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09/08/99

TIP PROJECT: U-6055

CONTRACT: DN00607

See Sheet 1A For Index of Sheets

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

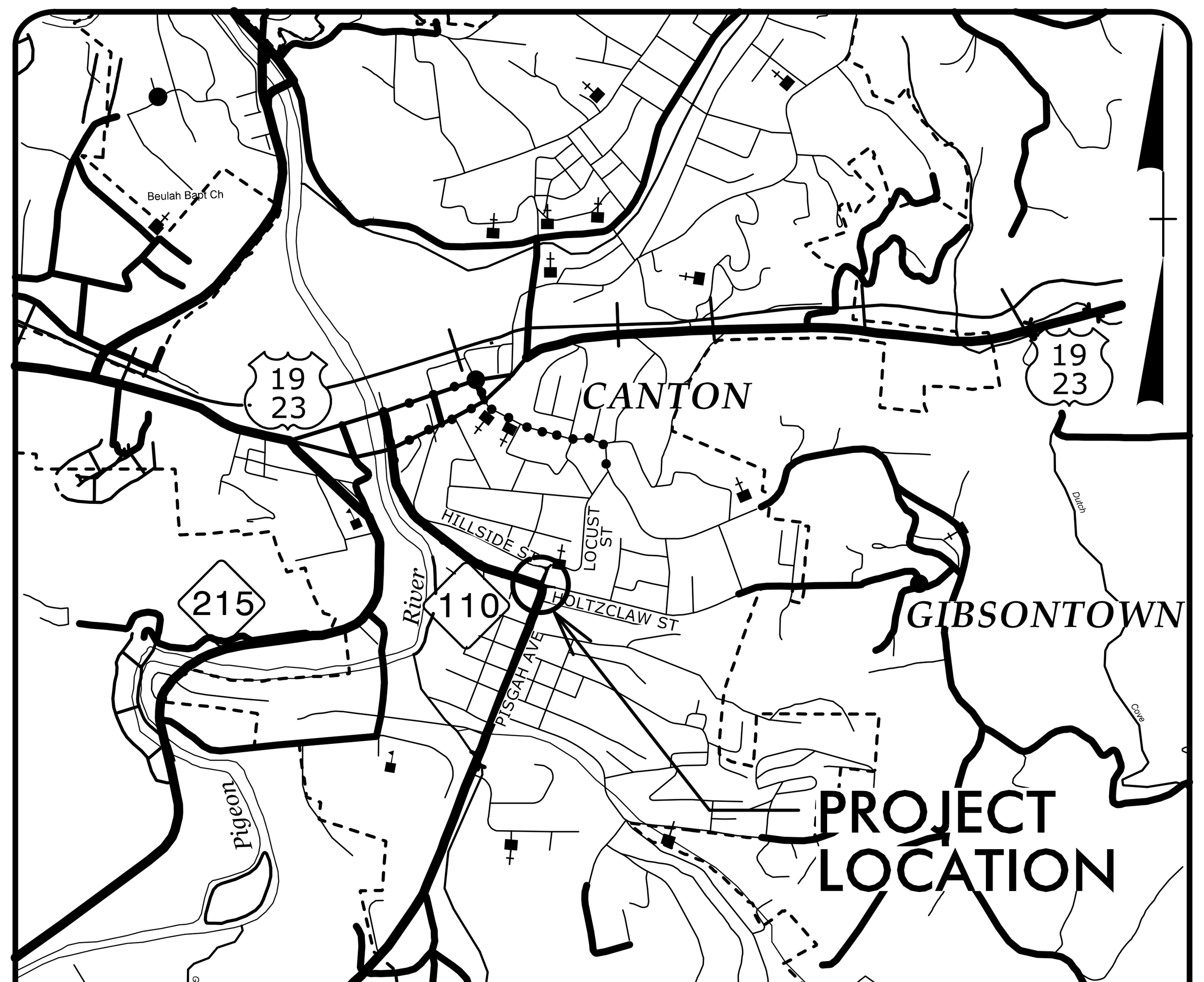
HAYWOOD COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-6055	1	

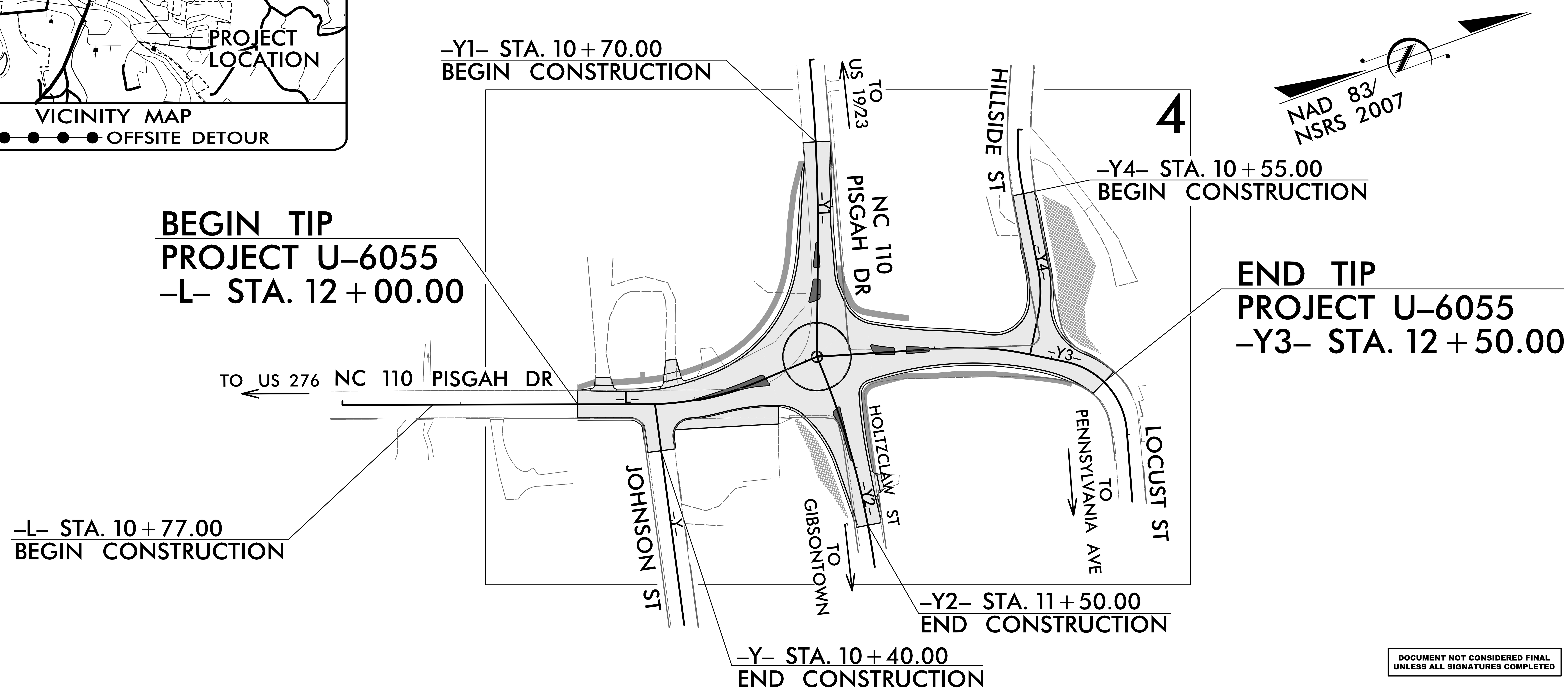
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
47166.1.1	STBGDA-0110(013)	PE
47166.2.1	STBGDA-0110(013)	R/W, UTIL.
47166.3.1	STBGDA-0110(013)	CONST.

LOCATION: INTERSECTION OF PISGAH DR (NC 110), HOLTZCLAW ST, AND LOCUST ST IN THE TOWN OF CANTON

TYPE OF WORK: GRADING, PAVING, DRAINAGE, AND CURB & GUTTER



VICINITY MAP
OFFSITE DETOUR



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES

20 10 0 20 40
PLANS

20 10 0 20 40
PROFILE (HORIZONTAL)

4 2 0 4 8
PROFILE (VERTICAL)

DESIGN DATA

ADT 2019 = 8,100
ADT 2040 = 9,980
V = 30 MPH

FUNC CLASS =
URBAN ARTERIAL
REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT U-6055	=	0.150 MILES
TOTAL LENGTH TIP PROJECT U-6055	=	0.150 MILES

NCDOT CONTACT: J. SCOTT MILLER

PLANS PREPARED BY:	PLANS PREPARED FOR:
TGS ENGINEERS 804-C N. LAFAYETTE ST SHELBY, NC 28150 PH (704) 476-0003 CORP. LICENSE NO.: C-0275	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION 14 253 WEBSTER RD SYLVA, NC 28779

RIGHT OF WAY DATE:
APRIL 16, 2018

LETTING DATE:
DECEMBER 11, 2018

2018 STANDARD SPECIFICATIONS

JIMMY L. TERRY, PE
PROJECT ENGINEER

SANDRA G. MELVIN
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER
10/15/2018 7:39:
DocuSigned by:
Benjamin J. Henegar
SIGNATURE: P.E.
NORTH CAROLINA PROFESSIONAL SEAL 044158 ENGINEER BENJAMIN J. HENEGAR

ROADWAY DESIGN ENGINEER
10/15/2018 7:07:
DocuSigned by:
Jimmy Terry
SIGNATURE: P.E.
NORTH CAROLINA PROFESSIONAL SEAL 35018 ENGINEER JIMMY L. TERRY

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

10/12/2018
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User:smelvin

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
U-6055	1A

ROADWAY DESIGN ENGINEER

SEAL 35018 ENGINEER JIMMY L. TERRY

10/23/2018 12:01:35 PM PDT

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

INDEX OF SHEETS

SHEET NUMBER	SHEET
1	TITLE SHEET
1A	INDEX OF SHEETS, GENERAL NOTES, AND STANDARD DRAWINGS
1B	CONVENTIONAL SYMBOLS
1C-1 THRU 1C-2	SURVEY CONTROL SHEETS
RW-01THRU RW-04	RIGHT OF WAY CONTROL SHEETS
2A-1 THRU 2A-2	PAVEMENT SCHEDULE AND TYPICAL SECTIONS
2B-1	ROADWAY DETAIL - ROUNDABOUT LAYOUT
2C-1	CURB RAMP DETAIL - MEDIAN OR TURN LANE ISLAND
2C-2	CURB RAMP DETAIL - PARALLEL RAMPS
3B-1	EARTHWORK SUMMARY, ASPHALT PAVEMENT REMOVAL SUMMARY
3D-1	DRAINAGE SUMMARIES
3G-1	GEOTECHNICAL SUMMARIES
4	PLAN SHEET
5 THRU 6	PROFILE SHEETS
TMP-1 THRU TMP-10	TRANSPORTATION MANAGEMENT PLANS
PMP-1 THRU PMP-2	PAVEMENT MARKING PLANS
EC-1 THRU EC-5	EROSION CONTROL PLANS
SIGN-1 THRU SIGN-3	SIGNING PLANS
UC-1 THRU UC-6	UTILITIES CONSTRUCTION PLANS
UO-1 THRU UO-2	UTILITIES BY OTHERS PLANS
X-1A	CROSS-SECTION INDEX SHEET
X-1B	CROSS-SECTION SUMMARY SHEET
X-1 THRU X-10	CROSS-SECTIONS

GENERAL NOTES

GENERAL NOTES:

2018 SPECIFICATIONS
EFFECTIVE: 01-16-2018
REVISED:

GRADE LINE:
GRADING AND SURFACING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. GRADE LINES MAY BE ADJUSTED AT THEIR BEGINNING AND ENDING AND AT STRUCTURES AS DIRECTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

CLEARING:

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.

SUPERELEVATION:

ALL CURVES ON THIS PROJECT SHALL BE SUPERELEVATED IN ACCORDANCE WITH STD. NO. 225.04 USING THE RATE OF SUPERELEVATION AND RUNOFF SHOWN ON THE PLANS. SUPERELEVATION IS TO BE REVOLVED ABOUT THE GRADE POINTS SHOWN ON THE TYPICAL SECTIONS.

SIDE ROADS:

THE CONTRACTOR WILL BE REQUIRED TO DO ALL NECESSARY WORK TO PROVIDE SUITABLE CONNECTIONS WITH ALL ROADS, STREETS, AND DRIVES ENTERING THIS PROJECT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PARTICULAR ITEMS INVOLVED.

SUBSURFACE DRAINS:

SUBSURFACE DRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 815.02 AT LOCATIONS DIRECTED BY THE ENGINEER.

DRIVEWAYS:

DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. 848.02 USING 3 FOOT RADII OR RADII AS SHOWN ON THE PLANS. LOCATIONS OF DRIVES WILL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

STREET TURNOUT:

STREET RETURNS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 848.04 USING THE RADII NOTED ON PLANS.

UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE AT&T, DUKE ENERGY, CHARTER, TOWN OF CANTON WATER & SEWER, AND PSNC

ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS, EXCEPT AS SHOWN ON THE PLANS.

CURB RAMPS

CURB RAMPS ARE SHOWN ON THE PLANS AT APPROXIMATE LOCATIONS. CONSTRUCT ALL CURB RAMPS ACCORDANCE WITH STD 848.05 and/or 848.06.

STANDARD DRAWINGS

EFF. 01-16-2018
REV.

2018 ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated January, 2018 are applicable to this project and by reference hereby are considered a part of these plans:

STD.NO.	TITLE
	DIVISION 2 - EARTHWORK
200.02	Method of Clearing - Method II
225.02	Guide for Grading Subgrade - Secondary and Local
225.04	Method of Obtaining Superelevation - Two Lane Pavement
225.06	Method of Grading Sight Distance at Intersections
	DIVISION 3 - PIPE CULVERTS
300.01	Method of Pipe Installation
	DIVISION 6 - ASPHALT BASES AND PAVEMENTS
654.01	Pavement Repairs
	DIVISION 8 - INCIDENTALS
815.02	Subsurface Drain
840.00	Concrete Base Pad for Drainage Structures
840.01	Brick Catch Basin - 12" thru 54" Pipe
840.02	Concrete Catch Basin - 12" thru 54" Pipe
840.03	Frame, Grates and Hood - for Use on Standard Catch Basin
840.14	Concrete Drop Inlet - 12" thru 30" Pipe
840.15	Brick Drop Inlet - 12" thru 30" Pipe
840.16	Drop Inlet Frame and Grates - for use with Std. Dwg 840.14 and 840.15
840.29	Frames and Narrow Slot Flat Grates
840.31	Concrete Junction Box - 12" thru 66" Pipe
840.32	Brick Junction Box - 12" thru 66" Pipe
840.35	Traffic Bearing Grated Drop Inlet - for Cast Iron Double Frame and Grates
840.45	Precast Drainage Structure
840.46	Traffic Bearing Precast Drainage Structure
840.51	Brick Manhole - 12" thru 36" Pipe
840.52	Precast Manhole - 4', 5' and 6' Diameter
840.53	Precast Manhole with Masonry Base - 12" thru 42" Pipe
840.54	Manhole Frame and Cover
840.66	Drainage Structure Steps
840.71	Concrete and Brick Pipe Plug
846.01	Concrete Curb, Gutter and Curb & Gutter
848.01	Concrete Sidewalk
848.02	Driveway Turnout - Radius Type
848.04	Street Turnout
848.05	Curb Ramp - Proposed Curb & Gutter
852.01	Concrete Islands
852.04	Method for Placement of Drop Inlets in Grassed Median - Using 1'-6" Curb and Gutter
852.06	Method for Placement of Drop Inlets in Concrete Islands
876.01	Rip Rap in Channels

10/23/2018
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12/2/2016

PROJECT REFERENCE NO.	SHEET NO.
U-6055	1B

STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

Note: Not to Scale **S.U.E. = Subsurface Utility Engineering*

BOUNDARIES AND PROPERTY:

- State Line
- County Line
- Township Line
- City Line
- Reservation Line
- Property Line
- Existing Iron Pin (EIP)
- Computed Property Corner
- Property Monument (ECM)
- Parcel/Sequence Number (123)
- Existing Fence Line
- Proposed Woven Wire Fence
- Proposed Chain Link Fence
- Proposed Barbed Wire Fence
- Existing Wetland Boundary (WLB)
- Proposed Wetland Boundary (WLB)
- Existing Endangered Animal Boundary (EAB)
- Existing Endangered Plant Boundary (EPB)
- Existing Historic Property Boundary (HPB)
- Known Contamination Area: Soil (S)
- Potential Contamination Area: Soil (S)
- Known Contamination Area: Water (W)
- Potential Contamination Area: Water (W)
- Contaminated Site: Known or Potential

BUILDINGS AND OTHER CULTURE:

- Gas Pump Vent or U/G Tank Cap
- Sign (S)
- Well (W)
- Small Mine
- Foundation
- Area Outline
- Cemetery
- Building
- School
- Church
- Dam

HYDROLOGY:

- Stream or Body of Water
- Hydro, Pool or Reservoir
- Jurisdictional Stream (JS)
- Buffer Zone 1 (BZ 1)
- Buffer Zone 2 (BZ 2)
- Flow Arrow
- Disappearing Stream
- Spring
- Wetland
- Proposed Lateral, Tail, Head Ditch (FLOW)
- False Sump

RAILROADS:

- Standard Gauge (CSX TRANSPORTATION)
- RR Signal Milepost (MILEPOST 35)
- Switch (SWITCH)
- RR Abandoned
- RR Dismantled

RIGHT OF WAY & PROJECT CONTROL:

- Secondary Horiz and Vert Control Point
- Primary Horiz Control Point
- Primary Horiz and Vert Control Point
- Exist Permanent Easment Pin and Cap
- New Permanent Easement Pin and Cap
- Vertical Benchmark
- Existing Right of Way Marker
- Existing Right of Way Line
- New Right of Way Line (R/W)
- New Right of Way Line with Pin and Cap
- New Right of Way Line with Concrete or Granite R/W Marker
- New Control of Access Line with Concrete C/A Marker
- Existing Control of Access
- New Control of Access
- Existing Easement Line (E)
- New Temporary Construction Easement (E)
- New Temporary Drainage Easement (TDE)
- New Permanent Drainage Easement (PDE)
- New Permanent Drainage / Utility Easement (DUE)
- New Permanent Utility Easement (PUE)
- New Temporary Utility Easement (TUE)
- New Aerial Utility Easement (AUE)

ROADS AND RELATED FEATURES:

- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut (C)
- Proposed Slope Stakes Fill (F)
- Proposed Curb Ramp (CR)
- Existing Metal Guardrail
- Proposed Guardrail
- Existing Cable Guiderail
- Proposed Cable Guiderail
- Equality Symbol
- Pavement Removal

VEGETATION:

- Single Tree
- Single Shrub
- Hedge
- Woods Line
- Orchard
- Vineyard (Vineyard)

EXISTING STRUCTURES:

MAJOR:

- Bridge, Tunnel or Box Culvert (CONC)
- Bridge Wing Wall, Head Wall and End Wall (CONC WW)

MINOR:

- Head and End Wall (CONC HW)
- Pipe Culvert
- Footbridge
- Drainage Box: Catch Basin, DI or JB (CB)
- Paved Ditch Gutter
- Storm Sewer Manhole
- Storm Sewer (S)

UTILITIES:

POWER:

- Existing Power Pole
- Proposed Power Pole
- Existing Joint Use Pole
- Proposed Joint Use Pole
- Power Manhole
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole
- H-Frame Pole
- U/G Power Line LOS B (S.U.E.*) (P)
- U/G Power Line LOS C (S.U.E.*) (P)
- U/G Power Line LOS D (S.U.E.*) (P)

TELEPHONE:

- Existing Telephone Pole
- Proposed Telephone Pole
- Telephone Manhole
- Telephone Pedestal
- Telephone Cell Tower
- U/G Telephone Cable Hand Hole
- U/G Telephone Cable LOS B (S.U.E.*) (T)
- U/G Telephone Cable LOS C (S.U.E.*) (T)
- U/G Telephone Cable LOS D (S.U.E.*) (T)
- U/G Telephone Conduit LOS B (S.U.E.*) (TC)
- U/G Telephone Conduit LOS C (S.U.E.*) (TC)
- U/G Telephone Conduit LOS D (S.U.E.*) (TC)
- U/G Fiber Optics Cable LOS B (S.U.E.*) (T FO)
- U/G Fiber Optics Cable LOS C (S.U.E.*) (T FO)
- U/G Fiber Optics Cable LOS D (S.U.E.*) (T FO)

WATER:

- Water Manhole
- Water Meter
- Water Valve
- Water Hydrant
- U/G Water Line LOS B (S.U.E*)
- U/G Water Line LOS C (S.U.E*)
- U/G Water Line LOS D (S.U.E*)
- Above Ground Water Line (A/G Water)

TV:

- TV Pedestal
- TV Tower
- U/G TV Cable Hand Hole
- U/G TV Cable LOS B (S.U.E.*) (TV)
- U/G TV Cable LOS C (S.U.E.*) (TV)
- U/G TV Cable LOS D (S.U.E.*) (TV)
- U/G Fiber Optic Cable LOS B (S.U.E.*) (TV FO)
- U/G Fiber Optic Cable LOS C (S.U.E.*) (TV FO)
- U/G Fiber Optic Cable LOS D (S.U.E.*) (TV FO)

GAS:

- Gas Valve
- Gas Meter
- U/G Gas Line LOS B (S.U.E.*) (G)
- U/G Gas Line LOS C (S.U.E.*) (G)
- U/G Gas Line LOS D (S.U.E.*) (G)
- Above Ground Gas Line (A/G Gas)

SANITARY SEWER:

- Sanitary Sewer Manhole
- Sanitary Sewer Cleanout
- U/G Sanitary Sewer Line (SS)
- Above Ground Sanitary Sewer (A/G Sanitary Sewer)
- SS Forced Main Line LOS B (S.U.E.*) (FSS)
- SS Forced Main Line LOS C (S.U.E.*) (FSS)
- SS Forced Main Line LOS D (S.U.E.*) (FSS)

MISCELLANEOUS:

- Utility Pole
- Utility Pole with Base
- Utility Located Object
- Utility Traffic Signal Box (S)
- Utility Unknown U/G Line LOS B (S.U.E.*) (?UTL)
- U/G Tank; Water, Gas, Oil
- Underground Storage Tank, Approx. Loc. (UST)
- A/G Tank; Water, Gas, Oil
- Geoenvironmental Boring
- U/G Test Hole LOS A (S.U.E.*)
- Abandoned According to Utility Records — AATUR
- End of Information — E.O.I.

PROJECT REFERENCE NO.	SHEET NO.
U-6055	1C-1
Location and Surveys	

SURVEY CONTROL SHEET U-6055
-FINAL-

BL

POINT	DESC.	NORTH	EAST	ELEVATION
1	BL-1	668381.1260	858772.2550	2607.04
2	BL-2	668670.5020	858847.4920	2615.31
3	BL-3	668839.5090	858879.9210	2626.53
4	BL-4	668873.3380	858634.7930	2625.51

BY1

POINT	DESC.	NORTH	EAST	ELEVATION
22	BL-2	668670.5020	858847.4920	2615.31
5	BY1-5	668600.6660	859042.8040	2619.53

BY2

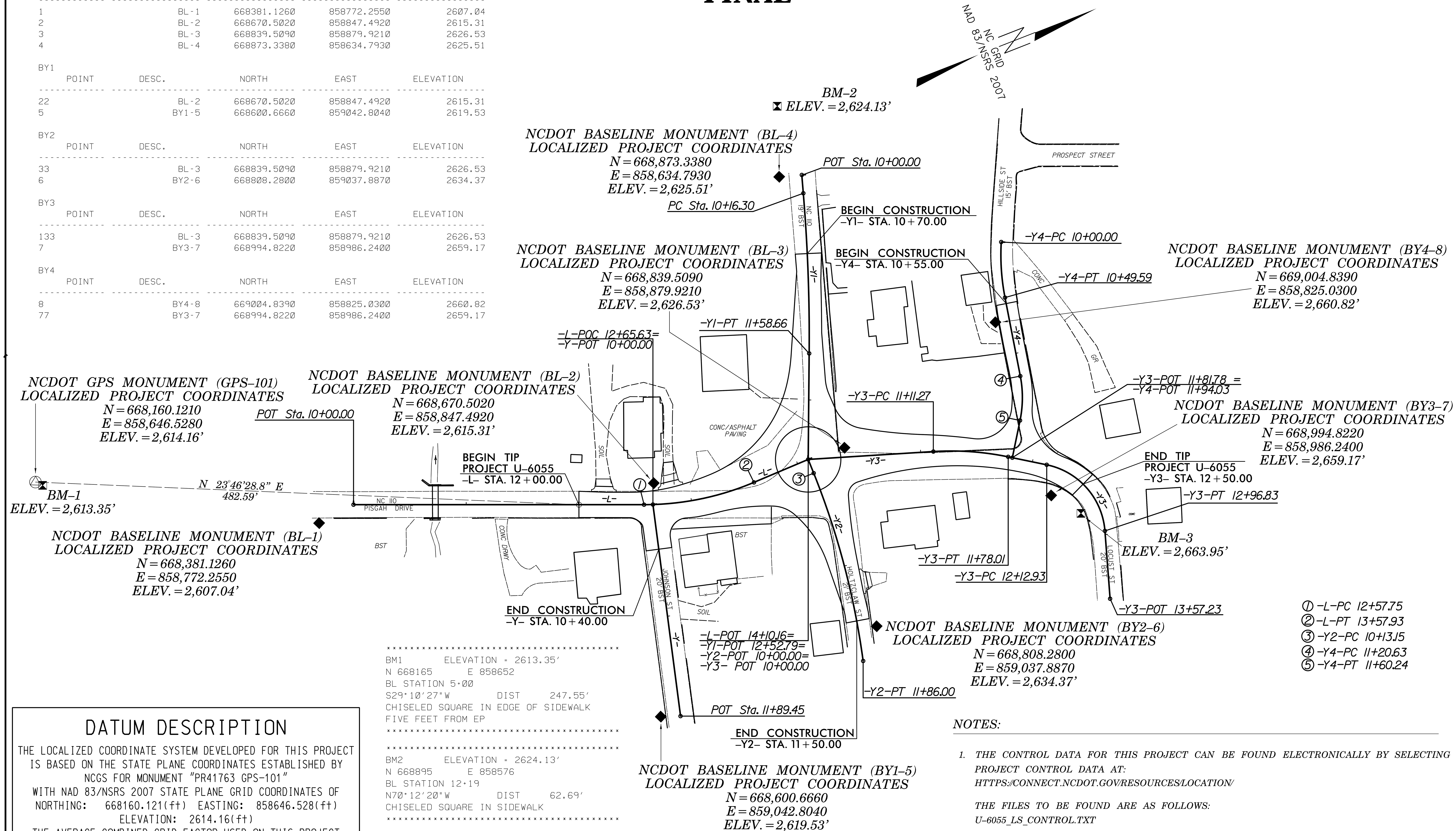
POINT	DESC.	NORTH	EAST	ELEVATION
33	BL-3	668839.5090	858879.9210	2626.53
6	BY2-6	668808.2800	859037.8870	2634.37

BY3

POINT	DESC.	NORTH	EAST	ELEVATION
133	BL-3	668839.5090	858879.9210	2626.53
7	BY3-7	668994.8220	858986.2400	2659.17

BY4

POINT	DESC.	NORTH	EAST	ELEVATION
8	BY4-8	669004.8390	858825.0300	2660.82
77	BY3-7	668994.8220	858986.2400	2659.17



BM1 ELEVATION = 2613.35'
N 668165 E 858652
BL STATION 5+00
S29°10'27"W DIST 247.55'
CHISELED SQUARE IN EDGE OF SIDEWALK
FIVE FEET FROM EP

BM2 ELEVATION = 2624.13'
N 668895 E 858576
BL STATION 12+19
N70°12'20"W DIST 62.69'
CHISELED SQUARE IN SIDEWALK

BM3 ELEVATION = 2663.95'
N 669014 E 859011
BY4 STATION 6+62
N 52° 23' 02.8" E DIST 30.88'
CHISELED SQUARE IN SIDEWALK

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCGS FOR MONUMENT "PR41763 GPS-101"
WITH NAD 83/NSRS 2007 STATE PLANE GRID COORDINATES OF NORTHING: 668160.121(ft) EASTING: 858646.528(ft)
ELEVATION: 2614.16(ft)
THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99976362
THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "PR41763 GPS-101" TO -L- STATION 12+00.00 IS
N 23°46'28.8" E 482.59' (ft)
ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
VERTICAL DATUM USED IS NAVD 88

GEOID MODEL - G??
NOTE: DRAWING NOT TO SCALE

NOTES:

1. THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT:
HTTPS://CONNECT.NCDOT.GOV/RESOURCES/LOCATION/

THE FILES TO BE FOUND ARE AS FOLLOWS:
U-6055_LS_CONTROL.TXT

SITE CALIBRATION INFORMATION HAS NOT BEEN PROVIDED FOR THIS PROJECT. IF FURTHER INFORMATION IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

INDICATES GEODETIC CONTROL MONUMENTS USED OR SET FOR HORIZONTAL PROJECT CONTROL BY THE NCDOT LOCATION AND SURVEYS UNIT.
PROJECT CONTROL ESTABLISHED USING GLOBAL POSITIONING SYSTEM.

6/2/99
10/12/2018
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6/2/99

PROJECT REFERENCE NO.	SHEET NO.
U-6055	1C-2
Location and Surveys	

SURVEY CONTROL SHEET U-6055
-FINAL-

-FINAL- ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
L	11+60.00	-15.43	668570.1367	858812.1275
L	12+90.00	-30.00	668693.4881	858842.8255
L	13+55.00	-43.00	668749.9508	858836.3325
L	13+59.68	41.44	668756.4373	858920.6392
L	12+91.00	20.00	668682.4426	858891.5999
L	12+26.00	14.41	668620.7098	858863.9790

-FINAL- ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y	10+33.00	13.55	668641.8002	858893.6544
Y	10+42.00	-13.45	668665.8329	858908.9037

-FINAL- ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y1	12+00.00	39.00	668789.2967	858814.2997
Y1	10+60.00	14.55	668861.0030	858693.3179
Y1	11+87.00	-23.26	668851.9049	858825.4908

-FINAL- ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y2	11+43.99	18.76	668776.1943	859017.8072
Y2	11+44.51	10.89	668783.8531	859019.7096
Y2	11+50.00	-12.86	668806.1921	859029.4616
Y2	11+08.04	-16.85	668816.8730	858987.7830
Y2	10+49.01	-26.81	668831.9971	858928.0056

-FINAL- ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y3	10+50.00	-39.00	668865.2823	858855.9643
Y3	11+47.00	-24.00	668955.3548	858903.5361
Y3	12+29.63	-24.94	669032.2239	858953.4935
Y3	12+51.60	-14.01	669038.4166	858983.2399
Y3	12+55.93	15.97	669011.9484	858997.9271
Y3	12+00.65	20.46	668979.6132	858969.8808
Y3	10+74.30	27.48	668868.1220	858926.6878
Y3	10+48.27	29.34	668842.7688	858920.5166

-FINAL- ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y4	11+51.00	21.00	668979.5054	858896.3749
Y4	10+83.00	10.88	669004.0561	858838.5973
Y4	10+45.00	-11.73	669033.1412	858805.5678
Y4	10+44.79	-41.19	669062.0253	858811.3797

L -FINAL-

TYPE	STATION	NORTH	EAST
POT	10+00.00	668415.5304	858768.1401
PC	12+57.75	668655.5278	858862.1399
PT	13+57.93	668753.5526	858879.2642
POT	14+10.16	668805.7612	858877.8329

Y -FINAL-

TYPE	STATION	NORTH	EAST
POT	10+00.00	668662.9137	858864.8992
POT	11+89.45	668617.2030	859048.7493

Y1 -FINAL-

TYPE	STATION	NORTH	EAST
POT	10+00.00	668892.6184	858640.5860
PC	10+16.30	668887.9443	858656.1991
PT	11+58.66	668840.9130	858790.5172
POT	12+52.79	668805.7612	858877.8329

Y2 -FINAL-

TYPE	STATION	NORTH	EAST
POT	10+00.00	668805.7612	858877.8329
PC	10+13.15	668805.8611	858890.9790
PT	11+86.00	668785.9287	859062.2408

Y3 -FINAL-

TYPE	STATION	NORTH	EAST
POT	10+00.00	668805.7612	858877.8329
PC	11+11.27	668911.7142	858911.8109
PT	11+78.01	668971.8105	858940.3832
PC	12+12.93	669001.0760	858959.4440
PT	12+96.83	669027.7517	859032.9472
POT	13+57.23	669010.0640	859090.6925

Y4 -FINAL-

TYPE	STATION	NORTH	EAST
PC	10+00.00	669035.6404	858760.5177
PT	10+49.59	669020.7788	858807.6927
PC	11+20.63	669007.9739	858877.5762
PT	11+60.24	668993.4059	858914.1288
POT	11+94.03	668974.9672	858942.4392

PDE

-FINAL- ROW MARKER PERMANENT EASEMENT-E

ALIGN	STATION	OFFSET	NORTH	EAST
L	10+71.86	-15.21	668487.9887	858780.1871
L	10+70.93	-62.00	668504.1867	858736.2767
L	11+56.00	-53.00	668580.1151	858775.6827

DUE

-FINAL- ROW MARKER PERMANENT EASEMENT-E

ALIGN	STATION	OFFSET	NORTH	EAST
L	11+25.00	-15.34	668537.5156	858799.4439
L	11+25.00	-36.00	668545.0504	858780.2064
L	12+04.00	-31.00	668616.7859	858813.6729
L	12+20.00	-23.23	668628.8516	858826.7396

PUE

-FINAL- ROW MARKER PERMANENT EASEMENT-E

ALIGN	STATION	OFFSET	NORTH	EAST
L	12+87.00	-40.00	668693.4654	858832.4982
L	12+86.00	29.72	668674.7088	858899.6569
L	11+25.00	26.00	668522.4393	858837.9363
L	11+25.00	14.66	668526.5747	858827.3778

PUE

-FINAL- ROW MARKER PERMANENT EASEMENT-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y1	11+96.00	38.39	668791.3601	858810.8184
Y1	11+48.00	31.02	668816.0105	858769.2286
Y1	11+48.00	45.00	668803.0018	858764.0952
Y1	11+16.00	45.00	668814.1078	858735.0775
Y1	11+16.00	25.64	668832.2609	858741.8112
Y1	10+94.00	21.54	668843.5031	858722.8435
Y1	10+73.00	29.00	668843.2333	858700.8822
Y1	10+76.00	45.00	668827.1440	858698.4931
Y1	10+54.00	49.00	668830.1072	858676.9918
Y1	10+48.00	14.77	668864.4838	858681.9505
Y1	11+12.00	-17.49	668874.0977	858753.0158

PUE

-FINAL- ROW MARKER PERMANENT EASEMENT-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y2	10+60.00	-24.54	668829.1488	858939.2633
Y2	10+63.00	-42.00	668846.3805	858943.4724

PUE

-FINAL- ROW MARKER PERMANENT EASEMENT-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y3	10+49.00	-70.00	668873.7966	858826.1397
Y3	11+54.00	-31.32	668965.5943	858900.4999
Y3	10+57.39	27.91	668851.8838	858921.9321

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCGS FOR MONUMENT "PR41763 GPS-101"
WITH NAD 83/NSRS 2007 STATE PLANE GRID COORDINATES OF
NORTHING: 668160.121(ft) EASTING: 858646.528(ft)
ELEVATION: 2614.16(ft)
THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99976362
THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "PR41763 GPS-101" TO -L- STATION 12+00.00 IS
N 23°46'28.8" E 482.59' (ft)
ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
VERTICAL DATUM USED IS NAVD 88

NOTES:

1. *THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT:*
   HTTPS://CONNECT.NCDOT.GOV/RESOURCES/LOCATION/

   THE FILES TO BE FOUND ARE AS FOLLOWS:
   U-6055_LS_CONTROL.TXT

   SITE CALIBRATION INFORMATION HAS NOT BEEN PROVIDED FOR THIS PROJECT. IF FURTHER INFORMATION IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

INDICATES GEODETIC CONTROL MONUMENTS USED OR SET FOR HORIZONTAL PROJECT CONTROL BY THE NCDOT LOCATION AND SURVEYS UNIT.
PROJECT CONTROL ESTABLISHED USING GLOBAL POSITIONING SYSTEM.

10/12/2018
X:\NCDOT\U-6055\Roadway\Proj\u6055_ls_1c-2.dgn

3/20/18

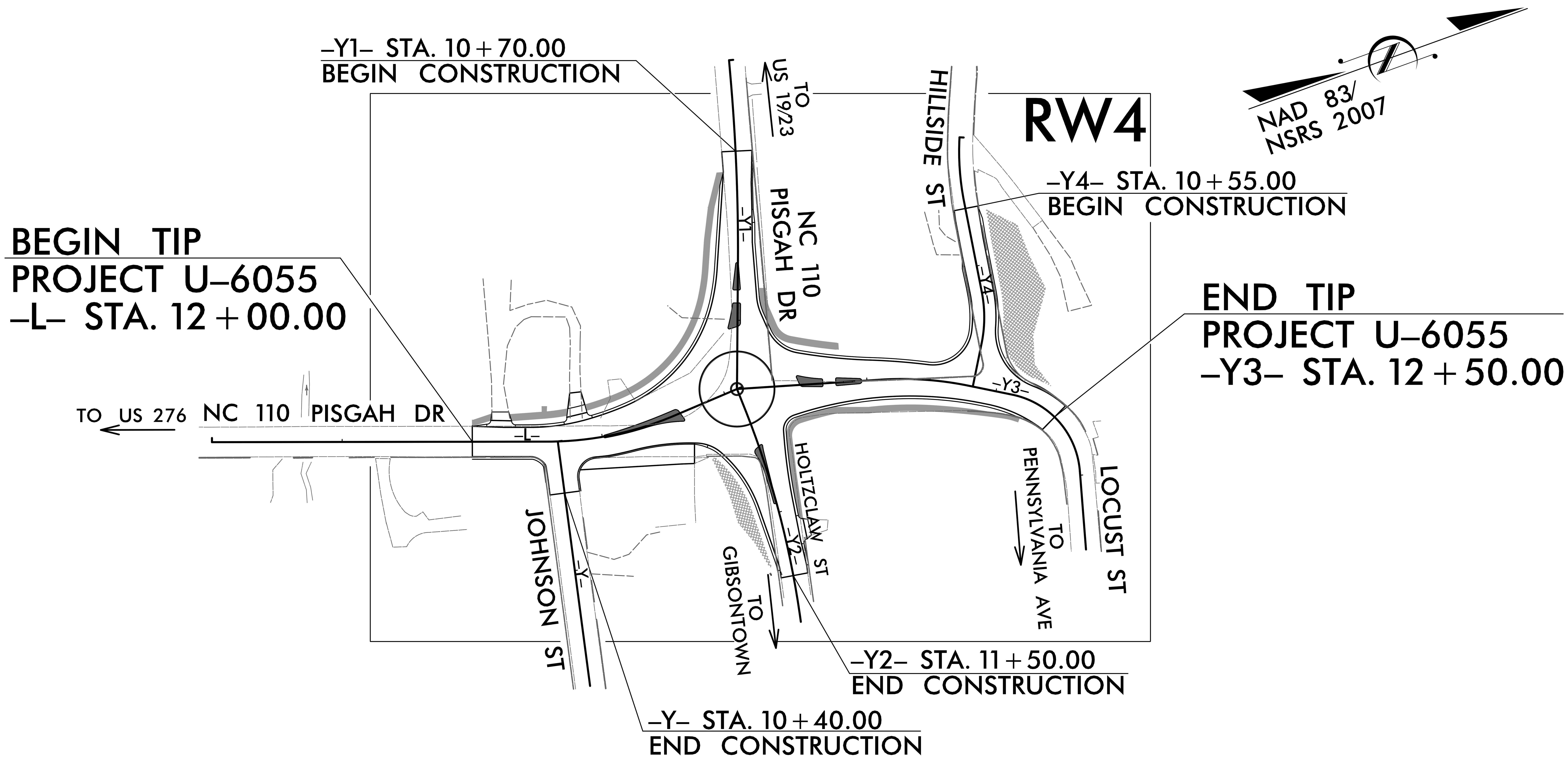
TIP PROJECT: U-6055

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-6055	RW01	

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SURVEY CONTROL, EXISTING CENTERLINES, RIGHT OF WAY, EASEMENTS AND PROPERTY TIES

HAYWOOD COUNTY



GRAPHIC SCALE

50 25 0 50 100

PLANS

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT
IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY
NCGS FOR MONUMENT "PR41763 GPS-101"
WITH NAD 83/NSRS 2007 STATE PLANE GRID COORDINATES OF
NORTHING: 668160.121(ft) EASTING: 858646.528(ft)
ELEVATION: 2614.16(ft)
THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT
(GROUND TO GRID) IS: 0.99976362
THE N.C. LAMBERT GRID BEARING AND
LOCALIZED HORIZONTAL GROUND DISTANCE FROM
"PR41763 GPS-101" TO -L- STATION 12+00 IS
N 23°46'28.8" E 482.59(ft)
ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
VERTICAL DATUM USED IS NAVD 88

Prepared In the Office of:

DIVISION OF HIGHWAYS

1000 Birch Ridge Dr., Raleigh NC, 27610

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
APRIL 18, 2018

LETTING DATE:
DECEMBER 11, 2018

PROFESSIONAL LAND SURVEYOR

10/17/2018 1:14:46 PM PDT

SEAL L-4775

DocuSigned by:
Matt Cornwell

SIGNATURE:

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

3/19/18

PROJECT REFERENCE NO.	SHEET NO.
U-6055	RW02D-1

Location and Surveys

PROPOSED ALIGNMENT CONTROL SHEET

REVISIONS

L

TYPE	STATION	NORTH	EAST
POT	10·00.00	668415.5304	858768.1401
PC	12·57.75	668655.5278	858862.1399
PT	13·57.93	668753.5526	858879.2642
POT	14·10.16	668805.7612	858877.8329

Y

TYPE	STATION	NORTH	EAST
POT	10·00.00	668662.9137	858864.8992
POT	11·89.45	668617.2030	859048.7493

Y1

TYPE	STATION	NORTH	EAST
POT	10·00.00	668892.6184	858640.5860
PC	10·16.30	668887.9443	858656.1991
PT	11·58.66	668840.9130	858790.5172
POT	12·52.79	668805.7612	858877.8329

Y2

TYPE	STATION	NORTH	EAST
POT	10·00.00	668805.7612	858877.8329
PC	10·13.15	668805.8611	858890.9790
PT	11·86.00	668785.9287	859062.2408

Y3

TYPE	STATION	NORTH	EAST
POT	10·00.00	668805.7612	858877.8329
PC	11·11.27	668911.7142	858911.8109
PT	11·78.01	668971.8105	858940.3832
PC	12·12.93	669001.0760	858959.4440
PT	12·96.83	669027.7517	859032.9472
POT	13·57.23	669010.0640	859090.6925

Y4

TYPE	STATION	NORTH	EAST
PC	10·00.00	669035.6404	858760.5177
PT	10·49.59	669020.7788	858807.6927
PC	11·20.63	669007.9739	858877.5762
PT	11·60.24	668993.4059	858914.1288
POT	11·94.03	668974.9672	858942.4392

NOTES:

1. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.

2. THE PROPOSED ALIGNMENT CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATINO REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

3/20/18

PROJECT REFERENCE NO.	SHEET NO.
U-6055	RW03E-1

Location and Surveys

PROJECT SURVEYOR

NORTH CAROLINA PROFESSIONAL SEAL L-4775 LAND SURVEYOR MATTHEW T. CORNWELL

REVISIONS

RIGHT OF WAY & PERMANENT EASEMENT CONTROL SHEET

I, Matthew T. Cornwell, a Professional Land Surveyor in the state of North Carolina hereby certify to the best of my knowledge and belief that the following work item(s) (Base map Compilation, R/W Staking) performed under my responsible charge meet NCDOT Survey Standards as directed in the NCDOT Location & Surveys guidelines and procedures.

I further certify that the data compiled came from available surveys/mapping performed by others and provided to me by NCDOT and do not certify to the accuracy or quality of the individual data sources.

I further certify that the right of way and permanent easement points shown herein and outlined in the tables shown hereon (localized coordinates, station/offset) have been checked and are accurate representations of the right of way and permanent easement points depicted on the corresponding highway plans. I also certify that the right of way and permanent easement points shown herein have been field monumented under my supervision from existing survey control provided by others; that the depicted property data shown herein were surveyed by others; and these monuments denote the right of way and easement boundaries at the time of staking which may be subject to change due to right of way revisions (See deeds for final determination).

Witness my original signature, registration number and seal this 20th day of March, 2018.

Matthew T. Cornwell

Digitally signed by Matthew T. Cornwell
DN: cn=Matthew T. Cornwell, o=TGS Engineers, ou=Location & Surveys, email=mcornwell@tgsengineers.com, c=US
Date: 2018.03.20 07:53:45 -04'00'

Professional Land Surveyor L-4775 PLS # Seal

-L- ROW MARKER IRON PIN AND CAP

ALIGN	STATION	OFFSET	NORTH	EAST	
L	11+60.00	-15.43	668570.1367	858812.1275	MAG NAIL
L	12+26.00	14.41	668620.7098	858863.9790	
L	12+90.00	-30.00	668693.4881	858842.8255	
L	12+91.00	20.00	668682.4426	858891.5999	MAG NAIL
L	13+55.00	-43.00	668749.9508	858836.3325	
L	13+59.68	41.44	668756.4373	858920.6392	

-Y- ROW MARKER IRON PIN AND CAP

ALIGN	STATION	OFFSET	NORTH	EAST	
Y	10+33.00	13.55	668641.8002	858893.6544	
Y	10+42.00	-13.45	668665.8329	858908.9037	MAG NAIL

-Y1- ROW MARKER IRON PIN AND CAP

ALIGN	STATION	OFFSET	NORTH	EAST	
Y1	10+60.00	14.55	668861.0030	858693.3179	MAG NAIL
Y1	11+87.13	-22.87	668851.4967	858825.4666	MAG NAIL
Y1	12+00.00	39.00	668789.2967	858814.2997	

-Y2- ROW MARKER IRON PIN AND CAP

ALIGN	STATION	OFFSET	NORTH	EAST	
Y2	11+08.06	-16.78	668816.7988	858987.7898	MAG NAIL
Y2	11+44.04	18.74	668776.2103	859017.8602	
Y2	11+44.56	10.89	668783.8413	859019.7586	MAG NAIL
Y2	11+50.00	-12.86	668806.1921	859029.4616	

-Y3- ROW MARKER IRON PIN AND CAP

ALIGN	STATION	OFFSET	NORTH	EAST	
Y3	10+39.77	39.88	668831.4533	858927.9525	MAG NAIL
Y3	10+48.27	29.34	668842.7688	858920.5166	MAG NAIL
Y3	10+50.00	-39.00	668865.2823	858855.9643	
Y3	10+74.40	27.40	668868.2402	858926.6437	MAG NAIL
Y3	11+47.00	-24.00	668955.3548	858903.5361	
Y3	12+00.62	20.18	668979.7441	858969.6332	MAG NAIL
Y3	12+50.00	-14.01	669037.6380	858981.4588	
Y3	12+55.93	15.97	669011.9484	858997.9271	MAG NAIL

-Y4- ROW MARKER IRON PIN AND CAP

ALIGN	STATION	OFFSET	NORTH	EAST
Y4	10+45.00	-11.73	669033.1412	858805.5678
Y4	10+58.00	-30.00	669048.7713	858821.3743
Y4	10+83.00	10.88	669004.0561	858838.5973
Y4	11+51.00	21.00	668979.5054	858896.3749
Y4	11+59.00	-40.00	669027.8632	858934.4967

-L- ROW MARKER PERMANENT EASEMENT

ALIGN	STATION	OFFSET	NORTH	EAST	
L	10+70.93	-62.00	668504.1867	858736.2767	
L	10+71.86	-15.21	668487.9887	858780.1871	
L	11+25.00	-36.00	668545.0504	858780.2064	
L	11+25.00	-15.34	668537.5156	858799.4439	MAG NAIL
L	11+25.00	26.00	668522.4393	858837.9363	
L	11+25.00	14.66	668526.5747	858827.3778	
L	11+56.00	-53.00	668580.1151	858775.6827	
L	12+04.00	-31.00	668616.7859	858813.6729	
L	12+20.00	-23.23	668628.8516	858826.7396	
L	12+86.00	29.72	668674.7088	858899.6569	MAG NAIL
L	12+87.00	-40.00	668693.4654	858832.4982	

-Y1- ROW MARKER PERMANENT EASEMENT

ALIGN	STATION	OFFSET	NORTH	EAST	
Y1	10+48.00	14.77	668864.4838	858681.9505	MAG NAIL
Y1	10+54.00	49.00	668830.1072	858676.9918	
Y1	10+73.00	29.00	668843.2333	858700.8822	
Y1	10+76.00	45.00	668827.1440	858698.4931	
Y1	10+94.00	21.54	668843.5031	858722.8435	
Y1	11+12.00	-17.23	668873.8547	858752.9263	MAG NAIL
Y1	11+16.00	25.64	668832.2609	858741.8112	
Y1	11+16.00	45.00	668814.1078	858735.0775	
Y1	11+48.00	45.00	668803.0018	858764.0952	
Y1	11+48.00	31.02	668816.0105	858769.2286	
Y1	11+96.00	38.39	668791.3601	858810.8184	

-Y2- ROW MARKER PERMANENT EASEMENT

ALIGN	STATION	OFFSET	NORTH	EAST	
Y2	10+59.94	-23.94	668828.5513	858939.1656	MAG NAIL
Y2	10+63.00	-42.00	668846.3805	858943.4724	

-Y3- ROW MARKER PERMANENT EASEMENT

ALIGN	STATION	OFFSET	NORTH	EAST	
Y3	10+49.00	-70.00	668873.7966	858826.1397	
Y3	10+57.43	27.40	668852.0808	858921.4615	MAG NAIL
Y3	11+54.00	-31.32	668965.5943	858900.4999	

NOTES:

1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.

PROJECT REFERENCE NO.	SHEET NO.
U-6055	RW04

Location and Surveys

I, Matthew T. Cornwell, a Professional Land Surveyor in the state of North Carolina hereby certify to the best of my knowledge and belief that the following work item(s) (Base map Compilation, R/W Staking) performed under my responsible charge meet NCDOT Survey Standards as directed in the NCDOT Location & Surveys guidelines and procedures.

I further certify that the data compiled came from available surveys/mapping performed by others and provided to me by NCDOT and do not certify to the accuracy or quality of the individual data sources.

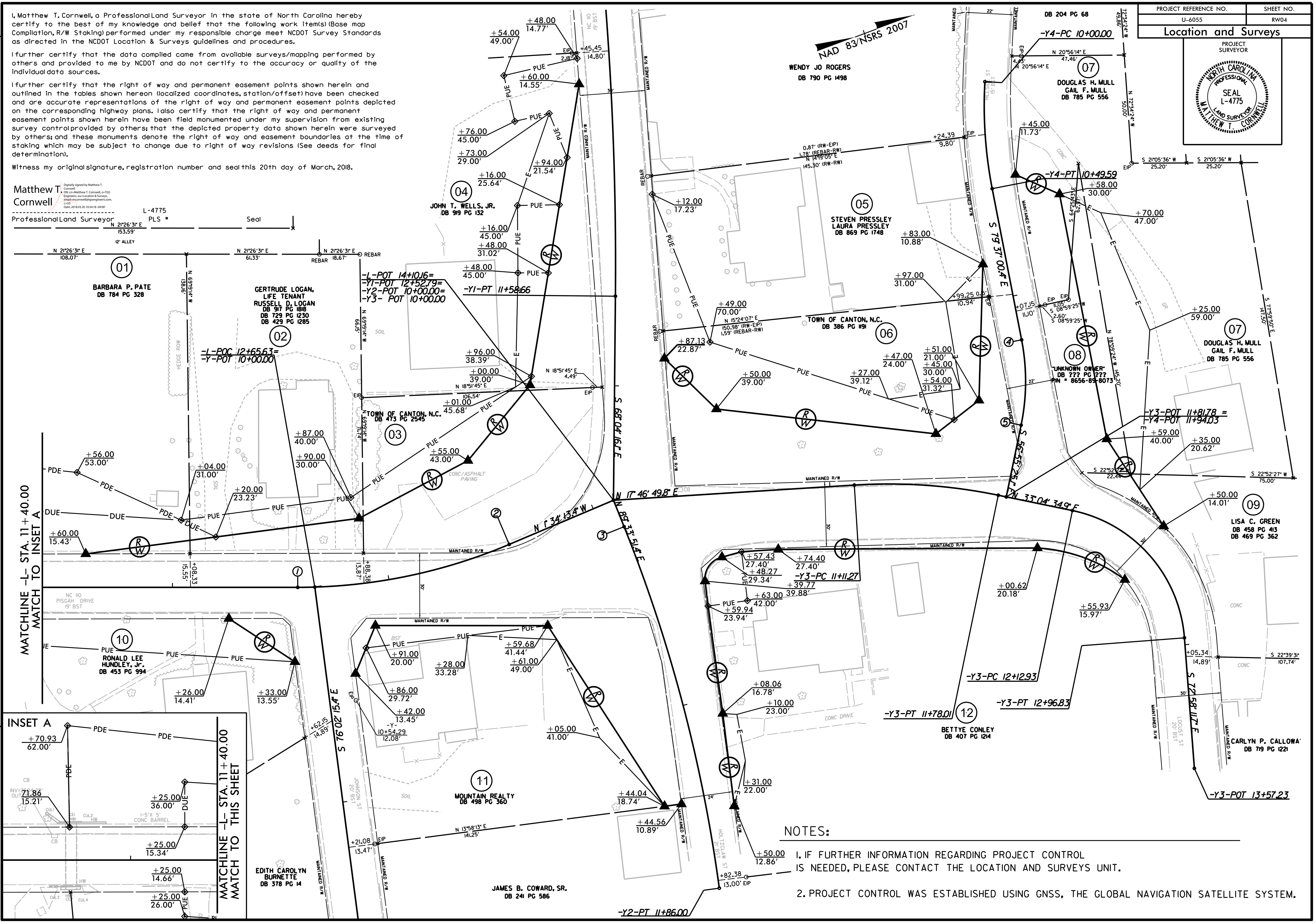
I further certify that the right of way and permanent easement points shown herein and outlined in the tables shown hereon (localized coordinates, station/offset) have been checked and are accurate representations of the right of way and permanent easement points depicted on the corresponding highway plans. I also certify that the right of way and permanent easement points shown herein have been field monumented under my supervision from existing survey control provided by others; that the depicted property data shown herein were surveyed by others; and these monuments denote the right of way and easement boundaries at the time of staking which may be subject to change due to right of way revisions (See deeds for final determination).

Witness my original signature, registration number and seal this 20th day of March, 2018.

Matthew T. Cornwell

Digitally signed by Matthew T. Cornwell
DN: cn=Matthew T. Cornwell, o=TGS Engineers, ou=Location & Surveys, email=mcornwell@tgsengineers.com, c=US
Date: 2018.03.20 10:34:18 -04'00'

Professional Land Surveyor — PLS # L-4775 — Seal



NOTES:

1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.

6/2/99

PROJECT REFERENCE NO.	SHEET NO.
U-6055	2A-1
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER
SEAL 35018 JIMMY L. TERRY 10/15/2018 11:07:10 AM PDT	SEAL 025536 Wanda H. Austin 10/15/2018 10:21:47 AM EDT

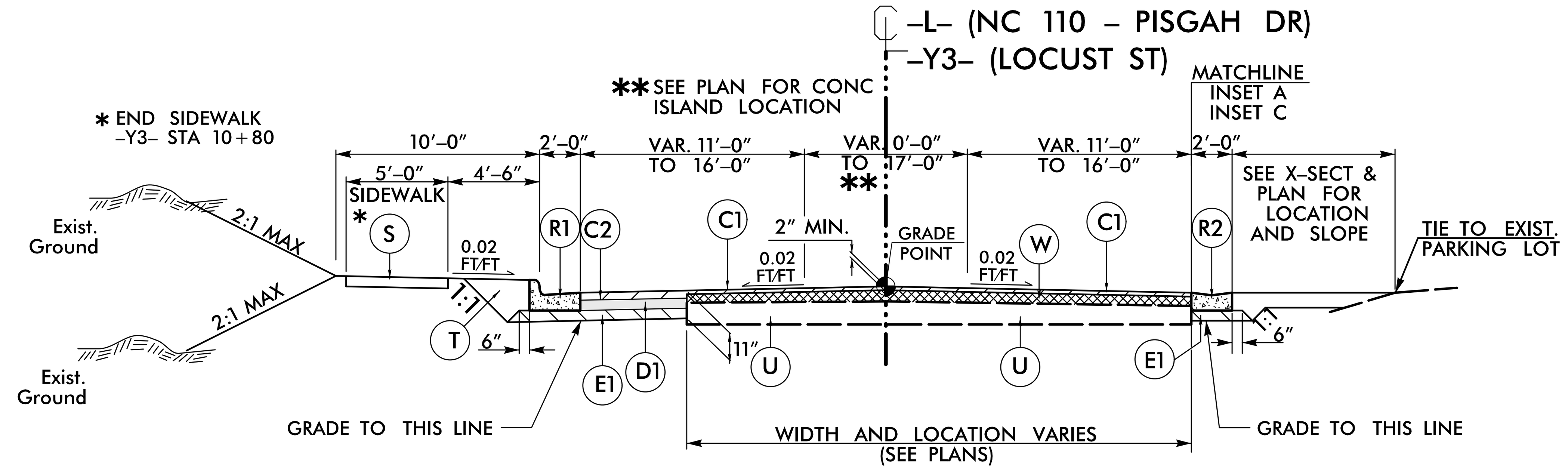
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

TGS ENGINEERS
804-C N. LAFAYETTE ST
SHELBY, NC 28150
PH (704) 476-0003
CORP. LICENSE NO.: C-0275

PAVEMENT SCHEDULE

C1	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C2	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C3	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 1.5" IN DEPTH.
D1	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
D2	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2½" IN DEPTH OR GREATER THAN 4" IN DEPTH.
E1	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
E2	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 3" IN DEPTH OR GREATER THAN 5½" IN DEPTH.
J1	10" AGGREGATE BASE COURSE
R1	2'-6" CONCRETE CURB AND GUTTER.
R2	2'-0" VALLEY GUTTER.
R3	1'-6" CONCRETE CURB AND GUTTER
R4	9" X 18" CONCRETE CURB.
R5	7" TRUCK MOUNTABLE CONC ISLAND
S	CONCRETE SIDEWALK
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V	MILLING EXISTING PAVEMENT, SEE SHEET 2A-2 FOR DETAIL
W	WEDGING EXISTING PAVEMENT, SEE SHEET 2A-2 FOR DETAILS

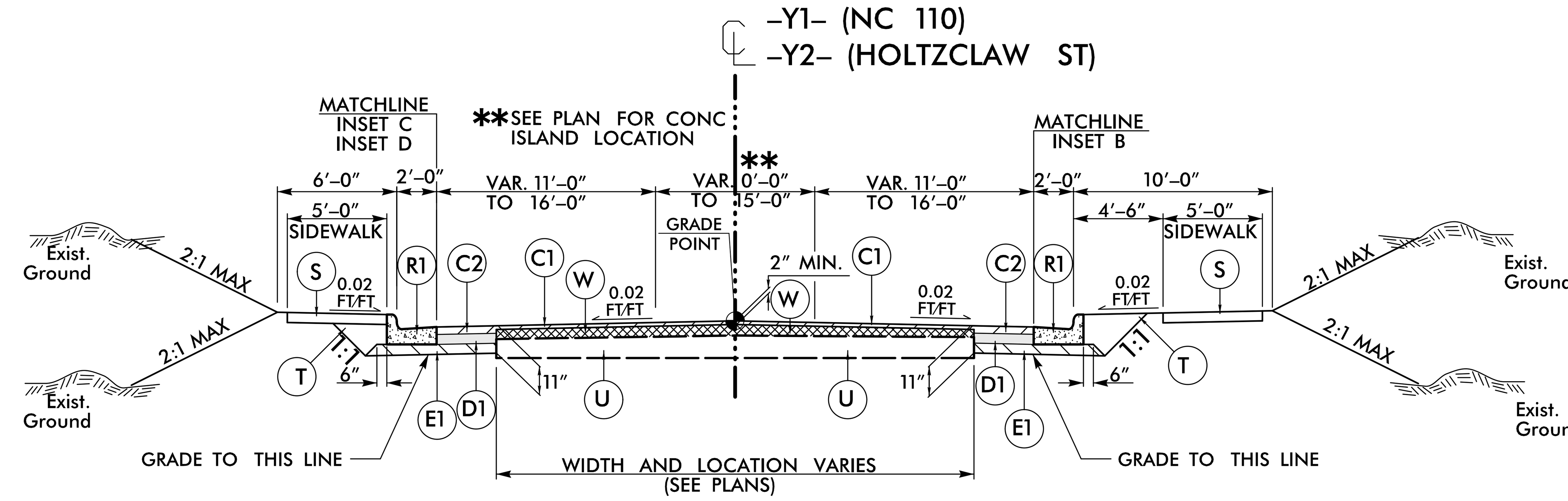
PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.



TYPICAL SECTION NO. 1

USE TYPICAL SECTION NO. 1
-L- STA. 12+25.00 TO -L- STA. 13+65.16
-Y3- STA. 10+45.00 TO -Y3- STA. 12+25.00

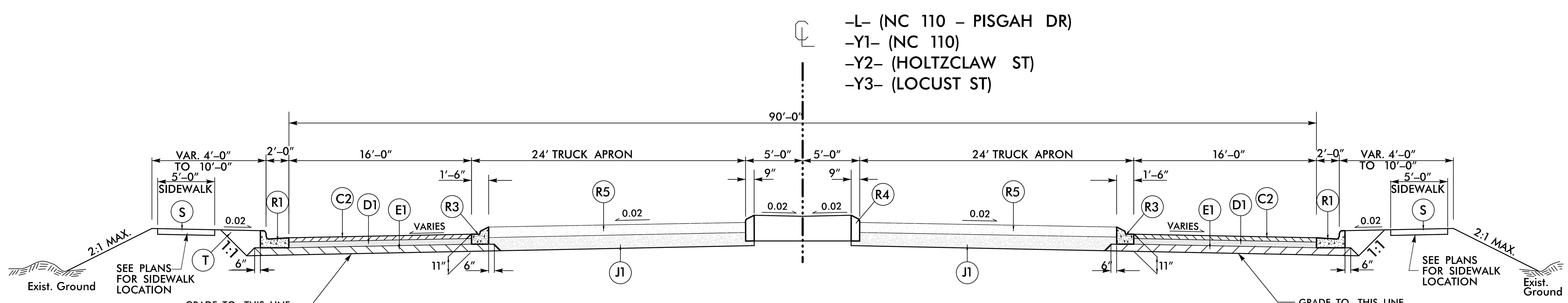
NOTE: TRANSITION BETWEEN TYP. SECT. NO. 1 AND EXISTING AS FOLLOWS:
-L- STA. 12+00.00 TO -L- STA. 12+25.00
-Y3- STA. 12+25.00 TO -Y3- STA. 12+50.00



TYPICAL SECTION NO. 2

USE TYPICAL SECTION NO. 2
-Y1- STA. 10+95.00 TO -Y1- STA. 12+07.79
-Y2- STA. 10+45.00 TO-Y2- STA. 11+25.00

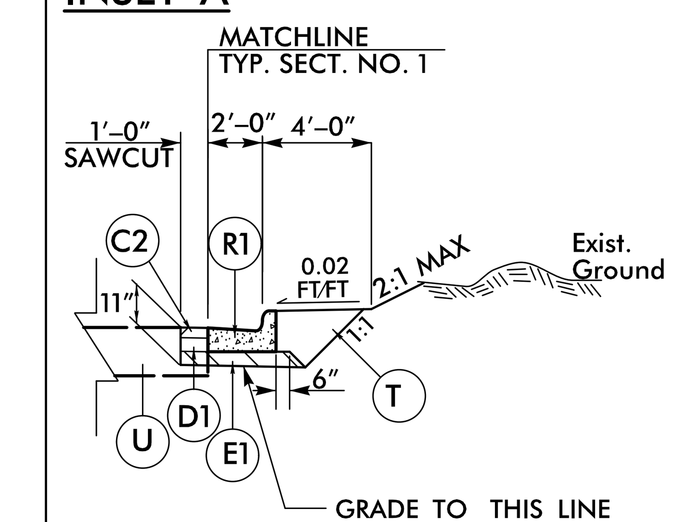
NOTE: TRANSITION BETWEEN TYP. SECT. NO. 2 AND EXISTING AS FOLLOWS:
-Y1- STA. 10+70.00 TO -Y1- STA. 10+95.00
-Y2- STA. 11+25.00 TO -Y2- STA. 11+50.00



TYPICAL SECTION NO. 3

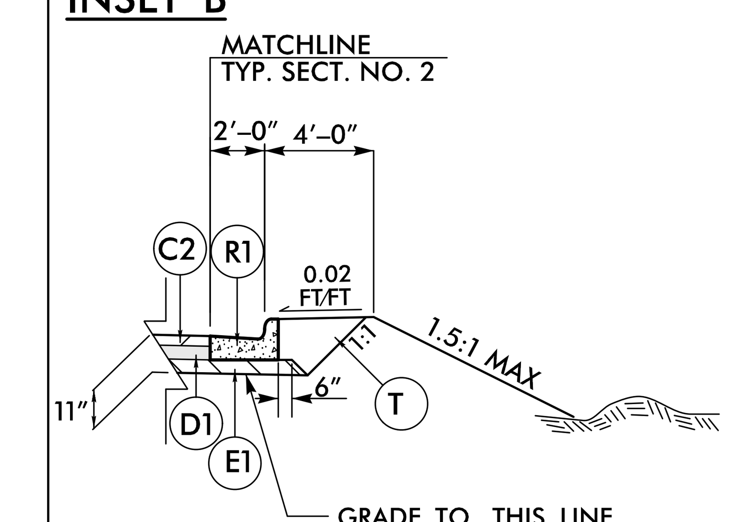
USE TYPICAL SECTION NO. 3
-L- STA. 13+65.16 TO -L- STA. 14+10.16
-Y1- STA. 12+07.79 TO -Y1- STA. 12+52.79
-Y2- STA. 10+00.00 TO-Y2- STA. 10+45.00
-Y3- STA. 10+00.00 TO -Y3- STA. 10+45.00

INSET A



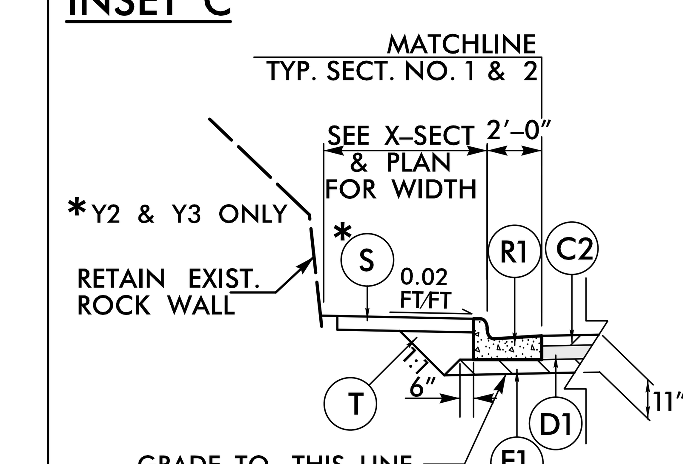
USE INSET A
-L- STA. 12+00.00 TO -L- STA. 12+46.80 RT

INSET B



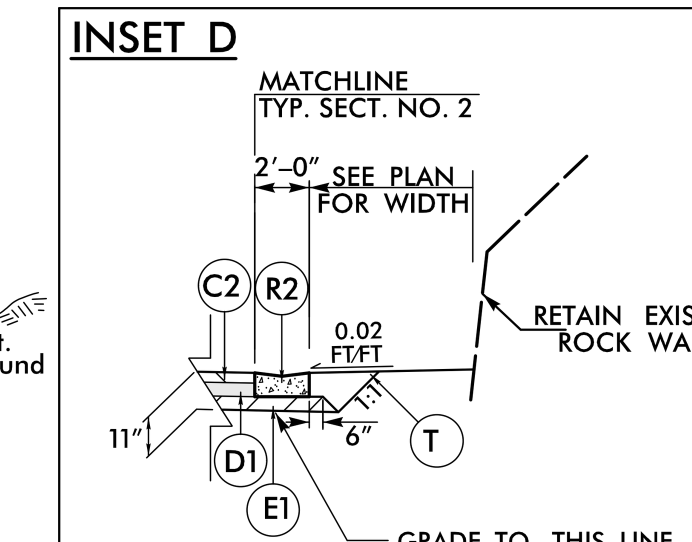
USE INSET B
-Y2- STA. 10+45.00 TO -Y2- STA. 11+25.00 RT

INSET C



USE INSET C
-Y1- STA. 11+15.00 TO -Y1- STA. 11+87.65 LT
-Y2- STA. 10+45.00 TO -Y2- STA. 11+09.00 LT
-Y3- STA. 10+45.00 TO -Y3- STA. 12+25.00 RT

INSET D



USE INSET D
-Y1- STA. 10+70.00 TO -Y1- STA. 11+15.00 LT

10/12/2018
X:\NCDOT\U-6055\Roadway\Proj\U-6055_Rdy_typ.dgn
User:mel.vp

6/2/99

PROJECT REFERENCE NO.	SHEET NO.
U-6055	2A-2
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 35018 ENGINEER JIMMY L. TERRY 10/15/2018 7:07:10 AM PDT	NORTH CAROLINA PROFESSIONAL SEAL 025536 ENGINEER Wanda H. Austin 10/15/2018 10:21:47 AM EDT

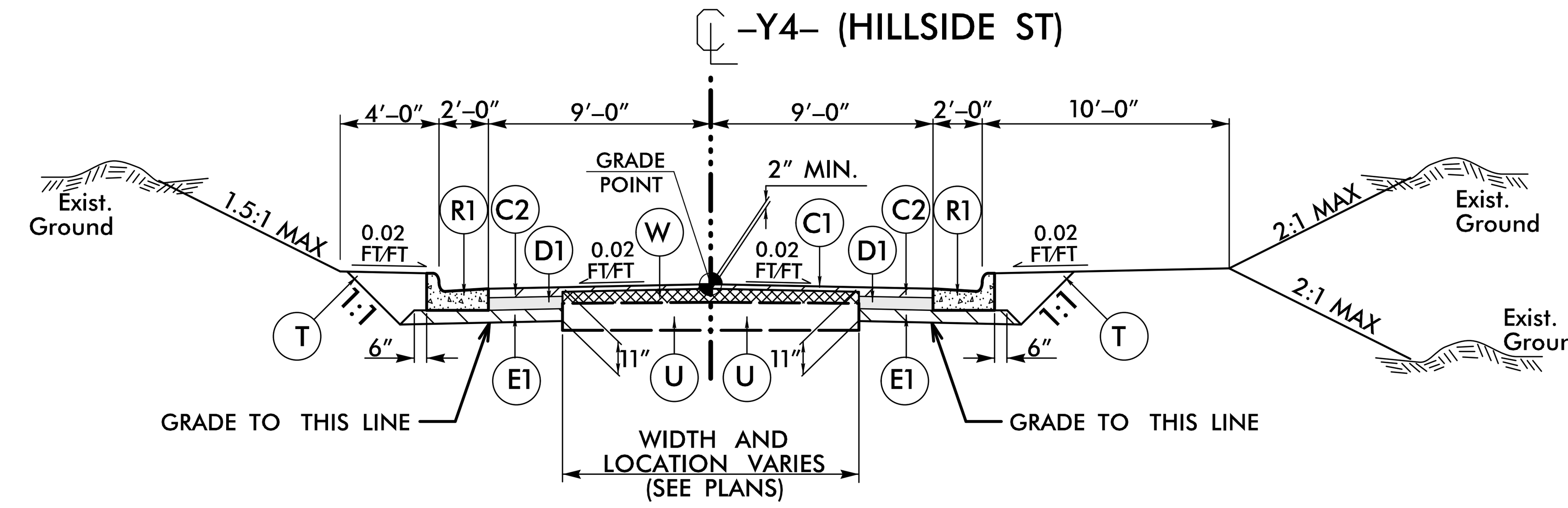
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

TGS ENGINEERS
804-C N. LAFAYETTE ST
SHELBY, NC 28150
PH (704) 476-0003
CORP. LICENSE NO.: C-0275

PAVEMENT SCHEDULE

C1	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B
C2	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B
C3	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B
D1	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C
D2	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C
E1	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C
E2	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0C
R1	2'-6" CONCRETE CURB AND GUTTER.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V	MILLING EXISTING PAVEMENT, SEE THIS SHEET FOR DETAIL
W	WEDGING EXISTING PAVEMENT, SEE THIS SHEET FOR DETAILS

PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.



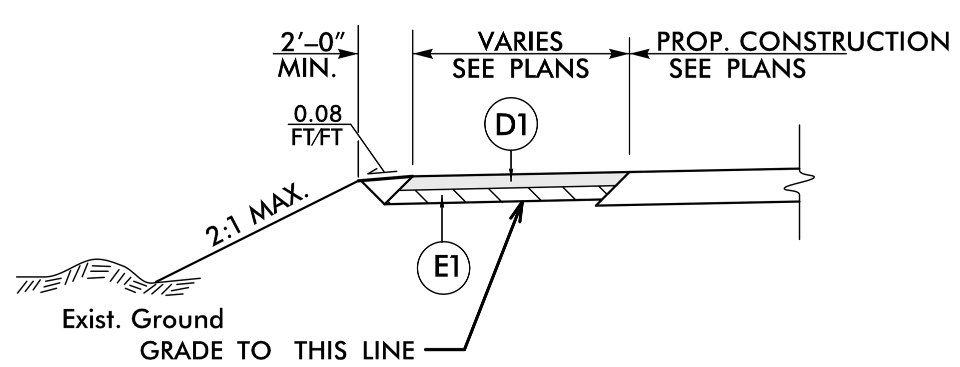
NOTE:
USE FULL DEPTH PAVEMENT FROM
-Y4- STA 10+90.00 TO 11+83.03

TYPICAL SECTION NO. 4

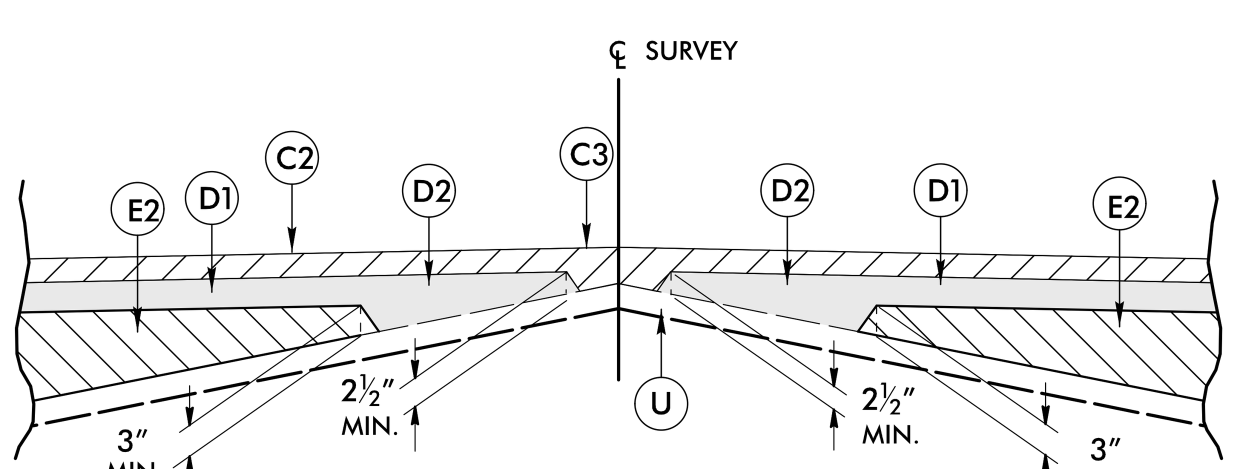
USE TYPICAL SECTION NO. 4
-Y4- STA. 10+80.00 TO -Y4- STA. 11+83.03 LT
-Y4- STA. 11+15.00 TO -Y4- STA. 11+83.03 RT

NOTE: TRANSITION BETWEEN TYP. SECT. NO. 4 AND EXISTING AS FOLLOWS:
-Y4- STA. 10+55.00 TO -Y4- STA. 10+80.00 LT
-Y4- STA. 10+90.00 TO -Y4- STA. 11+15.00 RT
NOTE: RETAIN EXISTING CURB
-Y4- STA 10+55.00 TO 10+90.00 RT

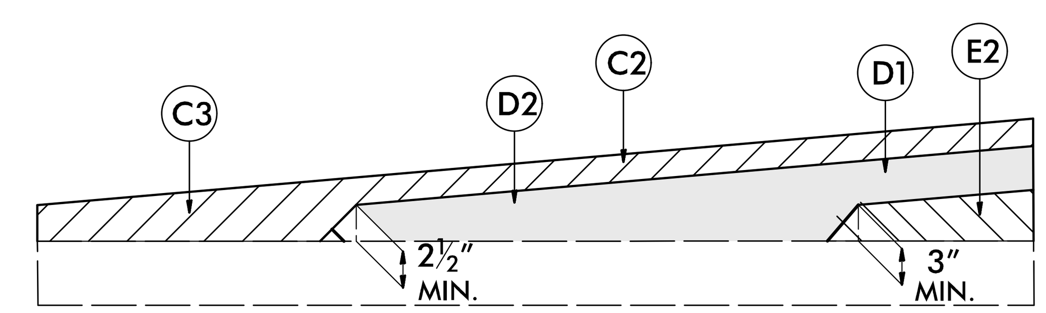
TEMPORARY PAVEMENT DETAIL



-Y1- STA. 11+61± RT TO -L- STA. 12+95 ± LT

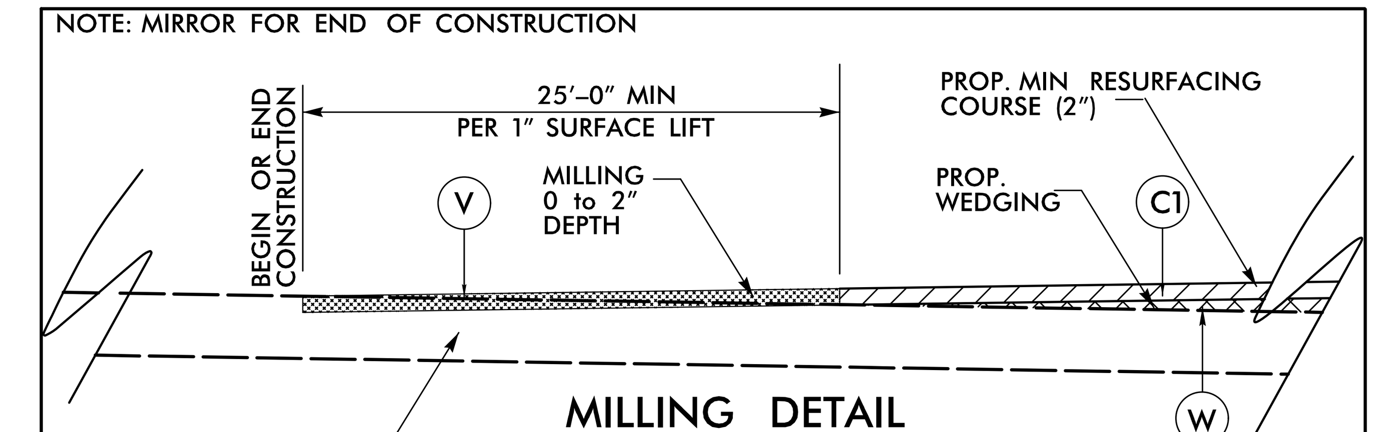


Detail Showing Method of Wedging



Wedging Detail For Resurfacing

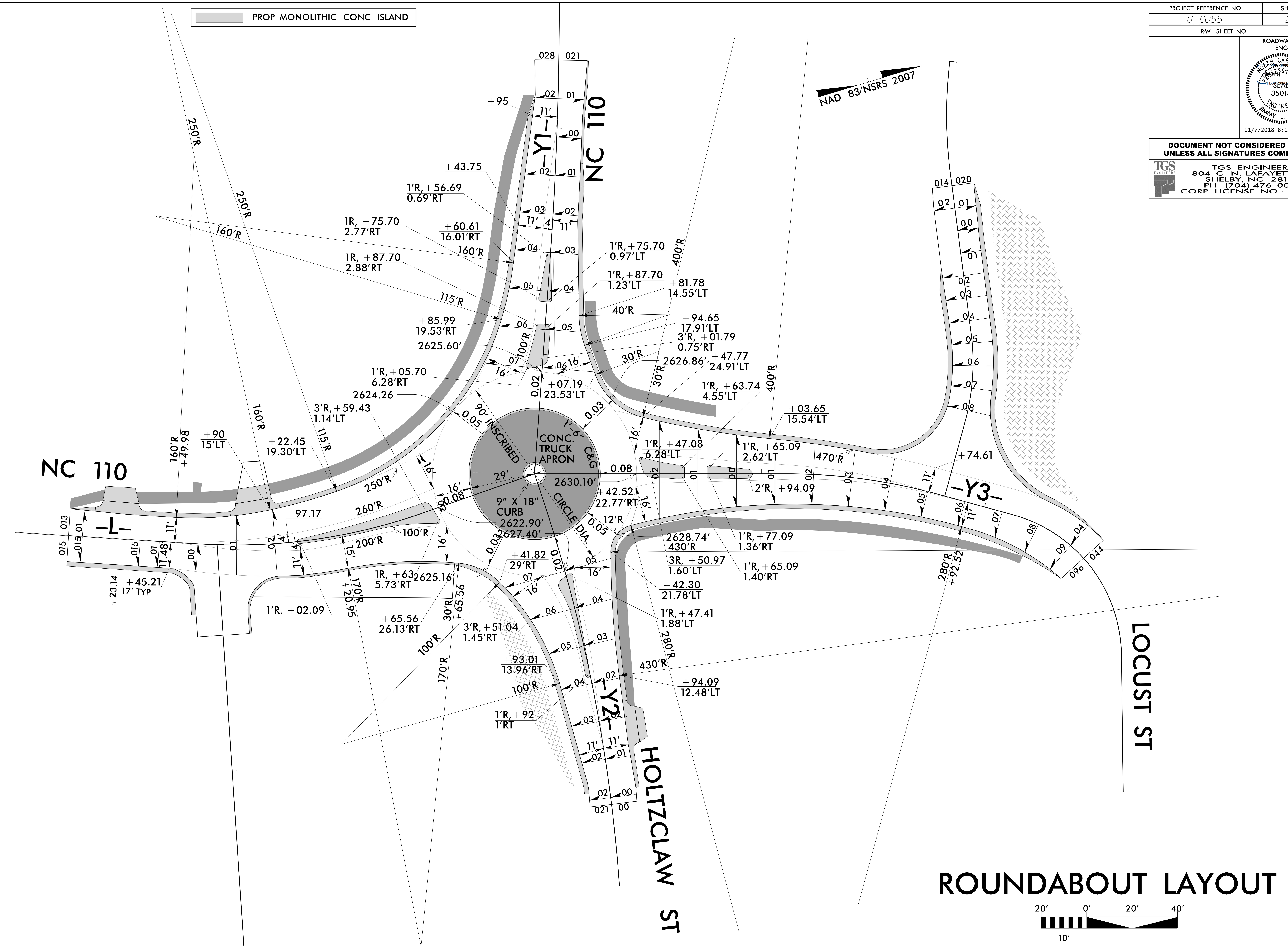
NOTE: MIRROR FOR END OF CONSTRUCTION



MILLING DETAIL

USE MILLING DETAIL
-L- STA. 12+00.00 TO -L- STA. 12+50.00
-Y1- STA. 10+70.00 TO -Y1- STA. 11+20.00
-Y2- STA. 11+00.00 TO -Y2- STA. 11+50.00
-Y3- STA. 12+00.00 TO -Y3- STA. 12+50.00
-Y4- STA. 10+55.00 TO -Y4- STA. 10+90.00

10/12/2018
X:\NCDOT\U-6055\Roadway\Proj\U-6055_Rdy_typ.dgn
Username: lyp



PROJECT REFERENCE NO.	SHEET NO.
U-6055	2B-1
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 35018 ENGINEER JIMMY L. TERRY

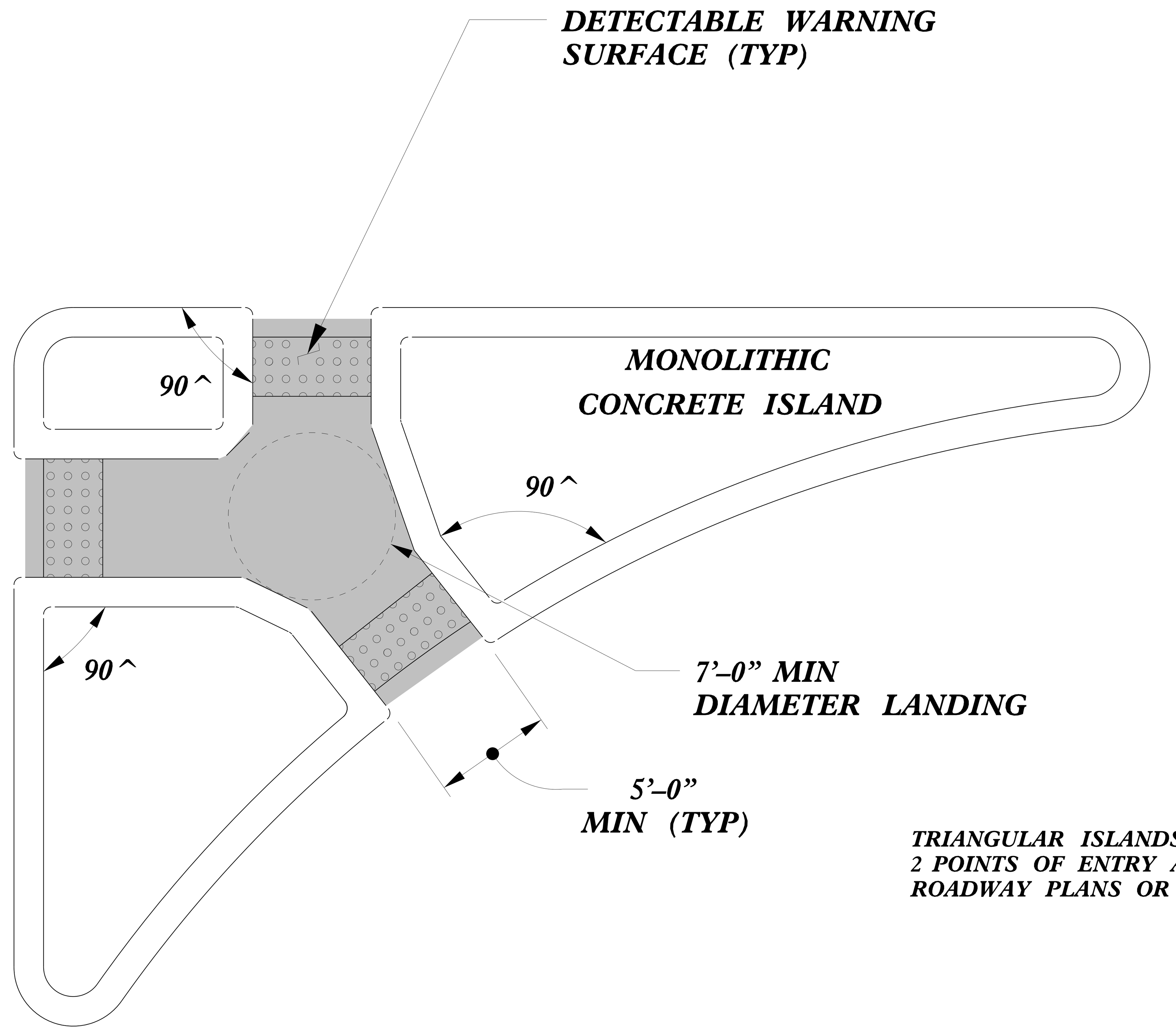
11/7/2018 8:19:02 AM PST

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

TGS ENGINEERS
804-C N. LAFAYETTE ST
SHELBY, NC 28150
PH (704) 476-0003
CORP. LICENSE NO.: C-0275

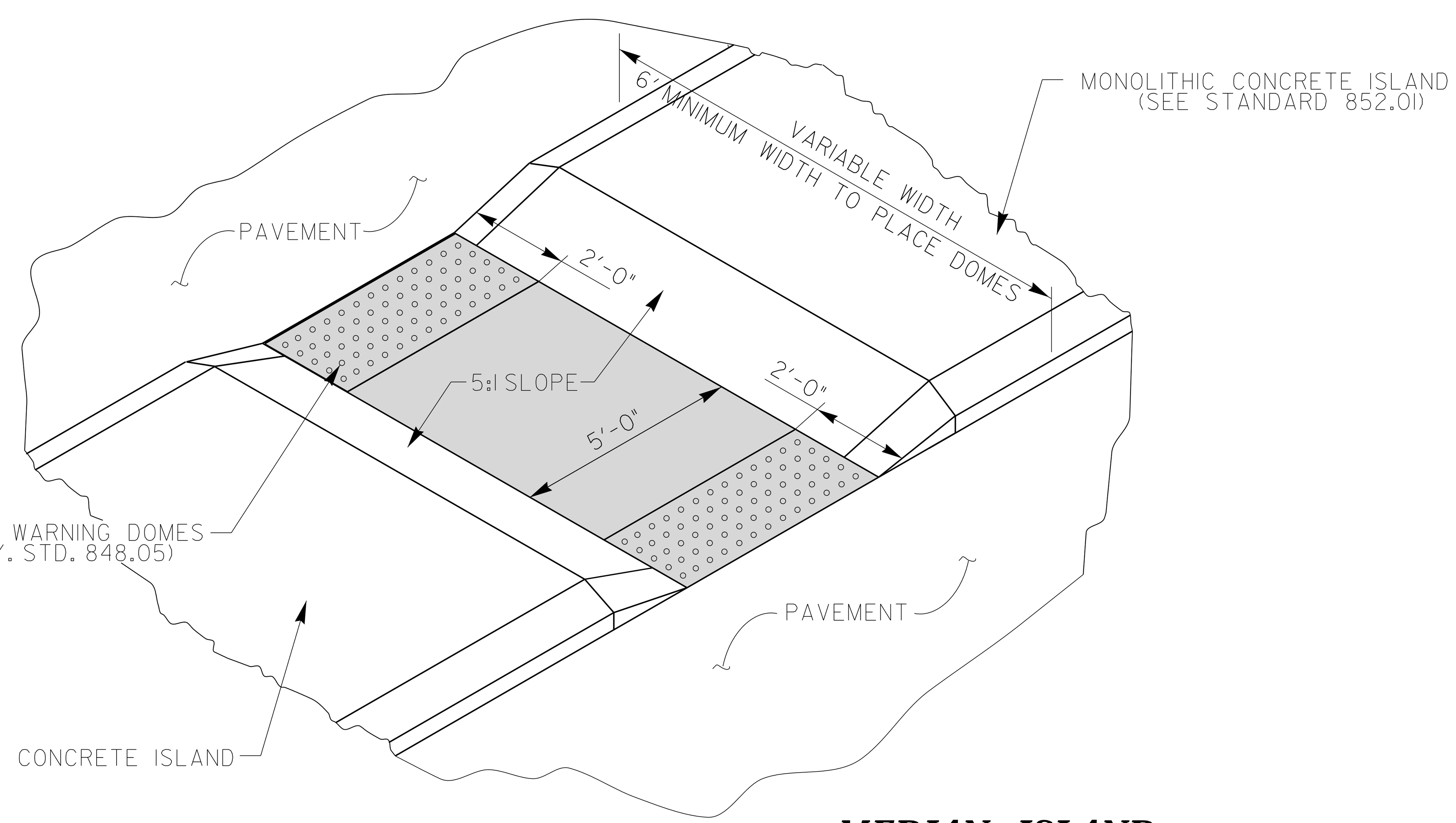
PROJECT REFERENCE NO.	SHEET NO.
U-6055	2C-1

PAY LIMITS FOR 2 OR 3 CURB RAMPS
(CALCULATE BASED ON NUMBER OF
SETS OF TRUNCATED DOMES)

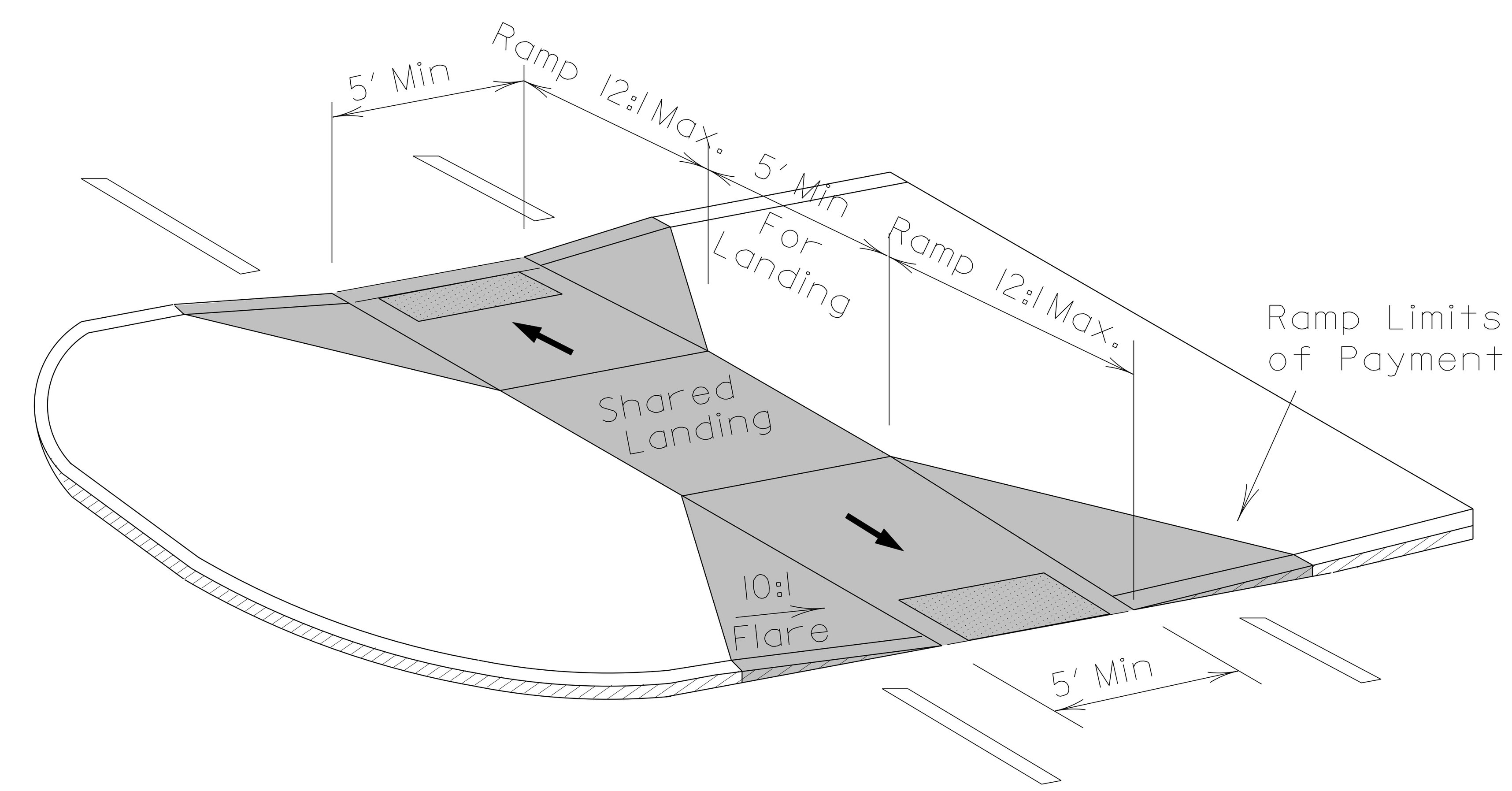


TRIANGULAR ISLANDS MAY BE CONSTRUCTED WITH ONLY 2 POINTS OF ENTRY AND EXIT AS SHOWN IN THE ROADWAY PLANS OR AS DIRECTED BY THE ENGINEER.

TRIANGULAR ISLAND
WITH CUT THROUGH



MEDIAN ISLAND
WITH CUT THROUGH



MEDIAN ISLAND
CURB RAMPS

SEAL 022966
Joel S. Howerton
10/23/2018 3:16:00 PM EDT

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

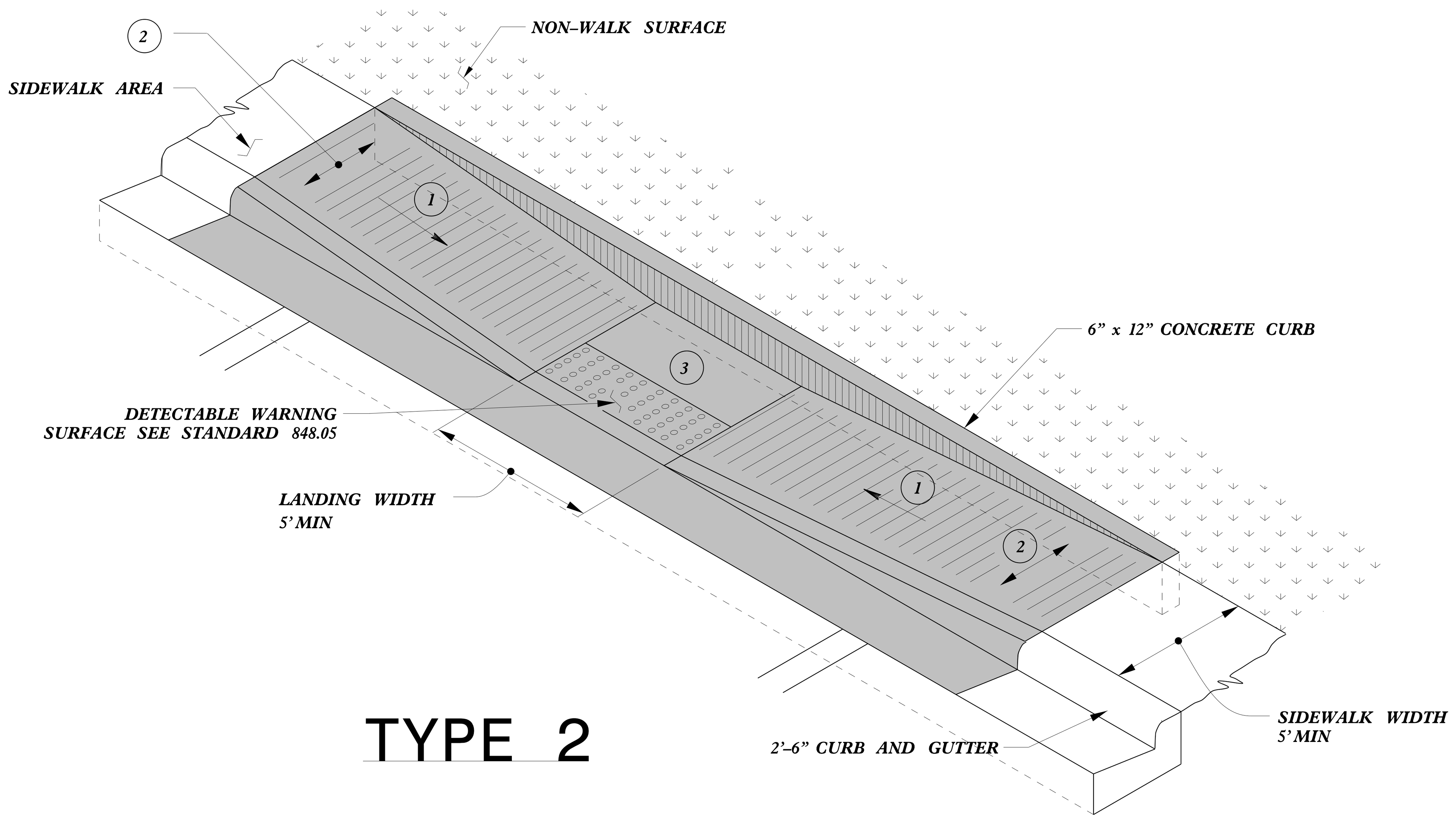
CONTRACT STANDARDS
AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

CURB RAMPS

Median or Turn Lane Islands

ORIGINAL BY: J.S. HOWERTON DATE: 7/7/11
MODIFIED BY: DATE:
CHECKED BY: DATE:
FILE SPEC.: stds/2012CurbRamp/CurbRampDetails.dgn

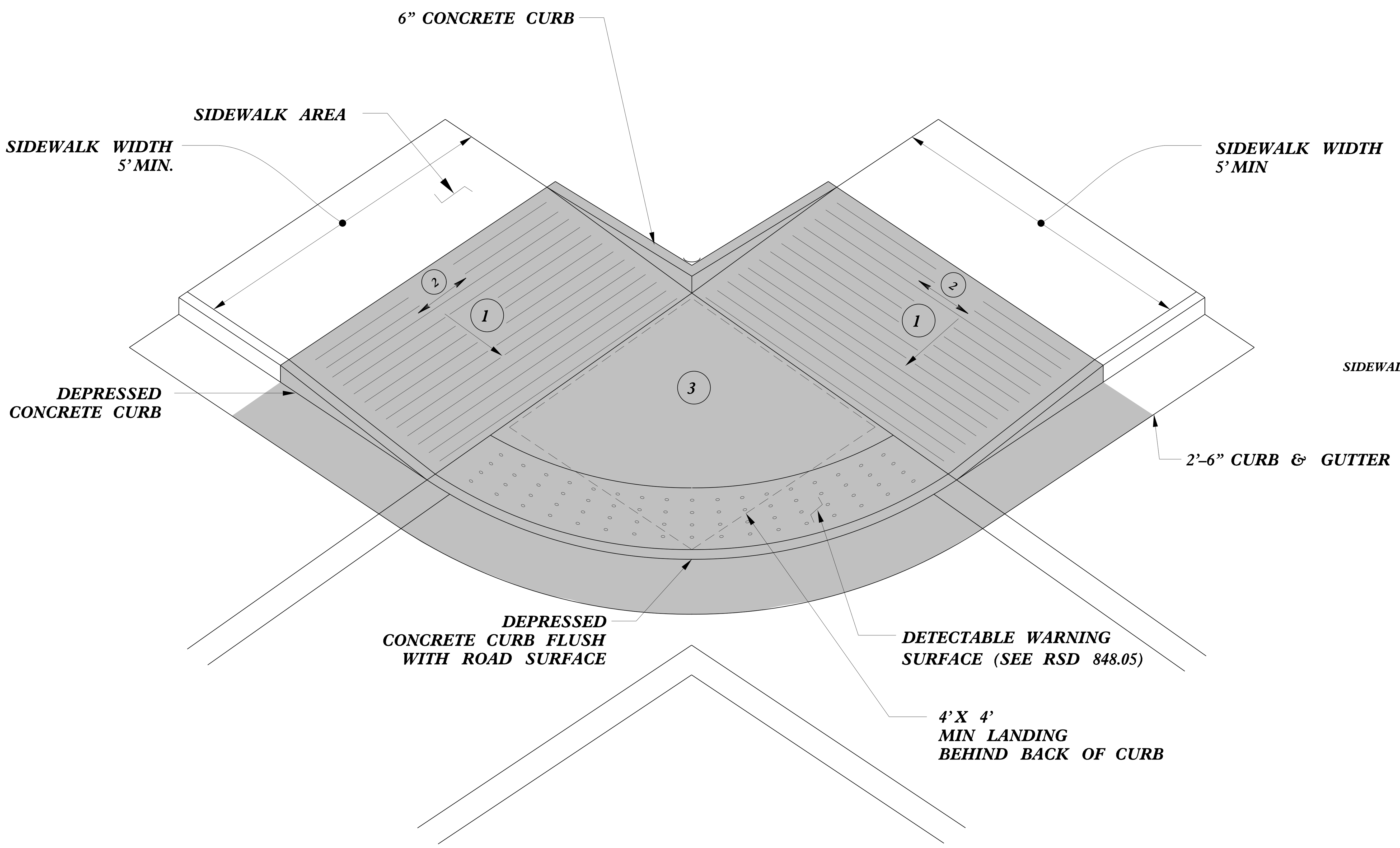
PROJECT REFERENCE NO.	SHEET NO.
U-6055	2C-2



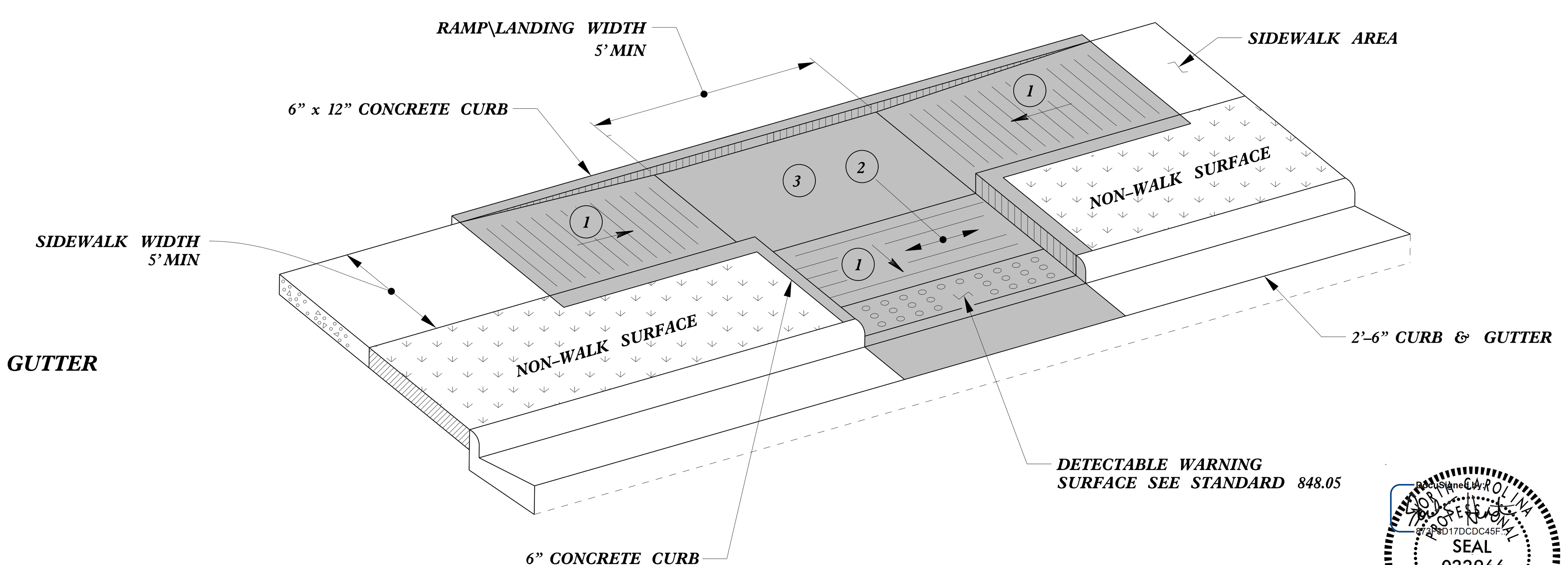
TYPE 2

PAY LIMITS FOR 1 CURB RAMP

1. 8.33% (12:1) MAX RAMP SLOPE
2. CROSS SLOPE: 2.00%
3. CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.



TYPE 2A



TYPE 3

NORTH CAROLINA PROFESSIONAL SEAL 022966 ENGINEER Joel S. Howerton

10/23/2018 3:16:00 PM EDT

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

CONTRACT STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

CURB RAMPS

Parallel Ramps

ORIGINAL BY: J.S. HOWERTON DATE: 7/7/11
MODIFIED BY: DATE:
CHECKED BY: DATE:
FILE SPEC.: stds/2012CurbRamp/CurbRampDetails.dgn

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SUMMARY OF EARTHWORK

Station	Station	Uncl. Excav.	Embank. +%	Borrow	Waste
-L- 12+00.00	-L- 14+10.16	71	147	76	
-Y1- 10+70.00	-Y1- 12+52.79	249	23		226
-Y2- 10+00.00	-Y2- 11+50.00	25	153	128	
-Y3- 10+00.00	-Y3- 12+50.00	100	307	207	
-Y4- 10+55.00	-Y4- 11+83.03	567	7		560
SUBTOTAL :		1,012	637	411	786
TOTALS:		1,012	637	411	786
LOSS DUE TO CLEARING & GRUBBING		-125			-125
WASTE IN LIEU OF BORROW				-411	-411
GRAND TOTALS:		887	637	0	250
SAY:		**1,000**			

Approximate quantities only. Unclassified excavation, fine grading, clearing and grubbing, removal of existing pavement will be paid for at the lump sum price for "Grading".

PAVEMENT REMOVAL SUMMARY

IN SQUARE YARDS

SURVEY LINE	Station	Station	LOCATION LT/RT/CL	ASPHALT REMOVAL	ASPHALT BREAKUP	CONCRETE REMOVAL	CONCRETE BREAKUP
-L-	12+90	13+81	RT	71.13			
-Y1-	10+70	12+06	LT	62.19			
-Y2-	10+43	11+41	LT	45.2			
-Y3-	10+40	12+48	RT	162.79			
-Y4-	10+90	11+83	CL	210.36			
Under Prop. Roundabout				236.92			
Temporay Pavement				65.56			
			TOTAL	854.15			
			SAY	**860**			

TGSBEN-LAPTOP

COMPUTED BY: TBE DATE: 2/23/18

CHECKED BY: BJH DATE: 2/23/18

PROJECT NO.	SHEET NO.
U-6055	3D-1

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

Note: Invert Elevations indicated are for Bid Purposes only and shall not be used for project construction stakeout. See "Standard Specifications For Roads and Structures, Section 300-5".

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48 INCHES & UNDER)

LINE & STATION / SIZE / THICKNESS OR GAUGE	OFFSET	STRUCTURE NUMBER FROM	TO	TOP ELEVATION FT.	INVERT ELEVATION FT.	INVERT ELEVATION FT.	MINIMUM REQUIRED SLOPE %	Drainage Pipe (RCP, CSP, CAAP, HDPE, or PVC) 12	15	18	24	30	36	42	48	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	DO NOT USE PVC	C. S. PIPE 12 .064	15 .064	18 .064	24 .079	30 .079	36 .109	42 .109	48	R. C. PIPE CLASS III 12	15	18	24	30	36	42	48	R. C. PIPE CLASS IV 12	15	18	24	30	36	42	48	R. C. PIPE CLASS V 12	15	18	24	30	36	42	48	QUANTITIES FOR DRAINAGE STRUCTURES (NOTE: TOTAL LIN. FT. FOR PAY QUANTITY SHALL BE A + (1.3 X B)) 0' THRU 5' EACH (A)	5' THRU 10' LIN. FT. (B)	10' AND ABOVE LIN. FT.	C.B. STD. 840.01 OR STD. 840.02	FRAME, GRATES, AND HOOD STD. 840.03 GRATE TYPE E	F	G		CONCRETE TRANSITIONAL SECTION D.I. STD. 852.04 OR STD. 852.06	C.B. STD. 852.05	OPEN THROAT C.B. STD. 840.04 OR STD. 840.05	CONCRETE BRIDGE APPROACH D.I. STD. 840.13	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME AND GRATES STD. 840.16	G.D.I. TYPE "A" STD. 840.17 OR STD. 840.26	G.D.I. TYPE "B" STD. 840.18 OR STD. 840.27	G.D.I. TYPE "D" STD. 840.19 OR STD. 840.28	G.D.I. (W.S. FLAT) FRAME WITH GRATE STD. 840.20	G.D.I. (W.S. FLAT) FRAME W/ 2 GRATES STD. 840.20	G.D.I. (W.S. SAG) FRAME W/ GRATE STD. 840.22	G.D.I. (W.S. SAG) FRAME W/ 2 GRATES STD. 840.22	G.D.I. (N.S. SAG) FRAME W/ GRATE STD. 840.24	G.D.I. (N.S. SAG) FRAME W/ 2 GRATES STD. 840.24	G.D.I. (N.S. FLAT) FRAME W/ GRATE STD. 840.29	G.D.I. (N.S. FLAT) FRAME W/ 2 GRATES STD. 840.29	J.B. STD. 840.31 OR STD. 840.32	ANGLED VANE GRATES AND FRAMES STD. 840.33	T.B.J.B. STD. 840.34	T.B.D.I. STD. 840.35	M.H. STD. 840.51, STD. 840.52, OR STD. 840.53	M.H. FRAME AND COVER STD. 840.54		FLOWABLE FILL CY	CONCRETE COLLARS CL. "B" STD. 840.72 CY	CONCRETE AND BRICK PIPE PLUG STD. 840.71 CY	PIPE REMOVAL LIN. FT.	REMARKS
Y4 11+02	11 RT	0401		2657.5																																																	1			1		1																														
		0401	0402		2654.5	2648.6																																	44																																																			
Y4 11+48	11 RT	0402		2651.6																																																	1			1		1																														
		0402	0403		2648.6	2638.6																																	44																																																			
Y3 11+44	14 LT	0403		2641.6																																																	1			1		1																														
		0403	0404		2638.6	2626.7																																	96																																																			
Y3 10+50	26 LT	0404		2629.7																																																	1			1		1																														
		0404	0405		2626.7	2620.3																																										76																																													
Y1 12+07	29 RT	0405		2623.3																																																	1			1	1																															
		0405	0406		2620.3	2618.7	0.4																																48																																																			
L 13+61	29 LT	0406		2621.7																																																	1			1		1																														
		0406	0408		2618.7	2614.0	0.5																																52																																																			
L 13+04	32 LT	0407		2618.1																																																	1												1	1																									
		0407	0408		2615.8	2614.0																												12																																																															
L 13+04	19 LT	0408		2617.0																																																	1			1		1																														
		0408	0419		2614.0	2611.8	0.8																																32																																																			
L 12+35	13 LT	0409		2612.8																																																	1			1			1																													
		0409	0424		2608.9	2606.9	0.8																																		44																																																
Y3 11+88	13 RT	0411		2648.5																																																	1			1			1																													
		0411	0412		2645.5	2633.0	1.0																																68																																																			
Y3 11+14	15 RT	0412		2636.0																																																	1			1			1																													
		0412	0413		2633.0	2627.3	1.1																																68																																																			
Y3 10+45	24 RT	0413		2630.3																																																	1			1			1																													
		0413	0414		2627.3	2624.6	1.2																																									36																																													
Y2 10+51	1 LT	0414		2627.9																																																	1								1				1	1																									
		0414	0415		2624.4	2621.8	0.5																																										32																																												
Y2 10+45	30 RT	0415		2625.1																																																	1			1			1																													
		0415	0420		2621.8	2609.6	1.1																																										156																																												
L 12+79	28 RT	0416		2615.7																																																	1																										1				1									
		0416	0417		2612.9	2611.8																																										24																																													
L 12+56	27 RT	0417		2614.8																																																	1			1			1																													
		0417	0420		2611.8	2609.8																																	28																																																			
L 13+05	0 CL	0418		2617.7																																																	1								1				1	1																									
		0418	0408		2614.5	2614.0																																										16																																													
L 12+69	14 LT	0419		2614.8																																																	1			1		1																														
		0419	0409		2611.8	2609.6	0.8																																32																																																			
L 12+35	14 RT	0420		2612.9																																																	1			1			1																													
		0420	0409		2609.1	2608.9	0.4																																											24																																											
Y3 11+95	13 RT	0421		2649.7																																																	1			1			1																													
		0421	0411		2646.7	2645.5	1.0																																8																																																			
Y 10+37	12 LT	0422		2616.0																																																	1																										1				1									
		0422	0416		2613.2	2612.9																																	8																																																			
L 14+10	0 CL	0423		2626.0																																																	1												1	1																									
		0423	0406		2621.0	2618.7																																										56																																													
L 11+94	27 LT	0424		2610.4																																																	1	1.1																									1				1	1							
		0424	0410		2604.3	2603.3	0.8																																		28																																																
Y2 10+24	6 RT																																																																																					9				
Y 10+19	37 LT																																																																																								148	
L 12+31	14 RT																																																																																							0.100		
SHEET TOTALS																														12								528		72						208	188	24					23	1.1		16	1	7	8		2				4	4																2	1			2	1	1		9		0.100	148	
PROJECT TOTALS																														12								528		72						208	188	24					23	1.1		16	1	7	8		2				4	4																2	1			2	1	1		9		0.100	148	

ABBREVIATIONS

C.A.A.	CORRUGATED ALUMINIUM ALLOY
C.B.	CATCH BASIN
C.S.	CORRUGATED STEEL
D.I.	DROP INLET
G.D.I.	GRATED DROP INLET
H.D.P.E.	HIGH DENSITY POLYETHYLENE
J.B.	JUNCTION BOX
M.H.	MANHOLE
N.S.	NARROW SLOT
P.V.C.	POLYVINYL CHLORIDE
R.C.	REINFORCED CONCRETE
T.B.D.I.	TRAFFIC BEARING DROP INLET
T.B.J.B.	TRAFFIC BEARING JUNCTION BOX
W.S.	WIDE SLOT

COMPUTED BY: M. Brewer DATE: 6/27/17
CHECKED BY: M. Walko DATE: 6/27/17

(2-16-16)

PROJECT NO.	SHEET NO.
U-6055	3G-1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SUMMARY OF SUBSURFACE DRAINAGE

LINE	Station	Station	Location LT/RT/CL	Drain Type* UD/BD/SD	LF
CONTINGENCY				SD	500
				TOTAL LF:	500

*UD = Underdrain
*BD = Blind Drain
*SD = Subsurface Drain

SUMMARY OF AGGREGATE SUBGRADE/STABILIZATION

LINE	Station	Station	Aggregate Type* ASU/AST	Aggregate Thickness INCHES	Shallow Undercut CY	Class IV Subgrade Stabilization TONS	Geotextile for Soil Stabilization SY	Stabilizer Aggregate TONS	Class IV Aggregate Stabilization TONS
	CONTINGENCY		ASU	12	300	590	900		
			TOTAL CY/TONS/SY:		300	590	900*	0	0

*ASU = Aggregate Subgrade
*AST = Aggregate Stabilization
**Total square yards of "Geotextile for Soil Stabilization" is only the estimated quantity for ASU/AST and may only represent a portion of the geotextile quantity shown in the Item Sheets of the Proposal.

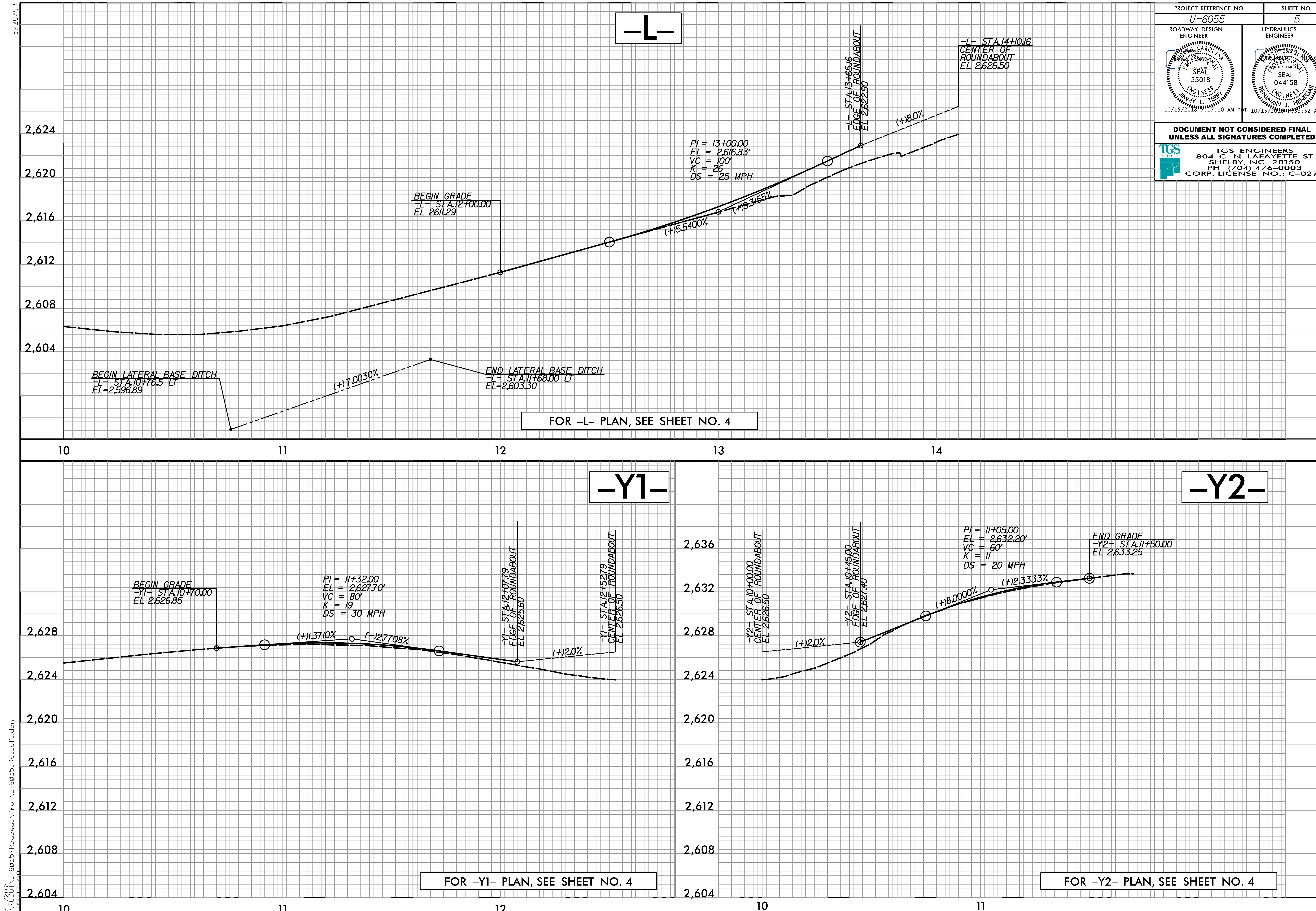

PROJECT REFERENCE NO.
U-6055
SHEET NO.
4
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
SEAL 35018
SEAL 044158
10/23/2018 12:01:35 PM PDT
10/23/2018 12:05:22 PM PDT
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
TGS ENGINEERS
804-C N. LAFAYETTE ST
SHELBY, NC 28150
PH (704) 476-0003
CORP. LICENSE NO.: C-0275
-L- CURVE DATA
PI Sta 13+08.52
Δ = 22° 57' 33.0" (LT)
D = 22° 55' 05.9"
L = 100.18'
T = 50.77'
R = 250.00'
SE = 02
DS = 25 MPH
① -L-PC 12+57.75
② -L-PT 13+57.93
-Y1- CURVE DATA
PI Sta 10+87.53
Δ = 5° 15' 45.0" (RT)
D = 3° 41' 47.4"
L = 142.36'
T = 71.23'
R = 1,550.00'
SE = NC
DS = 45 MPH
-Y2- CURVE DATA
PI Sta 11+00.02
Δ = 14° 08' 54.6" (RT)
D = 8° 11' 06.4"
L = 172.86'
T = 86.87'
R = 700.00'
SE = 03
DS = 40 MPH
③ -Y2-PC 10+13.15
-Y3- CURVE DATA
PI Sta 11+44.84
Δ = 15° 17' 45.1" (RT)
D = 22° 55' 05.9"
L = 66.74'
T = 33.57'
R = 250.00'
SE = 02
DS = 25 MPH
PI Sta 12+61.87
Δ = 73° 57' 13.4" (RT)
D = 88° 08' 50.5"
L = 83.90'
T = 48.94'
R = 65.00'
SE = EXIST.
-Y4- CURVE DATA
PI Sta 10+24.92
Δ = 14° 12' 20.8" (LT)
D = 28° 38' 52.4"
L = 49.59'
T = 24.92'
R = 200.00'
PI Sta 11+40.70
Δ = 22° 41' 35.3" (RT)
D = 57° 17' 44.8"
L = 39.61'
T = 20.07'
R = 100.00'
SE = 03
DS = 20 MPH
④ -Y4-PC 11+20.63
⑤ -Y4-PT 11+60.24
DETAIL 1
LATERAL BASE DITCH
(Not to Scale)
Natural Ground
Fill Slope
GEOTEXTILE
Min. D= 1.5 Ft.
Max. d= 1.5 Ft.
B= 2.0 Ft.
b= 5.0 Ft.
*When B is < 6.0'
Type of Liner= Class 'I' Rip-Rap
FROM -L- STA. 10+77 TO STA. 11+68 LT
DDE = 70 CY
BEGIN CONSTRUCTION
-Y1- STA. 10+70.00
NAD 83/NSRS 2007
BEGIN CONSTRUCTION
-Y4- STA. 10+55.00
BEGIN TIP
PROJECT U-6055
-L- STA. 12+00.00
END TIP
PROJECT U-6055
-Y3- STA. 12+50.00
END CONSTRUCTION
-Y- STA. 10+40.00
END CONSTRUCTION
-Y2- STA. 11+50.00
MATCHLINE -L- STA. 11+40.00
MATCH TO INSET A
INSET A
MATCHLINE -L- STA. 11+40.00
MATCH TO THIS SHEET
BEGIN CONSTRUCTION
-L- STA. 10+77.00
LATERAL BASE DITCH
SEE DETAIL 1
CLASS 'I' RIP RAP
EST. 58 TONS
GEOTEXTILE
EST 115 SY
-L-POT 14+10.16=
-Y1-POT 12+52.79=
-Y2-POT 10+00.00=
-Y3- POT 10+00.00
-Y1-PT 11+58.66
-L-POC 12+65.63=
-Y-POT 10+00.00
-Y4-PC 10+00.00
-Y4-PT 10+49.59
-Y3-POT 11+81.78 =
-Y4-POT 11+94.03
-Y3-PC 11+11.27
-Y3-PC 12+12.93
-Y3-PT 11+78.01
-Y3-PT 12+96.83
-Y3-POT 13+57.23
-Y2-PT 11+86.00
COIR FIBER MATTING
-Y3- 11+81 TO 12+50
EST. 175 SY
-Y4- 10+55 TO 11+94
EST. 425 SY
COIR FIBER MATTING
-Y2- 10+40 TO 11+40
EST. 250 SY
REMOVE 12' OF ROCK WALL
TIE IN CONCRETE WALK
REMOVE METAL CANOPY (BY OWNER)
DO NOT DISTURB EXIST. STRUCTURE
SIDEWALK (SEE X-SECT FOR WIDTH)
TIE-IN WALK TO EXIST STEPS
RETAIN EXIST. ROCK WALL
2' VALLEY GUTTER
FLOWABLE FILL
+15 BEGIN 10' TRANSITION 2' VG TO 2'-6" C&G
+63.54 BEGIN 10' TRANSITION 2' VG TO 2'-6" C&G
+44, 11.56'LT END PROP. C&G TIE TO EXIST. CURB
+44, 9.22'RT END PROP. C&G TIE TO EXIST. CURB
+85.66, 10.06' RT TIE TO EXIST. CURB
01 BARBARA P. PATE DB 784 PG 328
02 GERTRUDE LOGAN, LIFE TENANT RUSSELL D. LOGAN DB 917 PG 1818 DB 729 PG 1230 DB 429 PG 1285
03 TOWN OF CANTON, N.C. DB 473 PG 2545
04 JOHN T. WELLS, JR. DB 919 PG 132
05 STEVEN PRESSLEY LAURA PRESSLEY DB 869 PG 1748
06 TOWN OF CANTON, N.C. DB 386 PG 1191
07 DOUGLAS H. MULL GAIL F. MULL DB 785 PG 556
08 "UNKNOWN OWNER" DB ??? PG ??? PIN # 8656-89-8073
09 LISA C. GREEN DB 458 PG 413 DB 469 PG 362
10 RONALD LEE HUNDLEY, Jr. DB 453 PG 994
11 MOUNTAIN REALTY DB 498 PG 360
12 BETTYE CONLEY DB 407 PG 1214
WENDY JO ROGERS DB 790 PG 1498
EDITH CAROLYN BURNETTE DB 378 PG 14
JAMES B. COWARD, SR. DB 241 PG 586
CARLYN P. CALLOWAY DB 719 PG 1221
DB 204 PG 68
NC 110 PISGAH DRIVE 19' BST
JOHNSON ST 20' BST
HOLTZCLAW ST 21' BST
LOCUST ST 20' BST
N 21° 23' 19.6" E
S 76° 02' 15.4" E
N 33° 04' 34.9" E
S 79° 37' 00.4" E
FOR ROUNDABOUT LAYOUT SEE SHEET NO. 2B-1
FOR -L-, -Y1- & -Y2- PROFILES, SEE SHEET NO. 5
FOR -Y3- & -Y4- PROFILES, SEE SHEET NO. 6
REVISIONS
8/17/99
10/23/2018
X:\NCDOT\U-6055\Roadway\Proj\U-6055_Rdy_psh_04.dgn

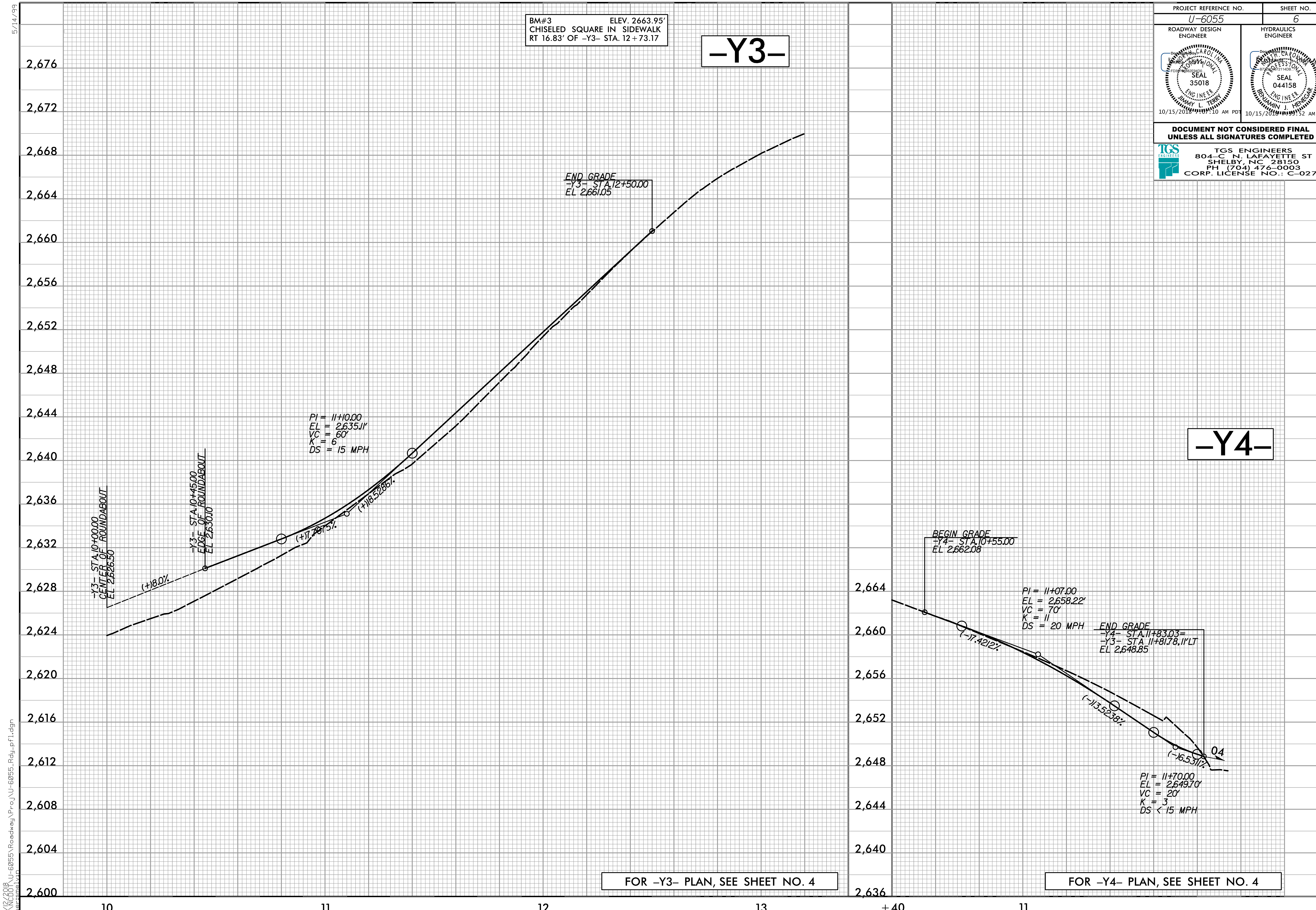
PROJECT REFERENCE NO.	SHEET NO.
U-6055	5

ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DocuSigned by: Jimmy L. Terry FD39F38882E94D0... NORTH CAROLINA PROFESSIONAL SEAL 35018 ENGINEER JIMMY L. TERRY 10/15/2018 7:07:10 AM PDT	DocuSigned by: Benjamin J. Henegar B7229C1372114DB... NORTH CAROLINA PROFESSIONAL SEAL 044158 ENGINEER BENJAMIN J. HENEGAR 10/15/2018 7:39:52 AM PDT

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

TGS ENGINEERS
804-C N. LAFAYETTE ST
SHELBY, NC 28150
PH (704) 476-0003
CORP. LICENSE NO.: C-0275





PROJECT REFERENCE NO.	SHEET NO.
U-6055	6

ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DocuSigned by: Jimmy Terry FD39F38882E94D0... NORTH CAROLINA PROFESSIONAL SEAL 35018 ENGINEER JIMMY L. TERRY 10/15/2018 7:07:10 AM PDT	DocuSigned by: Benjamin J. Henegar B7229C1372114DB... NORTH CAROLINA PROFESSIONAL SEAL 044158 ENGINEER BENJAMIN J. HENEGAR 10/15/2018 7:39:52 AM PDT

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

TGS ENGINEERS
804-C N. LAFAYETTE ST
SHELBY, NC 28150
PH (704) 476-0003
CORP. LICENSE NO.: C-0275

10/12/2018
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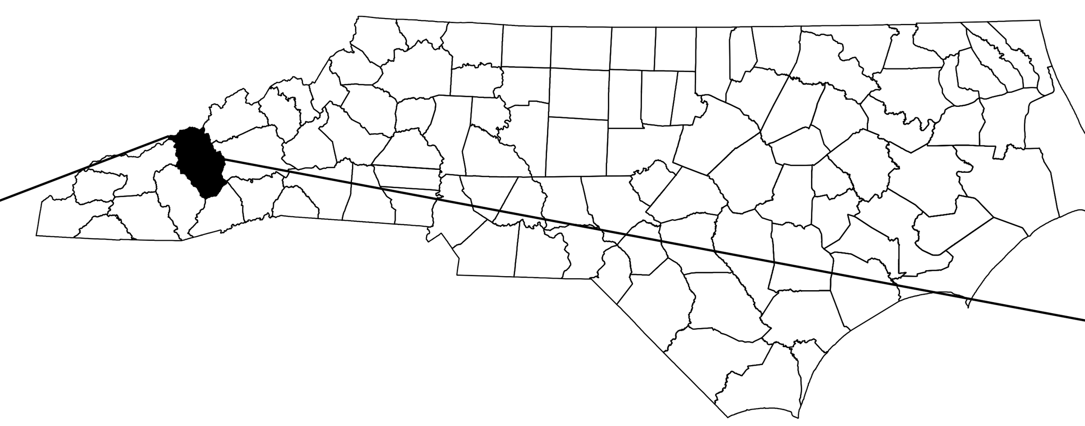
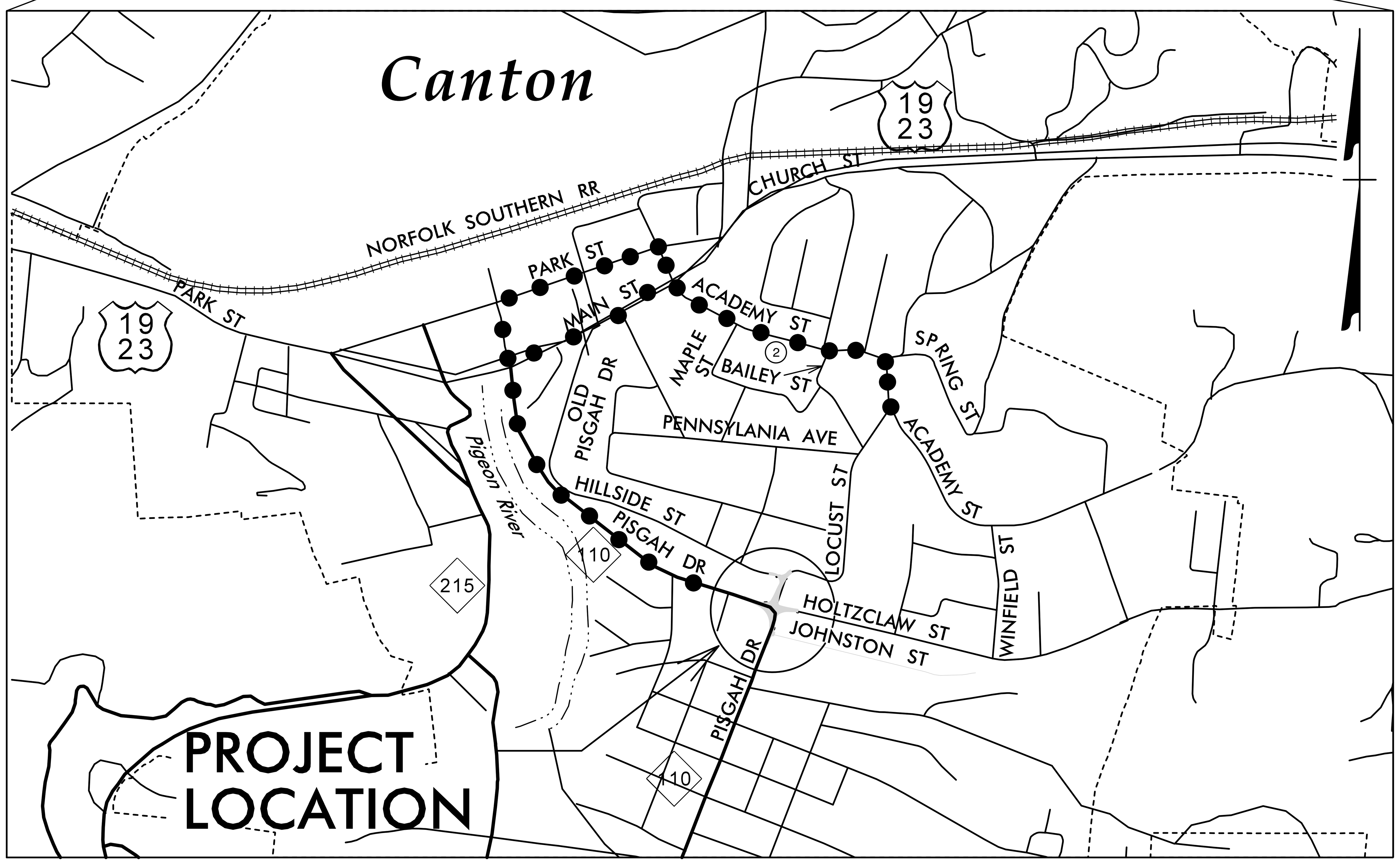
User:smelvin

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

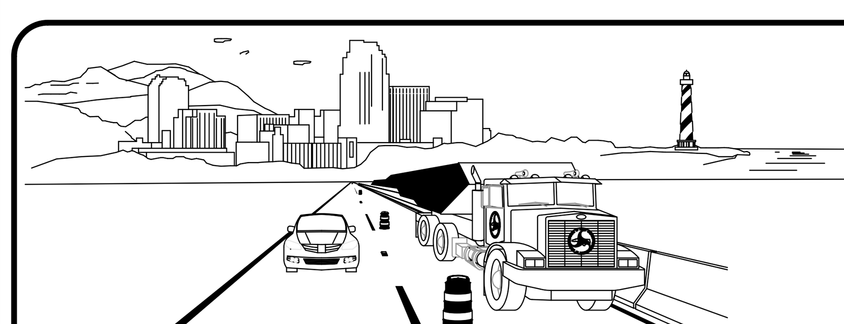
HAYWOOD COUNTY





VICINITY MAP

●—●—●—● OFFSITE DETOUR



PLAN PREPARED FOR N.C.D.O.T. BY:

TGS ENGINEERS
804-C N. LAFAYETTE ST
SHELBY, NC 28150
PH (704) 476-0003
CORP. LICENSE NO.: C-0275

JIMMY L. TERRY, PE — *PROJECT ENGINEER*
SANDRA G. MELVIN — *DESIGN TECHNICIAN*

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

SHEET NO.
TMP-1

INDEX OF SHEETS

SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP, AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND, AND TEMPOARY PAVEMENT SCHEDULE
TMP-1B	TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES, GENERAL NOTES, AND LOCAL NOTES)
TMP-1C	SPECIAL SIGN DESIGN
TMP-2	TRAFFIC CONTROL PHASING
TMP-3	TEMPORARY TRAFFIC CONTROL PHASE I OVERVIEW
TMP-4	DETOUR LAYOUT
TMP-5 THRU TMP-7	TEMPORARY TRAFFIC CONTROL PHASE I DETAILS
TMP-8	TEMPORARY TRAFFIC CONTROL PHASE II OVERVIEW
TMP-9 AND TMP-10	TEMPORARY TRAFFIC CONTROL PHASE II DETAILS

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APPROVED:

DATE: 10/15/2018 7:09:30 AM PDT

NORTH CAROLINA PROFESSIONAL SEAL 35018 ENGINEER JIMMY L. TERRY

TIP PROJECT: U-6055

10/15/2018
X:\NCDOT\U-6055\Traffic\TrafficControl\TCP\U-6055_TC_TMP_01(Title Sht).dgn
User:smelvin

TGS ENGINEERS
804-C N. LAFAYETTE ST
SHELBY, NC 28150
PH (704) 476-0003
CORP. LICENSE NO.: C-0275

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTI-LANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS

LEGEND

GENERAL

DIRECTION OF TRAFFIC FLOW
DIRECTION OF PEDESTRIAN TRAFFIC FLOW
EXIST. PVMT.
NORTH ARROW
PROPOSED PVMT.
TEMP. SHORING (LOCATION PURPOSES ONLY)
WORK AREA
REMOVAL
USER DEFINED (IF NEEDED)
USER DEFINED (IF NEEDED)

SIGNALS

EXISTING
PROPOSED
TEMP TEMPORARY

PAVEMENT MARKINGS

EXISTING LINES
TEMPORARY LINES

TRAFFIC CONTROL DEVICES

BARRICADE (TYPE III)
CONE
DRUM
SKINNY DRUM
TUBULAR MARKER
TEMPORARY CRASH CUSHION
FLASHING ARROW BOARD
FLAGGER
LAW ENFORCEMENT
TRUCK MOUNTED ATTENUATOR (TMA)
CHANGEABLE MESSAGE SIGN

TEMPORARY SIGNING

PORTABLE SIGN
STATIONARY SIGN
STATIONARY OR PORTABLE SIGN

PAVEMENT MARKERS

CRYSTAL/CRYSTAL
CRYSTAL/RED
YELLOW/YELLOW

PAVEMENT MARKING SYMBOLS

PAVEMENT MARKING SYMBOLS

TEMPORARY PAVEMENT MARKING

SYMBOL	DESCRIPTION
	PAINT(24")
P2	WHITE STOPBAR
	PAINT(4")
PA	WHITE EDGELINE
PI	YELLOW DOUBLE CENTER

APPROVED: ____________
DATE: 10/15/2018 7:09:30 AM PDT

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 35018 ENGINEER JIMMY L. TERRY

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DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WORK ZONE TRAFFIC CONTROL

ROADWAY STANDARD DRAWINGS & LEGEND

10/15/2018
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User:smelvin

PROJ. REFERENCE NO.	SHEET NO.
U-6055	TMP-1B

TGS ENGINEERS
804-C N. LAFAYETTE ST
SHELBY, NC 28150
PH (704) 476-0003
CORP. LICENSE NO.: C-0275

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS, AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS OR RESULT IN DUPLICATE OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT EXCEPT WHEN OTHERWISE NOTED IN THE PLAN OR DIRECTED BY THE ENGINEER.

TIME RESTRICTIONS

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
NC 110 PISGAH DR -L- & -Y1-	MON THRU FRI 6:00 AM TO 9:00AM & 2:00 PM TO 7:00 PM
HOLTZCLAW ST -Y2-	MON THRU FRI 6:00 AM TO 9:00AM & 2:00 PM TO 7:00 PM

B) DO NOT CLOSE OR NARROW TRAVEL LANES DURING HOLIDAYS AND SPECIAL EVENTS AS FOLLOWS:

ROAD NAME

NC 110 PISGAH DR -L- & -Y1-
HOLTZCLAW ST -Y2-

HOLIDAY

1. FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
2. FOR NEW YEAR'S, BETWEEN THE HOURS OF 4:00 P.M. DECEMBER 31st TO 9:00 A.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 9:00 A.M. THE FOLLOWING TUESDAY.
3. FOR EASTER, BETWEEN THE HOURS OF 4:00 P.M. THURSDAY AND 9:00 A.M. MONDAY.
4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 4:00 P.M. FRIDAY TO 9:00 A.M. TUESDAY.
5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 4:00 P.M. THE DAY BEFORE INDEPENDENCE DAY AND 9:00 A.M. THE DAY AFTER INDEPENDENCE DAY.

   IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 4:00 P.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 9:00 A.M. THE TUESDAY AFTER INDEPENDENCE DAY.
6. FOR LABOR DAY, BETWEEN THE HOURS OF 4:00 P.M. FRIDAY AND 9:00 A.M. TUESDAY.
7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 4:00 P.M. TUESDAY TO 9:00 A.M. MONDAY.
8. FOR CHRISTMAS, BETWEEN THE HOURS OF 4:00 P.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 9:00 A.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
9. FOR HIGH SCHOOL FOOTBALL GAMES , BETWEEN THE HOURS OF 6:00 P.M. FRIDAY TO 10:00 P.M. FRIDAY.

LANE AND SHOULDER CLOSURE REQUIREMENTS

C) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.

D) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.

E) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

F) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.

G) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.

PAVEMENT EDGE DROP OFF REQUIREMENTS

H) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS AN EDGE OF PAVEMENT DROP-OFF AS FOLLOWS:

BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.

BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.

BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT.

I) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 100 FT IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

J) NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

K) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

L) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.

PROVIDE SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE AS SHOWN IN THE TRAFFIC CONTROL PLANS.

M) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION.

COVER OR REMOVE ALL SIGNS REQUIRED FOR THE OFF-SITE DETOUR WHEN THE DETOUR IS NOT IN OPERATION.

N) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

O) INSTALL BLACK ON ORANGE ''DIP'' SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 100 FT IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC CONTROL DEVICES

P) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH) EXCEPT, 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.

Q) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

PAVEMENT MARKINGS AND MARKERS

R) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

ROAD NAME	MARKING	MARKER
NC 110 PISGAH DR -L- & -Y1-	PAINT	NONE
HOLTZCLAW ST -Y2-	PAINT	NONE

S) PLACE ONE APPLICATION OF PAINT FOR TEMPORARY TRAFFIC PATTERNS. PLACE A SECOND APPLICATION OF PAINT SIX (6) MONTHS AFTER THE INITIAL APPLICATION AND EVERY SIX MONTHS AS DIRECTED BY THE ENGINEER.

T) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

U) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

V) TRACE THE PROPOSED MONOLITHIC ISLAND LOCATIONS WITH PROPER COLOR PAVEMENT MARKINGS PRIOR TO INSTALLATION. PLACE DRUMS TO DELINEATE ANY PROPOSED MONOLITHIC ISLANDS BEFORE INSTALLATION

MISCELLANEOUS

W) LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS AS DIRECTED BY THE ENGINEER.

X) IN THE EVENT A TIE-IN CANNOT BE MADE IN ONE DAY'S TIME, BRING THE TIE-IN AREA TO AN APPROPRIATE ROADWAY ELEVATION AS DETERMINED BY THE ENGINEER. PLACE BLACK ON ORANGE "LOOSE GRAVEL" SIGNS (W8-7) AND BLACK ON ORANGE ''PAVEMENT ENDS'' SIGNS (W8-3) 100 FT AND 100 FT RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.

Y) ALL CURB RAMP LOCATIONS SHALL BE DERIVED FROM STATIONING SHOWN ON PAVEMENT MARKING PLANS OR AS DIRECTED BY THE ENGINEER IN COORDINATION WITH THE SIGNING AND DELINEATION UNIT.

Z) CONTRACTOR SHALL MAINTAIN SIDEWALK ACCESS AT ALL TIMES AS STATED IN THE PHASING. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY SIDEWALKS (CONCRETE, ASPHALT, OR OTHER SUITABLE MATERIAL AS APPROVED BY THE ENGINEER) AT ALL LOCATIONS WHERE THE OPEN PEDESTRIAN TRAVELWAY HAS BEEN REMOVED FOR CONSTRUCTION OPERATIONS (UTILITIES, DRAINAGE, ETC.).

LOCAL NOTES

UNLESS OTHERWISW NOTED MAINTAIN ACCESS TO DRIVEWAYS AT ALL TIMES.

UNLESS OTHERWISE NOTED TWO WAY THROUGH TRAFFIC SHALL BE MAINTAINED ON TWO 11 FT(MIN) LANES AT ALL TIMES WHILE FLAGGERS ARE NOT AT WORK FOR NC 110 PISGAH DR(-L- AND -Y1-) AND TWO 10 FT(MIN) FOR HOLTZCLAW ST (-Y2-).

MANAGEMENT STRATEGIES

THE CONSTRUCTION OF PISGAH DR (-L- & -Y1-) AND HOLTZCLAW ST (-Y2-) WILL BE PERFORMED USING FLAGGERS, TEMPORARY LANE CLOSURES AND A TEMPORARY LANE SHIFT USING TEMPORARY PAVEMENT.

LOCUST ST (-Y3-) AND HILLSIDE ST (-Y4-) WILL BE CLOSED TO THROUGH TRAFFIC. TRAFFIC WILL BE MAINTAINED ON THE FOLLOWING OFFSITE DETOUR:
ACADEMY ST TO PARK ST TO PISGAH DR

APPROVED:

DATE: 10/15/2018 9:53:18 AM PDT

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 35018 ENGINEER

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DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

TRANSPORTATION OPERATIONS PLAN

10/15/2018
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User:smelvin

PROJ. REFERENCE NO.	SHEET NO.
U-6055	TMP-1C

TGS ENGINEERS
804-C N. LAFAYETTE ST
SHELBY, NC 28150
PH (704) 476-0003
CORP. LICENSE NO.: C-0275

SIGN NUMBER: DET-1
TYPE: STATIONARY
QUANTITY: SEE PLANS

SIGN WIDTH: 3′-6″
HEIGHT: 1′-6″
TOTAL AREA: 5.3 Sq.Ft.

BORDER TYPE: INSET
RECESS: 0.38″
WIDTH: 0.5″
RADII: 1.5″

NO. Z BARS:
LENGTH:

BACKG COLOR: Fluorescent Orange
COPY COLOR: Black

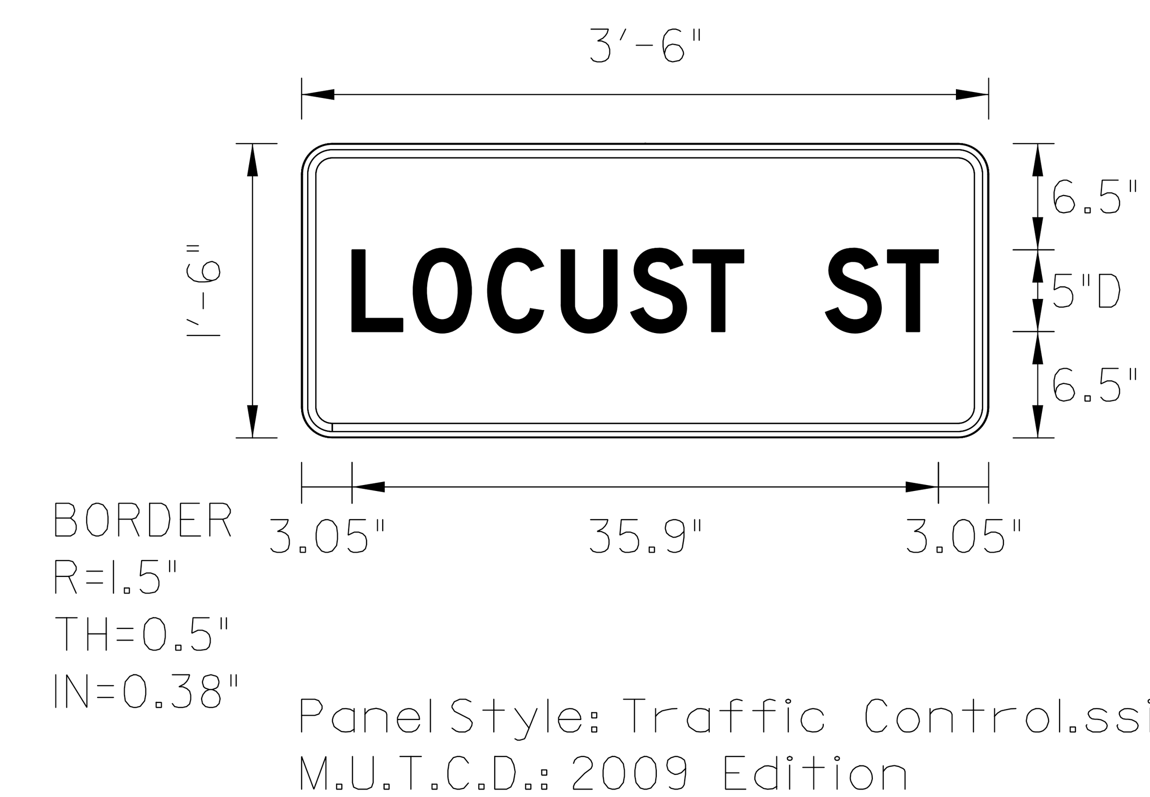
SYMBOL	X	Y	WID	HT

MAT'L: 0.080″ (2.0 mm) ALUMINUM

USE NOTES: 1,2

1. Legend and border shall be direct applied black non-reflective sheeting.
2. Background shall be NC GRADE B fluorescent orange retroreflective sheeting.

DESIGN BY: SGM
CHECKED BY: JLT
DATE: Jul 13, 2017
PROJECT ID: U-6055
LOCATION: HAYWOOD COUNTY
DIV: 14



Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter locations are panel edge to lower left corner

L	O	C	U	S	T		S	T	Series/Size Text Length
3.1	6.8	11.4	15.9	20.1	23.9	27	32	35.8	D 2000 35.9

FILENAME: U-6055_TC_TMP_01C(Special Sign)

NORTH CAROLINA D.O.T. SIGN DETAIL

APPROVED:
DATE: 10/15/2018 7:09:30 AM PDT
SEAL
NORTH CAROLINA PROFESSIONAL SEAL 035018 ENGINEER JIMMY L. TERRY

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DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

SPECIAL SIGN DESIGN

TGS ENGINEERS
804-C N. LAFAYETTE ST
SHELBY, NC 28150
PH (704) 476-0003
CORP. LICENSE NO.: C-0275

UNLESS OTHERWISE NOTED PROVIDE ACCESS TO ALL DRIVES AT ALL TIMES.

UNLESS OTHERWISE NOTED TWO WAY THROUGH TRAFFIC SHALL BE MAINTAINED ON TWO 11 FT (MIN.) LANES AT ALL TIMES WHILE FLAGGERS ARE NOT AT WORK.

Phase I

STEP 1:

INSTALL ALL ADVANCE WORK ZONE WARNING SIGNS ON L- AND ALL Y- LINES IN ACCORDANCE WITH NCDOT STD DRAWING 1101.01, SHEET 3 OF 3.

INSTALL TYPE III BARRICADES AND DETOUR SIGNS, SHIFT TRAFFIC ONTO THE DETOUR, AND CLOSE LOCUST ST (-Y3-) AND HILLSIDE ST (-Y4-) TO TRAFFIC.
SEE TMP-4 SEE NCDOT STD DRAWING 1101.03, SHEETS 1 AND 2 OF 9

CLOSE THE SIDEWALK ALONG LOCUST ST (Y-3-) AND HOLTZCLAW ST (-Y2-) TO PEDESTRIANS.
SEE TMP-3 & TMP-5

CONSTRUCT THE NEW SIDEWALK ALONG PISGAH DR (-L- & -Y1-) FROM -L- STA. 12+00, LT TO -Y1- STA. 10+86, RT AND OPEN TO PEDESRTRIAN.
SEE TMP-3 & TMP-5

STEP 2:

BEGIN CONSTRUCTION OF LOCUST ST (-Y3-) AND HILLSIDE ST (-Y4-) INCLUDING THE FINAL LAYER OF SURFACE COURSE AS FOLLOWS:
-Y3- STA. FROM 10+45+/- TO 12+50
-Y4- STA. FROM 10+55 TO 11+83.03
SEE TMP-3 & TMP-5

PLACE THE SPLITTER ISLANDS AS FOLLOWS: -Y3- STA. FROM 10+46+/- TO 10+96+/-
SEE TMP-3 & TMP-5

NOTE: THE CONTRACTOR CAN WORK CONCURRENTLY IN BOTH PHASE 1, STEP 2 AND PHASE 1, STEP 3.

STEP 3:

WITH PISGAH DR (-L- & -Y1-) AND HOLTZCLAW ST (-Y2-) TRAFFIC IN ITS EXISTING PATTERN AND USING TEMPORARY LANE CLOSURES AND FLAGGERS CONSTRUCT THE WIDENING AND WEDGING AS SHOWN ON PLANS. CONSTRUCT UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE AS FOLLOWS:
-L- STA. FROM 12+00 TO 13+81+/-
-Y1- STA. FROM 10+70 TO 12+24+/-
-Y2- STA. FROM 10+29 TO 11+50
SEE TMP-3 & TMP-6. SEE NCDOT STD DRAWING 1101.02, SHEET 1 OF 14.

TO ACCOMODATE A FUTURE TRAFFIC SHIFT PLACE TEMPORARY PAVEMENT AND WIDEN PISGAH DR (-L- & -Y1-) AS FOLLOWS:
FROM L- STA. 12+95+/-, LT TO Y1- STA. 11+61+/-, RT.
SEE TMP-3 & TMP-6.

CONSTRUCT JOHNSON ST (-Y-) UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE AS FOLLOWS:
-Y- STA. FROM 10+13+/- TO 10+40
SEE TMP-3 & TMP-6. SEE NCDOT STD DRAWING 1101.02, SHEETS 1 OF 14.

STEP 4:

USING FLAGGERS AND TEMPORARY LANE CLOSURES PLACE TEMPORARY PAVEMENT MARKING AS SHOWN ON PLAN.
SEE TMP-6. SEE NCDOT STD DRAWING 1101.02, SHEETS 1 OF 14.

STEP 5:

WITH TRAFFIC IN ITS NEW PATTERN CONSTRUCT THE FOLLOWING UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE:
-L- STA. FROM 13+81+/- TO 14+10.16
-Y1- STA. FROM 12+24+/- TO 12+52.79
-Y2- STA. FROM 10+00 TO 10+29
-Y3- STA. FROM 10+00 TO 10+45+/-

CONSTRUCT THE ROUNDABOUT TRUCK APRON.

Phase II

STEP 1:

USING FLAGGERS AND TEMPORARY LANE CLOSURES PLACE TEMPORARY PAVEMENT MARKINGS AND PLACE DRUMS TO DELINEATE THE ROUNDABOUT SPLITTER ISLANDS. PLACE THE TRAFFIC IN THE ROUNDABOUT PATTERN.
NOTE: LOCUST ST (-Y3-) AND HILLSIDE ST(-Y4-) REMAIN CLOSED.
SEE TMP-8 & TMP-9. SEE NCDOT STD DRAWING 1101.02, SHEETS 1 OF 14.

STEP2:

REMOVE TEMPORARY PAVEMENT PLACED IN PHASE I AND COMPLETE THE SOUTHWEST ROUNDABOUT QUADRANT FROM L- STA 12+95+/- TO Y1- STA 11+61+/-.
SEE TMP-8 & TMP-9. SEE NCDOT STD DRAWING 1101.02, SHEETS 1 OF 14.

STEP 3:

USING FLAGGERS AND TEMPORARY LANE CLOSURES PLACE THE FINAL LAYER OF SURFACE COURSE AS FOLLOWS:
-L- STA. FROM 12+00 TO 13+81.16
-Y- STA. 10+12.92 TO 10+40
-Y1- STA FROM 10+70 TO 12+23.79
-Y2- STA FROM 10+29 TO 11+50
SEE TMP-8 & TMP-10. SEE NCDOT STD DRAWING 1101.02, SHEETS 1 OF 14.

USING FLAGGERS AND TEMPORARY LANE CLOSURES PLACE THE SPLITTER ISLANDS AS SHOWN ON PLANS.
-L- STA. FROM 13+02+/- TO 13+63+/-
-Y1- STA. FROM 11+56+/- TO 12+07+/-
-Y2- STA. FROM 10+47+/- TO 10+93+/-
SEE TMP-8 & TMP-10. SEE NCDOT STD DRAWING 1101.02, SHEETS 1 OF 14.

STEP 4:

USING FLAGGERS AND TEMPORARY LANE CLOSURES PLACE THE FINAL PAVEMENT MARKING AS SHOWN IN PAVEMENT MARKING PLANS.
SEE PAVEMENT MARKING PLANS. SEE NCDOT STD DRAWING 1101.02, SHEETS 1 AND 2 OF 14.

REMOVE ALL DETOUR SIGNING AND BARRICADES AND OPEN LOCUST ST (-Y3-) AND HILLSIDE ST (-Y4-) TO TRAFFIC. OPEN ALL SIDEWALKS TO PEDESTRIANS.

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NORTH CAROLINA PROFESSIONAL SEAL 35018 ENGINEER JIMMY L. TERRY

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DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WORK ZONE TRAFFIC CONTROL

PHASING

PROJ. REFERENCE NO.	SHEET NO.
U-6055	TMP-3

TGS ENGINEERS
804-C N. LAFAYETTE ST
SHELBY, NC 28150
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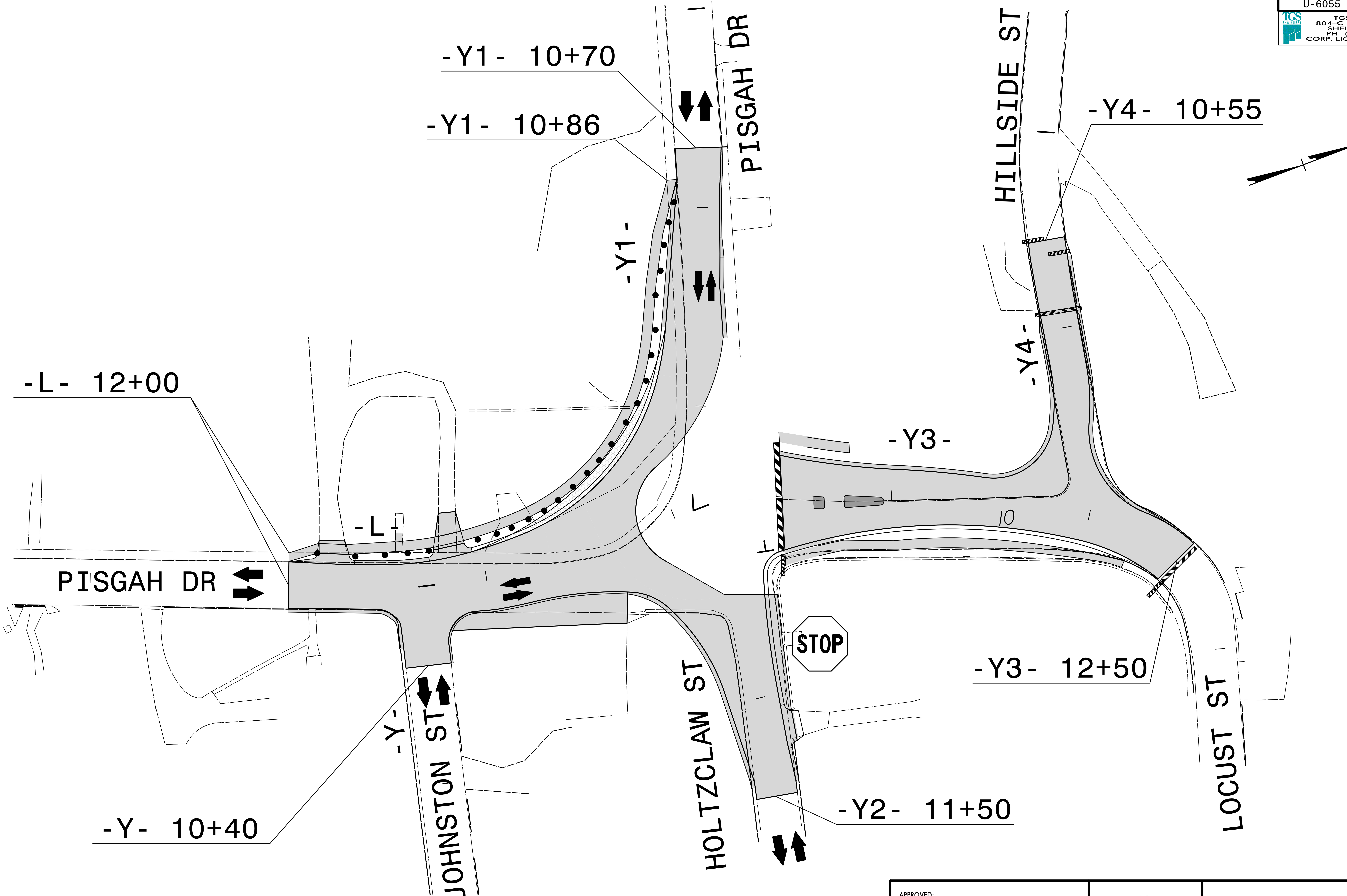

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DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
WORK ZONE TRAFFIC CONTROL

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PHASE I
OVERVIEW

10/15/2018
X:\NCDOT\U-6055\Traffic\TrafficControl\TCP\U-6055_TC_TMP_03(OVI).dgn
User:smelvin

PROJ. REFERENCE NO.	SHEET NO.
U-6055	TMP-4

TGS ENGINEERS
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SHELBY, NC 28150
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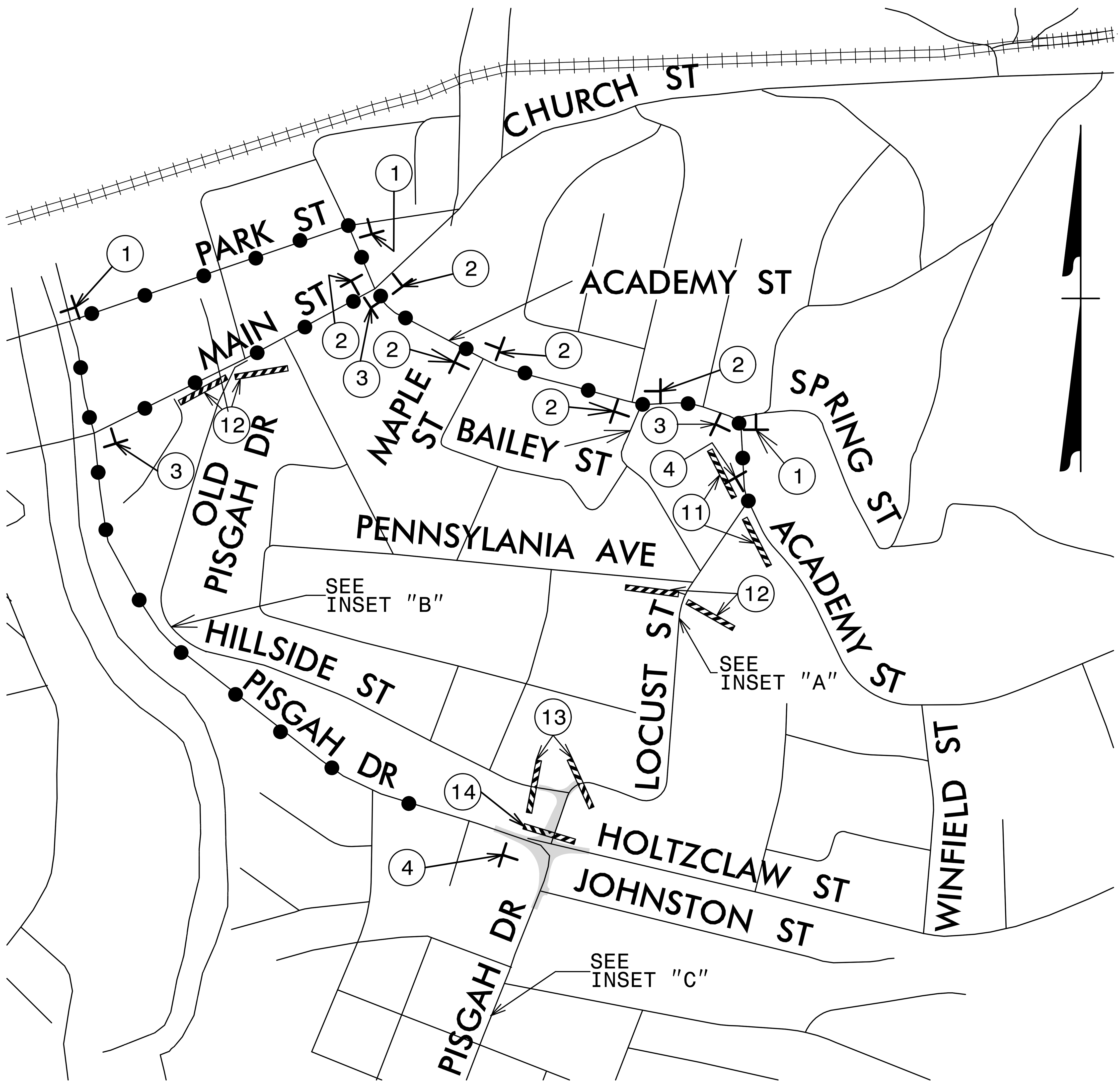
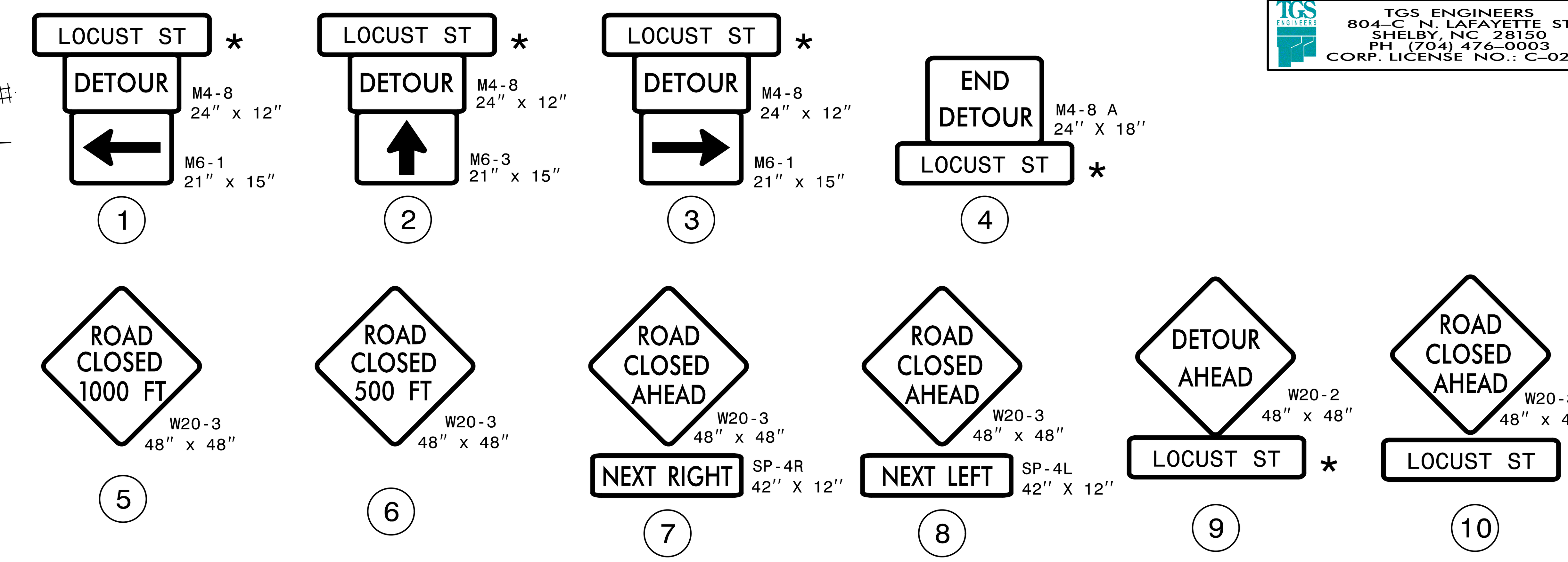
CORP. LICENSE NO.: C-0275



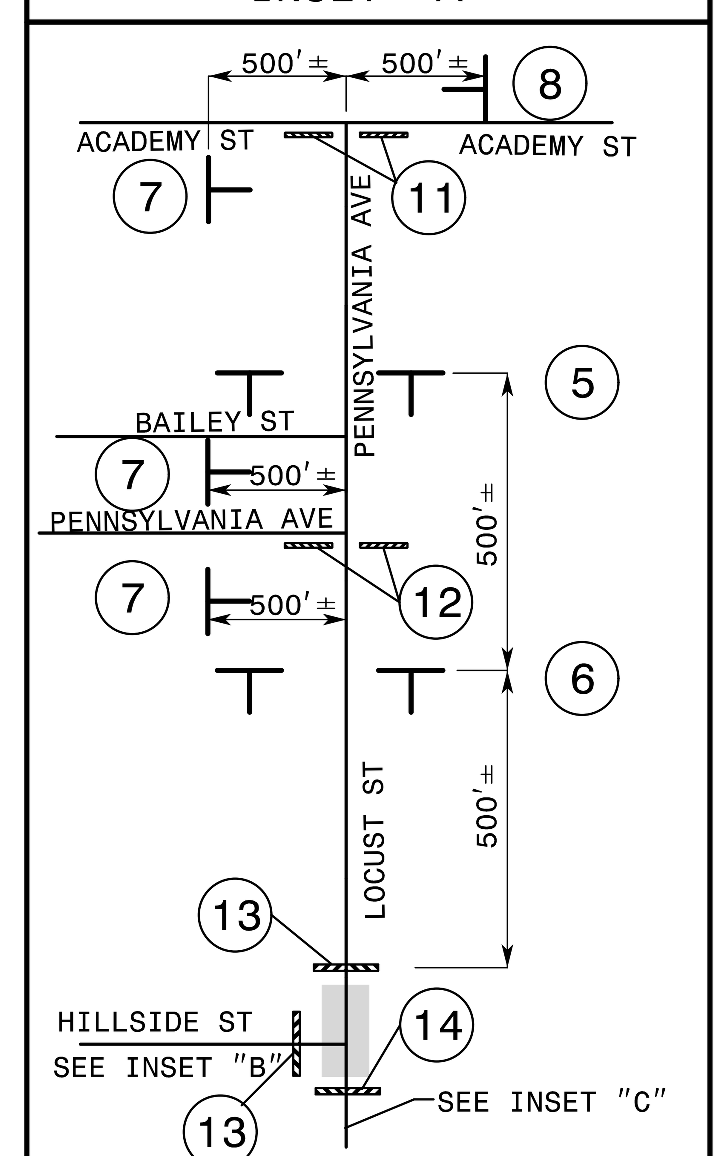


* SEE SHEET TMP-1C FOR SPECIAL SIGN DESIGN

DENOTES DETOUR ROAD

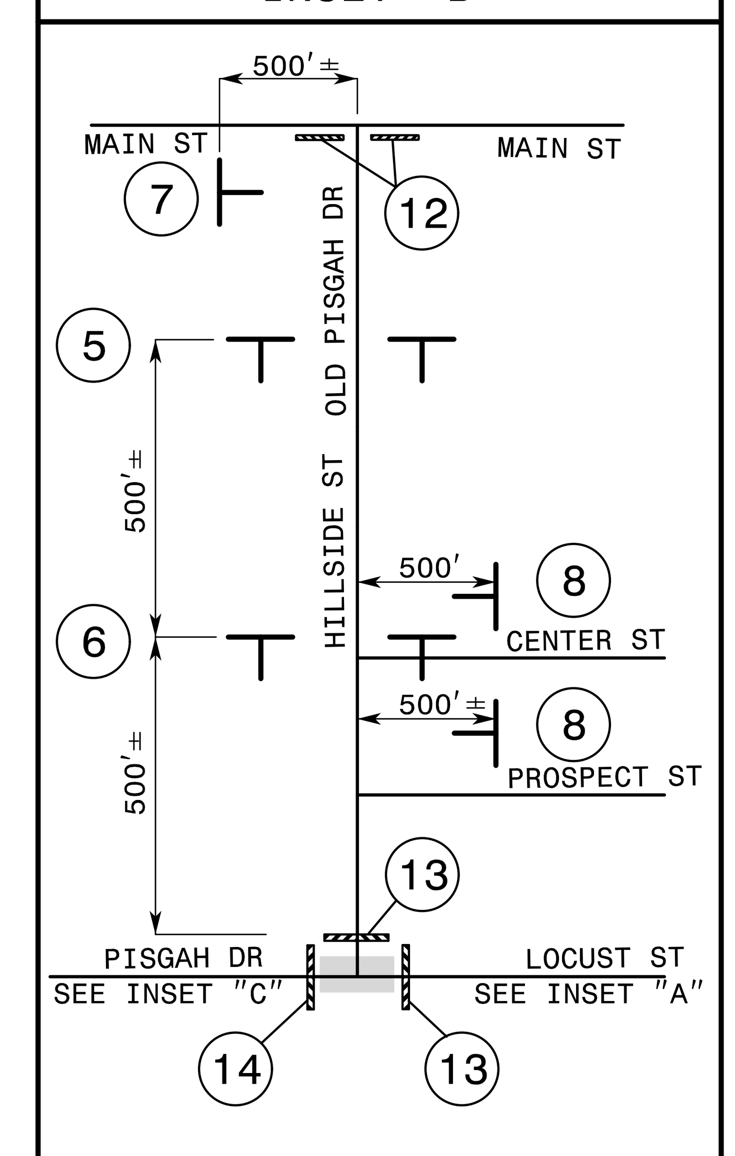
DENOTES WORK ZONE

INSET "A"



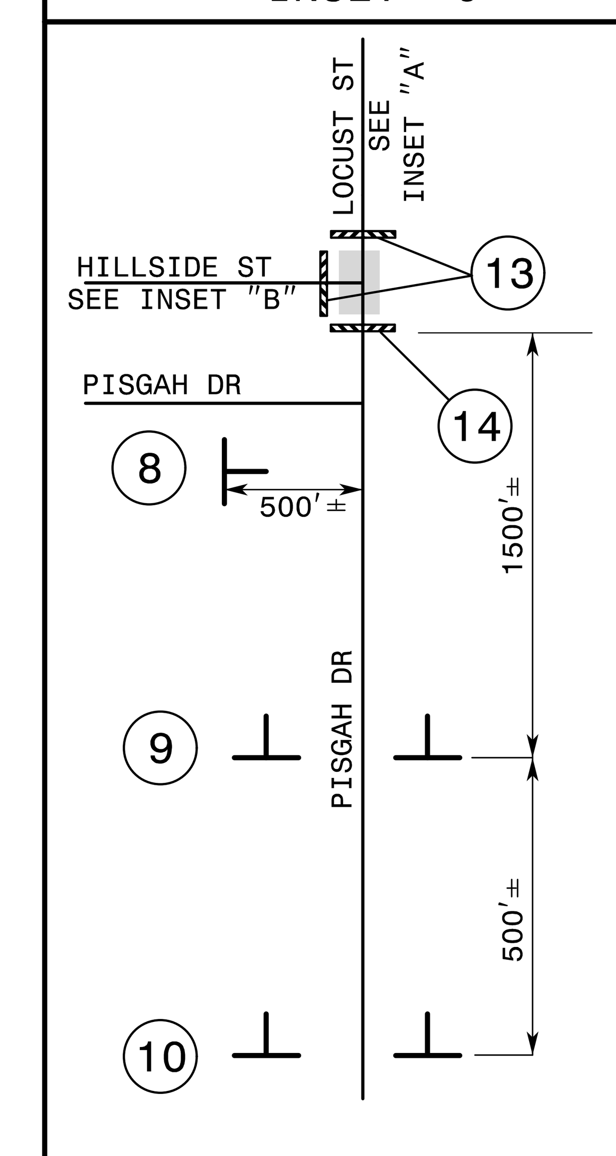
REFER TO ROADWAY STANDARD DRAWING 1101.03, SHEET 1 OF 9 FOR APPLICABLE NOTES.

INSET "B"

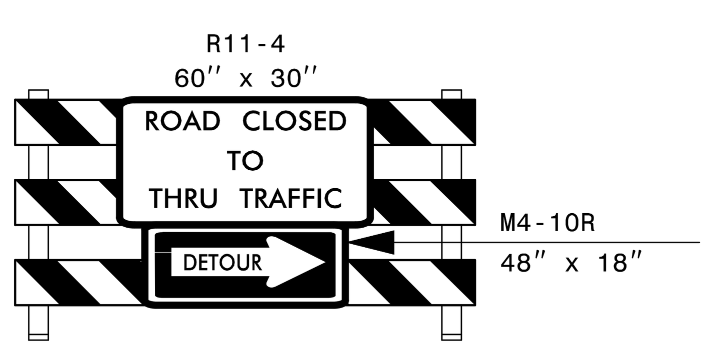


REFER TO ROADWAY STANDARD DRAWING 1101.03, SHEET 1 OF 9 FOR APPLICABLE NOTES.

INSET "C"

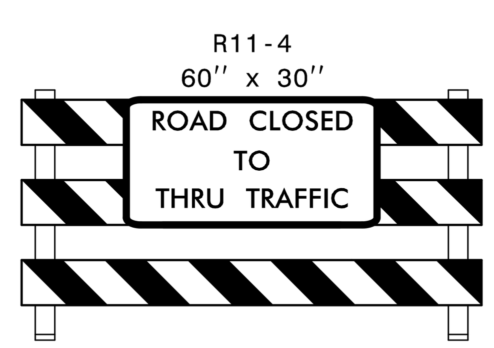


REFER TO ROADWAY STANDARD DRAWING 1101.03, SHEET 1 OF 9 FOR APPLICABLE NOTES.



TYPE III BARRICADE

11



TYPE III BARRICADE

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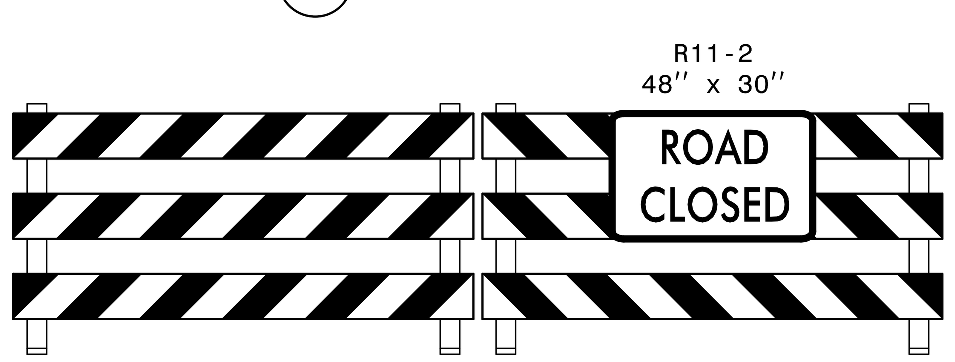
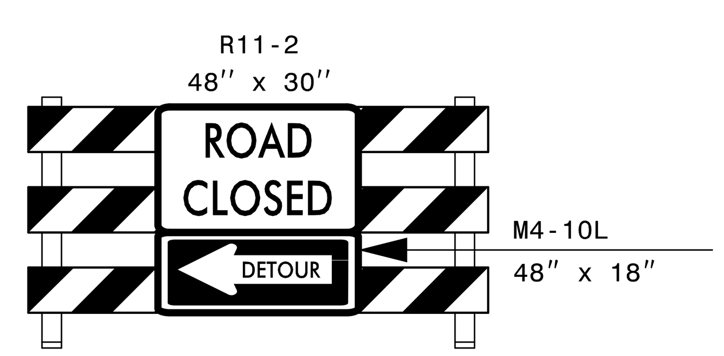


TYPE III BARRICADE(S)

13



TYPE III BARRICADE

14

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OFFSITE DETOUR ROUTE AND BARRICADE PLACEMENT

PROJ. REFERENCE NO.	SHEET NO.
U-6055	TMP-5

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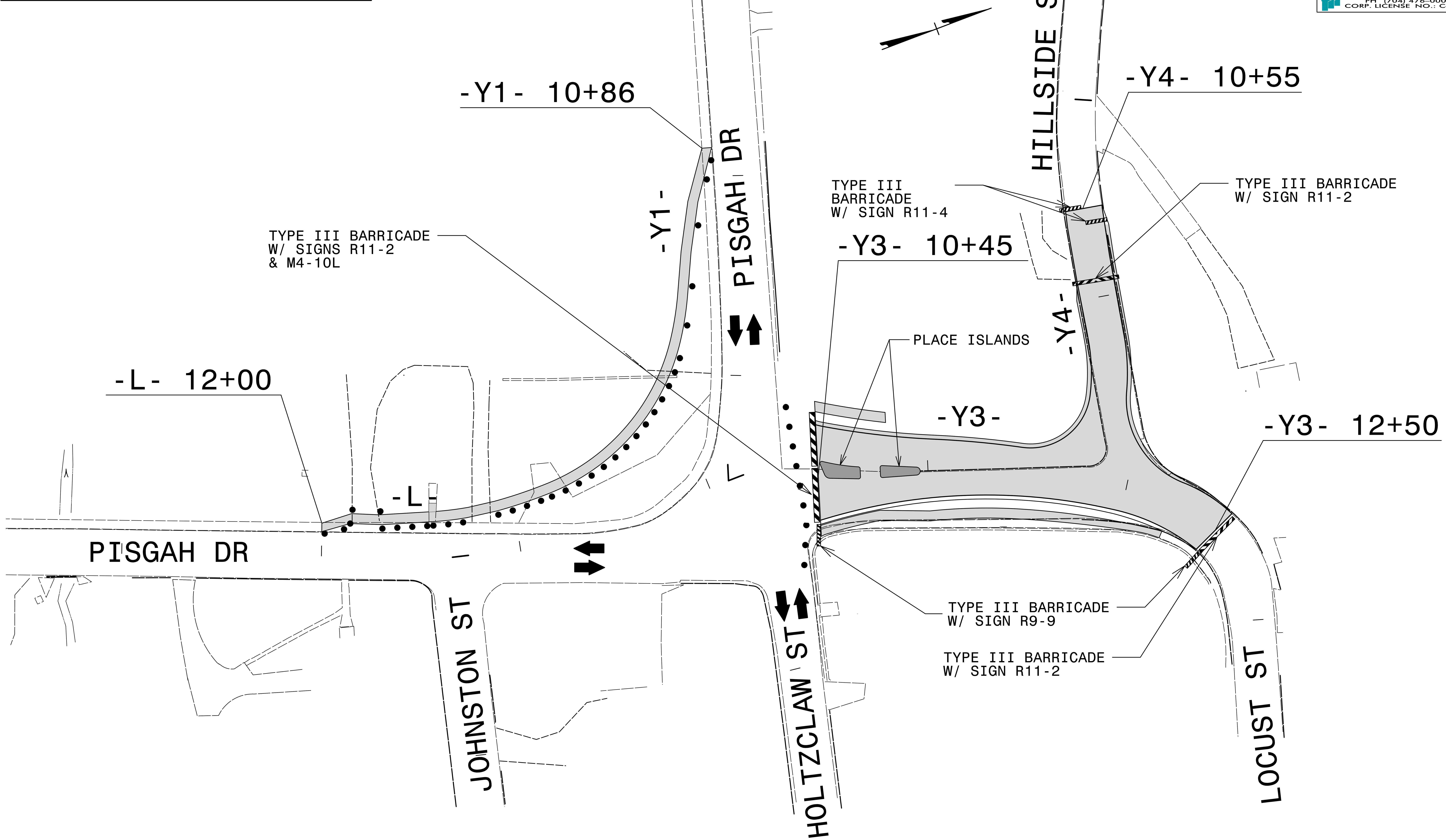
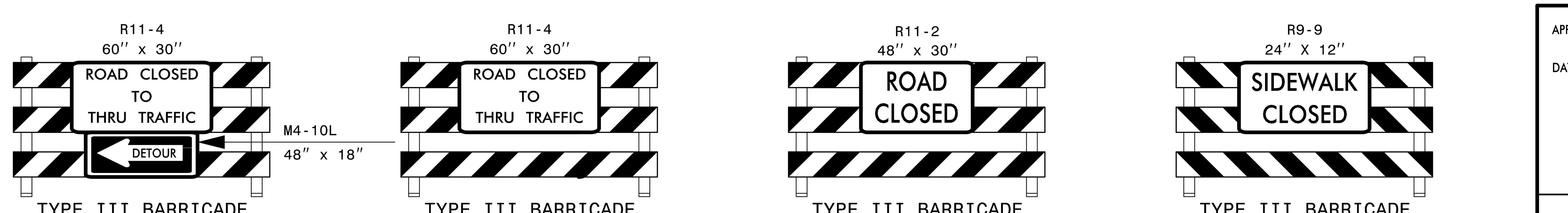
CORP. LICENSE NO.: C-0275

PHASE I, STEPS 1 & 2:





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WORK ZONE TRAFFIC CONTROL

PHASE I
DETAILS

PROJ. REFERENCE NO.	SHEET NO.
U-6055	TMP-6

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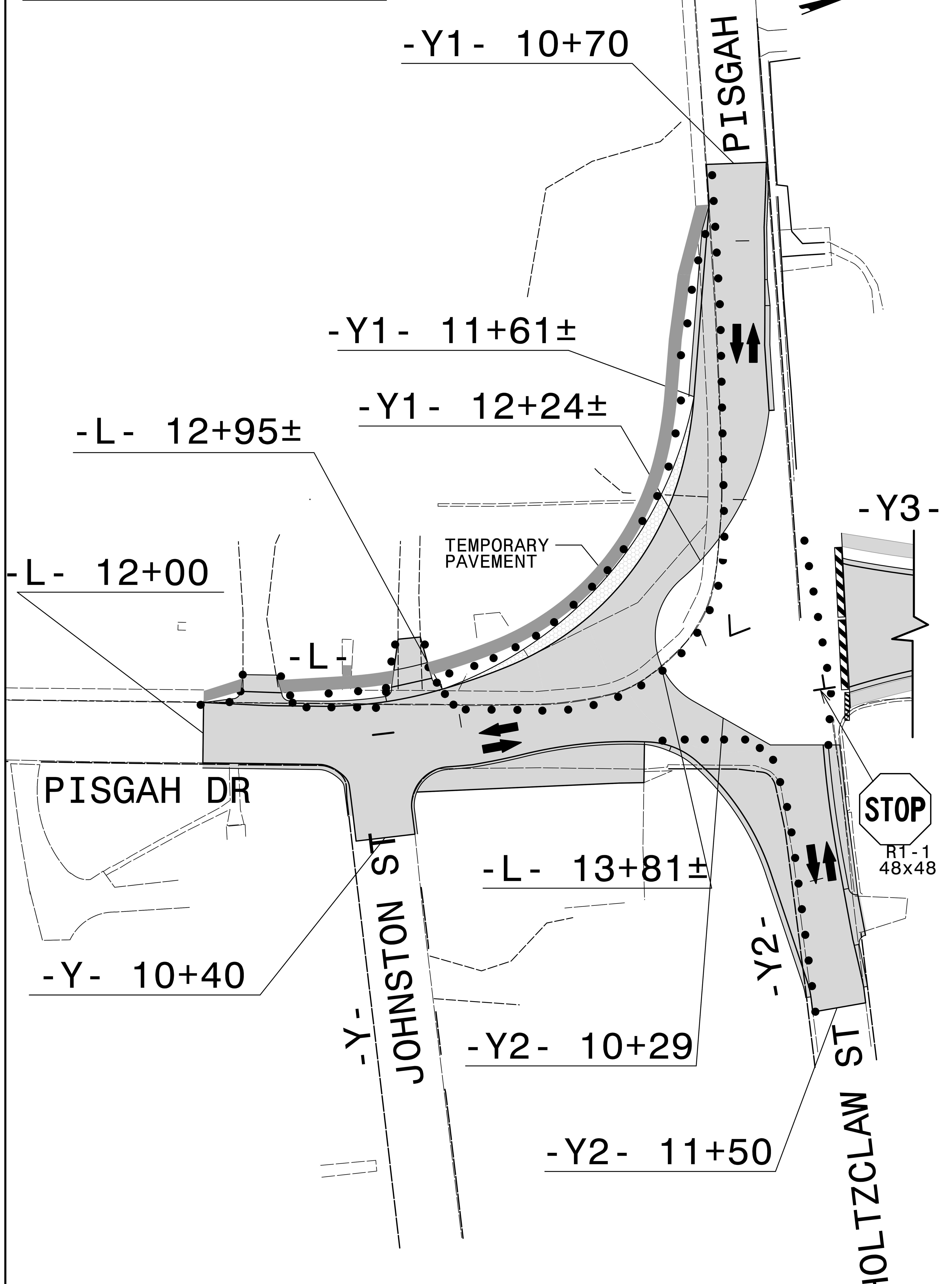
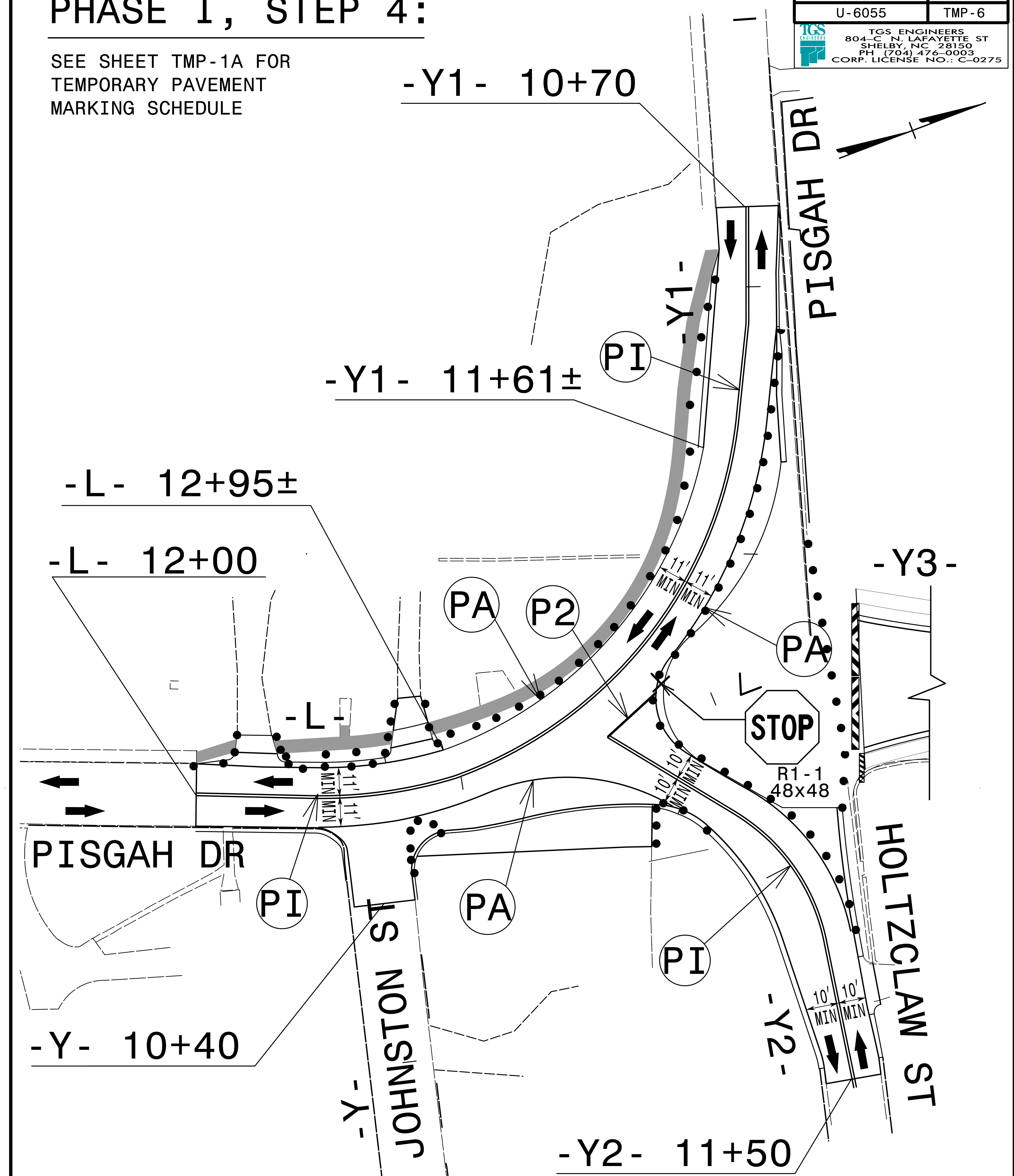
PH (704) 476-0003
CORP. LICENSE NO.: C-0275

PHASE I, STEP 3:



PHASE I, STEP 4:

SEE SHEET TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE



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PHASE I DETAILS

10/15/2018
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User:smelvin

PROJ. REFERENCE NO.	SHEET NO.
U-6055	TMP-7

TGS ENGINEERS
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SHELBY, NC 28150
PH (704) 476-0003
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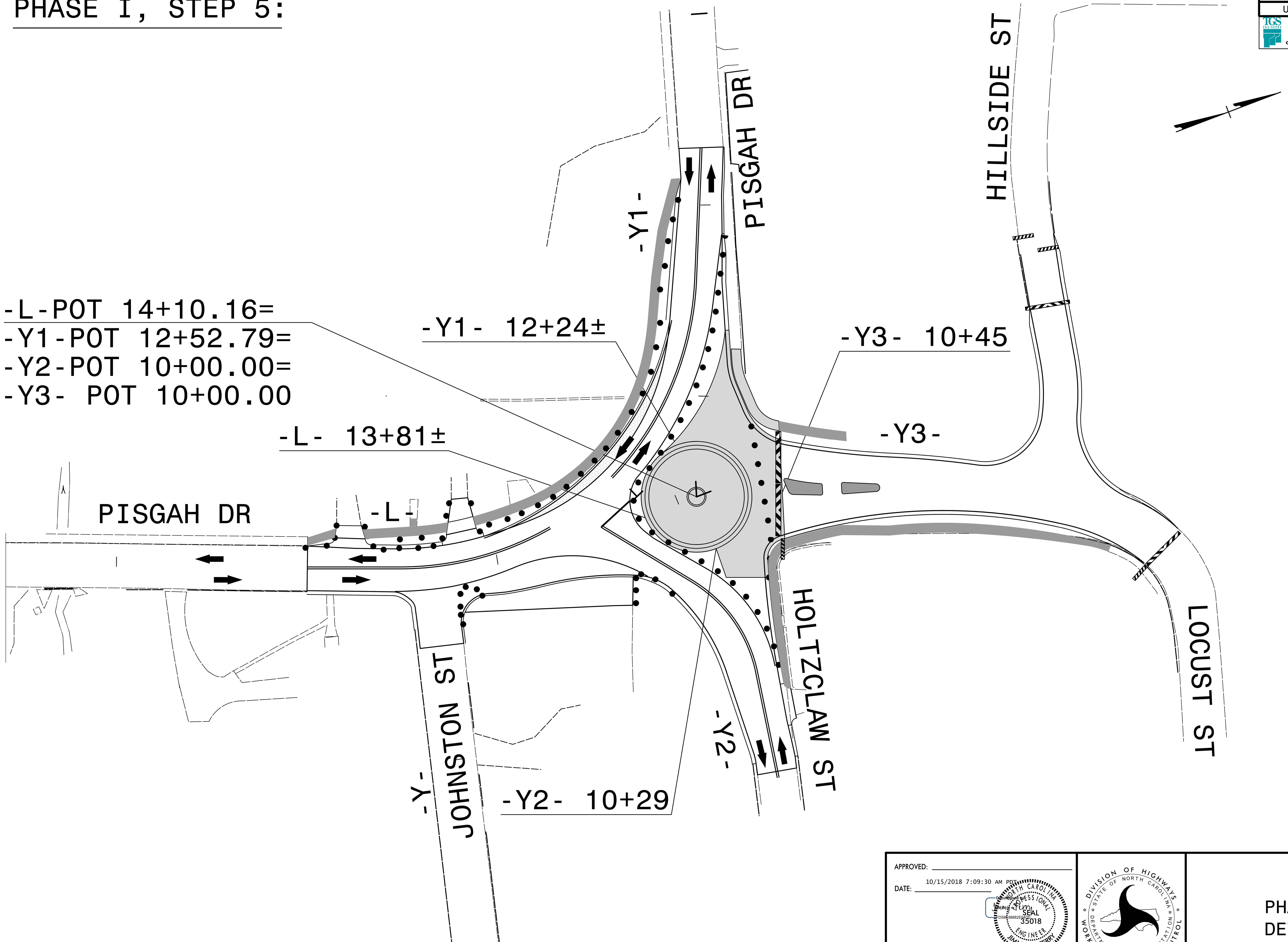
PHASE I, STEP 5:



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PHASE I DETAILS

10/15/2018
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User:smelvin

PROJ. REFERENCE NO.	SHEET NO.
U-6055	TMP-8

TGS ENGINEERS
804-C N. LAFAYETTE ST
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PH (704) 476-0003
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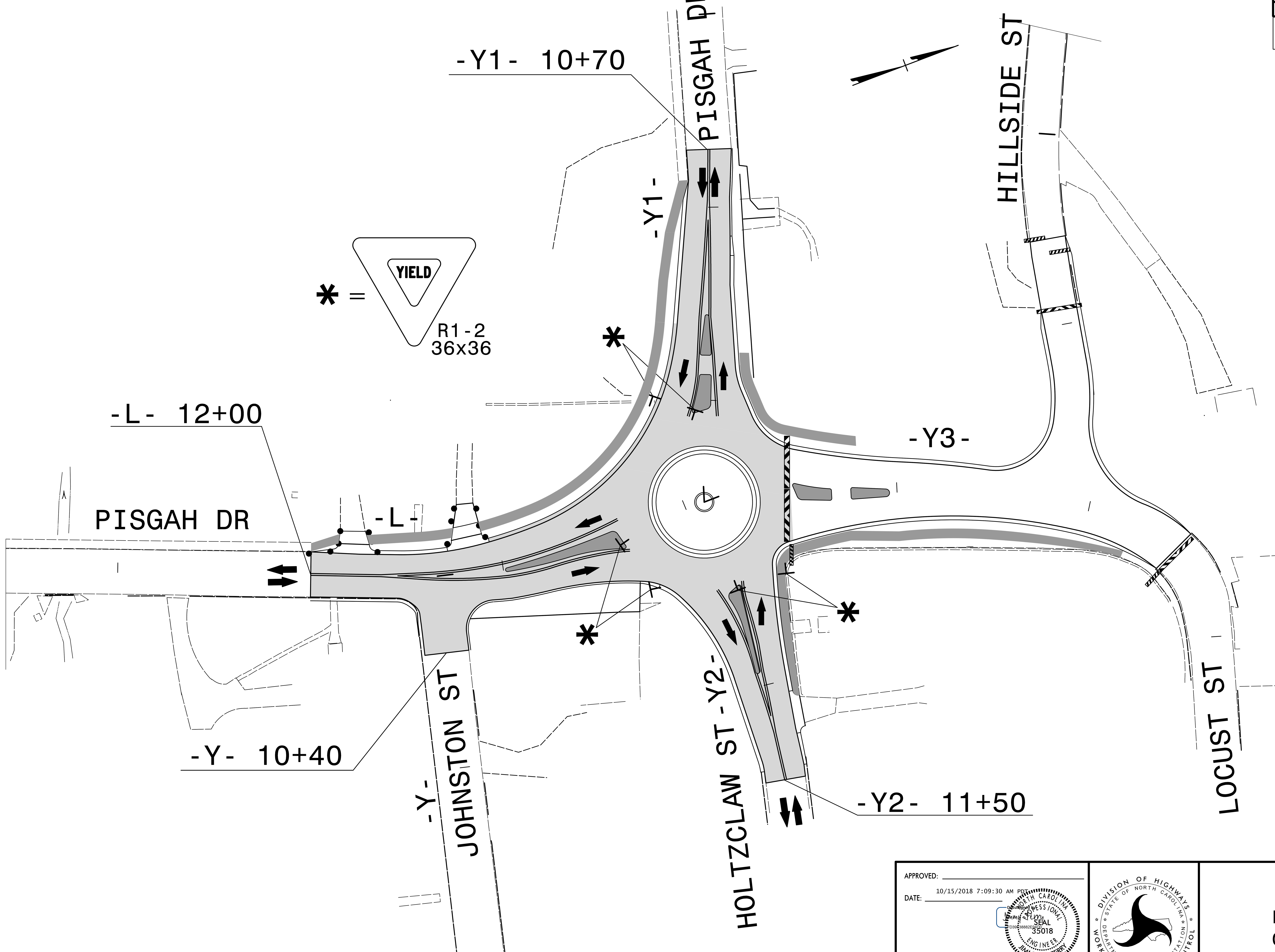

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NORTH CAROLINA PROFESSIONAL SEAL 35018 ENGINEER JIMMY L. TERRY

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DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WORK ZONE TRAFFIC CONTROL

PHASE II
OVERVIEW

10/15/2018
X:\NCDOT\U-6055\Traffic\TrafficControl\TCP\U-6055_TC_TMP_08(OV2).dgn
User:smelvin

PROJ. REFERENCE NO.	SHEET NO.
U-6055	TMP-9

TGS ENGINEERS
804-C N. LAFAYETTE ST
SHELBY, NC 28150
PH (704) 476-0003
CORP. LICENSE NO.: C-0275

PHASE II, STEP 1 & 2:

SEE SHEET TMP-1A FOR TEMPORARY PAVEMENT MARKING SCHEDULE

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DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WORK ZONE TRAFFIC CONTROL

PHASE II DETAILS

PROJ. REFERENCE NO.	SHEET NO.
U-6055	TMP-10

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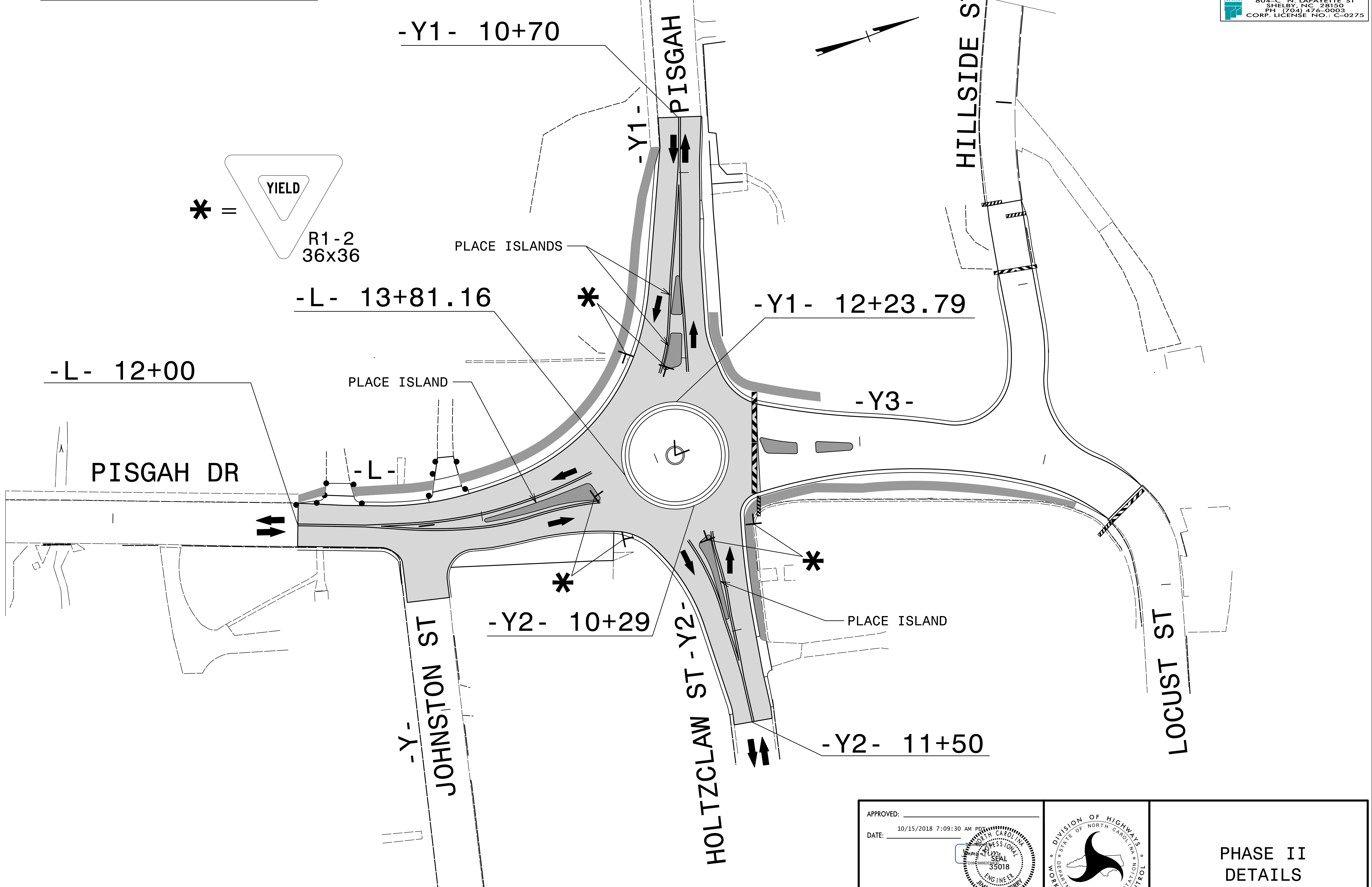
PH (704) 476-0003
CORP. LICENSE NO.: C-0275

PHASE II, STEP 3:



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DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WORK ZONE TRAFFIC CONTROL

PHASE II DETAILS

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User:smelvin

T.I.P.: U-6055

TIP NO.	SHEET NO.
U-6055	PMP-1

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DATE: ______

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STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING PLAN

HAYWOOD COUNTY

LOCATION: INTERSECTION OF PISGAH DR (NC 110), HOLTZCLAW ST, AND LOCUST ST IN THE TOWN OF CANTON

ROADWAY STANDARD DRAWING

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1253.01	RAISED PAVEMENT MARKERS - SNOWPLOWABLE

GENERAL NOTES

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLAN, OR DIRECTED BY THE ENGINEER.

A) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME	MARKING	MARKER
NC 110 PISGAH DR	THERMOPLASTIC	SNOWPLOWABLE RAISED
HOLTZCLAW ST	THERMOPLASTIC	SNOWPLOWABLE RAISED
LOCUST ST	THERMOPLASTIC	SNOWPLOWABLE RAISED
HILLSIDE ST	THERMOPLASTIC	NONE

B) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

C) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS.

D) STOP BAR LOCATION AT NON-SIGNALIZED INTERSECTIONS MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER.

E) UNLESS OTHERWISE SPECIFIED, HEATED-IN-PLACE THERMOPLASTIC MAY BE USED IN LIEU OF EXTRUDED THERMOPLASTIC FOR STOP BARS, SYMBOLS, CHARACTERS AND DIAGONALS. IF HEATED-IN-PLACE IS USED, IT SHALL BE PAID FOR USING THE EXTRUDED THERMOPLASTIC PAY ITEM.

F) SEE ROADWAY PLANS FOR ALTERNATE CURB RAMP DESIGNS WHEN INDICATED ON PAVEMENT MARKING DETAIL SHEETS.

FINAL PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION
	PAVEMENT MARKINGS
	THERMOPLASTIC(12", 120 MILS)
T10	3 FT. - 3 FT./SP WHITE MINISKIP
	THERMOPLASTIC(24", 120 MILS)
T2	WHITE STOPBAR
T3	WHITE CROSSWALK LINE
	THERMOPLASTIC(4", 120 MILS)
TH	YELLOW SINGLE CENTER
TI	YELLOW DOUBLE CENTER
	THERMOPLASTIC(8", 90 MILS)
TN	WHITE GORELINE
TP	YELLOW DIAGONAL

SYMBOL	DESCRIPTION
	THERMOPLASTIC PAVEMENT MARKING SYMBOLS (90 MILS)
UN	24" YIELD LINE TRIANGLE
	MARKERS
	SNOWPLOWABLE RAISED PAVEMENT MARKERS
ME	YELLOW & YELLOW

INDEX

SHEET NO.	DESCRIPTION
PMP-1	PAVEMENT MARKING PLAN TITLE, INDEX OF SHEETS, LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, GENERAL NOTES, AND FINAL PAVEMENT MARKING SCHEDULE
PMP-2	FINAL PAVEMENT MARKING PLAN

PLAN PREPARED FOR N.C.D.O.T. BY:

TGS ENGINEERS
804-C N. LAFAYETTE ST
SHELBY, NC 28150
PH (704) 476-0003
CORP. LICENSE NO.: C-0275

JIMMY L. TERRY, PE — PROJECT ENGINEER

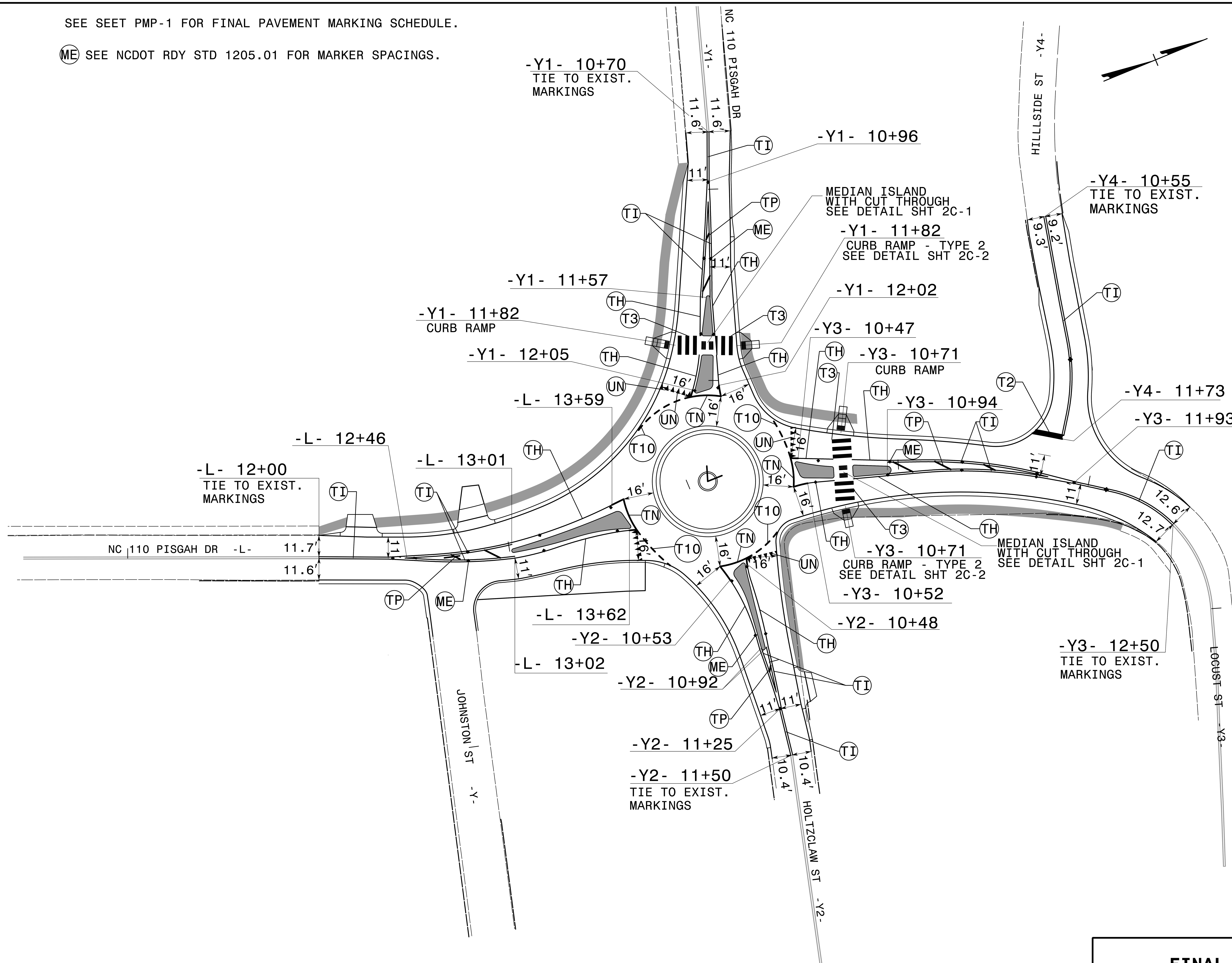
SANDRA MELVIN — DESIGN TECHNICIAN

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

10/12/2018
X:\NCDOT\U-6055\Traffic\Pavement Markings\U-6055_Sgn_PMP_01.dgn
User:smelvin

SEE SEET PMP-1 FOR FINAL PAVEMENT MARKING SCHEDULE.

(ME) SEE NCDOT RDY STD 1205.01 FOR MARKER SPACINGS.



TIP NO.	SHEET NO.
U-6055	PMP-2

APPROVED: ____________

DATE: ____________

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10/23/2018 12:01:35

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SHELBY, NC 28150
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CORP. LICENSE NO.: C-0275

FINAL PAVEMENT MARKING DETAIL

10/23/2018
X:\NCDOT\U-6055\Traffic\Pavement Markings\U-6055_Sgn_PMP_02(FinalPM).dgn
User:smelvin

U-6055

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-6055	EC-1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
47166.1.1	STBGDA-0110(013)	PE
47166.2.1	STBGDA-0110(013)	R/W, UTIL.
47166.3.1	STBGDA-0110(013)	CONST.

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

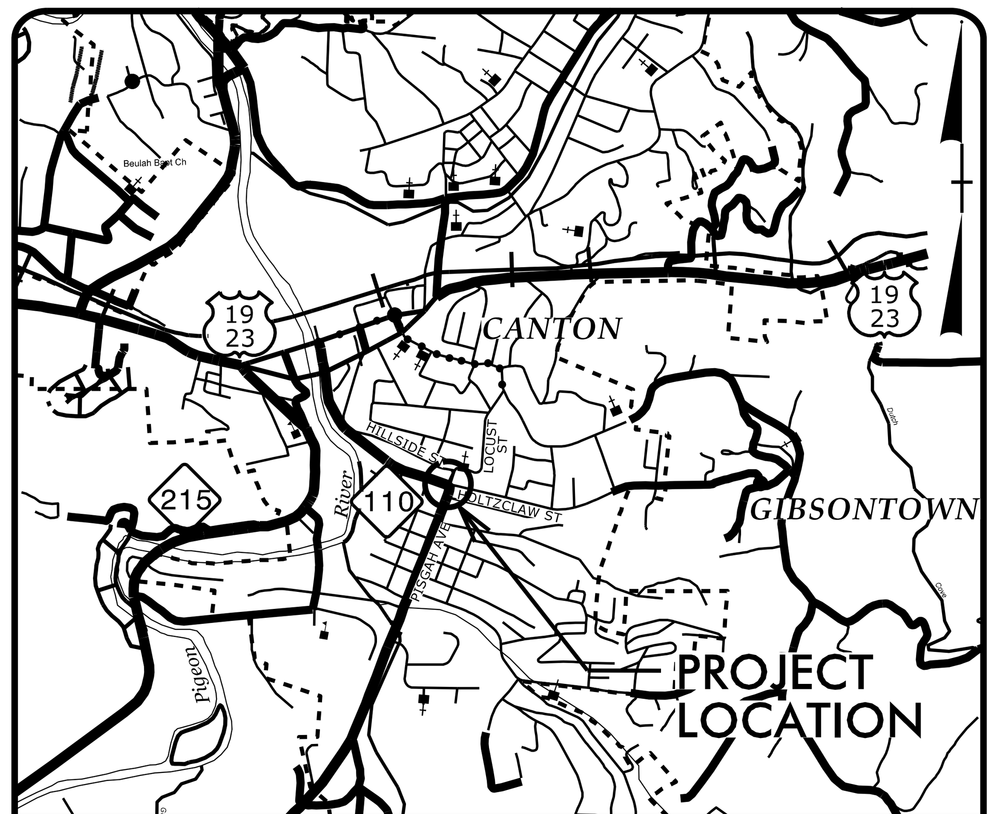
PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

HAYWOOD COUNTY

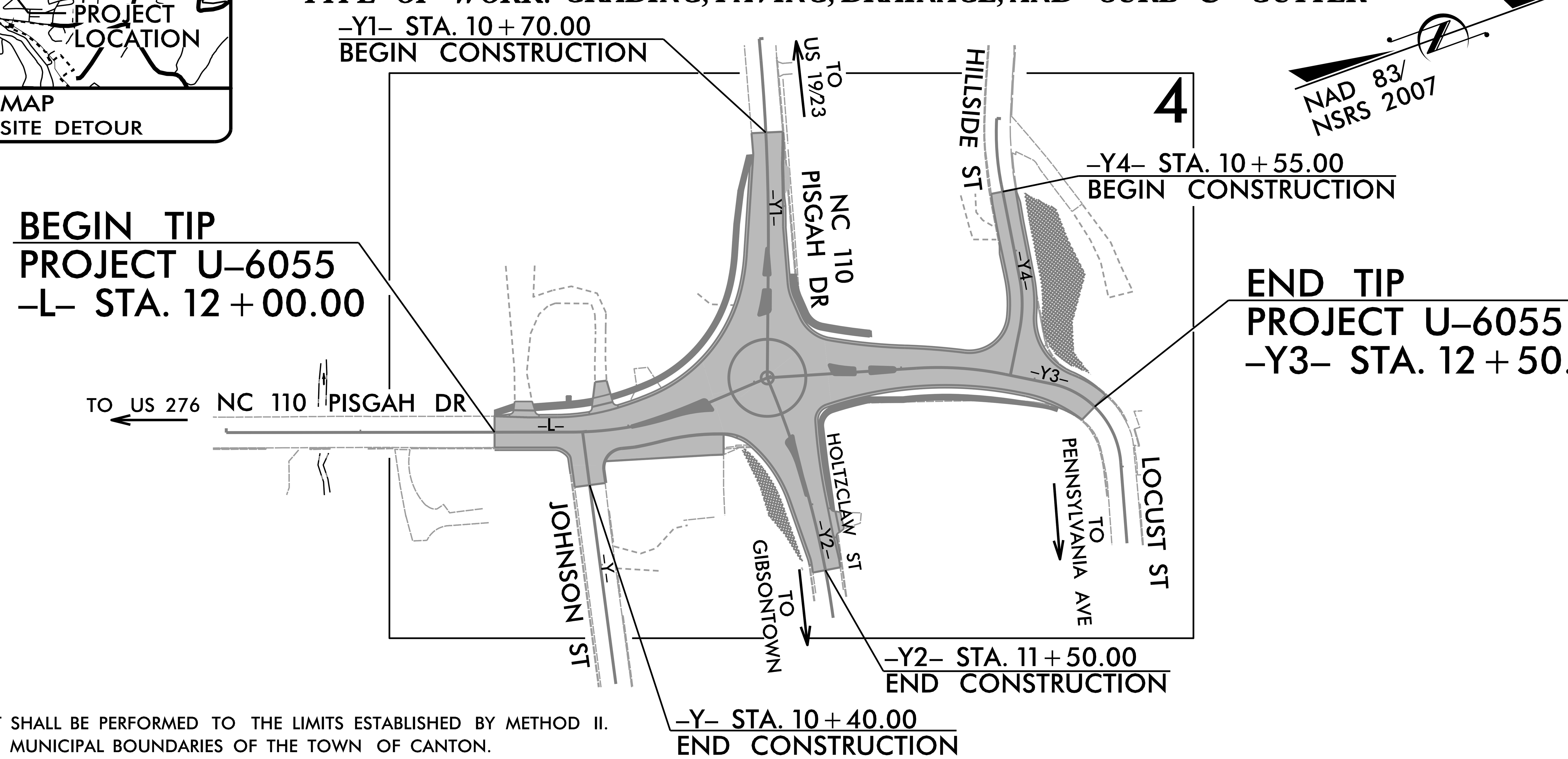
LOCATION: INTERSECTION OF PISGAH DR (NC 110), HOLTZCLAW ST, AND LOCUST ST IN THE TOWN OF CANTON

TYPE OF WORK: GRADING, PAVING, DRAINAGE, AND CURB & GUTTER

See Sheet 1A For Index of Sheets



VICINITY MAP
OFFSITE DETOUR



CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.
THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF THE TOWN OF CANTON.

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.02	Silt Basin Type B	
1633.01	Temporary Rock Silt Check Type-A	
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	
1633.02	Temporary Rock Silt Check Type-B	
	Wattle / Coir Fiber Wattle	EW / CFW
	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM)	
1634.01	Temporary Rock Sediment Dam Type-A	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-A	
1635.02	Rock Pipe Inlet Sediment Trap Type-B	
1630.04	Stilling Basin	
1630.06	Special Stilling Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	
	Tiered Skimmer Basin	
	Infiltration Basin	

THIS PROJECT CONTAINS EROSION CONTROL PLANS FOR CLEARING AND GRUBBING PHASE OF CONSTRUCTION.

HIGH QUALITY WATER(S) EXIST ON THIS PROJECT

High Quality Water Zone(s) Exist
-L- Sta. 10+70

Refer To E. C. Special Provisions for Special Considerations.

GRAPHIC SCALE

0 20

PLANS

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 1, 2016 AND ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER RESOURCES.

Prepared In the Office of:

TGS ENGINEERS
706 HILLSBOROUGH ST
SUITE 200
RALEIGH, NC 27603

PH (919) 773-8887
CORP. LICENSE NO.: C-0275

Designed by:

BEN HENEGAR, PE — ***3564***

NAME — *LEVEL III CERTIFICATION NO.*

2018 STANDARD SPECIFICATIONS

Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"– Roadway Design Unit – N. C. Department of Transportation – Raleigh, N. C., dated January 2018 and the latest revison thereto are applicable to this project and by reference hereby are considered a part of these plans.

1604.01 Railroad Erosion Control Detail
1605.01 Temporary Silt Fence
1606.01 Special Sediment Control Fence
1607.01 Gravel Construction Entrance
1622.01 Temporary Berms and Slope Drains
1630.01 Riser Basin
1630.02 Silt Basin Type B
1630.03 Temporary Silt Ditch
1630.04 Stilling Basin
1630.05 Temporary Diversion
1630.06 Special Stilling Basin
1631.01 Matting Installation
1632.01 Rock Inlet Sediment Trap Type A
1632.02 Rock Inlet Sediment Trap Type B
1632.03 Rock Inlet Sediment Trap Type C
1633.01 Temporary Rock Silt Check Type A
1633.02 Temporary Rock Silt Check Type B
1634.01 Temporary Rock Sediment Dam Type A
1634.02 Temporary Rock Sediment Dam Type B
1635.01 Rock Pipe Inlet Sediment Trap Type A
1635.02 Rock Pipe Inlet Sediment Trap Type B
1640.01 Coir Fiber Baffle
1645.01 Temporary Stream Crossing

PROJECT REFERENCE NO.	SHEET NO.
U-6055	EC-2

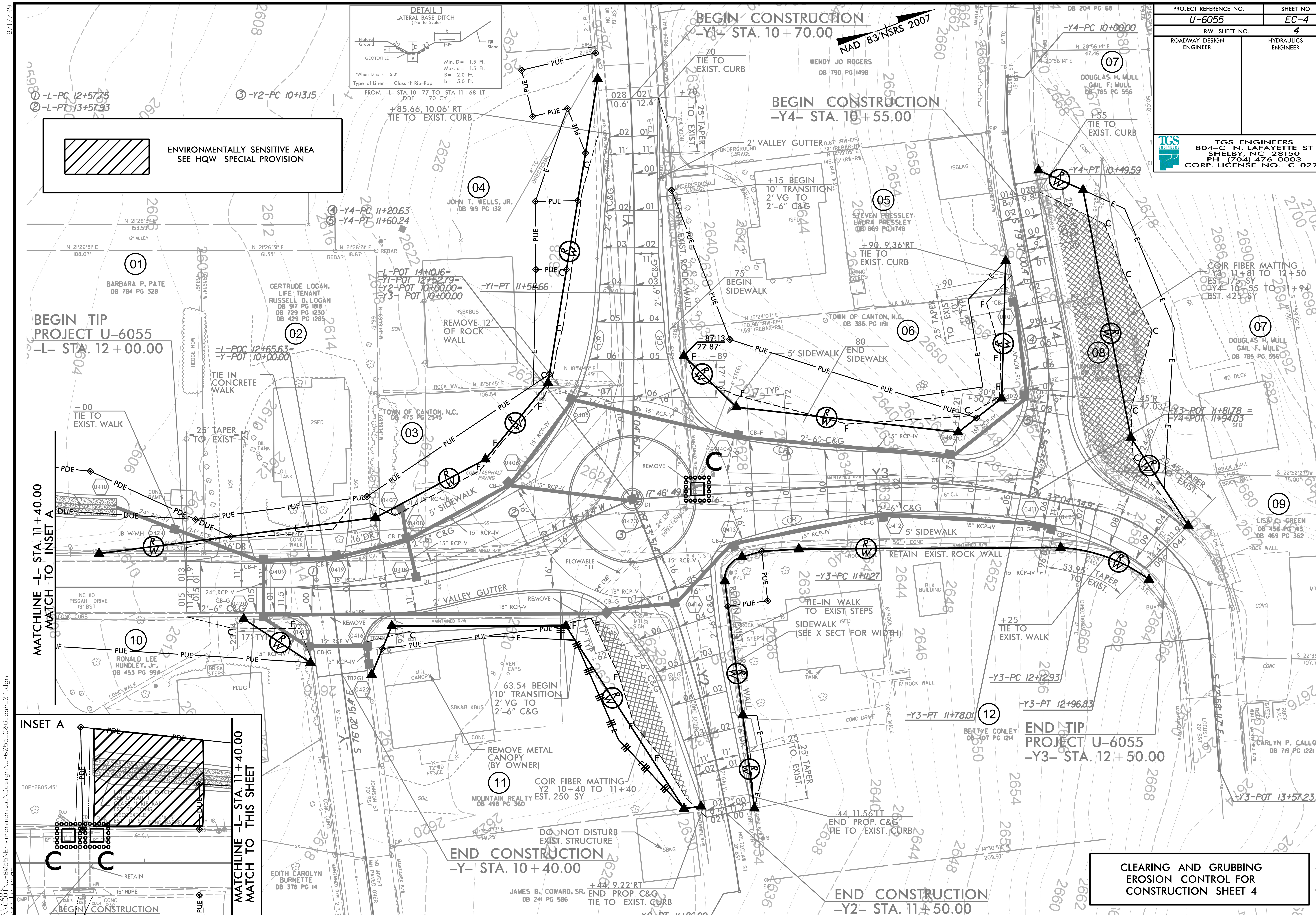
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

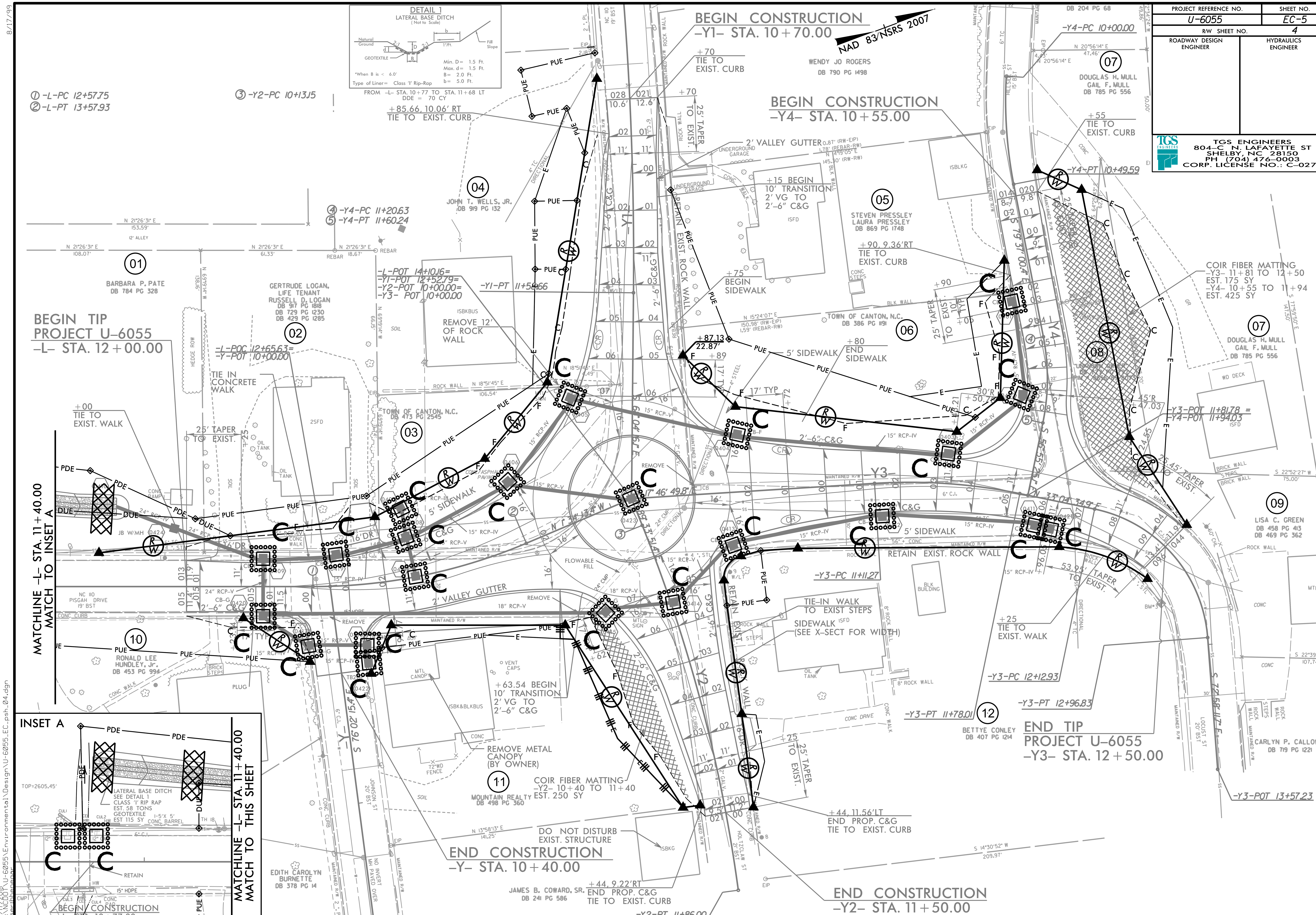
SHEET INTENTIONALLY LEFT BLANK

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.


PROJECT REFERENCE NO. U-6055
SHEET NO. EC-4
R/W SHEET NO. 4
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
TGS ENGINEERS
804-C N. LAFAYETTE ST
SHELBY, NC 28150
PH (704) 476-0003
CORP. LICENSE NO.: C-0275
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4
ENVIRONMENTALLY SENSITIVE AREA
SEE HQW SPECIAL PROVISION
DETAIL 1
LATERAL BASE DITCH
(Not to Scale)
Natural Ground
GEOTEXTILE
Fill Slope
Min. D= 1.5 Ft.
Max. d= 1.5 Ft.
B= 2.0 Ft.
b= 5.0 Ft.
*When B is < 6.0'
Type of Liner= Class 'I' Rip-Rap
FROM -L- STA. 10+77 TO STA. 11+68 LT
DDE = 70 CY
NAD 83/NSRS 2007
BEGIN CONSTRUCTION
-Y1- STA. 10+70.00
BEGIN CONSTRUCTION
-Y4- STA. 10+55.00
BEGIN TIP
PROJECT U-6055
-L- STA. 12+00.00
END TIP
PROJECT U-6055
-Y3- STA. 12+50.00
END CONSTRUCTION
-Y- STA. 10+40.00
END CONSTRUCTION
-Y2- STA. 11+50.00
MATCHLINE -L- STA. 11+40.00
MATCH TO INSET A
INSET A
MATCHLINE -L- STA. 11+40.00
MATCH TO THIS SHEET
BEGIN CONSTRUCTION
-L- STA. 10+77.00
① -L-PC 12+57.75
② -L-PT 13+57.93
③ -Y2-PC 10+13.15
④ -Y4-PC 11+20.63
⑤ -Y4-PT 11+60.24
-L-POT 14+10.16=
-Y1-POT 12+52.79=
-Y2-POT 10+00.00=
-Y3- POT 10+00.00
-L-POC 12+65.63=
-Y-POT 10+00.00
-Y1-PT 11+59.66
-Y4-PC 10+00.00
-Y4-PT 10+49.59
-Y3-POT 11+81.78 =
-Y4-POT 11+94.03
-Y3-PC 11+11.27
-Y3-PC 12+12.93
-Y3-PT 12+96.83
-Y3-PT 11+78.01
-Y3-POT 13+57.23
-Y2-PT 11+86.00
COIR FIBER MATTING
-Y3- 11+81 TO 12+50
EST. 175 SY
-Y4- 10+55 TO 11+94
EST. 425 SY
COIR FIBER MATTING
-Y2- 10+40 TO 11+40
EST. 250 SY
BARBARA P. PATE
DB 784 PG 328
GERTRUDE LOGAN, LIFE TENANT
RUSSELL D. LOGAN
DB 917 PG 1818
DB 729 PG 1230
DB 429 PG 1285
JOHN T. WELLS, JR.
DB 919 PG 132
TOWN OF CANTON, N.C.
DB 473 PG 2545
WENDY JO ROGERS
DB 790 PG 1498
STEVEN PRESSLEY
LAURA PRESSLEY
DB 869 PG 1748
TOWN OF CANTON, N.C.
DB 386 PG 1191
DOUGLAS H. MULL
GAIL F. MULL
DB 785 PG 556
LISA C. GREEN
DB 456 PG 113
DB 469 PG 362
RONALD LEE HUNDLEY, Jr.
DB 453 PG 994
MOUNTAIN REALTY
DB 498 PG 360
BETTYE CONLEY
DB 407 PG 1214
CARLYN P. CALLOWAY
DB 719 PG 1221
EDITH CAROLYN BURNETTE
DB 378 PG 14
JAMES B. COWARD, SR.
DB 241 PG 586
REMOVE 12' OF ROCK WALL
TIE IN CONCRETE WALK
25' TAPER TO EXIST.
+00 TIE TO EXIST. WALK
2' VALLEY GUTTER
5' SIDEWALK
RETAIN EXIST. ROCK WALL
TIE-IN WALK TO EXIST STEPS
SIDEWALK (SEE X-SECT FOR WIDTH)
+25 TIE TO EXIST. WALK
+63.54 BEGIN 10' TRANSITION 2' VG TO 2'-6" C&G
+15 BEGIN 10' TRANSITION 2' VG TO 2'-6" C&G
+85.66, 10.06' RT TIE TO EXIST. CURB
+90, 9.36' RT TIE TO EXIST. CURB
+75 BEGIN SIDEWALK
+80 END SIDEWALK
+55 TIE TO EXIST. CURB
+70 TIE TO EXIST. CURB
REMOVE METAL CANOPY (BY OWNER)
DO NOT DISTURB EXIST. STRUCTURE
+44, 11.56' LT END PROP. C&G TIE TO EXIST. CURB
+44, 9.22' RT END PROP. C&G TIE TO EXIST. CURB
NC 110 PISGAH DRIVE
JOHNSON ST
LOCUST ST
HOLTZCLAW ST
FLOWABLE FILL
REMOVE



PROJECT REFERENCE NO.
U-6055
SHEET NO.
EC-5
R/W SHEET NO.
4
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
TGS ENGINEERS
804-C N. LAFAYETTE ST
SHELBY, NC 28150
PH (704) 476-0003
CORP. LICENSE NO.: C-0275
DETAIL 1
LATERAL BASE DITCH
(Not to Scale)
Natural Ground
GEOTEXTILE
Fill Slope
Min. D= 1.5 Ft.
Max. d= 1.5 Ft.
B= 2.0 Ft.
b= 5.0 Ft.
*When B is < 6.0'
Type of Liner= Class 'I' Rip-Rap
FROM -L- STA. 10+77 TO STA. 11+68 LT
DDE = 70 CY
① -L-PC 12+57.75
② -L-PT 13+57.93
③ -Y2-PC 10+13.15
④ -Y4-PC 11+20.63
⑤ -Y4-PT 11+60.24
BEGIN CONSTRUCTION
-Y1- STA. 10+70.00
NAD 83/NSRS 2007
BEGIN CONSTRUCTION
-Y4- STA. 10+55.00
BEGIN TIP
PROJECT U-6055
-L- STA. 12+00.00
END TIP
PROJECT U-6055
-Y3- STA. 12+50.00
END CONSTRUCTION
-Y- STA. 10+40.00
END CONSTRUCTION
-Y2- STA. 11+50.00
MATCHLINE -L- STA. 11+40.00
MATCH TO INSET A
INSET A
MATCHLINE -L- STA. 11+40.00
MATCH TO THIS SHEET
BEGIN CONSTRUCTION
-L- STA. 10+77.00
LATERAL BASE DITCH
SEE DETAIL 1
CLASS 'I' RIP RAP
EST. 58 TONS
GEOTEXTILE
EST 115 SY
COIR FIBER MATTING
-Y3- 11+81 TO 12+50
EST. 175 SY
-Y4- 10+55 TO 11+94
EST. 425 SY
COIR FIBER MATTING
-Y2- 10+40 TO 11+40
EST. 250 SY
+85.66, 10.06' RT
TIE TO EXIST. CURB
+70
TIE TO EXIST. CURB
+55
TIE TO EXIST. CURB
-Y4-PC 10+00.00
-Y4-PT 10+49.59
+15 BEGIN
10' TRANSITION
2' VG TO
2'-6" C&G
+75
BEGIN SIDEWALK
+90, 9.36' RT
TIE TO EXIST. CURB
2' VALLEY GUTTER
RETAIN EXIST. ROCK WALL
REMOVE 12' OF ROCK WALL
TIE IN CONCRETE WALK
+00
TIE TO EXIST. WALK
25' TAPER TO EXIST.
-L-POT 14+10.16=
-Y1-POT 12+52.79=
-Y2-POT 10+00.00=
-Y3- POT 10+00.00
-Y1-PT 11+59.66
-L-POC 12+65.63=
-Y-POT 10+00.00
+87.13 22.87'
5' SIDEWALK
+80 END SIDEWALK
-Y3-POT 11+81.78 =
-Y4-POT 11+94.03
-Y3-PC 11+11.27
TIE-IN WALK TO EXIST STEPS
SIDEWALK (SEE X-SECT FOR WIDTH)
+25 TIE TO EXIST. WALK
-Y3-PC 12+12.93
-Y3-PT 12+96.83
-Y3-PT 11+78.01
-Y3-POT 13+57.23
+63.54 BEGIN
10' TRANSITION
2' VG TO
2'-6" C&G
REMOVE METAL CANOPY (BY OWNER)
DO NOT DISTURB EXIST. STRUCTURE
+44, 11.56' LT
END PROP. C&G
TIE TO EXIST. CURB
+44, 9.22' RT
END PROP. C&G
TIE TO EXIST. CURB
-Y2-PT 11+86.00
FLOWABLE FILL
01 BARBARA P. PATE DB 784 PG 328
02 GERTRUDE LOGAN, LIFE TENANT RUSSELL D. LOGAN DB 917 PG 1818 DB 729 PG 1230 DB 429 PG 1285
03 TOWN OF CANTON, N.C. DB 473 PG 2545
04 JOHN T. WELLS, JR. DB 919 PG 132
05 STEVEN PRESSLEY LAURA PRESSLEY DB 869 PG 1748
06 TOWN OF CANTON, N.C. DB 386 PG 1191
07 DOUGLAS H. MULL GAIL F. MULL DB 785 PG 556
09 LISA C. GREEN DB 458 PG 413 DB 469 PG 362
10 RONALD LEE HUNDLEY, Jr. DB 453 PG 994
11 MOUNTAIN REALTY DB 498 PG 360
12 BETTYE CONLEY DB 407 PG 1214
WENDY JO ROGERS DB 790 PG 1498
EDITH CAROLYN BURNETTE DB 378 PG 14
JAMES B. COWARD, SR. DB 241 PG 586
CARLYN P. CALLOWAY DB 719 PG 1221
NC 110 PISGAH DRIVE 19' BST
8/17/99
10/17/2018

T.I.P.: U-6055

PROJECT REFERENCE NO.	SHEET NO.
U-6055	SIGN-1

APPROVED:

DATE:

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 35018 ENGINEER JIMMY L. TERRY

10/18/2018 10:30:45 AM PDT

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

SIGNING PLAN
HAYWOOD COUNTY

LOCATION: INTERSECTION OF PISGAH DR (NC 110), HOLTZCLAW ST, AND LOCUST ST IN THE TOWN OF CANTON

ROADWAY STANDARD DRAWING

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
901.50	ARROWS AND SHIELDS
903.10	GROUND MOUNTED SIGN SUPPORTS
904.10	ORIENTATION OF GROUND MOUNTED SIGNS
904.50	MOUNTING OF TYPE 'D', 'E' AND 'F' SIGNS ON 'U' CHANNEL POSTS

GENERAL NOTES

- SIGNS FURNISHED BY CONTRACTOR
- IF REMOVAL OR RELOCATION OF SIGNS ON PRIVATE STREET (NON-STATE MAINTAINED) IS REQUIRED DUE TO CONSTRUCTION, THE CONTRACTOR SHALL INFORM THE ENGINEER. THE WORK WILL BE COMPLETED BY OTHERS.
- WHEN NOT STATIONED OR DIMENSIONED ON PLANS, ALL 'E' AND 'F' SIGNS SHALL BE FIELD LOCATED BY THE ENGINEER
- ALL EXISTING SIGNS ON "U" CHANNEL POST WITHIN THE PROJECT LIMITS SHALL BE REMOVED AND DISPOSED OF UNLESS OTHERWISE NOTED ON PLANS.
- WHEN EXISTING SIGNS ARE REMOVED AND INSTALLED ON NEW SUPPORTS, THE RE-ERECTION SHALL IMMEDIATELY FOLLOW THE REMOVAL.
- THE BACKGROUND FOR TYPE E & F SIGNS SHALL BE TYPE C REFLECTIVE SHEETING.
- ALL TYPE 'D' SIGNS SHALL BE MOUNTED ON TWO U-CHANNEL POSTS UNLESS OTHERWISE INDICATED ON THE PLANS.

SUMMARY OF QUANTITIES

ITEM NO. DESC. NO.	ITEM NO. SECT. NO.	ITEM DESCRIPTION	QUANTITY	UNIT
4025000000	901	CONTRACTOR FURNISHED, TYPE D SIGN	100	S.F.
4025000000	901	CONTRACTOR FURNISHED, TYPE E SIGN	210	S.F.
4025000000	901	CONTRACTOR FURNISHED, TYPE F SIGN	20	S.F.
4072000000	903	SUPPORTS, 3 LB STEEL U-CHANNEL	550	L.F.
4096000000	904	SIGN ERECTION, TYPE D	4	EA.
4102000000	904	SIGN ERECTION, TYPE E	36	EA.
4108000000	904	SIGN ERECTION, TYPE F	2	EA.
4116100000	904	SIGN ERECTION, RELOCATE SIGN TYPE E (GROUND MOUNTED)	3	EA.
4155000000	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	6	EA.
4237000000	907	STOCKPILE SIGN, D, E OR F	3	EA.

INDEX

SHEET NO.	DESCRIPTION
SIGN-1	TITLE SHEET
SIGN-2	E AND F SIGNS
SIGN-2A	SIGN DESIGN
SIGN-3	SIGNING PLAN SHEET

PLANS PREPARED FOR N.C.D.O.T. BY:

TGS ENGINEERS
804-C N. LAFAYETTE ST
SHELBY, NC 28150
PH (704) 476-0003
CORP. LICENSE NO.: C-0275

JIMMY L. TERRY, PE — PROJECT ENGINEER

SANDRA G. MELVIN — DESIGN TECHNICIAN

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

10/18/2018
X:\NCDOT\U-6055\Traffic\Signing\CADD\Signing Layout Plans\U-6055_Sgn_SGN_01(Tsh).dgn
Usersmelvin

PROJECT REFERENCE NO.	SHEET NO.
U-6055	SIGN-2

APPROVED: ______________________

DATE: ______________________

SEAL

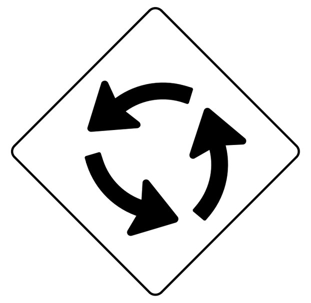
NORTH CAROLINA PROFESSIONAL SEAL 35018 ENGINEER JIMMY L. TERRY

10/18/2018 10:30:45 AM PDT

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

TGS ENGINEERS
804-C N. LAFAYETTE ST
SHELBY, NC 28150
PH (704) 476-0003
CORP. LICENSE NO.: C-0275

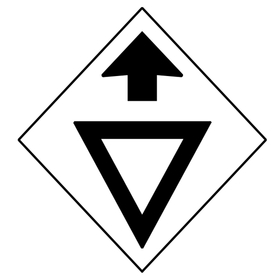
(401) QUANTITY REQ'D 4



30 X 30
W2-6

ONE "U" POST PER SIGN

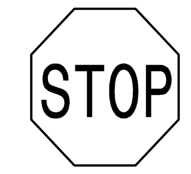
(402) QUANTITY REQ'D 4



30 X 30
W3-2

ONE "U" POST PER SIGN

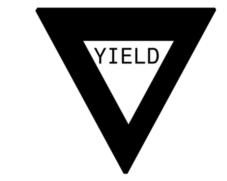
(403) QUANTITY REQ'D 2



30 X 30
R1-1

ONE "U" POST PER SIGN

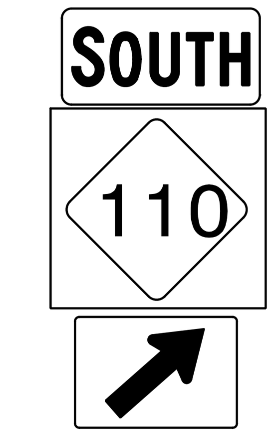
(404) QUANTITY REQ'D 8



36 X 36 X 36
R1-2

ONE "U" POST PER SIGN

(501) QUANTITY REQ'D



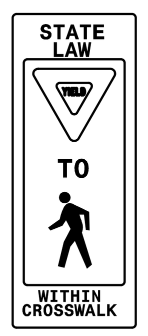
1 - 24" x 12"
M3-3

1 - 24" x 24"
M1-5

1 - 21" x 15"
M6-2

ONE "U" POSTS

(405) QUANTITY REQ'D 4



12 X 36
R1-6

2 SIGNS MOUNTED BACK TO BACK

ONE "U" POSTS PER INSTALLATION

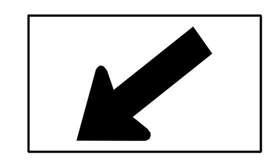
(406) QUANTITY REQ'D 4

30 X 30
W11-2

YELLOW/GREEN REFLECTIVE SHEETING

ONE "U" POST PER SIGN

(407) QUANTITY REQ'D 4

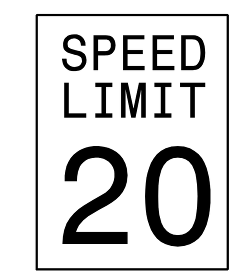


24 X 12
W16-7

YELLOW/GREEN REFLECTIVE SHEETING

MOUNT BELOW SIGN 404
IN 4 INSTALLATIONS

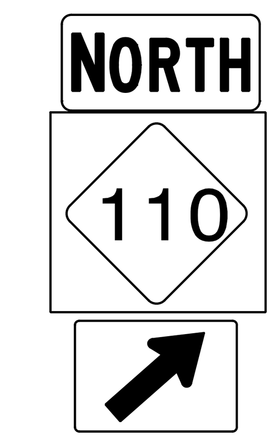
(408) QUANTITY REQ'D 1



24 X 30
R2-1

ONE "U" POST PER SIGN

(502) QUANTITY REQ'D

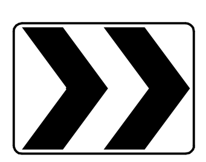


1 - 24" x 12"
M3-1

1 - 24" x 24"
M1-5

1 - 21" x 15"
M6-2

(409) QUANTITY REQ'D 4



30 X 24
R6-4

ONE "U" POST PER SIGN

(410) QUANTITY REQ'D 1

24 X 30
R2-1

TYPE "E" & "F" SIGNS

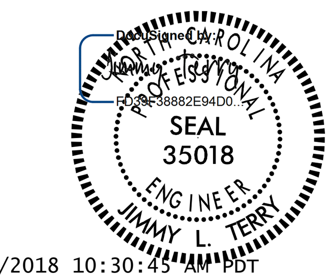
10/18/2018
X:\NCDOT\U-6055\Traffic\Signing\CADD\Signing Layout Plans\U-6055_Sgn_SGN_02(Type E&F).dgn
Userismelvin

TIP NO.	SHEET NO.
U-6055	SIGN-2A

APPROVED: ____________________

DATE: ____________________

SEAL



10/18/2018 10:30:45 AM PDT

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SIGN NUMBER: 301
TYPE: D
QUANTITY: 1
BACKG COLOR: Green
COPY COLOR: White

SIGN WIDTH: 6'-0"
HEIGHT: 4'-0"
TOTAL AREA: 24.0 Sq.Ft.

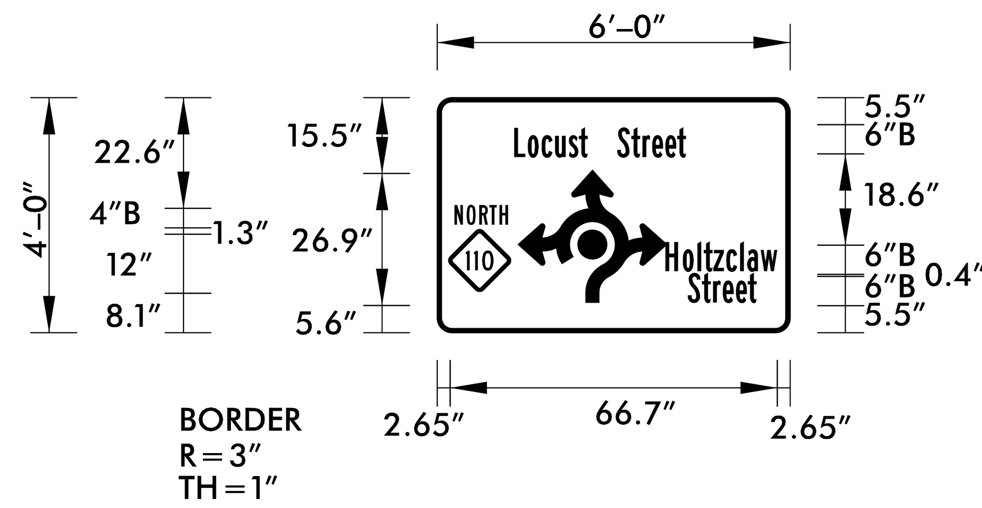
BORDER TYPE: FLUSH
RECESS: 0"
WIDTH: 1"
RADII: 3"

NO. Z BARS: 2
LENGTH: 64.0

SYMBOL	X	Y	WID	HT
NC110	2.7	8.1	12	12
roundabout	16.5	5.6	26.9	30.3

MAT'L: 0.125" (3.2 mm) ALUMINUM

DESIGN BY: SGM
PROJECT ID: U-6055
CHECKED BY:
LOCATION: Intersection of NC 110, Holtzclaw St, & Locust St in City of Canton
Oct 18, 2018
DIV: 14



BORDER
R=3"
TH=1"

USE NOTES: 1,2

1. Legend and border(except those that are colored black) shall be direct applied Grade C sheeting.
2. Background shall be Grade C reflective sheeting.

Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter locations are panel edge to lower left corner

										Series/Size Text Length
L	o	c	u	s	t		S	t		B 2000
23.1	25.9	28.7	31.4	34.3	36.3	38.1	44.1	47		25.7
N	O	R	T	H						B 2000
3.5	6	8.6	10.6	12.7						10.9
H	o	l	t	z	c	l	a	w		B 2000
46.5	50.1	53.1	54.3	56.3	59	61.8	63.2	66		22.8
S	t	r	e	e	t					B 2000
51.1	54	56.3	58.2	60.9	63.3					14

FILENAME: U-6055_Sgn_SGN_Sign Design

NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: 302
TYPE: D
QUANTITY: 1
BACKG COLOR: Green
COPY COLOR: White

SIGN WIDTH: 6'-0"
HEIGHT: 4'-0"
TOTAL AREA: 24.0 Sq.Ft.

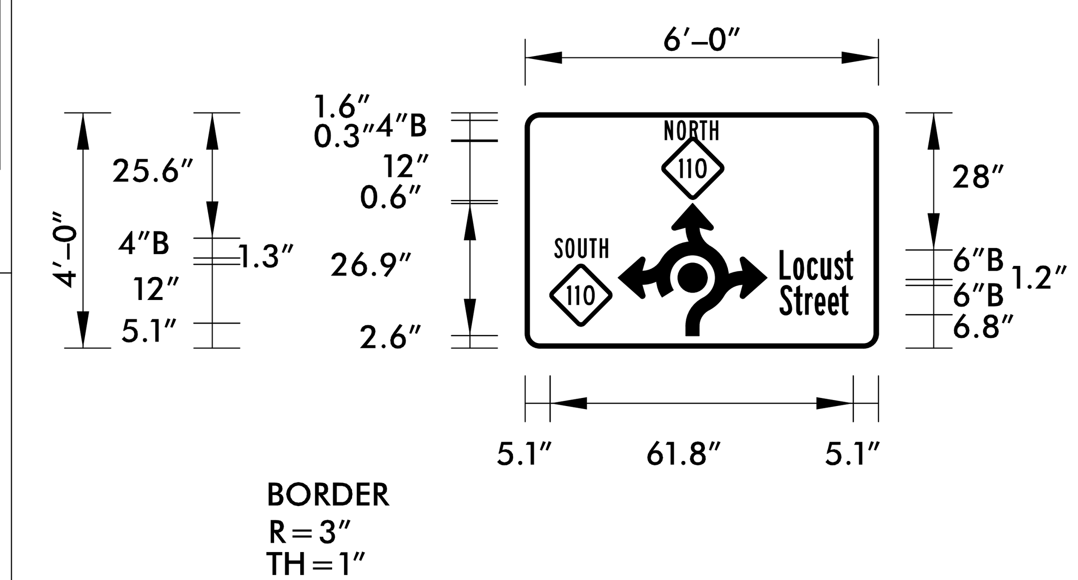
BORDER TYPE: FLUSH
RECESS: 0"
WIDTH: 1"
RADII: 3"

NO. Z BARS: 2
LENGTH: 64.0

SYMBOL	X	Y	WID	HT
NC110	28.1	30.1	12	12
NC110	5.1	5.1	12	12
roundabout	19	2.6	26.9	30.3

MAT'L: 0.125" (3.2 mm) ALUMINUM

DESIGN BY: SGM
PROJECT ID: U-6055
CHECKED BY:
LOCATION: Intersection of NC 110, Holtzclaw St, & Locust St in City of Canton
Oct 18, 2018
DIV: 14



BORDER
R=3"
TH=1"

USE NOTES: 1,2

1. Legend and border(except those that are colored black) shall be direct applied Grade C sheeting.
2. Background shall be Grade C reflective sheeting.

Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter locations are panel edge to lower left corner

						Series/Size Text Length
N	O	R	T	H		B 2000
28.4	30.9	33.5	35.6	37.6		10.9
S	O	U	T	H		B 2000
6	8.2	10.8	13.1	15.2		10.9
L	o	c	u	s	t	B 2000
51.9	54.6	57.5	60.2	63	65.1	15
S	t	r	e	e	t	B 2000
51.9	54.8	57	59	61.7	64.1	14

FILENAME: U-6055_Sgn_SGN_Sign Design

NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: 303
TYPE: D
QUANTITY: 1
BACKG COLOR: Green
COPY COLOR: White

SIGN WIDTH: 6'-0"
HEIGHT: 4'-0"
TOTAL AREA: 24.0 Sq.Ft.

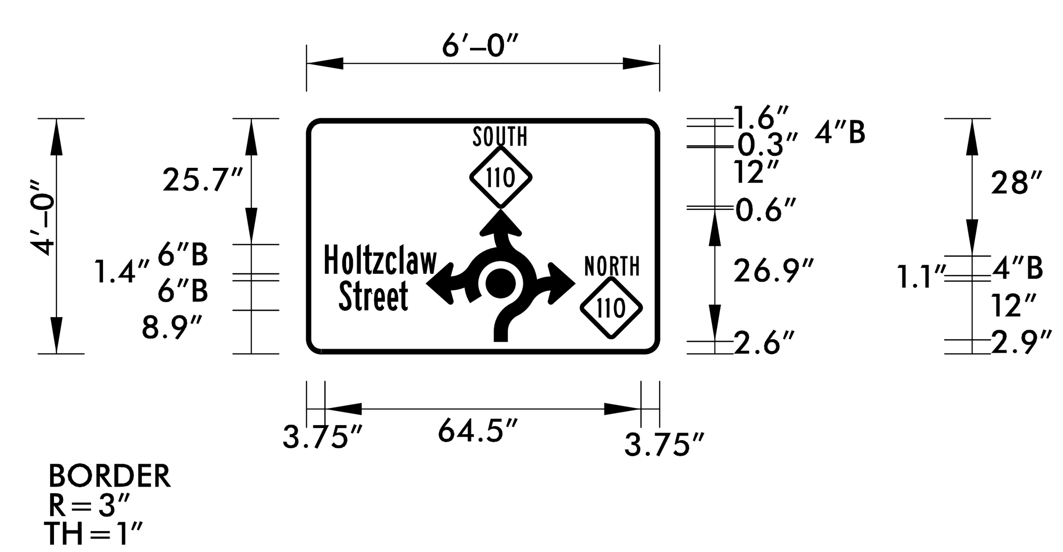
BORDER TYPE: FLUSH
RECESS: 0"
WIDTH: 1"
RADII: 3"

NO. Z BARS: 2
LENGTH: 64.0

SYMBOL	X	Y	WID	HT
NC110	33.6	30.1	12	12
roundabout	24.5	2.6	26.9	30.3
NC110	56.2	2.9	12	12

MAT'L: 0.125" (3.2 mm) ALUMINUM

DESIGN BY: SGM
PROJECT ID: U-6055
CHECKED BY:
LOCATION: Intersection of NC 110, Holtzclaw St, & Locust St in City of Canton
Oct 18, 2018
DIV: 14



BORDER
R=3"
TH=1"

USE NOTES: 1,2

1. Legend and border(except those that are colored black) shall be direct applied Grade C sheeting.
2. Background shall be Grade C reflective sheeting.

Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter locations are panel edge to lower left corner

									Series/Size Text Length
S	O	U	T	H					B 2000
33.9	36.2	38.8	41.1	43.1					10.9
H	o	l	t	z	c	l	a	w	B 2000
3.8	7.3	10.3	11.6	13.5	16.2	19	20.4	23.2	22.8
N	O	R	T	H					B 2000
56.8	59.3	61.9	64	66					10.9
S	t	r	e	e	t				B 2000
6.7	9.5	11.8	13.8	16.5	18.9				14

FILENAME: U-6055_Sgn_SGN_Sign Design

NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: 304
TYPE: D
QUANTITY: 1
BACKG COLOR: Green
COPY COLOR: White

SIGN WIDTH: 6'-0"
HEIGHT: 4'-0"
TOTAL AREA: 24.0 Sq.Ft.

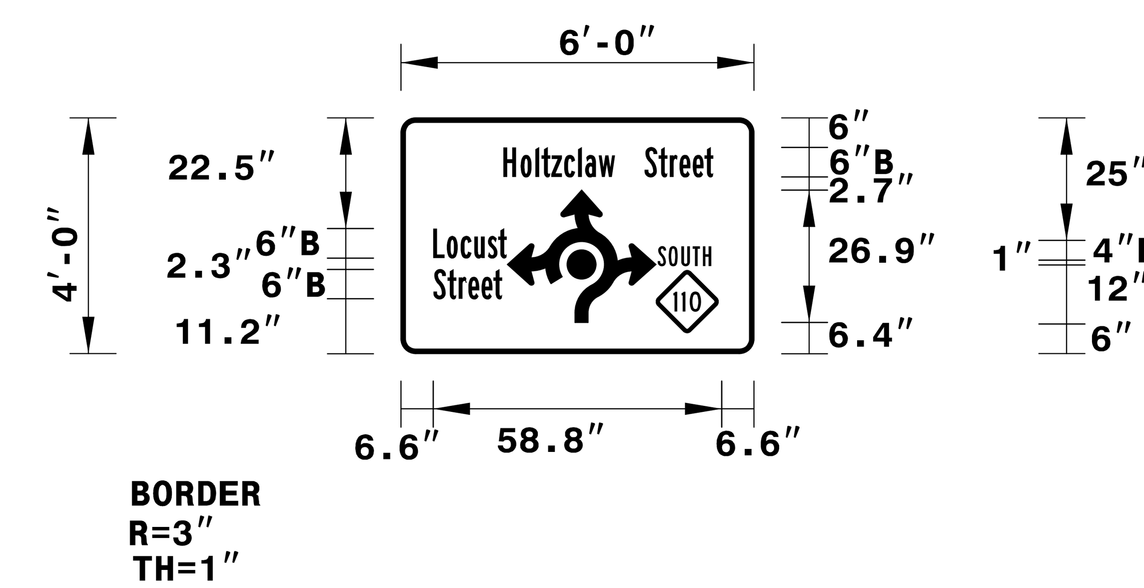
BORDER TYPE: FLUSH
RECESS: 0"
WIDTH: 1"
RADII: 3"

NO. Z BARS: 2
LENGTH: 64.0

SYMBOL	X	Y	WID	HT
roundabout	21.7	6.3	26.9	30.3
NC110	53.4	6	12	12

MAT'L: 0.125" (3.2 mm) ALUMINUM

DESIGN BY: U-6055
PROJECT ID: SGM
CHECKED BY:
LOCATION: Intersection of NC 110, Holtzclaw St, & Locust St in City of Canton
Oct 18, 2018
DIV: 14



BORDER
R=3"
TH=1"

USE NOTES: 1,2

1. Legend and border(except those that are colored black) shall be direct applied Grade C sheeting.
2. Background shall be Grade C reflective sheeting.

Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter locations are panel edge to lower left corner

																Series/Size Text Length
H	o	l	t	z	c	l	a	w		S	t	r	e	e	t	B 2000
20.9	24.4	27.4	28.7	30.7	33.3	36.1	37.6	40.3	43.7	49.7	52.6	54.8	56.8	59.5	61.9	42.8
L	o	c	u	s	t											B 2000
6.6	9.4	12.2	14.9	17.8	19.8											15
S	O	U	T	H												B 2000
33.9	36.2	38.8	41.1	43.1												10.9
S	t	r	e	e	t											B 2000
6.6	9.5	11.8	13.7	16.4	18.8											14

FILENAME: U-6055_Sgn_SGN_Sign Design

NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN DESIGN

10/18/2018
X:\NCDOT\U-6055\Traffic\Signing\CADD\Signing Layout Plans\U-6055_Sgn_SGN_02A (Sign Design).dgn
Userismelvin

TIP NO.	SHEET NO.
U-6055	SIGN-3

APPROVED:

DATE:

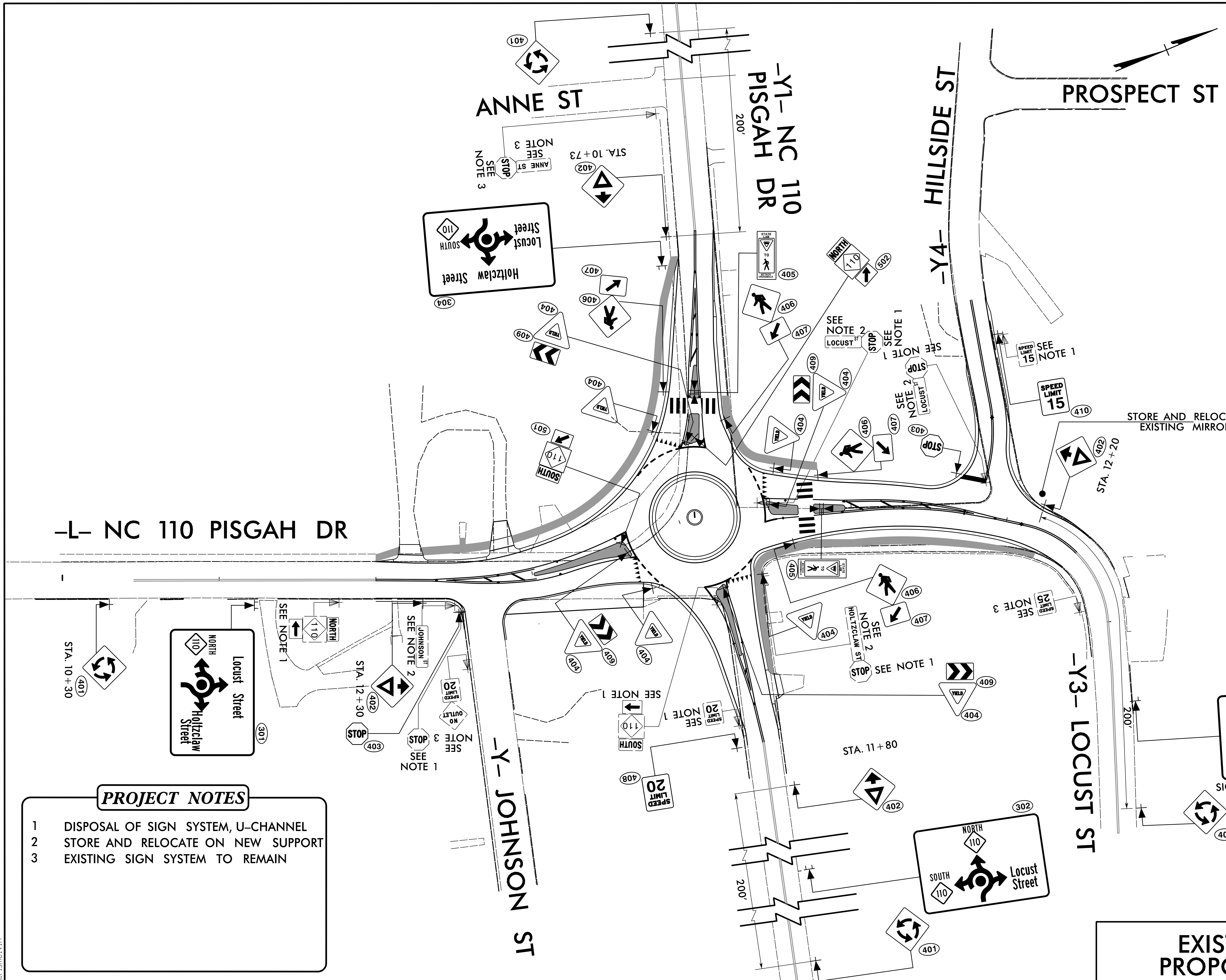
SEAL

NORTH CAROLINA PROFESSIONAL SEAL 35018 ENGINEER JIMMY L. TERRY

10/18/2018 10:30:45 AM PDT

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

TGS ENGINEERS
804-C N. LAFAYETTE ST
SHELBY, NC 28150
PH (704) 476-0003
CORP. LICENSE NO.: C-0275



PROJECT NOTES

1 DISPOSAL OF SIGN SYSTEM, U-CHANNEL
2 STORE AND RELOCATE ON NEW SUPPORT
3 EXISTING SIGN SYSTEM TO REMAIN

EXISTING AND PROPOSED SIGNS

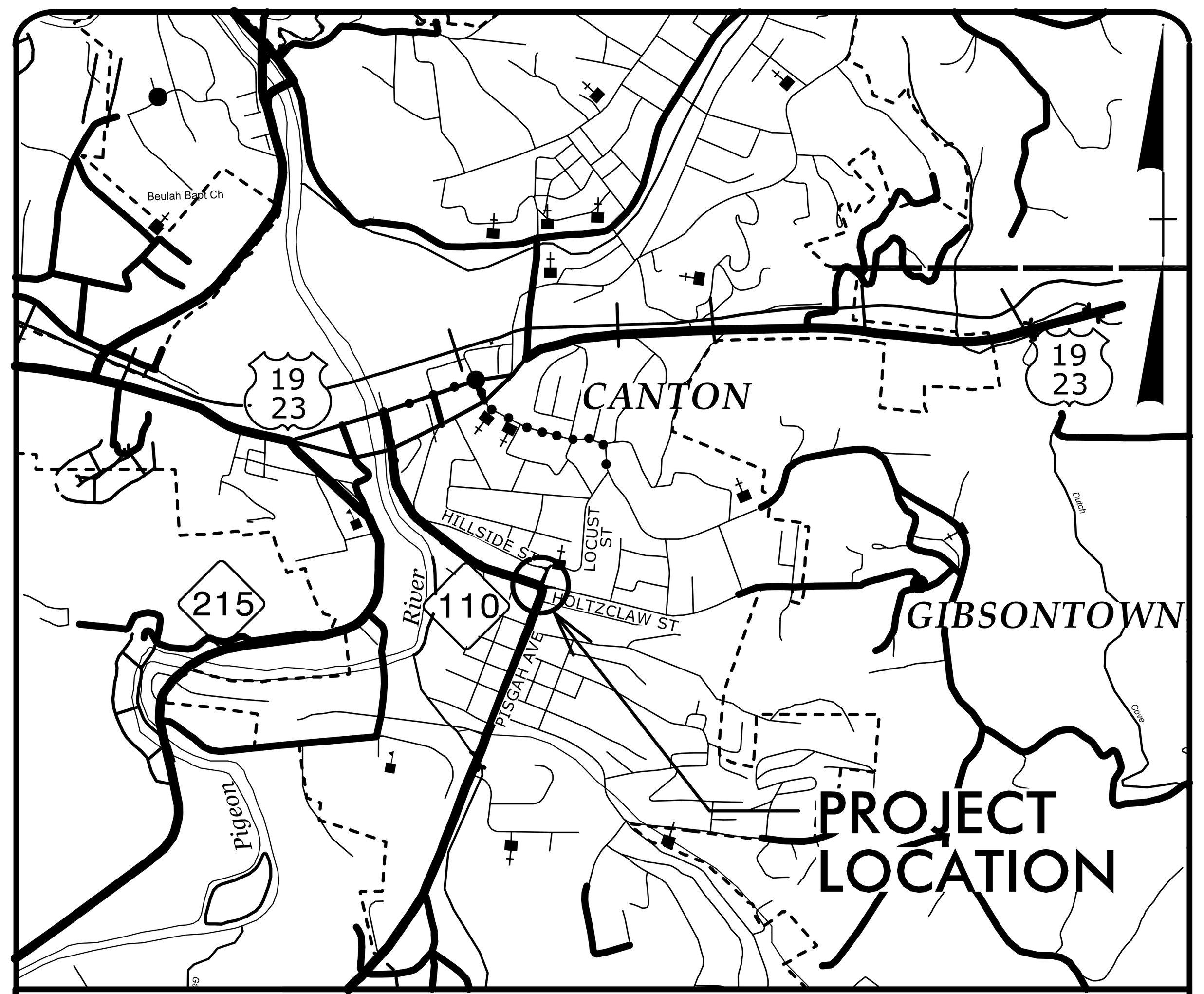
09/08/99

TIP PROJECT: U-6055

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

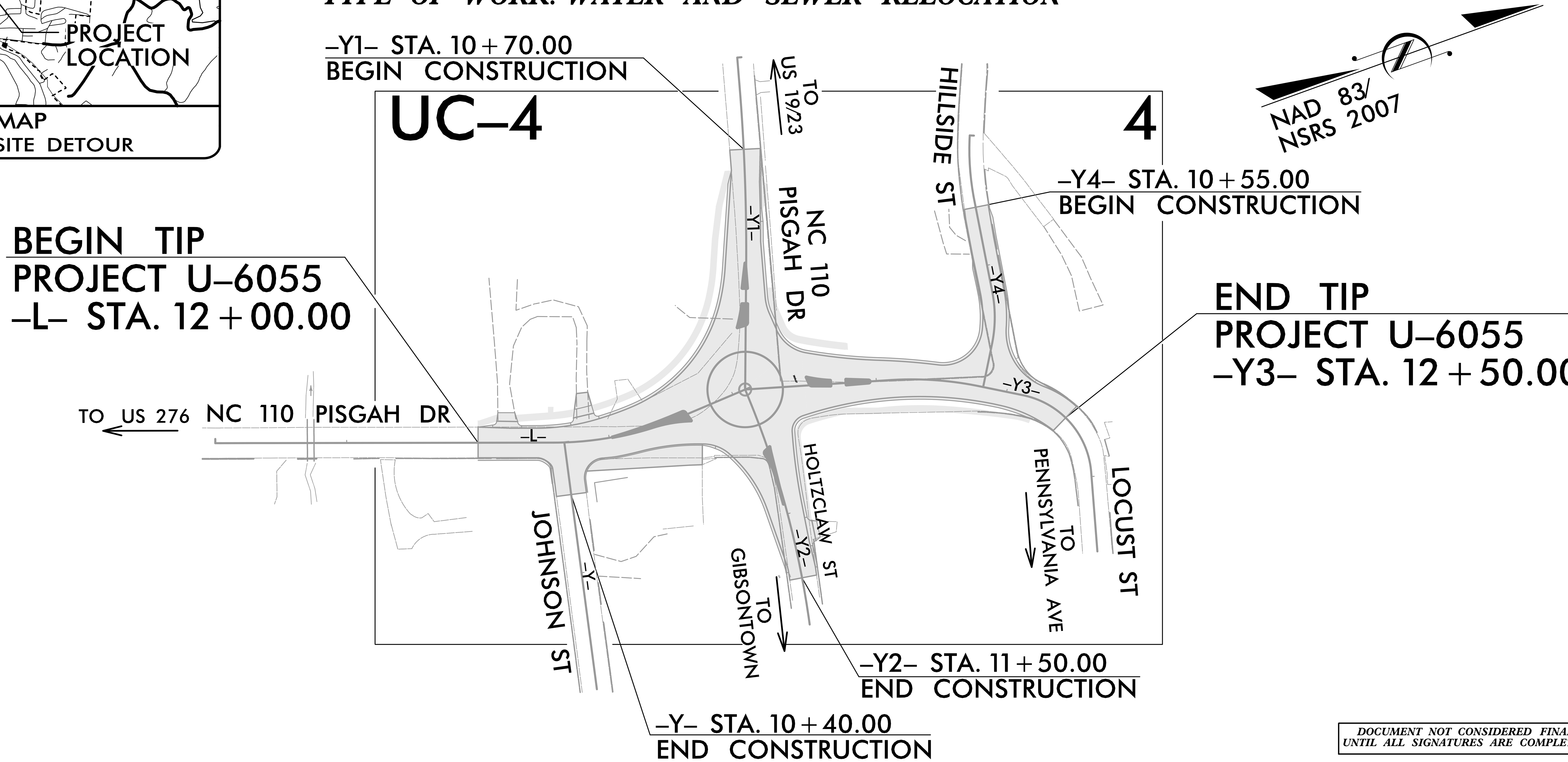
T.I.P. NO.	SHEET NO.
U-6055	UC-1

UTILITY CONSTRUCTION PLANS
HAYWOOD COUNTY



LOCATION: INTERSECTION OF PISGAH DR (NC 110), HOLTZCLAW ST, AND LOCUST ST IN THE TOWN OF CANTON

TYPE OF WORK: WATER AND SEWER RELOCATION



DOCUMENT NOT CONSIDERED FINAL UNTIL ALL SIGNATURES ARE COMPLETED

GRAPHIC SCALES

20 10 0 20 40
PLANS

20 10 0 20 40
PROFILE (HORIZONTAL)

4 2 0 4 8
PROFILE (VERTICAL)

INDEX OF SHEETS

SHEET NO.:	*DESCRIPTION:*
UC-1	TITLE SHEET
UC-2	UTILITY SYMBOLOGY
UC-3	NOTES
UC-3A	DETAILS
UC-4	UTILITY CONSTRUCTION SHEET
UC-5 TO UC-6	PROFILE SHEETS

WATER AND SEWER OWNERS ON PROJECT

(A) WATER - TOWN OF CANTON
(B) SANITARY SEWER - TOWN OF CANTON

PREPARED IN THE OFFICE OF

TGS ENGINEERS
TGS ENGINEERS
804-C N. LAFAYETTE ST
SHELBY, NC 28150
PH (704) 476-0003
CORP. LICENSE NO.: C-0275

B. CHAD HOUSER PE, PLS — *UTILITY DESIGN ENGINEER*
JIMMY TERRY PE — *PROJECT MANAGER*

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 030499 ENGINEER BOBBY C HOUSER
DocuSigned by: Bobby Chad Houser
8/21/2018

DIVISION OF HIGHWAYS
DIVISION 14
253 WEBSTER ROAD
SYLVA, NC 28779
828-586-2141

7/9/2018
X:\NCDOT\U-6055\Utilities\Engineering\UC\Proj\U-6055_Ut_tsh_UC1_psh.dgn
8:41:18 AM

5/14/99

PROJECT REFERENCE NO.	SHEET NO.
U-6055	UC-2

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 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	
Telephone Pole	
Joint Use Pole	
Utility Pole	
Utility Pole with Base	
H-Frame Pole	
Power Transmission Line Tower	
Water Manhole	
Power Manhole	
Telephone Manhole	
Sanitary Sewer Manhole	
Hand Hole for Cable	
Power Transformer	
Telephone Pedestal	
CATV Pedestal	
Gas Valve	
Gas Meter	
Located Miscellaneous Utility Object	
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	
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	SS
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)	

REV: 2/1/2012

$$$$SYSTIME$$$$ $$$$USERNAME$$$$ $$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$

DESIGNED BY: BCH
DRAWN BY: ART
CHECKED BY: JLT
APPROVED BY:
REVISED:

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
UTILITIES ENGINEERING SEC.
PHONE:(919)707-6690
FAX:(919)250-4151

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL BOBBY C HOUSER
8/21/2018
UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

UTILITY CONSTRUCTION

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 CANTON.

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. ALL SEWER LINES TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT QUALITY, 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. 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.

LIST OF STANDARD DRAWINGS

1515.01 WATER METER

1515.02 FIRE HYDRANT

1520.01 SEWER CLEAN OUT

1525.06 PRECAST CONCRETE SANITARY SEWER MANHOLE WITH CAST-IN-PLACE BOTTOM

PROJECT SPECIFIC NOTES:

1. ALL PROPOSED 6" WATER MAINS SHALL BE PRESSURE CLASS 350 DUCTILE IRON PIPE MANUFACTURED IN ACCORDANCE WITH THE REQUIREMENTS OF ANSI/AWWA C151/A21.51 AND UTILIZE FLEXIBLE PUSH-ON RESTRAINED JOINTS.

2. ALL PROPOSED 6" WATER MAINS SHALL UTILIZE FLEXIBLE PUSH-ON RESTRAINED JOINTS. PUSH-ON JOINTS FOR SUCH PIPE SHALL BE IN ACCORDANCE WITH ANSI/AWWA C111/A21.11

3. ALL WATER LINE FITTINGS 6" OR LARGER SHALL BE PRESSURE CLASS 350 DUCTILE IRON RESTRAINED JOINT IN ACCORDANCE WITH APPLICABLE REQUIREMENTS OF ANSI/AWWA C110/A21.10 AND/OR C153/A21.53 WITH THE EXCEPTION OF THE MANUFACTURER'S PROPRIETARY DESIGN DIMENSIONS. PUSH-ON JOINTS FOR SUCH FITTINGS SHALL BE IN ACCORDANCE WITH ANSI/AWWA C111/A21.11.

4. WATER LINE UTILIZING RESTRAINED JOINTS SHALL BE TYTON JOINT, HP LOK, TR FLEX, USIFLEX OR EQUIVALENT.

5. ALL PROPOSED 2" WATER LINE SHALL BE C-900 THICKNESS CLASS SDR 14 WITH A MINUMUM PRESSURE RATING OF 200 PSI.

6. ALL WATERLINE SHALL HAVE COATED TRACER WIRE NO SMALLER THAN 14 AWG SOLID COPPER.

7. ALL PROPOSED HYDRANT LEGS SHALL BE 6" DUCTILE IRON PIPE AND UTILIZE MECHANICAL RESTRAINED JOINTS.

8. ALL 6" VALVES SHALL BE RESILIENT WEDGE GATE VALVES.

9. WATER MAINS CROSSING OTHER UTILITIES AND NON -POTABLE WATER LINES (SANITARY SEWER, STORM DRAINS, ETC.) SHALL BE LAID TO PROVIDE A MINIMUM TWENTY -FOUR (24") INCHES BETWEEN THE WATER LINE AND OTHER UTILITIES. IF THESE SEPARATIONS CANNOT BE MAINTAINED, THEN DUCTILE IRON PIPE SHALL BE USED FOR 10' ON EACH SIDE OF THE CROSSING WITH A MINIMUM SEPARATION OF 6" MAINTAINED AS WELL AS ENCASED IN CLASS B CONCRETE FOR 5' ON EACH SIDE.

10. PROPOSED WATER LINES SHALL BE WRAPPED IN POLYETHYLENE ENCASEMENT FOR 10' EACH SIDE OF GAS LINE CROSSINGS AND WHERE THE WATER LINE AND GAS LINE ARE WITHIN 10 FEET OF EACH OTHER.

11. PROVIDE THRUST RESTRAINT ON THE EXISTING WATER LINE WHERE TIE-INS ARE MADE AS NECESSARY.

12. CONTRACTOR SHALL NOT OPERATE ANY VALVES ON THE EXISTING UTILITY SYSTEMS. CONTRACTOR SHALL CONTACT THE UTILITY OWNER TO CONDUCT STRATEGIC OPERATION OF VALVES FOR SERVICE INTERRUPTION IN ORDER TO PERFORM SPECIFIC WORK.

13. CONTRACTOR SHALL RETURN ALL REMOVED WATER METERS TO THE UTILITY OWNER.

14. ANY BENDS OF PVC WATER PIPE NOT SPECIFICALLY CALLED OUT WITH A 90, 45, 22.5, OR 11.25 DEGREE BEND FITTING, SHALL BE CONSTRUCTED BY A RADIAL BEND OF THE PIPE AS NOTED ON THE PLANS OR IN ACCORDANCE WITH PIPE MANUFACTURER'S SPECIFICATIONS (WHICHEVER IS MORE STRINGENT) - OR A COMBINATION OF BEND FITTINGS AND A RADIAL BEND OF THE PIPE. DEFLECTION OF THE PIPE JOINTS ON PVC PIPE MATERIAL IS NOT AN ACCEPTABLE METHOD OF PIPE BENDING.

15. ALL PROPOSED GRAVITY SEWER LINE SHALL BE PRESSURE CLASS 350 DUCTILE IRON PIPE.

16. DUCTILE IRON SEWER LINES SHALL RECEIVE 40 MIL NOMINAL DRY FILM THICKNESS LINING OF APPROVED EPOXY COATING.

17. ALL MATERIALS, EQUIPMENT, LABOR, AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES DATED 2018.

5/14/99

PROJECT REFERENCE NO.	SHEET NO.
U-6055	UC-3A

DESIGNED BY: BCH
DRAWN BY: ART
CHECKED BY: JLT
APPROVED BY:
REVISED:

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
UTILITIES ENGINEERING SEC.
PHONE:(919)707-6690
FAX:(919)250-4151

NORTH CAROLINA PROFESSIONAL SEAL 30498 ENGINEER BOBBY C HOUSER
DocuSigned by: Bobby Chad Houser 0BFA26F63564434...
8/21/2018

UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION

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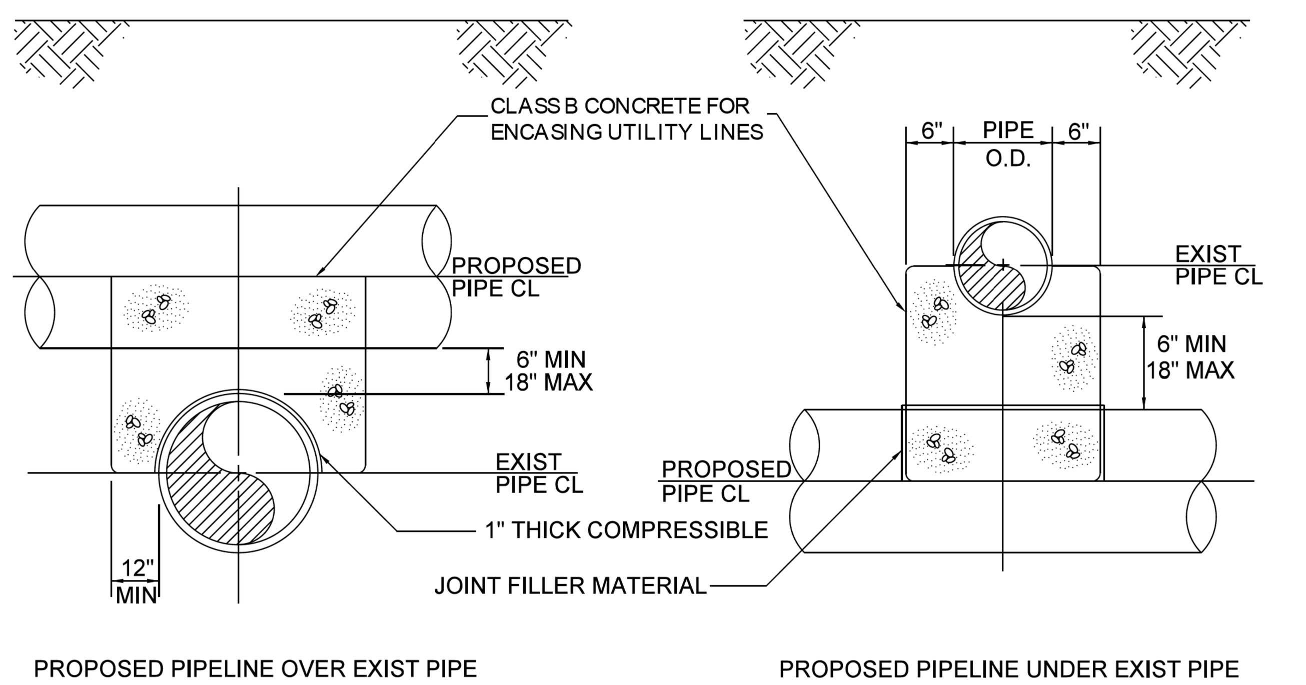
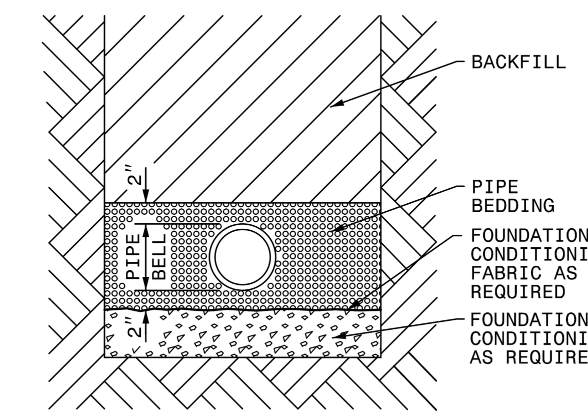
PROJECT TYPICAL DETAILS

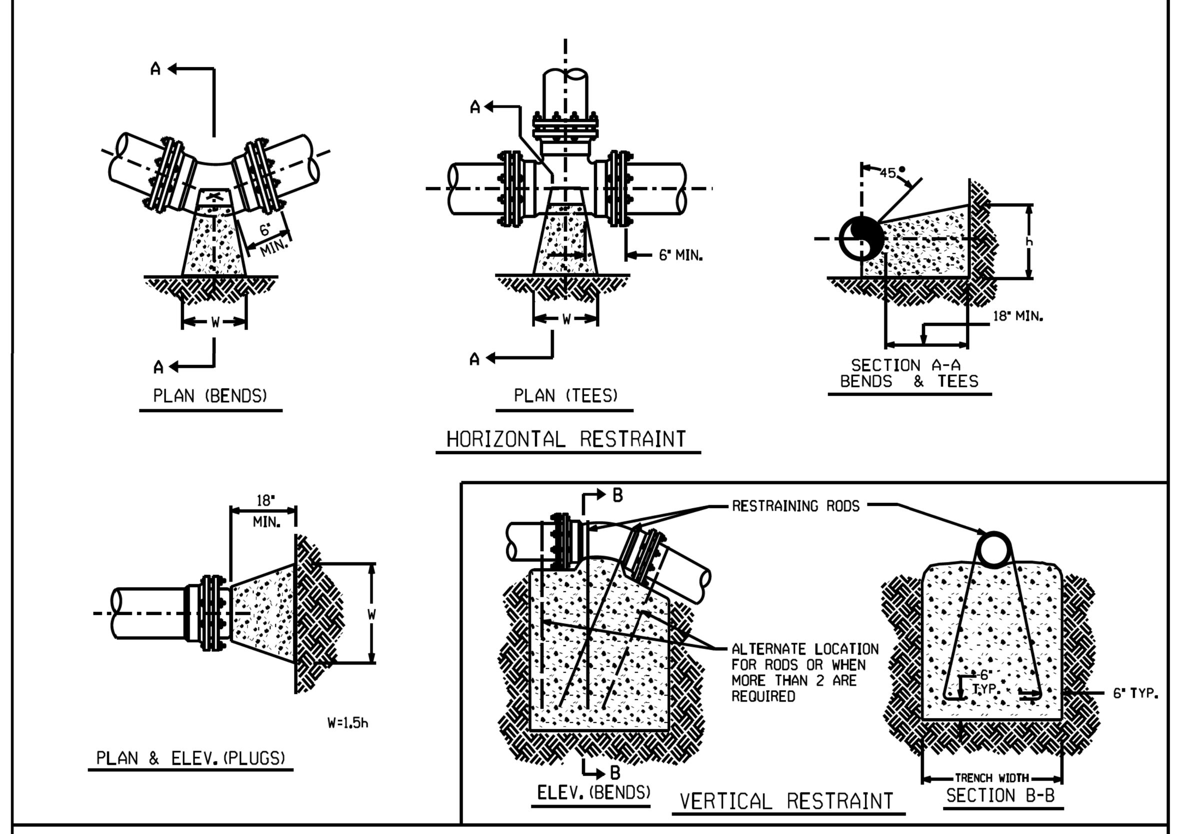


PIPE ENCASEMENT DETAIL

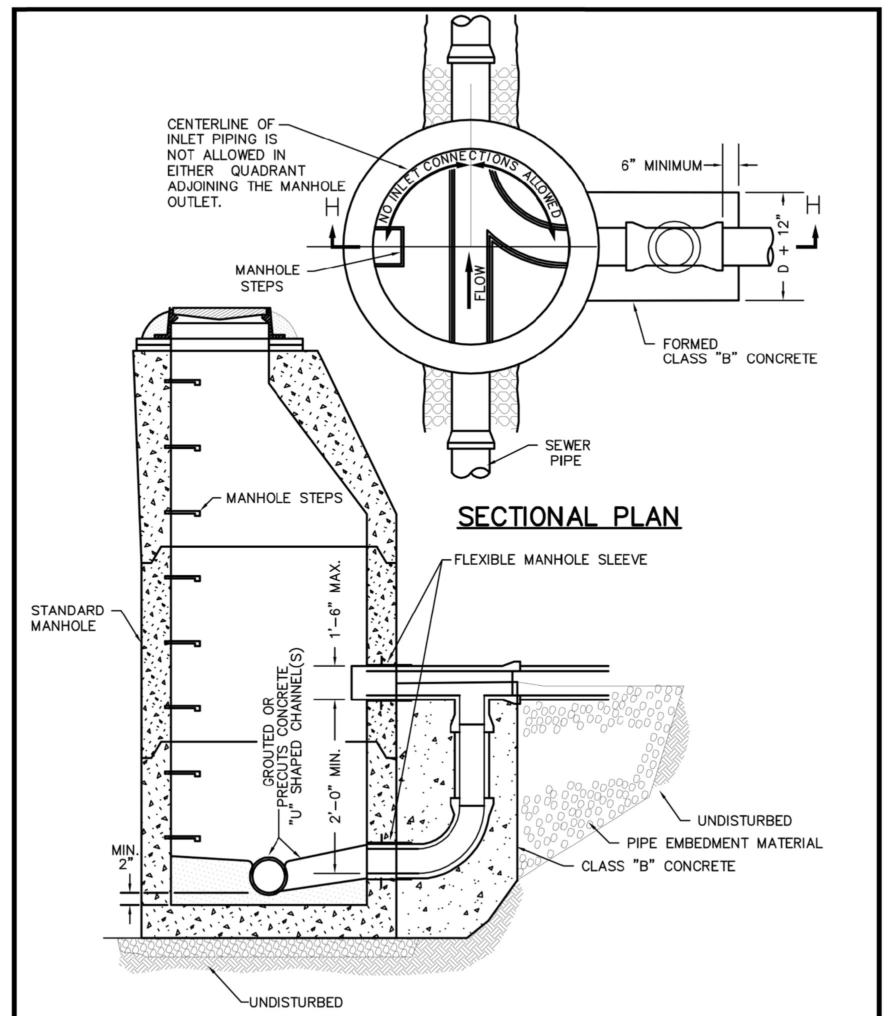
TRENCH DETAIL



PLACE FOUNDATION CONDITIONING MATERIAL BELOW BEDDING IF REQUIRED, AS DIRECTED BY ENGINEER. PIPE BEDDED IN SELECT MATERIAL, CLASS II (TYPE 1) OR CLASS III. TRENCH BACKFILLED IN LOOSE 6" LAYERS COMPACTED TO TOP OF TRENCH USING LOCAL EXCAVATED MATERIAL IF APPROVED BY THE ENGINEER, OR SELECT MATERIAL. ALL MATERIAL SHALL BE FREE OF ROCKS, FOREIGN MATERIAL, AND FROZEN EARTH. COMPACTION SHALL BE TO APPROXIMATELY 95% DENSITY IN ACCORDANCE WITH AASHTO T-99 AS MODIFIED BY THE DEPARTMENT OF TRANSPORTATION.



THRUST RESTRAINT FOR PIPE LINES

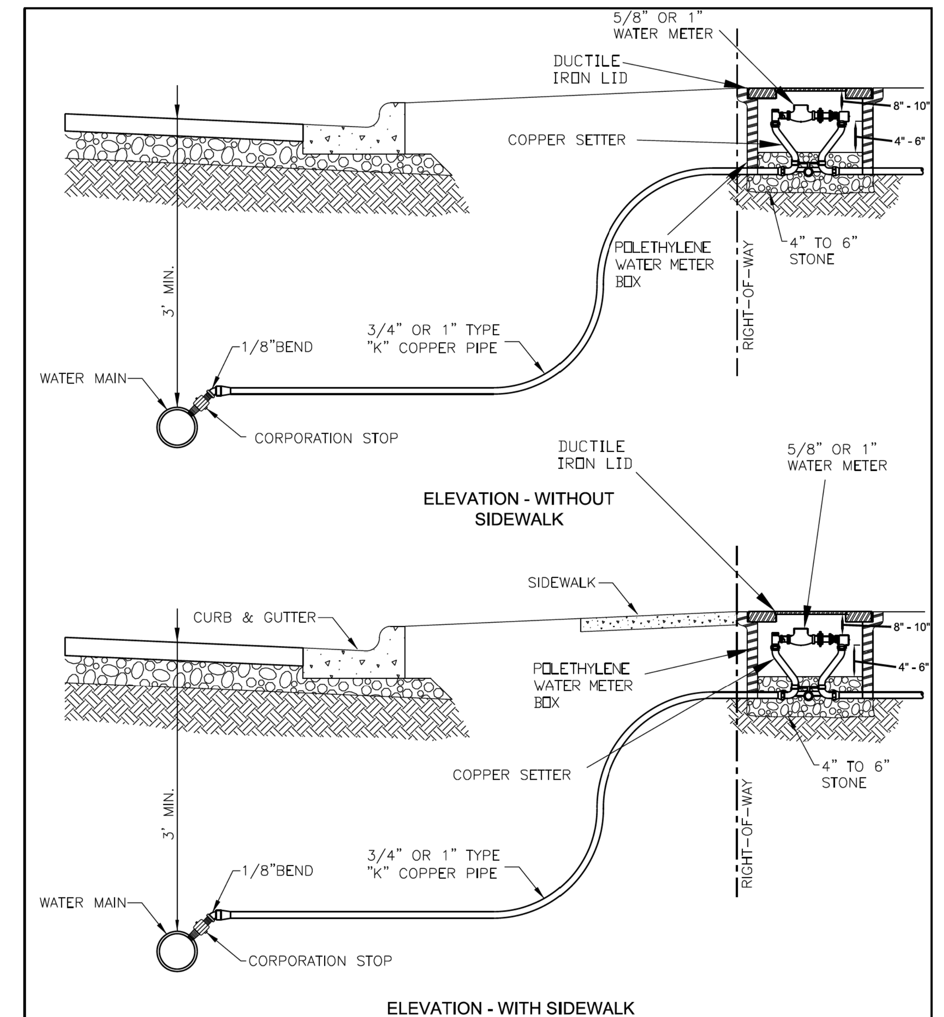


SECTION H–H

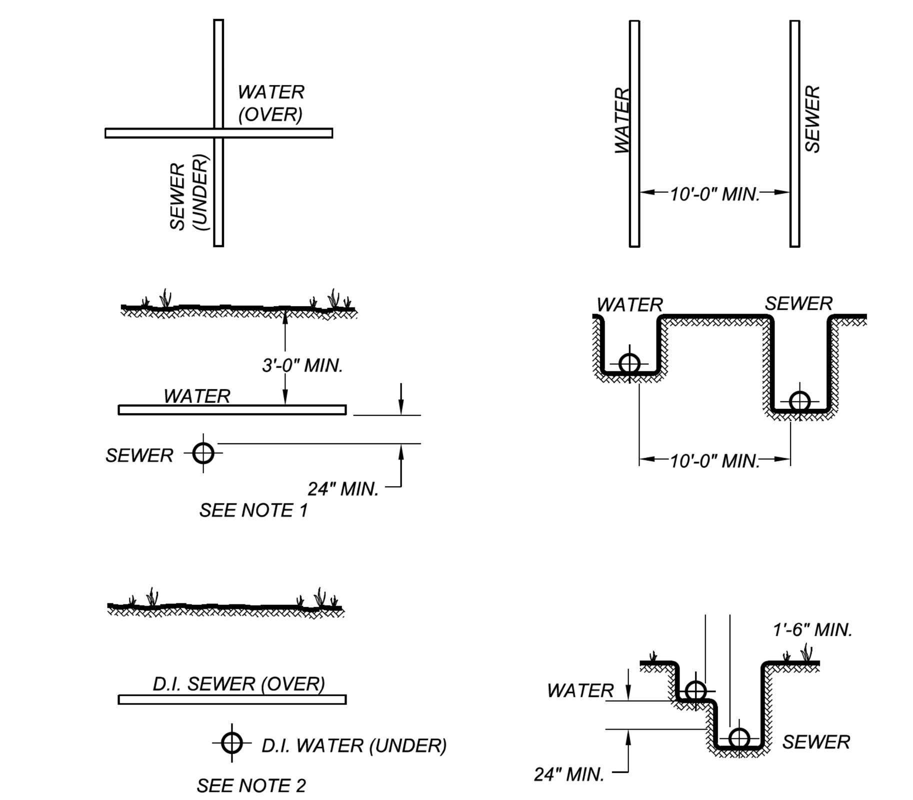
NOTE:

1. DROP CONNECTION IS NOT PERMITTED FOR HIGH VELOCITY SEWER MAINS MAINTAIN MINIMUM OF 8" OF CLEARANCE BETWEEN DROP CONNECTION AND MANHOLE STEPS.
2. BASE FOUNDATION TO CONSTRUCTED LEVEL WITH EXISTING MATERIAL OR CONDITIONED WITH STONE AS REQUIRED BY SPECIFICATIONS

DROP MANHOLE DETAIL

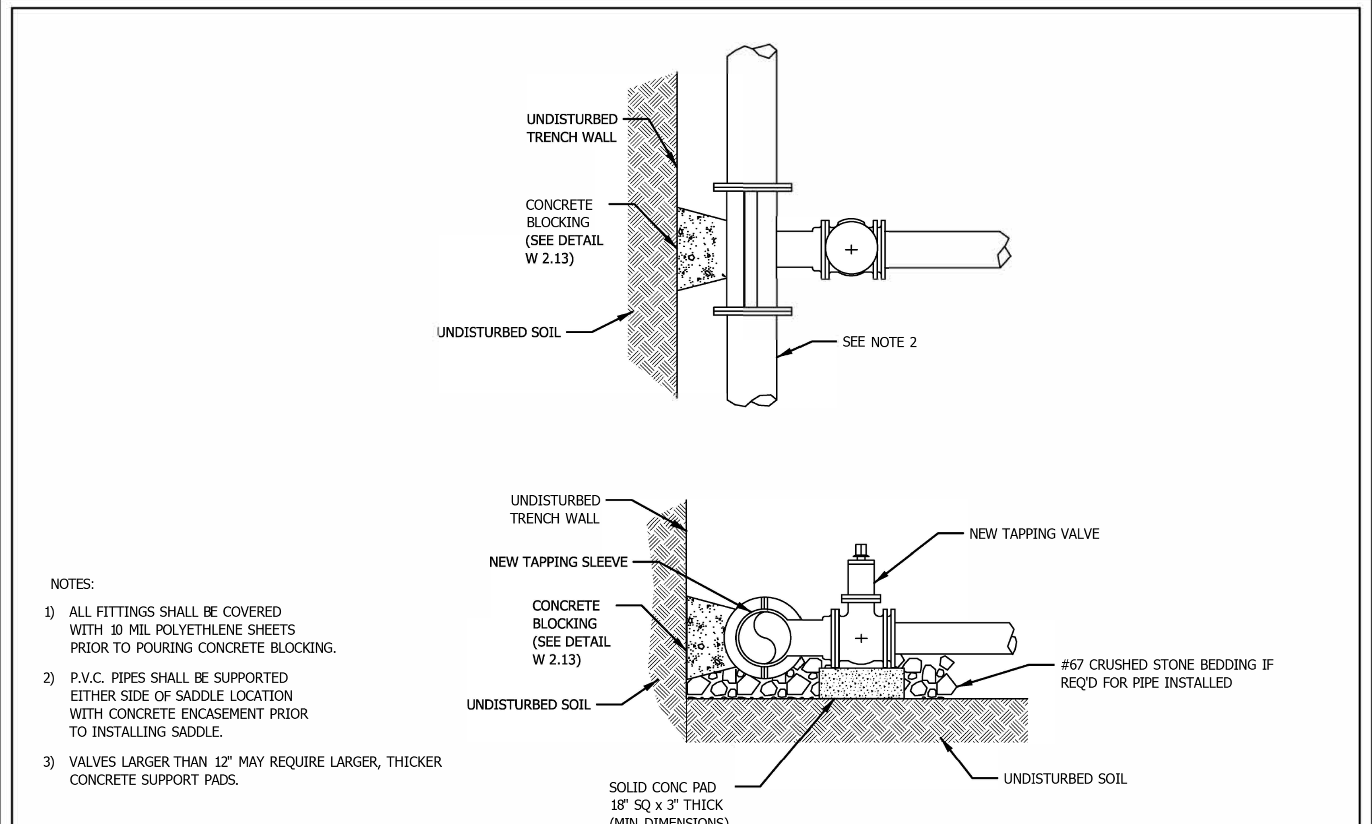


3/4" OR 1" WATER CONNECTION FOR 5/8" OR 1" WATER METERS



NOTES:
1. WHERE THE WATER MAIN IS INSTALLED ABOVE THE SEWER, BUT LESS THAN 24" CLEAR, BOTH THE WATER AND THE SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE WITH WATER MAIN STANDARD JOINTS FOR A LATERAL DISTANCE OF AT LEAST 10 FEET ON EACH SIDE OF THE POINT OF CROSSING.
2. WHERE THE WATER PIPE IS LAID UNDER SEWER, BOTH THE WATER AND THE SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE WITH WATER MAIN STANDARD JOINTS FOR A LATERAL DISTANCE OF AT LEAST 10 FEET ON EACH SIDE OF THE POINT OF CROSSING.
3. "SEWER" SHALL BE CONSIDERED TO MEAN EITHER SANITARY SEWER OR STORM SEWER.

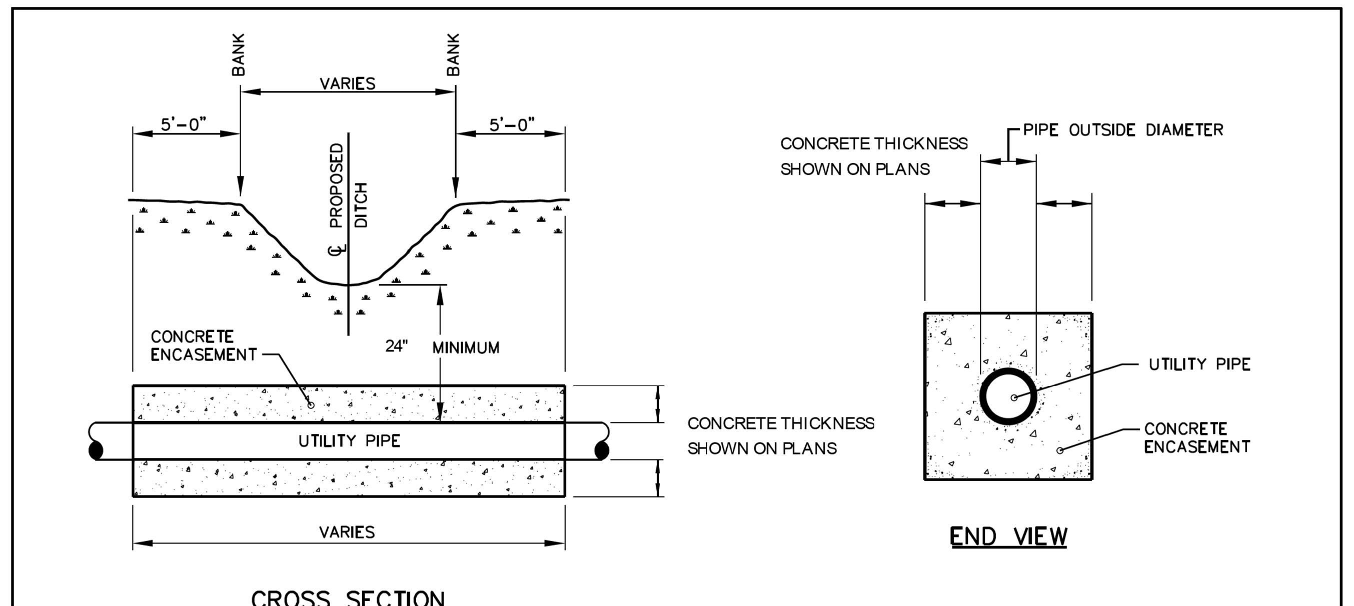
TYPICAL PIPE CROSSING AND PARALLELS
NTS



NOTES:
1) ALL FITTINGS SHALL BE COVERED WITH 10 MIL POLYETHYLENE SHEETS PRIOR TO POURING CONCRETE BLOCKING.
2) P.V.C. PIPES SHALL BE SUPPORTED EITHER SIDE OF SADDLE LOCATION WITH CONCRETE ENCASEMENT PRIOR TO INSTALLING SADDLE.
3) VALVES LARGER THAN 12" MAY REQUIRE LARGER, THICKER CONCRETE SUPPORT PADS.

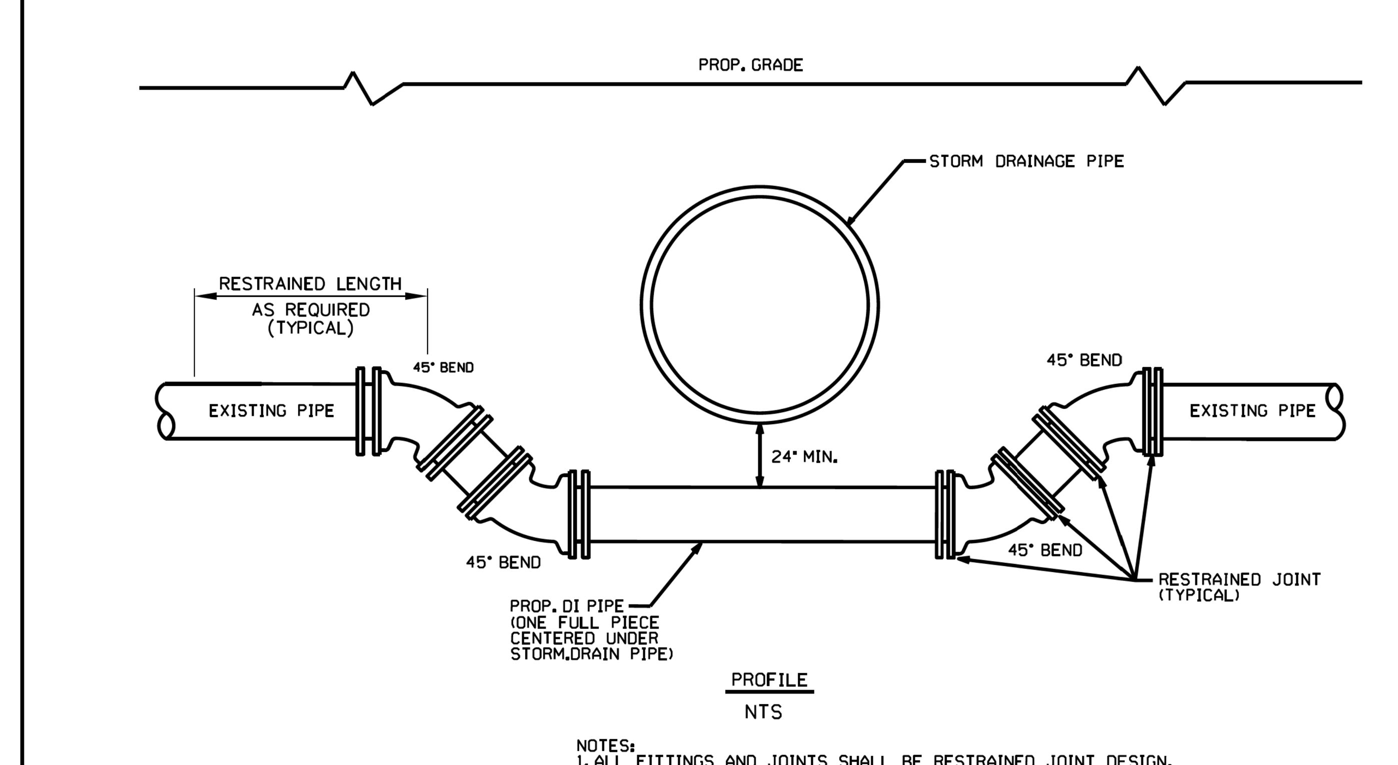
TAPPING SLEEVE AND VALVE

DATE:	REVISIONS	STANDARD DETAIL	SHEET 1 OF 1



NOTES:
1. CONCRETE SHALL BE CLASS B – 2,500 P.S.I. MIN. COMPRESSIVE STRENGTH.
2. CONCRETE ENCASEMENT IS NOT REQUIRED WHEN PIPE IS AT LEAST THREE (3) FEET UNDER CENTERLINE OF CREEK BOTTOM.

UTILITY PIPE CONCRETE ENCASEMENT FOR DITCH/CREEK/STREAM CROSSING



PROFILE
NTS

NOTES:
1. ALL FITTINGS AND JOINTS SHALL BE RESTRAINED JOINT DESIGN.
2. PROVIDE APPROPRIATE RESTRAINED LENGTH AS PER TABLE HEREIN.

FORCE MAIN / WATER MAIN CROSSING UNDER STORM DRAINAGE PIPE

PROJECT REFERENCE NO.	SHEET NO.
U-6055	UC-4

DESIGNED BY: BCH
DRAWN BY: ART
CHECKED BY: JLT
APPROVED BY:
REVISED:

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
UTILITIES ENGINEERING SEC.
PHONE:(919)707-6690
FAX:(919)250-4151

UTILITY CONSTRUCTION PLANS ONLY

NORTH CAROLINA PROFESSIONAL ENGINEER BOBBY C HOUSER 30490
8/21/2018

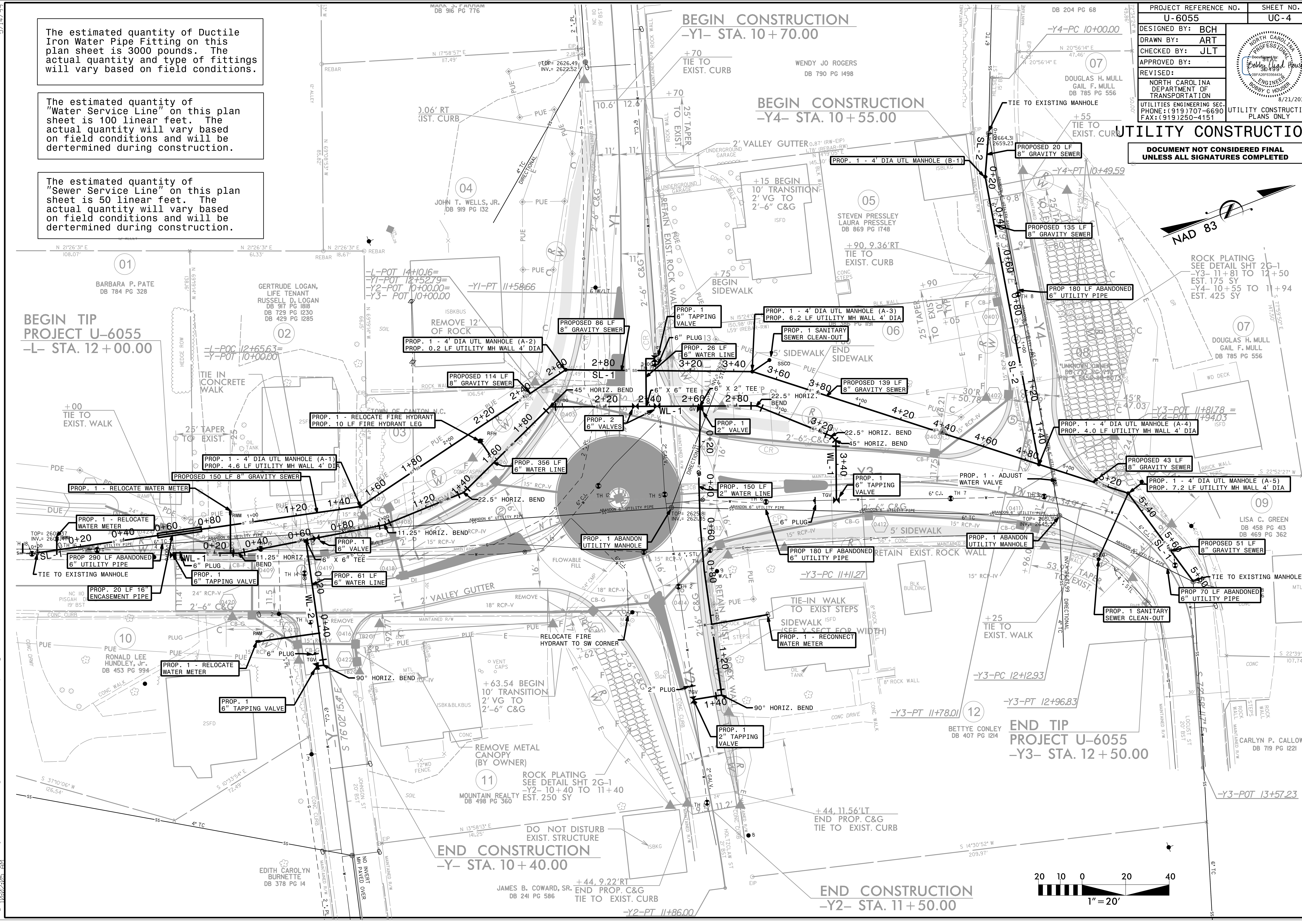
UTILITY CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

The estimated quantity of Ductile Iron Water Pipe Fitting on this plan sheet is 3000 pounds. The actual quantity and type of fittings will vary based on field conditions.

The estimated quantity of "Water Service Line" on this plan sheet is 100 linear feet. The actual quantity will vary based on field conditions and will be dertermined during construction.

The estimated quantity of "Sewer Service Line" on this plan sheet is 50 linear feet. The actual quantity will vary based on field conditions and will be dertermined during construction.



PROJECT REFERENCE NO.	SHEET NO.
U-6055	UC-5

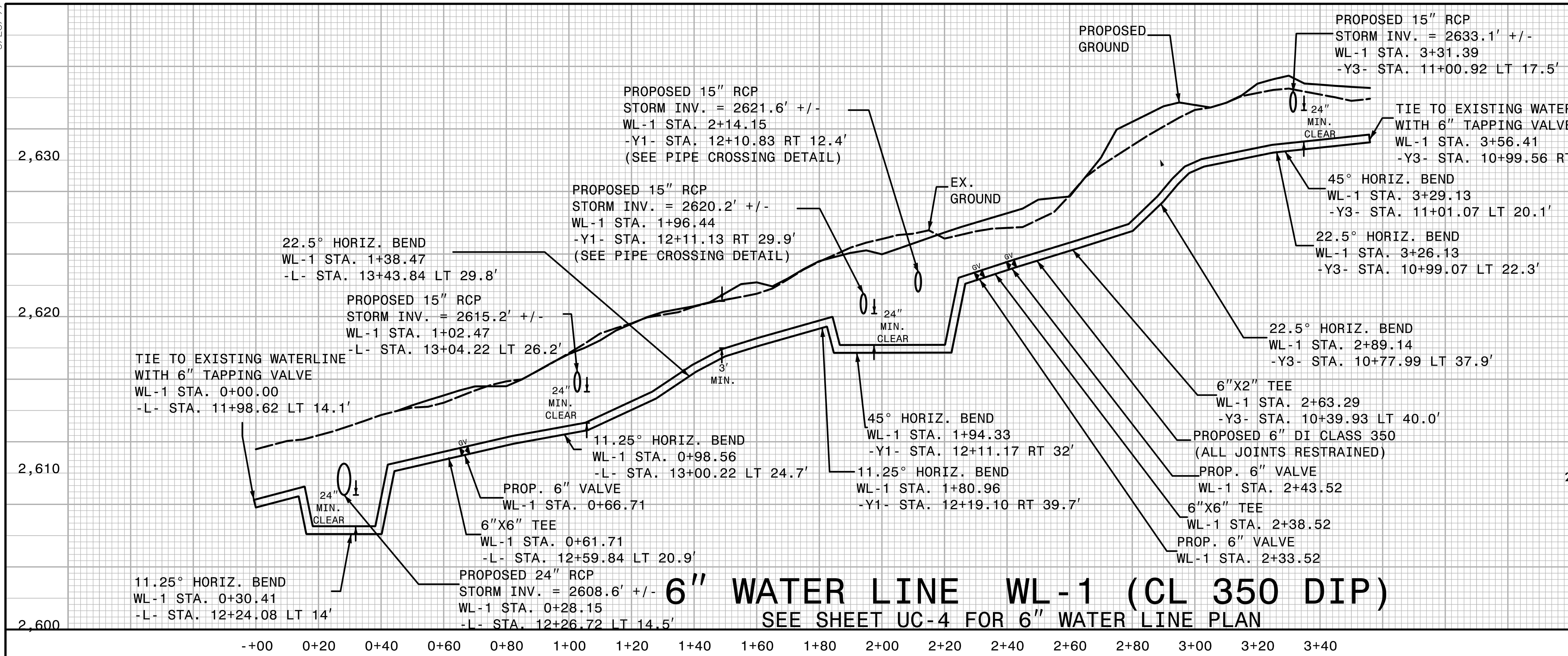
DESIGNED BY: BCH
DRAWN BY: ART
CHECKED BY: JLT
APPROVED BY:
REVISED:

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
UTILITIES ENGINEERING SEC.
PHONE: (919)707-6690
FAX: (919)250-4151

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL — BOBBY C. HOUSER — 8/21/2018

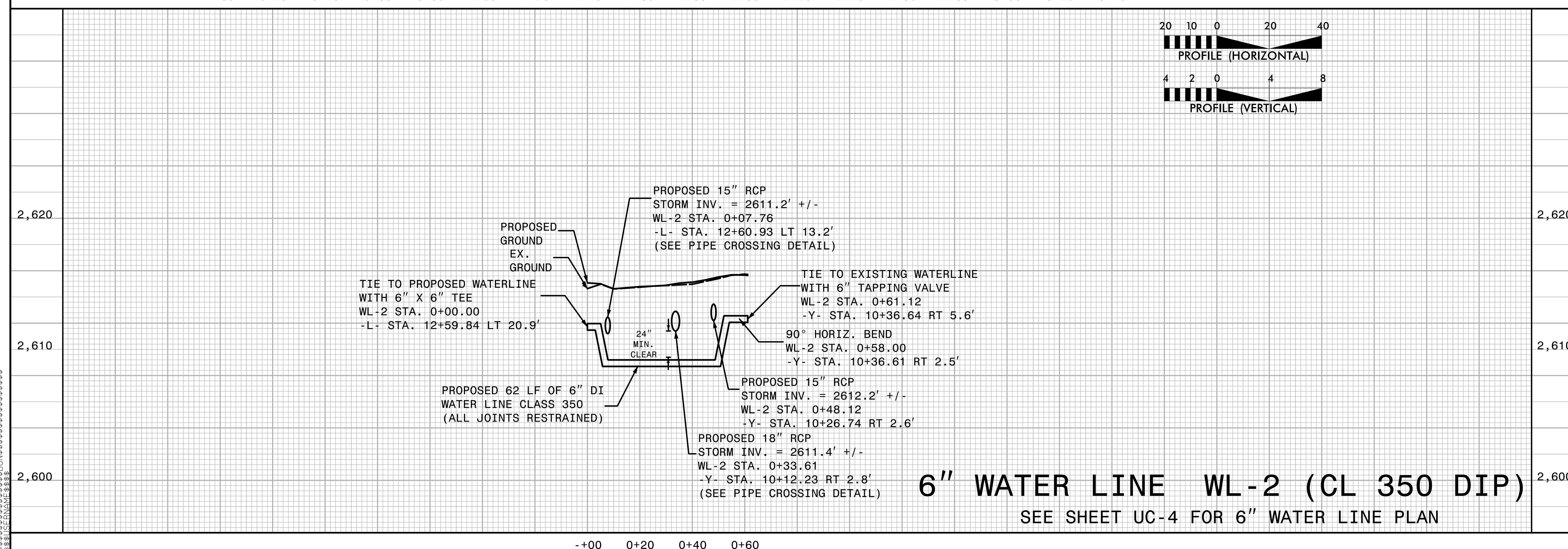
UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION



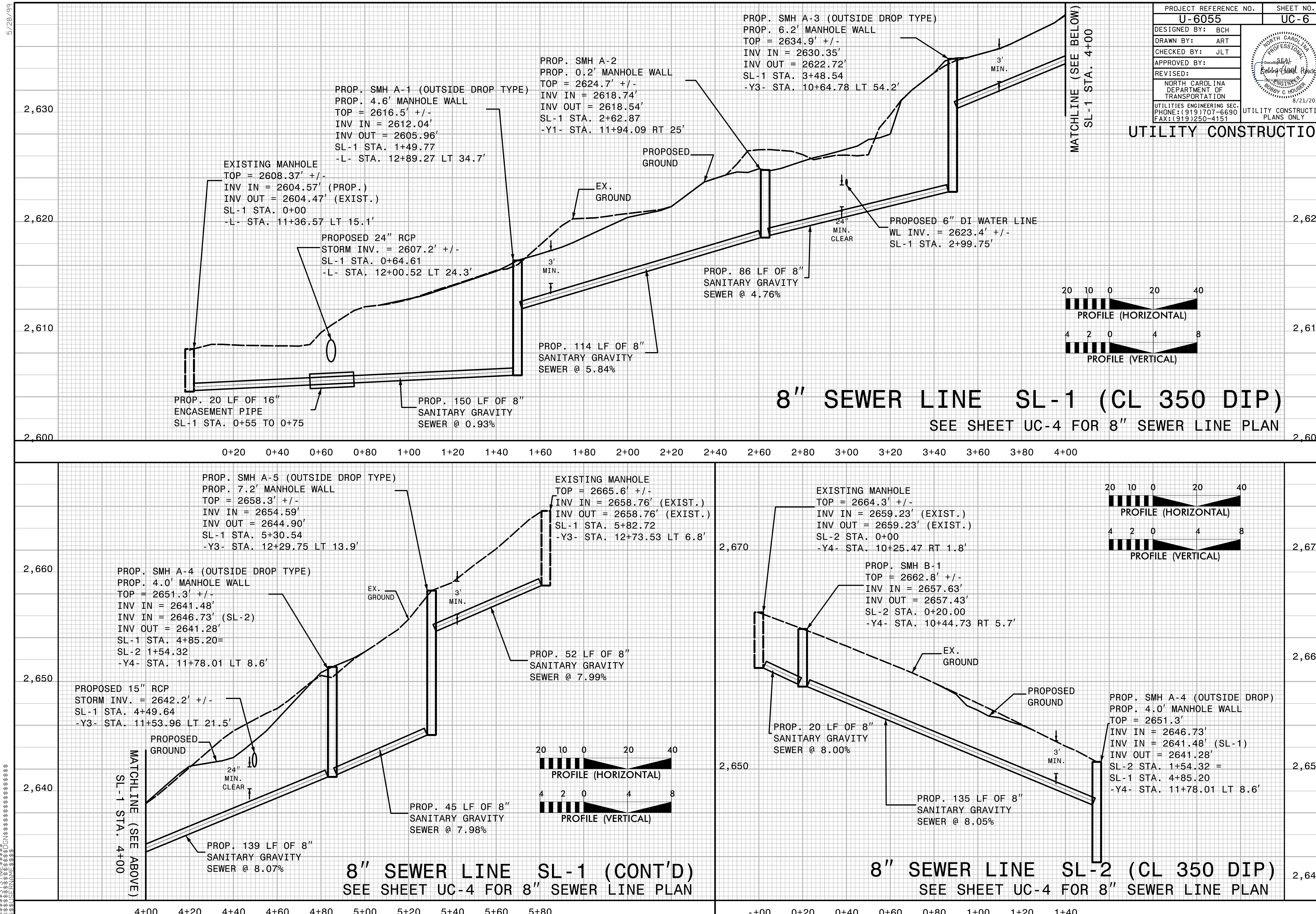
6" WATER LINE WL-1 (CL 350 DIP)

SEE SHEET UC-4 FOR 6" WATER LINE PLAN



6" WATER LINE WL-2 (CL 350 DIP)

SEE SHEET UC-4 FOR 6" WATER LINE PLAN


PROJECT REFERENCE NO. U-6055
SHEET NO. UC-6
DESIGNED BY: BCH
DRAWN BY: ART
CHECKED BY: JLT
APPROVED BY:
REVISED:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
UTILITIES ENGINEERING SEC. PHONE:(919)707-6690 FAX:(919)250-4151
NORTH CAROLINA PROFESSIONAL SEAL ENGINEER BOBBY C. HOUSER
8/21/2018
UTILITY CONSTRUCTION PLANS ONLY
UTILITY CONSTRUCTION
5/28/99
PROP. SMH A-3 (OUTSIDE DROP TYPE)
PROP. 6.2′ MANHOLE WALL
TOP = 2634.9′ +/-
INV IN = 2630.35′
INV OUT = 2622.72′
SL-1 STA. 3+48.54
-Y3- STA. 10+64.78 LT 54.2′
PROP. SMH A-2
PROP. 0.2′ MANHOLE WALL
TOP = 2624.7′ +/-
INV IN = 2618.74′
INV OUT = 2618.54′
SL-1 STA. 2+62.87
-Y1- STA. 11+94.09 RT 25′
PROP. SMH A-1 (OUTSIDE DROP TYPE)
PROP. 4.6′ MANHOLE WALL
TOP = 2616.5′ +/-
INV IN = 2612.04′
INV OUT = 2605.96′
SL-1 STA. 1+49.77
-L- STA. 12+89.27 LT 34.7′
EXISTING MANHOLE
TOP = 2608.37′ +/-
INV IN = 2604.57′ (PROP.)
INV OUT = 2604.47′ (EXIST.)
SL-1 STA. 0+00
-L- STA. 11+36.57 LT 15.1′
PROPOSED GROUND
EX. GROUND
3′ MIN.
MATCHLINE (SEE BELOW) SL-1 STA. 4+00
PROPOSED 24″ RCP
STORM INV. = 2607.2′ +/-
SL-1 STA. 0+64.61
-L- STA. 12+00.52 LT 24.3′
PROPOSED 6″ DI WATER LINE
WL INV. = 2623.4′ +/-
SL-1 STA. 2+99.75′
24″ MIN. CLEAR
PROP. 86 LF OF 8″ SANITARY GRAVITY SEWER @ 4.76%
PROP. 114 LF OF 8″ SANITARY GRAVITY SEWER @ 5.84%
PROP. 20 LF OF 16″ ENCASEMENT PIPE SL-1 STA. 0+55 TO 0+75
PROP. 150 LF OF 8″ SANITARY GRAVITY SEWER @ 0.93%
20 10 0 20 40 PROFILE (HORIZONTAL)
4 2 0 4 8 PROFILE (VERTICAL)
8″ SEWER LINE SL-1 (CL 350 DIP)
SEE SHEET UC-4 FOR 8″ SEWER LINE PLAN
2,630 2,620 2,610 2,600
0+20 0+40 0+60 0+80 1+00 1+20 1+40 1+60 1+80 2+00 2+20 2+40 2+60 2+80 3+00 3+20 3+40 3+60 3+80 4+00
PROP. SMH A-5 (OUTSIDE DROP TYPE)
PROP. 7.2′ MANHOLE WALL
TOP = 2658.3′ +/-
INV IN = 2654.59′
INV OUT = 2644.90′
SL-1 STA. 5+30.54
-Y3- STA. 12+29.75 LT 13.9′
EXISTING MANHOLE
TOP = 2665.6′ +/-
INV IN = 2658.76′ (EXIST.)
INV OUT = 2658.76′ (EXIST.)
SL-1 STA. 5+82.72
-Y3- STA. 12+73.53 LT 6.8′
PROP. SMH A-4 (OUTSIDE DROP TYPE)
PROP. 4.0′ MANHOLE WALL
TOP = 2651.3′ +/-
INV IN = 2641.48′
INV IN = 2646.73′ (SL-2)
INV OUT = 2641.28′
SL-1 STA. 4+85.20=
SL-2 1+54.32
-Y4- STA. 11+78.01 LT 8.6′
EX. GROUND
3′ MIN.
PROP. 52 LF OF 8″ SANITARY GRAVITY SEWER @ 7.99%
PROPOSED 15″ RCP
STORM INV. = 2642.2′ +/-
SL-1 STA. 4+49.64
-Y3- STA. 11+53.96 LT 21.5′
PROPOSED GROUND
24″ MIN. CLEAR
MATCHLINE (SEE ABOVE) SL-1 STA. 4+00
PROP. 45 LF OF 8″ SANITARY GRAVITY SEWER @ 7.98%
PROP. 139 LF OF 8″ SANITARY GRAVITY SEWER @ 8.07%
20 10 0 20 40 PROFILE (HORIZONTAL)
4 2 0 4 8 PROFILE (VERTICAL)
8″ SEWER LINE SL-1 (CONT'D)
SEE SHEET UC-4 FOR 8″ SEWER LINE PLAN
2,660 2,650 2,640
4+00 4+20 4+40 4+60 4+80 5+00 5+20 5+40 5+60 5+80
EXISTING MANHOLE
TOP = 2664.3′ +/-
INV IN = 2659.23′ (EXIST.)
INV OUT = 2659.23′ (EXIST.)
SL-2 STA. 0+00
-Y4- STA. 10+25.47 RT 1.8′
PROP. SMH B-1
TOP = 2662.8′ +/-
INV IN = 2657.63′
INV OUT = 2657.43′
SL-2 STA. 0+20.00
-Y4- STA. 10+44.73 RT 5.7′
EX. GROUND
PROPOSED GROUND
PROP. SMH A-4 (OUTSIDE DROP)
PROP. 4.0′ MANHOLE WALL
TOP = 2651.3′
INV IN = 2646.73′
INV IN = 2641.48′ (SL-1)
INV OUT = 2641.28′
SL-2 STA. 1+54.32 =
SL-1 STA. 4+85.20
-Y4- STA. 11+78.01 LT 8.6′
3′ MIN.
PROP. 20 LF OF 8″ SANITARY GRAVITY SEWER @ 8.00%
PROP. 135 LF OF 8″ SANITARY GRAVITY SEWER @ 8.05%
20 10 0 20 40 PROFILE (HORIZONTAL)
4 2 0 4 8 PROFILE (VERTICAL)
8″ SEWER LINE SL-2 (CL 350 DIP)
SEE SHEET UC-4 FOR 8″ SEWER LINE PLAN
2,670 2,660 2,650 2,640
-+00 0+20 0+40 0+60 0+80 1+00 1+20 1+40

T.I.P. NO.	SHEET NO.
U-6055	UO-1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

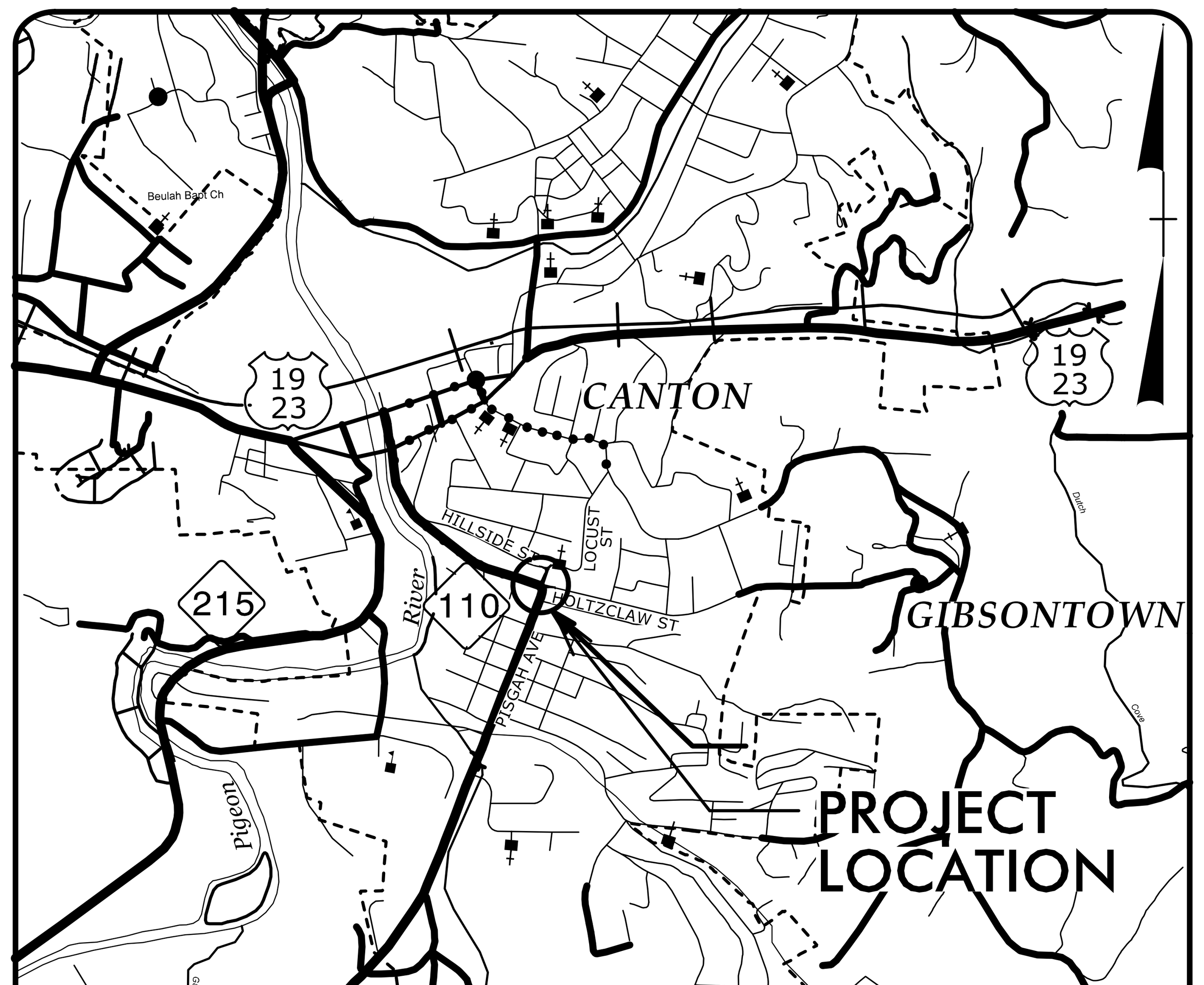
NOTE:
ALL UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS. NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR UTILITY WORK SHOWN ON THIS SHEET.

UTILITIES BY OTHERS PLANS
HAYWOOD COUNTY

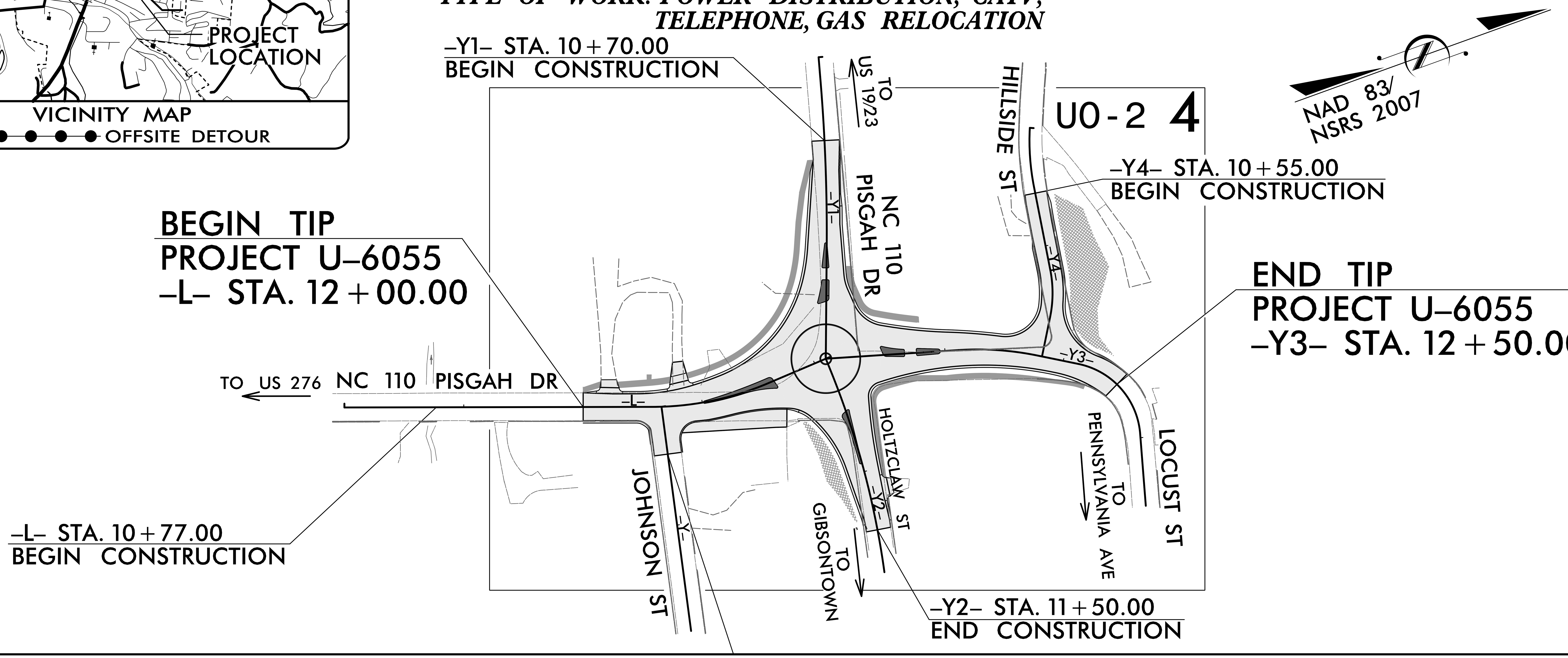
TIP PROJECT: U-6055

LOCATION: INTERSECTION OF PISGAH DR (NC 110), HOLTZCLAW ST, AND LOCUST ST IN THE TOWN OF CANTON

TYPE OF WORK: POWER DISTRIBUTION, CATV, TELEPHONE, GAS RELOCATION



VICINITY MAP
●—●—●—●—● OFFSITE DETOUR



GRAPHIC SCALES

20 10 0 20 40
PLANS

20 10 0 20 40
PROFILE (HORIZONTAL)

4 2 0 4 8
PROFILE (VERTICAL)

INDEX OF SHEETS

SHEET NO.:	*DESCRIPTION:*
UO-1	*TITLE SHEET*
UO-2	*UBO PLAN SHEET*

UTILITY OWNERS WITH CONFLICTS

(A) POWER DISTRIBUTION - DUKE ENERGY
(B) CATV - CHARTER COMMUNICATIONS
(C) COMUNICATIONS - AT&T
(D) GAS - PSNC ENERGY

PREPARED IN THE OFFICE OF:

TELICS
849 SOUTH LAUREL ST
LINCOLNTON, NC 28092
PHONE (704) 732-3241

STEVE MODE	*UTILITY PROJECT MANAGER*
DANNY LITTLE	*PROJECT UTILITY COORDINATOR*

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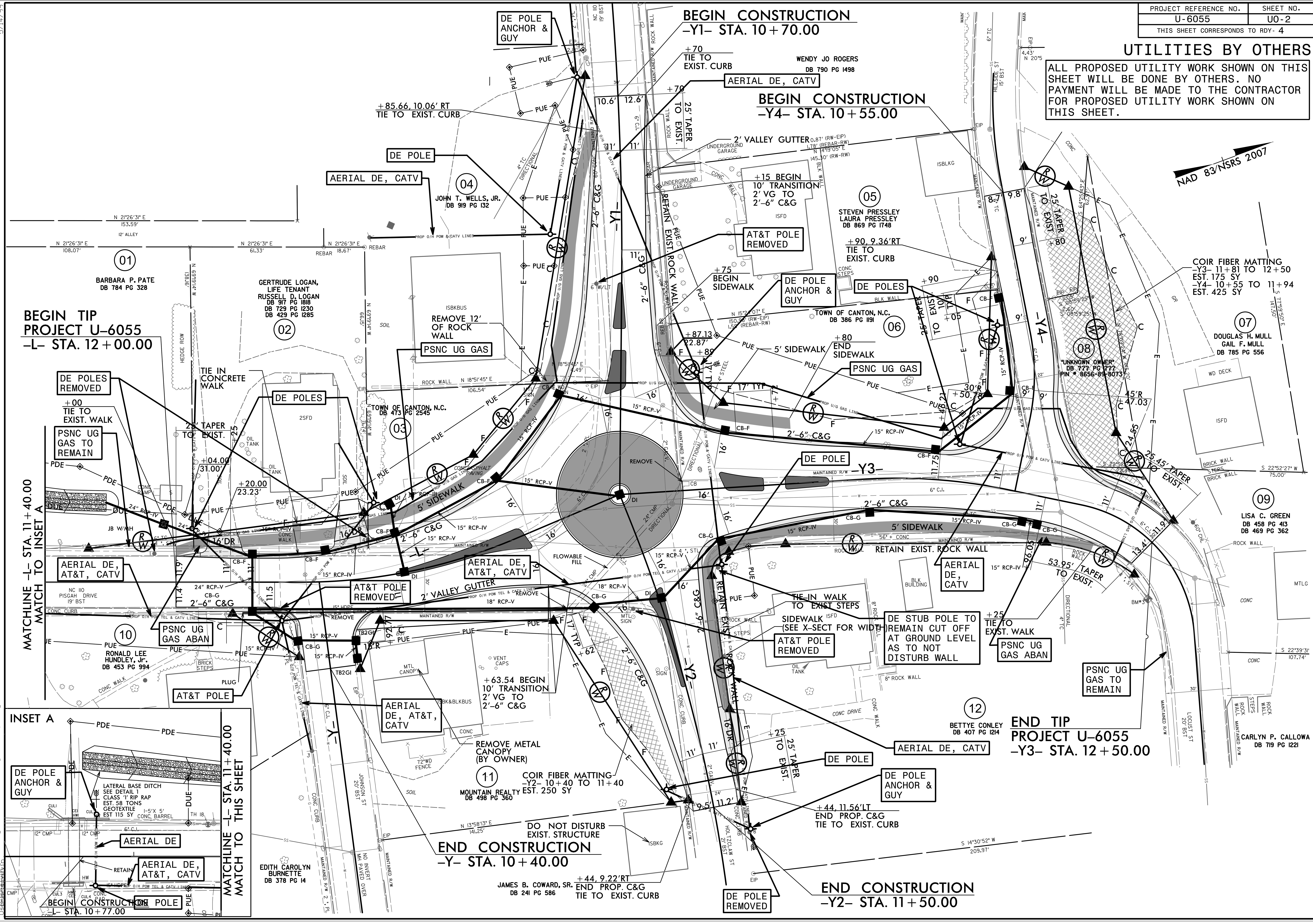
FAX (919) 250-4151

BRIAN BURCH	*UTILITIES REGIONAL ENGINEER*
BOB GOLDING	*UTILITIES ENGINEER*
VACANT	*UTILITIES AREA COORDINATOR*
BILL GREEN	*UTILITIES COORDINATOR*

09/08/99

10/12/2018
X:\NCDOT\U-6055\Utilities\Engineering\UBO\U6055_ut_tsh_U001_psh.dgn
User:smelvin


PROJECT REFERENCE NO.
U-6055
SHEET NO.
U0-2
THIS SHEET CORRESPONDS TO RDY- 4
UTILITIES BY OTHERS
ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS. NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR PROPOSED UTILITY WORK SHOWN ON THIS SHEET.
NAD 83/NSRS 2007
BEGIN CONSTRUCTION
-Y1- STA. 10+70.00
BEGIN CONSTRUCTION
-Y4- STA. 10+55.00
BEGIN TIP
PROJECT U-6055
-L- STA. 12+00.00
END TIP
PROJECT U-6055
-Y3- STA. 12+50.00
END CONSTRUCTION
-Y- STA. 10+40.00
END CONSTRUCTION
-Y2- STA. 11+50.00
MATCHLINE -L- STA. 11+40.00
MATCH TO INSET A
INSET A
MATCHLINE -L- STA. 11+40.00
MATCH TO THIS SHEET
BEGIN CONSTRUCTION
-L- STA. 10+77.00
DE POLE
ANCHOR &
GUY
AERIAL DE
AERIAL DE,
AT&T, CATV
LATERAL BASE DITCH
SEE DETAIL 1
CLASS 'I' RIP RAP
EST. 58 TONS
GEOTEXTILE
EST 115 SY
DE POLE ANCHOR & GUY
DE POLE
AERIAL DE, CATV
DE POLES REMOVED
PSNC UG GAS TO REMAIN
PSNC UG GAS
AERIAL DE, AT&T, CATV
PSNC UG GAS ABAN
AT&T POLE
AT&T POLE REMOVED
DE POLES
AT&T POLE REMOVED
DE POLE ANCHOR & GUY
DE POLES
AERIAL DE, CATV
PSNC UG GAS
DE POLE
AERIAL DE, CATV
DE STUB POLE TO REMAIN CUT OFF AT GROUND LEVEL AS TO NOT DISTURB WALL
AT&T POLE REMOVED
PSNC UG GAS ABAN
PSNC UG GAS TO REMAIN
AERIAL DE, CATV
DE POLE
DE POLE ANCHOR & GUY
DE POLE REMOVED
AERIAL DE, AT&T, CATV
REMOVE 12' OF ROCK WALL
TIE IN CONCRETE WALK
+00 TIE TO EXIST. WALK
+85.66, 10.06' RT
TIE TO EXIST. CURB
+70 TIE TO EXIST. CURB
+90, 9.36'RT TIE TO EXIST. CURB
+44, 9.22'RT END PROP. C&G TIE TO EXIST. CURB
+44, 11.56'LT END PROP. C&G TIE TO EXIST. CURB
+15 BEGIN 10' TRANSITION 2' VG TO 2'-6" C&G
+63.54 BEGIN 10' TRANSITION 2' VG TO 2'-6" C&G
+75 BEGIN SIDEWALK
+80 END SIDEWALK
+25 TIE TO EXIST. WALK
TIE-IN WALK TO EXIST STEPS
SIDEWALK (SEE X-SECT FOR WIDTH)
REMOVE METAL CANOPY (BY OWNER)
DO NOT DISTURB EXIST. STRUCTURE
COIR FIBER MATTING
-Y3- 11+81 TO 12+50
EST. 175 SY
-Y4- 10+55 TO 11+94
EST. 425 SY
COIR FIBER MATTING
-Y2- 10+40 TO 11+40
EST. 250 SY
RETAIN EXIST ROCK WALL
RETAIN EXIST. ROCK WALL
2' VALLEY GUTTER
5' SIDEWALK
2'-6" C&G
FLOWABLE FILL
REMOVE
NC 110
PISGAH DRIVE
19' BST
JOHNSON ST
20' BST
LOCUST ST
20' BST
HOLTZCLAW ST
21' BST
01
BARBARA P. PATE
DB 784 PG 328
02
GERTRUDE LOGAN, LIFE TENANT
RUSSELL D. LOGAN
DB 917 PG 1818
DB 729 PG 1230
DB 429 PG 1285
03
TOWN OF CANTON, N.C.
DB 473 PG 2545
04
JOHN T. WELLS, JR.
DB 919 PG 132
05
STEVEN PRESSLEY
LAURA PRESSLEY
DB 869 PG 1748
06
TOWN OF CANTON, N.C.
DB 386 PG 1191
07
DOUGLAS H. MULL
GAIL F. MULL
DB 785 PG 556
08
"UNKNOWN OWNER"
DB ??? PG ???
PIN # 8656-89-8073
09
LISA C. GREEN
DB 458 PG 413
DB 469 PG 362
10
RONALD LEE HUNDLEY, Jr.
DB 453 PG 994
11
MOUNTAIN REALTY
DB 498 PG 360
12
BETTYE CONLEY
DB 407 PG 1214
WENDY JO ROGERS
DB 790 PG 1498
EDITH CAROLYN BURNETTE
DB 378 PG 14
JAMES B. COWARD, SR.
DB 241 PG 586
CARLYN P. CALLOWA
DB 719 PG 1221
-Y1-
-Y2-
-Y3-
-Y4-
-Y-
-L-