

AGREEMENT OVERVIEW

NORTH CAROLINA
UNION COUNTY

DATE: 3/18/2026

PARTIES TO THE AGREEMENT:

PROJECT NUMBERS:

NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION

TIP #: U-4714BA

AND

WBS ELEMENTS: PE 39078.1.9
CON 39078.3.10

UNION COUNTY

The purpose of this Agreement is to identify the participation in project costs, project delivery and/or maintenance, by the other party to this Agreement, as further defined in this Agreement.

SCOPE OF PROJECT (“Project”): This Project consists of water line relocation and betterments related to widening SR 1009 (John Street / Old Monroe Road) to multi-lanes from west of Morningside Meadow Lane to Indian Trail Road.

ESTIMATED COST TO OTHER PARTY: \$ 3,221,261.68

ESTIMATED COST TO OTHER PARTY (PE): \$ 8,261.68

ESTIMATED COSTS TO OTHER PARTY (CON): \$ 3,213,000.00

PAYMENT TERMS: Union County will submit payment upon execution of agreement.

MAINTENANCE: Union County is responsible for all utility maintenance.

EFFECTIVE DATES OF AGREEMENT:

START: Upon Full Execution of this Agreement

END: When work is complete and all terms are met.

This **Agreement** is made and entered into on the last date executed below, by and between the North Carolina Department of Transportation, an agency of the State of North Carolina, hereinafter referred to as the **Department** and the Union County, hereinafter referred to as the **County**; and collectively referred to as the **Parties**.

The **Parties** to this Agreement, listed above, intend that this Agreement, together with all attachments, schedules, exhibits, and other documents that both are referenced in this Agreement and refer to this Agreement, represents the entire understanding between the **Parties** with respect to its subject matter and supersedes any previous communication or agreements that may exist.

I. WHEREAS STATEMENTS

WHEREAS, this Agreement is made under the authority granted to the **Department** by the North Carolina General Assembly under General Statutes of North Carolina (NCGS), particularly Chapter 136-27.1 and 136-27.3; and,

WHEREAS, the **Department** has plans to make certain street and highway constructions and/or traffic control improvements; and,

WHEREAS, the **County** has requested that the **Department** perform work or provide services; and,

WHEREAS, the **Parties** hereto wish to enter into an agreement for scoped work to be performed or provided by the **Department** (including construction, reviews, goods, or services) with reimbursement for the costs thereof by the **County** as hereinafter set out; and,

WHEREAS, the **Department** and the **County** have agreed that the jurisdictional limits of the **Parties**, as of the date of entering the agreement for the above-mentioned project, are to be used in determining the duties, responsibilities, rights, and legal obligations of the **Parties** hereto for the purposes of this Agreement.

NOW, THEREFORE, this Agreement states the promises and undertakings of each party as herein provided, and the **Parties** do hereby covenant and agree, each with the other, as follows:

II. RESPONSIBILITIES

A. DEPARTMENT

The **Department** shall be responsible for all phases of project delivery to include utility relocation, and construction, and/or maintenance as shown in the **PROJECT DELIVERY REQUIREMENTS** Provision.

B. COUNTY

The **County** shall be responsible for maintenance as shown in the **PROJECT DELIVERY REQUIREMENTS** Provision and payment as shown in the **COSTS AND FUNDING** Provision.

III. PROJECT DELIVERY REQUIREMENTS

A. PRELIMINARY ENGINEERING

- i. At the request of the **County**, the **Department** will provide design services for the required relocation and/or betterment of the **County's** utility lines as affected by Project U-4714BA. The work is described as follows: water line design.

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- ii. The **Department** will ensure the design of municipal utility relocation is performed by professional engineering services. If the **Department** revises highway plans, then the **County** reserves the right to re-engineer relocation plans.
- iii. Upon the satisfactory completion of the utility construction plans covered under this Agreement, the **County** shall review and approve the plans, the associated estimated utility construction cost, and special provisions to be made part of the **Department's** roadway contract for highway construction. The **County** shall release the **Department** of any future responsibility for the design of the utility construction plans. Said releases shall be deemed to be given by the **County** upon completion of the plans, estimate, special provisions and acceptance by the **Department** and **County** for the plans to be made part of the highway contract.

B. CONSTRUCTION

- i. At the request of the **County** the **Department** shall place provisions in the construction contract for Project U-4714BA, for the contractor to adjust and relocate utility lines and/or provide betterment. The work is described as follows: water line relocation.
- ii. Said work shall be accomplished in accordance with plan sheets, attached hereto as Exhibit "A", cost estimate attached hereto as Exhibit "B", and project specific provisions, if applicable, attached hereto as Exhibit "C".
- iii. The Department's Standard Special Provisions binds the contractor to guarantee materials and workmanship against latent and patent defects arising from faulty materials, faulty workmanship or negligence for a period of twelve months following the date of final acceptance of the work for maintenance and shall replace such defective materials and workmanship without cost to the **Department**. The highway contractor will not be responsible for damage due to faulty design, normal wear and tear, for negligence on the part of the **Department**, and/or for use in excess of the design. Where items of material carry a manufacturer's guarantee for any period in excess of twelve months, then the manufacturer's guarantee shall apply to that particular piece of material. Appropriate provisions of the payment and/or performance bonds shall cover this guarantee for the project. Should any failure result from the conditions found in this section the **Department** would then enter into a Contract with the **County** for reimbursement to be made to the **County** for necessary repairs performed by the **County** and/or its contractor. The Utility Relocation Agreement would be issued by the NCDOT Utilities Unit and the repairs would be coordinated between the **County** and the Department's assigned Resident Engineer.

C. MAINTENANCE AND OPERATIONS

- i. Upon satisfactory completion of the utility relocations and successful placement of the utility lines into service, the **County** shall assume responsibility for the normal maintenance and operation of the utility lines. Upon completion of the construction of the

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highway project, the **County** shall release the **Department** from any and all claims for damages in connection with adjustments made to its utility lines; and, further, the **County** shall release the **Department** of any future responsibility for the cost of maintenance to said utility lines. The **Department** will invite the **County** to the Final Inspection meeting with its contractor and will include the **County** in the project acceptance notification. Said releases shall be deemed to be given by the **County** upon completion of construction of the project and its acceptance by the **Department** from its contractor unless the **County** notifies the **Department**, in writing, to the contrary prior to the **Department's** acceptance of the project.

- ii. The **County** obligates itself to service and to maintain its facilities to be retained and installed over and along the highway within the **Department's** right-of-way limits in accordance with Paragraph B. i., the mandate of the North Carolina General Statutes and such other laws, rules, and regulations as have been or may be validly enacted or adopted, now or hereafter.
- iii. If at any time the **Department** shall require the removal of or changes in the location of the encroaching facilities which are being relocated at the **County's** expense, the **County** binds itself, its successors and assigns, to promptly remove or alter said facilities, in order to conform to the said requirement (if applicable per G.S. 136-27.1), without any cost to the **Department**.

IV. COSTS AND FUNDING

A. PROJECT COSTS

- i. The **County** shall be responsible for relocation, and/or betterment, costs for utility work as shown on the attached Exhibit "A". The estimated cost to the **County** is \$3,221,261.68 as shown on the attached Exhibit "B".
- ii. Upon request by the **County**, the **Department** will provide the **County** with an updated estimate of the utility work based on the bid amounts in the awarded highway contract.
- iii. It is understood by both **Parties** that this is an estimated cost for the utility work described in this Agreement and is subject to change.
- iv. If the **County** does not approve the anticipated cost increases, the **Department** will cease work on the Project. Any funding provided by the **County** that is unused will be returned to the **County**.
- v. A supplemental agreement will be generated to document increased cost participation by the **County**. The **County** shall not unreasonably withhold consent to amending this agreement to account for documented cost increases.

B. PAYMENT BY THE COUNTY

- i. Upon completion of the plans, the **Department** shall submit an itemized invoice to the **County** for costs incurred. Billing will be based upon the negotiated cost and any supplemental agreements made part of this agreement. Reimbursement shall be made by the **County** in one final payment within sixty (60) days of said invoice.
- ii. Upon the satisfactory completion and the **County's** acceptance of the relocations and adjustments of the utility lines covered under this Agreement, the **Department** may at its discretion submit an itemized invoice to the **County** for partial costs incurred for the utility work. The partial cost invoice will not exceed 90% of the total utility work cost estimate. Upon completion of the highway work, the **Department** shall submit an itemized invoice to the **County** for the balance of unpaid costs incurred for the utility work. Billings will be based upon the actual bid prices and the actual quantities used.
- iii. Reimbursement payments shall be made in full by the **County** within sixty (60) days of said invoices.
- iv. If the **County** does not pay said invoices within sixty (60) days of the date of the invoice, the **Department** shall charge interest on any unpaid balance at a variable rate of the prime plus one percent (1%) in accordance with G.S. 136-27.3.
- v. Any cost incurred due to additional utility work requested by the **County** after award of the construction contract, shall be solely the responsibility of the **County**. The **County** shall reimburse the **Department** 100% of the additional utility cost.
- vi. In the event the **County** fails for any reason to pay the **Department** in accordance with the provisions for payment hereinabove provided, North Carolina General Statute 136-41.3 authorizes the **Department** to withhold so much of the **County's** share of funds allocated to said **County** by North Carolina General Statute, Section 136-41.1, until such time as the **Department** has received payment in full.

C. DOWN PAYMENT OR PRE-PAYMENT

At any time prior to final billing by the **Department**, the **County** may prepay any portion of the estimated cost by sending payment in accordance with the attached "Remittance Guidance". The **Department** will provide a final billing based on the fixed cost, less any previous payments that have been made.

V. STANDARD PROVISIONS

A. AGREEMENT MODIFICATIONS

Any modification to scope, funding, responsibilities, or time frame will be agreed upon by all **Parties** by means of a written supplemental agreement.

B. ASSIGNMENT OF RESPONSIBILITIES

The **Department** must approve any assignment or transfer of the responsibilities of the **County** set forth in this Agreement to other parties or entities.

C. AGREEMENT FOR IDENTIFIED PARTIES ONLY

This Agreement is solely for the benefit of the identified **Parties** to the Agreement and is not intended to give any rights, claims, or benefits to third parties or to the public at large.

D. OTHER AGREEMENTS

The **County** is solely responsible for all agreements, contracts, and work orders entered into or issued by the **County** to meet the terms of this Agreement. The **Department** is not responsible for any expenses or obligations incurred for the terms of this Agreement except those specifically eligible for the funds and obligations as approved by the **Department** under the terms of this Agreement.

E. TITLE VI

The other party to this Agreement shall comply with Title VI of the Civil Rights Act of 1964 (Title 49 CFR, Subtitle A, Part 21) and related nondiscrimination authorities. Title VI and related authorities prohibit discrimination on the basis of race, color, national origin, disability, gender, and age in all programs or activities of any recipient of Federal assistance.

F. AUTHORIZATION TO EXECUTE

The **Parties** hereby acknowledge that the individual executing this Agreement has read this Agreement, conferred with legal counsel, fully understands its contents, and is authorized to execute this Agreement and to bind the respective **Parties** to the terms contained herein.

G. DEBARMENT POLICY

It is the policy of the **Department** not to enter into any agreement with parties that have been debarred by any government agency (Federal or State). By execution of this agreement, the **County** certifies that neither it nor its agents or contractors are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by any Federal or State Agency or Department and that it will not enter into agreements with any entity that is debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction.

H. INDEMNIFICATION

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To the extent authorized by state and federal statutes, the **County** will indemnify and hold harmless the FHWA (if applicable), the **Department** and the State of North Carolina, their respective officers, directors, principals, employees, agents, successors, and assigns from and against any and all claims for damage and/or liability, including those that may be initiated by third parties, in connection with the Project activities performed pursuant to this Agreement including construction of the Project, except for those claims arising out of the errors, omissions, or negligence of the **Department**, its respective officers, directors, principals, employees, agents, successors, and assigns.

I. AVAILABILITY OF FUNDS

All terms and conditions of this Agreement are dependent upon, and, subject to the allocation of funds for the purpose set forth in the Agreement and the Agreement shall automatically terminate if funds cease to be available.

J. COUNTERPARTS AND ELECTRONIC SIGNATURES

- i. This Agreement, and other documents to be delivered pursuant to this Agreement, may be executed in one or more counterparts, each of which will be deemed to be an original copy and all of which, when taken together, will be deemed to constitute one and the same agreement or document and will be effective when counterparts have been signed by each of the **Parties**. An image of a manual signature on this Agreement, or other documents to be delivered pursuant to this Agreement, will constitute an original signature for all purposes. The delivery of copies of this Agreement or other documents to be delivered pursuant to this Agreement, including executed signature pages where required, by electronic transmission will constitute effective delivery of this Agreement or such other document for all purposes.
- ii. The **Parties** hereto further acknowledge and agree that this Agreement may be signed and/or transmitted by email or a PDF document or using electronic signature technology (e.g. DocuSign, Adobe Sign, or other electronic signature technology), and that such signed record shall be valid and as effective to bind the **Party(ies)** so signing as a paper copy bearing a handwritten signature. By selecting "I Agree", "I Accept", or other similar item, button, or icon via use of a keypad, mouse, or other device, as part of the electronic signature technology, the **Parties** consent to be legally bound by the terms and conditions of Agreement and that such act constitutes a signature as if actually signed in writing. The **Parties** also agree that no certification authority or other third-party verification is necessary to validate its electronic signature and that the lack of such certification or third-party verification will not in any way affect the enforceability of its electronic signature; however, each **Party** agrees to maintain certification records and will produce said records upon request. The **Parties** acknowledge and agree that delivery of a copy of this Agreement or any other document contemplated hereby through the electronic signature

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technology, will have the same effect as physical delivery of the paper document bearing an original written signature.

K. GIFT BAN

By Executive Order 24, issued by Governor Perdue, and NCGS 133-32, it is unlawful for any vendor or contractor (i.e. architect, bidder, contractor, construction manager, design professional, engineer, landlord, offeror, seller, subcontractor, supplier, or vendor), to make gifts or to give favors to any State employee of the Governor's Cabinet Agencies (i.e. Administration, Adult Corrections, Commerce, Environmental Quality, Health and Human Services, Information Technology, Military and Veterans Affairs, Natural and Cultural Resources, Public Safety, Revenue, Transportation, and the Office of the Governor).

SIGNATURE PAGE

IN WITNESS WHEREOF, this Agreement has been executed the day and year heretofore set out, on the part of the **Department** and the **County** by authority duly given.

(DOCUSIGN ONLY)

UNION COUNTY

Authorized Signer: _____ Print Name: _____

Date Signed: _____ Title: _____

Approved as to Legal Form: BTI

If applicable, this Agreement has been pre-audited in the manner required by the Local Government Budget and Fiscal Control Act:

Finance Signer: _____ Print Name: _____

Date Signed: _____ Title: _____

Fed Tax ID No: _____

Remittance Address: _____

Purchase Order, Ref. No., etc.:

Accounts Payable Contact:
Name: _____

Email: _____

Phone Number: _____

DEPARTMENT OF TRANSPORTATION

By: _____ Print Name: _____

Date: _____ Title: _____

APPROVED BY BOARD OF TRANSPORTATION ITEM O: _____ (DATE)

SIGNATURE PAGE

IN WITNESS WHEREOF, this Agreement has been executed the day and year heretofore set out, on the part of the **Department** and the **County** by authority duly given.

UNION COUNTY (INK SIGNATURES)

Attest:	Authorized Signer: _____
By: _____	Print Name: _____
Title: _____	Title: _____
	Date Signed: _____

If applicable, this Agreement has been pre-audited in the manner required by the Local Government Budget and Fiscal Control Act:

Fed Tax ID No: _____	Finance Signer: _____
Remittance Address: _____ _____	Print Name: _____
	Title: _____
	Date Signed: _____

Purchase Order, Ref. No., etc.: _____	Accounts Payable Contact:
	Name: _____
	Email: _____
	Phone Number: _____

DEPARTMENT OF TRANSPORTATION (DOCUSIGN)

By: _____	Print Name: _____
Date: _____	Title: _____

APPROVED BY BOARD OF TRANSPORTATION ITEM O: _____ (DATE)

09/08/99

TIP PROJECT: U-4714BA

See Sheet UC-1 For Index of Sheets
See Sheet UC-2 For Standard Symbology Sheet

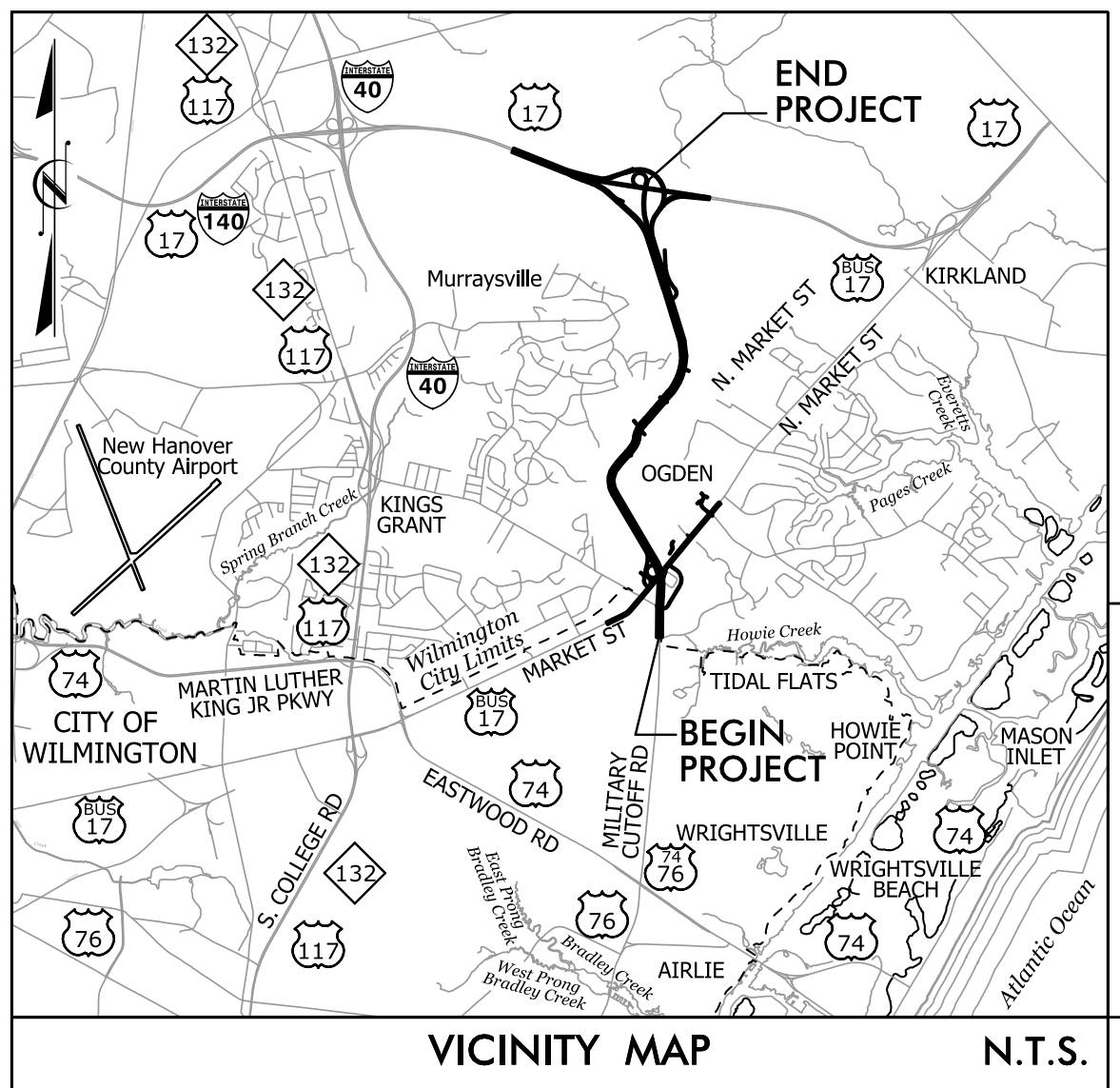
T.I.P. NO.	SHEET NO.
U-4714BA	UC-1

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

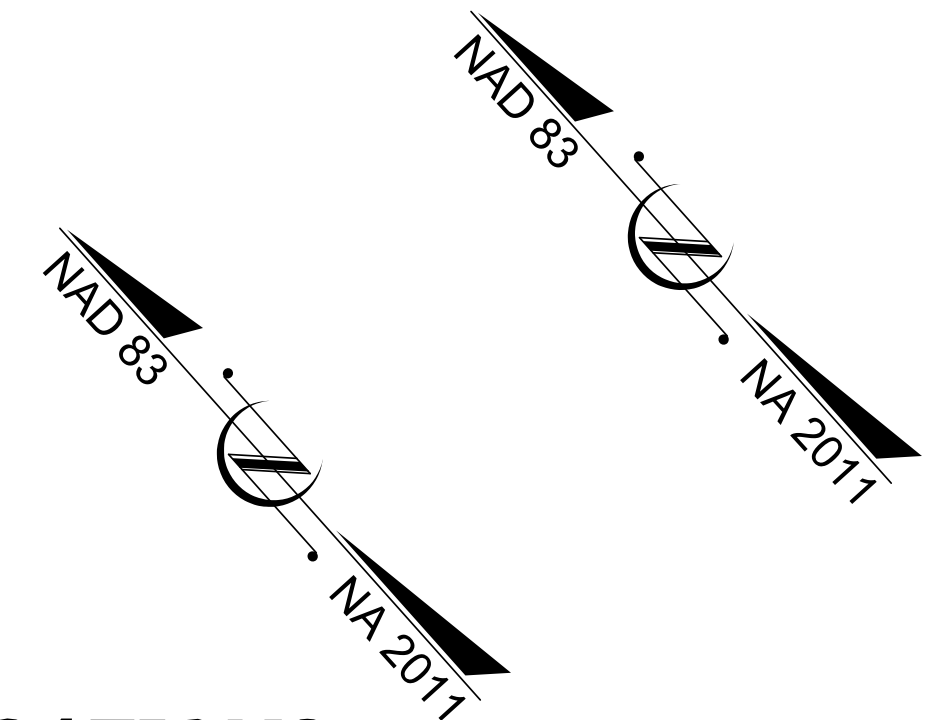
UTILITY CONSTRUCTION PLANS UNION COUNTY

LOCATION: SR 1009 (OLD MONROE ROAD) FROM WEST OF
MORNINGSIDE MEADOW LANE TO EAST OF SR 1377
(WESLEY CHAPEL-STOUTS RD)

TYPE OF WORK: WATER LINE AND SANITARY SEWER RELOCATIONS



90% PLANS



END TIP PROJECT U-4714AC
-L- POT STA. 193+50.61 LB=
BEGIN TIP PROJECT U-4714BA
-L- POT STA. 10+00.00 LA

END TIP PROJECT U-4714BA
BEGIN FUTURE TIP PROJECT U-4714BB
-L- POT STA. 85+85.86=
-LBA- POT STA. 17+74.95

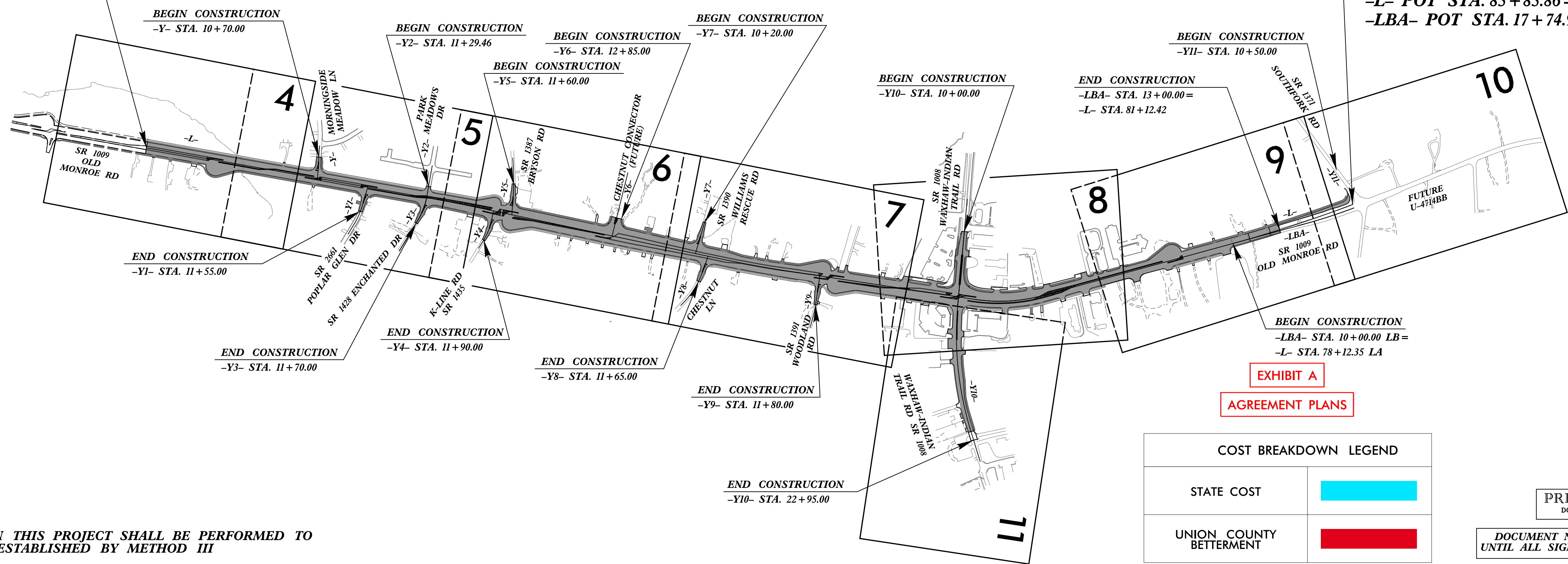


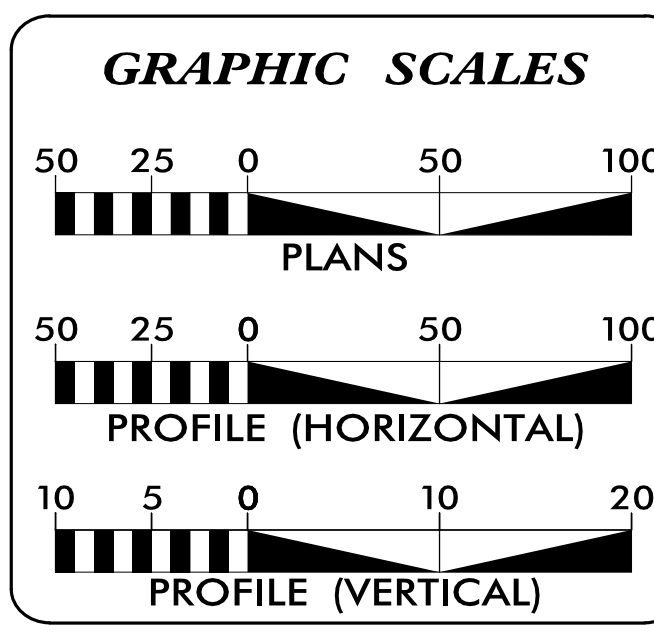
EXHIBIT A
AGREEMENT PLANS

COST BREAKDOWN LEGEND	
STATE COST	
UNION COUNTY BETTERMENT	

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL
UNTIL ALL SIGNATURES ARE COMPLETED

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III



SHEET NO.:	DESCRIPTION:
UC-1	TITLE SHEET
UC-2	UTILITY SYMBOLGY
UC-3 - UC-3A	NOTES
UC-3B - UC-3J	DETAILS
UC-4 - UC-10, UC-20	UTILITY CONSTRUCTION SHEETS
UC-22 - UC-28, UC-38	ABANDONMENT & ADJUSTMENT SHEETS
UC-40 - UC-44, UC-51 - UC-57,	PROFILE SHEETS
UC-62, UC-65 - UC-67	

WATER AND SEWER OWNERS ON PROJECT

(A) WATER - UNION COUNTY WATER
(B) SANITARY SEWER - UNION COUNTY WATER

PREPARED IN THE OFFICE OF

STV Engineers, Inc.
2151 Hawkins St., Suite 1400
Charlotte, NC 28203
NC License Number F-0991

SEAN STEPHENS, PE CONSULTANT CONTACT #1
ROBERT KRANTZ, PE CONSULTANT CONTACT #2
CONSULTANT CONTACT #3

SEAL

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

DONALD E. HAMPTON UTILITIES REGIONAL ENGINEER
LYNN BASINGER UTILITIES ENGINEER
STEVE TREXLER UTILITIES AREA COORDINATOR
ADAM J. PRESLAR UTILITIES COORDINATOR

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STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

UTILITIES PLAN SHEET SYMBOLS

PROPOSED WATER SYMBOLS

Water Line (Sized as Shown)	12" WL
11¼ 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	REM FH
Water Meter	
Relocate Water Meter	
Remove Water Meter	REM WM
Water Pump Station	
RPZ Backflow Preventer	
DCV Backflow Preventer	
Relocate RPZ Backflow Preventer	
Relocate DCV Backflow Preventer	

PROPOSED SEWER SYMBOLS

Gravity Sewer Line (Sized as Shown)	12" SS
Force Main Sewer Line (Sized as Shown)	12" FSS
Manhole (Sized per Note)	
Sewer Pump Station	

PROPOSED MISCELLANEOUS UTILITIES SYMBOLS

Power Pole	
Telephone Pole	
Joint Use Pole	
Telephone Pedestal	
Utility Line by Others (Type as Shown)	—PROP O/H POW LINES—
Trenchless Installation	12" TL INSTALL
Encasement by Open Cut	24" ENCAS BY OC
Encasement	24" ENCASEMENT

Thrust Block	
Air Release Valve	
Utility Vault	
Concrete Pier	
Steel Pier	
Plan Note	
Pay Item Note	

EXISTING UTILITIES SYMBOLS

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 Line	
Hand Hole for Cable		Aboveground Gravity Sanitary Sewer Line	
Power Transformer		*Underground SS Forced Main Line	
Telephone Pedestal		Underground Unknown Utility Line	
CATV Pedestal		SUE Test Hole	
Gas Valve		Water Meter	
Gas Meter		Water Valve	
Located Miscellaneous Utility Object		Fire Hydrant	
Abandoned According to Utility Records	AATUR	Sanitary Sewer Cleanout	
End of Information	E.O.I.		

*For Existing Utilities
 Utility Line Drawn from Record (Type as Shown) _____
 Designated Utility Line (Type as Shown) _____

GENERAL NOTES:

1. THE PROPOSED UTILITY CONSTRUCTION SHALL MEET THE APPLICABLE REQUIREMENTS OF THE NC DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" DATED JANUARY 2024.
2. THE EXISTING UTILITIES BELONG TO UNION COUNTY WATER.
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. 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.

UTILITY CONSTRUCTION

7. 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.
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.

PROJECT SPECIFIC NOTES:

1. ALL CONSTRUCTED AND PROPOSED WATER LINES TO BE TESTED PER UNION COUNTY WATER, NCDOT, AND NCDEQ STANDARD SPECIFICATIONS.
2. THE UTILITY OWNER OWNS THE EXISTING UTILITY FACILITIES AND WILL OWN THE NEW UTILITY FACILITIES AFTER ACCEPTANCE BY UNION COUNTY WATER REPRESENTATIVE.
3. IF THE PROPOSED WATER AND/OR SANITARY SEWER MAIN IS INSTALLED WITHIN 12" IN ANY DIRECTION (VERTICALLY OR HORIZONTALLY) OF A GAS MAIN THEN THE CONTRACTOR SHALL CALL PIEDMONT NATURAL GAS COMPANY AT (704) 525-5585 AND INFORM THEM.
4. THE CONTRACTOR SHALL USE EROSION CONTROL MEASURES, AS DIRECTED.
5. IF ADDITIONAL WORK SPACE IS NEEDED, AN ENCROACHMENT IS TO BE AGREED UPON BETWEEN THE CONTRACTOR AND THE PROPERTY OWNER.
6. CONCRETE THRUST BLOCKING, WALL BLOCKING, RODDING, OR OTHER APPROVED METHOD SHALL BE PROVIDED BY CONTRACTOR AS NEEDED ON EXISTING WATER LINES AT THE PROPOSED RELOCATION TIE-IN POINTS

7. THE LOCATION OF EXISTING UTILITIES SHOWN ON THE PLANS IS FOR THE USE OF THE CONTRACTOR IN PROVIDING PROTECTION FOR THE UTILITIES DURING CONSTRUCTION OPERATIONS. NCDOT, DESIGN CONSULTANT WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF LOCATION, SIZE, DEPTH, OR COMPLETENESS OF THE INFORMATION. THE CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.

8. THE CONTRACTOR SHALL SUPPORT AND PROTECT ANY EXISTING UNDERGROUND UTILITIES ENCOUNTERED DURING TRENCH EXCAVATION AND/OR PIPE INSTALLATION.

9. MINIMUM PIPE SEPARATION: 10 FEET HORIZONTAL SEPARATION OR 18" VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN WATER MAINS OVER SEWER MAINS. WHEN WATER MAINS ARE BELOW SEWER MAINS OR THE ABOVE MINIMUM SEPARATIONS CANNOT BE MAINTAINED, DUCTILE IRON PIPE SHALL BE USED FOR BOTH MAINS TO 10 FEET ON EITHER SIDE OF THE CROSSINGS, AND ALL ALONG THE LENGTH OF MAINS WHERE MINIMUM SEPARATION CANNOT BE MAINTAINED.

10. ALL PROPOSED 6"-12" WATER LINES TO BE DUCTILE IRON PC350, AND 16" WATER LINES TO BE DUCTILE IRON PC250.

11. WELL IN ADVANCE OF BEGINING UTILITY WORK, SOFT DIGS SHALL BE PERFORMED BY CONTRACTOR TO VERIFY ACTUAL WATER LINE DEPTH AND MATERIAL AT PROPOSED TIE-IN LOCATIONS.

12. LAY PIPE STRAIGHT IN ALIGNMENT AND GRADIENT OR FOLLOW TRUE CURVES AS NEARLY AS POSSIBLE. DO NOT DEFLECT ANY JOINT MORE THAN HALF THE MAXIMUM DEFLECTION RECOMMENDED BY THE MANUFACTURER.

13. CONTRACTOR SHALL ADHERE TO SECTION 1530 "ABANDON OR REMOVE UTILITIES" FOR ABANDONMENT OF EXISTING WATER LINES.

14. CONTRACTOR SHALL COORDINATE SHUTDOWNS OF WATER LINESFOR TIE-INS A MINIMUM OF 96 HOURS IN ADVANCE OF TIE-IN OPERATIONS. COORDINATE WITH UNION COUNTY FIELD REPRESENTATIVE.

15. ALL DUCTILE IRON WATER PIPE SHALL BE FURNISHED WITH CEMENT MORTAL LINING AND SEAL COATING IN ACCORDANCE WITH ANSI/AWWA A21.4/C104.

16. ALL DUCTILE IRON SEWER PIPE SHALL BE FURNISHED WITH CERAMIC EPOXY LINING, TNEMEC 431 OR EQUAL, AND SEAL COATED IN ACCORDANCE WITH ANSI/AWWA A21.4/C104.

17. PRIOR TO THE START OF PROJECT, CONTRACTOR MUST CONTACT THOMAS MANN,CIP PROGRAM MANAGER, OF UNION COUNTY WATER. UNION COUNTY WATER MAY INSPECT THE WORK AT ANY TIME.

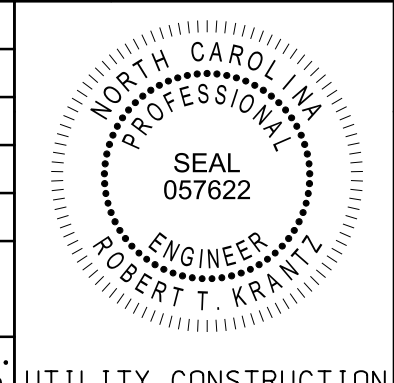

18. NO INTERRUPTION OF EXISTING WATER SERVICE SHALL BE MADE DURING CONSTRUCTION UNTIL AUTHORIZED BY UNION COUNTY WATER. UNION COUNTY WATER WILL BE COPIED ON BOTH THE WATER MAIN PRESSURE TEST REPORT AND THE WATER MAIN CHLORINATION TEST REPORT. UNION COUNTY COLLECTS SAMPLES FOR BACTERIOLOGICAL TESTING. SAMPLES WILL BE COLLECTED ONLY ON WEDNESDAY MORNINGS, USUALLY BEFORE 9:00 AM. SCHEDULE WATER INSTALLATIONS AND PRESSURE TESTING ACCORDINGLY. THERE WILL BE NO COST TO THE CONTRACTOR FOR BACTERIOLOGICAL TESTING FOR THE FIRST SAMPLES COLLECTED FOR EACH SEGMENT. CONTRACTOR WILL BE RESPONSIBLE FOR COSTS RELATED TO RE-TESTING FOR FAILING BACTERIOLOGICAL SAMPLES AT THE PREVAILING RATES OF THE TESTING LABORATORY. PRICE IS SUBJECT TO CHANGE. UNION COUNTY WILL NOT ACCEPT TEST RESULTS FROM OUTSIDE TESTING LABS.

19. EXISTING WATER VALVES ARE TO BE OPERATED BY UNION COUNTY OPERATIONS STAFF.

20. WHEN ABANDONING VALVES, CLOSE VALVE BEFORE REMOVING VALVE BOX.

21. INSTALLATION OF PIPE MAY REQUIRE EXCAVATING AROUND AND BENEATH RELOCATED TELECOMMUNICATION AND OTHER UTILITY LINES FOR WATER RELOCATION.

22. PROPOSED WATER SERVICE LINE SHALL BE TYPE "K" COPPER TUBING. SPLICING OF COPPER SERVICE LINE BETWEEN THE WATER METER AND EXISTING OR NEW WATER LINES WILL NOT BE ALLOWED FOR ANY CASE. PROVIDE AND INSTALL A CONTINUOUS SEGMENT OF COPPER WATER SERVICE LINE BETWEEN THE CORPORATION STOP AND WATER METER. IN THE EVENT A WATER SERVICE PIPE IS DAMAGED DURING THE COURSE OF CONSTRUCTION, A NEW REPLACEMENT COPPER SERVICE LINE IS TO BE INSTALLED BETWEEN THE WATER LINE AND WATER METER AT NO COST TO UNION COUNTY OR NCDOT.

PROJECT REFERENCE NO. U-4714B	SHEET NO. UC-3
DESIGNED BY: TK	
DRAWN BY: TK	
CHECKED BY: RTK	
APPROVED BY:	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION	
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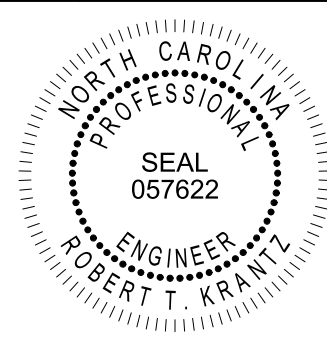

PROJECT SPECIFIC NOTES:

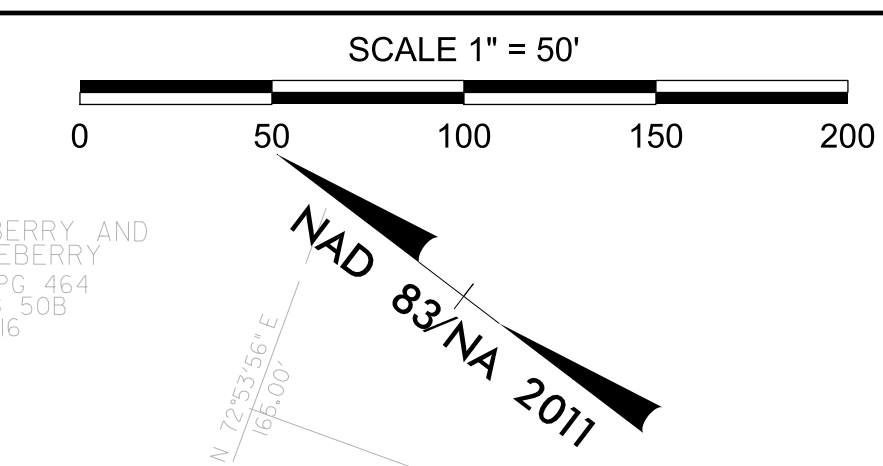
UTILITY CONSTRUCTION

22. IN ACCORDANCE WITH SECTION 1500-7 - SUBMITTALS AND RECORDS, CONTRACTOR TO PROVIDE AS-BUILT PLANS OF THE INSTALLED UTILITY. UPON COMPLETION OF PRESSURE TESTING AND BACTERIOLOGICAL TESTING AND PRIOR TO REQUESTING WATER SYSTEM ISOLATION FOR CONNECTION OF THE NEW WATER PIPE TO THE EXISTING WATER SYSTEM, PROVIDE RED-LINE MARK-UPS OF THE WATER LINE IMPROVEMENTS TO UNION COUNTY FOR REVIEW AND COMMENT. UNION COUNTY WILL THEN REQUEST ACCEPTANCE OF THE WATER IMPROVEMENTS FROM NCDEQ PUBLIC WATER SUPPLY SECTION. UPON ACCEPTANCE BY PUBLIC WATER SUPPLY SECTION, UNION COUNTY WILL WORK WITH CONTRACTOR TO SCHEDULE TIE-INS TO THE EXISTING SYSTEM.

23. IN ACCORDANCE WITH SECTION 1500-7 - SUBMITTALS AND RECORDS, CONTRACTOR TO PROVIDE AS-BUILT PLANS OF THE INSTALLED UTILITY. IN ADDITION TO THE HARD COPIES REQUIRED BY THE SPECIFICATIONS, PROVIDE THE SAME PDF FILES REQUIRED FOR SUBMISSION TO NCDOT TO UNION COUNTY. UNION COUNTY WILL NOT ACCEPT THE WORK FROM CONTRACTOR AND NCDOT UNTIL AS-BUILTS ARE RECEIVED AS AS-BUILTS ARE NEEDED AS PART OF THE FINAL PERMIT APPROVALS FROM NCDEQ PUBLIC WATER SUPPLY SECTION.

24. UTILITY CONTRACTOR(S) SHALL BE PRESENT AND ASSIST WITH FINAL INSPECTIONS OF NEW WATER AND SEWER LINES AND SERVICES.

PROJECT REFERENCE NO.	SHEET NO.
U-4714B	UC-3A
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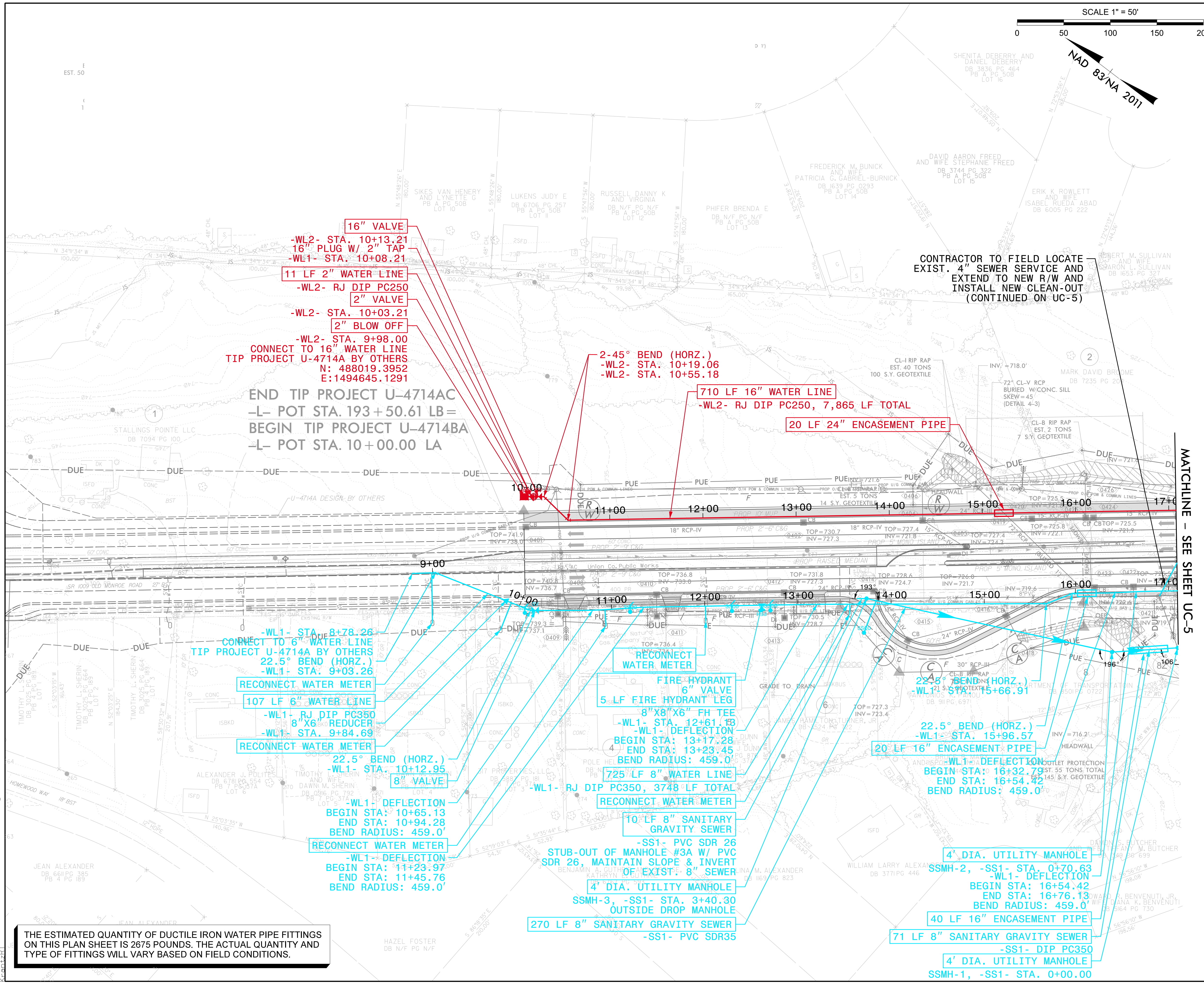


PROJECT REFERENCE NO.	SHEET NO.
U-4714B	UC-4
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APPROVED BY:	
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16" VALVE
 -WL2- STA. 10+13.21
 16" PLUG W/ 2" TAP
 -WL1- STA. 10+08.21

11 LF 2" WATER LINE
 -WL2- RJ DIP PC250
 2" VALVE
 -WL2- STA. 10+03.21
 2" BLOW OFF
 -WL2- STA. 9+98.00
 CONNECT TO 16" WATER LINE
 TIP PROJECT U-4714A BY OTHERS
 N: 488019.3952
 E: 1494645.1291

END TIP PROJECT U-4714AC
 -L- POT STA. 193+50.61 LB=
BEGIN TIP PROJECT U-4714BA
 -L- POT STA. 10+00.00 LA

2-45° BEND (HORZ.)
 -WL2- STA. 10+19.06
 -WL2- STA. 10+55.18

710 LF 16" WATER LINE
 -WL2- RJ DIP PC250, 7,865 LF TOTAL

20 LF 24" ENCASEMENT PIPE

CONTRACTOR TO FIELD LOCATE
 EXIST. 4" SEWER SERVICE AND
 EXTEND TO NEW R/W AND
 INSTALL NEW CLEAN-OUT
 (CONTINUED ON UC-5)

107 LF 6" WATER LINE
 -WL1- STA. 8+78.26
 CONNECT TO 6" WATER LINE
 TIP PROJECT U-4714A BY OTHERS
 22.5° BEND (HORZ.)
 -WL1- STA. 9+03.26
 RECONNECT WATER METER

8" X6" REDUCER
 -WL1- STA. 9+84.69
 RECONNECT WATER METER

22.5° BEND (HORZ.)
 -WL1- STA. 10+12.95
 8" VALVE

RECONNECT WATER METER
 -WL1- DEFLECTION
 BEGIN STA: 10+65.13
 END STA: 10+94.28
 BEND RADIUS: 459.0'

RECONNECT WATER METER
 -WL1- DEFLECTION
 BEGIN STA: 11+23.97
 END STA: 11+45.76
 BEND RADIUS: 459.0'

RECONNECT WATER METER
 FIRE HYDRANT
 6" VALVE
 5. LF FIRE HYDRANT LEG
 8" X8" X6" FH TEE
 -WL1- STA. 12+61.13
 -WL1- DEFLECTION
 BEGIN STA: 13+17.28
 END STA: 13+23.45
 BEND RADIUS: 459.0'

725 LF 8" WATER LINE
 -WL1- RJ DIP PC350, 3748 LF TOTAL
 RECONNECT WATER METER

10 LF 8" SANITARY GRAVITY SEWER
 -SS1- PVC SDR 26
 STUB-OUT OF MANHOLE #3A W/ PVC SDR 26, MAINTAIN SLOPE & INVERT OF EXIST. 8" SEWER

4" DIA. UTILITY MANHOLE
 SSMH-3, -SS1- STA. 3+40.30
 OUTSIDE DROP MANHOLE

270 LF 8" SANITARY GRAVITY SEWER
 -SS1- PVC SDR35

22.5° BEND (HORZ.)
 -WL1- STA. 15+66.91

20 LF 16" ENCASEMENT PIPE
 -WL1- DEFLECTION
 BEGIN STA: 16+32.79
 END STA: 16+54.42
 BEND RADIUS: 459.0'


4" DIA. UTILITY MANHOLE
 SSMH-2, -SS1- STA. 0+70.63
 -WL1- DEFLECTION
 BEGIN STA: 16+54.42
 END STA: 16+76.13
 BEND RADIUS: 459.0'

40 LF 16" ENCASEMENT PIPE
 71 LF 8" SANITARY GRAVITY SEWER
 -SS1- DIP PC350

4" DIA. UTILITY MANHOLE
 SSMH-1, -SS1- STA. 0+00.00

THE ESTIMATED QUANTITY OF DUCTILE IRON WATER PIPE FITTINGS ON THIS PLAN SHEET IS 2675 VARIOUS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

MATCHLINE - SEE SHEET UC-5

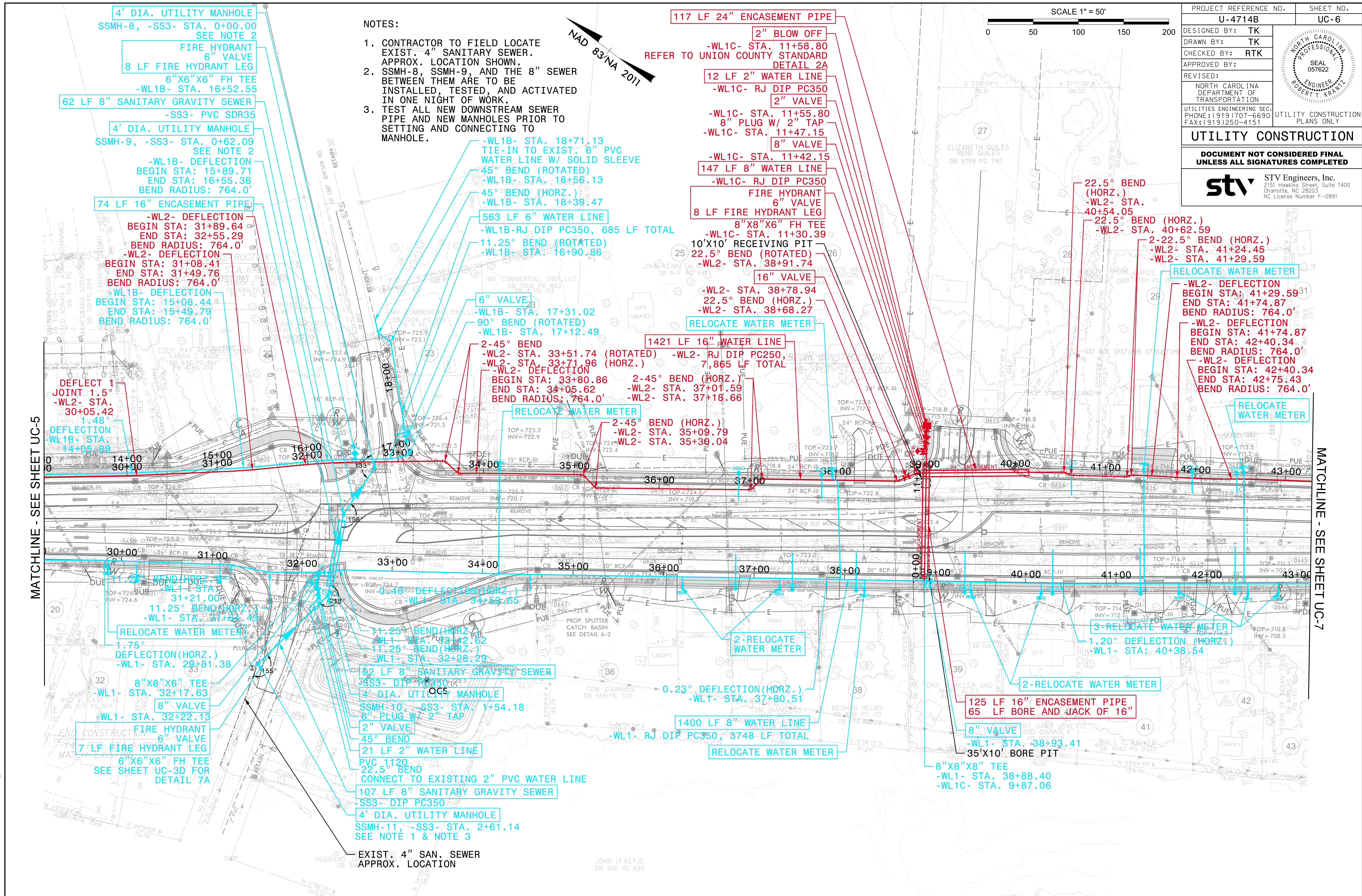
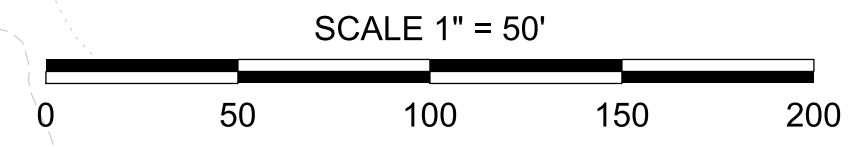
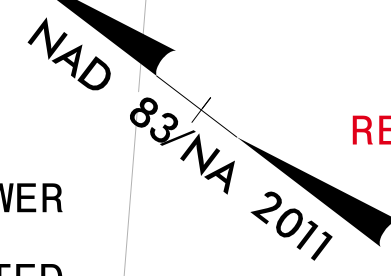
PROJECT REFERENCE NO.	SHEET NO.
U-4714B	UC-6
DESIGNED BY: TK	
DRAWN BY: TK	
CHECKED BY: RTK	
APPROVED BY:	
REVISED:	UTILITY CONSTRUCTION PLANS ONLY
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UTILITY CONSTRUCTION

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- NOTES:
- CONTRACTOR TO FIELD LOCATE EXIST. 4" SANITARY SEWER. APPROX. LOCATION SHOWN.
 - SSMH-8, SSMH-9, AND THE 8" SEWER BETWEEN THEM ARE TO BE INSTALLED, TESTED, AND ACTIVATED IN ONE NIGHT OF WORK.
 - TEST ALL NEW DOWNSTREAM SEWER PIPE AND NEW MANHOLES PRIOR TO SETTING AND CONNECTING TO MANHOLE.

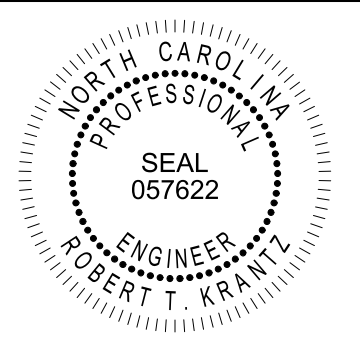


MATCHLINE - SEE SHEET UC-5

MATCHLINE - SEE SHEET UC-7

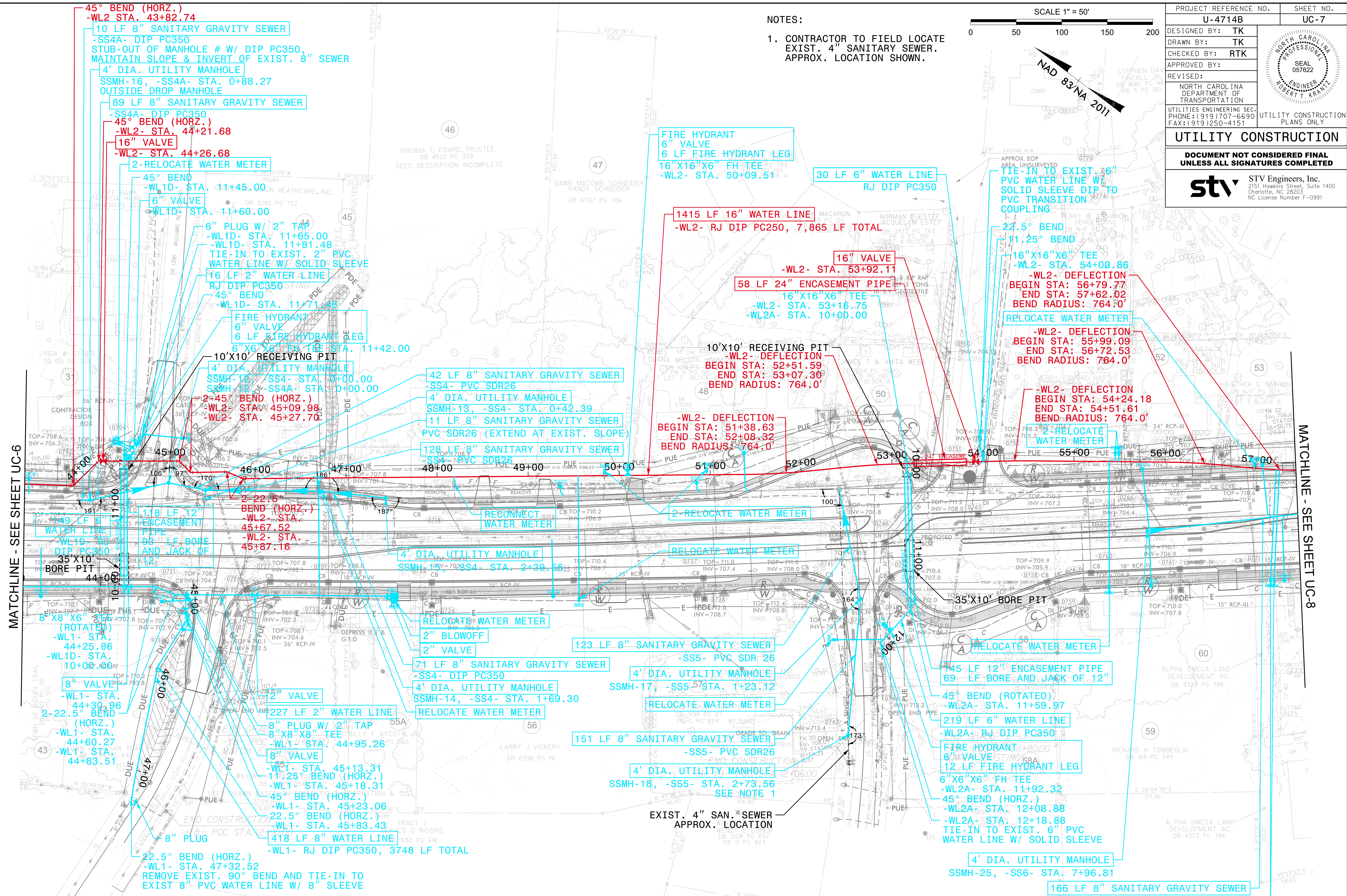
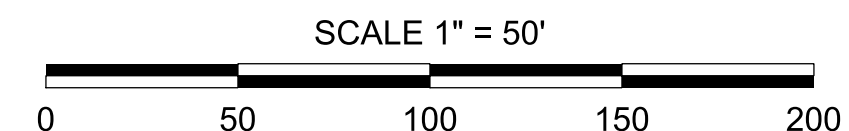
THE ESTIMATED QUANTITY OF DUCTILE IRON WATER PIPE FITTINGS ON THIS PLAN SHEET IS 8000 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

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PROJECT REFERENCE NO.	U-4714B	SHEET NO.	UC-7
DESIGNED BY:	TK		
DRAWN BY:	TK		
CHECKED BY:	RTK		
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REVISOR:		NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	UTILITY CONSTRUCTION PLANS ONLY
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NOTES:

1. CONTRACTOR TO FIELD LOCATE EXIST. 4" SANITARY SEWER. APPROX. LOCATION SHOWN.

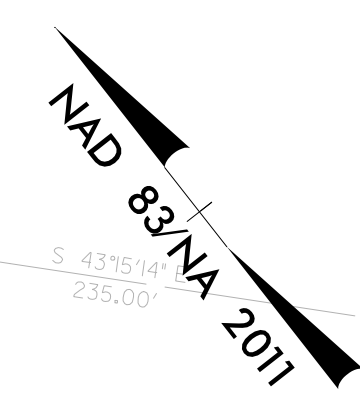
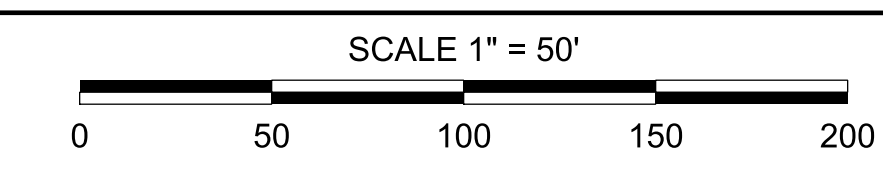


MATCHLINE - SEE SHEET UC-6

MATCHLINE - SEE SHEET UC-8

THE ESTIMATED QUANTITY OF DUCTILE IRON WATER PIPE FITTINGS ON THIS PLAN SHEET IS 6805 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

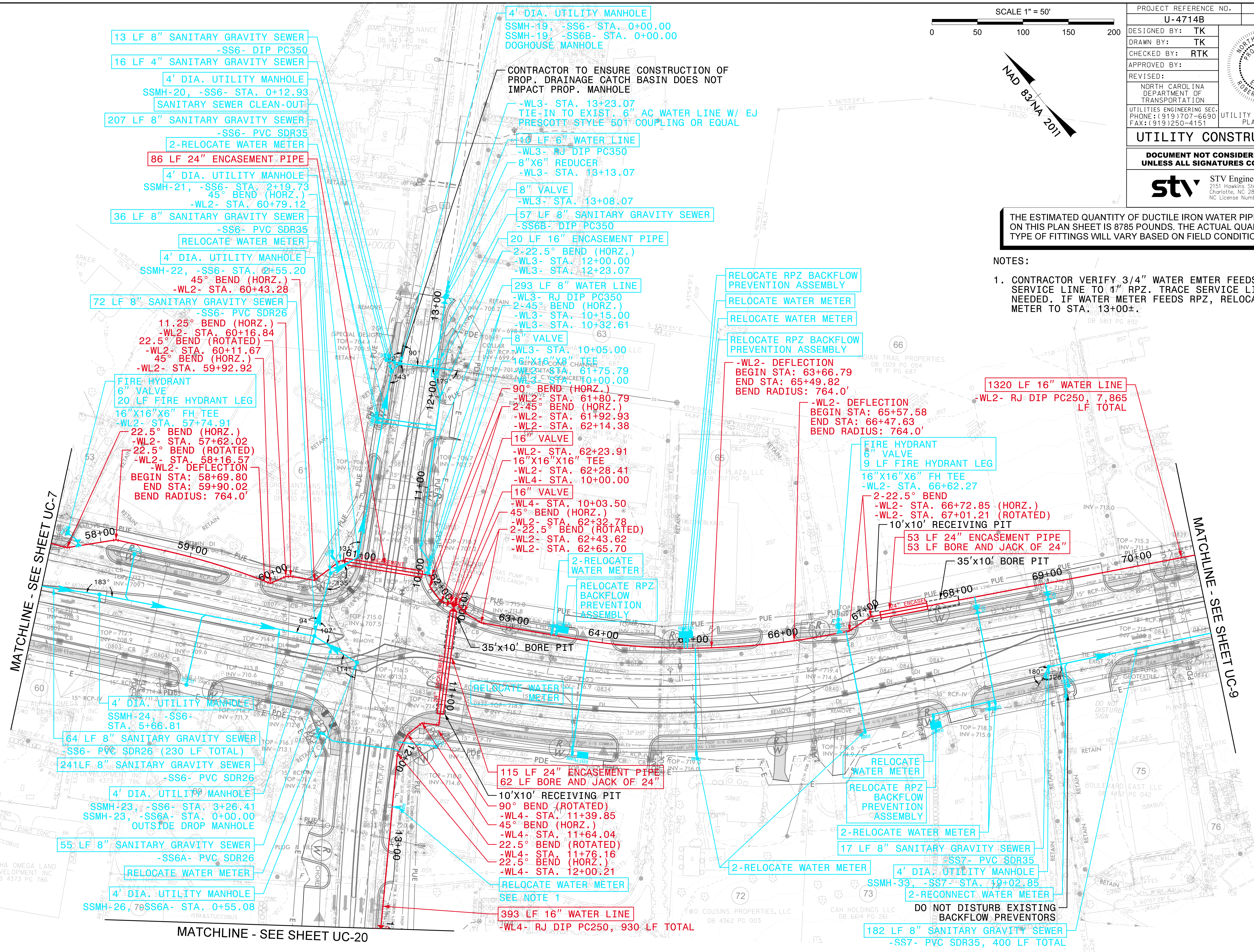
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PROJECT REFERENCE NO.	SHEET NO.
U-4714B	UC-8
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THE ESTIMATED QUANTITY OF DUCTILE IRON WATER PIPE FITTINGS ON THIS PLAN SHEET IS 8785 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

- NOTES:
- CONTRACTOR VERIFY 3/4" WATER EMTER FEEDS SERVICE LINE TO 1" RPZ. TRACE SERVICE LINES AS NEEDED. IF WATER METER FEEDS RPZ, RELOCATE METER TO STA. 13+00±.

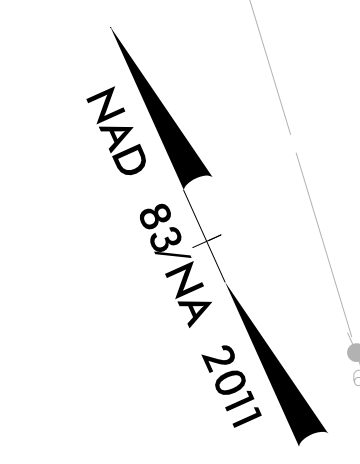
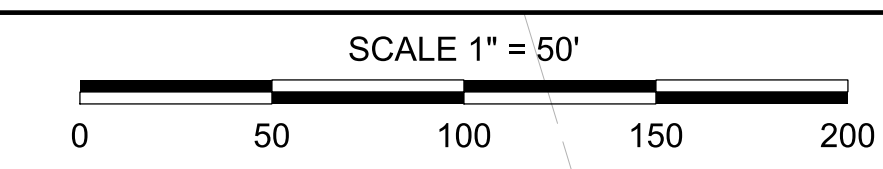


MATCHLINE - SEE SHEET UC-7

MATCHLINE - SEE SHEET UC-9

MATCHLINE - SEE SHEET UC-20

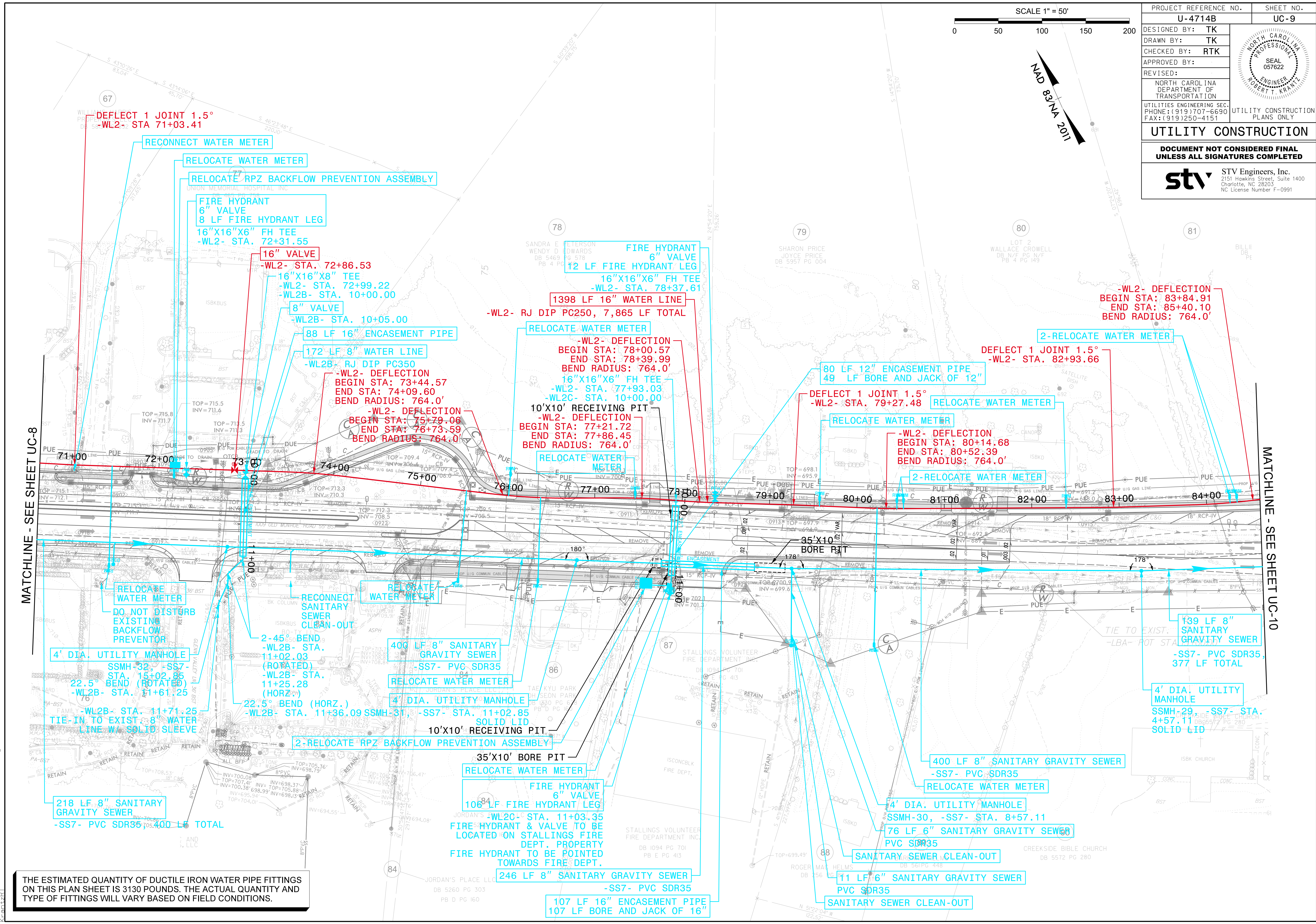
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PROJECT REFERENCE NO.	SHEET NO.
U-4714B	UC-9
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MATCHLINE - SEE SHEET UC-8

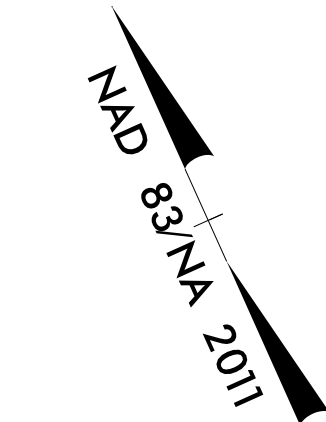
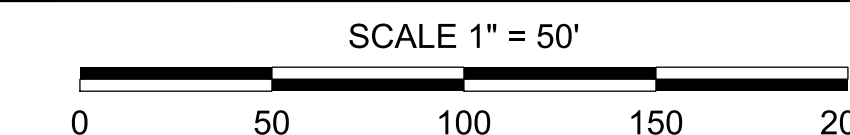
MATCHLINE - SEE SHEET UC-10

THE ESTIMATED QUANTITY OF DUCTILE IRON WATER PIPE FITTINGS ON THIS PLAN SHEET IS 3130 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

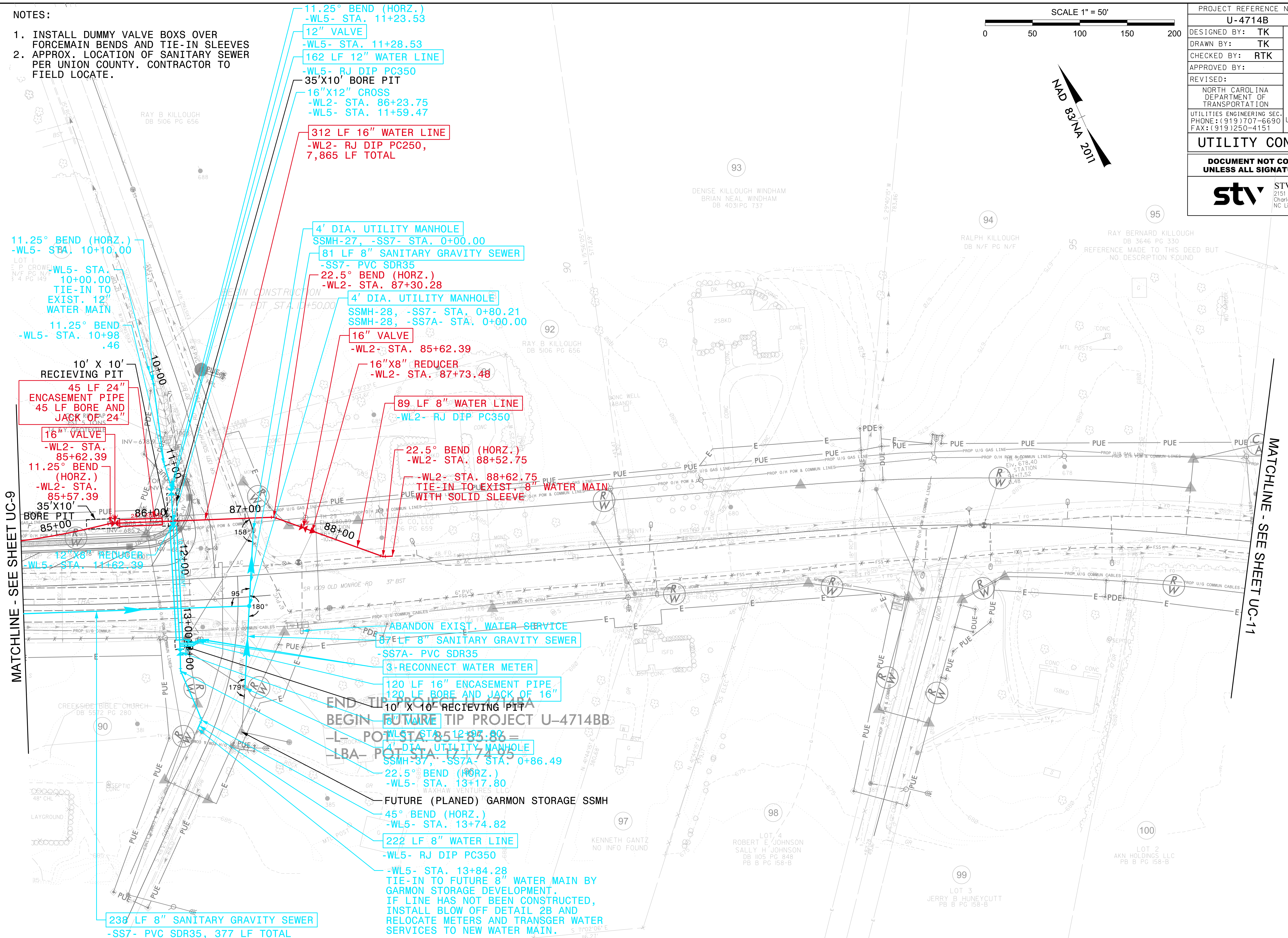
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NOTES:

1. INSTALL DUMMY VALVE BOXS OVER FORCEMAIN BENDS AND TIE-IN SLEEVES
2. APPROX. LOCATION OF SANITARY SEWER PER UNION COUNTY, CONTRACTOR TO FIELD LOCATE.



PROJECT REFERENCE NO. U-4714B	SHEET NO. UC-10
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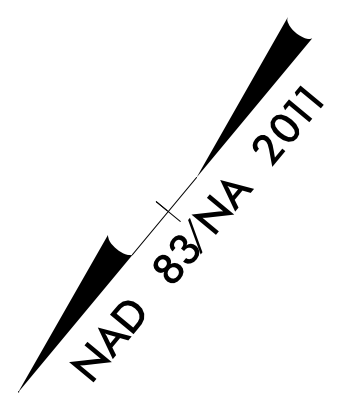
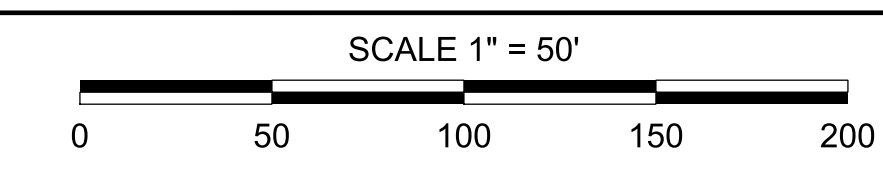


MATCHLINE - SEE SHEET UC-9

MATCHLINE - SEE SHEET UC-11

THE ESTIMATED QUANTITY OF DUCTILE IRON WATER PIPE FITTINGS ON THIS PLAN SHEET IS 6145 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

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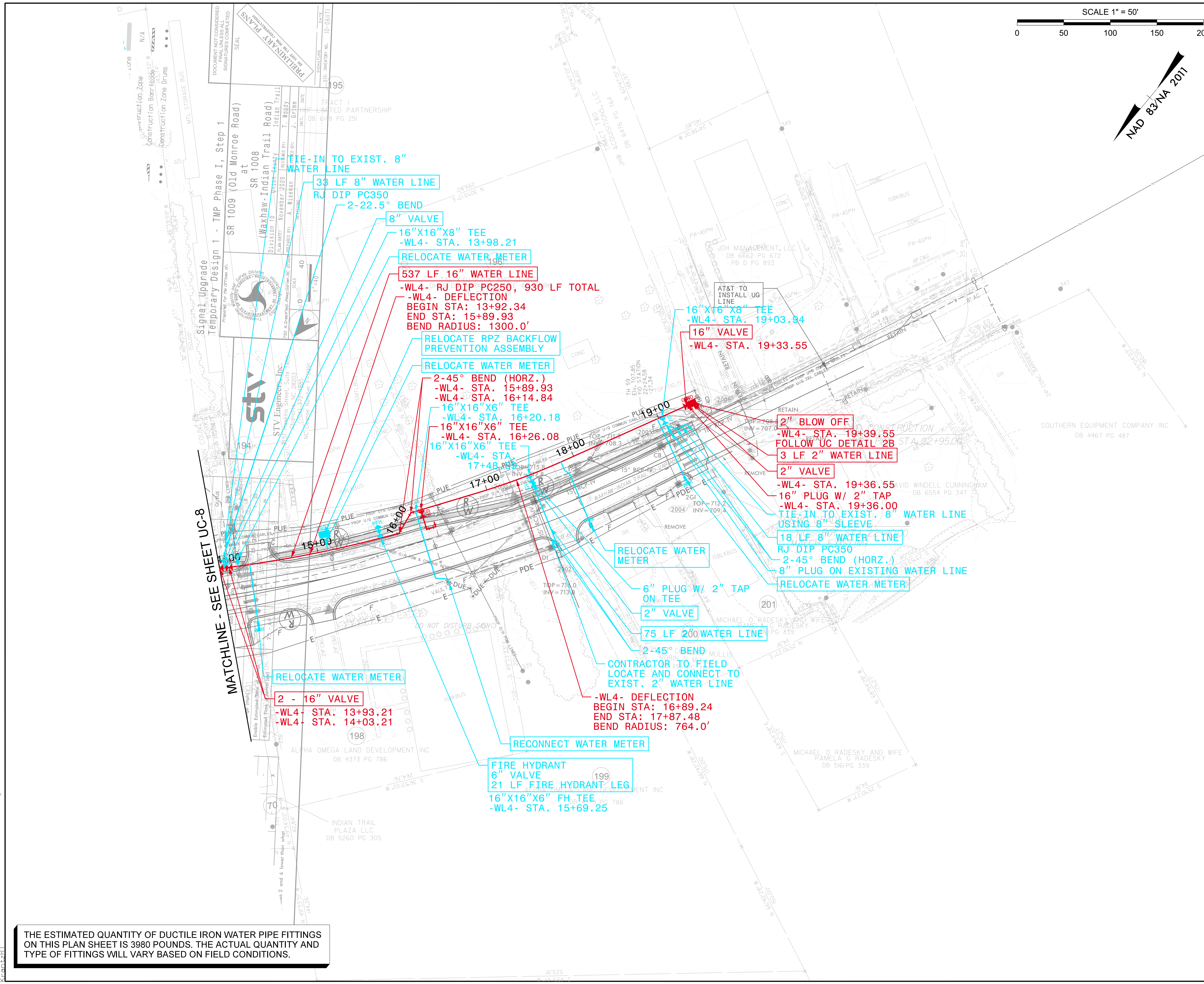


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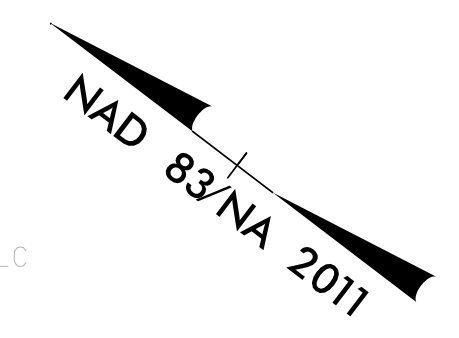
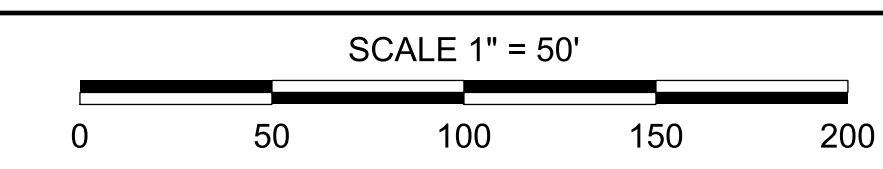
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THE ESTIMATED QUANTITY OF DUCTILE IRON WATER PIPE FITTINGS ON THIS PLAN SHEET IS 3980 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

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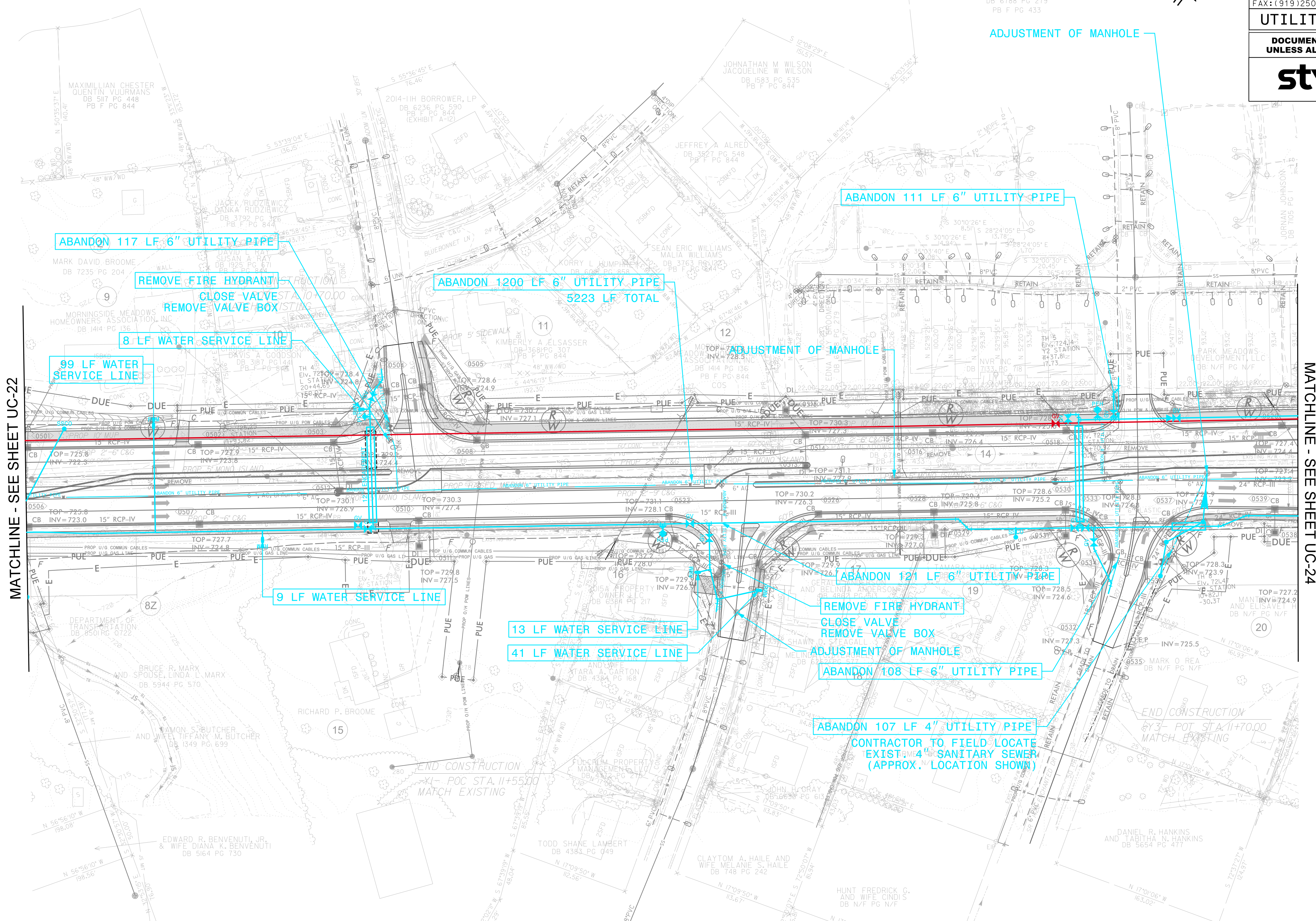


PROJECT REFERENCE NO.	SHEET NO.
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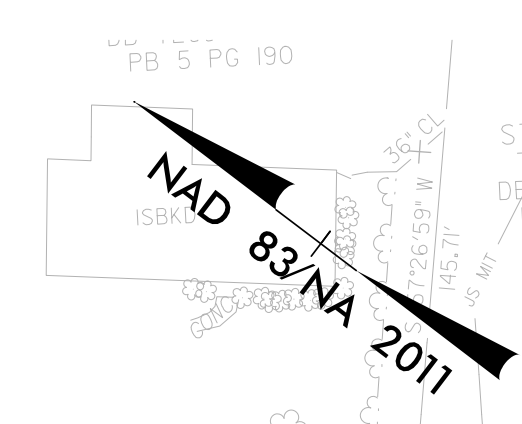
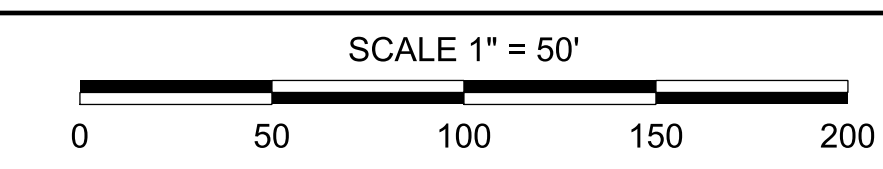


MATCHLINE - SEE SHEET UC-22

MATCHLINE - SEE SHEET UC-24

SEE SHEET UC-5 FOR CORRESPONDING PROPOSED UTILITY NOTES

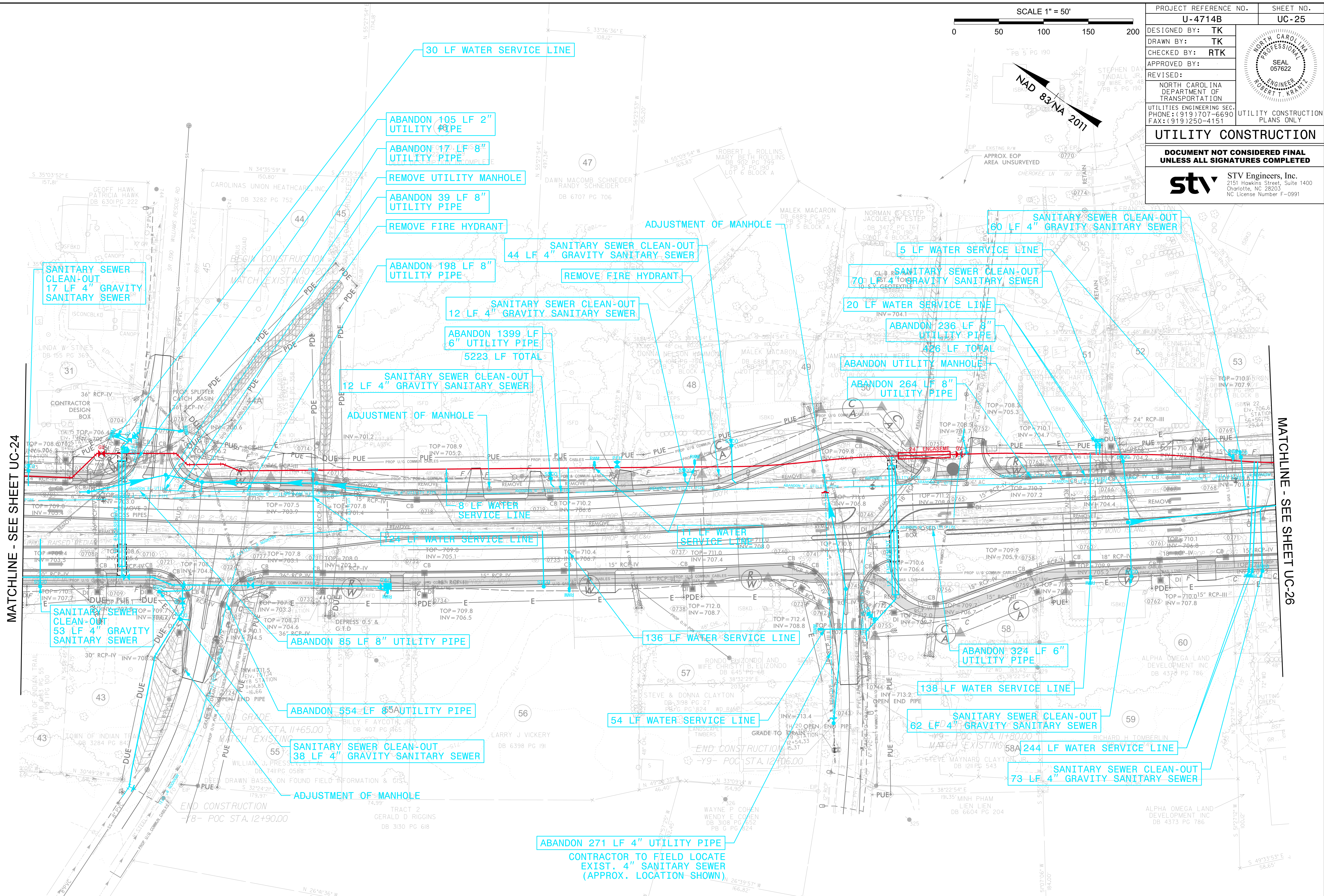
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PROJECT REFERENCE NO.	SHEET NO.
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2151 Hawkins Street, Suite 1400
Charlotte, NC 28203
NC License Number F-0991

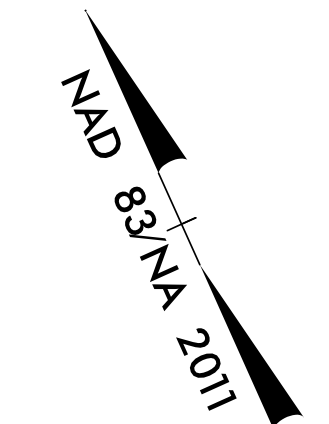
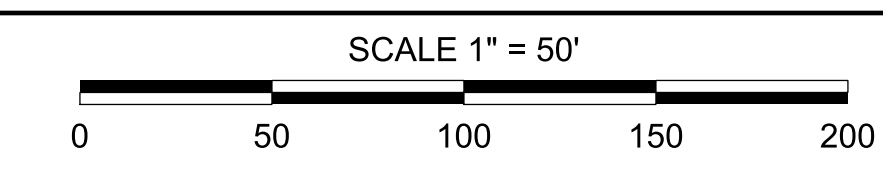


MATCHLINE - SEE SHEET UC-24

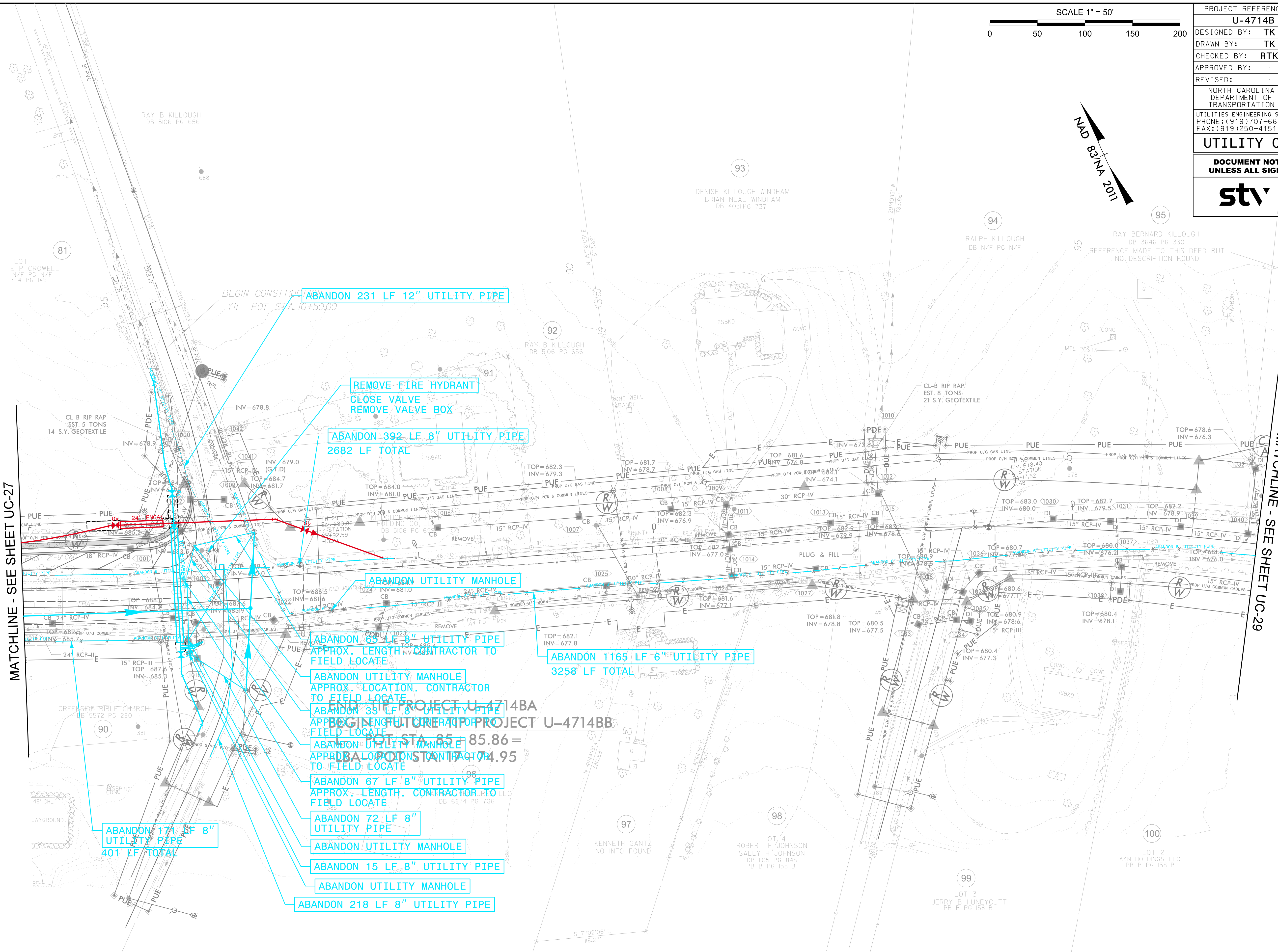
MATCHLINE - SEE SHEET UC-26

SEE SHEET UC-7 FOR CORRESPONDING PROPOSED UTILITY NOTES

1/2/2026 C:\Users\jts\OneDrive\Documents\Projects\4019628\4019628.dwg Models and Sheets\04-CU-Utilities\Sheets\Abandon\BA-U-4714BA_UC_UC25.dwg



PROJECT REFERENCE NO.	SHEET NO.
U-4714B	UC-28
DESIGNED BY: TK	
DRAWN BY: TK	
CHECKED BY: RTK	
APPROVED BY:	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY	
UTILITY CONSTRUCTION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
STV Engineers, Inc. 2151 Hawkins Street, Suite 1400 Charlotte, NC 28203 NC License Number F-0991	



MATCHLINE - SEE SHEET UC-27

MATCHLINE - SEE SHEET UC-29

SEE SHEET UC-10 FOR CORRESPONDING PROPOSED UTILITY NOTES

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North Carolina Department of Transportation
Preliminary Estimate

EXHIBIT B

U-4714BA UC AGREEMNET

County: Union
Route: U-4714BA
From:

Requested By: NCDOT
Prepared By: STV
Date: 2/12/2026

Item	Type	Section No.	Description	Quantity		Total		Units	Amount
				Union County Betterment	NCDOT	Quantity			
5325200000-E	U	1510	2" WATER LINE	26	446	472		LF	
5325800000-E	U	1510	8" WATER LINE	236	4,584	4,820		LF	
5326600000-E	U	1510	16" WATER LINE	8,707.0	0	8,707		LF	
5329000000-E	U	1510	DUCTILE IRON WATER PIPE FITTINGS	28830	15,755	44,585		LB	
5536000000-E	U	1515	2" VALVE	3	5	8		EA	
5546000000-E	U	1515	8" VALVE	1	16	17		EA	
5558600000-E	U	1515	16" VALVE	14.0	0	14		EA	
5606000000-E	U	1515	2" BLOW OFF	3	2	5		EA	
5666000000-N	U	1515	FIRE HYDRANT	1	18	19		EA	
5673000000-E	U	1515	FIRE HYDRANT LEG	8	285	293		LF	
5835700000-E	U	1540	16" ENCASMENT PIPE	125	684	809		LF	
5836000000-E	U	1540	24" ENCASMENT PIPE	494	0	494		LF	
5872500000-E	U	1550	BORE AND JACK OF 24"	160	0	160		LF	
5872500000-E	U	1550	BORE AND JACK OF 16"	65	227	292		LF	

Union County Construction Cost

..... \$ 3,213,000.00

NCDOT TIP Project: U-4714BA

Project Special Provisions

**SR 1009 (Old Monroe Road) from West of Morningside Meadow Lane to East of
SR 1377 (Wesley Chapel-Stouts Rd)
Utility Construction**

Feb. 24, 2026

Prepared by:

Robert T. Krantz, PE

STV Engineers, Inc.

2151 Hawkins Street, Suite 1400

Charlotte, NC 28203

Signature and seal of professional engineer that prepared these special provisions



**PROJECT SPECIAL PROVISIONS
UTILITY CONSTRUCTION**

Revise the 2024 Standard Specifications as follows:

Page 15-1, Sub-article 1500-2 Cooperation with the Utility Owner, paragraph 2:

Add the following sentences:

The utility owner is Union County and the utilities are maintained by Union County Water. The contact person for Union County Water is Thomas Mann, PE; and he can be reached by phone at (704) 292-2560 or by email at thomas.mann@unioncountync.gov. The contractor is required to contact Thomas Mann at least two (2) weeks prior to the commencement of any water and/or sewer construction.

Prior to water and/or sewer construction, the contractor must submit to Thomas Mann of Union County Water, the proposed utility material submittals and shop drawings, as applicable for Union County review and obtain Union County approval of utility material submittals and shop drawings.

The contractor shall keep Union County's appointed representative informed of the work progress and provide opportunity for inspection of construction and testing. The contractor shall maintain water and sewer service to existing customers during construction, minimize the duration of any service disruption, and notify the Union County representative at least 72 hours in advance of any scheduled service disruption.

Testing, inspection, and acceptance of water and sewer utility shall be in accordance with NCDEQ and Union County requirements. Contractor shall coordinate with Union County to ensure all testing, inspection, and documentation requirements are met.

Unless otherwise indicated in these special provisions, all materials and requirements for proposed water and sewer lines shall at a minimum meet the standards and requirements outlined in the Union County Standard Specifications dated October 10, 2024 and Details dated September 13, 2024 (applicable details included in the plans). Any requirements not covered in the Union County standards shall meet the requirements of the 2024 NCDOT Standard Specifications.

Twelve Month Guarantee:

(A) The Contractor shall guarantee materials and workmanship against latent and patent defects arising from faulty materials, faulty workmanship or negligence for a period of twelve months following the date of final acceptance of the work for maintenance and shall replace such defective materials and workmanship without cost to the Department or Union County. The Contractor will not be responsible for damage due to faulty design, normal wear and tear, for negligence on the part of the Department or Union County, and/or for use in excess of the design.

(B) Where items of equipment or material carry a manufacturer's guarantee for any period in excess of twelve months, then the manufacturer's guarantee shall apply for that particular piece of equipment or material. Union County's first remedy shall be through the manufacturer although the Contractor is responsible for invoking the warranted repair work with the manufacturer. The Contractor's responsibility shall be limited to the term of the manufacturer's guarantee. Union County would be afforded the same warranty as provided by the Manufacturer.

This guarantee provision shall be invoked only for major components of work in which the Contractor would be wholly responsible for under the terms of the contract. Examples would include water and sewer pipe, valves, blow off assemblies, fire hydrants, and manholes. This provision will not be used as a mechanism to force the Contractor to return to the project to make repairs or perform additional work for which the Department or Union County would normally compensate the Contractor. In addition, routine maintenance activities (i.e. mowing grass, debris removal, ruts in earth shoulders,) are not parts of this guarantee.

Appropriate provisions of the payment and/or performance bonds shall cover this guarantee for the project.

Payment:

No direct payment will be made for utility construction work required by the preceding provisions, which are general requirements applying to utility construction, and all the requirements stated will be considered incidental work, paid at the contract unit prices of the various utility items included in this contract.

Measurement and payment for work will be in accordance with the *NCDOT Standard Specifications for Roads and Structures*, January 2024.

Page 15-5, Sub-article 1510-2 Materials, paragraph 1:

Add the following sentences:

Water line pipe from 6" through 12" diameter shall be Pressure Class 350 ductile iron pipe. 16" water line pipe shall be Pressure Class 250 ductile iron pipe. Follow Union County specifications and NCDOT Section 1036. In addition to allowable restraining systems for restrained-joint ductile iron pipe as provided in the Union County specifications, field-locking gaskets are allowable as a restraining device.

All 2" water line pipe shall be PVC 1120 SDR 21 in accordance with ASTM-D2241. Fittings for 2" PVC pipe shall be push-on joint PVC or threaded malleable iron.

All water service line ¾" thru 2" shall be Type "K" copper tubing with compression fittings. Splicing of copper service line of runs less than 100 feet will not be allowed. Provide and install a continuous segment of copper water service line between the corporation stop and water meter.

Ductile iron fittings shall have a cement mortar lining, and seal coated in accordance with ANSI/AWWA A21.4/C104.

Page 15-7, Sub-article 1510-3 Construction Methods, line 16:

Add the following sentences:

Samples for bacteriological testing will be collected by Union County personnel and tested at a laboratory under contract by Union County. Samples will typically be collected only on Wednesday mornings. Requests for sample collection must be made at least 48 hours in advance of the sample collection. Sample results will be available no sooner than 24 hours after the samples are delivered to the lab. There will be no cost to Contractor for sample testing for the first sample collected for each water line segment to be tested. Contractor will be responsible for costs related to re-testing for failing bacteriological samples at the prevailing rates of the testing laboratory. Price is subject to change. Union County will not accept test results from outside testing labs.

Page 15-9, Sub-article 1515-3 Construction Methods, line 14:

Add the following sentences:

Elevations of fire hydrants above finished grade to be within manufacturer's recommendation. Elevations of fire hydrants to be determined by Contractor. No separate payment will be made for fire hydrant extensions. The cost of fire hydrant extensions is to be included in the unit price for fire hydrants.

Page 15-9, Sub-article 1515-3 Construction Methods, line 30:

Add the following sentences:

2" blow offs include MJ plug to match the diameter of the water pipe as required, 2" brass nipple, 2" brass pipe, 2" 90-degree bend, 2" coupling, 2" gate valve when required, valve box, concrete ring, and thrust blocking or restraint as required.

Page 15-11, Sub-article 1520-2 Materials, paragraph 1:

Add the following sentences:

Gravity sewer pipe shall be SDR 26 PVC pipe or Pressure Class 350 ductile iron pipe. Pressure Class 350 ductile iron pipe shall be furnished with ceramic epoxy lining, Tnemec 431 or equal, and seal coating in accordance with ANSI/AWWA A21.4/C104.

All sewer lateral pipe shall be smooth-walled Schedule 40 PVC pipe in accordance with ASTM D1784, or Pressure Class 350 ductile iron pipe furnished with ceramic epoxy lining, Tnemec 431 or equal, and seal coating in accordance with ANSI/AWWA A21.4/C104 when ferrous pipe is required due to proximity to other utilities.

SP-1 RELOCATE SEWER LATERAL CLEAN OUT TO NEW RIGHT-OF-WAY

Description:

Locate and remove existing sewer clean out and lateral pipe and install new clean out and lateral pipe.

Materials:

Refer to Division 10 and Union County Specifications.

Item	Section
Sanitary Sewer Pipe and Fittings	1034

Use any pipe specified under Section 1034 except where a particular type of pipe is specified in the plans or required by environmental regulations or Departmental or Union County policy.

Verify the pipe is appropriate for the test pressure of the system and the external loading.

For sewer services and laterals, use Schedule 40 PVC pipe or Pressure Class 350 ductile iron pipe furnished with ceramic epoxy lining, Tnemec 431 or equal, and seal coating in accordance with ANSI/AWWA A21.4/C104.

Construction Methods:

Locate existing sewer clean out at old roadway right-of-way line. Contact North Carolina 811 as needed to locate the existing sewer service line. Coordinate with sewer customer as needed to minimize disruption to service.

Apply Section 1505 for excavation, trenching, pipe laying and backfill to sanitary sewer installation. Perform all excavation to uncover existing clean out, wye, and sewer lateral. Saw-cut and remove wye and vertical clean out pipe. Remove existing lateral pipe between the existing clean out and proposed clean out at the right-of-way or easement line shown in the plans.

Install 4-inch minimum diameter sanitary sewer clean-out flush with finished grade on 4-inch and 6-inch service lines. Provide clean-outs at the right-of-way line and at changes in direction. Do not locate clean-outs within the roadway pavement or shoulders. Provide clean-outs no more than 50 feet apart when beyond the roadway shoulders. Provide and install Pressure Class 350 ductile iron pipe furnished with ceramic epoxy lining, Tnemec 431 or

equal, and seal coating in accordance with ANSI/AWWA A21.4/C104 when required due to proximity to other utilities.

Assemble pipe in accordance with the recommendations of the manufacturer. Connect pipe to the saw-cut end of the existing lateral pipe and extend new lateral pipe to the new clean out location.

Extend new pipe at the same slope as the existing sewer lateral pipe on the “sewer side” of the saw-cut. Differences in the elevations between the new lateral pipe and the existing private sewer lateral pipe at the right-of-way should be made up in the vertical clean out pipe using combination wyes as needed. Connect the existing sewer lateral pipe at the right-of-way to the new clean out. Provide sleeves or couplings as needed.

Measurement and Payment:

Relocate Sewer Lateral Clean Out to New Right-of-Way will be paid as the actual number of sewer clean outs relocated to the new right-of-way line, complete in place.

Materials used for clean outs and extension of sewer service lines for which there is a pay item will be paid under the specific pay item, including Sanitary Sewer Clean-Out and Sewer Service Line. No extra payment will be made for work included in other pay items. No separate payment will be made for explorations, PVC fittings, adapters, couplings, or construction equipment.