

ToK Project # ZCP-7-24

7800 KNIGHTDALE BLVD.



Know what's below.
Call before you dig.
Dial 811 or 1-800-632-4949

owner:

Axiom Holdings, LLC
3739 National Drive, STE 105
Raleigh, NC 27612
(919) 760-0101
Contact: Tom White

landscape architect:

TMTLA Associates
5011 Southpark Drive, Ste. 200
Durham, North Carolina 27713
(919) 484-8880
Contact: Andy Porter, PLA

civil engineer:

Stocks Engineering
801 East Washington Street
Nashville, North Carolina 27856
(252) 459-8196
Contact: Ethan Averette, PE

architect:

Evolution Design & Development
409 Sadie Drive
Matthews, NC 28105
(980) 579-0581
Contact: Brian Fifolt, Designer

surveyor:

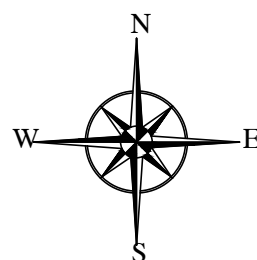
Stewart-Proctor, LLC
319 Chapanoke Rd # 106
Raleigh, North Carolina 27603
(919) 779-1855
Contact: Herbert Proctor, PLS

7800 KNIGHTDALE BLVD. KNIGHTDALE, NC 27545

MASTER PLAN
PIN# 1754773240



VICINITY MAP
NOT TO SCALE



WATER ALLOCATION SUMMARY

WATER ALLOCATION SUMMARY PER TOWN OF KNIGHTDALE MUNICIPAL WATER ALLOCATION POLICY - PROJECTS MUST BE AWARDED 50 TOTAL POINTS OR MORE TO MERIT WATER ALLOCATION.	
BASE POINTS ALL OTHER USES NOT CATEGORIZED THIS CATEGORY OF USE CAPTURES ALL OTHER USES NOT CATEGORIZED ELSEWHERE. ALLOCATIONS FOR SUCH USES ARE LEFT TO THE DISCRETION OF THE TOWN COUNCIL UPON RECOMMENDATION OF THE LAND USE REVIEW BOARD AND ACTED ON A CASE-BY-CASE BASIS.	
SECTION 1A - ABATEMENT OF NONCONFORMITIES ABATEMENT OF ANY EXISTING NON-CONFORMING STRUCTURES. THE EXISTING NON-CONFORMING STRUCTURE IS PROPOSED TO BE ABATED.	(MAX - 3 POINTS) 3 POINTS
SECTION 2B - PARKING LOTS AND STORMWATER BMP'S CONSTRUCT A FOUNTAIN OR OTHER STORMWATER AMENITY WITHIN THE BMP (AS APPROVED BY STAFF) PROPOSED FOUNTAIN IN SCM.	(MAX - 10 POINTS) 4 POINTS
PROVISION OF ON-STREET PUBLIC PARKING (1 POINT PER STALL UP TO 4 MAX) 6 ON-STREET PUBLIC PARKING SPACES PROVIDED.	4 POINTS
SECTION 3A - OUTDOOR ENHANCEMENT OUTDOOR DISPLAY OF PUBLIC ART (SUBJECT TO TRC APPROVAL) PROPOSED PUBLIC ART ALONG THE PROJECT FRONTAGE ON KNIGHTDALE BLVD. BETWEEN BUILDINGS 1&2.	(MAX - 10 POINTS) 4 POINTS
ENHANCED ROADSIDE LANDSCAPING (SUBJECT TO TRC APPROVAL) SUPPLEMENTAL ROADSIDE LANDSCAPING IS NOW PROVIDED ALONG KNIGHTDALE BLVD. AND METROLINER PLACE.	2 POINTS
SECTION 3B - TRANSIT PROVISION OF 10 DESIGNATED PARK & RIDE STALLS 10 DESIGNATED PARK & RIDE STALLS PROVIDED ON-SITE	(MAX - 8 POINTS) 3 POINTS
TOTAL BASE POINTS = 30 TOTAL BONUS POINTS = 20 OVERALL TOTAL POINTS = 50	

SUBMITTAL DATES

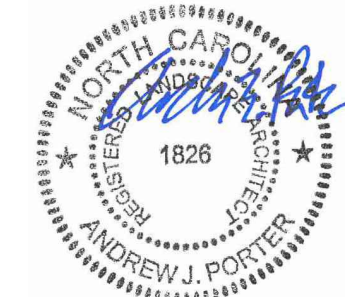
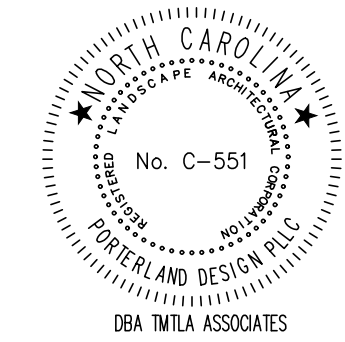
SKETCH PLAN FIRST SUBMITTAL	4/9/2024
SKETCH PLAN SECOND SUBMITTAL	10/14/2024
MASTER PLAN FIRST SUBMITTAL	11/24/2025

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A201	BUILDING THREE EXTERIOR ELEVATIONS
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SITE DATA

OWNER:	AXIOM HOLDINGS, LLC
OWNER ADDRESS:	3739 NATIONAL DR. STE. 105, RALEIGH, NC 27612
PROPERTY ADDRESS:	7800 KNIGHTDALE BLVD.
PIN:	1754773240
REID:	0115243
DEED:	D819287/DP1910
PROPERTY AREA:	217,652 SF / 5.00 AC
EX. USE:	VEHICLE/HEAVY EQUIPMENT SALES; AUTO PARTS SALES (R&K MARINE, INC.)
PROPOSED USE:	GENERAL RETAIL / MEDICAL SERVICES
EX. ZONING:	HB - HIGHWAY BUSINESS
OVERLAYS:	NONE
JURISDICTION:	TOWN OF KNIGHTDALE
BUILDING AREA:	3,454 SF EXISTING TO BE DEMOLISHED BLDG #1 - 7,917 SF RETAIL BLDG #2 - 7,917 SF RETAIL BLDG #3 - 14,008 SF MEDICAL SERVICES TOTAL BLDG SF PROPOSED = 29,842 SF
FRONT SETBACK:	10' MIN., 30' MAX.
SIDE SETBACK:	6' MIN., 30' MAX.
REAR SETBACK:	0' MIN.
PARKING REAR SETBACK:	5'
BUILDING HEIGHT:	70' MAX (5-STORIES) BLDG. 1 & 2 - 30' PROPOSED (1-STORY) (SEE BLDG. ELEVATIONS) BLDG. 3 - 23' PROPOSED (1-STORY) (SEE BLDG. ELEVATIONS)
WATERSHED:	MARKS CREEK
WATERSHED OVERLAY:	NONE
RIVER BASIN:	NEUSE RIVER BASIN
PUBLIC GATHERING SPACE:	UDO SEC. 6.9. A MINIMUM OF 1 SF PER EVERY 25 SF OF GROSS FLOOR AREA OR 500 SF, WHICHEVER IS LESS, OF PUBLIC GATHERING SPACE SHALL BE PROVIDED.
TREE COVERAGE:	EXISTING PARCEL PERIMETER = 2,037 LF REQUIRED TREE COVER AREA = 2,037 X 20 = 40,740 SF / 0.94 AC (0.94 AC / 5.0 AC = 18.8%) EXISTING PARCEL AREA = 217,652 SF MAX TREE COVER AREA (108) = 217,652 SF X 0.1 = 21,765 SF / 0.50 AC PRESERVED TREE COVER AREA #1 = 19,927 SF PRESERVED TREE COVER AREA #2 = 4,315 SF PRESERVED TREE COVER AREA #3 = 2,744 SF PRESERVED TREE COVER AREA #4 = 3,216 SF PRESERVED TREE COVER AREA TOTAL = 30,224 SF / 0.69 AC (0.69 AC / 5.0 AC = 13.8%)
LANDSCAPE BUFFERS:	NORTH - HB ZONING TO HB ZONING, NO BUFFER YARD REQUIRED EAST-1 - HB ZONING TO NMXPUD ZONING, 20' TYPE B BUFFER YARD EAST-2 - HB ZONING TO UR12 ZONING, 30' TYPE C BUFFER YARD SOUTH-1 - HB ZONING TO NMXPUD ZONING, 20' TYPE B BUFFER YARD WEST - KNIGHTDALE BLVD., NO BUFFER YARD REQUIRED
VEHICULAR PARKING:	UDO SEC. 7.1.G. BASED ON PROPOSED USE BLDG #1 GENERAL RETAIL (10K SF OR LESS) MIN- PARKING SPACES 1/2 MAXIMUM ALLOWED (14 MIN. SPACES) MAX- PARKING SPACES 3.5 PER KSF GFA 7,917 / 1,000 SF = 7.9 X 3.5 = 27.6 (28) MAX PARKING SPACES ALLOWED BLDG #2 GENERAL RETAIL (10K SF OR LESS) MIN- PARKING SPACES 1/2 MAXIMUM ALLOWED (14 MIN. SPACES) MAX- PARKING SPACES 3.5 PER KSF GFA 7,917 / 1,000 SF = 7.9 X 3.5 = 27.6 (28) MAX PARKING SPACES ALLOWED BLDG #3 MEDICAL SERVICES MIN- PARKING SPACES 1/2 MAXIMUM ALLOWED (39 MIN. SPACES) MAX- PARKING SPACES 5.5 PER KSF GFA 14,008 / 1,000 SF = 14.008 X 5.5 = 77.04 (77) MAX PARKING SPACES ALLOWED MIN- PARKING REQUIRED = 67 SPACES MAX- PARKING ALLOWED = 133 SPACES 125 TOTAL PARKING SPACES PROVIDED INCLUDING 6 ADA VAN SPACES BLDG. 1 = 26 SPACES PROVIDED BLDG. 2 = 25 SPACES PROVIDED BLDG. 3 = 74 SPACES PROVIDED
ELECTRIC VEHICLE PARKING:	UDO SEC. 7.1.I. NONRESIDENTIAL USES WITH OFF-STREET PARKING FOR MOTORIZED VEHICLES OF MORE THAN FORTY (40) SPACES SHALL PROVIDE ELECTRIC VEHICLE CHARGING STATIONS AT A RATE OF ONE (1) ELECTRIC VEHICLE CHARGING STATION FOR EVERY FORTY (40) MOTORIZED VEHICLE SPACES BLDG 1&2 - 51 / 40= 1.2 (2) EV CHARGING STATIONS REQUIRED/PROVIDED BLDG 3 - 76 / 40= 1.9 (2) EV CHARGING STATIONS REQUIRED/PROVIDED
BICYCLE PARKING:	UDO SEC. 7.1.F. ONE (1) BICYCLE PARKING SPACE FOR EVERY TEN (10) MOTORIZED VEHICLE SPACES BLDG 1&2 - 51 MOTOR VEHICLE SPACES / 10 = 5.1 (6) BIKE PARKING SPACES REQUIRED/ 8 PROVIDED BLDG 3 - 74 MOTOR VEHICLE SPACES / 10 = 7.4 (8) BIKE PARKING SPACES REQUIRED/PROVIDED



11-24-2025
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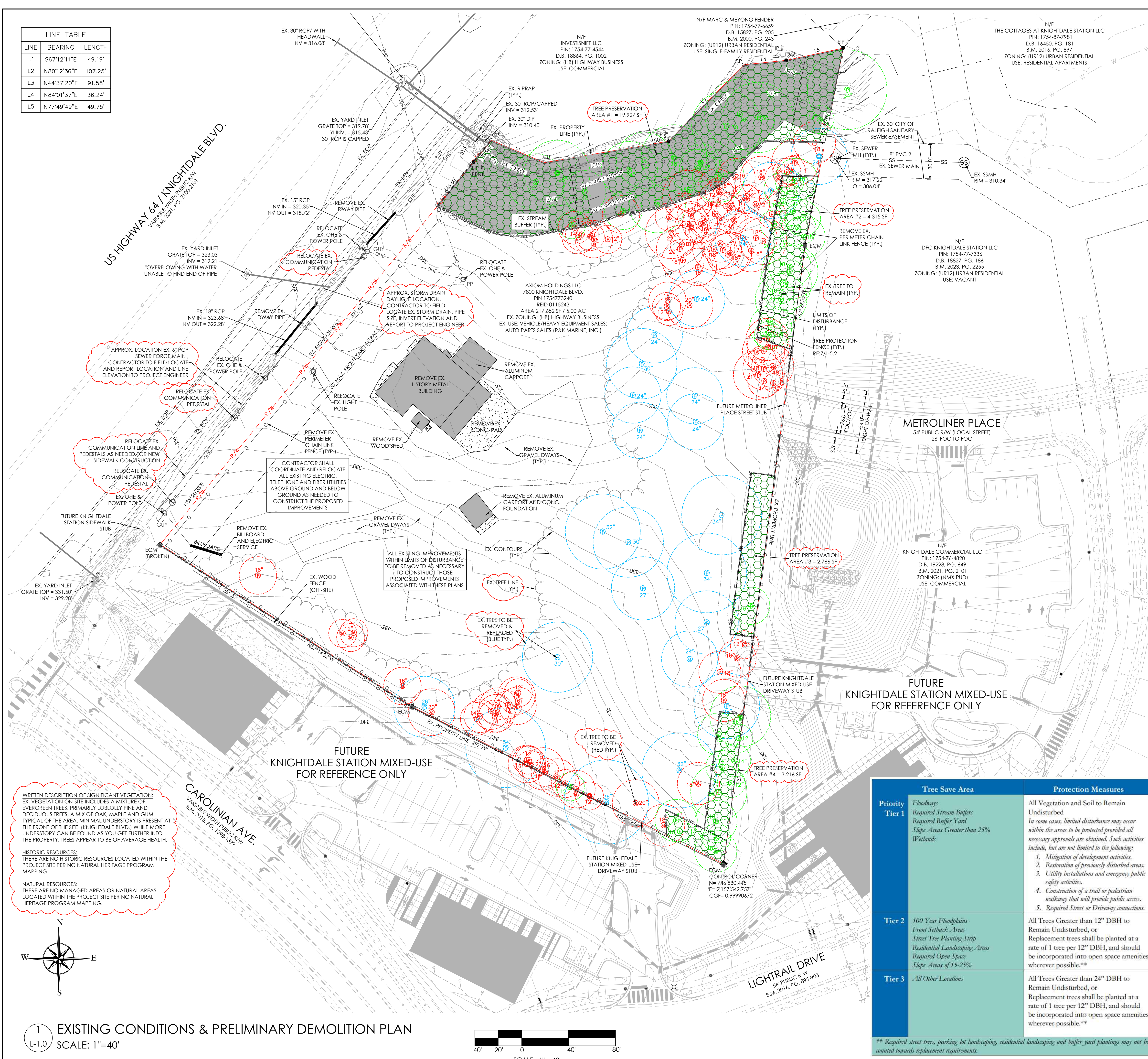
REVISIONS:

1. Tok Sketch Plan 1st review Comments 2024-10-14
2. Tok Sketch Plan 2nd review Comments 2025-11-24

COVER SHEET
7800 KNIGHTDALE BLVD.
7800 KNIGHTDALE BLVD
KNIGHTDALE, NC 27545
TOK PROJECT #ZCP-7-24

SCALE:
AS NOTED
DRAWN BY:
AJP
PROJECT #
24029
DATE:
11/13/2025
SHEET
L-0.0
OF

LINE	BEARING	LENGTH
L1	S67°12'11"E	49.19'
L2	N80°12'36"E	107.25'
L3	N44°37'20"E	91.58'
L4	N84°01'37"E	36.24'
L5	N77°49'49"E	49.75'



EXISTING CONDITIONS NOTES

- BOUNDARY AND FIELD TOPOGRAPHIC SURVEY PROVIDED BY STEWART-PROCTOR, MAY 2024.
- ADDITIONAL BASE INFORMATION PER WAKE COUNTY GIS.
- PROJECT SITE IS NOT LOCATED WITHIN ANY SPECIAL FLOOD HAZARD AREAS OR FUTURE CONDITIONS FLOOD HAZARD AREAS, AS SHOWN ON FIRM PANEL #3720175400K (ZONE X) DATED JULY 19, 2022.
- THERE ARE NO PROTECTED WETLANDS WITHIN THE PROJECT SITE AS DETERMINED BY SOIL & ENVIRONMENTAL CONSULTANTS, INC.
- THERE ARE BUFFERED STREAMS WITHIN THE PROJECT SITE AS DETERMINED BY SOIL & ENVIRONMENTAL CONSULTANTS, INC.
- EXISTING CONDITIONS AS SHOWN ON THESE PLANS ARE GENERAL AND ILLUSTRATIVE IN NATURE AND DO NOT INCLUDE MECHANICAL, ELECTRICAL AND MISCELLANEOUS STRUCTURES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW THE PROJECT SITE AND FAMILIARIZE WITH ACTUAL FIELD CONDITIONS PRIOR TO BIDDING AND COMMENCING WORK. IF FIELD CONDITIONS ARE FOUND TO BE SIGNIFICANTLY DIFFERENT THE CONTRACTOR SHALL NOTIFY THE PROJECT LANDSCAPE ARCHITECT OR ENGINEER IMMEDIATELY.

DEMOLITION NOTES

- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL LOCAL AND STATE PERMITS TO PERFORM DEMOLITION WORK ON-SITE AND IN THE RIGHT-OF-WAY.
- IF ANY HAZARDOUS MATERIALS ARE FOUND ON SITE, THEY SHALL BE REMOVED BY A LICENSED HAZARDOUS MATERIALS HANDLER. CONTRACTOR SHALL NOTIFY OWNER IMMEDIATELY IF HAZARDOUS MATERIALS ARE ENCOUNTERED.
- CONTRACTOR SHALL PROTECT ADJACENT STRUCTURES AND INFRASTRUCTURE FROM DAMAGE DUE TO DEMOLITION ACTIVITIES. ANY DAMAGE OUTSIDE OF THE PROJECT LIMITS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST.
- DEMOLITION SHALL BE PERFORMED WITH DUE CARE AND DILIGENCE. ALL STRUCTURES AND UTILITIES NOT DESIGNATED FOR REMOVAL OR MODIFICATION SHALL REMAIN AND BE PROTECTED FROM DAMAGE DURING CONSTRUCTION. ANY DAMAGED INFRASTRUCTURE ON-SITE OR IN THE RIGHT-OF-WAY SHALL BE REPAIRED TO NCDOT OR TOWN OF KNIGHTDALE STANDARDS AND SPECIFICATIONS BY THE CONTRACTOR AT NO ADDITIONAL COST.
- ALL EXISTING IMPROVEMENTS WITHIN THE LIMITS OF DISTURBANCE ABOVE AND BELOW GROUND SHALL BE DEMOLISHED AS NECESSARY TO CONSTRUCT THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS. THIS INCLUDES, BUT IS NOT LIMITED TO, EXISTING TREES, VEGETATION, FENCES, PAVEMENTS, CURB AND GUTTER, STRUCTURES, FOUNDATIONS, POLES, SIGNAGE, WALLS, AND OTHER MISCELLANEOUS SITE ELEMENTS.
- CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES ABOVE AND BELOW GROUND AND SHALL BE RESPONSIBLE FOR ANY DAMAGE RESULTING FROM THEIR ACTIVITIES. CONTRACTOR SHALL NOTIFY NORTH CAROLINA ONE CALL (1-800-632-4949) LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR TO CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF NORTH CAROLINA ONE CALL. THE CONTRACTOR MAY ALSO NEED TO ENGAGE A PRIVATE UTILITY LOCATING FIRM AT THEIR OWN COST TO EFFICIENTLY HAVE ALL UTILITIES LOCATED. CONTRACTOR SHALL REPORT ALL DISCOVERED UTILITIES DURING CONSTRUCTION TO THE PROJECT LANDSCAPE ARCHITECT OR ENGINEER.
- CONTRACTOR SHALL COORDINATE UTILITY ABANDONMENT, REMOVAL, AND RELOCATION WITH THE APPROPRIATE UTILITY SERVICE PROVIDER. ALL UTILITY ABANDONMENT, REMOVAL AND RELOCATION WORK SHALL BE PERFORMED PER THE SERVICE PROVIDERS STANDARDS AND SPECIFICATIONS.
- REFERENCE SITE LAYOUT PLAN SHEET 1-2 FOR LAYOUT DIMENSIONS AND EXTENT OF DEMOLITION AREAS. ALL PAVEMENT, CURB AND GUTTER AND SIDEWALK TO BE REMOVED SHALL BE SAW CUT TO PROVIDE A STRAIGHT AND UNIFORM LINE FOR REMOVAL. EXISTING PAVEMENT, CURB AND GUTTER, AND SIDEWALK NOT INDICATED FOR REMOVAL, WHICH IS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED TO MATCH ORIGINAL CONFIGURATION.
- ALL DEMOLITION AND CONSTRUCTION WASTE SHALL BE REMOVED FROM THE PROJECT SITE BY THE CONTRACTOR AND DISPOSED OF PROPERLY PER STATE, LOCAL, AND FEDERAL REGULATIONS.
- UNLESS OTHERWISE DIRECTED, THE CONTRACTOR SHALL PROTECT ALL TREES THAT ARE TO REMAIN AND FENCE WHICH MAY RISK DAMAGE FROM CONSTRUCTION EQUIPMENT OR WORK. TREE PROTECTION FENCING SHALL BE INSTALLED AS SHOWN ON THESE PLANS. ALL TREES WHICH ARE TO BE REMOVED SHALL BE DONE IN A MANNER WHICH WILL NOT INJURE PLANT MATERIAL TO REMAIN. STUMPS SHALL BE COMPLETELY REMOVED AND HAULED OFF.
- CONTRACTOR SHALL STRIP TOPSOIL AND STOCKPILE FOR LATER REUSE.
- EROSION AND SEDIMENTATION CONTROL MEASURES PER APPROVED EROSION CONTROL PLANS SHALL BE IN PLACE AND IN WORKING ORDER PRIOR TO THE START OF ANY DEMOLITION ACTIVITIES.

LEGEND

	EXISTING NEUSE RIVER BUFFER		EXISTING PINE 12\"/>
	EXISTING PRESERVED TREE COVER AREA		EXISTING GUM 12\"/>
	PROPERTY BOUNDARY LINES		EXISTING ELM 12\"/>
	EXISTING ROW		EXISTING CEDAR 12\"/>
	EXISTING STREAM BUFFER		EXISTING OAK 12\"/>
	EXISTING MAJOR CONTOUR		EXISTING MAPLE 12\"/>
	EXISTING MINOR CONTOUR		EXISTING MIMOSA 12\"/>
	EXISTING OVERHEAD ELECTRIC		EXISTING POPLAR 12\"/>
	EXISTING SANITARY SEWER		EXISTING PLUM 12\"/>
	EXISTING SEWER FORCE MAIN		EX. TREE TO BE REMOVED
	EXISTING STORM DRAIN		EX. TREE TO BE REMOVED AND REPLACED
	EXISTING WATER MAIN		EX. TREE TO BE PRESERVED
	EXISTING UTILITY EASEMENT		

TREE REPLACEMENT CALCULATIONS

TIER 2 - FRONT SETBACK AREAS: ALL TREES GREATER THAN 12\"/>	TIER 2 REMOVALS = 0 TREES GREATER THAN 12\"/>
TIER 3 - ALL OTHER LOCATIONS: ALL TREES GREATER THAN 24\"/>	TIER 3 REMOVALS = 23 TREES 27\"/>
640' TOTAL DBH REMOVED, 640' / 12\"/>	

TMTLA ASSOCIATES

LANDSCAPE ARCHITECTURE & LAND PLANNING

5011 SOUTH PARK DRIVE, STE. 200-DURHAM, NC 27713

p: (919) 484-8880 e: info@tmtla.com

NORTH CAROLINA

LANDSCAPE ARCHITECT

No. C-551

11-24-2025

PRELIMINARY NOT FOR CONSTRUCTION

NORTH CAROLINA

REGISTERED PROFESSIONAL

1828

ANDREW J. PORTER

EXISTING CONDITIONS & PRELIMINARY DEMOLITION PLAN

7800 KNIGHTDALE BLVD.

7800 KNIGHTDALE BLVD

KNIGHTDALE, NC 27545

TOK PROJECT #ZCP-7-24

SCALE:

AS NOTED

DRAWN BY:

AJP

PROJECT #

24029

DATE:

11/13/2025

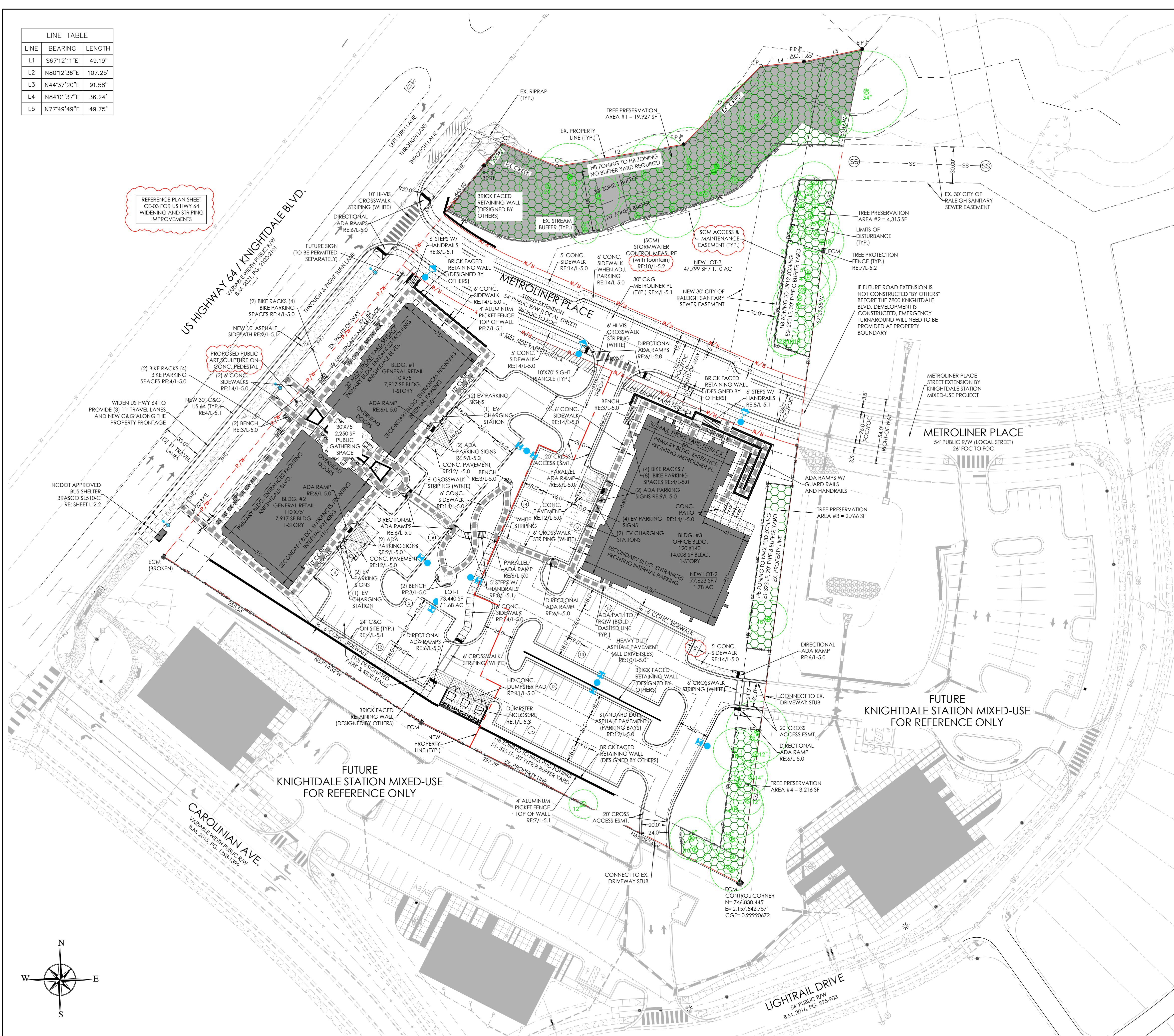
SHEET

L-1.0

OF

LINE TABLE		
LINE	BEARING	LENGTH
L1	S67°12'11"E	49.19'
L2	N80°12'36"E	107.25'
L3	N44°37'20"E	91.58'
L4	N84°01'37"E	36.24'
L5	N77°49'49"E	49.75'

REFERENCE PLAN SHEET
CE-03 FOR US HWY 64
WIDENING AND STRIPING
IMPROVEMENTS



SITE LAYOUT PLAN NOTES

1. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH ALL TOWN OF KNIGHTDALE, AND NCDOT STANDARDS AND SPECIFICATIONS AS APPLICABLE. IF DISCREPANCIES ARE FOUND THE MORE STRINGENT REQUIREMENTS WILL PREVAIL.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS TO COMPLETE THE PROPOSED WORK. NO CHANGES MAY BE MADE TO THE APPROVED DRAWINGS WITHOUT WRITTEN PERMISSION FROM THE ISSUING AUTHORITY.
3. DIMENSIONS ARE TO EDGE OF PAVEMENT, EDGE OF SIDEWALK, BACK OF CURB, CENTERLINE OF COLUMN AND FACE OF BUILDING WALL UNLESS OTHERWISE NOTED. ALL ANGLES ARE 90 DEGREES UNLESS OTHERWISE NOTED.
4. CONTRACTOR SHALL COORDINATE ALL WORK WITH ALL CONSTRUCTION TRADES PRIOR TO START OF CONSTRUCTION. CONTRACTOR TO REFERENCE CURRENT ARCHITECTURAL DRAWINGS FOR BUILDING INFORMATION.
5. ALL PAINT STRIPING, PAVEMENT MARKINGS, AND SIGNAGE SHALL CONFORM TO THE LATEST MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. PAINT STRIPING SHALL BE WHITE UNLESS OTHERWISE NOTED.
6. ALL LANDSCAPE ISLANDS SHALL HAVE RAISED CURB AND GUTTER. MINIMUM CURB RADII SHALL BE 3' UNLESS OTHERWISE NOTED.
7. A SEPARATE PERMIT AND APPROVAL IS REQUIRED FOR SIGNS.
8. FIRE LANE MARKING AND SIGNAGE TO BE IN ACCORDANCE WITH LOCAL GUIDELINES. CONTRACTOR TO CONTACT THE LOCAL FIRE MARSHAL FOR INSTRUCTIONS.
9. THE SITE WILL BE FULLY COMPLIANT WITH THE NORTH CAROLINA ACCESSIBILITY CODES (ANSI 117.1 - 2009 AND CHAPTER 11 OF THE NCBIC) UNLESS AND EXCEPT IN AREAS WHERE AN APPROVED STATEMENT FROM A SITE ENGINEER, SURVEYOR OR ARCHITECT VERIFIES THAT SITE CONDITIONS EXIST WHERE THE TOPOGRAPHY OF THE SITE IS EXTREME AND ONLY ALTERNATE METHODS OF COMPLIANCE ARE POSSIBLE.
10. ALL PAVEMENT PATCHING SHALL BE PERFORMED PER TOWN OF KNIGHTDALE OR NCDOT STANDARDS AND SPECIFICATION, AS APPLICABLE.
11. CONTRACTOR SHALL UTILIZE SIGNS, BARRICADES, FLAGMEN OR GUARDS AS REQUIRED TO PROTECT THE SAFETY OF ALL VEHICULAR AND PEDESTRIAN TRAFFIC DURING CONSTRUCTION.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR LAYOUT OF ALL WORK AS ILLUSTRATED ON THE PLANS. ALL PROJECT STAKING SHALL BE PERFORMED BY A REGISTERED PROFESSIONAL SURVEYOR PAID BY THE CONTRACTOR. DO NOT SCALE THE DRAWINGS. DIGITAL INFORMATION IS PROVIDED FOR CONSTRUCTION DRAWINGS. IF EXISTING CONDITIONS DIFFER FROM THOSE ILLUSTRATED ON THE PLANS, NOTIFY THE LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION.
13. CONTRACTOR SHALL FURNISH ALL MATERIALS AND LABOR TO COMPLETE THE WORK ILLUSTRATED ON THE DRAWINGS.
14. WITHIN THE SIGHT TRIANGLES SHOWN ON THIS PLAN, NO OBSTRUCTION BETWEEN TWO (2) FEET AND EIGHT (8) FEET IN HEIGHT ABOVE THE CURB LINE ELEVATION OR THE NEAREST TRAVELED WAY IF NO CURBING EXISTS.
15. ALL NEW UTILITIES SHALL BE LOCATED UNDERGROUND UNLESS OTHERWISE NOTED.
16. RETAINING WALLS SHALL BE WOOD, BRICK, OR STONE PER UDO SEC. 7.6.8.3.B.

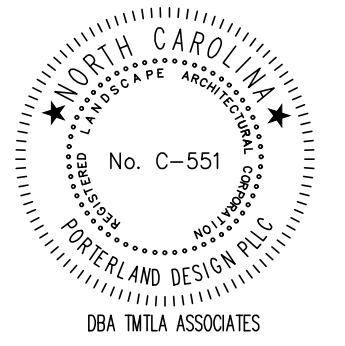
LEGEND

	EXISTING NEUSE RIVER BUFFER
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	EXISTING MAJOR CONTOUR
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	EXISTING SEWER FORCE MAIN
	EXISTING STORM DRAIN
	EXISTING WATER MAIN
	EXISTING UTILITY EASEMENT
	PROPOSED ROW
	PROPOSED PROPERTY LINE
	PROPOSED TREE PROTECTION FENCE
	PROPOSED LIMITS OF DISTURBANCE
	PROPOSED RETAINING WALL
	PROPOSED CHAIN LINK FENCE
	PROPOSED ALUMINUM PICKET FENCE
	PROPOSED UTILITY EASEMENT
	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	PROPOSED STORM PIPE
	PROPOSED SANITARY SEWER
	PROPOSED WATER
	ADA ROUTE TO ROW
	PROPOSED BUILDING SETBACK
	PROPOSED LANDSCAPE BUFFER

SITE LIGHTING NOTES

1. PROPOSED SITE LIGHTING SHALL MEET ALL STANDARDS AND SPECIFICATIONS OF THE TOWN OF KNIGHTDALE AND NCDOT AS APPLICABLE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS TO COMPLETE THE PROPOSED WORK.
3. LIGHTING SHALL BE ORIENTED NOT TO DIRECT GLARE OR EXCESSIVE ILLUMINATION ONTO STREETS IN A MANNER THAT MAY DISTRACT OR INTERFERE WITH THE VISION OF MOTOR VEHICLE DRIVES ON SUCH STREETS.
4. CONTRACTOR TO COORDINATE ALL BUILDING MOUNTED LIGHTING WITH ELECTRICAL DESIGNER.
5. CONTRACTOR SHALL COORDINATE LIGHT FIXTURE, AND LIGHT POLE INSTALLATION WITH DUKE ENERGY.
6. CONTRACTOR TO PROVIDE 2" SCHEDULE 40 PVC ELECTRICAL CONDUIT UNDER PAVEMENT, UNDER HEAVILY LANDSCAPED AREAS AND AS NECESSARY TO PROVIDE ACCESS TO ALL LIGHT FIXTURES/POLES AND CONNECT BACK TO ELECTRICAL TIE IN LOCATION.
7. CONTRACTOR TO COORDINATE LIGHT POLE AND CONDUIT LOCATIONS PRIOR TO PAVING.
8. ALL ELECTRICAL CONDUIT, LIGHT POLES, AND FIXTURES TO BE FURNISHED BY THE CONTRACTOR.
9. ALL CONDUIT ENDS ARE TO BE CAPPED TO PREVENT ENTRY OF DEBRIS.
10. ALL CONDUITS MORE THAN 20' IN LENGTH SHALL HAVE A POLY STRING INSTALLED.
11. ALL PVC JOINTS ARE TO BE SOLVENT WELDED.

TMTLA ASSOCIATES



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REVISIONS:

1. Tok Sketch Plan 1st review Comments 2024-10-14
2. Tok Sketch Plan 2nd review Comments 2025-11-24

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TOK PROJECT #ZCP-7-24

SCALE:
AS NOTED
DRAWN BY:
AJP
PROJECT #
24029
DATE:
11/13/2025
SHEET
L-2.0
OF

LINE TABLE		
LINE	BEARING	LENGTH
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L3	N44°37'20"E	91.58'
L4	N84°01'37"E	36.24'
L5	N77°49'49"E	49.75'

N: 747,526.374
E: 2,157,644.674
COMBINED FACTOR = 0.99990876

PHASING PLAN NOTES

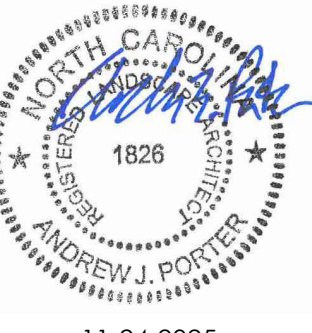
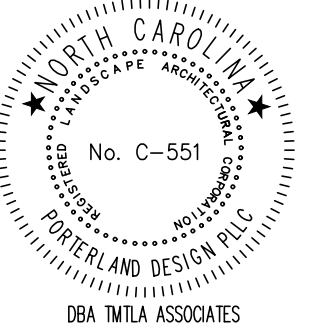
1. THE 7800 KNIGHTDALE BLVD. PROJECT WILL BE CONSTRUCTED IN TWO PHASES.
- PHASE 1 - ALL WORK OUTSIDE OF THE PHASE 2 AREA SHOWN ON THIS PLAN.
 - PHASE 2 - ALL WORK INSIDE THE PHASE 2 AREA SHOWN ON THIS PLAN.

LEGEND

	EXISTING NEUSE RIVER BUFFER
	EXISTING PRESERVED TREE COVER AREA
	CONCRETE PAVEMENT
	HEAVY DUTY ASPHALT
	STANDARD DUTY ASPHALT
	PHASE LINE
	PROPERTY BOUNDARY LINES
	EXISTING ROW
	EXISTING STREAM BUFFER
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	EXISTING OVERHEAD ELECTRIC
	EXISTING SANITARY SEWER
	EXISTING SEWER FORCE MAIN
	EXISTING STORM DRAIN
	EXISTING WATER MAIN
	EXISTING UTILITY EASEMENT
	PROPOSED ROW
	PROPOSED PROPERTY LINE
	PROPOSED TREE PROTECTION FENCE
	PROPOSED LIMITS OF DISTURBANCE
	PROPOSED RETAINING WALL
	PROPOSED CHAIN LINK FENCE
	PROPOSED ALUMINUM PICKET FENCE
	PROPOSED UTILITY EASEMENT
	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	PROPOSED STORM PIPE
	PROPOSED SANITARY SEWER
	PROPOSED WATER
	ADA ROUTE TO ROW
	PROPOSED BUILDING SETBACK
	PROPOSED LANDSCAPE BUFFER

TMTLA ASSOCIATES

LANDSCAPE ARCHITECTURE & LAND PLANNING
5011 SOUTH PARK DRIVE, STE. 200, DURHAM, NC 27713
p: (919) 484-8880 e: info@tmtla.com



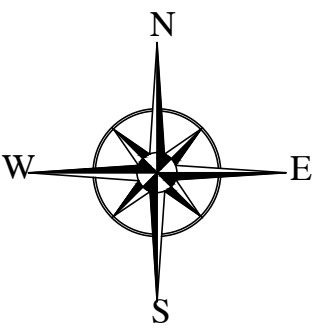
11-24-2025
PRELIMINARY
NOT FOR
CONSTRUCTION

REVISIONS:

1. Tok Sketch Plan 1st review Comments 2024-10-14
2. Tok Sketch Plan 2nd review Comments 2025-11-24

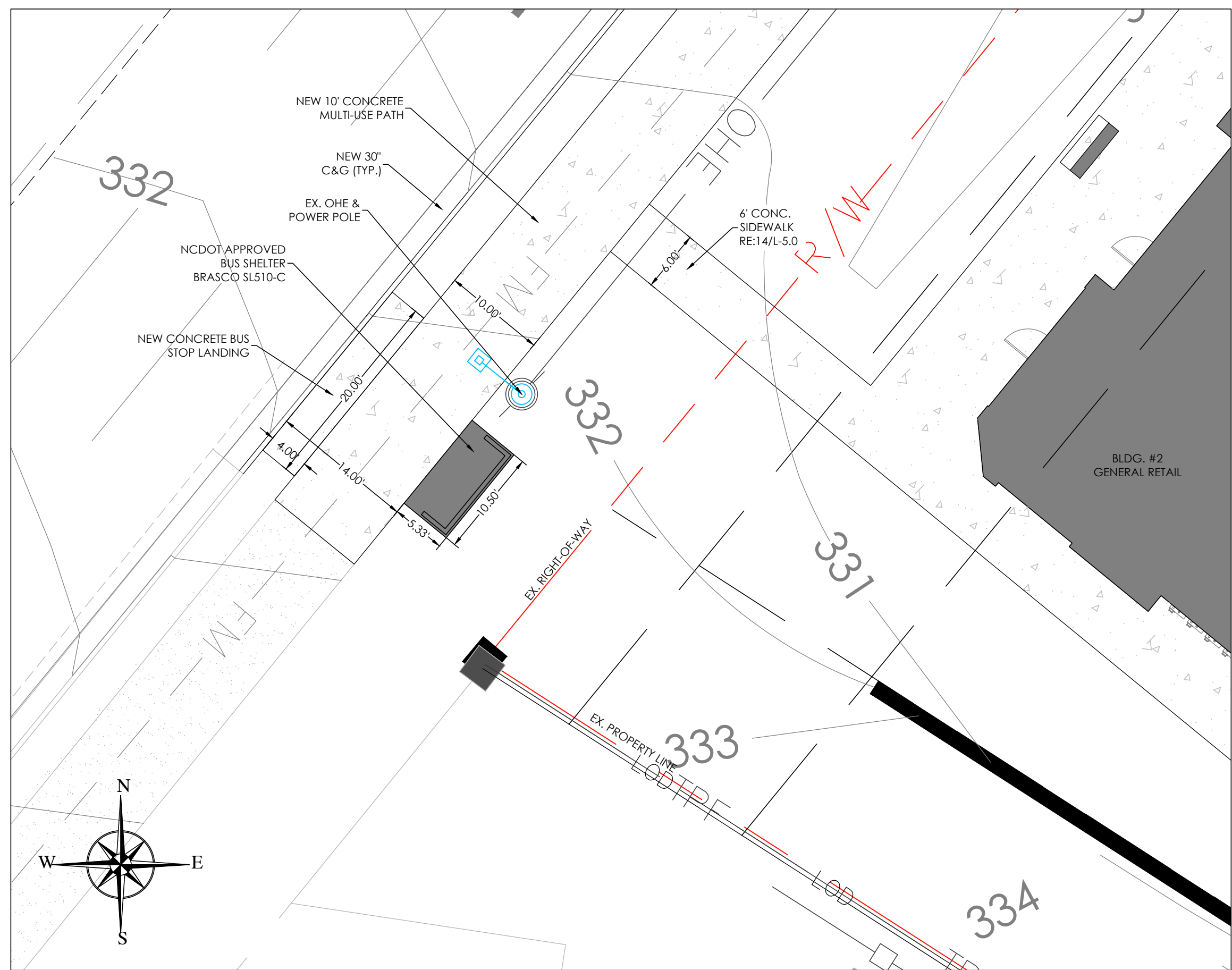
PHASING PLAN
7800 KNIGHTDALE BLVD.
7800 KNIGHTDALE BLVD
KNIGHTDALE, NC 27545
TOK PROJECT #ZCP-7-24

SCALE:
AS NOTED
DRAWN BY:
AJP
PROJECT #
24029
DATE:
11/13/2025
SHEET
L-2.1
OF

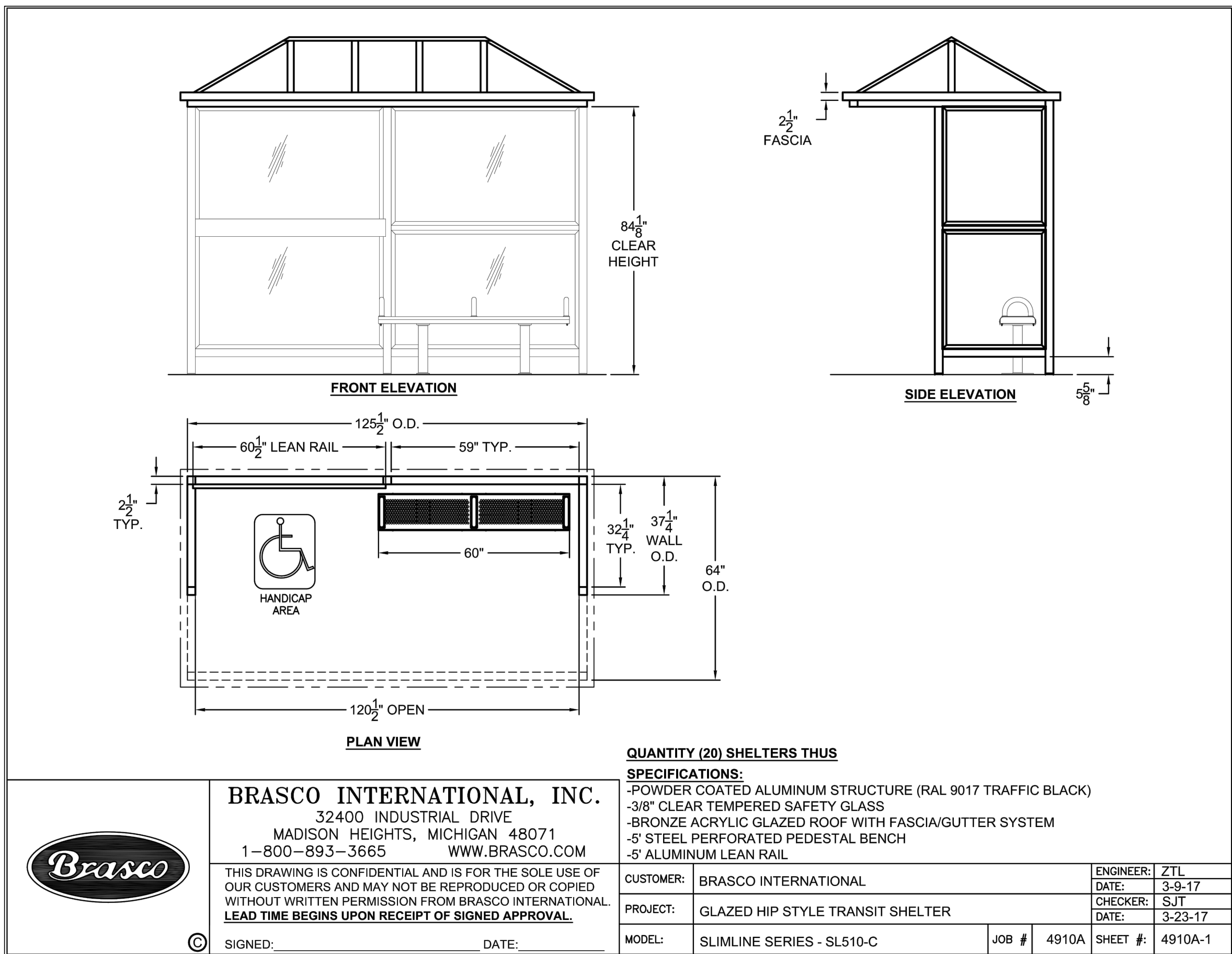
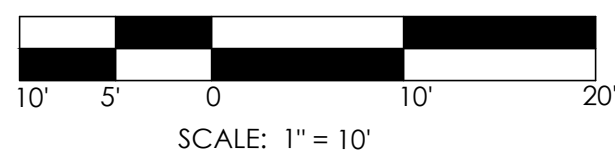


1 PHASING PLAN
L-2.1 SCALE: 1"=40'

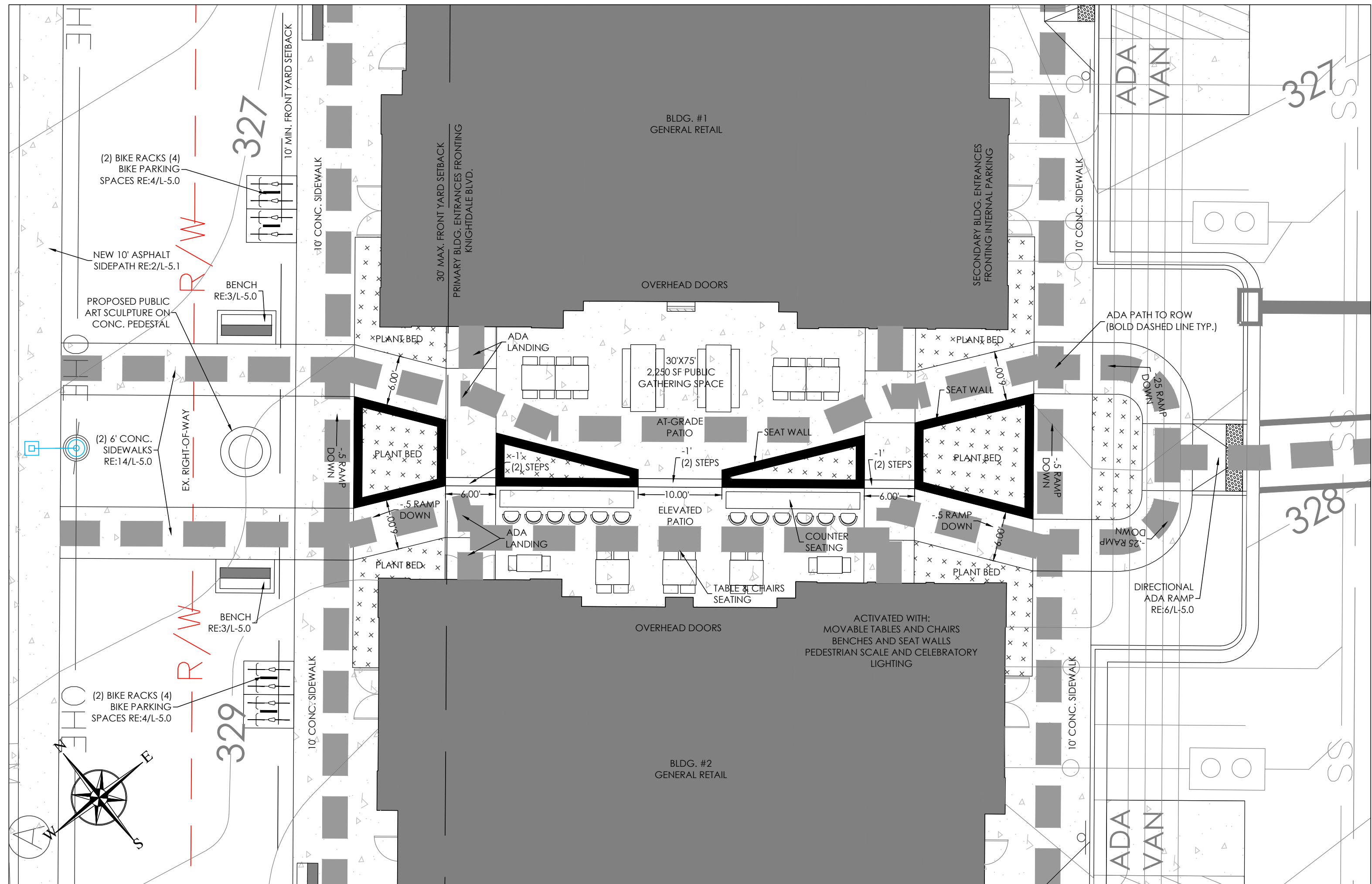
40' 20' 0 40' 80'
SCALE: 1" = 40'



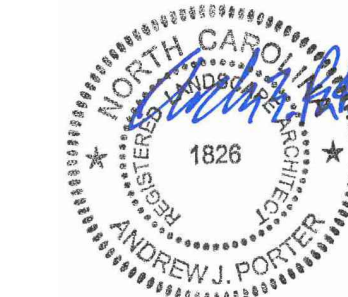
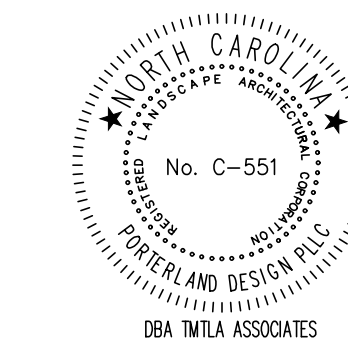
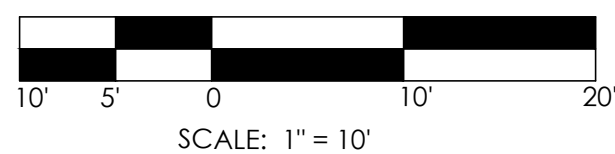
1 BUS STOP PLAN
L-2.2 SCALE: 1"=10'



2 BUS SHELTER DETAIL
L-2.2 SCALE: NTS



3 PUBLIC GATHERING SPACE
L-2.2 SCALE: 1"=10'

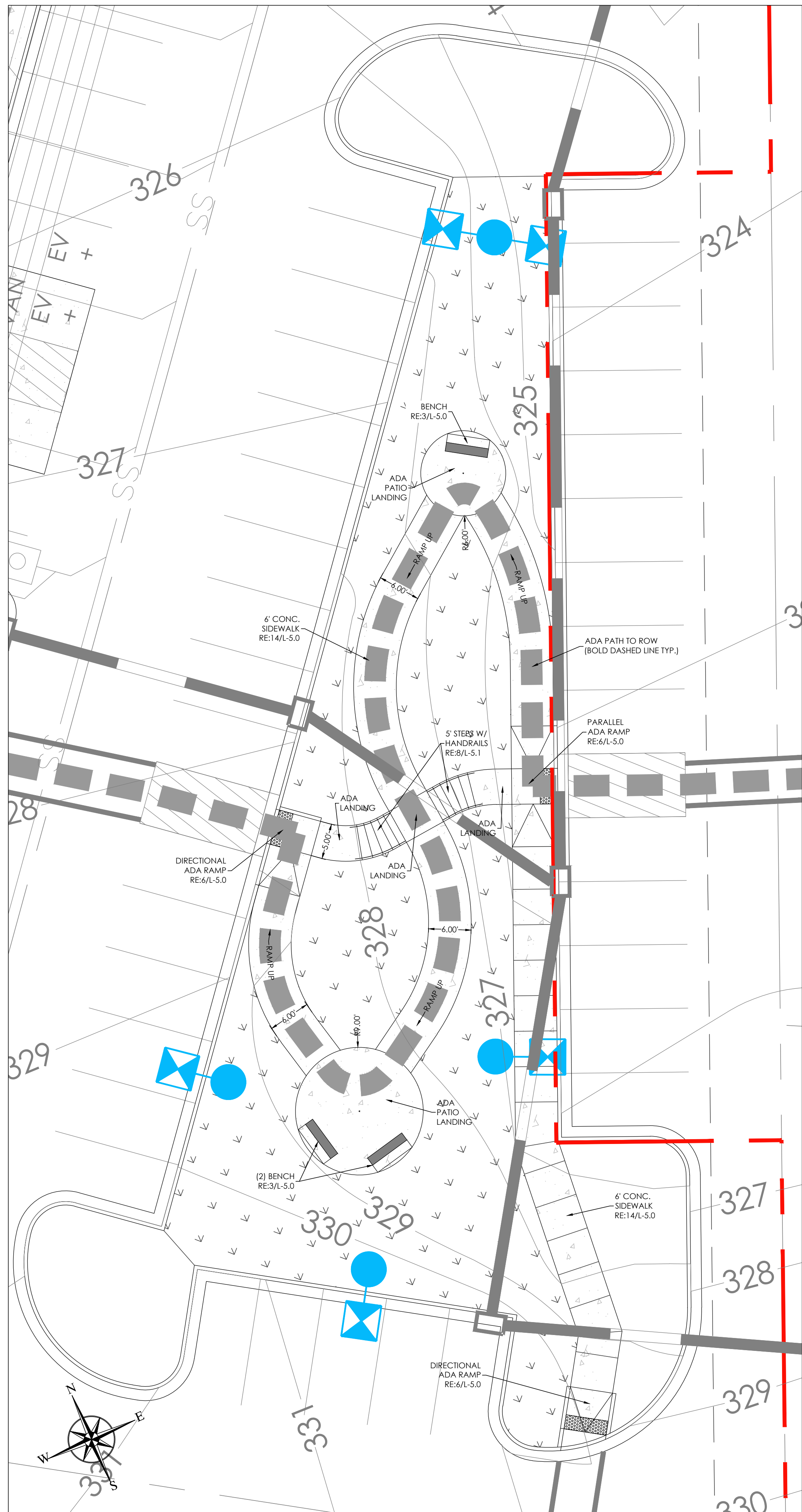


11-24-2025
PRELIMINARY
NOT FOR
CONSTRUCTION

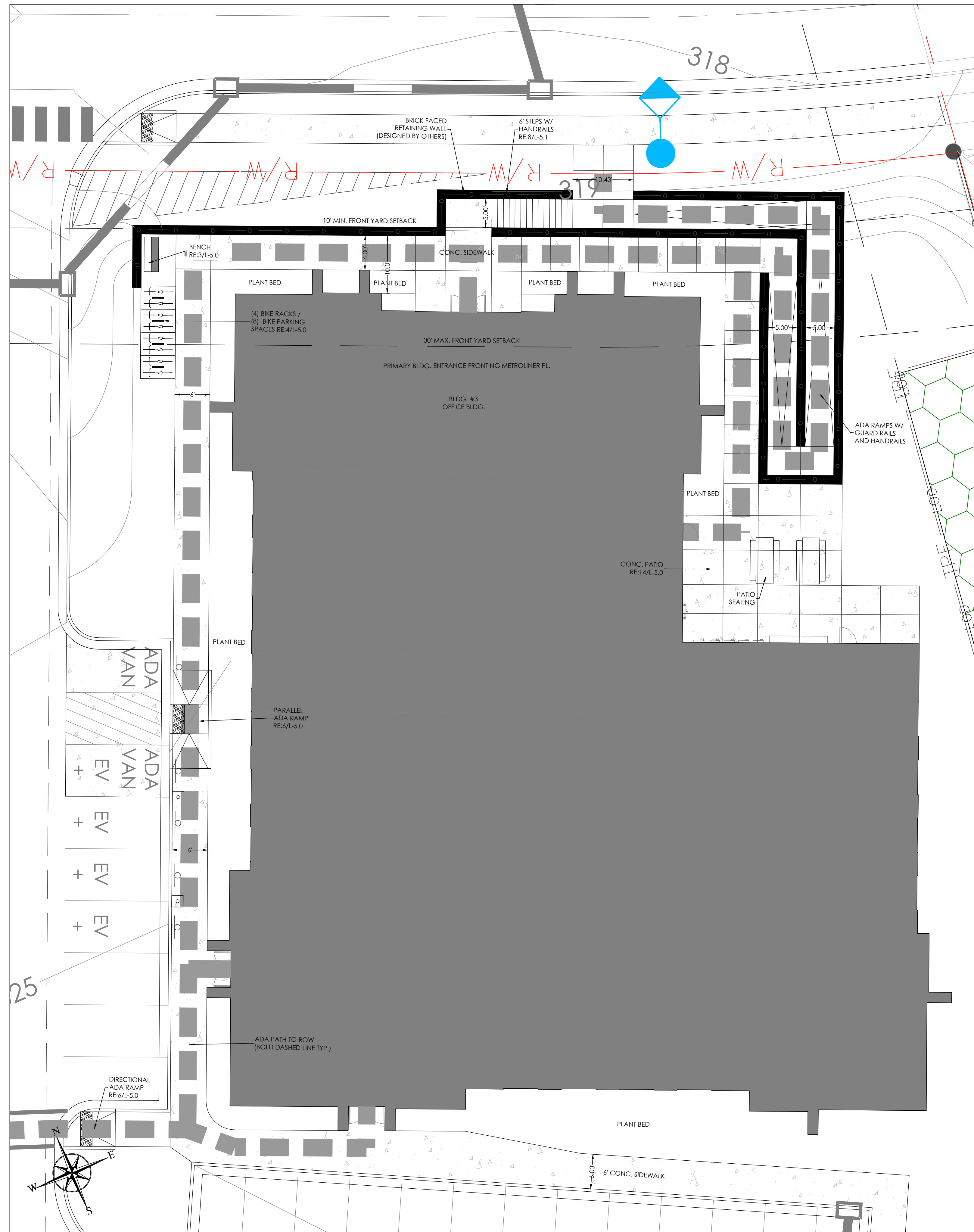
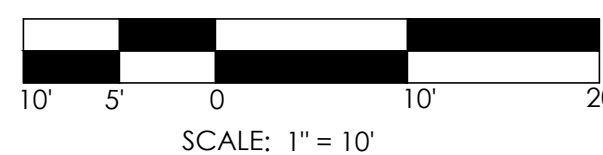
REVISIONS:
1. Tok Sketch Plan 1st review Comments 2024-10-14
2. Tok Sketch Plan 2nd review Comments 2025-11-24

EXPANDED PLAN VIEWS
7800 KNIGHTDALE BLVD.
7800 KNIGHTDALE BLVD
KNIGHTDALE, NC 27545
TOK PROJECT #ZCP-7-24

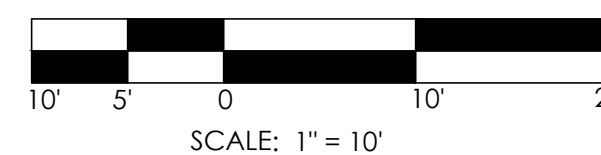
SCALE:
AS NOTED
DRAWN BY:
AJP
PROJECT #
24029
DATE:
11/13/2025
SHEET
L-2.2
OF



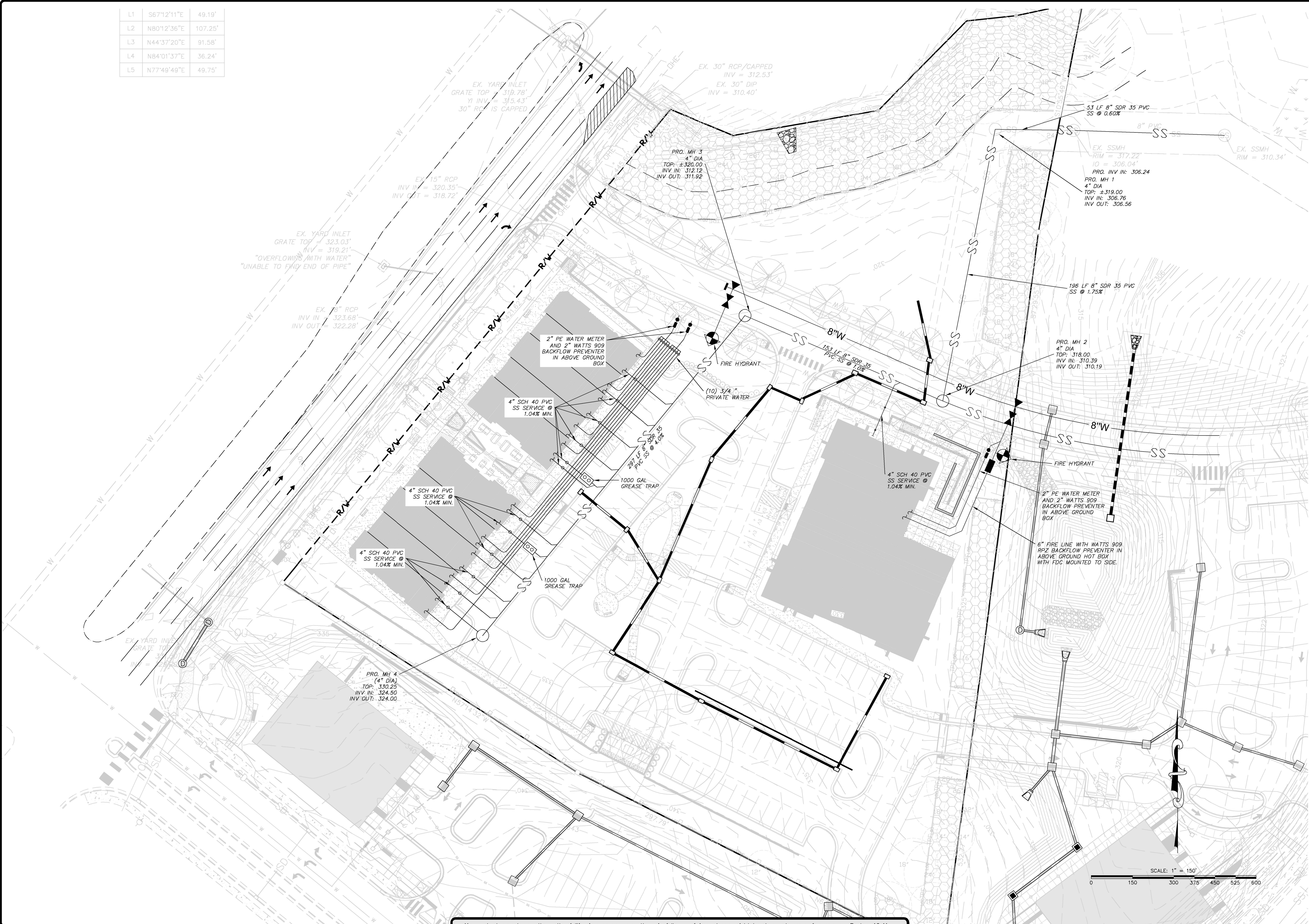
1 PUBLIC GATHERING SPACE
L-2.3 SCALE: 1"=10'



2 PUBLIC GATHERING SPACE
L-2.3 SCALE: 1"=10'



L1	S67°12'11"E	49.19'
L2	N80°12'36"E	107.25'
L3	N44°37'20"E	91.58'
L4	N84°01'37"E	36.24'
L5	N77°49'49"E	49.75'



You make known to me the path of life; in your presence there is fullness of joy; at your right hand are pleasures forevermore. Psalms 16:11

STOCKS
ENGINEERING

801 EAST WASHINGTON STREET
NASHVILLE, NC 27856
WWW.STOCKSENGINEERING.COM

P.O. BOX 1108
NASHVILLE, NC 27856
PHONE: (252) 459-6196

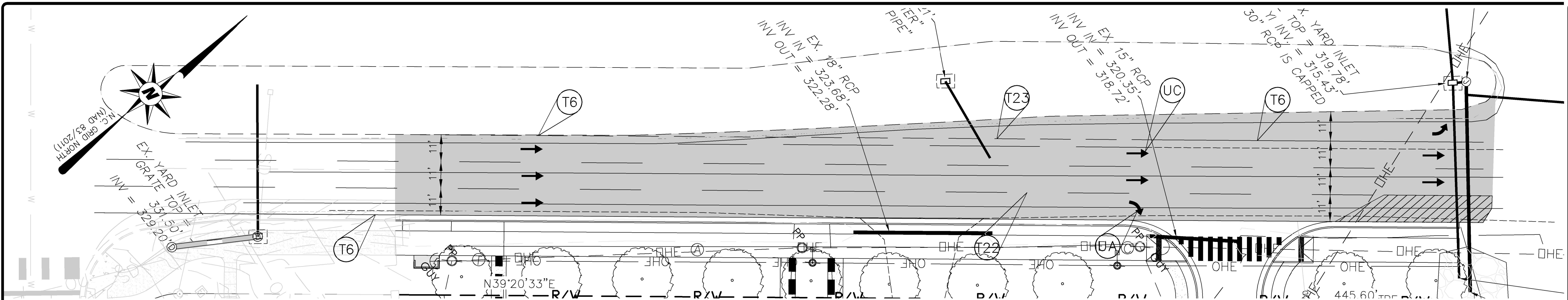
BLN-C-1874

7800 KNIGHTDALE BLVD.
KNIGHTDALE, NC 27545

NORTH CAROLINA
PROFESSIONAL
SEAL
19843

ENGINEER
MICHAEL STOCKS
11/22/2024

UTILITY PLAN
REVISIONS
FILE NO. 2024-081
HORZ. SCALE: 1"=150'
VERT. SCALE: NONE
CE-01



NOTES:

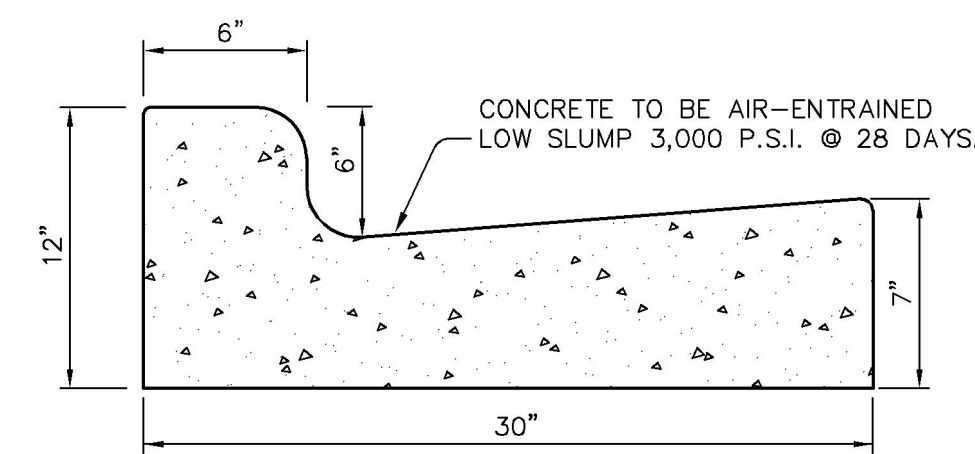
1. CONTRACTOR TO ENSURE POSITIVE DRAINAGE PRIOR TO POURING CONCRETE
2. CONTRACTOR TO INCLUDE IN BASE BID THE BACKFILLING BEHIND CURB, OFFSITE DISPOSAL OF EXCESS MATERIAL, OFF-SITE BORROW, SEED, STRAW & TACK.
3. CONTRACTOR TO INCLUDE IN BASE BID THE SAW-CUTTING, REMOVAL, & REPLACEMENT OF ASPHALT REQUIRED TO INSTALL CURB & GUTTER.
4. ASPHALT SHALL BE SAW-CUT TO PROVIDE SMOOTH EDGE TO PLACE CURB & GUTTER.
5. TWO-WAY TRAFFIC TO BE MAINTAINED AT ALL TIMES.
6. WIDENING, STRIPING AND SIGNAGE TO MATCH NCDOT STANDARDS AND DETAILS LATEST EDITION.
7. ALL STRIPING TO BE THERMOPLASTIC PER NCDOT STANDARDS AND SPECIFICATIONS.
8. CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND OR RELOCATION OF EXISTING UTILITIES, DRIVEWAY REPAIR, AND TRAFFIC CONTROL PER THE MUTCD, LATEST EDITION.
9. RAISED REFLECTIVE SNOW PLOWABLE PAVEMENT MARKERS SHALL ALSO BE INSTALLED WITHIN TURN LANE CONSTRUCTION LIMITS IN ACCORDANCE WITH NCDOT STANDARD SPECIFICATIONS

LEGEND

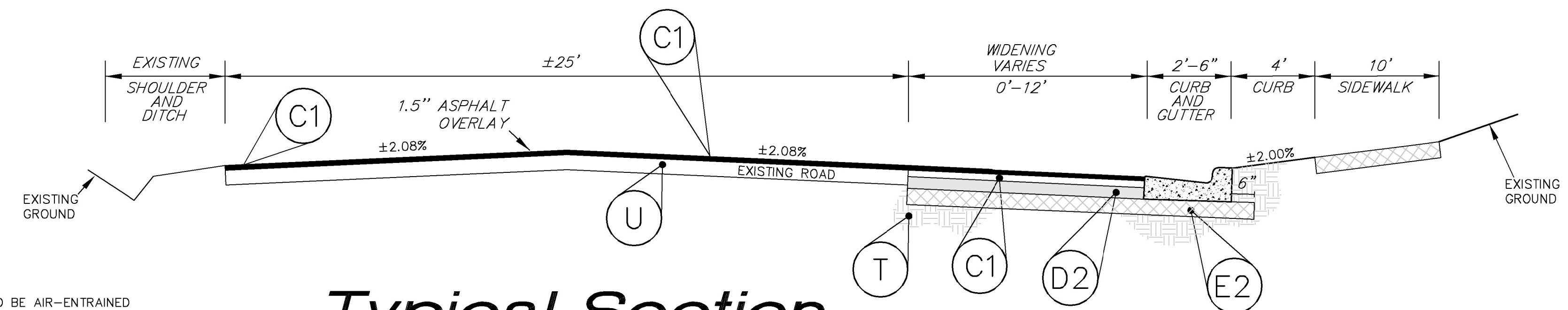
- (D2) 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I-19.0C
(E2) 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C @ AN AVERAGE RATE OF 684 LBS. PER SQUARE YARD.
(C1) 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C (OVERLAY)
(U) EXISTING PAVEMENT
(T) EXISTING EARTH

PAVEMENT MARKING LEGEND

- (T16) YELLOW DOUBLE CENTER LINE (6" @ 120 MIL)
(T6) WHITE EDGELINE (6" @ 90 MIL)
(UA) LEFT TURN ARROW (90 MIL)
(UC) STRAIGHT ARROW (90 MIL)
(T23) 3 FT.-9 FT./SP WHITE MINI-SKIP (6", 120 MIL)
(T42) YELLOW DIAGONAL (8", 90 MIL)
(T22) 10 FT.-30 FT./SP WHITE SKIP line (6", 120 MIL)

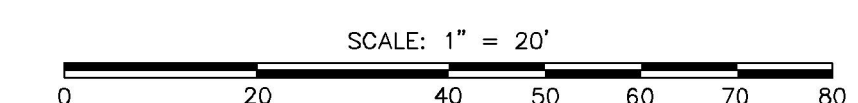
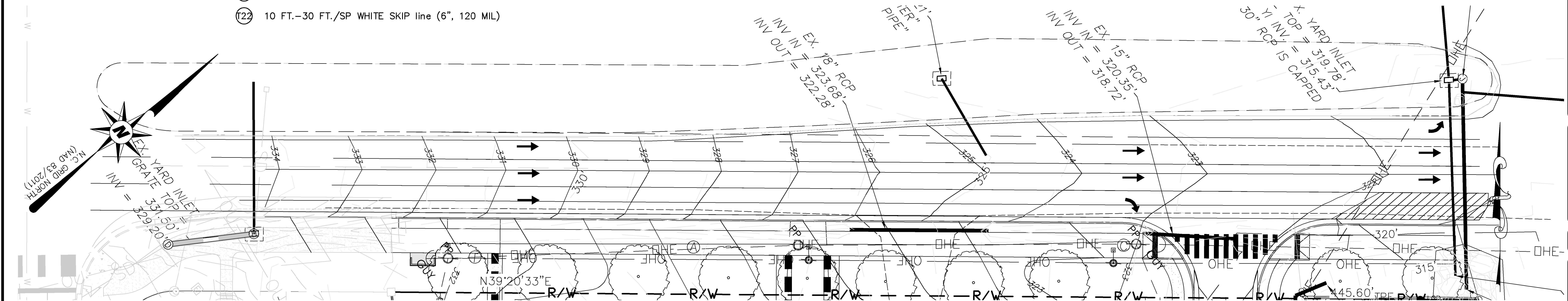


NCDOT STANDARD 30"
CURB AND GUTTER STD. 846.01



Typical Section

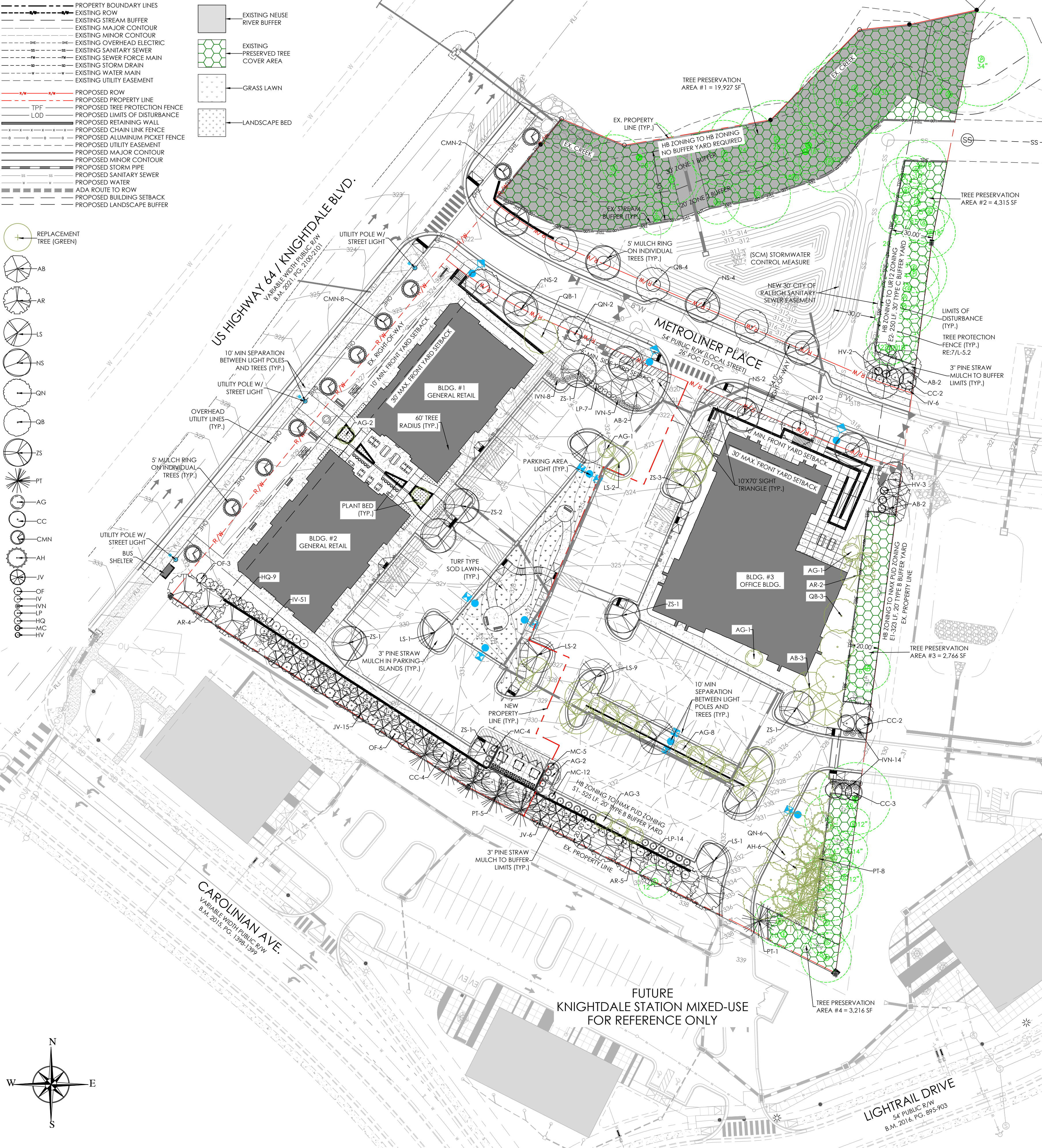
NEAR SIDE WIDENING: NOT TO SCALE



LEGEND

- PROPERTY BOUNDARY LINES
- EXISTING ROW
- EXISTING STREAM BUFFER
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING OVERHEAD ELECTRIC
- EXISTING SANITARY SEWER
- EXISTING SEWER FORCE MAIN
- EXISTING STORM DRAIN
- EXISTING WATER MAIN
- EXISTING UTILITY EASEMENT
- PROPOSED ROW
- PROPOSED PROPERTY LINE
- PROPOSED TREE PROTECTION FENCE
- PROPOSED LIMITS OF DISTURBANCE
- PROPOSED RETAINING WALL
- PROPOSED CHAIN LINK FENCE
- PROPOSED ALUMINUM PICKET FENCE
- PROPOSED UTILITY EASEMENT
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED STORM PIPE
- PROPOSED SANITARY SEWER
- PROPOSED WATER
- ADA ROUTE TO ROW
- PROPOSED BUILDING SETBACK
- PROPOSED LANDSCAPE BUFFER
- EXISTING NEUSE RIVER BUFFER
- EXISTING PRESERVED TREE COVER AREA
- GRASS LAWN
- LANDSCAPE BED

- REPLACEMENT TREE (GREEN)
- AB
- AR
- LS
- NS
- QN
- QB
- ZS
- PT
- AG
- CC
- CMN
- AH
- JV
- OF
- IV
- LP
- HQ
- MC
- HV



1 LANDSCAPE PLAN
L-4.0 SCALE: 1"=40'

SCALE: 1" = 40'

LANDSCAPE CALCULATIONS

UDO SEC. 7.4.J. INTERIOR PARKING LOT LANDSCAPING

APPLICABILITY: PARKING LOTS WITH MORE THAN SIXTEEN (16) PARKING SPACES SHALL BE LANDSCAPED.

MINIMUM PLANTINGS: NO PARKING SPACE SHALL BE MORE THAN SIXTY (60) FEET FROM THE BASE OF A DECIDUOUS CANOPY TREE. IN ADDITION, LANDSCAPE AREAS SHALL BE PROVIDED AT THE END OF EACH PARKING ROW AND SHALL CONTAIN A DECIDUOUS CANOPY TREE.

PERFORMANCE STANDARDS: DECIDUOUS CANOPY TREES SHALL BE PLANTED IN A MANNER THAT PROVIDES SHADE FOR THE ENTIRE PARKING LOT AT MATURITY. EACH CANOPY TREE SHALL BE PROVIDED WITH A MINIMUM PERVIOUS GROUND AREA OF THREE-HUNDRED (300) SF FOR ADEQUATE ROOT GROWTH WHICH SHALL BE SEPARATED FROM PARKING SPACES BY AN EIGHTEEN (18) INCH STANDARD CURB AND GUTTER DESIGNED TO MINIMIZE DAMAGE BY VEHICLES TO PLANTS WITHIN THE LANDSCAPED AREA.

UDO SEC. 7.4.L. STREET TREE PLANTINGS

STREET TREES SHALL BE CANOPY TREES AND SHALL BE INSTALLED AT A MINIMUM AVERAGE DISTANCE OF FORTY (40) FEET ON CENTER IN A PLANTING STRIP A MINIMUM OF FIVE (5) FEET IN WIDTH.

STREET TREES SHALL BE PLACED AT LEAST TEN (10) FEET FROM LIGHT POLES AND TWELVE (12) FEET FROM ELECTRICAL TRANSFORMERS IN ORDER TO ALLOW THESE UTILITIES TO BE SAFELY SERVICED (UNDERSTORY TREES MAY BE PLACED WITHIN FIVE (5) FEET OF SUCH DEVICES).

STREET TREES SHALL BE DECIDUOUS HARDWOODS AND SHALL MEET THE CRITERIA SET FORTH IN SECTION 7.4 (C).

STREET TREE SPECIES MUST ALTERNATE TO MAXIMIZE DIVERSITY PER SECTION 7.4 (G).

KNIGHTDALE BLVD. - 392 LF FRONTAGE
392 LF / 40 LF = 9.8 (10) STREET TREES REQUIRED/PROVIDED

METROLINER PL. (NORTH) - 333 LF FRONTAGE
333 LF / 40 LF = 8.3 (8) STREET TREES REQUIRED/PROVIDED

METROLINER PL. (SOUTH) - 330 LF FRONTAGE
330 LF / 40 LF = 8.2 (8) STREET TREES REQUIRED/PROVIDED

UDO SEC. 7.4.M. OVERALL TREE CANOPY

ALL NEW DEVELOPMENT ON LOTS OR PARCELS OVER TWO (2) ACRES MUST MEET THE FOLLOWING TREE COVER REQUIREMENT DURING THE INITIAL MASTER PLAN PROCESS: A TREE COVER AREA EQUAL TO THE PERIMETER OF THE DEVELOPMENT IN FEET MULTIPLIED BY TWENTY (20) SHALL BE MAINTAINED ON-SITE UP TO A MAXIMUM TREE COVER AREA CONSISTING OF TEN (10) PERCENT OF THE ENTIRE SITE. ANY REQUIRED LANDSCAPE BUFFER YARDS AND NEUSE RIVER BASIN RIPARIAN BUFFERS (NRBS) MAY BE CREDITED TOWARD THIS REQUIREMENT. IN THE EVENT THAT THE REQUIRED TREE COVER AREA CANNOT BE MET WITH THE REQUIRED LANDSCAPE BUFFER YARDS AND NRBS, ADDITIONAL SPACE MUST BE SET ASIDE. IN THIS ADDITIONAL SPACE, PRESENCE IS GIVEN TO PRESERVING EXISTING TREES RATHER THAN UTILIZING NEW PLANTINGS.

EXISTING PARCEL PERIMETER = 2,037 LF
REQUIRED TREE COVER AREA = 2,037 X 20 = 40,740 SF / 0.94 AC [0.94 AC / 5.0 AC = 18.8%]
EXISTING PARCEL AREA = 217,652 SF
MAX. TREE COVER AREA (10%) = 217,652 SF X 0.1 = 21,765 SF / 0.50 AC

PRESERVED TREE COVER AREA #1 = 19,927 SF
PRESERVED TREE COVER AREA #2 = 4,315 SF
PRESERVED TREE COVER AREA #3 = 2,766 SF
PRESERVED TREE COVER AREA #4 = 3,216 SF
PRESERVED TREE COVER AREA TOTAL = 30,224 SF / 0.69 AC [0.69 AC / 5.0 AC = 13.8%]

UDO SEC. 7.4.I. BUFFERS

80% BUFFER SHRUBS MUST BE EVERGREEN

BUFFER E1-525 LF 20' TYPE "B" BUFFER YARD
FOR EVERY ONE HUNDRED (100) LINEAR FEET, THERE SHALL BE AT LEAST THREE (3) CANOPY TREES, FIVE (5) UNDERSTORY TREES, AND TWENTY (20) SHRUBS.

525 LF X 20 = 10,500 SF BUFFER AREA
1,122 SF PRESERVED TREE AREA, 1,122 SF / 10,500 SF BUFFER AREA = 0.10, 90% TO BE PLANTED
CANOPY TREES (3/100 LF) 525LF X .03 = 15.7 (16) X 9 (90%) = 15 TREES REQUIRED/PROVIDED
UNDERSTORY TREES (5/100 LF) 525LF X .05 = 26.2 (27) X 9 (90%) = 25 TREES REQUIRED/PROVIDED
SHRUBS (20/100 LF) 525LF X .2 = 105 (105) X 9 (90%) = 95 SHRUBS REQUIRED/PROVIDED (76 EVG)
TOTAL: 135 PLANTS

BUFFER E1-323 LF 20' TYPE "B" BUFFER YARD
FOR EVERY ONE HUNDRED (100) LINEAR FEET, THERE SHALL BE AT LEAST THREE (3) CANOPY TREES, FIVE (5) UNDERSTORY TREES, AND TWENTY (20) SHRUBS.

323 LF X 20 = 6,460 SF BUFFER AREA
4,860 SF PRESERVED TREE AREA, 4,860 SF / 6,460 SF BUFFER AREA = 0.75, 25% TO BE PLANTED
CANOPY TREES (3/100 LF) 323LF X .03 = 9.6 (10) X 25 (25%) = 3 TREES REQUIRED/PROVIDED
UNDERSTORY TREES (5/100 LF) 323LF X .05 = 16.1 (17) X 25 (25%) = 2 TREES REQUIRED/PROVIDED
SHRUBS (20/100 LF) 323LF X .2 = 64.6 (65) X 25 (25%) = 17 SHRUBS REQUIRED/PROVIDED (14 EVG)
TOTAL: 25 PLANTS

BUFFER E2-250 LF 30' TYPE "C" BUFFER YARD
FOR EVERY ONE HUNDRED (100) LINEAR FEET, THERE SHALL BE AT LEAST FIVE (5) CANOPY TREES, FIVE (5) UNDERSTORY TREES, AND TWENTY-FIVE (25) SHRUBS.

250 LF X 30 = 7,500 SF BUFFER AREA
6,619 SF PRESERVED TREE AREA, 6,619 SF / 7,500 SF BUFFER AREA = 0.88, 12% TO BE PLANTED
CANOPY TREES (5/100 LF) 250LF X .05 = 12.5 (13) X 12 (12%) = 2 TREES REQUIRED/PROVIDED
UNDERSTORY TREES (5/100 LF) 250LF X .05 = 12.5 (13) X 12 (12%) = 2 TREES REQUIRED/PROVIDED
SHRUBS (25/100 LF) 250LF X .25 = 62.5 (63) X 12 (12%) = 8 SHRUBS REQUIRED/PROVIDED (6 EVG)
TOTAL: 12 PLANTS

UDO SEC. 7.5 SCREENING

(B) VEHICLE ACCOMMODATION AREA: FOR EVERY ONE HUNDRED (100) LINEAR FEET, THERE SHALL BE AT LEAST THREE (3) CANOPY TREES, TWO (2) UNDERSTORY TREES, AND TWENTY (20) SHRUBS.

METROLINER PLACE FRONTAGE: 103 LF
2 CANOPY TREES, 2 UNDERSTORY TREES AND 20 SHRUBS REQ/PROVIDED
TOTAL: 24 PLANTS

(E) TRASH RECEPTACLE: FOR EVERY ONE HUNDRED (100) LINEAR FEET THERE SHALL BE AT LEAST THREE (3) CANOPY TREES, FIVE (5) UNDERSTORY TREES, AND TWENTY (20) SHRUBS.

DUMPSTER WALL: 33.2 LF
CANOPY TREES (33.2/100 LF) = 0.3 X 3 = 1 TREES REQUIRED/PROVIDED
UNDERSTORY TREES (33.2/100 LF) = 0.3 X 5 = 1.7 (2) TREES REQUIRED/PROVIDED
SHRUBS (33.2/100 LF) = 0.3 X 20 = 6.6 (7) SHRUBS REQUIRED/PROVIDED
TOTAL: 10 PLANTS

UDO SEC. 7.4.H. TREE PROTECTION

SEE CALCULATION ON SHEET L-1 (54 REPLACEMENT TREES REQUIRED/PROVIDED)

PLANT SCHEDULE

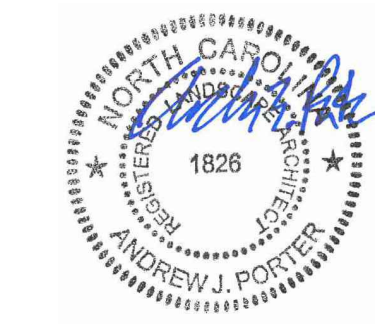
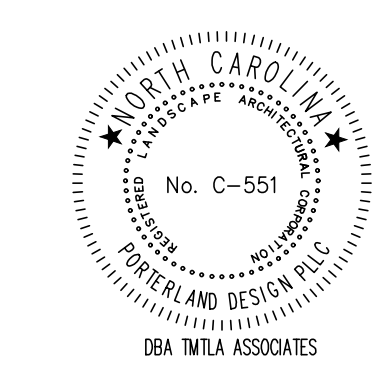
LANDSCAPE PLAN NOTES

- ALL PLANT MATERIAL ON THIS SITE MUST MEET MINIMUM TOWN OF KNIGHTDALE UDO REQUIREMENTS FOR SIZE, HEIGHT, AND SPACING. PLANT MATERIAL SHALL BE INSTALLED ACCORDING TO SOUND NURSERY PRACTICES AND IN CONFORMANCE WITH THE GENERAL PLANTING NOTES AND DETAILS WITHIN THIS PLAN SET.
- PLANTING STOCK SHALL MEET ALL STANDARDS WITHIN THE LATEST EDITION OF "AMERICAN STANDARDS FOR NURSERY STOCK." ALL PLANTS SHALL BE VIGOROUS, HEALTHY MATERIAL FREE FROM PESTS AND DISEASE.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW THE PROJECT SITE AND FAMILIARIZE WITH ACTUAL FIELD CONDITIONS PRIOR TO BIDDING AND COMMENCING WORK. THE CONTRACTOR SHALL ACCEPT ACTUAL CONDITIONS AT THE SITE AND PERFORM THE WORK SPECIFIED INCLUDING THE FINE GRADING AND INCORPORATION OF TOPSOIL INTO PLANTING AREAS, WITHOUT ADDITIONAL COMPENSATION FOR POSSIBLE VARIATIONS FROM GRADES AND CONDITIONS SHOWN WEATHER SURFACE OR SUBSURFACE. IF FIELD CONDITIONS ARE FOUND TO BE SIGNIFICANTLY DIFFERENT THE CONTRACTOR SHALL NOTIFY THE PROJECT LANDSCAPE ARCHITECT OR ENGINEER IMMEDIATELY AND PRIOR TO ORDERING MATERIALS.
- CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED PERMITS TO PERFORM THE WORK.
- CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES ABOVE AND BELOW GROUND AND SHALL BE RESPONSIBLE FOR ANY DAMAGE RESULTING FROM THEIR ACTIVITIES. CONTRACTOR SHALL NOTIFY NORTH CAROLINA ONE CALL (1-800-632-4949) AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR TO CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF NORTH CAROLINA ONE CALL. THE CONTRACTOR MAY ALSO NEED TO ENGAGE A PRIVATE UTILITY LOCATING FIRM AT THEIR OWN COST TO EFFICIENTLY HAVE ALL UTILITIES LOCATED.
- ANY DAMAGE TO EXISTING IMPROVEMENTS OUTSIDE OF THE PROJECT LIMITS, INCLUDING CURB AND GUTTER, SIDEWALK OR PAVEMENT OR TREES OR TREES TO BE PREPARED TO ORIGINAL CONDITIONS BY THE CONTRACTOR WITHOUT ADDITIONAL COST TO THE DEVELOPER.
- PLANT QUANTITIES TO BE VERIFIED BY LANDSCAPE CONTRACTOR. IN THE EVENT OF A DISCREPANCY BETWEEN THE QUANTITY OF PLANTS SHOWN ON THE PLANS AS COMPARED TO THE PLANT LIST THE CONTRACTOR SHALL PROVIDE THE QUANTITY SHOWN ON THE PLANS.
- CONTRACTOR SHALL OBTAIN WRITTEN AUTHORIZATION FROM THE LANDSCAPE ARCHITECT FOR ANY PLANT SUBSTITUTIONS OR MODIFICATIONS TO THE LANDSCAPE PLANS. THIS MAY REQUIRE A MODIFICATION TO THE APPROVED PLANS. NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES ON THE PLANS.
- ALL ABOVE GROUND MECHANICAL EQUIPMENT, ELECTRICAL TRANSFORMERS, DUMPSTERS, BACKFLOW PREVENTERS, AND VALVE BOXES SHALL BE SCREENED FROM VIEW OF ADJACENT PROPERTIES AND RIGHT-OF-WAY WHILE MAINTAINING REQUIRED ACCESS TO LOCAL CODE STANDARDS AND REQUIREMENTS.
- WITHIN THE SIGHT TRIANGLES SHOWN ON THIS PLAN, NO OBSTRUCTIONS BETWEEN TWO FEET AND EIGHT FEET IN HEIGHT ABOVE THE NEAREST VEHICLE SURFACE OR ADJACENT CURB LINE SHALL BE ALLOWED.
- ALL UNPAVED AREAS SHALL BE TOPSOILED AND SEEDDED / SODDED OR MULCHED TO THE LIMITS OF CONSTRUCTION BASED ON ACTUAL FIELD CONDITIONS BEYOND THE APPROVED PLANS.
- ALL SOD TO BE REBEL FESCUE IV, TURF GEM, LESCO OR EQUAL. ALL SEED TO BE REBEL FESCUE IV, TURF GEM, LESCO OR EQUAL @ 6 LBS. PER 1000 S.F. IN LAWN AREAS 3" TOPSOIL SHALL BE TILLED INTO THE TOP 6" OF GROUND PRIOR TO SEEDING.
- SLOPES GREATER THAN 3:1 SHALL REQUIRE HYDRO-SEEDING. SLOPES GREATER THAN 2:1 SHALL BE SODDED WITH CENTPEDE GRASS. ADDITIONAL STABILIZATION MEASURES MAY BE REQUIRED FOR SLOPES GREATER THAN 3:1 TO ENSURE SOIL STABILIZATION AND ESTABLISHMENT OF PERMANENT GROUND COVER.
- INTERIOR MULCH SHALL BE DOUBLE GROUND PINE BARK TO A DEPTH OF 4". PERIMETER LANDSCAPE BUFFERS SHALL BE MULCHED WITH 4" PINE STRAW TO BED LINES SHOWN OR BUFFER LIMITS. BED LINES SHALL CONFORM TO CONFIGURATION SHOWN ON THE PLANS.
- PINE STRAW SHALL NOT BE USED AS MULCH OR GROUND COVER WITHIN TEN FEET OF ANY STRUCTURES CONSISTING OF EXTERIOR COMBUSTIBLE CONSTRUCTION.
- CONTRACTOR SHALL LEVEL AND SMOOTH ALL DISTURBED AREAS AND REMOVE ALL ROCKS AND CONSTRUCTION DEBRIS PRIOR TO SEEDING, SOD OR PLANT INSTALLATION.
- NOTE THAT WITHIN LANDSCAPED AREAS SURROUNDING BUILDING, THE GRADES SHOWN ON THE GRADING SHEET ARE "TOP OF MULCH" OR "TOP OF TOPSOIL." CONTRACTOR SHALL ENSURE POSITIVE FINISHED DRAINAGE (MIN. 2%) AWAY FROM ALL BUILDINGS AND COORDINATE WITH THE LANDSCAPE PLAN TO LEAVE SUBGRADE LOW ENOUGH TO MAINTAIN THESE SPOTS AS FINISHED GRADE.
- OWNER SHALL MAINTAIN ALL PLANT BEDS AND PLANT MATERIAL IN GOOD HEALTH, AND ANY DEAD, UNHEALTHY OR MISSING PLANTS SHALL BE REPLACED WITH THE SAME PLANT MATERIAL ORIGINALLY SPECIFIED ON THIS PLAN.
- TREE PLANTING AND SITE LIGHTING SHALL BE SEPARATED BY AT LEAST 10 FEET.

LANDSCAPE SCOPE OF WORK

- FURNISH ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED OR INDICATED BY THE DRAWINGS AND SPECIFICATIONS TO COMPLETE THE WORK INCLUDING INSTALLATION OF ALL TREES, SHRUBS, GROUND COVER, ANNUALS, SEED, SOD AND MULCH.
- MATERIALS AND WORK:
THE SELECTION OF ALL MATERIALS AND THE EXECUTION OF ALL WORK REQUIRED UNDER THE CONTRACT SHALL BE SUBJECT TO APPROVAL BY THE OWNER. THE OWNER SHALL HAVE THE RIGHT TO REJECT ANY AND ALL MATERIALS AND ANY AND ALL WORK, WHICH IN HIS OPINION, DOES NOT MEET THE REQUIREMENTS OF THE CONTRACT.
- PLANT MATERIALS:
ALL PLANT MATERIALS SHALL BE NURSERY GROWN, FRESHLY DUG IN THE FIELD, NATURALLY SHAPED, WELL BRANCHED, FULLY FOLIATED WHEN IN LEAF WITH FULLY DEVELOPED ROOT SYSTEMS. TREES MUST BE SELF-SUPPORTING, WITH STRAIGHT TRUNKS AND LEADERS INTACT. ALL PLANTS MUST BE FREE OF DISEASE, INSECT INFESTATION OR THEIR EGGS AND SHALL HAVE BEEN GROWN IN CLIMATIC CONDITIONS SIMILAR TO THOSE OF THE PROJECT SITE.
- PLANT SIZE:
SPECIFIED SIZES INDICATES THE MINIMUM ALLOWABLE SIZE AT PLANTING. WHERE CONTAINER AND HEIGHT/SPREADS ARE INDICATED FOR A SINGLE SPECIES, BOTH SIZE REQUIREMENTS SHALL BE MET WHEN ONLY PLANT HEIGHT OR SPREAD ARE INDICATED. CONTAINER SIZE SHALL BE BASED ON "AMERICAN STANDARDS FOR NURSERY STOCK" STANDARDS.
- ORGANIC MATTER:
AGED MANURE, COMPOST OR PINE BARK FINES, AT THE OPTION OF THE CONTRACTOR, MATERIAL SHALL BE AIR DRIED, FINELY SHREDDED AND SUITABLE FOR HORTICULTURAL PURPOSES AND SHALL CONTAIN NO MORE THAN 35% MOISTURE CONTENT BY WEIGHT.
- PINE BARK MULCH:
ALL PINE BARK MULCH SHALL BE CLEAN, DOUBLE GROUND, FINE TEXTURED NUGGET MULCH WITH MINIMAL AMOUNTS OF SAPWOOD CONTENT.
- TURF AREAS:
PRIOR TO ANY SEEDING OR SOD APPLICATION, VERIFY THAT ALL TRENCHING AND LAND DISTURBING ACTIVITIES HAVE BEEN COMPLETED. ENSURE ALL AREAS ARE FREE OF STONES, LARGE SOIL CLOUDS AND ANY OTHER CONSTRUCTION DEBRIS.

TMTLA ASSOCIATES



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REVISIONS:

1. Tok Sketch Plan 1st review Comments 2024-10-14
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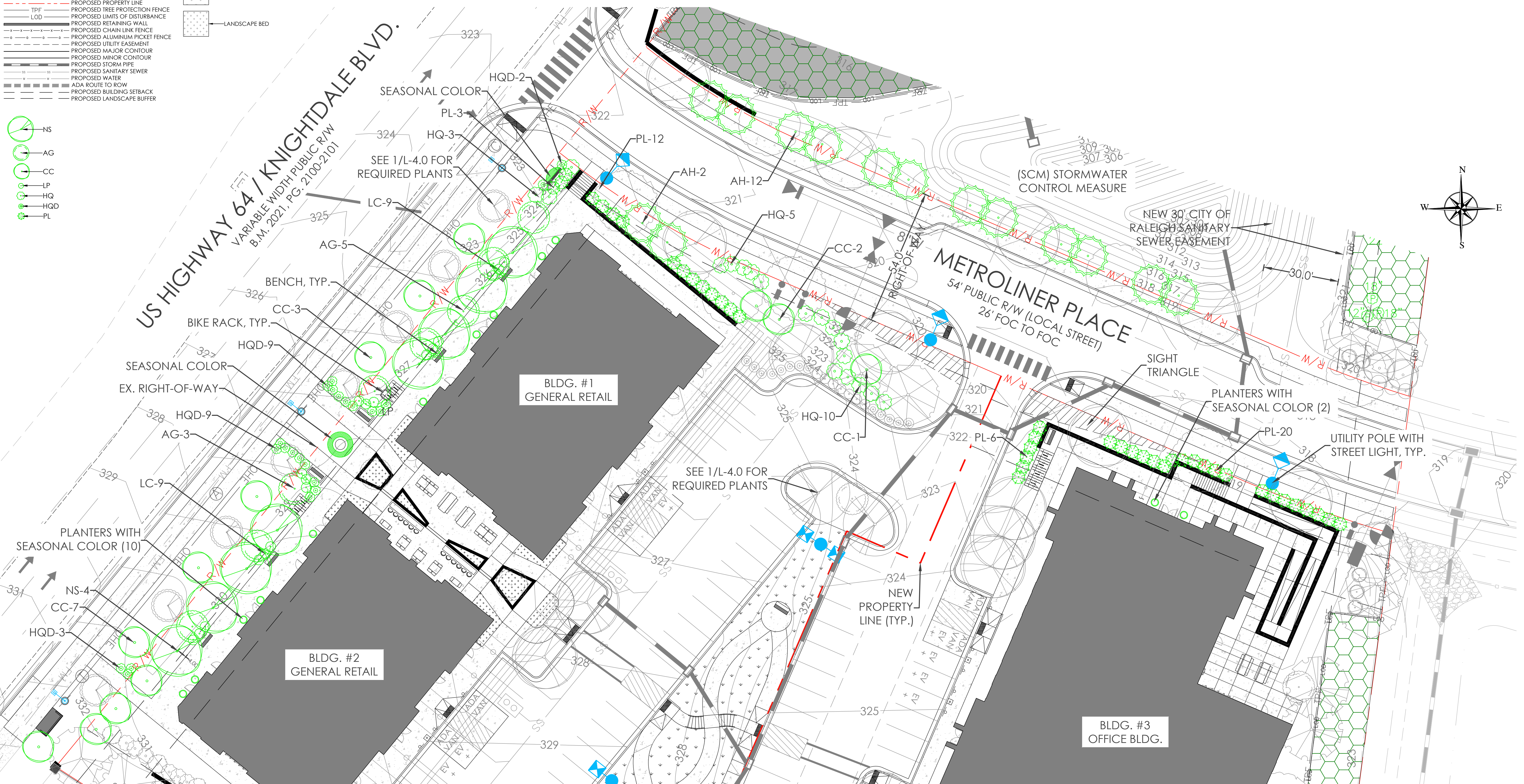
LANDSCAPE PLAN
7800 KNIGHTDALE BLVD.
7800 KNIGHTDALE BLVD
KNIGHTDALE, NC 27545
TOK PROJECT #ZCP-7-24

SCALE:
AS NOTED
DRAWN BY:
AJP
PROJECT #
24029
DATE:
11/13/2025
SHEET
L-4.0
OF

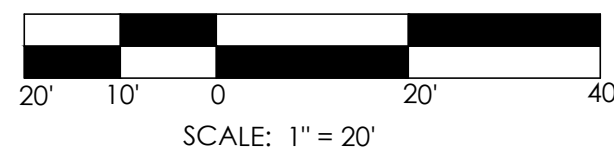
LEGEND

- PROPERTY BOUNDARY LINES
- EXISTING ROW
- EXISTING STREAM BUFFER
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING OVERHEAD ELECTRIC
- EXISTING SANITARY SEWER
- EXISTING SEWER FORCE MAIN
- EXISTING STORM DRAIN
- EXISTING WATER MAIN
- EXISTING UTILITY EASEMENT
- PROPOSED ROW
- PROPOSED PROPERTY LINE
- PROPOSED TREE PROTECTION FENCE
- TPF
- LOD
- PROPOSED LIMITS OF DISTURBANCE
- PROPOSED RETAINING WALL
- PROPOSED CHAIN LINK FENCE
- PROPOSED ALUMINUM PICKET FENCE
- PROPOSED UTILITY EASEMENT
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED STORM PIPE
- PROPOSED SANITARY SEWER
- PROPOSED WATER
- ADA ROUTE TO ROW
- PROPOSED BUILDING SETBACK
- PROPOSED LANDSCAPE BUFFER
- EXISTING NEUSE RIVER BUFFER
- EXISTING PRESERVED TREE COVER AREA
- GRASS LAWN
- LANDSCAPE BED

- NS
- AG
- CC
- LP
- HQ
- HQD
- PL



1 ENHANCED ROADSIDE LANDSCAPE
L-4.1 SCALE: 1"=20'



CONCRETE PLANTER, TYP.



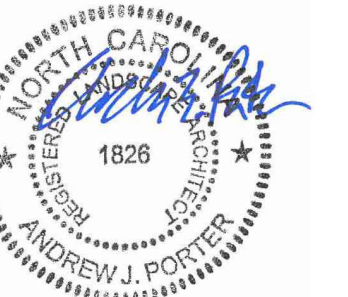
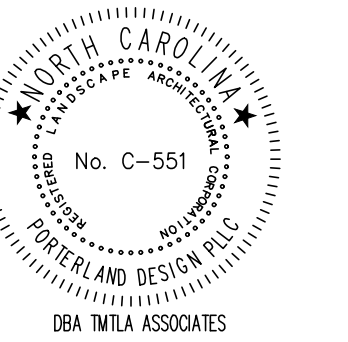
OWNER TO SELECT

ENHANCED PLANT SCHEDULE

TMTLA ASSOCIATES

LANDSCAPE ARCHITECTURE & LAND PLANNING

5011 SOUTH PARK DRIVE, STE. 200-DURHAM, NC 27713
p: (919) 484-8880 e: info@tmtla.com



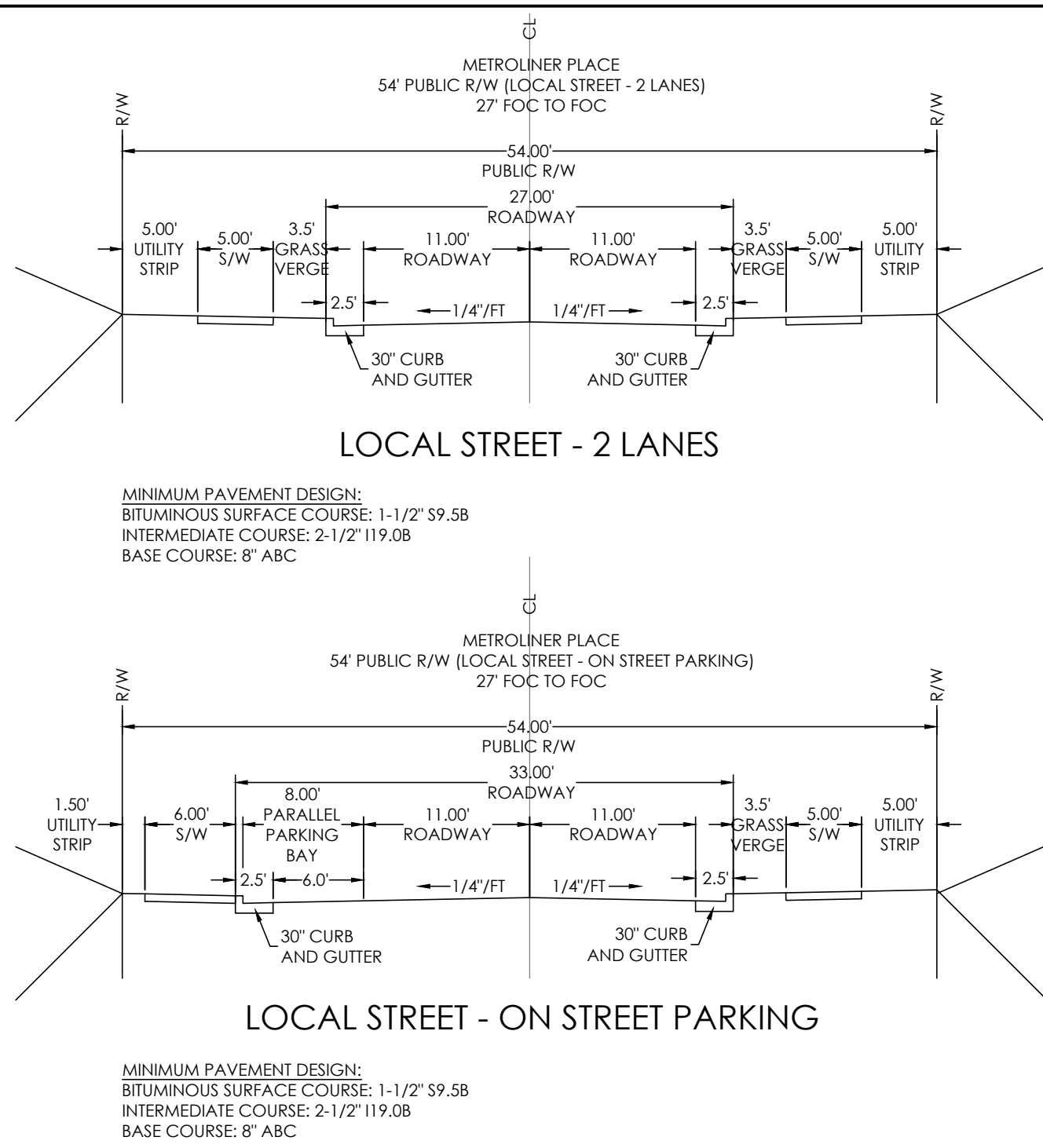
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ENHANCED ROADSIDE LANDSCAPE
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7800 KNIGHTDALE BLVD
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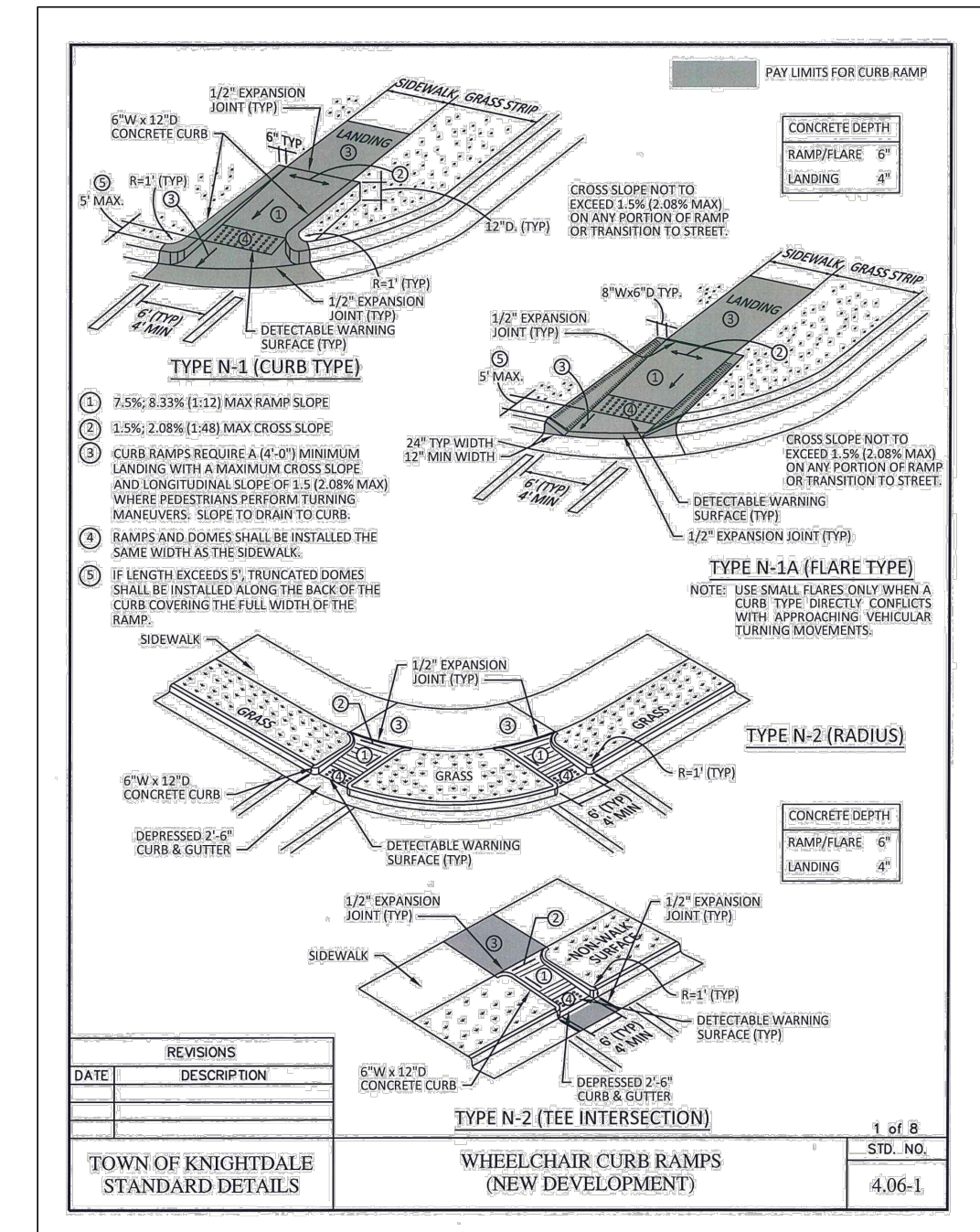
1 LOCAL STREET - SECTIONS
L-5.0 NTS

2 6-LANE BOULEVARD - SECTION
L-5.0 NTS

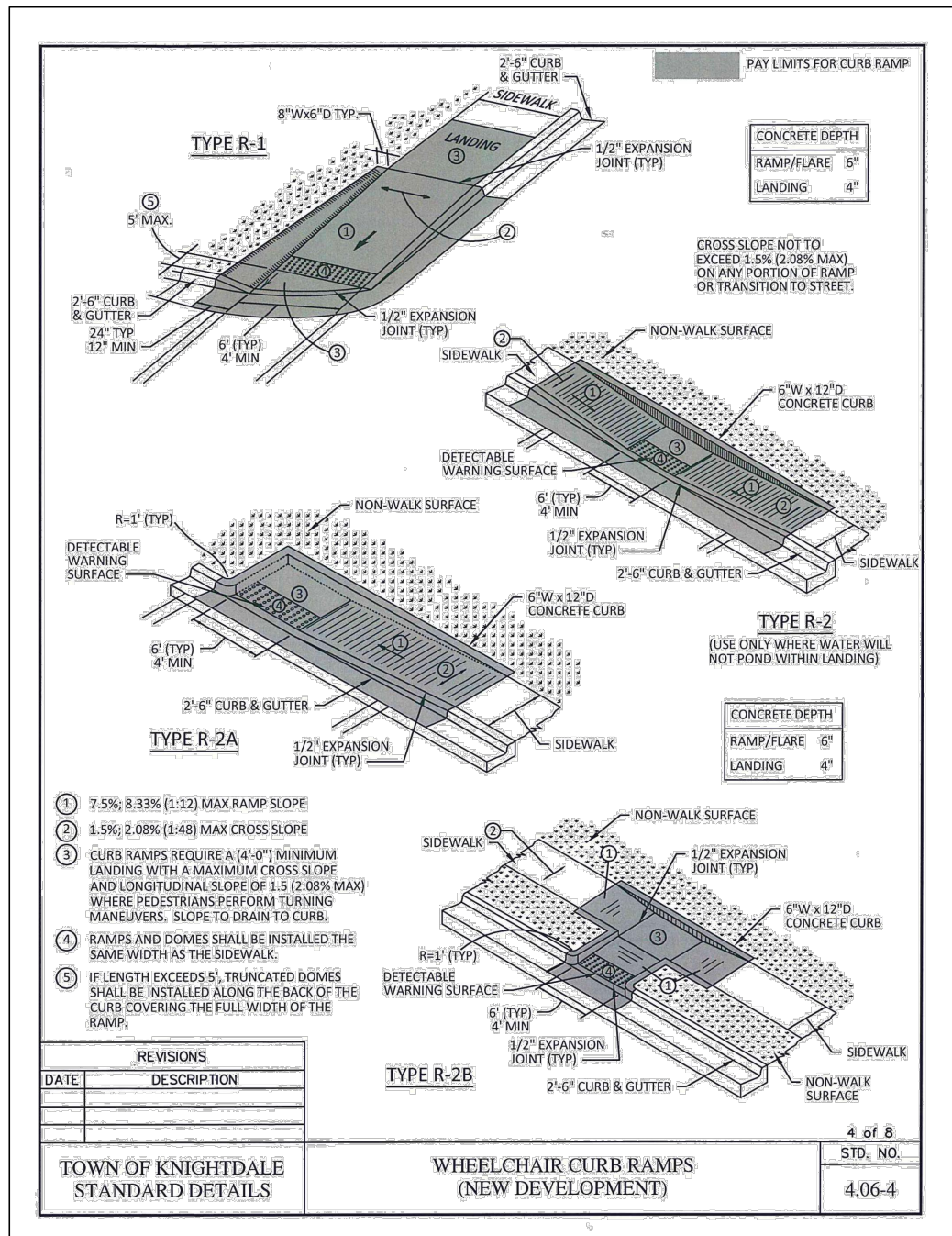
3 6' BENCH
L-5.0 NTS

4 BIKE RACK
L-5.0 NTS

5 TRASH RECEPTACLE
L-5.0 NTS



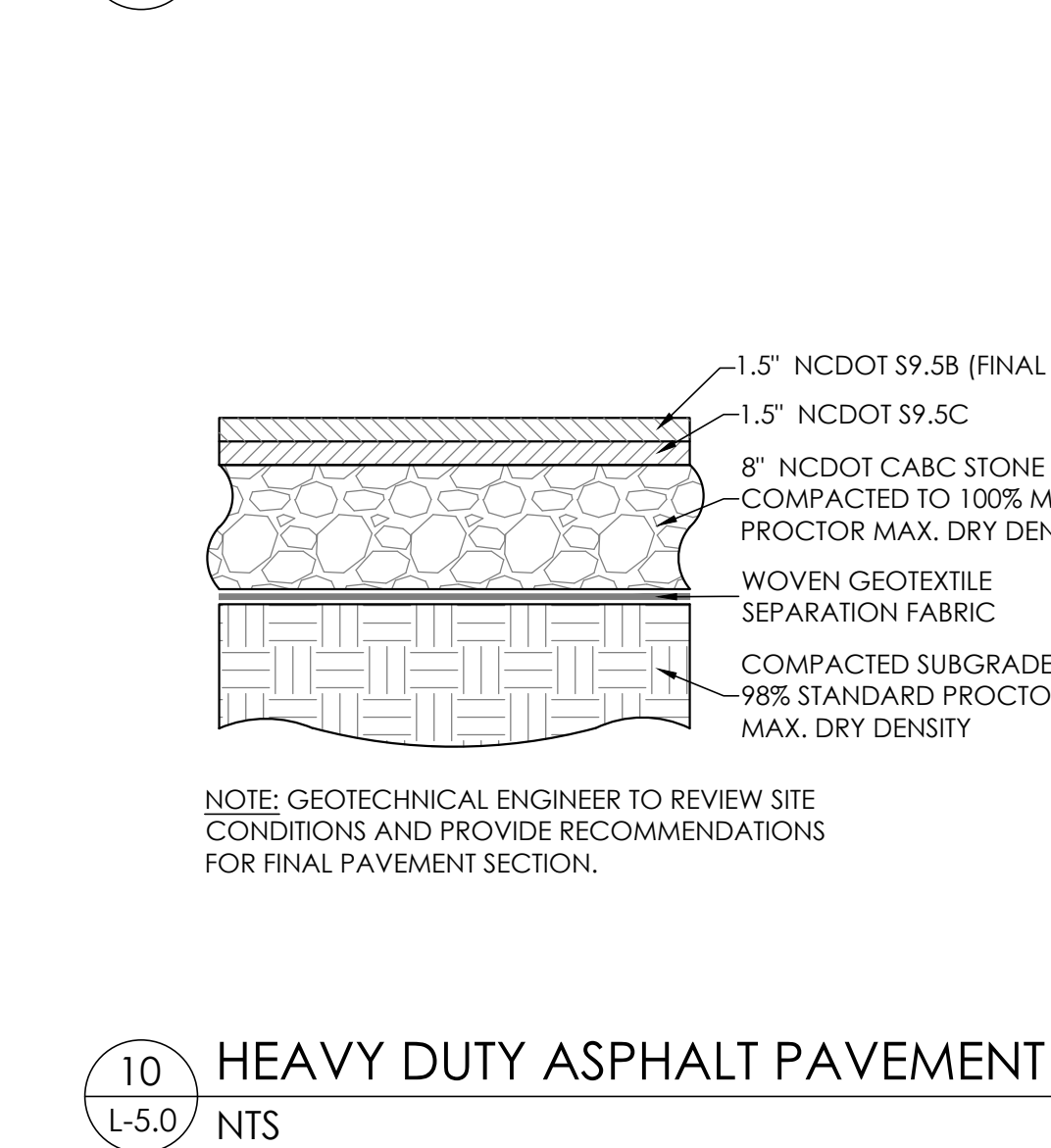
6 WHEELCHAIR CURB RAMPS
L-5.0 NTS



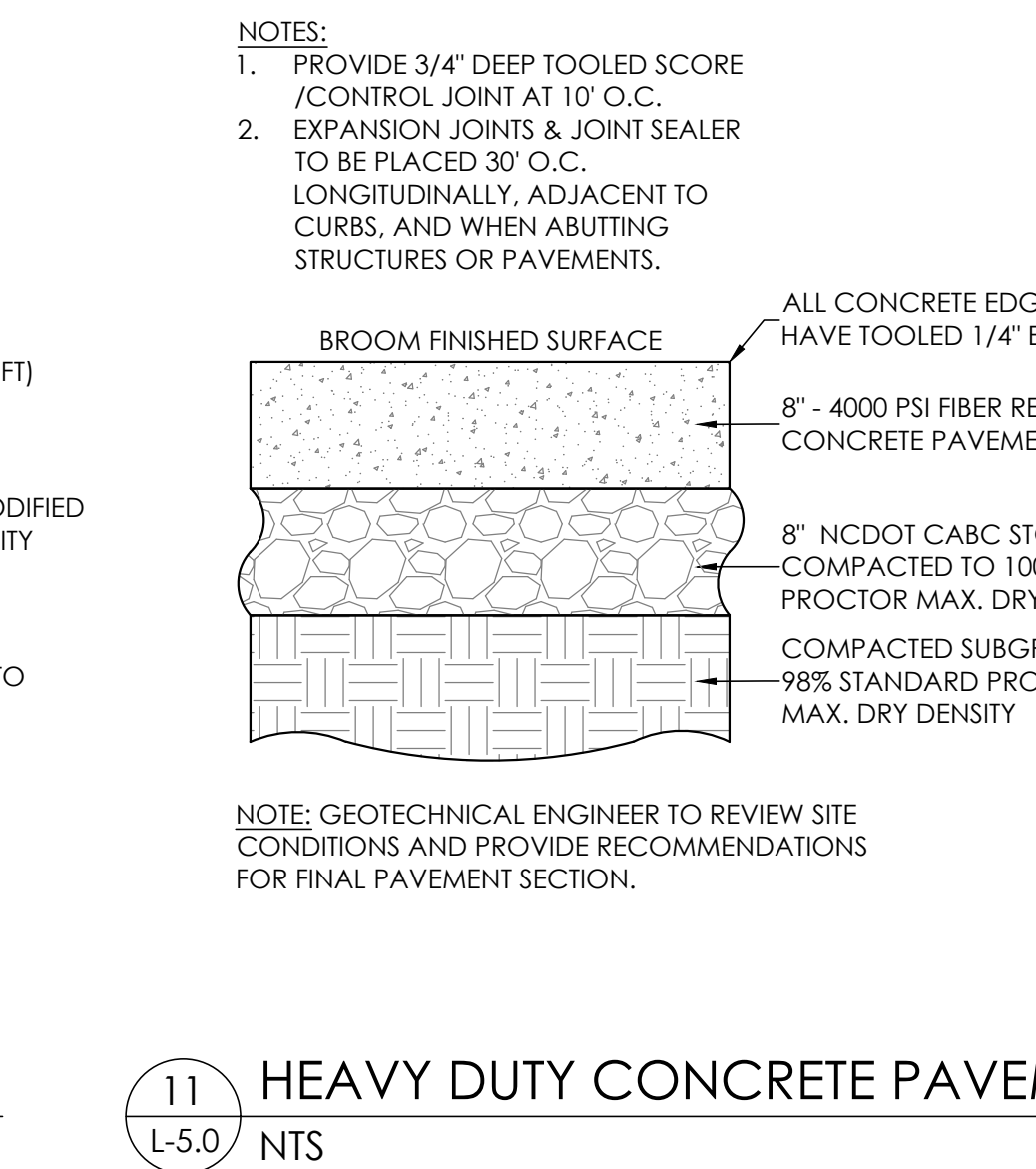
7 WHEELCHAIR CURB RAMP NOTES
L-5.0 NTS

8 TRUNCATED DOMES
L-5.0 NTS

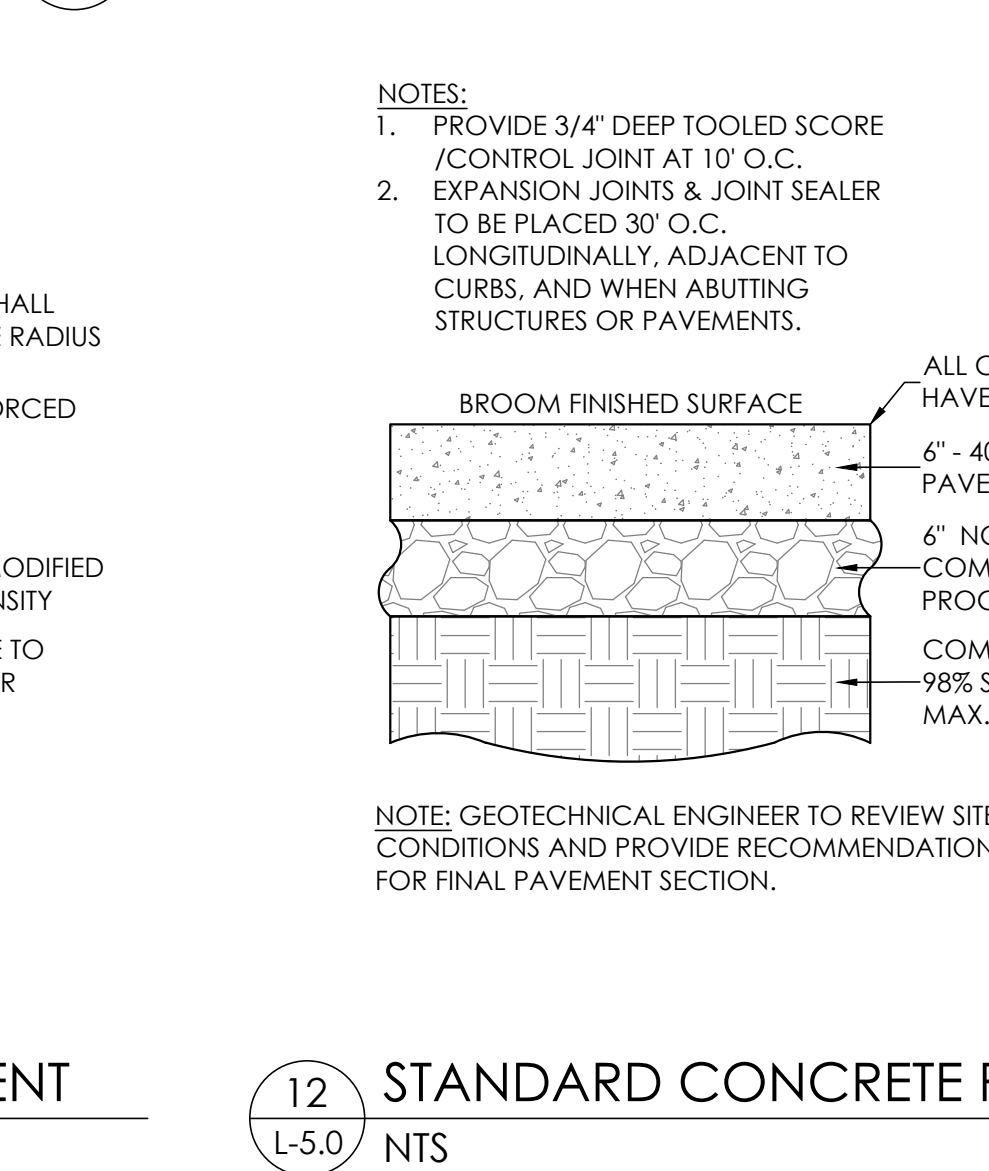
9 ADA PARKING SIGN
L-5.0 NTS



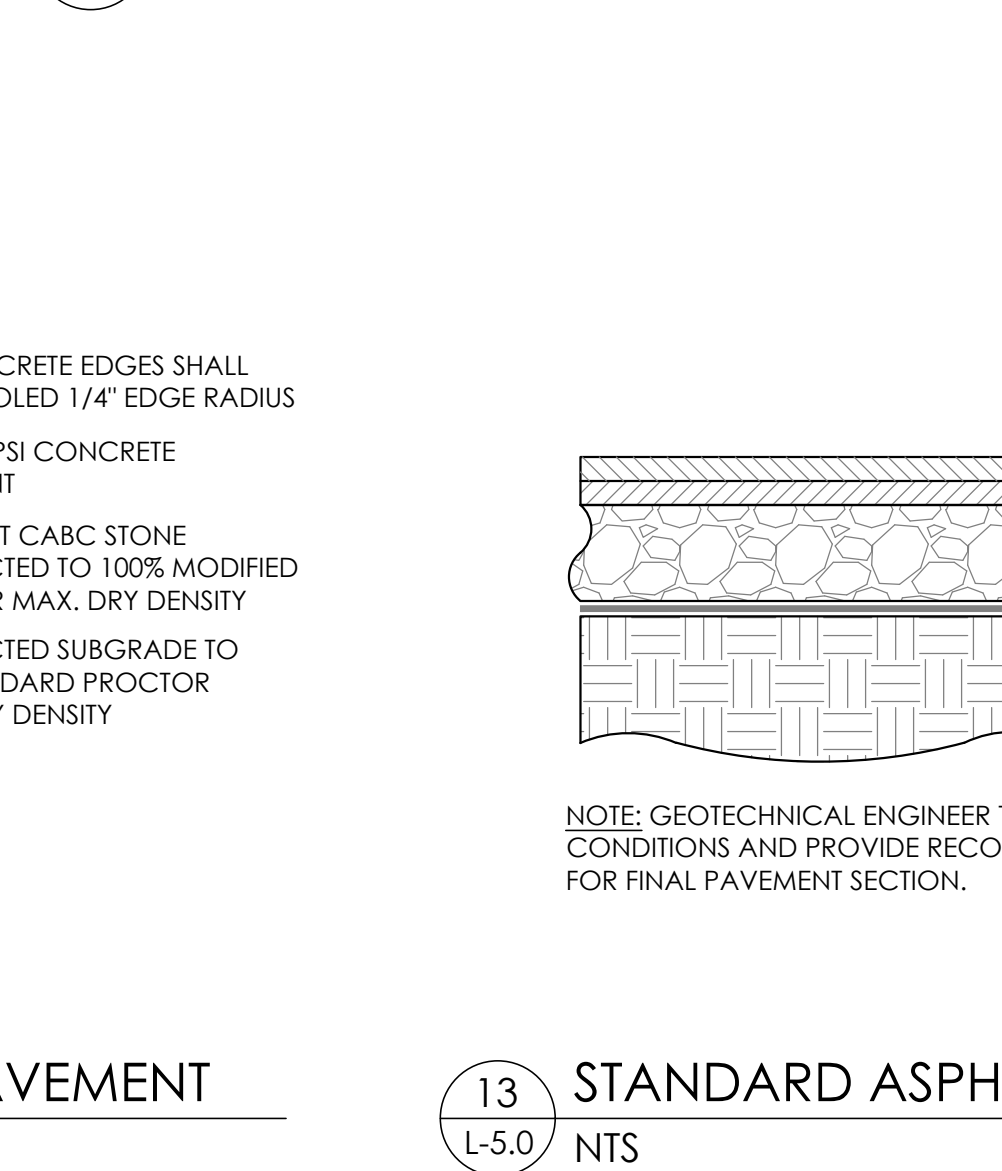
10 HEAVY DUTY ASPHALT PAVEMENT
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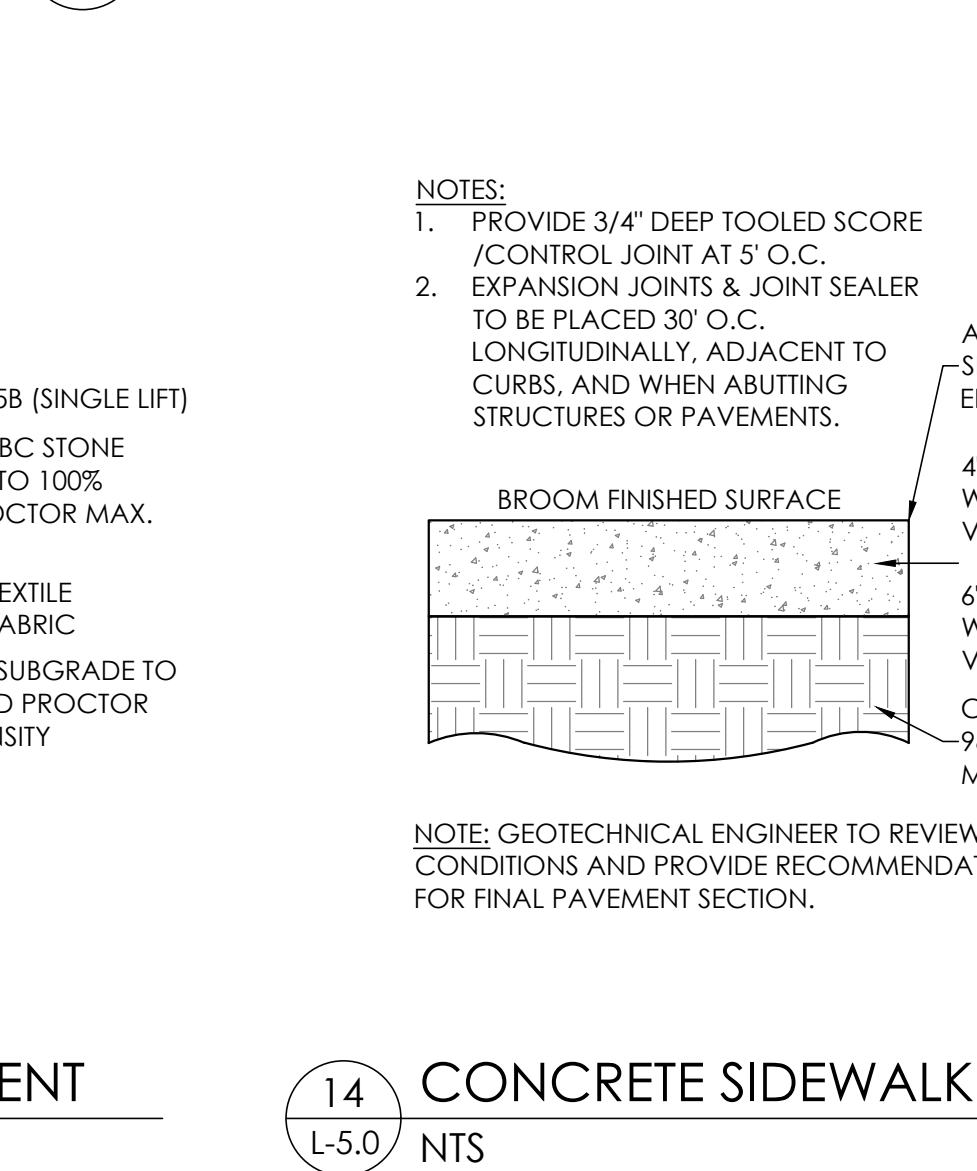
11 HEAVY DUTY CONCRETE PAVEMENT
L-5.0 NTS



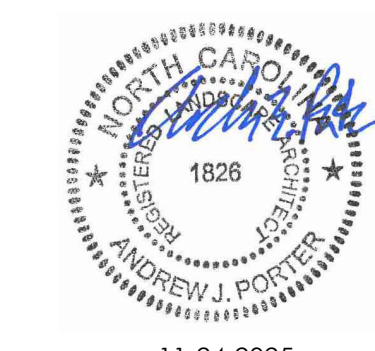
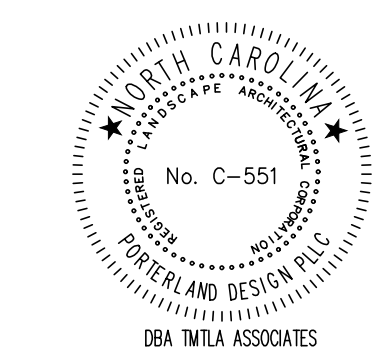
12 STANDARD CONCRETE PAVEMENT
L-5.0 NTS



13 STANDARD ASPHALT PAVEMENT
L-5.0 NTS



14 CONCRETE SIDEWALK
L-5.0 NTS



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SITE DETAILS

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KNIGHTDALE, NC 27545

TOK PROJECT #ZCP-7-24

SCALE:
AS NOTED

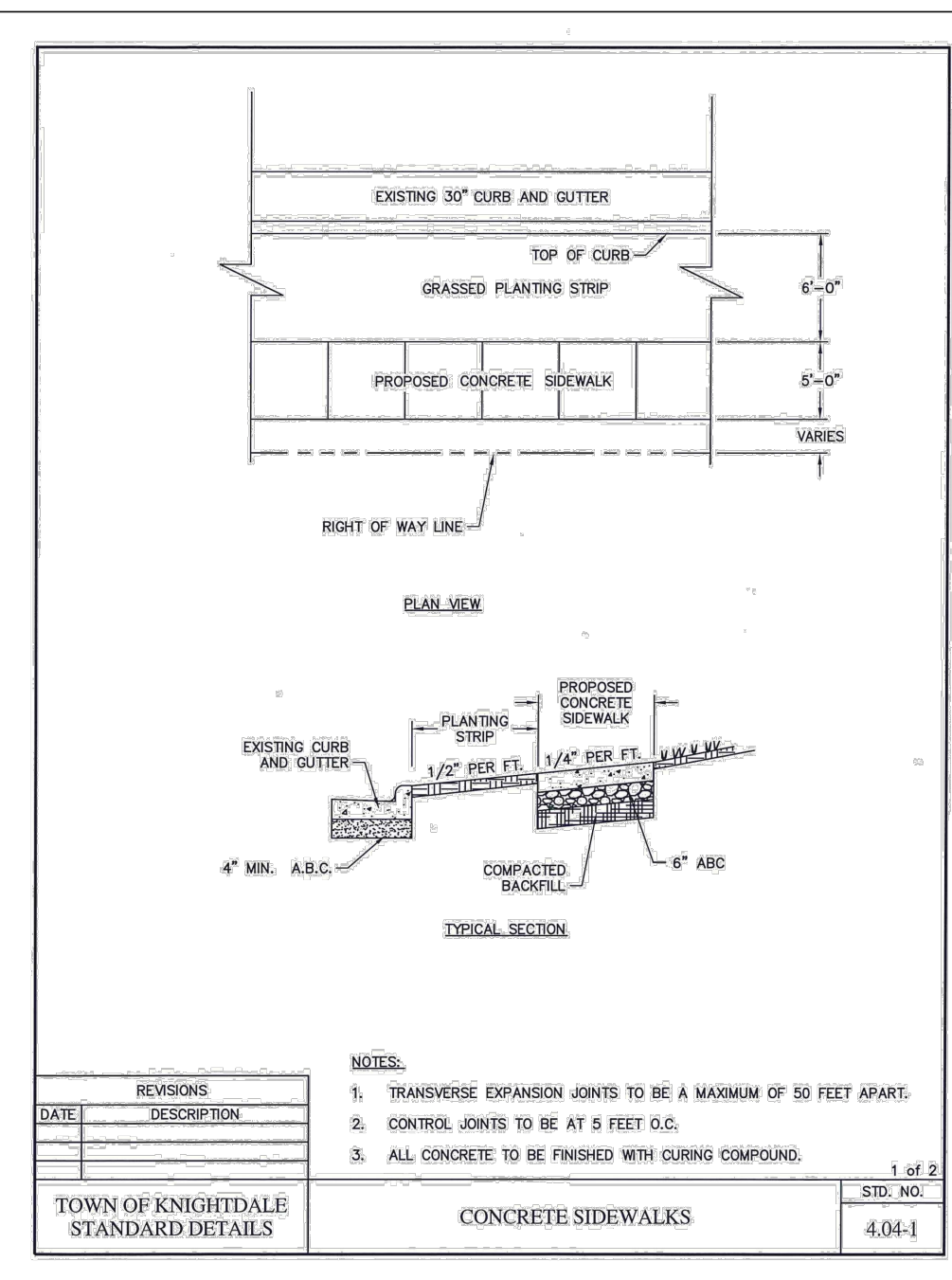
DRAWN BY:
AJP

PROJECT #
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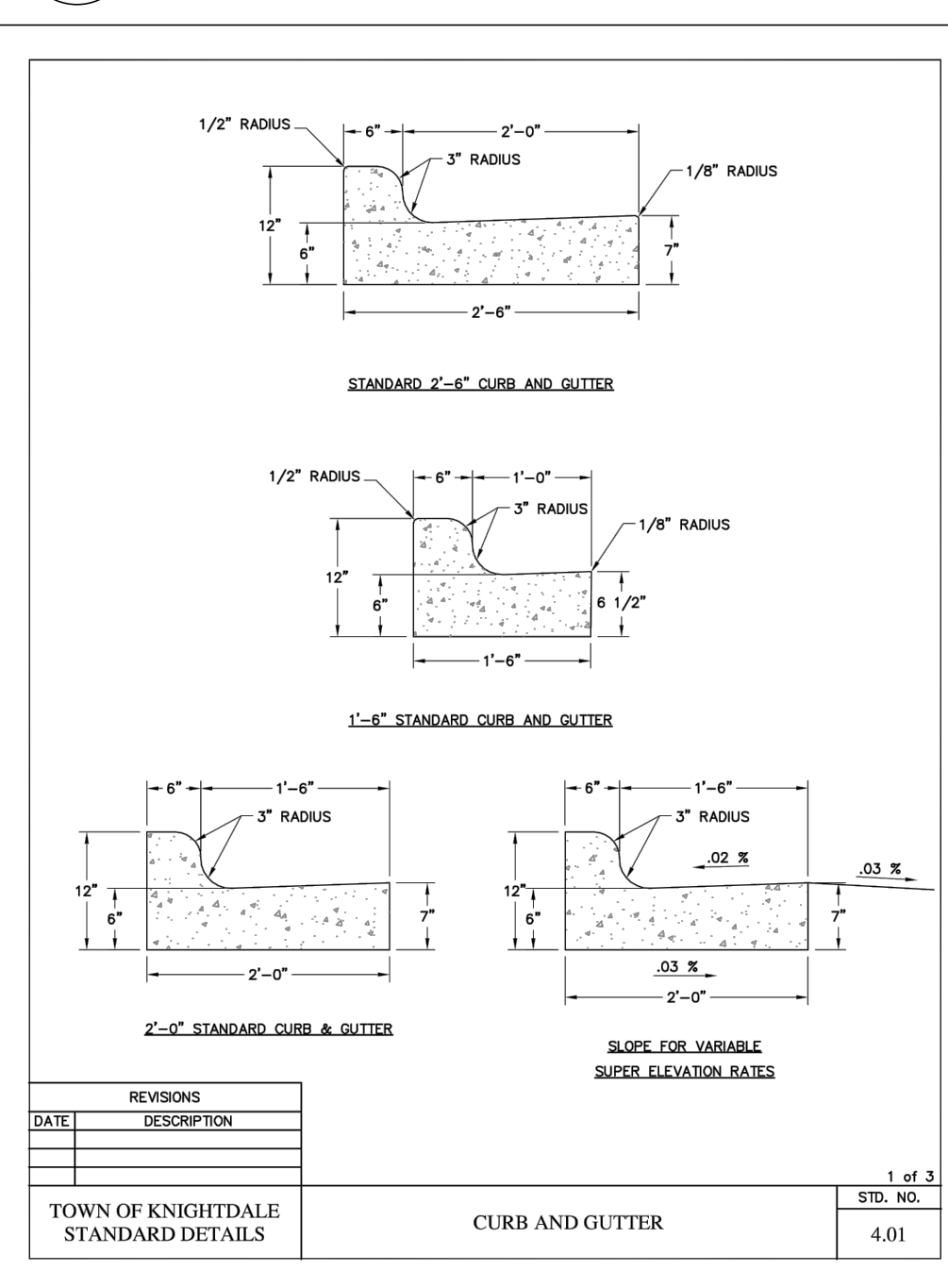
DATE:
4/9/2024

SHEET
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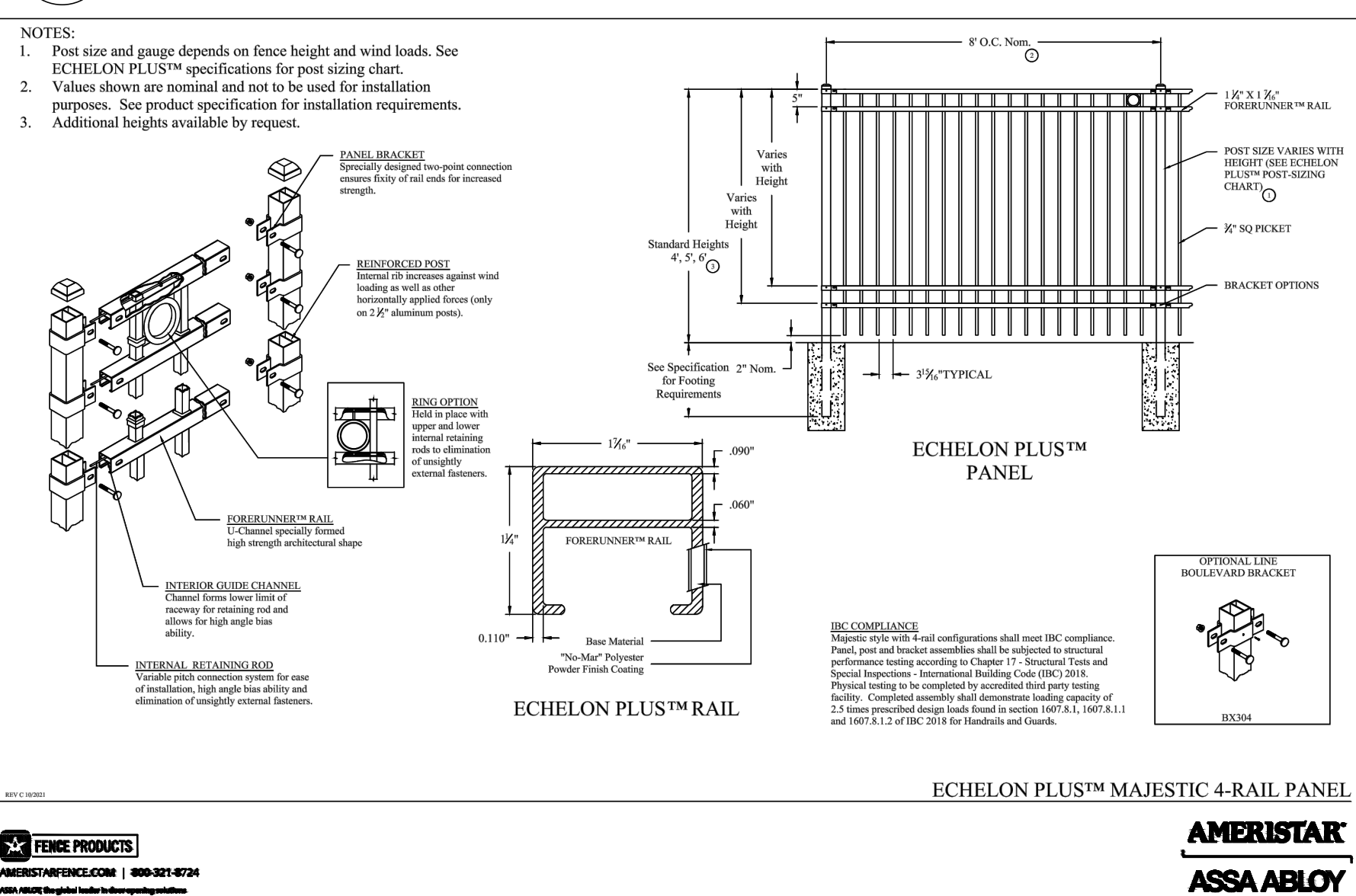
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1 CONCRETE SIDEWALKS

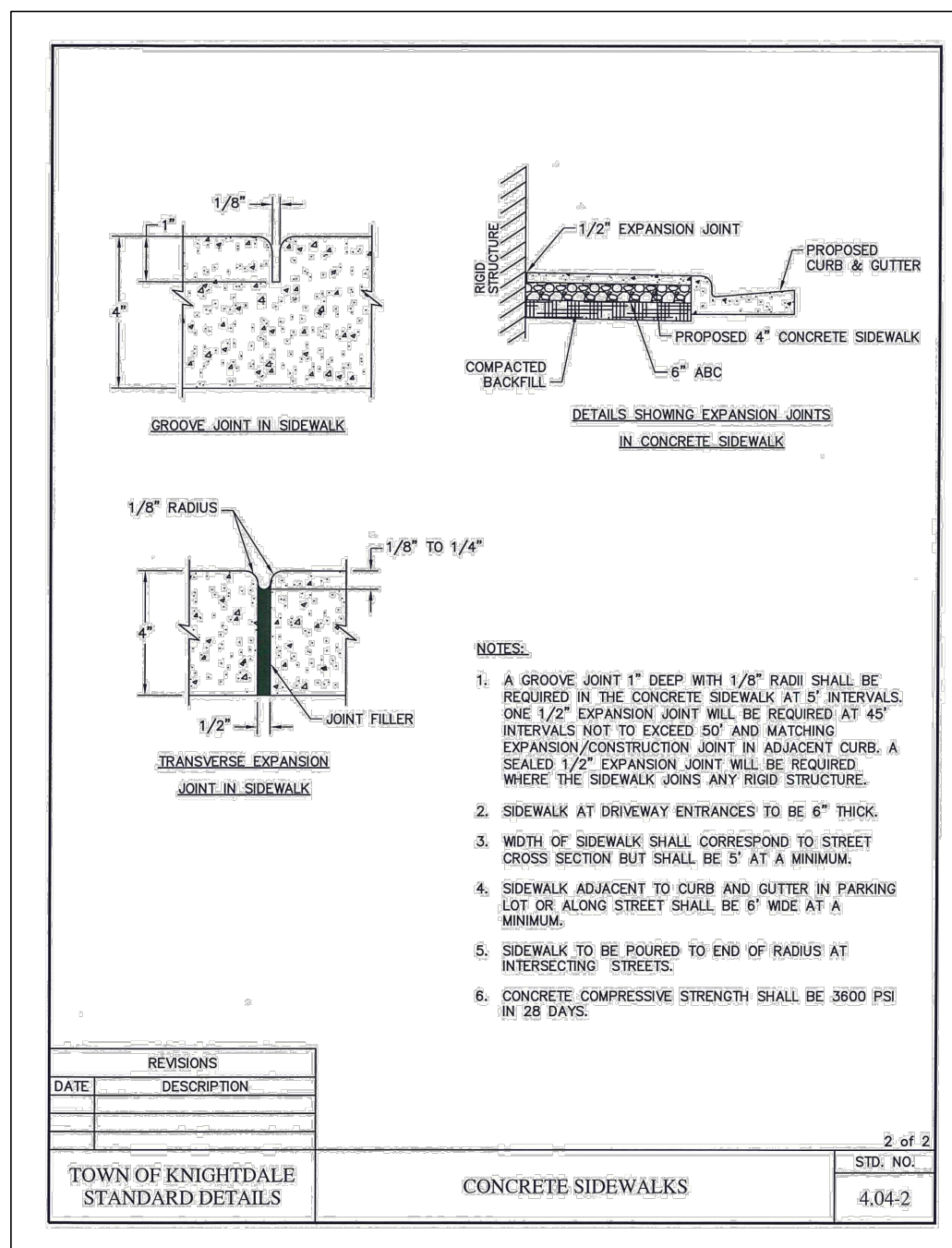


4 CURB AND GUTTER

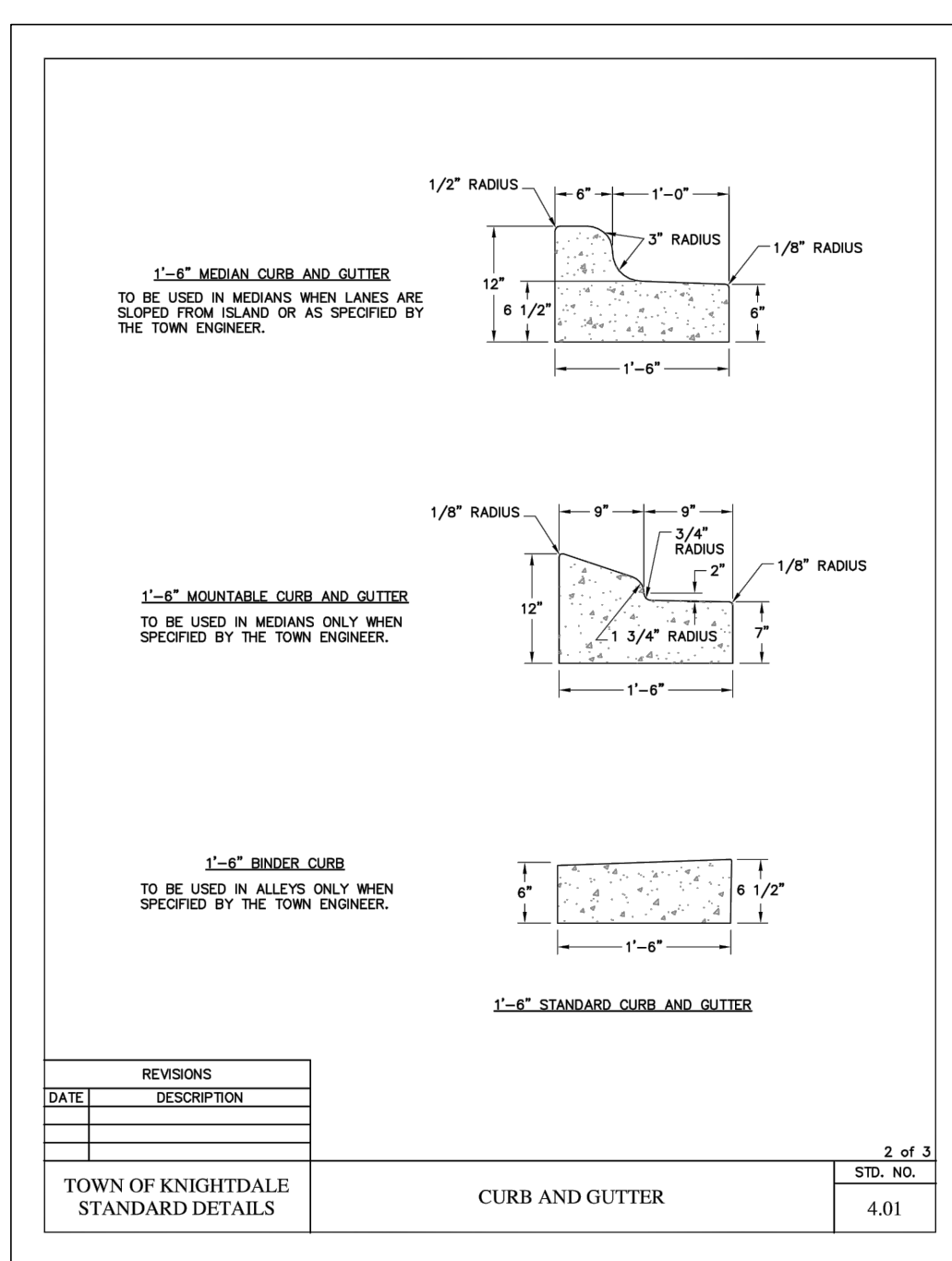


7 4' ALUMINUM PICKET FENCE

L-5.1 NTS

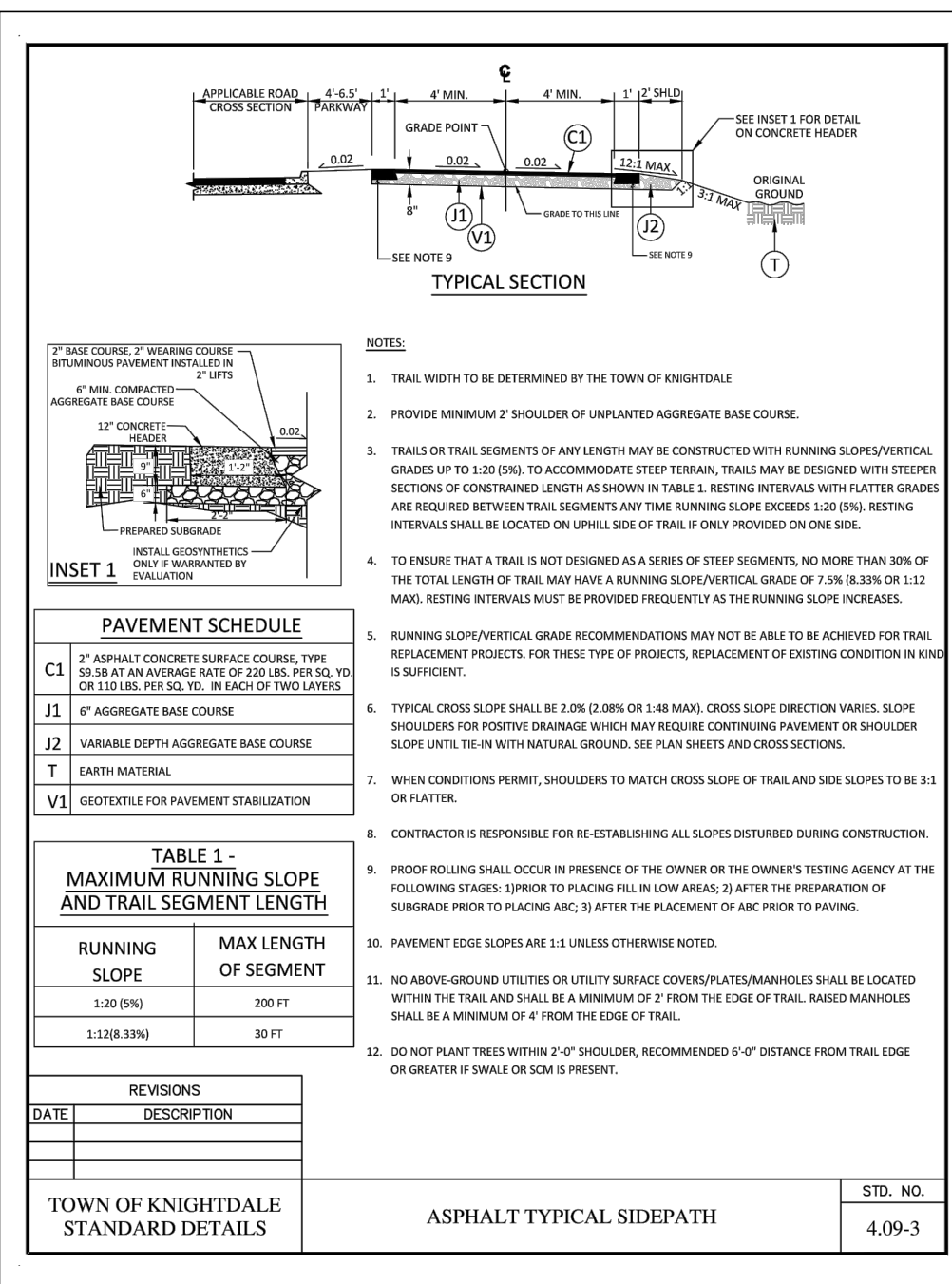


2 ASPHALT SIDEPATH



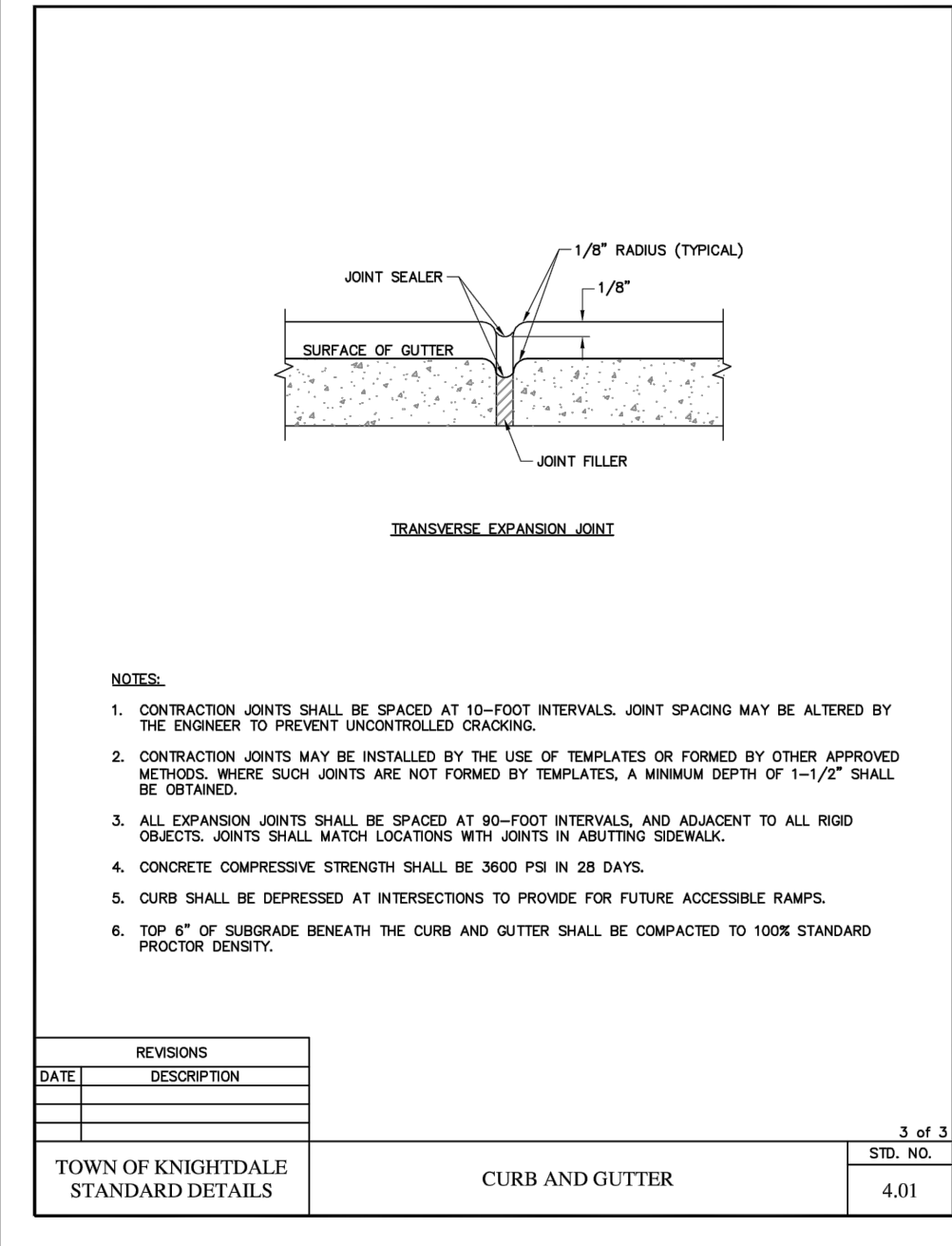
5 FIRE LANE MARKING

L-5.1 NTS



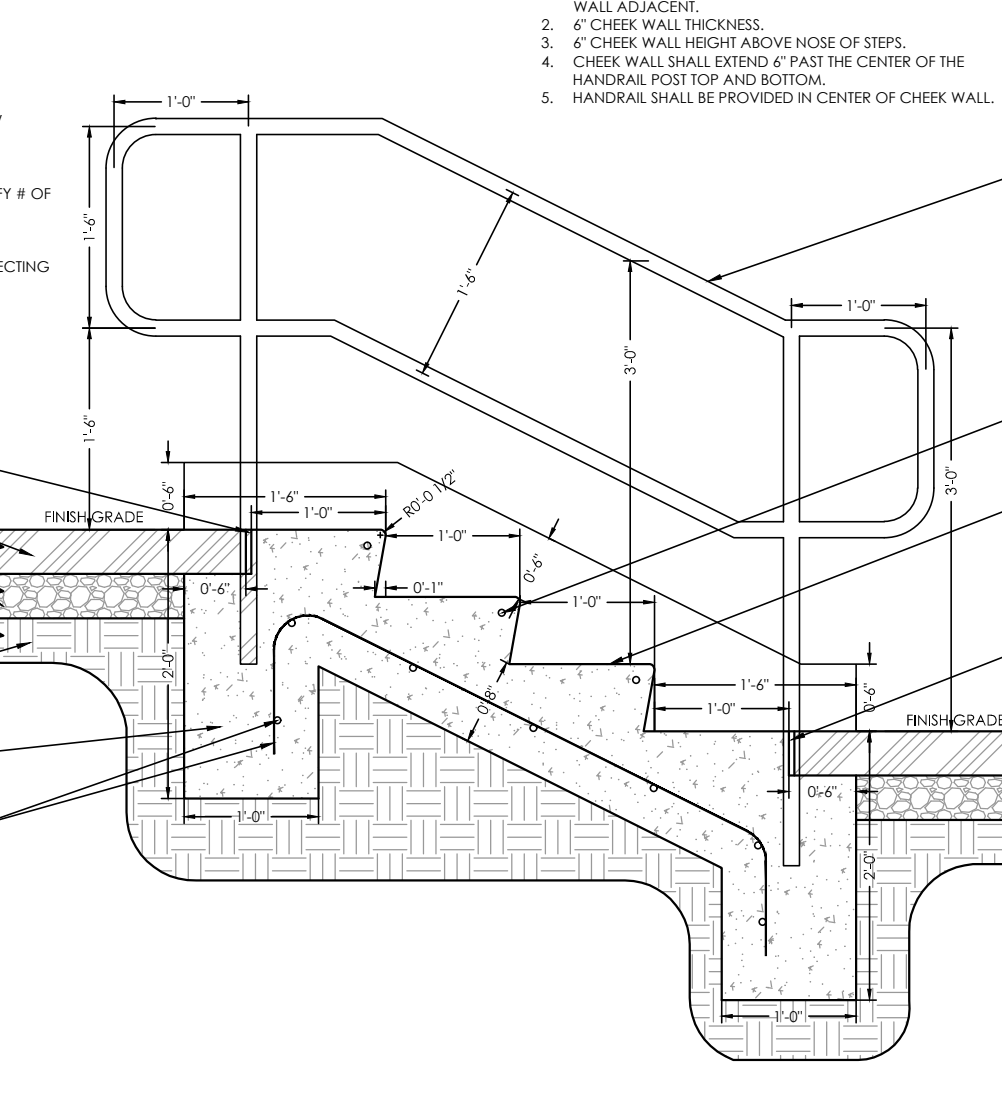
3 STREET NAME SIGN

L-5.1 NTS



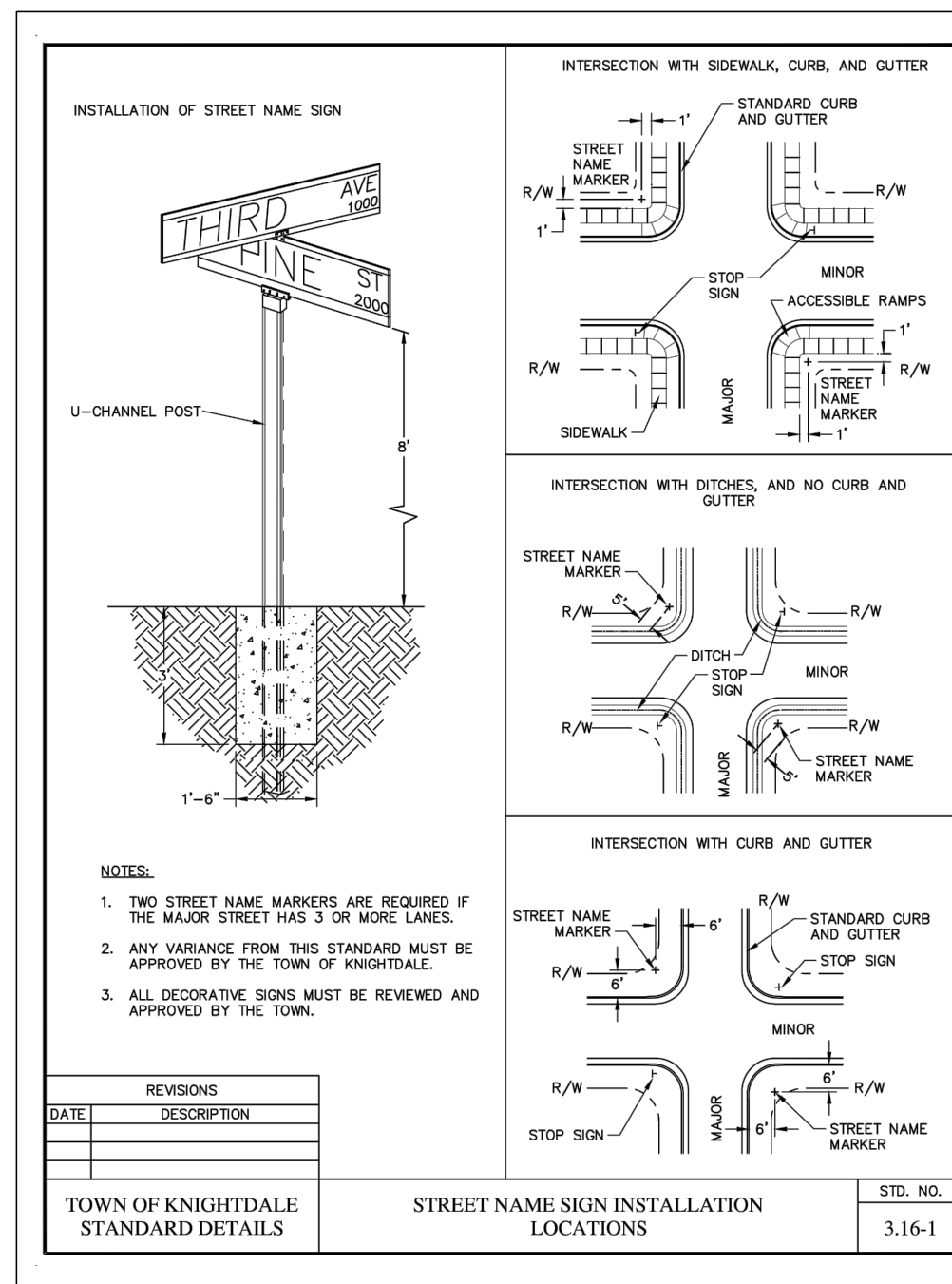
6 ASPHALT PAVEMENT PATCH

L-5.1 NTS

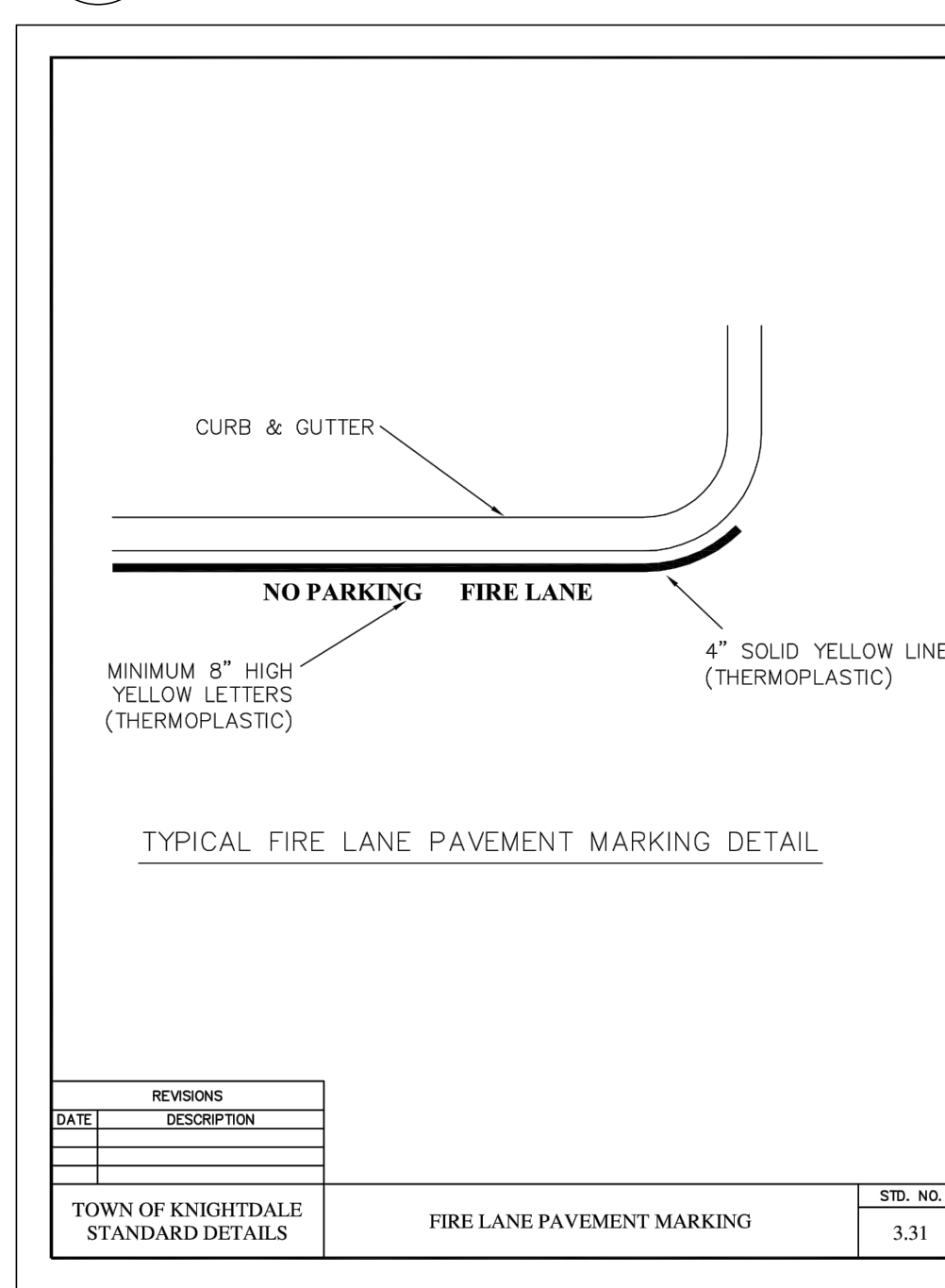


8 STEPS W/ HANDRAILS

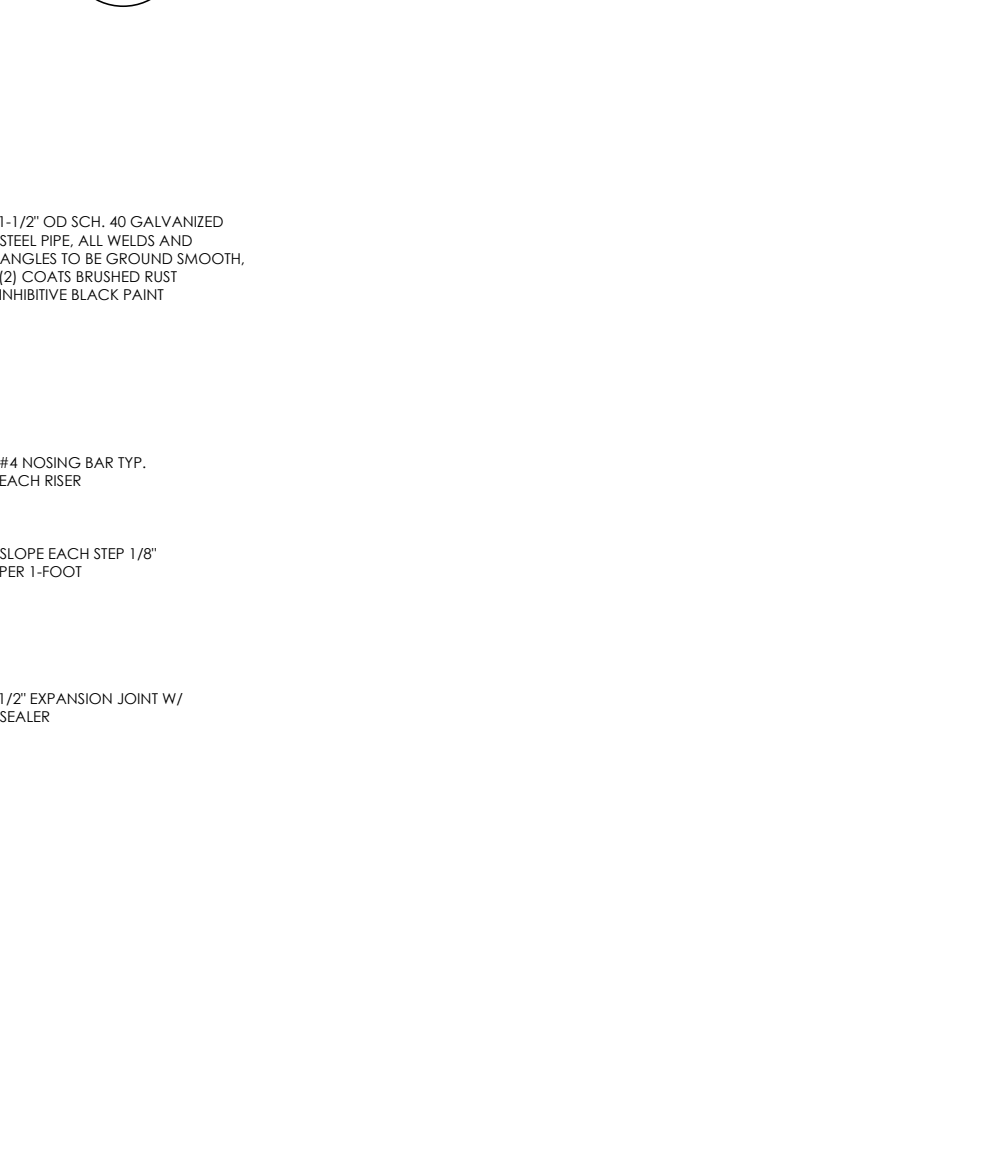
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1 CONCRETE SIDEWALKS

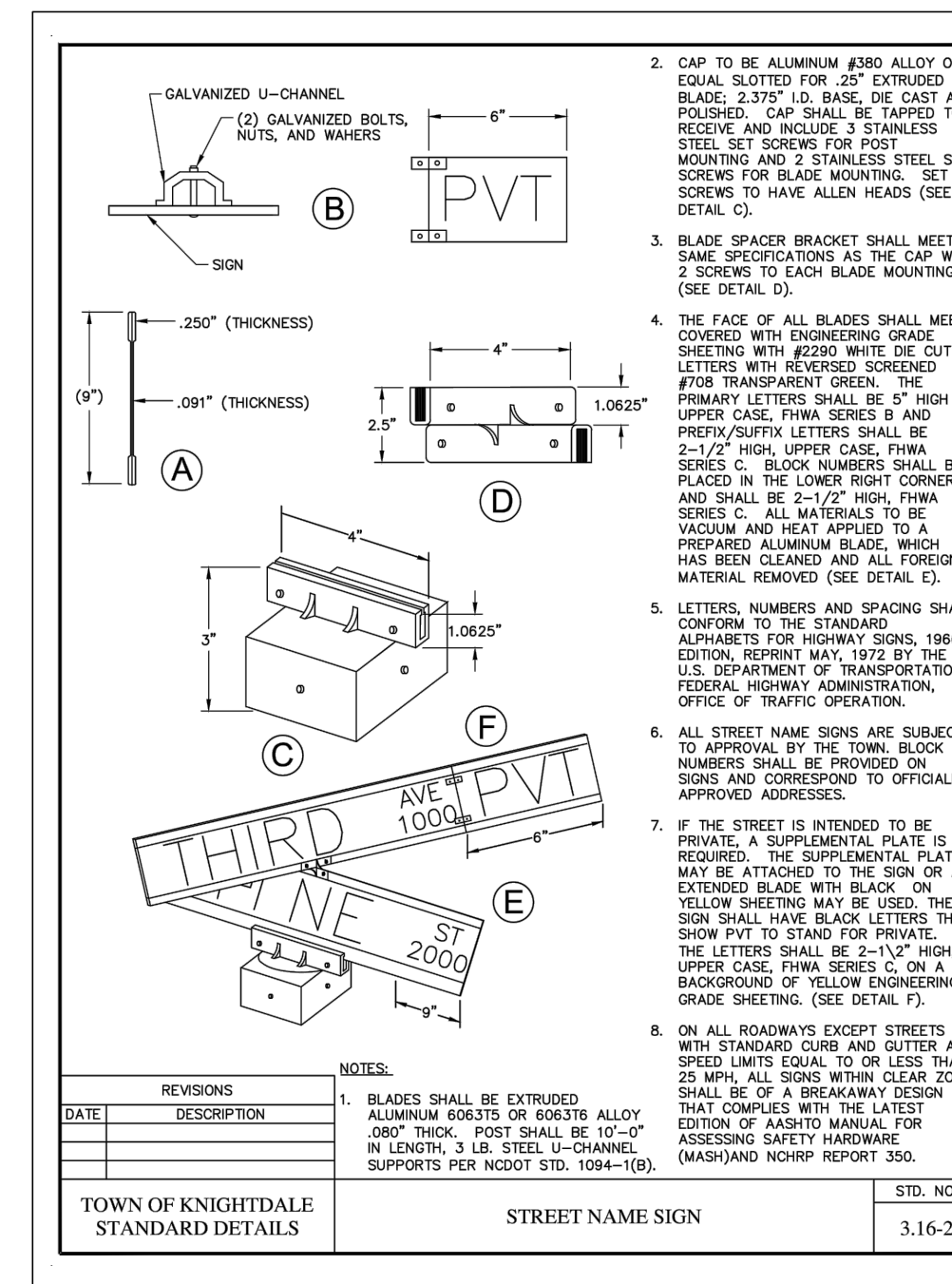


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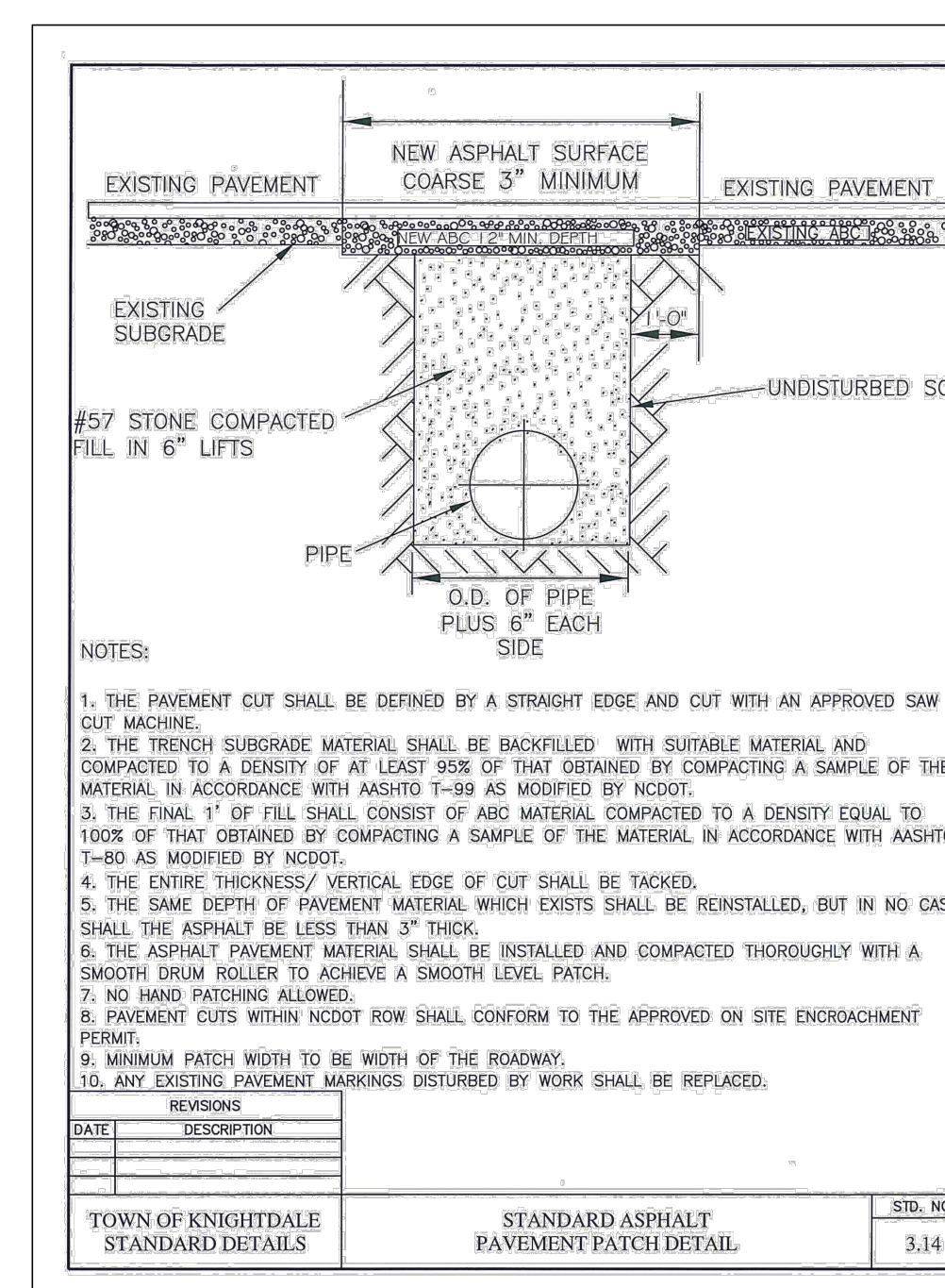


7 4' ALUMINUM PICKET FENCE

L-5.1 NTS



2 ASPHALT SIDEPATH



3 STREET NAME SIGN

L-5.1 NTS

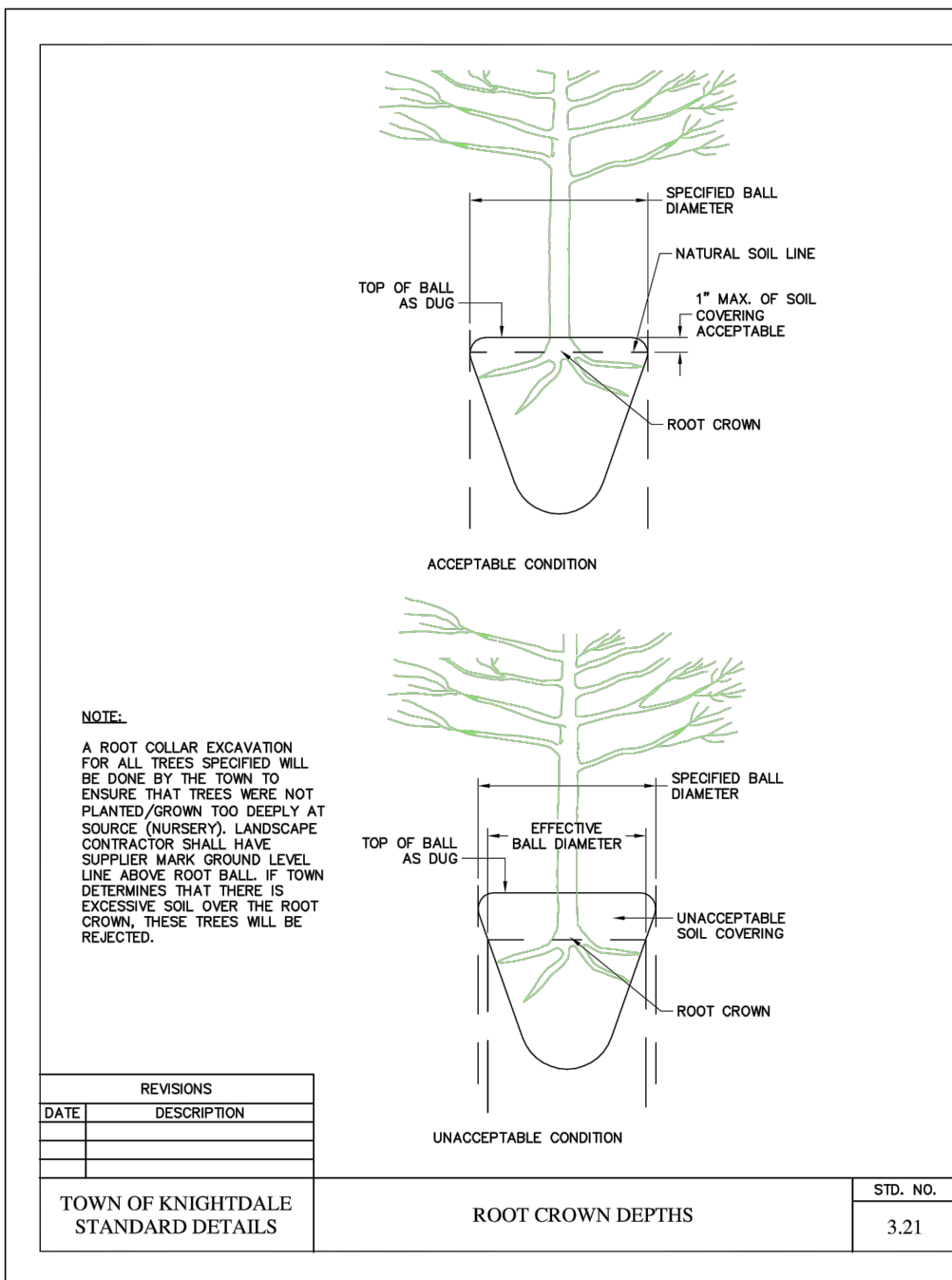


5 FIRE LANE MARKING

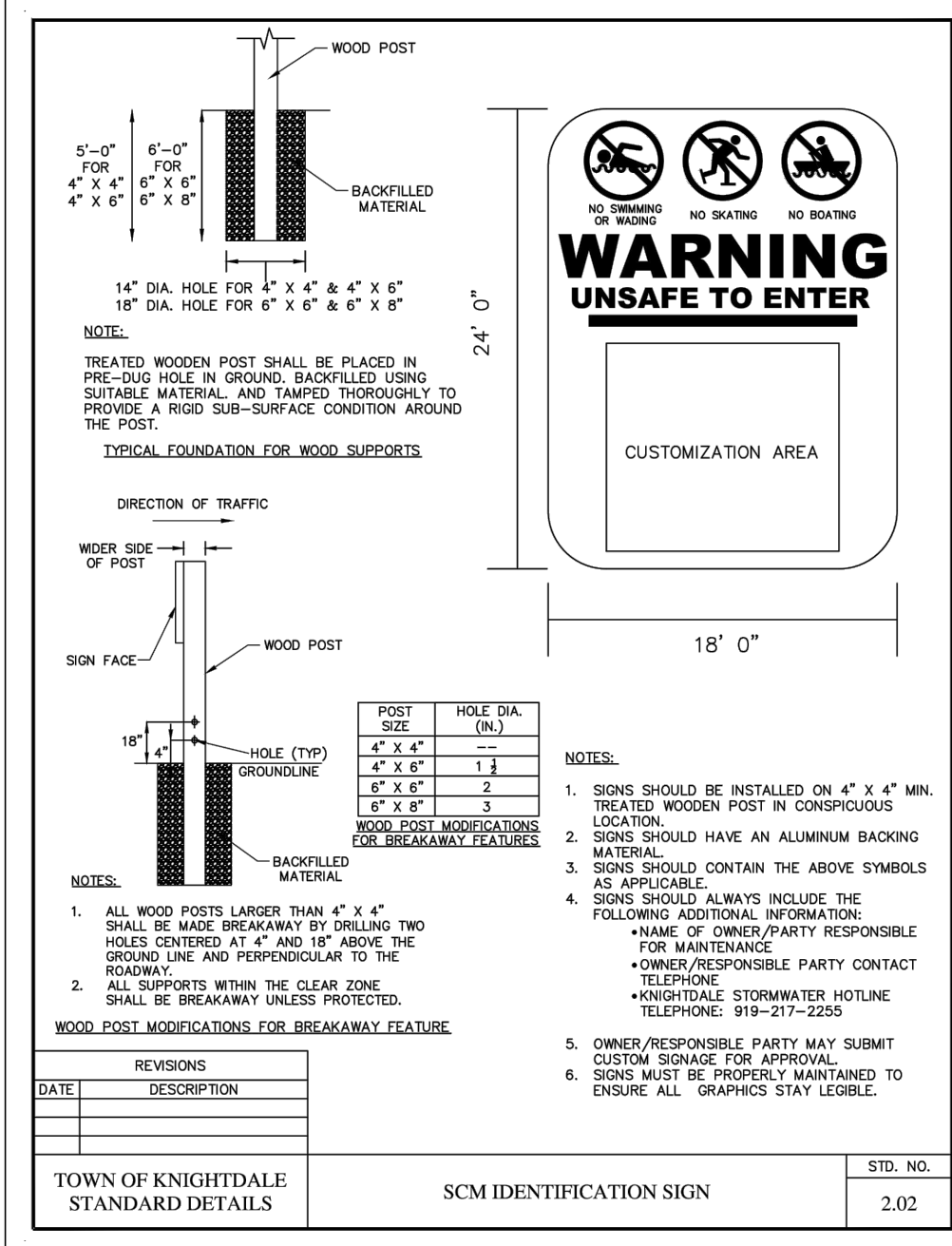
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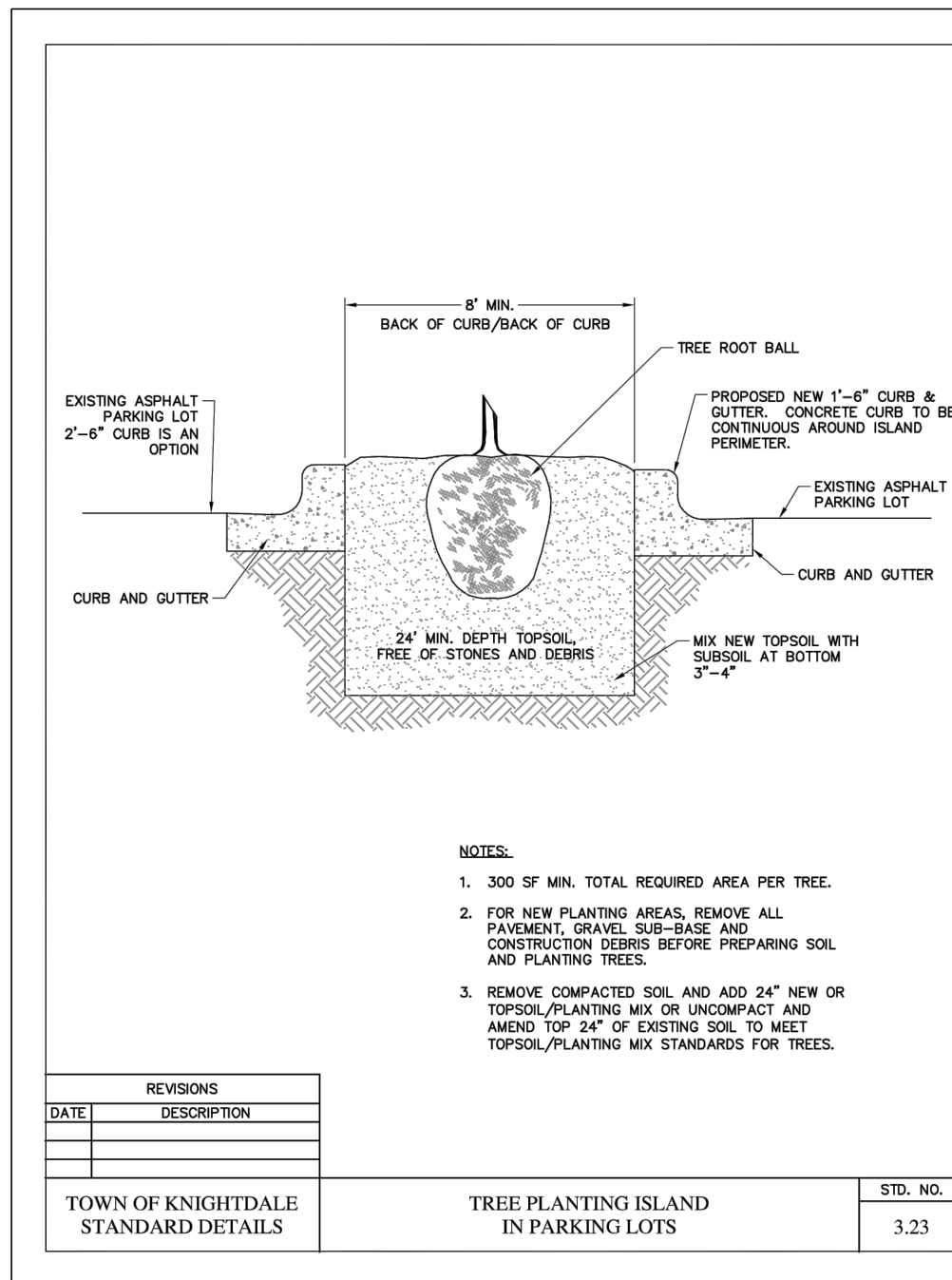
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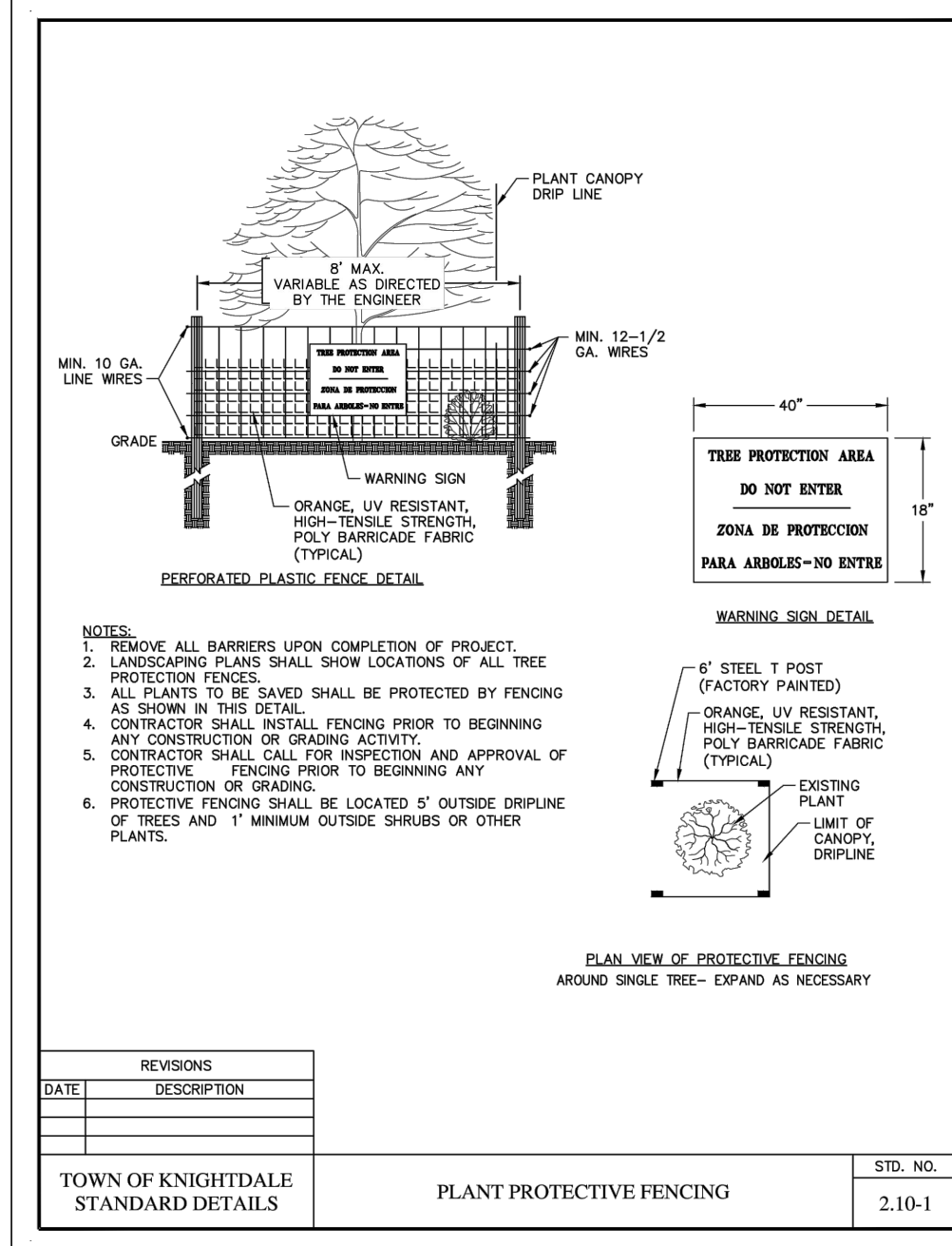
1 ROOT CROWN DEPTHS
L-5.2 NTS



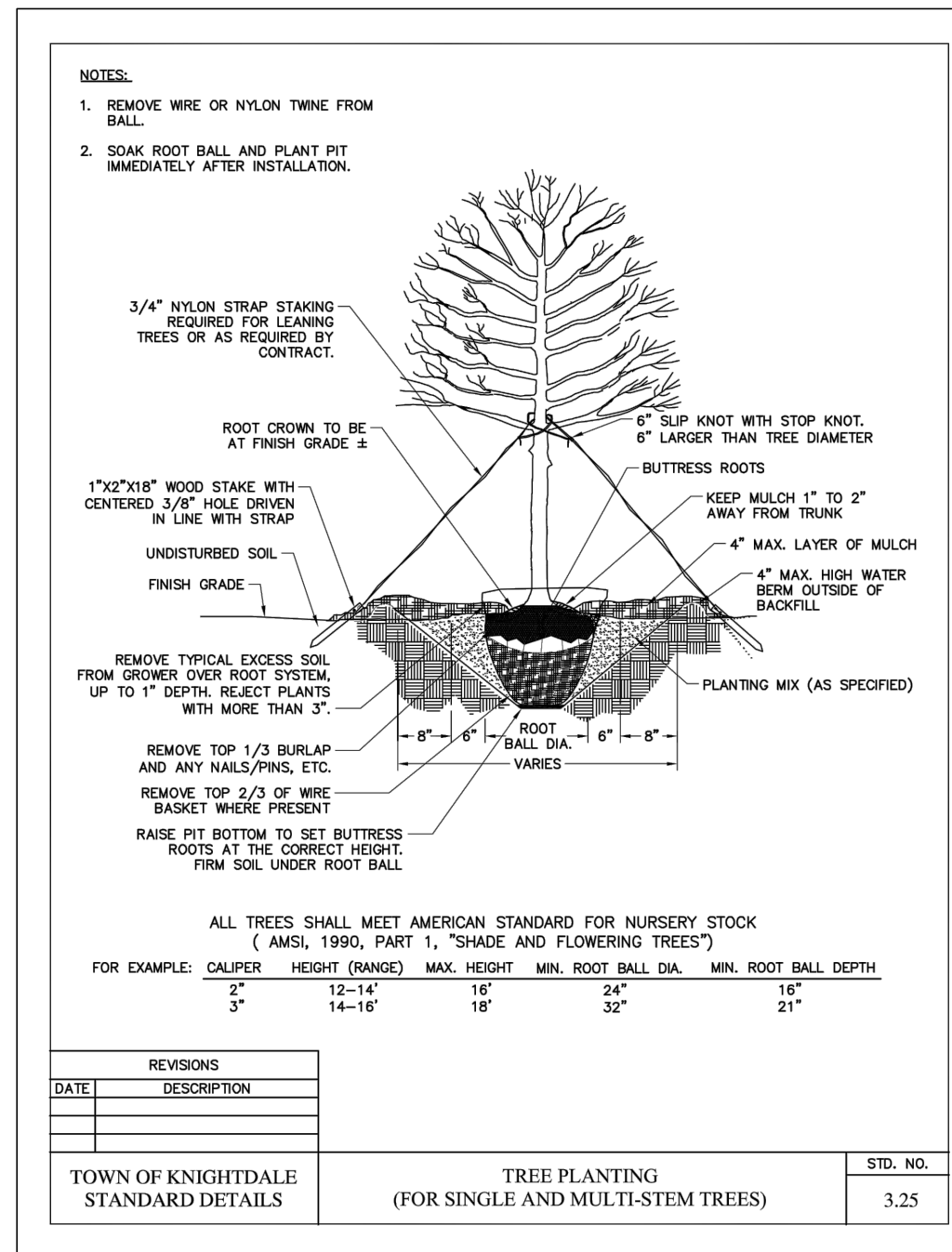
6 SCM IDENTIFICATION SIGN
L-5.2 NTS



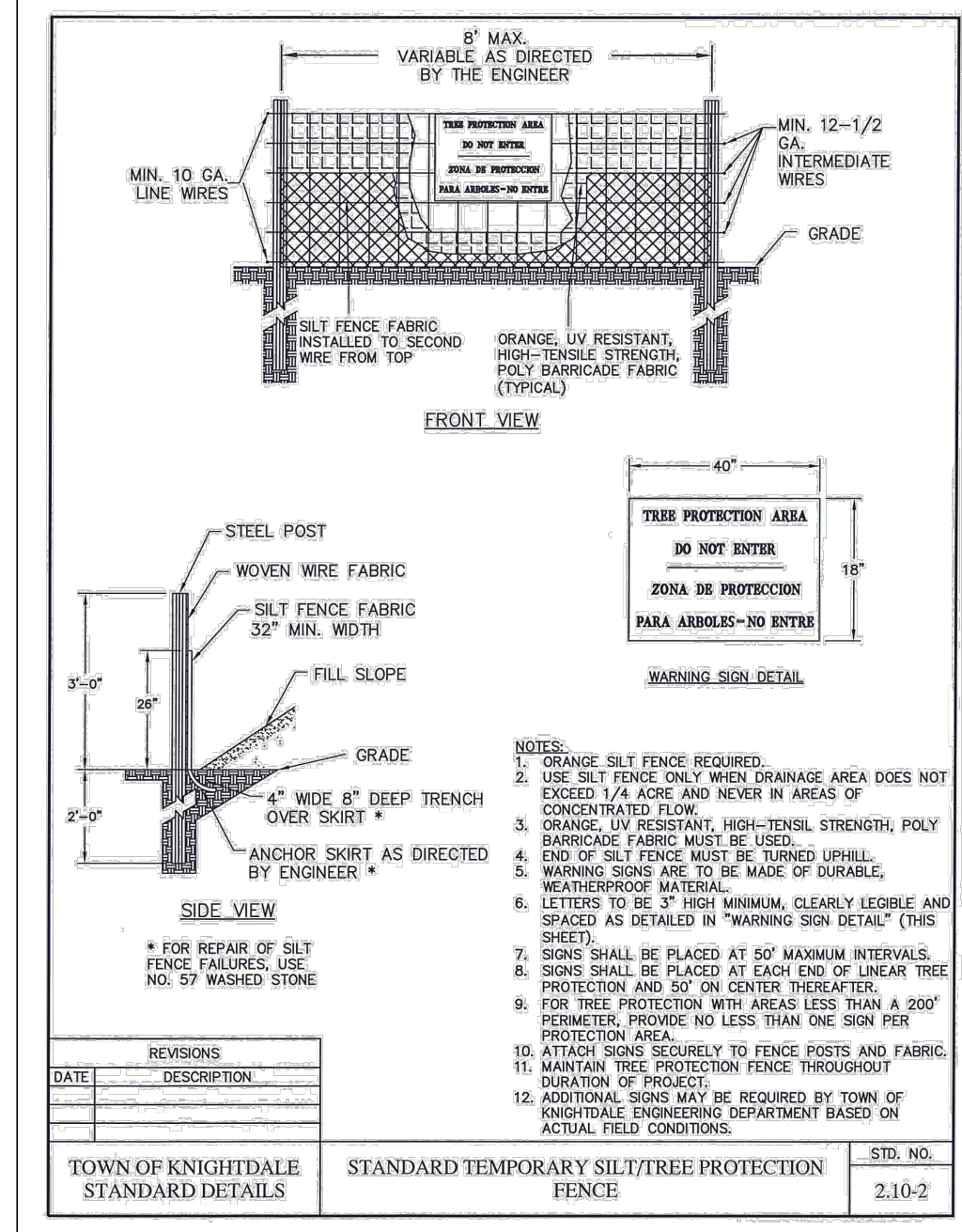
2 TREE PLANTING ISLAND
L-5.2 NTS



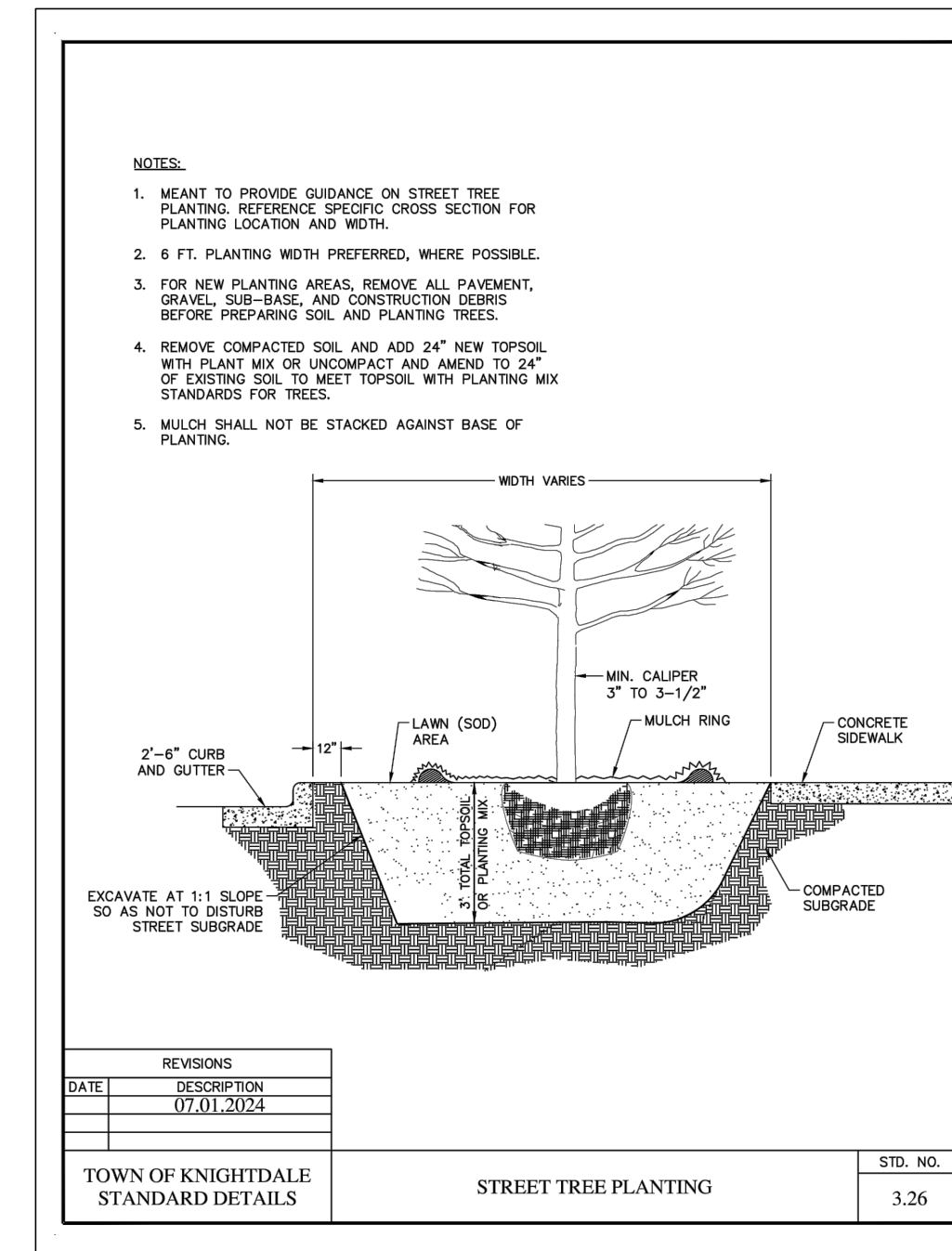
7 PLANT PROTECTIVE FENCING
L-5.2 NTS



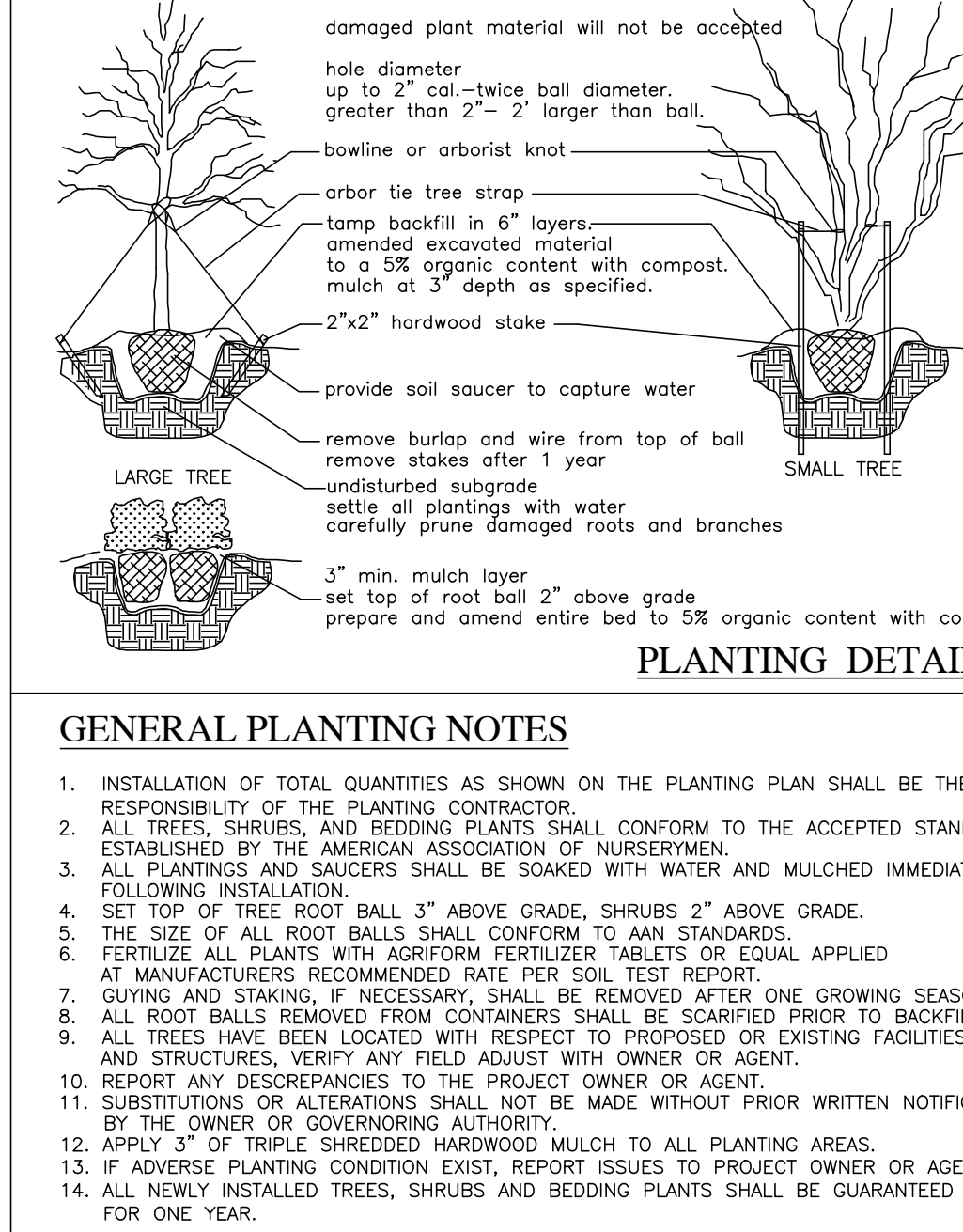
3 TREE PLANTING
L-5.2 NTS



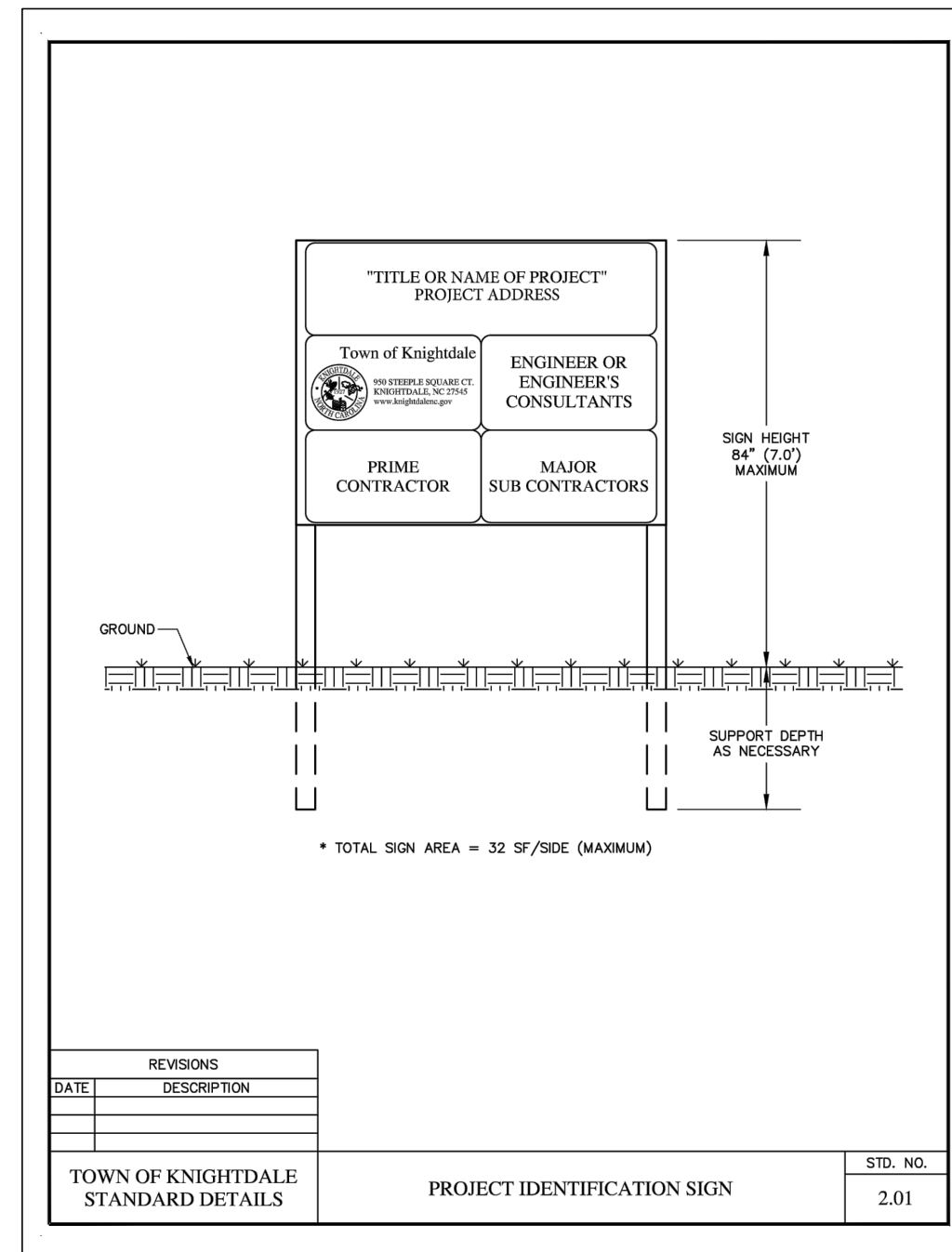
8 SILT/TREE PROTECTION FENCING
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4 STREET TREE PLANTING
L-5.2 NTS



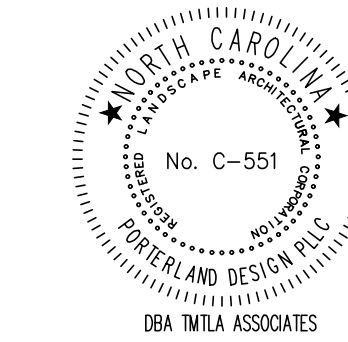
9 TREE AND SHRUB PLANTING DETAIL
L-5.2 NTS



5 PROJECT IDENTIFICATION SIGN
L-5.2 NTS



10 AQUA CONTROL EVOLUTION SERIES
L-5.2 NTS



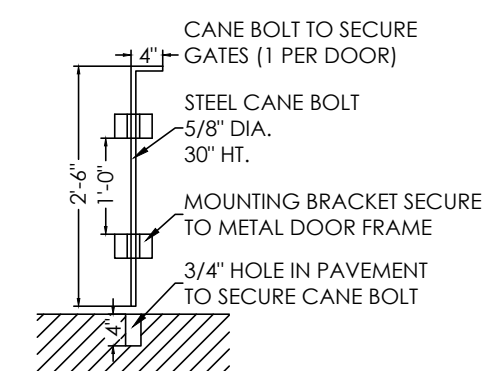
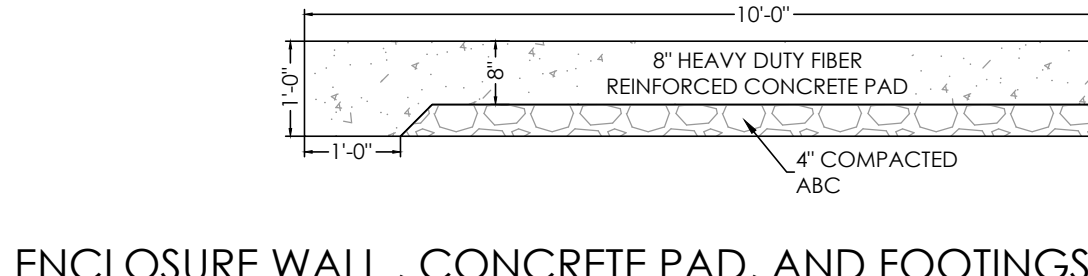
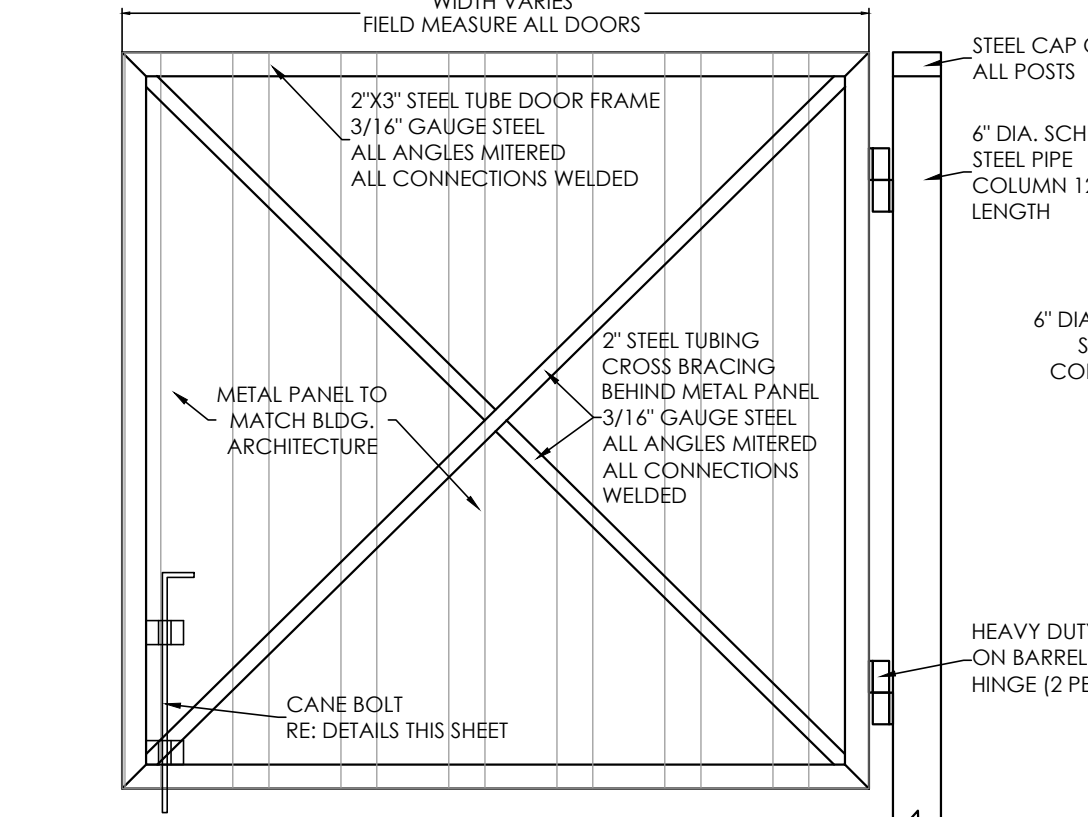
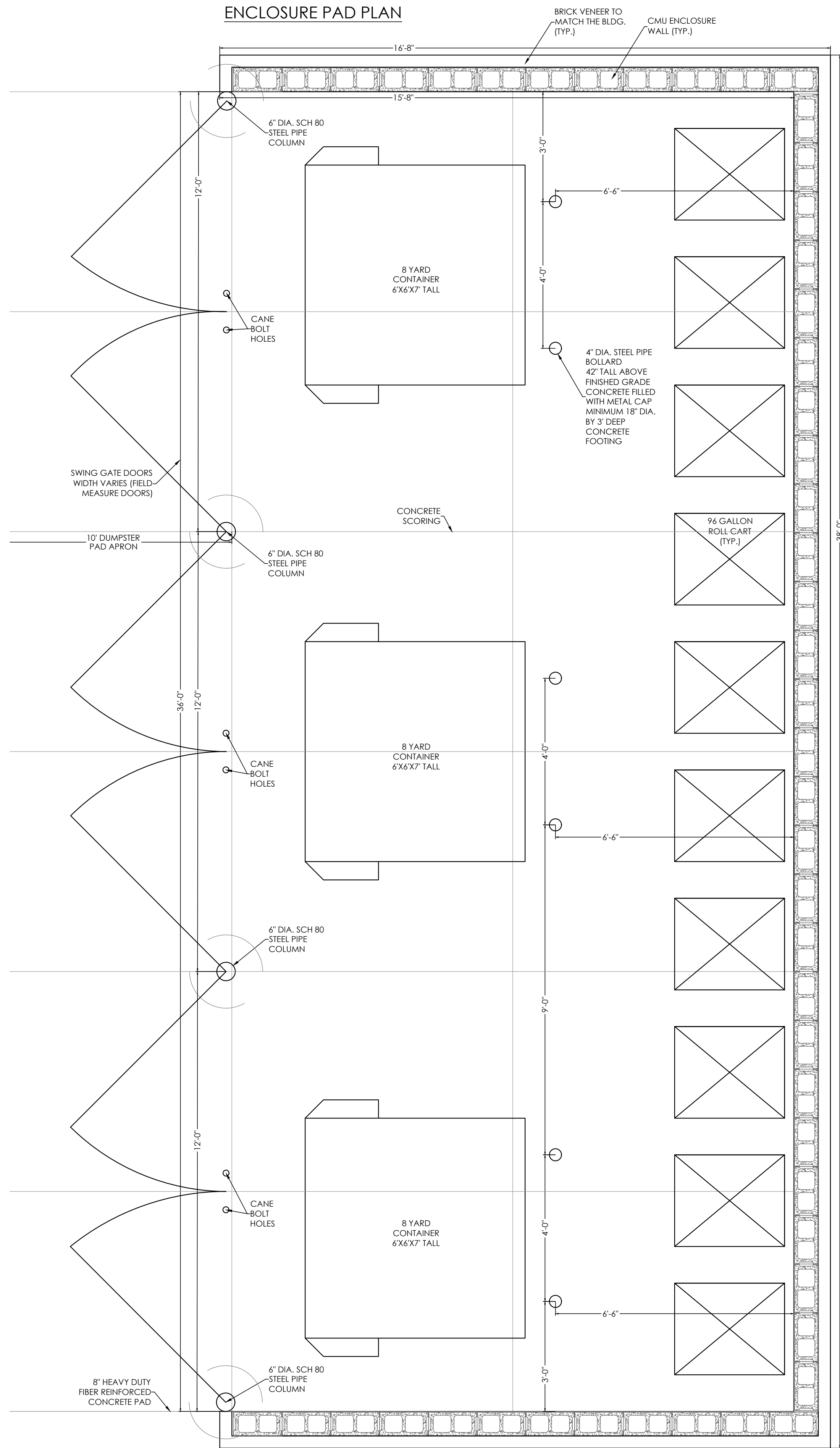
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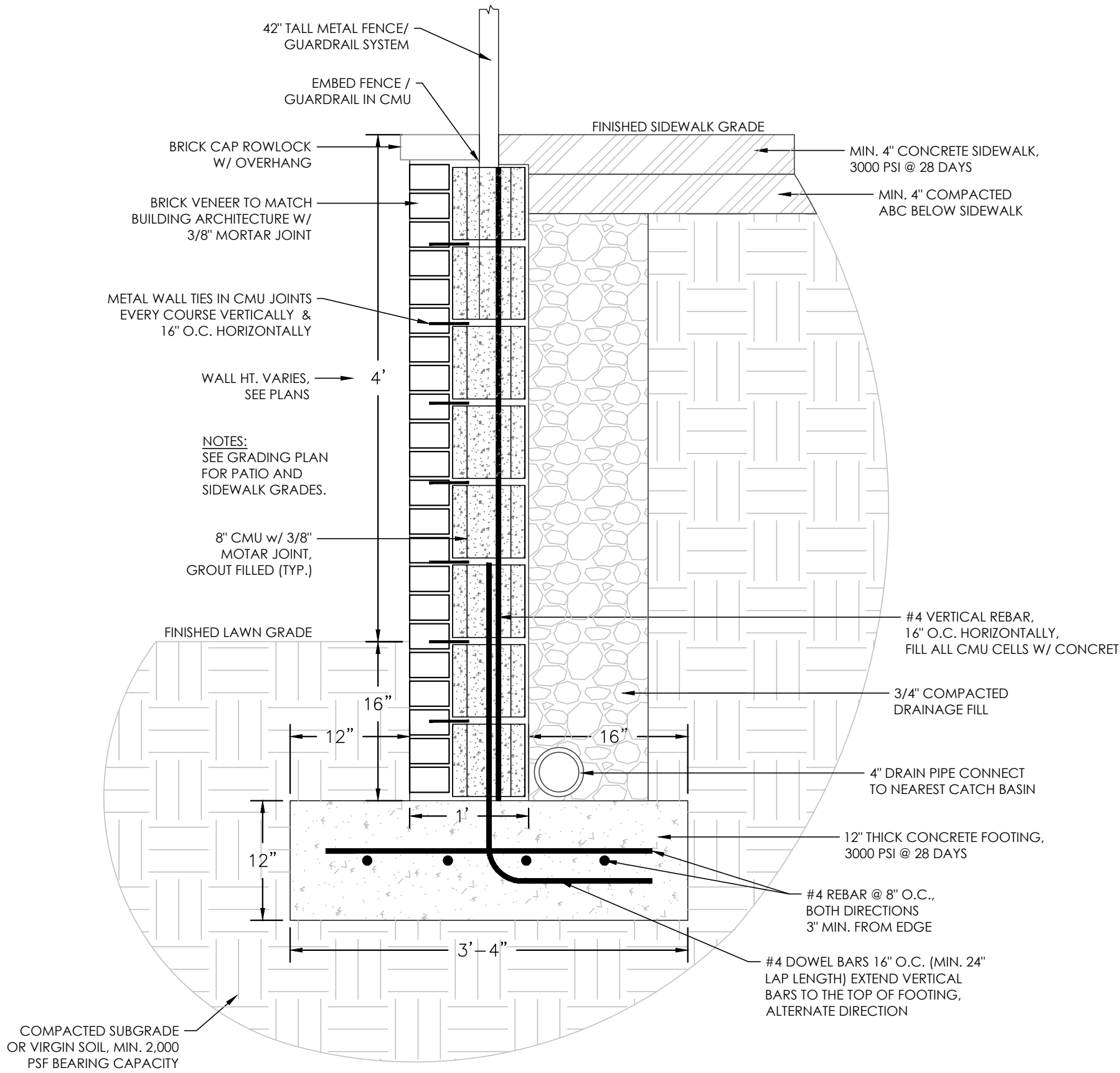
1. Tak Sketch Plan 1st review Comments 2024-10-14
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SITE DETAILS
7800 KNIGHTDALE BLVD.
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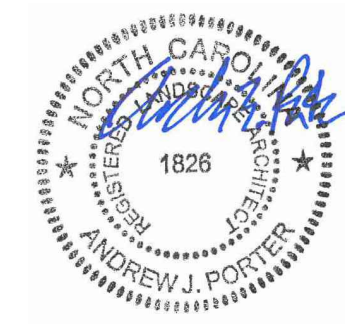
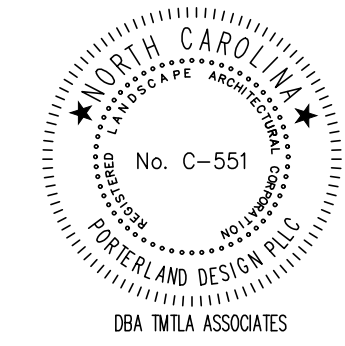
- NOTES:**
- ALL REINFORCED MASONRY WORK SHALL COMPLY WITH BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES (TMS 402-13/ACI 530-13/ASCE 5-13 & TMS 602-13/ACI 530-13/ASCE 6-13A OR LATEST EDITION).
 - ALL CONCRETE WORK SHALL COMPLY WITH THE SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS, ACI-308 AND THE BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, ACI-318 (EDITIONS IN FORCE).
 - ALL WORK AND MATERIALS SHALL COMPLY WITH APPLICABLE STATE, LOCAL, NATIONAL CODES (INCLUDING OSHA) AND COMPLIANT WITH THE LATEST EDITION OF THE CODE.
 - MASONRY CROUT SHALL REACH A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS.
 - TYPE OF MORTAR SHALL BE 'S' AND MORTAR SHALL REACH A MINIMUM COMPRESSIVE STRENGTH OF 1,800 PSI AT 28 DAYS.
 - YIELD STRENGTH OF REINFORCEMENT STEEL, F_y=60KSI.
 - CMU ARRANGEMENT TO ACHIEVE DIMENSIONS IS THE RESPONSIBILITY OF THE CONTRACTOR.
 - FOUNDATION SOIL BEARING CAPACITY SHALL BE A MINIMUM 2,000 PSF BEARING CAPACITY AND SHALL BE VERIFIED BY A QUALIFIED GEOTECHNICAL ENGINEER.
 - EXCAVATION FOR FOOTING WILL HAVE ALL LOOSE MATERIAL REMOVED. CONCRETE TO BE POURED TO EXTENTS OF THE EXCAVATION UP TO VIRGIN SOIL TO ACHIEVE HORIZONTAL BEARING PRESSURES.
 - DUMPSTER PAD CONCRETE 4000 PSI MIN. AT 28 DAYS.
 - ALL HARDWARE SHALL BE HOT DIPPED GALVANIZED OR ELECTROPLATED ZINC.
 - ALL METAL POSTS, HINGES AND HARDWARE SHALL BE PAINTED BLACK.
 - GATE WIDTH TO BE FIELD VERIFIED AFTER SETTING GATE POSTS AND PRIOR TO CONSTRUCTION OF GATE DOOR FRAMES.
 - HEIGHT OF SCREEN FENCE MUST BE 6\"/>
 - CONTRACTOR TO PROVIDE MIN. 4\"/>
 - CONTRACTOR TO COORDINATE BRICK SELECTION W/ OWNER PRIOR TO ORDERING MATERIALS.
 - DO NOT CHANGE THE DESIGN WITHOUT APPROVAL FROM THE LANDSCAPE ARCHITECT OR THE OWNER.



1
L-5.3
DUMPSTER ENCLOSURE
NTS

2
L-5.3
GENERIC BRICK/CMU WALL SECTION
NTS

FINAL BRICK/CMU WALL SECTIONS TO BE PROVIDED BY STRUCTURAL ENGINEER.
BRICK VENEER TO MATCH BUILDING ARCHITECTURE.

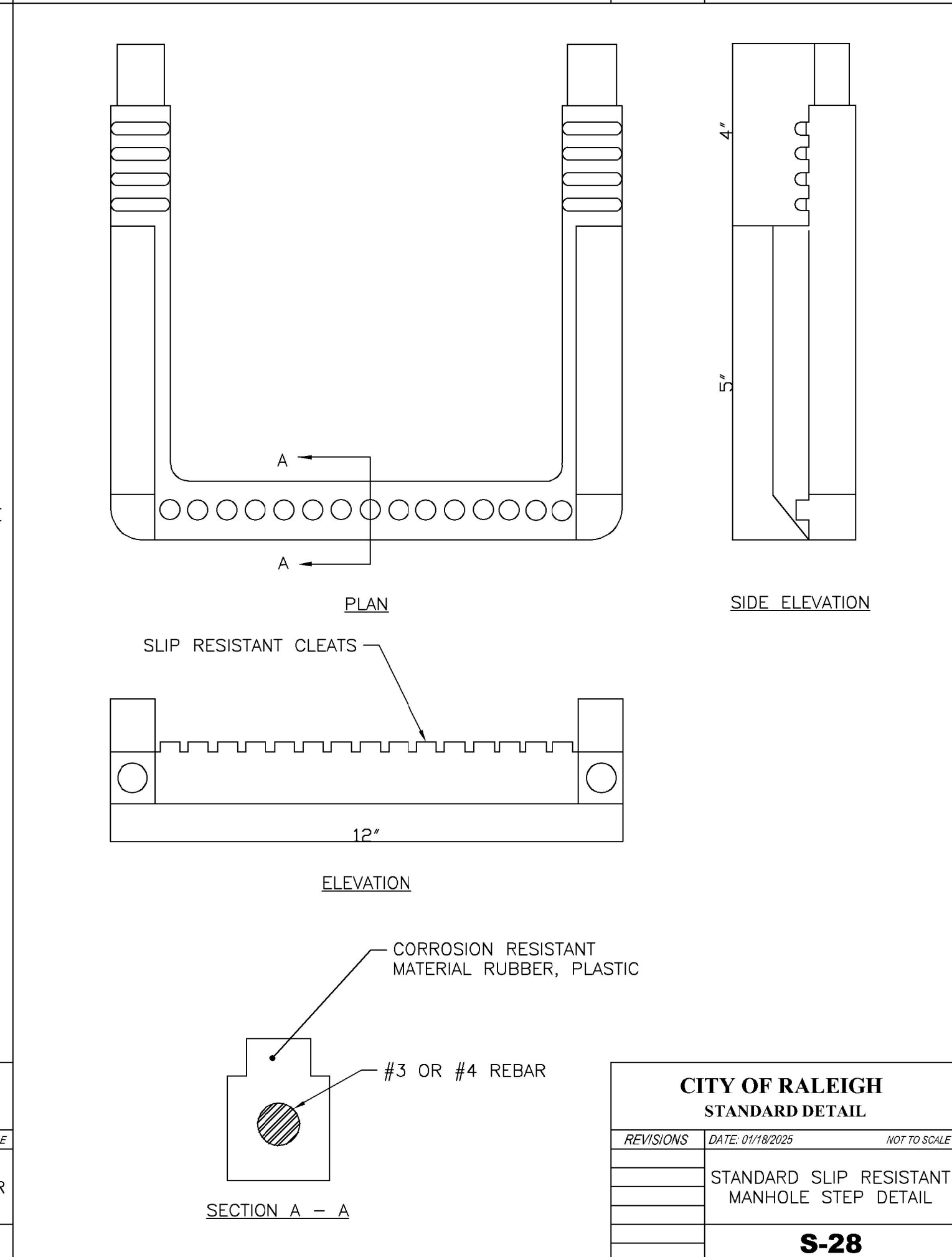
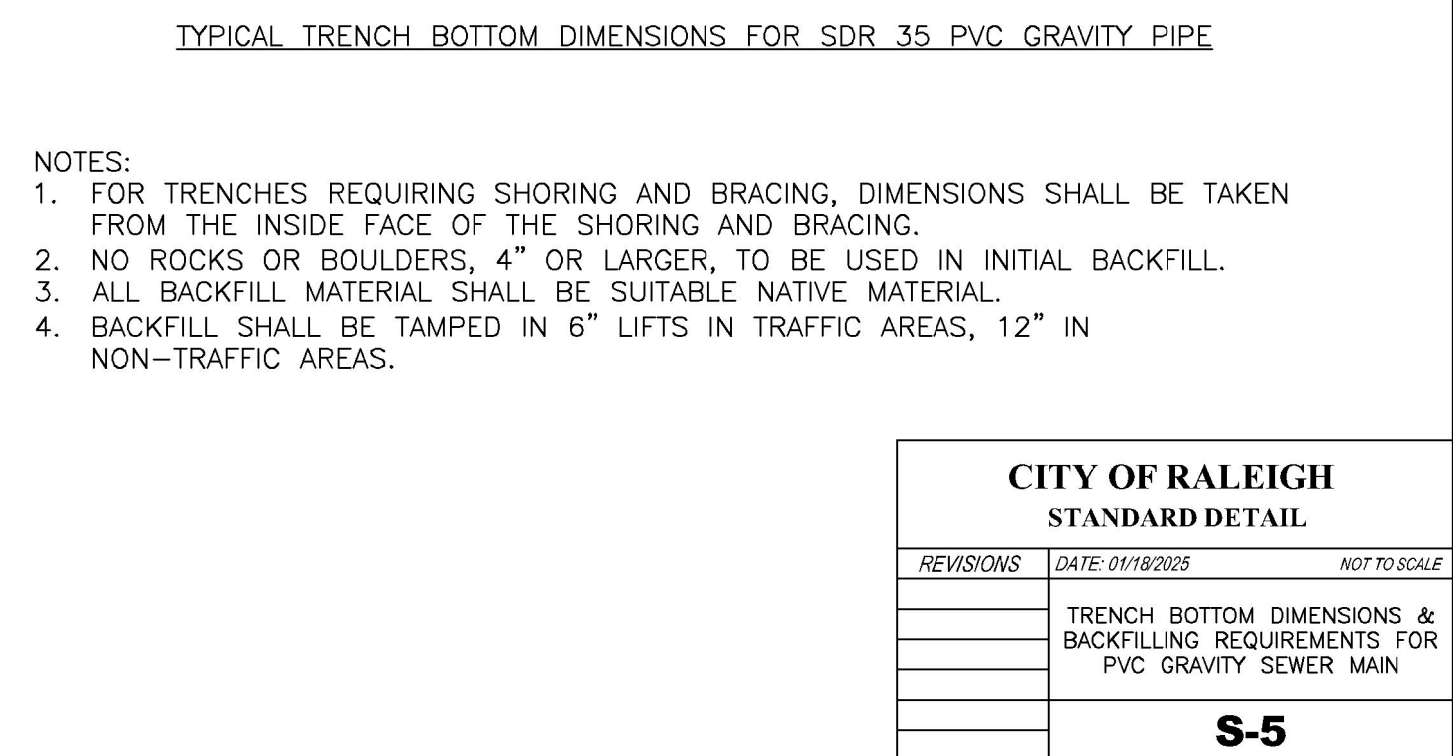
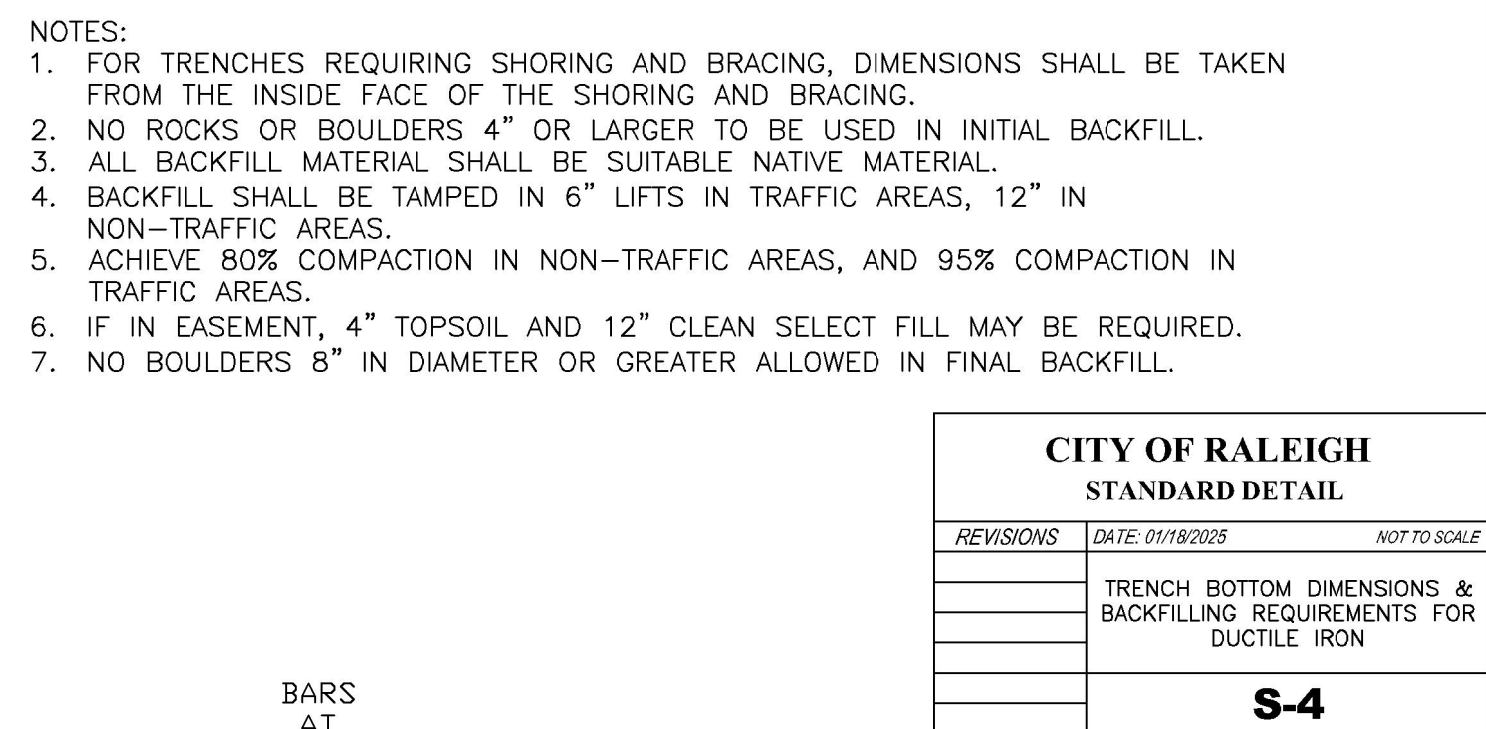


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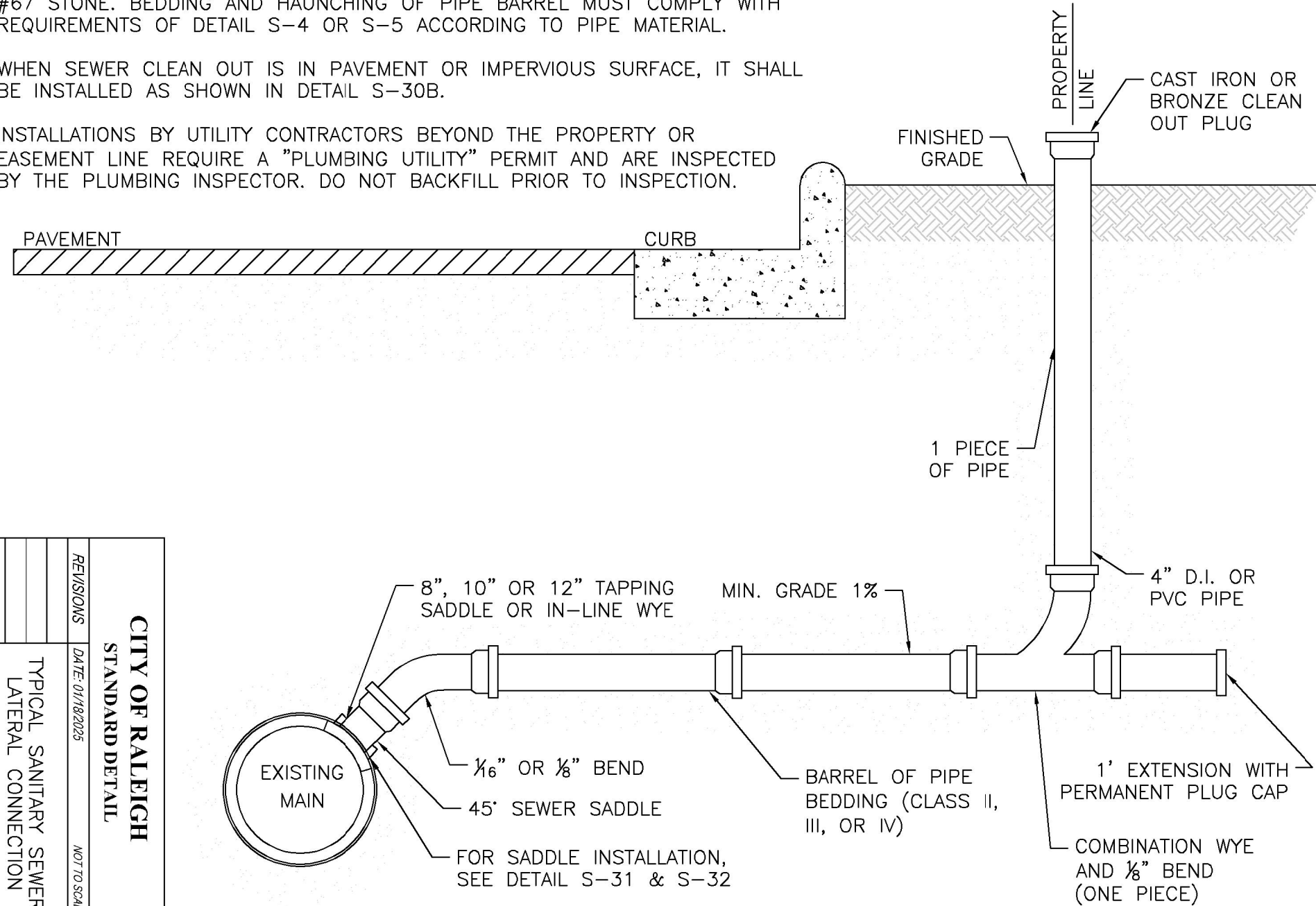
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NOTES:

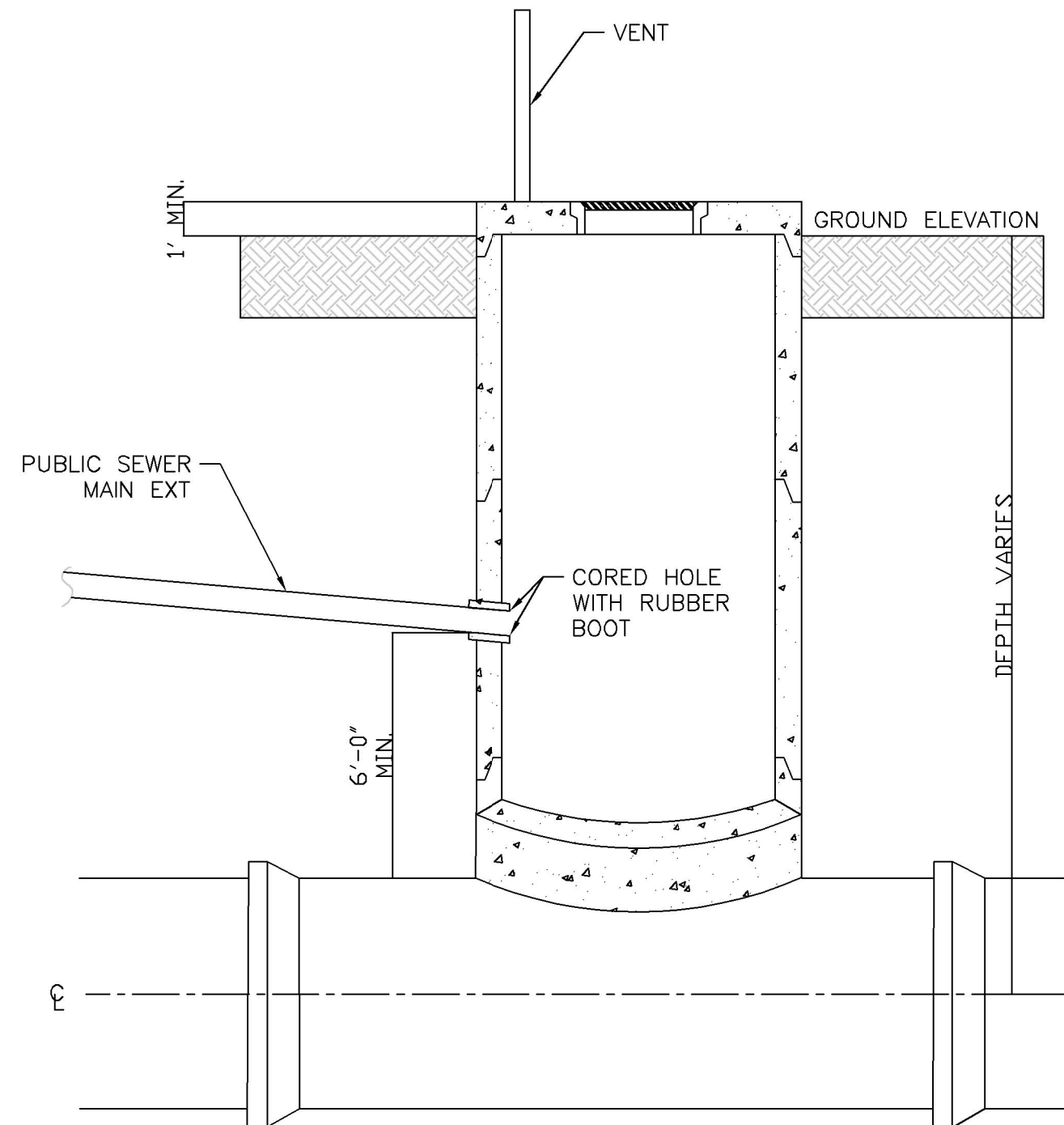
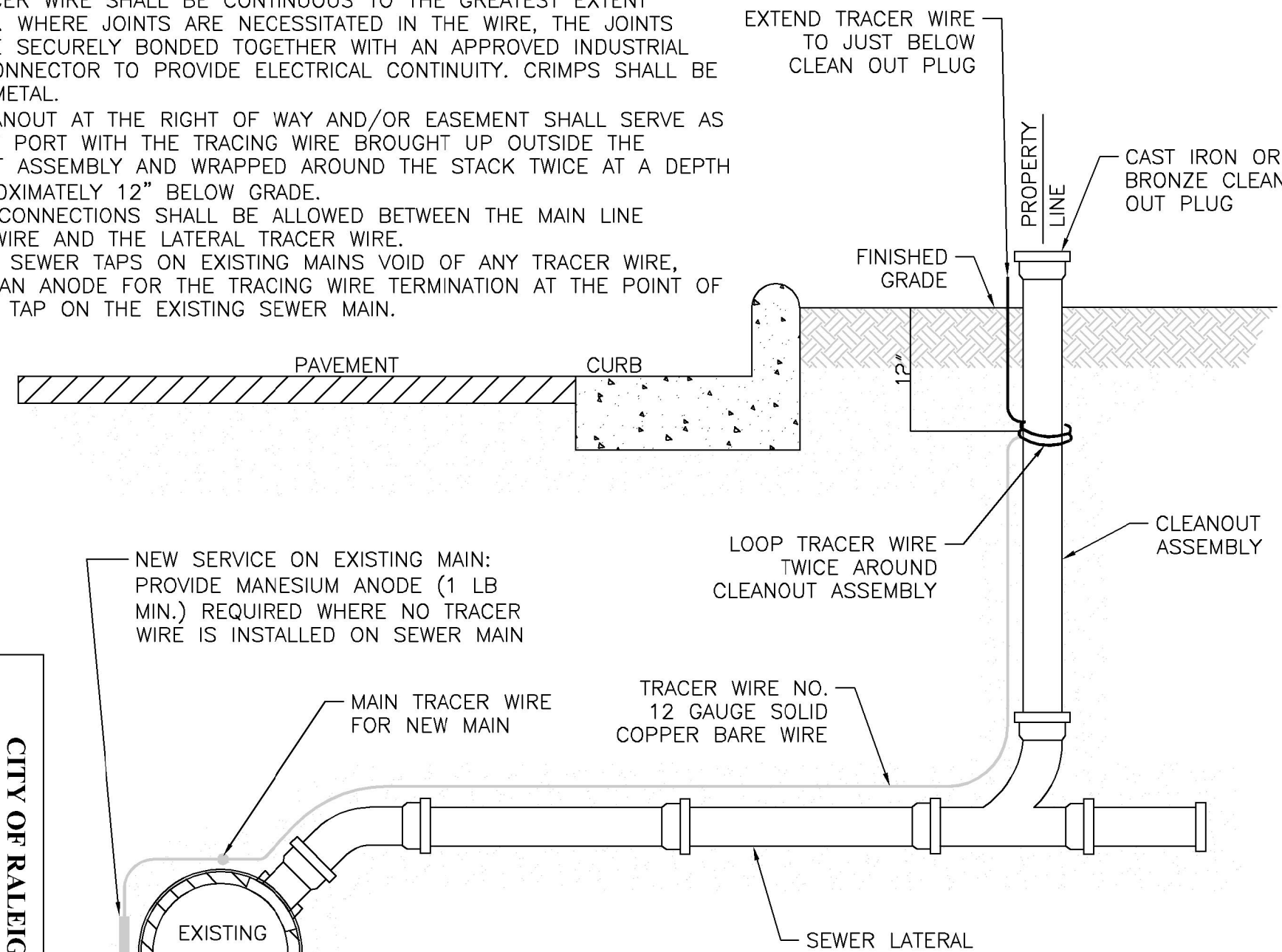
1. THE FULL LENGTH OF THE SERVICE DITCH SHALL BE COMPACTED IN 6" LIFTS WITH MECHANICAL TAMP. ALL TAPS WILL BE MADE USING MECHANICAL TAPPING MACHINE. FOR PVC INSTALLATIONS, SADDLE AND BEND MUST BE BEDDED IN #67 STONE. BEDDING AND HAUNCHING OF PIPE BARREL MUST COMPLY WITH REQUIREMENTS OF DETAIL S-4 OR S-5 ACCORDING TO PIPE MATERIAL.
2. WHEN SEWER CLEAN OUT IS IN PAVEMENT OR IMPERVIOUS SURFACE, IT SHALL BE INSTALLED AS SHOWN IN DETAIL S-30B.
3. INSTALLATIONS BY UTILITY CONTRACTORS BEYOND THE PROPERTY OR EASEMENT LINE REQUIRE A "PLUMBING UTILITY" PERMIT AND ARE INSPECTED BY THE PLUMBING INSPECTOR. DO NOT BACKFILL PRIOR TO INSPECTION.

* SERVICE LATERAL MATERIAL AS REQUIRED



NOTES:

1. THE TRACER WIRE SHALL BE CONTINUOUS TO THE GREATEST EXTENT POSSIBLE. WHERE JOINTS ARE NECESSITATED IN THE WIRE, THE JOINTS SHALL BE SECURELY BONDED TOGETHER WITH AN APPROVED INDUSTRIAL CRIMP CONNECTOR TO PROVIDE ELECTRICAL CONTINUITY. CRIMPS SHALL BE SIMILAR METAL.
2. THE CLEANOUT AT THE RIGHT OF WAY AND/OR EASEMENT SHALL SERVE AS THE TEST PORT WITH THE TRACING WIRE BROUGHT UP OUTSIDE THE CLEANOUT ASSEMBLY AND WRAPPED AROUND THE STACK TWICE AT A DEPTH OF APPROXIMATELY 12" BELOW GRADE.
3. SPLICED CONNECTIONS SHALL BE ALLOWED BETWEEN THE MAIN LINE TRACER WIRE AND THE LATERAL TRACER WIRE.
4. FOR NEW SEWER TAPS ON EXISTING MAINS VOID OF ANY TRACER WIRE, PROVIDE AN ANODE FOR THE TRACING WIRE TERMINATION AT THE POINT OF THE NEW TAP ON THE EXISTING SEWER MAIN.



NOTES:

1. HOLE SHALL BE CORED IN RISER SECTION FOR PUBLIC SERVICE MAIN EXTENSION.
2. RUBBER BOOT SHALL BE UTILIZED ON ALL CORES.
3. CORES SHALL BE IN CENTER OF RISER SECTION.
4. CONNECTION TO TEE MANHOLE MUST BE MADE BY CONTRACTOR APPROVED BY CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT.

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS DATE: 01/18/2025 NOT TO SCALE

MAIN EXTENSION TO TIE INTO TEE MANHOLE

S-33

LOCALLY AVAILABLE SIZES

INTERCEPTORS CAPACITY (GAL.)	SEPARATORS CAPACITY (GAL.)
300	1,000
550	1,200
750	1,600
1,000	
1,200	
1,500	
2,000	
2,500	
3,000	
4,000	
5,000	
6,000	
8,000	

NOTES:

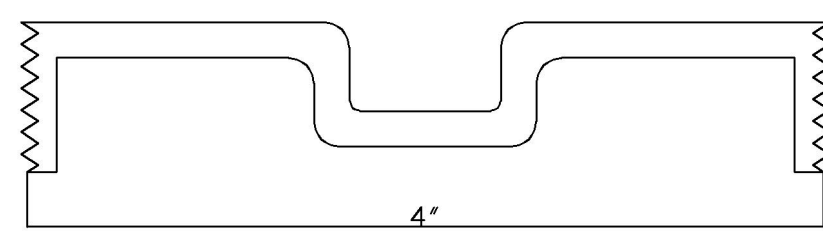
1. BAFFLE WALLS LOCATED AT A DISTANCE FROM INLET WALL $\frac{3}{8}$ TO $\frac{3}{4}$ OF THE TOTAL LENGTH OF THE INTERCEPTOR OR SEPARATOR AS SHOWN ON DETAIL S-40. BAFFLE WALLS LOCATED AT A DISTANCE APPROXIMATELY OF $\frac{1}{2}$ OF THE TOTAL LENGTH OF THE SEPARATOR AS SHOWN ON DETAIL S-40A.
2. EACH INTERCEPTOR OR SEPARATOR SHALL HAVE INLET AND OUTLET TEES. THE OUTLET TEE SHALL EXTEND 50% INTO THE LIQUID DEPTH. THE INLET TEE SHALL EXTEND 25% INTO THE LIQUID DEPTH. INLET AND OUTLET TEES MUST BE OPEN TO ALLOW THE COLLECTION OF F.O.G. SAMPLE.
3. ACCESS OPENINGS OVER EACH COMPARTMENT WITHIN THE INTERCEPTOR OR SEPARATOR SHALL BE 24 INCHES IN DIAMETER AND CONTAIN PICK HOLES. ALL COVERS SHALL BE CONSTRUCTED OF CAST IRON OR EQUIVALENT TRAFFIC BEARING MATERIAL. MANHOLE COVERS MUST EXTEND TO FINISH GRADE AND BE INSTALLED TO EXCLUDE THE ENTRANCE OF STORMWATER INTO THE INTERCEPTOR OR SEPARATOR.
4. FULL SIZE DUAL SWEEP CLEANOUTS SHALL BE INSTALLED ON THE INLET AND OUTLET SIDES OF THE INTERCEPTOR OR SEPARATOR.
5. INTERCEPTORS AND SEPARATORS MUST BE VENTED IN ACCORDANCE WITH THE NC STATE PLUMBING CODE.
6. CONCRETE: 4,000 PSI @ 28 DAYS.
7. DESIGN: ACI 318 BUILDING CODE
ASTM C1813-06 FOR GREASE INTERCEPTORS
ASTM C913-02 FOR WATER AND WASTEWATER STRUCTURES
ASTM C890-06 FOR MINIMAL STRUCTURAL DESIGN LOADING
8. INTERCEPTORS AND SEPARATORS SHALL BE DESIGNED TO WITHSTAND AN H-20 WHEEL LOAD.
9. INTERCEPTORS OR SEPARATORS MADE OF POLYETHYLENE OR FIBERGLASS SHALL INCLUDE A MINIMUM 12,000 PSI TENSILE STRENGTH, 19,000 PSI FLEXURAL STRENGTH, AND 800,000 PSI FLEXURAL MODULUS.
10. ALL INTERCEPTORS AND SEPARATORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.

CITY OF RALEIGH
STANDARD DETAIL

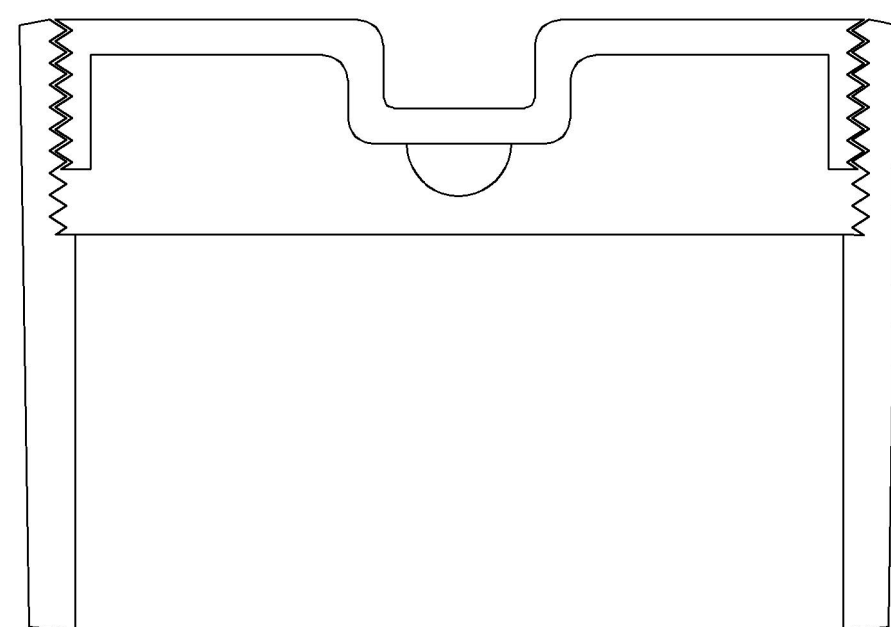
REVISIONS DATE: 01/18/2025 NOT TO SCALE

DIMENSIONS: GREASE INTERCEPTORS & OIL-WATER SAND SEPARATORS

S-41



STANDARD 4" BRONZE CLEANOUT PLUG



STYLES ACCEPTED:
INVERTED NUT
RAISED NUT

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS DATE: 01/18/2025 NOT TO SCALE

4" CLEANOUT PLUG

S-34

NOTES:

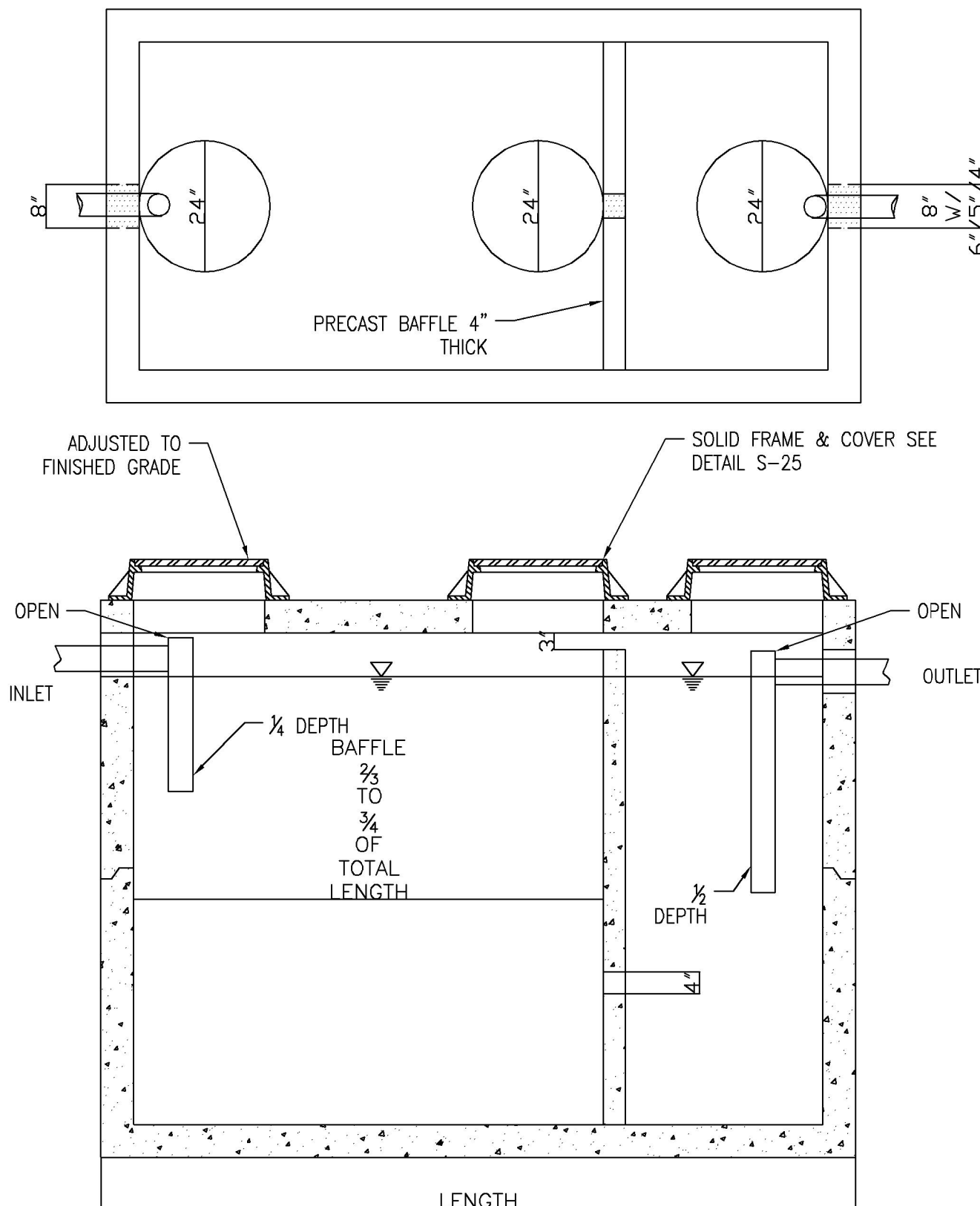
1. REINFORCEMENT: H-20 BRIDGE LOADING (TRAFFIC RATED).
2. CONCRETE: 4,000 PSI @ 28 DAYS.
3. EARTHCOVER: 0' TO 5' MAX.
4. HDPE ALLOWED IN LIEU OF CONCRETE. MEET SAME LOADING REQUIREMENTS.

CITY OF RALEIGH
STANDARD DETAIL

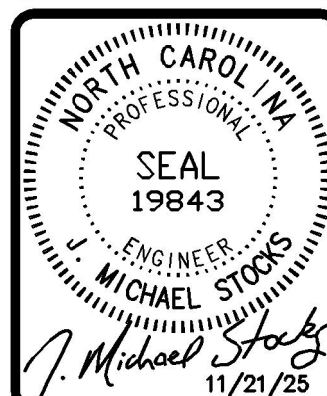
REVISIONS DATE: 01/18/2025 NOT TO SCALE

1,000 GALLON GREASE INTERCEPTOR

S-40



7800 KNIGHTDALE BLVD.
KNIGHTDALE, NC 27545



SEWER NOTES
+ DETAIL 2

REVISIONS

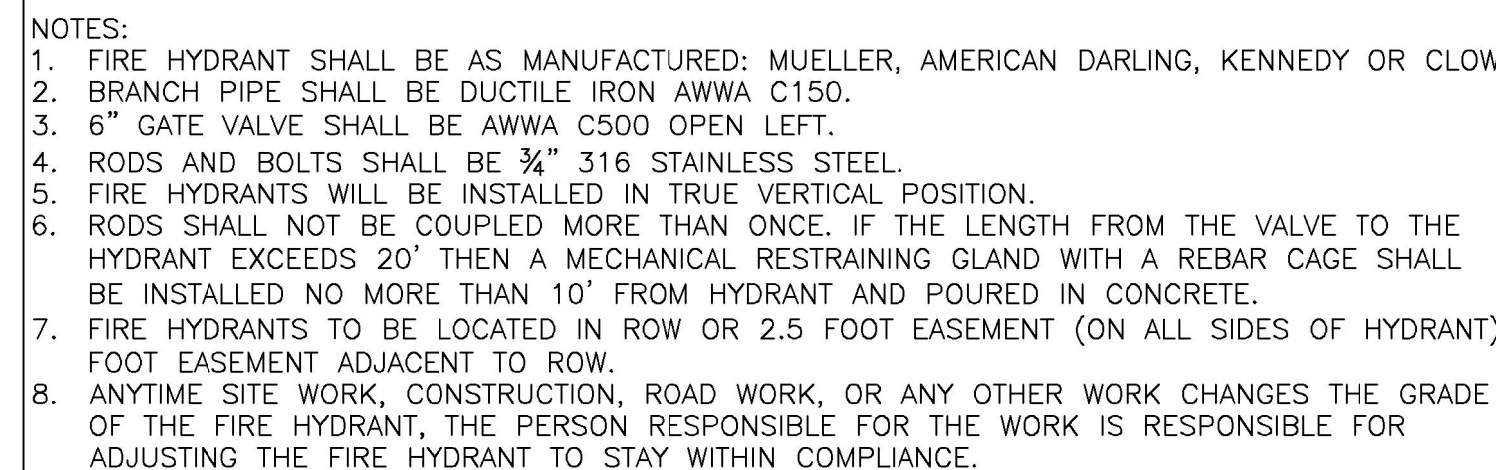
FILE NO. 2023-024
HORZ. SCALE: 1"=20'
VERT. SCALE: NONE

D-02

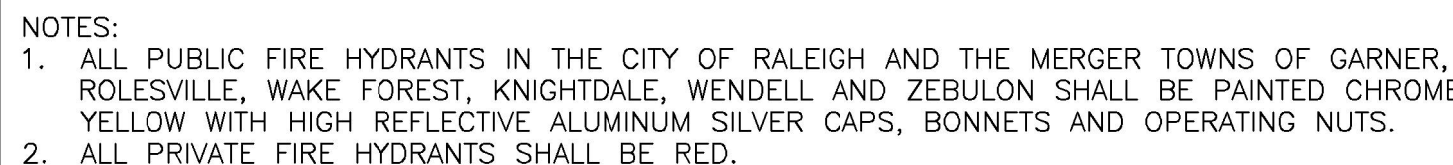
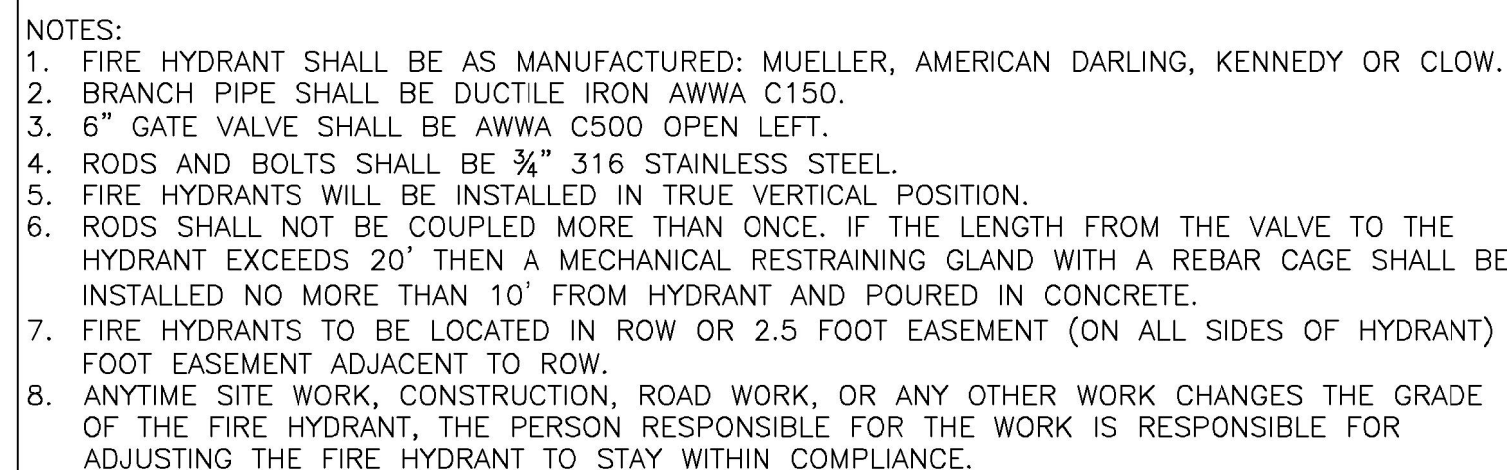
STOCKS
ENGINEERING

801 EAST WASHINGTON STREET
NASHVILLE, N.C. 27556
PHONE: (252) 459-8196
P.O. BOX 1108
WWW.STOCKSENGINEERING.COM

BLN-C-1874



CITY OF RALEIGH
STANDARD DETAIL

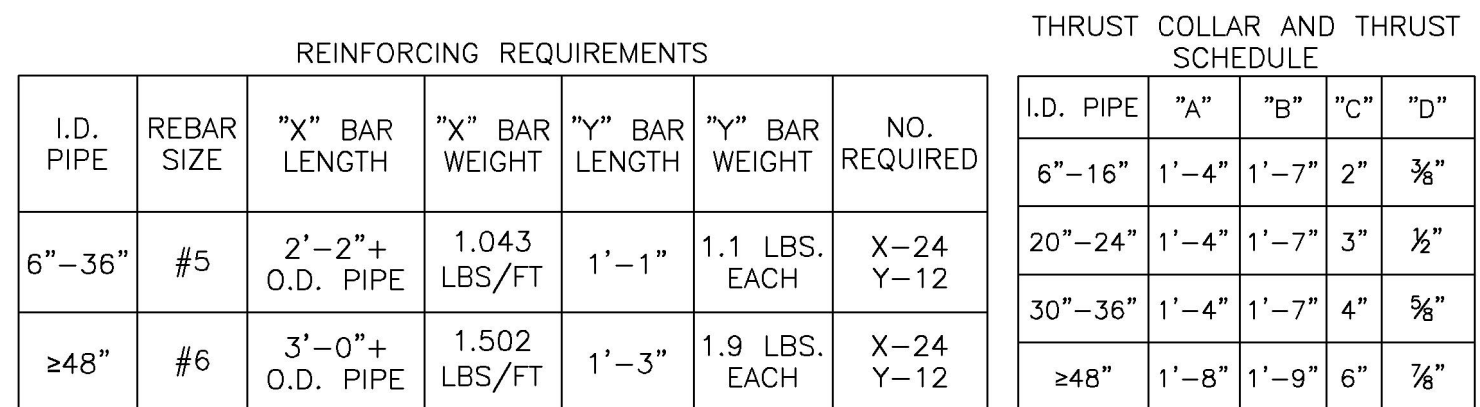


WATER PIPE BENDS 200 PSI			
FEET			
SAND, COMPACT FIRM 8,000 LBS/FT ²	SAND— CLEAN DRY 4,000 LBS/FT ²	SOIL 1,000 LBS/FT ² QUICKSAND (VERY POOR)	ROCK— POOR 10,000 LBS/FT ²
1	1	2	1
1	1	3	1
1	2	5	1
1	2	8	1
1	2	6	1
1	1	2	1
1	1	4	1
1	2	8	1
2	4	15	2
2	3	10	1
1	2	5	1
2	3	9	1
3	5	18	2
4	8	32	4
3	6	23	3
1	2	8	1
2	4	16	2
4	8	31	4
8	15	57	6
5	10	41	5

MEASURED IN A VERTICAL PLANE IN
JUST VECTOR.
ADDITIONAL SAFETY FACTOR.

CITY OF RALEIGH

STANDARD DETAIL



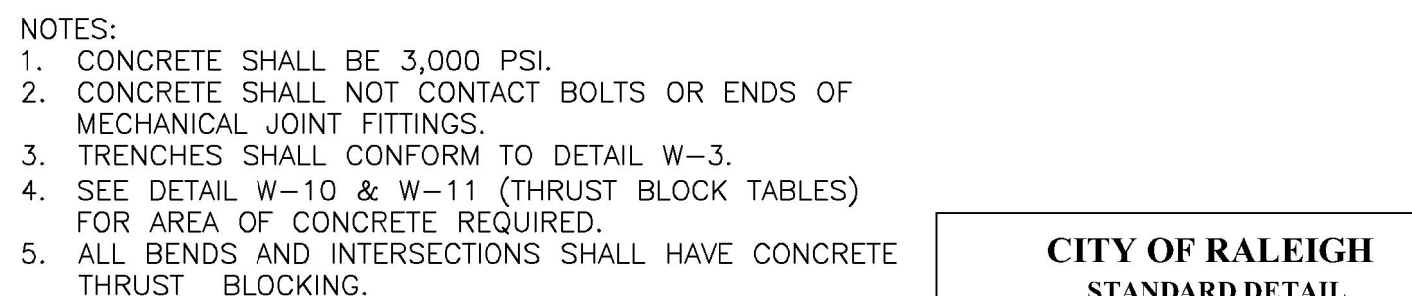
REACTION BEARING AREAS FOR HORIZONTAL WATER PIPE BENDS BASED ON TEST PRESSURE OF 200 PSI										
ALL AREAS GIVEN IN SQUARE FEET										
SIZE OF BEND	DEGREE OF BEND	STATIC THRUST IN POUNDS	MODERATELY DRY CLAY 4,000 LBS/FT²	SOFT CLAY 2,000 LBS/FT²	1,600 LBS/FT² GRAVE/C COURSE SAND	8,000 LBS/FT² DRY CLAY (ALWAYS DRY)	SAND, COMPACT FIRM 8,000 LBS/FT²	SAND- CLEAN DRY 4,000 LBS/FT²	SOIL 1,000 LBS/FT² QUICKSAND (VERY POOR)	ROCK- POOR 10,000 LBS/FT²
24"	11 ¼'	17,734	5	9	11	3	3	5	18	2
	22 ½'	35,305	9	18	22	5	5	9	36	4
	45'	69,252	18	35	42	9	9	18	70	7
	90'	127,938	32	64	77	16	16	32	128	113
	PLUG	90,478	23	46	55	12	12	23	91	10
30"	11 ¼'	27,709	7	14	17	4	4	7	2	3
	22 ½'	55,163	14	28	34	7	7	14	56	6
	45'	108,206	28	55	65	14	14	28	109	11
	90'	199,900	50	100	120	25	25	50	200	20
	PLUG	141,372	36	71	85	18	18	36	142	15
36"	11 ¼'	39,901	10	20	24	5	5	10	40	4
	22 ½'	79,439	20	40	48	10	10	20	30	8
	45'	155,816	39	78	94	20	20	39	156	16
	90'	287,855	72	144	172	36	36	72	288	29
	PLUG	203,575	51	102	122	26	26	51	204	21
48"	11 ¼'	70,935	18	36	43	9	9	18	71	8
	22 ½'	141,218	36	71	85	18	18	36	142	15
	45'	277,007	70	139	166	35	35	70	277	28
	90'	511,742	128	256	320	64	64	128	512	52
	PLUG	361,911	91	181	217	46	46	91	362	37

NOTES:

1. REACTION BEARING AREAS ARE IN SQUARE FEET MEASURED IN A VERTICAL PLANE IN THE TRENCH SIDE AT AN ANGLE OF 90° TO THE THRUST VECTOR.
2. USE 6" 90° BEND VALUE FOR HYDRANTS FOR ADDITIONAL SAFETY FACTOR.



	W-8
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	W-9
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NOTES:

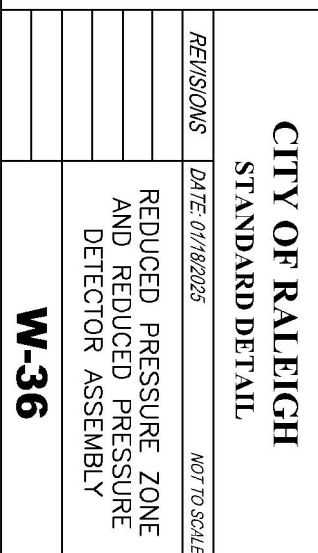
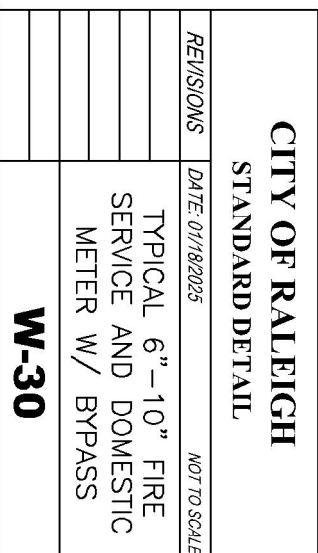
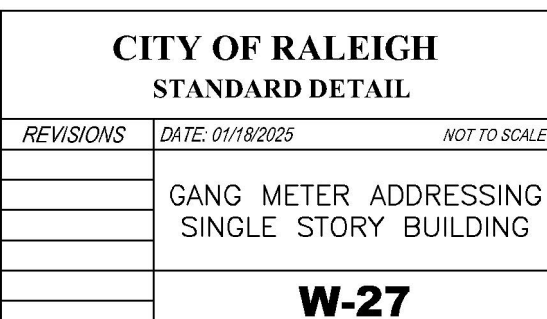
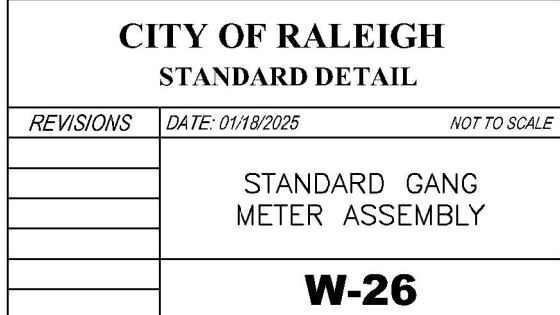
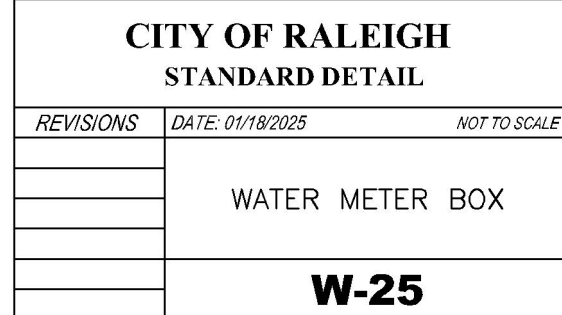
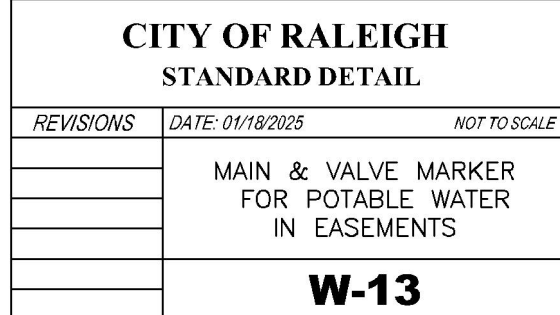
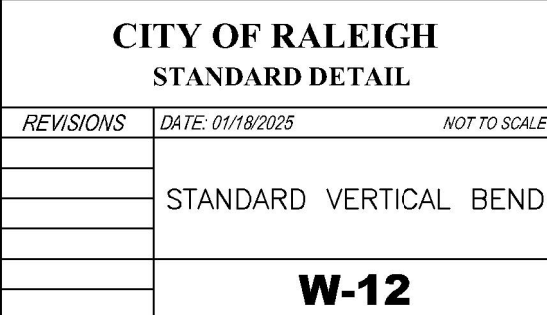
1. REACTION BEARING AREAS ARE IN SQUARE FEET MEASURED IN A VERTICAL PLANE IN THE TRENCH SIDE AT AN ANGLE OF 90° TO THE THRUST VECTOR.
2. USE 6" 90° BEND VALUE FOR HYDRANTS FOR ADDITIONAL SAFETY FACTOR.

	W-10

NOTES:

1. REACTION BEARING AREAS ARE IN SQUARE FEET MEASURED IN A VERTICAL PLANE IN THE TRENCH SIDE AT AN ANGLE OF 90° TO THE THRUST VECTOR.
2. USE 6" 90° BEND VALUE FOR HYDRANTS FOR ADDITIONAL SAFETY FACTOR.

	W-11
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Knightdale Concept Design

7800 Knightdale Blvd,
Knightdale, NC 27545

Concept Designs for Buildings One & Two



Evolution Design & Development
608 Matthews-Mint Hill Rd, Suite 102,
Matthews, NC 28105
980.579.0581
contact@evolution-dd.com
evolution-dd.com

Project Number	2024-10
Date	8-19-24

G100

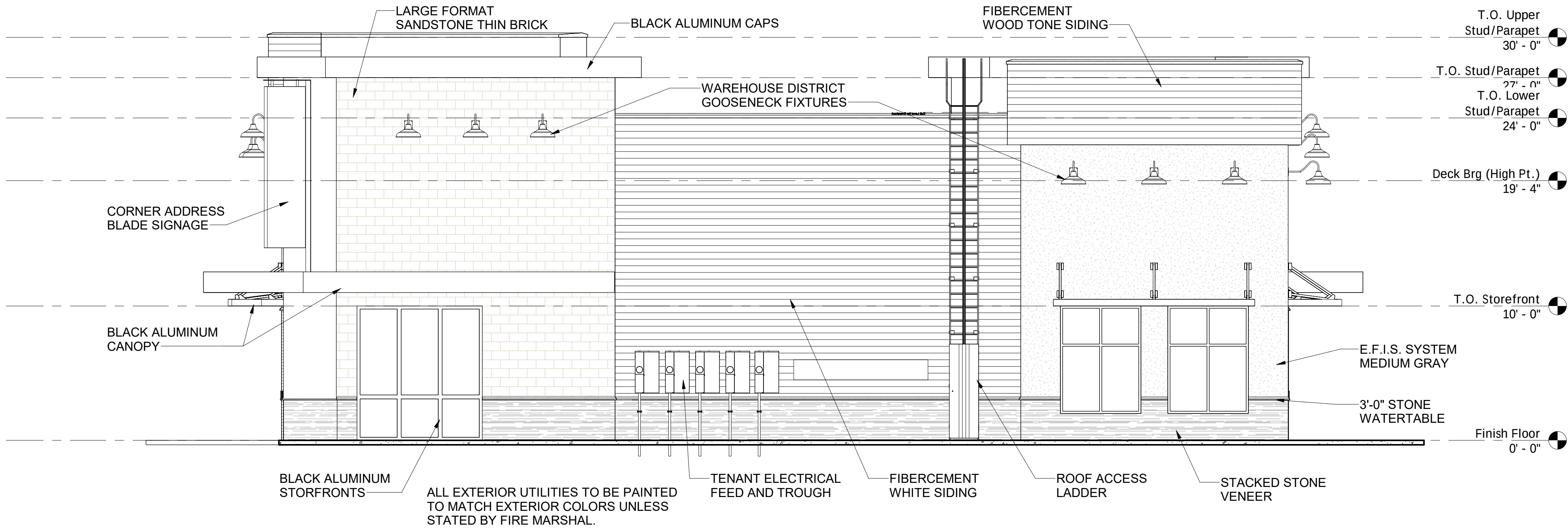
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PROFESSIONAL SEAL

Not For Construction

Date	
Description	
No.	

PROJECT NAME Knightdale Concept Design	PROJECT TEAM Evolution Design & Development	Checked by BKF	ISSUE FOR CONCEPT ELEVATIONS
ISSUE DATE 6-19-25			
PROJECT NUMBER 2024-10			
Building Two Exterior Elevations			
A201			
Scale 3/16" = 1'-0"			



② Right Side Elevation (Carolina Place)
3/16" = 1'-0"

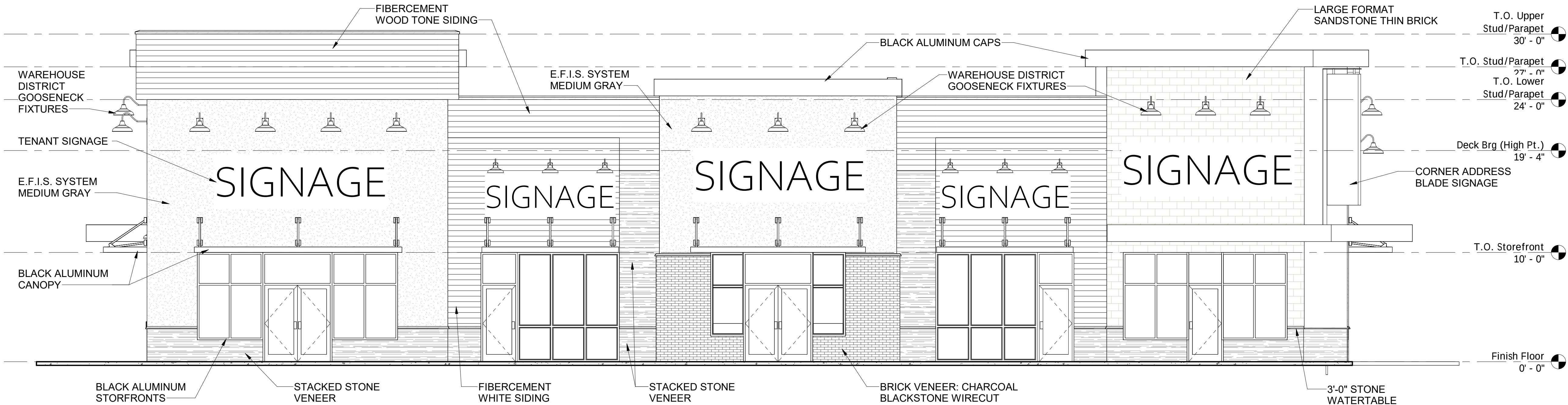
ALL SIGNAGE MUST COMPLY WITH CHAPTER 8 OF THE UDO. ALL SIGNAGE IS REVIEWED AND APPROVED THROUGH A SEPARATE APPROVAL PROCESS. APPROVAL OF THESE ARCHITECTURAL PLANS DOES NOT CONSTITUTE APPROVAL OF ANY SIGNAGE



Building Two Facing Carolina Ave
Utilities & Roof Access Location

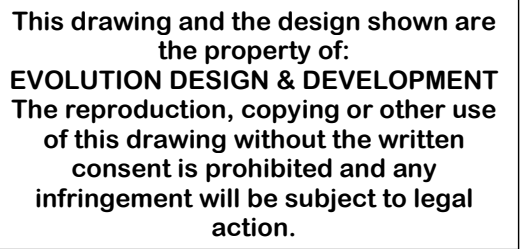


Building Two Facing
Carolina Place & Knightdale Blvd



① Front Elevation (Knightdale Blvd)
3/16" = 1'-0"

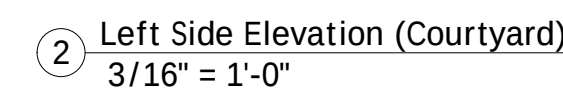
ALL SIGNAGE MUST COMPLY WITH CHAPTER 8 OF THE UDO. ALL SIGNAGE IS REVIEWED AND APPROVED THROUGH A SEPARATE APPROVAL PROCESS. APPROVAL OF THESE ARCHITECTURAL PLANS DOES NOT CONSTITUTE APPROVAL OF ANY SIGNAGE



Not For Construction

[illegible]

PROJECT NAME Knightdale Concept Design	PROJECT TEAM Evolution Design & Development	Checked by Checker
	ISSUE FOR CONCEPT ELEVATIONS	
	Drawn by Author	
ISSUE DATE 6-19-25		
PROJECT NUMBER 2024-10		
Building Two Exterior Elevations		
A202		
Scale		3/16" = 1'-0"

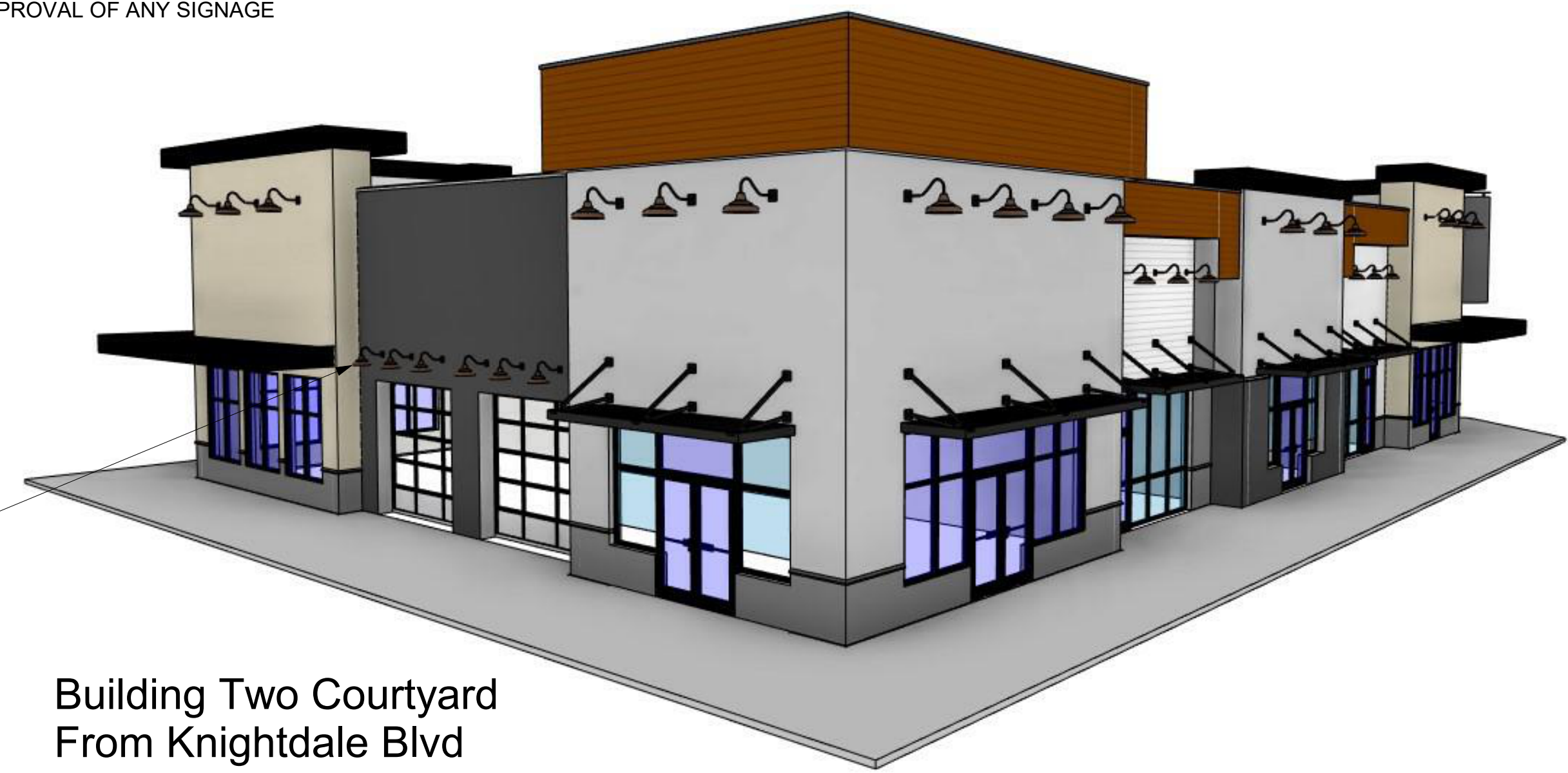
A 3D architectural rendering of a two-story building complex, viewed from a parking lot. The building features a mix of light beige, grey, and brown siding. The left wing has a prominent corner with large, multi-paned windows and a black awning. The right wing has a flat roof with a brown section and a glass entrance. Several outdoor light fixtures are mounted on the walls. The building is set on a grey paved area.

Building Two Courtyard
From Parking Lot

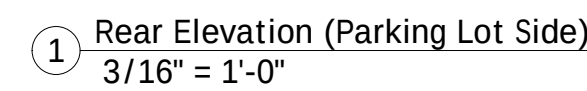
Building Two Courtyard From Parking Lot



Brass & Black Gooseneck
In Courtyard Area



Building Two Courtyard From Knightdale Blvd



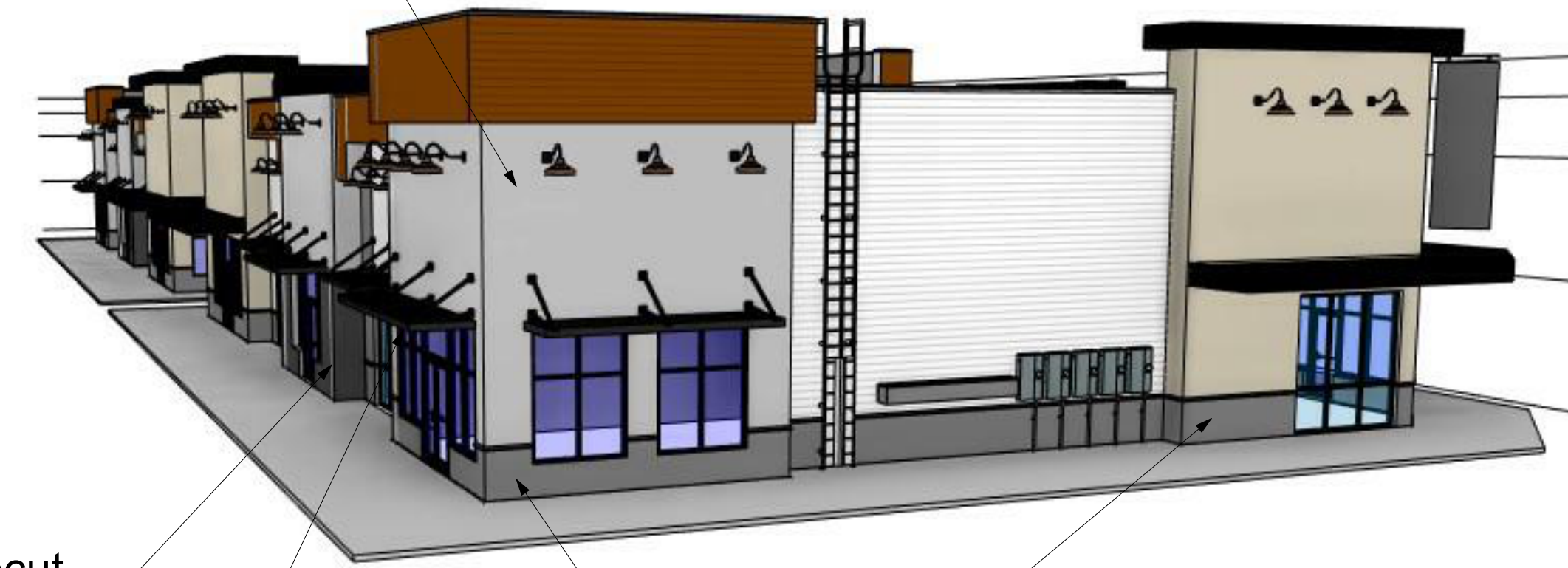
ALL SIGNAGE MUST COMPLY WITH CHAPTER 8 OF THE UDO. ALL SIGNAGE IS REVIEWED AND APPROVED THROUGH A SEPARATE APPROVAL PROCESS. APPROVAL OF THESE ARCHITECTURAL PLANS DOES NOT CONSTITUTE APPROVAL OF ANY SIGNAGE

Building One & Two @ Corner of Knightdale & Metroliner

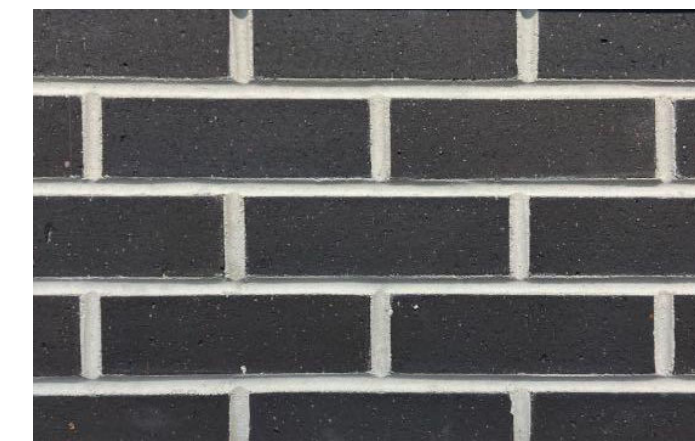


—Medium Gray E.I.F.S.

Building One From Metroliner Place



—Palmetto Brick - Blackstone Wirecut
Brick Veneer - Charcoal—

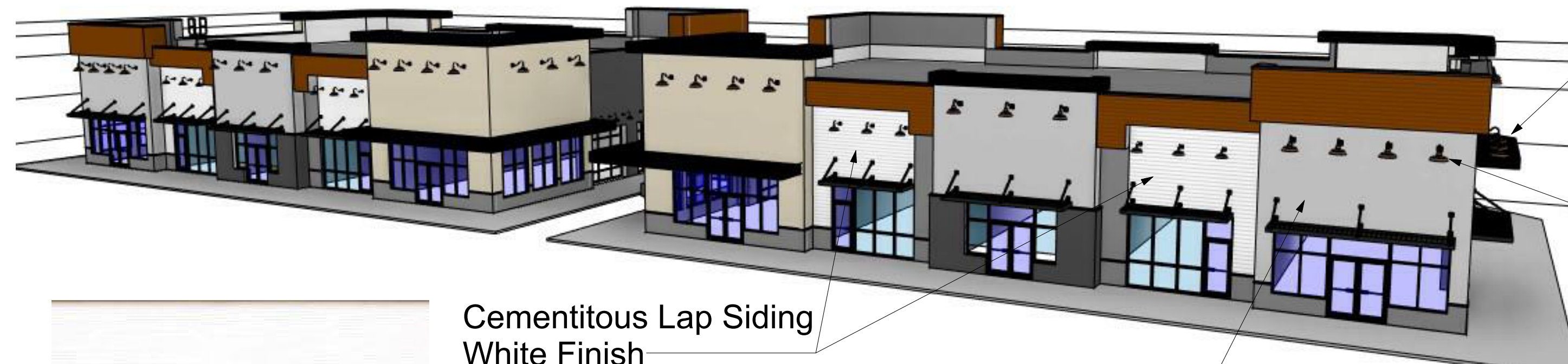


—Medium Gray E.I.F.S.



—Black Aluminum Canopies

Building One & Two From Parking Lot



Cementitious Lap Siding
White Finish



Building Blade Sign

—Medium Gray E.I.F.S.

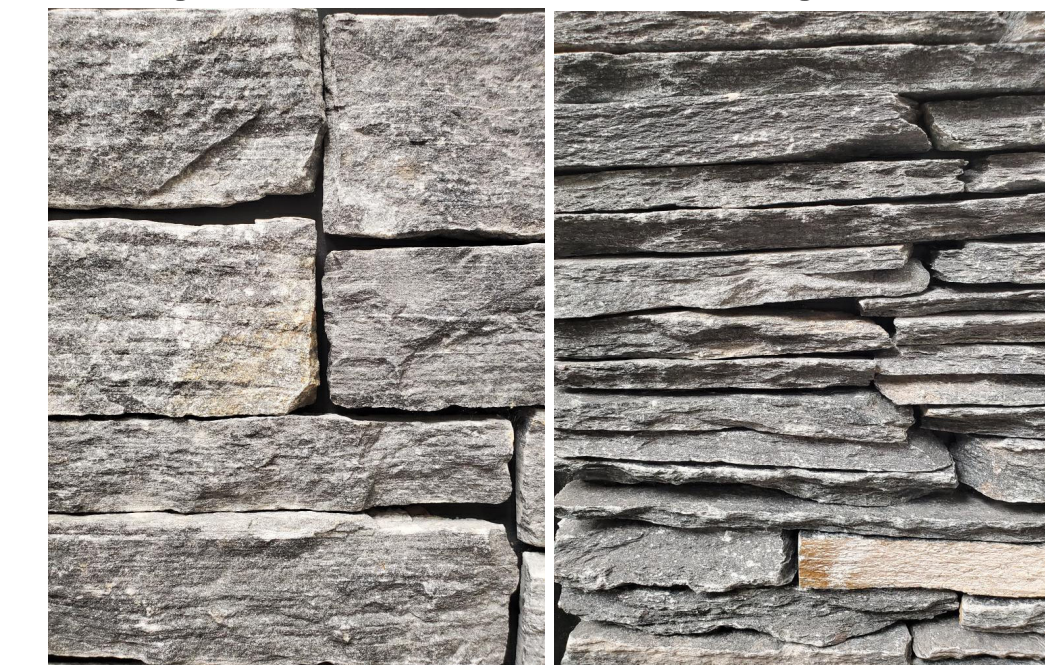


Black Gooseneck Over Tenant Signage



Brass & Black Gooseneck
In Courtyard Area

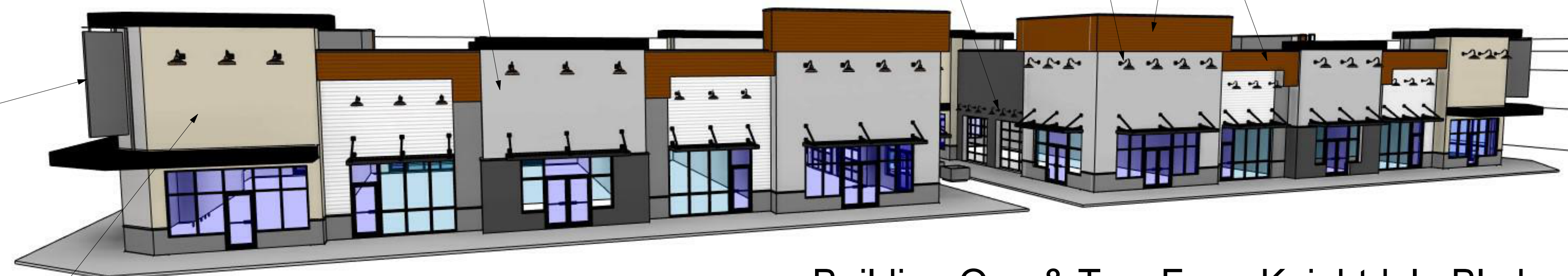
Stack Stone 80/20 Mix
Pangaea - West Coast Microledge
Pangaea - West Coast Ledgestone



—Black Aluminum Canopies



—Cementitious Lap Siding
Wood Tone



Building One & Two From Knightdale Blvd



EVOLUTION DESIGN
— & —
DEVELOPMENT
INNOVATIVE DESIGN NEXT LEVEL LIVING

EVOLUTION DESIGN & DEVELOPMENT
409 Sadie Drive, Matthews NC 28105
Phone: 980-579-0581
E-mail: contact@evolution-dd.com
www.evolution-dd.com

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PROFESSIONAL SEAL

[illegible]

PROJECT NAME	Knightdale Concept Design	
PROJECT TEAM	Evolution Design & Development	
Drawn by	BKF	Checked by BKF
ISSUE FOR		CONCEPT ELEVATIONS

ISSUE DATE
8-19-24

PROJECT NUMBER
2024-10

Building One & Two Elevations & Materials

A203

Scale

8/17/2024 9:45:49 AM

Knightdale Concept Design

7800 Knightdale Blvd,
Knightdale, NC 27545

Concept Design for Building Three



Evolution Design & Development
608 Matthews-Mint Hill Rd, Suite 102,
Matthews, NC 28105
980.579.0581
contact@evolution-dd.com
evolution-dd.com

Project Number 2024-10
Date 9-15-24

G100

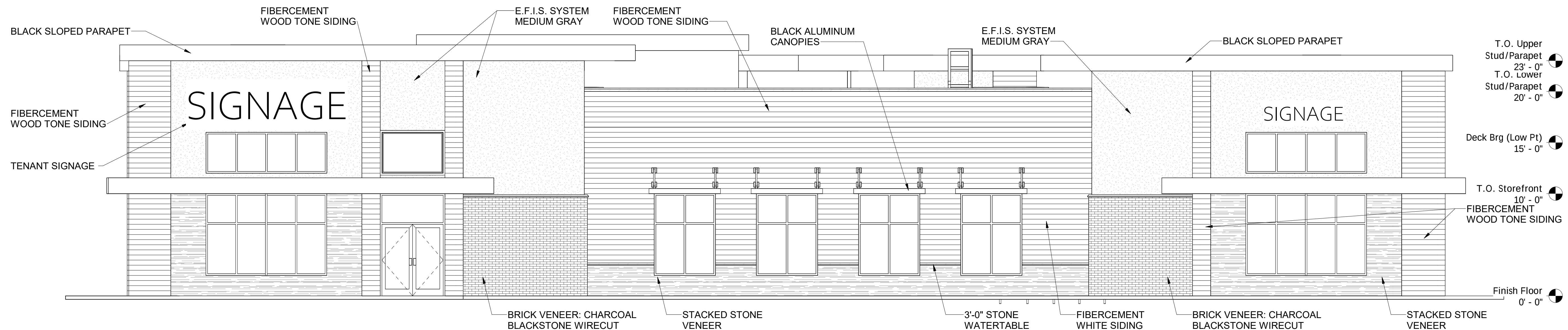


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Architectural elevation drawing of a building facade. The drawing includes the following labels and dimensions:

- T.O. Upper Stud/Parapet** 23' - 0"
- T.O. Lower Stud/Parapet** 20' - 0"
- E.F.I.S. SYSTEM MEDIUM GRAY**
- Deck Brg (Low Pt)** 15' - 0"
- T.O. Storefront** 10' - 0"
- Finish Floor** 0' - 0"
- FIBERCEMENT WOOD TONE SIDING**
- BLACK SLOPED PARAPETS**
- FIBERCEMENT WOOD TONE SIDING**
- FIBERCEMENT WHITE SIDING**
- ROOF ACCESS LADDER**
- E.F.I.S. SYSTEM MEDIUM GRAY**
- PARAPET**
- WOOD TONE SIDING**
- SIGNAGE**
- BLACK ALUMINUM CANOPY**
- BLACK ALUMINUM STORFRONTS**
- STACKED STONE VENEER**
- BLACK ALUMINUM CANOPY**
- BLACK ALUMINUM STORFRONTS**
- 3'-0" STONE WATERTABLE**
- TENANT AND HOUSE ELECTRICAL**
- BRICK VENEER: CHARCOAL BLACKSTONE WIRECUT**
- STACKED STONE VENEER**

ALL SIGNAGE MUST COMPLY WITH CHAPTER 8 OF THE UDO. ALL SIGNAGE IS REVIEWED AND APPROVED THROUGH A SEPARATE APPROVAL PROCESS. APPROVAL OF THESE ARCHITECTURAL PLANS DOES NOT CONSTITUTE APPROVAL OF ANY SIGNAGE



ALL SIGNAGE MUST COMPLY WITH CHAPTER 8 OF THE UDO. ALL SIGNAGE IS REVIEWED AND APPROVED THROUGH A SEPARATE APPROVAL PROCESS. APPROVAL OF THESE ARCHITECTURAL PLANS DOES NOT CONSTITUTE APPROVAL OF ANY SIGNAGE

[illegible]

PROJECT NAME	Knightdale Concept Design	
PROJECT TEAM	Evolution Design & Development	
Drawn by	BKF	Checked by
ISSUE FOR		CONCEPT ELEVATIONS

ISSUE DATE
6-19-25

PROJECT NUMBER
2024-10

Building Three Exterior Elevations

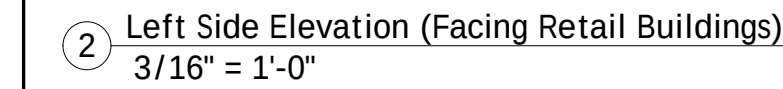
A201

Scale	3/16" = 1'-0"
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10. *Journal of the American Medical Association*, 2000; 283: 2689-2694.



Building Three Main Entrance From Parking Lot

Black Aluminum

Black Sloped Parapet

Black Gooseneck Over Tenant Signage

The image is a 3D architectural rendering of a two-story commercial building, identified as Building Three. The building features a modern design with a flat roof and a prominent black sloped parapet. The facade is composed of light-colored panels, likely stone or concrete, with large windows framed in black aluminum. The windows are arranged in a grid pattern, with some larger windows on the ground floor and smaller ones on the upper floor. The building is situated on a paved parking lot, and a black gooseneck light fixture is shown in the foreground, pointing towards the entrance. The overall aesthetic is clean and professional.

Building Three From Property Line Entrance

Canopies

A 3D architectural rendering of a modern building facade. The structure features a central entrance with a large glass door and windows, flanked by two sets of windows. The facade is composed of light gray panels and dark gray sections. Two prominent brick columns are positioned on either side of the central entrance. The roof is dark gray. The rendering includes annotations: a line pointing to the top of the brick columns, a line pointing to the central glass entrance, and a line pointing to the base of the brick columns. The building is set on a light gray ground plane.

A close-up photograph of three horizontal panels of a white, textured material, likely a wall or ceiling. The material has a rough, stucco-like finish with prominent vertical ridges and grooves. The panels are separated by dark, recessed horizontal lines. The lighting is even, highlighting the texture of the surface.

Coronado Stone
Sonora Sandstone -
French White

A close-up photograph of a brick wall, focusing on the horizontal mortar joints. The bricks are dark and rectangular, arranged in a standard running bond pattern. The mortar is a light, off-white color, creating a strong contrast with the dark bricks. The image is cropped to show a section of the wall, with the top and bottom edges cut off.

—Cementitious Lap Siding
Wood Tone

[illegible]

Building Three Facing Retail Buildings

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