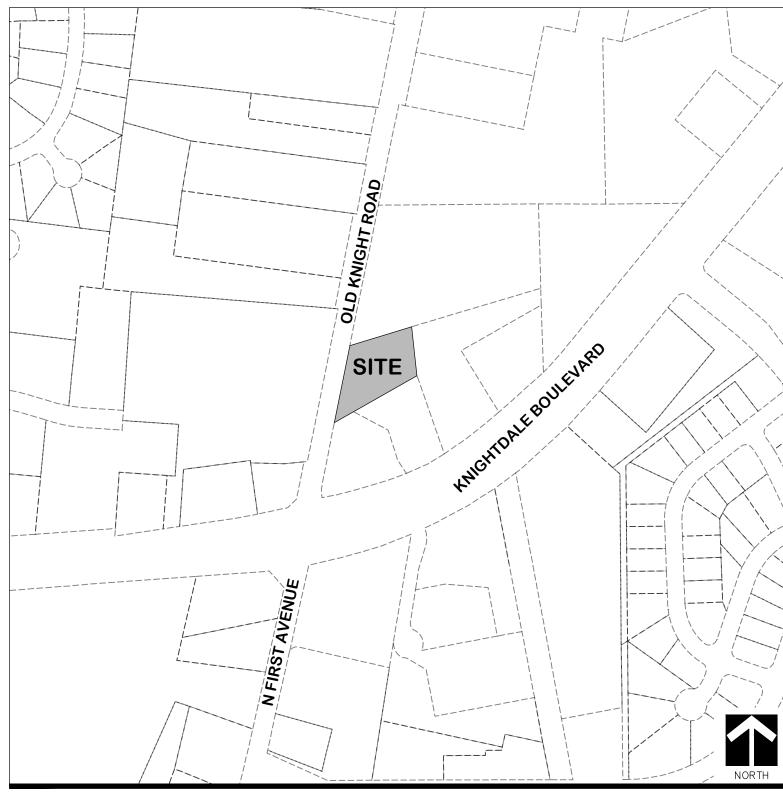
MASTER PLAN FOR:

OLD KNIGHT ROAD OFFICE BUILDING

KNIGHTDALE, WAKE COUNTY, NORTH CAROLINA 27545

CONTACT LIST

- TOWN OF KNIGHTDALE DEVELOPMENT SERVICES: **GIDEON SMITH, AICP** SENIOR PLANNER gideon.smith@knightdalenc.gov 950 STEEPLE SQUARE COURT **KNIGHTDALE. NC 27545** TEL: 919-217-2245
- TOWN OF KNIGHTDALE PERMITS AND INSPECTIONS: TRACY PADGETT PLANNER (BUILDING PERMITS) tracy.padgett@knightdalenc.gov 950 STEEPLE SQUARE COURT **KNIGHTDALE, NC 27545** TEL: 919-217-2244
- TOWN OF KNIGHTDALE TRANSPORTATION PLANNING **DEPARTMENT: ANDREW SPILOTIS SENIOR PLANNER - TRANSPORTATION** andrew.spilotis@knightdale.com 950 STEEPLE SQUARE COURT **KNIGHTDALE, NC 27545** TEL: 919-217-2247
- TOWN OF KNIGHTDALE STORMWATER swengineer@knightdale.gov 950 STEEPLE SQUARE COURT **KNIGHTDALE, NC 27545** TEL: 919-217-2257
- TOWN OF KNIGHTDALE PUBLIC WORKS PHILLIP BUNTON **PUBLIC WORKS DIRECTOR** phillip.bunton@knightdalenc.gov 950 STEEPLE SQUARE COURT **KNIGHTDALE, NC 27545** TEL: 919-217-2250
- RALEIGH WATER: publicutilityinfo@raleighnc.gov ONE EXCHANGE PLAZA RALEIGH, NC 27601 TEL: 919-996-3245
- NCDOT STREETS & HIGHWAYS: **DIVISION 5, DISTRICT 1 JEREMY WARREN, PE** jlwarren@ncdot.gov TEL: 919-733-3213
- OWNER: MOORE'S REALITY, INC. **JACKIE MOORE 623 NOON FLYER WAY KNIGHTDALE, NC 27545** TEL: 919-931-1116 E-MAIL: jackie.mooresrealtyinc@gmail.com
- **CIVIL ENGINEER:** PABST DESIGN GROUP, PA P. DAN PABST, PE 107 FAYETTEVILLE STREET, SUITE 200 RALEIGH, NC 27601 TEL: 919-848-4399 E-MAIL: dpabst@pabstdesign.com
- SURVEYOR: NEWCOMB LAND SURVEYORS, LLC JUSTIN L. LUTHER, PLS 7008 HARPS MILL ROAD, SUITE 105 RALEIGH, NC 27615 TEL: 919-847-1800
- ARCHITECT: **FURINI ARCHITECTS, PLLC ALEX FURINI, RA, PRINCIPAL** 202 WAYFIELD LANE **CARY, NC 27518** TEL: 919-646-5811 E-MAIL: alex@furiniarchitects.com



VICINITY MAP 1"= 300

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017F 1 F 5 F 5 F 5 F 5	SITE DATA TABLE
SITE ADDRESS:	700 OLD KNIGHT ROAD
000000000000000000000000000000000000000	KNIGHTDALE, NORTH CAROLINA 27545
OWNER/APPLICANT:	JACKIE MOORE, MOORE'S REALTY, INC. 623 NOON FLYER WAY
	KNIGHTDALE, NORTH CAROLINA 27545
ENCINEED	,
ENGINEER:	PABST DESIGN GROUP, PA 107 FAYETTEVILLE STREET, SUITE 200
	RALEIGH, NC 27601
	919.848.4399
DEED/PAGE:	DB 019200 PG 01486
PIN(S):	1754-56-9791
EXISTING ZONING	LIICHWAY DUCINECS (HD)
DISTRICT:	HIGHWAY BUSINESS (HB)
EXISTING LAND USE:	VACANT
PROPOSED LAND USE:	OFFICE, PROFESSIONAL SERVICES
PARCEL AREA:	TOTAL BEFORE R/W DEDICATION: 41,295 SF (0.948 AC)
	TOTAL AFTER R/W DEDICATION: 37,326 SF (0.857 AC)
RIVERBASIN:	NEUSE
WATERSHED:	UPPER NEUSE RIVER
FLOODPLAIN DATA:	NO PORTION OF THE PROPERTY IS LOCATED WITHIN
	SPECIAL FLOOD HAZARD ZONE PER INSURANCE RATE MAI
	(RATE MAP 3720175400J DATED MAY 2, 2006)
PRE-DEVELOPED IMPERVIOUS:	±0.09 ACRES (3,902 SF)
POST-DEVELOPED	ONSITE: ±0.49 ACRES (21,530 SF)
IMPERVIOUS:	OFFSITE: ±0.00 ACRES (63 SF)
PROPOSED LAND	TOTAL: ±0.51 ACRES (21,593 SF)
DISTURBANCE:	±0.74 ACRES (32,374 SF)
PROPOSED BUILDING	
TYPE:	OFFICE, PROFESSIONAL SERVICES
PRINCIPAL BUILDING	REAR SETBACK: 0' (MIN)
SETBACKS:	SIDE SETBACK: 6' (MIN)
	FRONT SETBACK: 10' - 30' (MIN - MAX)
PARKING SETBACKS:	(PER VARIANCE BK019337PG01398) FRONT YARD: N/A
I ANNING GET DACKS.	SIDE YARD: 0' (MIN)
	REAR YARD: 5' (MIN)
BUILDING FLOOR AREA:	EXISTING = 0 GFA
	PROPOSED = 7,000 GFA
BUILDING HEIGHT:	MAX. BUILDING HEIGHT: 70'-0" (5 STORIES)
	PROPOSED BUILDING HEIGHT: 28'-8" (1 STORY)
MINIMUM PARKING	PROFESSIONAL SERVICES: 1 SPACE PER 500 SF OF FLOOR
REQUIREMENTS:	AREA
	7,000 SF OFFICE / 500 SF = 14 SPACES
	TOTAL REQUIRED: 14 SPACES TOTAL PROVIDED: 16 SPACES
	(INCLUDING 1 ADA, 1 BEING VAN)
PUBLIC GATHERING	1 SF / 25 SF GFA (REQUIRED)
SPACE:	(1/25)*7000 SF =280 SF
	1,217 SF (PROVIDED)

FOR REVIEW ONLY NOT FOR CONSTRUCTION

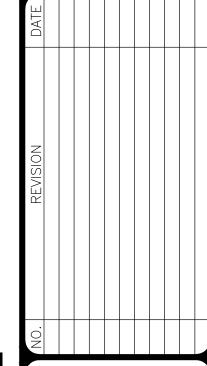
NOTE(s): ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH ALL TOWN OF KNIGHTDALE AND NCDOT STANDARDS AND SPECIFICATIONS.

BUILDING

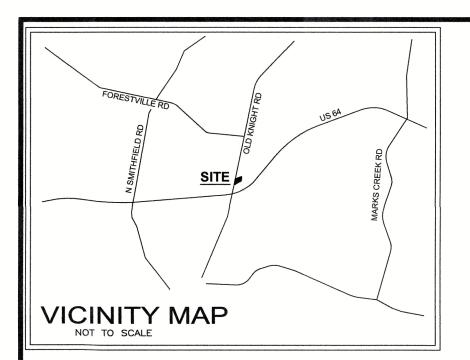
OFFICE

OAD

DRAFT



C-0.0



LEGEND and NOMENCLATURE

O Ex. iron pipe/rod or nail ☐ Ex. concrete monument --- OU --- Overhead utility ---- W ---- Water New iron pipe Calculated point Telephone pedesta **ABBREVIATIONS** Electric pedestal Fiber-optic marker Deed Book Traffic signal box Plat Book / Book of Maps Now or formerly Fire hydrant ✓ Valve (water or gas) Square feet Sanitary sewer manhole North Carolina State Route Storm curb inlet NCDOT North Carolina Dept. of Transportation Drainage inlet (w/ grate) Right-of-way Storm drain manhole Existing Utility pole Lamp post Polyvinyl chloride pipe Signal pole Measured Above ground

NOTES

- 1) All distances are horizontal ground distances in u.s. survey feet unless otherwise noted. Area(s) computed by coordinate geometry.
- 2) This survey does not include nor depict any environmental evaluations. No investigation into the existence of wetlands or riparian buffers performed in the preparation of this survey. Wetlands shown hereon field located by this office as placed by Sage Ecological Services per a sketch map provided dated 7/11/22.
- 3) Field survey performed February 1 thru 6, 2023 and November 20 thru November 22, 2023.
- 4) Surveyor has made no investigation or independent search for easements of record, encumbrances, restrictive covenants, ownership title evidence or any other facts that an accurate and current title search may disclose.
- 5) The locations of underground utilities as shown hereon (if any) are based on aboveground structures and aboveground visual evidence only. Locations of underground utilities/structures may vary from location shown hereon. Additional buried utilities/structures may be encountered. No excavations were made during the progress of this survey to locate buried utilities/structures.
- 6) Subject property is NOT located within a special flood hazard zone per FEMA Flood Insurance Rate Map (FIRM) #3720175400K, effective date July 19, 2022.
- 7) The State Plane Coordinates for this project were produced with RTK GPS observations and processed using the North Carolina VRS network. The network positional accuracy of the derived positional information is ±0.07'.

HORIZONTAL DATUM = NAD 83/2011 VERTICAL DATUM = NAVD 88

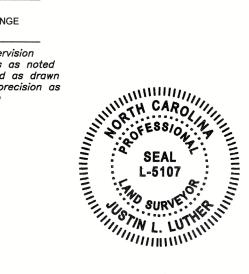
AN EXISTING STREET.

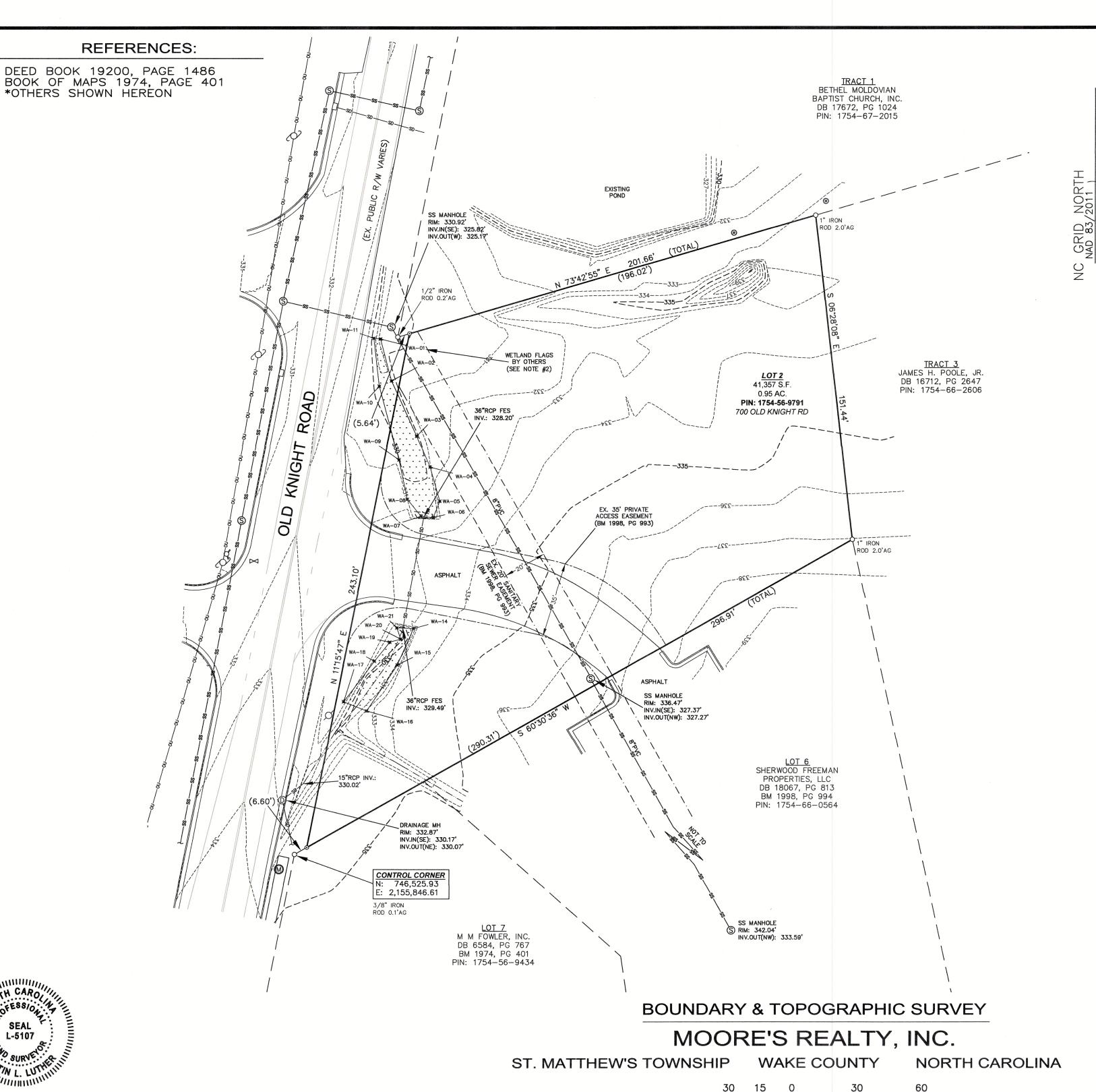
THIS SURVEY IS OF AN EXISTING PARCEL OR PARCELS OF LAND OR ONE OR MORE EXISTING EASEMENTS AND DOES NOT CREATE A NEW STREET OR CHANGE

I, Justin L. Luther, certify that this plat was drawn under my supervision from an actual survey made under my supervision from references as noted on said plat; that the boundaries not surveyed are clearly indicated as drawn from information as indicated under references; that the ratio of precision as calculated is greater than 1:10,000; that this plat was prepared in accordance with NCGS 47-30 as amended.

Witness my original signature, license number and seal this day of DECENTY, 2023.

Professional Land Surveyor (L-5107)





SCALE: 1"=30'

FLOW DIRECTION

SURVEY LEGEND and NOMENCLATURE

NEW IRON PIPE

CABLE VAULT

CALCULATED POINT

TELEPHONE PEDESTAI

ELECTRIC PEDESTAL

FIBER-OPTIC MARKER

PROPANE TANK

WATER METER

FIRE HYDRANT

VALVE (WATER OR GAS)

STORM CURB INLET

UTILITY POLE

LAMP POST

SIGNAL POLE

GUY WIRE

SIGN POST

SANITARY SEWER MANHOLE

SANITARY SEWER CLEANOUT

DRAINAGE INLET (W/ GRATE

STORM DRAIN MANHOLE

GAS METER

EX. IRON PIPE/ROD OR NAIL

EXISTING CONCRETE MONUMENT

SYMBOLS |

- 1. ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED. AREA(S)
- 2. THIS SURVEY DOES NOT INCLUDE NOR DEPICT ANY ENVIRONMENTAL EVALUATIONS. NO INVESTIGATION INTO THE EXISTENCE OF WETLANDS OR RIPARIAN BUFFERS PERFORMED IN THE PREPARATION OF THIS SURVEY.
- 3. FIELD SURVEY PERFORMED FEBRUARY 1 THRU 6, 2023.

DESCRIBED IN THE PLANS AND SPECIFICATIONS

- SURVEYOR HAS MADE NO INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBRANCES. RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE OR ANY OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE
- 5. THE LOCATIONS OF UNDERGROUND UTILITIES AS SHOWN HEREON (IF ANY) ARE BASED ON ABOVEGROUND STRUCTURES AND ABOVEGROUND VISUAL EVIDENCE ONLY, LOCATIONS OF UNDERGROUND UTILITIES/STRUCTURES MAY VARY FROM LOCATION SHOWN HEREON. ADDITIONAL BURIED UTILITIES/STRUCTURES MAY BE ENCOUNTERED. NO EXCAVATIONS
- 6. SUBJECT PROPERTY IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD ZONE PER FEMA FLOOD INSURANCE RATE MAP (FIRM) #3720175400K, EFFECTIVE DATE JULY 19, 2022.

NERE MADE DURING THE PROGRESS OF THIS SURVEY TO LOCATE BURIED UTILITIES/STRUCTURES.

THE STATE PLANE COORDINATES FOR THIS PROJECT WERE PRODUCED WITH RTK GPS OBSERVATIONS AND PROCESSED USING THE NORTH CAROLINA VRS NETWORK. THE NETWORK POSITIONAL ACCURACY OF THE DERIVED POSITIONAL INFORMATION IS ± 0.07'.

DEMOLITION NOTES:

EXISTING STRUCTURE TO BE REMOVED

EXISTING RIP RAP

EXISTING GRAVEL

EXISTING VEGETATION

EXISTING WETLANDS

PROPOSED CONCRETE

PROPOSED ASPHALT

PROPOSED RIP RAP

PROPOSED GRAVEL

7-DAY STABILIZATION

14-DAY STABILIZATION

PROPOSED SS MANHOLE

PROPOSED SS CLEANOUT

PROPOSED METER VAULT

PROPOSED SW MANHOLE

PROPOSED SW FLARED END SECTION

BLOCK AND GRAVEL INLET PROTECTION

PROPOSED HOTBOX

PROPOSED SW INLET

SILT FENCE OUTLET

CONCRETE WASHOUT

FENCE

OVERHEAD UTILITY

SANITARY SEWER

DEED BOOK

SQUARE FEET

DROP INLET (STORM)

CURB INLET (STORM

BELOW-GROUND

WATERLINE (BLUE PAINT)

GAS LINE (YELLOW PAINT)

PLAT BOOK / BOOK OF MAPS

UNDERGROUND ELECTRIC (RED PAINT)

COMMUNICATIONS / FIBER (ORANGE PAINT)

— x — x — x —

— — — — OHE—

— — — — w —

— — — — UE—

— — — — G —

ABBREVIATIONS

PROPOSED VALVE

PROPOSED FIRE HYDRANT ASSEMBLY

PROPOSED BLOW OFF ASSEMBLY

EXISTING RIPARIAN BUFFER

PROPOSED LIGHT DUTY ASPHALT

PROPOSED AMENITY SPACE

PROPOSED PAVEMENT REPAIR

PROPOSED TREE PRESERVATION

PROPOSED CONSTRUCTION ENTRANCE

- 1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL LOCAL AND STATE PERMITS REQUIRED FOR DEMOLITION WORK
- 2. THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE OWNER AND/OR ENGINEER FOR ANY AND ALL INJURIES AND/OR DAMAGES TO PERSONNEL, EQUIPMENT, AND/OR EXISTING FACILITIES IN THE DEMOLITION AND CONSTRUCTION
- 3 EXISTING CONDITIONS AS DEPICTED 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 EXAMINE THE SITE AND BE FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING ON THE DEMOLITION WORK FOR THIS PROJECT. IF CONDITIONS ENCOUNTERED DURING EXAMINATION ARE SIGNIFICANTLY DIFFERENT THAN THOSE SHOWN. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
- 4. ALL EXISTING ABOVE AND BELOW GROUND STRUCTURES WITHIN THE LIMITS OF NEW CONSTRUCTION SHALL BE RAZED UNLESS NOTED OTHERWISE WITHIN THIS CONSTRUCTION SET, ARCHITECTURAL PLANS AND/OR PROJECT SPECIFICATIONS. THIS INCLUDES FOUNDATION SLABS, WALLS, AND FOOTINGS.
- 5 ALL DEMOLITION WASTE AND CONSTRUCTION DERRIS SHALL BE REMOVED BY THE CONTRACTOR AND DISPOSED OF IN A STATE APPROVED WASTE SITE AND IN ACCORDANCE WITH ALL LOCAL AND STATE CODES AND PERMIT REQUIREMENTS.
- 6. ALL UTILITY REMOVAL, RELOCATION, CUTTING, CAPPING AND/OR ABANDONMENT SHALL BE COORDINATED WITH THE
- 7. THE BURNING OF CLEARED MATERIAL AND DEBRIS SHALL NOT BE ALLOWED UNLESS CONTRACTOR GETS WRITTEN
- 8. MUNICIPAL AND UTILITY CONTACTS ARE LISTED ON COVER SHEET C-0.0.
- 9. EROSION AND SEDIMENTATION CONTROL MEASURES AROUND AREAS OF DEMOLITION SHALL BE INSTALLED PRIOR TO
- 10. ASBESTOS OR HAZARDOUS MATERIALS, IF FOUND ON SITE, SHALL BE REMOVED BY A LICENSED HAZARDOUS MATERIALS CONTRACTOR, CONTRACTOR SHALL NOTIFY OWNER IMMEDIATELY IF HAZARDOUS MATERIALS ARE ENCOUNTERED.
- 11. CONTRACTOR SHALL PROTECT ALL CORNER PINS, MONUMENTS, PROPERTY CORNERS, AND BENCHMARKS DURING DEMOLITION ACTIVITIES. IF DISTURBED, CONTRACTOR SHALL HAVE DISTURBED ITEMS RESET BY A LICENSED SURVEYOR AT NO ADDITIONAL COST TO THE OWNER.
- 12. CONTRACTOR SHALL ADHERE TO ALL LOCAL, STATE, FEDERAL, AND OSHA REGULATIONS WHEN OPERATING DEMOLITION EQUIPMENT AROUND UTILITIES.
- 13. CONTRACTOR SHALL PROTECT AT ALL TIMES ADJACENT STRUCTURES AND ITEMS FROM DAMAGE DUE TO DEMOLITION ACTIVITIES.
- 14. ALL DEMOLITION WORK SHALL BE PERFORMED WITH "DUE CARE AND DILIGENCE" SO AS TO PREVENT THE ARBITRARY DESTRUCTION OR INTERRUPTION OF CONCEALED UTILITIES WHICH ARE INTENDED TO REMAIN IN USE AND THE ROUTING OF WHICH COULD NOT BE PREDETERMINED UNTIL DEMOLITION WAS STARTED. ALL SUCH DISCOVERIES OF UTILITIES DURING THE DEMOLITION PROCESS WHICH ARE IN A LOCATION DIFFERENT FROM THAT INDICATED OR ARE UNIDENTIFIED, SHALL BE REPORTED TO THE OWNER, ENGINEER AND ARCHITECT BEFORE REMOVAL FOR FINAL
- 15. ALL UTILITIES OR STRUCTURES NOT DESIGNATED FOR REMOVAL OR MODIFICATION ARE TO REMAIN AND BE PROTECTED
- 16. EXISTING PAVEMENT, CURB AND GUTTER, SIDEWALK, ETC. NOT INDICATED FOR REMOVAL, WHICH IS DAMAGED DURING DEMOLITION/CONSTRUCTION, SHALL BE REPAIRED OR REPLACED TO MATCH ORIGINAL CONDITION
- 17. SALVAGEABLE FILL MATERIALS FROM SITE DEMOLITION DETERMINED TO BE ACCEPTABLE BY AN INDEPENDENT SOILS
- 18. ANY NOTE, OR REFERENCE TO ANY ELEMENT, WHICH DOES NOT SPECIFY ACTION BY THE CONTRACTOR SHALL BE CONSTRUED AS INFORMATION ONLY.
- 19. ALL PIPE INSTALLATION, WHEN REQUIRED BY PIPE DEPTHS AND EXCAVATION, SHALL BE PERFORMED WITH THE USE OF TRENCH BOXES. ALL EXCAVATIONS, UTILITY AND GRADING WORK, SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE
- 20. THE GENERAL CONTRACTOR SHALL PROVIDE ALL SAFETY AND SECURITY FENCING, BARRIERS, PROTECTION MATERIAL AND METHODS AS REQUIRED TO COMPLETE ANY OFF SITE WORK IN A SAFE AND TIMELY MANNER.

TESTING LABORATORY SHALL BE UTILIZED FOR FILL MATERIAL WHERE APPROPRIATE.

- 21. CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS CONSTRUCTION SET FOR OTHER PERTINENT INFORMATION.
- 22. UNLESS OTHERWISE NOTED, ALL EXISTING VEGETATION TO REMAIN AND TO BE UNDISTURBED FOR THE DURATION OF
- CONSTRUCTION. IF DAMAGES OCCUR TO EXISTING VEGETATION, PLANTS SHALL BE REPLACED IN KIND. 23. ANY EXISTING WELLS AND/OR SEPTIC SYSTEMS SHALL BE ABANDONED IN ACCORDANCE WITH WAKE COUNTY HEALTH

SITE LAYOUT NOTES:

- 1. ALL CONSTRUCTION AND EXCAVATION SHALL BE CONFINED TO THE LIMITS OF CONSTRUCTION, AND SHALL BE DONE IN ACCORDANCE WITH THE TOWN OF KNIGHTDALE, NCDOT, & NCDEQ STANDARDS AND SPECIFICATIONS.
- ALL DIMENSIONS ARE TO EDGE OF PAVEMENT, EDGE OF SIDEWALK, FACE OF CURB, CENTERLINE OF COLUMN AND FACE OF BUILDING WALL, UNLESS OTHERWISE NOTED. ALL RADII DIMENSIONS TO BACK OF CURB.
- CONTROL DEVICES" OR AS REQUIRED IN SPECIFICATIONS.

. ALL PAINT STRIPING, PAVEMENT MARKINGS, AND SIGNAGE SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC

- 4. ALL STRIPING SHALL BE 4" WIDE UNLESS NOTED OTHERWISE.
- 5. ALL RADII TO BE 3'-0" BOC UNLESS OTHERWISE NOTED.
- 6. VERIFY ALL SETBACKS WITH LOCAL CODES.
 - 7. A SEPARATE PERMIT AND APPROVAL IS REQUIRED FOR SIGNS.
 - 8. ALL CURB RAMPS SHALL HAVE A DETECTABLE WARNING COMPLYING WITH SECTIONS 4.7.7 AND 4.29.2 OF THE ADA
 - ACCESSIBILITY GUIDELINES 9. CONTRACTOR SHALL PROVIDE ALL LABOR AND MATERIALS FOR THE INSTALLATION OF TRAFFIC SIGNAGE AND
 - PAVEMENT MARKINGS AS SHOWN ON THE CONSTRUCTION PLANS. 10. CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS CONSTRUCTION SET FOR OTHER PERTINENT INFORMATION.
 - 11. DETECTABLE WARNINGS ARE REQUIRED AT ANY CROSSWALK, OR ISLAND CUT THRU, WHERE THERE IS NOT CHANGE IN **ELEVATION (I.E. RAMP NOT PROVIDED).**
 - 12. NEW WHITE PAINT DIRECTIONAL ARROWS SHALL BE IN ACCORDANCE WITH LATEST REQUIREMENTS OF THE "MANUAL
 - ON UNIFORM TRAFFIC CONTROL" FOR LOW SPEED URBAN CONDITIONS.
 - 13. CONTACT THE NORTH CAROLINA ONE CALL CENTER PRIOR TO DOING ANY DIGGING. 1-800-632-4949
 - 14. ALL ROOF DRAINS SHALL BE DIRECTED TO STORM DRAIN SYSTEM.
 - 15. ALL TRAFFICWAYS, INCLUDING DRIVEWAYS, ALLEYWAYS, ETC., SHALL REMAIN ACCESSIBLE TO RESIDENTIAL AND EMERGENCY VEHICLES THROUGHOUT PROJECT DURATION.
 - 16. EXISTING ASPHALT AND CONCRETE STREETS AND CURB AND GUTTER SHALL BE RESTORED TO MATCH ORIGINAL CONDITIONS PRIOR TO CONSTRUCTION
 - 17. GENERAL CONTRACTOR TO REFER TO THE MOST CURRENT ARCHITECTURAL PLANS FOR THE EXACT LOCATION OF UTILITY ENTRANCES, BUILDING DIMENSIONS, ROOF LEADERS, EXIT DOORS AND EXIT RAMPS.
 - 18. THE CONTRACTOR SHALL REMOVE, PRESERVE, AND RESET ALL FENCES, POSTS, CULVERTS, SIGNS, STREET MARKERS, MAILBOXES, AND THE LIKE WITHIN THE LIMITS OF THE PROPOSED IMPROVEMENTS. ALL COSTS ASSOCIATED WITH THIS NORK SHALL BE INCLUDED IN THE CONTRACTOR'S BID PRICE.
 - 19. PERMANENT AND TEMPORARY SIGNAGE REQUIRES AN APPROVED SIGN PERMIT PRIOR TO INSTALLATION. SIGNAGE IS A SEPARATE SUBMITTAL. REVIEW. AND APPROVAL PROCESS BY THE DEVELOPMENT SERVICES DEPARTMENT

GRADING NOTES:

1. ALL SITE WORK SHALL BE DONE IN ACCORDANCE WITH THE PLANS PREPARED BY PABST DESIGN GROUP, PA, THE CURRENT REQUIREMENTS OF WAKE COUNTY, THE APPLICABLE SECTIONS OF THE NCDOT STANDARD SPECIFICATIONS FOR ROADWAY CONSTRUCTION, AND ALL OTHER PERTINENT FEDERAL AND STATE LAWS.

CONSTRUCTION DRAWINGS, SITE SPECIFICATIONS OR INSTRUCTED BY THE OWNER.

- 2. ALL EXISTING TREES, VEGETATION, PAVEMENTS, CONCRETE FOUNDATIONS, STRUCTURES AND ORGANIC TOPSOIL SHALL BE STRIPPED AND REMOVED FROM NEW CONSTRUCTION AREAS UNLESS OTHERWISE NOTED.
- 3. ALL AREAS NOT PAVED SHALL BE TOPSOILED, SEEDED, MULCHED OR LANDSCAPED UNLESS OTHERWISE NOTED IN THE
- 4. CONTRACTOR SHALL BE FINANCIALLY RESPONSIBLE FOR DISPOSAL OF ALL WASTE MATERIALS OFF SITE. THIS RESPONSIBILITY SHALL INCLUDE ALL REQUIRED APPROVALS AND CONDITIONS DICTATED BY WAKE COUNTY
- 5. ALL OPEN STORM DRAIN PIPES SHALL BE PROTECTED WITH STONE FILTER PROTECTION AFTER STOPPAGE OF WORK 6. CONTRACTOR SHALL ADHERE TO ALL TERMS AND CONDITIONS AS OUTLINED IN THE GENERAL NPDES PERMIT FOR
- STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
- 7. IF AN OFFSITE SOIL SPOIL OR BORROW SITE IS UTILIZED, THEN THE DISTURBED AREA FOR THE SPOIL/BORROW SITE MUST BE INCLUDED IN THE LAND-DISTURBANCE PLAN AND PERMIT UNLESS THE SPOIL/BORROW SITE ALREADY HAS A
- LAND-DISTURBANCE PERMIT. 8. CONTRACTOR TO PROVIDE SHOP DRAWINGS ON ALL STORM SEWER MANHOLES AND INLETS.
- 9. BOUNDARY AND TOPOGRAPHIC SURVEY PROVIDED BY NEWCOMB LAND SURVEYORS, PLLC DATED FEBRUARY 6TH, 2023.
- 10. CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS CONSTRUCTION SET FOR OTHER PERTINENT INFORMATION.
- 11. CONTRACTOR SHALL FIELD VERIFY EXISTING TOPOGRAPHY IN RELATION TO THE PROPOSED GRADES TO ENSURE DRAINAGE IN THE DIRECTION INDICATED ON PLANS.
- 12. INITIATE CONSTRUCTION SEQUENCE BEFORE BEGINNING CLEARING AND GRADING ON-SITE OPERATIONS.
- 13. STRIP TOPSOIL TO FULL DEPTH IN AREAS TO BE GRADED.
- 14. MAXIMUM GRADED SLOPE SHALL NOT EXCEED 2:1, UNLESS OTHERWISE NOTED.
- 15. AREAS TO BE GRADED SHALL BE CLEARED OF ALL EXISTING VEGETATION. CONTRACTOR TO PROTECT VEGETATION LOCATED BEYOND GRADING LIMITS.
- 16. COMPACT ALL FILL AREAS TO 95% OF MAXIMUM DENSITY, OR PER GEOTECHNICAL RECOMMENDATIONS

SEASON. CONTACT ACF ENVIRONMENTAL FOR SPECIFICATIONS AT 1-800-448-3636.

17. PROPOSED SPOT ELEVATIONS ARE SHOWN AT FINISHED GRADED.

- 18. ALL 2:1 SLOPES TO BE STABILIZED WITH TURF REINFORCEMENT MAT PER MANUFACTURER'S RECOMMENDATIONS. SLOPES TO BE SEEDED w/ COASTAL SLOPE SHIELD MIX SUMMER/SPRING OR FALL/WINTER BLEND DEPENDING ON
- 19. THE PLACEMENT OF ANY FILL MATERIAL MUST BE CONDUCTED UNDER THE OBSERVATION OF A QUALIFIED LICENSED GEOTECHNICAL ENGINEER, AND UPON COMPLETION OF THE EARTHWORK ACTIVITIES, THE TOWN MUST BE PROVIDED WITH A FINAL GRADING REPORT THAT INCLUDES THE CORRESPONDING COMPACTION TEST RESULTS, AND CERTIFIES THE TYPE OF FILL MATERIAL AND ITS PROPER PLACEMENT.

GENERAL UTILITY NOTES:

- 1. ALL UTILITY WORK SHALL BE DONE IN ACCORDANCE WITH THE PLANS PREPARED BY PABST DESIGN GROUP, PA. THE CURRENT REQUIREMENTS OF THE CITY OF RALEIGH, THE APPLICABLE SECTIONS OF THE NCDOT STANDARD SPECIFICATIONS FOR ROADWAY CONSTRUCTION AND ALL OTHER PERTINENT FEDERAL AND STATE LAWS.
- 2. THE CONTRACTOR SHALL COMPLY AT ALL TIMES WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, PROVISIONS AND POLICIES GOVERNING SAFETY AND HEALTH, INCLUDING THE FEDERAL CONSTRUCTION SAFETY ACT (PUBLIC LAW 91-54), FEDERAL REGISTER, CHAPTER XVII, PART 1926 OF TITLE 29 REGULATIONS, OCCUPATIONAL SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION, AND SUBSEQUENT PUBLICATIONS UPDATING THESE REGULATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXAMINING THE AREAS AND CONDITIONS UNDER WHICH THE PROJECT IS TO BE CONSTRUCTED PRIOR TO THE SUBMISSION OF A BID. SUBMISSION OF A BID SHALL BE CONSTRUED TO MEAN THE CONTRACTOR HAS REVIEWED THE SITE AND IS FAMILIAR WITH CONDITIONS AND CONSTRAINTS OF THE SITE.
- BEFORE EXCAVATION, ALL UNDERGROUND UTILITIES SHALL BE LOCATED IN THE FIELD BY THE PROPER AUTHORITIES. THE CONTRACTOR SHALL NOTIFY N.C. 811 AT "811 OR 1-800-632-4949". THE LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES ARE APPROXIMATE AND MAY NOT ALL BE SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND EXACT LOCATION OF ALL UTILITIES AND UNDERGROUND
- 5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BID AND PERFORM ALL UTILITY WORK IN COMPLIANCE TO ALL APPLICABLE LOCAL AND STATE CODES AND REGULATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FEES ASSOCIATED WITH THE INSTALLATION, INSPECTING, TESTING AND FINAL ACCEPTANCE OF ALL PROPOSED UTILITIES CONSTRUCTION.
- CONTRACTOR SHALL COORDINATE WITH THE APPROPRIATE UTILITY COMPANY ON THE ADDITION, REMOVAL AND/OR RELOCATION OF UTILITIES AND UTILITY POLES AND THE EXTENSION OF ALL PROPOSED UTILITIES TO RADISSON HOTEL.
- ALL UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE RESPECTIVE UTILITY COMPANY IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE ALL UTILITIES ARE INSTALLED CORRECTLY TO MEET PROJECT REQUIREMENTS WHETHER PERFORMED BY THE CONTRACTOR OR NOT.
- AN AS-BUILT DRAWING OF NEW UTILITY SERVICES SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE OWNER UPON COMPLETION OF THE PROJECT.
- 10. CONDUIT LOCATIONS TO SIGNS AND SITE LIGHT POLES TO BE COORDINATE WITH OWNER.
- 11. CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS CONSTRUCTION SET FOR OTHER PERTINENT INFORMATION. 12. CONTRACTOR SHALL VERIFY ALL ILLUSTRATED UTILITY CROSSINGS PRIOR TO CONSTRUCTION AND NOTIFY THE
- ENGINEER IF CONFLICTS ARE ENCOUNTERED. 13. ALL CITY OF RALEIGH UTILITY CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF RALEIGH
- STANDARD SPECIFICATIONS AND DETAILS IN EFFECT AT TIME OF UTILITY PERMITTING. 14. GREASE INTERCEPTOR SIZING AND DETAILS ARE TO BE INCLUDED WITH BUILDING CONSTRUCTION PLUMBING PLANS. A
- PLUMBING PERMIT WILL BE REQUIRED FOR INSTALLATION OF THE GREASE INTERCEPTOR AND ANY ASSOCIATED PLUMBING SEWER LATERAL IF INSTALLED DURING THE SITE DEVELOPMENT PHASE OF CONSTRUCTION
- APPROVAL AND PERMITTING OF THIS UTILITY PLAN COVERS PUBIC INFRASTRUCTURE ONLY. WHILE PRIVATE UTILITY MAINS MAY BE SHOWN HEREON FOR REFERENCE, THEY ARE ALLOWED ONLY AFTER OBTAINING A SEPARATE PERMIT FOR

CITY OF RALEIGH UTILITY NOTES:

- ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH DESIGN STANDARDS, DETAILS & SPECIFICATIONS (REFERENCE: CORPUD HANDBOOK, CURRENT EDITION)
- 2. UTILITY SEPARATION REQUIREMENTS: a. A DISTANCE OF 100' SHALL BE MAINTAINED BETWEEN SANITARY SEWER & ANY PRIVATE OR PUBLIC WATER SUPPLY SOURCE SUCH AS AN IMPOUNDED RESERVOIR USED AS A SOURCE OF DRINKING WATER. IF ADEQUATE LATERAL SEPARATION CANNOT BE ACHIEVED, FERROUS SANITARY SEWER PIPE SHALL BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS. HOWEVER, THE MINIMUM SEPARATION SHALL NOT BE LESS THAN 25' FROM A PRIVATE WELL OR 50' FROM A PUBLIC WELL.
- b. WHEN INSTALLING WATER &/OR SEWER MAINS, THE HORIZONTAL SEPARATION BETWEEN UTILITIES SHALL BE 10'. IF THIS SEPARATION CANNOT BE MAINTAINED DUE TO EXISTING CONDITIONS, THE VARIATION ALLOWED IS THE WATER MAIN IN A SEPARATE TRENCH WITH THE ELEVATION OF THE WATER MAIN AT LEAST 18" ABOVE THE TOP OF THE SEWER & MUST BE APPROVED BY THE PUBLIC UTILITIES DIRECTOR. ALL DISTANCES ARE MEASURED FROM OUTSIDE
- c. WHERE IT IS IMPOSSIBLE TO OBTAIN PROPER SEPARATION, OR ANYTIME A SANITARY SEWER PASSES OVER A WATERMAIN, DIP MATERIALS OR STEEL ENCASEMENT EXTENDED 10' ON EACH SIDE OF CROSSING MUST BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS
- d. 5.0' MINIMUM HORIZONTAL SEPARATION IS REQUIRED BETWEEN ALL SANITARY SEWER & STORM SEWER FACILITIES,
- UNLESS DIP MATERIAL IS SPECIFIED FOR SANITARY SEWER. e. MAINTAIN 18" MIN. VERTICAL SEPARATION AT ALL WATERMAIN & RCP STORM DRAIN CROSSINGS; MAINTAIN 24" MIN VERTICAL SEPARATION AT ALL SANITARY SEWER & RCP STORM DRAIN CROSSINGS. WHERE ADEQUATE SEPARATIONS

CANNOT BE ACHIEVED, SPECIFY DIP MATERIALS & A CONCRETE CRADLE HAVING 6" MIN. CLEARANCE (PER CORPUD

- f. ALL OTHER UNDERGROUND UTILITIES SHALL CROSS WATER & SEWER FACILITIES WITH 18" MIN. VERTICAL SEPARATION REQUIRED. 3. ANY NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW & APPROVAL OF AN AMENDED PLAN &/OR PROFILE BY THE
- CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER & SEWER SERVICE TO EXISTING RESIDENCES & BUSINESSES THROUGHOUT CONSTRUCTION OF PROJECT. ANY NECESSARY SERVICE INTERRUPTIONS SHALL BE PRECEDED BY A 24 HOUR ADVANCE NOTICE TO THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT.
- 5. 3.0' MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCEMAINS. 4.0' MINIMUM COVER IS REQUIRED ON 6. IT IS THE DEVELOPER'S RESPONSIBILITY TO ABANDON OR REMOVE EXISTING WATER & SEWER SERVICES NOT BEING
- USED IN REDEVELOPMENT OF A SITE UNLESS OTHERWISE DIRECTED BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT. THIS INCLUDES ABANDONING TAP AT MAIN & REMOVAL OF SERVICE FROM ROW OR EASEMENT PER CORPUD HANDBOOK PROCEDURE.
- INSTALL WATER SERVICES WITH METERS LOCATED AT ROW OR WITHIN A WATERLINE EASEMENT IMMEDIATELY ADJACENT. NOTE: IT IS THE APPLICANT'S RESPONSIBILITY TO PROPERLY SIZE THE WATER SERVICE FOR EACH CONNECTION TO PROVIDE ADEQUATE FLOW & PRESSURE.
- 8. INSTALL 4" 8" PVC* SEWER SERVICES @ 1.0% MINIMUM GRADE WITH CLEANOUTS LOCATED AT ROW OR EASEMENT LINE & SPACED EVERY 75 LINEAR FEET MAXIMUM. PRESSURE REDUCING VALVES ARE REQUIRED ON ALL WATER SERVICES EXCEEDING 80 PSI; BACKWATER VALVES ARE
- REQUIRED ON ALL SANITARY SEWER SERVICES HAVING BUILDING DRAINS LOWER THAN 1.0' ABOVE THE NEXT UPSTREAM

- 10. ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM NCDWQ, USACE &/OR FEMA FOR ANY RIPARIAN BUFFER, WETLAND &/OR FLOODPLAIN IMPACTS (RESPECTIVELY) PRIOR TO CONSTRUCTION.
- 11. NCDOT / RAILROAD ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK (INCLUDING MAIN EXTENSIONS & SERVICE TAPS) WITHIN STATE OR RAILROAD ROW PRIOR TO CONSTRUCTION.
- 12. CROSS-CONNECTION CONTROL PROTECTION DEVICES ARE REQUIRED BASED ON DEGREE OF HEALTH HAZARD INVOLVED AS LISTED IN APPENDIX-B OF THE RULES GOVERNING PUBLIC WATER SYSTEMS IN NORTH CAROLINA. THESE GUIDELINES ARE THE MINIMUM REQUIREMENTS. THE DEVICES SHALL MEET AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE) STANDARDS OR BE ON THE UNIVERSITY OF SOUTHERN CALIFORNIA APPROVAL LIST. THE DEVICES SHALL BE INSTALLED AND TESTED (BOTH INITIAL AND PERIODIC TESTING THEREAFTER) IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS OR THE LOCAL CROSS-CONNECTION CONTROL PROGRAM, WHICHEVER IS MORE STRINGENT. CONTACT JOANIE HARTLEY AT (919) 996-5923 OR joanie.hartley@raleighnc.gov FOR MORE INFORMATION.

GENERAL PLANTING NOTES:

- ALL LANDSCAPING SHALL BE INSTALLED ACCORDING TO SOUND NURSERY PRACTICES AND SHALL MEET ALL STANDARDS AS STATED IN THE LATEST EDITION OF 'AMERICAN STANDARD FOR NURSERY STOCK'.
- 2. PLANT LIST QUANTITIES ARE PROVIDED FOR CONVENIENCE ONLY. IN THE EVENT OF QUANTITY DISCREPANCIES, THE DRAWINGS SHALL TAKE PRECEDENCE.
- 4. CONTRACTOR SHALL HAVE UTILITY COMPANY LOCATE ALL UTILITIES PRIOR TO DIGGING. CONTRACTOR SHALL BE
- 5. METHODS OF TREE STAKING INDICATED ON THE DRAWINGS ARE SUGGESTIONS ONLY. THE LANDSCAPE CONTRACTOR SHALL USE WHATEVER METHOD HE DEEMS FIT. HOWEVER HE WILL BE HELD LIABLE FOR ANY DAMAGES CAUSED TO TREES BY IMPROPER STAKING METHODS (OR ABSENCE OF STAKING) AND IS RESPONSIBLE FOR UPRIGHTING AND
- 9. ALL PLANT BEDS SHALL BE TREATED WITH PRE-EMERGENT WEED CONTROL (I.E. TREFLON GRANULES).
- 10. ALL PLANTS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN ASSOCIATION OF NURSERYMEN AND SHALL BE VIGOROUS. HEALTHY MATERIAL FREE OF PESTS AND DISEASE.
- 11. VERIFICATION OF TOTAL QUANTITIES AS SHOWN ON THE PLANT LIST SHALL BE THE RESPONSIBILITY OF THE PLANTING CONTRACTOR, AND THE TOTAL QUANTITIES SHALL BE REQUIRED ON THE PLANTING PLAN
- 12. OWNERS 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.
- 13. PLANT MATERIAL ON THIS SITE MUST BE INSTALLED IN CONFORMANCE WITH THE GENERAL PLANTING NOTES AND DETAILS ON THIS PLAN OR TO THE STANDARDS OF THE TOWN OF KNIGHTDALE.
- 16. ALL LANDSCAPING WILL BE MAINTAINED IN PERPETUITY.

- CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION TO AVOID CONFLICT DURING GRADING OPERATION. CONTRACTOR SHALL CALL 1-800-632-4949 N.C. "ONE CALL" PRIOR TO DIGGING TO LOCATE ALL EXISTING UNDERGROUND UTILITIES ON SITE.
- 6. SCHEDULE AN ONSITE PRE-CONSTRUCTION MEETING WITH THE TOWN OF KNIGHTDALE TO INSPECT THE INSTALLED
- 9. BEGIN CLEARING AND GRUBBING. MAINTAIN DEVICES AS NEEDED. ROUGH GRADE SITE.
- 11. STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, PAVING, DITCH LININGS, ETC. SEED
- AND C-5.1, INCLUDING RETAINING WALLS TO THE EXTENT POSSIBLE.
- ON SHEET D-4.1). 14. INSTALL CURB AND GUTTER, CABC STONE, AND SIDEWALK IN ALL HARDSCAPE AREAS.
- 15. STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION AND PAVING, ESTABLISH GROUND
- IMPLEMENTATION AND MAINTENANCE, THE CONTRACTOR IS OBLIGATED TO TAKE ADDITIONAL CORRECTIVE ACTION. 17. THE CONTRACTOR SHALL INSPECT AND MAINTAIN THE EROSION CONTROL DEVICES SO THEY CONTINUE TO FUNCTION

- REFER TO SHEET C-5.0 IN THIS PLAN SET FOR PHASE 1 E&S OPERATIONS PRIOR TO BEGINNING THIS CONSTRUCTION SEQUENCE AND INSTALLATION OF MEASURES ON SHEET C-5.1.
- . CONTINUE BRINGING THE SITE TO FINAL GRADES, INSTALLING UTILITIES AND RETAINING WALL AT THE SAME TIME AS NECESSARY. CONTACT TOWN OF KNIGHDALE INSPECTOR FOR INSPECTION.
- WATER AND SEDIMENT (FROM ANY STORM STRUCTURES THAT RECEIVED WATER AND SEDIMENT PAST THE INLET PROTECTION) INTO SILT BAG AND DISPOSE OF APPROPRIATELY
- 5. FINISH INSTALL OF CURB AND GUTTER, CABC STONE, PAVEMENT AND SIDEWALK IN ALL HARDSCAPE AREAS, WHERE
- IF IT IS DETERMINED DURING CONSTRUCTION THAT SIGNIFICANT SEDIMENT IS LEAVING THE SITE, DESPITE PROPER IMPLEMENTATION AND MAINTENANCE. THE CONTRACTOR IS OBLIGATED TO TAKE ADDITIONAL CORRECTIVE ACTION.
- 9. IF SITE IS APPROVED, REMOVE TEMPORARY EROSION AND SEDIMENTATION MEASURES AND SEED OUT TO STABILIZE ANY
- RESULTING BARE AREAS. 10. BEFORE REMOVAL OF PLUGS TO ALLOW FOR THE NEW STORM CONVEYANCE SYSTEM TO TIE INTO THE DOWNSTREAM
- 11. FINE GRADE THE FINAL PORTION OF THE SITE. SEED OR OTHERWISE STABILIZE ANY RESULTING BARE AREAS.
- 12. MAINTAIN ALL REMAINING SOIL AND EROSION CONTROL MEASURES UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
- 13. WHEN VEGETATION HAS BECOME ESTABLISHED (90% GERMINATION), CALL FOR A FINAL INSPECTION BY THE EROSION CONTROL INSPECTOR. OBTAIN A CERTIFICATE OF COMPLETION.

16. IF IT IS DETERMINED DURING CONSTRUCTION THAT SIGNIFICANT SEDIMENT IS LEAVING THE SITE, DESPITE PROPER

SZ

DRAWING

PROJECT NUMBER

NOTE(s): ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH ALL TOWN OF KNIGHTDALE AND NCDOT STANDARDS AND SPECIFICATIONS.

FOR REVIEW ONLY

NOT FOR CONSTRUCTION

SURVEY NOTES EXISTING CONCRETE EXISTING ASPHALT COMPUTED BY COORDINATE GEOMETRY.

- 3. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN AUTHORIZATION FROM THE OWNER OR LANDSCAPE DESIGNER
- 6. ALL AREAS NOT SHOWN AS HARD SURFACES, PLANT BED, MULCHED OR UNDISTURBED AREAS, SHALL BE SEEDED OR SODDED AS LAWN WITH BERMUDA GRASS.
- 7. ALL LANDSCAPE BEDS CONTAIN TRIPLE SHREDDED HARDWOOD MULCH AT A THICKNESS OF 3".
- 8. ALL LANDSCAPE BEDS SHALL HAVE POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES.

- 14. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED PERMITS AND LICENSES TO PERFORM THE REQUIRED
- 15. FOUNDATION PLANTINGS WILL BE PLANTED ALONG BUILDING FOUNDATIONS THAT FACE A STREET.
- 17. ALL HOTBOXES AND OTHER ON GROUND/FREE STANDING MECHANICAL EQUIPMENT SHALL BE SCREENED WITH DENSE EVERGREEN VEGETATION AT LEAST THE HEIGHT OF THE EQUIPMENT PRIOR TO THE ISSUANCE OF A CERTIFICATE OF
- 18. WITHIN THE SIGHT TRIANGLE NOTHING SHALL BE ERECTED, PLACED, PLANTED, OR ALLOWED TO GROW IN SUCH A MANNER AS TO IMPEDE THE SIGHT VISION AT THE INTERSECTION AND THE MAXIMUM HEIGHT OF ANY MATERIAL SHALL NOT EXCEED 3 ½ FEET, IN ACCORDANCE WITH THE NCDOT'S STANDARDS AS APPLICABLE.

E&S CONSTRUCTION SEQUENCE - PHASE 1:

- 1. SCHEDULE AN INITIAL PRE-CONSTRUCTION CONFERENCE WITH THE TOWN OF KNIGHTDALE
- 2. OBTAIN A LAND-DISTURBANCE PERMIT.
- 3. OBTAIN AN APPROVED (STAMPED) E&S CONTROL PLAN AND KEEP IT ON SITE, EITHER IN THE INSPECTION BOX, CONSTRUCTION OFFICE OR WITH THE CONTRACTOR.
- INSTALL ALL PERIMETER CONTROLS AS SHOWN ON THE APPROVED PLANS. CLEAR ONLY AS NECESSARY TO INSTALL
- THESE DEVICES. CLEARING SHOULD BE LIMITED TO A 35' "RIBBON" AROUND PERIMETER TO INSTALL CONTROLS. NO
- 7. IF APPROVED, PROCEED WITH INSTALLING OTHER MEASURE AS SHOWN ON THE APPROVED PLANS. CLEAR ONLY AS NECESSARY TO INSTALL THESE DEVICES.
- 8. CALL TOWN OF KNIGHTDALE EROSION CONTROL INSPECTOR TO SCHEDULE AN ONSITE INSPECTION AND OBTAIN A CERTIFICATE OF COMPLIANCE.
- 10. INSTALL STORM SEWER, IF SHOWN, AND PROTECT INLETS WITH SUITABLE EROSION AND SEDIMENTATION CONTROL MEASURES AS SHOWN IN THE APPROVED PLANS. BEGIN CONSTRUCTION. BUILDING, ETC.
- AND MULCH DENUDED AREAS PER GROUND STABILIZATION TIME FRAMES. 12. GRADING FOR PHASE 1 S&E WILL BE CONDUCTED AS NECESSARY TO ACHIEVE SITE GRADES SHOWN ON SHEETS C-4.0
- 13. CUT AND FILL SLOPES WILL BE STABILIZED WITHIN 14 DAYS OF ANY PHASE OF GRADING. (SEE STABILIZATION CRITERIA
- COVER ON DENUDED AREAS WITH FOURTEEN (14) DAYS OF COMPLETION OF PROJECT.

- **E&S CONSTRUCTION SEQUENCE PHASE 2:**
- 3. AS PERMANENT STORMWATER PIPES AND STRUCTURES ARE INSTALLED. INSTALL INLET PROTECTION AND PLUG THE PIPES UNTIL THE MAJORITY OF THE SITE IS STABILIZED. PERIODICALLY OR AFTER LARGE RAIN EVENTS, PUMP OUT
- 4. CUT AND FILL SLOPES WILL BE STABILIZED WITHIN 14 DAYS OF ANY PHASE OF GRADING. (SEE STABILIZATION CRITERIA
- 6. STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION AND PAVING. ESTABLISH GROUND COVER ON DENUDED AREAS WITHIN FOURTEEN DAYS (14) DAYS OF COMPLETION OF PROJECT.
- WHEN CONSTRUCTION IS COMPLETE AND ALL AREAS ARE STABILIZED COMPLETELY, CALL EROSION CONTROL
- SYSTEM THE NEW SYSTEM SHOULD BE FLUSHED AND SEDIMENT PUMPED OUT AND PROPERLY DISPOSED OF

E&S PLAN MAINTENANCE NOTES:

- 1. PROVIDE A PLAN DETAIL, CONSTRUCTION SPECIFICATIONS, AND SPECIFIC MAINTENANCE REQUIREMENTS FOR ALL PROPOSED SEDIMENT AND EROSION CONTROL STRUCTURES INCLUDED ON THE PLAN. RECOMMEND PLACING MAINTENANCE REQUIREMENTS WITH THE ASSOCIATED CONSTRUCTION DETAIL.
- . MAINTENANCE AND/OR CLEAN OUT, IS NECESSARY ANYTIME THE DEVICE IS AT 50% CAPACITY. ALL SEDIMENT STORAGE MEASURES WILL REMAIN ON SITE AND FUNCTIONAL UNTIL ALL GRADING AND FINAL LANDSCAPING OF THE PROJECT IS
- 3. AS DESIGNATED BY NCDEQ NCG01 PERMITTING, SELF-INSPECTIONS FOR EROSION AND SEDIMENTATION CONTROL MEASURES ARE TO BE PERFORMED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF EVERY RAIN EVENT OF 1 INCH OR GREATER. ANY NEEDED REPAIRS SHALL BE MADE IMMEDIATELY TO MAINTIAN MEASURES AS
- 4. PROVIDE THE MINIMUM MAINTENANCE STANDARDS AS SPECIFIED BELOW:

4.1. SURVEYOR FLAGS/TAPE/STAKES: - REPLACE IDENTIFIERS IF DAMAGED OR KNOCKED DOWN DURING DEVELOPMENT.

- ENSURE KEY ENVIRONMENTAL AND/OR CULTURAL RESOURCES MAINTAIN IDENTIFIERS. - COLORS SHOULD ADHERE TO THE APWA UNIFORM COLOR CODE. USE ACCEPTED SURVEY SYMBOLS AND ENSURE OPERATORS UNDERSTAND DESIGNATIONS. UTILITY LINE OWNERS/OPERATORS SHALL IDENTIFY THE DESIGNATING

4.2. PERMITS / NCG01 INSPECTIONS BOX:

- CONFIRM BOX IS SECURELY FASHIONS TO A POST OR WALL IN A VISIBLE LOCATION IN PROXIMITY TO THE CONSTRUCTION ENTRANCE. - MAINTAIN RELEVANT IDENTIFICATION ON THE EXTERIOR OF THE BOX.

- ENSURE PAPER DOCUMENTS REMAIN DRY / LEGIBLE (LAMINATION, TICKET HOLDERS, BINDERS, ETC.) - REPLACE ANY MISSING DOCUMENTS IMMEDIATELY. CONSIDER PLACING TIES OR FASTENERS IF NECESSARY.

- CHECK AND REMOVE ANY ITEMS FROM THE RAIN FUNNEL AND THE DEBRIS FILTER (DUST, BUGS, OTHER DEBRIS.) - OPEN THE RAIN GAUGE AND REMOVE ANY FOREIGN OBJECTS. - PERFORM ROUTINE MAINTENANCE AS SPECIFIED BY THE MANUFACTURER.

- CHECK THAT THE GAUGE IS NOT BEING OBSTRUCTED FROM RAIN CAPTURE AND IS LEVEL BEFORE AND AFTER

4.4. TREE PROTECTION FENCE: - PRUNE ANY DAMAGED TREES. (IF) DAMAGE TO PROTECTED TREES OCCURS, REPAIR ANY DAMAGE TO THE CROWN, TRUNK, OR ROOT SYSTEM IMMEDIATELY. - REPAIR ROOTS BY CUTTING OFF THE DAMAGED AREAS AND PAINTING THEM WITH TREE PAINT. SPREAD PEAT MOSS OR MOIST TOPSOIL OVER EXPOSED ROOTS.

PAINT WITH TREE PAINT. - CUT OFF ALL THE DAMAGED TREE LIMBS ABOVE THE TREE COLLAR AT THE TRUNK OR MAIN BRANCH. USE THREE SEPARATE CUTS TO AVOID PEELING BARK FROM HEALTHY AREAS OF THE TREE.

- REPAIR DAMAGE TO BARK BY TRIMMING AROUND THE DAMAGED AREA, TAPER THE CUT TO PROVIDE DRAINAGE AND

4.5. SILT FENCE: - SHOULD THE FABRIC OF THE SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT - REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUTS. - REMOVE ALL THE FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND

- FRESHEN STONE WHEN SEDIMENT ACCUMULATION EXCEEDS 6 INCHES. - KEEP MESH FREE OF DEBRIS TO PROVIDE ADEQUATE FLOW AND REPLACE STONE AS NEEDED TO FACILITATE DE-WATERING.

STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

- MAINTAIN THE GRAVEL PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH 2 INCH STONE. - IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED, OR TRACKED ONTO PUBLIC ROADWAYS.

4.8. INLET PROTECTION (PIPE / YARD / DROP / CURB): - INSPECT INLET PROTECTIONS AND REMOVE SEDIMENT AFTER EACH RAIN EVENT. - KEEP FREE OF DEBRIS TO PROVIDE ADEQUATE FLOW AND IF PRESENT REPLACE STONE AS NEEDED TO FACILITATE DE-WATERING.

TOWN OF KNIGHTDALE SCM PLANTING NOTES:

- 1. 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 FROM THE TOWN.
- 2. 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.
- 3. 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
- 4. ALL AQUATIC PLANTINGS ARE TO BE INSTALLED DURING THE APPROPRIATE TIME OF YEAR TO ENSURE SURVIVABILITY.
- 5. 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.
- 6. 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.
- 7. 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 INSPECTION NOTES:

- 1. WHEN SCHEDULING INSPECTIONS, PLEASE CALL THE PUBLIC WORKS ADMINISTRATIVE ASSISTANT AT (919) 217-2250.
- 2. THE FOLLOWING PERSONNEL MUST BE PRESENT AT ALL INSPECTIONS:
- 1) SITE SUPERVISOR
- 3) AS-BUILT CERTIFYING ENGINEER OR SOMEONE UNDER THEIR SUPERVISION
- 3. THE FOLLOWING ITEMS MUST BE INSPECTED BY TOK STAFF DURING THE INSTALLATION OF ANY SCM WITH DAM:
- 1) KEY TRENCH EXCAVATION 2) PRINCIPAL SPILLWAY PIPE AND ASSOCIATED COMPONENTS:
- a. CONCRETE CRADLE b. ANTI-SEEP COLLAR
- c. SEEPAGE DIAPHRAGM 3) OUTLET STRUCTURE
- 4) ANTI-FLOATATION BALLAST 5) ANY SITE-CONSTRUCTED REINFORCED CONCRETE STRUCTURES
- 4. THE FOLLOWING ITEMS MUST BE INSPECTED BY TOK STAFF DURING THE INSTALLATION OF ANY SAND FILTERS OR
- **BIORETENTION DEVICES:** a. SUBGRADE OR CONSTRUCTED FOUNDATION
- b. OUTLET OR RISER IN COMBINATION WITH CONNECTING UNDERDRAINS c. FILTER MEDIA
- d. DAM ITEMS ON PREVIOUS LIST IF APPLICABLE
- 5. GEOTECHNICAL TESTING AND CERTIFICATION ALL REPORTS ARE TO BE SUBMITTED WITHIN 30-DAYS OF DAM COMPLETION. REQUIRED GEOTECHNICAL RECORDS INCLUDE:
- 1) DAM EMBANKMENT MATERIAL COMPOSITION AND DENSITY TESTING
- 2) MAP THAT LABELS ALL POINTS WHERE THE DAM AND DAM FOUNDATION AREAS WERE TESTED. 3) DIGITAL PHOTOS SHOWING THE DAM FOUNDATION AREAS, THE RISER, THE PRINCIPAL SPILLWAY PIPE, THE CONCRETE CRADLE, THE SEEPAGE DIAPHRAGM, RELIEF DRAINS, ETC., BEING INSTALLED.

FOR REVIEW ONLY NOT FOR CONSTRUCTION

NOTE(s): ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH ALL TOWN OF KNIGHTDALE AND NCDOT STANDARDS AND SPECIFICATIONS.

BUILDING

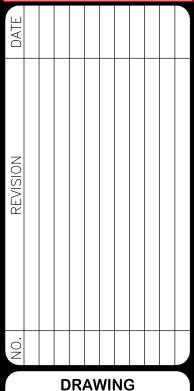
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Prepared by and Return to: Town of Knightdale 950 Steeple Square Court Knightdale, North Carolina 27545

- ----



WAKE COUNTY

TOWN OF KNIGHTDALE

950 STEEPLE SQUARE COURT • KNIGHTDALE, NC 27545 Office (919) 217-2242 • FAX (919) 217-2249

ORDER GRANTING A VARIANCE

THE TOWN OF KNIGHTDALE

On the date listed below, the Knightdale Board of Adjustment, held a public hearing to consider the following application:

APPLICANT:

Morningstar Law Group

PROPERTY OWNERS:

Jackie Moore, Moore's Realty, Inc.

(Formerly Owned by Greg and Angela Jones)

PROJECT NUMBER:

PROJECT LOCATION:

BOARD OF ADJUSTMENT

VAR-5-22
700 Old Knight Road

- WAKE COUNTY PIN:

1754-56-9791

WINE COCKTITI

MEETING DATE:

October 25, 2022

BK019337PG01401

NORTH CAROLINA WAKE COUNTY

IN WITNESS WHEREOF, the Town of Knightdale has caused this order to be issued in its name, and the undersigned being all of the property owners of the properties above described, do hereby accept this Variance, together with all its conditions, as binding upon them and their successors in interest or ownership.

Mul Move

Vackie Moore, Moore's Realty, Inc.

ATTEST:

AlalluM Sville Heather M. Smith, Town Clerk



I, BYHTLY Hunt, a Notary Public in and for said County and State, do hereby certify that Heather Smith, Town Clerk of Knightdale, personally came before me this day and being by me duly sworn says that she knows the corporate seal of the Town of Knightdale and that the seal affixed to the foregoing instrument is the corporate seal of the Town of Knightdale, that Heather Smith, Town Clerk for the Town of Knightdale subscribed her name thereto; that the corporate seal of the Town of Knightdale was affixed thereto, all by virtue of an order of the Board of Adjustment and that said instrument is the

IN WITNESS WHEREOF, I have hereunto set my hand and seal this _____ day of

Brithney Hos

act and deed of the Town of Knightdale.



BK019337PG01399

The Board of Adjustment, for the Town of Knightdale held a public hearing on Tuesday, October 25, 2022 to receive evidence presented by interested parties on a request for variance from the Knightdale Unified Development Ordinance.

The Board of Adjustment, having considered the verified application, the staff reports, and the testimony, exhibits, and arguments presented at the public hearing, makes the following FINDINGS OF

- 1. Applicants seek a variance to Section 6.9 of the Town of Knightdale Unified Development Ordinance (UDO) to allow for the construction of a commercial building type at 700 Old Knight Road in Knightdale. The proposed commercial building will have a maximum front setback of 78 feet, where a minimum of 10 feet and maximum of 30 feet is required per the LIDO.
- 2. There is present in this matter an identified hardship based on the existing sewer easement, cross-access easement, and wetlands on the lot. These constraints restrict the buildable area along the lot frontage making the construction of the proposed building not possible within the existing front yard setbacks.
- 3. There is present in this matter an identified hardship in the way of carrying out the strict application of the Ordinance regarding the front yard setback requirements prescribed by the UDO. The intent of the front yard setback maximum in UDO section 6.9 is to provide convenient automobile access from the fronting thoroughfare, while minimizing the negative impacts of parking lots on an active pedestrian realm. The proposed parking is shown in the rear and side yards of the property. The proposed development permits reasonable use of the property and maintains public interest in the existing sewer easement.
- 4. Neither of the above hardships is a result of any action taken by the applicants. The sewer and cross access easement agreements were entered into by the owners prior to the adoption of Section 6.9 of the UDO requiring a maximum setback of 30 feet. Prior to the UDO update in 2021, the UDO had a maximum front setback of 90 feet for the Highway Business zoning district.

THEREFORE, based on the foregoing Findings of Fact, the Board of Adjustment makes the following CONCLUSIONS OF LAW:

- There are unnecessary hardships in complying with the strict application of the Ordinance.
 The identified hardships result from conditions peculiar to the property, including location,
- 3. The identified hardships did not result from actions taken by the applicant or property owners; and
- 4. The variance is consistent with the spirit, purpose and intent of this Ordinance; such that public safety is secured and substantial justice is achieved.

Having heard all of the evidence and arguments presented at the hearing, the Board of Adjustment --- hereby grants the variance VAR-5-22. A variance is granted from the following sections of the Unified Development Ordinance:

BK019337PG01402







Please retain yellow trailer page

It is part of the recorded document and must be submitted with the original for rerecording.

Tammy L. Brunner
Register of Deeds
Wake County Justice Center
300 South Salisbury Street, Suite 1700
Raleigh, NC 27601

☐ New Time Stamp☐ Additional Document Fee

☐ \$25 Non-Standard Fee

Additional Doci

Additional Reference Fee

This Customer Group

of Excessive Entities

his Document

5 # of Pages

of Excessive Entities # of Time Stamps Needed

BK019337PG01400

Section 6.9 Commercial Building Type Standards (Front Setbacks). The Unified Development ordinance requires a minimum front setback of 10 feet and maximum front setback of 30 feet. The applicant is specifically granted a front maximum setback of 78 feet.

This order of the Board of Adjustment in granting this Variance shall expire if a building permit has not been obtained within two (2) years from the date of its decision.

Ordered this 3rd day of November, 2022 and subsequently revised on this 17th day of May, 2023.

Acting Chairperson, Joe Mecca

NOTE: If you are dissatisfied with the decision of this board, an appeal may be taken to the Superior Court of Wake County within thirty (30) days after the date this order is served on you. See Chapter 12, Development Process, of the Knightdale Unified Development Ordinance.

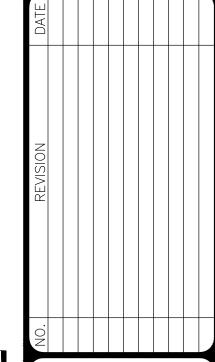
NORTH CAROLINA 27545
24.2022
GINEER:
ADD DESIGNER:

DATE: 06.24.2022
PROJECT ENGINEER:
PDP
PROJECT CADD DESIGNE

T ROAD OFFICE BUILDING
LE, WAKE COUNTY, NORTH CAROLINA
AASTER PLAN
VARIANCE DOCUMENT

700 OLD KNIGHTT KNIGHTDALE, MAMA

DRAFT



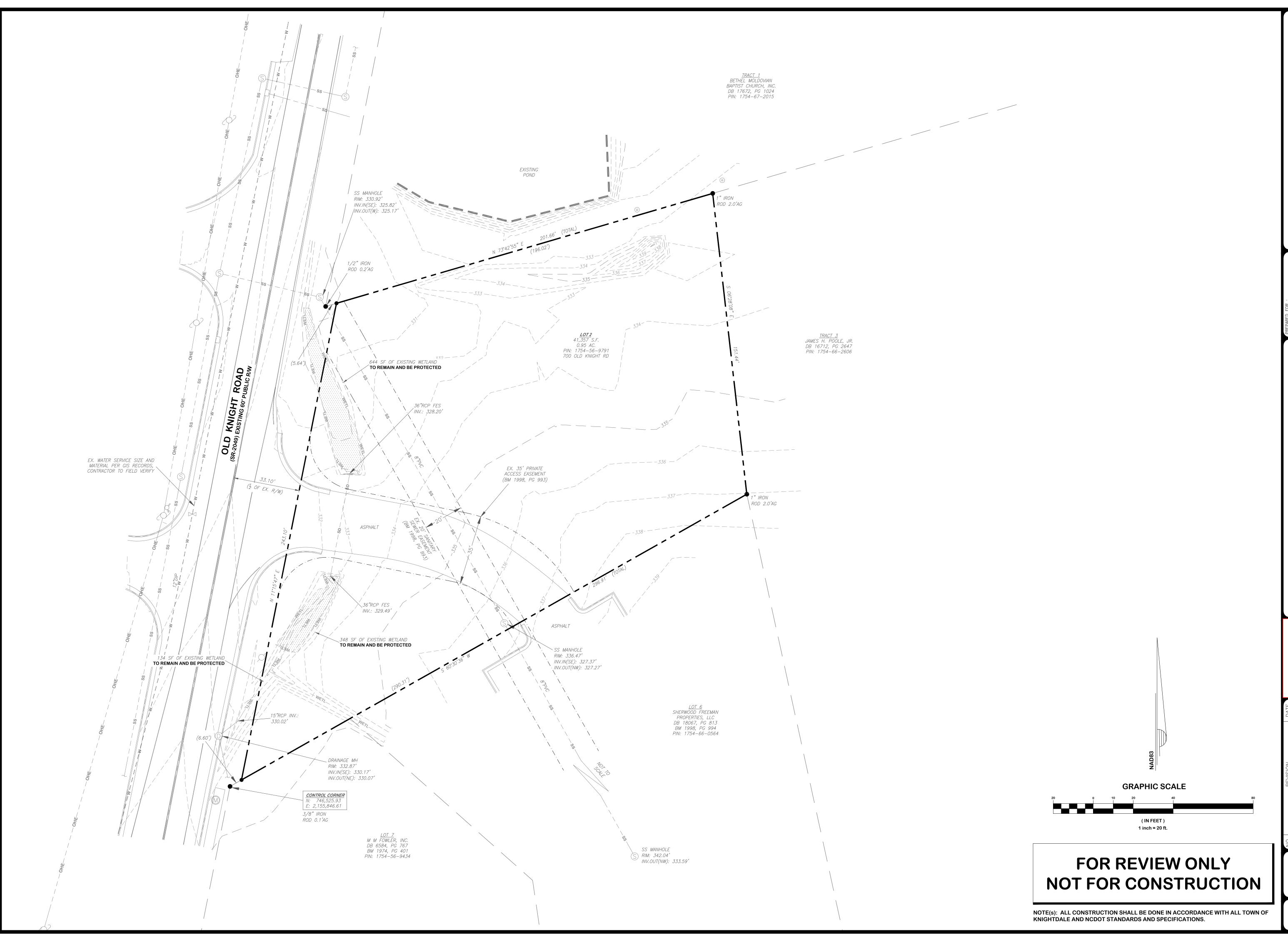
SHEET C-0.3

PROJECT NUMBER
627-22

NOTE(s): ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH ALL TOWN OF KNIGHTDALE AND NCDOT STANDARDS AND SPECIFICATIONS.

FOR REVIEW ONLY

NOT FOR CONSTRUCTION



SST DESIGN GROUP, P.

Engineering I Consulting
107 Feverteville Street, Suite 200, Releigh, North Ceroline 27601



DATE: 06.24.2022

PROJECT ENGINEER:

PDP

PROJECT CADD DESIGNER:

PDP

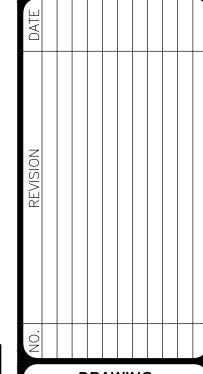
PROJECT SURVEYOR:

700 OLD KNIGHT ROAD OFFICE BUILDING

KNIGHTDALE, WAKE COUNTY, NORTH CAROLINA

MASTER PLAN

DRAFT

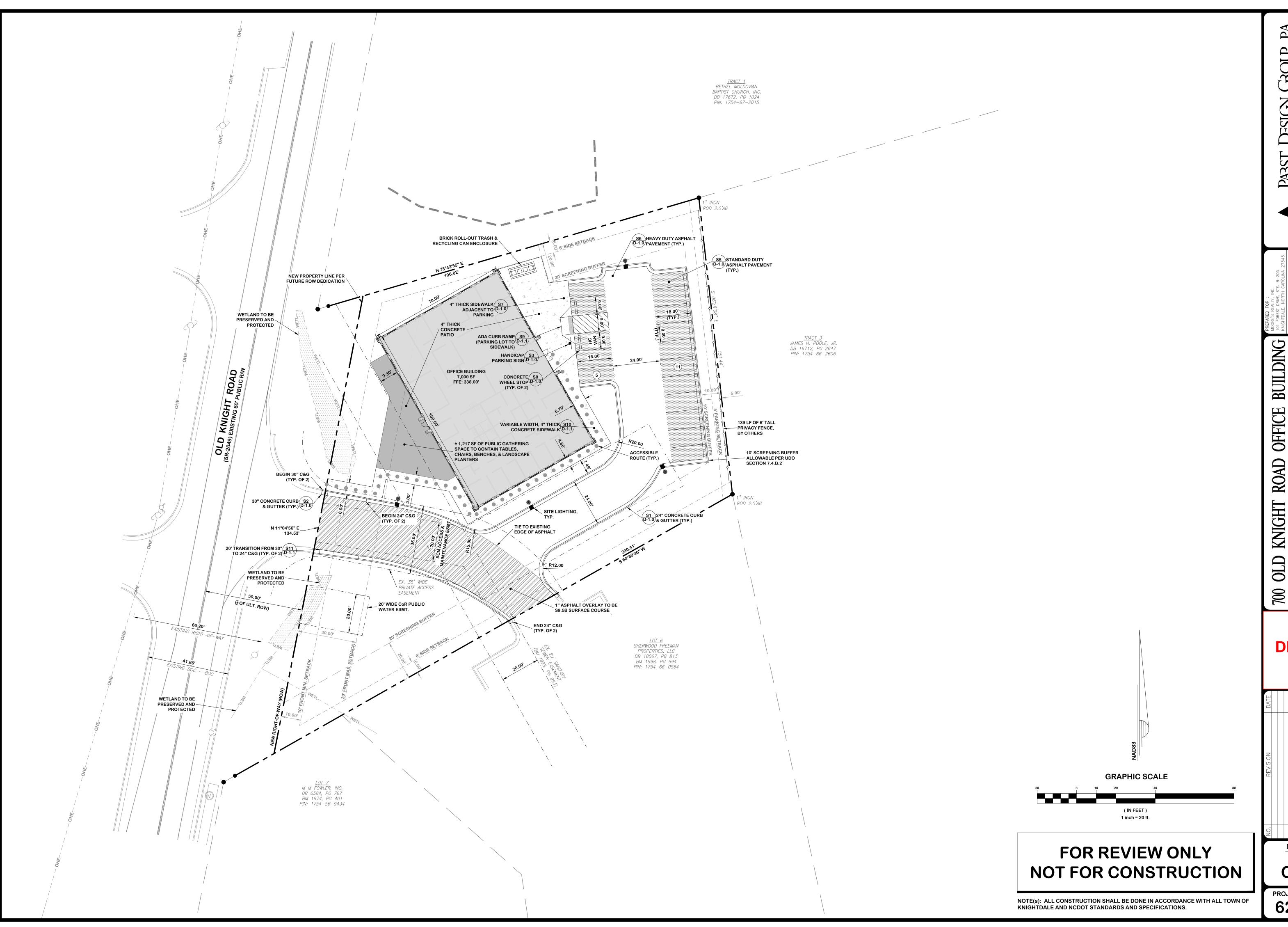


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SHEET

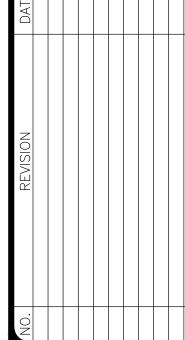
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PROJECT NUMBER

627-22

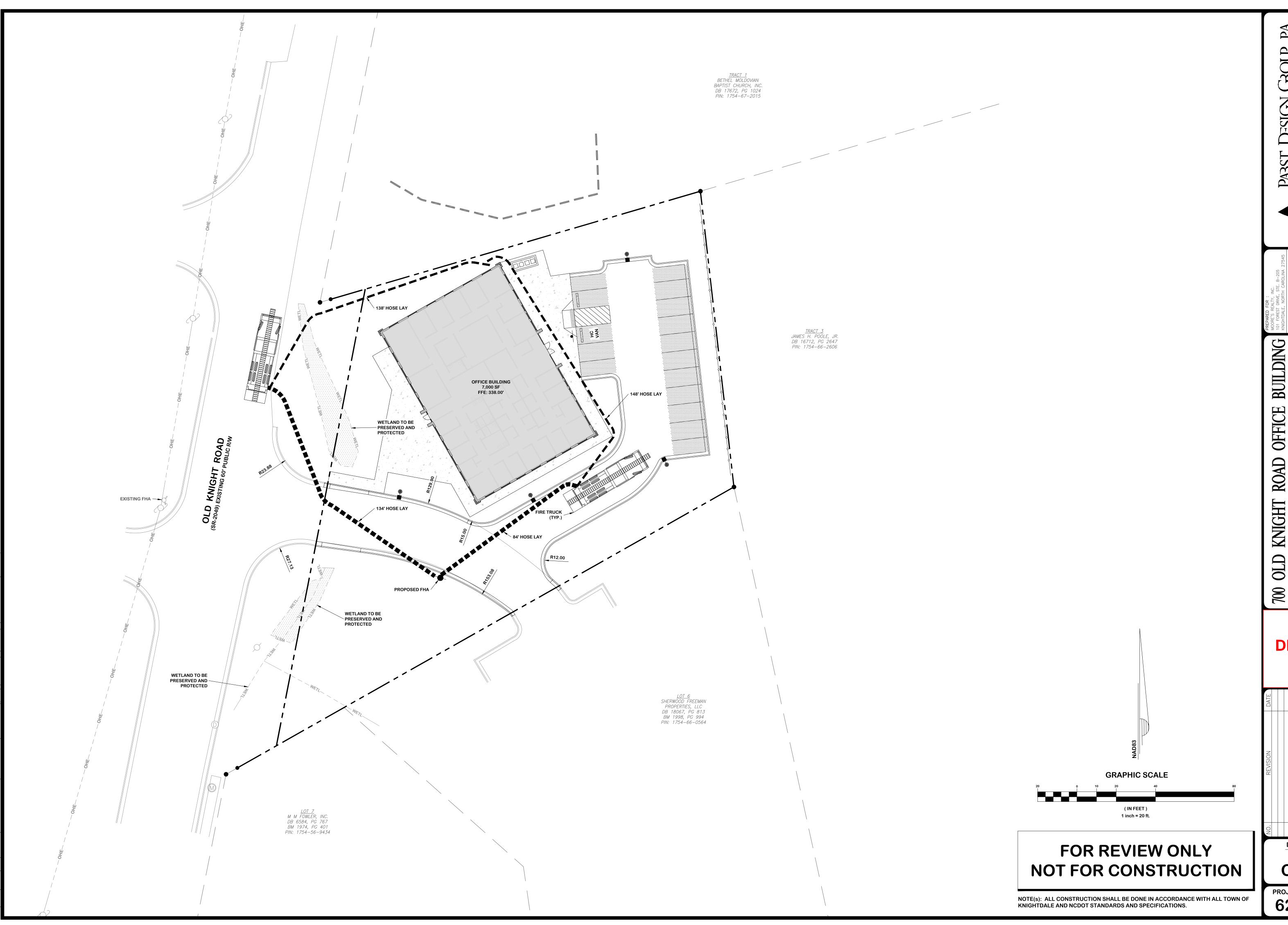


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PROJECT NUMBER



MSST DESIGN GROUP, PA

Engineering | Consulting



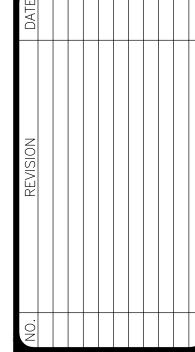
DATE: 06.24.2022
PROJECT ENGINEER:
PDP
PROJECT CADD DESIGNER:
PDP
PROJECT SURVEYOR:

KNIGHTDALE, WAKE COUNTY, NORTH CAROLINA

MASTER PLAN

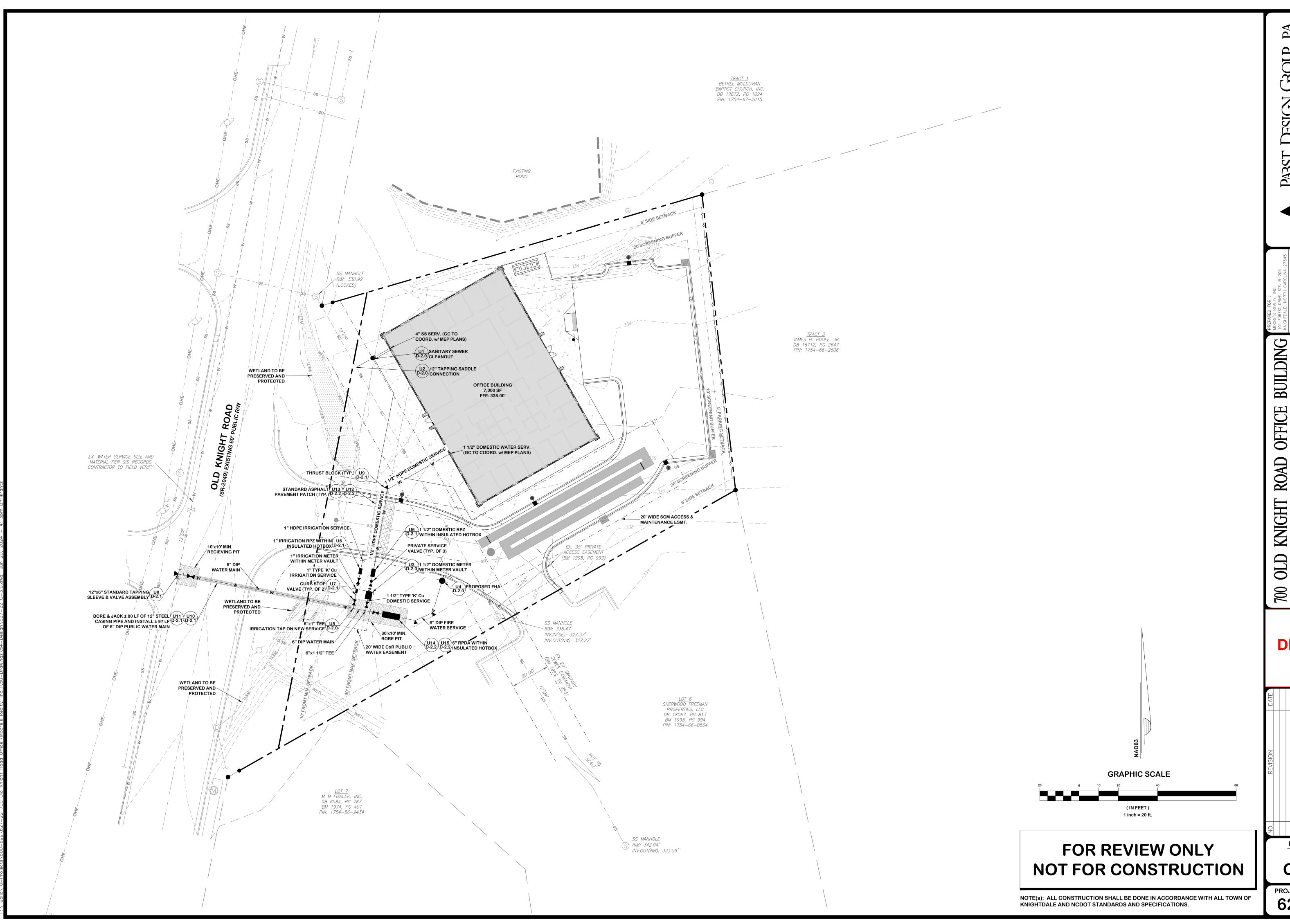
FIRE APPARATIIS ACCESS DI

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DRAWING
SHEET

C-2.1



ASST DESIGN GROUP, PA



DATE: 06.24.2022

PROJECT ENGINEER:

PDP

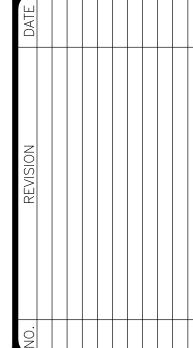
PROJECT CADD DESIGNER:

PDP

PROJECT SURVEYOR:

KNIGHTDALE, WAKE COUNTY, NORTH CAROLINA
MASTER PLAN
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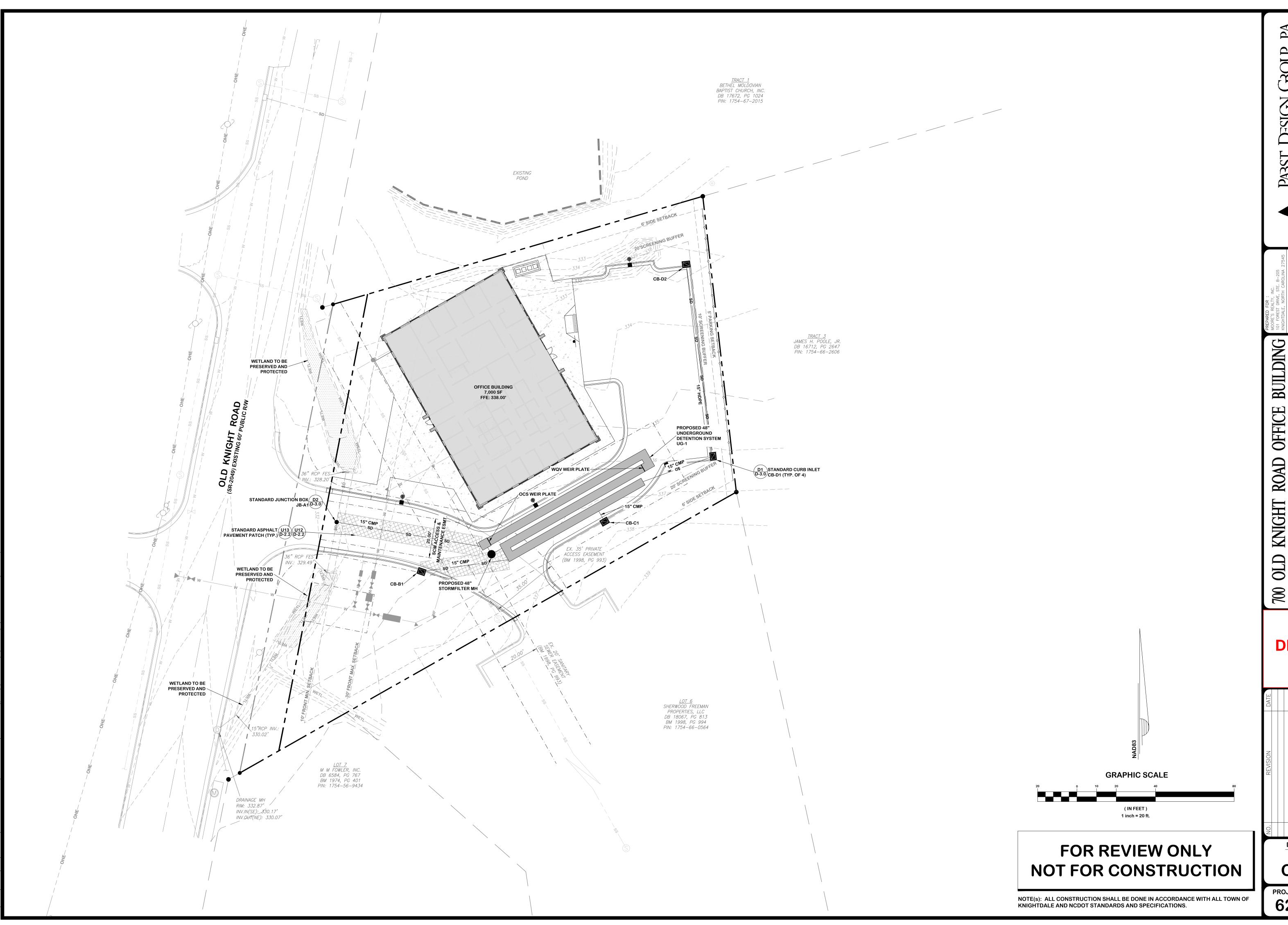
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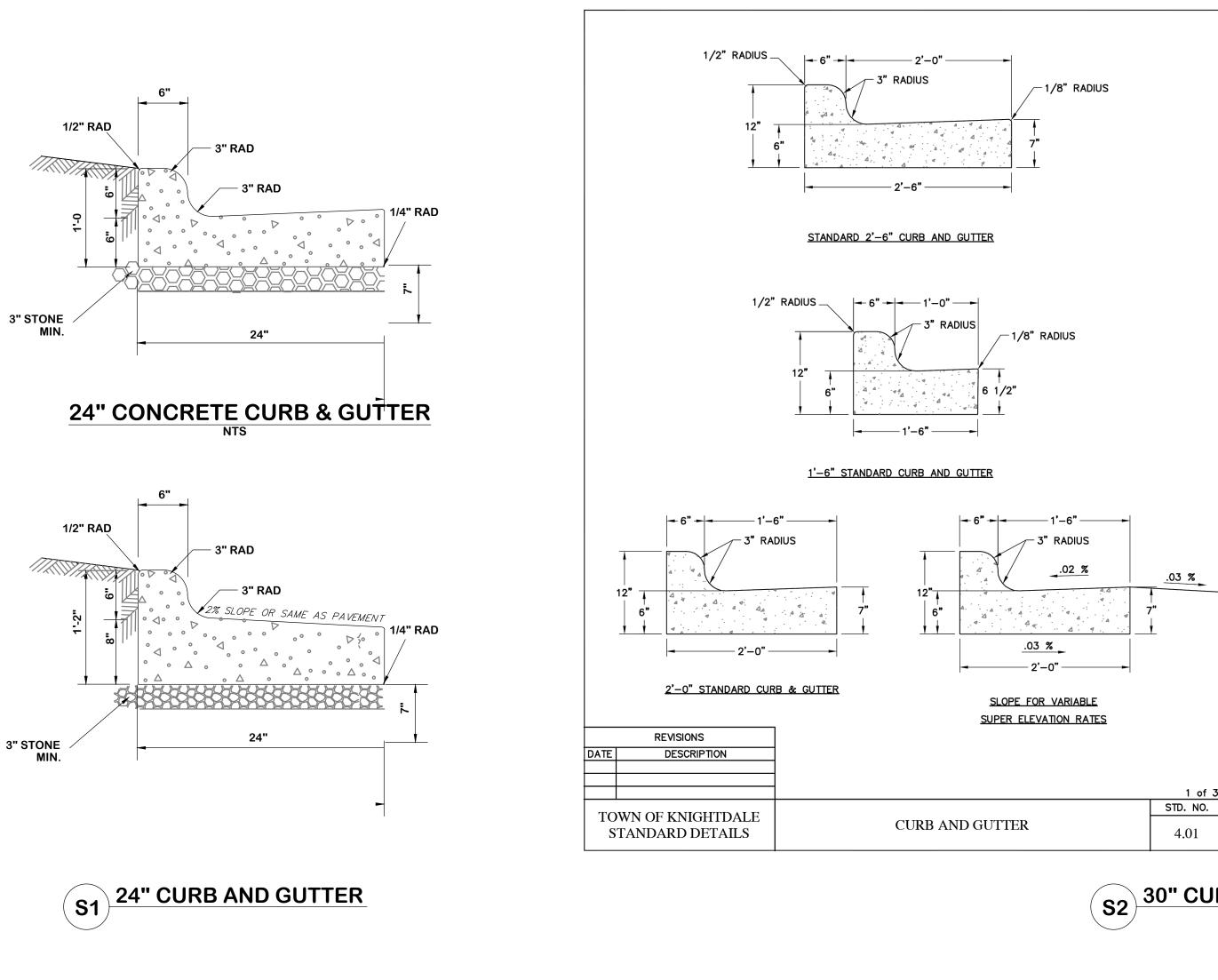
C-3.0

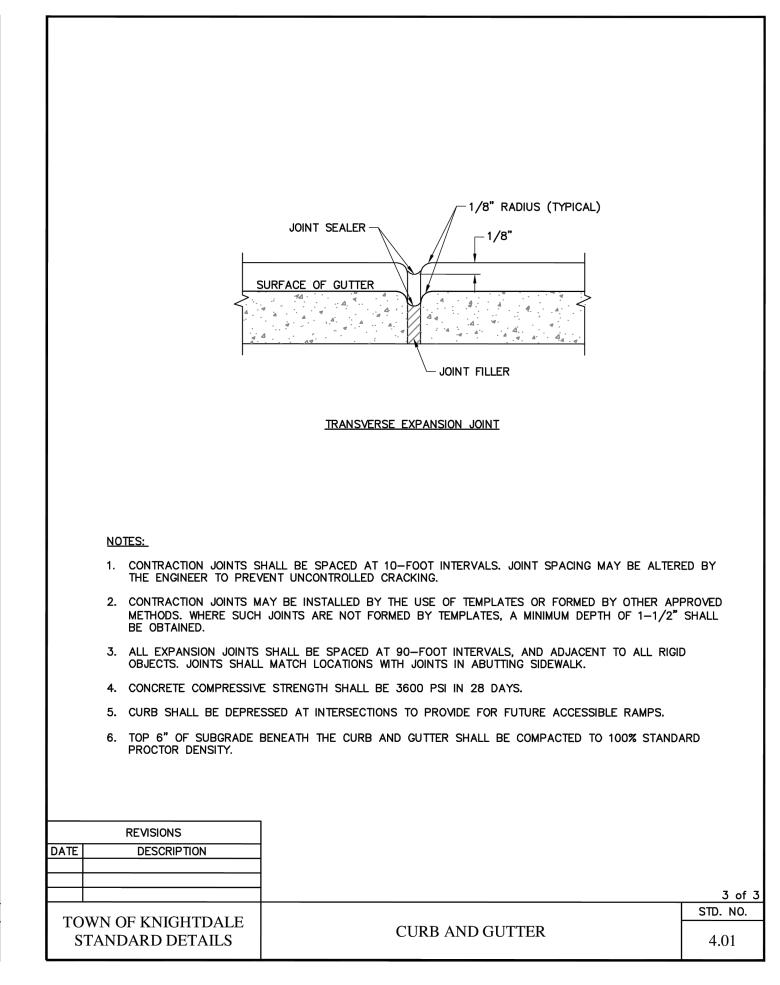
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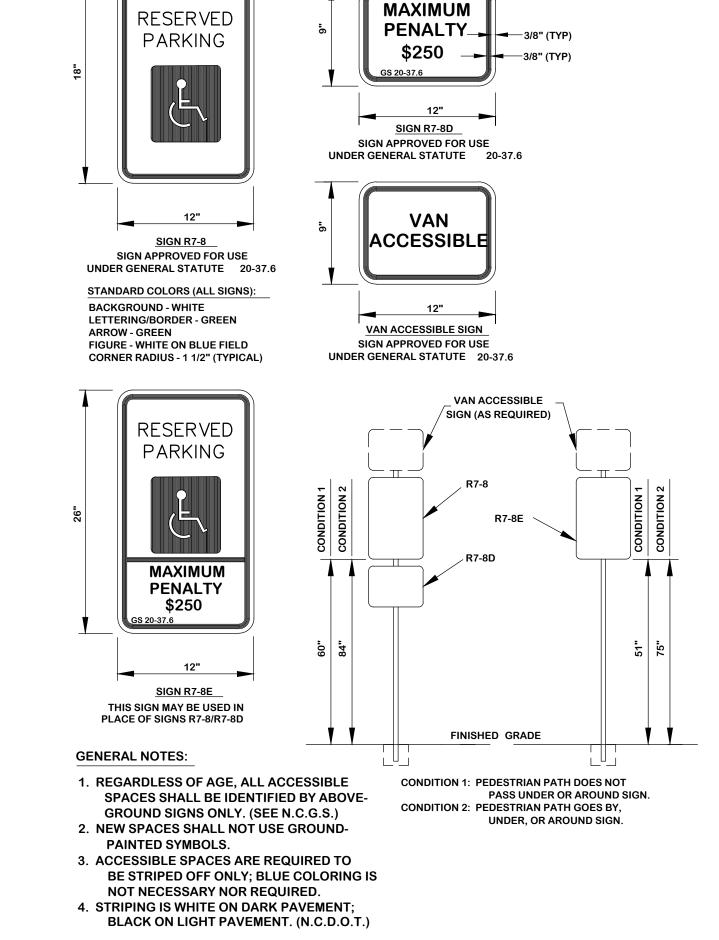


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DRAWING C-4.0







(S2) 30" CURB AND GUTTER

3" S-9.5B (2, 1.5" LIFTS)

MODIFIED PROCTOR

SUBGRADE TOP 10"

COMPACTED TO 98% STANDARD PROCTOR

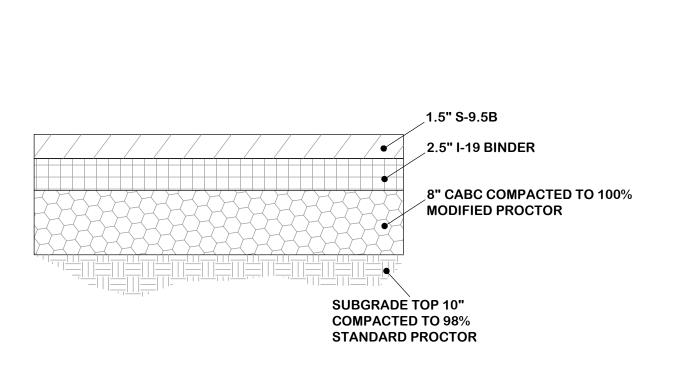
6" CABC COMPACTED TO 100%



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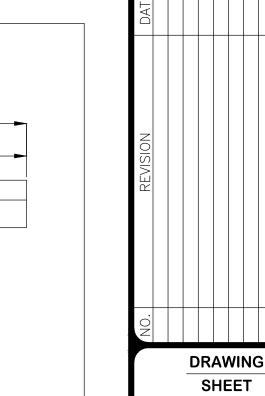
STANDARD DUTY - ASPHALT PAVEMENT SECTION PAVEMENT SECTION IS FOR REFERENCE ONLY. REFER TO GEOTECHNICAL SUBSURFACE INVESTIGATION REPORT FOR PAVEMENT SECTION REQUIREMENTS



SUBSURFACE INVESTIGATION REPORT FOR PAVEMENT SECTION REQUIREMENTS

DRIVE 1" DIA. PIPES 3'-0" INTO GROUND

CONCRETE WHEEL STOP



BUILDING

OFFICE

OAD

KNIGHT

OLD

9

DRAFT

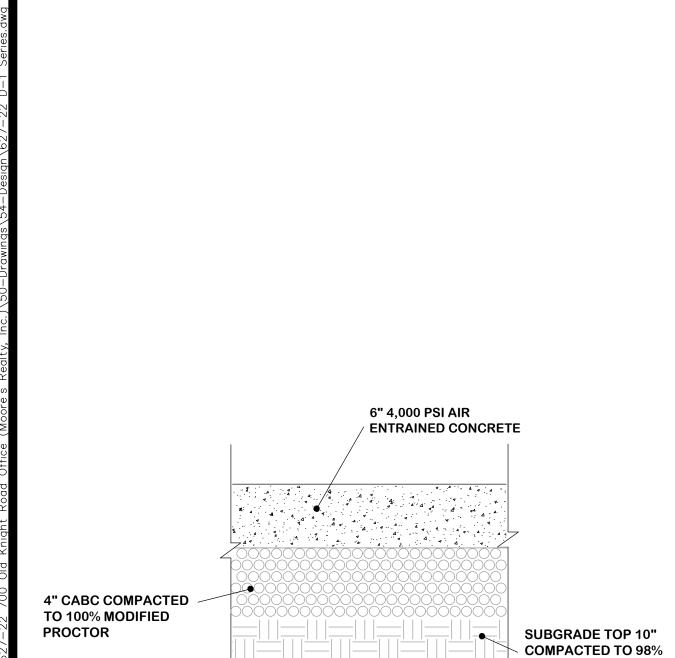
D-1.0

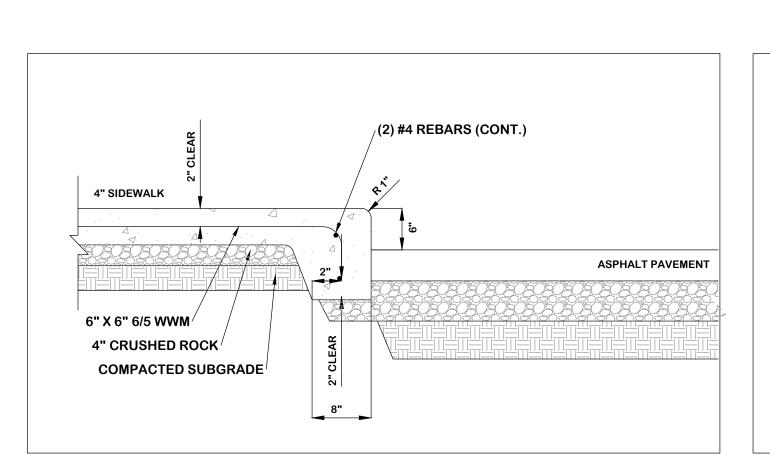
PROJECT NUMBER 627-22

CONCRETE PAVEMENT SECTION

STANDARD PROCTOR

S6 HEAVY DUTY - ASPHALT PAVEMENT SECTION
PAVEMENT SECTION IS FOR REFERENCE ONLY. REFER TO GEOTECHNICAL





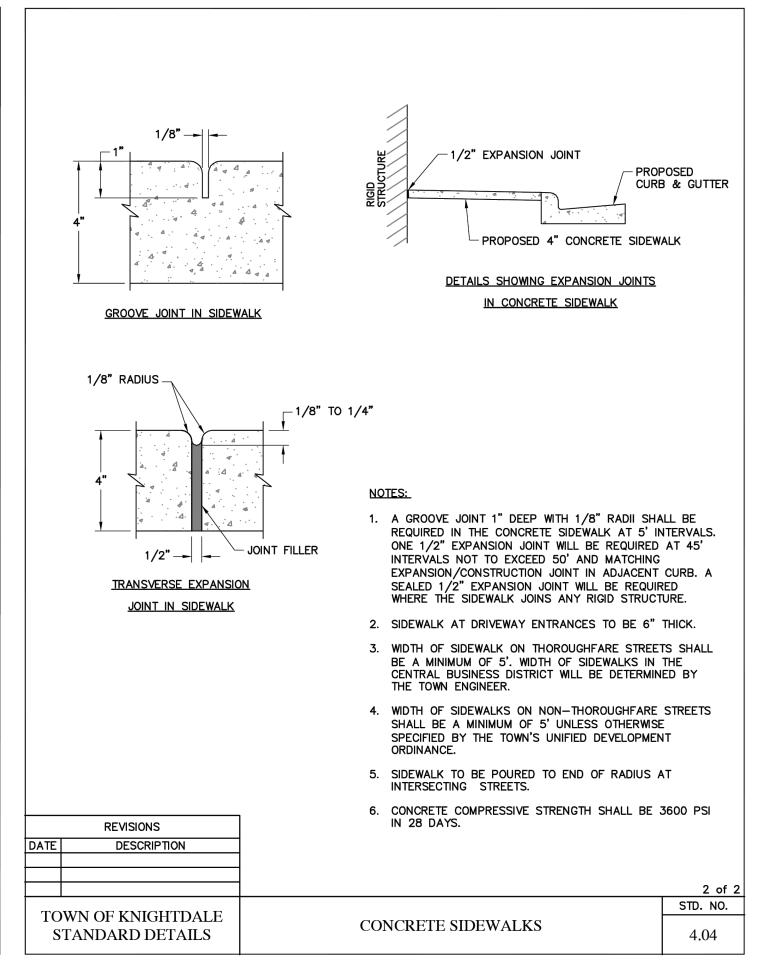
(S7) SIDEWALK ADJACENT TO PARKING

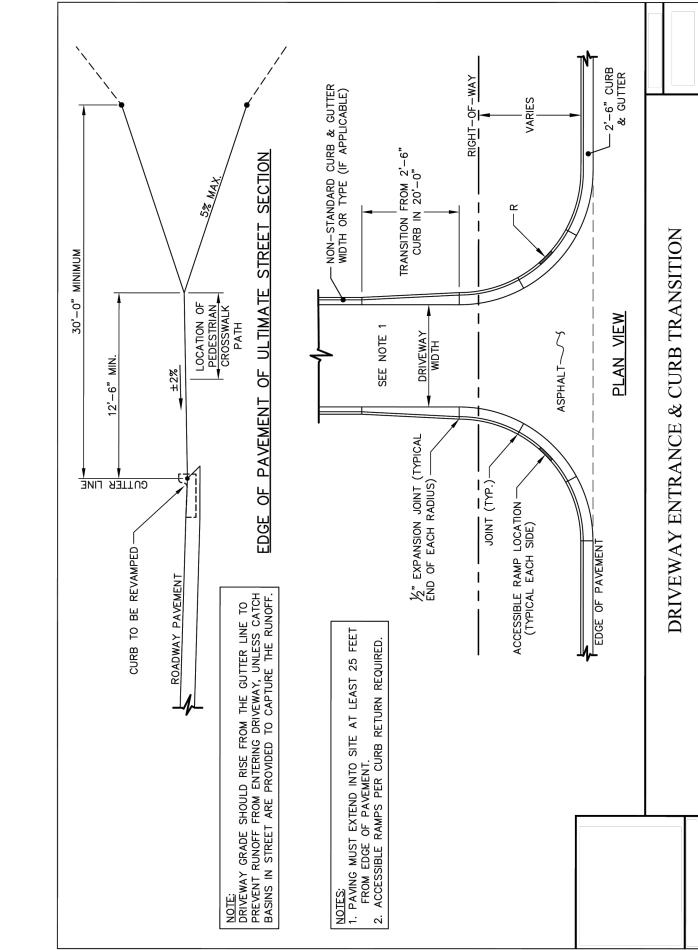
PANDICAPPED RAMP AND ACCESS
ES SHALL MEET ALL CODES AND
AGR REGULATIONS.

ON THE PARTIES STRIPES - @ 24" O.C.

AT 45 DEGREES.

EXISTING 30" CURB AND GUTTER GRASSED PLANTING STRIP PROPOSED CONCRETE SIDEWALK VARIES RIGHT OF WAY LINE -PLAN VIEW CONCRETE SIDEWALK AND GUTTER — 6" SIDEWALK - SUB BASE TYPICAL SECTION 1. TRANSVERSE EXPANSION JOINTS TO BE A MAXIMUM OF 50 FEET APART. 2. CONTROL JOINTS TO BE AT 5 FEET O.C. REVISIONS DESCRIPTION 3. ALL CONCRETE TO BE FINISHED WITH CURING COMPOUND. 4. SIDEWALK SUB BASE TO BE A MIXTURE OF 70 PERCENT #57 STONE AND ASTM C33 SAND OR EQUAL. STD. NO. TOWN OF KNIGHTDALE CONCRETE SIDEWALKS STANDARD DETAILS





S11 DRIVEWAY ENTRANCE & CURB TRANSITION

S9 ADA CURB RAMP (PARKING LOT TO SIDEWALK)

1:10 MAX. SLOPE

S10 CONCRETE SIDEWALK

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DRAWING SHEET

DRAFT

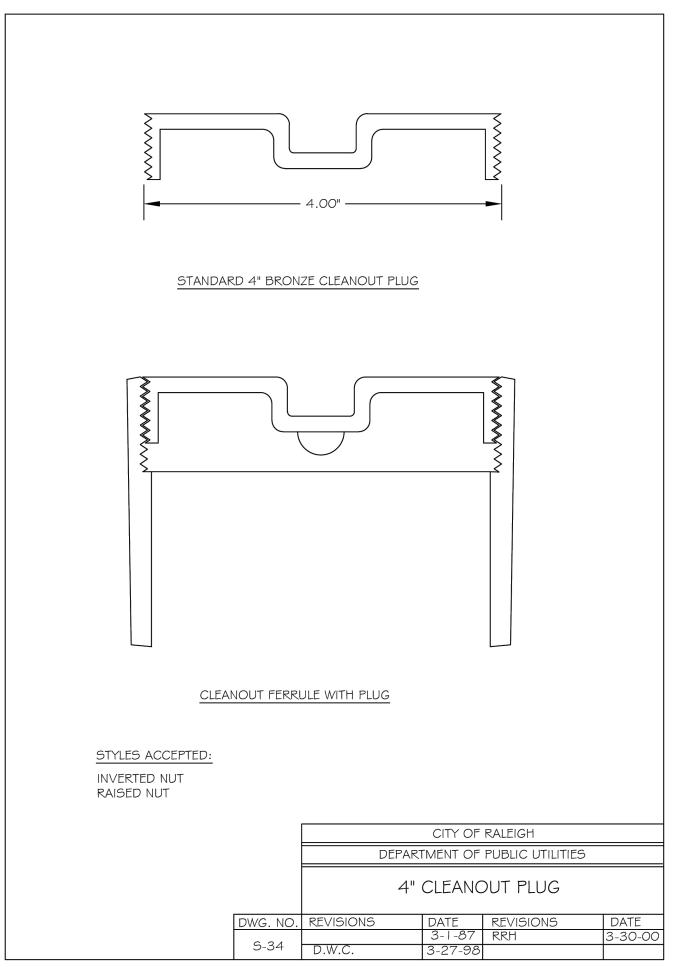
BUILDING

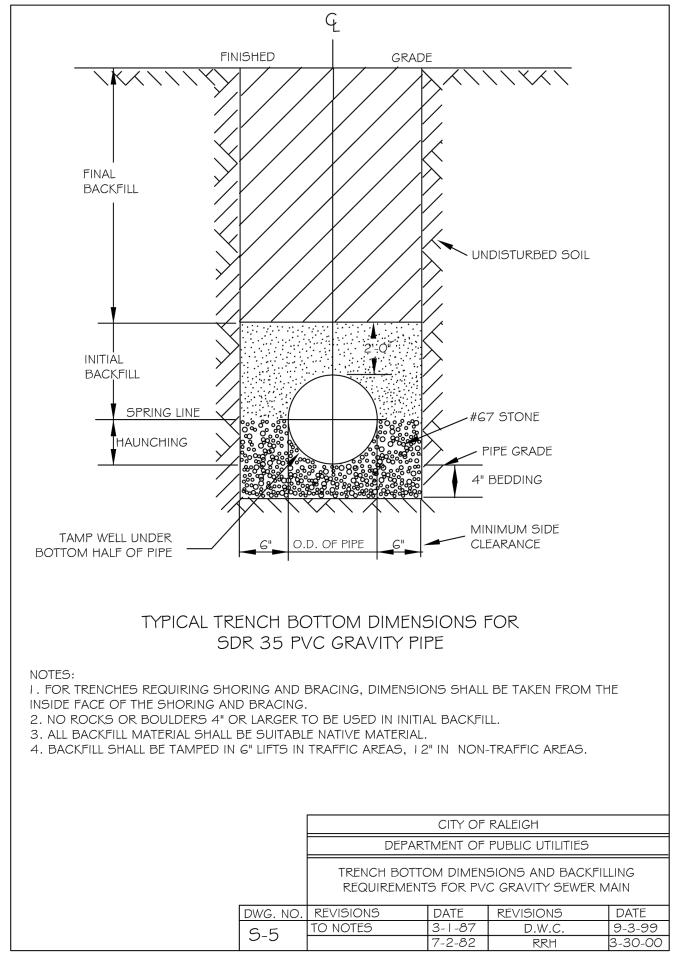
OFFICE

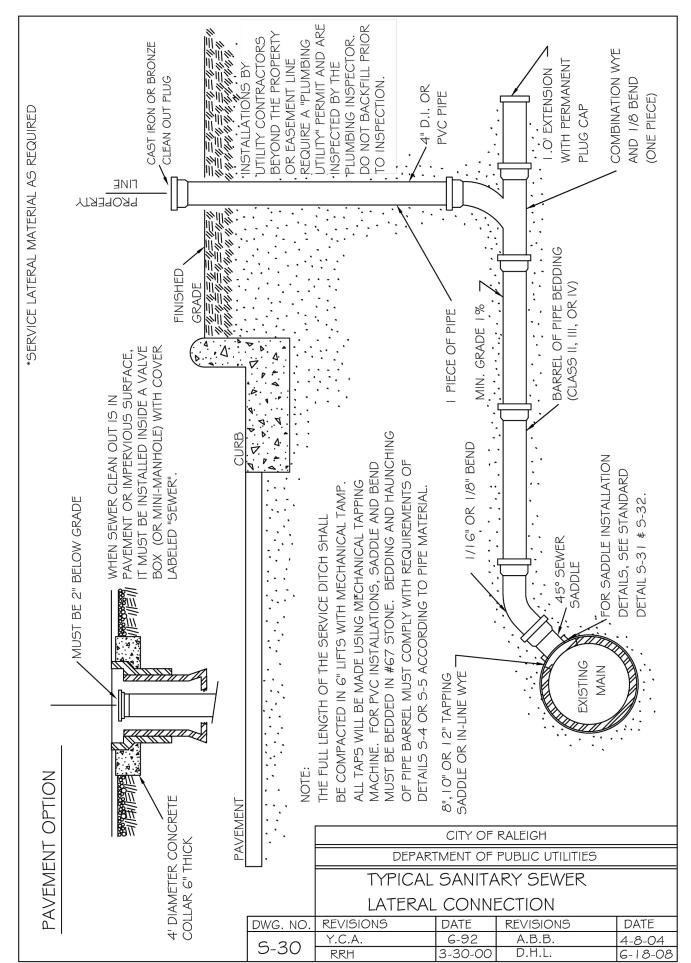
OAD

TER PLAN ETAIL SHEET

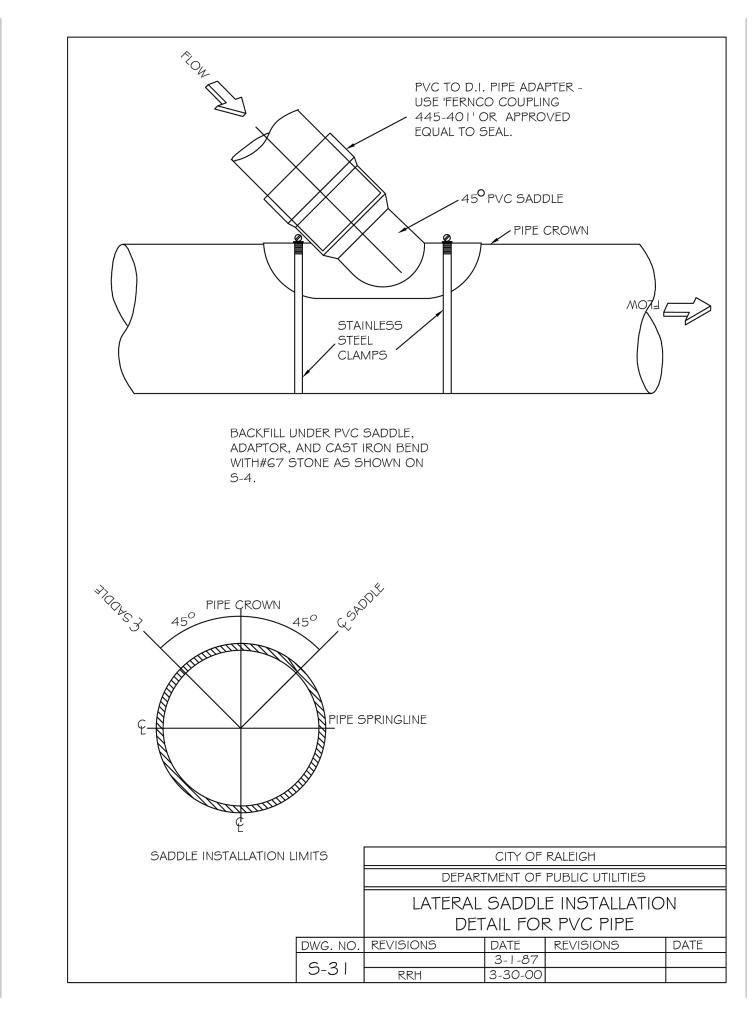
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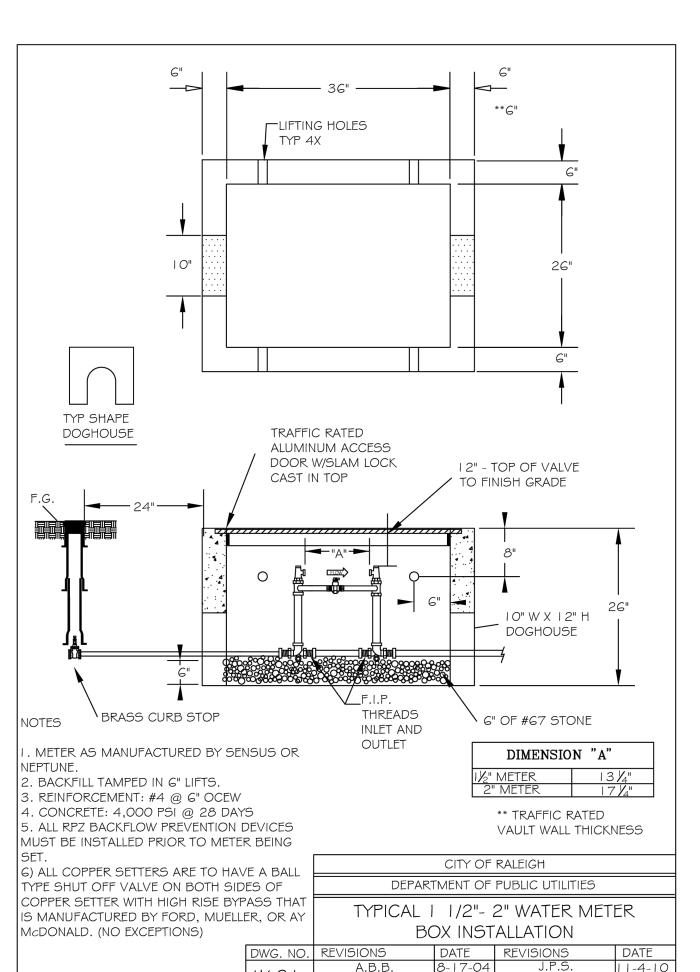




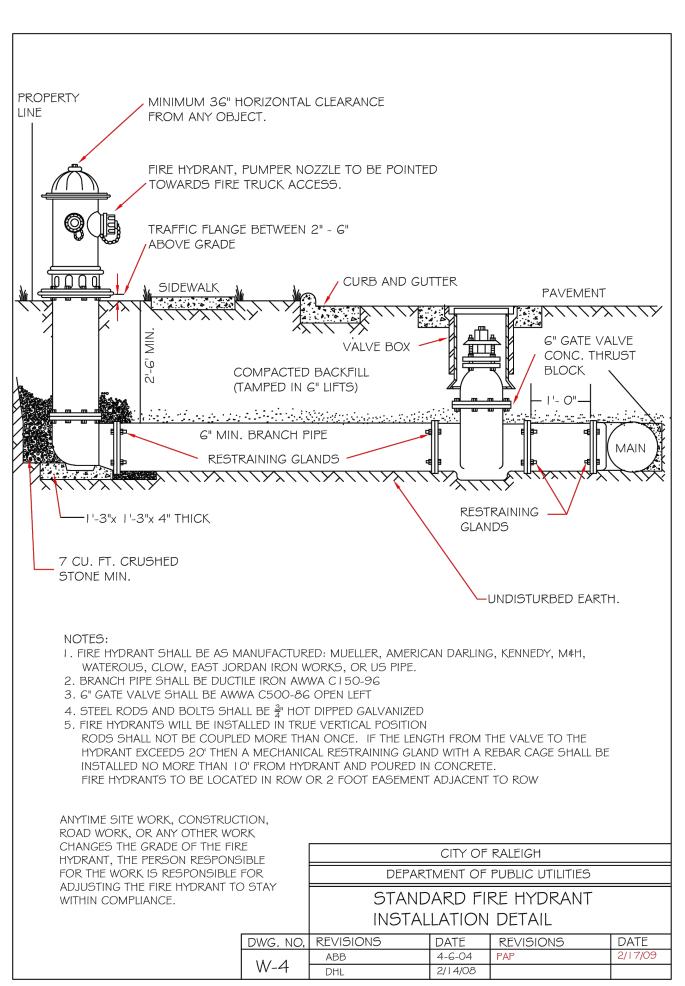


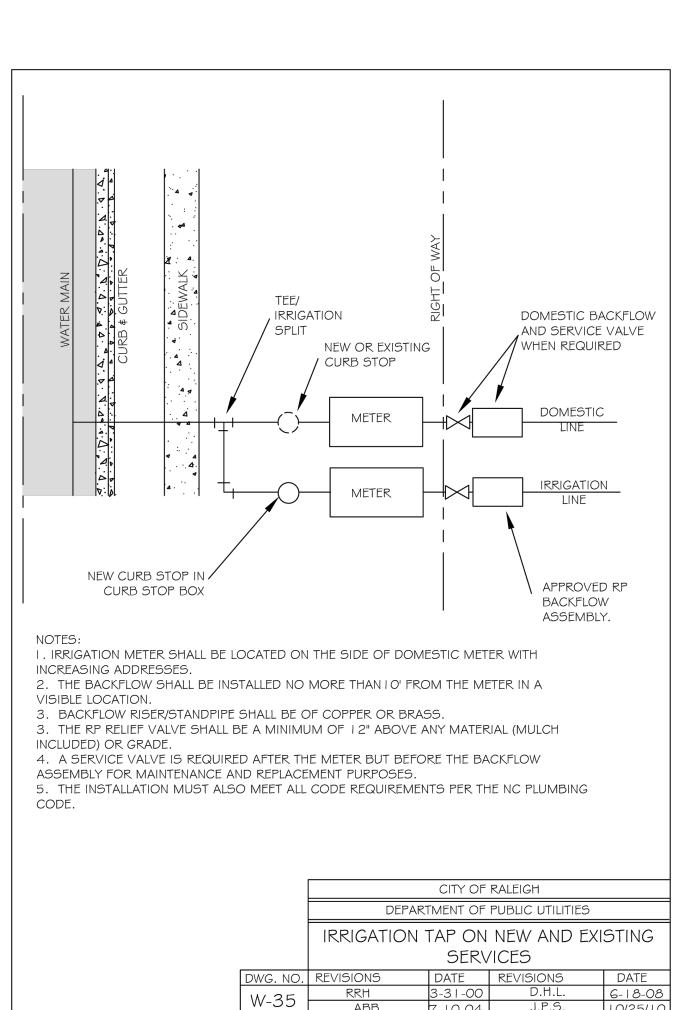
(U2) 12" TAPPING SADDLE CONNECTION





(U3) TYPICAL 1 1/2" - 2" WATER METER BOX INSTALLATION





(U5) IRRIGATION TAP ON NEW AND EXISTING SERVICES

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PROJECT NUMBER 627-22

DRAWING

D-2.0

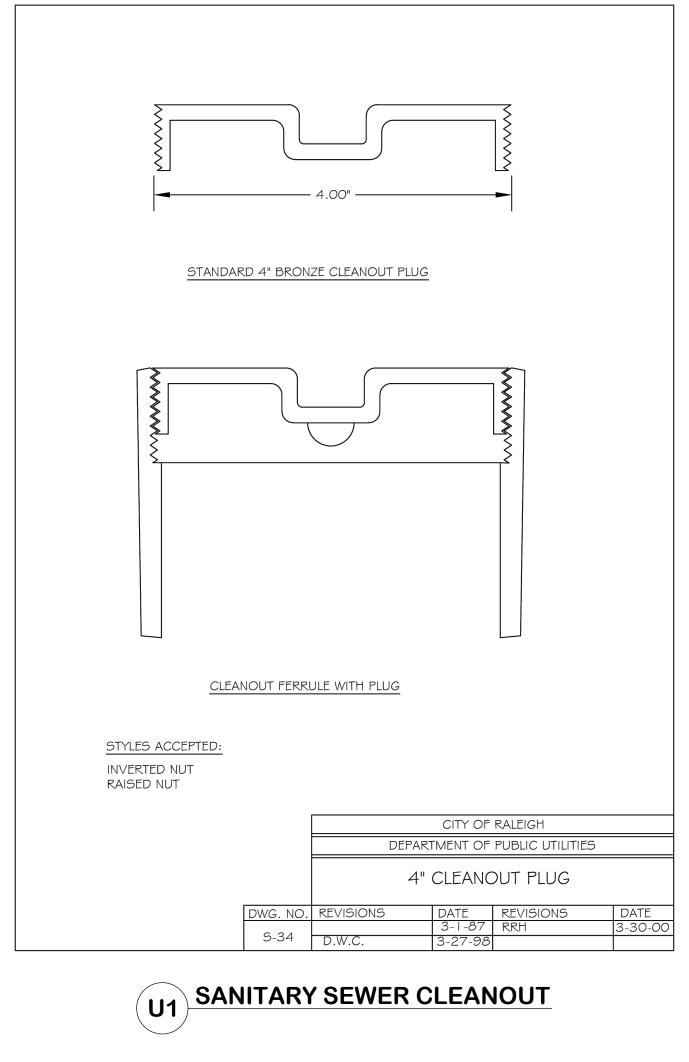
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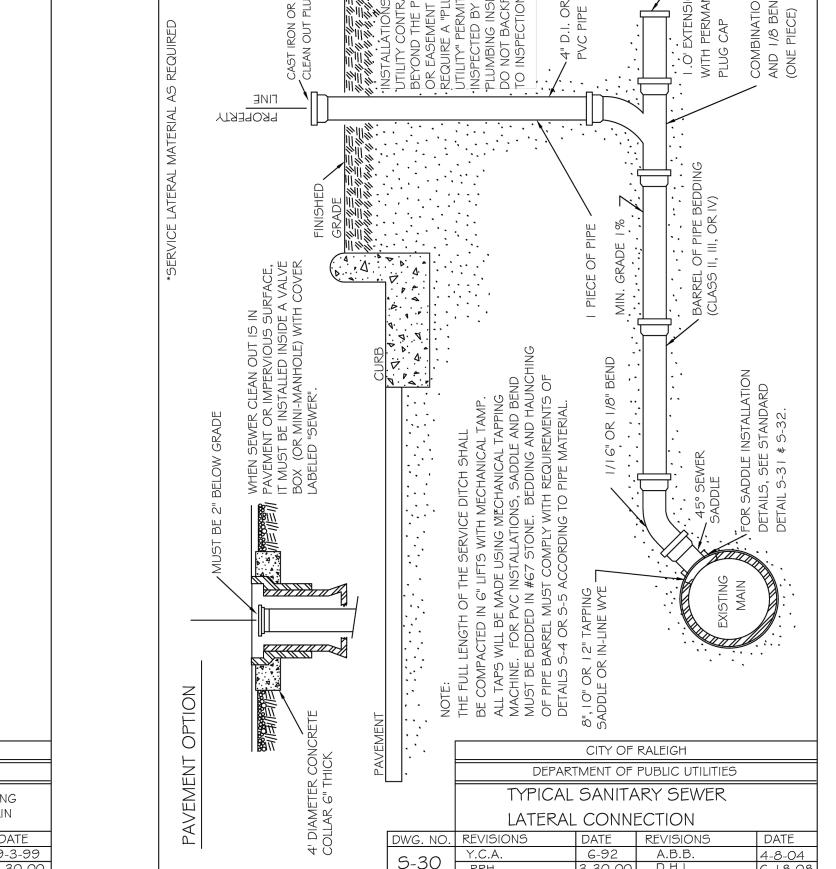
BUILDING

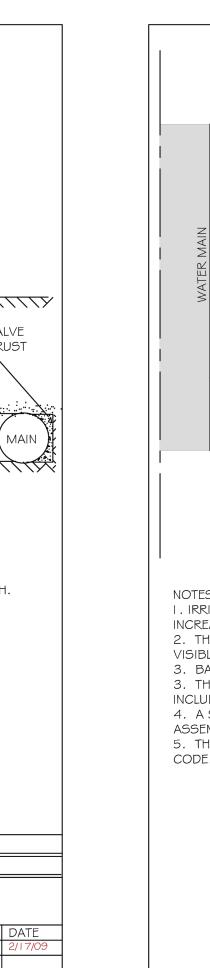
OFFICE

OAD

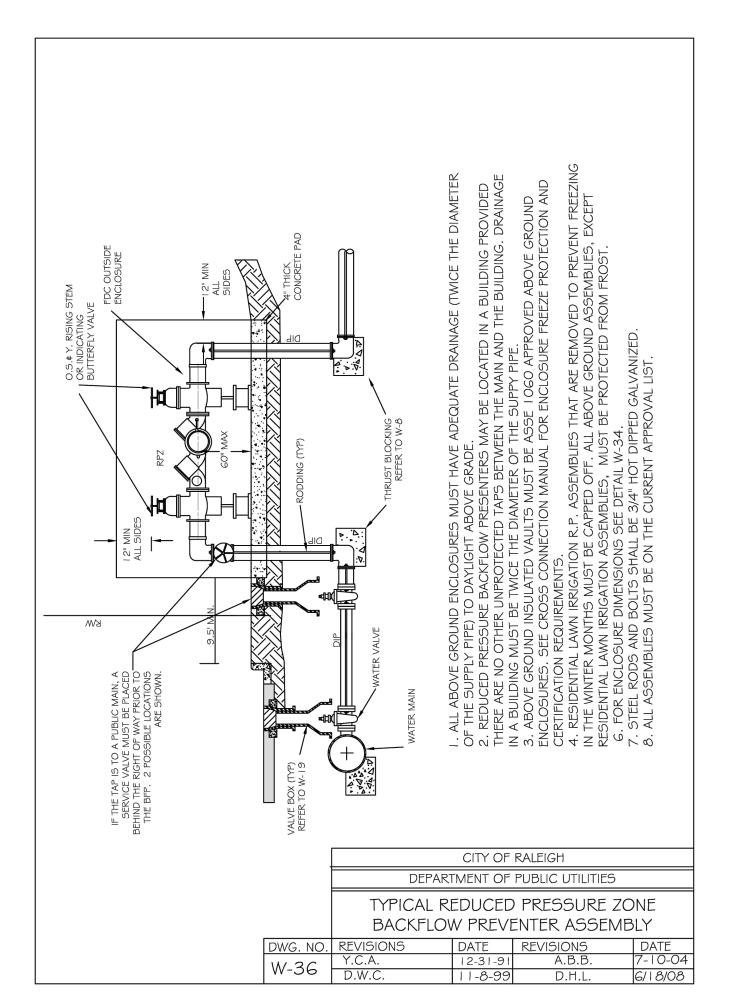
KNIGHTDALE AND NCDOT STANDARDS AND SPECIFICATIONS.

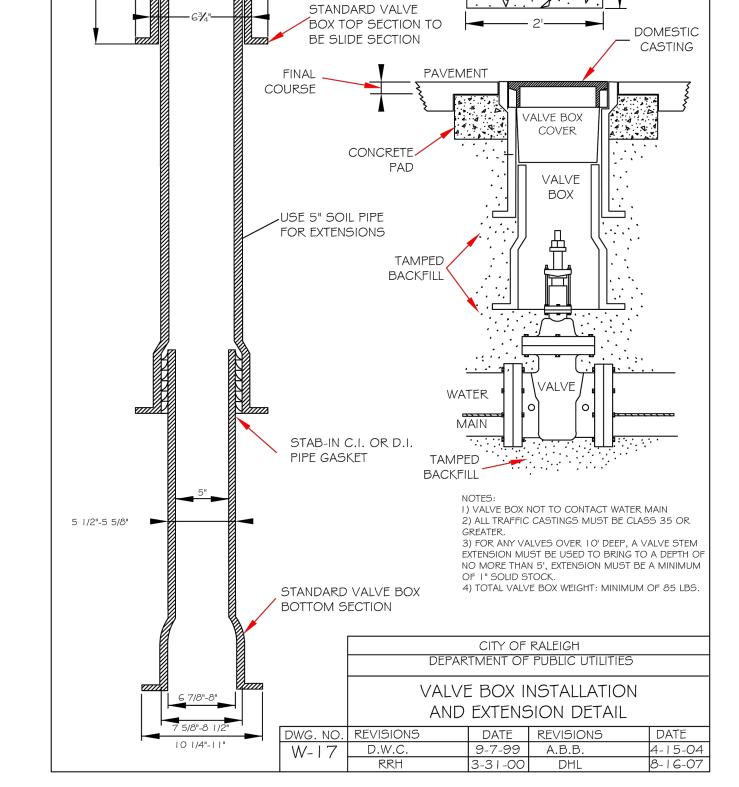






(U4) STANDARD FIRE HYDRANT INSTALLATION

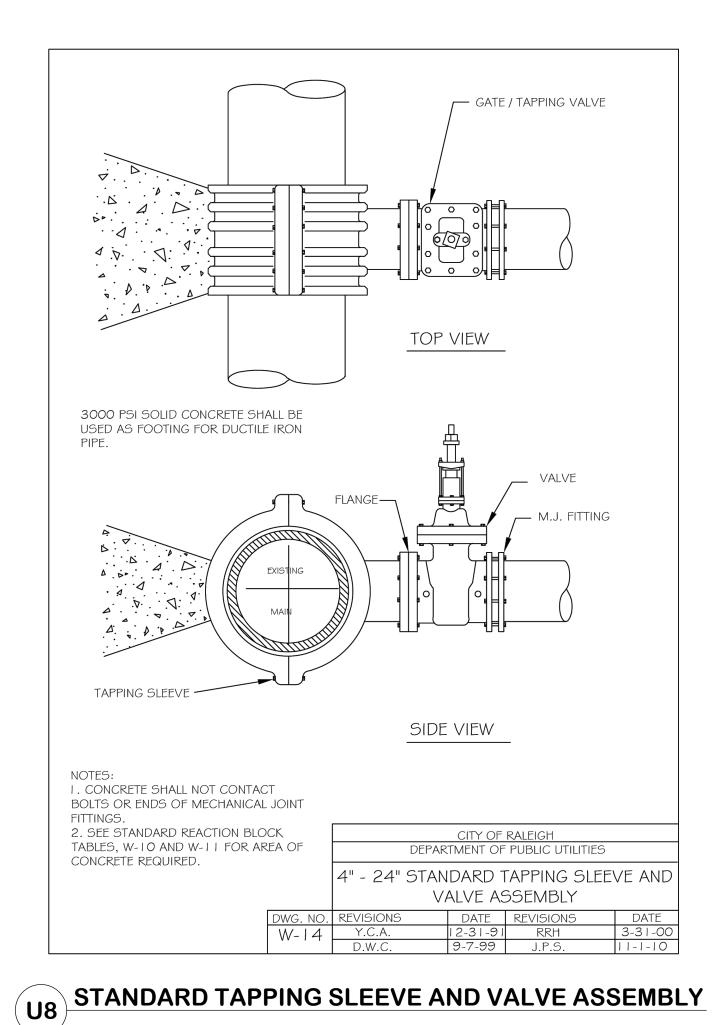


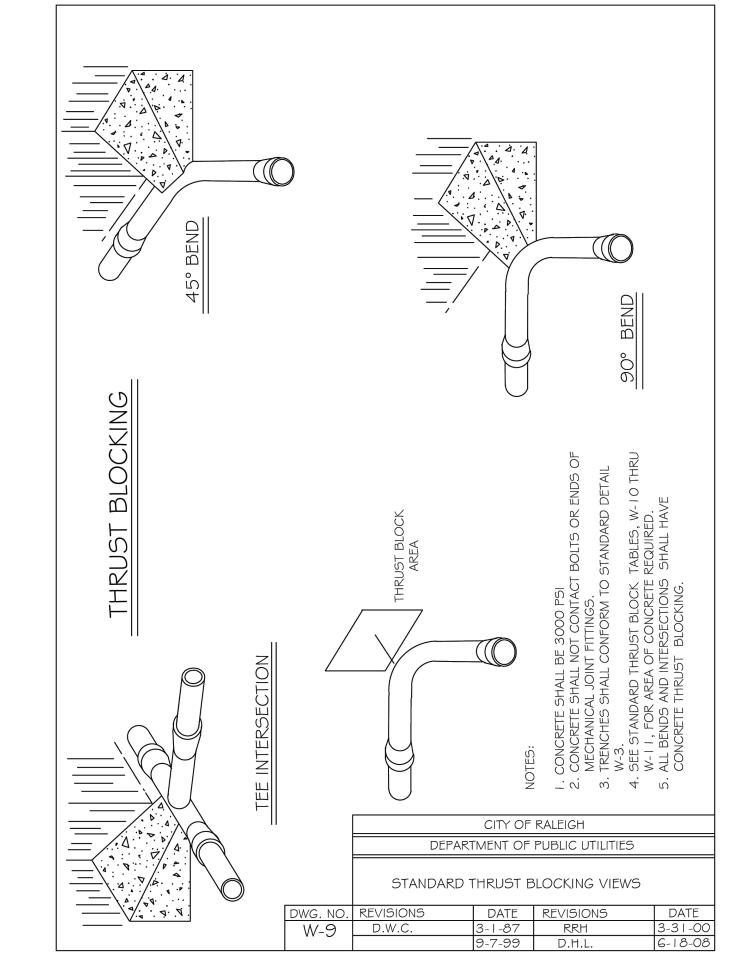


VALVE BOX INSTALLATION AND EXTENSION DETAIL

BEE STANDARD W-18 FOR COVER DETAILS.

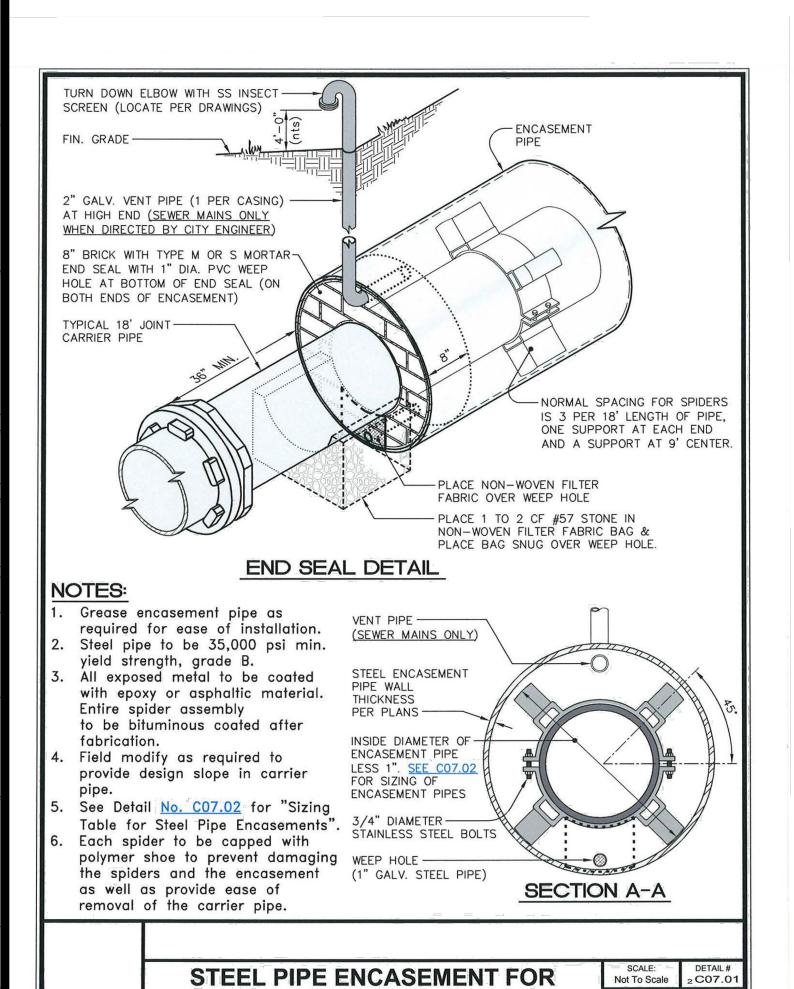
APPROVED METHOD FOR EXTENSION OF VALVE BOX





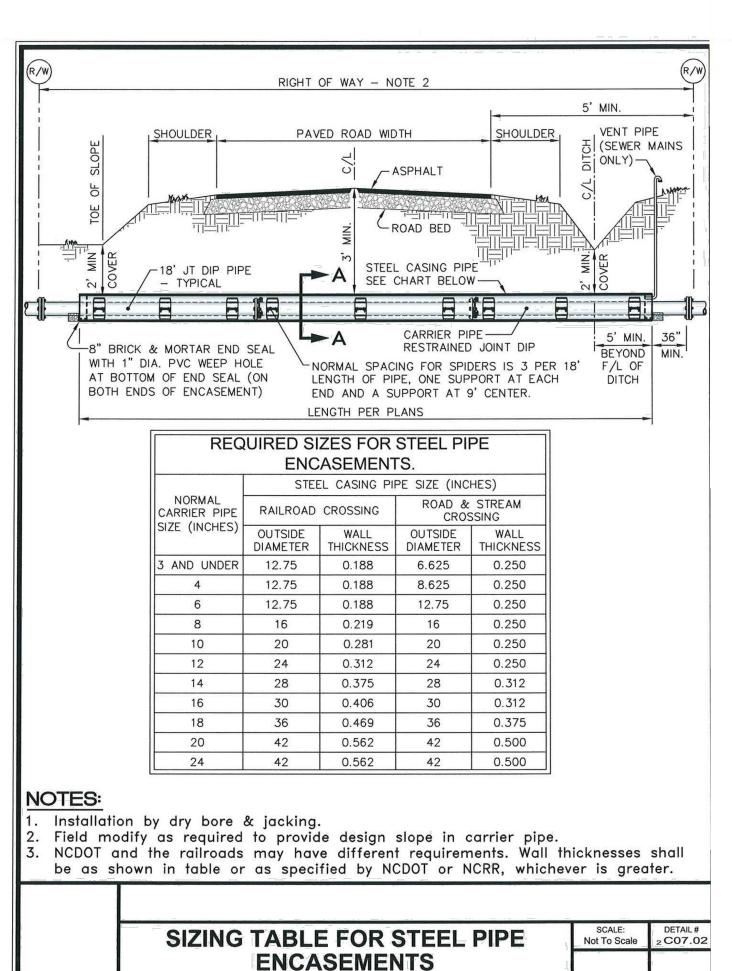
U9 STANDARD THRUST BLOCK

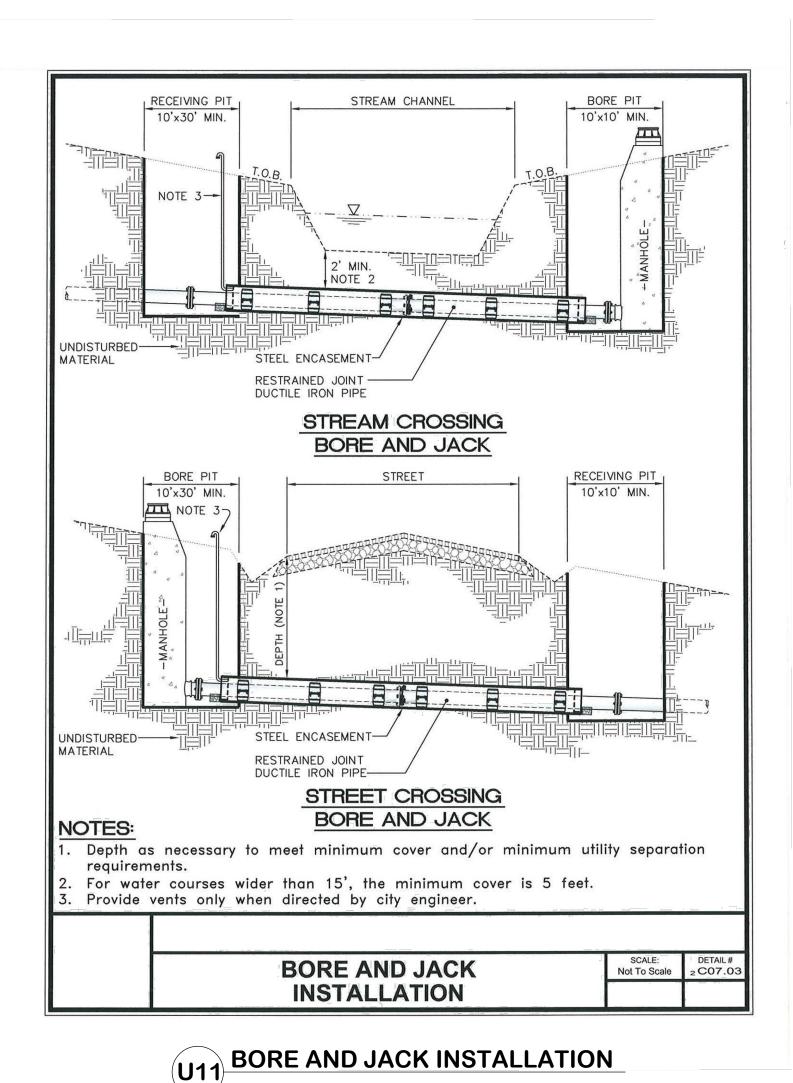
(U6) TYPICAL RPZ BACKFLOW PREVENTER ASSEMBLY



WATER AND SEWER MAINS

U10 STEEL PIPE ENCASEMENT





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PROJECT NUMBER 627-22

DRAWING

D-2.1

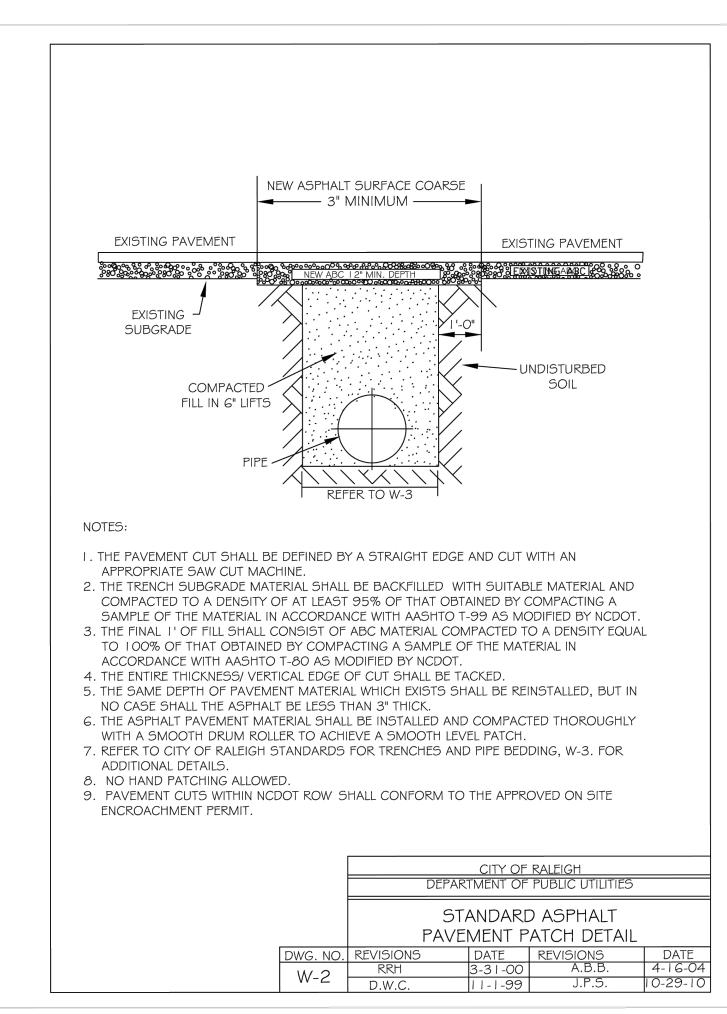
BUILDING

OFFICE

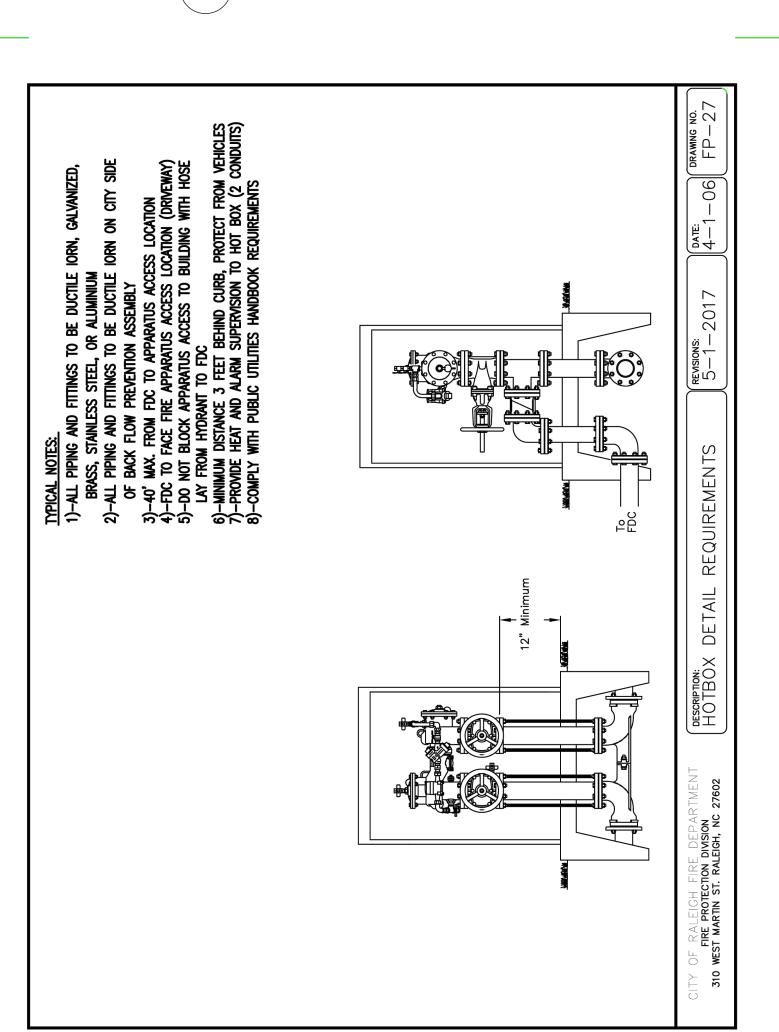
OAD

OLD

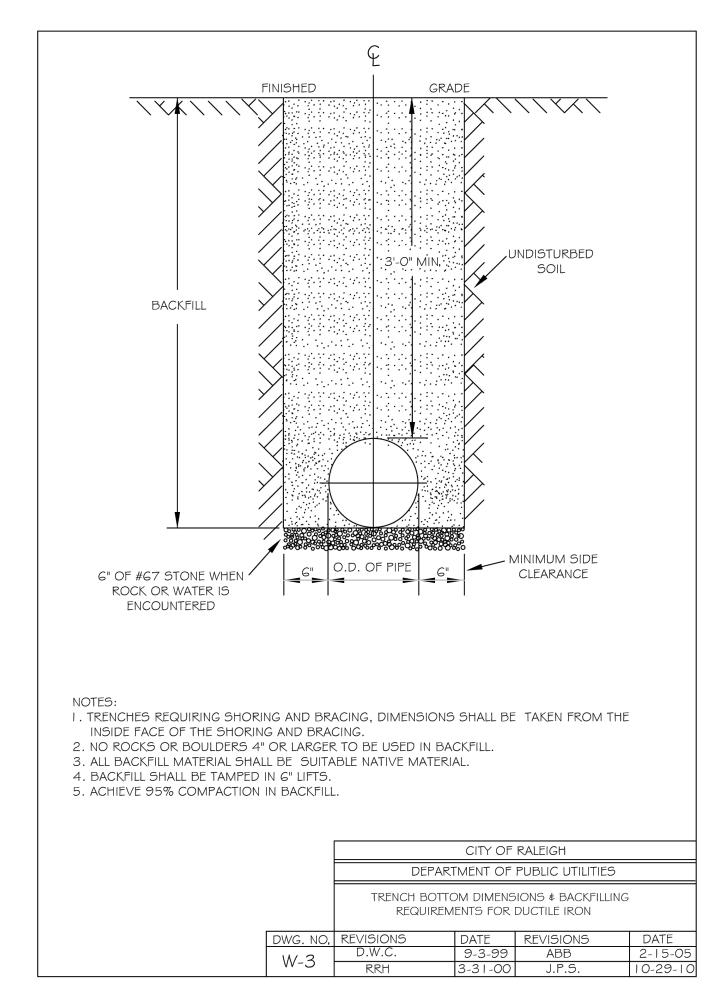
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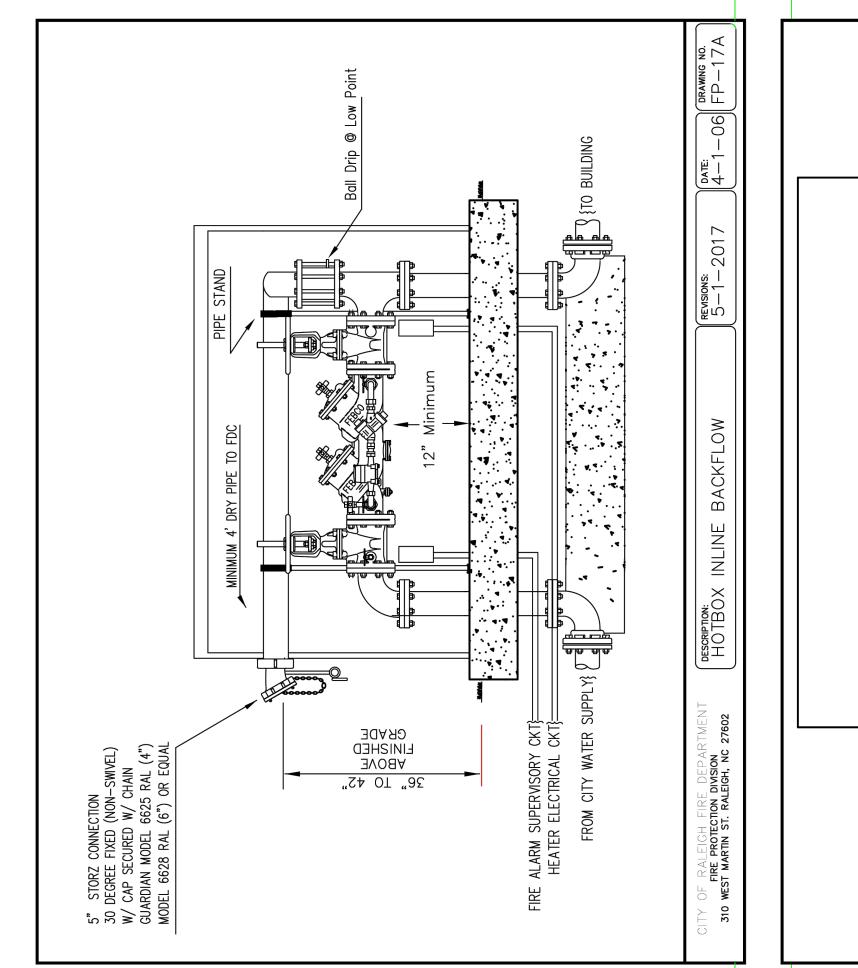
U12 ASPHALT PAVEMENT PATCH

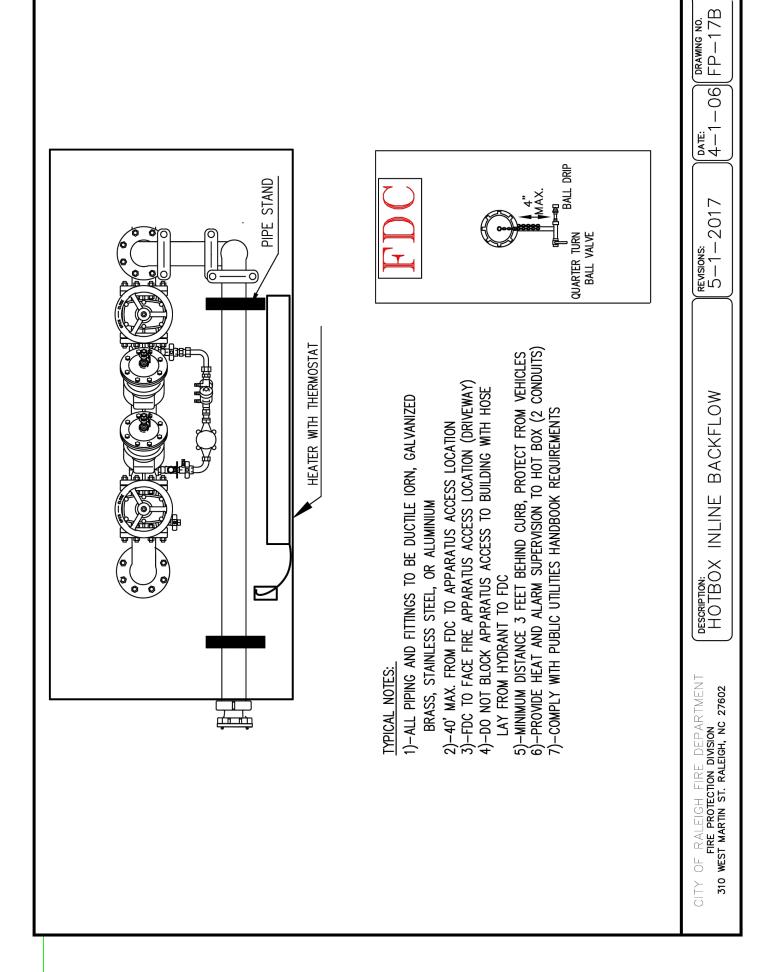


U15 HOTBOX INSTALLATION



U13 TRENCH DIMENSIONS & BACKFILLING REQUIREMENTS



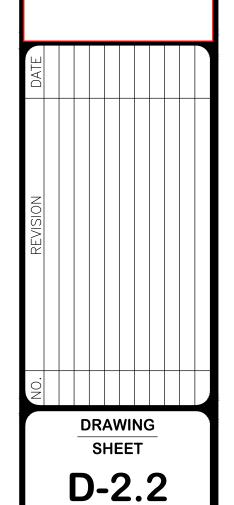


U14 FIRE LINE BACKFLOW

NOTE(s): ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH ALL TOWN OF

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> PROJECT NUMBER 627-22



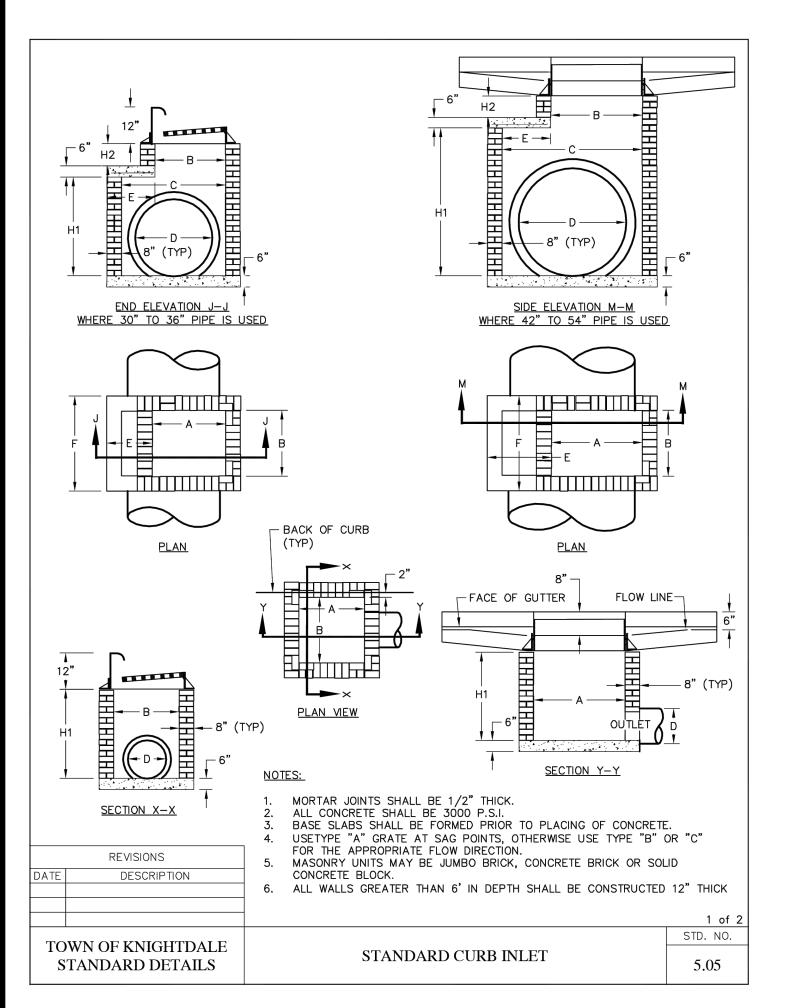
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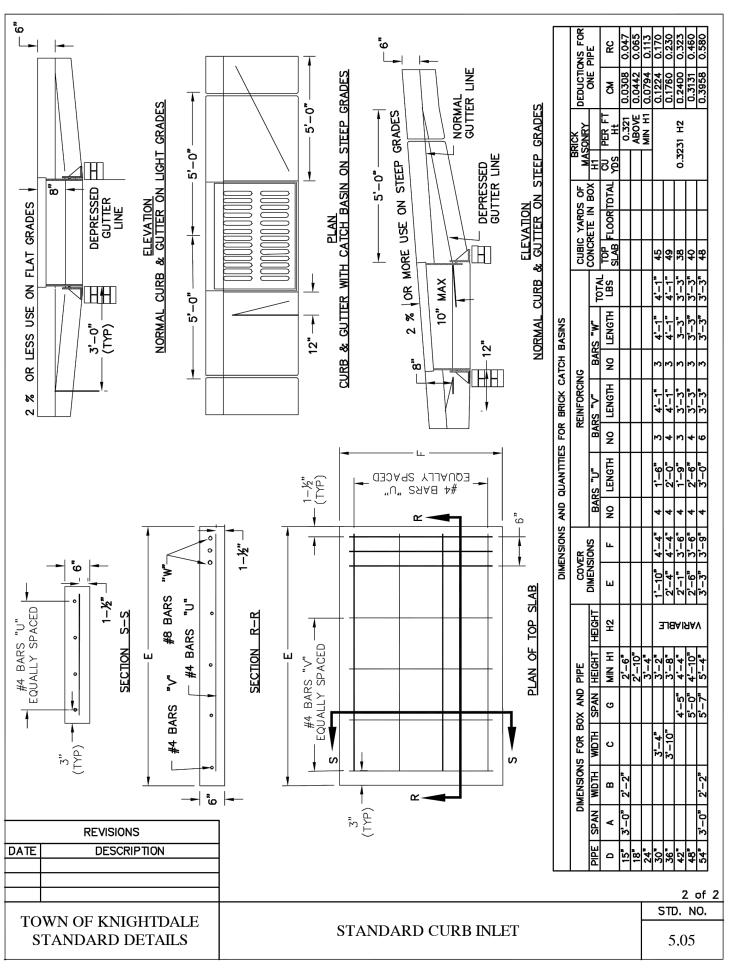
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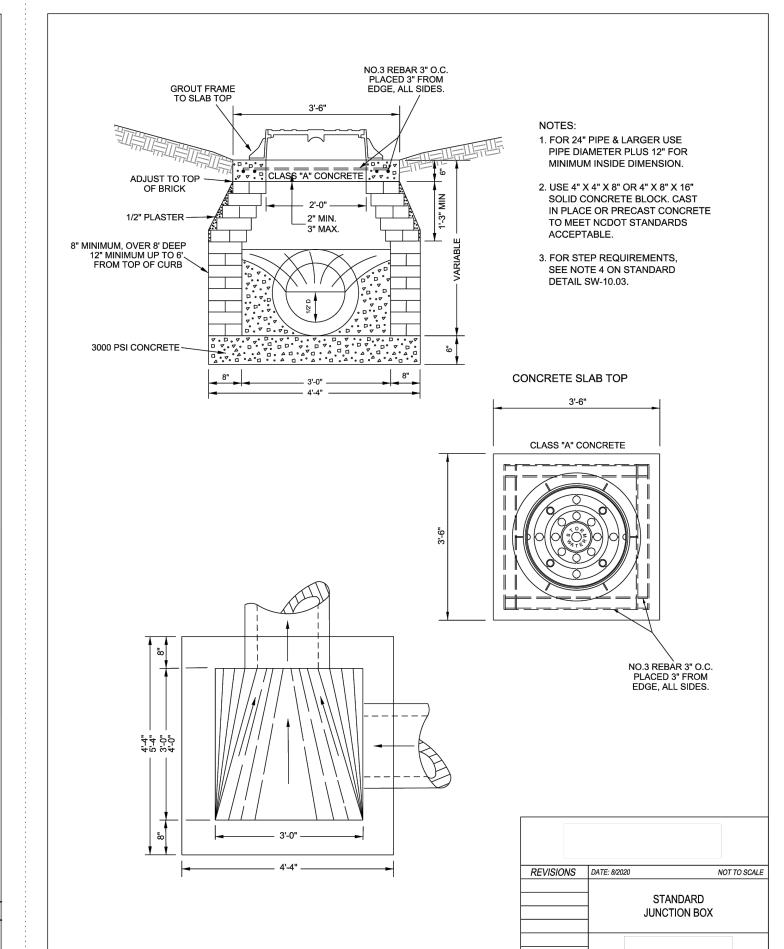
OFFICE

OAD

KNIGHT







D1 STANDARD CURB INLET

D2 STANDARD JUNCTION BOX

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DRAWING DRAWING

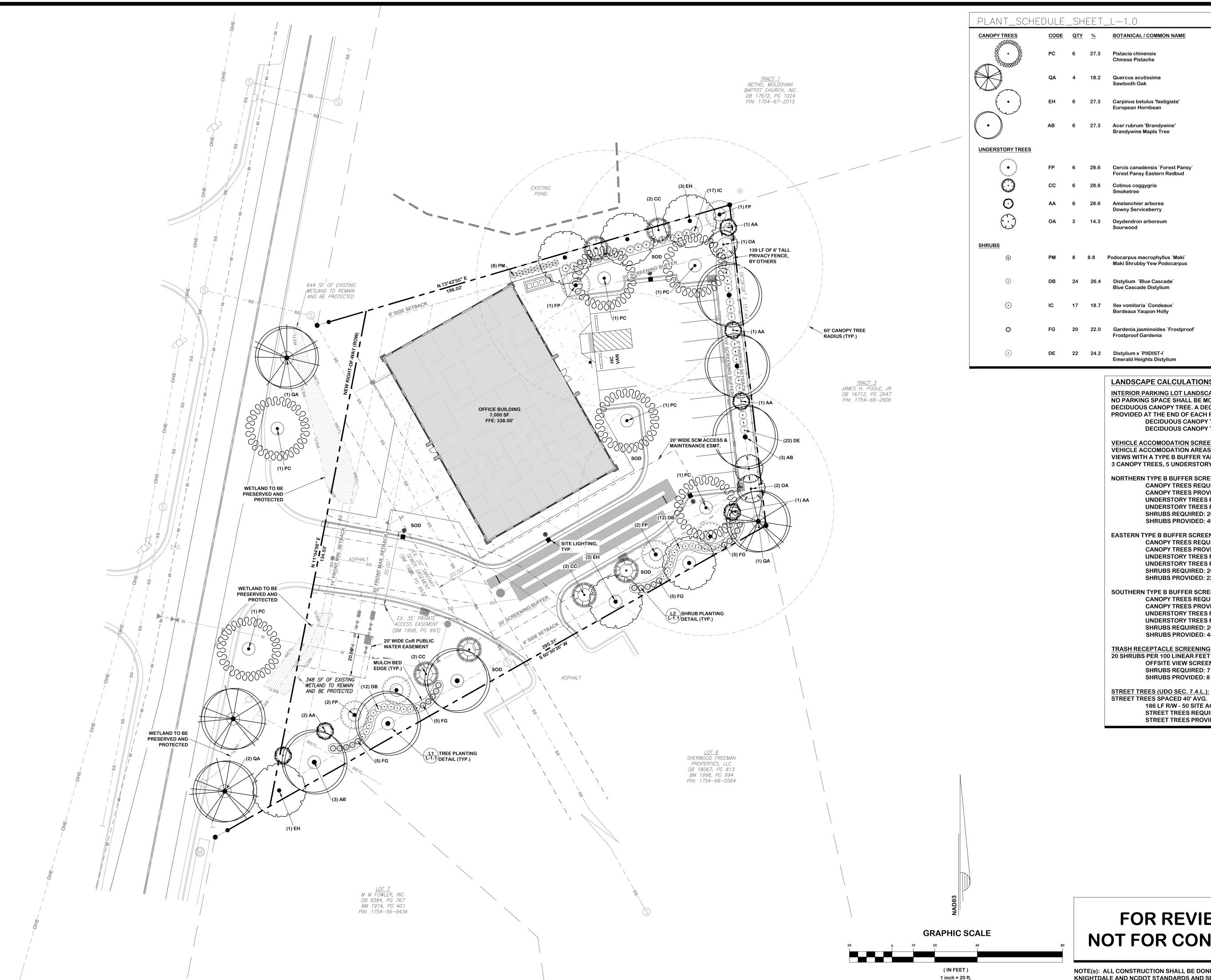
DRAFT

BUILDING

OFFICE

OAD

D-3.0



CONTAINER CODE QTY % BOTANICAL / COMMON NAME CALIPER HEIGHT 2" MIN. 8` MIN. B&B 2" MIN. 8` MIN. Carpinus betulus 'fastigiata' 2" MIN. 8` MIN. AB 6 27.3 Acer rubrum 'Brandywine' 2" MIN. 8` MIN. **Brandywine Maple Tree** FP 6 28.6 Cercis canadensis 'Forest Pansy' 1.5" MIN. 6` MIN. Forest Pansy Eastern Redbud 1.5" MIN. 6` MIN. B&B 1.5" MIN. 6` MIN. B&B 1.5" MIN. 6` MIN. B&B INSTALL MATURE HT. MATURE WIDTH 36" MIN. 8-10` PM 8 8.8 Podocarpus macrophyllus `Maki` Maki Shrubby Yew Podocarpus 26.4 Distylium `Blue Cascade` 18" MIN. 3-4` 3-4` Blue Cascade Distylium Ilex vomitoria `Condeaux` 18" MIN. 3-4` 3-4` **Bordeaux Yaupon Holly** 18" MIN. 5` Gardenia jasminoides `Frostproof`

LANDSCAPE CALCULATIONS:

INTERIOR PARKING LOT LANDSCAPING (UDO SEC. 7.4.J.) NO PARKING SPACE SHALL BE MORE THAN 60 FT FROM THE BASE OF A DECIDUOUS CANOPY TREE. A DECIDUOUS CANOPY TREE SHALL BE PROVIDED AT THE END OF EACH PARKING ROW. **DECIDUOUS CANOPY TREES REQUIRED: 4 DECIDUOUS CANOPY TREES PROVIDED: 4**

VEHICLE ACCOMODATION SCREENING (UDO SEC. 7.5.B.): VEHICLE ACCOMODATION AREAS SHALL BE SCREENED FROM OFF-SITE

VIEWS WITH A TYPE B BUFFER YARD: PER EVERY 100 LINEAR FEET (LF), 3 CANOPY TREES, 5 UNDERSTORY TREES, AND 20 SHRUBS REQUIRED.

NORTHERN TYPE B BUFFER SCREENING: 85 LF **CANOPY TREES REQUIRED:** 3 x 0.85 = 2.55 = 3 **CANOPY TREES PROVIDED: 3**

UNDERSTORY TREES REQUIRED: 5 x 0.85 = 4.25 = 4 **UNDERSTORY TREES PROVIDED: 4 SHRUBS REQUIRED: 20 x 0.85 = 17** SHRUBS PROVIDED: 49

EASTERN TYPE B BUFFER SCREENING: 112 LF CANOPY TREES REQUIRED: 3 x 1.12 = 3.36 = 3 **CANOPY TREES PROVIDED: 3**

UNDERSTORY TREES REQUIRED: 5 x 1.12 = 5.6 = 6 **UNDERSTORY TREES PROVIDED: 6** SHRUBS REQUIRED: 20 x 1.12 = 22.4 = 22 SHRUBS PROVIDED: 22

SOUTHERN TYPE B BUFFER SCREENING: 112 LF

CANOPY TREES REQUIRED: 3 x 2.19 = 6.57 = 7 **CANOPY TREES PROVIDED: 3 UNDERSTORY TREES REQUIRED:** 5 x 2.19 = 10.95 = 11 **UNDERSTORY TREES PROVIDED: 4** SHRUBS REQUIRED: 20 x 2.19 = 43.8 = 44 SHRUBS PROVIDED: 44

TRASH RECEPTACLE SCREENING (UDO SEC. 7.5.E. & 7.I.3.): 20 SHRUBS PER 100 LINEAR FEET = 20% = 0.5 OFFSITE VIEW SCREEN: 13.3 LF x 0.5 = 6.65 = 7 **SHRUBS REQUIRED: 7**

STREET TREES (UDO SEC. 7.4.L.):

186 LF R/W - 50 SITE ACCESS = 186 LF **STREET TREES REQUIRED:** 186 / 40 = 4.65 = 5 STREET TREES PROVIDED: 5

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DRAWING

DRAFT

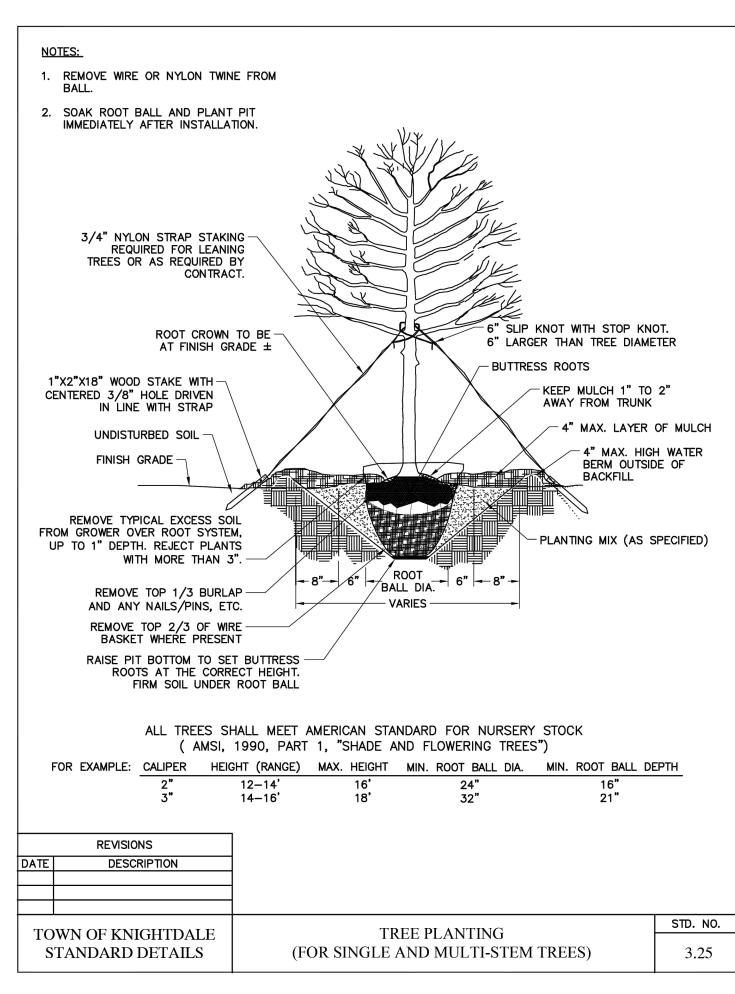
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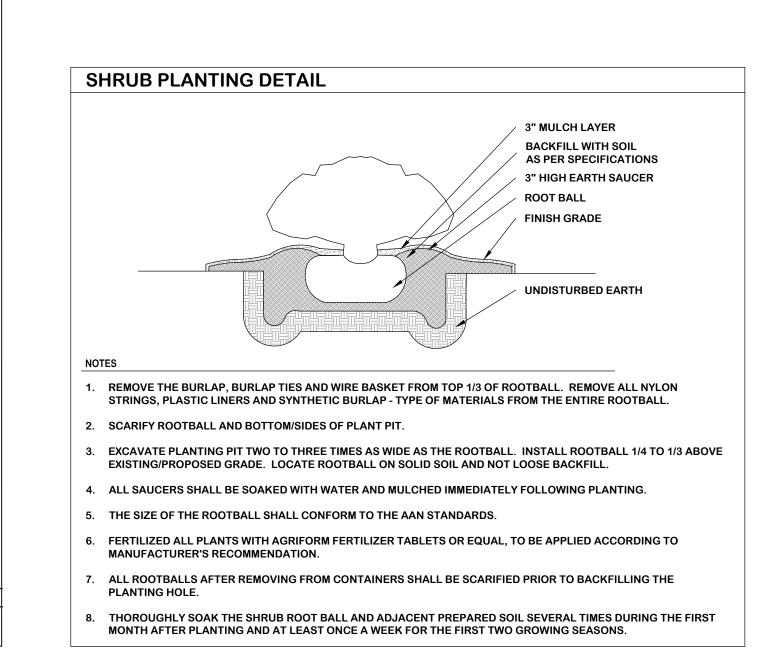
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TREE PLANTING DETAIL



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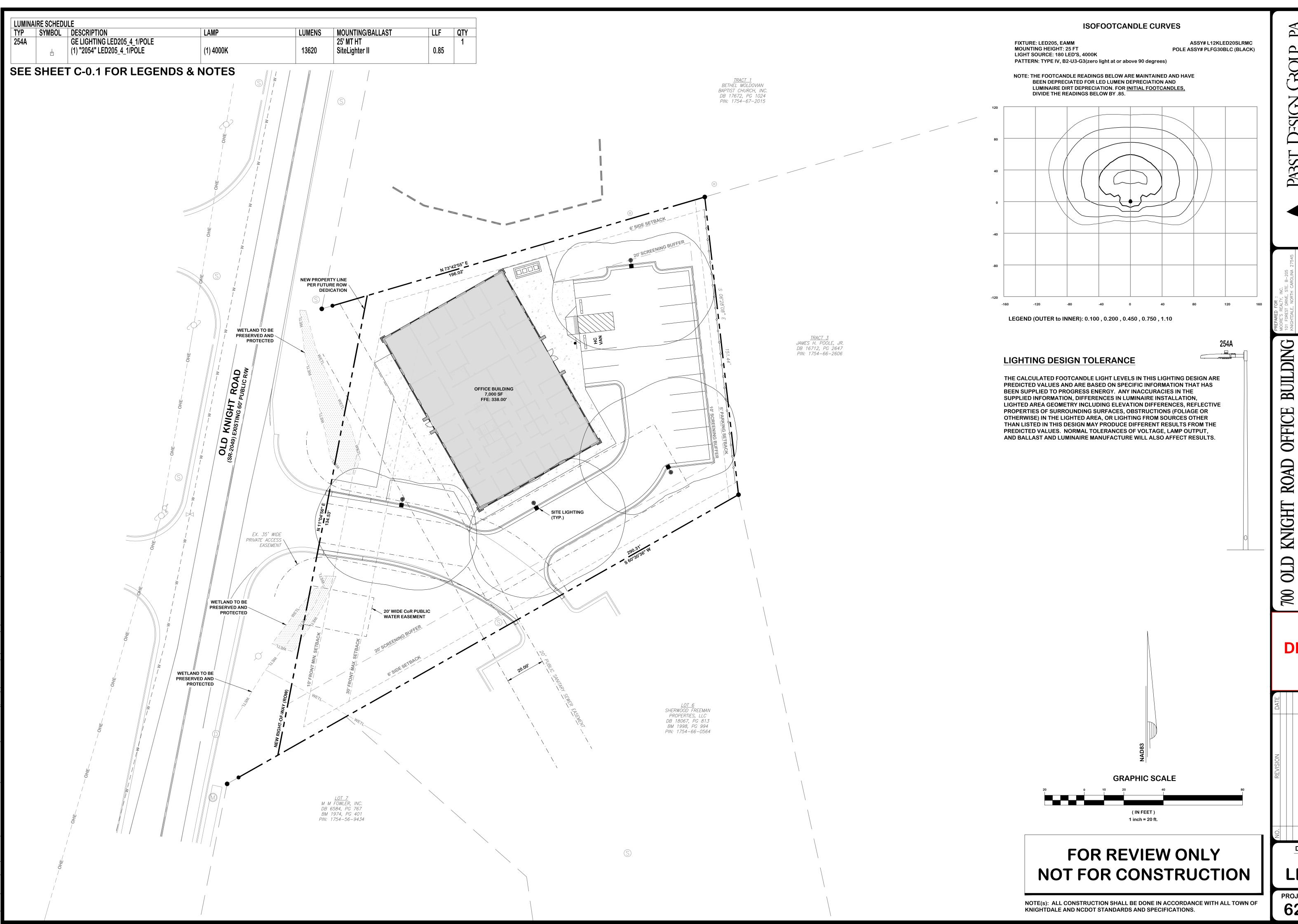
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DRAFT

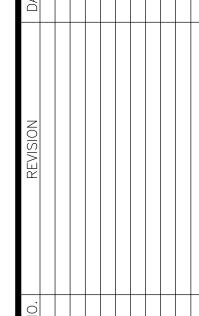
OFFICE

OAD

627-22



DRAFT



LP-1.0















DATE: 04/26/2024





