

09/28/19

TIP PROJECT: B-5156

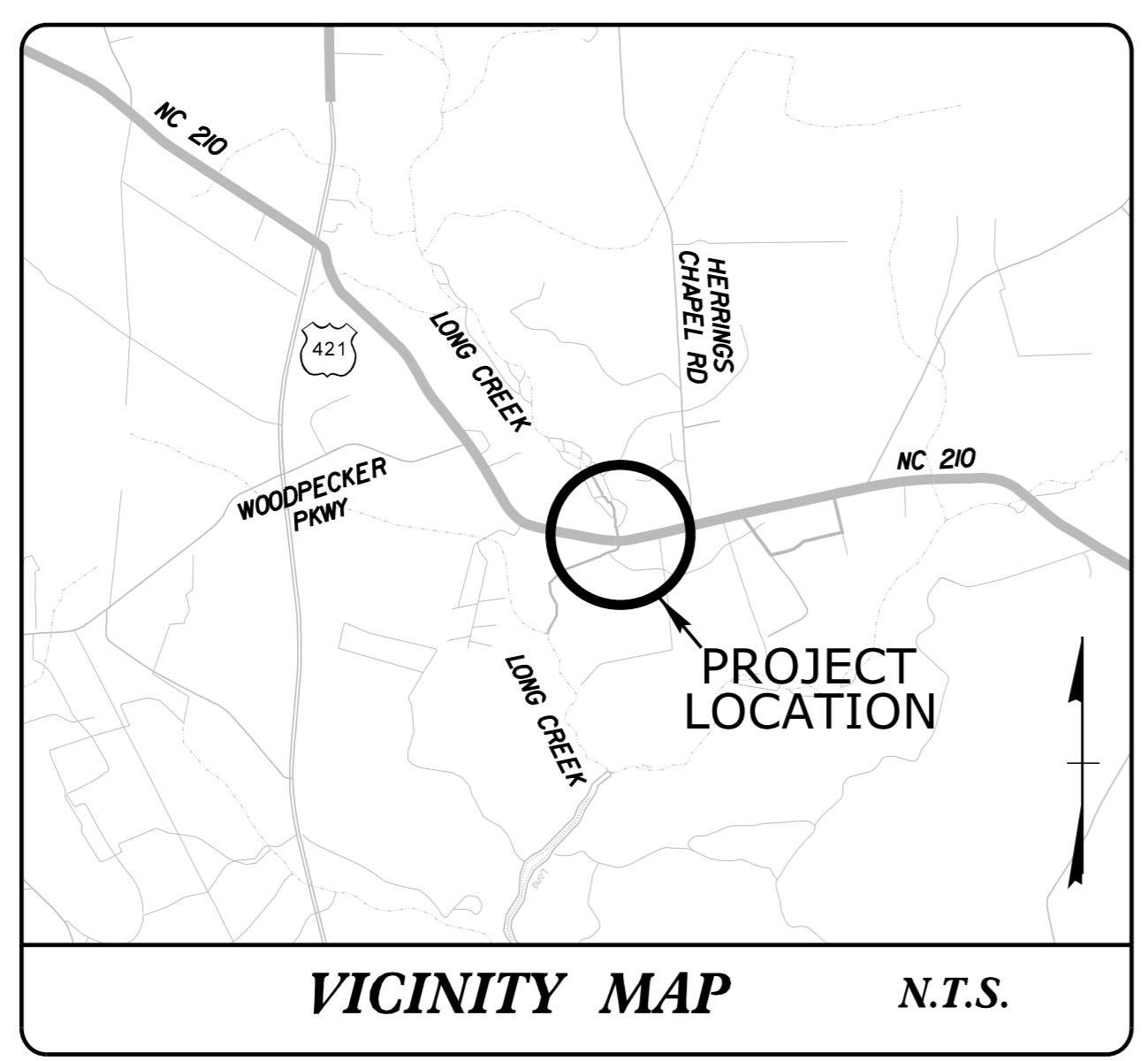
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| T.I.P. NO. | SHEET NO. |
| B-5156 | UC-1 |

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

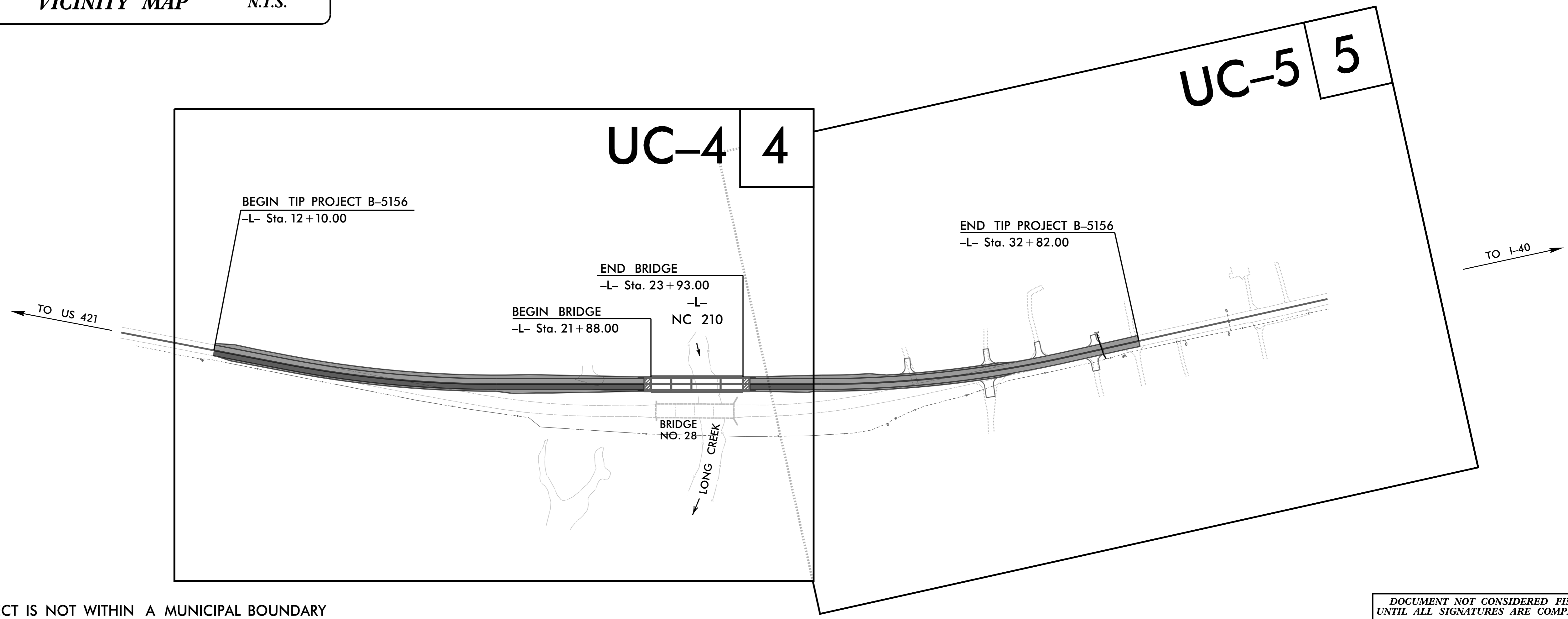
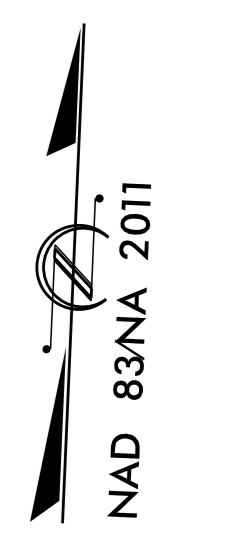
UTILITY CONSTRUCTION PLANS
PENDER COUNTY

LOCATION: BRIDGE 28 OVER LONG CREEK ON NC 210

TYPE OF WORK: RELOCATION OF WATER METER

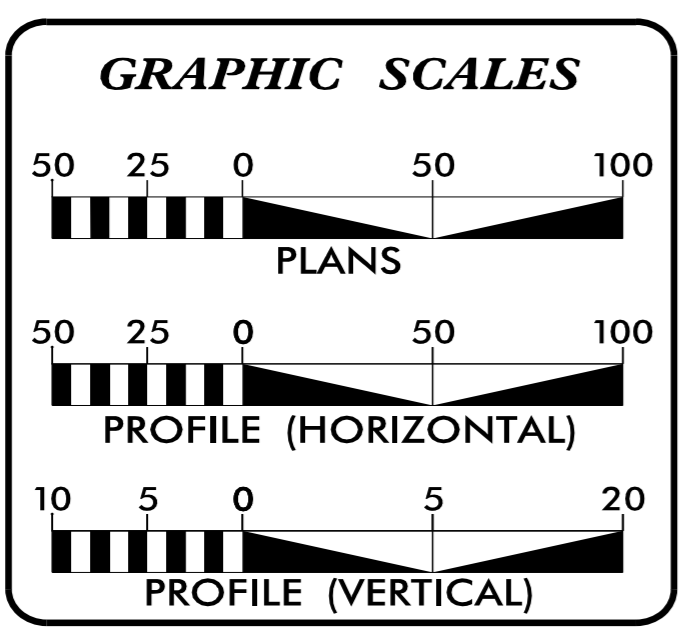


UC PLANS



THIS PROJECT IS NOT WITHIN A MUNICIPAL BOUNDARY

DOCUMENT NOT CONSIDERED FINAL
UNTIL ALL SIGNATURES ARE COMPLETED



| INDEX OF SHEETS | |
|-----------------|-----------------------------|
| SHEET NO.: | DESCRIPTION: |
| UC-1 | TITLE SHEET |
| UC-2 | UTILITY SYMBOLGY |
| UC-3 | UTILITY NOTES |
| UC-3A | UTILITY DETAILS |
| UC-4 THRU UC-5 | UTILITY CONSTRUCTION SHEETS |

WATER AND SEWER OWNERS ON PROJECT

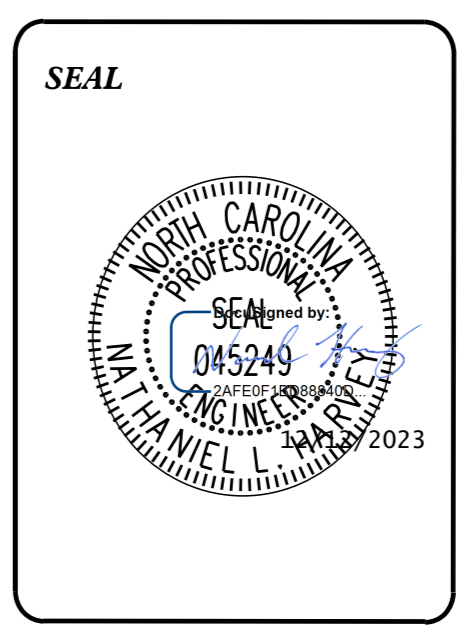
(1) WATER - PENDER COUNTY

PREPARED IN THE OFFICE OF

Kimley»Horn ©2022

NC LICENSE #P-0102
421 FAYETTEVILLE STREET, SUITE 600
RALEIGH, NORTH CAROLINA 27601
PHONE: (919) 677-2000

Nate Harvey, P.E. CONSULTANT CONTACT #1
Jack Bajerski, E.I. CONSULTANT CONTACT #2



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

Bo Hemphill, P.E. EASTERN UTILITIES MANAGER
Nabil Hamdan REGIONAL UTILITIES ENGINEER
Tanga Sampson REGIONAL UTILITY COORDINATOR
Larry James SENIOR UTILITY COORDINATOR

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 | |

NOTE
PAY ITEM

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)

5/14/99

5/14/23

NCDOT GENERAL UTILITY 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 PENDER COUNTY.
- 3. ALL WATER LINE TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL AND NATURAL RESOURCES, 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 ENVIRONMENTAL AND NATURAL 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 AND THE UTILITY OWNER 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 A MINIMUM OF ONE WEEK PRIOR TO SERVICE INTERRUPTIONS AND TESTING. KEEP UTILITY OWNERS' REPRESENTATIVES INFORMED OF WORK PROGRESS AND PROVIDE OPPROTUNITY 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 ADDITONAL 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.

PROJECT SPECIFIC UTILITY NOTES:

- 1. CONTRACTOR SHALL COORDINATE ALL WORK WITH UTILITY OWNER AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION, OR AS OTHERWISE SPECIFIED HEREIN.
- 2. CONTRACTOR SHALL NOTIFY AFFECTED PROPERTY OWNERS AND TENNANTS AT LEAST 7 DAYS PRIOR TO WATER UTILITY CONSTRUCTION THAT CONSTRUCTION ACTIVITY WILL TAKE PLACE IN THEIR AREA.

PREPARED BY:
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 RALEIGH, NC 27601

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|--|-----|-----------|---|
| PROJECT REFERENCE NO. | | SHEET NO. | |
| B-5156 | | UC-3 | |
| DESIGNED BY: | NLH | | UTILITY CONSTRUCTION PLANS ONLY DOCUMENT NOT CONSIDERED FINAL UNTIL ALL SIGNATURES ARE COMPLETED |
| DRAWN BY: | JNB | | |
| CHECKED BY: | NDR | | |
| APPROVED BY: | NLH | | |
| REVISED: | | | |
| NORTH CAROLINA DEPARTMENT OF TRANSPORTATION | | | |
| UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151 | | | |

UTILITY CONSTRUCTION

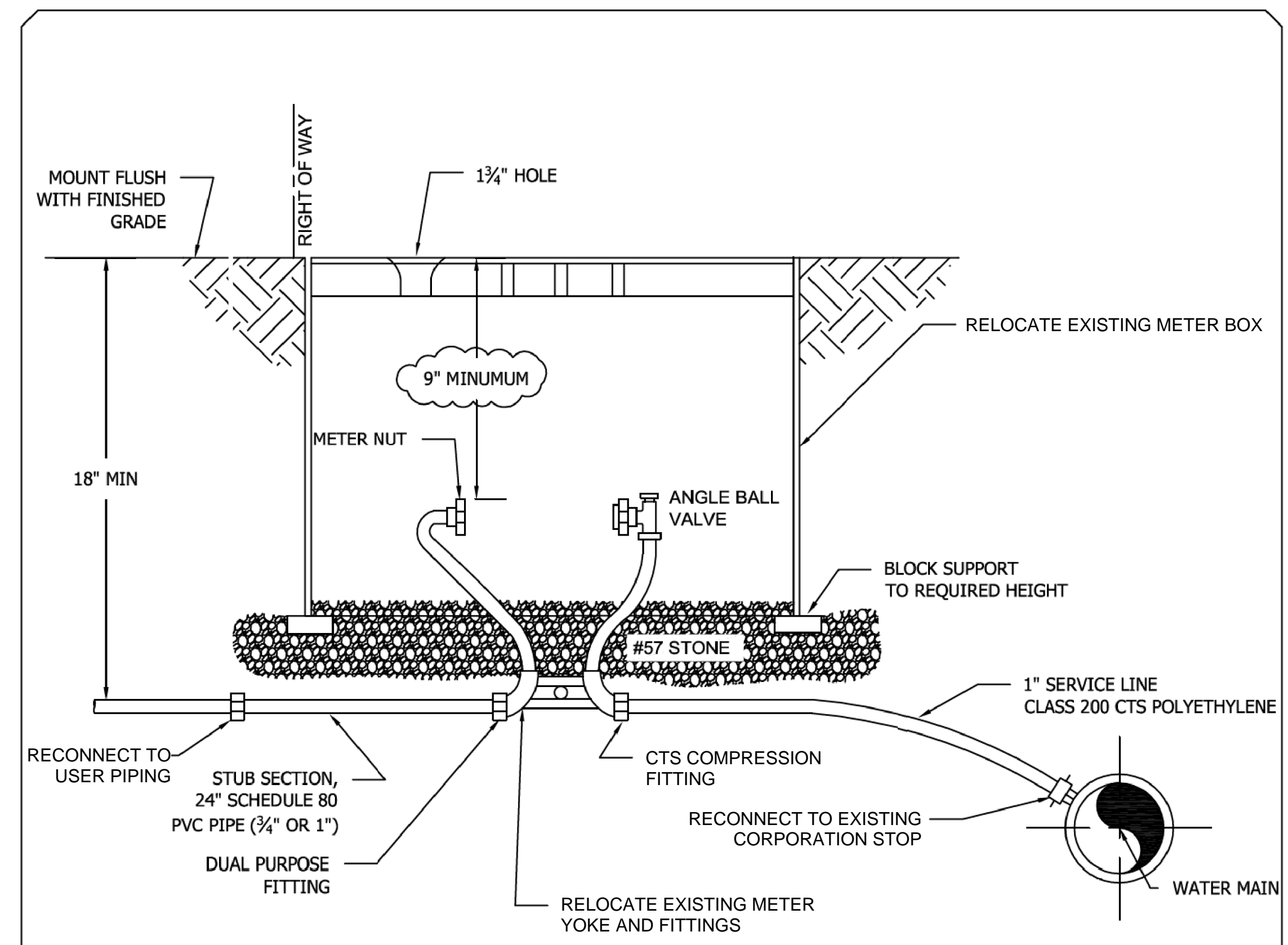
5/14/23

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| PROJECT REFERENCE NO. | SHEET NO. |
| B-5156 | UC-3A |
| DESIGNED BY: NLH | |
| DRAWN BY: JNB | |
| CHECKED BY: NDR | |
| APPROVED BY: NLH | |
| REVISED: | |
| NORTH CAROLINA DEPARTMENT OF TRANSPORTATION | |
| UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151 | |
| UTILITY CONSTRUCTION PLANS ONLY | |
| DOCUMENT NOT CONSIDERED FINAL UNTIL ALL SIGNATURES ARE COMPLETED | |

UTILITY CONSTRUCTION

PCU STANDARD NOTES

1. A PRE-CONSTRUCTION MEETING IS REQUIRED BEFORE BEGINNING WORK. THE MEETING MUST BE SCHEDULED WITH PENDER COUNTY UTILITIES (PCU) AT LEAST ONE WEEK IN ADVANCE. ATTENDEES MUST INCLUDE PCU, THE UTILITY CONTRACTOR'S SUPERINTENDENT, AND THE ENGINEER.
2. CLOSE-OUT DOCUMENTS WHICH MUST BE RECEIVED BY PCU PRIOR TO PCU SIGNING THE NCDEQ PWSS APPLICANT CERTIFICATION INCLUDE: SATISFACTORY BACTERIOLOGICAL TESTS, PRESSURE TESTS, AND RECORD DRAWINGS (PDF & CAD).



- NOTES:
1. CONTRACTOR SHALL PLACE METER BOX IN NON-TRAFFIC AREA ONLY.
 2. CONTRACTOR SHALL CENTER METER YOKE IN METER BOX.
 3. METER BOX TO BE ADJUSTED VERTICALLY TO ACCEPT COUNTY'S STANDARD SERVICE METER (NEPTUNE T-10, PRO READ REGISTER, R900 MIU).
 4. METER TO BE SET BY COUNTY UPON SATISFACTORY INSPECTION OF WATER SERVICE LINE.

STANDARD WATER SERVICE DETAIL
 NOT TO SCALE



5/14/99

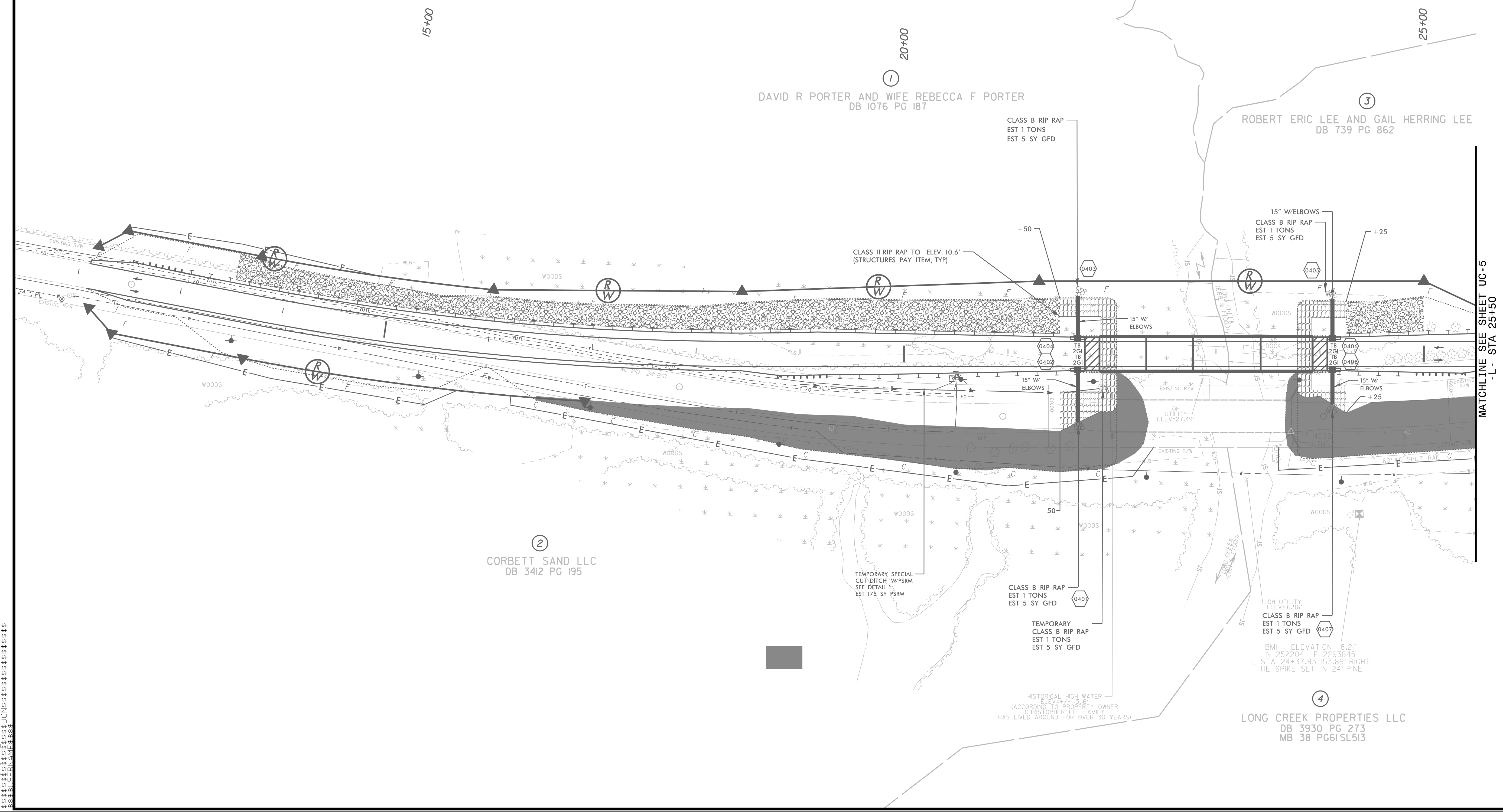
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|---|-------------------|
| PROJECT REFERENCE NO. B-5156 | SHEET NO. UC-4 |
| DESIGNED BY: NLH | |
| DRAWN BY: JNB | |
| CHECKED BY: NDR | |
| APPROVED BY: NLH | |
| REVISED: | |
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| UTILITY CONSTRUCTION PLANS ONLY DOCUMENT NOT CONSIDERED FINAL UNTIL ALL SIGNATURES ARE COMPLETED | |

NOTE:
 NO UTILITY CONSTRUCTION THIS SHEET.

NAD 83/NA 2011

UTILITY CONSTRUCTION
 THIS SHEET CORRESPONDS TO RDY-4



MATCHLINE SEE SHEET UC-5
 -L- STA 23+50

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5/14/99

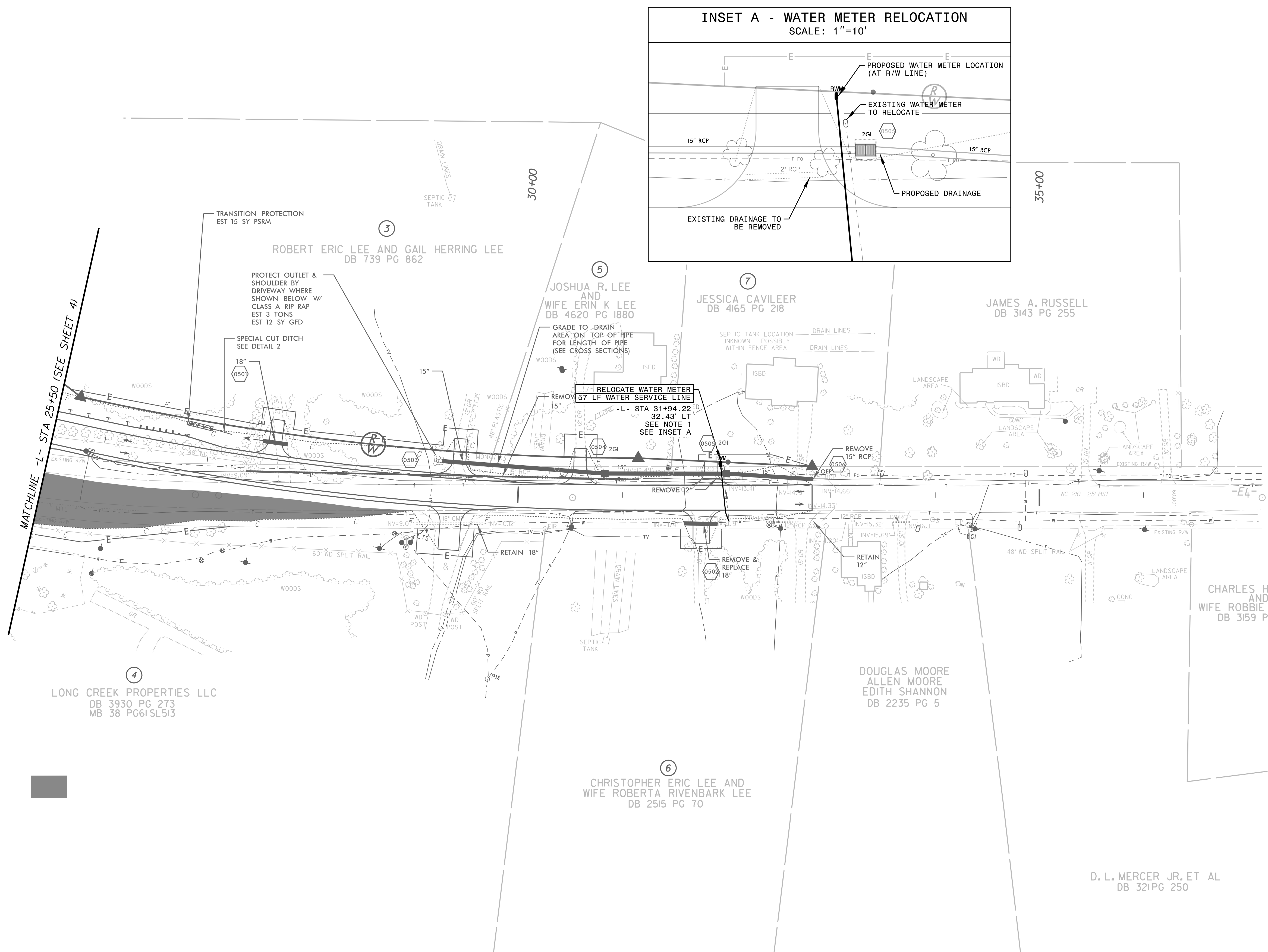
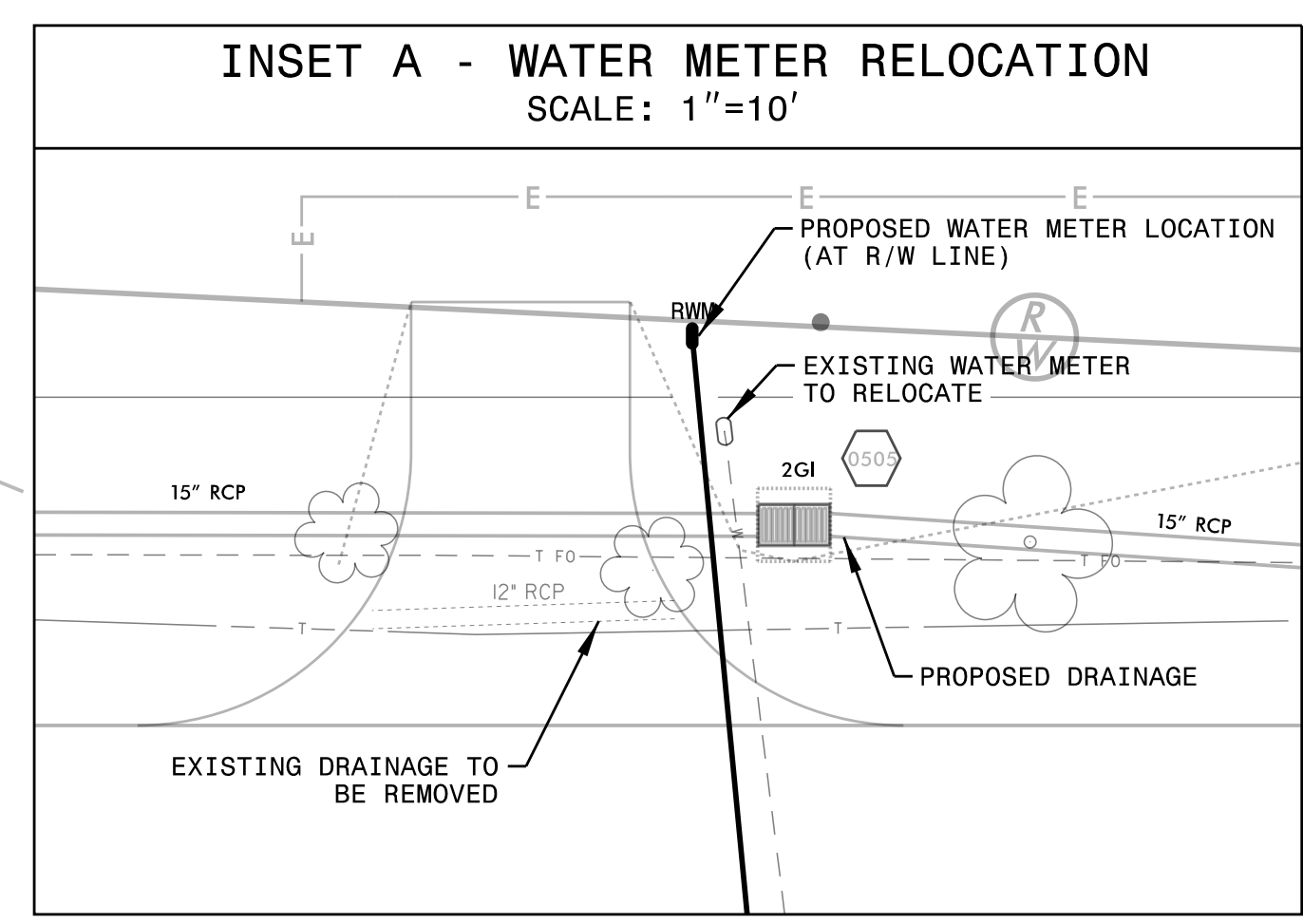
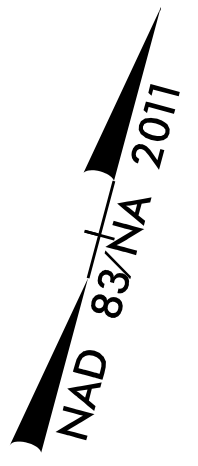
- NOTES:
1. RELOCATE WATER METER AS SHOWN AND CONNECT TO EXISTING CORPORATION STOP AT EXISTING WATER MAIN WITHOUT SPLICES OR COUPLERS BETWEEN THE NEW METER AND THE WATER MAIN.
 2. MAINTAIN MINIMUM COVER OF 36-INCHES ON PROPOSED WATER SERVICE LINE.
 3. INSTALL WATER SERVICE LINE UNDER EXISTING PAVEMENT BY A TRENCHLESS METHOD PER NCDOT STANDARD SPECIFICATIONS ARTICLE 1510-3.
 4. TEST HOLE SHOWS EXISTING WATER LINE IS 18" SIZE PVC.

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| B-5156 | UC-5 |
| DESIGNED BY: NLH | |
| DRAWN BY: JNB | |
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| APPROVED BY: NLH | |
| REVISED: | |
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UTILITY CONSTRUCTION

THIS SHEET CORRESPONDS TO RDY-5



BM2 ELEVATION= 23.72'
 L STA 37+12.00
 N 53°07'23.5" DIST 217.96'
 TIE SPIKE SET IN 24' OAK

DATE: 5/14/99
 TIME: 10:00 AM
 DRAWN BY: JNB
 CHECKED BY: NDR
 APPROVED BY: NLH