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STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

**UTILITY CONSTRUCTION PLANS
JONES COUNTY & ONSLOW COUNTY**

T.I.P. NO.	SHEET NO.
R-2514B	UC-1

UTILITY CONSTRUCTION PLANS DESIGNED BY:

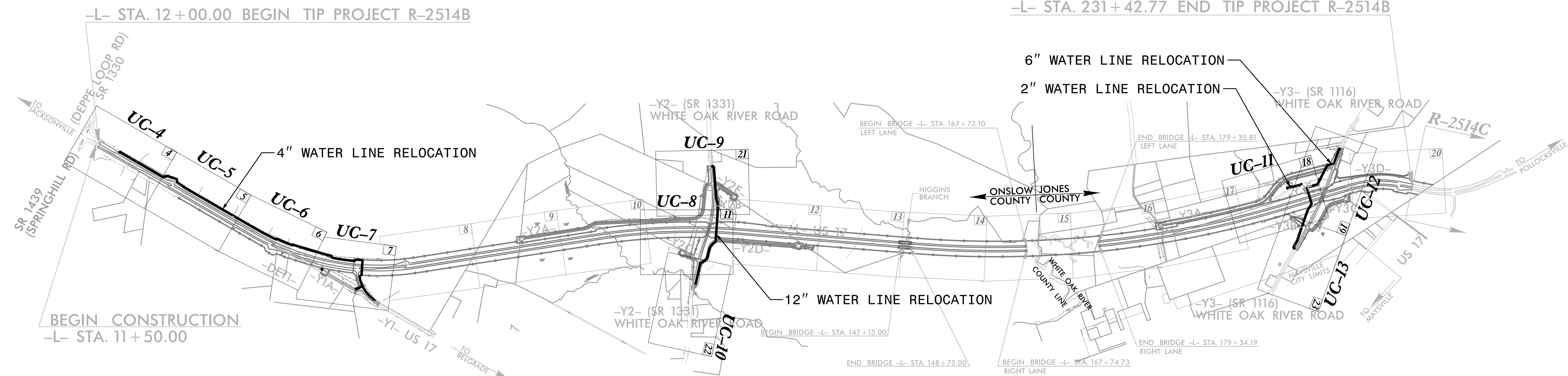
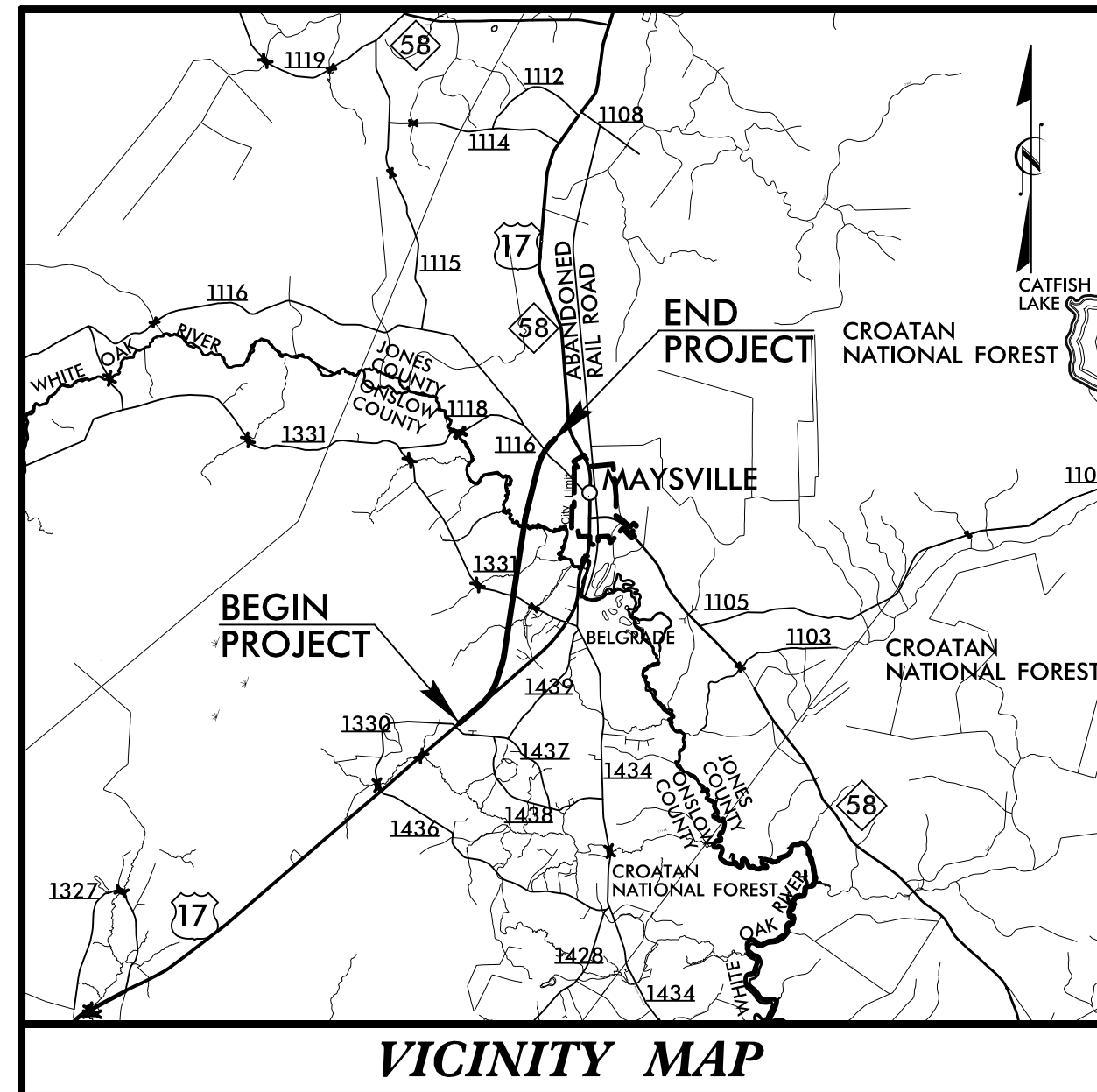
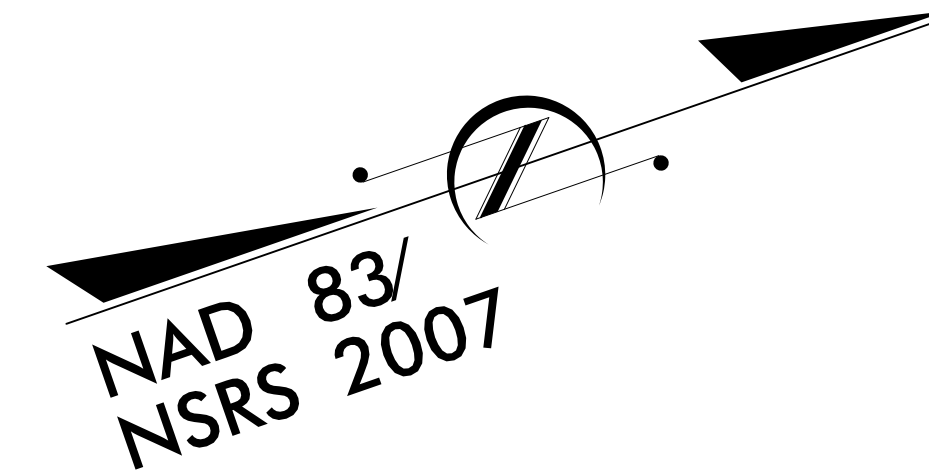


THE WOOTEN COMPANY
ENGINEERING | PLANNING | ARCHITECTURE
120 North Baylan Avenue, Raleigh, NC 27603-1423
919.828.0531, fax 919.834.3589
License Number: F-0115

Brian J.P. Oswald, P.E. UTILITIES PROJECT MANAGER

LOCATION: US 17 FROM SOUTH OF BELGRADE AT
SR 1330/SR 1439 TO NORTH OF MAYSVILLE

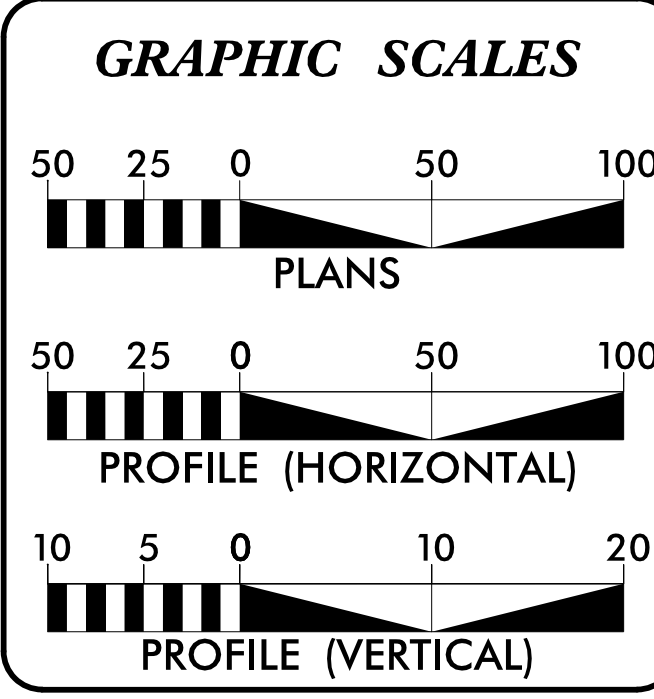
TYPE OF WORK: UTILITY RELOCATION



TIP PROJECT: R-2514B

CONTRACT: C203591

RW Revision 5/14 JCL -Y2A- Realigned



INDEX OF SHEETS

SHEET NO.	DESCRIPTION
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UC-2	UTILITY SYMBOLOGY
UC-3	NOTES
UC-3A, UC-3B & UC-3C	DETAILS
UC-4 THRU UC-13	UTILITY CONSTRUCTION SHEETS
UC-14 THRU UC-18	PROFILE SHEETS

WATER AND SEWER OWNERS ON PROJECT

(1) JONES COUNTY
(2) ONWASA

SEAL

3/19/2015

PREPARED IN THE OFFICE OF:
**DIVISION OF HIGHWAYS
UTILITIES UNIT
UTILITIES ENGINEERING**

1591 MAIL SERVICES CENTER
RALEIGH NC 27699-1591
PHONE (919) 707-6690
FAX (919) 250-4151

Roger Worthington, P.E. UTILITIES SECTION ENGINEER
Roger Worthington, P.E. UTILITIES SQUAD LEADER
Kifah Kamil SENIOR UTILITIES ENGINEER

\$\$\$ \$TIME\$\$\$
\$\$\$ \$CON\$\$\$
\$\$\$ \$NAME\$\$\$

5/14/19

UTILITY CONSTRUCTION

NCDOT GENERAL NOTES:

1. THE EXISTING UTILITIES BELONG TO JONES COUNTY AND ONSLOW WATER AND SEWER AUTHORITY (ONWASA).
2. THE PROPOSED UTILITY CONSTRUCTION IN JONES COUNTY SHALL MEET THE APPLICABLE REQUIREMENTS OF THE NC DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" DATED JANUARY 2012. PROPOSED UTILITY CONSTRUCTION IN ONSLOW COUNTY SHALL MEET NCDOT'S "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" DATED JANUARY 2012 AND THE ONWASA MANUAL OF STANDARDS, SPECIFICATIONS, AND DETAILS. IN THE EVENT OF A CONFLICT, THE MORE RESTRICTIVE SHALL GOVERN.
3. ALL WATER LINES 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 ENVIRONMENT AND NATURAL RESOURCES, 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 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 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.


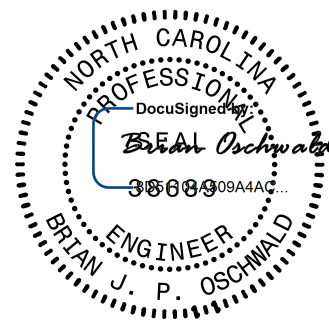
7. MAKE FINAL CONNECTIONS OF THE NEW WORK TO THE EXISTING SYSTEM WHERE INDICATED ON THE PLANS, AS REQUIRED TO FIT THE ACTUAL CONDITIONS, OR AS DIRECTED.
8. MAKE CONNECTIONS BETWEEN EXISTING AND PROPOSED UTILITIES AT TIMES MOST CONVENIENT TO THE PUBLIC, WITHOUT ENDANGERING THE UTILITY SERVICE, AND IN 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.

TWC PROJECT GENERAL NOTES:

1. EXISTING UTILITIES ARE LOCATED ON PLANS APPROXIMATELY. NOTIFY UTILITY LOCATING SERVICE TO MARK LOCATION OF EXISTING UTILITIES AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION ACTIVITY. CONTRACTOR RESPONSIBLE FOR VERIFYING EXACT LOCATION OF THESE EXISTING UTILITIES. THE COST TO REPAIR THESE FACILITIES, IF DAMAGED, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
2. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT AND NOT TO DISTURB EXISTING PROPERTY CORNER MARKERS. ALL DISTURBED PROPERTY CORNER MARKERS SHALL BE REPLACED BY A PROFESSIONAL LAND SURVEYOR.
3. FOR AREAS OUTSIDE NCDOT RIGHT-OF-WAY, CLEAR AND GRUB PERMANENT EASEMENT IN ITS ENTIRETY AND TEMPORARY EASEMENT ONLY AS NECESSARY TO INSTALL UTILITY. REMOVE MINOR ITEMS AS REQUIRED FOR THE INSTALLATION OF THE UTILITY. MINOR ITEMS SHALL INCLUDE, BUT NOT BE LIMITED TO, EXISTING SIGNS, MAIL BOXES, STORM SEWER PIPES AND REINSTALL ITEMS TO THEIR ORIGINAL CONDITION. INCLUDE COSTS IN THE PER FOOT COST OF THE UTILITY BEING INSTALLED.
4. SUPPORT, RELOCATE, ADJUST, OR REMOVE AND REPLACE EXISTING UTILITY POLES, FENCES, CULVERTS, PAVEMENT, UTILITIES, CURBING AND OTHER STRUCTURES DURING CONSTRUCTION. REPAIR DAMAGED ITEMS TO THEIR ORIGINAL CONDITION AT NO ADDITIONAL COST.

NCDOT PROJECT SPECIFIC NOTES:

1. PROPOSED WATER LINE SHALL BE RJDI (RESTRAINED JOINT DUCTILE IRON) AS INDICATED ON THE CONSTRUCTION DRAWINGS. WATER LINE INSTALLATION THROUGH ENCASEMENT PIPE SHALL BE RJDI AS SHOWN IN THE PROFILE.
2. CONTRACTOR'S ATTENTION IS DIRECTED TO SECTIONS 102, 107, AND 1550 OF THE STANDARD SPECIFICATIONS AND APPLICABLE ONWASA STANDARDS CONCERNING TRENCHLESS INSTALLATION. IT IS CONTRACTOR'S RESPONSIBILITY TO HAVE BORE DESIGNED AND SEALED BY A LICENSED NORTH CAROLINA PROFESSIONAL ENGINEER. NO DAMAGE IS ALLOWED TO RIVER, WETLANDS, OR BUFFER ZONES.
3. IF HDPE PIPE IS INSTALLED BY DIRECTIONAL DRILL, IT SHALL BE FILLED WITH WATER AND NOT BE CONNECTED TO ANY OTHER PIPE OR FITTINGS FOR ONE WEEK FROM THE TIME OF INSTALLATION.
5. 6 INCHES OF NCDOT ABC AGGREGATE SHALL BE PROVIDED FOR THE FULL WIDTH OF UNPAVED DRIVEWAYS AND OTHER GRAVEL AREAS FOR THE DISTURBED AREAS. CONTRACTOR SHALL MINIMIZE DISTURBANCE.
6. OPEN CUT PAVED AREAS, INCLUDING DRIVEWAYS, SIDEWALK, AND CURB AND GUTTER. OUTSIDE OF NCDOT ROAD CONSTRUCTION LIMITS, REPLACE PAVEMENT AND CURB AND GUTTER WITH NEW TO MATCH THE EXISTING CROSS SECTION.
7. CONTRACTOR SHALL USE CAUTION WHEN CROSSING EXISTING STORM SEWER, ESPECIALLY OLD STYLE RCP (BELL PIPE). CONTRACTOR IS RESPONSIBLE FOR REPAIRING OR REPLACING DAMAGE TO THESE FACILITIES AT NO ADDITIONAL COST TO THE OWNER.
8. ALL CONSTRUCTION AND TESTING IN ONSLOW COUNTY SHALL BE PER ONWASA STANDARDS AND NCDOT STANDARDS. IN THE EVENT OF A CONFLICT, THE MORE RESTRICTIVE SHALL GOVERN. ALL CONSTRUCTION AND TESTING IN JONES COUNTY SHALL BE PER NCDOT STANDARDS.
9. ANY SERVICE INTERRUPTED BY THE CONTRACTOR SHALL BE RETURNED TO SERVICE AS SOON AS POSSIBLE AND IN NO CASE BEYOND THE END OF THE WORKING DAY.
10. CONTRACTOR SHALL REMOVE ALL ABANDONED UTILITIES INCLUDING VALVES AND APPURTENANCES IN CONFLICT WITH THE PROPOSED IMPROVEMENTS. IF NOT IN CONFLICT, USE NCDOT STANDARDS SECTION 1530 FOR ABANDONING UTILITY.


PREPARED IN THE OFFICE OF:  THE WOOTEN COMPANY <small>ENGINEERING PLANNING ARCHITECTURE</small> <small>120 North Royal Avenue Raleigh, NC 27603-1423</small> <small>919.878.0011 fax 919.878.5166</small> <small>License Number: F-4015</small>	PROJECT REFERENCE NO.	SHEET NO.
	R-2514B	UC-3
DESIGNED BY: BJPO		
DRAWN BY: TK		
CHECKED BY: BJPO		
APPROVED BY: MDS		
REVISED:	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
ONLY WATER LINE CONSTRUCTION SHOWN ON THIS SHEET		

UTILITY CONSTRUCTION

5/14/19

PROJECT TYPICAL DETAILS

PREPARED IN THE OFFICE OF:



THE WOOTEN COMPANY
ENGINEERING | PLANNING | ARCHITECTURE
120 North Wolfe Street, Raleigh, NC 27603-1423
919.878.0011 | 919.878.0099
License Number: F-0115

PROJECT REFERENCE NO. **R-2514B** SHEET NO. **UC-3A**

DESIGNED BY: BJO
DRAWN BY: TK
CHECKED BY: BJO
APPROVED BY: MDS

REVISED:

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

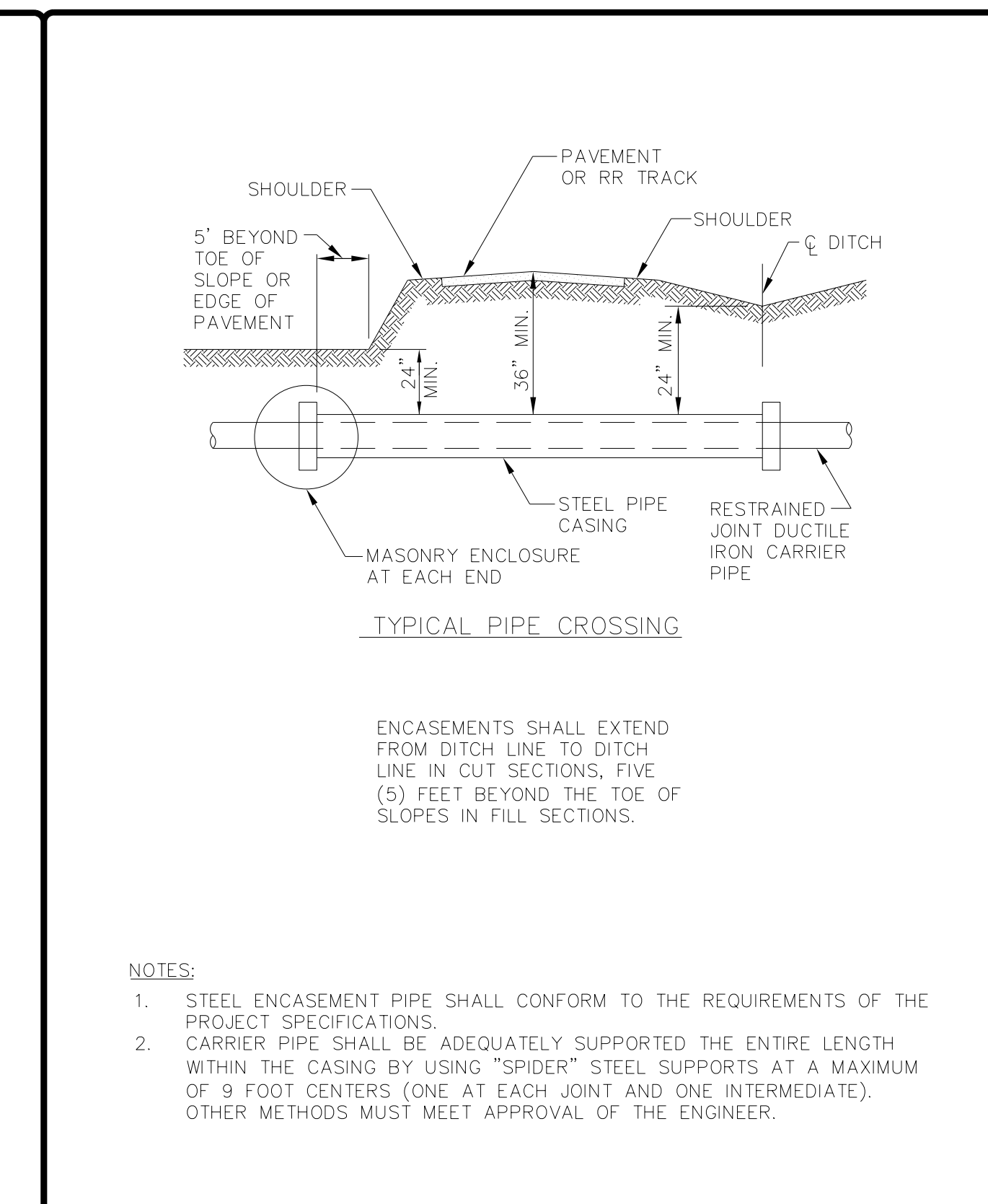
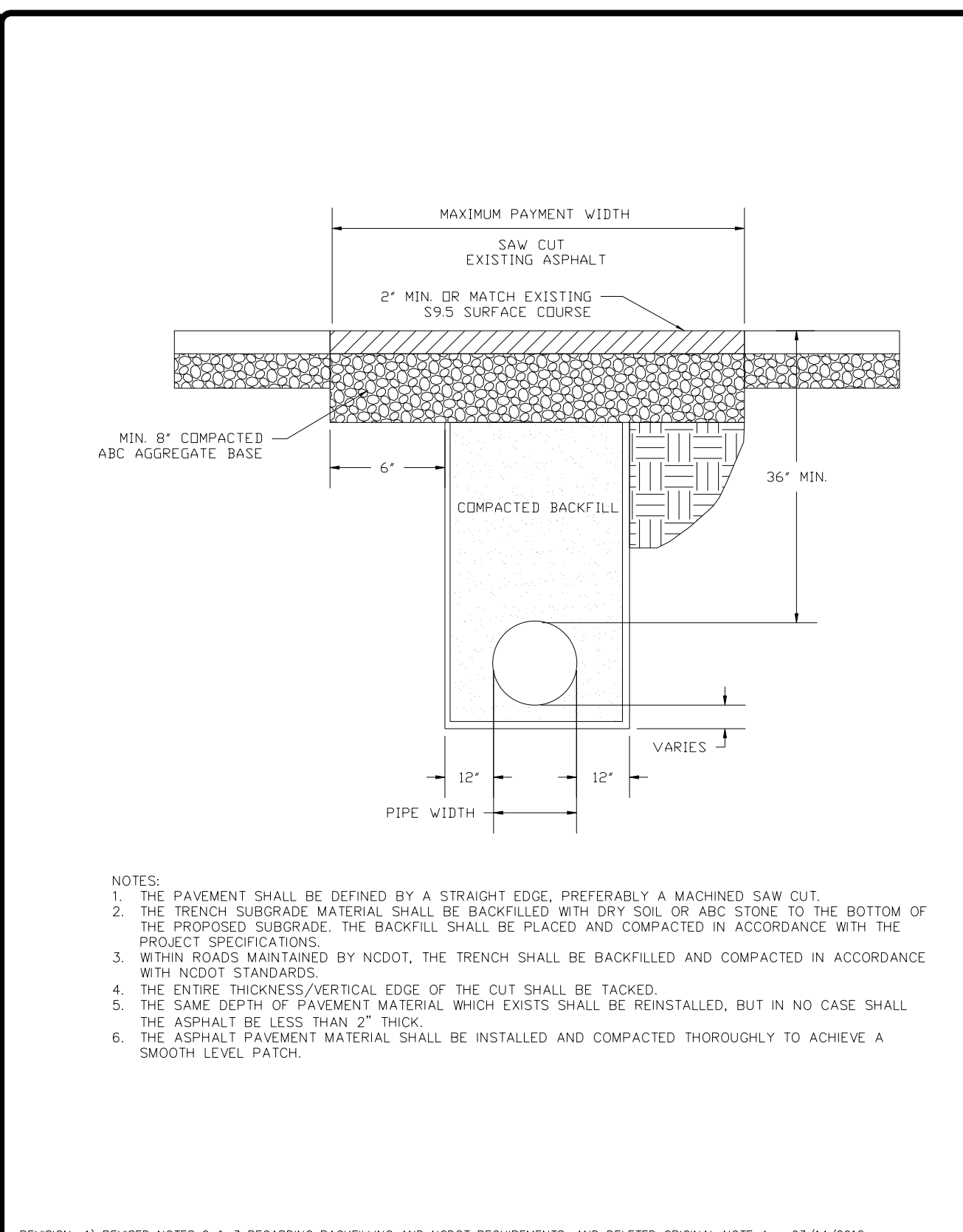
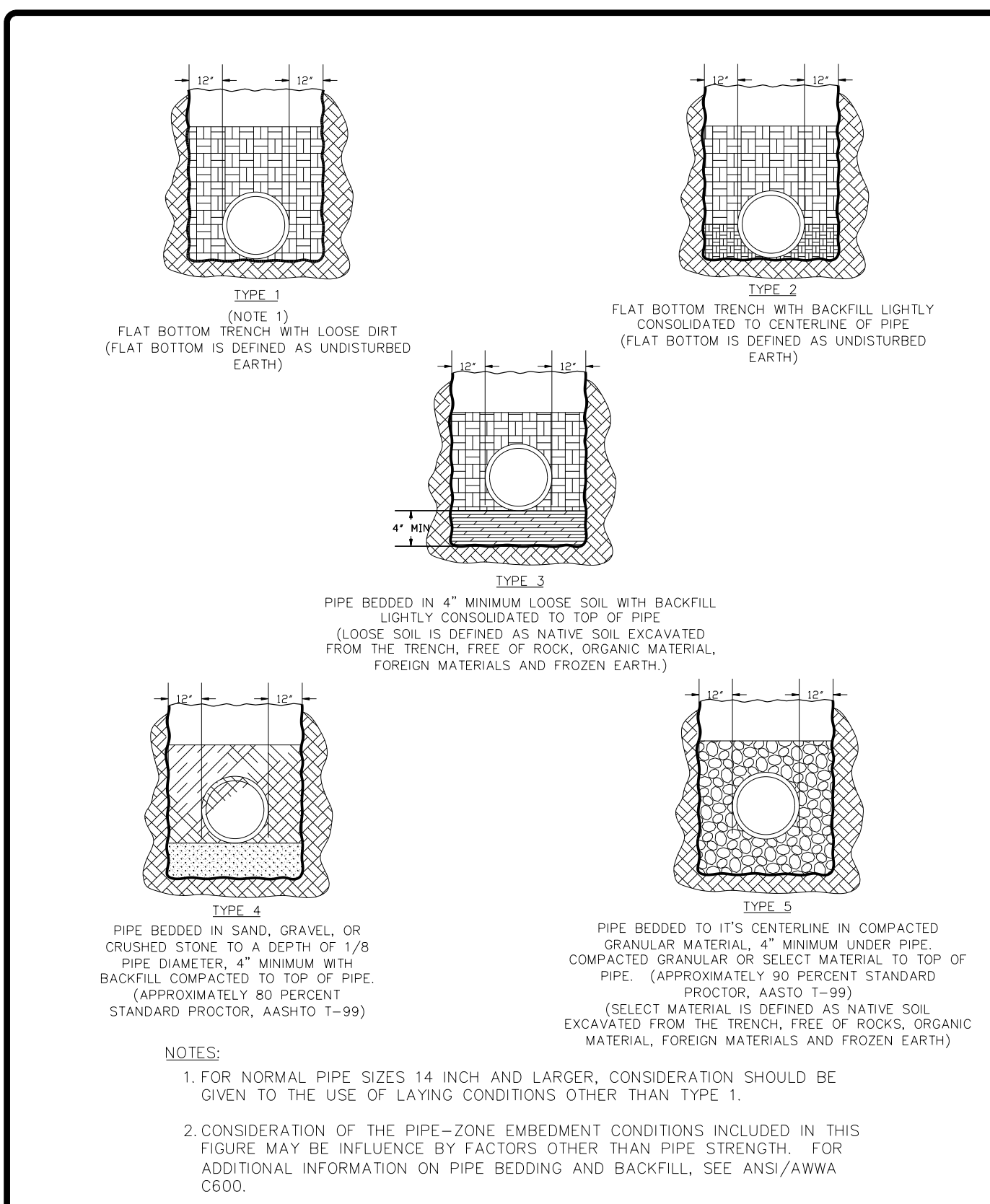
UTILITIES ENGINEERING SEC.
PHONE: (919) 707-6690
FAX: (919) 250-4151

UTILITY CONSTRUCTION PLANS ONLY

2/3/2015

VERTICAL SCALE: 0 5' 10'
HORIZONTAL SCALE: 0 25' 50'

ONLY WATER LINE CONSTRUCTION SHOWN ON THIS SHEET



UTILITY CONSTRUCTION

Onslow Water & Sewer Authority
USE WITH "ONWASA MANUAL OF SPECIFICATIONS, STANDARDS AND DETAILS, latest revision"

WATER MAIN EMBEDMENT DETAILS

SCALE: Not To Scale
REVISION DATE: March, 2012
SHEET #: 1 of 1

Onslow Water & Sewer Authority
USE WITH "ONWASA MANUAL OF SPECIFICATIONS, STANDARDS AND DETAILS, latest revision"

STANDARD PAVEMENT CUT AND PATCH DETAILS

SCALE: Not To Scale
REVISION DATE: March, 2012
SHEET #: 1 of 1

Onslow Water & Sewer Authority
USE WITH "ONWASA MANUAL OF SPECIFICATIONS, STANDARDS AND DETAILS, latest revision"

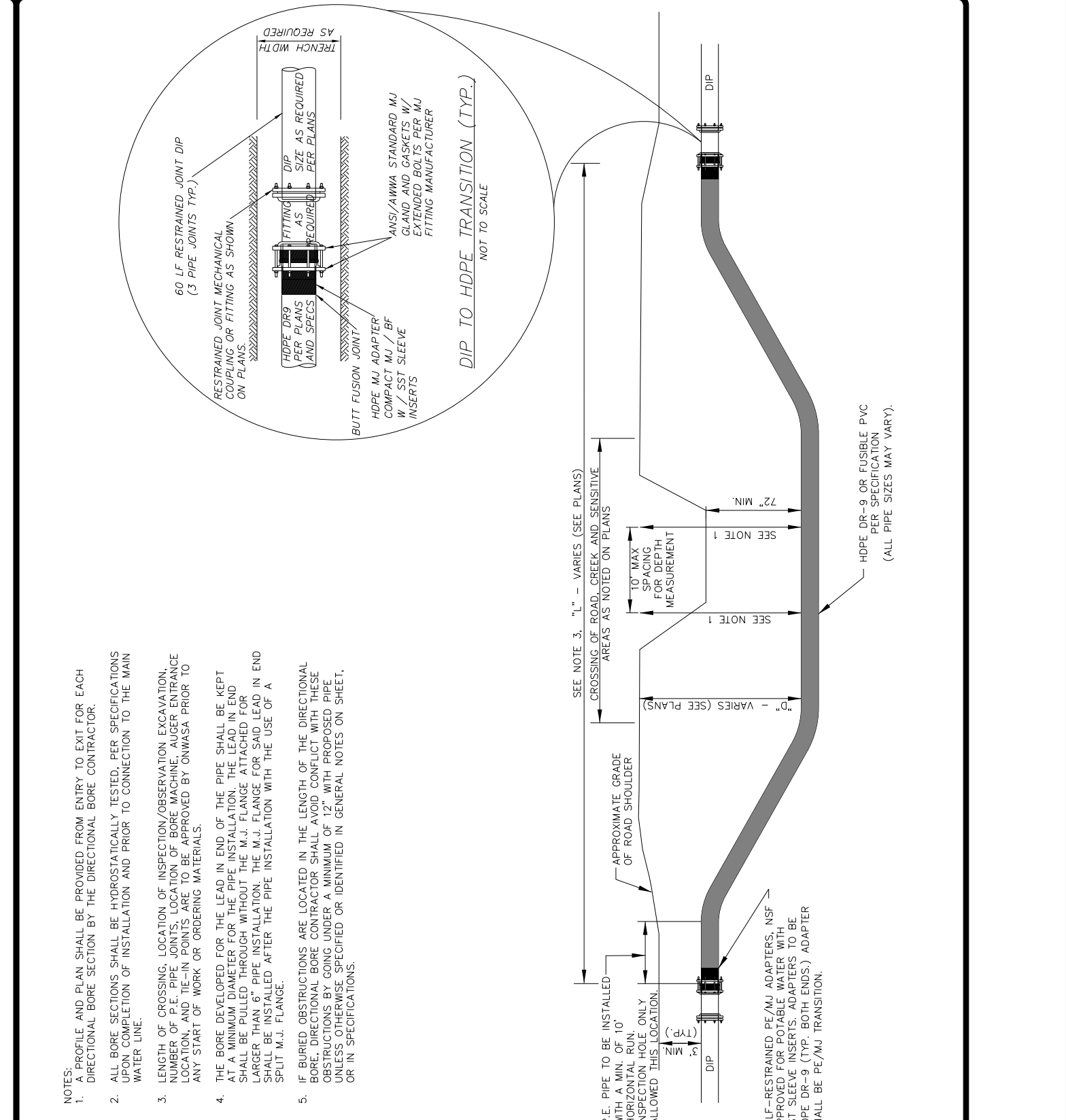
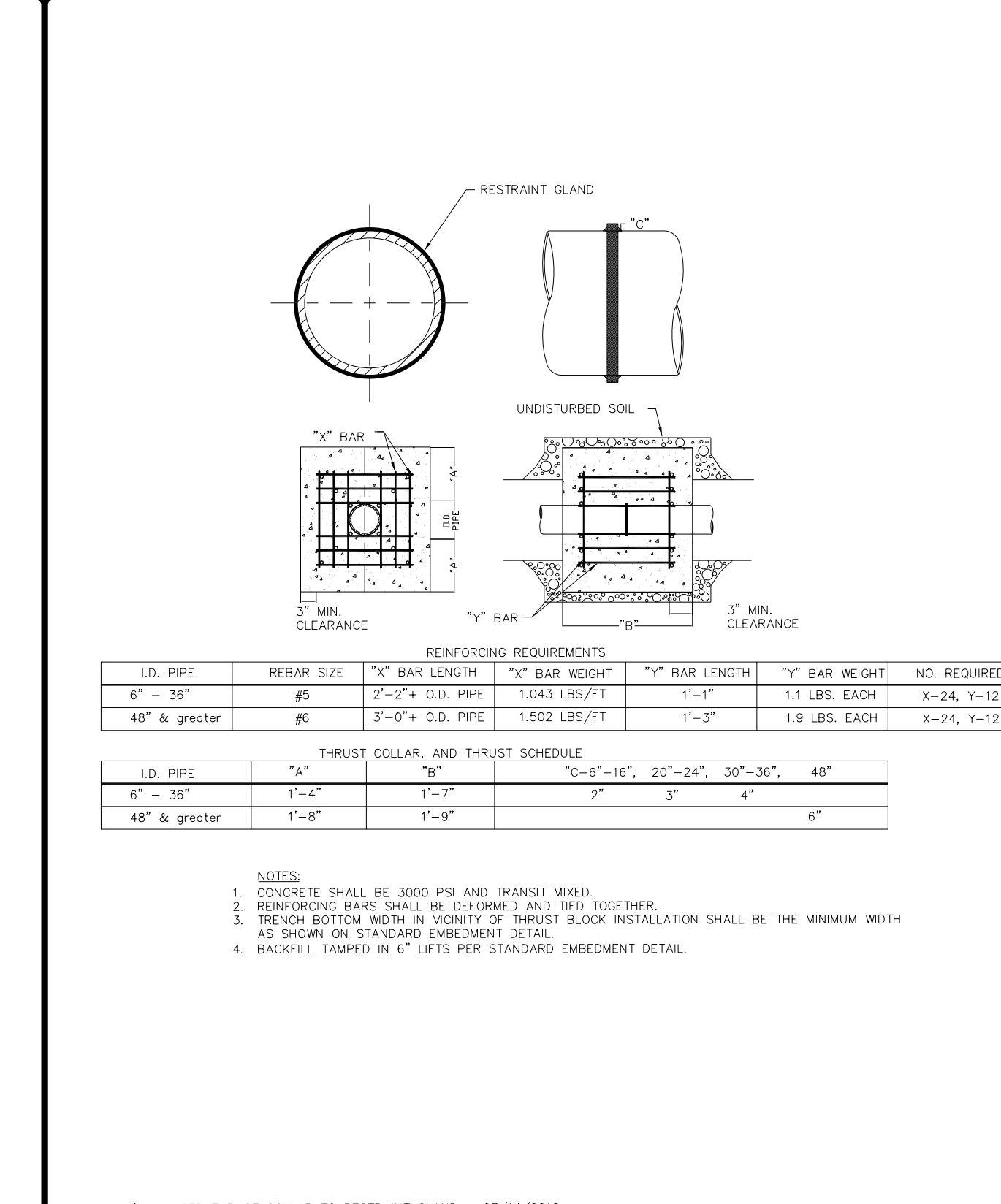
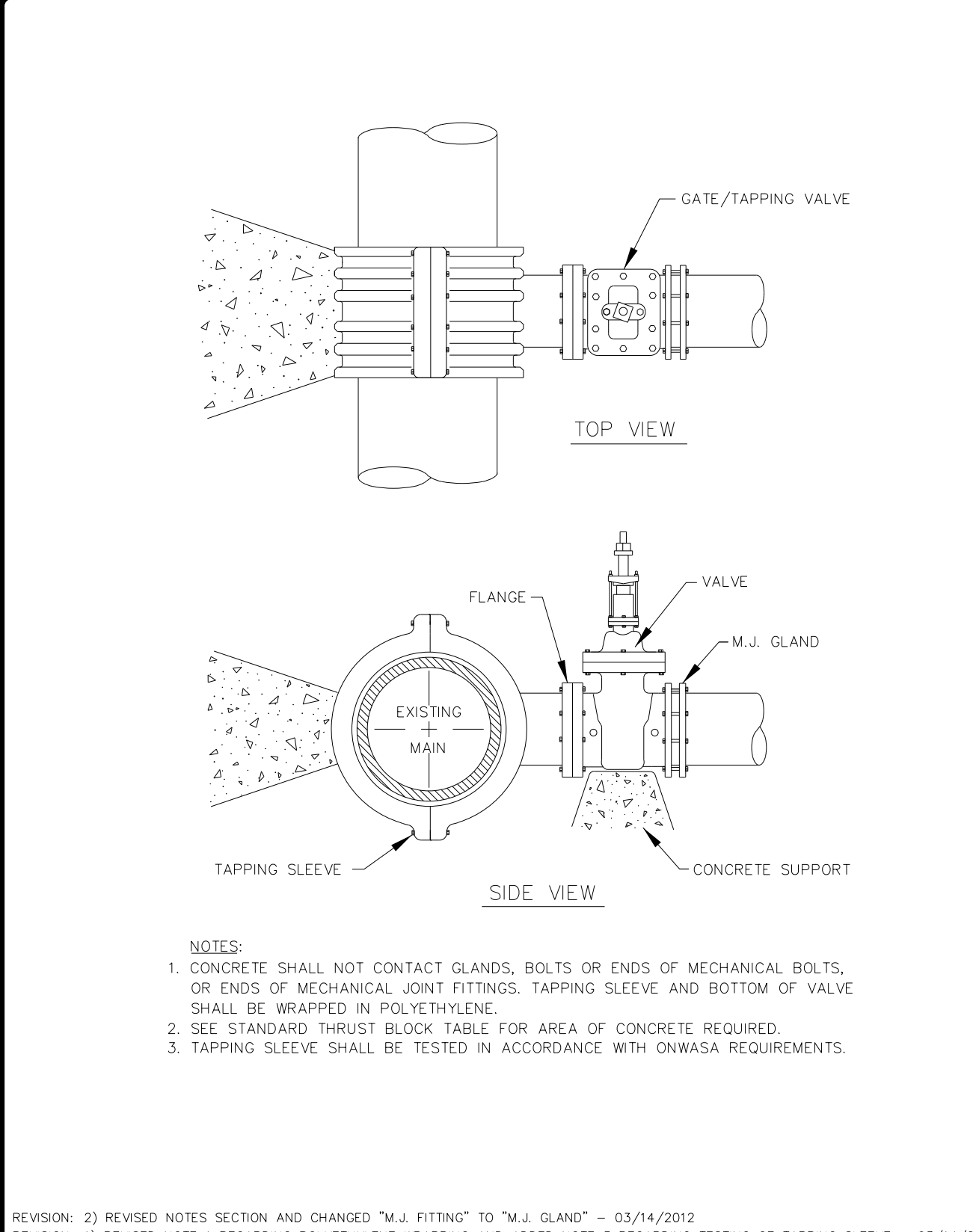
PIPE ENCASEMENT

SCALE: Not To Scale
REVISION DATE: March, 2012
SHEET #: 1 of 1

TEST PRESSURE = 150 PSI				
PIPE SIZE	TYPE FITTING	DIMENSIONS (FT)		VOLUME CONCRETE CU. YD.
		"L"	"H"	"T"
4 INCHES	11 1/4"	---	---	---
	22 1/2"	1.00	1.00	1.50
	45"	1.00	1.00	1.50
	TEE	1.00	1.00	2.00
6 INCHES	11 1/4"	1.00	1.00	2.50
	22 1/2"	1.00	1.00	2.50
	45"	1.00	1.00	2.50
	TEE	1.50	1.50	2.00
8 INCHES	11 1/4"	1.50	1.50	2.50
	22 1/2"	1.50	1.50	2.50
	45"	1.50	1.50	2.50
	TEE	2.00	2.00	2.50
10 INCHES	11 1/4"	2.00	2.00	2.50
	22 1/2"	2.00	2.00	2.50
	45"	2.00	2.00	2.50
	TEE	3.00	2.00	3.00
12 INCHES	11 1/4"	2.00	2.00	3.00
	22 1/2"	2.00	2.00	3.00
	45"	2.00	2.50	3.00
	TEE	4.50	3.00	3.50
16 INCHES	11 1/4"	2.00	2.00	3.00
	22 1/2"	3.00	2.00	3.00
	45"	4.00	3.00	3.50
	TEE	6.50	3.50	3.00

CHART NOTES:

- IF BLOCKING EXCAVATION IS IN LIGHTLY COMPACTED FILL AREAS, OR IN AREAS WHERE BOULDERS OR STUMPS HAVE BEEN REMOVED, BLOCKING SIZE MUST BE RE-SIZED FOR THE SPECIFIC LOCATION/CIRCUMSTANCE BY A LICENSED PROFESSIONAL ENGINEER.
- BLOCKING SIZES SHOWN IN THESE TABLES ASSUME THE FOLLOWING:
 - BLOCKING IS CONSTRUCTED IN RESIDUAL SOILS AS SHOWN IN DETAIL.
 - SOIL BEARING PRESSURE = 2000 PSF
 - VELOCITY OF FLOW = 15 FPS
- THIS DETAIL NOT APPLICABLE TO REDUCING BENDS.
- NEITHER THE WEIGHT OF THE CONCRETE BLOCKING NOR FRICTION BETWEEN CONCRETE BLOCKING AND SOIL WAS ADDED INTO BLOCKING SIZES COMPUTATION. THEREFORE, BLOCKING SIZE IS CONSERVATIVE.



Onslow Water & Sewer Authority
USE WITH "ONWASA MANUAL OF SPECIFICATIONS, STANDARDS AND DETAILS, latest revision"

THRUST BLOCKING

SCALE: Not To Scale
REVISION DATE: March, 2012
SHEET #: 2 of 4

Onslow Water & Sewer Authority
USE WITH "ONWASA MANUAL OF SPECIFICATIONS, STANDARDS AND DETAILS, latest revision"

4" AND LARGER TAPPING SLEEVE AND VALVE ASSEMBLY

SCALE: Not To Scale
REVISION DATE: March, 2012
SHEET #: 1 of 1

Onslow Water & Sewer Authority
USE WITH "ONWASA MANUAL OF SPECIFICATIONS, STANDARDS AND DETAILS, latest revision"

THRUST BLOCKING

SCALE: Not To Scale
REVISION DATE: March, 2012
SHEET #: 4 of 4

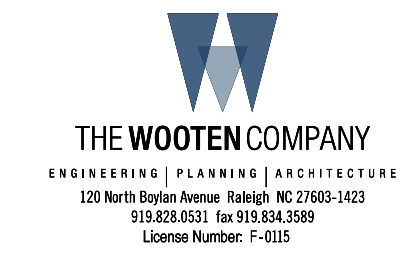
Onslow Water & Sewer Authority
USE WITH "ONWASA MANUAL OF SPECIFICATIONS, STANDARDS AND DETAILS, latest revision"

HORIZONTAL DIRECTIONAL DRILL PROFILE (TYP.)

SCALE: Not To Scale
REVISION DATE: March, 2012
SHEET #: 1 of 1

PROJECT TYPICAL DETAILS

PREPARED IN THE OFFICE OF:



PROJECT REFERENCE NO.

R-2514B

SHEET NO.

UC-3B

DESIGNED BY: BJPO

DRAWN BY: TK

CHECKED BY: BJPO

APPROVED BY: MDS

REVISED:

NORTH CAROLINA

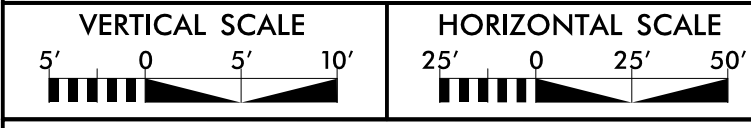
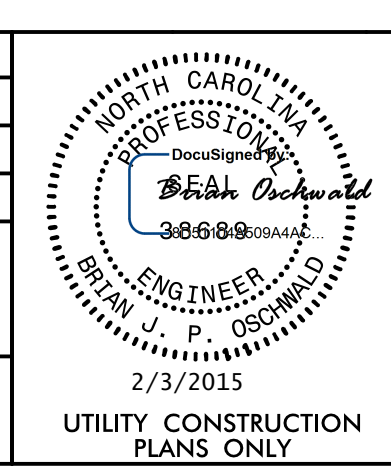
DEPARTMENT OF

TRANSPORTATION

UTILITIES ENGINEERING SEC.

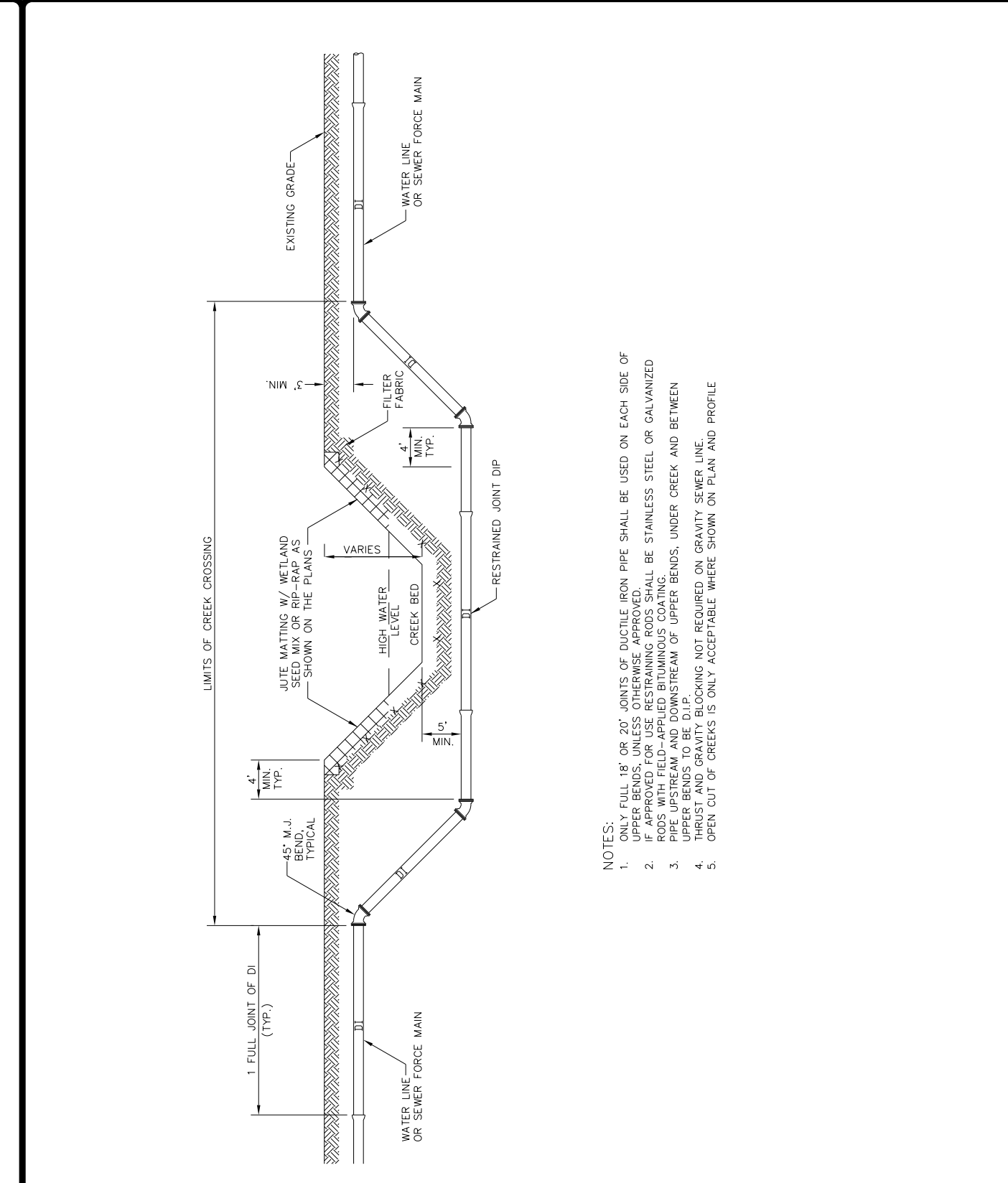
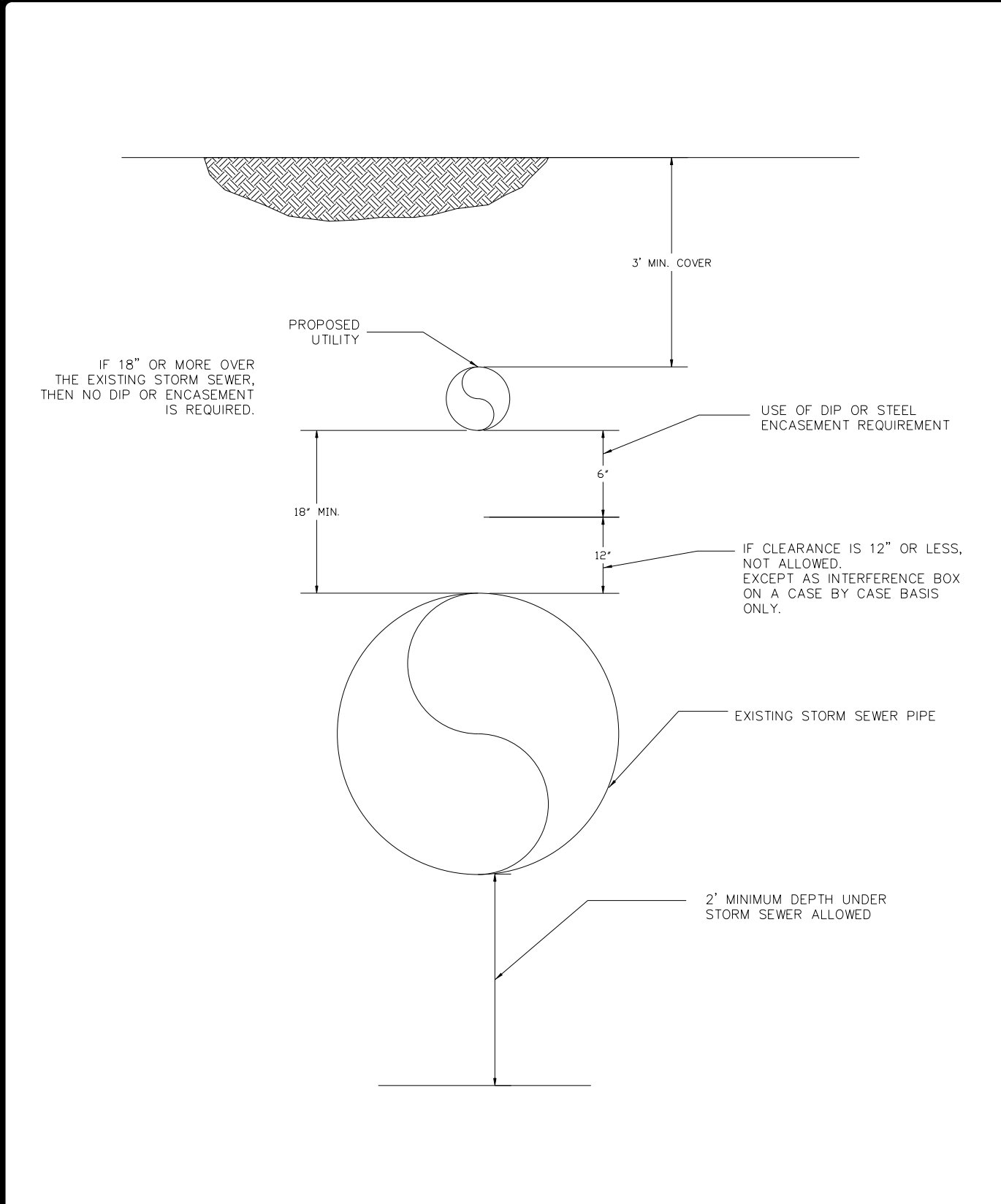
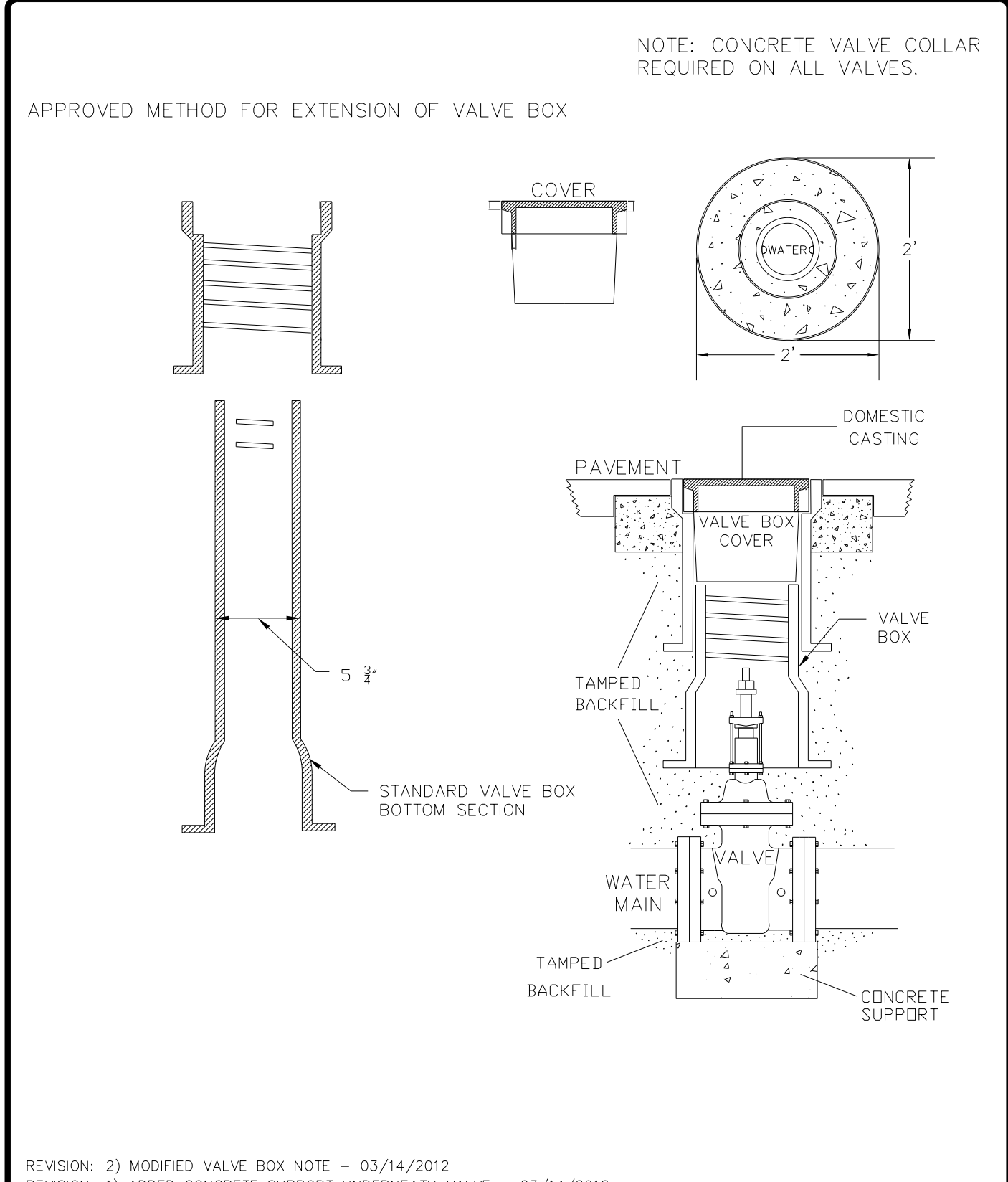
PHONE: (919) 707-6690

FAX: (919) 250-4151



ONLY WATER LINE CONSTRUCTION SHOWN ON THIS SHEET

UTILITY CONSTRUCTION PLANS ONLY



ONWASA Onslow Water & Sewer Authority
USE WITH "ONWASA MANUAL OF SPECIFICATIONS, STANDARDS and DETAILS, latest revision"

VALVE BOX INSTALLATION

SCALE: Not To Scale
REVISION DATE: March, 2012

DETAIL # WS_VB
SHEET #: 1 of 1

ONWASA Onslow Water & Sewer Authority
USE WITH "ONWASA MANUAL OF SPECIFICATIONS, STANDARDS and DETAILS, latest revision"

PROPOSED UTILITY OVER EXISTING STORM SEWER

SCALE: Not To Scale
REVISION DATE: March, 2012

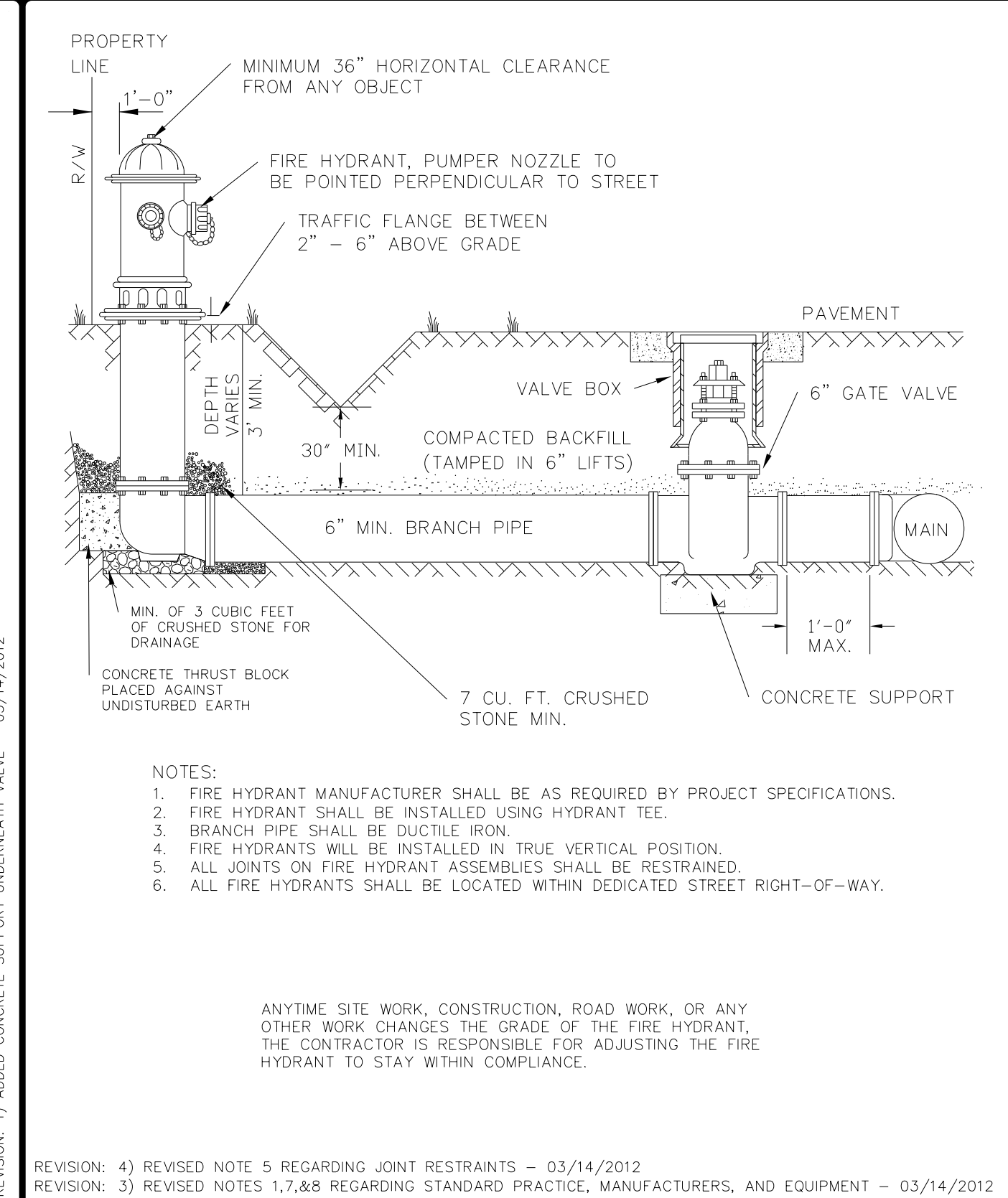
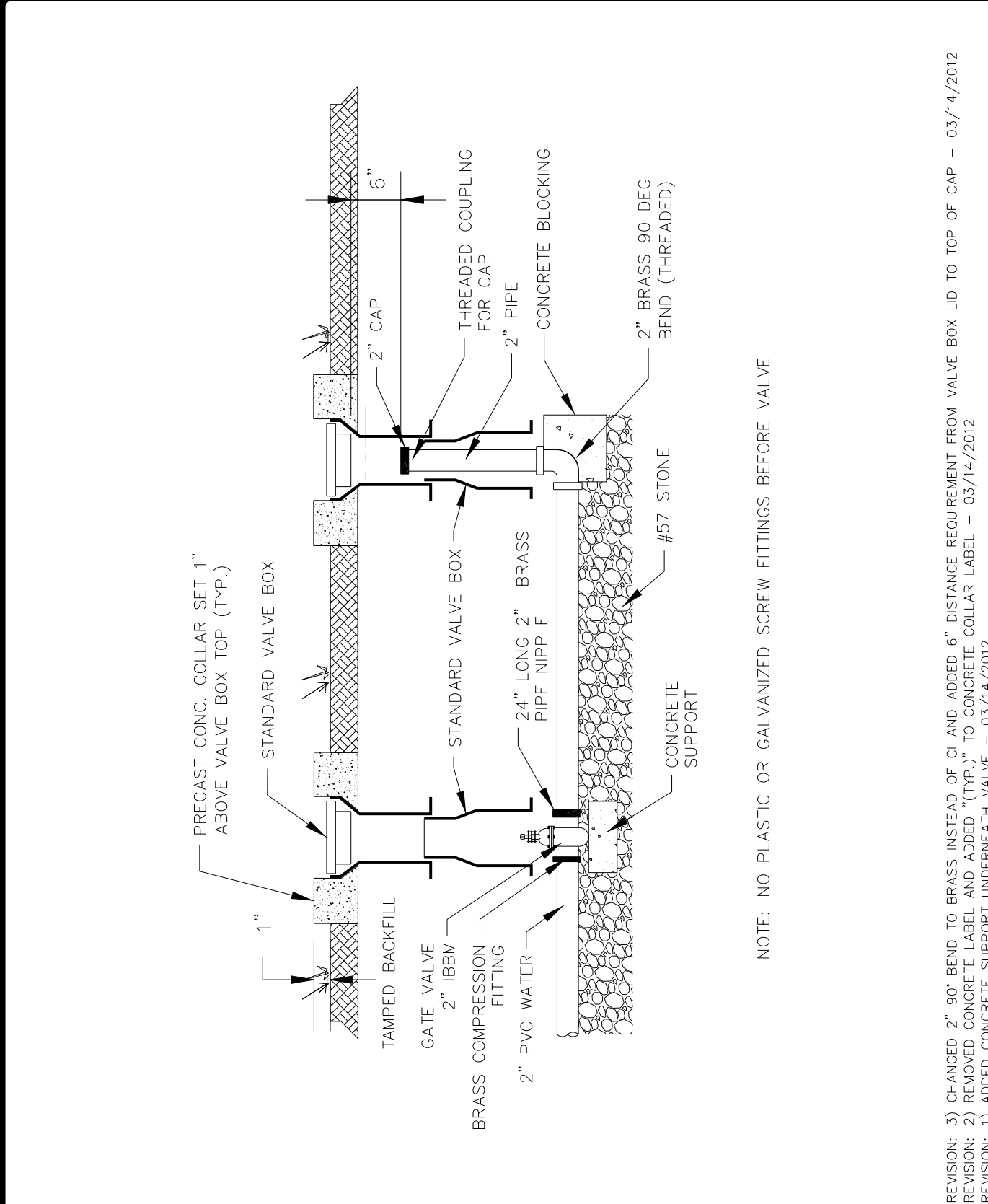
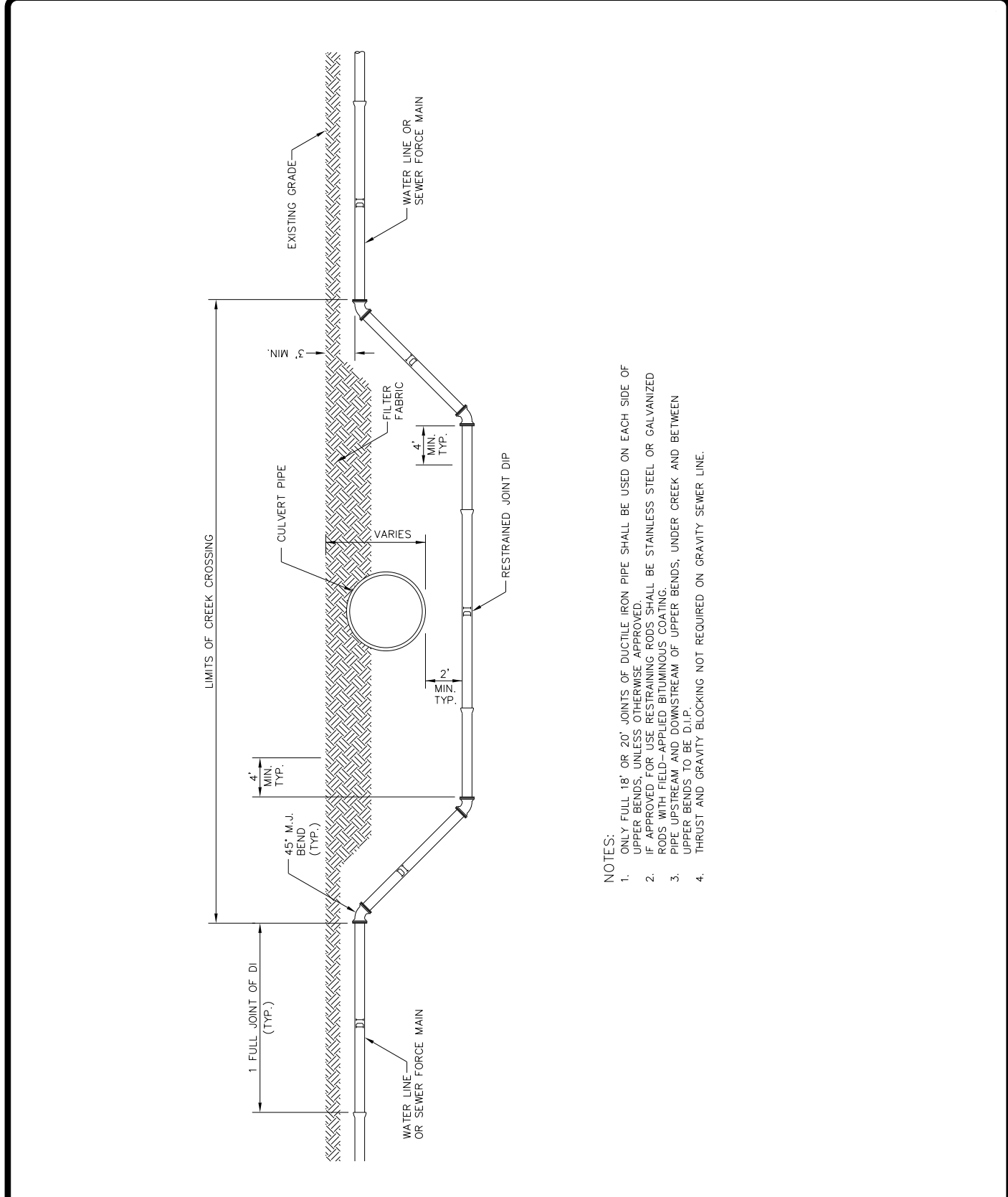
DETAIL # WS_UTL
SHEET #: 1 of 1

ONWASA Onslow Water & Sewer Authority
USE WITH "ONWASA MANUAL OF SPECIFICATIONS, STANDARDS and DETAILS, latest revision"

CREEK/DITCH CROSSING

SCALE: Not To Scale
REVISION DATE: March, 2012

DETAIL # WS_CDC
SHEET #: 1 of 1



ONWASA Onslow Water & Sewer Authority
USE WITH "ONWASA MANUAL OF SPECIFICATIONS, STANDARDS and DETAILS, latest revision"

CULVERT CROSSING

SCALE: Not To Scale
REVISION DATE: March, 2012

DETAIL # WS_CULC
SHEET #: 1 of 1

ONWASA Onslow Water & Sewer Authority
USE WITH "ONWASA MANUAL OF SPECIFICATIONS, STANDARDS and DETAILS, latest revision"

2-INCH BLOW OFF ASSEMBLY

SCALE: Not To Scale
REVISION DATE: March, 2012

DETAIL # WS_BO2
SHEET #: 1 of 1

ONWASA Onslow Water & Sewer Authority
USE WITH "ONWASA MANUAL OF SPECIFICATIONS, STANDARDS and DETAILS, latest revision"

FIRE HYDRANT ASSEMBLY SHOULDER / DITCH SECTION

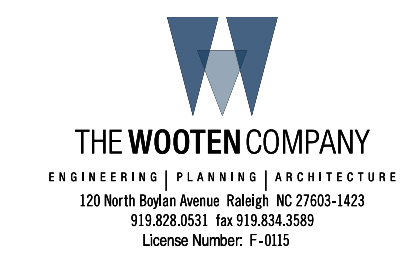
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REVISION DATE: March, 2012

DETAIL # WS_FHD
SHEET #: 1 of 1

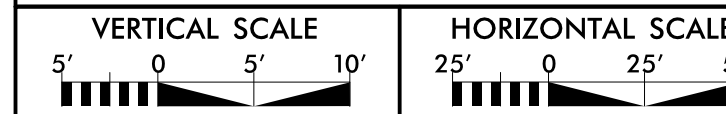
5/14/2012

WATER LINES OWNED BY ONSLOW WATER AND SEWER AUTHORITY
 *WATER LINE CONSTRUCTION STA. 9+51 TO STA. 12+00 (-L): COST OF CONSTRUCTION PAID BY ONWASA

PREPARED IN THE OFFICE OF:



PROJECT REFERENCE NO.	SHEET NO.
R-2514B	UC-4
DESIGNED BY: BJPO	
DRAWN BY: TK	
CHECKED BY: BJPO	
APPROVED BY: MDS	
REVISED:	3/3/2015 UTILITY CONSTRUCTION PLANS ONLY



ONLY WATER LINE CONSTRUCTION SHOWN ON THIS SHEET

UTILITY CONSTRUCTION

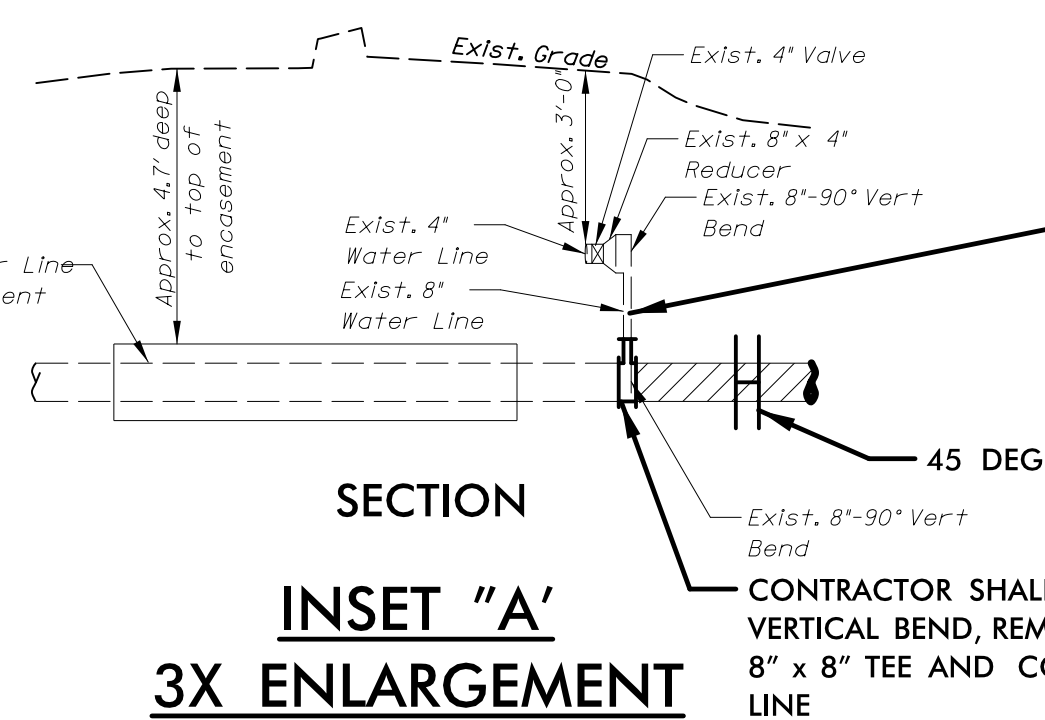
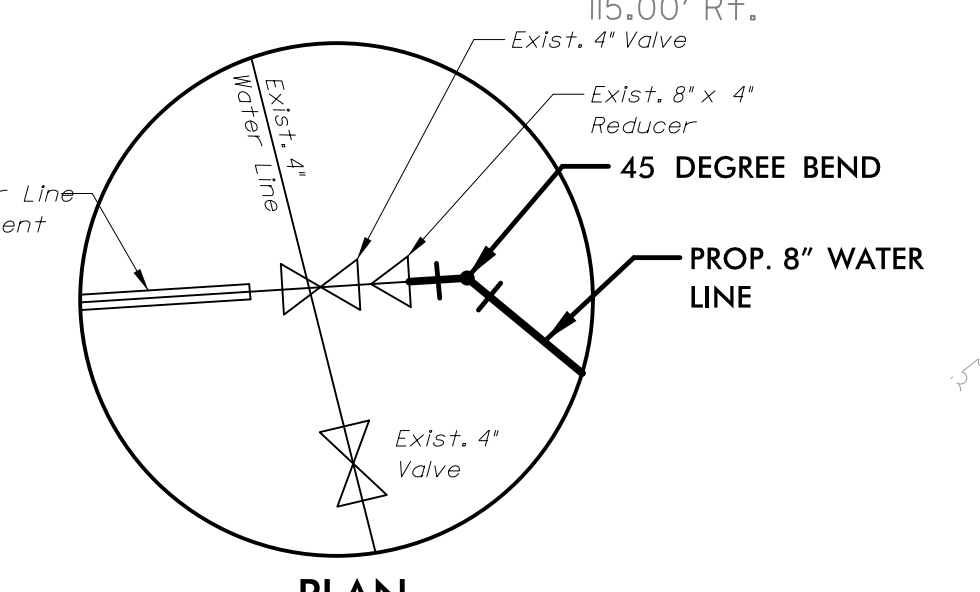
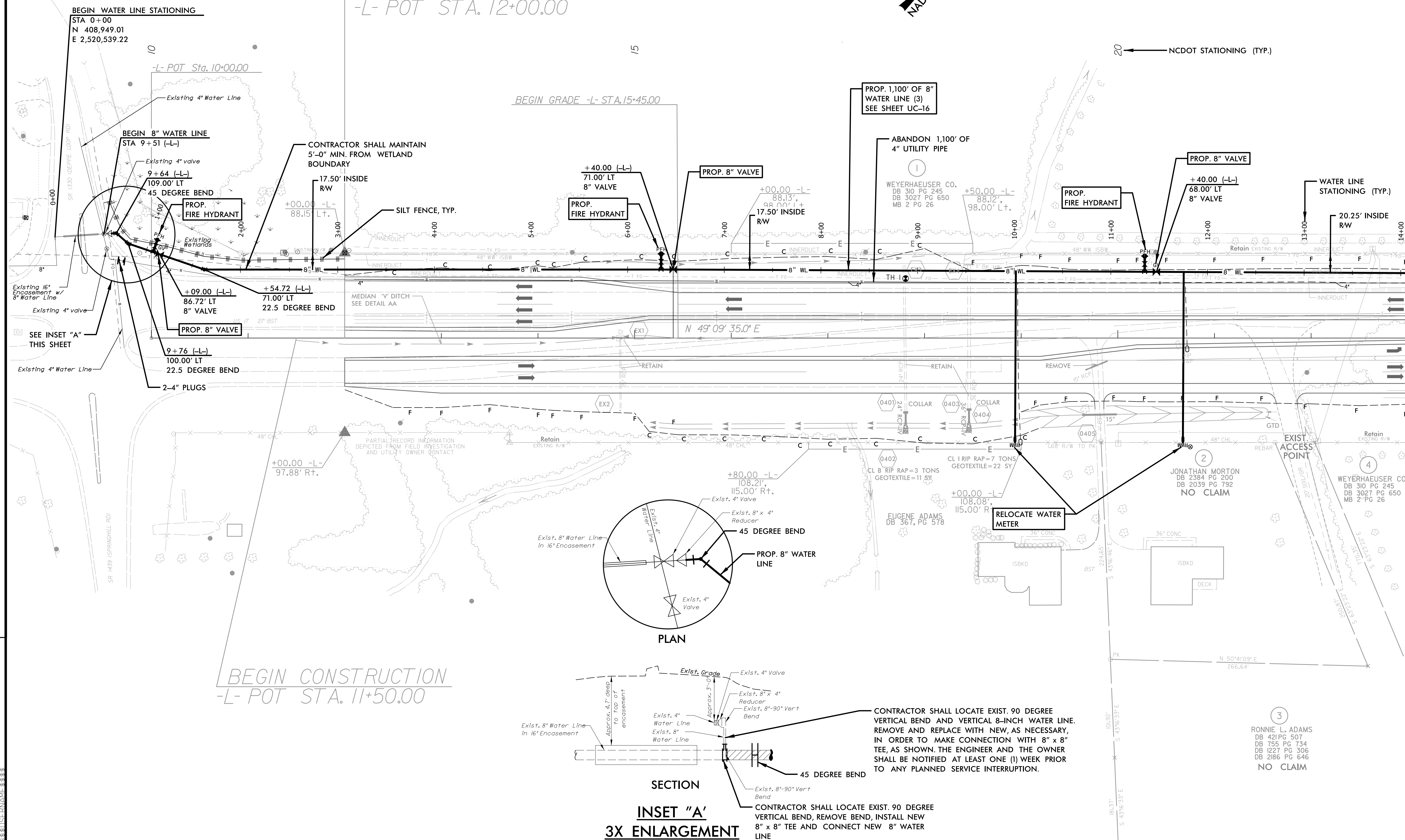


BEGIN STATE PROJECT R-2514B
 -L- POT STA. 12+00.00

20 ← NCDOT STATIONING (TYP.)

MATCHLINE SHEET UC-5 -L- STA. 23+00.00

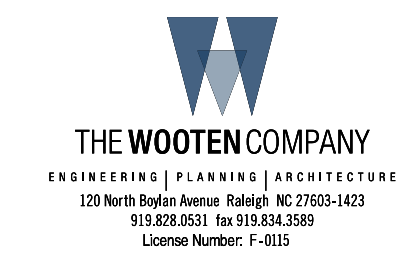
REVISIONS
 R.A.W. Revision 4/9/14 JCL Added "No Claim" note to parcels with no taking Deleted Parcel #s 3 and 4 Added Parcel #2 Owner and Deed Book Information



5/14/2015

WATER LINES OWNED BY ONSLOW WATER AND SEWER AUTHORITY

PREPARED IN THE OFFICE OF:



PROJECT REFERENCE NO.

R-2514B

SHEET NO.

UC-5

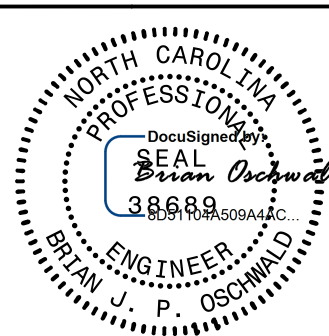
DESIGNED BY: BJPO

DRAWN BY: TK

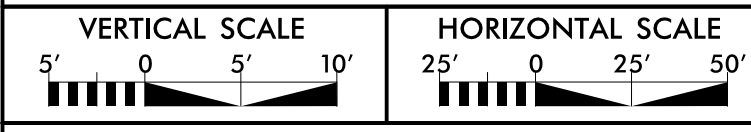
CHECKED BY: BJPO

APPROVED BY: MDS

REVISED:



3/3/2015
UTILITY CONSTRUCTION
PLANS ONLY



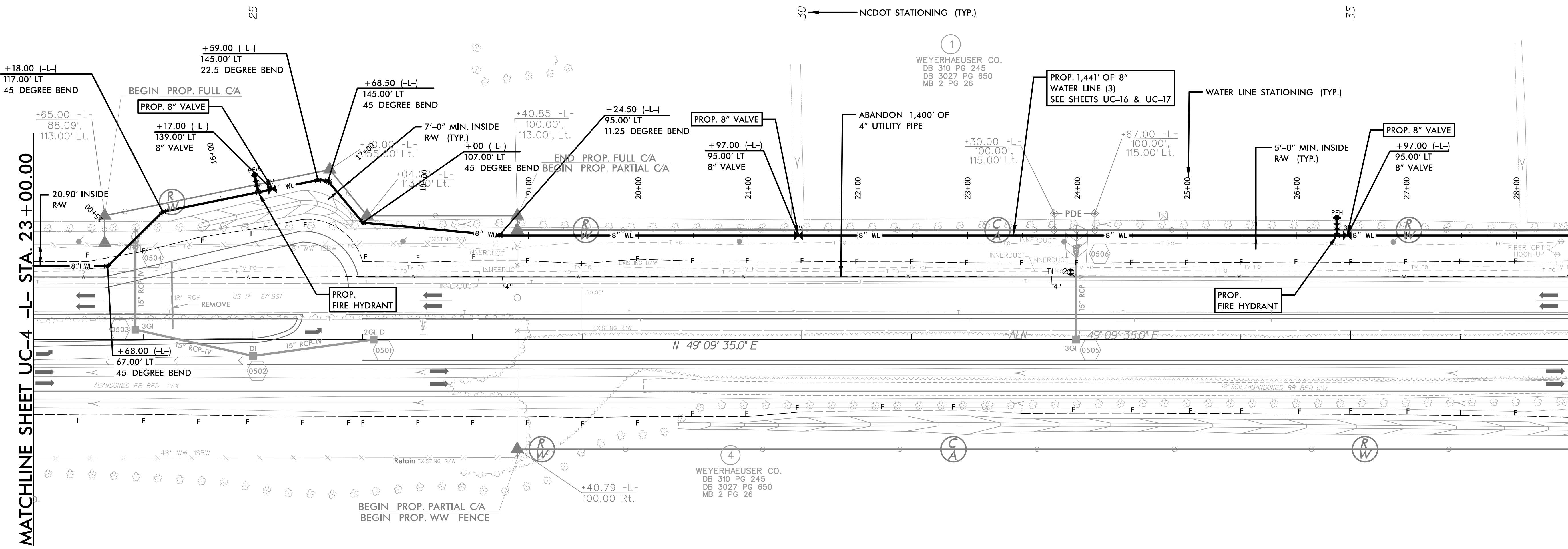
ONLY WATER LINE CONSTRUCTION
SHOWN ON THIS SHEET

UTILITY CONSTRUCTION



REVISIONS

R/W Revision 6/26/14 JCL Removed Permanent Utility Easement (PUE) on Parcel 1

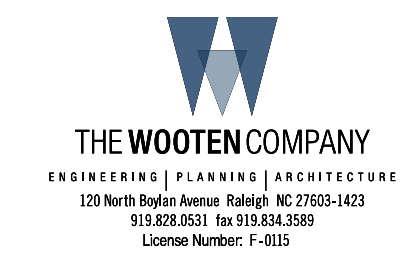


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SEE SHEET 24 FOR -L- PROFILE
 SEE SHEET 2-A FOR MEDIAN TURN DETAIL
 CONCRETE ISLAND

WATER LINES OWNED BY ONSLOW WATER AND SEWER AUTHORITY

PREPARED IN THE OFFICE OF:



PROJECT REFERENCE NO.

R-2514B

SHEET NO.

UC-6

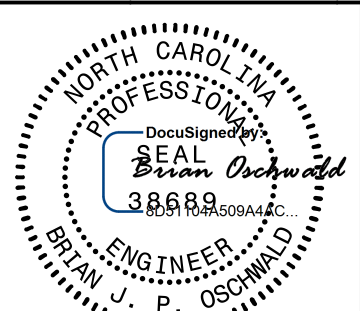
DESIGNED BY: BJPO

DRAWN BY: TK

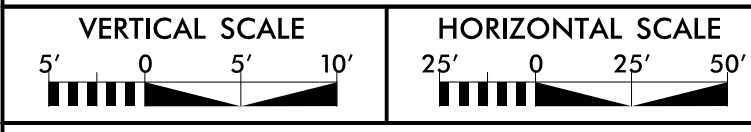
CHECKED BY: BJPO

APPROVED BY: MDS

REVISED:

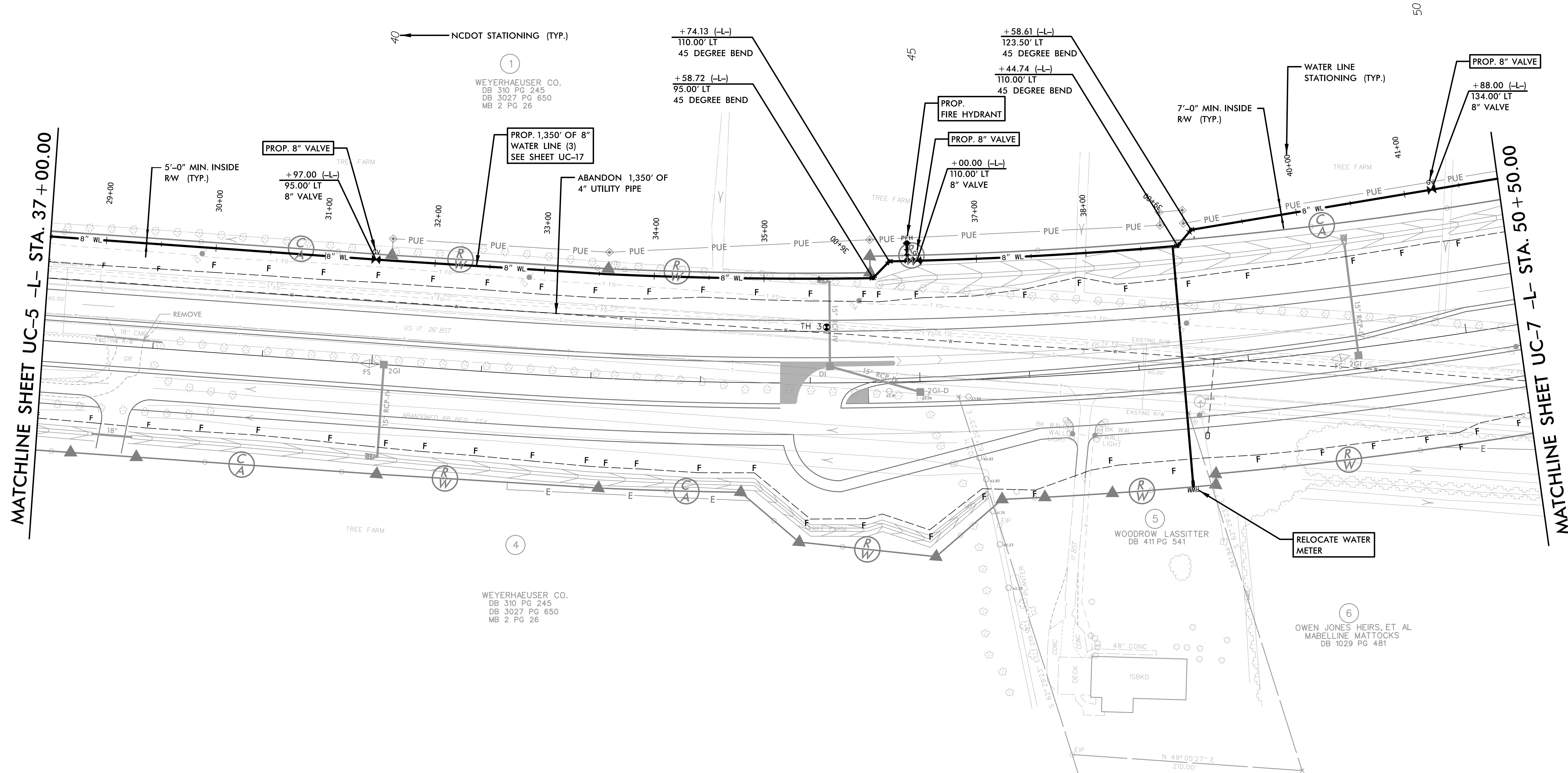


3/3/2015
UTILITY CONSTRUCTION
PLANS ONLY



ONLY WATER LINE CONSTRUCTION
SHOWN ON THIS SHEET

UTILITY CONSTRUCTION



MATCHLINE SHEET UC-5 -L- STA. 37 + 00.00

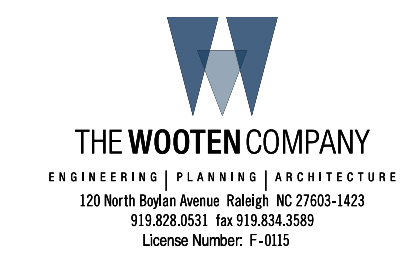
MATCHLINE SHEET UC-7 -L- STA. 50 + 50.00

REVISIONS
R/W_Revision_6/26/14_14L_Revision_Existing_Permanent_Utility_Easements_(PUE)_on_Parcel_L

SEE SHEETS 24-25 FOR -L- PROFILE
SEE SHEET 2-A FOR MEDIAN TURN DETAIL
CONCRETE ISLAND

WATER LINES OWNED BY ONSLOW WATER AND SEWER AUTHORITY

PREPARED IN THE OFFICE OF:



PROJECT REFERENCE NO.

R-2514B

SHEET NO.

UC-10

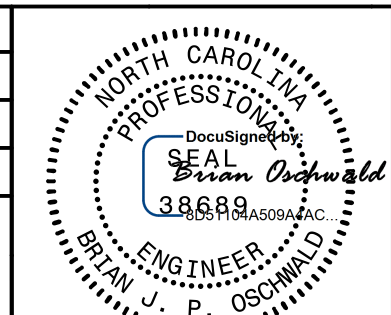
DESIGNED BY: BJPO

DRAWN BY: TK

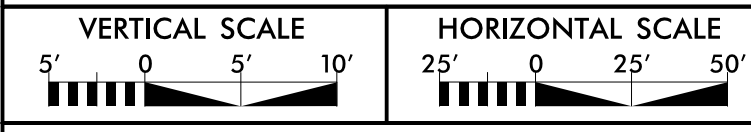
CHECKED BY: BJPO

APPROVED BY: MDS

REVISED:



3/3/2015
UTILITY CONSTRUCTION
PLANS ONLY

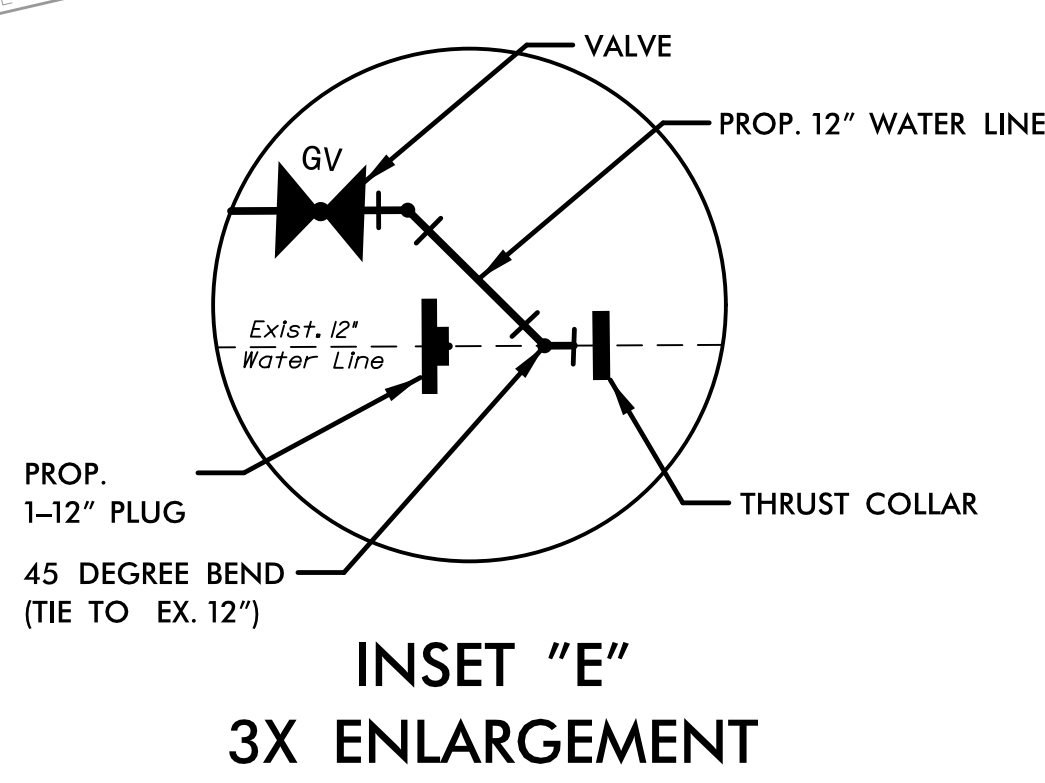
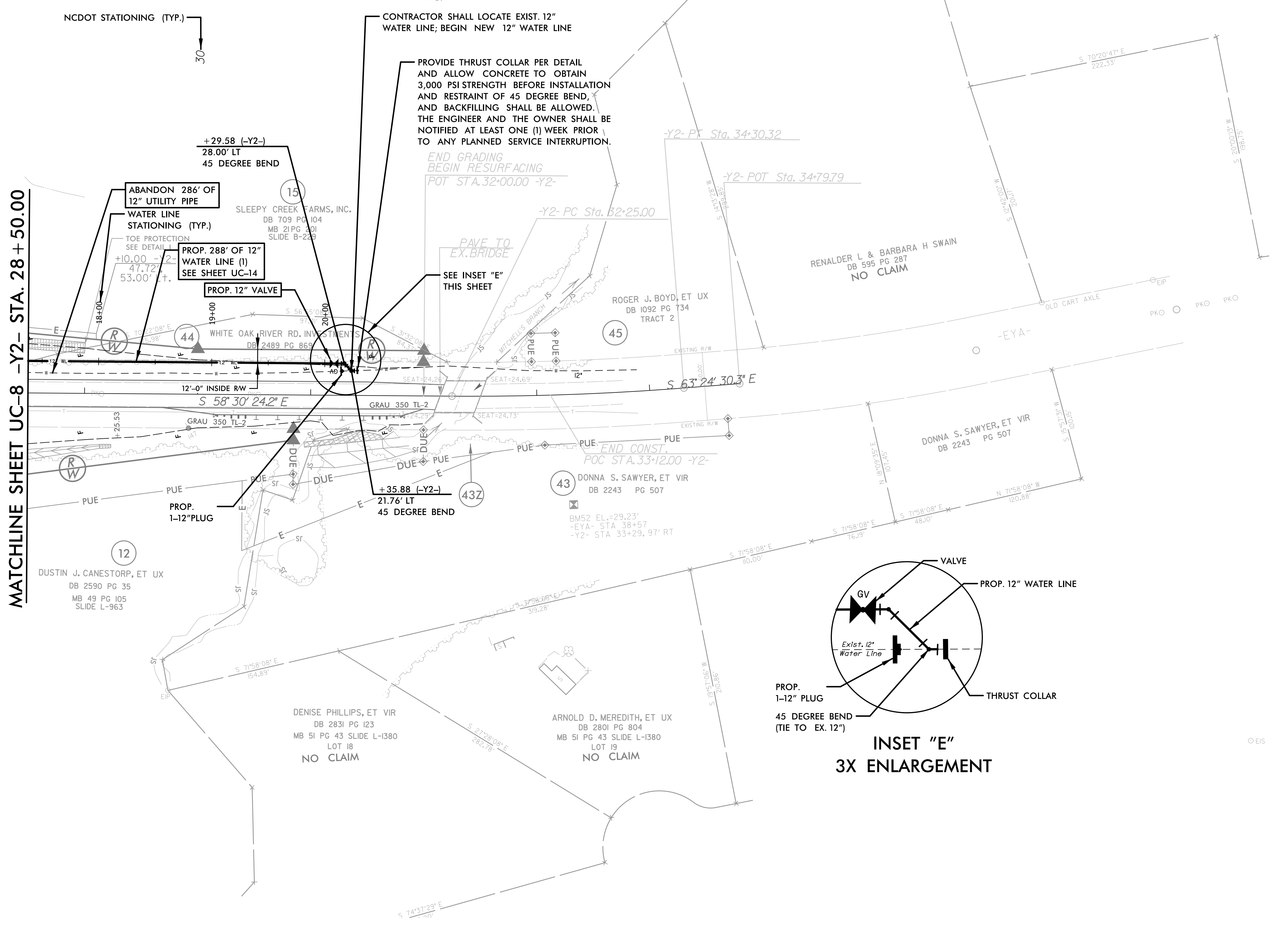


ONLY WATER LINE CONSTRUCTION
SHOWN ON THIS SHEET

UTILITY CONSTRUCTION

REVISIONS
R/W Revision 7/28/14 - JCL Added new Parcel #43Z.

MATCHLINE SHEET UC-8 -Y2- STA. 28 +50.00



5/14/99
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WATER LINES OWNED BY JONES COUNTY

NAD 83/NSRS 2007

PREPARED IN THE OFFICE OF:



PROJECT REFERENCE NO.

R-2514B

SHEET NO.

UC-11

DESIGNED BY: BJPO

DRAWN BY: TK

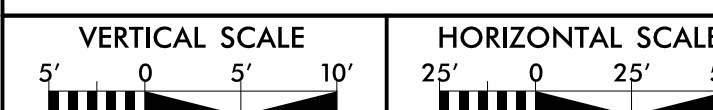
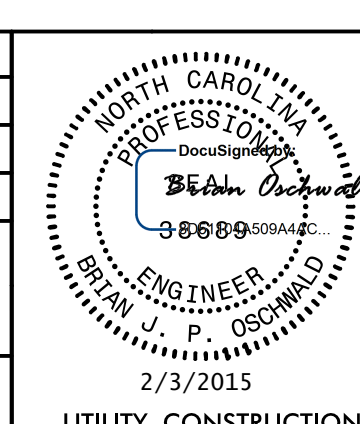
CHECKED BY: BJPO

APPROVED BY: MDS

REVISED:

NORTH CAROLINA
DEPARTMENT OF
TRANSPORTATION

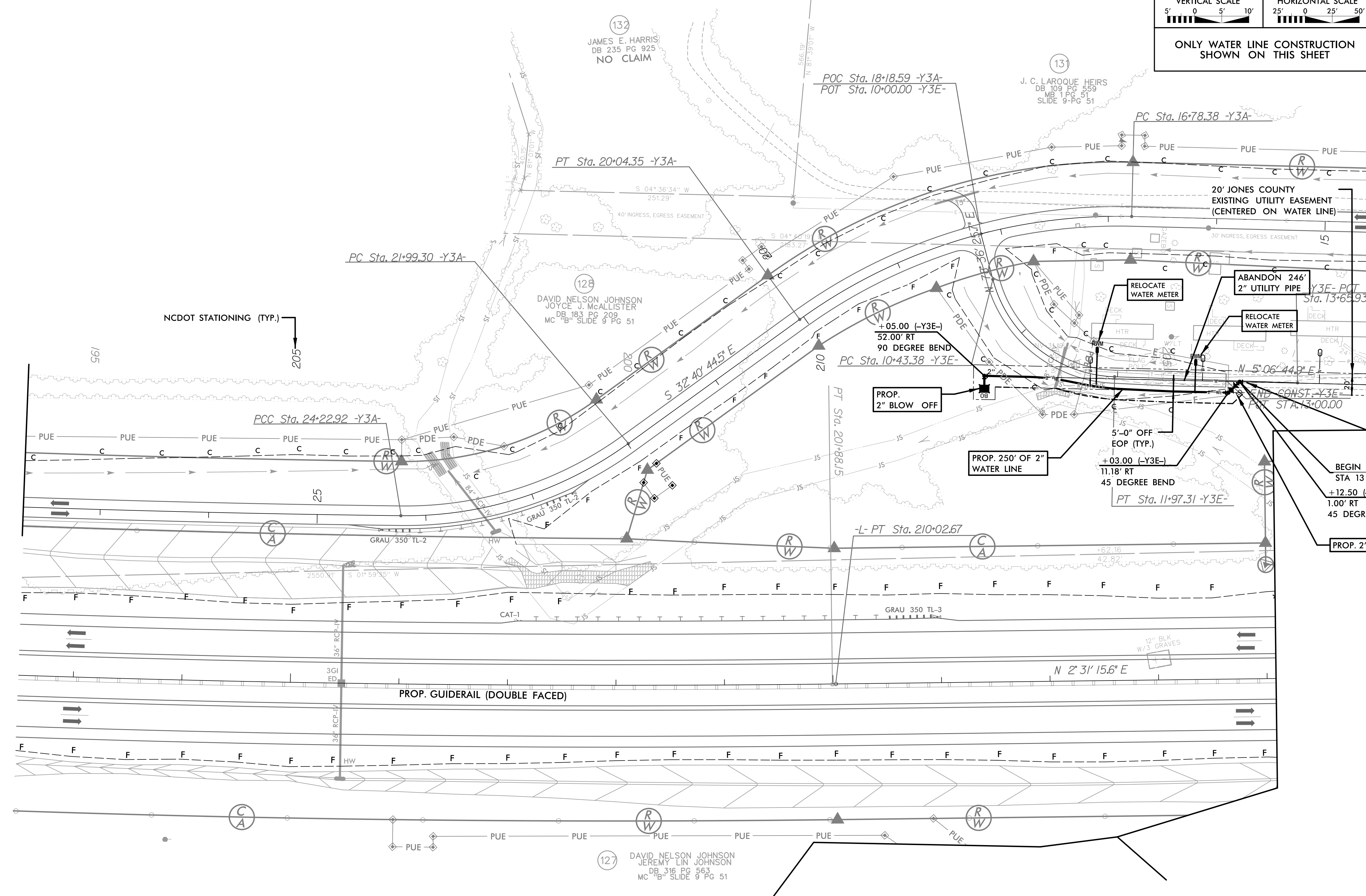
UTILITIES ENGINEERING SEC.
PHONE: (919) 707-6690
FAX: (919) 250-4151



ONLY WATER LINE CONSTRUCTION
SHOWN ON THIS SHEET

UTILITY CONSTRUCTION

REVISIONS
R/W Revision 7/28/14 JCL Added new Parcel #302



MATCHLINE SHEET UC-12
-Y3A- STA. 14+50.00

CONTRACTOR SHALL LOCATE
EXIST. 2" WATER LINE;
BEGIN NEW 2" WATER LINE
BEGIN WATER LINE STATIONING
STA 13+12.50 (-Y3-) = STA 0+00
+12.50 (-Y3E-)
1.00' RT
45 DEGREE BEND
PROP. 2" VALVE

5/14/99

127 DAVID NELSON JOHNSON
JEREMY LIN JOHNSON
DB 316 PG 563
MC "B" SLIDE 9 PG 51

WATER LINES OWNED BY JONES COUNTY

PREPARED IN THE OFFICE OF:



PROJECT REFERENCE NO.

R-2514B

SHEET NO.

UC-12

DESIGNED BY: BJPO

DRAWN BY: TK

CHECKED BY: BJPO

APPROVED BY: MDS

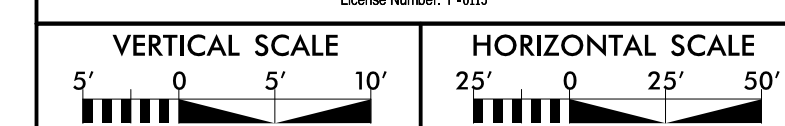
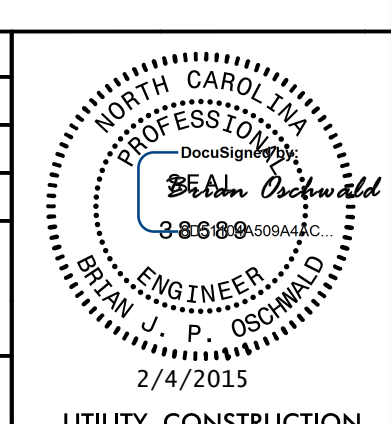
REVISED:

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

UTILITIES ENGINEERING SEC.

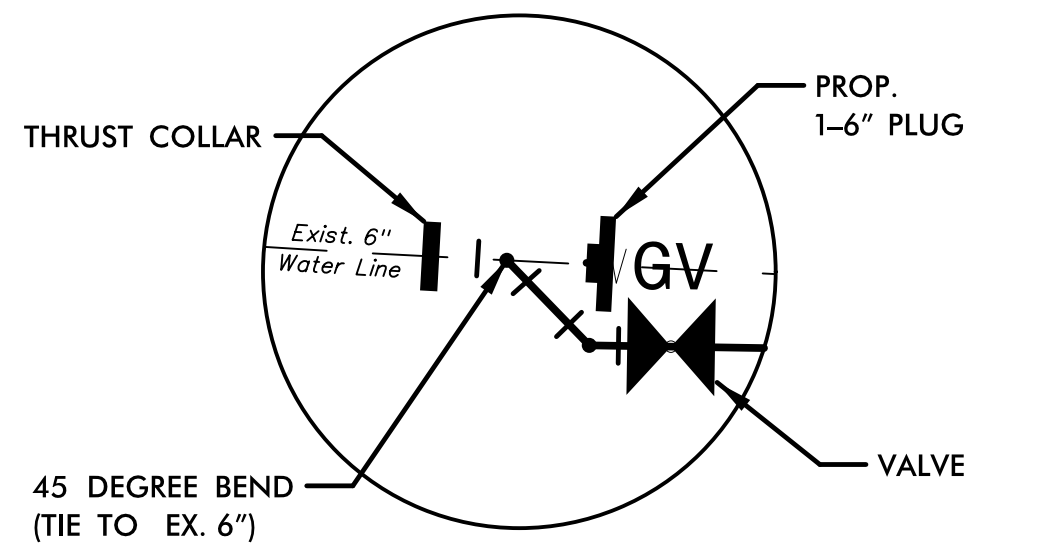
PHONE: (919) 707-6690

FAX: (919) 250-4151



ONLY WATER LINE CONSTRUCTION SHOWN ON THIS SHEET

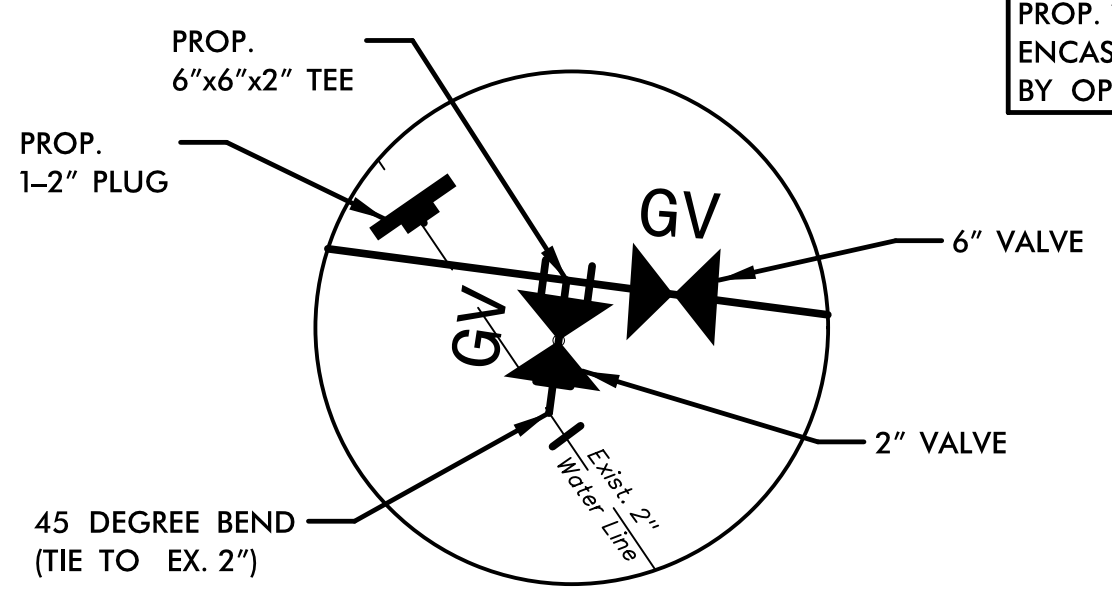
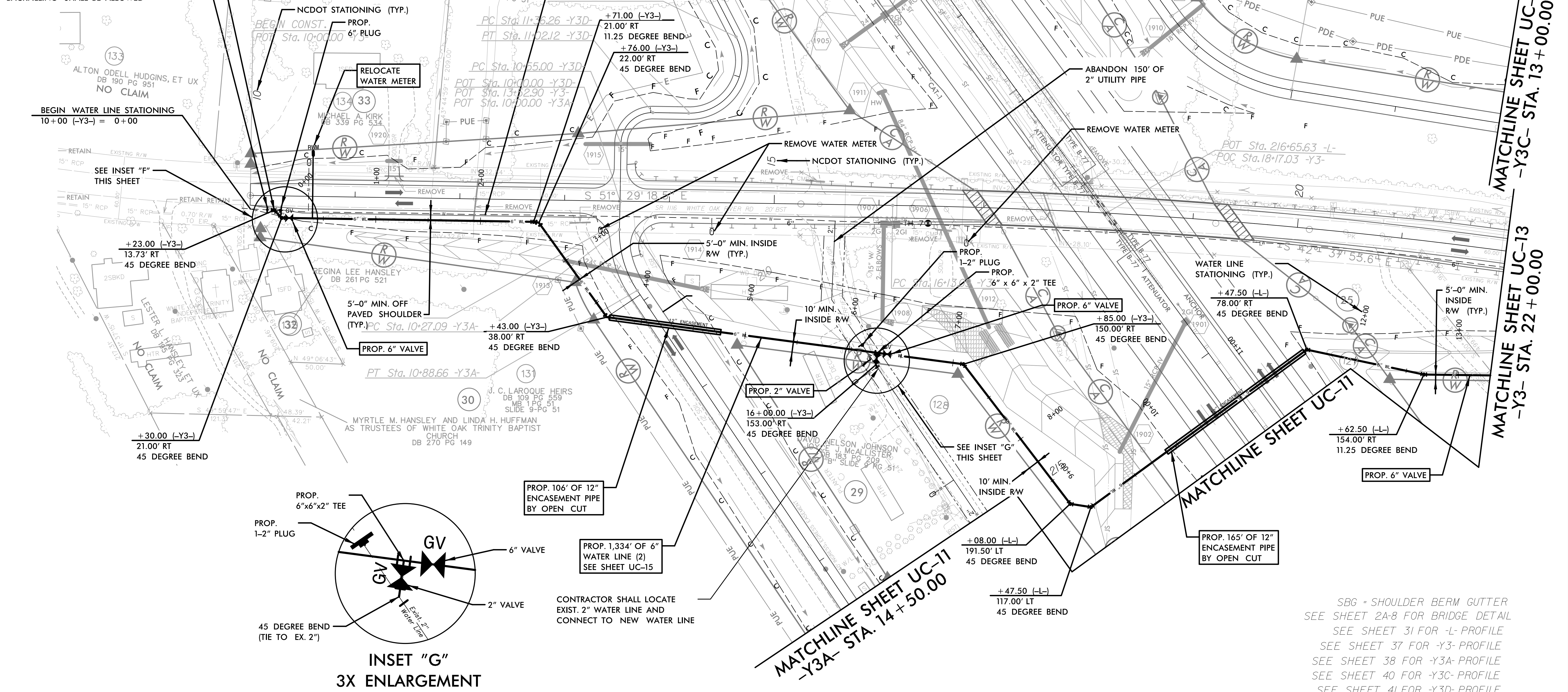
UTILITY CONSTRUCTION PLANS ONLY



INSET "F"
3X ENLARGEMENT

CONTRACTOR SHALL LOCATE EXIST. 6" WATER LINE; BEGIN NEW 6" WATER LINE

PROVIDE THRUST COLLAR PER DETAIL AND ALLOW CONCRETE TO OBTAIN 3,000 PSI STRENGTH BEFORE INSTALLATION AND RESTRAINT OF 45 DEGREE BEND, AND BACKFILLING SHALL BE ALLOWED



INSET "G"
3X ENLARGEMENT

CONTRACTOR SHALL LOCATE EXIST. 2" WATER LINE AND CONNECT TO NEW WATER LINE

REVISIONS
R/W Revision 5/26/14 JCL Added new Permanent Utility Easements (PUE) to Parcel 34.

5/14/14/599

MATCHLINE SHEET UC-13
-Y3C- STA. 13 + 00.00

MATCHLINE SHEET UC-13
-Y3- STA. 22 + 00.00

MATCHLINE SHEET UC-11
-Y3A- STA. 14 + 50.00

MATCHLINE SHEET UC-11

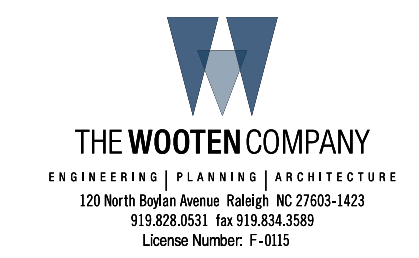
SBG = SHOULDER BERM GUTTER
SEE SHEET 2A-8 FOR BRIDGE DETAIL
SEE SHEET 31 FOR -L- PROFILE
SEE SHEET 37 FOR -Y3- PROFILE
SEE SHEET 38 FOR -Y3A- PROFILE
SEE SHEET 40 FOR -Y3C- PROFILE
SEE SHEET 41 FOR -Y3D- PROFILE
SEE SHEETS S- THRU S- FOR STRUCTURE PLANS

5/28/19

WATER LINES OWNED BY ONSLOW WATER AND SEWER AUTHORITY

PROFILE SHOWN IS BASED ON STATIONING ALONG PROPOSED WATER LINE ALIGNMENT ALONG ROADWAY ALIGNMENT -Y2- (SEE SHEETS UC-8, UC-9 & UC-10)

PREPARED IN THE OFFICE OF:



PROJECT REFERENCE NO. R-2514B

SHEET NO. UC-14

DESIGNED BY: BJPO

DRAWN BY: TK

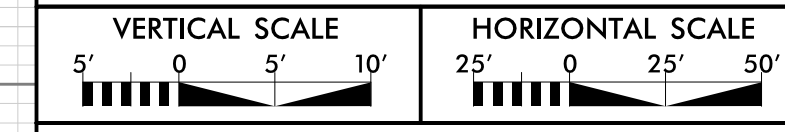
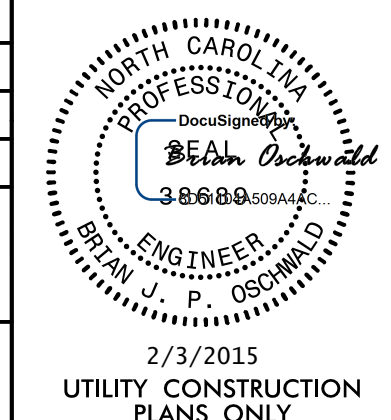
CHECKED BY: BJPO

APPROVED BY: MDS

REVISED:

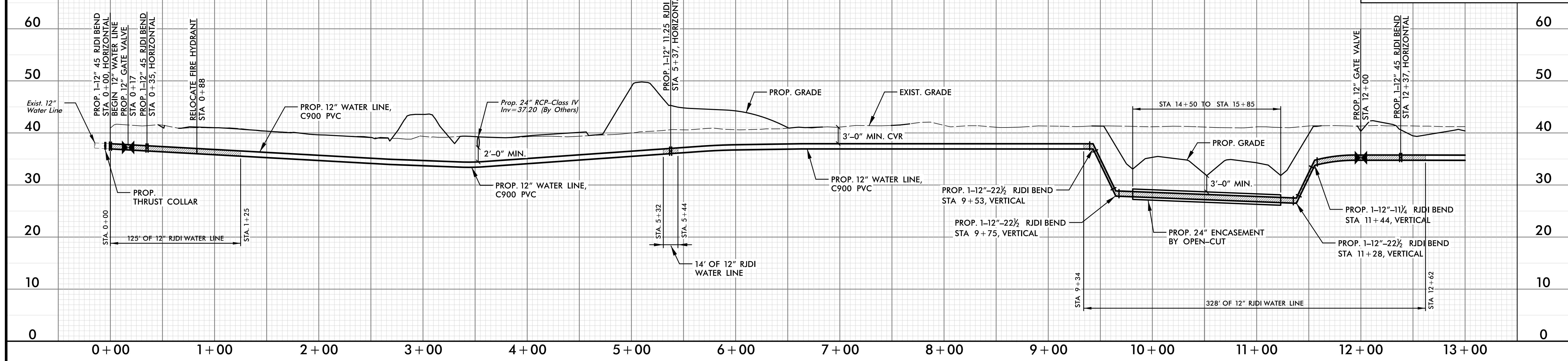
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

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

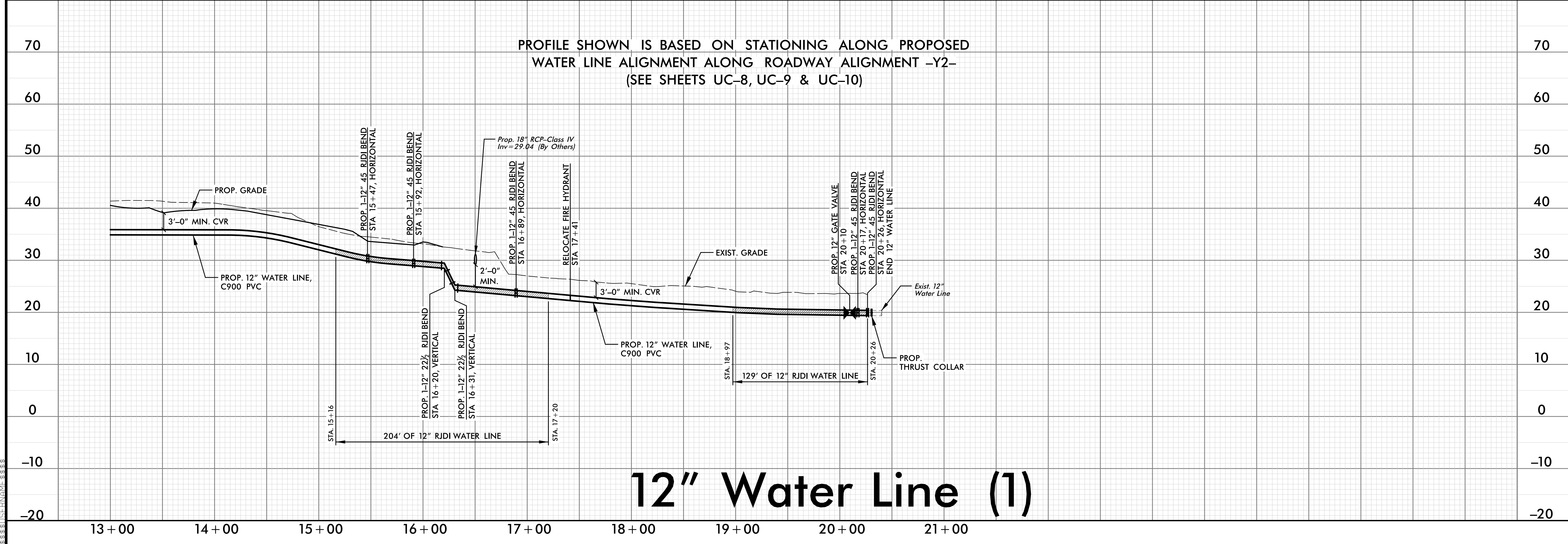


ONLY WATER LINE CONSTRUCTION SHOWN ON THIS SHEET

UTILITY CONSTRUCTION



PROFILE SHOWN IS BASED ON STATIONING ALONG PROPOSED WATER LINE ALIGNMENT ALONG ROADWAY ALIGNMENT -Y2- (SEE SHEETS UC-8, UC-9 & UC-10)



12" Water Line (1)

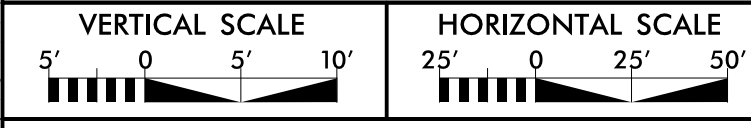
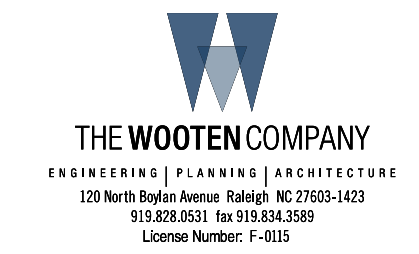
CONSTRUCTION

5/28/14

WATER LINES OWNED BY JONES COUNTY

PROFILE SHOWN IS BASED ON STATIONING ALONG
PROPOSED WATER LINE ALIGNMENT ALONG
ROADWAY ALIGNMENT -Y3-
(SEE SHEETS UC-12 & UC-13)

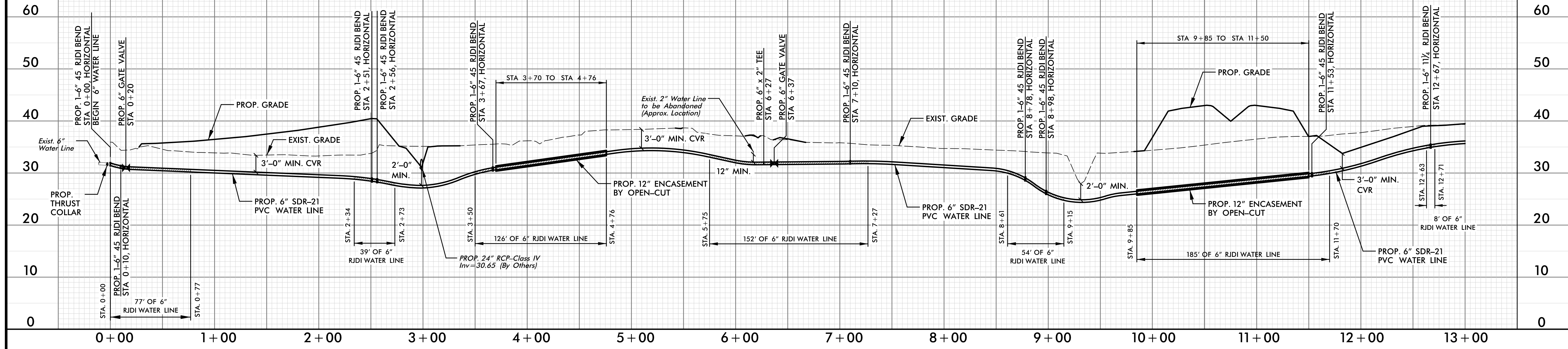
PREPARED IN THE OFFICE OF:



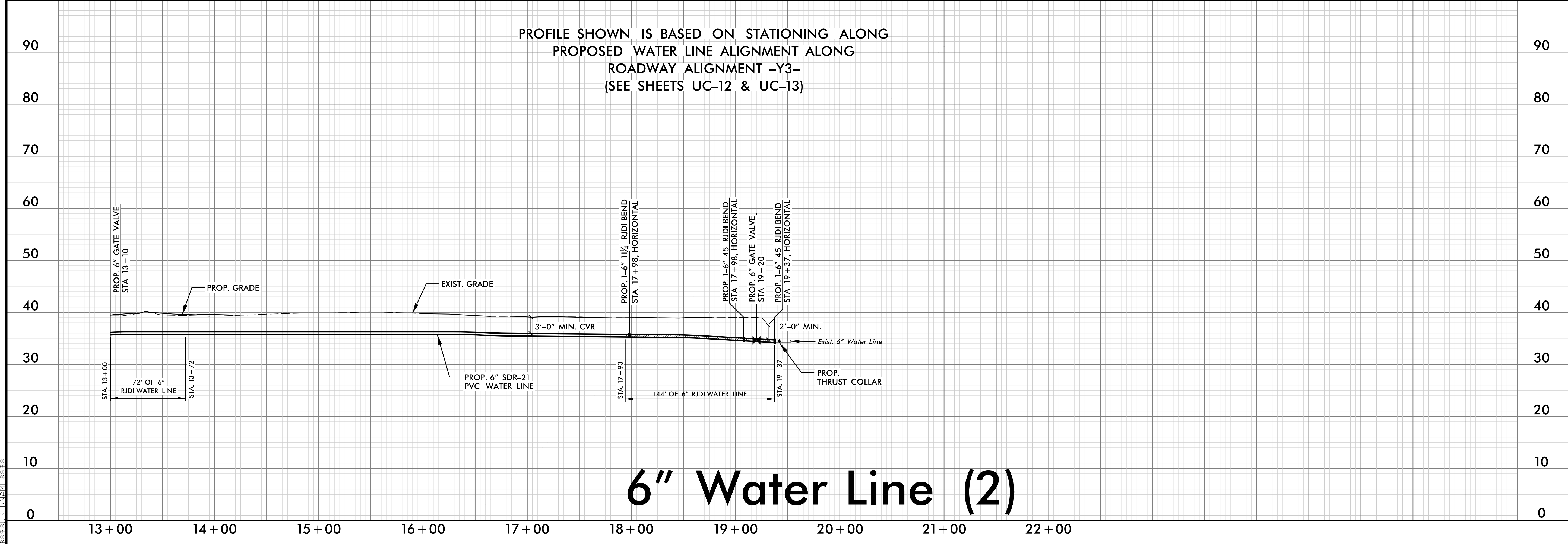
ONLY WATER LINE CONSTRUCTION
SHOWN ON THIS SHEET

PROJECT REFERENCE NO. R-2514B	SHEET NO. UC-15
DESIGNED BY: BJPO	
DRAWN BY: TK	
CHECKED BY: BJPO	
APPROVED BY: MDS	REVIS: NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	2/3/2015 UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION



PROFILE SHOWN IS BASED ON STATIONING ALONG PROPOSED WATER LINE ALIGNMENT ALONG ROADWAY ALIGNMENT -Y3- (SEE SHEETS UC-12 & UC-13)



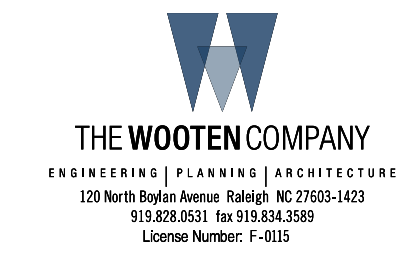
6" Water Line (2)

5/28/14

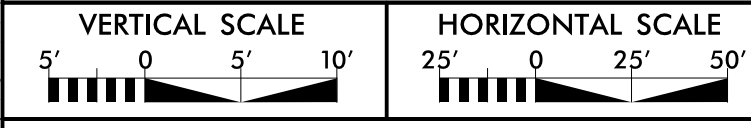
5/28/19

WATER LINES OWNED BY ONWASA
 PROFILE SHOWN IS BASED ON STATIONING ALONG
 PROPOSED WATER LINE ALIGNMENT ALONG
 ROADWAY ALIGNMENT -L-
 (SEE SHEETS UC-4 & UC-5)

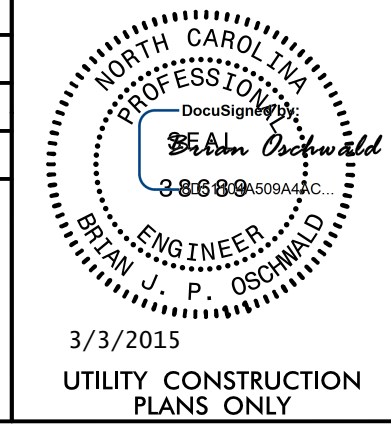
PREPARED IN THE OFFICE OF:



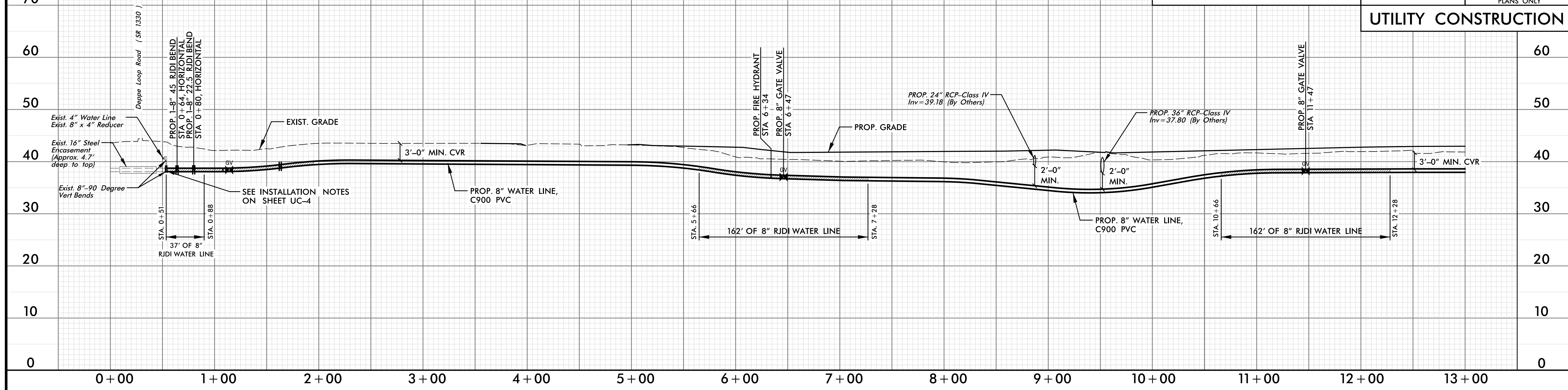
PROJECT REFERENCE NO. R-2514B	SHEET NO. UC-16
DESIGNED BY: BJPO	
DRAWN BY: TK	
CHECKED BY: BJPO	
APPROVED BY: MDS	
REVISED:	



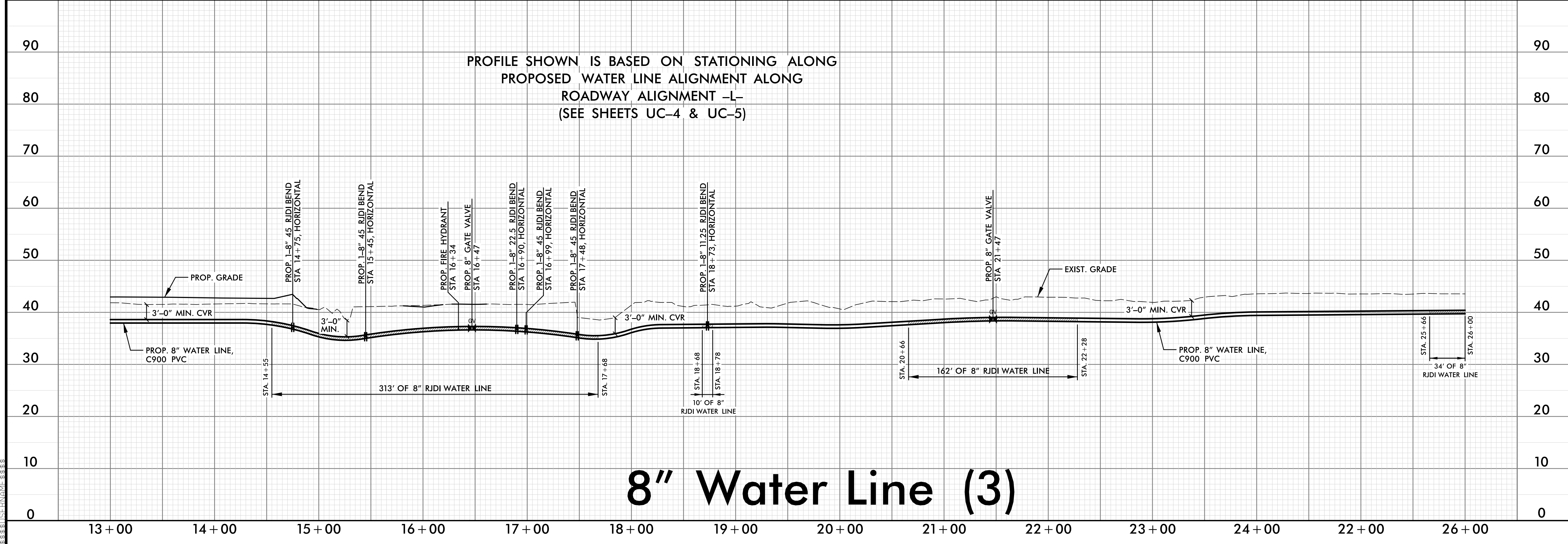
ONLY WATER LINE CONSTRUCTION SHOWN ON THIS SHEET



UTILITY CONSTRUCTION



**PROFILE SHOWN IS BASED ON STATIONING ALONG
 PROPOSED WATER LINE ALIGNMENT ALONG
 ROADWAY ALIGNMENT -L-
 (SEE SHEETS UC-4 & UC-5)**



8" Water Line (3)

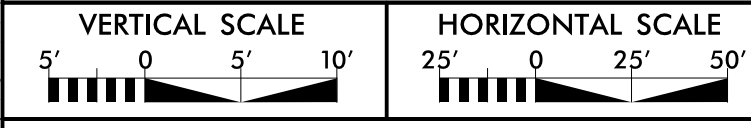
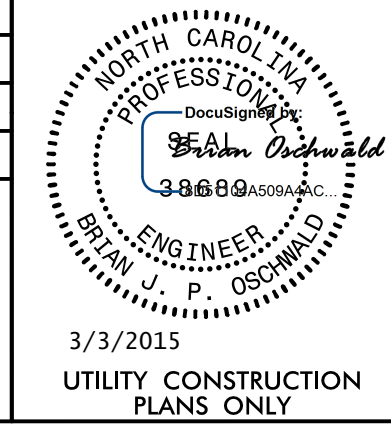
5/28/19

5/28/19

Brian Oswald
0051104509A0AC

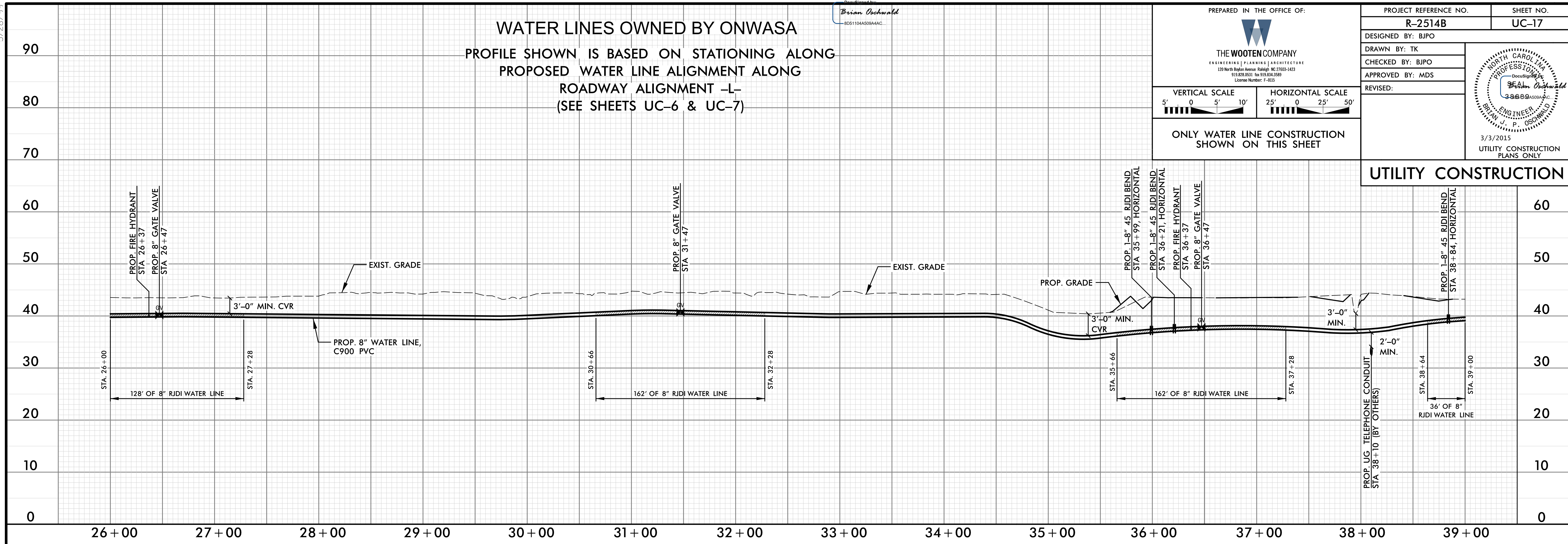
PREPARED IN THE OFFICE OF:
THE WOOTEN COMPANY
ENGINEERING | PLANNING | ARCHITECTURE
120 North Royal Avenue Raleigh, NC 27603-1423
919.878.0011 Fax 919.878.2188
License Number: F-0113

PROJECT REFERENCE NO. R-2514B	SHEET NO. UC-17
DESIGNED BY: BJPO	
DRAWN BY: TK	
CHECKED BY: BJPO	
APPROVED BY: MDS	
REVISED:	

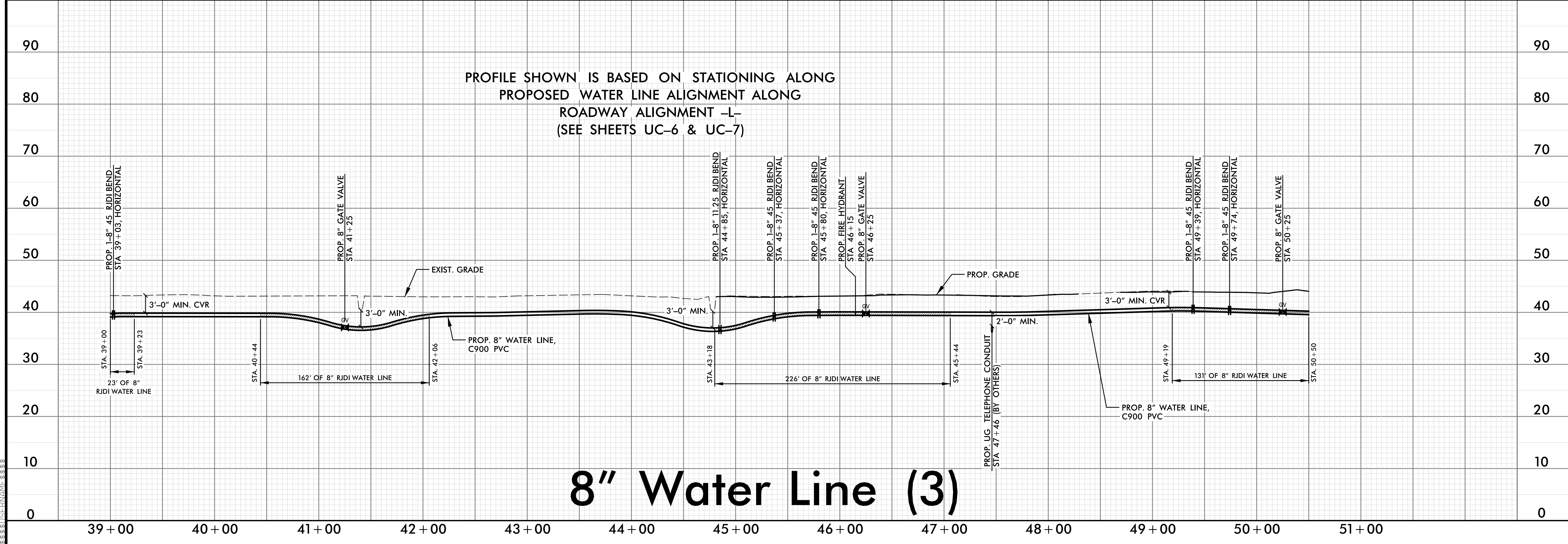


ONLY WATER LINE CONSTRUCTION SHOWN ON THIS SHEET

UTILITY CONSTRUCTION



PROFILE SHOWN IS BASED ON STATIONING ALONG PROPOSED WATER LINE ALIGNMENT ALONG ROADWAY ALIGNMENT -L- (SEE SHEETS UC-6 & UC-7)



8" Water Line (3)

5/28/19

