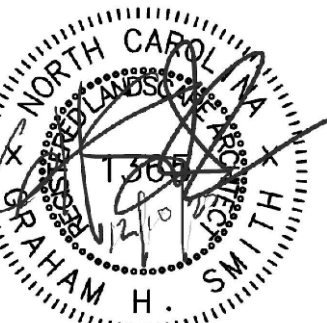
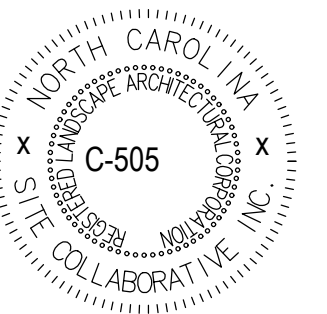


BIG OAK VET HOSPITAL

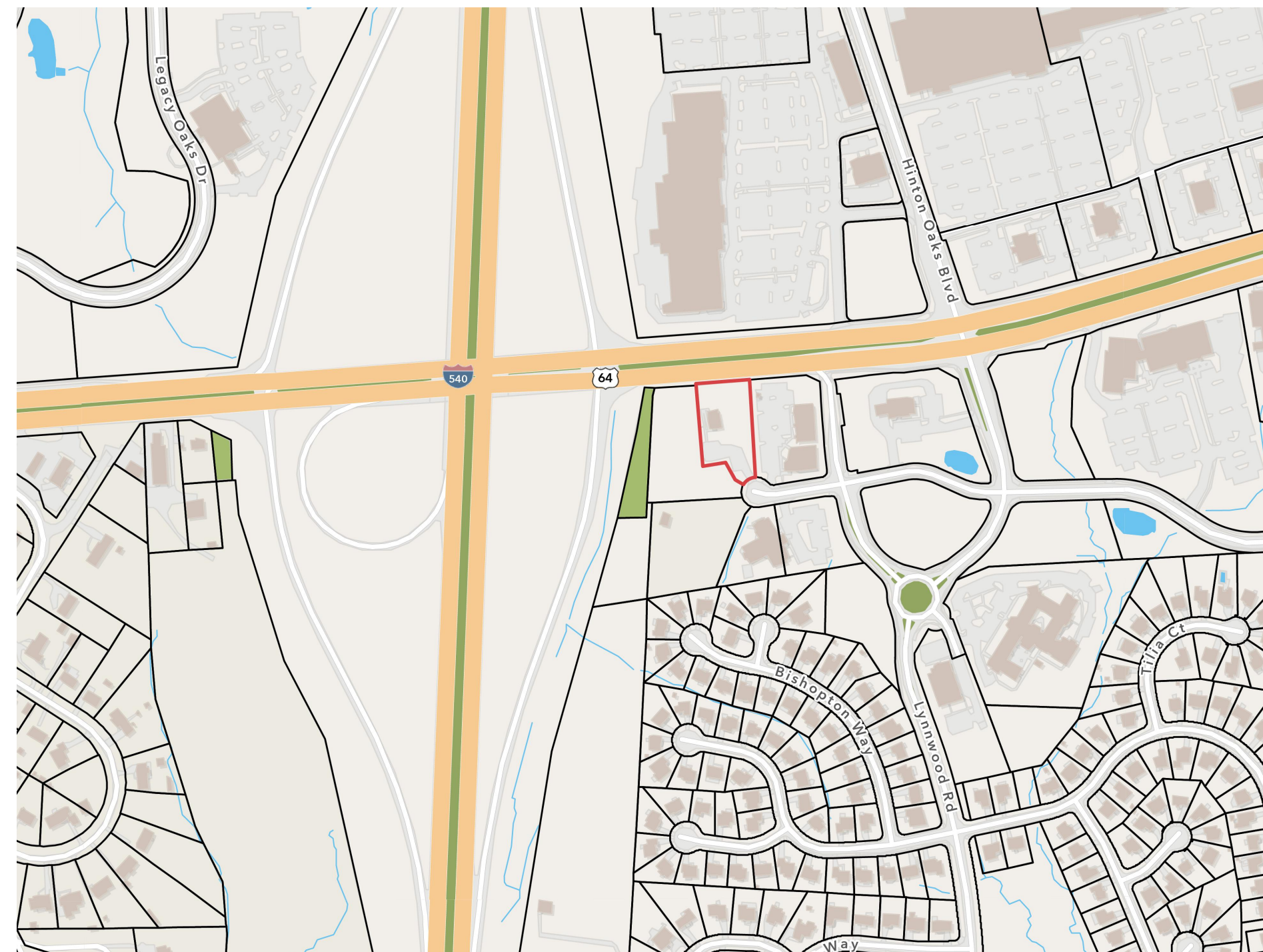
MASTER PLAN

TOWN OF KNIGHTDALE

TOK Project# ZCP-11-24



REUSE OF DOCUMENT
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VICINITY MAP



SCALE: 1" = 800'

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| PROPOSED SITE DATA | |
|--|-------------------------------|
| PROPOSED | |
| PROJECT NAME | BIG OAK VET HOSPITAL |
| PROPOSED USE | ANIMAL SERVICES, NON BOARDING |
| PARKING | |
| REQUIRED | |
| MAX: 6 PER 1,000 GFA | 35 SPACES |
| MIN: 1/2 MAXIMUM | 18 SPACES |
| PROVIDED | |
| STANDARD SPACES | 28 SPACES |
| ADA SPACES | 2 SPACES |
| ELECTRIC CHARGING: 1 PER 40 | 2 SPACES |
| TOTAL | 32 SPACES |
| BICYCLE PARKING | |
| REQUIRED: 1 PER 40 SPACES (MIN. 2 SPACES) | 2 SPACES |
| PROVIDED: 1 PER 40 SPACES (MIN. 2 SPACES) | 2 SPACES |
| TOTAL | 2 SPACES |
| IMPERVIOUS SURFACE AREA | |
| EXISTING | 11,239 SF |
| PROPOSED | |
| BUILDING | 5,815 SF |
| CONCRETE | 3,050 SF |
| ASPHALT | 15,847 SF |
| TOTAL AREA PROPOSED | 24,712 SF |
| PERCENT OF THE SITE | 53 % |
| NET CHANGE OF IMPERVIOUS | 13,473 SF |
| AREA FOR STORMWATER DEVICE | |
| PROVIDED | 1,500 SF |

| EXISTING SITE DATA | |
|------------------------------|-----------------------------------|
| EXISTING STREET ADDRESS | 1004 BIG OAK COURT, KNIGHTDALE NC |
| LOT AREA (CURRENT) | 46,677 SF / 1.07 AC |
| CURRENT ZONING | NMX |
| PARCEL NUMBER | 1744445693 |
| REID | 0195735 |
| DEED BOOK / DEED PAGE | DB 017157, PG 02669 |
| EXISTING GROSS BUILDING AREA | 1,652 SF |
| EXISTING BUILDING USE | RESTAURANT |
| EXISTING IMPERVIOUS AREA | 11,239 SF |

WATER ALLOCATION TABLE

| CATEGORY | POINTS |
|--|-----------|
| BASE: SINGLE USE OFFICE | 41 |
| BONUS 1A: ABATEMENT OF ANY EXISTING NON-CONFORMING STRUCTURES | 3 |
| BONUS 2B: STORMWATER - BIORETENTION | 5 |
| BONUS 3A: ENHANCED ROADSIDE LANDSCAPING AND HARDSCAPING 2 | 2 |
| TOTAL | 51 |

CONTACT INFORMATION

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ARCHITECT
CLINE DESIGN ASSOCIATES
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EMAIL: KELLYS@CLINEDESIGNASSOC.COM

Town Approved Standards Shall Control. In the event of a conflict or inconsistency between these construction drawings and the Town of Knightdale's Approved Standards for this project, the Approved Standards shall control. Town of Knightdale Approved Standards shall mean all development documents necessary for approval for the Property including, but not limited to, any special use permit, subdivision plan, site plan, subdivision plat(s), phasing schedule, Development Agreement, Utility Allocation Agreement, Annexation Agreement, the Town of Knightdale Standard Specification and Details Manual and applicable provisions of the North Carolina State Building Code.

Professional Design Engineer Certification. These improvements shall be constructed in accordance with the following drawings and with the Standard Specifications of the Town of Knightdale. I, _____, PE, certify that the Standard Specifications of the Town of Knightdale have been thoroughly checked and found to be applicable to this project. All exceptions to the applicable Town standards have been previously approved by the Town of Knightdale and said exceptions are shown on Sheet(s) _____ of these drawings.
Seal By: _____, PE
Date: _____

a. Town Certification. This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.
By: _____ Date: _____
Town Engineer
These plans are approved by the Town of Knightdale and serve as construction plans for this project.
By: _____ Date: _____
Land Use Administrator

BIG OAK VET HOSPITAL
VETS PETS
1004 BIG OAK COURT

TOK PROJECT #:
ZCP-11-24

PROJECT NUMBER:

PROJECT PHASE:
CONSTRUCTION
DRAWINGS

DATE: 03.16.2026

SHEET TITLE:

COVER SHEET

SHEET NUMBER:

COV

DEMOLITION NOTES

1. THE CONTRACTOR SHALL NOTIFY THE N.C. ONE CALL CENTER AT 811 OR 1-800-632-4949 PRIOR TO STARTING WORK.
2. THE CONTRACTOR SHALL NOTIFY THE LOCAL GOVERNING PUBLIC UTILITIES DEPARTMENT PRIOR TO STARTING WORK.
3. ALL DEMOLITION, AND ANY SUBSEQUENT CONSTRUCTION, SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS SET FORTH AND APPROVED BY THE LOCAL GOVERNING MUNICIPALITY OR THE STATE. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS.
4. THE CONTRACTOR SHALL NOT MAKE ANY LANE CLOSURES OR CHANGES TO THE EXISTING TRAVEL PATTERNS ON ANY PUBLIC STREET WITHOUT PRIOR APPROVAL FROM THE LOCAL GOVERNING MUNICIPALITY TRANSPORTATION DEPARTMENT AND/OR STATE TRANSPORTATION DEPARTMENT.
5. LANE CLOSURE, TRAFFIC CONTROL PLAN, OR PEDESTRIAN CONTROL PLAN TO BE COORDINATED WITH APPROPRIATE STAFF OF THE LOCAL GOVERNING MUNICIPALITY AND/OR STATE DEPARTMENT OF TRANSPORTATION PRIOR TO ANY CONSTRUCTION IN PUBLIC RIGHT-OF-WAY.
6. THE CONTRACTOR IS RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE AND FEDERAL REQUIREMENTS REGARDING REMOVAL AND DISPOSAL OF MATERIALS AND DEBRIS.
7. CONTRACTOR SHALL REFER TO CIVIL SHEETS FOR SANITARY SEWER AND WATER REMOVALS AND RELOCATIONS.
8. RELOCATION OF EXISTING UTILITIES TO BE COORDINATED WITH THE LOCAL UTILITY PROVIDER(S).
9. WHERE UTILITIES (TO BE REMOVED) IMPACT THE FOOTPRINT OF THE NEW BUILDING, CONTRACTOR SHALL EXCAVATE AND REMOVE AN ADDITIONAL 2 FEET OF SOILS TO EITHER SIDE OF PIPE, AND 1 FOOT BELOW TO REMOVE UNSUITABLE SOILS, IF UNSUITABLE SOILS EXIST.
10. CLEANOUTS LOCATED IN AREAS OF DEMOLITION OR SUBSEQUENT CONSTRUCTION THAT ARE TO REMAIN, SHALL BE PROTECTED FROM DAMAGE AND RAISED TO FLUSH WITH NEW GRADE.
11. ELECTRICAL OR GAS UTILITY SERVICES TO BE REMOVED SHALL BE REMOVED AND RELOCATED (AS INDICATED) BY THE UTILITY PROVIDER. CONTRACTOR SHALL SCHEDULE AND COORDINATE THIS WORK WITH THE APPROPRIATE SERVICE PROVIDER. ALL SERVICES SHOULD BE RE-INSTALLED PRIOR TO THE INSTALLATION OF PAVEMENT, SIDEWALKS, CURB AND GUTTER, OR OTHER PERMANENT FEATURES.
12. REMOVE EXISTING CONCRETE (WHERE REQUESTED) TO FIRST COLD JOINT OR SAWCUT JOINT TO OBTAIN A CLEAN EDGE FOR NEW CONSTRUCTION. SAWCUT EXISTING ASPHALT DRIVE AT LIMITS OF NEW CURBING TO OBTAIN A CLEAN EDGE.
13. CONTRACTOR SHALL RETAIN AND STOCKPILE CONCRETE WHEELSTOPS WHICH ARE IN USEABLE CONDITION FOR RE-INSTALLATION AT THE END OF THE PROJECT.
14. CONTRACTOR SHALL RESTORE THE LAYDOWN AND STAGING AREA TO ORIGINAL CONDITIONS AND TO THE SATISFACTION OF THE OWNER, PRIOR TO DEMOBILIZATION AT THE CONCLUSION OF THE PROJECT.
15. CLEAN SOILS SHALL BE UTILIZED FOR BACKFILL. COMPACTION OF THESE SOILS PERFORMED IN ACCORDANCE WITH SPECIFICATIONS, GEOTECHNICAL REPORT, AND SITE PLAN.
16. ALL FENCING TO BE REMOVED SHALL BE REMOVED AT NEXT NEAREST POLE.
17. ALL GRAVEL TO BE REMOVED (SURFACE OR SUBSURFACE) SHALL BE STOCKPILED AND REUSED ON SITE WHERE POSSIBLE.
18. ALL ITEMS DESIGNATED TO BE REMOVED SHALL BE REMOVED COMPLETELY, INCLUDING ALL SUBGRADE MATERIALS DIRECTLY ASSOCIATED WITH ITEMS TO BE REMOVED.
19. ALL ITEMS DESIGNATED TO BE REMOVED SHALL BE DISPOSED OF LEGALLY OFFSITE UNLESS OTHERWISE NOTED ON THIS PLAN.
20. ALL TREES TO BE REMOVED SHALL BE GROUND DOWN TO A MINIMUM DEPTH OF 12" BELOW PROPOSED FINISH GRADE.
21. ALL TREE PROTECTION FENCING SHALL REMAIN IN PLACE DURING DEMOLITION AND CONSTRUCTION.
22. CONTRACTOR SHALL NOT STOCKPILE SOILS OR CONSTRUCTION EQUIPMENT WITHIN ROOT ZONES OF EXISTING TREES TO REMAIN. ANY DAMAGED TREES SHALL BE REPLACED AT CONTRACTOR'S EXPENSE.
23. LANDSCAPED AREAS REQUIRED BY CHAPTER 7 OF THE UDO SHALL NOT CONTAIN ANY DEVELOPMENT, IMPERVIOUS SURFACES, OR SITE FEATURES THAT DO NOT FUNCTION TO MEET THE APPLICABLE STANDARDS FOR THAT AREA OR THAT REQUIRE REMOVAL OF EXISTING SIGNIFICANT VEGETATION [UDO, SEC. 7.4.E.1].
24. NO GRADING, DEVELOPMENT, OR LAND-DISTURBING ACTIVITIES SHALL OCCUR WITHIN A BUFFER YARD IF FOREST CANOPY, SPECIMEN TREES, OR SIGNIFICANT VEGETATION EXISTS WITHIN THESE AREAS, UNLESS APPROVED BY THE LAND USE ADMINISTRATOR. IF GRADING WITHIN A BUFFER YARD IS PROPOSED, SLOPES OF 1:3 OR LESS ARE ENCOURAGED TO ENSURE THE PROPER TRANSITION OF GRADES TO THE ADJACENT PROPERTY AND TO FACILITATE LANDSCAPING AND MAINTENANCE [UDO, SEC. 7.4.E.2].
25. THROUGH THE PROTECTION OF TREES AND EXISTING VEGETATION, THE TOWN ENCOURAGES NEW DEVELOPMENT TO BE CREATIVE IN DESIGN AND PLACEMENT OF BUILDINGS, STRUCTURES, PARKING, AND OTHER IMPERVIOUS SURFACES AS TO PRESERVE NATURAL FEATURES AND TO COMPLEMENT THE EXISTING TOPOGRAPHY WHEN PRACTICAL. NO TREE GREATER THAN TWELVE (12) INCHES IN DIAMETER AT BREAST HEIGHT (DBH: MEASURED AT 4.5 FEET ABOVE GRADE) LOCATED ON PUBLIC PROPERTY OR WITHIN A REQUIRED TREE PROTECTION AREA (SECTION 7.4) SHALL BE REMOVED FOR THE PURPOSE OF SURVEYING WITHOUT APPROVAL FROM THE LAND USE ADMINISTRATOR [UDO, SEC. 7.4.D.4.A.II.A].
26. TREE PROTECTION FENCES SHALL BE PLACED AROUND ALL PROTECTED TREES DESIGNATED TO BE SAVED PRIOR TO THE START OF DEVELOPMENT ACTIVITIES OR GRADING IN ACCORDANCE WITH STANDARD 2.10 OF THE TOWN OF KNIGHTDALE STANDARD SPECIFICATIONS AND DETAILS MANUAL. TREE PROTECTION FENCES SHALL REMAIN IN PLACE UNTIL DEVELOPMENT ACTIVITIES ARE COMPLETED. TO PREVENT UNINTENDED COMPACTION OF SOIL, THE AREA WITHIN THE PROTECTIVE BARRICADE SHALL REMAIN FREE OF ALL BUILDING MATERIALS, DIRT OR OTHER CONSTRUCTION DEBRIS, CONSTRUCTION TRAFFIC, STORAGE OF VEHICLES AND MATERIALS, AND MASS GRADING [UDO, SEC. 7.4.D.4.A.II.B].
27. EXCEPT FOR DRIVEWAY ACCESS POINTS, SIDEWALKS, CURB, AND GUTTER; NO PAVING WITH CONCRETE OR OTHER IMPERVIOUS MATERIALS WITHIN FIVE (5) FEET OF A TREE DRIP LINE SHALL BE ALLOWED UNLESS OTHERWISE APPROVED. WHERE GRADING WITHIN A TREE DRIPLINE CANNOT BE AVOIDED, CUT AND FILL SHALL BE LIMITED TO ONE-QUARTER (¼) TO ONE-HALF (½) OF THE AREA WITHIN THE DRIPLINE, AND TREE ROOTS MUST BE PRUNED WITH CLEAN CUTS AT THE EDGE OF THE DISTURBED AREA. NO FILL SHALL BE PLACED WITHIN THE DRIPLINE OF A TREE WITHOUT VENTING TO ALLOW AIR AND WATER TO REACH THE ROOTS [UDO, SEC. 7.4.D.4.A.II.C].

a. **Town Certification.** This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: _____ Date: _____

Town Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

By: _____ Date: _____

Land Use Administrator

GENERAL SITE NOTES

1. ALL CONSTRUCTION IN RIGHT-OF-WAY PER TOWN OF KNIGHTDALE STANDARD.
2. SIDEWALKS ALONG RIGHT-OF-WAY ARE PUBLIC AND MUST BE ACCESSIBLE TO PERSONS WHO ARE BLIND, HAVE LOW VISION AND PEOPLE WITH MOBILITY DISABILITIES. EXISTING PEDESTRIAN ROUTES AND ALTERNATE PEDESTRIAN ROUTES DURING CONSTRUCTION ARE REQUIRED TO BE COMPLIANT WITH THE PUBLIC RIGHTS OF WAY ACCESSIBILITY GUIDELINES (PROWAG), 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
3. ALL PAVEMENTS TO SLOPE POSITIVELY AWAY FROM ALL BUILDINGS. PONDING OF WATER IS PROHIBITED.
4. PROVIDE CONSTRUCTION JOINTS IN CONCRETE WALKWAYS AS SHOWN IN PLANS. IF NOT SHOWN ON PLANS - MAX SPACING @ 10'
5. THROUGHOUT PROJECT SITE, ALL DIMENSIONS TO BE FIELD VERIFIED. NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCY. ALL DIMENSIONS ARE TO OUTSIDE FACE OF BUILDING, TO CENTERLINE, CENTER TO CENTER ON STRIPES, AND/OR FACE OF CURB, UNLESS OTHERWISE NOTED.
6. BUILDING AND PUBLIC ROADWAY STAKE OUT SHALL BE PERFORMED BY A REGISTERED LAND SURVEYOR.
7. GUARDRAILS MUST BE INSTALLED ON THE OPEN SIDES OF ELEVATED WALKING SURFACES THAT EXCEED 30 INCHES IN HEIGHT. ALL GUARDRAILS MUST BE A MINIMUM HEIGHT OF 42 INCHES ABOVE THE LEADING EDGE OF THE TREAD OR WALKING SURFACE. GUARDRAILS SHALL HAVE BALUSTERS SUCH THAT A 4 INCH DIAMETER SPHERE CANNOT PASS THROUGH ANY OPENING UP TO A HEIGHT OF 34 INCHES. FROM 34 INCHES TO 42 INCHES ABOVE THE WALKING SURFACE, A 8 INCH DIAMETER SPHERE SHALL NOT PASS.
8. THE CONTRACTOR, AT ALL TIMES, MUST KEEP THE PREMISES FREE FROM ACCUMULATIONS OF WASTE MATERIALS OR RUBBISH CAUSED BY THE CONTRACTOR, THE CONTRACTOR'S EMPLOYEES OR THE CONTRACTOR'S SUBCONTRACTOR. ALL DEBRIS SHALL BE REMOVED FROM THE PROJECT SITE ON A DAILY BASIS.
9. IF DEPARTURES FROM THE DRAWINGS OR SPECIFICATIONS ARE DEEMED NECESSARY BY THE CONTRACTOR, DETAILS OF SUCH DEPARTURES FROM THE CONTRACT DOCUMENTS SHALL BE MADE WITH THE EXPRESS WRITTEN PERMISSION OF THE OWNER.
10. LANDSCAPE ARCHITECT AND/OR OWNER DISCLAIM ANY ROLE IN THE CONSTRUCTION MEANS AND/OR METHODS ASSOCIATED WITH THE PROJECT AS SET FORTH IN THESE PLANS.
11. EXISTING UTILITIES AND STRUCTURES SHOWN, BOTH UNDERGROUND AND ABOVE, ARE BASED ON A FIELD DATA PROVIDED TO LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL LOCATE EXISTING UTILITIES, UNDERGROUND LINES, AND STRUCTURES AS NECESSARY TO AVOID DAMAGING OR DESTROYING EXISTING SERVICES.
12. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING THE ACTUAL AND EXACT LOCATION, SIZE, AND MATERIAL COMPOSITION OF ANY EXISTING WATER OR SEWER SERVICE PROPOSED FOR CONNECTION OR USE ON THIS PROJECT. THE RELOCATION OF ANY UTILITY SERVICES REQUIRED TO COMPLETE ANY PORTION OF THESE CONSTRUCTION PLANS.
13. CONTRACTOR SHALL MAINTAIN AN "AS BUILT" SET OF DRAWINGS TO RECORD ANY FIELD CHANGES, ALONG WITH ANY PIPING PRIOR TO CONCEALMENT. DRAWINGS SHALL BE GIVEN TO THE OWNER AT THE END OF THE PROJECT.
14. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH PERMITS AS ISSUED, AND ANY AND ALL APPLICABLE STATE, COUNTY AND LOCAL CODES.
15. EXISTING IMPROVEMENTS DAMAGED OR DESTROYED DURING CONSTRUCTION SHALL BE REPLACED OR RESTORED TO THEIR ORIGINAL CONDITION, AND TO THE SATISFACTION OF THE OWNER OF THE IMPROVEMENTS.
16. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL INSPECTIONS, CERTIFICATIONS, AND/OR ANY OTHER REQUIREMENTS WHICH MUST BE MET UNDER CONTRACT.
17. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR DETAILS OF BUILDINGS AND BUILDING DIMENSIONS.
18. CONTRACTOR SHALL COORDINATE CONSTRUCTION OF ALL UNDERGROUND UTILITIES FOR THIS PROJECT WITH THE OWNER'S REPRESENTATIVE PER ALL APPLICABLE REGULATIONS.
19. CONTRACTOR SHALL COORDINATE WITH OTHER CONTRACTOR'S ON SITE AND UTILITY PROVIDERS DURING CONSTRUCTION TO ENSURE SMOOTH TRANSITION BETWEEN DISCIPLINES.
20. ALL DEMOLITION, AND ANY SUBSEQUENT CONSTRUCTION, SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS SET FORTH AND APPROVED BY THE CITY OF RALEIGH. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS. ALL TREE PROTECTION FENCING SHALL REMAIN IN PLACE DURING CONSTRUCTION.
21. TRAFFIC CONTROLS FOR ANY UTILITY WORK WITHIN THE PUBLIC RIGHT OF WAY SHALL BE PERFORMED IN COMPLIANCE WITH STANDARDS OF THE NORTH CAROLINA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
22. ALL CROSSWALK MARKINGS WITHIN RIGHT-OF-WAY SHALL BE CONSTRUCTED OF THERMOPLASTIC MATERIALS AND CONSTRUCTED IN ACCORDANCE WITH NCDOT SPECIFICATIONS. CONTRACTOR TO INSTALL CROSSWALKS IN SUCH A MANNER THAT CROSSWALKS ARE ALIGNED BETWEEN HANDICAP/WALKWAY ACCESS POINTS OR PERPENDICULAR TO THE ROADWAY / DRIVE LANE.
23. ALL SIGNS AND PAVEMENT MARKINGS ARE TO MEET MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) AND NCDOT STANDARDS.
24. ALL SIGNS SHALL USE PRISMATIC SHEETING THAT MEETS MINIMUM RETROREFLECTIVITY STANDARDS FOUND IN THE LATEST EDITION OF THE MUTCD.

PLANTING NOTES

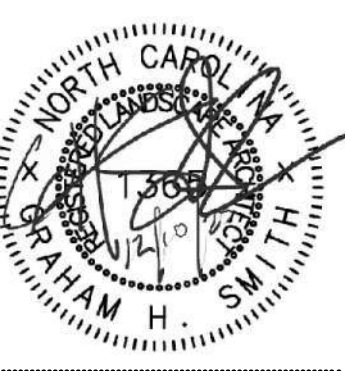
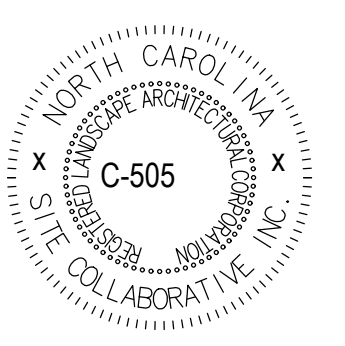
1. ROUGH GRADING TO BE COMPLETED PRIOR TO THE START OF PLANT INSTALLATION. SUBSTANTIAL COMPLETION SIGN-OFF BY LANDSCAPE ARCHITECT CONTRACTOR TO ENSURE NO CHANNELIZED FLOWS AROUND THE SITE.
2. CONTRACTOR RESPONSIBLE FOR LOCATING ALL UTILITIES AND UNDERGROUND IMPEDIMENTS PRIOR TO BEGINNING PLANTING.
3. ALL WEEDS, NON-NATIVE INVASIVE SPECIES, AND EXOTIC SPECIES LOCATED WITHIN THE PROJECT CONTRACTOR LIMITS SHALL BE ELIMINATED PRIOR TO PLANTING BED CREATION, PLANTING, AND SEEDING/SODDING OPERATIONS.
4. PLANTING SHOULD OCCUR IMMEDIATELY AFTER CONSTRUCTION TO STABILIZE AREAS OF BARE SOIL.
5. IT SHALL BE NOTED THAT ALL SECTIONS OF THE SITE THAT ARE SLOPED 3:1 OR HIGHER WILL BE COVERED WITH EROSION CONTROL STABILIZATION COIR FABRIC (WITH 1" SQUARE OPENINGS) PRIOR TO PLANTING TO ENSURE IMMEDIATE STABILIZATION. LANDSCAPE CONTRACTOR SHALL CUT FABRIC AT EACH PLANT LOCATION AND PLACE PLANTS ACCORDING TO PLAN. ALL FABRIC SHALL BE RE-STAKED PER ENGINEERS ORIGINAL DRAWINGS IMMEDIATELY AFTER PLANTING.
6. PLANTS ARE TO BE PURCHASED BY BOTANICAL NAMES. THEY SHALL BE REPRESENTATIVE OF THEIR SPECIES, MEET ALL NOTED CONDITIONS OF SPECIFICATIONS, AND SHALL BE IN VIGOROUS GROWING CONDITION MEETING ANSI STANDARD Z60.
7. LANDSCAPE ARCHITECT OR OWNER MAINTAINS RIGHT TO REJECT ANY PLANT DUE TO AESTHETICS OR STRUCTURAL DEFICIENCY AT ANY TIME.
8. CONTRACTOR RESPONSIBLE FOR FURNISHING AND INSTALLING ALL PLANTS SHOWN ON PLANS IN LOCATIONS SHOWN. QUANTITIES GIVEN ON THE PLANT LEGEND ARE FOR CONTRACTOR'S CONVENIENCE ONLY. IF DISCREPANCIES OCCUR, THE PLANS SHALL OVERRULE THE PLANT LEGEND. CONTRACTOR SHALL LOCATE ALL PLANTS AWAY FROM KNOWN PERMANENT FIXTURES. IF CONFLICT ARISES WITH PLAN, CONTRACTOR SHALL NOTIFY PROJECT MANAGER OR DESIGNER PRIOR TO PROCEEDING.
9. ALL PLANT MATERIAL SHALL CONFORM TO OR EXCEED THE AMERICAN STANDARD FOR NURSERY STOCK (LATEST EDITION) AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
10. ALL PLANT MATERIAL SHALL BE FREE OF ALL PESTS, DISEASES, AND CANKERS, IN HEALTHY CONDITION, AND FREE OF MECHANICAL DAMAGE AT THE TIME OF PLANTING.
11. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE A HEALTHY AND VIABLE PLANT AND THE PLANT SHALL BE REJECTED IF DEEMED UNHEALTHY OR UNFIT AT ANY TIME DURING THE CONTRACT OR WARRANTY DURATION.
12. IF ANY PLANT/MATERIAL SUBSTITUTIONS ARE REQUESTED BY CONTRACTOR, THEN NOTICE SHALL BE GIVEN TO PROJECT MANAGER OR DESIGNEE AT MINIMUM SEVENTY-TWO (72) HOURS (NOT INCLUDING WEEKENDS) PRIOR TO DESIRED ORDERING DATE/TIME. WHEN SUBSTITUTIONS ARE REQUESTED BY CONTRACTOR, SUGGESTED ACCEPTABLE REPLACEMENTS SHALL ALSO BE PRESENTED AT TIME FOR FULL AND COMPLETE REVIEW BY LANDSCAPE ARCHITECT OR OWNER.
13. BALLED AND BURLAPPED PLANTS/TREES TO BE PLANTED PRIOR TO CONTAINER OR BEDDING PLANTS.
14. BALLED AND BURLAPPED MATERIAL SHALL COMPLY WITH THE FOLLOWING GUIDELINES:
 - 14.1. TREES DESIGNATED B&B SHALL BE PROPERLY DUG WITH FIRM, NATURAL BALLS OF SOIL RETAINING AS MANY FIBROUS ROOTS AS POSSIBLE, IN SIZES AND SHAPES AS SPECIFIED IN THE AMERICAN STANDARD FOR NURSERY STOCK ANSI Z60.1.
 - 14.2. ROOT BALLS SHALL BE FIRMLY WRAPPED WITH NONSYNTHETIC, ROTTABLE BURLAP AND SECURED WITH NAILS AND HEAVY, NONSYNTHETIC TWINE.
 - 14.3. ROOT COLLAR SHALL BE APPARENT AT SURFACE OF BALL. OR THE CONTRACTOR WILL BE RESPONSIBLE FOR REMOVING EXCESS SOIL FROM THE TOP OF THE ROOTBALL.
 - 14.4. REMOVE ALL BURLAP, LACING, AND WIRE BASKET FROM AT LEAST THE TOP 1/2 OF THE ROOTBALL AND DISCARD FROM PLANTING HOLE.
 - 14.5. DO NOT MANUEVER BY TRUNK. HANDLE BY ROOT BALL ONLY.
15. CONTAINERIZED PLANTS SHALL COMPLY WITH THE FOLLOWING GUIDELINES:
 - 15.1. MATERIAL SHALL HAVE FIRM, NATURAL BALLS OF SOIL RETAINING AS MANY FIBROUS ROOTS AS POSSIBLE, IN SIZES AND SHAPES AS SPECIFIED IN THE AMERICAN STANDARD FOR NURSERY STOCK ANSI Z60.1
 - 15.2. ROOT COLLAR SHALL BE APPARENT AT SURFACE OF BALL. OR THE CONTRACTOR WILL BE RESPONSIBLE FOR REMOVING EXCESS SOIL FROM THE TOP OF THE ROOTBALL.
 - 15.3. REMOVE CONTAINER PRIOR TO PLANTING.
16. TREES TO BE STAKED WILL BE DESIGNATED BY THE LANDSCAPE ARCHITECT. TREE STAKING FOR CANOPY AND LARGE EVERGREEN TREES SHALL NOT EXCEED 90 DAYS.
17. PLANT BED PREPARATION:
 - 17.1. ALL PLANT BEDS ARE TO RECEIVE A MINIMUM OF 4" OF APPROVED TOPSOIL TILLED IN TO A DEPTH OF 8" TO ENSURE INTEGRATION WITH EXISTING SOIL.
 - 17.2. APPROVED TOPSOIL IS TO BE PREFERABLY FROM ON-SITE STOCKPILE FROM STRIPPING OPERATIONS - SEE EROSION AND SEDIMENT CONTROL PLANS.
 - 17.3. IF ON-SITE TOPSOIL IS NOT AVAILABLE, CONTRACTOR SHALL PROVIDE TO SITE ACCORDINGLY.
18. ALL MULCH TO BE CERTIFIED TO BE FREE OF WEEDS, NON-NATIVE INVASIVE SPECIES AND THEIR LARVAE. MULCH SAMPLE SUBMITTAL SHALL BE PROVIDED TO LANDSCAPE ARCHITECT BEFORE SITE DELIVERY.

SEEDING/SODDING NOTES

1. ROUGH GRADING TO BE COMPLETED PRIOR TO THE START OF PLANT INSTALLATION. SUBSTANTIAL COMPLETION SIGN-OFF BY LANDSCAPE ARCHITECT CONTRACTOR TO ENSURE NO CHANNELIZED FLOWS AROUND THE SITE.
2. ALL SEEDED/SODDED AREAS SHALL BE FINISHED GRADE AT THE THICKNESS OF THE SOD.
3. NO SEEDED/SODDED AREAS SHALL BE SODDED UNTIL ALL OTHER CONSTRUCTION ACTIVITIES, INCLUDING PLANTING AND MULCHING HAVE OCCURRED AND LANDSCAPE ARCHITECT HAS REVIEWED THE FINAL GRADING.
4. SOD AREAS WILL BE ACCEPTED WHEN IN COMPLIANCE WITH ALL THE FOLLOWING CONDITIONS:
 - 4.1. ROOTS ARE THOROUGHLY KNIT TO THE SOIL
 - 4.2. ABSENCE OF VISIBLE JOINTS
 - 4.3. ALL AREAS SHOW A UNIFORM STAND OF SPECIFIED GRASS IN HEALTHY CONDITION
 - 4.4. AT LEAST 30 DAYS HAVE ELAPSED SINCE THE COMPLETION OF WORK UNDER THIS SECTION.
5. QUALITY GUARANTEE:
 - 5.1. SOD SHALL BE UNIFORM IN COLOR, LEAF TEXTURE, LEAF AND ROOD DENSITY, AND FREE FROM WEED, DISEASES, AND OTHER VISIBLE IMPERFECTIONS AT TIME OF FINAL ACCEPTANCE. GUARANTEE DOES NOT COVER DAMAGE AS A RESULT OF FERTILIZERS, PESTICIDES, OR OTHER APPLICATIONS NOT SUPERVISED BY THE CONTRACTOR OR AS A RESULT OF ACTS OF GOD OR VANDALISM.
 - 5.2. SEED SHALL BE UNIFORM IN COLOR, LEAF TEXTURE, LEAF AND ROOD DENSITY, AND FREE FROM WEED, DISEASES, AND OTHER VISIBLE IMPERFECTIONS AT TIME OF FINAL ACCEPTANCE. GUARANTEE DOES NOT COVER DAMAGE AS A RESULT OF FERTILIZERS, PESTICIDES, OR OTHER APPLICATIONS NOT SUPERVISED BY THE CONTRACTOR OR AS A RESULT OF ACTS OF GOD OR VANDALISM.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE SEED/SOD IS PROPERLY IRRIGATED DURING THE GROW-IN PERIOD AND SHALL BE RESPONSIBLE IF THE SOD SUFFERS IRREPARABLE HARM.
7. SEED/SOD IS SUBJECT TO INSPECTION AND ACCEPTANCE. LANDSCAPE ARCHITECT AND/OR CLIENT RESERVES THE RIGHT TO REJECT AT ANY TIME OR PLACE PRIOR TO ACCEPTANCE. ANY WORK AND SOD WHICH IN THE LANDSCAPE ARCHITECTS OPINION FAIL TO MEET THESE SPECIFICATIONS REQUIREMENTS.
8. SOD STANDARDS:
 - 8.1. GENERAL: HEALTHY, THICK TURF HAVING UNDERGONE A PROGRAM OF REGULAR FERTILIZATION, MOWING AND WEED CONTROL; FREE OF OBJECTABLE WEEDS; UNIFORM IN GREEN COLOR, LEAF TEXTURE AND DENSITY; HEALTHY, VIGOROUS ROOT SYSTEM; INSPECTED AND FOUND FREE OF DISEASE, NEMATODES, PEST AND PEST LARVAE BY THE ENTOMOLOGIST OF THE STATE DEPARTMENT OF AGRICULTURE
 - 8.2. EACH PIECE OF SOD: SANDY-LOAM SOIL BASE THAT WILL NOT BREAK, CRUMBLE OR TEAR DURING SOD INSTALLATION.
 - 8.3. THICKNESS: MINIMUM 3/4" THICK, EXCLUDING THE TOP GROWTH THATCH.
 - 8.4. THATCH: NOT TO EXCEED 1/2" UNCOMPRESSED.
 - 8.5. SIZE: CUT IN STRIPS 18" WIDE NO MORE THAN 24 HOURS PRIOR TO DELIVERY.
9. SOD DELIVERY, STORAGE AND HANDLING GUIDELINES ARE AS FOLLOWS:
 - 9.1. SOD SHALL BE DELIVERED ON PALLETS PROPERLY LOADED ON VEHICLES AND WITH ROOT SYSTEM PROTECTED FROM EXPOSURE TO SUN, WIND, AND HEAT IN ACCORDANCE WITH STANDARD PRACTICE AND LABELED WITH BOTANICAL AND COMMON NAME OF EACH GRASS SPECIES IN ACCORDANCE WITH FEDERAL SEED ACT. SOD THAT HAS BEEN DAMAGED BY POOR HANDLING OR IMPROPER STORAGE IS SUBJECT TO REJECTION BY THE LANDSCAPE ARCHITECT OR OWNER.
 - 9.2. PROTECT FROM DEHYDRATION, CONTAMINATION, FREEZING AND HEATING AT ALL TIMES. KEEP STORED SOD MOIST AND UNDER SHADE OR COVERED WITH MOISTENED BURLAP.
 - 9.3. DO NOT DROP SOD ROLLS FROM CARTS, TRUCKS OR PALLETS.
 - 9.4. DO NOT DELIVER WET SOD THAN CAN BE INSTALLED WITHIN 36 HOURS.
 - 9.5. DO NOT STACK SOD MORE THAN 2 FEET DEEP.
10. SEED/SODDED BED PREPARATION:
 - 10.1. ALL DEBRIS, ROCKS, ETC. LARGER THAN .5" ARE TO BE REMOVED PRIOR TO SEEDING/SODDING OR PLANTING.
 - 10.2. ALL AREAS TO BE SEEDED/SODDED ARE TO RECEIVE A MINIMUM OF 2" OF APPROVED TOPSOIL TILLED INTO A DEPTH OF 4" TO ENSURE INTEGRATION WITH EXISTING SOIL.
 - 10.3. APPROVED TOPSOIL IS TO BE PREFERABLY FROM ON-SITE STOCKPILE FROM STRIPPING OPERATIONS - SEE EROSION AND SEDIMENT CONTROL PLANS.
 - 10.4. IF ON-SITE TOPSOIL IS NOT AVAILABLE, CONTRACTOR SHALL PROVIDE TO SITE ACCORDINGLY.

GRADING NOTES

1. ORIGINAL EXISTING CONDITIONS SHOWN AS 'EXISTING' IN THIS PLAN SET HAS BEEN COMPILED FROM SURVEY DATA PROVIDED BY JACO. CONTRACTOR TO FIELD VERIFY ALL INFORMATION AND REPORT ANY DISCREPANCIES.
2. ALL DIMENSIONS AND GRADES SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN OR GRADE CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO CONTRACTOR FOR ANY WORK DONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
3. ALL PAVEMENTS TO SLOPE POSITIVELY AWAY FROM ALL BUILDINGS. PONDING OF WATER IS PROHIBITED.
4. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF EROSION CONTROL METHODS DURING CONSTRUCTION, AND THE OWNER IS RESPONSIBLE FOR MAINTENANCE OF ALL PERMANENT EROSION CONTROL METHODS AFTER CONSTRUCTION IS COMPLETE, IF ANY PERMANENT METHODS ARE REQUIRED.
5. CONSTRUCTION AND MAINTENANCE OF ALL EROSION CONTROL DEVICES SHALL CONFORM TO THE STANDARDS SET FORTH IN THE CITY OF RALEIGH EROSION AND SEDIMENT CONTROL MANUAL.
6. INSPECTOR REFERS TO AUTHORIZED REGULATORY AGENCY SEDIMENTATION AND EROSION CONTROL INSPECTOR OR HIS/HER REPRESENTATIVE. FIELD INSPECTIONS MAY REQUIRE ADDITIONAL SEDIMENTATION AND EROSION CONTROL MEASURES AS DEEMED NECESSARY BY THE INSPECTOR, CLIENT, AND/OR CLIENT'S REPRESENTATIVES.
7. WHEN HAND PLANTING, MULCH (HAY OR STRAW) SHOULD BE UNIFORMLY SPREAD OVER SEEDED AREA WITHIN 24 HOURS OF SEEDING.
8. DURING UNSUITABLE GROWING SEASONS, MULCH WILL BE USED AS A TEMPORARY COVER ON SLOPES THAT ARE 4:1 OR STEEPER. MULCH WILL BE ANCHORED.
9. EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSTALLED AND INSPECTED PRIOR TO ANY GRADING ON SITE. PLEASE CALL THE REGULATORY AUTHORITY FOR AN INSPECTION.
10. INSPECT AND MAINTAIN ALL EROSION CONTROL MEASURES EVERY 7 DAYS AND AFTER EACH SIGNIFICANT RAINFALL (0.5 INCHES OR GREATER) AND DOCUMENT WITH INSPECTION REPORTS.
11. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE.
12. LOCATE STOCKPILES UPSLOPE FROM EROSION CONTROL MEASURES. ALL SOIL STOCK PILES SHALL HAVE APPROPRIATE EROSION CONTROL PER THE LATEST VERSION OF THE CITY OF RALEIGH EROSION AND SEDIMENT CONTROL MANUAL INCLUDING SEEDING AND SILT FENCE AROUND THE BASE OF THE STOCK PILE.



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BIG OAK VET HOSPITAL
VETS PETS
1004 BIG OAK COURT

TOK PROJECT #:
ZCP-11-24

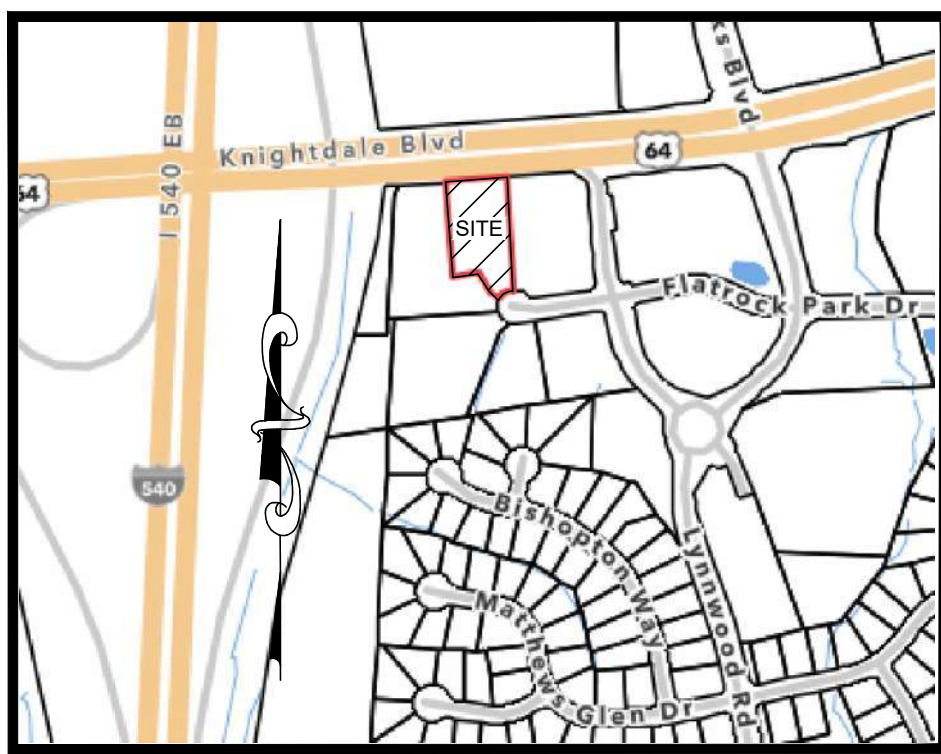
PROJECT NUMBER:

PROJECT PHASE:
CONSTRUCTION DRAWINGS

DATE: 03.16.2026
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SHEET TITLE:
STANDARD NOTES

SHEET NUMBER:
L001



VICINITY MAP
NOT TO SCALE

SITE DATA
 LOT 2
 OWNER ROWDY RIDGEBACKS HOLDINGS LLC
 325 NASH ST E
 WILSON NC 27893-4130
 SITE ADDRESS 1004 BIG OAK CT
 KNIGHTDALE, NC 27545
 PIN 1744445693
 REFERENCES DB 17151, PG 2669
 BM 1994, PG 840
 DB 9312, PG 2086
 AREA 46,677 S.F. (1.0716 AC.)
 ZONING NMX

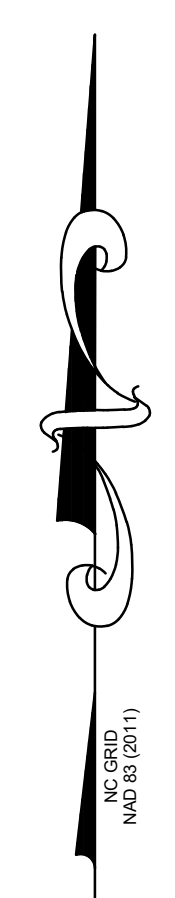
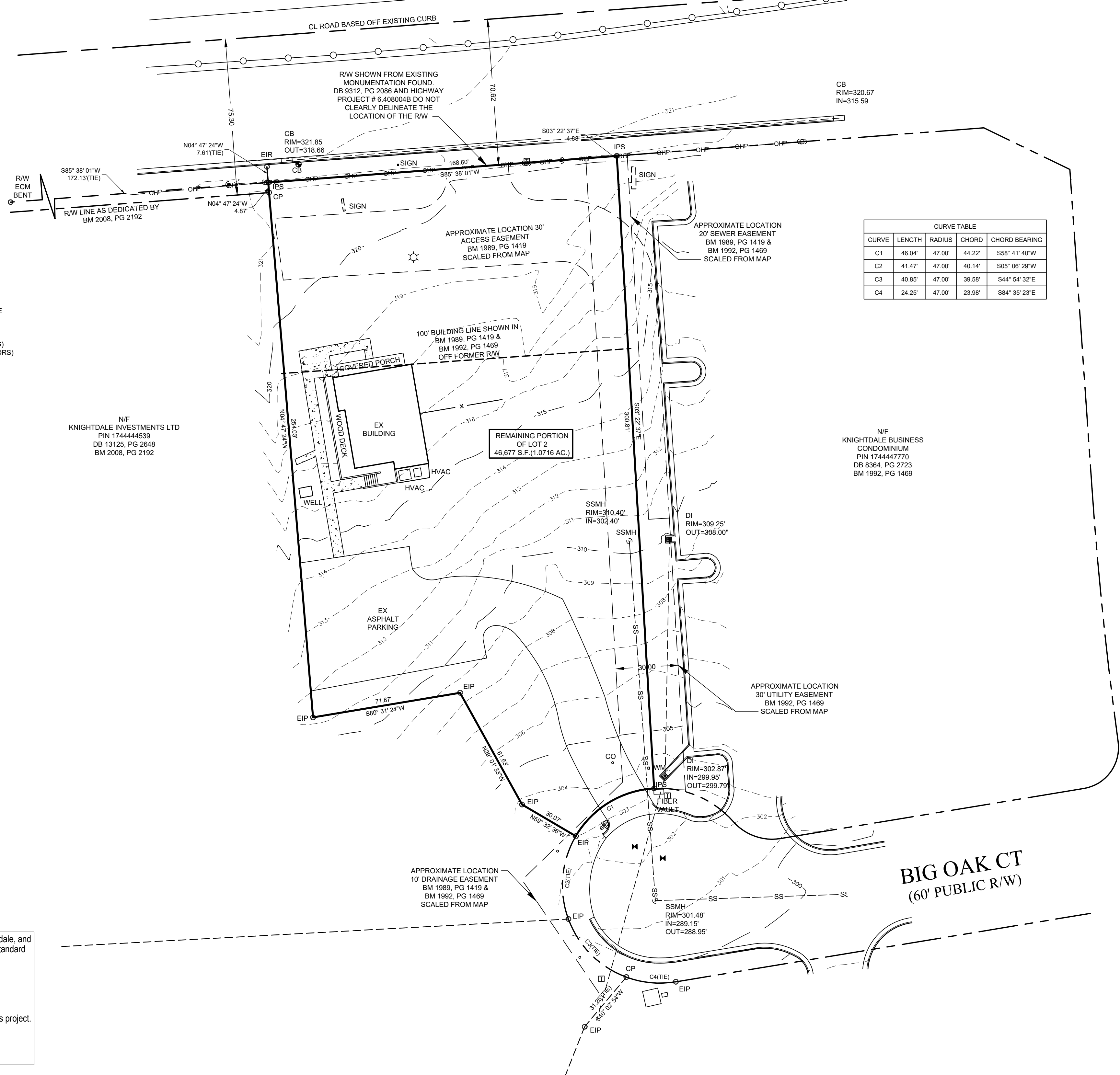
NOTES:

- ALL DISTANCES ARE HORIZONTAL GROUND.
- ALL DIMENSIONS ARE IN FEET.
- AREA COMPUTED USING COORDINATE METHOD FROM MEASURED FIELD DATA.
- THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND MAY BE SUBJECT TO ANY MATTERS THAT A FULL TITLE SEARCH WOULD DISCLOSE.
- BASIS OF BEARINGS IS NORTH CAROLINA GRID NORTH: NAD83(2011). THE SITE WAS LOCALIZED UTILIZING REAL-TIME KINEMATIC (RTK) GLOBAL POSITIONING SYSTEM (GPS) SOLUTIONS REFERENCING THE CONTINUOUSLY OPERATING REFERENCE STATION (CORS) NETWORK BASE STATION NCRD, RALEIGH, NC.
- ALL REFERENCE ARE MADE TO THE WAKE COUNTY REGISTRY.
- HORIZONTAL DATUM IS NAD 83(2011) AND VERTICAL DATUM IS NAVD 88

N/F
 KNIGHTDALE INVESTMENTS LTD
 PIN 174444539
 DB 13125, PG 2648
 BM 2008, PG 2192

N/F
 KNIGHTDALE BUSINESS
 CONDOMINIUM
 PIN 1744447770
 DB 8364, PG 2723
 BM 1992, PG 1469

**US HIGHWAY 64
 KNIGHTDALE BLVD
 (VARIABLE WIDTH PUBLIC R/W)**
 SEE NCDOT PROJECT # 6.408004B
 HM 3, PG 193



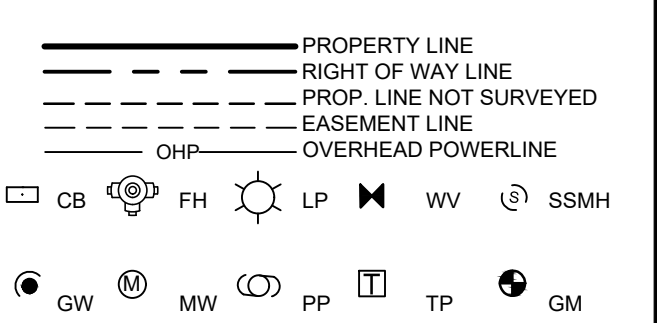
JOHN A. EDWARDS & COMPANY
 Consulting Engineers
 and Land Surveyors
 NC License F-0289
 333 Wade Ave., Raleigh, N.C. 27605
 Phone: (919) 828-4428
 Fax: (919) 828-4711
 E-mail: info@jaeco.com
 www.jaeco.com



Project
 1004 BIG OAK CT
 KNIGHTDALE, NC 27545
 Client
SITE COLLABORATIVE
 1620 HILLSBOROUGH ST
 STE 100
 RALEIGH, NC 27605

LEGEND

| | |
|------|--------------------------|
| BM | BOOK OF MAPS |
| DB | DEED BOOK |
| PG | PAGE |
| N/F | NOW OR FORMERLY |
| R/W | RIGHT OF WAY |
| EIP | EXISTING IRON PIPE |
| EMAG | EXISTING MAG NAIL |
| IPS | IRON PIPE SET |
| MAGS | MAG NAIL SET |
| CP | COMPUTED POINT |
| SS | SANITARY SEWER |
| CO | SANITARY SEWER CLEAN OUT |
| HC | HANDICAPPED |
| ST | STORM |
| TF | TRANSFORMER |
| CB | STORM CATCH BASIN |
| WV | WATER VALVE |
| DI | DROP INLET |
| CONC | CONCRETE |
| SSMH | SANITARY SEWER |
| WM | WATER METER |
| LP | LIGHT POLE |
| GM | GAS METER |
| TP | TELEPHONE PEDESTAL |
| FH | FIRE HYDRANT |
| PP | POWER POLE |
| BFP | BACK FLOW PREVENTER |
| RCP | REINFORCED CONCRETE PIPE |
| EBOX | ELECTRICAL BOX |
| XXX | DENOTES ADDRESS |



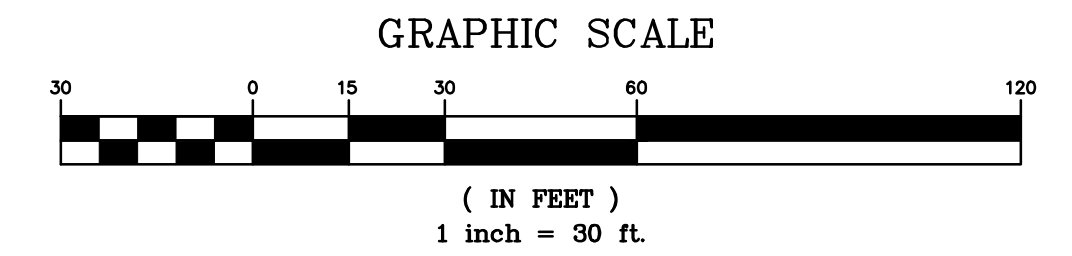
**L100
 EXISTING
 CONDITIONS SURVEY**

Revisions

| Number | Description | Date |
|--------|-------------|------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Drawing Scale 1" = 30'
 Drawn By ZCS
 Checked By CLP/JAE, JR.
 Date Issued 8/20/2024 1 of 1

a. **Town Certification.** This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.
 By: _____ Date: _____
Town Engineer
 These plans are approved by the Town of Knightdale and serve as construction plans for this project.
 By: _____ Date: _____
Land Use Administrator



BIG OAK VET HOSPITAL
VETS PETS
1004 BIG OAK COURT

TOK PROJECT #:
 ZCP-11-24

PROJECT NUMBER:

PROJECT PHASE:
CONSTRUCTION
DRAWINGS

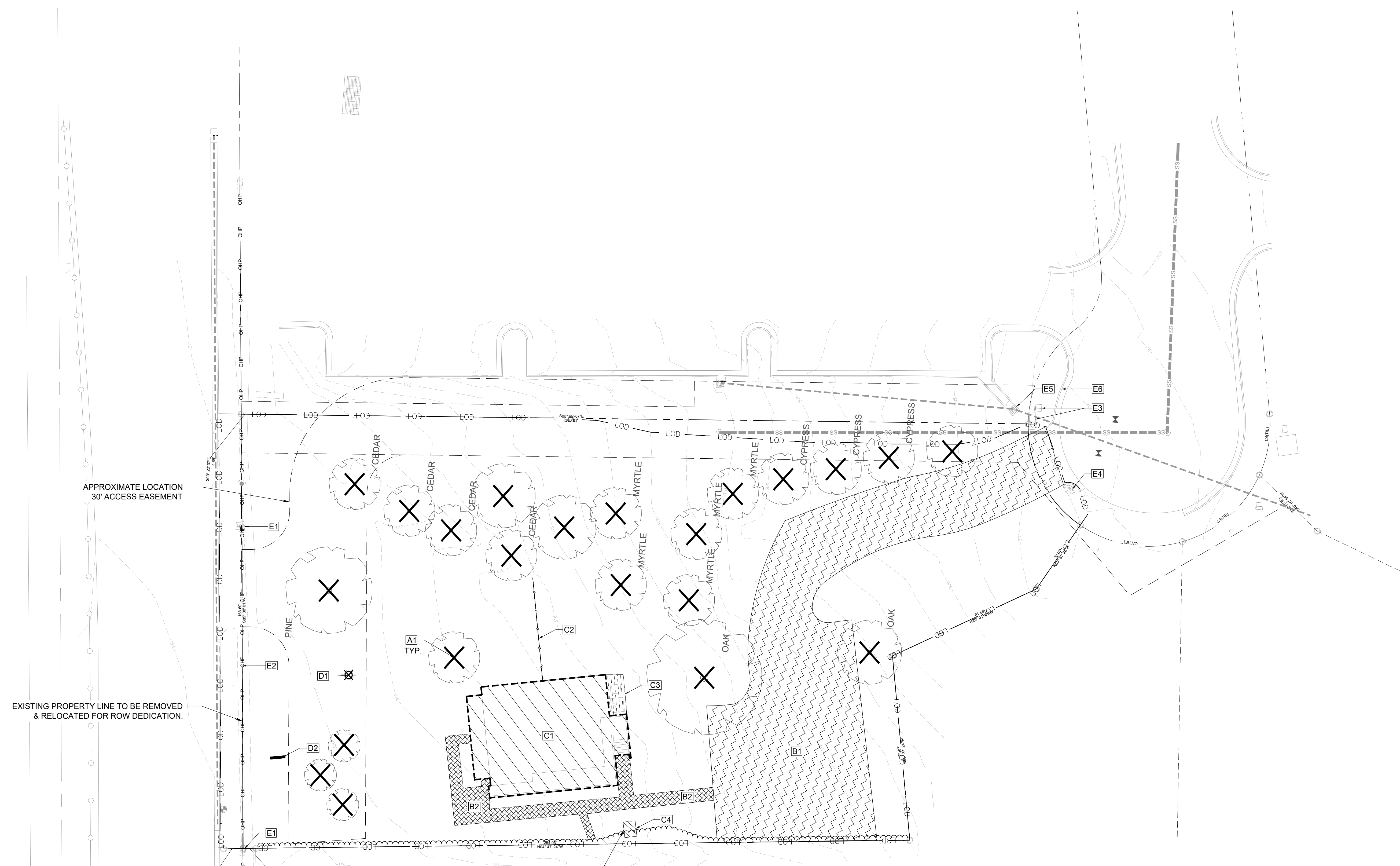
DATE: 03.16.2026

SHEET TITLE:

DEMOLITION PLAN

SHEET NUMBER:

L101

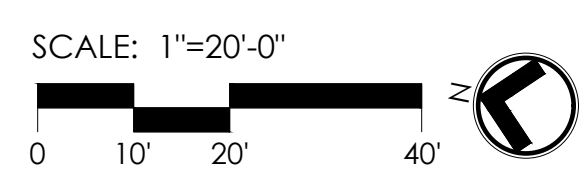


APPROXIMATE LOCATION
 30' ACCESS EASEMENT

EXISTING PROPERTY LINE TO BE REMOVED
 & RELOCATED FOR ROW DEDICATION.

ONE OR MORE EXISTING WELL(S) HAVE BEEN FIELD LOCATED ON THE SUBJECT PROPERTY(IES) AND WILL REQUIRE ABANDONMENT. CONTRACTOR SHALL OBTAIN WELL ABANDONMENT PERMITS FROM WAKE COUNTY THROUGH THE COUNTY'S PERMIT PORTAL PRIOR TO REMOVAL OF SAID WELL(S).

| DEMOLITION LEGEND | |
|-------------------|--|
| KEY | DESCRIPTION |
| | A1 TREE TO BE REMOVED COMPLETELY |
| | B1 ASPHALT DRIVE TO BE REMOVED COMPLETELY |
| | B2 CONCRETE PAVING TO BE REMOVED COMPLETELY |
| | C1 EXISTING BUILDING TO BE DEMOLISHED |
| | C2 EXISTING FENCE TO BE REMOVED COMPLETELY |
| | C3 EXISTING HVAC TO BE REMOVED COMPLETELY |
| | C4 EXISTING WELL TO BE REMOVED COMPLETELY |
| | D1 POWER POLE TO BE REMOVED COMPLETELY. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER |
| | D2 SIGN TO BE REMOVED COMPLETELY. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER |
| | E1 EXISTING POWER POLE TO BE RELOCATED |
| | E2 EXISTING OVERHEAD POWER LINES TO BE RELOCATED |
| | E3 EXISTING UTILITIES TO BE RELOCATED |
| | E4 EXISTING FIRE HYDRANT TO BE PROTECTED IN PLACE |
| | E5 EXISTING DRAIN INLET TO BE PROTECTED IN PLACE |
| | E6 EXISTING CURB AND GUTTER TO BE PROTECTED IN PLACE |



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By: _____ Date: _____
Town Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

By: _____ Date: _____
Land Use Administrator

LAYOUT LEGEND

| SYMBOL | DESCRIPTION |
|--------|---------------------------------|
| — | ALIGN |
| X-X" | DIMENSION (PRECISION TO 1') |
| ⌒ X-X" | ARC DIMENSION (PRECISION TO 1') |
| TYP. | TYPICAL |
| — | CENTERLINE |
| — | MIRROR |
| ∅ | DIAMETER |
| R | RADIUS |

US HIGHWAY 64
KNIGHTDALE BLVD
(VARIABLE WIDTH PUBLIC R/W)
SEE NCDOT PROJECT # 6-408004B
HM 3, PG 193

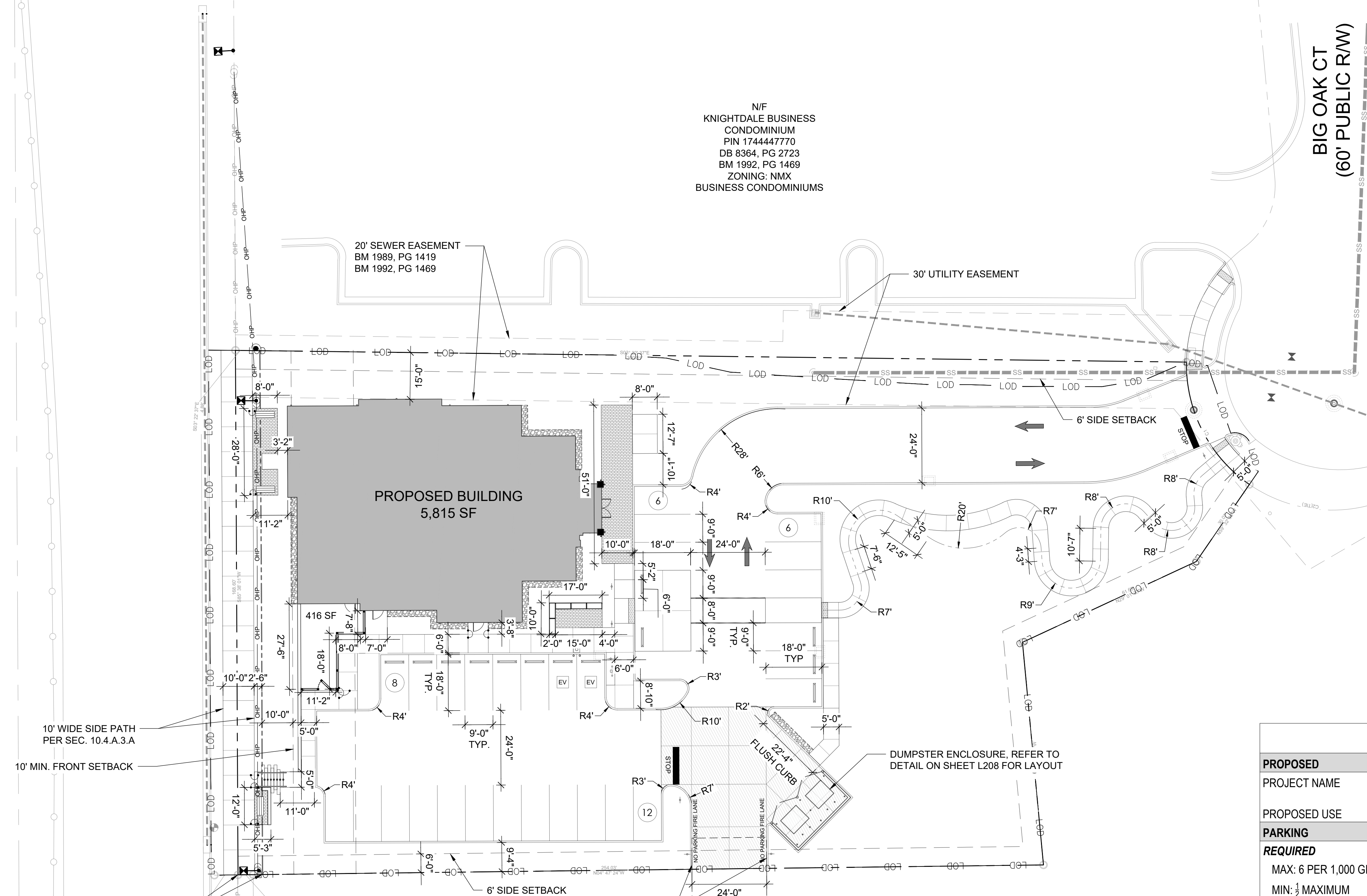
N/F
KNIGHTDALE BUSINESS
CONDOMINIUM
PIN 174444770
DB 8364, PG 2723
BM 1992, PG 1469
ZONING: NMX
BUSINESS CONDOMINIUMS

20' SEWER EASEMENT
BM 1989, PG 1419
BM 1992, PG 1469

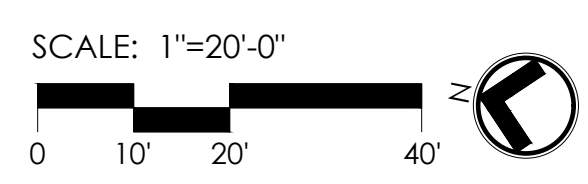
30' UTILITY EASEMENT

BIG OAK CT
(60' PUBLIC R/W)

CURRIN, GLENN R TRUSTEE
CURRIN, SUE A TRUSTEE
PIN 1744444361
DB 018770, PG 00024
BM 1998, PG 1482
ZONING: NMX
VACANT



N/F
KNIGHTDALE INVESTMENTS LTD
PIN 1744444539
DB 13125, PG 2648
BM 2008, PG 2192
ZONING: NMX
VACANT



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By: _____ Date: _____

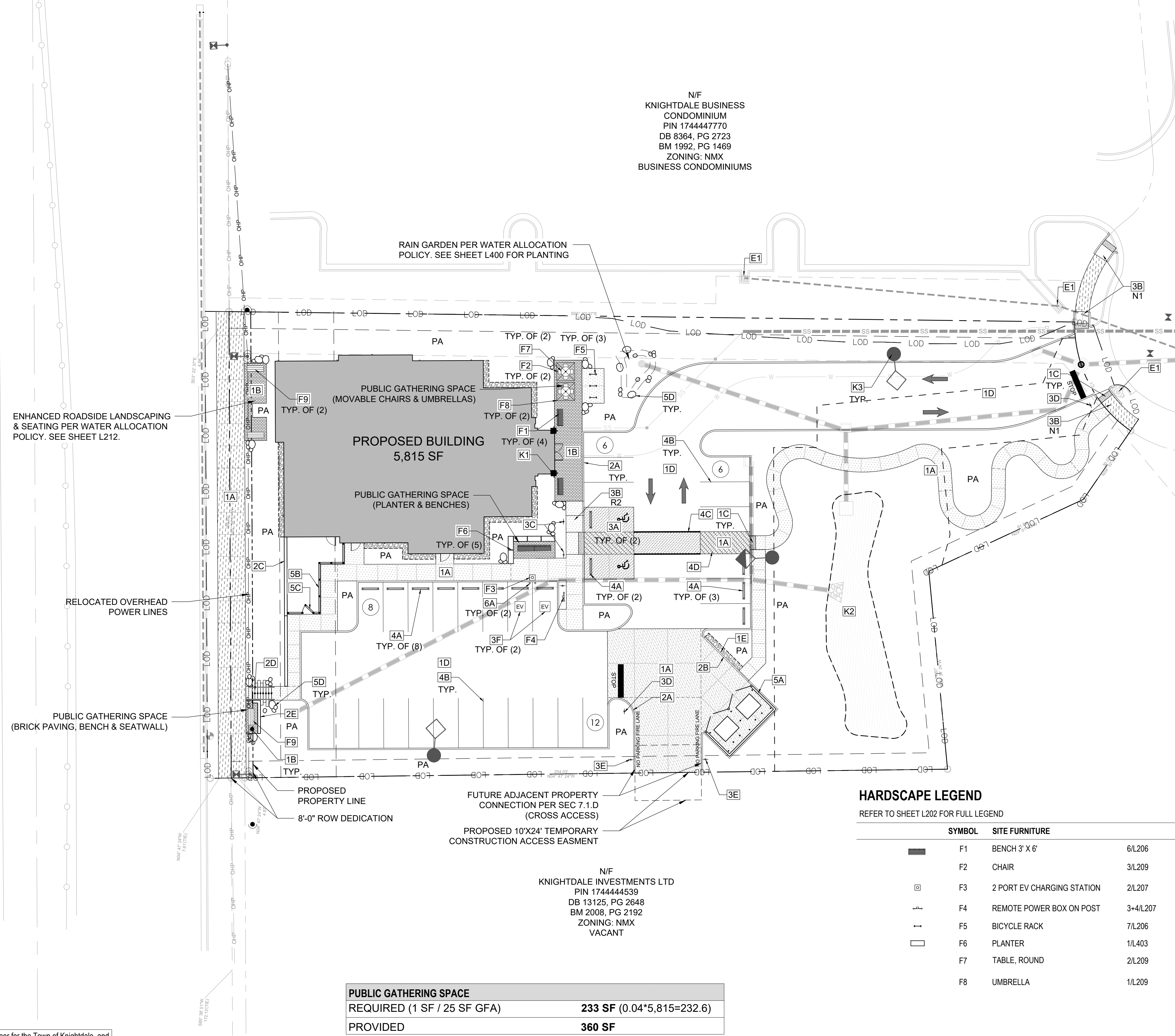
Town Engineer

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By: _____ Date: _____

Land Use Administrator

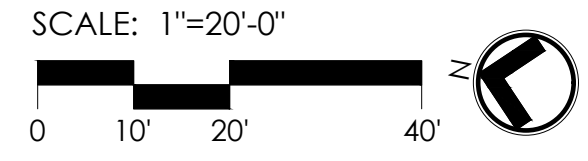
**US HIGHWAY 64
KNIGHTDALE BLVD
(VARIABLE WIDTH PUBLIC R/W)**
SEE NCDOT PROJECT # 6-408004B
HM 3, PG 193



| PUBLIC GATHERING SPACE | |
|-----------------------------|---------------------------|
| REQUIRED (1 SF / 25 SF GFA) | 233 SF (0.04*5,815=232.6) |
| PROVIDED | 360 SF |

HARDSCAPE LEGEND
REFER TO SHEET L202 FOR FULL LEGEND

| SYMBOL | SITE FURNITURE | DETAIL/SHEET |
|--------|-------------------------------|--------------|
| ■ | F1 BENCH 3' X 6' | 6/L206 |
| □ | F2 CHAIR | 3/L209 |
| ⊞ | F3 2 PORT EV CHARGING STATION | 2/L207 |
| ⊞ | F4 REMOTE POWER BOX ON POST | 3+4/L207 |
| ⊞ | F5 BICYCLE RACK | 7/L206 |
| □ | F6 PLANTER | 1/L403 |
| ⊞ | F7 TABLE, ROUND | 2/L209 |
| ⊞ | F8 UMBRELLA | 1/L209 |



PROPOSED SITE DATA

| PROPOSED | |
|---|--|
| PROJECT NAME | BIG OAK VET HOSPITAL ANIMAL SERVICES, NON BOARDING |
| PROPOSED USE | |
| PARKING | |
| REQUIRED | |
| MAX: 6 PER 1,000 GFA | 35 SPACES |
| MIN: 1/2 MAXIMUM | 18 SPACES |
| PROVIDED | |
| STANDARD SPACES | 28 SPACES |
| ADA SPACES | 2 SPACES |
| ELECTRIC CHARGING: 1 PER 40 | 2 SPACES |
| TOTAL | 32 SPACES |
| BICYCLE PARKING | |
| REQUIRED: 1 PER 40 SPACES (MIN. 2 SPACES) | 2 SPACES |
| PROVIDED: 1 PER 40 SPACES (MIN. 2 SPACES) | 2 SPACES |
| TOTAL | 2 SPACES |
| IMPERVIOUS SURFACE AREA | |
| EXISTING | 11,239 SF |
| PROPOSED | |
| BUILDING | 5,815 SF |
| CONCRETE | 3,050 SF |
| ASPHALT | 15,847 SF |
| TOTAL AREA PROPOSED | 24,712 SF |
| PERCENT OF THE SITE | 53 % |
| NET CHANGE OF IMPERVIOUS | 13,473 SF |
| AREA FOR STORMWATER DEVICE | |
| PROVIDED | 1,500 SF |

HARDSCAPE LEGEND
REFER TO SHEET L202 FOR FULL LEGEND

| VEH. | PED. | SYMBOL | PROPOSED SITE ITEM | DETAIL/SHEET |
|--------|------------------------------|-------------|---|----------------------------|
| | | 1A | C.I.P. CONCRETE PAVING, TYPE 1 | 2/L205 |
| | | 1B | C.I.P. CONCRETE PAVING, TYPE 2 | 2/L205 |
| | | 1C | PRECAST CONCRETE PAVERS | 8/L205 |
| | | 1D | TRUNCATED DOME PAVERS | 4.07/L210 |
| | | 1E | ASPHALT PAVING | 1/L205 |
| | | 1F | GRAVEL (WITH METAL EDGING) | 1/L206 |
| | | 2A | C.I.P. CONCRETE CURB | 7/L205 |
| | | 2B | C.I.P. FLUSH CONCRETE CURB | 6/L205 |
| | | 2C | C.M.U. RETAINING WALL WITH BRICK VENEER | 7/L206 |
| | | 2D | C.I.P. CONCRETE STEPS | 1/L207 |
| | | 2E | C.M.U. SEAT WALL WITH BRICK VENEER | 6/L206 |
| | | 3A | ADA PARKING | 1/L204 |
| | | 3B | CURB RAMP | 4.06-1/L210 4.06-4/L210 |
| | | 3C | ADA SIGN (MUTCD R7-8) | 5/L204 |
| | | 3D | STOP SIGN (MUTCD R1-1) | 4/L204 |
| | | 3E | NO PARKING SIGN (MUTCD R8-3) | 4/L204 |
| | | 3F | EV PARKING | |
| | | 4A | CONCRETE WHEELSTOP | 2/L206 |
| | | 4B | PARKING STRIPE (4" WIDE) | |
| | | 4C | CROSSWALK | |
| | | 4D | ANGLED STRIPE (4" WIDE) | |
| | | 5A | DUMPSTER ENCLOSURE WITH GATE | 1/L208 |
| | | 5B | 6' HT. OPAQUE FENCE | |
| | | 5C | 6' HT. GATE | |
| | | 5D | LANDSCAPE BOULDER | 3/L403 |
| | | 6A | BOLLARD | 3/L206 |
| SYMBOL | BY OTHER CONSULTANTS | | | |
| K1 | BUILDING COLUMN | PER ARCH. | | |
| K2 | STORMWATER BASIN | PER CIVIL | | |
| K3 | LIGHT POLES | DUKE ENERGY | | |
| SYMBOL | EXISTING SITE ITEM TO REMAIN | | | |
| E1 | EXISTING FIRE HYDRANT | | | |
| E2 | EXISTING DRAIN INLET | | | |

a. **Town Certification.** This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

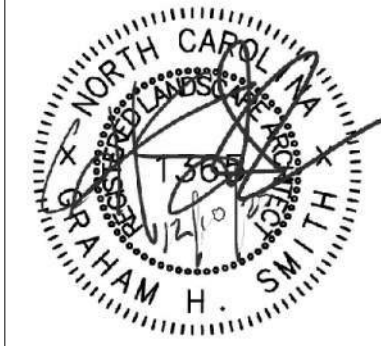
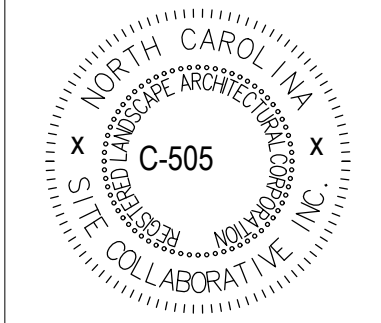
By: _____ Date: _____

Town Engineer

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By: _____ Date: _____

Land Use Administrator



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**BIG OAK VET HOSPITAL
VETS PETS
1004 BIG OAK COURT**

TOK PROJECT #:
ZCP-11-24

PROJECT NUMBER:

PROJECT PHASE:
**CONSTRUCTION
DRAWINGS**
DATE: 03.16.2026

SHEET TITLE:
HARDSCAPE PLAN

SHEET NUMBER:

L201

HARDSCAPE LEGEND

REFER TO SHEET L202 FOR FULL LEGEND

| VEH. | PED. | SYMBOL | PROPOSED SITE ITEM | DETAIL/SHEET | MANUFACTURER | MODEL # | COLOR | FINISH | NOTE |
|--|------|--------|--|----------------------------|--|--|--|--|---|
| | | | 1A C.I.P. CONCRETE PAVING, TYPE 1 | 2/L205 | LOCAL BATCH PLANT | TYPE 2 CONCRETE | NATURAL GRAY | TOPCAST ETCH #5, SEAL WITH PROSOCO SLX100 | PROVIDE 4'X4' MOCKUP FOR REVIEW PRIOR TO INSTALLATION |
| | | | 1B C.I.P. CONCRETE PAVING, TYPE 2 | 2/L205 | LOCAL BATCH PLANT | TYPE 2 CONCRETE | NATURAL GRAY | BROOM | - |
| | | | 1C PRECAST CONCRETE PAVERS | 8/L205 | TECHO BLOC (1.877.832.4625) | VICTORIAN 60 MM | SHALE GREY | SMOOTH, SEAL WITH BP PRO NATURAL STABILIZING SEALER | RUNNING BOND PATTERN, DIRECTION AS SHOWN IN PLANS. PROVIDE SAMPLE PRIOR TO INSTALLATION. PROVIDE 4'X4' MOCKUP FOR REVIEW PRIOR TO INSTALLATION |
| | | | 1D TRUNCATED DOME PAVERS | 4.07/L210 | WAUSAU TILE (715.359.3121) | ADA 2-1/2'X12" DETECTABLE WARNING | ADA-100 | LIGHT SANDBLAST | PROVIDE PRODUCT CUTSHEET PRIOR TO ORDERING |
| | | | 1E ASPHALT PAVING | 1/L205 | LOCAL BATCH PLANT | N/A | N/A | N/A | - |
| | | | 1F GRAVEL (WITH METAL EDGING) | 1/L206 | -AGGREGATE: LOCAL SUPPLIER -EDGING: JD RUSSELL CO. (800.888.7425) O.A.E. | -4-6" DIA. (ROUND COBBLE) -DURAEDGE (3/16") | -SEE NOTES -BLACK | -N/A -N/A | PROVIDE LIST OF AVAILABLE AGGREGATE MATERIAL FROM SUPPLIER FOR FINAL SELECTION BY LANDSCAPE ARCHITECT. PROVIDE EDGING CUTSHEET PRIOR TO ORDERING |
| | | | 2A C.I.P. CONCRETE CURB | 7/L205 | LOCAL BATCH PLANT | TYPE 2 CONCRETE | NATURAL GRAY | SMOOTH TROWEL | - |
| | | | 2B C.I.P. FLUSH CONCRETE CURB | 6/L205 | LOCAL BATCH PLANT | TYPE 2 CONCRETE | NATURAL GRAY | SMOOTH TROWEL | - |
| | | | 2C C.M.U. RETAINING WALL WITH BRICK VENEER | 7/L206 | -MASONRY: LOCAL SUPPLIER -BRICK: MATCH BUILDING -PRECAST CAP: STEPSTONE (800.572.9029), O.A.E. | -C.M.U. PER DETAIL -MATCH BUILDING -SQUARE MODULAR WALL CAP | -STANDARD -MATCH BUILDING -PEBBLE (1824) | -N/A -MATCH BUILDING -LIGHT SANDBLAST | PROVIDE BRICK AND CAP SAMPLE PRIOR TO ORDERING. PROVIDE CAP SHOP DRAWINGS PRIOR TO ORDERING. INSTALL CAP CORNER PIECE AT CORNERS AND CAP END PIECE AT WALLS ENDS. |
| | | | 2D C.I.P. CONCRETE STEPS | 1/L207 | LOCAL BATCH PLANT | TYPE 2 CONCRETE | NATURAL GRAY | TOPCAST ETCH #5, SEAL WITH PROSOCO SLX100 | - |
| | | | 2E C.M.U. SEAT WALL WITH BRICK VENEER | 6/L206 | -MASONRY: LOCAL SUPPLIER -BRICK: MATCH BUILDING | -C.M.U. PER DETAIL -MATCH BUILDING | -STANDARD -MATCH BUILDING | -N/A -MATCH BUILDING | PROVIDE BRICK SAMPLE PRIOR TO ORDERING |
| | | | 3A ADA PARKING | 1/L204 | N/A | CODE COMPLIANT | N/A | N/A | - |
| | | | 3B CURB RAMP | 4.06-1/L210 4.06-4/L210 | LOCAL BATCH PLANT | TYPE 2 CONCRETE | NATURAL GRAY | BROOM | - |
| | | | 3C ADA SIGN (MUTCD R7-8) | 5/L204 | LOCAL SUPPLIER | CODE COMPLIANT | N/A | N/A | - |
| | | | 3D STOP SIGN (MUTCD R1-1) | 4/L204 | LOCAL SUPPLIER | CODE COMPLIANT | N/A | N/A | - |
| | | | 3E NO PARKING SIGN (MUTCD R8-3) | 4/L204 | LOCAL SUPPLIER | CODE COMPLIANT | N/A | N/A | - |
| | | | 3F EV PARKING | | N/A | CODE COMPLIANT | N/A | N/A | - |
| | | | 4A CONCRETE WHEELSTOP | 2/L206 | LOCAL SUPPLIER | N/A | NATURAL GRAY | SMOOTH TROWEL | - |
| | | | 4B PARKING STRIPE (4" WIDE) | | LOCAL SUPPLIER | THERMOPLASTIC PAINT | WHITE | N/A | INSTALL PER MANUFACTURER'S RECOMMENDATIONS |
| | | | 4C CROSSWALK | | LOCAL SUPPLIER | THERMOPLASTIC PAINT | WHITE | N/A | INSTALL PER MANUFACTURER'S RECOMMENDATIONS |
| | | | 4D ANGLED STRIPE (4" WIDE) | | | THERMOPLASTIC PAINT | WHITE | N/A | INSTALL PER MANUFACTURER'S RECOMMENDATIONS |
| | | | 5A DUMPSTER ENCLOSURE WITH GATE | 1/L208 | -MASONRY: LOCAL SUPPLIER -BRICK: MATCH BUILDING -PRECAST CAP: STEPSTONE (800.572.9029), O.A.E. -STEEL: LOCAL SUPPLIER -WOOD (COMPOSITE): TREX (1.800.289.8739), O.A.E. | -C.M.U. PER DETAIL -MATCH BUILDING -SQUARE MODULAR WALL CAP -TUBE STEEL -CHARCOAL CLADDING | -STANDARD -MATCH BUILDING -PEBBLE (1824) -NATURAL | -N/A -MATCH BUILDING -LIGHT SANDBLAST -GALVANIZED | PROVIDE BRICK, CAP, AND WOOD SAMPLE PRIOR TO ORDERING. PROVIDE CAP SHOP DRAWINGS PRIOR TO ORDERING |
| | | | 5B 6' HT. OPAQUE FENCE | | CATALYST (888.549.7350), O.A.E. | -NEWBURY (VINYL PRIVACY) | SEE NOTES | N/A | PROVIDE PRODUCT CUTSHEET PRIOR TO ORDERING. PROVIDE SAMPLE OF SAND, CLAY, AND GRAY COLORS FOR FINAL SELECTION BY LANDSCAPE ARCHITECT |
| | | | 5C 6' HT. GATE | | CATALYST (888.549.7350), O.A.E. | -NEWBURY (VINYL PRIVACY) | SEE NOTES | N/A | ENSURE GATE IS SELF CLOSING/LATCHING |
| | | | 5D LANDSCAPE BOULDER | 3/L403 | LOCAL SUPPLIER | 3-4" DIA. BOULDER | SEE NOTES | N/A | PROVIDE LIST OF AVAILABLE BOULDERS FROM SUPPLIER FOR FINAL SELECTION BY LANDSCAPE ARCHITECT |
| | | | 6A BOLLARD | 3/L206 | LOCAL SUPPLIER | STEEL (4" DIA.) | YELLOW | EPOXY PAINT | PROVIDE PRODUCT CUTSHEET PRIOR TO ORDERING |
| SYMBOL SITE FURNITURE | | | | | | | | | |
| | | | F1 BENCH 3' X 6' | 6/L206 | KEYSTONE RIDGE (1.800.284.8208) | CARSON, CS26 (ARMLESS) | BRONZE | POWDERCOAT | SURFACE MOUNT. PROVIDE PRODUCT DATA PRIOR TO ORDERING |
| | | | F2 CHAIR | 3/L209 | LANDSCAPEFORMS (1.800.521.2546) | CHIPMAN (ARMLESS) | FOG | POWDERCOAT | PROVIDE PRODUCT CUTSHEET PRIOR TO ORDERING |
| | | | F3 2 PORT EV CHARGING STATION | 2/L207 | BOSCH (1.887.805.3873) | EV800 (EL-50650-GNTD-A) | N/A | N/A | PROVIDE PRODUCT CUTSHEET PRIOR TO ORDERING. INSTALLATION BY QUALIFIED LICENSED ELECTRICIAN |
| | | | F4 REMOTE POWER BOX ON POST | 3+4/L207 | KNOX BOX (800.566.9269) | N/A | N/A | N/A | INSTALLATION BY QUALIFIED LICENSED ELECTRICIAN |
| | | | F5 BICYCLE RACK | 7/L206 | SPORTWORKS (888.661.0555) | SQUARE TUBE INVERTED-U WIDE RACK | CUSTOM (DARK BRONZE) | POWDERCOAT | SURFACE MOUNT. PROVIDE PRODUCT DATA PRIOR TO ORDERING |
| | | | F6 PLANTER | 1/L403 | TOURNESOL (800.542.2282) | WR-602424 | CUSTOM (DARK BRONZE) | SMOOTH | PROVIDE PRODUCT DATA PRIOR TO ORDERING |
| | | | F7 TABLE, ROUND | 2/L209 | LANDSCAPEFORMS (1.800.521.2546) | CHIPMAN (31" ROUND) | FOG | POWDERCOAT | PROVIDE PRODUCT DATA PRIOR TO ORDERING |
| | | | F8 UMBRELLA | 1/L209 | LANDSCAPEFORMS (1.800.521.2546) | TUCCI OCEAN MASTER SQ. (89"X89") | POLISHED ALUMINUM (POLE), TBD (FABRIC) | N/A | PROVIDE PRODUCT CUTSHEET PRIOR TO ORDERING. INCLUDE TABLE MOUNT G-PLATE |
| | | | F9 BENCH (3' X 6') IN R.O.W. | 4.14/L211 | DUMOR (800.598.4018) | 169 SERIES | BLACK | POWDERCOAT | SURFACE MOUNT. PROVIDE PRODUCT DATA PRIOR TO ORDERING |
| SYMBOL BY OTHER CONSULTANTS | | | | | | | | | |
| | | | K1 BUILDING COLUMN | | PER ARCH. | | | | |
| | | | K2 STORMWATER BASIN | | PER CIVIL | | | | |
| | | | K3 LIGHT POLES | | DUKE ENERGY | | | | |
| SYMBOL EXISTING SITE ITEM TO REMAIN | | | | | | | | | |
| | | | E1 EXISTING FIRE HYDRANT | | | | | | |
| | | | E2 EXISTING DRAIN INLET | | | | | | |
| SYMBOL OTHER | | | | | | | | | |
| | | | PA PLANTING AREA | | | | | | |
| | | | TYP. TYPICAL | | | | | | |
| | | | C.I.P. CAST-IN-PLACE | | | | | | |
| | | | O.A.E. OR APPROVED EQUAL | | | | | | |
| | | | SAWCUT JOINT | 4/L205 | | | | | |
| | | | EXPANSION JOINT | 4/L205 | | | | | |
| | | | LOD LIMIT OF DISTURBANCE | | | | | | |

a. **Town Certification.** This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

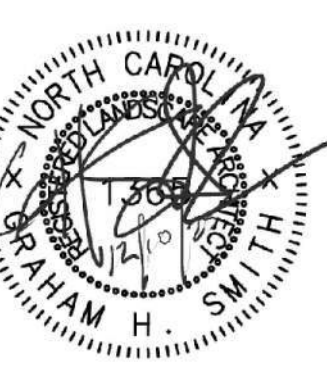
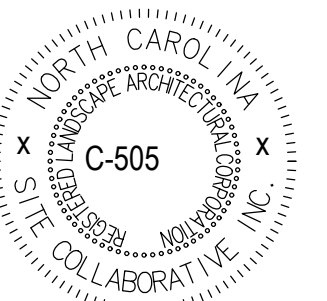
By: _____ Date: _____

Town Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

By: _____ Date: _____

Land Use Administrator



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BIG OAK VET HOSPITAL
VETS PETS
1004 BIG OAK COURT

TOK PROJECT #:
ZCP-11-24

PROJECT NUMBER:

PROJECT PHASE:
CONSTRUCTION
DRAWINGS

DATE: 03.16.2026

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SHEET TITLE:
FULL HARDSCAPE
LEGEND

SHEET NUMBER:
L202

**BIG OAK VET HOSPITAL
 VETS PETS
 1004 BIG OAK COURT**

TOK PROJECT #:
 ZCP-11-24

PROJECT NUMBER:

PROJECT PHASE:
**CONSTRUCTION
 DRAWINGS**

DATE: 03.16.2026

SHEET TITLE:
VICINITY MAP

SHEET NUMBER:
L203



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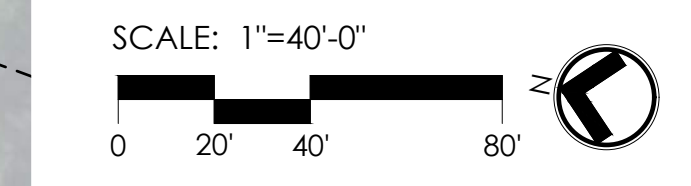
By: _____ Date: _____

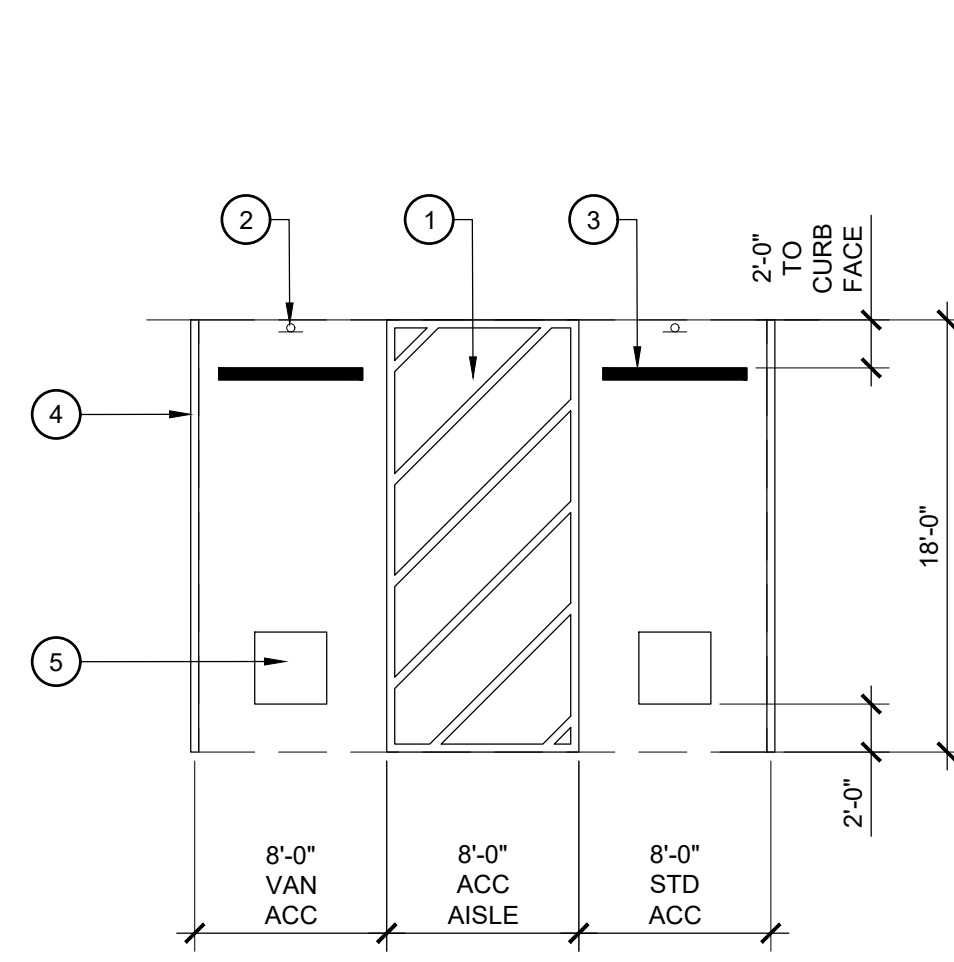
Town Engineer

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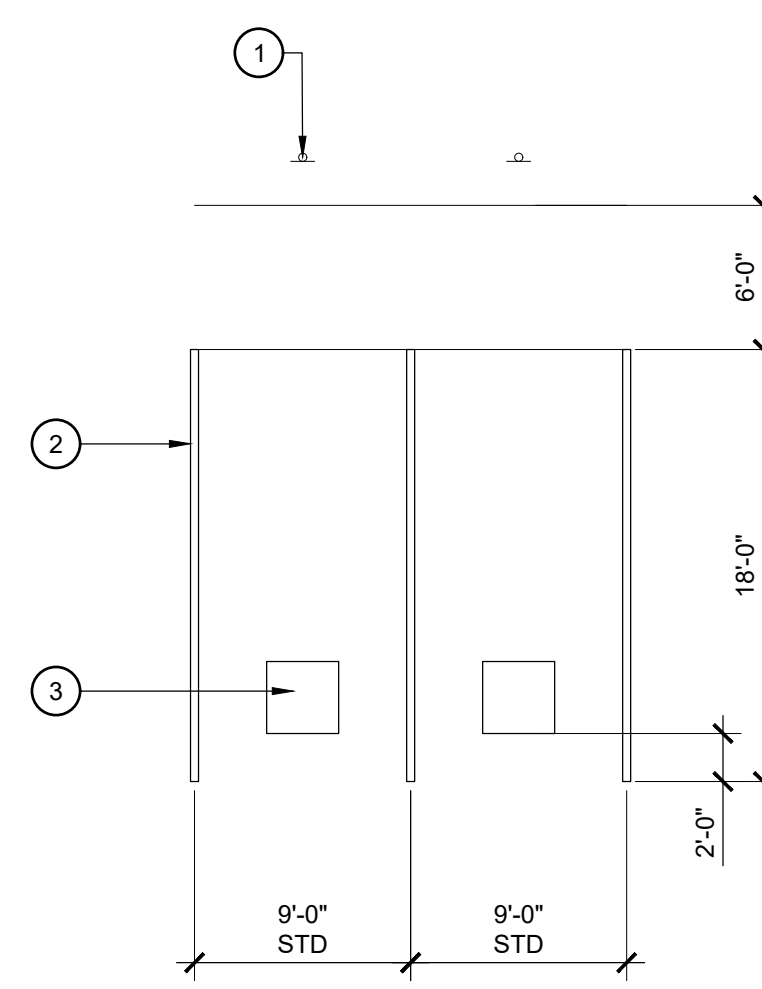
Land Use Administrator






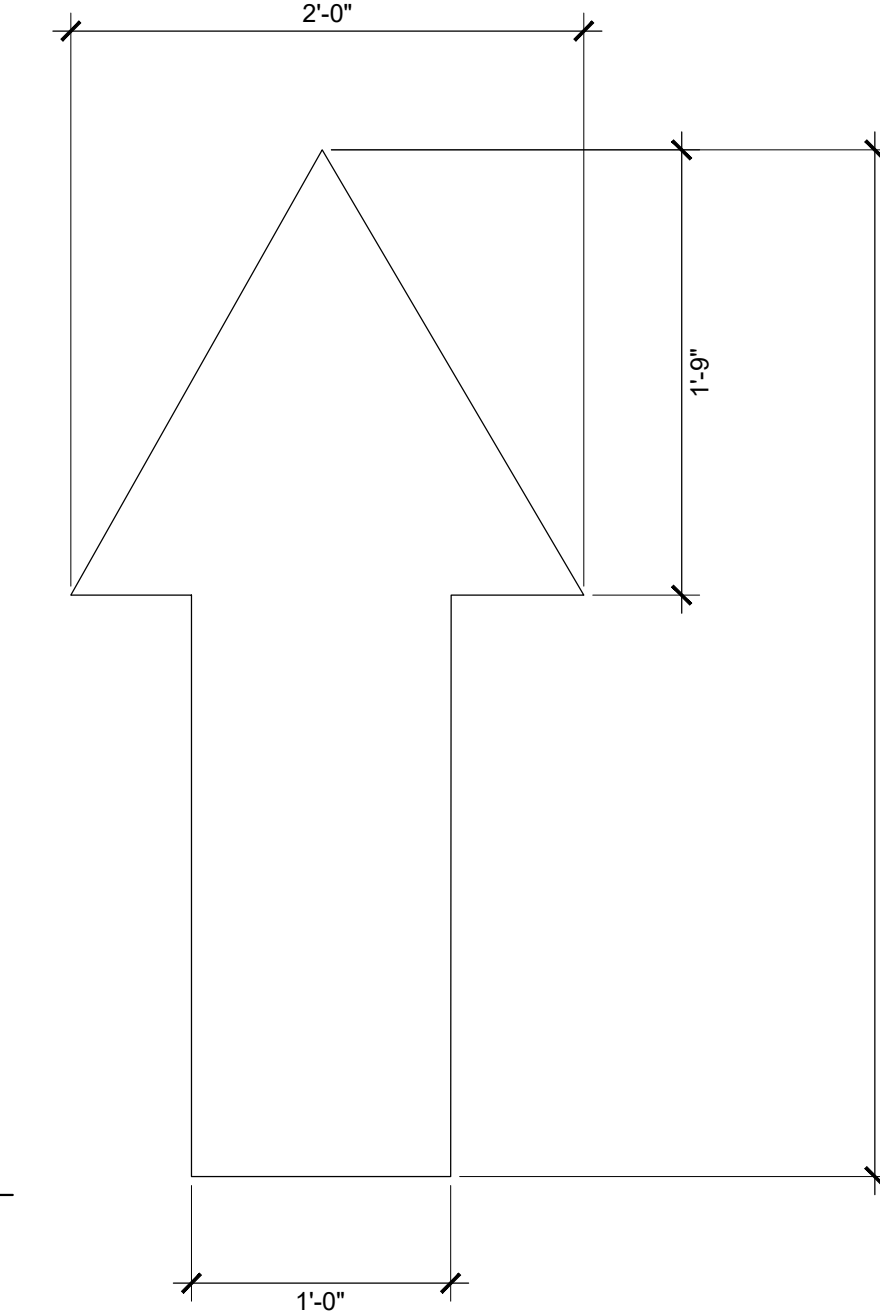
1 ACCESSIBLE PARKING SPOT
SCALE: 1/8" = 1'-0"

- LEGEND**
1. ACCESSIBLE AISLE TO BE CLEAR OF ALL OBSTRUCTIONS
 2. ACCESSIBLE SIGN PER DETAIL, SEE HARDSCAPE PLAN FOR LOCATION
 3. CONCRETE WHEEL STOP
 4. 4" WIDE WHITE STRIPE
 5. 36" X 36" INTERNATIONAL SIGN OF ACCESSIBILITY EMBLEM
- NOTES**
- A. CONTRACTOR SHALL VERIFY A MAX. SLOPE OF 2% IN ALL DIRECTIONS. NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES PRIOR TO INSTALLATION



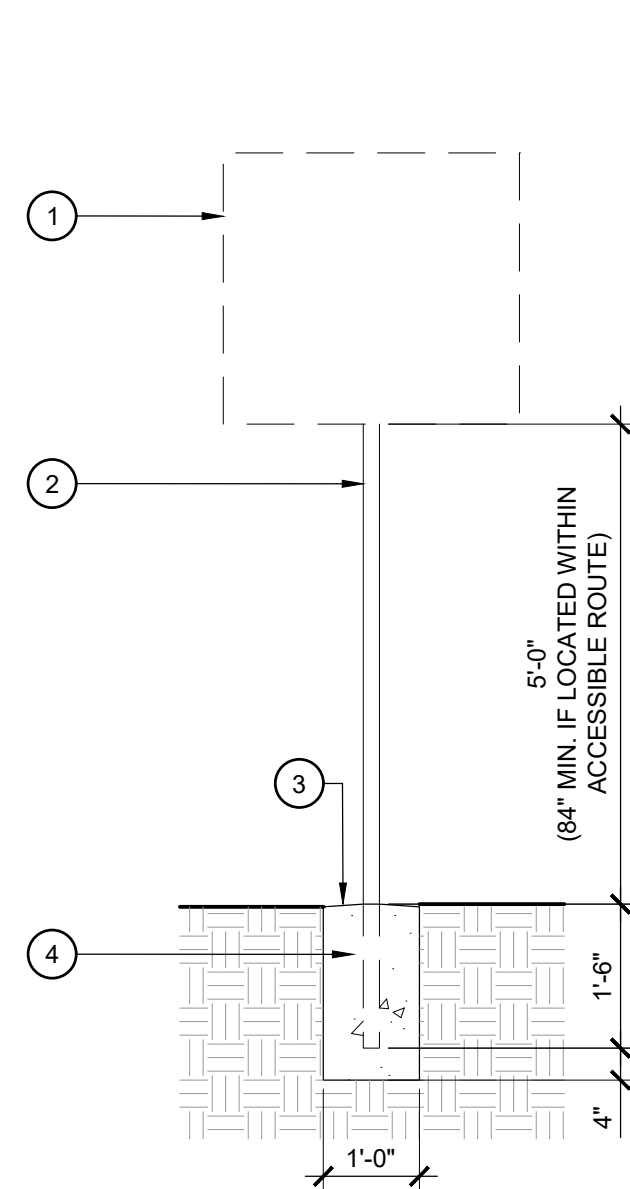
2 EV PARKING
SCALE: NTS

- 
- LEGEND**
1. ELECTRIC VEHICLE SIGN PER DETAIL, SEE HARDSCAPE PLAN FOR LOCATION
 2. 4" WIDE WHITE STRIPE
 3. 36" X 36" EV SYMBOL FOR ELECTRICAL VEHICLES
- NOTES**
- A. STALL DIMENSIONS ARE MEASURED TO THE CENTERLINE OF THE PAINTED STRIPE
B. REFER TO PLAN FOR EV EQUIPMENT PLACEMENT AND PROTECTION.

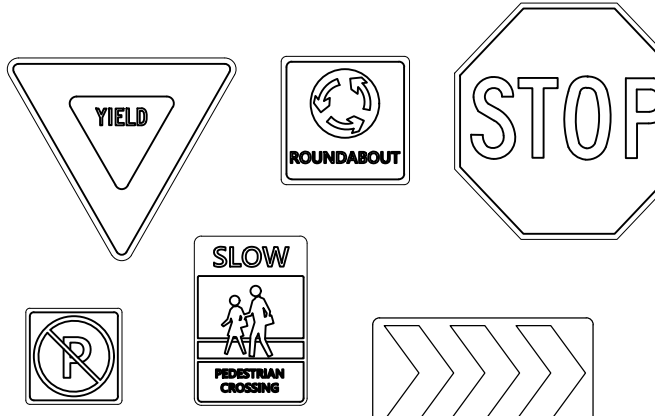


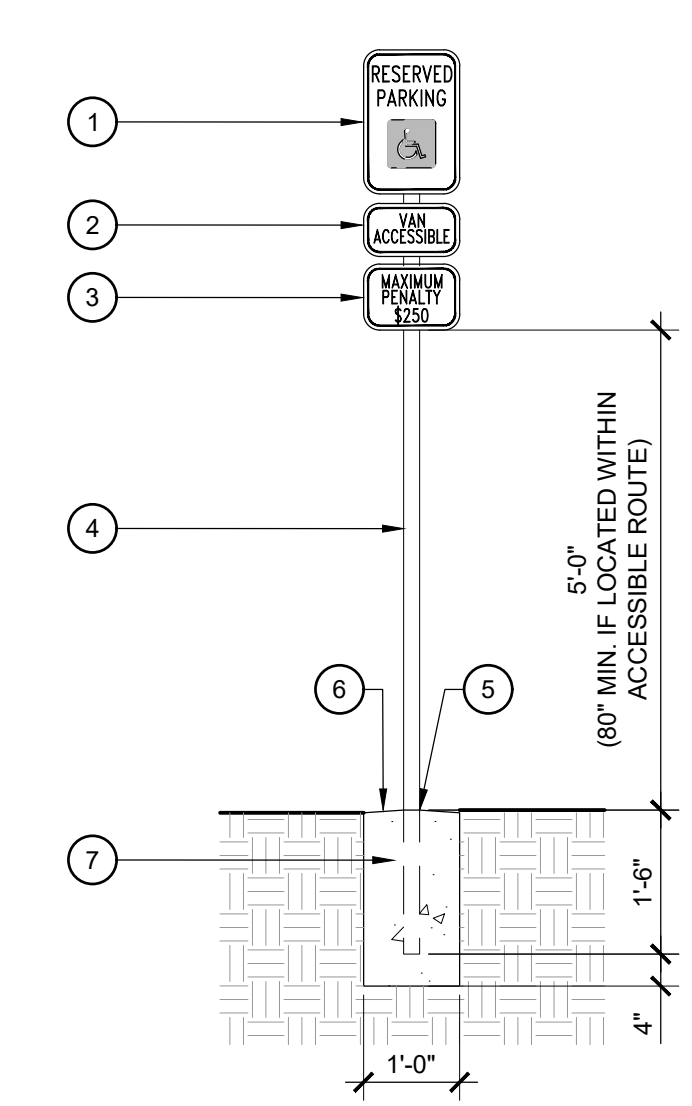
3 DIRECTIONAL ARROW
SCALE: NTS

- NOTES**
- ALL TRAFFIC FLOW ARROWS TO BE THERMOPLASTIC REFLECTIVE WHITE PAINT.
 - ALL ARROWS TO POINT IN DIRECTION OF TRAFFIC.



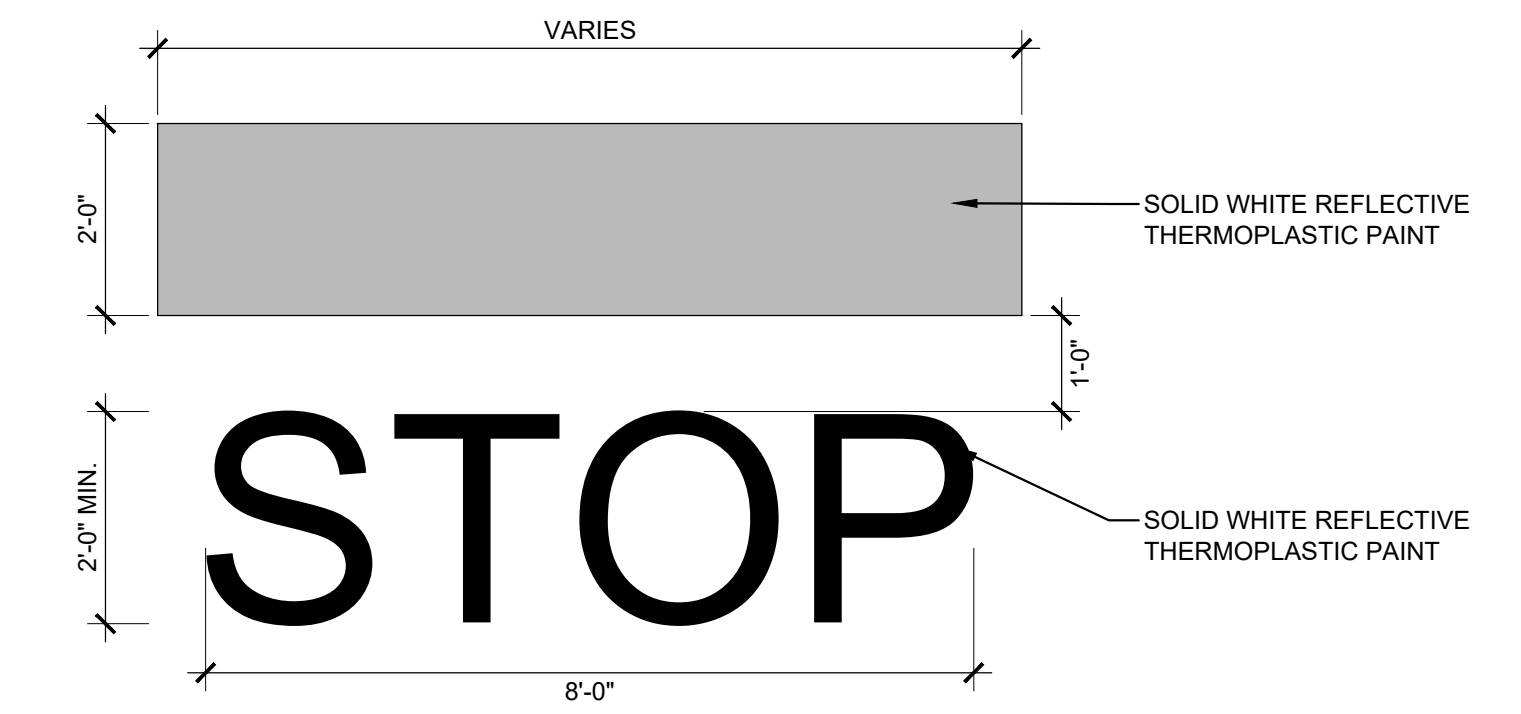
4 SIGN DETAILS
SCALE: NTS

- LEGEND**
1. SIGN WITH STANDARD TRAFFIC CONTROL SYMBOL SHOWN BELOW
 2. 2" DIA. OR U-CHANNEL GALVANIZED STEEL POST CENTERED ON FOOTING
 3. SLOPE TOP OF FOOTER AWAY FROM POST WHEN FOOTER IS IN A PLANTING AREA
 4. CAST-IN-PLACE CONCRETE FOOTER
- NOTES**
- A. HEIGHT OF SIGN AS PRESCRIBED BY N.C. DEPT. OF TRANSPORTATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
B. STANDARD SIGNS FOR TRAFFIC CONTROL BELOW. REFER TO HARDSCAPE PLAN FOR LOCATION OF EACH SIGN TYPE.
- 



5 ACCESSIBLE PARKING SIGN
SCALE: 1/2" = 1'-0"

- LEGEND**
1. SIGN WITH INTERNATIONAL SIGN OF ACCESSIBILITY (MUTCD R7-8)
 2. UTILIZE VAN ACCESSIBLE SIGN WHEN APPLICABLE
 3. PENALTY SIGN, WHEN VAN ACCESSIBLE SIGN NOT REQUIRED PLACE DIRECTLY BELOW INTERNATIONAL SIGN OF ACCESSIBILITY
 4. 2" DIA. OR U-CHANNEL GALVANIZED STEEL POST CENTERED ON POST
 5. NON-SHRINK GROUT POST TO FOOTER
 6. SLOPE TOP OF FOOTER AWAY FROM POST WHEN FOOTER IS IN A PLANTING AREA
 7. CAST-IN-PLACE CONCRETE FOOTER
- NOTES**
- A. HEIGHT OF R7-8C RESERVED PARKING SIGN AS PRESCRIBED BY N.C. DEPT. OF TRANSPORTATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, SECTION 2A-23, PART II

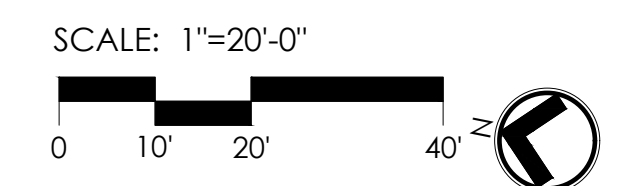
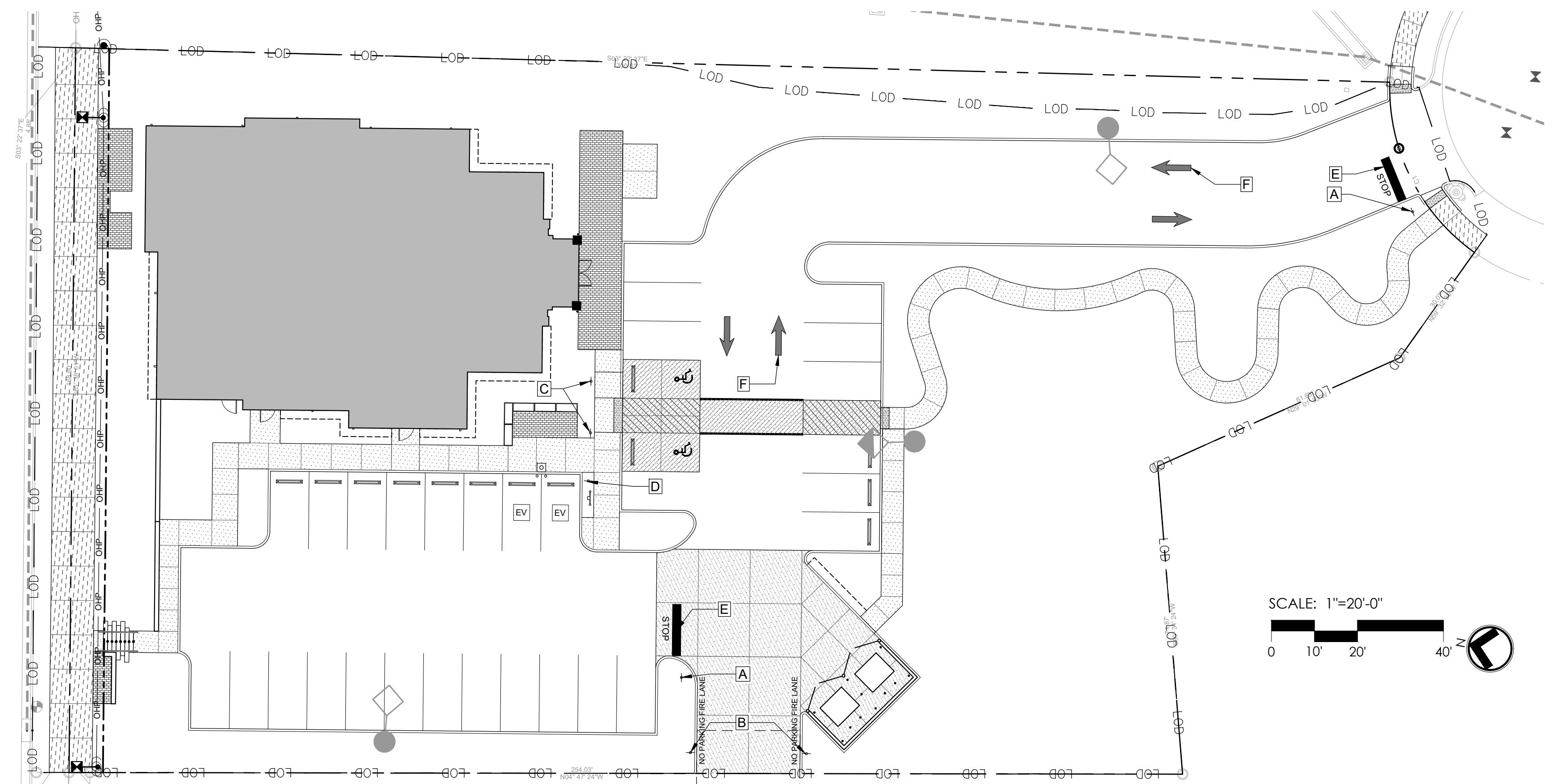


6 STOP BAR
SCALE: NTS

- STRIPING NOTES**
- ALL MARKING AND SIGNAGE SHALL BE CONSTRUCTED IN ACCORDANCE WITH MUTCD STANDARDS, INCLUDING COLOR, LETTER HEIGHT, AND LETTER CASE.
 - ALL PAVEMENT MARKING SHALL BE THERMOPLASTIC.

SIGN LEGEND

| SYMBOL | DESCRIPTION | DETAIL |
|--------|---------------------|--------|
| | A STOP SIGN | 4/L204 |
| | B NO PARKING SIGN | 4/L204 |
| | C ADA PARKING | 1/L204 |
| | D EV PARKING & SIGN | 2/L204 |
| | E STOP BAR | 6/L204 |
| | F DIRECTIONAL ARROW | 3/L204 |
| | G ADA PARKING SIGN | 5/L204 |



a. **Town Certification.** This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

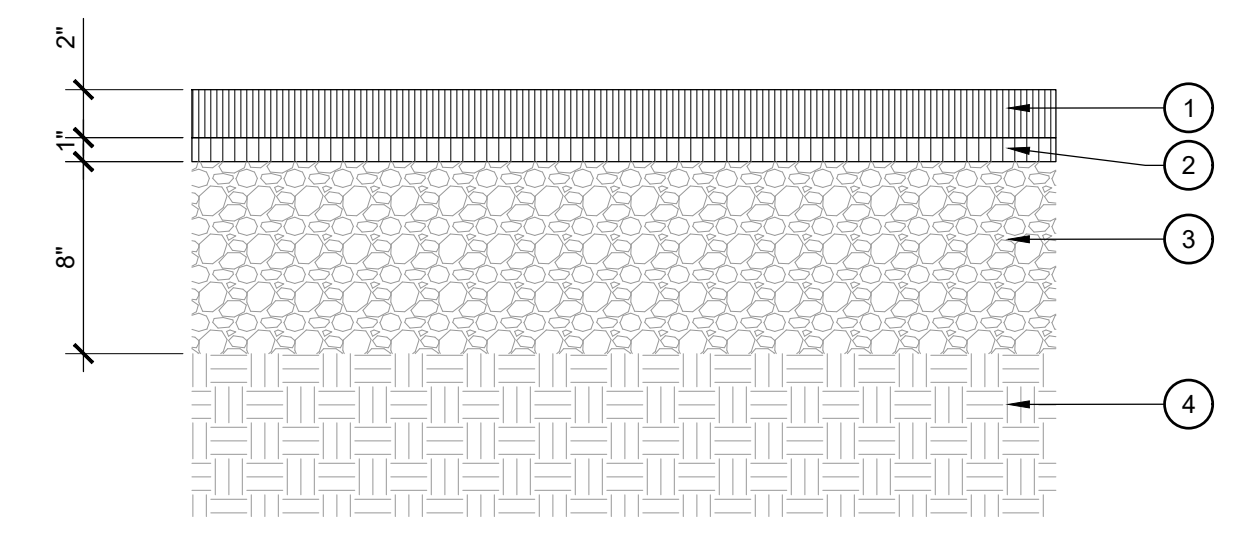
By: _____ Date: _____

Town Engineer

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By: _____ Date: _____

Land Use Administrator



HEAVY DUTY (DRIVE LANES AND PARKING AREAS)

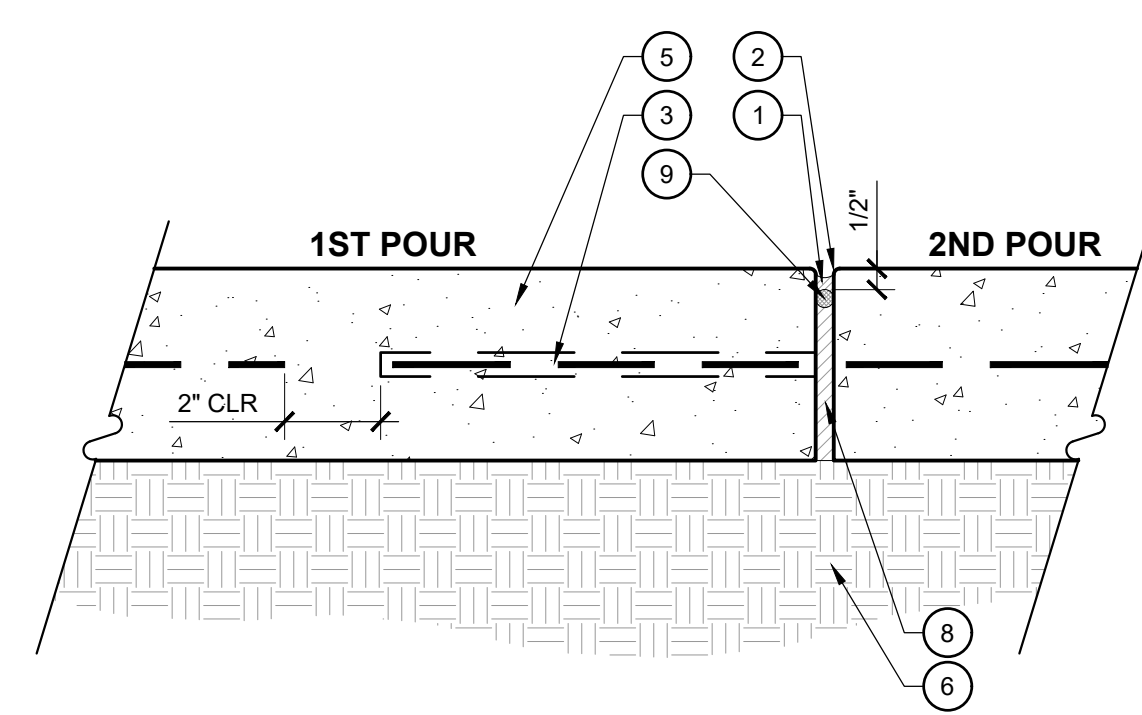
1 ASPHALT PAVING
SCALE: 1-1/2" = 1'-0"

LEGEND

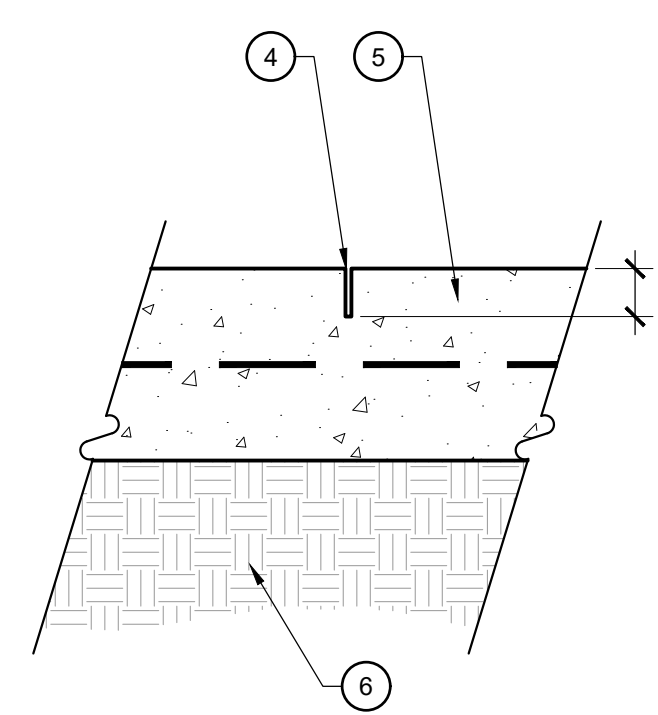
- 3/8" EXPANSION JOINT W/ SEALANT DUSTED WITH DOUBLE-WASHED CONCRETE SAND WHILE WET PER SPECIFICATIONS. SAND COLOR TO MATCH COLOR OF ADJACENT CONCRETE COLOR
- 1/8" RADIUS TOOLED EDGE
- #4 18" STEEL DOWEL @ 18" O.C., CENTERED IN SLAB, SLEEVE ONE SIDE
- 1/8" WIDE SAWCUT JOINT
- C.I.P. CONCRETE PAVING PER DETAIL
- BASE AND SUBGRADE PREPARATION PER GEOTECHNICAL REPORT
- 3/16" WIDE SAWCUT JOINT; INSTALLED AFTER TOOLED EDGES
- PREMOLDED FOAM EXPANSION JOINT FILLER PER SPECIFICATIONS
- 5/8" DIA. POLYETHYLENE FOAM BACKER ROD

NOTES

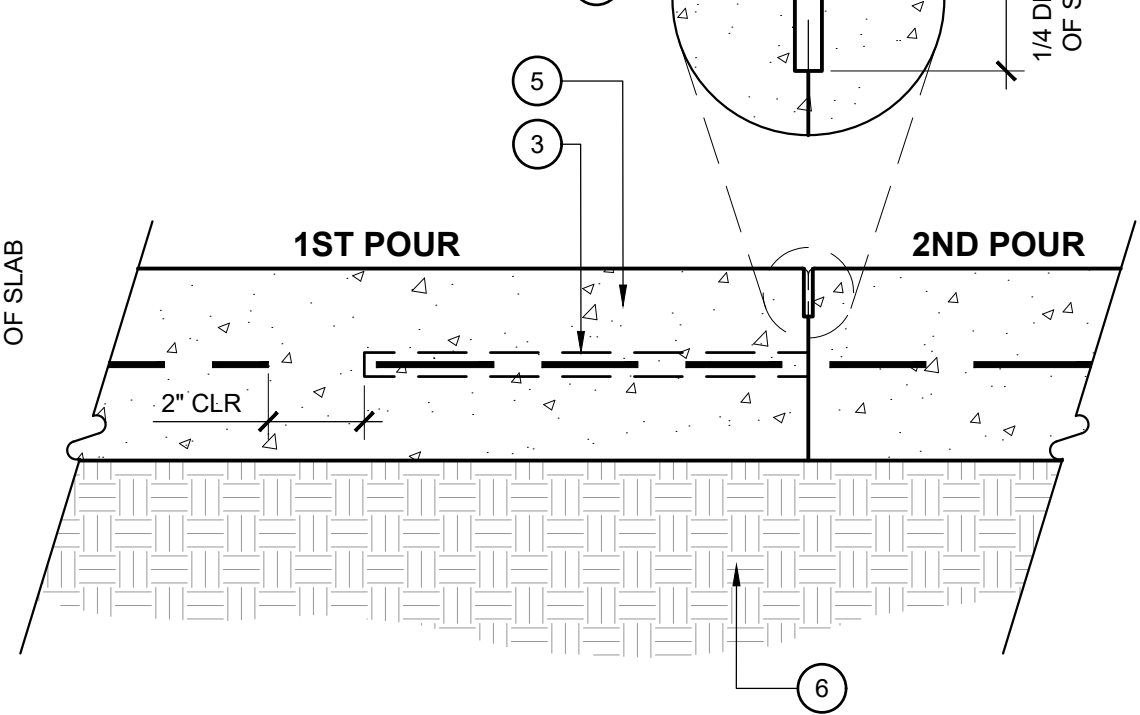
- A. PROVIDE EXPANSION JOINTS WHERE INDICATED ON THE DRAWINGS, AND WHERE PAVING ABUTS WALLS, CURBS, STEPS, RAMPS AND OTHER VERTICAL APPURTENANCES. OMIT DOWELS WHERE ABUTTING WALLS, BUILDINGS, AND CURBS.
- B. ALL TOOLED EDGES OF EXPANSION JOINTS SHALL BE 1/4" RADIUS MAX.
- C. PROVIDE COLD JOINTS BETWEEN DIFFERENT CONCRETE PAVING TYPES.



EXPANSION JOINT



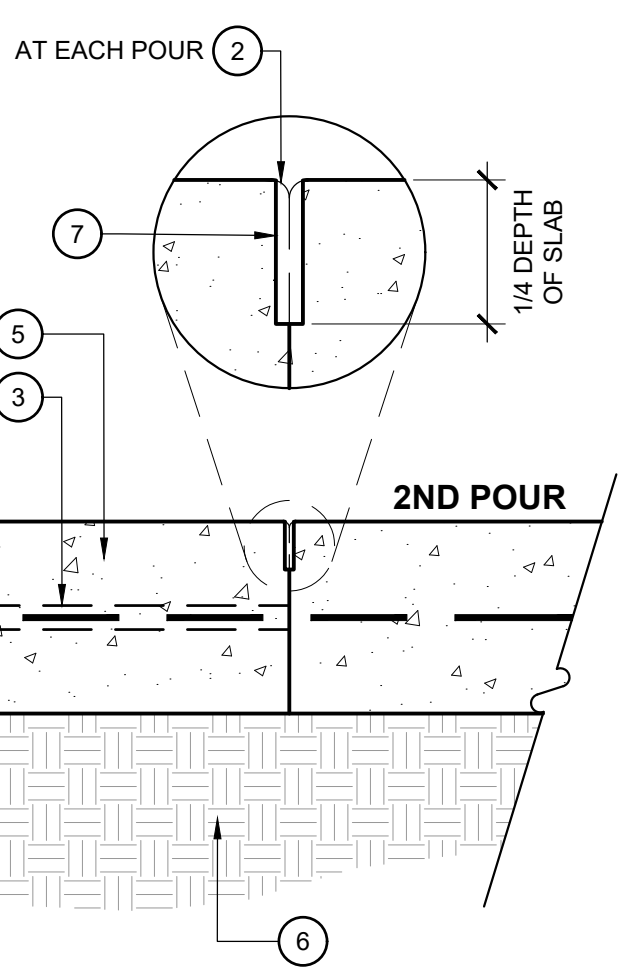
SAWCUT JOINT



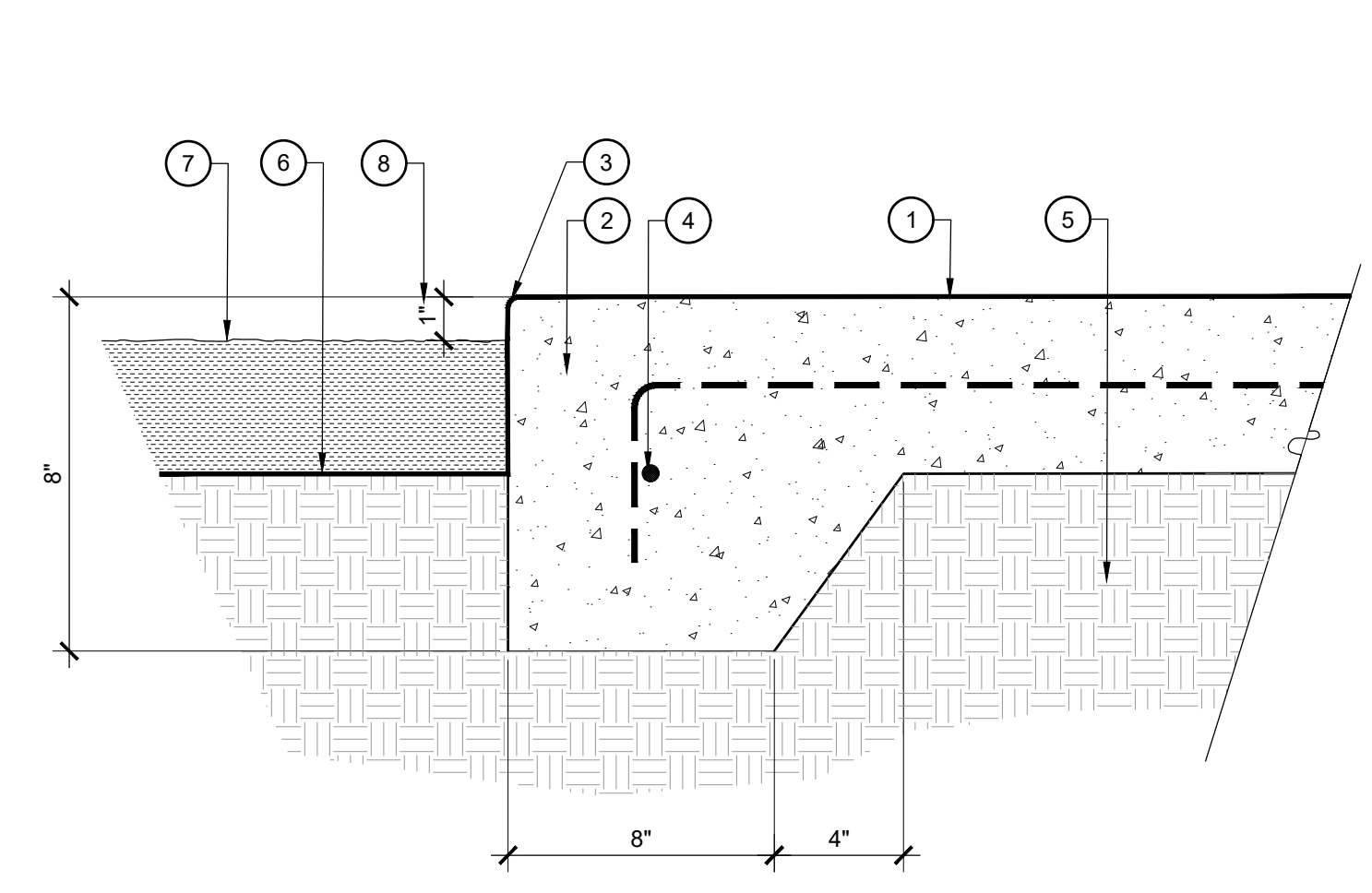
COLD JOINT

4 CONCRETE JOINTS
SCALE: 3" = 1'-0"

2 CONCRETE PAVING
SCALE: 1-1/2" = 1'-0"



3 ASPHALT TO CONCRETE TRANSITION
SCALE: 1-1/2" = 1'-0"



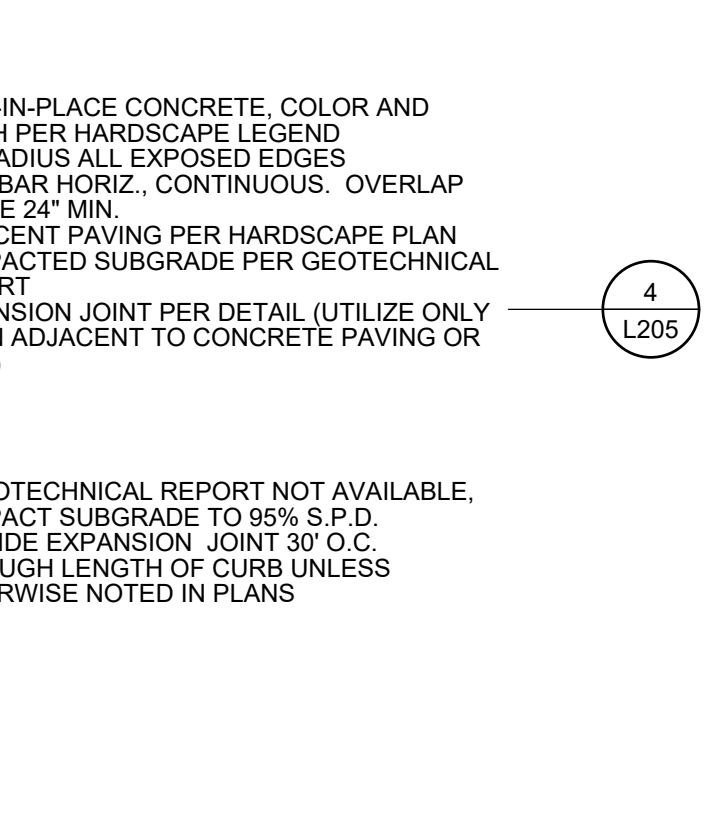
LEGEND

- CONCRETE PAVING PER DETAIL
- THICKENED EDGE
- 1/8" RADIUS TOOLED EDGE
- #3 BAR CONTINUOUS, 48" LAPPED AND WIRED
- COMPACTED SUBGRADE AND BASE REQUIREMENTS PER GEOTECHNICAL REPORT
- FINISH GRADE AT PLANTING
- FINISH SURFACE FOR MULCH, PER PLANS AND SPECIFICATIONS
- 1" GAP NOT REQUIRED WHEN ADJACENT TO ASPHALT PAVING

NOTES

- A. THICKENED EDGE REQUIRED WHEREVER CONCRETE PAVING IS ADJACENT TO ASPHALT OR DECOMPOSED GRANITE
- B. IF NO GEOTECHNICAL REPORT IS AVAILABLE, COMPACT BASE AND SUBGRADE TO 95% S.P.D. AS DETERMINED BY ASTM-D698

5 CONCRETE THICKENED EDGE
SCALE: 3" = 1'-0"



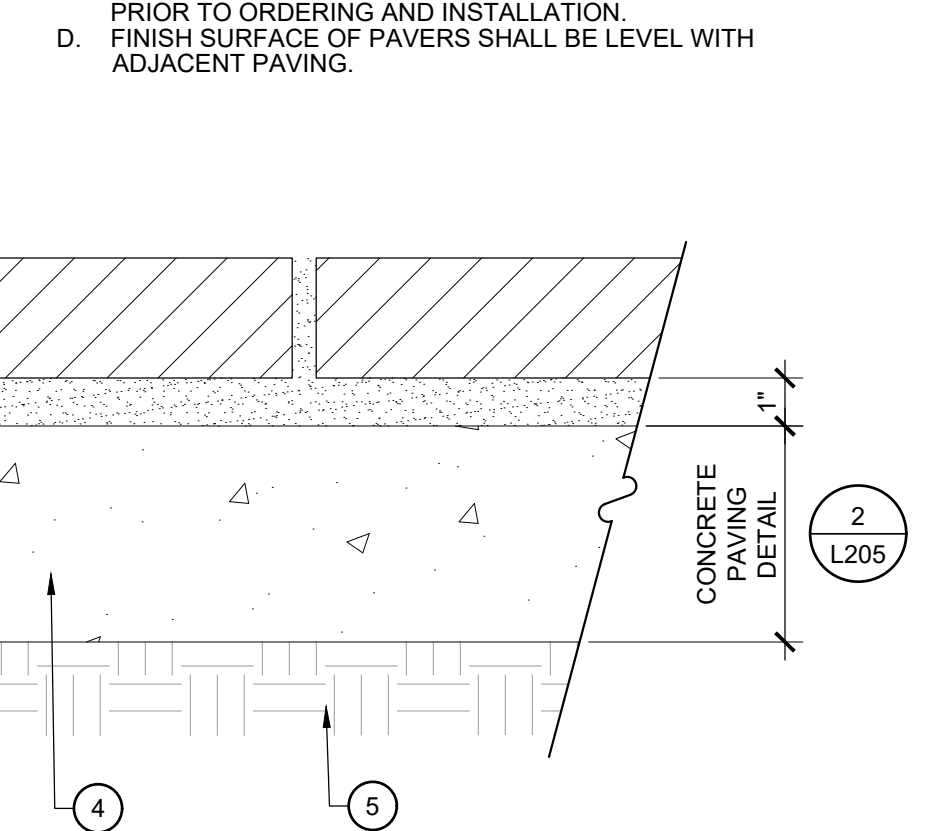
LEGEND

- CAST-IN-PLACE CONCRETE, COLOR AND FINISH PER HARDSCAPE LEGEND
- 1/4" RADIUS ALL EXPOSED EDGES
- #4 REBAR HORIZ., CONTINUOUS, OVERLAP SPLICE 24" MIN
- ADJACENT PAVING PER HARDSCAPE PLAN
- COMPACTED SUBGRADE PER GEOTECHNICAL REPORT
- EXPANSION JOINT PER DETAIL (UTILIZE ONLY WHEN ADJACENT TO CONCRETE PAVING OR BASE)

NOTES

- A. IF GEOTECHNICAL REPORT NOT AVAILABLE, COMPACT SUBGRADE TO 95% S.P.D.
- B. PROVIDE EXPANSION JOINT 30" O.C. THROUGH LENGTH OF CURB UNLESS OTHERWISE NOTED IN PLANS

6 6" FLUSH CURB
SCALE: 1-1/2" = 1'-0"



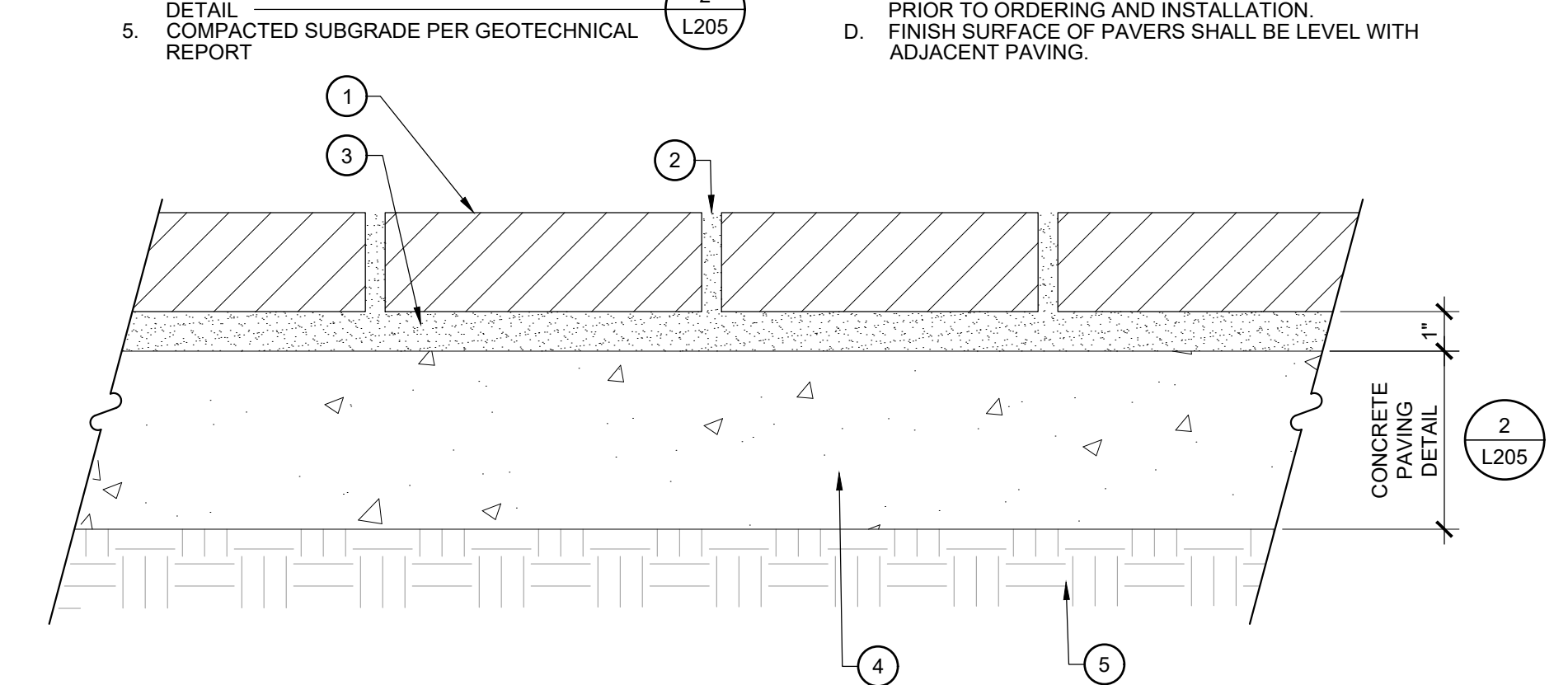
LEGEND

- PRECAST CONCRETE PAVER PER HARDSCAPE LEGEND
- GROUTED JOINTS, COLOR PER HARDSCAPE LEGEND
- MORTAR SETTING BED
- CONCRETE SUBBASE, REINFORCED PER DETAIL
- COMPACTED SUBGRADE PER GEOTECHNICAL REPORT

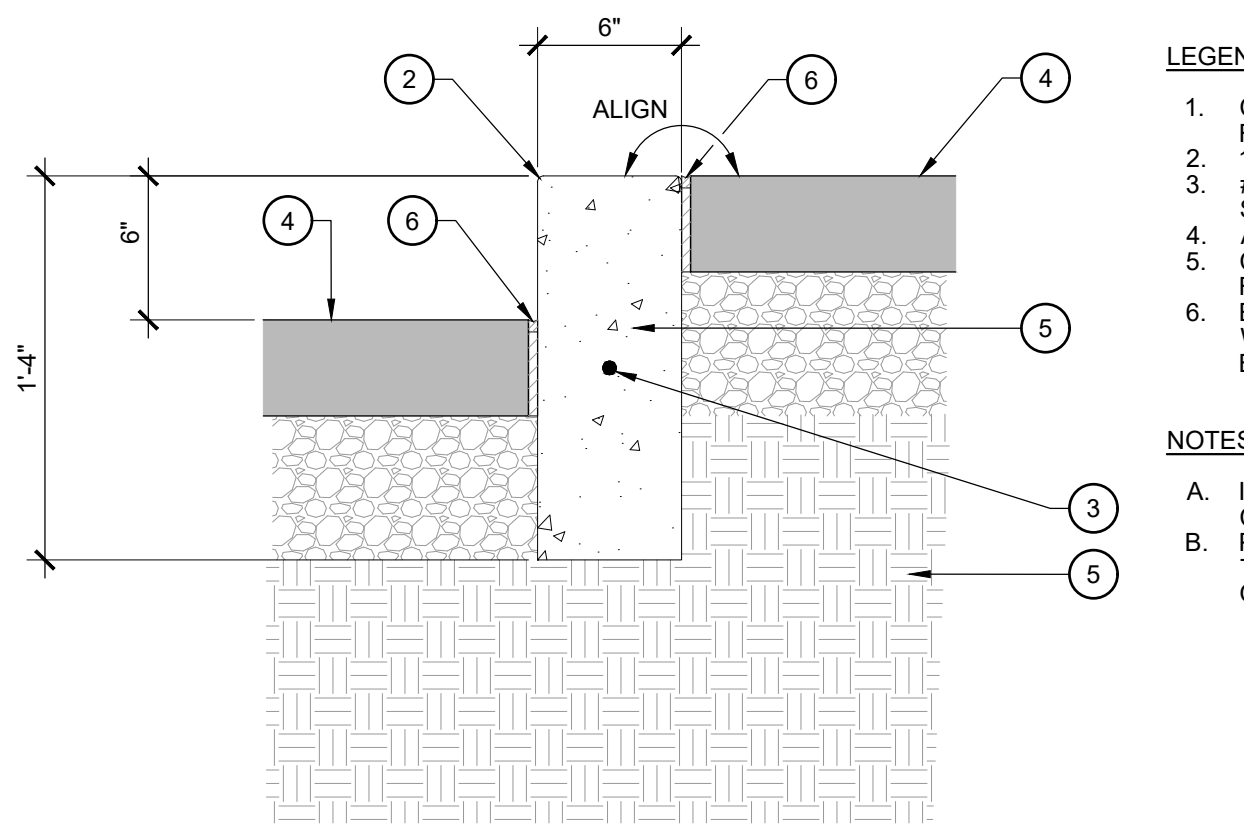
NOTES

- A. IF GEOTECHNICAL REPORT NOT AVAILABLE, COMPACT SUBGRADE TO 95% S.P.D. AS DETERMINED BY ASTM-D698
- B. REFER TO HARDSCAPE PLAN AND LEGEND FOR LAYOUT AND PATTERN OF PAVERS
- C. CONTRACTOR TO SUBMIT PAVER AND GROUT SAMPLE TO LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO ORDERING AND INSTALLATION
- D. FINISH SURFACE OF PAVERS SHALL BE LEVEL WITH ADJACENT PAVING.

8 PRECAST PAVERS - MORTAR SET
SCALE: 3" = 1'-0"



7 CONCRETE CURB
SCALE: 1-1/2" = 1'-0"



| PAVEMENT TYPE | ABC (IN.) | REINFORCEMENT | CONCRETE (IN.) |
|-----------------------------------|-----------|---------------------|----------------|
| SERVICE DRIVE AREA / DUMPSTER PAD | 4 | #4 @ 12" O.C., B.W. | 8 |
| ACCESSIBLE PARKING SPACES | 4 | #4 @ 12" O.C., B.W. | 6 |
| PEDESTRIAN SIDEWALKS | 4 | NONE | 4 |

a. **Town Certification.** This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

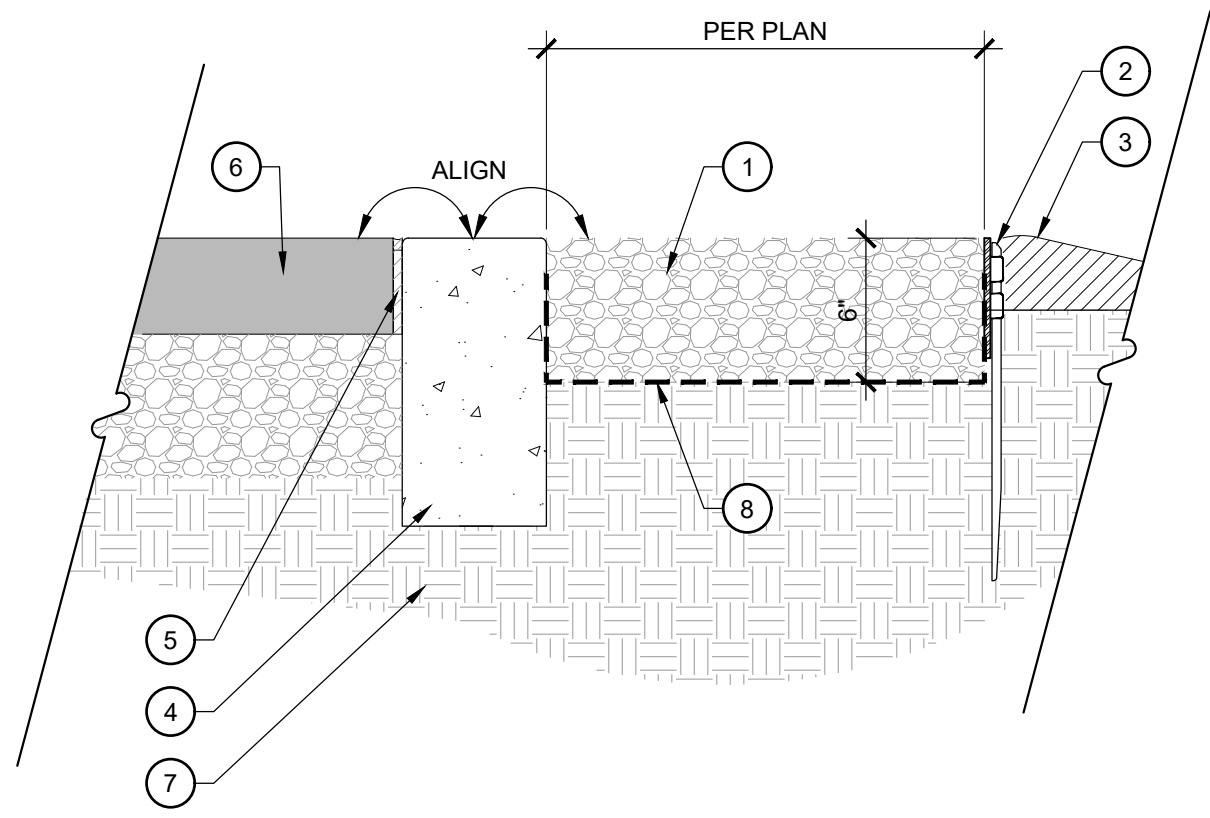
By: _____ Date: _____

Town Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

By: _____ Date: _____

Land Use Administrator



- LEGEND**
- DECORATIVE GRAVEL PER HARDSCAPE LEGEND
 - STEEL EDGING PER HARDSCAPE PLANS, INSTALL PER MANUFACTURER'S RECOMMENDATIONS. SEE DETAIL
 - ADJACENT PLANTING AREA
 - FLUSH CONCRETE CURB. SEE DETAIL
 - EXPANSION JOINT PER DETAIL (UTILIZE ONLY WHEN ADJACENT TO CONCRETE PAVING OR BASE). SEE DETAIL
 - ADJACENT PAVING PER HARDSCAPE PLANS
 - BASE AND SUBGRADE PREPARATION PER GEOTECHNICAL REPORT
 - LANDSCAPE FABRIC, MIRAFI OR EQUAL

NOTE

A. IF NO GEOTECHNICAL REPORT IS AVAILABLE COMPACT BASE AND SUBGRADE TO 95% S.P.D. AS DETERMINED BY ASTM D-698.

B. PROVIDE EXPANSION JOINT 30' O.C. THROUGH LENGTH OF CURB UNLESS OTHERWISE NOTED IN PLANS

1 GRAVEL
SCALE: 1-1/2" = 1'-0"

Square Tube Inverted-U Wide Rack

Capacity: 2 Warranty: 1 Year

- Square tubing resists pipe cutters, providing higher security than round tubing
- U-Lock compatible
- Custom Colors Available
- APBP compliant

Product Specifications

- Materials:**
- Stainless Steel or Mild Steel
 - 2" Square Tubing
 - Mounting Feet: 0.375" flat bar

Finishing Options:

- Stainless Steel Bead Blast Satin (recommended)
- Stainless Steel Powder Coat
- Stainless Steel Thermoplastic (Plascoat)
- Mild Steel Hot Dipped Galvanized
- Mild Steel Powder Coat
- Mild Steel Thermoplastic (Plascoat)

Mounting Options:

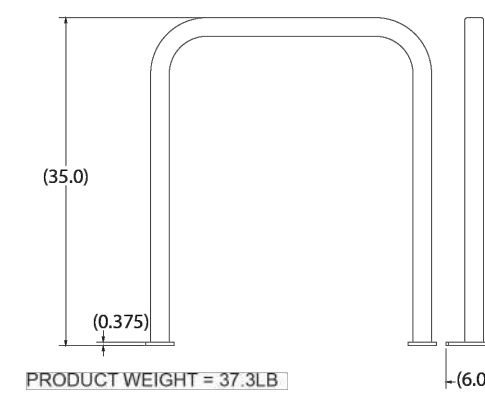
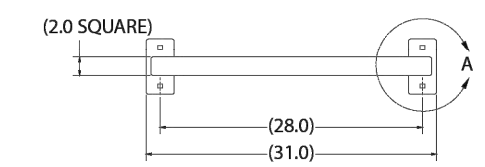
- Surface Mount: 3" x 6" flat bar foot
- Embedded In-Ground Mount into concrete footing
- Mounting Rails - Bolted to two aluminum mounting rails - see website for configurations:

www.sportworks.com/product/mounting-rails

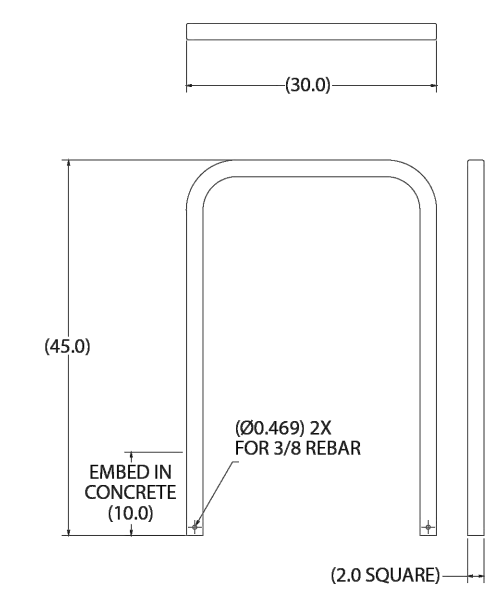
Hardware Options:

- Concrete Wedge Anchors (standard)
 - + Tamper Resistant Nuts (recommended)
- *For other hardware options contact our sales and support staff.

Surface Mount Dimensions

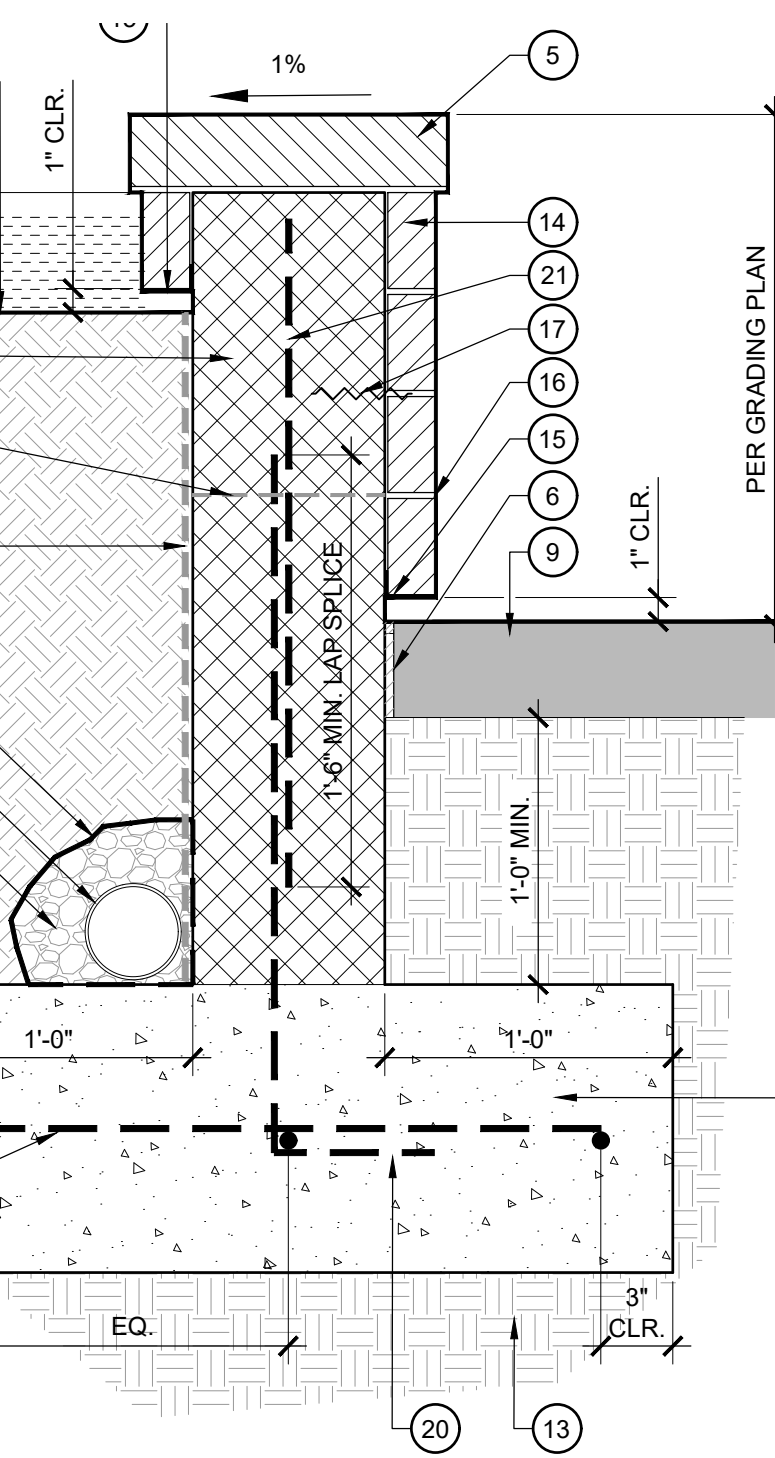


Embedded Mount Dimensions



*All dimensions are in inches

5 BENCH
SCALE: NTS



LEGEND

- 8"x8"x16" C.M.U BLOCK PER HARDSCAPE LEGEND, GROUT ALL VOIDS SOLID
- 3,000 PSI MIN. CAST-IN-PLACE CONCRETE FOOTING
- 4" DIA. PERFORATED HDPE PIPE, CONNECT TO NEAREST STORM DRAIN LINE
- WATERPROOFING MEMBRANE AND DRAINAGE BOARD, MIRAFI OR EQUAL
- PRECAST CONCRETE CAP PER HARDSCAPE LEGEND, MORTAR SET TO C.M.U WALL
- EXPANSION JOINT PER DETAIL (ONLY IF ADJACENT TO CONCRETE PAVING)
- MULCH PER PLANTING DETAILS
- PLANTING SOIL PER SPECIFICATIONS
- ADJACENT PAVING PER HARDSCAPE PLAN
- FINISH GRADE AT PLANTING AREA
- GEOTEXTILE FABRIC, MIRAFI OR EQUAL
- #57 WASHED STONE, 1 CU.FT. MIN. AROUND PIPE PER LINEAR FOOT OF WALL
- COMPACTED SUBGRADE PER GEOTECHNICAL REPORT
- BRICK MASONRY VENEER PER HARDSCAPE LEGEND, MORTAR SET TO C.M.U WALL
- 1"x2"x1/4" THICK STEEL ANGLE AT BOTTOM BRICK COURSE ATTACHED TO C.M.U. WALL, BOTH SIDES
- 3/8" TOOLED JOINT
- MASONRY TIE, INSTALL ONE (1) TIE PER 2 SQ.FT. OF WALL FACE
- #4 REBAR, HORIZONTAL @ 24" O.C.
- #4 REBAR, HORIZONTAL SPACING AS SHOWN, 12" MIN. LAP AT SPLICE
- #4 REBAR, VERTICAL DOWEL @ 24" O.C.
- #4 REBAR, VERTICAL @ 24" O.C.
- HORIZONTAL REBAR LADDER REINFORCEMENT, PLACE EVERY OTHER C.M.U COURSE

NOTES

- A. IF NO GEOTECHNICAL REPORT IS AVAILABLE, COMPACT SUBGRADE TO 95% S.P.D. AS DETERMINED BY ASTM-D698.
- B. PROVIDE BRICK AND CAP SAMPLE PRIOR TO ORDERING.
- C. PROVIDE CAP SHOP DRAWINGS FOR APPROVAL PRIOR TO INSTALLATION.

4 BIKE RACK
SCALE: NTS

a. **Town Certification.** This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: _____ Date: _____

Town Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

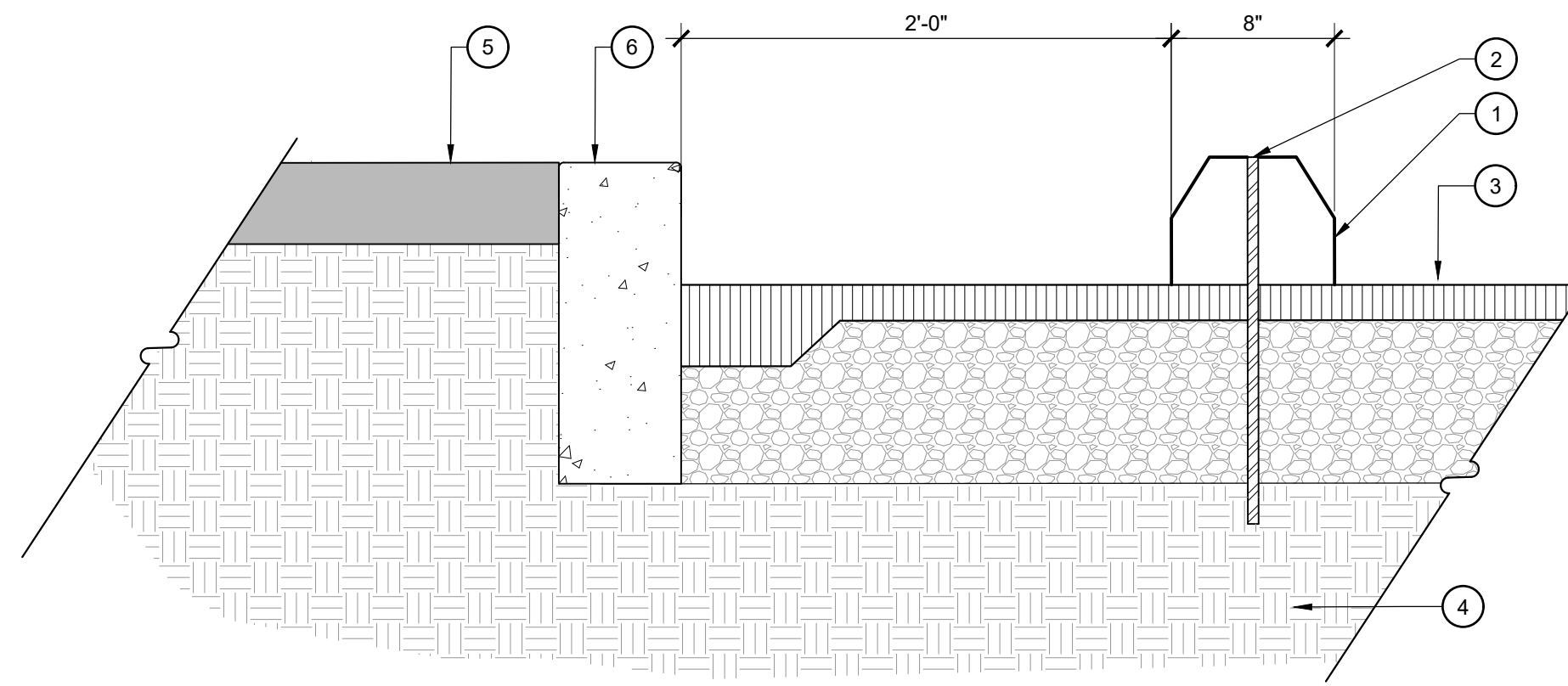
By: _____ Date: _____

Land Use Administrator

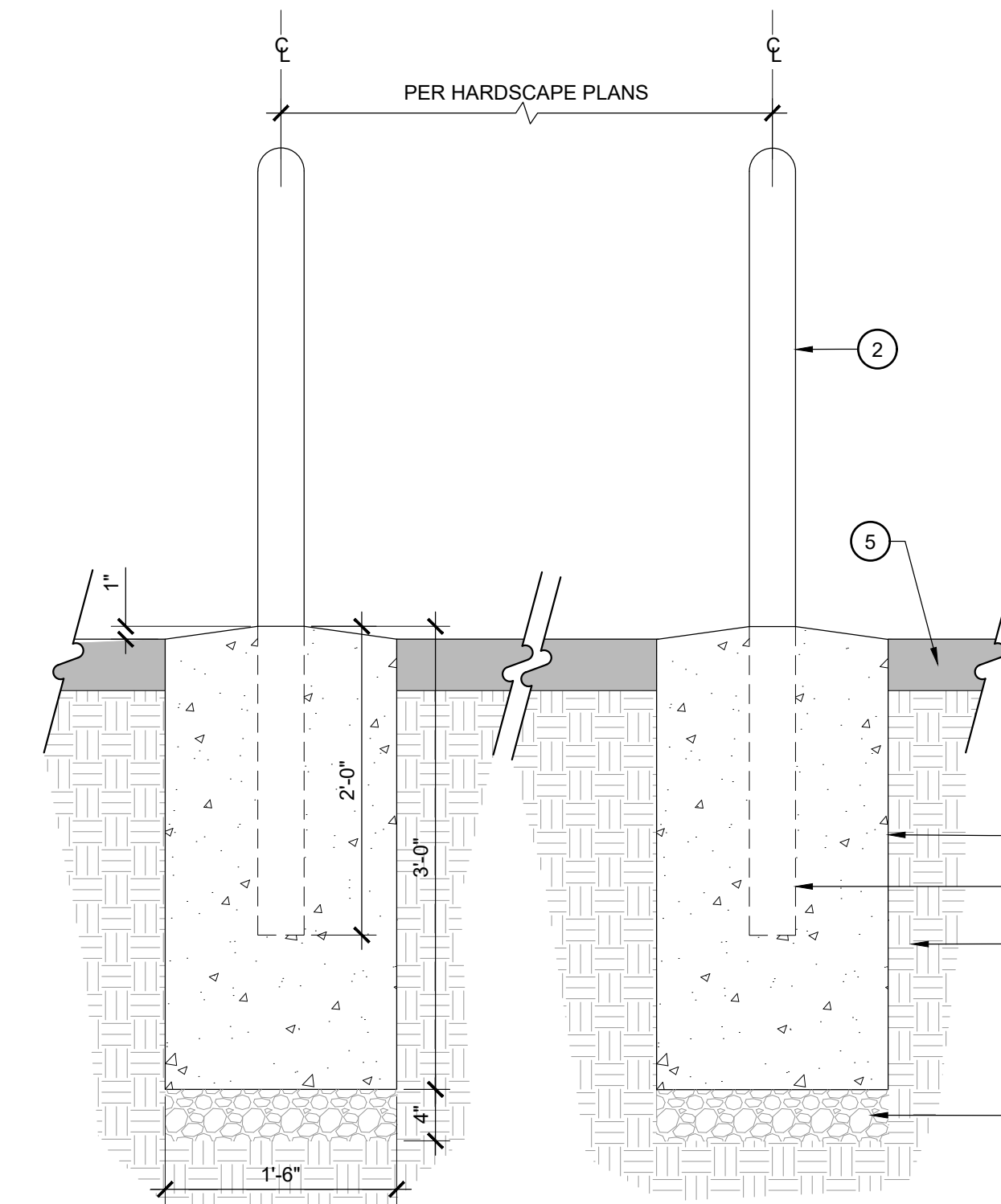
7 RETAINING WALL
SCALE: 1-1/2" = 1'-0"

LEGEND

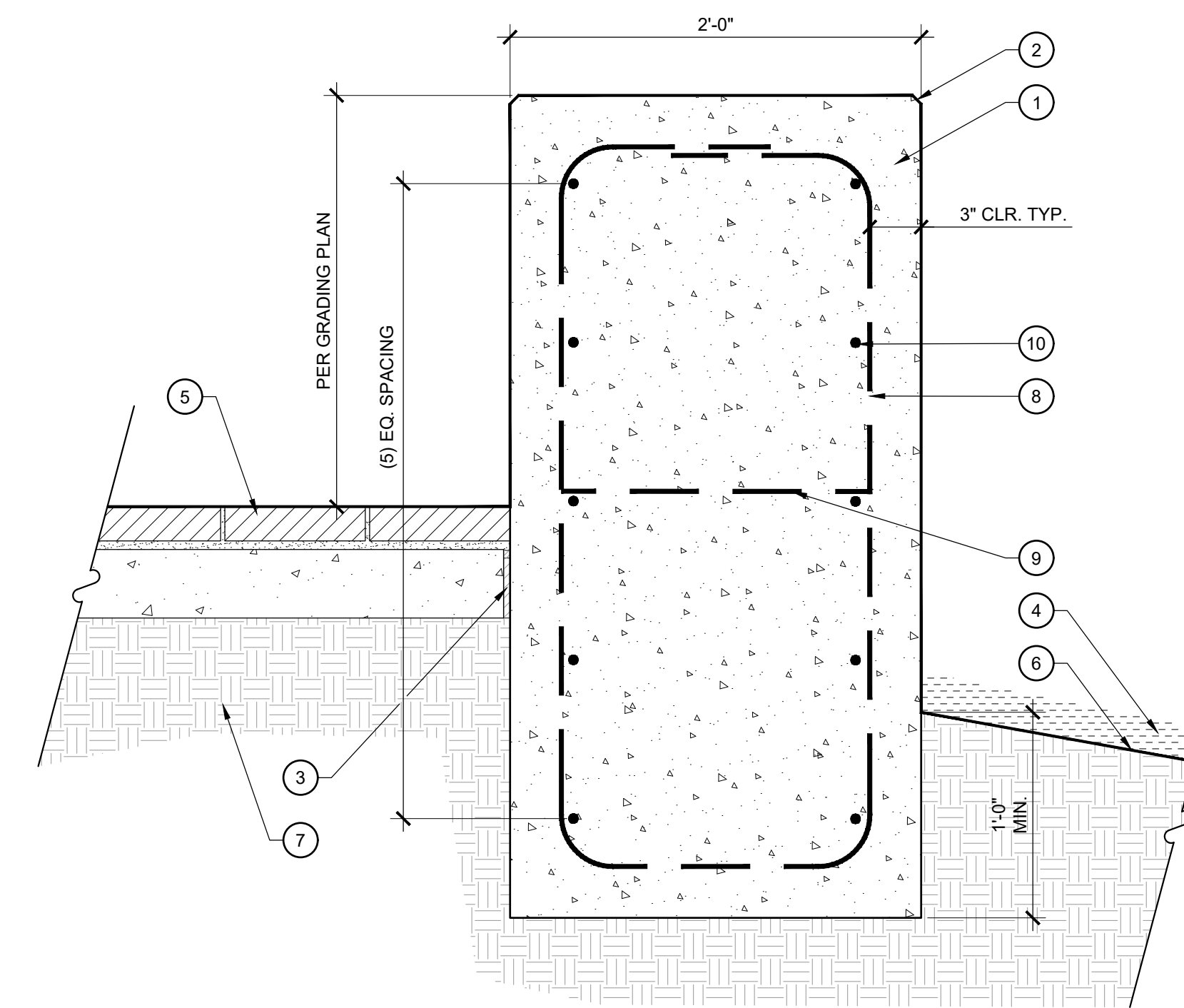
- PRECAST CONCRETE WHEEL STOP
- 5/8" DIA. REIN. BAR 18" LONG 2 PER WHEEL STOP
- ASPHALT PAVING PER DETAIL
- EXISTING SUBGRADE
- ADJACENT PAVING PER HARDSCAPE PLANS
- CAST-IN-PLACE CONCRETE CURB PER DETAIL



2 CONCRETE WHEEL STOP
SCALE: 1-1/2" = 1'-0"



3 BOLLARD
SCALE: 1" = 1'-0"



6 CAST-IN-PLACE CONCRETE SEATING WALL
SCALE: 1-1/2" = 1'-0"

LEGEND

- CAST-IN-PLACE CONCRETE FOOTING
- BOLLARD PER HARDSCAPE LEGEND
- EMBED BOLLARD PER MANUFACTURER'S RECOMMENDATIONS
- COMPACTED AGGREGATE BASE COURSE
- ADJACENT PAVING PER PLANS
- COMPACTED SUBGRADE PER GEOTECHNICAL REPORT

NOTES

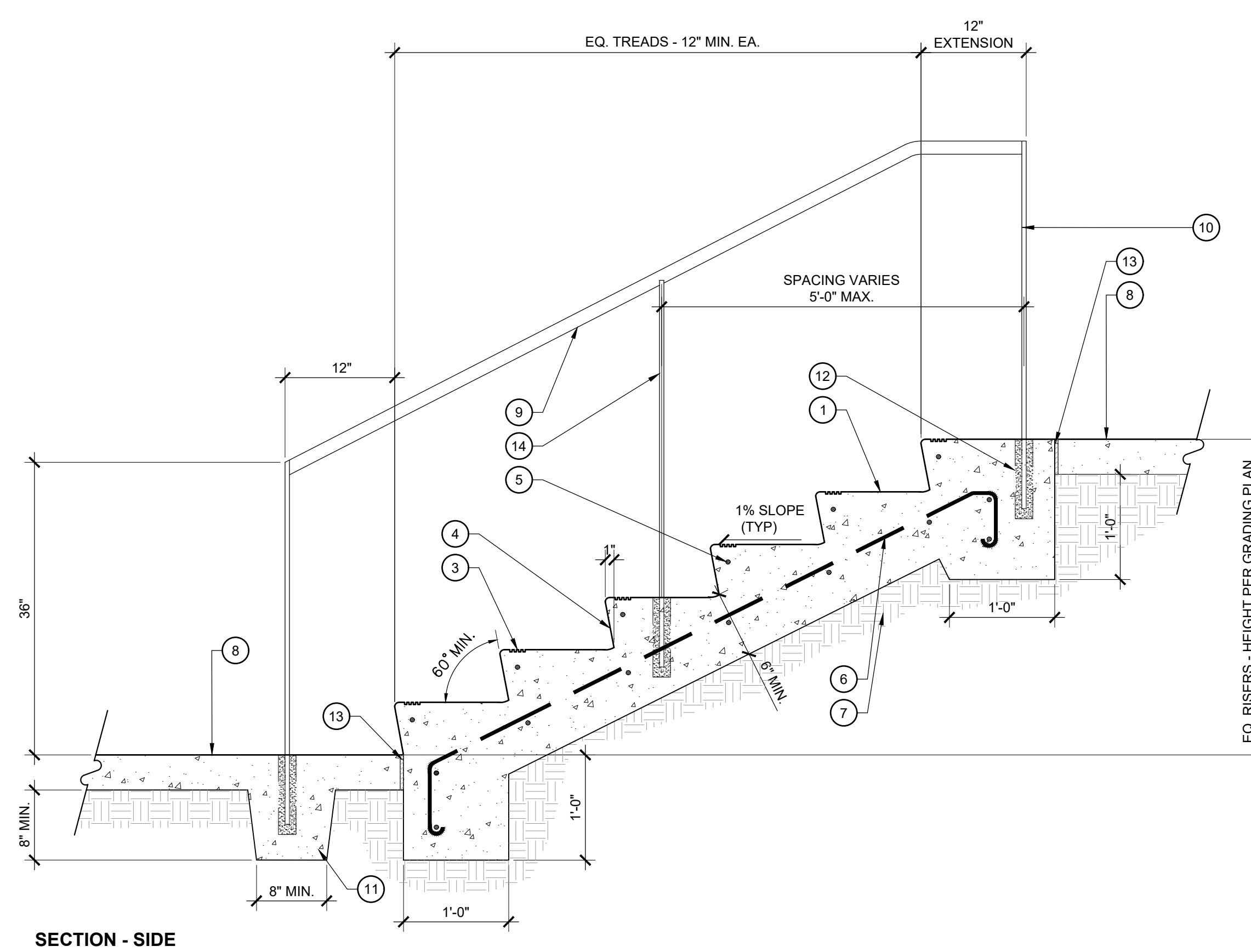
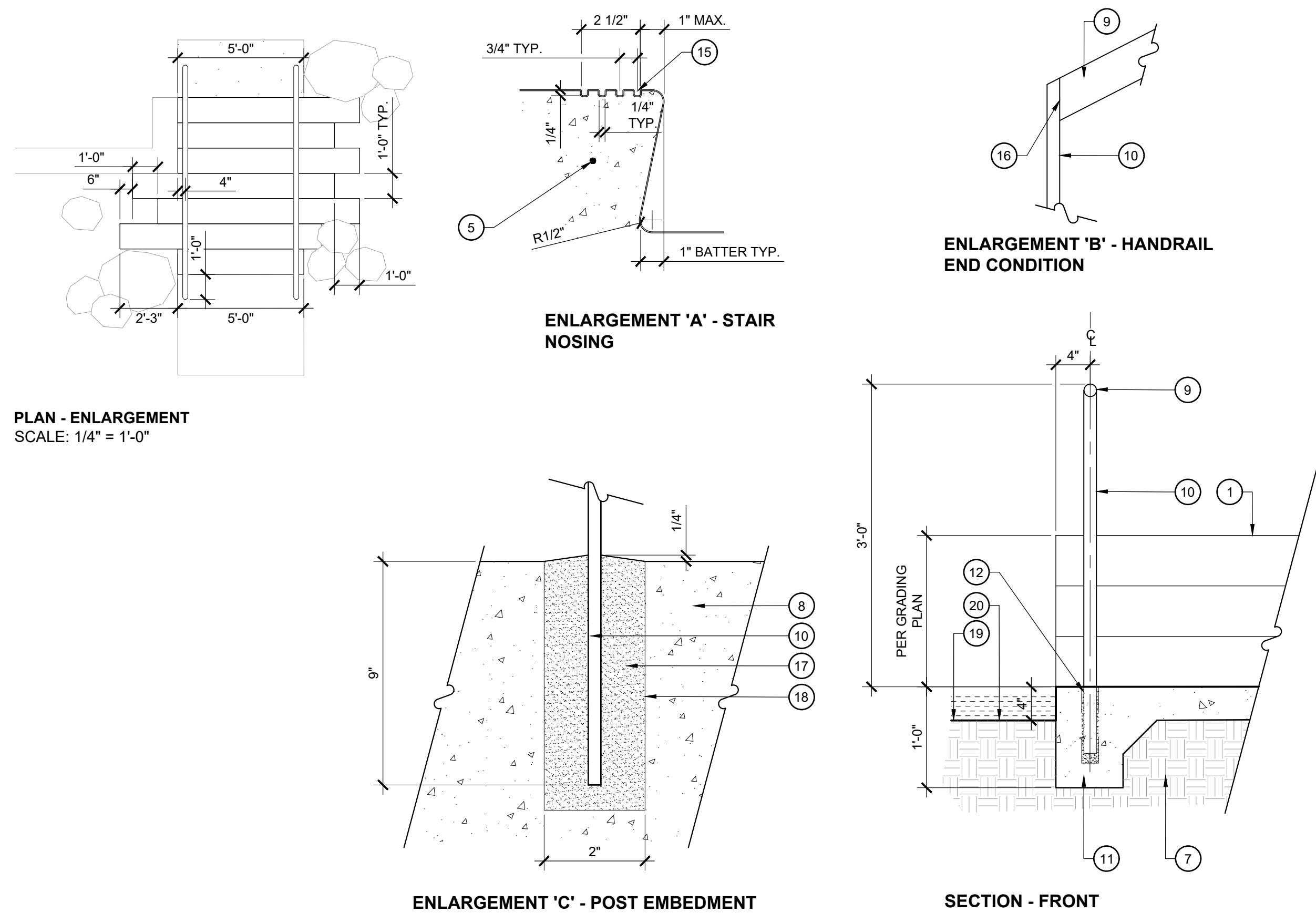
- A. IF NO GEOTECHNICAL REPORT IS AVAILABLE, COMPACT BASE AND SUBGRADE TO 95% S.P.D. AS DETERMINED BY ASTM-D698
- B. FLAG BOLLARD LOCATIONS IN FIELD PRIOR TO INSTALLATION FOR REVIEW BY LANDSCAPE ARCHITECT
- C. INSTALL BOLLARD PER MANUFACTURER'S RECOMMENDATIONS

LEGEND

- CAST-IN-PLACE CONCRETE SEAT WALL PER HARDSCAPE LEGEND
- 1/2" CHAMFER AT ALL EXPOSED EDGES
- EXPANSION JOINT PER DETAIL
- MULCH PER PLANTING PLANS AND SPECIFICATIONS
- ADJACENT PRECAST CONCRETE PAVERS PER DETAIL
- FINISH GRADE AT PLANTING AREA
- COMPACTED SUBGRADE PER GEOTECHNICAL REPORT
- #4 REBAR CAGE, 12" O.C.
- #4 REBAR HORIZONTAL, 12" O.C.
- #4 REBAR HORIZONTAL, 18" LAP AT SPLICE

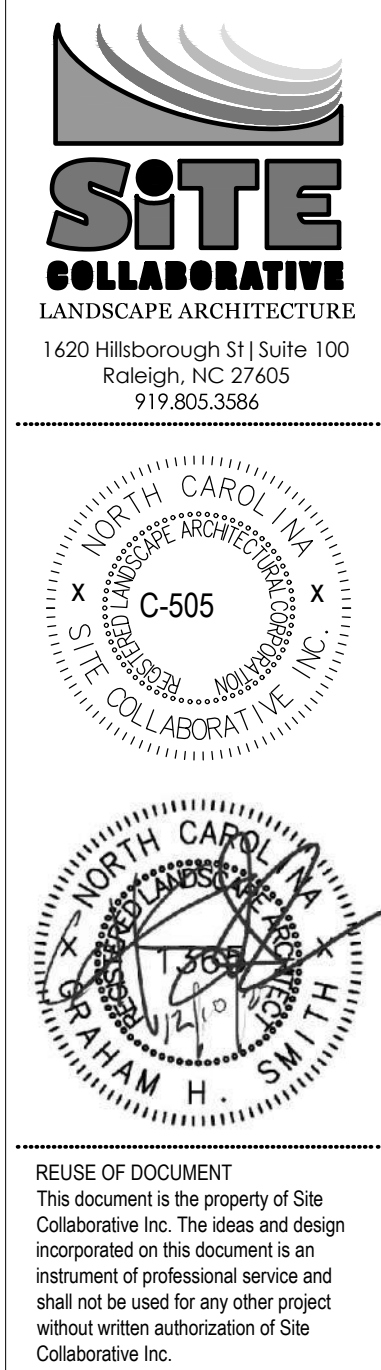
NOTES

- A. IF NO GEOTECHNICAL REPORT IS AVAILABLE, COMPACT BASE AND SUBGRADE TO 95% S.P.D. AS DETERMINED BY ASTM-D698
- B. PROVIDE SHOP DRAWINGS PRIOR TO INSTALLATION



- LEGEND**
1. CAST-IN-PLACE CONCRETE STAIRS PER HARDSCAPE LEGEND, REINFORCEMENT PER STRUCTURAL DRAWINGS
 2. 1/2" R. TOOLED EDGE, TYP
 3. STAIR NOSE - SEE ENLARGEMENT 'A'. REINFORCEMENT PER STRUCTURAL DRAWINGS
 4. BATTERED RISER/FACE PER ENLARGEMENT 'A'
 5. #4 REBAR CONT. AT NOSING, 3/4" CLEAR
 6. #5 @ 12" O.C. BOTH WAYS, 3" CLEAR
 7. COMPACTED SUBGRADE PER GEOTECHNICAL REPORT
 8. ADJACENT PAVING PER HARDSCAPE PLAN
 9. 1-1/2" DIA. STAINLESS STEEL TOP RAIL PER HARDSCAPE LEGEND
 10. 1-1/2" X 1/2" THICK STAINLESS STEEL FLAT BAR POST PER HARDSCAPE LEGEND
 11. DEEP POUR PAVING FOR POST EMBEDMENT
 12. EMBEDDED POST MOUNT - SEE ENLARGEMENT 'C'
 13. EXPANSION JOINT PER DETAIL
 14. 1-1/4" X 1/2" THICK INTERMEDIATE POST TO BE CENTERED ON TREAD, TYP.
 15. TOOLED GROOVES WITH BLACK EPOXY PAINT FULL WIDTH OF STAIRS
 16. WELD ALL AROUND, GRIND SMOOTH, MIN. 1/8" RADIUS AT JOINT
 17. NON-SHRINK EPOXY GROUT, COLOR TO MATCH ADJACENT CONCRETE
 18. 4" DIA. CORE DRILL IN CONCRETE TO RECEIVE SUPPORT
 19. FINISH GRADE PER GRADING PLAN
 20. MULCH PER PLANTING PLAN
- NOTE**
- A. PROVIDE SHOP DRAWING OF RAILING PER FIELD CONDITIONS FOR LANDSCAPE ARCHITECT APPROVAL PRIOR TO RAILING FABRICATION
 - B. GRIPPING SURFACES SHALL HAVE A SMOOTH SURFACE WITH NO SHARP CORNERS
 - C. SUBMIT JOINT COLOR SAMPLE FOR LANDSCAPE ARCHITECT APPROVAL PRIOR TO INSTALLATION
 - D. PROVIDE POSITIVE DRAINAGE AT TOP AND BOTTOM LANDINGS TO AVOID PONDING
 - E. REFER TO GRADING PLANS FOR ALL FINISH GRADE AND SURFACE ELEVATIONS

1 CAST-IN-PLACE CONCRETE STAIRS
SCALE: 1" = 1'-0"



Invented for life

Electric Vehicle Charging Solutions

Simple plug and play

- No complicated installation configurations or modifications
- No app needed
- No expensive network subscription required
- All safety certifications are for the full units
- Maintenance-free charging stations protected by cover-to-cover 3-year warranty

EV300 Level 2 Charging Station

- Easy to install and use
- Industry standard NEMA 14-50 plug included
- NEMA 3R-rated enclosure for indoor or outdoor installation (outdoor installation requires in-use cover over receptacle)
- Compact design ideal for areas with limited space (indoor and outdoor)
- Includes tamper resistant mounting bracket
- Easy to manage 16' cable
- 240V, 32A capacity for faster vehicle charging
- Up to 6 times faster than a standard wall outlet
- SAE J1772 charging connector is compatible with all EVs in North America
- 3 year warranty

Item: 805TG9
Mfr. Model: EV300

EV3000 DC Fast Charger

- 30KW DC charging charges up to 4 times faster than Level 2 AC charging
- Ideal for fleets, public parking lots and dealerships
- Can charge new vehicles that operate at higher voltages
- SAE J1772 CCS cable. Compatible with nearly all battery electric vehicles sold in North America
- Wall mountable
- High resolution LCD display
- IP55 rated enclosure for indoor or outdoor installation
- 3 year warranty

Item: 800HH7
Mfr. Model: EV3000

EV400 Series Level 2 Charging Station

- 25' cable is the longest available for more versatility and installation locations
- NEMA 3R-rated enclosure for indoor or outdoor installation (outdoor installation requires in-use cover over receptacle)
- SAE J1772 charging connector is compatible with all EVs in North America
- Movable, plug-in installation allows charging when you need it, leaving an open outlet when not charging
- Safely charges in all weather conditions - rain, snow, sleet, ice and extreme heat or cold
- Bracketless mounting for fast and easy installation
- Clear, bright LEDs indicate charging and power status, stop and reset functions
- Industry leading 4 year warranty

Item: 61HP12
Mfr. Model: EL-52503

EV810 Series Level 2 Charging Station

- NEMA 4X-rated enclosure is weatherproof for safe charging in any weather or location
- SAE J1772 charging connector is compatible with all EVs in North America
- Flexible mounting. Hardware from back, top, or side. Can be fitted with included NEMA plug
- Movable, plug-in installation option allows charging when you need it, leaving an open outlet when not charging
- 3 year warranty

Item: 30VZ36
Mfr. Model: EL-50600-D

EV850 Series Single Bollard Charging Station

- Galvanized steel bollard for parking lot and commercial use - 1/2" thick galvanized steel bollard protects against car bumpers, shopping carts and vandalism, protecting your investment
- NEMA 4X-rated enclosure is weatherproof for safe charging in any weather or location
- SAE J1772 charging connector is compatible with all EVs in North America
- Hardware installation and protective bollard creates safe, tamper-proof setup
- Also available as EV860 Dual bollard charging station with two EV810 Series charging stations in a galvanized steel bollard

Item: 52ND57
Mfr. Model: EL-50650-GNTD-B

Item: 61HP13
Mfr. Model: EL-50650-GNTD-A

2 EV CHARGING STATION
SCALE: NTS

KNOX
When seconds matter®

KNOX REMOTE POWER BOX®

IMPORTANT:
The Knox Remote Power Box must be installed, operated and maintained by qualified persons who are thoroughly trained and who understand any hazards that may be involved. Carefully review the product mounting instructions prior to installing the Knox Remote Power Box. Follow product instructions supplied with the shipment.

ATTENTION:
Knox Remote Power Boxes are strong devices that MUST be mounted properly to ensure maximum security and to resist physical attack.

ELECTRICAL RATINGS

Main Switch: 24-480 VAC, 125 VA MAX, Pilot duty, per contact block. Two contact blocks per switch; double pole, double throw (DPDT)

Tamper Switch: 24 VDC, 50 mA, general use

Enclosure Rating: NEMA Type 2, 3R

Ambient Air Temperature Rating: -40° to +65° C, -40° to +149° F

Use 75° C wire only

All Knox Remote Power Boxes are fully tested and listed by Underwriters Laboratories as anti-theft devices. Alarm Tamper Alerts are UL listed as Central Station Alarm Units. UL Electrical Range: Max Voltage of 24 VDC at 50 mA.

UL LISTED

- UL 437 Standard for Safety for Key Locks
- UL 508 Industrial Control Equipment
- UL 1037 Anti-theft Alarms and Devices
- UL 1532 Organic Coatings for Steel Enclosures for Outdoor Use Electrical Equipment
- UL 1610 Central Station Alarm Units

ATTENTION FIRE INSPECTORS:
Solar power often cannot be remotely disconnected by the local power company. Requiring a Knox Remote Power Box for solar power systems in your jurisdiction provides safety and protection for your emergency responders.

FRONT VIEW
7" WIDE
1/8" stainless steel lock cover
Hole for tamper seal
Optional dual lock
5/8" solid steel plate door with gasket
Hinged door (dead bar protected)

Surface Mount

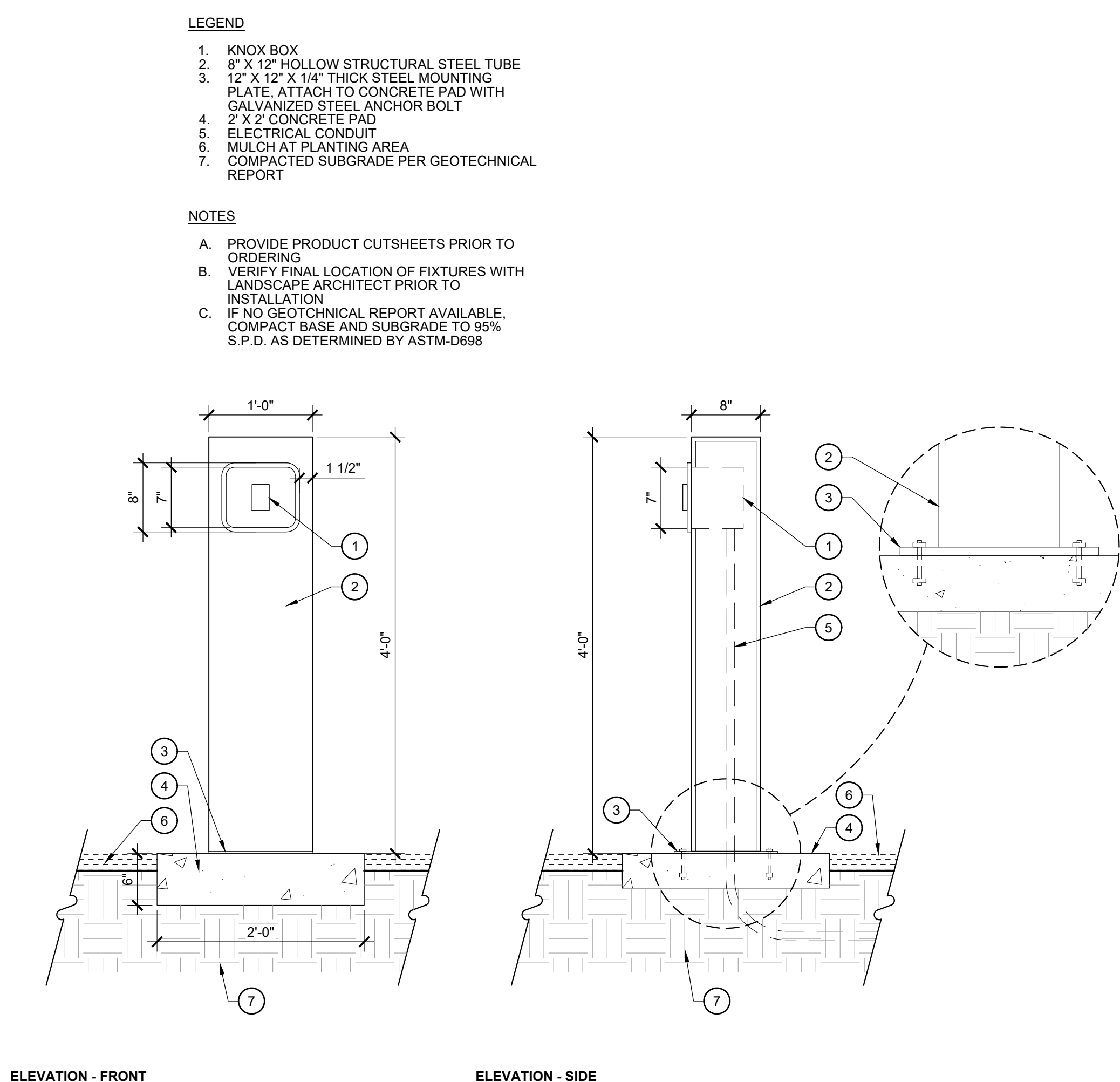
FRONT VIEW
9-1/2" WIDE
9-1/2" HIGH
Optional dual lock

RECESSED MOUNT

FRONT VIEW
9-1/2" WIDE
9-1/2" HIGH
1/4" steel case, 100% welded

SIDE VIEW
3-1/4" HIGH
6-5/8" DEEP

3 REMOTE POWER BOX
SCALE: NTS



3 POWER BOX POST
SCALE: 1" = 1'-0"

a. **Town Certification.** This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: _____ Date: _____

Town Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

By: _____ Date: _____

Land Use Administrator

BIG OAK VET HOSPITAL
VETS PETS
1004 BIG OAK COURT

TOK PROJECT #: ZCP-11-24

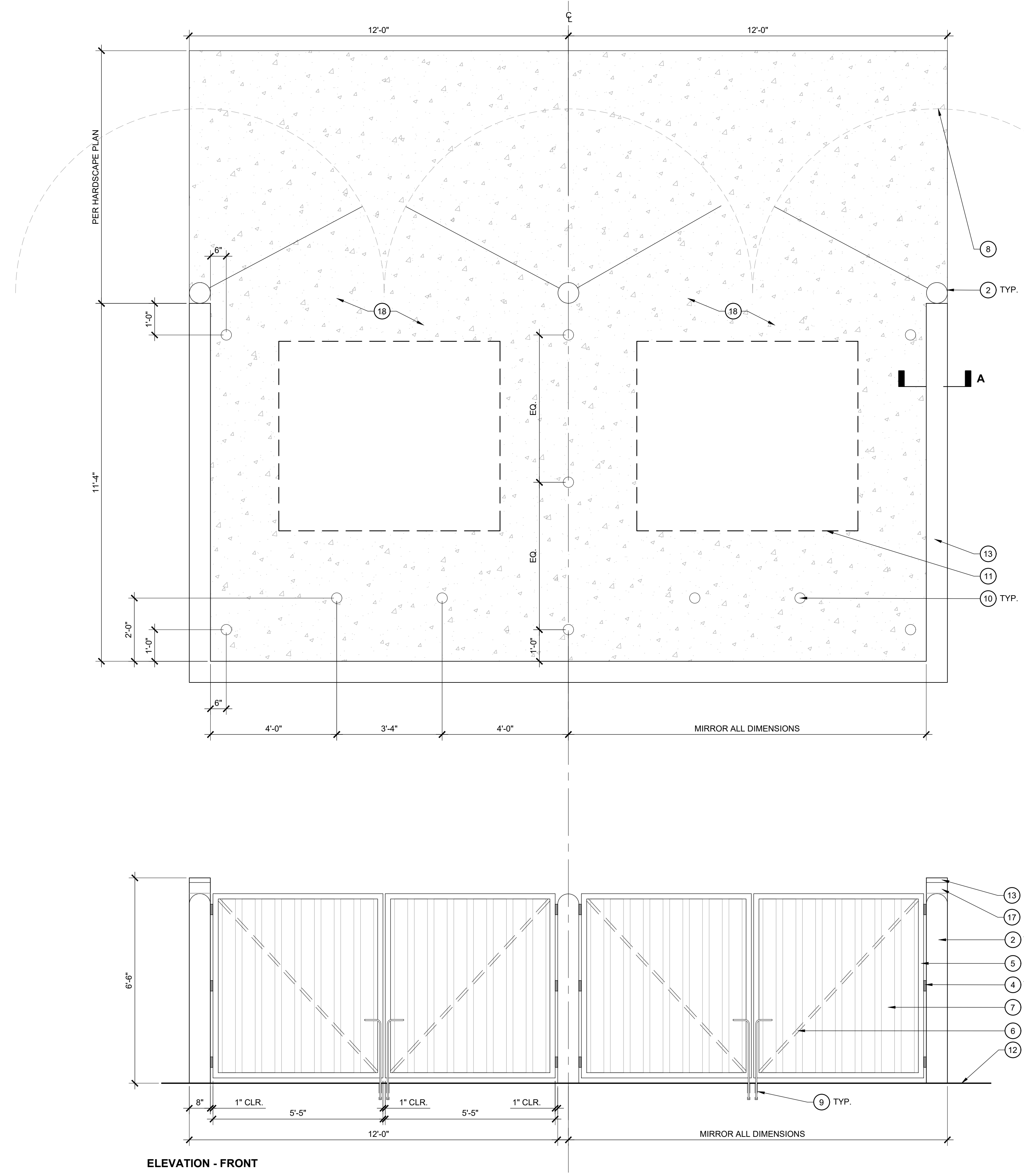
PROJECT NUMBER:

PROJECT PHASE: CONSTRUCTION DRAWINGS

DATE: 03.16.2026

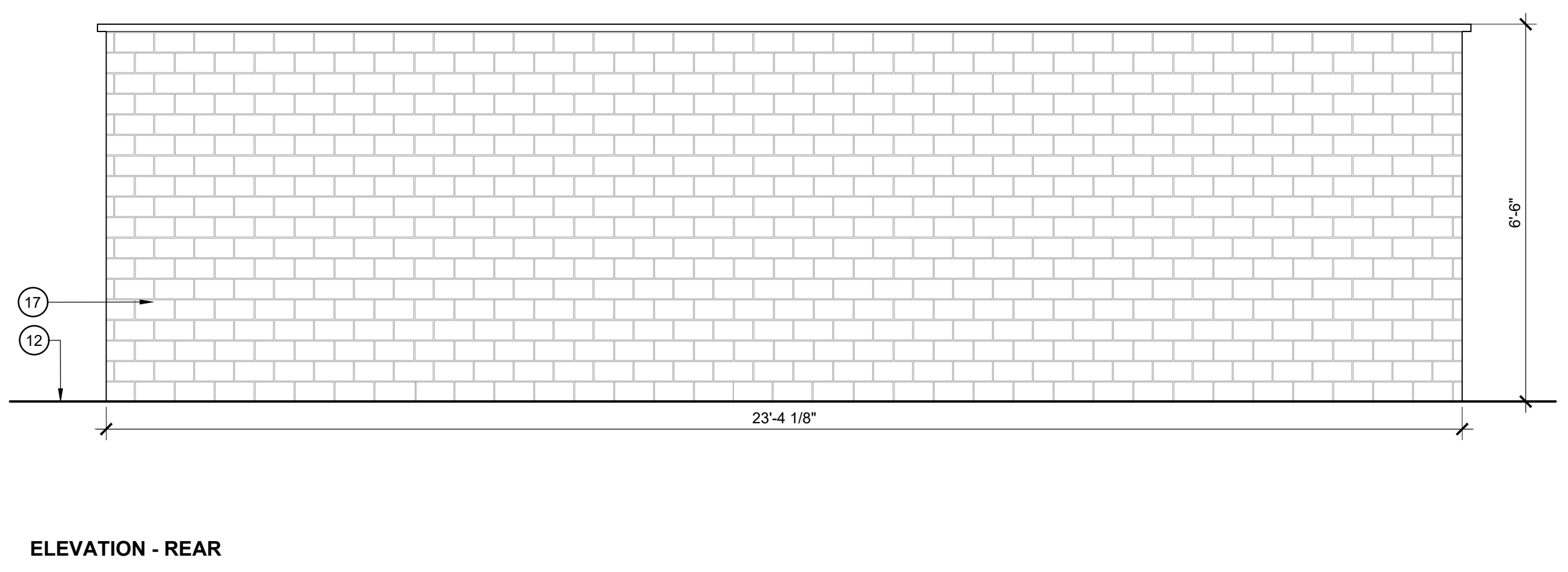
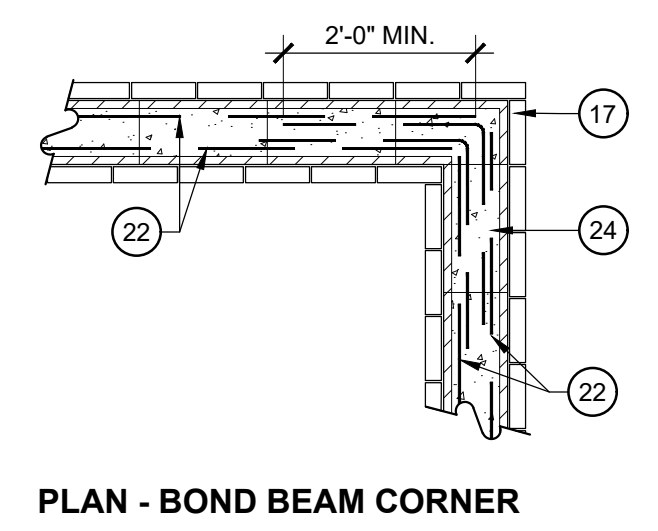
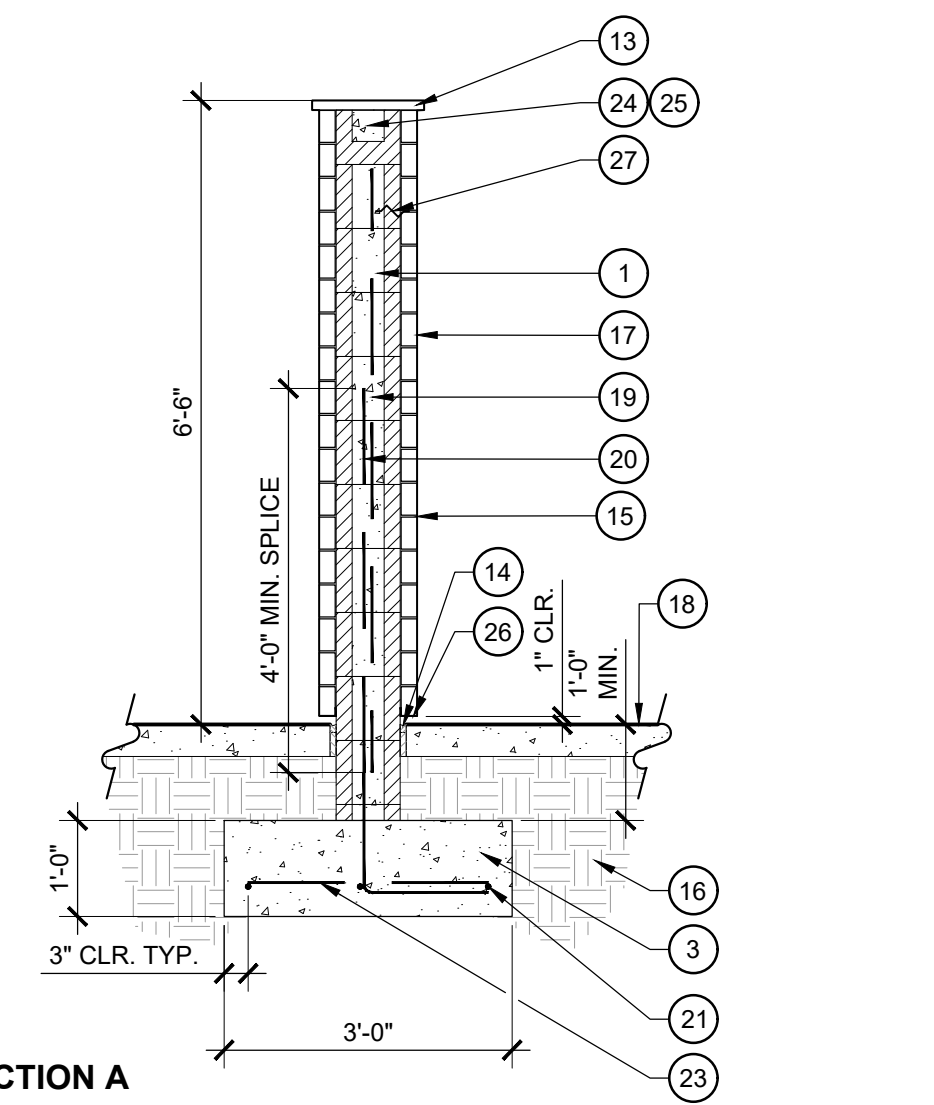
SHEET TITLE: SITE DETAILS

SHEET NUMBER: L207



- LEGEND**
- 8"x8"x16" CMU BLOCK, GROUT ALL VOIDS SOLID WITH 3,000 PSI GROUT
 - 6" DIA. GALVANIZED STEEL GATE POST.
 - CAST-IN-PLACE CONCRETE FOOTING, 3,000 PSI MIN. HEAVY DUTY GALVANIZED STEEL GATE HINGES, THREE (3) AT EACH GATE EQUALLY SPACED
 - 2"x2" SQ. GALVANIZED H.S.S. EXTERIOR SUPPORT GATE FRAME
 - 1"x1" SQ. GALVANIZED H.S.S. INTERIOR SUPPORT GATE FRAME
 - TREX COMPOSITE SLATS PER HARDSCAPE LEGEND. ATTACH TO GATE FRAME AND SUPPORT WITH GALVANIZED STEEL HARDWARE
 - GATE HINGES SHALL ALLOW FOR 180° SWING
 - 1/2" DIA. SOLID STOCK STEEL DROP ROD
 - BOLLARD PER DETAIL
 - 8 YARD DUMPSTER BY OTHERS (SHOWN FOR REFERENCE ONLY)
 - FINISH SURFACE
 - PRECAST CONCRETE CAP PER HARDSCAPE LEGEND. MORTAR SET TO C.M.U WALL
 - EXPANSION JOINT PER DETAIL
 - 3/8" TOOLED JOINT MORTAR JOINT
 - COMPACTED SUBGRADE PER GEOTECHNICAL REPORT
 - BRICK VENEER TO MATCH BUILDING
 - CONCRETE PAVING PER DETAIL
 - #5 VERT. REBAR AT 40" O.C. PLACE A VERTICAL BAR AT EACH CORNER INTERSECTION
 - #5 REBAR DOWEL AT 40" O.C., ALTERNATE SIDES
 - (3) #5 HORIZ. REBAR, 12" MIN. LAP AT SPLICE
 - #5 HORIZ. REBAR, CONTINUOUS BOND BEAM REINFORCEMENT
 - #5 REBAR AT 40" O.C.
 - TOP OF WALL, 8"x8"x16" BOND BEAM CMU BLOCK
 - REFER TO TOP OF WALL BOND BEAM DETAIL ON THIS SHEET
 - 1"x2"x1/4" THICK STEEL ANGLE AT BOTTOM BRICK COURSE ATTACHED TO C.M.U. WALL, BOTH SIDES MASONRY TIE, INSTALL ONE (1) TIE PER 2 SQ. FT. OF WALL FACE

- NOTES**
- ALL MOUNTING HARDWARE TO BE GALVANIZED STEEL
 - PROVIDE SHOP DRAWINGS PRIOR TO INSTALLATION
 - IF NO GEOTECHNICAL REPORT IS AVAILABLE, COMPACT SUBGRADE TO 95% S.P.D. AS DETERMINED BY ASTM-D698



1 DUMPSTER ENCLOSURE
SCALE: 1/2" = 1'-0"

a. **Town Certification.** This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

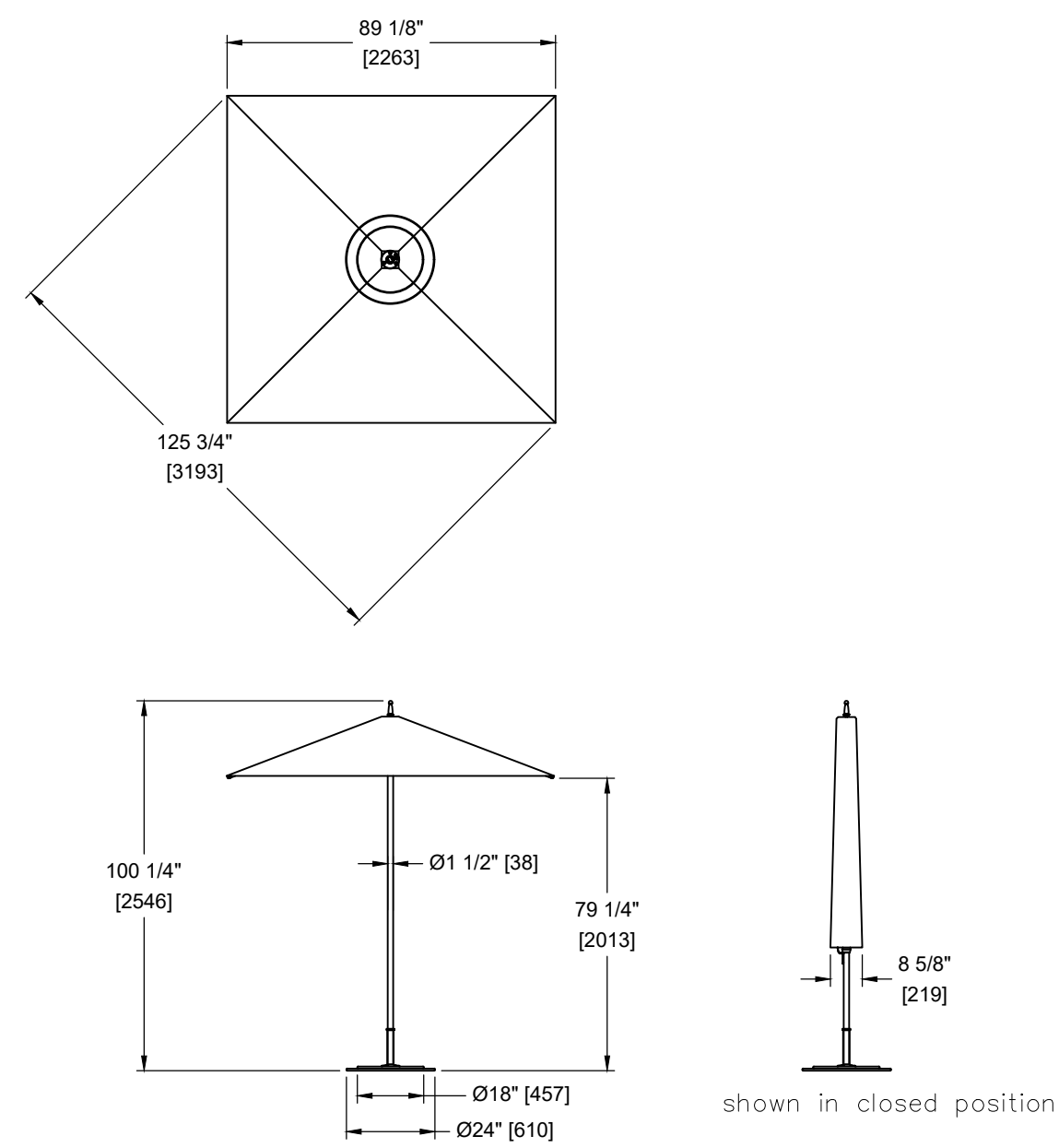
By: _____ Date: _____

Town Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

By: _____ Date: _____

Land Use Administrator



1 UMBRELLA
 SCALE: 1/4" = 1'-0"

Parasols by TUUCI

landscapeforms

Product Data Sheet



From design partner TUUCI, the Miami-based maker of premier umbrellas and shade structures, the parasols are contemporary in form, smart in function and versatile in application. All offer elegant opportunities for creating shade and defining social space. Manufactured of premium quality materials that stand up to the elements, they are robust and refined, built to perform beautifully in any environment.

Landscape Forms-TUUCI Parasols Ocean Master Series

- Canopy frames/panels, and poles are aluminum extrusions.
- Fasteners and hardware are stainless steel.
- Surface mount stand is stainless steel.
- Freestanding base is galvanized steel.
- Switch security pin system.
- Ocean Master Max Cantilever parasols come standard with the auto-lift piston assist system.
- Ocean Master Max Classic parasols come standard with the auto-loc marine lift pulley system.
- Sunbrella® marine-grade, 100% solution-dyed fiber is treated for a high degree of fade-resistance, is mildew proof and meets California Technical Bulletin #117 Section E (CS-191-53).
- All fabric umbrellas are subject to damage from high winds; we recommend lowering TUUCI at night and in 25 MPH wind conditions.
- Pole finish is polished aluminum.

Mounting

- Ocean Master Classic Hexagon and Square must be anchored to Landscape Forms table (surface mounted or embedded table style) paired with a picnic-style table using a 120 lb TUUCI G-Plate double stack combo, stand-alone in a TUUCI 150 lb G-Plate double stack combo free standing base or surface mounted stand, or deck mount security sleeve.
- Ocean Master MAX Classic, and Ocean Master Max Single and Dual Cantilever can be freestanding, surface mounted, or embedded.

| Ocean Master F-1 Classic Square | Depth | Width | Height | Product weight |
|---------------------------------|-------|-------|--------|----------------|
| | - | 150" | 156" | xx |
| Ocean Master F-1 Octagon | Depth | Width | Height | Product weight |
| | 201" | 218" | 148" | xx |

| Ocean Master Classic Square | Depth | Width | Height | Product weight |
|------------------------------------|---------|---------|--------|----------------|
| | - | 89" | 100" | 21 lb |
| Ocean Master Classic Hexagon | Depth | Width | Height | Product weight |
| | 100" | 125.5" | 100" | 26 lb |
| Ocean Master MAX Classic Square | Depth | Width | Height | Product weight |
| | - | 120" | 100" | 34 lb |
| Ocean Master MAX Classic Octagon | Depth | Width | Height | Product weight |
| | 109" | 125" | 100" | 49 lb |
| Ocean Master MAX Classic Rectangle | Depth | Width | Height | Product weight |
| | 98" | 145" | 105" | 29 lb |
| Ocean Master MAX Cantilever | Depth | Width | Height | Product weight |
| | 127" | 120.25" | 109" | 140 lb |
| Ocean Master MAX Dual Cantilever | Depth | Width | Height | Product weight |
| | 120.25" | 250.75" | 109" | 215 lb |

1 Revised November 1, 2024 | Landscape Forms Inc. | 800.521.2546 | F 269.381.3455 | 7800 E. Michigan Ave., Kalamazoo, MI 49048

Chipman

landscapeforms

Product Data Sheet



Chair

- The frame of Chipman is formed of aluminum castings welded together to make the final form.
- Powdercoated seating is offered armless, or with arms, is lightweight and nests.
- Bumper/glides are made of tough nylon to resist damage from dragging on rough surfaces.

Stool

- The frame of Chipman is formed of aluminum castings welded together to make the final form.
- Powdercoated seating is offered armless, is lightweight and nests.
- Bumper/glides are made of tough nylon to resist damage from dragging on rough surfaces.

Finishes

- All metal is finished with Landscape Forms' proprietary Pangard III® polyester powdercoat, a hard yet flexible finish that resists rusting, chipping, peeling and fading.
- Call for standard color chart.

To Specify

- Select table size, shape, height, and powdercoat color. Specify surface mount or freestanding. Select with or without umbrella hole for dining table only. If specified with umbrella, table must be surface mounted.

Chair

- Select chair with arms, or armless, and powdercoat color.

Stool

- Select powdercoat color.

Designed by Robert Chipman
 Chipman is protected by U.S. Patent No. D694,543; D69,544; D746,074; D718,558

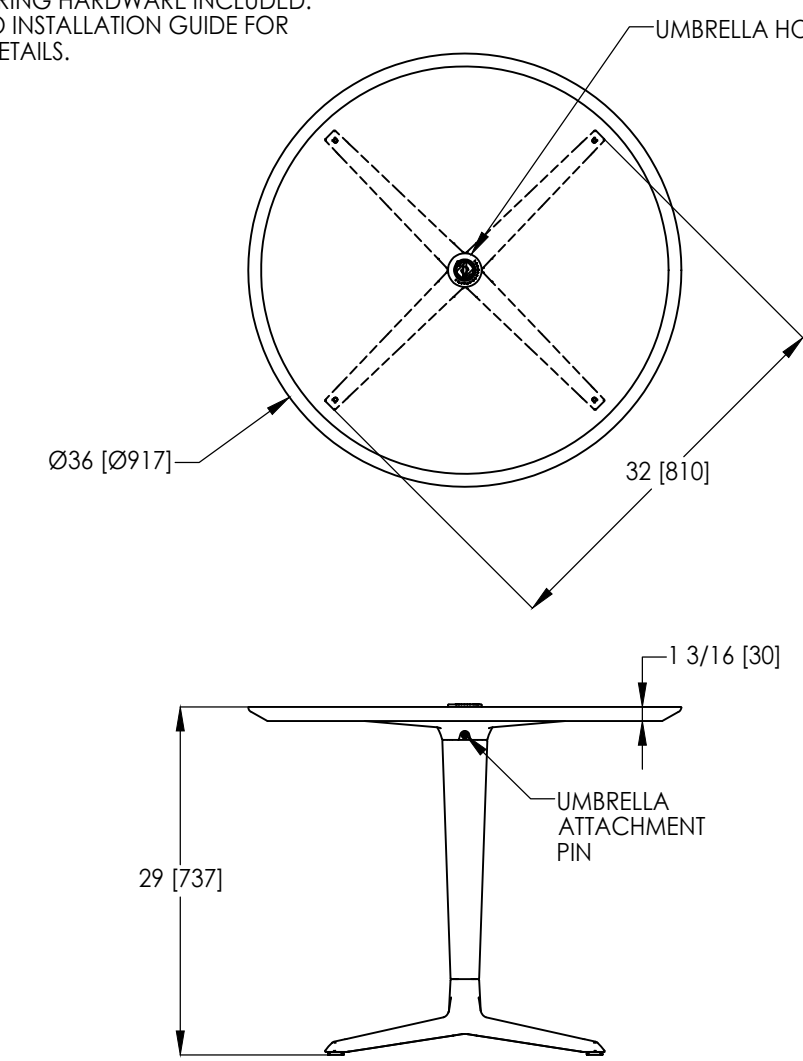
3 Revised July 10, 2020 | Landscape Forms Inc. | 800.521.2546 | F 269.381.3455 | 7800 E. Michigan Ave., Kalamazoo, MI 49048

www.landscapeforms.com

Date: 9/1/2023
 Ph: 800.521.2546

* TABLE WITH UMBRELLA HOLE MUST BE SURFACE MOUNTED*

ANCHORING HARDWARE INCLUDED. REFER TO INSTALLATION GUIDE FOR MORE DETAILS.



2 TABLE
 SCALE: 3/4" = 1'-0"

Chipman

Product Data Sheet

landscapeforms



The Chipman line, designed by landscape architect Robert Chipman, includes a cast aluminum chair and stool of stunning sculptural form, and complementary tables in lounge, dining and standing height versions. In its consummate refinement Chipman adds to the special ambience of high-profile terraces, rooftop gardens, cafes and other protected social spaces. The elegance of design and detail enable these pieces to move easily into high-end residential settings. The compatibility of elements makes it possible to specify one family of products for a range of commercial spaces. Chair, stool and tables are finished with Landscape Forms proprietary Pangard III® HAPS, VOC, lead-free polyester powdercoat. Chipman is intended and warranted for use in protected public spaces and is part of Landscape Forms' Terrace Life group.

Table

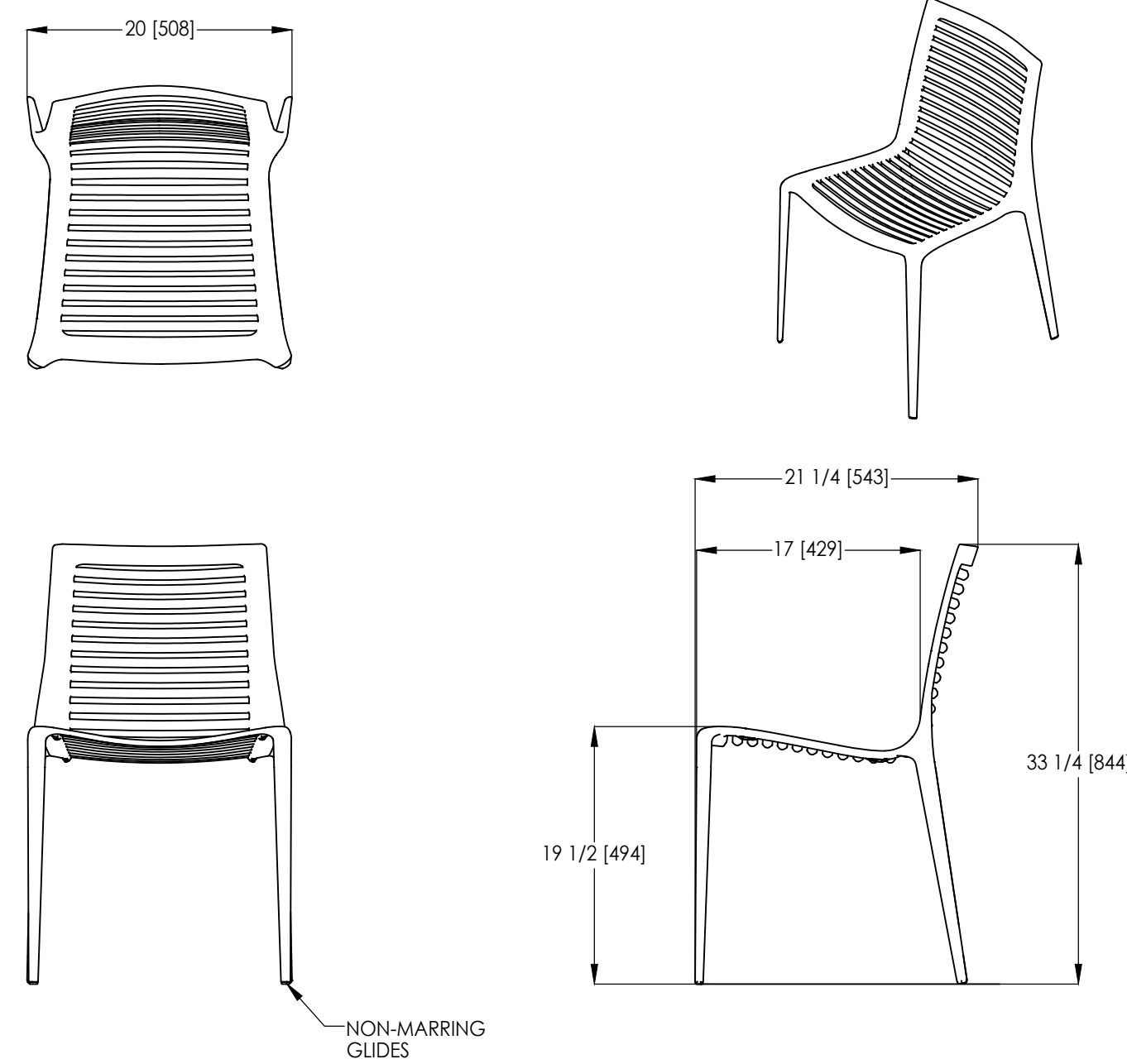
- The tables have cast aluminum bases attached to a cast aluminum support tube.
- The support tube is bolted to a cast aluminum frame supporting a steel sheet top.
- The table features a unique surface/embedded mount system that allows for leveling adjustment.
- Dining table is available with or without umbrella hole.
- If used with umbrella, table must be surface mounted.

| Table Top Shape | Style | Diameter/Depth | Height | Product Weight |
|-----------------|----------------------|----------------|--------|----------------|
| | Round Dining Table | 45" | 29.25" | 89 lb |
| | Round Dining Table | 36" | 29.25" | 64 lb |
| | Round Dining Table | 31" | 29.25" | 58 lb |
| | Square Dining Table | 37" | 29.25" | 82 lb |
| | Square Dining Table | 32" | 29.25" | 88 lb |
| | Square Dining Table | 27" | 29.25" | 56 lb |
| Table Top Shape | Style | Diameter/Depth | Height | Product Weight |
| | Round Standing Table | 36" | 42.25" | 89 lb |
| | Round Standing Table | 31" | 42.25" | 58 lb |

1 Revised July 10, 2020 | Landscape Forms Inc. | 800.521.2546 | F 269.381.3455 | 7800 E. Michigan Ave., Kalamazoo, MI 49048

www.landscapeforms.com

Date: 04/12/2016
 Ph: 800.521.2546



3 CHAIR
 SCALE: 1" = 1'-0"

Visit landscapeforms.com for more information. Specifications are subject to change without notice. Landscape Forms supports the Landscape Architecture Foundation at the Second Century level. ©2020 Landscape Forms, Inc. Printed in U.S.A.

a. **Town Certification.** This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

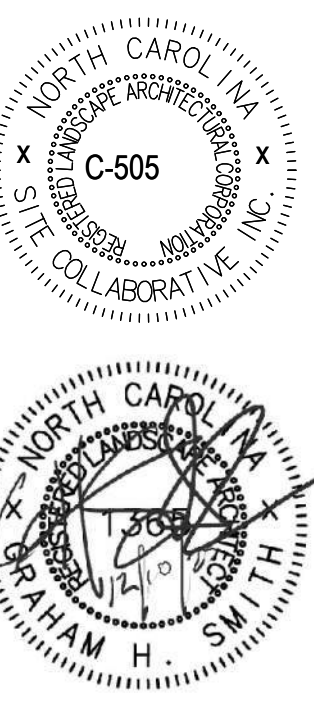
By: _____ Date: _____

Town Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

By: _____ Date: _____

Land Use Administrator



REUSE OF DOCUMENT
 This document is the property of Site Collaborative Inc. The ideas and design incorporated on this document is an instrument of professional service and shall not be used for any other project without written authorization of Site Collaborative Inc.

TOK PROJECT #:
 ZCP-11-24

PROJECT NUMBER:

PROJECT PHASE:
CONSTRUCTION DRAWINGS

DATE: 03.16.2026

SHEET TITLE:

SITE DETAILS

SHEET NUMBER:

L209

PLAN VIEW

TYPICAL SECTION

NOTES:

- RESIDENTIAL DRIVEWAYS TO BE 12' TO 18' WIDE AT RIGHT-OF-WAY.
- COMMERCIAL DRIVEWAYS TO BE A MAXIMUM OF 36' WIDE AT RIGHT-OF-WAY.
- CONCRETE SHALL BE 3000 P.S.I.
- CONTROL JOINTS NOT TO EXCEED 10' ON CENTER.
- CURB RADIUS SHALL NOT RISE MORE THAN 1 (ONE) INCH.
- IF THE DRIVEWAY SECTION BETWEEN THE SIDEWALK AND THE DRIVEWAY APRON IS 18" OR LESS THE SIDEWALK WILL BE WIDENED TO THE APRON AND AN EXPANSION JOINT ELIMINATED.
- DRIVEWAY SHALL BE A MINIMUM OF 2 FEET FROM PROPERTY LINES.

| DATE | REVISIONS DESCRIPTION |
|------|-----------------------|
| | |

| | | |
|-------------------------------------|-------------------------|---------------|
| TOWN OF KNIGHTDALE STANDARD DETAILS | STANDARD DRIVEWAY APRON | STD. NO. 4.03 |
|-------------------------------------|-------------------------|---------------|

PLAN VIEW

TYPICAL SECTION

NOTES:

- TRANSVERSE EXPANSION JOINTS TO BE A MAXIMUM OF 50 FEET APART.
- CONTROL JOINTS TO BE AT 5 FEET O.C.
- ALL CONCRETE TO BE FINISHED WITH CURING COMPOUND.

| DATE | REVISIONS DESCRIPTION |
|------|-----------------------|
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| | | |
|-------------------------------------|--------------------|------------------------|
| TOWN OF KNIGHTDALE STANDARD DETAILS | CONCRETE SIDEWALKS | 1 of 2 STD. NO. 4.04-1 |
|-------------------------------------|--------------------|------------------------|

TYPE N-1 (CURB TYPE)

TYPE N-1A (FLARE TYPE)

TYPE N-2 (RADIUS)

TYPE N-2A

TYPE N-2B

NOTES:

- 7.5% (8.33% [1:12]) MAX RAMP SLOPE
- 1.5% (2.08% [1:48]) MAX CROSS SLOPE
- CURB RAMP REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 1.5 (2.08% MAX) WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.
- RAMP AND DOMES SHALL BE INSTALLED THE SAME WIDTH AS THE SIDEWALK.
- IF LENGTH EXCEEDS 5', TRUNCATED DOMES SHALL BE INSTALLED ALONG THE BACK OF THE CURB COVERING THE FULL WIDTH OF THE RAMP.

| DATE | REVISIONS DESCRIPTION |
|------|-----------------------|
| | |

| | | |
|-------------------------------------|---|------------------------|
| TOWN OF KNIGHTDALE STANDARD DETAILS | WHEELCHAIR CURB RAMPS (NEW DEVELOPMENT) | 1 of 8 STD. NO. 4.06-1 |
|-------------------------------------|---|------------------------|

TYPE R-1

TYPE R-2

TYPE R-2A

TYPE R-2B

NOTES:

- 7.5% (8.33% [1:12]) MAX RAMP SLOPE
- 1.5% (2.08% [1:48]) MAX CROSS SLOPE
- CURB RAMP REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 1.5 (2.08% MAX) WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.
- RAMP AND DOMES SHALL BE INSTALLED THE SAME WIDTH AS THE SIDEWALK.
- IF LENGTH EXCEEDS 5', TRUNCATED DOMES SHALL BE INSTALLED ALONG THE BACK OF THE CURB COVERING THE FULL WIDTH OF THE RAMP.

| DATE | REVISIONS DESCRIPTION |
|------|-----------------------|
| | |

| | | |
|-------------------------------------|---|------------------------|
| TOWN OF KNIGHTDALE STANDARD DETAILS | WHEELCHAIR CURB RAMPS (NEW DEVELOPMENT) | 4 of 8 STD. NO. 4.06-4 |
|-------------------------------------|---|------------------------|

TRUNCATED DOME PLAN VIEW

TRUNCATED DOME SPACING

TRUNCATED DOME SECTION

NOTES:

- ALL MATS SHALL BE REPLACEABLE MATS. PLASTIC MATS CAN BE EITHER SURFACE APPLIED OR SET-FRAMES THAT ACCEPT THE PLASTIC MATS. (NO PRE-CAST PAVERS, ETC.)
- WIDTH OF DETECTABLE WARNING AREA SHALL BE A MINIMUM OF 4 FEET AND VARY WITH WIDTH OF RAMP.
- LENGTH OF DETECTABLE WARNING AREA SHALL BE 2 FEET REGARDLESS OF SECTION WIDTH.
- DETECTABLE WARNING AREA CAN BE SQUARE WHERE USED IN A CURB RADIUS.
- DETECTABLE WARNING DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES.
- DETECTABLE WARNING AREA SHALL BE COLORED YELLOW IN ALL LOCATIONS.

| DATE | REVISIONS DESCRIPTION |
|------|-----------------------|
| | |

| | | |
|-------------------------------------|--|----------------------|
| TOWN OF KNIGHTDALE STANDARD DETAILS | TRUNCATED DOMES PLAN AND CROSS SECTION | 1 of 1 STD. NO. 4.07 |
|-------------------------------------|--|----------------------|

TYPICAL SECTION

PAVEMENT SCHEDULE

| PAVEMENT SCHEDULE | DESCRIPTION |
|-------------------|---|
| C1 | 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.58 AT AN AVERAGE RATE OF 220 LBS. PER SQ. YD. OR 130 LBS. PER SQ. YD. IN EACH OF TWO LAYERS |
| J1 | 6" AGGREGATE BASE COURSE |
| J2 | VARIABLE DEPTH AGGREGATE BASE COURSE |
| T | EARTH MATERIAL |
| V1 | GEOTEXTILE FOR PAVEMENT STABILIZATION |

TABLE 1 - MAXIMUM RUNNING SLOPE AND TRAIL SEGMENT LENGTH

| RUNNING SLOPE | MAX LENGTH OF SEGMENT |
|---------------|-----------------------|
| 1:20 (5%) | 200 FT |
| 1:12 (8.33%) | 30 FT |

NOTES:

- TRAIL WIDTH TO BE DETERMINED BY THE TOWN OF KNIGHTDALE
- PROVIDE MINIMUM 2" SHOULDER OF UNPLANTED AGGREGATE BASE COURSE.
- TRAILS OR TRAIL SEGMENTS OF ANY LENGTH MAY BE CONSTRUCTED WITH RUNNING SLOPES/VERTICAL GRADES UP TO 1:20 (5%), TO ACCOMMODATE STEEP TERRAIN, TRAILS MAY BE DESIGNED WITH STEEPER SECTIONS OF CONSTRAINED LENGTH AS SHOWN IN TABLE 1. RESTING INTERVALS WITH FLATTER GRADES ARE REQUIRED BETWEEN TRAIL SEGMENTS ANY TIME RUNNING SLOPE EXCEEDS 1:20 (5%). RESTING INTERVALS SHALL BE LOCATED ON UPHILL SIDE OF TRAIL IF ONLY PROVIDED ON ONE SIDE.
- TO ENSURE THAT A TRAIL IS NOT DESIGNED AS A SERIES OF STEEP SEGMENTS, NO MORE THAN 30% OF THE TOTAL LENGTH OF TRAIL MAY HAVE A RUNNING SLOPE/VERTICAL GRADE OF 7.5% (8.33% OR 1:12 MAX). RESTING INTERVALS MUST BE PROVIDED FREQUENTLY AS THE RUNNING SLOPE INCREASES.
- RUNNING SLOPE/VERTICAL GRADE RECOMMENDATIONS MAY NOT BE ABLE TO BE ACHIEVED FOR TRAIL REPLACEMENT PROJECTS. FOR THESE TYPE OF PROJECTS, REPLACEMENT OF EXISTING CONDITION IN KIND IS SUFFICIENT.
- TYPICAL CROSS SLOPE SHALL BE 2.0% (2.08% OR 1:48 MAX). CROSS SLOPE DIRECTION VARIES. SLOPE SHOULDERS FOR POSITIVE DRAINAGE WHICH MAY REQUIRE CONTINUING PAVEMENT OR SHOULDER SLOPE UNTIL TIE-IN WITH NATURAL GROUND. SEE PLAN SHEETS AND CROSS SECTIONS.
- WHEN CONDITIONS PERMIT, SHOULDER TO MATCH CROSS SLOPE OF TRAIL AND SIDE SLOPES TO BE 3:1 OR FLATTER.
- CONTRACTOR IS RESPONSIBLE FOR RE-ESTABLISHING ALL SLOPES DISTURBED DURING CONSTRUCTION.
- PROOF ROLLING SHALL OCCUR IN PRESENCE OF THE OWNER OR THE OWNER'S TESTING AGENCY AT THE FOLLOWING STAGES: 1) PRIOR TO PLACING FILL IN LOW AREAS; 2) AFTER THE PREPARATION OF SUBGRADE PRIOR TO PLACING ABC; 3) AFTER THE PLACEMENT OF ABC PRIOR TO PAVING.
- PAVEMENT EDGE SLOPES ARE 1:1 UNLESS OTHERWISE NOTED.
- NO ABOVE-GROUND UTILITIES OR UTILITY SURFACE COVERS/PLATES/MANHOLES SHALL BE LOCATED WITHIN THE TRAIL AND SHALL BE A MINIMUM OF 2' FROM THE EDGE OF TRAIL. RAISED MANHOLES SHALL BE A MINIMUM OF 4' FROM THE EDGE OF TRAIL.
- DO NOT PLANT TREES WITHIN 2'-0" SHOULDER, RECOMMENDED 6'-0" DISTANCE FROM TRAIL EDGE OR GREATER IF SWALE OR SCM IS PRESENT.

| DATE | REVISIONS DESCRIPTION |
|------|-----------------------|
| | |

| | | |
|-------------------------------------|--------------------------|------------------------|
| TOWN OF KNIGHTDALE STANDARD DETAILS | ASPHALT TYPICAL SIDEWALK | 1 of 1 STD. NO. 4.09-3 |
|-------------------------------------|--------------------------|------------------------|

HEAVY VEHICLE PAVEMENT SECTION

SECTION

NOTES:

- TO BE USED ON ANY STREET INTENDED FOR INDUSTRIAL AND HEAVY VEHICLE USE.
- FOLLOW DESIGN DETAIL FOR APPLICABLE CROSS SECTION.

| DATE | REVISIONS DESCRIPTION |
|------|-----------------------|
| | |

| | | |
|-------------------------------------|-------------------------------|----------------------|
| TOWN OF KNIGHTDALE STANDARD DETAILS | HEAVY VEHICLE PAVEMENT DESIGN | 1 of 1 STD. NO. 3.17 |
|-------------------------------------|-------------------------------|----------------------|

a. Town Certification. This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: _____ Date: _____

Town Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

By: _____ Date: _____

Land Use Administrator

NOTES:

- BENCH SHALL BE DUMOR 169 SERIES 6 FT. STEEL PERFORATED SEAT (BLACK), OR EQUIVALENT.
- OTHER DESIGNS MAY BE ALLOWED PER TOWN OF KNIGHTDALE REVIEW AND APPROVAL.
- BENCH TO BE INSTALLED BY CONTRACTORS IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND DETAILS.
- ALL STEEL MEMBERS COATED WITH ZINC RICH COATING THEN POLYESTER POWDER COATED.

| REVISIONS | | STD. NO. |
|-----------|-------------|----------|
| DATE | DESCRIPTION | |
| | | 4.14 |

TOWN OF KNIGHTDALE STANDARD DETAILS TYPICAL BENCH STD. NO. 4.14

NOTES:

- BENCHES SHALL BE KAY PARK RECREATION CONTOUR BENCH WITH BACK, 6 FT., RECYCLED PLASTIC (BROWN), OR APPROVED EQUIVALENT.
- TRASH RECEPTACLE SHALL BE TREE TOP PRODUCTS 32 GALLON, SLATTED, RECYCLED PLASTIC (BROWN), NO. 42K5003 WITH DOME LID AND PUSH DOOR, OR APPROVED EQUIVALENT.
- RECYCLING RECEPTACLE SHALL MATCH TRASH RECEPTACLE, WITH USE OF BLUE DOME LID.
- PET WASTE STATION SHALL BE TREE TOP PRODUCTS STANDARD ROUND PET WASTE STATION, 10 GALLON, RECYCLED PLASTIC (BROWN), OR APPROVED EQUIVALENT.
- BENCHES, DOG STATION, TRASH AND RECYCLE RECEPTACLES TO BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND DETAILS.
- SURFACE OR INGROUND MOUNT OF FIXTURES TO BE INDICATED AND APPROVED IN PLAN REVIEW.
- AMENITIES TO BE PLACED IN ACCORDANCE WITH UDO AND APPROVED CONSTRUCTION PLANS.

| REVISIONS | | STD. NO. |
|-----------|-------------|----------|
| DATE | DESCRIPTION | |
| | | 4.09-4 |

TOWN OF KNIGHTDALE STANDARD DETAILS PUBLIC GREENWAY AMENITIES (BENCH, TRASH, RECYCLING, PET STATION) STD. NO. 4.09-4

**STANDARD 2'-6\"/>

**1'-6\"/>

**2'-0\"/>

SLOPE FOR VARIABLE SUPER ELEVATION RATES

| REVISIONS | | STD. NO. |
|-----------|-------------|----------|
| DATE | DESCRIPTION | |
| | | 4.01 |

TOWN OF KNIGHTDALE STANDARD DETAILS CURB AND GUTTER 1 of 3 STD. NO. 4.01******

**1'-6\"/>

**1'-6\"/>

**1'-6\"/>

**1'-6\"/>

| REVISIONS | | STD. NO. |
|-----------|-------------|----------|
| DATE | DESCRIPTION | |
| | | 4.01 |

TOWN OF KNIGHTDALE STANDARD DETAILS CURB AND GUTTER 2 of 3 STD. NO. 4.01********

NOTES:

- CONTRACTION JOINTS SHALL BE SPACED AT 10-FOOT INTERVALS. JOINT SPACING MAY BE ALTERED BY THE ENGINEER TO PREVENT UNCONTROLLED CRACKING.
- CONTRACTION JOINTS MAY BE INSTALLED BY THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS. WHERE SUCH JOINTS ARE NOT FORMED BY TEMPLATES, A MINIMUM DEPTH OF 1-1/2\"/>
- ALL EXPANSION JOINTS SHALL BE SPACED AT 90-FOOT INTERVALS, AND ADJACENT TO ALL RIGID OBJECTS. JOINTS SHALL MATCH LOCATIONS WITH JOINTS IN ABUTTING SIDEWALK.
- CONCRETE COMPRESSIVE STRENGTH SHALL BE 3600 PSI IN 28 DAYS.
- CURB SHALL BE DEPRESSED AT INTERSECTIONS TO PROVIDE FOR FUTURE ACCESSIBLE RAMPS.
- TOP 6\"/>

| REVISIONS | | STD. NO. |
|-----------|-------------|----------|
| DATE | DESCRIPTION | |
| | | 4.01 |

TOWN OF KNIGHTDALE STANDARD DETAILS CURB AND GUTTER 3 of 3 STD. NO. 4.01

a. Town Certification. This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

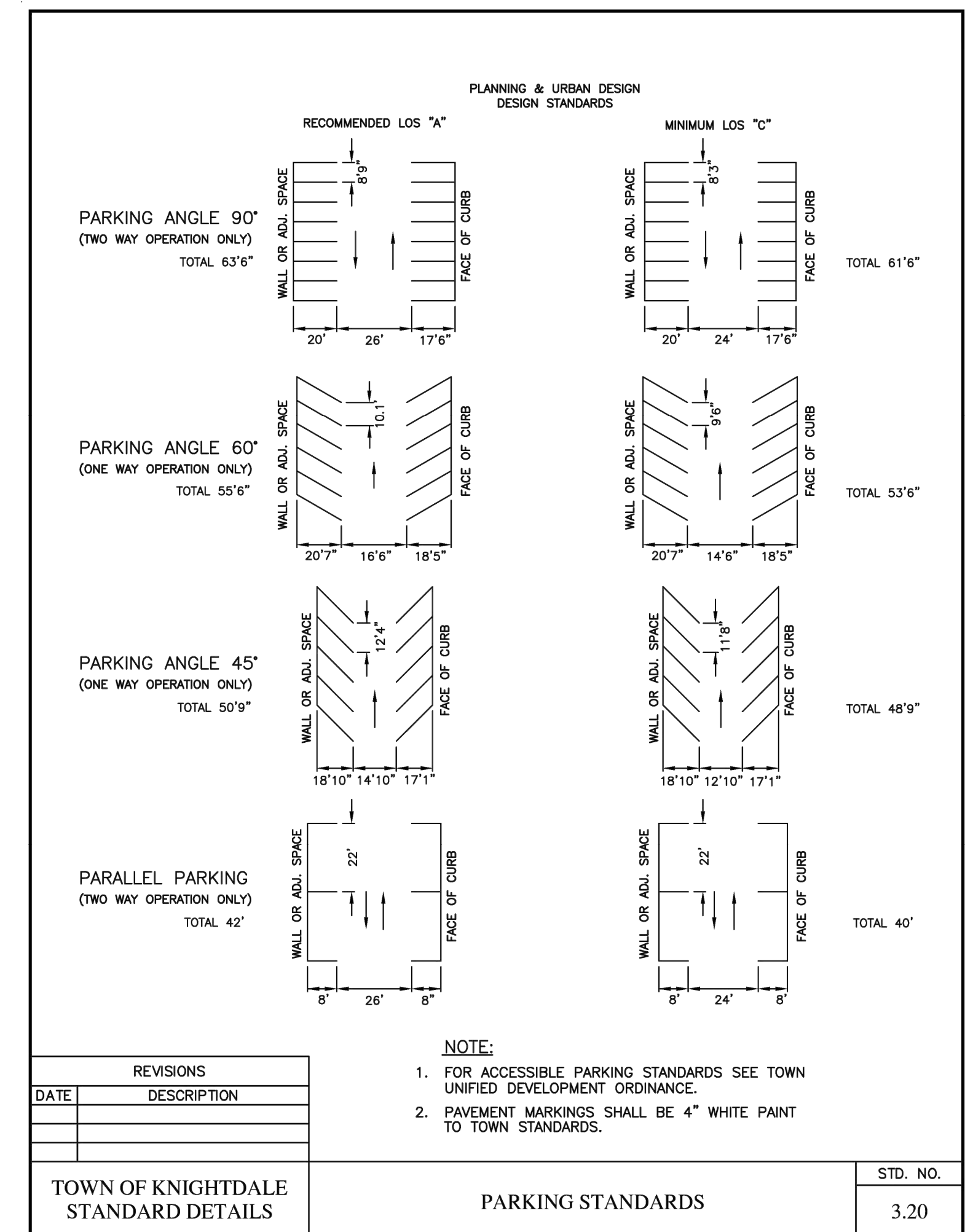
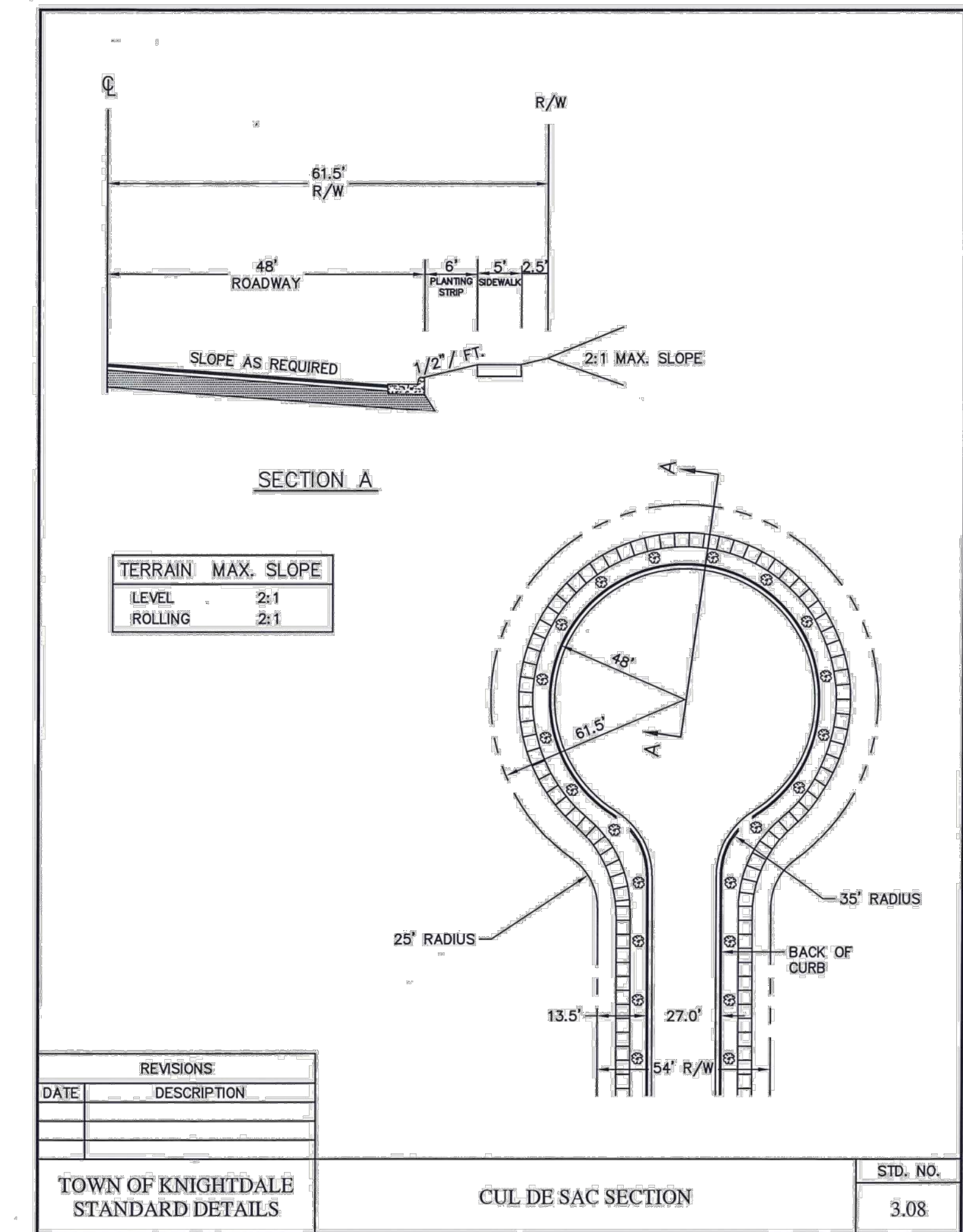
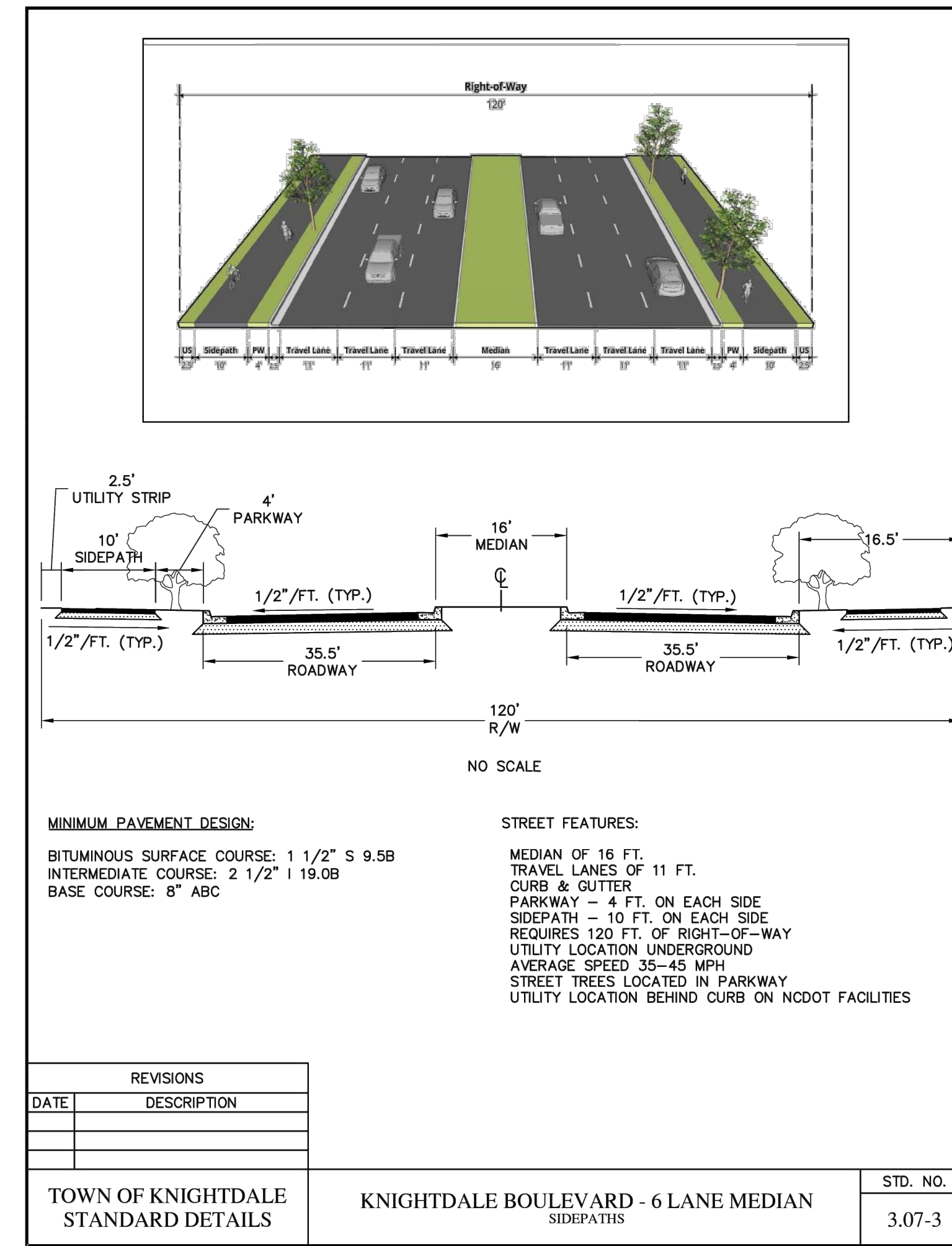
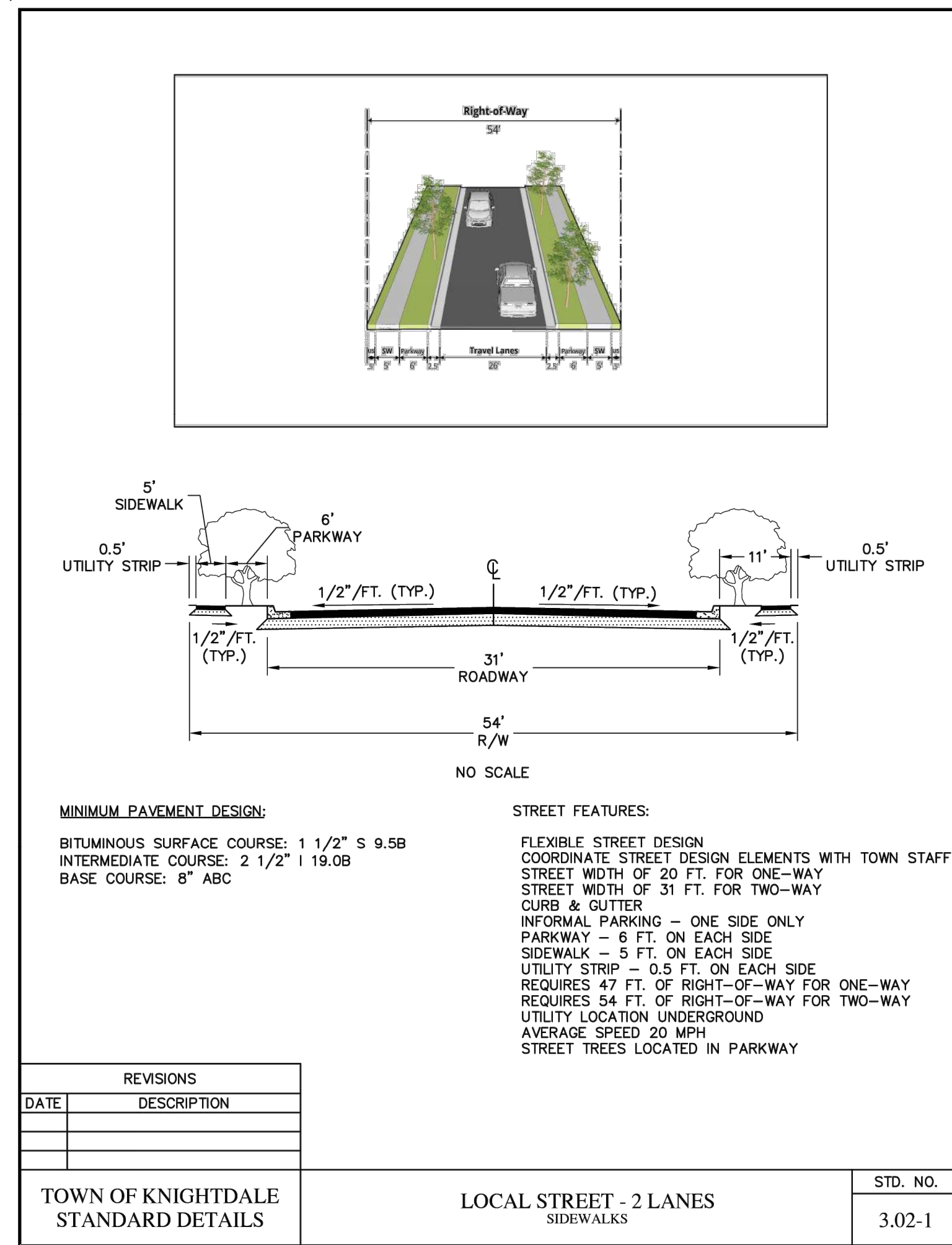
By: _____ Date: _____

Town Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

By: _____ Date: _____

Land Use Administrator



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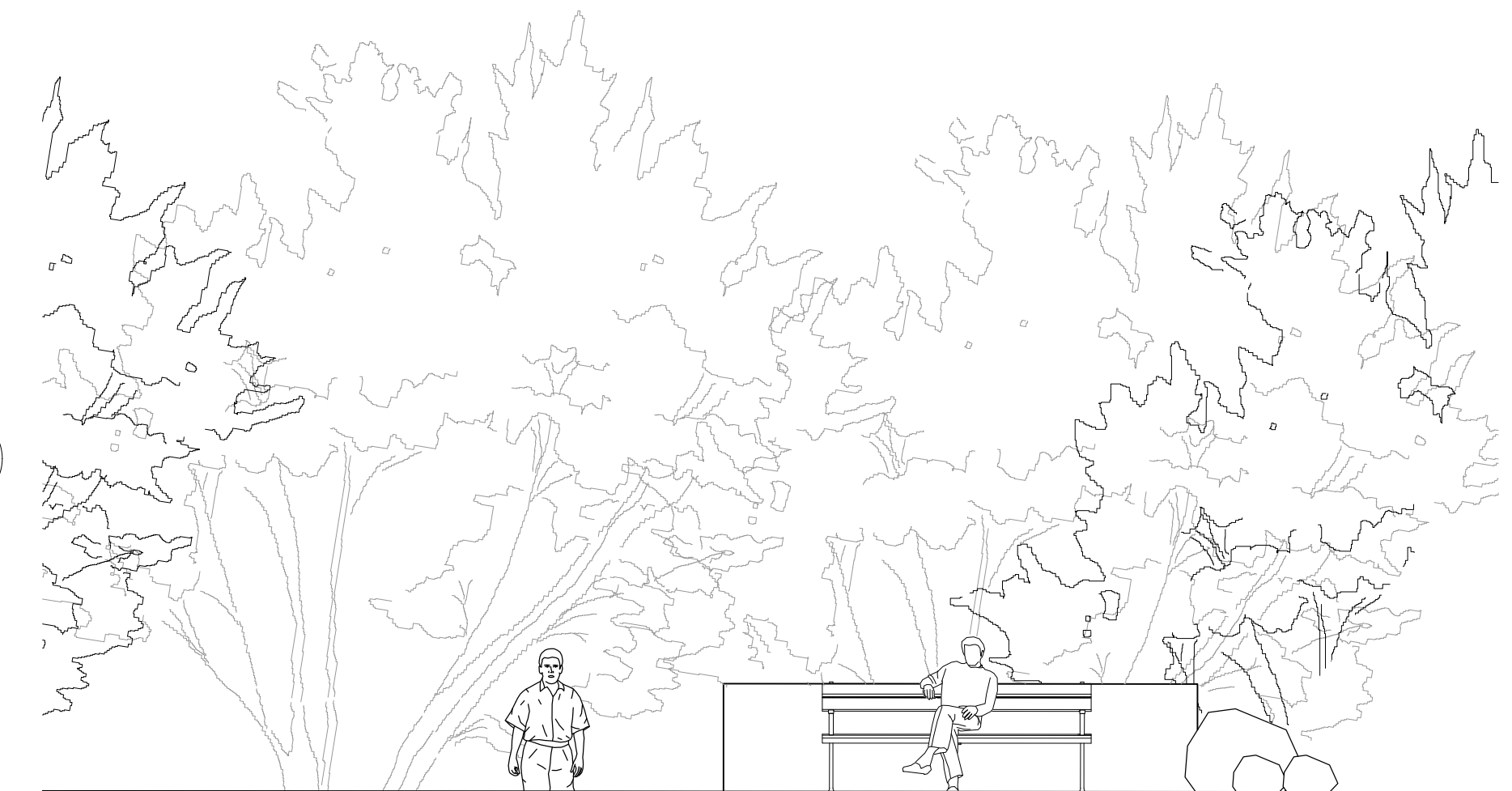
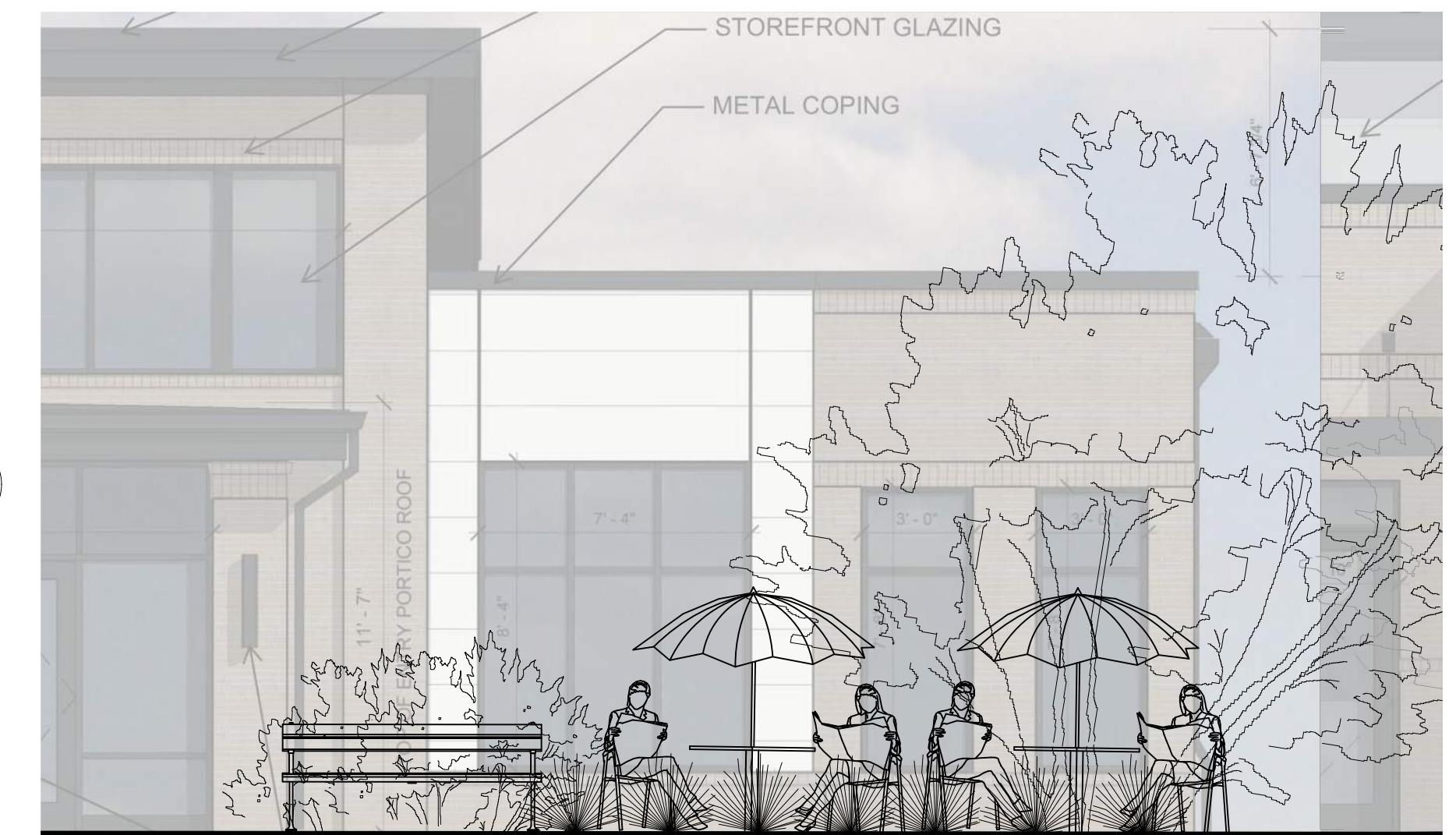
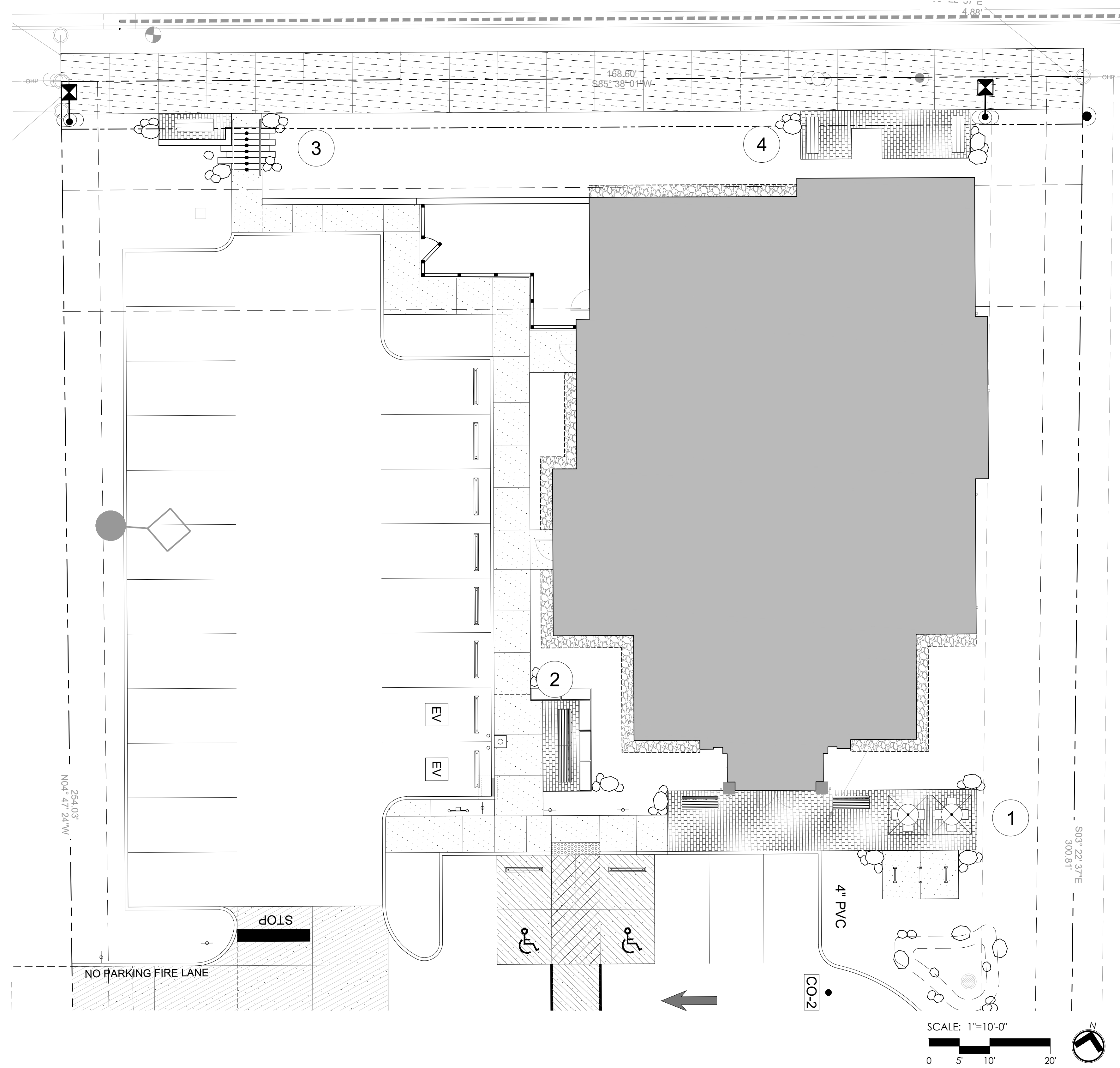
By: _____ Date: _____

Town Engineer

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By: _____ Date: _____

Land Use Administrator



BIG OAK VET HOSPITAL
VETS PETS
1004 BIG OAK COURT

TOK PROJECT #:
ZCP-11-24

PROJECT NUMBER:

PROJECT PHASE:
CONSTRUCTION DRAWINGS

DATE: 03.16.2026

SHEET TITLE:

PUBLIC GATHERING SPACE

SHEET NUMBER:

L213

a. **Town Certification.** This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: _____ Date: _____

Town Engineer

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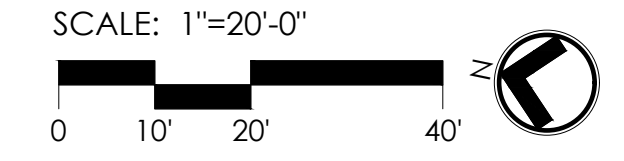
By: _____ Date: _____

Land Use Administrator



GRADING LEGEND

| SYMBOL | DESCRIPTION |
|---------|-----------------------------------|
| FG | FINISH GRADE |
| FS | FINISH SURFACE |
| MG | MEET EXISTING GRADE |
| HP | HIGH POINT |
| LP | LOW POINT |
| HPS | HIGH POINT OF SWALE |
| BC | BOTTOM OF CURB |
| TC | TOP OF CURB |
| BW | BOTTOM OF WALL |
| TW | TOP OF WALL |
| BS | BOTTOM OF STAIRS |
| TS | TOP OF STAIRS |
| INV. | INVERT (IN OR OUT) |
| ← X% | SLOPE DIRECTION - POINTS DOWNWARD |
| --- | GRADE BREAK |
| - - - > | CENTERLINE OF SWALE |



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By: _____ Date: _____
Town Engineer

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By: _____ Date: _____
Land Use Administrator

BIG OAK VET HOSPITAL
VETS PETS
1004 BIG OAK COURT

TOK PROJECT #:
 ZCP-11-24

PROJECT NUMBER:

PROJECT PHASE:
CONSTRUCTION
DRAWINGS

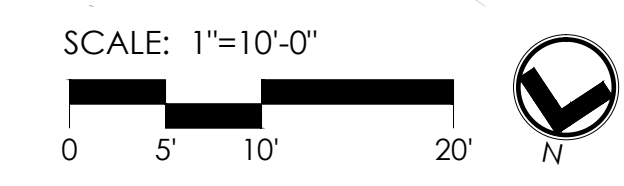
DATE: 03.16.2026

SHEET TITLE:
GRADING PLAN

SHEET NUMBER:
L300

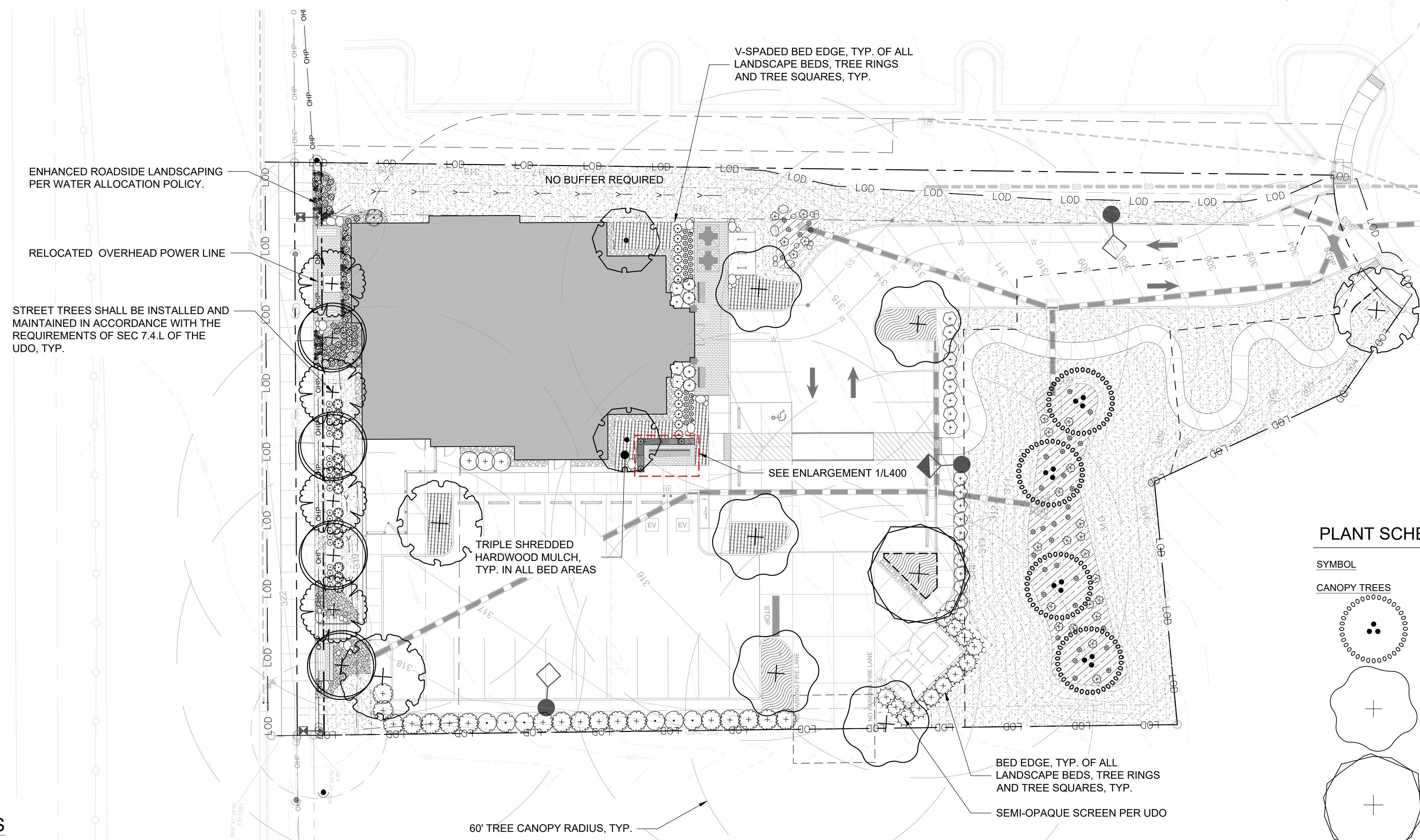


ENHANCED ROADSIDE LANDSCAPE ENLARGEMENT



BIG OAK CT
(60' PUBLIC RW)

US HIGHWAY 64
KNIGHTDALE BLVD
(VARIABLE WIDTH PUBLIC R/W)
SEE NCDOT PROJECT # 6-408004B
HM 3, PG 193



ENHANCED ROADSIDE LANDSCAPING PER WATER ALLOCATION POLICY.

RELOCATED OVERHEAD POWER LINE

STREET TREES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE REQUIREMENTS OF SEC 7.4.L OF THE UDO, TYP.

TRIPLE SHREDDED HARDWOOD MULCH, TYP. IN ALL BED AREAS

V-SPADED BED EDGE, TYP. OF ALL LANDSCAPE BEDS, TREE RINGS AND TREE SQUARES, TYP.

SEE ENLARGEMENT 1/L400

BED EDGE, TYP. OF ALL LANDSCAPE BEDS, TREE RINGS AND TREE SQUARES, TYP.

SEMI-OPAQUE SCREEN PER UDO

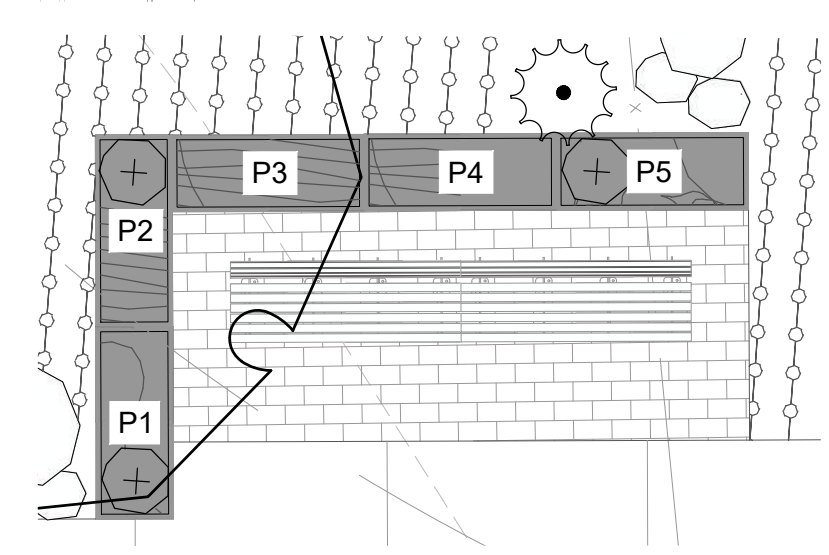
60' TREE CANOPY RADIUS, TYP.

LANDSCAPE REQUIREMENTS

STREET TREES
REQUIRED: (1) SHADE TREE PER 40' OF FRONTAGE OR (1) UNDERSTORY TREE PER 20' OF FRONTAGE DUE TO OVERHEAD UTILITY LINE

KNIGHTDALE BLVD. FRONTAGE: 169'
REQUIRED: (4) SHADE TREES
PROVIDED: (8) UNDERSTORY TREES (OVERHEAD UTILITY LINES)

BIG OAK CT FRONTAGE: 24' (46' - 22' DRIVE)
REQUIRED: (1) SHADE TREES
PROVIDED: (1) SHADE TREES



1 **PLANTER ENLARGEMENT**
SCALE: NTS

PLANT SCHEDULE P1 PLANT SCHEDULE P2 PLANT SCHEDULE P3

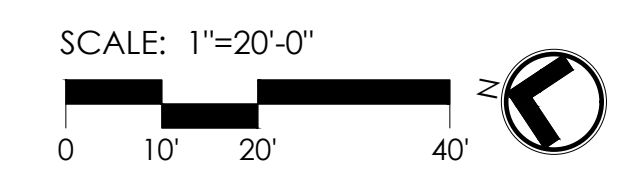
| SYMBOL | COMMON NAME | SYMBOL | COMMON NAME | SYMBOL | COMMON NAME |
|-----------------------------|-----------------------------|----------------------|-----------------------------|----------------------|------------------------|
| GRASSES / PERENNIALS | | | | | |
| | Little Bunny Fountain Grass | | Little Bunny Fountain Grass | GROUND COVERS | |
| GROUND COVERS | | GROUND COVERS | | | Sandy Shores Hellebore |
| | Autumn Frost Hosta | | Sandy Shores Hellebore | | |

PLANT SCHEDULE P4 PLANT SCHEDULE P5

| SYMBOL | COMMON NAME | SYMBOL | COMMON NAME |
|----------------------|------------------------|-----------------------------|-----------------------------|
| GROUND COVERS | | | |
| | Autumn Frost Hosta | GRASSES / PERENNIALS | |
| | Sandy Shores Hellebore | | Little Bunny Fountain Grass |
| GROUND COVERS | | GROUND COVERS | |
| | Autumn Frost Hosta | | Autumn Frost Hosta |

PLANT SCHEDULE REFER TO SHEET L401 FOR FULL PLANT SCHEDULE

| SYMBOL | COMMON NAME | SYMBOL | COMMON NAME |
|---------------------|-------------------------------|-----------------------------|-----------------------------|
| CANOPY TREES | | | |
| | Dura Heat® River Birch | SHRUBS | |
| | Green Street Chinese Pistache | | Dwarf Burford Holly |
| | Legacy Sugar Maple | | Dwarf Yaupon Holly |
| | Sawtooth Oak | | Gatsby Gal® Oakleaf Hydrant |
| | September Golden Rain Tree | | Gold Splash® Wintercreeper |
| | Japanese Flowering Cherry | | Inkberry Holly |
| | Kousa Dogwood | | Limeade™ Spartan Juniper |
| | | | Oak Leaf Holly |
| | | | Panicle Hydrangea |
| | | | Shishi Gashira Camellia |
| | | | Spicebush |
| | | | Virginia Sweetspire |
| | | GRASSES / PERENNIALS | |
| | | | Black-eyed Susan |
| | | | Blue Flag Iris |
| | | | Cassian Fountain Grass |
| | | | Hameln Fountain Grass |
| | | | Little Bunny Fountain Grass |
| | | GROUND COVERS | |
| | | | Appalachian Sedge |
| | | | Autumn Frost Hosta |
| | | | Blue Fescue |
| | | | Cherokee Sedge |
| | | | Creek Sedge |
| | | | Sandy Shores Hellebore |
| | | | Silver Carpet Dymondia |



a. **Town Certification.** This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: _____ Date: _____

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These plans are approved by the Town of Knightdale and serve as construction plans for this project.

By: _____ Date: _____

Land Use Administrator

PLANT SCHEDULE

| SYMBOL | COMMON NAME | BOTANICAL NAME | CALIPER | INSTALL HEIGHT | B&B OR CONT. | FORM | QTY | REMARKS |
|---------------------|-------------------------------|-------------------------------------|---------|----------------|--------------|---------------|-----|--|
| CANOPY TREES | | | | | | | | |
| | Dura Heat® River Birch | Betula nigra 'BNMTF' | 1 1/2" | 8-10' MIN. | B&B | 3 TRUNKS | 4 | Bioretention Pond |
| | Green Street Chinese Pistache | Pistacia chinensis 'Green Street' | 3" | 14' MIN. | B&B | SINGLE LEADER | 5 | Parking Lot Interior |
| | Legacy Sugar Maple | Acer saccharum 'Legacy' | 3" | 14' MIN. | B&B | SINGLE LEADER | 1 | Full, Dense, Upright / Strong Central leader Parking Lot Island |
| | Sawtooth Oak | Quercus acutissima 'Gobbler' | 3" | 10-12' MIN. | B&B | SINGLE LEADER | 3 | Strong, Central Leader Street Tree |
| | September Golden Rain Tree | Koeleruteria paniculata 'September' | 3" | 14' | B&B | SINGLE LEADER | 4 | Street Tree |

UNDERSTORY TREES (KEY)

| | | | | | | | | |
|--|---------------------------|-------------------------------|--------|-------------|-----|---------------|---|---------------|
| | Japanese Flowering Cherry | Prunus serrulata 'Snow Goose' | 2 1/2" | 10-12' MIN. | B&B | 3 TRUNKS | 4 | Street Tree |
| | Kousa Dogwood | Cornus kousa | 1 1/2" | 10' MIN. | B&B | SINGLE LEADER | 2 | Building Tree |

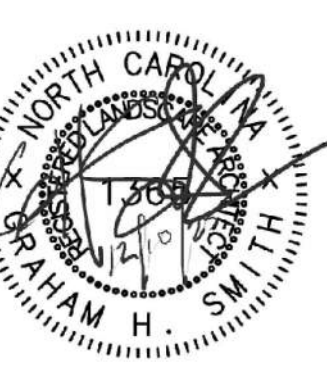
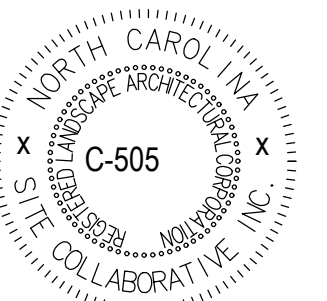
| SYMBOL | COMMON NAME | BOTANICAL NAME | SPACING | INSTALL HEIGHT | INSTALL SPREAD | TYPE | QTY | REMARKS |
|-----------------------------|-------------------------------|---|----------|----------------|----------------|------|-----|-------------------------------|
| SHRUBS | | | | | | | | |
| | Dwarf Burford Holly | Ilex cornuta 'Burfordii Nana' | 48" | 18" MIN. | CONTAINER | | 21 | Full, Dense Screening |
| | Dwarf Yaupon Holly | Ilex vomitoria 'Nana' | 36" | 24" MIN. | 24" MIN. | | 15 | Enhanced Roadside Landscaping |
| | Gatsby Gal® Oakleaf Hydrangea | Hydrangea quercifolia 'Brenhill' | 66" | 36" MIN. | 36" MIN. | | 6 | Full, Dense |
| | Gold Splash® Wintercreeper | Euonymus fortunei 'Roemertwo' | AS SHOWN | 12" MIN. | 20" MIN. | | 11 | Internal Planting |
| | Inkberry Holly | Ilex glabra | 72" | 24" MIN. | 24" MIN. | | 12 | Screening |
| | Limeade™ Spartan Juniper | Juniperus chinensis 'Montodd' | AS SHOWN | 24" MIN. | 24" MIN. | | 4 | Building Entry |
| | Oak Leaf Holly | Ilex x 'Oak Leaf' | 72" | 24" MIN. | 24" MIN. | | 18 | Screening |
| | Panicle Hydrangea | Hydrangea paniculata 'Fire & Ice' | AS SHOWN | 24" MIN. | 42" MIN. | | 4 | Building Entry |
| | Shishi Gashira Camellia | Camellia sasanqua 'Shishi Gashira' | 66" | 24" MIN. | 24" MIN. | | 3 | Full, Dense, Upright |
| | Spicebush | Lindera benzoin | AS SHOWN | 32" MIN. | 30" MIN. | | 3 | Enhanced Roadside Landscaping |
| | Virginia Sweetspire | Itea virginica | AS SHOWN | 24" MIN. | 24" MIN. | | 24 | Bioretention Areas |
| GRASSES / PERENNIALS | | | | | | | | |
| | Black-eyed Susan | Rudbeckia hirta | AS SHOWN | 12" MIN. | 12" MIN. | | 36 | Enhanced Roadside Landscaping |
| | Blue Flag Iris | Iris virginica | AS SHOWN | 18" MIN. | 16" MIN. | | 34 | Enhanced Roadside Landscaping |
| | Cassian Fountain Grass | Pennisetum alopecuroides 'Cassian's Choice' | 24" | 12" MIN. | 12" MIN. | | 58 | Enhanced Roadside Landscaping |
| | Hameln Fountain Grass | Pennisetum alopecuroides 'Hameln' | AS SHOWN | 16" MIN. | 18" MIN. | | 28 | Enhanced Roadside Landscaping |
| | Little Bunny Fountain Grass | Pennisetum alopecuroides 'Little Bunny' | AS SHOWN | 10" MIN. | 12" MIN. | | 25 | Enhanced Roadside Landscaping |

GROUND COVERS

| | | | | | | | | |
|--|------------------------|--------------------------------------|-----|----------|----------|--|-------|-------------------------------|
| | Appalachian Sedge | Carex appalachica | 16" | 12" MIN. | 16" MIN. | | 123 | Enhanced Roadside Landscaping |
| | Autumn Frost Hosta | Hosta x 'Autumn Frost' | --- | 6" MIN. | 10" MIN. | | 16 sf | Internal Planting |
| | Blue Fescue | Festuca glauca | 12" | 6" MIN. | 10" MIN. | | 468 | Parking Lot Island |
| | Cherokee Sedge | Carex cherokeensis | 16" | 12" MIN. | 12" MIN. | | 231 | Enhanced Roadside Landscaping |
| | Creek Sedge | Carex amphibola | 16" | 10" MIN. | 10" MIN. | | 433 | Bioretention Areas |
| | Sandy Shores Hellebore | Helleborus x hybridus 'Sandy Shores' | --- | 10" MIN. | 16" MIN. | | 666 | Planters |
| | Silver Carpet Dymondia | Dymondia margaretae | 20" | 10" MIN. | 10" MIN. | | 295 | Parking Lot Island |

TURF

| | | | | | | | | |
|--|-----------------|---------------------|-----|--|--|--|-----------|--|
| | Cashmere Zoysia | Zoysia x 'Cashmere' | SOD | | | | 11,401 sf | |
|--|-----------------|---------------------|-----|--|--|--|-----------|--|



REUSE OF DOCUMENT
This document is the property of Site Collaborative Inc. The ideas and design incorporated on this document is an instrument of professional service and shall not be used for any other project without written authorization of Site Collaborative Inc.

BIG OAK VET HOSPITAL
VETS PETS
1004 BIG OAK COURT

TOK PROJECT #:
ZCP-11-24

PROJECT NUMBER:

PROJECT PHASE:
CONSTRUCTION
DRAWINGS
DATE: 03.16.2026

SHEET TITLE:
FULL PLANTING
SCHEDULE

SHEET NUMBER:

L401

a. **Town Certification.** This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

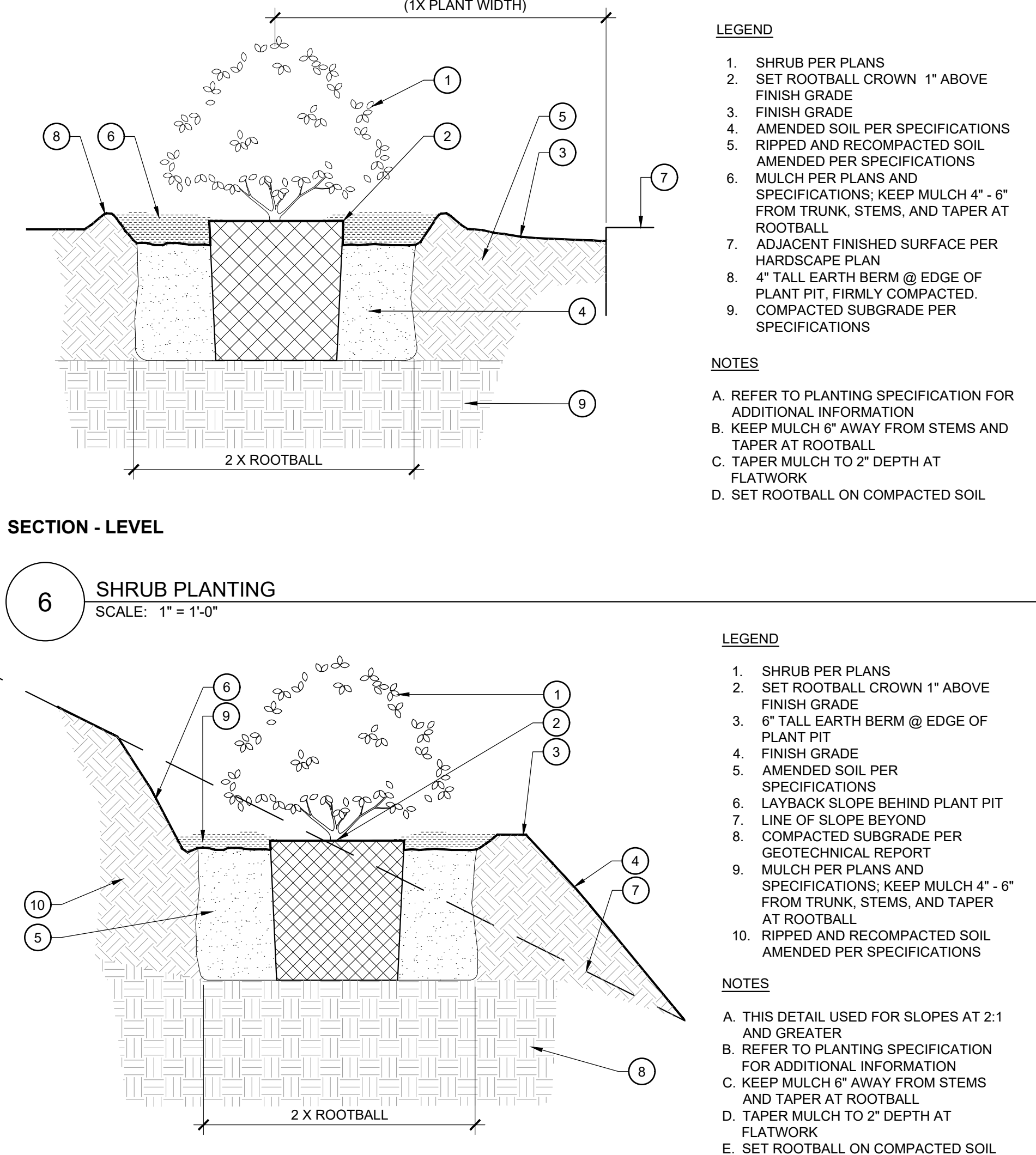
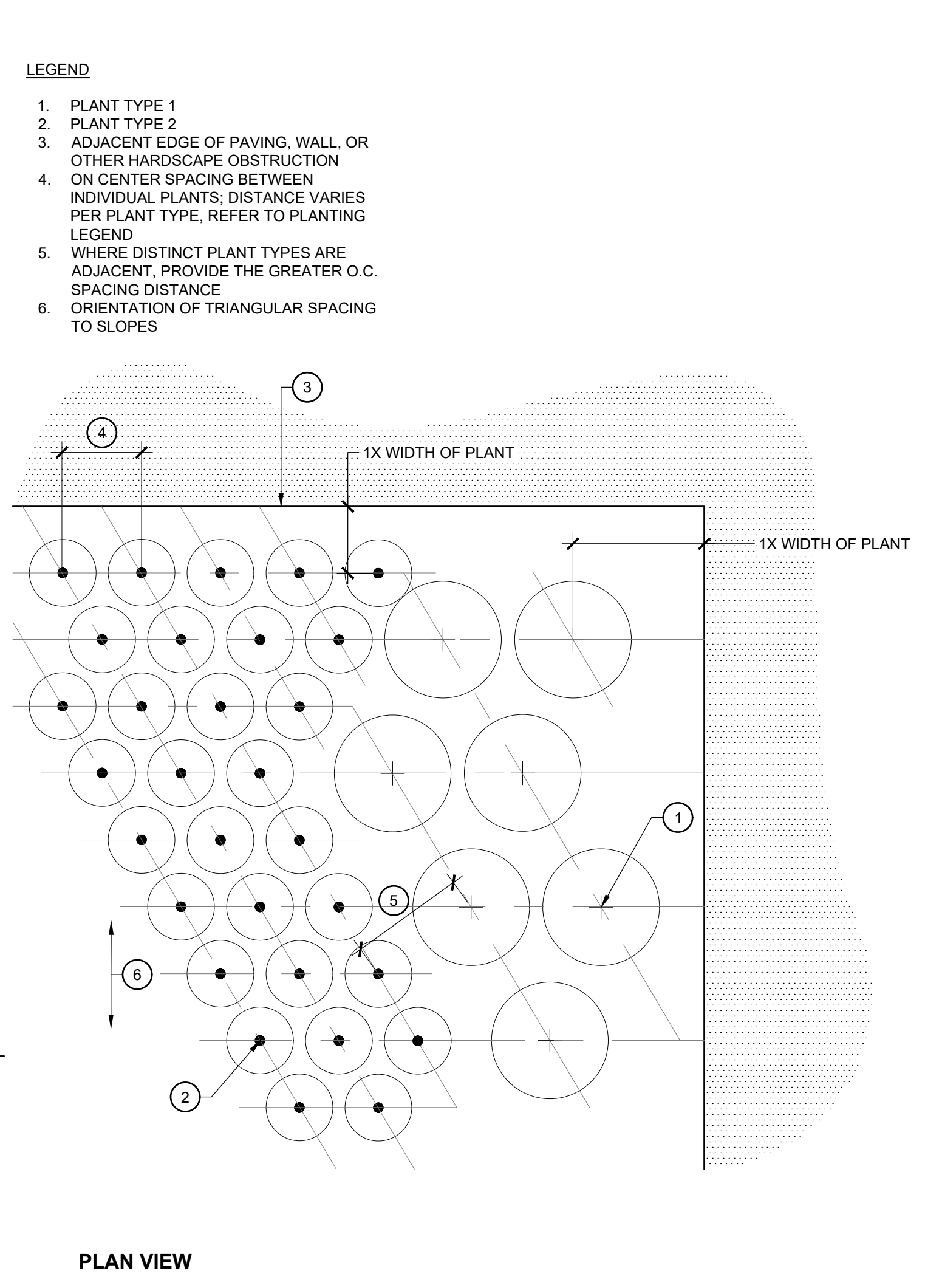
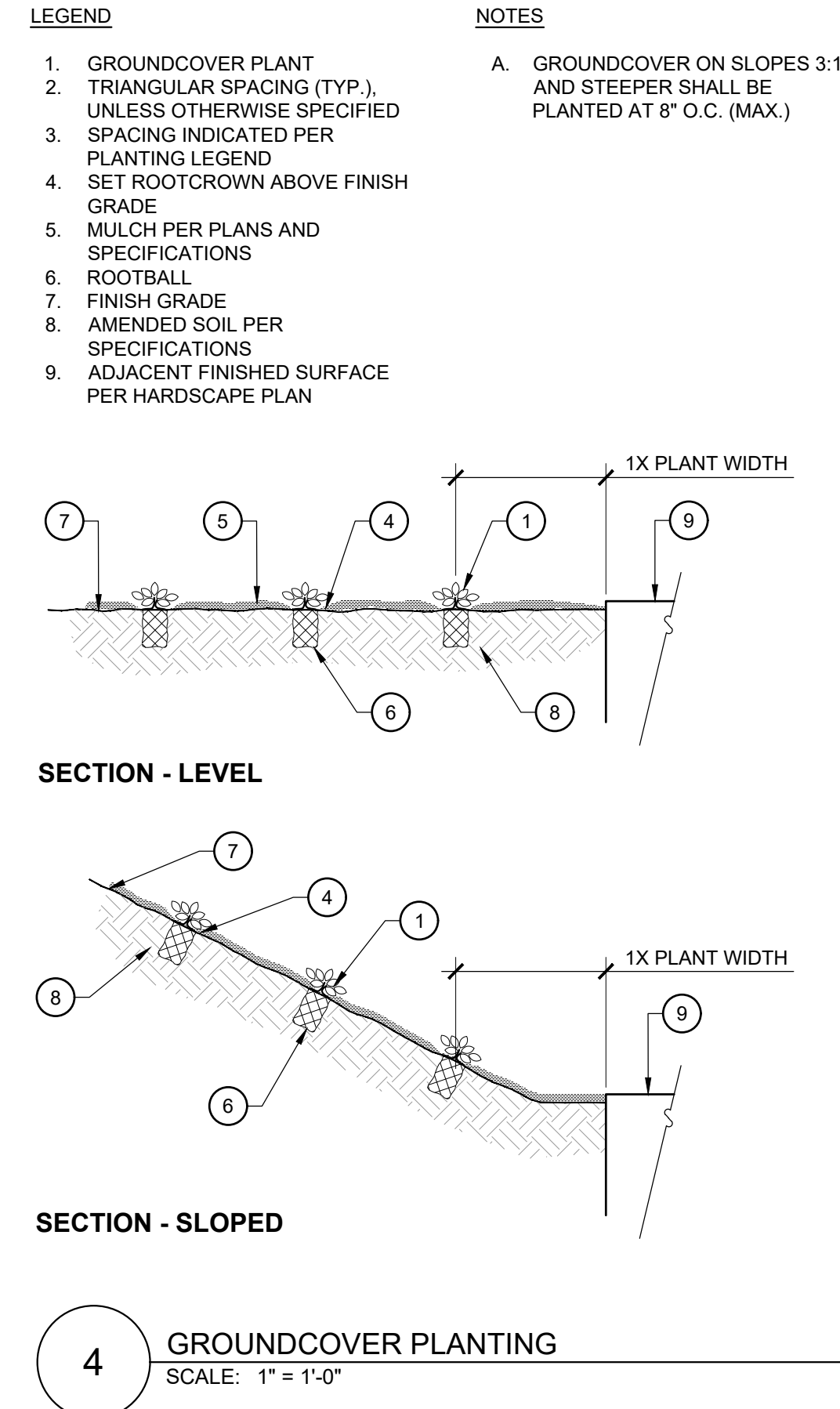
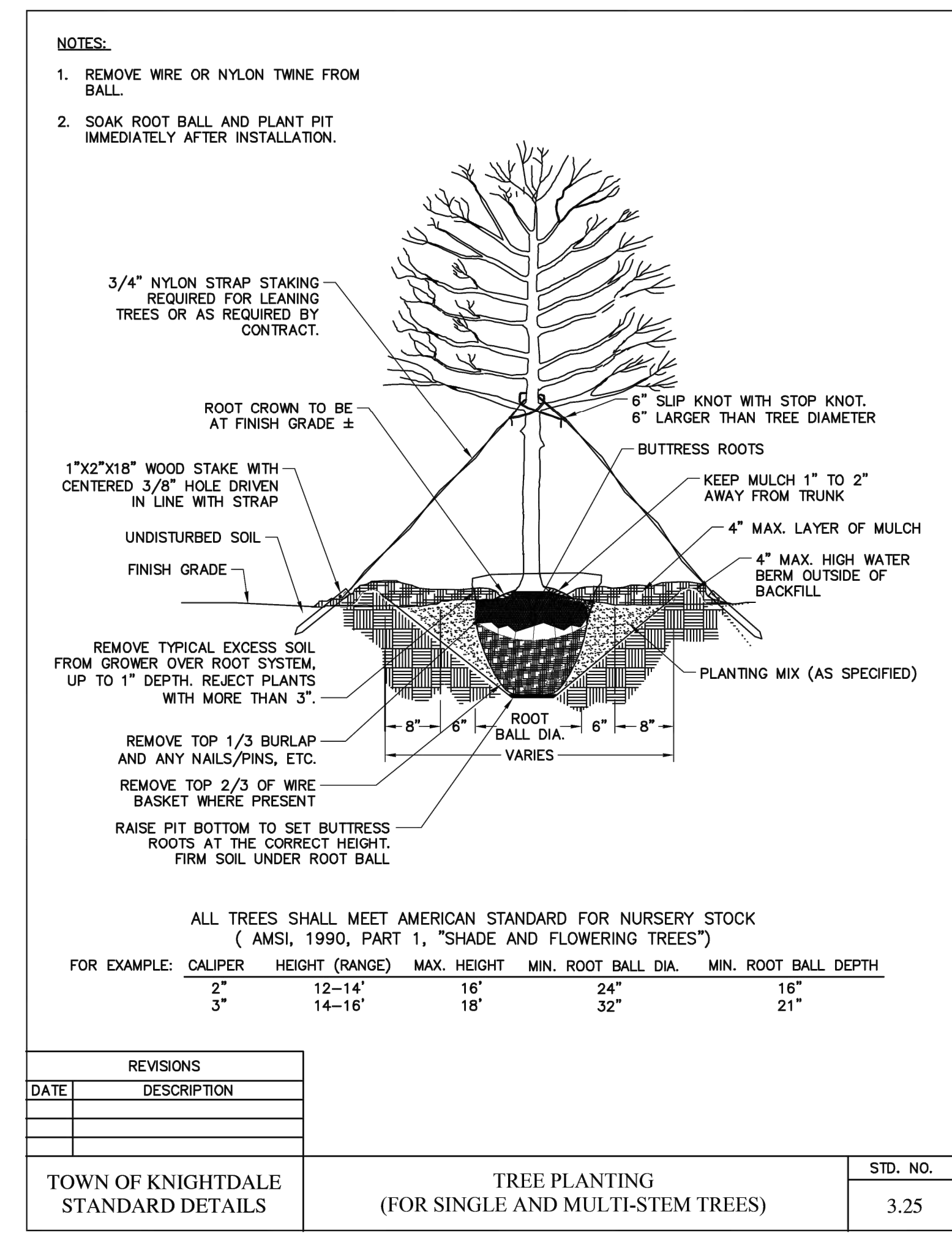
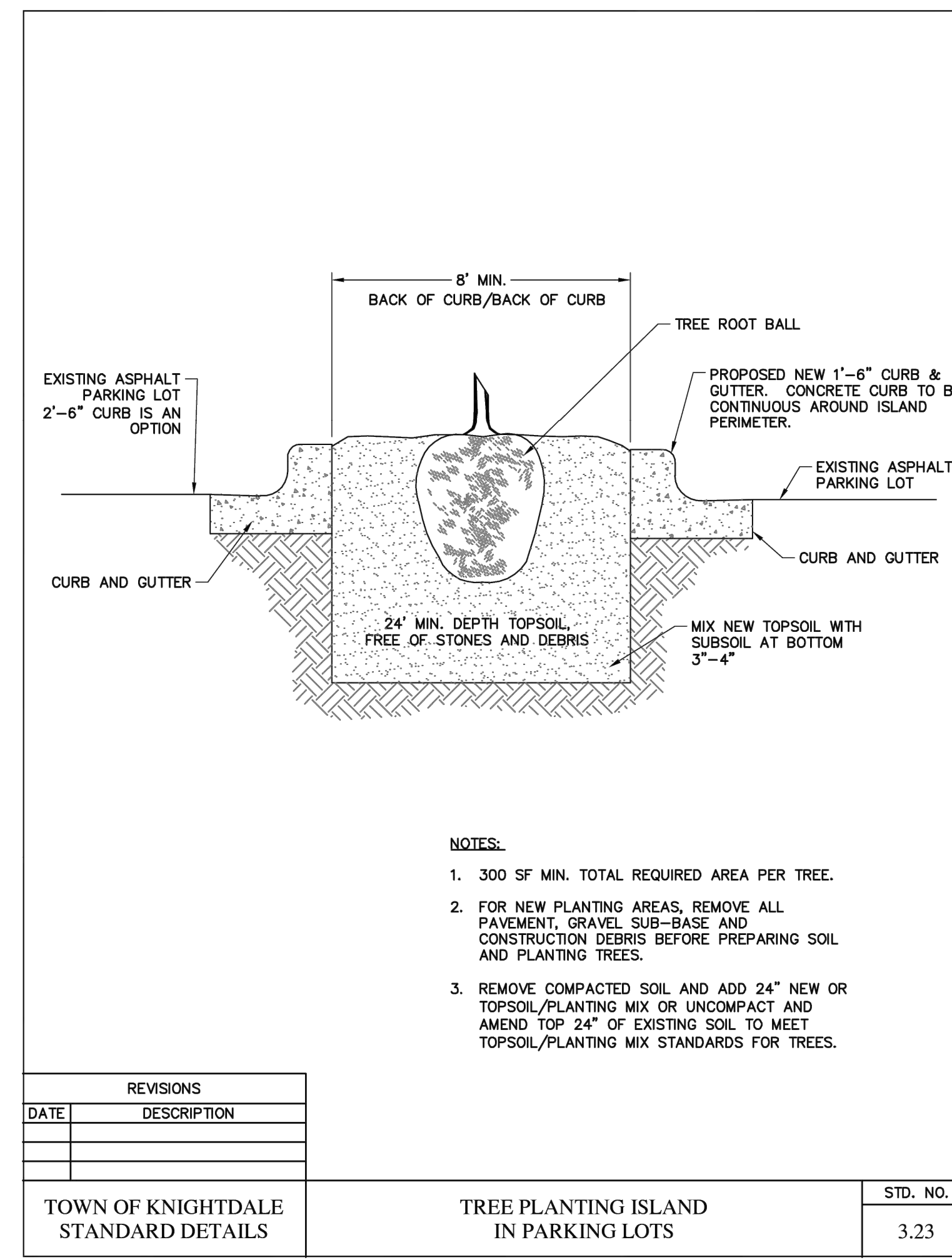
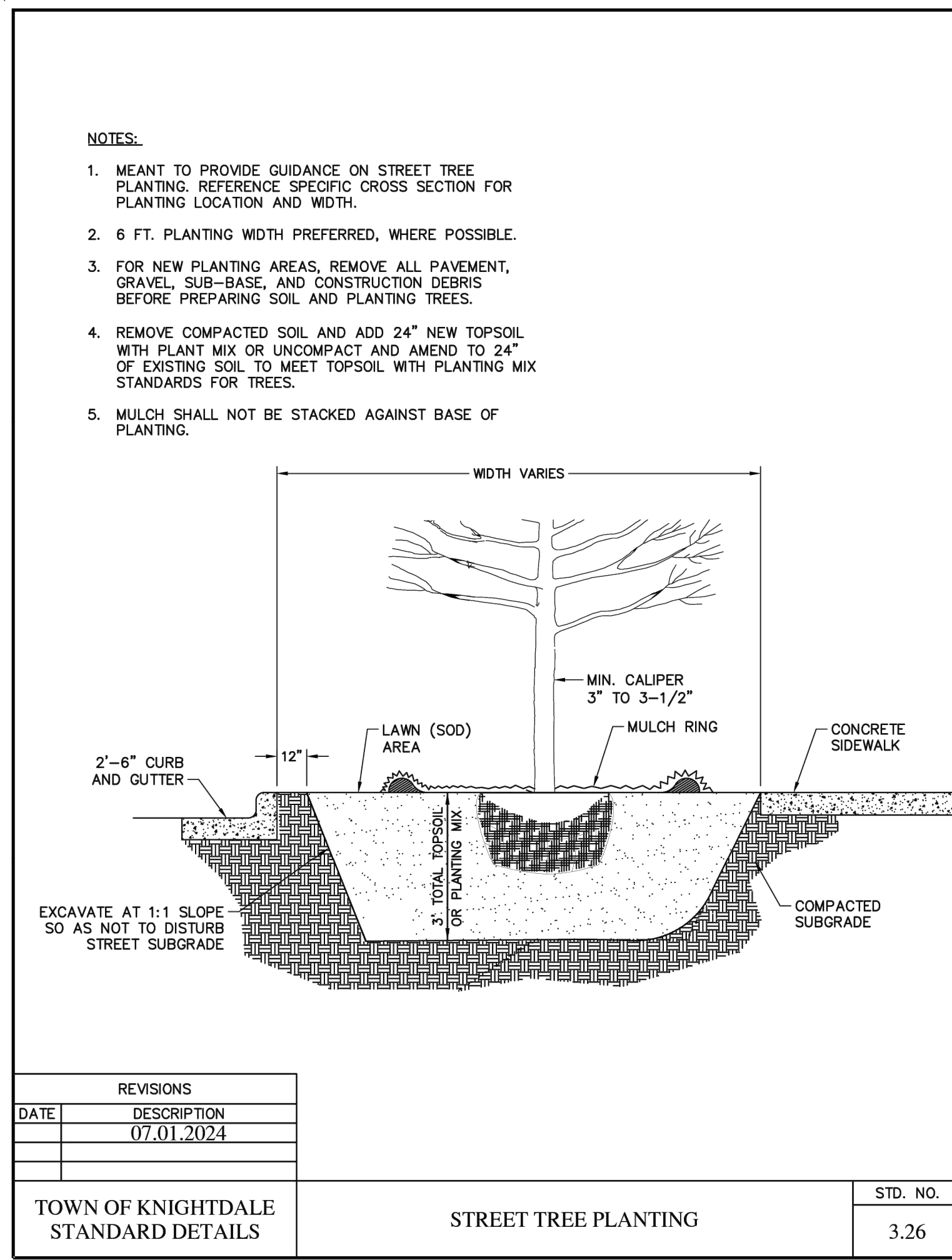
By: _____ Date: _____

Town Engineer

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Land Use Administrator



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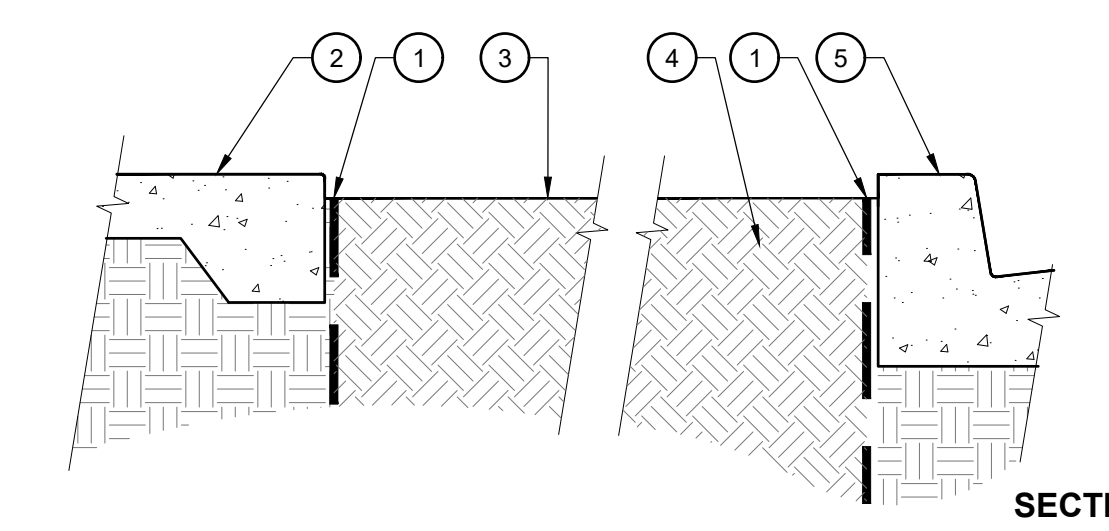
By: _____ Date: _____

Town Engineer

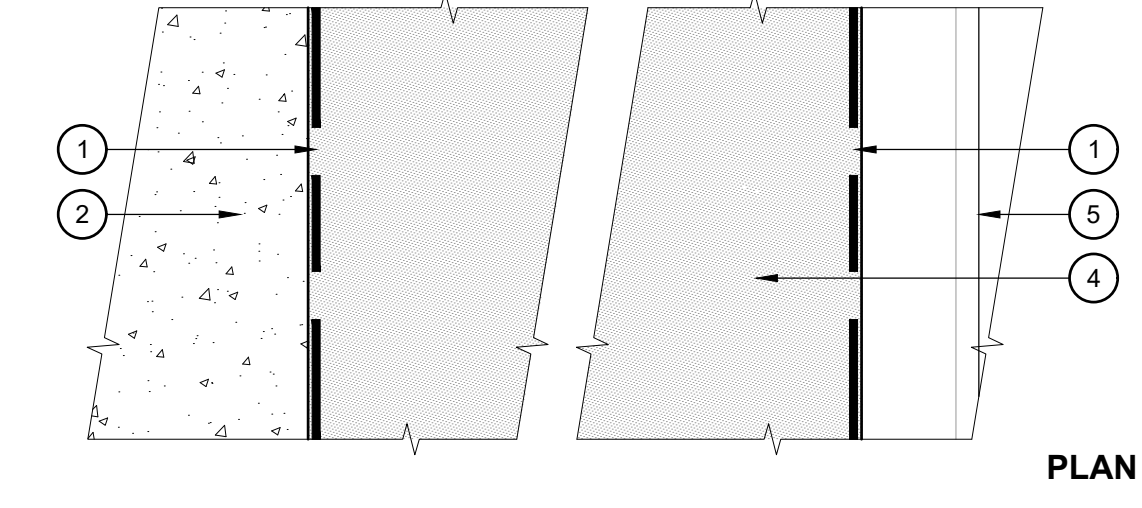
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Land Use Administrator



- LEGEND**
1. ROOT BARRIER ABUTTING PAVING OR MOW EDGE (10' LENGTH) CENTERED ON TREE TRUNK. HEIGHT PER SPECIFICATIONS
 2. ADJACENT PAVING PER HARDSCAPE PLAN
 3. FINISH GRADE IN PLANTING AREA
 4. PLANTING BACKFILL MIX PER SPECIFICATIONS
 5. VEHICULAR CONCRETE CURB

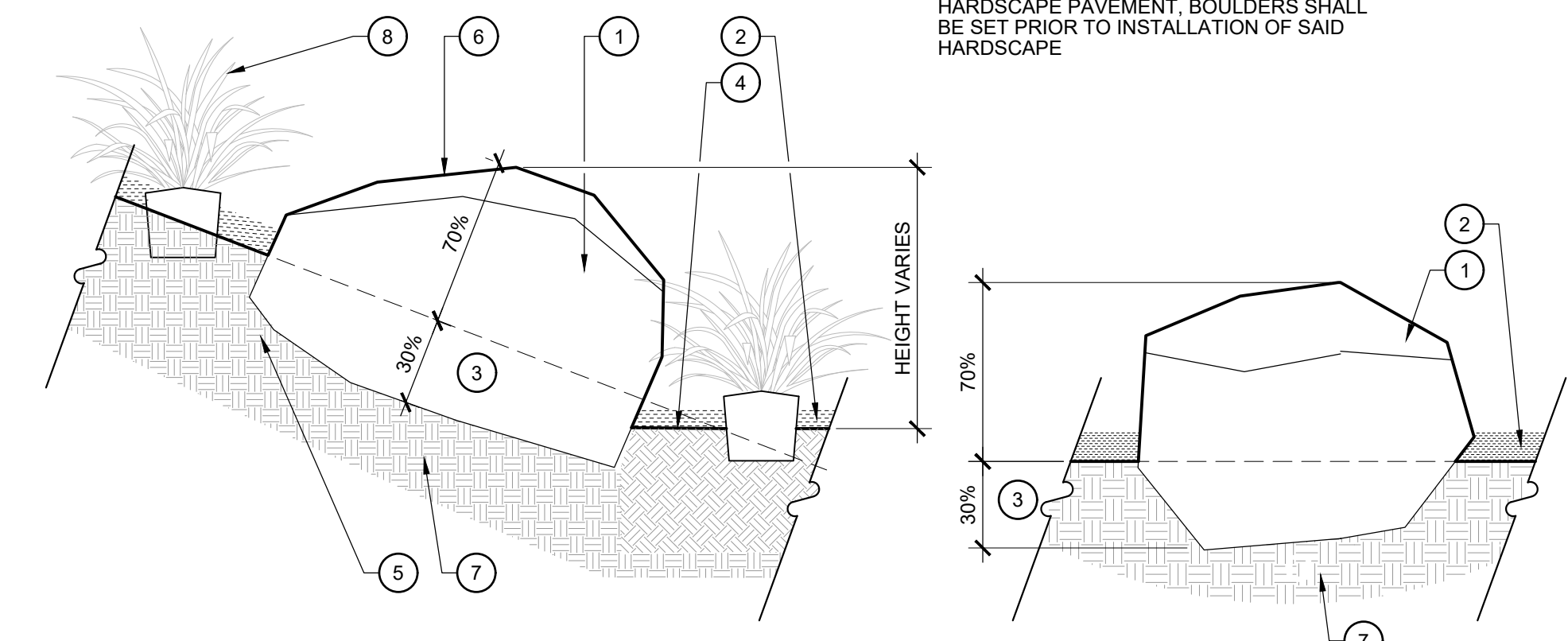


- NOTES**
- INSTALL ROOTBARRIER WHEN TREES ARE WITHIN 5' OR LESS FROM ADJACENT HARDSCAPE
 - THIS ROOTBARRIER IS FOR USE IN ON-GRADE LANDSCAPE APPLICATIONS ONLY. REFER TO PLANTING SPECIFICATIONS FOR ROOT BARRIER PRODUCT AND SIZE.
 - REFER TO PLANTING PLANS FOR SPECIFIC HARDSCAPE/BARRIER LOCATION. DETAIL IS DIAGRAMMATIC.
 - TRIM TOP OF BARRIER TO BE 1/2" BELOW FINISHED GRADE.

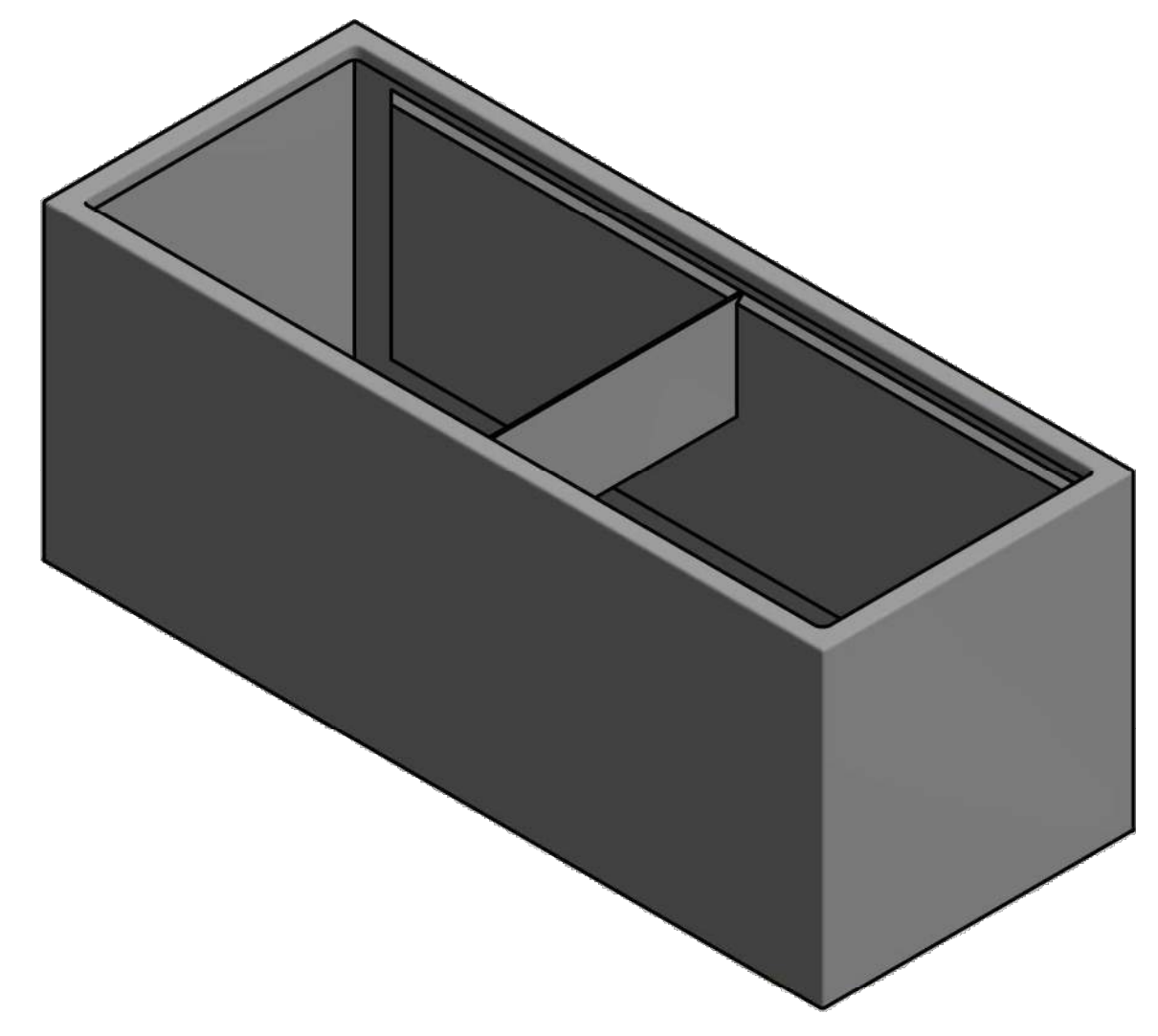
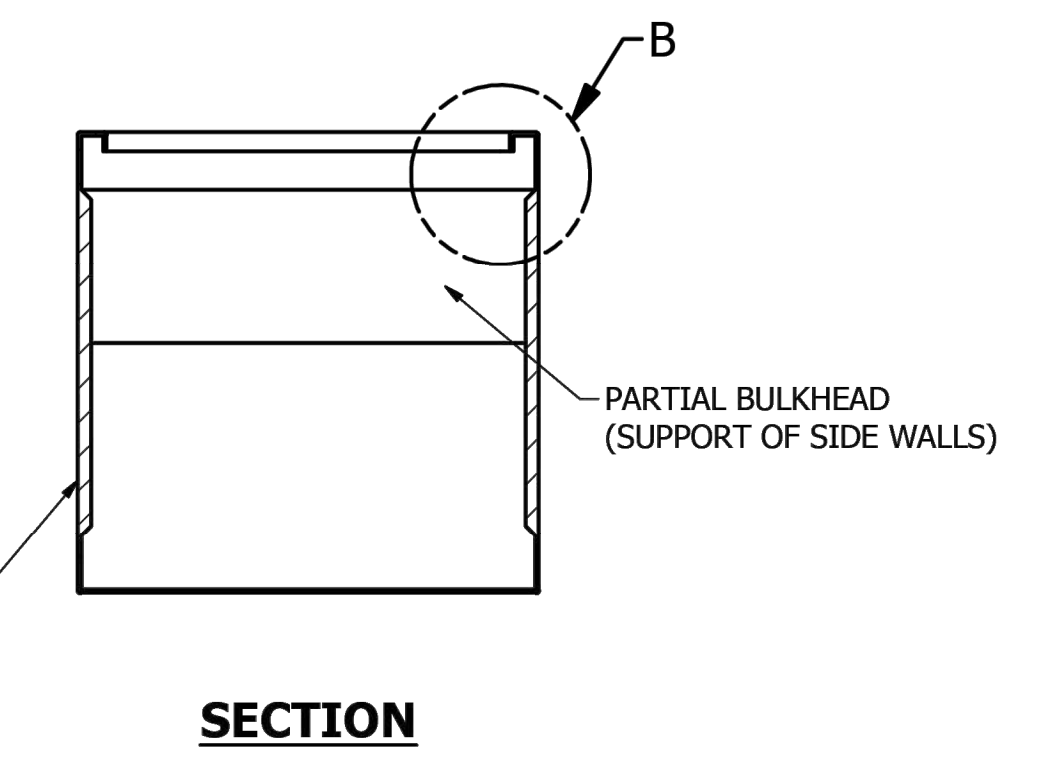
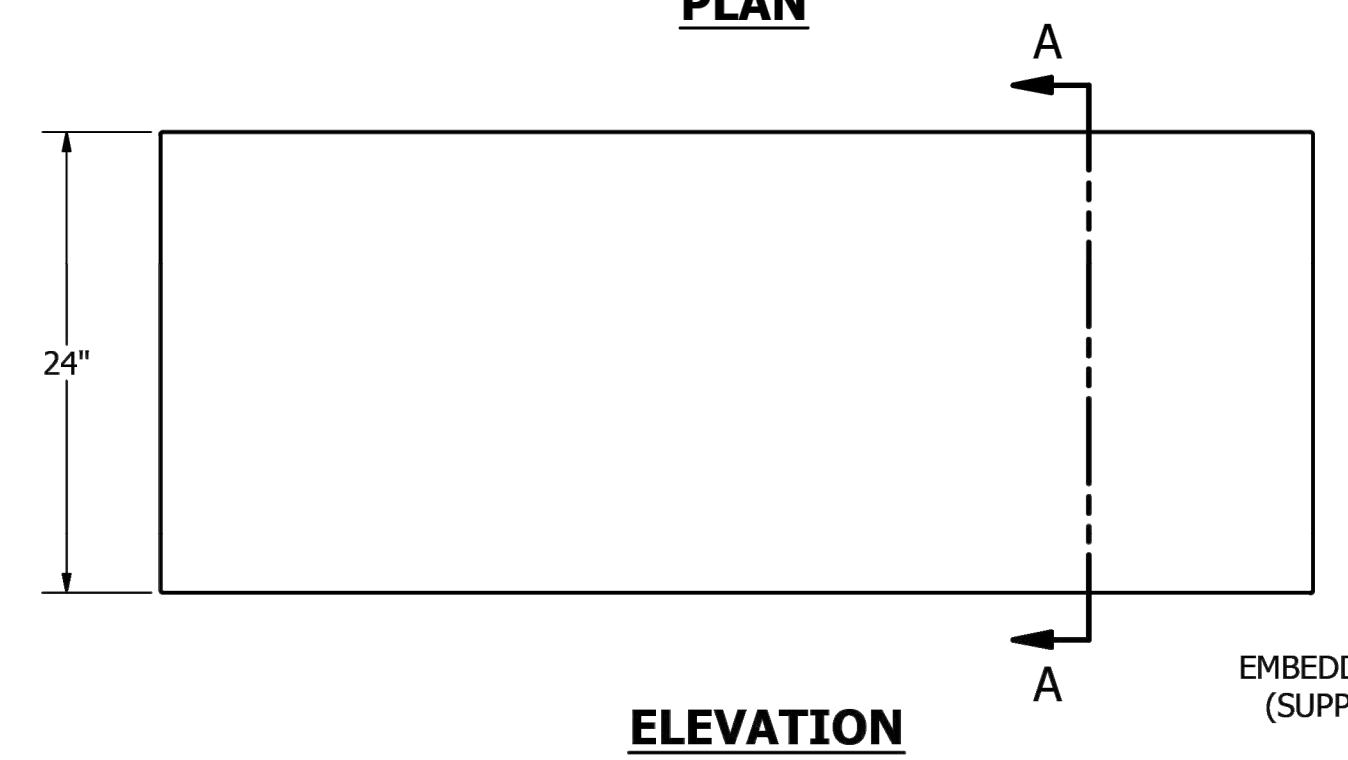
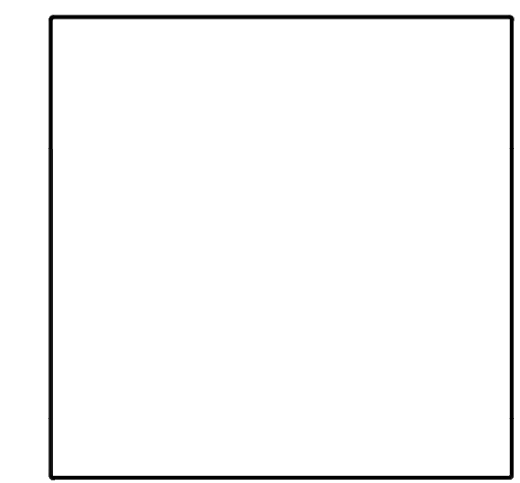
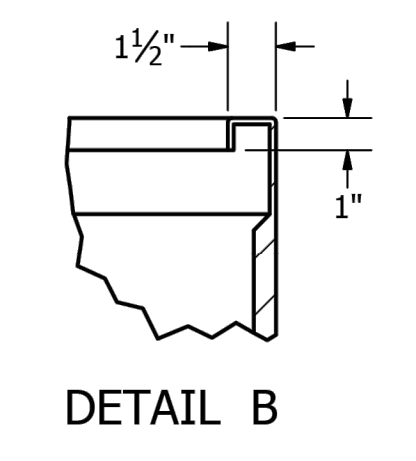
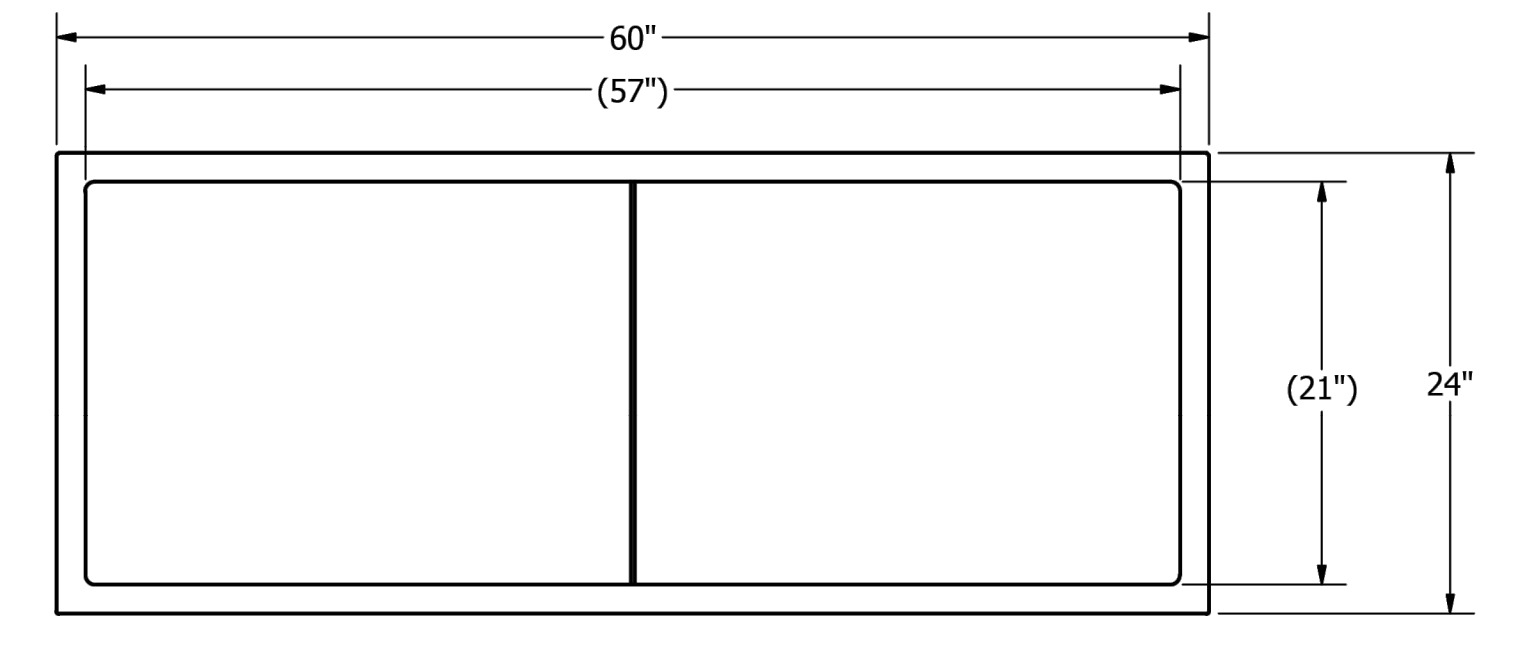
2 ROOT BARRIER
SCALE: 1" = 1'-0"

- LEGEND**
1. BOULDER PER HARDSCAPE LEGEND
 2. MULCH AT ADJACENT PLANTING AREA
 3. SET BOULDER AT 30% ± BELOW FINISH SURFACE
 4. FINISH GRADE OF PLANTING AREA, WHERE OCCURS (SEE PLAN)
 5. ADD SOIL BASE TO RAISE ROCKS FOR EVEN PROFILE
 6. ROUGHLY EVEN PROFILE AT TOP OF ROCKS
 7. COMPACTED SUBGRADE
 8. PLANTING PER PLANTING PLAN

- NOTES:**
- BOULDER LOCATIONS PER HARDSCAPE PLANS
 - LANDSCAPE ARCHITECT TO OBSERVE AND APPROVE LOCATIONS OF BOULDERS PRIOR TO INSTALLATION
 - CONTRACTOR SHALL STOCKPILE BOULDERS FROM ON-SITE DEMOLITION FOR FINAL SELECTION BY LANDSCAPE ARCHITECT.
 - BOULDER TO BE PLACED SO THAT A FLAT SURFACE FACES UP, WITH NO PROTRUSIONS EXTENDING VERTICALLY OR ROUGH EDGES EXPOSED.
 - WHEN BOULDERS FUNCTION AS AN EDGE TO HARDSCAPE PAVEMENT, BOULDERS SHALL BE SET PRIOR TO INSTALLATION OF SAID HARDSCAPE



3 BOULDER
SCALE: 3/4" = 1'-0"



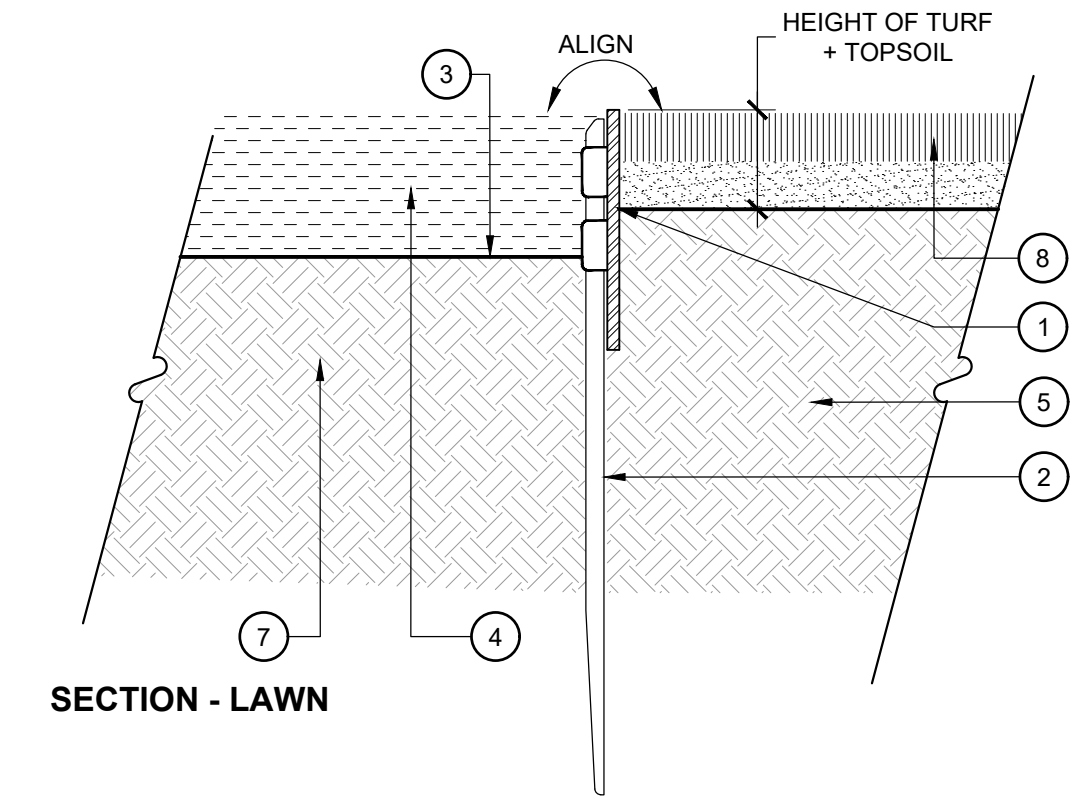
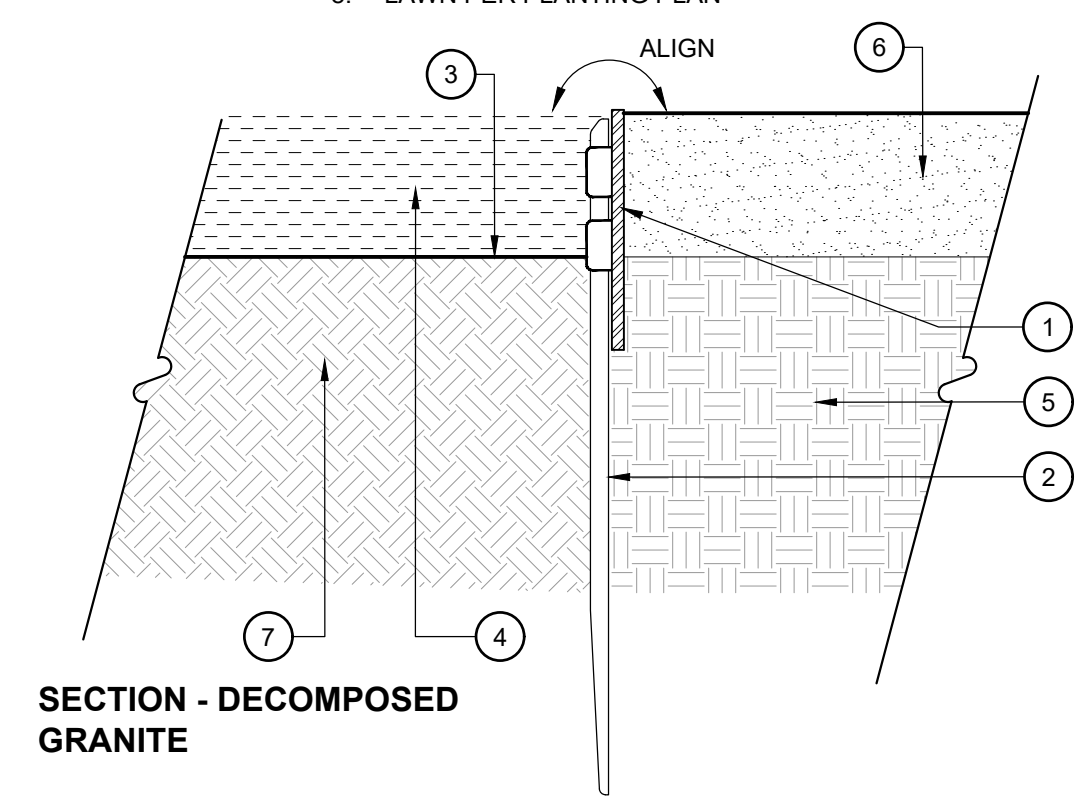
- NOTES: UNLESS OTHERWISE SPECIFIED**
- 1) MATERIAL: FIBERGLASS REINFORCED PLASTIC (FRP) NOMINAL WALL THICKNESS 1/8" - 3/16"
 - 2) ALL DIMENSIONS ARE NOMINAL, ACTUAL SIZE MAY VARY.
- COLOR: _____
- TEXTURE: _____

| | | | |
|---|---------------|-----------------------|----------------|
| | | TITILE | |
| Tournesol Siteworks 2930 Faber Street, Union City, CA 94587 | | WILSHIRE WR-602424 | |
| DRAWN: WAY | 2/18/2011 | SIZE | REV |
| C | WR-602424-SUB | C | A |
| ALL DIMENSIONS IN INCHES | | SCALE 1/10 | MATERIAL: GFRP |
| | | SHEET 1 OF 1 | |

1 PLANTER
SCALE: NTS

- LEGEND**
1. METAL EDGING, REFER TO HARDSCAPE LEGEND FOR TYPE, COLOR, AND FINISH
 2. METAL EDGING STAKE TO MATCH METAL EDGING. SPACE APPROX. 30" O.C.
 3. FINISHED GRADE IN ADJACENT PLANTING AREA
 4. MULCH IN PLANTING AREA
 5. COMPACTED SUBGRADE PER GEOTECHNICAL REPORT
 6. STABILIZED DECOMPOSED GRANITE PER DETAIL
 7. AMENDED PLANTING SOIL PER SPECIFICATIONS
 8. LAWN PER PLANTING PLAN

- NOTES**
- INSTALL EDGING AND STAKES PER MANUFACTURER'S RECOMMENDATIONS
 - IF NO GEOTECHNICAL REPORT AVAILABLE COMPACT SUBGRADE TO 95% S.P.D.



4 METAL EDGING
SCALE: 3" = 1'-0"

a. **Town Certification.** This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

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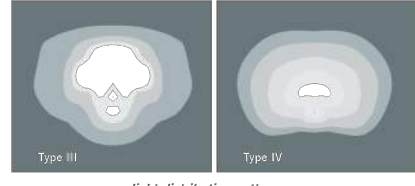
Outdoor Lighting



ROADWAY LED
(Meets Dark Sky Criteria)

| | |
|---------------------------|---|
| Light source: LED (white) | 110 150 220 280 watts |
| Mounting height | 20', 25', 30' |
| Color | Black Gray |
| Pole | Fiberglass Metal Wood |
| Applications | Neighborhoods Roadways Shopping centers |

Light pattern: ESNA Type III | Type IV (forward throw)
IESNA cutoff classification: B2/UG3
BUG rating: Type III = BSJ003 (150W), BSJ003 (150W), BSJ004 (220W/280W)
Type IV = BSJ003 (150W), BSJ004 (220W), BSJ005 (280W)
Color temperature: 3,000K | 4,000K

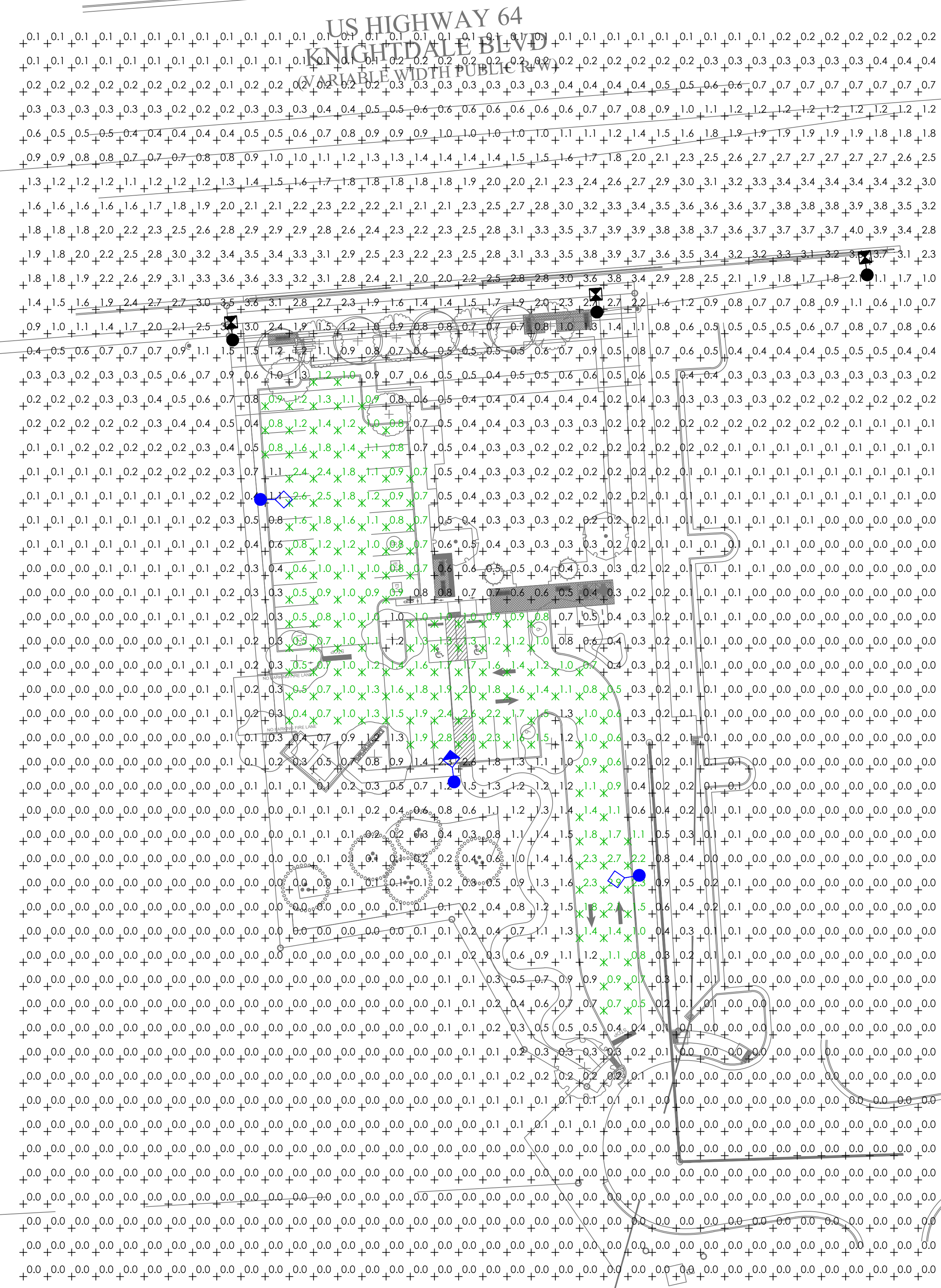


| POLE AVAILABLE | MOUNTING HEIGHT | COLOR |
|----------------------------|-----------------|-------------------------------|
| Fiberglass | 25', 30', 35' | Gray, Black (additional cost) |
| Wood | 25', 30', 35' | Standard |
| Metal (special conditions) | 25', 30', 35' | Galvanized |

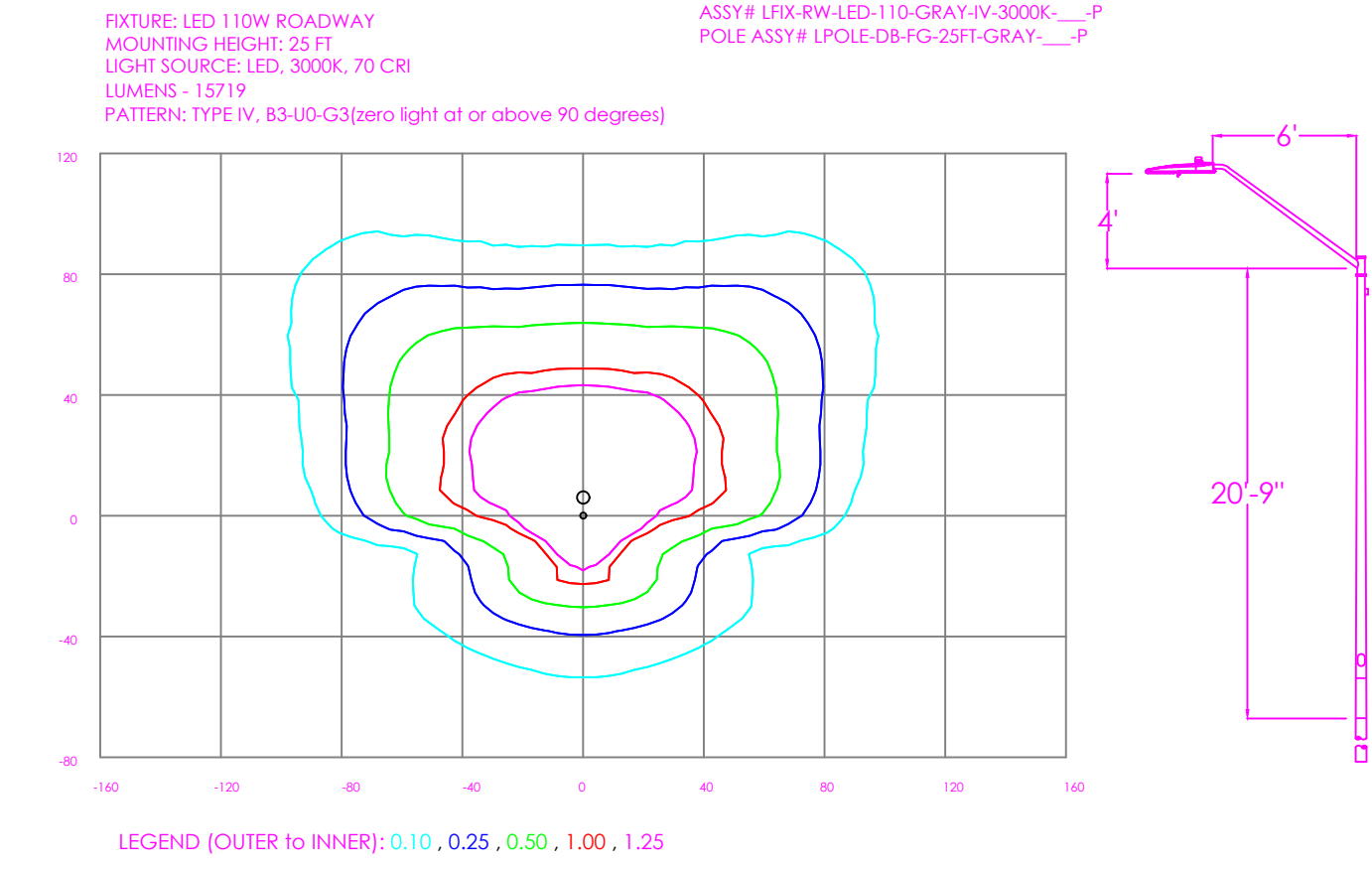
| FEATURES | BENEFITS |
|--|--|
| Turnkey operation | Provides hassle-free installation and service |
| Little or no installation cost | Freeks up capital for other projects |
| Design services by lighting professionals included | Meets industry standards and lighting ordinances |
| Maintenance, electricity & warranty included | Eliminates high and unexpected repair bills |
| One low monthly cost on your electric bill | Convenience and savings for you |

For additional information, contact us at OOL.Care@duke-energy.com

DUKE ENERGY
PROGRESS
REALLY SMARTER ENERGY TODAY



ISOFOOTCANDLE CURVES



BIG OAK CT
(60' PUBLIC R/W)

a. Town Certification. This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

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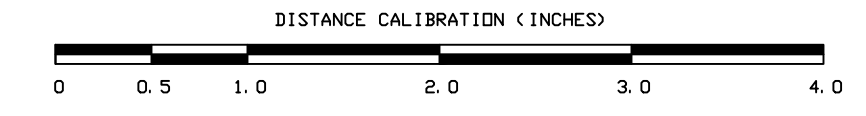
By: _____ Date: _____

Land Use Administrator

| Statistics | | | | | | |
|-------------|--------|--------|--------|--------|---------|---------|
| Description | Symbol | Avg | Max | Min | Max/Min | Avg/Min |
| Parking | X | 1.3 fc | 3.0 fc | 0.4 fc | 7.5:1 | 3.3:1 |

| Schedule | | | | | | |
|----------|-------|-----|---|--------------|-------------|------|
| Symbol | Label | QTY | Description | Number Lamps | Lamp Output | LLF |
| ◆ | A | 1 | LED 110w Roadway - Type IV - 3000K | 1 | 15719 | 0.85 |
| ◇ | B | 2 | LED 110w Roadway - Type IV - 3000K - Shield | 1 | 12982 | 0.85 |
| ● | C | 4 | Existing Roadway Fixture | 1 | 37650 | 0.85 |

| REV B | 02/11/26 | UPDATED SITE PLAN. | NJ |
|-------|----------|--------------------|----|
| NO. | DATE | REVISION | BY |
| | | | |



LIGHTING DESIGN TOLERANCE

The calculated footcandle light levels in this lighting design are predicted values and are based on specific information that has been supplied to Duke Energy. Any inaccuracies in the supplied information, differences in luminaire installation, lighted area geometry including elevation differences, reflective properties of surrounding surfaces, obstructions (foliage or otherwise) in the lighted area, or lighting from sources other than listed in this design may produce different results from the predicted values. Normal tolerances of voltage, lamp output, and ballast and luminaire manufacture will also affect results.



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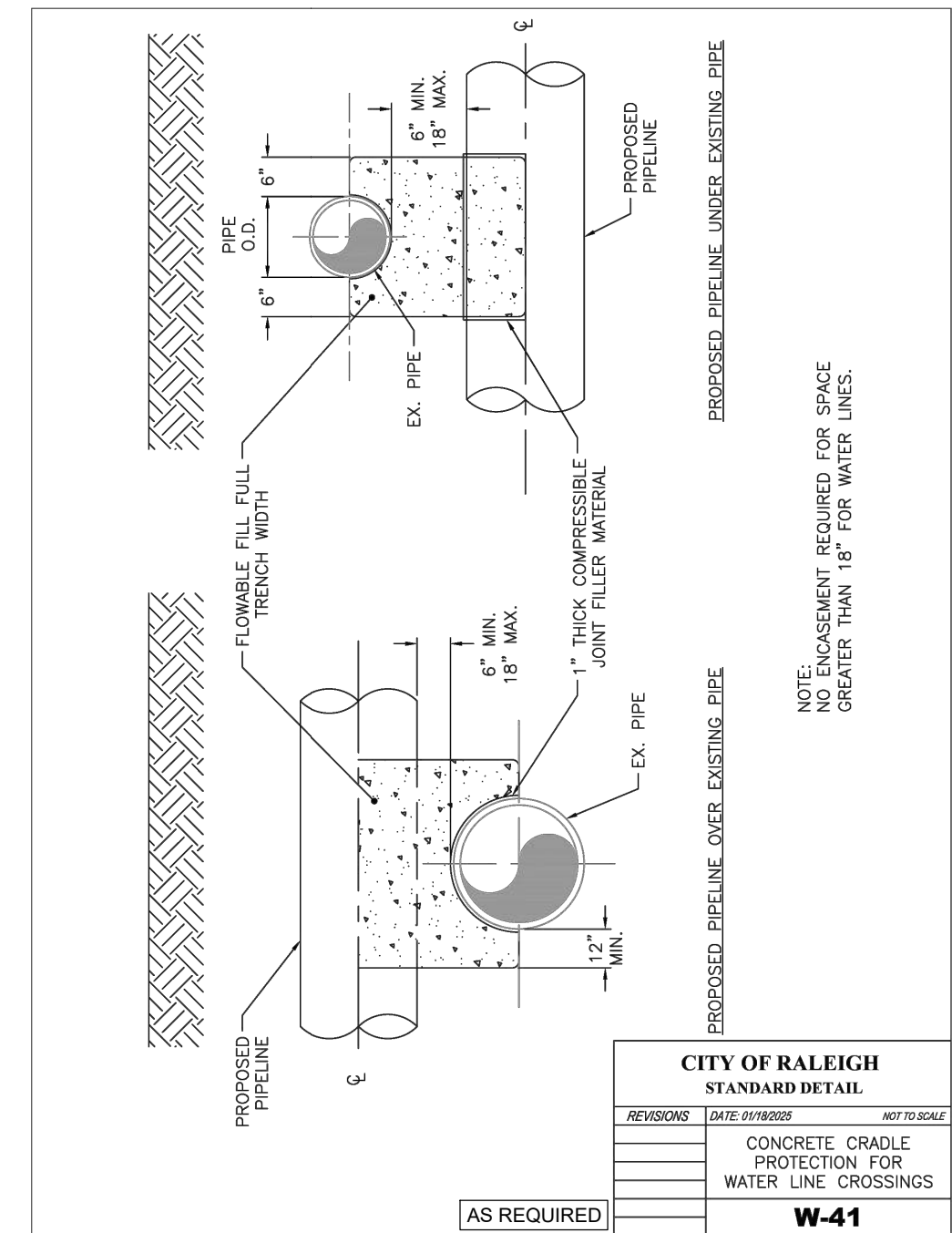
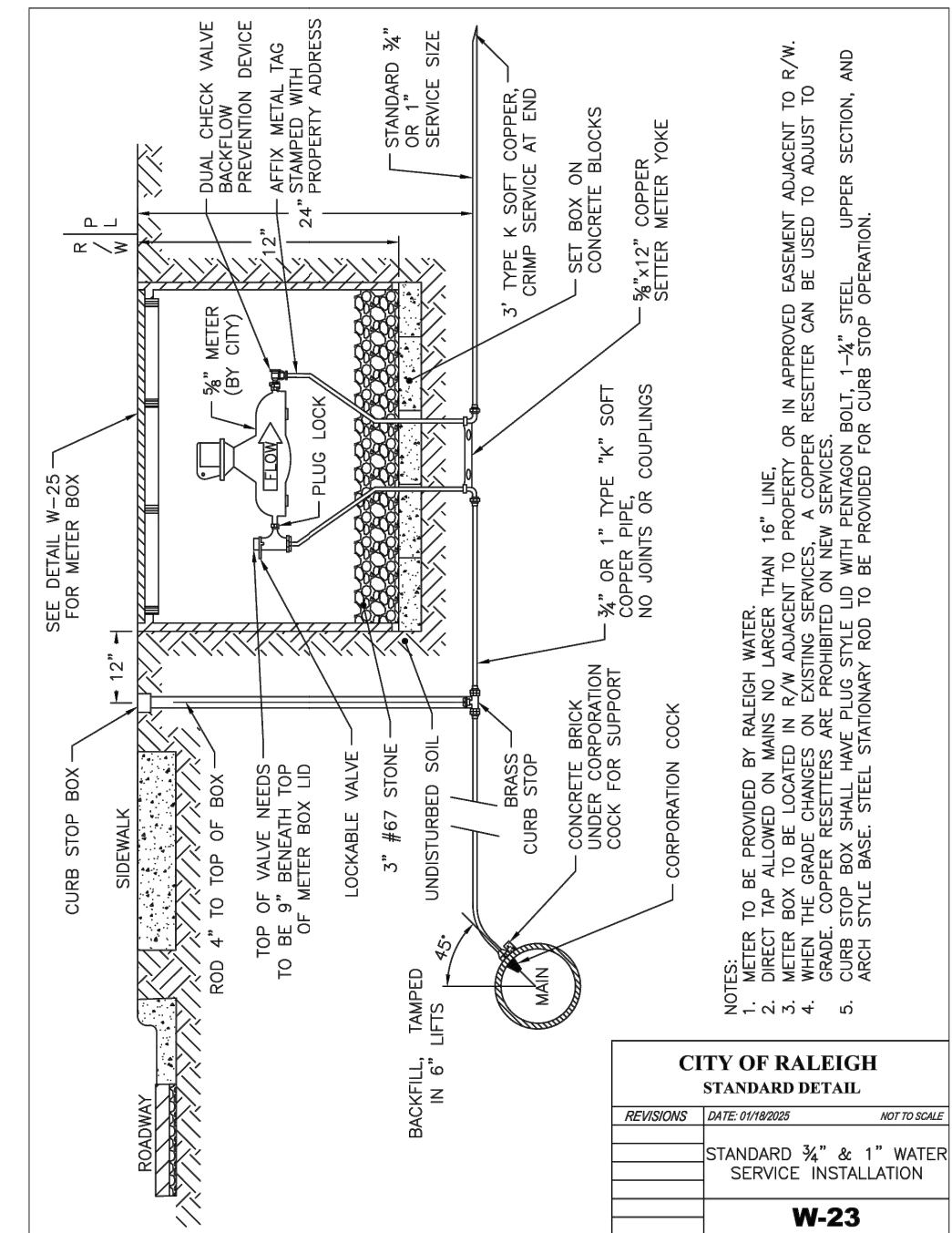
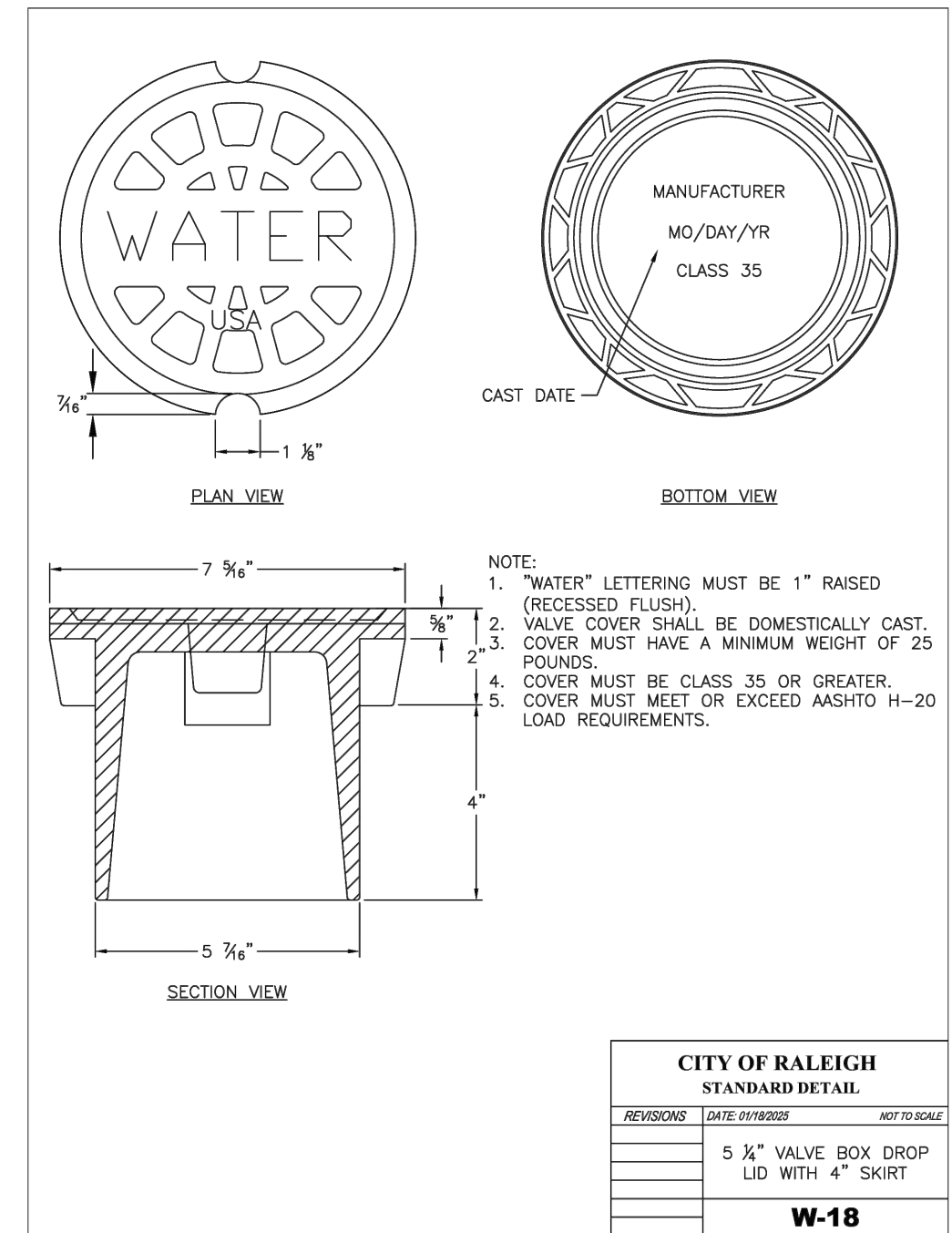
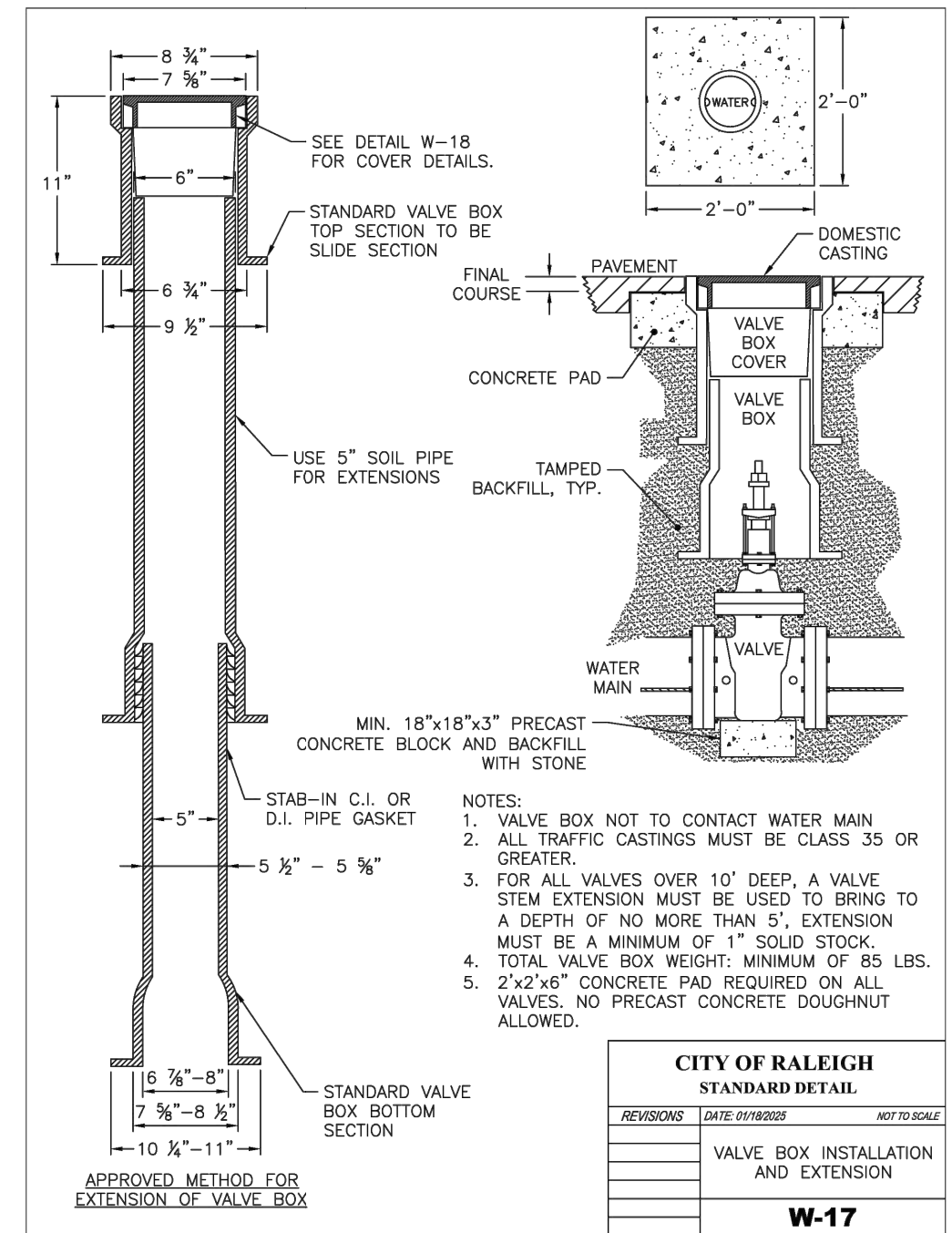
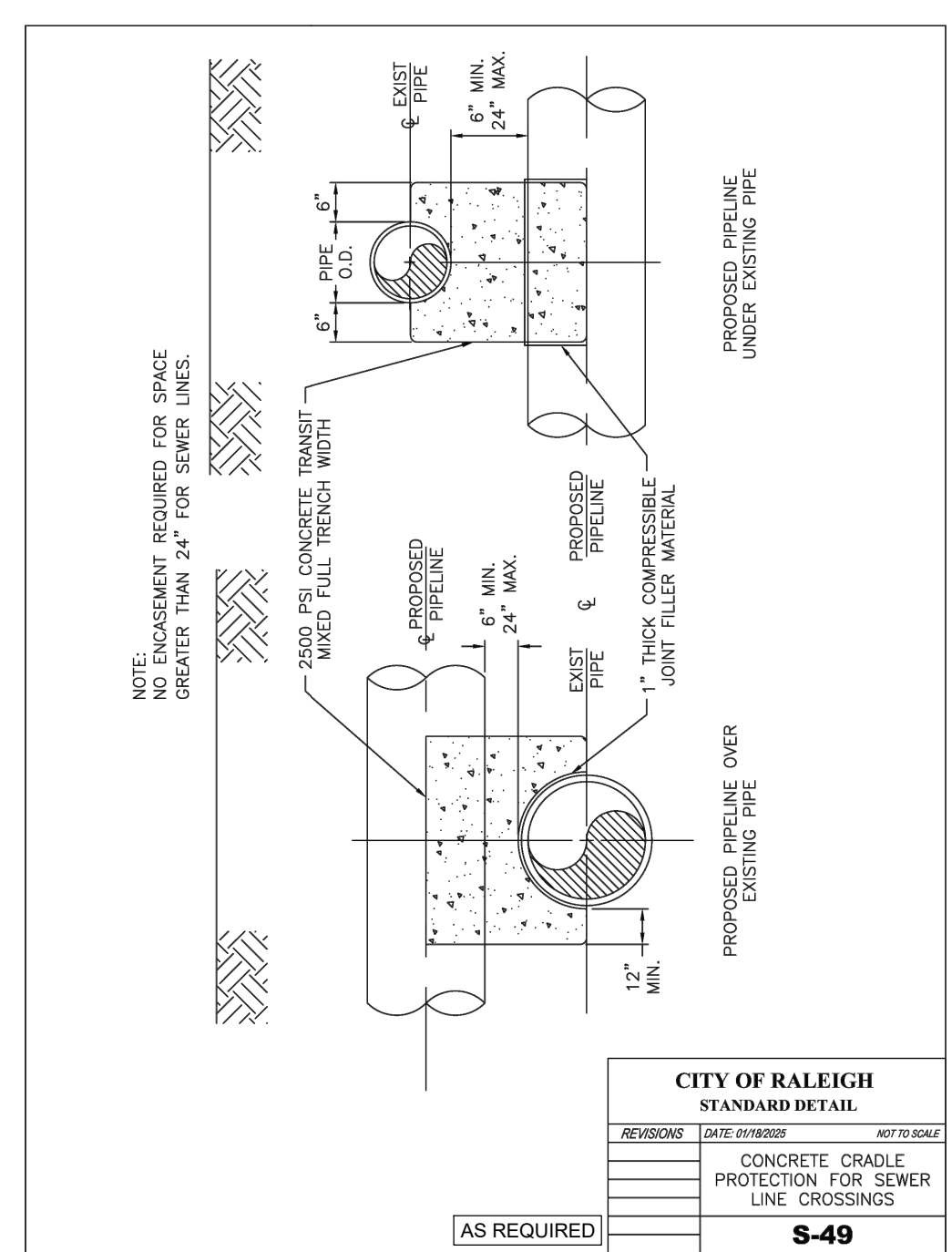
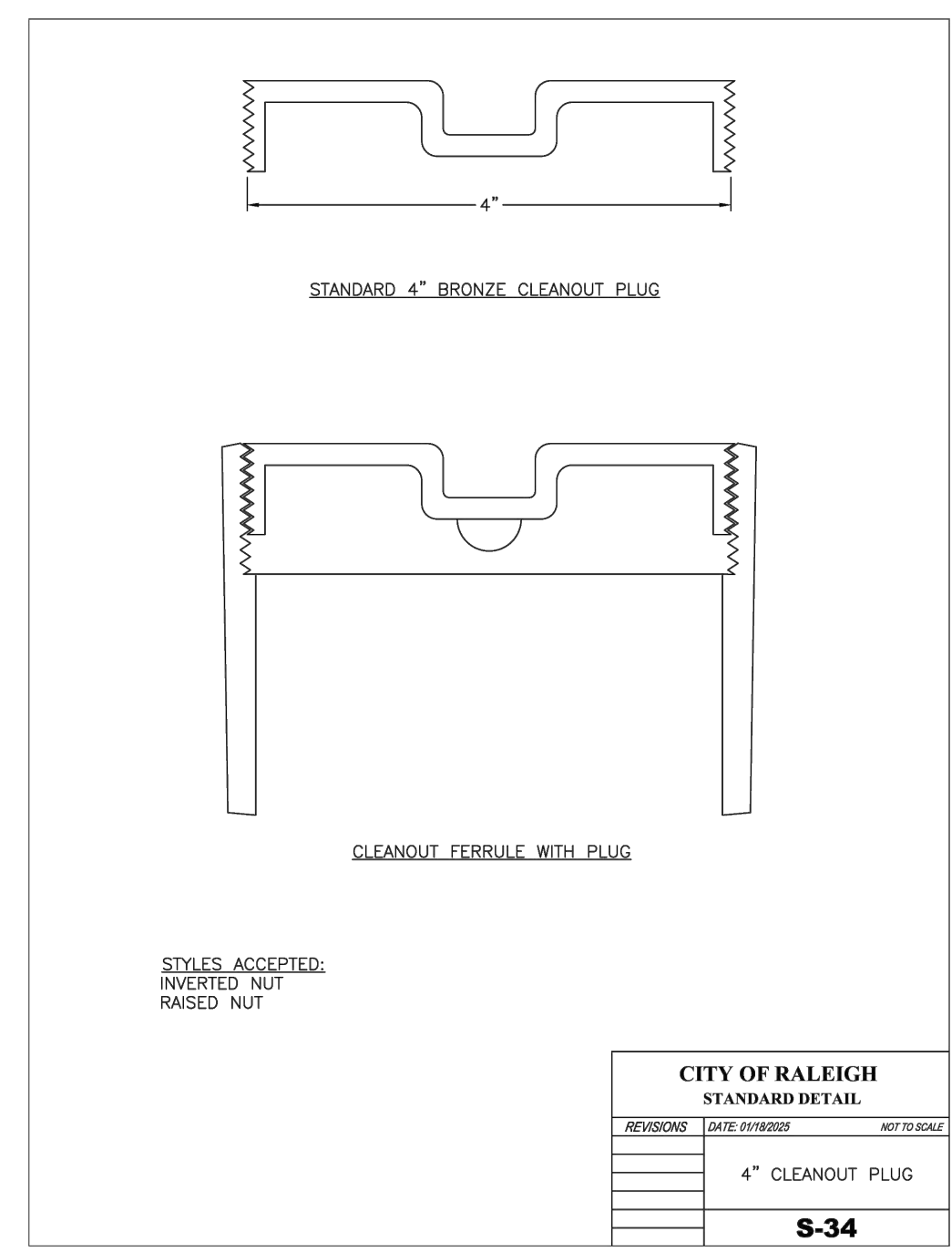
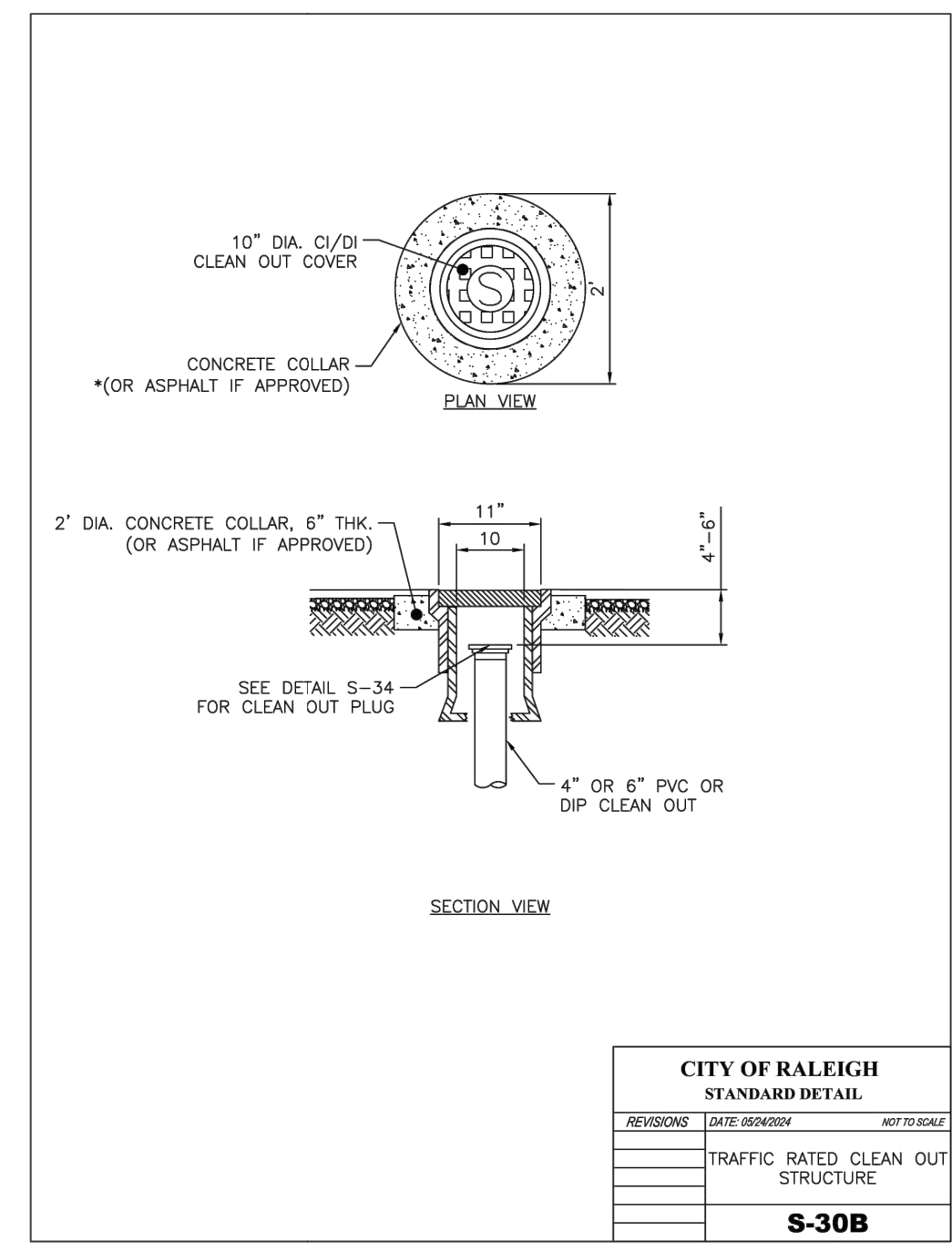
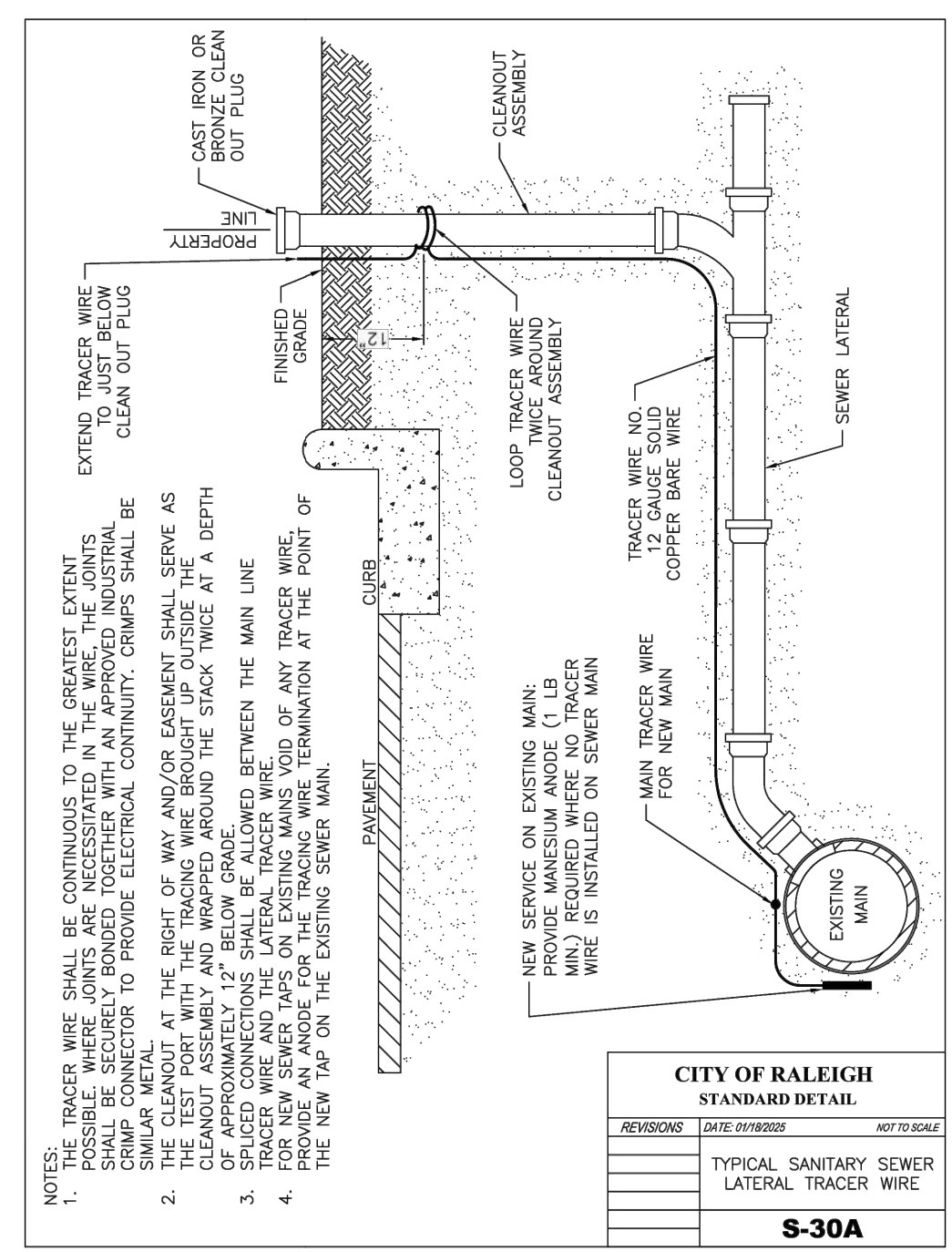
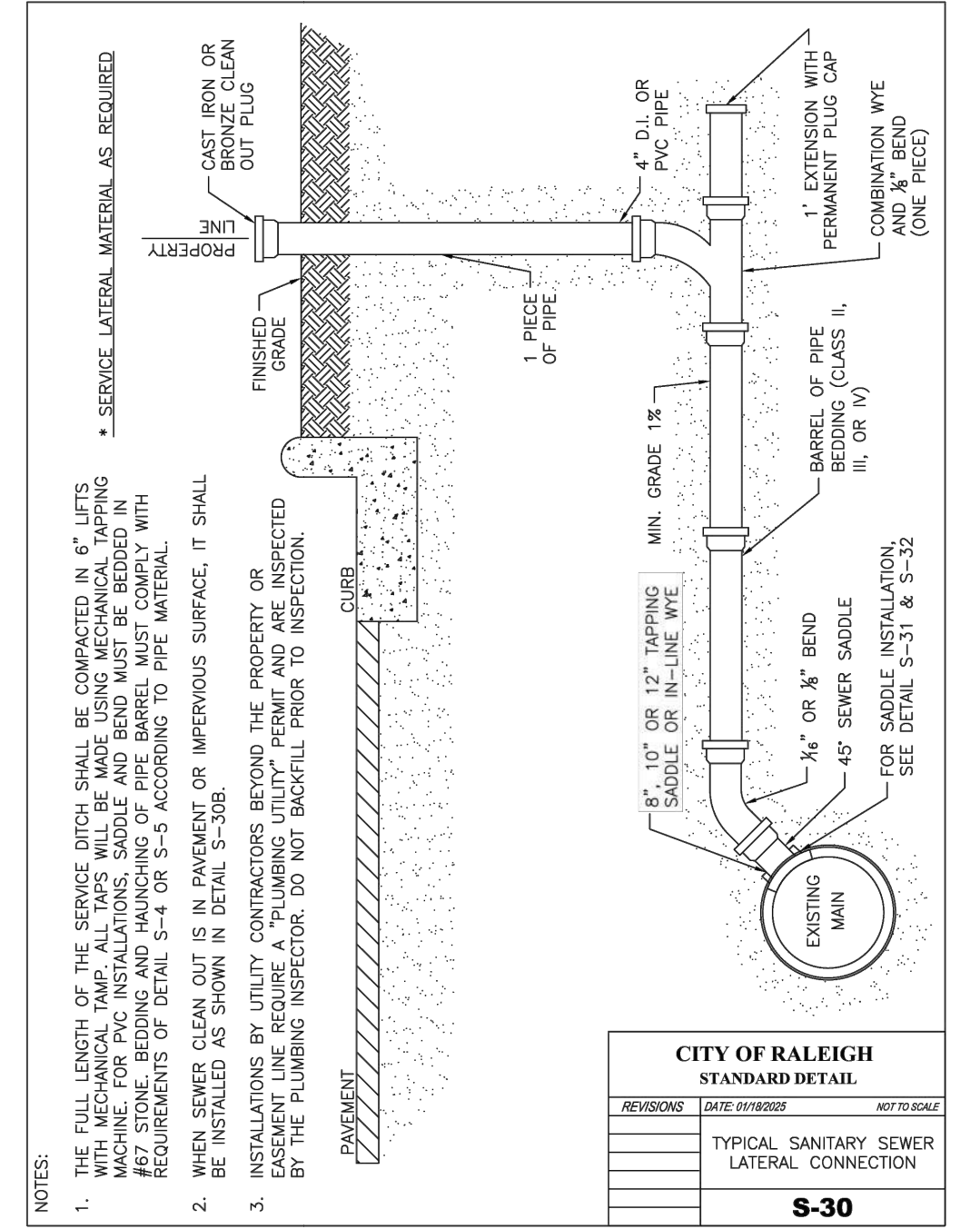
| | |
|---------------------------|---|
| BIG OAK VET | |
| KNIGHTDALE, NC | |
| SITE LIGHTING ARRANGEMENT | |
| Designed by | DUKE ENERGY PROGRESS LIGHTING SOLUTIONS |
| Reviewed by | N. Johnson Scale 1" = 30' |
| Date | 02/11/2026 Size Drawing size "D" |
| Description | LED ROADWAY |
| Drawing No. | 25-0364B Sht. 1 OF 1 |

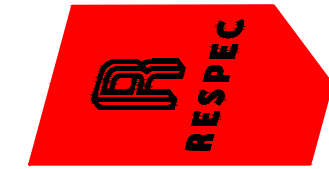
a. Town Certification. This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: _____ Date: _____
Town Engineer

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By: _____ Date: _____
Land Use Administrator



| | |
|--|------------|
| CONSULTANT: | |
| SEAL: | |
|  <p>Raleigh, NC RSNC Engineering, PLLC 555 Fayetteville St, Suite 300 Raleigh, NC 27601 Phone: 919.230.1587 www.respec.com</p> | |
| SHEET TITLE: UTILITY DETAILS | |
| PROJECT: BIG OAK VET HOSPITAL VETS PETS | |
| 1004 BIG OAK COURT, KNIGHTDALE, NC 27545 | |
| DESIGN | TT |
| DRAWN | TT |
| CHECKED | TT |
| DATE | 03/06/2028 |
| PROJECT No. L0029.25001 | |
| SHEET NUMBER C-301 | |

IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING ITS PRODUCTION. AFFECTING ALL LABELED SCALES.

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

SECTION E: GROUND STABILIZATION

| Required Ground Stabilization Timeframes | | |
|--|---|---|
| Site Area Description | Stabilize within this many calendar days after ceasing land disturbance | Timeframe variations |
| (a) Perimeter dikes, swales, ditches, and perimeter slopes | 7 | None |
| (b) High Quality Water (HQW) Zones | 7 | None |
| (c) Slopes steeper than 3:1 | 7 | If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed |
| (d) Slopes 3:1 to 4:1 | 14 | -7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed |
| (e) Areas with slopes flatter than 4:1 | 14 | -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope |

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

GROUND STABILIZATION SPECIFICATION

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

| Temporary Stabilization | Permanent Stabilization |
|---|--|
| <ul style="list-style-type: none"> Temporary grass seed covered with straw or other mulches and tackifiers Hydroseeding Rolled erosion control products with or without temporary grass seed Appropriately applied straw or other mulch Plastic sheeting | <ul style="list-style-type: none"> Permanent grass seed covered with straw or other mulches and tackifiers Geotextile fabrics such as permanent soil reinforcement matting Hydroseeding Shrubs or other permanent plantings covered with mulch Uniform and evenly distributed ground cover sufficient to restrain erosion Structural methods such as concrete, asphalt or retaining walls Rolled erosion control products with grass seed |

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

- Select flocculants that are appropriate for the soils being exposed during construction, selecting from the *NC DWR List of Approved PAMS/Flocculants*.
- Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
- Apply flocculants at the concentrations specified in the *NC DWR List of Approved PAMS/Flocculants* and in accordance with the manufacturer's instructions.
- Provide ponding area for containment of treated Stormwater before discharging offsite.
- Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE

- Maintain vehicles and equipment to prevent discharge of fluids.
- Provide drip pans under any stored equipment.
- Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
- Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
- Remove leaking vehicles and construction equipment from service until the problem has been corrected.
- Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

- Never bury or burn waste. Place litter and debris in approved waste containers.
- Provide a sufficient number and size of waste containers (e.g dumpster, trash receptacle) on site to contain construction and domestic wastes.
- Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
- Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
- Anchor all lightweight items in waste containers during times of high winds.
- Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
- Dispose waste off-site at an approved disposal facility.
- On business days, clean up and dispose of waste in designated waste containers.

PAINT AND OTHER LIQUID WASTE

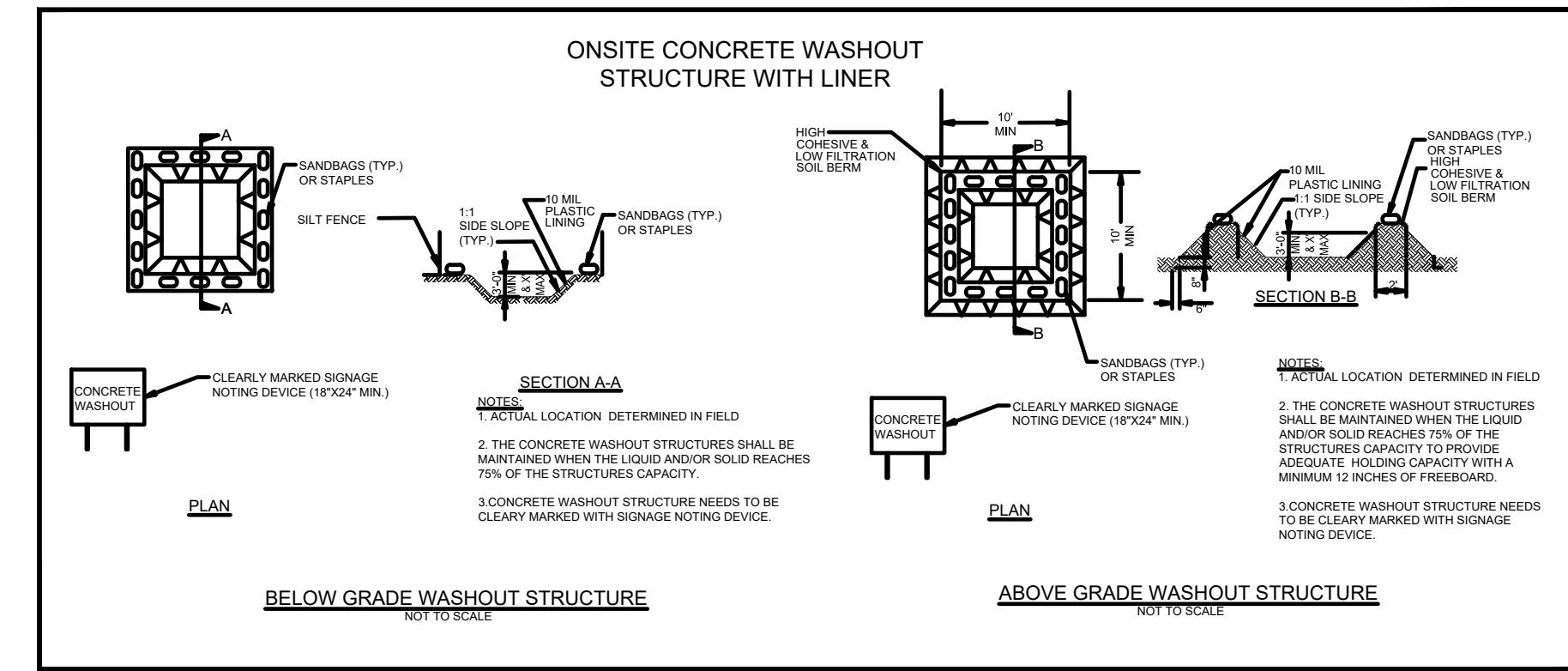
- Do not dump paint and other liquid waste into storm drains, streams or wetlands.
- Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Contain liquid wastes in a controlled area.
- Containment must be labeled, sized and placed appropriately for the needs of site.
- Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

PORTABLE TOILETS

- Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
- Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
- Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

EARTHEN STOCKPILE MANAGEMENT

- Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
- Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
- Provide stable stone access point when feasible.
- Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.



CONCRETE WASHOUTS

- Do not discharge concrete or cement slurry from the site.
- Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
- Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
- Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
- Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
- Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
- Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
- Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.
- Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
- At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

HERBICIDES, PESTICIDES AND RODENTICIDES

- Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
- Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
- Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
- Do not stockpile these materials onsite.

HAZARDOUS AND TOXIC WASTE

- Create designated hazardous waste collection areas on-site.
- Place hazardous waste containers under cover or in secondary containment.
- Do not store hazardous chemicals, drums or bagged materials directly on the ground.

| NO. | DATE | REVISIONS | ITEM |
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CONSULTANT:

SEAL:

Raleigh, NC
 RSNC Engineering, PLLC
 555 Fayetteville St., Suite 300
 Raleigh, NC 27601
 Phone: 919.230.1587
 www.respac.com

SHEET TITLE: **NCG01 NOTES & DETAILS**

PROJECT: **BIG OAK VET HOSPITAL VETS PETS**

1004 BIG OAK COURT, KNIGHTDALE, NC 27545

DESIGN: TT
 DRAWN: TT
 CHECKED: TT
 DATE: 03/06/2018

PROJECT No. **L0029.25001**
 SHEET NUMBER

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection.

Table with 3 columns: Inspect, Frequency (during normal business hours), and Inspection records must include: (1) Rain gauge maintained in good working order, (2) E&SC Measures, (3) Stormwater discharge outfalls (SDOs), (4) Perimeter of site, (5) Streams or wetlands onsite or offsite, (6) Ground stabilization measures.

NOTE: The rain inspection resets the required 7 calendar day inspection requirement.

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. E&SC Plan Documentation

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit.

Table with 2 columns: Item to Document and Documentation Requirements. (a) Each E&SC measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC plan. (b) A phase of grading has been completed. (c) Ground cover is located and installed in accordance with the approved E&SC plan. (d) The maintenance and repair requirements for all E&SC measures have been performed. (e) Corrective actions have been taken to E&SC measures.

2. Additional Documentation to be Kept on Site

In addition to the E&SC plan documents above, the following items shall be kept on the site and available for inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

- (a) This General Permit as well as the Certificate of Coverage, after it is received. (b) Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements.

3. Documentation to be Retained for Three Years

All data used to complete the e-NOI and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING

1. Occurrences that Must be Reported

Permittees shall report the following occurrences:

- (a) Visible sediment deposition in a stream or wetland. (b) Oil spills if: They are 25 gallons or more, They are less than 25 gallons but cannot be cleaned up within 24 hours, They cause sheen on surface waters (regardless of volume), or They are within 100 feet of surface waters (regardless of volume). (c) Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85. (d) Anticipated bypasses and unanticipated bypasses. (e) Noncompliance with the conditions of this permit that may endanger health or the environment.

2. Reporting Timeframes and Other Requirements

After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Department's Environmental Emergency Center personnel at (800) 858-0368.

Table with 2 columns: Occurrence and Reporting Timeframes (After Discovery) and Other Requirements. (a) Visible sediment deposition in a stream or wetland. (b) Oil spills and release of hazardous substances per Item 1(b)-(c) above. (c) Anticipated bypasses [40 CFR 122.41(m)(3)]. (d) Unanticipated bypasses [40 CFR 122.41(m)(3)]. (e) Noncompliance with the conditions of this permit that may endanger health or the environment [40 CFR 122.41(l)(7)].

PART II, SECTION G, ITEM (4) DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

- (a) The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&SC plan authority has approved these items, (b) The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit, (c) Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems, (d) Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above, (e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and (f) Sediment removed from the dewatering treatment devices described in Item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

Table with 2 columns: NO. and DATE, and 10 rows for REVISIONS.

CONSULTANT:

SEAL:



SHEET TITLE: NCG01 NOTES & DETAILS. PROJECT: BIG OAK VET HOSPITAL VETS PETS. 1004 BIG OAK COURT, KNIGHTDALE, NC 27545.

DESIGN TT, DRAWN TT, CHECKED TT, DATE 03/06/2028.

PROJECT No. L0029.25001. SHEET NUMBER.

C-405

1" IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING ITS PRODUCTION, AFFECTING ALL LABELED SCALES

a. Town Certification. This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: _____ Date: _____
Town Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

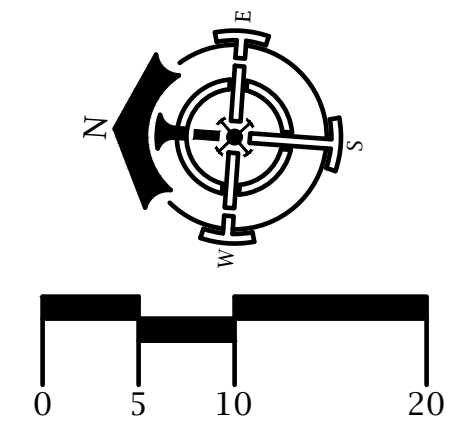
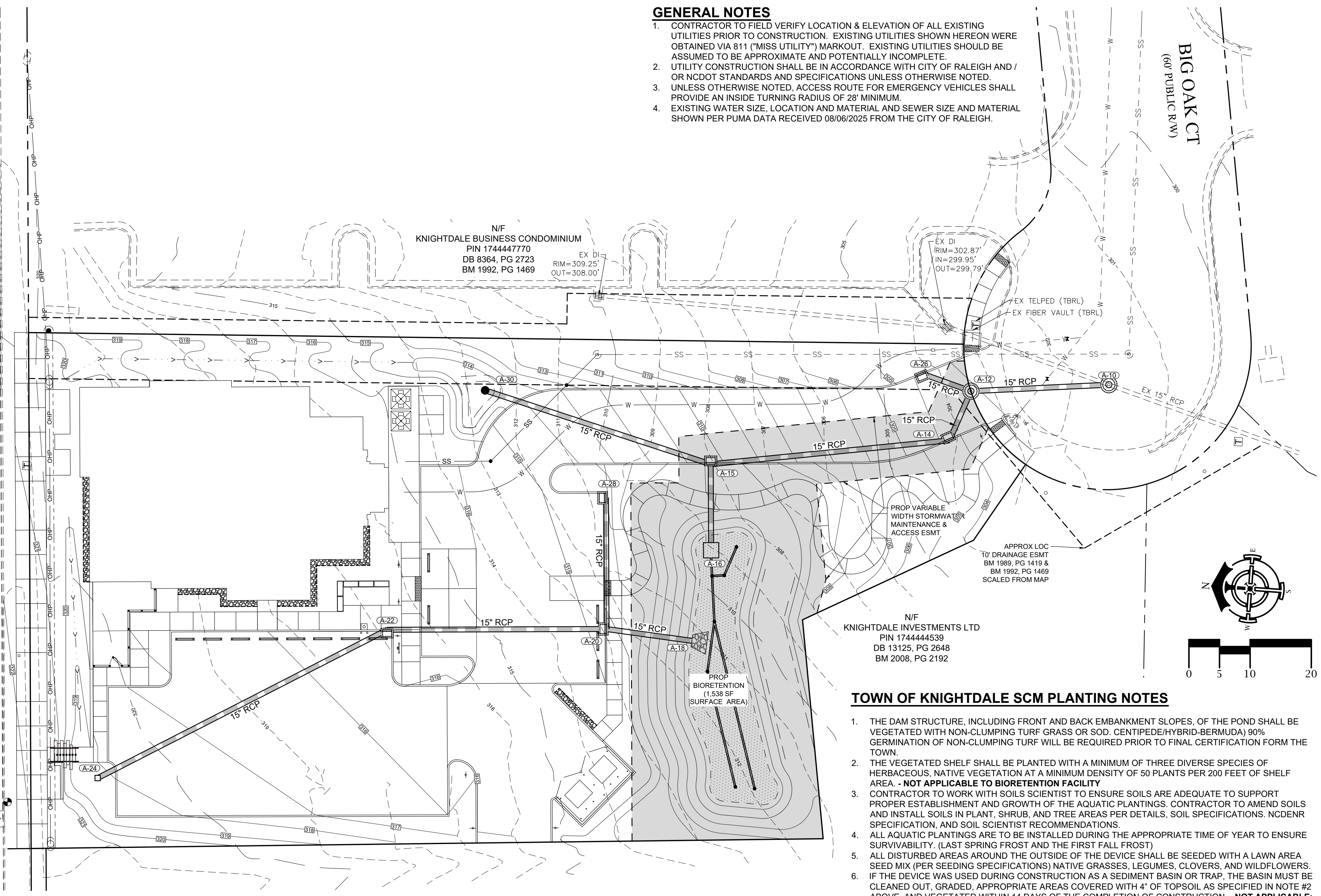
By: _____ Date: _____
Land Use Administrator

RIM=320.67
IN=315.59

**US HIGHWAY 64
KNIGHTDALE BLVD
(VARIABLE WIDTH PUBLIC R/W)**

SEE NCDOT PROJECT # 6-400004B
HM 3, PG 193

RIM=321.85
OUT=318.66



GENERAL NOTES

- CONTRACTOR TO FIELD VERIFY LOCATION & ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. EXISTING UTILITIES SHOWN HEREON WERE OBTAINED VIA 911 ("MISS UTILITY") MARKOUT. EXISTING UTILITIES SHOULD BE ASSUMED TO BE APPROXIMATE AND POTENTIALLY INCOMPLETE.
- UTILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH AND / OR NCDOT STANDARDS AND SPECIFICATIONS UNLESS OTHERWISE NOTED.
- UNLESS OTHERWISE NOTED, ACCESS ROUTE FOR EMERGENCY VEHICLES SHALL PROVIDE AN INSIDE TURNING RADIUS OF 28' MINIMUM.
- EXISTING WATER SIZE, LOCATION AND MATERIAL AND SEWER SIZE AND MATERIAL SHOWN PER PUMA DATA RECEIVED 08/06/2025 FROM THE CITY OF RALEIGH.

TOWN OF KNIGHTDALE SCM PLANTING NOTES

- THE DAM STRUCTURE, INCLUDING FRONT AND BACK EMBANKMENT SLOPES, OF THE POND SHALL BE VEGETATED WITH NON-CLUMPING TURF GRASS OR SOD. CENTIPEDE/HYBRID-BERMUDA) 90% GERMINATION OF NON-CLUMPING TURF WILL BE REQUIRED PRIOR TO FINAL CERTIFICATION FORM THE TOWN.
- THE VEGETATED SHELF SHALL BE PLANTED WITH A MINIMUM OF THREE DIVERSE SPECIES OF HERBACEOUS, NATIVE VEGETATION AT A MINIMUM DENSITY OF 50 PLANTS PER 200 FEET OF SHELF AREA - NOT APPLICABLE TO BIORETENTION FACILITY.
- CONTRACTOR TO WORK WITH SOILS SCIENTIST TO ENSURE SOILS ARE ADEQUATE TO SUPPORT PROPER ESTABLISHMENT AND GROWTH OF THE AQUATIC PLANTINGS. CONTRACTOR TO AMEND SOILS AND INSTALL SOILS IN PLANT, SHRUB, AND TREE AREAS PER DETAILS, SOIL SPECIFICATIONS, NCDENR SPECIFICATION, AND SOIL SCIENTIST RECOMMENDATIONS.
- ALL AQUATIC PLANTINGS ARE TO BE INSTALLED DURING THE APPROPRIATE TIME OF YEAR TO ENSURE SURVIVABILITY. (LAST SPRING FROST AND THE FIRST FALL FROST)
- ALL DISTURBED AREAS AROUND THE OUTSIDE OF THE DEVICE SHALL BE SEEDED WITH A LAWN AREA SEED MIX (PER SEEDING SPECIFICATIONS) NATIVE GRASSES, LEGUMES, CLOVERS, AND WILDFLOWERS.
- IF THE DEVICE WAS USED DURING CONSTRUCTION AS A SEDIMENT BASIN OR TRAP, THE BASIN MUST BE CLEANED OUT, GRADED, APPROPRIATE AREAS COVERED WITH 4" OF TOPSOIL AS SPECIFIED IN NOTE #2 ABOVE, AND VEGETATED WITHIN 14 DAYS OF THE COMPLETION OF CONSTRUCTION. - NOT APPLICABLE; NOT USED AS SEDIMENT BASIN/TRAP
- CONTRACTOR SHALL WATER ALL VEGETATION AND GRASS ON A WEEKLY BASIS AS NEEDED TO ENSURE GRASS AND PLANT SURVIVAL UNTIL AFTER THE SCM IS CERTIFIED AND ACCEPTED BY THE TOWN.

TOWN OF KNIGHTDALE SCM INSPECTIONS

WHEN SCHEDULING INSPECTIONS, PLEASE CALL THE PUBLIC WORKS ADMINISTRATIVE ASSISTANT AT (919) 217-2250.

THE FOLLOWING PERSONNEL MUST BE PRESENT AT ALL INSPECTIONS:

- SITE SUPERVISOR
- GEOTECH
- AS-BUILT CERTIFYING ENGINEER OR SOMEONE UNDER THEIR SUPERVISION

THE FOLLOWING ITEMS MUST BE INSPECTED BY TOK STAFF DURING THE INSTALLATION OF ANY SCM WITH DAM:

- KEY TRENCH EXCAVATION
- PRINCIPAL SPILLWAY PIPE AND ASSOCIATED COMPONENTS:
 - CONCRETE CRADLE
 - ANTI-SEEP COLLAR
 - SEEPAGE DIAPHRAGM
- OUTLET STRUCTURE
- ANTI-FLOTATION BALLAST
- ANY SITE-CONSTRUCTED REINFORCED CONCRETE STRUCTURES

THE FOLLOWING ITEMS MUST BE INSPECTED BY TOK STAFF DURING THE INSTALLATION OF ANY SAND FILTERS OR BIORETENTION DEVICES:

- SUBGRADE OR CONSTRUCTED FOUNDATION
- OUTLET OR RISER IN COMBINATION WITH CONNECTING UNDERDRAINS
- FILTER MEDIA
- DAM ITEMS ON PREVIOUS LIST IF APPLICABLE

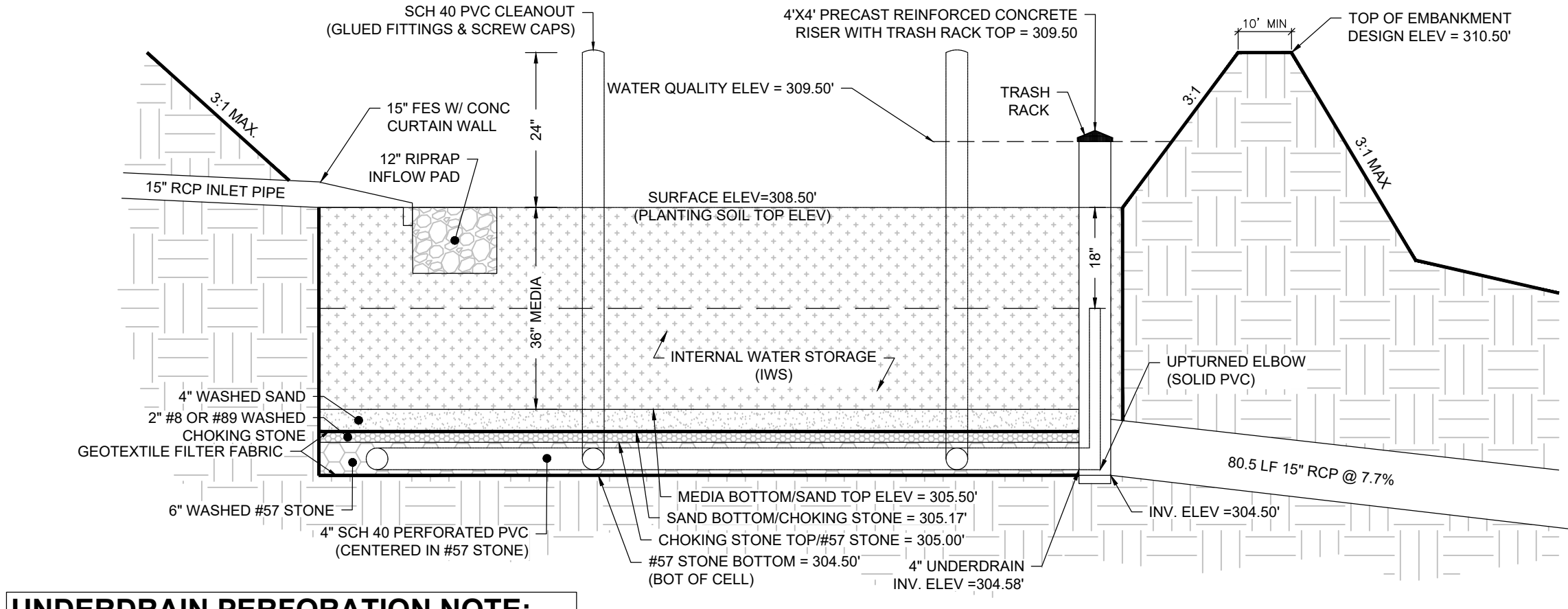
GEOTECHNICAL TESTING AND CERTIFICATION

ALL REPORTS ARE TO BE SUBMITTED WITHIN 30-DAYS OF DAM COMPLETION REQUIRED GEOTECHNICAL RECORDS INCLUDE:

- DAM EMBANKMENT MATERIAL COMPOSITION AND DENSITY TESTING
- MAP THAT LABELS ALL POINTS WHERE THE DAM AND DAM FOUNDATION AREAS WERE TESTED
- DIGITAL PHOTOS SHOWING THE DAM FOUNDATION AREAS, THE RISER, THE PRINCIPLE SPILLWAY PIPE, THE CONCRETE CRADLE, THE SEEPAGE DIAPHRAGM, RELIEF DRAINS, ETC., BEING INSTALLED.

STORM STRUCTURE TABLE

| STRUCTURE ID | TYPE | STD. DETAIL | RIM | INVERT IN (U/S STR.) | INVERT OUT (D/S STR.) | PIPE OUT |
|--------------|-------|--------------------|--------|---------------------------------|-----------------------|--------------------------|
| A-10 | MH | NCDOT 840.52 | 301.63 | 297.00 (A-12) 297.00 (EX DI) | 297.00 (A-34) | EX 15" RCP |
| A-12 | MH | NCDOT 840.52 | 303.50 | 299.00 (A-14) 299.00 (A-26) | 298.90 (A-10) | 45.13LF 15" RCP @ 4.21% |
| A-14 | CB | TOK 5.05-3 | 304.30 | 299.50 (A-15) | 299.40 (A-12) | 17.52LF 15" RCP @ 2.28% |
| A-15 | CB | TOK 5.05-3 | 311.00 | 303.00 (A-16) 306.00 (A-30) | 303.00 (A-14) | 78.43LF 15" RCP @ 4.46% |
| A-16 | RISER | SEE SHOPS | 308.60 | | 304.50 (A-15) | 28.11LF 15" RCP @ 5.34% |
| A-18 | FES | Flared End Section | | 308.50 (A-20) | | |
| A-20 | CB | TOK 5.05-3 | 315.40 | 308.75 (A-22) 308.75 (A-28) | 308.65 (A-18) | 28.12LF 15" RCP @ 0.53% |
| A-22 | CB | TOK 5.05-3 | 316.25 | 310.70 (A-24) | 310.60 (A-20) | 71.73LF 15" RCP @ 2.58% |
| A-24 | YI | TOK 5.04 | 317.00 | | 313.00 (A-22) | 106.30LF 15" RCP @ 2.16% |
| A-26 | CB | TOK 5.05-3 | 304.30 | | 299.35 (A-12) | 17.39LF 15" RCP @ 2.01% |
| A-28 | CB | TOK 5.05-3 | 314.51 | | 309.20 (A-20) | 42.85LF 15" RCP @ 1.05% |
| A-30 | DB | NYLOPLAST | 313.50 | | 308.55 (A-15) | 77.59LF 15" RCP @ 3.29% |



UNDERDRAIN PERFORATION NOTE:
ALL HORIZONTAL UNDERDRAINS TO BE PERFORATED SCH 40 PVC. ALL VERTICAL CLEANOUTS TO BE SOLID SCH 40 PVC.

BIORETENTION FACILITY DETAIL
NOT TO SCALE

| NO. | DATE | REVISIONS | ITEM |
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CONSULTANT:

SEAL:

Raleigh, NC
RSNC Engineering, PLLC
555 Fayetteville St, Suite 300
Raleigh, NC 27601
Phone: 919.230.1597
www.respac.com

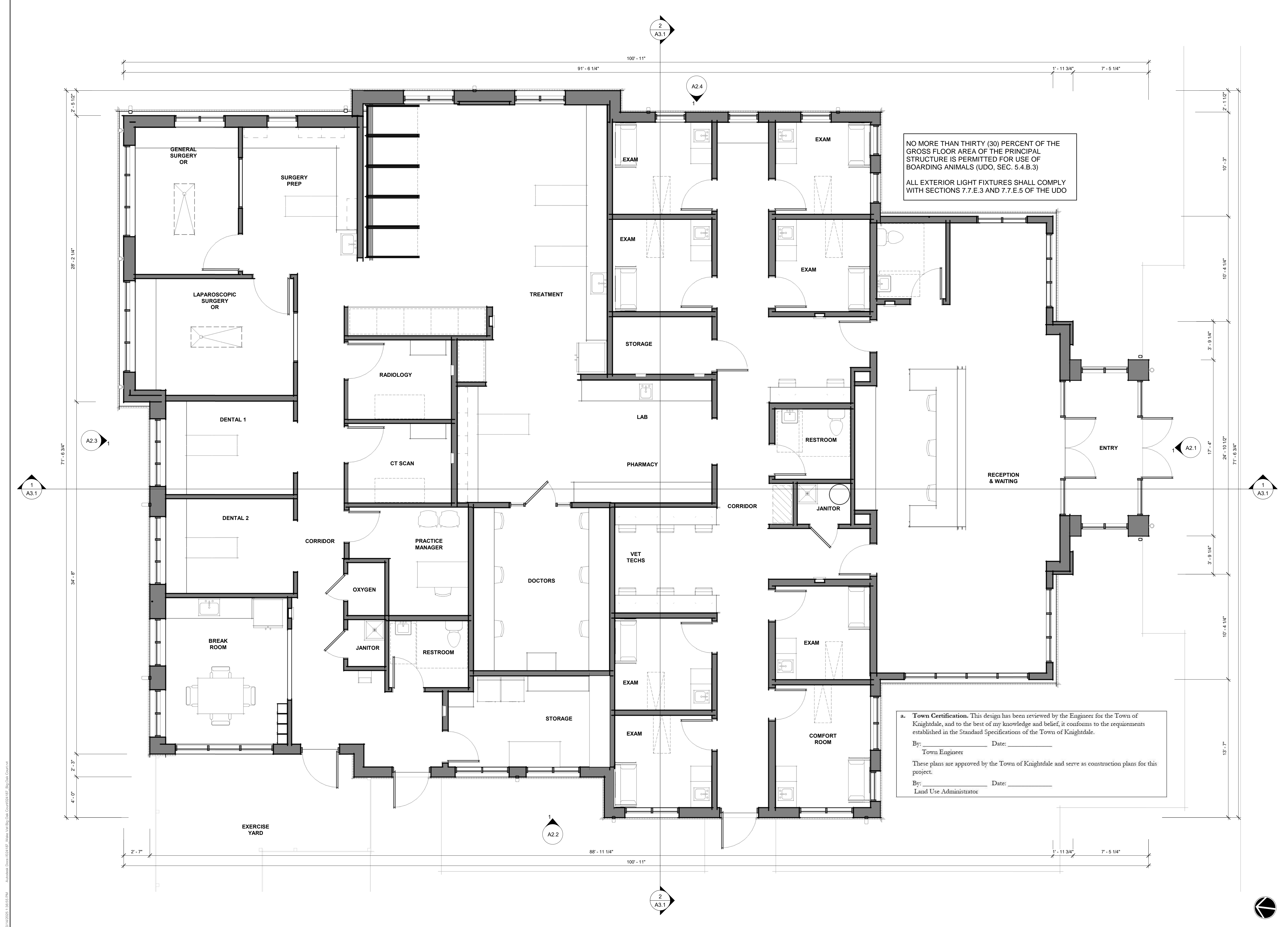
SHEET TITLE: **STORMDRAIN & STORMWATER PLAN**

PROJECT: **BIG OAK VET HOSPITAL VETS PETS**

1004 BIG OAK COURT, KNIGHTDALE, NC 27545

DESIGN: TT
DRAWN: TT
CHECKED: TT
DATE: 03/06/2026

PROJECT NO: **L0029.25001**
SHEET NUMBER: **C-500**



NOT FOR
CONSTRUCTION

SITE PLAN
REVIEW

PROJECT: 024187
DATE: 03.06.2026
REVISIONS: DATE

*P# = PERMIT, R# = RFI, # = REVISION
DRAWN BY: TG
CHECKED BY: KS, PK

ARCHITECTURAL
FLOOR PLAN

10/10/2026 1:58:55 PM Autodesk Docs:1004187P_Vets Vet Big Oak Court:1004187P_Big Oak Court.rvt

NOT FOR
CONSTRUCTION

SITE PLAN
REVIEW

PROJECT: 024187
DATE: 03.06.2026
REVISIONS: DATE

*PM = PERMIT, RM = RFI, # = REVISION
DRAWN BY: TG
CHECKED BY: KS, PK

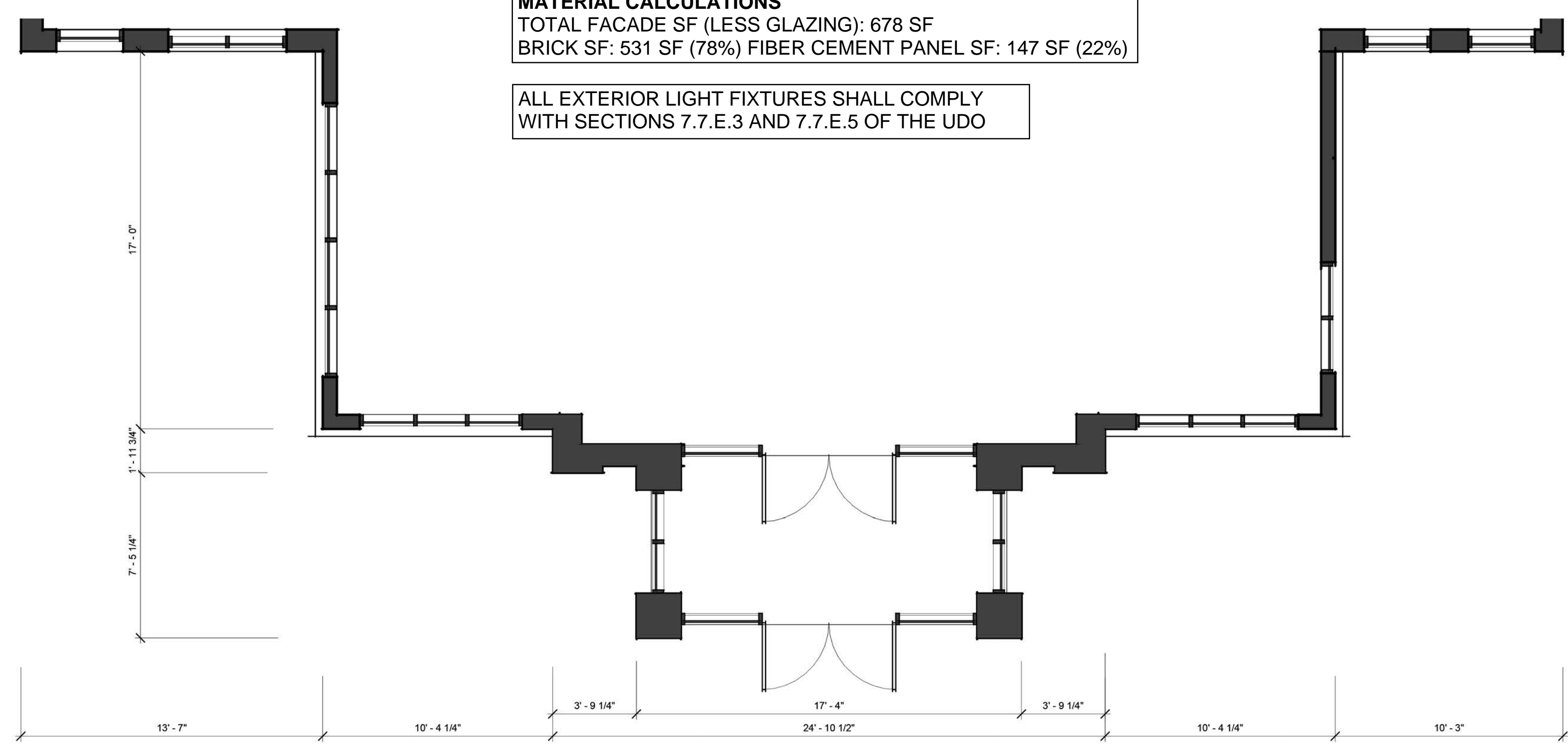
SOUTH ELEVATION



SOUTH ELEVATION GLAZING CALCULATIONS
TOTAL FACADE SF: 1,159 SF GLAZING SF: 481 SF (42%)

MATERIAL CALCULATIONS
TOTAL FACADE SF (LESS GLAZING): 678 SF
BRICK SF: 531 SF (78%) FIBER CEMENT PANEL SF: 147 SF (22%)

ALL EXTERIOR LIGHT FIXTURES SHALL COMPLY WITH SECTIONS 7.7.E.3 AND 7.7.E.5 OF THE UDO



a. **Town Certification.** This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: _____ Date: _____
Town Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

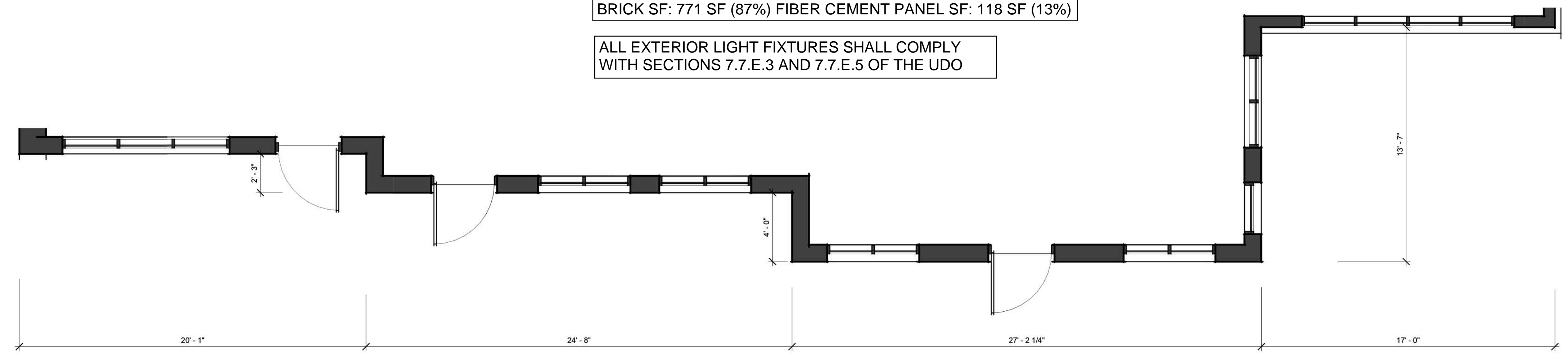
By: _____ Date: _____
Land Use Administrator



WEST ELEVATION GLAZING CALCULATIONS
TOTAL FACADE SF: 1,416 SF GLAZING SF: 527 SF (37%)

MATERIAL CALCULATIONS
TOTAL FACADE SF (LESS GLAZING): 889 SF
BRICK SF: 771 SF (87%) FIBER CEMENT PANEL SF: 118 SF (13%)

ALL EXTERIOR LIGHT FIXTURES SHALL COMPLY WITH SECTIONS 7.7.E.3 AND 7.7.E.5 OF THE UDO



NOT FOR CONSTRUCTION

SITE PLAN REVIEW

| | |
|------------|------------|
| PROJECT: | 024187 |
| DATE: | 03.06.2026 |
| REVISIONS: | DATE |

a. **Town Certification.** This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: _____ Date: _____
Town Engineer

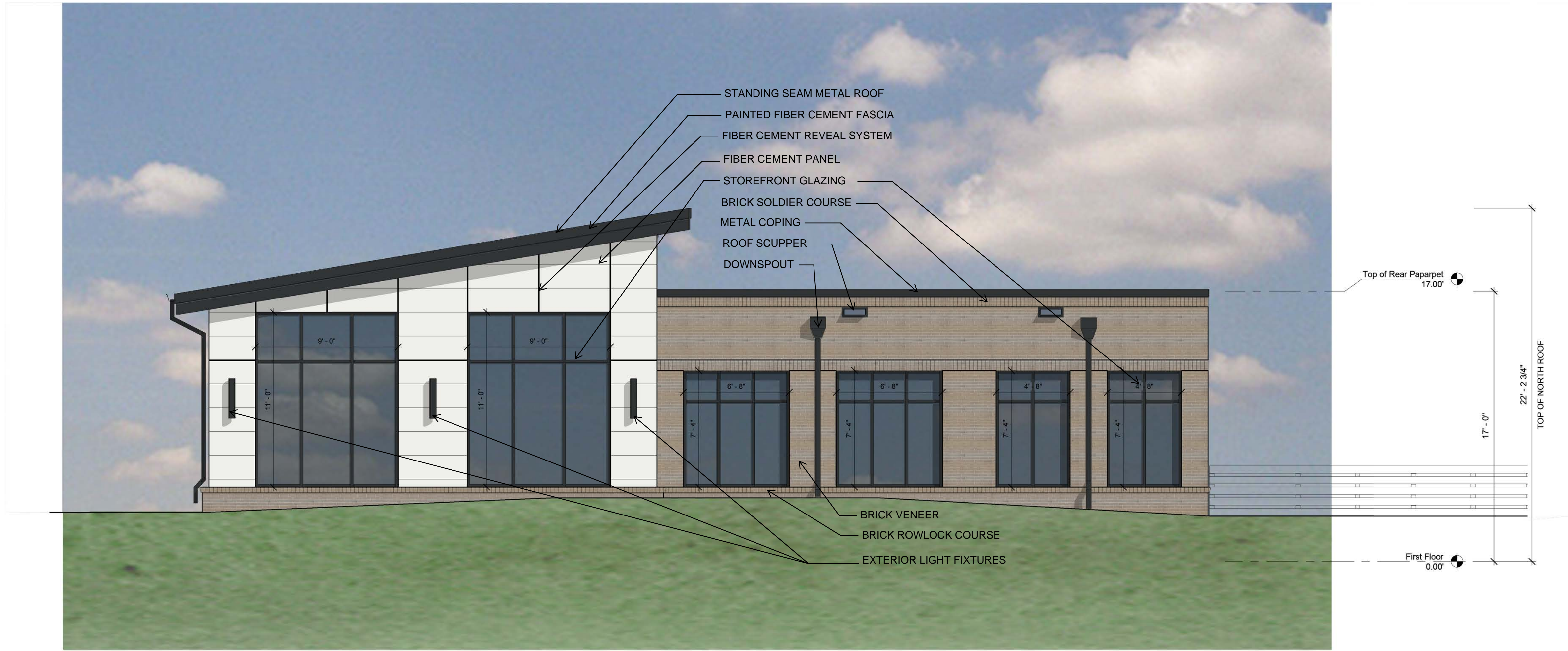
These plans are approved by the Town of Knightdale and serve as construction plans for this project.

By: _____ Date: _____
Land Use Administrator

WEST ELEVATION 1
1/4" = 1'-0"

*# = PERMIT, R# = RFI, # = REVISION
DRAWN BY: TG
CHECKED BY: KS, PK

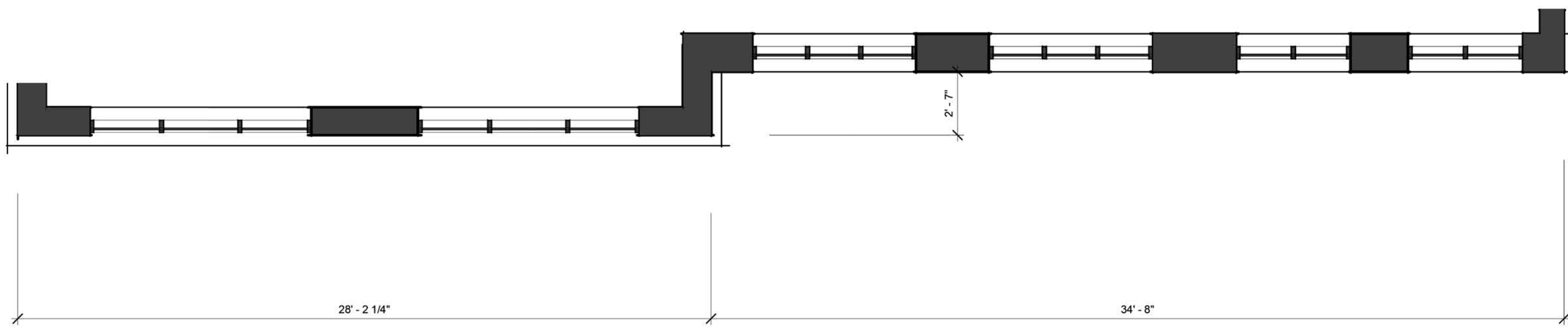
WEST ELEVATION



NORTH ELEVATION GLAZING CALCULATIONS
 TOTAL FACADE SF: 891 SF GLAZING SF: 364 SF (41%)

MATERIAL CALCULATIONS
 TOTAL FACADE SF (LESS GLAZING): 527 SF
 BRICK SF : 325 SF (62%) FIBER CEMENT PANEL SF: 202 SF (38%)

ALL EXTERIOR LIGHT FIXTURES SHALL COMPLY WITH SECTIONS 7.7.E.3 AND 7.7.E.5 OF THE UDO



a. **Town Certification.** This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.

By: _____ Date: _____
 Town Engineer

These plans are approved by the Town of Knightdale and serve as construction plans for this project.

By: _____ Date: _____
 Land Use Administrator

NORTH ELEVATION 1
 1/4" = 1'-0"

NOT FOR CONSTRUCTION

SITE PLAN REVIEW

| | |
|------------|------------|
| PROJECT: | 024187 |
| DATE: | 03.06.2026 |
| REVISIONS: | DATE |

*P# = PERMIT, R# = RFI, # = REVISION
 DRAWN BY: TG
 CHECKED BY: KS, PK

NORTH ELEVATION

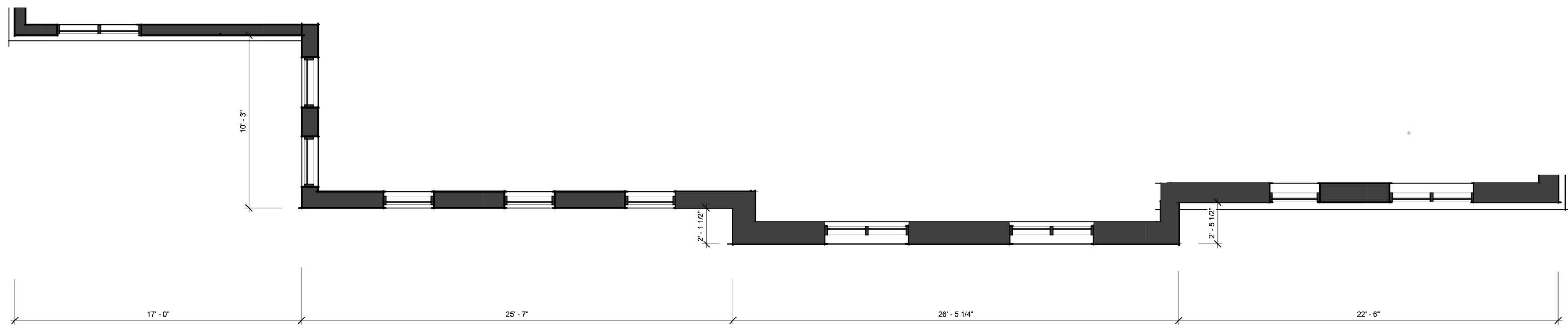


21' - 7 3/4"
TOP OF SOUTH ROOF
11' - 3 1/2"
TOP OF ENTRY PORTICO ROOF

Top of Parapet 15.00'
15'-0"
22' - 2 3/4"
TO TOP OF NORTH ROOF
First Floor 0.00'

MATERIAL CALCULATIONS
TOTAL FACADE SF (LESS GLAZING): 1,050 SF
BRICK SF: 668 SF (64%) FIBER CEMENT PANEL SF: 382 SF (36%)

ALL EXTERIOR LIGHT FIXTURES SHALL COMPLY WITH SECTIONS 7.7.E.3 AND 7.7.E.5 OF THE UDO



a. **Town Certification.** This design has been reviewed by the Engineer for the Town of Knightdale, and to the best of my knowledge and belief, it conforms to the requirements established in the Standard Specifications of the Town of Knightdale.
By: _____ Date: _____
Town Engineer
These plans are approved by the Town of Knightdale and serve as construction plans for this project.
By: _____ Date: _____
Land Use Administrator

EAST ELEVATION 1
1/4" = 1'-0"

NOT FOR CONSTRUCTION

SITE PLAN REVIEW

PROJECT: 024187
DATE: 03.06.2026
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EAST ELEVATION

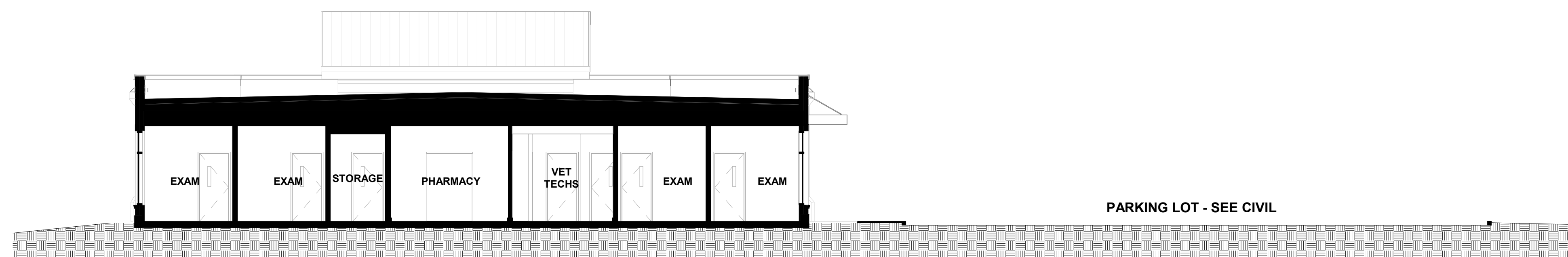
NOT FOR
CONSTRUCTION

SITE PLAN
REVIEW

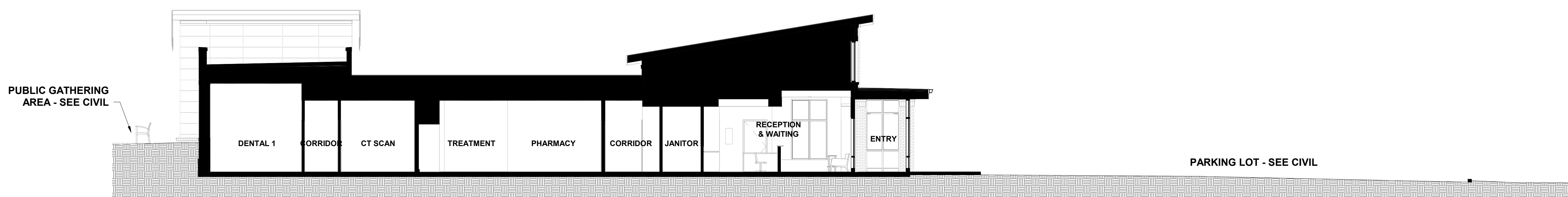
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CROSS SECTIONS



TRANSVERSE SECTION 2
1/8" = 1'-0"



LONGITUDINAL SECTION 1
1/8" = 1'-0"

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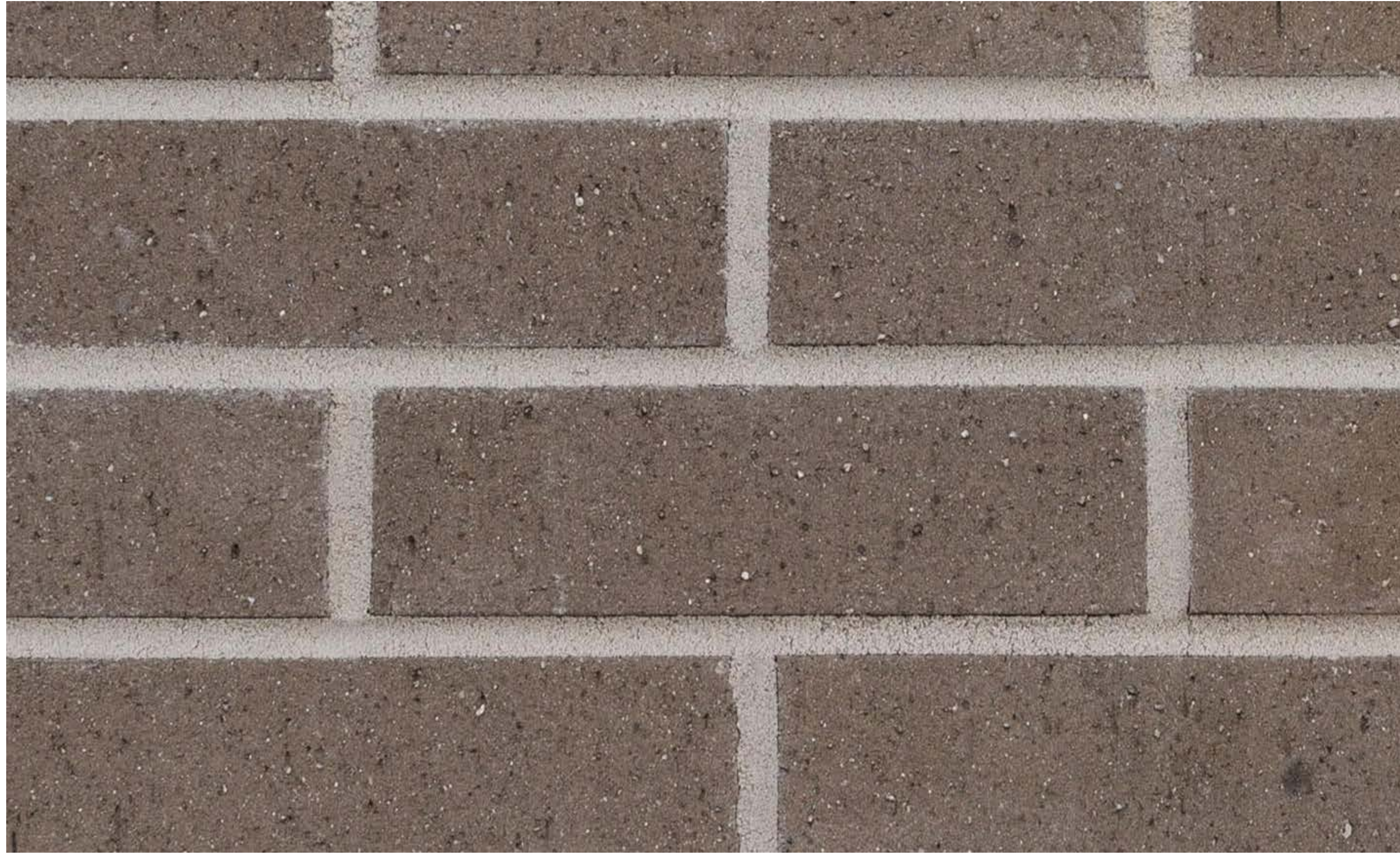
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Town Engineer

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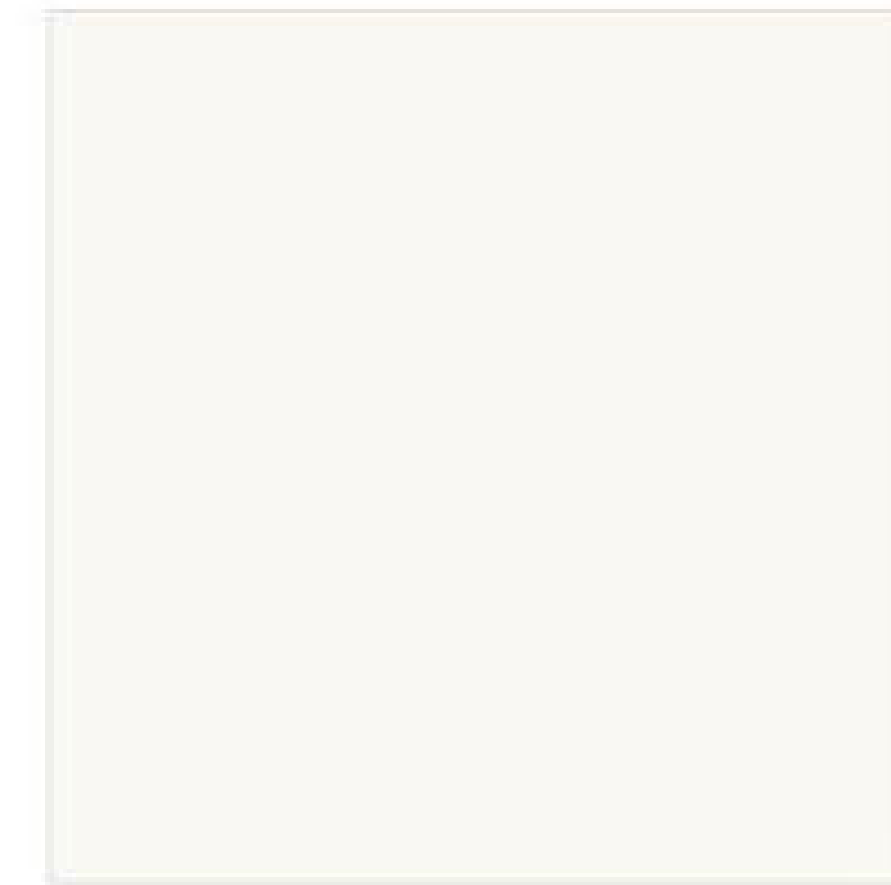
By: _____ Date: _____
Land Use Administrator

10/10/2025 1:54:43 PM Autodesk Docs:024187 - Wake Vet Big Oak Court 024187.dwg - Big Oak Court

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PALMETTO BRICK VENEER
2.0 GREYSTONE WIRECUT



NICHIHA ILLUMINATION CEMENTITIOUS
PANEL (OR SIMILAR)
WARM WHITE



STOREFRONT, GUTTERS, FASCIA,
DOWNSPOUTS
DARK BRONZE - PANTONE 7518V

ALL EXTERIOR LIGHT FIXTURES SHALL COMPLY
WITH SECTIONS 7.7.E.3 AND 7.7.E.5 OF THE UDO

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MATERIAL BOARD