

# UNIVERSITY OF NORTH CAROLINA AT PEMBROKE

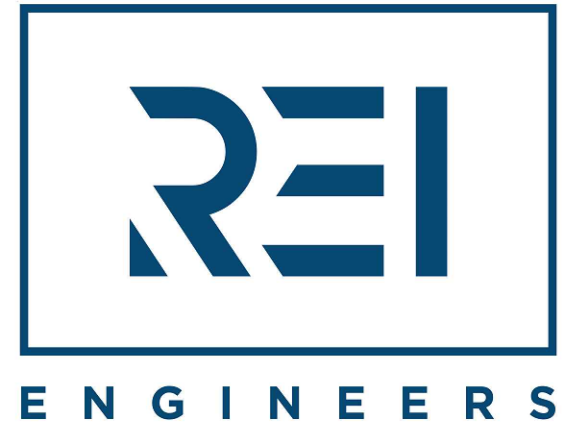
## WEST HALL PARKING (LOT 21) PAVEMENT IMPROVEMENT

SCO ID# 22-24689-01A

111 UNIVERSITY ROAD  
PEMBROKE, NC 28372

REI PROJECT NO. 022CLT-296

DATE: FEBRUARY 3, 2023



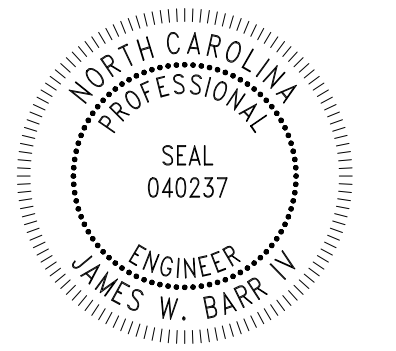
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SEALS:



PROJECT NAME:

UNIVERSITY OF NORTH  
CAROLINA AT PEMBROKE

WEST HALL PARKING (LOT 21)  
PAVEMENT IMPROVEMENT

111 UNIVERSITY ROAD  
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022CLT-296

REVISIONS:

NO.	DATE	DESCRIPTION
DD	02-03-23	DESIGN DEVELOPMENT
△	10-11-23	PER OWNER FEEDBACK
△	03-22-24	ADDENDUM NO. 1

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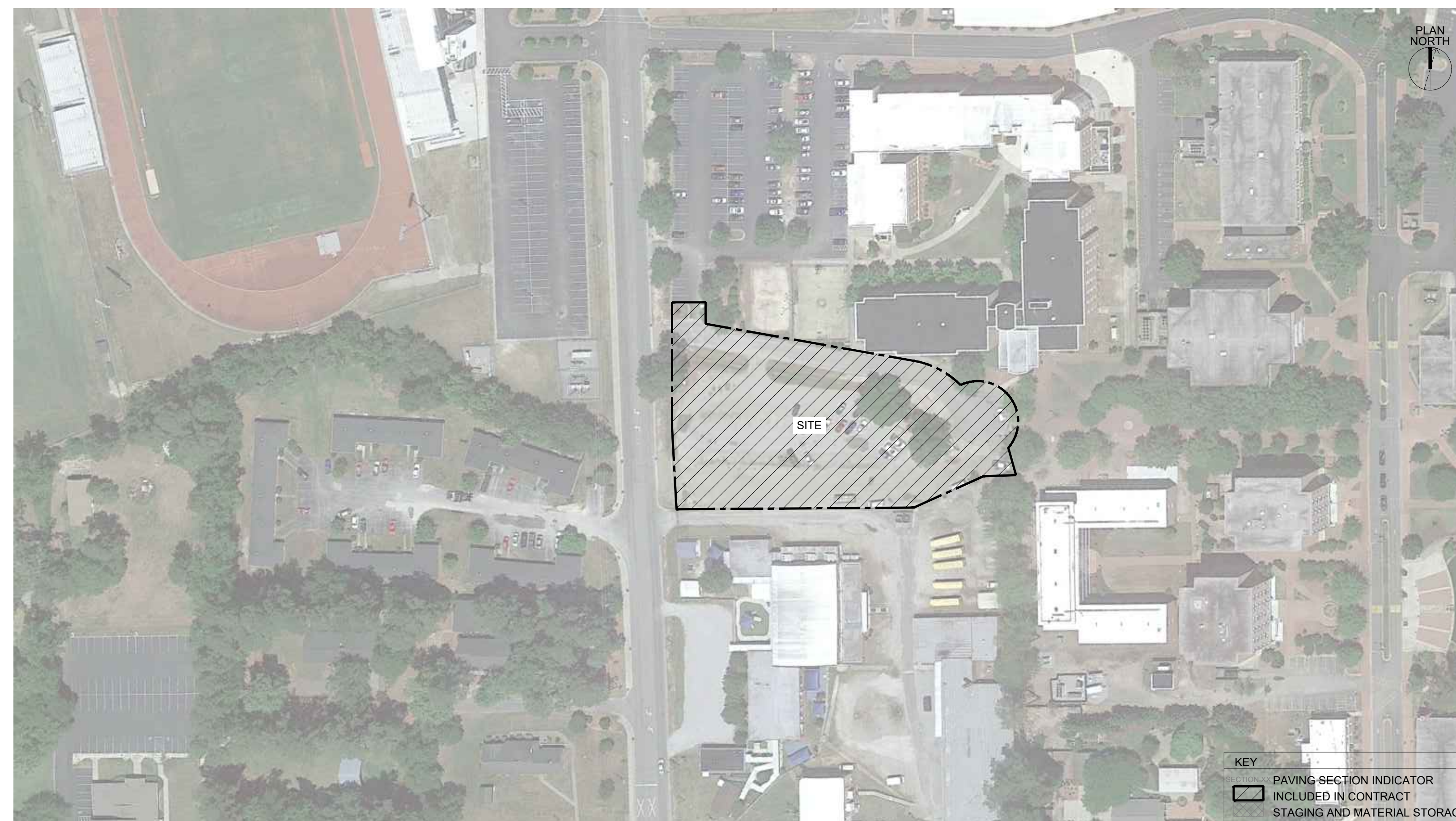
COVER

DRAWING

G-001



**A** VICINITY MAP  
SCALE: N.T.S.



**B** SITE PLAN  
SCALE: N.T.S.

**GENERAL NOTES**  
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3. NOTES ARE INTENDED TO PROVIDE TYPICAL LOCATIONS OF WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO QUANTIFY ALL LOCATIONS.

**DETAIL NOTES**  
1. LIGHT LINES REPRESENT EXISTING CONSTRUCTION TO REMAIN AND DARK LINES REPRESENT NEW COMPONENTS TO BE PROVIDED.

**DIMENSION NOTES**  
1. DEFINED SLOPES HAVE A TOLERANCE OF ±0.5%.  
2. DEFINED LENGTHS HAVE A TOLERANCE OF ±6".

**DRAWING INDEX:**

- G-001 COVER
- G-002 NOTES
- G-003 BUILDING CODE SUMMARY
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- C-103 SITE PLAN
- C-104 IRRIGATION PLAN
- C-105 GRADING & STORMWATER PLAN
- C-106 GATEWAY PLAN
- C-201 GATEWAY ELEVATION
- E-100 ELECTRICAL DETAILS & SPECIFICATIONS
- E-101 SITE ELECTRICAL DEMOLITION PLAN
- E-102 SITE ELECTRICAL RENOVATION PLAN
- E-103 SITE ELECTRICAL RENOVATION PLAN
- C-501 DETAILS
- C-502 DETAILS
- C-503 STRUCTURAL DETAILS
- C-504 DETAILS
- C-505 DETAILS

**ABBREVIATION LIST:**

- C.B. CATCH BASIN
- C.G. CURB AND GUTTER
- CMP CORRUGATED METAL PIPE
- D.I. DROP INLET
- DS DOWNSPOUT
- EJ EXPANSION JOINT
- EX. EXISTING
- F.E.S. FLARED END SECTION
- HDPE HIGH DENSITY POLYETHYLENE
- MAX. MAXIMUM
- MIN. MINIMUM
- N.C. NOT IN CONTRACT
- N.T.S. NOT TO SCALE
- O.C. ON CENTER
- PVC POLYVINYL CHLORIDE
- RCP REINFORCED CONCRETE PIPE
- STD. STANDARD
- TYP. TYPICAL

**EXISTING PARKING:**

STD. STALL COUNT:	0
STD. ADA PARKING:	0
VAN ADA PARKING:	0

**PROPOSED PARKING:**

STD. STALL COUNT:	89
STD. ADA PARKING:	3
VAN ADA PARKING:	1

**KEY**  
 PAVING SECTION INDICATOR  
 INCLUDED IN CONTRACT  
 STAGING AND MATERIAL STORAGE

**EROSION CONTROL NOTES:**

- ON-SITE BURIAL PITS REQUIRE AN ON-SITE DEMOLITION LANDFILL PERMIT FROM THE ZONING ADMINISTRATOR.
- ANY GRADING BEYOND THE NOTED LIMITS SHOWN ON THE PLAN IS A VIOLATION OF ENCODER AND IS SUBJECT TO A FINE.
- GRADING MORE THAN ONE ACRE WITHOUT AN APPROVED EROSION CONTROL PLAN IS A VIOLATION OF NCDENR AND IS SUBJECT TO A FINE.
- SEE STABILIZATION TIME FRAME TABLE ON THIS SHEET FOR CONSTRUCTION STABILIZATION REQUIREMENTS.
- ADDITIONAL MEASURES TO CONTROL EROSION AND SEDIMENT MAY BE REQUIRED BY A REPRESENTATIVE OF NCDENR.
- ANY LAND-DISTURBING ACTIVITY > 1 ACRE REQUIRES COMPLIANCE WITH ALL CONDITIONS OF THE GENERAL PERMIT TO DISCHARGE STORM WATER UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (PERMIT NO. NCGO10000). ANY PERMIT NON-COMPLIANCE IS A VIOLATION OF THE CLEAN WATER ACT AND MAY REQUIRE ENFORCEMENT ACTION BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT, HEALTH AND NATURAL RESOURCES.
- TEMPORARY DRIVEWAY PERMIT FOR CONSTRUCTION ENTRANCES IN NCDOT RIGHT OF WAY MUST BE PRESENTED AT PRECONSTRUCTION MEETING.
- TOTAL DISTURBED AREA = 0.85 ACRES.
- FOR THIS PROJECT, DISTURBANCE INCLUDES EXPOSURE OF SUBGRADE.

**DRAINAGE NOTES:**

- REVERSE CURB AND GUTTER TO BE USED IN AREAS NOT CHANNELING STORM WATER RUNOFF.
- THE PROPOSED CONTOURS WITHIN PAVED AREAS ARE GRAPHICAL REPRESENTATIONS ONLY. THE CONTRACTOR IS RESPONSIBLE FOR GRADING UNIFORMLY BETWEEN SPOT ELEVATIONS.
- CONTRACTOR TO GRADE ALL AREAS WITHIN PROJECT TO DRAIN STORM WATER. CARE SHALL BE TAKEN TO ENSURE THAT ALL AREAS WITHIN PARKING LOTS AND LANDSCAPED ISLANDS SHALL NOT HOLD WATER UPON PROJECT COMPLETION.
- MIN. SLOPE ON ALL ASPHALT TO BE 1.5%
- MIN. SLOPE ON CURB AND GUTTER CARRYING STORM WATER TO BE 0.5%.
- MIN. SLOPE ON REVERSE CURB AND GUTTER TO BE 0.5%.

**STORMWATER MONITORING:**

- THE CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENTATION CONTROL FACILITIES EVERY SEVEN DAYS AND WITHIN 24 HOURS OF A 0.5 INCH OF RAINFALL. FINDINGS SHALL BE RECORDED AND PRESENTED UPON INSPECTOR'S REQUEST.
- THE CONTRACTOR SHALL PROVIDE RAIN-RECORDING DEVICE AND RECORD EACH RAINFALL.
- ANY FAILURES THAT CAUSE VISIBLE SEDIMENTATION TO LEAVE THE APPROVED DISTURBED LIMITS SHALL BE CORRECTED IMMEDIATELY AND DOCUMENTED.
- A COPY OF THE NPDES PERMIT AND STORM WATER RECORDS SHOULD BE KEPT ON SITE FOR REFERENCE.

**ADA STANDARDS FOR ACCESSIBLE DESIGN AND STATE BUILDING CODE REFERENCES:**

- ACCESSIBLE ROUTES (AR) SHALL COMPLY WITH SECTION 402 AND SECTION 403.
- ACCESSIBLE RAMPS (R) AND ACCESSIBLE LANDINGS (L) SHALL COMPLY WITH SECTION 405 AND SECTION 405.7, RESPECTIVELY.
- ACCESSIBLE PARKING SPACES SHALL COMPLY WITH SECTION 502.
- ACCESSIBLE PARKING STALL STRIPING SHALL FOLLOW CURRENT NORTH CAROLINA STATE BUILDING CODE REQUIREMENTS.
- ACCESSIBLE PARKING SIGNS ARE TO BE INSTALLED IN ACCORDANCE WITH FEDERAL AND STATE ADA STANDARDS.

**GENERAL CONDITIONS**

- THE CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION TO ERECT THE STRUCTURE INDICATED ON THE DRAWINGS.
- THE STRUCTURE IS DESIGNED TO ACT IN WHOLE AS A COMPLETED UNIT. THE CONTRACTOR SHALL DESIGN AND PROVIDE TEMPORARY BRACING, SHORING, AND SUPPORTS AS REQUIRED UNTIL ALL STRUCTURAL ELEMENTS ARE INSTALLED.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DEVIATIONS TO BE MADE FROM THE CONSTRUCTION DOCUMENTS. SUCH NOTIFICATION SHALL BE MADE IN WRITING AND CLEARLY IDENTIFIED IF INCLUDED ON SHOP DRAWINGS/PRODUCT DATA SUBMITTALS. THE CONTRACTOR SHALL NOT PROCEED WITH INSTALLATION OF ALTERNATE CONSTRUCTION UNTIL RECEIPT OF WRITTEN CONFIRMATION OF THE CHANGE FROM THE ENGINEER.
- THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF CONCRETE FORMWORK AND SHORING.
- THE CONTRACTOR SHALL NOT IMPOSE LOADS ON THE STRUCTURE DURING CONSTRUCTION THAT EXCEED THE CAPACITY OF THE STRUCTURE. DESIGN LOADS ARE INDICATED ON THE DRAWINGS.
- THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING INSPECTIONS AND COORDINATING QUALITY CONTROL TESTS DURING THE COURSE OF THE WORK.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PROTECTION OF PERSONS AND PROPERTY BOTH ON AND/OR ADJACENT TO THE PROJECT SITE. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE SAFETY REGULATIONS.

**FOUNDATIONS/EARTHWORK**

- IF FOOTING SUBGRADE SOILS ARE WET, DISTURBED, UNSTABLE, OR UNSUITABLE MATERIAL THE ENGINEER SHALL BE NOTIFIED. FOUNDATION EXCAVATIONS SHALL BE CLEARED OF ALL DEBRIS, TRASH, AND LOOSE MATERIAL PRIOR TO PLACING CONCRETE.
- STRUCTURAL FILL AND BACKFILL SHALL BE SUITABLE MATERIAL FREE FROM DEBRIS, LARGE STONES, ORGANIC MATTER, OR OTHER DELETERIOUS MATERIALS. SOIL MATERIALS SUITABLE AS FILL AND BACKFILL SHALL HAVE A DRY DENSITY OF AT LEAST 90 POUNDS PER CUBIC FOOT AS DETERMINED BY ASTM D698. ASTM D2487 SOIL CLASSIFICATION GROUPS CH, OL, OH, AND PT SHALL NOT BE USED. MH SOILS USED AS FILL OR BACKFILL SHALL BE INSTALLED ONLY AS PERMITTED BY THE GEOTECHNICAL ENGINEER. SEE GEOTECHNICAL REPORT FOR LIMITATIONS ON USE OF MH SOILS.
- GRANULAR BASE MATERIAL SHALL BE NATURALLY OR ARTIFICIALLY GRADED MIXTURE OF NATURAL OR CRUSHED GRAVEL, CRUSHED STONE, AND NATURAL OR CRUSHED SAND, ASTM D2940, WITH AT LEAST NINETY-FIVE (95) PERCENT PASSING A 1 1/2 INCH SIEVE AND NOT MORE THAN EIGHT (8) PERCENT PASSING A NO. 200 SIEVE.
- DRAINAGE FILL SHALL BE WASHED, EVENLY GRADED MIXTURE OF CRUSHED STONE OR CRUSHED OR UNCRUSHED GRAVEL, ASTM D448, COARSE AGGREGATE GRADING SIZE FIFTY-SEVEN (57), WITH ONE HUNDRED (100) PERCENT PASSING A 1 1/2 INCH SIEVE AND NOT MORE THAN FIVE (5) PERCENT PASSING A NO. 8 SIEVE.
- COMPACT TOP 2 FEET OF EXISTING SUBGRADE AND EACH LAYER OF FILL OR BACKFILL UNDER STRUCTURES AND BUILDING SLABS AND TO TEN (10) FEET BEYOND BUILDING LINES TO NINETY-FIVE (95) PERCENT MAXIMUM DRY DENSITY ACCORDING TO ASTM D698. COMPACT FILL OR BACKFILL WITHIN TWELVE (12) INCHES OF SLAB OR FOUNDATION SUBGRADE TO NINETY-EIGHT (98) PERCENT OF MAXIMUM DRY DENSITY ACCORDING TO ASTM D698. COMPACTED GRANULAR BASE MATERIAL BENEATH SLAB ON GRADE TO ONE HUNDRED (100) PERCENT OF MAXIMUM DRY DENSITY ACCORDING TO ASTM D698.

**CONCRETE WORK**

- CONCRETE WORK SHALL COMPLY WITH PROVISIONS OF ACI 301 AND ACI 318. CONCRETE CONSTRUCTION TOLERANCES SHALL BE AS SET FORTH IN ACI 117. PROVISIONS OF ACI 305 AND/OR ACI 306 SHALL APPLY AS WEATHER CONDITIONS WARRANT. FORM WORK SHALL BE IN COMPLIANCE WITH PROVISIONS OF ACI 347.
- UNLESS OTHERWISE NOTE, SPLICES IN REINFORCING WHERE PERMITTED SHALL BE AS FOLLOWS:  
DEFORMED REINFORCING BARS 50 BAR DIAMETERS  
WELDED WIRE FABRIC 6 INCH OVERLAP
- ALL HOOKS IN REINFORCING BARS SHALL BE ACI STANDARD HOOKS UNLESS OTHERWISE SHOWN OR NOTED ON THE DRAWINGS.
- READY MIXED CONCRETE SHALL CONFORM TO ASTM C94 AND ACI 304. CONCRETE SHALL BE PLACED AS NEAR AS PRACTICABLE TO ITS FINAL LOCATION. CONCRETE SHALL NOT BE ALLOWED TO FALL FREELY FOR A HEIGHT OF MORE THAN FOUR (4) FEET. CONCRETE SHALL BE CONSOLIDATED TO PREVENT VOIDS AND HONEYCOMBS. CONCRETE VIBRATORS SHALL NOT BE USED TO MOVE CONCRETE TO ITS FINAL LOCATION.
- POST INSTALLED DOWELS SHALL BE GROUTED WITH A LOW TO MEDIUM VISCOSITY HIGH MODULUS EPOXY ADHESIVE (HILTI HIT-HY 200V3 MAX OR EQUAL). INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS. EMBEDMENT DEPTH SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED.

BAR SIZE	EMBEDMENT
#4/ 1/2"	5 1/2"
#5/ 5/8"	7"

**MASONRY WORK**

- ALL CONCRETE MASONRY CONSTRUCTION SHALL COMPLY WITH NCBC CHAPTER 21 AND ACI 530.1.
- MAINTAIN A MINIMUM CLEARANCE OF 3/4" FROM MASONRY SHELLS AND WEBS WHERE REINFORCING STEEL IS PLACED IN MASONRY CORES.
- GROUT SHALL BE PLACED IN FIVE (5) FOOT MAXIMUM LIFT HEIGHTS AT FILLED CORES UNLESS HIGH LIFT PROCEDURES ARE FOLLOWED DURING GROUTING.
- DO NOT PLACE BACKFILL AGAINST OR SET STEEL FRAMING ON MASONRY WALLS UNTIL MORTAR AND GROUT HAVE ATTAINED A MINIMUM OF 3/4 OF SPECIFIED DESIGN STRENGTH.

**SEED SCHEDULE AND SPECIFICATIONS:**

**3:1 SLOPES OR FLATTER**

- APPLY AGRICULTURAL LIME AT THE RATE OF 90 LBS/1000 S.F.
- APPLY 10-10-10 COMMERCIAL FERTILIZER AT THE RATE OF 20 LBS/1000 S.F.
- SEED IN ACCORDANCE WITH THE FOLLOWING SCHEDULE AND APPLICATIONS RATES:

	TYPE	PLANTING RATE
AUG.15-APR.15	TALL FESCUE	300 LB/AC. OR 7BL/1000 S.F.
APR.15-JUL.30	MULLED COMMON BERMUDAGRASS	30 LB/AC. OR 1LB/S.F.
JUL.15-AUG.15	TALL FESCUE AND BROWNTOP MILLET OR SORGHUM SUDAN HYBRIDS	300 LB/AC. OR 7 LB/1000 S.F. 35 LB/AC. OR 1 1/2 LB/1000 S.F. 30 LB/AC. OR 3/4 LB/1000 S.F.

- MULCH WITH STRAW APPLIED AT THE RATE OF 75-100 LB/1000 S.F.

**SLOPES GREATER THAN 3:1 TO 2:1 SLOPES**

**STEPS 1 AND 2 SAME AS ABOVE**

- SEED IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

	TYPE	PLANTING RATE
MAR.1-JUN.1 MAR.1-APR.1	SERICEA LESPEDEZA (SCARIFIED) AND ADD TALL FESCUE	50 LB/AC. OR 1 1/2 LB/1000 S.F. 150 LB/AC. OR 3 1/2 LB/1000 S.F.
JUN.1-SEPT.1	TALL FESCUE AND BROWN TOP MILLET	60 LB/AC. OR 1 1/2 LB/1000 S.F. 35 LB/AC. OR 3/4 LB/1000 S.F.
SEPT.1-MAR.1	SERICEA LESPEDEZA (UNHULLED-UNSCARIFIED) AND TALL FESCUE	70 LB/AC. OR 1 1/2 LB/1000 S.F. 150 LB/AC. OR 3 1/2 LB/1000 S.F.

- MULCH WITH 3" STRAW APPLIED AT THE RATE OF 50-90 LB/1000 S.F. ANCHOR WITH ASPHALT EMULSION TACK COAT APPLIED AT THE RATE OF 14-28 GAL/1000 S.F. OR 800-1200 GAL/AC.

**SEED PREPARATION NOTES:**

- SURFACE WATER CONTROL MEASURES TO BE INSTALLED ACCORDING TO PLAN.
- AREAS TO BE SEEDED SHALL BE RIPPED AND SPREAD WITH AVAILABLE TOPSOIL 3" DEEP. TOTAL SEEDBED PREPARATION DEPTH SHALL BE 4" TO 6" DEEP.
- LOOSE ROCKS, ROOTS AND OTHER OBSTRUCTIONS SHALL BE REMOVED FROM THE SURFACE SO THAT THEY WILL NOT INTERFERE WITH ESTABLISHMENT AND MAINTENANCE OF VEGETATION. SURFACE FOR FINAL SEEDBED PREPARATION SHALL BE REASONABLY SMOOTH AND UNIFORM.
- IF NO SOIL TEST IS TAKEN, FERTILIZER AND LIME TO BE ACCORDING TO SEED SPECIFICATIONS ABOVE. ELSE SEED IN ACCORDANCE WITH SOIL TEST REPORT.
- LIME AND FERTILIZER SHALL BE APPLIED UNIFORMLY AND MIXED WITH THE SOIL DURING SEEDBED PREPARATION.
- GRADED SLOPES AND FILLS - THE ANGLE FOR GRADED SLOPES AND FILLS SHALL BE NO GREATER THAN THE ANGLE WHICH CAN BE RETAINED BY VEGETATIVE COVER OR OTHER ADEQUATE EROSION CONTROL DEVICES OR STRUCTURES. IN ANY EVENT, SLOPES LEFT EXPOSED SHALL, WITHIN 30 WORKING DAYS OF COMPLETION OF ANY PHASE OF GRADING, BE PLANTED OR OTHERWISE PROVIDED WITH GROUND COVER, DEVICES OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION.
- GROUND COVER - WHENEVER LAND DISTURBING ACTIVITY IS UNDERTAKEN ON A TRACT OF LAND COMPRISING MORE THAN ONE ACRE, IF MORE THAN ONE CONTIGUOUS ACRE IS UNCOVERED, A GROUND COVER SUFFICIENT TO RESTRAIN EROSION MUST BE PLANTED OR OTHERWISE PROVIDED WITHIN 15 WORKING DAYS ON THAT PORTION OF THE TRACT UPON WHICH FURTHER ACTIVE CONSTRUCTION IS NOT BEING UNDERTAKEN, PROVIDED THAT THIS SUBSECTION (C) SHALL NOT APPLY TO CLEARED LAND FORMING THE BASIN OF A RESERVOIR LATER TO BE INUNDATED.
- ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED DEPENDING ON FIELD CONDITIONS.
- MULCH TO BE TACKED OR MECHANICALLY TIED DOWN WITHIN TWO DAYS AFTER MULCH IS SPREAD.

STABILIZATION TIME FRAMES		
SITE AREA DESCRIPTION	STABILIZATION	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES

**STABILIZATION NOTES:**

- ALL SLOPES STEEPER THAN 3:1 SHALL HAVE EROSION CONTROL MATTING INSTALLED.

- L = ACCESSIBLE LANDING
- SLOPE 1.5% IN ALL DIRECTIONS
- AR = ACCESSIBLE ROUTE
- MAX. 1.5% CROSS SLOPE
- MAX. 4.5% RUNNING SLOPE
- R = ACCESSIBLE RAMP
- MAX. 1.5% CROSS SLOPE
- MAX. 7.5% RUNNING SLOPE
- EX.EP = EXISTING EDGE OF PAVEMENT
- PR.EP = PROPOSED EDGE OF PAVEMENT
- EX.SW = EXISTING SIDEWALK
- PR.SW = PROPOSED SIDEWALK
- FFE = FINISHED FLOOR ELEVATION
- MEE = MATCH EXISTING ELEVATION



**ENGINEERS**

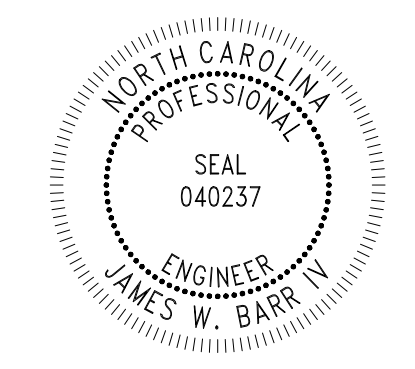
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**SHEET TITLE**

**NOTES**

**DRAWING**

**G-002**



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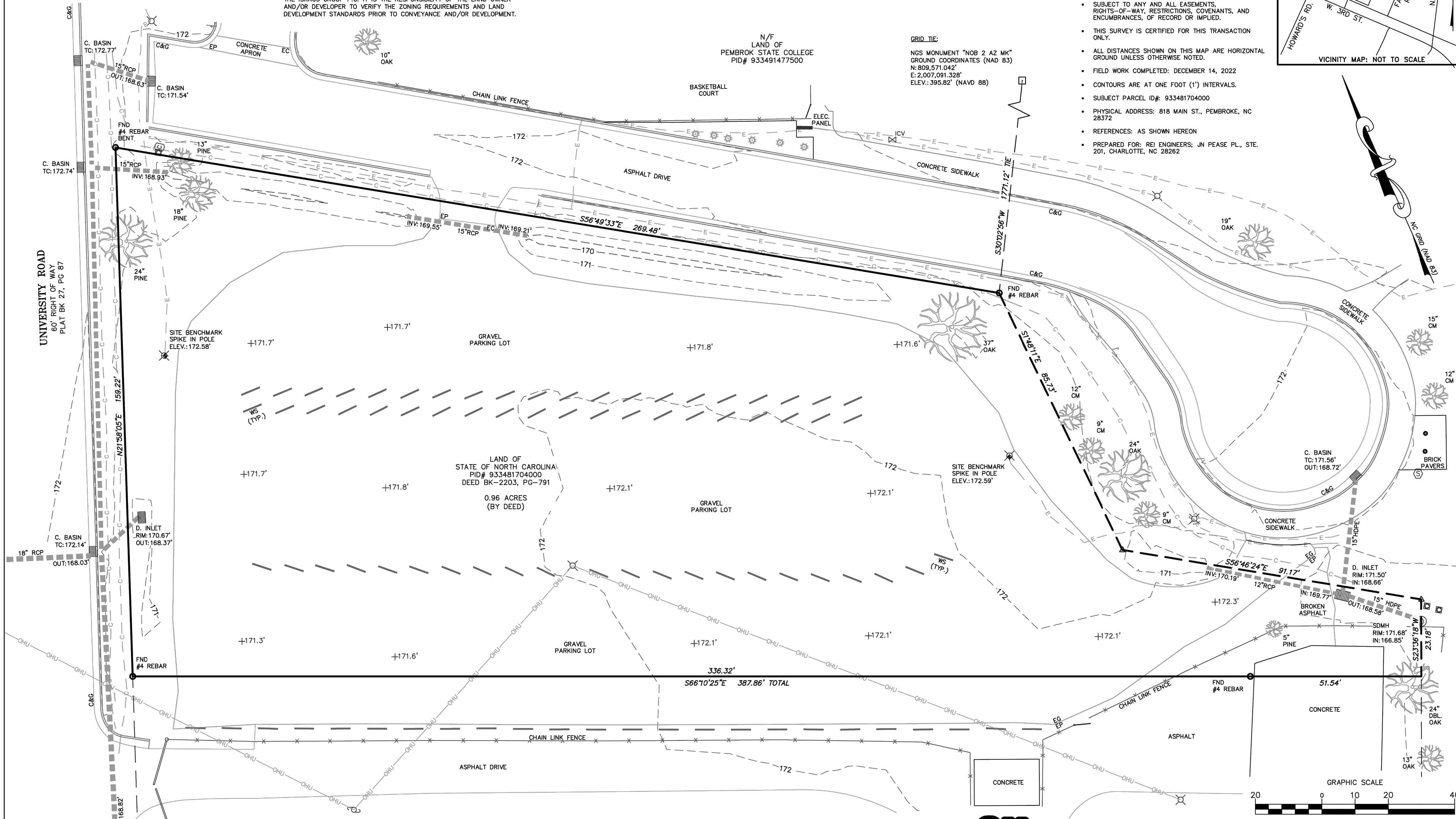
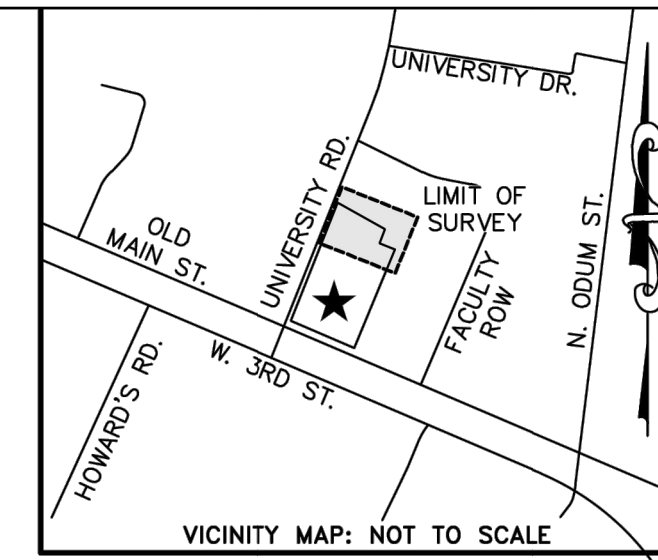
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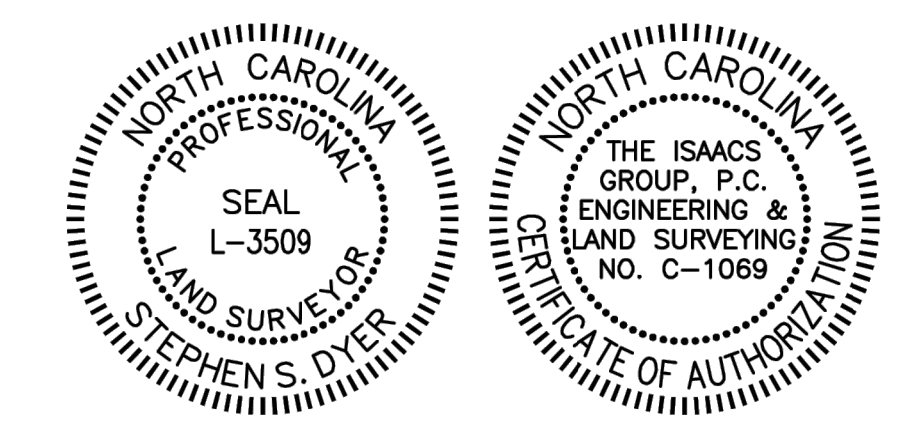
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**GIS STATEMENT:**  
 THE ISAACS GROUP SURVEY DATUM FOR THIS PROJECT:  
 COORDINATE SYSTEM: US STATE PLANE 1983 (2011 HARN ADJUSTMENT)  
 ZONE: NORTH CAROLINA 3200  
 PROJECT DATUM: NAD 1983 (2011 HARN ADJUSTMENT)  
 VERTICAL DATUM: NAVD 88 GEOID MODEL = GEOID 12A (CONUS)  
 COORDINATE UNIT: US SURVEY FEET  
 PROJECT LOCALIZED (GRID TO GROUND): POINT #10001 (AKA #1227)  
 NORTHING: 814328.501' EASTING: 2033205.062' ELEVATION: 733.76'  
 USING A GROUND SCALE FACTOR OF 0.999941900536

- NOTES:**
- NOT A BOUNDARY SURVEY. NOT FOR RECORDATION OR PROPERTY CONVEYANCE. THE SOLE PURPOSE OF THIS MAP IS TO DETECT PLANNING AND TOPOGRAPHIC FEATURES OF THE AREA SHOWN HEREON.
  - A BOUNDARY AND LOCATION SURVEY IS RECOMMENDED PRIOR TO THE COMMENCEMENT OF ALL SITE EARTHWORK, DEMOLITION, OR CONSTRUCTION.
  - NO COMPLETE TITLE SEARCH DONE OR SUPPLIED TO THE ISAACS GROUP.
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  - THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.
  - ALL DISTANCES SHOWN ON THIS MAP ARE HORIZONTAL GROUND UNLESS OTHERWISE NOTED.
  - FIELD WORK COMPLETED: DECEMBER 14, 2022
  - CONTOURS ARE AT ONE FOOT (1') INTERVALS.
  - SUBJECT PARCEL ID#: 933481704000
  - PHYSICAL ADDRESS: 818 MAIN ST., PEMBROKE, NC 28372
  - REFERENCES: AS SHOWN HEREON
  - PREPARED FOR: REI ENGINEERS; JN PEASE PL., STE. 201, CHARLOTTE, NC 28262



- LEGEND:**
- N/F NOW OR FORMERLY
  - R/W RIGHT OF WAY
  - C&G CONCRETE CURB AND GUTTER
  - RCP REINFORCED CONCRETE PIPE
  - SDMH STORM DRAIN MANHOLE
  - HDPE HIGH DENSITY POLYETHYLENE
  - EP EDGE OF PAVEMENT
  - EC EDGE OF CONCRETE
  - EG EDGE OF GRAVEL
  - WS CONCRETE WHEEL STOP
  - CM CRAPE MYRTLE TREE
  - MONUMENTATION FOUND (AS NOTED)
  - CALCULATED POINT
  - PROJECT BENCHMARK
  - COMMUNICATION PEDESTAL
  - COMMUNICATION VAULT
  - UTILITY POLE
  - LIGHT POLE
  - CATCH BASIN
  - DROP INLET
  - STORM DRAIN MANHOLE
  - IRRIGATION CONTROL VALVE
  - CALL BOX/SPEAKER
  - BOLLARD
  - GATE
  - SIGN
  - TREE
  - SHRUB
  - FENCE LINE
  - STORM DRAIN PIPE
  - OVERHEAD UTILITY
  - UNDERGROUND ELECTRIC
  - UNDERGROUND COMMUNICATION



**SURVEYOR'S CERTIFICATE:**  
 I HEREBY CERTIFY THAT THIS PROJECT WAS COMPLETED UNDER MY DIRECT AND RESPONSIBLE CHARGE FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION; THIS MAP IS FOR AS-BUILT INFORMATION ONLY AND IS NOT INTENDED TO BE A BOUNDARY SURVEY. THE ORIGINAL DATA WAS OBTAINED ON 12-14-22; THAT THE SURVEY WAS COMPLETED ON 01-13-23. WITNESS MY ORIGINAL SIGNATURE, REGISTRATION NUMBER AND SEAL.  
 Stephen S. Dyer, PLS  
 2023.01.20  
 09:12:35-0500  
 STEPHEN S. DYER, PLS L-3509

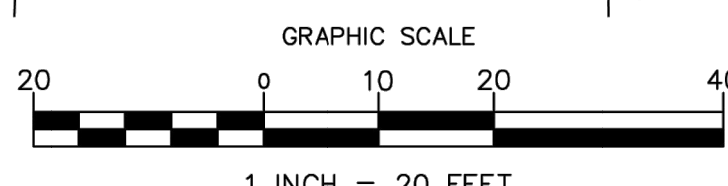


**TOPOGRAPHIC SURVEY**  
**LAND OF STATE OF NORTH CAROLINA**  
**"UNIVERSITY OF NORTH CAROLINA AT PEMBROKE"**  
 PEMBROKE TOWNSHIP  
 ROBESON COUNTY, NORTH CAROLINA

File #: 2223-TOPO Date: 01-13-23 Project P.L.S.: SSD  
 Surveyed By: JDN  
 Drawn By: KCW/CLC  
 Scale: 1"=20'

**ISAACS GROUP**  
 CIVIL ENGINEERING DESIGN AND LAND SURVEYING  
 8720 RED OAK BLVD. SUITE 420  
 CHARLOTTE, N.C. 28217  
 PHONE (704) 527-3440 FAX (704) 527-8335

SHEET 1 OF 1



**A SURVEY**



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PROJECT NAME:  
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**WEST HALL PARKING (LOT 21)**  
**PAVEMENT IMPROVEMENT**

111 UNIVERSITY ROAD  
 PEMBROKE, NC 28372

PROJ. NO:  
**022CLT-296**

REVISIONS:

NO.	DATE	DESCRIPTION
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△	10-11-23	PER OWNER FEEDBACK

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SHEET TITLE

**SURVEY**

DRAWING

**V-101**





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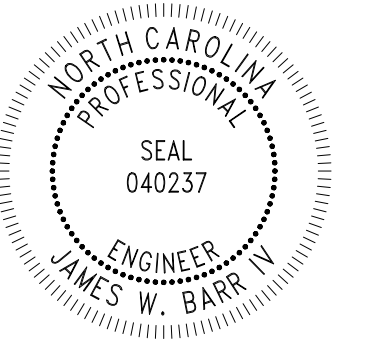
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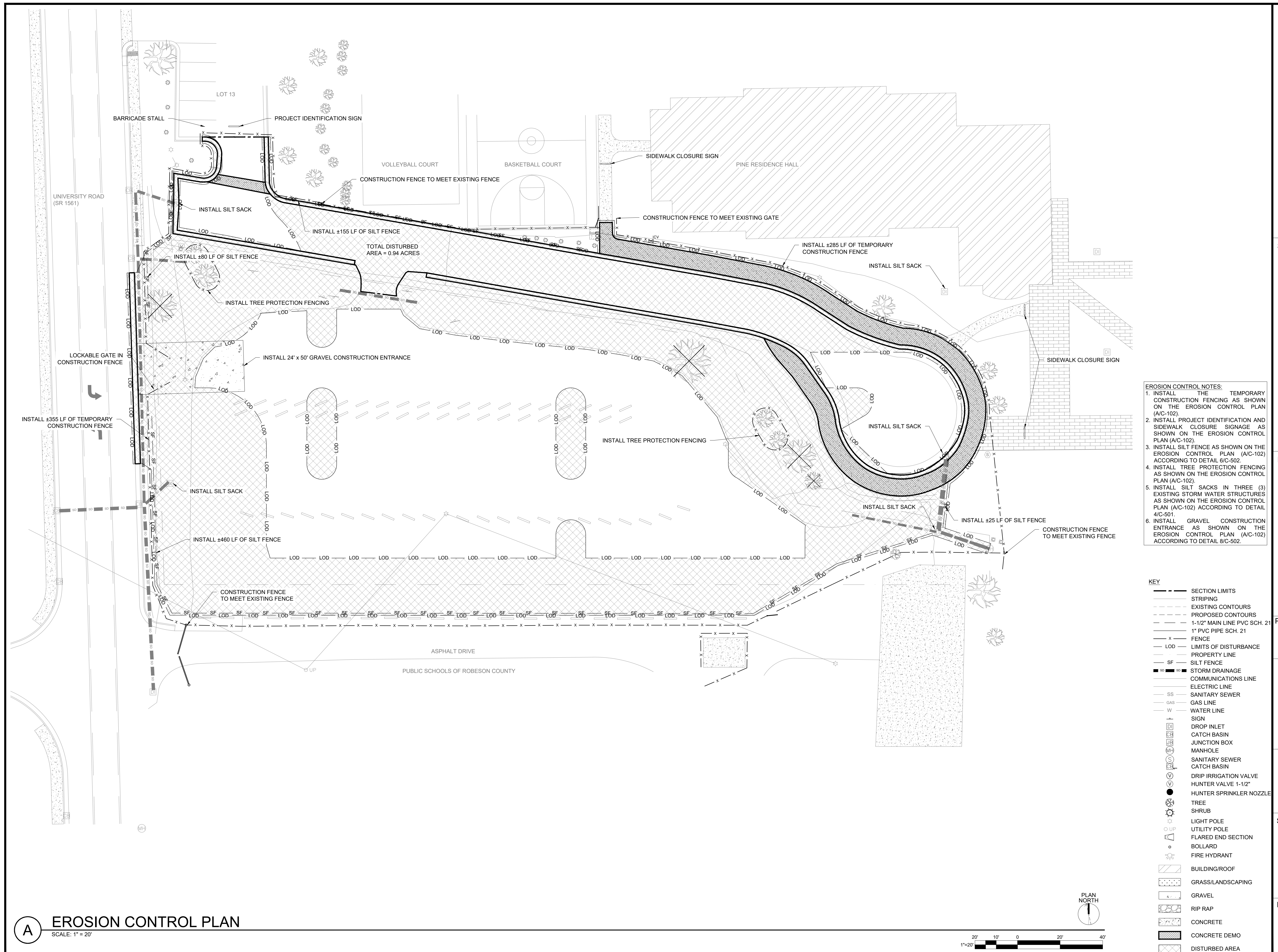
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SHEET TITLE

**EROSION CONTROL  
PLAN**

DRAWING

**C-102**



- EROSION CONTROL NOTES:**
1. INSTALL THE TEMPORARY CONSTRUCTION FENCING AS SHOWN ON THE EROSION CONTROL PLAN (A/C-102).
  2. INSTALL PROJECT IDENTIFICATION AND SIDEWALK CLOSURE SIGNAGE AS SHOWN ON THE EROSION CONTROL PLAN (A/C-102).
  3. INSTALL SILT FENCE AS SHOWN ON THE EROSION CONTROL PLAN (A/C-102) ACCORDING TO DETAIL 6/C-502.
  4. INSTALL TREE PROTECTION FENCING AS SHOWN ON THE EROSION CONTROL PLAN (A/C-102).
  5. INSTALL SILT SACKS IN THREE (3) EXISTING STORM WATER STRUCTURES AS SHOWN ON THE EROSION CONTROL PLAN (A/C-102) ACCORDING TO DETAIL 4/C-501.
  6. INSTALL GRAVEL CONSTRUCTION ENTRANCE AS SHOWN ON THE EROSION CONTROL PLAN (A/C-102) ACCORDING TO DETAIL 8/C-502.

- KEY**
- SECTION LIMITS
  - STRIPING
  - EXISTING CONTOURS
  - PROPOSED CONTOURS
  - 1-1/2" MAIN LINE PVC SCH. 21
  - 1" PVC PIPE SCH. 21
  - FENCE
  - LOD - LIMITS OF DISTURBANCE
  - PROPERTY LINE
  - SF - SILT FENCE
  - STORM DRAINAGE
  - COMMUNICATIONS LINE
  - ELECTRIC LINE
  - SS - SANITARY SEWER
  - GAS LINE
  - W - WATER LINE
  - SIGN
  - DROP INLET
  - CATCH BASIN
  - JUNCTION BOX
  - MANHOLE
  - SANITARY SEWER CATCH BASIN
  - DRIP IRRIGATION VALVE
  - HUNTER VALVE 1-1/2"
  - HUNTER SPRINKLER NOZZLE
  - TREE
  - SHRUB
  - LIGHT POLE
  - UTILITY POLE
  - FLARED END SECTION
  - BOLLARD
  - FIRE HYDRANT
  - BUILDING/ROOF
  - GRASS/LANDSCAPING
  - GRAVEL
  - RIP RAP
  - CONCRETE
  - CONCRETE DEMO
  - DISTURBED AREA



**A** EROSION CONTROL PLAN  
SCALE: 1" = 20'



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PAVEMENT IMPROVEMENT

111 UNIVERSITY ROAD  
PEMBROKE, NC 28372

PROJ. NO:

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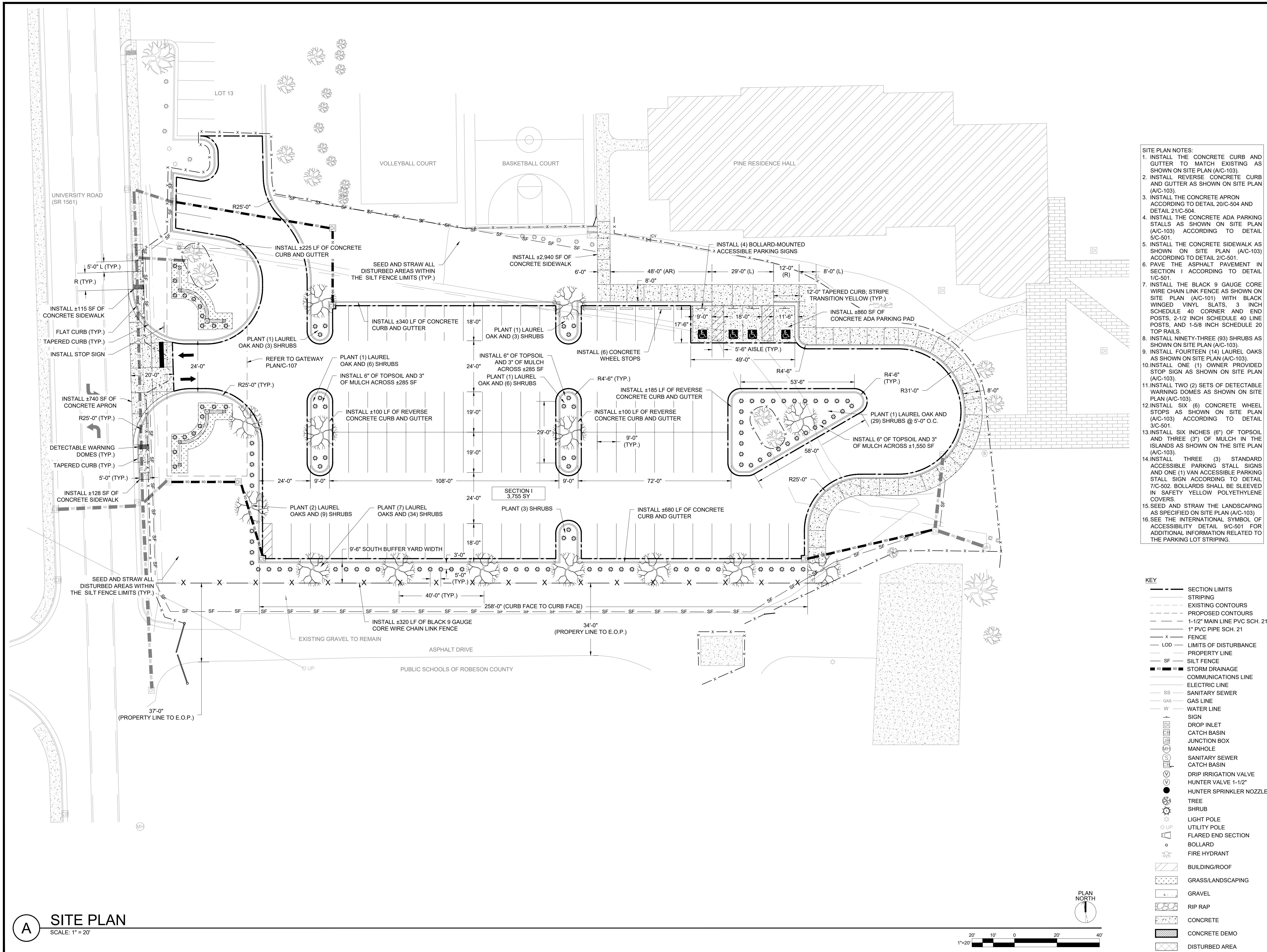
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SHEET TITLE

SITE PLAN

DRAWING

C-103

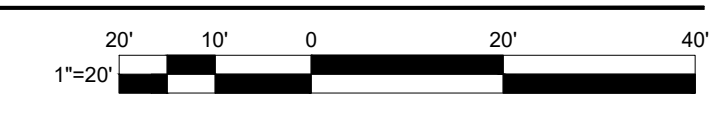


- SITE PLAN NOTES:**
- INSTALL THE CONCRETE CURB AND GUTTER TO MATCH EXISTING AS SHOWN ON SITE PLAN (A/C-103).
  - INSTALL REVERSE CONCRETE CURB AND GUTTER AS SHOWN ON SITE PLAN (A/C-103).
  - INSTALL THE CONCRETE APRON ACCORDING TO DETAIL 20/C-504 AND DETAIL 21/C-504.
  - INSTALL THE CONCRETE ADA PARKING STALLS AS SHOWN ON SITE PLAN (A/C-103) ACCORDING TO DETAIL 5/C-501.
  - INSTALL THE CONCRETE SIDEWALK AS SHOWN ON SITE PLAN (A/C-103) ACCORDING TO DETAIL 2/C-501.
  - PAVE THE ASPHALT PAVEMENT IN SECTION I ACCORDING TO DETAIL 1/C-501.
  - INSTALL THE BLACK 9 GAUGE CORE WIRE CHAIN LINK FENCE AS SHOWN ON SITE PLAN (A/C-101) WITH BLACK WINGED VINYL SLATS, 3 INCH SCHEDULE 40 CORNER AND END POSTS, 2-1/2 INCH SCHEDULE 40 LINE POSTS, AND 1-5/8 INCH SCHEDULE 20 TOP RAILS.
  - INSTALL NINETY-THREE (93) SHRUBS AS SHOWN ON SITE PLAN (A/C-103).
  - INSTALL FOURTEEN (14) LAUREL OAKS AS SHOWN ON SITE PLAN (A/C-103).
  - INSTALL ONE (1) OWNER PROVIDED STOP SIGN AS SHOWN ON SITE PLAN (A/C-103).
  - INSTALL TWO (2) SETS OF DETECTABLE WARNING DOMES AS SHOWN ON SITE PLAN (A/C-103).
  - INSTALL SIX (6) CONCRETE WHEEL STOPS AS SHOWN ON SITE PLAN (A/C-103) ACCORDING TO DETAIL 3/C-501.
  - INSTALL SIX INCHES (6") OF TOPSOIL AND THREE (3") OF MULCH IN THE ISLANDS AS SHOWN ON THE SITE PLAN (A/C-103).
  - INSTALL THREE (3) STANDARD ACCESSIBLE PARKING STALL SIGNS AND ONE (1) VAN ACCESSIBLE PARKING STALL SIGN ACCORDING TO DETAIL 7/C-502. BOLLARDS SHALL BE SLEEVED IN SAFETY YELLOW POLYETHYLENE COVERS.
  - SEED AND STRAW THE LANDSCAPING AS SPECIFIED ON SITE PLAN (A/C-103).
  - SEE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY DETAIL 9/C-501 FOR ADDITIONAL INFORMATION RELATED TO THE PARKING LOT STRIPING.

**KEY**

- SECTION LIMITS
- STRIPING
- EXISTING CONTOURS
- PROPOSED CONTOURS
- 1-1/2" MAIN LINE PVC SCH. 21
- 1" PVC PIPE SCH. 21
- X- FENCE
- LOD- LIMITS OF DISTURBANCE
- P- PROPERTY LINE
- SF- SILT FENCE
- STORM DRAINAGE
- COMMUNICATIONS LINE
- ELECTRIC LINE
- SS- SANITARY SEWER
- GAS- GAS LINE
- W- WATER LINE
- SIGN
- DROP INLET
- CATCH BASIN
- JUNCTION BOX
- MANHOLE
- SANITARY SEWER CATCH BASIN
- DRIP IRRIGATION VALVE
- HUNTER VALVE 1-1/2"
- HUNTER SPRINKLER NOZZLE
- TREE
- SHRUB
- LIGHT POLE
- UTILITY POLE
- FLARED END SECTION
- BOLLARD
- FIRE HYDRANT
- BUILDING/ROOF
- GRASS/LANDSCAPING
- GRAVEL
- RIP RAP
- CONCRETE
- CONCRETE DEMO
- DISTURBED AREA

**A** SITE PLAN  
SCALE: 1" = 20'





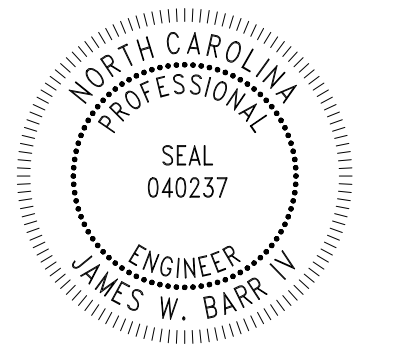
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PAVEMENT IMPROVEMENT

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PEMBROKE, NC 28372

PROJ. NO:

022CLT-296

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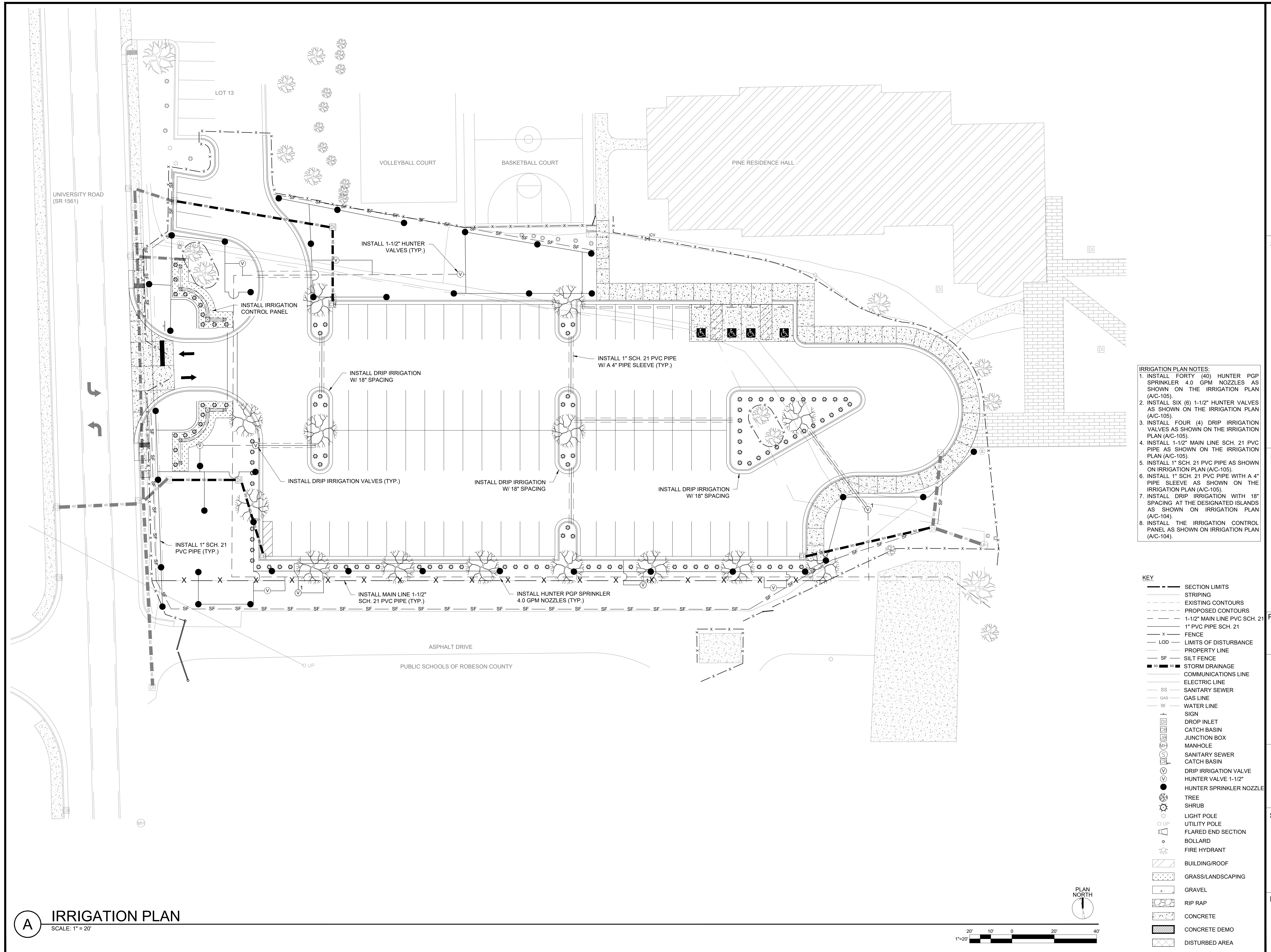
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SHEET TITLE

IRRIGATION  
PLAN

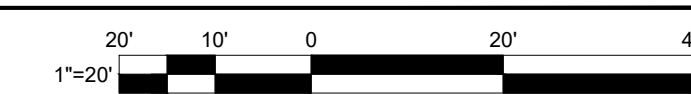
DRAWING

C-104



- IRRIGATION PLAN NOTES:**
1. INSTALL FORTY (40) HUNTER PGP SPRINKLER 4.0 GPM NOZZLES AS SHOWN ON THE IRRIGATION PLAN (A/C-105).
  2. INSTALL SIX (6) 1-1/2" HUNTER VALVES AS SHOWN ON THE IRRIGATION PLAN (A/C-105).
  3. INSTALL FOUR (4) DRIP IRRIGATION VALVES AS SHOWN ON THE IRRIGATION PLAN (A/C-105).
  4. INSTALL 1-1/2" MAIN LINE SCH. 21 PVC PIPE AS SHOWN ON THE IRRIGATION PLAN (A/C-105).
  5. INSTALL 1" SCH. 21 PVC PIPE AS SHOWN ON IRRIGATION PLAN (A/C-105).
  6. INSTALL 1" SCH. 21 PVC PIPE WITH A 4" PIPE SLEEVE AS SHOWN ON THE IRRIGATION PLAN (A/C-105).
  7. INSTALL DRIP IRRIGATION WITH 18" SPACING AT THE DESIGNATED ISLANDS AS SHOWN ON IRRIGATION PLAN (A/C-104).
  8. INSTALL THE IRRIGATION CONTROL PANEL AS SHOWN ON IRRIGATION PLAN (A/C-104).

- KEY**
- SECTION LIMITS
  - STRIPING
  - EXISTING CONTOURS
  - PROPOSED CONTOURS
  - 1-1/2" MAIN LINE PVC SCH. 21
  - 1" PVC PIPE SCH. 21
  - X- FENCE
  - LOD- LIMITS OF DISTURBANCE
  - - - PROPERTY LINE
  - SF- SILT FENCE
  - STORM DRAINAGE
  - COMMUNICATIONS LINE
  - ELECTRIC LINE
  - SS SANITARY SEWER
  - GAS GAS LINE
  - W WATER LINE
  - SIGN
  - DROP INLET
  - CATCH BASIN
  - JUNCTION BOX
  - MANHOLE
  - SANITARY SEWER CATCH BASIN
  - DRIP IRRIGATION VALVE
  - HUNTER VALVE 1-1/2"
  - HUNTER SPRINKLER NOZZLE
  - TREE
  - SHRUB
  - LIGHT POLE
  - UTILITY POLE
  - FLARED END SECTION
  - BOLLARD
  - FIRE HYDRANT
  - ▨ BUILDING/ROOF
  - ▨ GRASS/LANDSCAPING
  - ▨ GRAVEL
  - ▨ RIP RAP
  - ▨ CONCRETE
  - ▨ CONCRETE DEMO
  - ▨ DISTURBED AREA



**A** IRRIGATION PLAN  
SCALE: 1" = 20'





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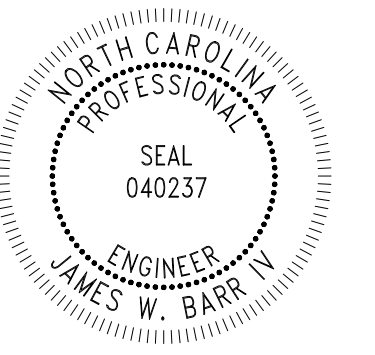
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PAVEMENT IMPROVEMENT**

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PEMBROKE, NC 28372

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3	03-27-24	ADDENDUM NO. 2
4	03-29-24	ADDENDUM NO. 3

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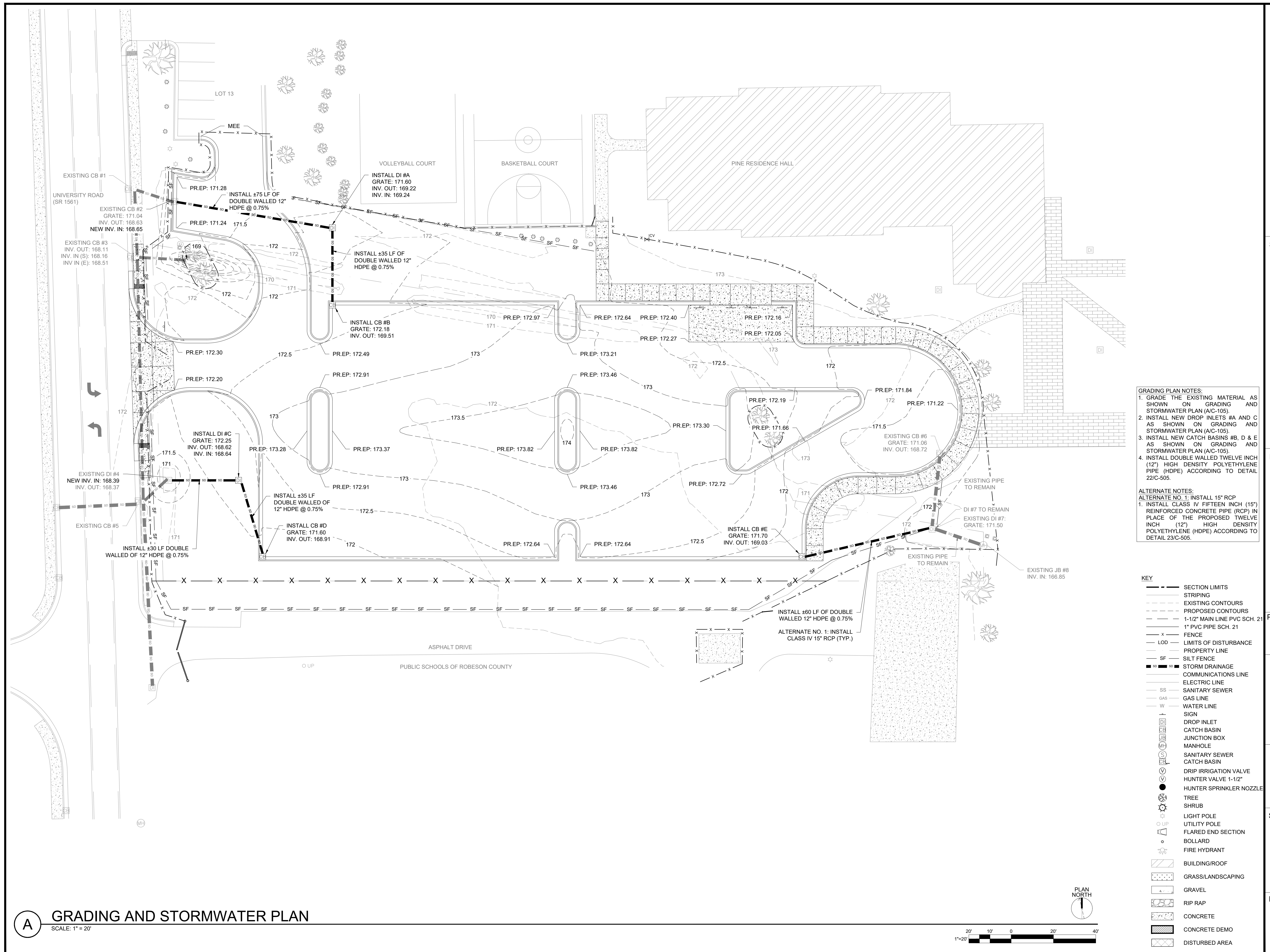
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SHEET TITLE

**GRADING AND  
STORMWATER PLAN**

DRAWING

**C-105**



**A GRADING AND STORMWATER PLAN**  
SCALE: 1" = 20'



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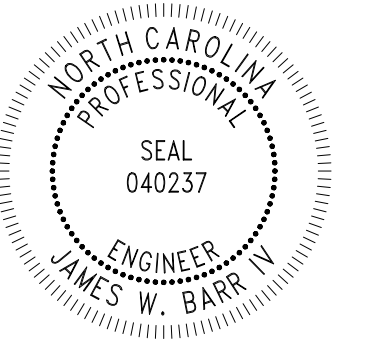
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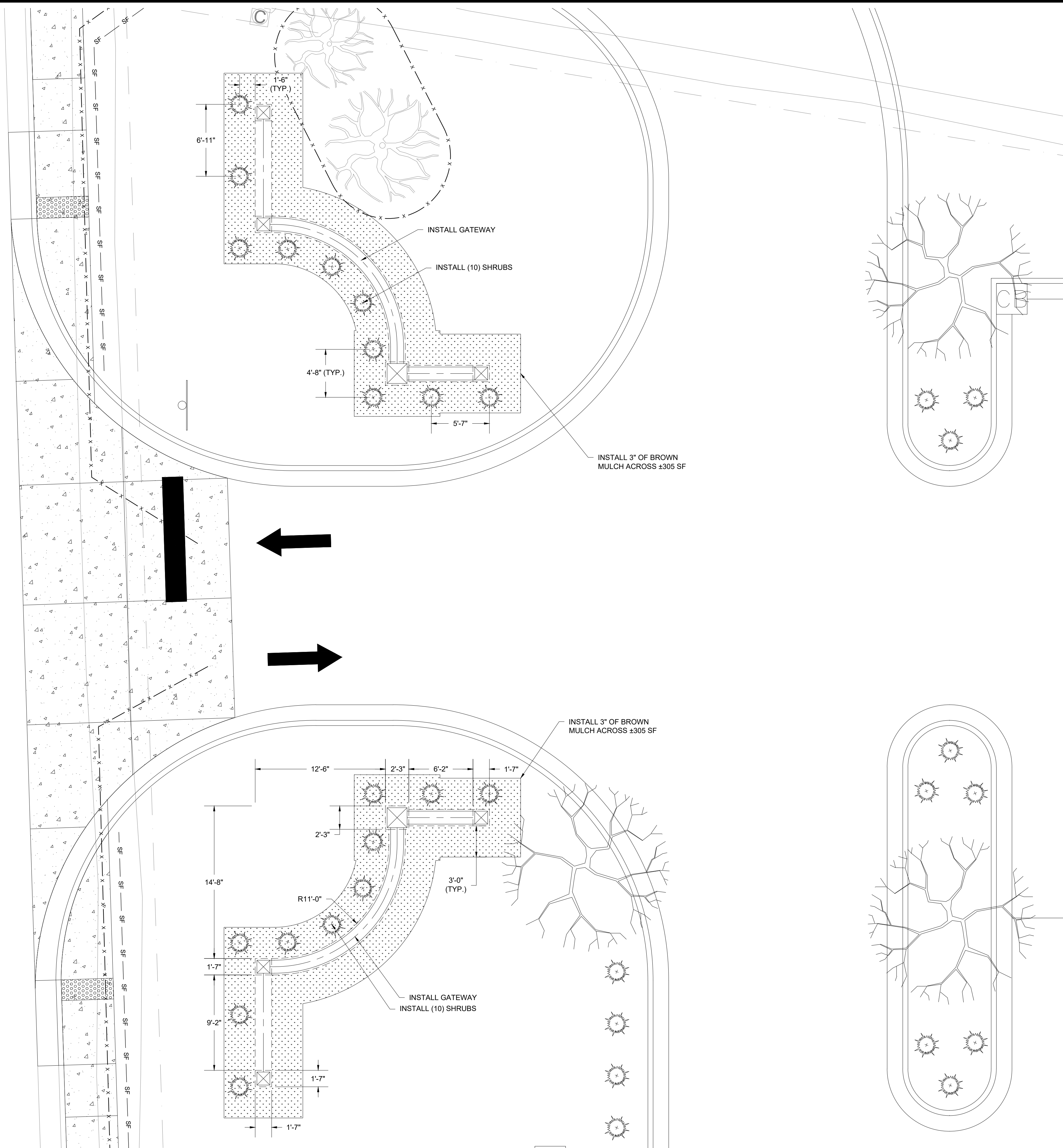
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SHEET TITLE

GATEWAY PLAN

DRAWING

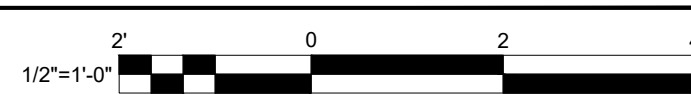
C-106



- GATEWAY NOTES:**
1. INSTALL THE GATEWAY AS SHOWN ON THE GATEWAY PLAN (A/C-107) AND THE GATEWAY ELEVATION PLAN (A/C-201) ACCORDING TO THE STRUCTURAL DETAILS SHEET C-503.
  2. INSTALL THREE INCHES (3") OF BROWN MULCH AS SHOWN ON GATEWAY PLAN (A/C-107).
  3. INSTALL TWENTY (20) SHRUBS AS SHOWN ON GATEWAY PLAN (A/C-107).

**KEY**

---	SECTION LIMITS
---	STRIPING
---	EXISTING CONTOURS
---	PROPOSED CONTOURS
---	1-1/2" MAIN LINE PVC SCH. 21
---	1" PVC PIPE SCH. 21
-x-	FENCE
-LOD-	LIMITS OF DISTURBANCE
-P-	PROPERTY LINE
-SF-	SILT FENCE
■	STORM DRAINAGE
■	COMMUNICATIONS LINE
---	ELECTRIC LINE
SS	SANITARY SEWER
GAS	GAS LINE
W	WATER LINE
+	SIGN
+	DROP INLET
+	CATCH BASIN
+	JUNCTION BOX
+	MANHOLE
+	SANITARY SEWER CATCH BASIN
+	DRIP IRRIGATION VALVE
+	HUNTER VALVE 1-1/2"
+	HUNTER SPRINKLER NOZZLE
+	TREE
+	SHRUB
+	LIGHT POLE
+	UTILITY POLE
+	FLARED END SECTION
+	BOLLARD
+	FIRE HYDRANT
+	BUILDING/ROOF
+	GRASS/LANDSCAPING
+	GRAVEL
+	RIP RAP
+	CONCRETE
+	CONCRETE DEMO
+	DISTURBED AREA



**A** GATEWAY PLAN  
SCALE: 1/2" = 1'-0"



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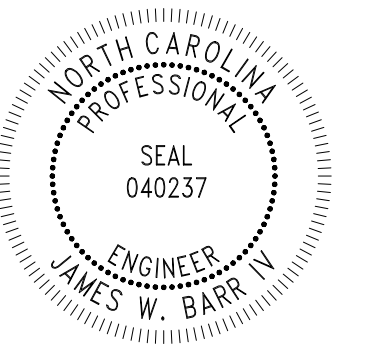
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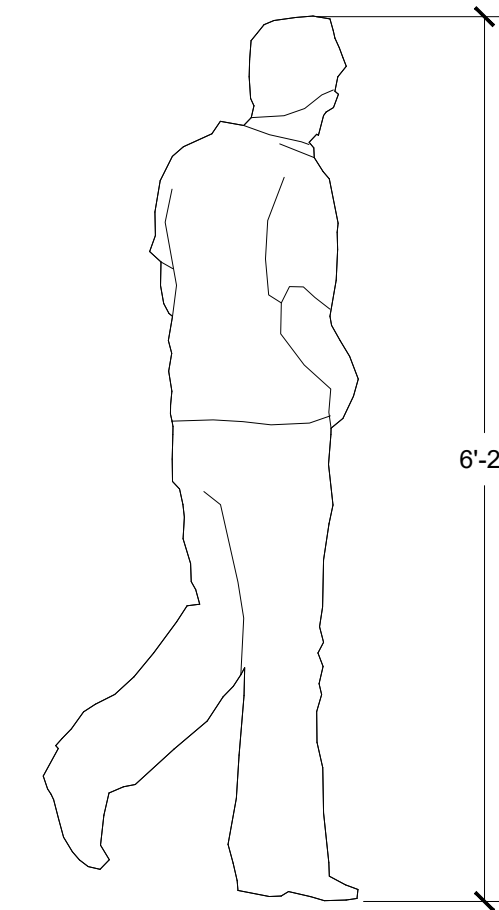
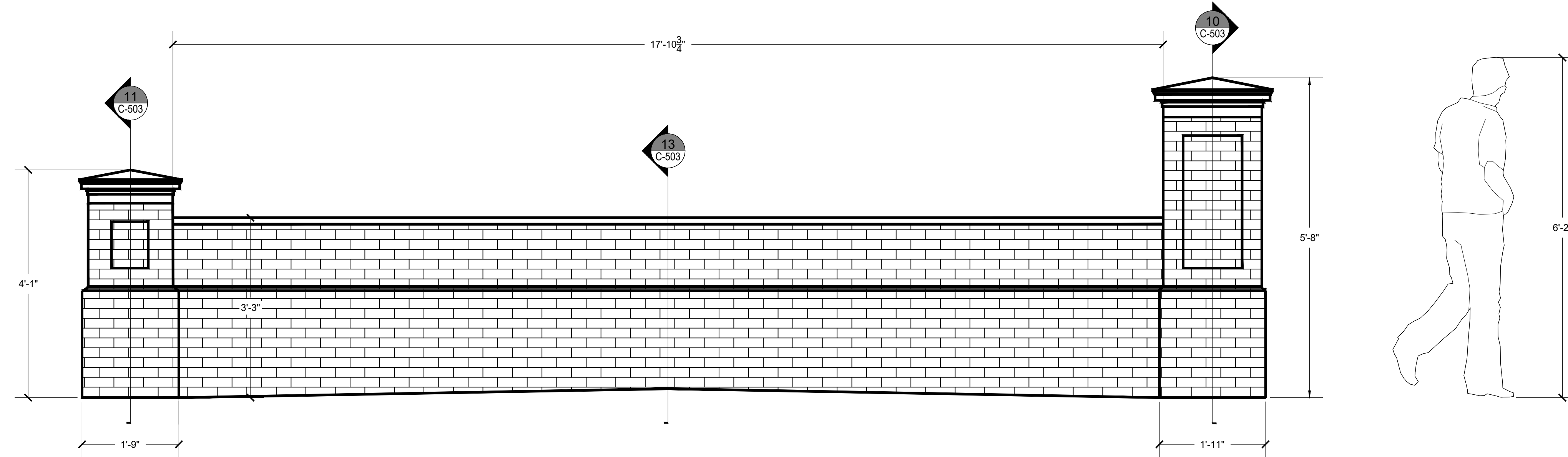
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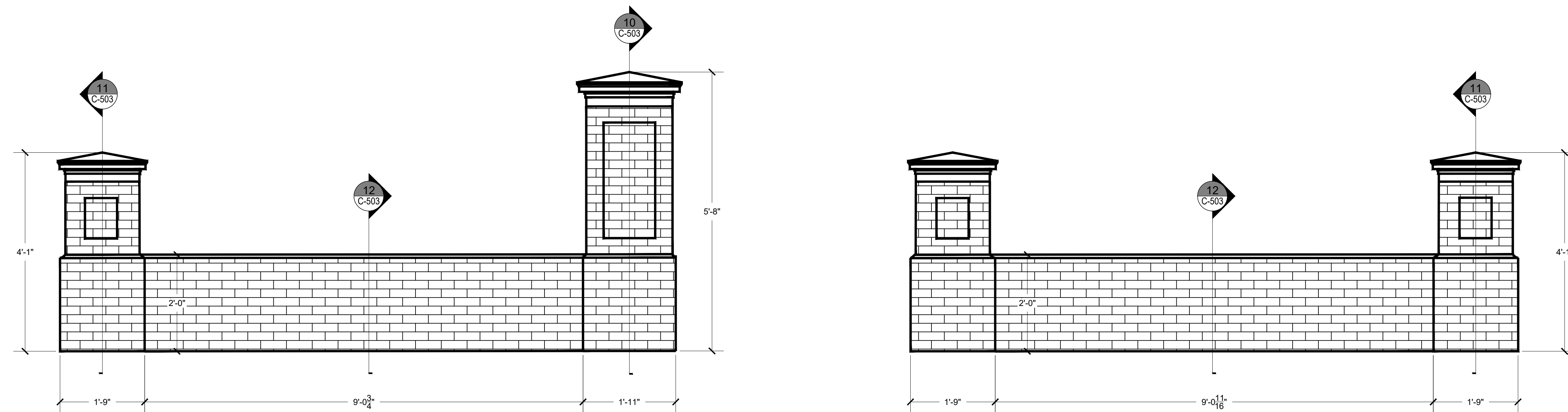
GATEWAY  
ELEVATION

DRAWING

C-201



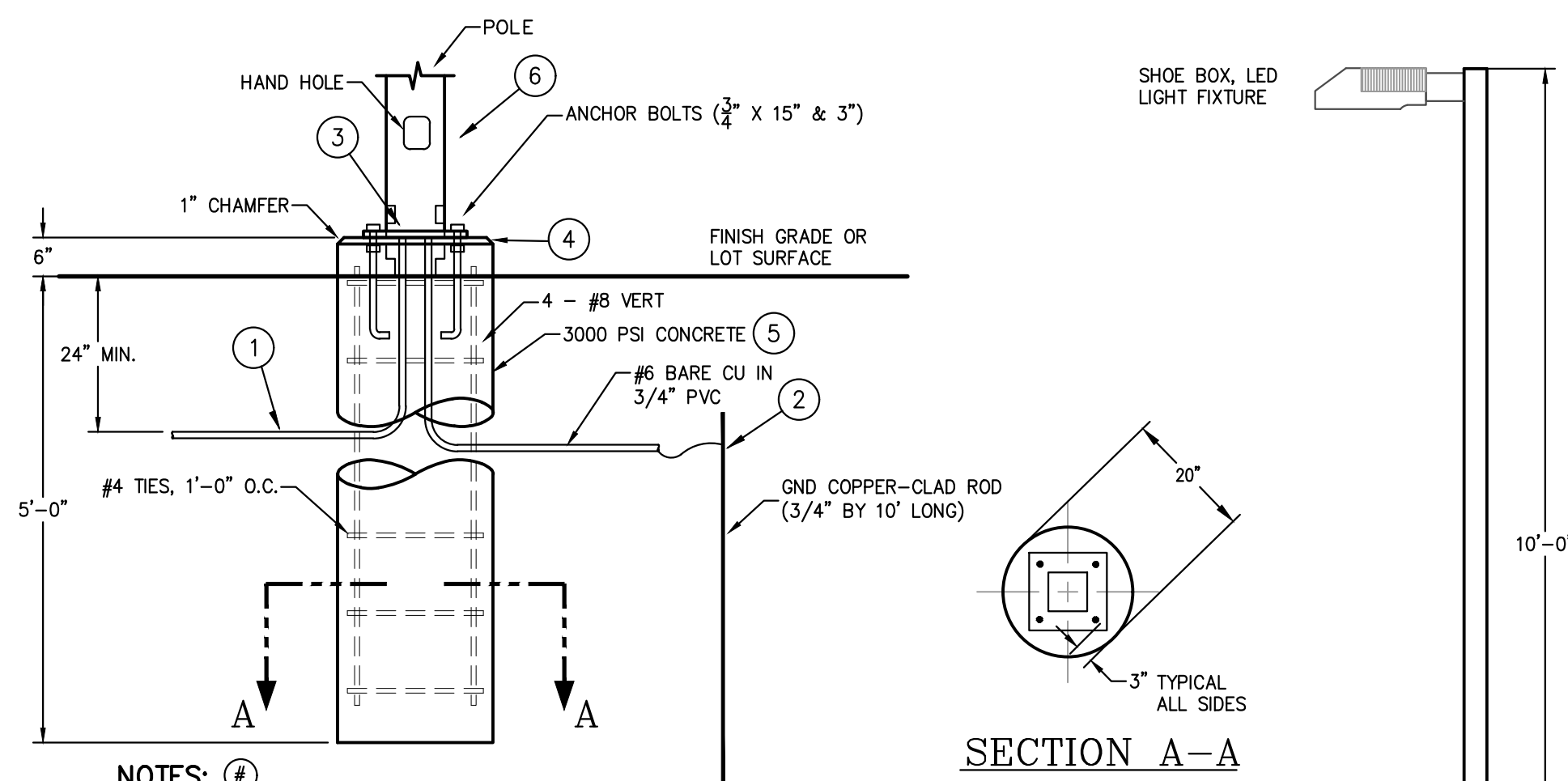
**A** GATEWAY ELEVATION [CURVED WALL]  
SCALE: 1/2" = 1'-0"



**B** GATEWAY ELEVATION [LARGE COLUMN]  
SCALE: 1/2" = 1'-0"

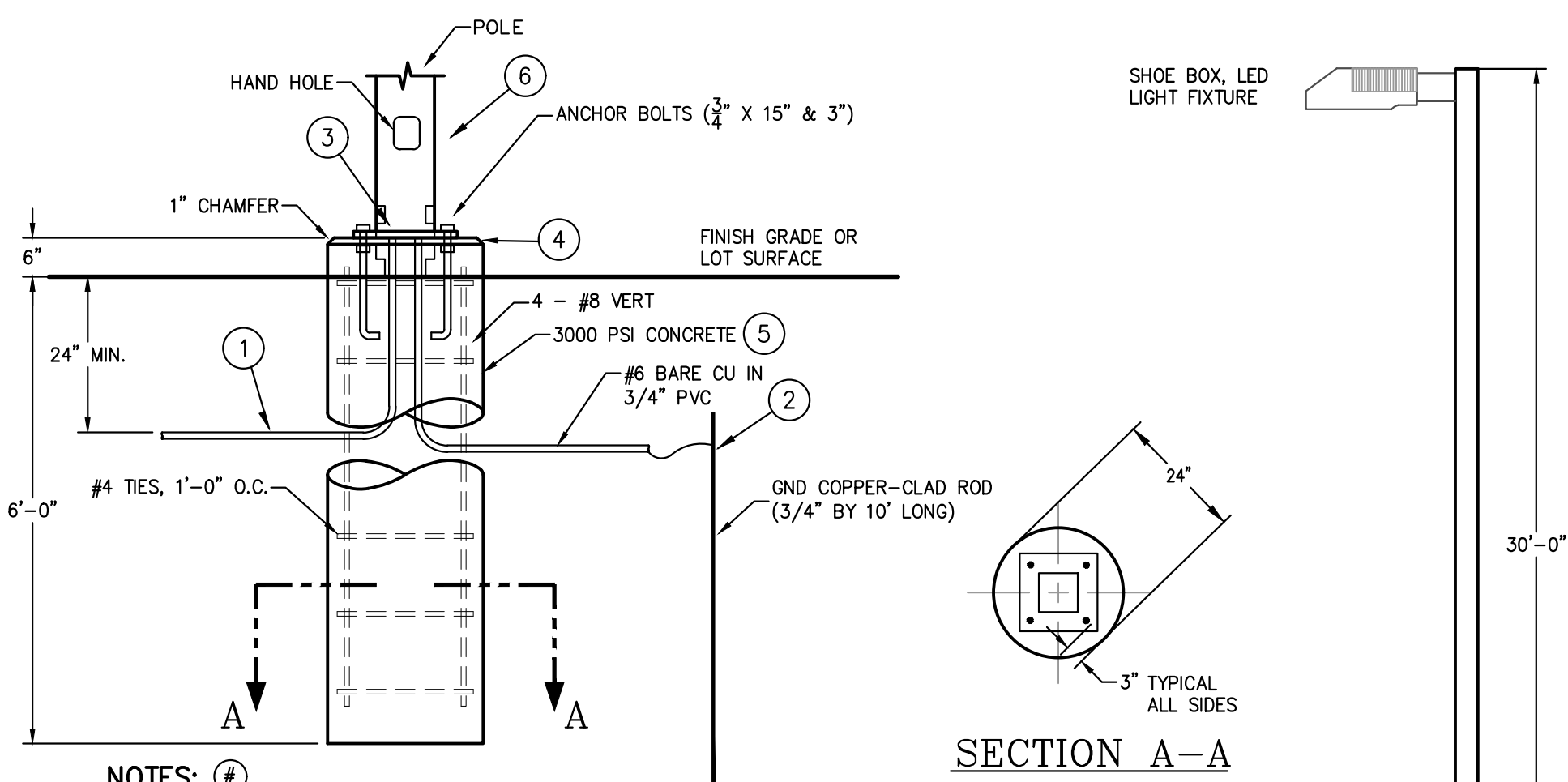
**C** GATEWAY ELEVATION [SMALL COLUMN]  
SCALE: 1/2" = 1'-0"





- NOTES: (A)**
- CONDUIT RUN(S) AS SHOWN ON SITE LIGHTING PLAN.
  - BOND GROUNDING ELECTRODE CONDUCTOR TO ROD USING CLAMP LISTED FOR DIRECT BURIAL.
  - BOND GROUNDING ELECTRODE CONDUCTOR & CIRCUIT GROUNDING CONDUCTOR TO POLE BASE.
  - GROUT AROUND POLE BASE. PROVIDE BOLT/NUT COVERS TO MATCH POLE COLOR & CONSTRUCTION.
  - PROVIDE TEMPORARY FORM TO MATCH INDICATED DIAMETER. AFTER FORM REMOVAL FINISH TO LEAVE SURFACE WITHOUT VOIDS OR BLEMISH.
  - CENTER POLE ON CONCRETE BASE. BOLT PATTERN IS TO MATCH POLE BASE. ORIENT POLE BASE SUCH THAT FLAT SIDE OF POLE BASE IS PARALLEL TO CURB LINE.
  - CONTRACTOR TO VERIFY POLE BASE DIMENSIONS AND MOUNTING REQUIREMENTS BEFORE CONSTRUCTING CONCRETE BASE.

**1** 10' Light Pole Detail  
E-100 SCALE: NONE



- NOTES: (B)**
- CONDUIT RUN(S) AS SHOWN ON SITE LIGHTING PLAN.
  - BOND GROUNDING ELECTRODE CONDUCTOR TO ROD USING CLAMP LISTED FOR DIRECT BURIAL.
  - BOND GROUNDING ELECTRODE CONDUCTOR & CIRCUIT GROUNDING CONDUCTOR TO POLE BASE.
  - GROUT AROUND POLE BASE. PROVIDE BOLT/NUT COVERS TO MATCH POLE COLOR & CONSTRUCTION.
  - PROVIDE TEMPORARY FORM TO MATCH INDICATED DIAMETER. AFTER FORM REMOVAL FINISH TO LEAVE SURFACE WITHOUT VOIDS OR BLEMISH.
  - CENTER POLE ON CONCRETE BASE. BOLT PATTERN IS TO MATCH POLE BASE. ORIENT POLE BASE SUCH THAT FLAT SIDE OF POLE BASE IS PARALLEL TO CURB LINE.
  - CONTRACTOR TO VERIFY POLE BASE DIMENSIONS AND MOUNTING REQUIREMENTS BEFORE CONSTRUCTING CONCRETE BASE.
  - WHERE POLES ARE DESIGNATED AS A CAMERA LOCATION PROVIDE A 1" CONDUIT FOR POWER AND A 1-1/2" CONDUIT FOR COMMUNICATIONS. COMMUNICATIONS CONDUIT ROUGH-IN FOR FUTURE EQUIPMENT SHALL BE COMPLETE WITH PULL STRING FROM HANDHOLE AS INDICATED ON SITE PLAN. CONDUIT TO BE STUBBED THROUGH POLE FOUNDATION THROUGH POLE TO CABINET LOCATION. DRILL POLE TO PROVIDE WHIP INTO POLE. COORDINATE WITH POLE MOUNTING PLATE AND OWNER. PROVIDE A WET LOCATION JUNCTION BOX FOR CONDUIT TERMINATION AND SECURE TO BASE OF POLE. EXTEND CONDUITS AND POWER CIRCUIT TO OWNER PROVIDED CONTROL PANEL TO BE MOUNTED ON POLE.

**2** 30' Light Pole Detail  
E-100 SCALE: NONE

ELECTRICAL SYMBOLS	
SYMBOL	DESCRIPTION
A-15	NEW HOMERUN (EX. PANEL 'A', CIRCUIT 15)
—	NEW POWER OR LIGHTING CIRCUIT
□	POWER PANEL - SEE PLANS AND SCHEDULES FOR DETAILS
○	10' LIGHT POLE
○	30' LIGHT POLE
☒	12"x10"x5" WEATHERPROOF BOX FOR OWNER-PROVIDED EQUIPMENT. L-COM NB121005-10F OR EQUAL BY AXIS OR HAMMOND.



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License: C-1813

PROJECT NAME:  
**UNIVERSITY OF NORTH  
CAROLINA AT PEMBROKE  
WEST HALL PARKING (LOT 21)  
PAVEMENT IMPROVEMENT**

111 UNIVERSITY ROAD  
PEMBROKE, NC 28372

PROJ. NO:  
**022CLT-296**

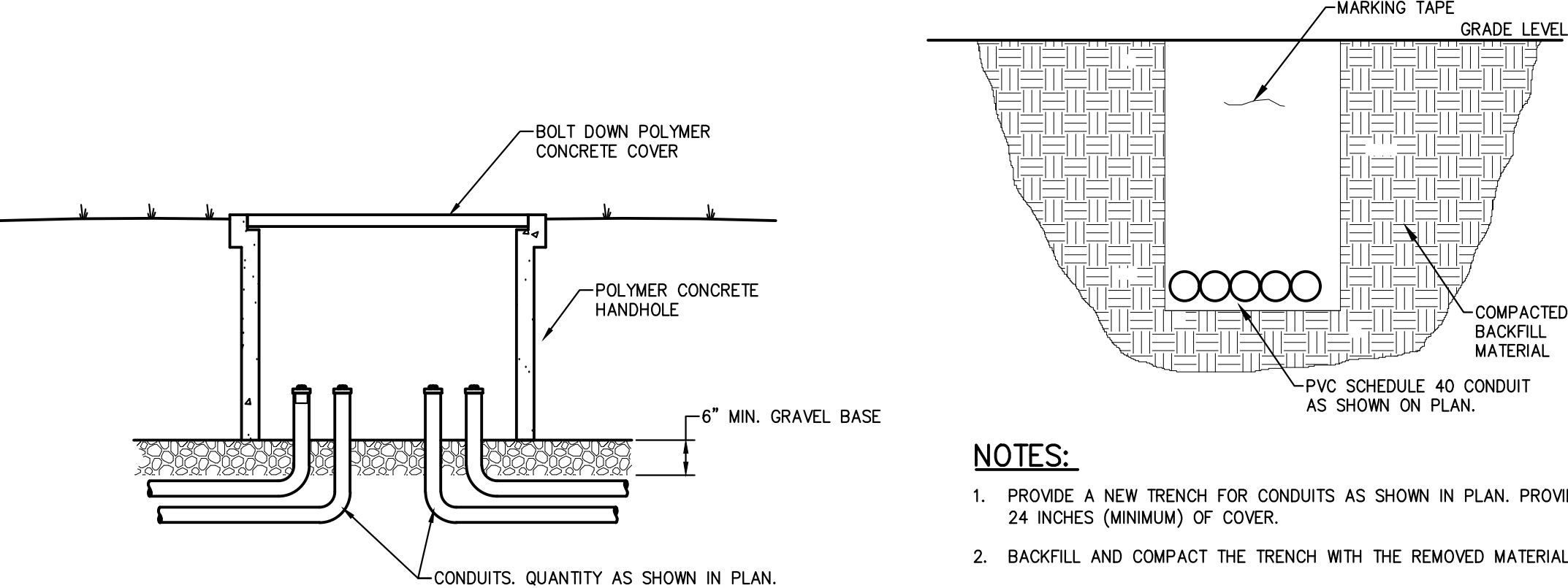
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PLANS FOR SCO REVIEW**

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SHEET TITLE  
**ELECTRICAL  
DETAILS &  
SPECIFICATIONS**

DRAWING  
**E-100**

EXISTING PANEL '1X'																		
NOTES	CKT	LOAD	DESCRIPTION	COND	EGC	N	W	CB	LOAD	CB	W	N	EGC	COND	DESCRIPTION	LOAD	CKT	NOTES
	1	400	BASKETBALL LTS	EX	EX	EX	EX	2P	900	20	10	10	10	3/4"	LOT 21 LTS	500	2	1
	3	400	*	EX	EX	EX	EX	2P	900	2P	10	-	-	-	*	500	4	
	5	1100	LOT 13 LTS	EX	EX	EX	EX	20	1300	20	10	10	10	3/4"	P. LOT CAMERAS	200	6	1
	7	1100	*	EX	EX	EX	EX	2P	1300	20	12	12	12	3/4"	IRRIGATION PNL	200	8	1
	9	200	VOLLEYBALL	EX	EX	EX	EX	2P	200						SPACE	10		
	11	200		EX	EX	EX	EX	2P							SPACE	12		
	13	500	EMERG AIR HORN	EX	EX	EX	EX	20	500						SPACE	14		
	15	180	DUPLEX RECEP	EX	EX	EX	EX	20	180						SPACE	16		
	17	500	IRRIGATION SYSTEM	EX	EX	EX	EX	20	500						SPACE	18		
	1	19	440 SIDEWALK LTS	3/4"	10	10	10	2P	440						SPACE	20		
	21	440	*	-	10	-	-	2P	440						SPACE	22		
	23		SPACE						0						SPACE	24		
208Y/ 120 VOLTS 3 PHASE 60 BUS AMPS N/A MLO 60 FEEDER AMPS 60 MCB AMPS X MCB															4 WIRE SURFACE MOUNT X GROUND BAR NEMA 1 SE RATED 10K A/C MINIMUM			
<b>NOTES:</b> 1 PROVIDE NEW NEW BREAKER IN EXISTING SPACE 2 PANEL FED DIRECTLY FROM EXISTING UTILITY TRANSFORMER 3 EXISTING PANEL IS SQUARE D NQDD 4 5															AMPS PHASE TOTALS: KVA 26.17 PHASE A: 3.14 14.33 PHASE B: 1.72 16.67 PHASE C: 2.00 19.06 TOTAL CONNECTED 6.86 22.72 TOTAL DEMAND * 8.18			



- NOTES:**
- PROVIDE A NEW TRENCH FOR CONDUITS AS SHOWN IN PLAN. PROVIDE 24 INCHES (MINIMUM) OF COVER.
  - BACKFILL AND COMPACT THE TRENCH WITH THE REMOVED MATERIAL.
  - PROVIDE MARKING TAPE 8-12" BELOW GRADE LEVEL TO WARN OF THE ELECTRIC POWER OR COMMUNICATIONS UTILITIES BELOW AS APPLICABLE.

**4** Branch Circuit Trench Detail  
E-100 SCALE: NONE

- NOTES:**
- HANDHOLE AND COVER TO BE PRECAST POLYMER CONCRETE.
  - HANDHOLE AND COVER TO BE UL LISTED.
  - COVER SHALL BE BOLT DOWN TYPE PROVIDED WITH TAMPER PROOF STAINLESS STEEL HARDWARE.
  - GRAVEL BASE SHALL BE TAMPED DOWN WITH COMPACTING DEVICE AND SHALL BE 6" THICK MINIMUM AFTER COMPACTION.
  - TOP OF HANDHOLE SHALL BE LEVEL WITH GRADE.
  - BACKFILL AROUND HANDHOLE WITH COVER IN PLACE.
  - TAMP BACKFILL AND RESTORE AREA AROUND HANDHOLE TO ORIGINAL CONDITION.
  - UTILIZE LONG RADIUS FIELD BENDS OR SWEEPS.

**HANDHOLE SCHEDULE:**  
 H 11"x18"x18", OPEN BOTTOM, POLYMER CONCRETE HANDHOLE EQUAL TO QUAZITE MODEL #PG118BA18 WITH COVER MODEL #G118HA00-42 ("TELECOM") OR EQUAL BY OLDCASTLE OR JH AMERICAN. ANSI LOAD RATING TIER 15 COVER.

**3** Handhole Installation Detail  
E-100 SCALE: NONE



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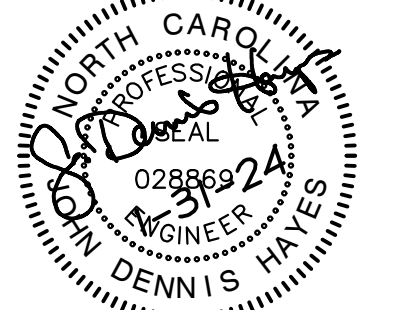
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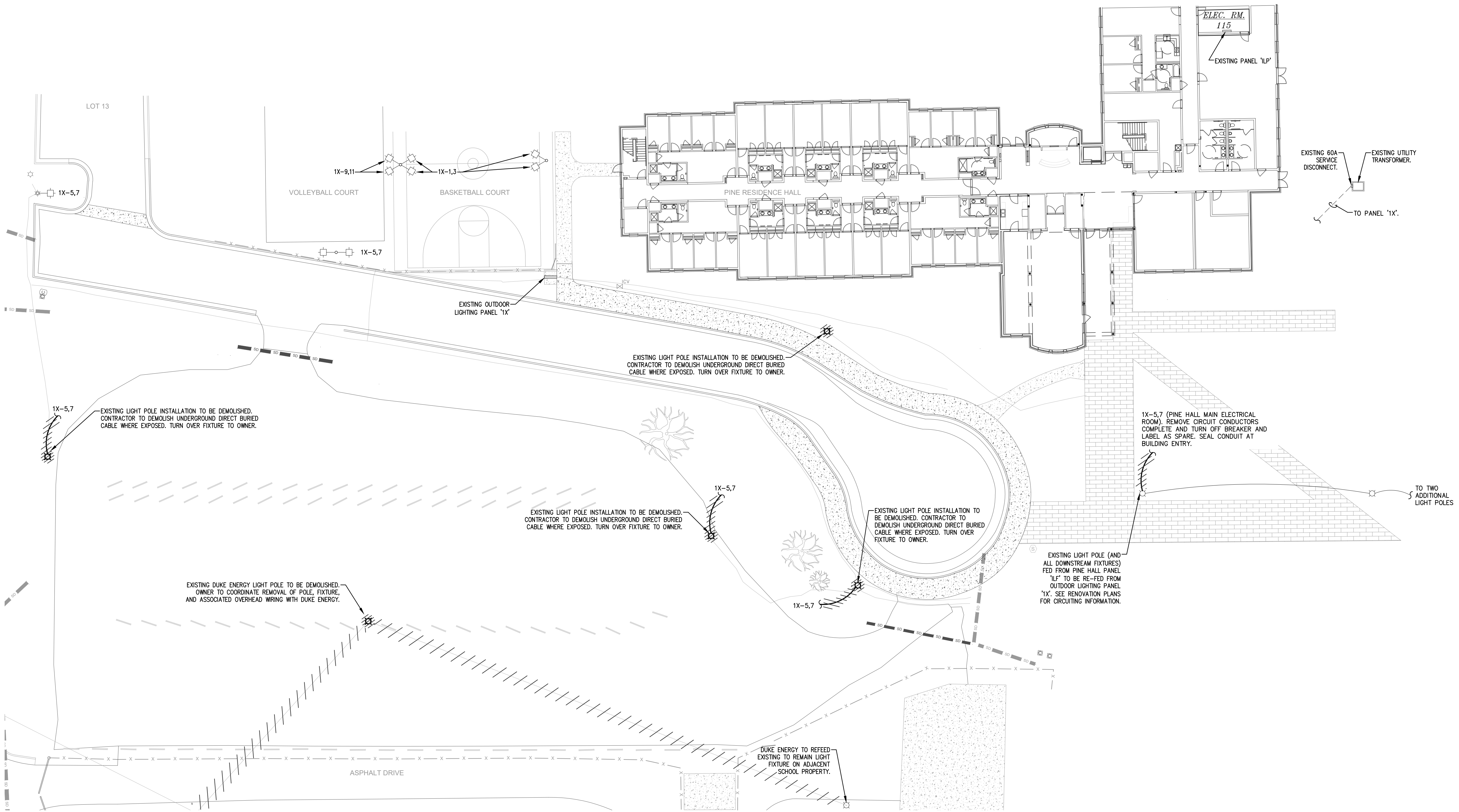
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SHEET TITLE

**SITE ELECTRICAL  
DEMOLITION PLAN**

DRAWING

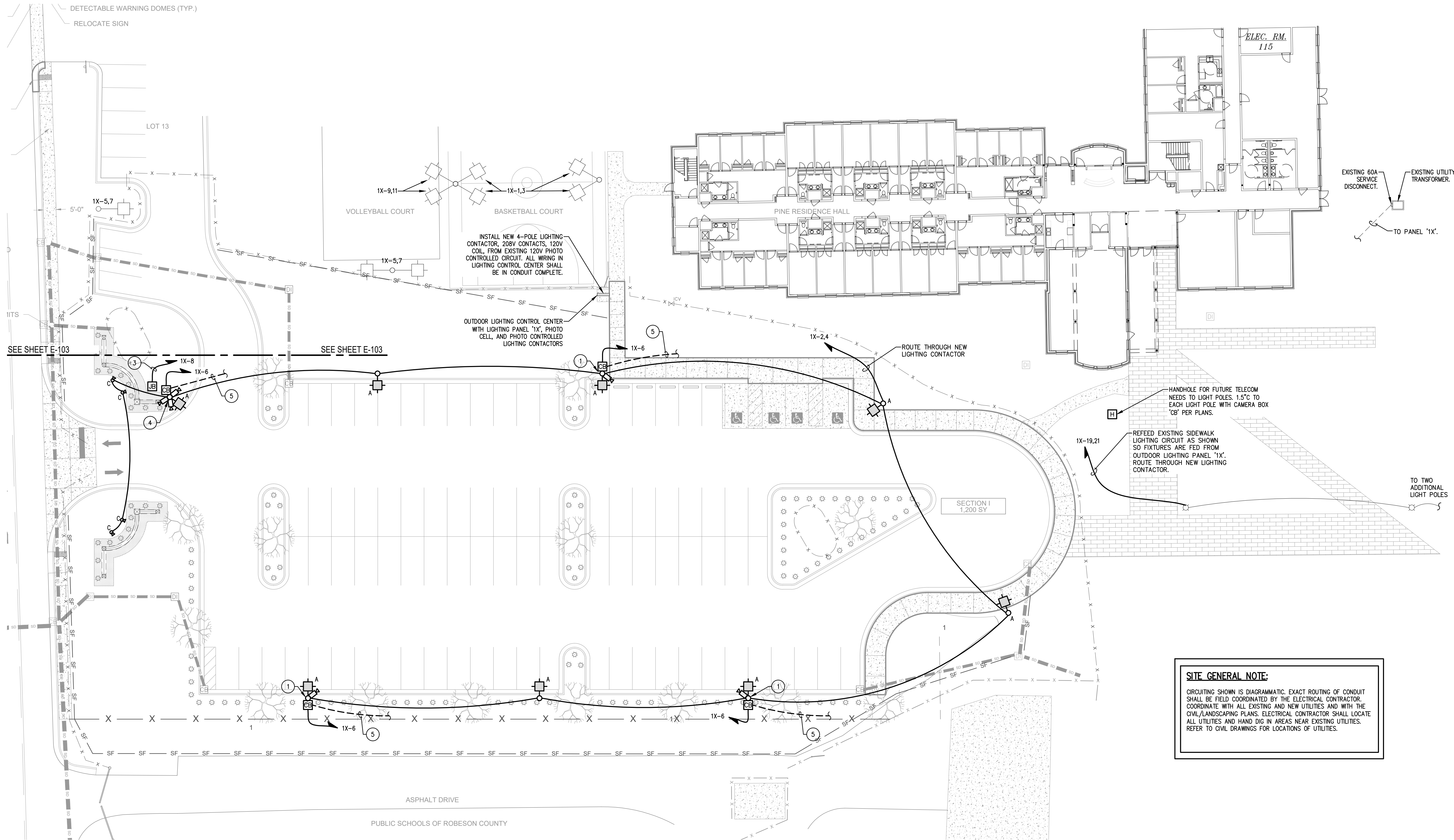
**E-101**



**1** Site Electrical Demolition Plan  
**E-101** SCALE: 1" = 20'-0"



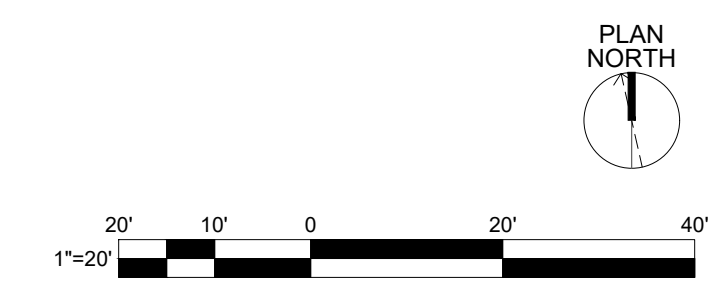
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LIGHT FIXTURE SCHEDULE							
TYPE	PRODUCT IMAGE	MANUFACTURER	MODEL NUMBER	LAMPING	VOLTAGE	VA	FIXTURE DESCRIPTION
A		LITHONIA LIGHTING	KAD LED-40C-1000 -4K-4K-MVLT -SPD04-DOBKD-HS POLE: SSA 30 66 DM19 DDB	LED, 4000K 12,844 LUMENS	120-277V	125W	LED PARKING LOT LIGHT WITH TYPE 4 DISTRIBUTION. PROVIDE WITH HOUSESIDE SHIELD.
B		VISIONAIRE LIGHTING	CON-2-L-T4-48LC -5-4K-UNV-BOA6 -BZ POLE: RNTS 4R 11 10 98C343 1238 BK	LED, 4000K 10,392 LUMENS	120-277V	80W	LED AREA LIGHT WITH TYPE 4 DISTRIBUTION. PROVIDE "RETA-2 3/8-4-BK" TENON ADAPTOR AS REQUIRED TO CONNECT TO SPECIFIED POLE.
C		HYDREL	4750L-2L-1000LMF -4K-MVOLT-MFL -KMS-MS12-Z1-BZ	LED, 4000K 2500 LUMENS	120-277V	20W	2' EXTERIOR LINEAR FLOOD.

**1**  
**E-102** Site Electrical Renovation Plan  
SCALE: 1" = 20'-0"

- KEYNOTES:**
- 1 LIGHT POLE WITH CAMERA. SEE DETAIL 2/E-100 FOR POWER AND TELECOM CONDUIT REQUIREMENTS.
  - 2 COMMUNICATIONS HANDHOLE FOR TELECOM INFRASTRUCTURE FOR FUTURE.
  - 3 POWER FOR IRRIGATION CONTROL PANEL. COORDINATE EXACT LOCATION WITH CIVIL DRAWINGS AND OWNER.
  - 4 LIGHT POLE WITH PARKING LOT CAMERA AND ADDITIONAL LICENSE PLATE CAMERAS. SEE DETAIL 2/E-100 FOR POWER AND TELECOM CONDUIT REQUIREMENTS.
  - 5 1-1/2" TO TELECOM HANDHOLE.



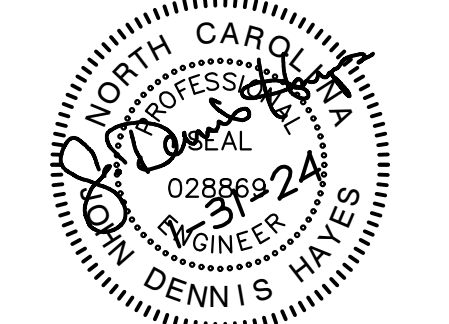
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SHEET TITLE

**SITE ELECTRICAL  
RENOVATION PLAN**

DRAWING

**E-102**

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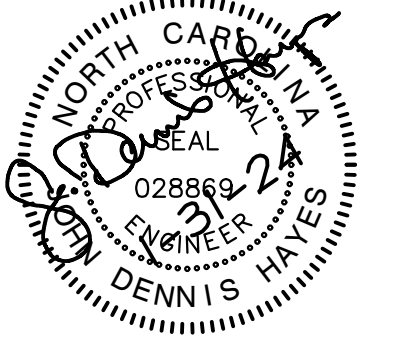
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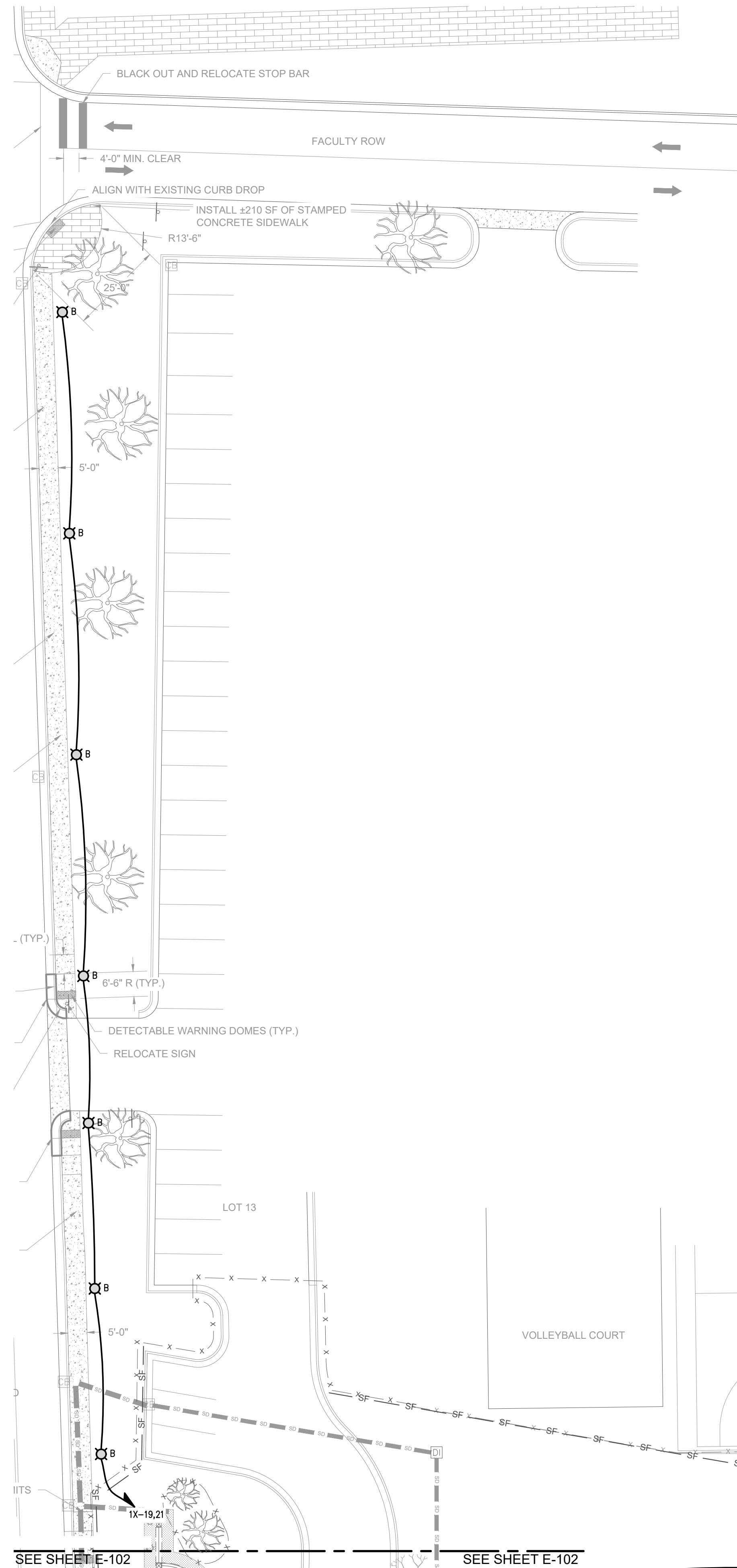
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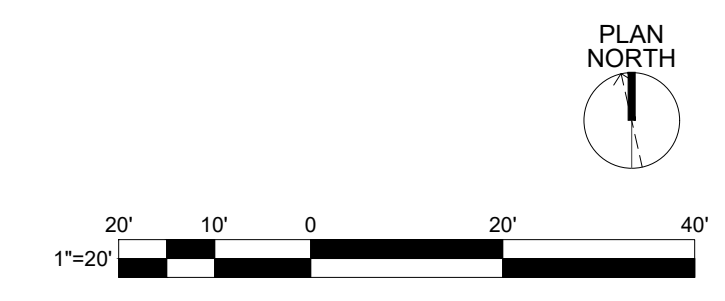
**SITE ELECTRICAL  
RENOVATION PLAN**

DRAWING

**E-103**



**1**  
**E-103** Site Electrical Renovation Plan  
SCALE: 1" = 20'-0" SIDEWALK ALTERNATE #1



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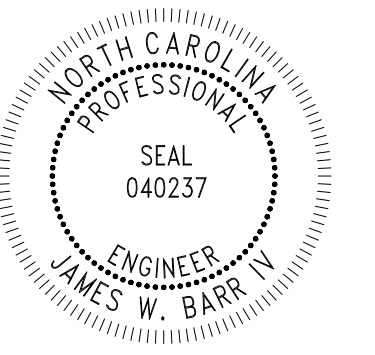
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REVISIONS:

NO.	DATE	DESCRIPTION
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⚠	10-11-23	PER OWNER FEEDBACK
⚠	03-22-24	ADDENDUM NO. 1

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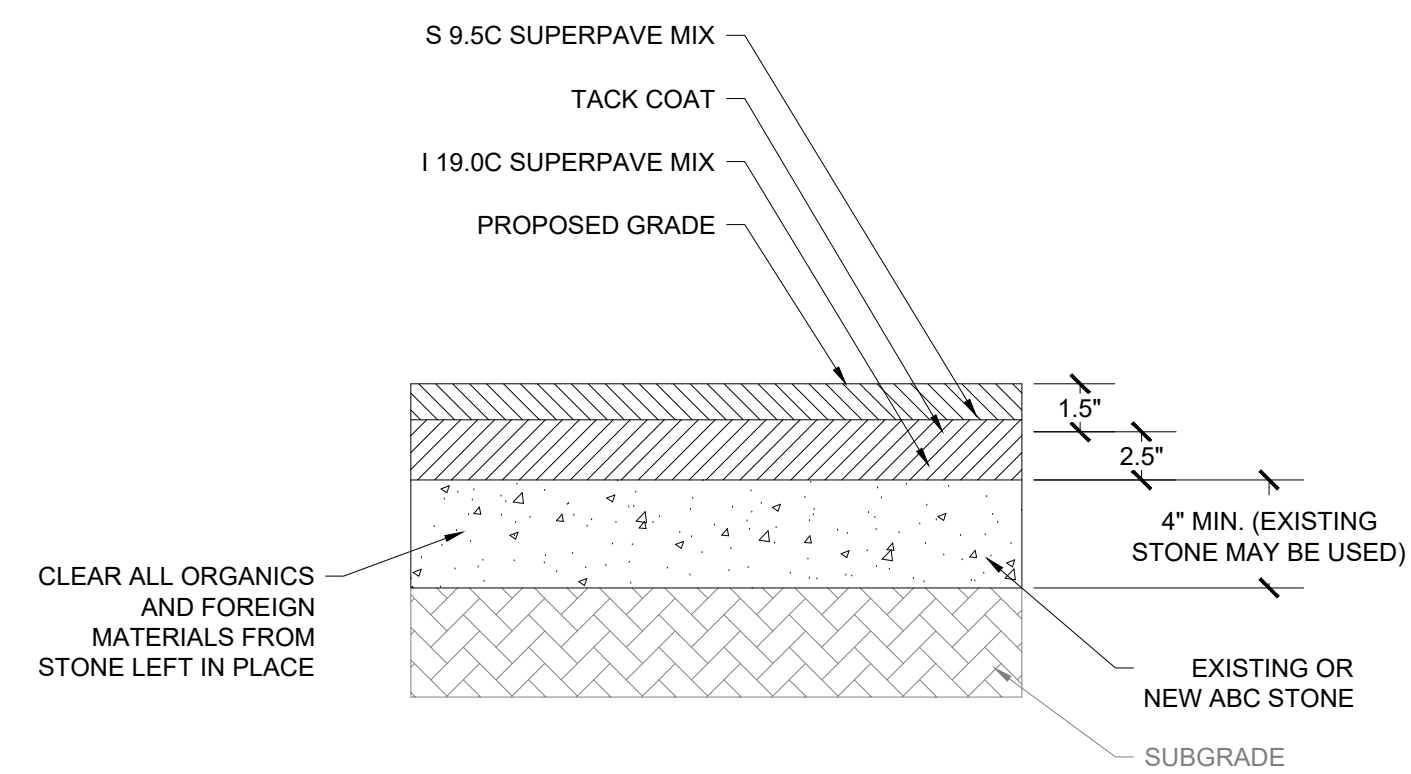
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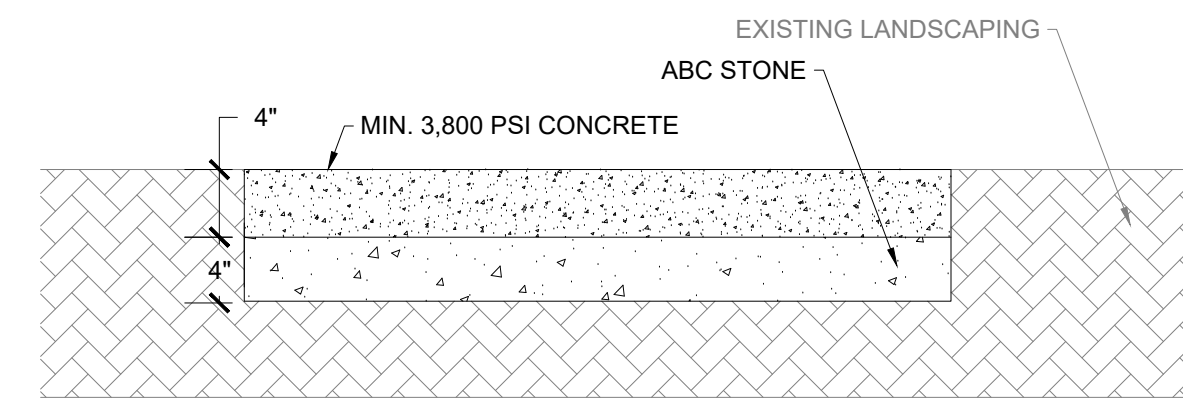
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C-501



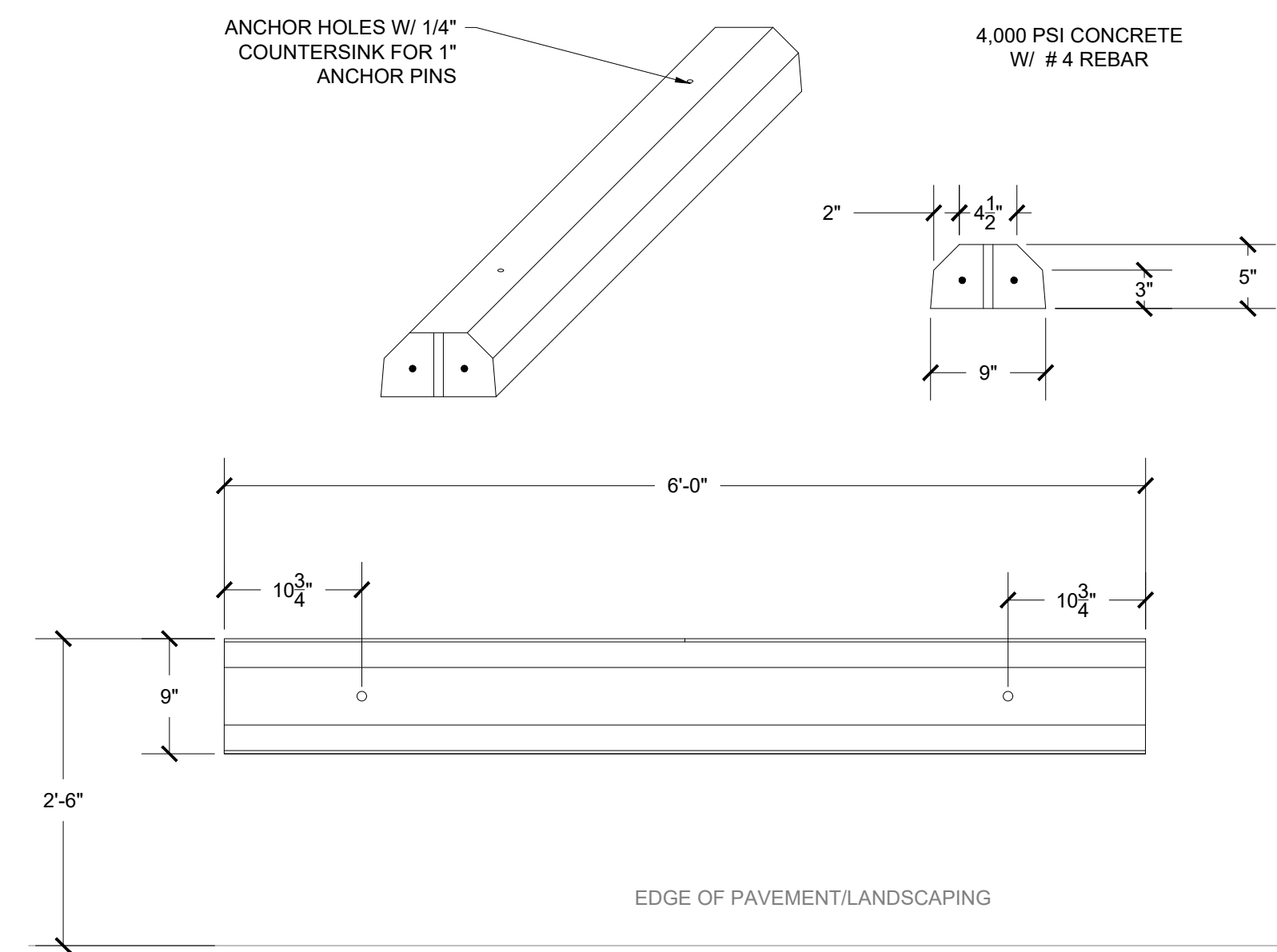
1 SECTION 1 PAVEMENT DETAIL

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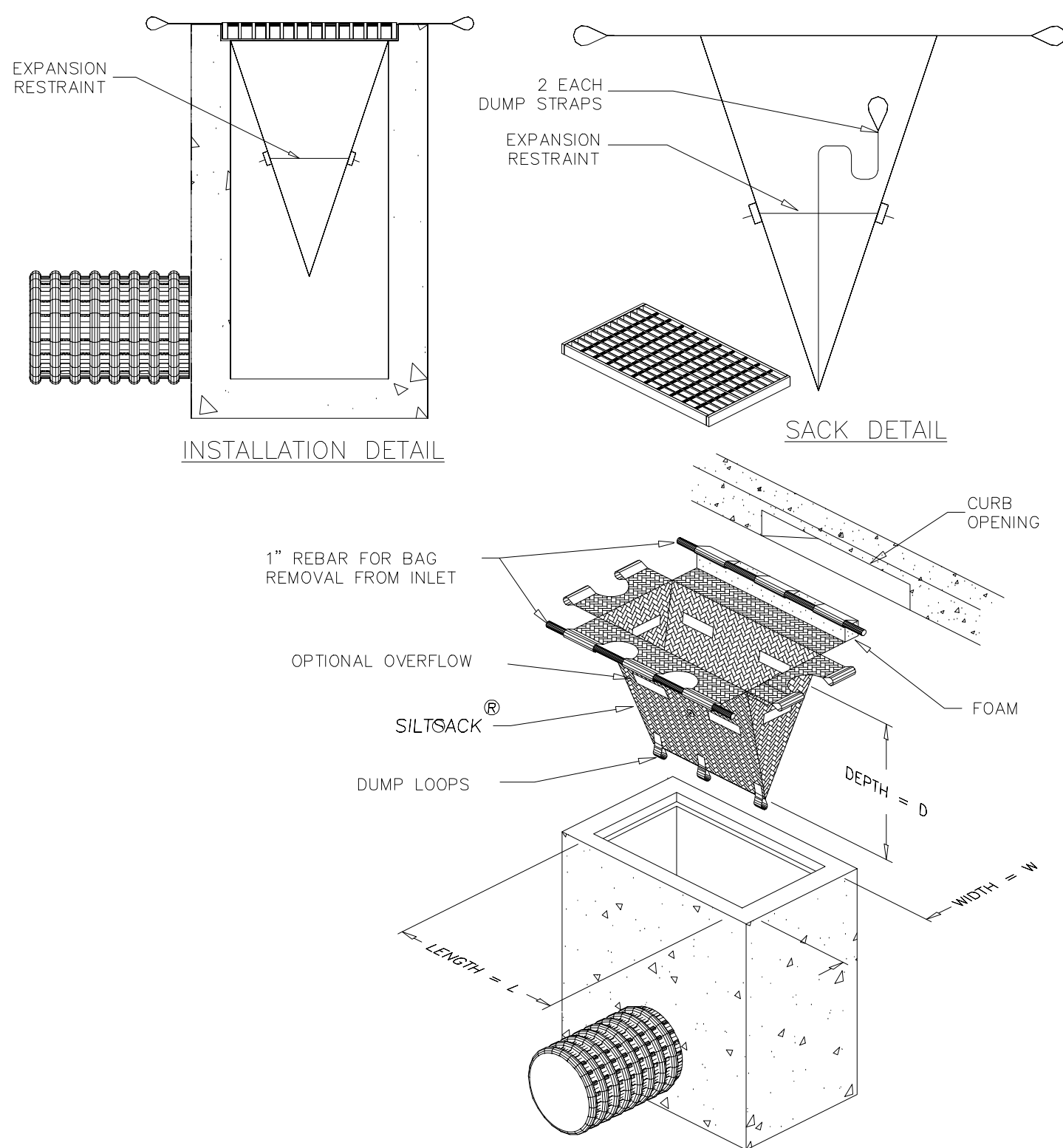
2 CONCRETE SIDEWALK DETAIL

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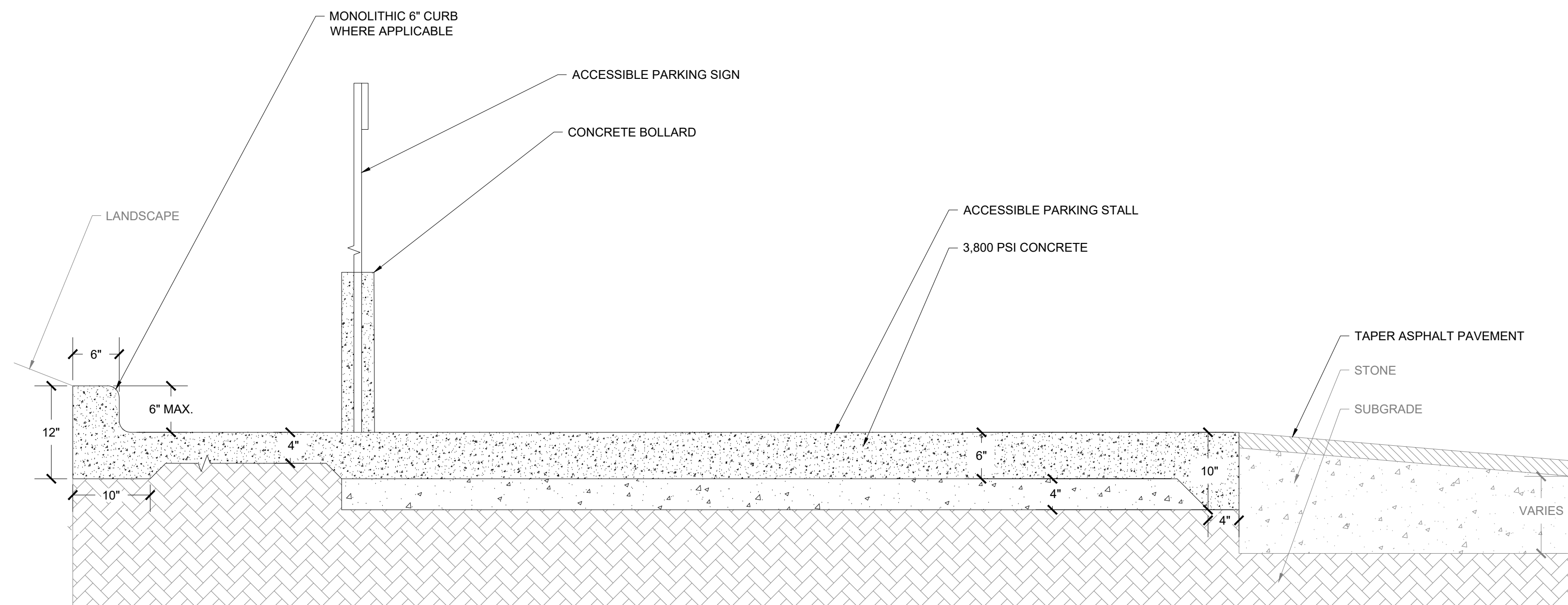
3 CONCRETE WHEEL STOP DETAIL

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4 SILT SACK DETAIL

SCALE: N.T.S.

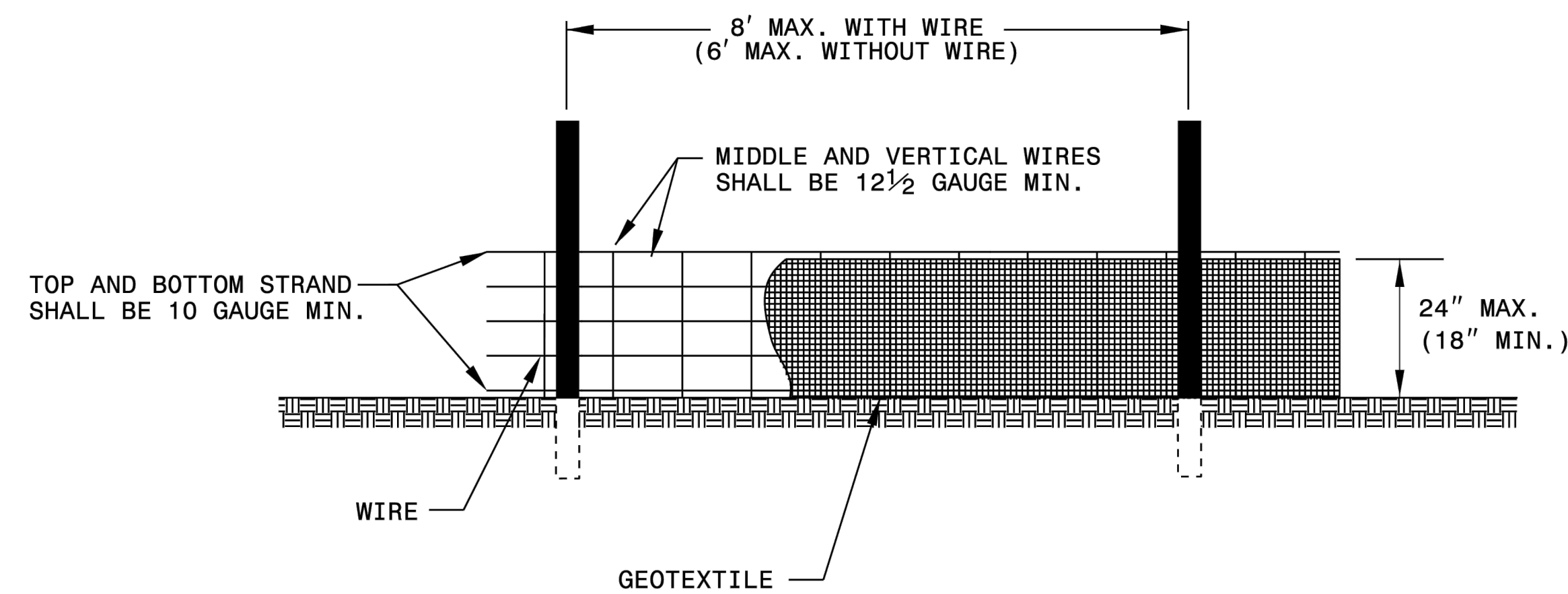


5 CONCRETE PARKING STALL DETAIL

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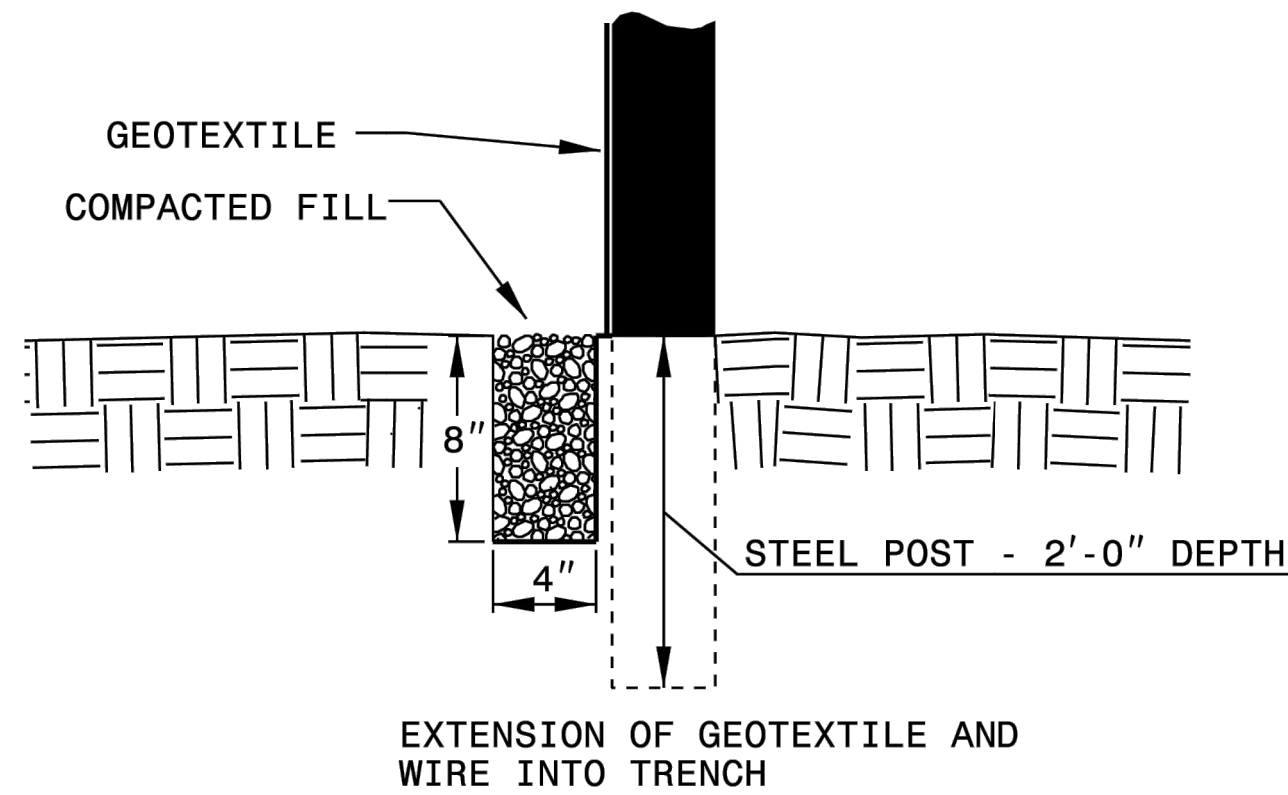
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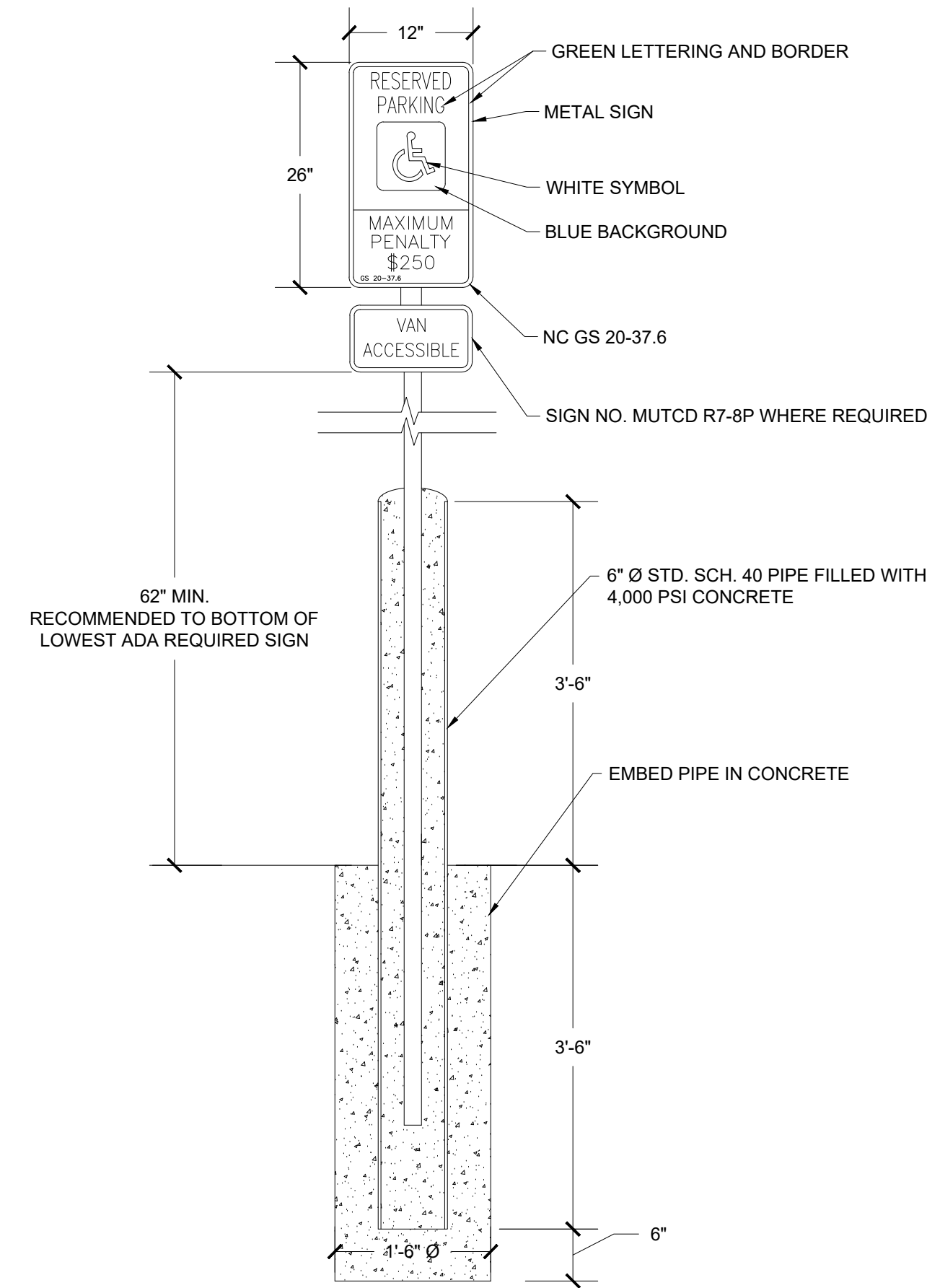
**NOTES**

- USE GEOTEXTILE A MINIMUM OF 36" IN WIDTH AND FASTEN ADEQUATELY TO THE POSTS AND WIRE AS DIRECTED.
- USE WIRE A MINIMUM OF 32" IN WIDTH AND WITH A MINIMUM OF 5 LINE WIRES WITH 12" VERTICAL SPACING.
- PROVIDE 5'-0" STEEL POST OF THE SELF-FASTENER ANGLE STEEL TYPE.
- FOR MECHANICAL SLICING METHOD INSTALLATION, GEOTEXTILE SHALL BE A MAXIMUM OF 18" ABOVE GROUND SURFACE.

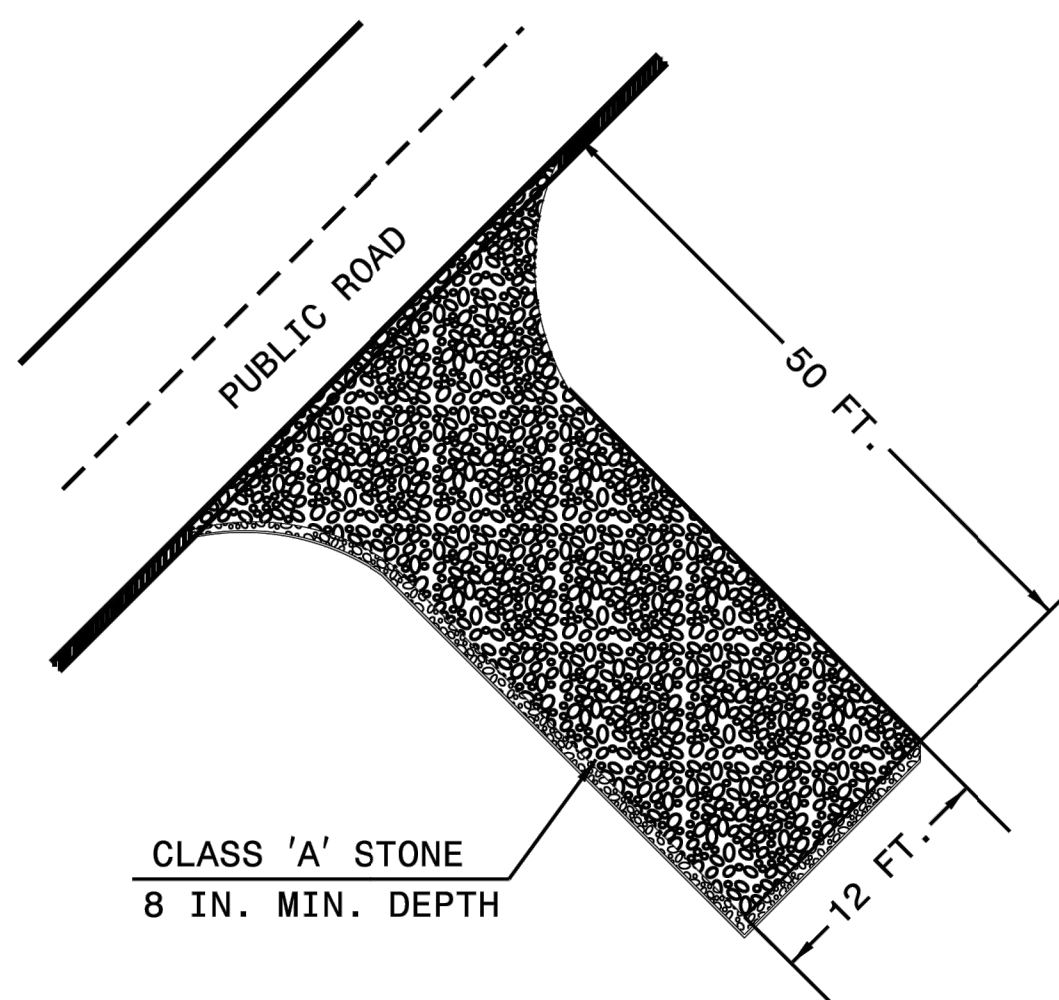


1-18 STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.  
 ROADWAY STANDARD DRAWING FOR  
**TEMPORARY SILT FENCE**  
 SHEET 1 OF 1  
**1605.01**

**6 SILT FENCE DETAIL**  
SCALE: N.T.S.



**7 ACCESSIBLE PARKING SIGN DETAIL**  
SCALE: N.T.S.



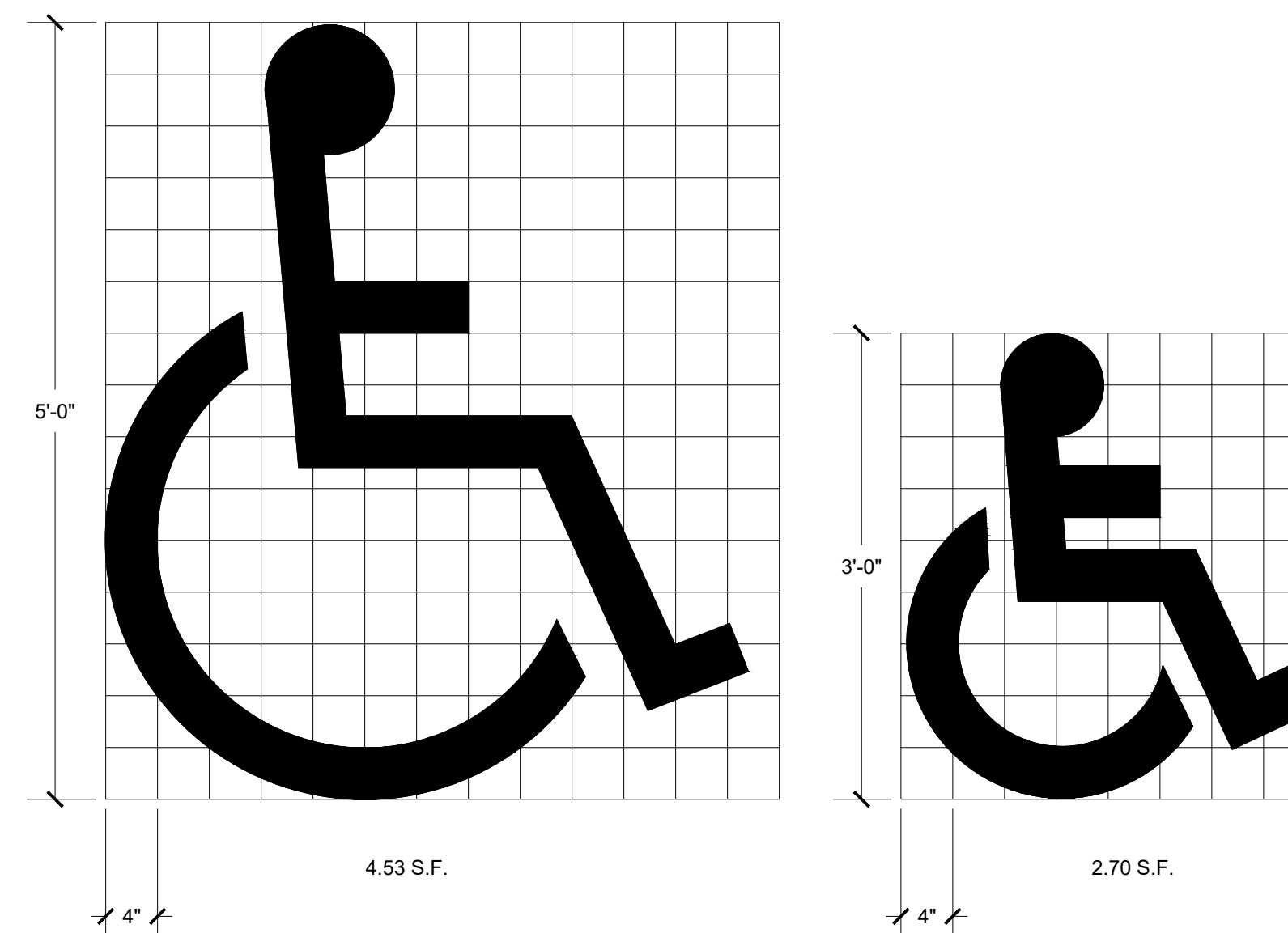
**NOTES**

- PROVIDE TURNING RADIUS SUFFICIENT TO ACCOMMODATE LARGE TRUCKS.
- LOCATE ENTRANCES TO PROVIDE FOR UTILIZATION BY ALL CONSTRUCTION VEHICLES.
- MUST BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR DIRECT FLOW OF MUD ONTO STREETS. PERIODIC TOPDRESSING WITH STONE WILL BE NECESSARY.
- ANY MATERIAL TRACKED ONTO THE ROADWAY MUST BE CLEANED UP IMMEDIATELY.
- LOCATE GRAVEL CONSTRUCTION ENTRANCE AT ALL POINTS OF INGRESS AND EGRESS UNTIL SITE IS STABILIZED. PROVIDE FREQUENT CHECKS OF THE DEVICE AND TIMELY MAINTENANCE.
- NUMBER AND LOCATION OF CONSTRUCTION ENTRANCES TO BE DETERMINED BY THE ENGINEER.
- USE CLASS 'A' STONE OR OTHER COARSE AGGREGATE APPROVED BY THE ENGINEER.
- INSTALL CONSTRUCTION ENTRANCES IN A WAY TO PREVENT VEHICLES FROM BYPASSING CONSTRUCTION ENTRANCE LEAVING PROJECT SITE.

NOTE: PLACE GEOTEXTILE FOR DRAINAGE BENEATH STONE

1-18 STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.  
 ROADWAY STANDARD DRAWING FOR  
**GRAVEL CONSTRUCTION ENTRANCE**  
 SHEET 1 OF 1  
**1607.01**

**8 CONSTRUCTION ENTRANCE DETAIL**  
SCALE: N.T.S.

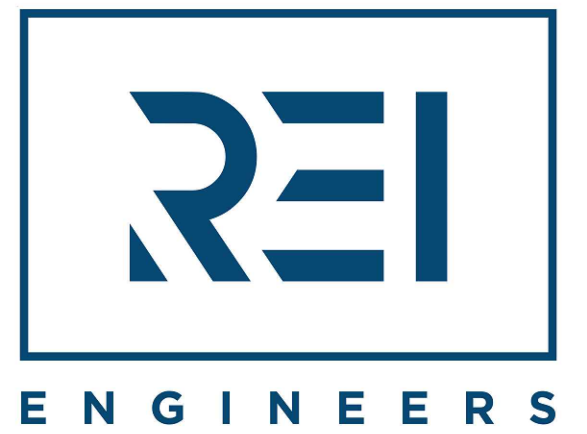


USE OF PAVEMENT SYMBOL IN ACCESSIBLE PARKING SPACES IS OPTIONAL. WHEN USED, THE SYMBOL SHALL BE 3' OR 5' HIGH AND WHITE IN COLOR.

**9 UNIVERSAL SYMBOL OF ACCESSIBILITY**  
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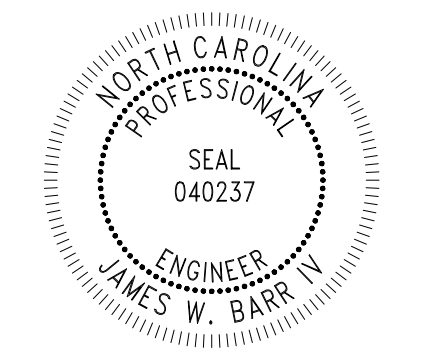
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△	10-11-23	PER OWNER FEEDBACK

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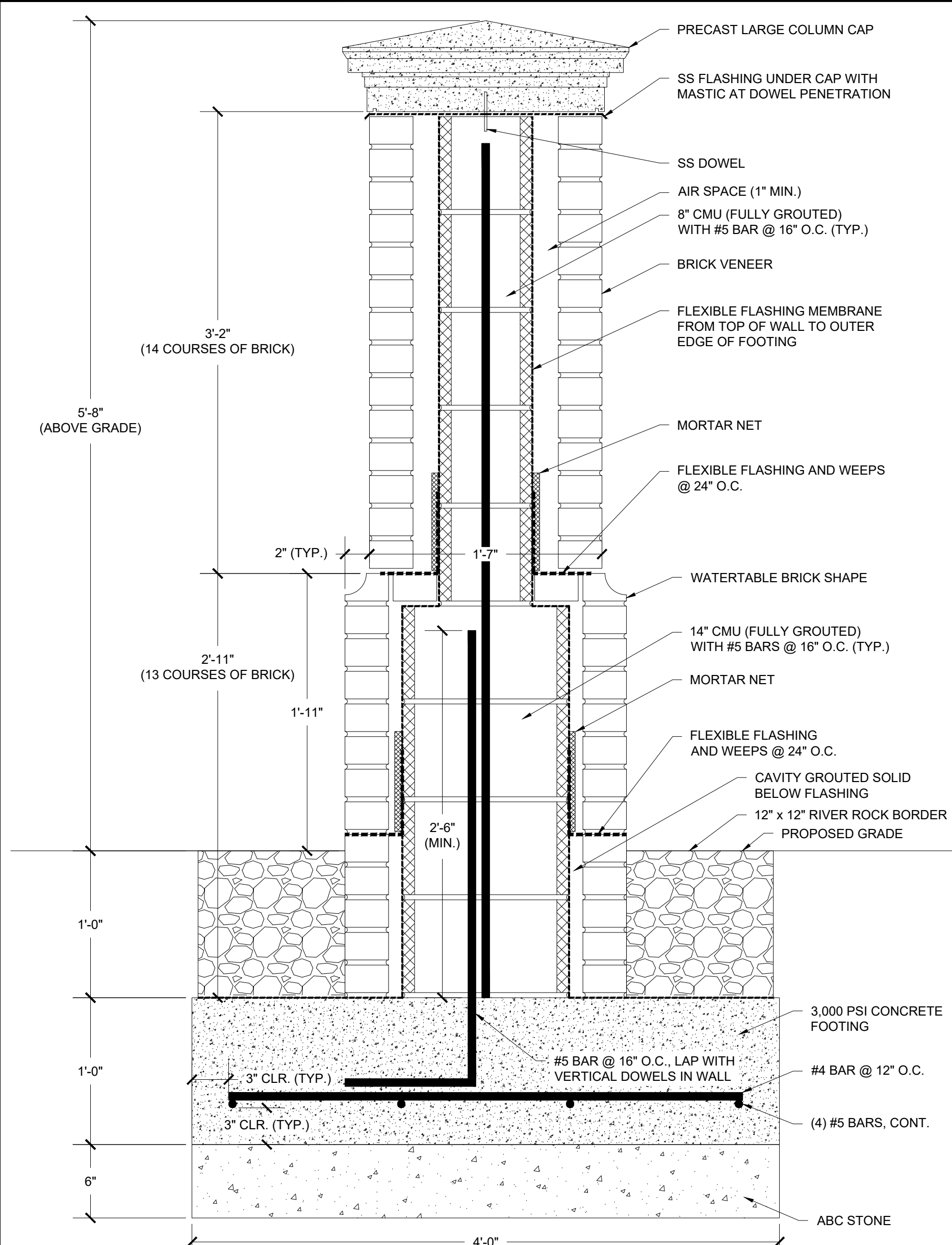
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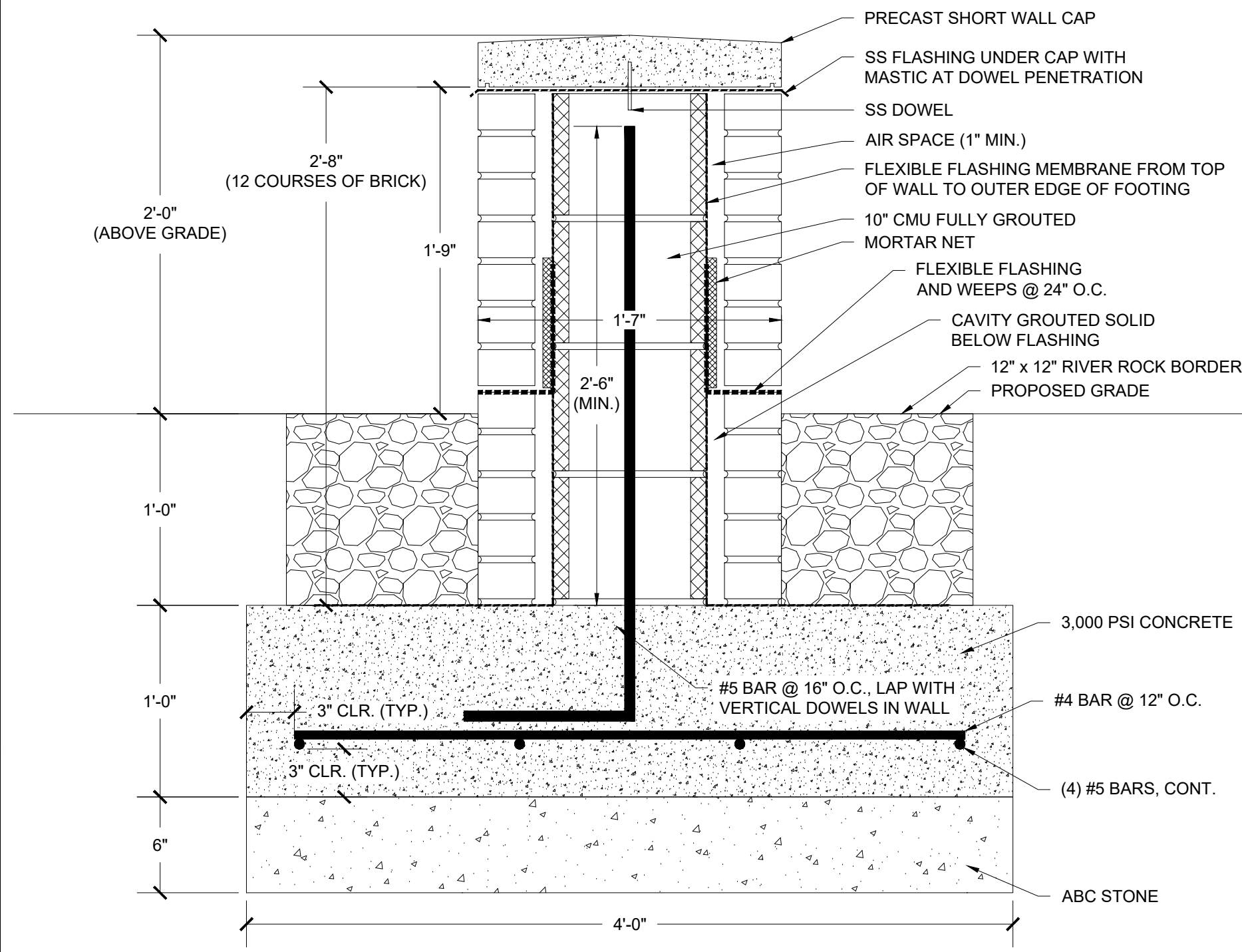
DETAILS

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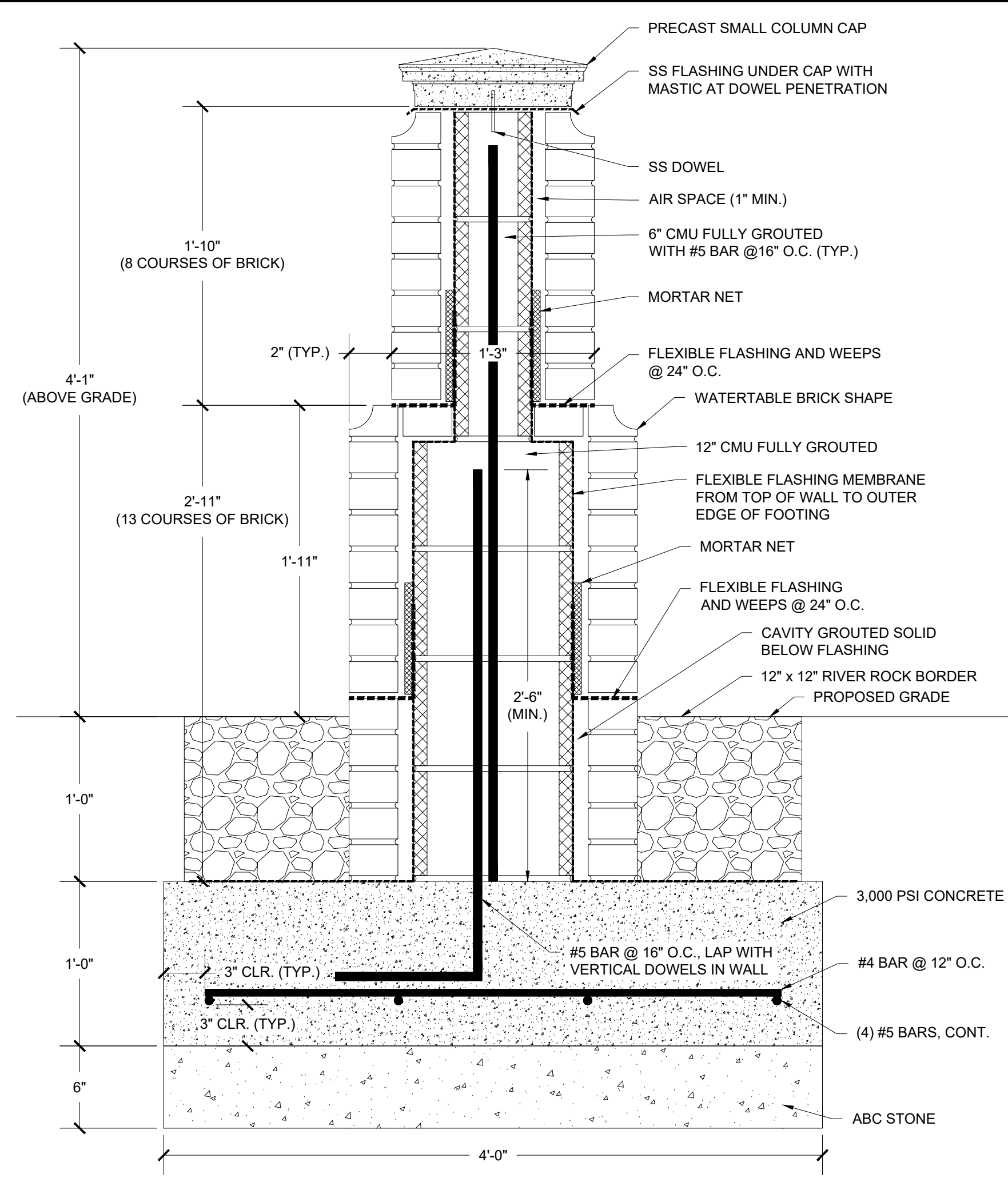
C-502



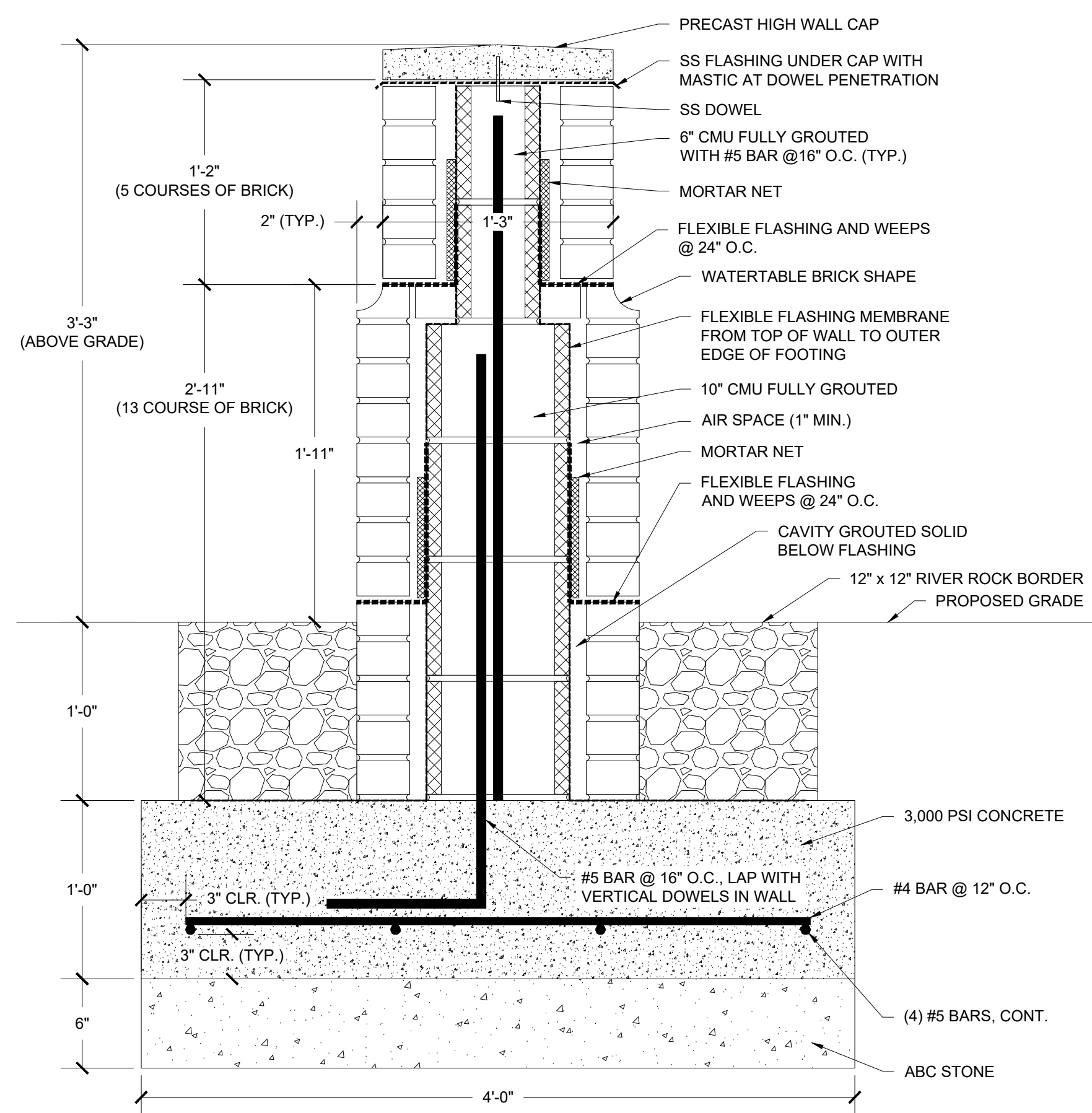
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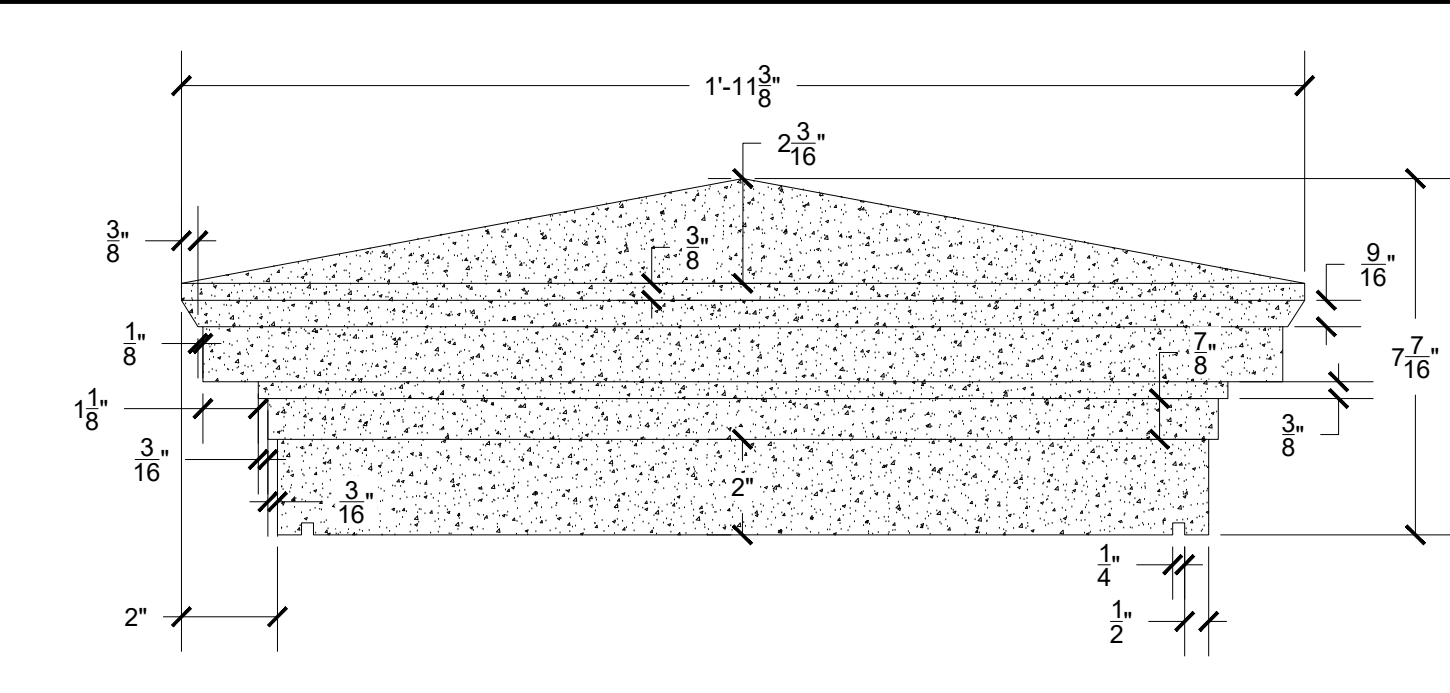
**12 SECTION AT SHORT WALL**  
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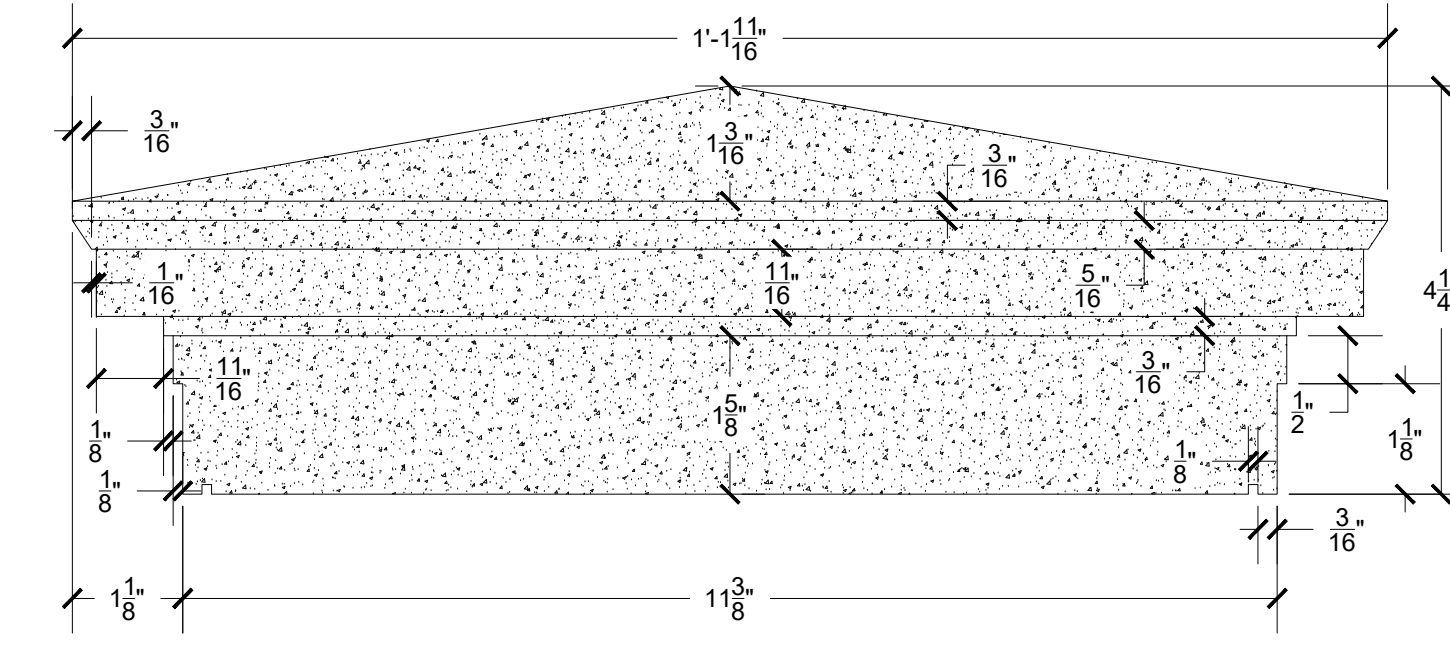
**11 SECTION AT SMALL COLUMN**  
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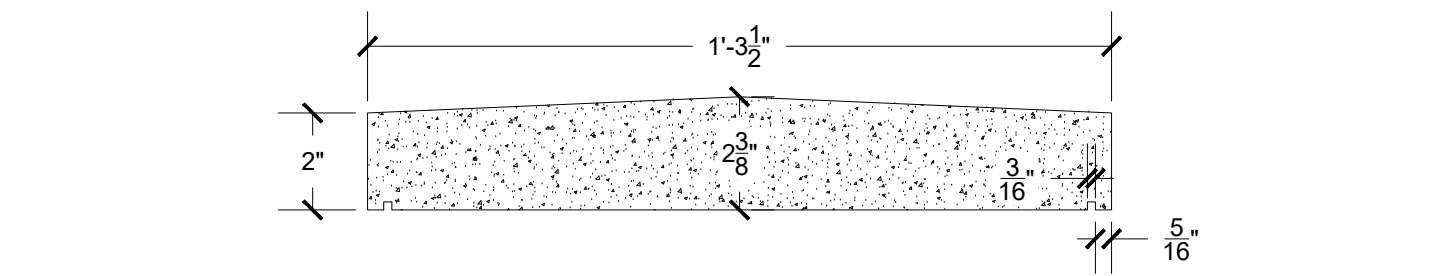
**13 SECTION AT HIGH WALL**  
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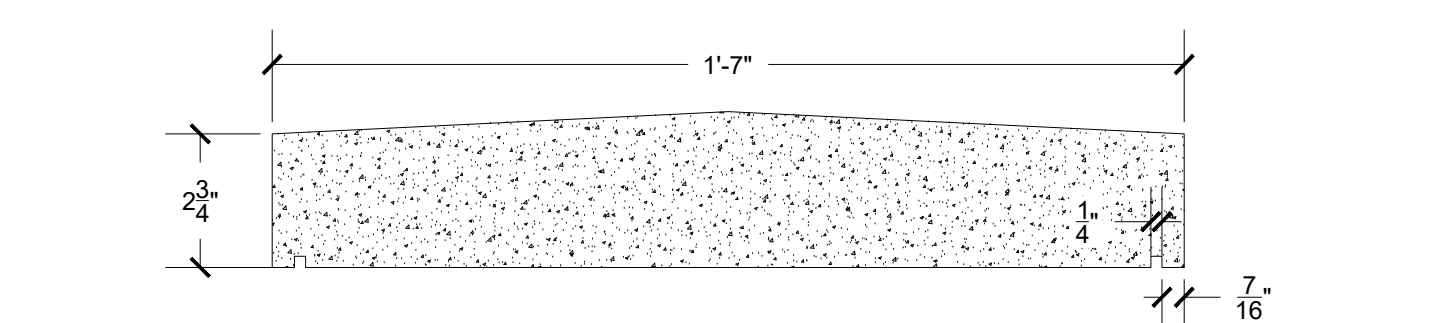
**14 PRECAST LARGE COLUMN CAP DETAIL**  
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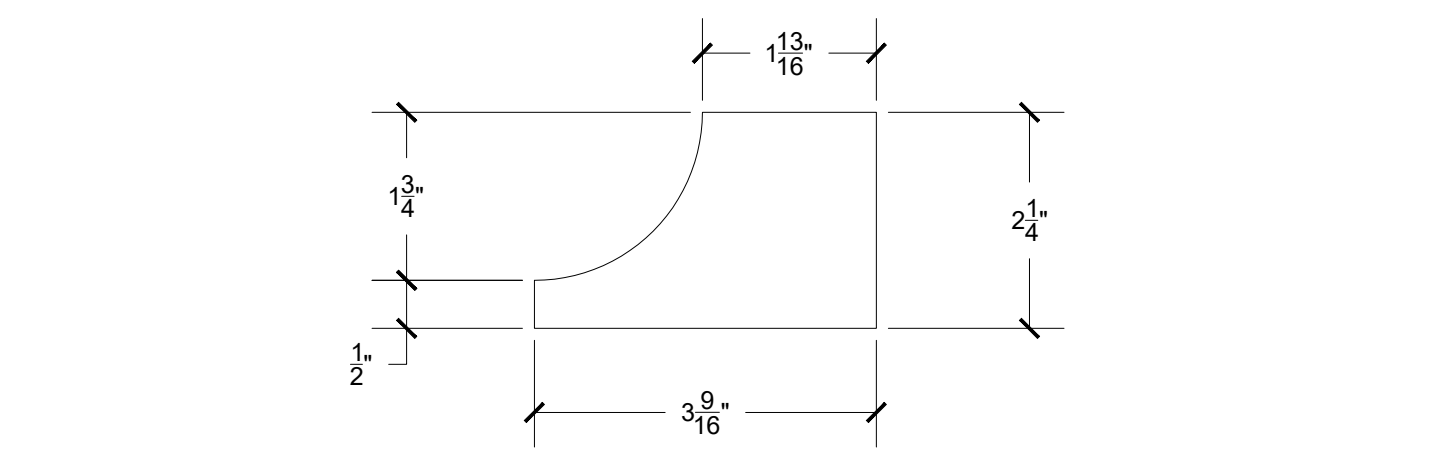
**15 PRECAST SMALL COLUMN CAP DETAIL**  
SCALE: N.T.S.



**16 PRECAST HIGH WALL CAP DETAIL**  
SCALE: N.T.S.



**17 PRECAST SHORT WALL CAP DETAIL**  
SCALE: N.T.S.



**18 WATERTABLE BRICK SHAPE DETAIL**  
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PAVEMENT IMPROVEMENT

111 UNIVERSITY ROAD  
PEMBROKE, NC 28372

PROJ. NO:

022CLT-296

REVISIONS:

NO.	DATE	DESCRIPTION
DD	02-03-23	DESIGN DEVELOPMENT
△	10-11-23	PER OWNER FEEDBACK

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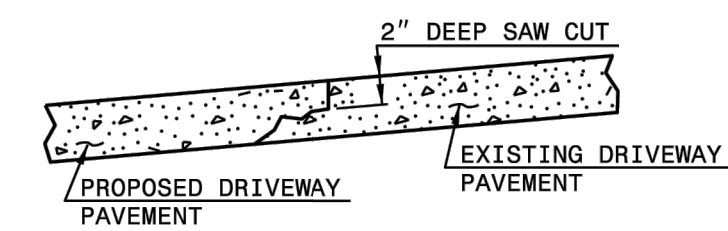
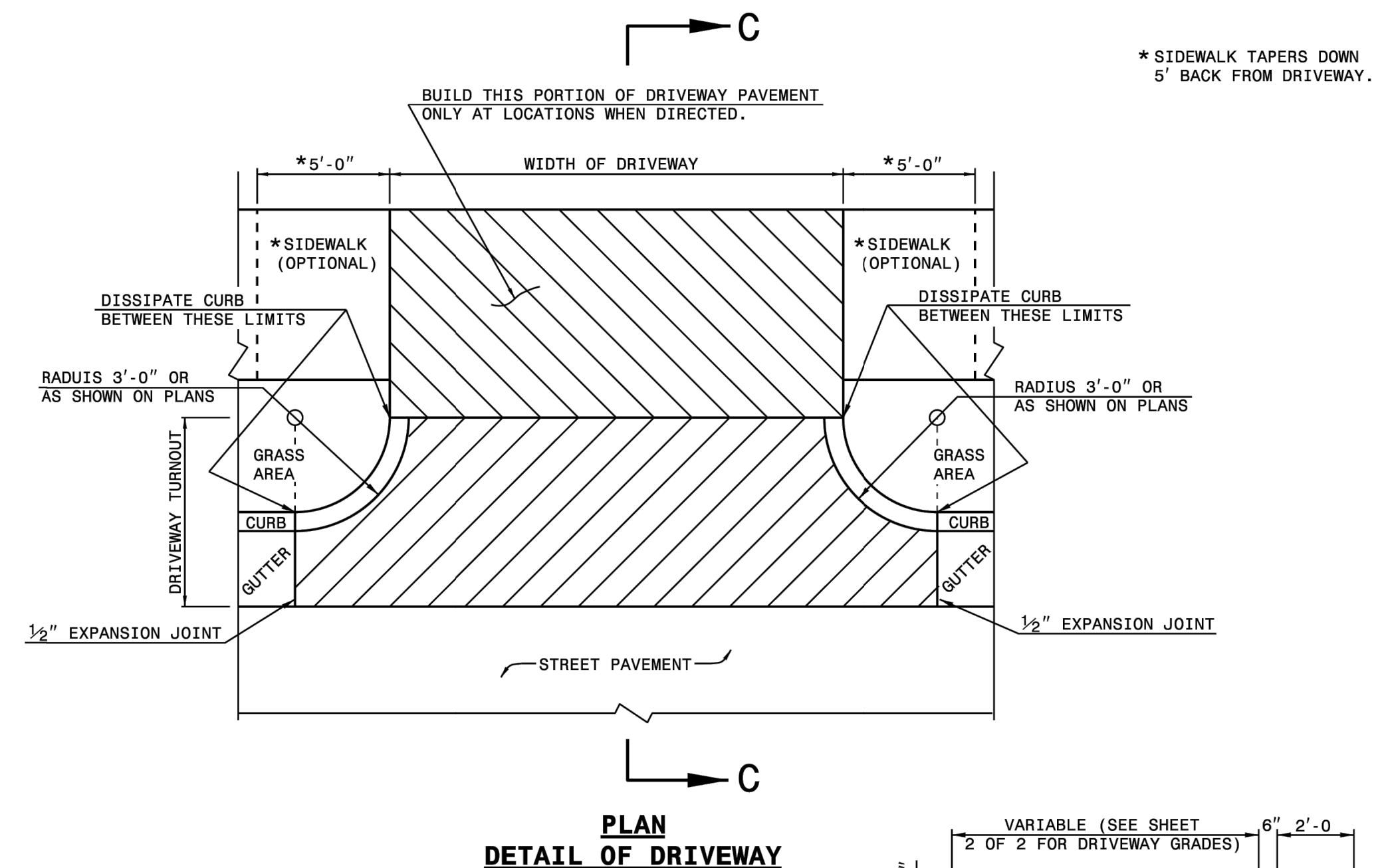
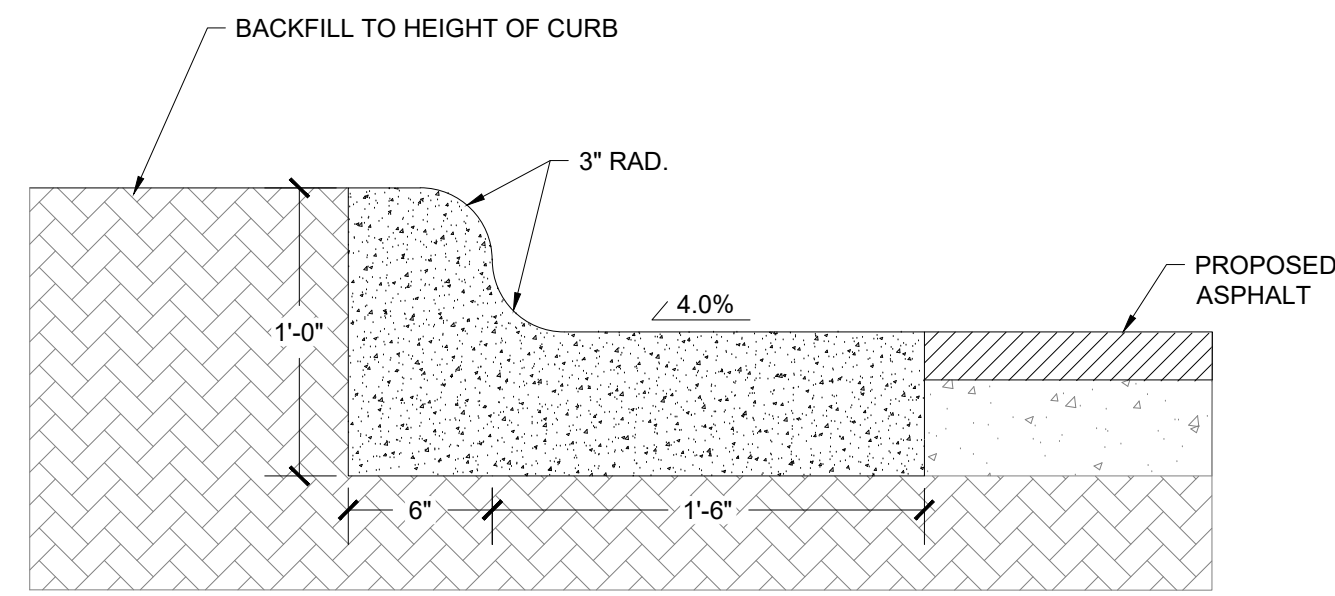
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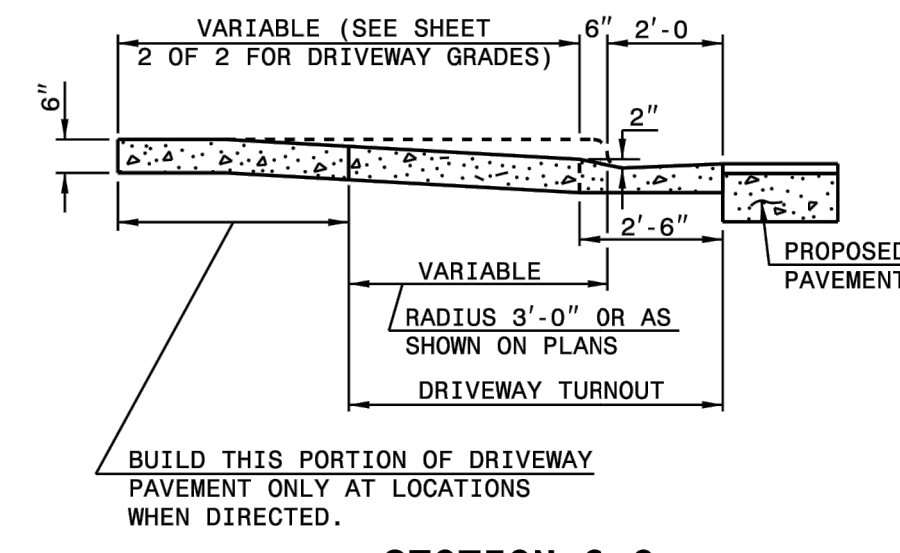
STRUCTURAL

DRAWING

C-503



**METHOD OF TIE IN**  
 WHEN EXISTING DRIVEWAY PAVEMENT IS CONCRETE, SAW CUT 2" DEEP JOINT AT THE POINT OF TIE-IN. SAW JOINT PERPENDICULAR TO EDGE OF EXISTING DRIVEWAY PAVEMENT.

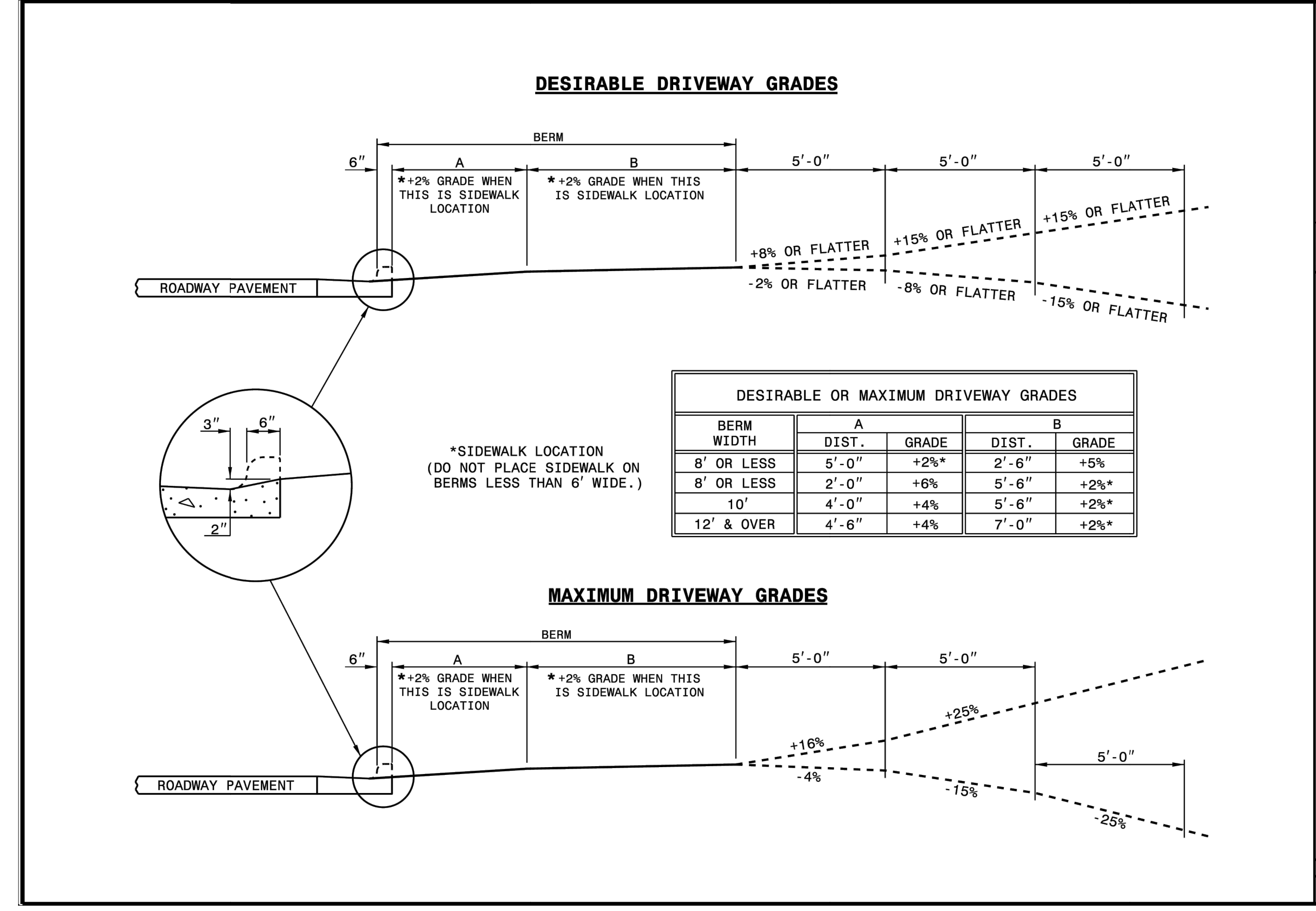


**SECTION C-C**

1-24 STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.  
 ROADWAY STANDARD DRAWING FOR DRIVEWAY TURNOUT RADIUS TYPE  
 SHEET 1 OF 2  
**848.02**

**19 CONCRETE CURB AND GUTTER DETAIL**  
 SCALE: N.T.S.

**20 CONCRETE APRON DETAIL**  
 SCALE: N.T.S.



1-24 STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.  
 ROADWAY STANDARD DRAWING FOR DRIVEWAY TURNOUT DRIVEWAY GRADES  
 SHEET 2 OF 2  
**848.02**

**21 CONCRETE APRON DETAIL**  
 SCALE: N.T.S.



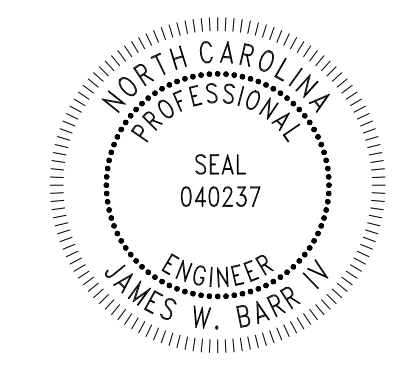
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**022CLT-296**

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△	03-22-24	ADDENDUM NO. 1

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SHEET TITLE  
**DETAILS**

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**C-504**

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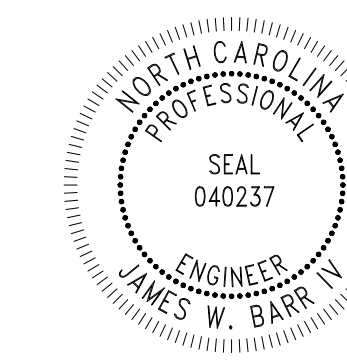
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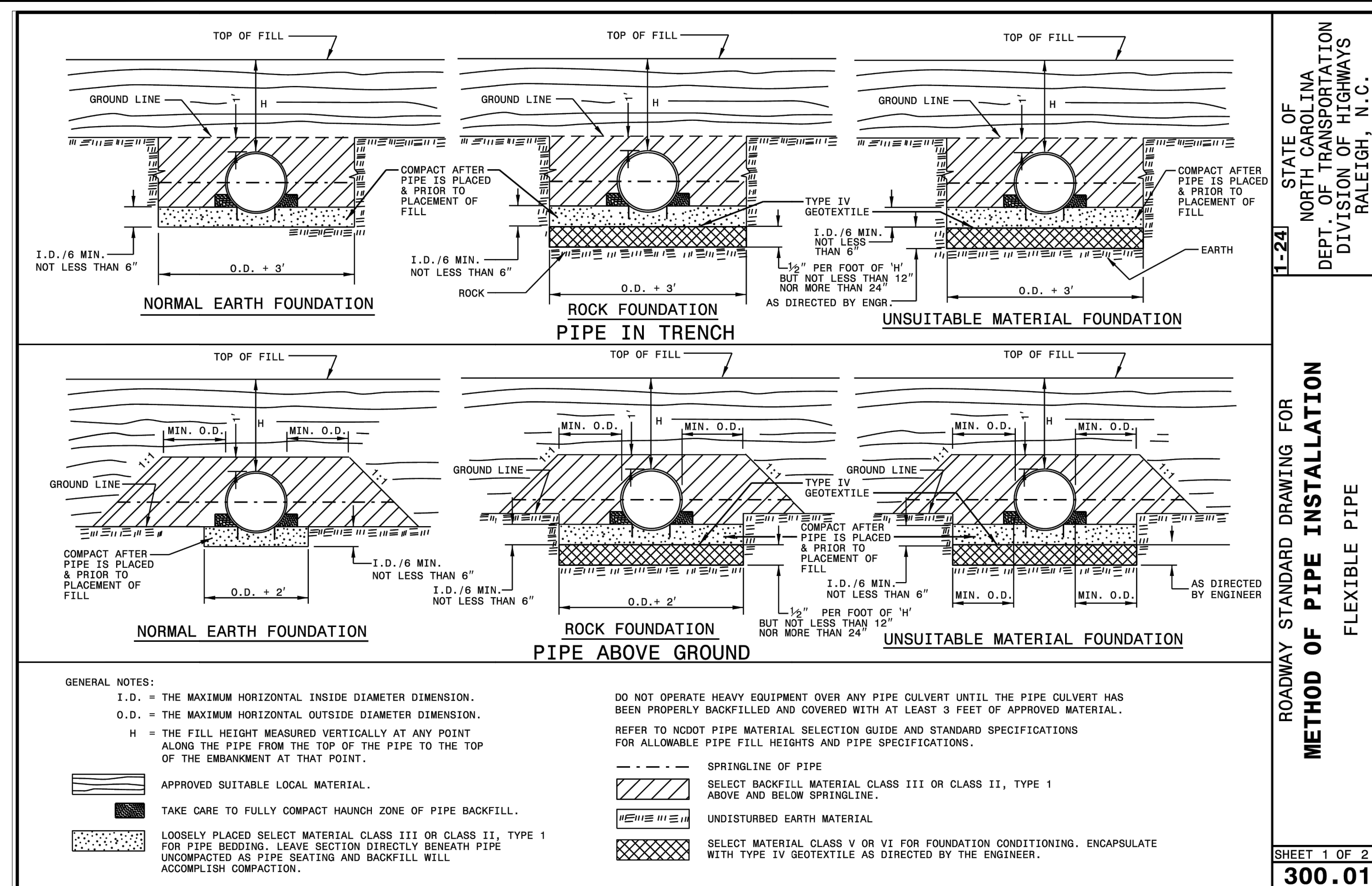
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DETAILS

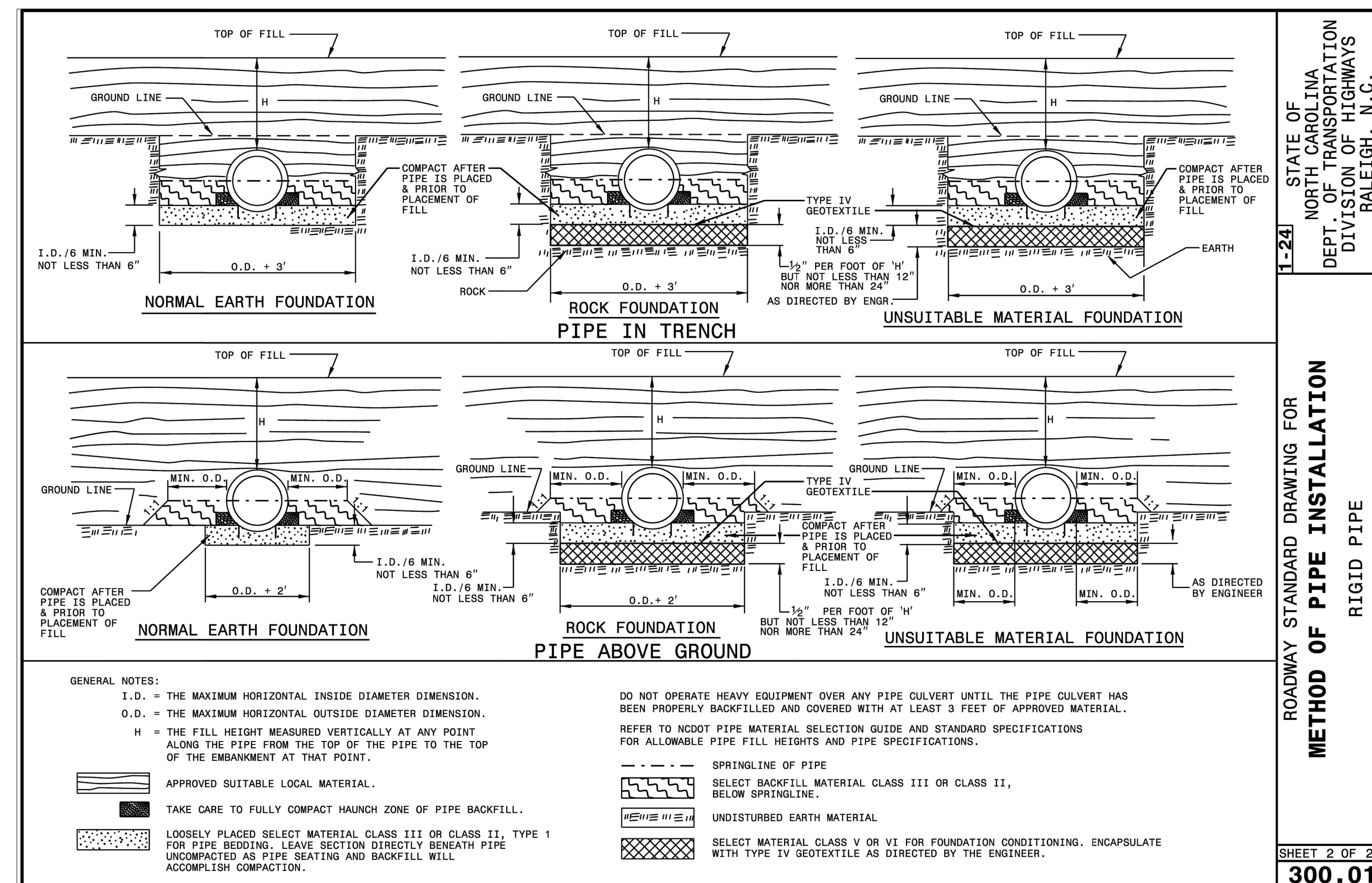
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**22 FLEXIBLE PIPE INSTALLATION DETAIL**

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**23 RIGID PIPE INSTALLATION DETAIL**

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