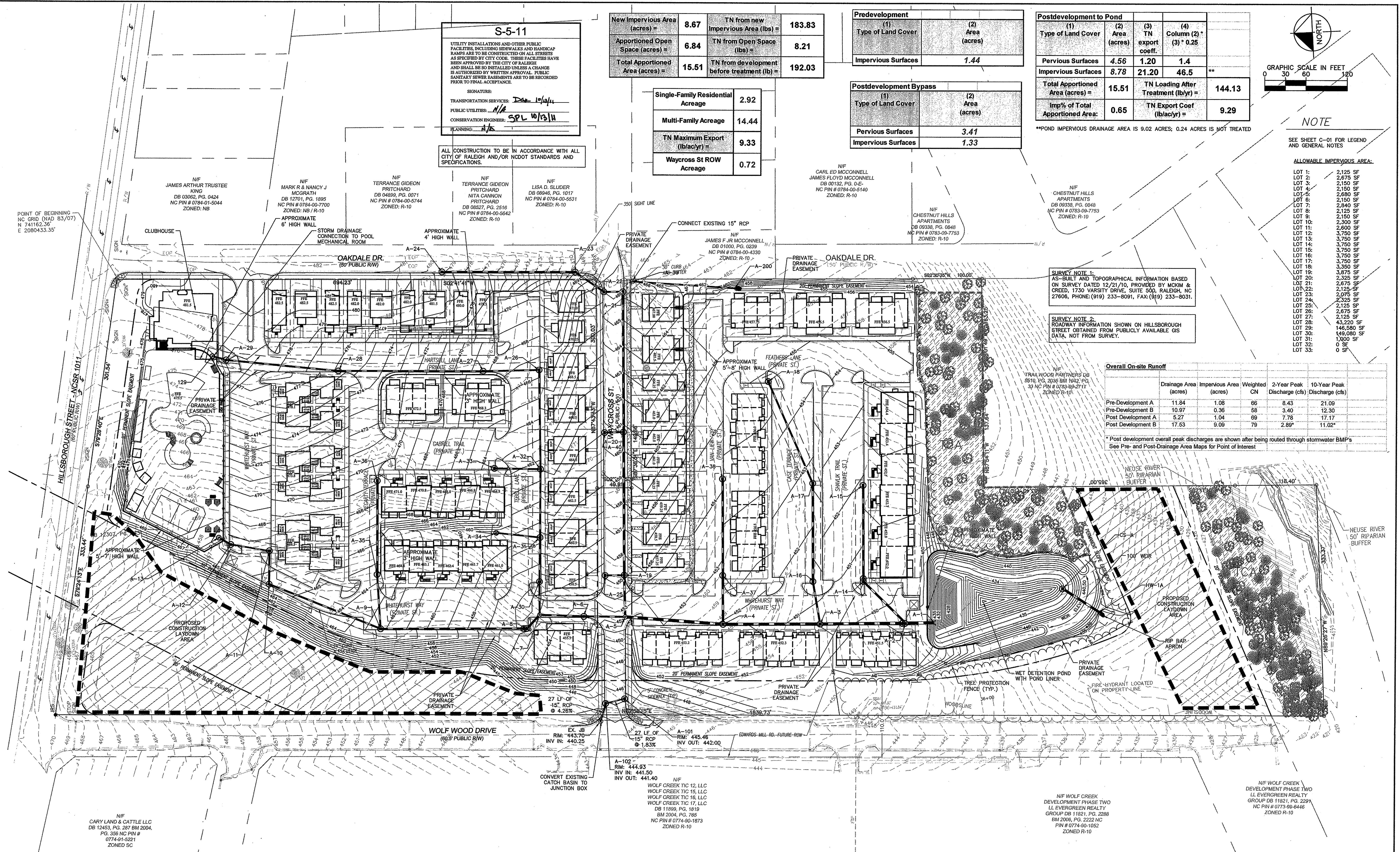
THE RETREAT AT RALEIGH
PREPARED FOR
LANDMARK PROPERTIES

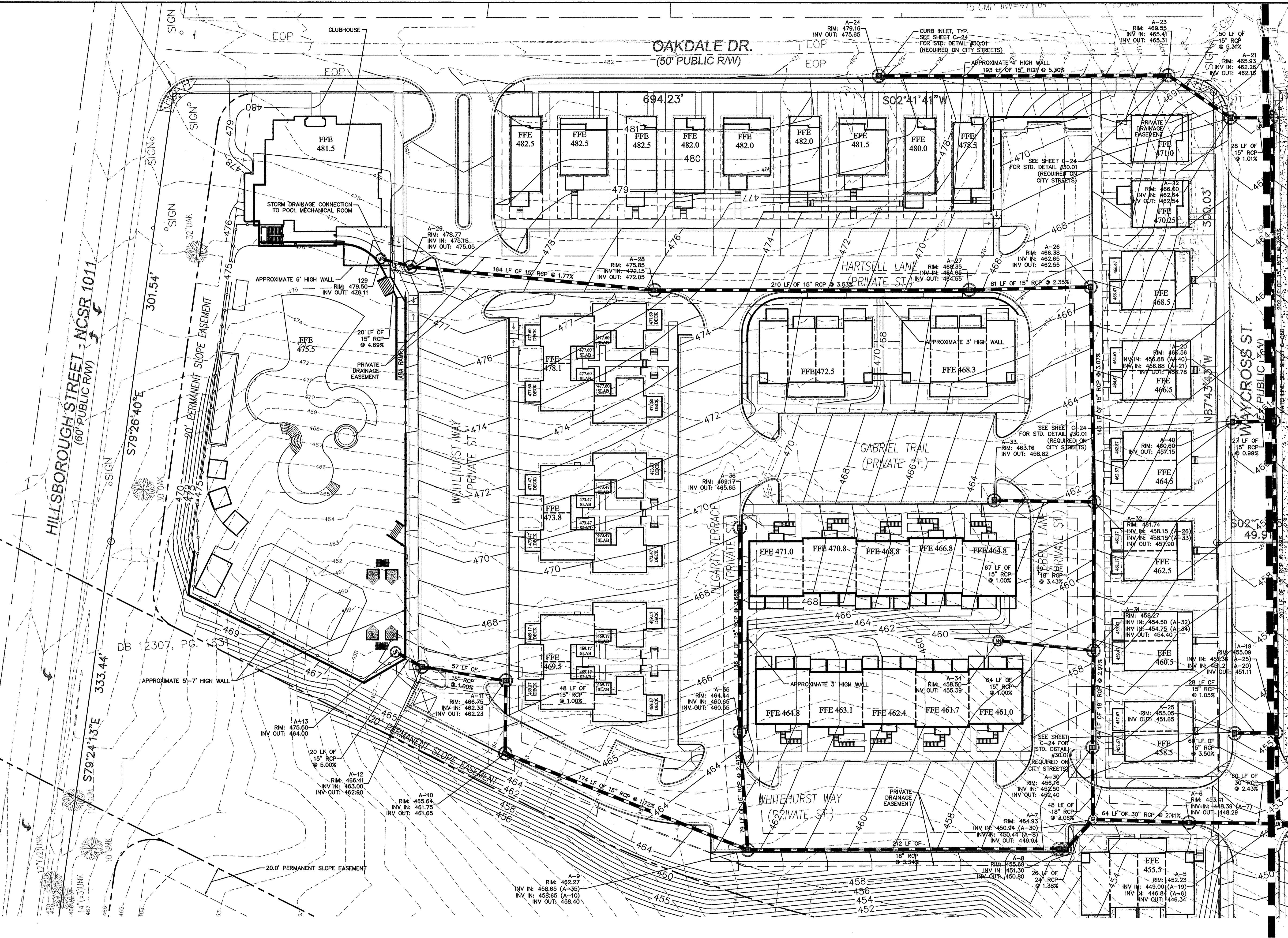


NORTH CAROLINA

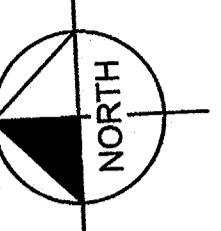
SITE PLAN

SHEET NUMBER
C-05A





GRAPHIC SCALE IN FEET
0 15 30 60



S-5-11

UTILITY INSTALLATIONS AND OTHER PUBLIC FACILITIES INCLUDING SIDEWALKS AND HANDICAP RAMPS ARE TO BE CONSTRUCTED ON ALL STREETS AS SHOWN. ALL PUBLIC SANITARY SEWERS HAVE BEEN APPROVED BY THE CITY OF RALEIGH AND SHALL BE SO INSTALLED UNLESS A CHANGE IS MADE WITH THE CITY'S APPROVAL. PUBLIC SANITARY SEWER EASEMENTS ARE TO BE RECORDED PRIOR TO FINAL ACCEPTANCE.

SIGNATURE: *[Signature]* DATE: *10/13/11*

TRANSPORTATION SERVICES: *N/A*

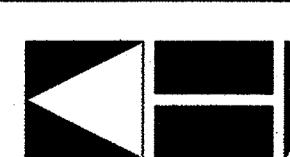
PUBLIC UTILITIES: *N/A*

CONSERVATION ENGINEER: *SPL 10/13/11*

PLANNING: *N/A*

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/OR NCDOT STANDARDS AND SPECIFICATIONS.

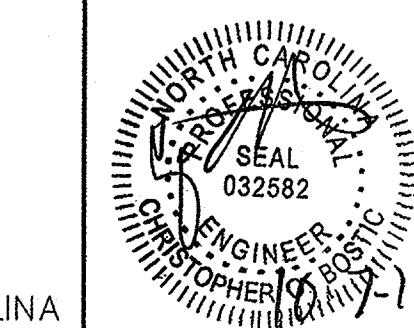
No.	REVISIONS	DATE	BY
2	CITY OF RALEIGH 2ND REVIEW COMMENTS	10/07/11	WJB
1	CITY OF RALEIGH 1ST REVIEW COMMENTS	9/21/11	WJB



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WWW.KIMLEY-HORN.COM

KHA PROJECT
011170001
DATE
7/29/11
SCALE AS SHOWN
DESIGNED BY COB
DRAWN BY WJB
NC CERTIFICATE OF AUTHORIZATION: F-0102
CHECKED BY PAB
RALEIGH

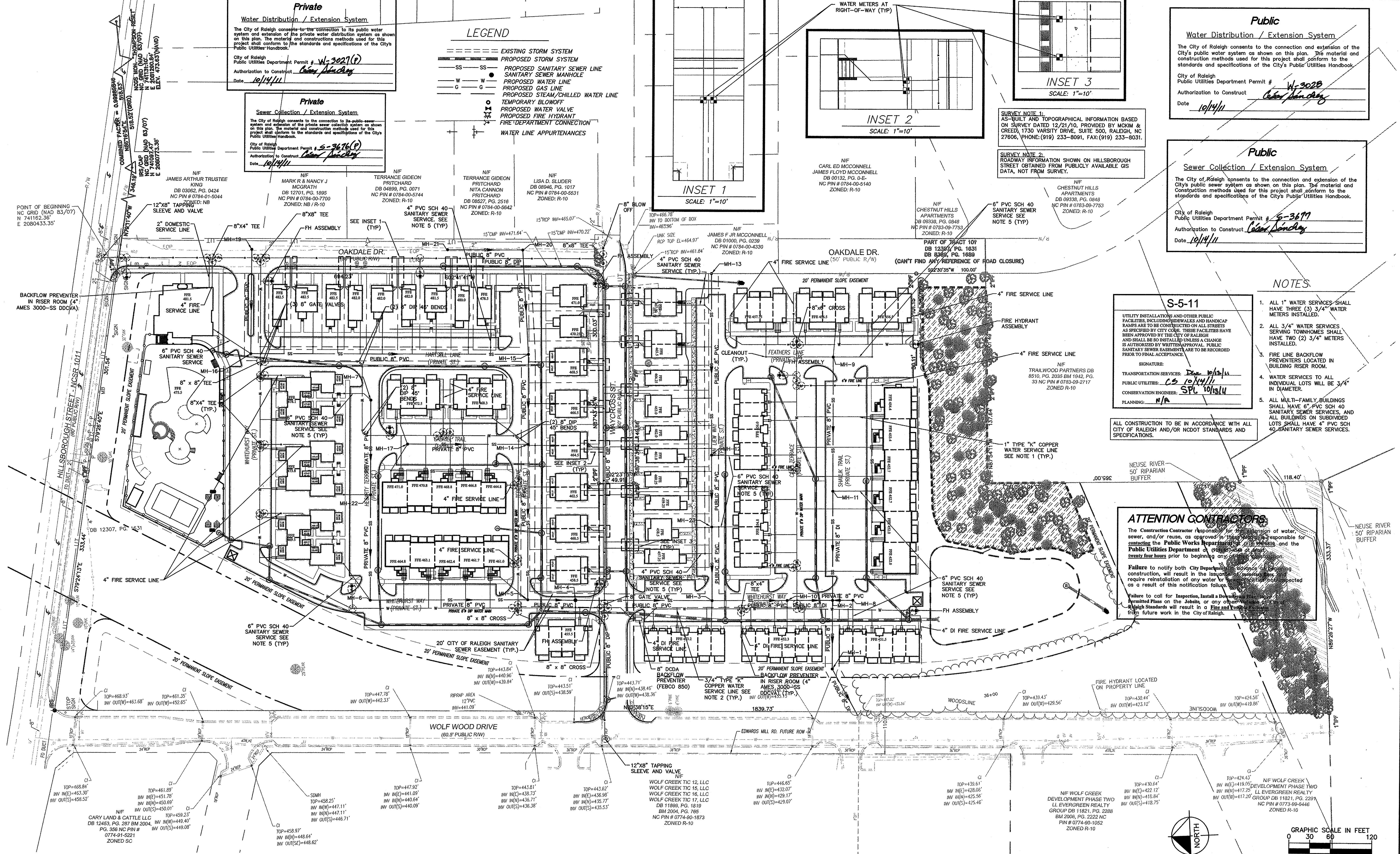
**THE RETREAT AT RALEIGH
PREPARED FOR
LANDMARK PROPERTIES**



NORTH CAROLINA
STATE ENGINEER
C. CHRISTOPHER MCGOWAN, P.E.

GRADING AND DRAINAGE PLAN

SHEET NUMBER
C-06A



No.	CITY OF RALEIGH 1ST REVIEW COMMENTS	REVISIONS	DATE	BY
1	9/21/11 WJB			

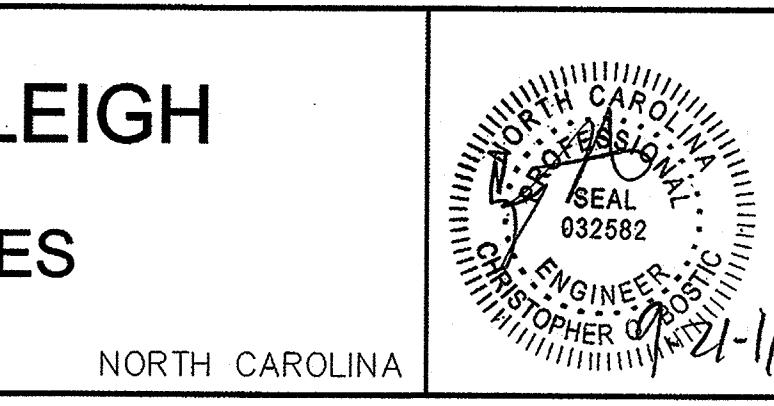
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PHONE: 919-385-1494 FAX: 919-653-5847
WWW.KIMLEY-HORN.COM

NC CERTIFICATE OF AUTHORIZATION: F-0102

KHA PROJECT 011170001
DATE 7/29/11
SCALE AS SHOWN
DESIGNED BY COB
DRAWN BY WJB
CHECKED BY PAB

THE RETREAT AT RALEIGH PREPARED FOR LANDMARK PROPERTIES

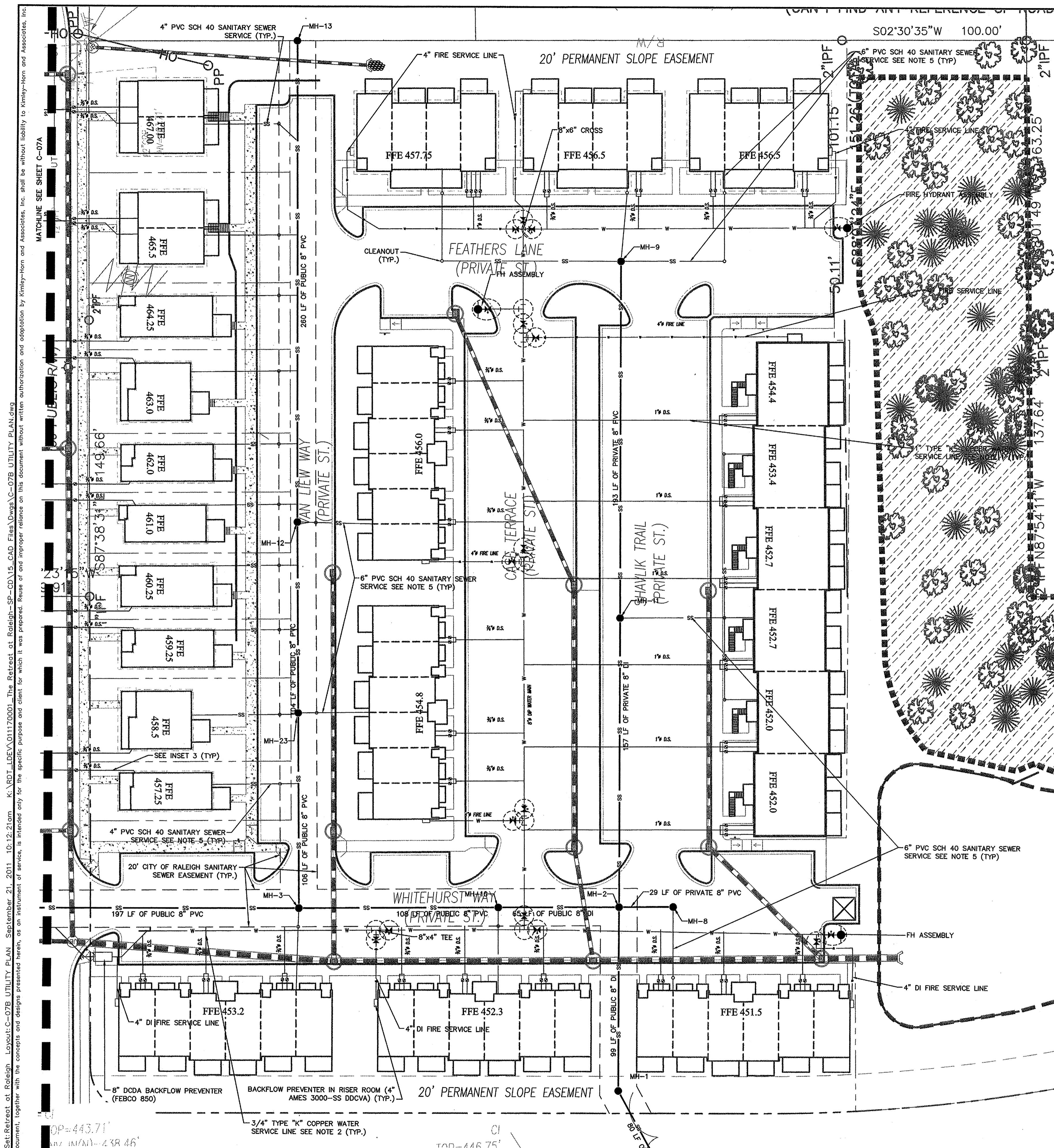
RALEIGH



NORTH CAROLINA
SEAL
OCTOBER 2011

OVERALL UTILITY PLAN

SHEET NUMBER
C-07



Private
Water Distribution / Extension System
The City of Raleigh consents to the connection to its public water system and extension of the private water distribution system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook.
City of Raleigh
Public Utilities Department Permit # W-30270
Authorization to Construct *Carl Jinday*
Date 10/14/11

Private
Sewer Collection / Extension System
The City of Raleigh consents to the connection to its public sewer system and extension of the private sewer collection system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook.
City of Raleigh
Public Utilities Department Permit # S-36768
Authorization to Construct *Carl Jinday*
Date 10/14/11

S-5-11
UTILITY INSTALLATIONS AND OTHER PUBLIC FACILITIES, INCLUDING SIDEWALKS AND HANDICAP RAMPS, SHALL BE CONSTRUCTED ON ALL STREETS AS SPECIFIED BY THE CITY COMMISIONERS. THESE HAVE BEEN APPROVED BY THE CITY OF RALEIGH AND SHALL BE SO INSTALLED UNLESS A CHANGE AND APPROVAL IS MADE BY THE CITY. APPROVAL PUBLIC SANITARY SEWER EASEMENTS ARE TO BE RECORDED PRIOR TO FINAL ACCEPTANCE.
SIGNATURE:
TRANSPORTATION SERVICES: *DAR 10/13/11*
PUBLIC UTILITIES: *CS 10/14/11*
CONSERVATION ENGINEER: *SPL 10/13/11*
PLANNING: *N/A*

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/OR NCDOT STANDARDS AND SPECIFICATIONS.

Public
Water Distribution / Extension System
The City of Raleigh consents to the connection and extension of the City's public water system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook.
City of Raleigh
Public Utilities Department Permit # W-30288
Authorization to Construct *Carl Jinday*
Date 10/14/11

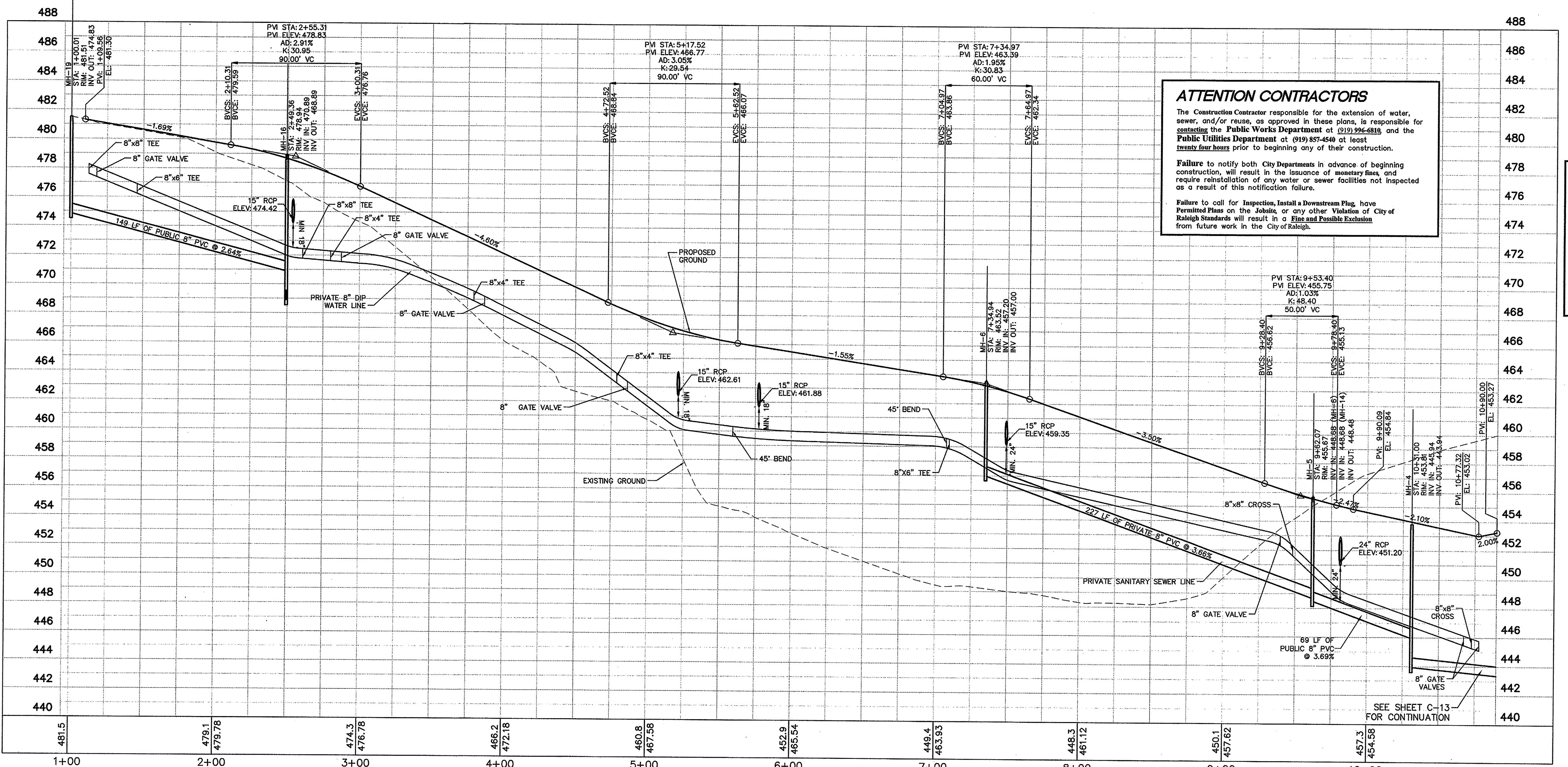
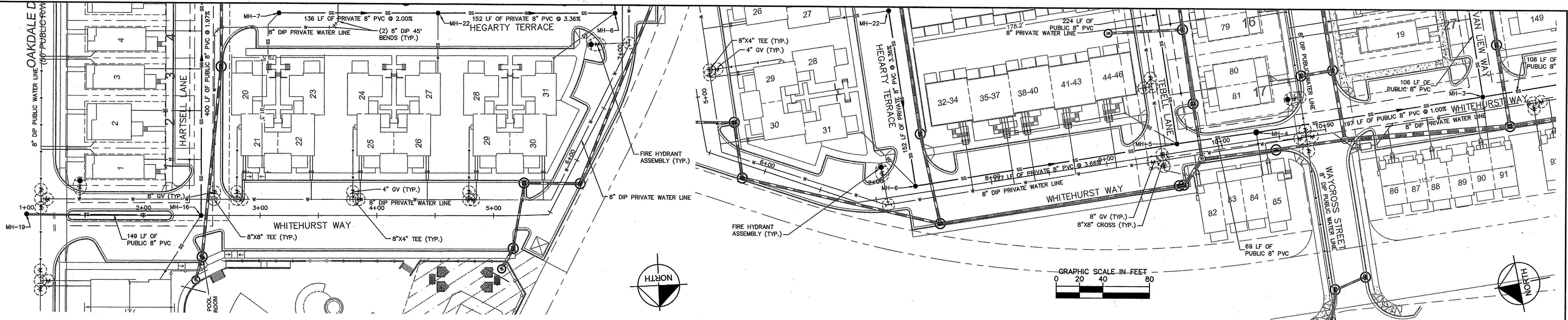
Public
Sewer Collection / Extension System
The City of Raleigh consents to the connection and extension of the City's public sewer system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook.
City of Raleigh
Public Utilities Department Permit # S-3677
Authorization to Construct *Carl Jinday*
Date 10/14/11

ATTENTION CONTRACTORS
The Construction Contractor responsible for the extension of water, sewer, and/or reuse, as approved in these plans, is responsible for contacting the Public Works Department at (919) 996-6810 and the Public Utilities Department at (919) 857-4540 at least twenty four hours prior to beginning any of their construction.
Failure to notify both City Departments in advance of beginning construction, will result in the issuance of monetary fines, and require reinstallation of any water or sewer facilities not inspected as a result of this notification failure.
Failure to call for inspection, install a downstream plug, have Permitted Plans on the Jobsite, or any other Violation of City of Raleigh Standards will result in a Fine and Possible Exclusion from future work in the City of Raleigh.

NOTES

1. ALL 1" WATER SERVICES SHALL HAVE THREE (3) 3/4" WATER METERS INSTALLED.
2. ALL 3/4" WATER SERVICES SPLITTING TOWNHOMES SHALL HAVE TWO (2) 3/4" METERS INSTALLED.
3. FIRE LINE BACKFLOW PREVENTERS LOCATED IN BUILDING RISER ROOM.
4. WATER SERVICES TO ALL INDIVIDUAL LOTS WILL BE 3/4" IN DIAMETER.
5. ALL MULTI-FAMILY BUILDINGS SHALL HAVE 6" PVC SCH 40 SANITARY SEWER SERVICES, AND ALL BUILDINGS ON SUBDIVIDED LOTS SHALL HAVE 4" PVC SCH 40 SANITARY SEWER SERVICES.

FIRE HYDRANT LOCATED
ON PROPERTY LINE



9+00 10+00
SCALE: Hori: 1" = 40' · VERT: 1" = 4'

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL
CITY OF RALEIGH AND/OR NCDOT STANDARDS AND
SPECIFICATIONS.



The logo for Kimley-Horn and Associates, Inc. It features a stylized graphic on the left consisting of a black square with a white triangle pointing upwards and to the right. To the right of the graphic, the company name is written in a bold, sans-serif font, with "Kimley-Horn" on top and "and Associates. Inc." on the line below.

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333 FAYETTEVILLE STREET, SUITE 600, RALEIGH, NC 276
PHONE: 919-835-1494 FAX: 919-653-5847

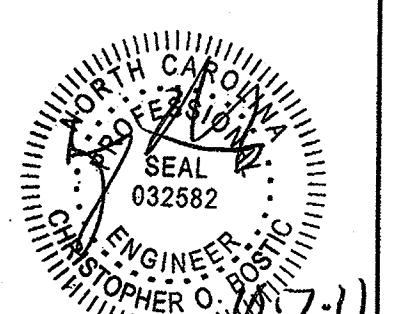
PHONE: 919-833-1494 FAX: 919-833-3847
WWW.KIMLEY-HORN.COM

KHA PROJE
01117000
DATE
7/29/11
SCALE AS SH
DESIGNED BY
DRAWN BY

THE RETREAT AT RALEIGH

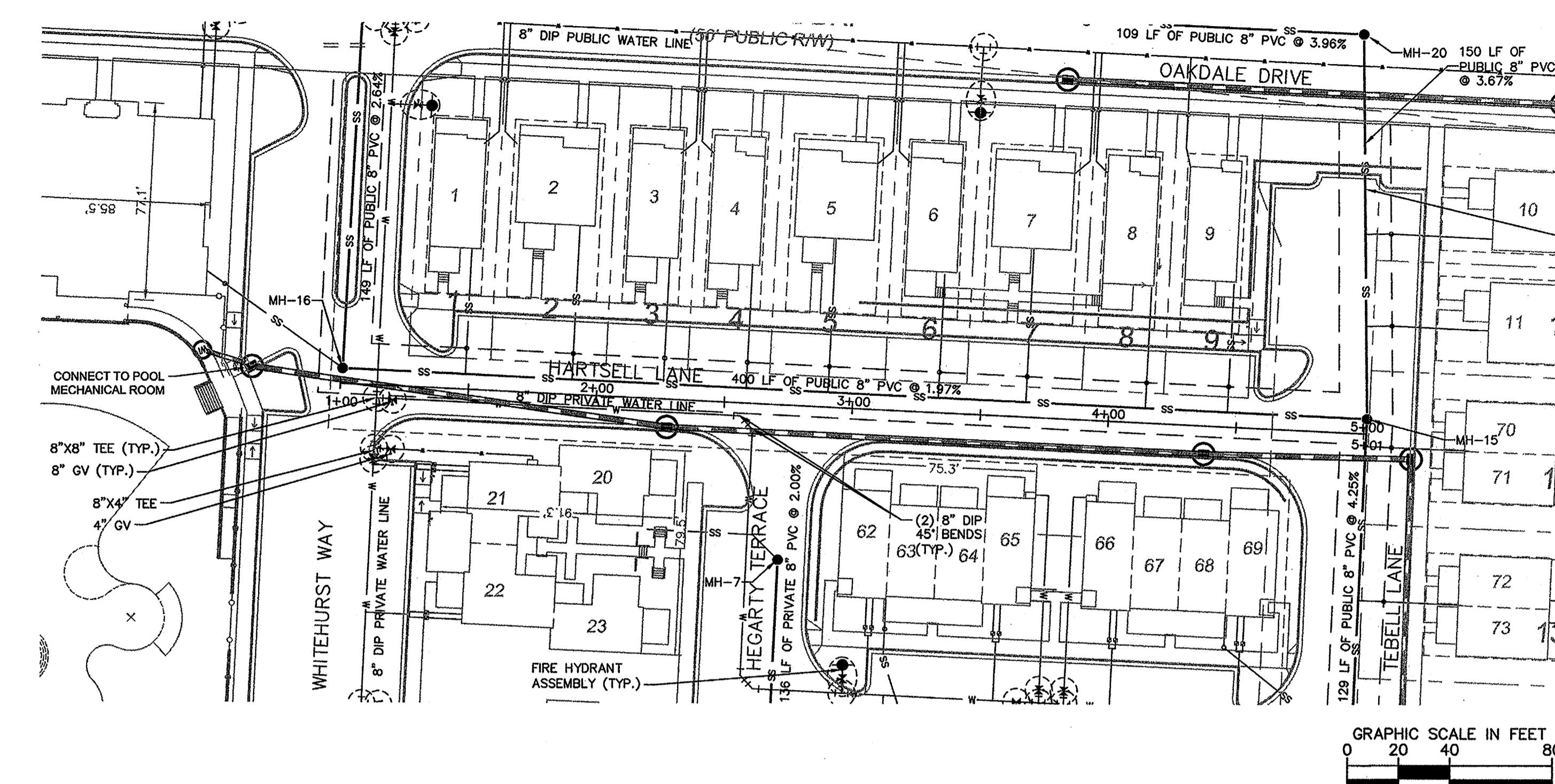
PREPARED FOR

LANDMARK PROPERTIES



PLAN AND PROFILE WHITEHURST WAY

SHEET NUMBER
C-08



ATTENTION CONTRACTORS

The Construction Contractor responsible for the extension of water, sewer, and/or reuse, as approved in these plans, is responsible for contacting the Public Works Department at (919) 996-6810 and the Public Utilities Department at (919) 857-4540 at least twenty-four hours prior to beginning any of their construction.

Failure to notify both City Departments in advance of beginning construction, will result in the issuance of monetary fines, and require reinstallation of any water or sewer facilities not inspected as a result of this notification failure.

Failure to call for inspection, install a downstream plug, have Permitted Plans on the jobsite, or any other violation of City of Raleigh Standards will result in a Fine and Possible Exclusion from future work in the City of Raleigh.

Private

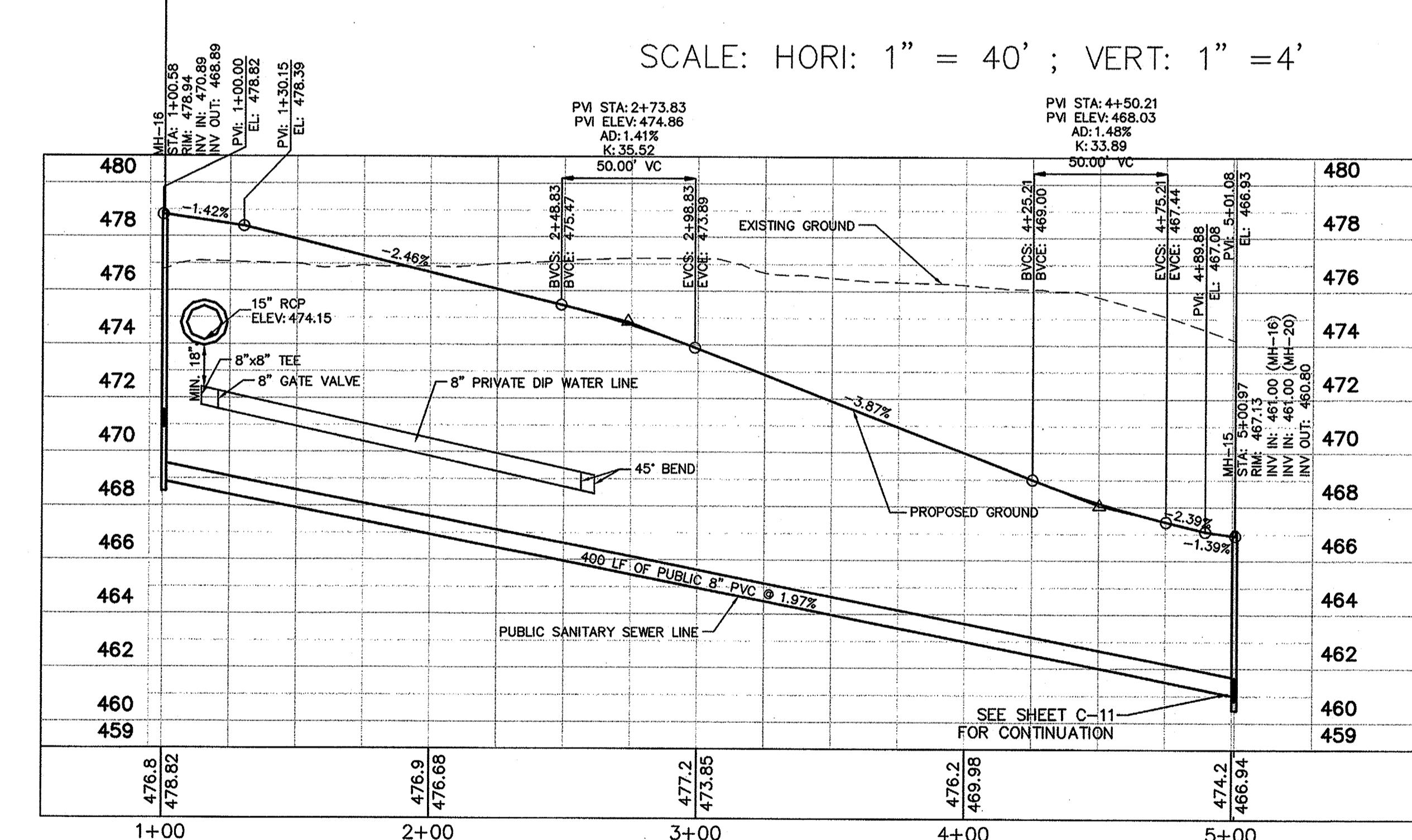
Water Distribution / Extension System

The City of Raleigh consents to the connection to its public water system, as indicated on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook.

City of Raleigh Public Utilities Department Permit # W-3027(p)

Authorization to Construct *Carly Hanley*

Date 10/14/11



Public

Sewer Collection / Extension System

The City of Raleigh consents to the connection and extension of the City's public sewer system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook.

City of Raleigh Public Utilities Department Permit # S-3677

Authorization to Construct *Carly Hanley*

Date 10/14/11

S-5-11

UTILITY INSTALLATIONS AND OTHER PUBLIC FACILITIES, INCLUDING SIDEWALKS AND HANDICAP RAMPS, ARE TO BE CONSTRUCTED ON ALL STREETS AS SPECIFIED IN THE CITY CODE. THESE FACILITIES HAVE BEEN APPROVED BY THE CITY OF RALEIGH AND SHALL BE SO INSTALLED UNLESS A CHANGE IS MADE IN THE CITY CODE. APPROVAL PUBLIC SANITARY SEWER EASEMENTS ARE TO BE RECORDED PRIOR TO FINAL ACCEPTANCE.

SIGNATURE: *Dave* 10/14/11

TRANSPORTATION SERVICES: *CS* 10/14/11

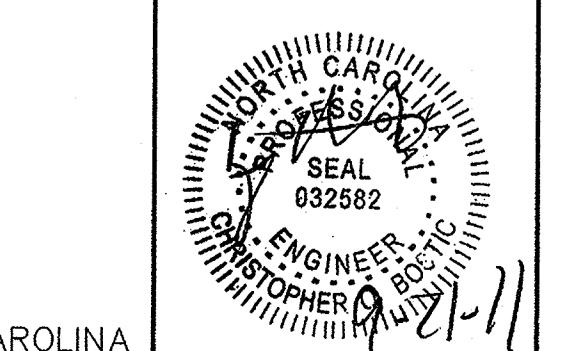
PUBLIC UTILITIES: *CS* 10/14/11

CONSERVATION ENGINEER: *SPL* 10/14/11

PLANNING: *N/A*

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/OR NCDOT STANDARDS AND SPECIFICATIONS.

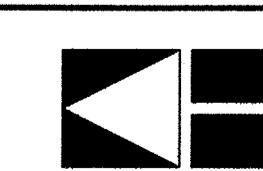
THE RETREAT AT RALEIGH PREPARED FOR LANDMARK PROPERTIES



PLAN AND PROFILE HARTSELL LANE

SHEET NUMBER
C-09

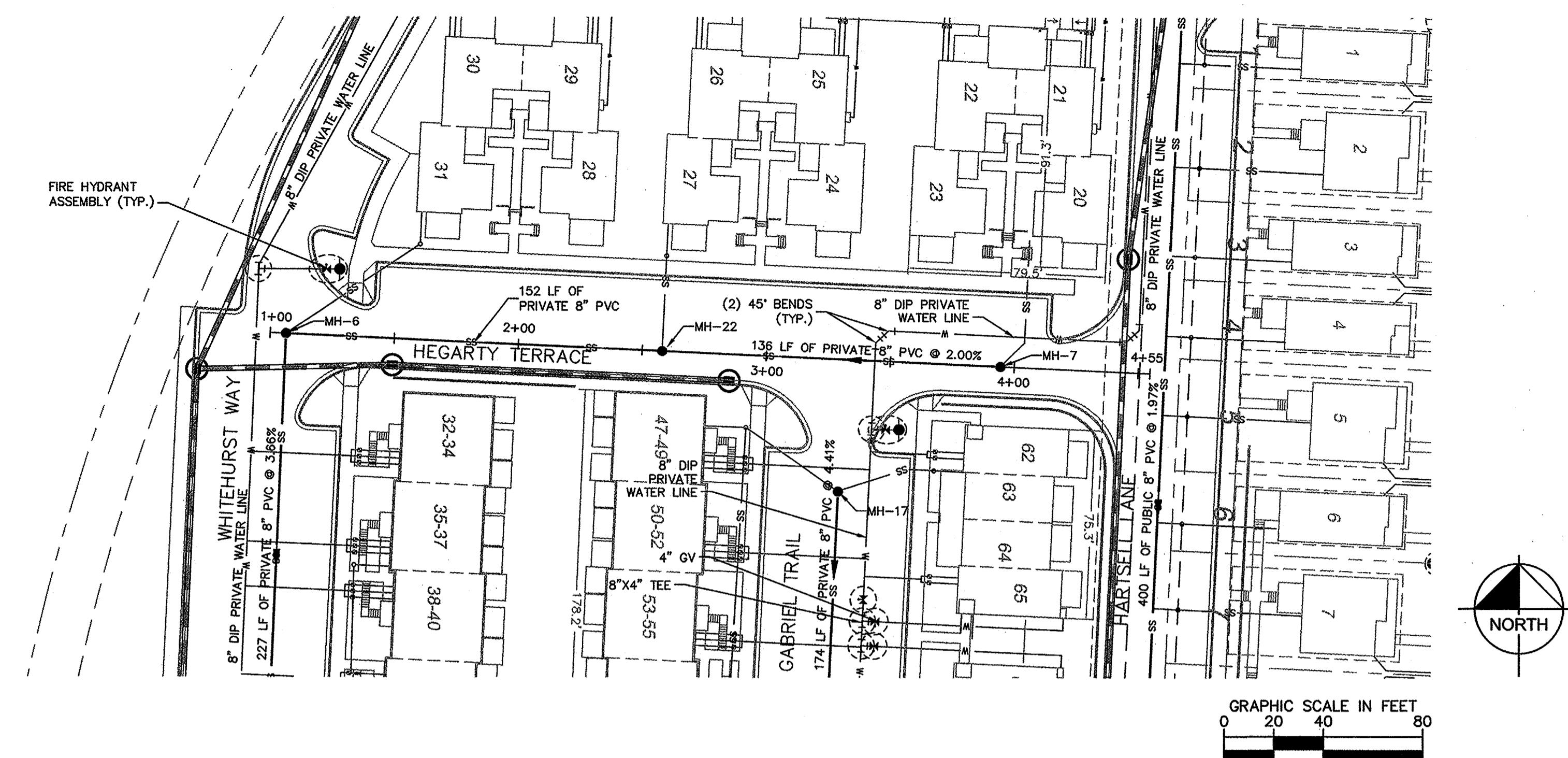
No.	CITY OF RALEIGH 1ST REVIEW COMMENTS	9/21/11	WJB
REVISIONS			
		DATE	BY



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and Associates, Inc.**
© 2011 KIMLEY-HORN AND ASSOCIATES, INC.
333 FAYETTEVILLE STREET, SUITE 600, RALEIGH, NC 27601
PHONE: 919-835-1494 FAX: 919-653-5847
WWW.KIMLEY-HORN.COM
NC CERTIFICATE OF AUTHORIZATION: F-0102

KHA PROJECT 011170001
DATE 7/29/11
SCALE AS SHOWN
DESIGNED BY COB
DRAWN BY WJB
CHECKED BY PAB
RALEIGH

NORTH CAROLINA



ATTENTION CONTRACTORS

The Construction Contractor responsible for the extension of water, sewer, and/or reuse, as approved in these plans, is responsible for contacting the Public Works Department at (919) 996-8110 and the Public Utilities Department at (919) 877-4540 at least twenty-four hours prior to beginning any of their construction.

Failure to notify both City Departments in advance of beginning construction, will result in the issuance of monetary fines, and require reinstatement of any water or sewer facilities not inspected as a result of this notification failure.

Failure to call for Inspection, Install a Downstream Plug, have Permitted Plans on the Jobsite, or any other violation of City of Raleigh Standards will result in a Fine and Possible Exclusion from future work in the City of Raleigh.

Private
Water Distribution / Extension System

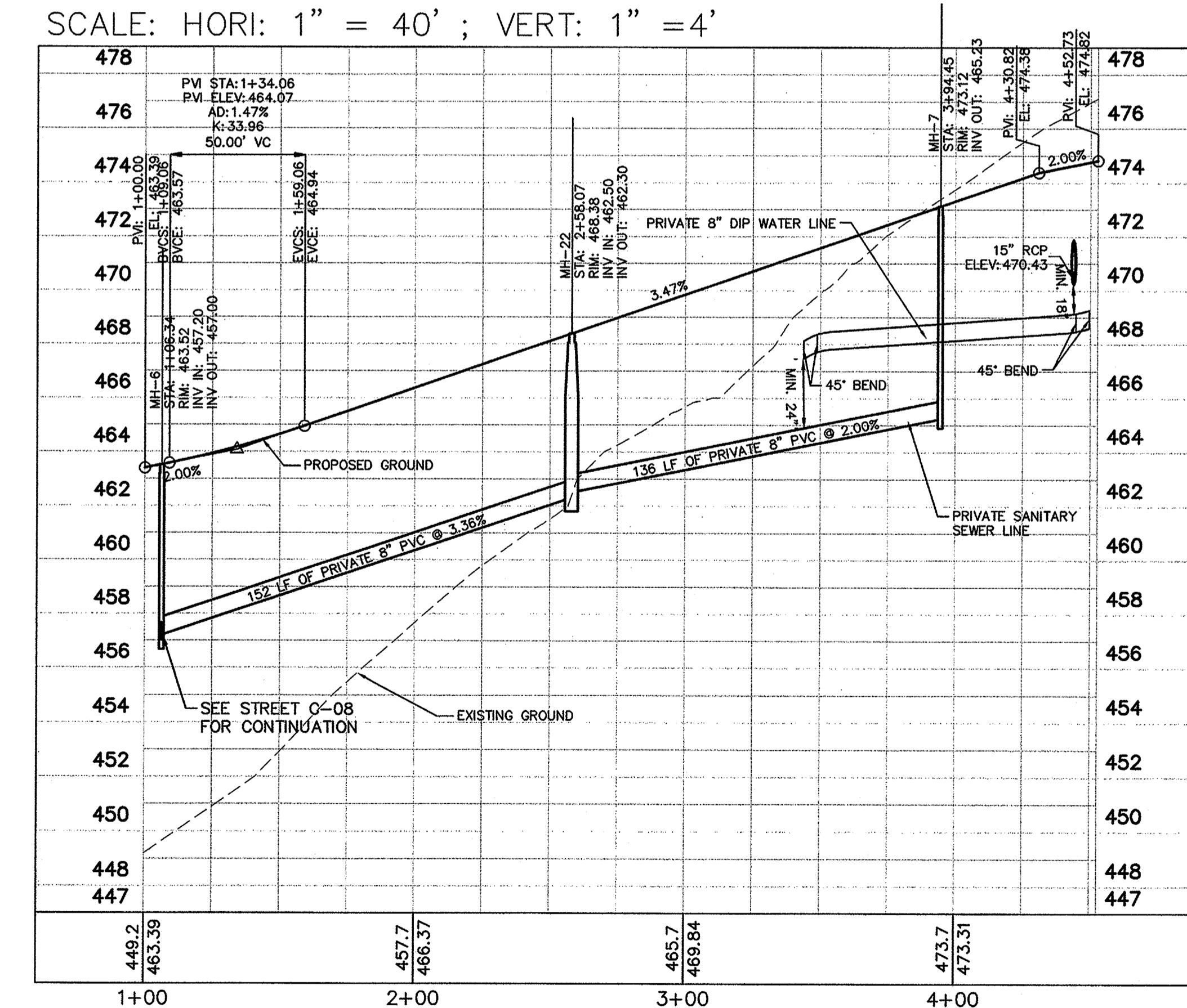
The City of Raleigh consents to the connection to its public water system and extension of the private water distribution system as shown on this plan. The material and construction methods used for this system shall conform to the standards and specifications of the City's Public Utilities Handbook.

City of Raleigh
Public Utilities Department Permit # W-3027(6)
Authorization to Construct *Cesar Landry*
Date 10/14/11

Private
Sewer Collection / Extension System

The City of Raleigh consents to the connection to its public sewer system and extension of the private sewer collection system as shown on this plan. The material and construction methods used for this system shall conform to the standards and specifications of the City's Public Utilities Handbook.

City of Raleigh
Public Utilities Department Permit # S-3676(6)
Authorization to Construct *Cesar Landry*
Date 10/14/11



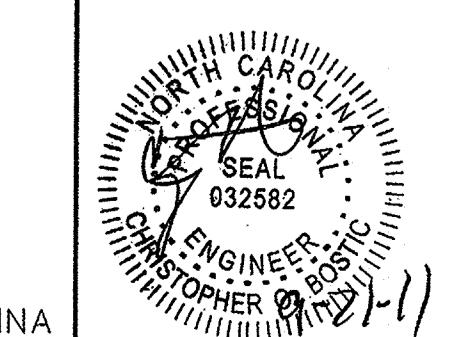
S-5-11

UTILITY INSTALLATIONS AND OTHER PUBLIC FACILITIES, INCLUDING SIDEWALKS AND HANDICAP RAMPS ARE TO BE CONSTRUCTED ON ALL STREETS AS SPECIFIED BY CITY CODE. THESE FACILITIES HAVE BEEN LOCATED ON THIS DRAWING AND SHALL BE SO INSTALLED UNLESS A CHANGE IS AUTHORIZED BY WRITTEN APPROVAL. PUBLIC SANITARY SEWER BASMENTS ARE TO BE RECORDED PRIOR TO FINAL ACCEPTANCE.

SIGNATURE: *[Signature]*
TRANSPORTATION SERVICES: *[Signature]*
PUBLIC UTILITIES: *CS 10/14/11*
CONSERVATION ENGINEER: *SPC 10/13/11*
PLANNING: *NA*

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/OR NCDOT STANDARDS AND SPECIFICATIONS.

THE RETREAT AT RALEIGH
PREPARED FOR
LANDMARK PROPERTIES



NORTH CAROLINA

PLAN AND PROFILE
HEGARTY TERRACE

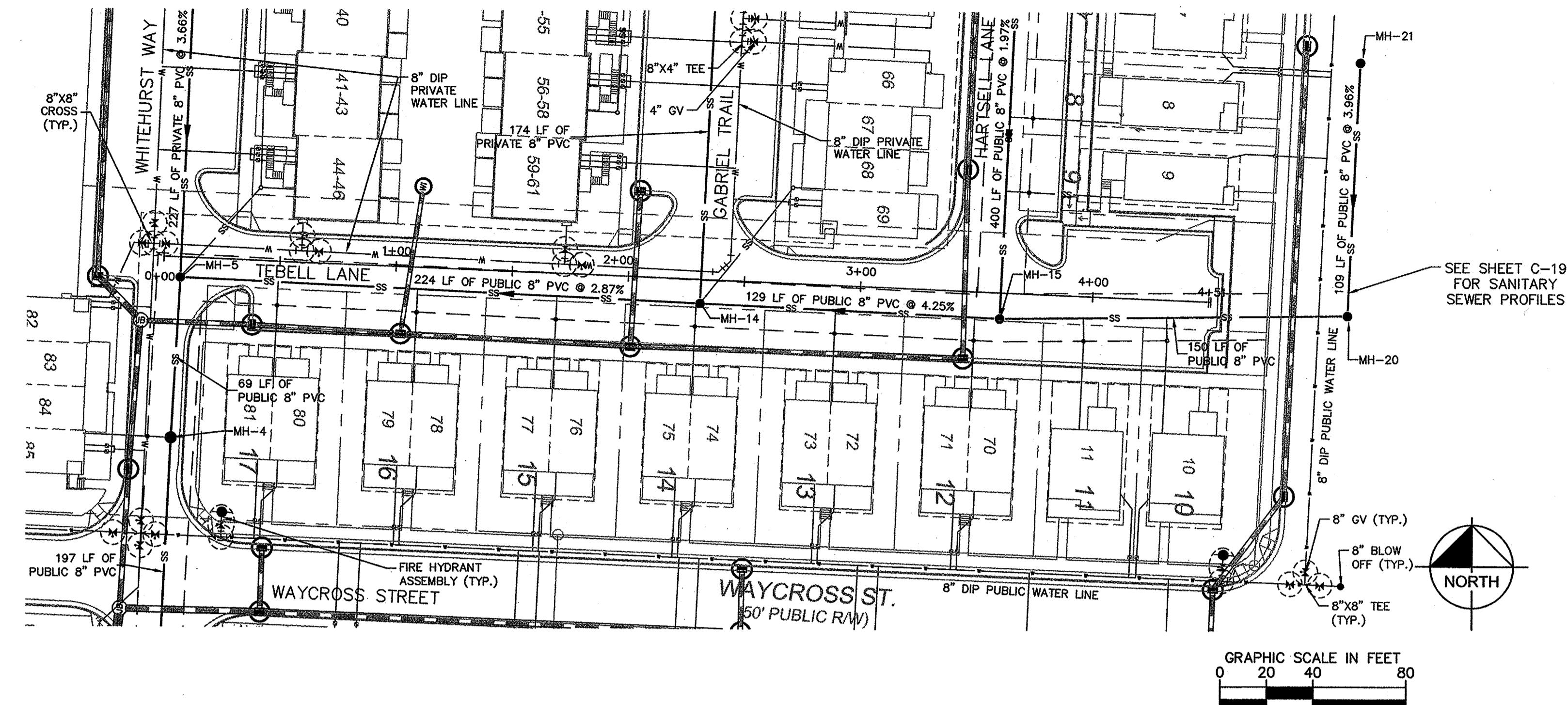
SHEET NUMBER
C-10

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1	CITY OF RALEIGH 1ST REVIEW COMMENTS	9/21/11	WJB
No.	REVISIONS	DATE	BY

NC CERTIFICATE OF AUTHORIZATION: F-0102

KHA PROJECT 011170001
DATE 7/29/11
SCALE AS SHOWN
DESIGNED BY COB
DRAWN BY WJB
CHECKED BY PAB
RALEIGH



ATTENTION CONTRACTORS

The Construction Contractor responsible for the extension of water, sewer, and/or reuse, as approved in these plans, is responsible for contacting the Public Works Department at (919) 996-6910 and the Public Utilities Department at (919) 857-4540 at least twenty-four hours prior to beginning any of their construction.

Failure to notify both City Departments in advance of beginning construction, will result in the issuance of monetary fines, and require reinstallation of any water or sewer facilities not inspected as a result of this notification failure.

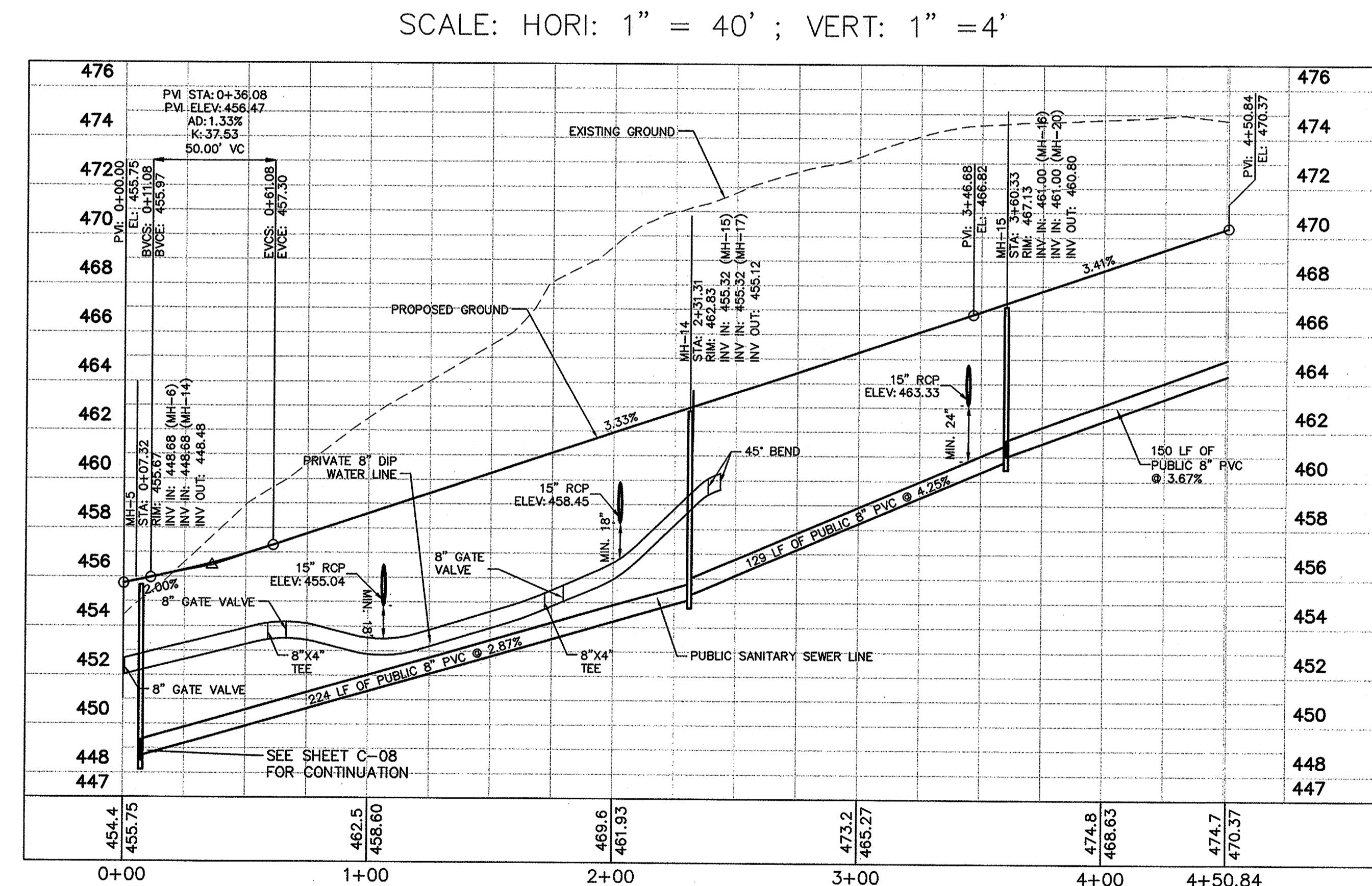
Failure to call for Inspection, Install a Downstream Plug, have Permitted Plans on the Jobsite, or any other Violation of City of Raleigh Standards will result in a Fine and Possible Excuse from future work in the City of Raleigh.

Private

Water Distribution / Extension System

The City of Raleigh consents to the connection to its public water system and extension of the private water distribution system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook.

City of Raleigh
Public Utilities Department Permit # W-3027(8)
Authorization to Construct *Cesar Andrade*
Date 10/14/11



Public

Sewer Collection / Extension System

The City of Raleigh consents to the connection and extension of the City's public sewer system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook.

City of Raleigh
Public Utilities Department Permit # S-3677
Authorization to Construct *Cesar Andrade*
Date 10/14/11

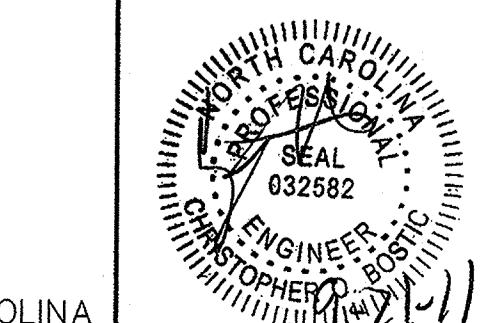
S-5-11

UTILITY INSTALLATIONS AND OTHER RELATED FACILITIES, INCLUDING SIDEWALKS AND HANDICAP RAMPS ARE TO BE CONSTRUCTED ON ALL STREETS AS SPECIFIED BY CITY CODE. THESE FACILITIES HAVE BEEN APPROVED FOR THIS PROJECT AND SHALL BE SO INSTALLED UNLESS A CHANGE IS AUTHORIZED BY WRITTEN APPROVAL. PUBLIC SAFETY REQUIREMENTS ARE TO BE RECORDED PRIOR TO FINAL ACCEPTANCE.

SIGNATURE: *Date 10/14/11*
TRANSPORTATION SERVICES: *CS 10/14/11*
PUBLIC UTILITIES: *SPU 10/13/11*
CONSERVATION ENGINEER: *N/A*
PLANNING: *N/A*

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/OR NCDOT STANDARDS AND SPECIFICATIONS.

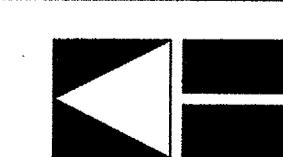
THE RETREAT AT RALEIGH PREPARED FOR LANDMARK PROPERTIES



PLAN AND PROFILE TEBELL LANE

SHEET NUMBER
C-11

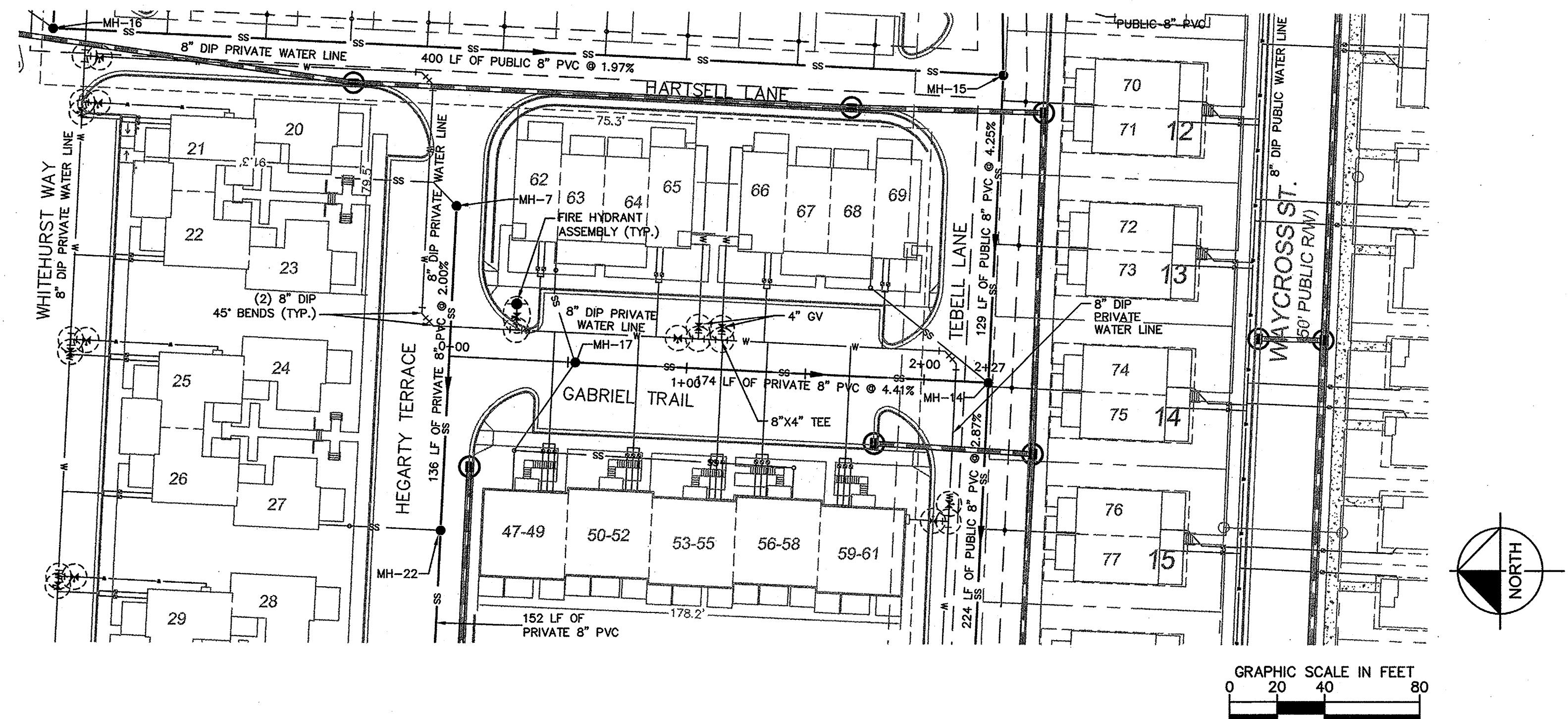
1 CITY OF RALEIGH 1ST REVIEW COMMENTS		9/21/11	WJB
No.	REVISIONS	DATE	BY



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WWW.KIMLEY-HORN.COM

KHA PROJECT
011170001
DATE
7/29/11
SCALE AS SHOWN
DESIGNED BY COB
DRAWN BY WJB
CHECKED BY PAB
NC CERTIFICATE OF AUTHORIZATION: F-0102
RALEIGH

NORTH CAROLINA
STATE ENGINEER
OCTOBER 2011

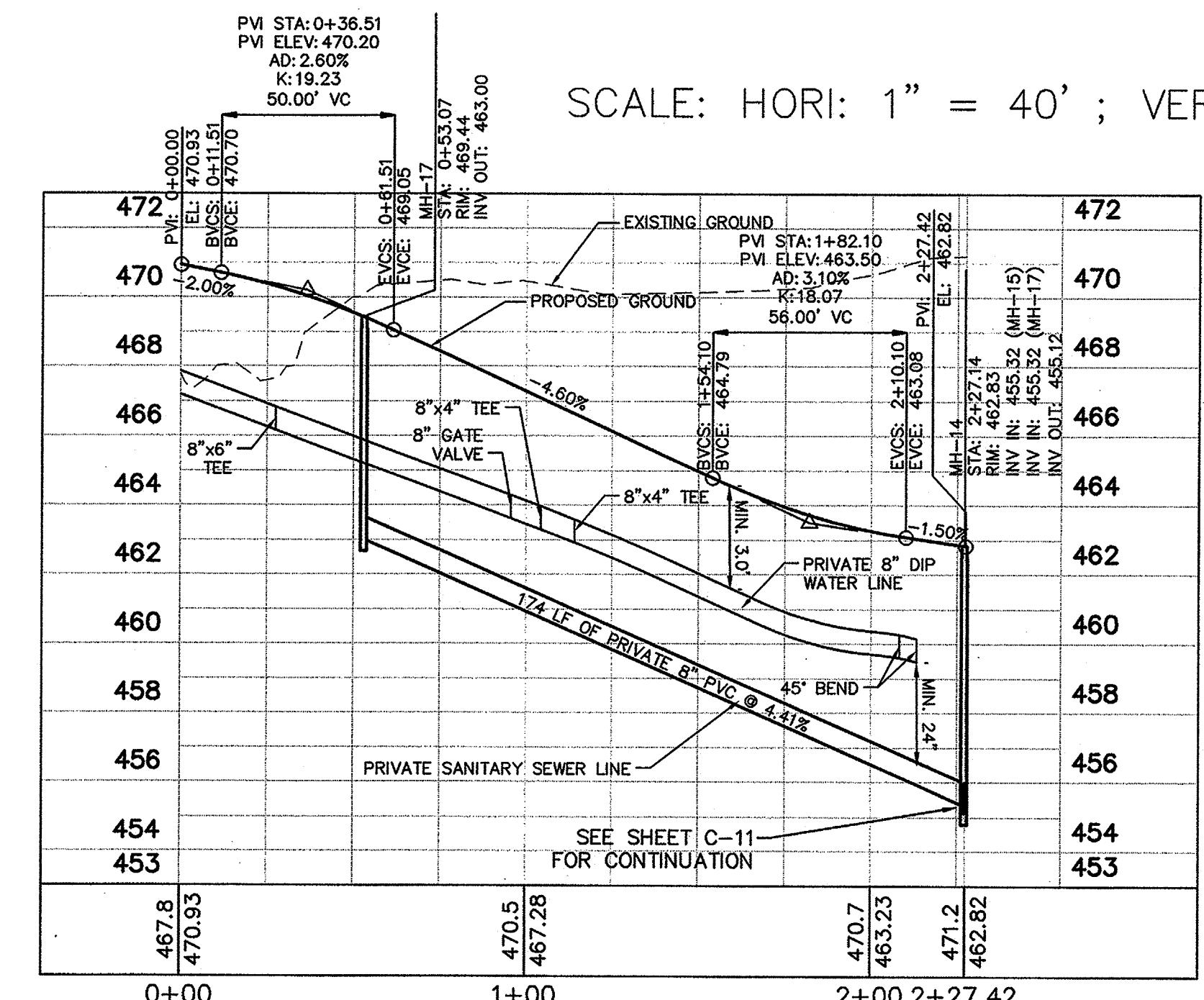


ATTENTION CONTRACTORS

The Construction Contractor responsible for the extension of water, sewer, and/or reuse, as approved in these plans, is responsible for contacting the Public Works Department at (919) 996-6810 and the Public Utilities Department at (919) 857-4540 at least twenty-four hours prior to beginning any of their construction. Failure to notify both City Departments in advance of beginning construction, will result in the issuance of monetary fines, and require reinstallation of any water or sewer facilities not inspected as a result of this notification failure. Failure to call for inspection, install a downstream plug, have Permitted Plans on the jobsite, or any other violation of City of Raleigh Standards will result in a Fine and Possible Exclusion from future work in the City of Raleigh.

Private
Water Distribution / Extension System
The City of Raleigh consents to the connection to its public water system and extension of the private water distribution system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook.
City of Raleigh Public Utilities Department Permit # 14-3027(P)
Authorization to Construct *Craig Anchors*
Date 10/14/11

Private
Sewer Collection / Extension System
The City of Raleigh consents to the connection to its public sewer system and extension of the private sewer collection system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook.
City of Raleigh Public Utilities Department Permit # S-3676(P)
Authorization to Construct *Craig Anchors*
Date 10/14/11



S-5-11
UTILITY INSTALLATIONS AND OTHER PUBLIC FACILITIES, INCLUDING SIDEWALKS AND HANDICAP RAMPS ARE TO BE CONSTRUCTED ON ALL STREETS AS SPECIFIED BY CITY CODE. THESE FACILITIES HAVE BEEN APPROVED BY THE CITY OF RALEIGH AND ARE SUBJECT TO CHANGE. ANY CHANGES OR ALTERATIONS ARE AUTHORIZED BY WRITTEN APPROVAL. PUBLIC SANITARY SEWER EASEMENTS ARE TO BE RECORDED PRIOR TO FINAL ACCEPTANCE.
SIGNATURE: *Dale L. Anchors*
TRANSPORTATION SERVICES: *DS 10/14/11*
PUBLIC UTILITIES: *CS 10/14/11*
CONSERVATION ENGINEER: *SP 10/14/11*
PLANNING: *N/A*

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/OR NCDOT STANDARDS AND SPECIFICATIONS.

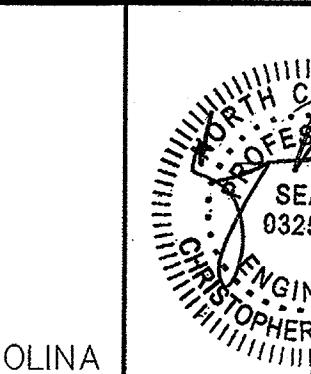


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333 FAYETTEVILLE STREET, SUITE 600, RALEIGH, NC 27601
PHONE: 919-835-1494 FAX: 919-653-5847
WWW.KIMLEY-HORN.COM

KHA PROJECT 011170001
DATE 7/29/11
SCALE AS SHOWN
DESIGNED BY COB
DRAWN BY WJB
NC CERTIFICATE OF AUTHORIZATION: F-0102
REVISIONS DATE BY

THE RETREAT AT RALEIGH PREPARED FOR LANDMARK PROPERTIES

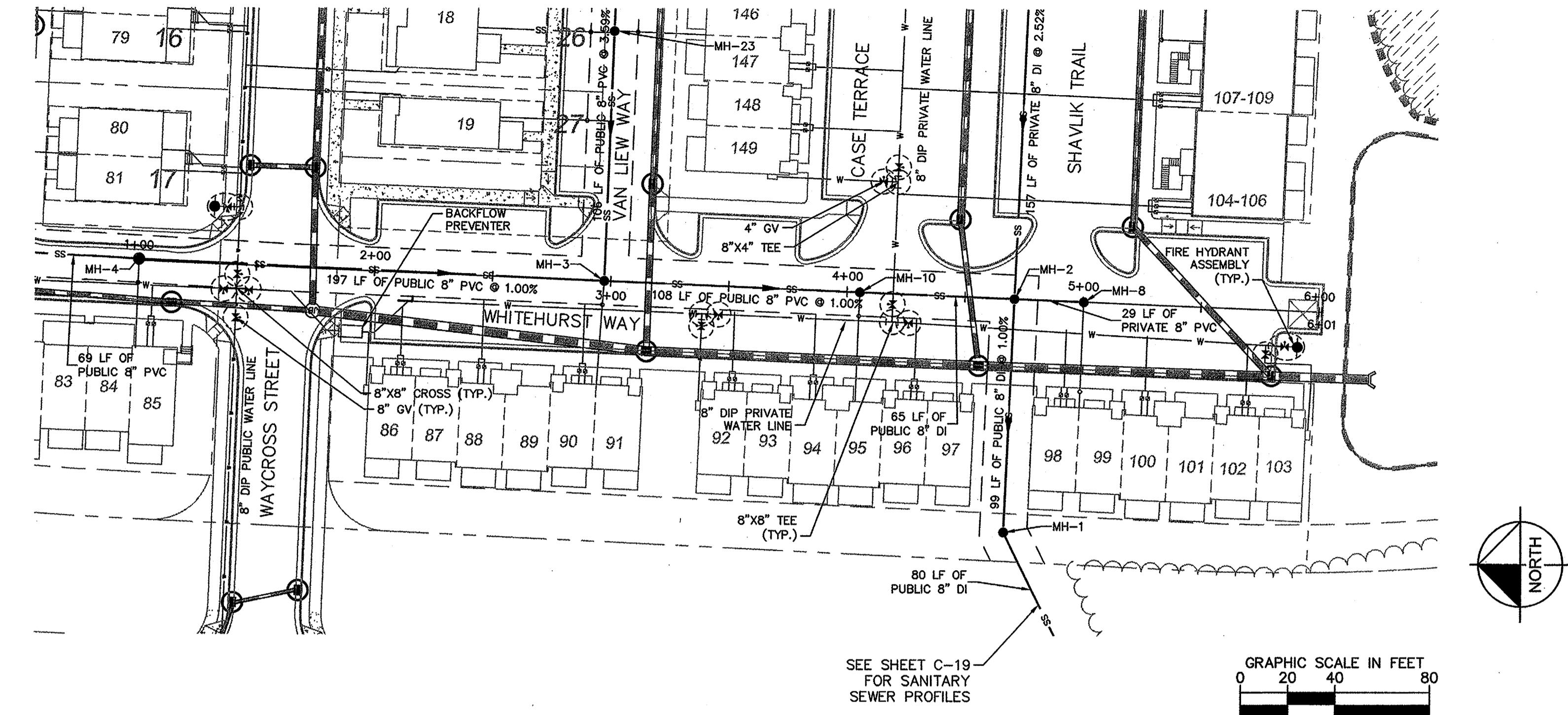
RALEIGH



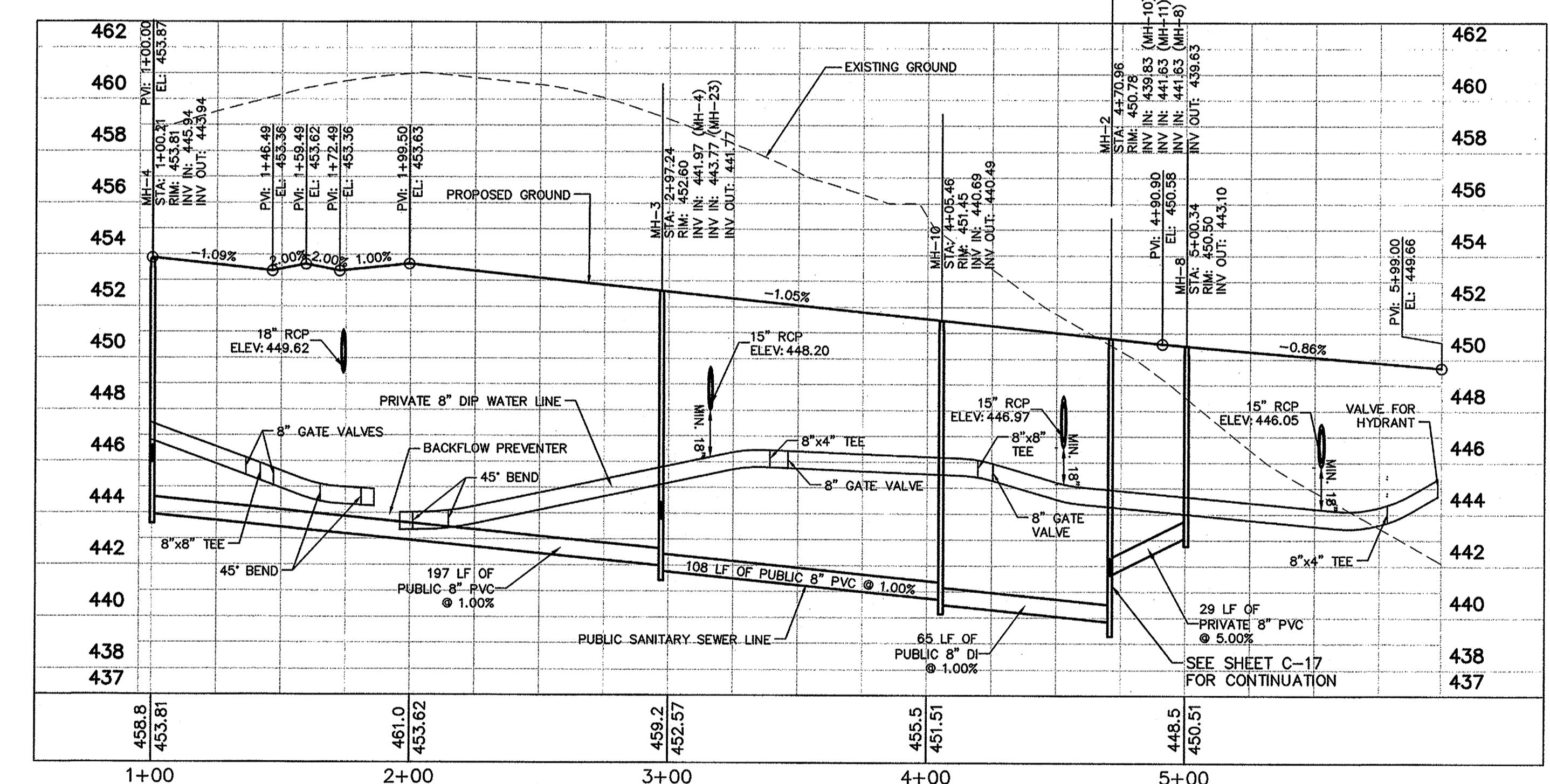
NORTH CAROLINA
THE RETREAT AT RALEIGH
SEAL
CITY OF RALEIGH
CHRISTOPHER J. BOONE
10/14/11

PLAN AND PROFILE GABRIEL TRAIL

SHEET NUMBER
C-12



SCALE: Hori: 1" = 40'; Vert: 1" = 4'



ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/OR NCDOT STANDARDS AND SPECIFICATIONS.

S-5-11

UTILITY INSTALLATIONS AND OTHER PUBLIC FACILITIES, INCLUDING SIDEWALKS AND HANDICAP RAMPING, SHALL BE LOCATED ON ALL STREETS AS SPECIFIED BY CITY CODE. THESE FACILITIES HAVE BEEN APPROVED BY THE CITY OF RALEIGH AND SHALL BE SO INSTALLED UNLESS A CHANGE IS MADE IN THE CITY CODE. ALL PUBLIC SANITARY SEWER EASEMENTS ARE TO BE RECORDED PRIOR TO FINAL ACCEPTANCE.

SIGNATURE: *David W/14*

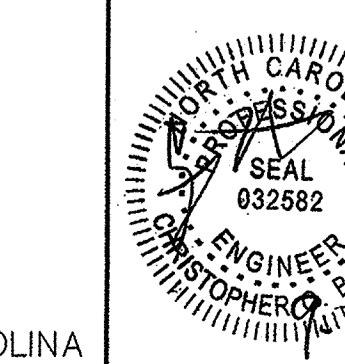
TRANSPORTATION SERVICES: *DW 10/14/11*
PUBLIC UTILITIES: *CS 10/14/11*
CONSERVATION ENGINEER: *SPL 10/13/11*
PLANNING: *N/A*



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WWW.KIMLEY-HORN.COM
NC CERTIFICATE OF AUTHORIZATION: F-0102

KHA PROJECT
01170001
DATE
7/29/11
SCALE AS SHOWN
DESIGNED BY COB
DRAWN BY WJB
CHECKED BY PAB
RALEIGH

**THE RETREAT AT RALEIGH
PREPARED FOR
LANDMARK PROPERTIES**



NORTH CAROLINA
PROFESSIONAL
ENGINEERS
BOARD
SEAL
032582

**PLAN AND PROFILE
WHITEHURST WAY**

**SHEET NUMBER
C-13**

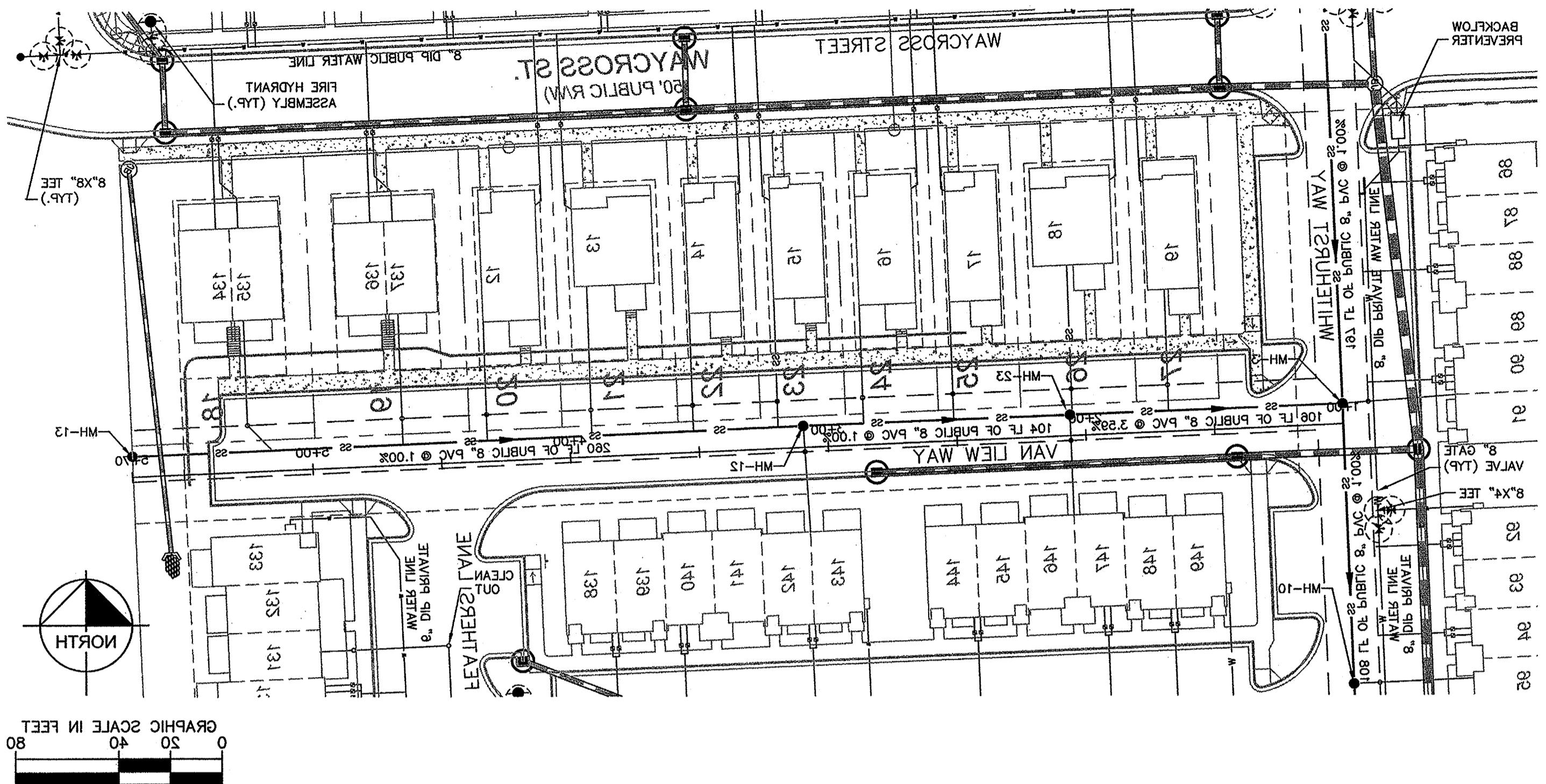
1	CITY OF RALEIGH 1ST REVIEW COMMENTS	9/21/11	WJB
No.	REVISIONS	DATE	BY

ATTENTION CONTRACTORS

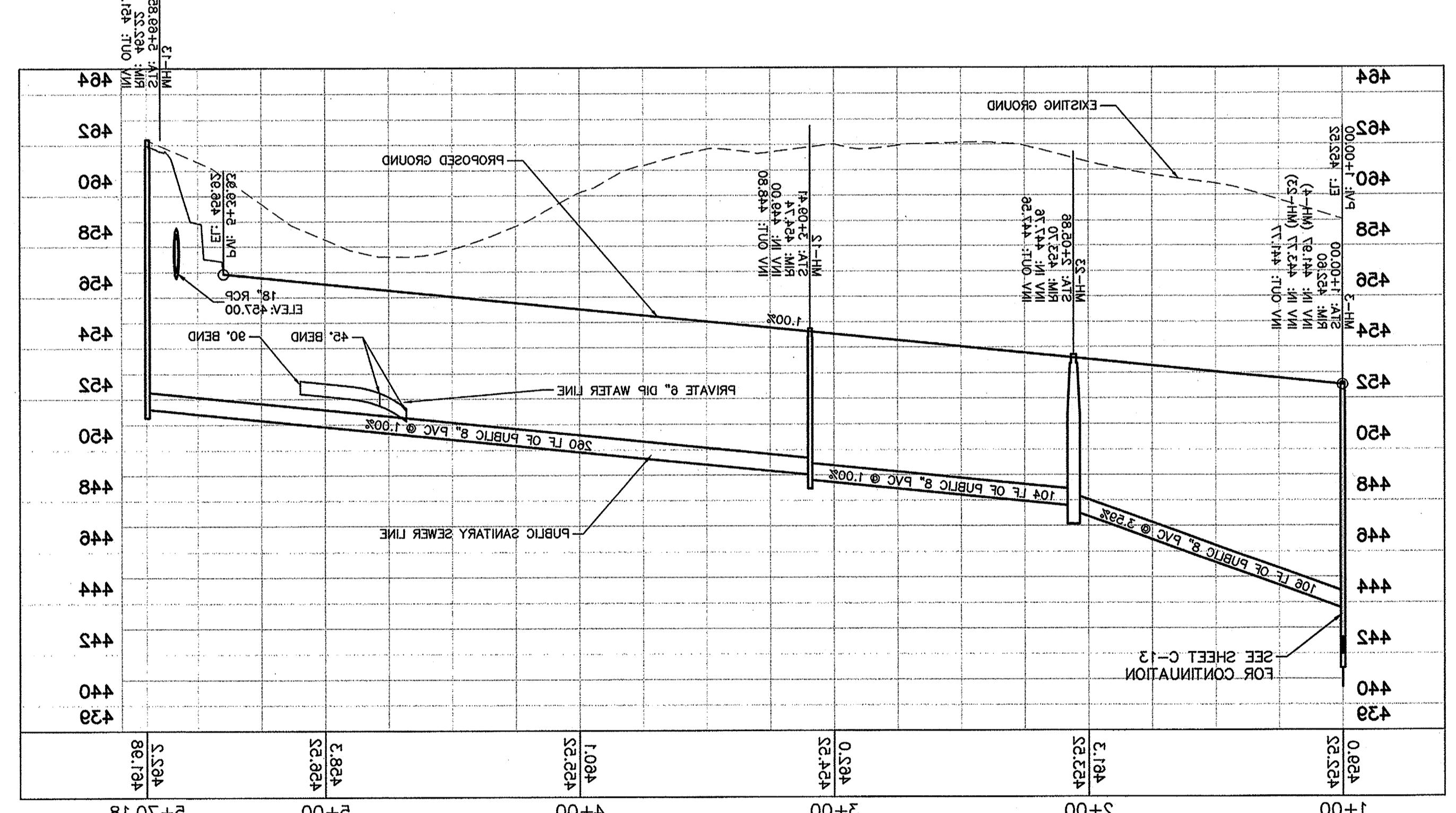
The Construction Contractor responsible for the extension of water
sewer, and/or reuse, as approved in these plans, is responsible for
constructing the Public Works Department at (312) 382-4240 or leave
Public Utilities Department at (312) 382-4240 or leave
Twenty four hours prior to beginning any of their construction.

Failure to notify City Deptments in advance of beginning
construction, will result in the issuance of ~~water~~ fines and
reduce reimbursement of only water or sewer facilities not inspected
as a result of this notification failure.

Failure to call for Inspection, Install & Downstream Pipe shall
result in a fine and possible Extension
Penalties imposed on the property or any other Violation of City of
Chicago Standards will result in a Fine and Possible Extension.



Public Sewer Collection \ Extension System	
<p>The City of Rosedale connects to the connection and extension of the City's public sewer system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook.</p>	
<p>City of Rosedale Public Utilities Department Permit # 2-3655 Authorizations to Construct (Signature) <i>[Signature]</i> Date 10/14/11</p>	



EQUIPMENTS	
Y'S OF RALEIGH AND/OR NC DOT STANDARDS AND CONSTRUCTION TO BE IN ACCORDANCE WITH ALL	
PLANNING: <i>N/A</i>	
CONSERVATION ENGINEER: <i>SPC 01/13/14</i>	
PUBLIC UTILITIES: <i>C-15/14/11</i>	
TRANSPORTATION SERVICES: <i>10/13/11</i>	
SIGNATURE: <i>SPC 01/13/11</i>	
PRIORITY TO FINAL ACCOMPLISHMENT	
STANDARDS ASSEMBLIES ARE TO BE RECORDED	
IS AUTHORIZED BY WRITTEN APPROVAL PURSU	
AND SHARE IT BE SO INSTALLED UNLESS A CHANGE	
BEEN APPROVED BY THE CITY OF RALEIGH	
AS SPECIFIED BY THE CITY CODE.	
RAMPS ARE TO BE CONSTRUCTED ON ALL STREETS	
FACILITIES, INCLUDING SIDEWALKS AND OTHER PUBLIC	
UTILITIES INSTALLATIONS AND OTHER PUBLIC	

PLAN AND PROFILE VAN LIEN WAY

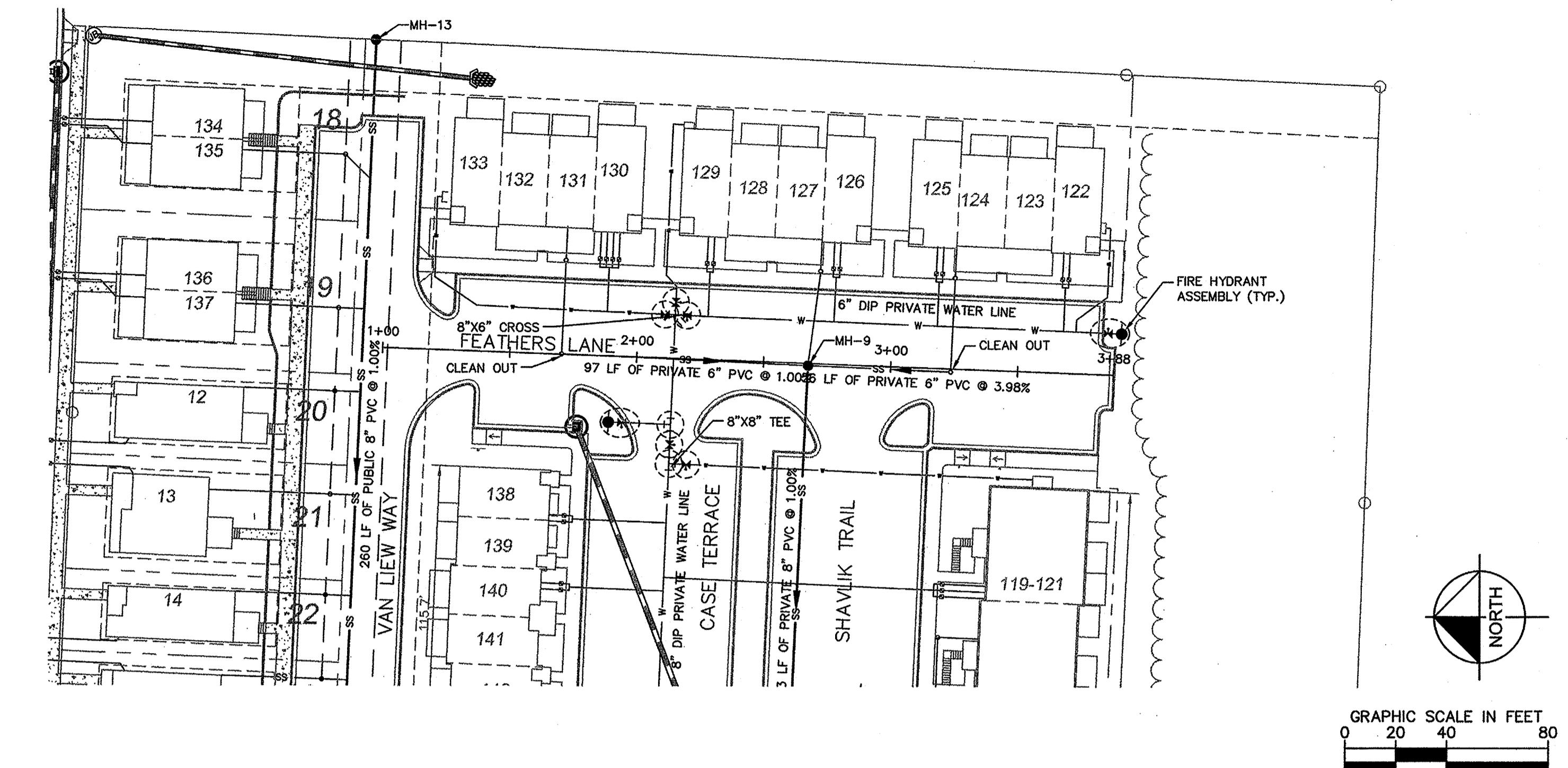
A circular library stamp with a decorative border. The text "NORTH CAROLINA STATE LIBRARY" is curved along the top inner edge, and "RALEIGH, NC" is curved along the bottom right inner edge. In the center, it says "LIBRARY STAMP" at the top, "035285" below it, and "SEAL" at the bottom.

THE RETREAT AT RALEIGH

LANDMARK PROPERTIES
PREPARED FOR

100TH CAROLINA

RAIL	CHEKED BY	PAB	NC CERTIFICATE OF AUTHORIZATION: E-0102
DRAWN BY	WBR	PHONE: 919-835-1464 FAX: 919-653-5847	333 FAYETTEVILLE STREET, SUITE 600, RALEIGH, NC 27601
DESIGNED BY	COB	© 2011 KIMLEY-HORN AND ASSOCIATES, INC.	© 2011 KIMLEY-HORN AND ASSOCIATES, INC.
SCALE AS SHOWN		WWW.KIMLEY-HORN.COM	Kimley-Horn and Associates, Inc.
J\23\11	DATE	0111J0001	KHA PROJECT



Private
Water Distribution / Extension System

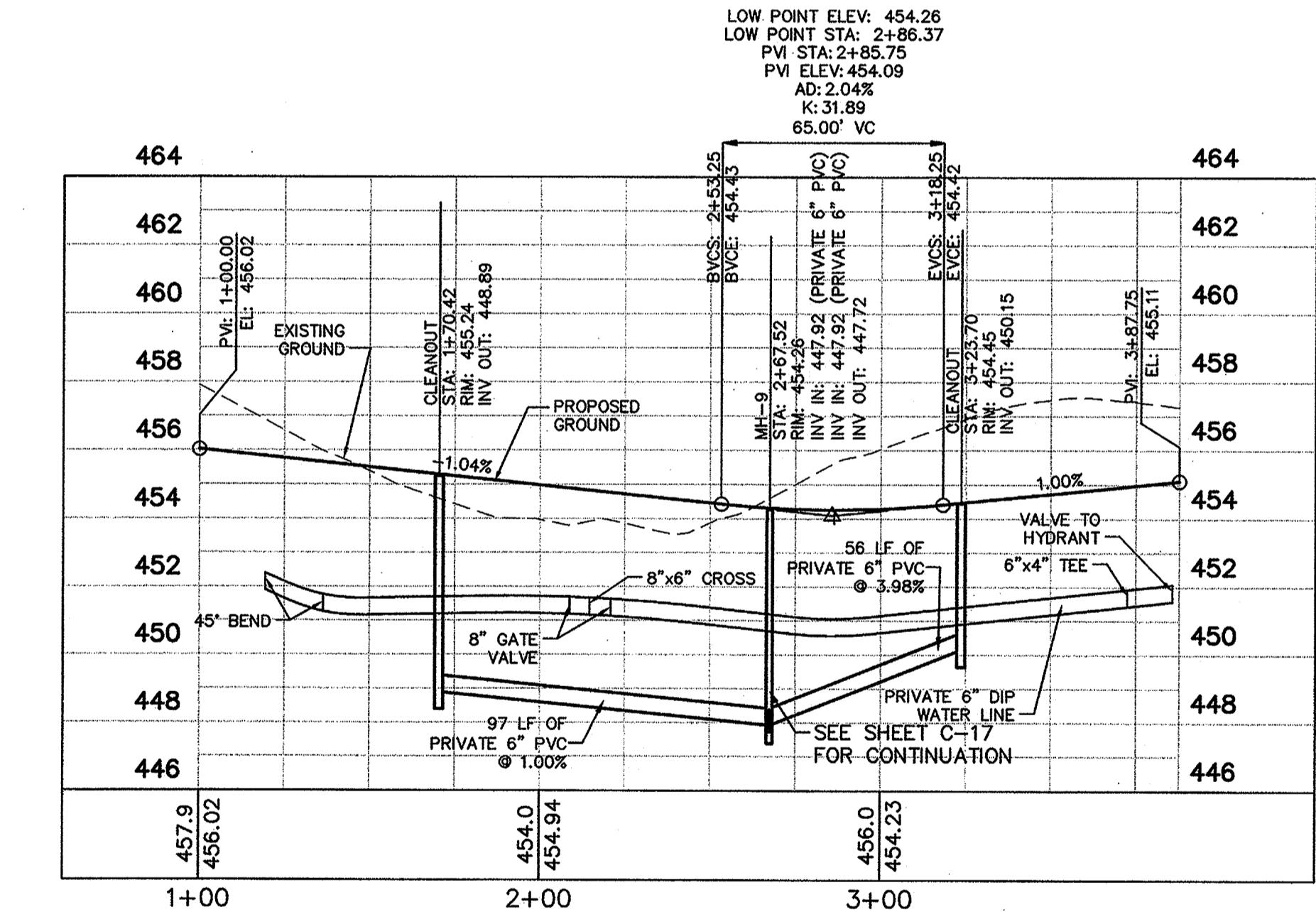
The City of Raleigh consents to the connection to its public water system and extension of the private water distribution system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook.

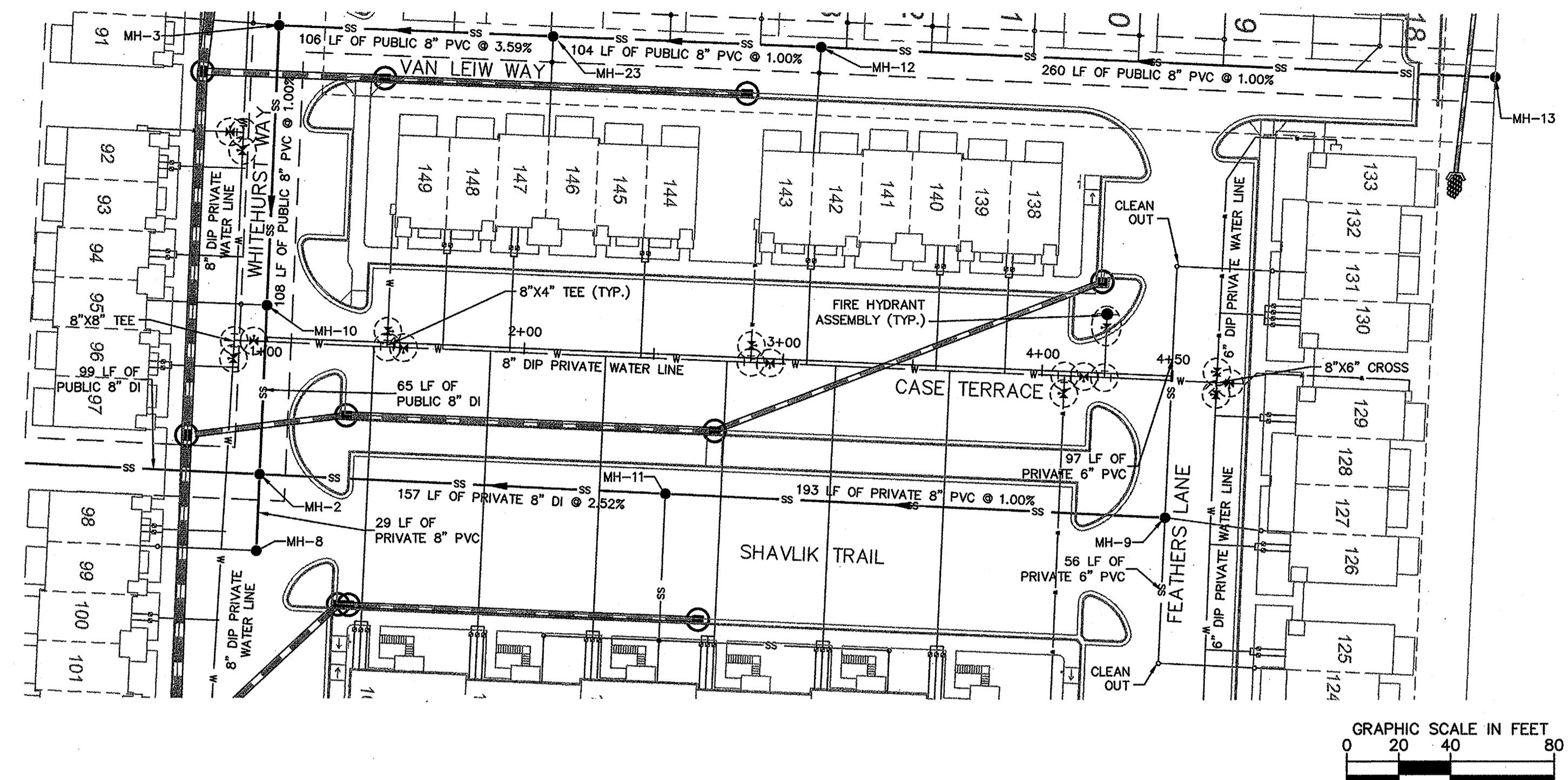
City of Raleigh
Public Utilities Department Permit # W-3027(7)
Authorization to Construct Craig Anderson
Date 10/14/11

Private
Sewer Collection / Extension System

The City of Raleigh consents to the connection to its public sewer system and extension of the private sewer collection system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook.

City of Raleigh
Public Utilities Department Permit # S-3676(7)
Authorization to Construct Craig Anderson
Date 10/14/11

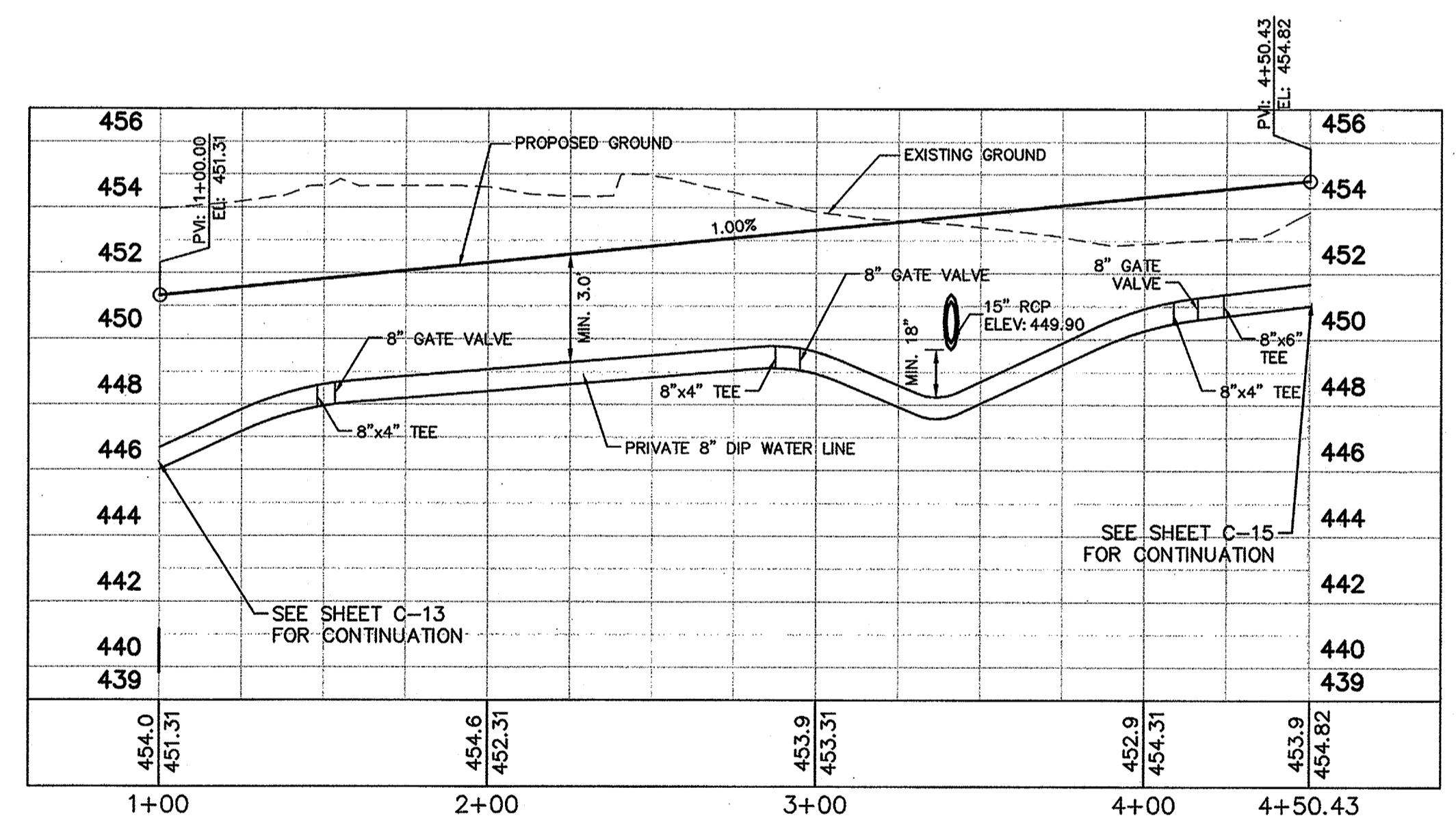




Private
Water Distribution / Extension System

The City of Raleigh consents to the connection to its public water system of the private water system shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook.

City of Raleigh Public Utilities Department Permit # W-3027(C)
Authorization to Construct *Leigh Pendleton*
Date 10/14/11



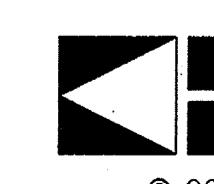
SCALE: Hori: 1" = 40'; Vert: 1" = 4'

S-5-11	
UTILITY INSTALLATIONS AND OTHER PUBLIC FACILITIES, INCLUDING SIDEWALKS AND HANDICAP RAMPS ARE TO BE CONSTRUCTED ON ALL STREETS AND AREAS WHERE THESE FACILITIES HAVE BEEN APPROVED BY THE CITY OF RALEIGH AND SHALL BE SO INSTALLED UNLESS A CHANGE IS AUTHORIZED BY WRITTEN APPROVAL. PUBLIC SANITARY SYSTEM CONNECTIONS ARE TO BE RECORDED PRIOR TO FINAL ACCEPTANCE.	

SIGNATURE: *Leigh Pendleton*
TRANSPORTATION SERVICES: *CS 10/14/11*
PUBLIC UTILITIES: *CS 10/14/11*
CONSERVATION ENGINEER: *SPL 10/13/11*
PLANNING: *N/A*

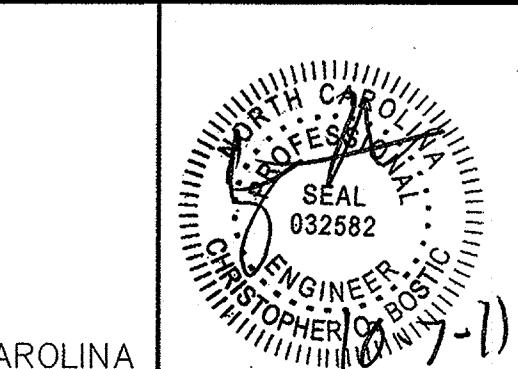
ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/OR NCDOT STANDARDS AND SPECIFICATIONS.

No.	REVISIONS	DATE	BY
2	CITY OF RALEIGH 2ND REVIEW COMMENTS	10/07/11	WJB
1	CITY OF RALEIGH 1ST REVIEW COMMENTS	9/21/11	WJB

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PHONE: 919-835-1494 FAX: 919-653-5847
WWW.KIMLEY-HORN.COM
NC CERTIFICATE OF AUTHORIZATION: F-0102

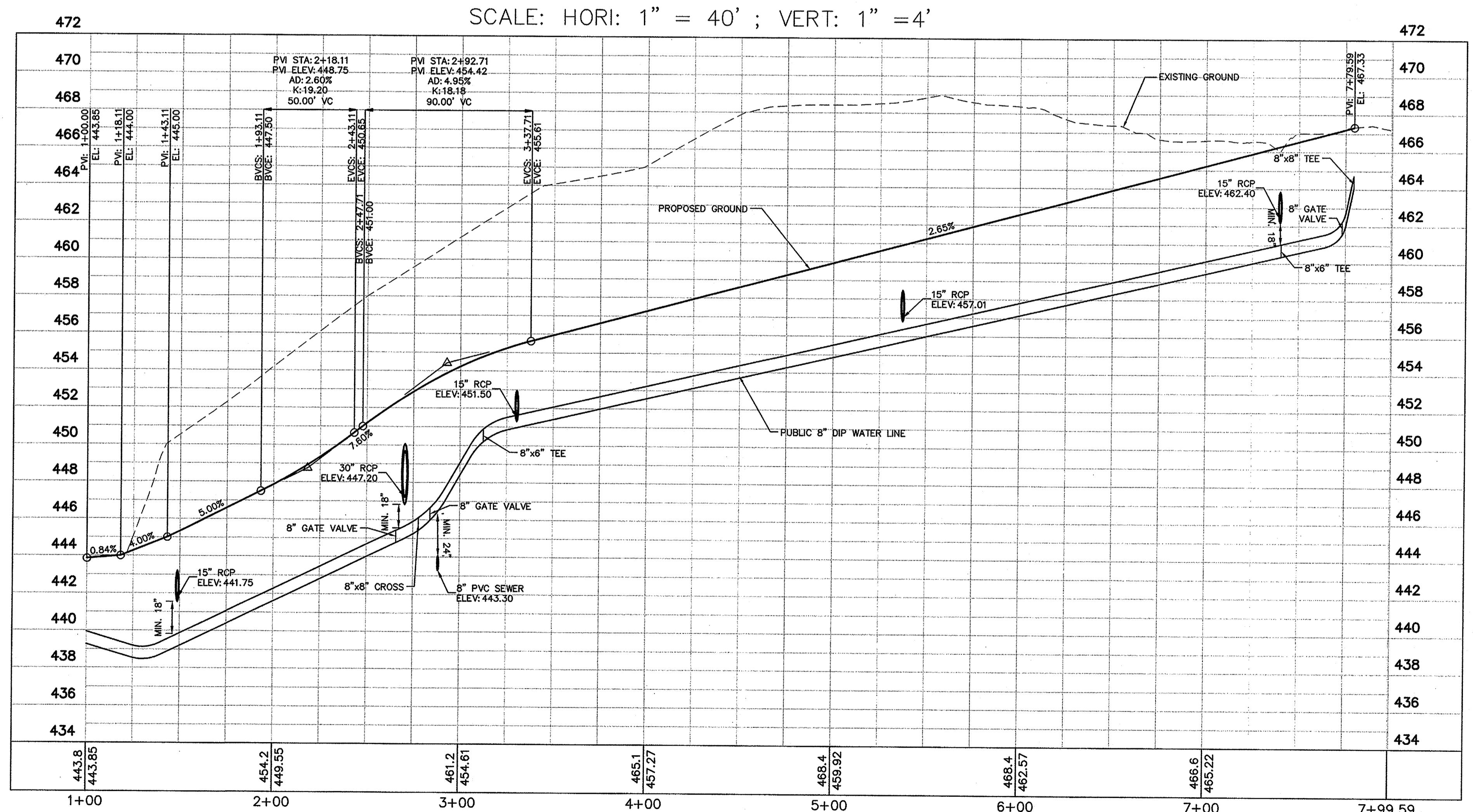
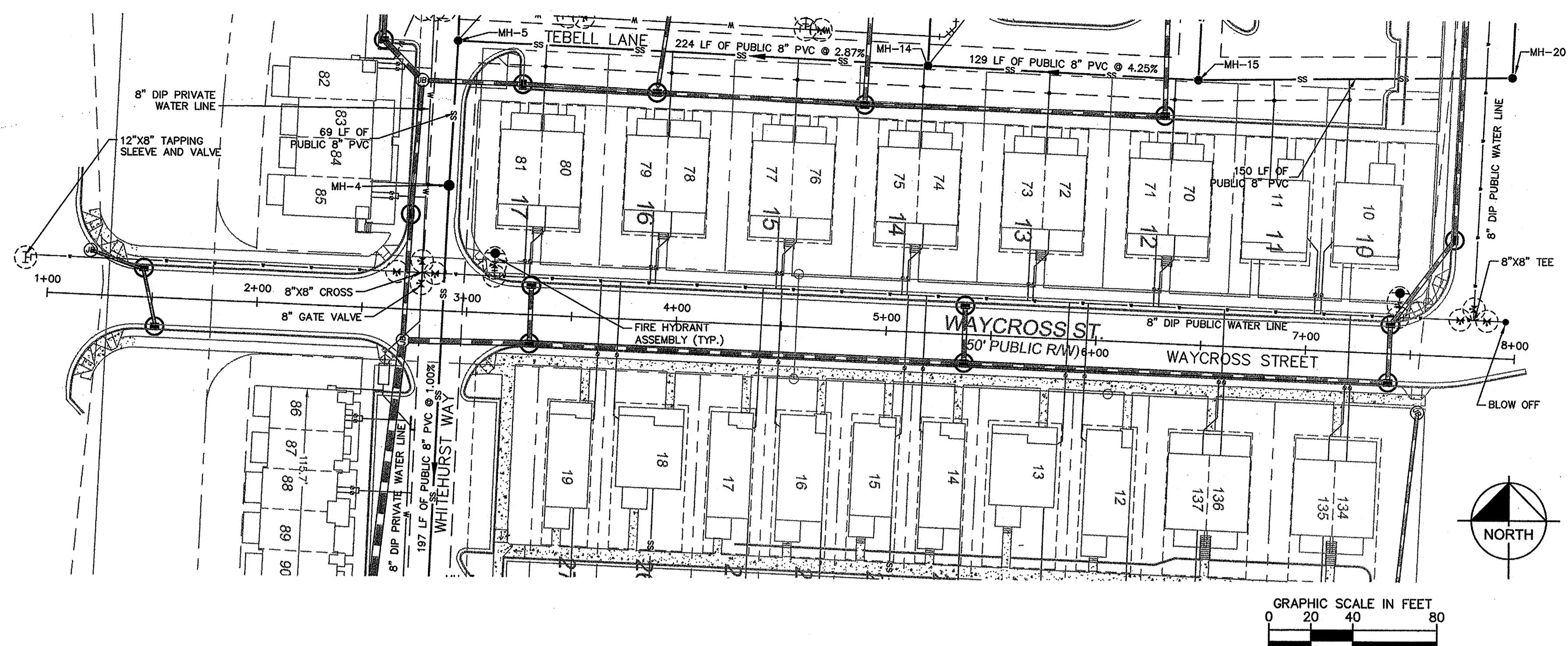
KHA PROJECT 011170001
DATE 7/29/11
SCALE AS SHOWN
DESIGNED BY COB
DRAWN BY WJB
CHECKED BY PAB
RALEIGH

THE RETREAT AT RALEIGH
PREPARED FOR
LANDMARK PROPERTIES

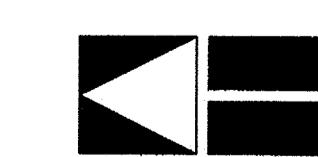


PLAN AND PROFILE
CASE TERRACE

SHEET NUMBER
C-16



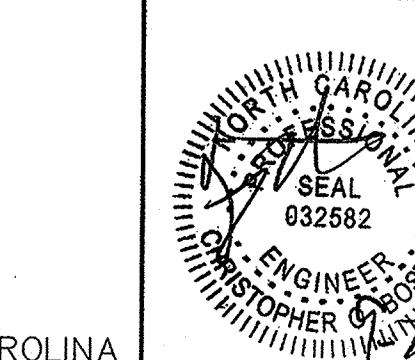
No.	CITY OF RALEIGH 1ST REVIEW COMMENTS	DATE	BY
1	REVISIONS	9/21/11	WJB



**Kimley-Horn
and Associates, Inc.**
© 2011 KIMLEY-HORN AND ASSOCIATES, INC.
333 FAYETTEVILLE STREET, SUITE 600, RALEIGH, NC 27601
PHONE: 919-835-1494 FAX: 919-653-5847
WWW.KIMLEY-HORN.COM
NC CERTIFICATE OF AUTHORIZATION: F-0102

KHA PROJECT
011170001
DATE
7/29/11
SCALE AS SHOWN
DESIGNED BY COB
DRAWN BY WJB
CHECKED BY PAB
RALEIGH

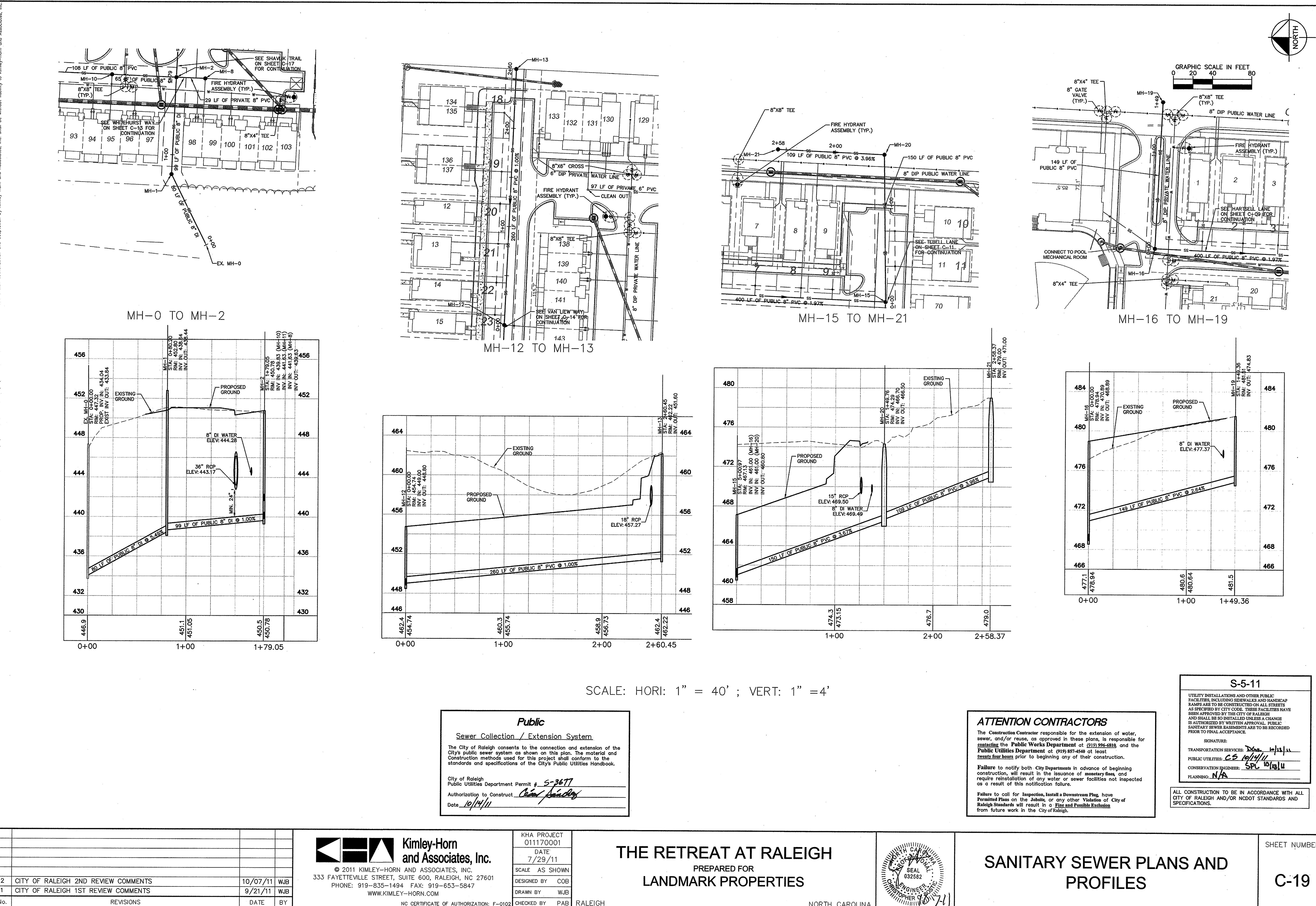
**THE RETREAT AT RALEIGH
PREPARED FOR
LANDMARK PROPERTIES**

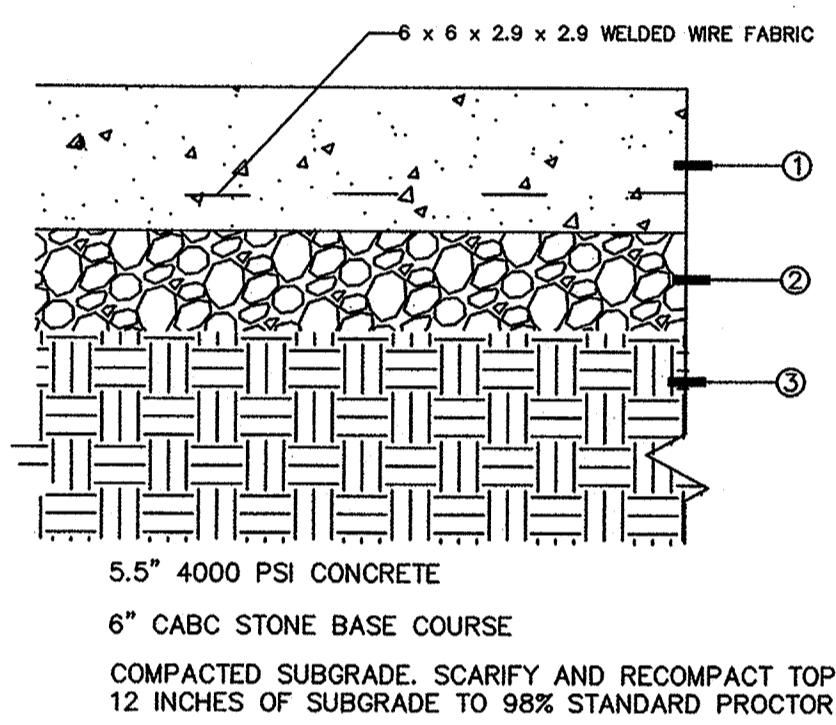
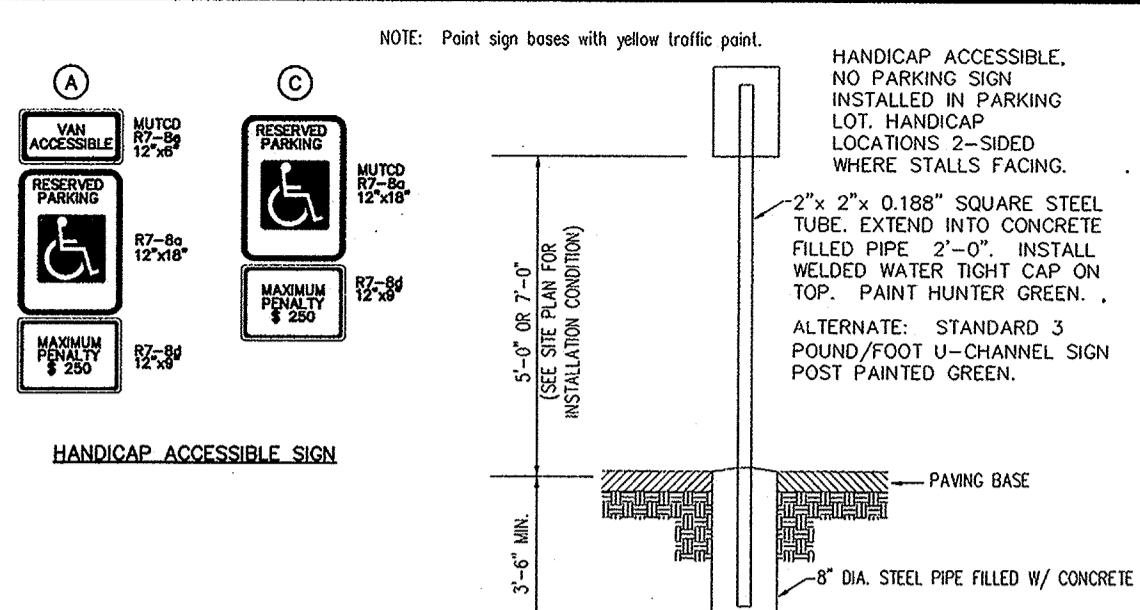
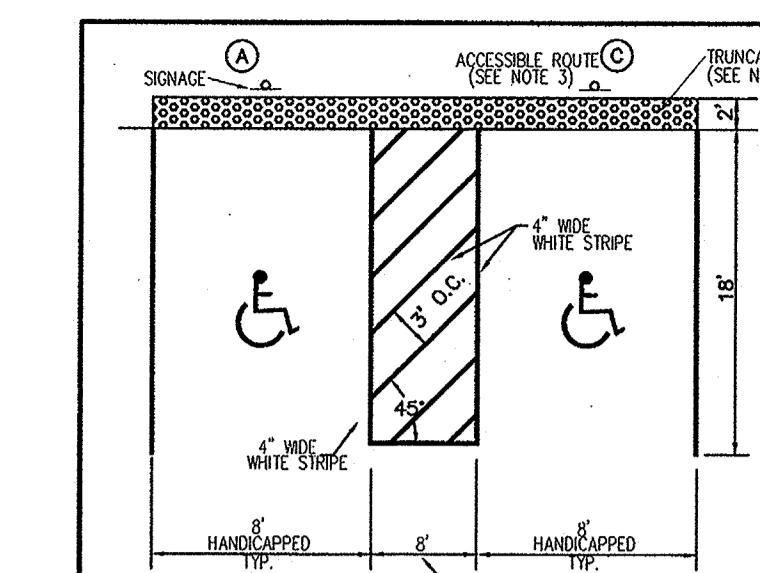
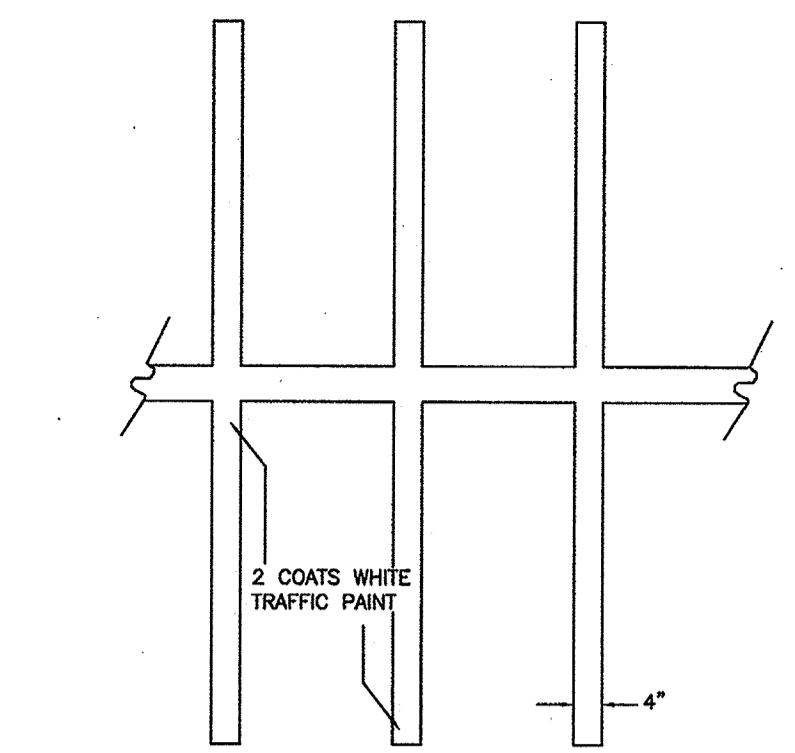
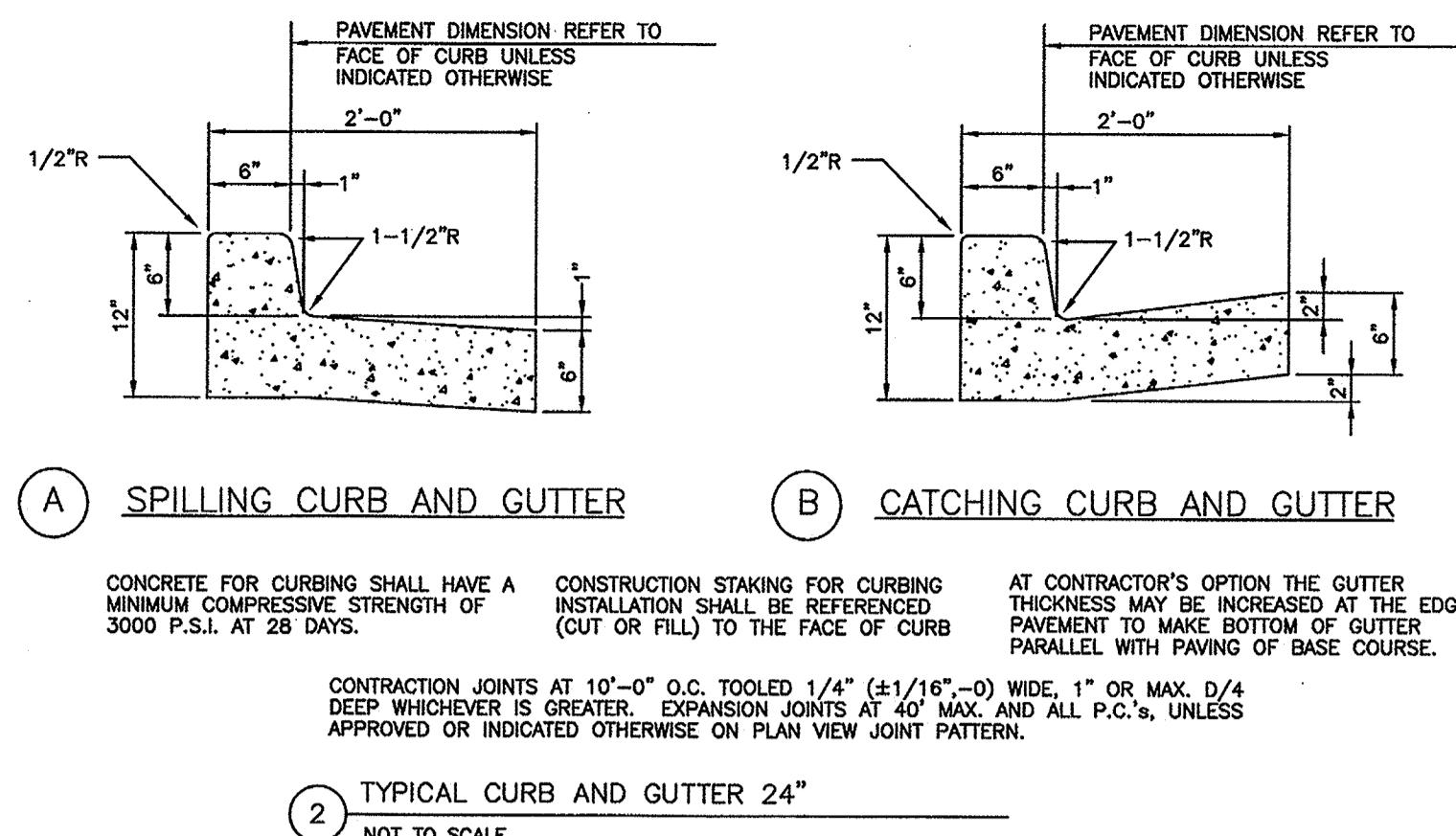
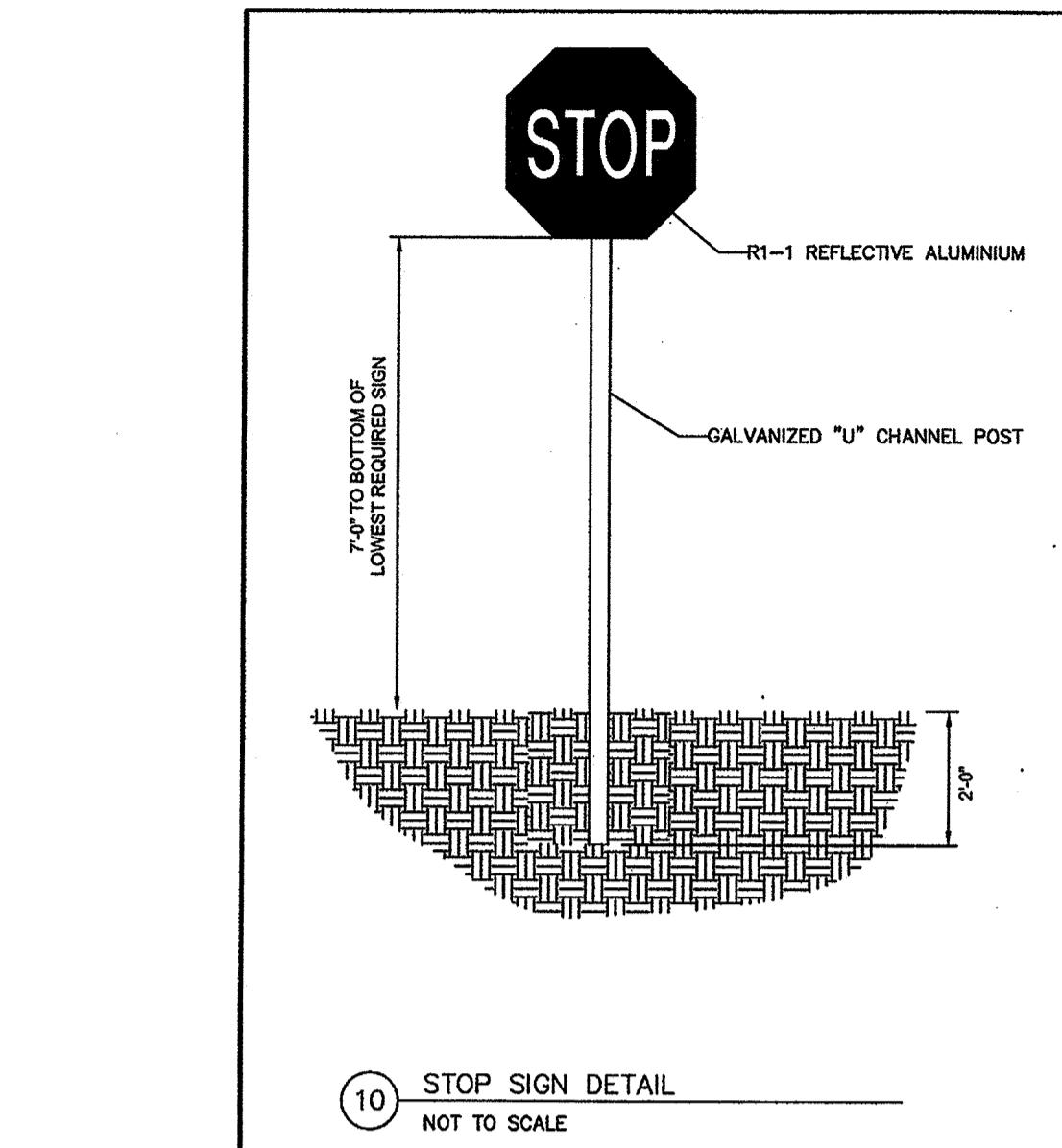


NORTH CAROLINA
SEAL
032682
CHRISTOPHER G. GORE, P.E., G.G., L.S.

**PLAN AND PROFILE
WAYCROSS STREET**

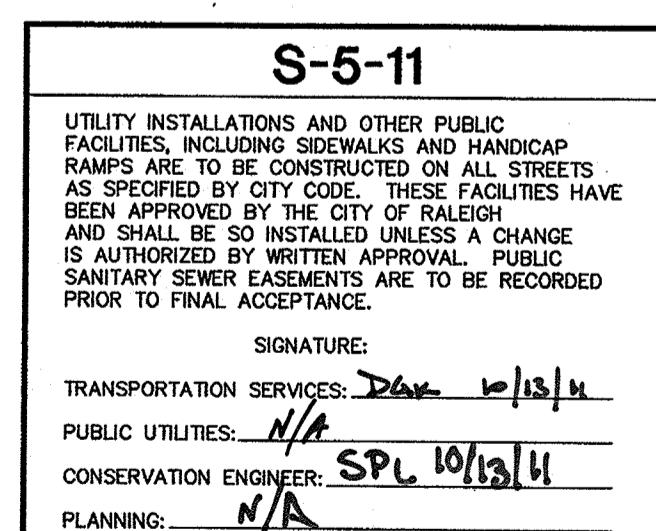
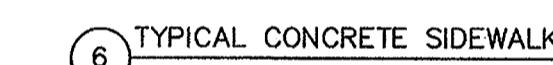
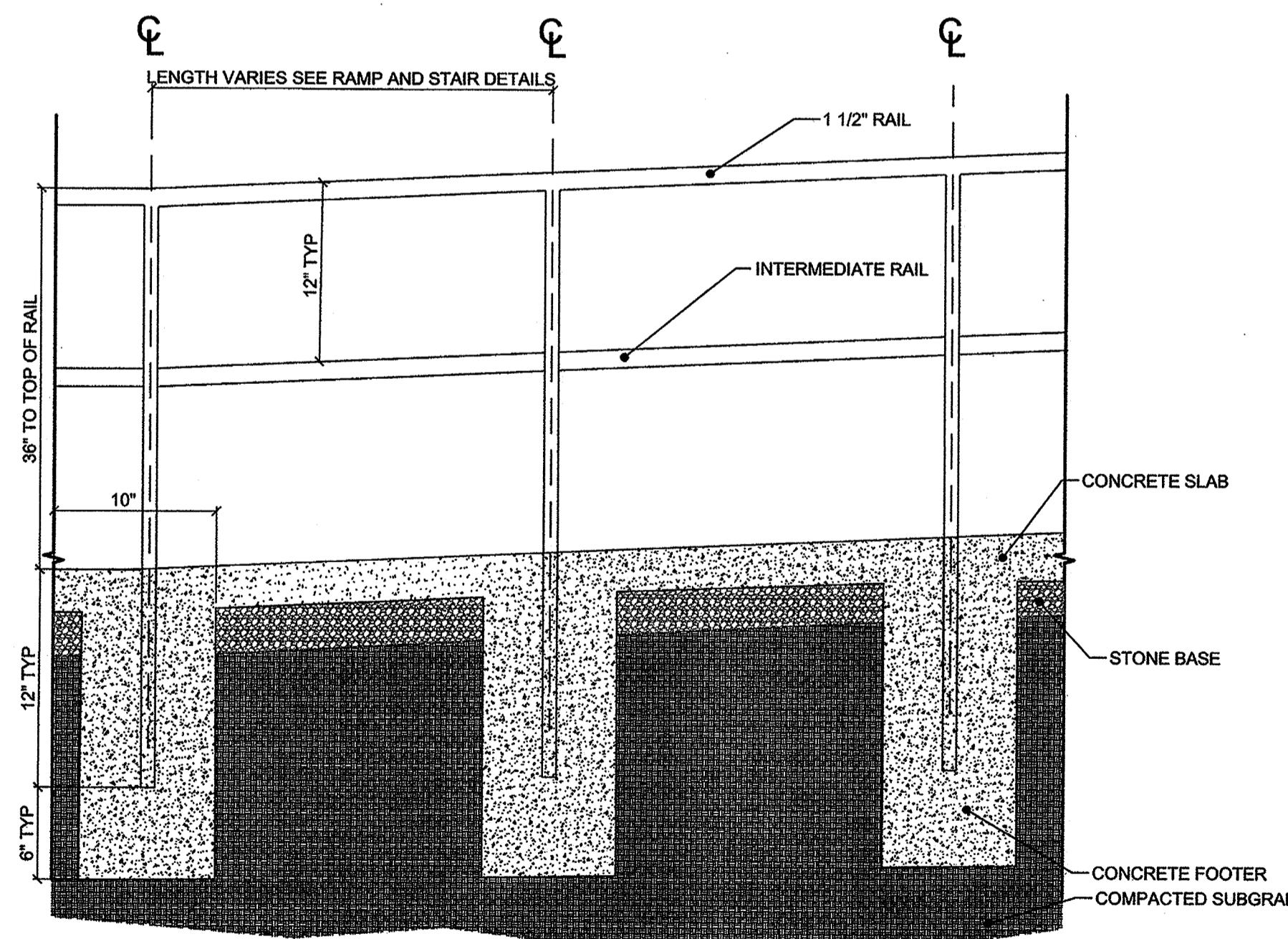
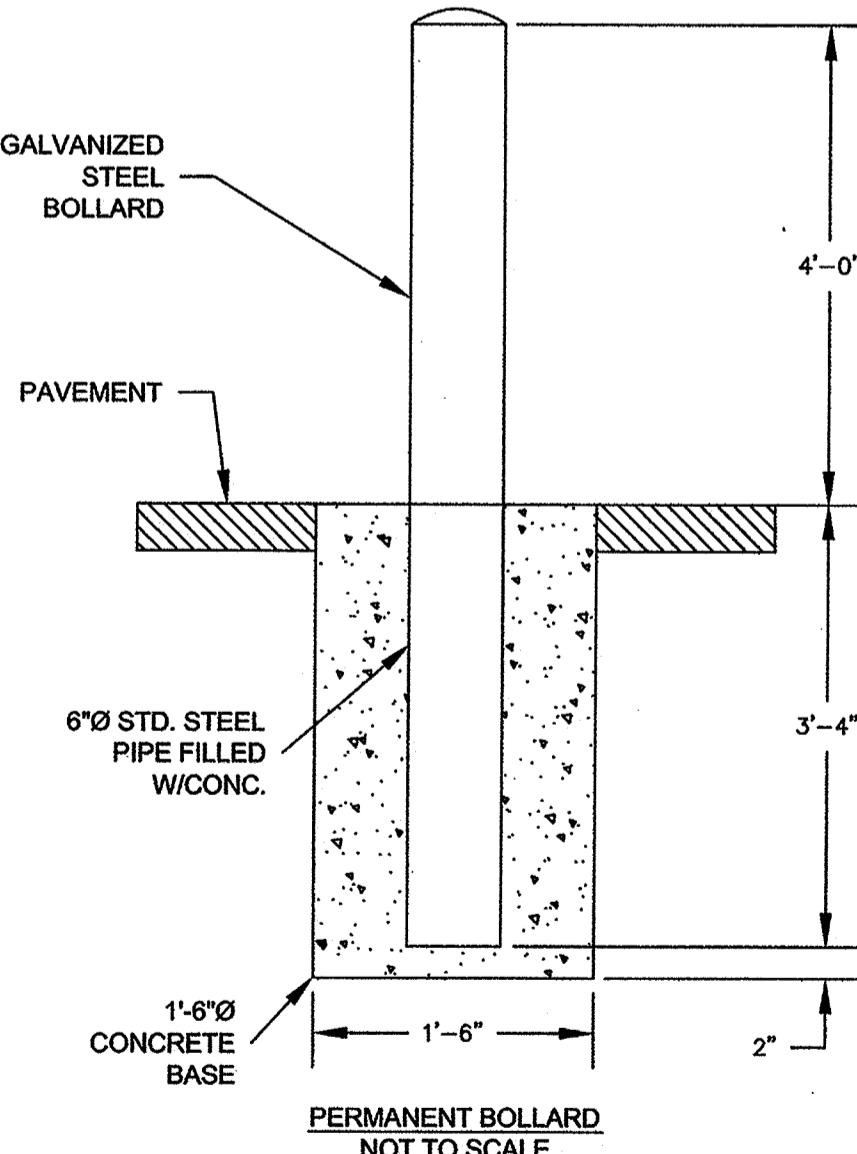
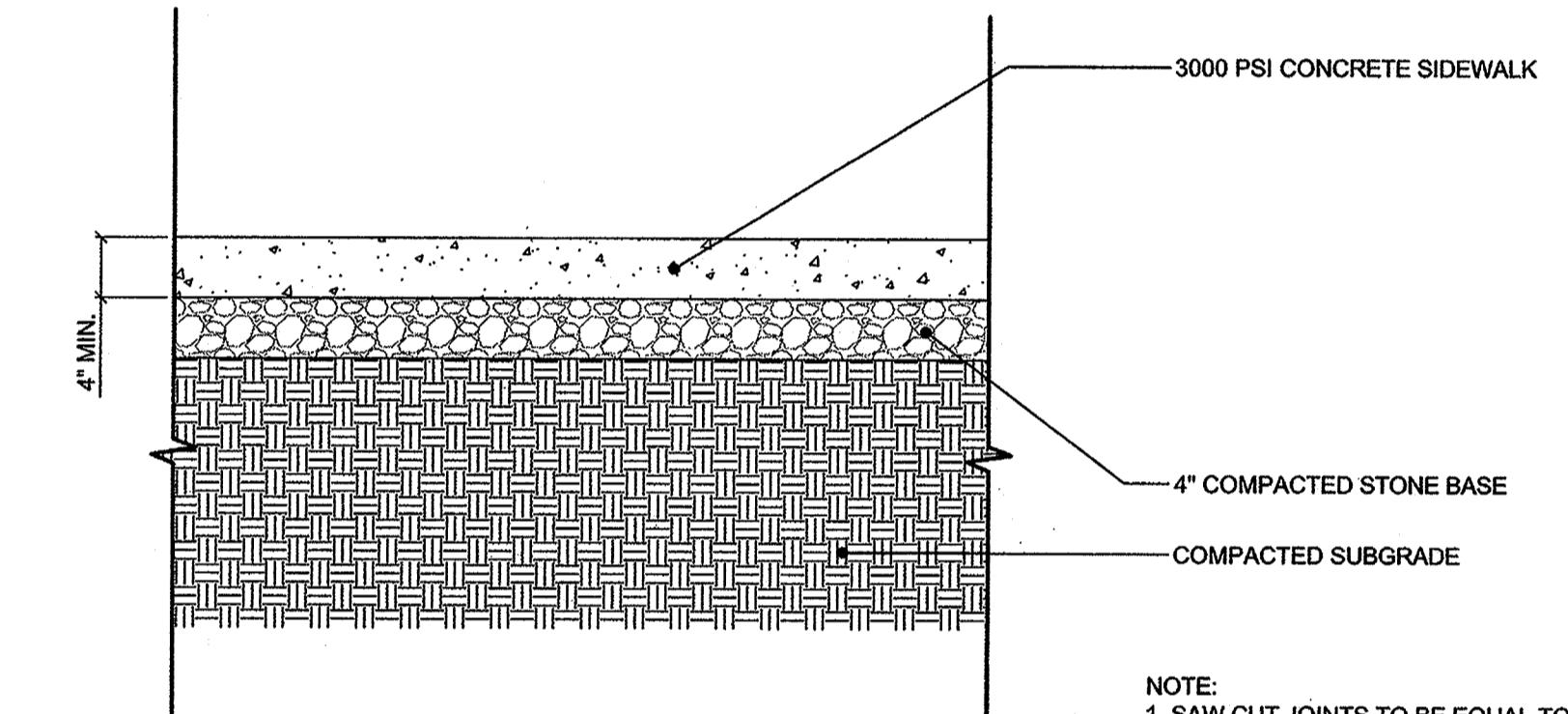
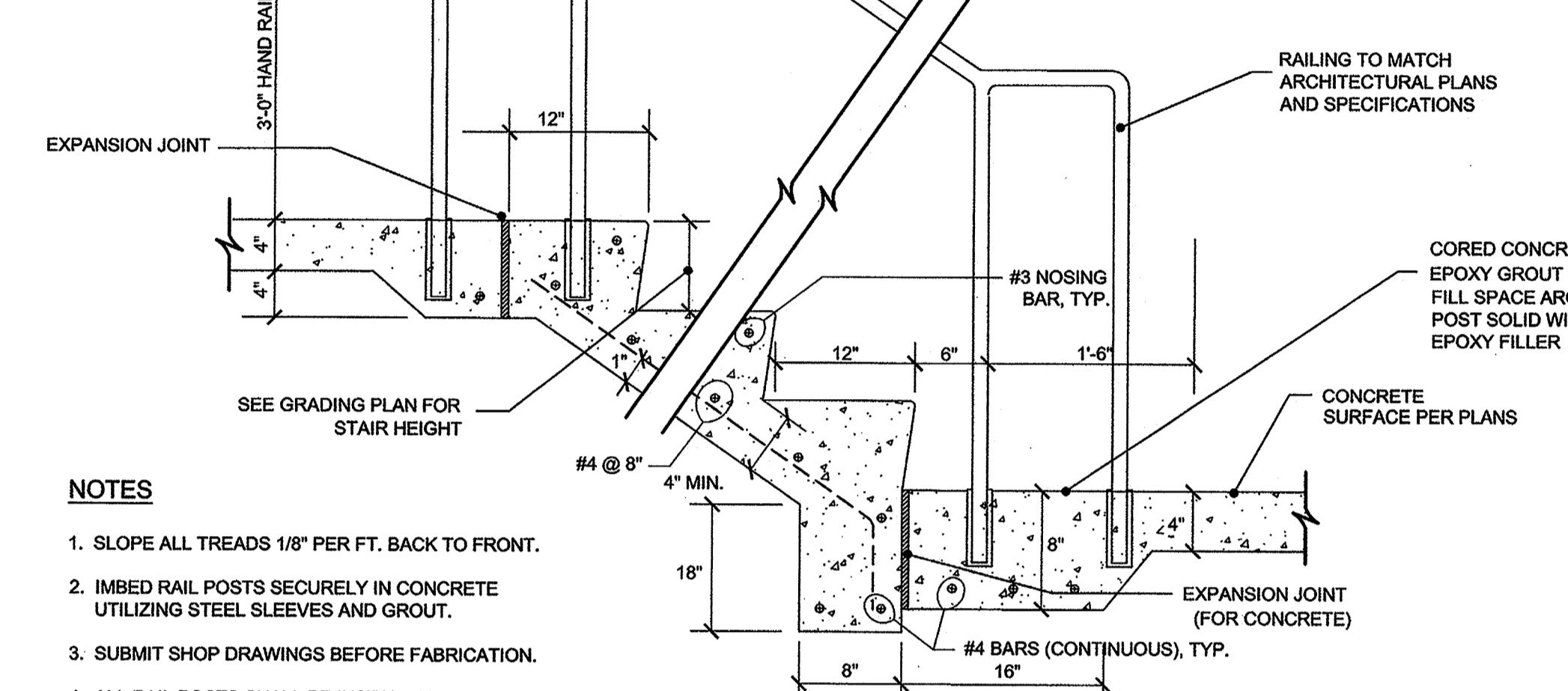
C-18



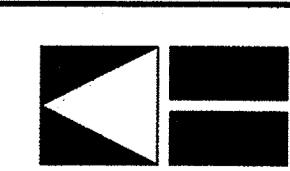


HEAVY DUTY CONCRETE PAVING

SCALE: NO SCALE



ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL
CITY OF RALEIGH AND/OR NCDOT STANDARDS AND
SPECIFICATIONS.



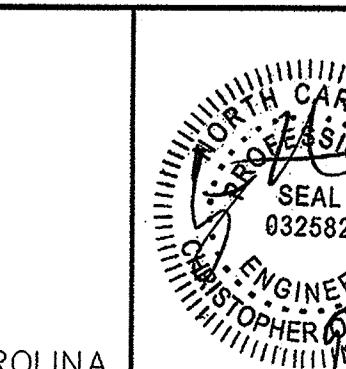
The logo consists of three black squares arranged horizontally. The first square contains a white triangle pointing left. The second square contains a white square. The third square contains a white triangle pointing right. To the right of the logo, the company name "Kimley-Horn and Associates, Inc." is written in a large, bold, black serif font.

	KHA
	011
	D
	7/
	SCALE
7601	DESIGNED
	DRAWN B

THE RETREAT AT RALEIGH

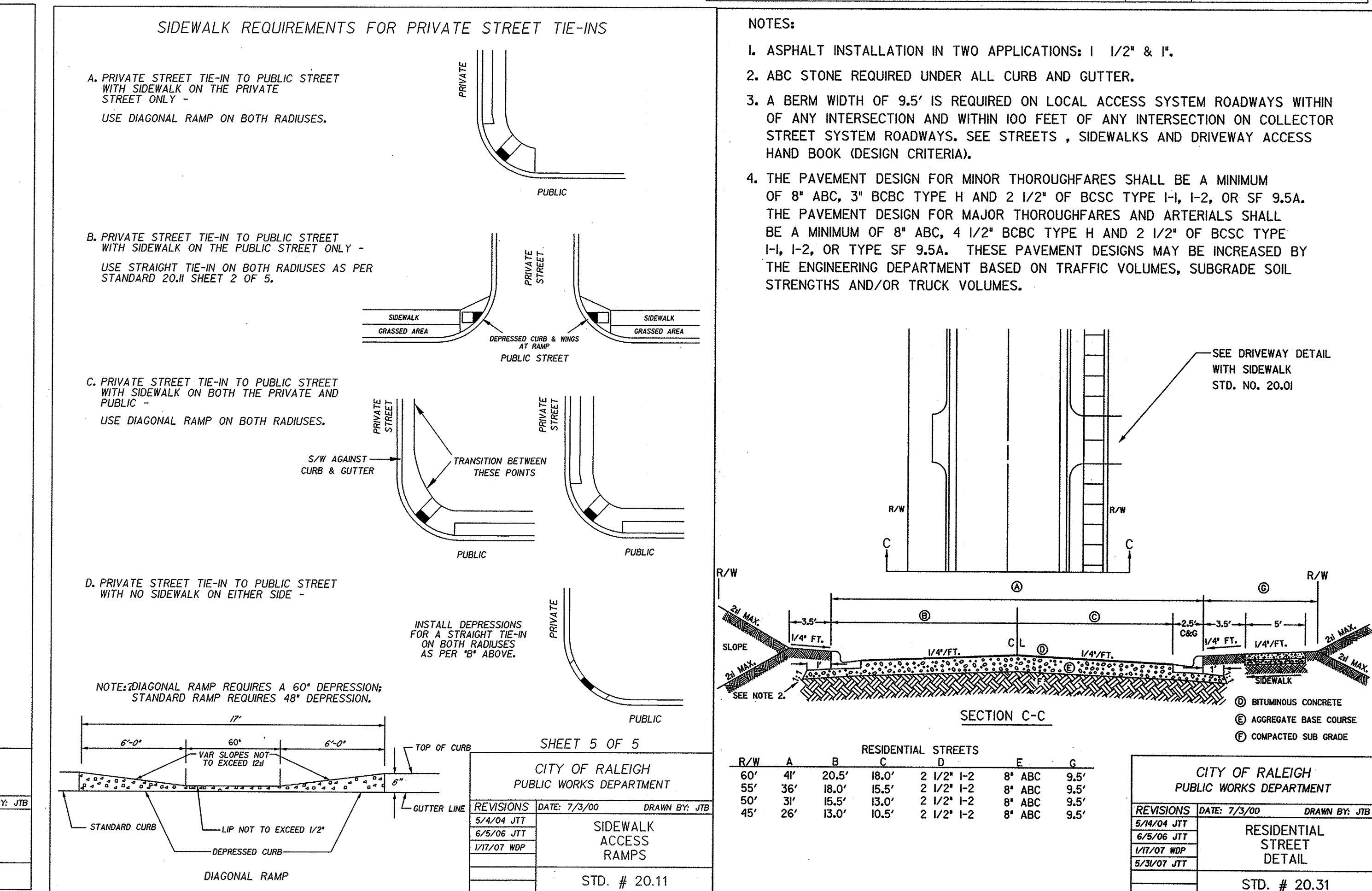
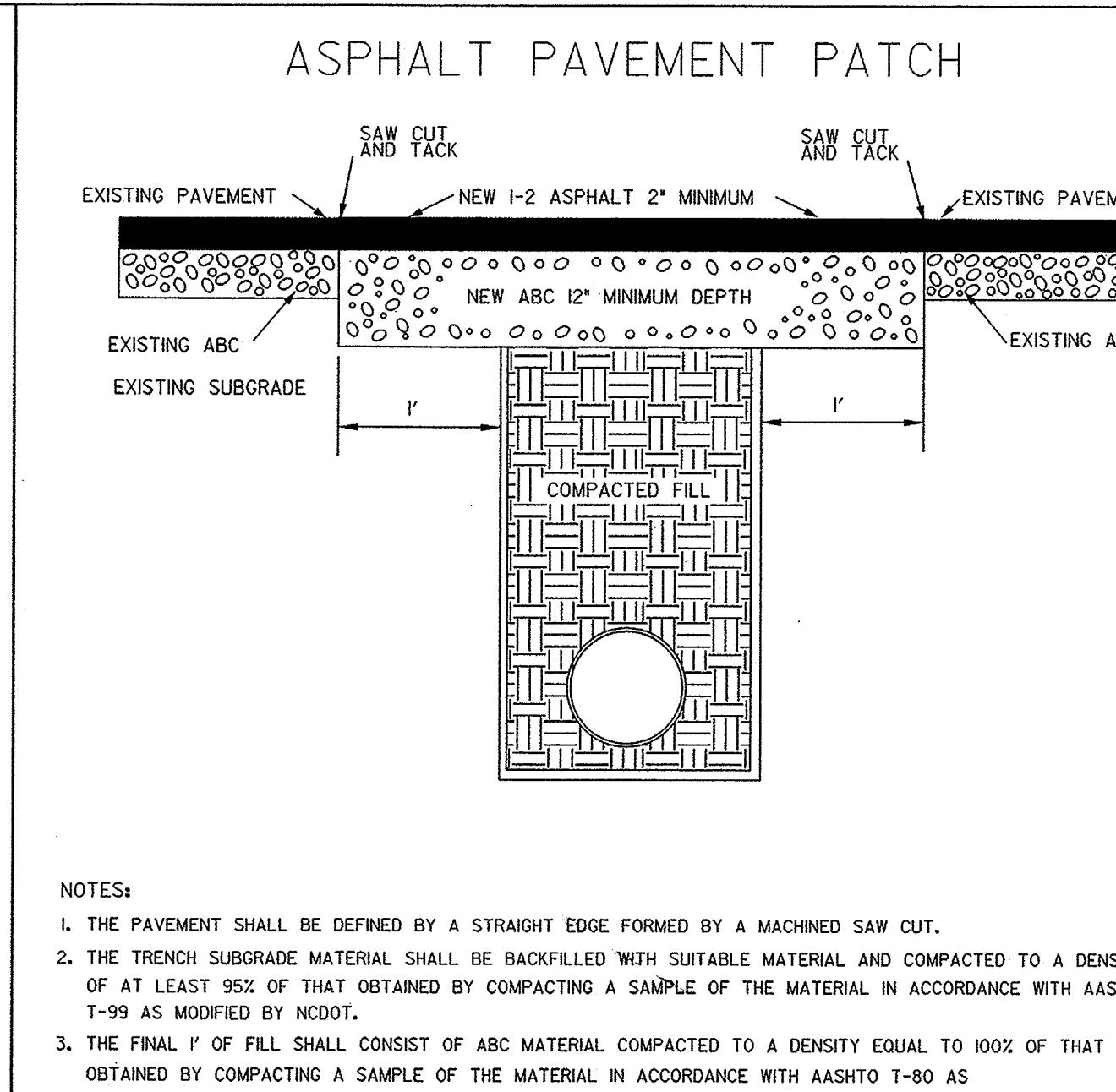
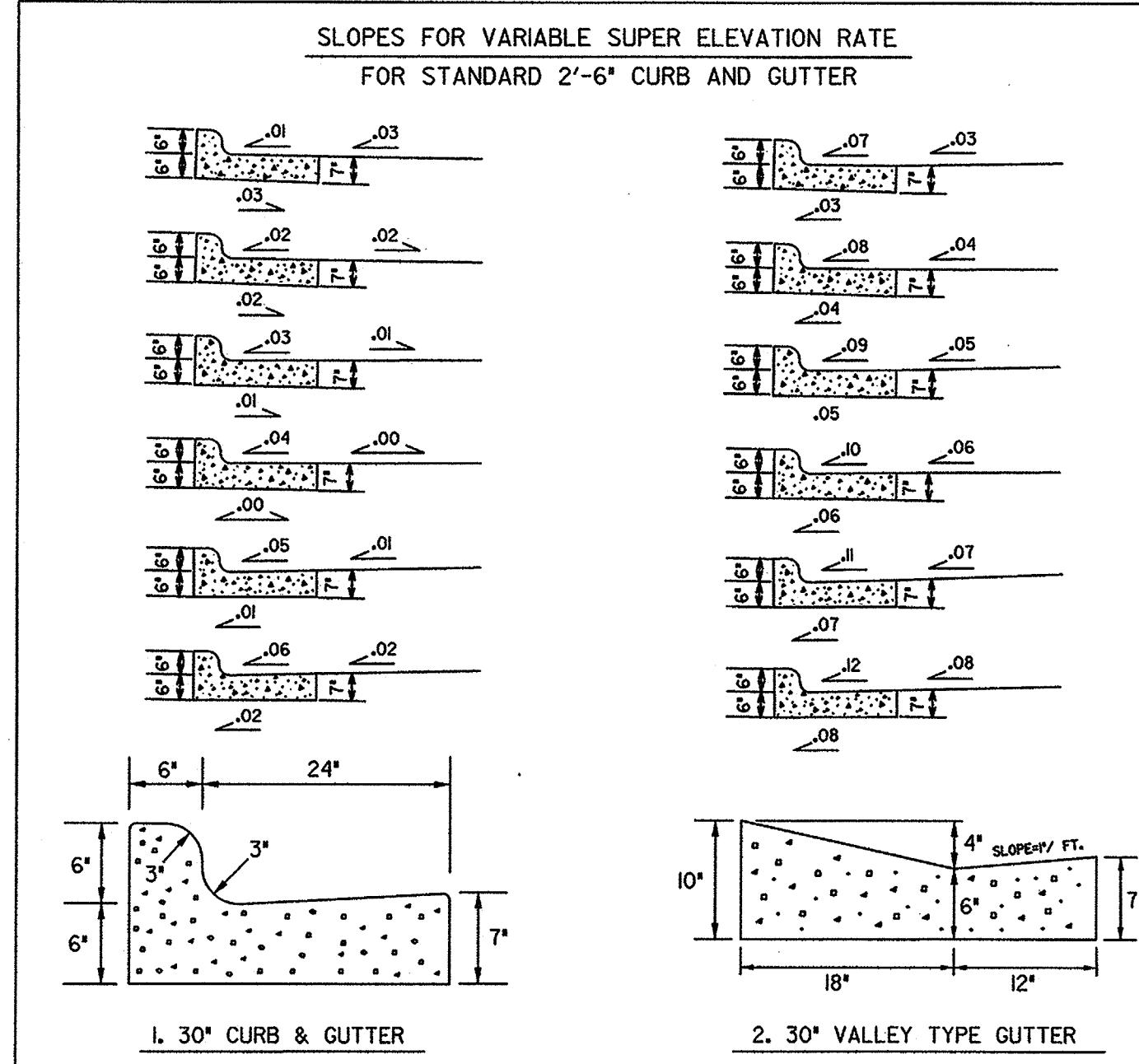
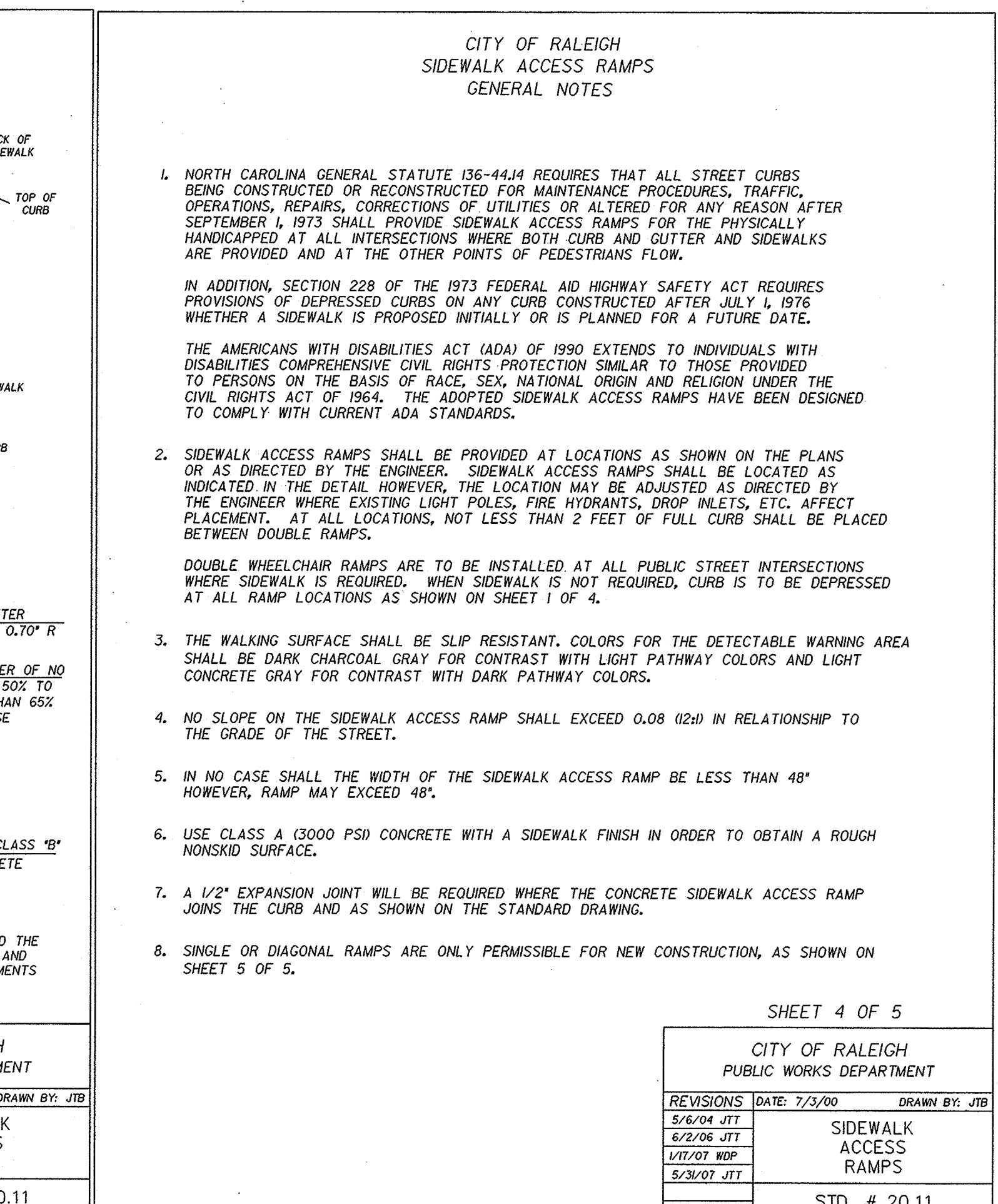
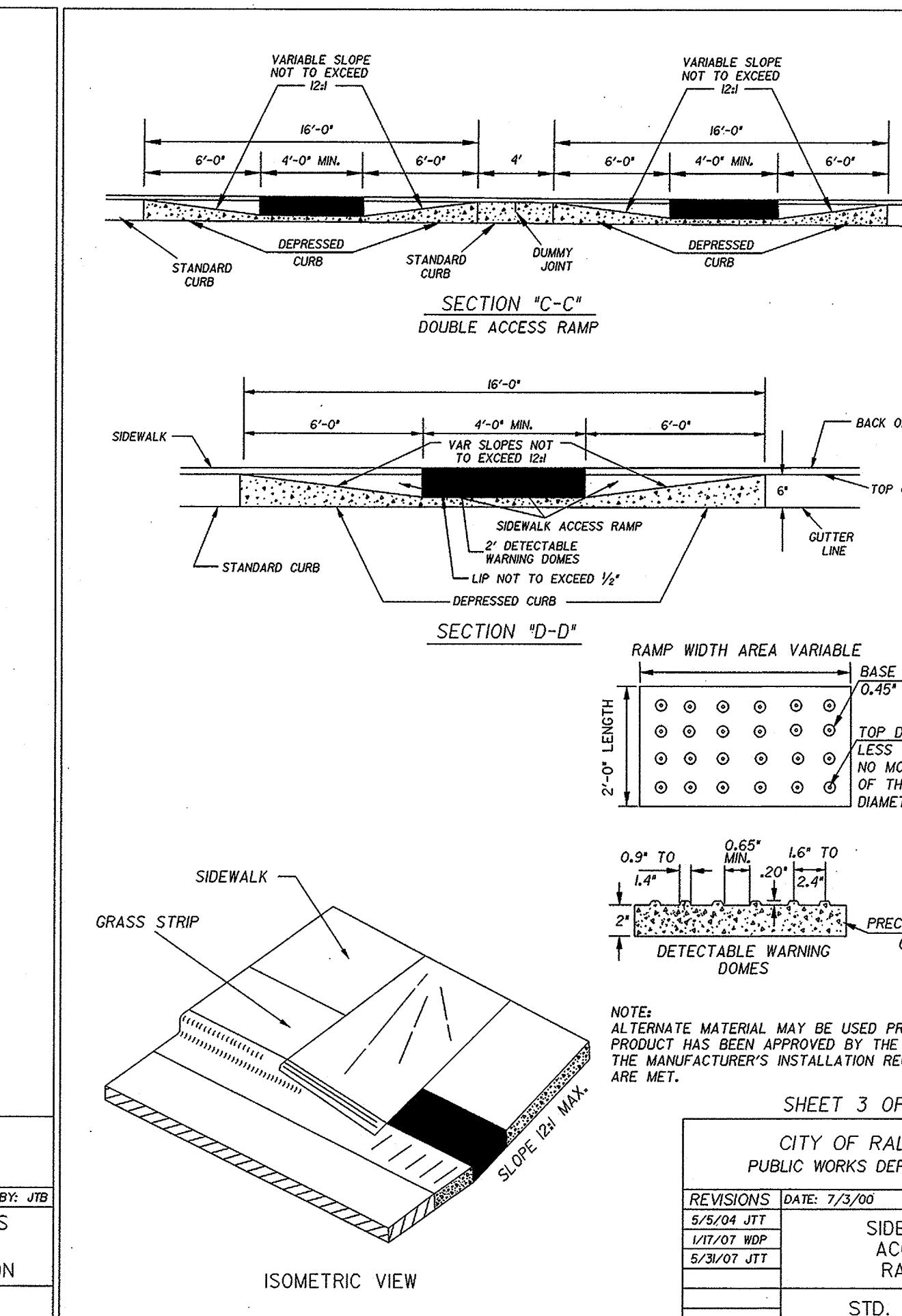
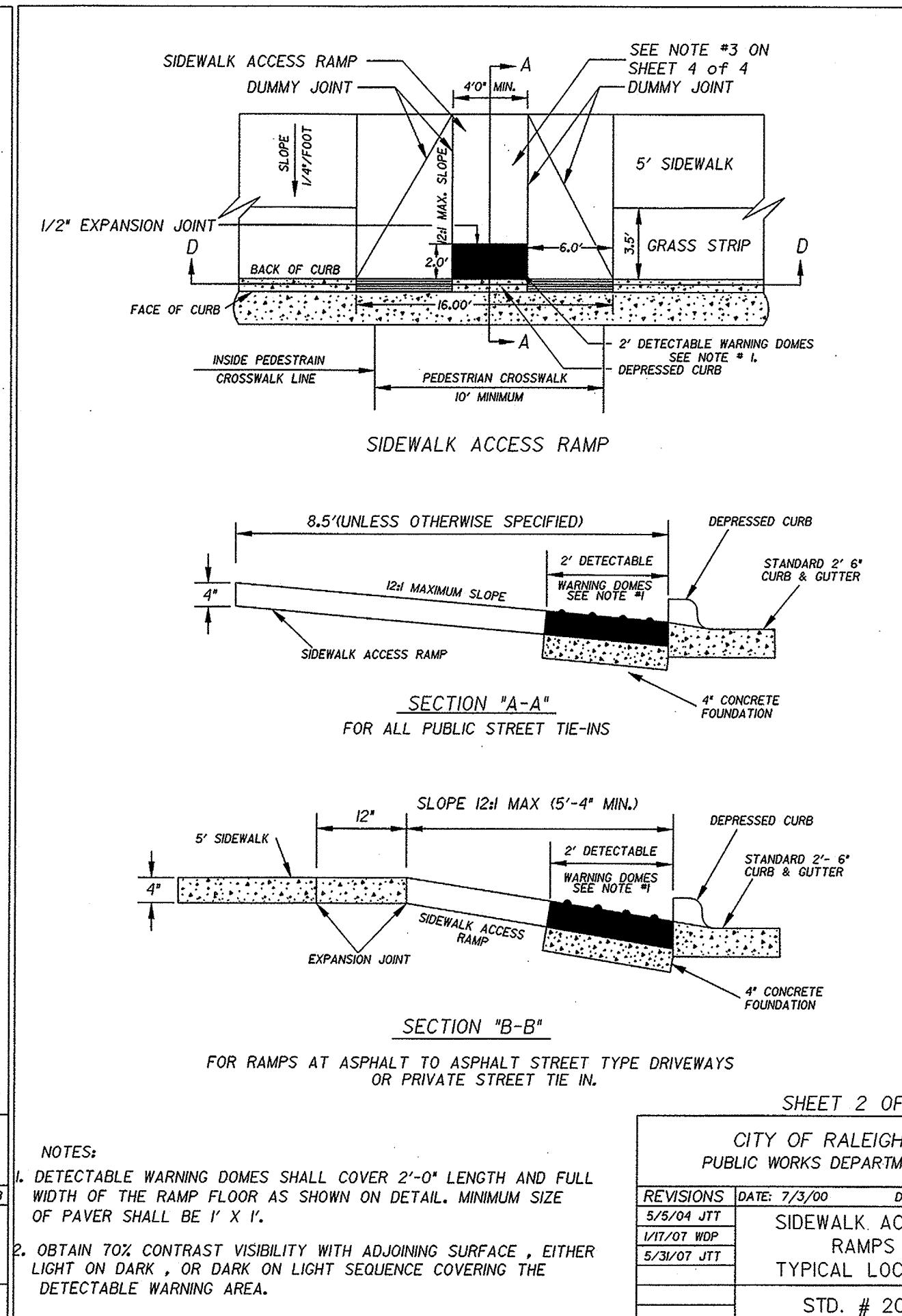
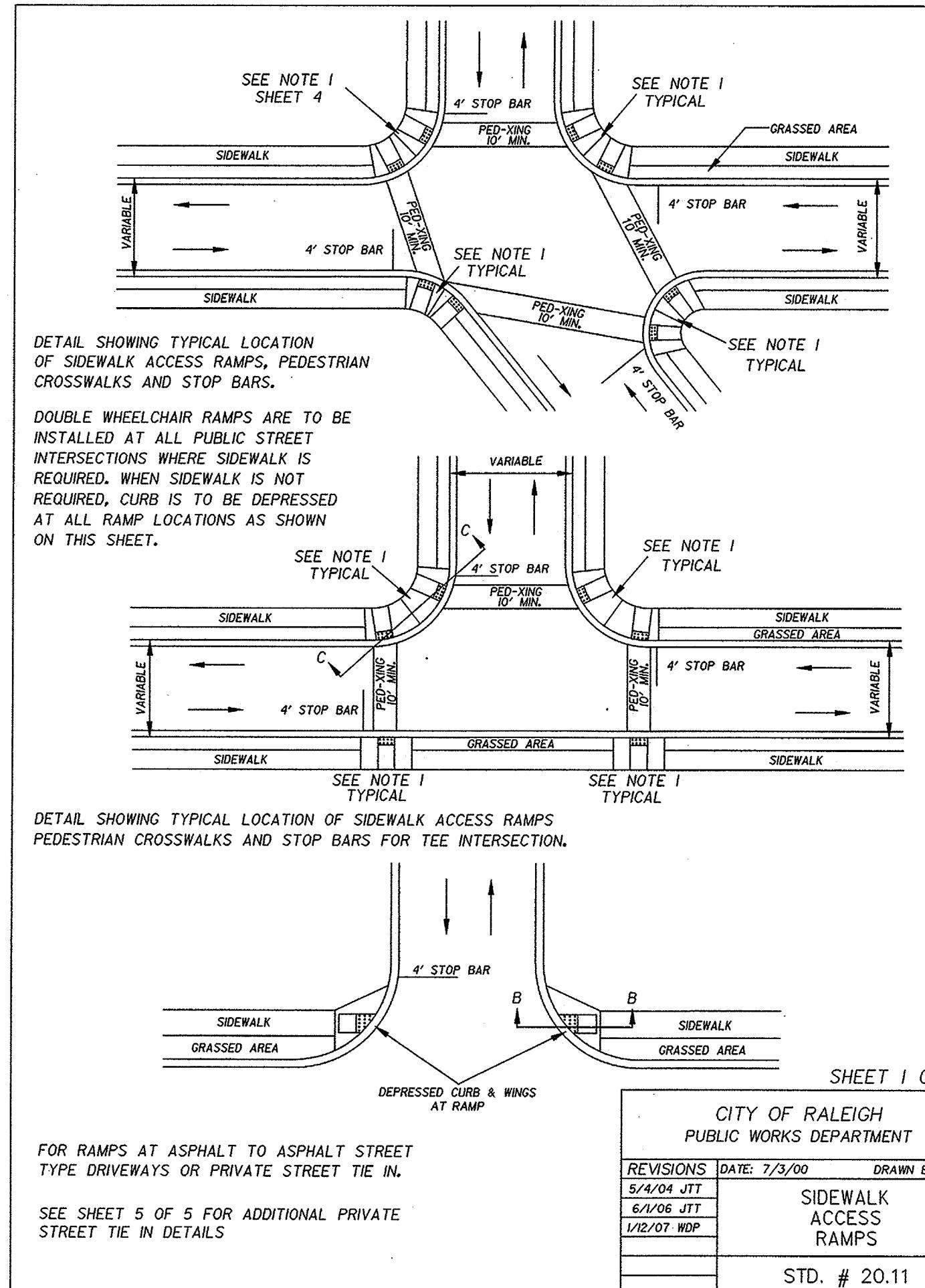
PREPARED FOR

LANDMARK PROPERTIES



SITE DETAILS

SHEET NUMBER



ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/OR NCDOT STANDARDS AND SPECIFICATIONS.

KHA PROJECT	011170001
DATE	7/29/11
SCALE AS SHOWN	
DESIGNED BY	COB
DRAWN BY	WJB
CONTRACTOR	SPV
PLANNING:	N/A

**Kimley-Horn
and Associates, Inc.**

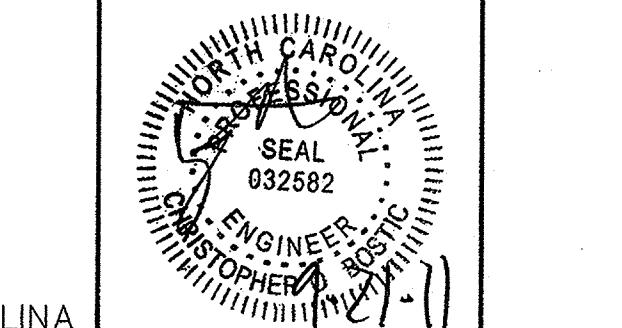
© 2011 KIMLEY-HORN AND ASSOCIATES, INC.
333 FAYETTEVILLE STREET, SUITE 600, RALEIGH, NC 27601
PHONE: 919-835-1494 FAX: 919-653-5847
WWW.KIMLEY-HORN.COM

NC CERTIFICATE OF AUTHORIZATION: F-0102

REVISIONS DATE BY

REVISIONS DATE BY

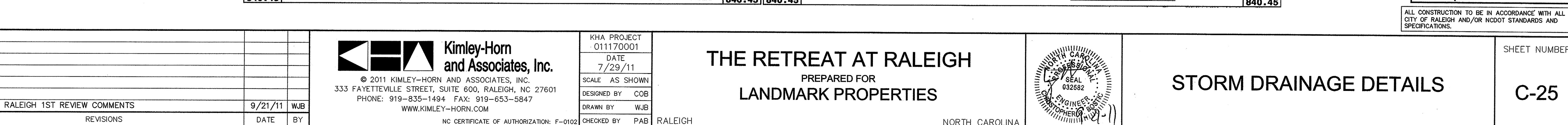
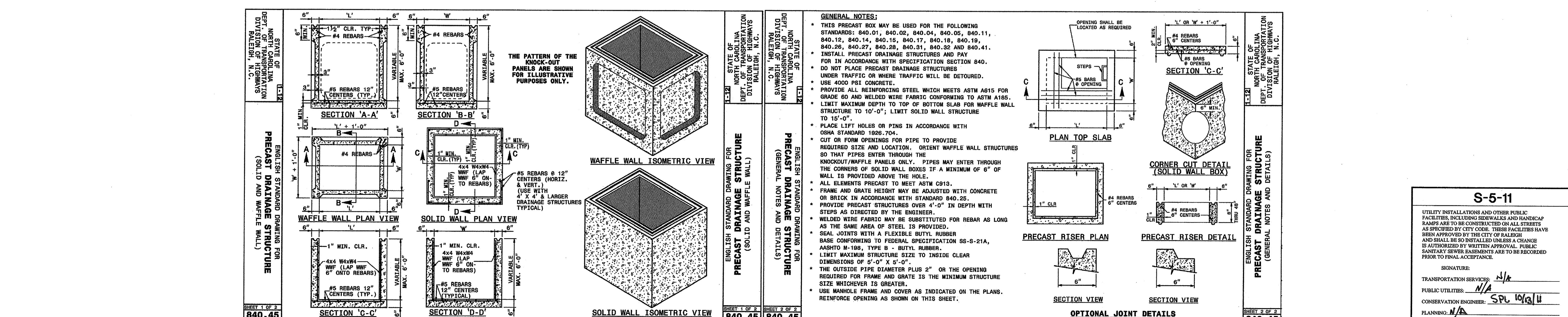
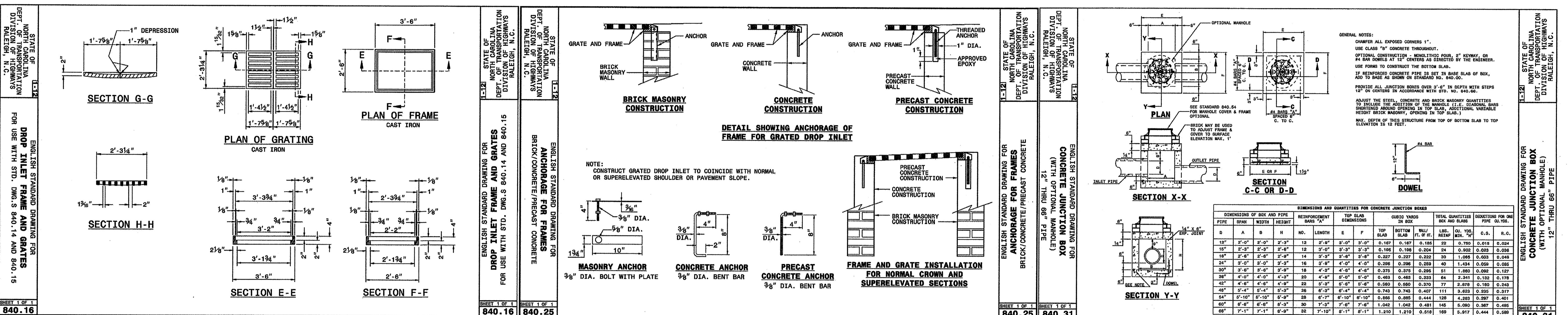
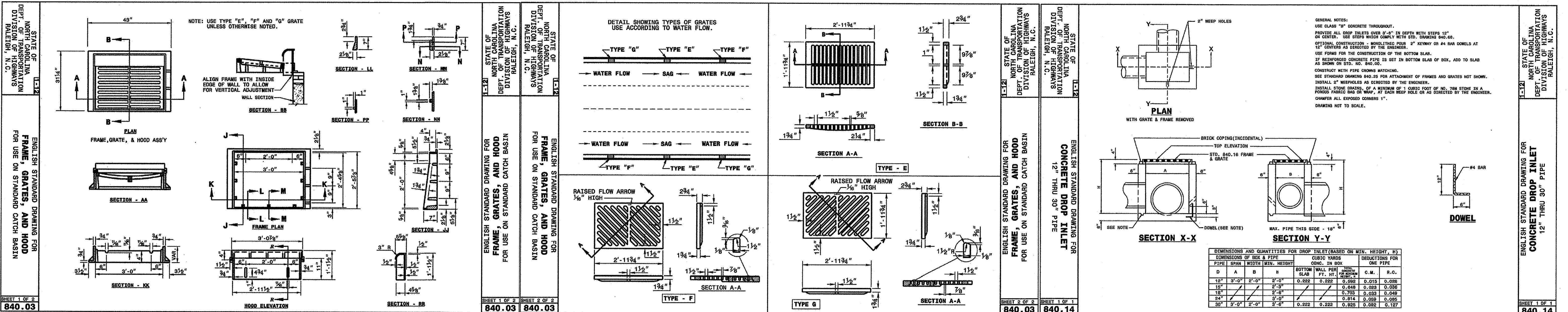
THE RETREAT AT RALEIGH PREPARED FOR LANDMARK PROPERTIES



NORTH CAROLINA

SITE DETAILS

SHEET NUMBER
C-23



S-5-11

UTILITY INSTALLATIONS AND OTHER PUBLIC FACILITIES, INCLUDING SIDEWALKS AND HANDICAP RAMPS ARE TO BE CONSTRUCTED ON ALL STREETS AS SPECIFIED IN THE CITY OF RALEIGH STANDARDS. THESE STANDARDS HAVE BEEN APPROVED BY THE CITY OF RALEIGH AND SHALL BE SO INSTALLED UNLESS A CHANGE IS MADE BY A WRITTEN APPROVAL. PUBLIC SANITARY SEWER SYSTEMS ARE TO BE RECORDED PRIOR TO FINAL ACCEPTANCE.

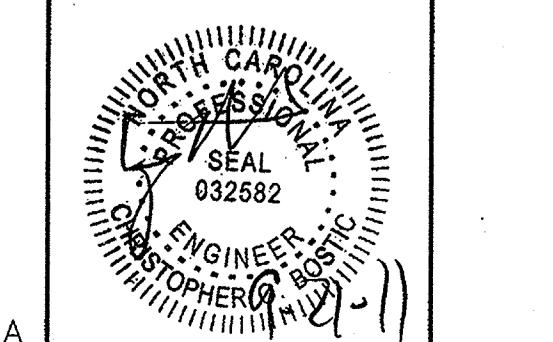
SIGNATURE:

TRANSPORTATION SERVICES: *N/A*
PUBLIC UTILITIES: *N/A*
CONSERVATION ENGINEER: SPL 10/13 *W*

PLANNING: *N/A*

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/OR NCDOT STANDARDS AND SPECIFICATIONS.

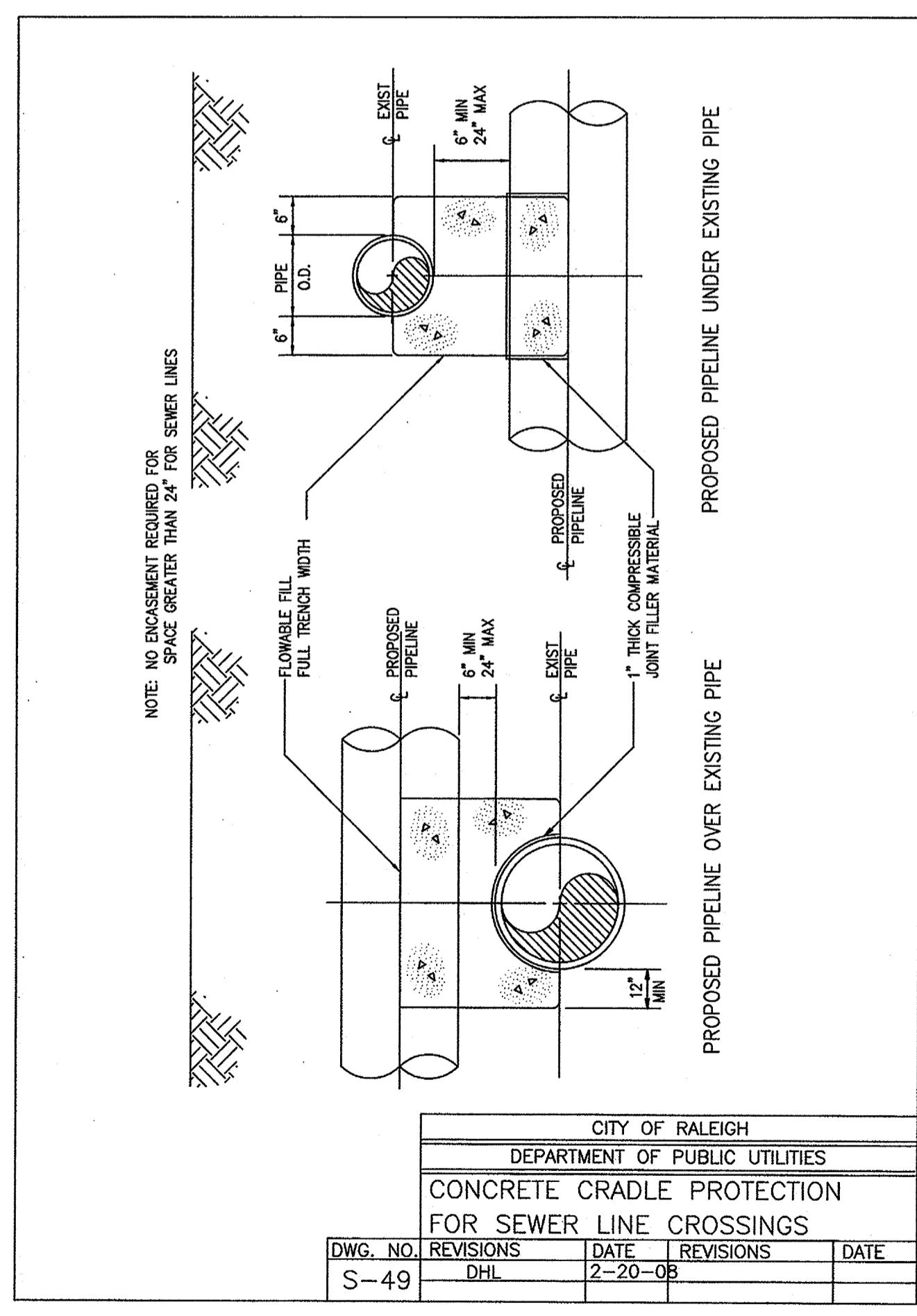
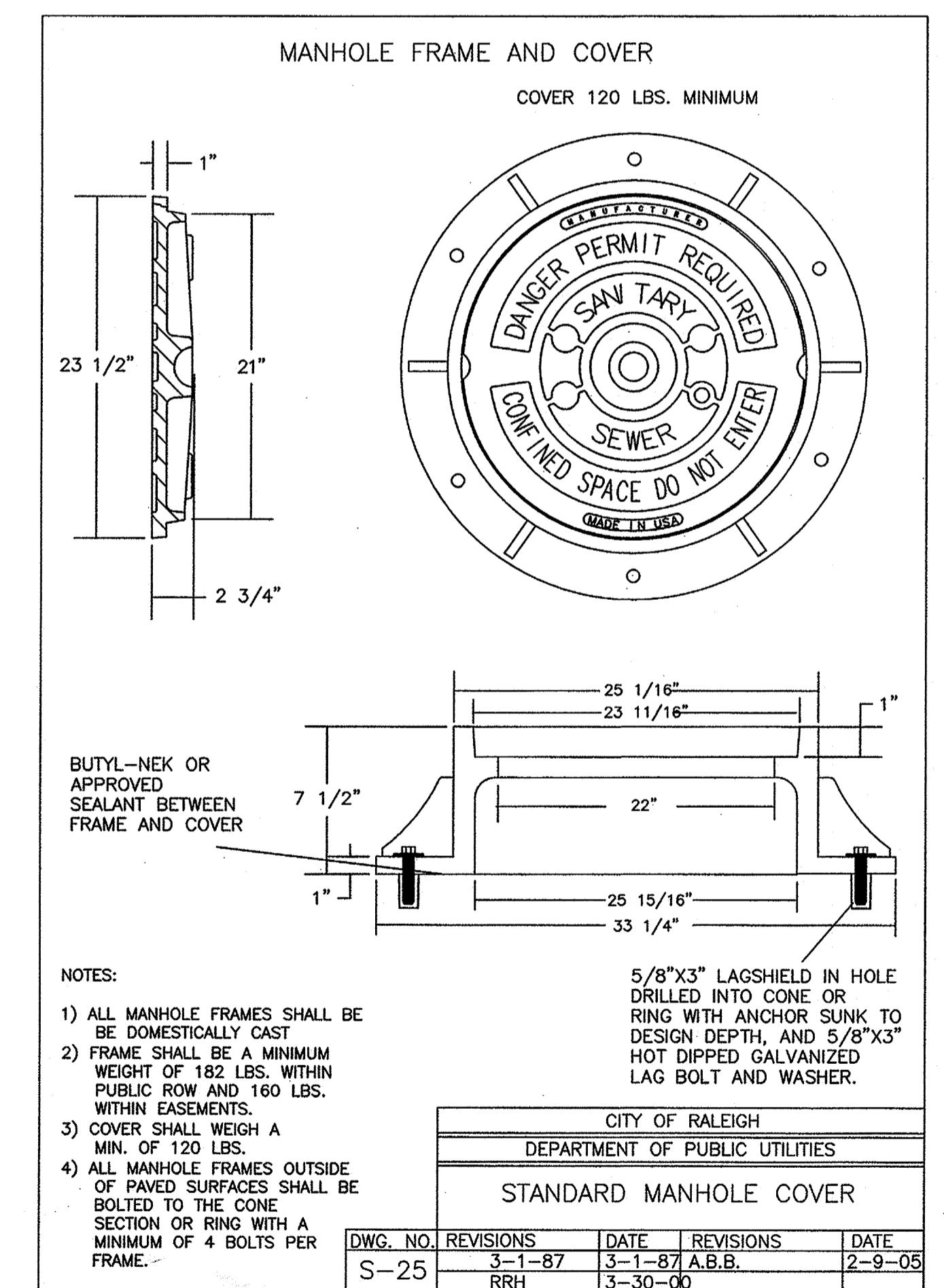
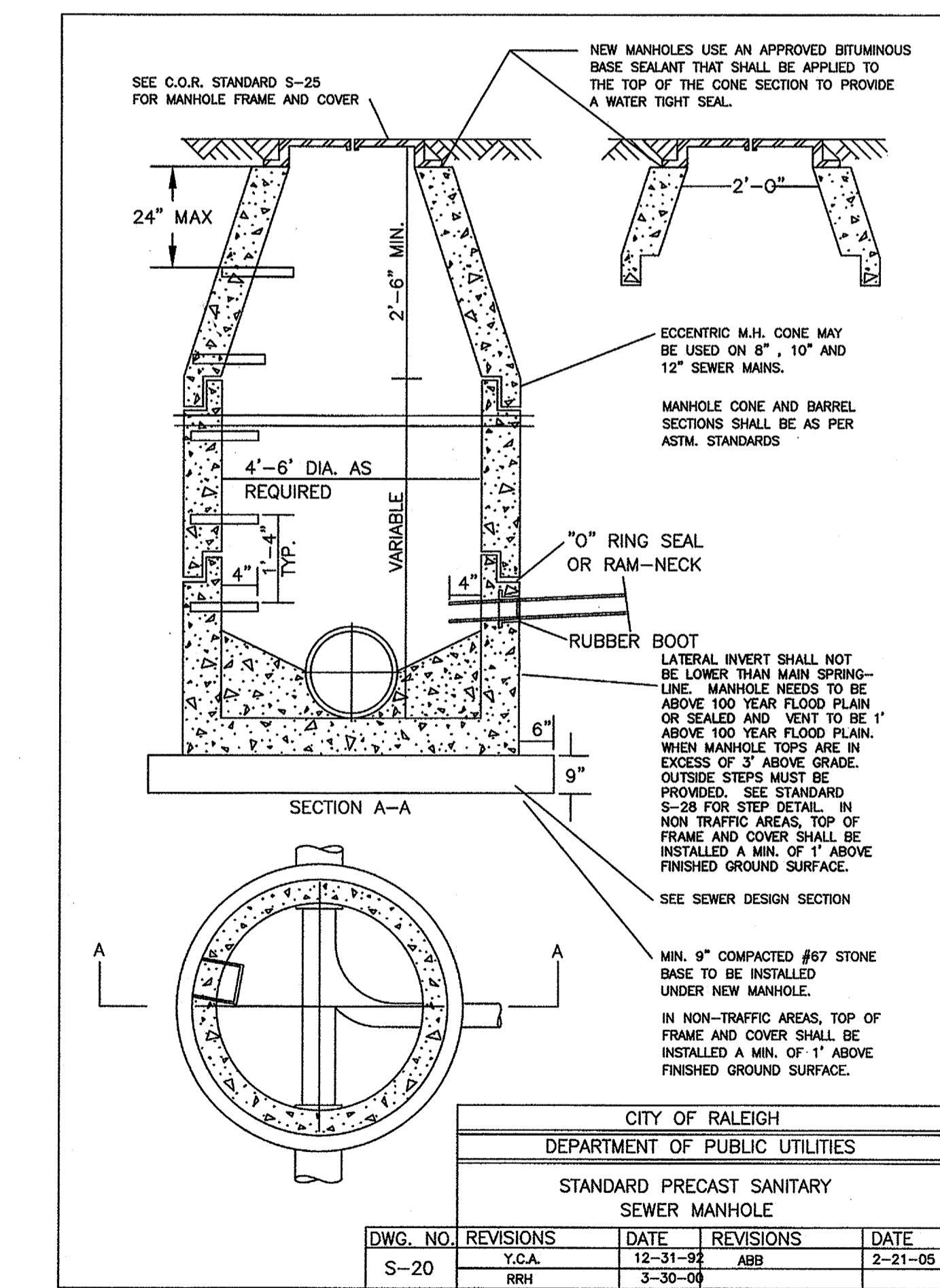
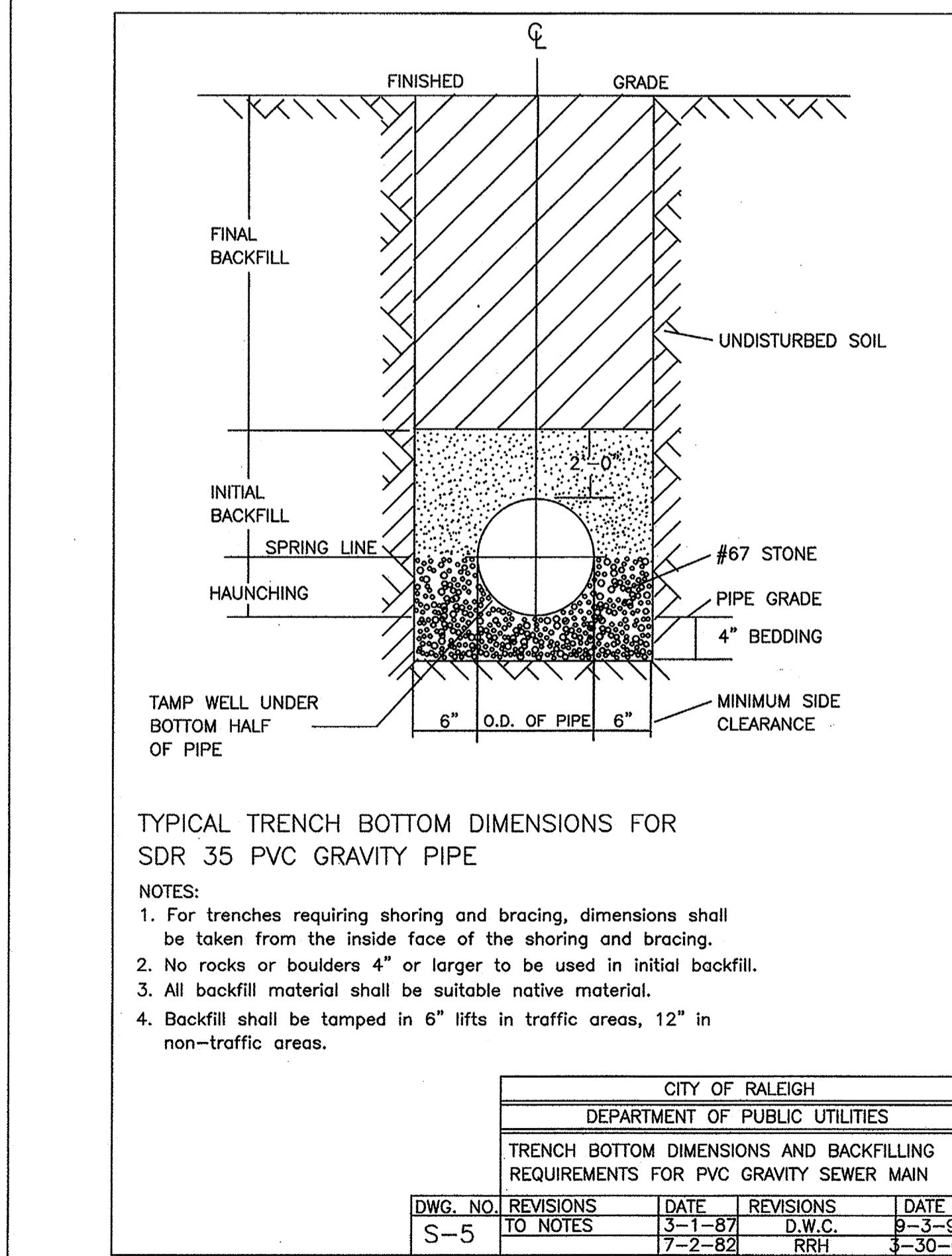
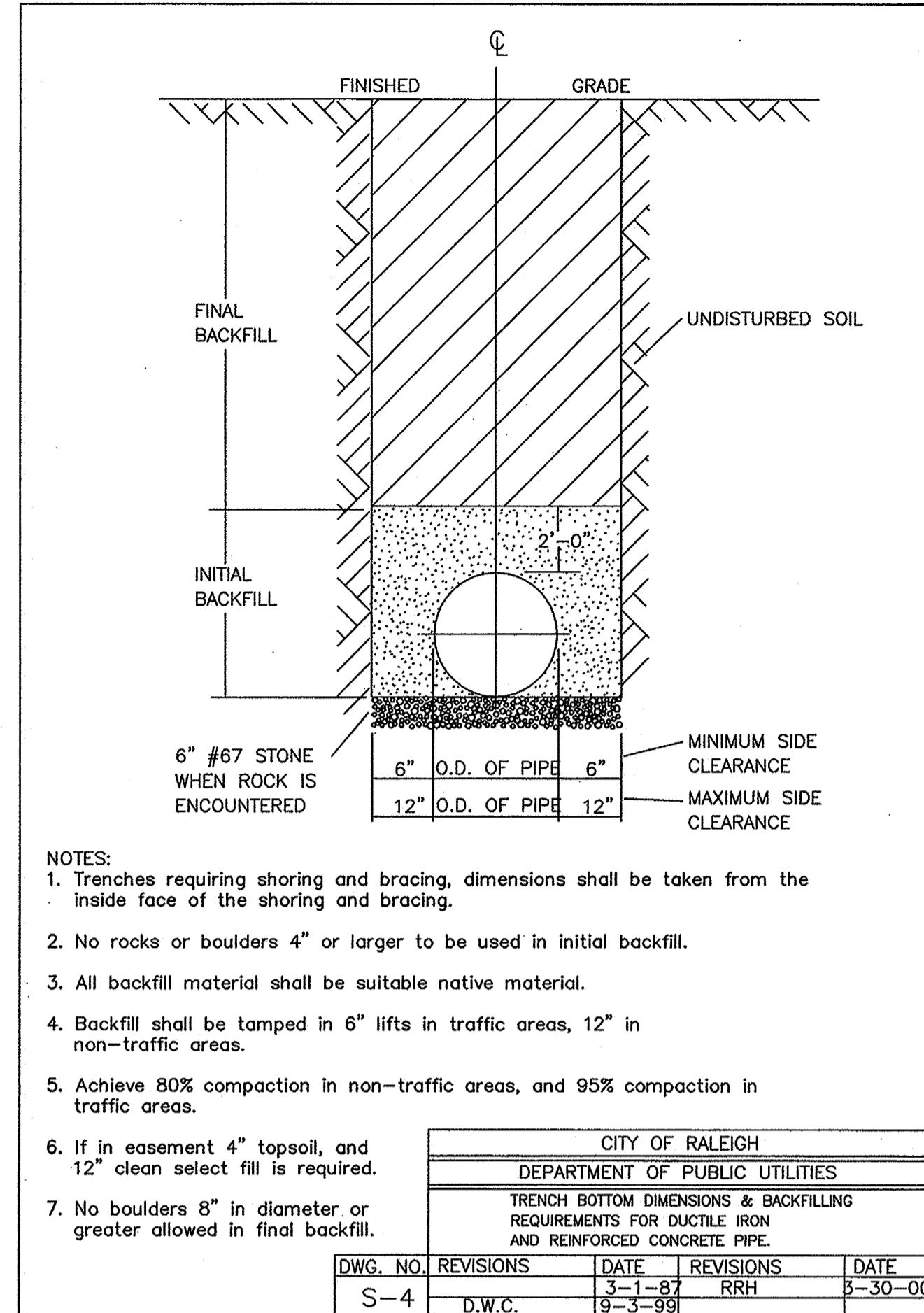
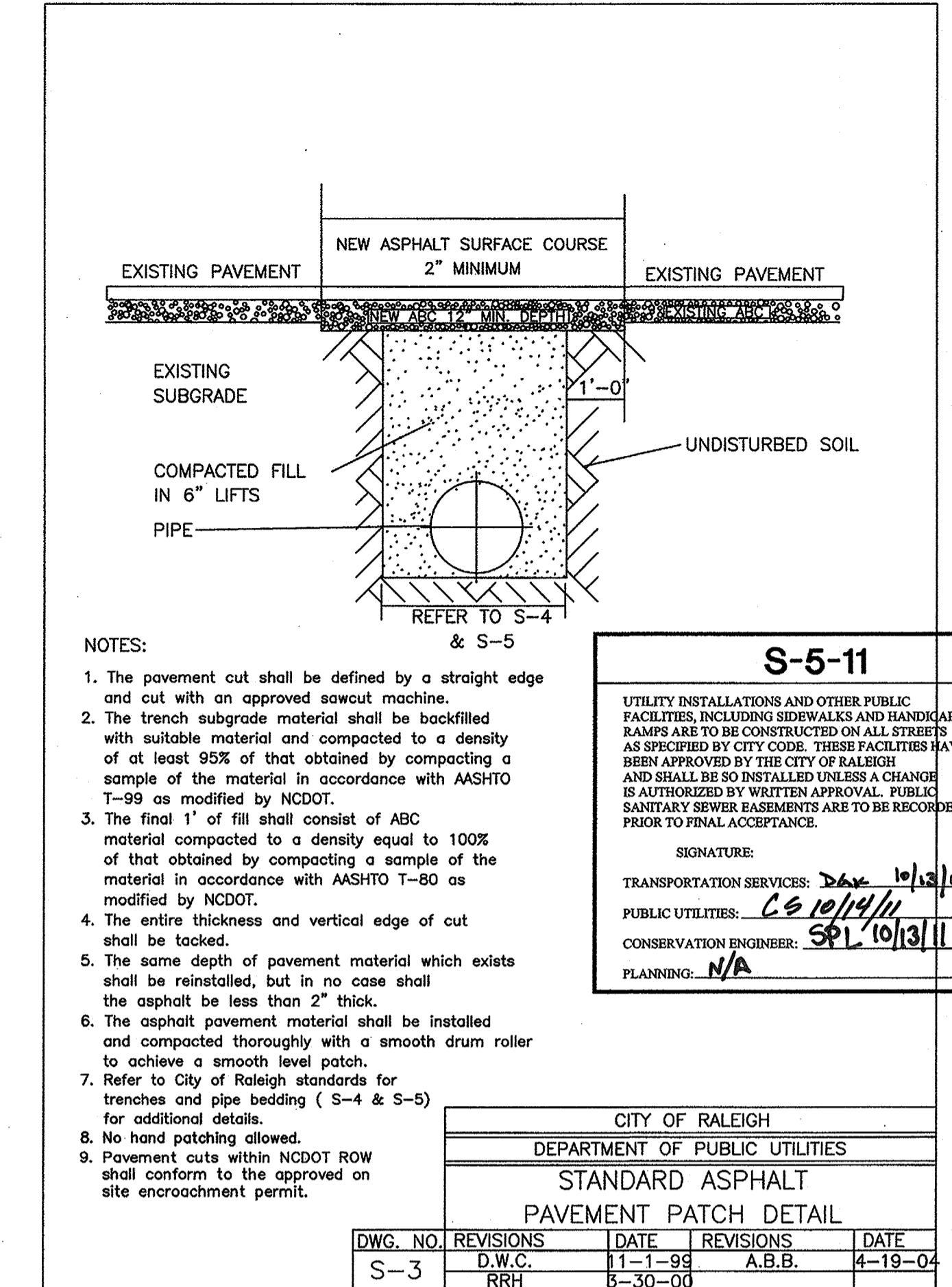
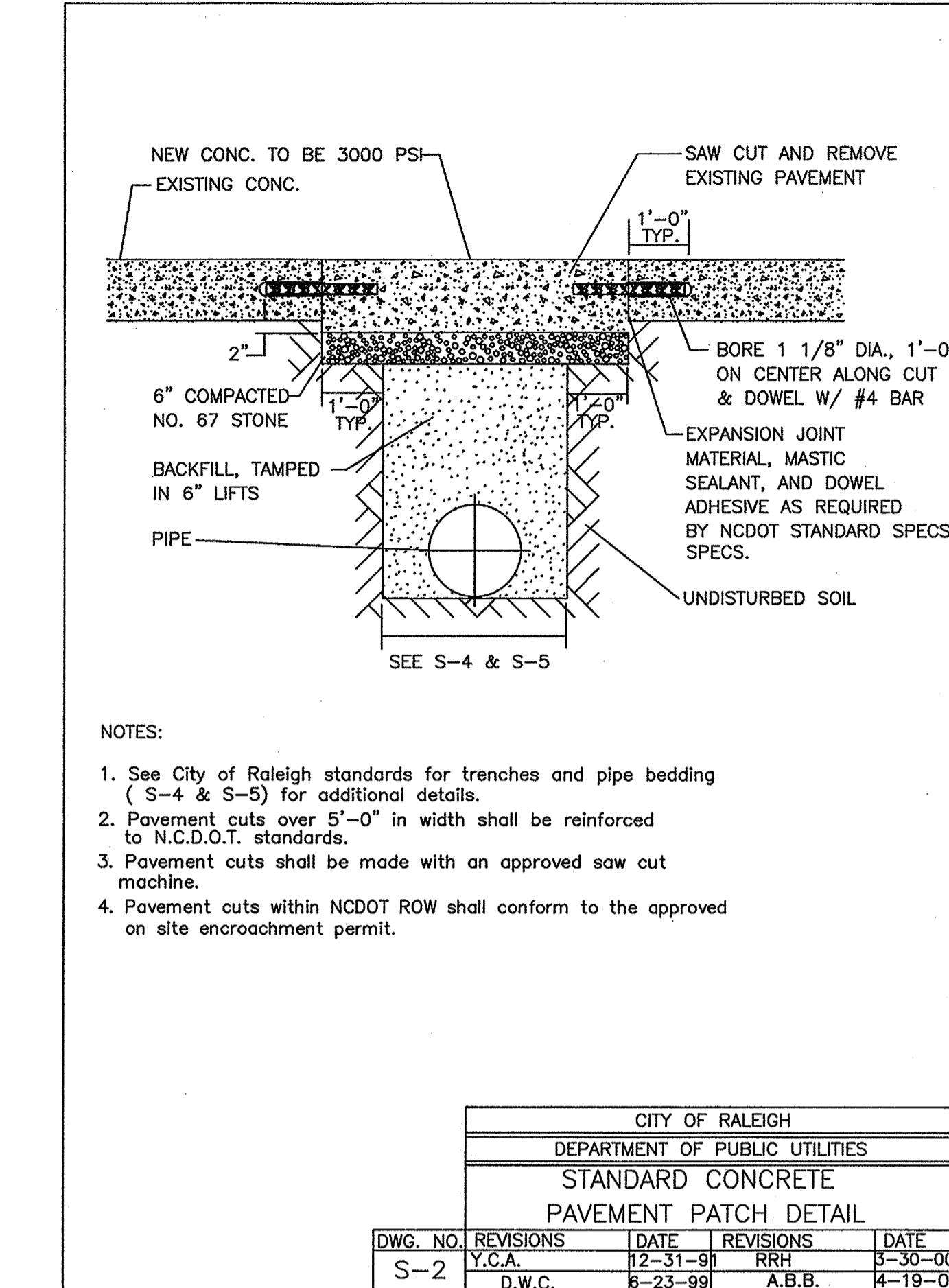
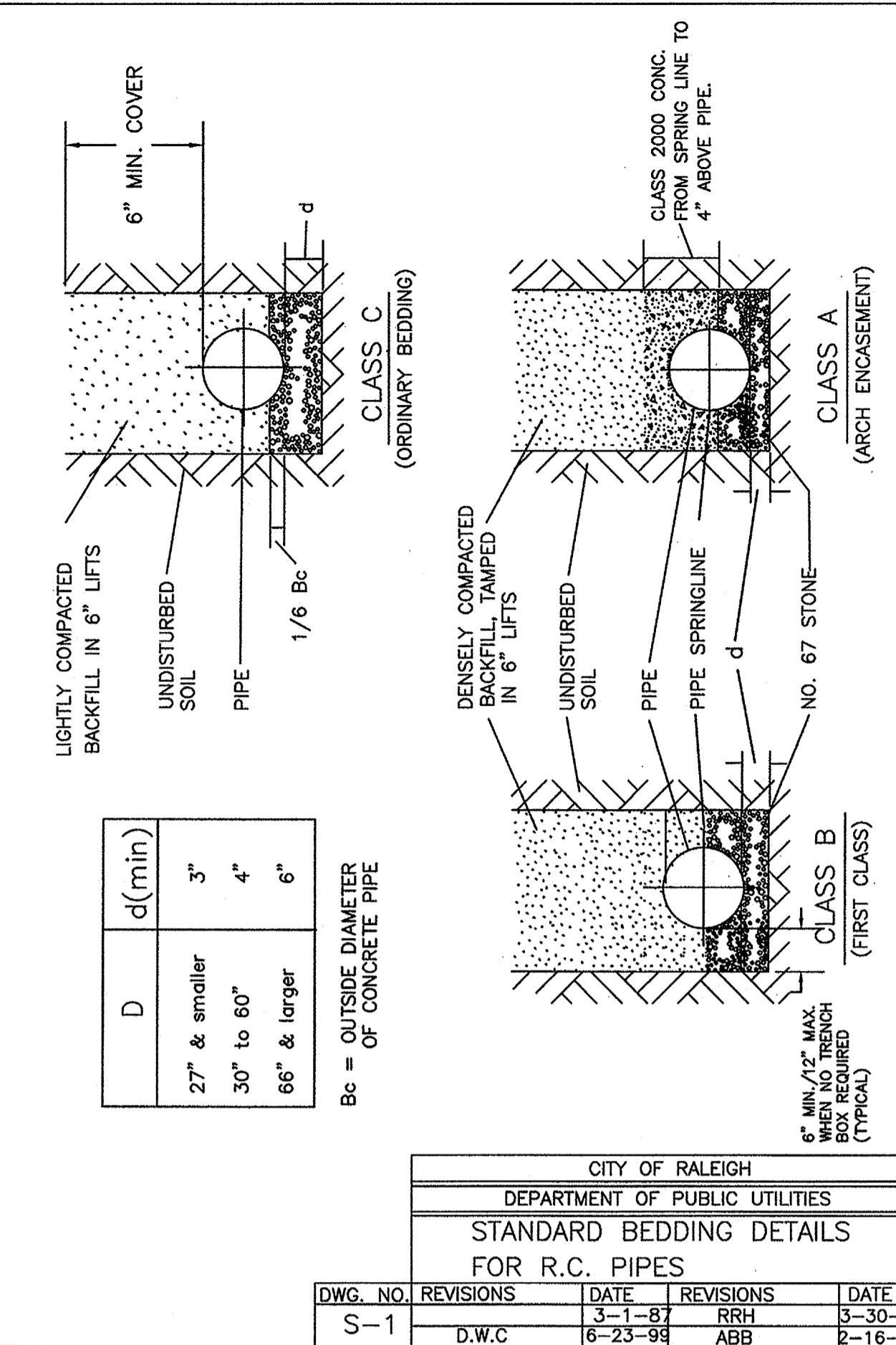
THE RETREAT AT RALEIGH PREPARED FOR LANDMARK PROPERTIES

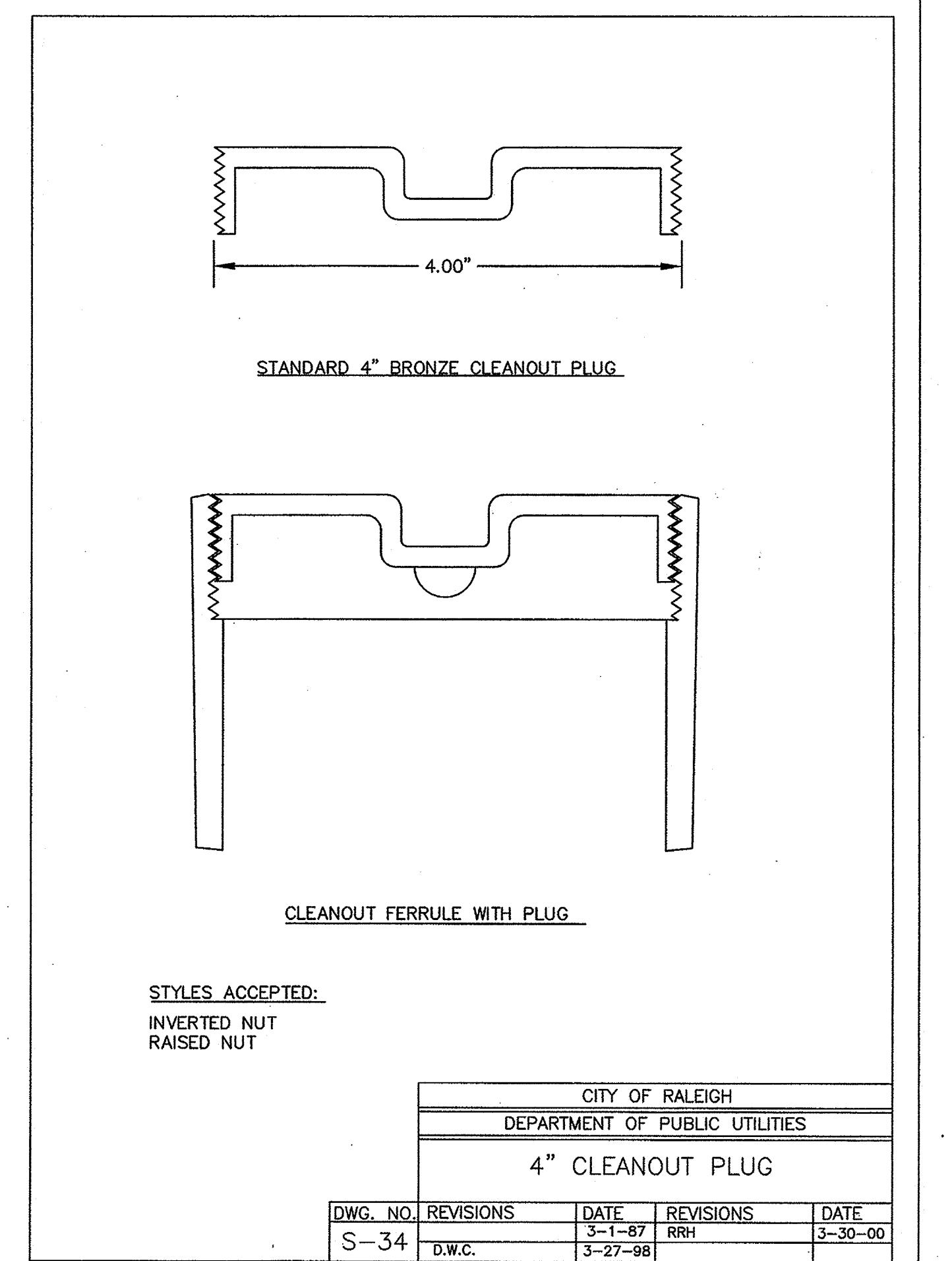
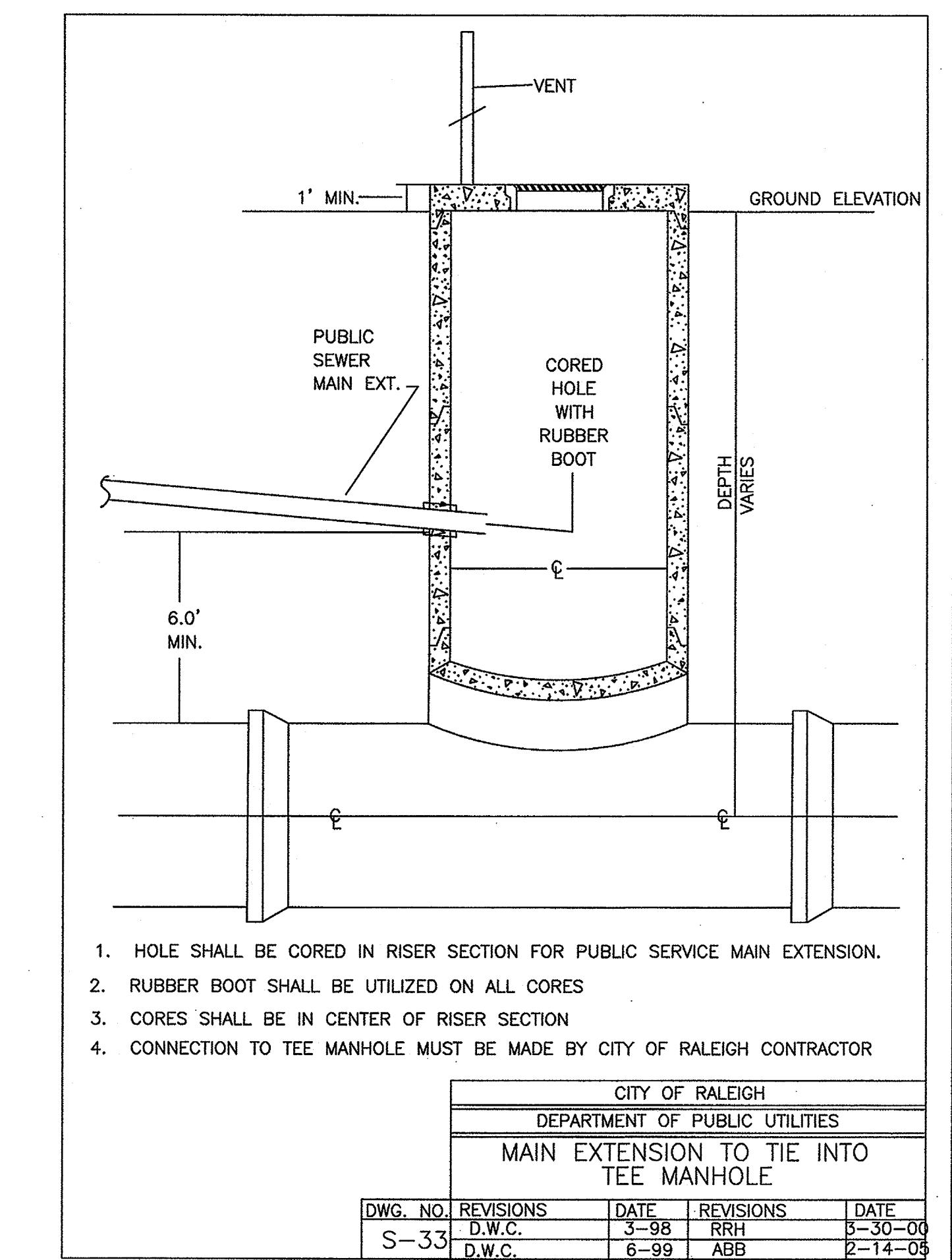
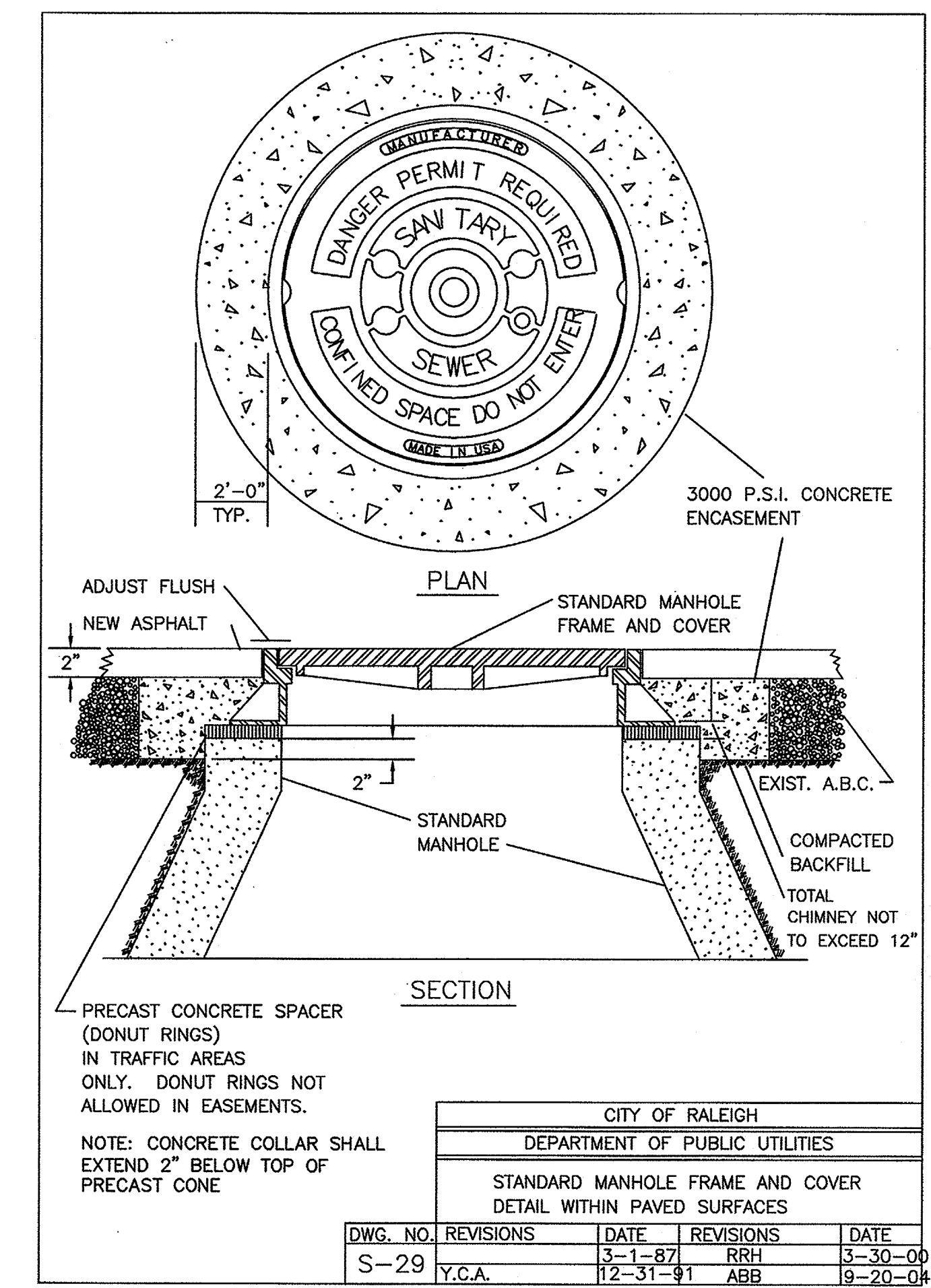
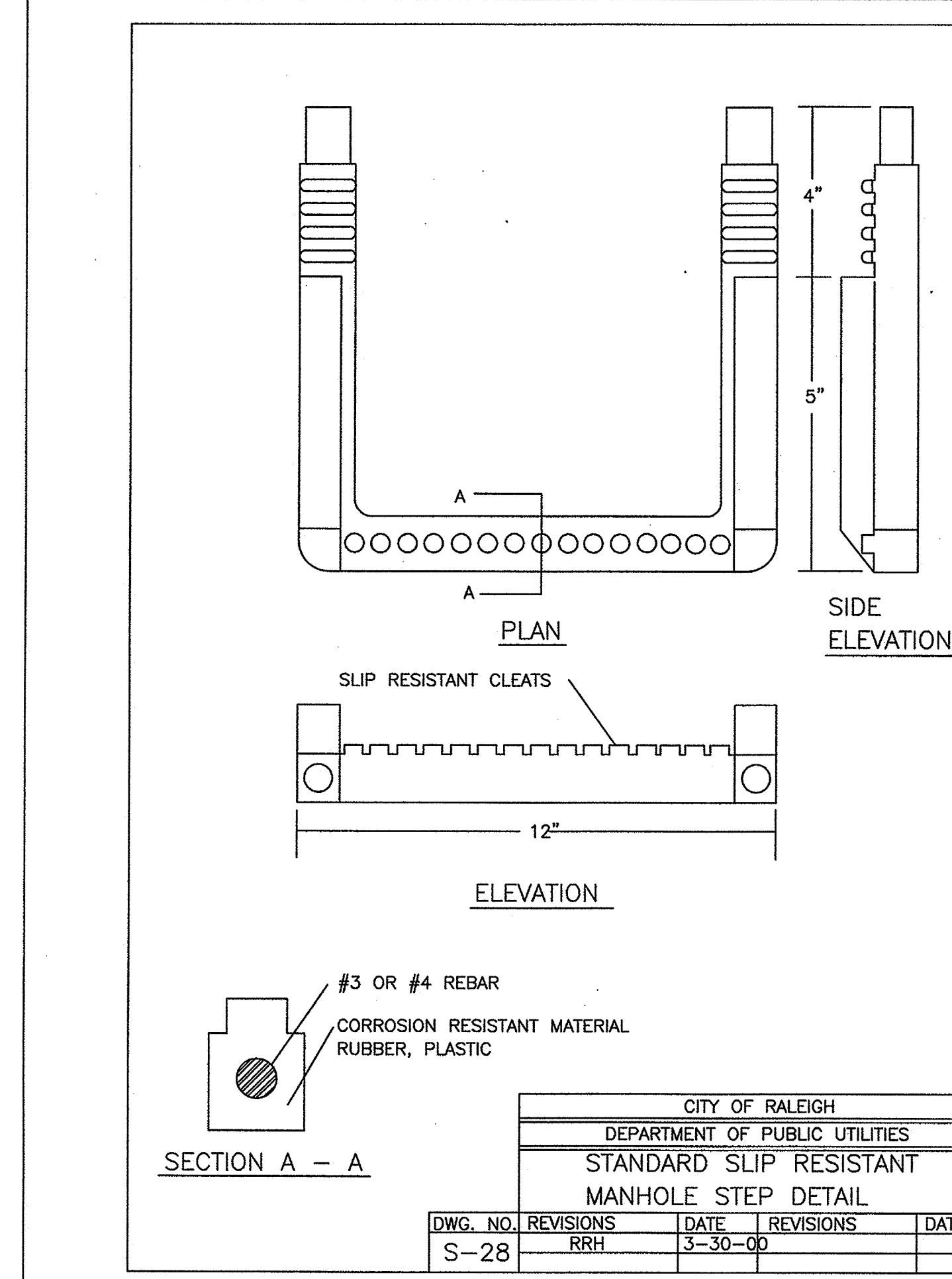


NORTH CAROLINA

STORM DRAINAGE DETAILS

SHEET NUMBER
C-25



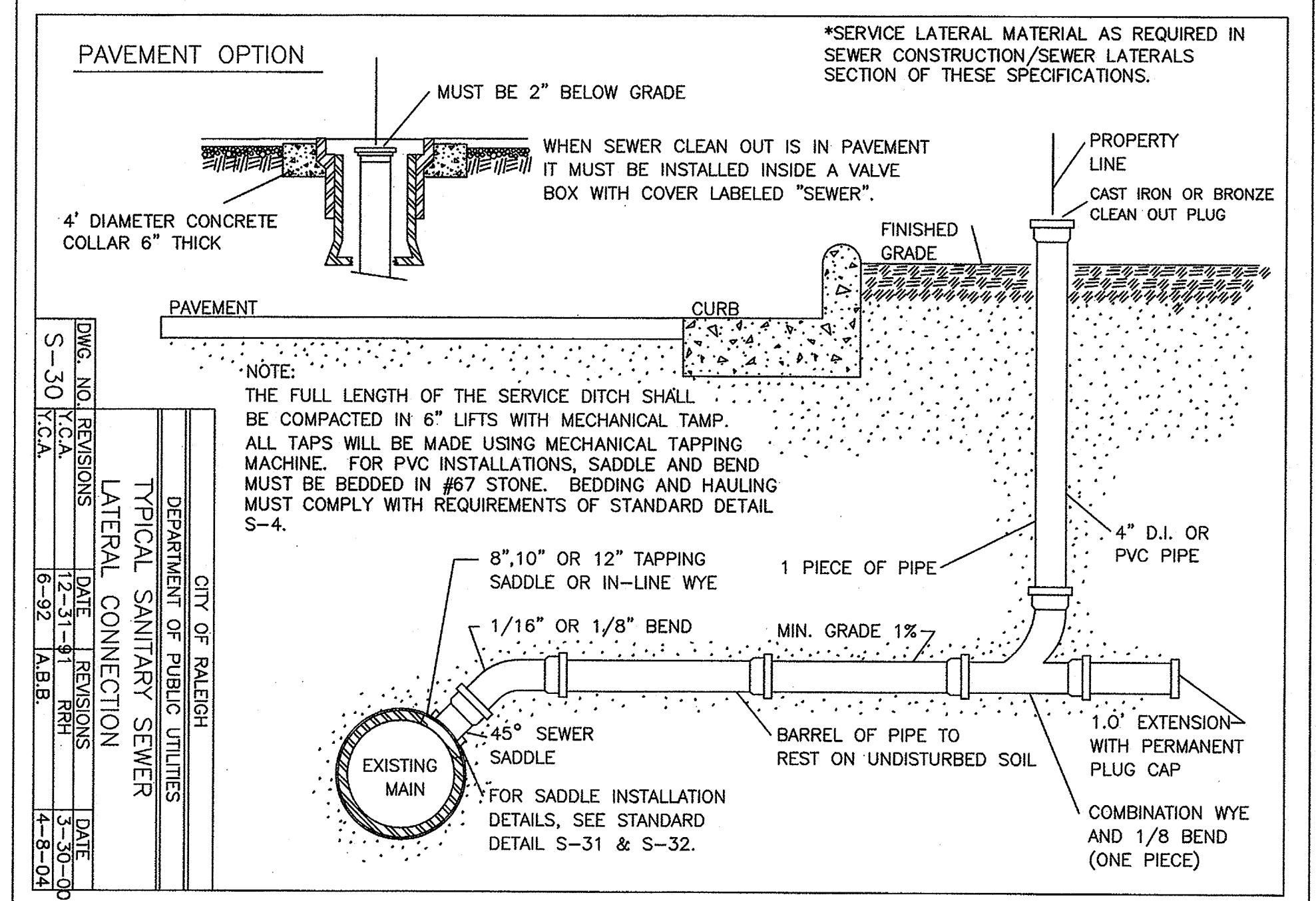


S-5-11

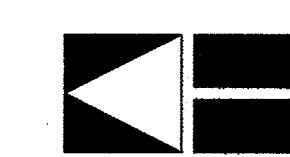
UTILITY INSTALLATIONS AND OTHER PUBLIC FACILITIES, INCLUDING SIDEWALKS AND HANDICAP RAMPS, ARE TO BE CONSTRUCTED ON ALL STREETS AND AREAS WHERE OTHER PUBLIC FACILITIES HAVE BEEN APPROVED BY THE CITY OF RALEIGH AND SHALL BE SO INSTALLED UNLESS A CHANGE IS AUTHORIZED BY WRITTEN APPROVAL. PUBLIC UTILITIES THAT ARE TO BE RECORDED PRIOR TO FINAL ACCEPTANCE.

SIGNATURE:
TRANSPORTATION SERVICES: WA
PUBLIC UTILITIES: CS 10/14/11
CONSERVATION ENGINEER: SPL 10/13/11
PLANNING: WA

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/OR NCDOT STANDARDS AND SPECIFICATIONS.



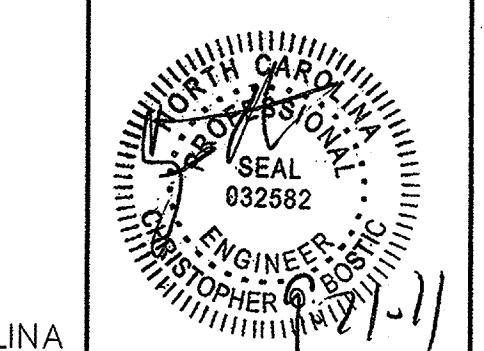
1	CITY OF RALEIGH 1ST REVIEW COMMENTS	9/21/11	WJB
No.	REVISIONS	DATE	BY



**Kimley-Horn
and Associates, Inc.**
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333 FAYETTEVILLE STREET, SUITE 600, RALEIGH, NC 27601
PHONE: 919-835-1494 FAX: 919-653-5847
WWW.KIMLEY-HORN.COM

KHA PROJECT 011170001
DATE 7/29/11
SCALE AS SHOWN
DESIGNED BY COB
DRAWN BY WJB
NC CERTIFICATE OF AUTHORIZATION: F-0102
CHECKED BY PAB
RALEIGH

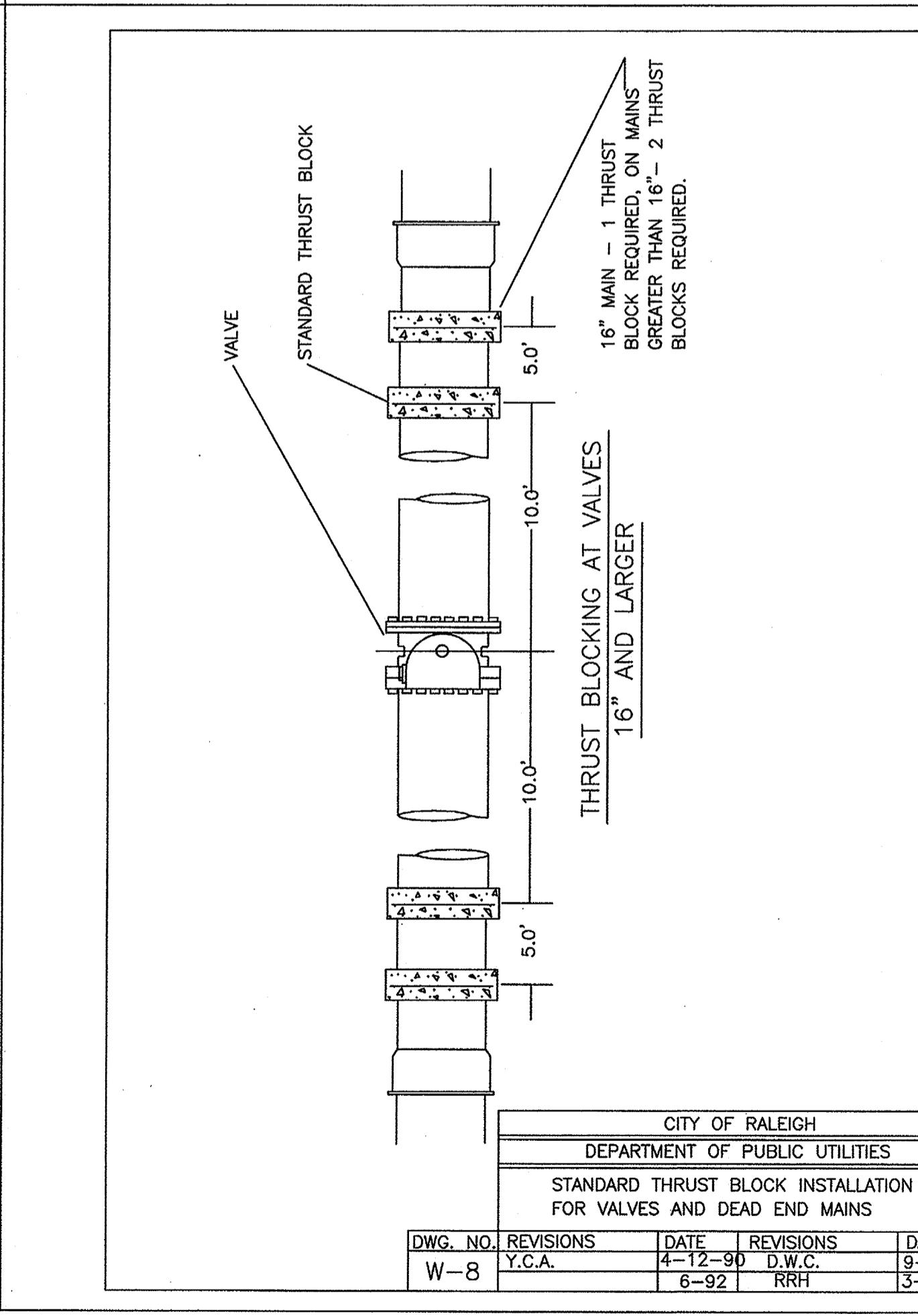
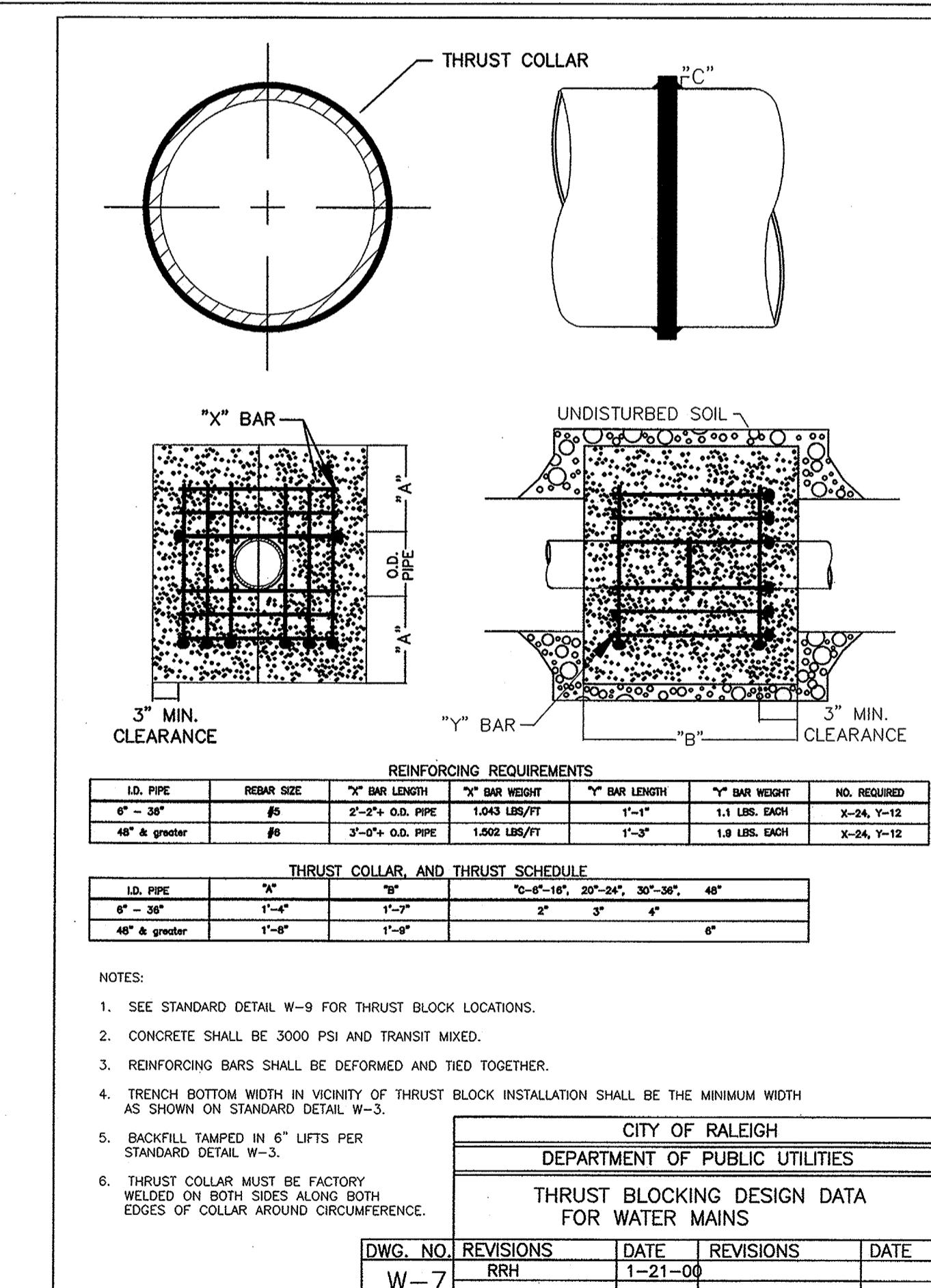
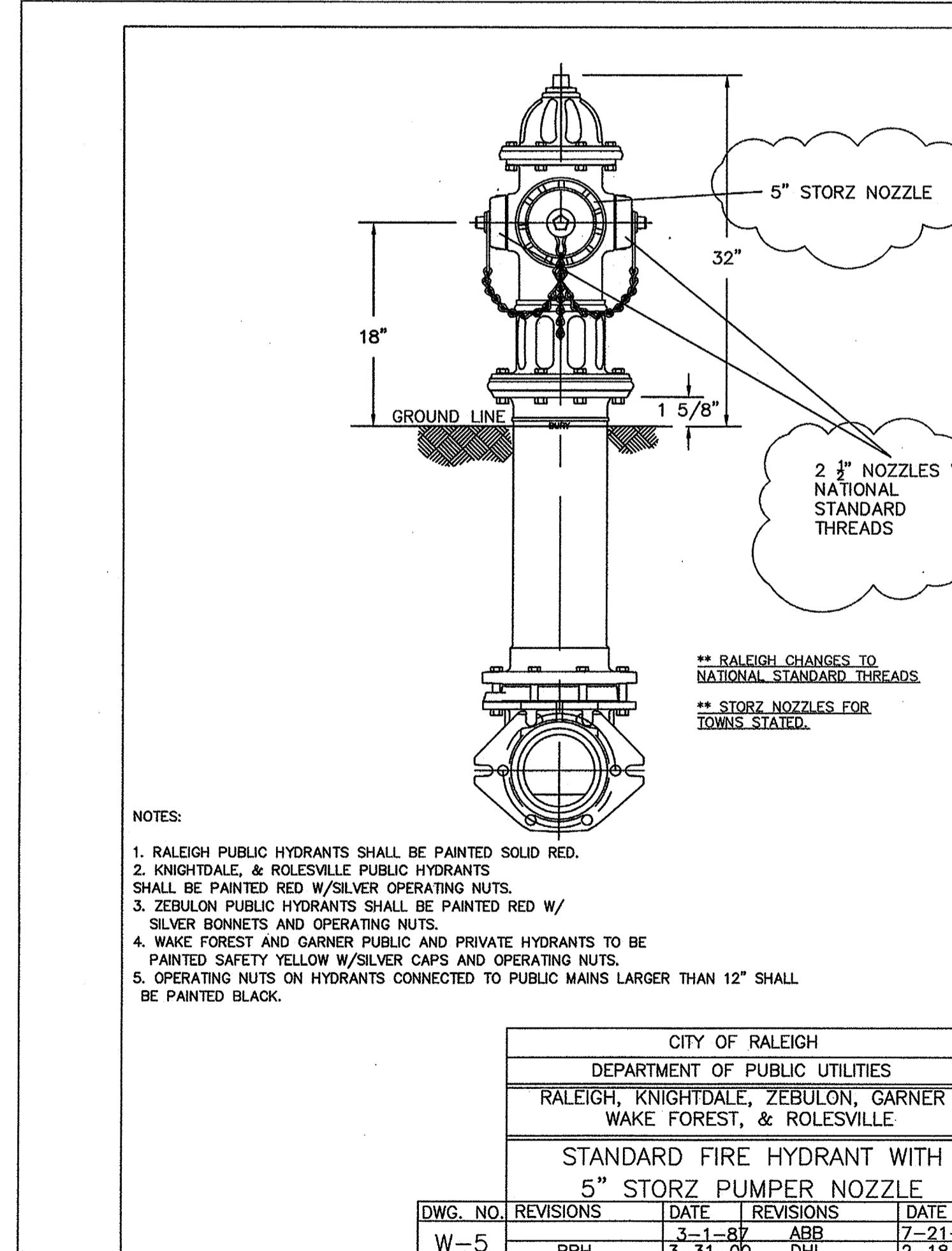
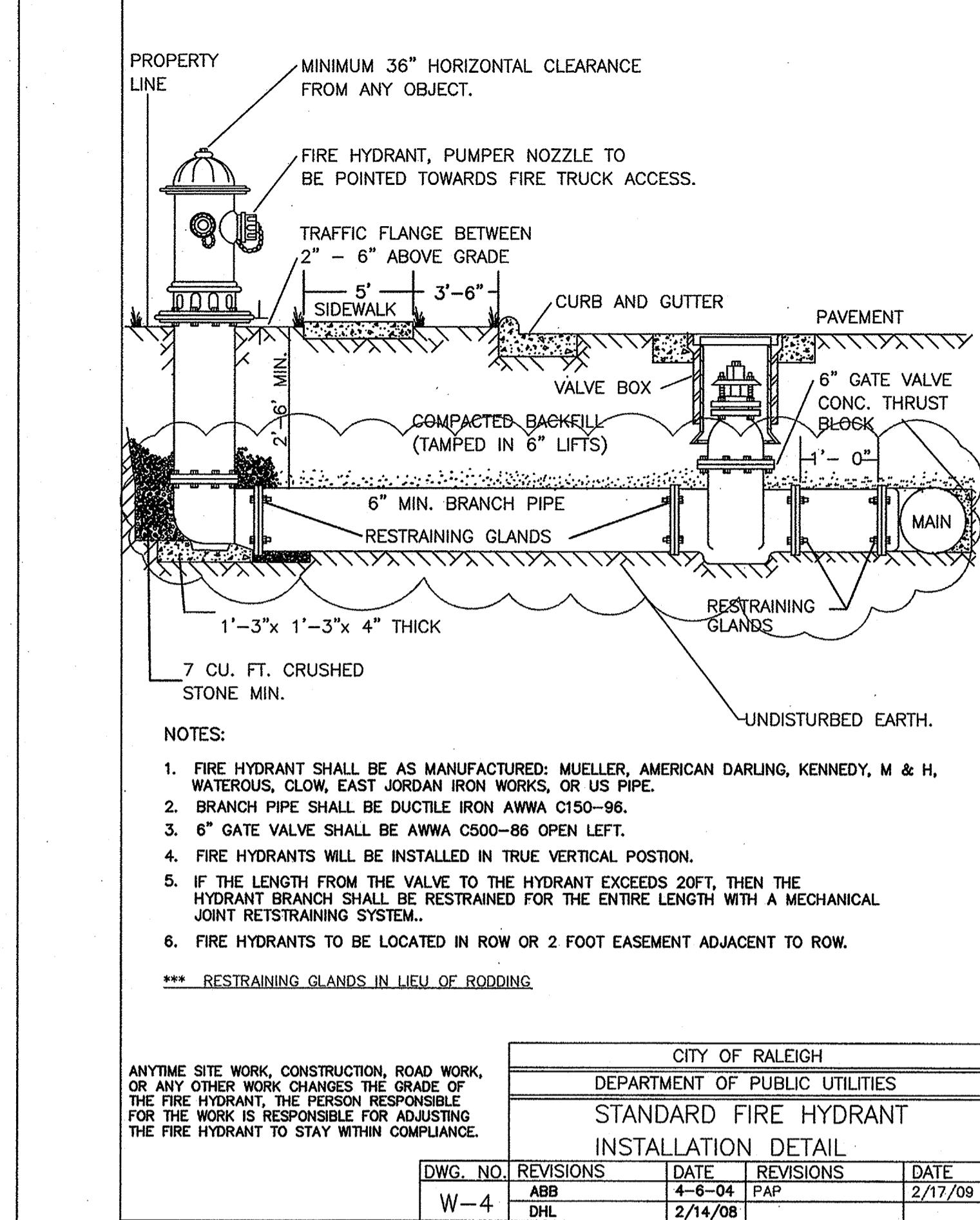
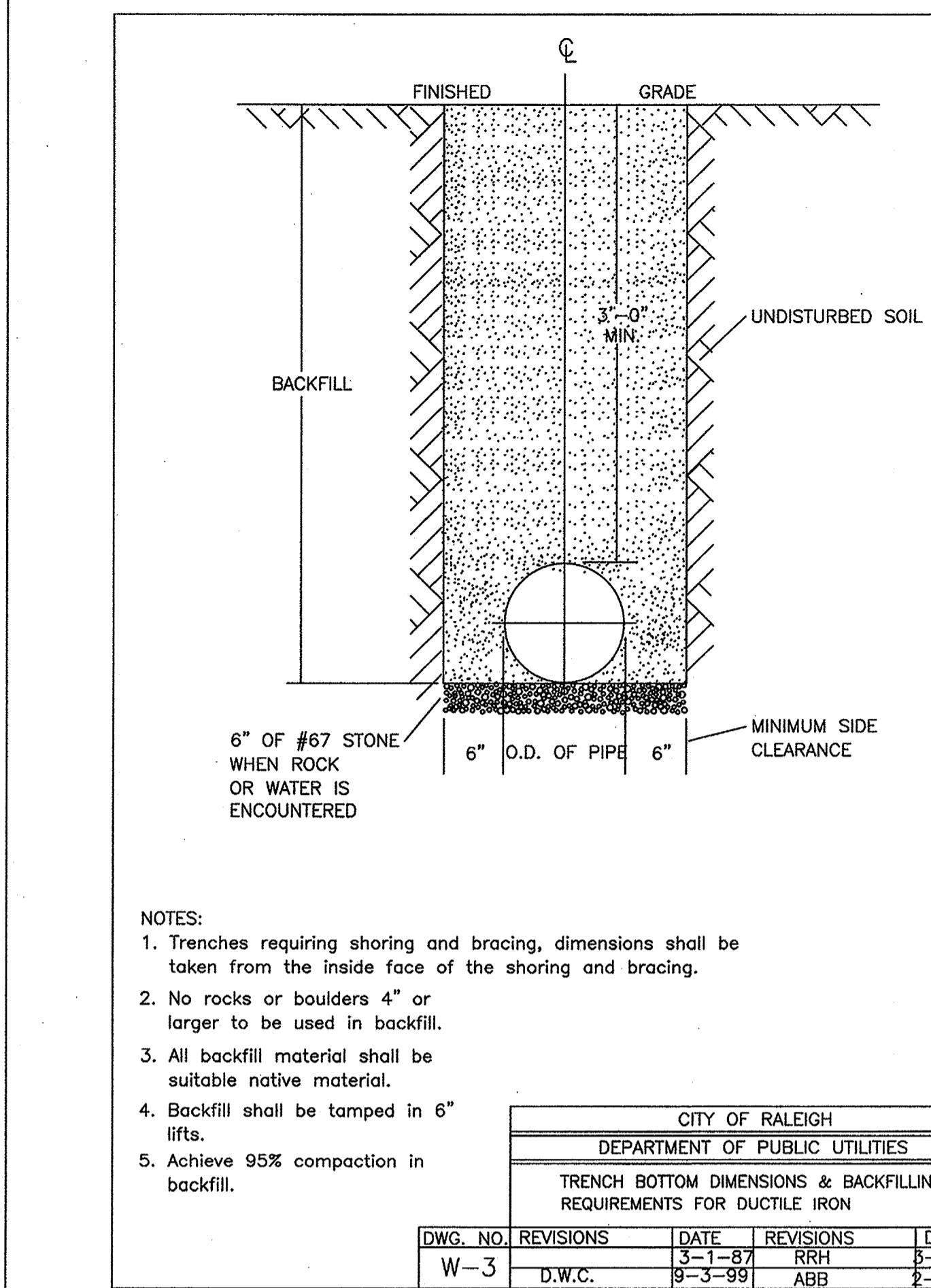
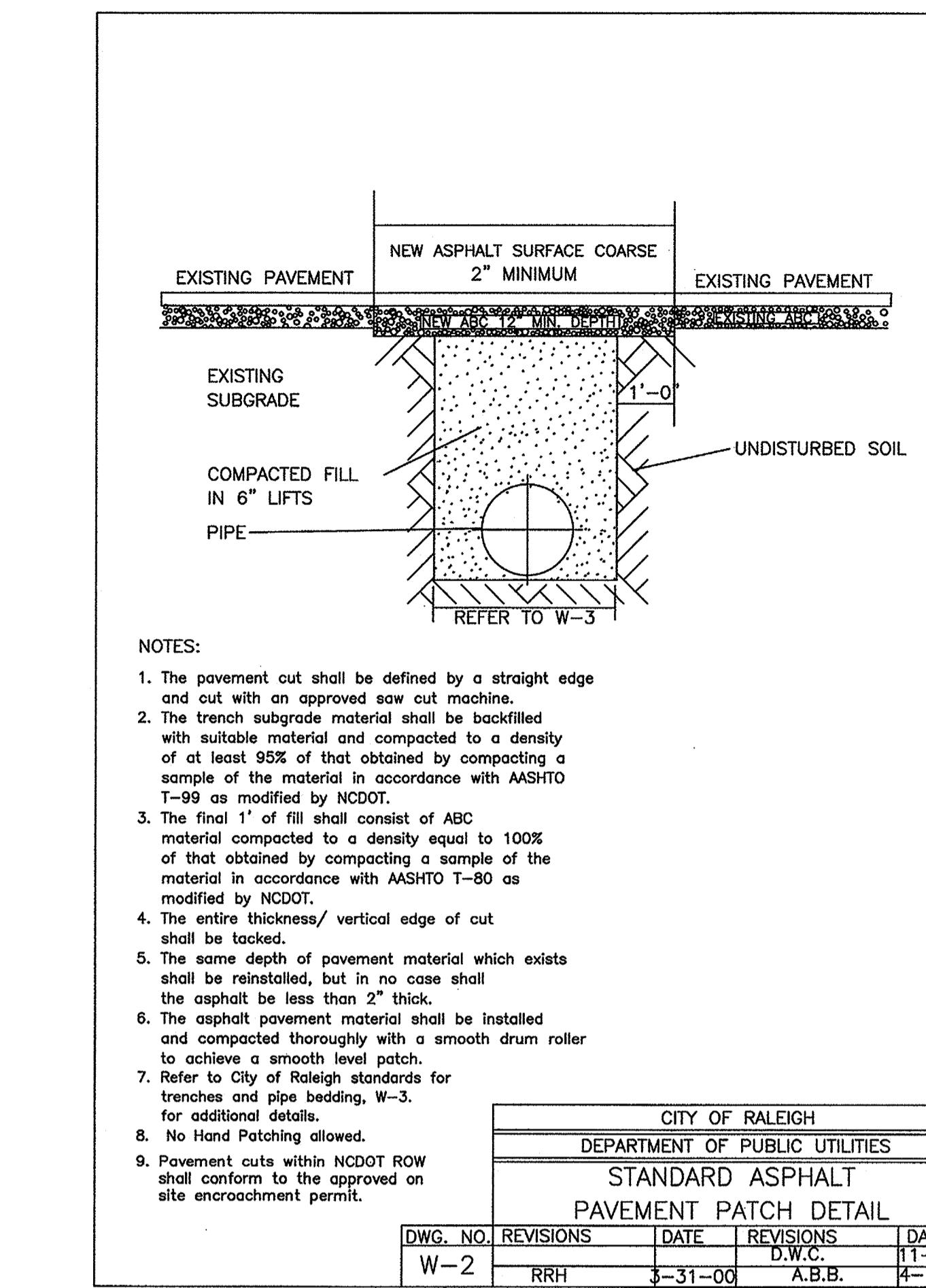
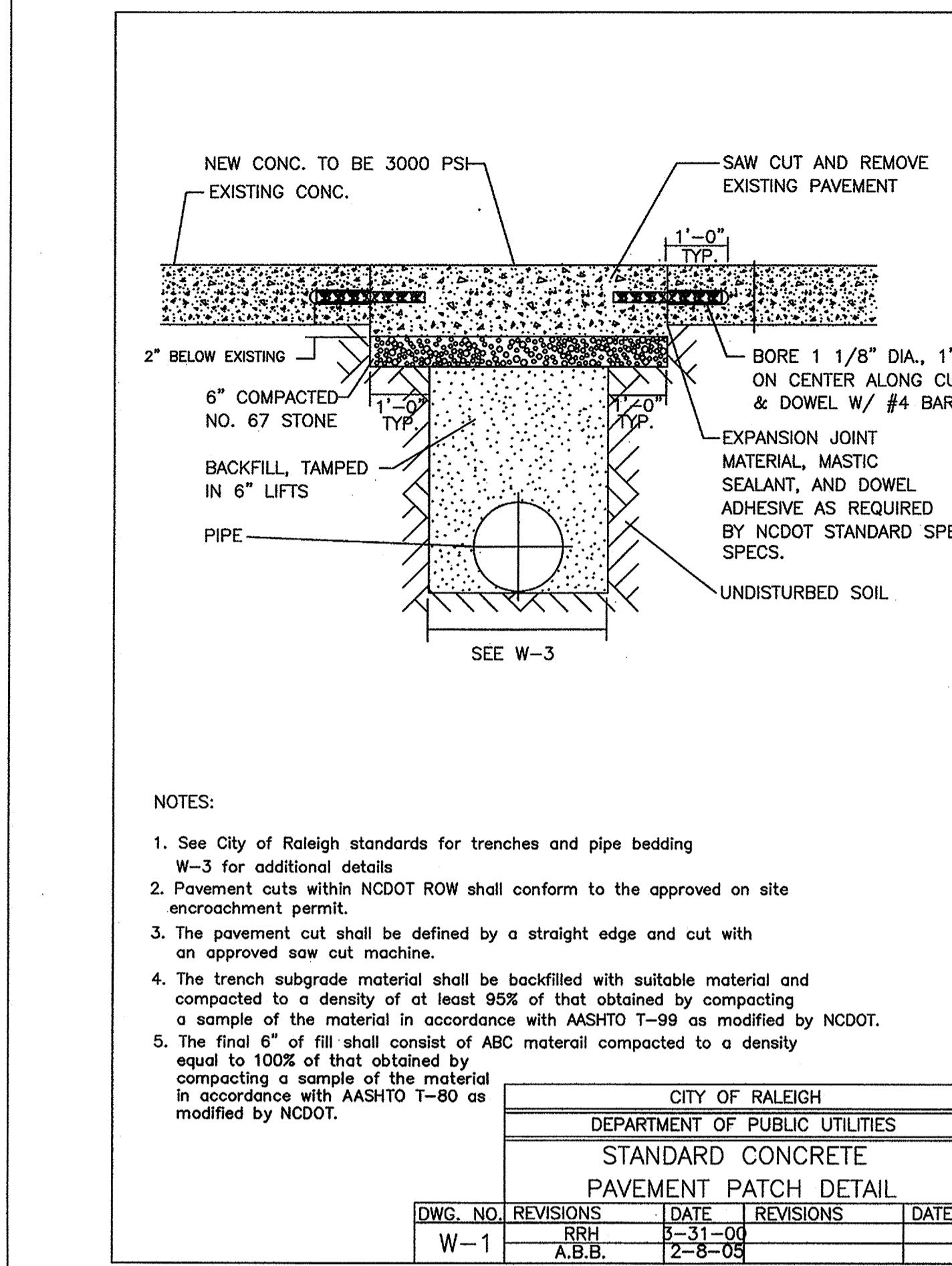
**THE RETREAT AT RALEIGH
PREPARED FOR
LANDMARK PROPERTIES**



NORTH CAROLINA
STATE BOARD OF
ENGINEERS AND LAND SURVEYORS

SEWER DETAILS

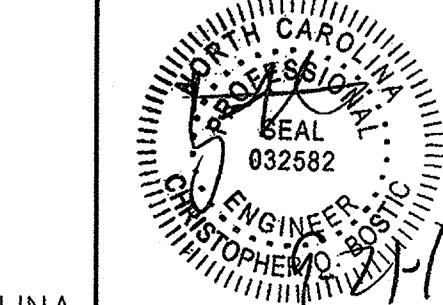
C-27



S-5-11
 UTILITY INSTALLATIONS AND OTHER PUBLIC FACILITIES, INCLUDING SIDEWALKS AND HANDICAP RAMPS ARE TO BE CONSTRUCTED ON ALL STREETS AS SHOWN ON THIS DRAWING. THESE FACILITIES HAVE BEEN APPROVED BY THE CITY OF RALEIGH AND SHALL BE SO INSTALLED UNLESS A CHANGE IS MADE WHICH REQUIRES APPROVAL. PUBLIC SANITARY SEWER EASEMENTS ARE TO BE RECORDED PRIOR TO FINAL ACCEPTANCE.
 SIGNATURE:
 TRANSPORTATION SERVICES: *[Signature]*
 PUBLIC UTILITIES: *CS 10/11/11*
 CONSERVATION ENGINEER: *SPL 10/13/11*
 PLANNING: *N/A*

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/OR NCDOT STANDARDS AND SPECIFICATIONS.

THE RETREAT AT RALEIGH PREPARED FOR LANDMARK PROPERTIES

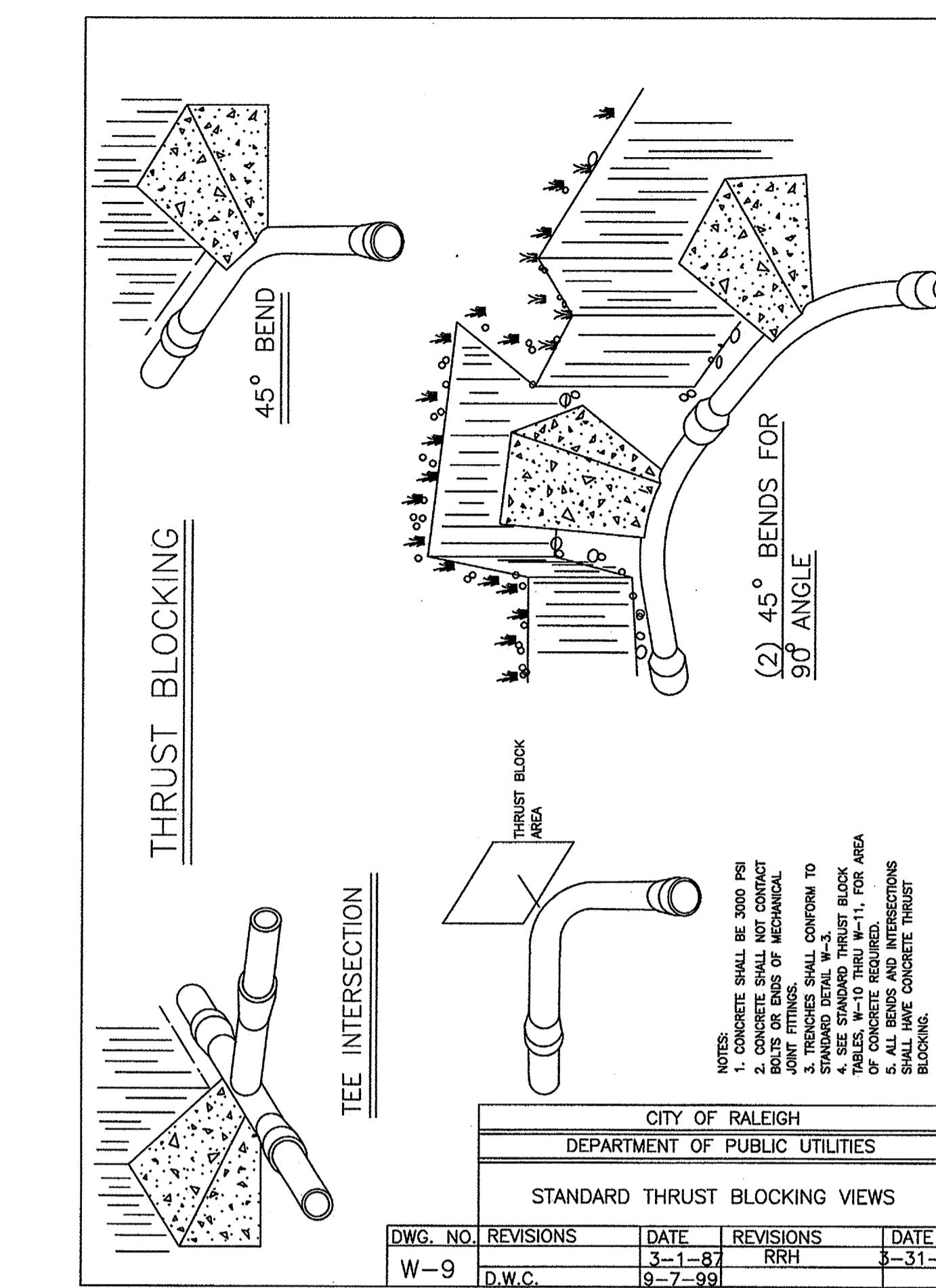


NORTH CAROLINA

WATER DETAILS

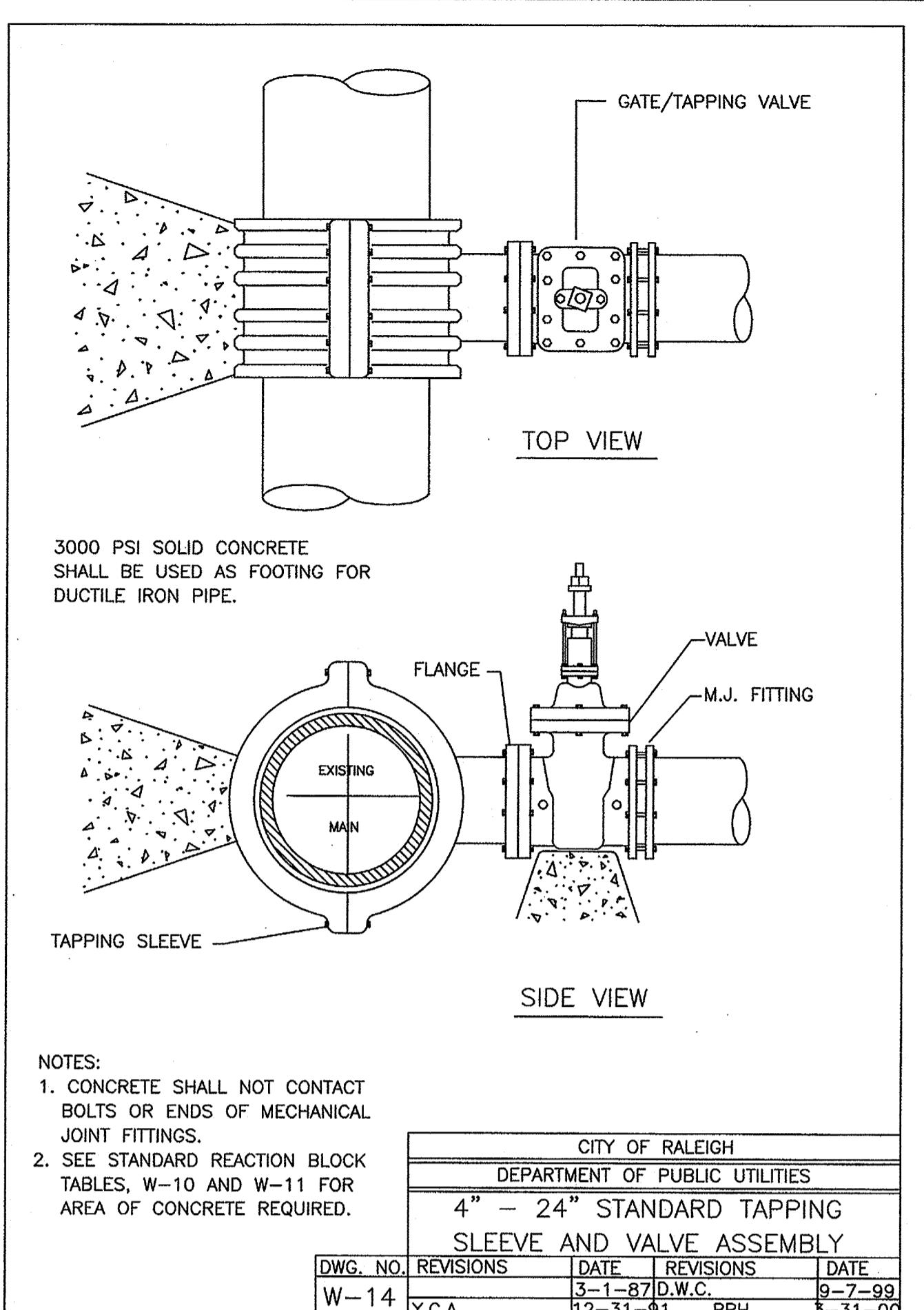
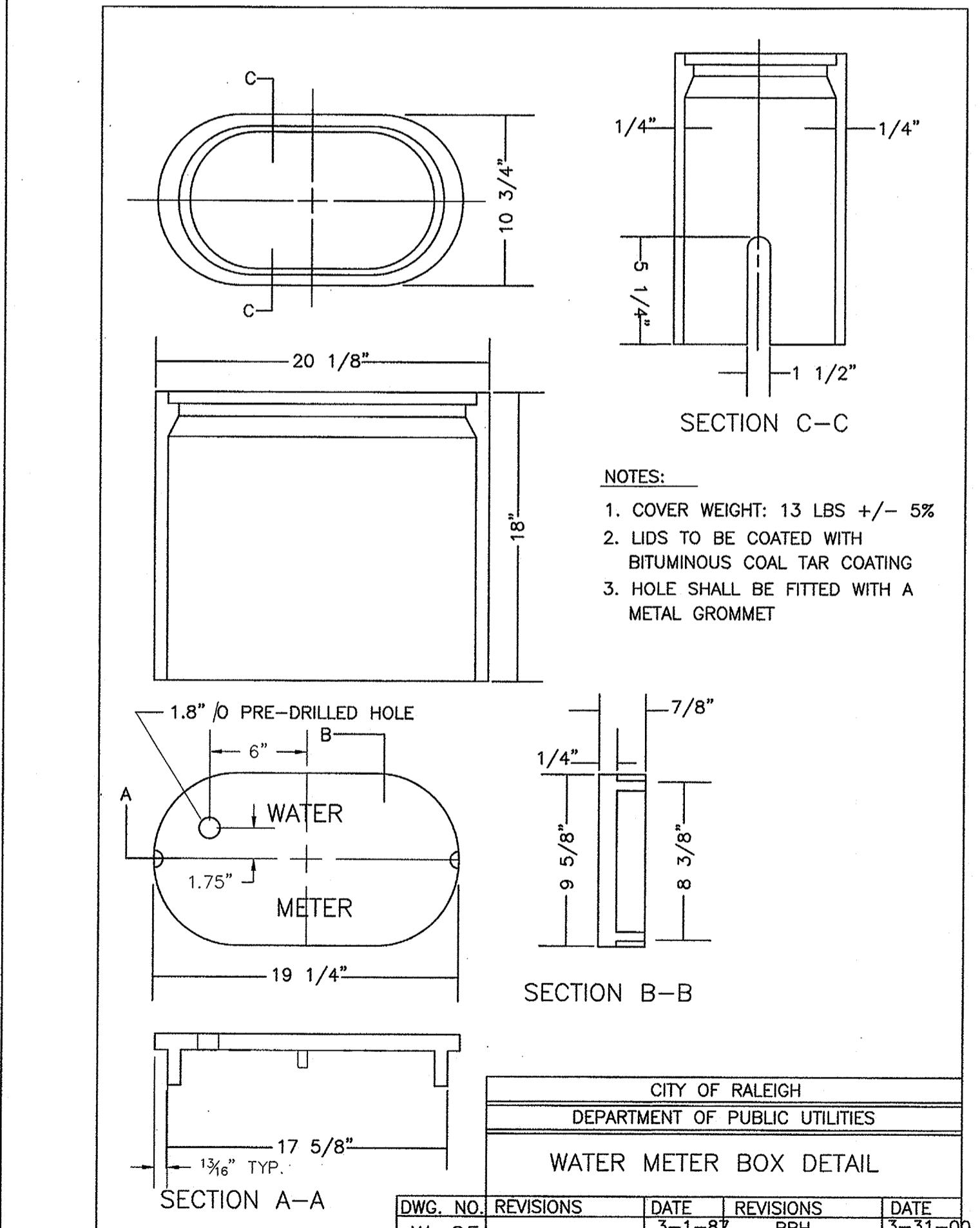
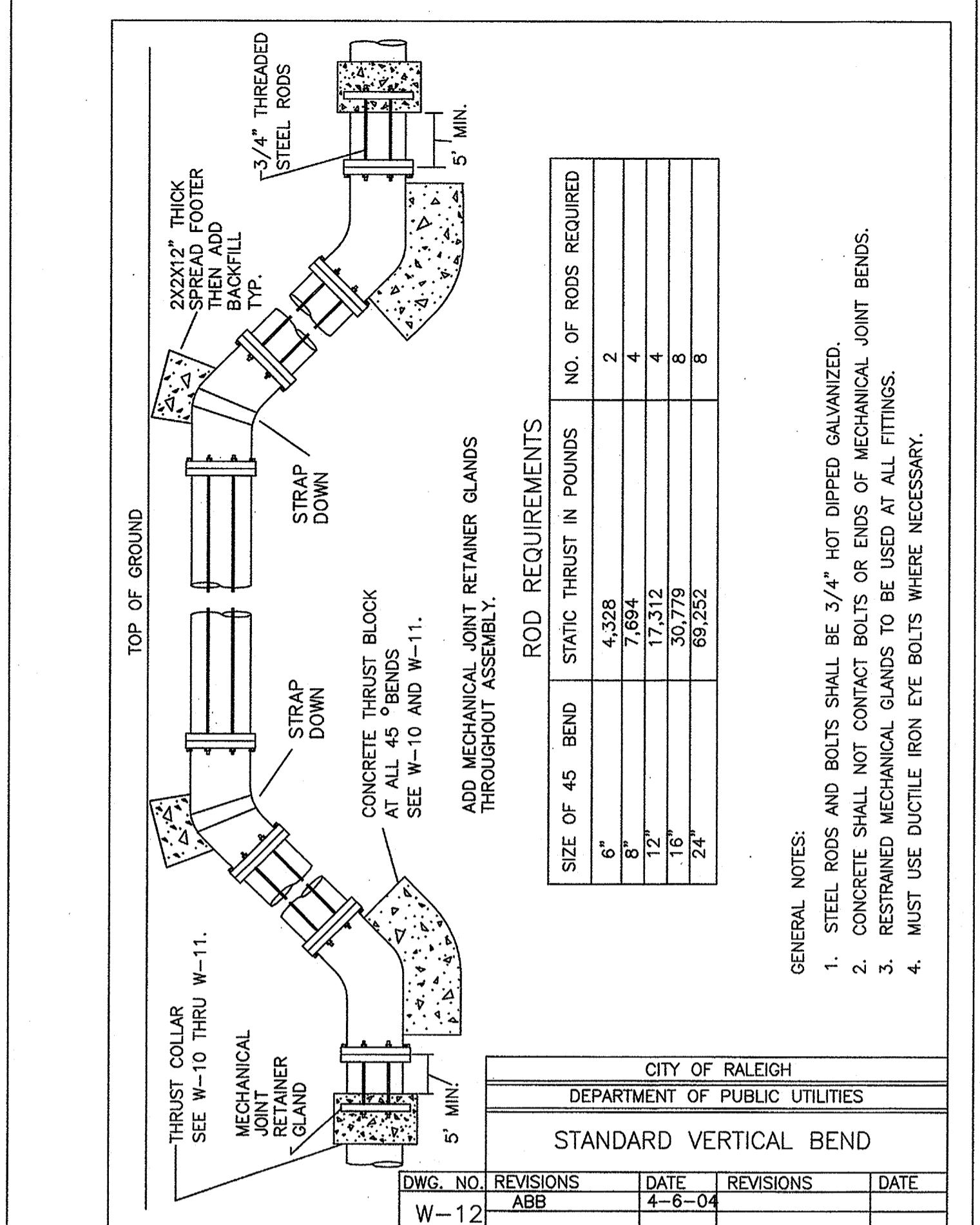
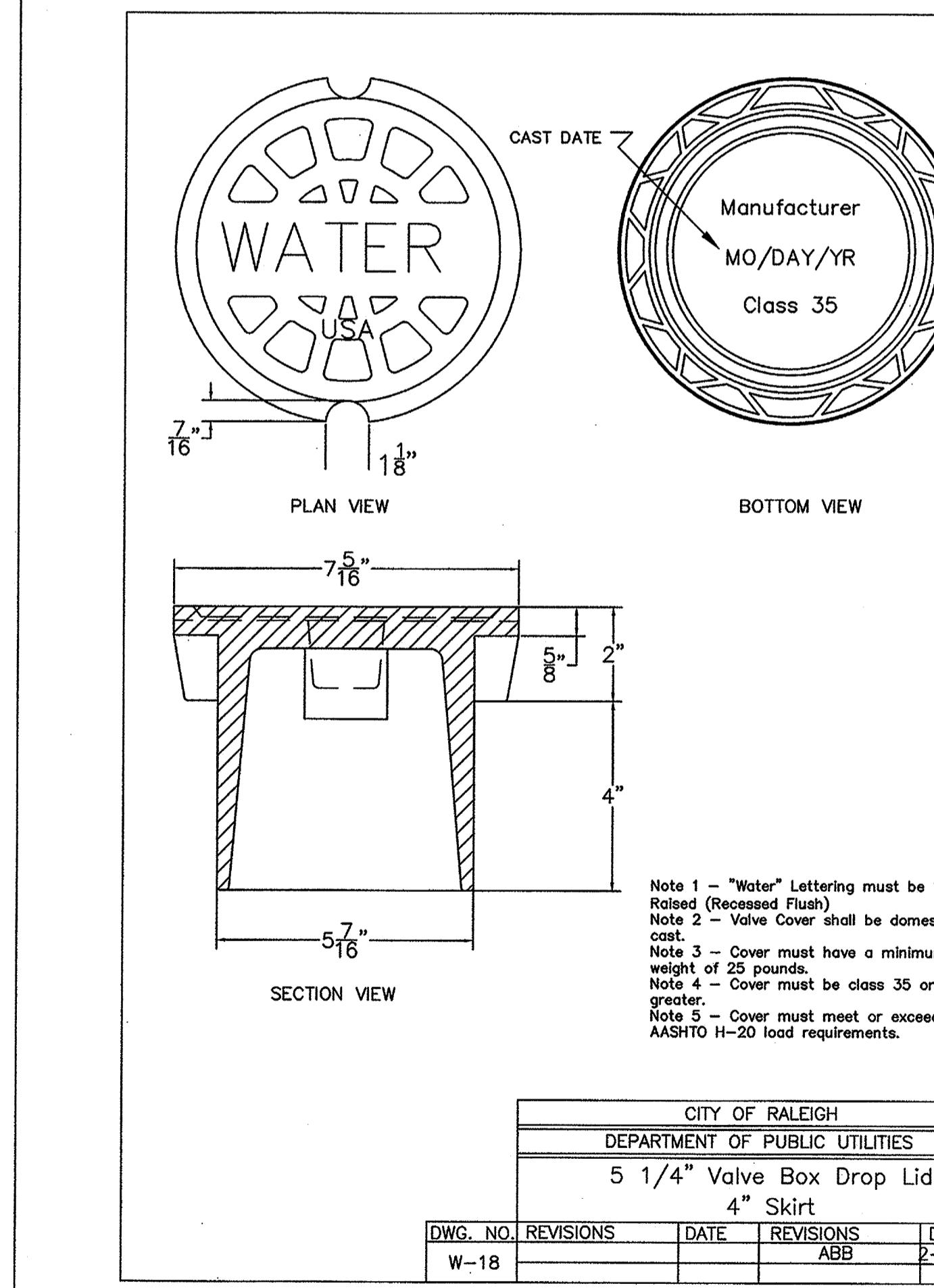
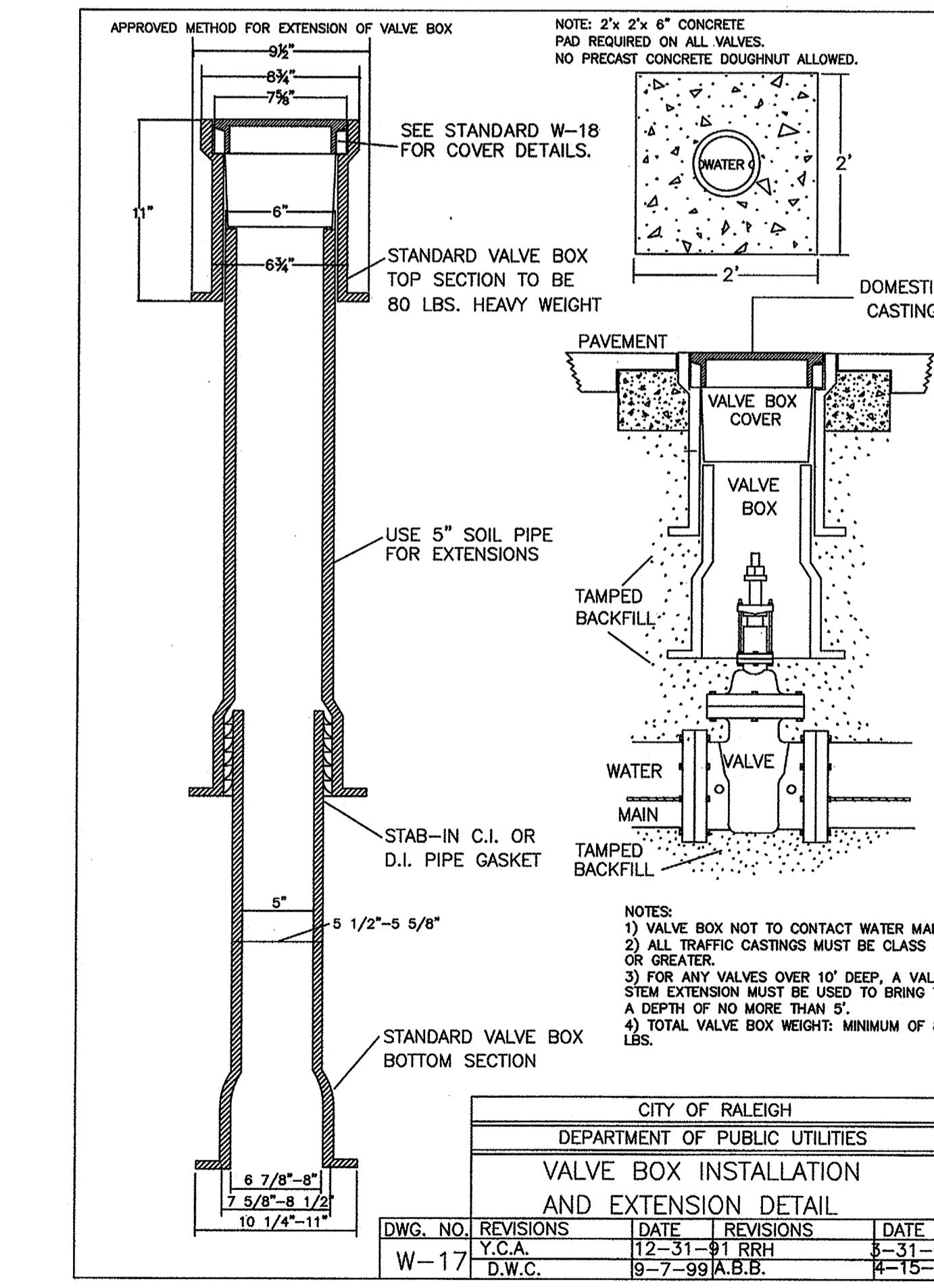
C-28

CITY OF RALEIGH 1ST REVIEW COMMENTS			
1	9/21/11	WJB	
No.	REVISIONS	DATE	BY



REACTION BEARING AREAS FOR HORIZONTAL WATER PIPE BENDS BASED ON TEST PRESSURE OF 200 P.S.I. ALL AREAS GIVEN IN SQUARE FEET.									
SIZE AND DEGREE OR BEND	STATIC THRUST POUNDS 4000 LBS./F.P.	MODERATELY DRY SOFT CLAY SOIL COARSE SAND DRY CLAY SOIL COMPACT FIRM SOIL CLEAN DRY QUICKSAND - 100% SOIL - POOR SOIL 100% LS/F.P.	DRY CLAY SOIL LS/F.P.	SOIL LS/F.P.					
6"									
11 1/4"	1,108	1	1	1	1	1	2	1	
22 1/2"	2,207	1	2	2	1	1	3	1	
45°	4,328	2	3	3	1	1	2	5	1
90°	7,996	2	4	5	1	1	2	8	1
PLUG	5,655	2	3	4	1	1	2	6	1
8"									
11 1/4"	1,970	1	1	2	1	1	1	2	1
22 1/2"	3,922	1	2	3	1	1	1	4	1
45°	7,694	2	4	5	1	1	2	8	1
90°	14,215	4	8	9	2	2	4	15	2
PLUG	10,053	3	5	6	2	2	3	10	1
12"									
11 1/4"	4,433	2	3	3	1	1	2	5	1
22 1/2"	8,826	3	5	6	2	2	3	9	1
45°	17,312	5	9	11	3	3	5	18	2
90°	31,983	8	16	19	4	4	8	32	4
PLUG	22,619	6	12	14	3	3	6	23	3
16"									
11 1/4"	7,881	2	4	5	1	1	2	8	1
22 1/2"	15,691	4	8	10	2	2	4	16	2
45°	30,779	8	16	19	4	4	8	31	4
90°	56,861	15	29	35	8	8	15	57	6
PLUG	40,213	10	21	25	5	5	10	41	5

CITY OF RALEIGH DEPARTMENT OF PUBLIC UTILITIES			
THRUST BLOCKING DESIGN QUANTITY TABLE			
USE 6° - 90° BEND VALUE FOR HYDRANTS FOR ADDITIONAL SAFETY FACTOR.			
DWG. NO.	REVISONS	DATE	REVISONS DATE
W-10	D.W.C.	6-23-99	



S-5-11

UTILITY INSTALLATIONS AND OTHER PUBLIC FACILITIES LOCATED SIDEWALKS AND HAWKING RAMPS ARE TO BE LOCATED ON THE PUBLIC STREETS AS SPECIFIED BY CITY CODE. THESE FACILITIES HAVE BEEN APPROVED BY THE CITY OF RALEIGH AND ARE SUBJECT TO INSPECTION AND APPROVAL. A PERMIT IS AUTHORIZED BY WRITTEN APPROVAL. PUBLIC SANITARY SEWER EASEMENTS ARE TO BE RECORDED PRIOR TO FINAL ACCEPTANCE.

SIGNATURE: *[Signature]*

TRANSPORTATION SERVICES: *N/A*

PUBLIC UTILITIES: *CS 10/14/11*

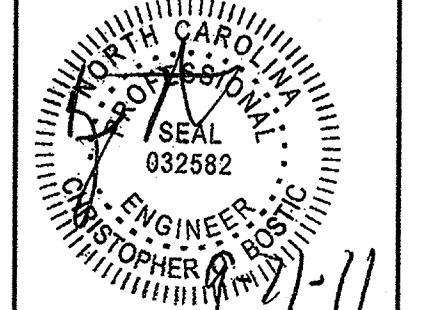
CONSERVATION ENGINEER: *SPL 10/13/11*

PLANNING: *N/A*

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/OR NCDOT STANDARDS AND SPECIFICATIONS.

THE RETREAT AT RALEIGH PREPARED FOR LANDMARK PROPERTIES

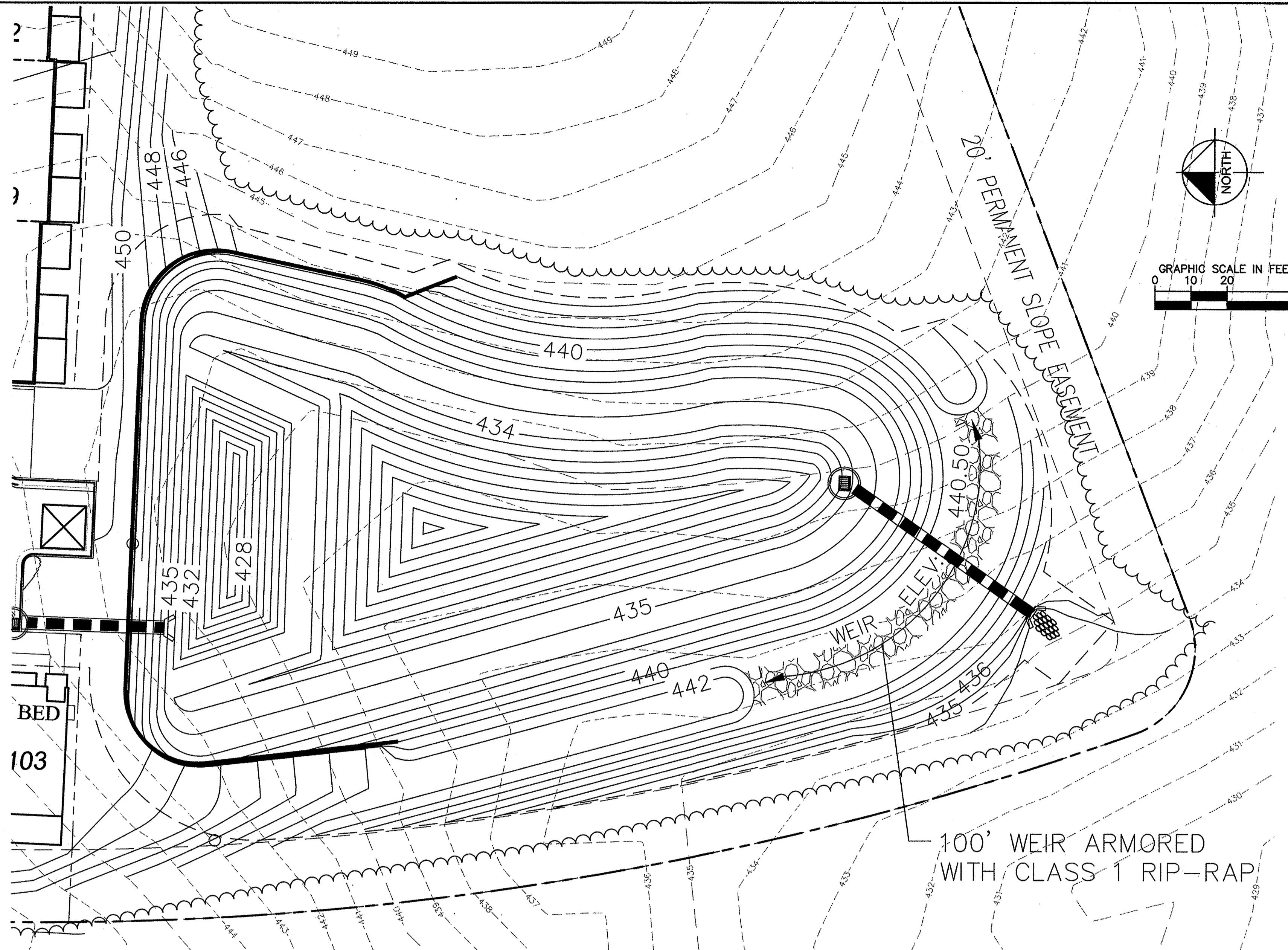
RALEIGH



NORTH CAROLINA
ENGINEER IN BASIC
STATE OF NORTH CAROLINA
REGISTRATION NO. 032682

WATER DETAILS

SHEET NUMBER
C-29

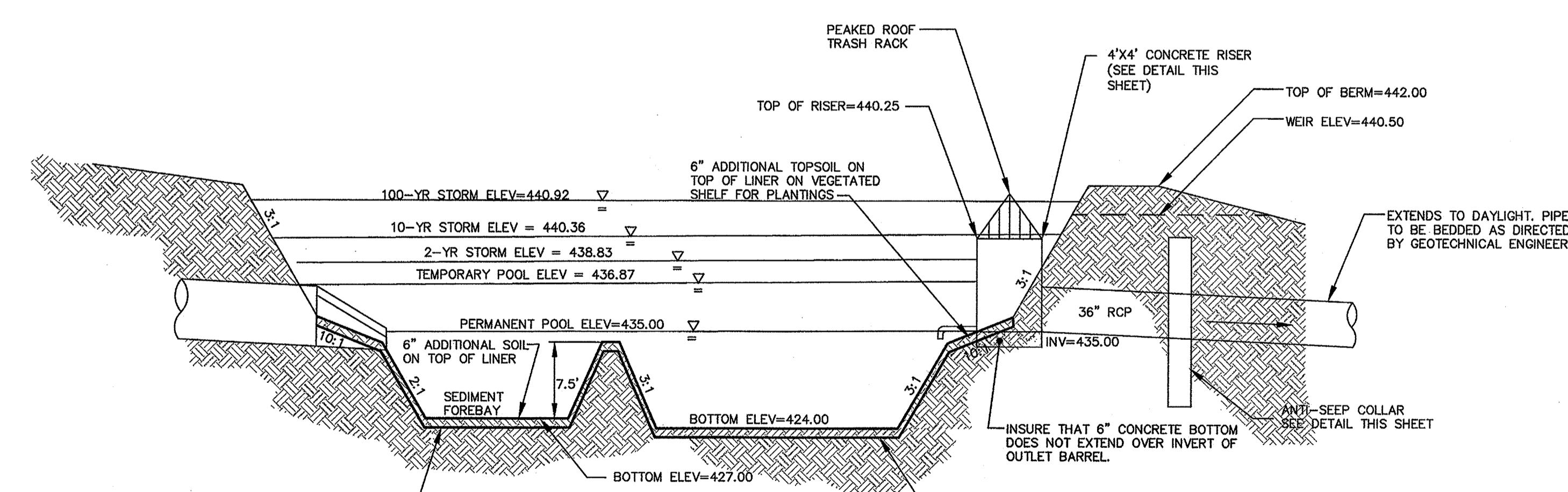


S-5-11

UTILITY INSTALLATIONS AND OTHER PUBLIC FACILITIES, INCLUDING SIDEWALKS AND HANDICAP RAMPS, ARE TO BE LOCATED IN PUBLIC RIGHTS AS SPECIFIED BY CITY CODE. THESE FACILITIES HAVE BEEN APPROVED BY THE CITY OF RALEIGH AND ARE SUBJECT TO APPROVAL BY THE STATE. A CHANGE IS AUTHORIZED BY WRITTEN APPROVAL. PUBLIC SANITARY SEWER EASEMENTS ARE TO BE RECORDED PRIOR TO FINAL ACCEPTANCE.

SIGNATURE:
TRANSPORTATION SERVICES: N/A
PUBLIC UTILITIES: N/A
CONSERVATION ENGINEER: SPL 10/13/11
PLANNING: N/A

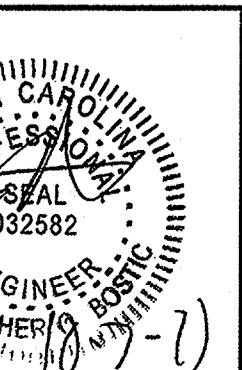
ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/OR NC DOT STANDARDS AND SPECIFICATIONS.



WET DETENTION POND
NOT TO SCALE

IMPERMEABLE LINER (CLAY OR SYNTHETIC) TO BE INSTALLED AT POND BOTTOM TO MAINTAIN PERMANENT POOL ELEVATION (MAX. INFILTRATION RATE OF 0.01 IN./HR.). LINER DESIGN TO BE APPROVED BY GEOTECHNICAL ENGINEER. LINER MAY NOT BE REQUIRED IF TESTING OF POND BOTTOM AFTER COMPLETION OF CONSTRUCTION BUT PRIOR TO STABILIZATION INDICATES THAT THE LINER IS NO LONGER REQUIRED.

THE RETREAT AT RALEIGH
PREPARED FOR
LANDMARK PROPERTIES



NORTH CAROLINA

WET POND DETAILS

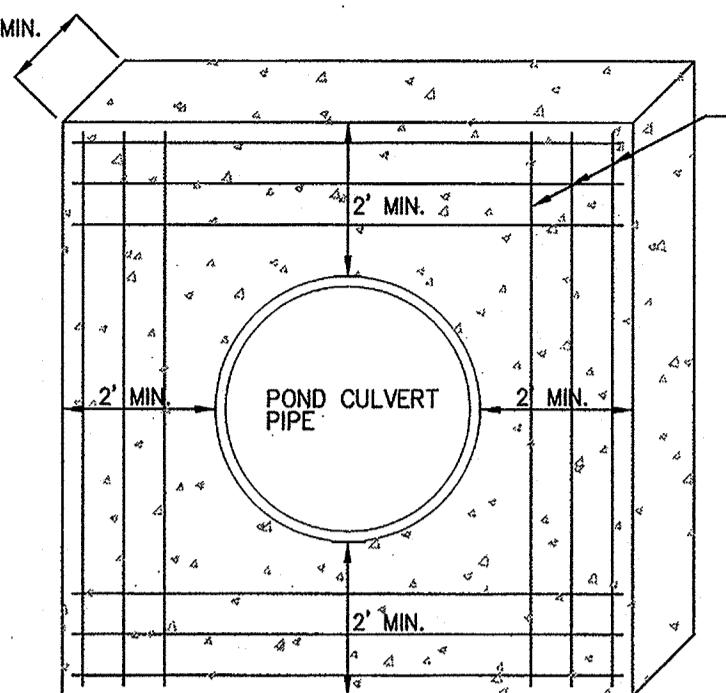
SHEET NUMBER
C-33

No.	REVISIONS	DATE	BY
2	CITY OF RALEIGH 2ND REVIEW COMMENTS	10/07/11	WJB
1	CITY OF RALEIGH 1ST REVIEW COMMENTS	9/21/11	WJB



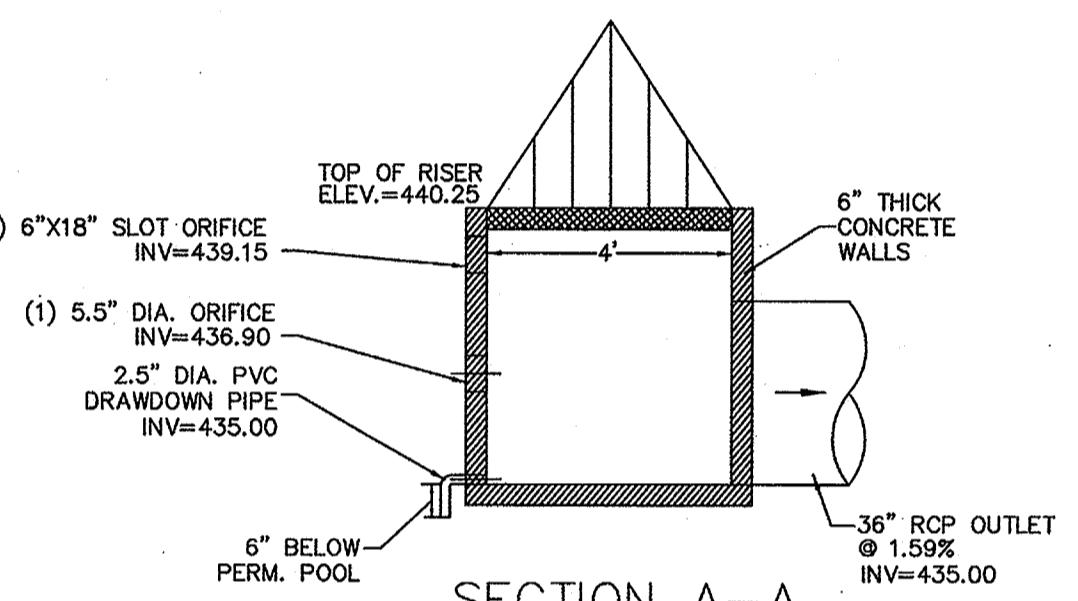
**Kimley-Horn
and Associates, Inc.**
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333 FAYETTEVILLE STREET, SUITE 600, RALEIGH, NC 27601
PHONE: 919-835-1494 FAX: 919-653-5847
WWW.KIMLEY-HORN.COM

KHA PROJECT
011170001
DATE
7/29/11
SCALE AS SHOWN
DESIGNED BY COB
DRAWN BY WJB
NC CERTIFICATE OF AUTHORIZATION: F-0102
CHECKED BY PAB
RALEIGH

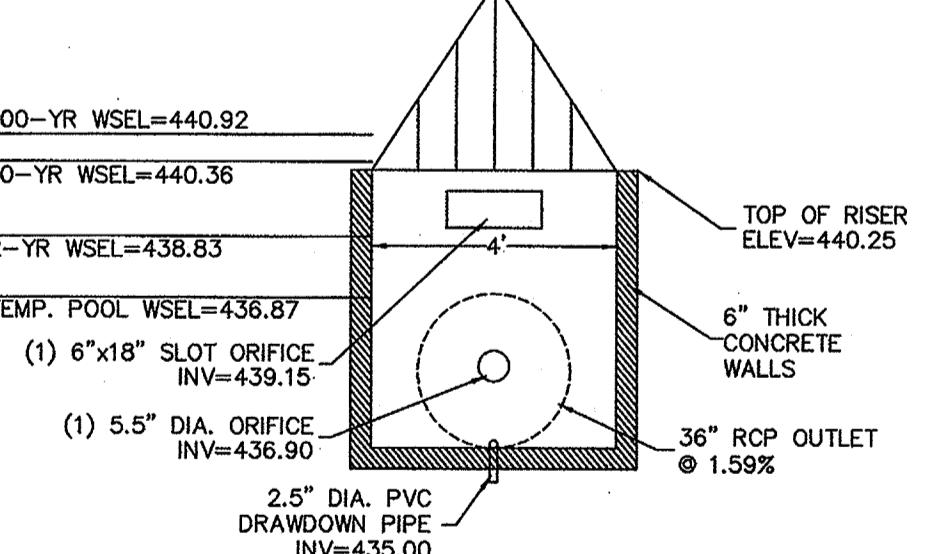
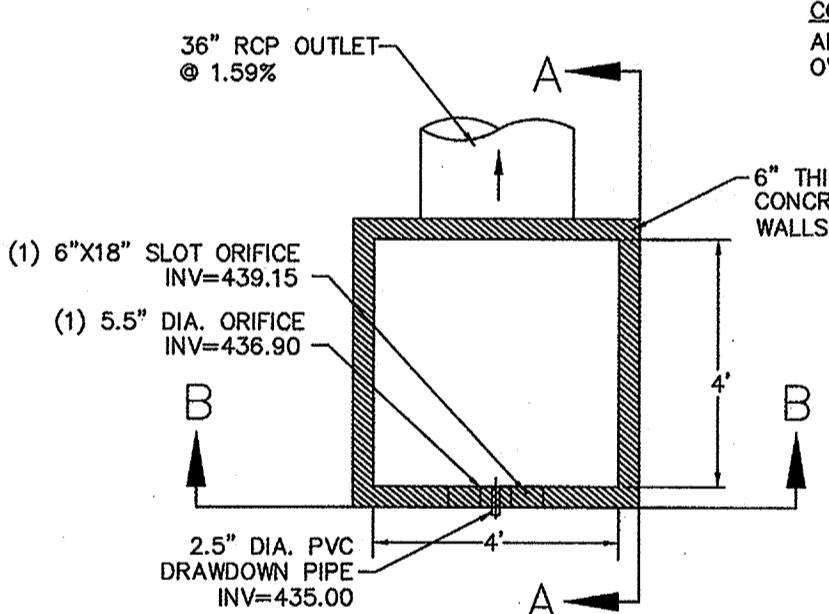


- #4 REBAR @ 12" OC
IN FRONT & REAR FACE
OF COLLAR. REBAR TO
HAVE 3" MIN. CONC COVER
FROM EDGE OR FACE OF COLLAR
- NOTES:
1. ALL CONCRETE TO BE 3000 PSI
NON-FLY ASH
 2. APPLY 1/2" THICK WRAP OF
ASPHALTIC CEMENT AROUND
DISCHARGE PIPE 6" BEYOND
PLANNED SEEPAGE COLLAR
ON BOTH SIDES
 3. APPLY 1/2" THICK
ASPHALTIC CEMENT AT PIPE/SEEPAGE
COLLAR INTERFACE ON
UPSTREAM FACES
 4. TO BE FIELD INSPECTED BY
GEOTECHNICAL ENGINEER.
ASPHALTIC CEMENT TO MEET
OR EXCEED FEDERAL
SPECIFICATION SS-153
TYPE I: ASTM-D-2822-75
TYPE 1.

CONCRETE SEEPAGE COLLAR
NOT TO SCALE



CONTROL STRUCTURE NOTE:
ALL ORIFICES TO HAVE SCREEN INSTALLED
OVER OPENINGS TO PREVENT BLOCKAGE.



SECTION B-B
WET POND CONTROL STRUCTURE
NOT TO SCALE