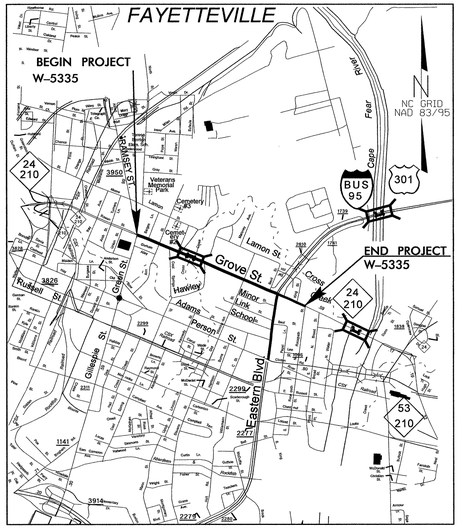
09/08/99

TIP PROJECT: W-5335

CONTRACT: C203310

See Sheet 1-A For Index of Sheets
See Sheet 1-B For Conventional Plan Sheet Symbols



VICINITY MAP

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

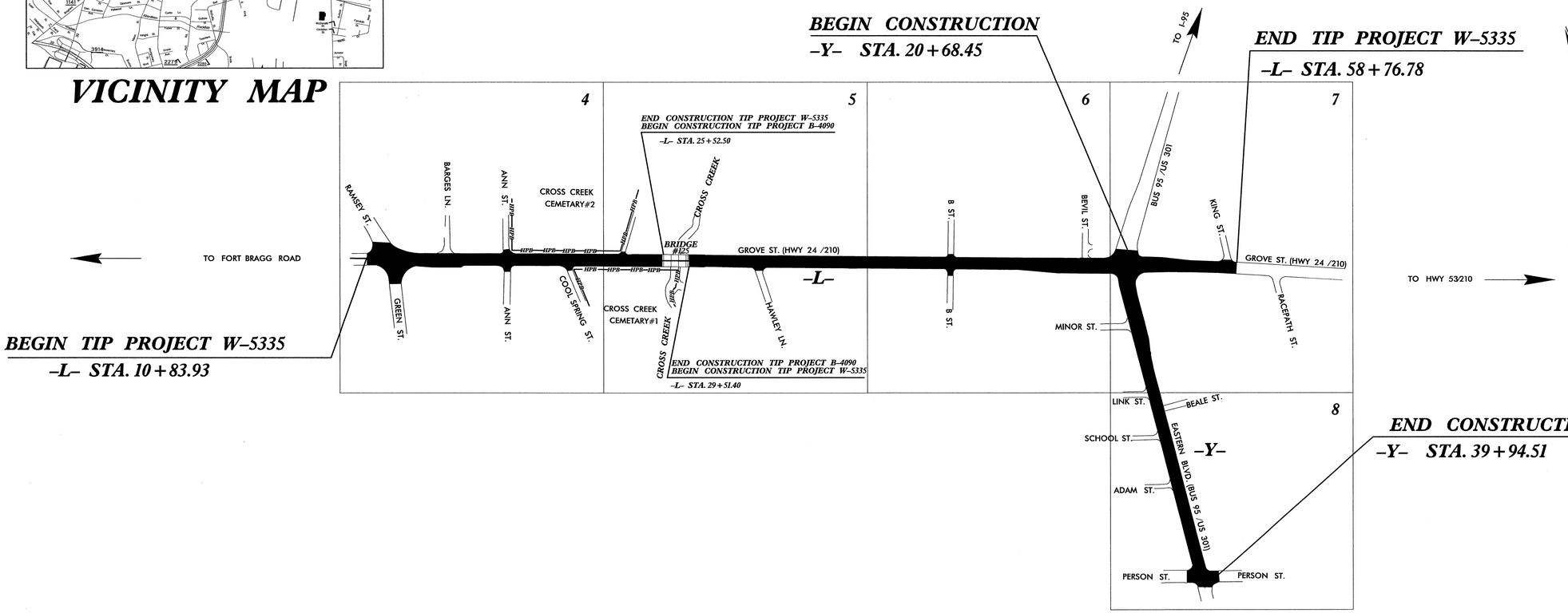
CUMBERLAND COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	W-5335	1	

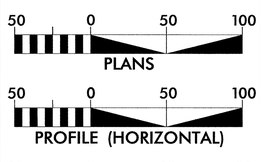
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
45428.1.1	STP-0024(49)	P.E.
45428.2.1	STP-0024(49)	R/W & UTILI.
45428.3.1	STP-0024(49)	CONSTRUCTION

LOCATION: NC 24/210 FROM RAMSEY STREET–GREEN STREET TO THE CAPE FEAR RIVER BRIDGE AND I–95 BUSINESS/US 301 FROM NC 24/210 TO PERSON STREET

TYPE OF WORK: RAISED MEDIAN WITH CURB AND GUTTER, SIGNALS, GRADING, DRAINAGE, AND PAVING



GRAPHIC SCALES



DESIGN DATA

ADT 2011 = 41,315
ADT 2030 = 63,700
DHV = 10 %
D = 60 %
T = 5 % *
V = 40 MPH
* TTST = 2+ DUAL 3

CLASS = PRINCIPAL ARTERIAL
TIER = REGIONAL

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT W–5335 = 0.832 MILE

Prepared In the Office of:
DIVISION OF HIGHWAYS
431 TRANSPORTATION Dr., FAYETTEVILLE NC, 28301

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: OCTOBER 18, 2011

LETTING DATE: MAY 21, 2013

SCOTT PRIDGEN
PROJECT ENGINEER

RICK HANDLIN
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER
ROADWAY DESIGN
ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 037837 ENGINEER JERRY M. BRADLEY

3-14-13
P.E.

SIGNATURE:

STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
W-5335	1-A
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 037837 ENGINEER JERRY W. BRADLEY 5-25-13

INDEX OF SHEETS

SHEET NUMBER	SHEET
1	TITLE SHEET
1-A	INDEX OF SHEETS, GENERAL NOTES, AND LIST OF STANDARD DRAWINGS
1-B	CONVENTIONAL SYMBOLS
1-C & 1-D	SURVEY CONTROL SHEETS
2 & 2-A	PAVEMENT SCHEDULE, TYPICAL SECTIONS, AND WEDGING DETAILS
2B-2F	CURB RAMP DETAILS
2-G	CONVERSION OF EXISTING DRAINAGE BOX TO CATCH BASIN DETAIL
2-H	STANDARD SEGMENTAL GRAVITY RETAINING WALL DETAIL
2-I	DRAINAGE OPENING THROUGH MONOLITHIC ISLAND DETAIL
2-J	TEMPORARY CONTAINMENT OF CONTAMINATED SOIL DETAIL
2-K	TRAFFIC BEARING STEEL COVER DETAIL
3	SUMMARY OF QUANTITIES
3-A	SUMMARY OF DRAINAGE QUANTITIES
3-B	EARTHWORK SUMMARY, AND ASPHALT PAVEMENT REMOVAL SUMMARY
3-C	PARCEL INDEX SHEET
4 THRU 8	PLAN SHEET
9 THRU 12	PROFILE SHEET
TCP-1 THRU TCP-16	TRAFFIC CONTROL PLANS
PM-1 THRU PM-7	PAVEMENT MARKING PLANS
EC-1 THRU EC-3	EROSION CONTROL PLANS
SD-1	SPECIAL SIGN DESIGN
SIGN-1 THRU SIGN-11	SIGNING PLANS
SIG-1 THRU SIG-25	SIGNAL PLANS
X-0 THRU X-28	CROSS-SECTIONS

GENERAL NOTES: 2012 SPECIFICATIONS
EFFECTIVE: 01-17-12
REVISED: 11/01/11

GRADING AND SURFACING OR RESURFACING AND WIDENING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. WHERE NO GRADE LINES ARE SHOWN, THE PROFILES SHOWN DENOTE THE TOP ELEVATION OF THE EXISTING PAVEMENT ALONG THE CENTER LINE OF SURVEY ON WHICH THE PROPOSED RESURFACING WILL BE PLACED. GRADE LINES MAY BE ADJUSTED 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.

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.

DRIVEWAYS:

DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. 848.02 USING 3' 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.

TEMPORARY SHORING:

SHORING REQUIRED FOR THE MAINTENANCE OF TRAFFIC WILL BE PAID FOR AS "EXTRA WORK" IN ACCORDANCE WITH SECTION 104-7.

SUBSURFACE PLANS:

NO SUBSURFACE PLANS ARE AVAILABLE ON THIS PROJECT. THE CONTRACTOR SHOULD MAKE HIS OWN INVESTIGATION AS TO THE SUBSURFACE CONDITIONS.

RIGHT-OF-WAY MARKERS:

ALL RIGHT-OF-WAY MARKERS ON THIS PROJECT SHALL BE PLACED BY OTHERS.

CURB RAMPS

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

STD.NO.	TITLE
DIVISION 2 - EARTHWORK	
200.02	Method of Clearing - Method II
DIVISION 3 - PIPE CULVERTS	
300.01	Method of Pipe Installation
DIVISION 6 - ASPHALT BASES AND PAVEMENTS	
654.01	Pavement Repairs
DIVISION 8 - INCIDENTALS	
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
840.25	Anchorage for Frames - Brick or Concrete or Precast
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
840.34	Traffic Bearing Junction Box - for Use with Pipes 42" and Under
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
840.54	Manhole Frame and Cover
840.66	Drainage Structure Steps
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
848.06	Curb Ramp - Existing Curb & Gutter
852.01	Concrete Islands

12/05/11

PROJECT REFERENCE NO.	SHEET NO.
W-5335	1B

Note: Not to Scale

****S.U.E. = Subsurface Utility Engineering***

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

- State Line
- County Line
- Township Line
- City Line
- Reservation Line
- Property Line
- Existing Iron Pin — EIP
- 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
- Known Soil Contamination: Area or Site
- Potential Soil Contamination: Area or Site

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:

- Baseline Control Point
- Existing Right of Way Marker
- Existing Right of Way Line
- Proposed Right of Way Line — RW
- Proposed Right of Way Line with Iron Pin and Cap Marker — RW
- Proposed Right of Way Line with Concrete or Granite R/W Marker — RW
- Proposed Control of Access Line with Concrete C/A Marker — CA
- Existing Control of Access — CA
- Proposed Control of Access — CA
- Existing Easement Line — E
- Proposed Temporary Construction Easement — E
- Proposed Temporary Drainage Easement — TDE
- Proposed Permanent Drainage Easement — PDE
- Proposed Permanent Drainage / Utility Easement — DUE
- Proposed Permanent Utility Easement — PUE
- Proposed Temporary Utility Easement — TUE
- Proposed Aerial Utility Easement — AUE
- Proposed Permanent Easement with Iron Pin and Cap Marker

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 — S
- Storm Sewer — S

UTILITIES:

POWER:

- Existing Power Pole
- Proposed Power Pole
- Existing Joint Use Pole
- Proposed Joint Use Pole
- Power Manhole — P
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole
- H-Frame Pole
- Recorded U/G Power Line — P
- Designated U/G Power Line (S.U.E.*) — P

TELEPHONE:

- Existing Telephone Pole
- Proposed Telephone Pole
- Telephone Manhole — T
- Telephone Booth
- Telephone Pedestal — T
- Telephone Cell Tower
- U/G Telephone Cable Hand Hole — HH
- Recorded U/G Telephone Cable — T
- Designated U/G Telephone Cable (S.U.E.*) — T
- Recorded U/G Telephone Conduit — TC
- Designated U/G Telephone Conduit (S.U.E.*) — TC
- Recorded U/G Fiber Optics Cable — T FO
- Designated U/G Fiber Optics Cable (S.U.E.*) — T FO

WATER:

- Water Manhole — W
- Water Meter
- Water Valve
- Water Hydrant
- Recorded U/G Water Line — W
- Designated U/G Water Line (S.U.E.*) — W
- Above Ground Water Line — A/G Water

TV:

- TV Satellite Dish
- TV Pedestal — C
- TV Tower
- U/G TV Cable Hand Hole — HH
- Recorded U/G TV Cable — TV
- Designated U/G TV Cable (S.U.E.*) — TV
- Recorded U/G Fiber Optic Cable — TV FO
- Designated U/G Fiber Optic Cable (S.U.E.*) — TV FO

GAS:

- Gas Valve
- Gas Meter
- Recorded U/G Gas Line — G
- Designated U/G Gas Line (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
- Recorded SS Forced Main Line — FSS
- Designated SS Forced Main Line (S.U.E.*) — FSS

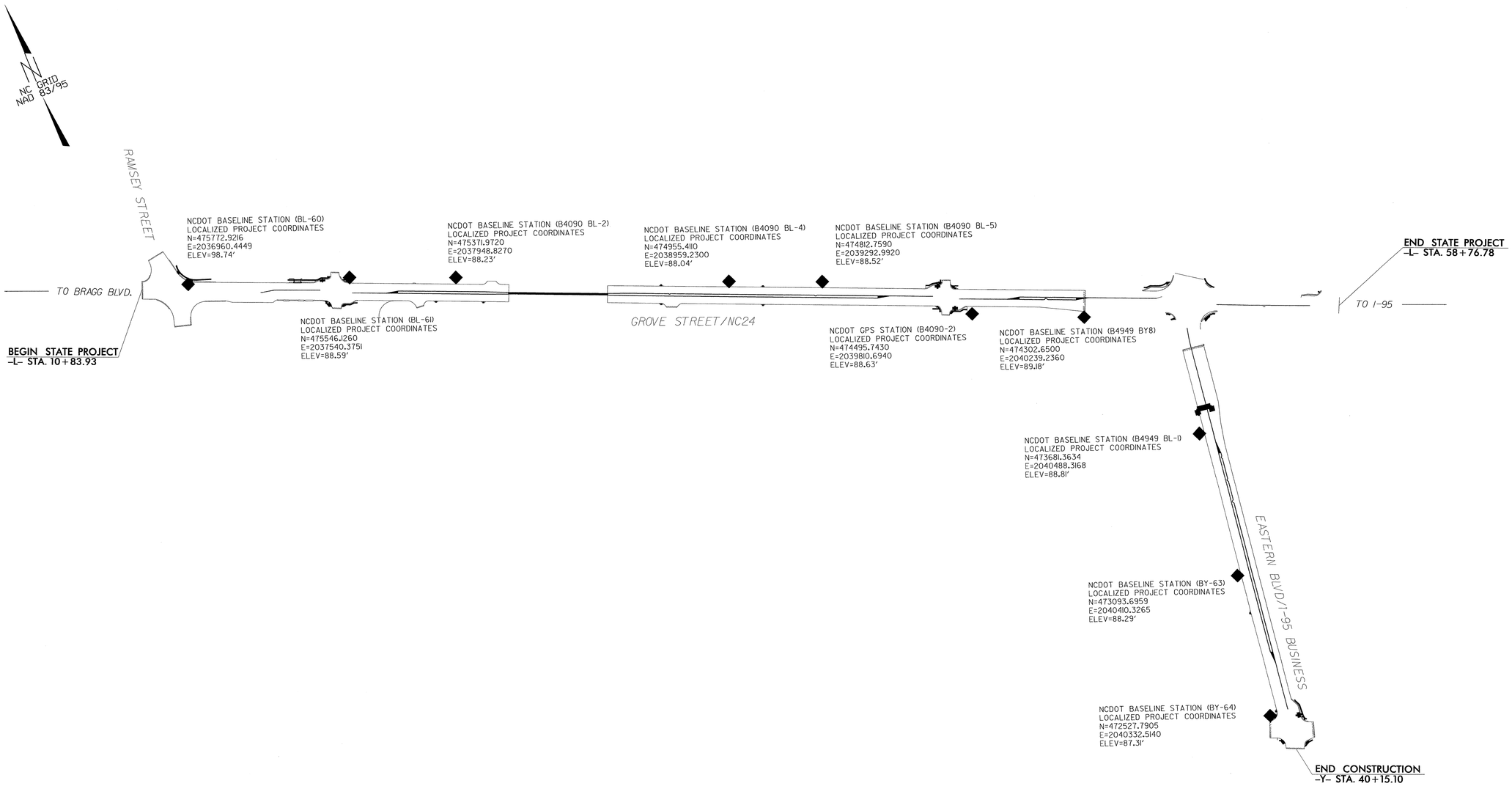
MISCELLANEOUS:

- Utility Pole
- Utility Pole with Base
- Utility Located Object
- Utility Traffic Signal Box — S
- Utility Unknown U/G Line — ?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 (S.U.E.*)
- Abandoned According to Utility Records — AATUR
- End of Information — E.O.I.

6/2/99

PROJECT REFERENCE NO.	SHEET NO.
W-5335	1-C
Location and Surveys	

SURVEY CONTROL SHEET W-5335



DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCGS FOR MONUMENT "VANDER RM3"
WITH NAD 83/95 STATE PLANE GRID COORDINATES OF
NORTHING: 464925.950067(ft) EASTING: 2069182.42002(ft)
ELEVATION: 151.82'(ft)
THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.999879130
THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "VANDER RM3" TO -L- STATION 10+83.93 IS
N 71° 25' 22.35" W 34188.4980'
ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
VERTICAL DATUM USED IS NAVD 88

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: TIP####_LS_CONTROL_DATE.HTML

   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.
NETWORK ESTABLISHED FROM NGS ONLINE POSITIONING SERVICE (OPUS)
SEE GPS CALIBRATION SHEET FOR HORIZONTAL AND VERTICAL COORDINATE VALUES.

6/2/99

PROJECT REFERENCE NO.	SHEET NO.
W-5335	1-D
Location and Surveys	

SURVEY CONTROL SHEET W-5335

BL

POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
60		475772.9216	2036960.4449	98.74	12+71.99	30.43 LT
61		475546.1260	2037540.3751	88.59	18+94.49	46.12 LT
52	B4090 BL-2	475371.9720	2037948.8270	88.23	23+38.51	43.88 LT
53	B4090 BL-3	475165.8770	2038431.5510	90.44	28+63.39	40.97 LT
54	B4090 BL-4	474955.4110	2038959.2300	88.04	34+31.39	51.46 LT
55	B4090 BL-5	474812.7590	2039292.9920	88.52	37+94.35	49.31 LT
65		474546.7184	2039691.1914	88.47	42+64.54	41.61 RT
57	B4090-2	474495.7430	2039810.6940	88.63	43+94.46	42.29 RT
58	B4949 BY8	474302.6500	2040239.2360	89.18	48+64.34	54.20 RT
59	B4949 BY9	474174.7370	2040538.6914	88.90	51+89.97	56.06 RT
70	B4949 BY10	473974.2050	2041005.6730	86.27	57+00.60	52.51 RT
71	B4949 BY11	473838.2340	2041320.6140	87.21	60+43.63	39.03 RT
62		473606.6253	2041805.5652	88.99	65+81.05	38.20 RT

BY

POINT	DESC.	NORTH	EAST	ELEVATION	Y STATION	OFFSET
82		474174.7370	2040538.6914	88.90	22+14.03	73.59 RT
81	B4949 BL1	473681.3634	2040488.3168	88.81	26+95.54	40.73 RT
63		473093.6959	2040410.3265	88.29	32+88.36	39.89 RT
64		472527.7905	2040332.5140	87.31	38+59.59	41.77 RT

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
L	17+87.60	-50.00	475591.1309	2037443.3449
L	18+22.12	-56.00	475583.2840	2037477.4872
L	19+45.01	55.00	475433.3326	2037547.7522
L	19+45.01	48.55	475439.2813	2037550.2531
L	18+99.38	70.00	475437.1861	2037499.8825
L	43+83.16	50.10	474492.9213	2039797.2560
L	43+28.78	65.00	474500.2583	2039741.3481
L	42+53.98	-65.00	474649.0881	2039722.7758
L	42+21.78	-49.56	474647.3364	2039687.1049
L	42+79.23	-65.00	474639.3029	2039746.0506
L	53+59.24	71.12	474095.2501	2040688.8924
L	43+83.15	65.00	474479.1865	2039791.4692
L	53+86.32	58.05	474096.8426	2040718.7451
L	18+00.00	-56.00	475591.8563	2037457.0972
L	19+19.91	55.00	475443.0576	2037524.6206
L	42+79.22	-49.49	474625.0145	2039740.0292

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y	39+05.85	-69.96	472467.0818	2040437.1035
Y	38+12.85	-49.32	472561.9969	2040429.0075
Y	38+12.86	-70.01	472559.2447	2040449.5176

ROW MARKER PERMANENT EASEMENT-E

ALIGN	STATION	OFFSET	NORTH	EAST
L	42+53.98	-75.00	474658.3067	2039726.6509
L	42+79.26	-100.00	474671.5559	2039759.6426

L

TYPE	STATION	NORTH	EAST
POT	10+00.00	475850.2800	2036697.9201
PC	53+62.44	474159.5731	2040719.4135
PT	57+37.74	474005.6840	2041061.6707
POT	72+19.03	473365.2327	2042397.3488

Y

TYPE	STATION	NORTH	EAST
POT	10+00.00	475105.0478	2041350.2590
PC	19+59.58	474369.6896	2040733.7911
PT	23+63.74	474004.8012	2040572.8012
POT	40+67.11	472316.5607	2040346.3255

```
**************************************
BM1        ELEVATION - 87.65
N 474255       E 2040787
L STATION 53+87.00 114 LEFT
RR SPIKE IN BASE OF 36 OAK TREE
**************************************
```

NOTE: DRAWING NOT TO SCALE

06-MAR-2013 13:24
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$$$$USERNAME$$$$

6/2/99

PROJECT REFERENCE NO.	SHEET NO.
W-5335	2

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 037837 ENGINEER JERRY M. BRADLEY

03/25/13

PAVEMENT DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 031484 ENGINEER VADIM G. MITCHEL

03/25/13

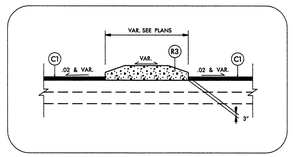
PAVEMENT SCHEDULE

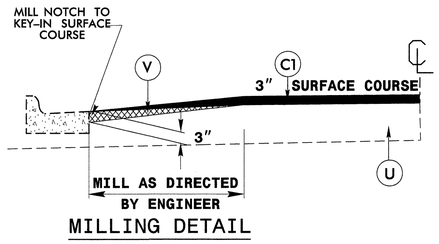
FINAL PAVEMENT DESIGN

C1	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS
C2	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE TYPE S9.5C, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH. TO BEPLACED IN LAYERS NOT TO EXCEED 2" 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 2.5" IN DEPTH OR GREATER THAN 4" IN DEPTH.
E1	PROP. APPROX. 11" ASPHALT CONCRETE BASE COURSE TYPE B25.0C, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
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 5.5" IN DEPTH.
E3	PROP. APPOX. 5.5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
R1	1'- 6" CONCRETE CURB AND GUTTER
R2	2'- 6" CONCRETE CURB AND GUTTER
R3	5" Monolithic Concrete Island (keyed in)
S	PROPOSED 5' SIDEWALK.
T	EARTH MATERIAL
U	EXIST. PAVEMENT
V	MILLING BITUMINOUS PAVEMENT. 0 - 3" DEPTH. (7' to 10' WIDTH) TO TIE TO THE C&G, AND TO OBTAIN DRAINAGE.
W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE WEDGING DETAIL)

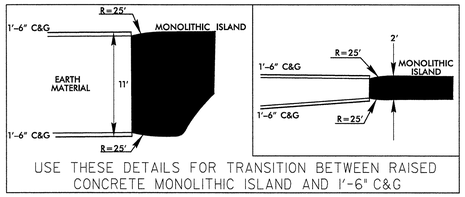
KEYED IN ISLAND DETAIL

ALL ISLANDS ON –L–





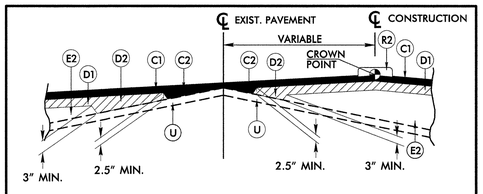
MILLING DETAIL



USE THESE DETAILS FOR TRANSITION BETWEEN RAISED CONCRETE MONOLITHIC ISLAND AND 1'-6" C&G

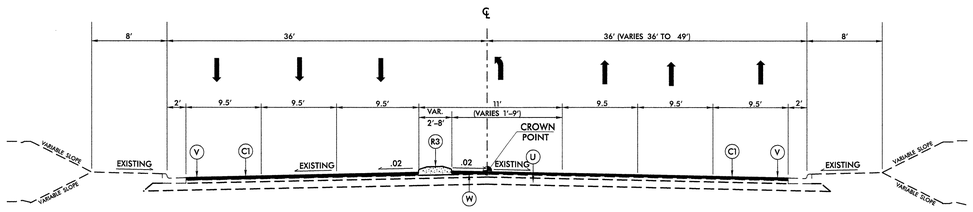
NOTE: RESURFACE –L– FROM STA. 10+83.93 TO 48+60.00
SEE PLAN SHEETS FOR MONOLITHIC ISLAND LOCATIONS

WEDGE AS DIRECTED BY THE ENGINEER TO OBTAIN DRAINAGE LT & RT OF 1'-6" C&G AND ISLANDS



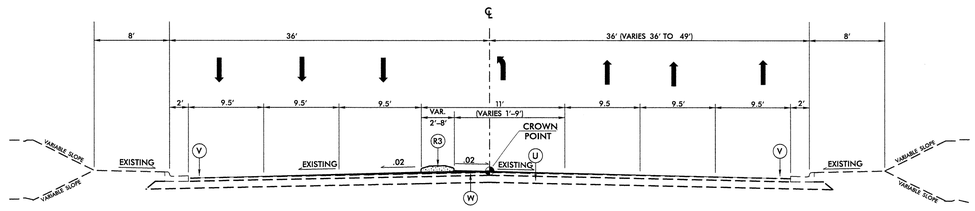
WEDGING DETAIL

–L– STA. 16+00.00 TO STA 58+25.00
–Y– STA. 22+25.00 TO STA 39+60.00



TYPICAL SECTION NO. 1

–L– STA. 10+83.93 TO 21+09.08
–L– STA. 40+29.21 TO 45+96.92
–L– STA. 48+23.81 TO 48+60.00



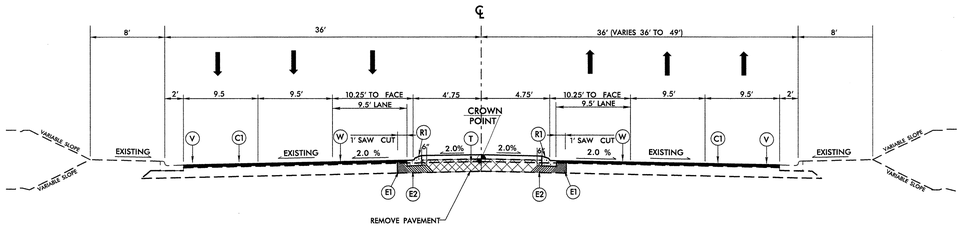
TYPICAL SECTION NO. 2

–L– STA. 48+60 TO 58+76.78

NOTES:

1– DO NOT PLACE FINAL SURFACE FROM –L– 48+60.00 TO 58+76.78

2– CONSTRUCT MONO ISLAND AS SHOWN ON THE PLANS FROM –L– 48+60.00 TO 58+76.78, ASPHALT KEY-IN AND RESURFACING WILL BE PLACED BY OTHERS.



TYPICAL SECTION NO. 3

–L– STA. 21+09.08 TO 25+52.50
–L– STA. 29+51.40 TO 40+29.21
–L– STA. 45+96.92 TO 48+23.81

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6/2/99

PROJECT REFERENCE NO.	SHEET NO.
W-5335	2A
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 037837 ENGINEER JOSEPH M. BRADLEY 3/21/13

NORTH CAROLINA PROFESSIONAL SEAL 031484 ENGINEER VLADIMIR G. MITCHEV 03/25/13

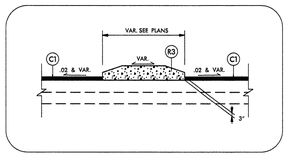
PAVEMENT SCHEDULE

FINAL PAVEMENT DESIGN

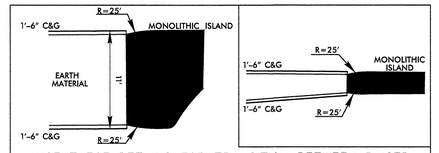
C1	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C2	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE TYPE S9.5C, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH. TO BEPLACED IN LAYERS NOT TO EXCEED 2" IN DEPTH.
D1	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 2.5" IN DEPTH OR GREATER THAN 4" IN DEPTH.
E1	PROP. APPROX. 11" ASPHALT CONCRETE BASE COURSE TYPE B25.0C, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
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 5.5" IN DEPTH.
E3	PROP. APPOX. 5.5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
R1	1'- 6" CONCRETE CURB AND GUTTER
R2	2'- 6" CONCRETE CURB AND GUTTER
R3	5" Monolithic Concrete Island (keyed in)
S	PROPOSED 5' SIDEWALK.
T	EARTH MATERIAL
U	EXIST. PAVEMENT
V	MILLING BITUMINOUS PAVEMENT. 0 - 3" DEPTH. (7' to 10' WIDTH) TO TIE TO THE C&G, AND TO OBTAIN DRAINAGE.
W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE WEDGING DETAIL)

KEYED IN ISLAND DETAIL

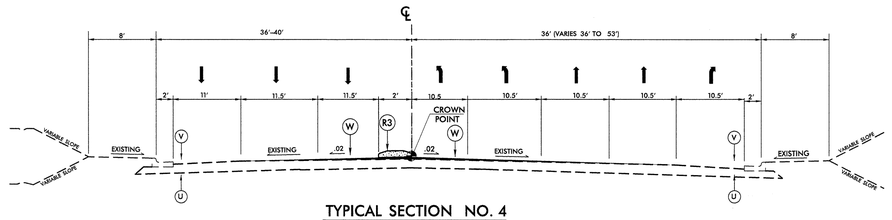
ALL ISLANDS ON –Y– STA.



MILL ASPHALT AS NEEDED TO OBTAIN DRAINAGE LT & RT OF 1'-6" C&G AND ISLANDS



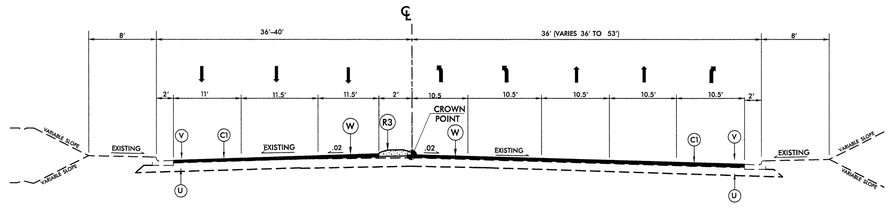
USE THESE DETAILS FOR TRANSITION BETWEEN RAISED CONCRETE MONOLITHIC ISLAND AND 1'-6" C&G



TYPICAL SECTION NO. 4

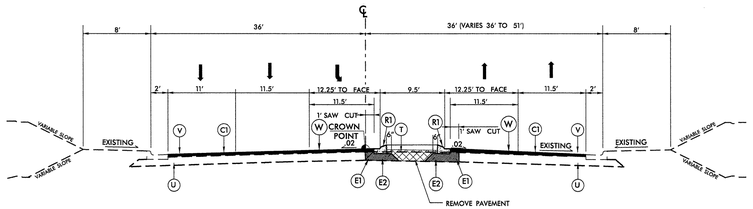
–Y– STA. 22+74.44 TO 23+55.00

NOTES: RESURFACE –Y– FROM STA. 23+55.00 TO STA. 40+15.10
DO NOT PLACE FINAL SURFACE COURSE –Y– FROM STA. 21+23.00 TO 23+55.00, ASPHALT KEY–IN AND RESURFACING TO BE PLACED BY OTHERS



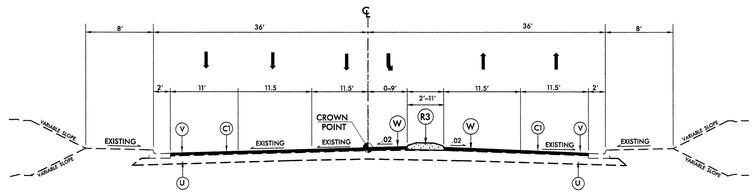
TYPICAL SECTION NO. 5

–Y– STA. 23+55.00 TO 27+93.53



TYPICAL SECTION NO. 6

–Y– STA. 27+93.53 TO 36+14.59



TYPICAL SECTION NO. 7

–Y– STA. 36+14.59 TO 40+15.10

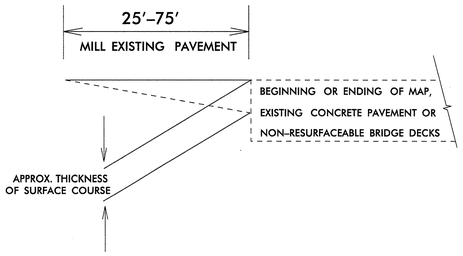
MILLING AT PAVEMENT TIE–INS

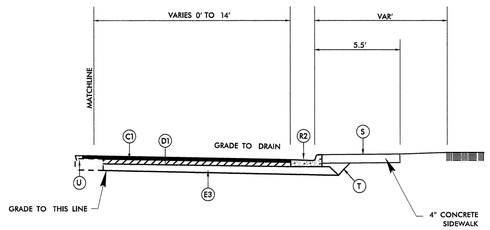
NOTES TO CONTRACTOR

For surface mixes over 1" in thickness, mill the existing pavement in acoordance with the following sketch as directed by the Engineer.

Locations shall include ties into existing concrete pavement, at bridge approaches where the bridge will not be resurfaced, and at the beginning and ending point of each resurfacing map.

Perform the work in accordance with Section 607 of the January 2012 North Carolina Department of Transportation Standard Specifications for Roads and Structures. Resurfacing will be accomplished at the same time as the milling operation.





TYPICAL SECTION NO. 8

LT –L– STA. 17+73.00 TO 18+39.00
RT –L– STA. 18+82.12 TO 19+46.62
LT –L– STA. 42+20.87 TO 42+87.02
RT –L– STA. 43+17.71 TO 43+87.45
LT –L– STA. 50+88.59 TO 52+13.92
RT –L– STA. 53+24.03 TO 53+89.40
LT –L– STA. 57+24.03 TO 58+02.68
LT –Y– STA. 38+16.34 TO 39+23.04

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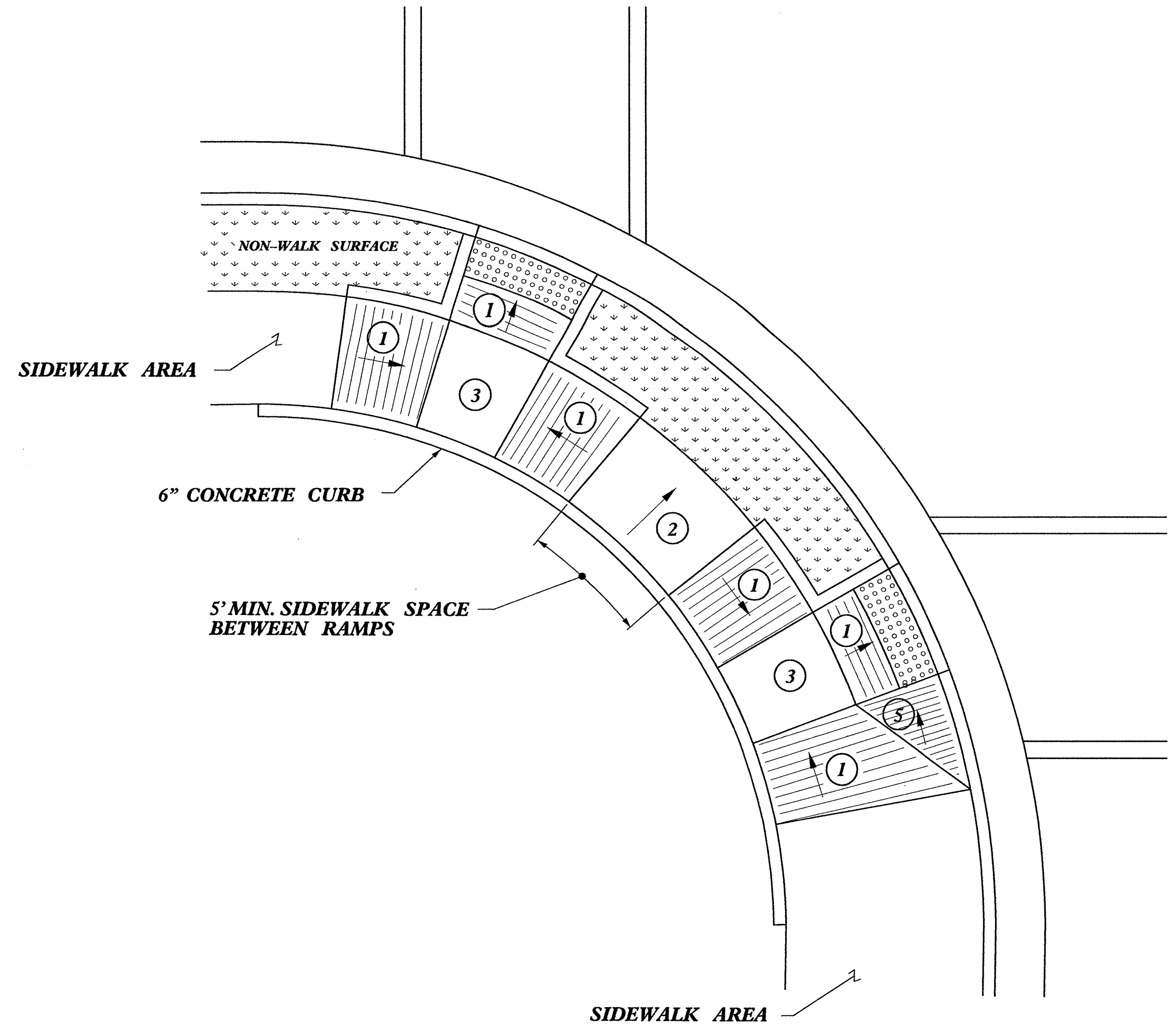
PROJECT REFERENCE NO.	SHEET NO.
W-5335	2B

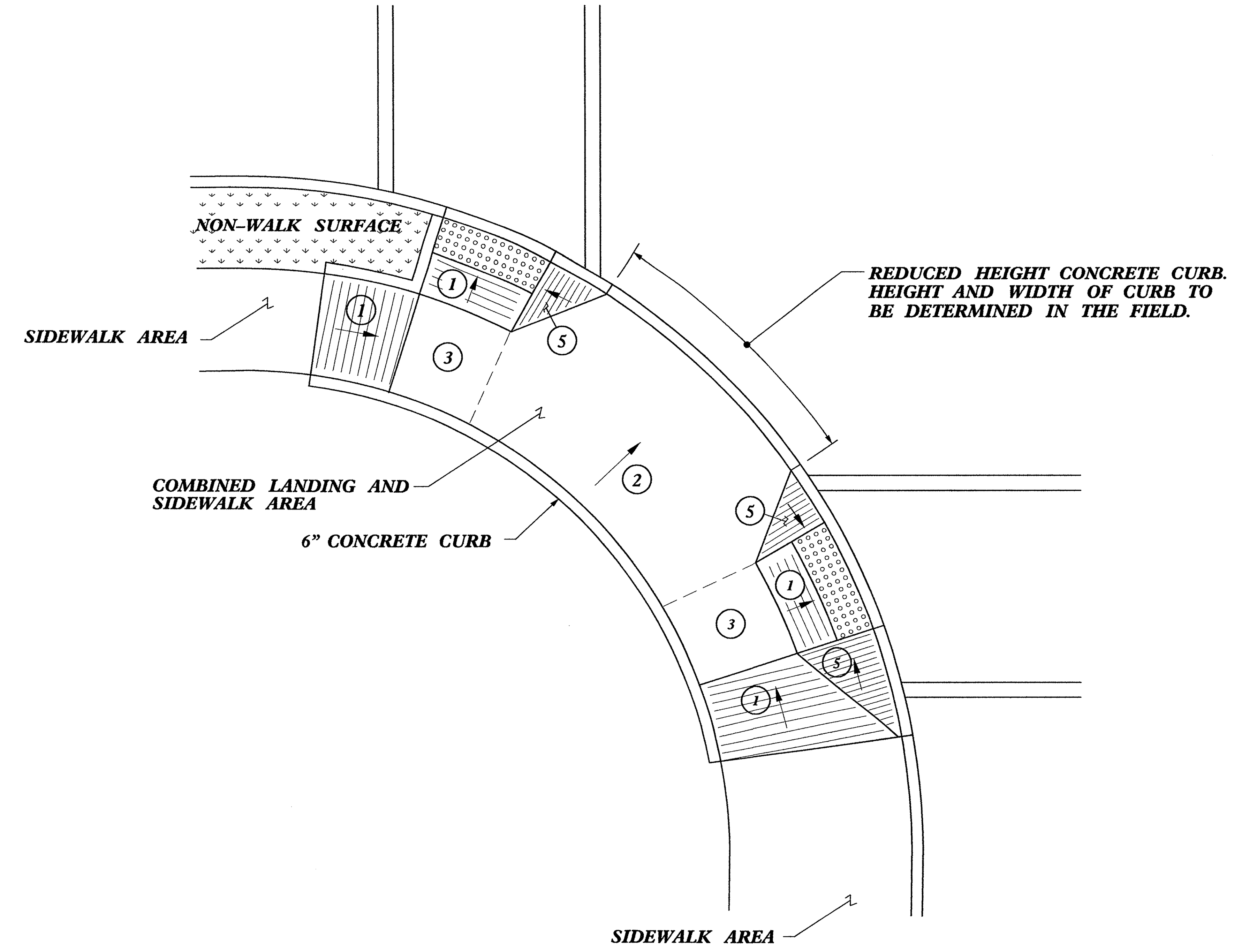
ROADWAY DESIGN ENGINEER

REVISIONS



DETAIL 1

(PLACEMENT GUIDANCE OF ADJACENT COMBINATION CURB RAMPS)



DETAIL 2

(PLACEMENT GUIDANCE OF ADJACENT COMBINATION CURB RAMPS WITH SHARED LANDING AND SIDEWALK AREA)

NORTH CAROLINA PROFESSIONAL SEAL 022966 ENGINEER

3/22/13

(1) RAMP SLOPE: 8.33% (12:1) MAX.

(2) CROSS SLOPE: 2.00% (50:1) MAX.

(3) UNLESS OTHERWISED SPECIFIED ON CURB RAMP TYPE DETAIL, CURB RAMPS REQUIRE A 4'-0" X 4'-0" MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% (50:1) WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.

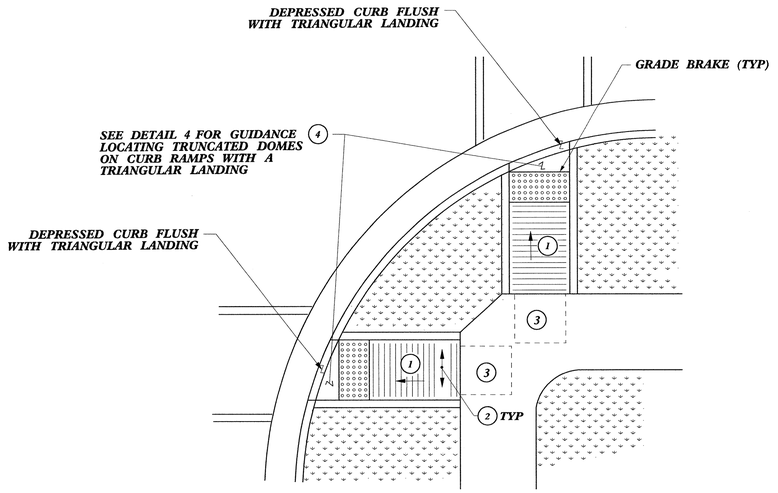
(5) FLARE SLOPE: 10.00% (10:1) MAX.

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
W-5335	2C
ROADWAY DESIGN ENGINEER	

REVISIONS

8/17/99



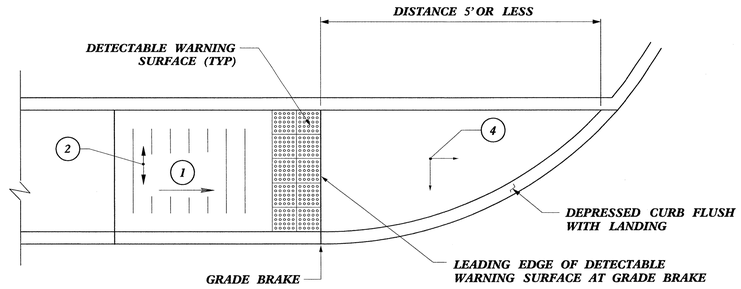
NOTES:

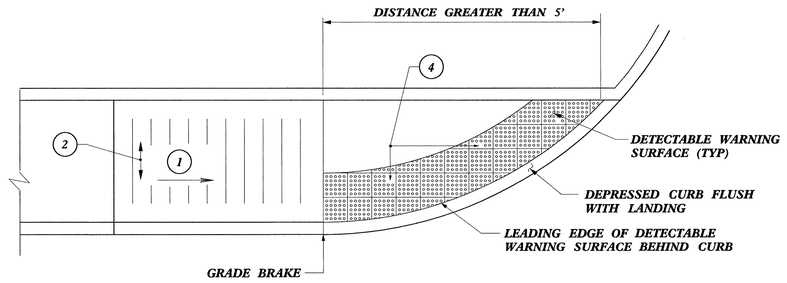
1. PROVIDE A LEVEL TRIANGLE LANDING WHEN SKEWING RAMPS TO TRANSITION THE GRADE BREAK FROM A CURB. SEE DETAIL 4 FOR DETECTABLE WARNING SURFACE GUIDANCE.

2. PERPENDICULAR CURB RAMPS SHOWN FOR ILLUSTRATED PURPOSES. GUIDANCE WILL APPLY TO OTHER CURB RAMP TYPES WHEN RAMP IS SKEWED. USE THE ABOVE GUIDANCE IN ADDITION TO EACH CURB RAMP'S CONSTRUCTION DETAILS.

DETAIL 3

(CONSTRUCTION GUIDANCE OF CURB RAMPS SKEWED TO ROADWAY)





(1) *RAMP SLOPE: 8.33% (12:1) MAX.*

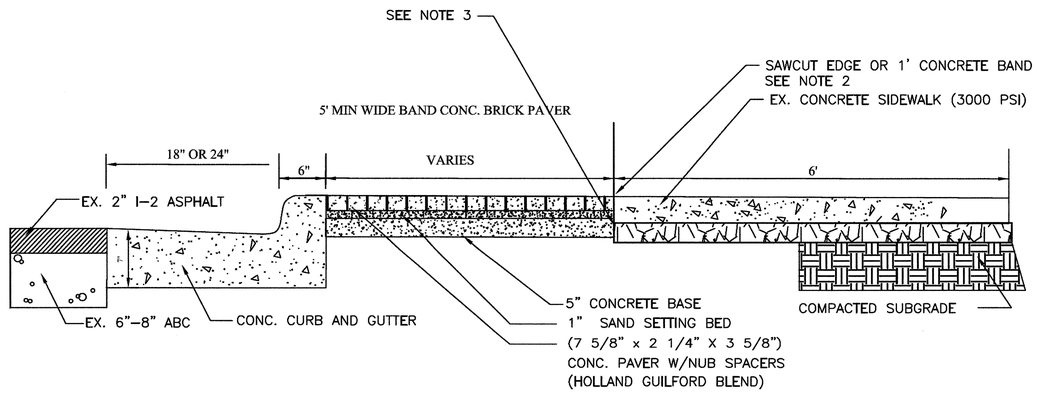
(2) *CROSS SLOPE: 2.00% (50:1) MAX.*

(3) *UNLESS OTHERWISED SPECIFIED ON CURB RAMP TYPE DETAIL, CURB RAMPS REQUIRE A 4'-0" X 4'-0" MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% (50:1) WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.*

(4) *TRIANGULAR LANDING CROSS SLOPE AND LONGITUDIAL SLOPE: 2.00% (50:1) MAX*

DETAIL 4

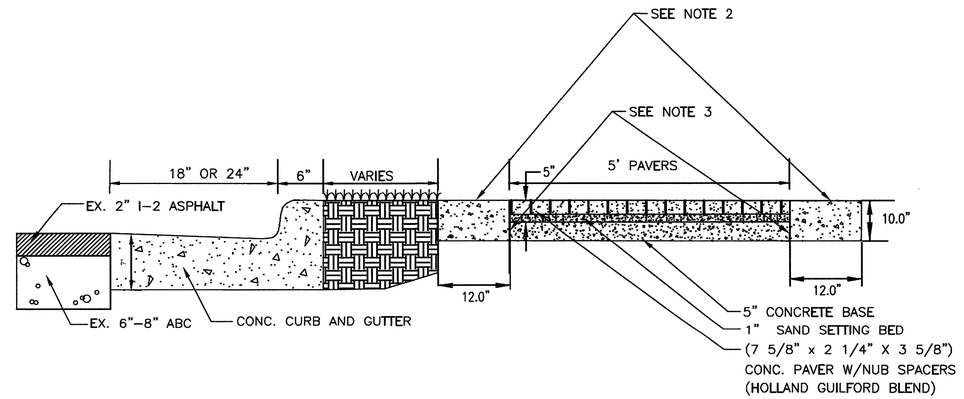
(CONSTRUCTION GUIDANCE FOR CURB RAMPS WITH A TRIANGULAR LANDING)



NOTES: 1.) PROVIDE CONTROL JOINTS AT DISTANCE EQUAL TO WIDTH OF SIDEWALK PROVIDE 1/2" EXP. JOINTS WITH PRE-MOLDED E.J. FILLER AT MAX. 30'OC.
2.) FOR CONCRETE BANDS: PROVIDE DUMMY JOINTS AT 10' INTERVALS AND 1/2" EXPANSION JOINTS WITH PRE-MOLDED E.J. FILLER AT MAX. 30' OC
3.) A 1/4" EXPANSION JOINT SHALL BE PLACED BETWEEN THE CONCRETE BASE AND THE CONCRETE BAND TO ENSURE SEPARATION.

DETAIL 5

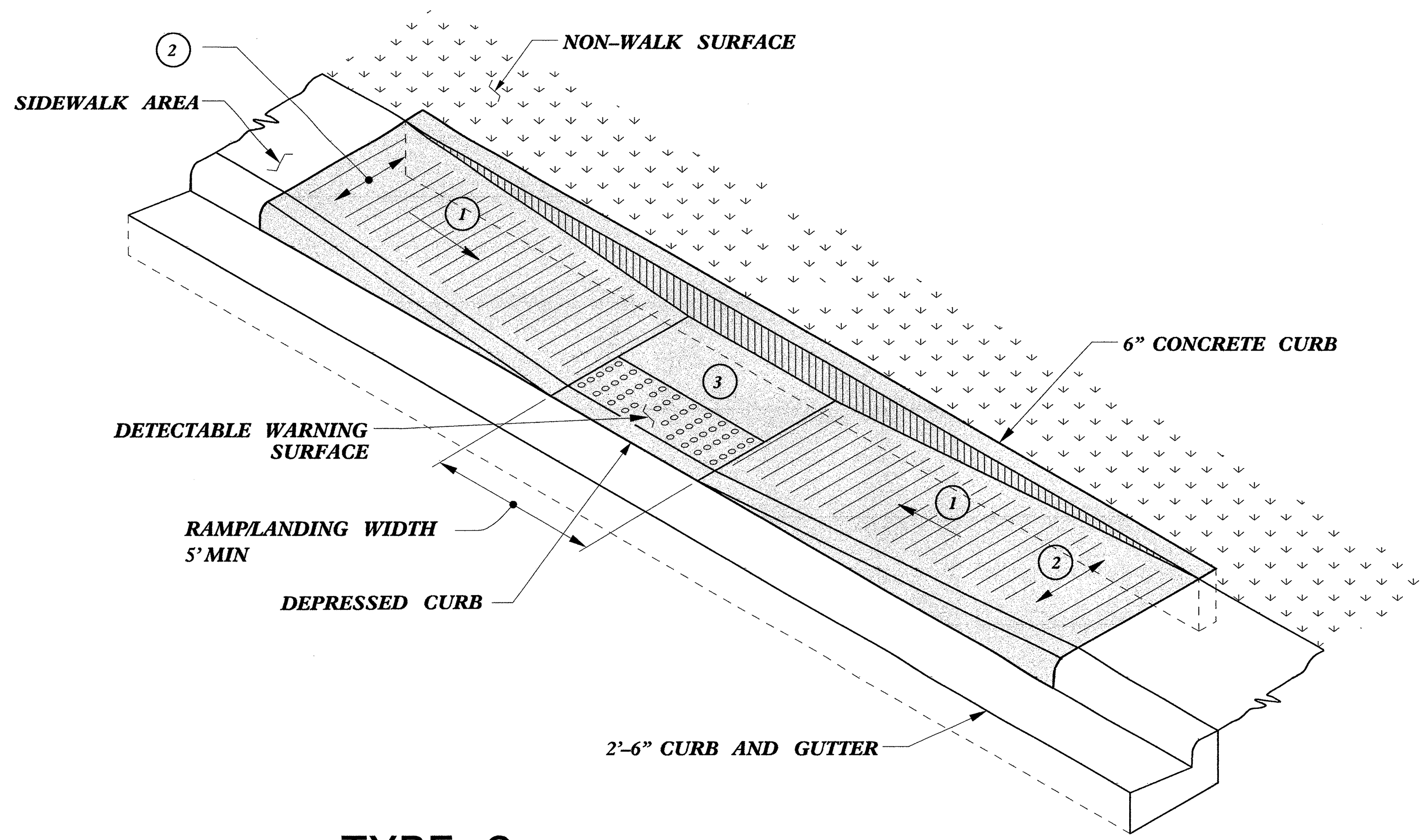
SIDEWALK WITH CONCRETE BRICK PAVERS RT -L- STA 11+30 - 13+60



NOTES: 1.) PROVIDE CONTROL JOINTS AT DISTANCE EQUAL TO WIDTH OF SIDEWALK PROVIDE 1/2" EXP. JOINTS WITH PRE-MOLDED E.J. FILLER AT MAX. 30'OC.
2.) FOR CONCRETE BANDS: PROVIDE DUMMY JOINTS AT 10' INTERVALS AND 1/2" EXPANSION JOINTS WITH PRE-MOLDED E.J. FILLER AT MAX. 30' OC
3.) A 1/4" EXPANSION JOINT SHALL BE PLACED BETWEEN THE CONCRETE BASE AND THE CONCRETE BAND TO ENSURE SEPARATION.

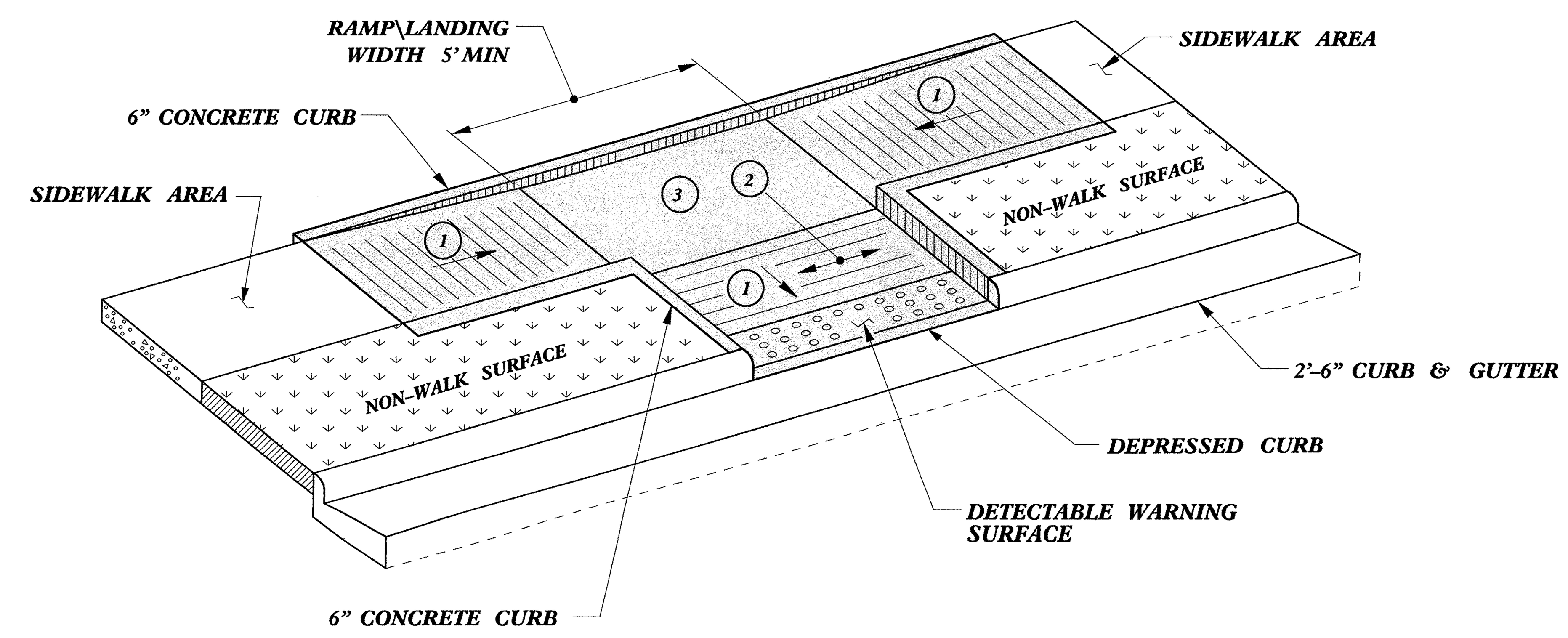
PROJECT REFERENCE NO.	SHEET NO.
W-5335	2D

ROADWAY DESIGN ENGINEER



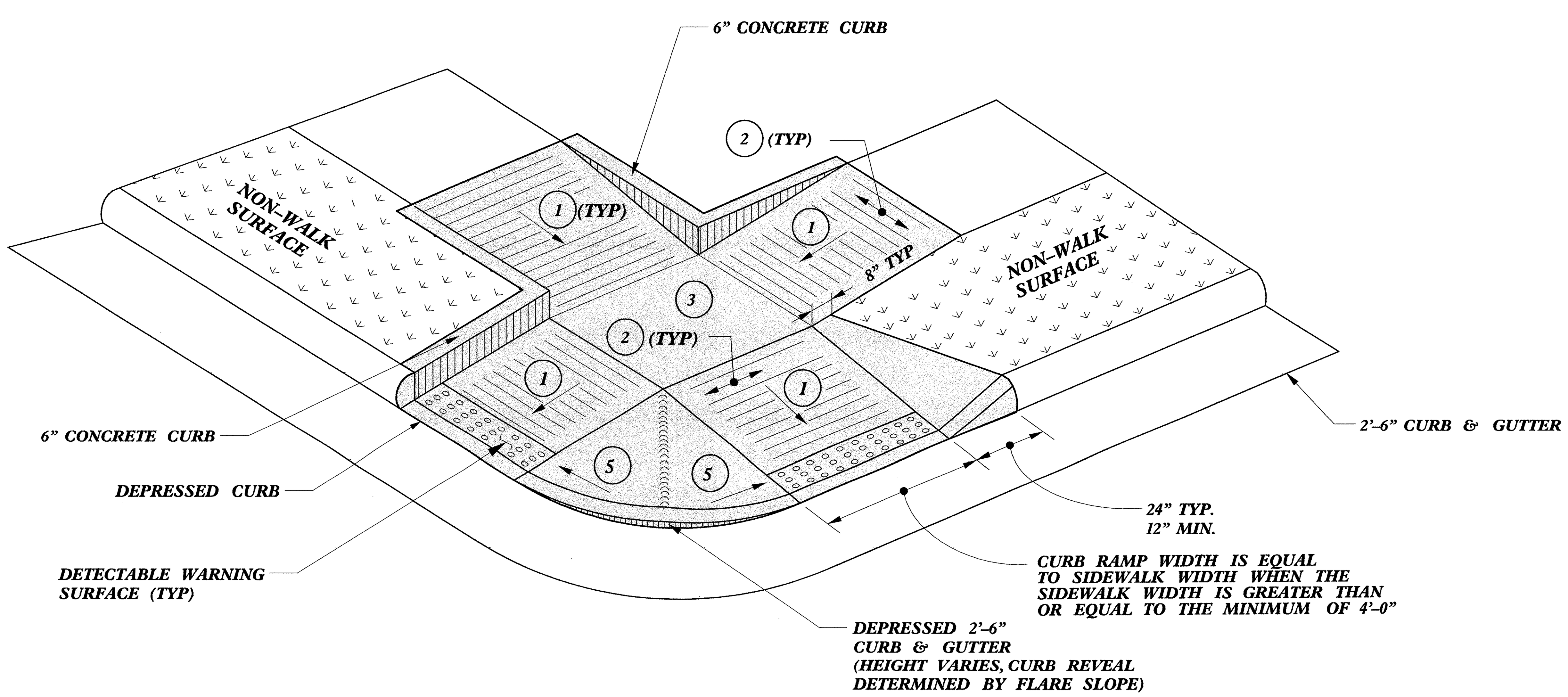
TYPE 2

(PARALLEL CURB RAMP)



TYPE 3

(COMBINATION CURB RAMP)



TYPE 5

(COMBINATION CURB RAMPS WITH SHARED LANDING)

PAY LIMITS FOR CURB RAMP

1. RAMP SLOPE: 8.33% (12:1) MAX.
2. CROSS SLOPE: 2.00% (50:1) MAX.
3. UNLESS OTHERWISED SPECIFIED ON CURB RAMP TYPE DETAIL, CURB RAMPS REQUIRE A 4'-0" X 4'-0" MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% (50:1) WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.
4. TRIANGULAR LANDING CROSS SLOPE AND LONGITUDIAL SLOPE: 2.00% (50:1) MAX
5. FLARE SLOPE: 10.00% (10:1) MAX.

NORTH CAROLINA PROFESSIONAL SEAL 022966 ENGINEER
3/22/13

REVISIONS

8/17/99

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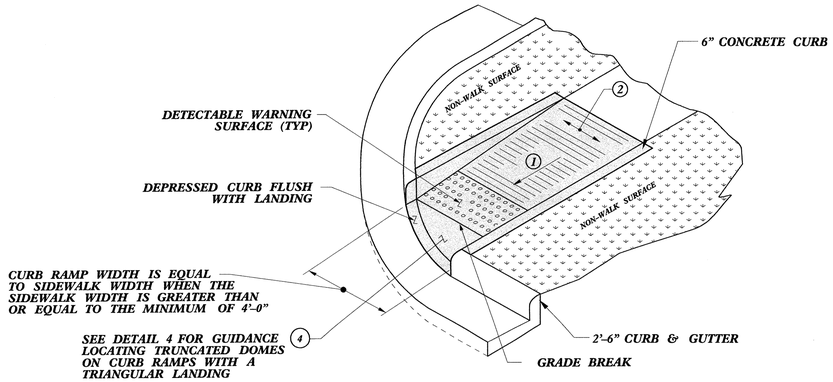
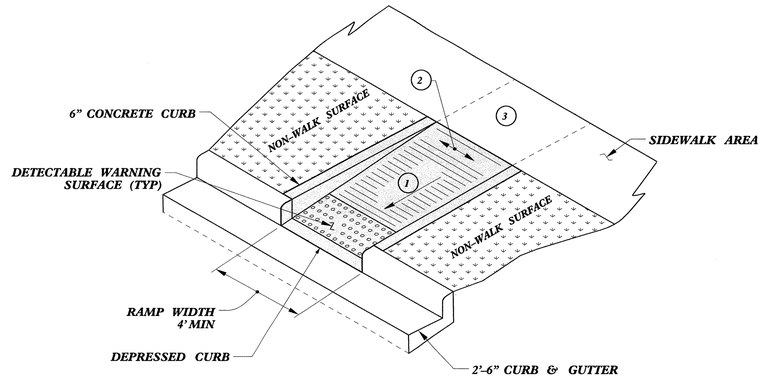
PROJECT REFERENCE NO.	SHEET NO.
W-5335	2E
ROADWAY DESIGN ENGINEER	



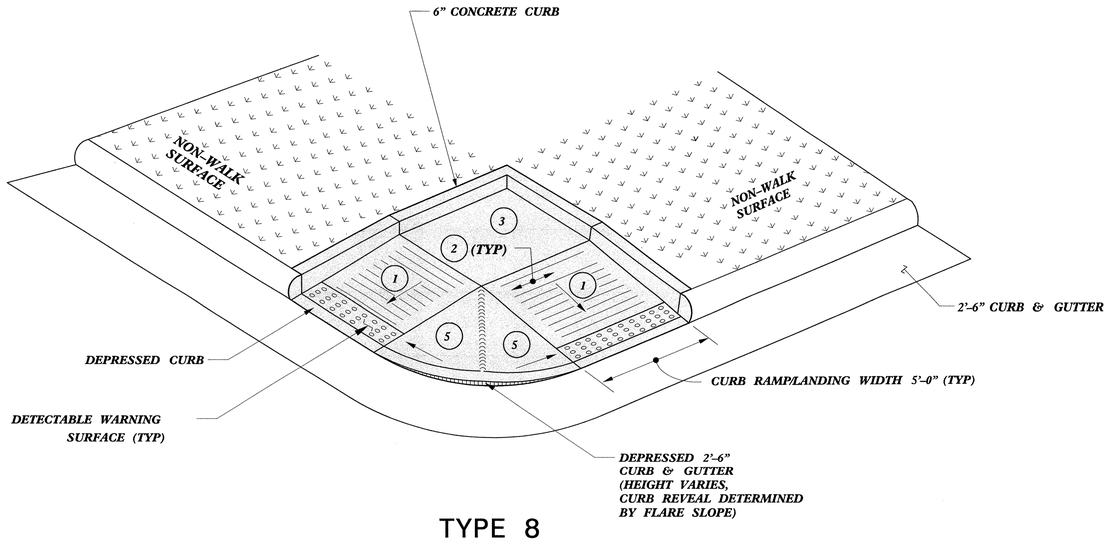
TYPE 6

(PARALLEL DIRECTIONAL CURB RAMP WITH RETURN CURBS AND TRIANGULAR LANDING)



TYPE 7

(PERPENDICULAR CURB RAMP WITH RETURN CURBS)



TYPE 8

(COMBINATION CURB RAMPS WITH SHARED LANDING)

PAY LIMITS FOR CURB RAMP

1. *RAMP SLOPE: 8.33% (12:1) MAX.*
2. *CROSS SLOPE: 2.00% (50:1) MAX.*
3. *UNLESS OTHERWISED SPECIFIED ON CURB RAMP TYPE DETAIL, CURB RAMPS REQUIRE A 4'-0" X 4'-0" MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% (50:1) WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.*
4. *TRIANGULAR LANDING CROSS SLOPE AND LONGITUDIAL SLOPE: 2.00% (50:1) MAX*
5. *FLARE SLOPE: 10.00% (10:1) MAX.*

NORTH CAROLINA PROFESSIONAL SEAL 022966 ENGINEER JOEL S. HOWARD 3/22/13

8/17/99

REVISIONS

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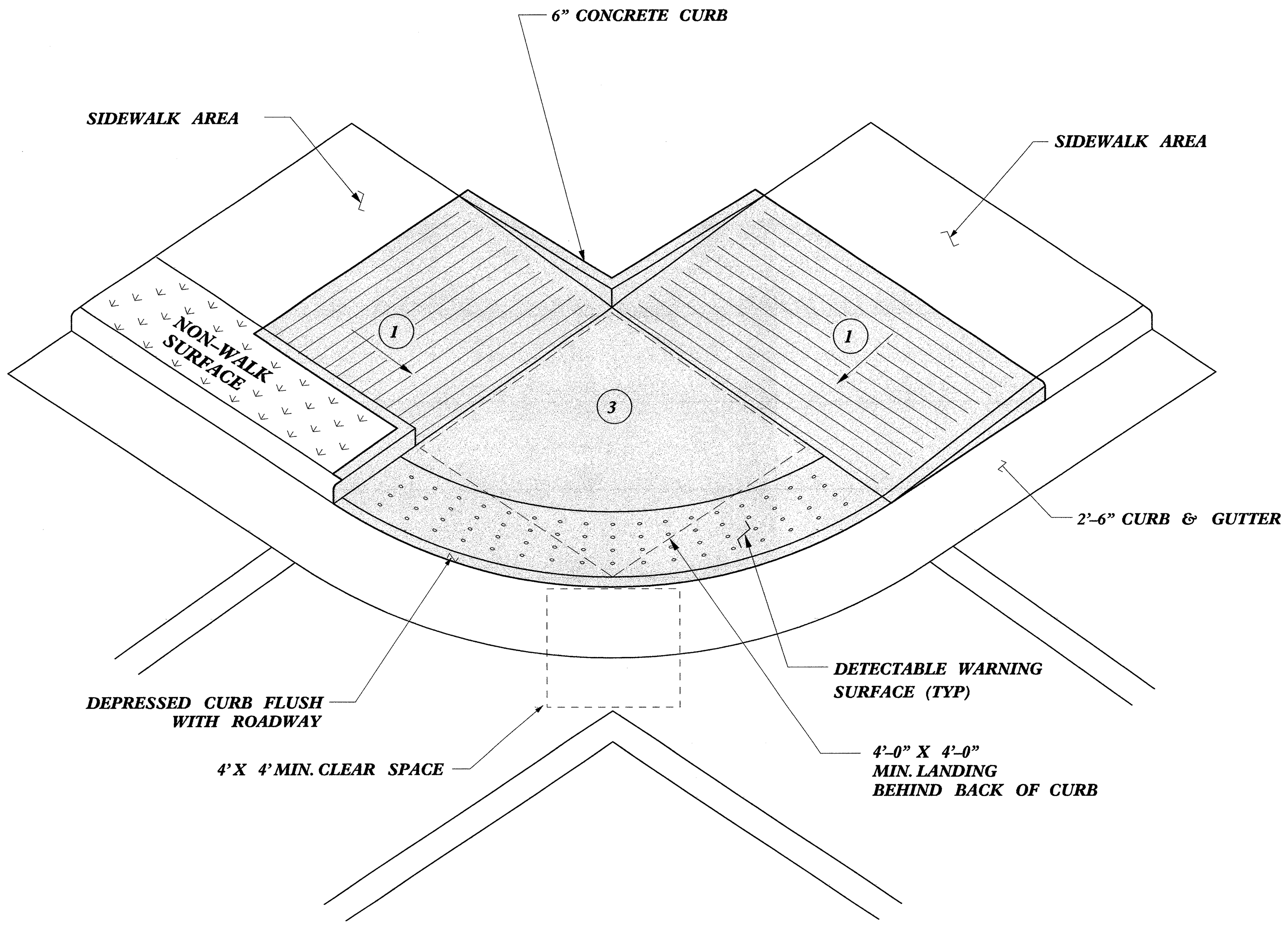
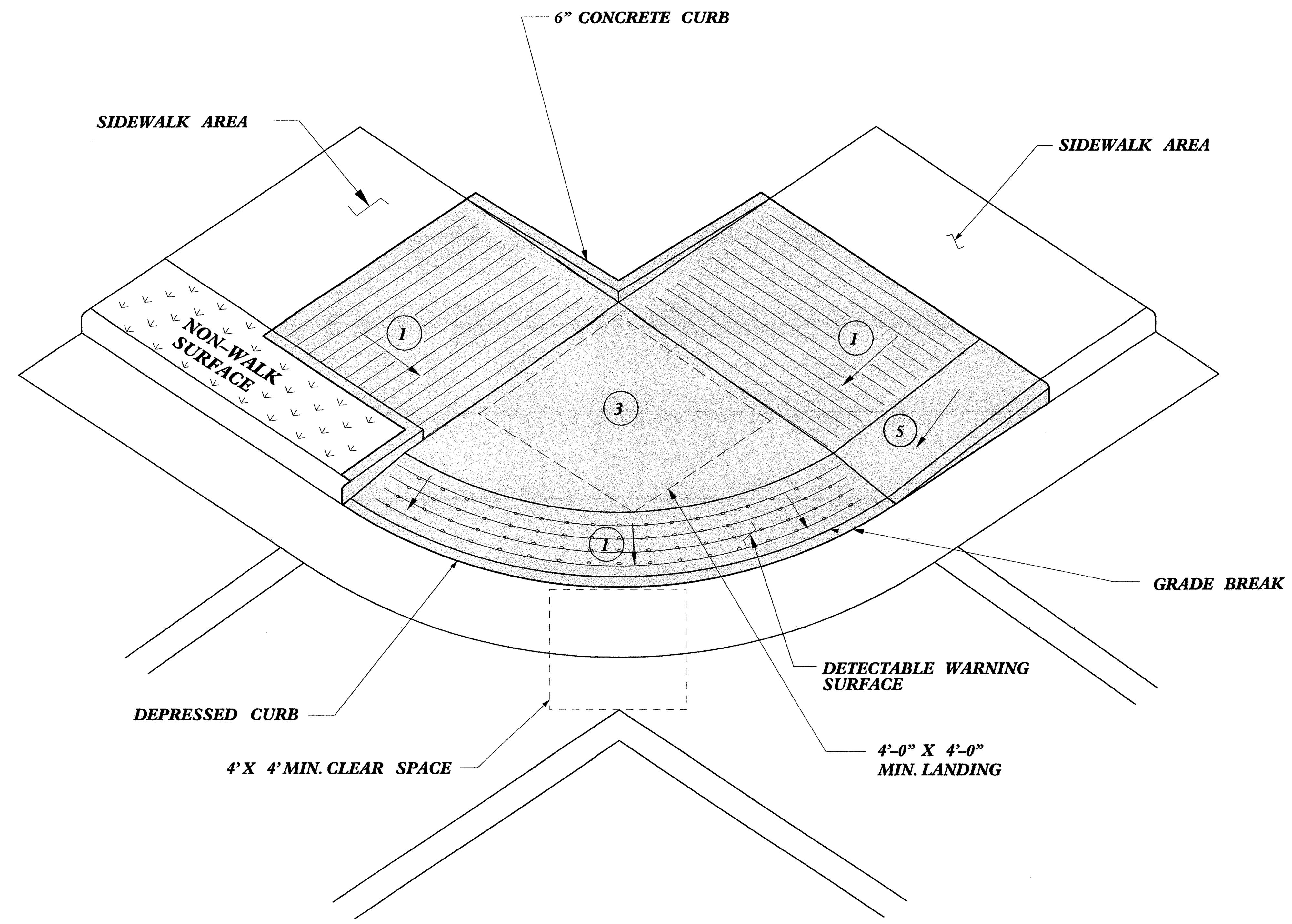
PROJECT REFERENCE NO.	SHEET NO.
W-5335	2F

ROADWAY DESIGN ENGINEER



TYPE 9

(PARALLEL CURB RAMPS WITH DEPRESSED CORNER SHARED LANDING)



TYPE 10

(COMBINATION CURB RAMPS WITH DEPRESSED CORNER SHARED LANDING)

NORTH CAROLINA PROFESSIONAL SEAL 022966 ENGINEER 3/22/13

PAY LIMITS FOR CURB RAMP

(1) RAMP SLOPE: 8.33% (12:1) MAX.

(2) CROSS SLOPE: 2.00% (50:1) MAX.

(3) UNLESS OTHERWISED SPECIFIED ON CURB RAMP TYPE DETAIL, CURB RAMPS REQUIRE A 4'-0" X 4'-0" MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% (50:1) WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.

(4) TRIANGULAR LANDING CROSS SLOPE AND LONGITUDIAL SLOPE: 2.00% (50:1) MAX

(5) FLARE SLOPE: 10.00% (10:1) MAX.

REVISIONS

8/17/99

05-MAR-2013 17:19
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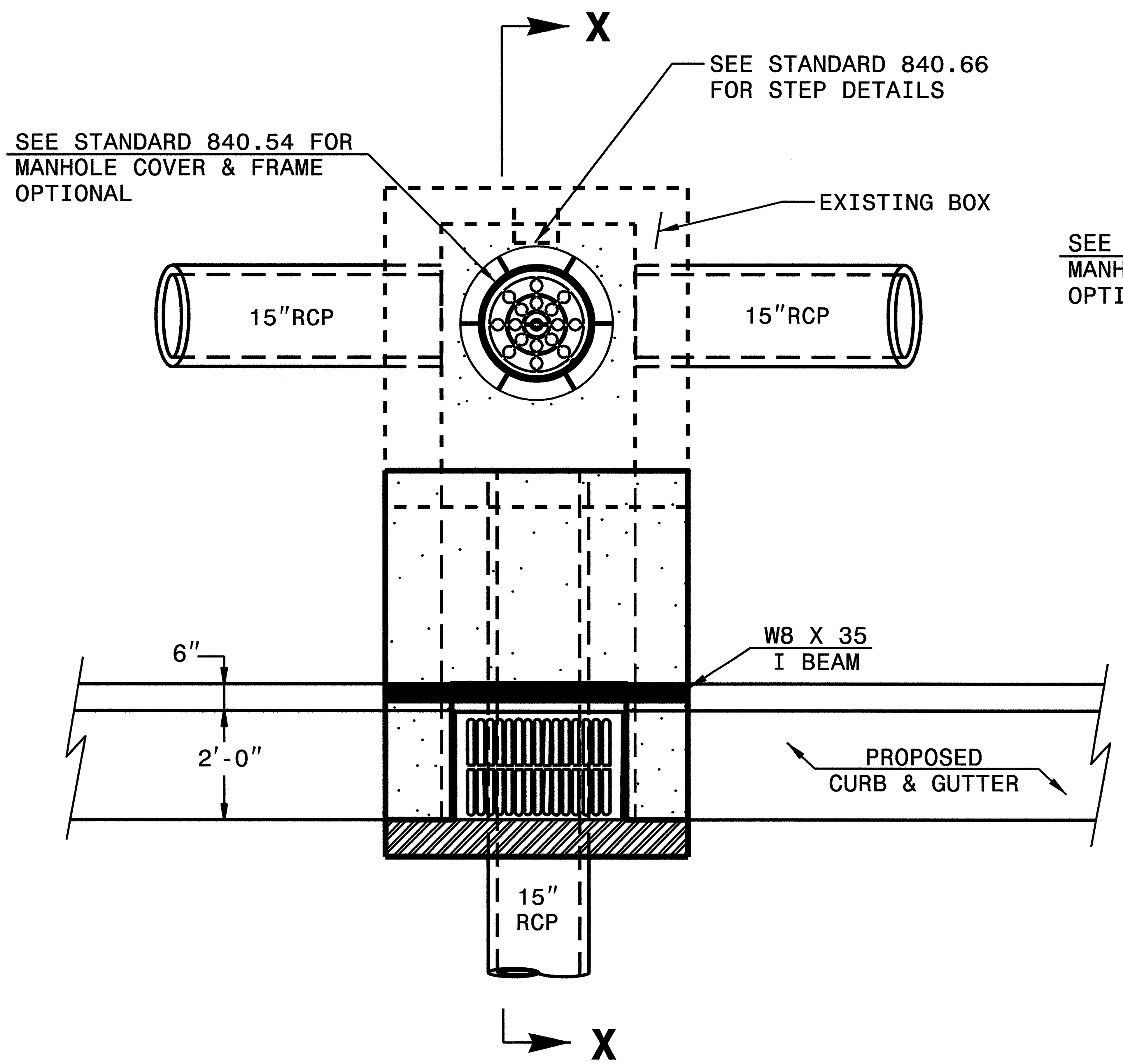
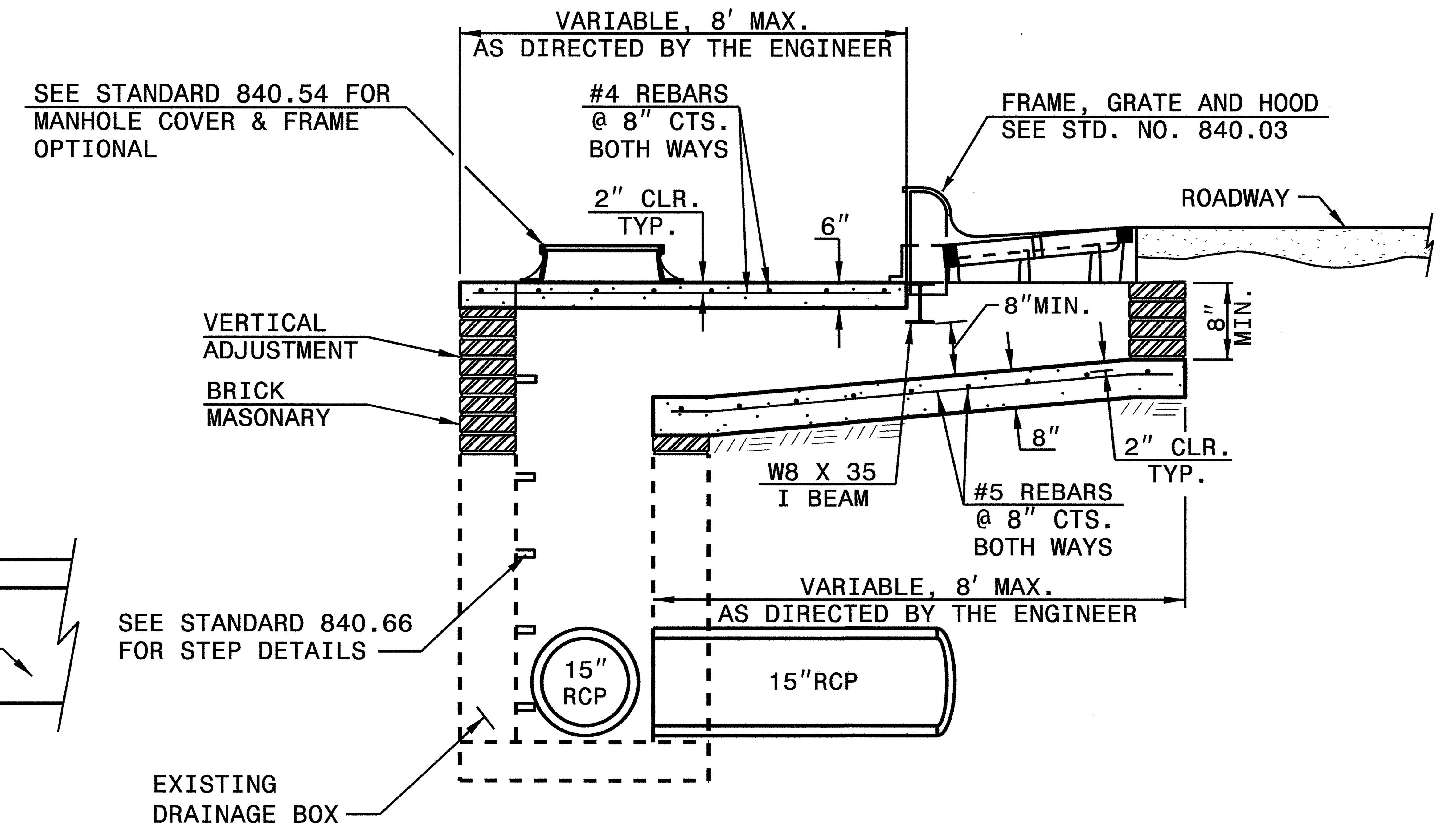
PROJECT REFERENCE NO.	SHEET NO.
W-5335	26



PLAN



SECTION X-X

NOTES:

MORTAR JOINTS ½″ TO ¼″ THICK.

USE CLASS "B" CONCRETE THROUGHOUT.

USE TYPE "E", "F" AND "G" GRATES UNLESS OTHERWISE INDICATED.

USE BRICK OR CONCRETE BLOCK WHICH COMPLIES WITH THE REQUIREMENTS OF SECTION 840 OF THE STANDARD SPECIFICATIONS.

CHAMFER ALL EXPOSED CORNERS 1″.

ALL CONVERSIONS SHALL BE ACCORDANCE WITH SECTION 859 OF THE STANDARD SPECIFICATIONS.

PROVIDE ALL CATCH BASINS OVER 3′-6″ IN DEPTH WITH STEPS 12″ ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING NO. 840.66.

DRAWING NOT TO SCALE.

NORTH CAROLINA PROFESSIONAL SEAL 022966 ENGINEER
9/22/13

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

CONVERSION OF EXISTING DRAINAGE BOX TO CATCH BASIN

ORIGINAL BY: E.E. WARD DATE: 1-24-02
MODIFIED BY: rnbritt DATE: 3-07-13
CHECKED BY: DATE:
FILE SPEC.: nbritt/english/hydro/edb to cb.dgn

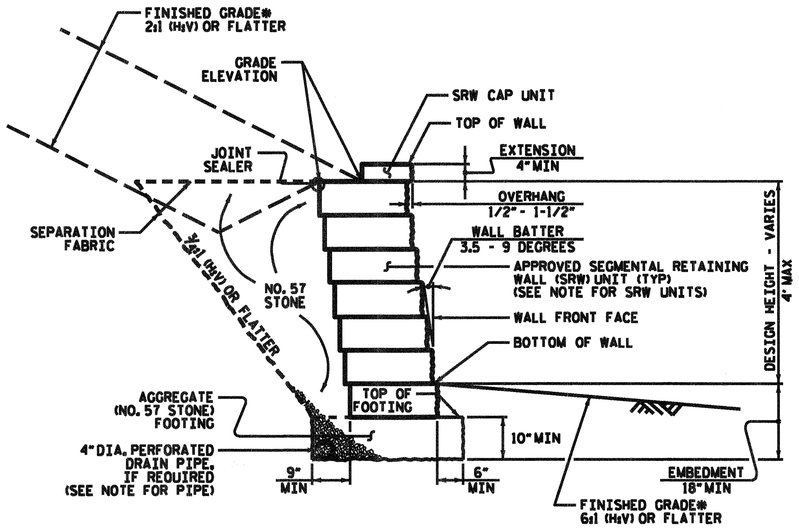
GEOTECHNICAL ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 16769 ENGINEER CHRISTOPHER A. KREIDER

SIGNATURE 4/8/13 DATE

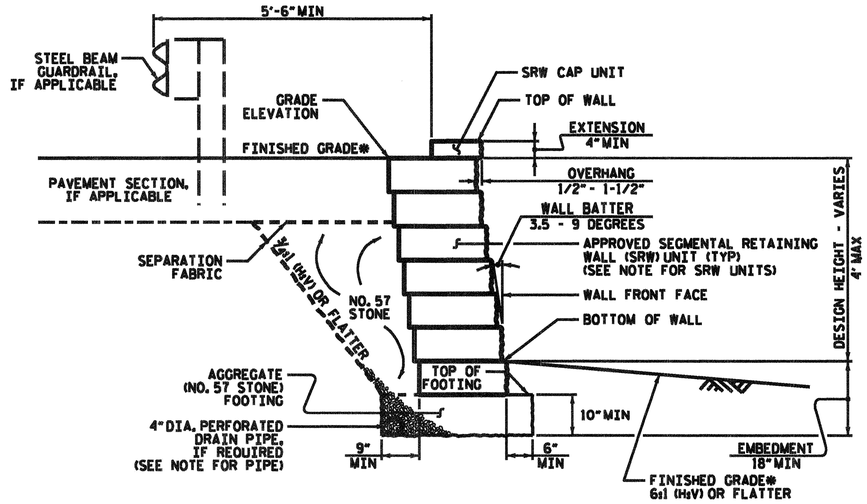
ENGINEER

SIGNATURE DATE



STANDARD SEGMENTAL GRAVITY WALL WITH BACK SLOPE

*SEE ROADWAY PLANS FOR FINISHED GRADE AND DITCH DETAILS.



STANDARD SEGMENTAL GRAVITY WALL WITHOUT BACK SLOPE

*SEE ROADWAY PLANS FOR FINISHED GRADE DETAILS.

NOTES:

FOR STANDARD SEGMENTAL GRAVITY RETAINING WALLS, SEE SEGMENTAL GRAVITY RETAINING WALLS PROVISION.

FOR STEEL BEAM GUARDRAIL, SEE ROADWAY PLANS AND SECTION 862 OF THE STANDARD SPECIFICATIONS.

DO NOT ATTACH FENCES OR HANDRAILS TO STANDARD SEGMENTAL GRAVITY WALLS.

DO NOT USE STANDARD SEGMENTAL GRAVITY WALLS FOR INTERSTATE HIGHWAY OR RAILROAD PROJECTS.

DO NOT USE STANDARD SEGMENTAL GRAVITY WALLS WHEN SURCHARGE LOADS WILL BE LOCATED CLOSER THAN 5'-6" FROM THE BACK OF WALLS.

DO NOT USE STANDARD SEGMENTAL GRAVITY WALLS WHEN VERY LOOSE OR SOFT SOIL OR MUCK IS PRESENT BELOW WALLS.

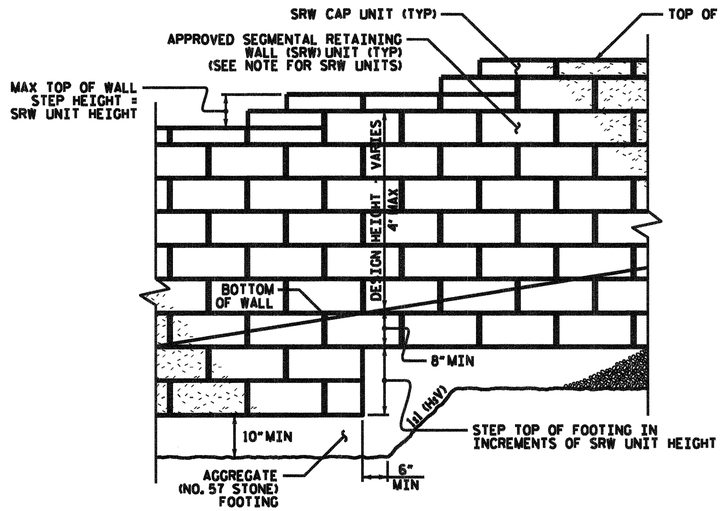
SRW UNITS ARE APPROVED FOR EITHER 2' OR 4' MAXIMUM DESIGN HEIGHTS. FOR DETAILS AND DIMENSIONS OF APPROVED SRW UNITS AND MAXIMUM DESIGN HEIGHTS, SEE www.ncdot.org/doh/preconstruct/highway/geotech/segcrvwalls

DO NOT MIX APPROVED SRW UNITS FROM DIFFERENT VENDORS ON THE SAME STANDARD SEGMENTAL GRAVITY WALL. USE THE SAME SIZE APPROVED SRW UNITS FOR EACH WALL SECTION.

BEFORE BEGINNING STANDARD SEGMENTAL GRAVITY WALL CONSTRUCTION, SURVEY WALL LOCATIONS AND SUBMIT WALL PROFILE VIEWS (WALL ENVELOPES) FOR REVIEW. FOR WALL ENVELOPES, INCLUDE BOTTOM OF WALL, EXISTING GROUND AND GRADE ELEVATIONS AND OTHER ELEVATIONS AS NEEDED AT INTERVALS OF 25' OR LESS ALONG WALLS. DO NOT START WALL CONSTRUCTION UNTIL WALL ENVELOPES ARE ACCEPTED.

A DRAIN PIPE IS REQUIRED IF GROUNDWATER IS ABOVE BOTTOM OF FOOTINGS.

DO NOT PLACE NO. 57 STONE FOR FOOTINGS UNTIL OBTAINING APPROVAL OF THE EXCAVATION DEPTH AND FOUNDATION MATERIAL.



STANDARD SEGMENTAL GRAVITY WALL - PARTIAL ELEVATION

PROJECT NO.: W-5335

CUMBERLAND *COUNTY*

STATION: LEFT-L- 17+19.80 TO 18+24.65

GEOTECHNICAL ENGINEERING UNIT

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH

STANDARD DRAWING NO. 453.02

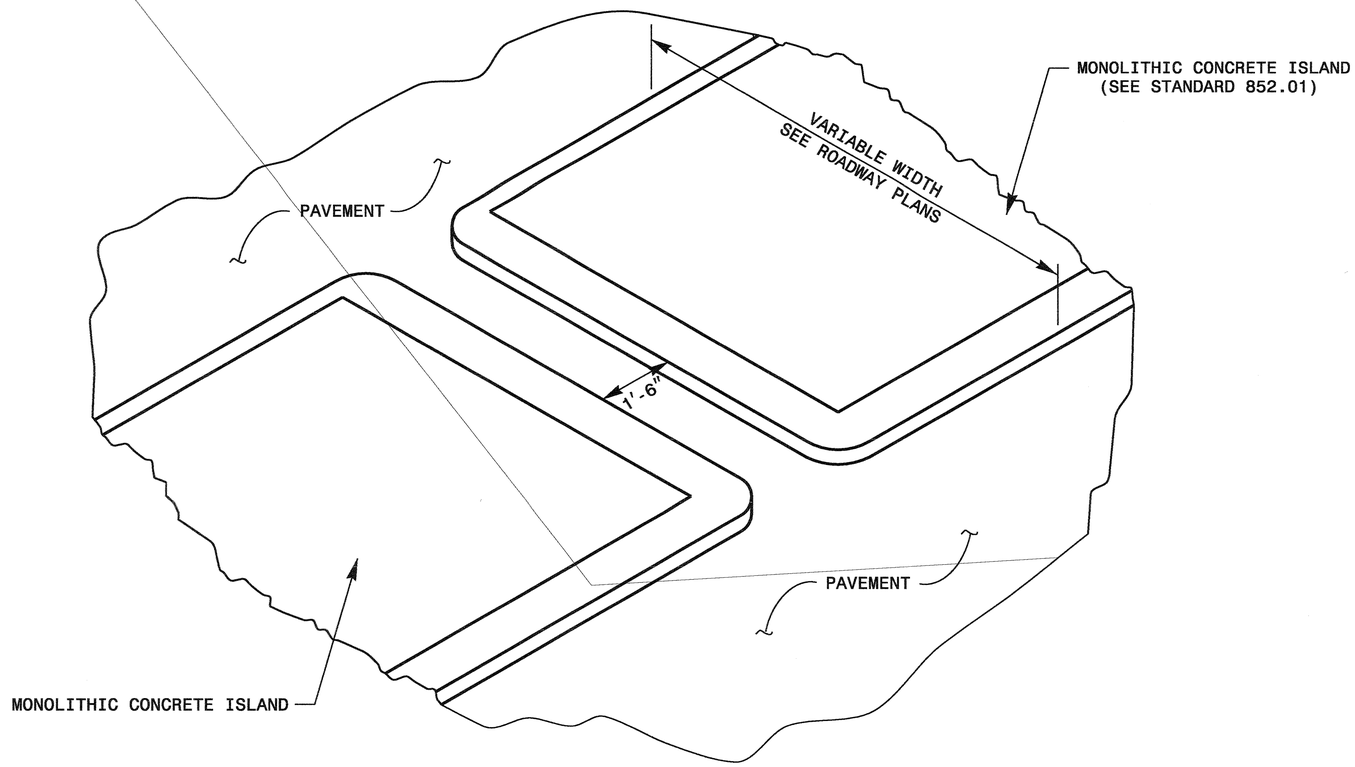
STANDARD SEGMENTAL GRAVITY RETAINING WALL

DATE: 9/21/10

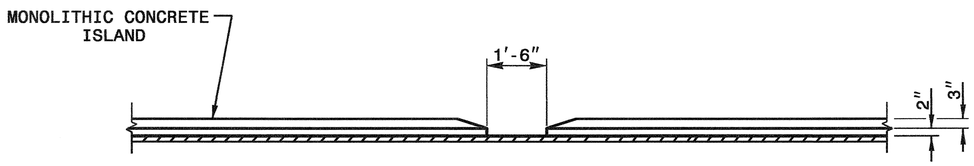
SHEET NO.

TOTAL SHEETS

PROJECT REFERENCE NO.	SHEET NO.
W-5335	2I



ISOMETRIC VIEW



ELEVATION

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

DRAINAGE OPENING THRU MONOLITHIC ISLAND

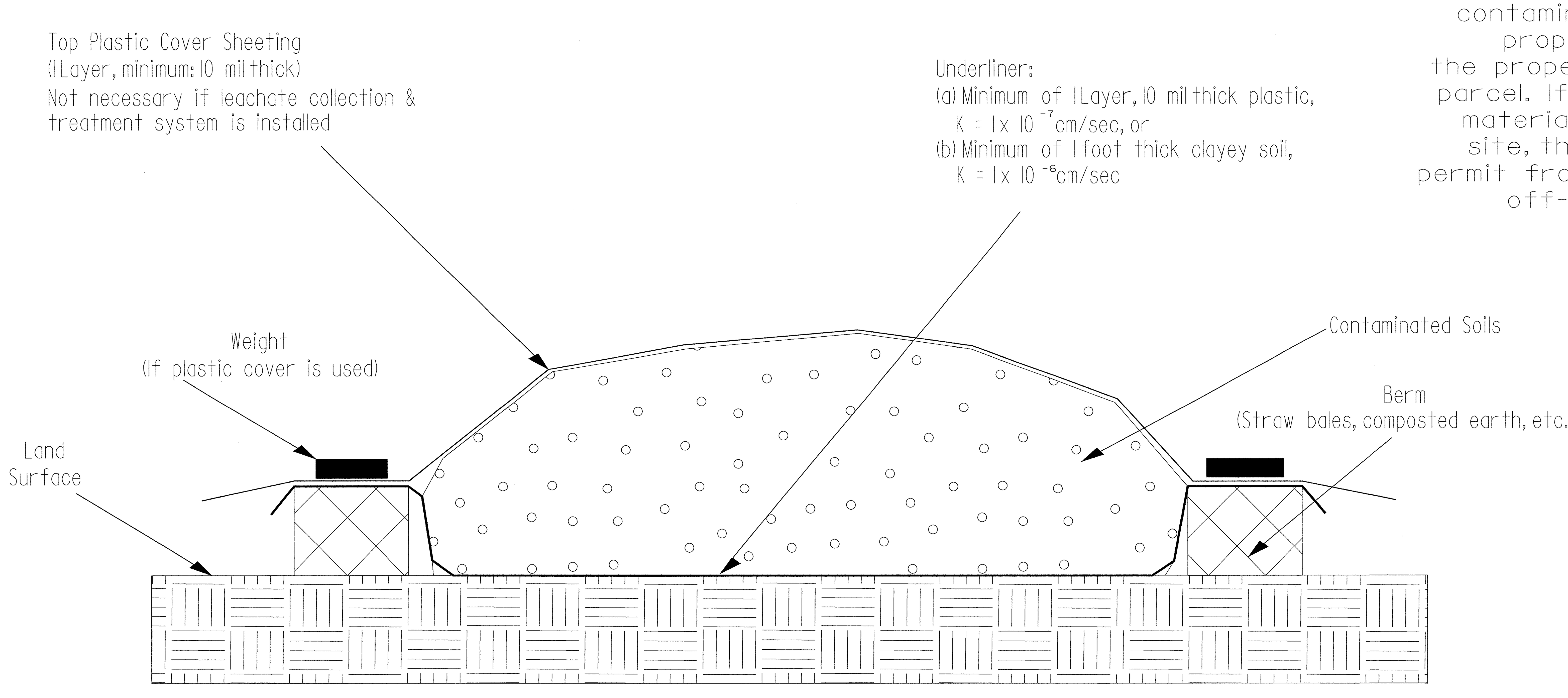
ORIGINAL BY: _____ DATE: 2-5-02
MODIFIED BY: _____ DATE: _____
CHECKED BY: _____ DATE: _____
FILE SPEC.: s:details\stand\Curb Ramp Thru Island.dgn

16-SEP-2011 13:33
S:\Contracts\Special Details\kkempf\english\Drainage Thru Island.dgn
$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
W-5335	2J

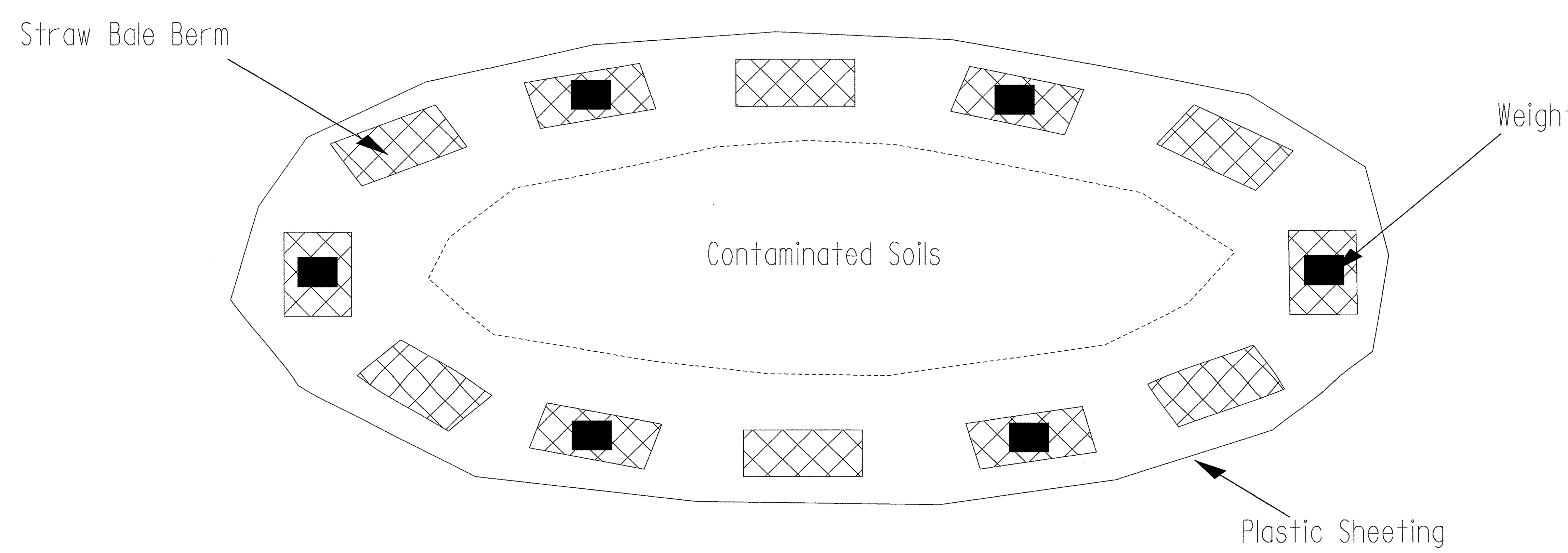
Detail for Temporary Containment of Contaminated Soil

Cross-Section View



NOTE:
The Contractor shall stockpile all contaminated soil excavated from a property in a location within the property boundaries of the source parcel. If the volume of contaminated material exceeds available space on site, the Contractor shall obtain a permit from the NCDENR UST Section for off-site temporary storage.

Map View



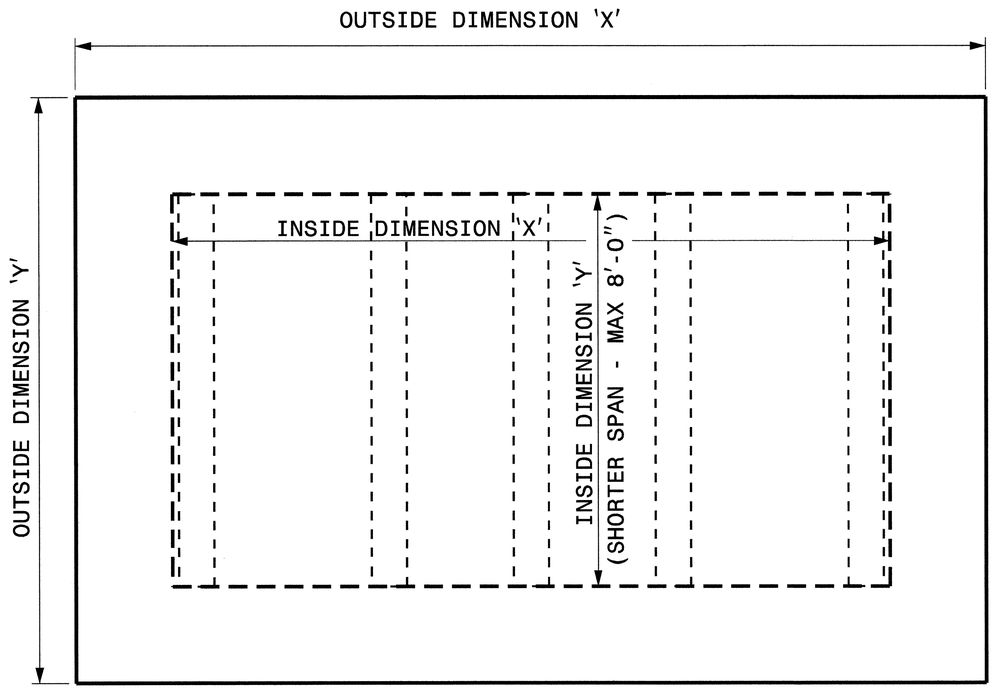
REVISIONS

8/17/99

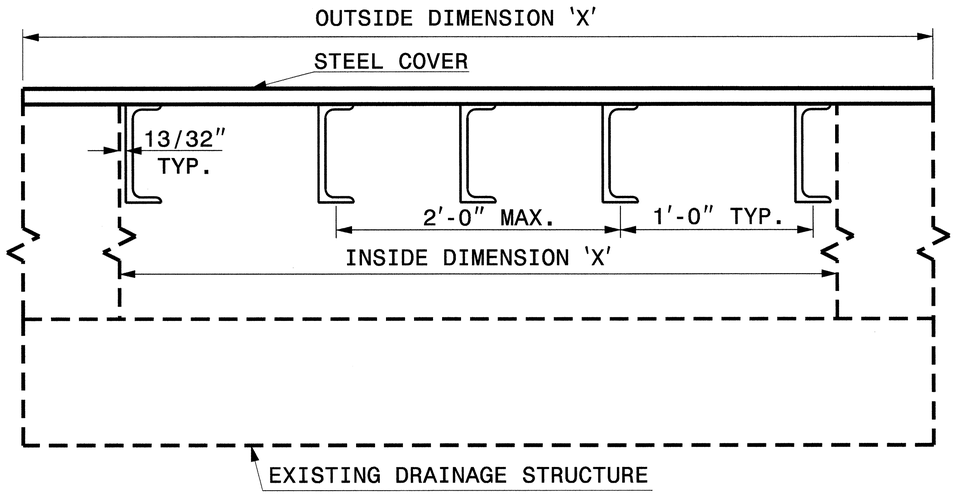
06-FEB-2013 08:16
S:\...\W-5335 Grove Street Raised Islands\GEO Environmental\W-5335 Stockpile Containment Detail.dgn
$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
W-5335	2K

5/14/99



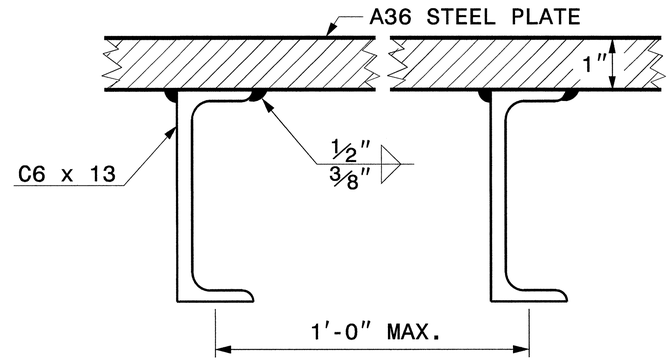
PLAN VIEWS



ELEVATION VIEWS

GENERAL NOTES:

-STEEL COVERS ARE FOR TEMPORARY USE TO SUPPORT TRAFFIC DURING PHASE CONSTRUCTION.
-PLACE PAVEMENT OR FILL DIRECTLY OVER THE STEEL PLATES.
-SEE ROADWAY PLANS AND PROVISIONS FOR LOCATIONS
-QUANTITIES TO BE PAID FOR AT THE UNIT PRICE BID PER EACH.



SECTION VIEW OF STEEL TOP PLATE

WELDS SHALL BE AS SPECIFIED BY AWS

NORTH CAROLINA PROFESSIONAL SEAL 022966 ENGINEER
3/22/13

CONTRACT STANDARDS & DEVELOPMENT UNIT
STANDARDS AND SPECIAL DESIGN
Office 919-250-4128 FAX 919-250-4119

DETAIL OF TRAFFIC BEARING STEEL COVER

ORIGINAL BY: _____ DATE: _____
MODIFIED BY: rnbritt DATE: 04-29-04
CHECKED BY: _____ DATE: _____
FILE SPEC.: details/nbritt/english/misc/steelcover.dgn

$$$$SYSTIME$$$$
$$$$SYSTIME$$$$
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8/17/99

REVISIONS

PROJECT REFERENCE NO.	SHEET NO.
W-5335	3

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
ROADWAY SUMMARY OF QUANTITIES FOR CONTRACT - C203310

ItemNumber	Sec #	Quantity	Unit	Description
0000100000-N	800	Lump Sum		MOBILIZATION
0000400000-N	801	Lump Sum		CONSTRUCTION SURVEYING
0000930000-E	SP	250	LF	GENERIC MISCELLANEOUS ITEM DIRECTIONAL DRILL (3" PVC SCHEDULE 40 CONDUIT)
0043000000-N	226	Lump Sum		GRADING
0050000000-E	226	1	ACR	SUPPLEMENTARY CLEARING & GRUBBING
0057000000-E	226	100	CY	UNDERCUT EXCAVATION
0255000000-E	SP	10	TON	GENERIC GRADING ITEM EXCAVATION, HAULING AND DISPOSAL OF CONTAMINATED SOIL
0318000000-E	300	20	TON	FOUNDATION CONDITIONING MATERIAL, MINOR STRUCTURES
0320000000-E	300	60	SY	FOUNDATION CONDITIONING GEOTEXTILE
0448200000-E	310	160	LF	15" RC PIPE CULVERTS, CLASS IV
1220000000-E	545	200	TON	INCIDENTAL STONE BASE
1308000000-E	607	13,640	SY	MILLING ASPHALT PAVEMENT, ***" TO ******" (0" TO 3"))
1330000000-E	607	2,260	SY	INCIDENTAL MILLING
1491000000-E	610	1,460	TON	ASPHALT CONC BASE COURSE, TYPE B25.0C
1503000000-E	610	400	TON	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0C
1523000000-E	610	6,980	TON	ASPHALT CONC SURFACE COURSE, TYPE S9.5C
1575000000-E	620	505	TON	ASPHALT BINDER FOR PLANT MIX
1693000000-E	654	100	TON	ASPHALT PLANT MIX, PAVEMENT REPAIR
2190000000-N	828	4	EA	TEMPORARY STEEL PLATE COVERS FOR MASONRY DRAINAGE STRUCTURE
2275000000-E	SP	11	CY	FLOWABLE FILL
2286000000-N	840	11	EA	MASONRY DRAINAGE STRUCTURES
2367000000-N	840	1	EA	FRAME WITH TWO GRATES, STD 840.29
2374000000-N	840	7	EA	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (E)
2374000000-N	840	5	EA	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (F)
2374000000-N	840	4	EA	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (G)
2396000000-N	840	7	EA	FRAME WITH COVER, STD 840.54
2535000000-E	846	200	LF	***X **" CONCRETE CURB (9" X 18")
2542000000-E	846	5,150	LF	1'-6" CONCRETE CURB & GUTTER
2549000000-E	846	1,380	LF	2'-6" CONCRETE CURB & GUTTER
2591000000-E	848	380	SY	4" CONCRETE SIDEWALK
2600000000-N	SP	4	EA	RETROFIT EXISTING CURB RAMP
2605000000-N	848	41	EA	CONCRETE CURB RAMP
2612000000-E	848	60	SY	6" CONCRETE DRIVEWAY
2655000000-E	852	720	SY	5" MONOLITHIC CONCRETE ISLANDS (KEYED IN)
2738000000-E	SP	110	SY	GENERIC PAVING ITEM BRICK SIDEWALK
2830000000-N	858	45	EA	ADJUSTMENT OF MANHOLES
2845000000-N	858	30	EA	ADJUSTMENT OF METER BOXES OR VALVE BOXES
2895000000-N	859	11	EA	CONVERT EXISTING OPEN THROAT CATCH BASIN TO CATCH BASIN
3572000000-E	867	125	LF	CHAIN LINK FENCE RESET
4072000000-E	903	1,711	LF	SUPPORTS, 3-LB STEEL U-CHANNEL
4096000000-N	904	11	EA	SIGN ERECTION, TYPE D
4102000000-N	904	62	EA	SIGN ERECTION, TYPE E
4108000000-N	904	15	EA	SIGN ERECTION, TYPE F
4155000000-N	907	65	EA	DISPOSAL OF SIGN SYSTEM, U-CHANNEL
4158000000-N	907	4	EA	DISPOSAL OF SIGN SYSTEM, WOOD
4238000000-N	907	1	EA	DISPOSAL OF SIGN, D, E OR F

HIS

ItemNumber	Sec #	Quantity	Unit	Description
4400000000-E	1110	1,221	SF	WORK ZONE SIGNS (STATIONARY)
4405000000-E	1110	489	SF	WORK ZONE SIGNS (PORTABLE)
4410000000-E	1110	12	SF	WORK ZONE SIGNS (BARRICADE MOUNTED)
4415000000-N	1115	2	EA	FLASHING ARROW BOARD
4420000000-N	1120	2	EA	PORTABLE CHANGEABLE MESSAGE SIGN
4430000000-N	1130	325	EA	DRUMS
4445000000-E	1145	36	LF	BARRICADES (TYPE III)
4455000000-N	1150	46	DAY	FLAGGER
4480000000-N	1165	1	EA	TMA
4510000000-N	SP	292	HR	LAW ENFORCEMENT
4516000000-N	1180	50	EA	SKINNY DRUM
4650000000-N	1251	30	EA	TEMPORARY RAISED PAVEMENT MARKERS
4685000000-E	1205	11,910	LF	THERMOPLASTIC PAVEMENT MARKING LINES (4", 90 MILS)
4686000000-E	1205	7,543	LF	THERMOPLASTIC PAVEMENT MARKING LINES (4", 120 MILS)
4697000000-E	1205	117	LF	THERMOPLASTIC PAVEMENT MARKING LINES (8", 120 MILS)
4710000000-E	1205	3,570	LF	THERMOPLASTIC PAVEMENT MARKING LINES (24", 120 MILS)
4721000000-E	1205	8	EA	THERMOPLASTIC PAVEMENT MARKING CHARACTER (120 MILS)
4725000000-E	1205	74	EA	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS)
4810000000-E	1205	19,652	LF	PAINT PAVEMENT MARKING LINES (4")
4820000000-E	1205	668	LF	PAINT PAVEMENT MARKING LINES (8")
4835000000-E	1205	4,218	LF	PAINT PAVEMENT MARKING LINES (24")
4840000000-N	1205	20	EA	PAINT PAVEMENT MARKING CHARACTER
4845000000-N	1205	161	EA	PAINT PAVEMENT MARKING SYMBOL
4850000000-E	1205	513	LF	REMOVAL OF PAVEMENT MARKING LINES (4")
4875000000-N	1205	6	EA	REMOVAL OF PAVEMENT MARKING SYMBOLS & CHARACTERS
4900000000-N	1251	532	EA	PERMANENT RAISED PAVEMENT MARKERS
5255000000-N	1413	Lump Sum		PORTABLE LIGHTING
6000000000-E	1605	1,850	LF	TEMPORARY SILT FENCE
6006000000-E	1610	80	TON	STONE FOR EROSION CONTROL, CLASS A
6012000000-E	1610	45	TON	SEDIMENT CONTROL STONE
6018000000-E	1620	50	LB	SEED FOR TEMPORARY SEEDING
6036000000-E	1631	50	SY	MATTING FOR EROSION CONTROL
6042000000-E	1632	850	LF	1/4" HARDWARE CLOTH
6071012000-E	SP	100	LF	COIR FIBER WATTLE
6084000000-E	1660	3.2	ACR	SEEDING & MULCHING
6090000000-E	1661	100	LB	SEED FOR REPAIR SEEDING
6093000000-E	1661	0.25	TON	FERTILIZER FOR REPAIR SEEDING
6117000000-N	SP	13	EA	RESPONSE FOR EROSION CONTROL
6132000000-N	SP	30	EA	GENERIC EROSION CONTROL ITEM FABRIC INSERT INLET PROTECTION DEVICE CLEANOUT
6132000000-N	SP	30	EA	GENERIC EROSION CONTROL ITEM FABRIC INSERT INLET PROTECTION DEVICE
7048500000-E	1705	32	EA	PEDESTRIAN SIGNAL HEAD (16", 1 SECTION W/COUNTDOWN)
7060000000-E	1705	9,000	LF	SIGNAL CABLE
7120000000-E	1705	20	EA	VEHICLE SIGNAL HEAD (12", 3 SECTION)
7132000000-E	1705	4	EA	VEHICLE SIGNAL HEAD (12", 4 SECTION)
7144000000-E	1705	1	EA	VEHICLE SIGNAL HEAD (12", 5 SECTION)
7252000000-E	1710	790	LF	MESSENGER CABLE (1/4")
7264000000-E	1710	370	LF	MESSENGER CABLE (3/8")
7279000000-E	1715	575	LF	TRACER WIRE

BLANK

ItemNumber	Sec #	Quantity	Unit	Description
7288000000-E	1715	25	LF	PAVED TRENCHING (**********) (2, 2)
7300000000-E	1715	130	LF	UNPAVED TRENCHING (**********) (1, 2)
7300000000-E	1715	530	LF	UNPAVED TRENCHING (**********) (2, 2)
7301000000-E	1715	550	LF	DIRECTIONAL DRILL (**********) (1, 2)
7301000000-E	1715	500	LF	DIRECTIONAL DRILL (**********) (3, 2)
7324000000-N	1716	18	EA	JUNCTION BOX (STANDARD SIZE)
7348000000-N	1716	8	EA	JUNCTION BOX (OVER-SIZED, HEAVY DUTY)
7372000000-N	1721	4	EA	GUY ASSEMBLY
7396000000-E	1722	2	EA	1/2" RISER WITH WEATHERHEAD
7420000000-E	1722	2	EA	2" RISER WITH WEATHERHEAD
7432000000-E	1722	4	EA	2" RISER WITH HEAT SHRINK TUBING
7444000000-E	1725	6,210	LF	INDUCTIVE LOOP SAWCUT
7456000000-E	1726	12,770	LF	LEAD-IN CABLE (**********) (14-2)
7516000000-E	1730	860	LF	COMMUNICATIONS CABLE (**FIBER) (12)
7528000000-E	1730	940	LF	DROP CABLE
7540000000-N	1731	2	EA	SPLICE ENCLOSURE
7552000000-N	1731	3	EA	INTERCONNECT CENTER
7564100000-N	1732	3	EA	FIBER-OPTIC TRANSCEIVER, SELF-HEALING RING
7566000000-N	1733	5	EA	DELINEATOR MARKER
7568000000-N	SP	1	EA	FURNISH FIBER-OPTIC RESTORATION KIT
7574000000-N	SP	1	EA	FURNISH FIBER-OPTIC TRANSCEIVER
7575160000-E	1734	860	LF	REMOVE EXISTING COMMUNICATIONS CABLE
7575180000-N	1735	7	EA	CABLE TRANSFER
7613000000-N	SP	4	EA	SOIL TEST
7614100000-E	SP	30	CY	DRILLED PIER FOUNDATION
7636000000-N	1745	1	EA	SIGN FOR SIGNALS
7642100000-N	1743	10	EA	TYPE I POST WITH FOUNDATION
7642200000-N	1743	20	EA	TYPE II PEDESTAL WITH FOUNDATION
7684000000-N	1750	2	EA	SIGNAL CABINET FOUNDATION
7756000000-N	1751	2	EA	CONTROLLER WITH CABINET (TYPE 2070L, BASE MOUNTED)
7780000000-N	1751	15	EA	DETECTOR CARD (TYPE 2070L)
7901000000-N	1753	2	EA	CABINET BASE EXTENDER
7980000000-N	SP	4	EA	GENERIC SIGNAL ITEM INSTALL METAL POLE WITH DUAL MAST ARM
8802030000-E	SP	440	SF	SEGMENTAL GRAVITY RETAINING WALLS

05-MAR-2013 13:10
C:\DOT Projects\W-5335 Grove Street Raised Islands\Roadway\proj\W-5335_Rdy_sum_sht_3.dgn
$$$$_FNAME$$$$

COMPUTED BY: NEIL BUTLER DATE: MAR. 14, 2013
CHECKED BY: SEAN MATUSZEWSKI DATE: MAR. 14, 2013

PROJECT REFERENCE NO.	SHEET NO.
W-5335	3A

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

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

SUB-REGIONAL & REGIONAL
LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48" & UNDER)

Station / Size / Thickness or Gauge	Location (LT, RT, or CL)	Structure No. From	Structure No. To	Top Elevation	Invert Elevation	Invert Elevation	Slope Critical	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	C.S. Pipe 12" .064	15" .064	18" .064	24" .064	36" .079	42" .109	48" .109	R.C. Pipe (Class III) 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)	*** R.C. Pipe Culverts, Contractor Design Pipe	*** R.C. Pipe Culverts, Contractor Design Pipe	15" Side Drain Pipe	18" Side Drain Pipe	Endwalls Std. 838.01, Std. 838.11 or Std. 838.80 (Unless Noted Otherwise) Cu. Yds. R.C.P.	C.S.P.	Quantities for Drainage Structures Per Each (0' thru 5.0')	* Total L.F. for pay quantity shall be col. 'A' + (1.3 X Col. B') Lin. *Ft. A 5.0' thru 10.0'	B 10.0' and Above	C.B. Std. 840.01 or Std. 840.02	Frame, Grates and Hood Standard 840.03 Type of Grate E	F	G	Concrete Transitional Section Catch Basin	Traffic Bearing Drop Inlet	M.H. Frame & Cover Std. 840.54	D.I. Frame & Grate Std. 840.29	Conv. Exist. O.T.C.B. to C.B. (Detail 2G)	J.B. Std. 840.31 or 840.32	T.B.J.B. Std. 840.34	T.B.D.I. Std. 840.35	Conc. Collars Cl. "B" C.Y. Std 840.72	Conc. & Brick Pipe Plug, C.Y. Std. 840.71	Pipe Removal Lin. Ft.	Remarks
-L- 18+07	LT	401		88.70																																													1									1				1					
	LT	401	402		84.47	84.57																													12																																
-L- 18+06	LT	402		88.04																																													1			1	1														PROPOSED C.B.
-L- 18+94	LT	403		88.15	86.38																																																1														FRAME, GRATE & HOOD ONLY
-L- 21+44																																																																			3" PVC SCHEDULE 40 CONDUIT
-L- 21+73	LT	404		88.17	83.97																																																		1					1							CONVERT TO CB, SEE DETAIL 2G
-L- 22+61	RT	405		87.93	83.80																																															1							1							CONVERT TO CB, SEE DETAIL 2G
-L- 24+52	RT	501		89.40	78.50																																																	1					1							CONVERT TO CB, SEE DETAIL 2G
-L- 31+62	RT	502		90.15	81.78																																																1						1							CONVERT TO CB, SEE DETAIL 2G
-L- 31+62	LT	503		89.84	81.78																																																	1					1							CONVERT TO CB, SEE DETAIL 2G
-L- 35+70	LT	504		88.39	82.74																																															1							1							CONVERT TO CB, SEE DETAIL 2G
-L- 35+70	RT	505		88.51	83.59																																																1						1							CONVERT TO CB, SEE DETAIL 2G
-L- 39+40																																																																			3" PVC SCHEDULE 40 CONDUIT
-L- 42+68	RT	601		88.51	84.80																																																1				1		1							CONVERT TO CB, SEE DETAIL 2G (W/M.H.)
-L- 42+68	LT	602		88.66																																													1									1				1					
		602	603		84.47	84.50																													12																																
-L- 42+68	LT	603		87.58																																													1			1	1														PROPOSED C.B.
-L- 43+38	LT	604		88.60	84.57																																																1						1							CONVERT TO CB, SEE DETAIL 2G
-L- 43+39	RT	605		87.90																																													1									1				1					
		605	606		84.90	84.95																													12																																
-L- 43+39	RT	606		88.18																																													1			1	1														PROPOSED C.B.
-L- 46+05																																																																				3" PVC SCHEDULE 40 CONDUIT
-Y- 25+88	RT	701		88.62																																													1									1			1						PROPOSED J.B. WITH MH COVER
		701	702		84.12	84.48																													60																																
-Y- 26+26	RT	702		87.92																																													1									1				1					T.B.J.B. WITH MH COVER
		701	703		84.12	84.00																													24																																
-Y- 25+88	RT	703		89.20																																													1										1				1				T.B.D.I.
		703	704		84.00	83.95																													24																																
-Y- 26+24	RT	704		89.21																																																																TIE INTO EXIST. M.H.
-Y- 26+24	RT/LT																																																																	EXIST. 15" (FLOWABLE FILL 11 CYDS)
-Y- 30+15																																																																			3" PVC SCHEDULE 40 CONDUIT
-Y- 34+15																																																																			3" PVC SCHEDULE 40 CONDUIT
-Y- 34+42	RT	801		88.50	85.56																																																	1					1							CONVERT TO CB, SEE DETAIL 2G
-Y- 38+50	RT	802		87.19	UNK																																																1						1							CONVERT TO CB, SEE DETAIL 2G
-Y- 38+87	LT	803		87.06																																													1									1				1					
		803	804		82.00	82.05																													16																																
-Y- 38+87	LT	804		86.62																																													1			1	1														PROPOSED C.B.
GRAND TOTALS																																			160														11			4	7	5	4			7	1	11	1	5	1				

ABBREVIATIONS	
C.B.	CATCH BASIN
N.D.I.	NARROW DROP INLET
D.I.	DROP INLET
G.D.I.	GRATED DROP INLET
G.D.I. (N.S.)	GRATED DROP INLET (NARROW SLOT)
J.B.	JUNCTION BOX
M.H.	MANHOLE
T.B.D.I.	TRAFFIC BEARING DROP INLET
T.B.J.B.	TRAFFIC BEARING JUNCTION BOX

4/04/06

20-MAR-2013 09:34
Grove Street Islands\Roadway\proj\W-5335_Rdy_sum_sht_3A.dgn

12/06/07

COMPUTED BY: RICK HANDLIN DATE: 15 AUGUST 2012
CHECKED BY: SCOTT PRIDGEN DATE: 12 MARCH 2013

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJECT REFERENCE NO.	SHEET NO.
W-5335	3B

SUMMARY OF EARTHWORK

STATION	STATION	UNCL. EXCAV.	EMBANK. +%	BORROW	WASTE
SUMMARY # 1					
AREA 1, PHASE 1					
–LT & RT (L)–					
42+30.00	42+80.00	31	3	0	29
43+30.00	43+80.00	32	1	0	31
50+90.00	51+70.00	71	0	0	71
53+50.00	53+80.00	17	0	0	17
57+30.00	57+80.00	17	0	0	17
–LT & RT (Y)–					
20+90.00	21+00.00	7	0	0	7
38+20.00	39+00.00	88	0	0	88
SUBTOTALS SUMMARY # 1		263	4	0	259
SUMMARY # 2					
AREA 1, PHASE 2					
–CTR MEDIAN (Y)–					
27+93.00	36+15.00	0	456	456	0
SUBTOTALS SUMMARY # 2		0	456	456	0
SUMMARY # 3					
AREA 2, PHASE 1					
–LT & RT (L)–					
12+90.00	14+10.00	18	61	43	0
16+30.00	19+40.00	196	8	0	189
SUBTOTALS SUMMARY # 3		214	69	43	189
SUMMARY # 4					
AREA 2, PHASE 2					
–CTR MEDIAN (L)–					
21+09.00	25+52.00	0	235	235	0
29+48.00	48+24.00	0	671	671	0
SUBTOTALS SUMMARY # 4		0	906	906	0
TOTAL SUMMARY # 1,2,3,4		477	1435	1406	448
WASTE IN LIEU OF BORROW				–43	–43
PROJECT TOTALS:		477	1435	1363	405
GRAND TOTALS:		477	1435	1363	405
SAY:		480	1440	1365	405

100 CYD OF UNDERCUT FOR CONTIGENCY

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

Earthwork quantities are calculated by the Roadway Design Unit.

ASPHALT PAVEMENT REMOVAL SUMMARY

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	YD^2
–L–	11+91.00	13+77.00	LT	223
–L–	12+80.00	14+17.00	RT	154
–L–	17+80.00	18+40.00	LT	450
–L–	21+90.00	25+52.00	CL	626
–L–	29+48.00	40+29.00	CL	1546
–L–	45+97.00	48+24.00	CL	328
–Y–	27+93.00	36+15.00	CL	1181
			TOTAL:	4508
			SAY:	4510

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PROJECT REFERENCE NO.	SHEET NO.
W-5335	3C

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PARCEL INDEX SHEET

PARCEL No.	SHEET No.	PROPERTY OWNER NAME
1	4	ROBERT T. HURST, JR. & KAREN H. SIMMONS
2	4	JOSEPH F. GOSSMAN
3	6	CITY OF FAYETTEVILLE
4	6	V/D NEAL PROPERTIES, LLC
5	7	BNP REALTY
6	8	THE PEPSI-COLA BOTTLING OF FAYETTEVILLE

12/06/07

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PROJECT REFERENCE NO.	SHEET NO.
W-5335	4
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

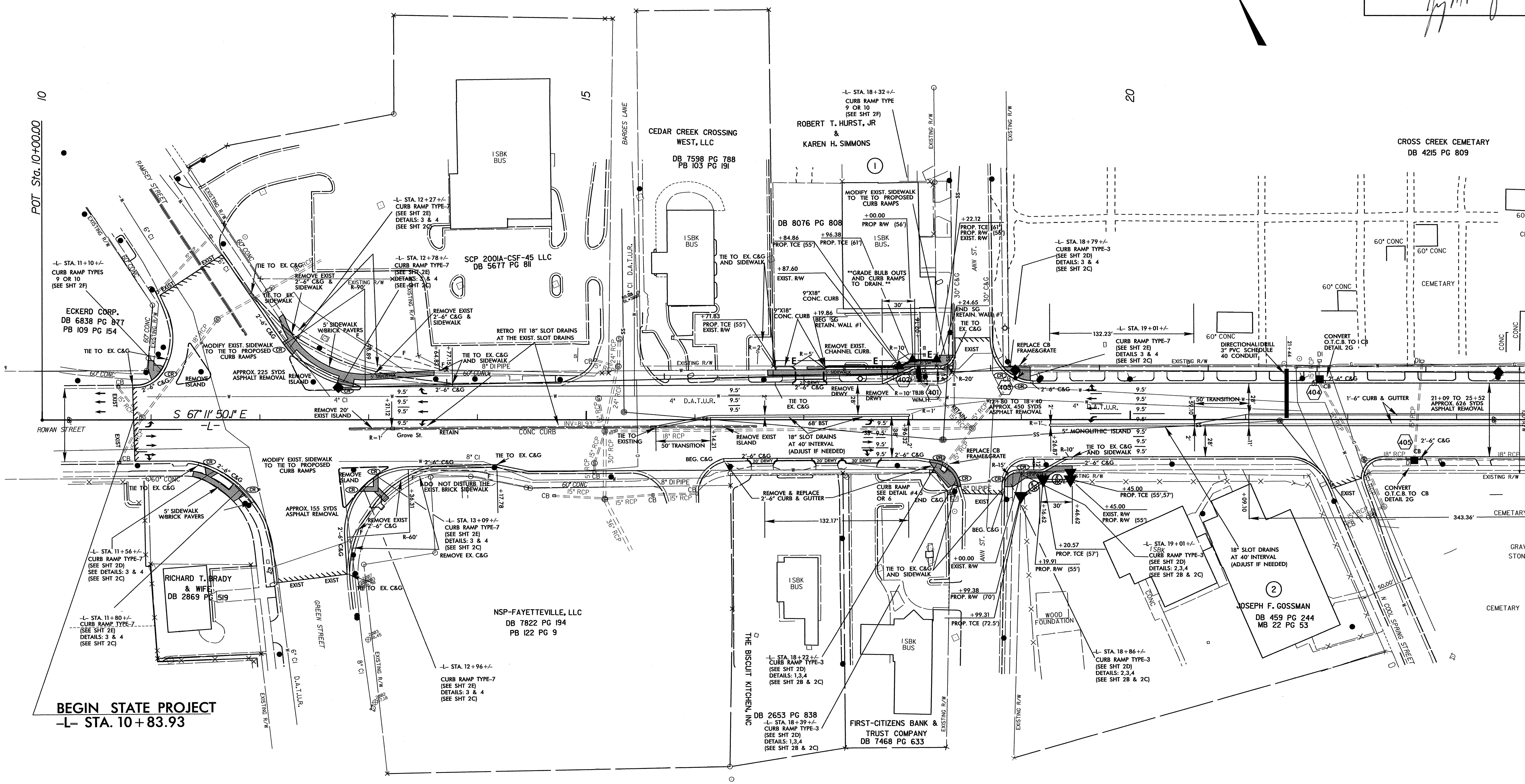
NORTH CAROLINA PROFESSIONAL SEAL 037837 ENGINEER JERRY M. BRADLEY 3-21-13

REVISIONS

8/17/99

SEGMENTAL GRAVITY RETAINING WALL
SEE DETAIL 2-H

STA	BOTTOM ELEV	TOP ELEV	HEIGHT
17+19.86	88.99	89.49	0.50
17+75	88.87	89.88	1.01
18+24.65	88.79	90.39	1.60



DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCGS FOR MONUMENT "VANDER RM3"
WITH NAD 83/95 STATE PLANE GRID COORDINATES OF
NORTHING: 464925.950067(ft) EASTING: 2069182.420002(ft)
ELEVATION: 151.82'(ft)
THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.999879130
THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "VANDER RM3" TO -L- STATION 10+83.93 IS
34,188.50' @ 71° 25'22"E
ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
VERTICAL DATUM USED IS NAVD 88

NOTE: REFER TO SIGNAL PLANS TO PLACE PED SIGNALS WHEN POURING SIDEWALK

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8/17/99

PROJECT REFERENCE NO.	SHEET NO.
W-5335	5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 037837 ENGINEER JEFFERY M. BRADLEY
3-21-13

NC GRID NAD 83/95

B-4090

25 30 35

CITY OF FAYETTEVILLE DB 4447 PG 485

FAYETTEVILLE METROPOLITIAN DB 4447 PG 485

BL-53 BL-54

METARY GRAVE STONES

252.41' N 38°58'42" E

-L- CHL 3 SBW

S 36°30'31" W 62.80' 45.28' CREEK

S 10°22'29" W 86.54'

24" RCP

CONVERT O.T.C.B. TO CB DETAIL 2G

2'-4" C&G

60" CONC

EXISTING R/W

BRIDGE #125

100' TRANSITION

30" C&G BST

CONC

DORIS DRIVE

INV=80.68'

INV=83.89'

24" RCP

29+48 TO 40+29 APPROX. 1,546 SYDS ASPHALT REMOVAL

2'-6" C&G

INV=64.52' S 67°11'50.1" E

INV=77.78'

Grove St 68' BST

INV=78.73'

INV=64.70'

INV=79.68'

8" DI PIPE

CR/W MON.

EXIST

1'-6" CURB & GUTTER

HAWLEY LANE

60' R/W

981.69'

N 86°41'05" W

108.32'

JOHN H FIELDS DB 4744 PG 300

DB 3848 PG 699 D.H. WILKINS

N 06°19'42" E 82.47'

S 05°59'48" W 214.85'

48" MTL S 86°32'19" E 107.32'

96.00' S 86°32'19" E

DB 2745 PG 179 C.R. EDWARDS

N 04°50'56" E 131.77'

N 06°19'42" E 149.39'

111.17' S 86°37'32" E

96.27' S 85°09'35" E

S 05°59'48" W 31.54'

INV=64.83'

INV=75.74'

MATCHLINE -L- STA. 23+65.00 SEE SHEET 4

MATCHLINE -L- STA. 37+04 SEE SHEET 6

501 502 503 504 505

CB DI

CONVERT O.T.C.B. TO CB DETAIL 2G

2'-6" C&G

15" CMP

GRAVE STONES

CONC 1.5' BLK WALL NO GRAVES

CITY OF FAYETTEVILLE DB 726 PG 108 DB 45 PG 353

JOHN H FIELDS DB 4744 PG 304

CROSS

EXISTING R/W

S 36°26'46" W (+ - NO DEED REF.) 124.38'

WITH RUN OF CREEK (+ -)

S 84°48'24" E (+ - NO DEED REF.) 173.67'

BEGIN CONSTRUCTION -L- STA. 29+51.40

END CONSTRUCTION -L- STA. 25+52.50

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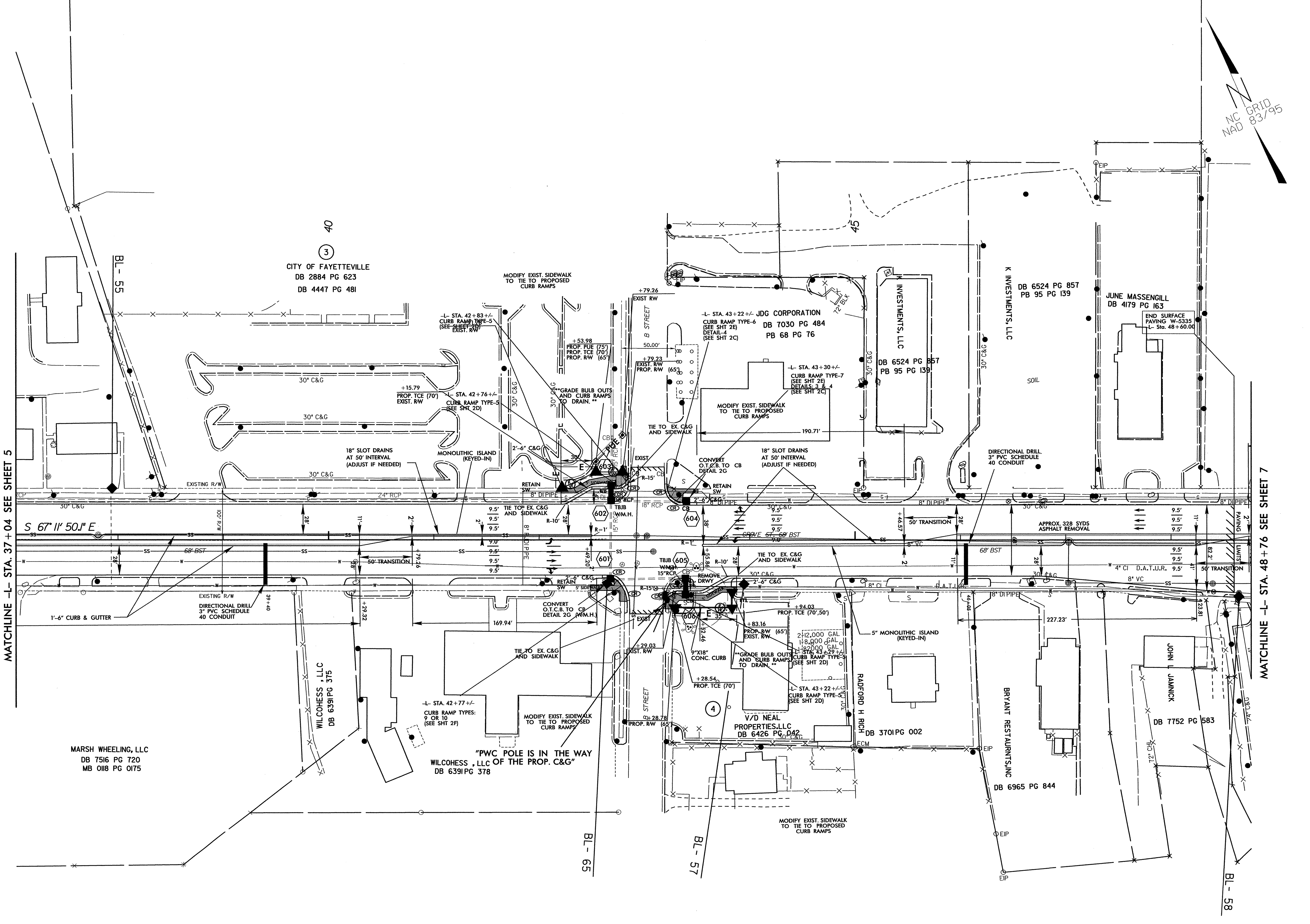
PROJECT REFERENCE NO.	SHEET NO.
W-5335	6
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 037837 ENGINEER JERRY M. BRADLEY
3-21-13



NC GRID NAD 83/95
MATCHLINE -L- STA. 37+04 SEE SHEET 5
MATCHLINE -L- STA. 48+76 SEE SHEET 7
S 67° 11' 50.1" E
CITY OF FAYETTEVILLE
DB 2884 PG 623
DB 4447 PG 481
JDG CORPORATION
DB 7030 PG 484
PB 68 PG 76
K INVESTMENTS, LLC
DB 6524 PG 857
PB 95 PG 139
JUNE MASSENGILL
DB 4179 PG 163
END SURFACE PAVING W-5335
-L- Sta. 48+60.00
MARSH WHEELING, LLC
DB 7516 PG 720
MB 0118 PG 0175
WILCOHESS, LLC
DB 6391 PG 375
WILCOHESS, LLC
DB 6391 PG 378
V/D NEAL PROPERTIES, LLC
DB 6426 PG 042
RADFORD H RICH
DB 3701 PG 002
BRYANT RESTAURANTS, INC
DB 6965 PG 844
JOHN L JANNICK
DB 7752 PG 583
"PWC POLE IS IN THE WAY OF THE PROP. C&G"
MODIFY EXIST. SIDEWALK TO TIE TO PROPOSED CURB RAMPS
18" SLOT DRAINS AT 50' INTERVAL (ADJUST IF NEEDED)
MONOLITHIC ISLAND (KEYED-IN)
DIRECTIONAL DRILL 3" PVC SCHEDULE 40 CONDUIT
1'-6" CURB & GUTTER
TIE TO EX. C&G AND SIDEWALK
CONVERT O.T.C.B. TO CB DETAIL 2G
5" MONOLITHIC ISLAND (KEYED-IN)
APPROX. 328 SYDS ASPHALT REMOVAL
GRADE BULB OUTS AND CURB RAMPS TO DRAIN.
B STREET
BL-55
BL-65
BL-57
BL-58

REVISIONS

8/17/99

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PROJECT REFERENCE NO.	SHEET NO.
W-5335	7
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 037837 ENGINEER JERRY W. BRADLEY 3-21-13

8/17/99

BEGIN CONSTRUCTION
-Y- STA. 20+68.45

END STATE PROJECT
-L- STA. 58+76.78

MATCHLINE -L- STA. 48+76 SEE SHEET 6

MATCHLINE -Y- STA. 27+05 SEE SHEET 8

NC GRID NAD 83/95

S 39°58'26.0" W

S 67°11'50.1" E

S 64°22'57.0" E

PT Sta. 23+63.74

PC Sta. 19+59.58

PC Sta. 53+62.44

PT Sta. 57+37.74

-Y-
PI Sta 21+67.20
Δ = 32° 20' 00.0" (LT)
D = 8° 00' 00.0"
L = 404.17'
T = 207.62'
R = 716.20'

-L-
PI Sta 55+50.13
Δ = 2° 48' 53.1" (RT)
D = 0° 45' 00.0"
L = 375.30'
T = 187.69'
R = 7,639.44'


PROJECT REFERENCE NO.
W-5335
SHEET NO.
8
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 037837 ENGINEER
3-21-13
NC GRID NAD 83/95
REVISIONS
8/17/99
EXISTING R/W
DB 7960 PG 658
PB 58 PG 97
30
35
CAPE FEAR PLAZA II, LLC
DB 7960 PG 338
PB 58 PG 97
THREE-O-ONE TRUCK STOP INC
DB 165 PG 8
FFCA ACQUISITION CORP
DB 4698 PG 159
1 SBLK BUS
18" SLOT DRAINS AT 50' INTERVAL (ADJUST IF NEEDED)
BST
BEALE STREET
EXIST. R/W
50.00'
821.17'
DIRECTIONAL DRILL
3" PVC SCHEDULE
40 CONDUIT
THE PEPSI-COLA BOTTLING COMPANY OF FAYETTEVILLE
DB 2580 PG 859
6
END CONSTRUCTION
-Y- STA. 40+15.10
-Y- STA. 38+99 +/-
CURB RAMP TYPE-3
(SEE SHT 2D)
DETAILS: 2,3,4
(SEE SHT 2B & 2C)
-Y- STA. 39+13 +/-
CURB RAMP TYPE-3
(SEE SHT 2D)
DETAILS: 2,3,4
(SEE SHT 2B & 2C)
POT Sta. 40+67.11
MODIFY EXIST. SIDEWALK TO TIE TO PROPOSED CURB RAMPS
CONTRACTOR SHALL REMOVE AND RESET 72" CHAINLINK FENCE
**GRADE BULB OUTS AND CURB RAMPS TO DRAIN. **
TIE TO EX. C&G AND SIDEWALK
EXIST RW +07.20
EXIST RW +05.85
PROP TCE (65') PROP RW (70') PROP TCE (65') EXIST. RW
PROP TCE (65') EXIST. RW
9"X18" CONC. CURB
-Y- STA. 39+98 +/-
CURB RAMP TYPES: 9 OR 10 (SEE SHT 2F)
5" MONO ISLAND
6"CI D.A.T.U.R.
16"CI D.A.T.U.R.
15" RCP
TBJB W.M.H.
MATCHLINE -Y- STA. 27+05.00 SEE SHEET 7
50' TRANSITION
5" MONO ISLAND
I-95 / US 301
SBL 33' BST
S 7° 38' 26.0" W
APPROX. 1,181 SYDS ASPHALT REMOVAL
30' C&G
24" RCP
OVER HEAD SIGN
50' TRANSITION
1'-6" CURB & GUTTER
CONVERT O.T.C.B. TO CB DETAIL 2L
CONVERT O.T.C.B. TO CB DETAIL 2G
18" SLOT DRAINS AT 25' INTERVAL (ADJUST IF NEEDED)
B&G ENTERPRISES
DB 5577 PG 247
ROBERT H BIDDIX
DB 4999 PG 833
PB 64 PG 71
LINK STREET
DB 2418 PG 62
CONSTANCE FASUL POTTER, ETAL
DB 2432 PG 197
PARIS & POTTER
DB 6850 PG 312
SCHOOL STREET
DAVID M. HALES & WIFE
DB 7836 PG 833
NIKOLAOS DRAKOS & WIFE
DB 3606 PG 461
ADAM STREET
THOMAS CLIETT & WIFE
DB 4113 PG 33
BY-63
BY-64
-Y- STA. 38+69 +/-
PLACE DETECTABLE WARNING DOME THROUGH EXIST. CURB RAMP STANDARD DRAWING 848.06
-Y- STA. 38+74 +/-
PLACE DETECTABLE WARNING DOME THROUGH EXIST. CURB RAMP STANDARD DRAWING 848.06
-Y- STA. 39+67 +/-
PLACE DETECTABLE WARNING DOME THROUGH EXIST. CURB RAMP STANDARD DRAWING 848.06
-Y- STA. 39+77 +/-
PLACE DETECTABLE WARNING DOME THROUGH EXIST. CURB RAMP STANDARD DRAWING 848.06
PERSON STREET
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5/28/99

PROJECT REFERENCE NO.	SHEET NO.
W-5335	9

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 037837 ENGINEER JERRY M. BRADLEY

3/14/13

BEGIN 1.5" OVERLAY –L– STA. 10+83.93

130 120 110 100 90 80 70 60 50 40

10+00 11+00 12+00 13+00 14+00 15+00 16+00 17+00 18+00 19+00 20+00 21+00 22+00 23+00

130 120 110 100 90 80 70 60 50 40

24+00 25+00 26+00 27+00 28+00 29+00 30+00 31+00 32+00 33+00 34+00 35+00 36+00 37+00

–L–

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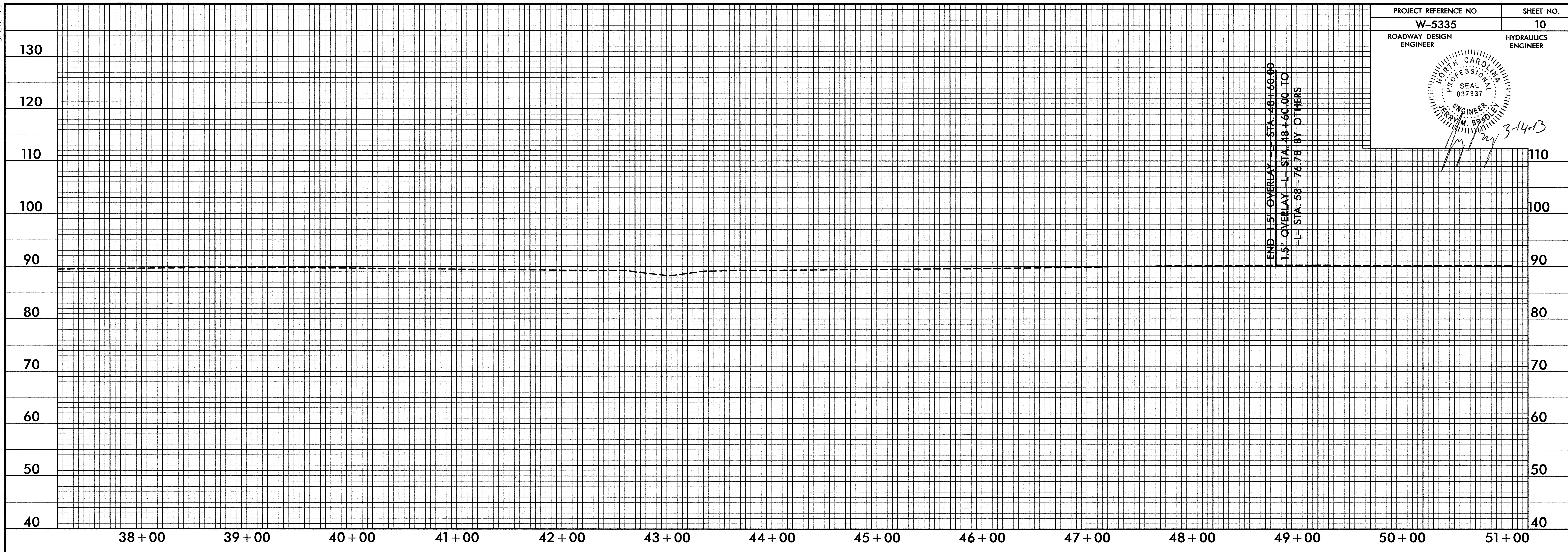
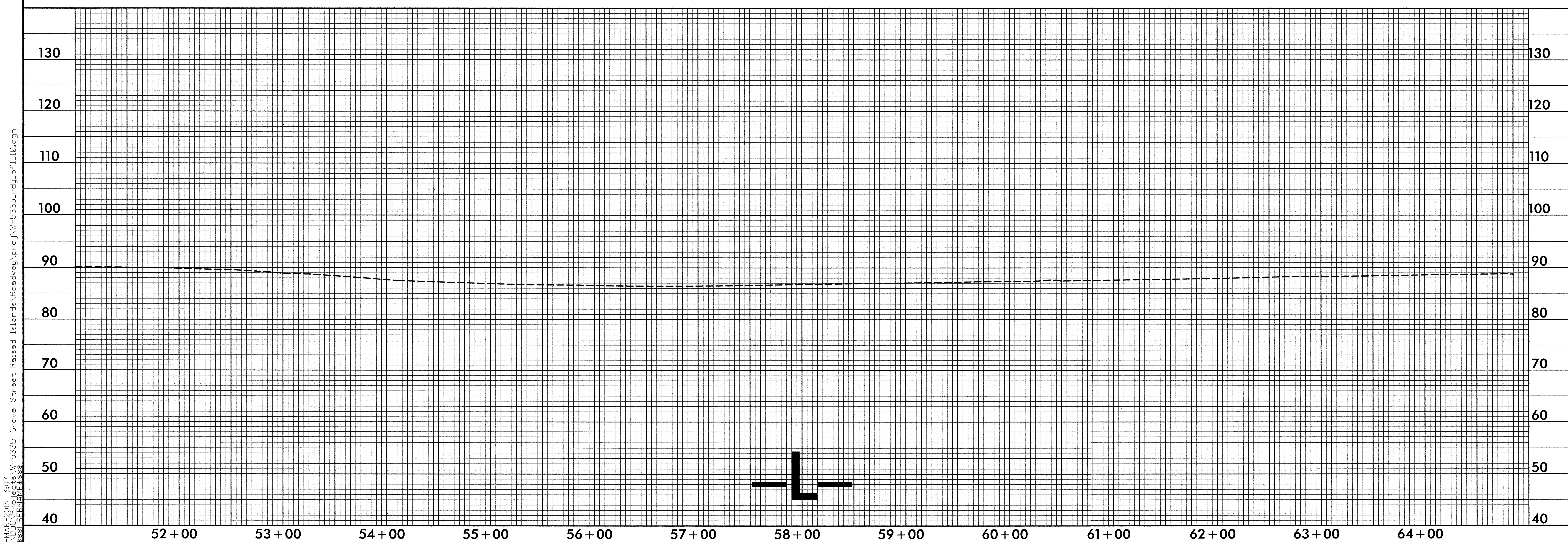
PROJECT REFERENCE NO.	SHEET NO.
W-5335	10

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 037837 ENGINEER TERRY M. BRADLEY 3-14-13





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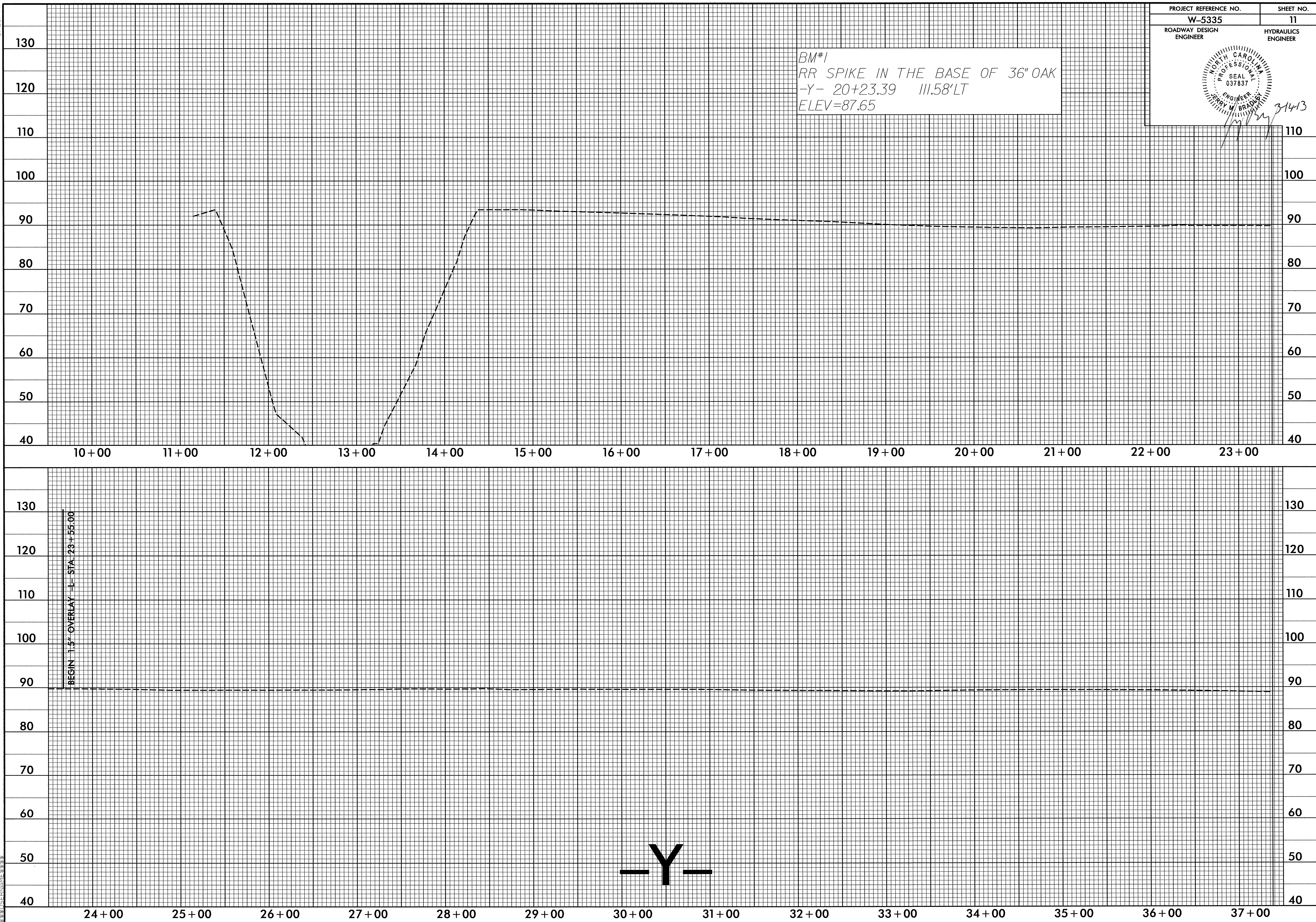
PROJECT REFERENCE NO.	SHEET NO.
W-5335	11

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER



NORTH CAROLINA PROFESSIONAL SEAL 037837 ENGINEER JERRY M. BRADLEY

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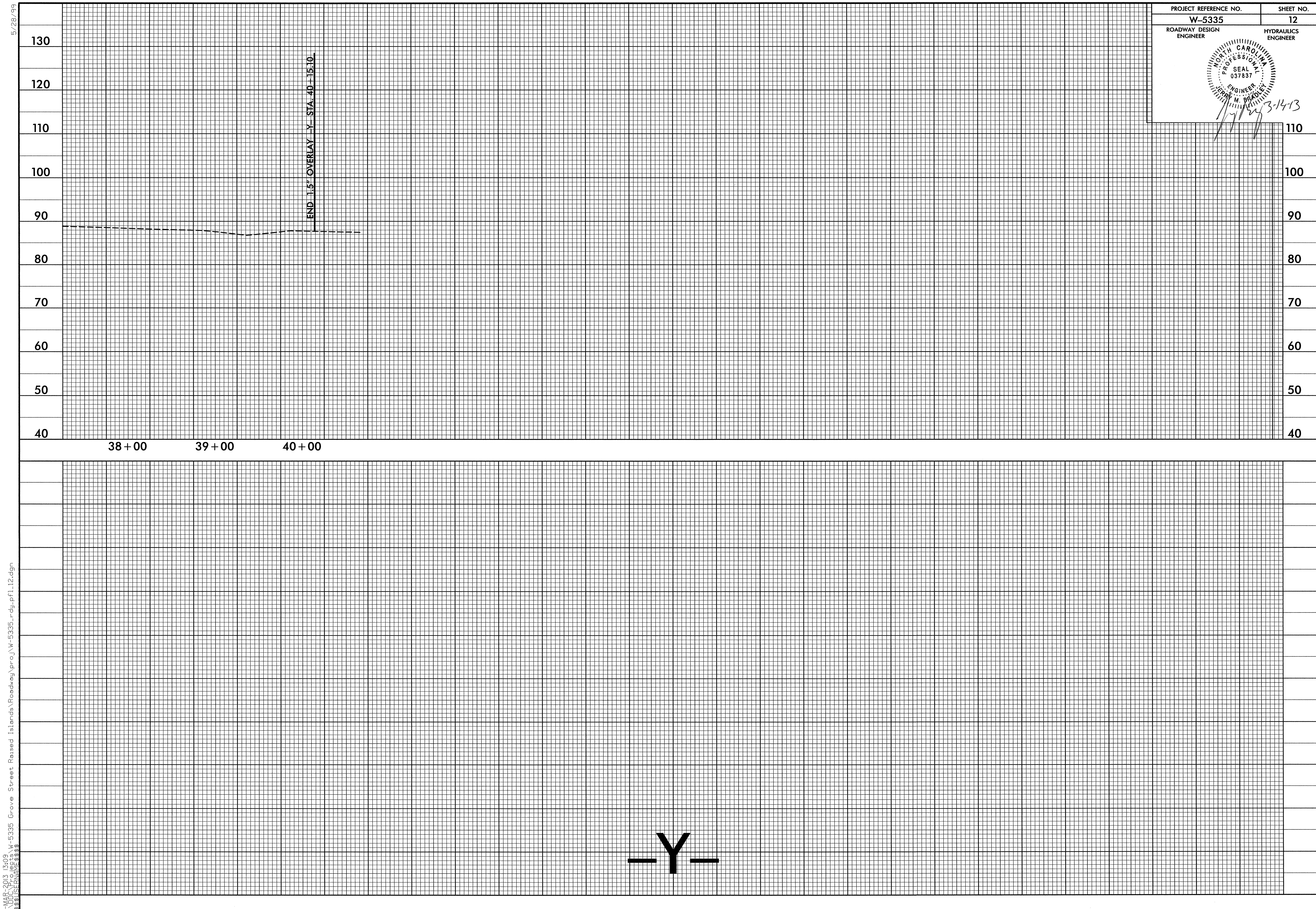
PROJECT REFERENCE NO.	SHEET NO.
W-5335	12

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 037837 ENGINEER JERRY M. BRADLEY 3-14-13



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