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TIP PROJECT: U-4910B

CONTRACT NO:

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-4910B	U0-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
40373.1.F3	HPP-1445(7)	PE	
40373.2.F2	HPP-1445(7)	R/W & UTIL	
40373.3.F2	STP-1445(4)	CONST	

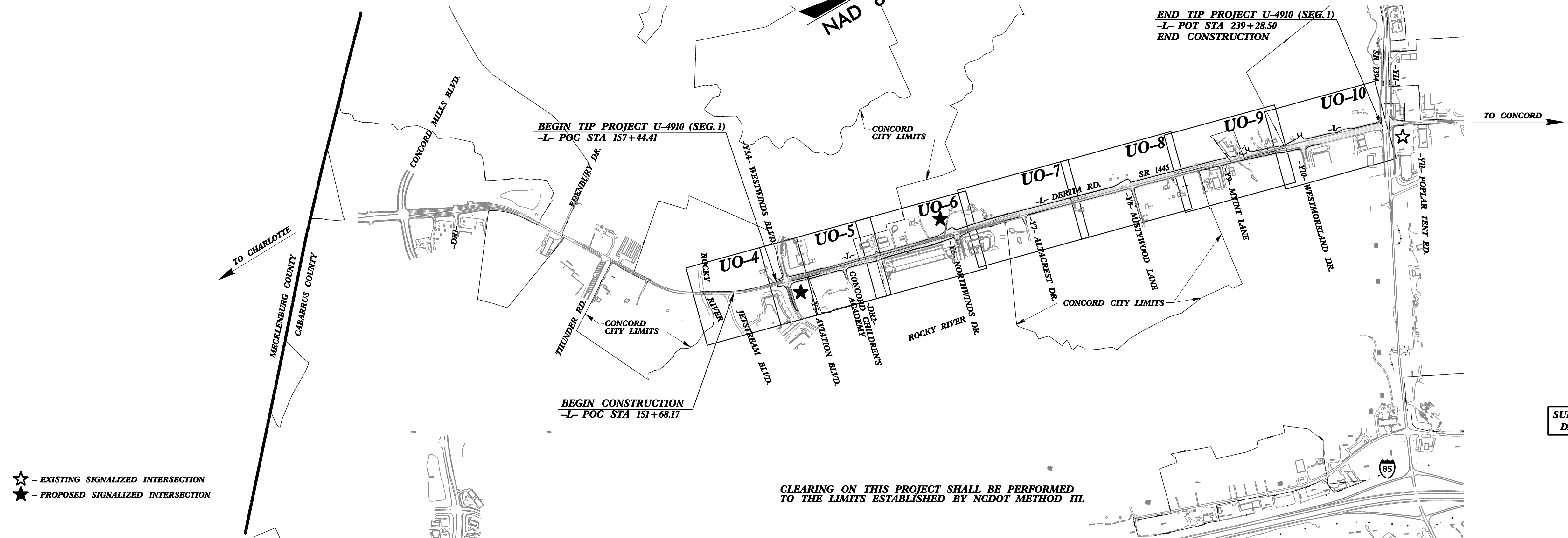
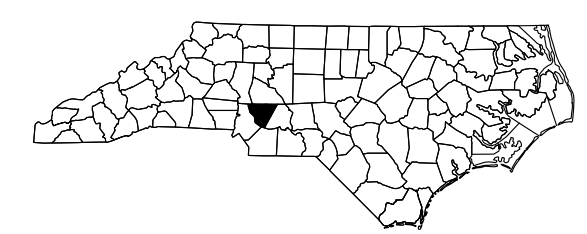
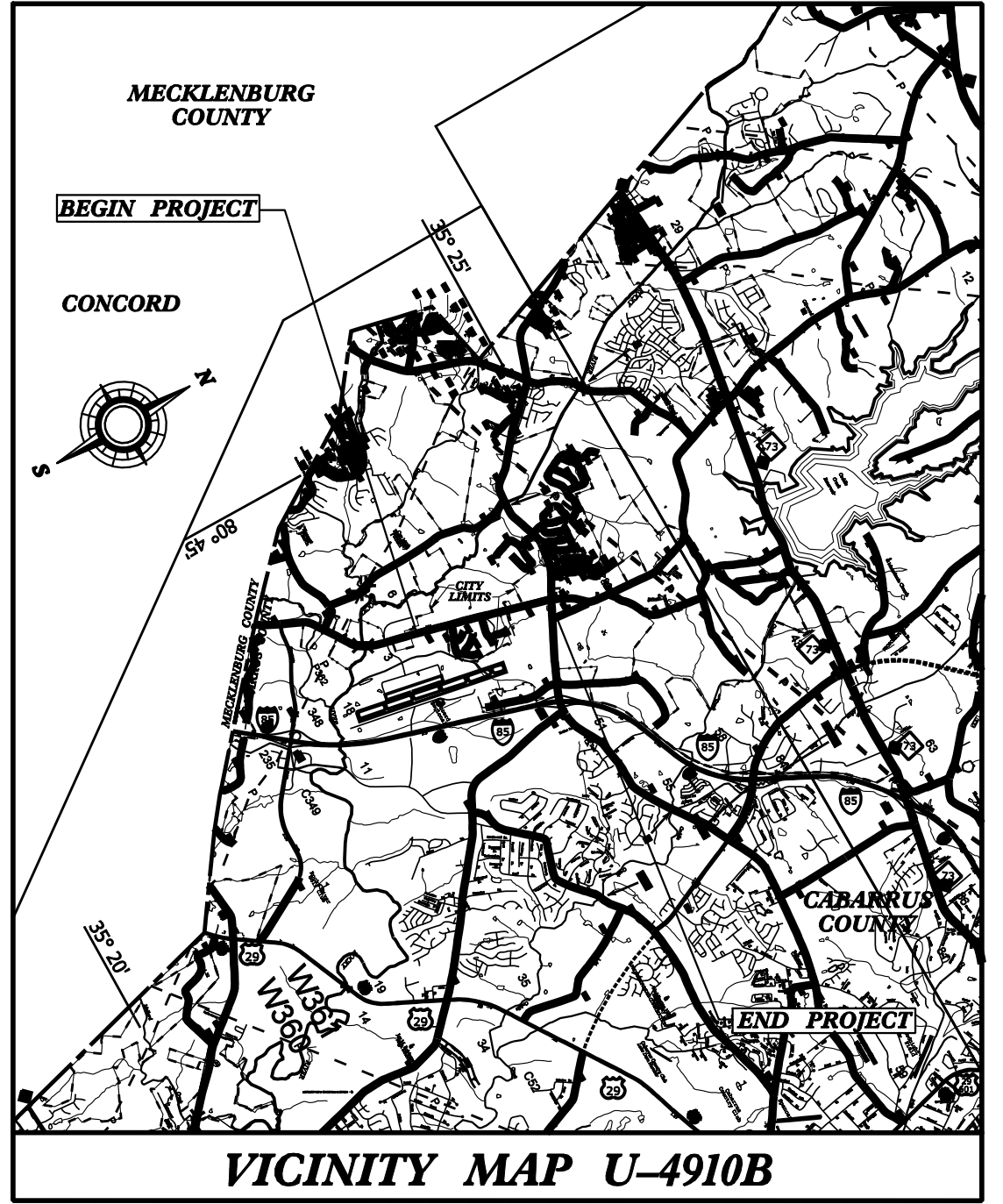
NOTE:
 ALL UTILITY WORK SHOWN ON THESE SHEETS IS DONE BY OTHERS.
 NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR UTILITY WORK SHOWN ON THESE SHEETS.

STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS

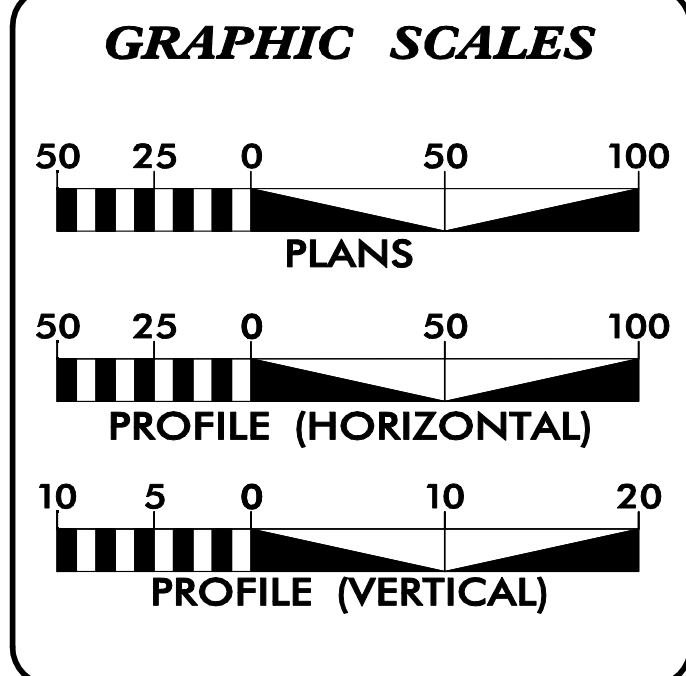
CABARRUS COUNTY

LOCATION: FROM AVIATION BOULEVARD TO THE INTERSECTION OF SR 1394 POPLAR TENT ROAD.

TYPE OF WORK: UTILITIES BY OTHERS



SUBMITTAL: 100% UBO PLANS
DATE: JANUARY 17, 2017



INDEX OF SHEETS

SHEET NO.	DESCRIPTION
U0-1	TITLE SHEET
U0-2	LEGEND OF SYMBOLS SHEET
U0-3	OMITTED
U0-4 to U0-10	UTILITIES BY OTHERS PLANS

- UTILITIES BY OTHERS OWNERS ON PROJECT**
- (1) POWER - CITY OF CONCORD, DUKE ENERGY
 - (2) TELECOMMUNICATIONS - WINDSTREAM, AT&T
 - (3) NATURAL GAS - PSNC
 - (4) CATV - TWC

Prepared in the Office of:

AECOM
 2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: SEPT. 18, 2014

LETTING DATE: FEB. 21, 2017

NC FIRM LICENSE No: F-0342
 701 Corporate Center Drive, Suite 475
 Raleigh, NC 27607
 (919) 854-6200 - (919) 854-6259(FAX)

KEVIN J. VAN METRE, P.E.
 PROJECT ENGINEER

JOHN D. POETZSCH, P.E.
 PROJECT UTILITY DESIGN ENGINEER

DIVISION OF HIGHWAYS

STATE HIGHWAY DESIGN ENGINEER

USER: sw/m/song
 DATE: 1/17/2017
 TIME: 2:39:50 PM
 DSN: u4910_uo_tsh.dgn

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	⋈ ^x
90 Degree Bend	⋈
Plug	⬮
Tee	⋈
Cross	⋈
Reducer	▶
Gate Valve	GV
Butterfly Valve	BV
Tapping Valve	TGV
Line Stop	LS
Line Stop with Bypass	LS/BP
Blow Off	BO
Fire Hydrant	PFH
Relocate Fire Hydrant	REFH
Remove Fire Hydrant	REM FH
Water Meter	PWM
Relocate Water Meter	RWM
Remove Water Meter	REM WM
Water Pump Station	PST(W)
RPZ Backflow Preventer	PRPZ
DCV Backflow Preventer	PBFP
Relocate RPZ Backflow Preventer	RPRZ
Relocate DCV Backflow Preventer	RBFP

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	PS(SS)

PROPOSED MISCELLANEOUS UTILITIES SYMBOLS

Power Pole	⦿
Telephone Pole	⦿
Joint Use Pole	⦿
Telephone Pedestal	TEL PED
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	AR
Utility Vault	UV
Concrete Pier	CP
Steel Pier	SP
Plan Note	————— NOTE
Pay Item Note	————— PAY ITEM

EXISTING UTILITIES SYMBOLS

Power Pole	•	*Underground Power Line	————— P
Telephone Pole	•	*Underground Telephone Cable	————— T
Joint Use Pole	•	*Underground Telephone Conduit	————— TC
Utility Pole	•	*Underground Fiber Optics Telephone Cable	————— T FO
Utility Pole with Base	□	*Underground TV Cable	————— TV
H-Frame Pole	••	*Underground Fiber Optics TV Cable	————— TV FO
Power Transmission Line Tower	⊠	*Underground Gas Pipeline	————— G
Water Manhole	⦿	Aboveground Gas Pipeline	————— A/G Gas
Power Manhole	⦿	*Underground Water Line	————— W
Telephone Manhole	⦿	Aboveground Water Line	————— A/G Water
Sanitary Sewer Manhole	•	*Underground Gravity Sanitary Sewer Line	————— SS
Hand Hole for Cable	⊠	Aboveground Gravity Sanitary Sewer Line	————— A/G Sanitary Sewer
Power Transformer	⊠	*Underground SS Forced Main Line	————— FSS
Telephone Pedestal	TEL PED	Underground Unknown Utility Line	————— ?UTL
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.		

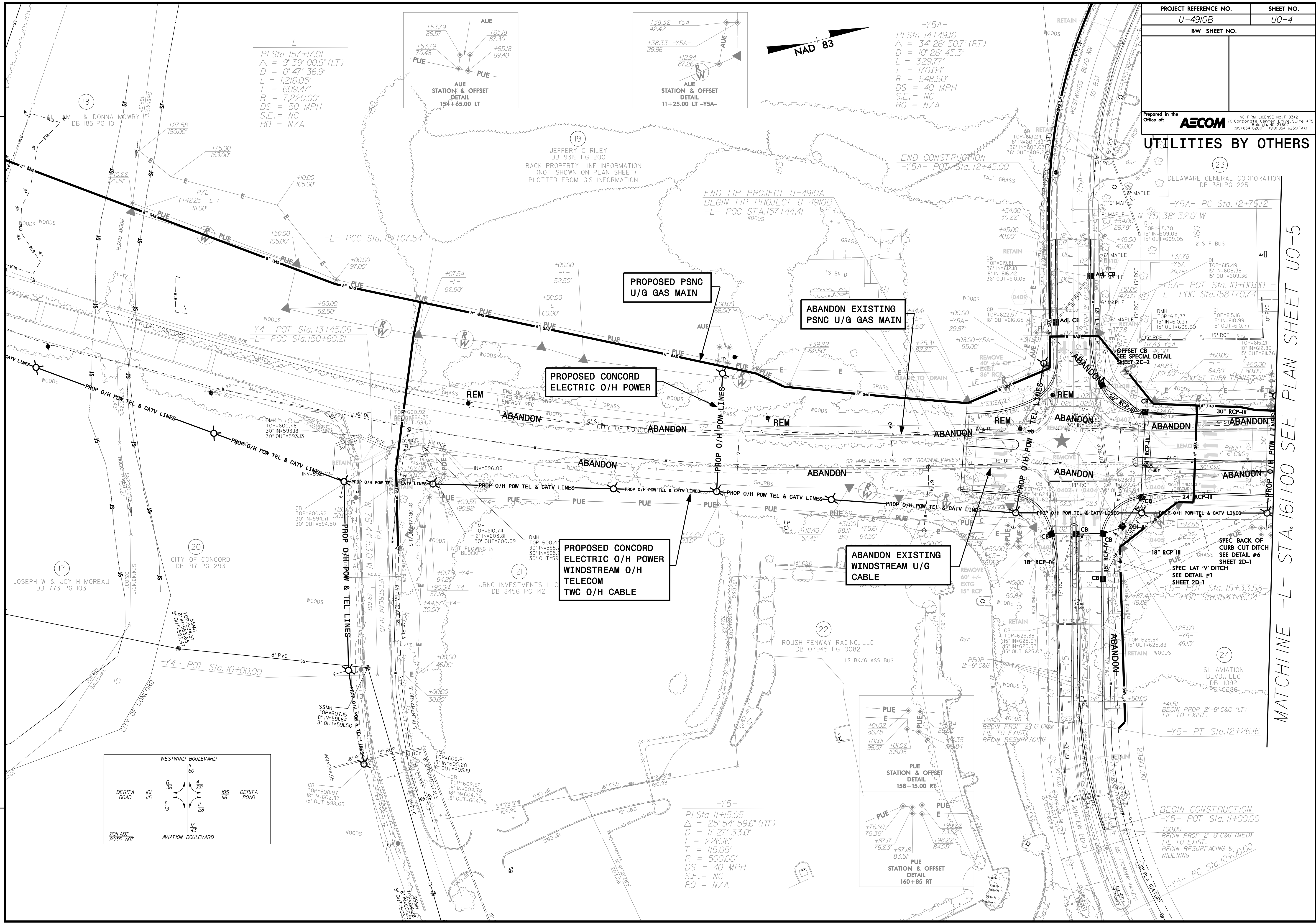
*For Existing Utilities
 Utility Line Drawn from Record (Type as Shown) ——— ?UTL ———
 Designated Utility Line (Type as Shown) - - - - - ?UTL - - - - -

5/14/99

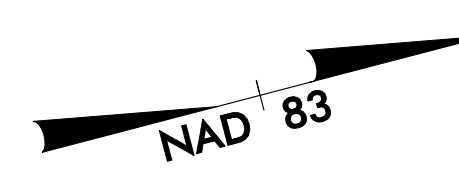
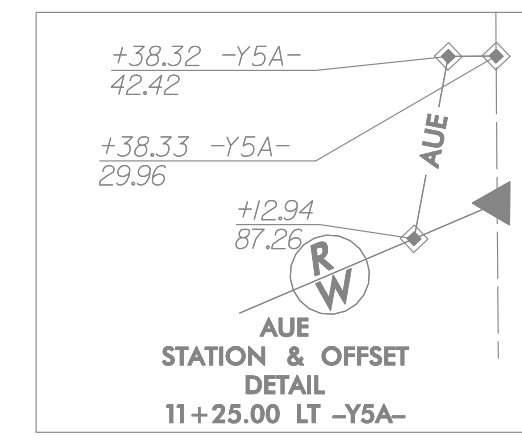
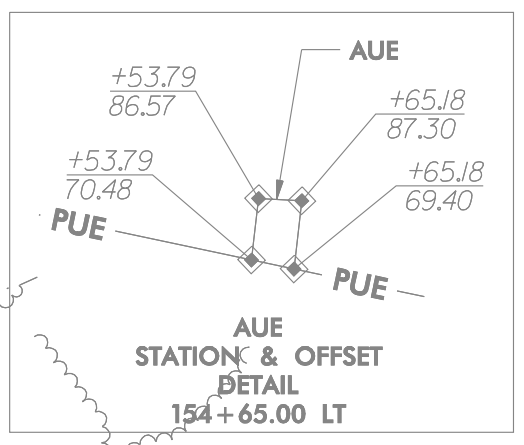
PROJECT REFERENCE NO.	SHEET NO.
U-4910B	U0-4
RW SHEET NO.	

Prepared in the Office of: **AECOM**
 NC FIRM LICENSE No. F-0342
 701 Corporate Center Blvd., Suite 475
 Raleigh, NC 27607
 (919) 854-6200 • (919) 854-6259(FAX)

UTILITIES BY OTHERS



-L-
 PI Sta 157+17.01
 $\Delta = 9' 39'' 00.9''$ (LT)
 $D = 0' 47'' 36.9''$
 $L = 1,216.05'$
 $T = 609.47'$
 $R = 7,220.00'$
 $DS = 50$ MPH
 $S.E. = NC$
 $RO = N/A$



-Y5A-
 PI Sta 14+49.16
 $\Delta = 34' 26'' 50.7''$ (RT)
 $D = 10' 26'' 45.3''$
 $L = 329.77'$
 $R = 170.04'$
 $DS = 548.50'$
 $S.E. = NC$
 $RO = N/A$

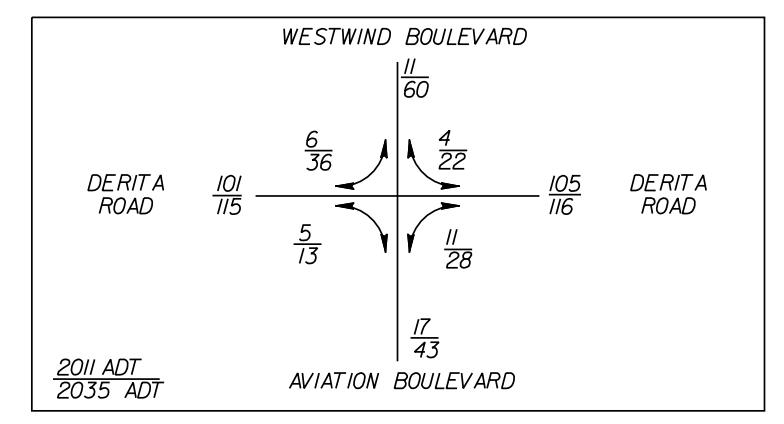
**PROPOSED PSNC
 U/G GAS MAIN**

**ABANDON EXISTING
 PSNC U/G GAS MAIN**

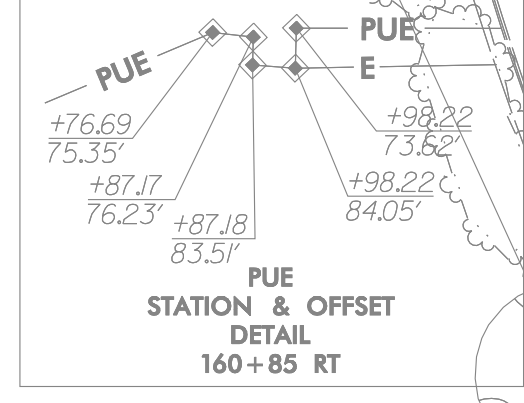
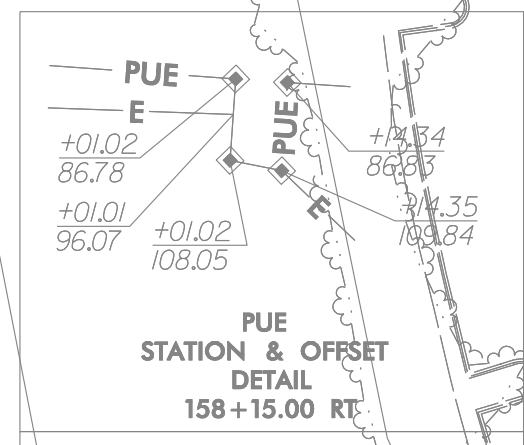
**PROPOSED CONCORD
 ELECTRIC O/H POWER**

**PROPOSED CONCORD
 ELECTRIC O/H POWER
 WINDSTREAM O/H
 TELECOM
 TWC O/H CABLE**

**ABANDON EXISTING
 WINDSTREAM U/G
 CABLE**



-Y5-
 PI Sta 11+15.05
 $\Delta = 25' 54'' 59.6''$ (RT)
 $D = 11' 27'' 33.0''$
 $L = 226.16'$
 $T = 115.05'$
 $R = 500.00'$
 $DS = 40$ MPH
 $S.E. = NC$
 $RO = N/A$



REVISIONS

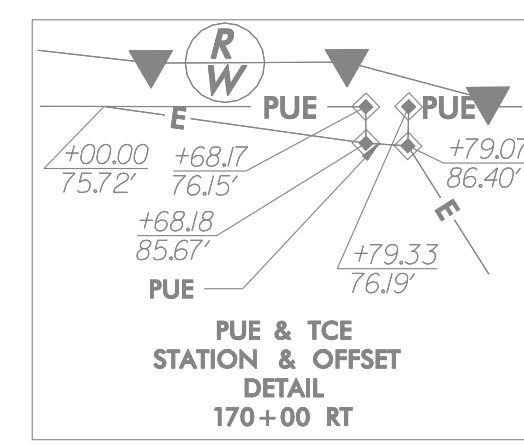
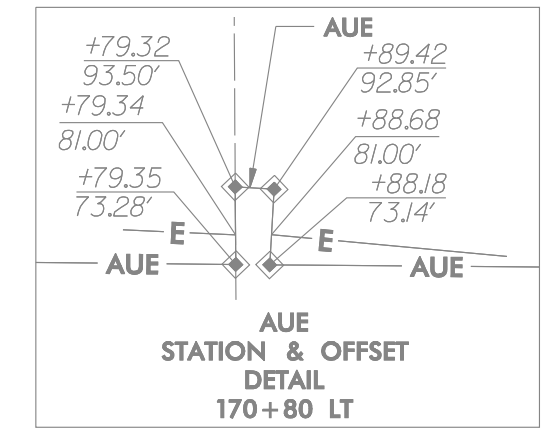
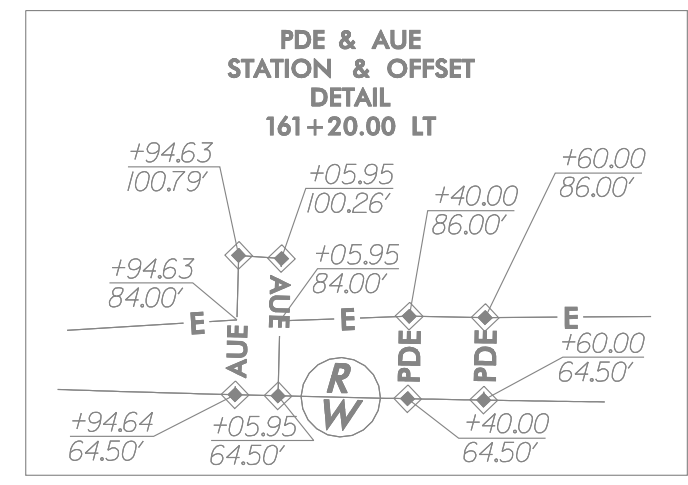
Revisions:

MATCHLINE -L- STA. 161+00 SEE PLAN SHEET U0-5



MATCHLINE -L- STA. 161+00 SEE PLAN SHEET U0-4

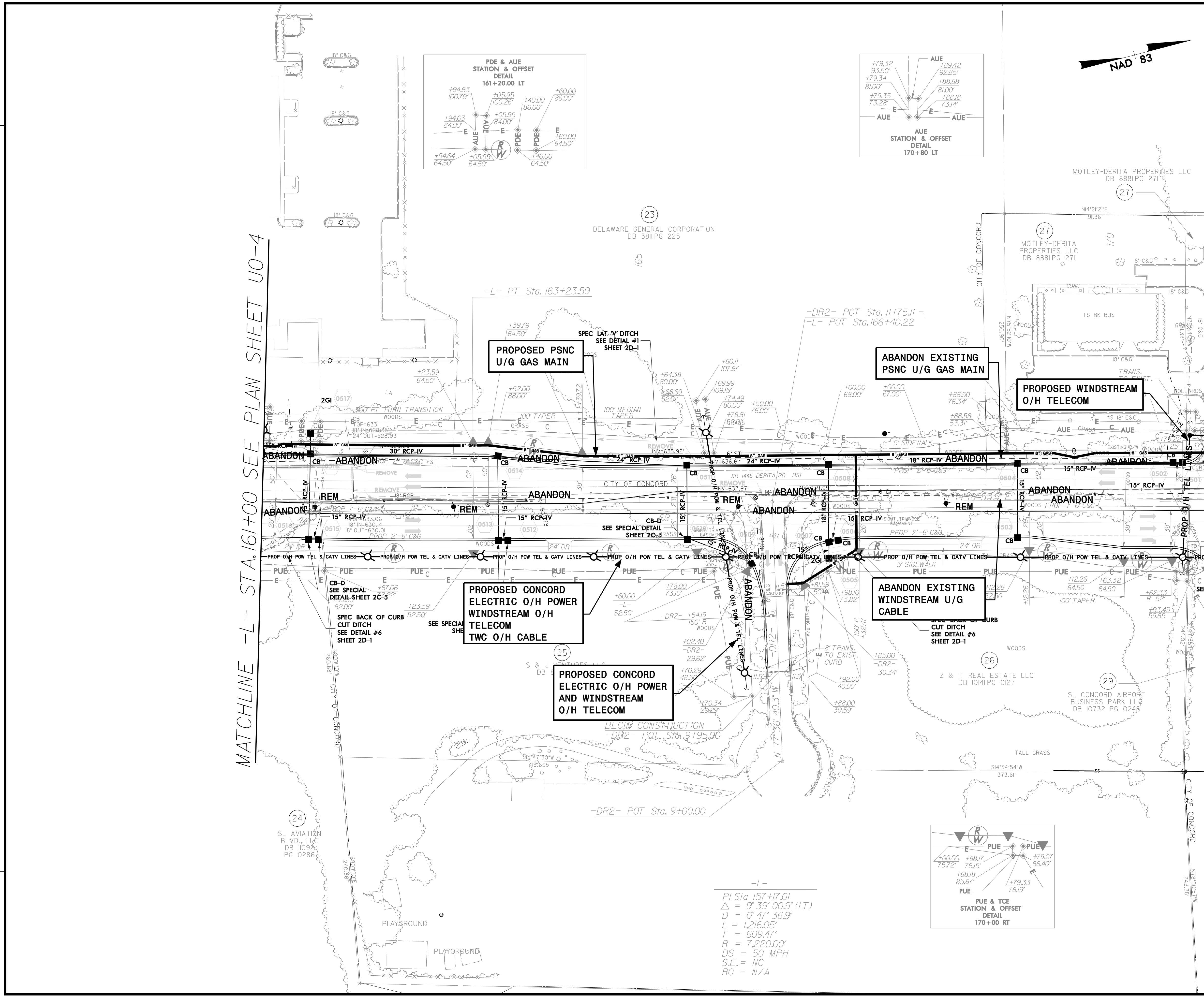
MATCHLINE -L- STA. 171+00 SEE PLAN SHEET U0-6



-L-
 PI Sta 157+17.01
 $\Delta = 9^{\circ} 39' 00.9" (LT)$
 $D = 0^{\circ} 47' 36.9"$
 $L = 1,216.05'$
 $T = 609.47'$
 $R = 7,220.00'$
 $DS = 50 \text{ MPH}$
 $S.E. = NC$
 $RO = N/A$

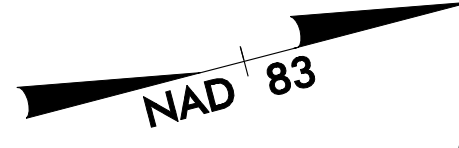
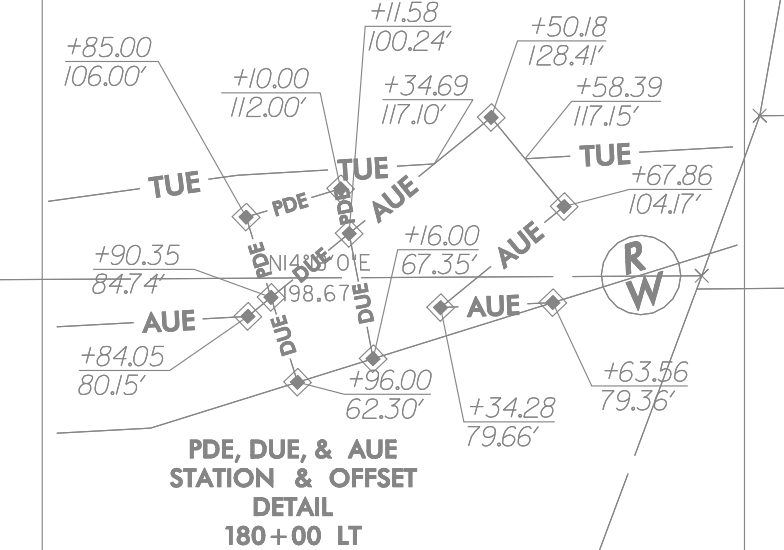
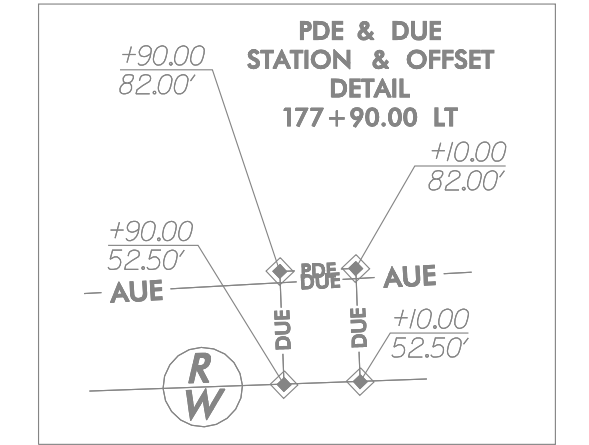
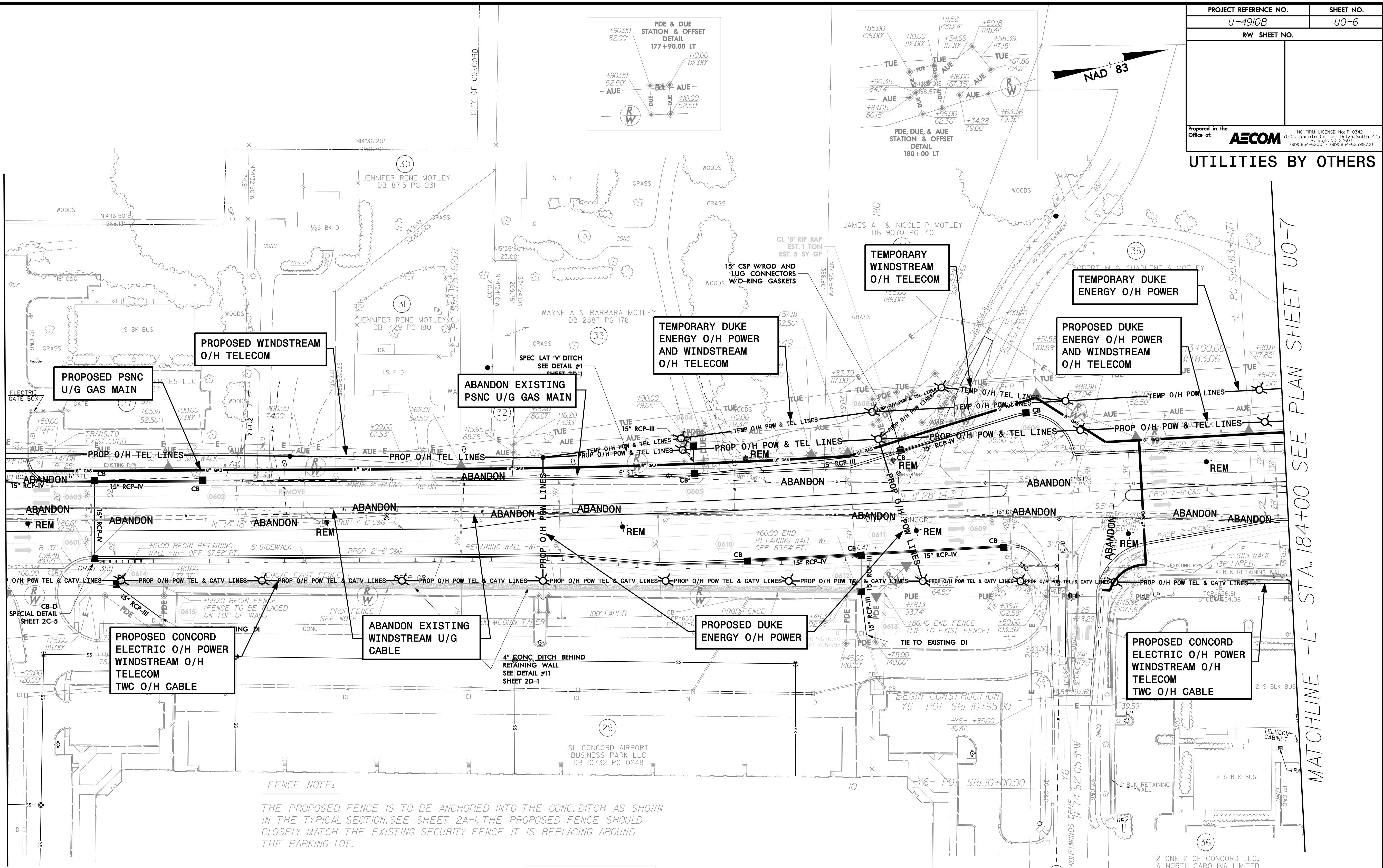
REVISIONS

Revisions:



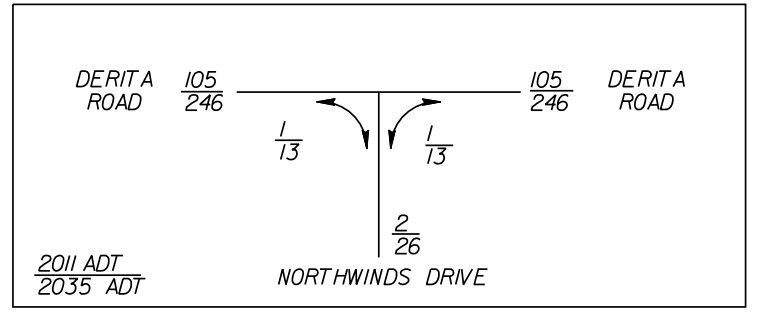
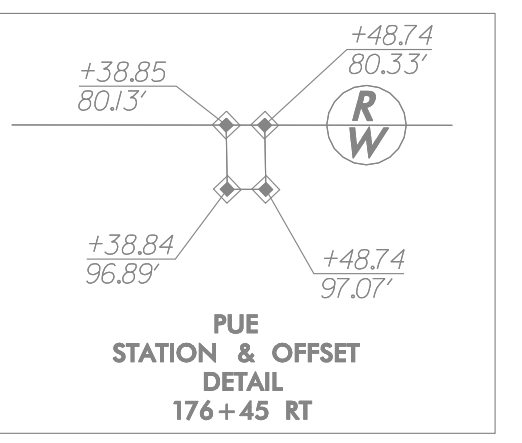
MATCHLINE -L- STA. 171+00 SEE PLAN SHEET U0-5

MATCHLINE -L- STA. 184+00 SEE PLAN SHEET U0-7



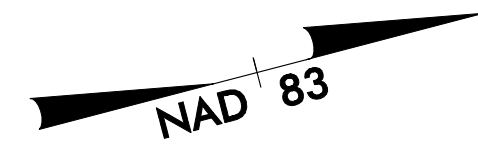
FENCE NOTE:
 THE PROPOSED FENCE IS TO BE ANCHORED INTO THE CONC. DITCH AS SHOWN IN THE TYPICAL SECTION. SEE SHEET 2A-1. THE PROPOSED FENCE SHOULD CLOSELY MATCH THE EXISTING SECURITY FENCE IT IS REPLACING AROUND THE PARKING LOT.

-L-
 PI Sta 177+41.32 PI Sta 186+18.82
 $\Delta = 2' 50'' 39.6''$ (LT) $\Delta = 4' 01'' 53.0''$ (RT)
 $D = 0' 47'' 36.9''$ $D = 0' 47'' 36.9''$
 $L = 358.42'$ $L = 508.01'$
 $T = 179.25'$ $T = 254.11'$
 $R = 7,220.00'$ $R = 7,220.00'$
 $DS = 50$ MPH $DS = 50$ MPH
 $S.E. = NC$ $S.E. = NC$
 $RO = N/A$ $RO = N/A$



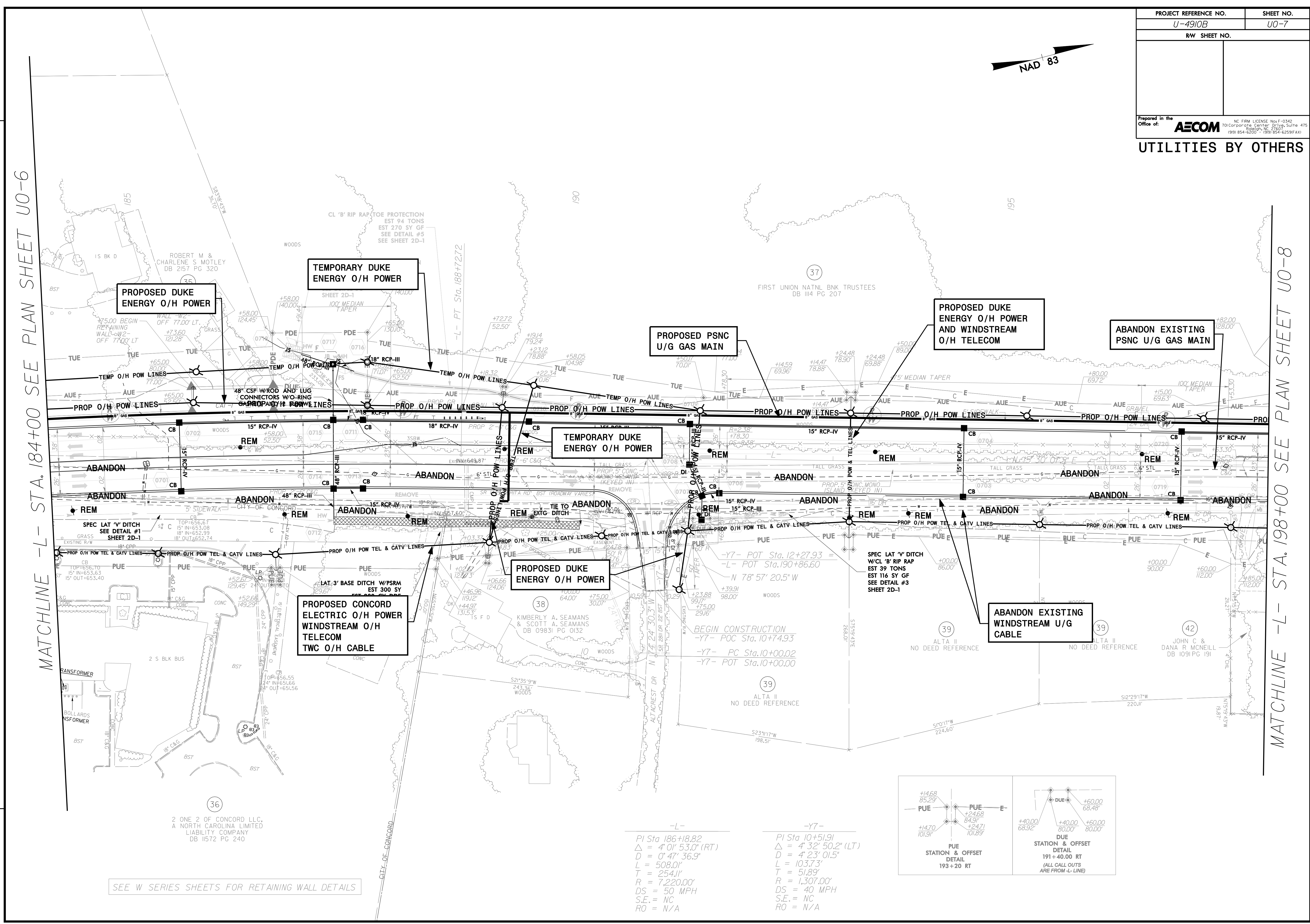
SEE W SERIES SHEETS FOR RETAINING WALL DETAILS

Revisions:



MATCHLINE -L- STA. 184+00 SEE PLAN SHEET U0-6

MATCHLINE -L- STA. 198+00 SEE PLAN SHEET U0-8

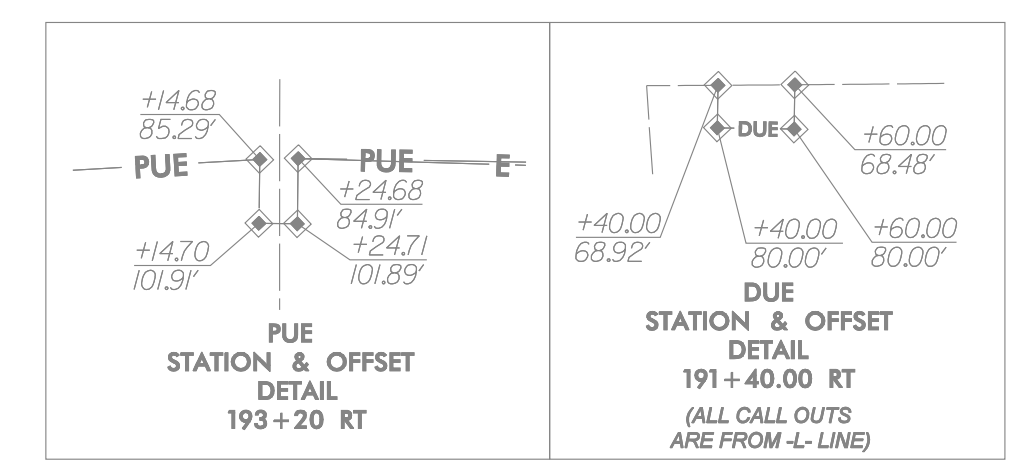


Revisions:

SEE W SERIES SHEETS FOR RETAINING WALL DETAILS

-L-
 PI Sta 186+18.82
 $\Delta = 4^{\circ} 01' 53.0''$ (RT)
 $D = 0^{\circ} 47' 36.9''$
 $L = 508.01'$
 $T = 254.11'$
 $R = 7,220.00'$
 $DS = 50$ MPH
 $S.E. = NC$
 $RO = N/A$

-Y7-
 PI Sta 10+51.91
 $\Delta = 4^{\circ} 32' 50.2''$ (LT)
 $D = 4^{\circ} 23' 01.5''$
 $L = 103.73'$
 $T = 51.89'$
 $R = 1,307.00'$
 $DS = 40$ MPH
 $S.E. = NC$
 $RO = N/A$



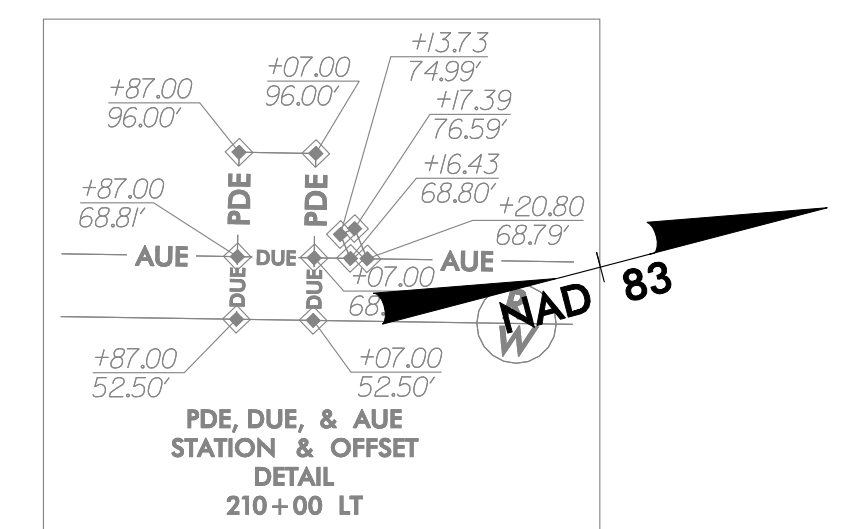
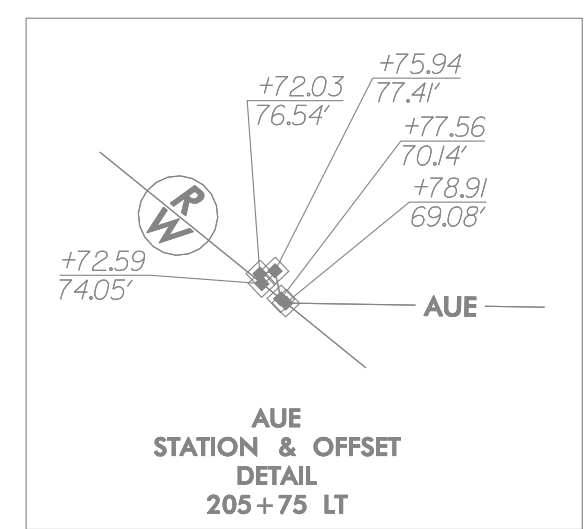
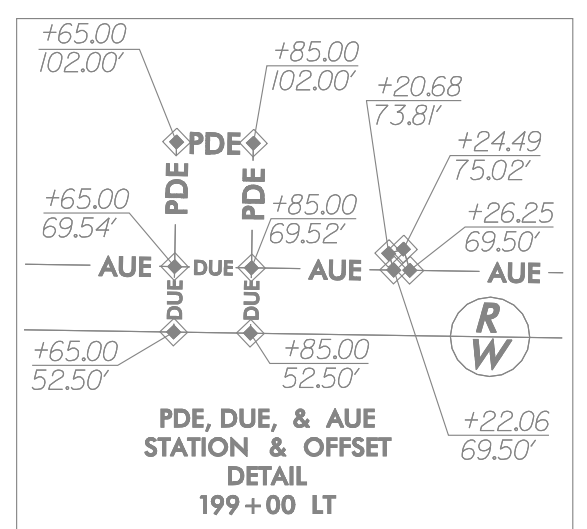
36
 2 ONE 2 OF CONCORD LLC,
 A NORTH CAROLINA LIMITED
 LIABILITY COMPANY
 DB 11572 PG 240

CITY OF CONCORD

39
 ALTA II
 NO DEED REFERENCE

39
 ALTA II
 NO DEED REFERENCE

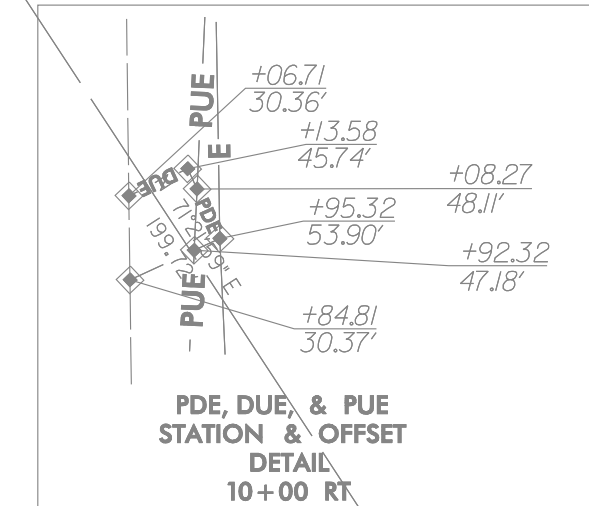
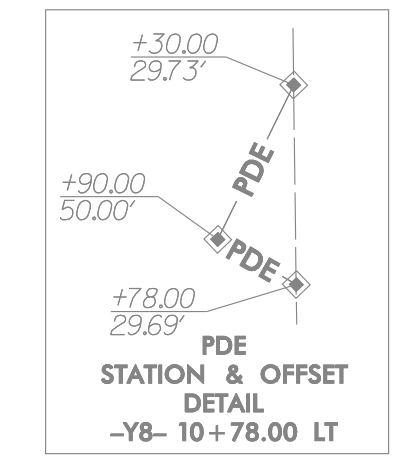
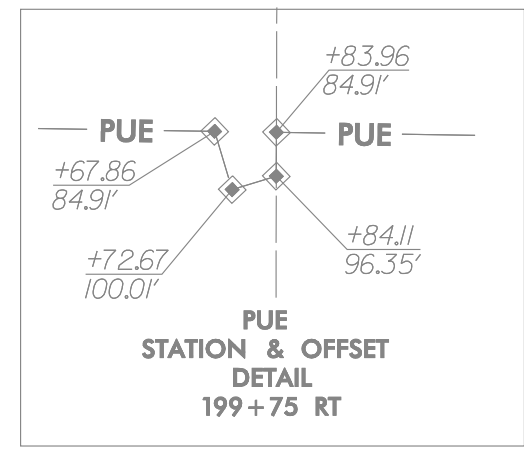
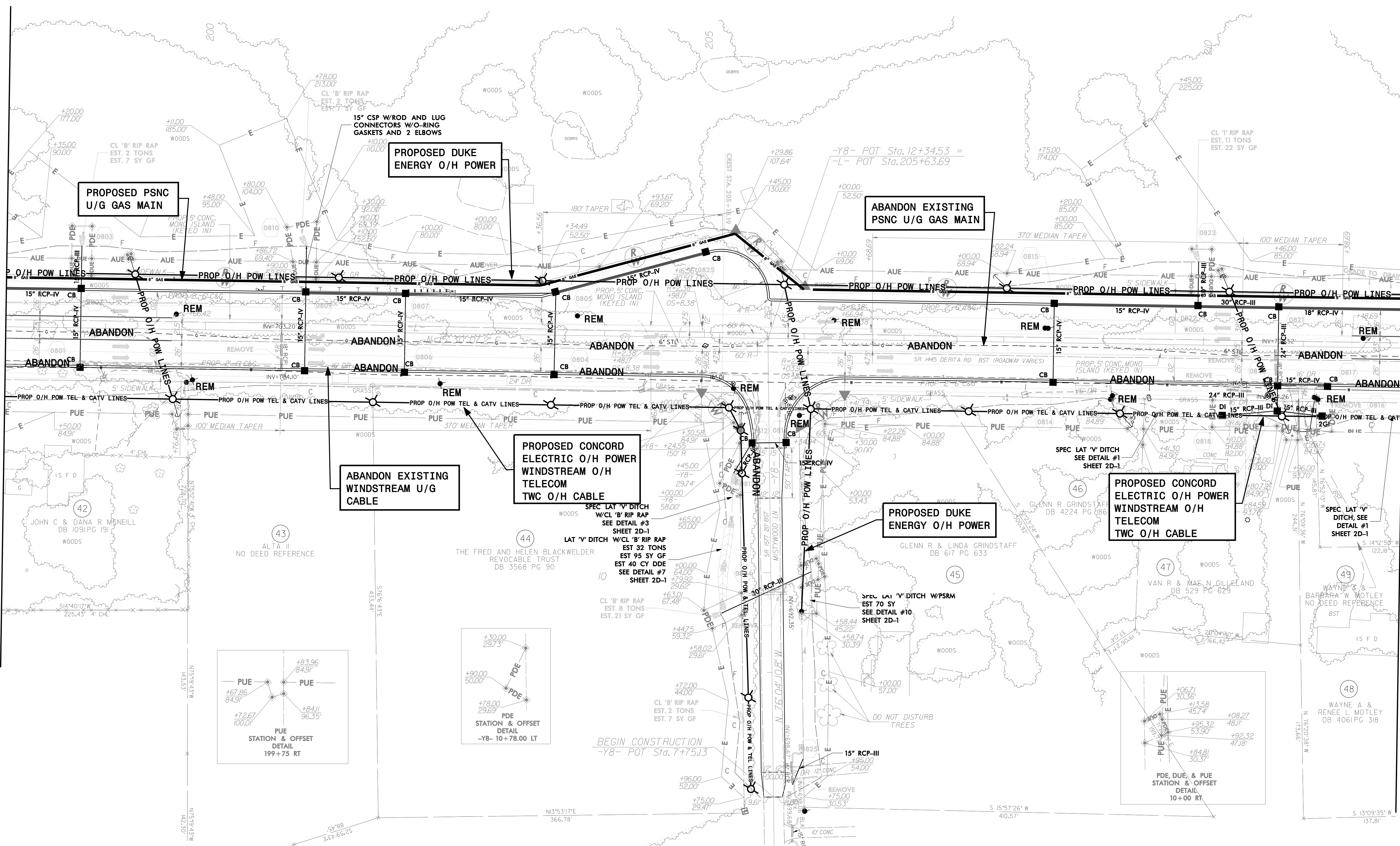
42
 JOHN C &
 DANA R MCNEILL
 DB 1091 PG 191



37
FIRST UNION NATNL BNK TRUSTEES
DB III4 PG 207

MATCHLINE -L- STA. 198+00 SEE PLAN SHEET U0-7

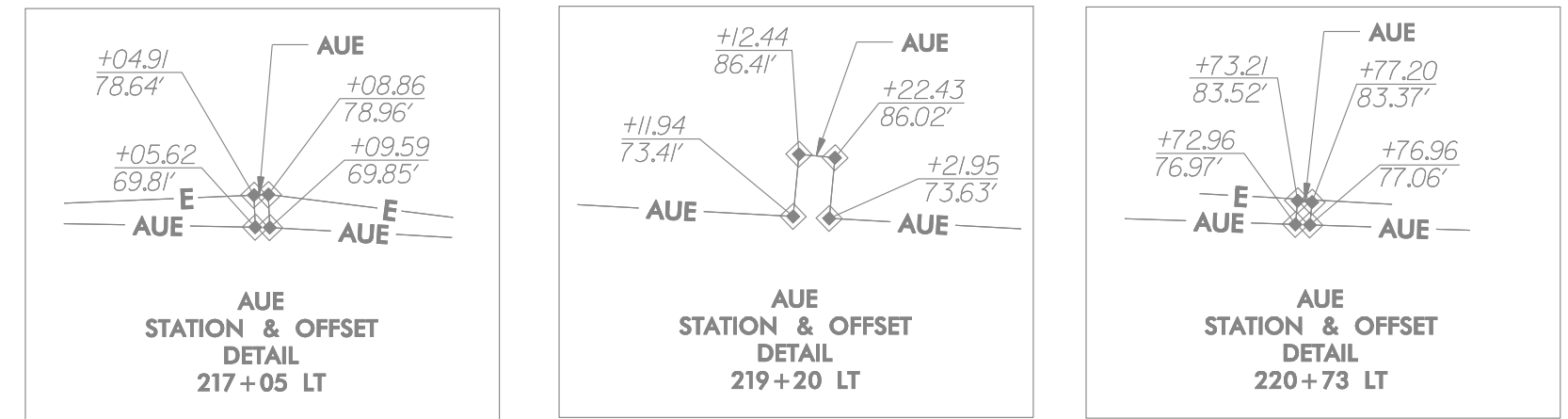
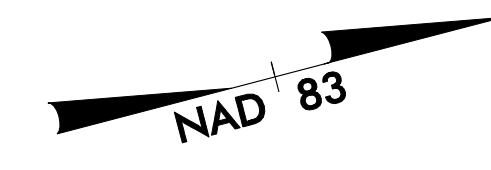
MATCHLINE STA. 212+00 SEE PLAN SHEET U0-9



REVISIONS:

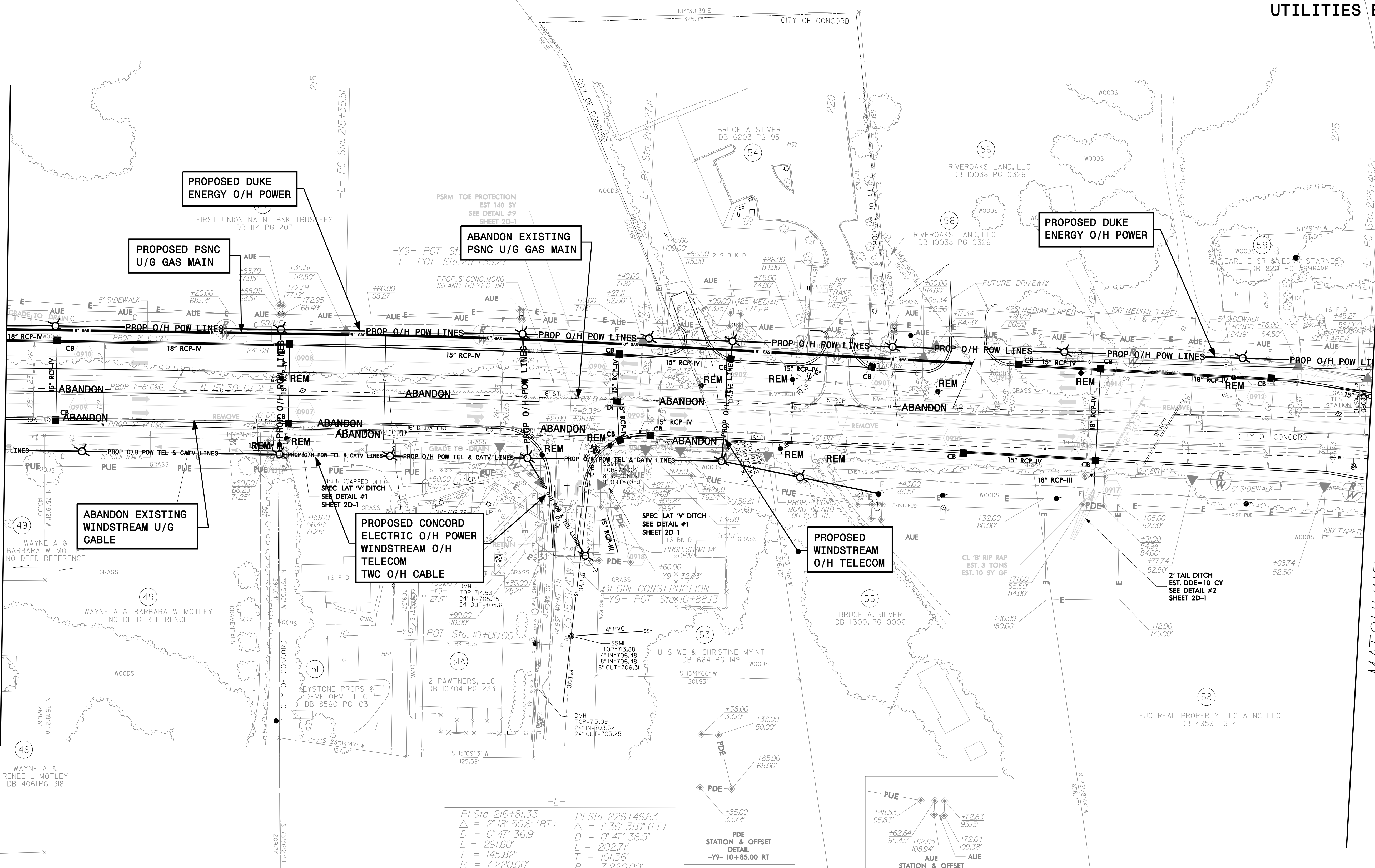
Revisions:

BEGIN CONSTRUCTION
-Y8- POT Sta. 7+75.13



MATCHLINE -L- STA. 212+00 SEE PLAN SHEET U0-8

MATCHLINE -L- STA. 225+50 SEE PLAN SHEET U0-10

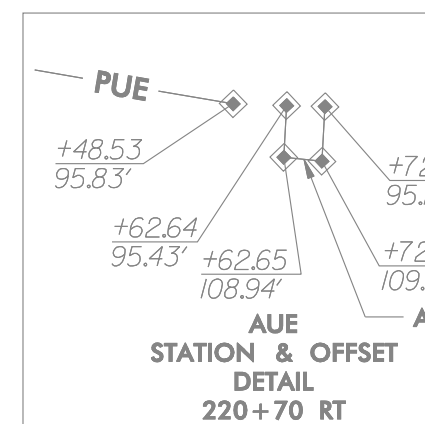
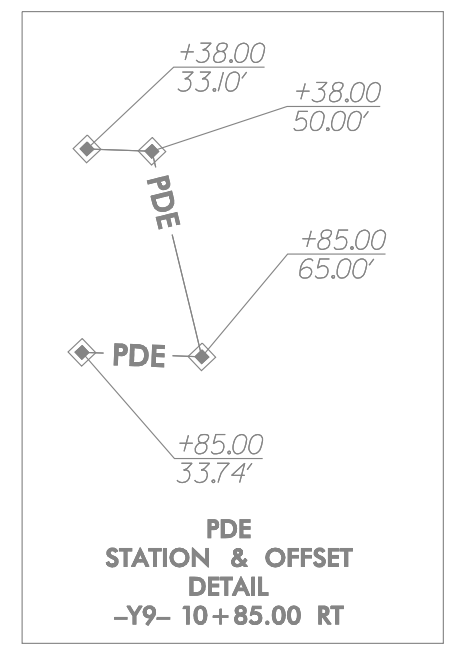


REVISIONS

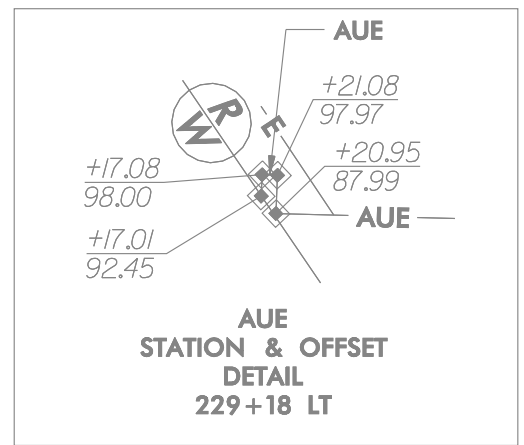
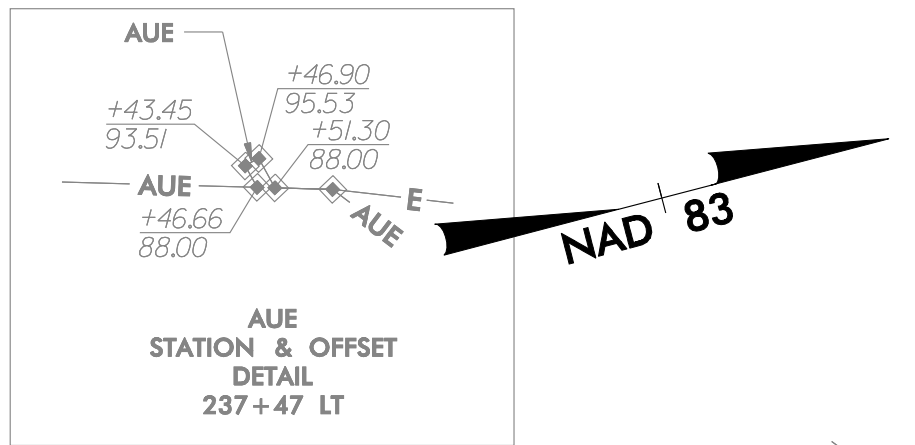
Revisions:

-L-
 PI Sta 216+81.33
 $\Delta = 2' 18" 50.6"$ (RT)
 $D = 0' 47" 36.9"$
 $L = 291.60'$
 $T = 145.82'$
 $R = 7,220.00'$
 $DS = 50$ MPH
 $S.E. = NC$
 $RO = N/A$

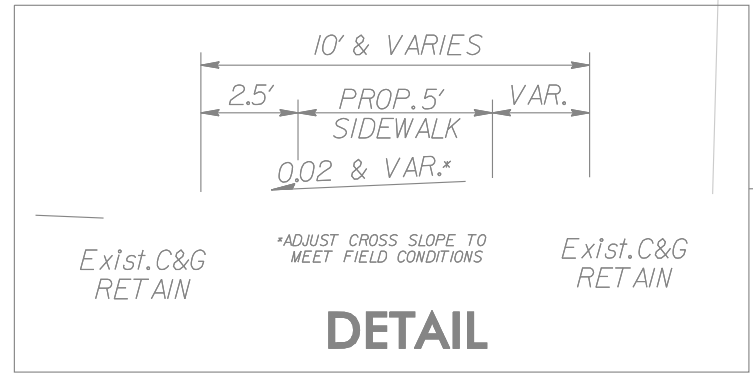
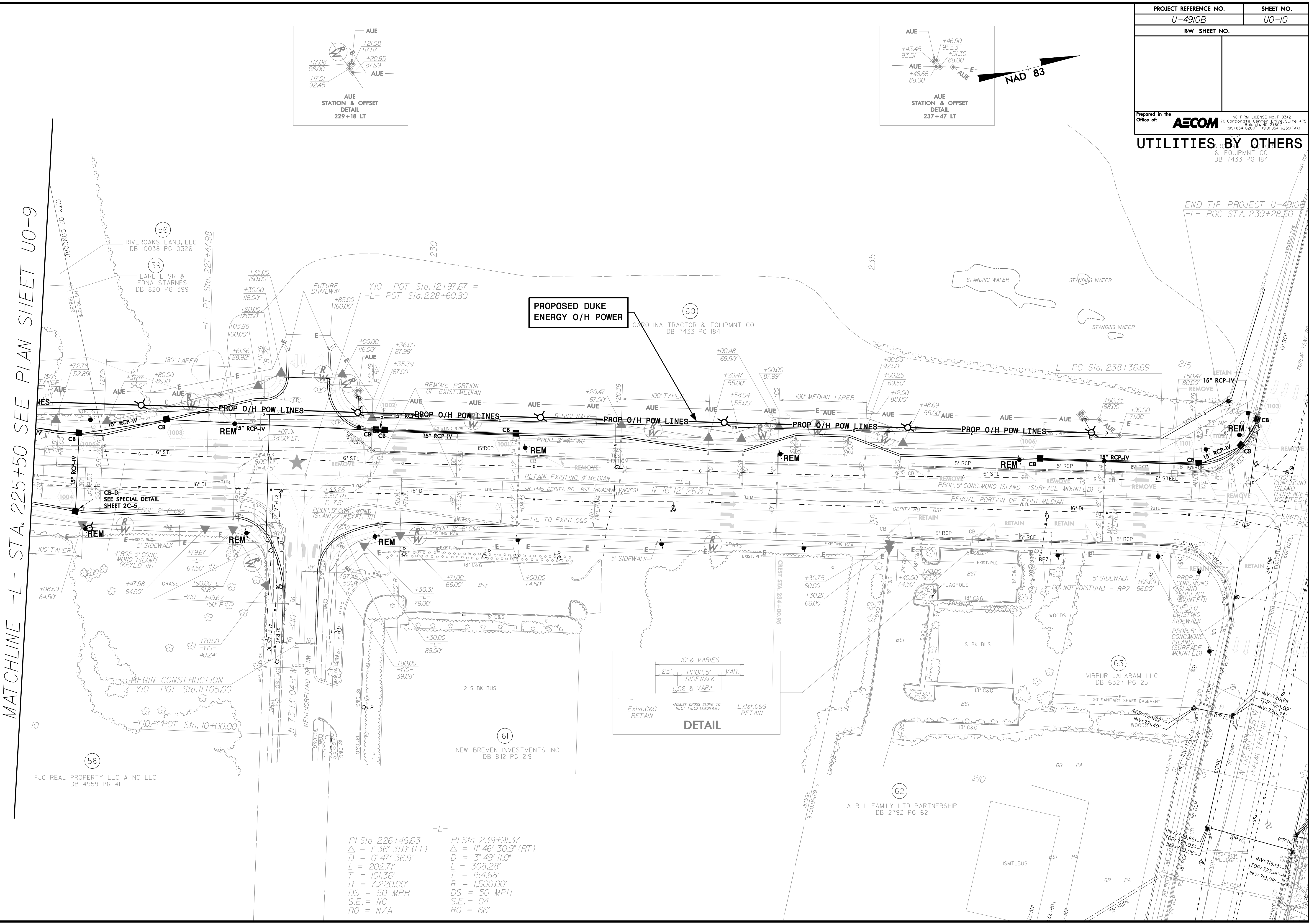
-L-
 PI Sta 226+46.63
 $\Delta = 1' 36" 31.0"$ (LT)
 $D = 0' 47" 36.9"$
 $L = 202.71'$
 $T = 101.36'$
 $R = 7,220.00'$
 $DS = 50$ MPH
 $S.E. = NC$
 $RO = N/A$



FOR -L- PROFILE SEE SHEET I3
 FOR -Y9- PROFILE SEE SHEET I5



REVISIONS:
 MATCHLINE -L- STA. 225+50 SEE PLAN SHEET U0-9



PI Sta 226+46.63	PI Sta 239+91.37
Δ = 1' 36" 31.0" (LT)	Δ = 1' 46" 30.9" (RT)
D = 0' 47" 36.9"	D = 3' 49" 11.0"
L = 202.71'	L = 308.28'
T = 101.36'	T = 154.68'
R = 7,220.00'	R = 1,500.00'
DS = 50 MPH	DS = 50 MPH
S.E. = NC	S.E. = 04
RO = N/A	RO = 66'

MATCHLINE -L- STA. 225+50 SEE PLAN SHEET U0-9

END TIP PROJECT U-4910B
-L- POC STA. 239+28.50