Durant Rd

SR2000

Falls of **Durant Rd** Neuse Rd SR3552 SR2006 **Durant Rd** Honeyc⊭tt Rd SR2012 Litchford Rd SR2000 SR2005 Falls of Neuse Rd

VICINITY MAP

BEGIN PROJECT

BEGIN TIP PROJECT U-5826

-L- POT STA. 13 + 00.00

SR2000

END PROJÈCT

SR2012

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

U-5826

T.I.P. NO.

UC-1

SHEET NO.

UTILITY CONSTRUCTION PLANS WAKE COUNTY

LOCATION: FALLS OF NEUSE ROAD (SR 2000) FROM I-540 TO DURANT ROAD (SR 2006)

TYPE OF WORK: WATER LINE, WATER SERVICE, AND FIRE HYDRANT RELOCATION

FALLS OF NEUSE

ATTENTION CONTRACTORS

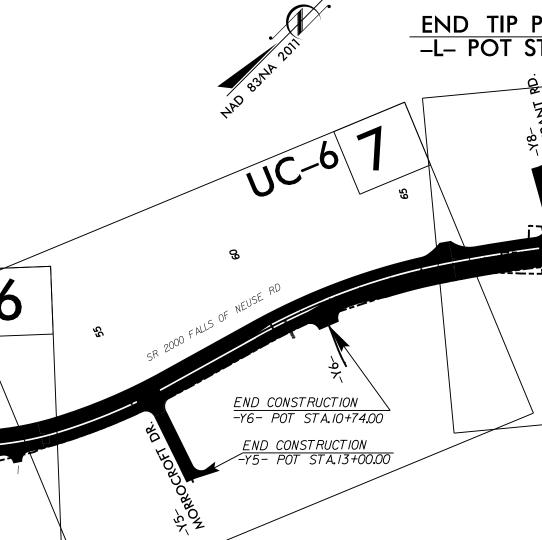
The *Construction Contractor* responsible for the extension of water, sewer, and/or reuse, as approved in these plans, is responsible for contacting the Public Works Department at (919) 996-2409, and the **Public Utilities Department** at (919) 996-4540 at least twenty four hours prior to beginning any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

UC-4⁸ 5

END CONSTRUCTION
-YI- POC STA.II+08.00



SITE PERMITTING APPROVAL

END TIP PROJECT U-5826 -L- POT STA. 76 + 75.00 UC-7 8 FALLS OF NEUSE END CONSTRUCTION -Y9- POT STA.10+84.00 SEE SHEET PMP-8

> DOCUMENT NOT CONSIDERED FINAL UNTIL ALL SIGNATURES ARE COMPLETED

GRAPHIC SCALES PLANS PROFILE (HORIZONTAL) PROFILE (VERTICAL)

UC-2

UC-3A, 3B, 3C

UC-4 THRU UC-7

INDEX OF SHEETS SHEET NO.:

DESCRIPTION:

TITLE SHEET UTILITY SYMBOLOGY **NOTES**

BEGIN EXIST. BRIDGE -L- POT STA. 21+18.17/

END EXIST. BRIDGE -L- POT STA. 24+04.67

FALLS OF NEUSE

DETAILS PLAN SHEETS PROFILE SHEET

WATER OWNER ON PROJECT

CITY OF RALEIGH PUBLIC **UTILITIES DEPARTMENT** ONE EXCHANGE PLAZA BOX #620 RALEIGH, NC 27601

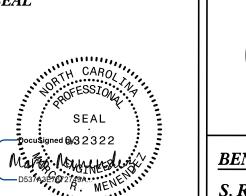
PREPARED IN THE OFFICE OF



UC-5 2

Engineers • Planners • Scientists • Construction Manager 4505 Falls of Neuse Road, Suite 400 Raleigh, NC 27609 Phone (919) 783-9214 • Fax (919) 783-9266 License No. C-764

MARCO MENENDEZ, PE PROJECT ENGINEER MARCO MENENDEZ, PE PROJECT MANAGER CHARLES SHEARON PROJECT DESIGNER



SEAL



DIVISION OF HIGHWAYS UTILITIES UNIT 1555 MAIL SERVICES CENTER **RALEIGH** NC 27699–1555 PHONE (919) 707-6690 FAX (919) 250-4151

BEN UPSHAW, P.E. TEAM LEAD S. REID DAVIDSON, P.E. DDC ENGINEER DON PROPER DIV. 5 UTILITIES ENGINEER MONROE BROWN DIV. 5 UTILITIES COORDINATOR

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PROJECT REFERENCE NO. SHEET NO. UC-2

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

UTILITIES PLAN SHEET SYMBOLS

PROPOSED WATER SYMBOLS

Water Line (Sized as Shown) 11⅓ Degree Bend 22½ Degree Bend 45 Degree Bend 90 Degree Bend Plug Tee Cross Reducer Gate Valve Butterfly Valve Tapping Valve Line Stop Line Stop with Bypass Blow Off Fire Hydrant… Relocate Fire Hydrant Remove Fire Hydrant Water Meter Relocate Water Meter Remove Water Meter Water Pump Station RPZ Backflow Preventer DCV Backflow Preventer Relocate RPZ Backflow Preventer Relocate DCV Backflow Preventer

PROPOSED MISCELLANOUS UTILITIES SYMBOLS

ower Pole ····································	Thrust Block
elephone Pole	Air Release Valve
oint Use Pole ····································	Utility Vault
elephone Pedestal	Concrete Pier
tility Line by Others Type as Shown)	Steel Pier
renchless Installation	Plan Note
incasement by Open Cut	Pay Item Note
ncasement	PAY ITEM

EXISTING UTILITIES SYMBOLS

	LAIOIING OILLI	TILO OTMOOLO
Power Pole	•	*Underground Power Line
Telephone Pole	- ◆-	*Underground Telephone Cable
Joint Use Pole	-	*Underground Telephone Conduit
Utility Pole	•	*Underground Fiber Optics Telephone Cable —————
Utility Pole with Base		*Underground TV Cable
H-Frame Pole	•—•	*Underground Fiber Optics TV Cable
Power Transmission Line Tower		*Underground Gas Pipeline
Water Manhole	₩	Aboveground Gas Pipeline
Power Manhole	®	*Underground Water Line
Telephone Manhole		Aboveground Water Line ———————————————————————————————
Sanitary Sewer Manhole		*Underground Gravity Sanitary Sewer Liness
Hand Hole for Cable	HH	Aboveground Gravity Sanitary Sewer Line A/G Sanitary Sewer
Power Transformer		*Underground SS Forced Main Line
Telephone Pedestal		Underground Unknown Utility Line
CATV Pedestal		SUE Test Hole
Gas Valve	\Diamond	Water Meter
Gas Meter	\Diamond	Water Valve ····································
Located Miscellaneous Utility Object	\odot	Fire Hydrant ····································
Abandoned According to Utility Records	AATUR	Sanitary Sewer Cleanout ⊕
End of Information	E.O.I.	

[^] For Existing Utilities	
Utility Line Drawn fro (Type as Shown)	m Record
Designated Utility Lin (Type as Shown)	e

REV: 2/1/2012

2. THE EXISTING UTILITIES BELONG TO CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT.

3. ALL WATER LINES TO BE INSTALLED
WITHIN COMPLIANCE OF THE RULES AND
REGULATIONS OF THE NORTH CAROLINA
DEPARTMENT OF ENVIRONMENTAL QUALITY,
DIVISION OF WATER RESOURCES,
PUBLIC WATER SUPPLY SECTION. ALL SEWER
LINES TO BE INSTALLED WITHIN COMPLIANCE
OF THE RULES AND REGULATIONS OF THE
NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT QUALITY, DIVISION OF WATER
RESOURCES, WATER QUALITY SECTION.
PERFORM ALL WORK IN ACCORDANCE WITH THE
APPLICABLE PLUMBING CODES.

4. THE UTILITY OWNER OWNS THE EXISTING UTILITY FACILITIES AND WILL OWN THE NEW UTILITY FACILITIES AFTER ACCEPTANCE BY THE DEPARTMENT. THE DEPARTMENT OWNS THE CONSTRUCTION CONTRACT AND HAS ADMINISTRATIVE AUTHORITY. COMMUNICATIONS AND DECISIONS BETWEEN THE CONTRACTOR AND UTILITY OWNER ARE NOT BINDING UPON THE DEPARTMENT OR THIS CONTRACT UNLESS AUTHORIZED BY THE ENGINEER. AGREEMENTS BETWEEN THE UTILITY OWNER AND CONTRACTOR FOR THE WORK THAT IS NOT PART OF THIS CONTRACT OR IS SECONDARY TO THIS CONTRACT ARE ALLOWED, BUT ARE NOT BINDING UPON THE DEPARTMENT.

5. PROVIDE ACCESS FOR THE DEPARTMENT PERSONNEL AND THE OWNER'S REPRESENTATIVES TO ALL PHASES OF CONSTRUCTION. NOTIFY DEPARTMENT PERSONNEL AND THE UTILITY OWNER TWO WEEKS PRIOR TO COMMENCEMENT OF ANY WORK AND ONE WEEK PRIOR TO SERVICE INTERRUPTION. KEEP UTILITY OWNERS' REPRESENTATIVES INFORMED OF WORK PROGRESS AND PROVIDE OPPORTUNITY FOR INSPECTION OF CONSTRUCTION AND TESTING.

6. THE PLANS DEPICT THE BEST AVAILABLE INFORMATION FOR THE LOCATION, SIZE, AND TYPE OF MATERIAL FOR ALL EXISTING UTILITIES. MAKE INVESTIGATIONS FOR DETERMINING THE EXACT LOCATION, SIZE, AND TYPE MATERIAL OF THE EXISTING FACILITIES AS NECESSARY FOR THE CONSTRUCTION OF THE PROPOSED UTILITIES AND FOR AVOIDING DAMAGE TO EXISTING FACILITIES. REPAIR ANY DAMAGE INCURRED TO EXISTING FACILITIES TO THE ORIGINAL OR BETTER CONDITION AT NO ADDITIONAL COST TO THE DEPARTMENT.

7. MAKE FINAL CONNECTIONS OF THE NEW WORK TO THE EXISTING SYSTEM WHERE INDICATED ON THE PLANS, AS REQUIRED TO FIT THE ACTUAL CONDITIONS, OR AS DIRECTED.

8. MAKE CONNECTIONS BETWEEN EXISTING AND PROPOSED UTILITIES AT TIMES MOST CONVENIENT TO THE PUBLIC, WITHOUT ENDANGERING THE UTILITY SERVICE, AND IN ACCORDANCE WITH THE UTILITY OWNER'S REQUIREMENTS. MAKE CONNECTIONS ON WEEKENDS, AT NIGHT, AND ON HOLIDAYS IF NECESSARY.

9. ALL UTILITY MATERIALS SHALL BE APPROVED PRIOR TO DELIVERY TO THE PROJECT. SEE 1500-7, "SUBMITTALS AND RECORDS" IN SECTION 1500 OF THE STANDARD SPECIFICATIONS.

10. 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 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.

11.WHERE IT IS IMPOSSIBLE TO OBTAIN PROPER SEPARATION, OR ANYTIME A SANITARY SEWER PASSES OVER A WATERMAIN, DIP MATERIALS OR STEEL ENCASEMENT EXTENDED 10' ON EACH SIDE OF CROSSING MUST BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS.

12. MAINTAIN 18" MIN. VERTICAL
SEPARATION AT ALL WATERMAIN & RCP STORM
DRAIN CROSSINGS; MAINTAIN 24" MIN.
VERTICAL SEPARATION AT ALL SANITARY
SEWER SEWER & RCP STORM DRAIN
CROSSINGS. WHERE ADEQUATE SEPARATIONS
CANNOT BE ACHIEVED, SPECIFY DIP
MATERIALS & A CONCRETE CRADLE HAVING 6"
MIN CLEARANCE AS SHOWN IN THE STANDARD
DETAIL.

13.ALL OTHER UNDERGROUND UTILITIES SHALL CROSS WATER & SEWER FACILITIES WITH 18" MIN. VERTICAL SEPARATION REQUIRED.

14.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.

15.CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER & SEWER SERVICE TO EXISTING RESIDENES & BUSINESSES THROUGHOUT CONSTRUCTION OF PROJECT. ANY NECESSARY SERVICE INTERRUPTIONS SHALL BE PRECEDED BY A 24 HOUR ADVANCE NOTICE TO THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT.

16. 3.0' MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCEMAINS. 4.0' MINIMUM COVER IS REQUIRED ON ALL REUSE MAINS.

PROJECT SPECIFIC NOTES:

1. PROPOSED WATER LINE SHALL BE DIP OF THE SAME PRESSURE CLASS AND THICKNESS AS THE EXISTING WATER LINE.

2. ALL PIPE JOINTS AND FITTINGS SHALL BE RESTRAINED WITH RESTRAINED JOINTS. IN ADDITION, THRUST BLOCKING SHALL BE PROVIDED AS SHOWN IN THE STANDARD DETAILS.

3. CONTRACTOR SHALL ENSURE THAT THE CONNECTION BETWEEN EXISTING AND PROPOSED WATER LINE SHALL BE AT TIMES MOST CONVENIENT TO THE PUBLIC AND UTILITY OWNER.

4. CONTRACTOR SHALL COORDINATE WITH THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT STAFF 72 HOURS PRIOR TO THE SHUTDOWN OF THE EXISTING WATER LINE.

PROJECT REFERENCE NO. SHEET NO.

U-5826

DESIGNED BY: DK

DRAWN BY: CS

CHECKED BY: MM

APPROVED BY:

REVISED:

NORTH CAROLINA
DEPARTMENT OF
TRANSPORTATION

UTILITIES ENGINEERING SEC.
PHONE: (919)707-6690
FAX: (919)250-4151

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4505 Falls of Neuse Road, Suite 400
Raleigh, NC 27609
Phone (919) 783-9214 • Fax (919) 783-9266
License No. C-764

UTILITY CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

5. CONTRACTOR SHALL REMOVE EXISTING 16" WATER LINE AS NECESSARY TO MAKE CONNECTION WITH THE NEW WATERLINE.

6. CONTRACTOR SHALL PLACE FOUNDATION CONDITIONING MATERIALS AND GEOTEXTILE IN ALL PROPOSED WATERLINE TRENCHES.

7. CONTRACTOR AND RALEIGH WATER WILL EXCHANGE ALL NECESSARY CONTACTS / PHONE NUMBERS AT THE PRE CONSTRUCTION CONFERENCE

8. RALEIGH WATER WILL STAGE A VALVE CREW AT THE EM JOHNSON WATER TREATMENT PLANT DURING CONSTRUCTION TO RESPOND TO CONTRACTOR REQUESTS AS NECESSARY.

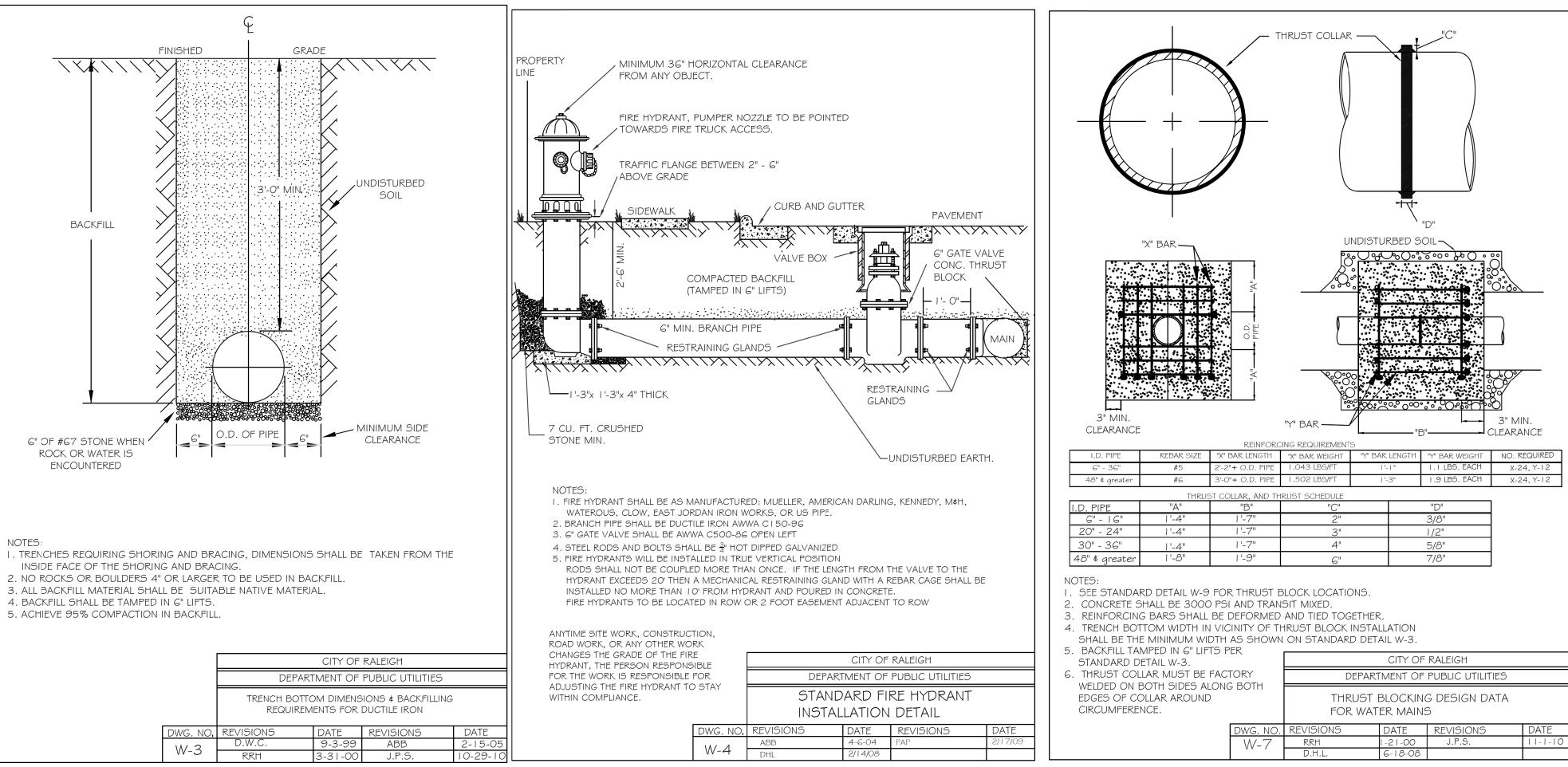
9. UPON EXPOSING ANY OF RALEIGH WATER'S ASSETS, CONTRACTOR SHALL IMMEDIATELY NOTIFY RALEIGH WATER ASSET MANAGEMENT TO PERFORM CONDITION ASSESSMENT OF THE ASSET WHILE EXPOSED.

10. CONTRACTOR SHALL PROVIDE A 2-DAY NOTIFICATION TO RALEIGH WATER PRIOR TO ANYTIME CONTRACTOR WILL EXCAVATE WITHIN 10 FEET OF ANY RALEIGH WATER MAIN.

11. ALL NEW WATER INFRASTRUCTURE SHALL BE IN COMPLIANCE WITH THE CITY OF RALEIGH PUBLIC UTILITIES HANDBOOK.

.-Wastewater/U-5826_ut_notes_UCØ3_psh.dgn

PROJECT TYPICAL DETAILS



THRUST BLOCKING

THRUST BLOCK

TEE INTERSECTION

. CONCRETE SHALL BE 3000 PSI

MECHANICAL JOINT FITTINGS.

CONCRETE THRUST BLOCKING.

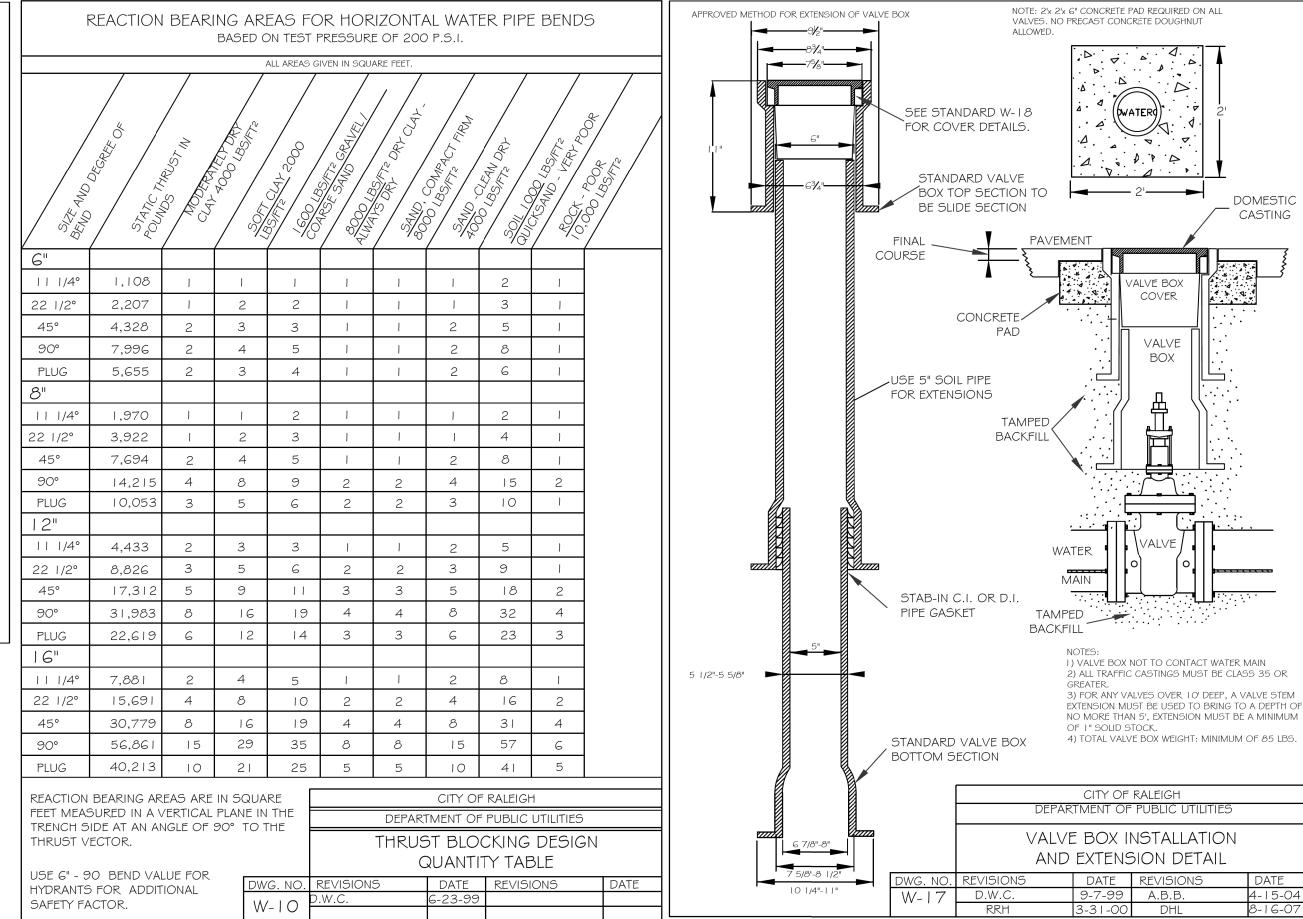
2. CONCRETE SHALL NOT CONTACT BOLTS OR ENDS OF

3. TRENCHES SHALL CONFORM TO STANDARD DETAIL

4. SEE STANDARD THRUST BLOCK TABLES, W-10 THRU W-II, FOR AREA OF CONCRETE REQUIRED.

5. ALL BENDS AND INTERSECTIONS SHALL HAVE

45° BEND



DOCUMENT NOT CONSIDERED FINAL

PHONE: (919)707-6690 UTILITY CONSTRUCTION

4505 Falls of Neuse Road, Suite 400 Raleigh, NC 27609 Phone (919) 783-9214 • Fax (919) 783-9266 UTILITY CONSTRUCTION

UNLESS ALL SIGNATURES COMPLETED

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DESIGNED BY: DK

CHECKED BY: MM

NORTH CAROLINA DEPARTMENT OF

TRANSPORTATION

FAX: (919)250-4151

UTILITIES ENGINEERING SEC

DRAWN BY:

REVISED:

APPROVED BY:

SHEET NO.

UC-3A

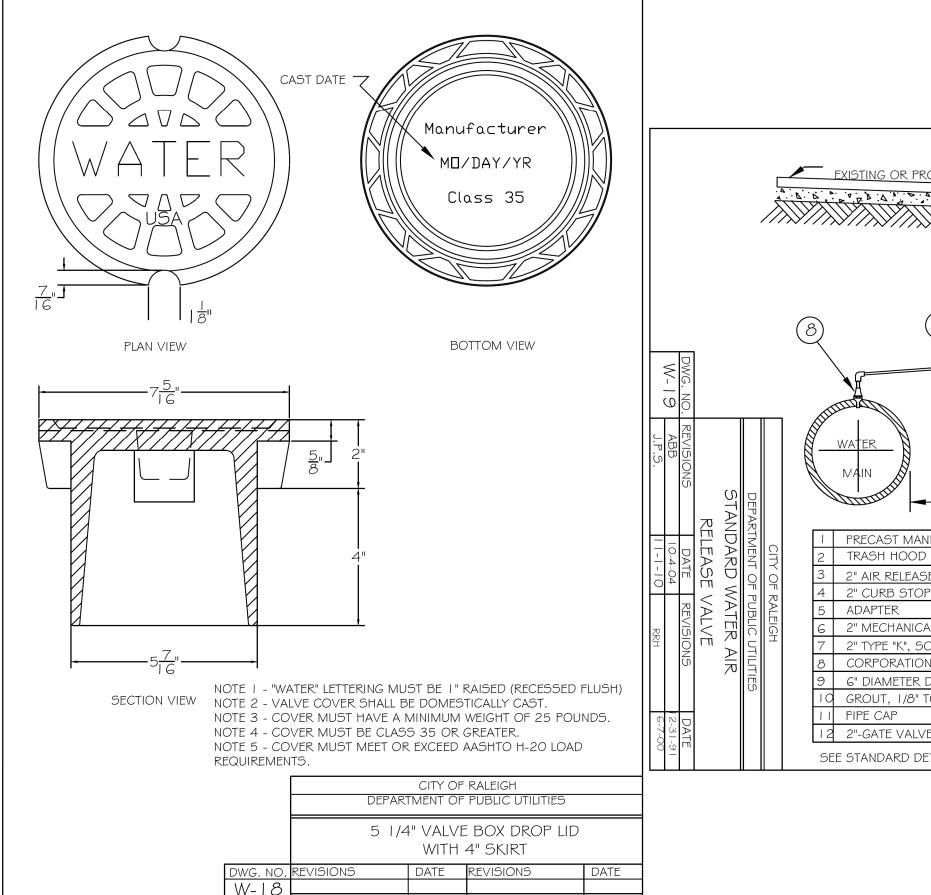
SEAL

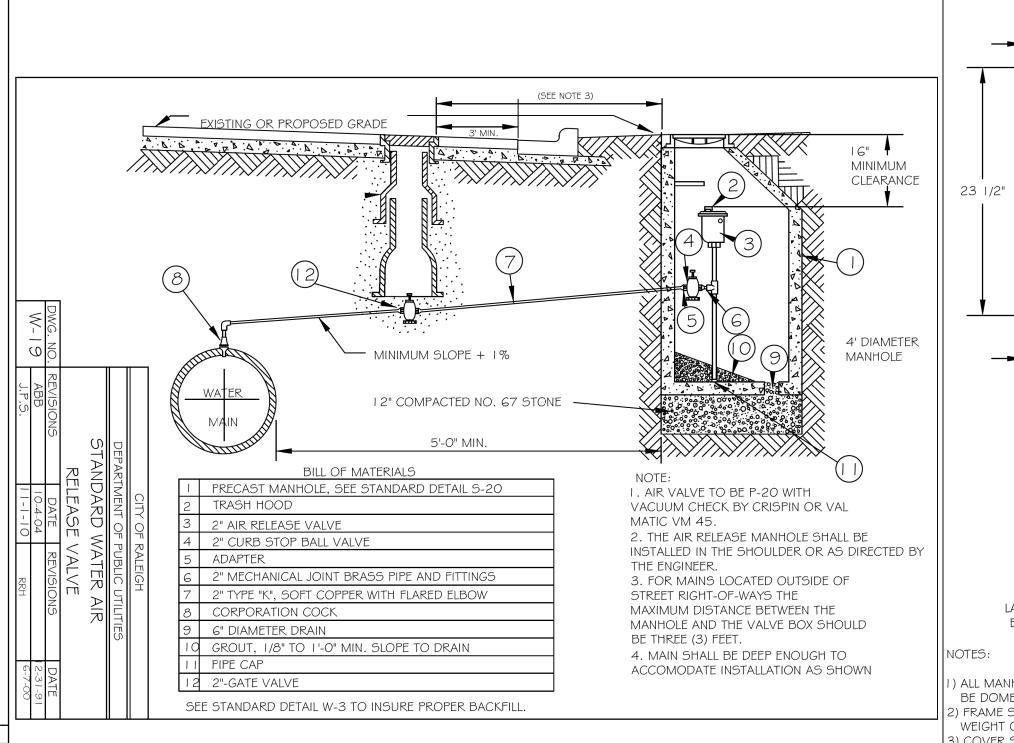
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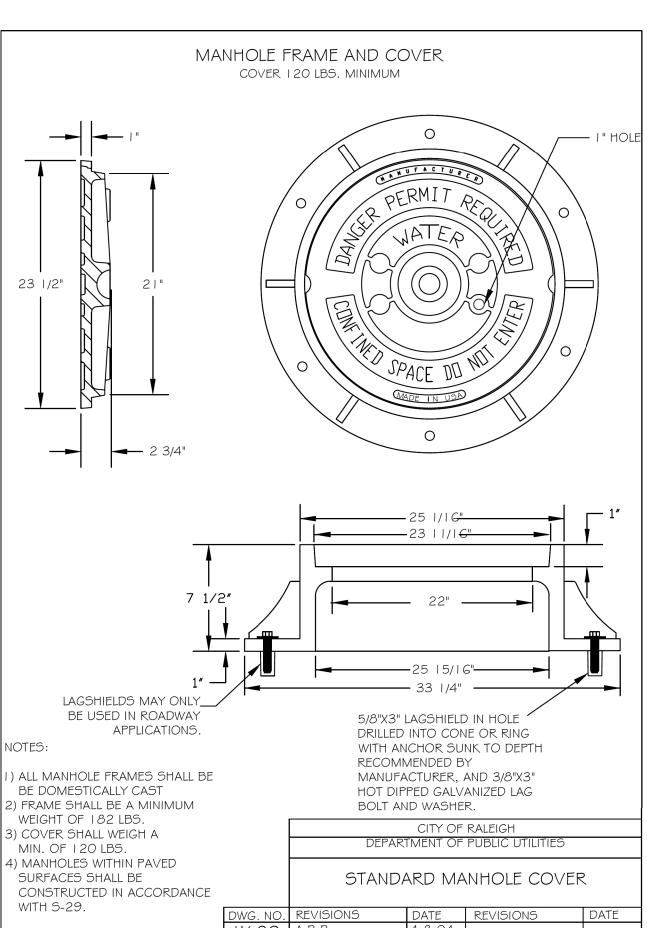
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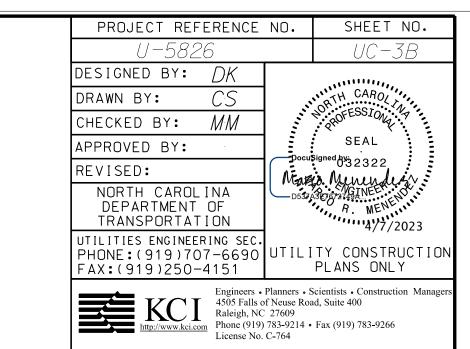
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PROJECT TYPICAL DETAILS



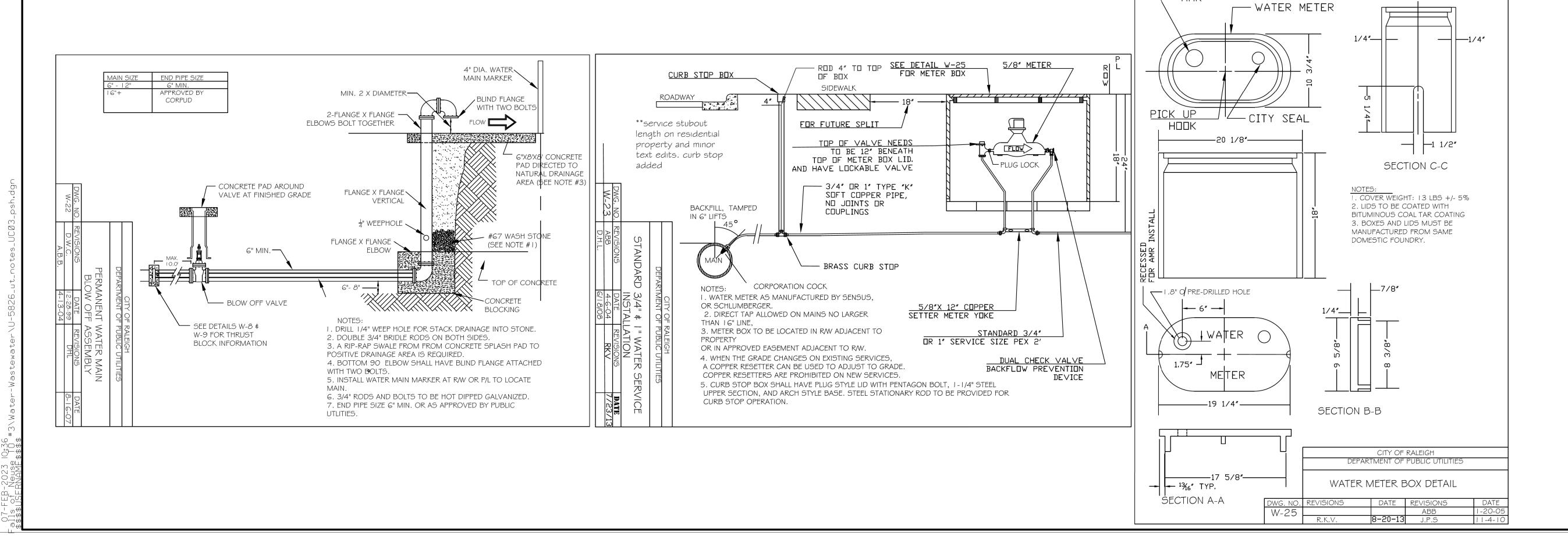




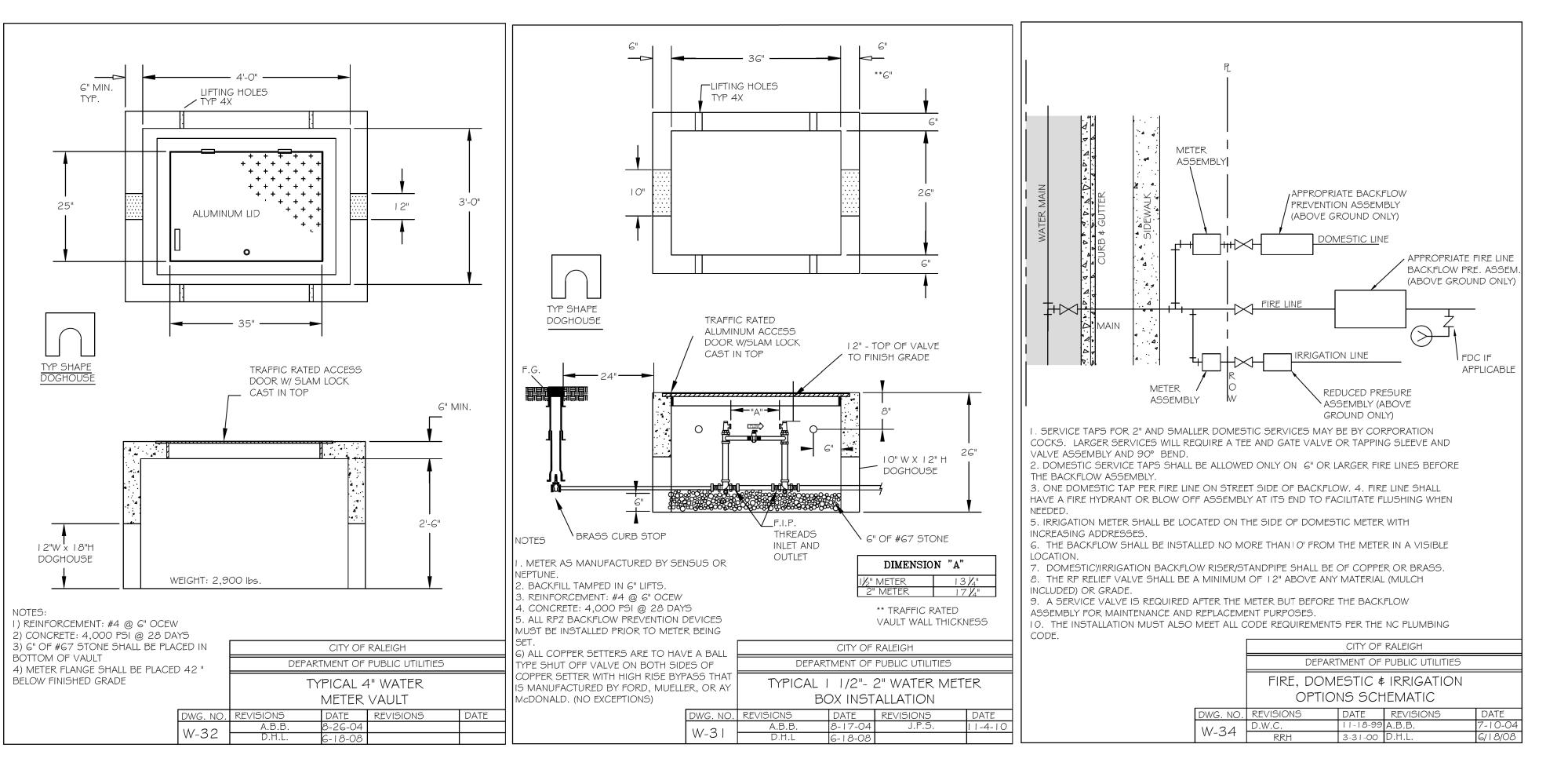


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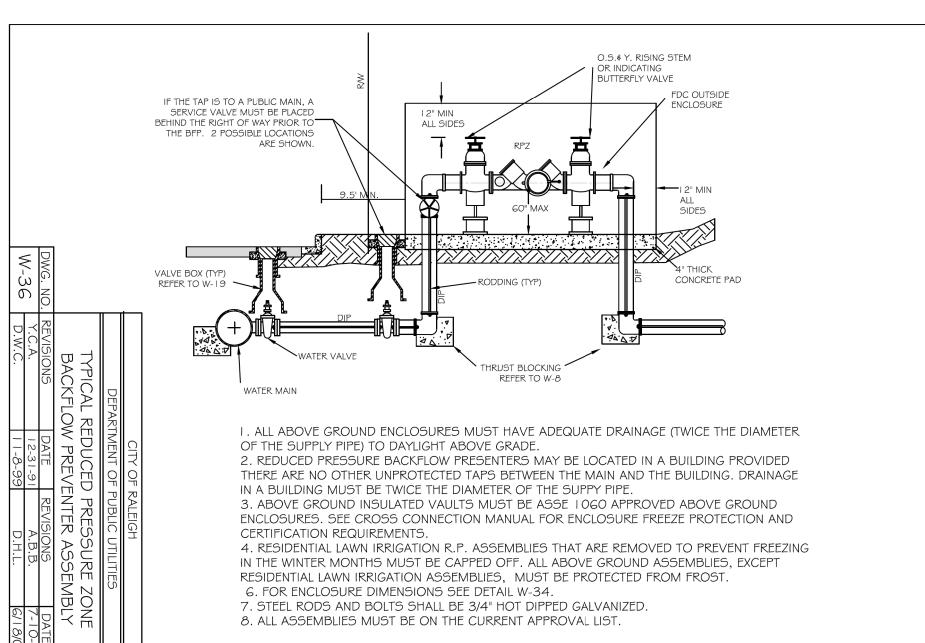
PROJECT TYPICAL DETAILS

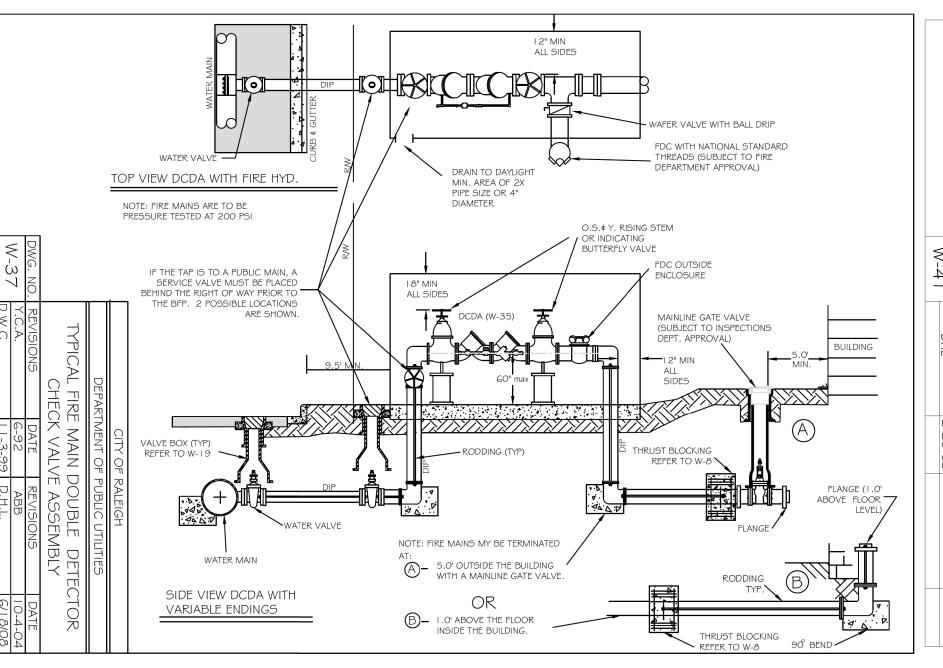


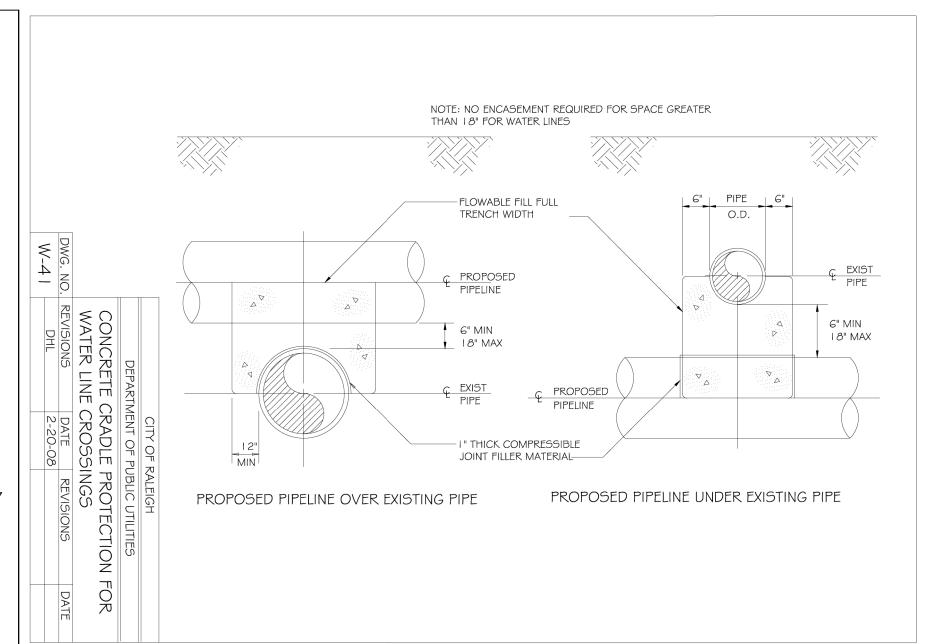


UTILITY CONSTRUCTION

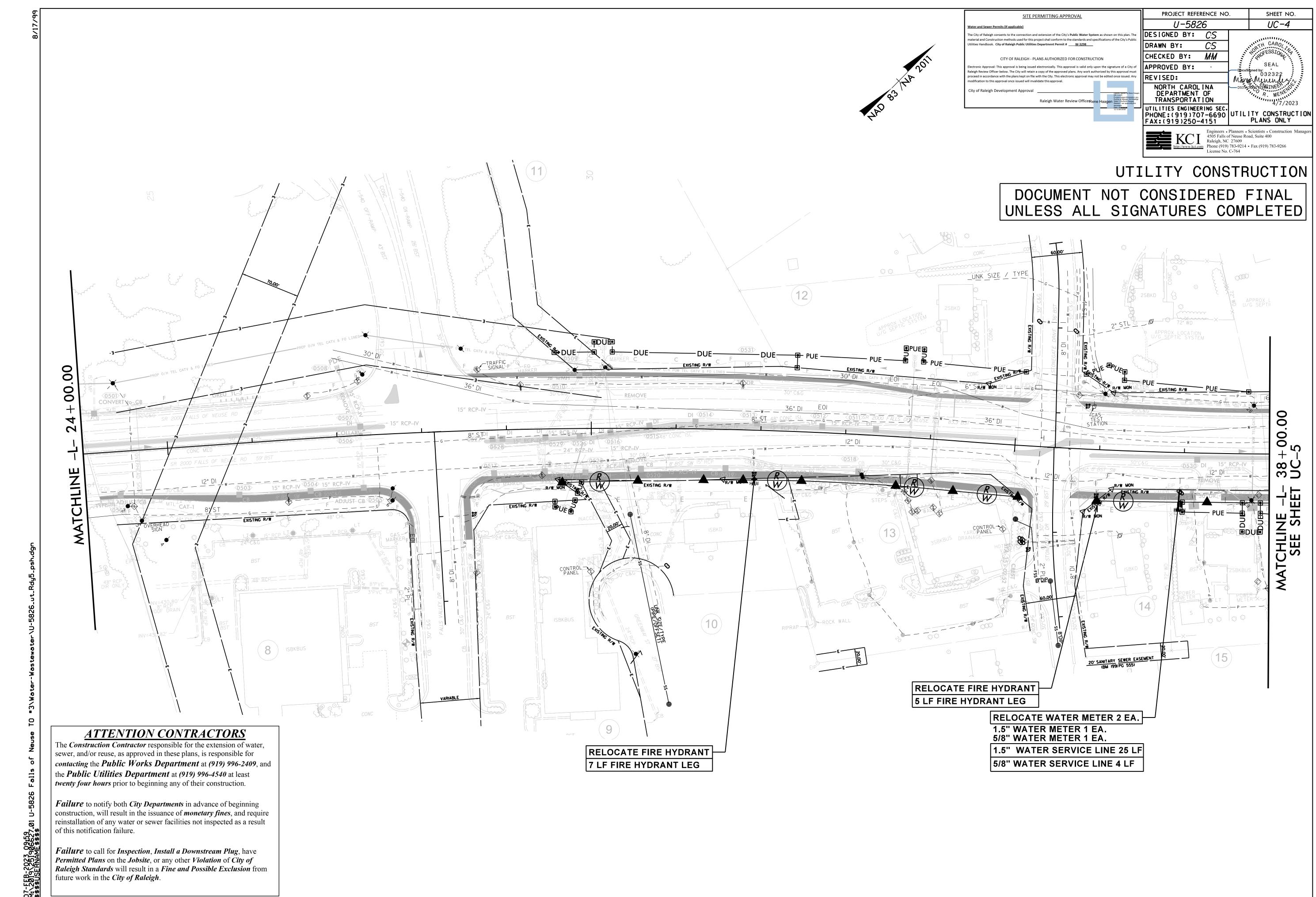
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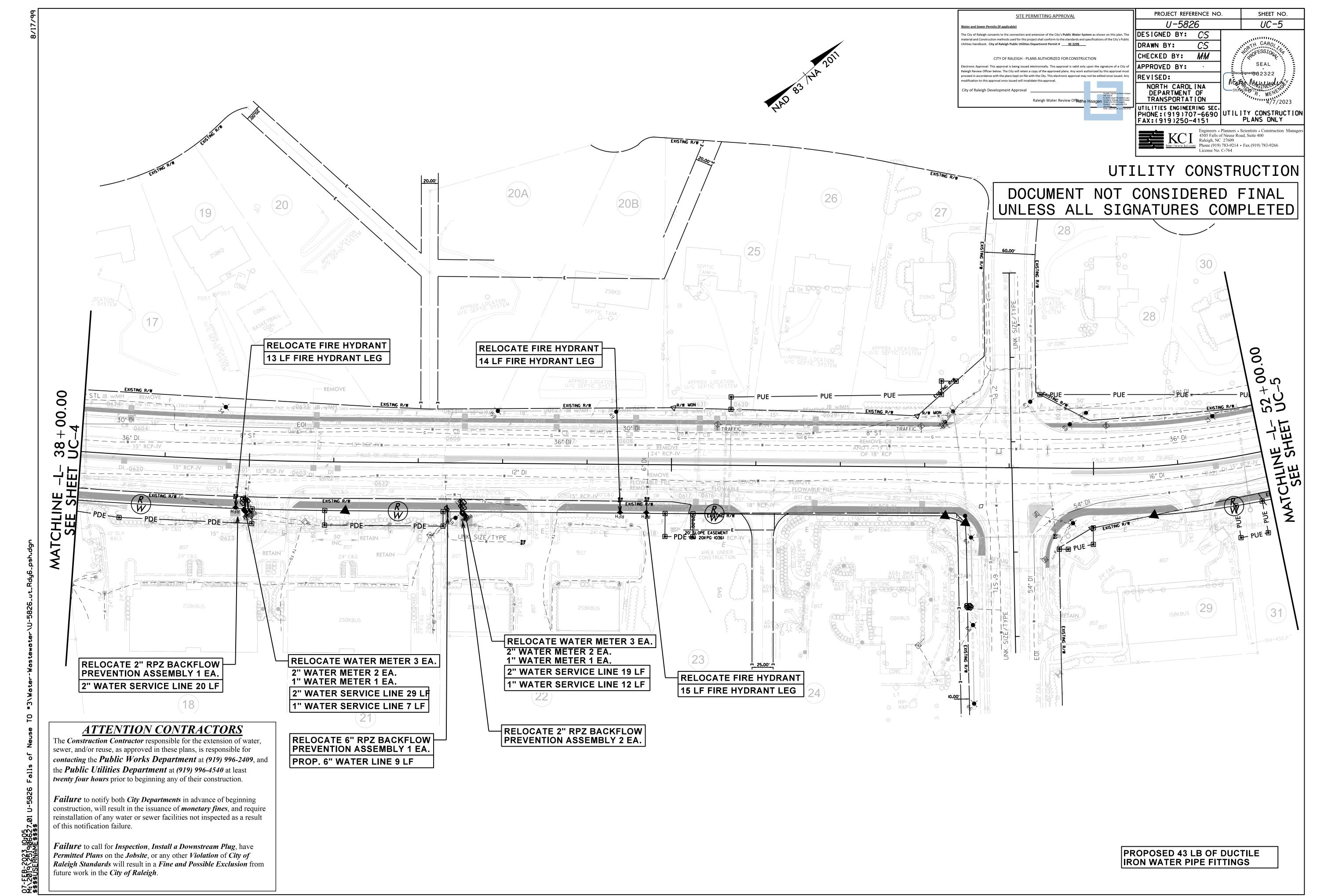


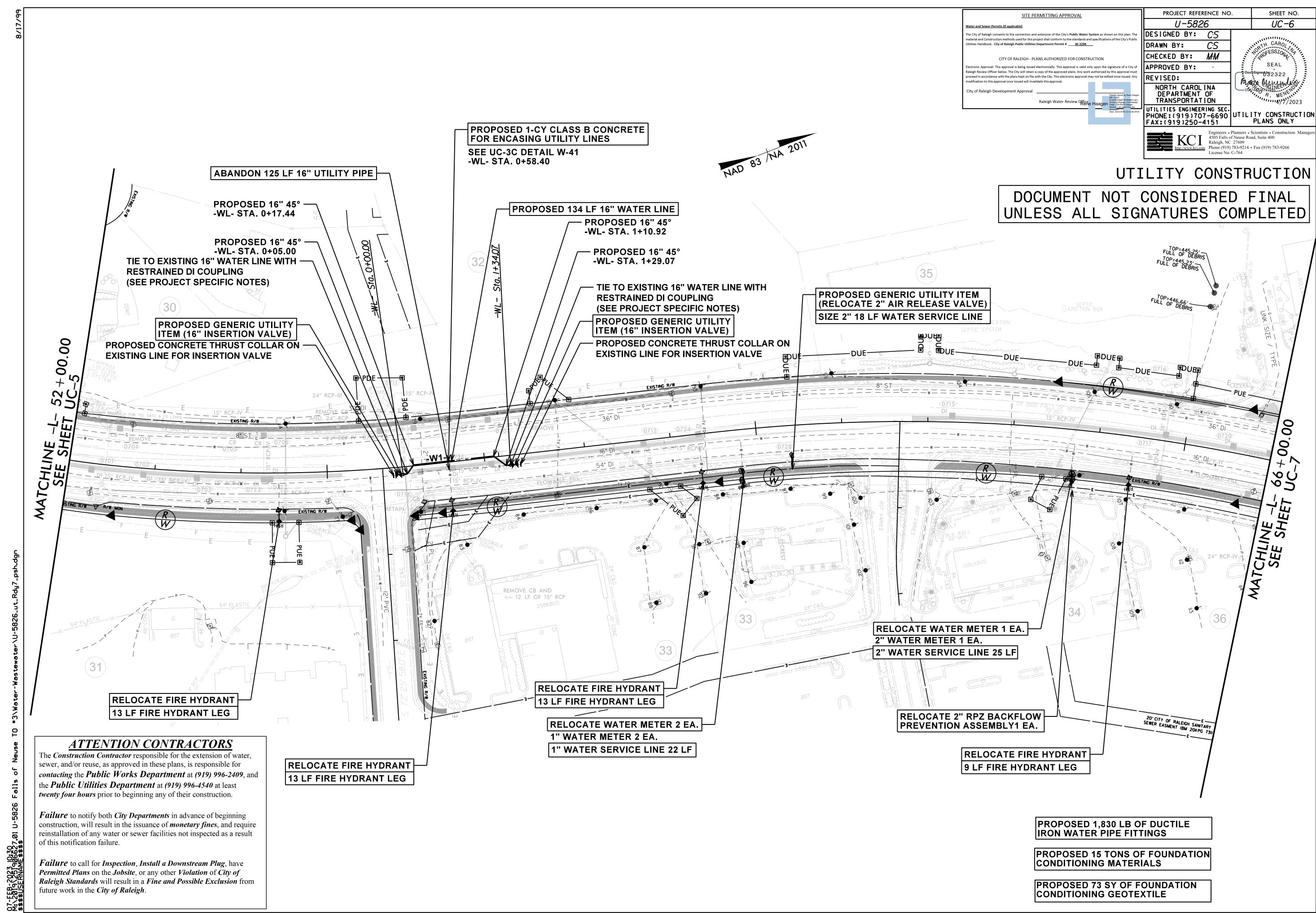


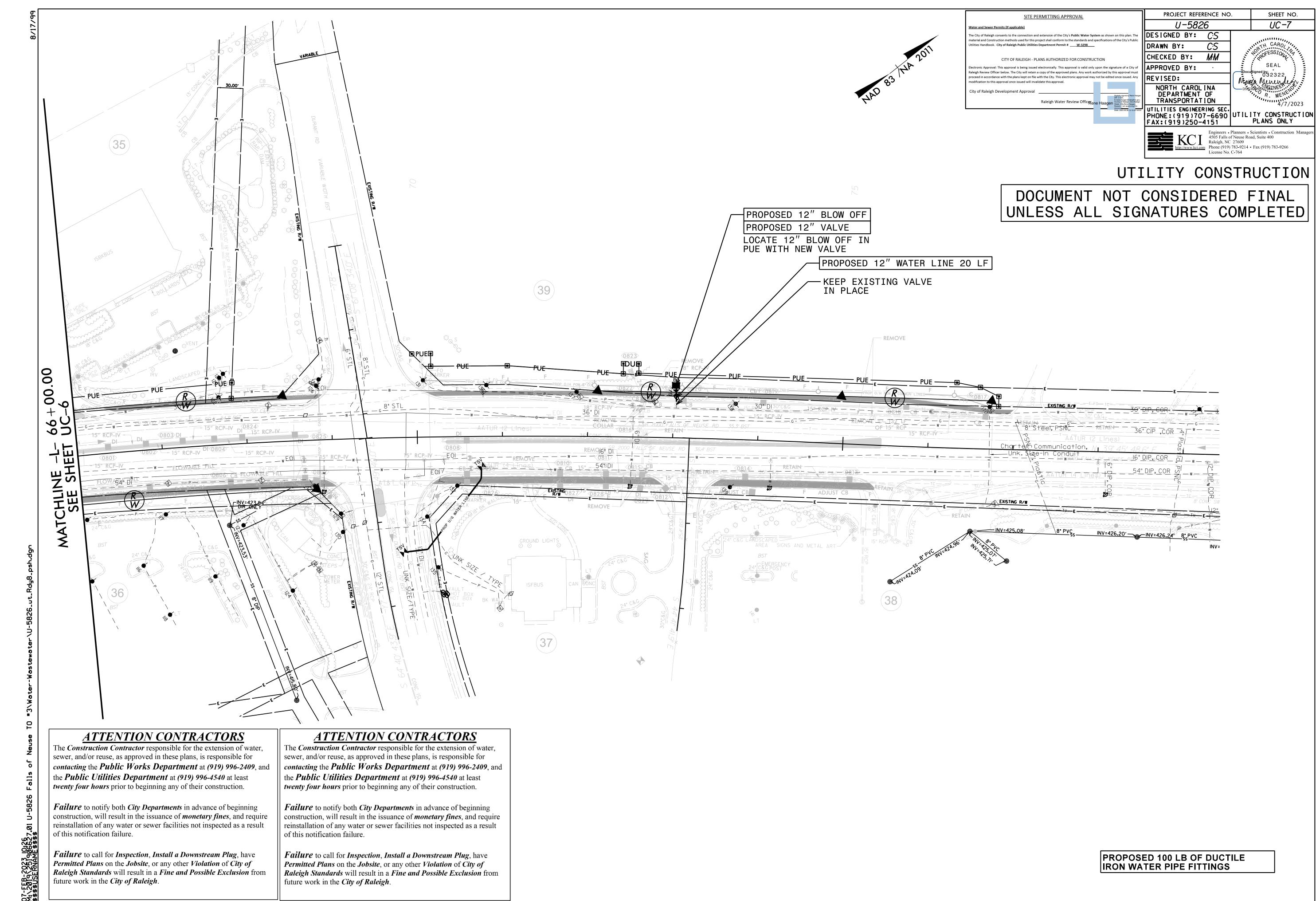


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- EXISTING 16" WATER LINE

1 + 00

2 + 00

0 + 00