



Raleigh

# Administrative Site Review Application

Planning and Development Customer Service Center • One Exchange Plaza, Suite 400 | Raleigh, NC 27601 | 919-996-2500

This form is required when submitting site plans as referenced in Unified Development Ordinance (UDO) Section 10.2.8. Please check the appropriate building types and include the plan checklist document when submitting.

**Office Use Only:** Case #: \_\_\_\_\_ Planner (print): \_\_\_\_\_

Please review UDO Section 10.2.8. to determine the site plan tier. If assistance determining a Site Plan Tier is needed a Site Plan Tier Verification request can be submitted online via the [Permit and Development Portal](#). (Note: There is a fee for this verification service.)

**Site Plan Tier:** Tier Two Site Plan  Tier Three Site Plan

Building and Development Type (Check all that apply)		Site Transaction History
<input type="checkbox"/> Detached	<input type="checkbox"/> General	Subdivision case #: _____
<input type="checkbox"/> Attached	<input type="checkbox"/> Mixed use	Scoping/sketch plan case #: _____
<input type="checkbox"/> Townhouse	<input checked="" type="checkbox"/> Civic	Certificate of Appropriateness #: _____
<input type="checkbox"/> Apartment	<input type="checkbox"/> Cottage Court	Board of Adjustment #: _____
<input type="checkbox"/> Tiny house	<input type="checkbox"/> Frequent Transit Development Option	Zoning Case #: _____
<input type="checkbox"/> Open lot		Design Alternate #: _____

## GENERAL INFORMATION

Development name: NC Troopers Association Museum

Inside City limits? Yes  No

Property address(es): 3405 Garner Rd, Raleigh NC 27610

Site P.I.N.(s): 1712-02-7194

Removal of a single family residence.

Construction of the North Carolina State Troopers Association Museum.

**Current Property Owner(s):** North Carolina Troopers Association Inc.

Company:

Title:

Address: PO Box 840, Smithfield NC 27577

Phone #:

Email: trooperh340@yahoo.com

**Applicant Name (If different from owner. See "who can apply" in instructions):**

Relationship to owner:  Lessee or contract purchaser  Owner's authorized agent  Easement holder

Company:

Address:

Phone #:	Email:
<b>NOTE: please attach purchase agreement or contract, lease or easement when submitting this form.</b>	
<b>Developer Contact:</b> Thomas Plant	
Company: Metcon Inc	Title: Vice President, LEED-AP
Address: 3050 Hammond Business Place	
Phone #: 919-810-3035	Email: TPlant@metconus.com
Applicant Name:	
Company:	Address:
Phone #: 919-810-3035	Email:

DEVELOPMENT TYPE + SITE DATE TABLE (Applicable to all developments)	
SITE DATA	BUILDING DATA
Zoning district(s) (please provide the acreage of each): R-10	Existing gross floor area (not to be demolished):
Gross site acreage: 3.44 ac	Existing gross floor area to be demolished: 2,729 sf
# of parking spaces proposed: 26	New gross floor area: 13,902 sf
Max # parking permitted (7.1.2.C): No maximum	Total sf gross (to remain and new):
Overlay District (if applicable): N/A	Proposed # of buildings: 1
Existing use (UDO 6.1.4): Residential	Proposed # of stories for each: 3
Proposed use (UDO 6.1.4): Civic (Museum)	Proposed # of basement levels (UDO 1.5.7.A.6) 0

STORMWATER INFORMATION	
Imperious Area on Parcel(s):  Existing (sf) <u>6068</u> Proposed total (sf) <u>41,382</u>	Impervious Area for Compliance (includes ROW):  Existing (sf) <u>6,068</u> Proposed total (sf) <u>41,382</u>

RESIDENTIAL & OVERNIGHT LODGING DEVELOPMENTS	
Total # of dwelling units:	Total # of hotel bedrooms:
# of bedroom units: 1br _____ 2br _____ 3br _____ 4br or more _____	
# of lots:	Is your project a cottage court? <input type="radio"/> Yes <input type="radio"/> No
	A frequent transit development? <input type="radio"/> Yes <input type="radio"/> No

Continue to Applicant Signature Block on Page Three.


**APPLICANT SIGNATURE BLOCK**

Pursuant to state law (N.C. Gen. Stat. § 160D-403(a)), applications for development approvals may be made by the landowner, a lessee or person holding an option or contract to purchase or lease land, or an authorized agent of the landowner. An easement holder may also apply for development approval for such development as is authorized by the easement.

By submitting this application, the undersigned applicant acknowledges that they are either the property owner or one of the persons authorized by state law (N.C.G.S. 160D-403(a)) to make this application, as specified in the application. The undersigned also acknowledges that the information and statements made in the application are correct and the undersigned understands that developments approvals are subject to revocation for false statements or misrepresentations made in securing the development approval, pursuant to N.C. Gen. Stat. § 160D-403(f).

The undersigned indicates that the property owner(s) is aware of this application and that the proposed project described in this application will be maintained in all respects in accordance with the plans and specifications submitted herewith, and in accordance with the provisions and regulations of the City of Raleigh Unified Development Ordinance.

The undersigned hereby acknowledges that, pursuant to state law (N.C.G.S. 143-755(b1)), if this permit application is placed on hold at the request of the applicant for a period of six consecutive months or more, or if the applicant fails to respond to comments or provide additional information requested by the City for a period of six consecutive months or more, then the application review is discontinued and a new application is required to proceed and the development regulations in effect at the time permit processing is resumed shall apply to the new application.

Signature: 	Date: 10/16/23
Printed Name: Benjamin M Keel	





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raleigh, nc 27601  
+ 919.275.5022  
urbandesignpartners.com

nc firm no: P-2671 sc coa no: C-03044

North Carolina  
Troopers Association

3228 GARNER RD  
RALEIGH, NC 27610

# North Carolina Troopers Association - Museum Demolition Plan

3405 Garner Rd Raleigh, NC 27610

NO. DATE BY: REVISIONS:

Project No: 23-RDU-022

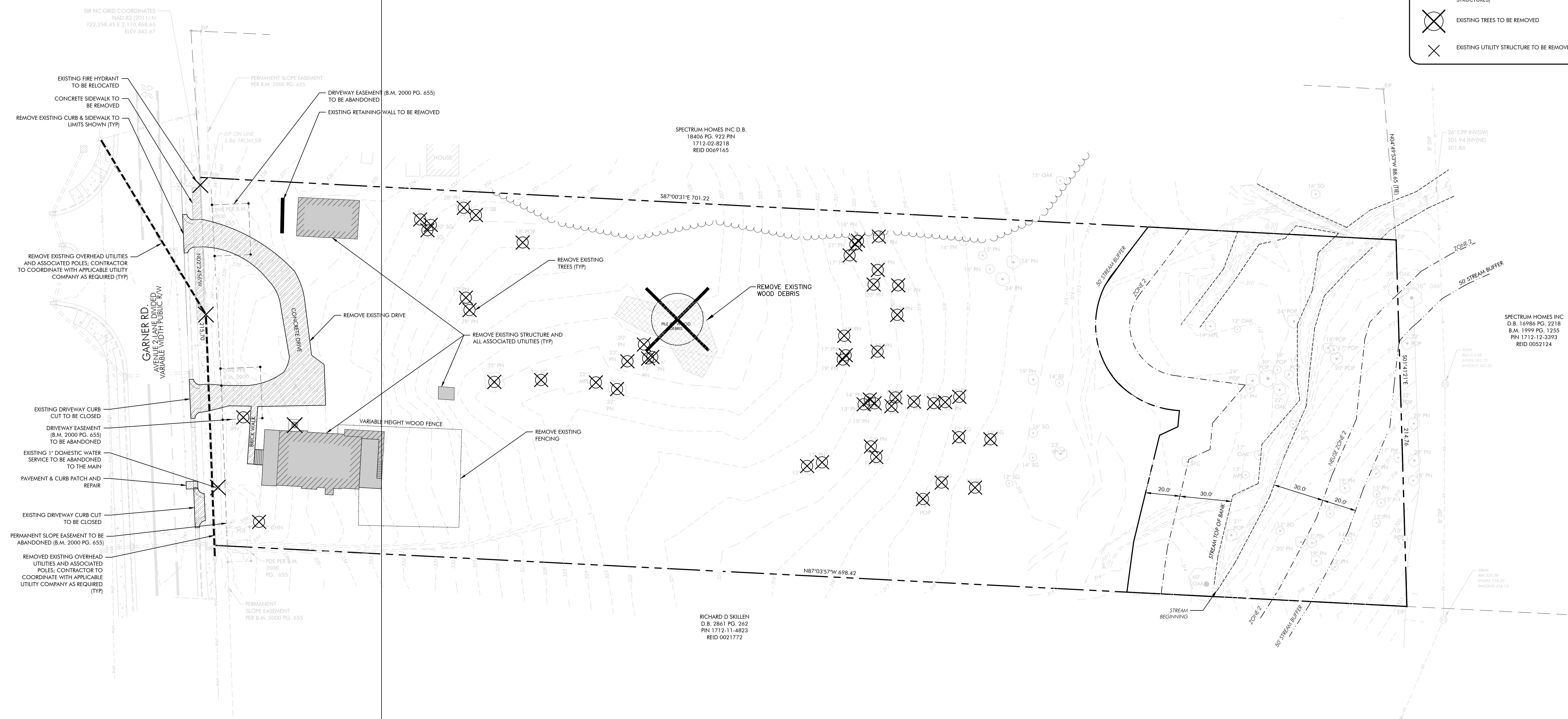
Date: 11.08.2023

Sheet No:

## C-2.1

**DEMOLITION LEGEND:**

- EXISTING BUILDING TO BE REMOVED
- EXISTING HARDSCAPE TO BE REMOVED
- EXISTING WALL TO BE REMOVED
- EXISTING UTILITIES TO BE REMOVED (INCLUDING THEIR CORRESPONDING STRUCTURES)
- EXISTING TREES TO BE REMOVED
- EXISTING UTILITY STRUCTURE TO BE REMOVED

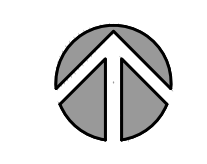


**DEMOLITION NOTES:**

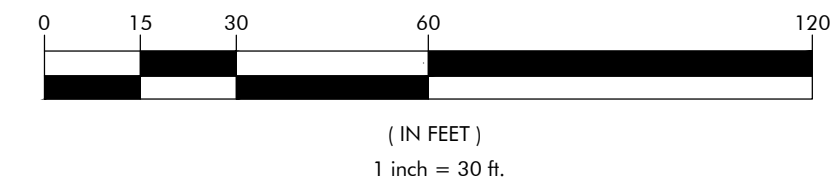
1. EXISTING INFORMATION ON THIS PLAN WAS TAKEN FROM A SURVEY PREPARED BY: TRIANGLE SURVEYORS, 3715 UNIVERSITY DRIVE, DURHAM, NC 27707 (919)490-2929
2. CONTRACTOR TO VERIFY ALL EXISTING UTILITIES AND SITE CONDITIONS PRIOR TO CONSTRUCTION.
3. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION AND SEQUENCING OF DEMOLITION OR RELOCATION OF UTILITIES WITH APPLICABLE UTILITY COMPANY.
5. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UTILITIES PRIOR TO BEGINNING DEMOLITION OPERATIONS. NOTIFY "NORTH CAROLINA ONE CALL" (TEL: 1-800-632-4949) AT LEAST 48 HOURS PRIOR TO START OF DEMOLITION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NORTH CAROLINA ONE CALL".
6. CLEAN SOILS SHALL BE UTILIZED FOR BACKFILL. COMPACTION OF THESE SOILS SHALL BE PERFORMED IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS.
7. ALL ITEMS DESIGNATED TO BE REMOVED SHALL BE REMOVED COMPLETELY, INCLUDING ALL SUBGRADE MATERIALS DIRECTLY ASSOCIATED WITH ITEMS TO BE REMOVED.
8. ALL ITEMS DESIGNATED TO BE REMOVED SHALL BE DISPOSED OF LEGALLY OFF-SITE UNLESS OTHERWISE NOTED ON THIS PLAN.
9. ALL DEMOLITION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL JURISDICTIONAL CODES OR REQUIREMENTS.
10. TREE PROTECTION FENCING SHALL BE IN PLACE PRIOR TO START OF DEMOLITION.
11. EROSION CONTROL PERMIT SHALL BE OBTAINED AND ONSITE PRIOR TO START OF DEMOLITION.
12. IF ANY ITEMS ARE DESIGNATED TO BE SALVAGED AND/OR RE-USED, THEY SHALL BE REMOVED BY THE CONTRACTOR AND PROVIDED TO THE OWNER. COORDINATE STORAGE LOCATION WITH OWNERS REPRESENTATIVE.
13. WHERE UTILITIES 'TO BE REMOVED' IMPACT THE FOOTPRINT OF THE NEW BUILDING, THE CONTRACTOR SHALL EXECUTE AND REMOVE AN ADDITIONAL 2 FEET OF SOILS TO EITHER SIDE OF THE PIPE AND 1 FOOT BELOW. CLEAN SUITABLE SOIL SHALL BE UTILIZED FOR BACKFILL AND COMPACTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
14. DEMOLITION AND SUBSEQUENT CONSTRUCTION OF UTILITIES (WATER, SEWER, ETC.) SHALL BE PERFORMED IN SUCH A MANNER THAT THE OLD PIPE AND STRUCTURES REMOVED DO NOT IMPACT OR MINIMIZE SERVICE INTERRUPTION TO EXISTING FACILITIES TO REMAIN. PROVISIONS SHALL BE MADE TO MAINTAIN SERVICE DURING CONSTRUCTION.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ALL DAMAGES TO THE EXISTING DRIVEWAY, SIDEWALK, AND CURB AND GUTTER TO REMAIN AS A RESULT OF CONSTRUCTION ACTIVITY AND TRAFFIC. CONTRACTOR SHALL MAINTAIN PRE-CONSTRUCTION PHOTO DOCUMENTATION TO SHOW THAT NO DAMAGES OCCURRED.
16. ALL MATERIALS, UTILITIES, AND PAVEMENT THAT ARE NOT SCHEDULED TO BE DEMOLISHED AND ARE DAMAGED BY THE CONTRACTOR AS A RESULT OF THE DEMOLITION OR CONSTRUCTION OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
17. WHERE UTILITIES ARE SHOWN 'TO BE REMOVED,' CONTRACTOR SHALL INCLUDE NECESSARY PLUG OR VALVES TO ENSURE UTILITY LINES TO REMAIN WILL CONTINUE TO BE IN SERVICE. COORDINATE NECESSARY SHUT DOWN AND REMOVAL WITH THE LOCAL JURISDICTION OR UTILITY OWNER.
18. CONTRACTOR TO HAVE ALL PHASE 1 EROSION CONTROL IN PLACE BEFORE SITE DEMOLITION OCCURS.
19. THIS PROPERTY IS NOT SERVICED BY CITY OF RALEIGH SEWER (PER THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT), NOR IS THERE AN ACTIVE SEPTIC PERMIT ASSOCIATED WITH THIS PROPERTY. CONTRACTOR TO FIELD VERIFY EXISTING SEPTIC SYSTEM ON-SITE. ANY EXISTING SEPTIC SYSTEM AND FIELD ARE TO BE REMOVED IN ACCORDANCE TO WAKE COUNTY REQUIREMENTS.



**BEFORE YOU DIG!  
CALL 811 OR 1-800-632-4949  
N.C. ONE-CALL CENTER  
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GRAPHIC SCALE



SIR NC GRID COORDINATES  
NAD 83 (2011) N  
772,258.45 E 2,110,468.65  
ELEV 342.67

SPECTRUM HOMES INC D.B.  
18406 PG. 922 PIN  
1712-02-8218  
REID 0069165

SPECTRUM HOMES INC  
D.B. 16986 PG. 2218  
B.M. 1999 PG. 1255  
PIN 1712-12-3393  
REID 0052124

RICHARD D SKILLEN  
D.B. 2861 PG. 262  
PIN 1712-11-4823  
REID 0021772

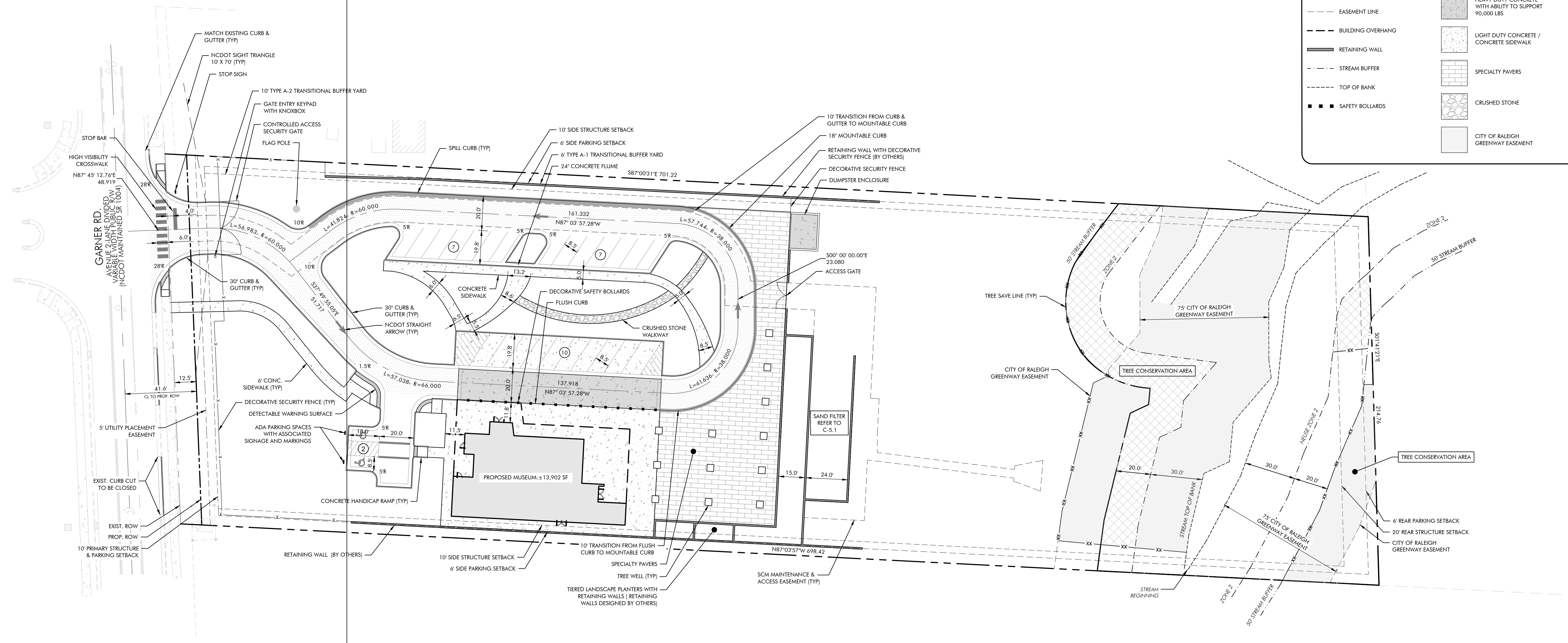


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nc firm no: P-2671 sc coa no: C-03044

**SITE PLAN LEGEND:**

	PROPOSED BUILDING
	TREE CONSERVATION AREA
	STANDARD DUTY ASPHALT
	HEAVY DUTY ASPHALT WITH ABILITY TO SUPPORT 90,000 LBS
	HEAVY DUTY CONCRETE WITH ABILITY TO SUPPORT 90,000 LBS
	LIGHT DUTY CONCRETE / CONCRETE SIDEWALK
	SPECIALTY PAVERS
	CRUSHED STONE
	CITY OF RALEIGH GREENWAY EASEMENT



**SITE DATA:**

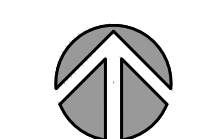
TAX PARCEL ID #:	1712-02-7194-00
SITE AREA:	3.44 AC (149,846 SF)
ROW DEDICATION:	0.06 AC (2,678 SF)
NET SITE AREA:	3.38 AC (147,168 SF)
EXISTING ZONING:	R-10
EXISTING LAND USE:	SINGLE FAMILY RESIDENCE MUSEUM (CHIC)
PROPOSED USE:	EQUIPPED WITH NINE (9) OVERNIGHT ROOMS FOR ON-DUTY TROOPERS
BUILDING GFA:	13,902 SF

**DEVELOPMENT SUMMARY:**

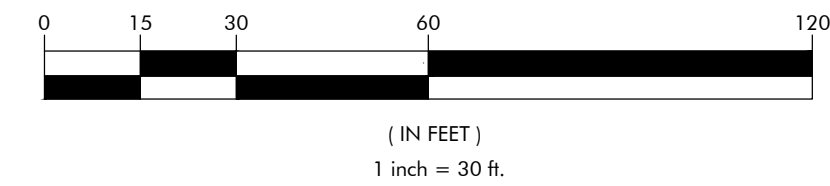
<b>LOT DIMENSIONS:</b>		<b>TRANSITIONAL BUFFER YARDS</b>	
LOT AREA:	3.38 AC (147,168 SF)	A-1 BUFFER YARD:	6' MIN.
PRIMARY STREET SETBACK:	10' MIN.	A-2 BUFFER YARD:	10' MIN.
SIDE STREET SETBACK:	10' MIN.	<b>TREE CONSERVATION AREA</b>	
SIDE LOT LINE SETBACK:	10' MIN.	REQUIRED TCA:	0.338 AC (10.0%)
REAR LOT LINE SETBACK:	20' MIN.	PROVIDED TCA:	0.477 AC (14.1%)
<b>STRUCTURE SETBACKS</b>		<b>BUILDING HEIGHT</b>	
PRIMARY STREET SETBACK:	10' MIN.	PRINCIPLE BUILDING:	45' MAX
SIDE STREET SETBACK:	10' MIN.	BUILDING HEIGHT:	40'
SIDE LOT LINE SETBACK:	10' MIN.	ACCESSORY STRUCTURE:	28' MAX
REAR LOT LINE SETBACK:	20' MIN.	<b>PARKING</b>	
<b>PARKING SETBACKS</b>		VEHICULAR PARKING:	
PRIMARY STREET SETBACK:	10' MIN.	REQUIRED:	N/A (NO MAX)
SIDE STREET SETBACK:	10' MIN.	PROPOSED:	26 SPACES
SIDE/REAR LOT LINE SETBACK:	6' MIN.	BICYCLE PARKING:	
		REQUIRED:	N/A (NOT REQUIRED)
		PROPOSED:	0 SPACES



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GRAPHIC SCALE



North Carolina Troopers Association

# North Carolina Troopers Association - Museum

Site Plan

3405 Garner Rd Raleigh, NC 27610

NO.	DATE	BY	REVISIONS:

Project No: 23-RDU-022

Date: 11.08.2023

Sheet No:

**C-3.0**





<b>EXISTING IMPERVIOUS</b>	6,048 SF (0.14 AC)
<b>PROPOSED IMPERVIOUS</b>	41,382 SF (0.95 AC)

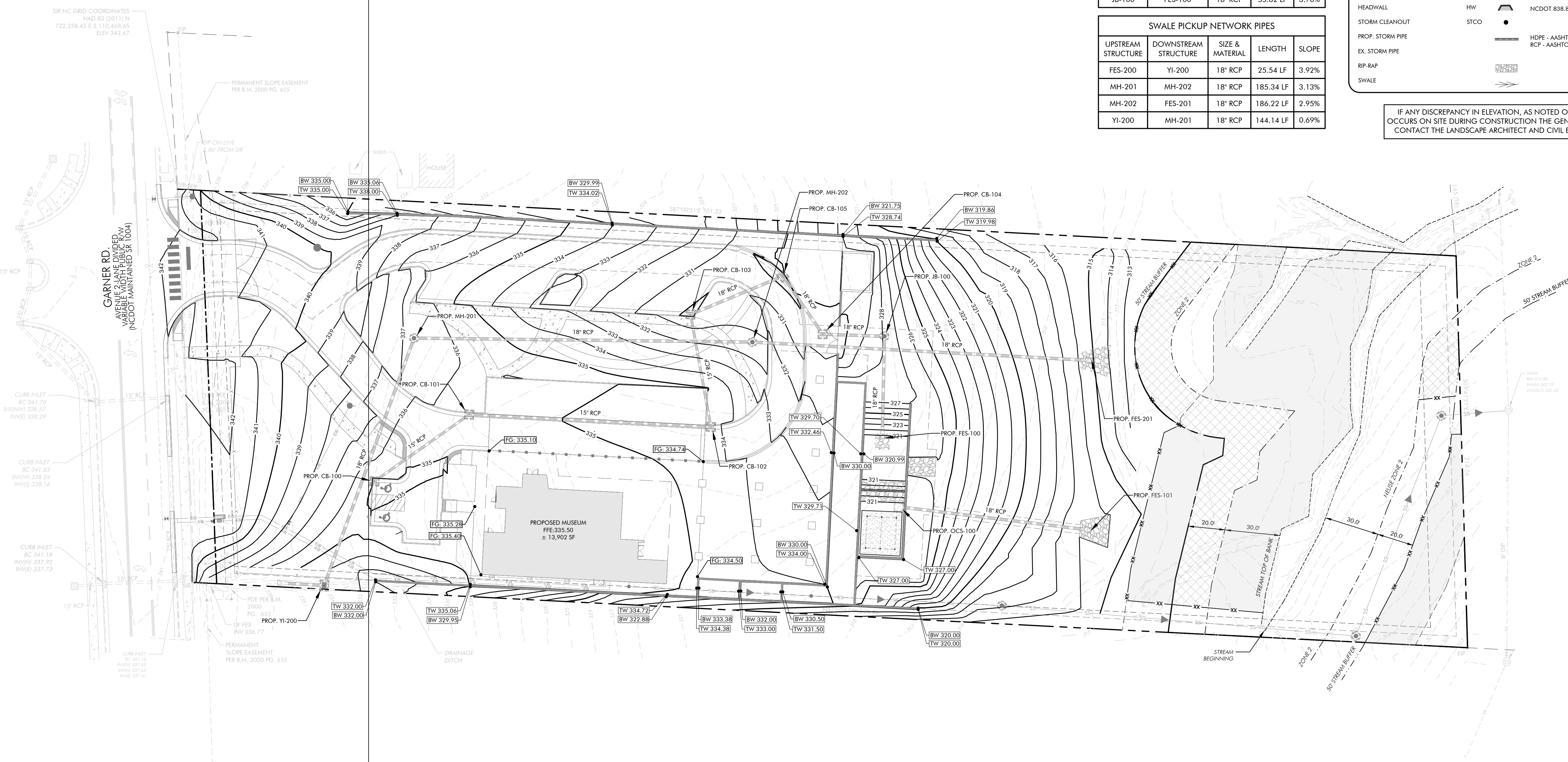
GRADING LEGEND:	
FINISHED GRADE	FG
TOP OF WALL	TW
BOTTOM OF WALL	BW
PROPOSED CONTOUR MAJOR	—
PROPOSED CONTOUR MINOR	- - -
EXISTING CONTOUR MAJOR	—
EXISTING CONTOUR MINOR	- - -

PROP. STORM NETWORK PIPES				
UPSTREAM STRUCTURE	DOWNSTREAM STRUCTURE	SIZE & MATERIAL	LENGTH	SLOPE
CB-100	CB-101	15" RCP	63.51 LF	0.79%
CB-101	CB-102	15" RCP	132.55 LF	0.56%
CB-102	CB-103	15" RCP	62.58 LF	1.95%
CB-103	CB-105	18" RCP	54.70 LF	0.95%
CB-104	CB-105	18" RCP	38.54 LF	5.01%
CB-104	JB-100	18" RCP	33.87 LF	5.40%
JB-100	FES-100	18" RCP	55.82 LF	3.76%

SWALE PICKUP NETWORK PIPES				
UPSTREAM STRUCTURE	DOWNSTREAM STRUCTURE	SIZE & MATERIAL	LENGTH	SLOPE
FES-200	YI-200	18" RCP	25.54 LF	3.92%
MH-201	MH-202	18" RCP	185.34 LF	3.13%
MH-202	FES-201	18" RCP	186.22 LF	2.95%
YI-200	MH-201	18" RCP	144.14 LF	0.69%

STORM LEGEND:		
ITEM	IDENTIFIER	SYMBOL
YARD INLET	YI	○
DROP INLET	DI	⊕
CATCH BASIN W/ HOOD	CB	⊕
DOUBLE CATCH BASIN	DCB	⊕
OPEN THROAT CATCH BASIN	OTCB	⊕
OUTLET CONTROL STRUCTURE	OCS	⊕
JUNCTION BOX	JB	⊕
FLARED END SECTION	FES	⊕
HEADWALL	HW	⊕
STORM CLEANOUT	STCO	⊕
PROP. STORM PIPE		—
EX. STORM PIPE		—
RIP-RAP		⊕
SWALE		—

IF ANY DISCREPANCY IN ELEVATION, AS NOTED ON THE GRADING PLAN, OCCURS ON SITE DURING CONSTRUCTION THE GENERAL CONTRACTOR IS TO CONTACT THE LANDSCAPE ARCHITECT AND CIVIL ENGINEER IMMEDIATELY.

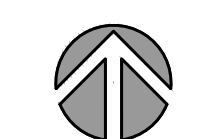


**GRADING AND STORM DRAINAGE NOTES:**

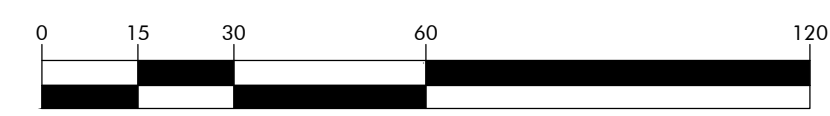
1. BURIAL PITS REQUIRE A PERMIT.
2. GRADING DONE BEYOND THE DENIED LIMITS INDICATED IN CONSTRUCTION DOCUMENTS IS A VIOLATION AND IS SUBJECT TO A FINE.
3. NO MORE THAN ONE ACRE WITHOUT AN APPROVED EROSION CONTROL PLAN IS A VIOLATION AND IS SUBJECT TO A FINE.
4. ALL CURB AND STREET GRADES AT INTERSECTIONS SHALL BE VERIFIED WITH INSPECTOR.
5. TRIANGLES INDICATED ARE THE MINIMUM REQUIRED.
6. THE VALUE OF CONSTRUCTION DOCUMENTS IS NOT AN INVITATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION SHALL BE OBTAINED BY CONTRACTOR FROM THE AFFECTED PROPERTY OWNER.
7. REFER TO ENSURE PROPER DRAINAGE, CONTRACTOR SHALL MAINTAIN A MINIMUM OF 0.5% SLOPE ON THE CURB.
8. SUBSURFACE DRAINAGE FACILITIES MAY BE REQUIRED IN THE STREET RIGHT OF WAY IF DEEMED NECESSARY BY THE INSPECTOR.
9. THE CONTRACTOR SHALL MAINTAIN EACH STREAM, CREEK OR BACKWASH CHANNEL IN AN UNOBSTRUCTED CONDITION AND SHALL REMOVE FROM THESE AREAS ALL DEBRIS, LOGS, TIMBER, TRASH, JUNK AND OTHER ACCUMULATIONS.
10. ANY CONSTRUCTION OR USE WITHIN THE AREAS DELINEATED AS FLOODWAY DISTRICT FRINGE BOUNDARY LINE OR FLOODWAY DISTRICT ENCROACHMENT BOUNDARY LINE IS SUBJECT TO THE RESTRICTIONS IMPOSED BY THE FLOODWAY REGULATIONS.
11. THE LOCAL ENGINEERING DEPARTMENT HAS NOT REVIEW AND DOES NOT ASSUME RESPONSIBILITY FOR THE STRUCTURAL STABILITY OF ANY EXISTING OR PROPOSED RETAINING WALLS ON THE SITE.
12. NON-STANDARD ITEMS (I.E.: PAVERS, IRRIGATION SYSTEMS, ETC.) IN THE RIGHT OF WAY REQUIRE A LOCAL OR STATE ENCROACHMENT AGREEMENT PRIOR TO INSTALLATION.
13. ALL SIDEWALKS, STOOPS, TERRACES AND OTHER PAVED AREAS SHALL SLOPE AWAY FROM BUILDING(S) AT A MINIMUM OF 2%.
14. CONTRACTOR SHALL CONTACT INSPECTOR 48 HOURS BEFORE CONSTRUCTION.
15. STABILIZE ALL SLOPES GREATER THAN 3:1 WITH JUTE MESH.
16. ALL ELEVATIONS ARE IN REFERENCE TO THE BENCHMARK WHICH MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO STARTING CONSTRUCTION.
17. ALL CONTOURS AND SPOT ELEVATIONS REFLECT FINISHED GRADES. REFER TO PAVEMENT CROSS-SECTION DATA TO ESTABLISH CORRECT SUB-BASE, AGGREGATE BASE COURSE ELEVATIONS TO BE COMPLETED UNDER THIS CONTRACT.
18. CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY WITH EXISTING CONTOURS.



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GRAPHIC SCALE



(IN FEET)  
1 inch = 30 ft.

North Carolina  
Troopers Association  
3228 GARNER RD  
RALEIGH, NC 27610

**North Carolina Troopers  
Association - Museum  
Grading & Storm Drainage Plan**  
3405 Garner Rd Raleigh, NC 27610

NO.	DATE	BY	REVISIONS:

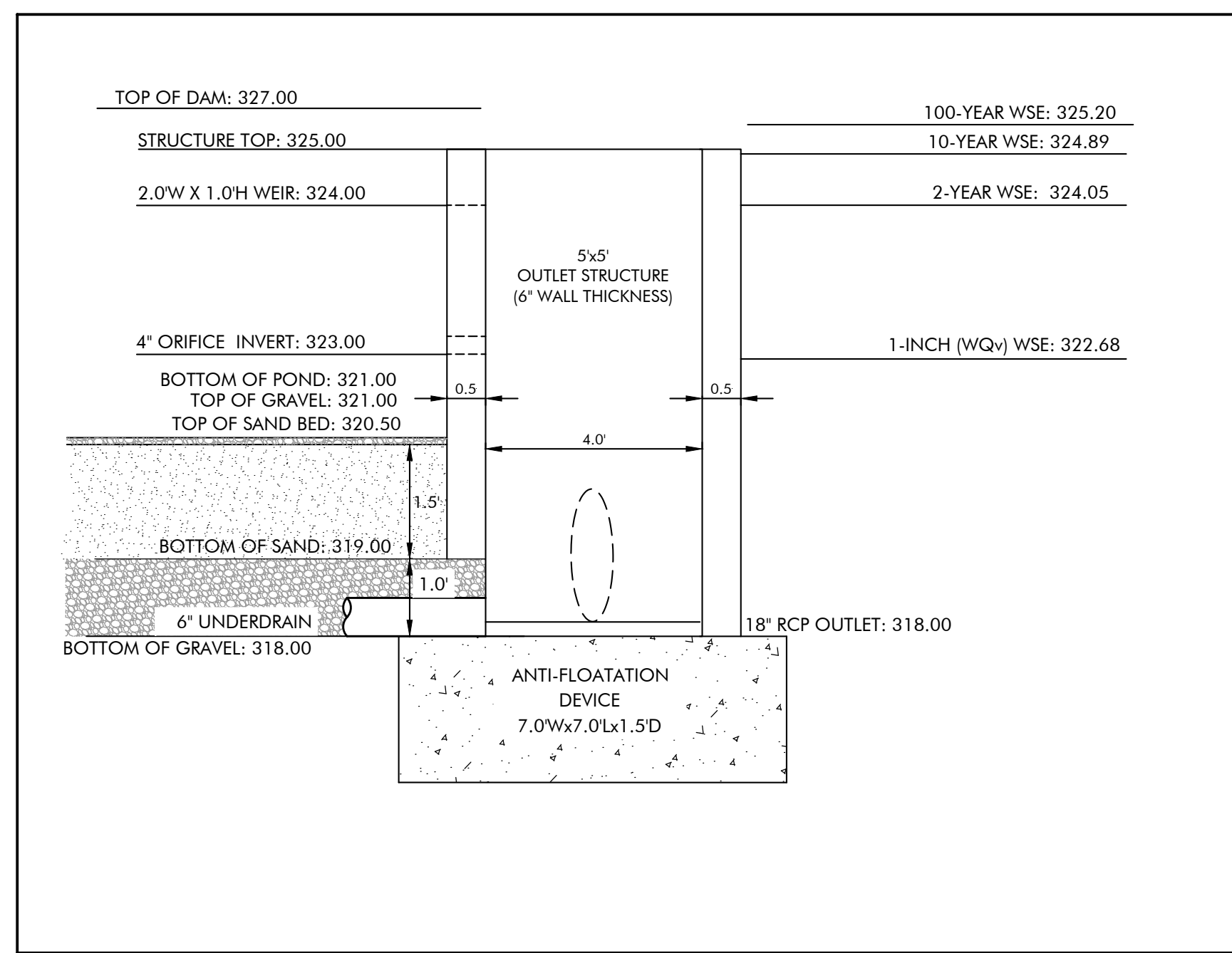
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**C-4.0**

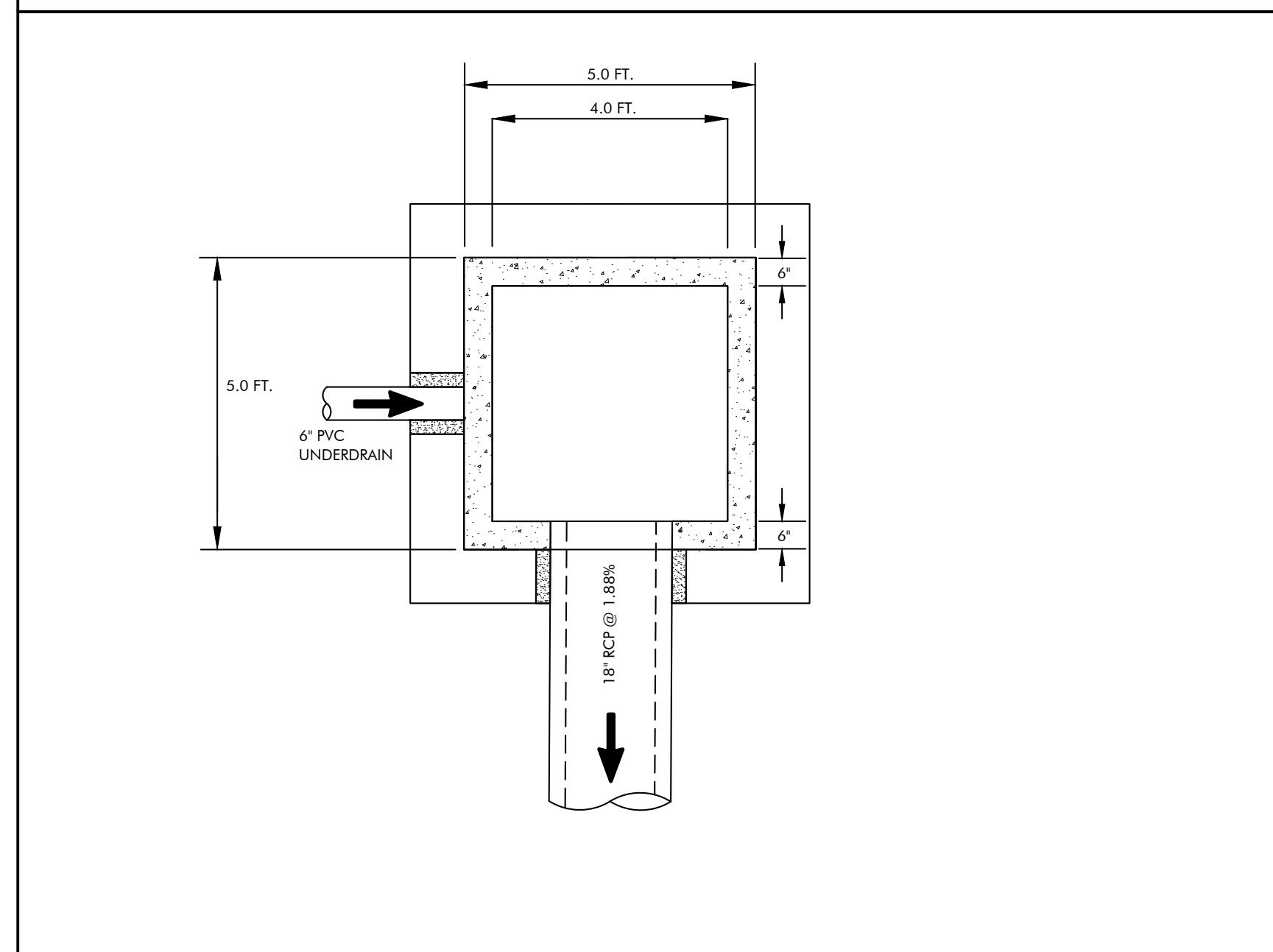




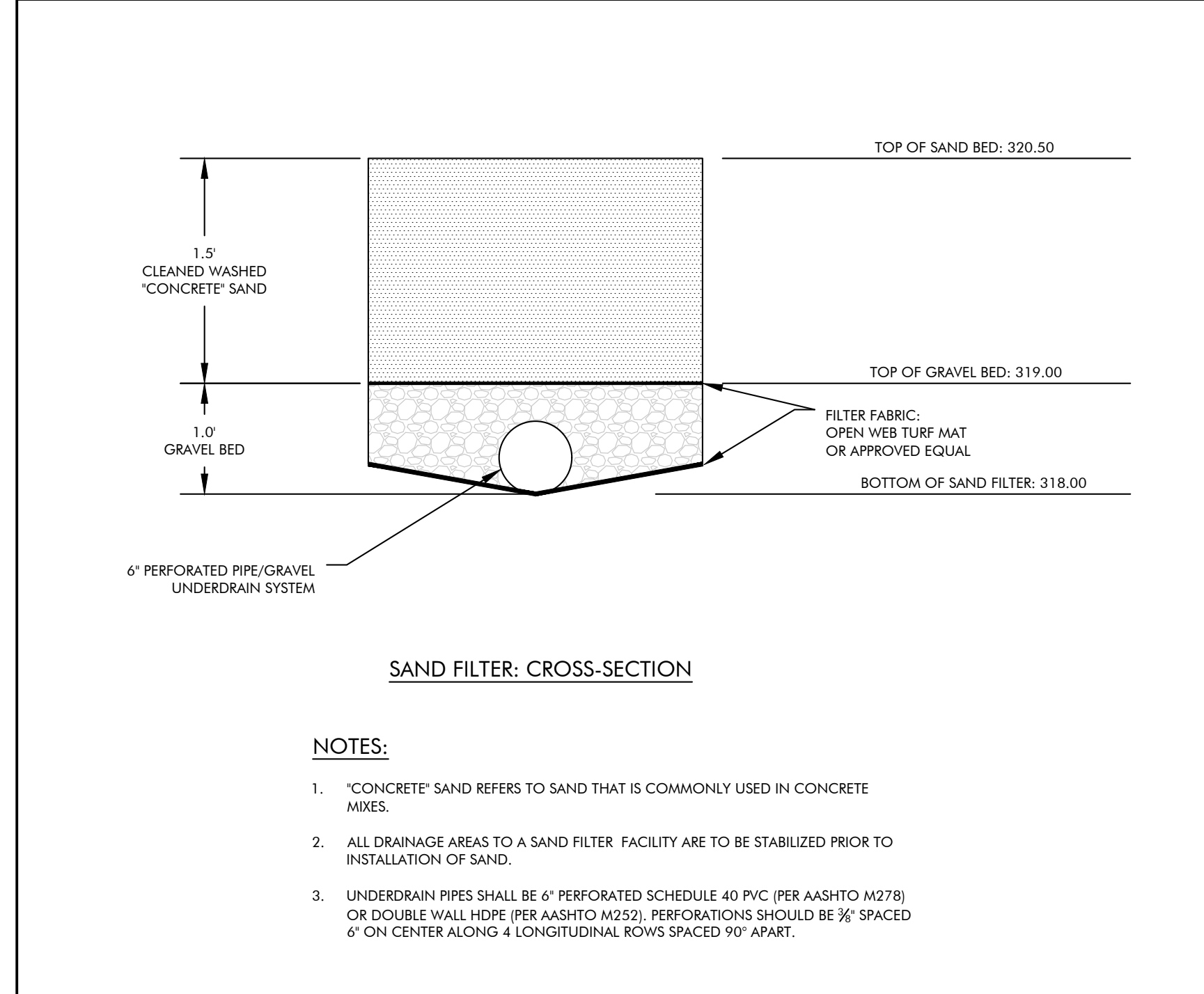
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urbanpartners.com  
nc firm no: P-2671 sc coa no: C-03044



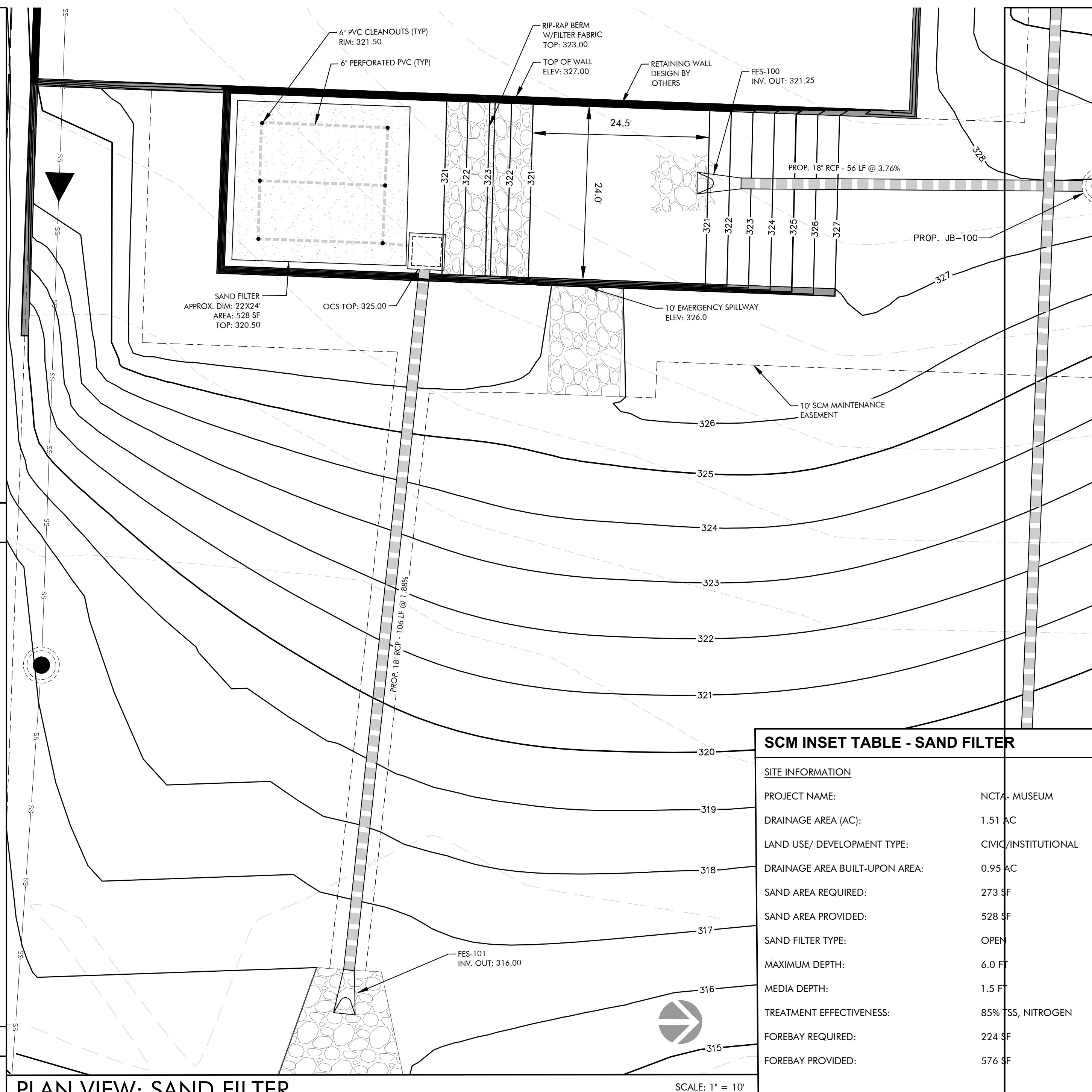
**OUTLET CONTROL STRUCTURE** SCALE: NTS



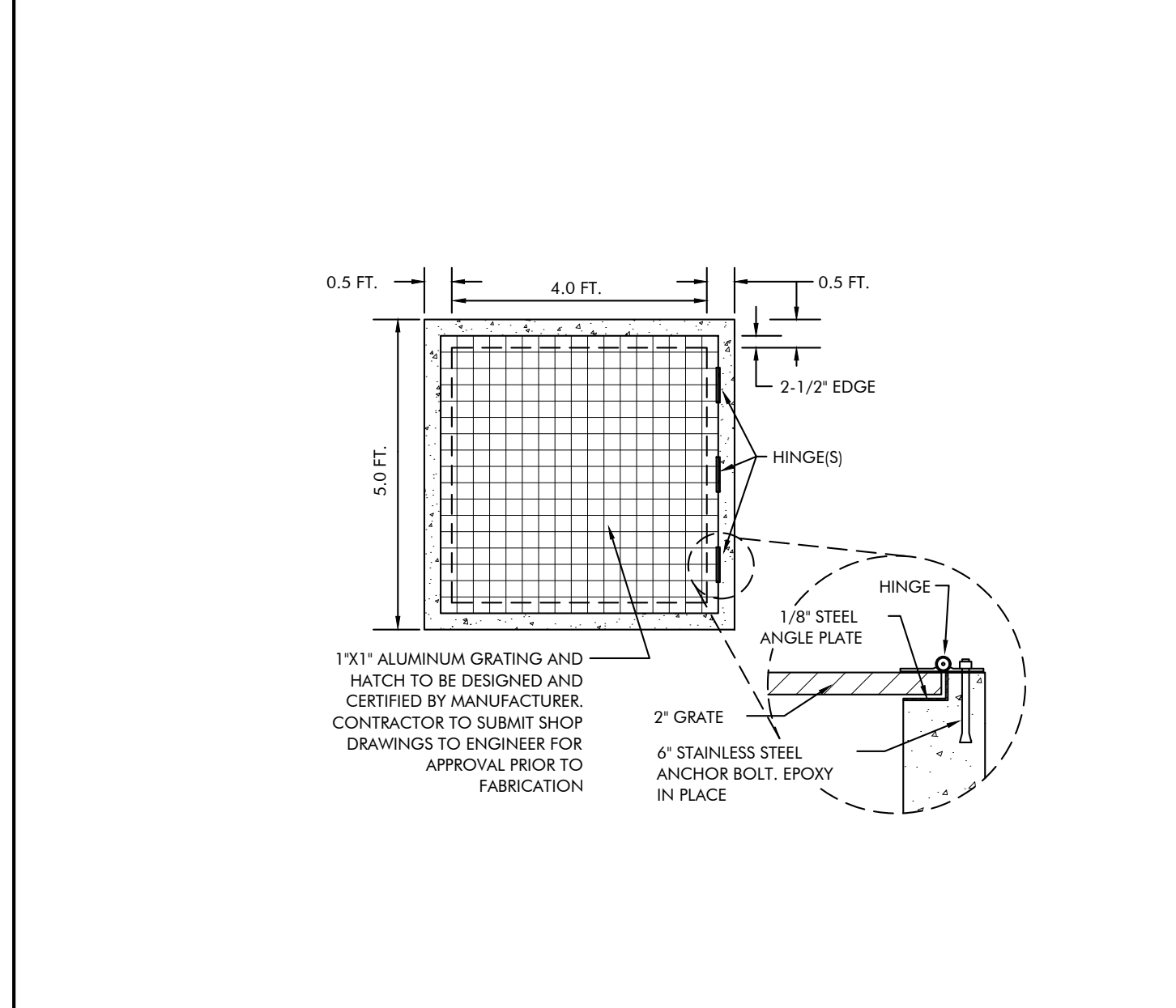
**STRUCTURE PLAN: SAND FILTER** SCALE: NTS



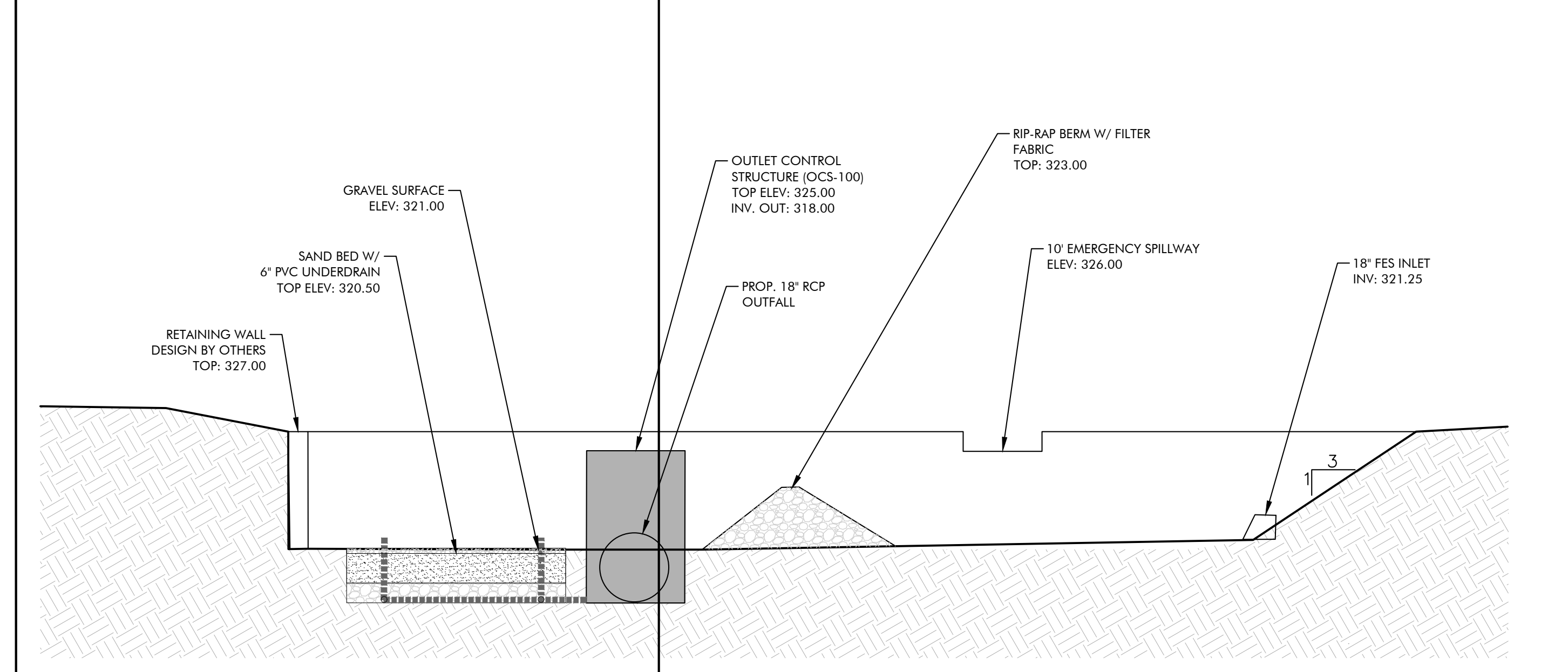
**SECTION: SAND FILTER** SCALE: NTS



**PLAN VIEW: SAND FILTER** SCALE: 1" = 10'



**GRATING DETAIL: SAND FILTER** SCALE: NTS



**SECTION: SAND FILTER** SCALE: NTS

SITE INFORMATION	
PROJECT NAME:	NCTA- MUSEUM
DRAINAGE AREA (AC):	1.51 AC
LAND USE/ DEVELOPMENT TYPE:	CIVIC/ INSTITUTIONAL
DRAINAGE AREA BUILT-UPON AREA:	0.95 AC
SAND AREA REQUIRED:	273 SF
SAND AREA PROVIDED:	528 SF
SAND FILTER TYPE:	OPEN
MAXIMUM DEPTH:	6.0 FT
MEDIA DEPTH:	1.5 FT
TREATMENT EFFECTIVENESS:	85% SS, NITROGEN
FOREBAY REQUIRED:	224 SF
FOREBAY PROVIDED:	576 SF

**SAND FILTER - OPERATION & MAINTENANCE**

**CONSTRUCTION**  
NO RUNOFF SHOULD ENTER THE FILTERS SAND BED UNTIL THE UPSTREAM DRAINAGE AREA IS COMPLETELY STABILIZED AND SITE CONSTRUCTION IS COMPLETED. ANY DISTURBED AREAS WITHIN THE SAND FILTER FACILITY DRAINAGE AREA MUST BE IDENTIFIED AND STABILIZED. FILTRATION CONTROLS MUST ONLY BE CONSTRUCTED AFTER THE CONSTRUCTION SITE IS STABILIZED.

**MAINTENANCE GUIDELINES**  
SAND FILTERS SHALL BE INSPECTED QUARTERLY AND WITHIN 24 HOURS AFTER EVERY STORM EVENT GREATER THAN 1.0-INCH. RECORDS OF OPERATION AND MAINTENANCE WILL BE KEPT IN A KNOWN SET LOCATION AND AVAILABLE UPON REQUEST.

TRASH AND DEBRIS SHOULD BE REMOVED AS NECESSARY. SEDIMENT SHOULD BE CLEANED OUT OF THE SEDIMENT CHAMBER WHEN IT ACCUMULATES TO A DEPTH OF MORE THAN 6 INCHES.

WHEN THE FILTERING CAPACITY OF THE FILTER DIMINISHES SUBSTANTIALLY (E.G. WHEN WATER PONDS ON THE SURFACE OF THE FILTER BED FOR MORE THAN 24 HOURS), THE UNDERLYING 3-INCHES OF FILTER MATERIAL SHOULD BE REMOVED AND REPLACED WITH FRESH MATERIAL. THE REMOVED SEDIMENTS SHOULD BE TESTED AND DISPOSED OF IN AN ACCEPTABLE MANNER (E.G. LANDFILL). SILT/SEDIMENT SHOULD BE REMOVED FROM THE FILTER BED WHEN THE ACCUMULATION EXCEEDS 1-INCH.

THE SAND MEDIA SHALL BE SKIMMED AT LEAST ONCE A YEAR.

VEGETATION WITHIN THE SEDIMENTATION CHAMBER SHOULD BE REMOVED, PREFERABLY BY HAND. PESTICIDES SHOULD BE WIPED ON PLANTS RATHER THAN SPRAYING.

DIRECT MAINTENANCE ACCESS SHOULD BE PROVIDED TO THE PRETREATMENT AREA AND THE FILTER BED.

STRUCTURE SHALL BE CAST IN PLACE CONCRETE. CHANGES TO CONSTRUCTION TYPE SHALL BE APPROVED BY THE CITY OF RALEIGH. A PROFESSIONAL ENGINEER SHALL CERTIFY CONSTRUCTION OF THE STRUCTURE UPON COMPLETION.

**CONSTRUCTION SPECIFICATIONS**

- A. EARTHWORK**
1. THE FOUNDATION AREA SHALL BE CLEARED OF TREES, LOGS, STUMPS, ROOTS, BOULDERS, SOD AND UNSUITABLE SOIL. IF NEEDED TO ESTABLISH VEGETATION, THE TOPSOIL SHALL BE STOCKPILED AND SPREAD ON THE COMPLETED DAM AND SPILLWAYS. THE FOUNDATION AREA SHALL BE THOROUGHLY SCARIFIED BEFORE PLACEMENT OF THE FILL MATERIAL.
  2. EXISTING STREAM CHANNELS IN THE FOUNDATION AREA SHALL BE SLOPED NO STEEPER THAN A RATIO OF ONE HORIZONTAL TO ONE VERTICAL. THEY SHALL BE DEEPENED AND WIDENED AS NECESSARY TO REMOVE ALL STONES, GRAVEL, SAND, STUMPS, ROOTS, AND OTHER OBJECTIONABLE MATERIAL AND TO ACCOMMODATE COMPACTION EQUIPMENT. FOUNDATION AREAS SHALL BE KEPT FREE OF STANDING WATER WHEN FILL IS PLACED ON THEM. THE BORROW AREAS SHALL BE CLEARED OF STUMPS, ROOTS AND UNSUITABLE SOIL. THE WATER QUALITY BASIN SHALL BE CLEARED AND ALL STUMPS REMOVED.
  3. BEFORE FILLING OPERATIONS BEGIN, THE SOILS ENGINEER WILL TAKE REPRESENTATIVE SAMPLES OF EACH PROPOSED FILL MATERIAL AND TEST THEM TO DETERMINE THE COMPACTION AND CLASSIFICATION CHARACTERISTICS (PROCTOR TEST). ONLY THOSE MATERIALS AS APPROVED BY THE SOILS ENGINEER WILL BE USED AS FILL ON THE DAM. GENERALLY SM OR SC CLASSIFICATION SOILS WILL BE ACCEPTABLE. COMPACTIONED EARTH FILLS SHALL BE CONSTRUCTED TO THE ELEVATIONS, LINES, GRADES AND CROSS SECTIONS INDICATED ON THE PLANS.
  4. AFTER STRIPPING OF FOUNDATIONS AND REMOVAL OF WEAK OR UNSUITABLE MATERIALS HAS BEEN COMPLETED, AND BEFORE START OF MATERIAL PLACEMENT, COMPACTED EARTH SHALL BE USED TO FILL ALL STUMP HOLES, MINOR EXCAVATIONS AND DEPRESSIONS FOR CAVITIES INSIDE THE EARTH FILL LIMITS.
  5. FILL SHALL BE PLACED IN HORIZONTAL LAYERS OF NOT MORE THAN (9") LOOSE DEPTH. AS SOON AS FEASIBLE AFTER STARTING CONSTRUCTION OF A FILL SLOPE THE CENTRAL PORTION THEREOF SHALL BE BUILT AND MAINTAINED SLIGHTLY HIGHER THAN THE SIDES TO ALLOW FREE DRAINAGE TO THE SIDE SLOPES.
  6. EACH LAYER OF FILL SHALL BE COMPACTED BY ROLLING WITH COMPACTION EQUIPMENT WHICH IS BEST SUITED FOR THE TYPES OF SOIL ENCOUNTERED. FILL ADJACENT TO PIPE CONDUIT AND ANTISEEP COLLARS SHALL BE COMPACTED BY HAND. EACH LAYER OF FILL SHALL BE COMPACTED TO NOT LESS THAN 95% MAXIMUM DRY DENSITY (STANDARD PROCTOR) WITHIN 2% OF OPTIMUM MOISTURE CONTENT. WETTING OR DRYING OF THE MATERIAL AND MANIPULATION TO SECURE UNIFORM MOISTURE CONTENT THROUGHOUT EACH LAYER SHALL BE REQUIRED. DENSITY TESTS WILL BE PERFORMED AT A FREQUENCY AS SPECIFIED BY THE SOILS ENGINEER. AS A MINIMUM, TESTS WILL BE PERFORMED ON EVERY THIRD LIFT OR EVERY 1000 CUBIC YARDS WHICHEVER COMES FIRST. ALSO DENSITY TEST WILL BE PERFORMED WHENEVER FILL MATERIAL CHARACTERISTICS CHANGE.
- B. OUTLET DEVICE**
1. OUTLET DEVICE COMPONENTS ARE TO FABRICATED AS SHOWN ON THE PLANS.
  2. CONTRACTOR TO SUBMIT DESIGNED SHOP DRAWINGS TO THE CIVIL ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION TO THE OUTLET DEVICE. SHOP DRAWINGS SHOULD INCLUDE PRECAST BOX DESIGN, TRASH RACK, GRATED COVER, ALUMINUM STEPS, AND ALL DRAIN/ORIFICE PIPING REQUIRED.
- C. CONCRETE**
1. ALL CONCRETE SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR READY MIXED CONCRETE, ASTM C 94. AN AIR-ENTRAINING ADMIXTURE SHALL BE ADDED. THE CONCRETE SHALL BE PROPORTIONED TO MEET THE FOLLOWING REQUIREMENTS:  
COMPRESSIVE STRENGTH: MINIMUM 3600 PSI  
WATER-CEMENT RATIO: 0.40 - 0.50  
SLUMP: MINIMUM 3", MAXIMUM 5"  
AIR CONTENT: MINIMUM 5%, MAXIMUM 8%  
COARSE AGGREGATE: 1" - 1 1/2"
- D. GRASSING**
1. GRASS ALL AREAS DISTURBED BY CONSTRUCTION PER SPECIFICATION OF EROSION CONTROL DETAIL SHEET.
- E. PLANTING**
1. PLANTINGS ARE DESIGNED PER THE GUIDANCE OF THE HARP (HABITAT ASSESSMENT AND RESTORATION PROGRAM) MANUAL.
  2. ADDITIONAL PLANTING INFORMATION CAN BE FOUND IN TABLE 2.2 OF THE NORTH CAROLINA BEST MANAGEMENT PRACTICES GUIDELINES.

North Carolina  
Troopers Association  
3228 GARNER RD  
RALEIGH, NC 27610

**North Carolina Troopers  
Association - Museum**  
SCM Plan & Details  
3405 Garner Rd Raleigh, NC 27610

NO.	DATE	BY	REVISIONS:

Project No: 23-RDU-022  
Date: 11.08.2023  
Sheet No:

**C-5.1**

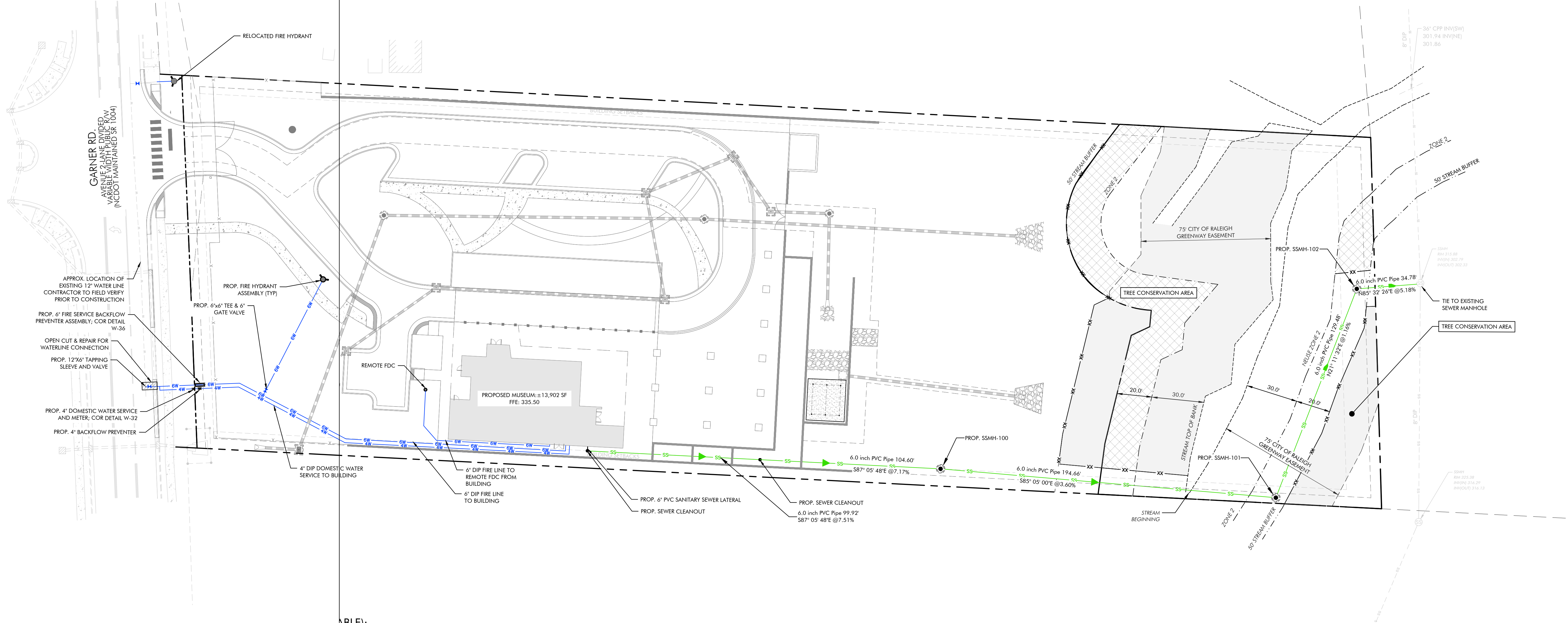


**UTILITIES SUMMARY:**

4" WATER LINE	250 LF
6" WATER LINE	425 LF
6" SANITARY SEWER MAIN	563 LF
NUMBER OF HYDRANTS	2
NUMBER OF MANHOLES	3
NUMBER OF CLEANOUTS	2

**UTILITY LEGEND:**

ITEM	IDENTIFIER	SYMBOL	ITEM	IDENTIFIER	SYMBOL
8" WATER LINE	8W		OVERHEAD ELECTRIC LINE	OHE	
6" WATER LINE	6W		UNDERGROUND ELECTRIC LINE	UGE	
2" WATER LINE	2W		UTILITY POLE	Ø	
WATER METER			TELECOM LINE	TEL	
BACKFLOW PREVENTOR	BFP		STORM DRAINAGE		
GATE VALVE	GV		EX. STORM DRAINAGE		
REDUCER			EX. OVERHEAD ELECTRIC	ohe	
BLOW OFF ASSEMBLY	BO		EX. TELEPHONE	t	
HYDRANT ASSEMBLY	HYD		EX. UNDERGROUND ELECTRIC	uge	
FIRE DEP. CONNECTION	FDC		EX. UNDERGROUND TELEPHONE	ugt	
SEWER LINE	SS		EX. SEWER FORCE MAIN	FM	
SEWER FORCE MAIN	FM		EX. WATER LINE	w	
MANHOLE	MH		EX. GAS LINE	g	
SANITARY SEWER CLEAN OUT	SSCO		EX. UTILITY POLE		
GAS LINE					



- APPROX. LOCATION OF EXISTING 12" WATER LINE CONTRACTOR TO FIELD VERIFY PRIOR TO CONSTRUCTION
- PROP. 6" FIRE SERVICE BACKFLOW PREVENTER ASSEMBLY; COR DETAIL W-36
- OPEN CUT & REPAIR FOR WATERLINE CONNECTION
- PROP. 12"x6" TAPPING SLEEVE AND VALVE
- PROP. 4" DOMESTIC WATER SERVICE AND METER; COR DETAIL W-32
- PROP. 4" BACKFLOW PREVENTER

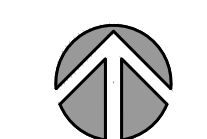
**NOTES:**

- WITH CITY OF RALEIGH DESIGN STANDARDS, EDITION]
- SEWER & ANY PRIVATE OR PUBLIC ED AS A SOURCE OF DRINKING ID, FERROUS SANITARY SEWER PIPE I, HOWEVER, THE MINIMUM OR 50' FROM A PUBLIC WELL
- SEPARATION BETWEEN UTILITIES TO EXISTING CONDITIONS, THE WITH THE ELEVATION OF THE WATER DE DIAMETER TO OUTSIDE DIAMETER
- TIME A SANITARY SEWER PASSES NDED 10' ON EACH SIDE OF CROSSING
- ALL SANITARY SEWER & STORM SEWER
- RCP STORM DRAIN CROSSINGS; R & RCP STORM DRAIN CROSSINGS. DIP MATERIALS & A CONCRETE & S-49)
- VER FACILITIES WITH 18" MIN.
- 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
- DEVELOPER SHALL PROVIDE 30 DAYS ADVANCE WRITTEN NOTICE TO OWNER FOR ANY WORK REQUIRED WITH AN EXISTING CITY OF RALEIGH UTILITY EASEMENT TRAVERSING PRIVATE PROPERTY.
- 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
- 3.0' MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCE MAINS. 4.0' MINIMUM COVER IS REQUIRED ON ALL REUSE MAINS
- 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 4" DUCTILE IRON WATER SERVICES WITH METERS LOCATED AT ROW OR WITHIN A 2'x2' 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.
- INSTALL 6" 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 MANHOLE
- 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.

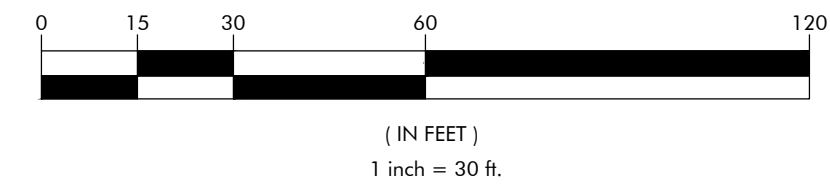
- NCDOT / RAILROAD ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK (INCLUDING MAIN EXTENSIONS & SERVICE TAPS) WITHIN STATE OR RAILROAD ROW PRIOR TO CONSTRUCTION
- GREASE INTERCEPTOR / OIL WATER SEPARATOR SIZING CALCULATIONS & INSTALLATION SPECIFICATIONS SHALL BE APPROVED BY THE CORPUD FOG PROGRAM COORDINATOR PRIOR TO ISSUANCE OF A BUILDING PERMIT. CONTACT STEPHEN CALVERLEY AT (919) 996-2334 OR STEPHEN.CALVERLEY@RALEIGHNC.GOV FOR MORE INFORMATION
- 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 MANUFACTURERS 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.



**BEFORE YOU DIG!**  
CALL 811 OR 1-800-632-4949  
N.C. ONE-CALL CENTER  
IT'S THE LAW!



GRAPHIC SCALE



North Carolina  
Troopers Association

# North Carolina Troopers Association - Museum Utility Plan

3228 GARNER RD  
RALEIGH, NC 27610

3405 Garner Rd Raleigh, NC 27610

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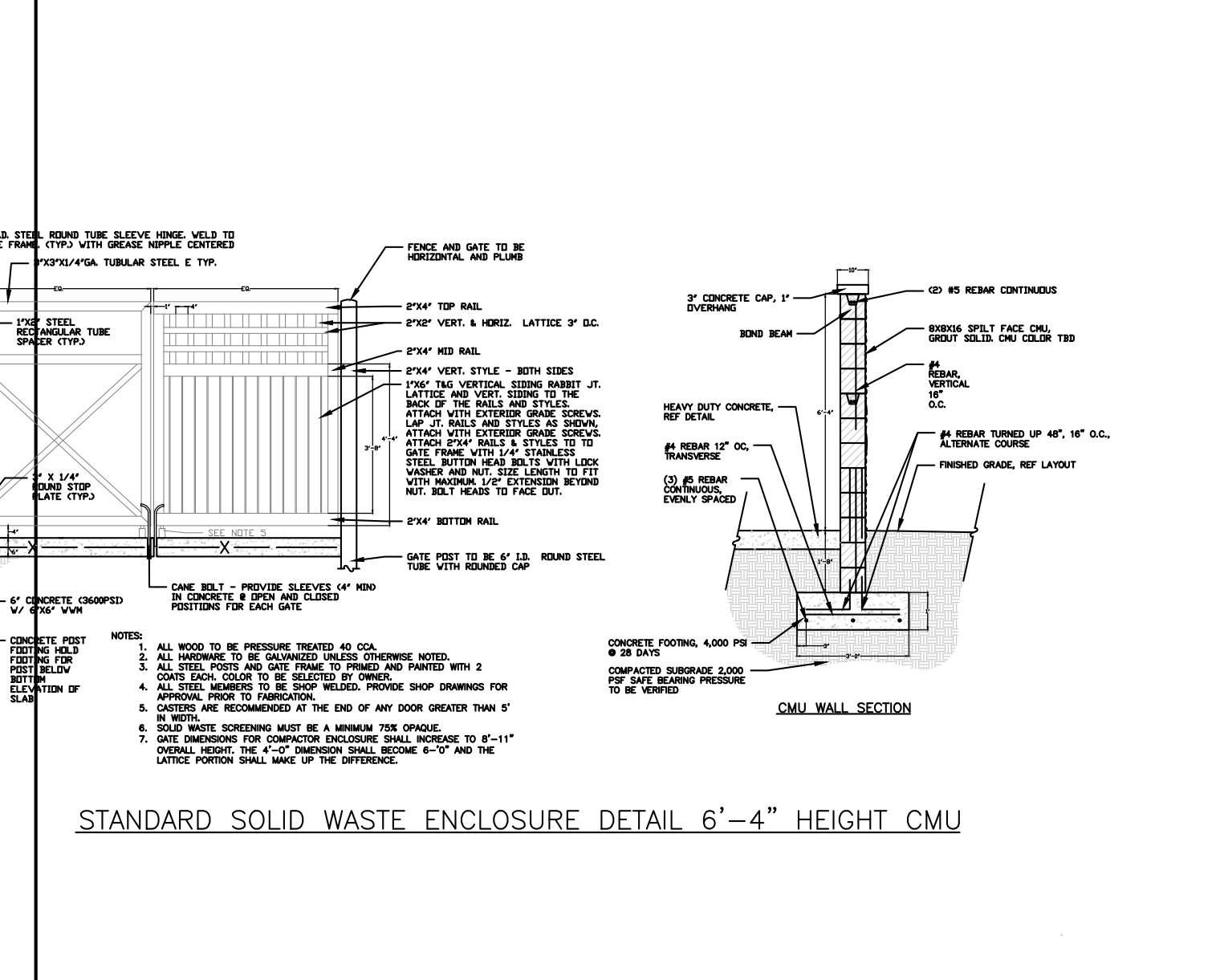
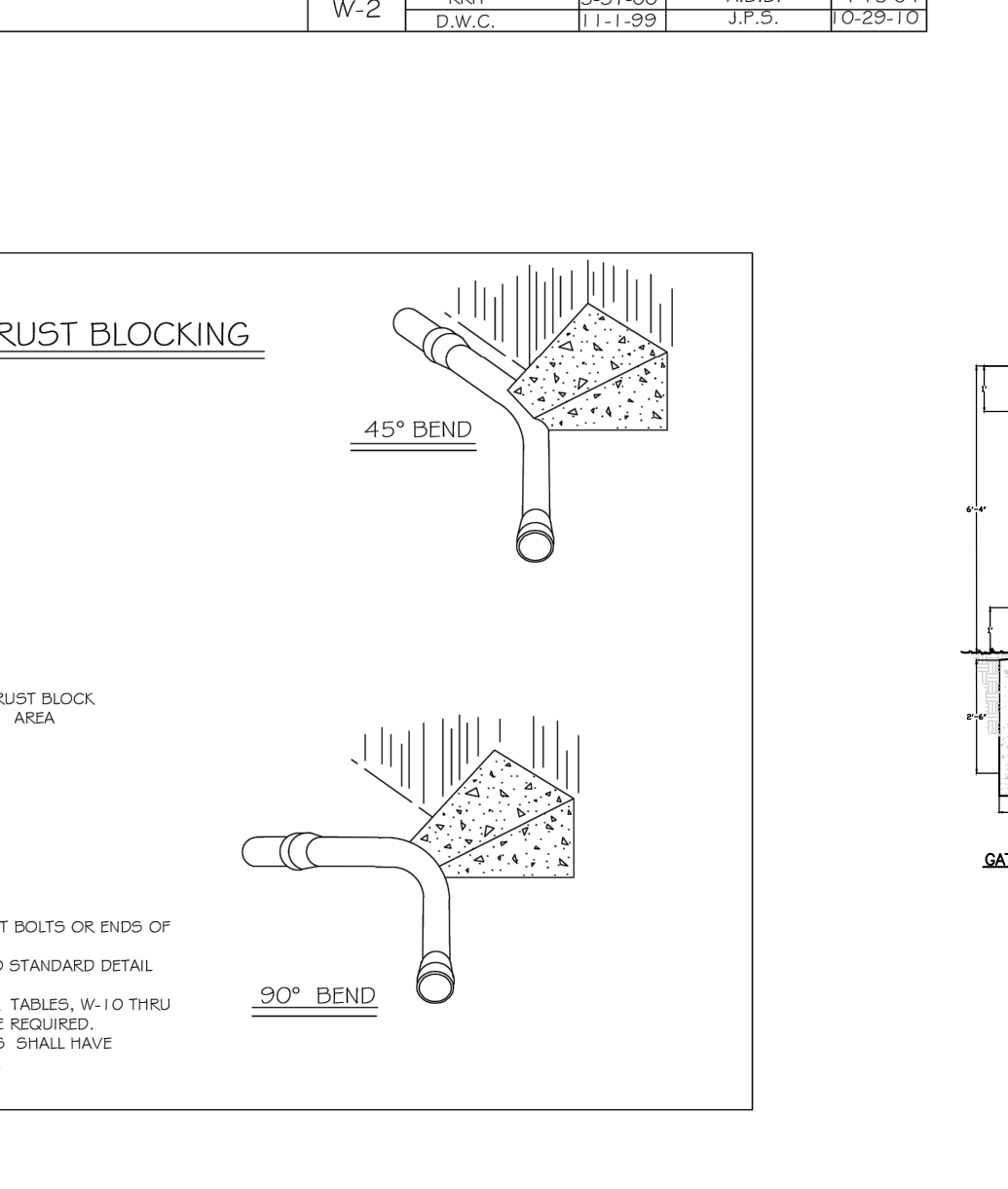
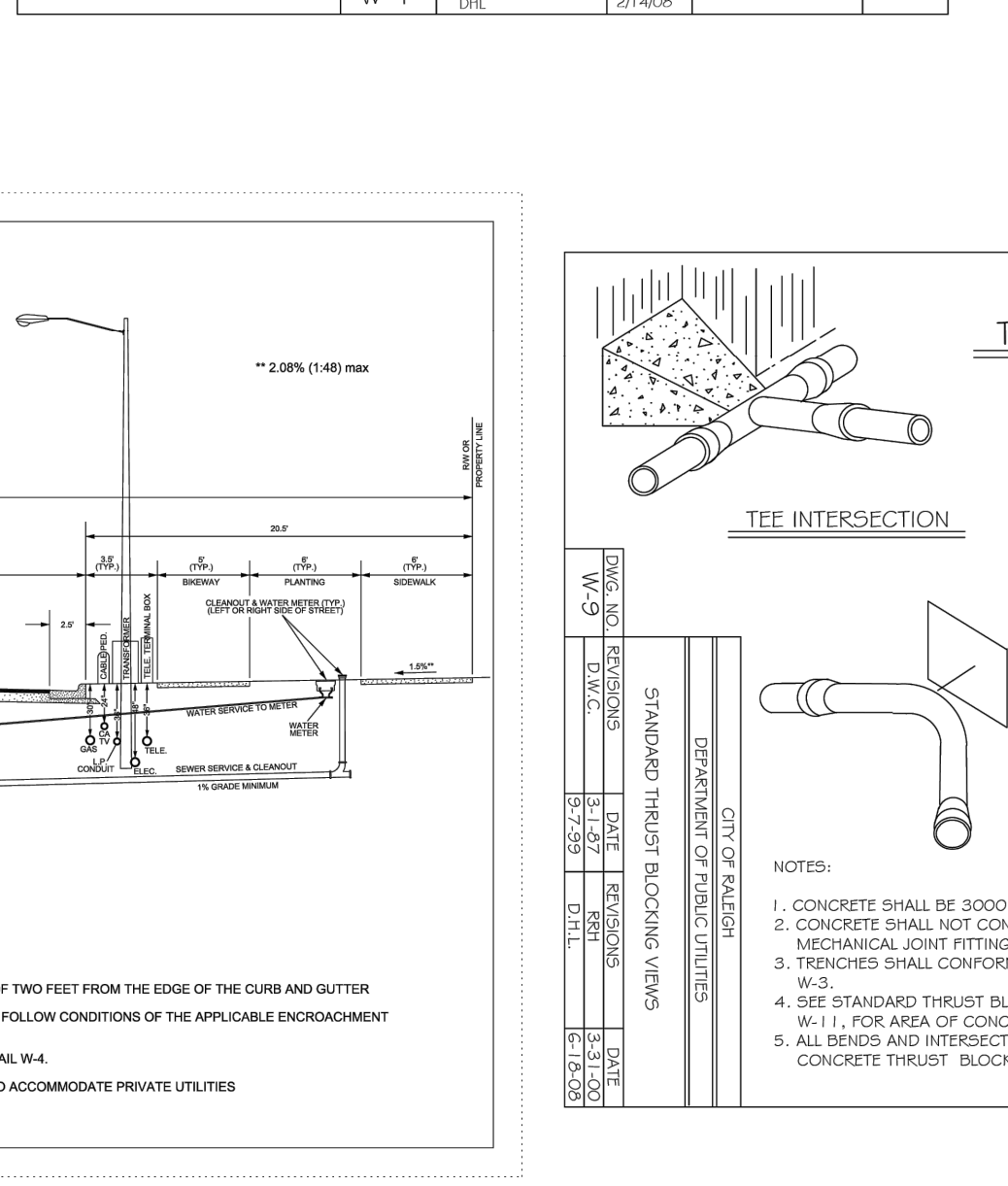
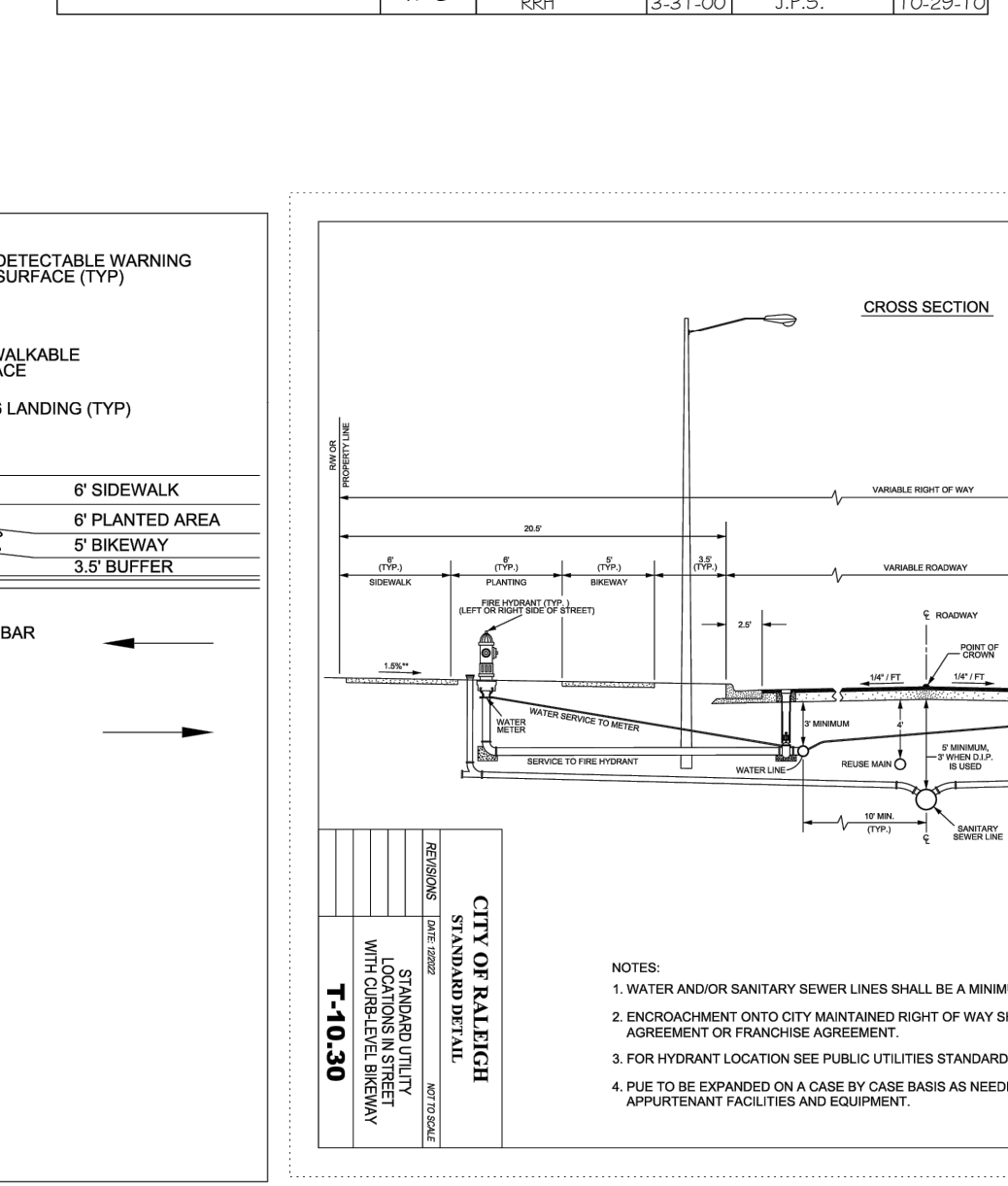
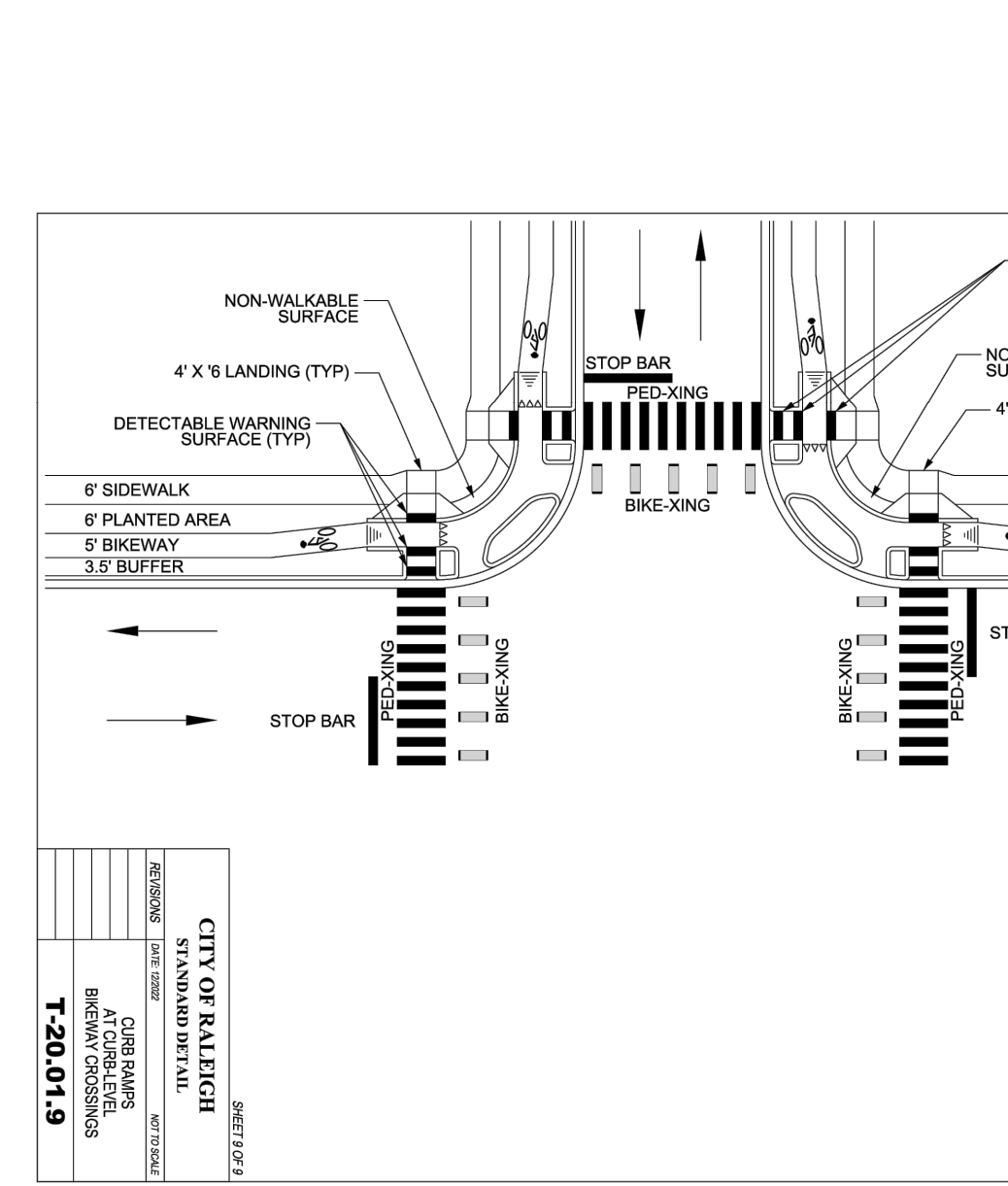
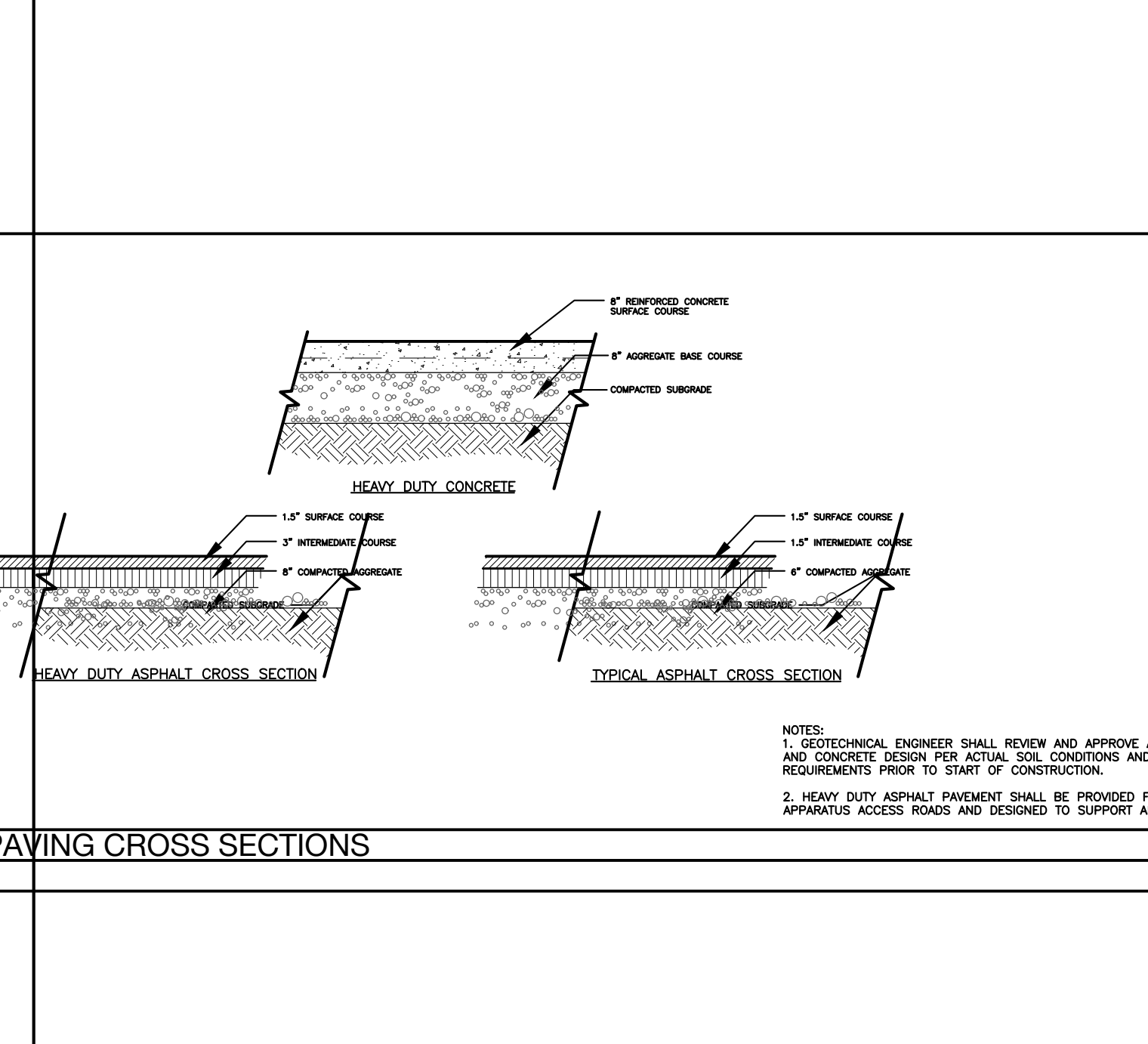
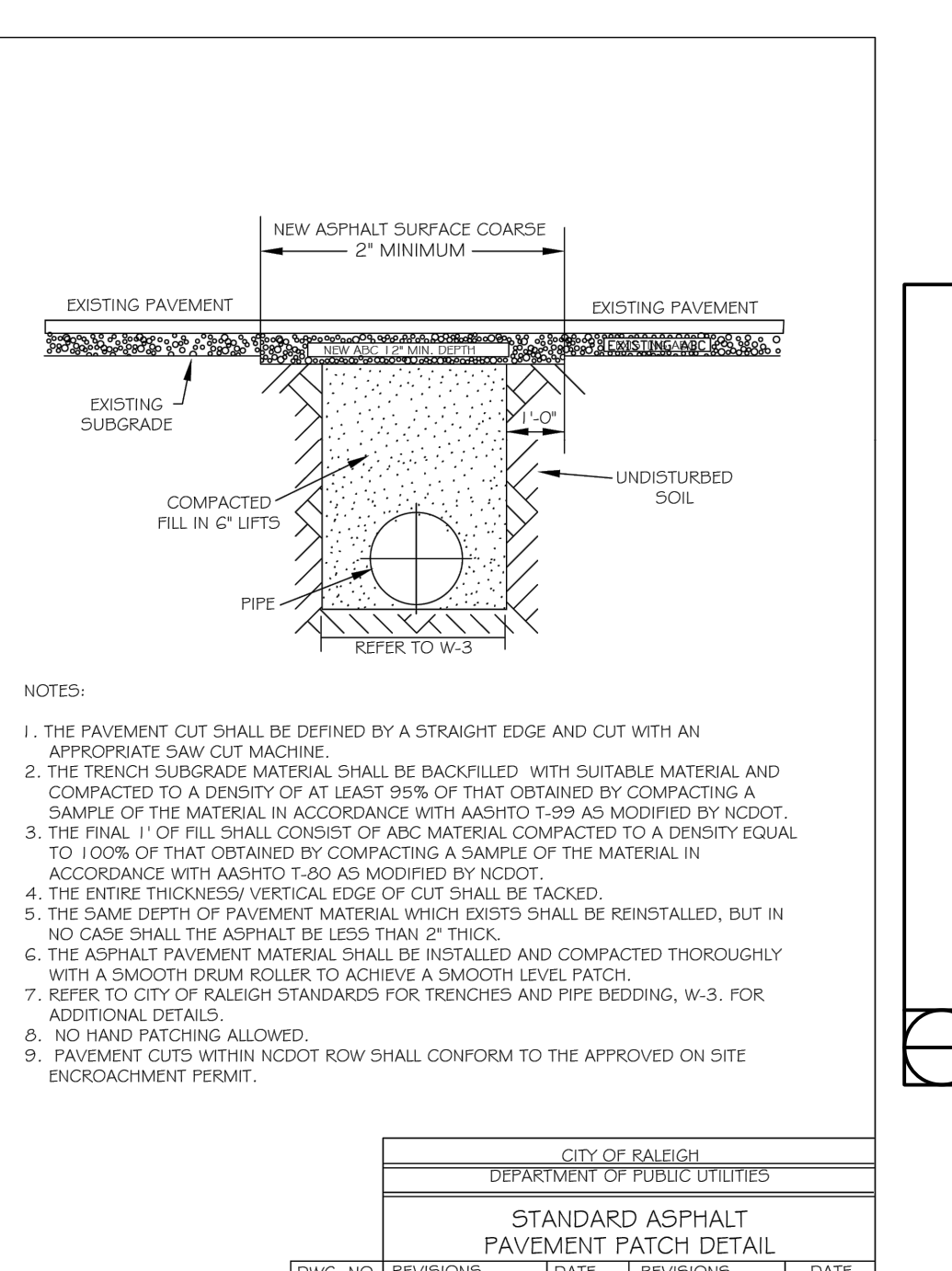
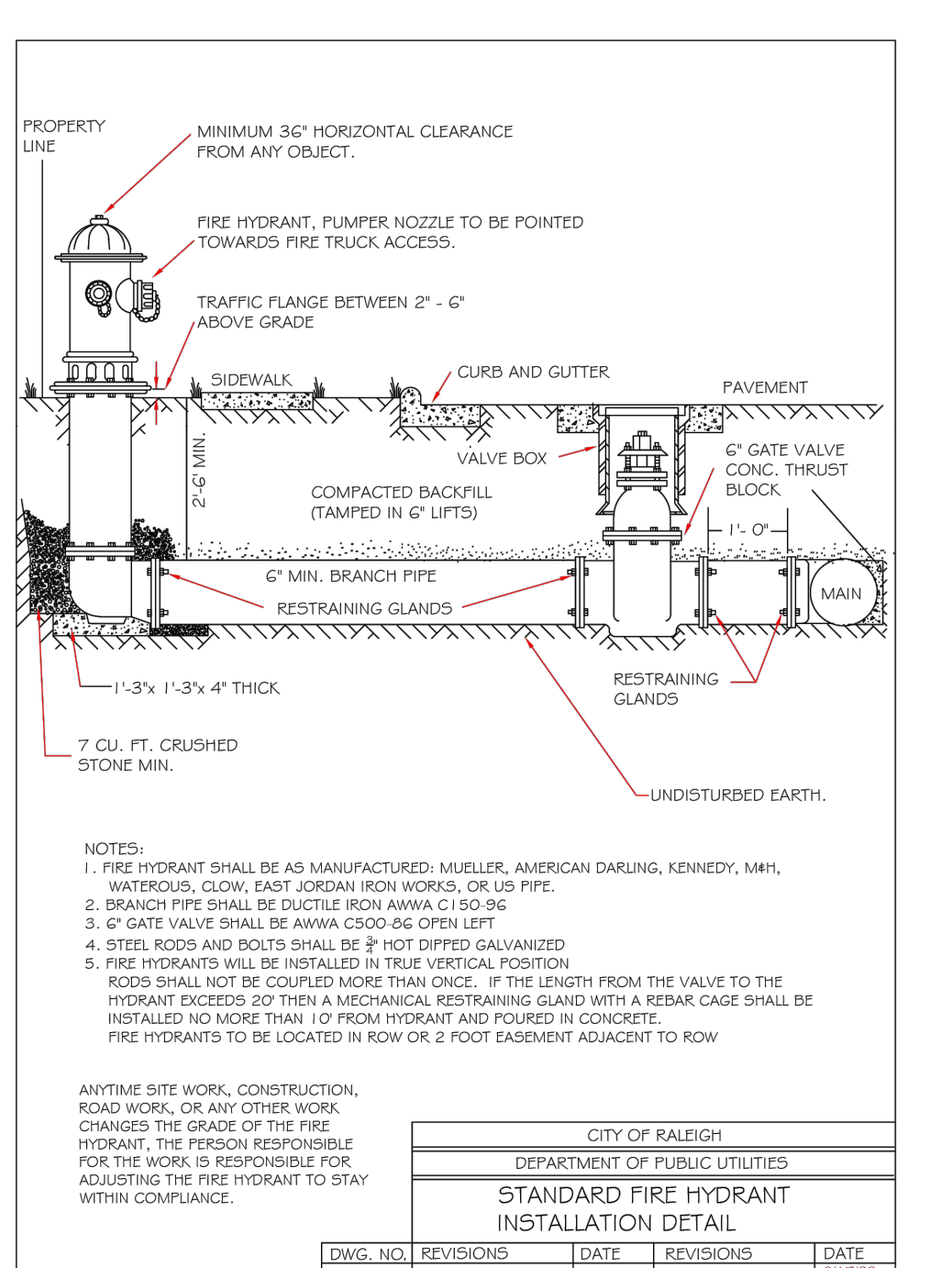
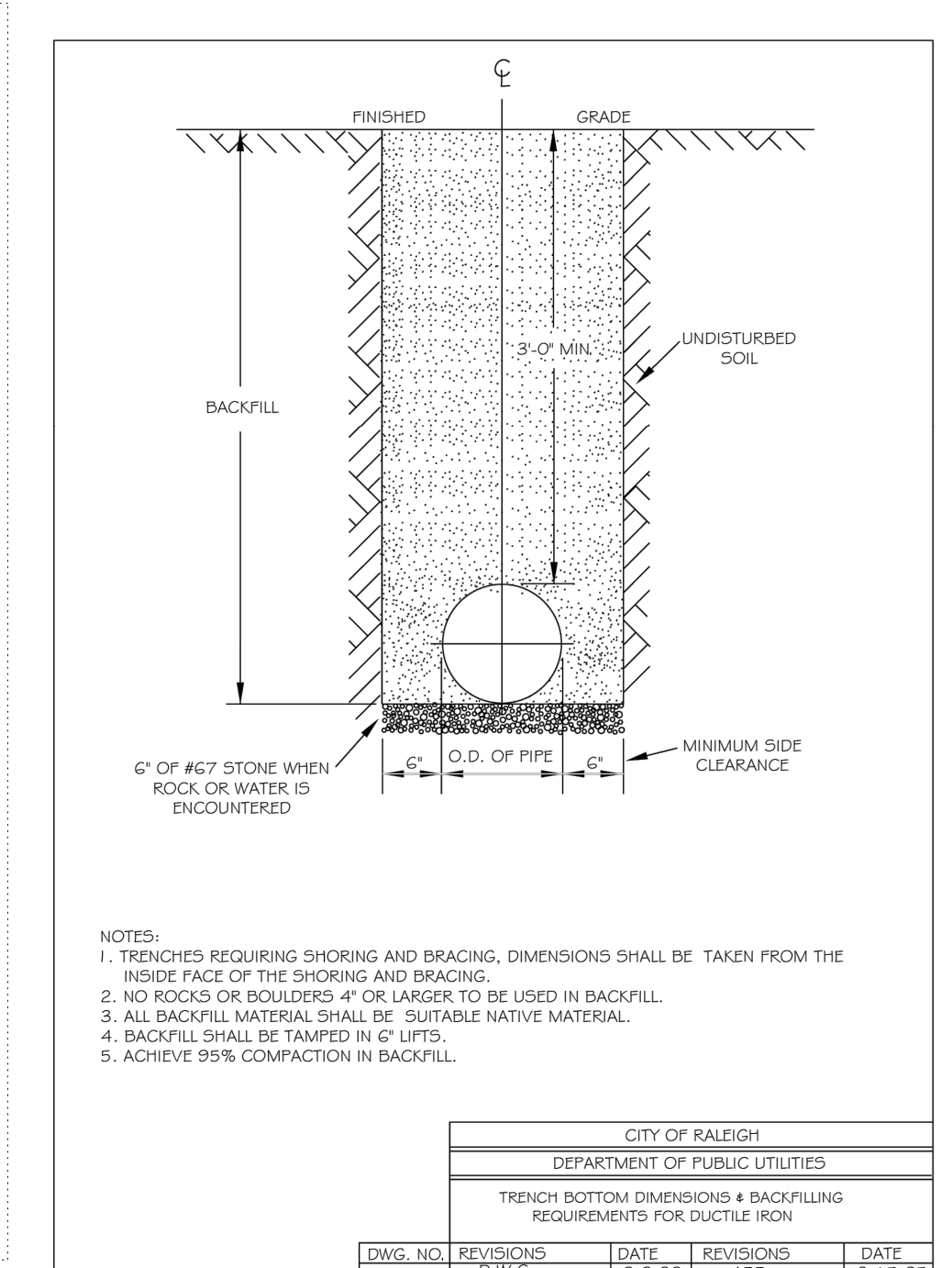
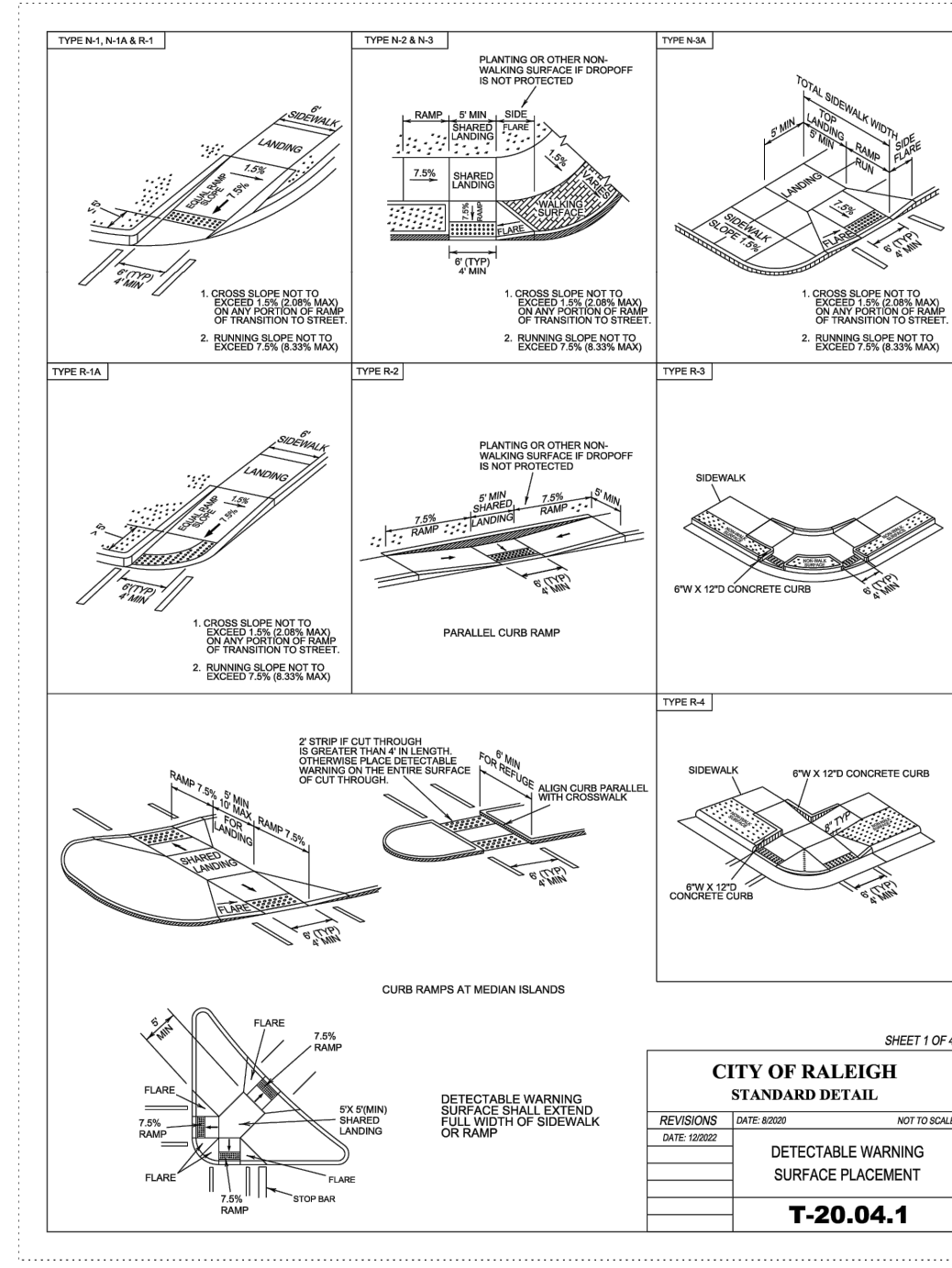
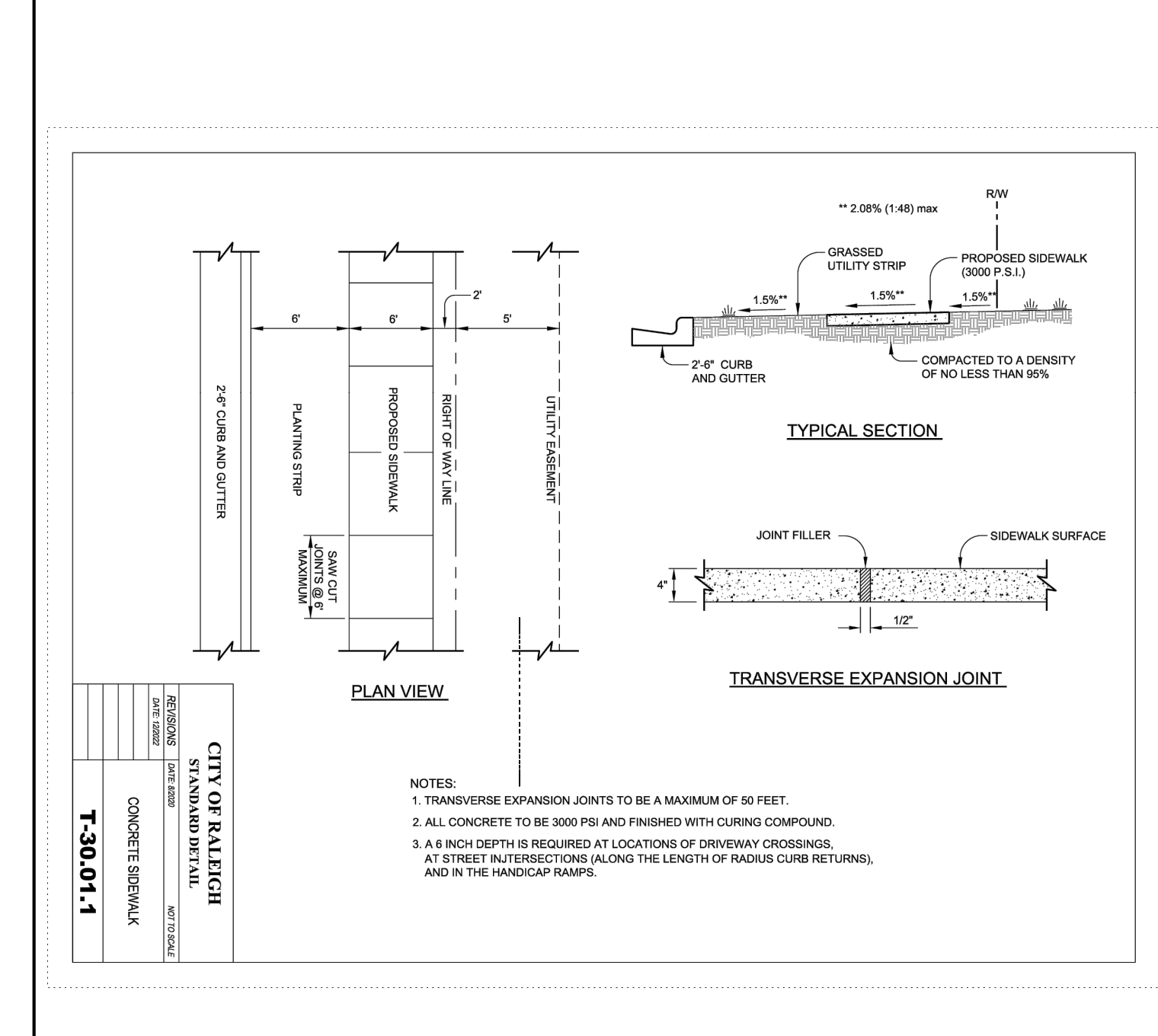
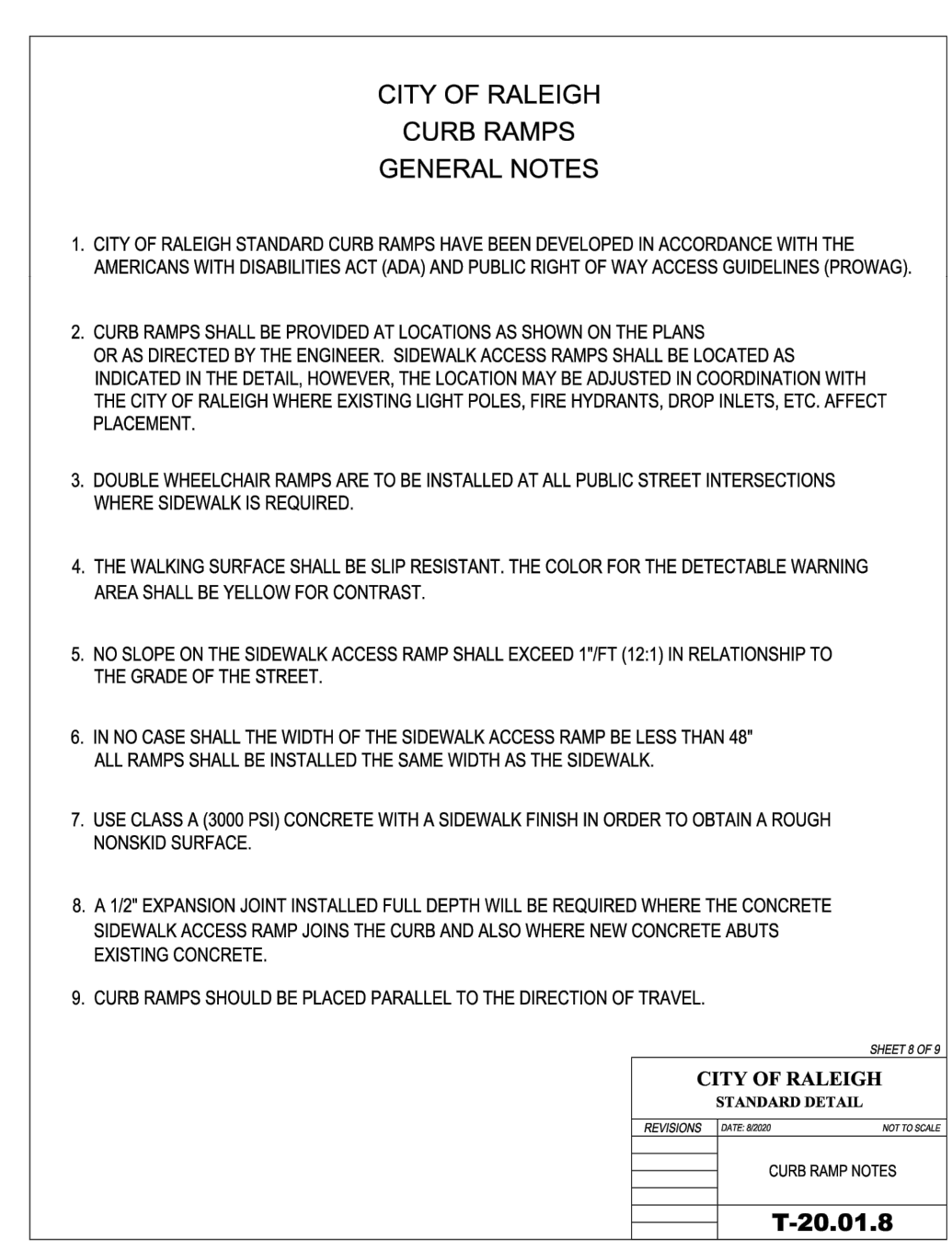
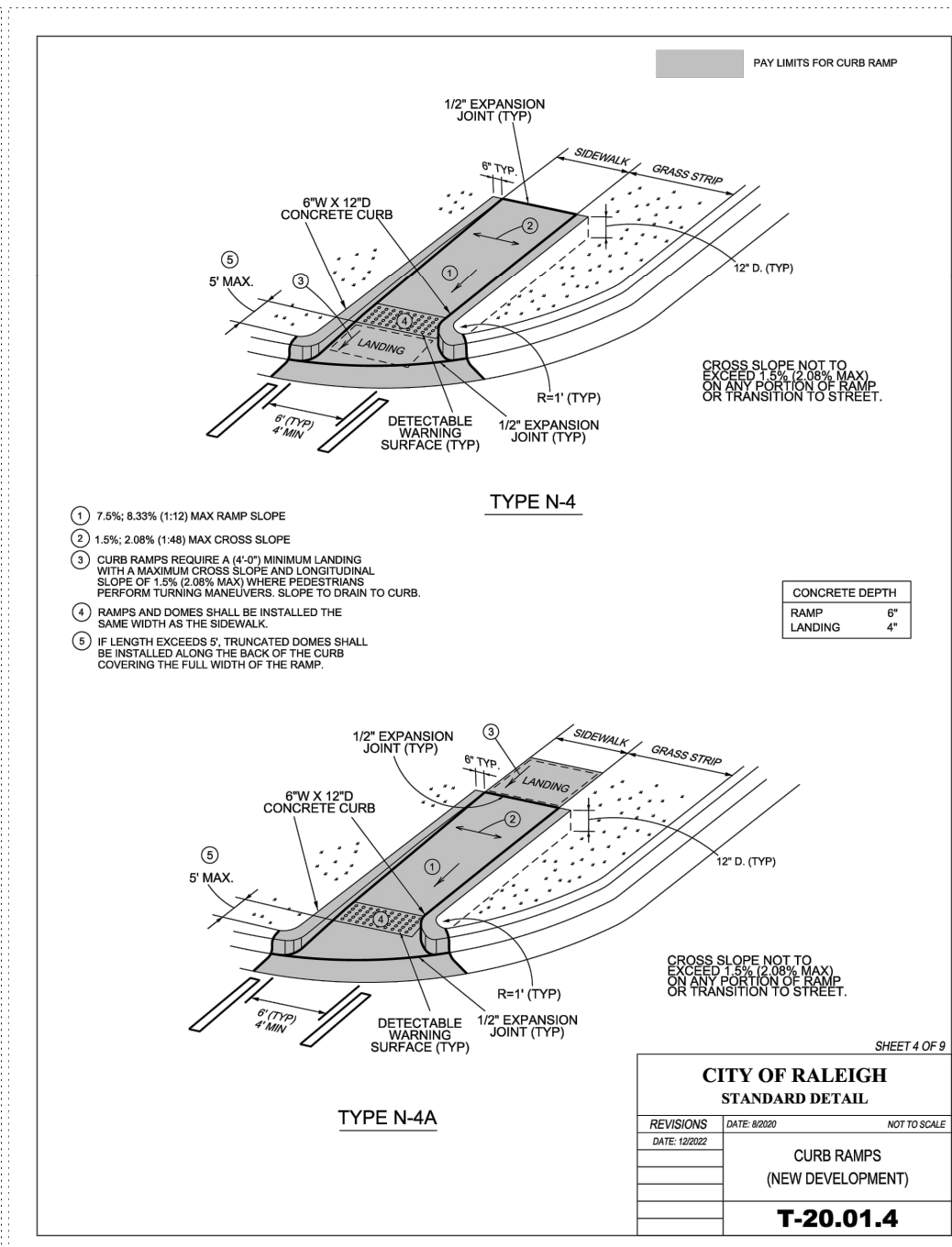
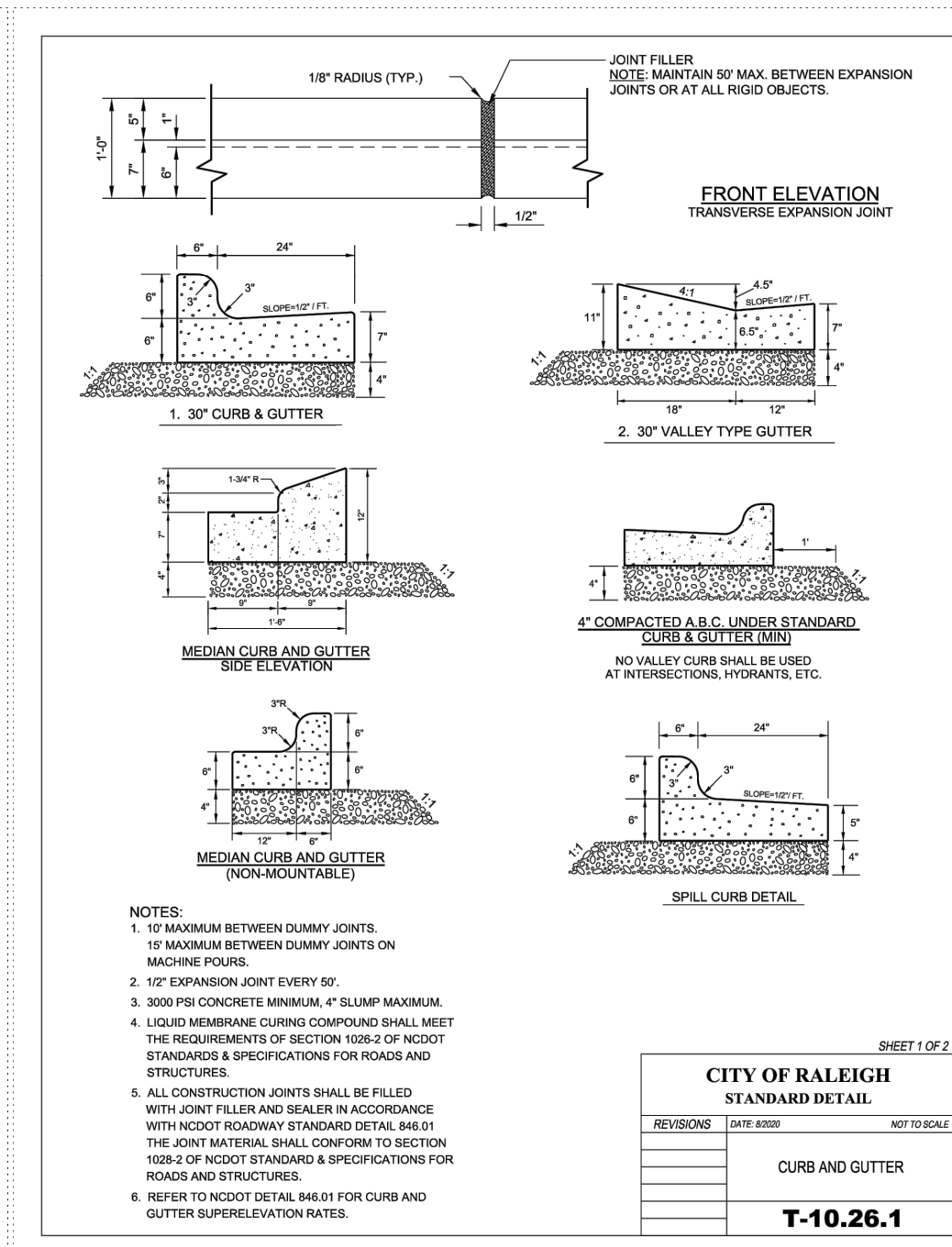
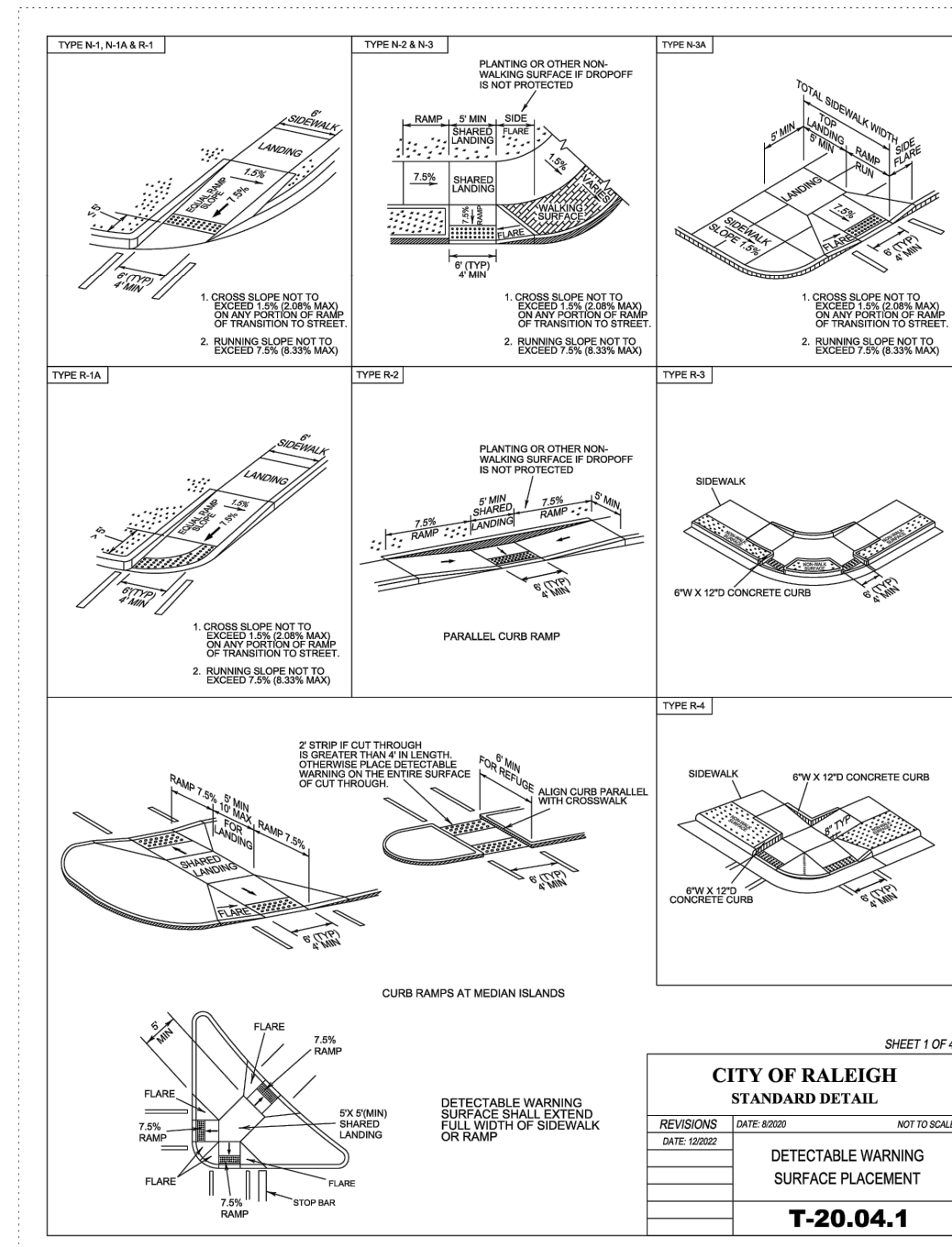
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North Carolina Troopers Association  
3228 GARNER RD  
RALEIGH, NC 27610

North Carolina Troopers Association - Museum Site Specifications & Details  
3405 Garner Rd Raleigh, NC 27610

NO.	DATE	BY	REVISIONS:

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Date: 11.08.2023  
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**C-8.0**



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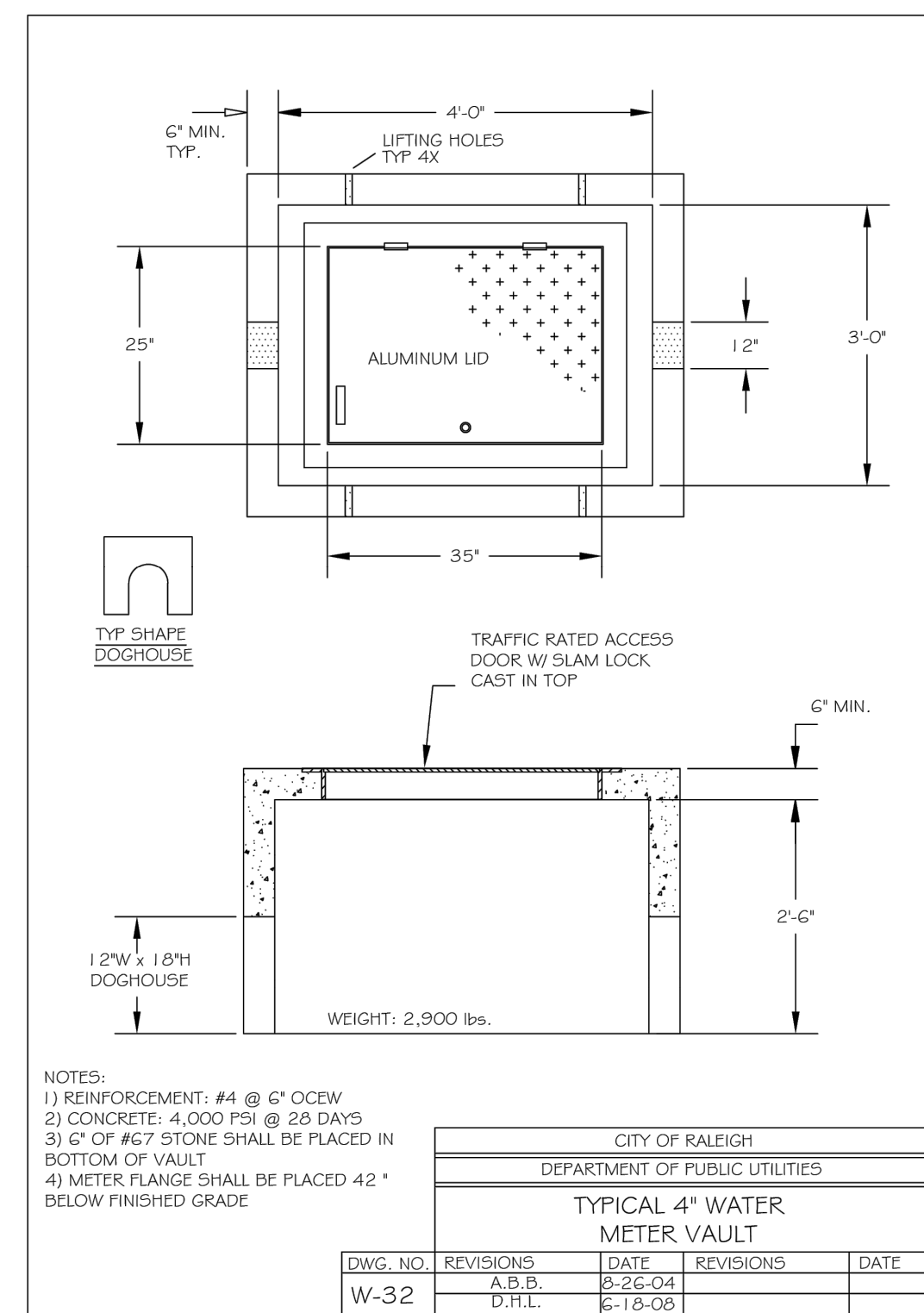
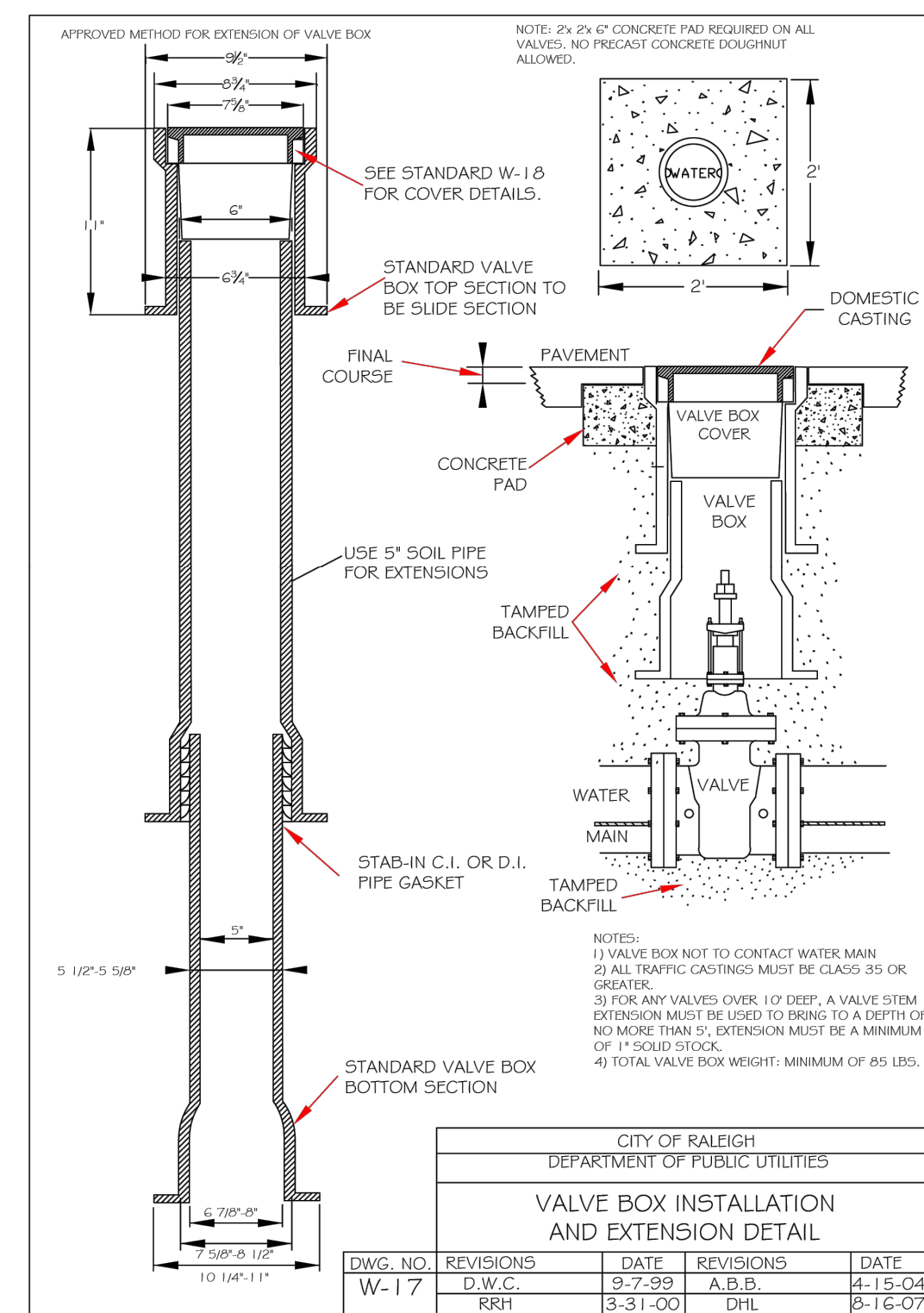
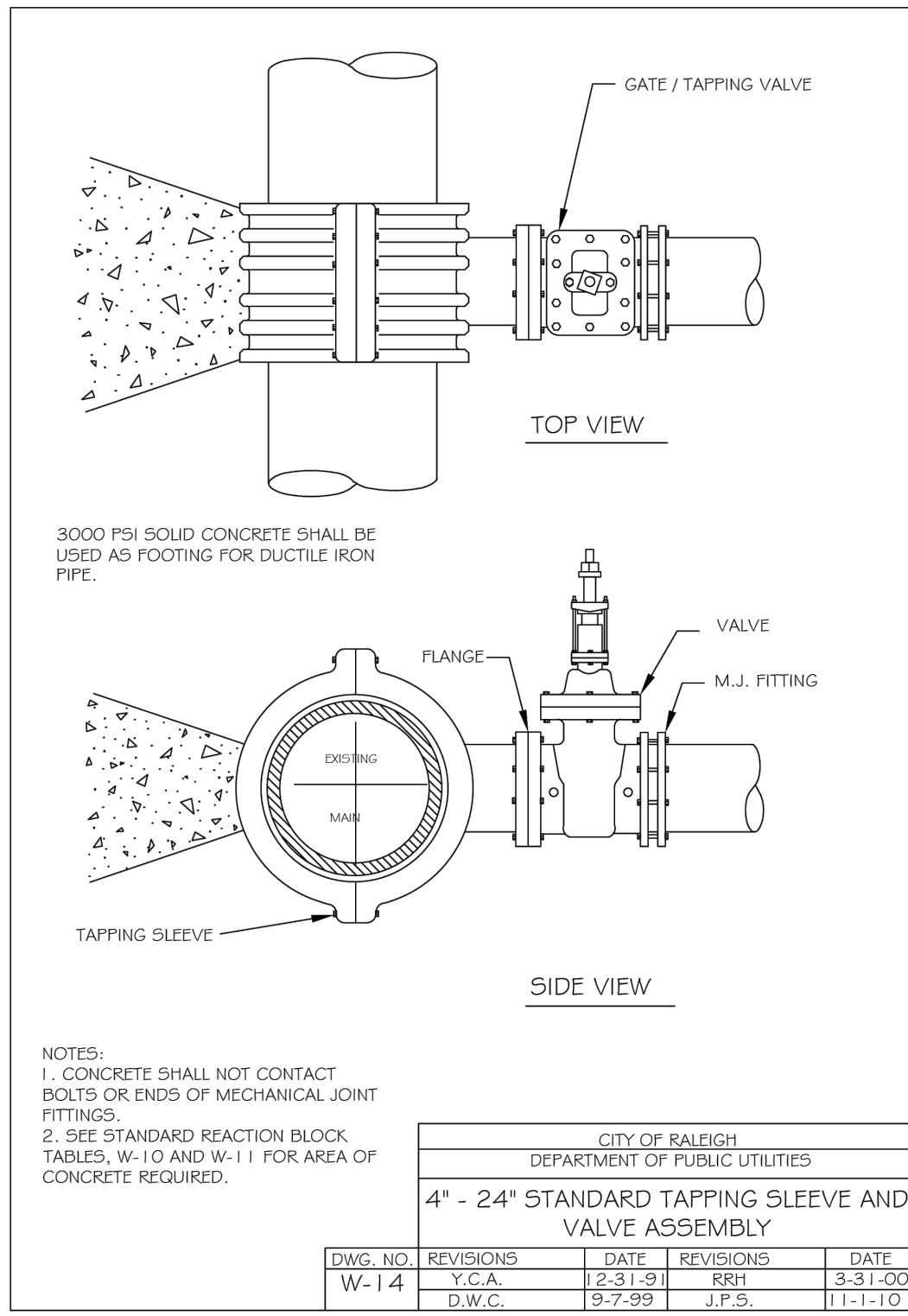
# North Carolina Troopers Association - Museum Site Specifications & Details

3405 Garner Rd Raleigh, NC 27610

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Sheet No:

## C-8.1



**REACTION BEARING AREAS FOR HORIZONTAL WATER PIPE BENDS**  
BASED ON TEST PRESSURE OF 200 P.S.I.

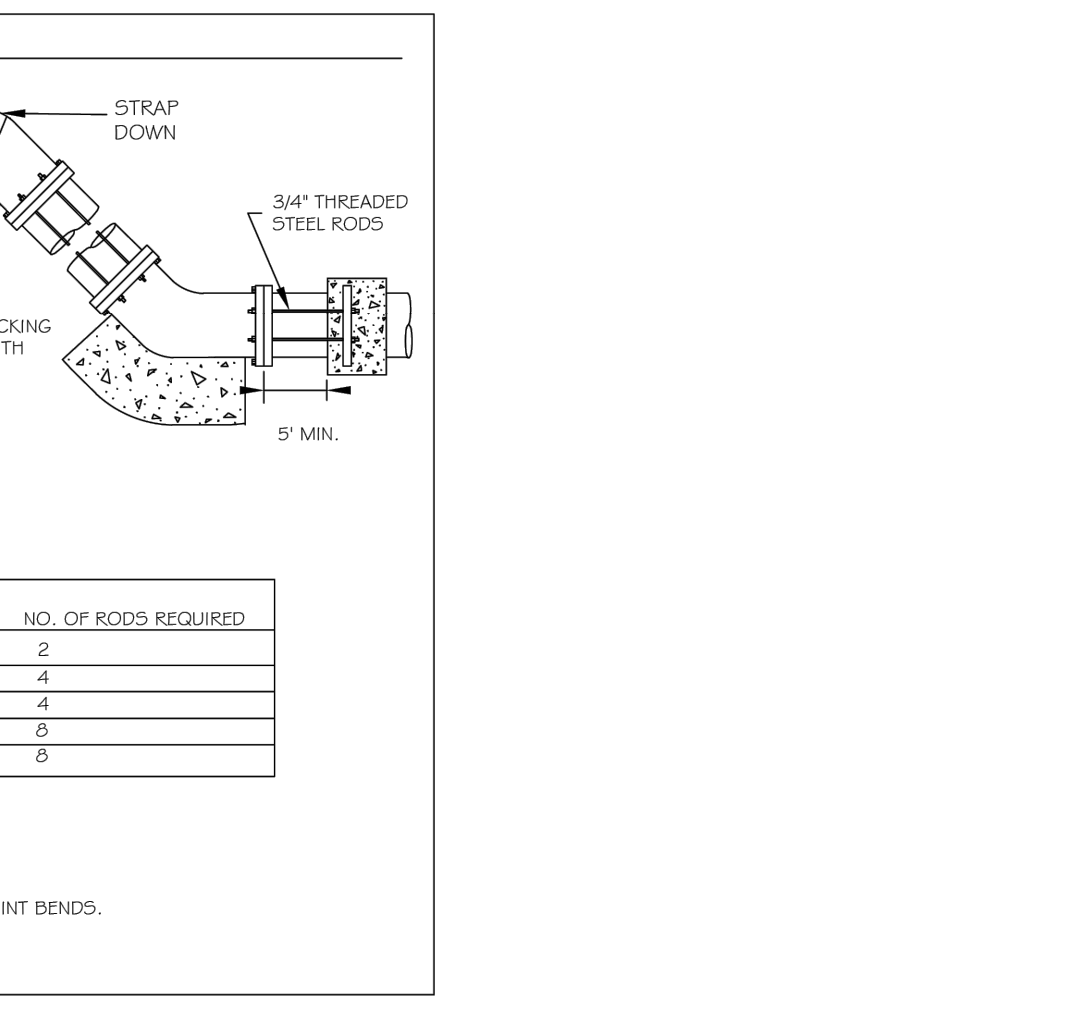
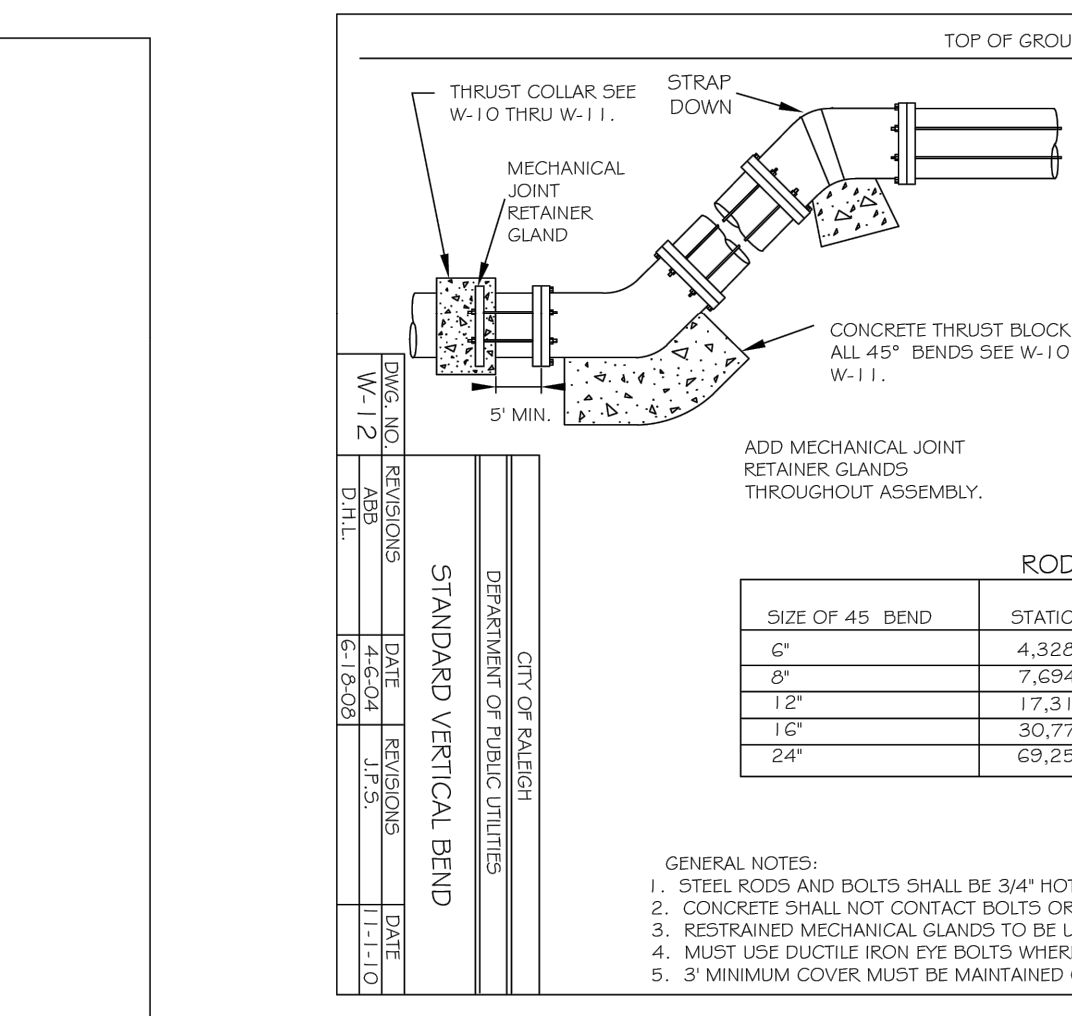
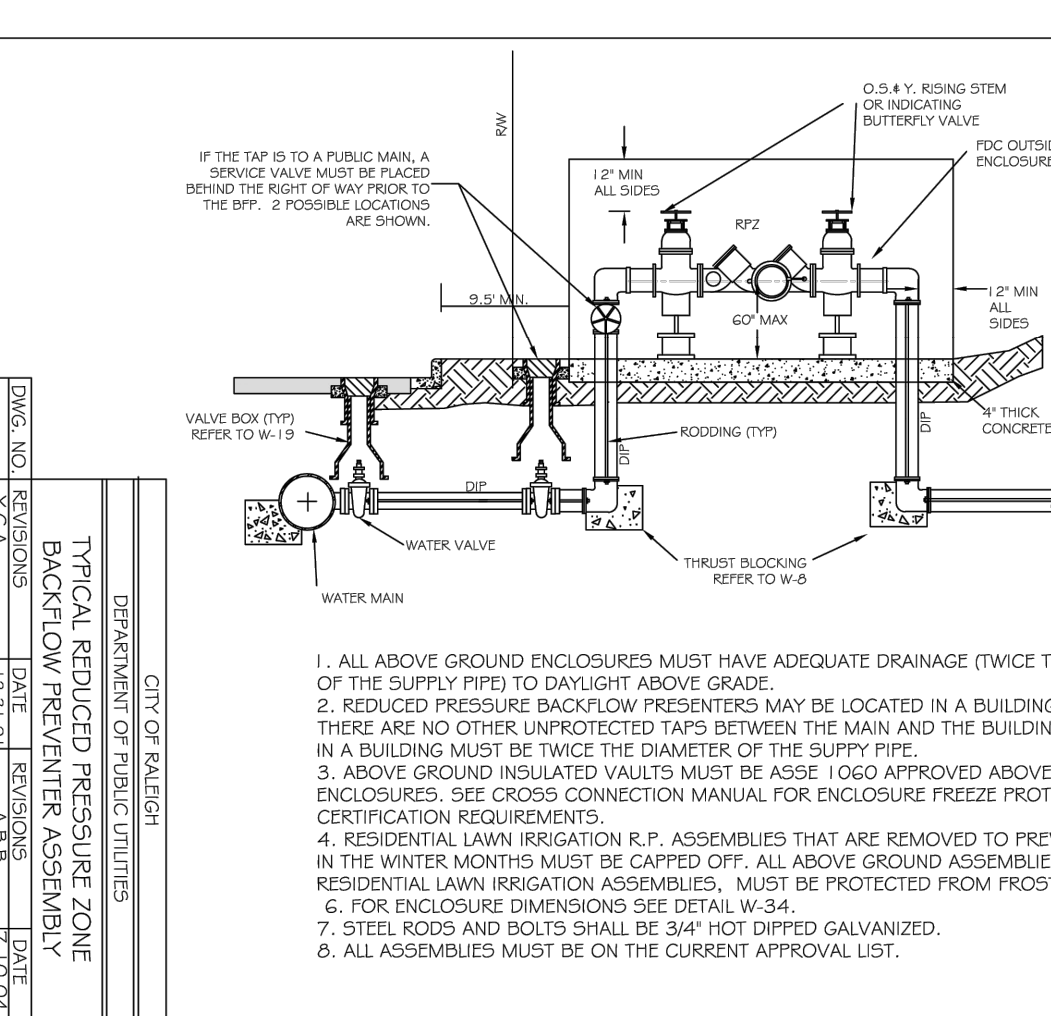
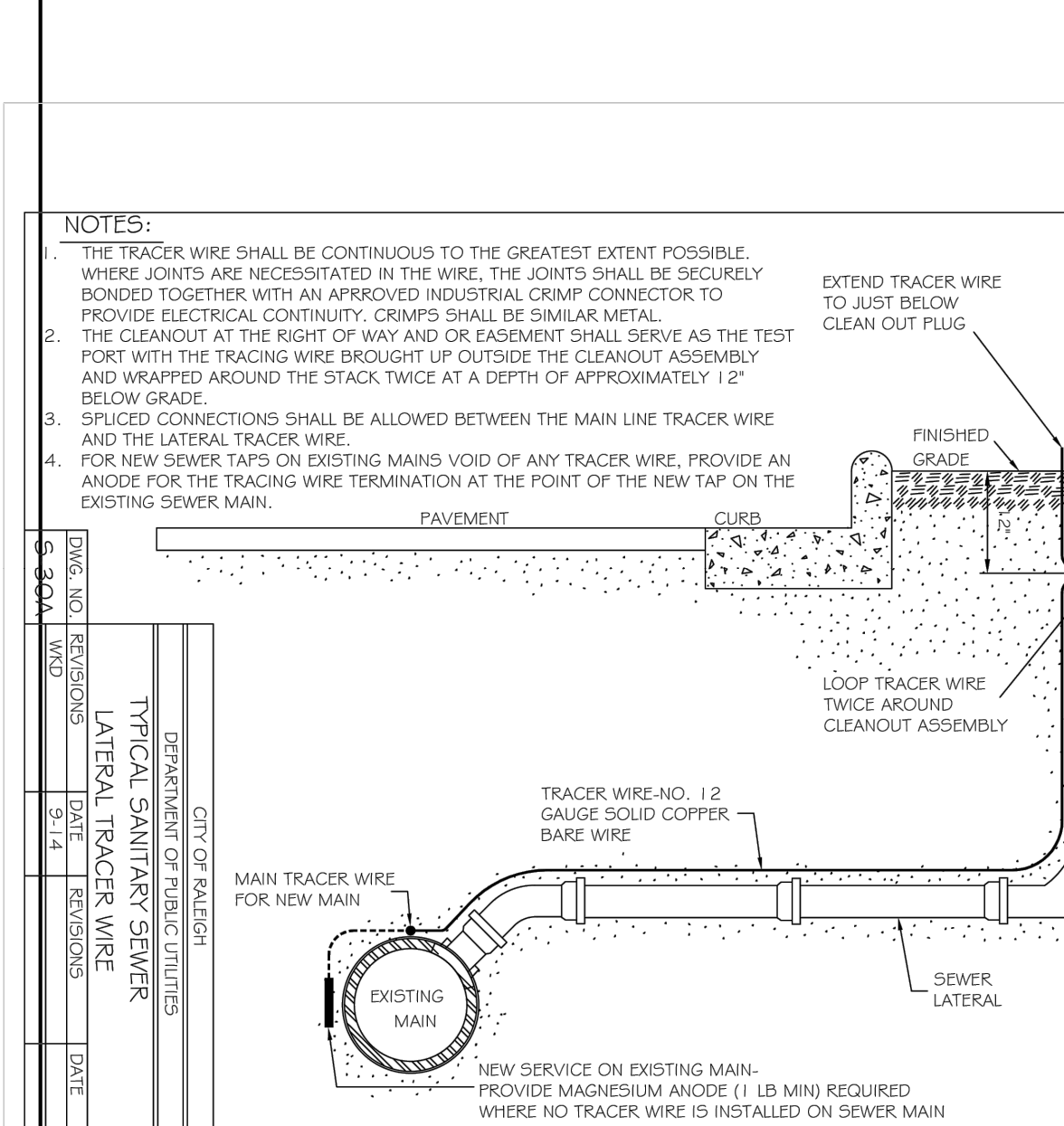
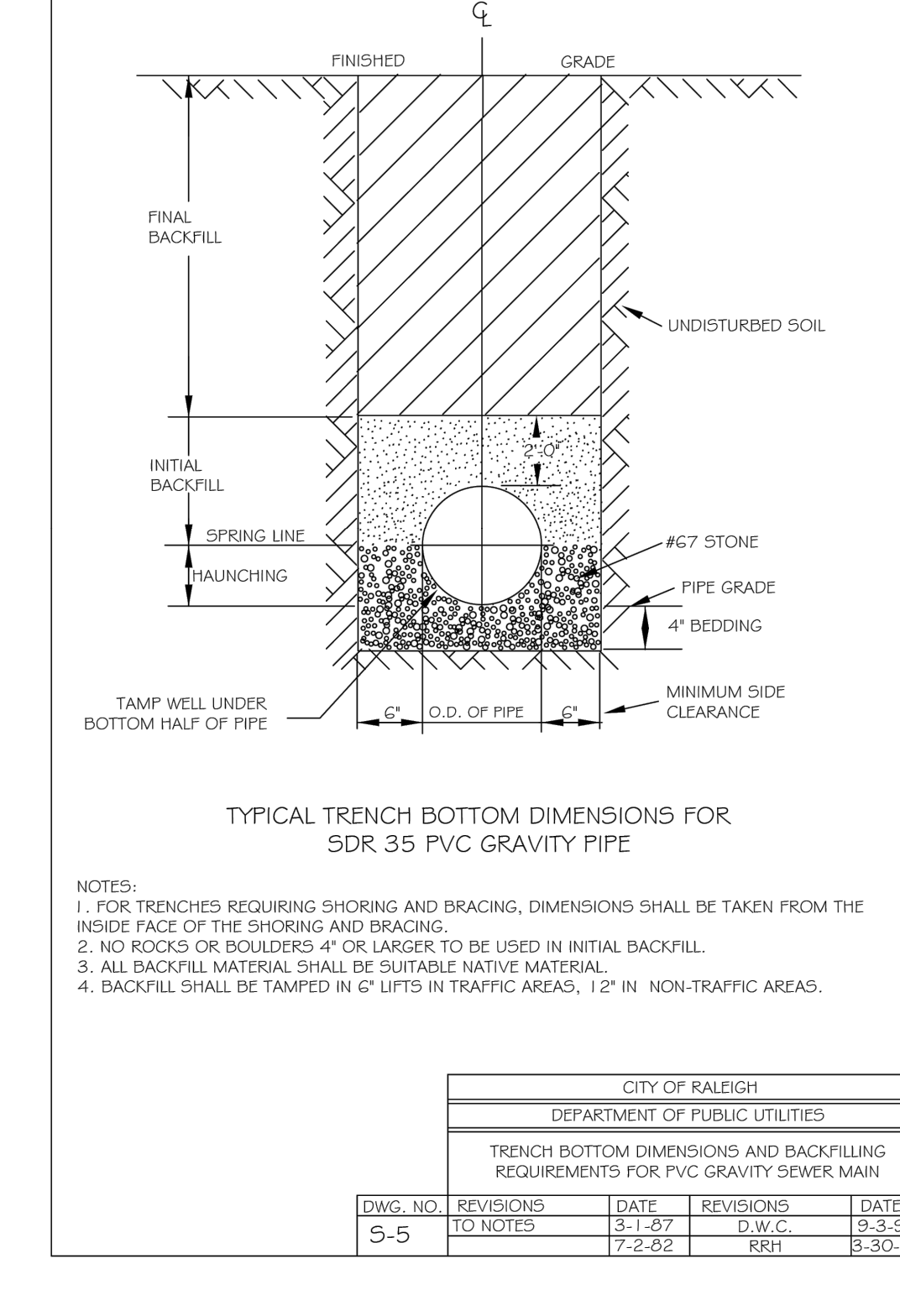
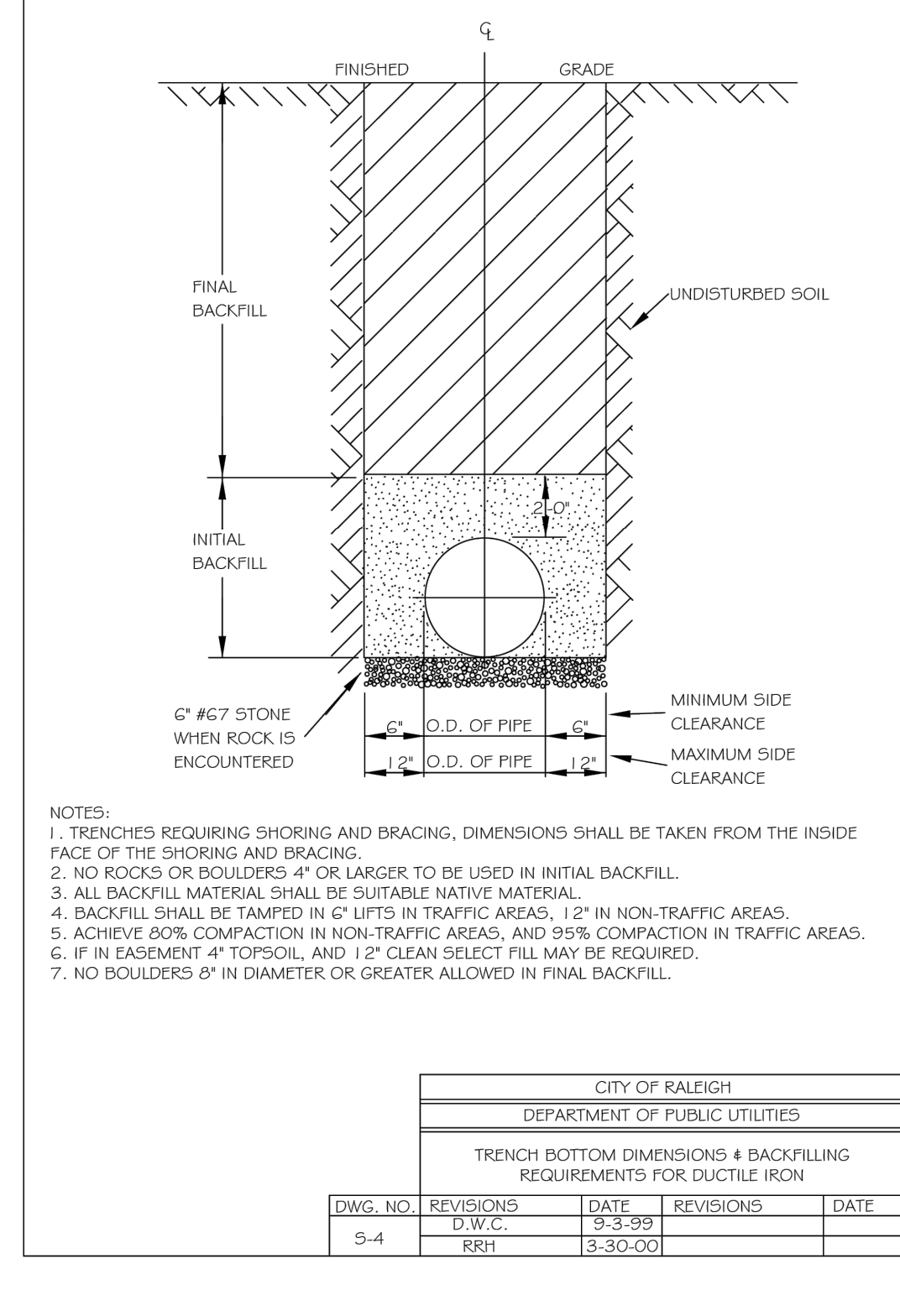
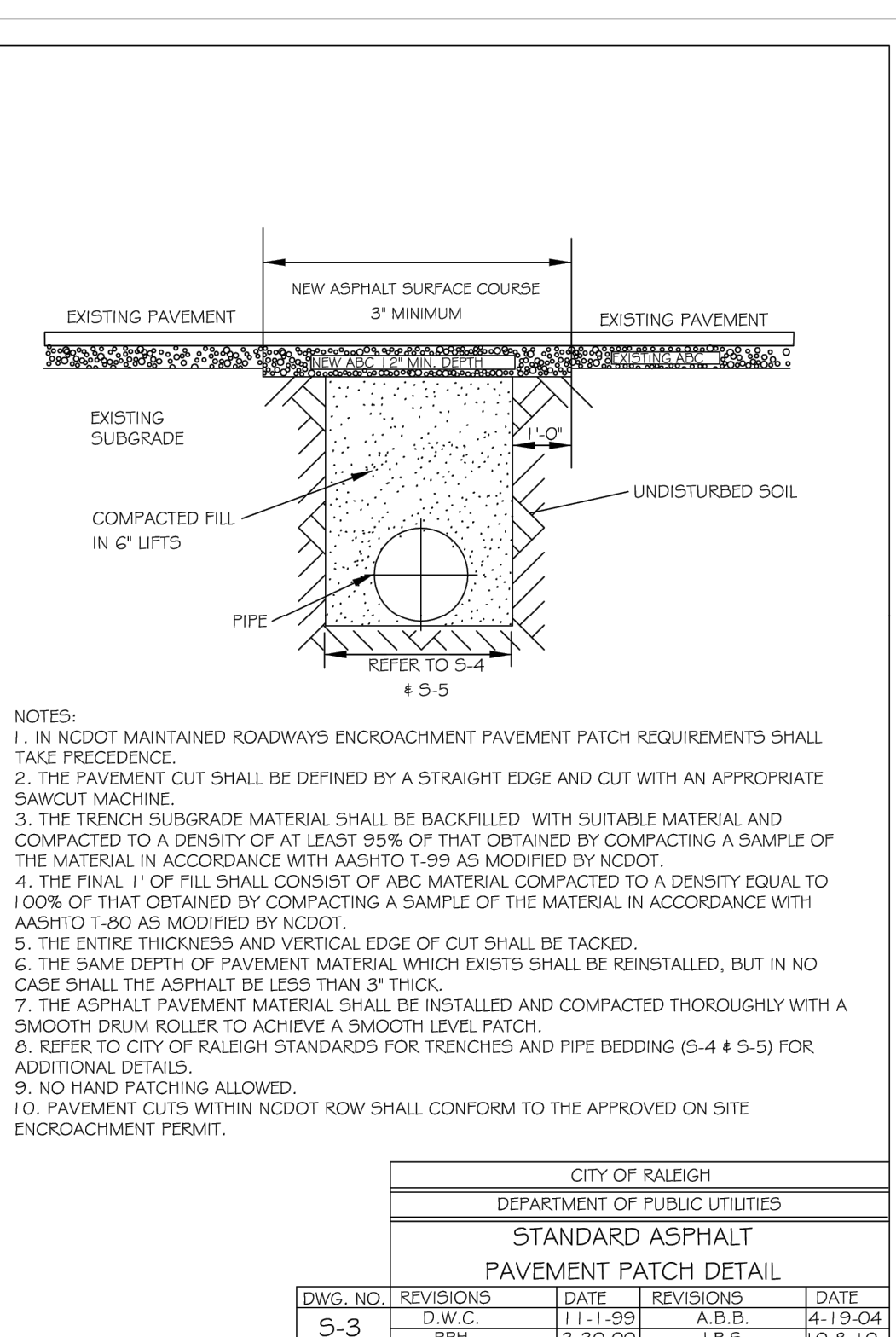
ALL AREAS GIVEN IN SQUARE FEET.

SIZE AND DEGREE OF BEND	STATIC THRUST IN POUNDS	REACTION BEARING AREA (S.F.)	REACTION BEARING AREA (S.F.)	REACTION BEARING AREA (S.F.)	REACTION BEARING AREA (S.F.)	REACTION BEARING AREA (S.F.)	REACTION BEARING AREA (S.F.)	REACTION BEARING AREA (S.F.)
6"								
1 1/4"	1,108	1	1	1	1	1	1	2
2 1/2"	2,207	1	2	2	1	1	1	3
4 1/2"	4,326	2	3	3	1	1	2	5
9 1/2"	7,992	2	4	5	1	1	2	6
PLUG	5,655	2	3	4	1	1	2	6
6"								
1 1/4"	1,970	1	1	2	1	1	1	2
2 1/2"	3,922	1	2	3	1	1	1	4
4 1/2"	7,694	2	4	5	1	1	2	6
9 1/2"	14,215	4	6	9	2	2	4	15
PLUG	10,053	3	5	6	2	2	3	10
1 1/4"	4,433	2	3	3				
2 1/2"	8,826	3	5	6				
4 1/2"	17,312	5	9	11				
9 1/2"	31,983	8	16	19				
PLUG	22,619	6	12	14				
1 1/4"	7,881	2	4	5	1	1	2	6
2 1/2"	15,691	4	6	10	2	2	4	16
4 1/2"	30,779	6	16	19	4	4	6	31
9 1/2"	56,861	15	29	35	6	6	15	57
PLUG	40,213	10	21	25	5	5	10	41

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.

USE 6" x 30" BEND VALUE FOR HYDRANTS FOR ADDITIONAL SAFETY FACTOR.

CITY OF RALEIGH DEPARTMENT OF PUBLIC UTILITIES				
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-10				
	D.W.C.	6-23-99		





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# North Carolina Troopers Association - Museum

## Site Specifications & Details

3405 Garner Rd Raleigh, NC 27610

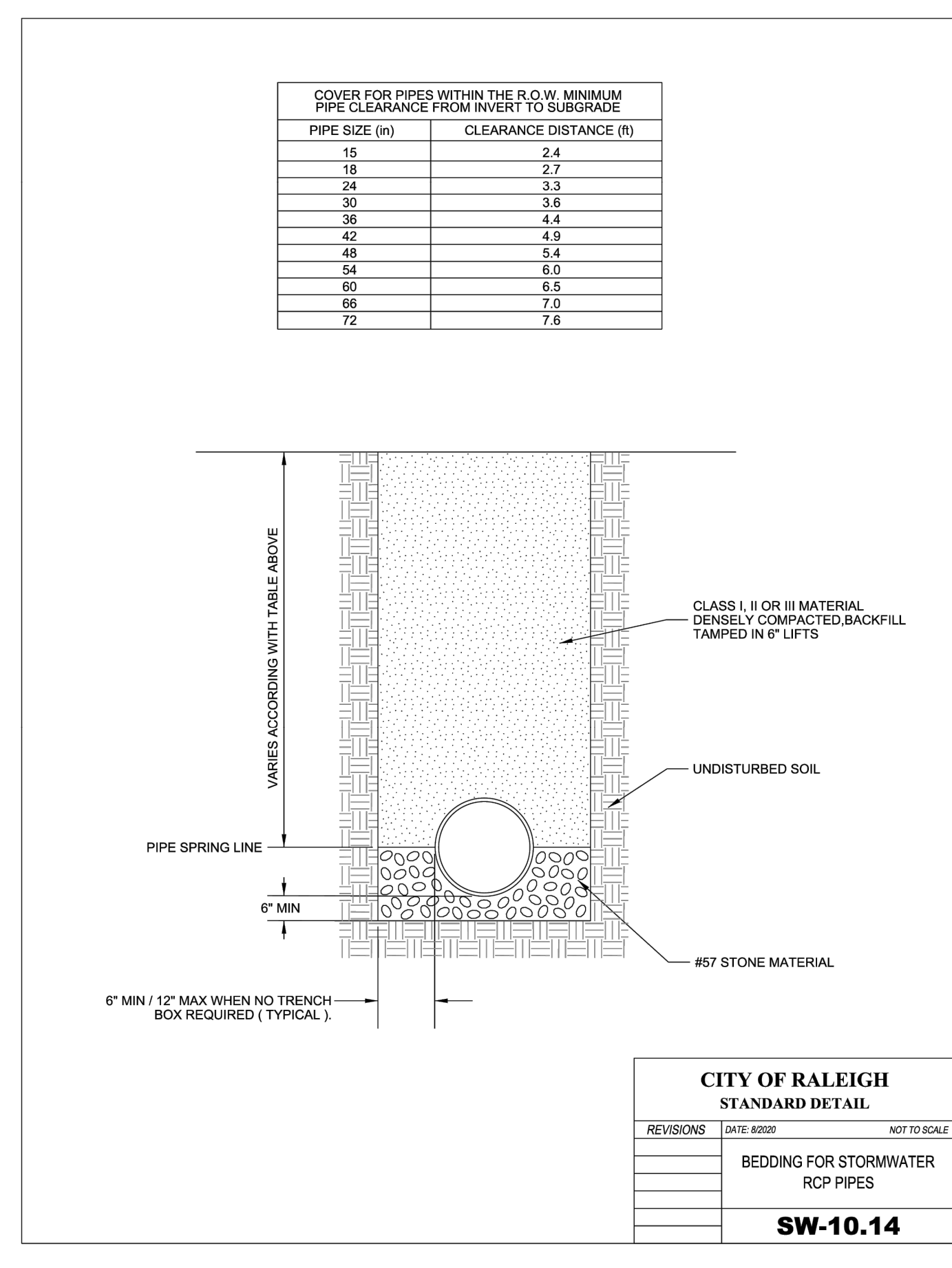
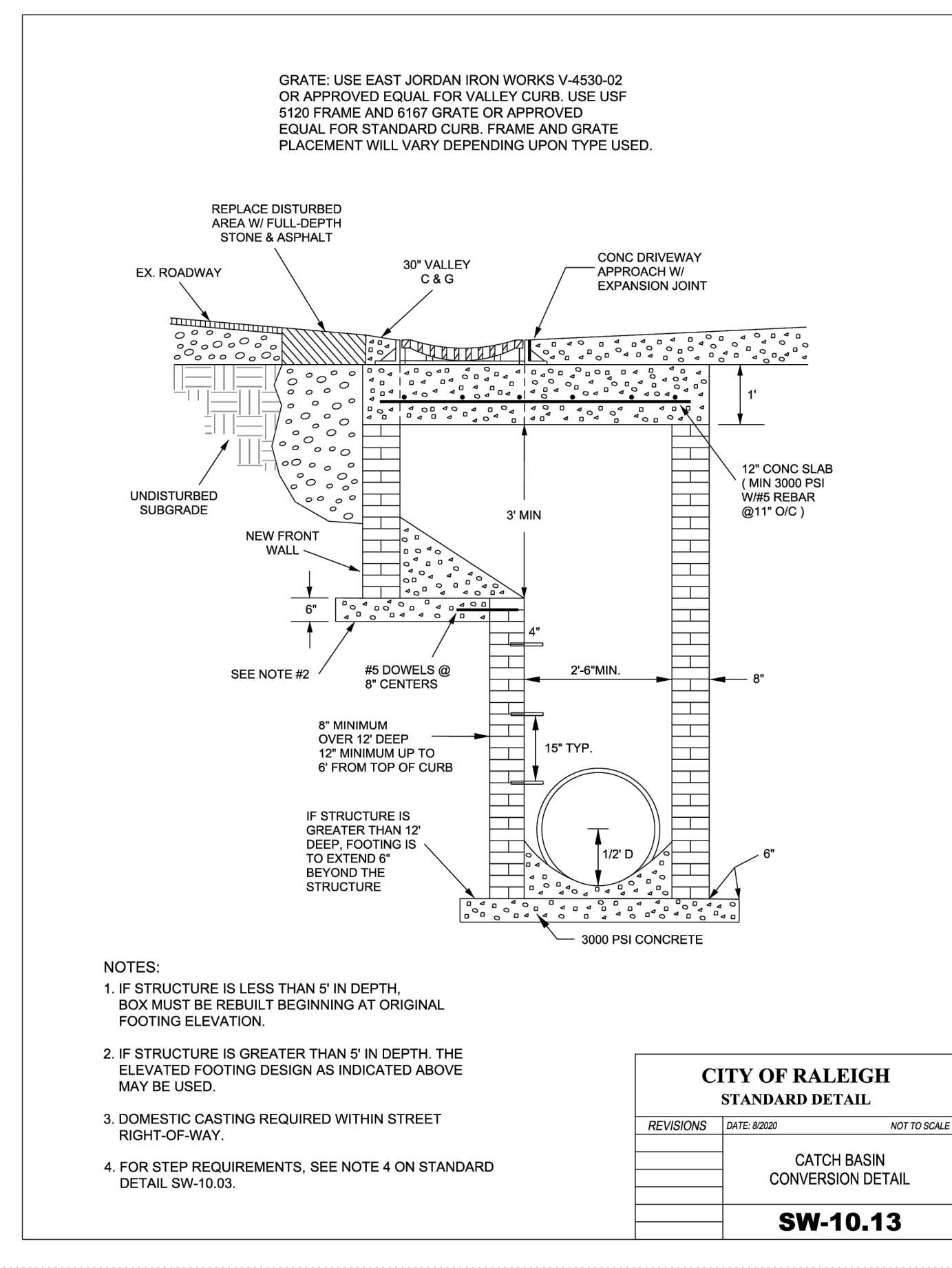
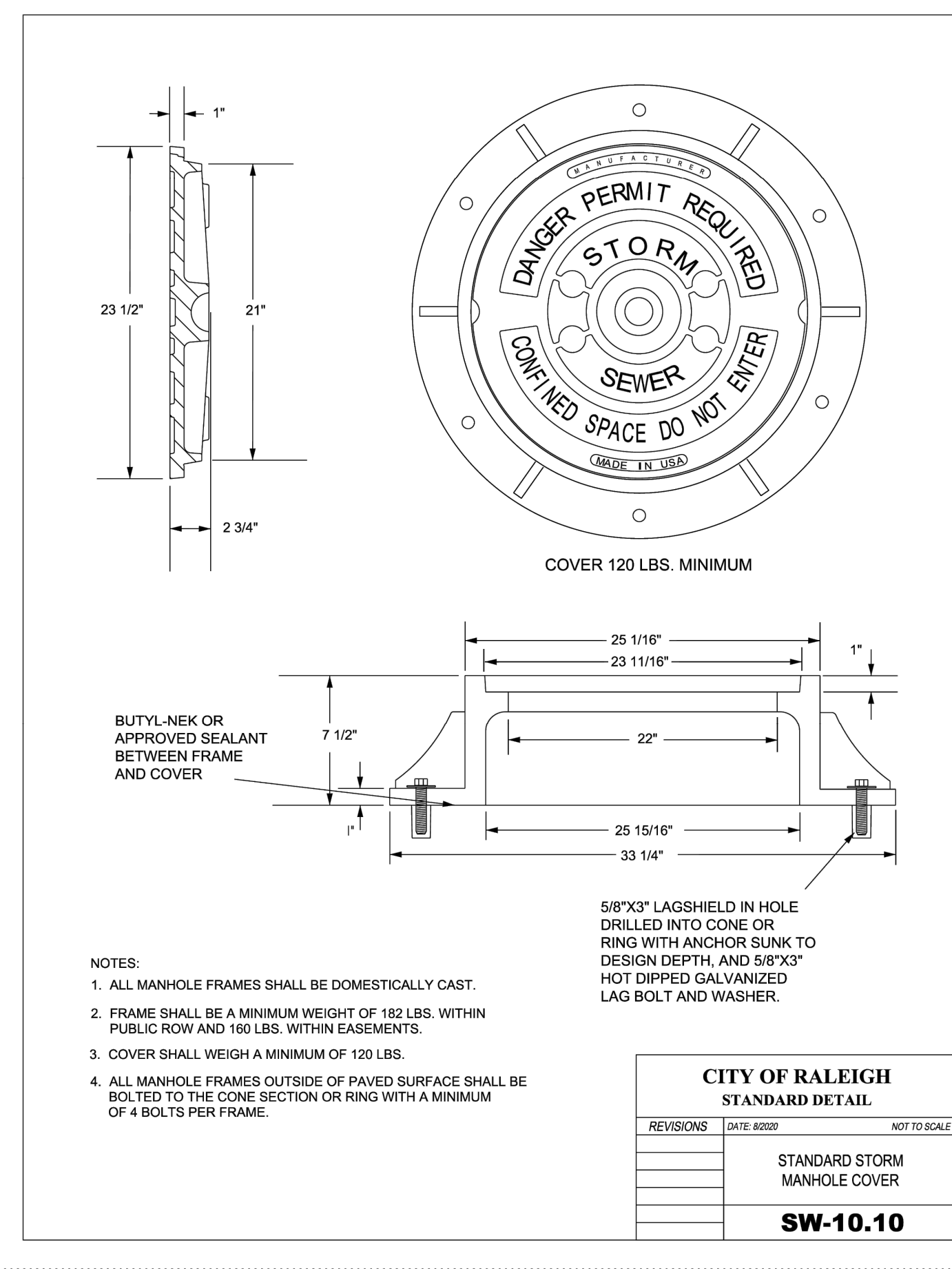
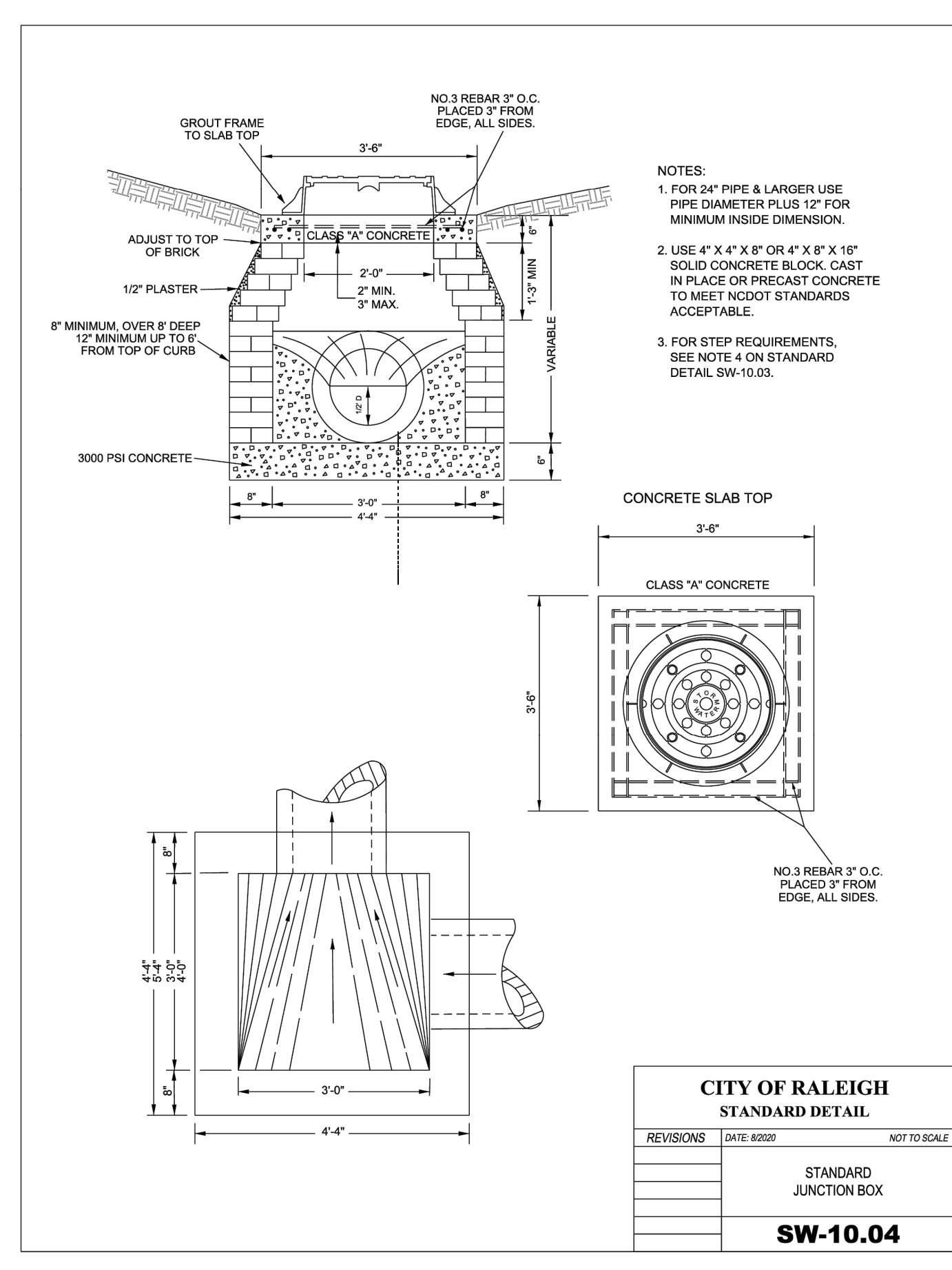
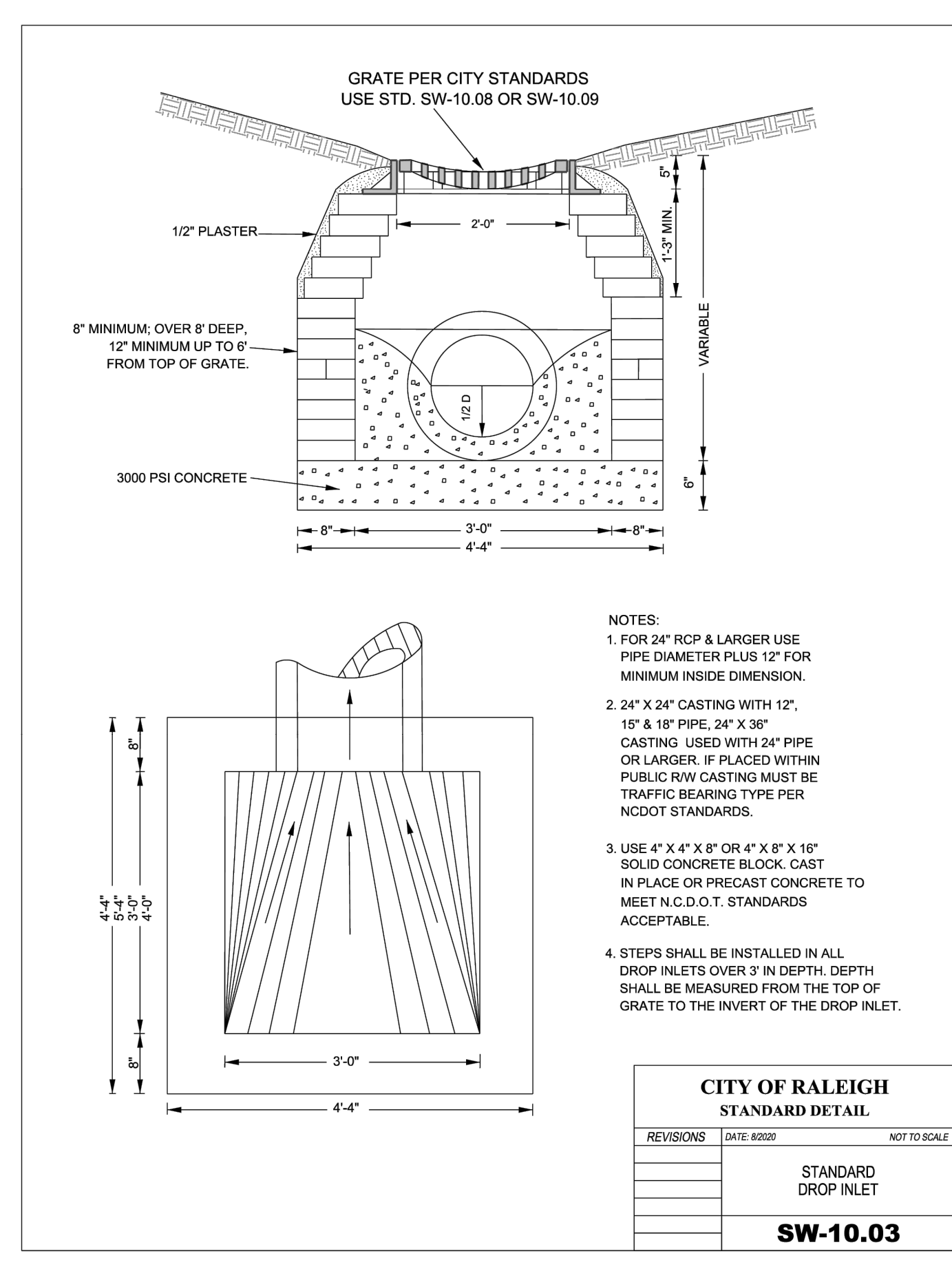
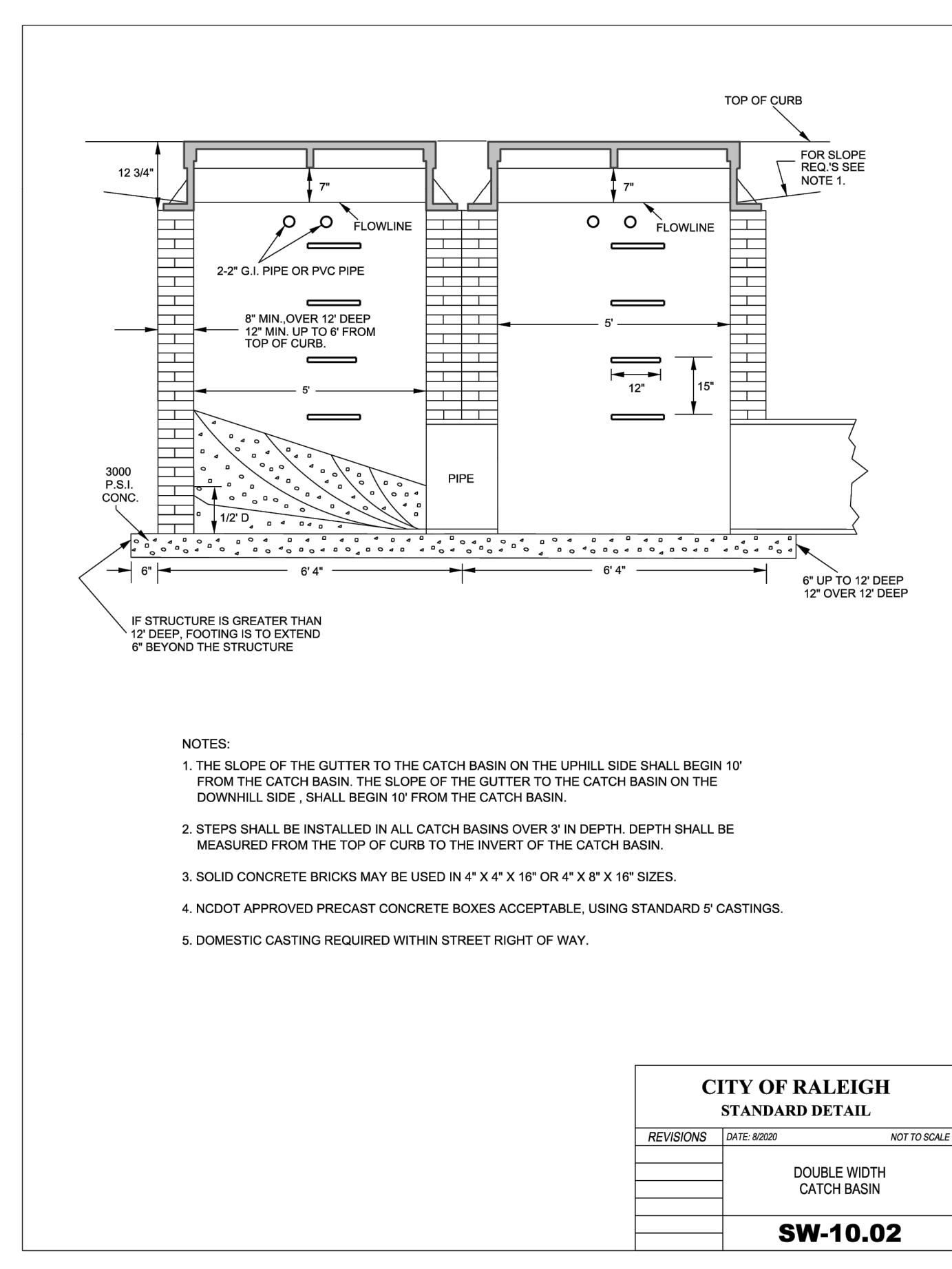
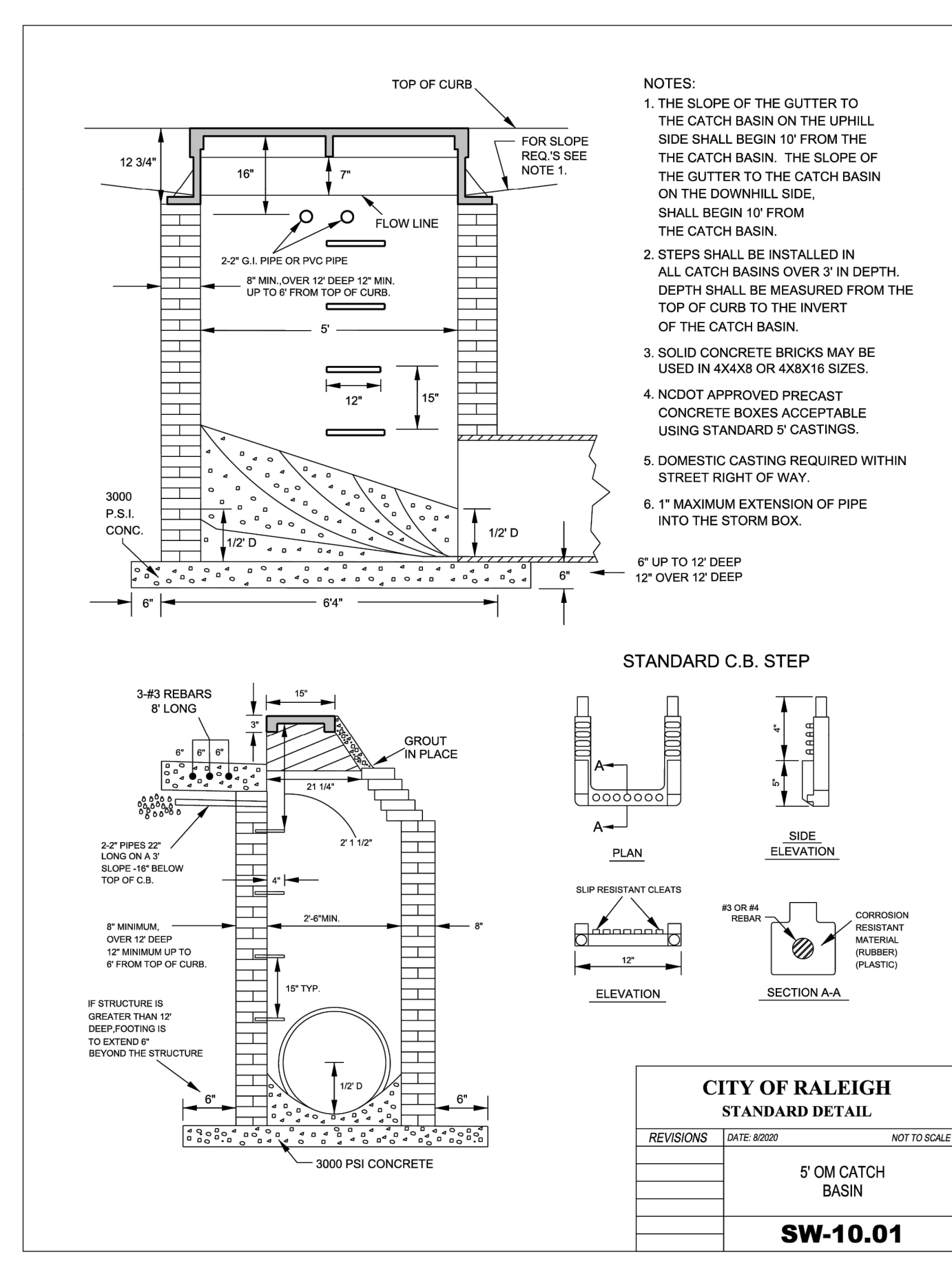
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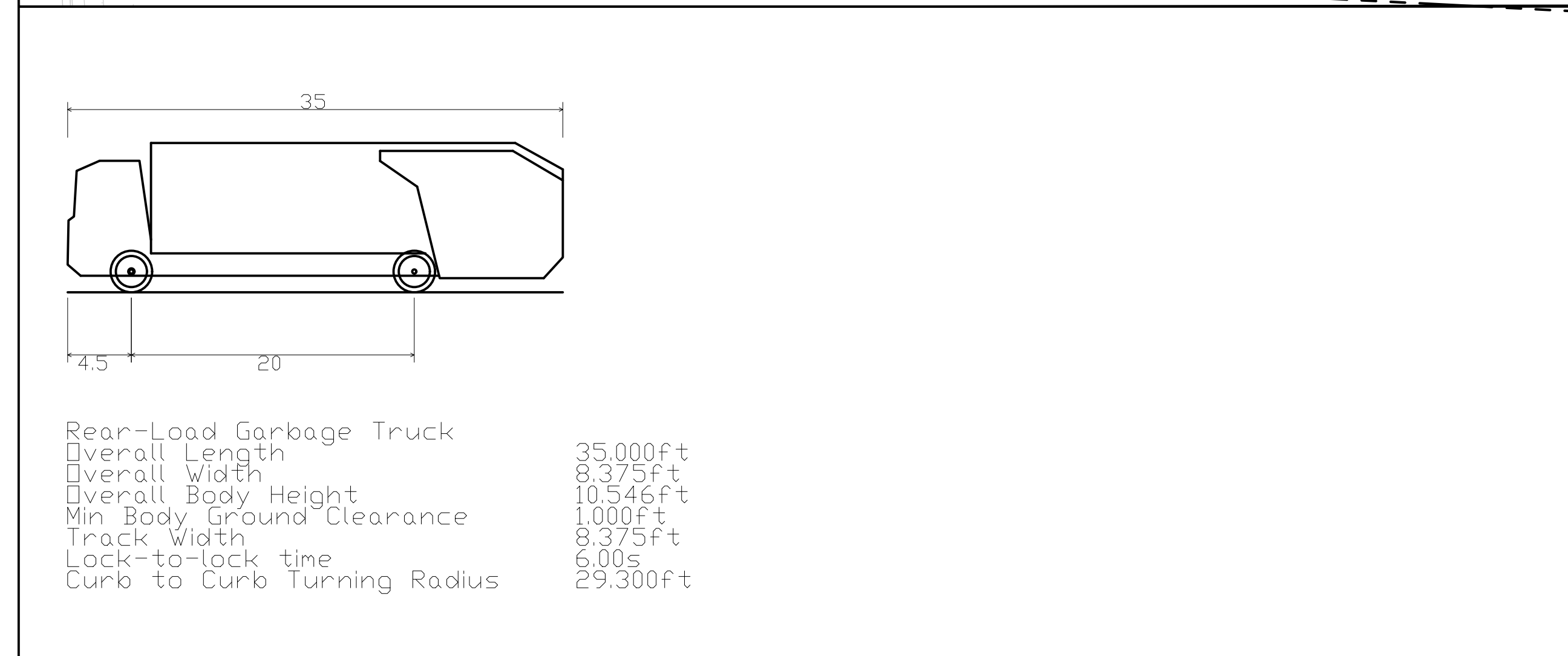
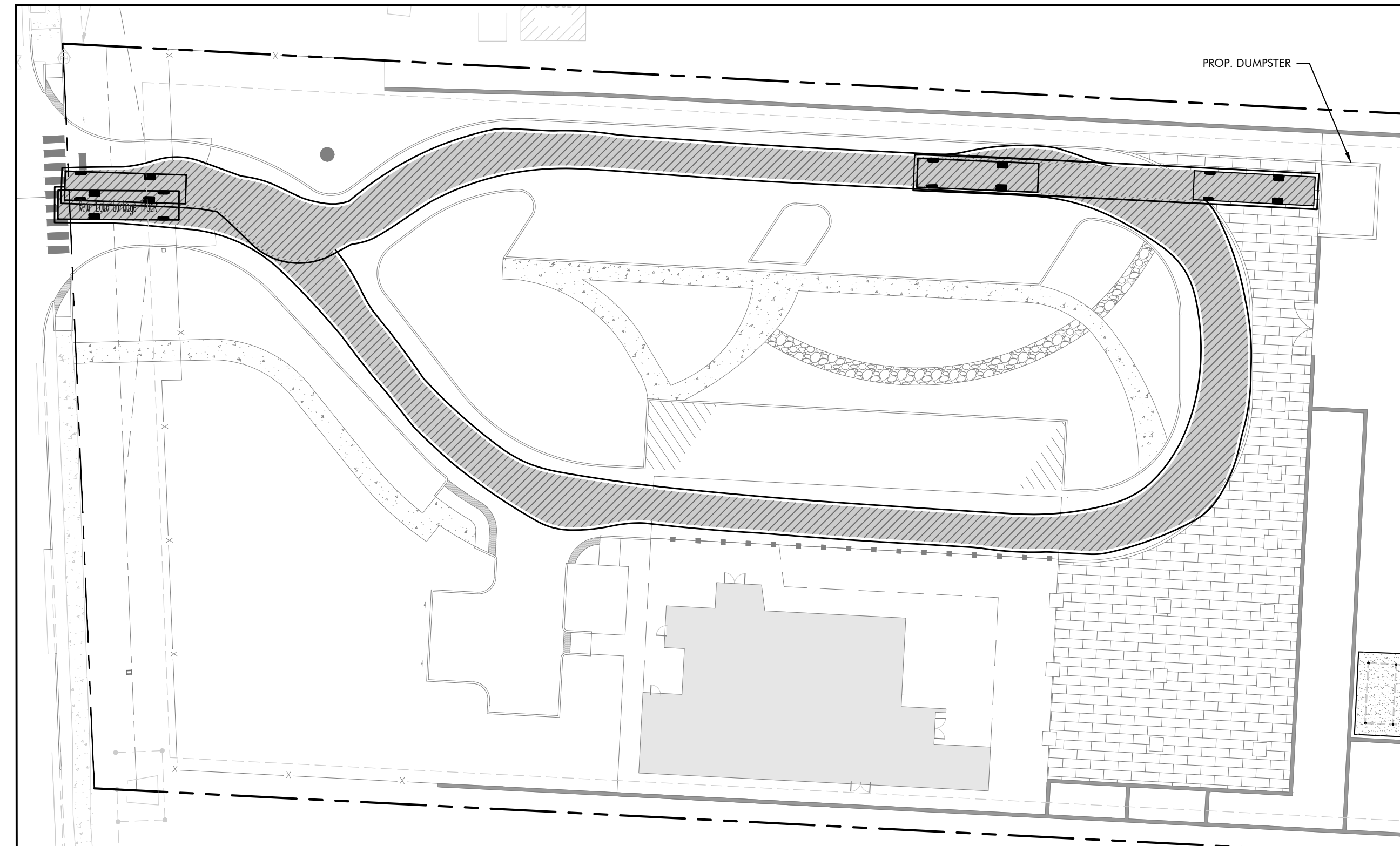
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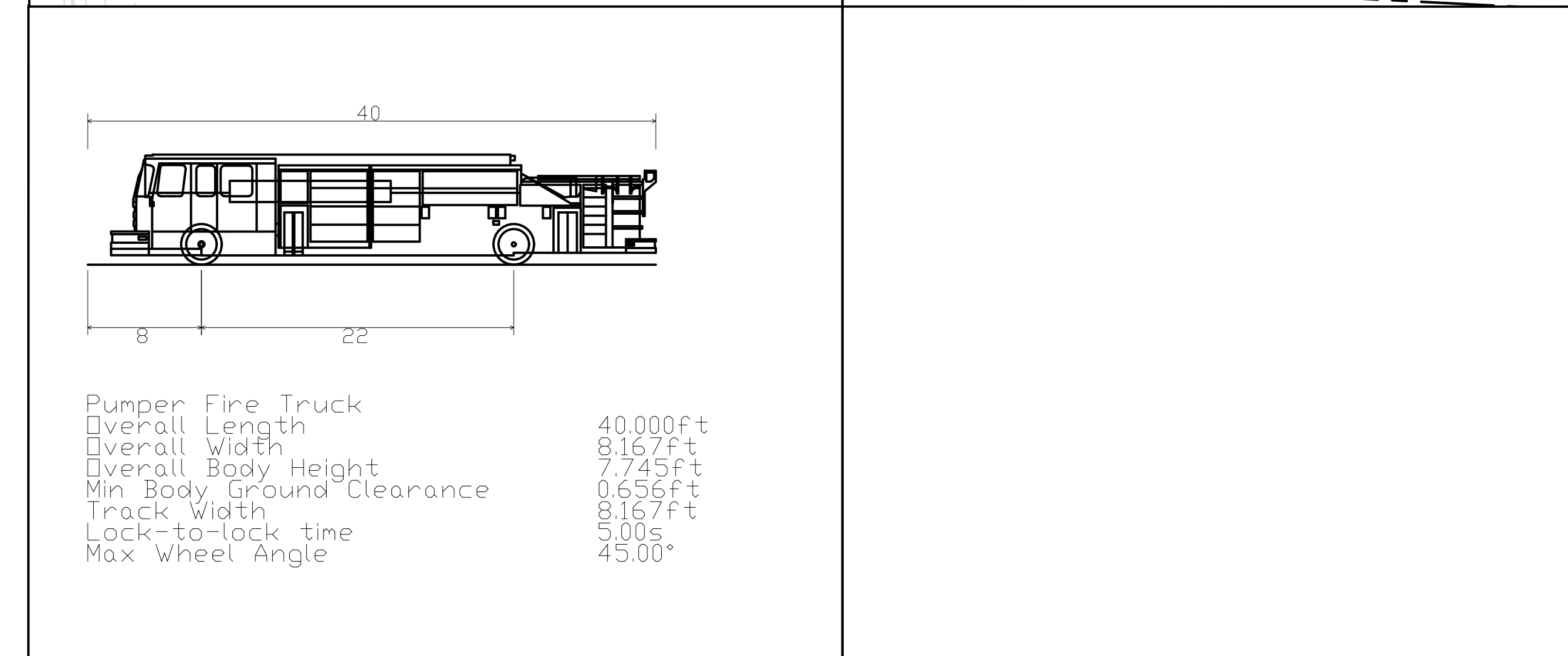
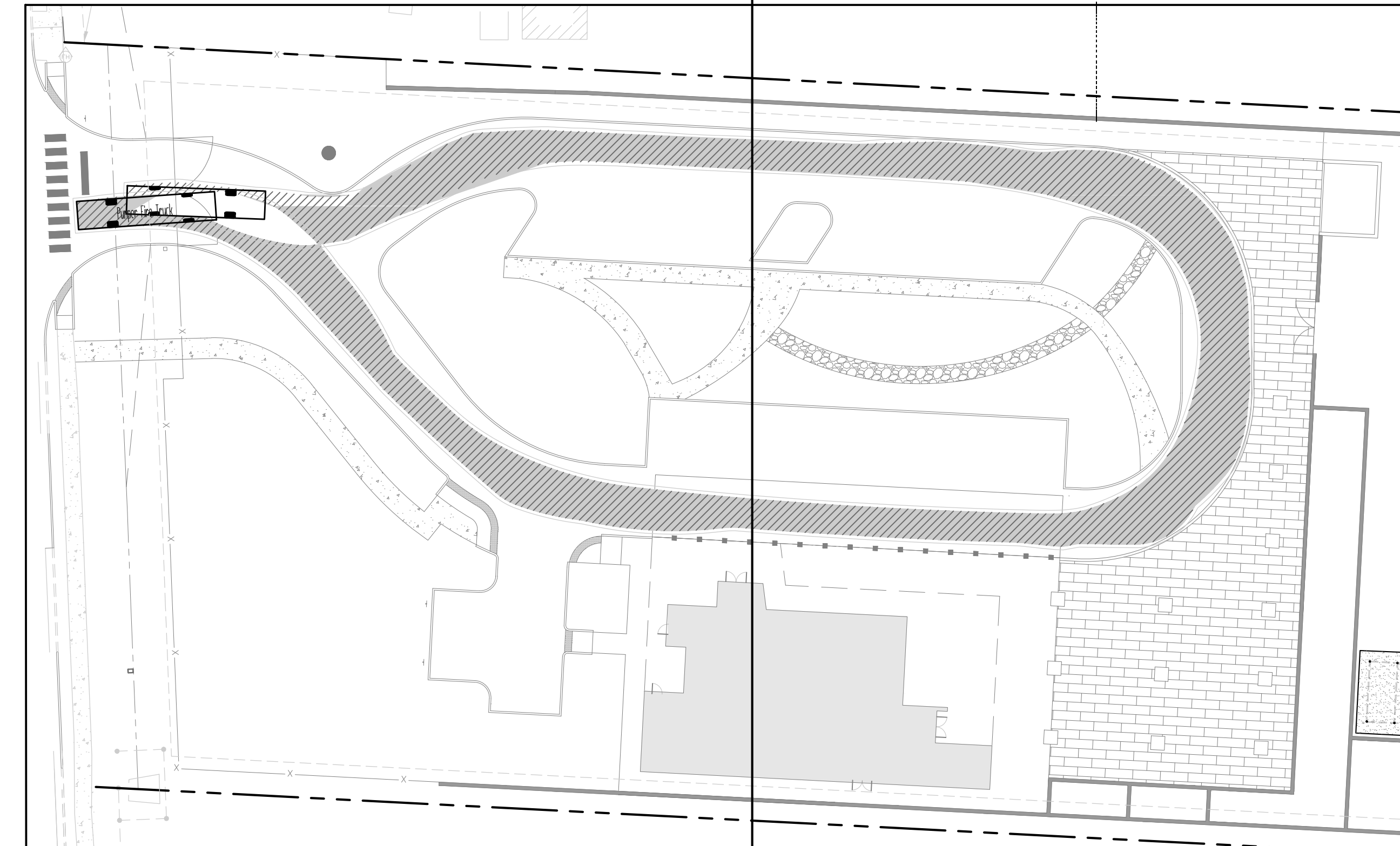
**GENERAL NOTES:**

(PER CITY OF RALEIGH FIRE PROTECTION)

1. ALL PORTIONS OF BUILDING MUST BE WITHIN 150' OF THE APPARATUS ACCESS ROAD SURFACE (SEE 503.1.1 NCFR), 200' WITH A 13R SPRINKLER SYSTEM, AND 250' FOR A 13 SYSTEM.
2. MINIMUM INSIDE TURNING RADIUS OF 28' MUST BE MAINTAINED THROUGHOUT THE SITE PLAN FOR ANY FIRE DEPARTMENT ACCESS LANES THAT WOULD BE USED BY A FIRE APPARATUS.
3. FIRE DEPARTMENT CONNECTION (FDC) TO BE WITHIN 40' OF THE FIRE DEPARTMENT ACCESS ROAD ON THE FRONT OR AT THE FRONT OF THE BUILDING ALONG THE ADDRESS SIDE.
4. FIRE HYDRANTS SHALL BE NO MORE THAN 100' FROM AN FDC FOR A SPRINKLER SYSTEM AND/OR STANDPIPE SYSTEM MEASURED AS THE HOSE LIES. HYDRANTS SERVING FDC SHALL BE LOCATED ON THE SAME SIDE OF THE ROAD AND SAME SIDE OF THE DRIVEWAY TO LIMIT BLOCKING RESPONDING APPARATUS ACCESS TO BUILDING.
5. FIRE DEPARTMENT VEHICLE ACCESS LANE TO BE DESIGNED AND CONSTRUCTED TO SUPPORT THE LOAD OF A FIRE APPARATUS WEIGHING AT LEAST 90,000 LBS. AND SHALL BE SURFACED TO PROVIDE ALL WEATHER DRIVING CAPABILITIES. (NCFR 503.2.3)



**DESIGN VEHICLE: GARBAGE TRUCK**



**DESIGN VEHICLE: FIRE TRUCK**

North Carolina  
Troopers Association

3228 GARNER RD  
RALEIGH, NC 27610

**North Carolina Troopers  
Association - Museum**

Emergency Vehicle Access  
3405 Garner Rd Raleigh, NC 27610

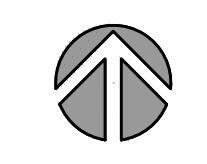
NO.	DATE	BY	REVISIONS:

Project No: 23-RDU-022

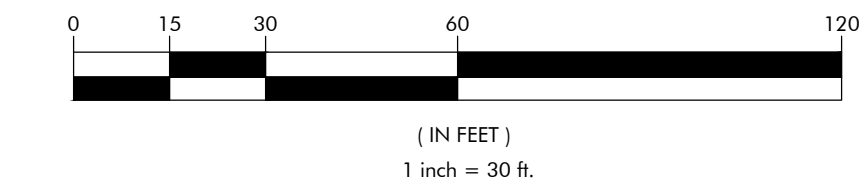
Date: 11.08.2023

Sheet No:

**C-9.0**



GRAPHIC SCALE

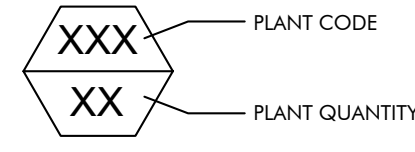




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+ 919.275.5022  
urbandesignpartners.com  
nc firm no: P-2671 sc coa no: C-03044

**NOTES:**

- IF GRAPHIC REPRESENTATION OF PLANTINGS ON PLANS DO NOT MATCH QUANTITIES IN PLANT SCHEDULE, GRAPHIC REPRESENTATION OF PLANTINGS WILL GOVERN.
- TREES NOT IN A LANDSCAPE BED SHALL RECEIVE A 4" DIAMETER MULCH RING.
- LIMITS OF IRRIGATION INCLUDE DENOTED LANDSCAPE BEDS, ALL SOD/SEED AREAS, AND TREES NOT LOCATED IN A LANDSCAPE BED.
- CITY TREE PLANTING AND PRESERVATION NOTES ON SHEET LS-2.0



**LANDSCAPE REQUIREMENTS:**

**TYPE A-1 PROTECTIVE YARD (CITY OF RALEIGH UDO SEC. 7.2.4)**  
WIDTH: 10'  
REQ'D WALL HT: 6.5'  
REQ'D UNDERSTORY TREES: 4 TREES/100 LF  
(312 LF / 100 LF)[4] = 13 UNDERSTORY TREES REQ'D  
PROVIDED TREES\*: 13 UNDERSTORY TREES

**TYPE A-2 PROTECTIVE YARD (CITY OF RALEIGH UDO SEC. 7.2.4)**  
WIDTH: 10'  
REQ'D FENCE HT: 6.5'  
REQ'D SHADE TREES: 4 TREES/100 LF  
REQ'D UNDERSTORY TREES: 4 TREES/100 LF  
(75 LF / 100 LF)[4] = 3 SHADE TREES REQ'D  
(75 LF / 100 LF)[4] = 3 UNDERSTORY TREES REQ'D  
PROVIDED TREES\*: 3 SHADE TREES  
3 UNDERSTORY TREES

\* EXISTING VEGETATION WITHIN TREE SAVE AREA TO MEET BUFFER REQUIREMENT. PROPOSED LANDSCAPE SHALL BE SUPPLEMENTED PER THE DIRECTION OF THE URBAN FORESTER TO MEET INTENT OF BUFFER. FINAL LOCATION OF LANDSCAPE MATERIAL WITHIN TREE SAVE SHALL BE DETERMINED BY URBAN FORESTER.

**GARNER ROAD R/W PLANTINGS (CITY OF RALEIGH CITY TREE MANUAL)**

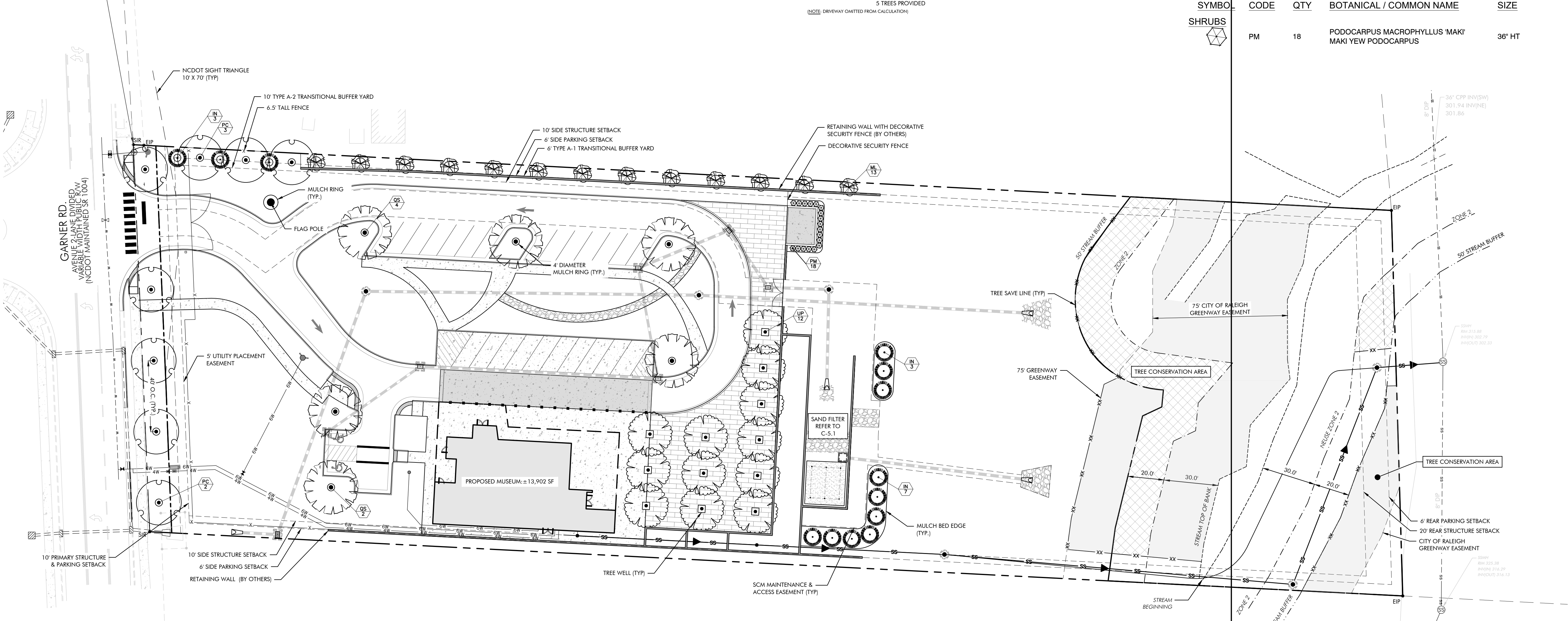
- ALL STREET TREES SHALL BE PLANTED 40" ON CENTER UNLESS OTHERWISE SPECIFIED IN THE UDO.
- GUIDELINES FOR PROXIMITY FROM CENTER OF TREE TO INFRASTRUCTURE SET FORTH IN CITY TREE MANUAL.
- NO LARGE MATURING TREES SHALL BE PLANTED BENEATH OVERHEAD POWER LINES.

(184 LF / 40 LF) = 5 TREES REQ'D  
5 TREES PROVIDED  
*(NOTE: DRIVEWAY OMITTED FROM CALCULATION)*

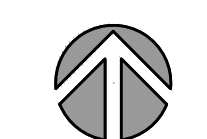
**PLANT SCHEDULE**

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL	SIZE
<b>SHADE TREES</b>						
	PC	8	PISTACIA CHINENSIS CHINESE PISTACHE	B & B	3" MIN.	14'-16' HT
	QS	6	QUERCUS SHUMARDII SHUMARD OAK	B & B	3" MIN.	14'-16' HT
	UP	12	ULMUS AMERICANA 'PRINCETON' PRINCETON AMERICAN ELM	B & B	2" MIN.	10'-12' HT
<b>UNDERSTORY TREES</b>						
	IN	13	ILEX X NELLIE R. STEVENS' NELLIE R. STEVENS HOLLY	B & B	-	6' HT
	ML	13	MAGNOLIA GRANDIFLORA 'LITTLE GEM' LITTLE GEM DWARF SOUTHERN MAGNOLIA	B & B	1.5" MIN.	6' MIN.
<b>SHRUBS</b>						
	PM	18	PODOCARPUS MACROPHYLLUS 'MAKI' MAKI YEW PODOCARPUS	36"		36" HT

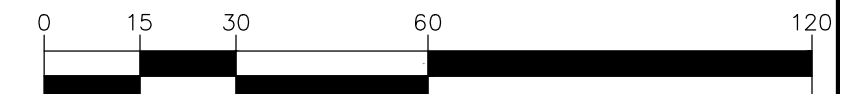
SIR NC GRID COORDINATES  
NAD 83 (2011) N  
722,258.45 E 2,110,488.65  
ELEV 342.67



BEFORE YOU DIG!  
CALL 811 OR 1-800-632-4949  
N.C. ONE-CALL CENTER  
IT'S THE LAW!



GRAPHIC SCALE



( IN FEET )  
1 inch = 30 ft.

North Carolina  
Troopers Association

North Carolina Troopers  
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Landscape Plan  
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3228 GARNER RD  
RALEIGH, NC 27610

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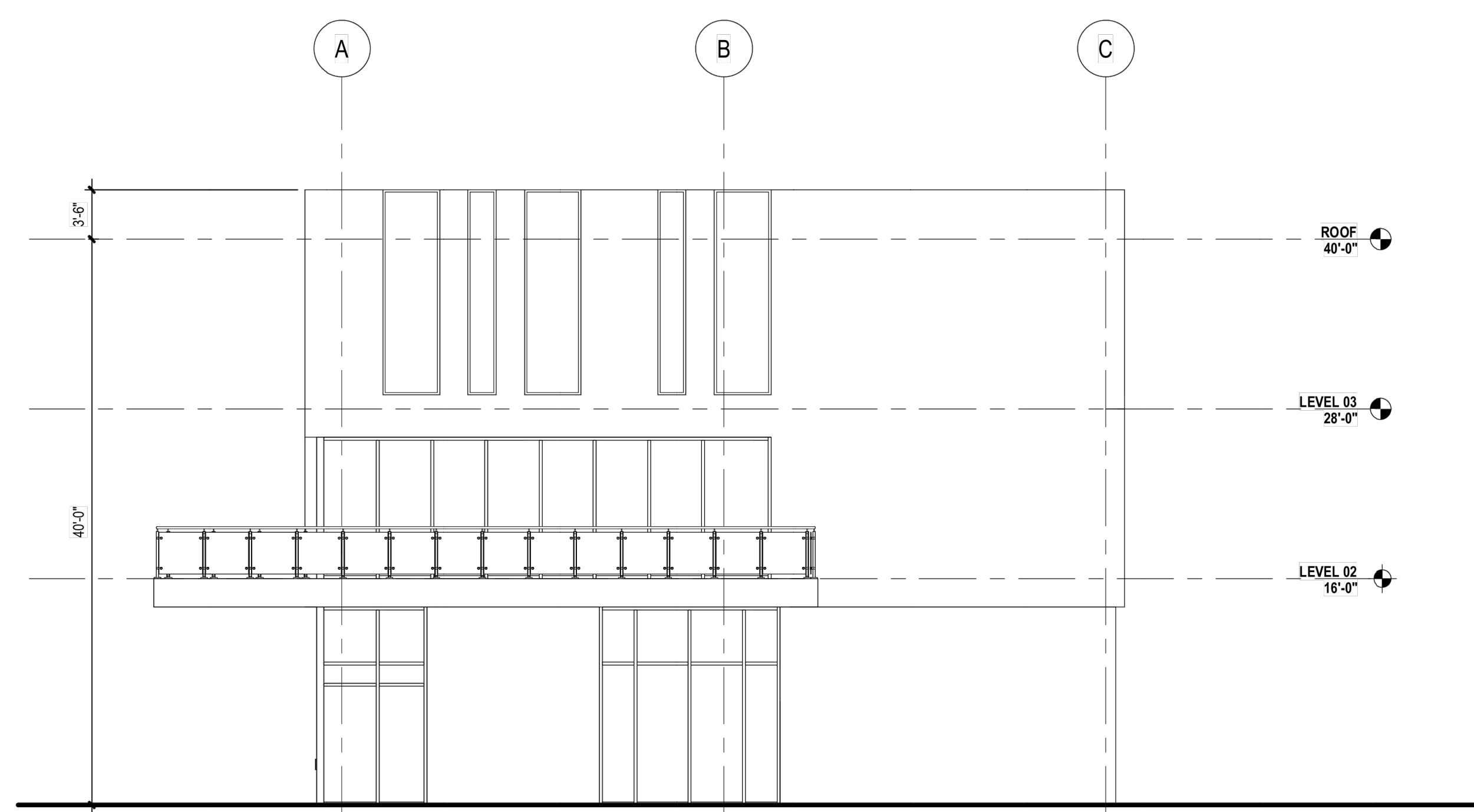
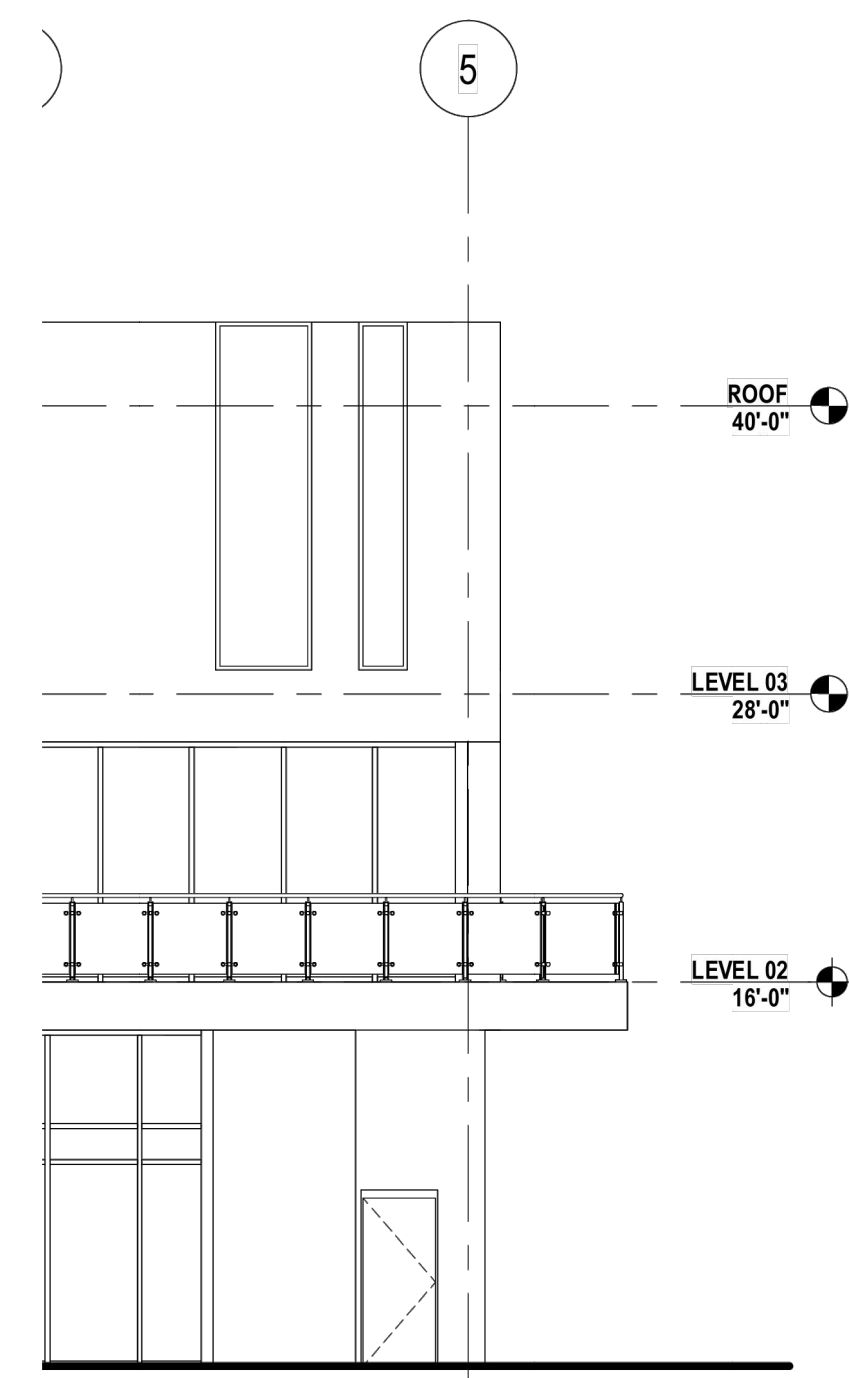
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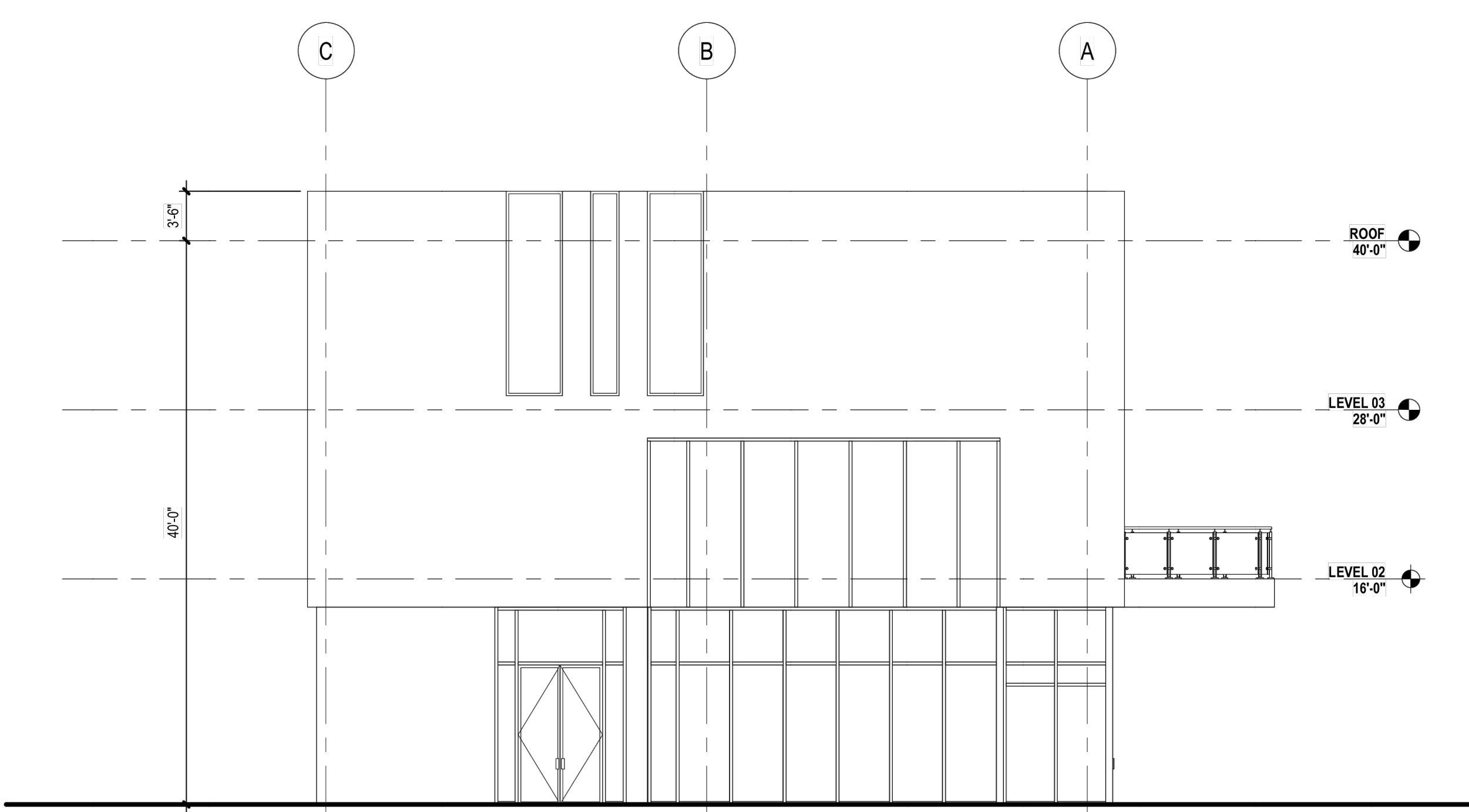
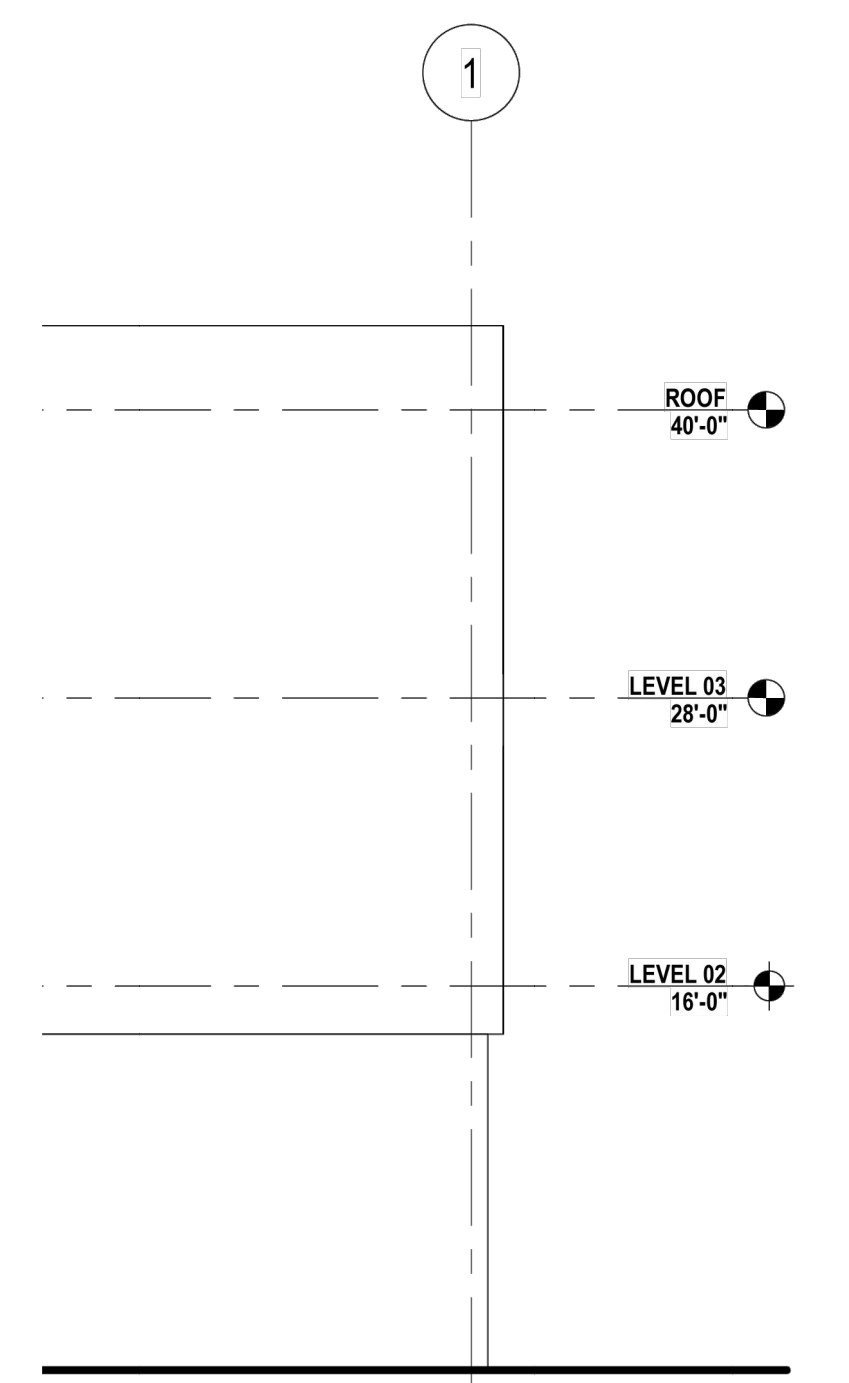
**LS-1.0**







**2 SOUTH ELEVATION**  
 A-200 SCALE: 1/8" = 1'-0"



**1 NORTH ELEVATION**  
 A-200 SCALE: 1/8" = 1'-0"

North Carolina Troopers Association  
**NC Troopers Museum**  
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EXTERIOR  
 ELEVATIONS -  
 ADMINISTRATIVE  
 SITE REVIEW

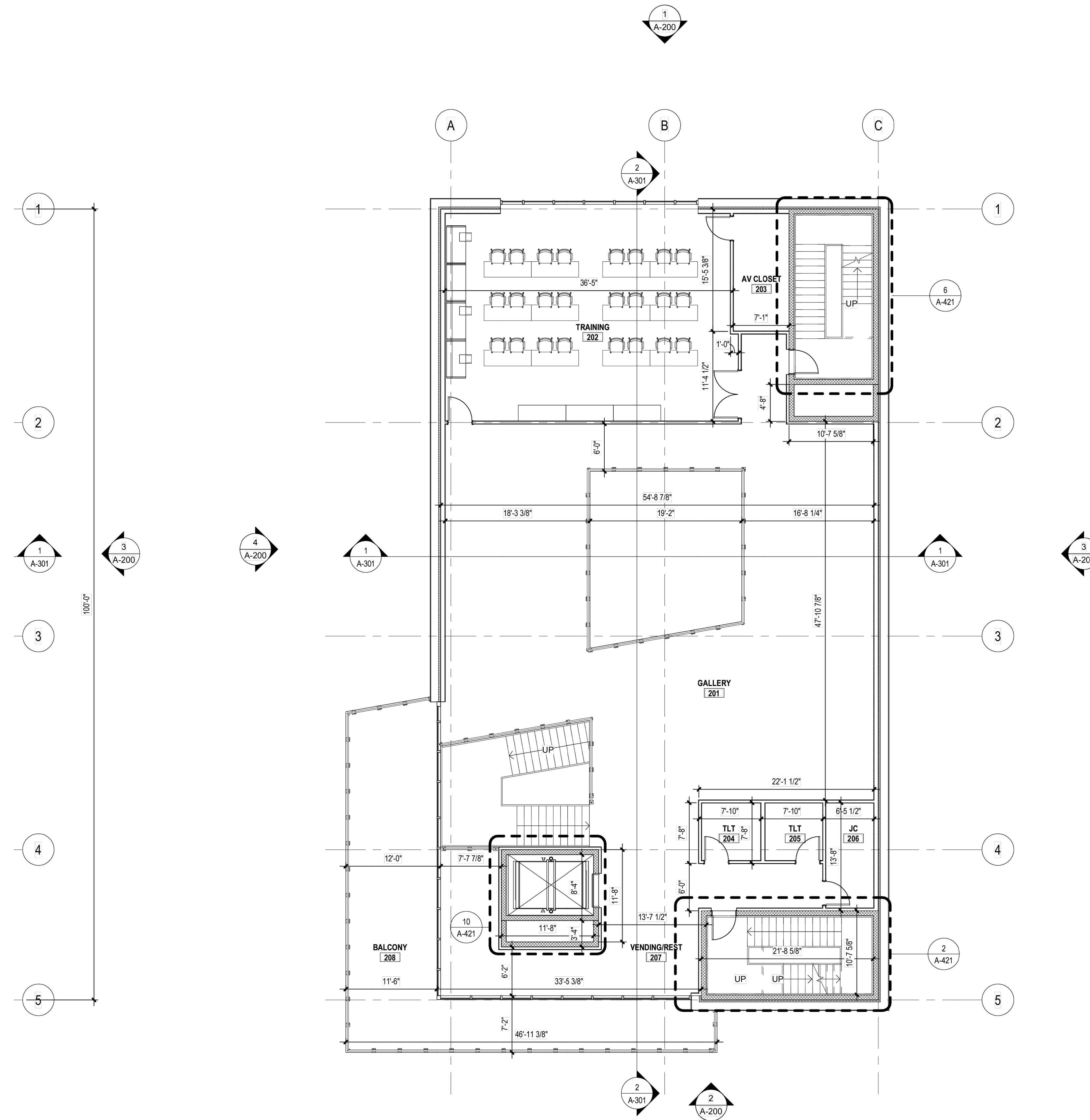
	3 HOUR RATED WALL
CJ	CONTROL JOINT - SEE DETAIL 2/A-???
FD	FLOOR DRAIN - SEE PLUMBING DRAWINGS
	STOREFRONT (CURTAIN WALL) TAG - SEE SHEET A-607 AND FLOOR PLANS
	WINDOW TAG - SEE SHEET A-607 AND FLOOR PLANS
	DOOR TAG - SEE SHEET A-607 AND FLOOR PLANS

**GENERAL NOTES:**

- SEE SHEET A-010 FOR UL DESIGNS AND PARTITION TYPES.
- ALL INTERIOR WALLS SHALL HAVE SOUND ATTENUATION BATTS EXCEPT AT UNIT CLOSETS.

**FLOOR PLAN KEY NOTES**

1 XXXXX



**Level 2**  
 A-101 SCALE: 1/8" = 1'-0"

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OVERALL PLAN -  
 LEVEL 1 AND LEVEL  
 2

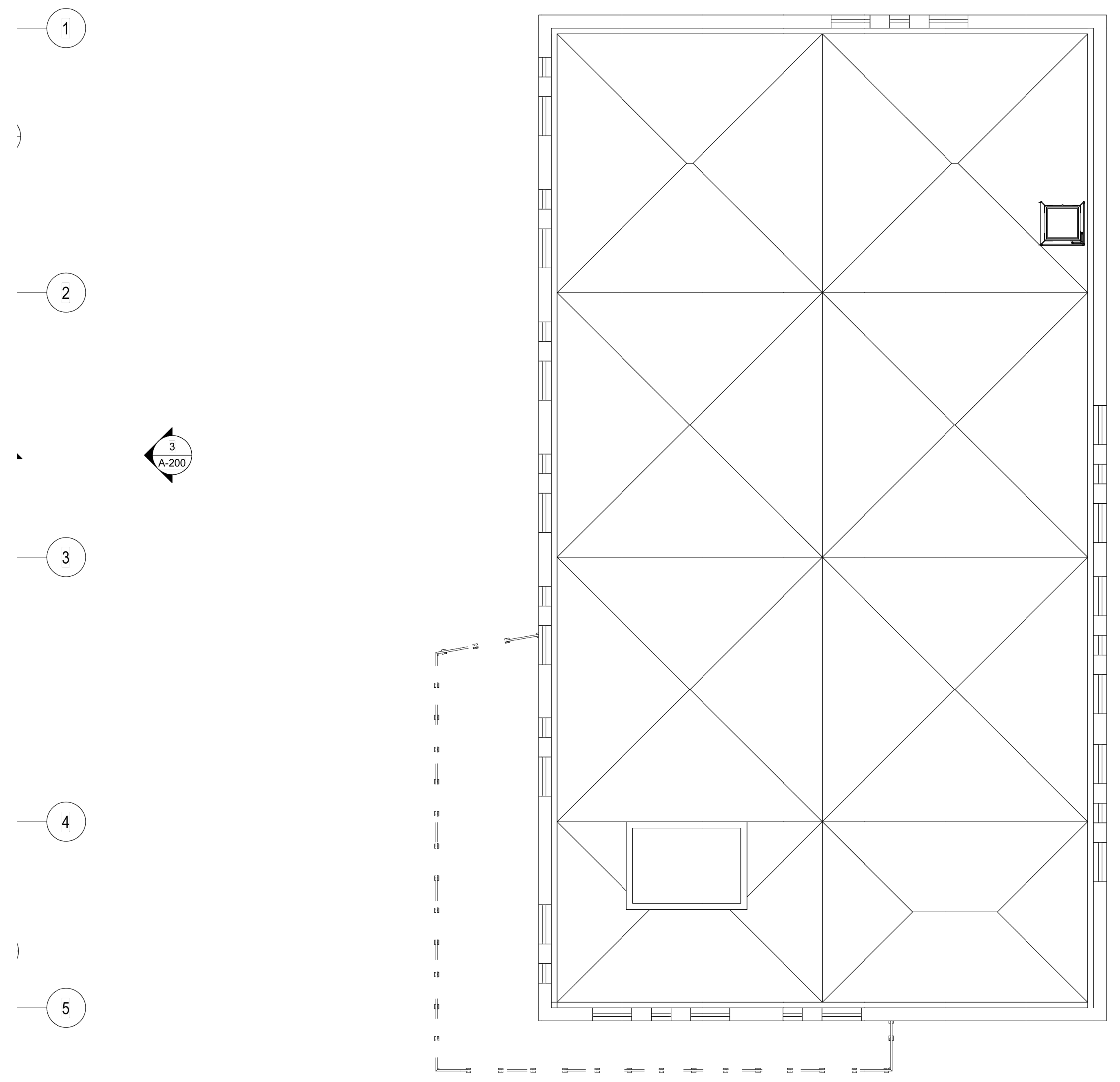
	3 HOUR RATED WALL
CJ	CONTROL JOINT - SEE DETAIL 2/A-???
FD	FLOOR DRAIN - SEE PLUMBING DRAWINGS
	STOREFRONT (CURTAIN WALL) TAG - SEE SHEET A-607 AND FLOOR PLANS
	WINDOW TAG - SEE SHEET A-607 AND FLOOR PLANS
	DOOR TAG - SEE SHEET A-607 AND FLOOR PLANS

**GENERAL NOTES:**

- SEE SHEET A-010 FOR UL DESIGNS AND PARTITION TYPES.
- ALL INTERIOR WALLS SHALL HAVE SOUND ATTENUATION BATTS EXCEPT AT UNIT CLOSETS.

**FLOOR PLAN KEY NOTES**

XXXXX



**Roof**  
 A-102 SCALE: 1/8" = 1'-0"

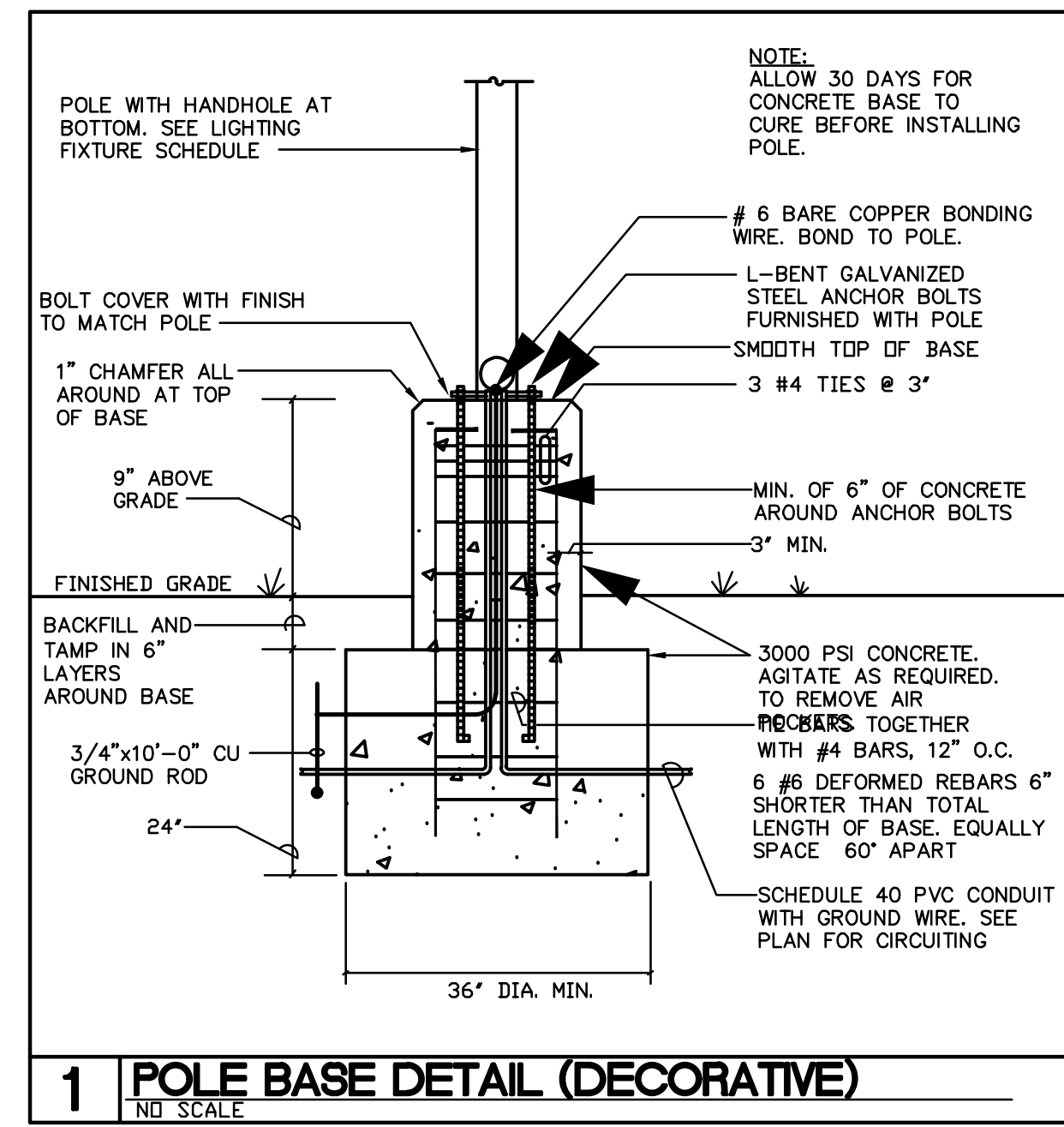
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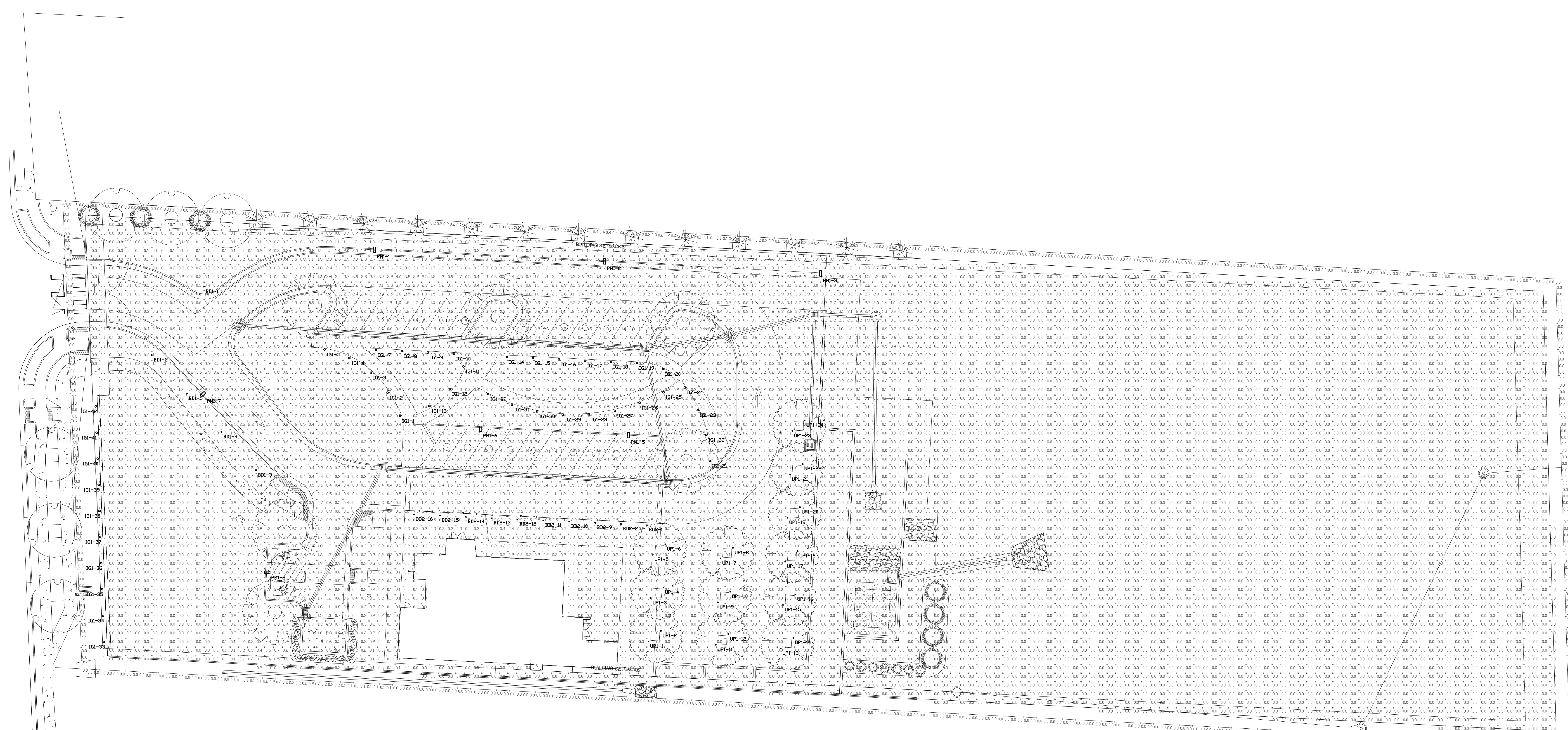
OVERALL PLAN -  
 LEVEL 3 AND ROOF



Symbol	Label	QTY	Manufacturer	Catalog	Description	Number Lamps	Lamp Output	LLF	Input Power	Polar Plot
○	BD1	5	Landscape Forms	AE-SH-200-30K	N/A	1	242	1	8.887	Max: 32cd
□	PM1	7	Landscape Forms	AE-432L3-04F-40K	N/A	1	7822	1	95.8	Max: 4108cd
○	UPI	24	BEGA Converted by LUMCO's V 24PS205 / N.R.		77762	1	1775	1	82	Max: 276cd
□	BD2	10	Landscape Forms InPath	DIFFUSE LENS	Cast aluminum housing, frosted plastic lens enclosure	470	1	8.0059		Max: 252cd
○	IG1	41	BEGA-US	77 073	13"DIA. X 6-1/8" IN-GRAND LUMINAIRE DIFFUSED LENS	1	214	1	20.25	Max: 74cd

Description	Symbol	Avg	Max	Min
Property Line	+	0.0 fc	0.4 fc	0.0 fc

GENERAL NOTES:  
1. ALL TYPE 'PM' FIXTURES SHALL BE MOUNTED ON 20"Ø POLE.



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**ENERGY STAR PARTNER**

No.	Date	Description

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**SITE PHOTOMETRIC PLAN**

CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION  
Plans for the proposed use have been reviewed for general compliance with applicable codes. This limited review and authorization for construction is not to be considered in compliance with all legal requirements for development and construction. The property owner, design consultants, and contractors are each responsible for compliance with applicable City, State and Federal laws. This specific authorization below is not a permit, nor shall it be construed to permit any violation of City, State or Federal Law. All Construction must be in accordance with all Local, State, and Federal Rules and Regulations. This approval of this electronic document is only valid if the document has not been modified and the digital signature below is valid.