

09.05/99

TIP PROJECT: R-2561CA

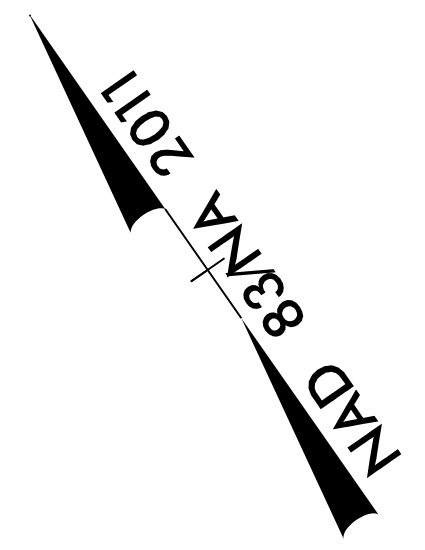
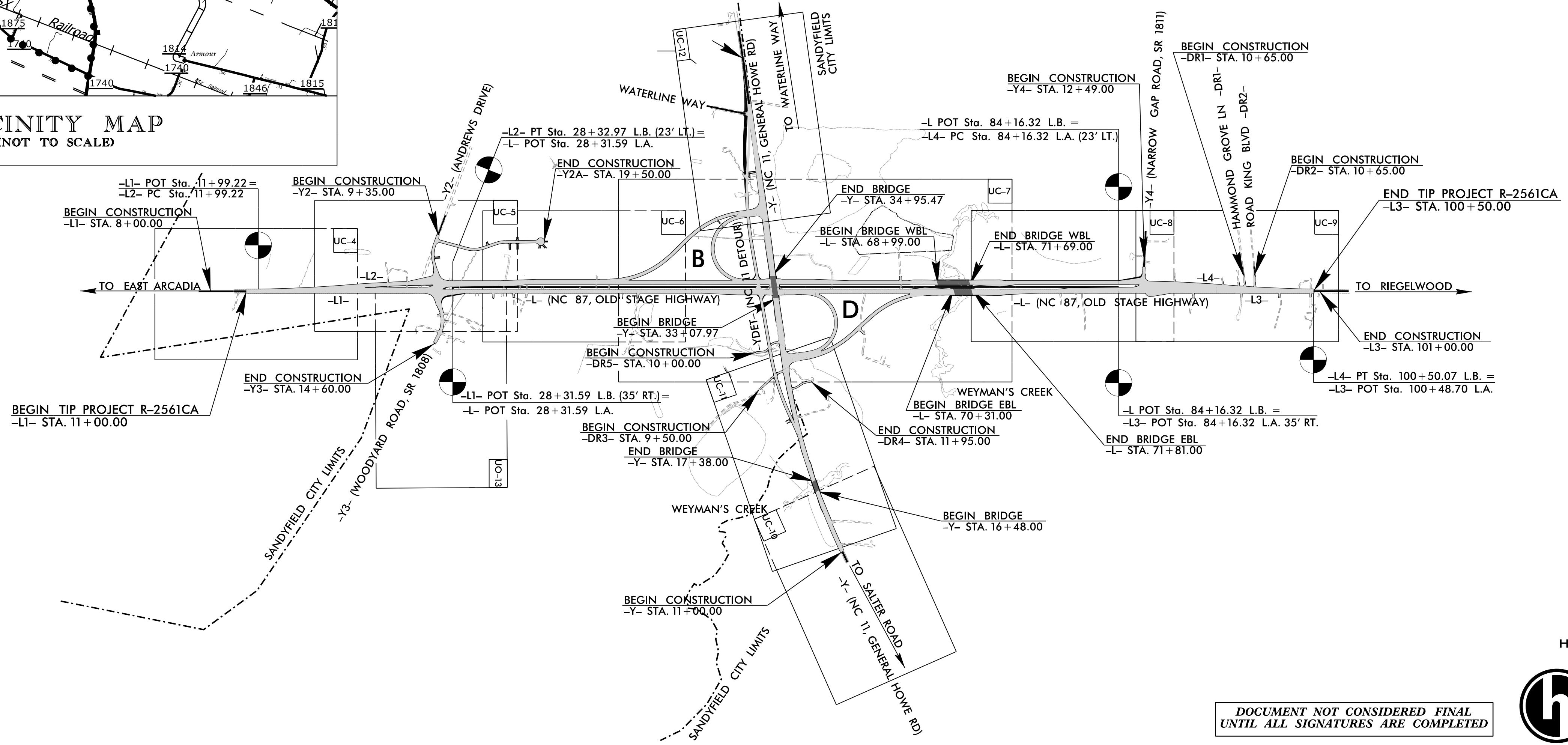
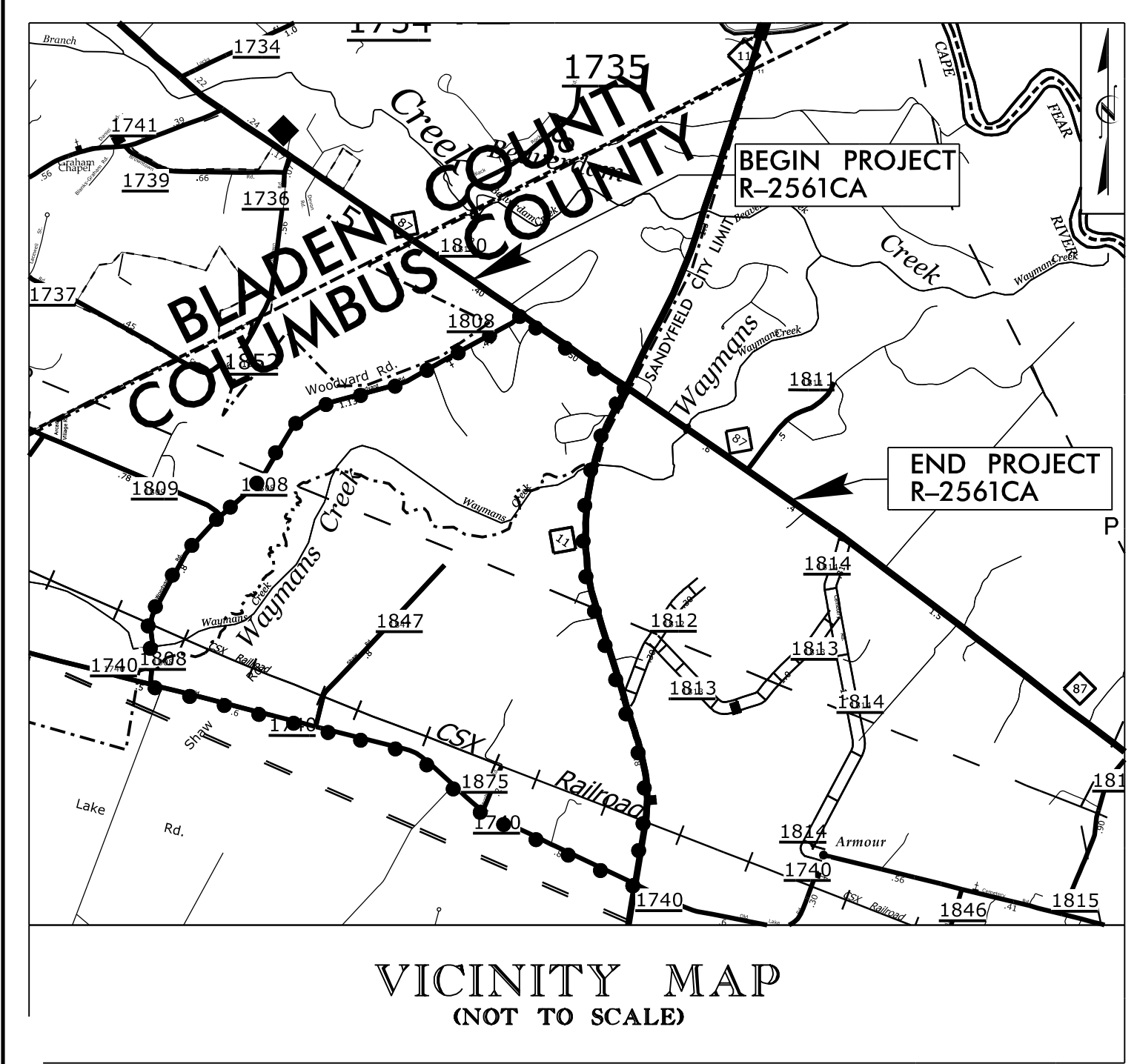
T.I.P. NO.	SHEET NO.
R-2561CA	UC-1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

UTILITY CONSTRUCTION PLANS
COLUMBUS COUNTY

LOCATION: NC 87 (OLD STAGE HWY)/NC 11 (GENERAL HOWE RD) INTERCHANGE

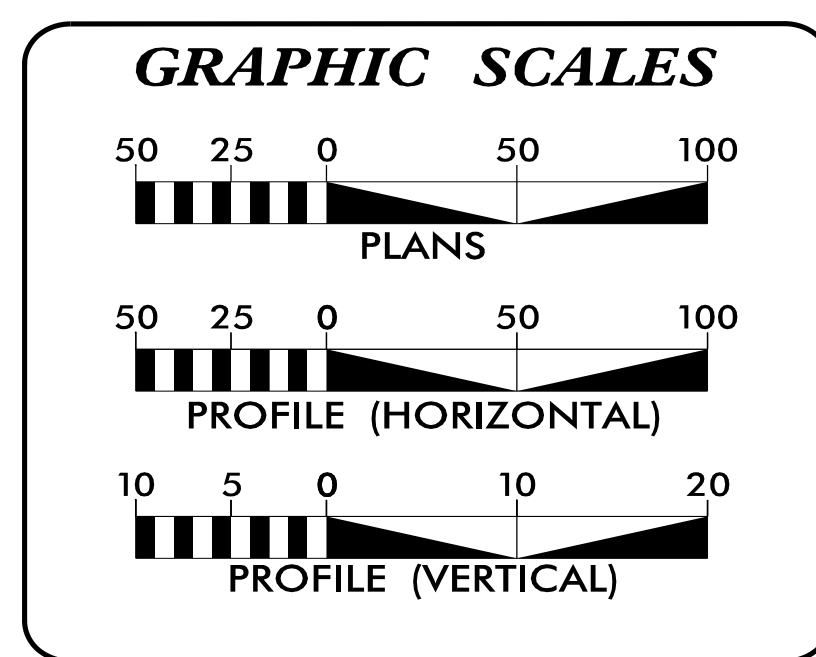
TYPE OF WORK: WATER



HIGHFILL PROJECT NO.: SEP2101

DOCUMENT NOT CONSIDERED FINAL
UNTIL ALL SIGNATURES ARE COMPLETED

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Cary, North Carolina 27518
Tel: 919-481-4342
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Engineering is our profession. Service is our passion.



SHEET NO.:	INDEX OF SHEETS DESCRIPTION:
UC-1	TITLE SHEET
UC-2	SYMBOLGY SHEET
UC-3	NOTES
UC-3A THRU UC-3B	DETAILS
UC-4 THRU UC-20	UTILITY CONSTRUCTION SHEETS

UTILITY OWNERS WITH CONFLICTS

(A) WATER - TOWN OF SANDYFIELD

PREPARED IN THE OFFICE OF:

1 Glenwood Avenue
Raleigh, NC 27603
Tel: 919.789.9977
Fax: 919.789.9591
License: C-2197

Brian J.P. Oschwald P.E. CONSULTANT CONTACT #1
William Pope P.E. CONSULTANT CONTACT #2

SEAL

HIGHWAY DIVISION 6

PO BOX 1150, 28302 (MAIL)
558 GILLESPIE ST., 28301 (DELIVERY)
FAYETTEVILLE, NC
PHONE (910) 364-0600
FAX (910) 486-1959
COURIER 14-55-24

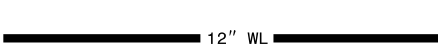























RICK HANDLIN UTILITIES ENGINEER
RICK BOUNDS UTILITIES COORDINATOR
RANDY ROGERS UTILITIES COORDINATOR

7/11/2022
U:\Projects\R-2561CA_Ut_UCL.tsh.dgn
USER:wdope

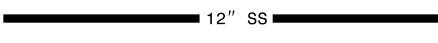
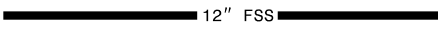


STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

UTILITIES PLAN SHEET SYMBOLS





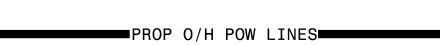
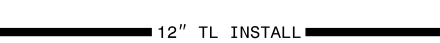

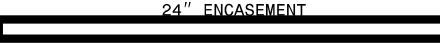
PROPOSED WATER SYMBOLS







Water Line (Sized as Shown)	
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)	
Force Main Sewer Line (Sized as Shown)	
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)	
Trenchless Installation	
Encasement by Open Cut	
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)

5/14/99
 10/16/2012
 R-2561CA-UC2-sym.dgn
 REV: 2/1/2012

5/14/99

PROJECT REFERENCE NO. R-2561CA	SHEET NO. UC-3
DESIGNED BY: BJPO	
DRAWN BY: WAP	
CHECKED BY:	
APPROVED BY:	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	

UTILITY CONSTRUCTION PLANS ONLY

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 2018.
2. THE EXISTING UTILITIES BELONG TO THE TOWN OF SANDYFIELD. CONTACT: GARRY KEATON
PHONE: 910-655-9878
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.
4. THE UTILITY OWNER OWNS THE EXISTING UTILITY FACILITIES AND WILL OWN THE NEW UTILITY FACILITIES AFTER ACCEPTANCE BY THE DEPARTMENT. THE DEPARTMENT OWNS THE CONSTRUCTION CONTRACT AND HAS ADMINISTRATIVE AUTHORITY. COMMUNICATIONS AND DECISIONS BETWEEN THE CONTRACTOR AND UTILITY OWNER ARE NOT BINDING UPON THE DEPARTMENT OR THIS CONTRACT UNLESS AUTHORIZED BY THE ENGINEER. AGREEMENTS BETWEEN THE UTILITY OWNER AND CONTRACTOR FOR THE WORK THAT IS NOT PART OF THIS CONTRACT OR IS SECONDARY TO THIS CONTRACT ARE ALLOWED, BUT ARE NOT BINDING UPON THE DEPARTMENT.
5. PROVIDE ACCESS FOR THE DEPARTMENT PERSONNEL AND THE OWNER'S REPRESENTATIVES TO ALL PHASES OF CONSTRUCTION. NOTIFY DEPARTMENT PERSONNEL AND THE UTILITY OWNER TWO WEEKS PRIOR TO COMMENCEMENT OF ANY WORK AND ONE WEEK PRIOR TO SERVICE INTERRUPTION. KEEP UTILITY OWNERS' REPRESENTATIVES INFORMED OF WORK PROGRESS AND PROVIDE OPPORTUNITY FOR INSPECTION OF CONSTRUCTION AND TESTING.

6. THE PLANS DEPICT THE BEST AVAILABLE INFORMATION FOR THE LOCATION, SIZE, AND TYPE OF MATERIAL FOR ALL EXISTING UTILITIES. MAKE INVESTIGATIONS FOR DETERMINING THE EXACT LOCATION, SIZE, AND TYPE MATERIAL OF THE EXISTING FACILITIES AS NECESSARY FOR THE CONSTRUCTION OF THE PROPOSED UTILITIES AND FOR AVOIDING DAMAGE TO EXISTING FACILITIES. REPAIR ANY DAMAGE INCURRED TO EXISTING FACILITIES TO THE ORIGINAL OR BETTER CONDITION AT NO ADDITIONAL COST TO THE DEPARTMENT.
7. MAKE FINAL CONNECTIONS OF THE NEW WORK TO THE EXISTING SYSTEM WHERE INDICATED ON THE PLANS, AS REQUIRED TO FIT THE ACTUAL CONDITIONS, OR AS DIRECTED.
8. MAKE CONNECTIONS BETWEEN EXISTING AND PROPOSED UTILITIES AT TIMES MOST CONVENIENT TO THE PUBLIC, WITHOUT ENDANGERING THE UTILITY SERVICE, AND IN ACCORDANCE WITH THE UTILITY OWNER'S REQUIREMENTS. MAKE CONNECTIONS ON WEEKENDS, AT NIGHT, AND ON HOLIDAYS IF NECESSARY.
9. ALL UTILITY MATERIALS SHALL BE APPROVED PRIOR TO DELIVERY TO THE PROJECT. SEE 1500-7, "SUBMITTALS AND RECORDS" IN SECTION 1500 OF THE STANDARD SPECIFICATIONS.

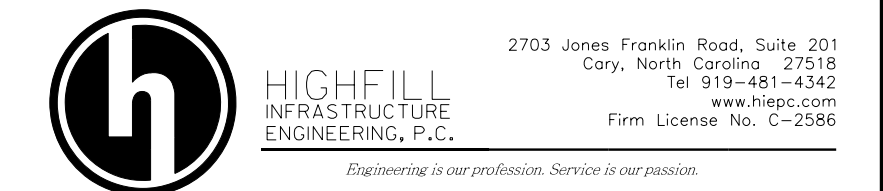
PROJECT SPECIFIC NOTES:

1. PROPOSED WATER LINE SHALL BE C900 DR18 PVC OR C150 PC 350 DIP.
2. RELATION OF WATER MAINS TO SEWERS LAY WATER MAINS AT LEAST 10 FEET Laterally FROM EXISTING OR PROPOSED SEWERS OR STORM DRAINS. IF LOCAL CONDITIONS OR BARRIERS PREVENT A 10 FOOT SEPARATION, LAY THE WATER MAIN WITH AT LEAST 18 INCHES VERTICAL SEPARATION ABOVE THE TOP OF THE SEWER OR STORM DRAIN PIPE EITHER IN A SEPARATE TRENCH OR IN THE SAME TRENCH ON A BENCH OF UNDISTURBED EARTH.

WHEN A PROPOSED WATER MAIN CROSSES OVER A PROPOSED OR EXISTING SEWER OR STORM DRAIN PIPE, LAY THE WATER MAIN WITH AT LEAST 18 INCHES VERTICAL SEPARATION ABOVE THE TOP OF THE SEWER OR STORM DRAIN PIPE. IF LOCAL CONDITIONS OR BARRIERS PREVENT AN 18 INCH VERTICAL SEPARATION, CONSTRUCT BOTH THE WATER MAIN AND THE SEWER FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE POINT CROSSING WITH FERROUS PIPE HAVING WATER MAIN QUALITY JOINTS.

WHEN A PROPOSED WATER MAIN CROSSES UNDER A PROPOSED OR EXISTING SEWER, CONSTRUCT BOTH THE WATER MAIN AND THE SEWER OF FERROUS MATERIALS WITH JOINTS THAT ARE EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE POINT OF CROSSING. CENTER THE SECTION OF WATER PIPE AT THE POINT OF CROSSING.
3. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS, SPECIFICATIONS AND STANDRAD DETAILS/DRAWINGS OF THE UTILITY OWNERS, IN ADDITION TO THE NCDOT "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" DATED JANUARY 2018. IN THE CASE OF A DISCREPANCY, ABIDE BY THE MORE STRINGENT OF THE TWO REQUIREMENTS.

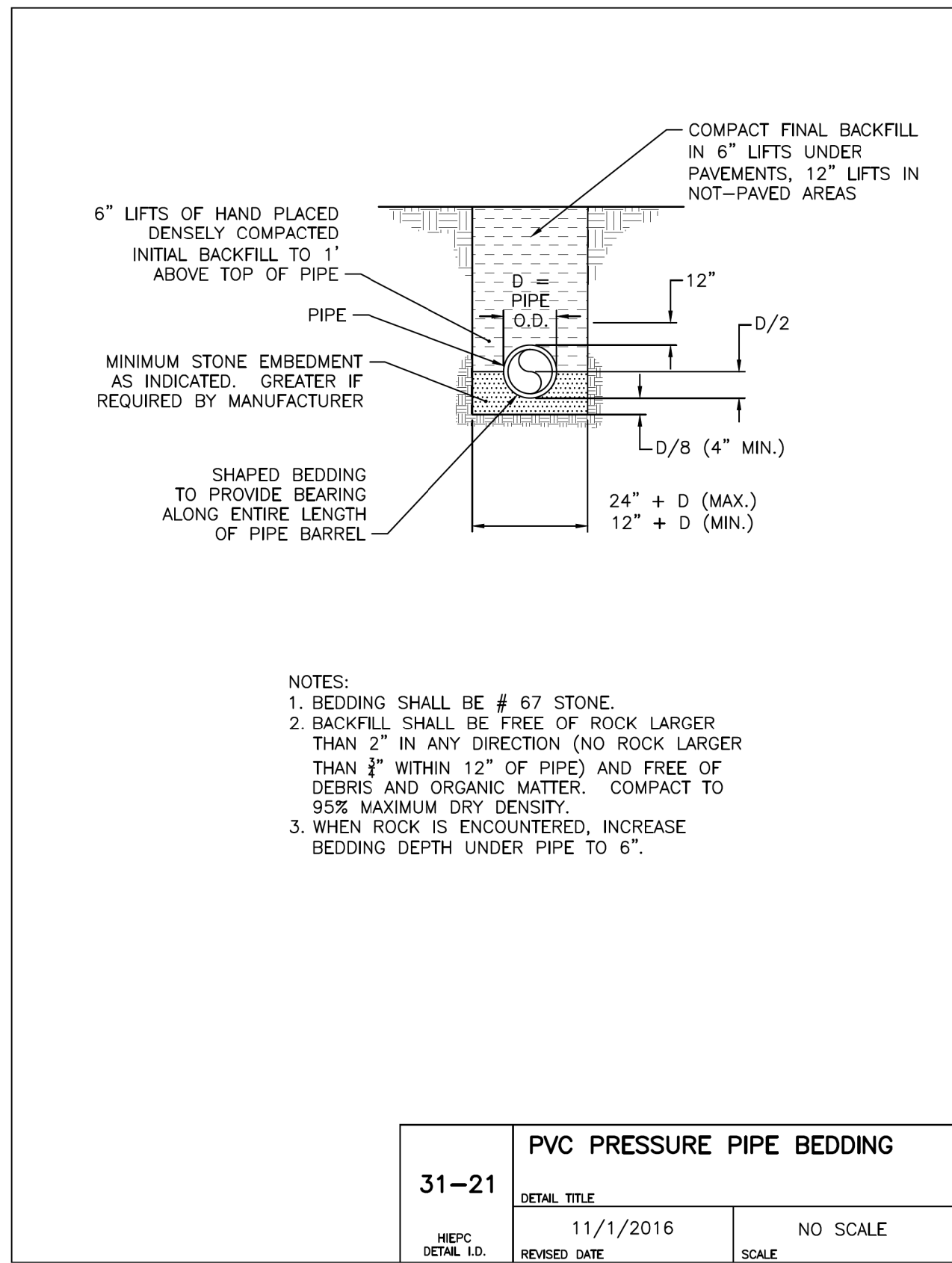
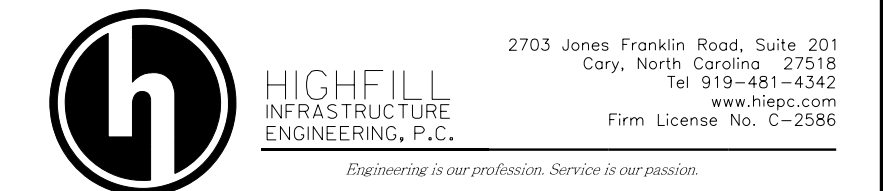
UTILITY CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL
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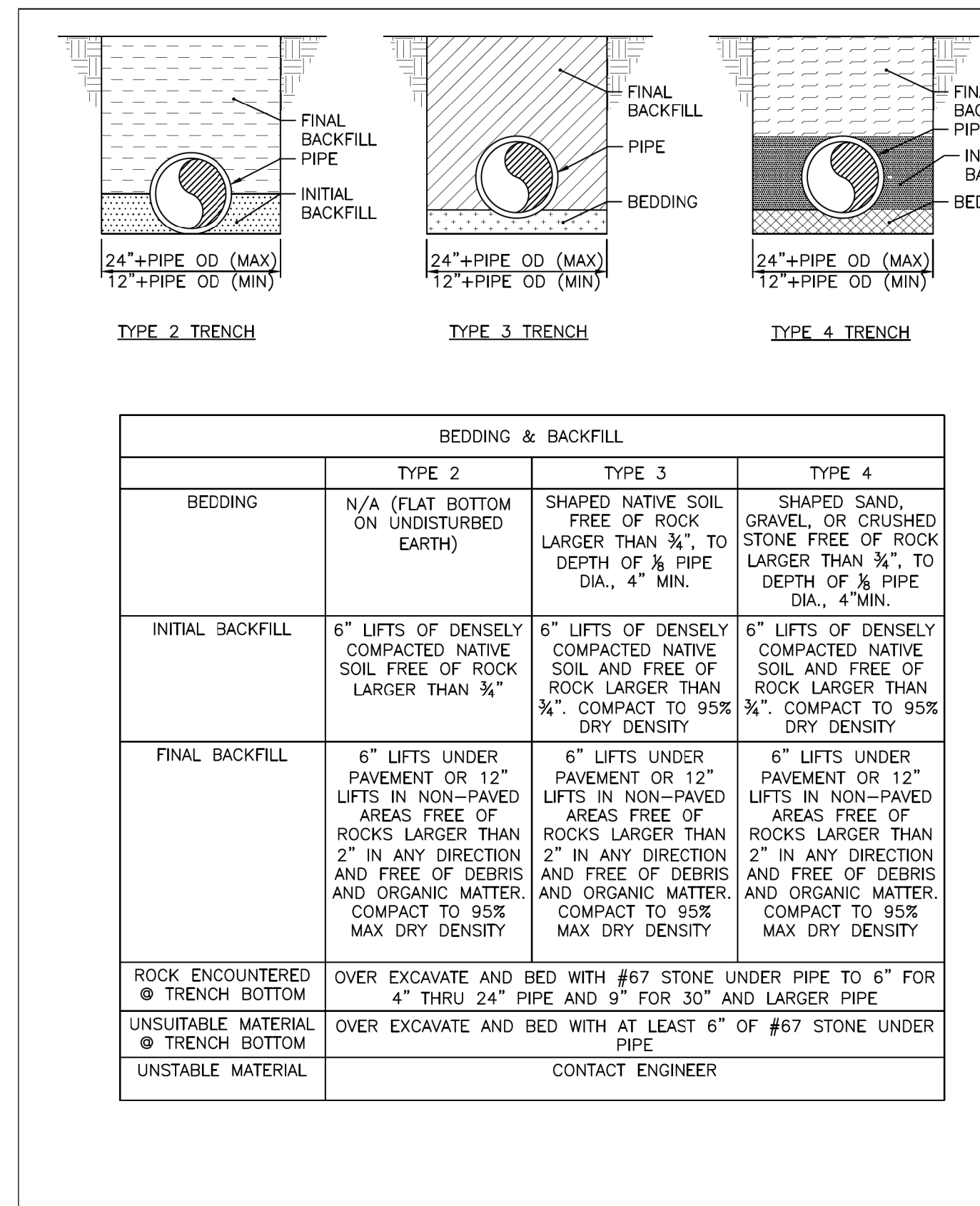
4. THE CONTRACTOR SHALL COORDINATE ISOLATION OF THE EXISTING WATER MAIN FOR TIE-INS WITH UTILITY OWNER. CALL UTILITY OWNER. IF TEMPORARY SHUT DOWN OF UTILITY IS REQUIRED THE CONTRACTOR WILL COORDINATE THIS SHUT DOWN WITH UTILITY OWNERS IN A MANNER THAT IS MOST CONVENIENT FOR CUSTOMERS AND UTILITY OWNER.
5. INSTALL WATER LINES WITH MINIMUM OF 36 INCHES OF COVER TO FINISHED GRADE UNLESS OTHERWISE DIRECTED OR APPROVED.
6. THE CONTRACTOR SHALL INSTALL CONCRETE THRUST BLOCKING AT ALL WATER LINE FITTINGS AND TEES, PER DETAILS 33-33 AND 33-34 ON SHEET UC-3B.

7/11/09 2:56:16 CA-Ut_UC3_notes.dgn

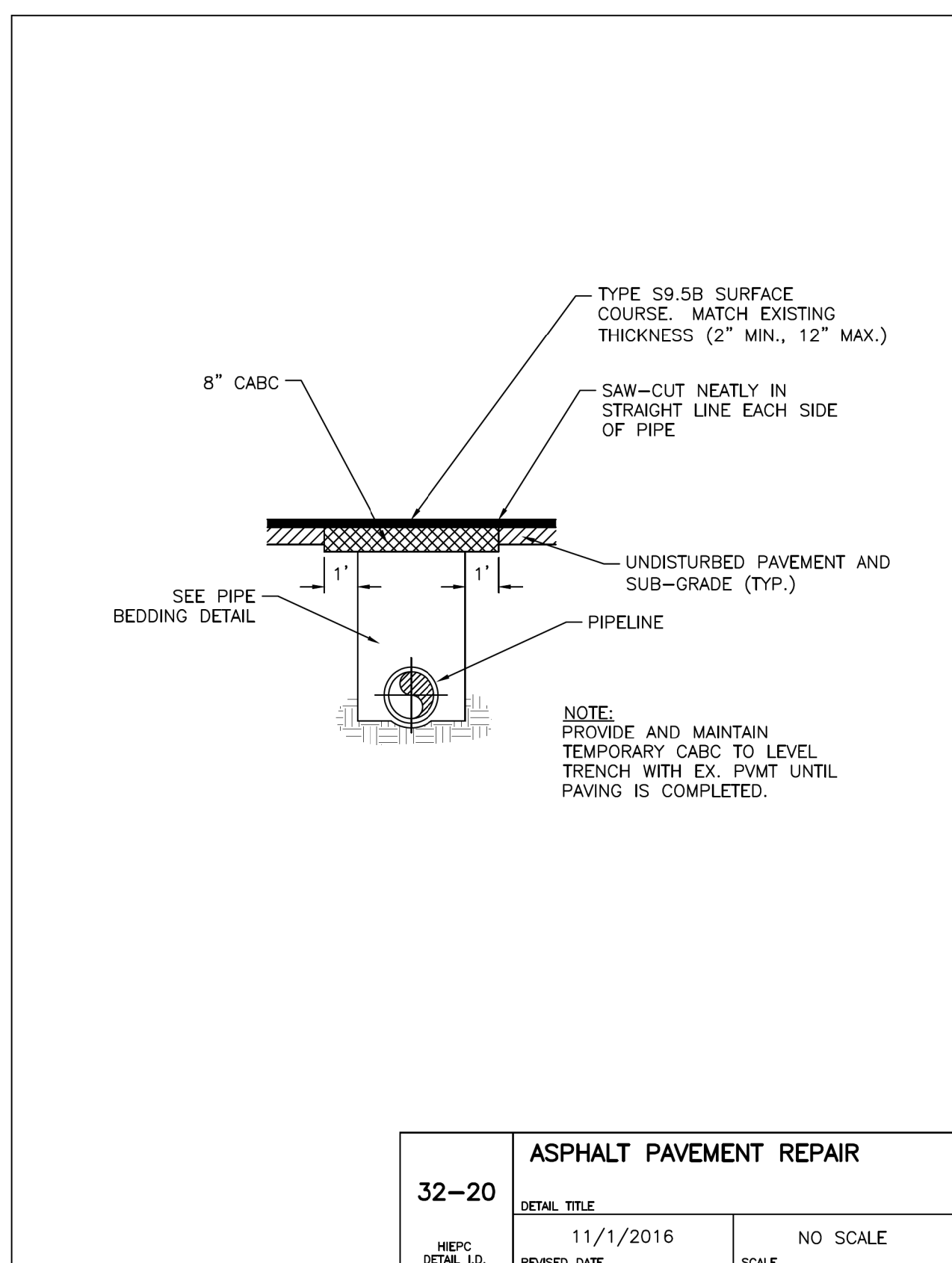
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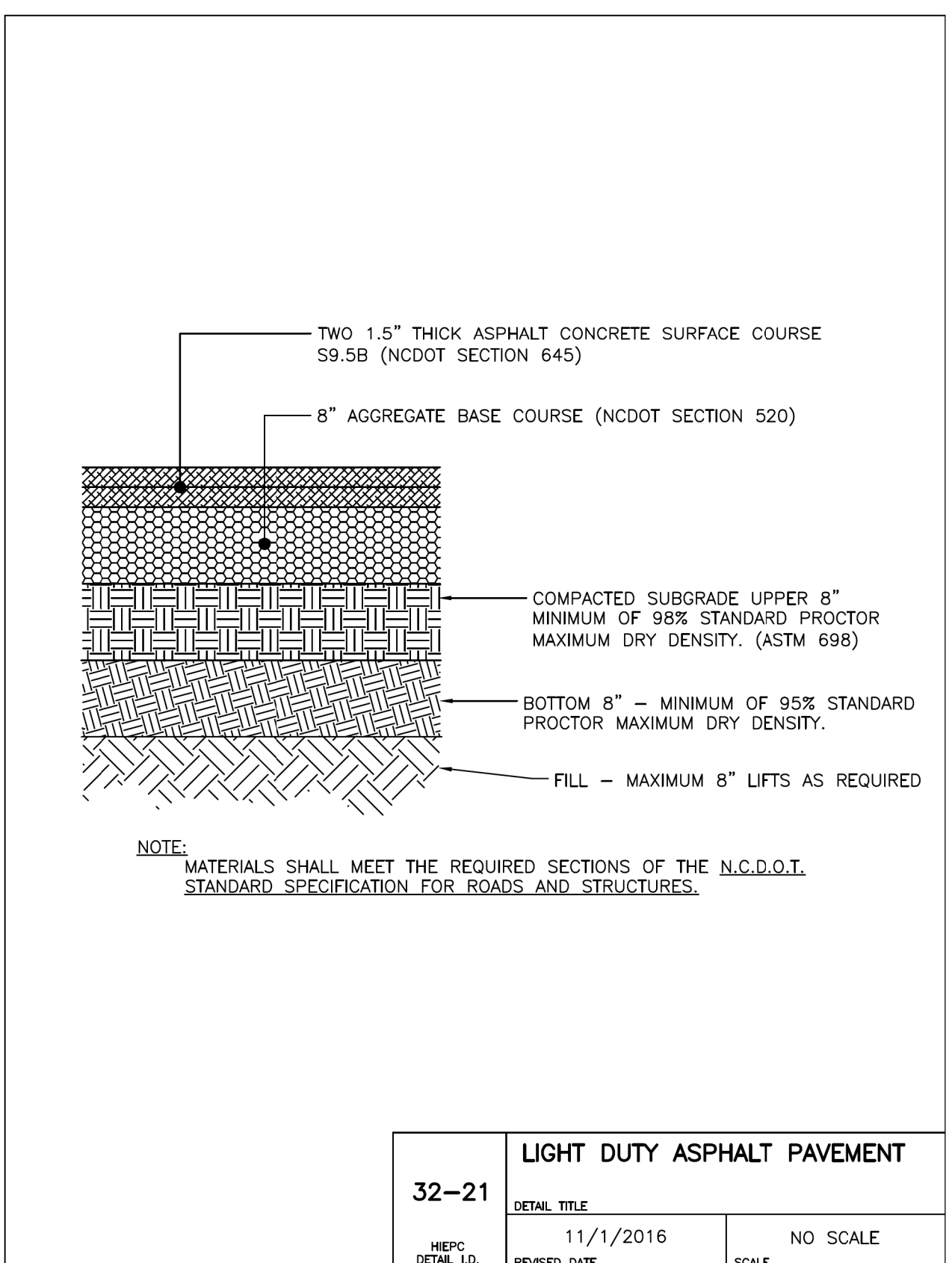
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HEPC DETAIL I.D.	SCALE
REVISOR	NO SCALE
REVISION DATE	11/1/2016



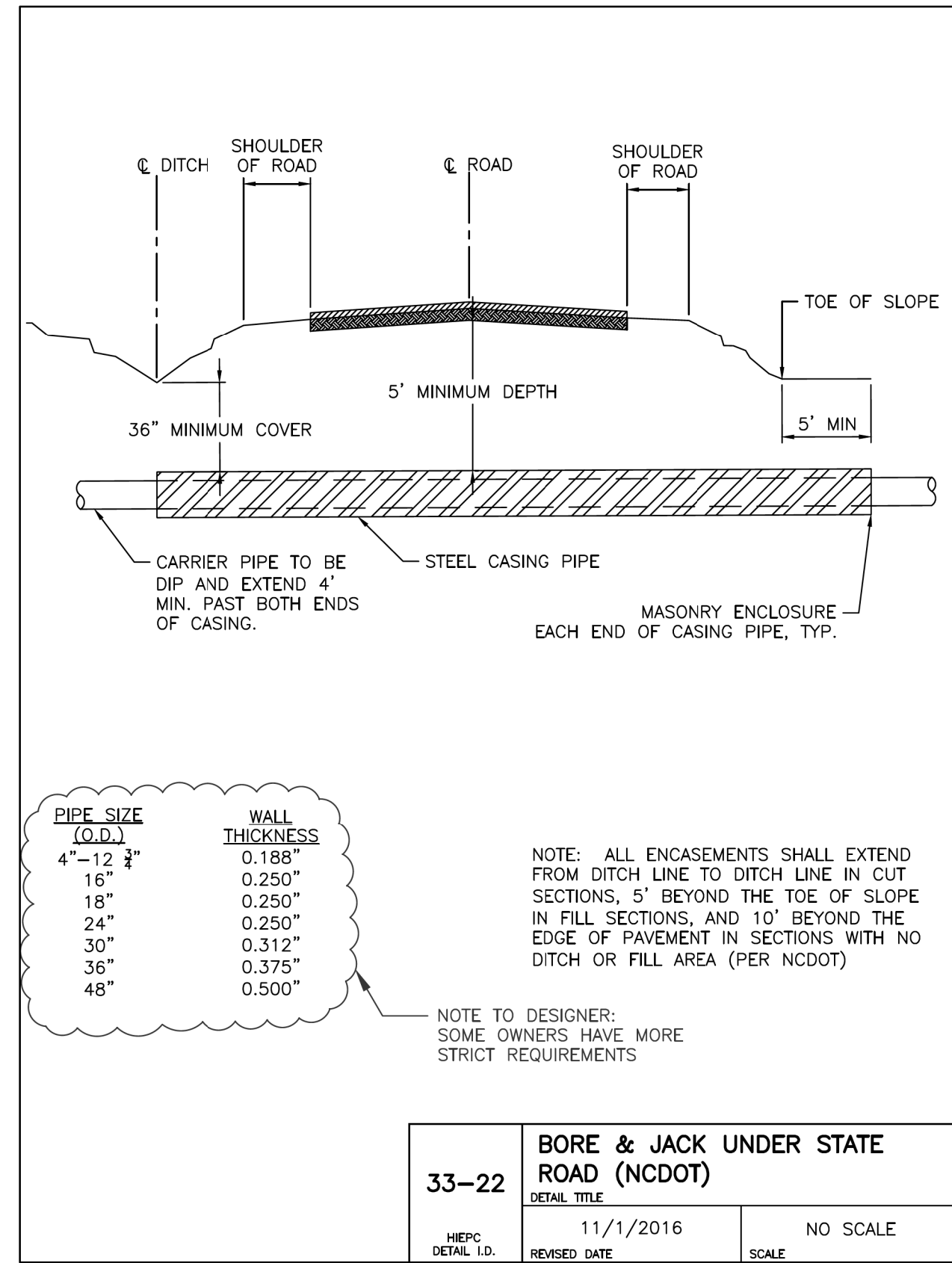
31-23	DI PIPE BEDDING (TYPE 2, 3, AND 4 TRENCHES)
HEPC DETAIL I.D.	SCALE
REVISOR	NO SCALE
REVISION DATE	11/1/2016



32-20	ASPHALT PAVEMENT REPAIR
HEPC DETAIL I.D.	SCALE
REVISOR	NO SCALE
REVISION DATE	11/1/2016



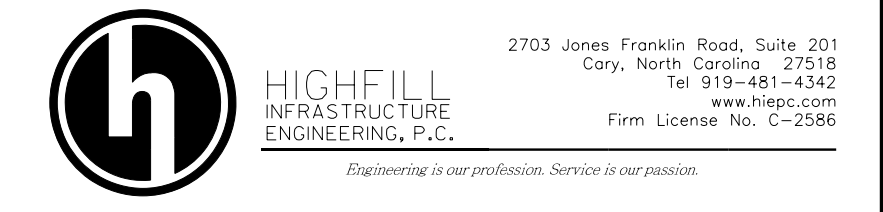
32-21	LIGHT DUTY ASPHALT PAVEMENT
HEPC DETAIL I.D.	SCALE
REVISOR	NO SCALE
REVISION DATE	11/1/2016



33-22	BORE & JACK UNDER STATE ROAD (NCDOT)
HEPC DETAIL I.D.	SCALE
REVISOR	NO SCALE
REVISION DATE	11/1/2016

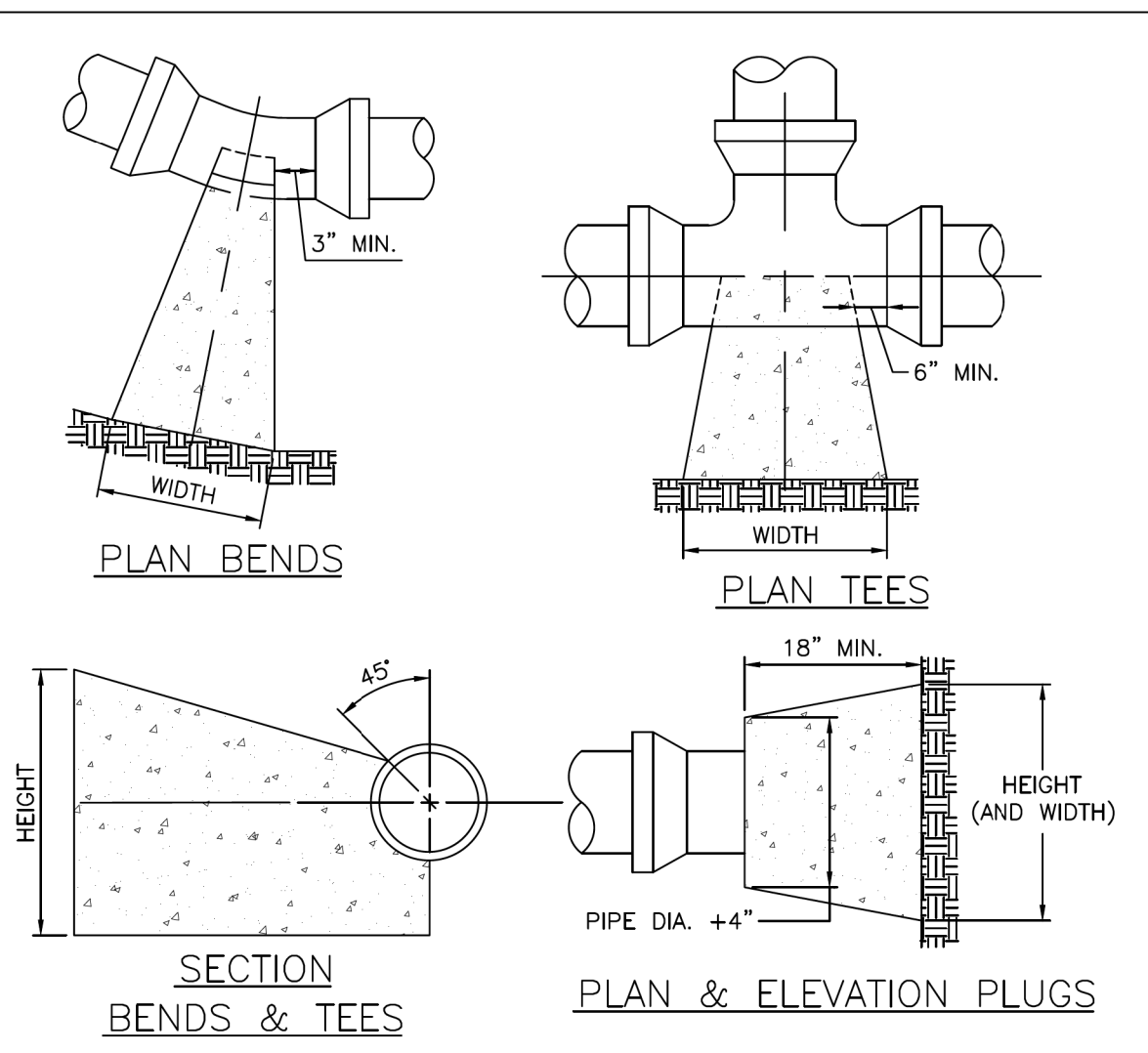
UTILITY CONSTRUCTION

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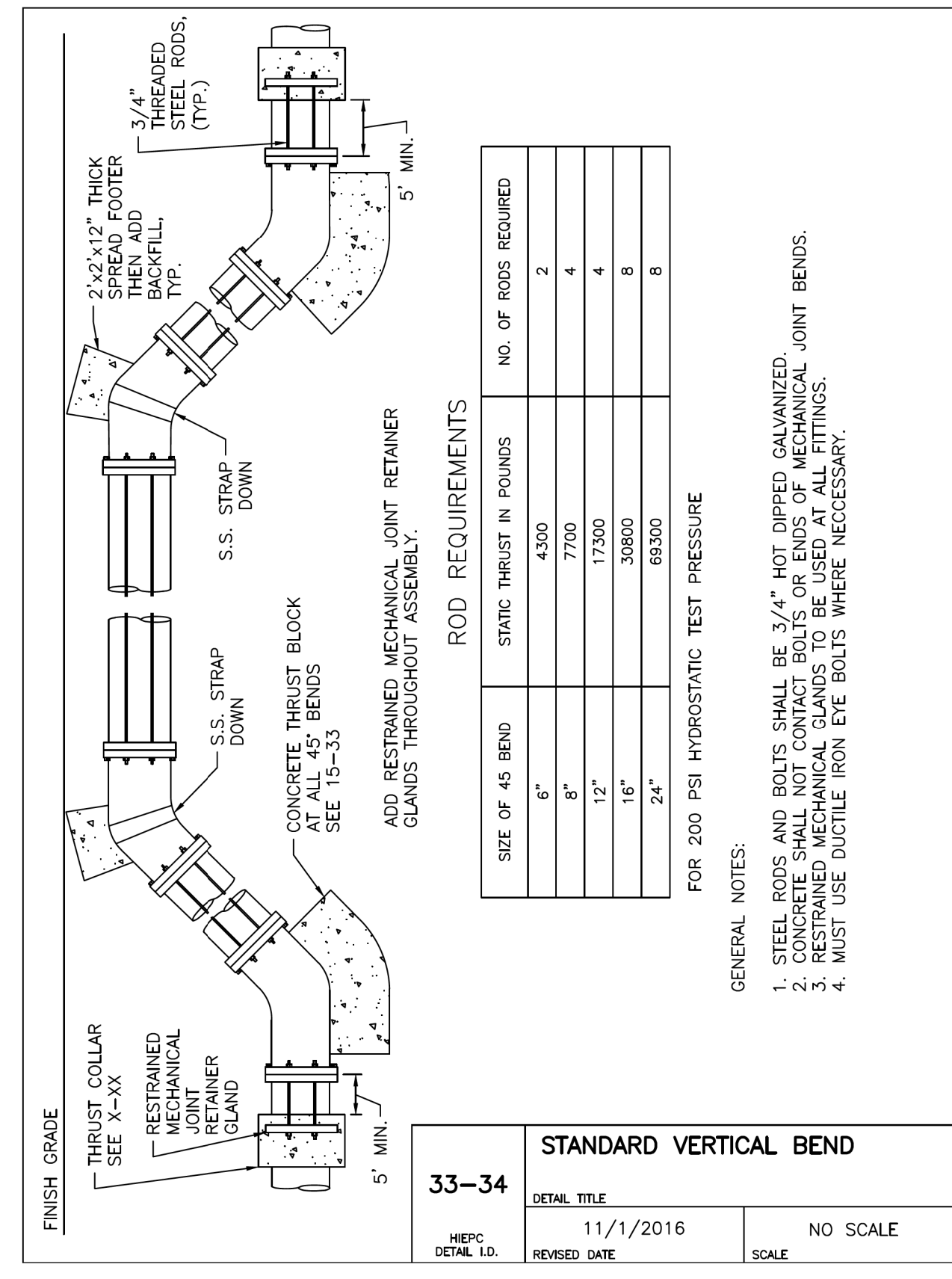
REACTION BEARING AREAS FOR HORIZONTAL PIPE BENDS							
DIA. (IN)	FITTING	REACTION AREA (SF)					
		1000 #/SF	1600 #/SF	2000 #/SF	4000 #/SF	8000 #/SF	10000 #/SF
6	11.25	2	1	1	1	1	1
	22.5	3	2	2	2	2	2
	45	5	4	3	2	1	1
	90	9	6	5	3	2	1
	PLUG/TEE	7	4	4	2	1	1
8	11.25	3	2	2	1	1	1
	22.5	5	3	3	2	1	1
	45	9	6	5	3	2	1
	90	16	10	8	4	2	2
	PLUG/TEE	12	8	6	3	2	2
12	11.25	5	4	3	2	1	1
	22.5	10	7	5	3	2	1
	45	20	13	10	5	3	2
	90	36	23	18	9	5	4
	PLUG/TEE	26	16	13	7	4	3
16	11.25	9	6	5	3	2	1
	22.5	18	12	9	5	3	2
	45	35	22	18	9	5	4
	90	64	40	32	16	8	7
	PLUG/TEE	46	29	23	12	6	5
24	11.25	20	13	10	5	3	2
	22.5	40	25	20	10	5	4
	45	78	49	39	20	10	8
	90	144	90	72	36	18	15
	PLUG/TEE	102	64	51	26	13	11
30	11.25	32	20	16	8	4	4
	22.5	63	39	32	16	8	7
	45	122	77	61	31	16	13
	90	225	141	113	57	29	23
	PLUG/TEE	160	100	80	40	20	16
36	11.25	45	29	23	12	6	5
	22.5	90	56	45	23	12	9
	45	176	110	88	44	22	18
	90	324	203	162	81	41	33
	PLUG/TEE	230	144	115	58	29	23

G:\Projects\Design Info\Restaint\Thrust Block Calculator.xls

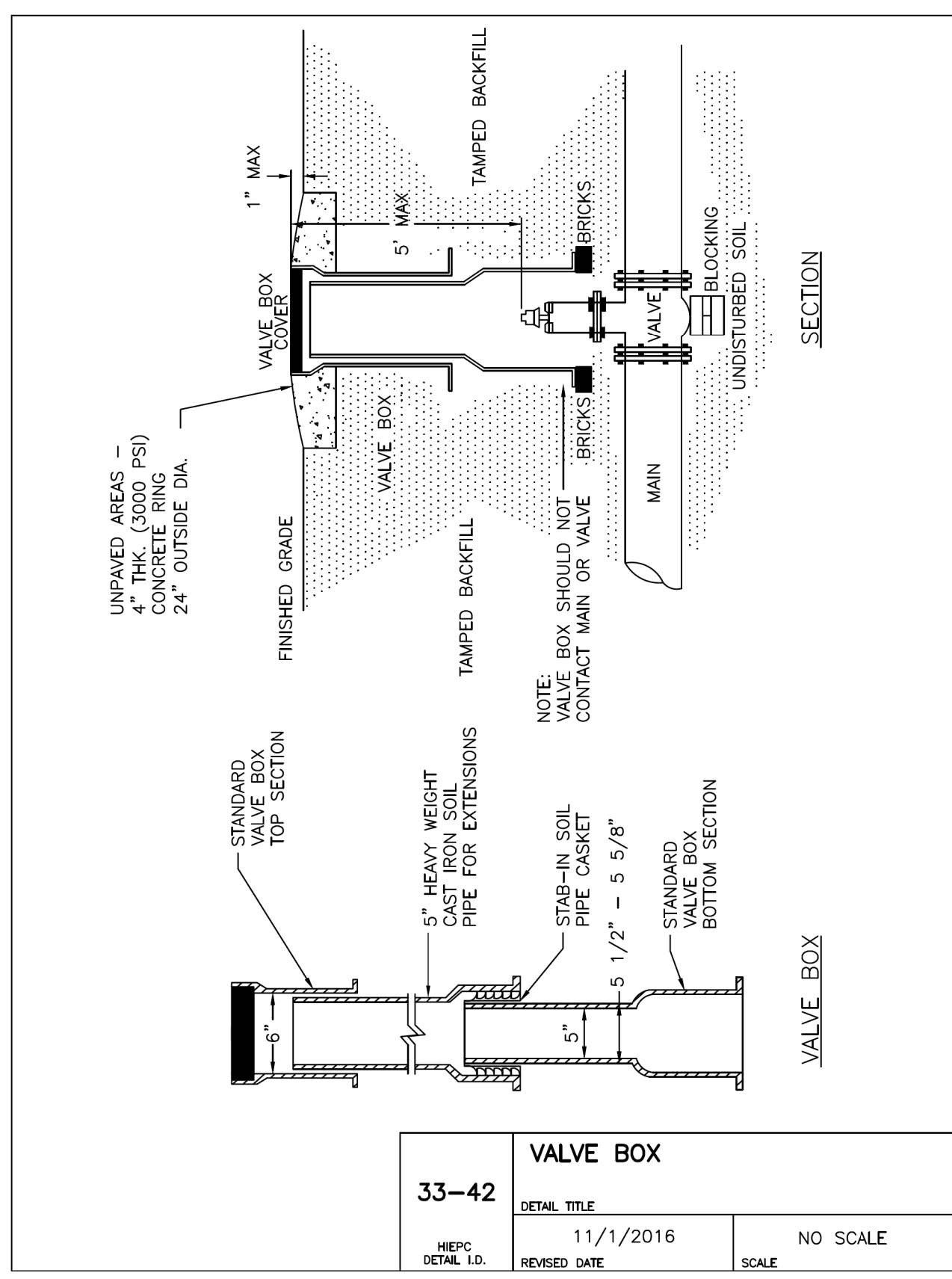


- NOTES:
- REACTION BEARING AREAS ARE IN SQUARE FEET MEASURED IN A VERTICAL PLANE IN THE TRENCH SIDE AT AN ANGLE OF 90° TO THE THRUST VECTOR.
 - REACTION AREA CALCULATED BASED ON 150 PSI TEST PRESSURE AND 1.5 SAFETY FACTOR.
 - GENERAL SOIL PROPERTIES: QUICKSAND = 1,000 #/SF; GRAVEL/COARSE SAND = 1,600 #/SF; SOFT CLAY = 2,000 #/SF; MODERATELY DRY CLAY, SAND-CLEAN DRY = 4,000 #/SF; DRY CLAY, SAND-COMPACT FIRM = 8,000 #/SF; ROCK = 10,000 #/SF.
 - USE 6" - 90° BEND VALVE FOR HYDRANTS.
 - WIDTH OF BLOCK SHOULD BE BETWEEN 1X AND 2X BLOCK HEIGHT.
 - CONSULT ENGINEER FOR FITTING OR SIZES NOT SHOWN.
 - CONCRETE SHALL BE 3000 PSI.
 - CONCRETE SHALL NOT CONTACT BOLTS OR ENDS OF MECHANICAL JOINT FITTINGS.
 - CONCRETE SHALL HAVE CONCRETE THRUST BLOCKING UNLESS NOTED OTHERWISE.

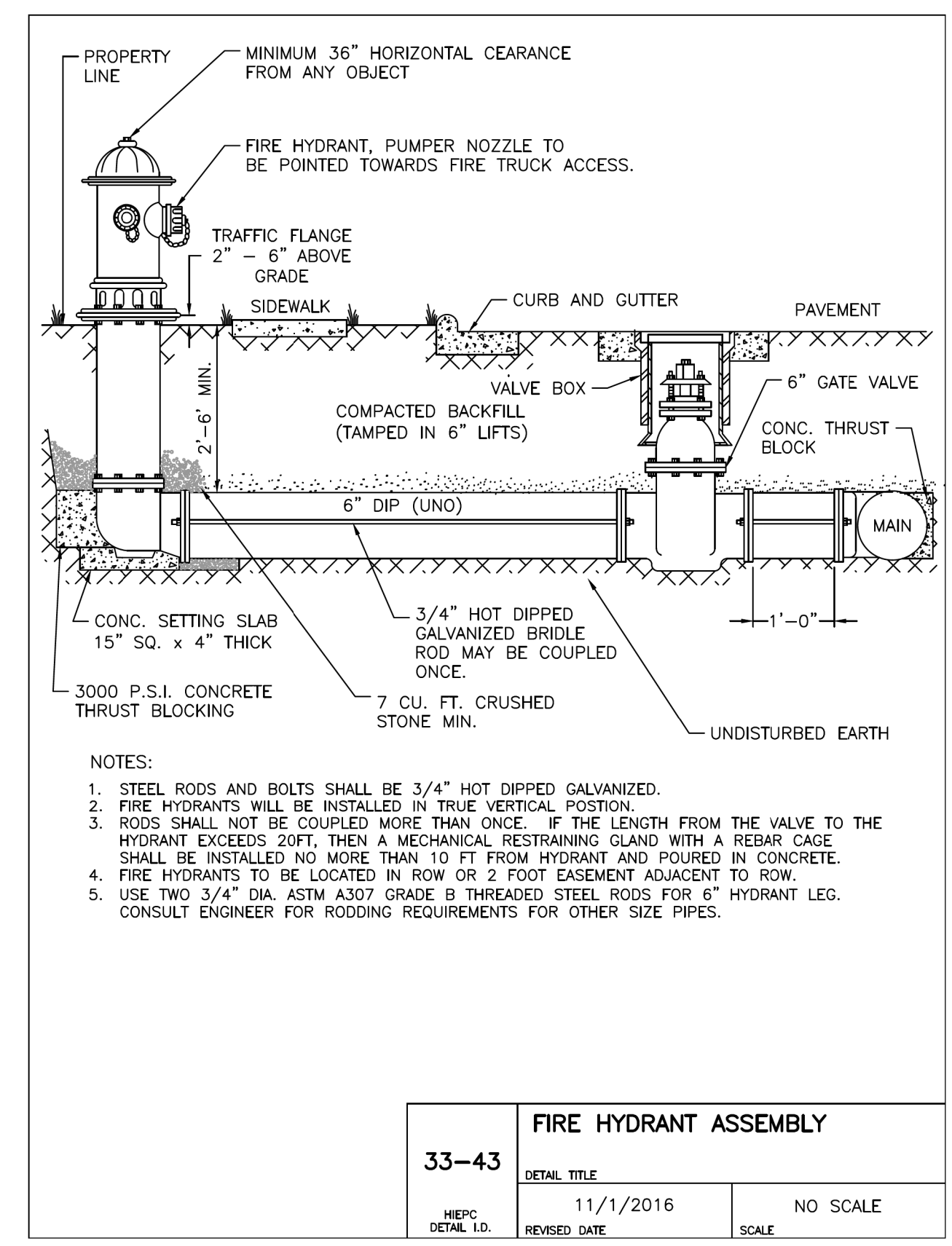
33-33	STANDARD THRUST BLOCKING
HEIPC DETAIL I.D.	NO SCALE
REVISIONS:	DATE
	11/1/2016



33-34	STANDARD VERTICAL BEND
HEIPC DETAIL I.D.	NO SCALE
REVISIONS:	DATE
	11/1/2016




33-42	VALVE BOX
HEIPC DETAIL I.D.	NO SCALE
REVISIONS:	DATE
	11/1/2016




33-43	FIRE HYDRANT ASSEMBLY
HEIPC DETAIL I.D.	NO SCALE
REVISIONS:	DATE
	11/1/2016

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7/11/2002 2561CA_Ut_UC4_psh.dgn
115583.dwg

PROJECT REFERENCE NO.	R-2561CA	SHEET NO.	UC-4
DESIGNED BY:	BJPO		
DRAWN BY:	WAP		
CHECKED BY:			
APPROVED BY:			
REVISED:			
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		UTILITY CONSTRUCTION PLANS ONLY	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151			

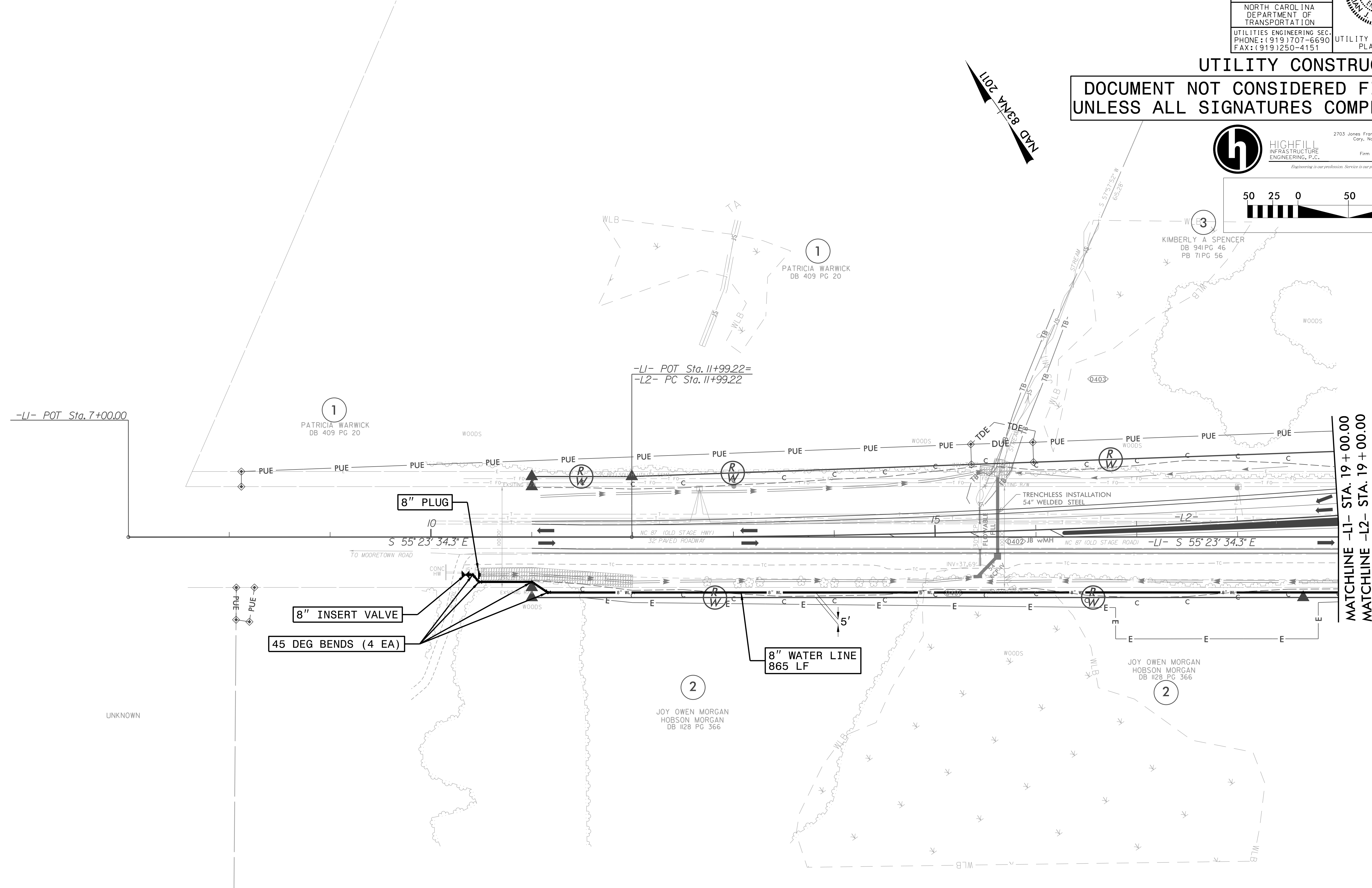
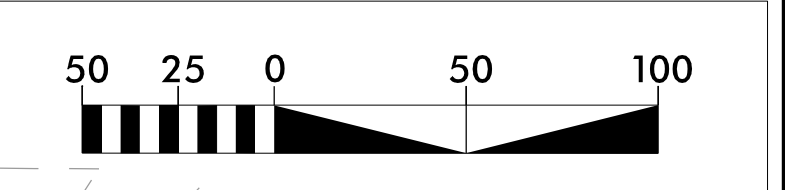
UTILITY CONSTRUCTION
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HIGHFILL
INFRASTRUCTURE
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Engineering is our profession. Service is our passion.



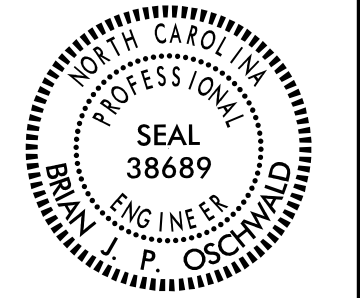
MATCHLINE -LI- STA. 19 + 00.00
MATCHLINE -L2- STA. 19 + 00.00
SEE SHEET UC-5

5/14/99
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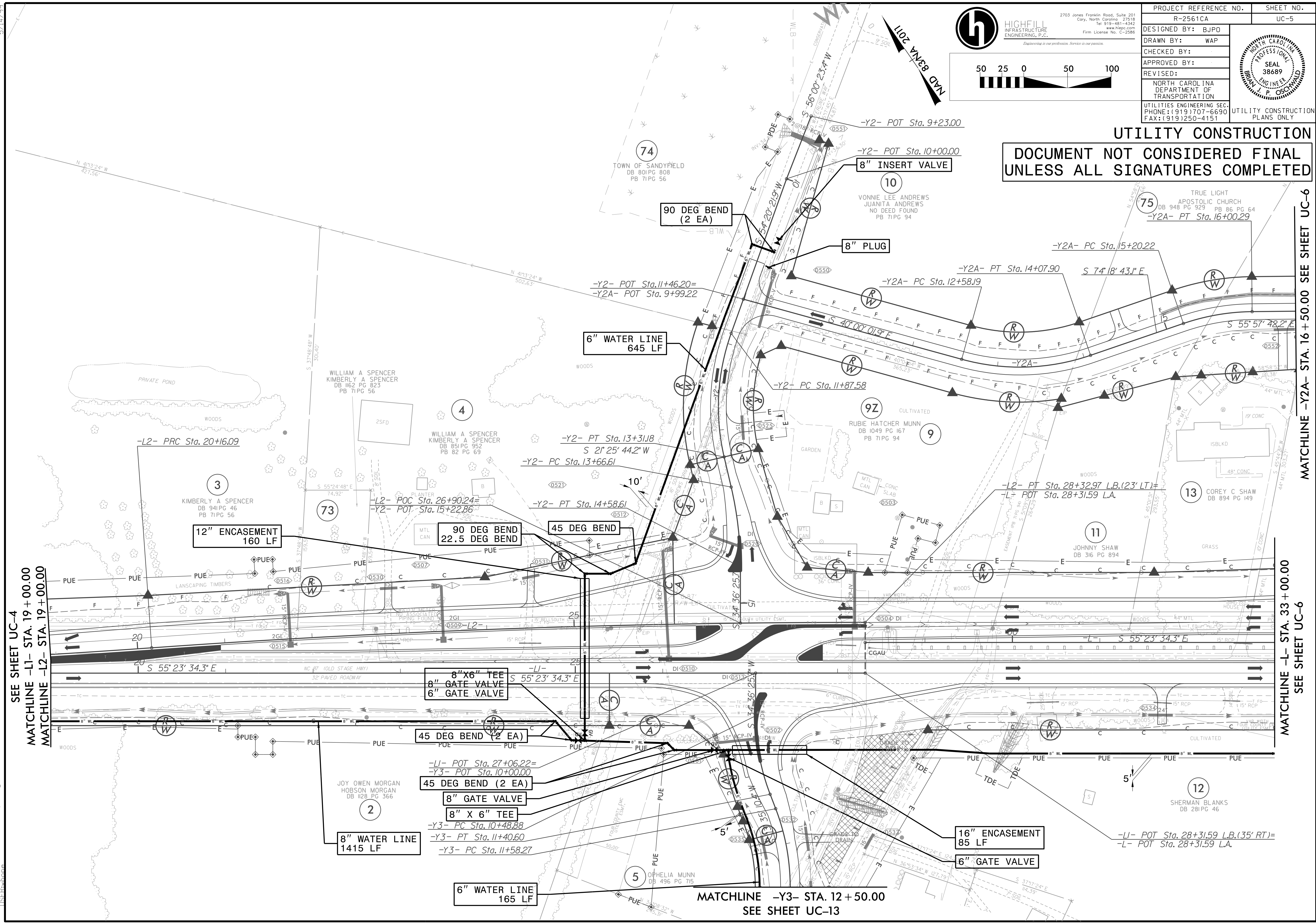
h HIGHFILL INFRASTRUCTURE ENGINEERING, P.C.
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Cary, North Carolina 27518
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Engineering is our profession. Service is our passion.

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PROJECT REFERENCE NO.	R-2561CA
SHEET NO.	UC-5
DESIGNED BY:	BUJO
DRAWN BY:	WAP
CHECKED BY:	
APPROVED BY:	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITY ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY	



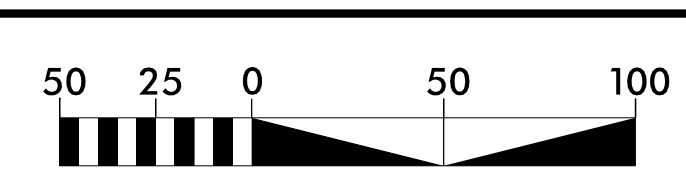
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MATCHLINE -Y2- STA. 16 + 50.00 SEE SHEET UC-6
MATCHLINE -L- STA. 33 + 00.00 SEE SHEET UC-6

MATCHLINE -Y3- STA. 12 + 50.00
SEE SHEET UC-13

5/14/99
7/14/2009 2:56:1CA_Ut_UC6_psh.dgn
115113.000



PROJECT REFERENCE NO.	R-2561CA	SHEET NO.	UC-6
DESIGNED BY:	BJPO		
DRAWN BY:	WAP		
CHECKED BY:			
APPROVED BY:			
REVISED:			
UTILITIES ENGINEERING SEC.	PHONE: (919) 707-6690	UTILITY CONSTRUCTION	PLANS ONLY
F & J PROPERTIES	DB 534 PG 98 PB 62 PG 89		

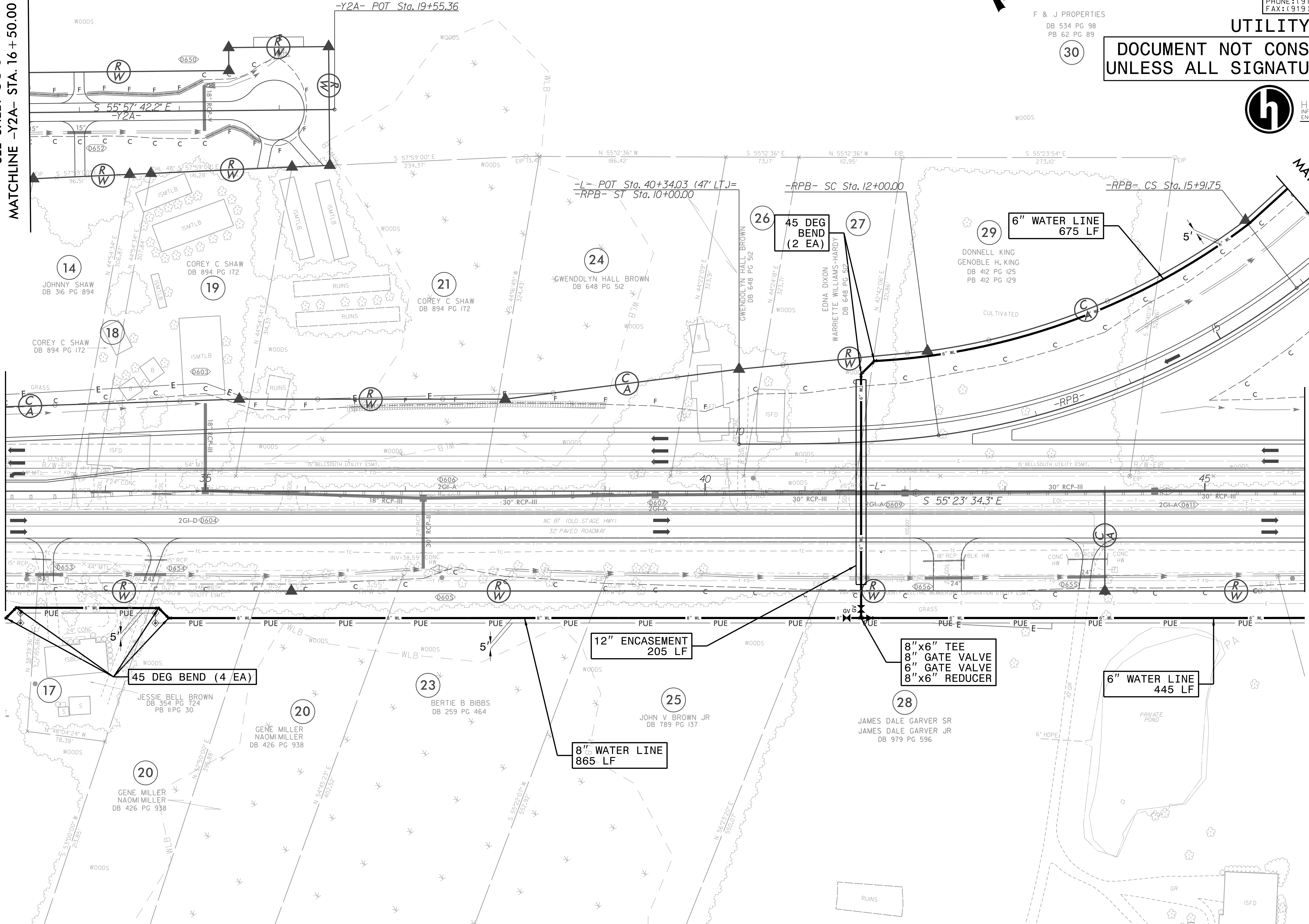
UTILITY CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL
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SEE SHEET UC-5
MATCHLINE -Y2A- STA. 16+50.00

SEE SHEET UC-5
MATCHLINE -L- STA. 33+00.00

MATCHLINE -L- STA. 46+00.00
SEE SHEET UC-7



F & J PROPERTIES
DB 534 PG 98
PB 62 PG 89

30

102+83.71

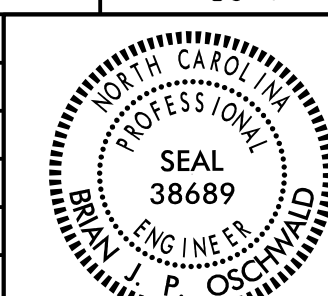


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PROJECT REFERENCE NO. R-2561CA

SHEET NO. UC-7

DESIGNED BY: BJO
DRAWN BY: WAP
CHECKED BY:
APPROVED BY:
REVISED:
NORTH CAROLINA
DEPARTMENT OF
TRANSPORTATION
UTILITIES ENGINEERING SEC.
PHONE: (919) 707-6690
FAX: (919) 1250-4151



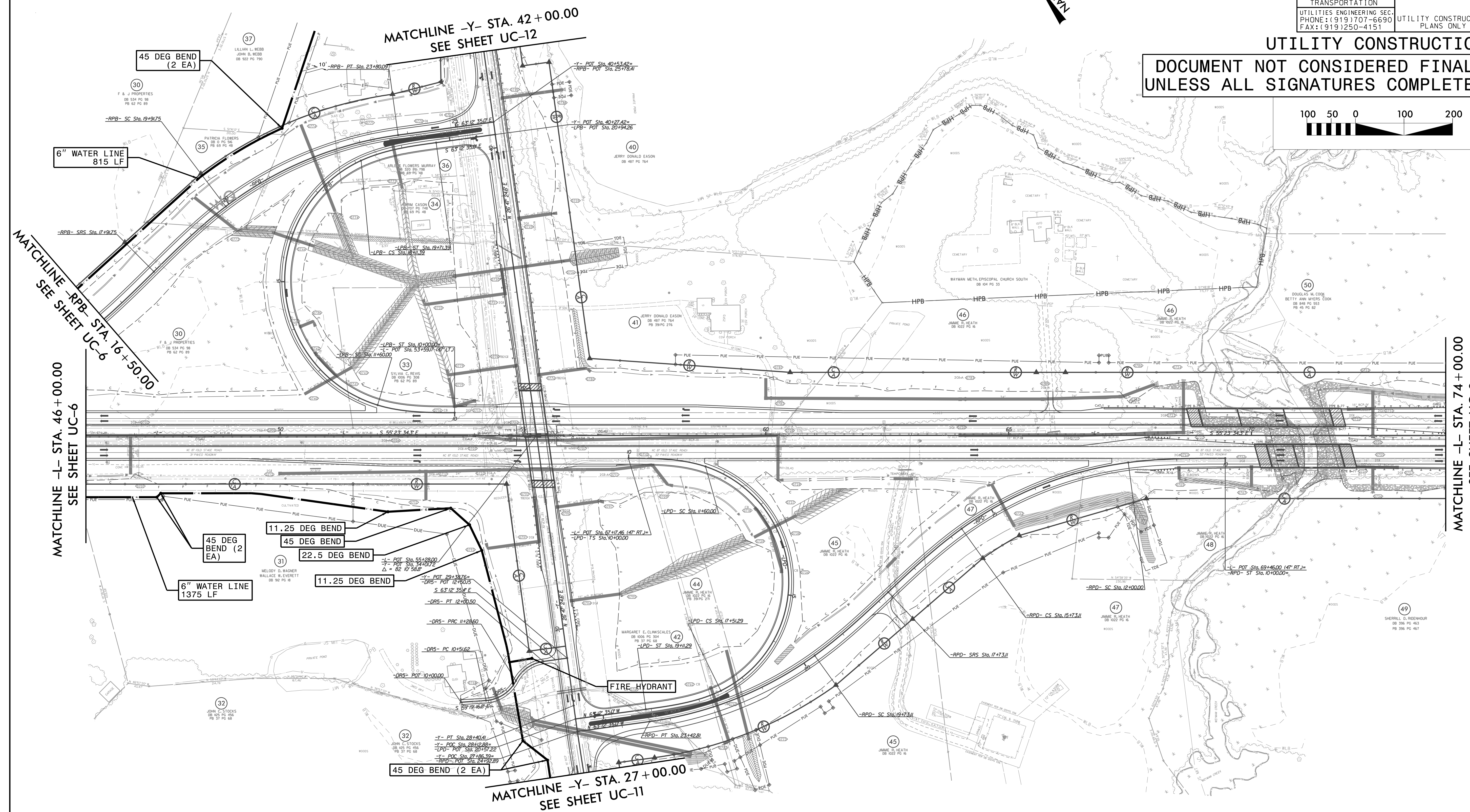
UTILITY CONSTRUCTION
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UTILITY CONSTRUCTION

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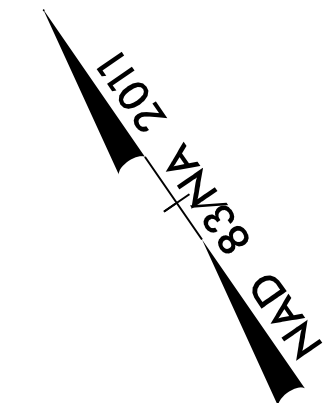
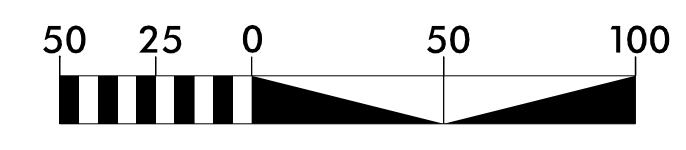
MA 33NA 2011



4.2/2/19

02/27/2019 10:00 AM
C:\Users\jwagner\OneDrive\Documents\Projects\2561CA\UC-7.dwg

5/14/99
7/14/2008 2561CA_Ut_UCB_psh.dgn
115183.000



PROJECT REFERENCE NO.	R-2561CA
SHEET NO.	UC-8
DESIGNED BY:	BJPO
DRAWN BY:	WAP
CHECKED BY:	
APPROVED BY:	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	UTILITY CONSTRUCTION PLANS ONLY



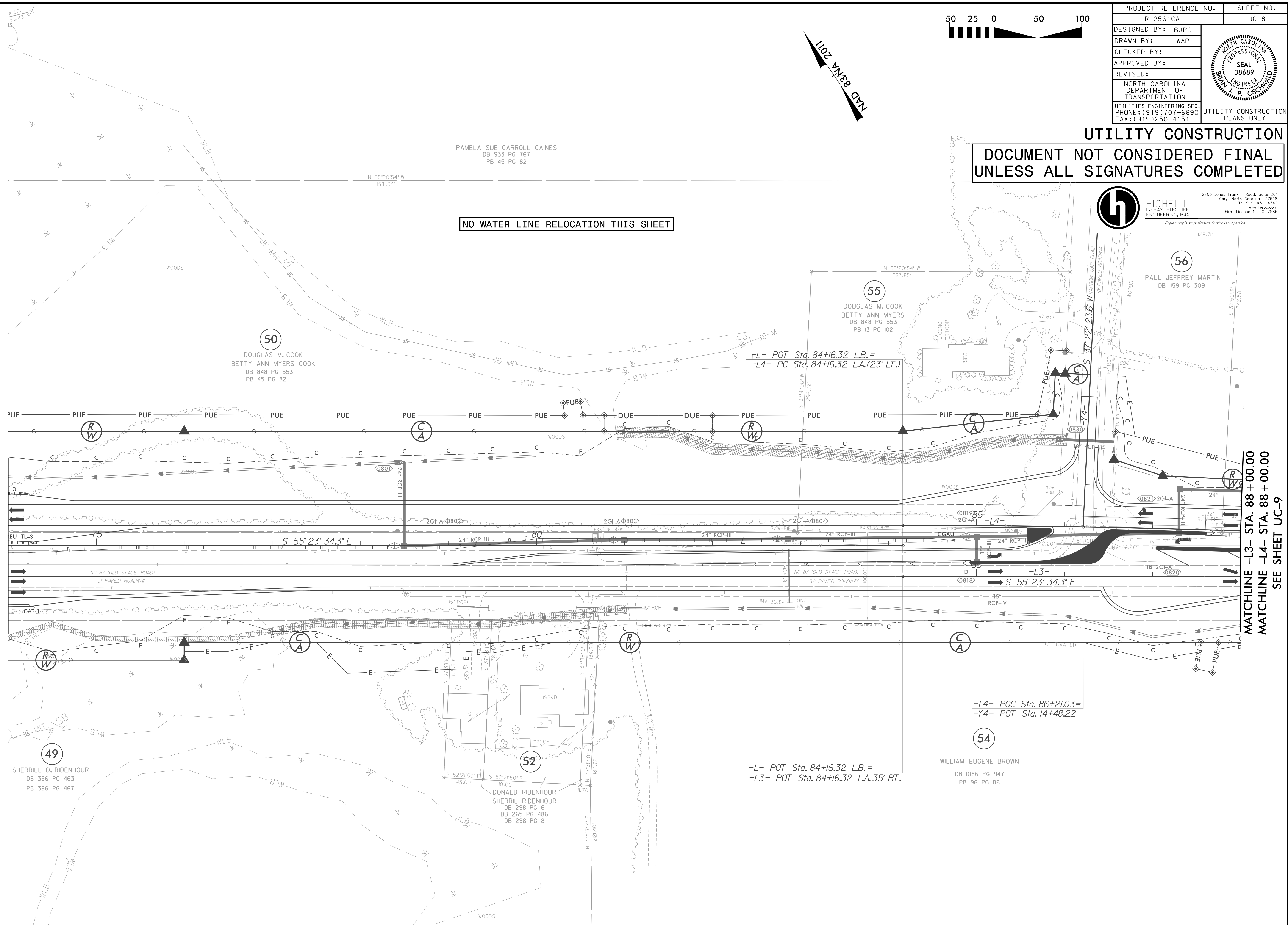
UTILITY CONSTRUCTION

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PAMELA SUE CARROLL CAINES
DB 933 PG 767
PB 45 PG 82

NO WATER LINE RELOCATION THIS SHEET

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SEE SHEET UC-7

MATCHLINE -L3- STA. 88 + 00.00
MATCHLINE -L4- STA. 88 + 00.00
SEE SHEET UC-9

49
SHERRILL D. RIDENHOUR
DB 396 PG 463
PB 396 PG 467

50
DOUGLAS M. COOK
BETTY ANN MYERS COOK
DB 848 PG 553
PB 45 PG 82

52
DONALD RIDENHOUR
SHERRILL RIDENHOUR
DB 298 PG 6
DB 265 PG 486
DB 298 PG 8

55
DOUGLAS M. COOK
BETTY ANN MYERS
DB 848 PG 553
PB 13 PG 102

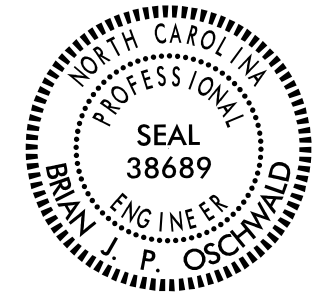
-L- POC Sta. 86+21.03=
-Y4- POT Sta. 14+48.22

54
WILLIAM EUGENE BROWN
DB 1086 PG 947
PB 96 PG 86


-L- POT Sta. 84+16.32 L.B.=
-L3- POT Sta. 84+16.32 L.A. 35' RT.

-L- POT Sta. 84+16.32 L.B.=
-L4- PC Sta. 84+16.32 L.A. (23' LT.)

5/14/99
7/11/2009
N:\Projects\2561CA_Ut_UC10_psh.dgn
TJSEB

PROJECT REFERENCE NO.	SHEET NO.
R-2561CA	UC-10
DESIGNED BY: BUJO	
DRAWN BY: WAP	
CHECKED BY:	
APPROVED BY:	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
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UTILITY CONSTRUCTION PLANS ONLY	

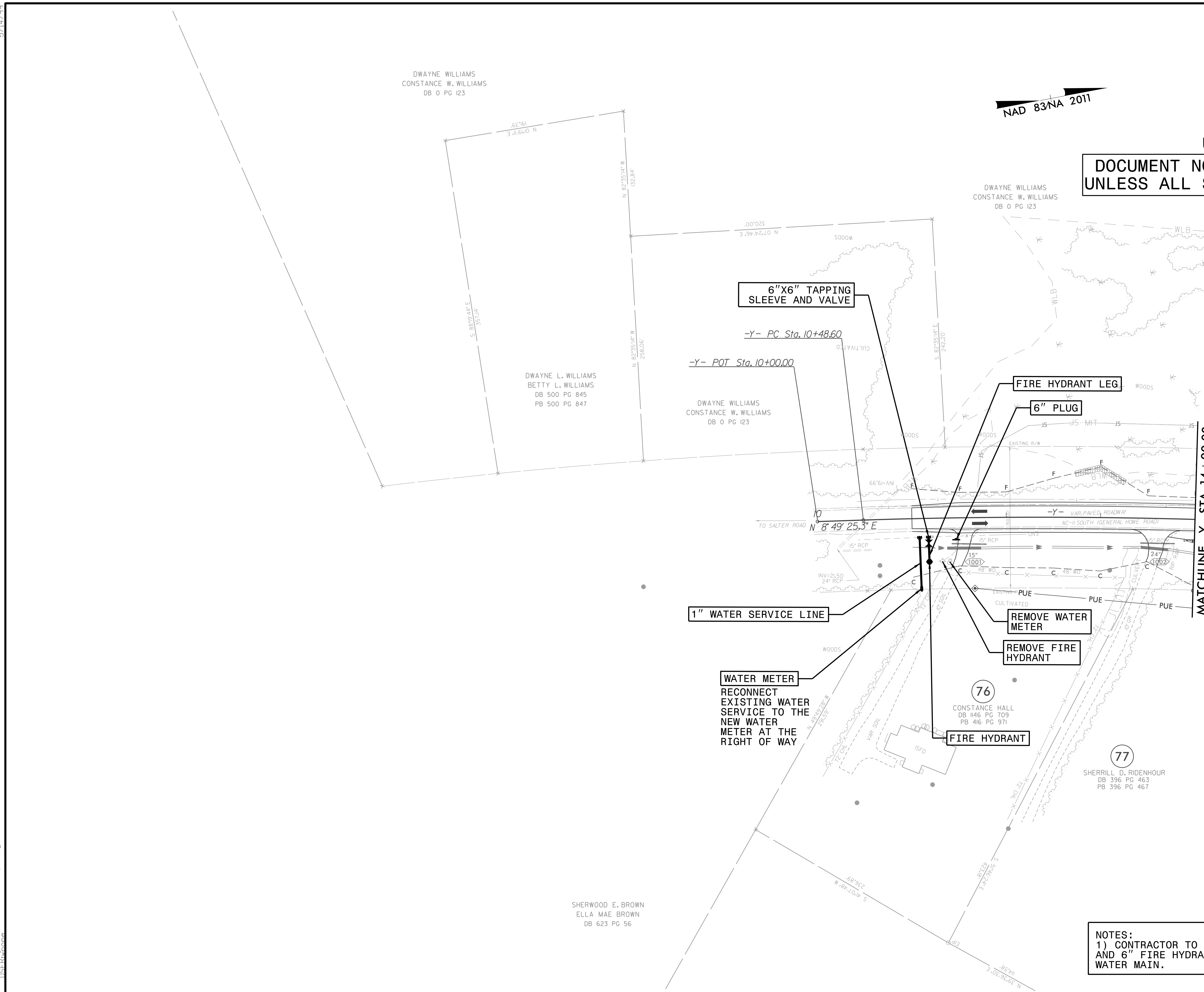

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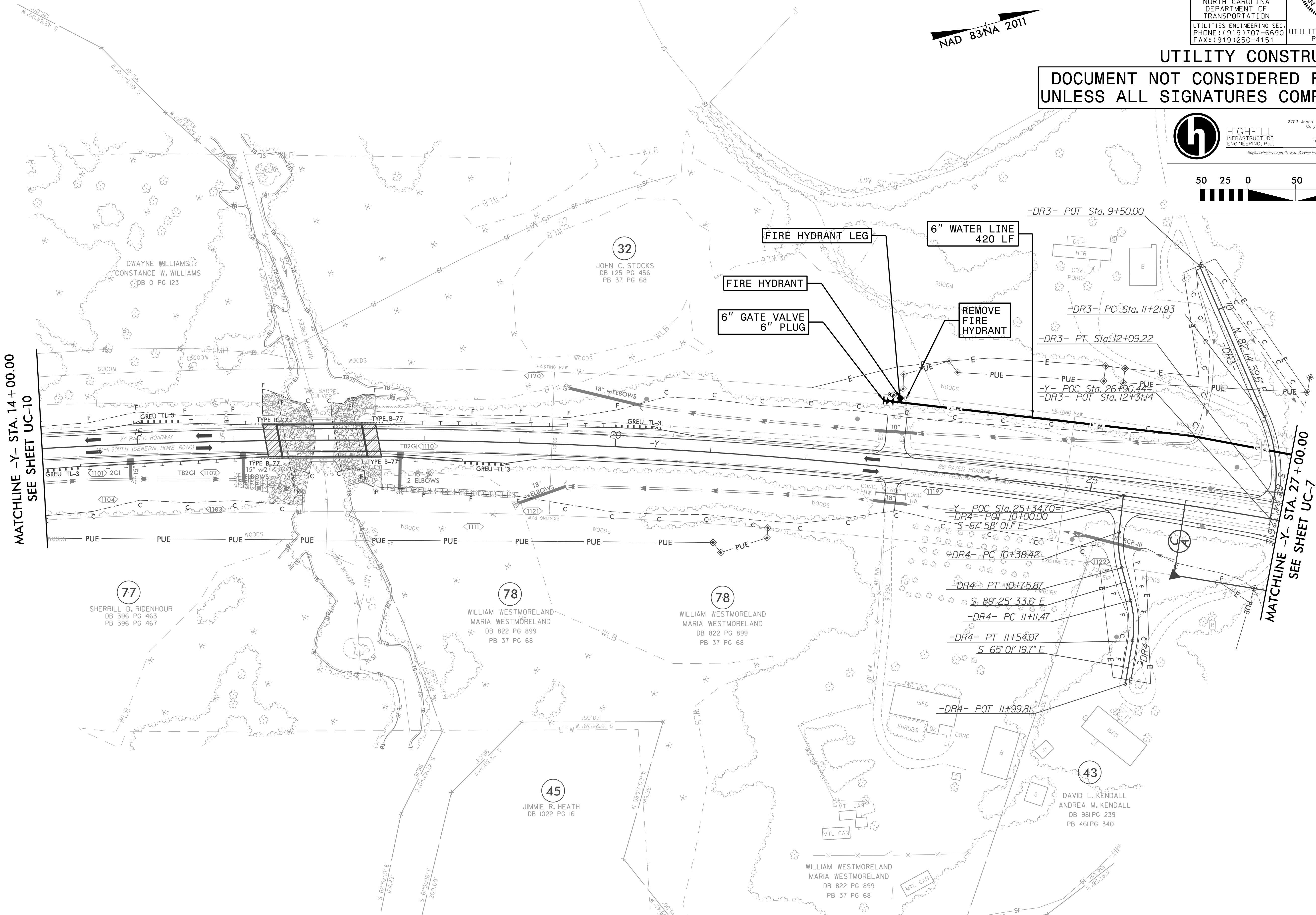
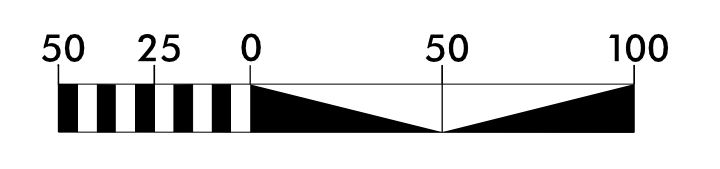
NOTES:
1) CONTRACTOR TO REMOVE EXISTING WATER SERVICE AND 6" FIRE HYDRANT STUB OUT CONNECTIONS FROM WATER MAIN.

PROJECT REFERENCE NO.	R-2561CA	SHEET NO.	UC-11
DESIGNED BY:	BUJO		
DRAWN BY:	WAP		
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UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151		UTILITY CONSTRUCTION PLANS ONLY	

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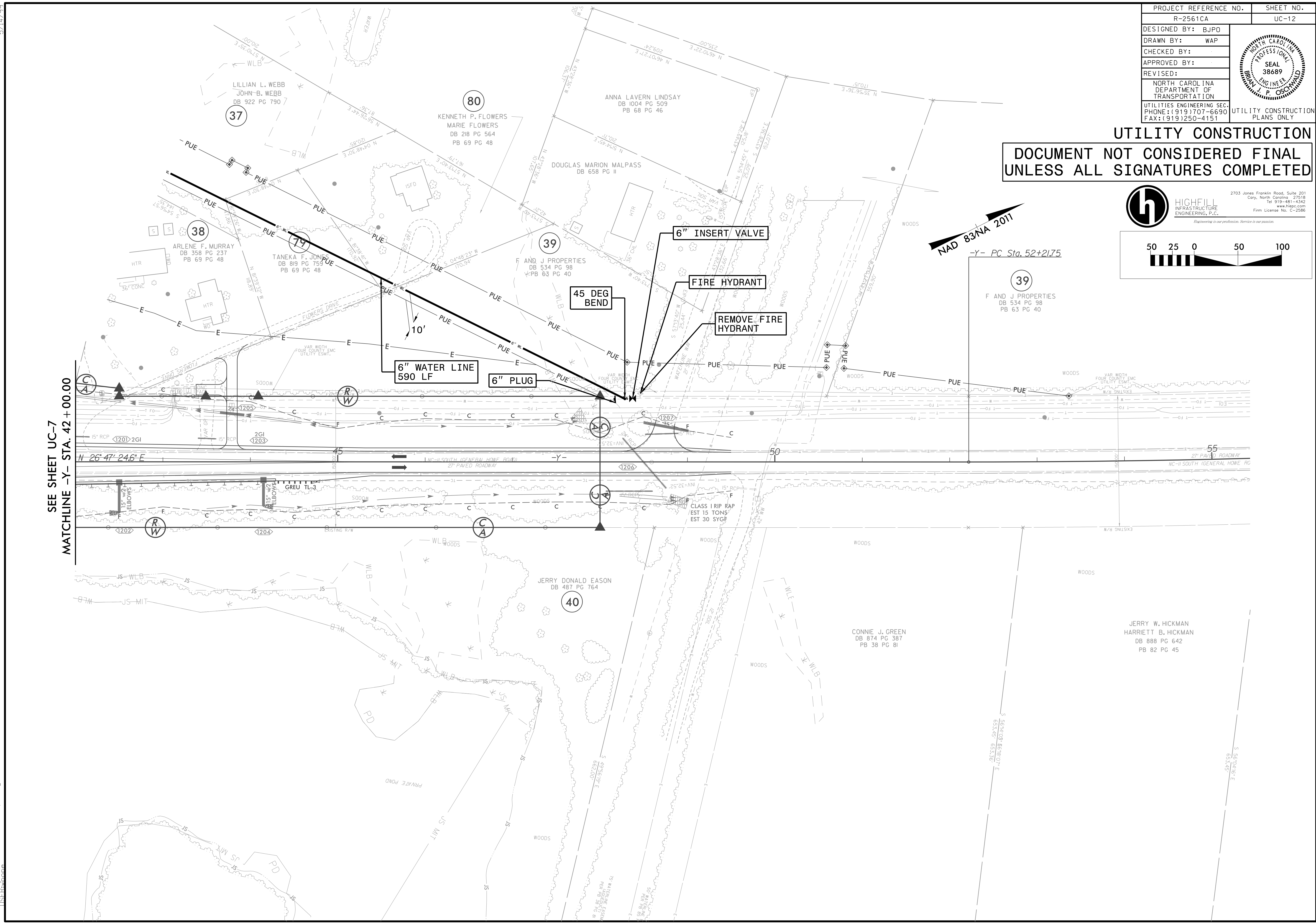
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 T:\E\2561CA

5/14/99

PROJECT REFERENCE NO.	R-2561CA	SHEET NO.	UC-12
DESIGNED BY:	BUJO		
DRAWN BY:	WAP		
CHECKED BY:			
APPROVED BY:			
REVISED:			
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151		UTILITY CONSTRUCTION PLANS ONLY	

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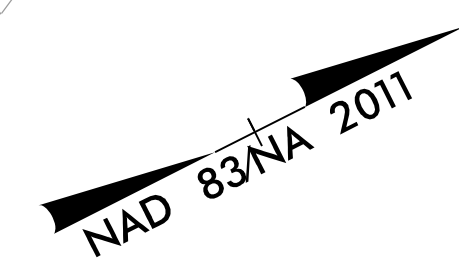
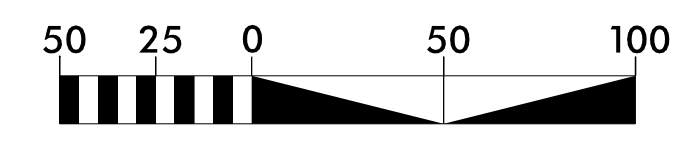
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7/1/2009 2:26:16 PM UC12_psh.dgn

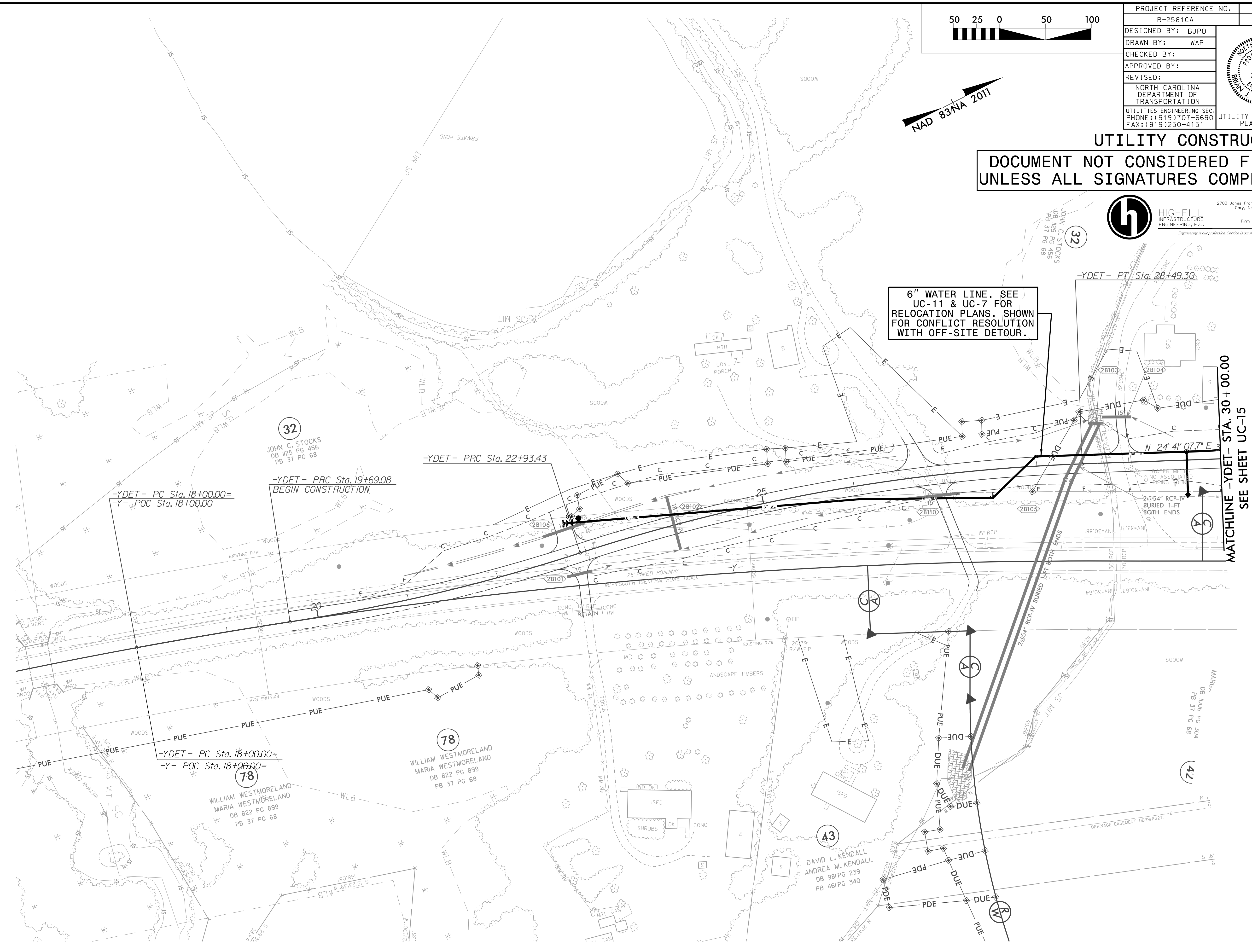
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7/14/2010
R-2561CA.UC-14-2B1.psh.dgn




PROJECT REFERENCE NO.	R-2561CA	SHEET NO.	UC-14
DESIGNED BY:	BJPO		
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PROJECT REFERENCE NO. R-2561CA	SHEET NO. UC-15
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APPROVED BY:	
REVISED:	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
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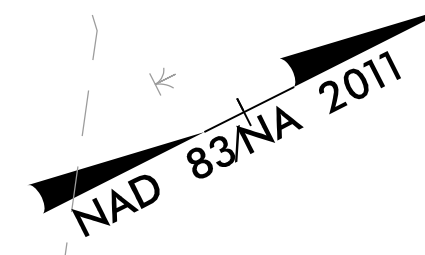


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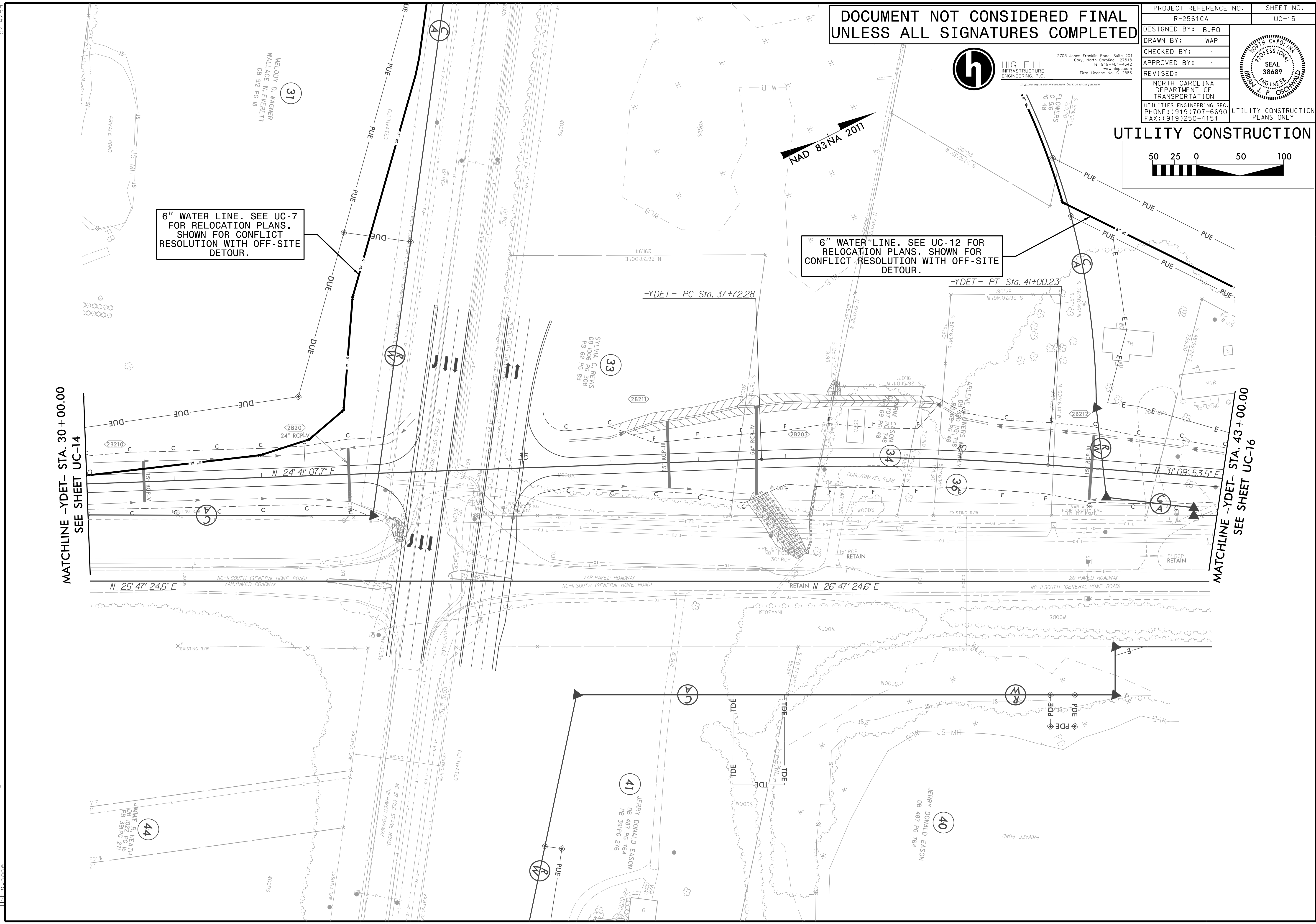


6" WATER LINE. SEE UC-7
FOR RELOCATION PLANS.
SHOWN FOR CONFLICT
RESOLUTION WITH OFF-SITE
DETOUR.

6" WATER LINE. SEE UC-12 FOR
RELOCATION PLANS. SHOWN FOR
CONFLICT RESOLUTION WITH OFF-SITE
DETOUR.

MATCHLINE -YDET- STA. 30+00.00
SEE SHEET UC-14

MATCHLINE -YDET- STA. 43+00.00
SEE SHEET UC-16



5/14/2015 11:57:11 AM J:\2561CA\U-15\UC15-2B2-psh.dgn

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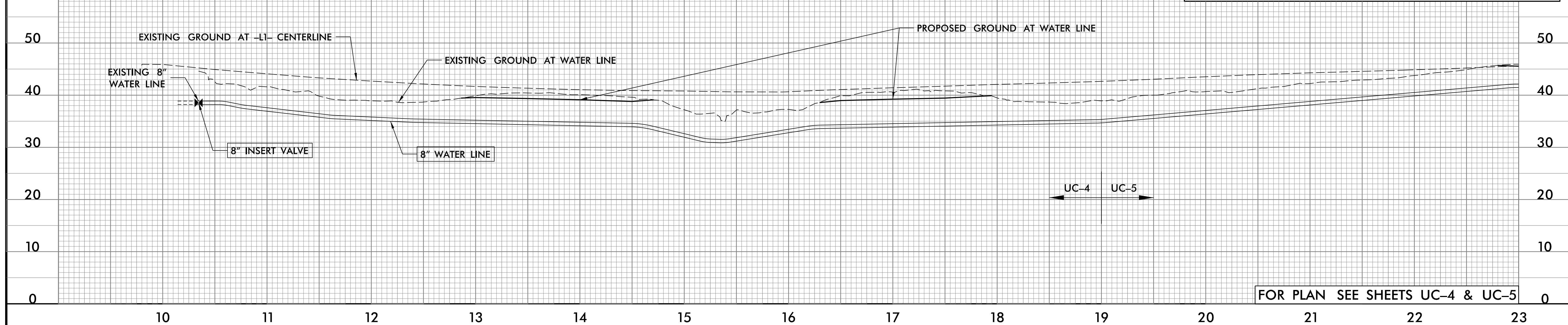
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PROFILE (HORIZONTAL)
10 5 0 10 20
PROFILE (VERTICAL)

PROJECT REFERENCE NO. R-2561CA	SHEET NO. UC-17
DESIGNED BY: BJPO	
DRAWN BY: WAP	
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-L1-

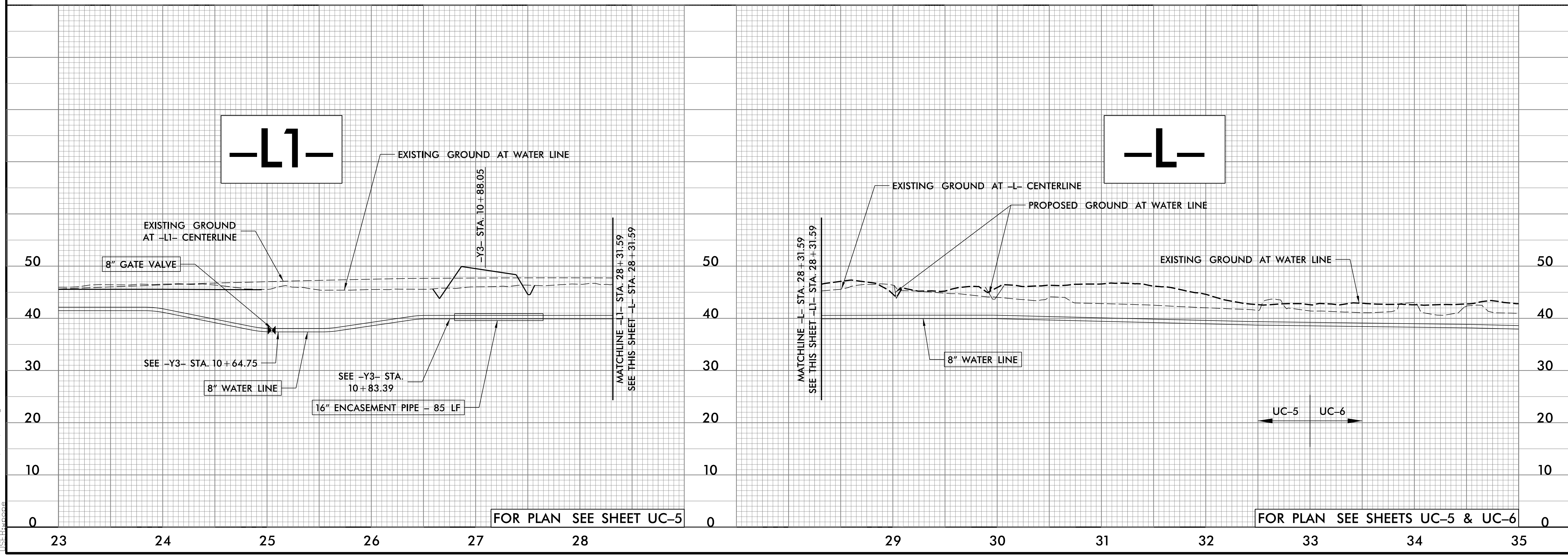
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-L1-

-L-



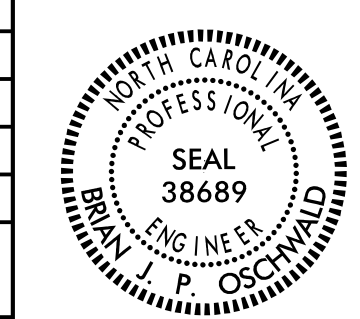
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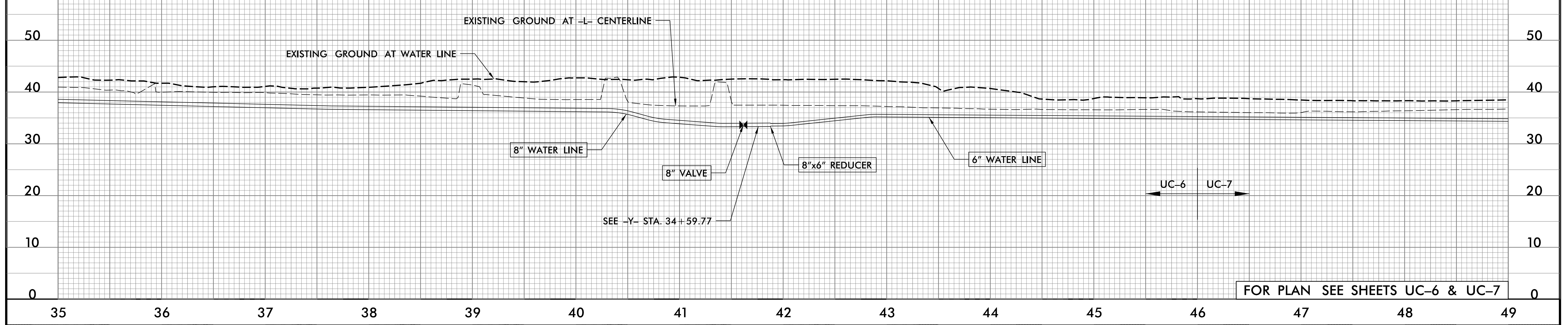
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 PROFILE (HORIZONTAL)
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 PROFILE (VERTICAL)

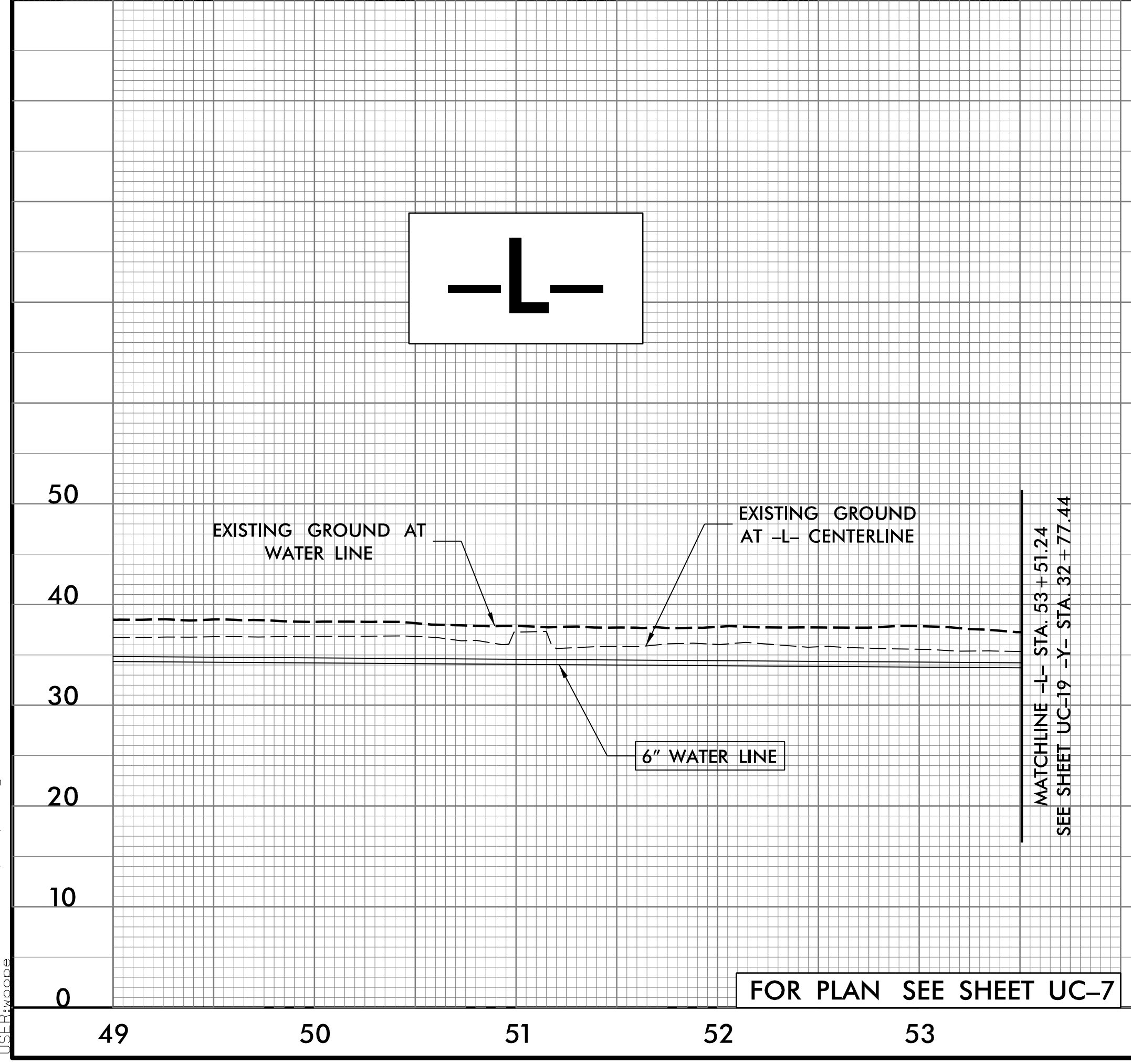
PROJECT REFERENCE NO. R-2561CA	SHEET NO. UC-18
DESIGNED BY: BJPO	
DRAWN BY: WAP	
CHECKED BY:	
APPROVED BY:	
REVISED:	
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UTILITY CONSTRUCTION

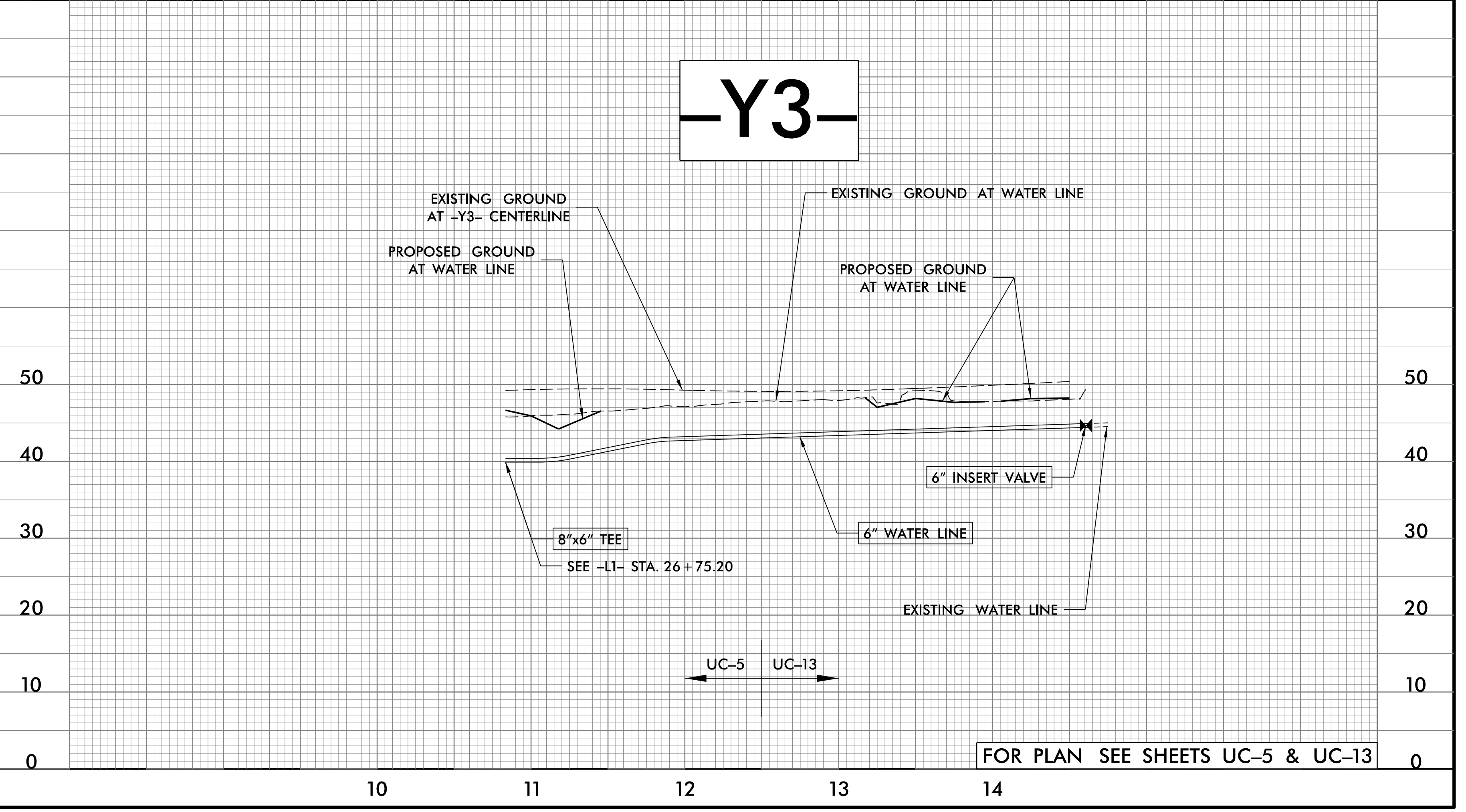
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FOR PLAN SEE SHEETS UC-6 & UC-7



FOR PLAN SEE SHEET UC-7



FOR PLAN SEE SHEETS UC-5 & UC-13

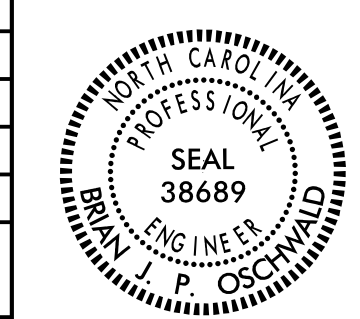
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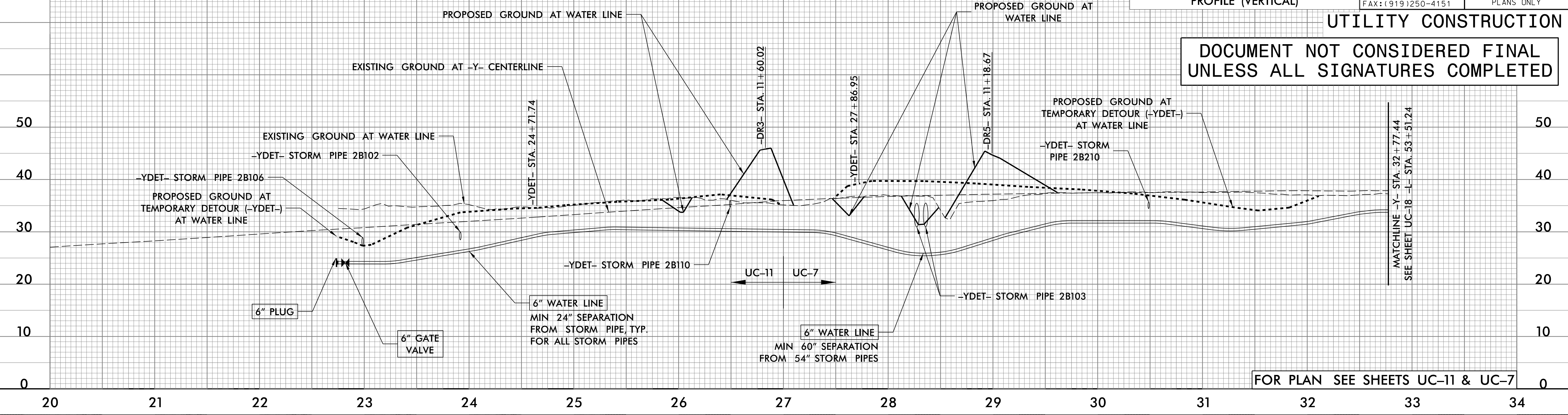
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 PROFILE (HORIZONTAL)
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 PROFILE (VERTICAL)

PROJECT REFERENCE NO. R-2561CA	SHEET NO. UC-19
DESIGNED BY: BJPO	
DRAWN BY: WAP	
CHECKED BY:	
APPROVED BY:	
REVISED:	
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UTILITY CONSTRUCTION PLANS ONLY	

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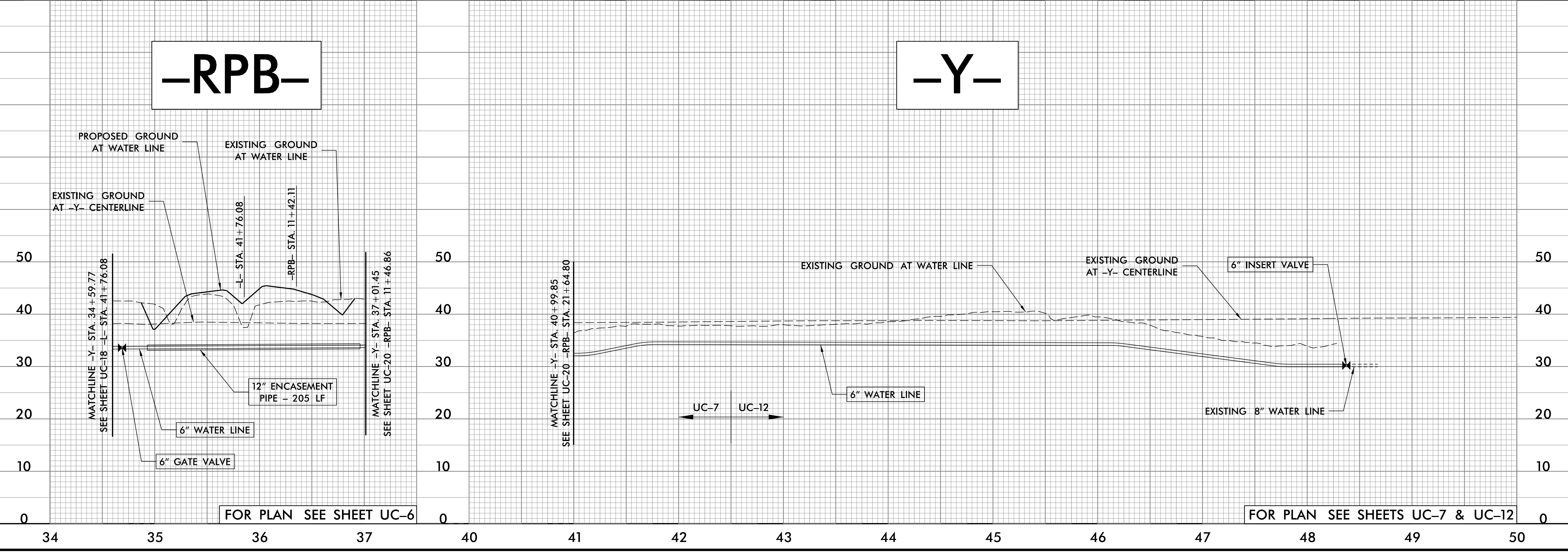
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-RPB-

-Y-



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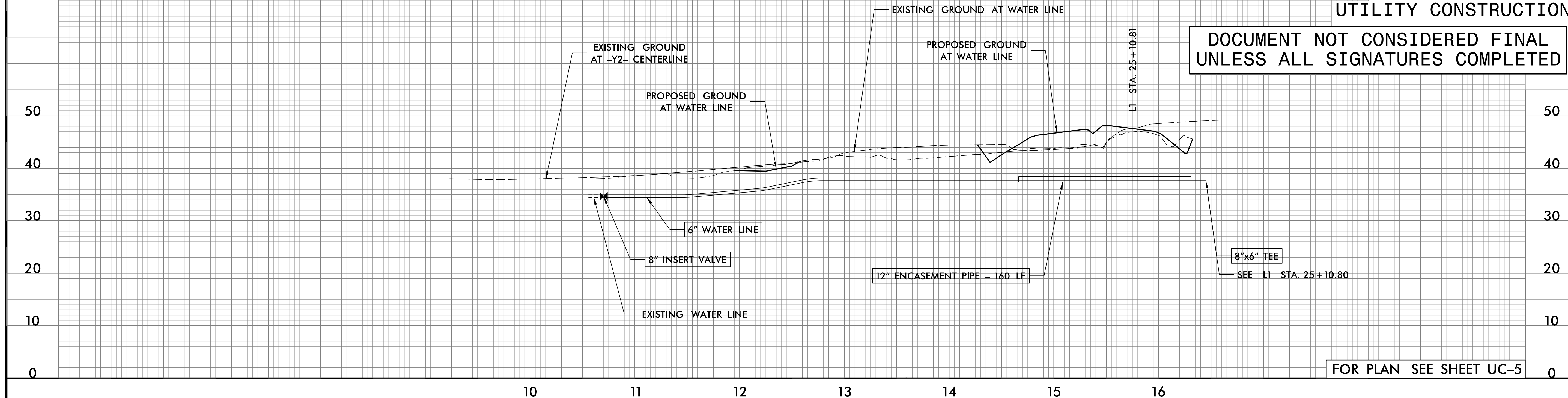
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 PROFILE (VERTICAL)

PROJECT REFERENCE NO. R-2561CA	SHEET NO. UC-20
DESIGNED BY: BJPO	
DRAWN BY: WAP	
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APPROVED BY:	
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UTILITY CONSTRUCTION PLANS ONLY	

-Y2-

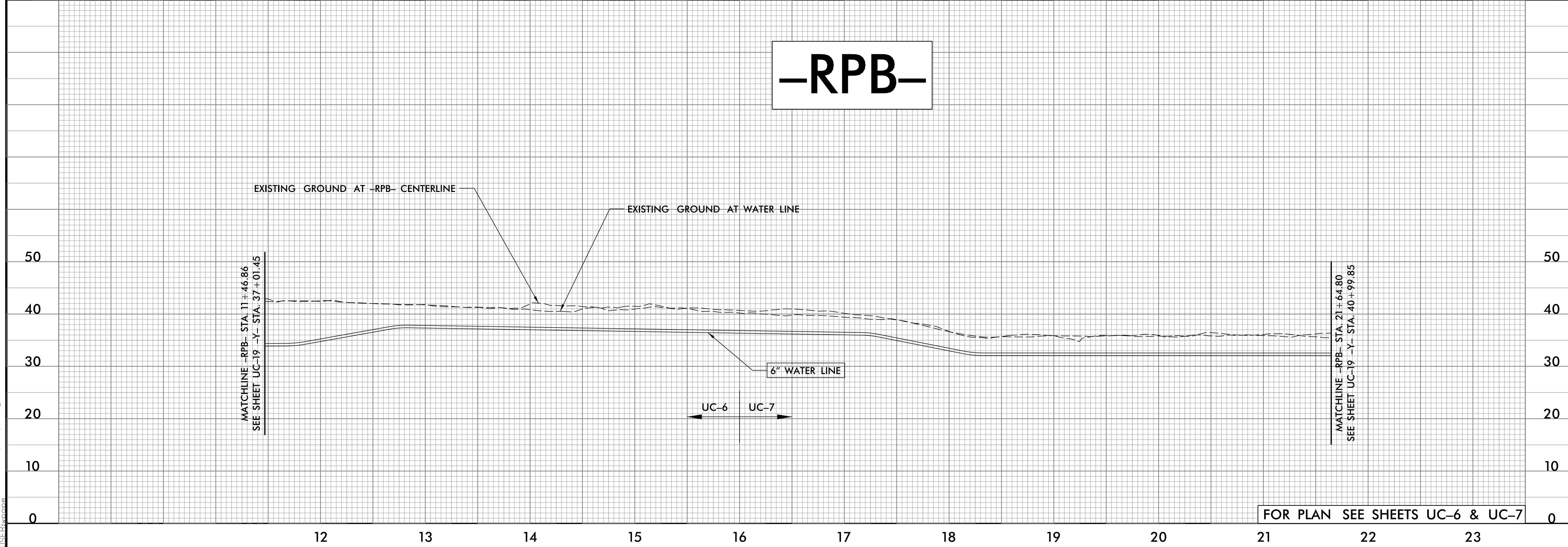
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FOR PLAN SEE SHEETS UC-6 & UC-7



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