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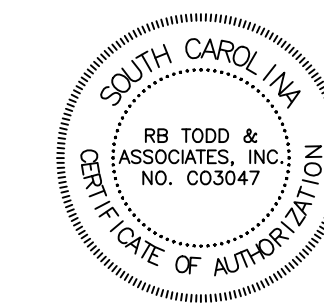
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STRUCTURAL
S1.1 RETAINING WALL FOUNDATION PLAN AND DETAILS

UNIVERSITY OF SOUTH CAROLINA - PARK STREET PARKING LOT

PROJECT NUMBER: H27-Z296 COLUMBIA, SC

APRIL, 2018

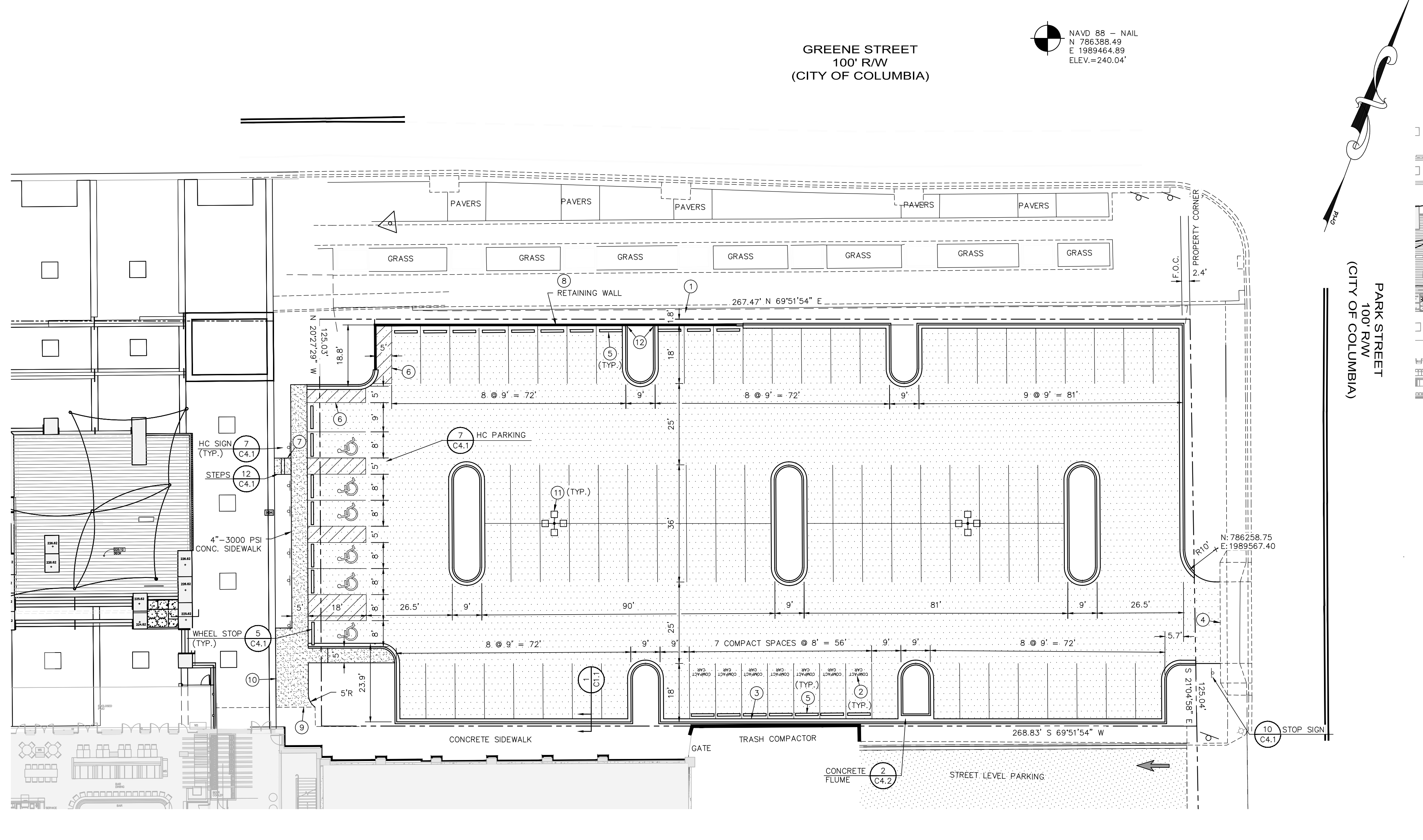
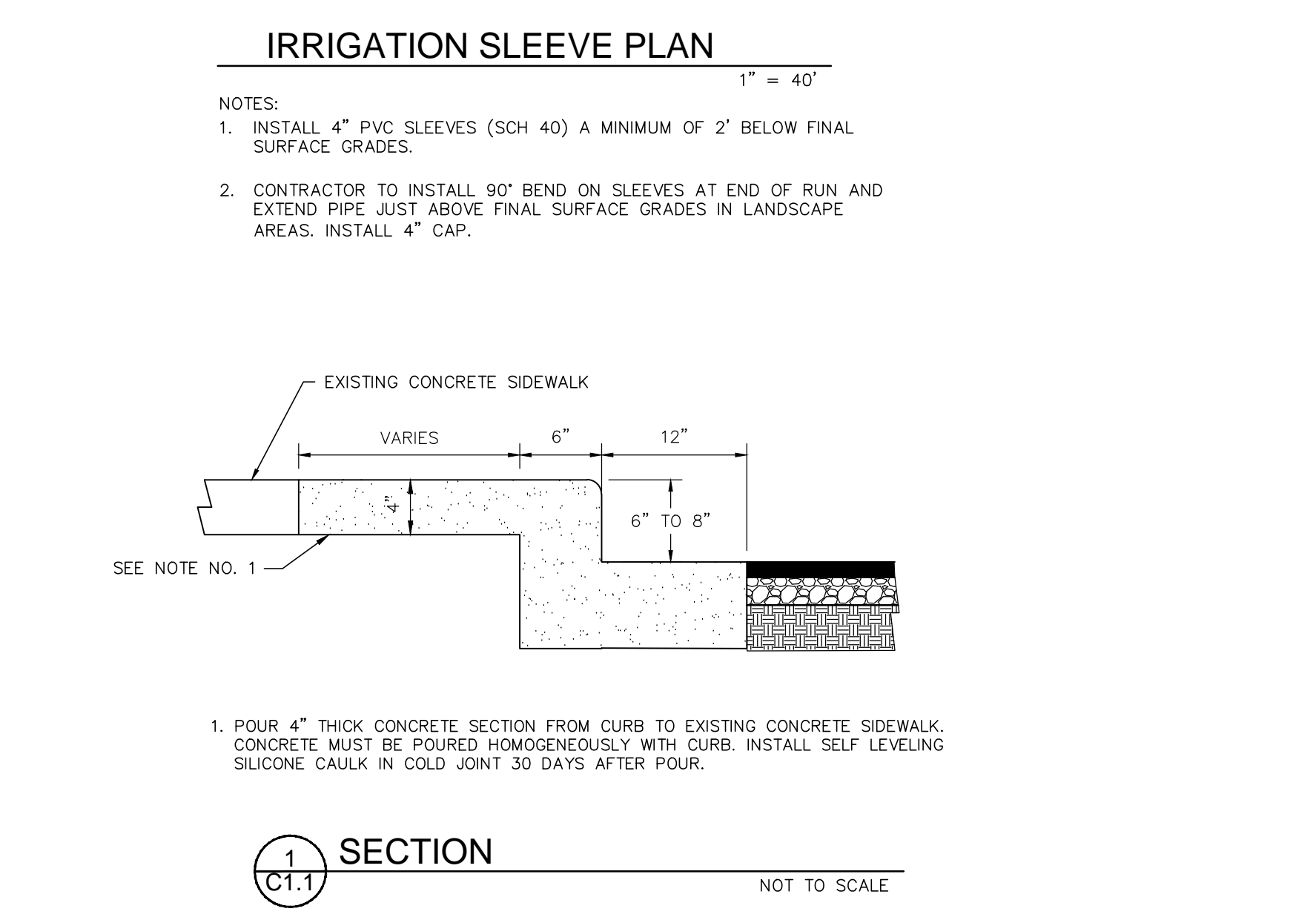
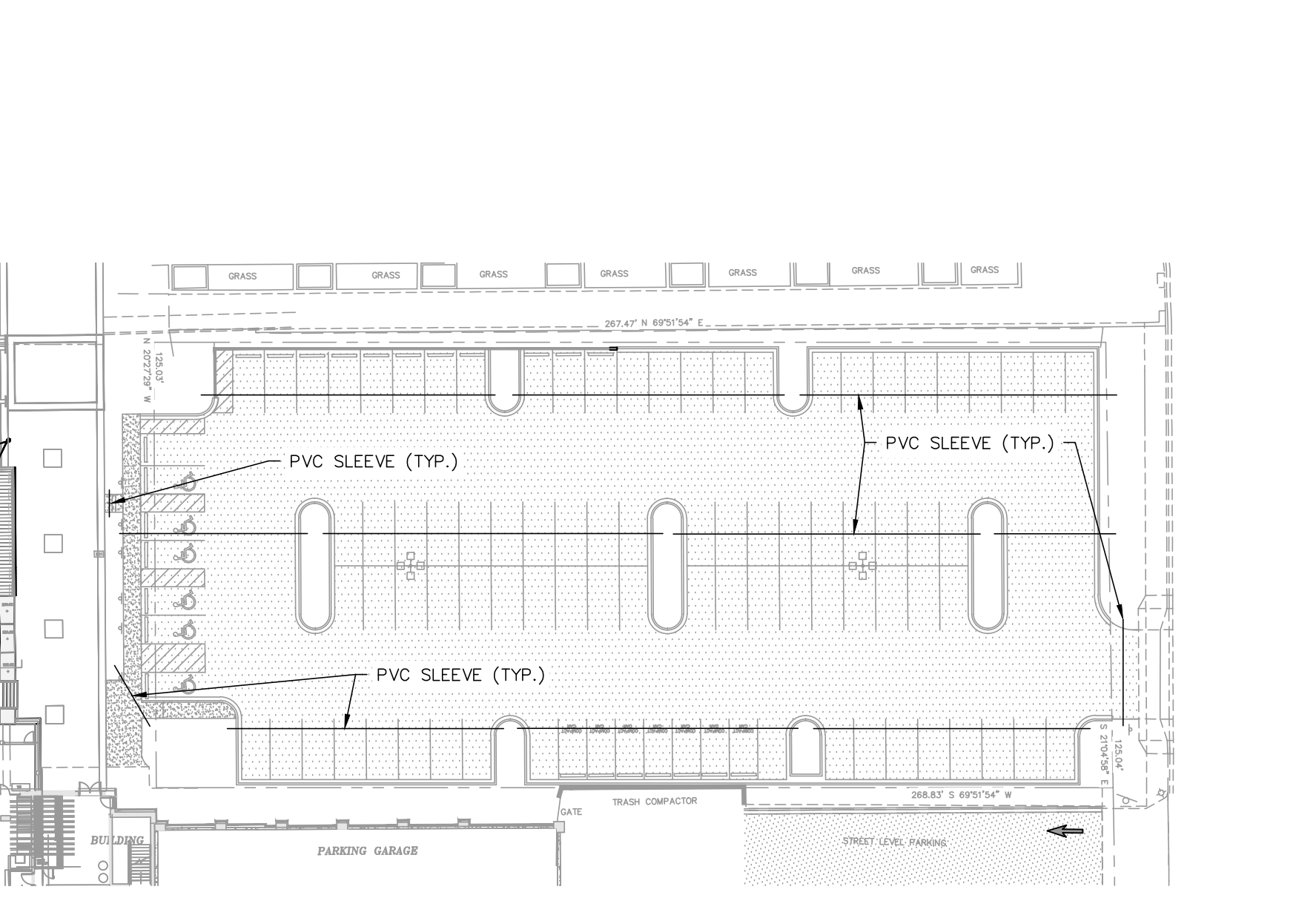
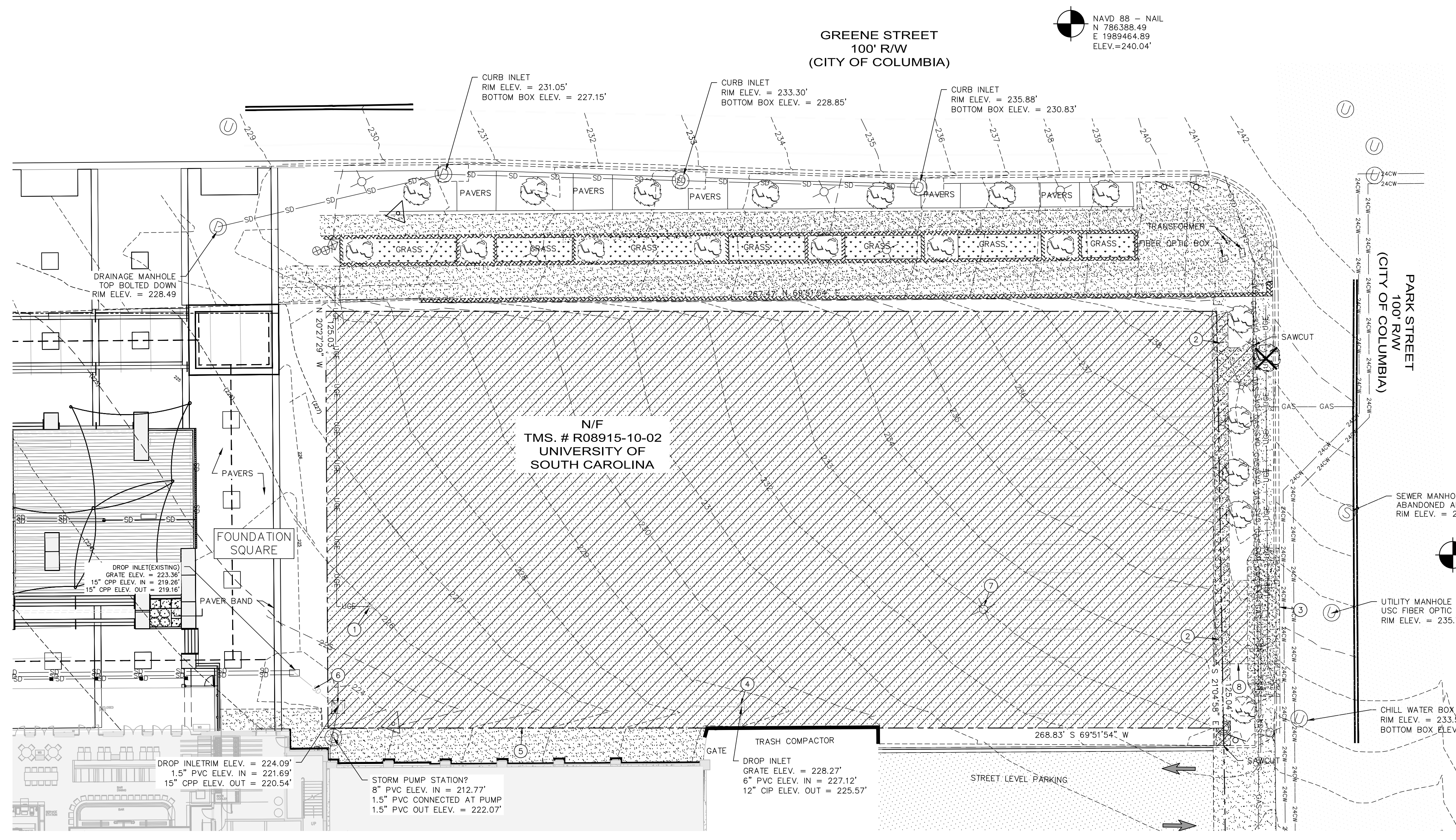
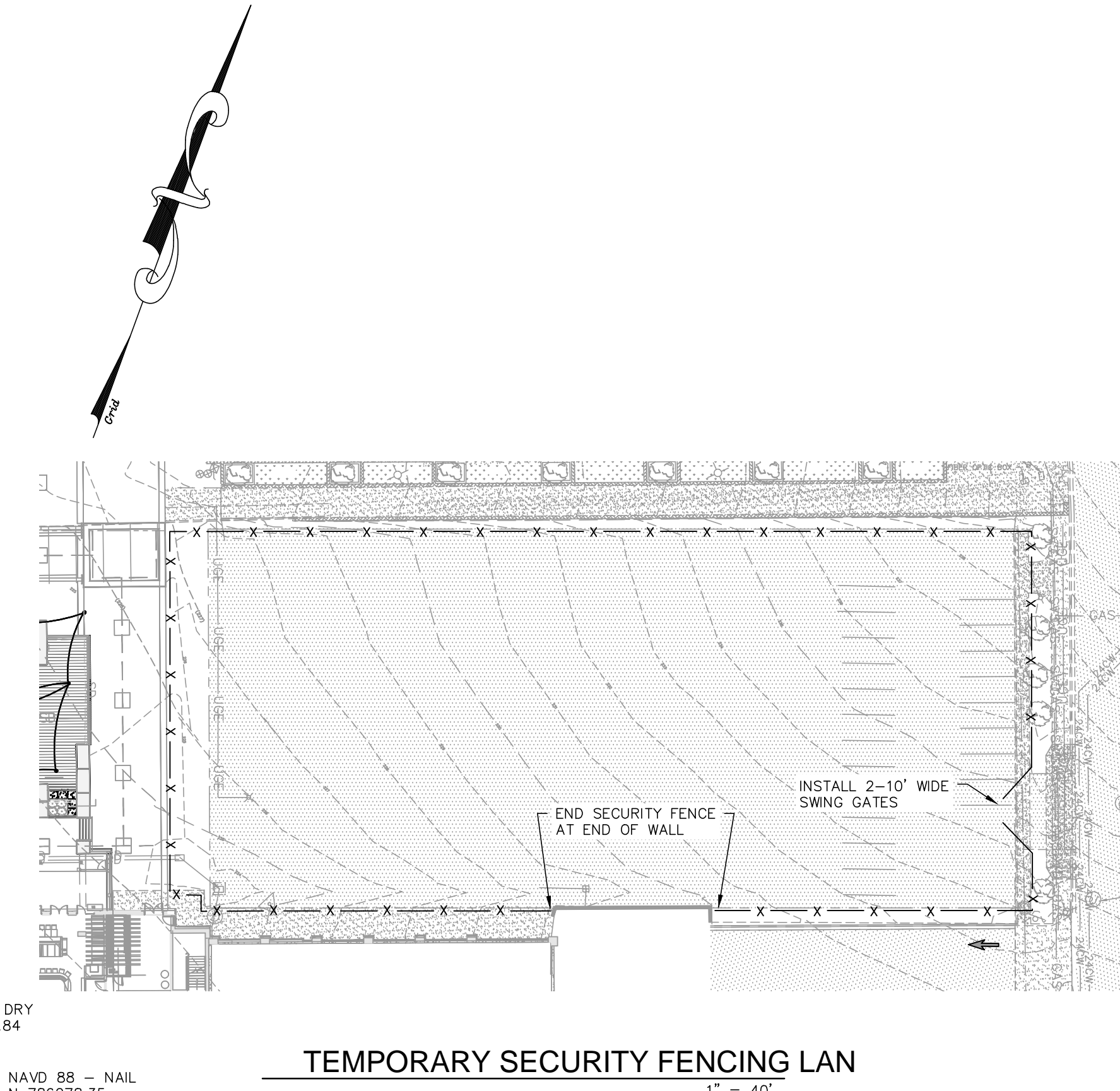
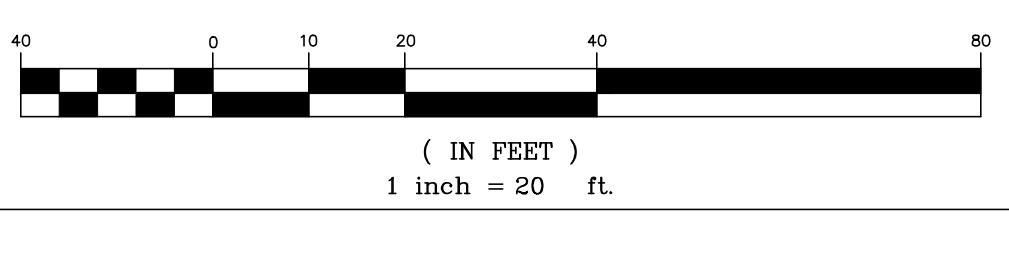


4/20/18

DEMOLITION	EXISTING	DESCRIPTION
N/A	+	BENCHMARK/CONTROL POINT
N/A	▭	PROPERTY LINE/RIGHT OF WAY
N/A	▭	BUILDING
N/A	⊙	LIGHT POLE
N/A	⊙	TREE
▨	▨	BITUMINOUS SURFACE
N/A	▨	CONCRETE SURFACE
N/A	—	CONTOUR
N/A	x	SPOT ELEVATION
N/A	x	CHAIN LINK FENCE
N/A	W	WATER VALVE
N/A	M	WATER METER
N/A	X	UNDERGROUND ELECTRIC LINE
N/A	—	UNDERGROUND ELECTRIC LINE w/LIGHT POLE
N/A	—	SANITARY SEWER LINE w/MANHOLE
N/A	—	SANITARY SEWER CLEANOUT
N/A	—	STORM DRAIN LINE w/STRUCTURE
①	N/A	KEY NOTE REFERENCE

- GENERAL NOTES**
- TOPOGRAPHIC SURVEY WAS COMPLETED BY SURVEY ONE, LLC ON SEPTEMBER 6, 2016. NO BOUNDARY OR TOPOGRAPHIC SURVEY WAS PERFORMED BY R.B. TODD CONSULTING ENGINEERS.
 - OWNER: UNIVERSITY OF SOUTH CAROLINA
 OFFICE OF BUSINESS AFFAIRS
 COLUMBIA, SC 29208
 PHONE NUMBER: 803-777-7592
 TMS: R08915-10-02
 ZONING: C-1
 DEVELOPMENT ADDRESS: 701 PARK STREET, COLUMBIA, SC 29208
 TOTAL ACREAGE: 0.77 ACRES
 DISTURBED AREA: 0.8 ACRES
 - ACCORDING TO FEMA FLOOD INSURANCE RATE MAP 45079C0094H, DATED FEBRUARY 20, 2002, THIS PROPERTY IS LOCATED IN FLOOD ZONE "X".
 - THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION OF ANY DISCREPANCIES BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS.
 - THE CONTRACTOR SHALL NOTIFY PUPS AT 1-888-721-7877 AT LEAST 72 HOURS PRIOR TO CONSTRUCTION TO HAVE ALL UNDERGROUND UTILITIES LOCATED.
 - SCORE NEW CONCRETE SIDEWALK 5' ON CENTER.
 - THE CONTRACTOR SHALL INSTALL A 6" HIGH TEMPORARY SECURITY FENCE AROUND THE PERIMETER OF IMPROVEMENTS. ADJUST FENCE AS NEEDED TO ACCOMMODATE CONSTRUCTION. PROVIDE CONSTRUCTION ACCESS GATES AT ENTRANCE.

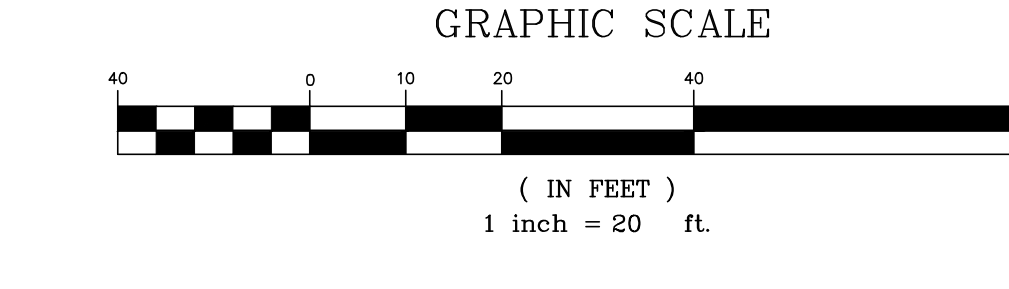
- KEY NOTES**
- COORDINATE WITH ELECTRICAL ENGINEERING PLANS ON REMOVAL OF EXISTING LIGHT POLES.
 - REMOVE SIDEWALK AND CURB AND GUTTER AS INDICATED.
 - EXISTING DROP CURB DRIVEWAY ENTRANCE.
 - REMOVE EXISTING DROP INLET AND DISCHARGE PIPE TO DOWNSTREAM STRUCTURE.
 - REMOVE ASPHALT TO EDGE OF EXISTING CONCRETE SIDEWALK.
 - REMOVE EXISTING DRAINAGE STRUCTURE AND DISCHARGE PIPE. SEE SHEET C2.1 FOR PROPOSED IMPROVEMENTS.
 - REMOVE LIGHT POLE. COORDINATE WITH ELECTRICAL ENGINEERING PLANS.
 - DEMOLISH ALL PAVEMENT UP TO EXISTING CONCRETE DROP CURB DRIVEWAY ENTRANCE.

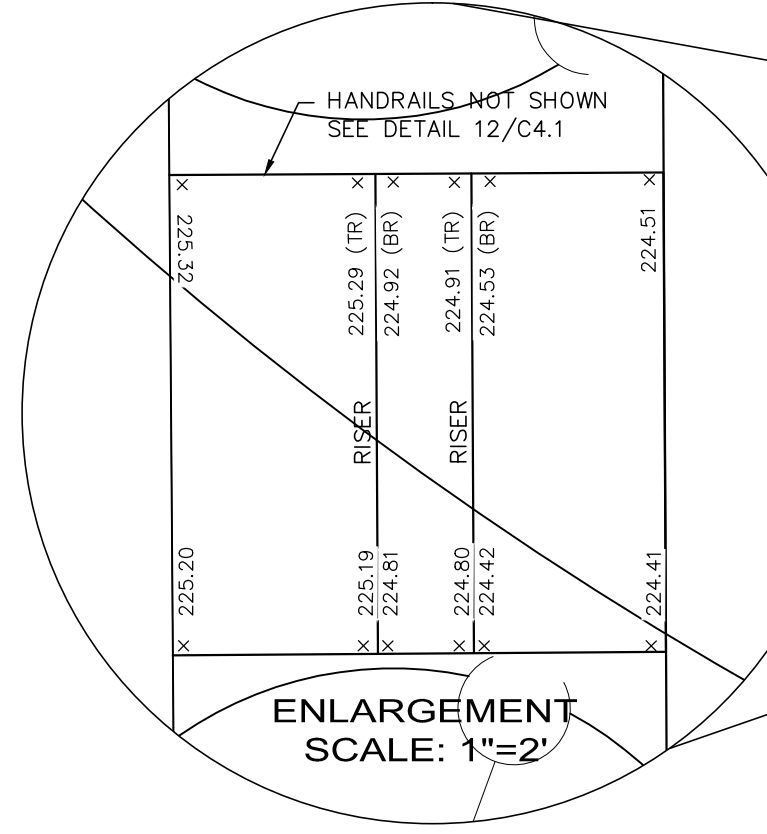
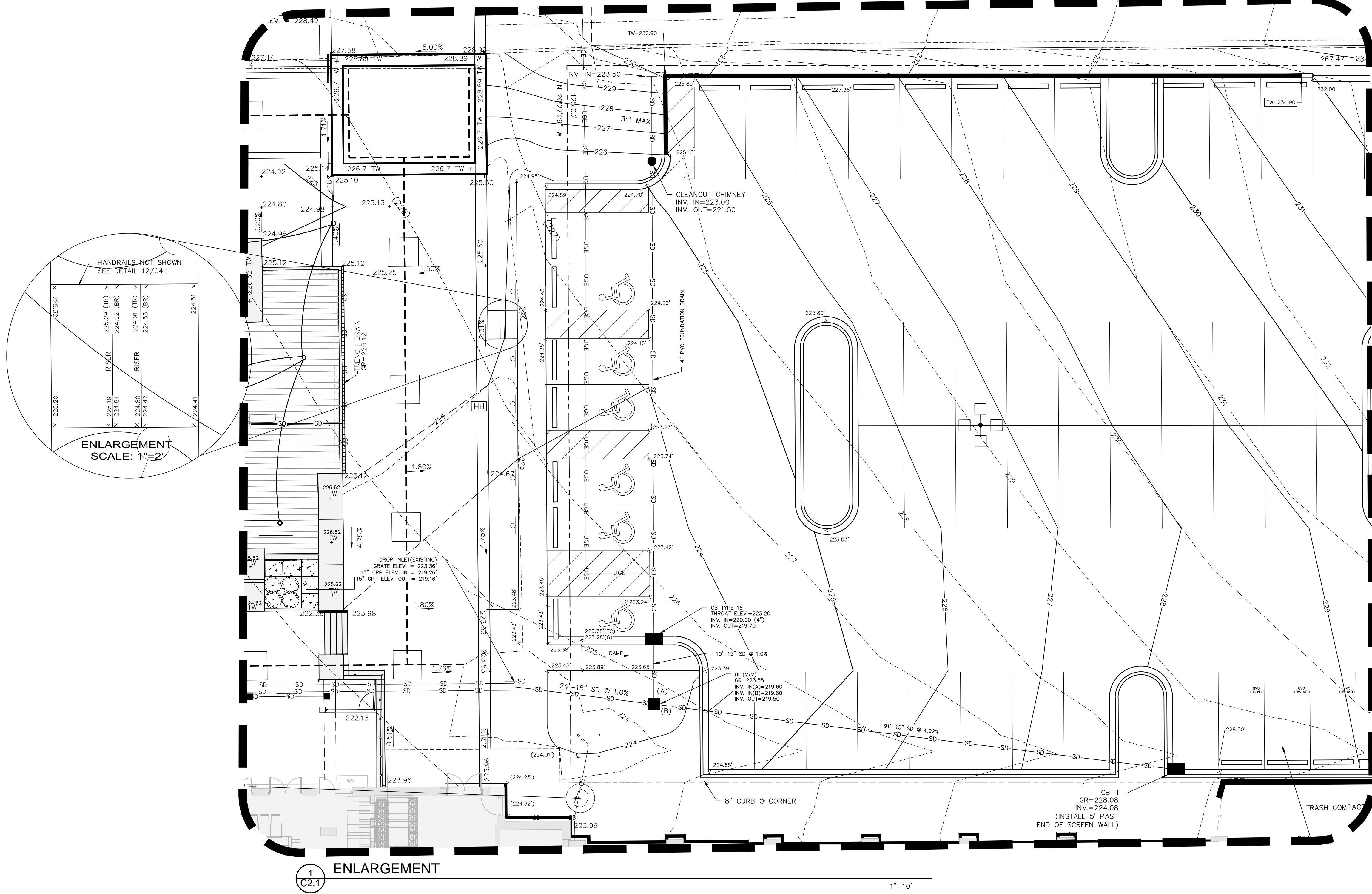


- GENERAL NOTES**
- ALL PARKING LOT AND ROADWAY STRIPING SHOWN SHALL BE PERFORMED BY THE CONTRACTOR USING TRAFFIC MARKING PAINT. PAINT SHALL BE SHERMAN-WILLIAMS "PRO-MARK" TRAFFIC MARKING PAINT OR EQUIVALENT TRAFFIC PAINT AND SHALL BE APPLIED IN TWO COATS AND IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. ALL PARKING LOT STRIPES TO BE 4" WIDE (WHITE). ALL HC STRIPES TO BE BLUE.
 - ALL DIMENSIONS ARE MEASURED TO FACE OF CURB, FACE OF BUILDING, EDGE OF SIDEWALK, OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
 - ALL RADII ARE 5' UNLESS OTHERWISE NOTED.
 - ALL COORDINATES ARE STATE PLAIN.
 - ALL PAVEMENT MARKINGS WITHIN CITY OF COLUMBIA RIGHT OF WAY TO BE THERMOPLASTIC.

NEW	EXISTING	DESCRIPTION
N/A	+	BENCHMARK/CONTROL POINT
N/A	⊙	LIGHT POLE
▨	▨	CURB AND GUTTER
▨	▨	CONCRETE PAVEMENT
▨	▨	ASPHALT PAVEMENT
①	N/A	KEY NOTE REFERENCE

- KEY NOTES**
- PARKING LOT TO BE INSTALLED PARALLEL WITH GREENE STREET RIGHT OF WAY AS INDICATED. INSTALL FACE OF CONCRETE RETAINING WALL AND FACE OF CURB 1.6' FROM PROPERTY LINE.
 - PAINT "COMPACT CAR" AT LOWER END OF SPACES (YELLOW) WITH 12" LETTERS.
 - INSTALL BACK OF CURB ALONG FACE OF MASONRY SCREEN WALL. INSTALL BITUMINOUS EXPANSION JOINT BETWEEN WALL AND CURB.
 - PLACE NEW ASPHALT PAVEMENT FLUSH WITH EDGE OF EXISTING DROP CURB DRIVEWAY ENTRANCE INDICATED.
 - INSTALL FACE OF WHEEL STOP 3' FROM FACE OF WALL.
 - PAINTED END ISLAND (YELLOW).
 - ALIGN NEW STEPS WITH PARKING LOT ACCESS ISLAND.
 - SEE STRUCTURAL ENGINEERING PLANS FOR INFORMATION ON RETAINING WALL.
 - FLARE CONCRETE SIDEWALK TO EXISTING CONCRETE SIDEWALK CORNER AS INDICATED.
 - POUR CONCRETE FLUSH WITH EXISTING PAVERS. TERMINATE CONCRETE POUR AT TOE OF EXISTING 4.75% SLOPE. COORDINATE WITH SHEET C2.1.
 - PROPOSED SECURITY LIGHT. SEE ELECTRICAL ENGINEERING PLANS.
 - END CURB AND GUTTER AT RETAINING WALL.

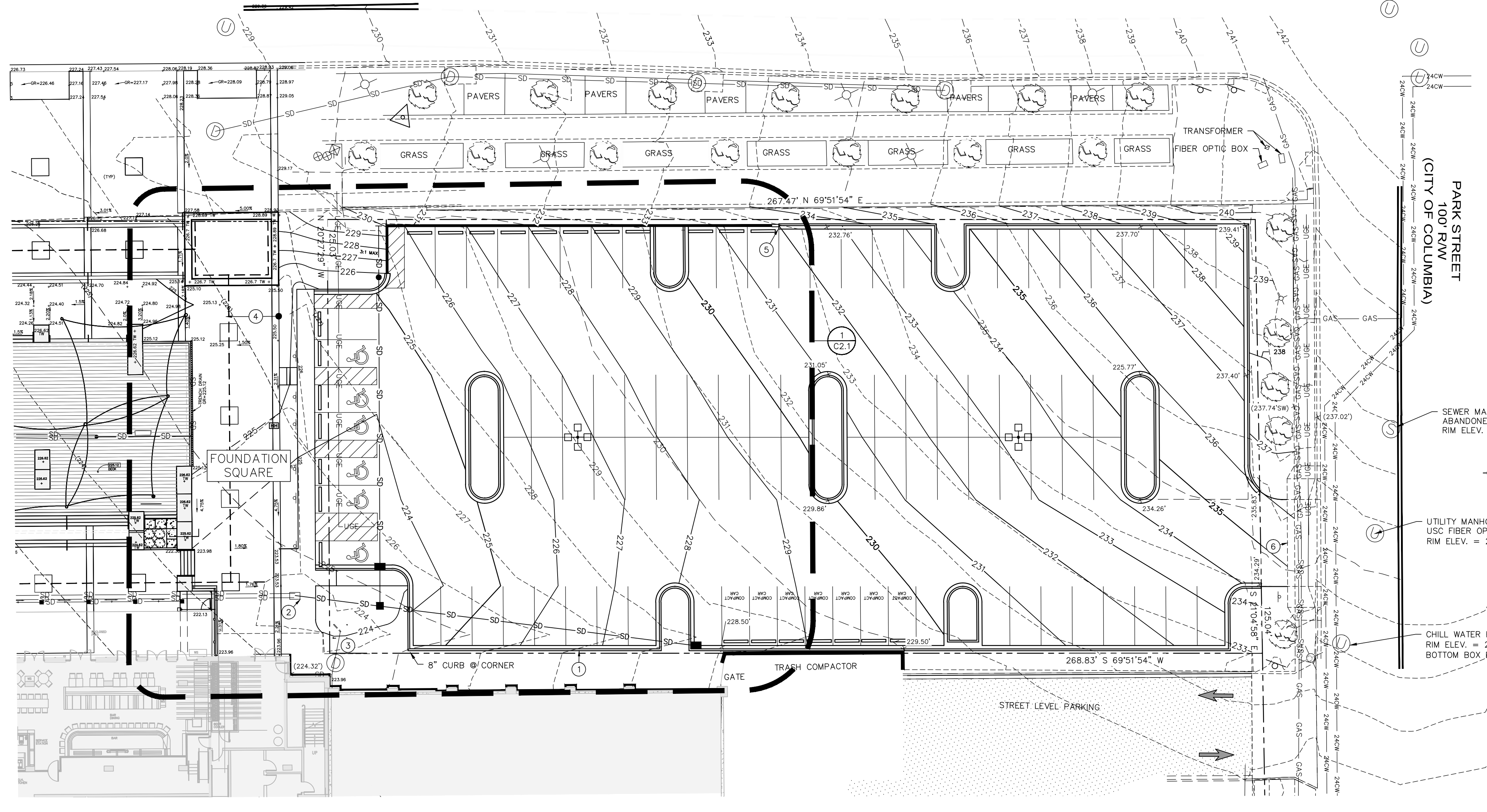




1
C2.1
ENLARGEMENT

GREENE STREET
100' R/W
(CITY OF COLUMBIA)

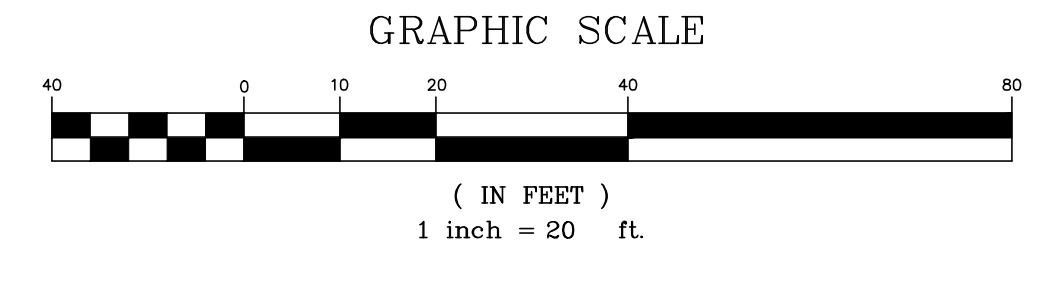
NAVD 88 - NAIL
N 786386.49
E 1989464.89
ELEV. = 240.04'



LEGEND

NEW	EXISTING	DESCRIPTION
N/A	+	BENCHMARK/CONTROL POINT
N/A	- - -	PROPERTY LINE/RIGHT OF WAY
N/A	▭	BUILDING
N/A	○	TREE
- - -	- - -	CONTOUR
x	x	SPOT ELEVATION
N/A	⊗	FIRE HYDRANT
N/A	⊗	LIGHT POLE
N/A	⊗	WATER VALVE
N/A	⊗	WATER METER
N/A	—	WATER MAIN/SERVICE
SD	SD	STORM DRAIN LINE w/STRUCTURE
N/A	SS	SANITARY SEWER LINE w/MANHOLE
N/A	⊗	SANITARY SEWER CLEANOUT
N/A	—	CHAIN LINK FENCE
①	N/A	KEY NOTE REFERENCE

- KEY NOTES**
- TAPER BACK OF CURB TO FOLLOW EXISTING SIDEWALK ELEVATION BETWEEN SOUTHWEST CURB CORNER AND TRASH COMPACTOR SCREEN WALL.
 - CONNECT NEW 15" STORM DRAIN LINE.
 - REMOVE 1.5" PVC FROM STRUCTURE BEING REMOVED AND EXTEND LINE FROM PUMP STATION TO NEW DROP INLET (DI 2x2).
 - SPOT GRADE INFORMATION AT EXISTING PLAZA WAS TAKEN FROM ORIGINAL PLAZA DESIGN PLANS.
 - SEE STRUCTURAL PLANS FOR WALL TAPER ON EASTERN END.
 - PLACE ASPHALT FLUSH WITH EDGE OF EXISTING DROP CURB DRIVEWAY ENTRANCE.



S:\PROJECTS\16520 USC PARK STREET PARKING\DRAWINGS\CIVIL\180305\170315 PARK STREET PARKING DWG - 6/12/16

SEDIMENT AND EROSION CONTROL NOTES

1. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN THROUGHOUT THE LENGTH OF CONSTRUCTION, INCLUDING BUILDING CONSTRUCTION, SILT FENCES AT ALL STORM DRAINAGE STRUCTURES AND ALONG THE PERIMETER OF CONSTRUCTION AS NECESSARY TO CONTAIN ALL SEDIMENT RUNOFF WITHIN THE AREAS DISTURBED BY CONSTRUCTION.
2. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER WORK HAS CEASED EXCEPT AS STATED BELOW.
 - > WHERE STABILIZATION BY THE 14th DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS, STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE.
 - > WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
3. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED AT LEAST ONCE EVERY CALENDAR WEEK. IF PERIODIC INSPECTION OR OTHER INFORMATION INDICATES THAT A BMP HAS BEEN INAPPROPRIATELY OR INCORRECTLY INSTALLED, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION.
4. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN THEY REACH ONE-THIRD THE HEIGHT OF THE SEDIMENT FENCE.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR STABILIZING ALL SLOPES FROM FINISH GRADE TO NATURAL GRADE AND FOR PREVENTING EXCESSIVE EROSION FROM OCCURRING IMMEDIATELY AFTER ESTABLISHING THE INTERIMEDIATE ROUGH GRADE SLOPES AND AFTER REACHING THE FINAL GRADE SLOPES, THE CONTRACTOR SHALL PROVIDE GRASSING OF THESE SLOPES. WHEN SLOPES ARE DISTURBED BY SUBSEQUENT EXCAVATIONS FOR OTHER ITEMS, THE CONTRACTOR SHALL INSPECT THE REPAIRS AND CORRECT ANY DEFICIENCIES IN THE REPAIRS.
6. ALL GRADING WORK SHALL CONFORM SUBSTANTIALLY WITH THE GRADING PLANS, WHERE SPOT GRADES ARE INDICATED ON THE PLANS, THEY SHALL BE ESTABLISHED BY SCALING AND SHALL TAKE PRECEDENCE OVER CONTOURS. ALL GRADING BETWEEN SPOT GRADES SHALL BE SMOOTH AND UNIFORM.
7. THE CONTRACTOR SHALL ADEQUATELY COORDINATE THE INSTALLATION OF THE STORM DRAINAGE SYSTEM TO ENSURE THAT POSITIVE RUNOFF OF STORMWATER IS EFFECTED BOTH DURING CONSTRUCTION AND AFTER COMPLETION OF THE WORK.
8. IF NECESSARY, SLOPES WHICH EXCEED 8 VERTICAL FEET SHALL BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS, IN ADDITION TO HYDROSEEDING, IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE DRAINS DURING CONSTRUCTION. TEMPORARY BERMS MAY BE NEEDED UNTIL THE SLOPE IS BROUGHT TO GRADE.
9. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED, AND STABILIZED IMMEDIATELY AFTER THE UTILITY INSTALLATION. FILL COVER, AND TEMPORARY SEEDING AT THE END OF EACH DAY ARE RECOMMENDED. IF WATER IS ENCOUNTERED WHILE TRENCHING, THE WATER SHOULD BE FILTERED TO REMOVE ANY SEDIMENTS BEFORE BEING PUMPED BACK INTO ANY WATERS OF THE STATE.
10. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE TRACKING OF MUD ONTO PAVED ROADWAY FROM CONSTRUCTION AREAS AND GENERATION OF DUST. THE CONTRACTOR SHALL REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.
11. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
12. TEMPORARY DIVERSION BERMS AND/OR DITCHES SHALL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR DIVERT SEDIMENT-LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.
13. ALL WATERS OF THE STATE (WOS), INCLUDING WETLANDS, ARE TO BE FLAGGED OR OTHERWISE CLEARLY MARKED IN THE FIELD. A DOUBLE ROW OF SILT FENCE IS TO BE INSTALLED IN ALL AREAS WHERE A 50-FOOT BUFFER CANNOT BE MAINTAINED BETWEEN THE DISTURBED AREAS AND ALL WOS. A 10-FOOT BUFFER SHOULD BE MAINTAINED BETWEEN THE LAST ROW OF SILT FENCE AND ALL WOS.
14. LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER), AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORMWATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORMWATER DISCHARGES.
15. A COPY OF THE SWPPP, INSPECTIONS RECORDS, AND RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR A NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS, FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THAT FINAL STABILIZATION IS REACHED.
16. INITIATE STABILIZATION MEASURES ON ANY EXPOSED STEEP SLOPE (3H:1V OR GREATER) WHERE LAND-DISTURBING ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, AND WILL NOT RESUME FOR A PERIOD OF 7 CALENDAR DAYS.
17. MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL.
18. MINIMIZE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, AND OTHER WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT OR BETTER TREATMENT PRIOR TO DISCHARGE.
19. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OF TRENCHES AND EXCAVATED AREAS. THESE DISCHARGES ARE TO BE ROUTED THROUGH APPROPRIATE BMPs (SEDIMENT BASIN, FILTER BAG, ETC.).
20. THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED:
 - WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL;
 - WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FROM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS;
 - FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; AND
 - SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.
21. AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE.
22. IF EXISTING BMPs NEED TO BE MODIFIED OR IF ADDITIONAL BMPs ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT AND/OR SC'S WATER QUALITY STANDARDS, IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT WHENEVER PRACTICAL. IF IMPLEMENTATION BEFORE THE NEXT STORM EVENT IS IMPRACTICABLE, THE SITUATION MUST BE DOCUMENTED IN THE SWPPP AND ALTERNATIVE BMPs MUST BE IMPLEMENTED AS SOON AS REASONABLY POSSIBLE.
23. A PRE-CONSTRUCTION CONFERENCE MUST BE HELD FOR EACH CONSTRUCTION SITE WITH AN APPROVED ON-SITE SWPPP PRIOR TO THE IMPLEMENTATION OF CONSTRUCTION ACTIVITIES. FOR NON-LINEAR PROJECTS THAT DISTURB 10 ACRES OR MORE THIS CONFERENCE MUST BE HELD ON-SITE UNLESS THE DEPARTMENT HAS APPROVED OTHERWISE.

PREDOMINANT SOIL TYPES

URBAN LAND (U)

STABILIZATION (TEMPORARY)

CONTRACTOR TO INSTALL 4" OF HARDWOOD MULCH IN LANDSCAPED ISLANDS AND AROUND THE DISTURBED PERIMETER.

GRASSING PER 1000 SQUARE FEET (PERMANENT)

PERMANENT GRASSING AND LANDSCAPING BY OTHERS WHICH WILL BE COMPLETED IN THE FALL OF 2018

EROSION CONTROL MAINTENANCE

CONTRACTOR TO BE RESPONSIBLE FOR MAINTAINING ALL EROSION CONTROL MEASURES THROUGHOUT THE LIFE OF THE PROJECT.

CONSTRUCTION SEQUENCE OF ENTIRE CONSTRUCTION AREA FOR EROSION AND SEDIMENT CONTROL

1. RECEIVE NPDES COVERAGE FROM DHEC
2. PRE-CONSTRUCTION MEETING (ON-SITE) WITH MORE THAN 10 DISTURBED AND NON-LINEAR
3. NOTIFY DHEC REGIONAL OFFICE OR SOUM OFFICE 48 HOURS PRIOR TO BEGINNING LAND-DISTURBING ACTIVITIES
4. INSTALLATION OF CONSTRUCTION ENTRANCES
5. CLEARING & GRUBBING ONLY AS NECESSARY FOR INSTALLATION OF PERIMETER CONTROLS
6. INSTALLATION OF PERIMETER CONTROLS (E.G., SILT FENCE)
7. CLEARING & GRUBBING OF SITE OR SEDIMENT (SEDIMENT & EROSION CONTROL MEASURES FOR THESE AREAS MUST ALREADY BE INSTALLED)
8. ROUGH GRADING
9. INSTALLATION OF STORM DRAIN SYSTEM PRIOR TO BUILDING CONSTRUCTION AND PLACEMENT OF INLET PROTECTION AS EACH INLET IS INSTALLED
10. BUILDING CONSTRUCTION
11. FINE GRADING, FINISH, ETC.
12. PERMANENT/FINAL STABILIZATION
13. REMOVAL OF TEMPORARY SEDIMENT & EROSION CONTROL MEASURES AFTER ENTIRE AREA DRAINING TO THE STRUCTURE IS FINALLY STABILIZED (THE DEPARTMENT RECOMMENDS THAT THE PROJECT OWNER/OPERATOR HAVE THE SWPPP PREPARED OR REGISTRATION EQUIVALENT APPROVE THE REMOVAL OF TEMPORARY STRUCTURES)
14. SUBMIT NOTICE OF TERMINATION (NOT) TO DHEC AS APPROPRIATE.

EROSION AND SEDIMENT CONTROL MEASURES

GENERAL

THE CONTRACTOR IS ADVISED THAT ALL GRADING AND DRAINAGE WORK ON THE PROJECT IS PERMITTED UNDER THE REQUIREMENTS OF THE SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL. DIVISION OF STORMWATER MANAGEMENT. COMPLIANCE WITH THE PERMITTED CONDITIONS IS MANDATORY. THE CONTRACTOR SHALL RELY ON EXPERIENCE AND CONTROL OF THE WORK TO PROVIDE ADEQUATE AND ORDERLY CONSTRUCTION METHODS TO CONTROL STORMWATER RUNOFF AND PREVENT THE EXCESSIVE IMPOSITION OF SEDIMENTS FROM THE SITE. THE CONTRACTOR ALSO SHALL DIRECT INSTALLATION OF NECESSARY TEMPORARY CONSTRUCTION MEASURES TO CONTROL STORMWATER RUNOFF. ALL STORMWATER MANAGEMENT MEASURES SHALL BE INSPECTED AFTER EACH RAIN EVENT AND ANY REQUIRED MAINTENANCE SHALL BE PERFORMED. CONTRACTOR IS RESPONSIBLE FOR SWPPP INSPECTIONS.

SILT FENCES

SILT FENCES OR EQUIVALENT SEDIMENT CONTROL SHALL BE INSTALLED WHERE INDICATED AND MAINTAINED IN ACCORDANCE WITH THIS PLAN.

STORM DRAINAGE STRUCTURES

TEMPORARY BARRIERS OF EITHER SILT FENCING OR ROCK RIPRAP SHALL BE INSTALLED AND MAINTAINED AROUND STORM DRAINAGE STRUCTURES UNTIL THEIR DRAINAGE AREA IS STABILIZED. STORM DRAINAGE PIPES, INCLUDING OUTLET PROTECTION, SHALL BE INSTALLED AS SOON AS EARTH GRADING IS ADEQUATE TO ACCEPT PIPE INSTALLATION. INLET PROTECTION SHALL BE CONSTRUCTED AS THE EARTH IS PLACED AND CONSTRUCTION SHALL AT ALL TIMES PROVIDE SURFACE DRAINAGE TO THEM. TEMPORARY BARRIERS SHALL BE INSTALLED AND MAINTAINED AT EACH INLET AS THE EARTH FILL RISES.

STABILIZATION OF DISTURBED AREAS

DISTURBED AREAS SHALL RECEIVE STABILIZING MEASURES WITHIN 14 DAYS AFTER DISTURBANCES.

INSPECTION AND MAINTENANCE

SEDIMENT CONTROL SYSTEMS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER ANY RAINFALL EVENT EXCEEDING 0.5 INCH. ANY NEEDED CORRECTIONS OR MAINTENANCE SHALL BE ACCOMPLISHED IMMEDIATELY THEREAFTER.

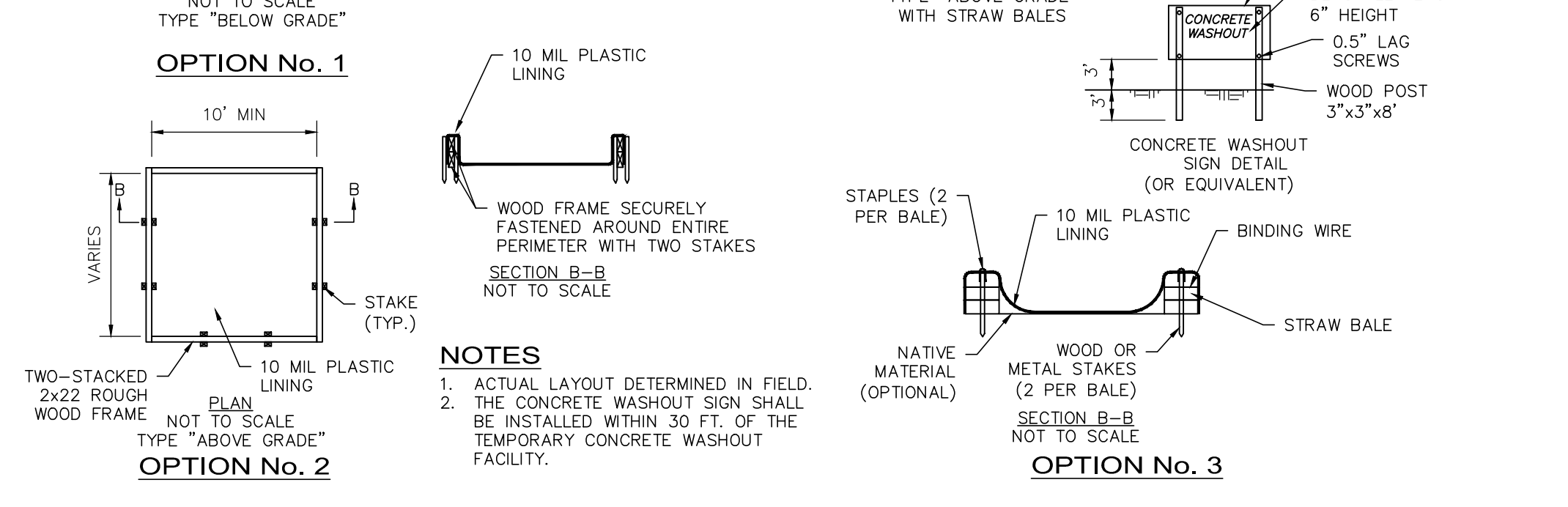
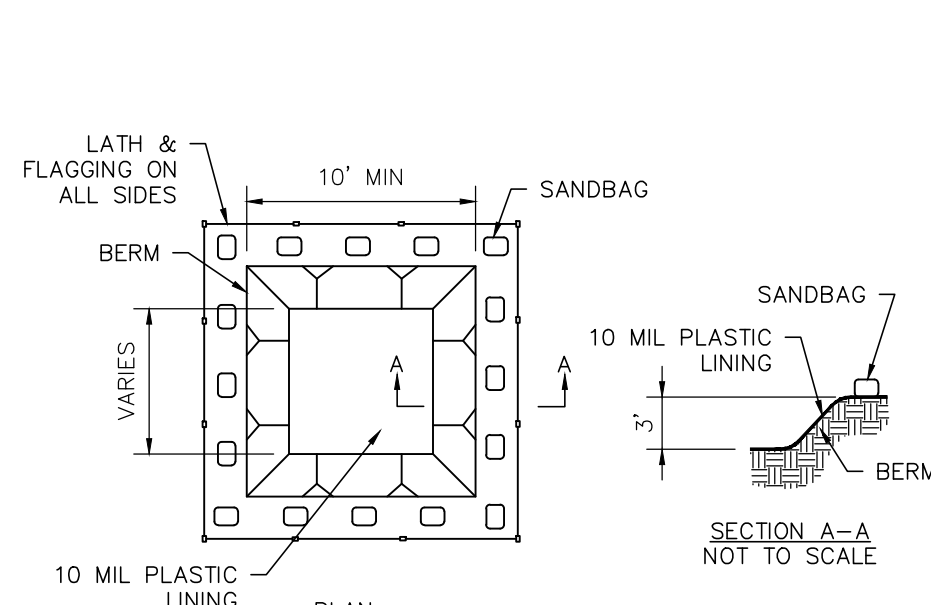
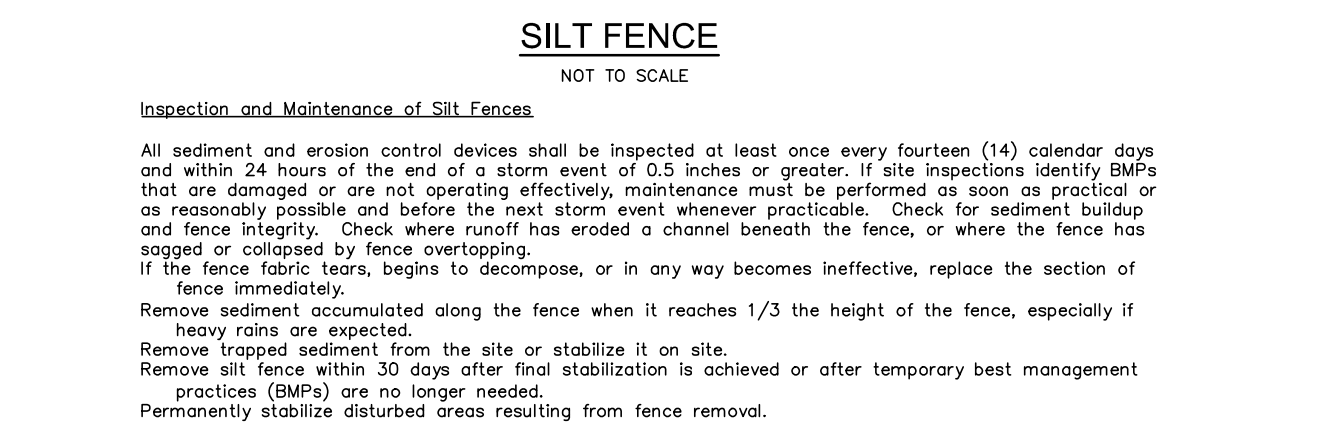
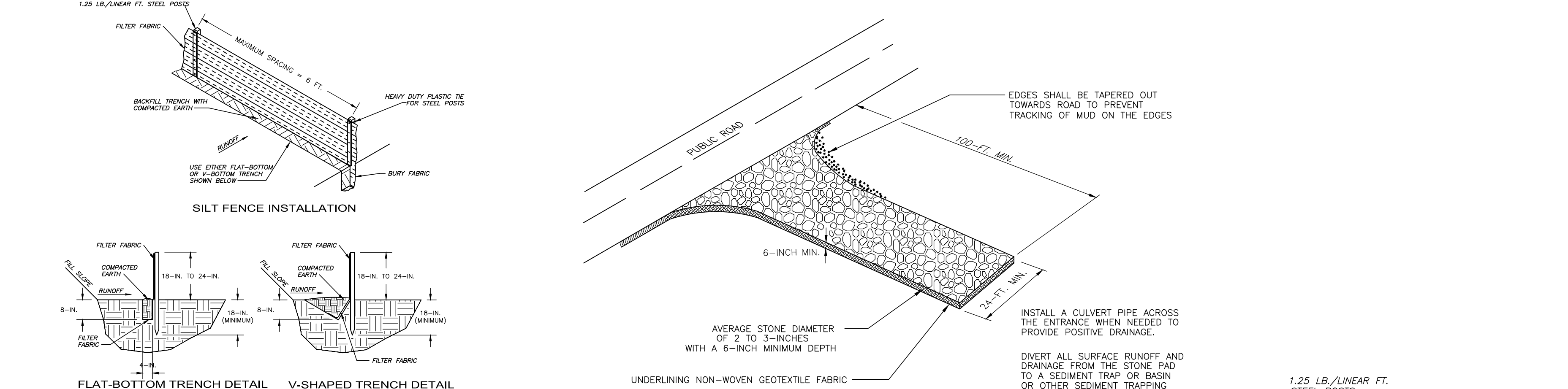
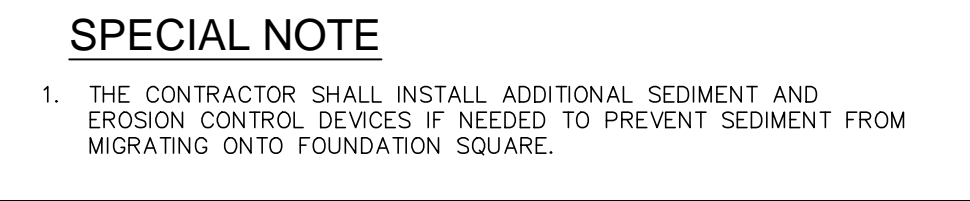
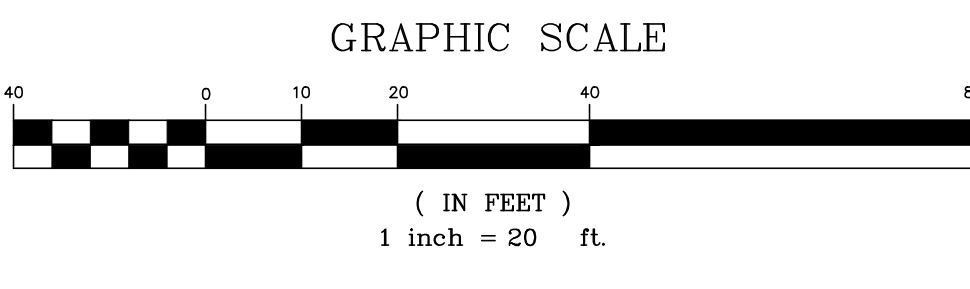
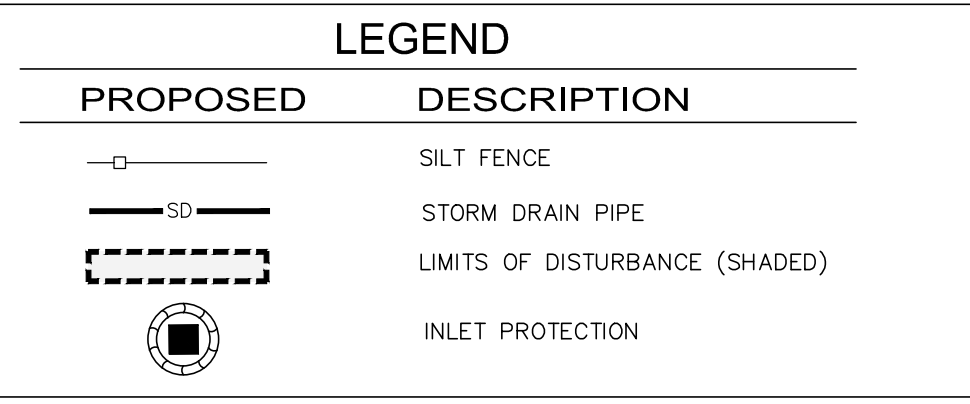
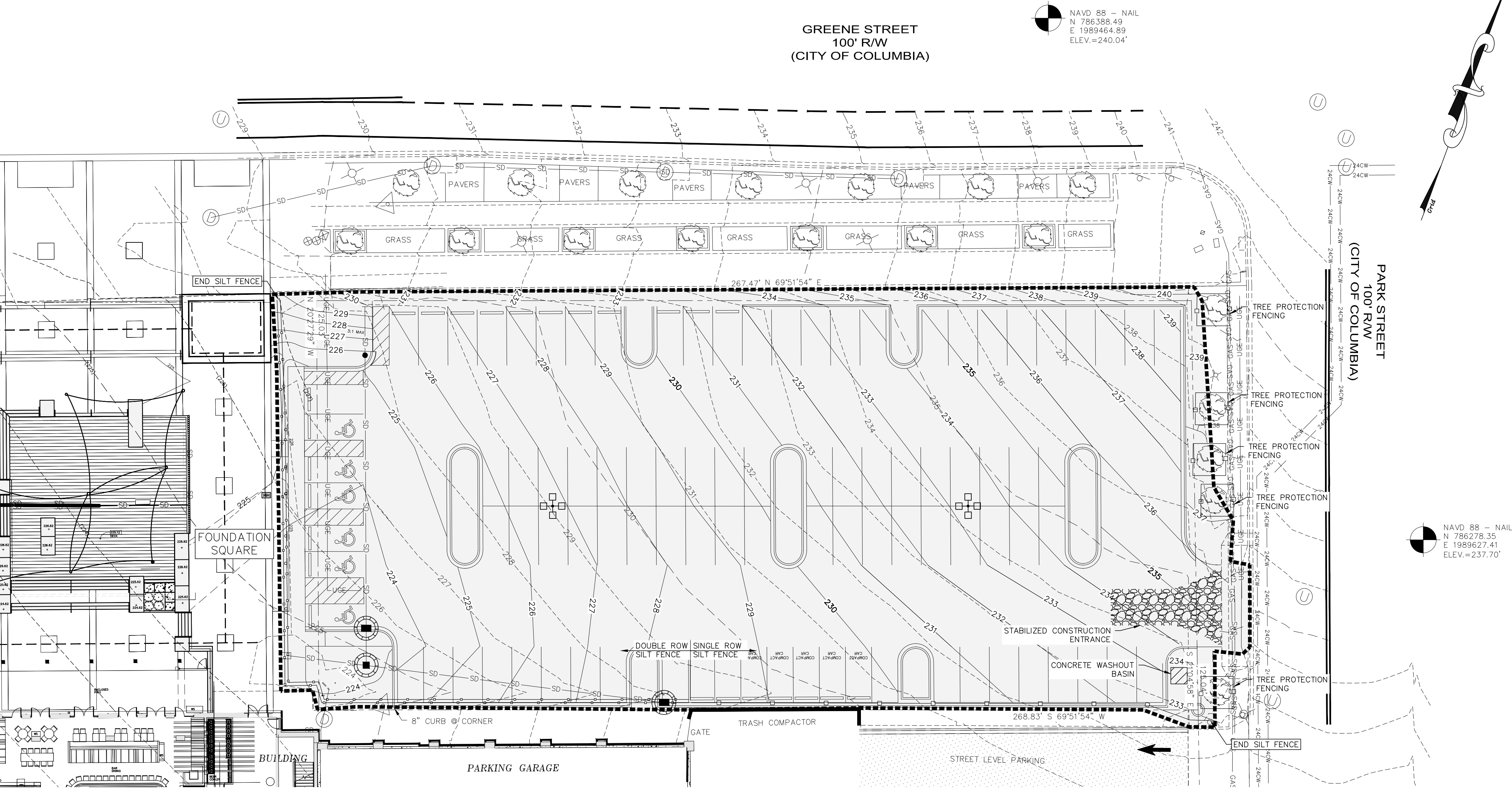
REMOVAL OF SEDIMENT CONTROL SYSTEMS

TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED AFTER EACH AFFECTED AREA HAS BEEN "FINALLY STABILIZED".

TEMPORARY DIVERSIONS

TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR DIVERT SEDIMENT LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.

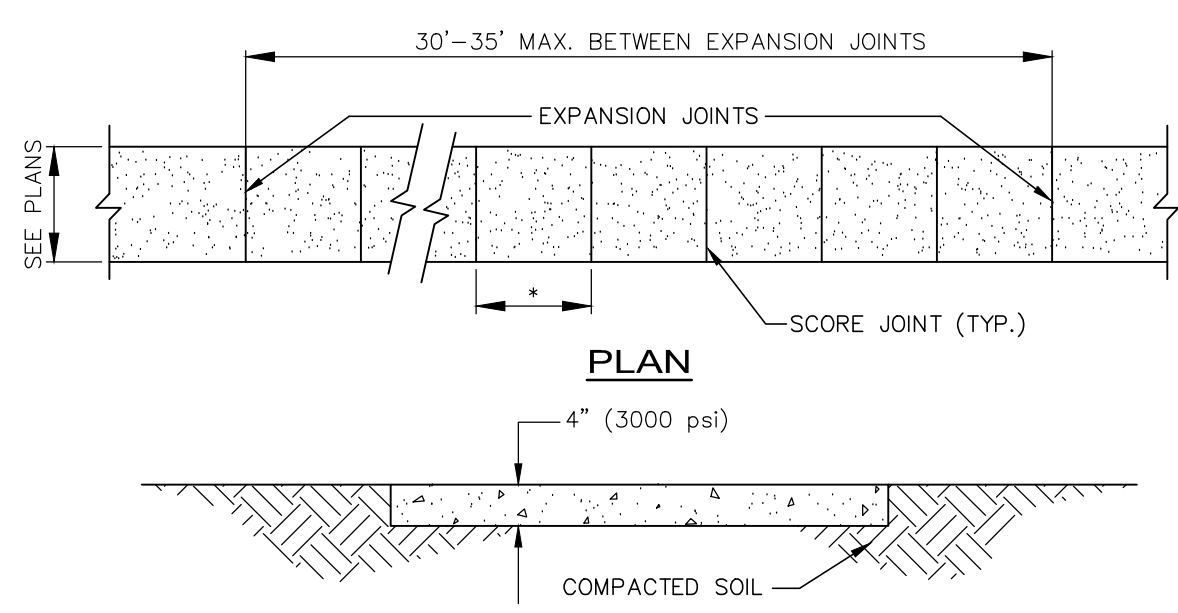
TEMPORARY DIVERSIONS SHALL BE CONSTRUCTED AS NECESSARY TO PREVENT FLOW OF STORMWATER OVER DISTURBED AREA. TEMPORARY DIVERSION OUTLETS SHALL HAVE ADEQUATE CAPACITY AND TERMINATE INTO DENSE VEGETATION, ROCK RIPRAP, STORM STRUCTURES OR SIMILAR MEASURES TO REDUCE EROSION AT THE OUTLET. TEMPORARY DIVERSION CHANNELS SHALL BE CONSTRUCTED AND MAINTAINED AT A MINIMUM OF 1 PERCENT SLOPE AND A MINIMUM GRADE OF 2 PERCENT. THE CAPACITY OF TEMPORARY DIVERSIONS SHALL BE RESTORED ANYTIME THE EXCAVATED CHANNEL BECOMES FULL OF SEDIMENT AT ANY POINT IN THE LENGTH OF THE DIVERSION. THE RIDGE AND CHANNEL OF THE TEMPORARY DIVERSIONS SHALL BE STABILIZED WITH TEMPORARY VEGETATION IMMEDIATELY AFTER CONSTRUCTION AND RE-STABILIZED AFTER EACH DISTURBANCE.



NOTES

1. ACTUAL LAYOUT DETERMINED IN FIELD. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
2. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED AT LEAST ONCE EVERY FOURTEEN (14) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT OF 0.5 INCHES OR GREATER. IF THE FABRIC BECOMES DAMAGED, IT SHOULD BE REPAIRED. SEDIMENT SHOULD BE REMOVED WHEN IT REACHES APPROXIMATELY 1/3 THE HEIGHT OF THE FENCE. TAKE CARE NOT TO DAMAGE OR UNDERMINE FABRIC WHEN REMOVING SEDIMENT. IF A PUMP IS USED, SEDIMENT SHOULD BE REMOVED WHEN IT IS APPROXIMATELY 1/2 THE DEPTH OF THE POND. MAINTAIN THE POND AREA, ALWAYS PROVIDING ADEQUATE SEDIMENT STORAGE VOLUME FOR THE NEXT STORM.

Storm drain inlet protection structures should be removed only after the disturbed areas are permanently stabilized. Remove all construction material and sediment, and dispose of them properly. Grade the disturbed area to the elevation of the drop inlet structure crest. Use appropriate permanent stabilization methods to stabilize bare areas around the inlet.

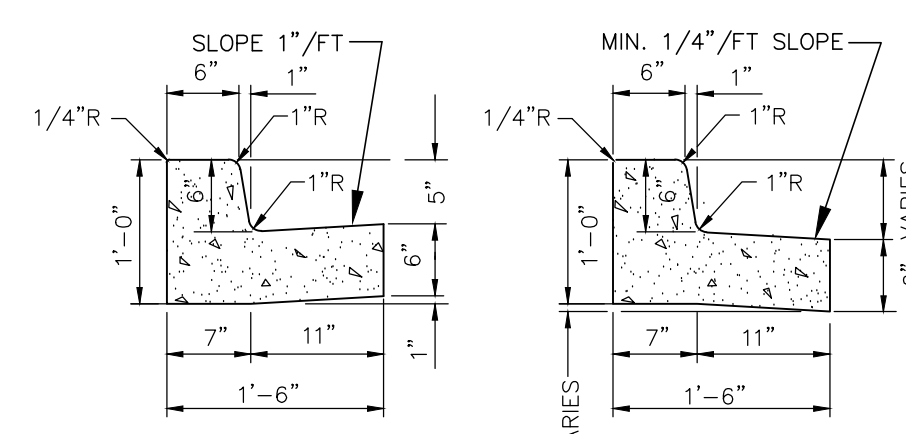


1
C4.1

CONCRETE SIDEWALK
SCALE: 1" = 1'-0"

NOTE: INSTALL 1/2" EXPANSION JOINTS 30'-35' O/C AND WHERE WALK ABUTS BUILDING, WALKS, OR OTHER CONSTRUCTION. SCORE WALK TO A DEPTH OF 1".

SW. WIDTH * SCORE
5" O/C * 8" O/C
8" (UNLESS OTHERWISE NOTED)

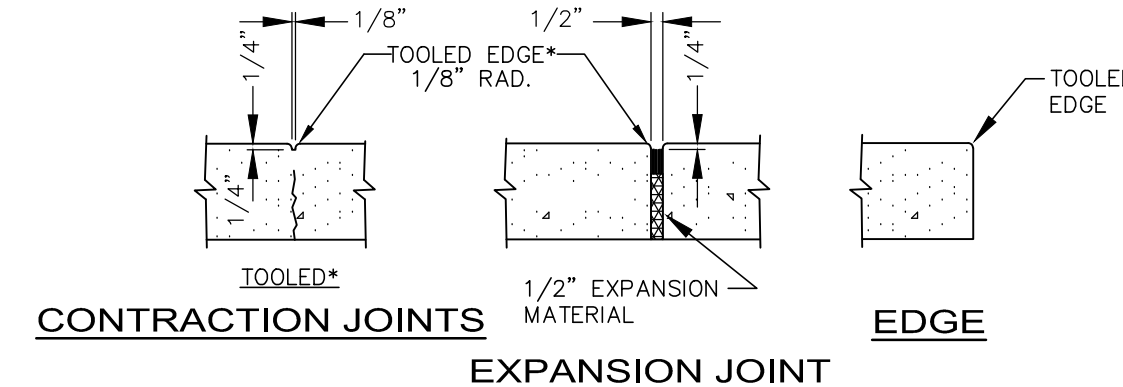


2
C4.1

CONCRETE CURB & GUTTER
SCALE: 3/4" = 1'-0"

NOTES:

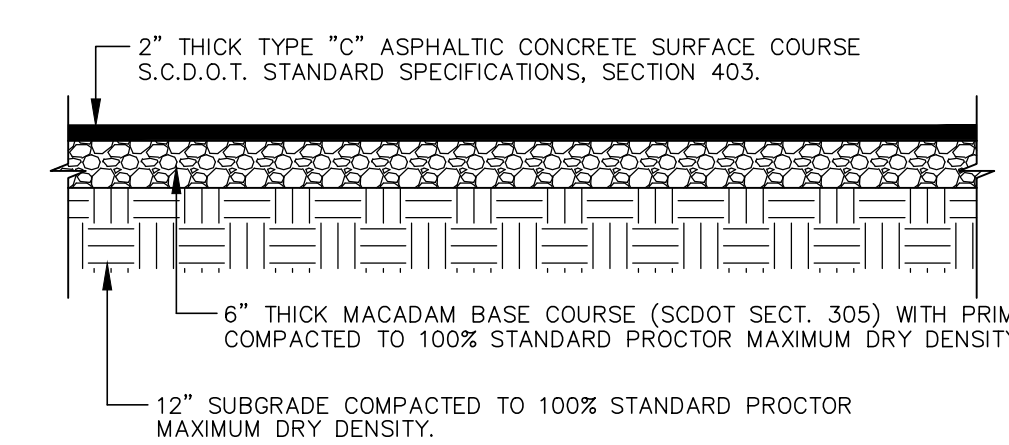
- CURB AND GUTTER TO BE CONSTRUCTED IN 10-FOOT LENGTHS.
- PROVIDE 1/2 INCH EXPANSION JOINT MATERIAL AT INTERVALS NOT TO EXCEED 100 FEET, AT THE ENDS AND MID-POINT OF RETURNS, AND AT ANY LOCATION WHERE THE NEW CURB AND GUTTER ABUTS OTHER CONCRETE STRUCTURES.
- PROVIDE A 5' LONG TRANSITION BETWEEN NORMAL GUTTER AND PITCHED GUTTER UNLESS OTHERWISE INDICATED ON PLANS.



3
C4.1

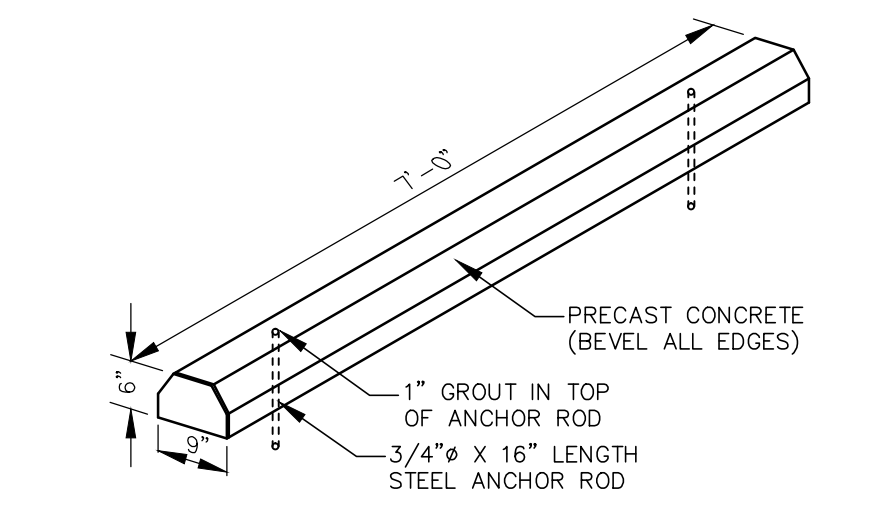
CONCRETE SIDEWALK JOINTS
NOT TO SCALE

*COORDINATE TOOLED EDGE FINISH WITH LANDSCAPING PLANS



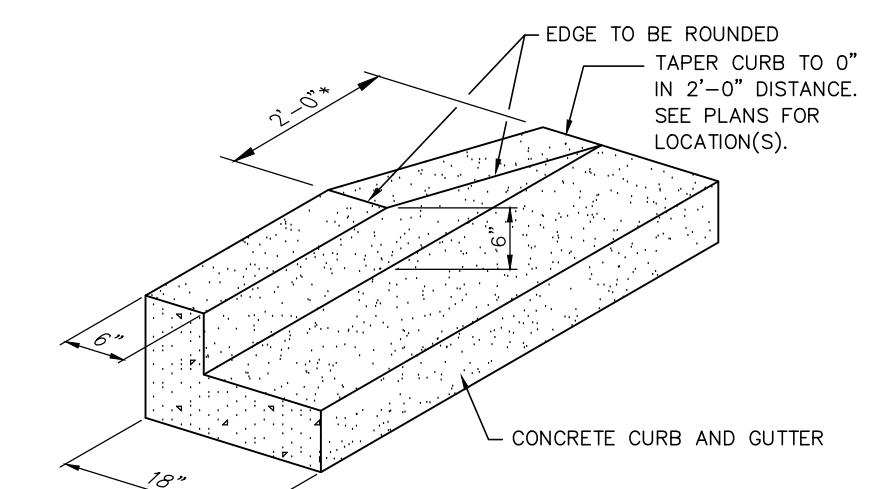
4
C4.1

LIGHT DUTY BITUMINOUS PAVEMENT
NOT TO SCALE



5
C4.1

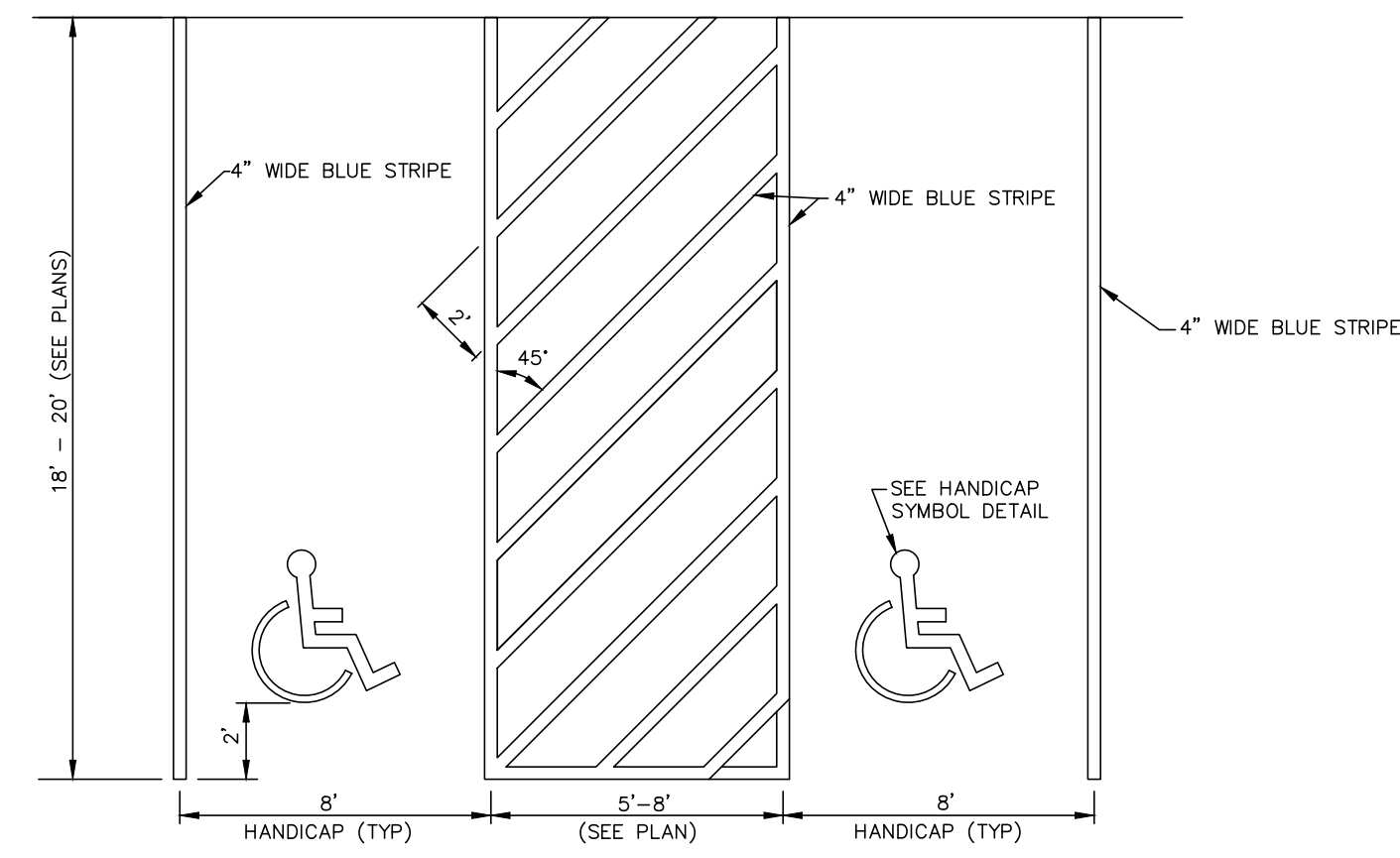
PRECAST CONCRETE WHEELSTOP
NOT TO SCALE



6
C4.1

TAPERED CURB
NOT TO SCALE

*UNLESS INDICATED OTHERWISE

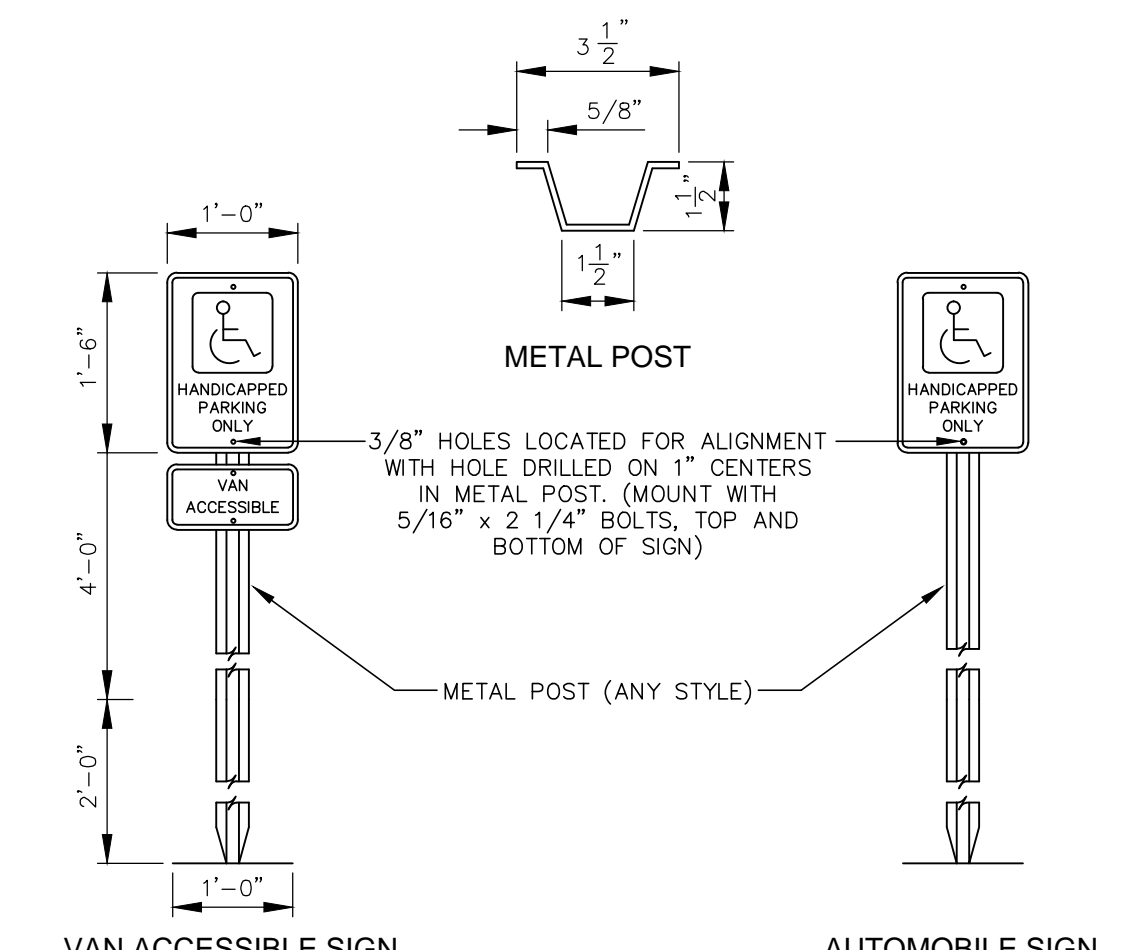


7
C4.1

HANDICAP ACCESSIBLE PARKING STALLS
NO SCALE

NOTES:

- ALL STRIPING SHALL BE PERFORMED BY CONTRACTOR USING TRAFFIC MARKING PAINT. PAINT SHALL BE SHERWIN-WILLIAMS "PRO-MARK" TRAFFIC MARKING PAINT OR GULDEN TRAFFIC MARKING PAINT AND SHALL BE APPLIED IN TWO COATS AND IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. ALL STRIPING ASSOCIATED WITH HANDICAP PARKING SHALL BE 4" WIDE (BLUE).
- SEE PLANS FOR SPECIFIC LOCATION AND DIMENSIONS.

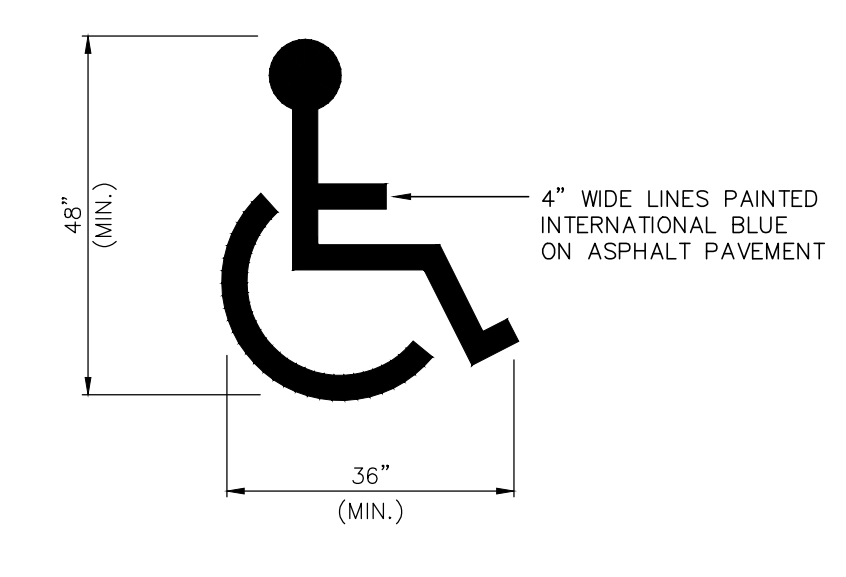


8
C4.1

HANDICAP SIGN
NO SCALE

NOTES:

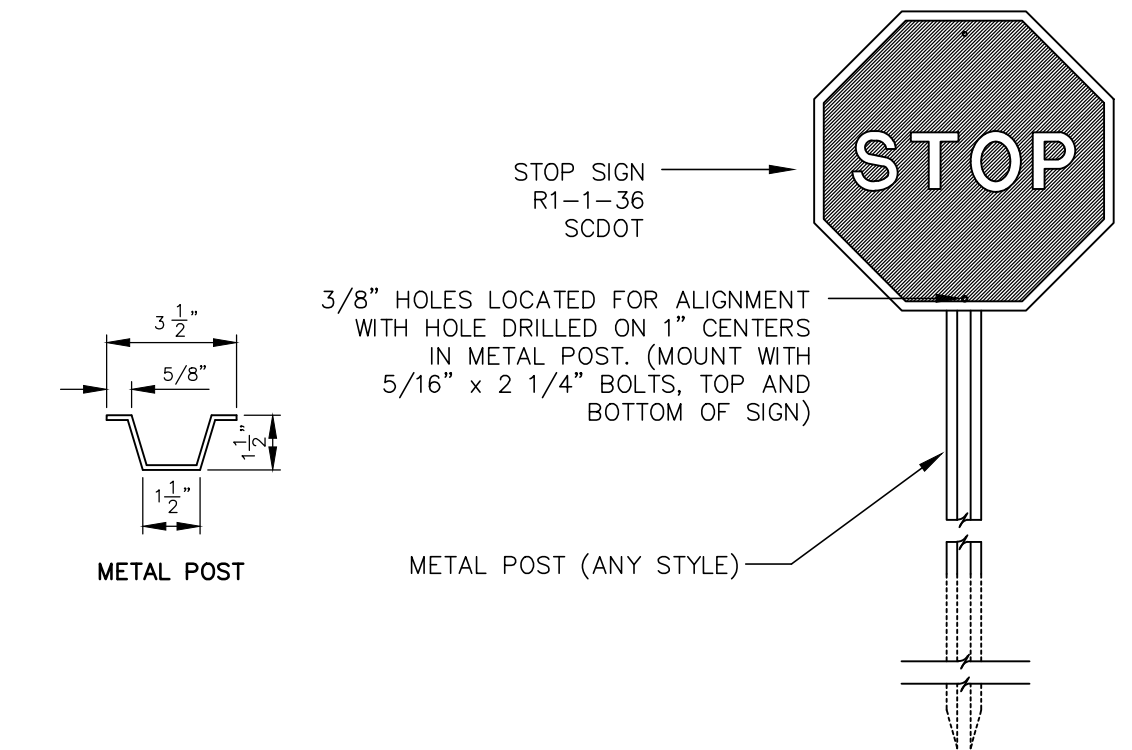
- METAL POST TO BE GALVANIZED. ALL BOLTS, NUTS, WASHERS, AND SCREWS MUST BE RUSTPROOF. (POST MAY BE ANY STYLE.)
- SIGNS WILL BE FABRICATED BY USING A REFLECTING COATING IN THE SYMBOL, MESSAGE, AND BORDERS APPLIED TO A SHEET ALUMINUM BACKING (0.80 IN THICKNESS).
- MESSAGE LETTERING SHALL BE UPPER CASE (WHITE, SERIES B) IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- THE SYMBOL IS COMPOSED OF TWO ELEMENTS, A WHITE WHEELCHAIR FIGURE (WHICH SHOULD ALWAYS FACE RIGHT) ON A SQUARE BACKGROUND, INTERNATIONAL BLUE IN COLOR (FED. STD. SPSA, COLOR #15180).
- SIGN POST SHALL BE MINIMUM OF 2'-0" CLEAR FROM BACK OF SIDEWALK. SEE PLANS FOR LOCATION OF SIGNS.



9
C4.1

HANDICAP PARKING PAINTED SYMBOL
NOT TO SCALE

NOTE: ALL PAVEMENT MARKINGS WITHIN SCDOT P/W SHALL BE THERMOPLASTIC AND INSTALLED ACCORDING TO SCDOT STANDING DRAWINGS AND SPECIFICATIONS.

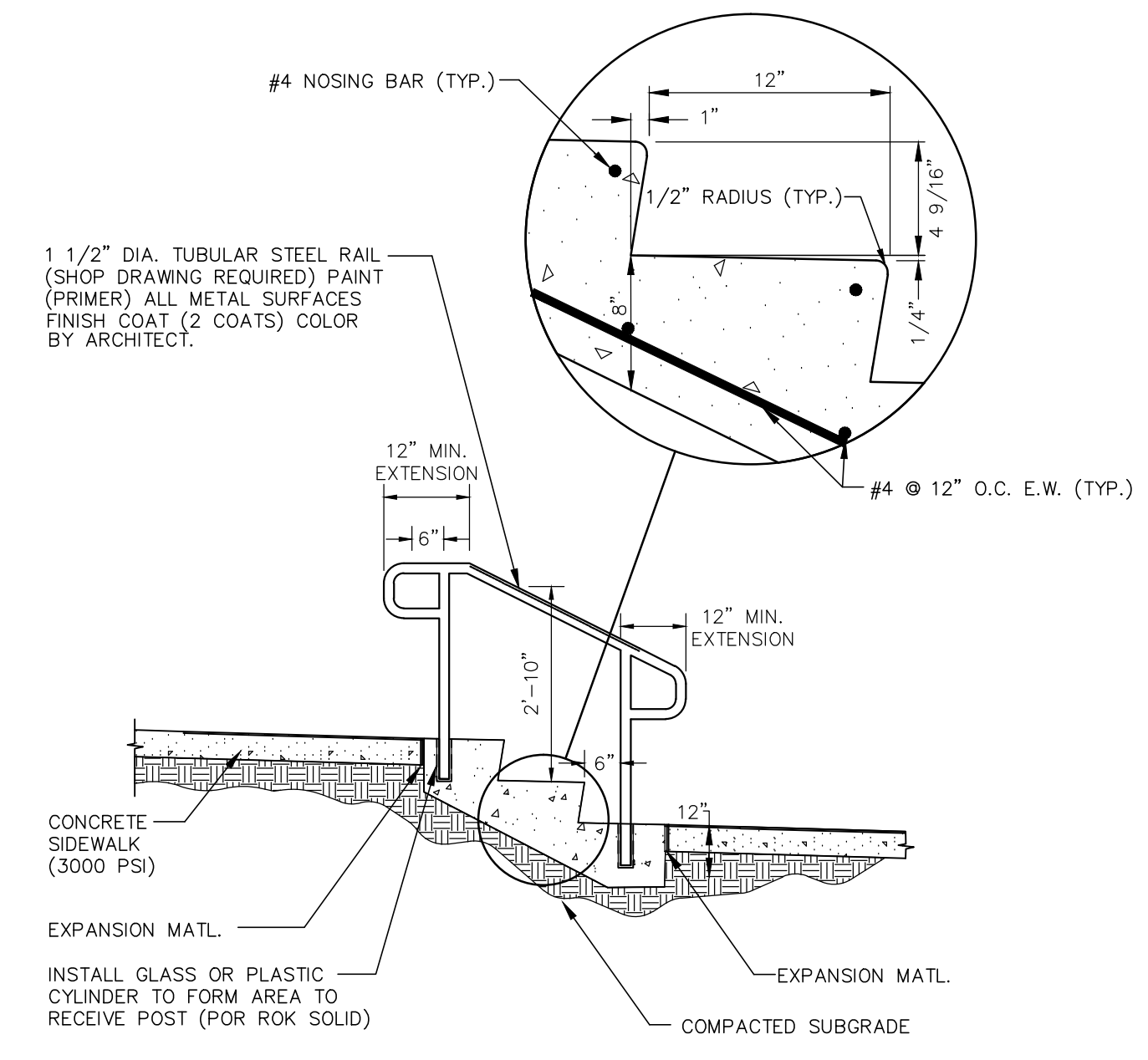


10
C4.1

STOP SIGN
NOT TO SCALE

NOTES:

- METAL POST TO BE GALVANIZED. ALL BOLTS, NUTS, WASHERS, AND SCREWS MUST BE RUSTPROOF. (POST MAY BE ANY STYLE.)
- CONCRETE FOR FOOTING SHALL BE OF PORTLAND CEMENT AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000psi.
- SIGNS WILL BE FABRICATED BY USING A REFLECTING COATING IN THE SYMBOL, MESSAGE, AND BORDERS APPLIED TO A SHEET ALUMINUM BACKING (0.80 IN THICKNESS).
- MESSAGE LETTERING SHALL BE UPPER CASE (WHITE, SERIES B) IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

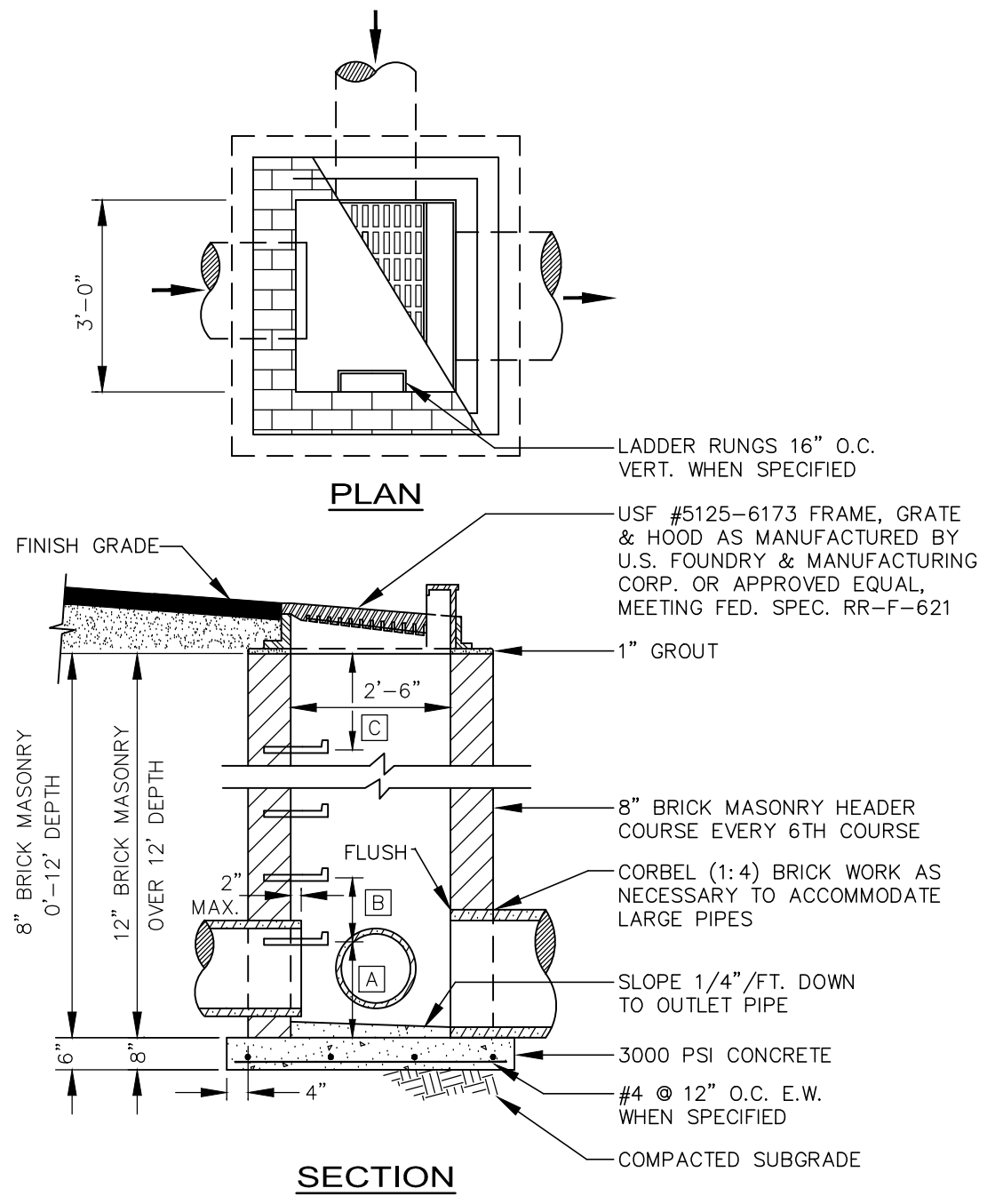


11
C4.1

CONCRETE STEPS AND HANDRAIL
NOT TO SCALE

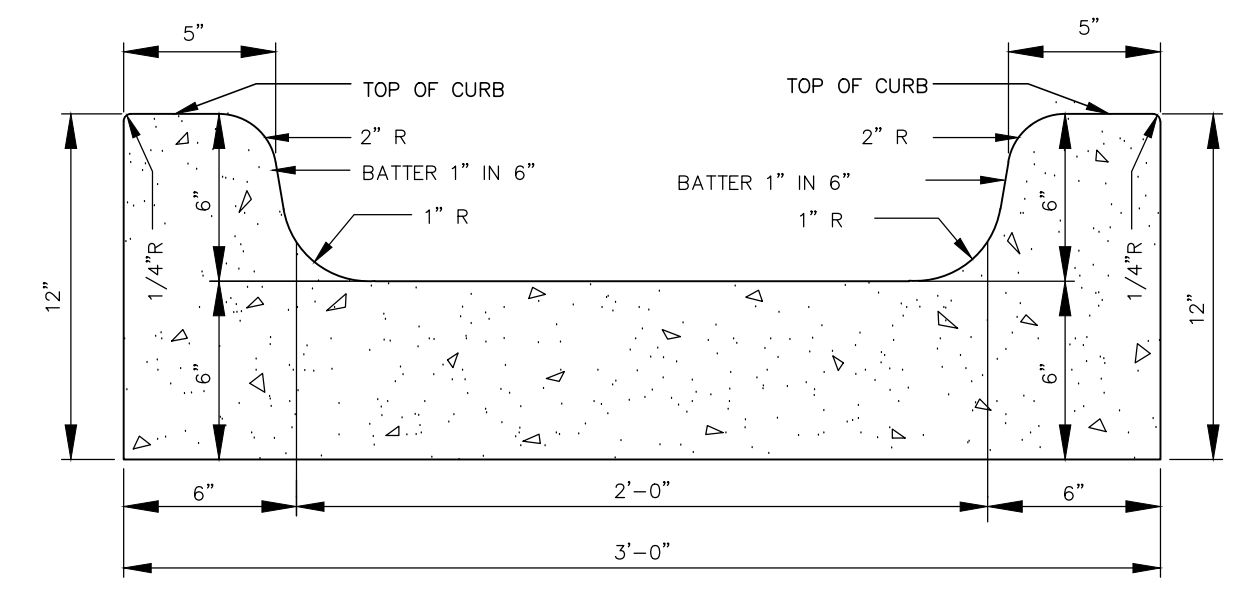
NOTES:

- ALL HANDRAILS AND STEPS TO MEET ALL STANDARD BUILDING CODES AND A.D.A. REQUIREMENTS AND REGULATIONS.
- HANDRAILS TO BE INSTALLED AS SHOWN ON DRAWINGS.
- CENTERLINE OF POSTS SHALL BE 4" FROM EDGE OF STAIRS.

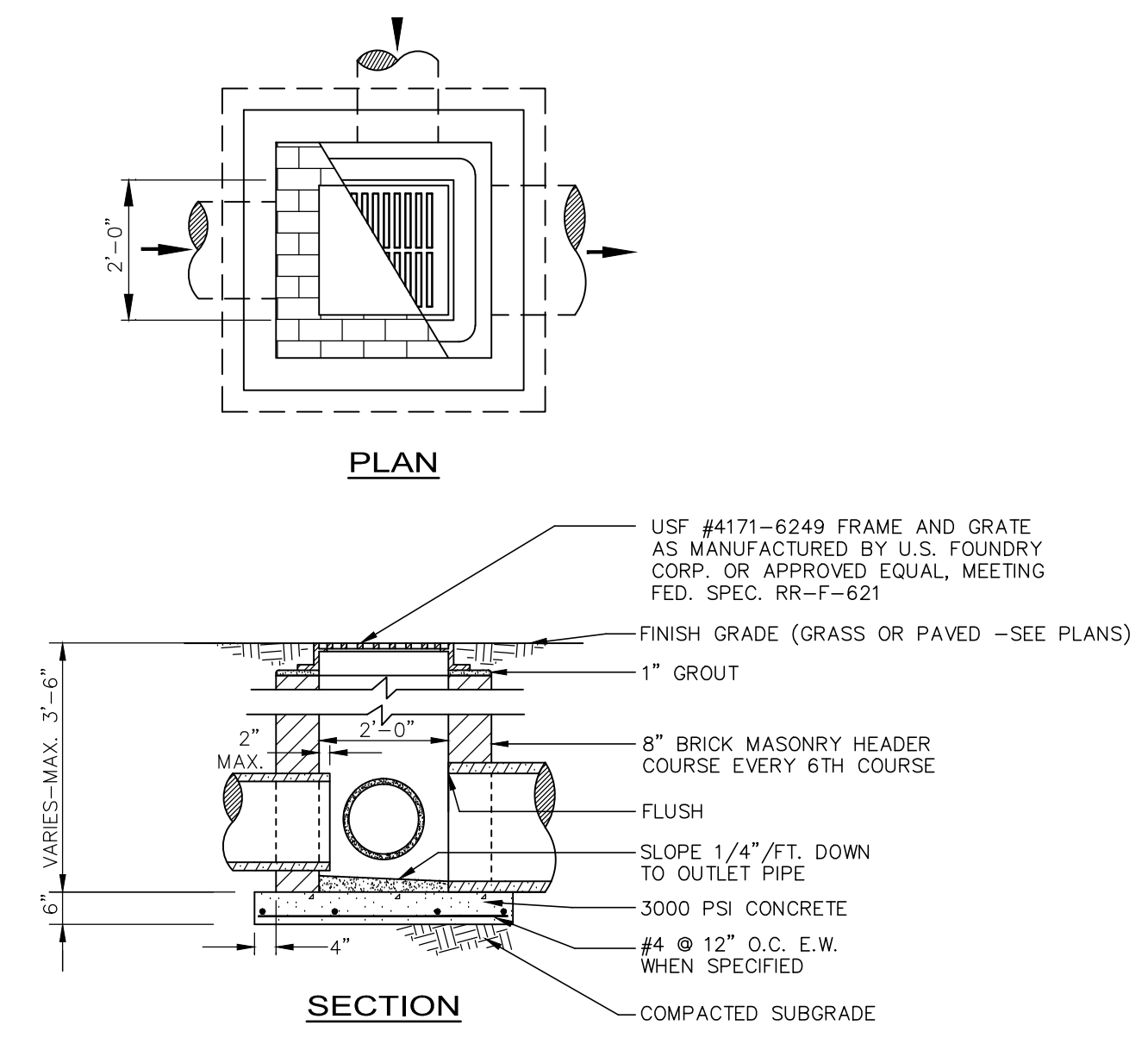


NOTES
 A. BOTTOM STEP SHALL BE 18" MINIMUM, 24" MAXIMUM, FROM FLOOR.
 B. STEPS SHALL BE 12" APART O.C.
 C. TOP STEP SHALL BE 18" FROM TOP.

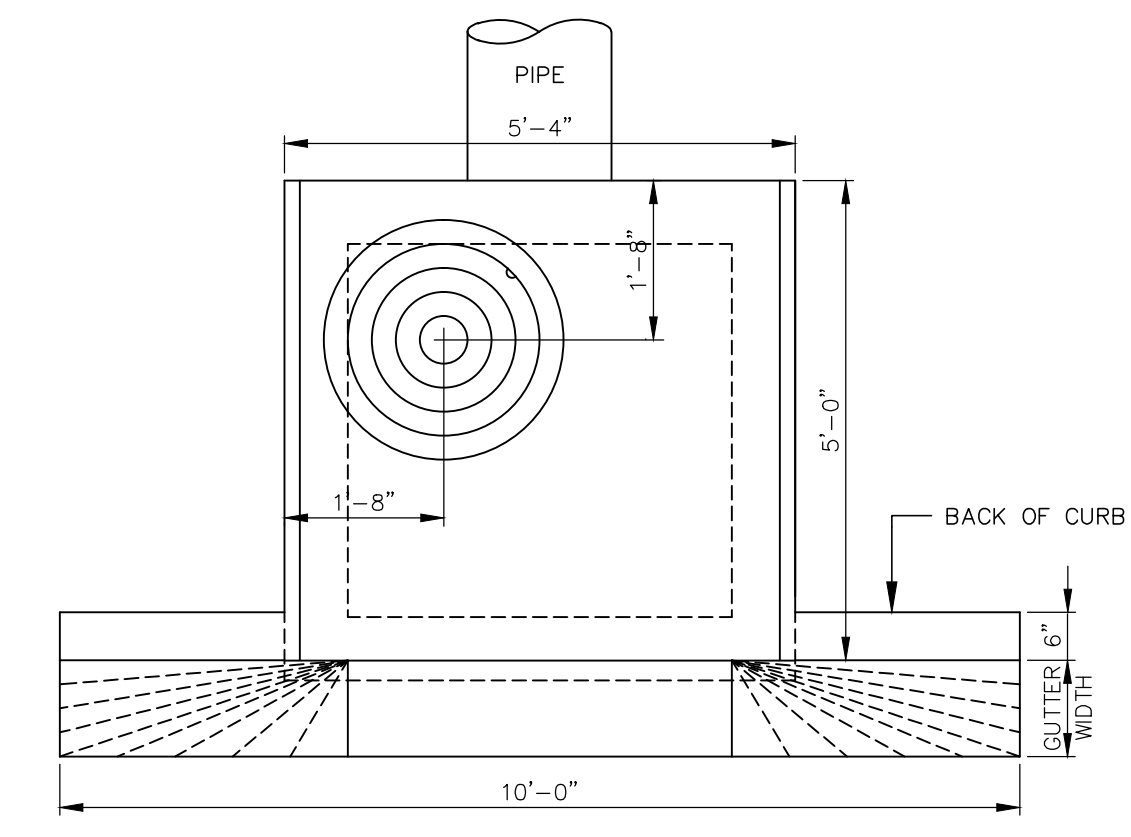
1 CATCH BASIN TYPE I (CB-I)
 NOT TO SCALE



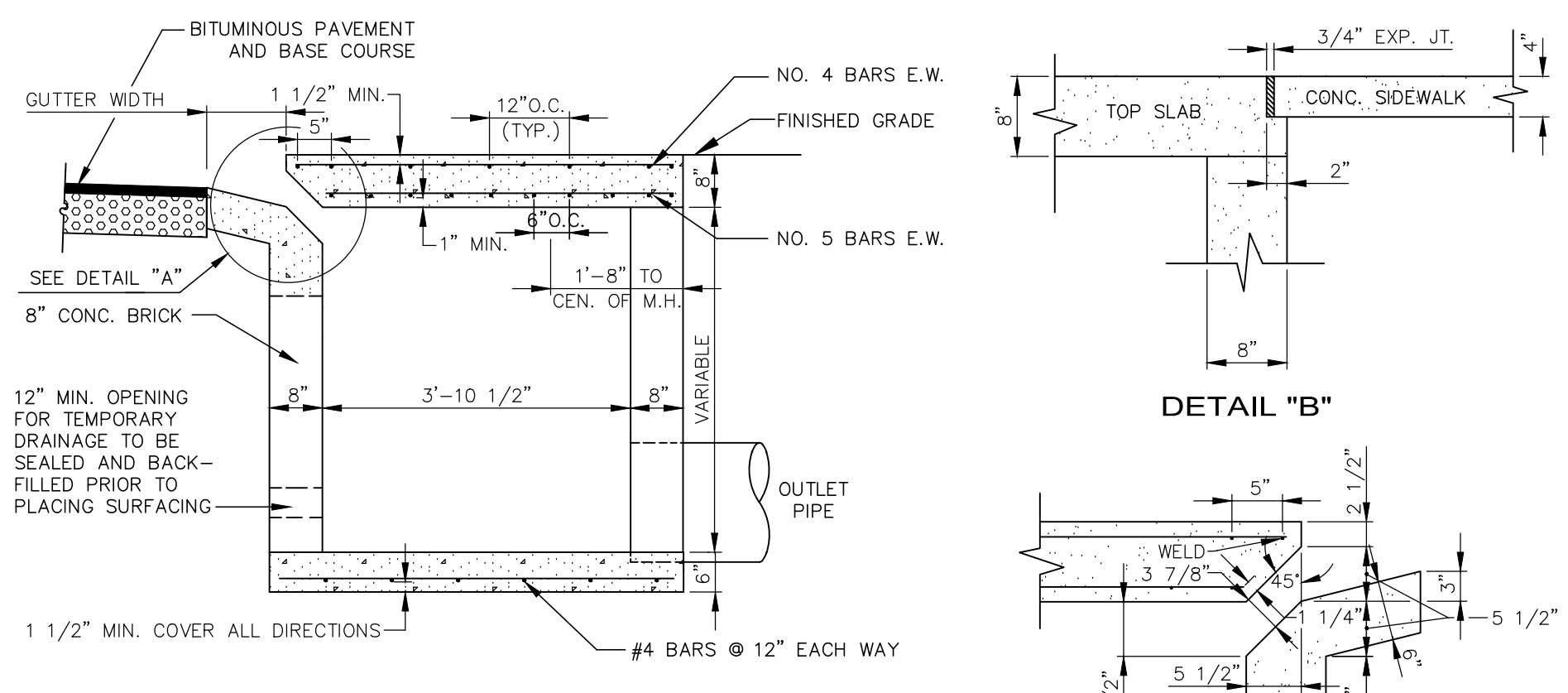
2 CONCRETE FLUME
 NOT TO SCALE



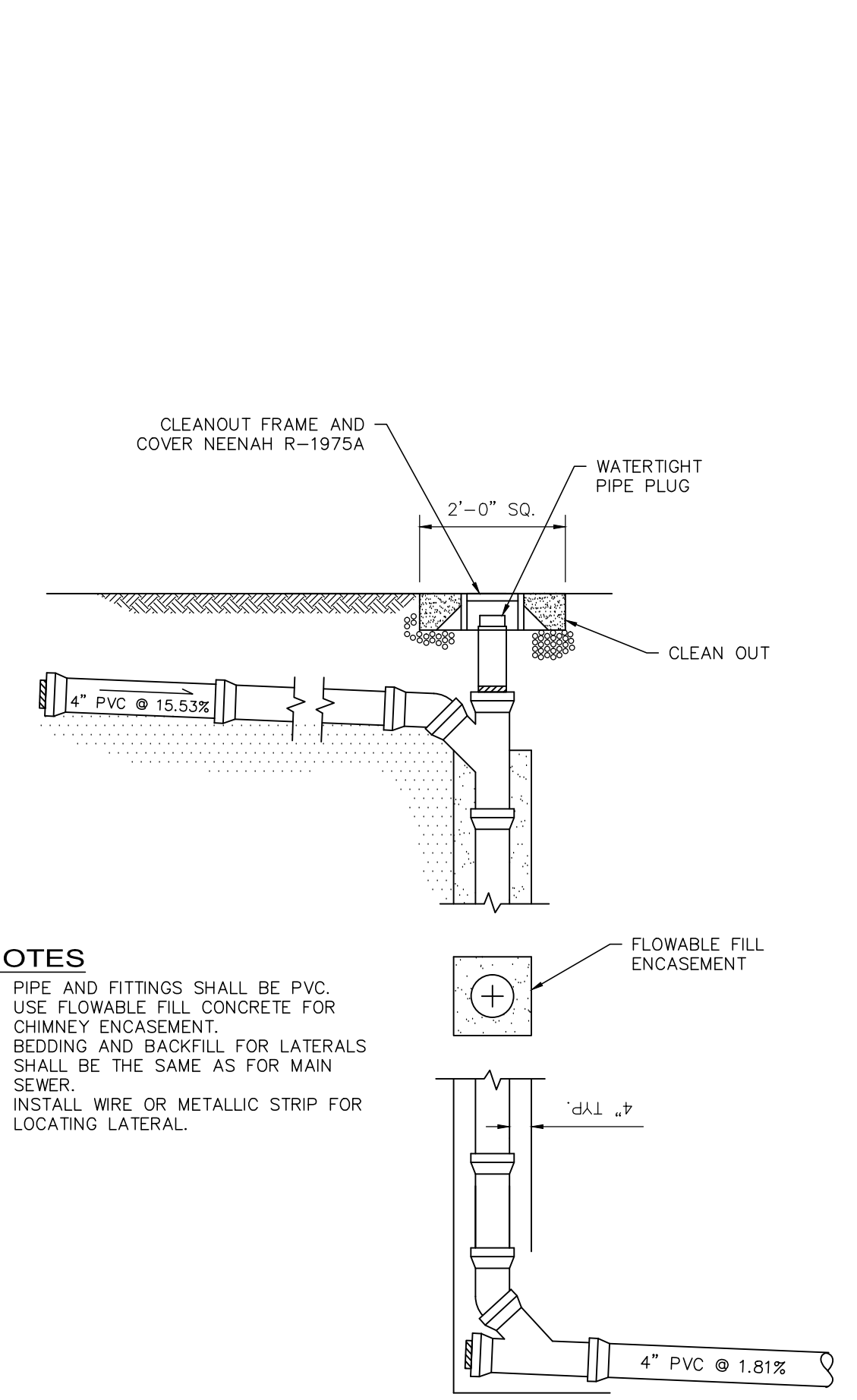
3 SHALLOW DI - 2'x2' (SDI 2x2)
 NOT TO SCALE



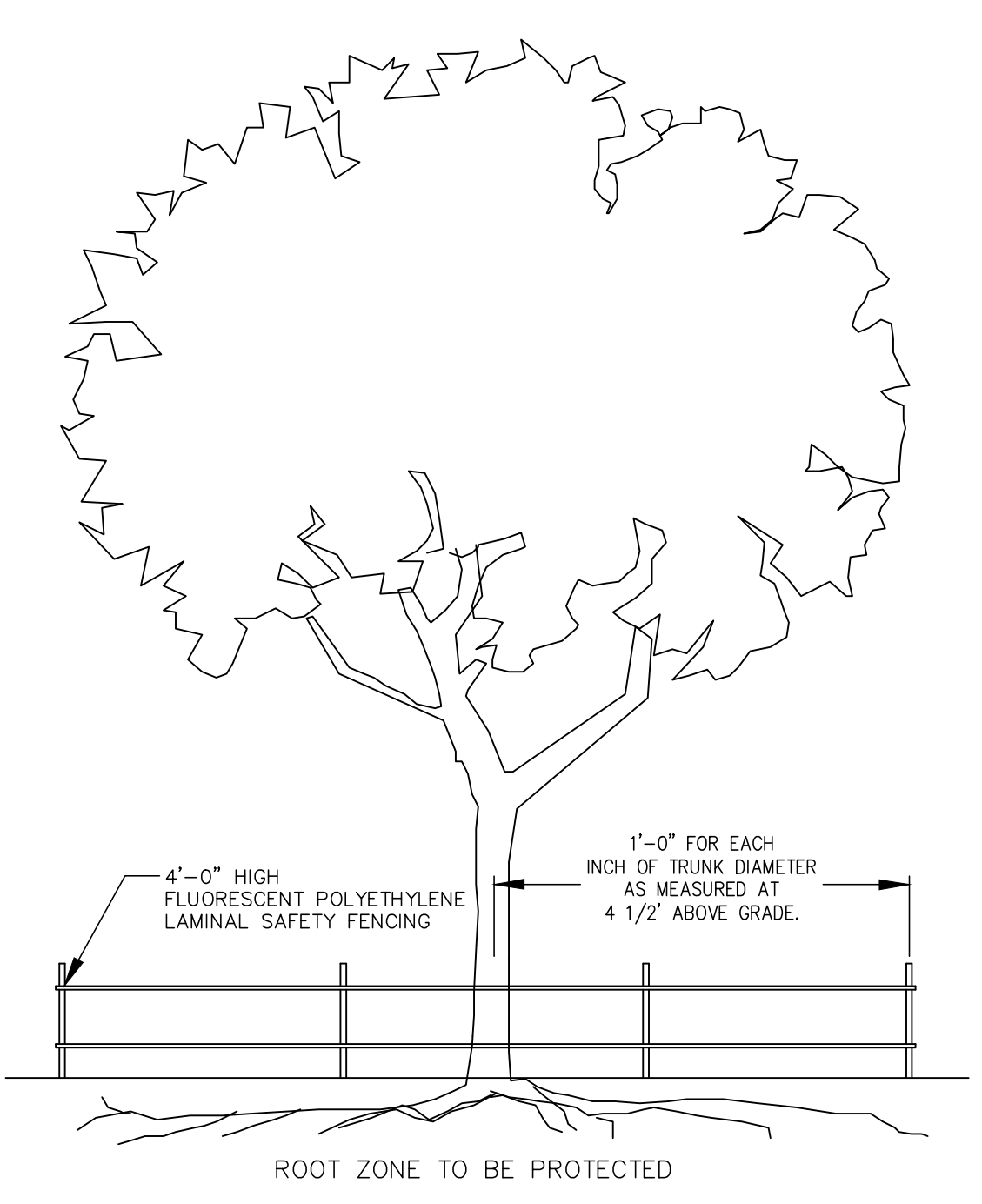
4 CATCH BASIN TYPE 16
 SCALE: AS SHOWN



5 CATCH BASIN TYPE 16
 SCALE: AS SHOWN

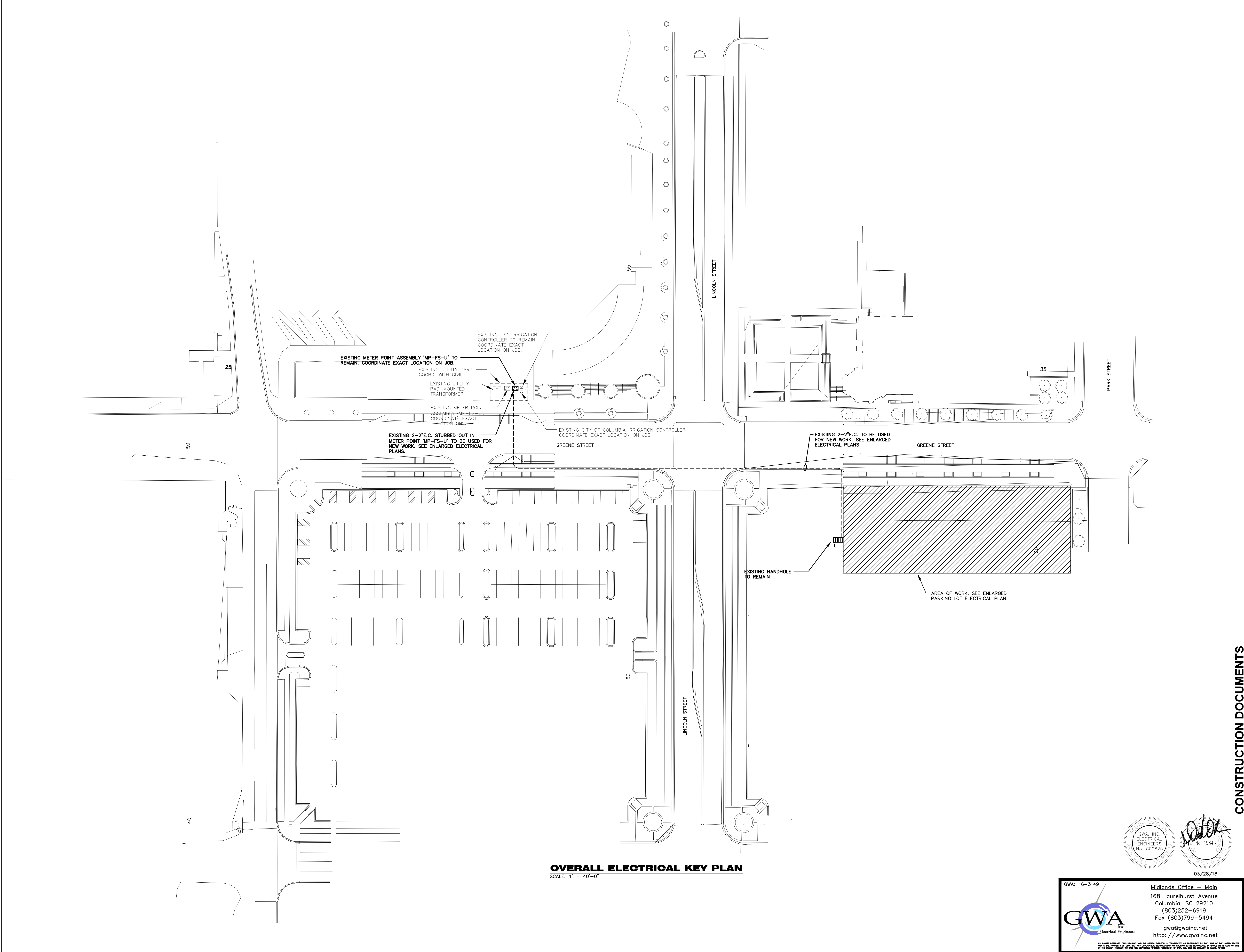


6 CLEANOUT CHIMNEY
 NOT TO SCALE

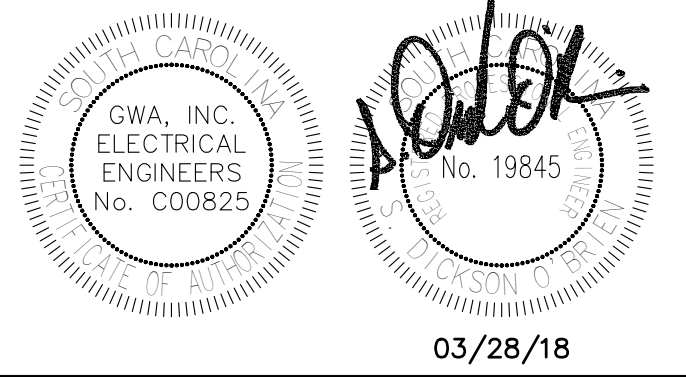


7 TREE PROTECTION
 NO SCALE

S:\PROJECTS\16520 USC PARK STREET PARKING\DRAWINGS\CIVIL\160305\170315 PARK STREET PARKING.DWG - 6/12/16



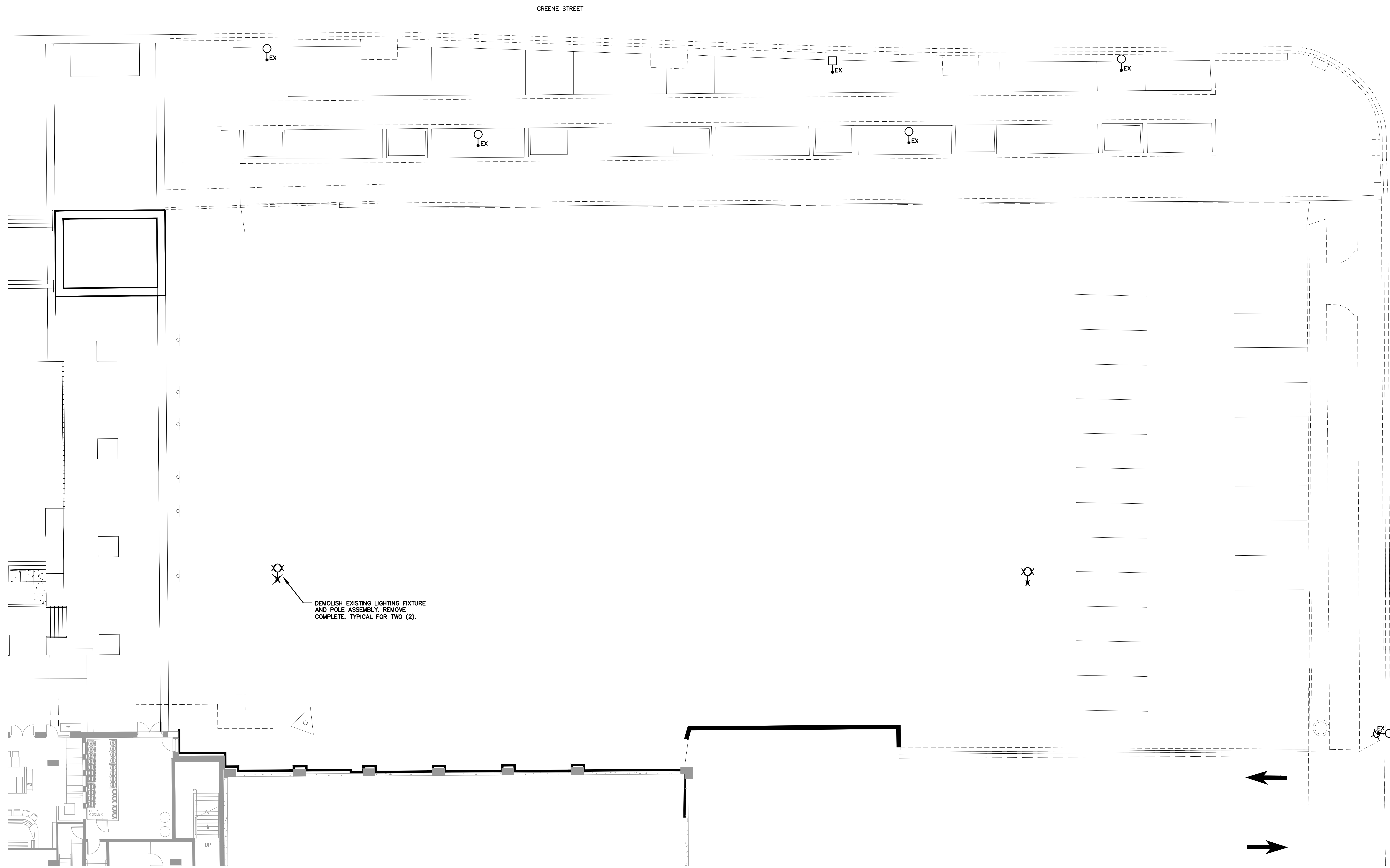
OVERALL ELECTRICAL KEY PLAN
 SCALE: 1" = 40'-0"



GWA, INC.
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 168 Laurelhurst Avenue
 Columbia, SC 29210
 (803)252-6919
 Fax (803)799-5494
 gwa@gwainc.net
 http://www.gwainc.net

CONSTRUCTION DOCUMENTS

PROJECT NO. 16-520	DRAWING NO. 16-520	DATE 23 MAR. 2018	PROJECT TITLE USC PARK STREET PARKING LOT H27-Z296
DRAWN BY CAW	CHECKED BY SDO	DATE 03/28/18	PROJECT TITLE USC PARK STREET PARKING LOT H27-Z296
THIS DRAWING AND THE EXISTING INFORMATION ON WHICH IT IS BASED ARE THE PROPERTY OF GWA, INC. AND ARE NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF GWA, INC.			PROJECT TITLE OVERALL ELECTRICAL KEY PLAN
DRAWING NO. ES02			PROJECT TITLE OVERALL ELECTRICAL KEY PLAN

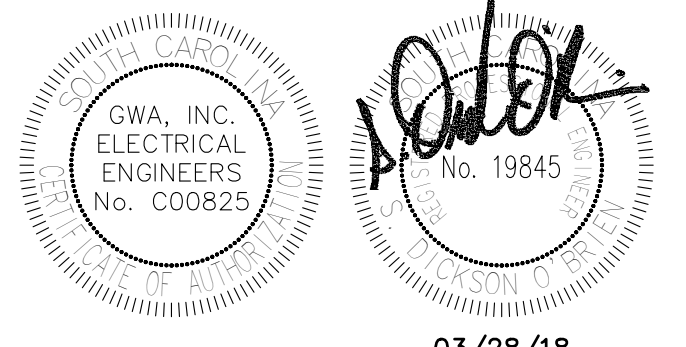


ENLARGED PARKING LOT ELECTRICAL DEMOLITION PLAN
 SCALE: 1" = 10'-0"

GWA: 16-3149

GWA
 Electrical Engineers

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 Columbia, SC 29210
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CONSTRUCTION DOCUMENTS

PROJECT NO. 16-520	DRAWING NO. 23	DRAWING DATE MAR. 2018	DRAWING NO. ES03
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ENLARGED PARKING LOT
 ELECTRICAL DEMOLITION PLAN

USC PARK STREET PARKING LOT
 H27-Z296

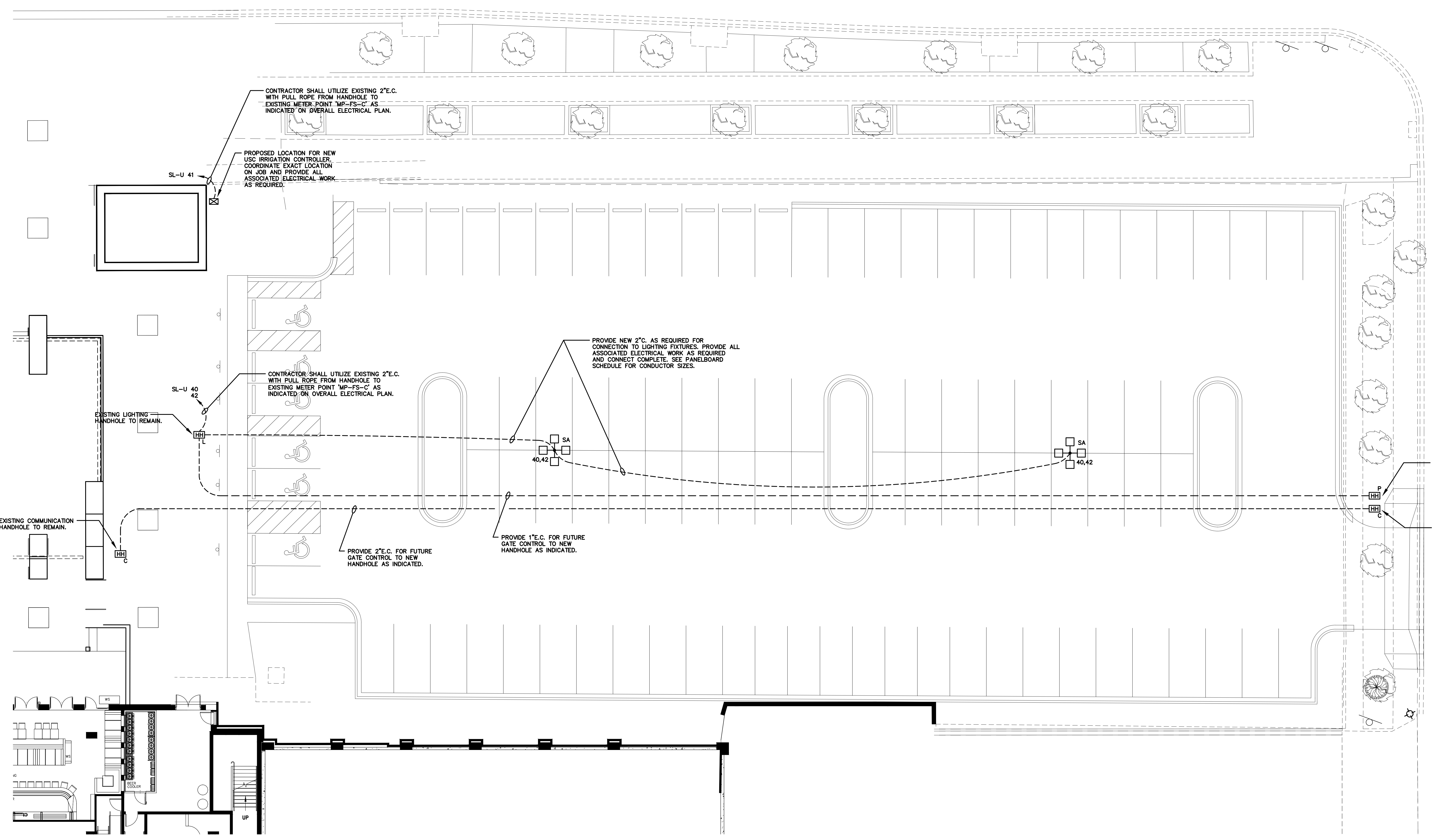
A/E SEAL

A/E SEAL

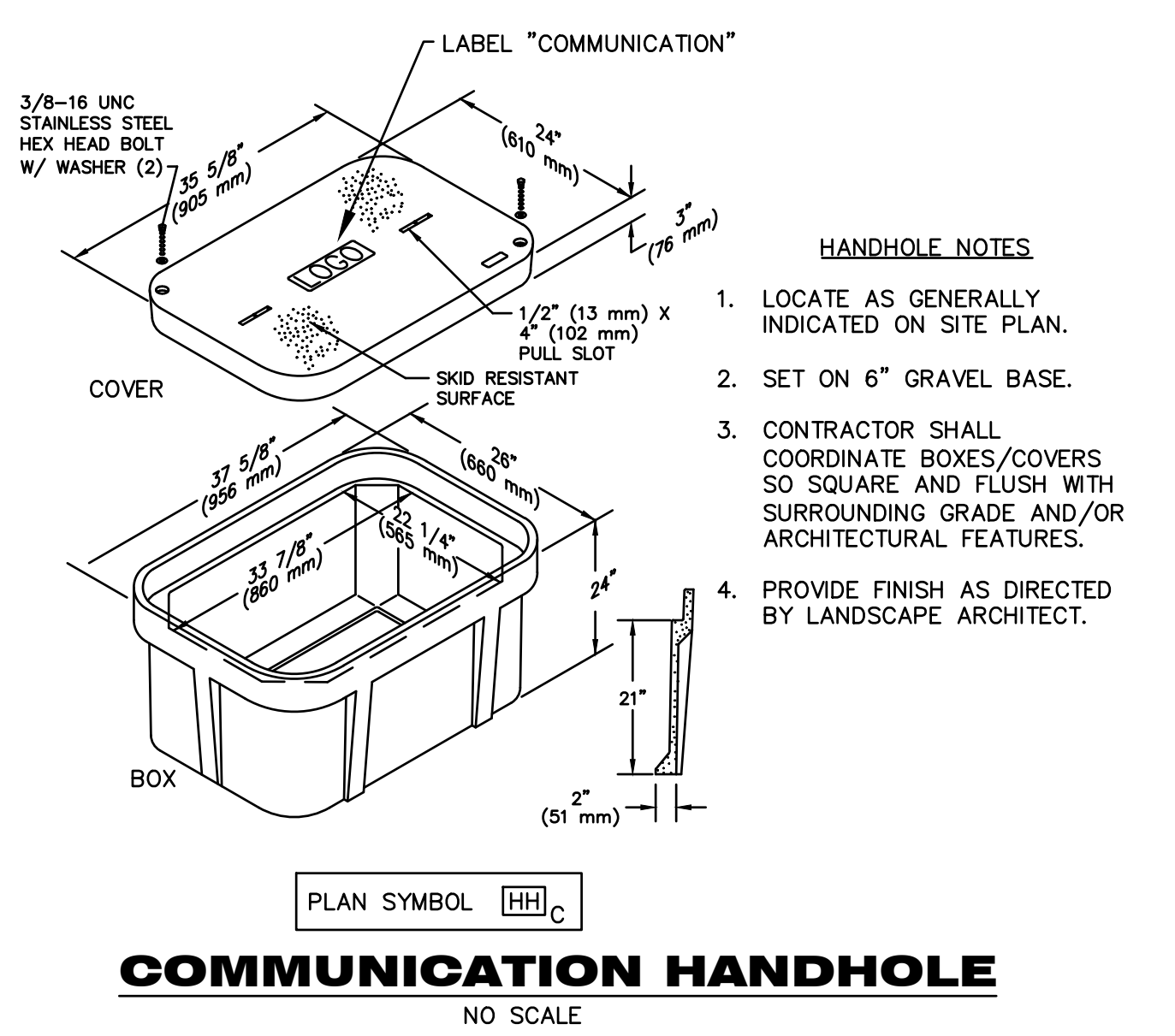
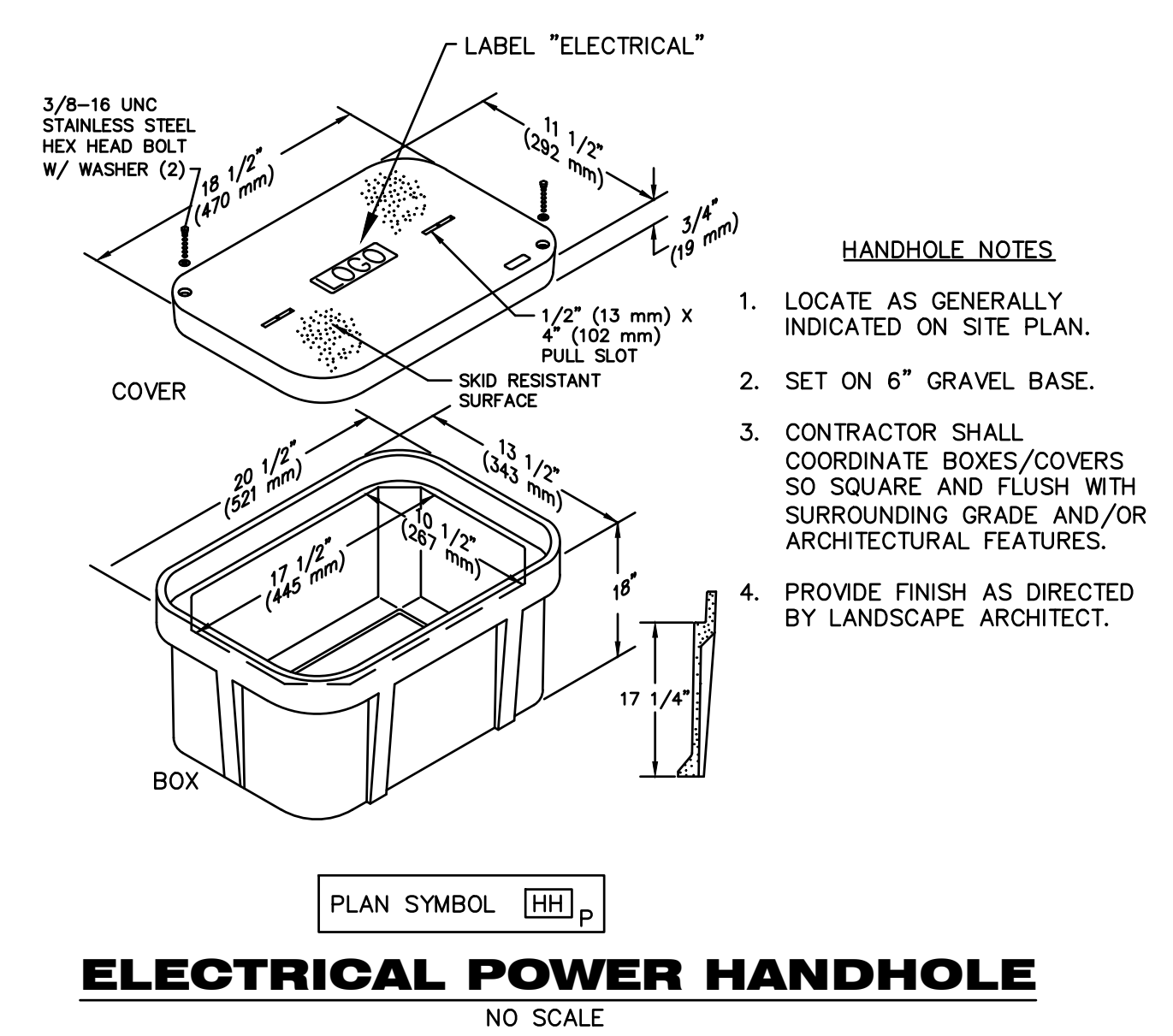
A/E SEAL

RB TODD
 CONSULTING ENGINEERS

7436 Broad River Road, Suite 212
 Jumbo, SC 29903
 Tel. 803.781.3142
 Fax. 803.781.3142
 www.rbtodd.com



ENLARGED PARKING LOT ELECTRICAL PLAN
SCALE: 1" = 10'-0"

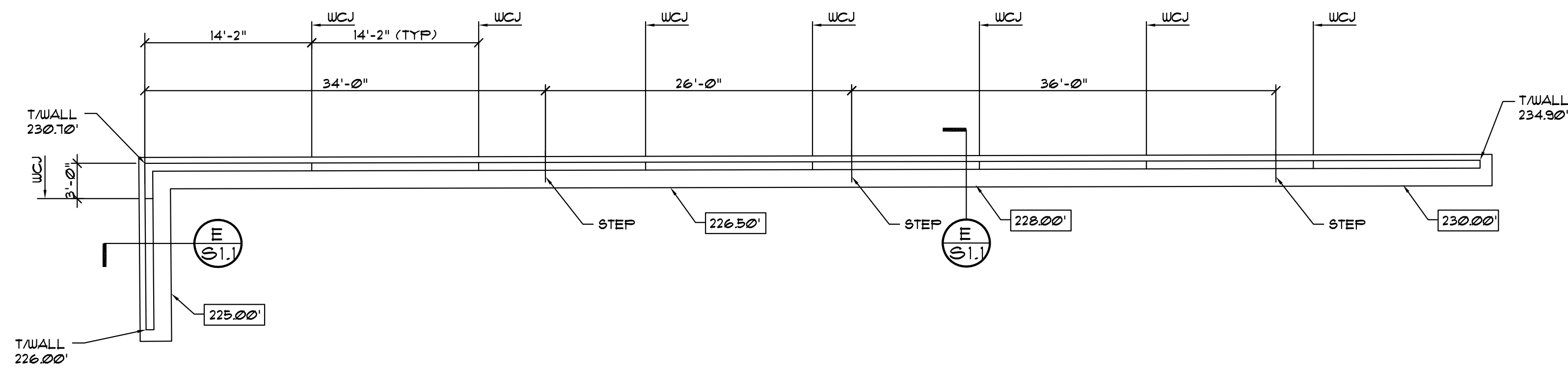


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No. C00625

03/28/18

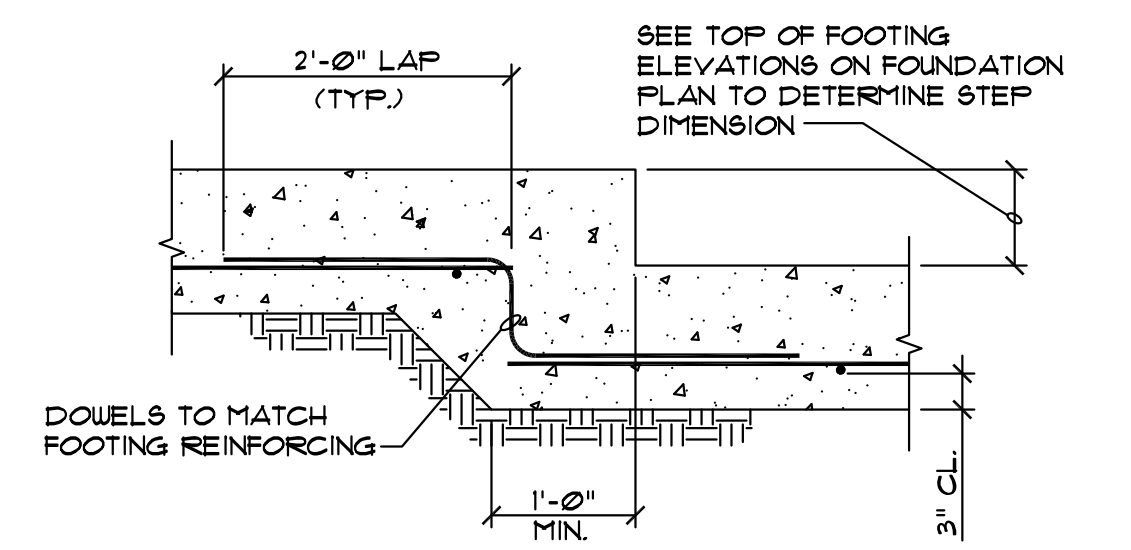
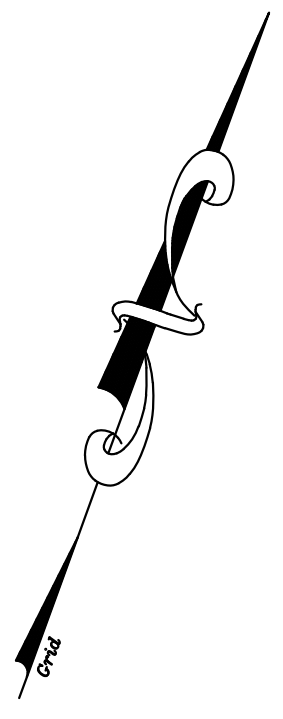
GWA, INC. - Main
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ALL WORK SHOWN ON THIS PLAN AND THE OTHER SHEETS IS TO BE CONSIDERED AS APPROVED BY THE LEVEL OF THE UNITED STATES OF AMERICA. THE UNITED STATES OF AMERICA IS NOT RESPONSIBLE FOR THE DESIGN OR CONSTRUCTION OF THIS PROJECT.



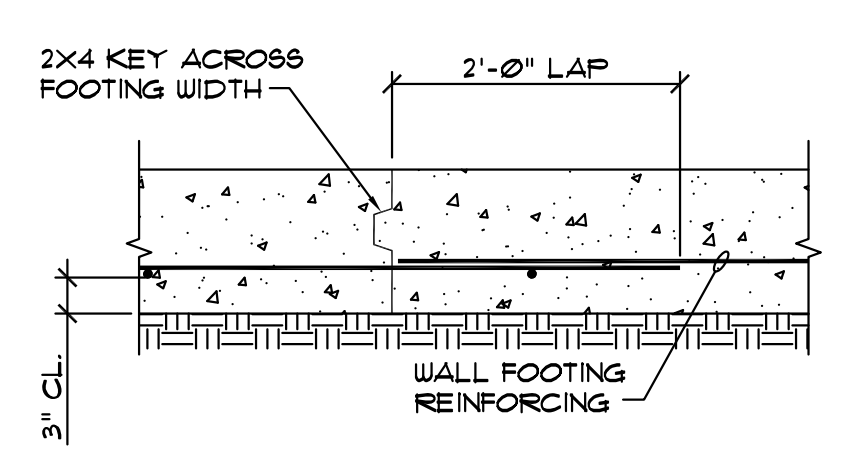
FOUNDATION PLAN A
 SCALE 1/8" = 1'-0"

PLAN NOTES:
 1. SEE CIVIL FOR WALL LAYOUT, DIMENSIONS AND TOP OF WALL ELEVATIONS.
 2. TOP OF FOOTINGS ARE INDICATED [] ON PLAN.



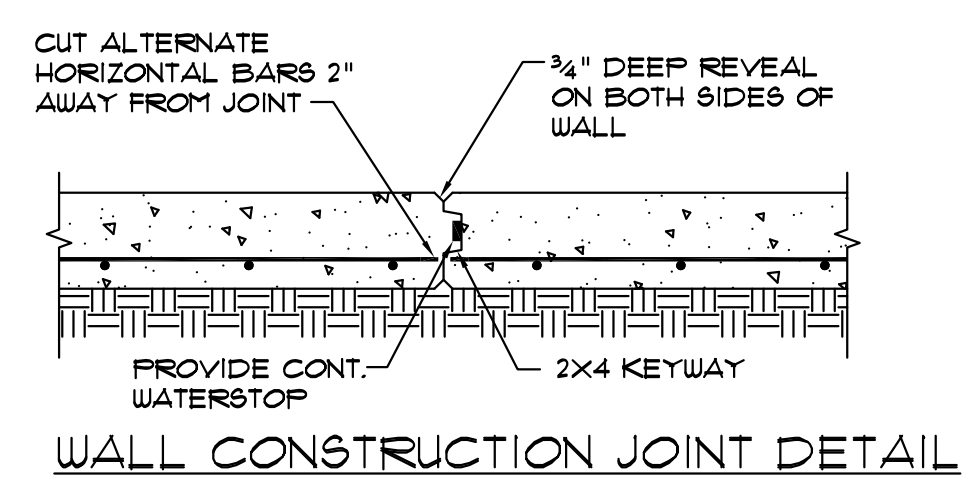
STEP FOOTING DETAIL B
 NO SCALE

NOTES:
 1. SEE FOUNDATION PLAN FOR LOCATIONS OF FOOTING STEPS.



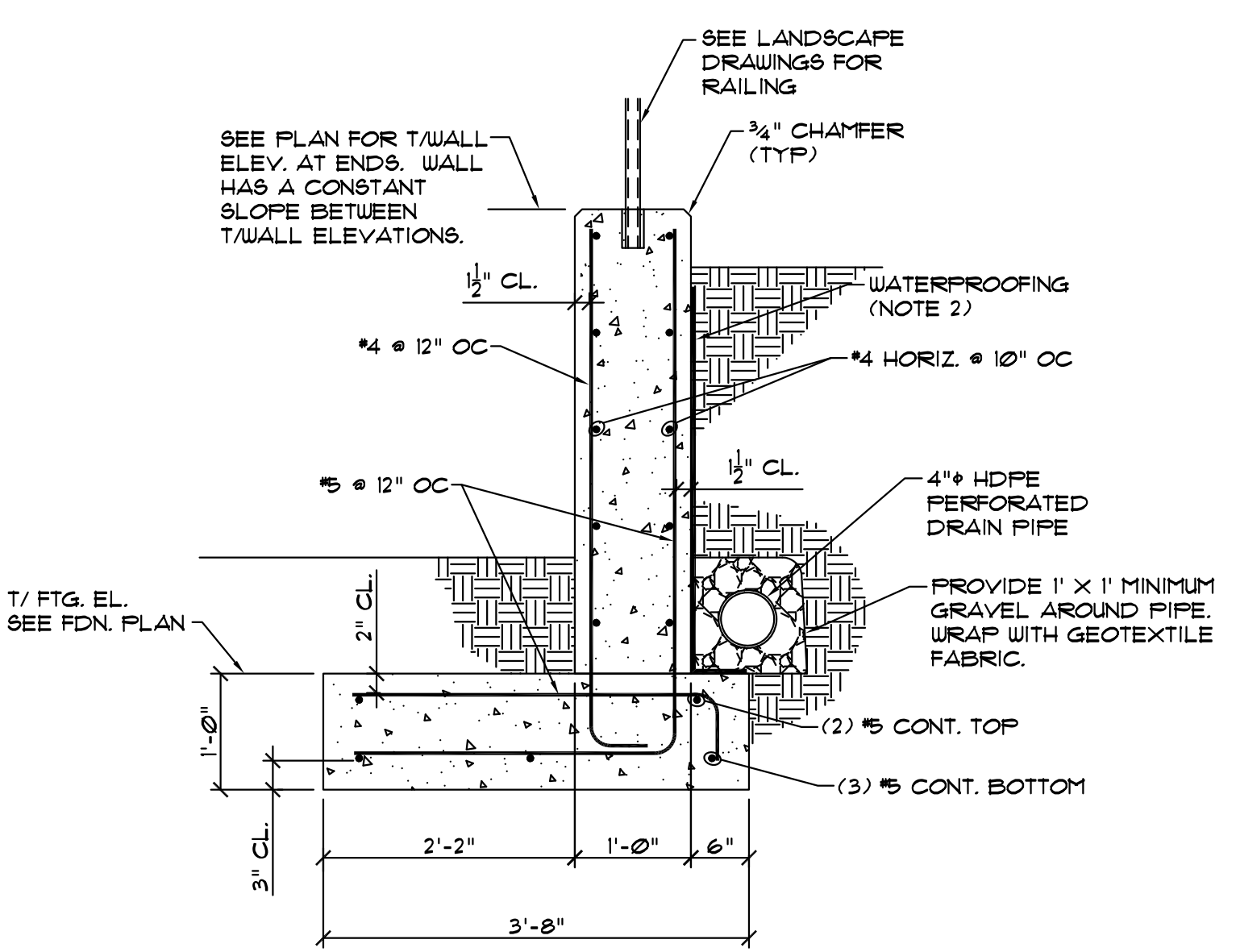
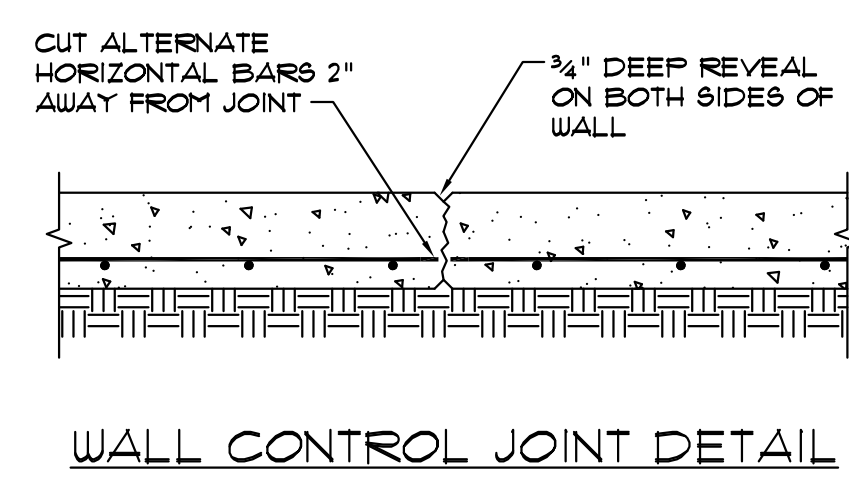
WALL FOOTING CONSTRUCTION JOINT DETAIL C
 NO SCALE

NOTES:
 1. THIS DETAIL SHALL BE USED AT ALL LOCATIONS IN WALL FOOTINGS WHERE CONCRETE FORMS ARE STOPPED.



SECTION D
 SCALE 3/4" = 1'-0"

NOTES:
 1. PROVIDE CONTROL JOINTS OR CONSTRUCTION JOINTS IN CONCRETE WALLS AT LOCATIONS INDICATED BY "WCJ" ON PLAN.
 2. TOOL A MATCHING REVEAL ACROSS THE TOP OF WALL TO ALIGN WITH REVEALS IN FACE OF WALL AT EACH JOINT.

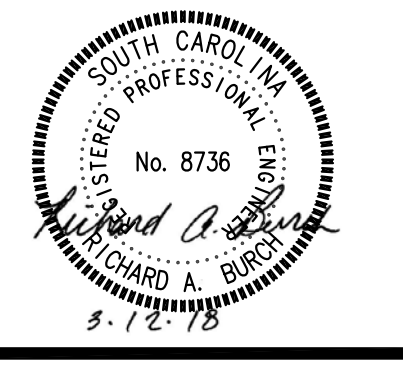
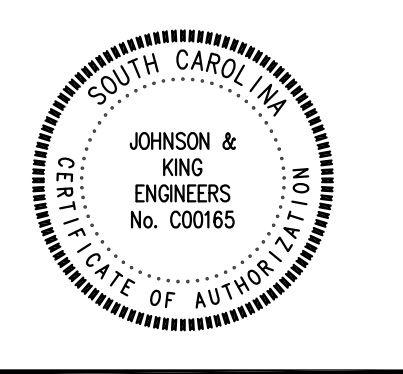


SECTION E
 SCALE 3/4" = 1'-0"

NOTES:
 1. PROVIDE RUBBED FINISH ON ALL EXPOSED CONCRETE SURFACES.
 2. COAT WALL WITH A HEAVY COATING OF BITUMASTIC WATERPROOFING BELOW GRADE.

GENERAL NOTES

- FOR DIMENSIONS AND DETAILS NOT SHOWN, SEE THE CIVIL DRAWINGS.
- DESIGN CRITERIA
 2.1. BUILDING CODE: 2015 INTERNATIONAL BUILDING CODE
- FOUNDATIONS:
 3.1. ASSUMED ALLOWABLE BEARING PRESSURE = 1500 PSF. TESTING AGENCY SHALL VERIFY FOOTING BOTTOMS FOR BEARING PRESSURE BEFORE CONCRETE IS PLACED.
 3.2. COMPACT ALL FOOTING BOTTOMS WITH A MECHANICAL TAMPER.
 3.3. SEE THE EARTHWORK SPECIFICATIONS FOR COMPACTION REQUIREMENTS AND OTHER REQUIREMENTS.
- CONCRETE: 28-DAY COMPRESSIVE STRENGTHS SHALL BE AS SHOWN BELOW.
 4.1. ALL CONCRETE:
 3000 PSI, NORMAL WEIGHT
- CONCRETE REINFORCING STEEL:
 5.1. ASTM A615, GRADE 60
 5.2. DETAIL IN ACCORDANCE WITH ACI DETAILING MANUAL, LATEST EDITION.
 5.3. LAP ALL BARS WITH CLASS B SPLICES UNLESS NOTED OTHERWISE.
 5.4. PROVIDE CORNER BARS OF SAME SIZE AND SPACING AS HORIZONTAL REINFORCING AT ALL WALL AND FOOTING INTERSECTIONS. LAP WITH CLASS B SPLICES.



PROJECT TITLE
USC PARK STREET PARKING LOT H27-Z296

DRAWING TITLE
RETAINING WALL FOUNDATION PLAN AND DETAILS

DRAWN BY	RAB	DRAWING TITLE
CHECKED BY	JUM	RETAINING WALL FOUNDATION PLAN AND DETAILS
FILE:	16-520	

JOHNSON & KING ENGINEERS
 1223 Elmwood Avenue | 803.779.8830 | Columbia, SC 29201 | 803.779.8831

PROJECT NO. 16-520
 DATE 23 MAR 2018
 DRAWING NO. **S1.1**