

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"/> Attached <input type="checkbox"/> Townhouse <input type="checkbox"/> Apartment <input type="checkbox"/> Tiny house <input type="checkbox"/> Open lot	<input type="checkbox"/> General <input type="checkbox"/> Mixed use <input type="checkbox"/> Civic <input type="checkbox"/> Cottage Court <input type="checkbox"/> Frequent Transit Development Option	Subdivision case #: _____ Scoping/sketch plan case #: _____ Certificate of Appropriateness #: _____ Board of Adjustment #: _____ Zoning Case #: _____ Design Alternate #: _____

GENERAL INFORMATION

Development name: _____

Inside City limits? Yes No

Property address(es): _____

Site P.I.N.(s): _____

Please describe the scope of work. Include any additions, expansions, and uses (UDO 6.1.4).

Current Property Owner(s):

Company: _____ Title: _____

Address: _____

Phone #: _____ Email: _____

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:
NOTE: please attach purchase agreement or contract, lease or easement when submitting this form.	
Developer Contact:	
Company:	Title:
Address:	
Phone #:	Email:
Applicant Name:	
Company:	Address:
Phone #:	Email:

DEVELOPMENT TYPE + SITE DATE TABLE (Applicable to all developments)	
SITE DATA	BUILDING DATA
Zoning district(s) (please provide the acreage of each):	Existing gross floor area (not to be demolished):
Gross site acreage:	Existing gross floor area to be demolished:
# of parking spaces proposed:	New gross floor area:
Max # parking permitted (7.1.2.C):	Total sf gross (to remain and new):
Overlay District (if applicable):	Proposed # of buildings:
Existing use (UDO 6.1.4):	Proposed # of stories for each:
Proposed use (UDO 6.1.4):	Proposed # of basement levels (UDO 1.5.7.A.6)

STORMWATER INFORMATION	
Imperious Area on Parcel(s): Existing (sf) _____ Proposed total (sf) _____	Impervious Area for Compliance (includes ROW): Existing (sf) _____ Proposed total (sf) _____

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 4.

APPLICANT SIGNATURE BLOCK

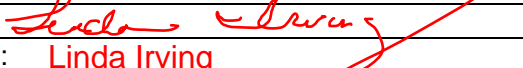
Pursuant to state law (N.C. Gen. Stat. § 160D-403(a)), applications for development approvals may be made by the landowner, a lessee or person holding an option or contract to purchase or lease land, or an authorized agent of the landowner. An easement holder may also apply for development approval for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

Acting as an authorized agent requires written permission from the property owner for the purposes of making this development approval and/or permit application. Written permission from the property owner to act as an authorized agent must be made available to the City of Raleigh upon request.

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 development 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: 4/9/24
Printed Name: Linda Irving	
Signature:	Date:
Printed Name:	

VARSITY DRIVE APARTMENTS

ADMINISTRATIVE SITE REVIEW

1530 VARISTY DRIVE
RALEIGH, NORTH CAROLINA 27606

CITY OF RALEIGH CASE #: ASR-00XX-2024

PROJECT NUMBER: SPEC-23034

DATE: APRIL 16, 2024

Administrative Site Review Application

Planning and Development Customer Service Center • One Exchange Plaza, Suite 400 | Raleigh, NC 27601 | 919-996-2900



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Site Plan Tier: Tier Two Site Plan <input type="checkbox"/> Tier Three Site Plan <input checked="" type="checkbox"/>	Building and Development Type (Check all that apply)	Site Transaction History
<input type="checkbox"/> Detached <input type="checkbox"/> Attached <input type="checkbox"/> Townhouse <input checked="" type="checkbox"/> Apartment <input type="checkbox"/> Tiny house <input type="checkbox"/> Open lot	<input type="checkbox"/> General <input type="checkbox"/> Mixed use <input type="checkbox"/> Civic <input type="checkbox"/> Cottage Court <input type="checkbox"/> Frequent Transit Development Option	Subdivision case #: _____ Scoping/sketch plan case #: _____ Certificate of Appropriateness #: _____ Board of Adjustment #: _____ Zoning Case #: 2-50-23 Design Alternate #: _____

GENERAL INFORMATION	
Development name: AVENT FERRY STUDENT HOUSING	
Inside City limits? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Property address(es): 1530 Varsity Dr.	
Site P.I.N.(s): 0793472384	
Please describe the scope of work. Include any additions, expansions, and uses (UDO 6.1.4).	

Redevelopment of lot for a privatized student housing apartment complex and associated infrastructure.

Current Property Owner(s): Dobs Inc.	
Company: Dobs Inc.	Title: _____
Address: 3939 Glenwood Ave. Suite 166 Raleigh, NC 27612	
Phone #: _____	Email: _____
Applicant Name (if different from owner. See "who can apply" in instructions): _____	
Relationship to owner: <input checked="" type="checkbox"/> Lessee or contract purchaser <input type="checkbox"/> Owner's authorized agent <input type="checkbox"/> Easement holder	
Company: Trinitas Development LLC	Address: 159 N. Sangaman Dr. Suite 200 Chicago, IL 60607

Phone #: 765.807.2737	Email: living@trinitas.ventures
NOTE: please attach purchase agreement or contract, lease or easement when submitting this form.	
Developer Contact: Linda Irving	
Company: Trinitas	Title: Vice President
Address: 159 N. Sangaman Dr. Suite 200 Chicago, IL 60607	
Phone #: 765.807.2737	Email: living@trinitas.ventures
Applicant Name: Linda Irving	
Company: Trinitas	Address: 159 N. Sangaman Dr. Suite 200 Chicago, IL 60607
Phone #: 765.807.2737	Email: living@trinitas.ventures

DEVELOPMENT TYPE + SITE DATE TABLE (Applicable to all developments)	
SITE DATA	BUILDING DATA
Zoning district(s) (please provide the acreage of each): RX-7-UL-CU	Existing gross floor area (not to be demolished): 0 SF
Gross site acreage: 2.86 AC (124,646 SF)	Existing gross floor area to be demolished: 117,402 SF
# of parking spaces proposed: 326 Spaces	New gross floor area: 149,640 SF
Max # parking permitted (7.1.2.C): 848 Spaces	Total sf gross (to remain and new): 149,640
Overlay District (if applicable): N/A	Proposed # of buildings: 1
Existing use (UDO 6.1.4): Apartments	Proposed # of stories for each: 7
Proposed use (UDO 6.1.4): Apartments	Proposed # of basement levels (UDO 1.5.7.A.6) 0

STORMWATER INFORMATION	
Impervious Area on Parcel(s):	Impervious Area for Compliance (includes ROW):
Existing (sf) 58,622 Proposed total (sf) 86,765	Existing (sf) 58,622 Proposed total (sf) 122,616

RESIDENTIAL & OVERNIGHT LODGING DEVELOPMENTS	
Total # of dwelling units: 324 Units	Total # of hotel bedrooms: N/A
# of bedroom units: 1br 71 2br 119 3br 33	4br or more 101
# of lots: 1	Is your project a cottage court? <input type="radio"/> Yes <input checked="" type="radio"/> No
	A frequent transit development? <input type="radio"/> Yes <input checked="" type="radio"/> No

APPLICANT SIGNATURE BLOCK	
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Signature:	Date: 4/9/24
Printed Name: Linda Irving	
Signature: _____	Date: _____
Printed Name: _____	

SITE DATA			
SITE ADDRESS/PIN NUMBER	1530 VARSITY DRIVE, RALEIGH, NORTH CAROLINA 27616 / PIN 0793472384		
EXISTING ZONING:	RX-5-GR-CU (RESIDENTIAL MIXED USE - 5 STORY - GREEN FRONTAGE - CONDITIONAL USE)		
PROPOSED ZONING:	RX-7-UL-CU (RESIDENTIAL MIXED USE - 7 STORY - URBAN LIMITED - CONDITIONAL USE)*		
OVERLAY DISTRICT:	N/A		
BLOCK PERIMETER:	MAX ALLOWABLE:	2,500 LF	
	PROPOSED:	N/A	
WATER SUPPLY WATERSHED:	NEUSE PERRY CREEK		
FLOODPLAIN/FIRM PANEL:	N/A		
SITE AREA:	CRSIS SITE AREA:	2.86 ACRES OR 124,646 SF	
	RIGHT-OF-WAY DEDICATION:	0.07 ACRES OR 3,110 SF	
	NET SITE AREA:	2.79 ACRES OR 121,536 SF	
EXISTING USE:	APARTMENTS		
PROPOSED USE:	APARTMENTS (324 DWELLING UNITS)		
PRIMARY STREETS:	VARSITY DRIVE AVENT FERRY ROAD		
BUILDING + PARKING SETBACK:	BUILD TO:	PRIMARY STREET (MIN/MAX):	0/20' * 5' 10'
		PRIMARY BUILDING WIDTH (MIN):	50% * 0/20' * 25% *
		SIDE STREET (MIN/MAX):	0/20' * 0' OR 6' * 4' OR 20' MIN
		SETBACKS:	BUILDING SETBACK: 5' PARKING SETBACK: 10'
		PRIMARY STREET:	5'
		SIDE STREET:	5'
		SIDE LOT LINE:	0' OR 6'
		REAR LOT LINE:	0' OR 6'
		FROM ALLEY:	4' OR 20' MIN
BUILDING HEIGHT:	MAXIMUM ALLOWED:	7 STORIES*	
	PROPOSED:	7 STORY BUILDING	
TREE CONSERVATION:	REQUIRED:	0.279 AC. OR 12,154 SF (10.0% NET SITE AREA)	
	PROPOSED:	0.279 AC. OR 12,155 SF (10.0% NET SITE AREA)	
IMPERVIOUS AREA:	EXISTING:	1.35 AC (58,622 SF)	
	PROPOSED:	1.99 AC (86,765 SF)	
	DELTA:	+0.64 AC (28,143 SF)	

* TO BE ADOPTED IN ZONING CASE 2-50-23, PENDING APPROVAL.
1. PER UDO SECTION 8.3.2.A.1.B.1, SITE IS BELOW MINIMUM SITE AREA OF 3 ACRES AND MAXIMUM BLOCK PERIMETER STANDARDS ARE NOT APPLICABLE.

BUILDING + PARKING DATA			
BUILDING DATA:	BUILDING 1: (802,400 SF) 124 UNITS (21 STUDIO, 50 ONE BED, 139 TWO BED, 33 THREE BED, 101 FOUR BED) GARAGE 1: (106,400 SF) 326 SPACES TOTAL GROSS AREA: 811,800 SF		
PARKING DATA:	VEHICLE PARKING:	MAXIMUM (PER UDO):	848 TOTAL SPACES
		APARTMENTS:	848 MAXIMUM SPACES (1.5 SPACES MAX/3 BEDROOM UNIT) X 71 UNITS = 107 SPACES MAX (2.25 SPACES MAX/2 BEDROOM UNIT) X 119 UNITS = 268 SPACES MAX (3 SPACES MAX/3 BEDROOM UNIT) X 33 UNITS = 99 SPACES MAX (4 SPACES MAX/4 BEDROOM UNIT) X 101 UNITS = 404 SPACES MAX
		PROVIDED:	318 STANDARD SPACES + 8 ACCESSIBLE (2 VAN) = 326 TOTAL
	ACCESSIBLE PARKING:	REQUIRED:	8 TOTAL ACCESSIBLE SPACES; 2 VAN SPACES PROVIDED: 8 TOTAL ACCESSIBLE SPACES; 2 VAN SPACES
	BIKE PARKING (SHORT-TERM):	REQUIRED (PER UDO):	17 TOTAL SPACES (1 SPACE/20 UNITS, 4 MIN)
		PROVIDED:	18 SPACES (9 RACKS, 2 SPACES EACH RACK)
	BIKE PARKING (LONG-TERM):	REQUIRED (PER UDO):	116 TOTAL SPACES (1 SPACE/7 BEDROOMS)
		PROVIDED:	162 SPACES

OUTDOOR AMENITY AREA CALCULATIONS:

SITE AREA:	2.79 AC. OR 121,536 SF
REQUIRED AMENITY AREA:	0.28 AC OR 12,154 SF
PROVIDED AMENITY AREA:	0.45 AC OR 19,532 SF

BUILD TO CALCULATIONS:

VARSITY DRIVE:	512 LF
REQUIRED BUILDING WIDTH IN BUILD TO:	256 LF (50%)
PROVIDED BUILDING WIDTH IN BUILD TO:	442 LF (86%)
AVENT FERRY ROAD:	267 LF
REQUIRED BUILDING WIDTH IN BUILD TO:	133.5 LF (50%)
PROVIDED BUILDING WIDTH IN BUILD TO:	223.5 LF (84%)

REZONING CONDITIONS:

2-50-23 (SUBJECT TO CITY OF RALEIGH COUNCIL ACTION)

1. THE FOLLOWING PRINCIPAL USES AS LISTED IN UDO SECTION 6.1.4 THAT ARE PERMITTED, LIMITED, OR SPECIAL USES IN THE "B" DISTRICT SHALL BE PROHIBITED: (I) CEMETERY, (II) TELECOMMUNICATION TOWER (OF ANY HEIGHT), (III) OUTDOOR SPORTS OR ENTERTAINMENT FACILITY (OF ANY SEATING CAPACITY), (IV) BEACH AND BREAKFAST, (V) HOSPITALITY HOUSE, (VI) PARKING FACILITY.

2. NEITHER VINYL SIDING (NOTWITHSTANDING VINYL WINDOW COMPONENTS) NOR EPS SHALL BE USED AS A BUILDING SIDING MATERIAL. RESPONSE: NEITHER OF THESE MATERIALS ARE PROPOSED AS THE BUILDING SIDING MATERIAL.

3. THE NUMBER OF DWELLING UNITS CONSTRUCTED ON THE PROPERTY SHALL NOT EXCEED 340 DWELLING UNITS. THE FOLLOWING CONDITION SHALL APPLY ONLY TO DEVELOPMENT QUALIFYING AS A TIER 3 SITE PLAN.

A. AFFORDABLE HOUSING:
THE PROPERTY OWNER SHALL PAY TO THE CITY A FEE IN THE AMOUNT OF \$140,000 IN LIEU OF DEDICATING AFFORDABLE UNITS. THE PAYMENT SHALL BE PLACED IN THE FUND DESIGNATED FOR THE CITY'S AFFORDABLE HOUSING PROGRAM. THE AMOUNT SHALL BE PAID IN FULL PRIOR TO THE ISSUANCE OF THE FIRST CERTIFICATE OF OCCUPANCY. PRIOR TO THE ISSUANCE OF ANY BUILDING PERMIT, THIS PAYMENT OBLIGATION SHALL BE ENFORCED BY A PROVISIONARY NOTE TO THE CITY. IF A SALE OF THE PROJECT OR THE PROPERTY (OR A PORTION THEREOF), INCLUDING A SALE OF CONTROLLING INTERESTS OF AN OWNERSHIP ENTITY WITHIN THE PROJECT, OCCURS SUBSEQUENT TO THE ISSUANCE OF THE FIRST BUILDING PERMIT AND PRIOR TO THE PAYMENT IN FULL OF THE SUM DESCRIBED WITHIN THIS CONDITION, ANY OUTSTANDING AMOUNT SHALL BE PAID PRIOR TO THE CHANGE OF OWNERSHIP.
RESPONSE: THIS FEE IN LIEU WILL BE PAID BY THE OWNER PRIOR TO THE FIRST CERTIFICATE OF OCCUPANCY.

B. BIKESHARE:
THE SITE PLAN FOR DEVELOPMENT OF THE PROPERTY SHALL PROVIDE FOR A MUTUALLY ACCEPTABLE LOCATION ON ADJACENT PUBLIC RIGHT-OF-WAY TO ACCOMMODATE A CITY BIKESHARE STATION. THE PROPERTY OWNER SHALL PROVIDE A STATION OF NO FEWER THAN 8 DOCKS, AT LEAST 8 ELECTRIC ASSIST BIKES, AND INSTALLATION OF ALL NECESSARY EQUIPMENT FOR A FUNCTIONAL BIKESHARE STATION. PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY FOR THE FIRST BUILDING, CLOSET TO THE PROPOSED BIKESHARE STATION, THE "MUTUALLY ACCEPTABLE LOCATION" FOR THE BIKESHARE STATION SHALL BE DETERMINED BY THE PROPERTY OWNER AND THE CITY.
RESPONSE: A BIKESHARE STATION WITH 8 BAYS ARE PROVIDED ON THE PROPOSED DEVELOPMENT.

C. TENANT NOTICE:
RESIDENTIAL TENANTS OF BUILDINGS THAT EXIST ON THE PROPERTY PRIOR TO THE EFFECTIVE DATE OF THESE CONDITIONS (THE "EXISTING BUILDINGS") ARE ENTITLED TO 90 DAYS WRITTEN NOTICE BEFORE THE TERMINATION OF THEIR LEASES DUE TO REDEVELOPMENT OF THE PROPERTY. THE OWNER OF THE PROPERTY, OR THEIR DESIGNEE, SHALL PROVIDE THE PLANNING AND DEVELOPMENT STAFF WITH A SWORN AFFIDAVIT CONFIRMING COMPLIANCE WITH THIS CONDITION PRIOR TO ISSUANCE OF A DEMOLITION PERMIT FOR BUILDINGS ON THE PROPERTY. THE PROPERTY OWNER OR ITS DESIGNEE SHALL PROVIDE TO THE PLANNING AND DEVELOPMENT STAFF A SWORN AFFIDAVIT CONFIRMING THAT NOTICE OF ELIGIBILITY FOR RELOCATION ASSISTANCE WAS GIVEN TO EACH RESIDENTIAL UNIT LOCATED IN THE EXISTING BUILDINGS ON THE PROPERTY. A COPY OF THE ELIGIBILITY NOTICE, IDENTIFICATION OF THE RESIDENTIAL UNITS RECEIVING RELOCATION ASSISTANCE, AND THE DATES SUCH ASSISTANCE PAYMENTS WERE MADE SHALL BE INCLUDED IN THE AFFIDAVIT REQUIRED BY THIS CONDITION.
RESPONSE: THE OWNER WILL PROVIDE RELOCATION ASSISTANCE WHERE NEEDED.

D. RELOCATION ASSISTANCE:
IN THE EVENT THAT PROPERTY OWNER IS OBLIGATED BY THESE ZONING CONDITIONS TO PROVIDE TENANTS OF THE EXISTING BUILDINGS WITH 90 DAYS WRITTEN NOTICE OF LEASE TERMINATION UNDER CONDITION 4.C., THE PROPERTY OWNER OR ITS DESIGNEE SHALL PROVIDE RELOCATION ASSISTANCE IN AN AMOUNT OF \$2,500 FOR EACH DWELLING UNIT. RESPECTIVE OF THE NUMBER OF OCCUPANTS OR RESIDERS IN EACH DWELLING UNIT.
PRIOR TO ISSUANCE OF A DEMOLITION PERMIT FOR BUILDINGS ON THE PROPERTY, THE PROPERTY OWNER OR ITS DESIGNEE SHALL PROVIDE TO THE PLANNING AND DEVELOPMENT STAFF A SWORN AFFIDAVIT CONFIRMING THAT NOTICE OF ELIGIBILITY FOR RELOCATION ASSISTANCE WAS GIVEN TO EACH RESIDENTIAL UNIT LOCATED IN THE EXISTING BUILDINGS ON THE PROPERTY. A COPY OF THE ELIGIBILITY NOTICE, IDENTIFICATION OF THE RESIDENTIAL UNITS RECEIVING RELOCATION ASSISTANCE, AND THE DATES SUCH ASSISTANCE PAYMENTS WERE MADE SHALL BE INCLUDED IN THE AFFIDAVIT REQUIRED BY THIS CONDITION.
RESPONSE: THE OWNER WILL PROVIDE RELOCATION ASSISTANCE WHERE NEEDED.

SHEET INDEX

C0.00	PROJECT NOTES
C1.00	EXISTING CONDITIONS (SURVEY PROVIDED BY KCI)
C1.01	DEMOLITION PLAN
C2.00	OVERALL SITE PLAN
C3.00	OVERALL GRADING PLAN
C4.00	OVERALL UTILITY PLAN
C8.00	SITE DETAILS
C8.01	SITE DETAILS
C8.02	WATER DETAILS
C8.03	WATER DETAILS
C8.04	STORM DETAILS
C8.05	SANITARY SEWER DETAILS
C9.00	STORMWATER CONTROL MEASURE PLAN
C9.01	STORMWATER CONTROL MEASURE DETAILS
L8.00	TREE CONSERVATION PLAN
L4.00	CODE COMPLIANCE LANDSCAPE PLAN (BY OTHERS)
L9.10	LANDSCAPE DETAILS AND NOTES (BY OTHERS)
SL.01	SITE LIGHTING SEVENTH FLOOR PHOTOMETRIC PLAN (BY OTHERS)

ARCHITECTURAL SHEETS

A-101	BUILDING PLANS & LEVEL DIAGRAM
A-201	BUILDING ELEVATIONS

TOTAL LIMITS OF DISTURBANCE = 3.15 ACRES

SEE SHEET C0.00 FOR ALL PROJECT, SITE, GRADING, STORM DRAINAGE AND UTILITY NOTES

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT NCDOT AND CITY OF RALEIGH ENGINEERING DESIGN AND CONSTRUCTION STANDARDS

HORIZONTAL DATUM: NAD 83
VERTICAL DATUM: NAVD 88

ATTENTION CONTRACTORS

The Construction Contractor responsible for the extension of water, sewer, and/or reuse, as approved in these plans, is responsible for contacting the Public Works Department at (919) 996-2409, and the Public Utilities Department at (919) 996-4540, at least twenty-four hours prior to beginning any of their construction.

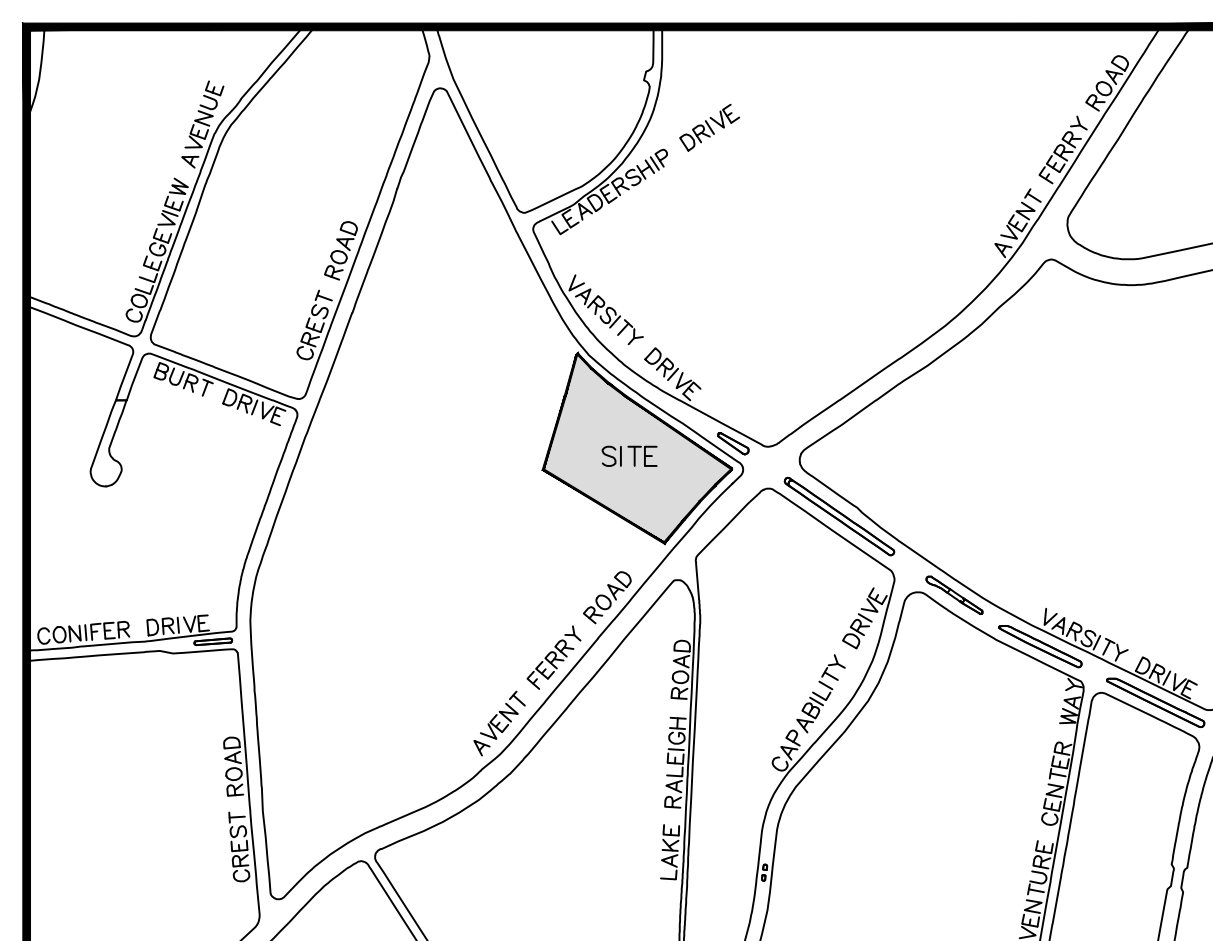
Failure to notify both City Departments in advance of beginning construction, will result in the issuance of monetary fines, and require reinstallation of any water or sewer facilities not inspected as a result of this notification failure.

Failure to call for inspection, install a Downstream Plug, have Permitted Plans on the jobsite, or any other violation of City of Raleigh Standards will result in a fine and possible exclusion from future work in the City of Raleigh.

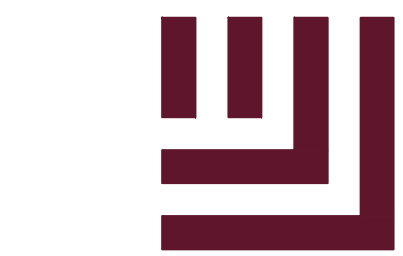
CONTRACTOR SHALL NOTIFY "NC811" (811) OR (1-800-632-4949) AT LEAST 3 FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NC811". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.



Know what's below.
Call before you dig.



VICINITY MAP
1" = 500'



McADAMS

The John R. McAdams Company, Inc.
621 Hillsborough Street
Suite 500
Raleigh, NC 27603
phone 919.361.5000
fax 919.361.2269
license number: C-0293, C-187

www.mcadamsco.com

CONTACT

ADAM PIKE
pika@mcadamsco.com
PHONE: 919.325.2272

CLIENT

TRINITAS DEVELOPMENT LLC
159 N. SANGAMAN DRIVE, SUITE 200
CHICAGO, ILLINOIS 60607
PHONE: 765.807.2737



PROJECT DIRECTORY

DEVELOPER
TRINITAS DEVELOPMENT LLC
159 N. SANGAMAN DRIVE, SUITE 200
CHICAGO, ILLINOIS 60607
PHONE: 765.807.2737

REVISIONS

NO. DATE

ADMINISTRATIVE SITE REVIEW PLANS FOR:

VARSITY DRIVE APARTMENTS
1530 VARSITY DRIVE
RALEIGH, NC 27606
PROJECT NUMBER: SPEC-23034

PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION

SITE PLAN NOTES

- NON-ALLEY LOADED DRIVEWAYS MAY INTERSECT A STREET NO CLOSER THAN 20 FEET FROM THE INTERSECTION OF TWO STREET RIGHT-OF-WAYS. THE MINIMUM CORNER CLEARANCE FROM CURB LINE OR EDGE OF PAVEMENT OF INTERSECTING STREETS SHALL BE AT LEAST 20 FEET FROM THE POINT OF TANGENCY OF THE RADIUS OF CURVATURE, OR 20 FEET FROM THE INTERSECTION OF RIGHT-OF-WAY LINES, WHICHEVER IS GREATER. THE RADIUS OF THE DRIVEWAY SHALL NOT ENCRDACH ON THE MINIMUM CORNER CLEARANCE. REFER TO SECTION 6.5 OF THE LATEST VERSION OF THE RALEIGH STREET DESIGN MANUAL FOR ADDITIONAL DETAILS.
- RIGHT-OF-WAY SHALL BE CLEARED AND GRUBBED WITHIN 50' OF ALL MINOR RESIDENTIAL, RESIDENTIAL, AND RESIDENTIAL COLLECTOR INTERSECTIONS. THE FULL LENGTH OF THE RIGHT-OF-WAY SHALL BE CLEARED AND GRADED ALONG ALL MAJOR, MINOR, & SENSITIVE AREA THROUGHFARES.
- WITHIN THE AREA DEFINED SIGHT TRIANGLES SHOWN ON THESE PLANS, THERE SHALL BE NO SIGHT OBSTRUCTING OR PARTLY OBSTRUCTING WALL, FENCE, SIGN, FOLIAGE BERMS, OR PARKED VEHICLES BETWEEN THE HEIGHTS OF 24 INCHES AND 8 FEET ABOVE THE CURBLINE ELEVATION ON THE NEAREST TRAVEL WAY IF NO CURBLINE EXISTS. REFER TO SECTION 6.3.2 OF THE LATEST VERSION OF THE RALEIGH STREET DESIGN MANUAL FOR ADDITIONAL DETAILS.
- MULTIWAY STOP CONTROL WILL NOT BE USED AT ANY PUBLIC STREET INTERSECTION WITHOUT AN ENGINEERING STUDY TO PROVIDE DATA TO CITY OF RALEIGH TRANSPORTATION DIVISION THAT THE MULTIWAY STOP INSTALLATION WARRANTS CAN BE MET AND ORDINANCES BY CITY COUNCIL APPROVAL.
- ALL CONSTRUCTION SHALL CONFORM TO THE LATEST CITY OF RALEIGH AND/OR NCDOT STANDARDS AND SPECIFICATIONS AS APPLICABLE.
- ALL DIMENSIONS SHOWN ON SITE PLAN ARE MEASURED TO FACE OF CURB UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL MAINTAIN AN "AS-BUILT" SET OF DRAWINGS TO RECORD THE EXACT LOCATION OF ALL PIPING PRIOR TO CONCEALMENT. DRAWINGS SHALL BE GIVEN TO THE ENGINEER UPON COMPLETION OF THE PROJECT WITH A COPY OF THE TRANSMITTAL LETTER TO THE OWNER.
- EXISTING IMPROVEMENTS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED/RESTORED TO THEIR ORIGINAL CONDITION AND TO THE SATISFACTION OF THE OWNER, BY THE CONTRACTOR RESPONSIBLE FOR THE DAMAGE.
- THE CONTRACTOR SHALL NOTE THAT THE DRAWINGS MAY NOT SHOW EVERY OFFSET, TRANSITION, FITTING, ETC. THAT MAY BE REQUIRED. THE CONTRACTOR SHALL INSTALL SUCH STANDARD APPURTENANCES AS REQUIRED TO CLOSELY FOLLOW THE GRADES AND ALIGNMENTS DEPICTED ON THE PLANS.
- CONTRACTOR SHALL NOTIFY "nc811" (811) OR (1-800-632-4949) AT LEAST 3 FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "nc811". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATING CONSTRUCTION ACTIVITIES WITH THE APPROPRIATE UTILITY COMPANIES FOR ANY REQUIRED RELOCATIONS (I.E. POWER POLES, TELEPHONE PEDESTALS, WATER METERS, ETC.).
- PRIOR TO BEGINNING CONSTRUCTION BEYOND EROSION CONTROL MEASURES, THE GENERAL CONTRACTOR SHALL SCHEDULE AND ATTEND A PRE-CONSTRUCTION CONFERENCE WITH THE CITY OF RALEIGH PUBLIC UTILITY DEPARTMENT (919) 996-2409, AND A REPRESENTATIVE OF THE ENGINEER AND OWNER, THE PURPOSE OF THIS MEETING IS TO REVIEW THE SPECIFIC COMPONENTS OF THE PLAN AND OPERATION OF THE FACILITIES DURING CONSTRUCTION.
- ALL DIMENSIONS AND GRADES SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. FOR NECESSARY PLAN OR GRADE CHANGES, NO EXTRA COMPENSATION SHALL BE PAID TO CONTRACTOR FOR ANY WORK DONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
- ACCESSIBLE RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF RALEIGH UNIFIED DEVELOPMENT ORDINANCE (UDO) DETAILS.
- ALL SIDEWALKS THAT CONNECT TO THE PUBLIC RIGHT-OF-WAY MUST BE ACCESSIBLE TO PERSONS WHO ARE BLIND, HAVE LOW VISION AND PEOPLE WITH MOBILITY DISABILITIES. PEDESTRIAN EXISTING ROUTES AND ALTERNATE PEDESTRIAN ROUTES DURING CONSTRUCTION WILL BE REQUIRED TO BE COMPLIANT WITH THE PUBLIC RIGHTS OF WAY ACCESSIBILITY GUIDELINES (PROWAG), 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- TYPICAL PAVEMENT SECTION DETAILS ARE SHOWN WITHIN THIS SET AND INTENDED TO BE A MINIMUM PAVEMENT SECTION REQUIREMENT. THE CURRENT GEOTECHNICAL REPORT SHALL OVER-RIDE ALL TYPICAL PAVEMENT SECTIONS SHOWN, IF THE GEOTECHNICAL ENGINEER DEEMS A HEAVIER SECTION IS REQUIRED.
- EQUIPMENT AND PRODUCTS OTHER THAN THOSE SPECIFIED MAY BE USED PROVIDED APPROVAL HAS BEEN OBTAINED FROM THE OWNER IN WRITING PRIOR TO ORDERING AND INSTALLATION. THE CONTRACTOR SHALL WAIVE ANY CLAIM FOR ADDITIONAL COST RELATED TO SUBSTITUTION OF ALTERNATE EQUIPMENT.
- IF UNFORESEEN CONDITIONS DEVELOP DURING CONSTRUCTION, REFER TO THE LATEST VERSION OF THE RALEIGH STREET DESIGN MANUAL AND CONTACT PUBLIC WORKS STAFF FOR FURTHER GUIDANCE.
- ALL SIGNAGE ASSOCIATED WITH THE PUBLIC STREET SYSTEM SHALL ADHERE TO MUTCD STANDARDS AND SPECIFICATIONS.
- ANY TRANSIT STOP LOCATIONS SHOWN ARE PRELIMINARY ONLY. FINAL LOCATION SHALL BE DETERMINED ONCE THE CITY OF RALEIGH TRANSIT ROUTE HAS BEEN FINALIZED. ALL TRANSIT STOPS SHALL HAVE A 10x20x6" (3000 PS) CONCRETE PAD.

ADDITIONAL UTILITY NOTES

- ALL WATER MAINS, SERVICES AND FIRE SERVICES GREATER THAN 2" DIAMETER ARE TO BE DUCTILE IRON PIPE, 2" & SMALLER DOMESTIC SERVICES MUST BE TYPE K SOFT COPPER (WITHOUT FITTINGS) TO THE WATER METER.
- ALL SEWER MAINS SHALL BE EITHER PVC OR DUCTILE IRON PIPE AS SHOWN ON THE PLANS. ALL PIPE MATERIAL SHALL MEET CITY OF RALEIGH STANDARDS AND SPECIFICATIONS AS DEFINED IN THE LATEST ISSUE OF THE PUBLIC UTILITIES HANDBOOK AND/OR UNIFIED DEVELOPMENT ORDINANCE (UDO).
- ALL FIRE HYDRANTS ALONG PUBLIC R/W LINES SHALL HAVE A 5'x5'x5" CITY OF RALEIGH WATERLINE EASEMENT ONTO ADJACENT PROPERTY.
- ALL SANITARY SEWER INTERCEPTOR LINES (12" AND LARGER), AS WELL AS MANHOLES AND FITTINGS ASSOCIATED WITH THE INTERCEPTOR LINE, SHALL BE INTERNALLY LINED WITH PROTECTO 401 OR APPROVED EQUAL TO PREVENT HYDROGEN SULFIDE CORROSION. SEE THE CURRENT CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT HANDBOOK FOR APPROVED COATINGS AND APPLICATION METHODS.
- IN ACCORDANCE WITH GENERAL STATUTE 87-121(G), ALL UNDERGROUND UTILITIES INSTALLED AFTER OCTOBER 1, 2014 SHALL BE ELECTRONICALLY LOCATABLE. CONTRACTOR SHALL COORDINATE DIRECTLY WITH THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT FOR DETAILS AND SPECIFICATIONS FOR MEETING THESE REQUIREMENTS.
- EXISTING UTILITIES SHOWN ARE BASED ON FIELD SURVEYS AND THE BEST AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY CONDITIONS PRIOR TO BEGINNING CONSTRUCTION. ANY DISCREPANCIES BETWEEN ACTUAL FIELD CONDITIONS AND THE PLANS SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
- ALL WATER AND SEWER MAINS WITHIN PUBLIC EASEMENTS OR RIGHTS-OF-WAY TO BE OWNED, OPERATED, AND MAINTAINED BY THE CITY OF RALEIGH.
- ALL WATER AND SEWER MAINS NOT WITHIN PUBLIC EASEMENTS OR RIGHTS-OF-WAY TO BE PRIVATELY OWNED, OPERATED, AND MAINTAINED BY THE PROPERTY OWNER.
- CONTRACTOR SHALL NOTIFY "nc811" (811) OR (1-800-632-4949) AT LEAST 3 FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "nc811". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
- ALL UTILITY SLEEVES SHALL BE SCHEDULE 40 PVC AND INSTALLED WITH 2" MINIMUM COVER. BOTH ENDS SHALL BE CAPPED AND MARKED.

RETAINING WALL NOTES

- THE RETAINING WALL ALIGNMENT SHOWN ON THESE PLANS DEPICTS THE LOCATION OF THE FRONT FACE OF THE RETAINING WALL AT THE BOTTOM OF THE WALL. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING RETAINING WALLS ARE NOT LOCATED IN ANY STREAM BUFFERS, AND THEIR CONSTRUCTION DOES NOT ENCRDACH INTO ANY ADJACENT PROPERTIES DUE TO ANY BATTER INCORPORATED IN THE DESIGN OF THE WALLS.
- RETAINING WALLS ARE TO BE DESIGN-BUILD PROJECTS BY THE CONTRACTOR. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN FINAL CONSTRUCTION DRAWINGS FROM A REGISTERED ENGINEER AND GAIN ALL REQUIRED PERMITS NECESSARY FOR THE CONSTRUCTION OF THE RETAINING WALLS.
- RETAINING WALLS SHALL BE ASSUMED TO BE BACKFILLED WITH OFF-SITE BORROW MATERIAL OR PROCESSED FILL, UNLESS THE CONTRACTOR CAN PROVIDE TO THE OWNER WITH CONFIRMATION FROM THE GEOTECHNICAL ENGINEER AND THE RETAINING WALL DESIGNER, THAT READILY AVAILABLE ON-SITE SOILS CAN BE USED.
- THE TOP AND BOTTOM OF WALL ELEVATIONS SHOWN ON THESE PLANS IDENTIFY FINISHED GRADE ELEVATIONS ONLY. THE EXTENT THAT THE RETAINING WALL WILL BE EXTENDED BELOW GRADE TO THE FOOTING OR ABOVE GRADE TO THE TOP OF THE CAP BLOCK COURSE SHALL BE IDENTIFIED ON THE RETAINING WALL CONSTRUCTION DRAWINGS.
- ALL RETAINING WALLS OVER 30" HIGH SHALL HAVE A SAFETY FENCE (DESIGN BY OTHERS).
- ANY PART OF ANY RETAINING WALL THAT EXTENDS INTO THE RIGHT-OF-WAY WILL REQUIRE AN ENCRDACHMENT AGREEMENT. ENCRDACHMENT AGREEMENTS FOR RETAINING WALLS SHALL BE APPROVED PRIOR TO CONSTRUCTION DRAWING APPROVAL.
- ANY TIEBACK SYSTEMS FOR THE RETAINING WALLS SHALL NOT BE ALLOWED WITHIN PUBLIC RIGHT-OF-WAY.
- STORMWATER RUN-OFF SHALL BE DIRECTED AWAY FROM RETAINING WALLS. ANY RUN-OFF FLOWING TO AND OVER A RETAINING WALL SHALL BE KEPT TO AN ABSOLUTE MINIMUM AND BROUGHT TO THE ATTENTION OF THE WALL DESIGNER PRIOR TO THEIR DESIGN.
- ALL WORK TO BE CONSTRUCTED IN STRICT COMPLIANCE W THE GEOTECHNICAL REPORT.

CITY OF RALEIGH PUBLIC UTILITIES STANDARD UTILITY NOTES (AS APPLICABLE)

- ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH DESIGN STANDARDS, DETAILS & SPECIFICATIONS (REFERENCE: CORPUD HANDBOOK, CURRENT EDITION).
- UTILITY SEPARATION REQUIREMENTS:
 - A DISTANCE OF 100' SHALL BE MAINTAINED BETWEEN SANITARY SEWER & ANY PRIVATE OR PUBLIC WATER SUPPLY SOURCE SUCH AS AN IMPOUNDING 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.
 - 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 DIAMETER TO OUTSIDE DIAMETER.
 - WHERE IT IS IMPOSSIBLE TO OBTAIN SEPARATE 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.
 - 5' MINIMUM HORIZONTAL SEPARATION IS REQUIRED BETWEEN ALL SANITARY SEWER & STORM SEWER FACILITIES, UNLESS DIP MATERIAL IS SPECIFIED FOR SANITARY SEWER.
 - 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 DETAILS W-41 & S-49).
 - ALL OTHER UNDERGROUND UTILITIES SHALL CROSS WATER & SEWER FACILITIES WITH 18" MIN. VERTICAL SEPARATION REQUIRED.
- 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 MUST 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 FORCEMAINS. 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.
- INSTALL 3/4" COPPER 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 4" PVC SEWER SERVICES @ 1% 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, WHERE SANITARY SERVICES ARE SERVING A BUILDING INSTALLED ON A FLOOR WITH A FINISHED FLOOR ELEVATION BELOW THE ELEVATION OF THE MANHOLE COVER OF THE NEXT UPSTREAM MANHOLE IN THE PUBLIC SEWER. SUCH FITTINGS SHALL BE PROTECTED BY A BACKWATER VALVE INSTALLED IN THE SERVICE LINE. SANITARY SERVICES SERVING A BUILDING WITH A FINISHED FLOOR ELEVATION ABOVE THE ELEVATION OF THE MANHOLE COVER OF THE NEXT UPSTREAM MANHOLE IN THE PUBLIC SEWER SHALL NOT DISCHARGE THROUGH A BACKWATER VALVE.
- 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 ENCRDACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK (INCLUDING MAIN EXTENSIONS & SERVICE TAPS) WITHIN STATE OR RAILROAD RIGHT-OF-WAY PRIOR TO CONSTRUCTION.
- GREASE INTERCEPTOR / OIL WATER SEPARATOR SIZING CALCULATIONS & INSTALLATION SPECIFICATIONS SHALL BE APPROVED BY THE CORPUD FOS PROGRAM COORDINATOR PRIOR TO ISSUANCE OF A BUILDING PERMIT. CONTACT STEPHEN CALVERLEY AT (919) 296-2334 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 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.

GRADING NOTES

- ALL DIMENSIONS AND GRADES SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION, FOR NECESSARY PLAN OR GRADE CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR ANY WORK DONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
- OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS FOR EXCAVATIONS: FINAL RULE 29CFR PART 1926, SUBPART 19" APPLIES TO ALL EXCAVATIONS EXCEEDING FIVE (5) FEET IN DEPTH. EXCAVATION EXCEEDING TWENTY (20) FEET IN DEPTH REQUIRES THE DESIGN OF A TRENCH SAFETY SYSTEM BY A REGISTERED PROFESSIONAL ENGINEER, PROVIDED BY CONTRACTOR RESPONSIBLE FOR EXCAVATION.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF RALEIGH AND/OR NCDOT STANDARDS AND SPECIFICATIONS AS APPLICABLE.
- CONTRACTOR SHALL NOTIFY "nc811" (811) OR (1-800-632-4949) AT LEAST 3 FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "nc811". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
- PRIOR TO BEGINNING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL SCHEDULE AND ATTEND A PRE-CONSTRUCTION CONFERENCE WITH THE CITY OF RALEIGH STORMWATER AND EROSION CONTROL DEPARTMENT, THE ENGINEER AND A REPRESENTATIVE OF THE OWNER.
- CONSTRUCTION, MAINTENANCE AND REMOVAL OF ALL EROSION CONTROL DEVICES ARE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. TIMING OF REMOVAL SHALL BE COORDINATED WITH THE EROSION CONTROL INSPECTOR.
- EXISTING UTILITIES AND STRUCTURES SHOWN, BOTH UNDERGROUND AND ABOVE GROUND, ARE BASED ON A FIELD SURVEY AND THE BEST AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY FIELD CONDITIONS PRIOR TO BEGINNING RELATED CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
- SOIL UNDER BUILDINGS, PAVED AREAS AND WITHIN SLOPES GREATER THAN 3:1 (H:V) SHALL BE APPROVED, PLACED AND COMPACTED AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
- ALL WORK TO BE CONSTRUCTED IN STRICT COMPLIANCE W THE GEOTECHNICAL REPORT.

TRAFFIC CONTROL NOTES

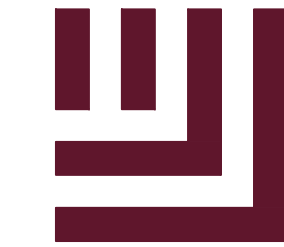
- THE CONTRACTOR SHALL CONDUCT ALL WORK IN A SAFE MANNER AND WITH A MINIMUM AMOUNT OF INCONVENIENCE TO TRAFFIC.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL AND SHALL ADHERE TO THE PROVISIONS OF THE MUTCD (MOST CURRENT EDITION).
- PRIOR TO START OF WORK, A PRE CONSTRUCTION MEETING MUST BE SETUP WITH THE CONTRACTOR AND THE CITY OF RALEIGH TRANSPORTATION FIELD SERVICES STAFF. CONTACT ENGINEERING INSPECTIONS AT 919-996-2409 TO SET UP THE MEETING.
- THE CONTRACTOR SHALL OBTAIN A RIGHT-OF-WAY OBSTRUCTION PERMIT FOR ANY WORK WHICH REQUIRES THE TEMPORARY CLOSURE OF A STREET, TRAVEL LANE, PARKING SPACE OR SIDEWALK FROM RIGHT-OF-WAY SERVICES AT LEAST 48 HOURS IN ADVANCE.
- A TEMPORARY STREET CLOSURE REQUEST MUST BE SUBMITTED AT LEAST A MINIMUM OF TWO WEEKS PRIOR TO THE START OF WORK. SEE "RIGHT-OF-WAY CLOSURES" ON WWW.RALEIGHNC.GOV. SEND THE RIGHT-OF-WAY OBSTRUCTION PERMIT REQUEST TO RIGHTOFWAYSERVICES@RALEIGHNC.GOV.
- THE CONTRACTOR SHALL HAVE A COMPLETE SET OF CONTRACT DOCUMENTS AS WELL AS ALL PERMITS, APPROVALS AND EASEMENTS ON THE JOB SITE AT ALL TIMES.
- THE CONTRACTOR SHALL REPAIR ALL DAMAGED DRIVEWAYS, DRIVEWAY PIPES, CURB AND GUTTER, SIDEWALKS AND STREETS TO EXISTING CONDITION OR BETTER.
- SIDEWALKS MUST BE ACCESSIBLE TO PERSONS WHO ARE VISUALLY IMPAIRED AND PEOPLE WITH MOBILITY DISABILITIES. EXISTING PEDESTRIAN ROUTES AND ALTERNATE PEDESTRIAN ROUTES, DURING CONSTRUCTION, WILL BE REQUIRED TO BE COMPLIANT WITH THE PUBLIC RIGHTS OF WAY ACCESSIBILITY GUIDELINES (PROWAG), 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

PAVEMENT MARKING NOTES

- ALL PAVEMENT MARKINGS SHOWN IN THESE PLANS FOR CITY OF RALEIGH MAINTAINED STREETS ARE SUBJECT TO FINAL APPROVAL FROM PUBLIC WORKS TRANSPORTATION OPERATIONS DIVISION. CONTRACTOR SHALL CONTACT TRANSPORTATION OPERATIONS AT 919-996-3030 FOR COORDINATION AND FINAL APPROVAL PRIOR TO PLACEMENT OF ANY PAVEMENT MARKINGS. MARKINGS WITHIN NCDOT RIGHT-OF-WAYS SHALL BE IN COMPLIANCE WITH NCDOT STANDARDS AND SPECIFICATIONS.
- ALL SIGNS & PAVEMENT MARKINGS ASSOCIATED WITH THE PUBLIC STREET SYSTEM WILL REQUIRE APPROVAL BY CITY COUNCIL TO BE ORDINANCED FOR ENFORCEMENT.
- ALL PAVEMENT MARKINGS SHALL BE PLACED PER THE NCDOT DIVISION 12 STANDARD DETAILS. BICYCLE LANE MARKINGS SHALL BE PLACED PER CITY OF RALEIGH STANDARD BICYCLE FACILITIES DETAILS.

STORM DRAINAGE NOTES

- ALL STORM DRAINAGE PIPES SHOWN SHALL BE REINFORCED CONCRETE (RCP) (MINIMUM CLASS III) UNLESS NOTED OTHERWISE. CONTRACTOR TO COORDINATE WITH THE GEOTECH TO VERIFY TYPE OF BEDDING REQUIRED BASED ON SOIL CONDITIONS. CONTRACTOR TO SELECT REQUIRED CLASS OF PIPE BASED ON DEPTH OF PIPE AND BEDDING PROVIDED PER THE AMERICAN CONCRETE PIPE ASSOCIATION GUIDELINES.
- ALL STORM DRAINAGE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF RALEIGH STANDARDS.
- ALL CONCRETE SHALL MEET A MINIMUM 3000 PSI COMPRESSIVE STRENGTH.
- ALL PIPE IN STORM DRAIN STRUCTURES SHALL BE STRUCK EVEN WITH INSIDE WALL.
- ALL PIPE JOINTS SHALL BE MADE WITH PREFORMED JOINT SEALER, WHICH CONFORMS TO AASHTO SPECIFICATION M-198 FOR TYPE B FLEXIBLE PLASTIC GASKETS UNLESS OTHERWISE NOTED.
- THE INTERIOR SURFACES OF ALL STORM DRAINAGE STRUCTURES SHALL BE POINTED UP AND SMOOTHED TO AN ACCEPTABLE STANDARD, USING MORTAR MIXED TO MANUFACTURER'S SPECIFICATIONS.
- ALL BACKFILL SHALL BE NON-PLASTIC IN NATURE, FREE FROM ROOTS, VEGETATION MATTER, WASTE CONSTRUCTION MATERIAL OR OTHER OBJECTIONABLE MATERIAL. SAID MATERIAL SHALL BE CAPABLE OF BEING COMPACTED BY MECHANICAL MEANS AND SHALL HAVE NO TENDENCY TO FLOW OR BEHAVE IN A PLASTIC MANNER UNDER THE TAMPING BLOWS OR PROOF ROLLING.
- MATERIALS DEEMED BY THE OWNER'S REPRESENTATIVE OR GEOTECH AS UNSUITABLE FOR BACKFILL PURPOSES SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL.
- BACKFILLING OF TRENCHES SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PIPE IS LAID. THE FILL AROUND THE PIPE SHALL BE THOROUGHLY COMPACTED TO 95 % OF THE MAXIMUM DRY DENSITY OBTAINABLE WITH THE STANDARD PROCTOR TEST. THE TOP EIGHT (8) INCHES SHALL BE COMPACTED TO 100 PERCENT STANDARD PROCTOR.
- UNDER NO CIRCUMSTANCES SHALL WATER BE ALLOWED TO RISE IN UNBACKFILLED TRENCHES AFTER PIPE HAS BEEN PLACED.
- ALL CONCRETE PIPE AND PRECAST STORM STRUCTURES SHALL MEET NCDOT STANDARDS BY MANUFACTURER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING ALL PIPE AND STRUCTURES FOR CRACKS OR BREAKS, PRIOR TO INSTALLATION. ANY DAMAGED ITEMS SHALL NOT BE INSTALLED.
- "KNOCK-OUT" BOXES OR HOPE PIPE SHALL NOT BE ALLOWED WITHIN PUBLIC RIGHT-OF-WAYS UNLESS APPROVED IN WRITING BY THE CITY OF RALEIGH STORMWATER DEPARTMENT.



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VARSITY DRIVE APARTMENTS
ADMINISTRATIVE SITE REVIEW
1530 VARSITY DRIVE
RALEIGH, NORTH CAROLINA 27606

REVISIONS

NO. DATE

PLAN INFORMATION

PROJECT NO. SPEC-23034
FILENAME SPEC23034-N1
CHECKED BY ACP/LJV
DRAWN BY MEM
SCALE N.T.S.
DATE 04.16.2024

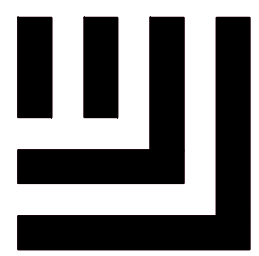
SHEET

PROJECT NOTES

C0.00

SEE SHEET C0.00 FOR ALL PROJECT, SITE, GRADING, STORM DRAINAGE AND UTILITY NOTES

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT CITY OF RALEIGH ENGINEERING DESIGN AND CONSTRUCTION STANDARDS



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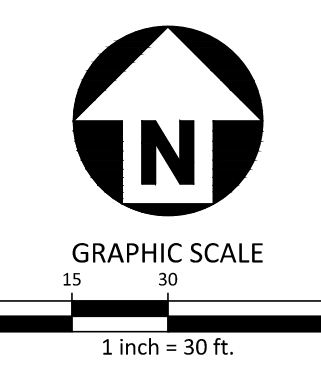
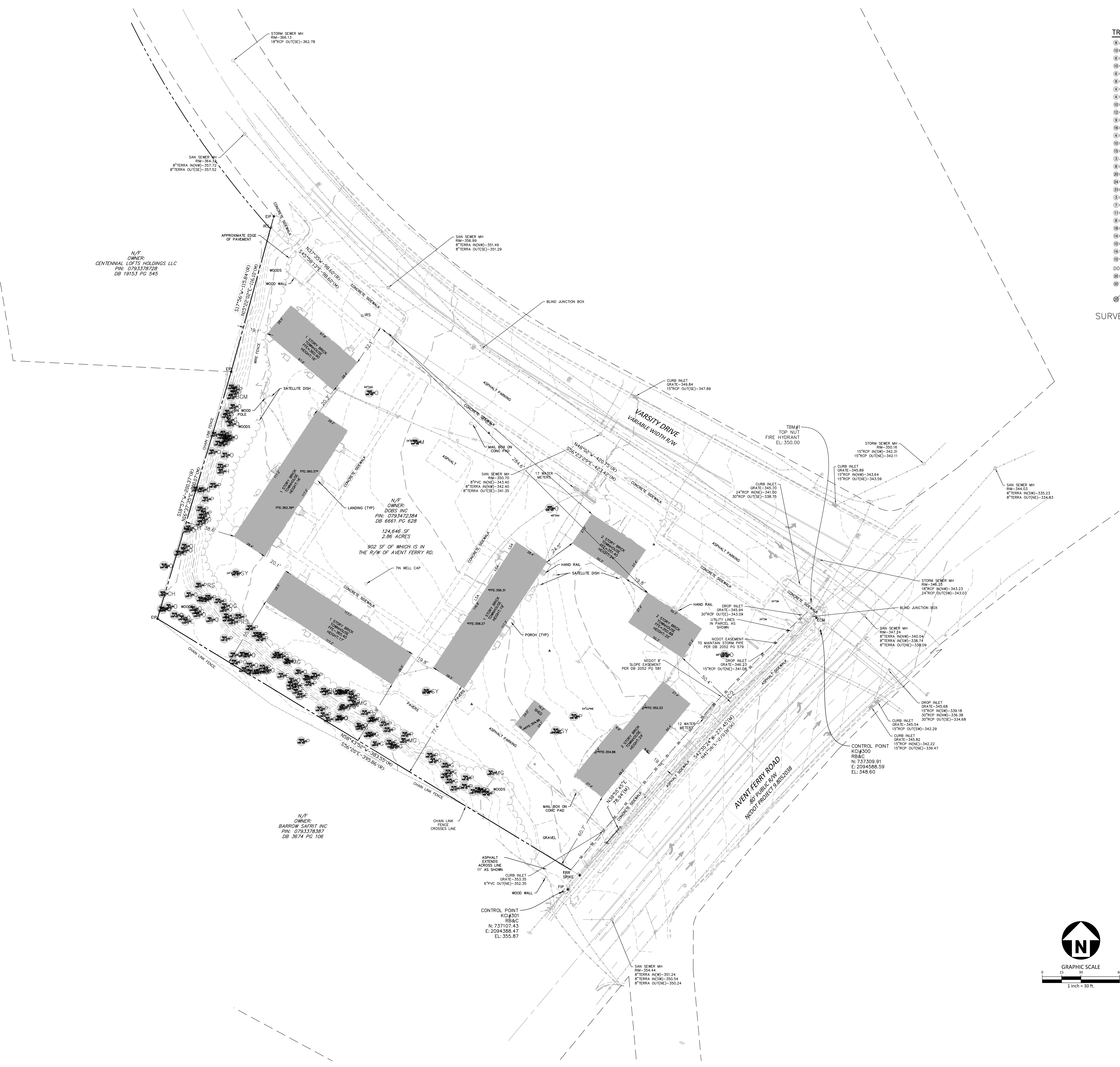


VARSITY DRIVE APARTMENTS ADMINISTRATIVE SITE REVIEW 1530 VARSITY DRIVE RALEIGH, NORTH CAROLINA 27606

TREE LEGEND

- ⊙A ASH
- ⊙BE BEECH
- ⊙B BIRCH
- ⊙C CEDAR
- ⊙CH CHERRY
- ⊙CM CRAPE MYRTLE
- ⊙CP CYPRESS
- ⊙DO DOGWOOD
- ⊙E ELM
- ⊙G SWEET GUM
- ⊙H MISC. HARDWOOD
- ⊙H HICKORY
- ⊙HO HOLLY
- ⊙MC MAGNOLIA
- ⊙M MAPLE
- ⊙JM JAPANESE MAPLE
- ⊙M MIMOSA
- ⊙RD RED OAK
- ⊙WO WHITE OAK
- ⊙O OAK
- ⊙PE PEACH
- ⊙PR PEAR
- ⊙PCN PECAN
- ⊙PS PERSIMMON
- ⊙P PINE
- ⊙PO POPLAR
- ⊙RB REDBUD
- ⊙S SYCAMORE
- ⊙W WALNUT
- ⊙DB DOUBLE AND TRIPLE TRUNKS
- ⊙DO DOUBLE OAK
- ⊙TO TRIPLE OAK
- ⊙C CALIPER INCH SIZE OF TREE
- ⊙T TYPE OF TREE
- ⊙D FOR DOUBLE, T FOR TRIPLE

SURVEY PROVIDED BY KCI



SEE SHEET C0.00 FOR ALL PROJECT, SITE, GRADING, STORM DRAINAGE AND UTILITY NOTES

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT CITY OF RALEIGH ENGINEERING DESIGN AND CONSTRUCTION STANDARDS

REVISIONS

NO. DATE

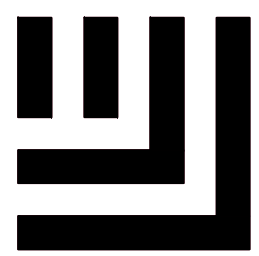
PLAN INFORMATION

PROJECT NO. SPEC-23034
FILENAME SPEC23034.XC1
CHECKED BY ACP/LJV
DRAWN BY MEM
SCALE 1" = 30'
DATE 04.16.2024

SHEET

EXISTING
CONDITIONS PLAN
C1.00

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CLIENT

TRINITAS DEVELOPMENT LLC
159 N. SANGMAN DRIVE, SUITE 200
CHICAGO, ILLINOIS 60607
PHONE: 765.807.2737



VARSITY DRIVE APARTMENTS ADMINISTRATIVE SITE REVIEW 1530 VARSITY DRIVE RALEIGH, NORTH CAROLINA 27606

REVISIONS

NO. DATE

PLAN INFORMATION

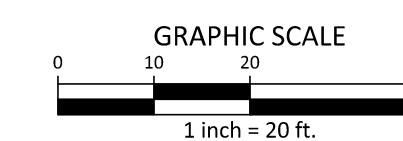
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FILENAME SPEC23034-DM1
CHECKED BY ACP/LJV
DRAWN BY MEM
SCALE 1" = 20'
DATE 04.16.2024

SHEET

OVERALL DEMOLITION PLAN C1.01

SEE SHEET C0.00 FOR ALL PROJECT, SITE, GRADING, STORM DRAINAGE AND UTILITY NOTES

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT CITY OF RALEIGH ENGINEERING DESIGN AND CONSTRUCTION STANDARDS



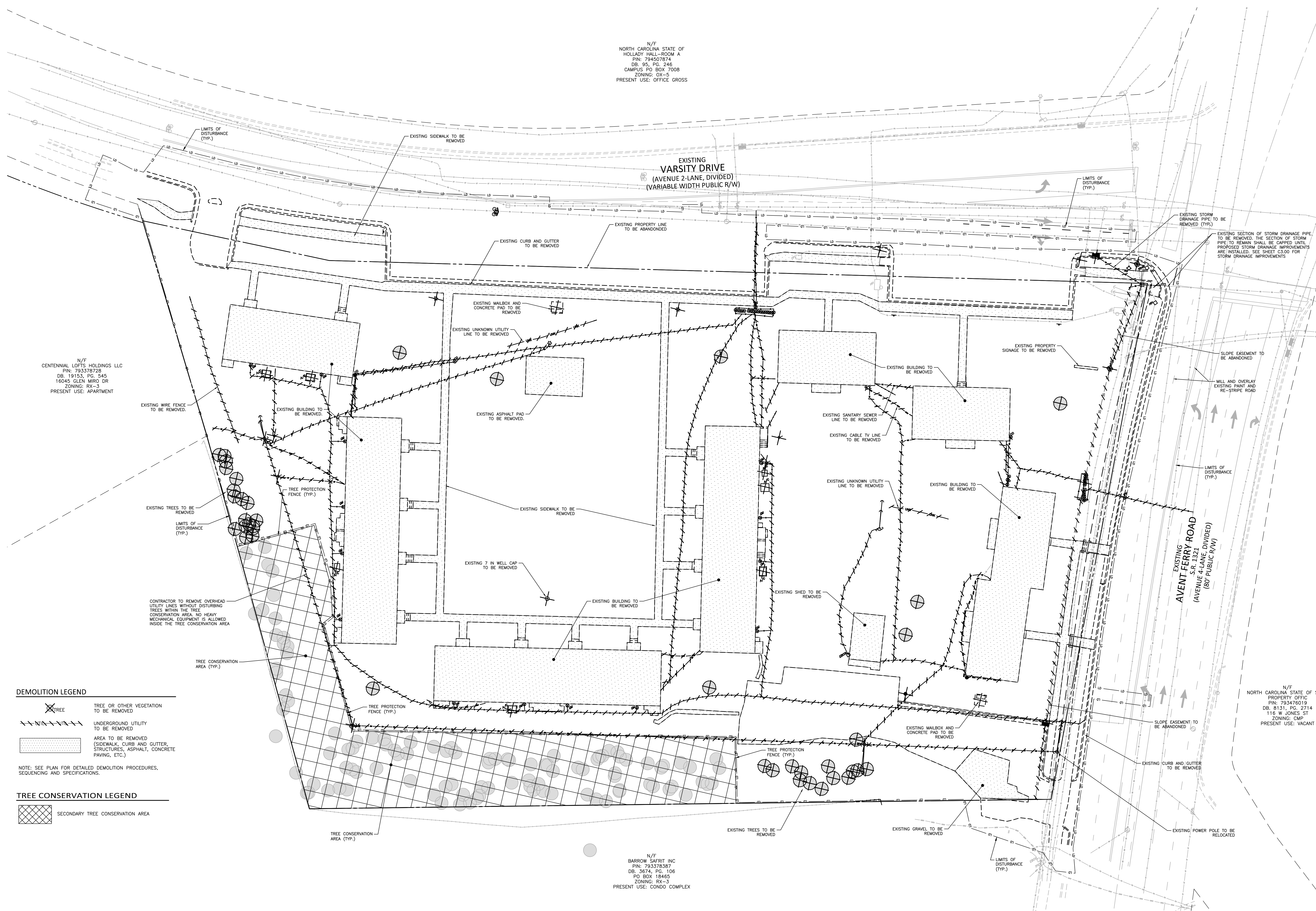
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N/F
NORTH CAROLINA STATE OF
HOLLADY HALL-ROOM A
PIN: 794507874
DB: 95, PG: 246
CAMPUS: PO BOX 7008
ZONING: OX-5
PRESENT USE: OFFICE CROSS

N/F
CENTENNIAL LOFTS HOLDINGS LLC
PIN: 793378728
DB: 19153, PG: 545
16045 GLEN MIRD DR
ZONING: OX-3
PRESENT USE: APARTMENT

N/F
NORTH CAROLINA STATE OF
PROPERTY OFFICE
PIN: 793476019
DB: 8131, PG: 2714
115 W JONES ST
ZONING: CMP
PRESENT USE: VACANT

N/F
BARROW SAFRIT INC
PIN: 793378387
DB: 3674, PG: 106
PO BOX 18465
ZONING: RX-3
PRESENT USE: CONDO COMPLEX



- DEMOLITION LEGEND**
- TREE: TREE OR OTHER VEGETATION TO BE REMOVED
 - UNDERGROUND UTILITY TO BE REMOVED
 - AREA TO BE REMOVED (SIDEWALK, CURB AND GUTTER, STRUCTURES, ASPHALT, CONCRETE PAVING, ETC.)
- NOTE: SEE PLAN FOR DETAILED DEMOLITION PROCEDURES, SEQUENCING AND SPECIFICATIONS.
- TREE CONSERVATION LEGEND**
- SECONDARY TREE CONSERVATION AREA

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McAdams

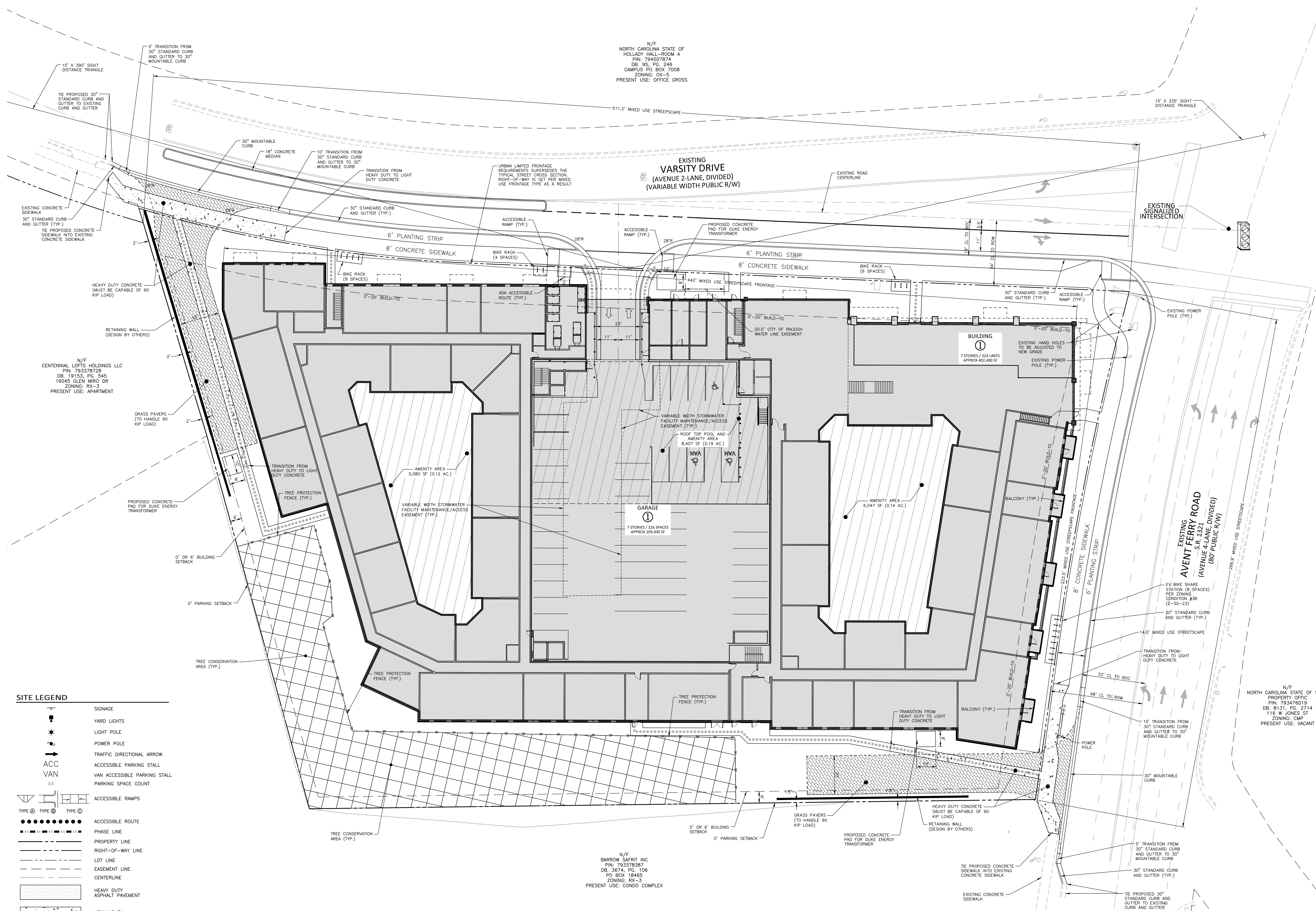
The John R. McAdams Company, Inc.
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Raleigh, NC 27603
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CHICAGO, ILLINOIS 60607
PHONE: 765.807.2737



VARSITY DRIVE APARTMENTS
ADMINISTRATIVE SITE REVIEW
1530 VARSITY DRIVE
RALEIGH, NORTH CAROLINA 27606



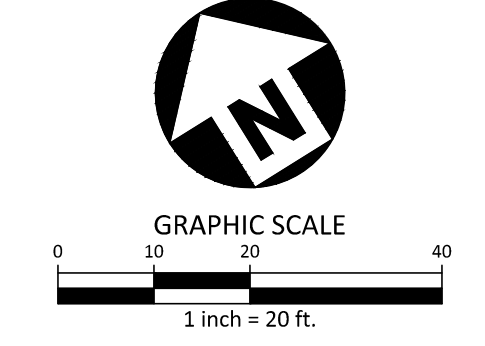
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HOLLADY HALL-ROOM A
PIN: 794507874
DB: 95, PG. 246
CAMPUS: PO BOX 7008
ZONING: OX-5
PRESENT USE: OFFICE CROSS

N/F
CENTENNIAL LOFTS HOLDINGS LLC
PIN: 793378728
DB: 19153, PG. 245
16045 GLEN MIRD DR
ZONING: OX-3
PRESENT USE: APARTMENT

N/F
BARROW SAFRIT INC
PIN: 793378387
DB: 3674, PG. 106
PO BOX 18465
ZONING: RA-3
PRESENT USE: CONDO COMPLEX

N/F
NORTH CAROLINA STATE OF
PROPERTY OFFICE
PIN: 793476019
DB: 8131, PG. 2714
116 W JONES ST
ZONING: CMP
PRESENT USE: VACANT

- SITE LEGEND**
- SIGNAGE
 - YARD LIGHTS
 - LIGHT POLE
 - POWER POLE
 - TRAFFIC DIRECTIONAL ARROW
 - ACC VAN ACCESSIBLE PARKING STALL
 - VAN ACCESSIBLE PARKING STALL
 - PARKING SPACE COUNT
 - ACCESSIBLE RAMPS
 - ACCESSIBLE ROUTE
 - PHASE LINE
 - PROPERTY LINE
 - RIGHT-OF-WAY LINE
 - LOT LINE
 - EASEMENT LINE
 - CENTERLINE
 - HEAVY DUTY ASPHALT PAVEMENT
 - HEAVY DUTY CONCRETE
 - GRASS PAVER
- TREE CONSERVATION LEGEND**
- SECONDARY TREE CONSERVATION AREA



SEE SHEET C0.00 FOR ALL PROJECT, SITE, GRADING, STORM DRAINAGE AND UTILITY NOTES
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REVISIONS

NO. DATE

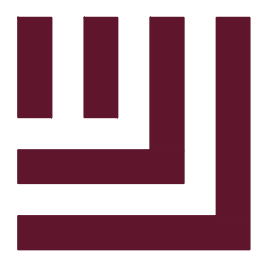
PLAN INFORMATION

PROJECT NO. SPEC-23034
FILENAME SPEC23034-OAS1
CHECKED BY ACP/LJV
DRAWN BY MEM
SCALE 1" = 20'
DATE 04.16.2024

SHEET

OVERALL SITE PLAN

C2.00



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CLIENT

TRINITAS DEVELOPMENT LLC
159 N. SANGMAN DRIVE, SUITE 200
CHICAGO, ILLINOIS 60607
PHONE: 765. 807. 2737



VARSITY DRIVE APARTMENTS
ADMINISTRATIVE SITE REVIEW
1530 VARSITY DRIVE
RALEIGH, NORTH CAROLINA 27606

REVISIONS

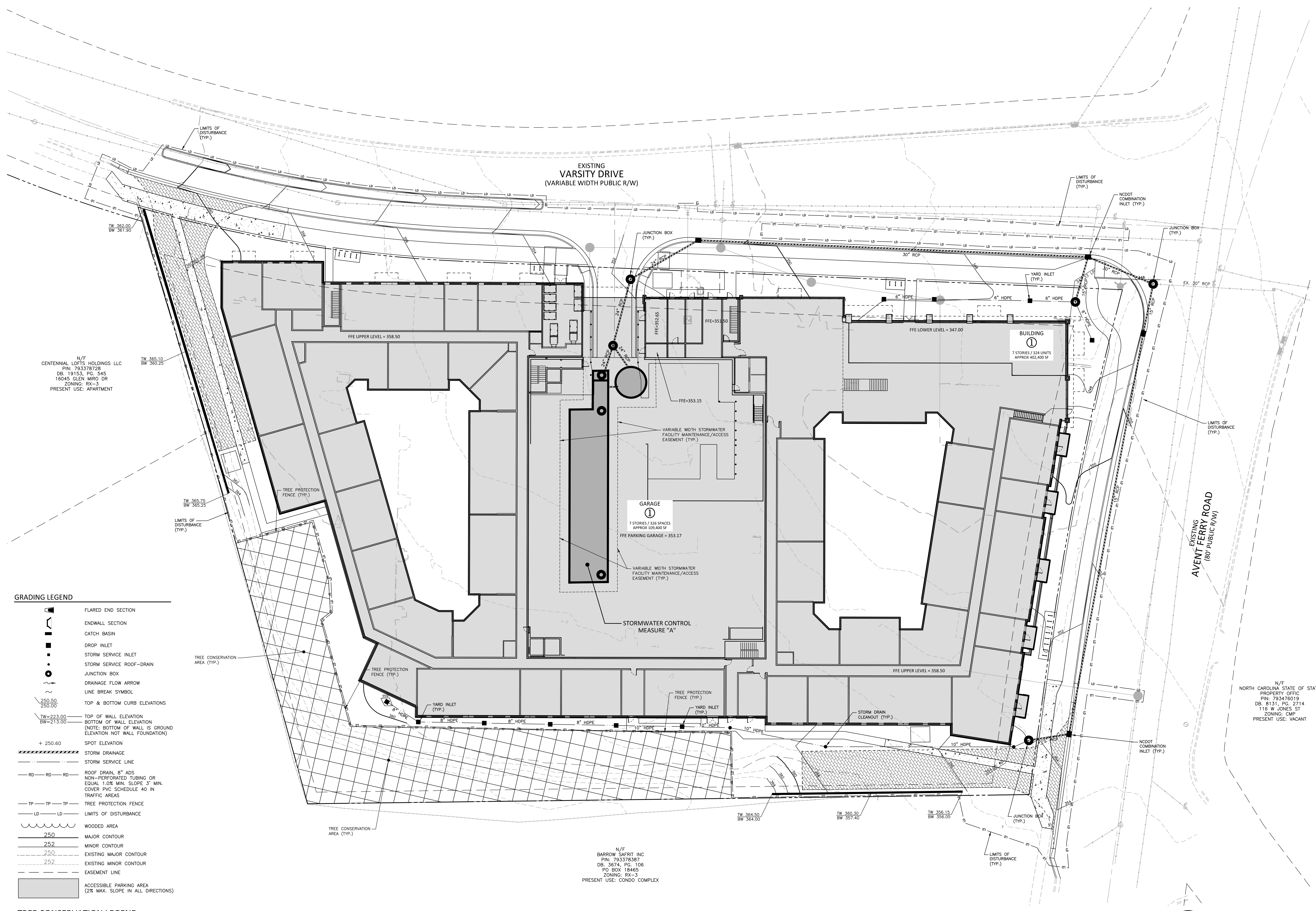
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PLAN INFORMATION

PROJECT NO. SPEC-23034
FILENAME SPEC23034-OAG1
CHECKED BY ACP/LJV
DRAWN BY MEM
SCALE 1" = 20'
DATE 04.16.2024

SHEET

OVERALL GRADING PLAN
C3.00



N/F
CENTENNIAL LOFTS HOLDINGS LLC
PIN: 793378728
DB: 19153, PG: 845
16045 GLEN MIRD DR
ZONING: RX-3
PRESENT USE: APARTMENT

N/F
NORTH CAROLINA STATE OF STATE
PROPERTY OFFICE
PIN: 793476019
DB: 8131, PG: 2714
116 W JONES ST
ZONING: CMP
PRESENT USE: VACANT

N/F
BARROW SAFRIT INC
PIN: 793378387
DB: 3674, PG: 106
PO BOX 18465
ZONING: RX-3
PRESENT USE: CONDO COMPLEX

GRADING LEGEND

- FLARED END SECTION
- ENDWALL SECTION
- CATCH BASIN
- DROP INLET
- STORM SERVICE INLET
- STORM SERVICE ROOF-RAIN
- JUNCTION BOX
- DRAINAGE FLOW ARROW
- LINE BREAK SYMBOL
- TOP & BOTTOM CURB ELEVATIONS
- TOP OF WALL ELEVATION
- BOTTOM OF WALL ELEVATION
(NOTE: BOTTOM OF WALL IS GROUND ELEVATION NOT WALL FOUNDATION)
- SPOT ELEVATION
- STORM DRAINAGE
- STORM SERVICE LINE
- ROOF DRAIN, 8" ADS
- NON-PERFORATED TUBING OR EQUAL 1.0% MIN. SLOPE 3" MIN. COVER PVC SCHEDULE 40 IN TRAFFIC AREAS
- TREE PROTECTION FENCE
- LIMITS OF DISTURBANCE
- WOODED AREA
- MAJOR CONTOUR
- MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EASEMENT LINE
- ACCESSIBLE PARKING AREA (2% MAX. SLOPE IN ALL DIRECTIONS)

TREE CONSERVATION LEGEND

- SECONDARY TREE CONSERVATION AREA

VARSITY DRIVE AVERAGE GRADE PLANE

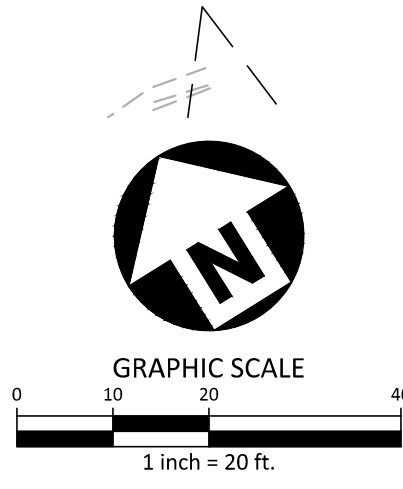
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	HIGH	LOW	AVERAGE
	360.50	347.33	353.92

AVENT FERRY ROAD AVERAGE GRADE PLANE

AVENT FERRY ROAD	PROPOSED		
	HIGH	LOW	AVERAGE
	354.25	347.33	350.79

SEE SHEET C0.00 FOR ALL PROJECT, SITE, GRADING, STORM DRAINAGE AND UTILITY NOTES

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VARSITY DRIVE APARTMENTS
ADMINISTRATIVE SITE REVIEW
1530 VARSITY DRIVE
RALEIGH, NORTH CAROLINA 27606

REVISIONS

NO. DATE

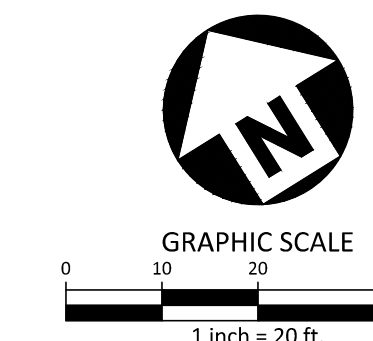
PLAN INFORMATION

PROJECT NO. SPEC-23034
FILENAME SPEC23034-OAU1
CHECKED BY ACP/LJV
DRAWN BY MEM
SCALE 1" = 20'
DATE 04.16.2024

SHEET

OVERALL UTILITY
PLAN
C4.00

SEE SHEET C0.00 FOR ALL PROJECT, SITE,
GRADING, STORM DRAINAGE AND UTILITY
NOTES
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CONSTRUCTION STANDARDS

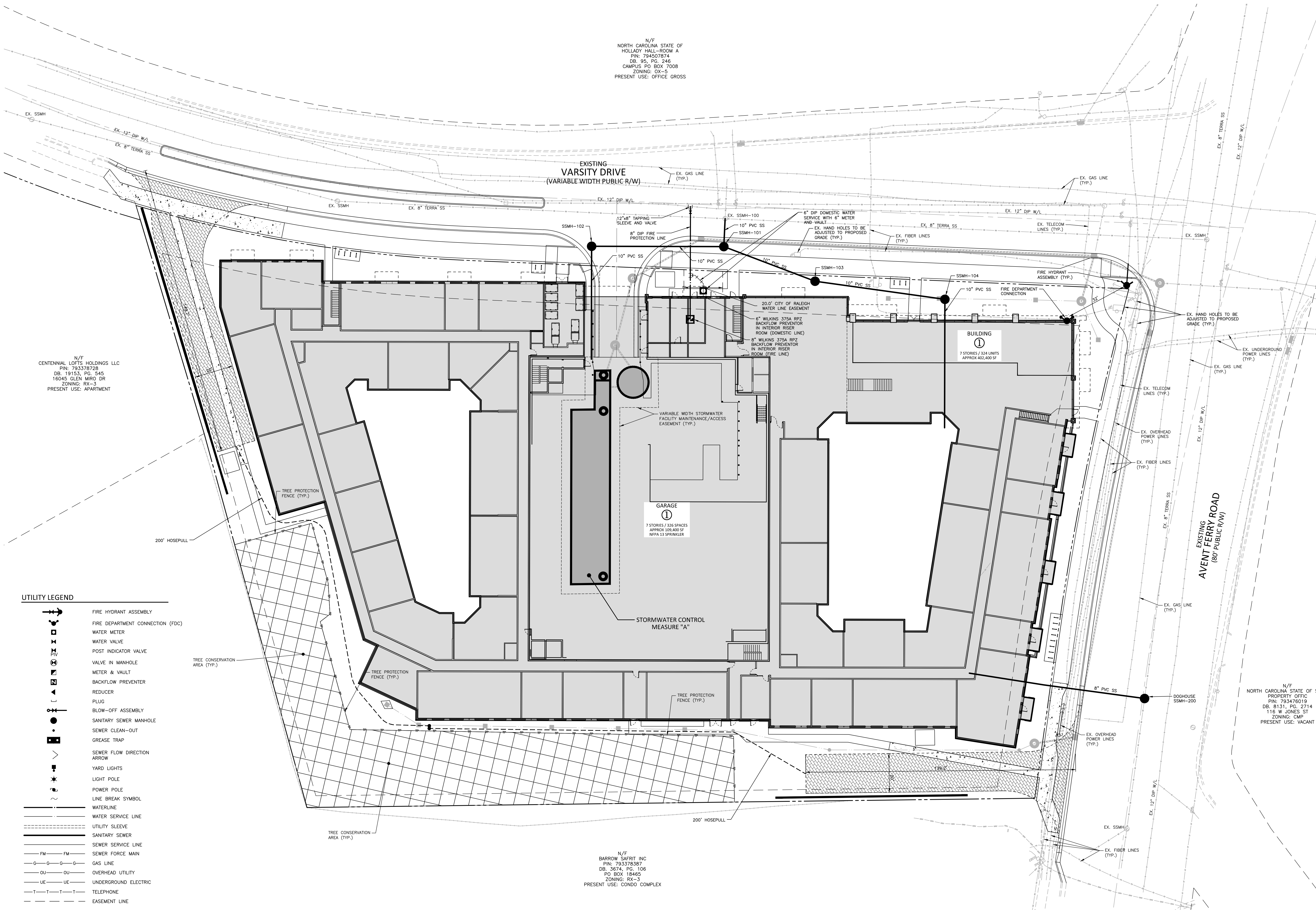


N/F
NORTH CAROLINA STATE OF
HOLLADY HALL-ROOM A
PIN: 794507874
DB: 95, PG: 246
CAMPUS: PO BOX 7008
ZONING: OX-5
PRESENT USE: OFFICE GROSS

N/F
CENTENNIAL LOFTS HOLDINGS LLC
PIN: 793378728
DB: 19153, PG: 245
16045 GLEN MIRD DR
ZONING: EX-3
PRESENT USE: APARTMENT

N/F
NORTH CAROLINA STATE OF STATE
PROPERTY OFFICE
PIN: 793476019
DB: 8131, PG: 2714
116 W JONES ST
ZONING: CMP
PRESENT USE: VACANT

N/F
BARROW SAFRIT INC
PIN: 793378387
DB: 3674, PG: 106
PO BOX 18465
ZONING: RA-3
PRESENT USE: CONDO COMPLEX



UTILITY LEGEND

- FIRE HYDRANT ASSEMBLY
- FIRE DEPARTMENT CONNECTION (FDC)
- WATER METER
- WATER VALVE
- POST INDICATOR VALVE
- VALVE IN MANHOLE
- METER & VAULT
- BACKFLOW PREVENTER
- REDUCER
- PLUG
- BLOW-OFF ASSEMBLY
- SANITARY SEWER MANHOLE
- SEWER CLEAN-OUT
- GREASE TRAP
- SEWER FLOW DIRECTION ARROW
- YARD LIGHTS
- LIGHT POLE
- POWER POLE
- LINE BREAK SYMBOL
- WATERLINE
- WATER SERVICE LINE
- UTILITY SLEEVE
- SANITARY SEWER
- SEWER SERVICE LINE
- SEWER FORCE MAIN
- GAS LINE
- OVERHEAD UTILITY
- UNDERGROUND ELECTRIC
- TELEPHONE
- EASEMENT LINE

TREE CONSERVATION LEGEND

- SECONDARY TREE CONSERVATION AREA



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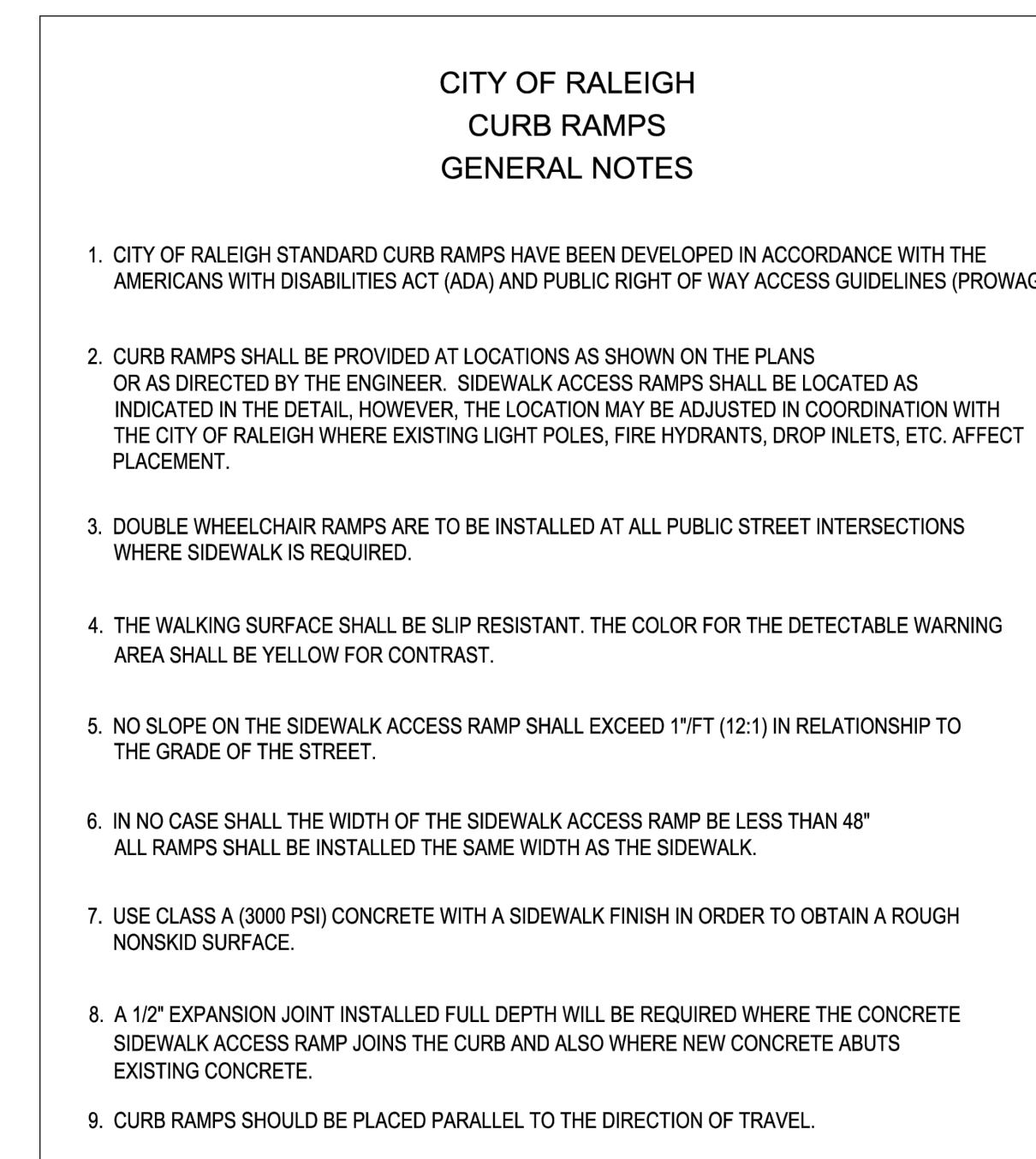
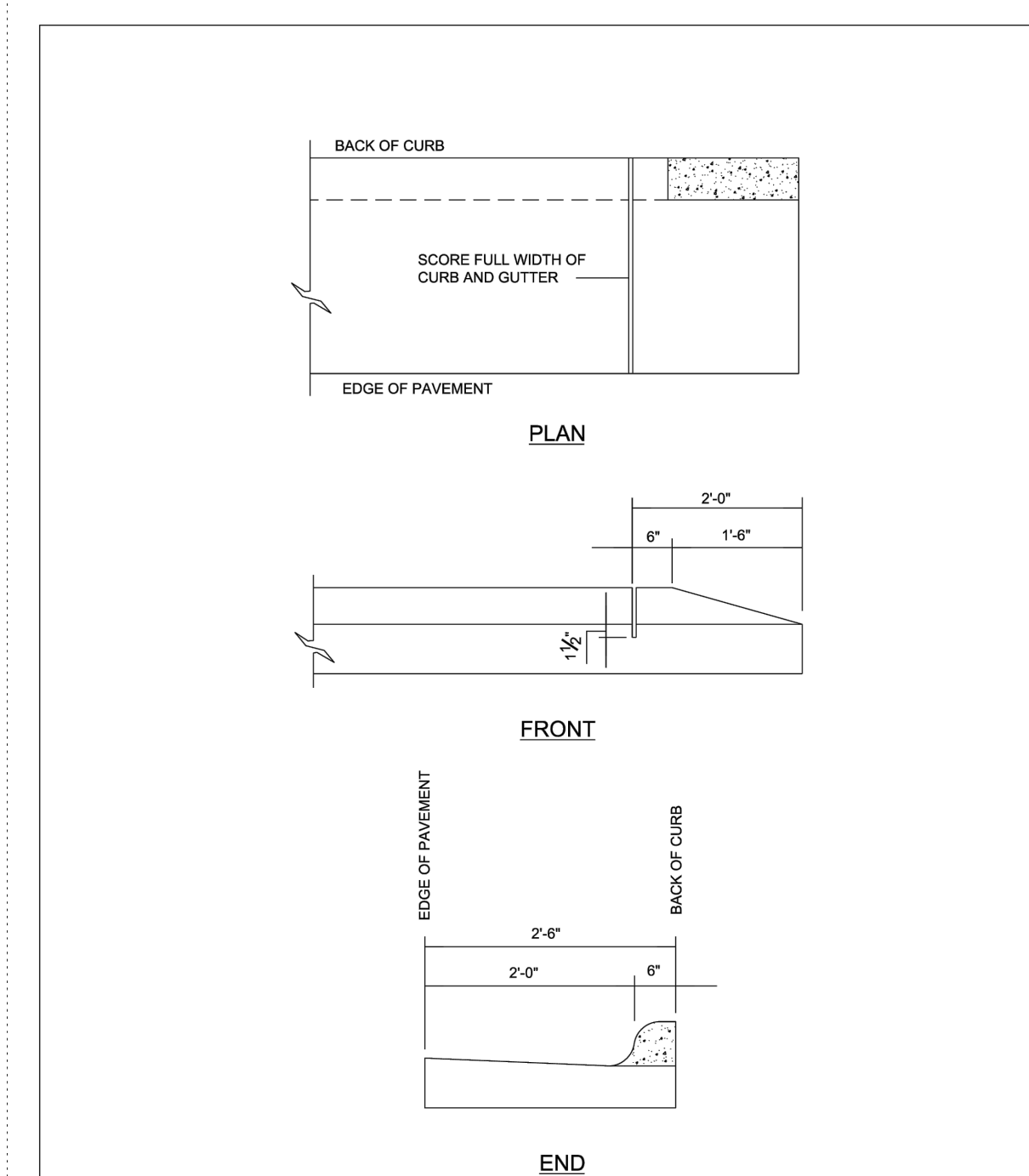
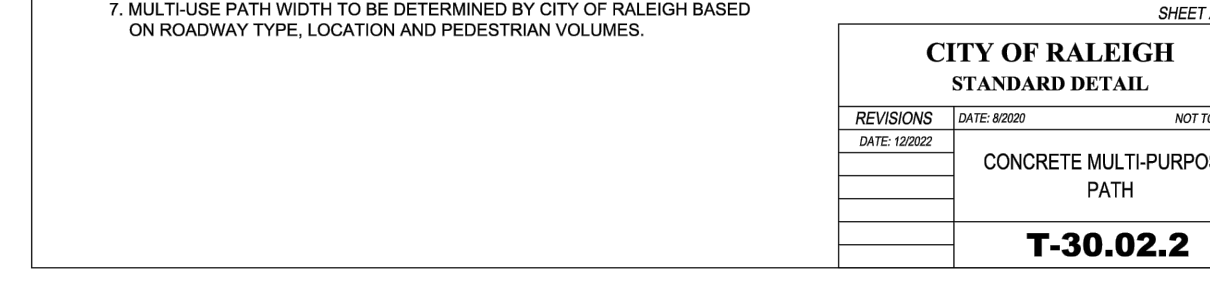
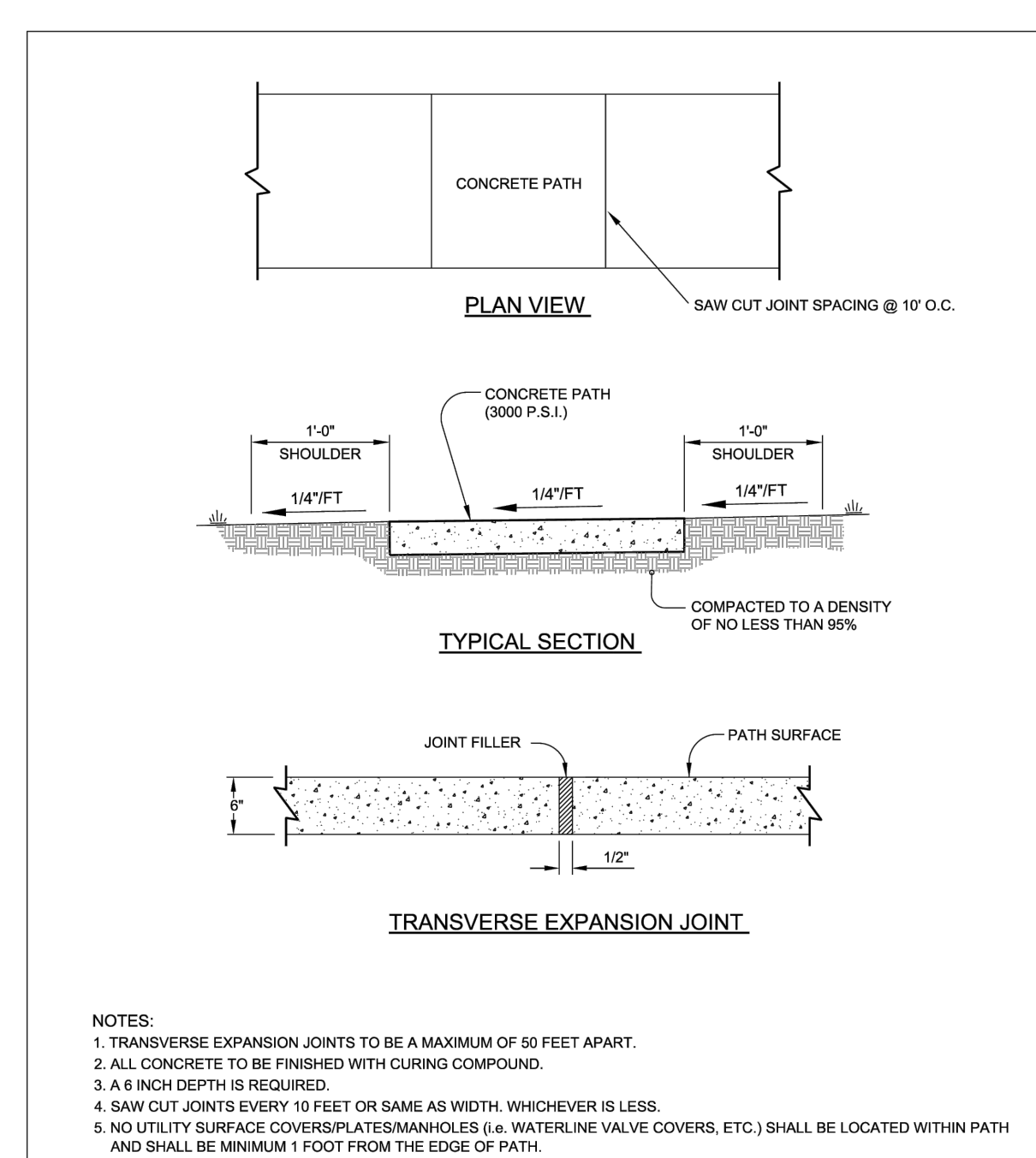
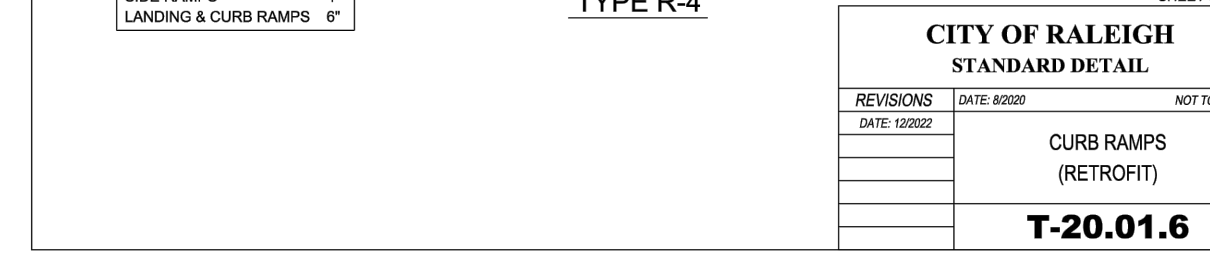
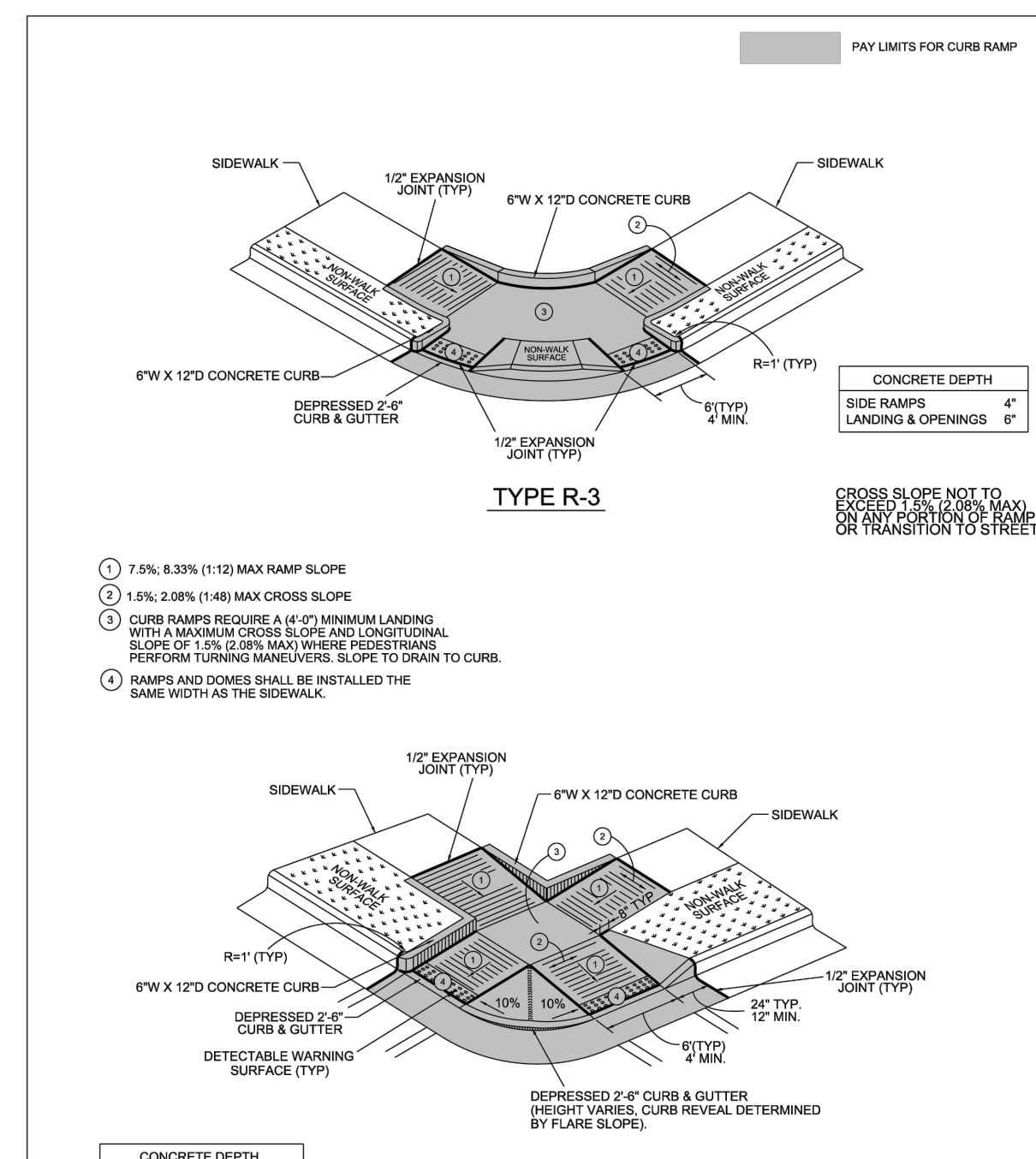
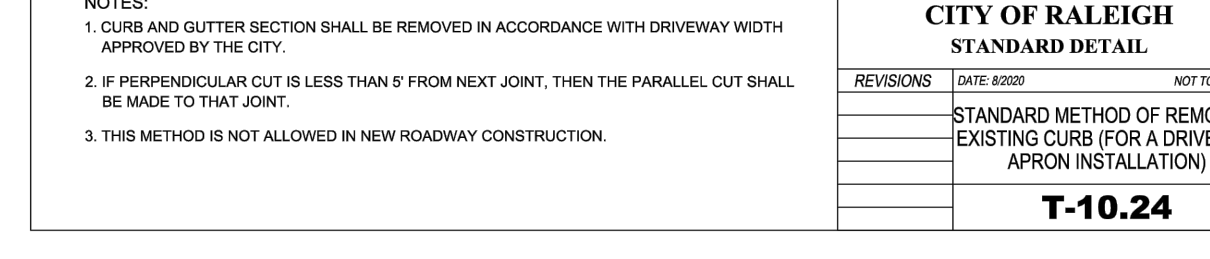
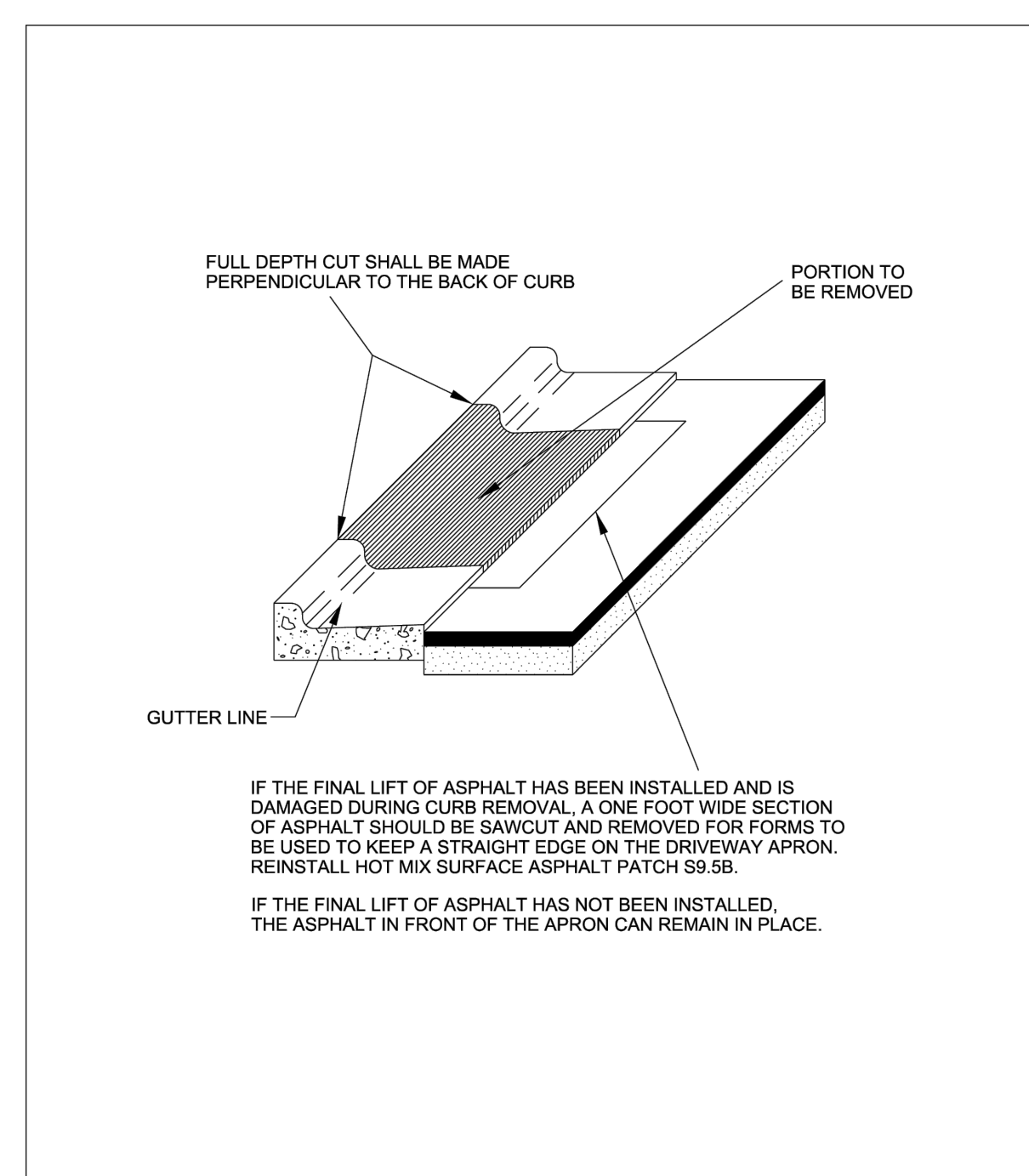
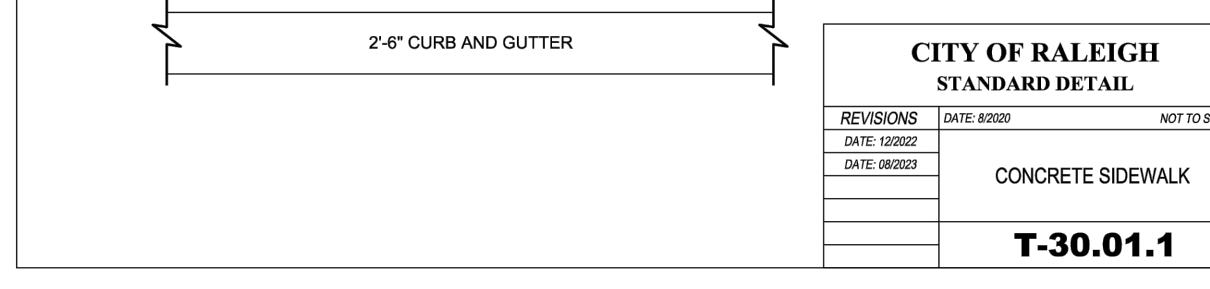
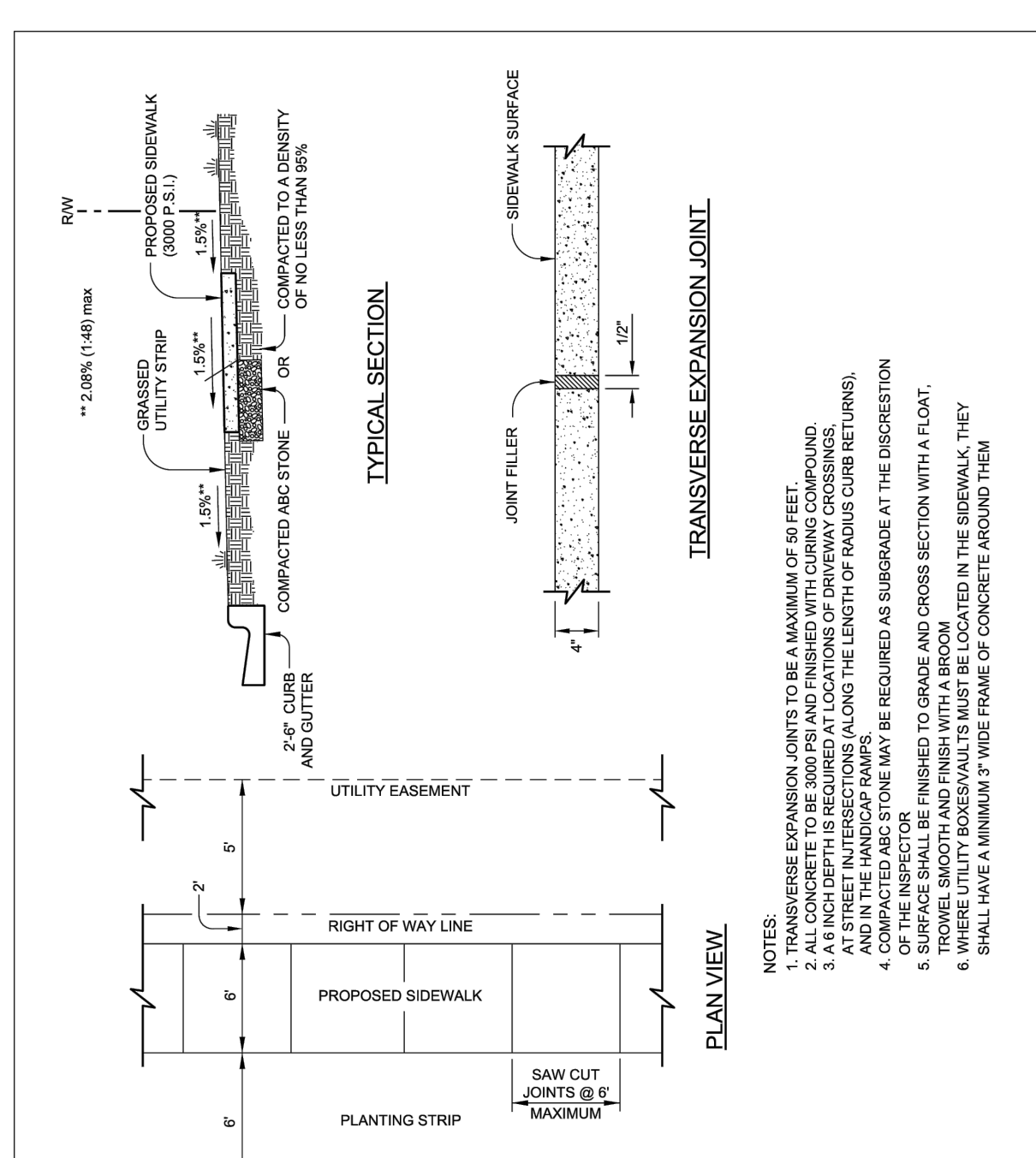
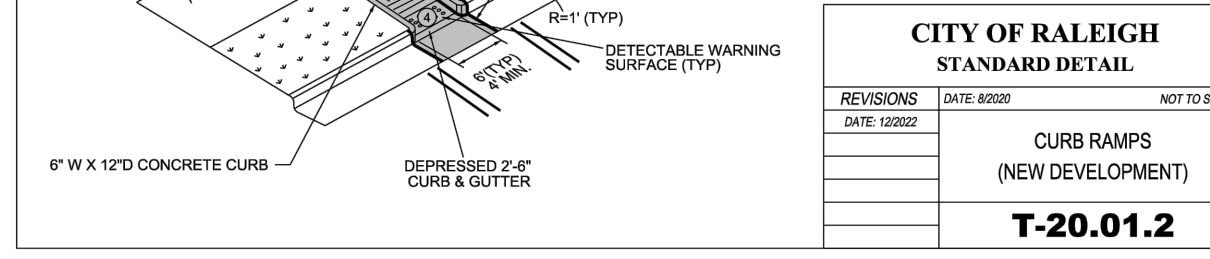
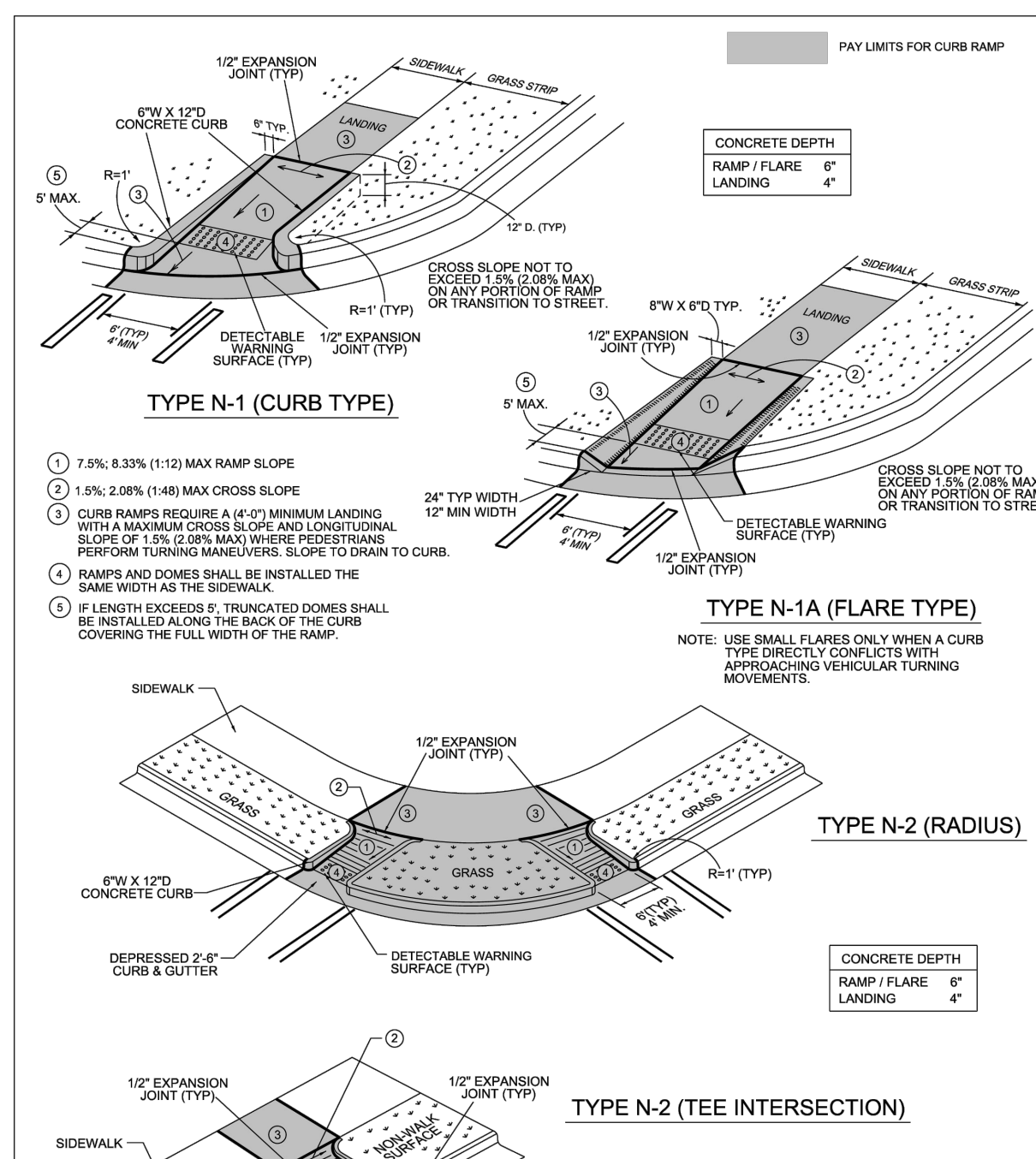
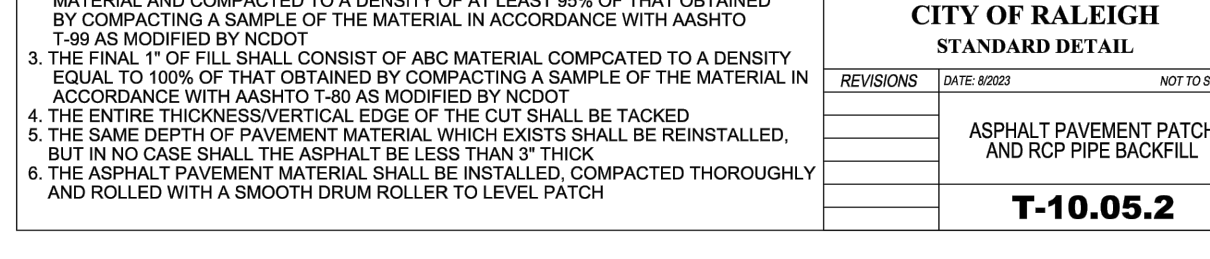
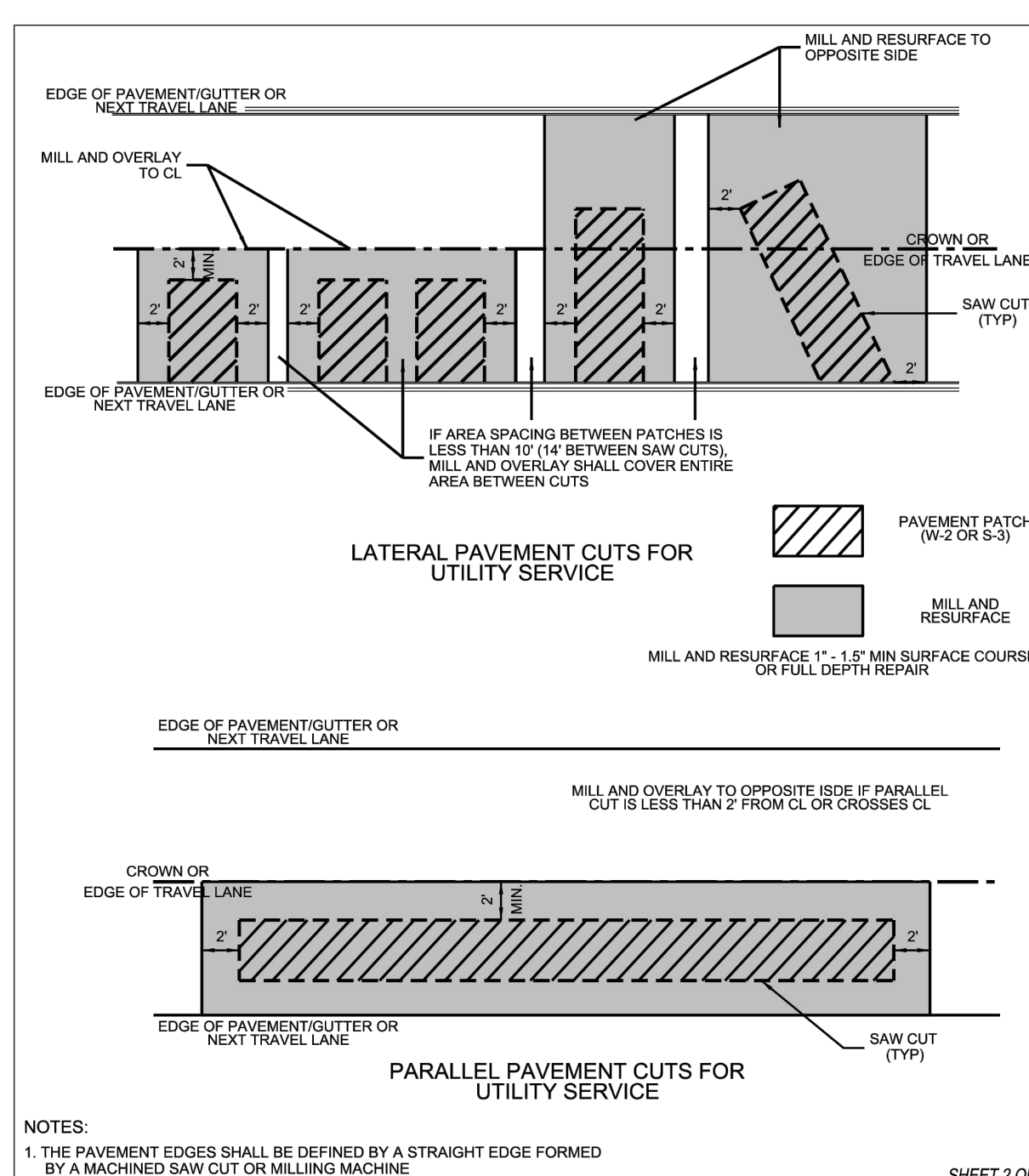
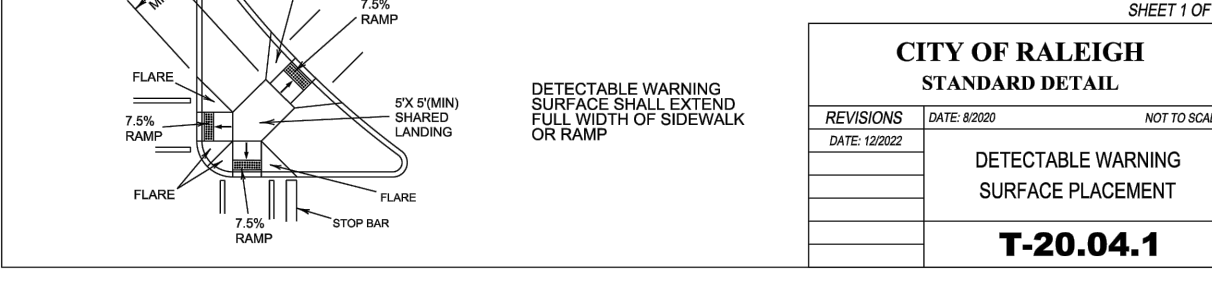
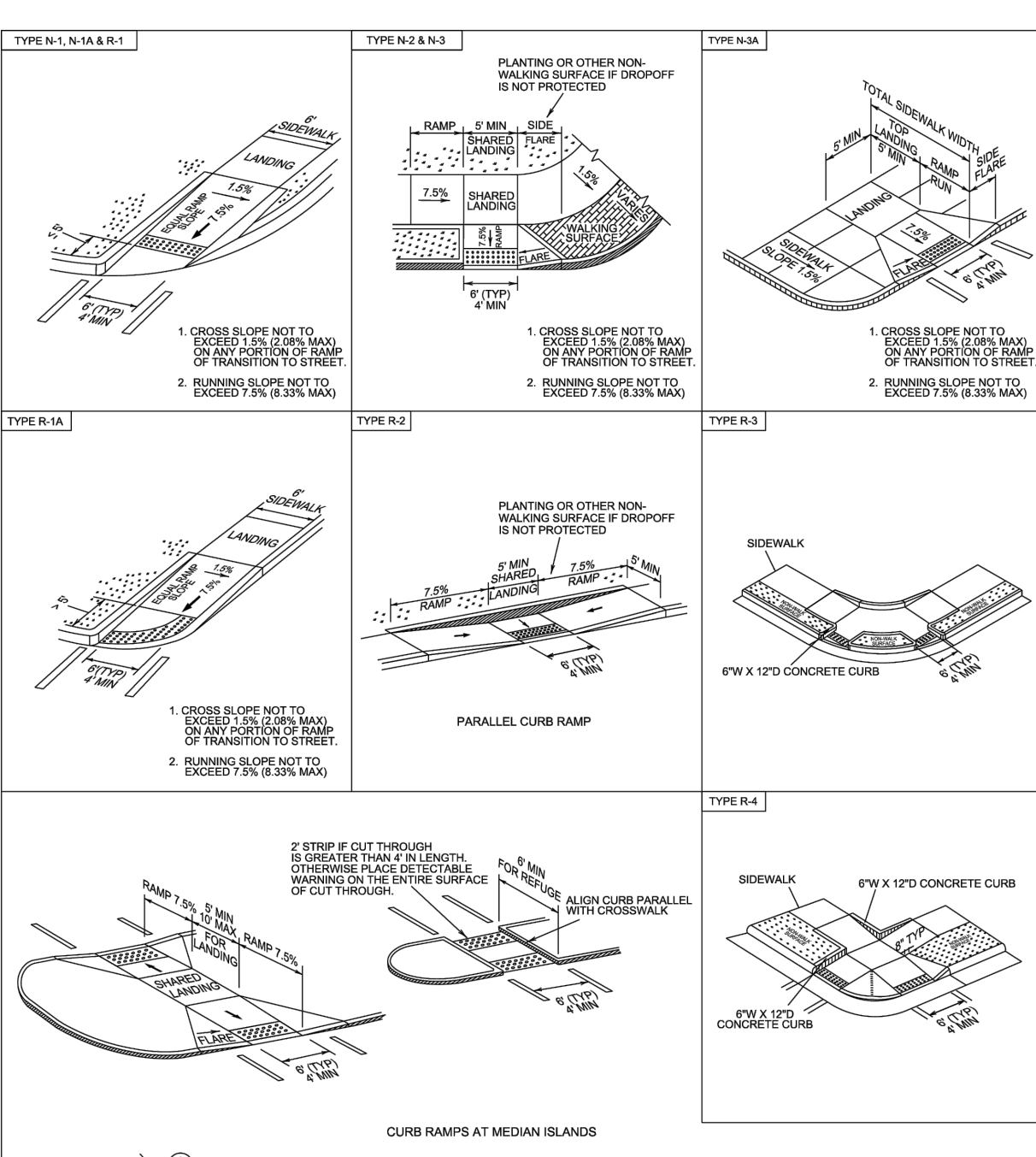
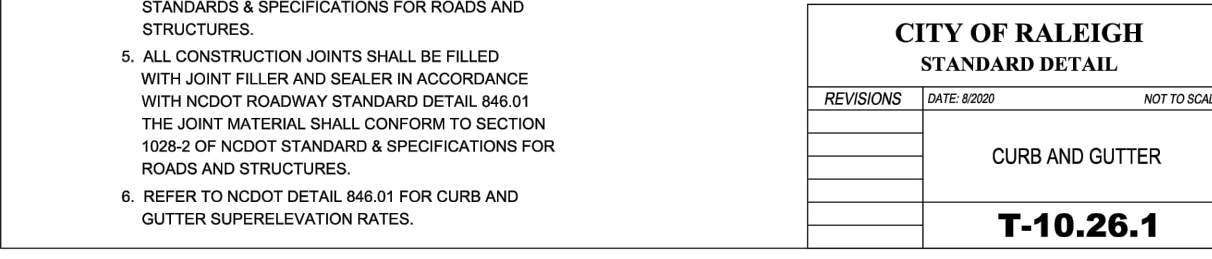
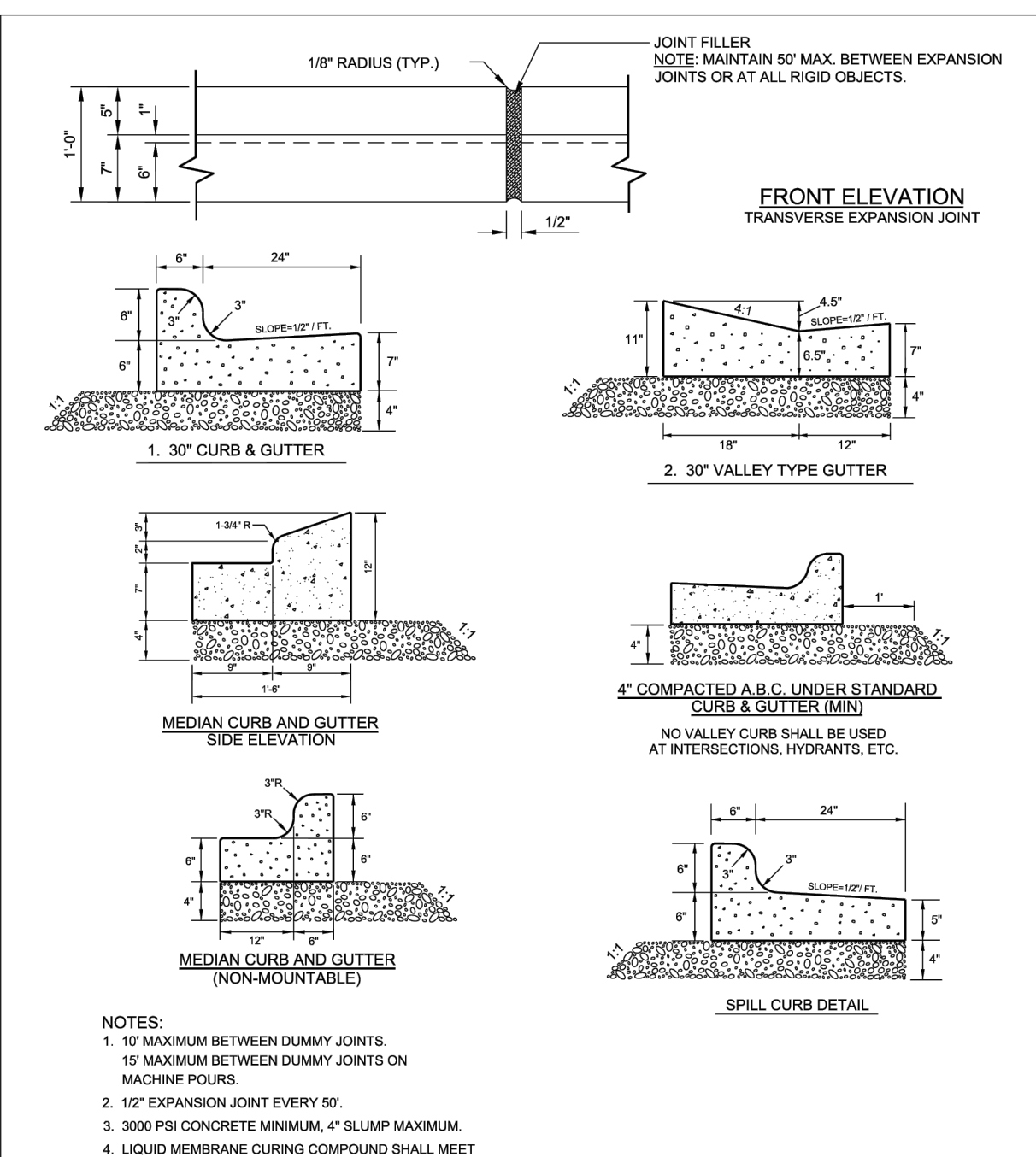
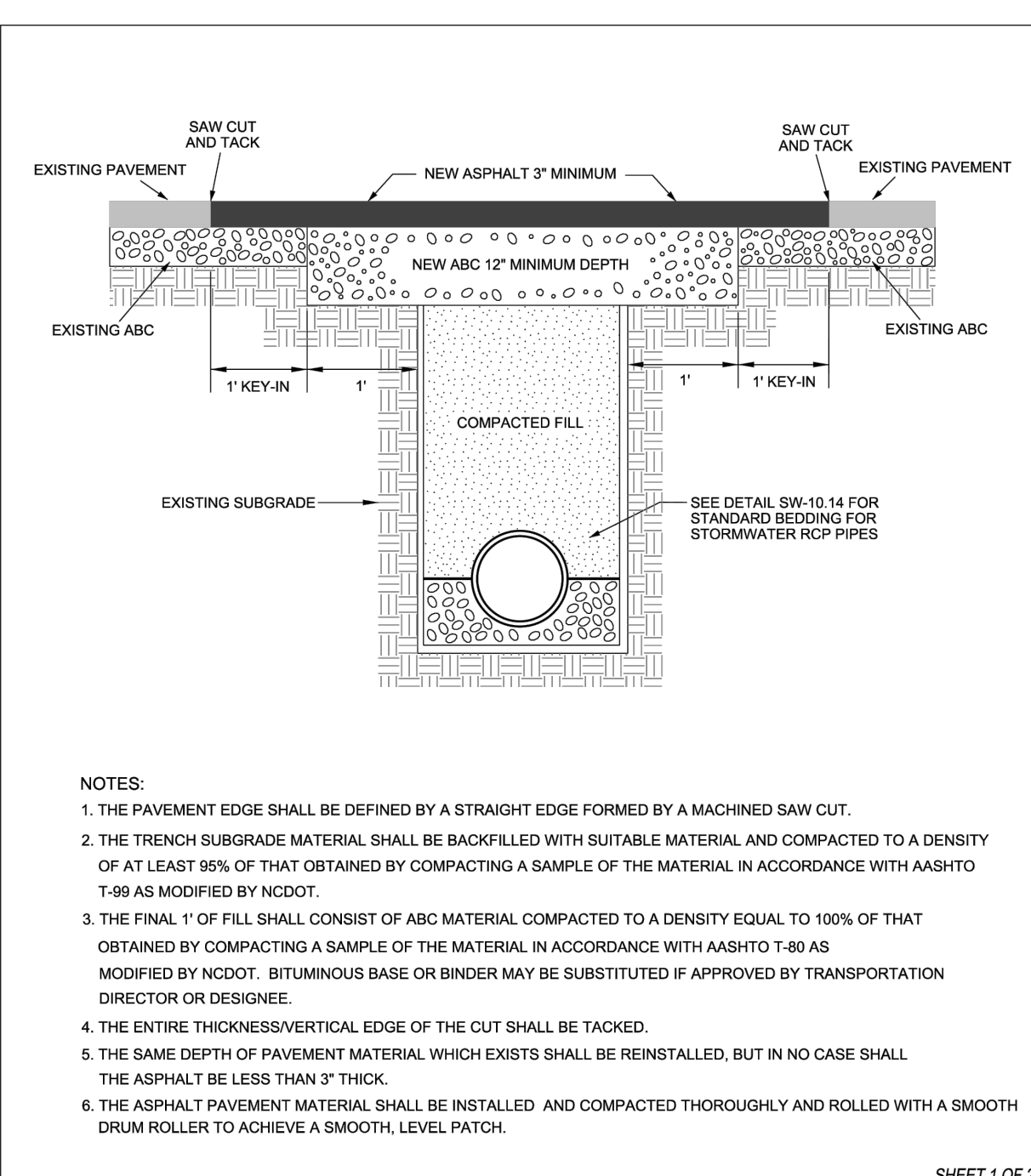
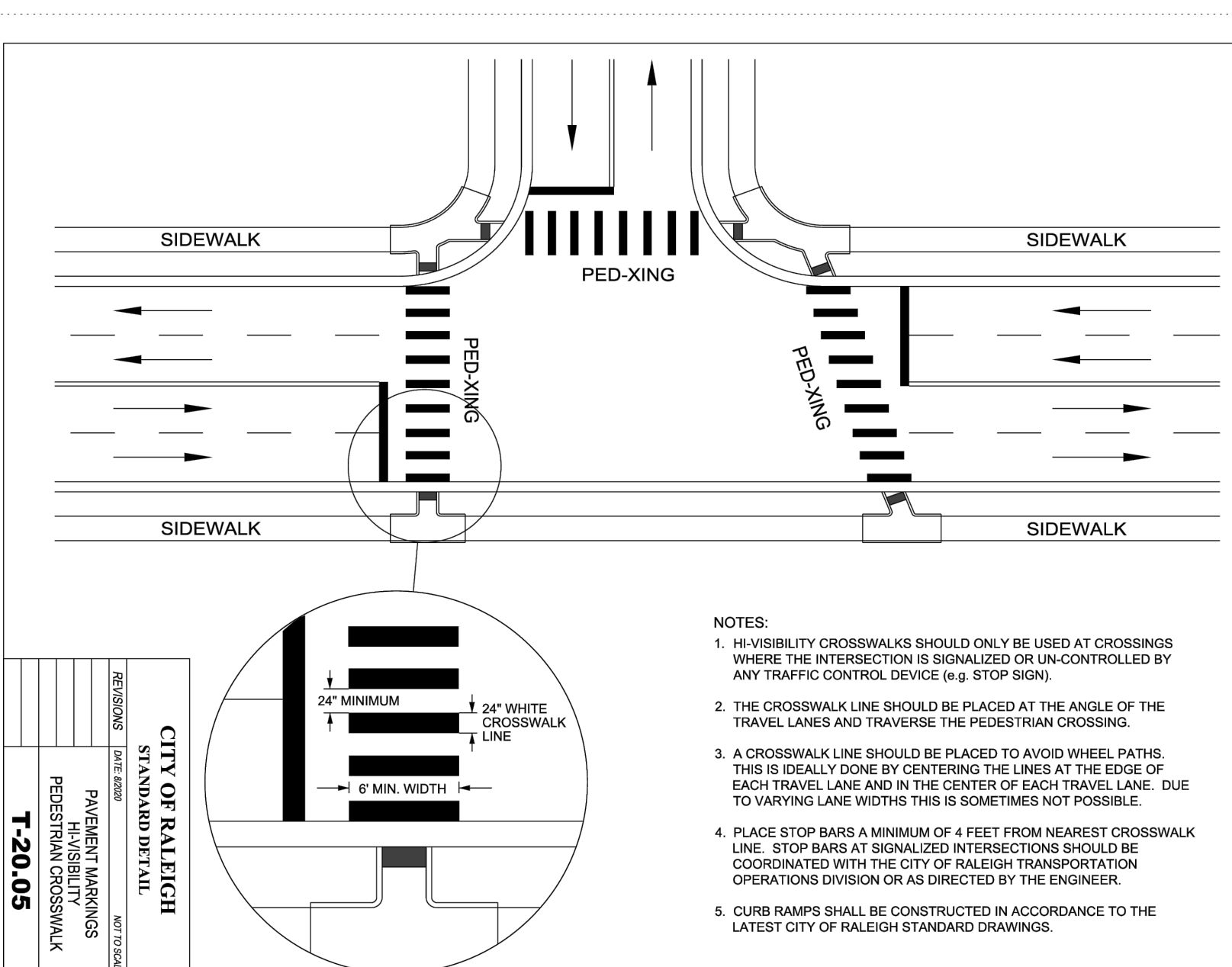
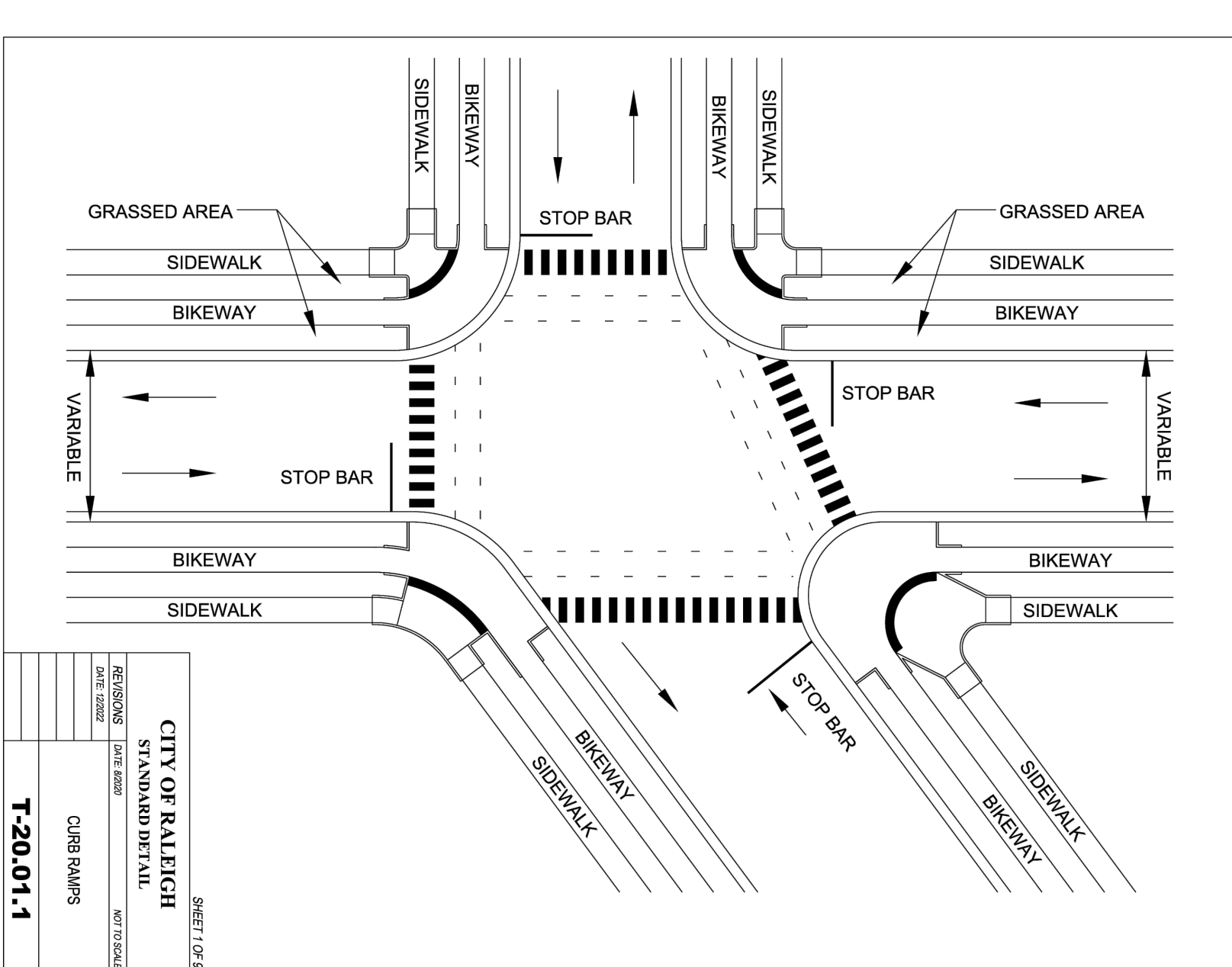
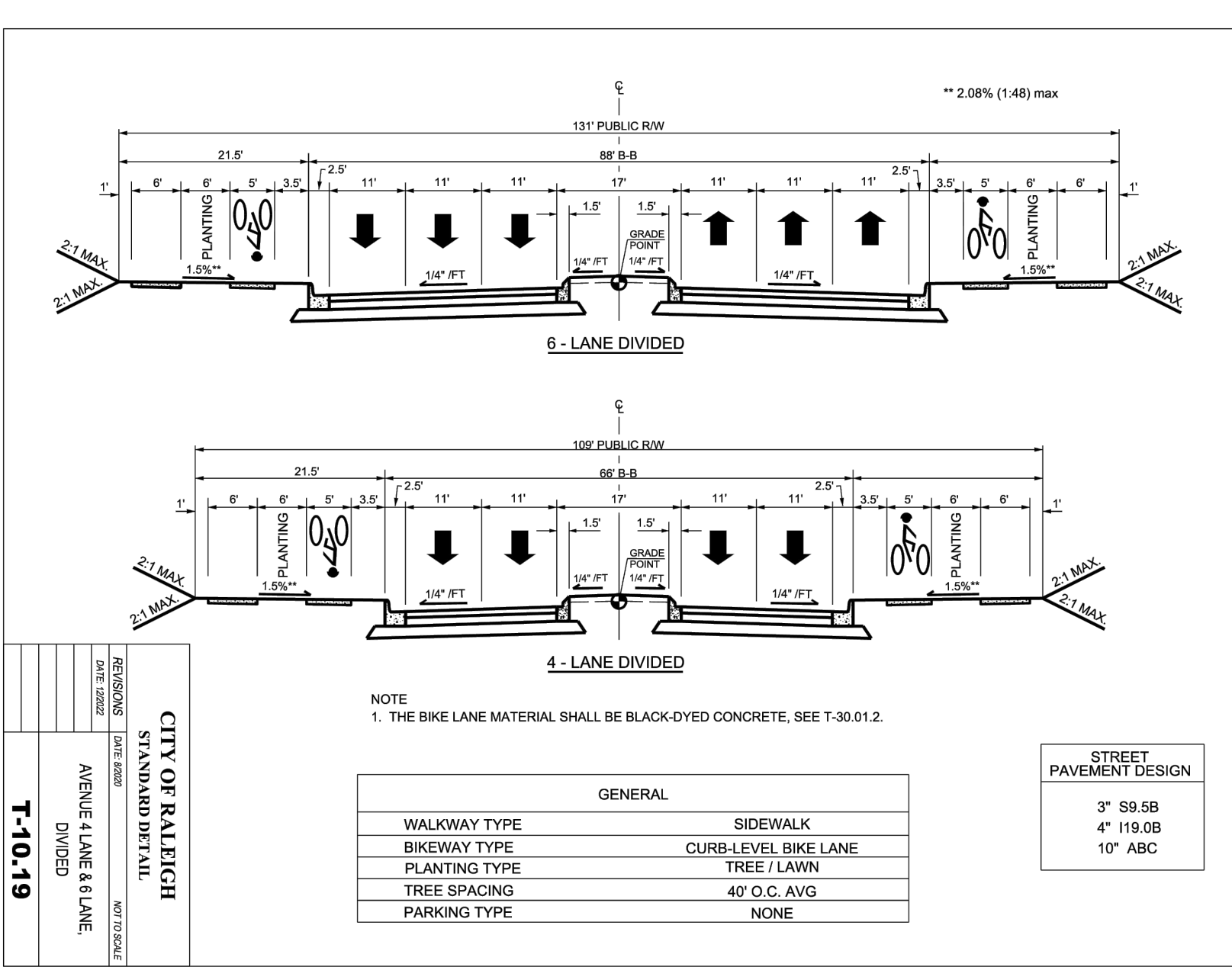
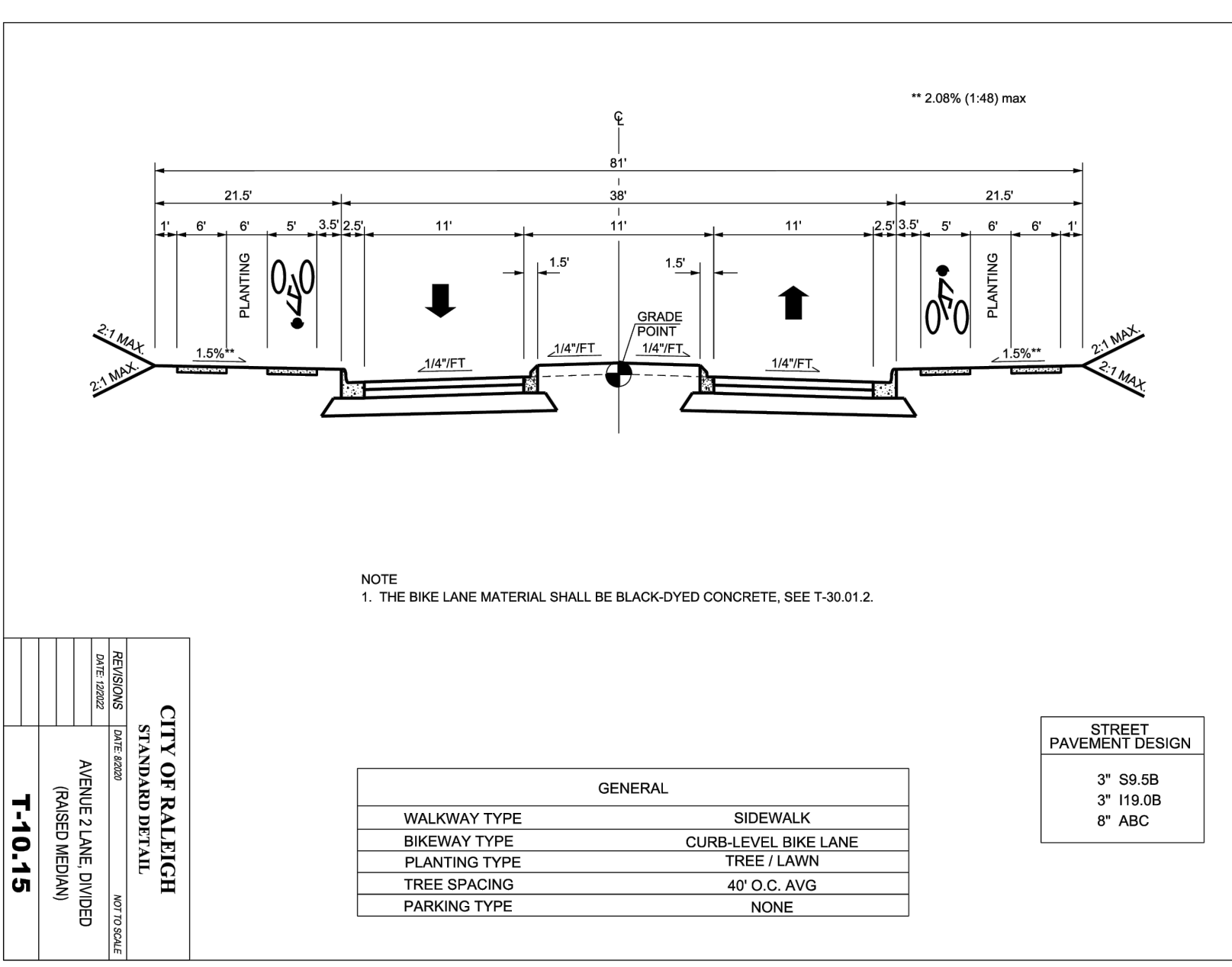
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CHICAGO, ILLINOIS 60607
PHONE: 765. 807. 2737



VARSITY DRIVE APARTMENTS
ADMINISTRATIVE SITE REVIEW
1530 VARSITY DRIVE
RALEIGH, NORTH CAROLINA 27606



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REVISIONS

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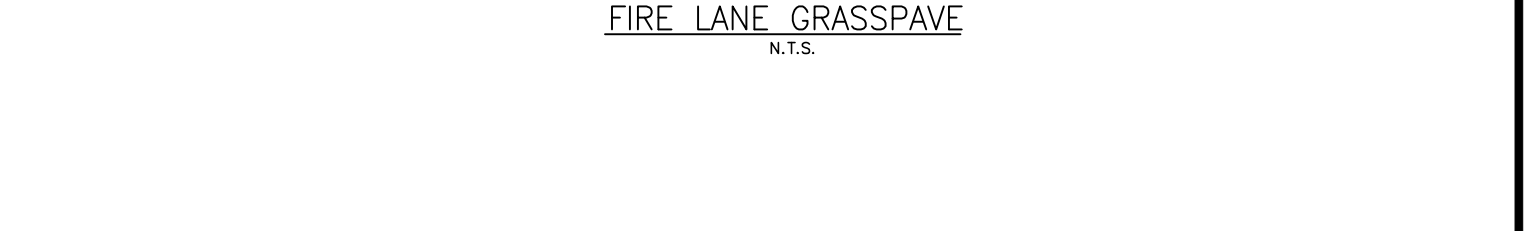
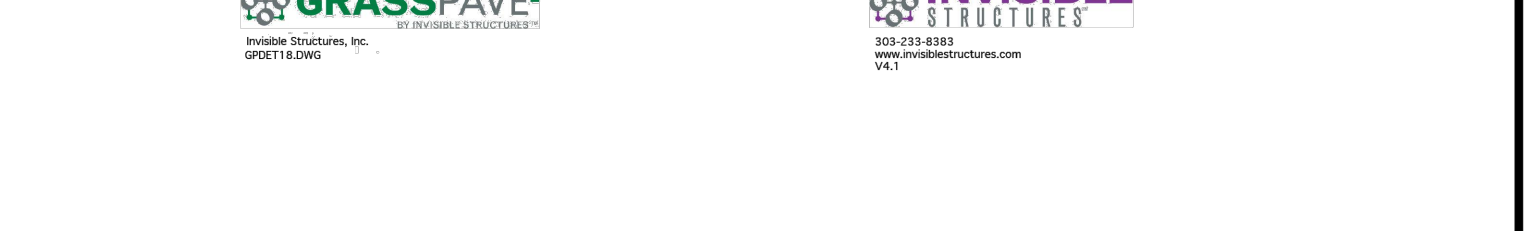
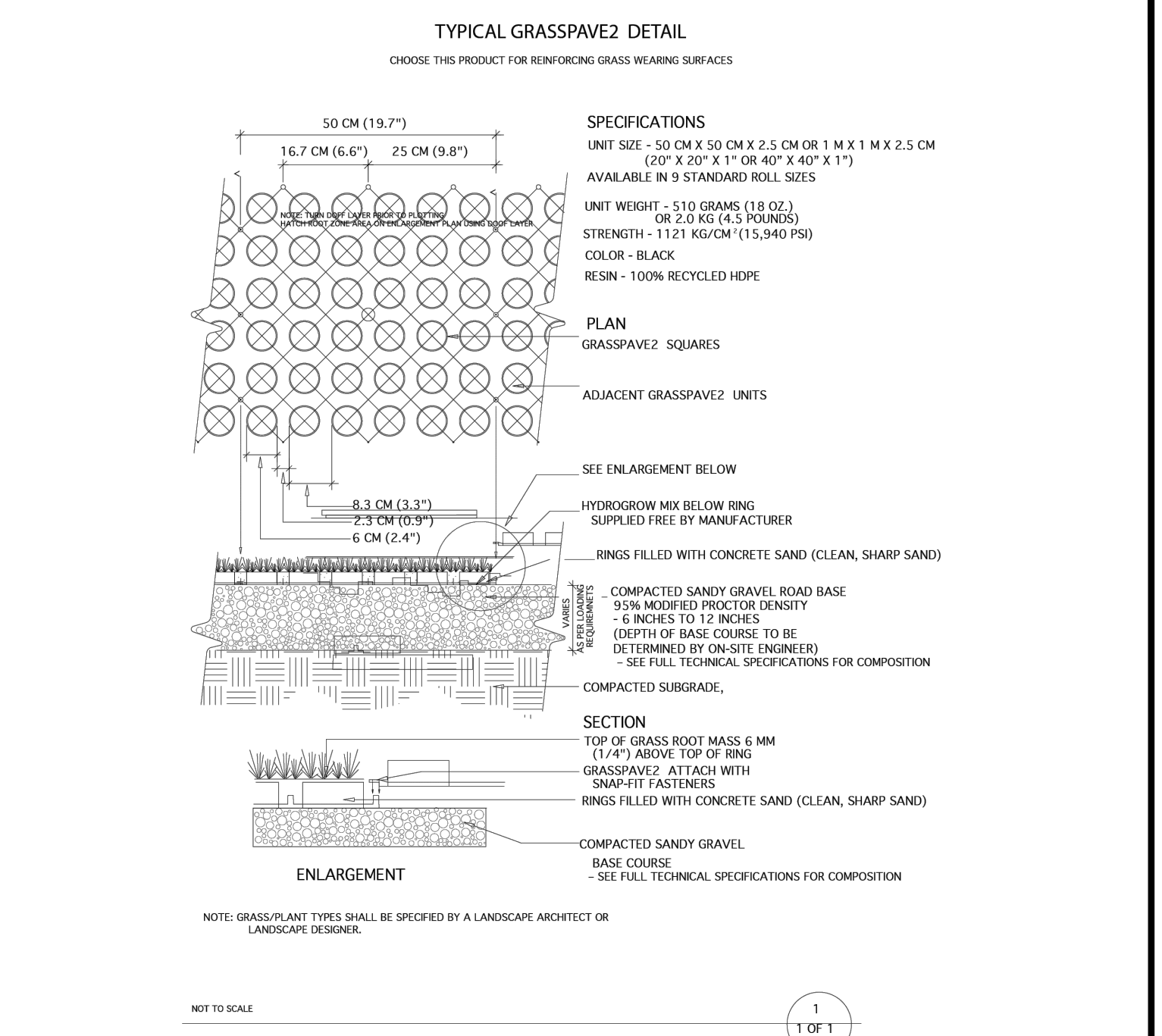
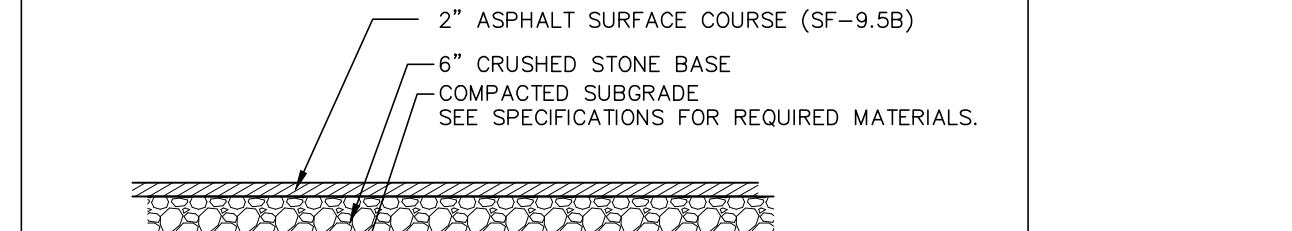
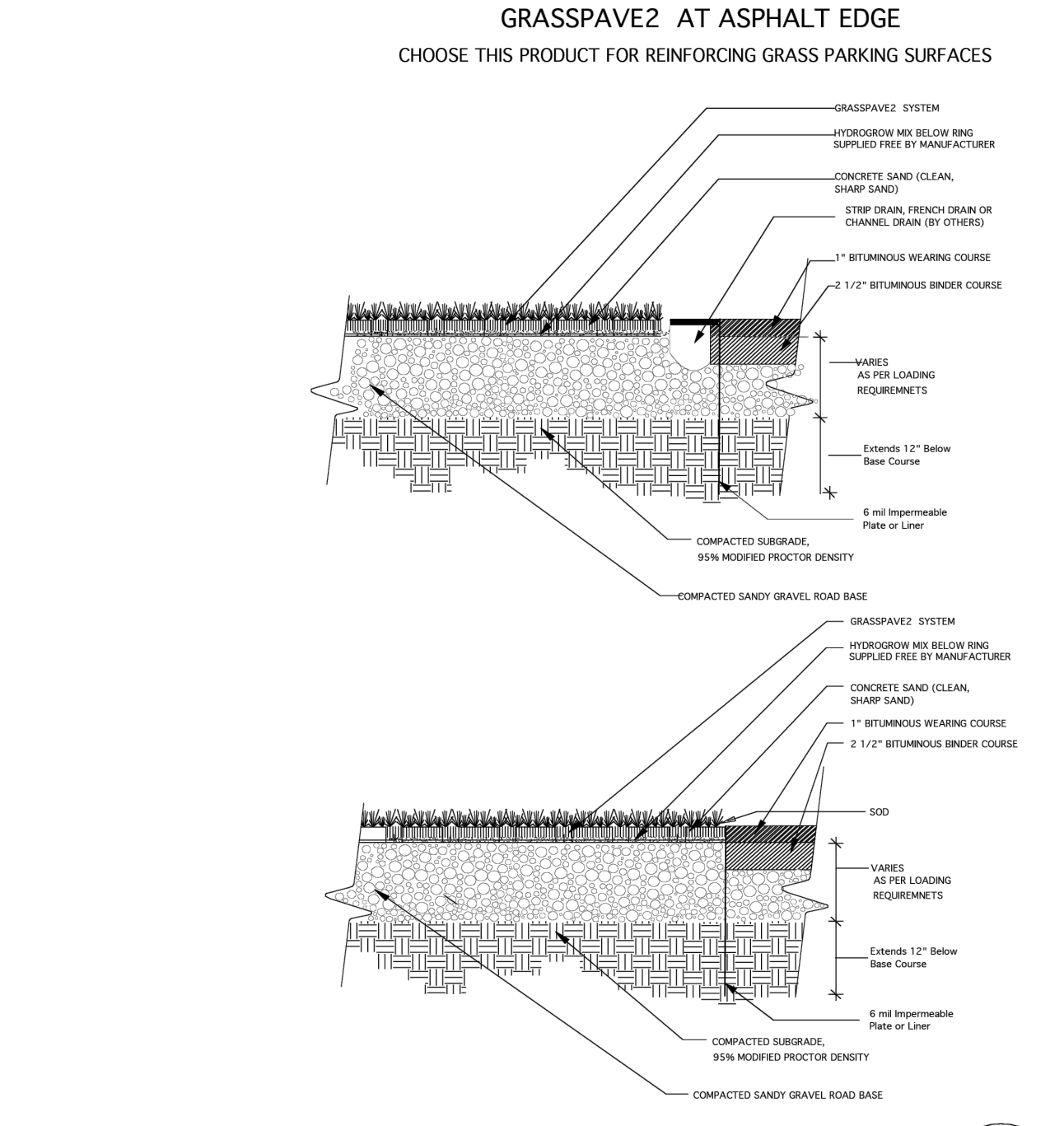
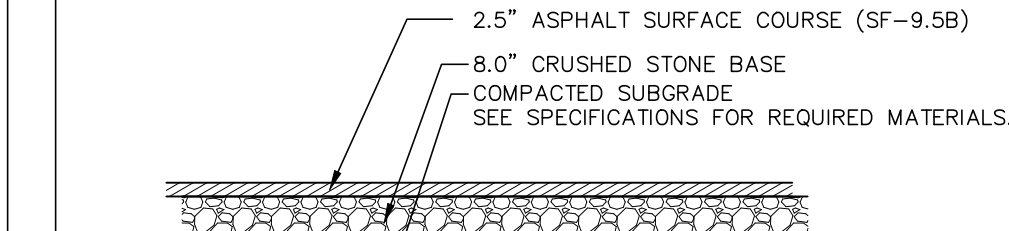
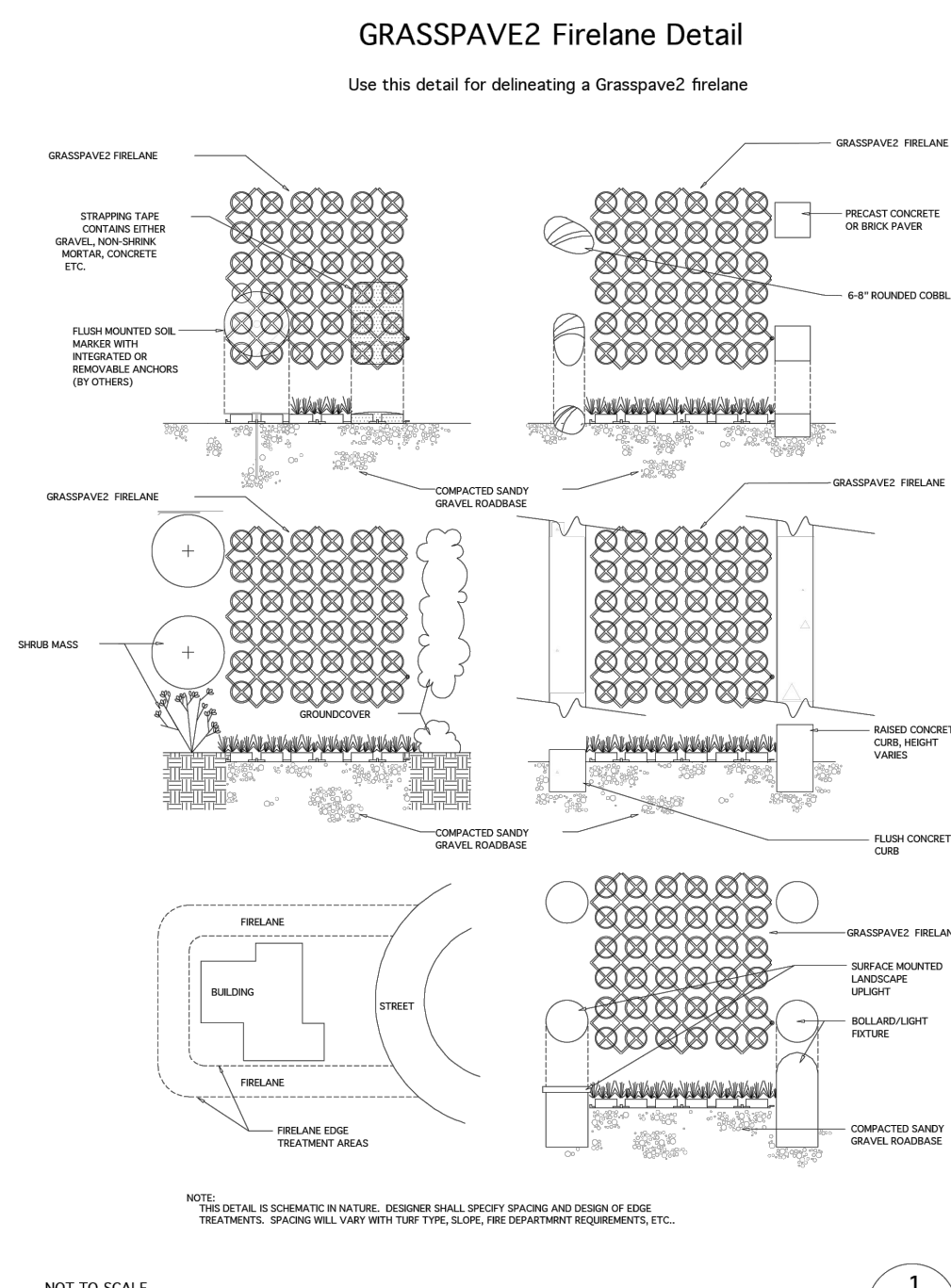
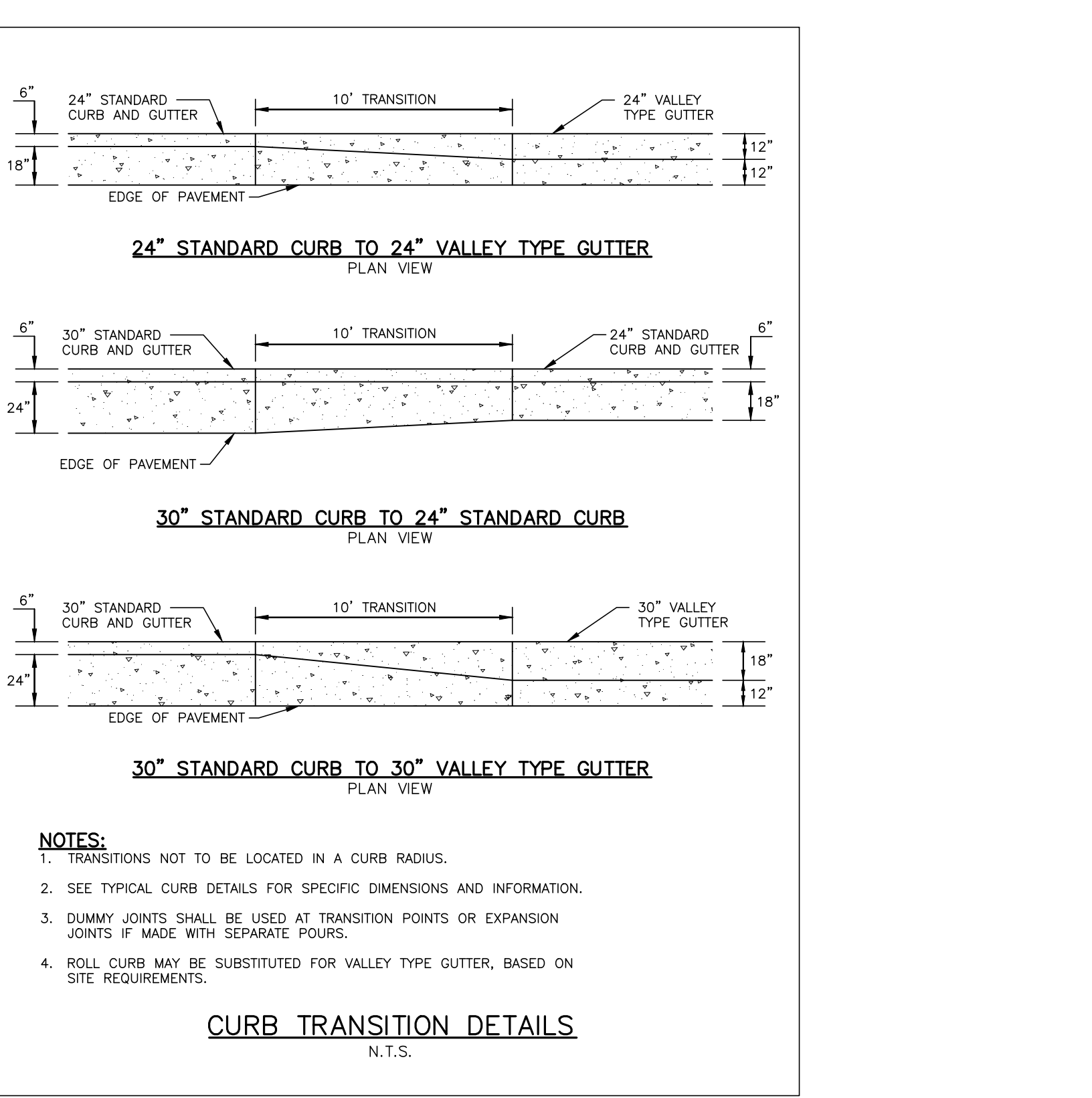
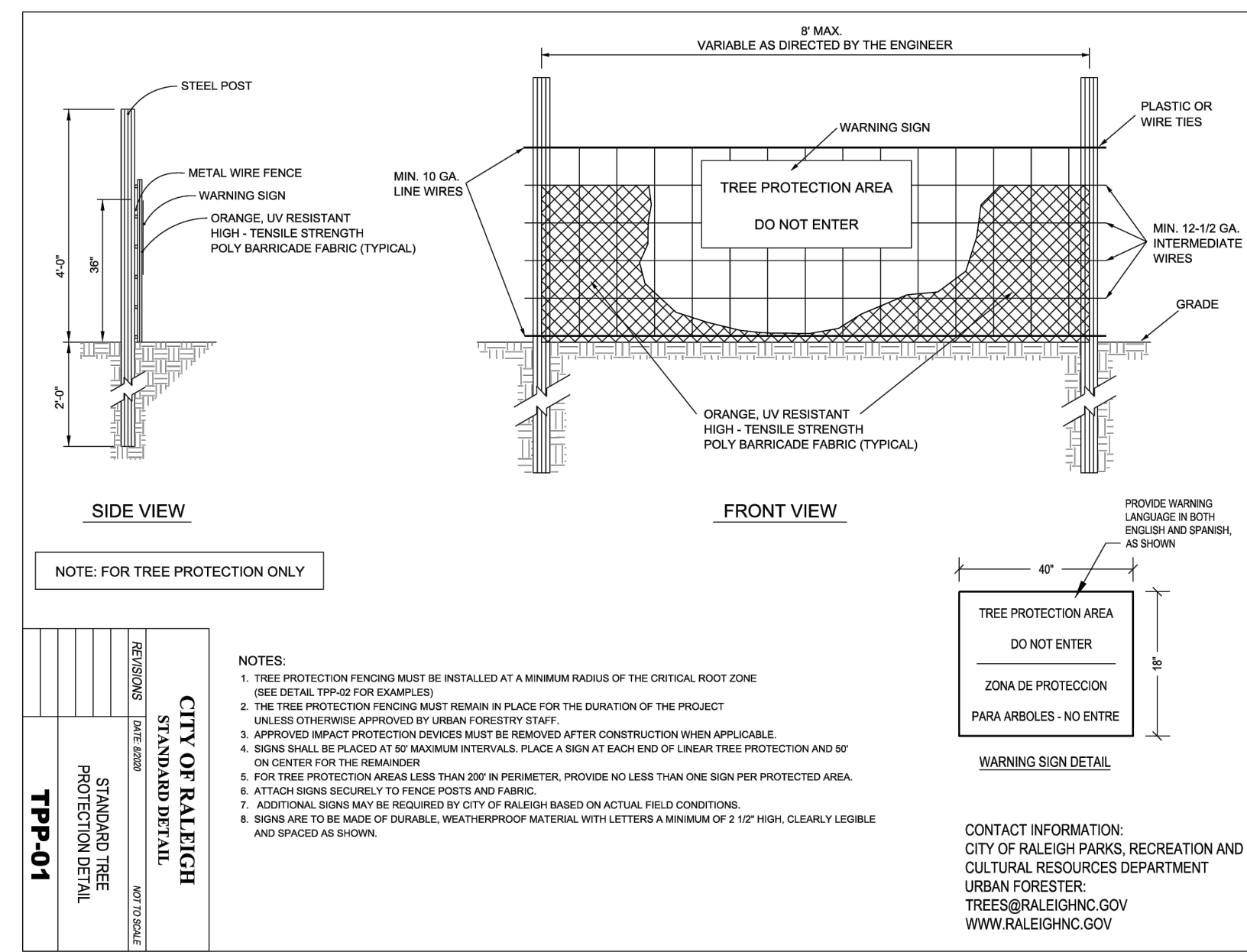
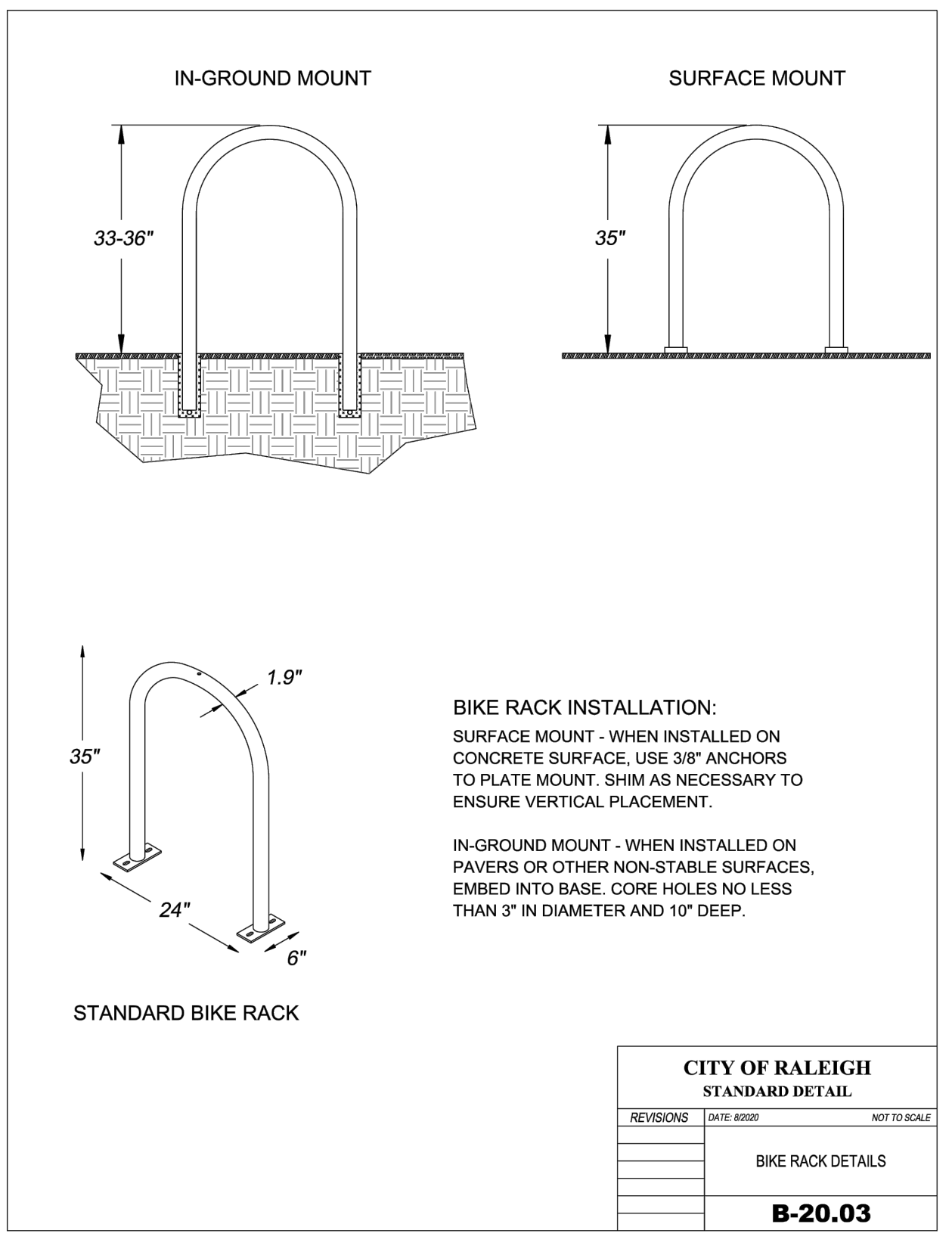
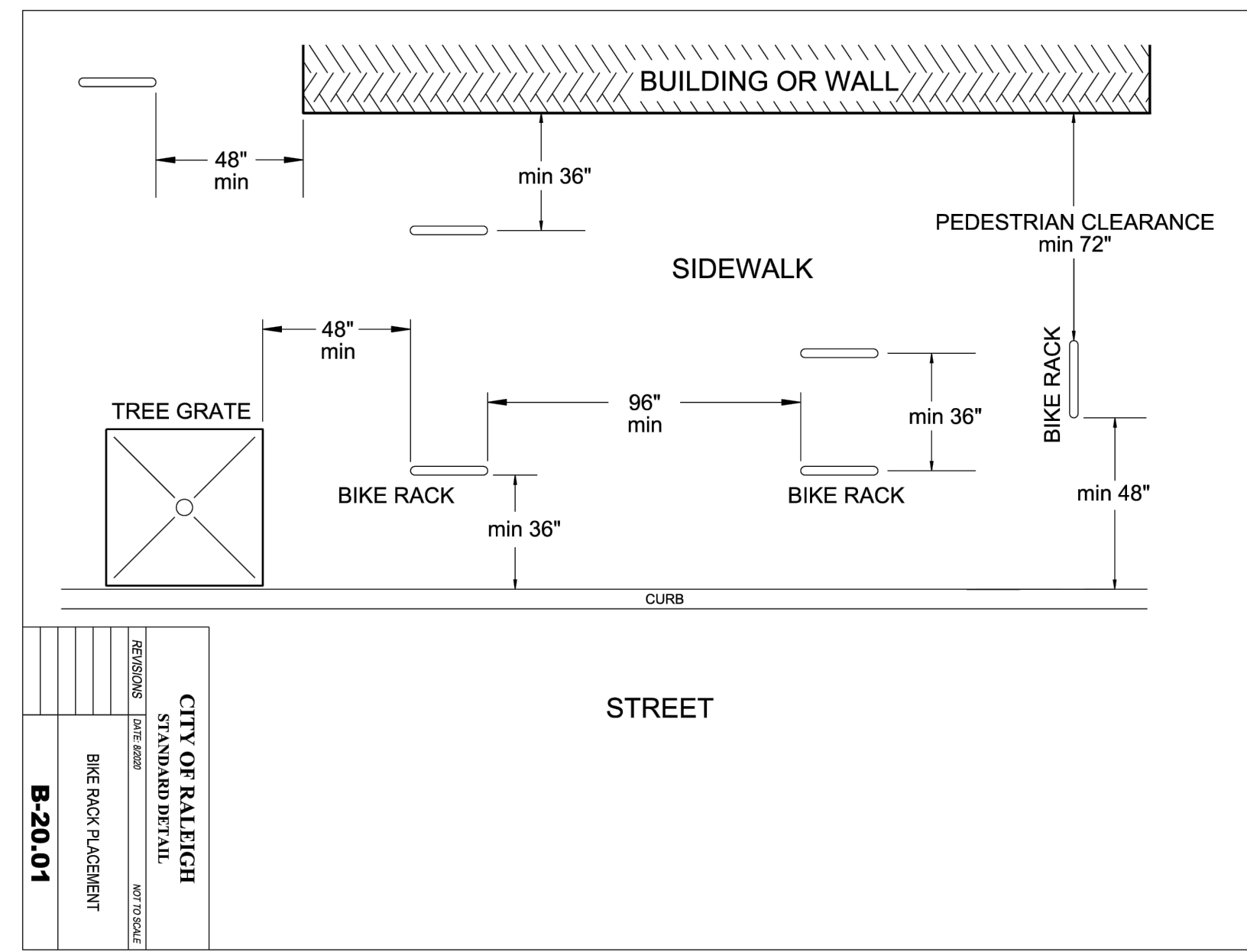
PLAN INFORMATION

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SHEET

SITE DETAILS

C8.00



M:\Projects\BPC\BPC-2023\BPC23034-D1.dwg, 4/16/2023 1:03:45 PM, Anjan Malgani

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CLIENT
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PHONE: 765.807.2737

TRINITAS

VARSITY DRIVE APARTMENTS
ADMINISTRATIVE SITE REVIEW
1530 VARSITY DRIVE
RALEIGH, NORTH CAROLINA 27606

REVISIONS

NO.	DATE

PLAN INFORMATION

PROJECT NO.	SPEC-23034
FILENAME	SPEC23034-D1
CHECKED BY	ACP/LJV
DRAWN BY	MEM
SCALE	N.T.S.
DATE	04.16.2024

SHEET

SITE DETAILS
C8.01

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PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION



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PHONE: 765.807.2737



VARSITY DRIVE APARTMENTS
ADMINISTRATIVE SITE REVIEW
1530 VARSITY DRIVE
RALEIGH, NORTH CAROLINA 27606

REVISIONS

NO. DATE

PLAN INFORMATION

PROJECT NO. SPEC-23034
FILENAME SPEC23034-D1
CHECKED BY ACP/JLV
DRAWN BY MEM
SCALE N.T.S.
DATE 04.16.2024

SHEET

WATER DETAILS

C8.02

SEE SHEET C0.00 FOR ALL PROJECT, SITE, GRADING, STORM DRAINAGE AND UTILITY NOTES

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT CITY OF RALEIGH ENGINEERING DESIGN AND CONSTRUCTION STANDARDS

PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION

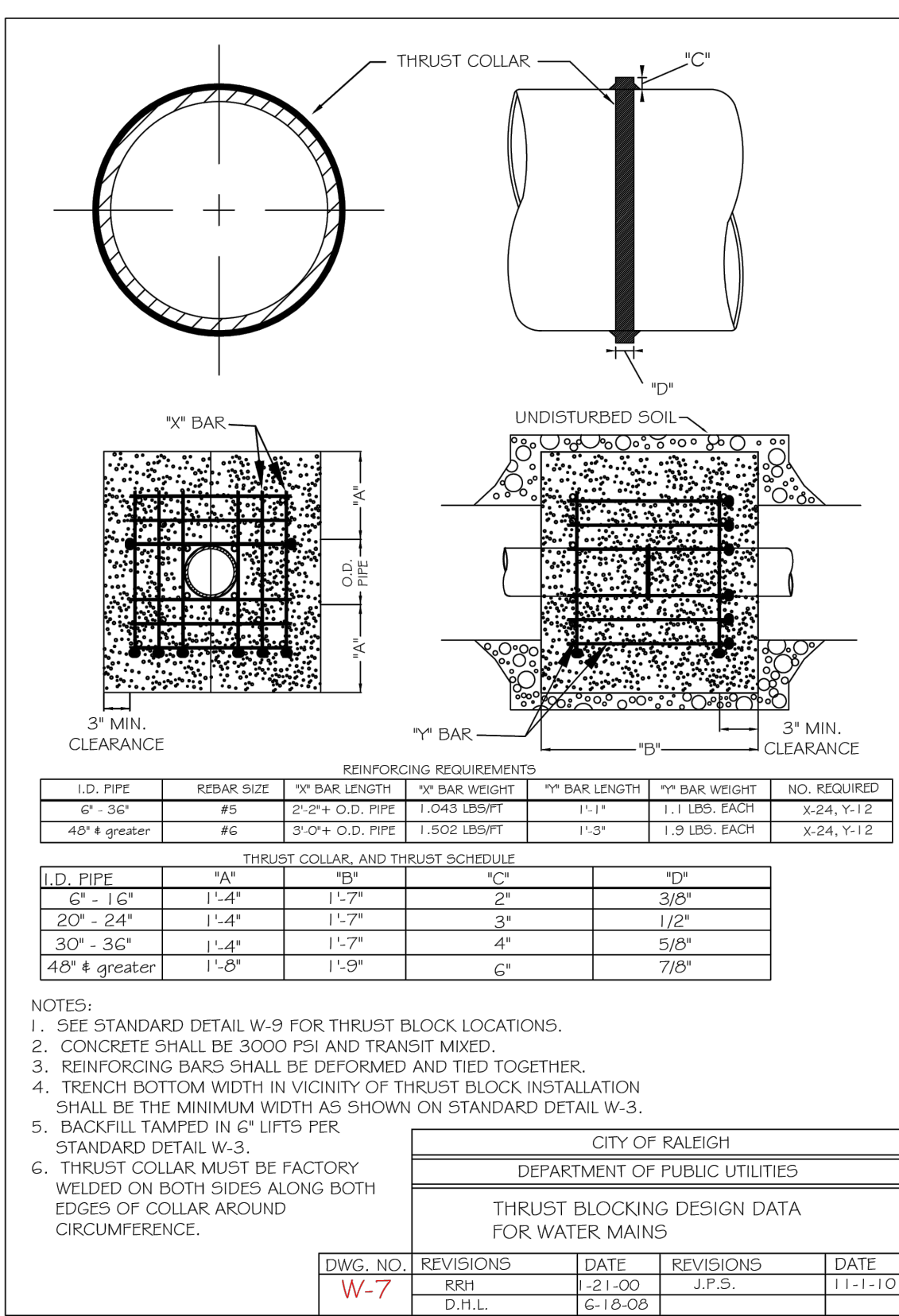


Table with columns: I.D. PIPE, REBAR SIZE, REINFORCING REQUIREMENTS, REBAR WEIGHT, REBAR LENGTH, NO. REBAR, NO. REQUIRED, TYPICAL WEIGHT, TYPICAL LENGTH.

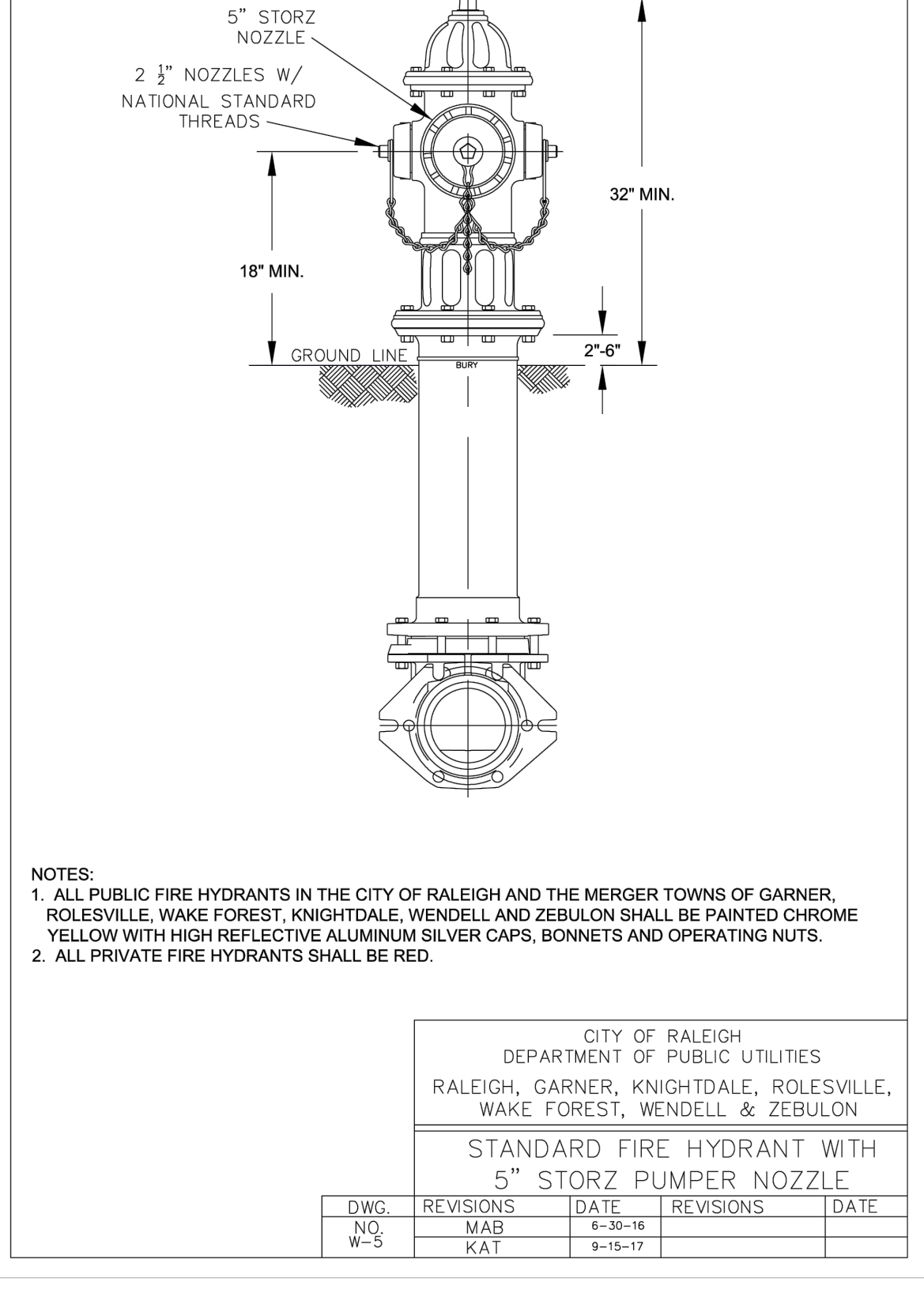


Table with columns: DWG. NO., REVISIONS, DATE, REVISIONS, DATE. Includes revision history for Standard Fire Hydrant.

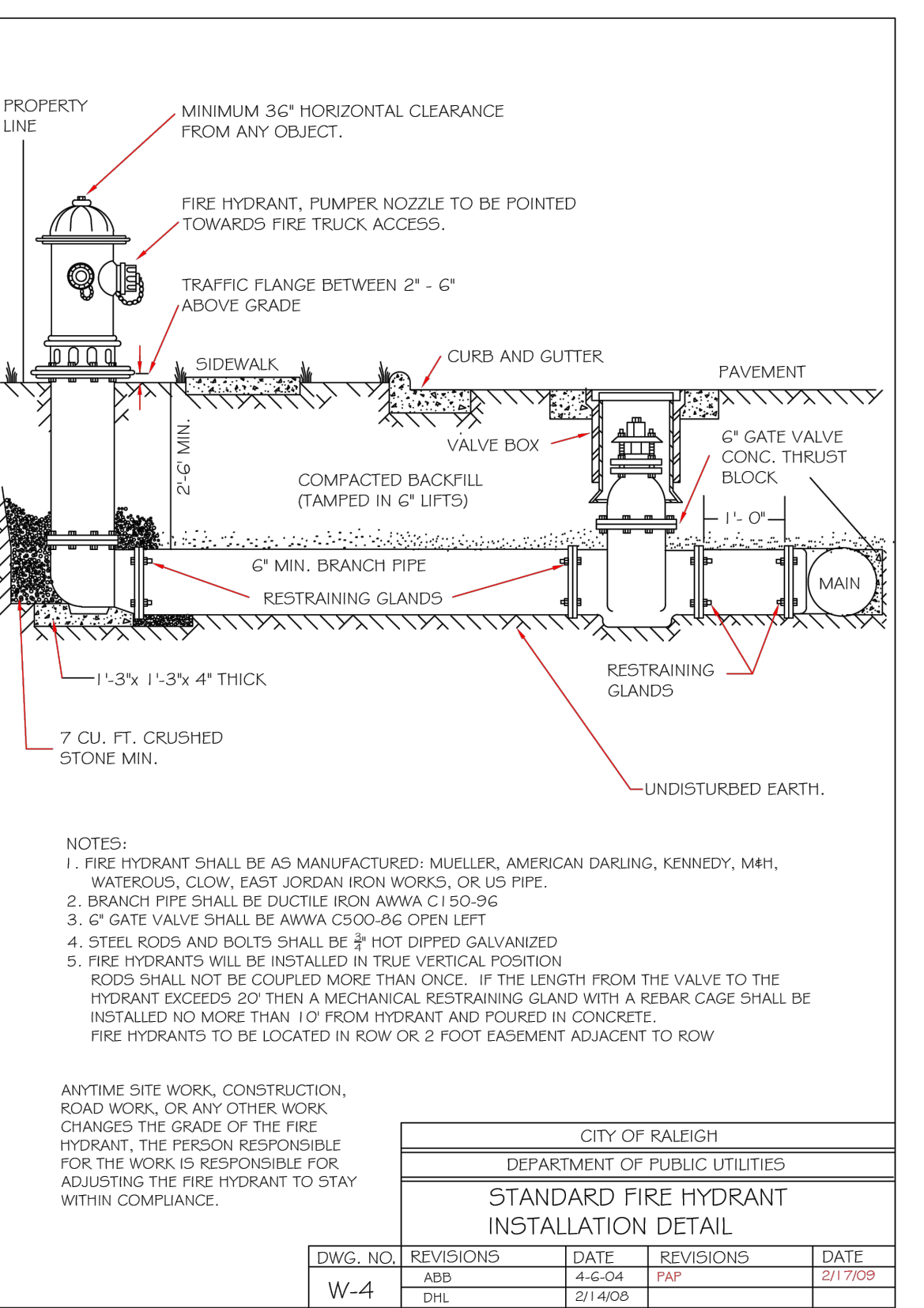


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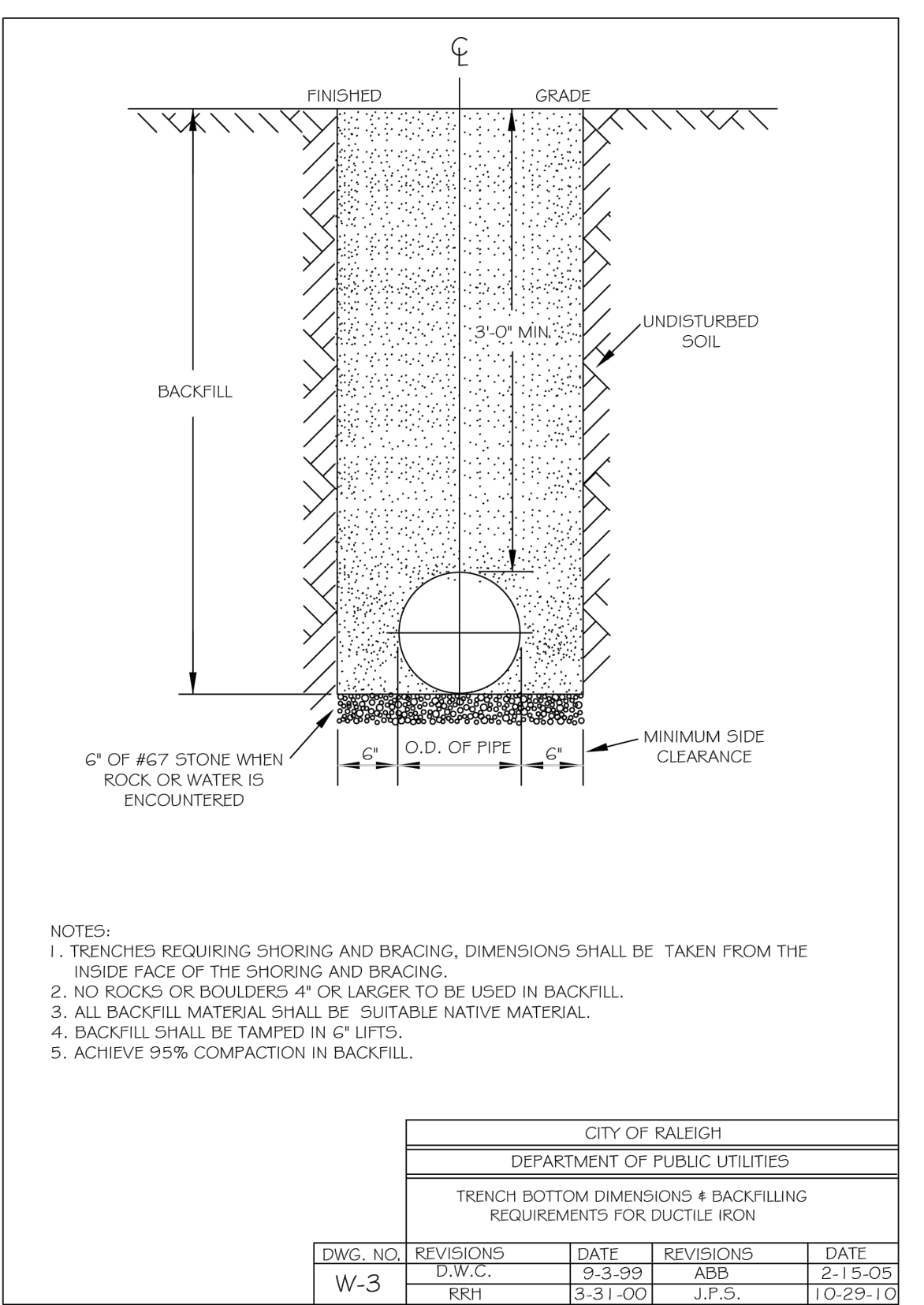


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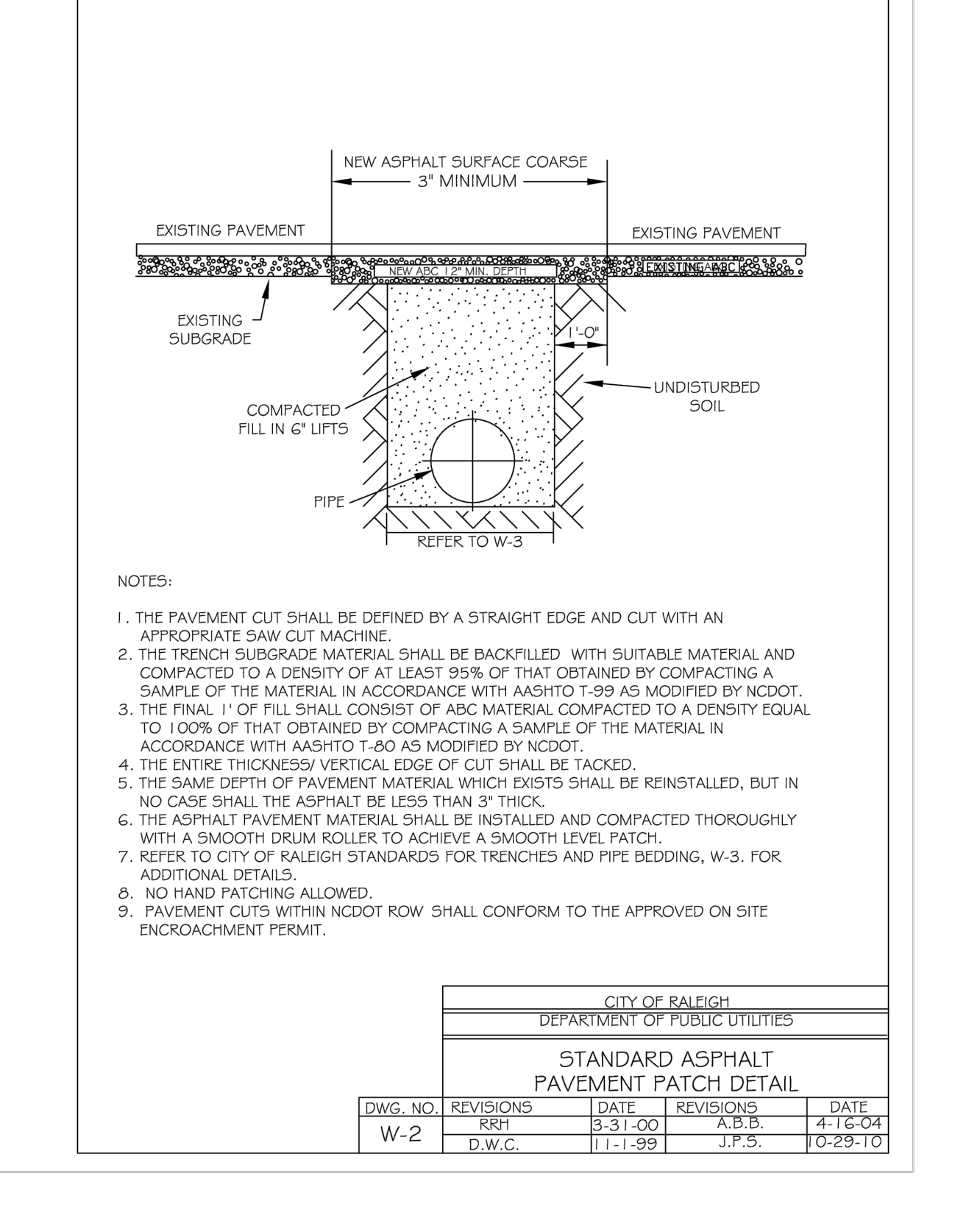


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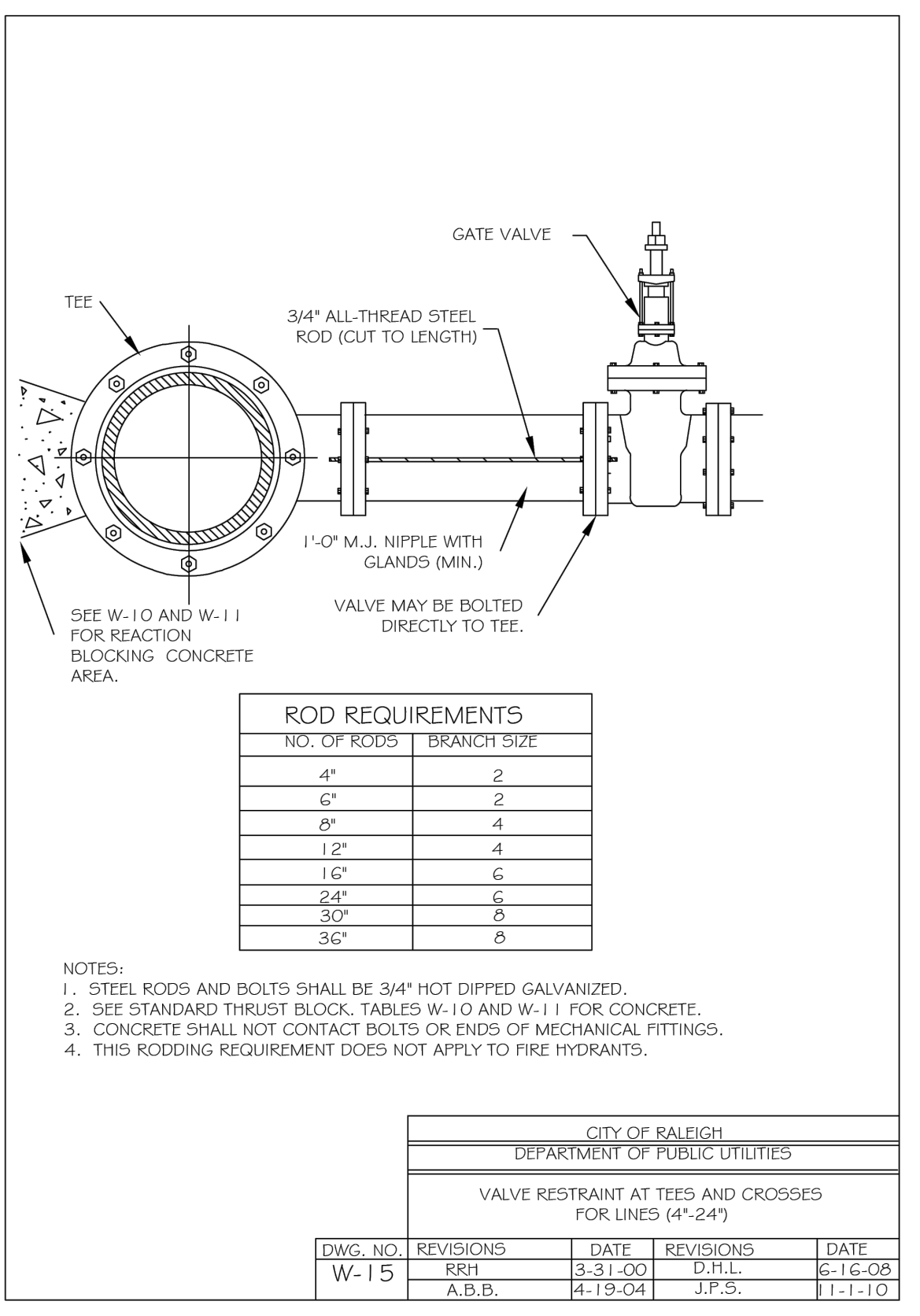


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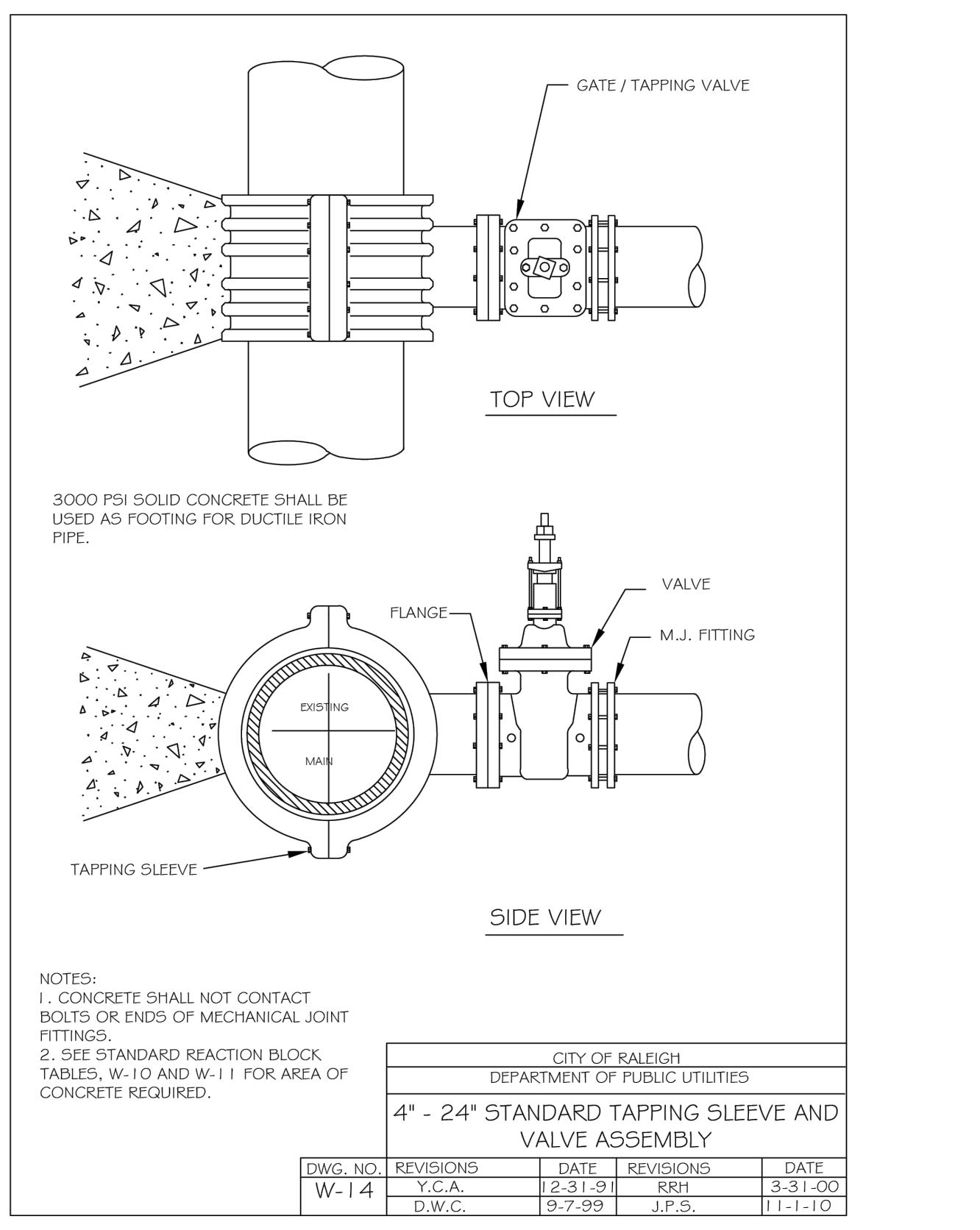


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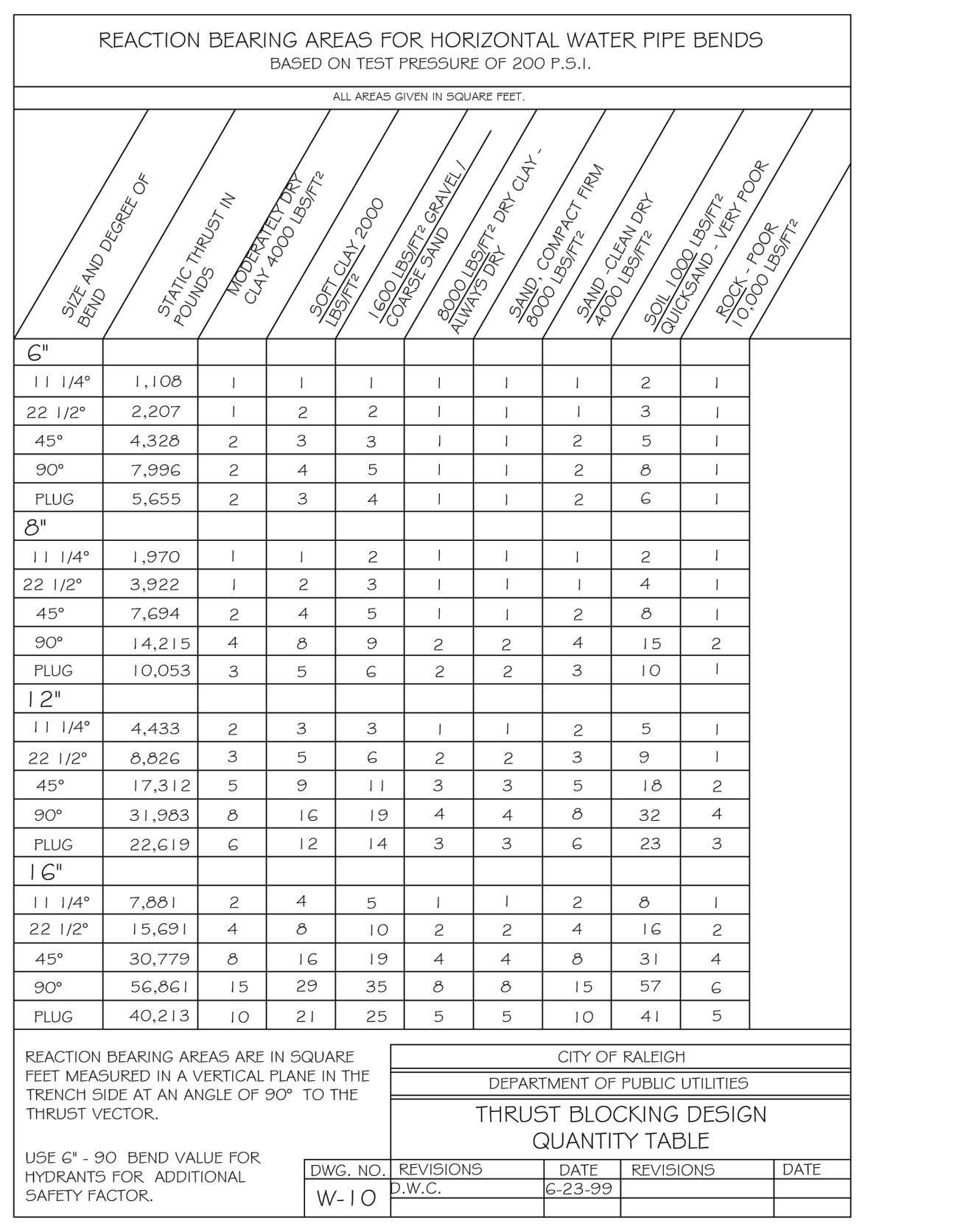


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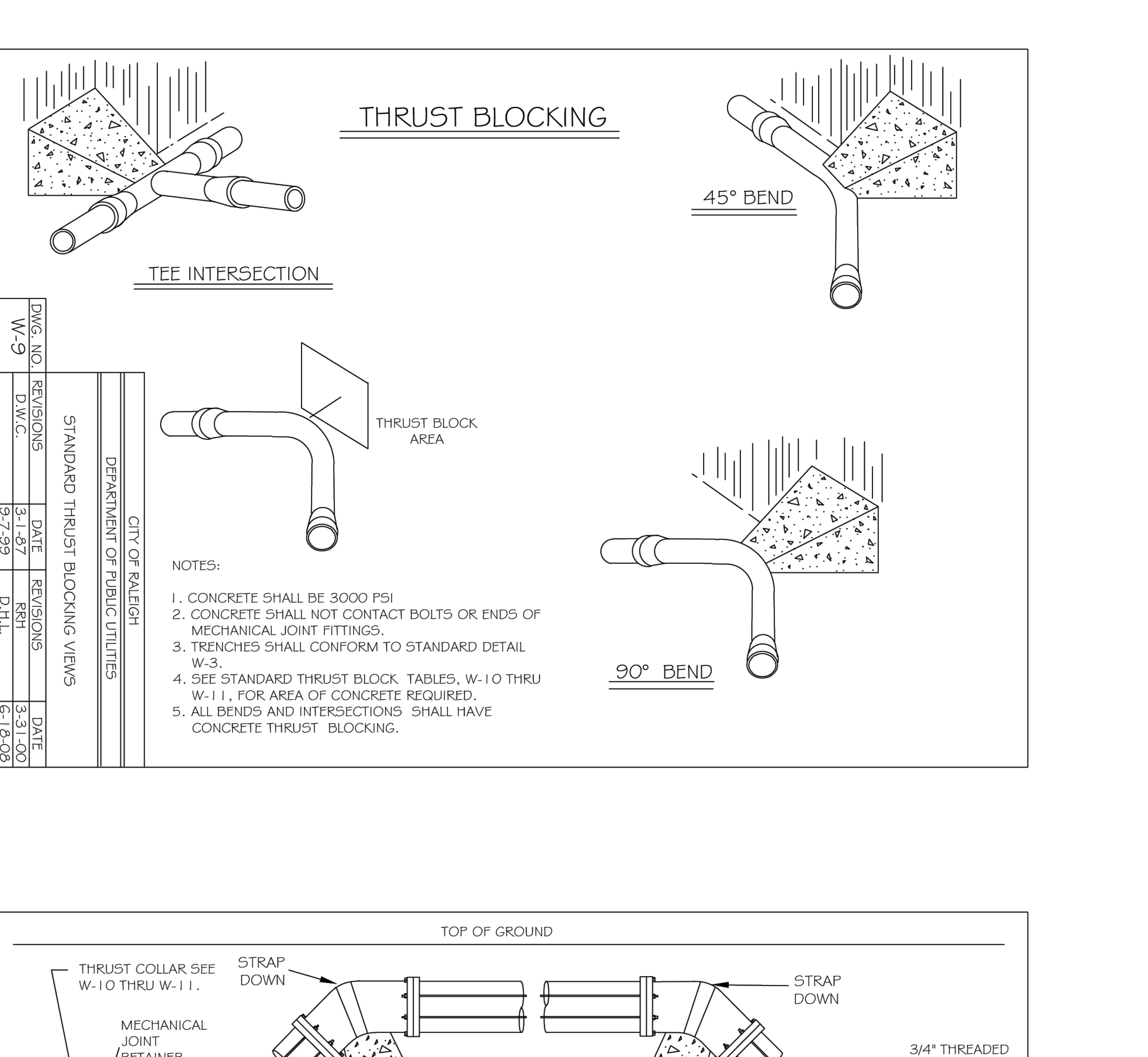


Table with columns: DWG. NO., REVISIONS, DATE, REVISIONS, DATE. Includes revision history for Standard Vertical Bend.

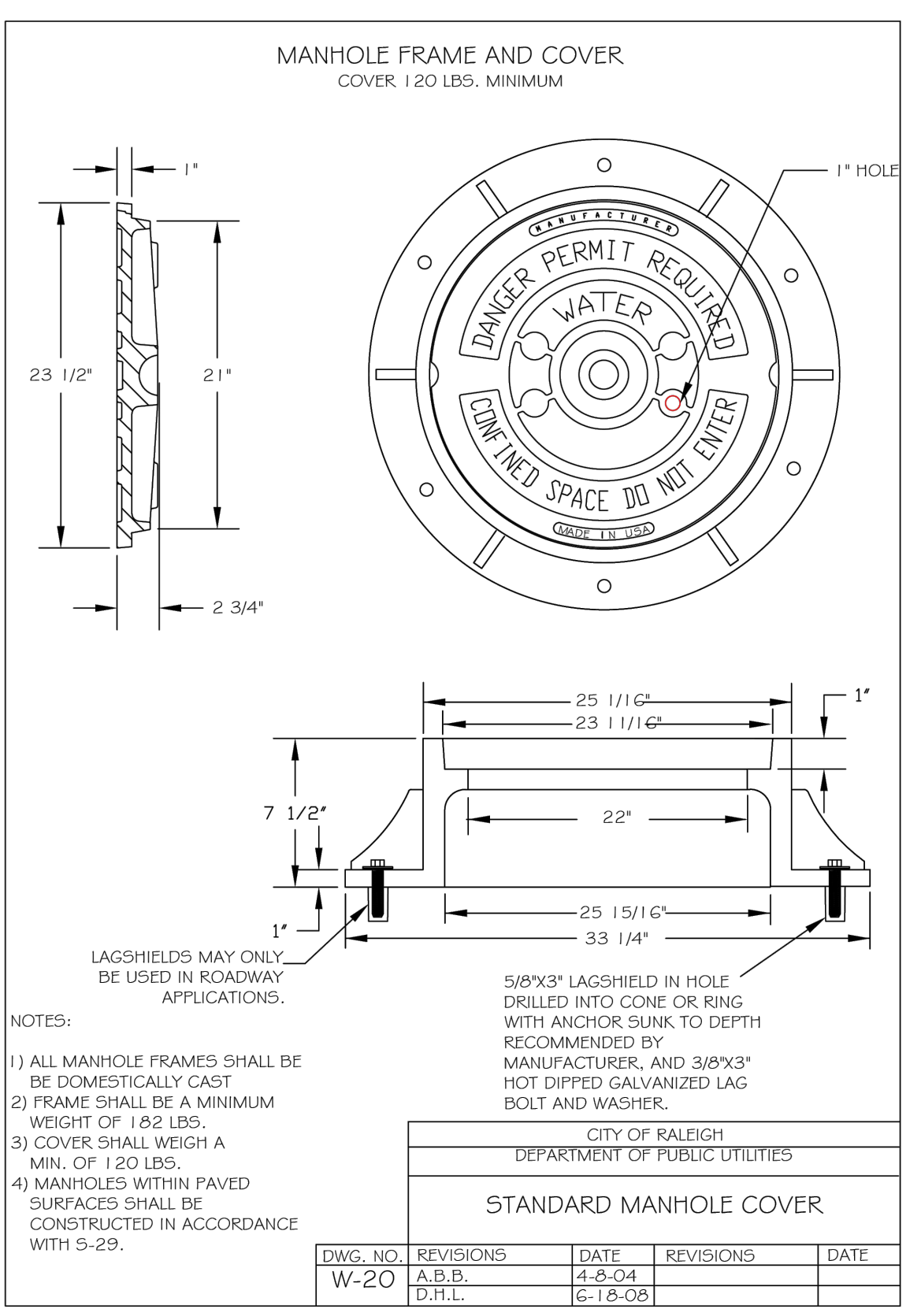


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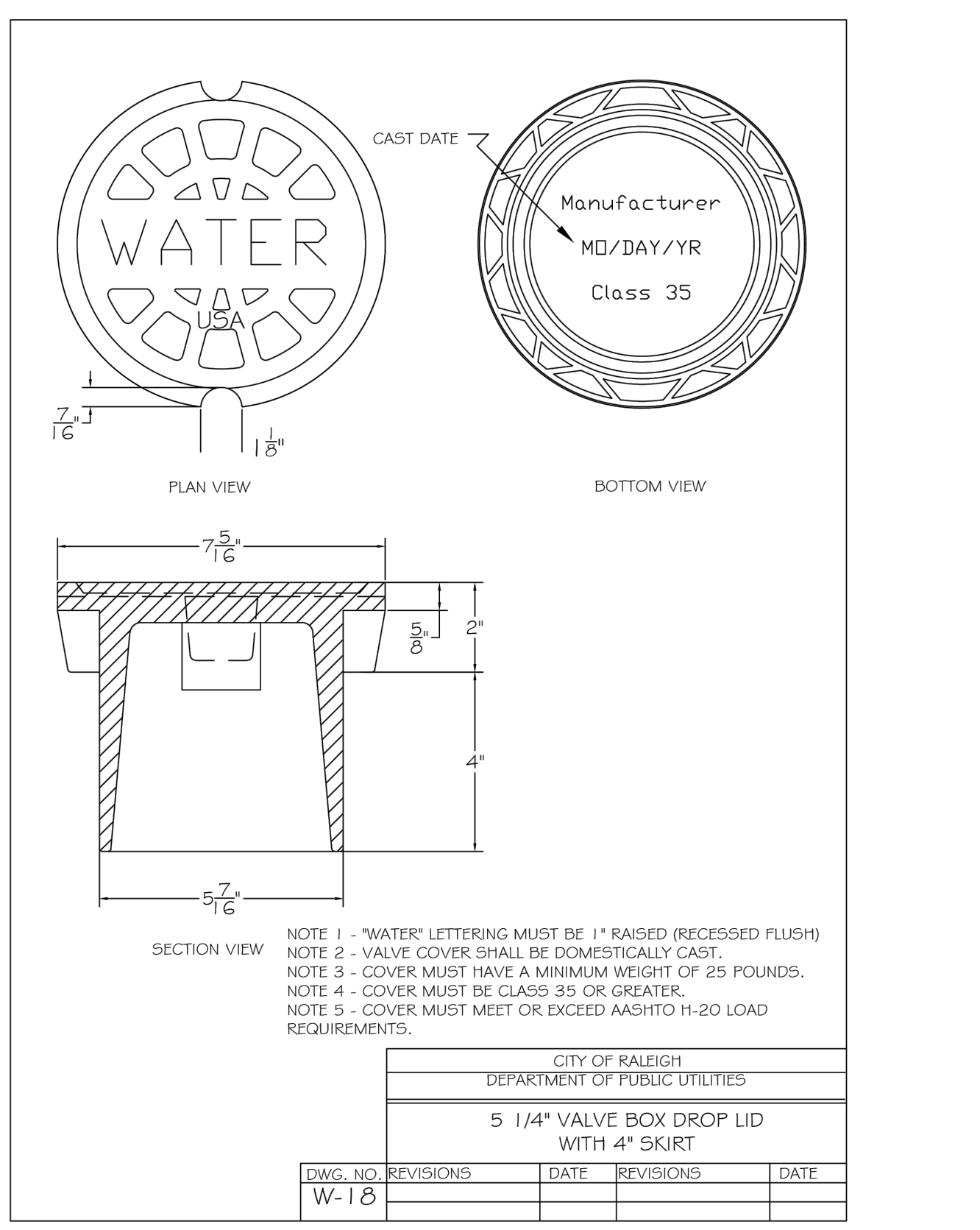


Table with columns: DWG. NO., REVISIONS, DATE, REVISIONS, DATE. Includes revision history for Valve Box Installation and Extension Detail.

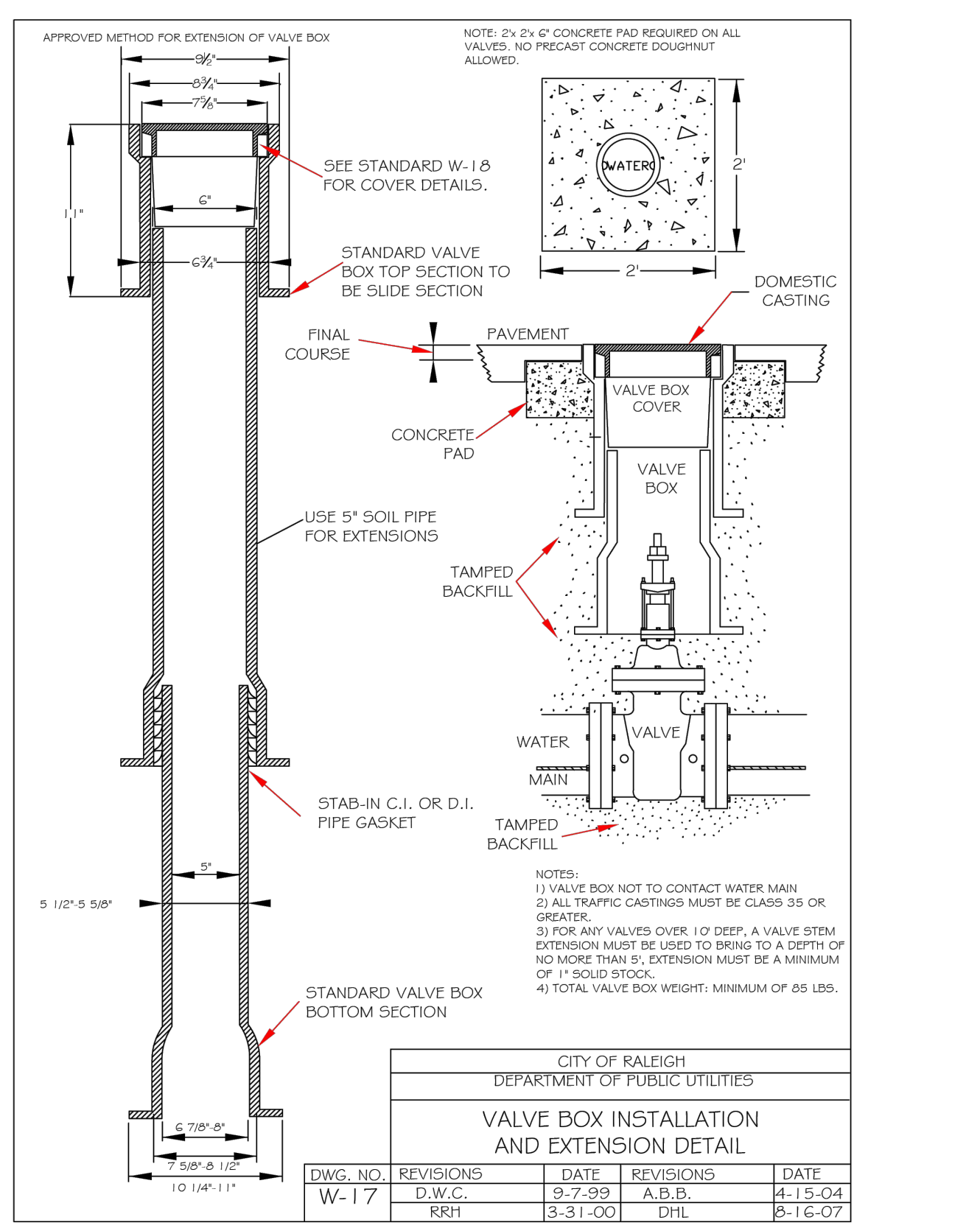


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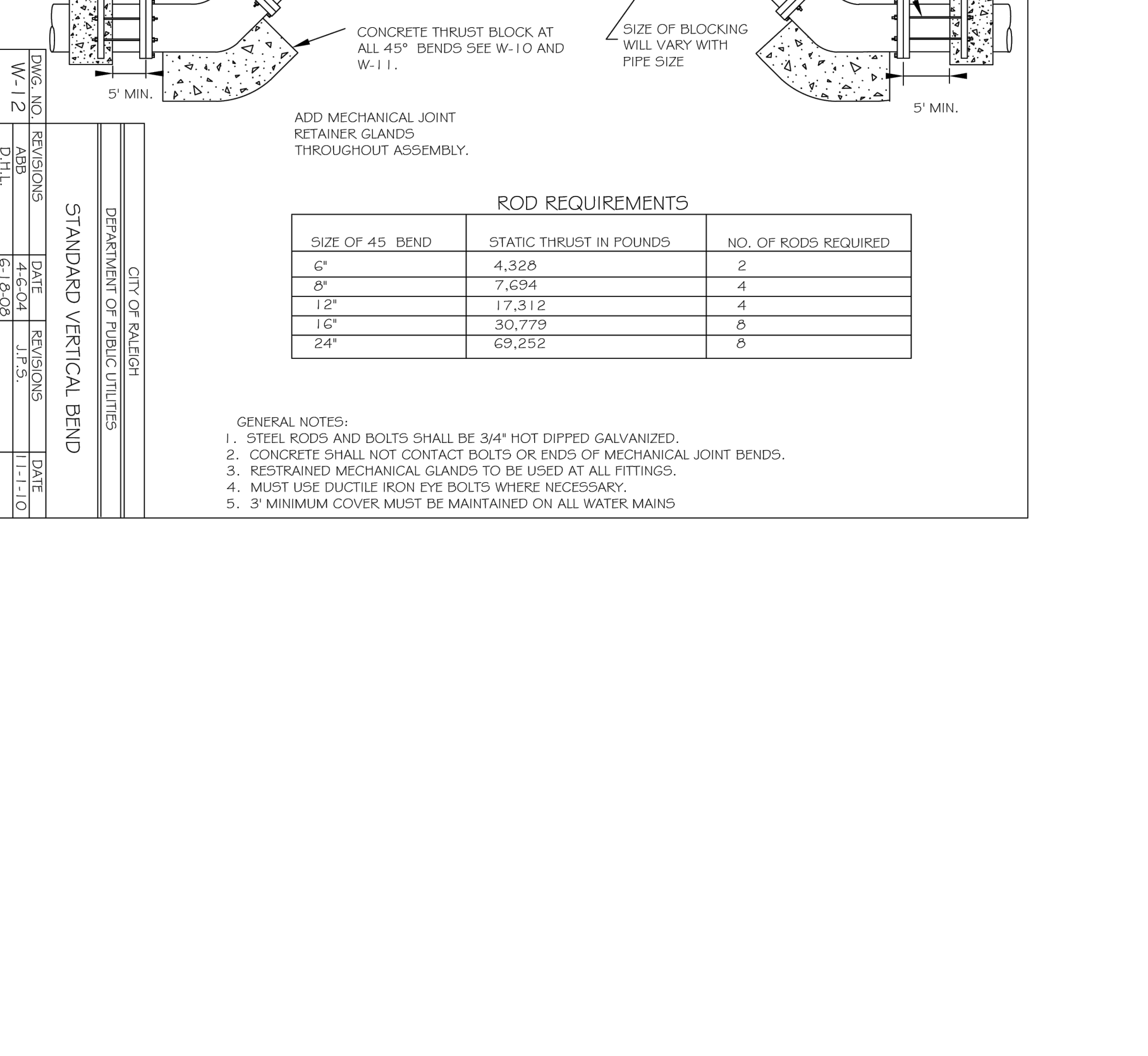
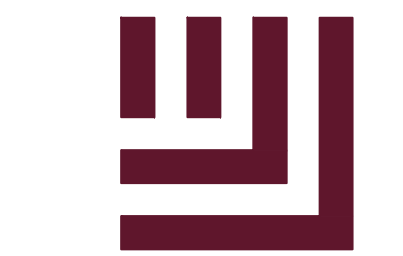


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M:\Projects\BPC\BPC-C-2023\BPC-C-2023-001\Production\Drawings\Administrative Site Plan\BPC-C-2023-001-D1.dwg, 4/16/2024 10:53:53 AM, Mubina Mahajan



McAdams

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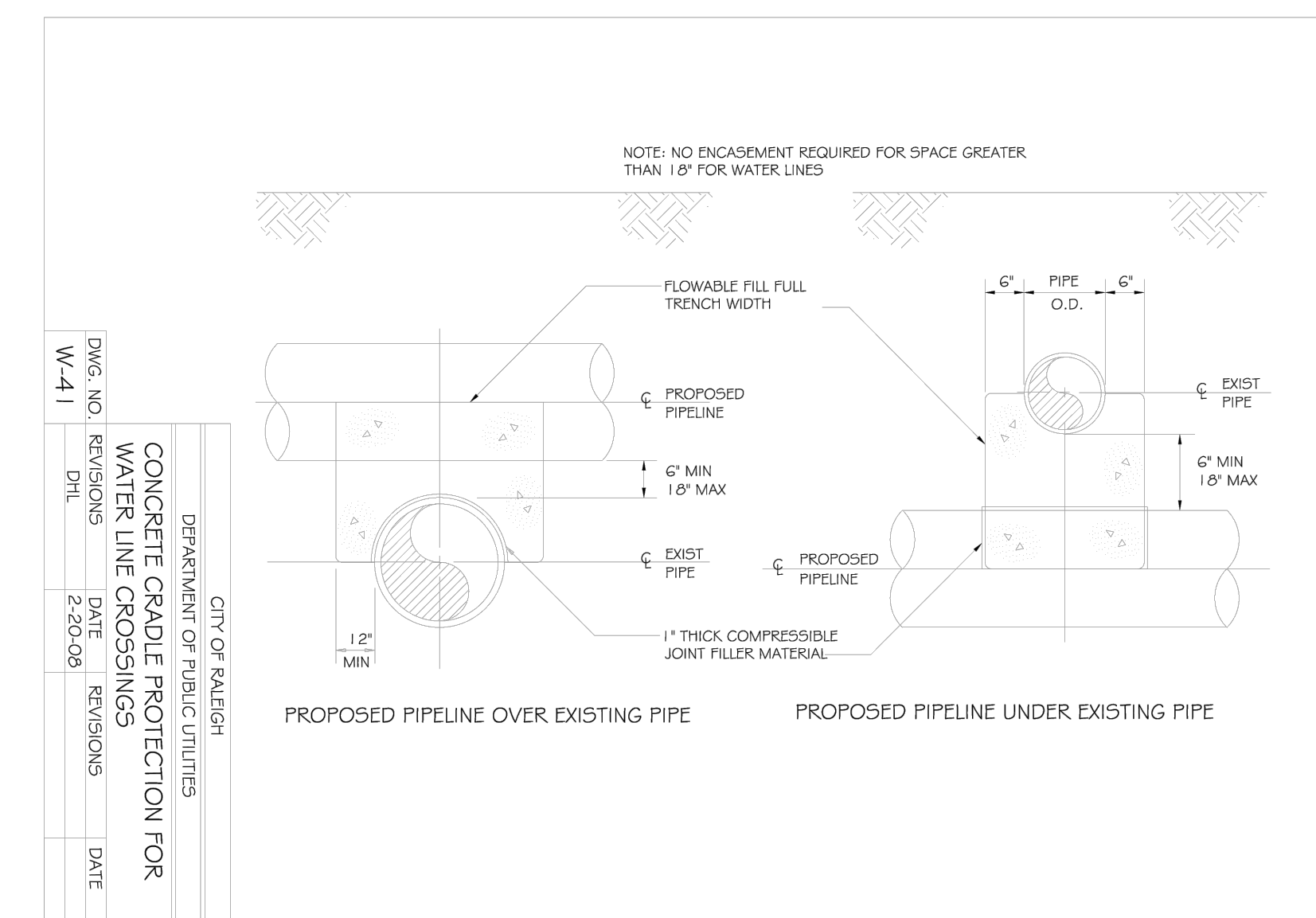
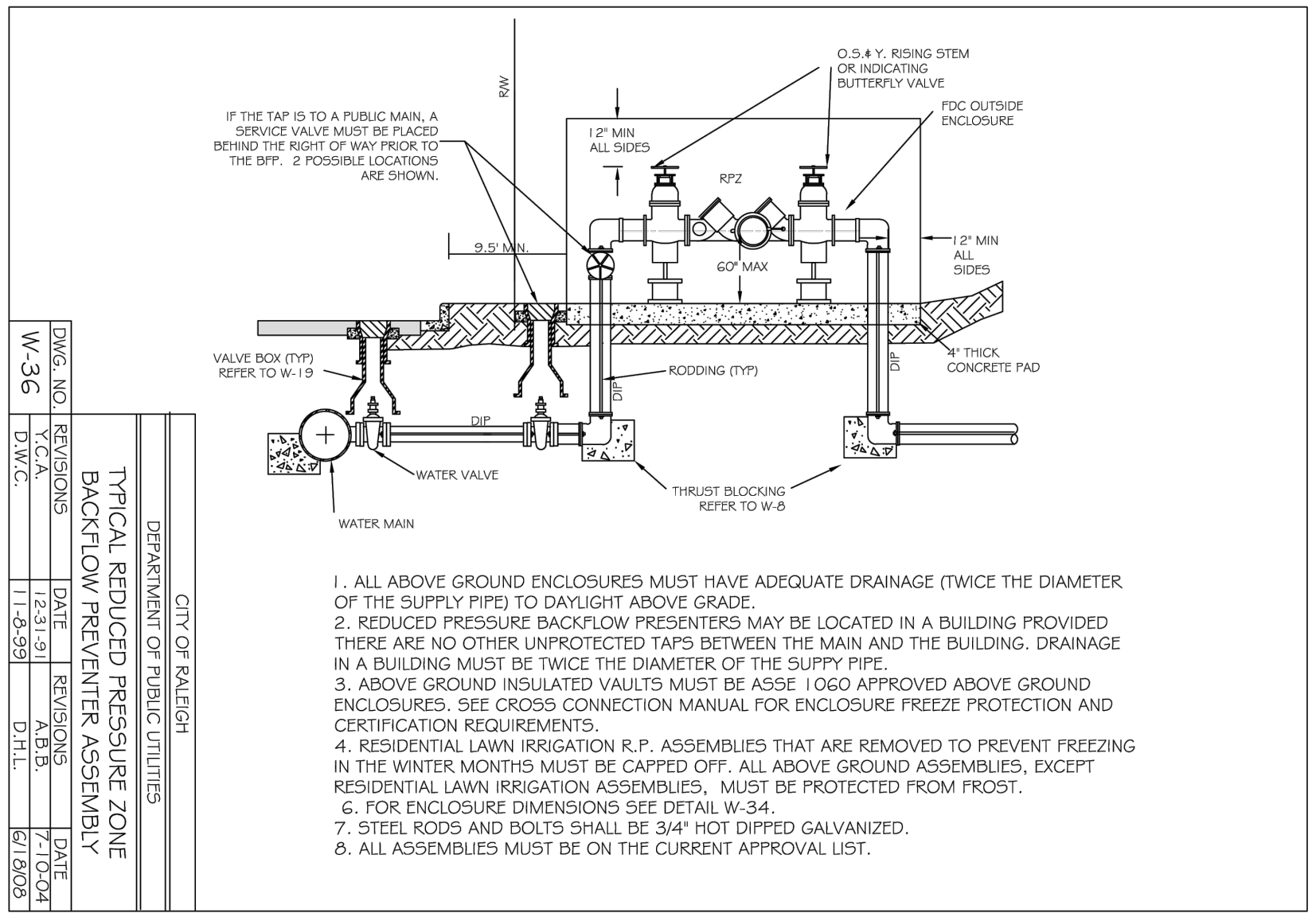
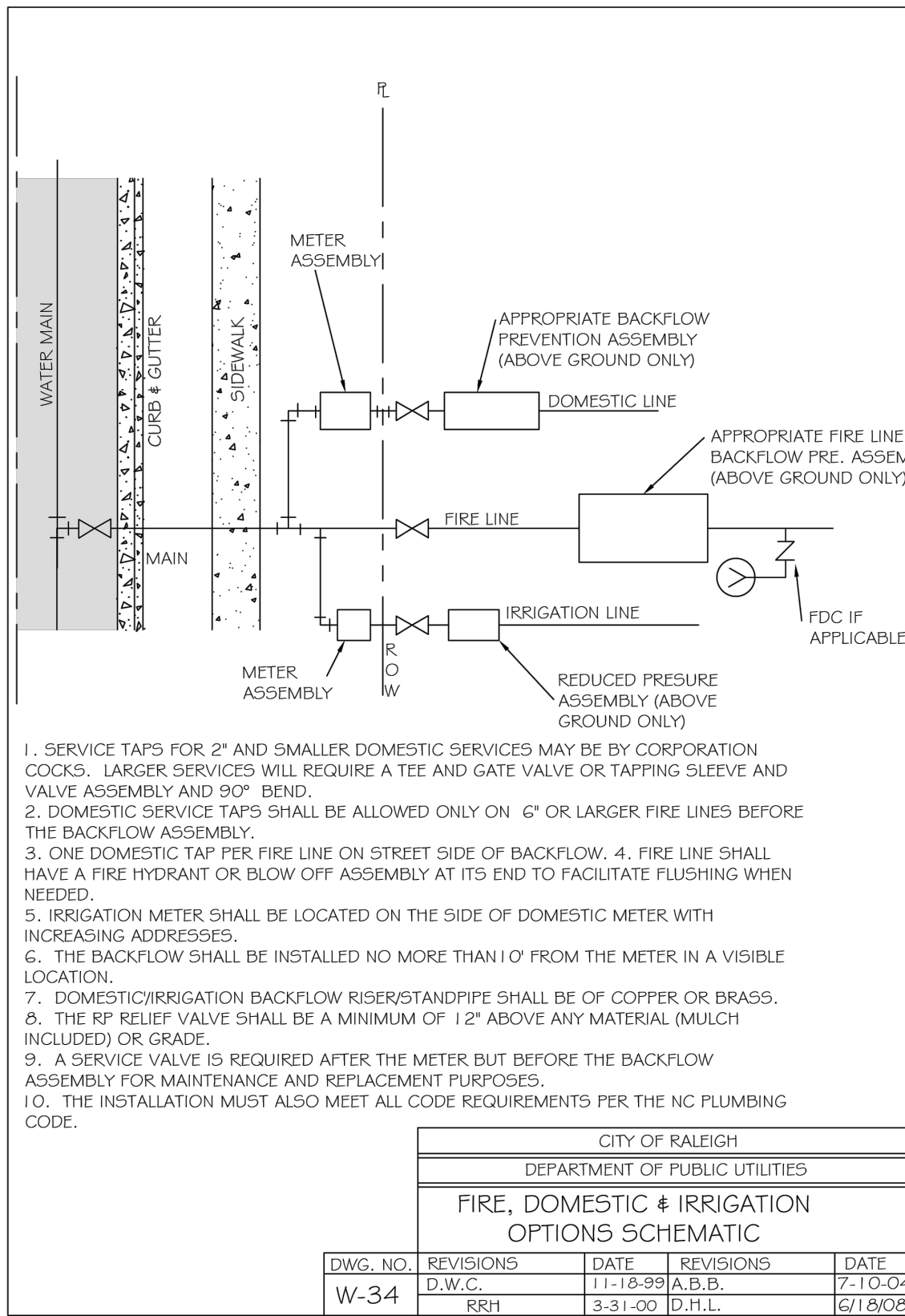
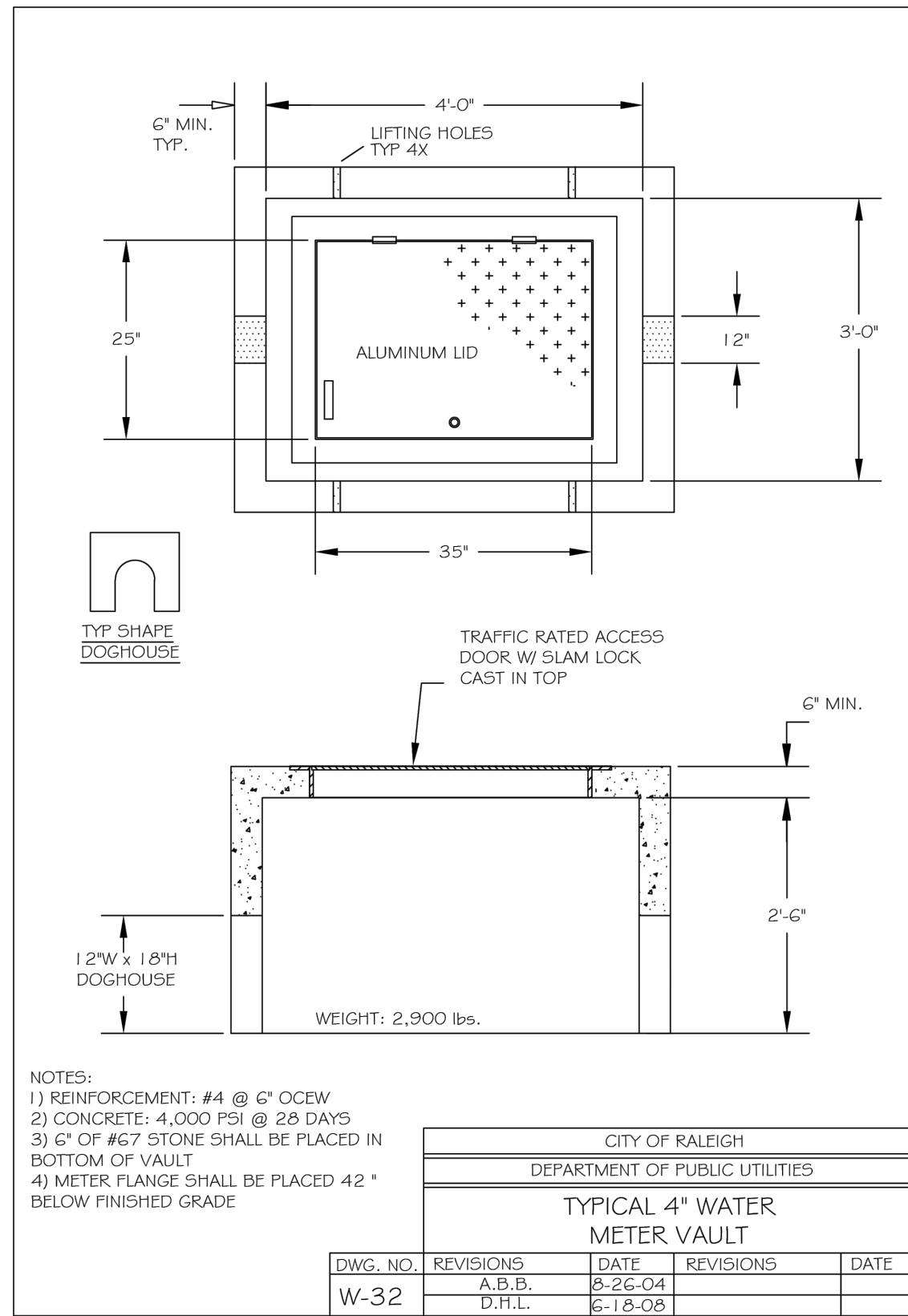
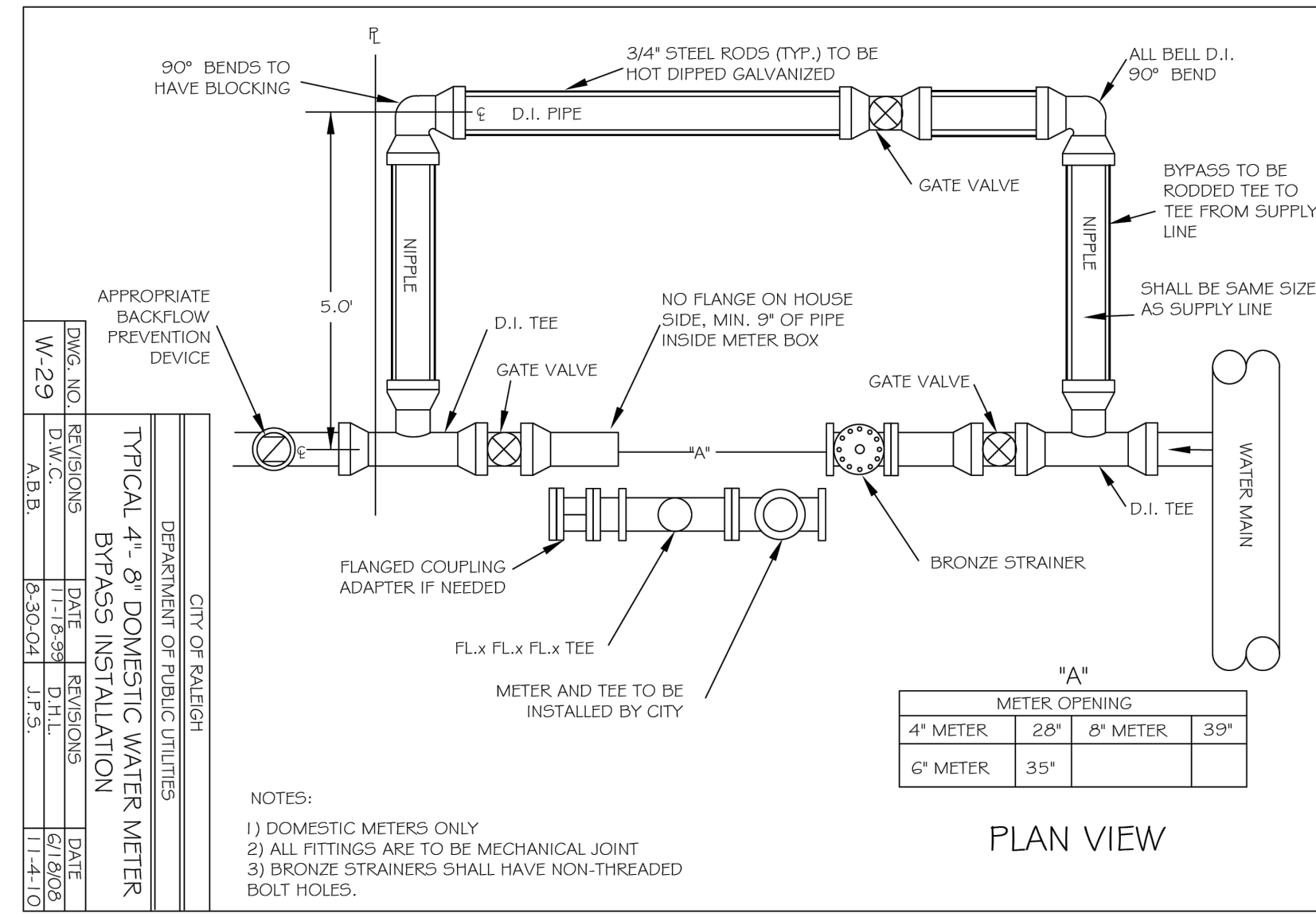


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Table with 5 columns: DWS. NO., REVISIONS, DATE, REVISIONS, DATE. Row 1: W-34, B.W.C., 11-18-05, J.S.B., 12-10-04.

SEE SHEET C0.00 FOR ALL PROJECT, SITE, GRADING, STORM DRAINAGE AND UTILITY NOTES

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REVISIONS

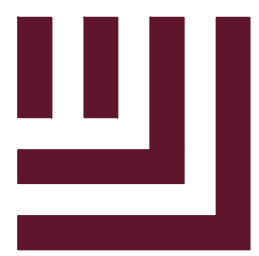
NO. DATE

PLAN INFORMATION

Table with 2 columns: PROJECT NO., FILENAME, CHECKED BY, DRAWN BY, SCALE, DATE. Values include SPEC-23034, ACP/JLV, MEM, N.T.S., 04.16.2024.

SHEET

WATER DETAILS C8.03



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VARSITY DRIVE APARTMENTS
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1530 VARSITY DRIVE
RALEIGH, NORTH CAROLINA 27606

REVISIONS

NO. DATE

PLAN INFORMATION

PROJECT NO. SPEC-23034
FILENAME SPEC23034-D1
CHECKED BY ACP/LJV
DRAWN BY MEM
SCALE N.T.S.
DATE 04.16.2024

SHEET

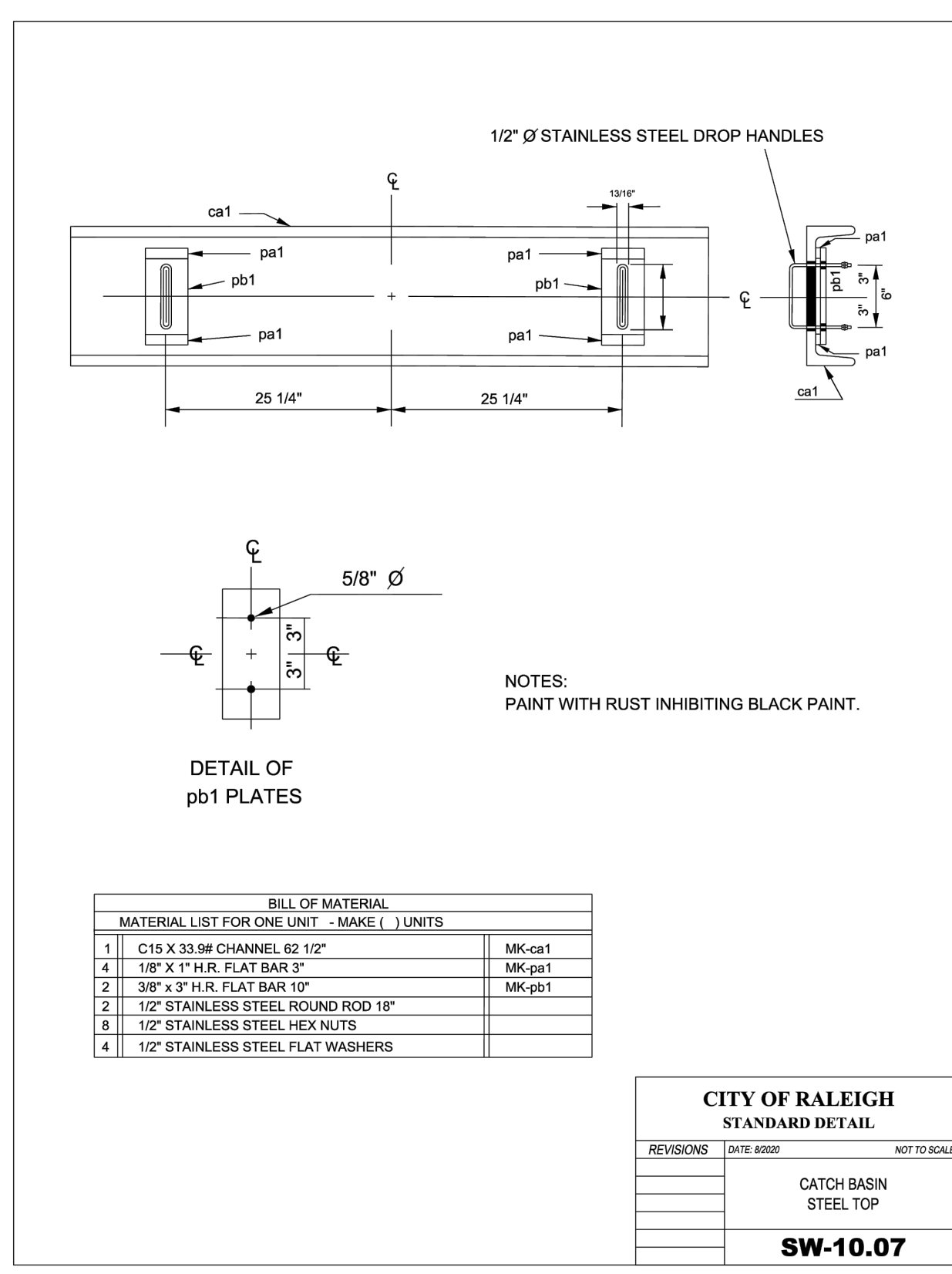
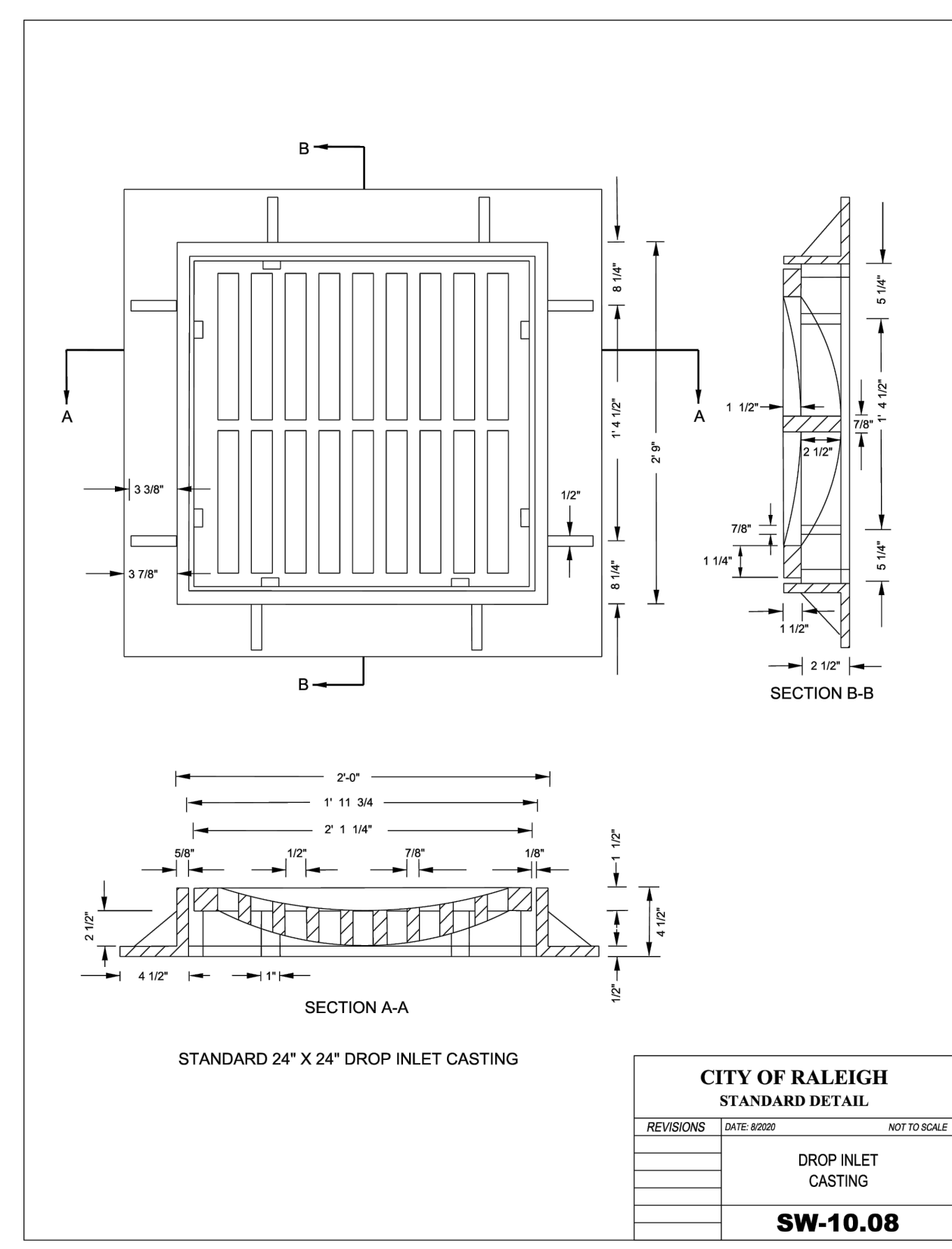
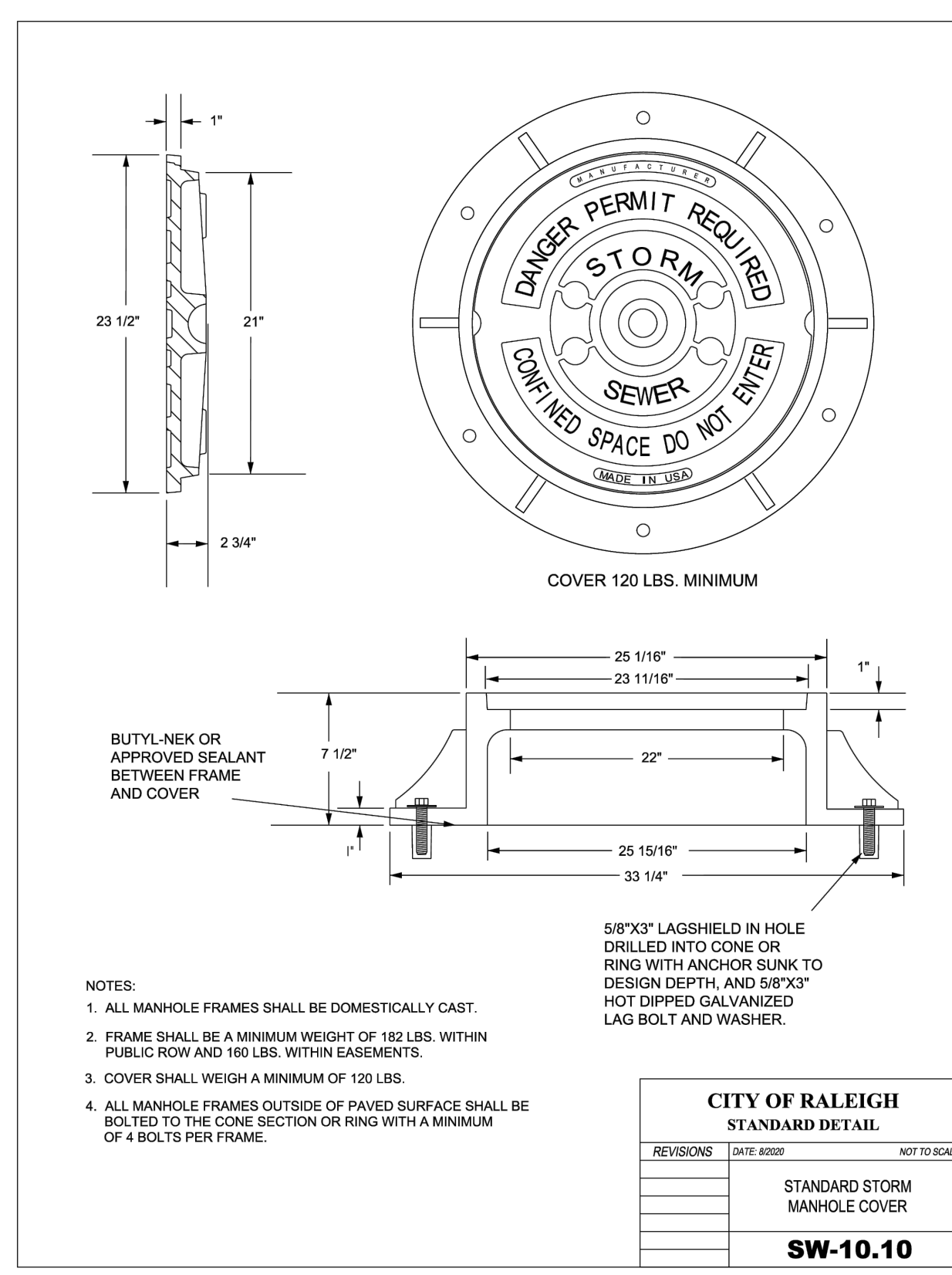
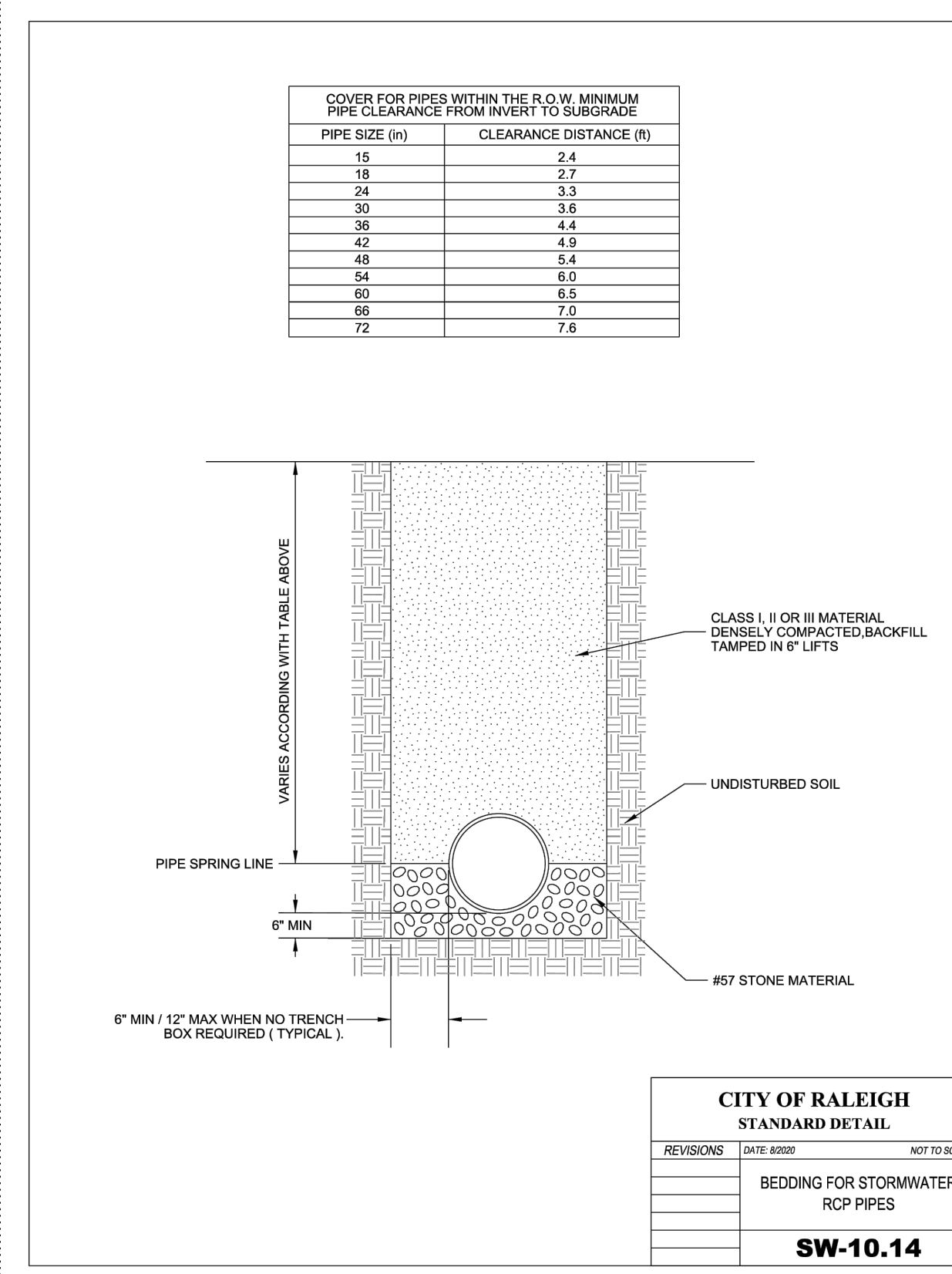
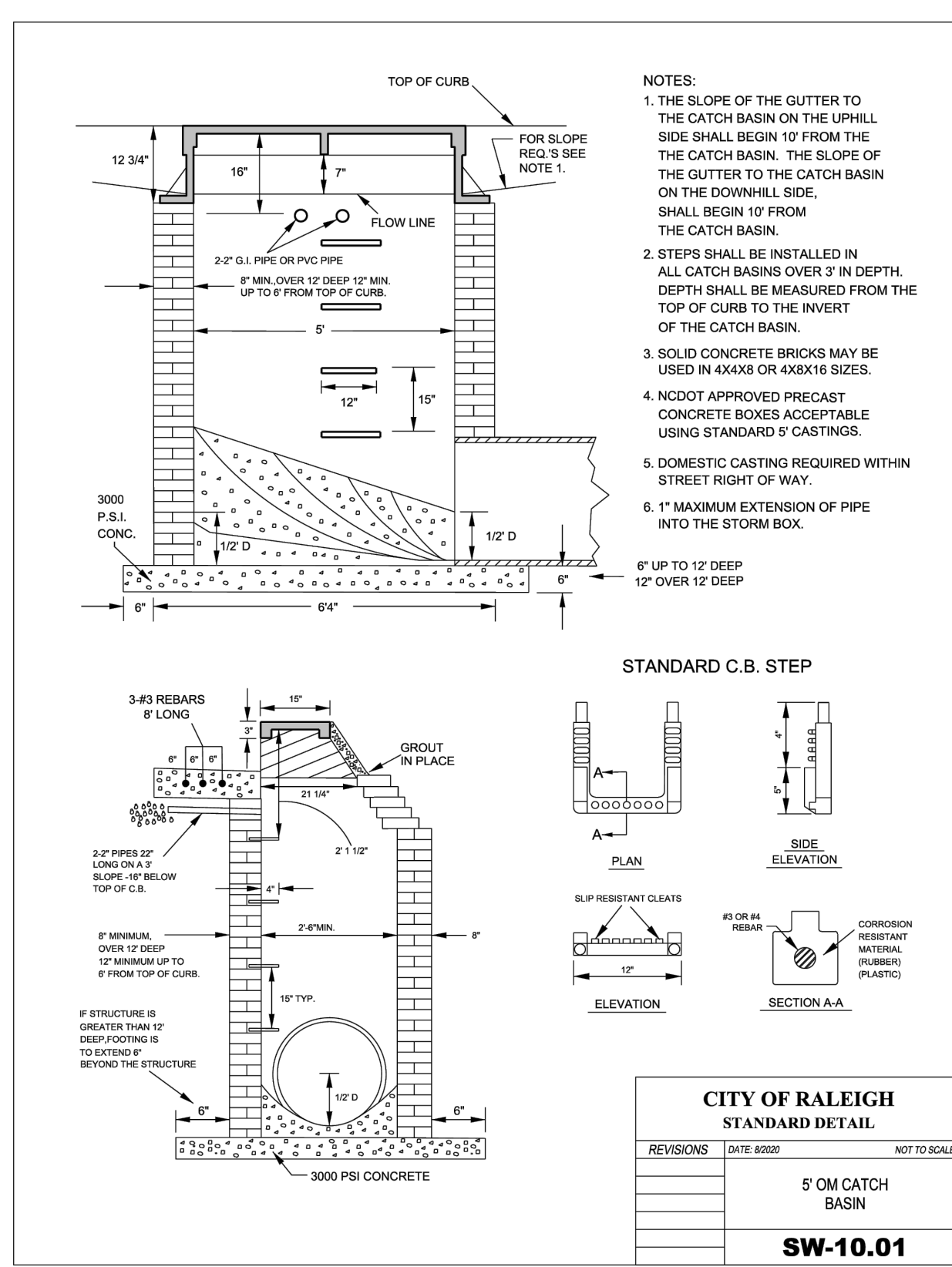
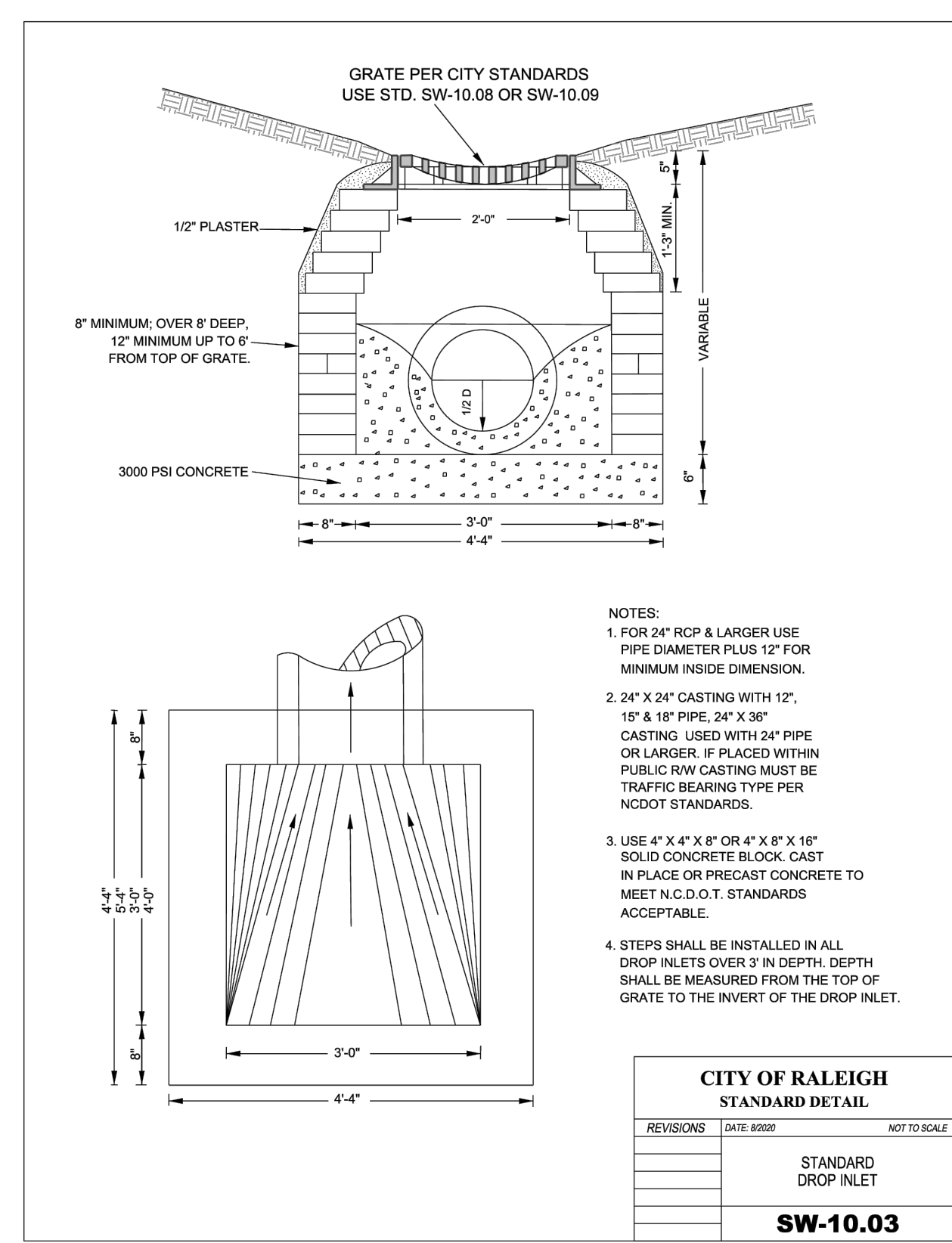
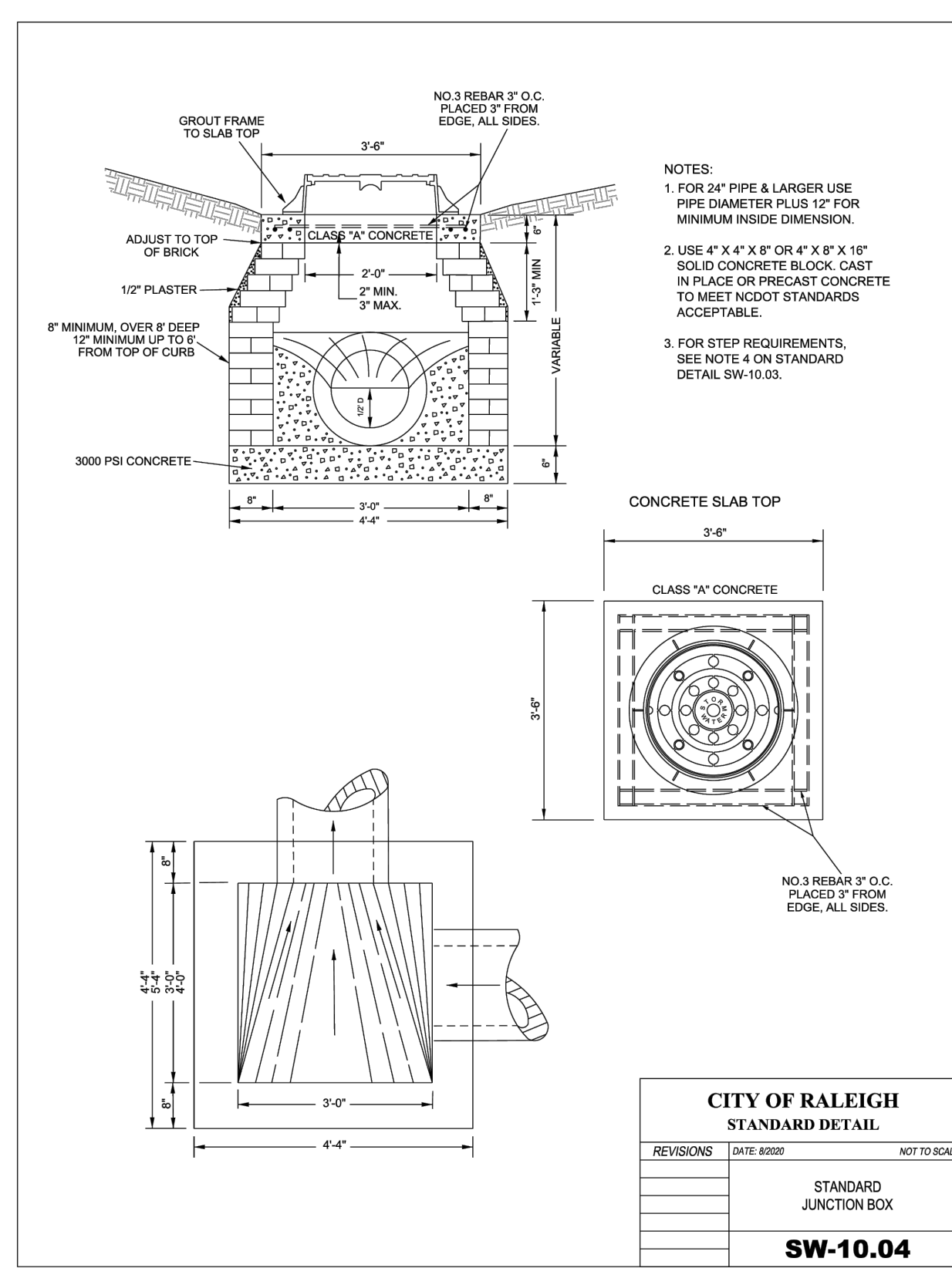
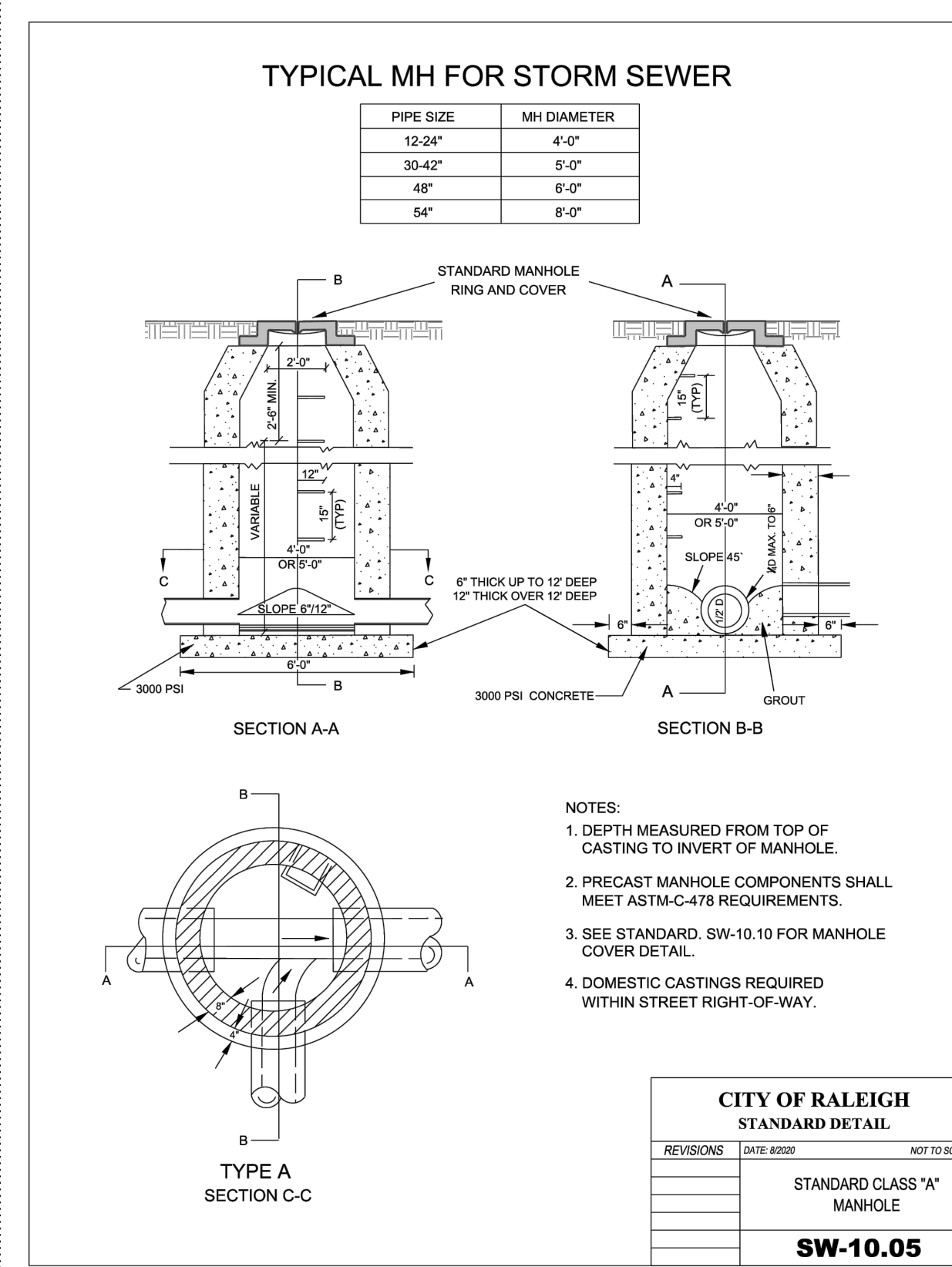
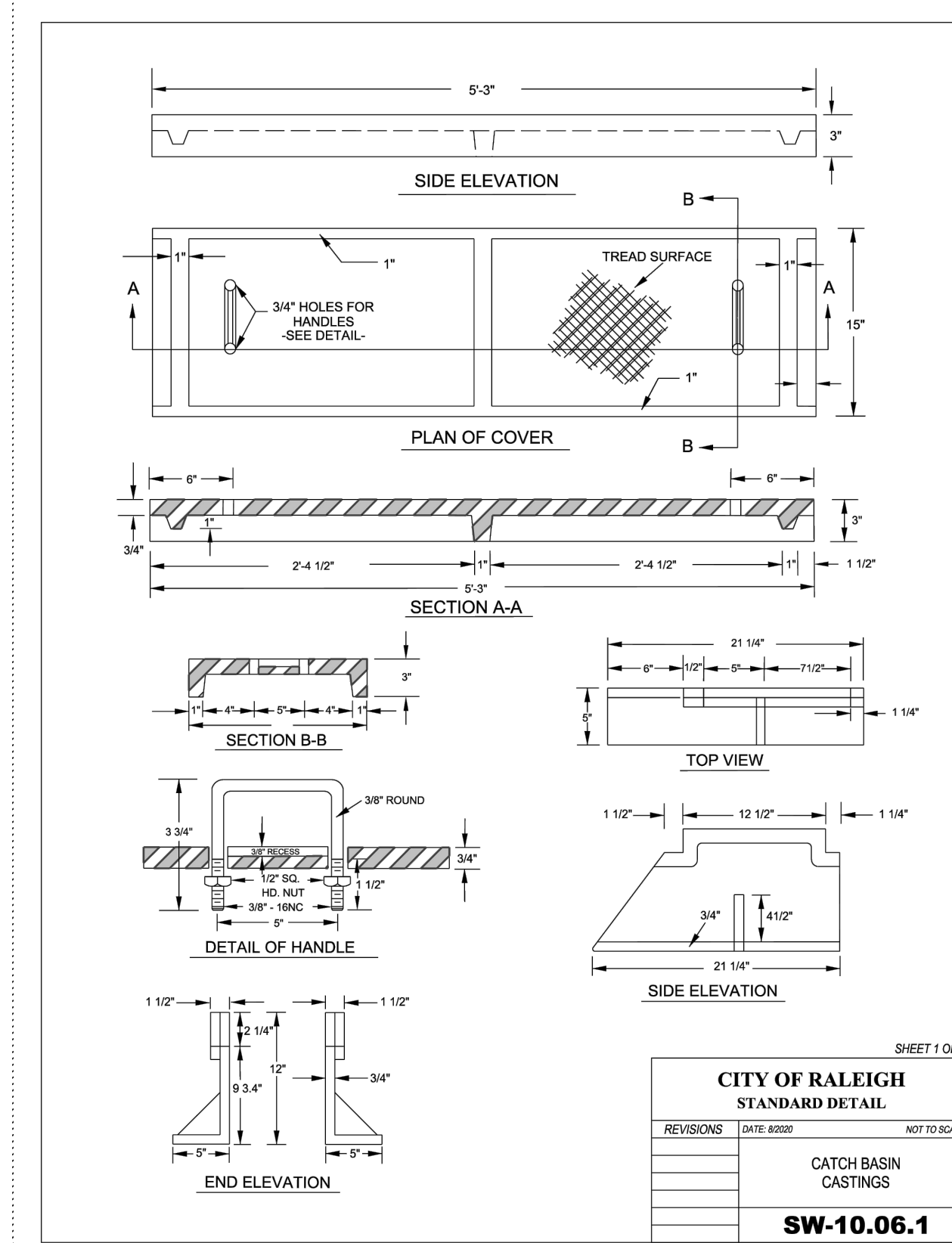
STORM DETAILS

C8.04

SEE SHEET C0.00 FOR ALL PROJECT, SITE, GRADING, STORM DRAINAGE AND UTILITY NOTES

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT CITY OF RALEIGH ENGINEERING DESIGN AND CONSTRUCTION STANDARDS

PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION



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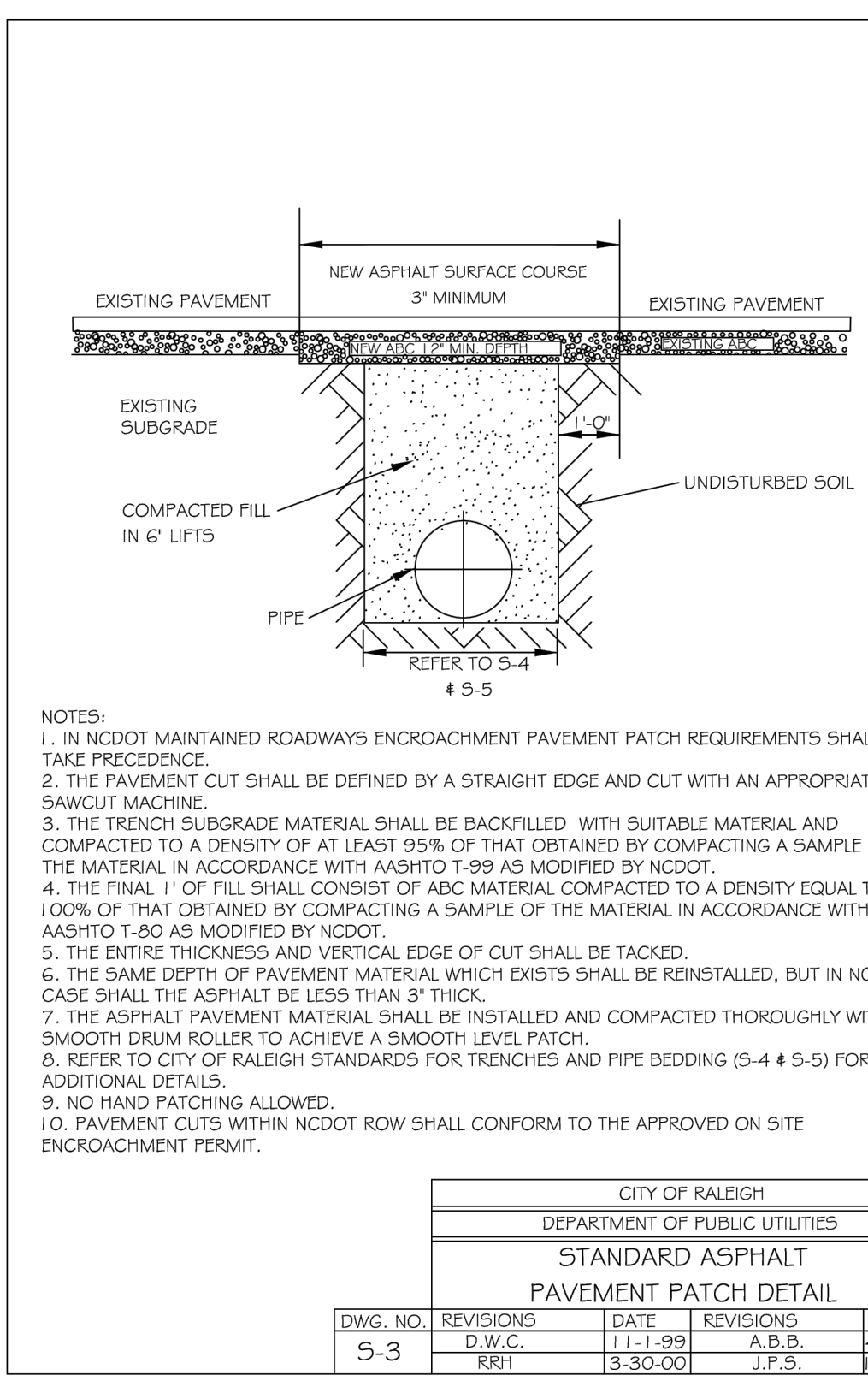
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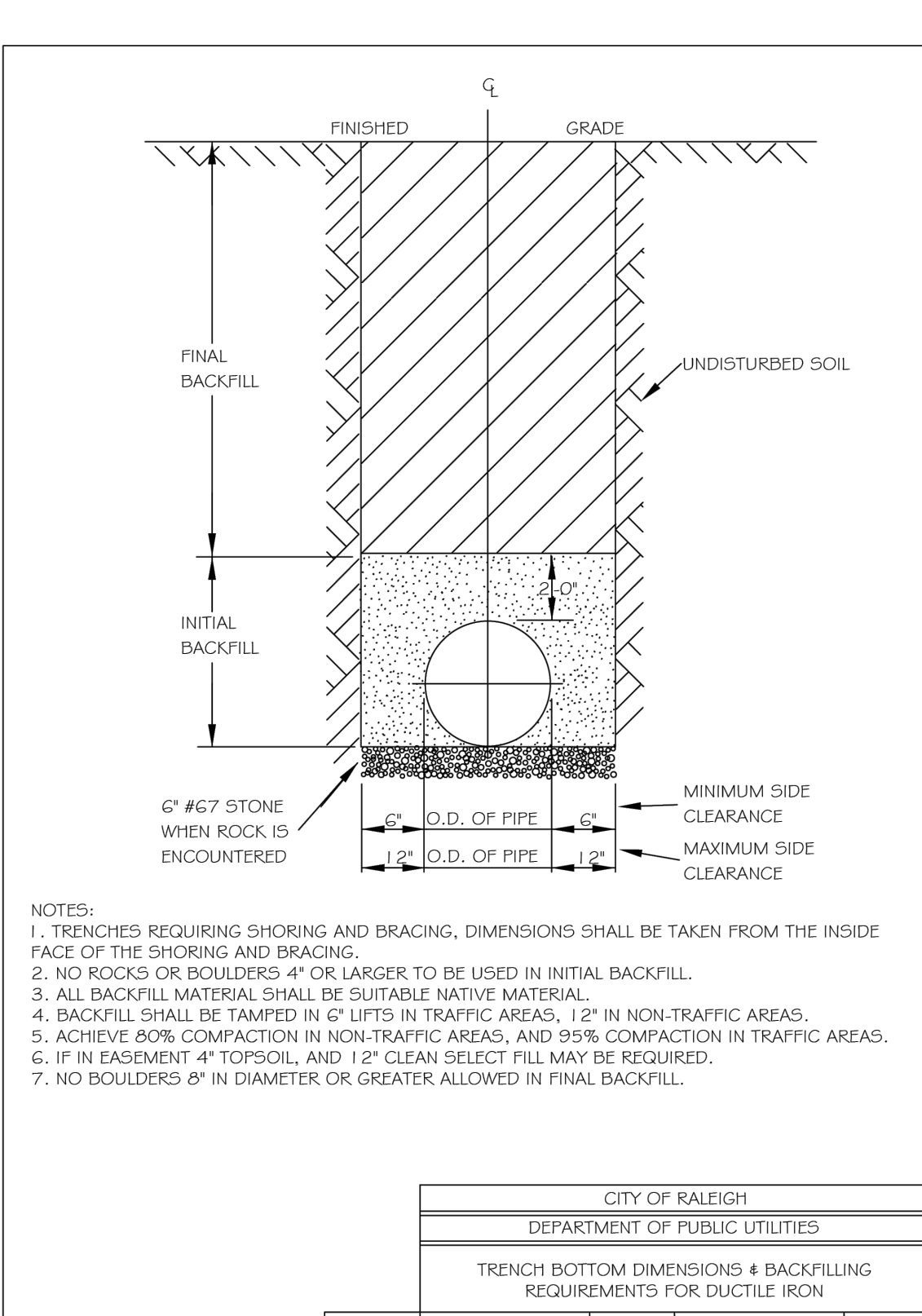


VARSITY DRIVE APARTMENTS
ADMINISTRATIVE SITE REVIEW
1530 VARSITY DRIVE
RALEIGH, NORTH CAROLINA 27606



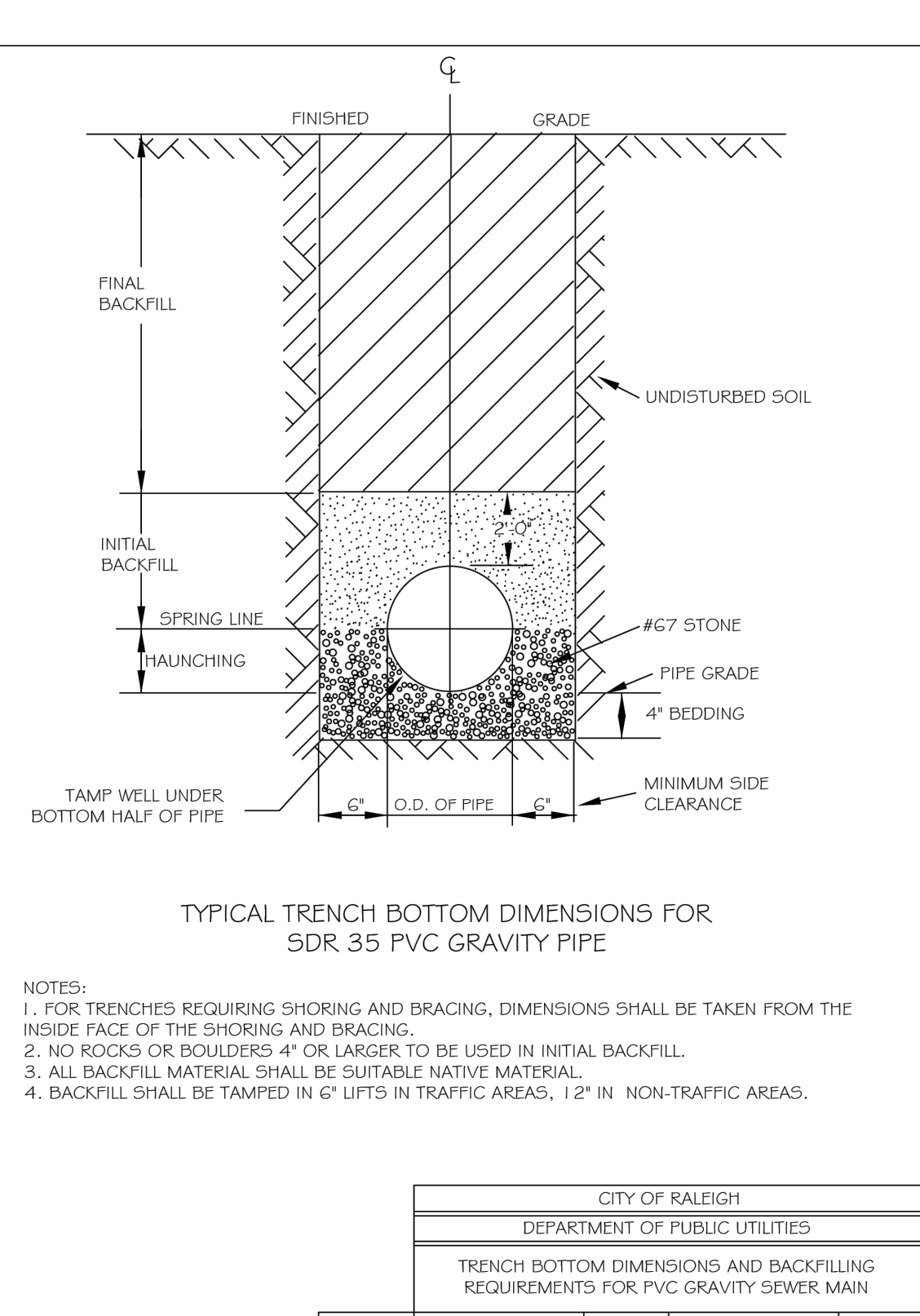
- NOTES:
1. IN NC DOT MAINTAINED ROADWAYS ENCROACHMENT PAVEMENT PATCH REQUIREMENTS SHALL TAKE PRECEDENCE.
2. THE PAVEMENT CUT SHALL BE DEFINED BY A STRAIGHT EDGE AND CUT WITH AN APPROPRIATE SAWCUT MACHINE.
3. THE TRENCH SUBGRADE MATERIAL SHALL BE BACKFILLED WITH SUITABLE MATERIAL AND COMPACTED TO A DENSITY OF AT LEAST 95% OF THAT OBTAINED BY COMPACTING A SAMPLE OF THE MATERIAL IN ACCORDANCE WITH AASHTO T-99 AS MODIFIED BY NC DOT.
4. THE FINAL 1" OF FILL SHALL CONSIST OF ABC MATERIAL COMPACTED TO A DENSITY EQUAL TO 100% OF THAT OBTAINED BY COMPACTING A SAMPLE OF THE MATERIAL IN ACCORDANCE WITH AASHTO T-99 AS MODIFIED BY NC DOT.
5. THE ENTIRE THICKNESS AND VERTICAL EDGE OF CUT SHALL BE TACKED.
6. THE SAME DEPTH OF PAVEMENT MATERIAL WHICH EXISTS SHALL BE REINSTALLED, BUT IN NO CASE SHALL THE ASPHALT BE LESS THAN 3" THICK.
7. THE ASPHALT PAVEMENT MATERIAL SHALL BE INSTALLED AND COMPACTED THOROUGHLY WITH A SMOOTH DRUM ROLLER TO ACHIEVE A SMOOTH LEVEL PATCH.
8. REFER TO CITY OF RALEIGH STANDARDS FOR TRENCHES AND PIPE BEDDING (S-4 S-5) FOR ADDITIONAL DETAILS.
9. NO HAND PATCHING ALLOWED.
10. PAVEMENT CUTS WITHIN NC DOT ROAD SHALL CONFORM TO THE APPROVED ON SITE ENCROACHMENT PERMIT.

Table with 4 columns: DWG. NO., REVISIONS, DATE, REVISIONS, DATE. Includes revision 5-3 dated 11-1-99.



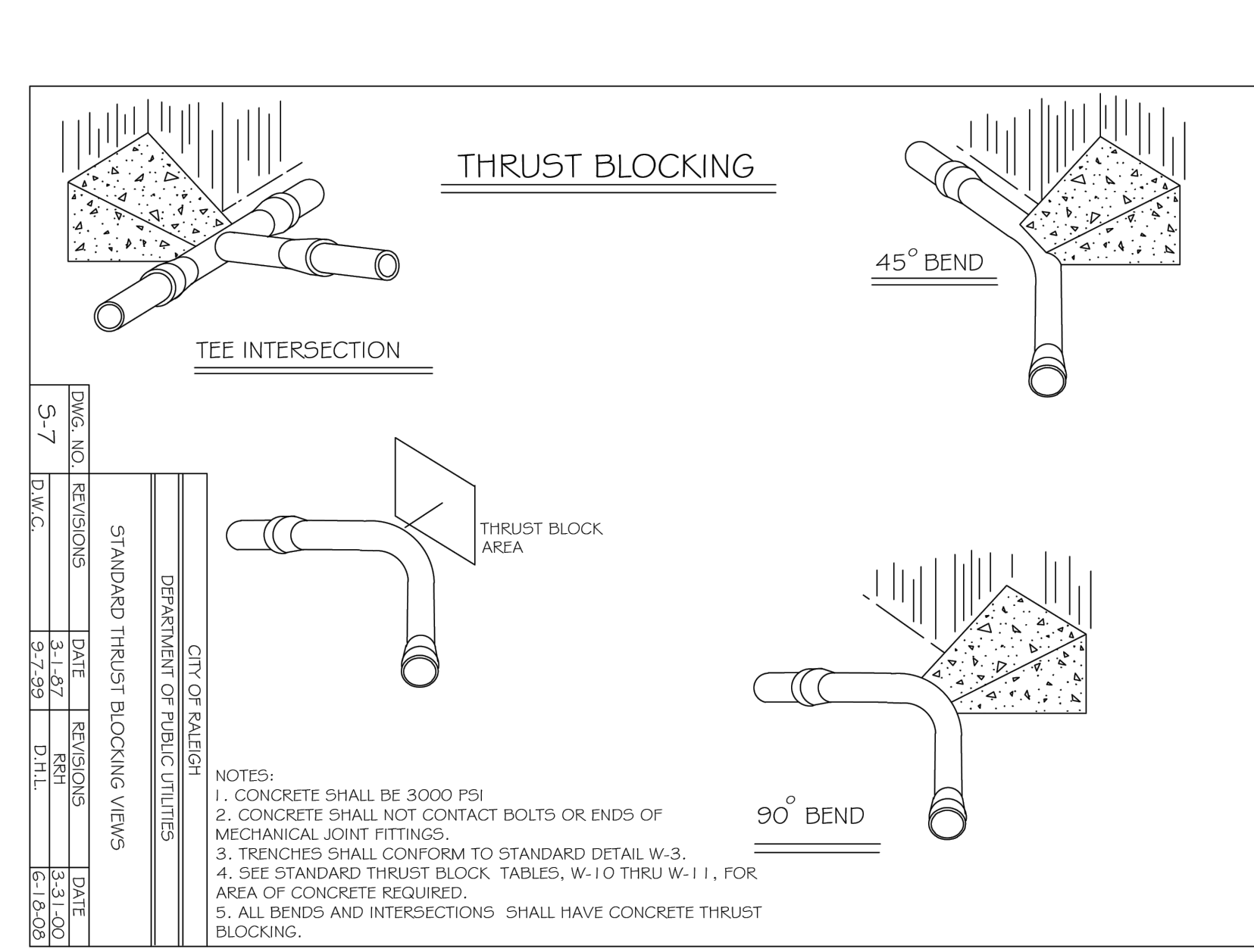
- NOTES:
1. TRENCHES REQUIRING SHORING AND BRACING, DIMENSIONS SHALL BE TAKEN FROM THE INSIDE FACE OF THE SHORING AND BRACING.
2. NO ROCKS OR BOULDERS 4" OR LARGER TO BE USED IN INITIAL BACKFILL.
3. ALL BACKFILL MATERIAL SHALL BE SUITABLE NATIVE MATERIAL.
4. BACKFILL SHALL BE TAMPED IN 6" LIFTS IN TRAFFIC AREAS, 12" IN NON-TRAFFIC AREAS.
5. ACHIEVE 90% COMPACTION IN NON-TRAFFIC AREAS, AND 95% COMPACTION IN TRAFFIC AREAS.
6. IF IN EASEMENT 4" TOPSOIL AND 1" OF CLEAN SELECT FILL MAY BE REQUIRED.
7. NO BOULDERS 8" IN DIAMETER OR GREATER ALLOWED IN FINAL BACKFILL.

Table with 4 columns: DWG. NO., REVISIONS, DATE, REVISIONS, DATE. Includes revision 5-4 dated 8-30-00.

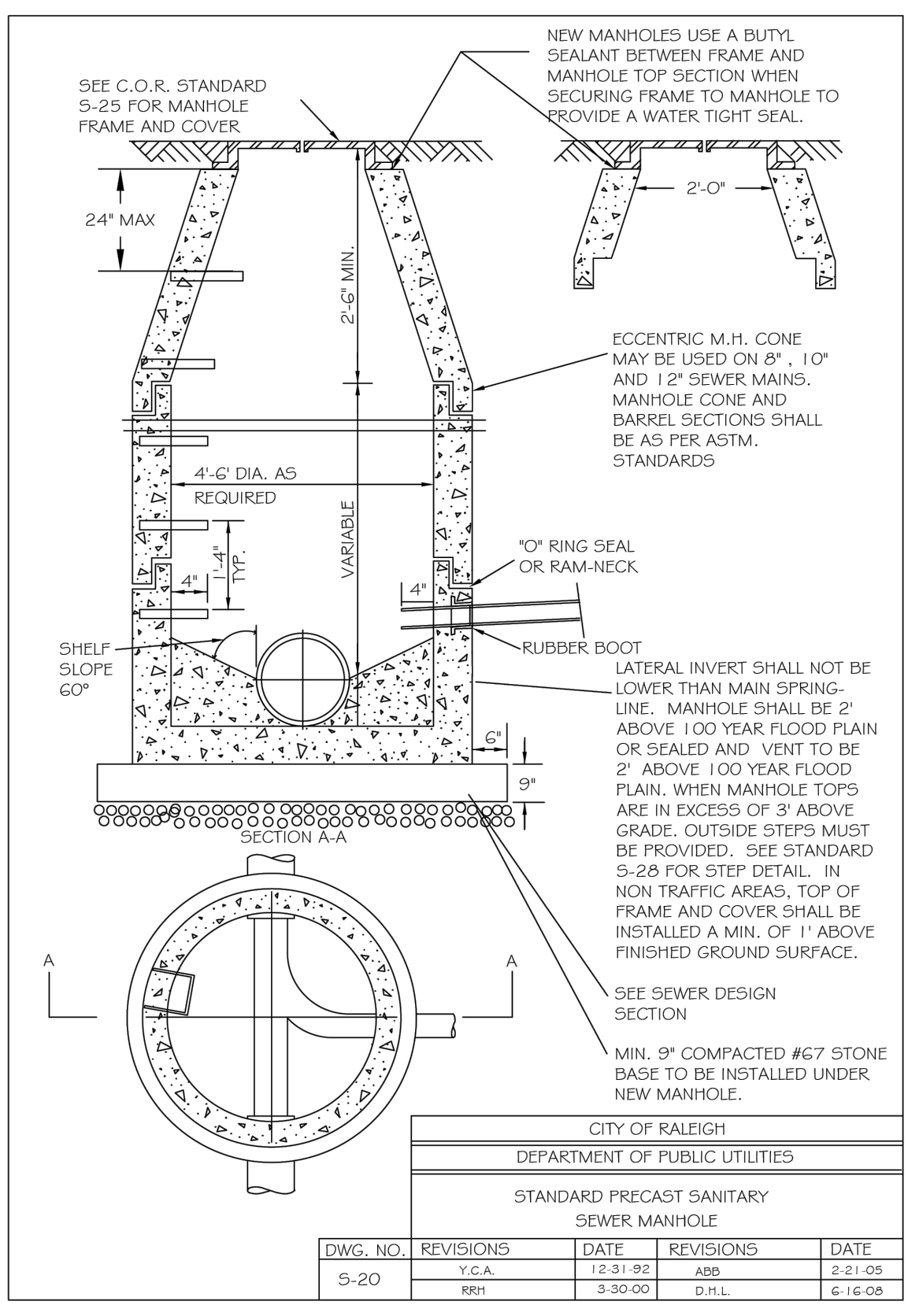


- NOTES:
1. FOR TRENCHES REQUIRING SHORING AND BRACING, DIMENSIONS SHALL BE TAKEN FROM THE INSIDE FACE OF THE SHORING AND BRACING.
2. NO ROCKS OR BOULDERS 4" OR LARGER TO BE USED IN INITIAL BACKFILL.
3. ALL BACKFILL MATERIAL SHALL BE SUITABLE NATIVE MATERIAL.
4. BACKFILL SHALL BE TAMPED IN 6" LIFTS IN TRAFFIC AREAS, 12" IN NON-TRAFFIC AREAS.

Table with 4 columns: DWG. NO., REVISIONS, DATE, REVISIONS, DATE. Includes revision 5-5 dated 7-2-92.

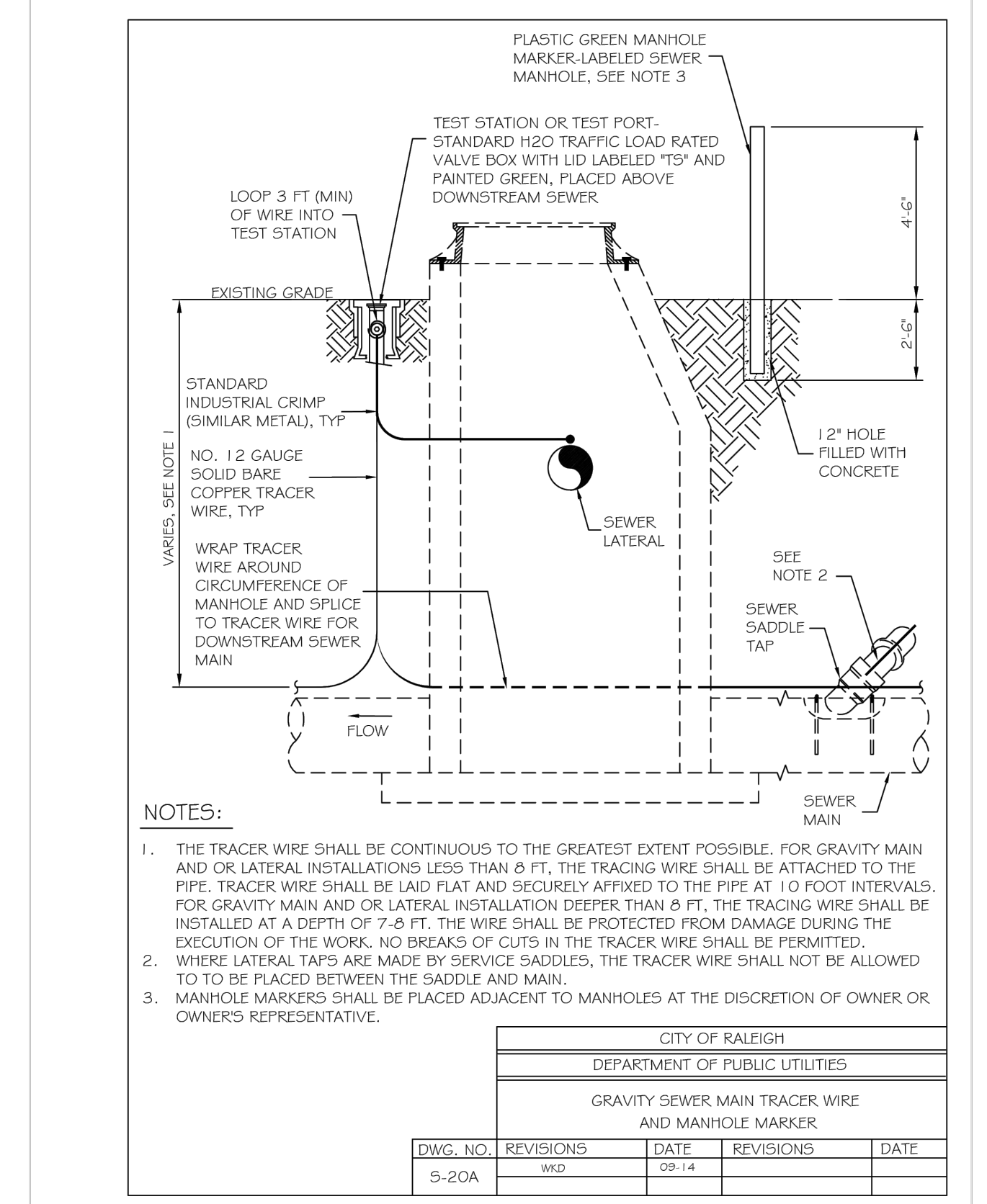


- NOTES:
1. CONCRETE SHALL BE 3000 PSI.
2. CONCRETE SHALL NOT CONTACT BOLTS OR ENDS OF MECHANICAL JOINT FITTINGS.
3. TRENCHES SHALL CONFORM TO STANDARD DETAIL W-3.
4. SEE STANDARD THRUST BLOCK TABLES, W-10 THRU W-11, FOR AREA OF CONCRETE REQUIRED.
5. ALL BENDS AND INTERSECTIONS SHALL HAVE CONCRETE THRUST BLOCKING.



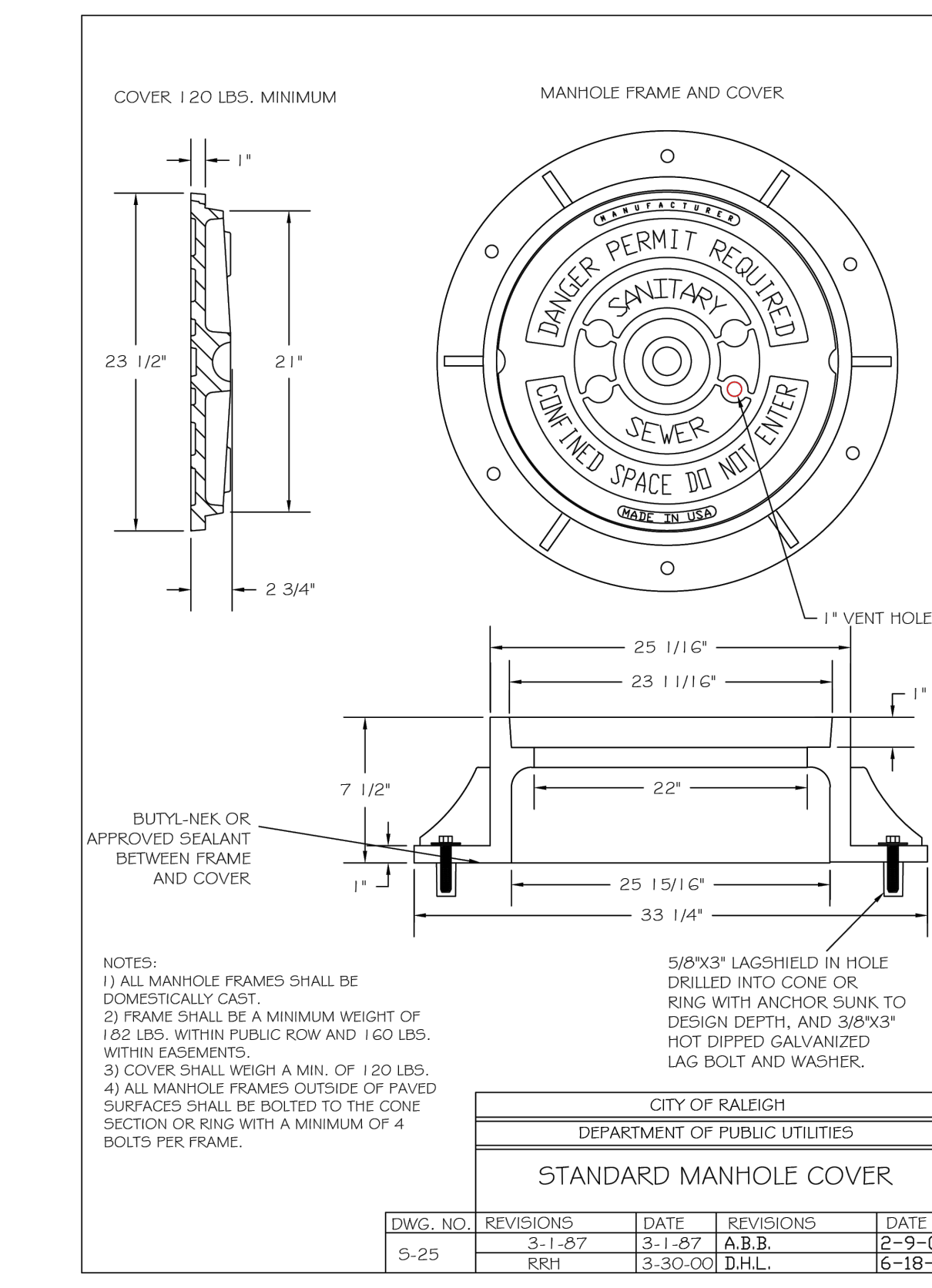
- NOTES:
1. THE TRACER WIRE SHALL BE CONTINUOUS TO THE GREATEST EXTENT POSSIBLE. FOR GRAVITY MAIN AND OR LATERAL INSTALLATIONS LESS THAN 8 FT, THE TRACING WIRE SHALL BE ATTACHED TO THE PIPE. TRACER WIRE SHALL BE LAID FLAT AND SECURELY ATTACHED TO THE PIPE AT 10 FOOT INTERVALS. FOR GRAVITY MAIN AND OR LATERAL INSTALLATION DEEPER THAN 8 FT, THE TRACING WIRE SHALL BE INSTALLED AT A DEPTH OF 7-8 FT. THE WIRE SHALL BE PROTECTED FROM DAMAGE DURING THE EXECUTION OF THE WORK. NO BREAKS OF CUTS IN THE TRACER WIRE SHALL BE PERMITTED.
2. WHERE LATERAL TAPS ARE MADE BY SERVICE SADDLES, THE TRACER WIRE SHALL NOT BE ALLOWED TO BE PLACED BETWEEN THE SADDLE AND MAIN.
3. MANHOLE MARKERS SHALL BE PLACED ADJACENT TO MANHOLES AT THE DISCRETION OF OWNER OR OWNER'S REPRESENTATIVE.

Table with 4 columns: DWG. NO., REVISIONS, DATE, REVISIONS, DATE. Includes revision 5-20 dated 1-2-92.



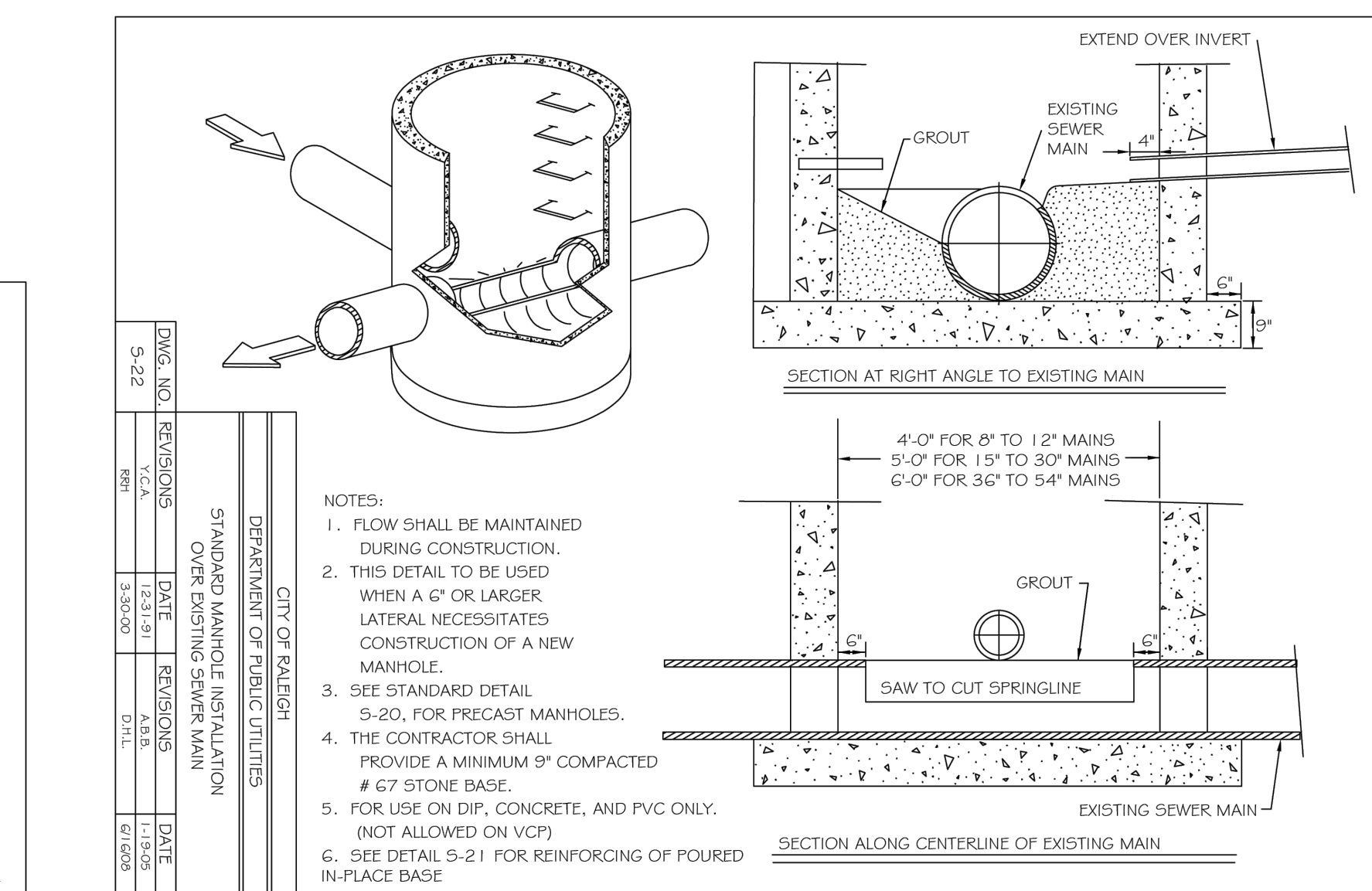
- NOTES:
1. THE TRACER WIRE SHALL BE CONTINUOUS TO THE GREATEST EXTENT POSSIBLE. FOR GRAVITY MAIN AND OR LATERAL INSTALLATIONS LESS THAN 8 FT, THE TRACING WIRE SHALL BE ATTACHED TO THE PIPE. TRACER WIRE SHALL BE LAID FLAT AND SECURELY ATTACHED TO THE PIPE AT 10 FOOT INTERVALS. FOR GRAVITY MAIN AND OR LATERAL INSTALLATION DEEPER THAN 8 FT, THE TRACING WIRE SHALL BE INSTALLED AT A DEPTH OF 7-8 FT. THE WIRE SHALL BE PROTECTED FROM DAMAGE DURING THE EXECUTION OF THE WORK. NO BREAKS OF CUTS IN THE TRACER WIRE SHALL BE PERMITTED.
2. WHERE LATERAL TAPS ARE MADE BY SERVICE SADDLES, THE TRACER WIRE SHALL NOT BE ALLOWED TO BE PLACED BETWEEN THE SADDLE AND MAIN.
3. MANHOLE MARKERS SHALL BE PLACED ADJACENT TO MANHOLES AT THE DISCRETION OF OWNER OR OWNER'S REPRESENTATIVE.

Table with 4 columns: DWG. NO., REVISIONS, DATE, REVISIONS, DATE. Includes revision 5-20A dated 10-14.

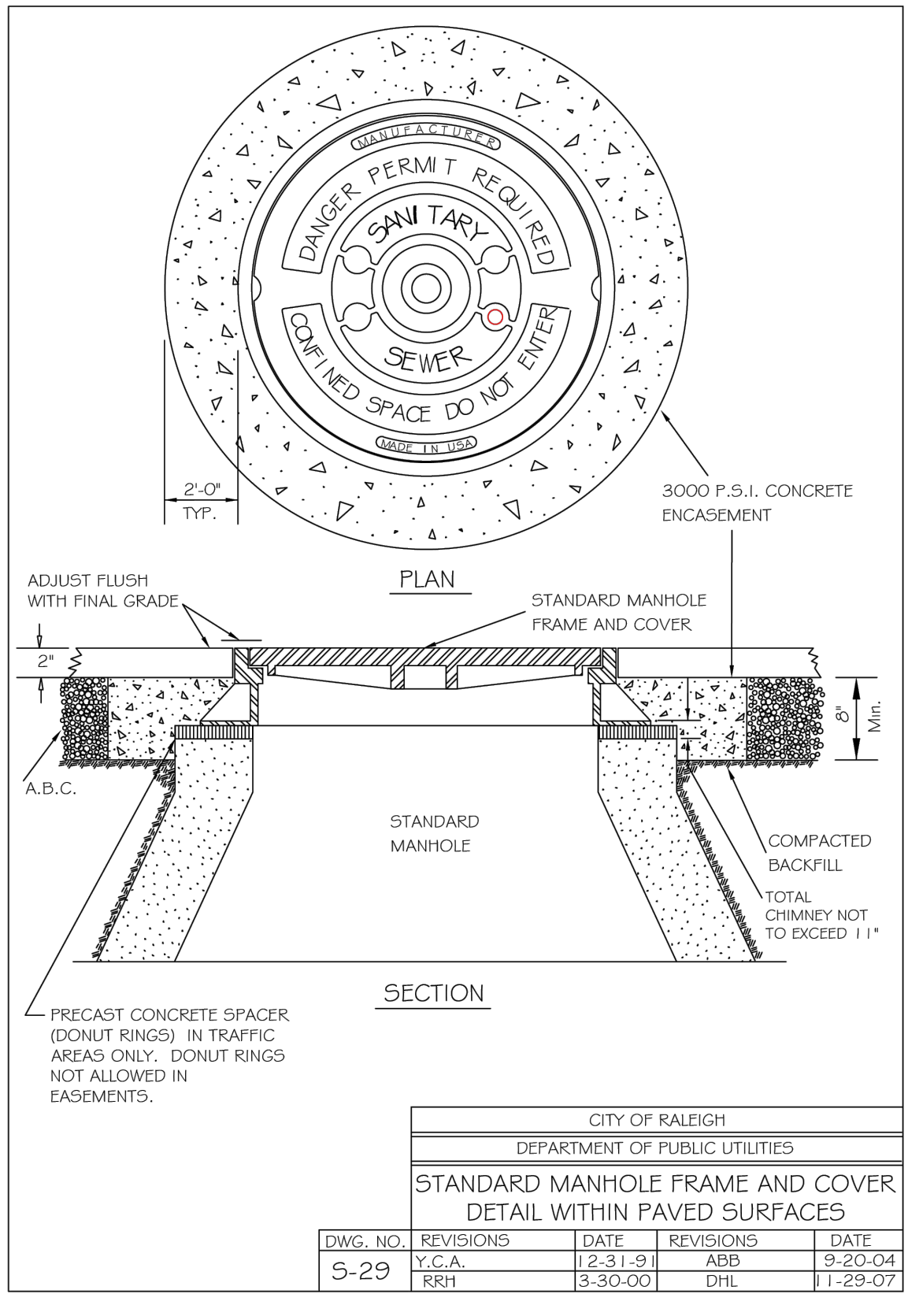


- NOTES:
1) ALL MANHOLE FRAMES SHALL BE DOMESTICALLY CAST.
2) FRAME SHALL BE A MINIMUM WEIGHT OF 162 LBS. WITHIN PUBLIC ROW AND 160 LBS. WITHIN EASEMENTS.
3) COVER SHALL WEIGH A MIN. OF 130 LBS.
4) ALL MANHOLE FRAMES OUTSIDE OF PAVED SURFACES SHALL BE BOLTED TO THE CONE SECTION OR RING WITH A MINIMUM OF 4 BOLTS PER FRAME.

Table with 4 columns: DWG. NO., REVISIONS, DATE, REVISIONS, DATE. Includes revision 5-25 dated 3-1-87.



- NOTES:
1. FLOW SHALL BE MAINTAINED DURING CONSTRUCTION.
2. THIS DETAIL TO BE USED WHEN A 6" OR LARGER LATERAL NECESSITATES CONSTRUCTION OF A NEW MANHOLE.
3. SEE STANDARD DETAIL S-20, FOR PRECAST MANHOLES.
4. THE CONTRACTOR SHALL PROVIDE A MINIMUM 3" COMPACTED 4# 6" STEEL BARS.
5. FOR USE ON DIP, CONCRETE, AND PVC ONLY. (NOT ALLOWED ON VCP).
6. SEE DETAIL S-21 FOR REINFORCING OF POURED IN-PLACE BASE.



- NOTES:
1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT CITY OF RALEIGH ENGINEERING DESIGN AND CONSTRUCTION STANDARDS.

Table with 4 columns: DWG. NO., REVISIONS, DATE, REVISIONS, DATE. Includes revision 5-29 dated 2-31-91.

SEE SHEET C0.00 FOR ALL PROJECT, SITE, GRADING, STORM DRAINAGE AND UTILITY NOTES
ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT CITY OF RALEIGH ENGINEERING DESIGN AND CONSTRUCTION STANDARDS

REVISIONS

NO. DATE

PLAN INFORMATION

PROJECT NO. SPEC-23034
FILENAME SPEC23034-D1
CHECKED BY ACP/LJV
DRAWN BY MEM
SCALE N.T.S.
DATE 04.16.2024

SHEET

SANITARY SEWER
DETAILS
C8.05

GENERAL NOTES

- PRIOR TO CONSTRUCTION, ANY DISCREPANCIES IN THE PLANS AND NOTES SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION.
- PRIOR TO ANY CONSTRUCTION OR PLACEMENT OF ANY BACKFILL, THE ONSITE GEOTECHNICAL ENGINEER SHALL INSPECT THE EXCAVATION AREA FOR THE UNDERGROUND SCM WITHIN THIS AREA TO ASSESS WHETHER SUITABLE SOILS EXIST AT THE SUBGRADE LEVEL. IF THE CONTRACTOR CONSTRUCTS AND COVERS UP THE UNDERGROUND SCM PRIOR TO INSPECTION, THEN THIS AREA SHALL BE UNCOVERED AND TESTED (TO THE ENGINEER'S AND OWNER'S APPROVAL) AT THE CONTRACTOR'S EXPENSE.
- THE FACILITY SHALL NOT BE USED AS A TEMPORARY EROSION CONTROL DEVICE (I.E. SEDIMENT TRAP OR SEDIMENT BASIN) DURING CONSTRUCTION.
- PRIOR TO PLACING STORMFILTER CARTRIDGES WITHIN THE UNDERGROUND SYSTEM, THE CONTRACTOR SHALL REQUEST AN ONSITE MEETING WITH THE DESIGN ENGINEER AND THE EROSION CONTROL INSPECTOR TO ENSURE THE UPSTREAM DRAINAGE AREA IS COMPLETELY STABILIZED (I.E. GOOD VEGETATIVE COVER). IF THE CONTRACTOR DECIDES TO PLACE THE STORMFILTER CARTRIDGES PRIOR TO APPROVAL FROM THE DESIGN ENGINEER AND THE EROSION CONTROL INSPECTOR, THEN THE CONTRACTOR SHALL EXCAVATE/REPLACE, AS NECESSARY, THE COMPONENTS NEEDED FOR THE SYSTEM TO FUNCTION PROPERLY AT HIS /HER EXPENSE SHOULD THE STORMFILTER CARTRIDGES NOT FUNCTION PROPERLY (I.E. WILL NOT DRAIN DUE TO SEDIMENT DEPOSITION) DUE TO AN UNSTABILIZED UPSTREAM DRAINAGE AREA.
- ONCE CONSTRUCTED, THE STORMFILTER CARTRIDGES SHALL NOT RECEIVE STORMWATER RUNOFF UNTIL THE ENTIRE CONTRIBUTING DRAINAGE AREA TO THE UNDERGROUND SYSTEM HAS BEEN COMPLETELY STABILIZED AND SITE CONSTRUCTION IS COMPLETE.
- ALL COMPONENTS OF THE UNDERGROUND SCM SYSTEM (JOINT / RISER CONNECTIONS, ENDCAPS, ACCESS MANHOLES, ETC.) SHALL BE DESIGNED BY OTHERS. ANY VARIATIONS OR CHANGES MADE FROM THESE SPECIFICATIONS AND DRAWINGS DURING THE ORDERING AND/OR INSTALLATION OF ALL COMPONENTS MUST BE APPROVED BY THE DESIGN ENGINEER. THE STRUCTURAL DESIGN OF THE UNDERGROUND SCM, ALONG WITH ITS ASSUMPTIONS, IS ALSO BY OTHERS. THE JOHN R. McADAMS COMPANY, INC. AND ITS EMPLOYEES ASSUME NO LIABILITY WITH RESPECT TO ANY ASPECT OF THE STRUCTURAL DESIGN FOR THE UNDERGROUND SCM SYSTEM.
- ALL PIPE/RISER CONNECTIONS AND JOINTS ASSOCIATED WITH THE STORM FILTER SYSTEM AND UNDERGROUND DETENTION PIPE SHALL BE WATER TIGHT. THE MECHANISM FOR ACHIEVING THIS SHALL BE SUBMITTED TO THE DESIGN ENGINEER FOR REVIEW.
- THE CONTRACTOR SHALL FURNISH, INSTALL, OPERATE, AND MAINTAIN ANY PUMPING EQUIPMENT, ETC. NEEDED FOR REMOVAL OF WATER FROM VARIOUS PARTS OF THE SAND-FILTER SYSTEM SITE. IT IS ANTICIPATED THAT PUMPING WILL BE NECESSARY IN THE EXCAVATION AREAS. DURING PLACEMENT OF FILL WITHIN THIS AREA (OR OTHER AREAS AS NECESSARY), THE CONTRACTOR SHALL KEEP THE WATER LEVEL BELOW THE BOTTOM OF THE EXCAVATION. THE MANNER IN WHICH THE WATER IS REMOVED SHALL BE SUCH THAT THE EXCAVATION BOTTOM AND SIDE SLOPES ARE STABLE.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ADHERE TO ALL CURRENT OSHA REGULATIONS FOR CONFINED SPACE ENTRY AND PROVIDE SUCH DURING ENGINEER WALK-THROUGH/INSPECTION.
- ALL PIPE PENETRATIONS THROUGH A CONCRETE OR CMP STRUCTURE (I.E. STORMFILTER CARTRIDGE / DETENTION SYSTEM, STORM DRAINAGE MANHOLES, ETC.) SHALL BE MADE WATERTIGHT USING NON-SHRINK CEMENTITIOUS GROUT.
- ACCESS MANHOLES SHALL INCLUDE LADDERS OR MANHOLE STEPS. IF, AT ANY ACCESS POINT, MANHOLE STEPS WOULD RESULT IN A 3" OR GREATER OFFSET, A LADDER SHALL BE PROVIDED. AS SUCH, A LADDER SHALL BE REQUIRED AT ALL MANHOLE ACCESS POINTS TO THE STORMFILTER VAULT. ALL LADDERS SHALL INCLUDE AN EXTENDING AND RETRACTING SECTION THAT ALLOWS THE LADDER TO BE EXTENDED ABOVE THE ACCESS LID TO FACILITATE SAFE INGRESS AND EGRESS TO/FROM A STANDING POSITION.

FOUNDATION NOTES

- ONCE THE EXCAVATION IS COMPLETE AND PRIOR TO INSTALLATION OF THE UNDERGROUND SCM SYSTEM, THE ONSITE GEOTECHNICAL ENGINEER SHALL VERIFY THE BEARING CAPACITY OF THE UNDERLYING SOILS TO SERVE AS A FOUNDATION FOR THE UNDERGROUND SCM SYSTEM. IF THE ONSITE GEOTECHNICAL ENGINEER DEEMS THE FOUNDATION SOILS AS UNSUITABLE, THEN THE UNSUITABLE MATERIAL SHOULD BE REMOVED DOWN TO A SUITABLE DEPTH AND THEN BUILT BACK UP TO THE CORRECT ELEVATION WITH A COMPACTED BACKFILL MATERIAL THAT IS APPROVED BY THE ONSITE GEOTECHNICAL ENGINEER. THE APPROVED BACKFILL MATERIAL SHOULD HAVE A GRADATION THAT WILL NOT ALLOW THE MIGRATION OF FINES, WHICH COULD CAUSE SETTLEMENT OF THE UNDERGROUND SCM SYSTEM. IF NECESSARY, A GEOTEXTILE FABRIC CAN BE USED TO SEPARATE THE UNDERLYING SOILS AND THE BACKFILL MATERIAL. THIS GEOTEXTILE FABRIC (IF USED) IS TO BE SPECIFIED BY THE GEOTECHNICAL ENGINEER.
- IF THE FOUNDATION SUBGRADE WILL BE EXPOSED FOR AN EXTENDED PERIOD DURING CONSTRUCTION, THEN IT SHOULD BE GRADED TO A SLIGHT SLOPE SUCH THAT SATURATION OF THE SUBGRADE DOES NOT OCCUR.
- THE CONTRACTOR SHALL FURNISH, INSTALL, OPERATE, AND MAINTAIN ANY PUMPING EQUIPMENT, ETC. NEEDED FOR REMOVAL OF WATER FROM THE EXCAVATION. IT IS BEST TO BEGIN THE CONSTRUCTION OF THE SAND FILTER/DETENTION SYSTEMS AT THE DOWNSTREAM END WITH THE OUTLET ALREADY CONSTRUCTED TO ALLOW A ROUTE FOR WATER TO ESCAPE.
- THE CONTRACTOR SHALL PROVIDE FOUNDATION DRAINS FOR THE UNDERGROUND SCM. THE FOUNDATION DRAIN SHALL CONSIST OF 8" DIAMETER PERFORATED PIPE WRAPPED IN NONWOVEN GEOTEXTILE FABRIC. THE FOUNDATION DRAINS SHALL BE PLACED ON ALL FOUR SIDES OF THE UNDERGROUND SCM AS SHOWN ON THE DRAWINGS AND WITHIN THE VAULT'S BEDDING SYSTEM (BUT NOT DIRECTLY BELOW THE VAULTS). THE FOUNDATION DRAIN SYSTEM SHALL TIE TO THE NEAREST STORM SEWER INLET / JUNCTION BOX MAINTAINING A POSITIVE SLOPE TO THE DOWNSTREAM STRUCTURE. FOUNDATION DRAINS SHALL NOT TIE INTO THE UNDERGROUND VAULT AT ANY POINT.

BEDDING NOTES

- THE EXCAVATION SUB GRADE MUST BE TRANSIT LEVEL.
- THE EXCAVATION PIT SHALL BE LINED (ON THE BOTTOM AND ALL FOUR SIDES) WITH A NON-WOVEN GEO-TEXTILE (GEOTEX 401 OR APPROVED EQUIVALENT). THE ONSITE GEOTECHNICAL ENGINEER SHALL APPROVE FABRIC FOR USE.
- THE SUBGRADE FOR THE DETENTION SYSTEM CAN BE A CONCRETE SLAB, OR CLEAN GRANULAR MATERIAL WITH A MAXIMUM AGGREGATE SIZE OF 3/4". THE BEDDING SHALL BE FREE FROM ROCK FORMATIONS, PROTRUDING STONES, FROZEN LUMPS, ROOTS, AND OTHER FOREIGN MATERIAL.
- PREPARE THE SUBGRADE PER THE ONSITE GEOTECHNICAL ENGINEER'S DIRECTION (APPROXIMATELY 5'-6" BELOW GRADE ON WHICH SLAB WILL SET). THE BEDDING MATERIAL SHOULD BE GRADED SUCH THAT A SMOOTH UNIFORM GRADE IS ESTABLISHED TO ALLOW FOR OPTIMUM PLACEMENT OF THE SAND FILTER.
- THE SUBGRADE MUST SUPPORT THE DETENTION SYSTEM WITHOUT DIFFERENTIAL SETTLEMENT BETWEEN PIECES.
- IF CONSTRUCTION EQUIPMENT WILL BE OPERATING FOR AN EXTENDED PERIOD OF TIME ON THE BEDDING, THEN THE APPROPRIATE MEASURES (E.G. STIFF GEOGRID, ETC.) SHALL BE TAKEN TO ENSURE THE INTEGRITY OF THE BEDDING IS NOT COMPROMISED.

STORMFILTER VAULT CONSTRUCTION NOTES

- STORMFILTER CONTROL MEASURE CONFIGURATION IS PROVIDED ON SHEET C9.01.
- ABSOLUTELY NO RUNOFF SHALL ENTER THE STORMFILTER CONTROL MEASURE UNTIL ALL CONTRIBUTING DRAINAGE AREAS HAVE BEEN STABILIZED.
- MANHOLE ACCESS SHALL BE PROVIDED FOR THE STORMFILTER CONTROL MEASURE. MANHOLES SHALL BE IN COMPLIANCE WITH CITY OF RALEIGH STANDARD DETAILS BUT SHALL BE A MINIMUM OF 24 INCHES IN DIAMETER TO COMPLY WITH OSHA CONFINED SPACE REQUIREMENTS (OR MINIMUM OSHA REQUIREMENTS APPLICABLE AT TIME OF CONSTRUCTION). CONTRACTOR SHALL PROVIDE ACCESS LADDERS FOR ACCESS BELOW ALL MANHOLES. MANHOLE COVERS SHALL ALLOW FOR PROPER VENTILATION.

STORMWATER SYSTEM MATERIAL SPECIFICATIONS

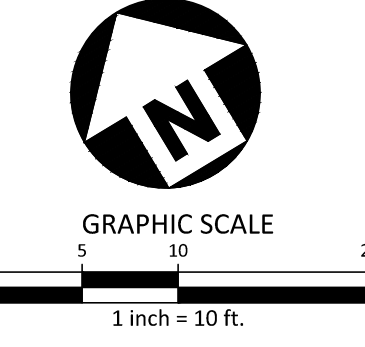
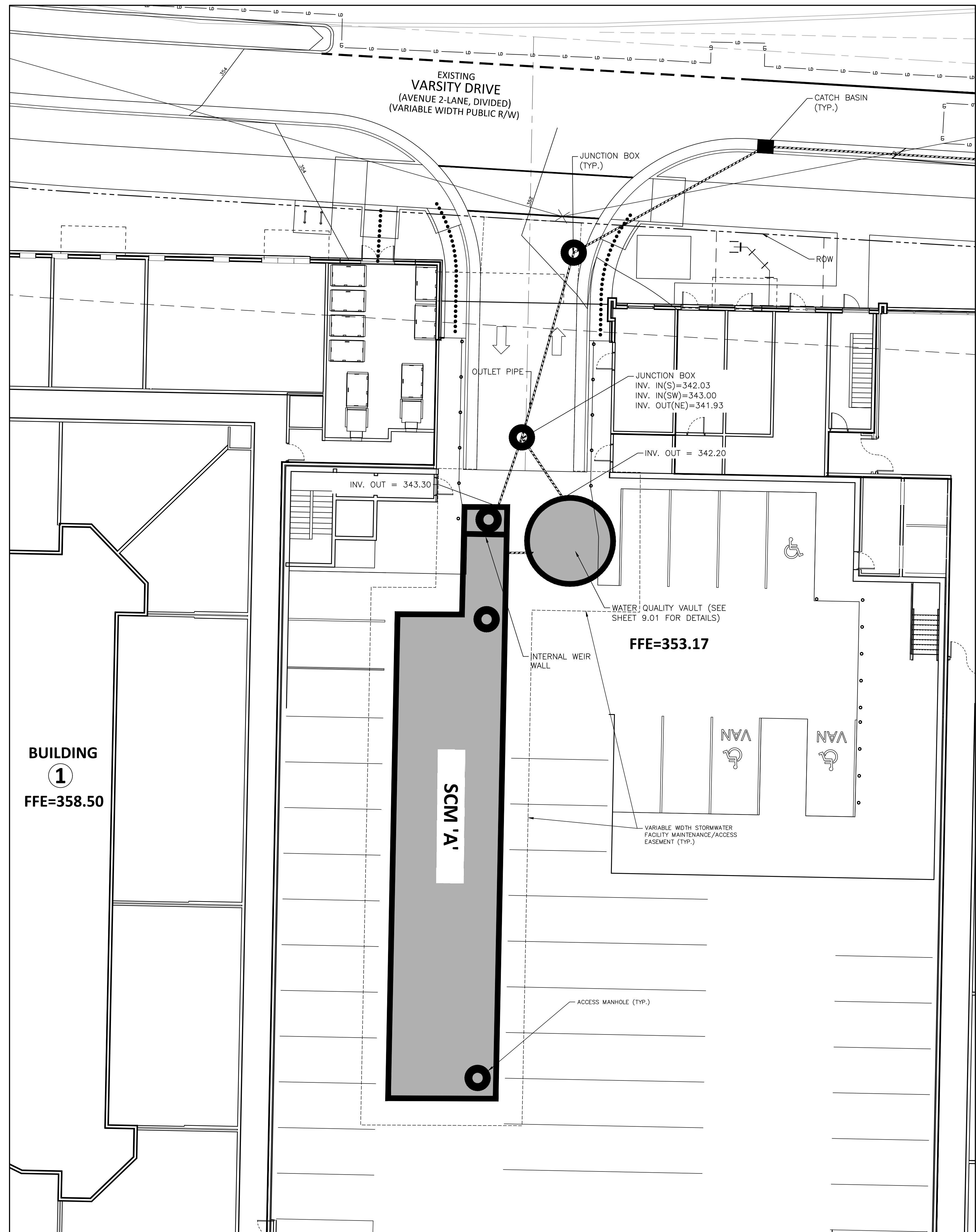
- THE UNDERGROUND SCM UNITS ARE TO BE DESIGNED BY OTHERS. ANY CHANGES TO THE APPROVED PLANS SHALL BE PROVIDED TO THE DESIGN ENGINEER PRIOR TO INSTALLATION FOR REVIEW.
- ACCESS RISERS SHALL BE INSTALLED PER MANUFACTURE SPECIFICATIONS. ACCESS STEPS / LADDERS SHALL BE ATTACHED TO THE RISERS TO ALLOW FOR ACCESS INTO THE UNDERGROUND SCM SYSTEM.
- DRAWDOWN OF THE DETENTION SYSTEMS IS VIA AN 6"Ø PLUG VALVE. THE VALVES SHALL BE A M&H STYLE 1820 X-CENTRIC VALVE OR ENGINEER APPROVED EQUIVALENT. THIS VALVE IS IN ACCORDANCE WITH ANWA C-517, AND SHALL BE OPERABLE FROM INSIDE THE SEDIMENTATION AND DETENTION SYSTEMS VIA A HANDWHEEL (SEE DETAIL SHEET SW-2). THE CONTRACTOR SHALL PROVIDE A REMOVABLE VALVE WRENCH WITH A HANDWHEEL ON TOP FOR OPERATION OF THE 6"Ø PLUG VALVE.
- THE RCP OUTLET BARREL SHALL BE CLASS III RCP, MODIFIED BELL AND SPIGOT, MEETING THE REQUIREMENTS OF ASTM C76-LATEST. THE PIPE SHALL HAVE CONFINED O-RING RUBBER GASKET JOINTS MEETING ASTM C443-LATEST. THE PIPE JOINTS SHALL BE TYPE R-4.
- GEOTEXTILE FABRIC FOR THE OUTLET BARREL JOINTS SHALL BE MIRAFI 180N OR ENGINEER APPROVED EQUAL (NON-WOVEN FABRIC). THE ONSITE GEOTECHNICAL ENGINEER SHALL APPROVE FABRIC FOR USE.
- ALL POURED CONCRETE SHALL BE MINIMUM 3000 PSI (28 DAY) UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL INSTALL THE UNDERGROUND SCM UNITS PER MANUFACTURERS' SPECIFICATIONS. CONTRACTOR TO PROVIDE A LETTER FROM MATERIAL SUPPLIER(S) STATING MATERIALS MEET THE SPECIFIED STANDARDS PRIOR TO INSTALLATION.

BACKFILL MATERIAL NOTES

- THE ON-SITE GEOTECHNICAL ENGINEER SHALL SPECIFY THE BACKFILL MATERIAL FOR THE UNDERGROUND SCM SYSTEM.
- THE BACKFILL MATERIAL SHOULD BE FREE OF ROCKS, FROZEN LUMPS, AND OTHER FOREIGN MATTER THAT COULD CAUSE HARD SPOTS WITHIN THE BACKFILL MATERIAL, OR THAT COULD DECOMPOSE AND CREATE VOIDS.
- HIGHLY PLASTIC SILTS, HIGHLY PLASTIC CLAYS, ORGANIC SILTS, ORGANIC CLAYS, AND PEATS SHOULD NOT BE USED AS A BACKFILL MATERIAL.
- THE BACKFILL MATERIAL SHOULD BE PLACED IN 6" LOOSE LIFTS AND COMPACTED TO 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM-D698). THE FILL SOILS SHOULD BE COMPACTED AT A MOISTURE CONTENT WITHIN +/- TWO PERCENT OF ITS OPTIMUM MOISTURE CONTENT.
- ANY MATERIAL STOCKPILING ON TOP OF THE UNDERGROUND SCM SYSTEM SHALL BE APPROVED BY THE STRUCTURAL DESIGN ENGINEER.

STATEMENT OF RESPONSIBILITY

- ALL REQUIRED MAINTENANCE AND INSPECTIONS OF THIS FACILITY SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER, PER THE EXECUTED OPERATION AND MAINTENANCE AGREEMENT FOR THIS FACILITY.



SEE SHEET C0.00 FOR ALL PROJECT, SITE, GRADING, STORM DRAINAGE AND UTILITY NOTES

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT CITY OF RALEIGH ENGINEERING DESIGN AND CONSTRUCTION STANDARDS



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www.mcadamsco.com

CLIENT
TRINITAS DEVELOPMENT LLC
159 N. SANGHAM DRIVE, SUITE 200
CHICAGO, ILLINOIS 60607
PHONE: 765. 807. 2737



VARSITY DRIVE APARTMENTS
ADMINISTRATIVE SITE REVIEW
1530 VARSITY DRIVE
RALEIGH, NORTH CAROLINA 27606

REVISIONS

NO. DATE

PLAN INFORMATION

PROJECT NO. SPEC-23034
FILENAME SPEC23034-SW1
CHECKED BY ACP/LJV
DRAWN BY MEM
SCALE 1:10
DATE 04.16.2024

SHEET

STORMWATER CONTROL MEASURE PLAN

C9.00

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McAdams

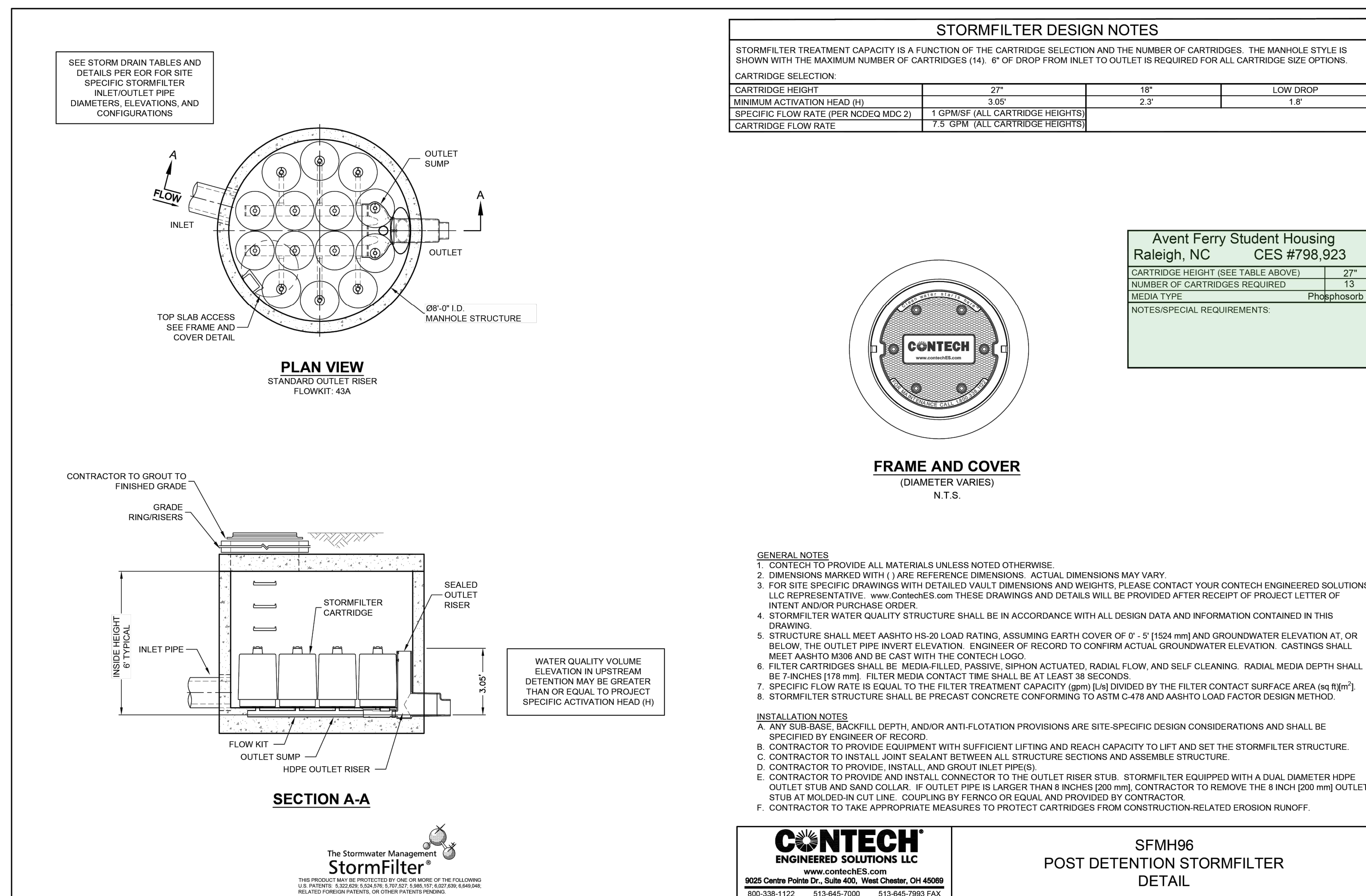
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Raleigh, NC 27603
phone 919.361.5000
fax 919.361.2269
license number: C-0293, C-187
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CLIENT

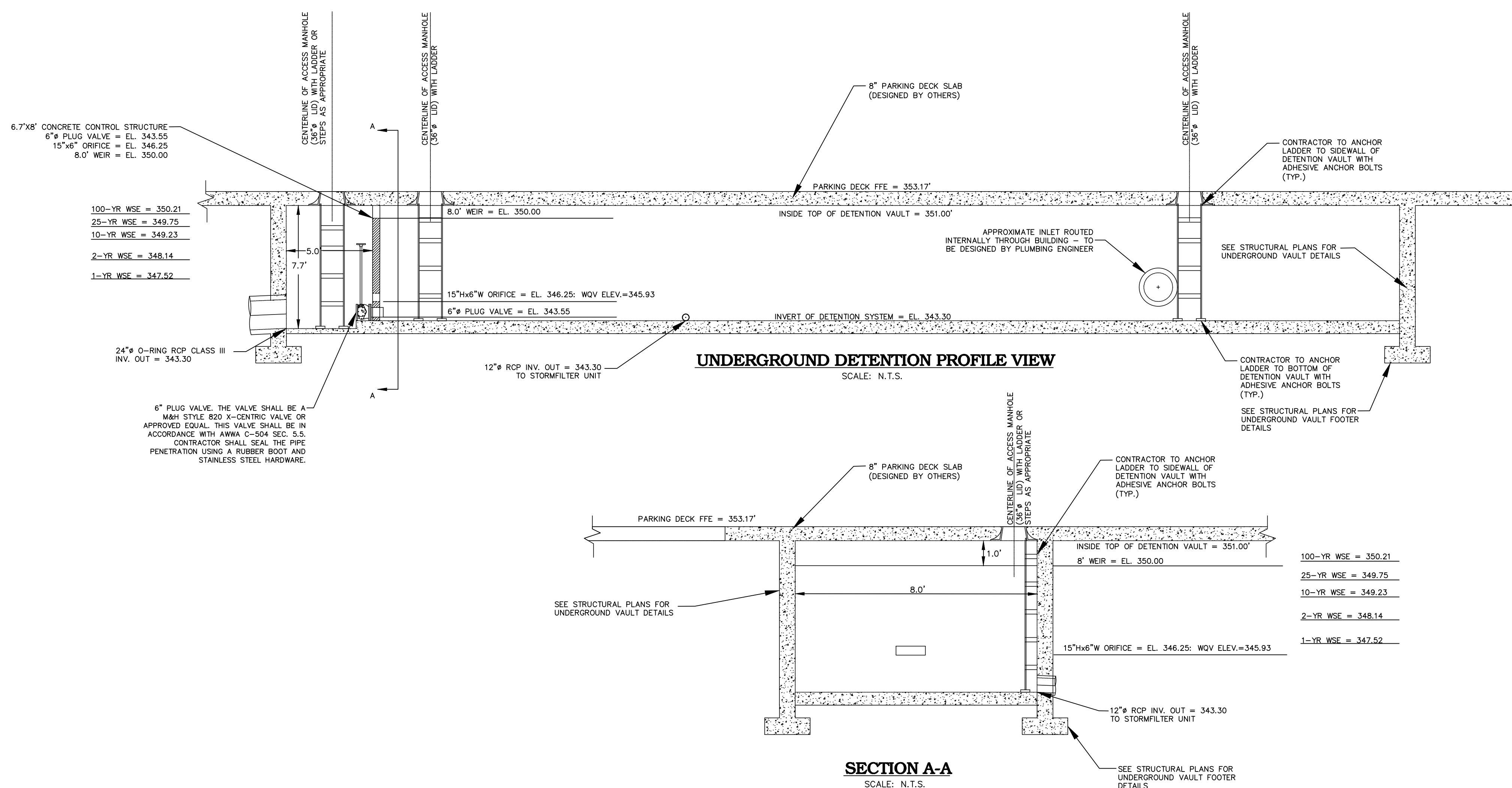
TRINITAS DEVELOPMENT LLC
159 N. SANGMAN DRIVE, SUITE 200
CHICAGO, ILLINOIS 60607
PHONE: 765.807.2737



VARSITY DRIVE APARTMENTS
ADMINISTRATIVE SITE REVIEW
1530 VARSITY DRIVE
RALEIGH, NORTH CAROLINA 27606



ACCESS NOTE: ACCESS MANHOLES SHALL INCLUDE LADDERS OR MANHOLE STEPS. IF, AT ANY ACCESS POINT, MANHOLE STEPS WOULD RESULT IN A 3" OR GREATER OFFSET, A LADDER SHALL BE PROVIDED. AS SUCH, A LADDER SHALL BE REQUIRED AT ALL MANHOLE ACCESS POINTS TO THE UNDERGROUND SOM SYSTEM. ALL LADDERS SHALL INCLUDE AN EXTENDING AND RETRACTING SECTION THAT ALLOWS THE LADDER TO BE EXTENDED ABOVE THE ACCESS LID TO FACILITATE SAFE INGRESS AND EGRESS TO/FROM A STANDING POSITION.



SEE SHEET C0.00 FOR ALL PROJECT, SITE, GRADING, STORM DRAINAGE AND UTILITY NOTES

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT CITY OF RALEIGH ENGINEERING DESIGN AND CONSTRUCTION STANDARDS

REVISIONS

NO. DATE

PLAN INFORMATION

PROJECT NO. SPEC-23034
FILENAME SPEC23034-SW1
CHECKED BY ACP/LJV
DRAWN BY MEM
SCALE AS NOTED
DATE 04.16.2024

SHEET

STORMWATER CONTROL MEASURE DETAILS

C9.01

TREE CONSERVATION CALCULATIONS:

GROSS SITE AREA: 2.86 AC. OR 124,646 SF.
 RIGHT OF WAY DEDICATION: 0.07 AC. OR 3,110 SF.
 NET SITE AREA: 2.79 AC. OR 121,536 SF.
 TREE CONSERVATION REQUIRED: 0.2791 AC. OR 12,155 SF. (10%)
 TREE CONSERVATION PROVIDED: 0.2791 AC. OR 12,155 SF. (10%)

TREE CONSERVATION LEGEND

SECONDARY TREE CONSERVATION AREA

N/F
 NORTH CAROLINA STATE OF
 HOLIDAY HALL-ROOM A
 PIN: 794507874
 DB: 95, PG: 246
 CAMPUS: PO BOX 7008
 ZONING: OX-5
 PRESENT USE: OFFICE GROSS

Misc. Tree - Fill In Name Or Erase

TREE LEGEND

- ① A ASH
- ② B BEECH
- ③ B BIRCH
- ④ C CEDAR
- ⑤ CH CHERRY
- ⑥ CM CRAPE MYRTLE
- ⑦ CP CYPRESS
- ⑧ DG DOGWOOD
- ⑨ E ELM
- ⑩ G SWEET GUM
- ⑪ HW MISC. HARDWOOD
- ⑫ H HICKORY
- ⑬ HO HOLLY
- ⑭ M MAGNOLIA
- ⑮ MA MAPLE
- ⑯ JM JAPANESE MAPLE
- ⑰ MI MIMOSA
- ⑱ RO RED OAK
- ⑲ WO WHITE OAK
- ⑳ O OAK
- ㉑ PE PEACH
- ㉒ PR PEAR
- ㉓ PCN PECAN
- ㉔ PS PERSIMMON
- ㉕ P PINE
- ㉖ PO POPLAR
- ㉗ RB REDBUD
- ㉘ SY SYCAMORE
- ㉙ W WALNUT
- DOUBLE AND TRIPLE TRUNKS
- ⑳+ DOUBLE OAK
- ㉑+ TRIPLE OAK
- ①-③ CAUPER INCH SIZE OF TREE
- ①-③ TYPE OF TREE
- D FOR DOUBLE, T FOR TRIPLE

N/F
 CENTENNIAL LOFTS HOLDINGS LLC
 PIN: 793378728
 DB: 10153, PG: 545
 16045 GLEN MIRO DR
 ZONING: RX-3
 PRESENT USE: APARTMENT

SITE LEGEND

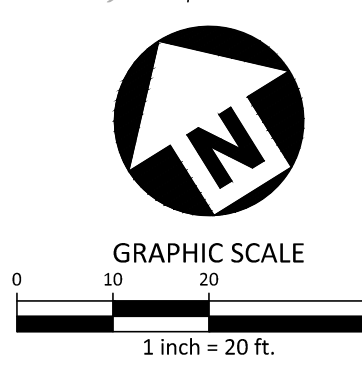
- SIGNAGE
- YARD LIGHTS
- LIGHT POLE
- POWER POLE
- TRAFFIC DIRECTIONAL ARROW
- ACCESSIBLE PARKING STALL
- VAN ACCESSIBLE PARKING STALL
- PARKING SPACE COUNT
- ACCESSIBLE RAMPS
- TYPE OF RAMP
- ACCESSIBLE ROUTE
- PHASE LINE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- LOT LINE
- EASEMENT LINE
- CENTERLINE
- HEAVY DUTY ASPHALT PAVEMENT

N/F
 NORTH CAROLINA STATE OF
 PROPERTY OFFICE
 PIN: 793476719
 DB: 8131, PG: 2714
 116 W JONES ST
 ZONING: CMP
 PRESENT USE: VACANT

N/F
 BARROW SAFRIT INC
 PIN: 793378387
 DB: 3674, PG: 106
 PO BOX 18465
 ZONING: RX-3
 PRESENT USE: CONDO COMPLEX

SECONDARY TREE CONSERVATION AREA
 0.2791 AC. OR 12,155 SF.

GARAGE
 6 STORES / 328 SPACES
 APPROX 109,400 SF



SEE SHEET C0.00 FOR ALL PROJECT, SITE, GRADING, STORM DRAINAGE AND UTILITY NOTES

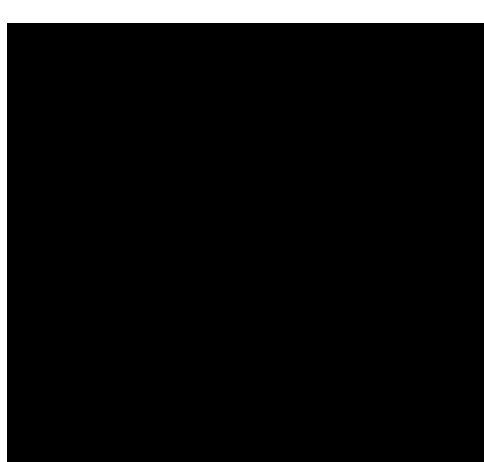
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VARSITY DRIVE APARTMENTS
 ADMINISTRATIVE SITE REVIEW
 1530 VARSITY DRIVE
 RALEIGH, NORTH CAROLINA 27606



REVISIONS

NO. DATE

PLAN INFORMATION

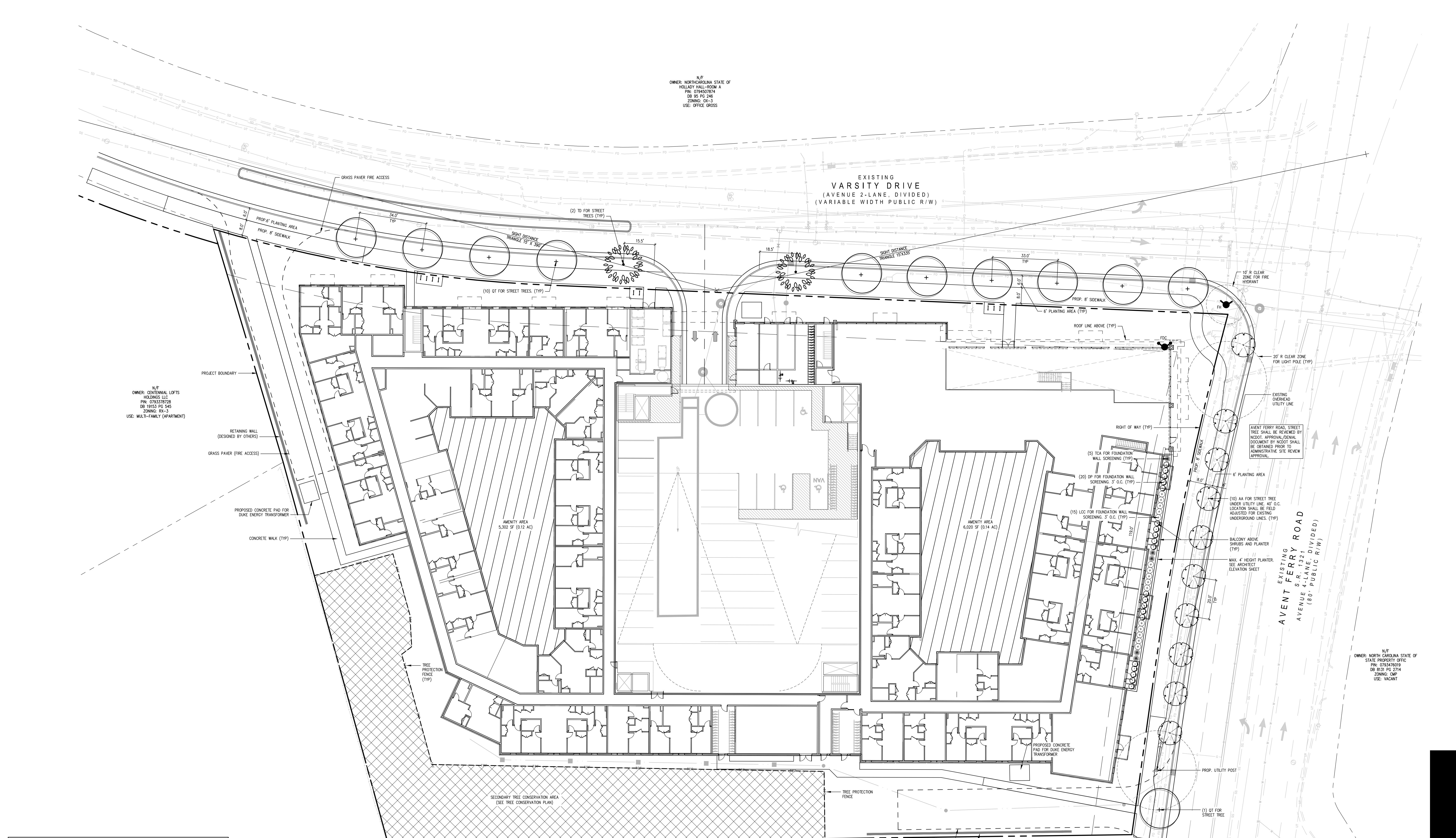
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 FILENAME SPEC23034-TC1
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 DRAWN BY CMV
 SCALE 1" = 20'
 DATE 04.16.2024

SHEET

TREE CONSERVATION PLAN
L8.00

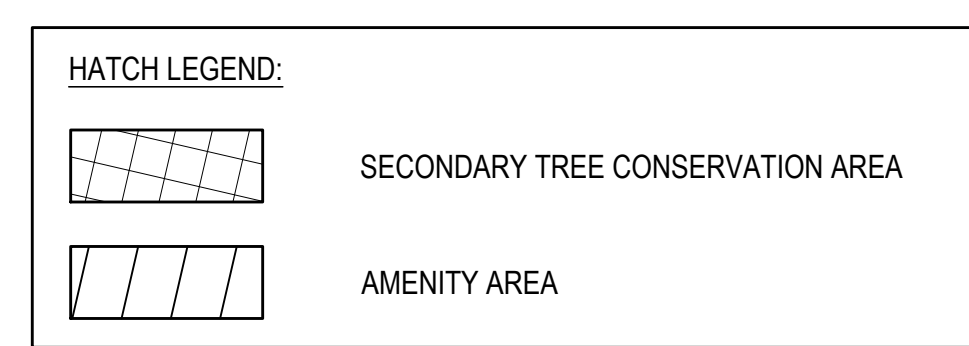
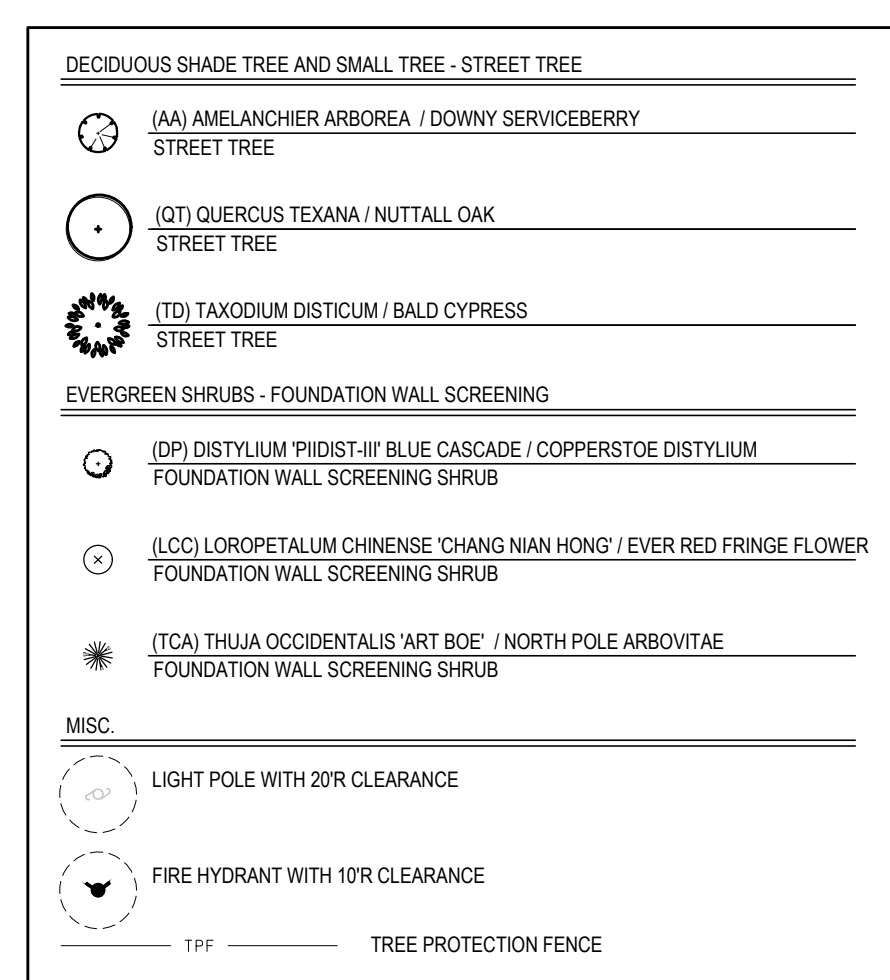
M:\Projects\SPEC\SPEC 2023\SPEC23034-Avanti Ferry Student Housing\GIS\Production Drawings\Current Drawings\Engineering\Production Drawings\Site Plan\SPEC23034-TC1.dwg, 4/16/2024, 1:04:36 PM, Megan Masorne

SEE PLANS ARE NOT TO BE REPRODUCED, CHANGED OR COPIED IN ANY FORM OR MANNER, WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT FIRST OBTAINING THE EXPRESSED WRITTEN PERMISSION AND CONSENT OF JDAVIS ARCHITECTS, P.C.
Y. NOT FOR CONSTRUCTION.



LANDSCAPE NOTES:

- CONTRACTOR TO FIELD VERIFY LOCATION AND DEPTH OF UTILITIES PRIOR TO INSTALLATION
- THE PLAN DEPICTS REQUIRED PLANTINGS REQUIRED BY THE CITY OF RALEIGH.
- ALL PLANT MATERIAL TO COMPLY WITH AMERICAN STANDARD FOR NURSERY STOCK BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.
- ALL PLANTS TO BE COMPACT, UNIFORM AND WELL GROWN.
- LOCATION OF PLANT MATERIAL TO BE REVIEWED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- ALL CONSTRUCTION TO CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CITY OF RALEIGH.
- ALL PLANTING BEDS ARE TO BE MULCHED TO A DEPTH OF 3 INCHES, WITH AGED TRIPLE SHIPPED HARDWOOD MULCH FROM A SINGLE SOURCE COMMERCIAL VENDOR WITH A MAXIMUM PARTICLE SIZE OF 2 INCHES. FREE OF WEED SEED AND WASTE MATERIALS. NO PINE STRAW PERMITTED. KEEP MULCH 4 TO 6 INCHES AWAY FROM TREE TRUNKS OR STEMS.
- ALL LAWN AREAS TO BE SEEDED ORLAND SOODED AS PER MANUFACTURER'S SPECIFICATIONS. REFER TO LANDSCAPE PLANS). ALL DISTURBED AREA SHALL EITHER BE MULCH OR LAWN.
- WITHIN THE SIGHT TRIANGLES SHOWN ON THIS PLAN, THERE SHALL BE NO SIGHT OBSTRUCTING OR PARTLY OBSTRUCTING WALL, FENCE, SIGN, FOLIAGE, BEAMS, OR PARKED VEHICLES BETWEEN THE HEIGHTS OF 24 INCHES AND EIGHT FEET ABOVE THE CURB LINE ELEVATION OR THE NEAREST TRAVELED WAY IF NO CURBING EXISTS.
- HVAC EQUIPMENT AND UTILITY DEVICES TO INCLUDE, BUT NOT LIMITED TO TELEPHONE AND CABLE PEDESTALS, ELECTRICAL TRANSFORMERS, SHOCK LOW DEVICE (HOTBOX ETC) SHALL BE SCREENED FROM OFF-SITE VIEW BY EVERGREEN SHRUBS, FENCE OR WALL.
- ALL CONFLICTS BETWEEN PROPOSED LANDSCAPE, UTILITIES AND STORMWATER WILL BE RESOLVED PRIOR TO APPLICATION FOR BUILDING PERMITS. UTILITY AND STORMWATER PLANS DEPICTED IN THIS SUBMITTAL ARE PRELIMINARY AND ARE SUBJECT TO CHANGE WITH THE DEVELOPMENT OF CONSTRUCTION DOCUMENTS.
- ALL STREET TREES SHALL BE PLANTED IN ACCORDANCE WITH CITY OF RALEIGH STANDARD DETAIL, TYP-03 AND MAINTAINED IN ACCORDANCE WITH THE REQUIREMENTS OF CHAPTER 2 OF THE RALEIGH CITY TREE MANUAL.
- MIN. 20' DISTANCE SHALL BE PROVIDED BETWEEN LIGHT POLES AND TREE TRUNKS.
- TREES SHALL NOT BE IN THE CURVE TRANSITIONING FROM ONE STREET TO ANOTHER.
- TREES WITHIN 20 FT. OF OVERHEAD POWER LINE(S) SHOULD BE UNDERSTORY TREES.
- CONTRACTOR SHALL NOT PLANT TREES/SHRUBS AT ANY LOCATION WHERE THEY WILL INTERFERE WITH PEDESTRIANS EXITING AUTOS PARKED IN PARALLEL SPACES.
- A TREE IMPACT PERMIT IS REQUIRED FOR TREES INSTALLED IN THE PUBLIC RIGHT-OF-WAY PRIOR TO ISSUANCE OF ANY BUILDING PERMITS.
- THE SITE SHALL BE STABILIZED AND SEEDED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY (CO).



PLANT LIST						
QTY	SYM	BOTANICAL NAME	COMMON NAME	MINIMUM INSTALL	MATURE SIZE	REMARKS
TREES						
10	AA	Amelanchier arborea	Downy Serviceberry	1.5" MIN	6' MIN	15'-25' 30'
11	QT	Quercus texana	Nuttall Oak	3" MIN	10' MIN	80' 55'
2	UA	Taxodium distichum	Bald Cypress	3" MIN	10' MIN	70' 30'
SHRUBS						
20	DP	Distylum 'PIDIST'-if Blue Cascade	Copperstone Distylum	36" MIN	3'-4'	4'-5'
15	LCC	Loropetalum chinense 'Chang Nian Hong'	Ever Red Fringe Flower	36" MIN	5'	5'
5	TCA	Thuja occidentalis 'Art Boe'	North Pole Arborvitae	36" MIN	10'-15'	3'-5'

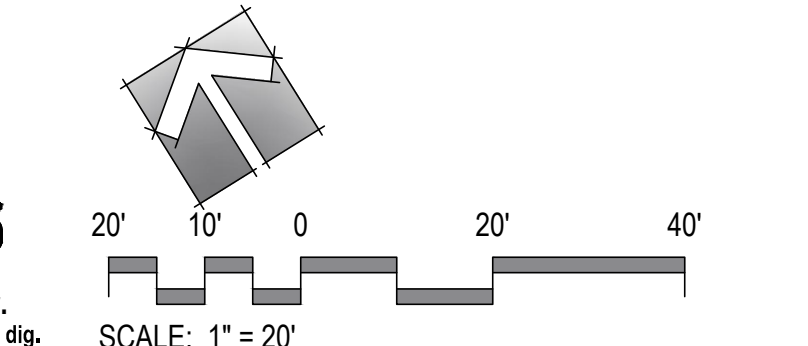
SEE L9.10 FOR LANDSCAPE DETAILS AND NOTES

ALL MECHANICAL EQUIPMENT TO BE LOCATED ON TOP OF BUILDING AND SCREENED WITH PARAPET WALL. REFER TO BUILDING ELEVATION SHEET(S).

City of Raleigh UDO Landscape & Screening Requirements
Project: Aventura Student Housing
Date: 04.16.2024 (Rev. xx.xx2024)

Zoning	Street Trees (Varsity Drive)	Street Trees (Aventura Ferry Road / NCDOT, S.R. 1321)
RX-7-UL-CU <td>Street Typology: Length of Right of Way: 515' / 40' = 12 EA Shade Trees Required (3" cal. 10' ht. @ 40' o.c. average) (round down) 515 / 40 = 12 EA Shade Trees Provided (3" cal. 10' ht. @ 40' o.c. average) 12 EA</td> <td>Street Typology: Length of Right of Way: 267' / 40' = 6 EA Shade Trees Required (3" cal. 10' ht. @ 40' o.c. average) (round down) 267 / 40 = 6 EA Shade Trees Provided (3" cal. 10' ht. @ 40' o.c. average) 6 EA</td>	Street Typology: Length of Right of Way: 515' / 40' = 12 EA Shade Trees Required (3" cal. 10' ht. @ 40' o.c. average) (round down) 515 / 40 = 12 EA Shade Trees Provided (3" cal. 10' ht. @ 40' o.c. average) 12 EA	Street Typology: Length of Right of Way: 267' / 40' = 6 EA Shade Trees Required (3" cal. 10' ht. @ 40' o.c. average) (round down) 267 / 40 = 6 EA Shade Trees Provided (3" cal. 10' ht. @ 40' o.c. average) 6 EA
	Small Shade Trees Provided (1.5" cal. 16' ht. @ 20' o.c. average) 10 EA	Small Shade Trees Provided (1.5" cal. 16' ht. @ 20' o.c. average) 10 EA
	Foundation Wall Screening at Northwest: Length of Foundation Wall (Greater than 5') 119 LF Evergreen Shrubs Required (36" ht @ 3/10 LF) 119 x 0.30 = 35.7 EA Evergreen Shrubs Provided (36" ht @ 3/10 LF) 40 EA	Foundation Wall Screening at Northwest: Length of Foundation Wall (Greater than 5') 119 LF Evergreen Shrubs Required (36" ht @ 3/10 LF) 119 x 0.30 = 35.7 EA Evergreen Shrubs Provided (36" ht @ 3/10 LF) 40 EA

ASR-XXXX-2024
CODE COMPLIANCE
LANDSCAPE PLAN



PROJECT:	TD-23104	DATE:	
ISSUE:	Administrative Site Review	DATE:	04.16.2024
REVISIONS:			
DRAWN BY:	SB		
CHECKED BY:	KT		
CONTENT:	CODE COMPLIANCE LANDSCAPE PLAN		

CHAPTER 2 TREE PLANTING AND MAINTENANCE

THIS CHAPTER OUTLINES THE STANDARDS FOR PLANTING AND MAINTAINING TREES ON PROPERTY OWNED OR CONTROLLED BY THE CITY OF RALEIGH.

B. TREE PLANTING ON CITY PROPERTY

THE PARKS, RECREATION AND CULTURAL RESOURCES DEPARTMENT IS RESPONSIBLE FOR PLAN REVIEW, INSPECTION, MONITORING AND ENFORCEMENT ASSOCIATED WITH TREE PLANTING AND MAINTENANCE ON PROPERTY OWNED OR CONTROLLED BY THE CITY.

- DEVELOPMENT, PRIVATE CITIZEN OR CONTRACT PLANTING ON CITY OWNED OR CONTROLLED PROPERTY BY ANY INDIVIDUAL OR ORGANIZATION OTHER THAN THE CITY. THESE PRODUCTS ARE AT THE EXPENSE OF THE REQUESTOR AND REQUIRE A TREE IMPACT PERMIT.
- PARTNERSHIP PLANTING UNDERTAKEN BY NON-PROFIT ORGANIZATIONS, PUBLIC-PRIVATE PARTNERSHIPS, AND CIVIC GROUPS. UNLESS WORK IS DONE UNDER STRICT GUIDANCE AND OVERSIGHT BY THE URBAN FORESTER, THESE PRODUCTS ARE AT THE EXPENSE OF THE REQUESTOR AND REQUIRE A TREE IMPACT PERMIT.

C. REQUESTS FOR TREE PLANTING

- REQUESTS FOR TREE PLANTING AND TREE IMPACT PERMITS ARE EVALUATED IN THE ORDER IN WHICH THEY ARE RECEIVED.
- TREE PLANTING IS CONTINGENT ON THE PLANTING SEASON, AVAILABILITY OF PLANT MATERIAL, SITE SUITABILITY, STAFFING, AND FUNDING.
- THE URBAN FORESTER OR DESIGNEE WILL PRIORITIZE TREE PLANTING REQUESTS ACCORDING TO THE FOLLOWING CRITERIA:
 - NEEDS BASED: AREAS IDENTIFIED WITH THE GREATEST TREE CANOPY DEFICITS
 - PRE-IDENTIFIED LOCATIONS: AREAS EXAMINED FOR BEAUTIFICATION IMPROVEMENTS
 - ON DEMAND: CITY DEPARTMENTS, VOLUNTEER GROUPS, NEIGHBORHOODS, CITIZENS, AND DEVELOPMENT

D. TREE QUALITY STANDARDS

- GENERAL: URBAN NURSERY-GROWN PLANTS TRUE TO GENUS, SPECIES, VARIETY, CULTIVAR, STEM FORM, SHEARING, AND OTHER FEATURES INDICATED ON DRAWINGS AND COMPLYING WITH ANSI Z60.1, WITH HEALTHY ROOT SYSTEMS DEVELOPED BY TRANSPARENTING OR ROOT PRUNING AND A VISIBL ROOT FLARE. PROVIDE WELL-DRAINED, FULLY BRANCHED HEALTHY, VIGOROUS ROOT SYSTEMS, FREE OF DISEASE, INSECTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN SCALD, INJURIES, ABRASIONS, AND DISFIGUREMENT.
- TREES WITH MULTIPLE LEADERS, UNLESS SPECIFIED, WILL BE REJECTED. TREES WITH DAMAGED OR GROUNDED LEADERS, BARK ABRASIONS, SUNSCALD, DEFOLIATION, KNOTS, OR PERMITS. THE SUBSTITUTION MUST BE OF SIMILAR GROWTH HABIT, FORM, AND CHARACTERISTICS, SIMILAR IN SPECIFIED SIZE, AND EQUAL IN AND SUBJECT TO APPROVAL OR REJECTION BY THE URBAN FORESTER.

- SPECIES SELECTION
 - SELECTED TREE SPECIES SHALL BE OF A CULTIVAR THAT IS SUPERIOR IN FORM AND DISEASE RESISTANCE. PREFERENCE WILL BE GIVEN TO TREES GROWN SPECIFICALLY FOR URBAN CONDITIONS.
 - EXOTIC INVASIVE SPECIES ARE NOT PERMITTED.
 - TREES TO BE INSTALLED UNDER OVERHEAD POWERLINES SHALL HAVE A MATURE HEIGHT OF NO GREATER THAN 30 FT.
 - ALL SPECIES SELECTIONS SHALL BE REVIEWED BY THE URBAN FORESTER OR DESIGNEE.
 - SPECIES DIVERSITY IS ENCOURAGED TO IMPROVE OVERALL URBAN FORESTRY HEALTH.
 - ALL PLANT MATERIAL AND INSTALLATION WORK SHALL CONFORM TO THE STANDARDS DETAILED IN THIS MANUAL, THE AMERICAN NATIONAL STANDARDS FOR TREE CARE OPERATIONS, ANSI A300 AND NURSERY STOCK, AND ANSI AND APPROVED CITY STANDARD DETAILS.

- ALL PLANT MATERIAL SHALL BE FREE OF ALL PESTS, DISEASES, AND CANKERS IN HEALTHY CONDITION, AND FREE OF MECHANICAL DAMAGE AT THE TIME OF PLANTING AS DETERMINED BY URBAN FORESTRY STAFF.
- PROVIDE PLANTS OF SIZES, GRADES, AND BALL OR CONTAINER SIZES COMPLYING WITH ANSI Z60.1 FOR TYPES AND FORMS OF PLANTS REQUIRED. PLANTS OF LARGER SIZE MAY BE USED IF ACCEPTABLE TO URBAN FORESTER, WITH A PROPORTIONATE INCREASE IN SIZE OF ROOTS OR BALLS.
- LABEL EACH PLANT OF EACH VARIETY AND CULTIVAR WITH A SECURELY ATTACHED, WATERPROOF TAG BEARING LEGIBLE DESIGNATION OF BOTANICAL AND COMMON NAME, INCLUDE NOMENCLATURE FOR HYBRID, VARIETY, OR CULTIVAR, IF APPLICABLE.

- WHEN MORE THAN ONE PLANT OF ANY SPECIES IS PLANTED, ALL PLANT MATERIAL SHALL BE UNIFORM IN SIZE AND SHAPE WHEN POSSIBLE. ALL PLANT MATERIAL SHALL HAVE PLANT FIT WITH EVEN-SPACED BRANCHING. ONE-SIDED PLANTS OR TIGHT ROW PLANTS ARE NOT ACCEPTABLE IF THE GROWTH HABIT IS ADVERSELY AFFECTED.

- TREE AND SHRUB MEASUREMENTS
 - MEASURE ACCORDING TO ANSI Z60.1 WITH BRANCHES AND TRUNKS OR CANES IN THEIR NORMAL POSITION. DO NOT PRUNE TO OBTAIN REQUIRED SIZES.
 - INSTALLATION SIZE FOR RIGHT OF WAY TREES
 - SHADE TREES SHALL BE A MINIMUM OF 3" CALIPER AND 10' TALL.
 - LANDSCAPE TREES SHALL BE A MINIMUM OF 1.5" CALIPER FOR SINGLE STEM AND 6" TALL FOR BOTH SINGLE AND MULTI-STEMMED TREES.

- BALLED AND BURLAP (BAB), CONTAINER AND BARE ROOT PLANT MATERIALS
 - TREES DESIGNATED BAB SHALL BE PROPERLY DUG WITH FIRM, NATURAL BALLS OF SOIL WITH BALL SIZE NOT LESS THAN DIAMETER AND DEPTH RECOMMENDED BY ANSI Z60.1 FOR TYPE AND SIZE OF TREE. RETAINING AS MANY FIBROUS ROOTS AS POSSIBLE. BALLS SHALL BE PROPERLY WRAPPED WITH BIODEGRADABLE BURLAP AND SECURED WITH NAILS AS RECOMMENDED BY ANSI Z60.1.
 - THE ROOT FLARE SHALL BE APPARENT AT THE SURFACE OF THE ROOT BALL, OR THE CONTRACTOR WILL BE RESPONSIBLE FOR REMOVING EXCESS SOIL FROM THE TOP OF THE ROOT BALL IN ORDER TO ESTABLISH THE CORRECT GRADE. TREES SHALL BE REJECTED IF THE ROOT FLARE HAS BEEN BURIED LONG ENOUGH FOR THE STEM TO SPROUT ADVENTITIOUS ROOTS. TREES WITH LOOSE, BROKEN, PROCESSED, OR MANUFACTURED ROOT BALLS WILL NOT BE ACCEPTED.
 - CONTAINER-GROWN STOCK SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED EXTERIOR PLANTS GROWN IN A CONTAINER WITH WELL-ESTABLISHED ROOT SYSTEM REACHING SIDES OF CONTAINER AND MAINTAINING A FIRM BALL WHEN REMOVED FROM CONTAINER. THE ROOT FLARE SHALL BE APPARENT AT SURFACE OF BALL, OR THE CONTRACTOR WILL BE RESPONSIBLE FOR REMOVING EXCESS SOIL FROM THE TOP OF THE ROOT BALL IN ORDER TO ESTABLISH THE CORRECT GRADE. CONTAINER SHALL BE RIGID ENOUGH TO HOLD BALL SHAPE AND PROTECT ROOT MASS DURING SHIPPING AND BE SECURED ACCORDING TO ANSI Z60.1 FOR KIND, TYPE, AND SIZE OF EXTERIOR PLANT REQUIRED.
 - BARE ROOT MATERIAL SHALL BE GROWN IN THE GROUND IN THE NURSERY WITHOUT ARTIFICIAL ROOT RESTRICTION DEVICES, SUCH AS CONTAINERS OR FABRIC BAGS, UNDER FAVORABLE GROWING CONDITIONS AND WHICH HAVE RECEIVED THE PROPER CULTURAL TREATMENT TO DEVELOP A WELL-BRANCHED ROOT SYSTEM AFTER HARVEST. THE SOIL IS REMOVED FROM THE ROOTS.

- DELIVERY, STORAGE AND HANDLING
 - DO NOT PRUNE TREES AND SHRUBS BEFORE DELIVERY. PROTECT BARK, BRANCHES, AND ROOT SYSTEMS FROM SUN SCALD, DRYING, SHEARING, WHIPPING, AND OTHER HANDLING AND TRUNK DAMAGE. DO NOT BEND OR BIND TREES OR SHRUBS IN SUCH A MANNER AS TO DESTROY THEIR NATURAL SHAPE. PROVIDE PROTECTIVE COVERING OF EXTERIOR PLANTS DURING DELIVERY. DO NOT DROP EXTERIOR PLANTS DURING DELIVERY.
 - HANDLE PLANTING STOCK BY ROOT BALL. HEAVIER MATERIAL SHALL BE HANDLED WITH STRAPS ON THE ROOT BALL AND APPROPRIATE EQUIPMENT SUCH AS A SMALL SKID STEER LOADER.
 - DELIVER BARE ROOT STOCK PLANTS FRESHLY DUG. IMMEDIATELY AFTER DIGGING UP BARE ROOT STOCK, PACK ROOT SYSTEM IN WET STRAW, HAY, OR OTHER SUITABLE MATERIAL TO KEEP ROOT SYSTEM MOIST UNTIL PLANTING.
 - DELIVER EXTERIOR PLANTS AFTER PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED AND INSTALL IMMEDIATELY. IF PLANTING IS DELAYED MORE THAN SIX HOURS AFTER DELIVERY, SET EXTERIOR PLANTS IN THEIR APPROPRIATE ASPIC (SUN, FILTRED SUN, OR SHADE), PROTECT FROM WEATHER AND MECHANICAL DAMAGE, AND KEEP ROOTS MOIST.
 - SET BALLED STOCK ON GROUND AND COVER BALL WITH SOIL, PEAT MOSS, SAWDUST, OR OTHER ACCEPTABLE MATERIAL.

- ACCEPTABLE MATERIAL.
 - DO NOT REMOVE CONTAINER-GROWN STOCK FROM CONTAINERS BEFORE TIME OF PLANTING.
 - WATER ROOT SYSTEMS OF EXTERIOR PLANTS STORED ON-SITE WITH A FINE MIST SPRAY WATER AS OFTEN AS NECESSARY TO MAINTAIN ROOT SYSTEMS IN MOIST, BUT NOT OVERLY-WET CONDITION.
 - HEEL-IN BARE-ROOT STOCK: SOME ROOTS THAT ARE IN DRY CONDITION IN WATER FOR TWO HOURS. REJECTED DROD-OUT STOCK.

- NURSERY
 - PLANTS SHALL BE GROWN WITHIN ONE COLD HARDINESS ZONE OF THE PROJECT SITE.
 - PROVIDE DIGITAL PHOTOS FROM THE NURSERY WITH HEIGHT IDENTIFIED FOR REVIEW BY THE URBAN FORESTER OR DESIGNEE PRIOR TO UNLOADING OR SHIPPING. ALL TREES SHALL ALSO BE REVIEWED AND APPROVED PRIOR TO INSTALLATION EITHER AT PLACE OF PURCHASE, NURSERY, HOLDING YARD OR WORK SITE BY THE URBAN FORESTER OR DESIGNEE.

- OBSERVATION AND REJECTION
 - URBAN FORESTER OR DESIGNEE MAY OBSERVE TREES AT PLACE OF PURCHASE, NURSERY, HOLDING YARD, OR AT SITE BEFORE PLANTING FOR COMPLIANCE WITH REQUIREMENTS FOR GENUS, SPECIES, VARIETY, SIZE, AND QUALITY. URBAN FORESTER RETAINS RIGHT TO OBSERVE TREES FURTHER FOR SIZE AND CONDITION OF BALLS AND ROOT SYSTEMS, INSECTS, INJURIES, AND LATE DEFECTS AND TO SELECT UNSATISFACTORY OR DEFECTIVE MATERIAL AT ANY TIME DURING PROCESS OF WORK. REMOVE REJECTED TREES IMMEDIATELY FROM PROJECT SITE.

- SUBSTITUTIONS
 - REQUESTS FOR SUBSTITUTION FOR THE LISTED PLANT MATERIAL MUST BE MADE TO THE URBAN FORESTER IN WRITING. THE REQUEST SHALL INCLUDE MINIMUM OF 5 SURVEYED ATTEMPTED FOR LOCATION AND CONTACT INFORMATION. SUBSTITUTION WILL BE CONSIDERED IF THE LISTED MATERIAL CANNOT BE LOCATED OR CONFIRMED BY KNOWN SUPPLIERS. PLANT SUPPLIERS MUST BE RESEARCHED AND LOCATED PRIOR TO SUBMITTAL. IF PLANT MATERIAL SUBSTITUTIONS ARE TO BE MADE AFTER AWARD OF THE CONTRACT OR PERMIT, THE SUBSTITUTION MUST BE OF SIMILAR GROWTH HABIT, FORM, AND CHARACTERISTICS, SIMILAR IN SPECIFIED SIZE, AND EQUAL IN AND SUBJECT TO APPROVAL OR REJECTION BY THE URBAN FORESTER.

- IF FOR ANY REASON TREES CANNOT BE INSTALLED ACCORDING TO THE PLANS A REQUEST SHALL BE MADE TO THE URBAN FORESTER IN WRITING. THE CONTRACTOR SHALL NOTIFY THE CITY AND ALTERNATE PLANTING LOCATIONS SHALL BE SELECTED FOR APPROVAL BY THE URBAN FORESTER.

- TREE QUALITY STANDARDS
 - PLEASE REFER TO CITY OF RALEIGH STANDARD DETAILS LOCATED AT RALEIGH.GOV
 - LINEAR SPACING AND LOCATION
 - TREES WILL BE PLANTED IN ACCORDANCE WITH SPACING REQUIREMENTS DETAILED IN THE UNIFIED DEVELOPMENT ORDINANCE UNLESS OTHERWISE SPECIFIED BY THE URBAN FORESTER OR DESIGNEE.
 - TREES TO BE INSTALLED UNDER OVERHEAD UTILITY LINES SHALL HAVE A MATURE HEIGHT OF NO GREATER THAN 30 FT.

- GROUPED PLANTINGS
 - GROUPING TREES WHEREVER POSSIBLE AND DESIGNING TREE PITS OR MULCH AREAS THAT ALLOW SHARED ROOT SPACE PROVIDES A NUMBER OF BENEFITS TO THE HEALTH AND LONGEVITY OF URBAN TREES. DESIGNS THAT GROUP TREES ARE FAVORED OVER INDIVIDUAL PLANTINGS

- EXECUTION
 - TREE AND SHRUB EXCAVATION
 - PLANTING HOLES: EXCAVATE CIRCULAR PITS WITH SIDES SLOPED INWARD. TRIM BALE LEAVING CENTER AREA RAISED SLIGHTLY TO SUPPORT ROOT BALL AND ASSIST IN DRAINAGE. DO NOT FURTHER DISRUPT BASE. SCARIFY PITS WITH SPINE BAR OR SMOOTHED DURING EXCAVATION.
 - EXCAVATE APPROXIMATELY THREE TIMES AS WIDE AS BALL DIAMETER FOR ALL PLANT MATERIAL.
 - PLANTING HOLES SHALL BE NO DEEPER THAN THE ROOT FLARE OF THE TREE OR PLANT WHICH SHALL BE INSTALLED AT GRADE, A MAXIMUM OF 2 INCHES ABOVE GRADE, AND NEVER BELOW GRADE.
 - SOIL REMOVED FROM EXCAVATIONS MAY BE USED AS BACKFILL PROVIDED IT MEETS THE SPECIFIED PLANTING SOIL MIX REQUIREMENTS.
 - OBSTRUCTIONS: NOTIFY URBAN FORESTER IF UNEXPECTED ROCK OR OBSTRUCTIONS DETRIMENTAL TO TREES OR SHRUBS ARE DISCOVERED IN EXCAVATIONS.
 - DRAINAGE: PLANTING HOLES NOT ASSOCIATED WITH A DRAIN SYSTEM SHALL DRAIN FULLY WITHIN A 24-HOUR PERIOD. NOTIFY URBAN FORESTER IF SURFACE CONDITIONS EVIDENCE UNEXPECTED WATER SEepage OR RETENTION IN TREES OR SHRUB PITS.
 - TREE AND SHRUB PLANTING
 - BALL AND BURLAP
 - SET BALLED AND BURLAPPED STOCK PLUMB AND IN CENTER OF PIT OR TRENCH WITH ROOT FLARE AT GRADE, A MAXIMUM OF 2 INCHES ABOVE ADJACENT FINISH GRADES, AND NEVER BELOW GRADE. DO NOT MANEUVER BY TRUNK. HANDLE BY ROOT BALL ONLY.
 - REMOVE BURLAP AND WIRE BASKETS FROM THE TOP 1/3 OF ROOT BALL, CUT OFF AND DISCARD FROM HOLE BUT DO NOT REMOVE FROM UNDER ROOT BALLS. REMOVE PALLETS, IF ANY, BEFORE SETTING. DO NOT USE PLANTING STOCK IF ROOT BALL IS CRACKED OR BROKEN BEFORE OR DURING PLANTING OPERATION.
 - PLACE PLANTING SOIL MIX AROUND ROOT BALL IN LAYERS, TAMING GENTLY TO SETTLE MIX AND ELIMINATE VOIDS AND AIR POCKETS. WHEN PIT IS APPROXIMATELY ONE-HALF BACKFILLED, WATER THOROUGHLY BEFORE PLACING REMAINDER OF BACKFILL. REPEAT WATERING UNTIL NO MORE WATER IS ABSORBED. WATER AGAIN AFTER PLACING AND TAMING FINAL LAYER OF PLANTING SOIL MIX.
 - CONTAINER
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 - TREE GRATES

- ORGANIC MULCHING
 - APPLY 1/3 INCH AVERAGE THICKNESS OF ORGANIC MULCH EXTENDING 12 INCHES BEYOND EDGE OF PLANTING PIT OR TRENCH. DO NOT PLACE MULCH WITHIN 3 INCHES OF TRUNKS OR STEMS. ROOT FLARE SHALL BE VISIBLE AT BASE OF ALL PLANT MATERIAL.
 - MULCH SHALL BE THE RESPONSIBILITY OF THE ADJACENT PROPERTY OWNER TO RESTORE AS NEEDED AND KEEP FREE OF DEBRIS AND TRASH.

- SOIL
 - BACKFILL DIRECTLY IN TREE PIT OR PLANTING AREA SHALL BE HIGH-QUALITY PLANTING SOIL SUITABLE FOR SUCCESSFUL GROWTH.
 - IF SOIL ON SITE IS SUITABLE IT MAY BE MIXED AT A RATE OF 50% WITH HIGH-QUALITY PLANTING SOIL.
 - SOIL MUST BE FREE OF SUBSOIL, HARD CLODS, STONE, RESIDUES OR UNDESIRABLE MATERIALS, STICKS, WEED SEED AND UNIFORM IN QUALITY.
 - THE URBAN FORESTER OR DESIGNEE MAY REJECT UNSUITABLE SOIL.

- GUYING AND STAKING
 - DO NOT STAKE UNLESS THE TREE BECOMES UNSTABLE OR IT IS A HIGH WIND AREA.
 - REMOVE ALL STAKING MATERIAL AFTER 1 YEAR.
 - LEAVE SLIGHT SLACK IN TIE TO PROMOTE TRUNK TAPER.
 - UPRIGHT STAKING AND TYING: WHEN REQUIRED USE A MINIMUM OF 3 STAKES. SET VERTICAL, STRIKES AND SPACE TO AVOID PENETRATING ROOT BALLS OR ROOT MASSES. SUPPORT TREES WITH TWO STRINGS OF THE WIRE ENCASED IN HOSE SECTIONS OR ARBORIST TAPE AT CONTACT POINTS WITH TREE TRUNK. ALLOW ENOUGH SLACK TO AVOID RESTRAINT OF TREE. SPACE STRIKES EQUALLY AROUND TREES AND ATTACH FLAGS TO EACH GUY WIRE FOR VISIBILITY.

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 - FOLLOW THE METHOD FOR CONTAINER PLANTING. STAKING REQUIRED.

- TREES IN SIDEWALKS, PITS, GRATES AND TREE LAWNS
 - TREE GRATES

- ORGANIC MULCHING
 - APPLY 1/3 INCH AVERAGE THICKNESS OF ORGANIC MULCH EXTENDING 12 INCHES BEYOND EDGE OF PLANTING PIT OR TRENCH. DO NOT PLACE MULCH WITHIN 3 INCHES OF TRUNKS OR STEMS. ROOT FLARE SHALL BE VISIBLE AT BASE OF ALL PLANT MATERIAL.
 - MULCH SHALL BE THE RESPONSIBILITY OF THE ADJACENT PROPERTY OWNER TO RESTORE AS NEEDED AND KEEP FREE OF DEBRIS AND TRASH.

- SOIL
 - BACKFILL DIRECTLY IN TREE PIT OR PLANTING AREA SHALL BE HIGH-QUALITY PLANTING SOIL SUITABLE FOR SUCCESSFUL GROWTH.
 - IF SOIL ON SITE IS SUITABLE IT MAY BE MIXED AT A RATE OF 50% WITH HIGH-QUALITY PLANTING SOIL.
 - SOIL MUST BE FREE OF SUBSOIL, HARD CLODS, STONE, RESIDUES OR UNDESIRABLE MATERIALS, STICKS, WEED SEED AND UNIFORM IN QUALITY.
 - THE URBAN FORESTER OR DESIGNEE MAY REJECT UNSUITABLE SOIL.

- GUYING AND STAKING
 - DO NOT STAKE UNLESS THE TREE BECOMES UNSTABLE OR IT IS A HIGH WIND AREA.
 - REMOVE ALL STAKING MATERIAL AFTER 1 YEAR.
 - LEAVE SLIGHT SLACK IN TIE TO PROMOTE TRUNK TAPER.
 - UPRIGHT STAKING AND TYING: WHEN REQUIRED USE A MINIMUM OF 3 STAKES. SET VERTICAL, STRIKES AND SPACE TO AVOID PENETRATING ROOT BALLS OR ROOT MASSES. SUPPORT TREES WITH TWO STRINGS OF THE WIRE ENCASED IN HOSE SECTIONS OR ARBORIST TAPE AT CONTACT POINTS WITH TREE TRUNK. ALLOW ENOUGH SLACK TO AVOID RESTRAINT OF TREE. SPACE STRIKES EQUALLY AROUND TREES AND ATTACH FLAGS TO EACH GUY WIRE FOR VISIBILITY.

- MAINTENANCE AND WARRANTY STANDARDS
 - BALL AND BURLAP
 - SET BALLED AND BURLAPPED STOCK PLUMB AND IN CENTER OF PIT OR TRENCH WITH ROOT FLARE AT GRADE, A MAXIMUM OF 2 INCHES ABOVE ADJACENT FINISH GRADES, AND NEVER BELOW GRADE. DO NOT MANEUVER BY TRUNK. HANDLE BY ROOT BALL ONLY.
 - CAREFULLY REMOVE ROOT BALL FROM CONTAINER WITHOUT DAMAGING ROOT BALL OR PLANT. GENTLY LOOSEN THE ROOTS AND CUT ANY GIRDING ROOTS IN AT LEAST TWO PLACES.
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 - CONTAINER
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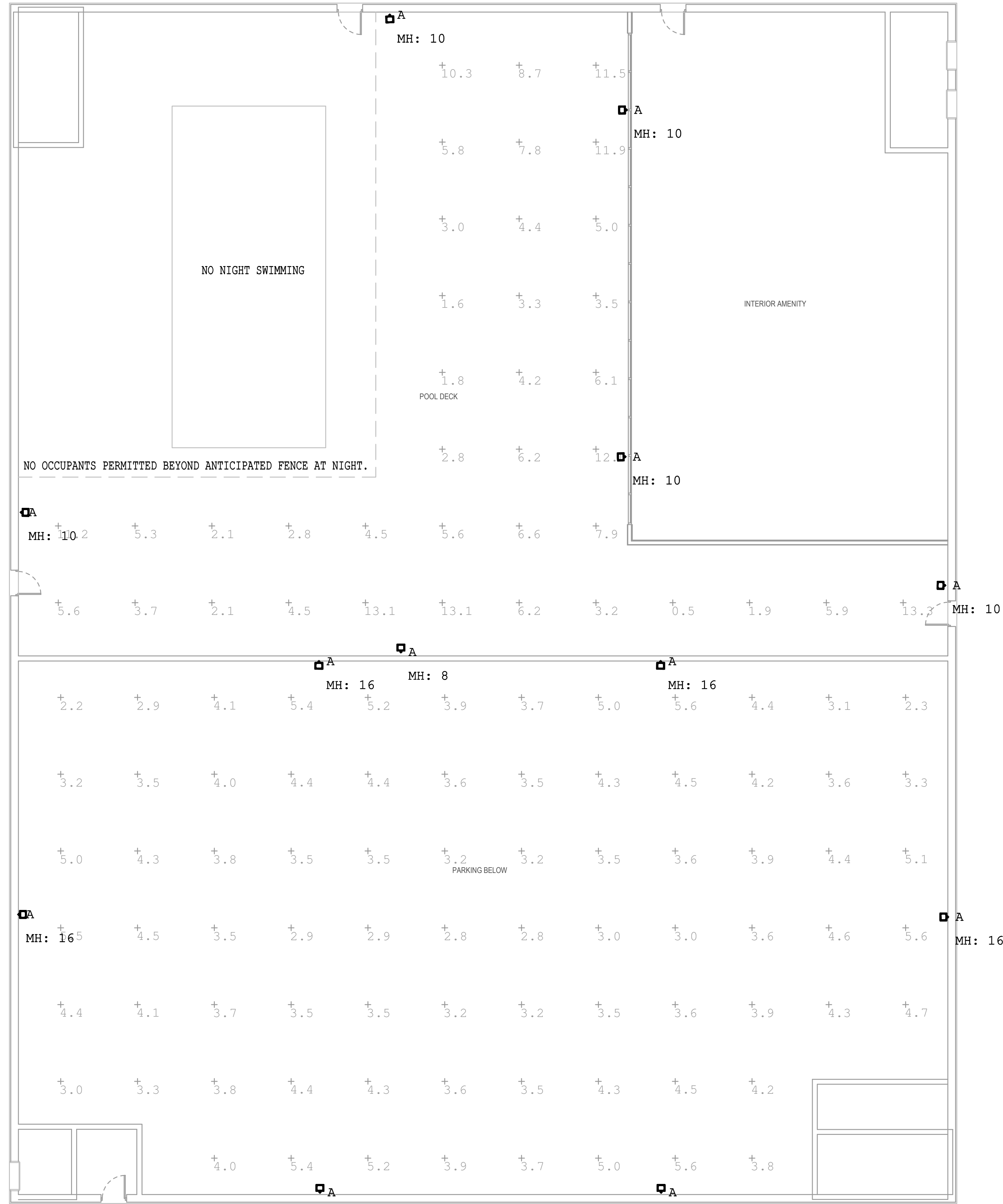
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1 SEVENTH FLOOR PHOTOMETRICS
 1/8"=1'-0"

Symbol	Qty	Label	Description	Tag	Luminaire Lumens	Luminaire Watts	(MANUFAC)	(LUMINAIRE)	Mounting Height
□	12	1011-161-1200-NW-G2-4	1011-161-1200-NW-G2-4	A	6588	53.6	SIGNIFY GARDCO	101L LED Sconce	7, 15, 16

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Garage	Illuminance	Fc	3.94	5.6	2.2	1.79	2.55
Pool Courtyard	Illuminance	Fc	6.03	13.3	0.5	12.06	26.60

Wall Mount

LED Wall Sconce

101L

by @ignify

Gardco 101L LED wall sconces feature a low-profile design that provides wide flexibility in high performance exterior wall illumination. Full cutoff performance, usable illumination patterns, and powerful wattages combine into a compact and architecturally pleasing design. 101L sconces are available in Type 2, 3, and 4 distributions, and provide output of up to 12,000 lumens. Energy saving control options increase energy savings and offer California Title 24 compliance. Emergency Battery Backup option available for path of egress.

Project: _____
 Location: _____
 Cat No: _____
 Type: **GW**
 Lamps: _____ City: _____
 Notes: _____

Ordering guide example: 101L-32L-700-NW-G2-3-120-BL-IMR12-BZ

Part	Number of LEDs	Drive Current	LED Color - Generation	Distribution	Emergency	Voltage
101L 101L LED Wall Sconce	16L 16 LEDs (1 module)	200mA 400mA 530mA 700mA 1000mA 1200mA	CW-G2 Cool White 6000K, 70°C/G2 Generation 2 NW-G2 Neutral White 4000K, 70°C/G2 Generation 2 WW-G2 Warm White 3000K, 70°C/G2 Generation 2 WY-G2 Warm Yellow 2700K, 80°C/G2 Generation 2	2 Type 2 3 Type 3 4 Type 4	EBRC Emergency Battery Back Cold Weather...	LMV 120-277V HW 240-480V SD 120V SD 120V SD 200V SD 240V SD 277V SD 347V SD 480V
	32L 32 LEDs (2 module)	830 530mA 700mA 1000mA 1000mA	BW-G2 Balanced White 3500K 80°C/G2 Generation 2 AM-G2 Direct Amber (500nm) Generation 2			

Options	Modern Battery Lens	Performance	Finish	Finish
DD 0-10V External dimming (controls by others) DCC Dual Circuit Control FAWS Field Adjustable Wattage 1+ BL Bi-lens functionality with motion sensor	MH12 integral with #2 lens MH13 integral with #3 lens	FCB Photocell control TLR06 Twist Lock Receptacle 3-Pin TLR07 Twist Lock Receptacle 3-Pin TLR08 Twist Lock Receptacle w/ Photocell	F1 Single (200, 277, 347VAC) F2 Double (208, 240, 480VAC) F3 Canadian Double Pole (208, 240, 480VAC) SPZ Surge Protection (10A standard) SP2 Increased 20KA	TRX Textured BK Black WH White BR Bronze GGV Dark Gray MGV Medium Gray

1. Only 16L up to 700mA can be used with battery backup (EBRC) configuration.
 2. Extended lead times apply. Contact factory for details.
 3. Available in 120 or 277V only.
 4. Not available with other dimming control options.
 5. Not available with motion sensor.
 6. Not available with photocell.

7. Not available in 547 or 480V.
 8. Must specify input voltage.
 9. Available with trim module (TM) at 450mA.
 10. Not available with DCC, DCC and FAWS dimming control options.
 11. Must specify a motion sensor lens. Limited to 30°C ambient if combined with 32L-1000mA (107W).
 12. Not available with DCC and FAWS.

13. Not available with DCC.
 14. Dimming will not be connected to NEMA receptacle if ordering with other control options.
 15. Not available in 480V. Order photocell separately with TLR06/7.

101L 10/21 page 1 of 5

- GENERAL NOTES:**
- ALL LIGHT FIXTURES SHALL BE A FULL-CUTOFF AND MOUNTED AT 90 DEGREES.
 - ALL LIGHT FIXTURES INDICATED ON PLAN ARE BELOW THE SURROUNDING STRUCTURE.
 - ALL LIGHT FIXTURE MOUNTING HEIGHTS (MH) ARE THE ABOVE FINISHED FLOOR HEIGHT.

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PROJECT:	23104	DATE
ISSUE:	ASR	04.05.2024
REVISIONS:		
DRAWN BY:	JLH	
CHECKED BY:	PSS	
CONTENT:	SITE LIGHTING SEVENTH FLOOR PHOTOMETRIC PLAN	

SL1.01

TRINITAS
Varsity Drive Student Housing
 1530 Varsity Drive
 Raleigh, NC 27606

400 W. Morgan Street, Suite 100
 Raleigh, North Carolina, 27603
 Tel: 919.835.9754
 Fax: 919.835.9754

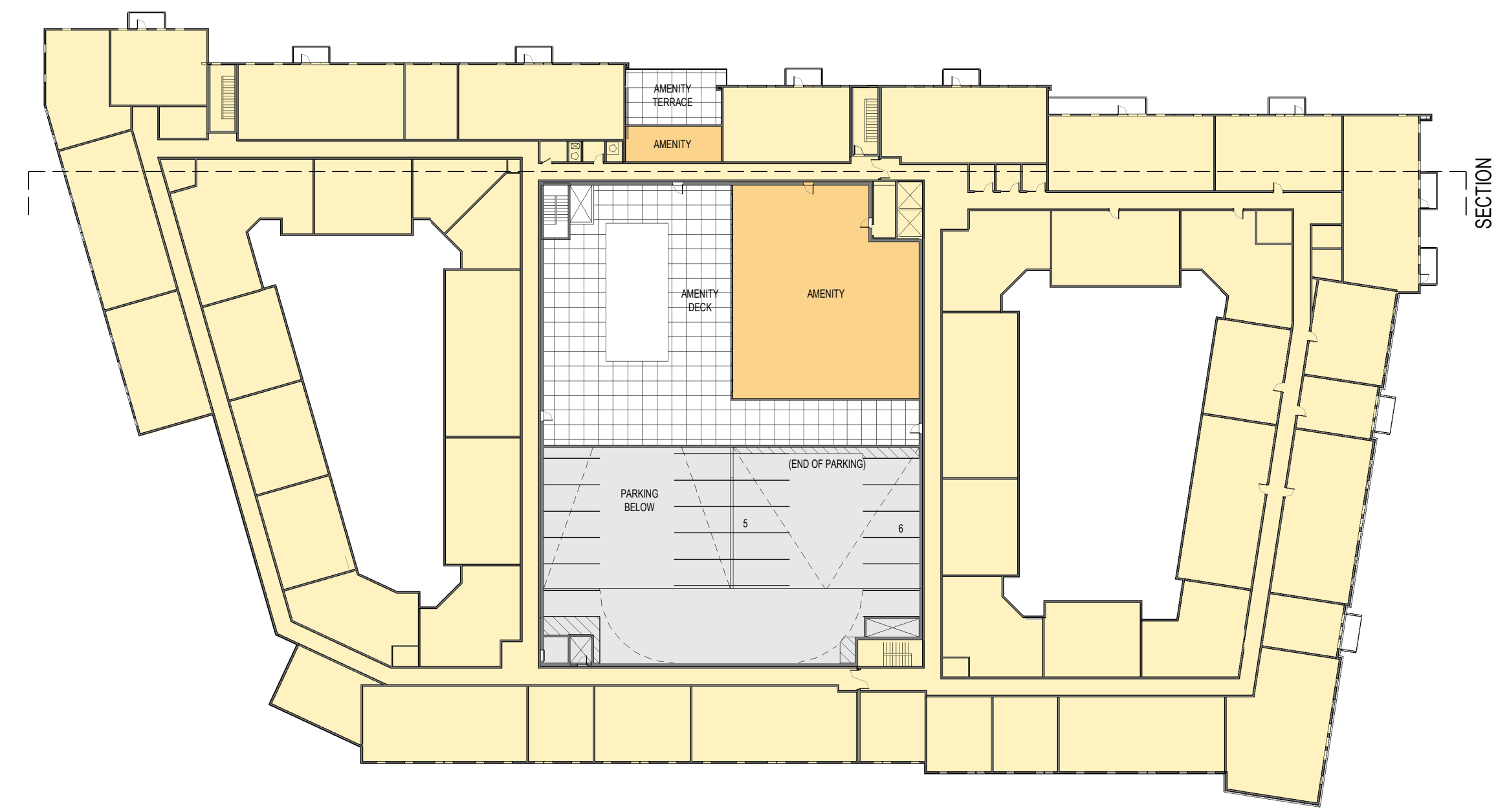
ELECTRICAL
 MECHANICAL
 PLUMBING

TRINTAS DEVELOPMENT
Varsity Drive Apartments
 1530 Varsity Drive
 Raleigh, NC 27606

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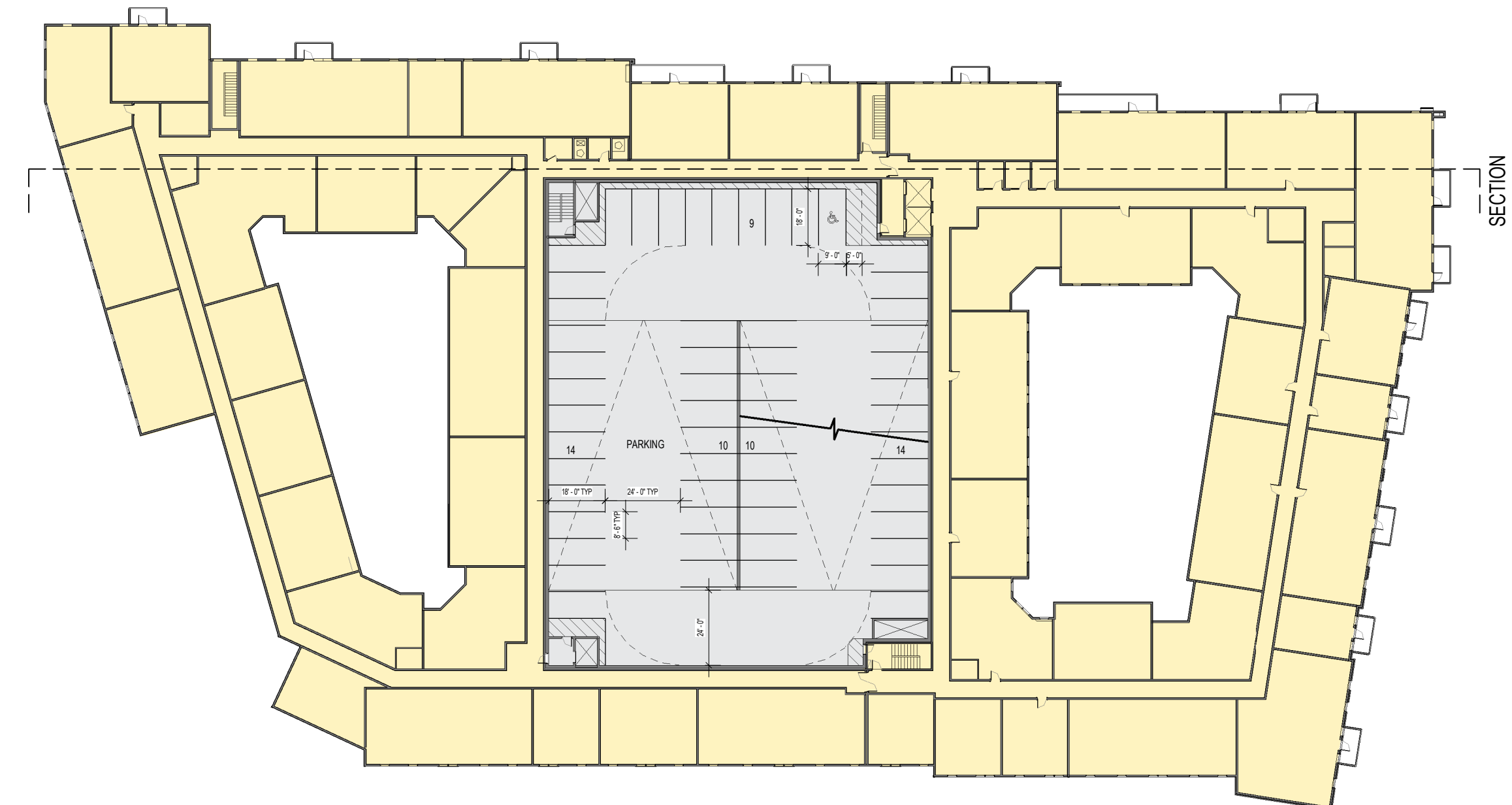
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PROJECT:	DATE	
23104		
ISSUE:	DATE	
ADMIN SITE REVIEW #1	04.16.2024	
REVISION	DESCRIPTION	DATE
CONTENT:	BUILDING PLANS & LEVEL DIAGRAM	



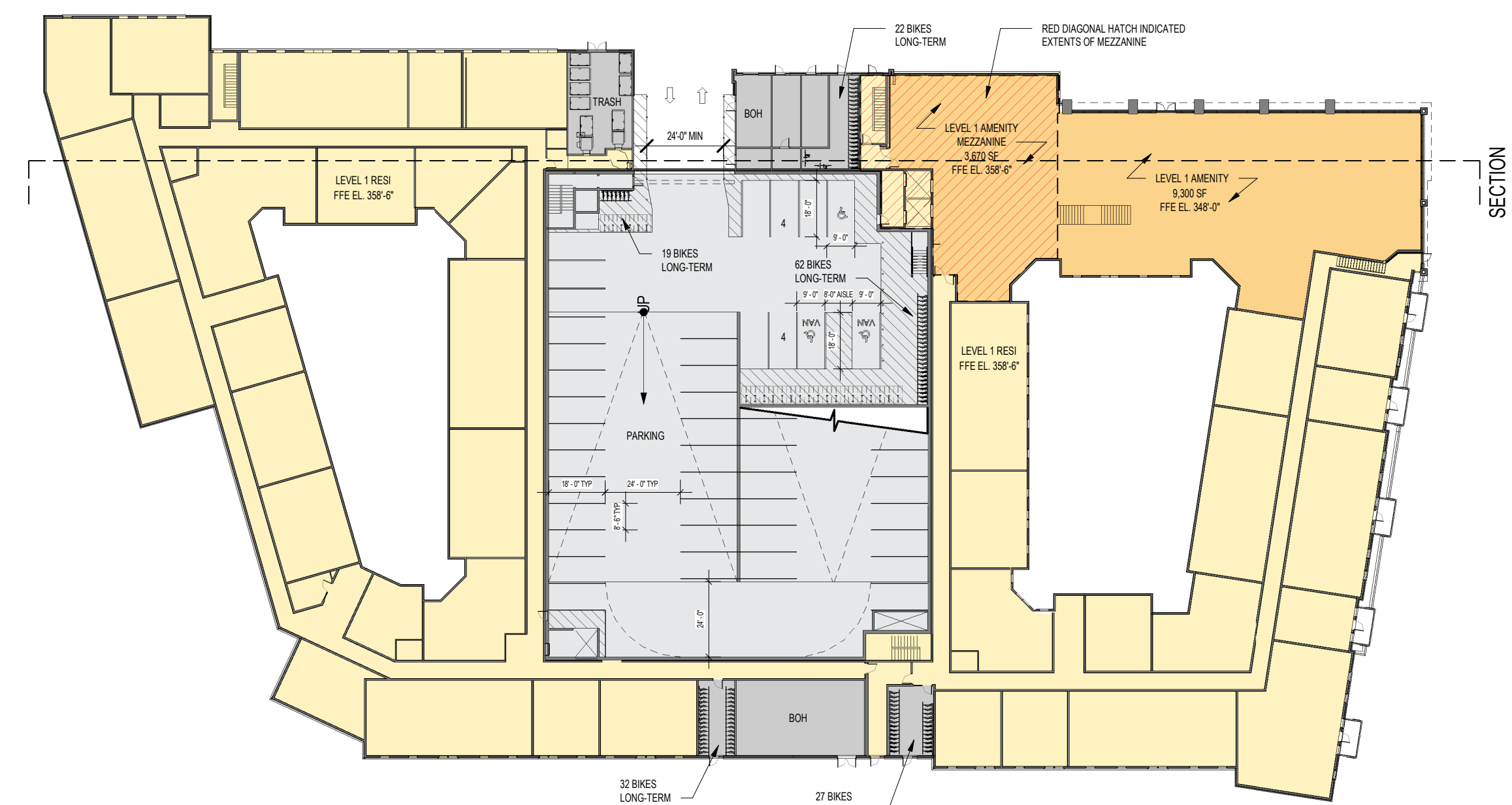
LEVEL 7 BUILDING & TOP PARKING LEVEL PLAN 3

1" = 40'-0"



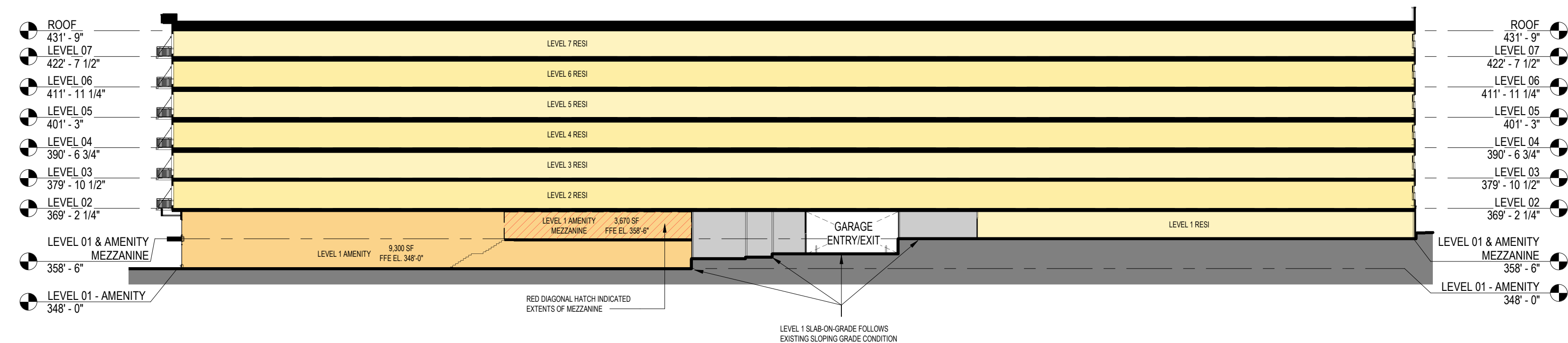
LEVELS 02-06 BUILDING & PARKING PLAN 2

1" = 40'-0"



LEVEL 01 BUILDING & PARKING PLAN 1

1" = 40'-0"



BUILDING LEVEL DIAGRAM 4

1/32" = 1'-0"

VEHICULAR PARKING:
 TOTAL SPACES PROVIDED 326 SPACES
 REQUIRED ACCESSIBLE SPACES 8 SPACES
 PROVIDED ACCESSIBLE SPACES 8 SPACES
 2 OF WHICH ARE ADA VAN SPACES

BIKE PARKING:
 LONG-TERM BIKES REQUIRED 116 BIKES
 LONG-TERM BIKES PROVIDED 162 BIKES PROVIDED WITHIN BLDG

SEE SITE PLAN FOR SHORT-TERM & E-BIKE PROVISIONS

MEZZANINE SUMMARY:
 LEVEL 1 AMENITY 9,300 SF
 LEVEL 1 AMENITY MEZZANINE 3,670 SF
 (3,670 SF / 9,300 SF) = 40%

LEVEL 1 AMENITY MEZZANINE COMPRISES LESS THAN 50% OF THE ROOM OR SPACE IN WHICH IT IS LOCATED, AND THEREFORE IS NOT CONSIDERED A STORY, PER UDO SECTION 3.3.1.E

UDO SECTION 3.3.1.E:
 WHEN A MEZZANINE OR MEZZANINES COMPRISE LESS THAN 50% OF THE FLOOR AREA OF THE ROOM OR SPACE IN WHICH THEY ARE LOCATED, THEY ARE NOT CONSIDERED A STORY. WHEN A MEZZANINE OR MEZZANINE COMPRISE 50% OR MORE OF THE FLOOR AREA OF THE ROOM OR SPACE IN WHICH THEY ARE LOCATED, THEY ARE CONSIDERED A STORY. IF A BUILDING IS TALLER THAN 5 STORIES, MEZZANINES ARE PERMITTED WITHIN ONLY TWO STORIES OF THAT BUILDING. ANY ADDITIONAL INTERMEDIATE LEVEL OTHERWISE QUALIFYING AS A MEZZANINE IS CONSIDERED AN ADDITIONAL STORY. IF A BUILDING HAS FIVE OR FEWER STORIES, THERE IS NO LIMIT ON THE NUMBER OF STORIES IN THAT BUILDING THAT MAY CONTAIN A MEZZANINE.

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REVISION	DESCRIPTION	DATE

CONTENT: BUILDING ELEVATIONS

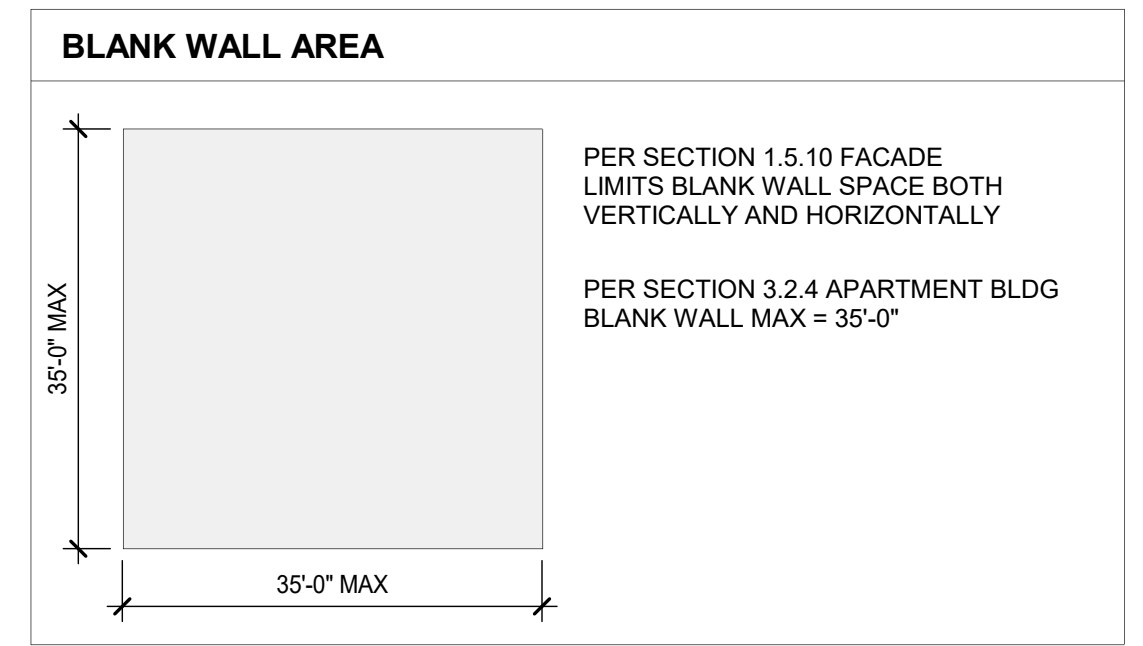


ASR - BUILDING ELEVATION - NORTH
 1/16" = 1'-0" 2



ASR - BUILDING ELEVATION - EAST
 1/16" = 1'-0" 1

BUILDING FOUNDATION WALLS
 BUILDING FOUNDATION WALLS WITHIN 30 FEET OF ROW MAY EXCEED 5 FEET IN HEIGHT IF A PERMANENT PLANTER OF NOT MORE THAN 4 FEET IN HEIGHT IS PROVIDED, PER UDO SECTION 7.2.8E.



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