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DCN 0400DEL_P30

TIP PROJECT: U-5008

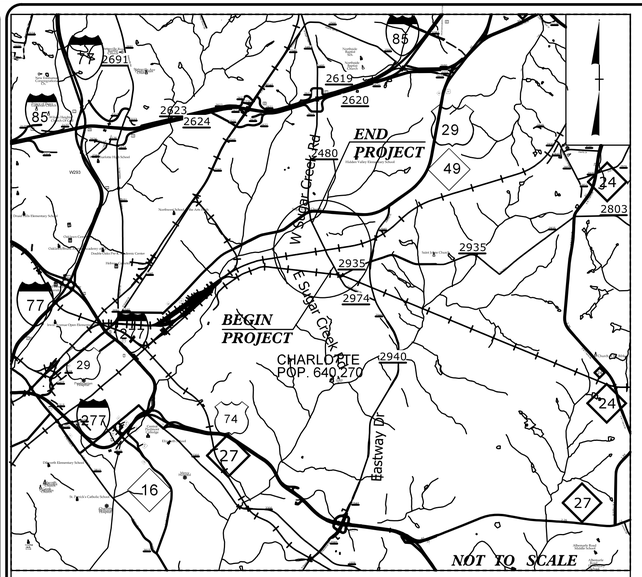
STATE OF NORTH CAROLINA
RAIL DIVISION

T.I.P. NO.	SHEET NO.
U-5008	UO-1

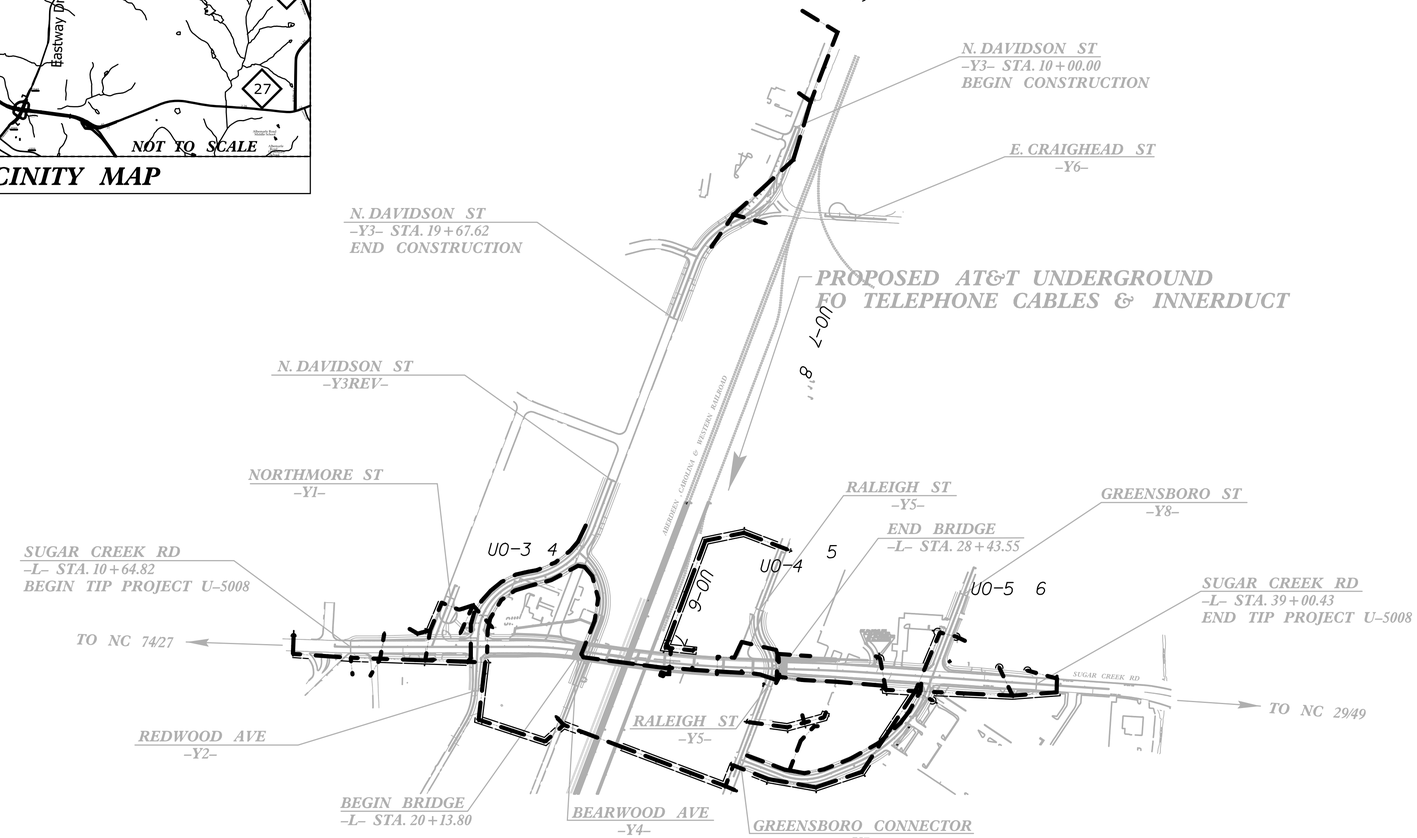
UTILITIES BY OTHERS PLANS
MECKLENBURG COUNTY

LOCATION: SUGAR CREEK ROAD AND NCRR/NSRR CROSSING NO. 715 352H GRADE SEPARATION

TYPE OF WORK: ELECTRIC POWER DISTRIBUTION, TELEPHONE, CABLE TV, GAS



PROJECT VICINITY MAP



CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III
THIS PROJECT IS WITHIN MUNICIPAL BOUNDARIES OF CHARLOTTE

GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

10 5 0 10 20
PROFILE (VERTICAL)

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
UO-1	TITLE SHEET
UO-2	UTILITY SYMBOLOGY SHEET
UO-3 THRU UO-7	UBO PLAN SHEETS

UTILITY OWNERS ON PROJECT

(1) DUKE ENERGY – POWER
(2) CDOT – LIGHTING
(3) LEVEL 3 – TELECOMMUNICATIONS
(4) TIME WARNER CABLE – CABLE TV
(5) PIEDMONT NATURAL GAS – GAS
(6) CMUD – WATER & SEWER
(7) AT&T – TELECOMMUNICATIONS

HINDE ENGINEERING
License No. C-2639
7520 E. Independence Blvd., Suite 230 Charlotte, NC 28227

NC DEPARTMENT OF TRANSPORTATION
RAIL DIVISION
ENGINEERING AND SAFETY BRANCH
CAPITAL YARD
1556 MAIL SERVICE CENTER
RALEIGH, NC 27699-1556

DCN 0400DEL_P30

PROJECT REFERENCE NO.	SHEET NO.
U-5008	U0-2

UTILITIES BY OTHERS

NOTE:
ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS

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 — 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 — RFH
- Remove Fire Hydrant — REM FH
- Water Meter — PWM
- Relocate Water Meter — RWM
- Remove Water Meter — REM WM
- Water Pump Station — PS(W)
- RPZ Backflow Preventer — PRPZ
- DCV Backflow Preventer — PBFP
- Relocate RPZ Backflow Preventer — RRPZ
- 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 MISCELLANOUS UTILITIES SYMBOLS

- Power Pole
- Telephone Pole
- Joint Use Pole
- Telephone Pedestal — TEL PED
- Utility Line by Others (Type as Shown) — PROP O/H POW LINE
- 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
- Telephone Pole
- Joint Use Pole
- Utility Pole
- Utility Pole with Base
- H-Frame Pole
- Power Transmission Line Tower
- Water Manhole — W
- Power Manhole — P
- Telephone Manhole — T
- Sanitary Sewer Manhole — S
- Hand Hole for Cable — HH
- Power Transformer
- Telephone Pedestal — T
- CATV Pedestal — C
- Gas Valve
- Gas Meter
- Located Miscellaneous Utility Object — O
- Abandoned According to Utility Records — AATUR
- End of Information — E.O.I.
- *Underground Power Line — P
- *Underground Telephone Cable — T
- *Underground Telephone Conduit — TC
- *Underground Fiber Optics Telephone Cable — T FO
- *Underground TV Cable — TV
- *Underground Fiber Optics TV Cable — TV FO
- *Underground Gas Pipeline — G
- Aboveground Gas Pipeline — A/G Gas
- *Underground Water Line — W
- Aboveground Water Line — A/G Water
- *Underground Gravity Sanitary Sewer Line — SS
- Aboveground Gravity Sanitary Sewer Line — A/G Sanitary Sewer
- *Underground SS Forced Main Line — FSS
- Underground Unknown Utility Line — ?UTL
- SUE Test Hole
- Water Meter
- Water Valve
- Fire Hydrant
- Sanitary Sewer Cleanout

*For Existing Utilities

- Utility Line Drawn from Record (Type as Shown)
- Designated Utility Line (Type as Shown)

NORTH CAROLINA
DEPT. OF TRANSPORTATION
RALEIGH, NORTH CAROLINA

SUGAR CREEK ROAD AND NCRR/NSRR
CROSSING NO.715 352 GRADE SEPERATION

Designed By:	Checked By:	Date:	Sheet:	Of:
OTHERS	OTHERS	12-22-14	U0-2	U0-7

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PROJECT REFERENCE NO.	SHEET NO.
U-5008	U0-3

UTILITIES BY OTHERS

NOTE:
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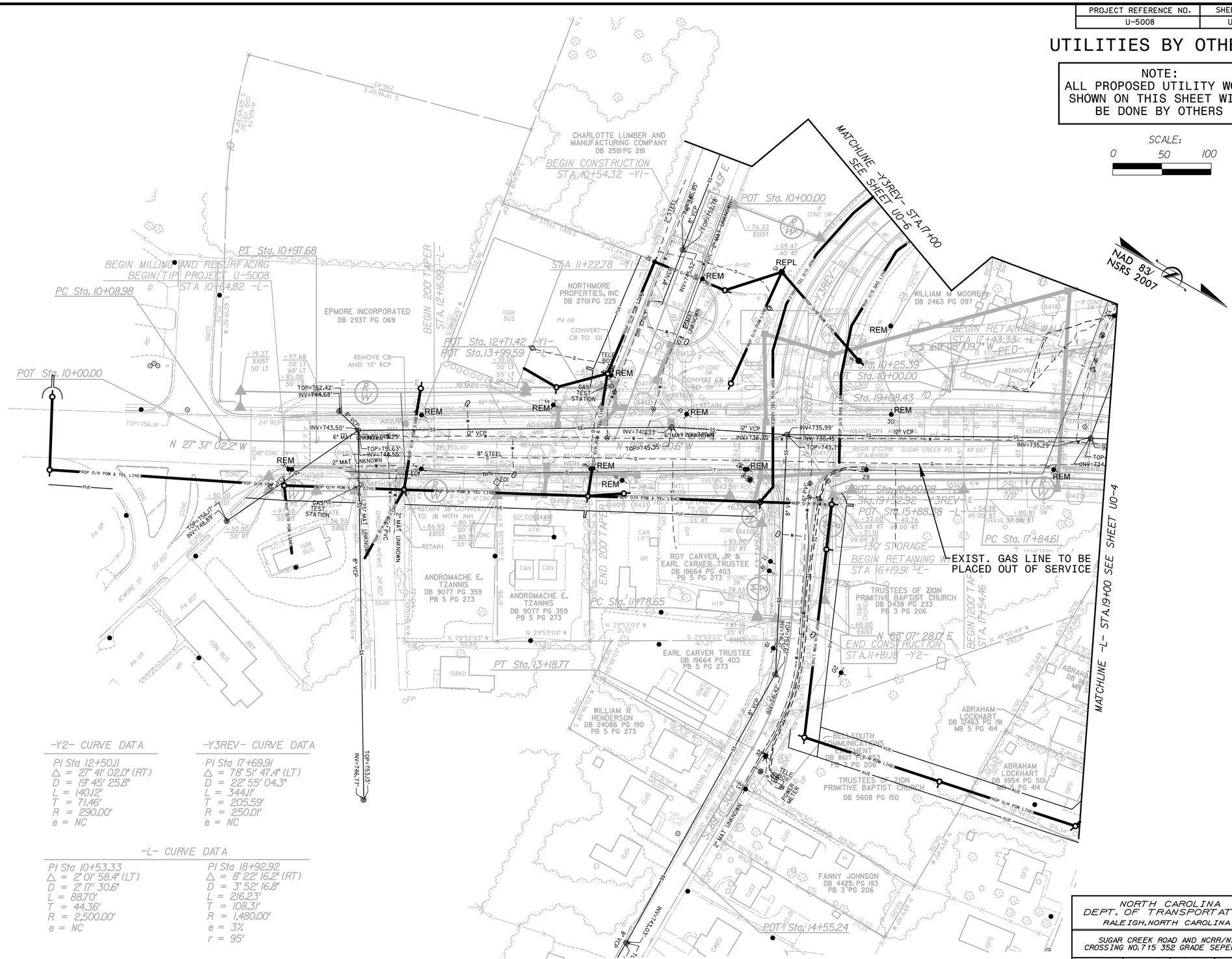
SCALE: 0 50 100



NORTH CAROLINA
DEPT. OF TRANSPORTATION
RALEIGH, NORTH CAROLINA

SUGAR CREEK ROAD AND NCRR/NSRR
CROSSING NO.715 352 GRADE SEPERATION

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PROJECT REFERENCE NO.	SHEET NO.
U-5008	U0-4

UTILITIES BY OTHERS

NOTE:
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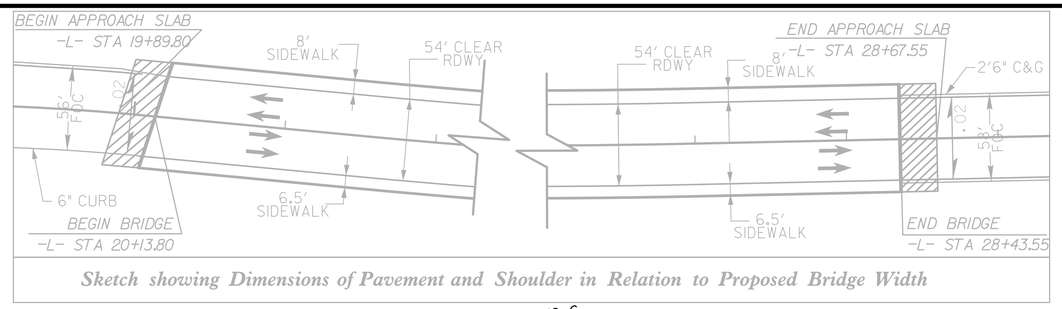
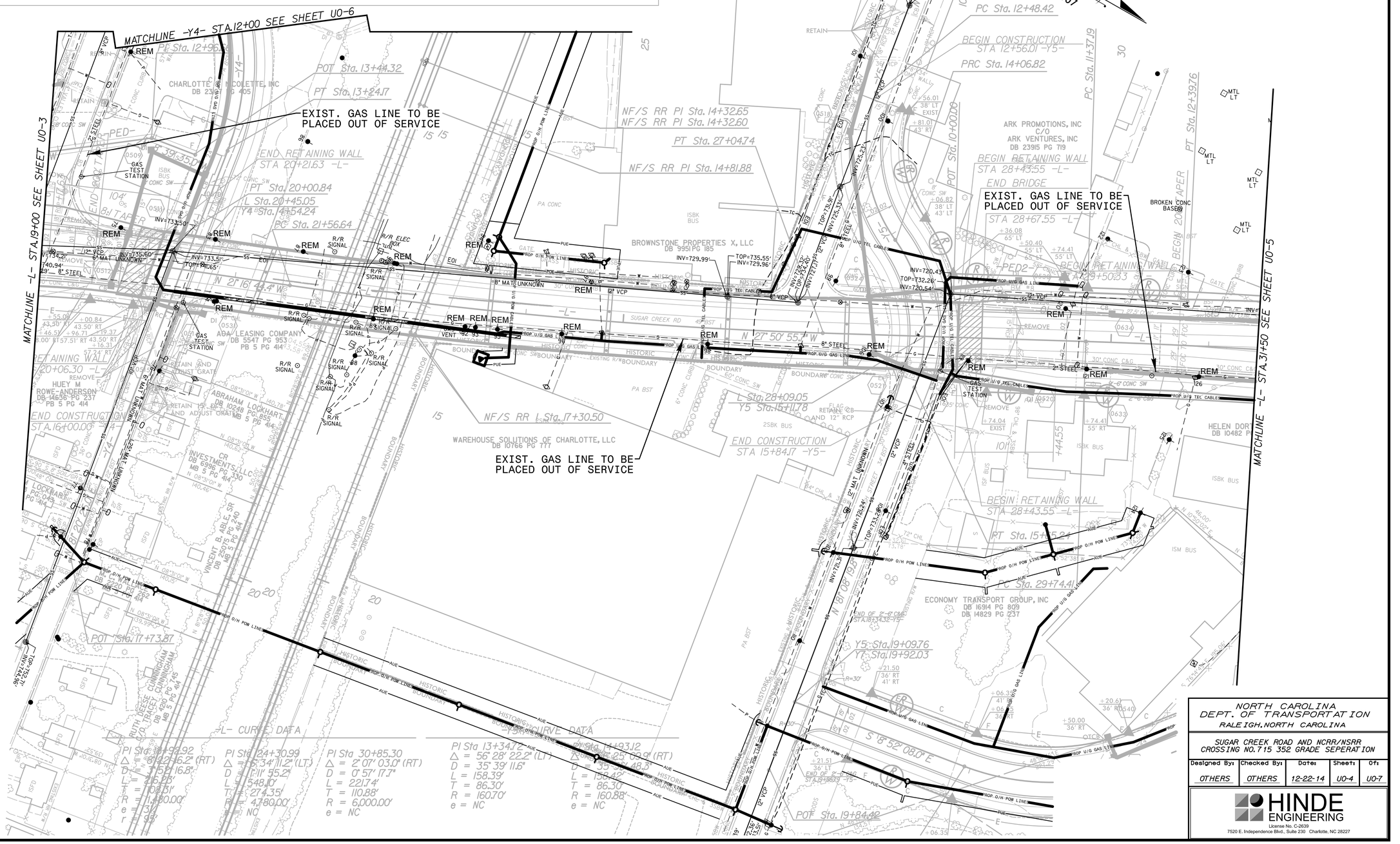
SCALE:
0 50 100



Sketch showing Dimensions of Pavement and Shoulder in Relation to Proposed Bridge Width



NAD 83/ NSRS 2007

NORTH CAROLINA
DEPT. OF TRANSPORTATION
RALEIGH, NORTH CAROLINA

SUGAR CREEK ROAD AND NCRR/NSRR
CROSSING NO. 715 352 GRADE SEPERATION

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OTHERS	OTHERS	12-22-14	U0-4	U0-7

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DCN 0400DEL_P30

PROJECT REFERENCE NO.	SHEET NO.
U-5008	U0-5

UTILITIES BY OTHERS

NOTE:
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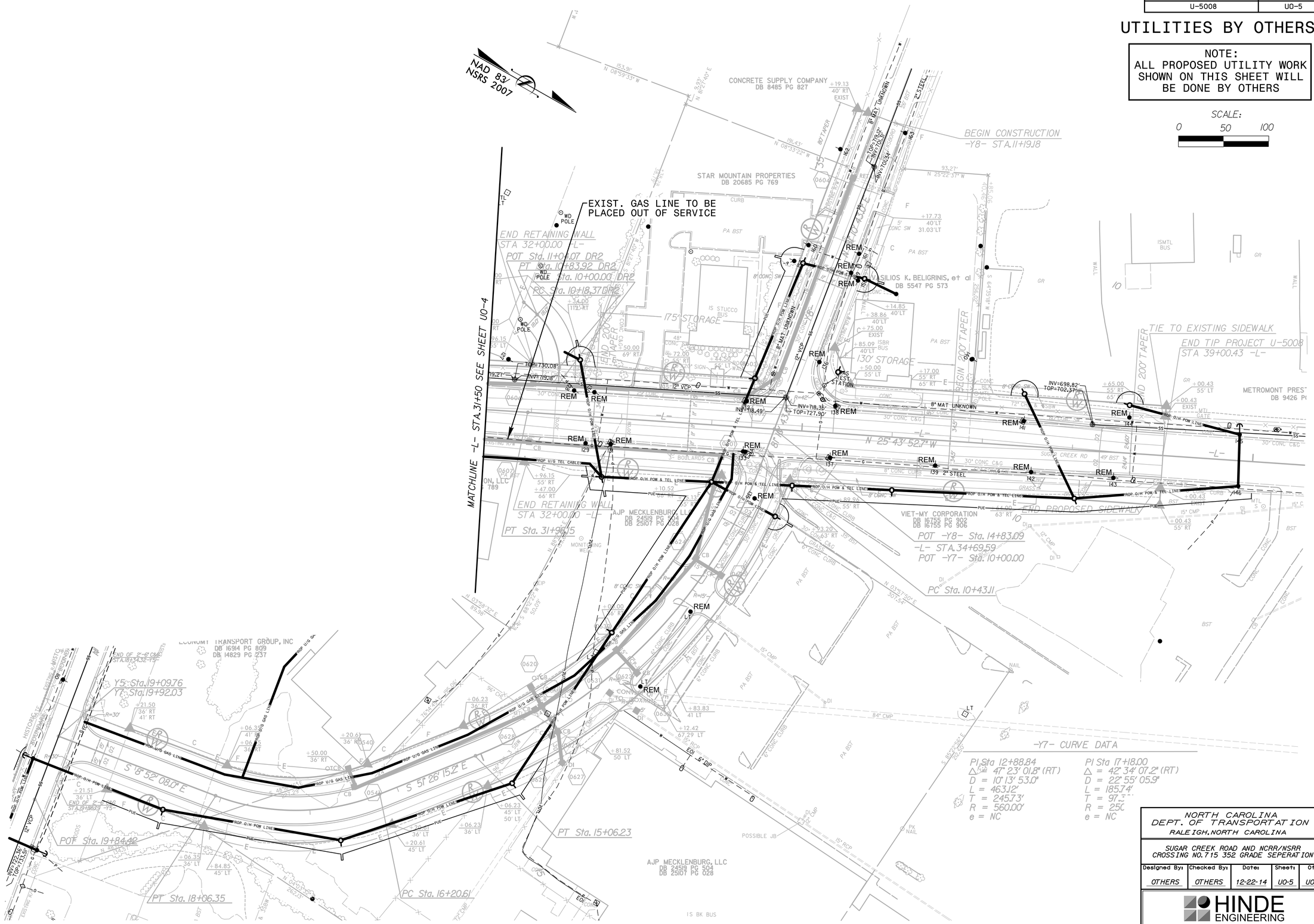
SCALE:
0 50 100



NORTH CAROLINA
DEPT. OF TRANSPORTATION
RALEIGH, NORTH CAROLINA

SUGAR CREEK ROAD AND NCRR/NSRR CROSSING NO. 715 352 GRADE SEPERATION

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PROJECT REFERENCE NO.	SHEET NO.
U-5008	U0-6

UTILITIES BY OTHERS

NOTE:
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SCALE:
0 50 100

NAD 83/ NSRS 2007

MATCHLINE -Y3- STA 19+00 SEE SHEET U0-7

MATCHLINE -Y4- STA 12+00 SEE SHEET U0-4

MATCHLINE -Y3REV- STA 17+00 SEE SHEET U0-3

-Y4- CURVE DATA
PI Sta 11+94.56
Δ = 69° 18' 55.3" (RT)
D = 22° 55' 05.9"
L = 302.45'
T = 172.84'
R = 250.00'
e = NC

-Y3REV- CURVE DATA
PI Sta 14+05.06
Δ = 60° 48' 09.9" (RT)
D = 17° 04' 10.5"
L = 356.21'
T = 196.94'
R = 335.66'
e = NC

-Y3REV- CURVE DATA
PI Sta 17+69.91
Δ = 78° 51' 47.4" (LT)
D = 22° 55' 04.3"
L = 344.11'
T = 205.59'
R = 250.01'
e = NC

NORTH CAROLINA DEPT. OF TRANSPORTATION ENGINEERING DIVISION RALEIGH, NORTH CAROLINA				
SUGAR CREEK ROAD AND NCRR/NSRR CROSSING NO. 715 352 GRADE SEPERATION				
Designed By:	Checked By:	Date:	Sheet:	Of:
OTHERS	OTHERS	12-22-14	U0-6	U0-7

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PROJECT REFERENCE NO.	SHEET NO.
U-5008	U0-7

UTILITIES BY OTHERS

NOTE:
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SCALE:
0 50 100

NAD 83/ NSRS 2007

-Y3- CURVE DATA

PI Sta 13+52.37
Δ = 43° 42' 57.3" (RT)
D = 15° 04' 40.2"
L = 289.93'
T = 152.44'
R = 380.00'
e = 4%
r = 116'

PI Sta 16+15.80
Δ = 43° 48' 50.2" (LT)
D = 18° 17' 44.6"
L = 239.48'
T = 125.94'
R = 313.17'
e = 4%
r = 116'

POT Sta. 12+50.00
POT -Y3- Sta. 10+00.00
ROT Sta. 10+00.00
BEGIN CONSTRUCTION -Y6- 10+14.86
END CONSTRUCTION -Y6- 11+25.00
BEGIN CONSTRUCTION STA 10+00.00 -Y3-
PC -Y3- Sta. 11+99.93
PRC -Y3- Sta. 14+89.87
PT -Y3- Sta. 17+29.34

EXIST. GAS LINE TO REMAIN IN PLACE
TEST HOLES PERFORMED BY PNG INDICATE EXIST. GAS LINE TO BE 7.5' TO 8' DEEP

MATCHLINE -Y3- STA.19+00 SEE SHEET U0-6

ELEV.
98.83
98.36
04.33
05.65
98.75
98.82
04.56

DRAINAGE J HW2 SHDT.

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DEPT. OF TRANSPORTATION
RALEIGH, NORTH CAROLINA

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