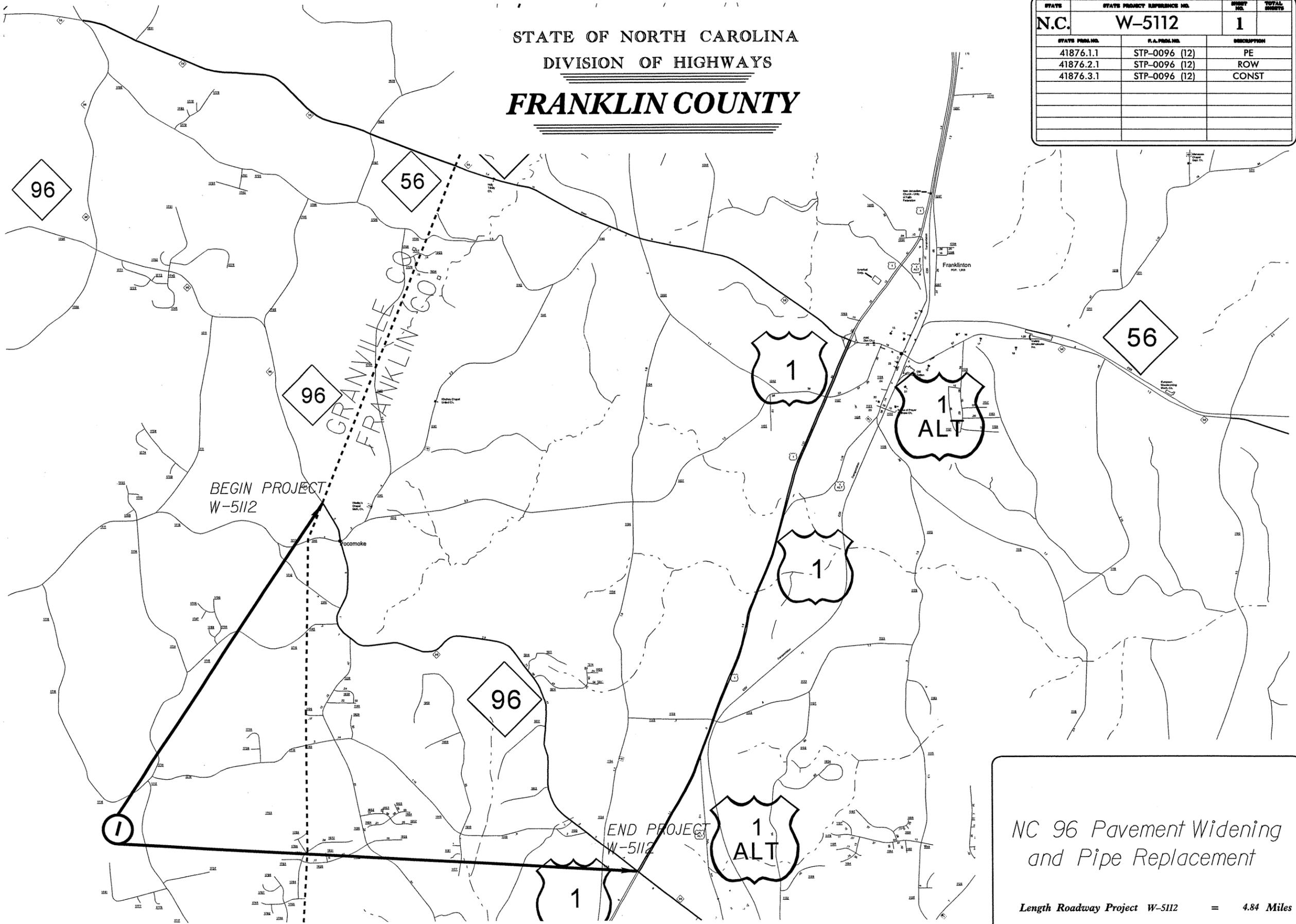


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R:\Projects\41876\1275  
Roj., tsh, dgn

**PROJECT: 41876**

**W-5112**

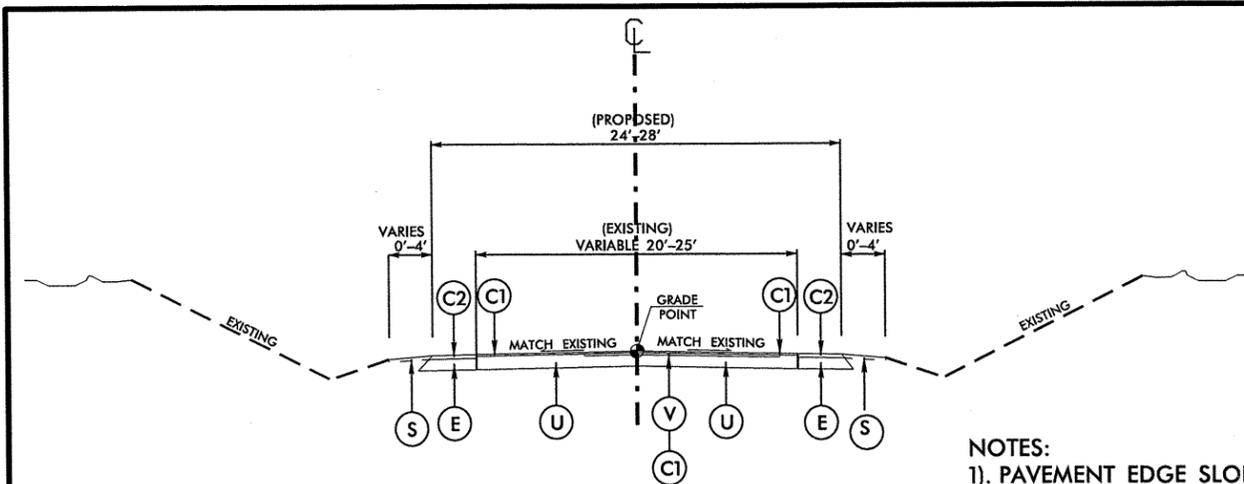


STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS  
**FRANKLIN COUNTY**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	W-5112	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
41876.1.1	STP-0096 (12)	PE	
41876.2.1	STP-0096 (12)	ROW	
41876.3.1	STP-0096 (12)	CONST	

*NC 96 Pavement Widening  
and Pipe Replacement*

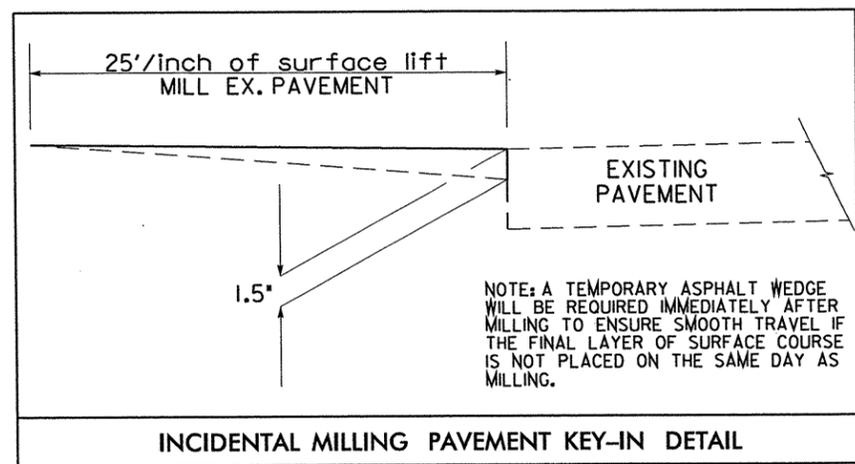
*Length Roadway Project W-5112 = 4.84 Miles*



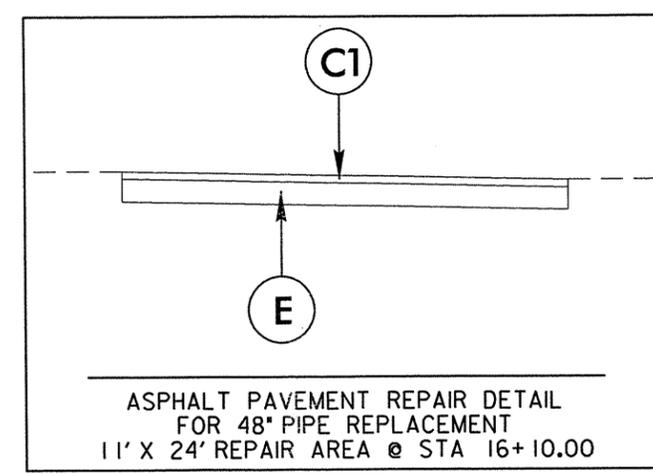
**TYPICAL SECTION NO. 1**

-L- STA. 10+00.00 TO 265+39.85

- NOTES:  
 1). PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.  
 2). EXISTING DITCHES NOT TO BE DISTURBED



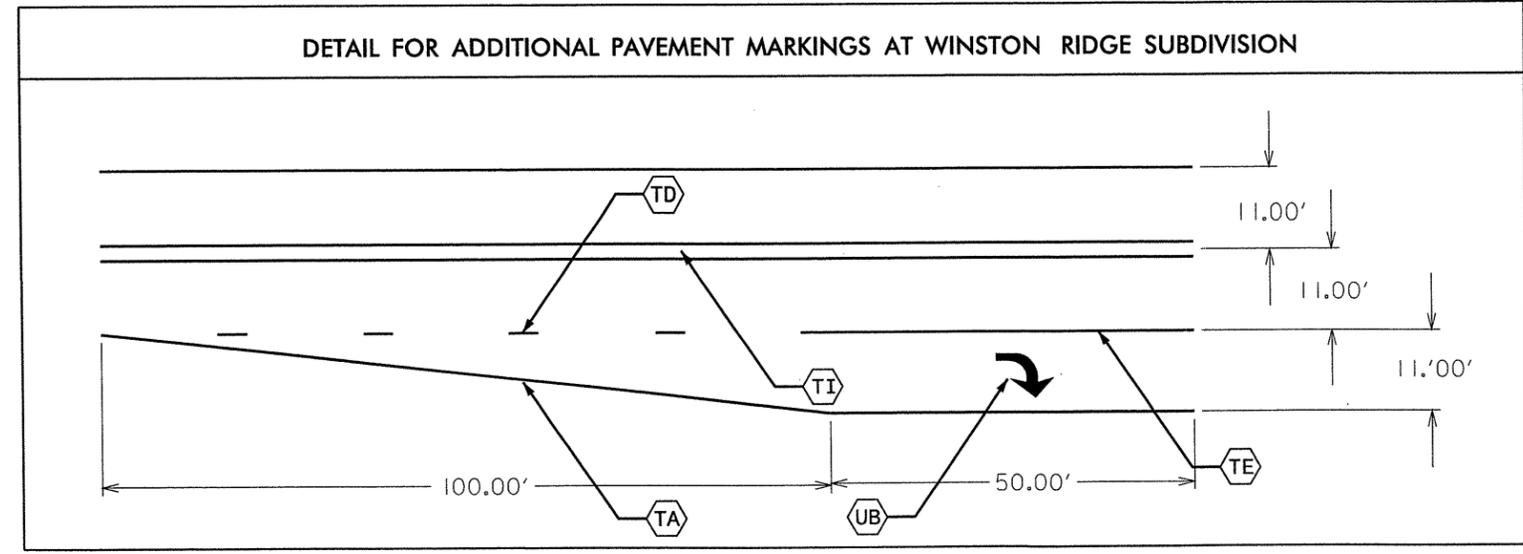
INCIDENTAL MILLING PAVEMENT KEY-IN DETAIL



ASPHALT PAVEMENT REPAIR DETAIL FOR 48" PIPE REPLACEMENT  
11' X 24' REPAIR AREA @ STA 16+10.00

**PAVEMENT MARKINGS LEGEND**

- TA WHITE EDGELINE
- TD 2 ft. WHITE MINISKIP
- TE WHITE SOLID LANE LINE
- TI YELLOW DOUBLE CENTER LINE
- UB RIGHT TURN ARROW



DETAIL FOR ADDITIONAL PAVEMENT MARKINGS AT WINSTON RIDGE SUBDIVISION

C1	PROP. APPROX. 1.5" BIT. CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 3" BIT. CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS
E	PROP. APPROX. 11" BIT. CONC. BASE COURSE, TYPE B25.B, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD. IN EACH OF TWO LAYERS
U	EXISTING PAVEMENT.
S	SHOULDER RECONSTRUCTION
V	1.5" MILLING AT LOCATIONS IDENTIFIED BY THE ENGINEER

STD. DWGS  
 560.01 : METHOD OF SHOULDER CONSTRUCTION  
 840.72 : PIPE COLLAR

SITE	PIPE SCHEDULE
1	REMOVE EXISTING 48"x60' CROSSLINE REPLACE WITH 48"x70' CORRUGATED STEEL PIPE (STA. 16+10)
2	EXTEND EXISTING 36" RCP 8' ON THE LEFT SIDE AND 4' ON THE RIGHT SIDE OF 96 (STA 197+51)
	EXTEND EXISTING 18" RCP 4' ON THE LEFT SIDE OF NC 96 (STA. 70+42)
	EXTEND EXISTING 18" RCP 8' ON THE LEFT SIDE OF NC 96 (STA 225+40)
	REMOVE AND REPLACE EXISTING 15" RCP DRIVEWAY PIPE ON THE LEFT SIDE OF NC 96 (STA 73+15)

DIVISION FIVE DESIGN  
ROADWAY DESIGN AND PAVEMENT

P.E. SIGNATURE

PAVEMENT WIDENING AND CROSSLINE REPLACEMENT ON NC 96

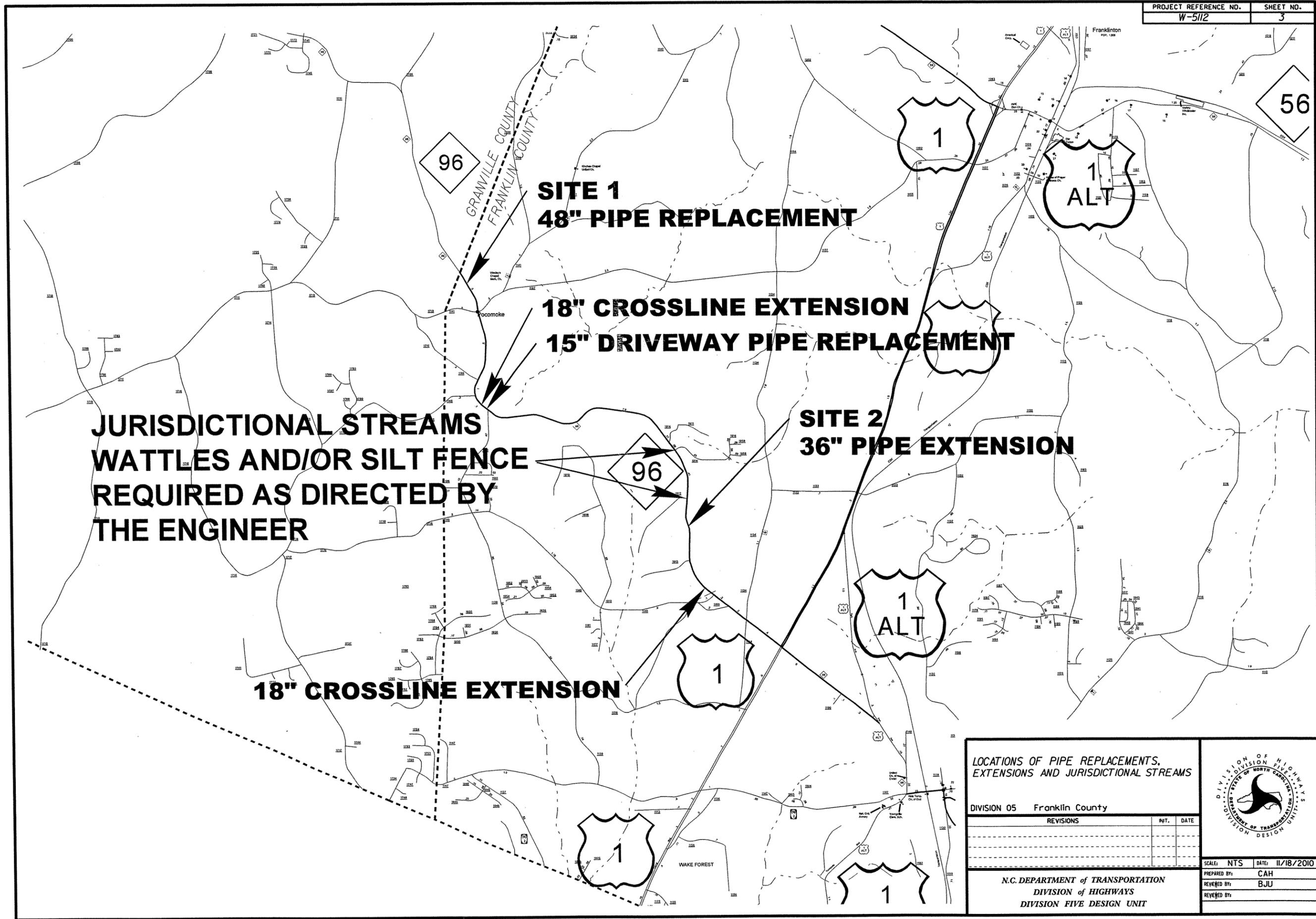
DIVISION 05 FRANKLIN COUNTY

REVISIONS	INT.	DATE

N.C. DEPARTMENT of TRANSPORTATION  
DIVISION of HIGHWAYS  
DIVISION FIVE DESIGN UNIT

SCALE: NTS DATE: 11/17/2010

PREPARED BY: CAH  
 REVIEWED BY: BJU



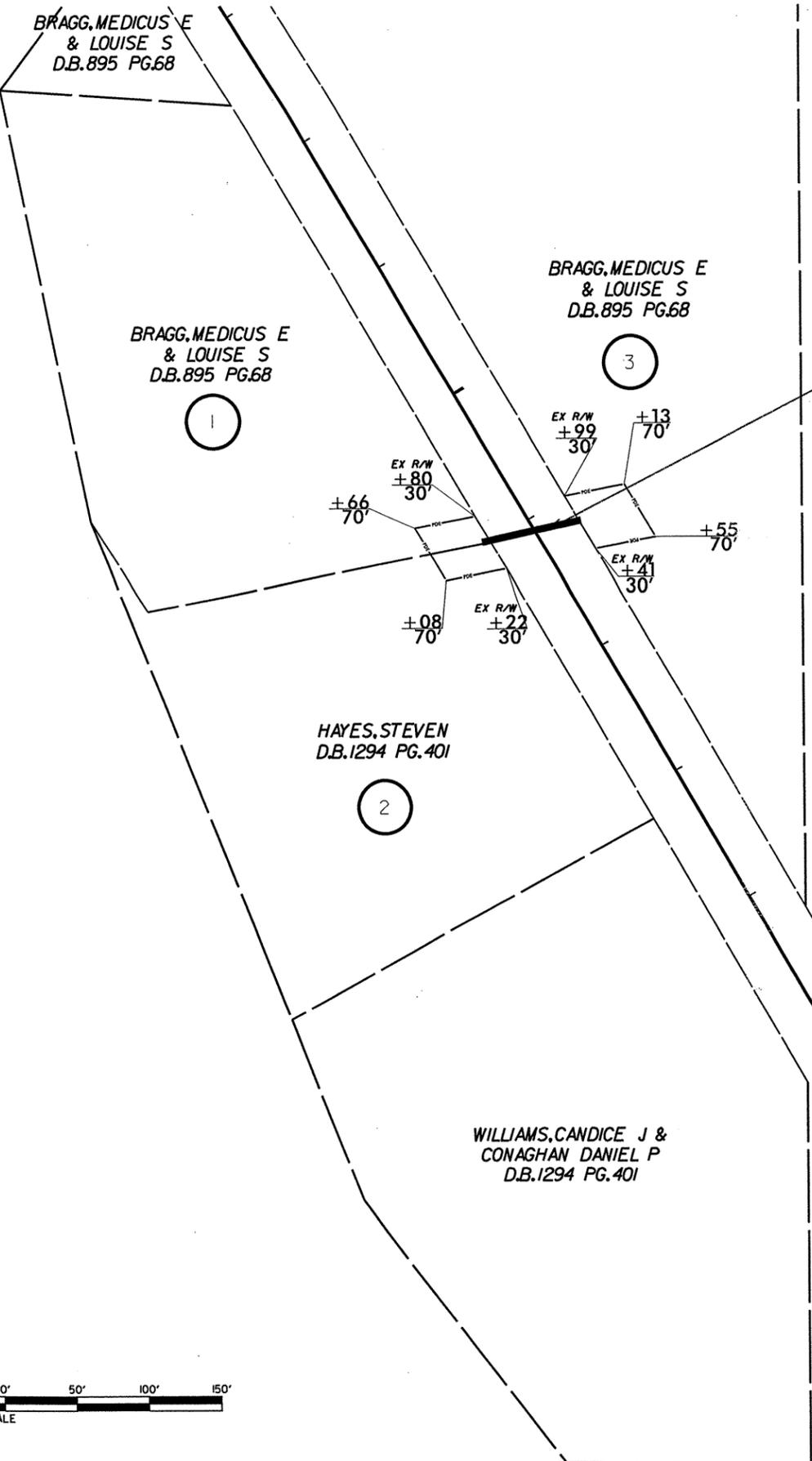
**JURISDICTIONAL STREAMS  
WATTLES AND/OR SILT FENCE  
REQUIRED AS DIRECTED BY  
THE ENGINEER**

**LOCATIONS OF PIPE REPLACEMENTS,  
EXTENSIONS AND JURISDICTIONAL STREAMS**

DIVISION 05 Franklin County		
REVISIONS	BY	DATE

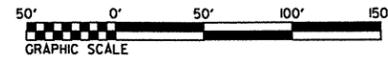
N.C. DEPARTMENT of TRANSPORTATION  
DIVISION of HIGHWAYS  
DIVISION FIVE DESIGN UNIT

SCALE: NTS DATE: 11/18/2010  
 PREPARED BY: CAH  
 REVIEWED BY: BJU  
 REVIEWED BY:



REMOVE AND REPLACE EXISTING CROSS LINE WITH 70' OF 48" CORRUGATED STEEL PIPE CULVERT

NOTE:  
 INSTALL PIPE @ 20% OF DIA.(9.6")  
 BELOW EXISTING STREAM BED ELEVATION.  
 ADJUST EAST END OF PIPE ALIGNMENT 5 FT NORTH TO AVOID DISTURBING TREE ON EAST SIDE OF NC 96



DIVISION FIVE DESIGN

SEAL  
030459  
ENGINEER  
BEN UPSHAW

P.E.  
SIGNATURE

Pavement Widening and  
Crossline Replacement on NC 96

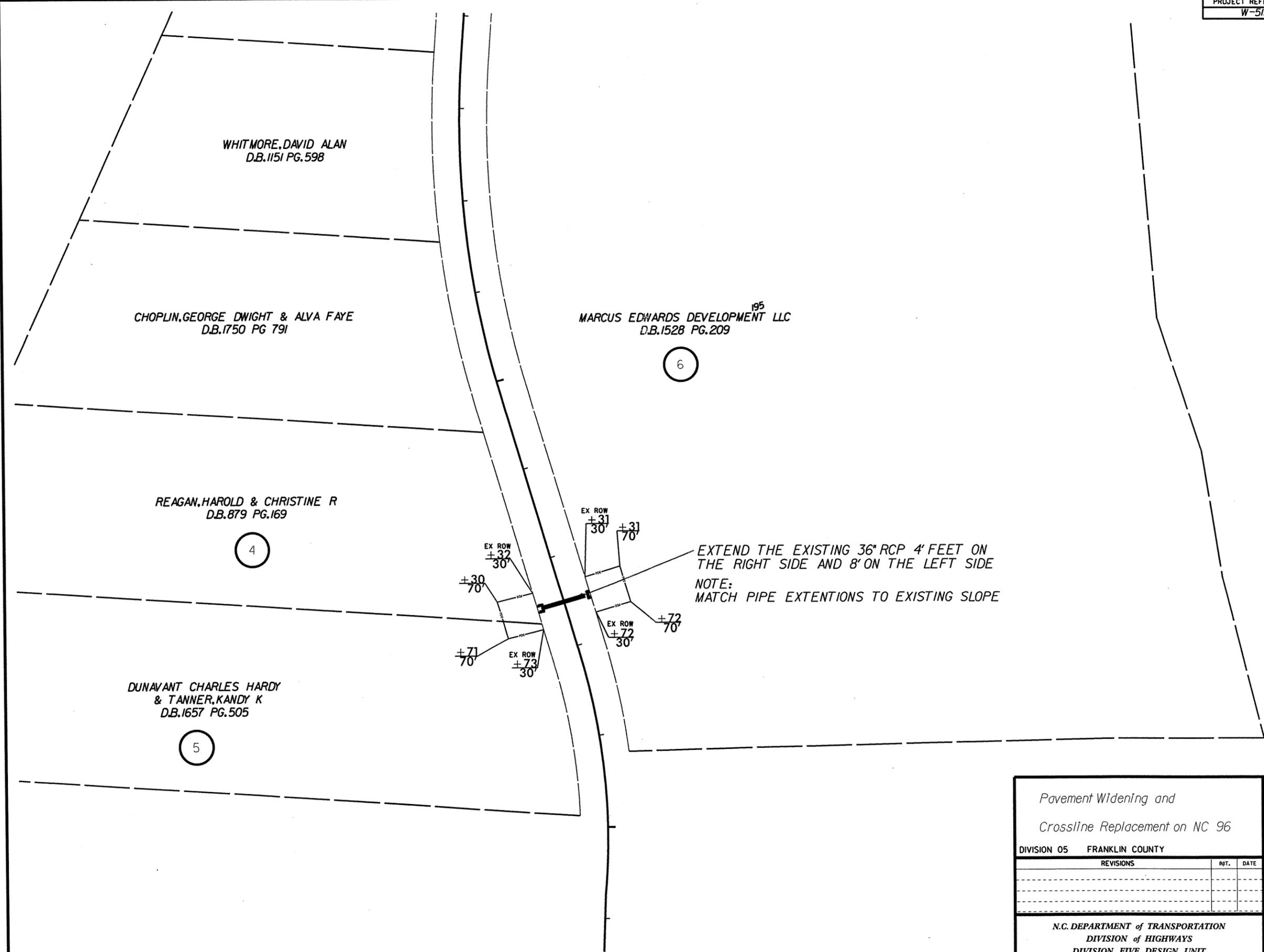
DIVISION 05 Franklin County

REVISIONS	INT.	DATE

N.C. DEPARTMENT of TRANSPORTATION  
 DIVISION of HIGHWAYS  
 DIVISION FIVE DESIGN UNIT

SCALE: 1"=50' DATE: 8/18/2010

PREPARED BY: CAH  
 REVIEWED BY: BJU



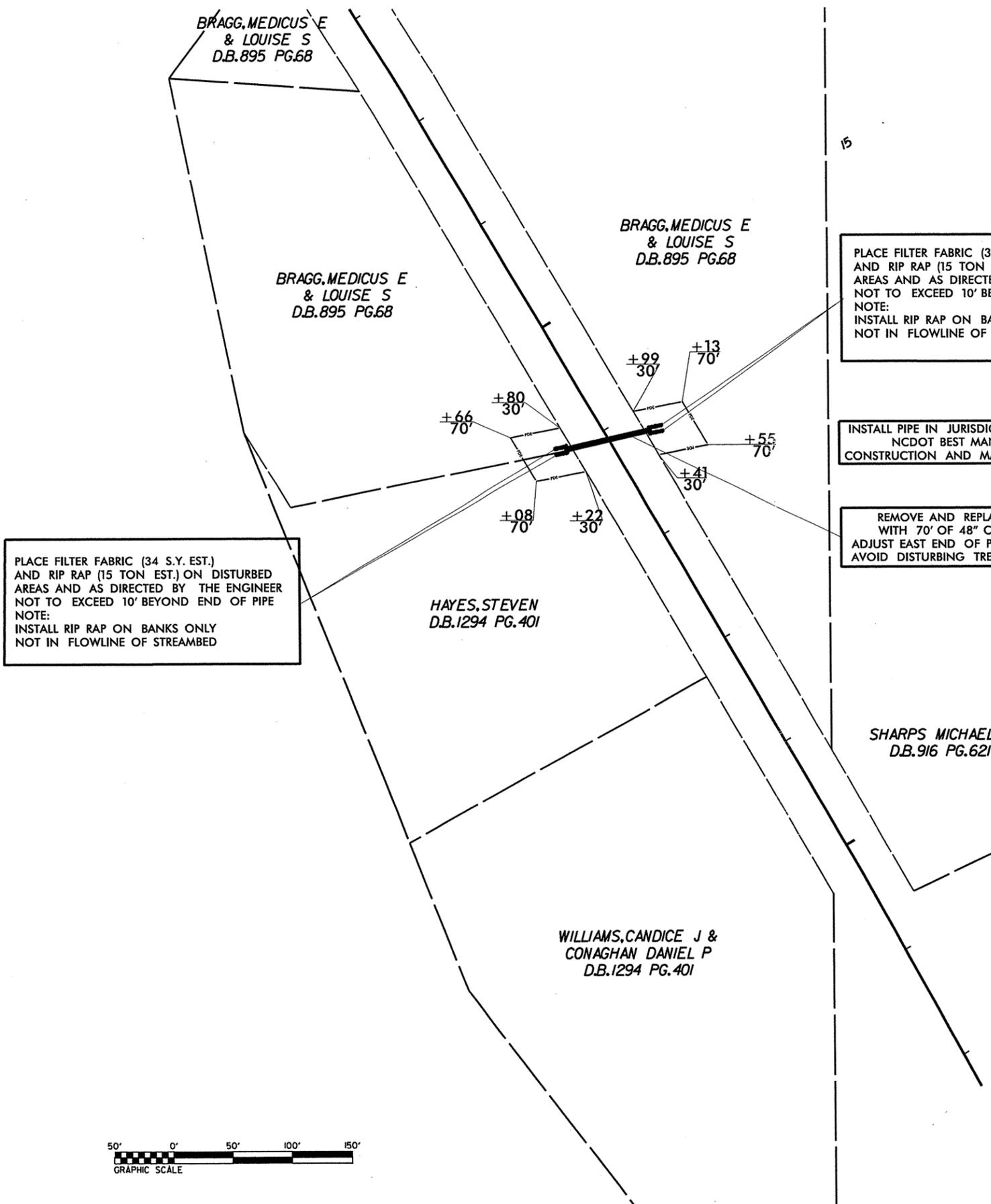
6

4

5

EXTEND THE EXISTING 36" RCP 4' FEET ON THE RIGHT SIDE AND 8' ON THE LEFT SIDE  
NOTE:  
MATCH PIPE EXTENTIONS TO EXISTING SLOPE

Pavement Widening and Crossline Replacement on NC 96 DIVISION 05 FRANKLIN COUNTY																
<table border="1"> <thead> <tr> <th>REVISIONS</th> <th>INT.</th> <th>DATE</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	REVISIONS		INT.	DATE												
REVISIONS	INT.	DATE														
N.C. DEPARTMENT of TRANSPORTATION DIVISION of HIGHWAYS DIVISION FIVE DESIGN UNIT		PREPARED BY: CAH REVIEWED BY: BJU														



PLACE FILTER FABRIC (34 S.Y. EST.) AND RIP RAP (15 TON EST.) ON DISTURBED AREAS AND AS DIRECTED BY THE ENGINEER NOT TO EXCEED 10' BEYOND END OF PIPE  
NOTE:  
INSTALL RIP RAP ON BANKS ONLY NOT IN FLOWLINE OF STREAMBED

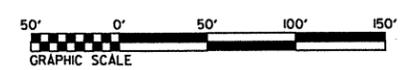
INSTALL PIPE IN JURISDICTIONAL AREAS ACCORDING TO NCDOT BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.

REMOVE AND REPLACE EXISTING 60' CROSSLINE WITH 70' OF 48" C.S. PIPE CULVERT .109" THICK ADJUST EAST END OF PIPE ALIGNMENT 5 FT. NORTH TO AVOID DISTURBING TREE ON THE EAST SIDE OF NC 96

PLACE FILTER FABRIC (34 S.Y. EST.) AND RIP RAP (15 TON EST.) ON DISTURBED AREAS AND AS DIRECTED BY THE ENGINEER NOT TO EXCEED 10' BEYOND END OF PIPE  
NOTE:  
INSTALL RIP RAP ON BANKS ONLY NOT IN FLOWLINE OF STREAMBED

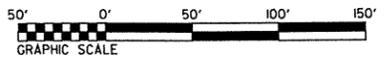
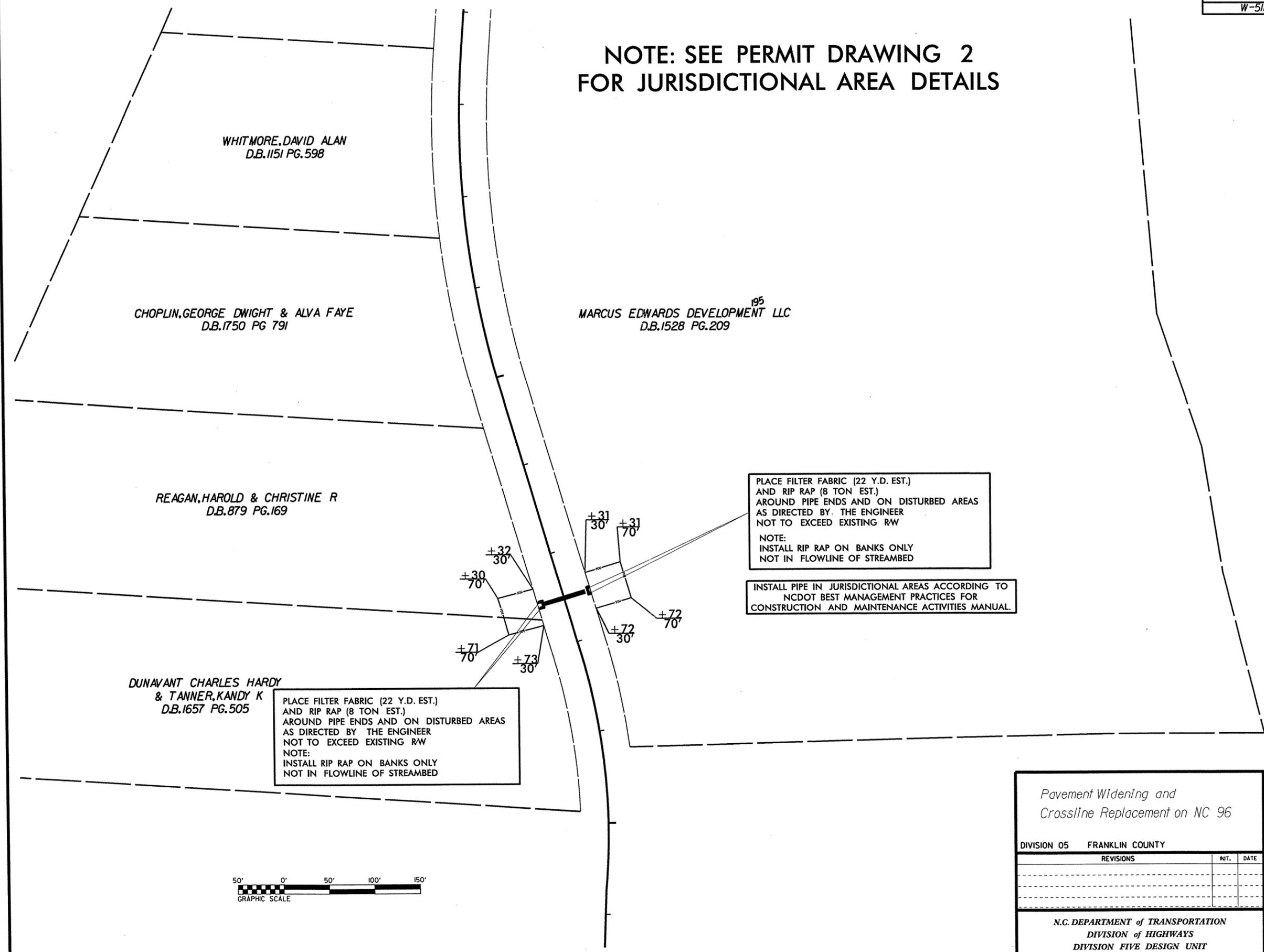


**NOTE: SEE PERMIT DRAWING 1 FOR JURISDICTIONAL AREA DETAILS**



DIVISION FIVE DESIGN  P.E.  SIGNATURE	<i>Pavement Widening and Crossline Replacement of NC 96</i>								
	DIVISION 05 Franklin County								
	<table border="1"> <thead> <tr> <th>REVISIONS</th> <th>BY</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		REVISIONS	BY	DATE				
REVISIONS	BY	DATE							
N.C. DEPARTMENT of TRANSPORTATION DIVISION of HIGHWAYS DIVISION FIVE DESIGN UNIT	SCALE: 1"=50' DATE: 11/18/2010 PREPARED BY: CAH REVIEWED BY: BJU								

**NOTE: SEE PERMIT DRAWING 2  
FOR JURISDICTIONAL AREA DETAILS**



Pavement Widening and Crossline Replacement on NC 96		
DIVISION 05 FRANKLIN COUNTY		
REVISIONS	INT.	DATE
N.C. DEPARTMENT of TRANSPORTATION DIVISION of HIGHWAYS DIVISION FIVE DESIGN UNIT		SCALE: 1"=50'    DATE: 11/18/2010 PREPARED BY: CAH REVIEWED BY: BJU REVISIONS BY:

5/14/99

- T.O.B. — TOP OF BANK
- E.T.F. — EXISTING TRANS. FACILITY
- B.Z.-1 — BUFFER ZONE 1
- B.Z.-2 — BUFFER ZONE 2
-  PROPOSED RIP RAP AND FABRIC
-  SURFACE WATER FILL

PROJECT REFERENCE NO. 41876  
W.B.S.No. W-5112

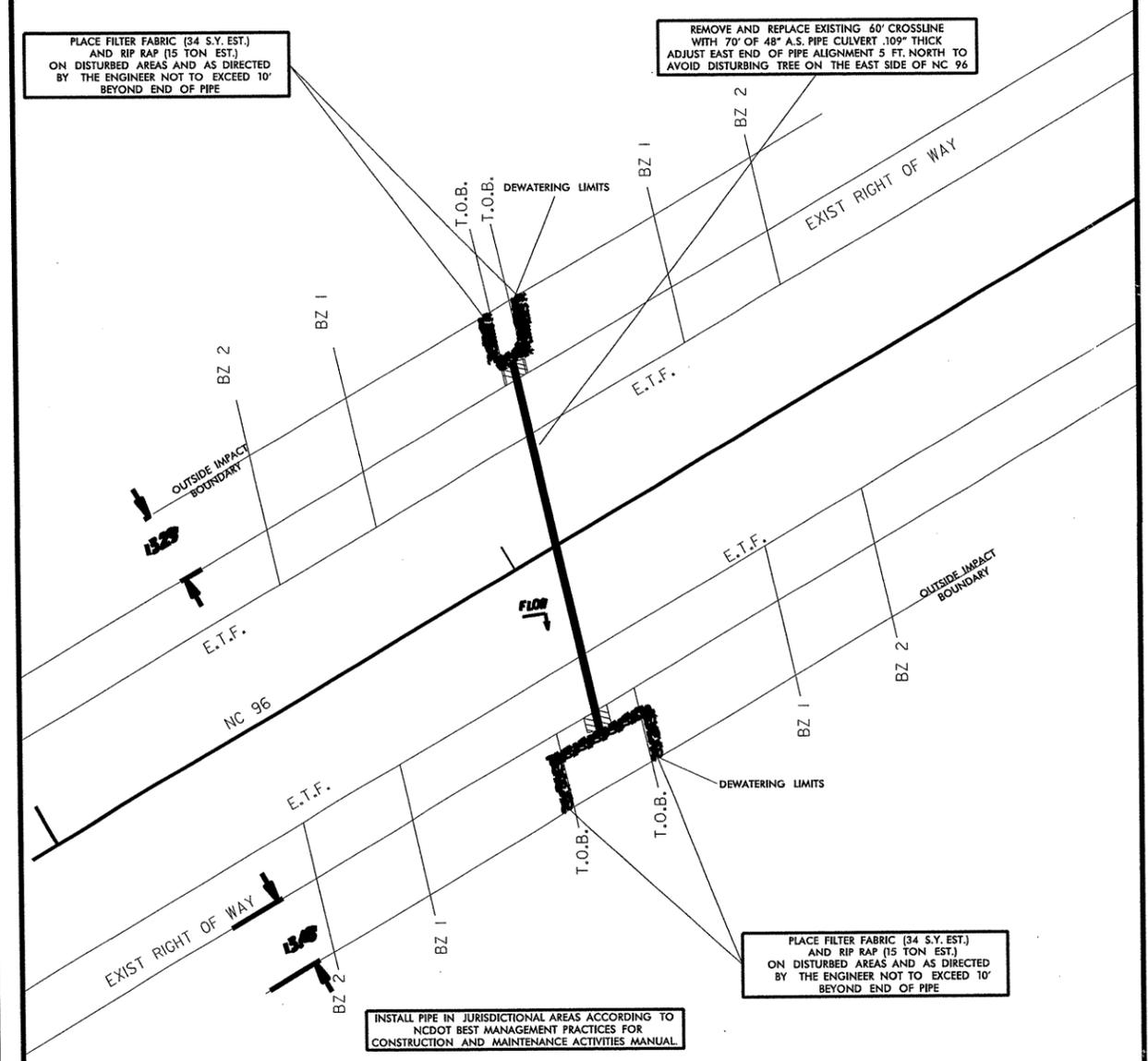
PAVEMENT WIDENING AND  
CROSSLINE REPLACEMENT  
ON NC 96 (SITE 1)

FRANKLIN COUNTY  
PERMIT DRAWING

1 OF 2

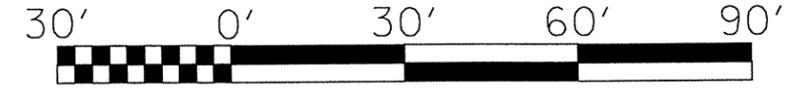
PLACE FILTER FABRIC (34 S.Y. EST.)  
AND RIP RAP (15 TON EST.)  
ON DISTURBED AREAS AND AS DIRECTED  
BY THE ENGINEER NOT TO EXCEED 10'  
BEYOND END OF PIPE

REMOVE AND REPLACE EXISTING 60" CROSSLINE  
WITH 70" OF 48" A.S. PIPE CULVERT 109" THICK  
ADJUST EAST END OF PIPE ALIGNMENT 5 FT. NORTH TO  
AVOID DISTURBING TREE ON THE EAST SIDE OF NC 96



INSTALL PIPE IN JURISDICTIONAL AREAS ACCORDING TO  
NCDOT BEST MANAGEMENT PRACTICES FOR  
CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL

PLACE FILTER FABRIC (34 S.Y. EST.)  
AND RIP RAP (15 TON EST.)  
ON DISTURBED AREAS AND AS DIRECTED  
BY THE ENGINEER NOT TO EXCEED 10'  
BEYOND END OF PIPE



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P:\Roadway\PCP\100666\100666.dwg  
T:\man

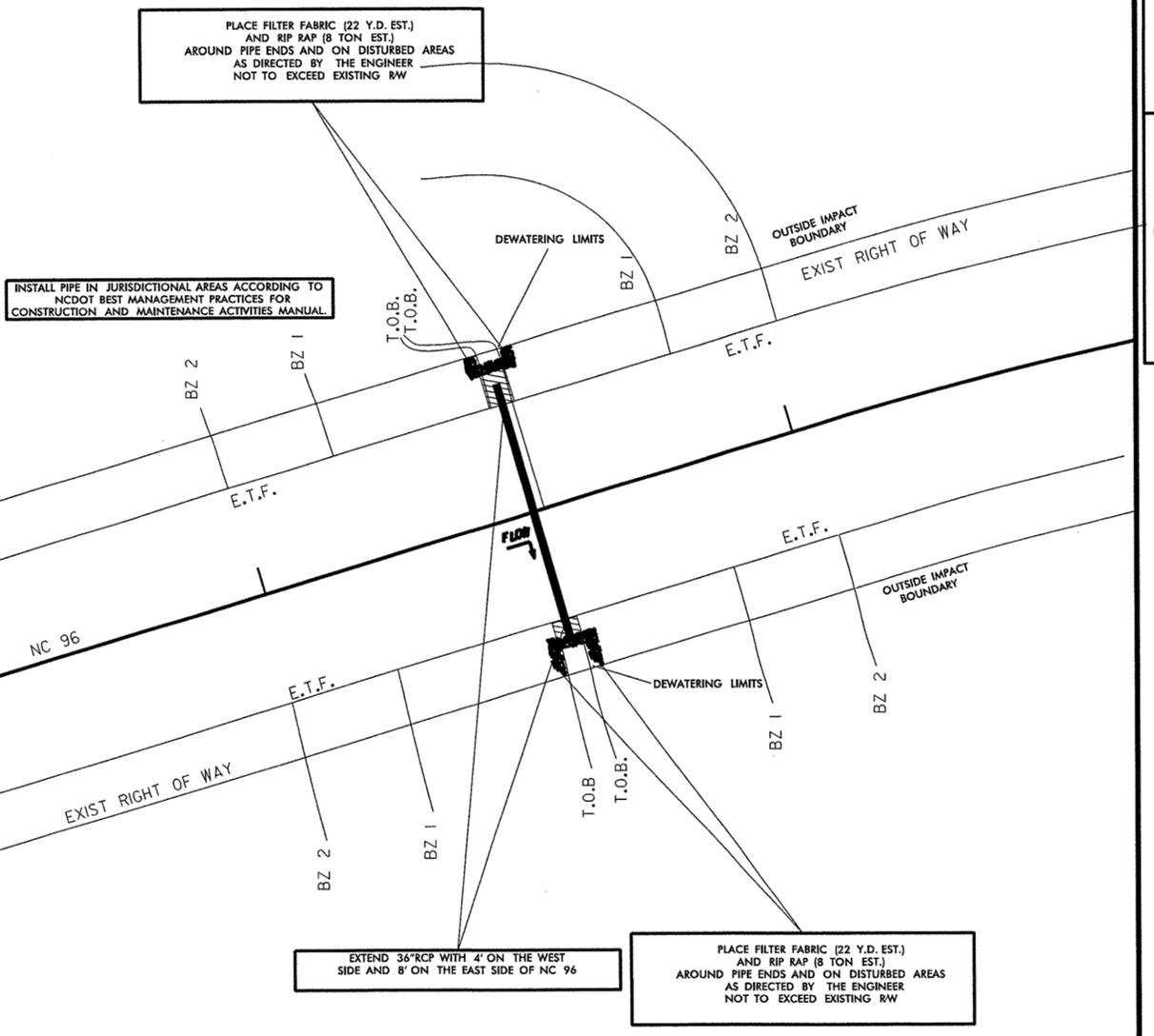
- T.O.B. — TOP OF BANK
- E.T.F. — EXISTING TRANS. FACILITY
- B.Z.-1 — BUFFER ZONE 1
- B.Z.-2 — BUFFER ZONE 2
-  PROPOSED RIP RAP AND FABRIC
-  SURFACE WATER FILL

PROJECT REFERENCE NO. 41876  
W.B.S.No. W-5112

PAVEMENT WIDENING AND  
CROSSLINE REPLACEMENT  
ON NC 96 (SITE 2)

FRANKLIN COUNTY  
PERMIT DRAWING

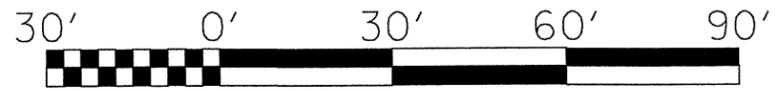
2 OF 2



INSTALL PIPE IN JURISDICTIONAL AREAS ACCORDING TO  
NCDOT BEST MANAGEMENT PRACTICES FOR  
CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL

EXTEND 36" RCP WITH 4' ON THE WEST  
SIDE AND 8' ON THE EAST SIDE OF NC 96

PLACE FILTER FABRIC (22 Y.D. EST.)  
AND RIP RAP (8 TON EST.)  
AROUND PIPE ENDS AND ON DISTURBED AREAS  
AS DIRECTED BY THE ENGINEER  
NOT TO EXCEED EXISTING RW



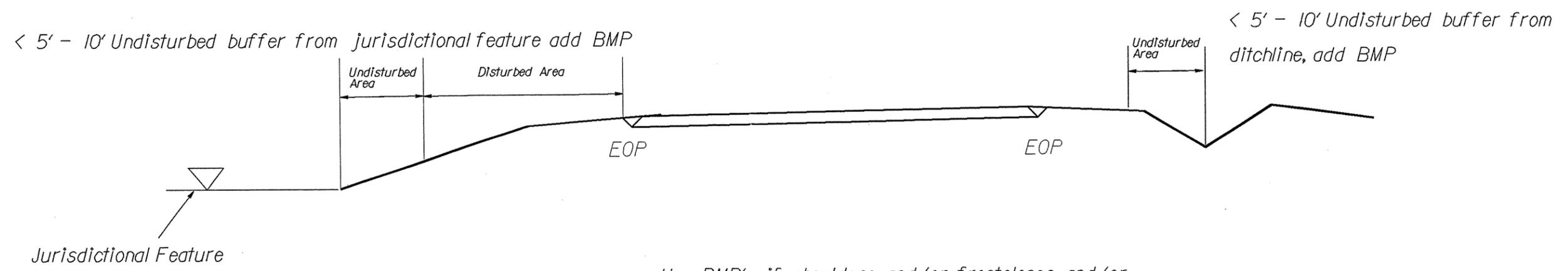
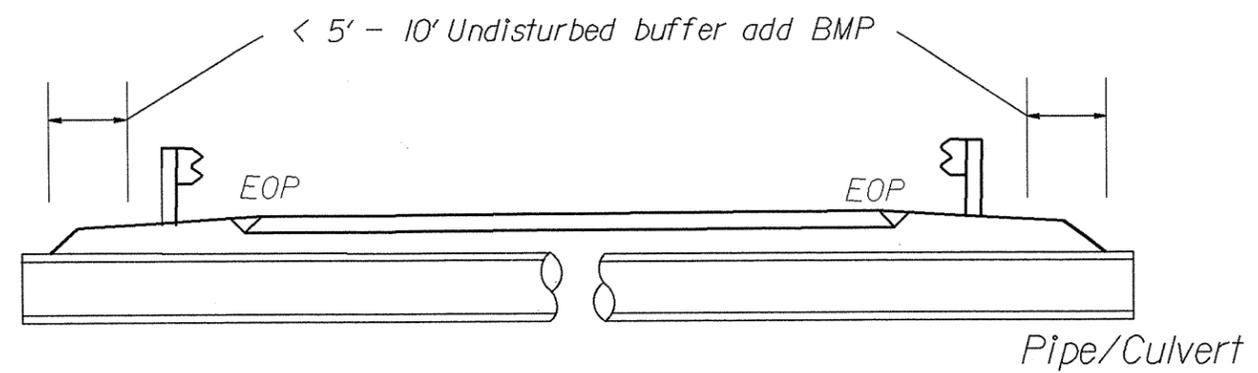
PROJECT REFERENCE NO. W-5112  
SHEET NO. 8

PROJECT REFERENCE NO. W-5112	SHEET NO. 9
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

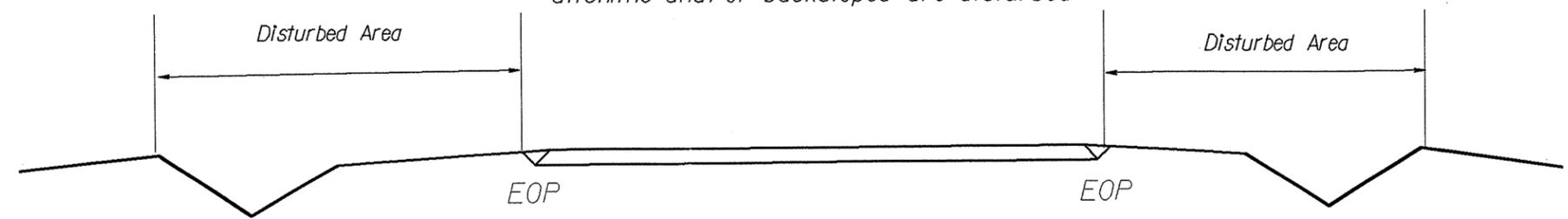
NOTES: Less than 5' - 10' undisturbed buffer from ROW, ditchline, water feature, or drainage inlet, add BMP.

BMP Options: Wattle or Silt Fence

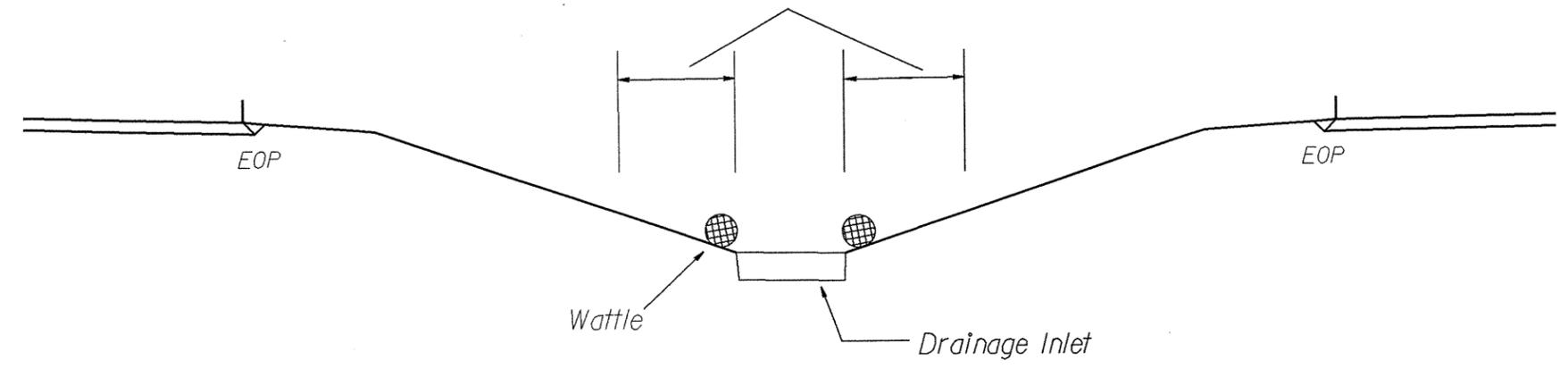
# EROSION CONTROL DETAIL



Use BMP's if shoulders and/or frontslopes and/or ditchline and/or backslopes are disturbed



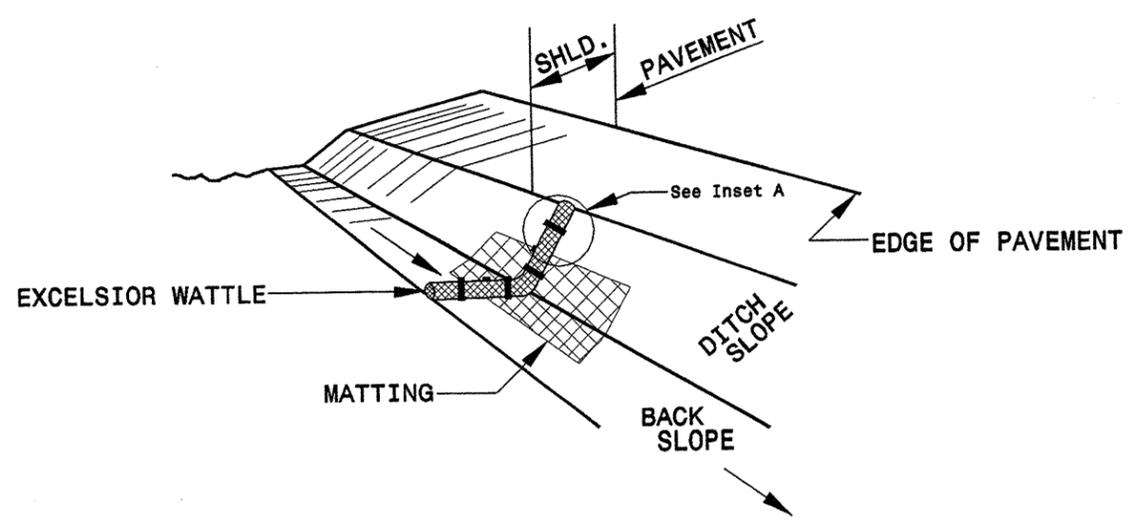
< 5' - 10' Undisturbed buffer from inlet, add wattle



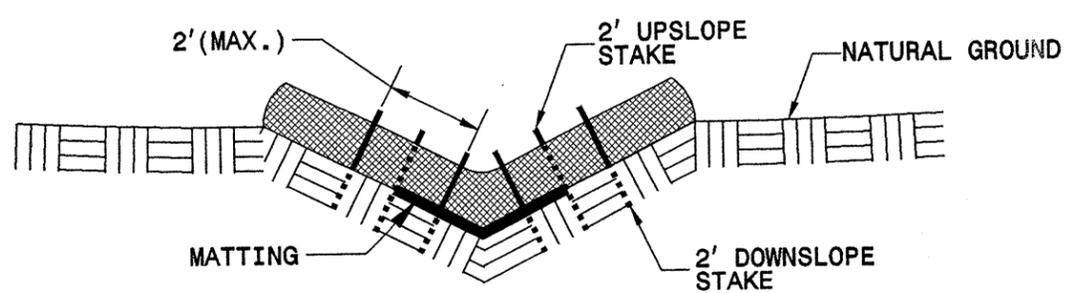
NOT TO SCALE

PROJECT REFERENCE NO. <b>W-5112</b>	SHEET NO. <b>10</b>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

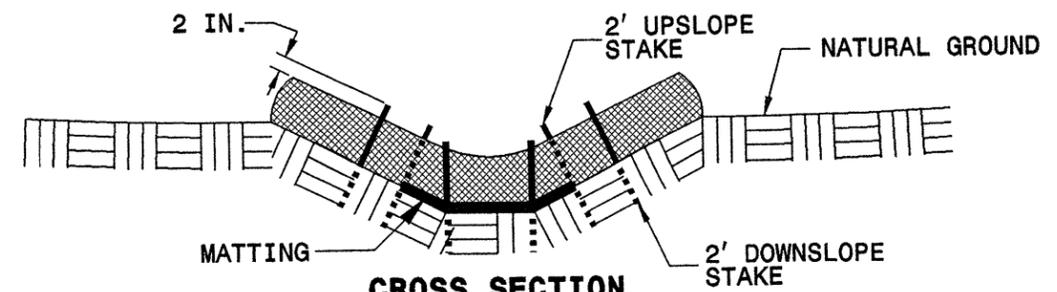
# WATTLE DETAIL



**ISOMETRIC VIEW**



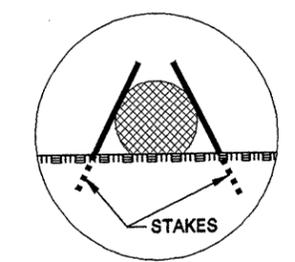
**CROSS SECTION VEE DITCH**



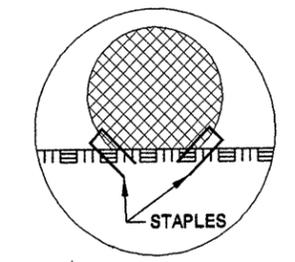
**CROSS SECTION TRAPEZOIDAL DITCH**

**NOTES:**

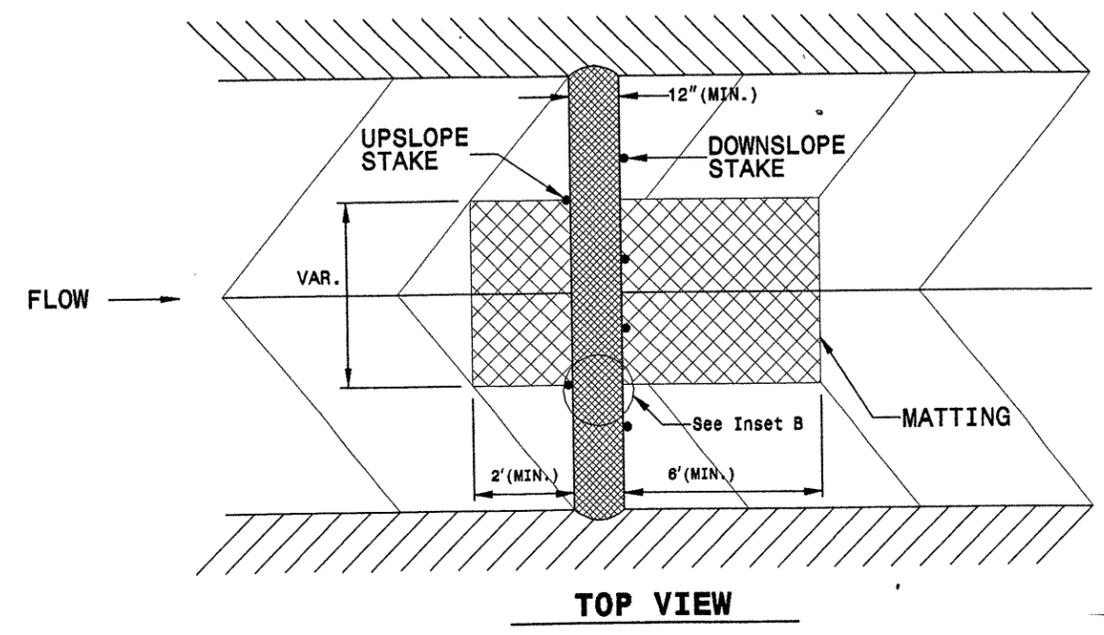
- USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.
- USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.
- ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.
- INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.
- PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.
- INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.
- INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.



**INSET A**



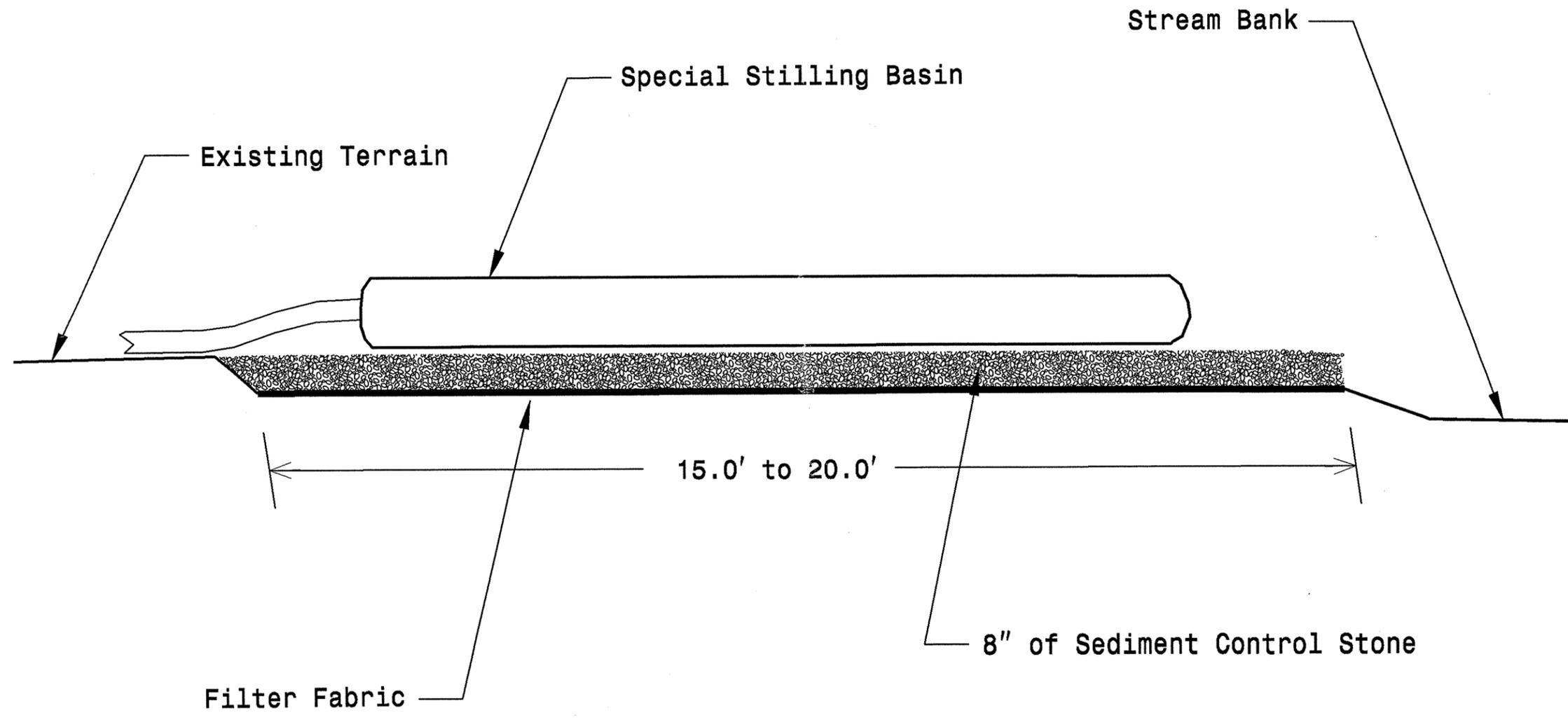
**INSET B**



**TOP VIEW**

STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.



Note: Provide Stabilized Outlet to Streambank  
Not To Scale

ENGLISH STANDARD DRAWING FOR  
**SPECIAL STILLING BASIN**

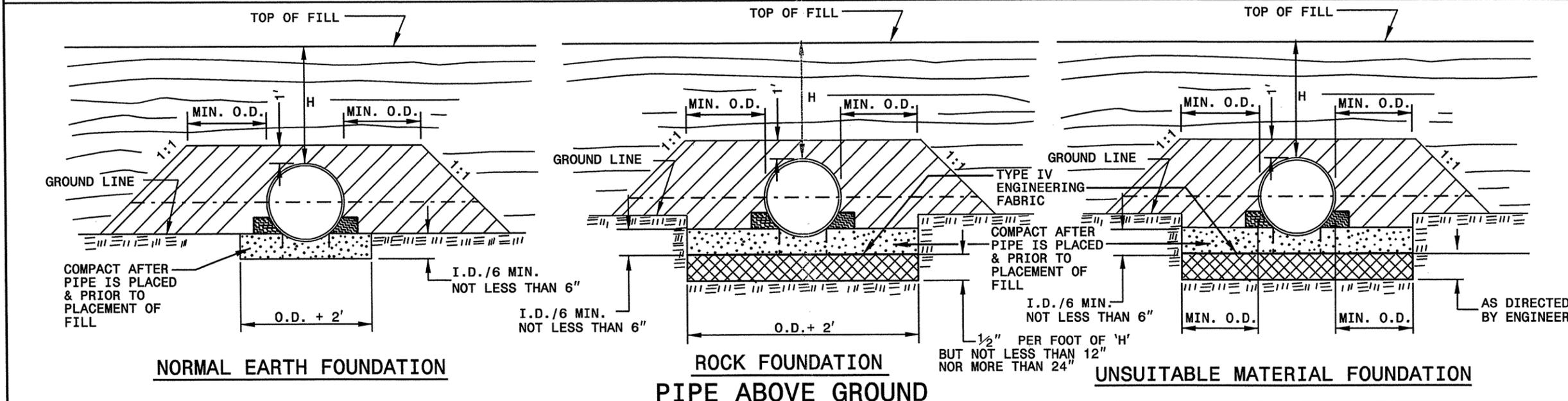
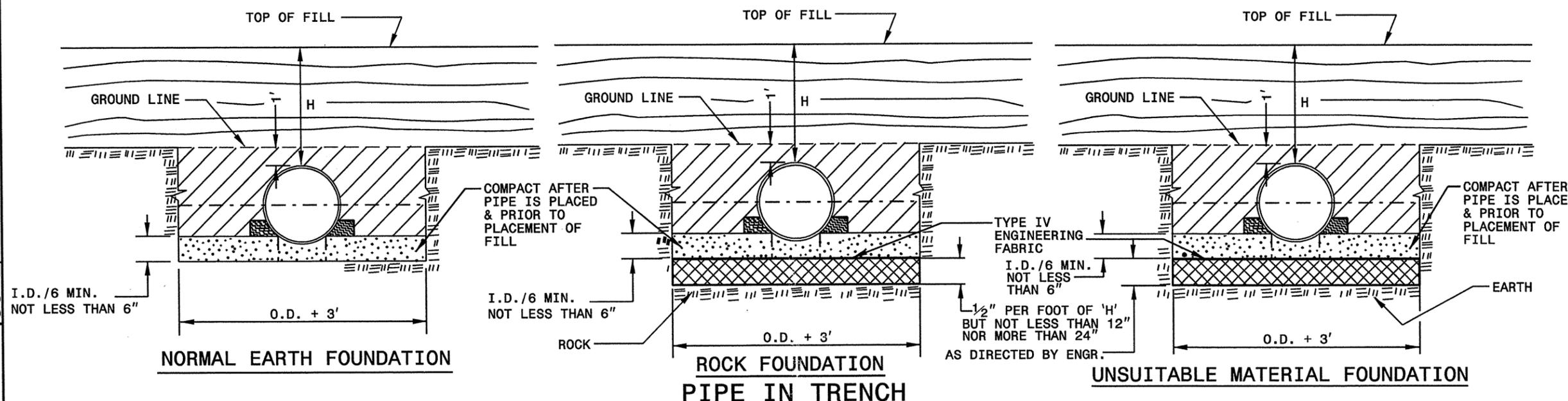
ENGLISH STANDARD DRAWING FOR  
**SPECIAL STILLING BASIN**

STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

7-06

7-06



GENERAL NOTES:

I.D. = THE MAXIMUM HORIZONTAL INSIDE DIAMETER DIMENSION.

O.D. = THE MAXIMUM HORIZONTAL OUTSIDE DIAMETER DIMENSION.

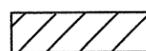
H = THE FILL HEIGHT MEASURED VERTICALLY AT ANY POINT ALONG THE PIPE FROM THE TOP OF THE PIPE TO THE TOP OF THE EMBANKMENT AT THAT POINT.

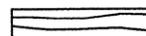
 TAKE CARE TO FULLY COMPACT HAUNCH ZONE OF PIPE BACKFILL.

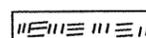
 LOOSELY PLACED SELECT MATERIAL CLASS III OR CLASS II, TYPE 1 FOR PIPE BEDDING. LEAVE SECTION DIRECTLY BENEATH PIPE UNCOMPACTED AS PIPE SEATING AND BACKFILL WILL ACCOMPLISH COMPACTION.

DO NOT OPERATE HEAVY EQUIPMENT OVER ANY PIPE CULVERT UNTIL THE PIPE CULVERT HAS BEEN PROPERLY BACKFILLED AND COVERED WITH AT LEAST 3 FEET OF APPROVED MATERIAL.

----- SPRINGLINE OF PIPE

 SELECT BACKFILL MATERIAL CLASS III OR CLASS II, TYPE 1 ABOVE AND BELOW SPRINGLINE.

 APPROVED SUITABLE LOCAL MATERIAL.

 UNDISTURBED EARTH MATERIAL

 SELECT MATERIAL CLASS V OR VI FOR FOUNDATION CONDITIONING. ENCAPSULATE WITH ENGINEERING FABRIC AS DIRECTED BY THE ENGINEER.

ENGLISH DETAIL DRAWING FOR  
METHOD OF PIPE INSTALLATION  
FLEXIBLE PIPE

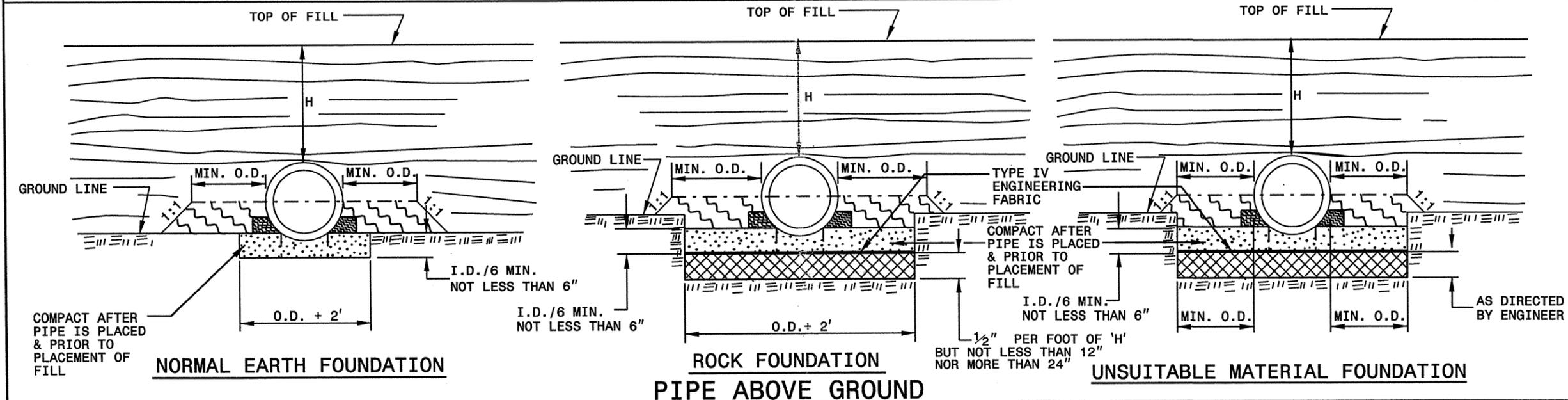
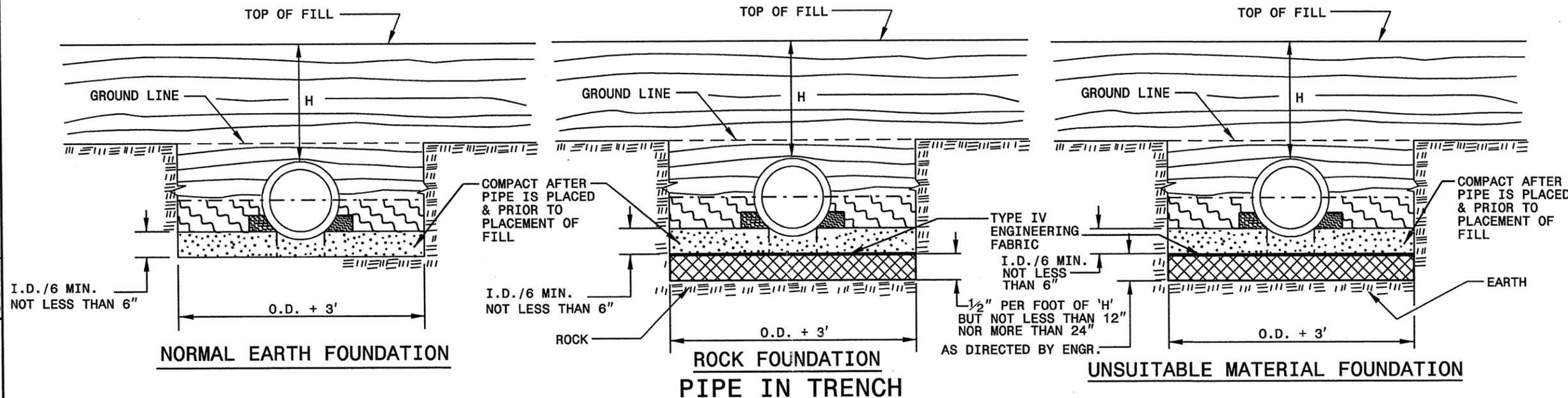
ENGLISH DETAIL DRAWING FOR  
METHOD OF PIPE INSTALLATION  
FLEXIBLE PIPE

STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

7-06

7-06



GENERAL NOTES:

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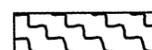
H = THE FILL HEIGHT MEASURED VERTICALLY AT ANY POINT ALONG THE PIPE FROM THE TOP OF THE PIPE TO THE TOP OF THE EMBANKMENT AT THAT POINT.

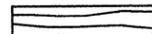
 TAKE CARE TO FULLY COMPACT HAUNCH ZONE OF PIPE BACKFILL.

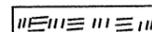
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DO NOT OPERATE HEAVY EQUIPMENT OVER ANY PIPE CULVERT UNTIL THE PIPE CULVERT HAS BEEN PROPERLY BACKFILLED AND COVERED WITH AT LEAST 3 FEET OF APPROVED MATERIAL.

----- SPRINGLINE OF PIPE

 SELECT BACKFILL MATERIAL CLASS III OR CLASS II, BELOW SPRINGLINE.

 APPROVED SUITABLE LOCAL MATERIAL ABOVE SPRINGLINE.

 UNDISTURBED EARTH MATERIAL

 SELECT MATERIAL CLASS V OR VI FOR FOUNDATION CONDITIONING. ENCAPSULATE WITH ENGINEERING FABRIC AS DIRECTED BY THE ENGINEER.

ENGLISH DETAIL DRAWING FOR  
METHOD OF PIPE INSTALLATION  
RIGID PIPE

ENGLISH DETAIL DRAWING FOR  
METHOD OF PIPE INSTALLATION  
RIGID PIPE

## FLEXIBLE PIPE

### Round Corrugated Steel Pipe 2 2/3 x 1/2 corrugation \*\*

Diameter (inches)	Minimum cover (inches)	Maximum Height of Cover (feet)				
		(Ga) 16	14	12	10	8
12	12	204	256			
15	12	162	204			
18	12	135	169	239		
21	12	115	145	204		
24	12	100	126	178		
30	12	79	100	142		
36	12	65	83	117	152	
42	12	55	70	100	130	160
48	12	48	61	87	113	139
54	12		54	77	100	123
60	12			69	90	111
66	12				81	100
72	12				74	91
78	12					81
84	12					69

### Round Corrugated Aluminum Pipe 2 2/3 x 1/2 corrugation \*\*

Diameter (inches)	Minimum cover (inches)	Maximum Height of Cover (feet)				
		(Ga) 16	14	12	10	8
12	12	123	155	218	281	344
15	12	98	123	174	224	275
18	12	81	102	144	187	228
21	12	69	87	123	160	195
24	12	60	76	108	139	171
27	12		67	95	123	151
30	12		60	85	111	136
36	12		50	71	92	113
42	12			60	78	96
48	12			52	68	84
54	12			46	50	74
60	12				50	62
66	12					51
72	12					41

\*\* FOR DIFFERENT CORRUGATIONS AND ARCH PIPES REFER TO ROADWAY DESIGN MANUAL OR MANUFACTURERS SPECIFICATION.

REFER TO THE FOLLOWING FOR PIPE SPECIFICATIONS

- CSP - AASHTO M36
- CAAP - AASHTO M196
- HDPE - AASHTO M294
- PVC - ASTM F949 or AASHTO M304

NOTES: FILL HEIGHTS SHOWN WERE CALCULATED USING AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

1' MINIMUM COVER FOR ALL SIDE DRAIN PIPE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS

## RIGID PIPE

- RCP - \* (Minimum fill) 1' for Class IV & CLASS V  
2' for Class III & Class II
- \* (Maximum fill) 10' - Class II pipe  
20' - Class III pipe  
30' - Class IV pipe  
40' - Class V pipe

(For fills > 40' & < 80' use LRFD Direct Design Method)

\* FILL HEIGHT IS MEASURED FROM THE TOP OF THE PIPE TO THE BOTTOM OF THE PAVEMENT STRUCTURE

REFER TO THE FOLLOWING FOR PIPE SPECIFICATIONS

- RCP - AASHTO M170

NOTES: FILL HEIGHTS SHOWN WERE CALCULATED USING AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

1' MINIMUM COVER FOR ALL SIDE DRAIN PIPE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS

STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

7-06

ENGLISH DETAIL DRAWING FOR  
METHOD OF PIPE INSTALLATION  
FILL HEIGHT TABLES

STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

7-06

ENGLISH DETAIL DRAWING FOR  
METHOD OF PIPE INSTALLATION  
FILL HEIGHT TABLES

PROJECT NO.	SHEET NO.	TOTAL NO.
W-5112	15	15

**SUMMARY OF QUANTITIES**

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT ALLOWED	LENGTH MI	WIDTH FT	UNDERCUT EXCAVATION CY	BORROW (INCLUDING 150 CY FOR SHOULDER RECONSTRUCTION) CY	REMOVAL OF EXISTING ASPHALT PAVEMENT SY	FOUNDATION COND MATL, MINOR STR TON	FOUNDATION CONDITIONING FABRIC SY	15" RCP CULVERTS, CLASS III LF	18" RCP CULVERTS, CLASS III LF	36" RCP CULVERTS, CLASS III LF	48" CORRUGATED STEEL PIPE CULVERTS, .109" LF	INCIDENTAL STONE BASE TONS
41876.3.1	Franklin	1	NC 96	FROM GRANVILLE COUNTY LINE TO US 1 (CAPITAL BLVD)	1	NO	YES	4.84	24	60	350	100	10.00	30.00	50.00	20.00	12.00	70.00	225
				<b>TOTAL FOR MAP NO. 1</b>				4.84		60	350	100	10.00	30.00	50.00	20.00	12.00	70.00	225
				<b>TOTAL FOR PROJ NO. 41876.3.1</b>				4.84		60	350	100	10.00	30.00	50.00	20.00	12.00	70.00	225
<b>GRAND TOTAL</b>								4.84		60	350	100	10.00	30.00	50.00	20.00	12.00	70.00	225

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	SHOULDER RECONSTRUCTION SMI	1/2" MILLING SY	INCIDENTAL MILLING SY	BASE COURSE, B25.0B TONS	SURFACE COURSE, S9.5B TONS	PG 64-22 PLANT MIX TONS	ASPHALT PLANT MIX, PAVEMENT REPAIR TONS	PATCHING EXISTING PAVEMENT TONS	PIPE COLLAR CY	6" DRIVEWAYS SY	RIP RAP, CLASS B TON	FILTER FABRIC FOR DRAINAGE SY	TEMPORARY SILT FENCE LF	SEDIMENT CONTROL STONE TON	SAFETY FENCE LF	PERMANENT SOIL REINFORCEMENT MAT SY	SPECIAL STILLING BASINS EA	WATTLE LF	SEED & MULCHING AC	IMPERVIOUS DIKE LF	RESPONSE FOR EROSION CONTROL EA
41876.3.1	Franklin	1	NC 96	FROM GRANVILLE COUNTY LINE TO US 1 (CAPITAL BLVD)	9.68	6,460	740	9,016	8,112	874	50	300	2.00	215	46	112	50	30	240.00	50	2	80	6.80	48	6
				<b>TOTAL FOR MAP NO. 1</b>	9.68	6,460	740	9,016	8,112	874	50	300	2.00	215	46	112	50	30	240.00	50	2	80	6.80	48	6
				<b>TOTAL FOR PROJ NO. 41876.3.1</b>	9.68	6,460	740	9,016	8,112	874	50	300	2.00	215	46	112	50	30	240.00	50	2	80	6.80	48	6
<b>GRAND TOTAL</b>					9.68	6,460	740	9,016	8,112	874	50	300	2.00	215	46	112	50	30	240.00	50	2	80	6.80	48	6

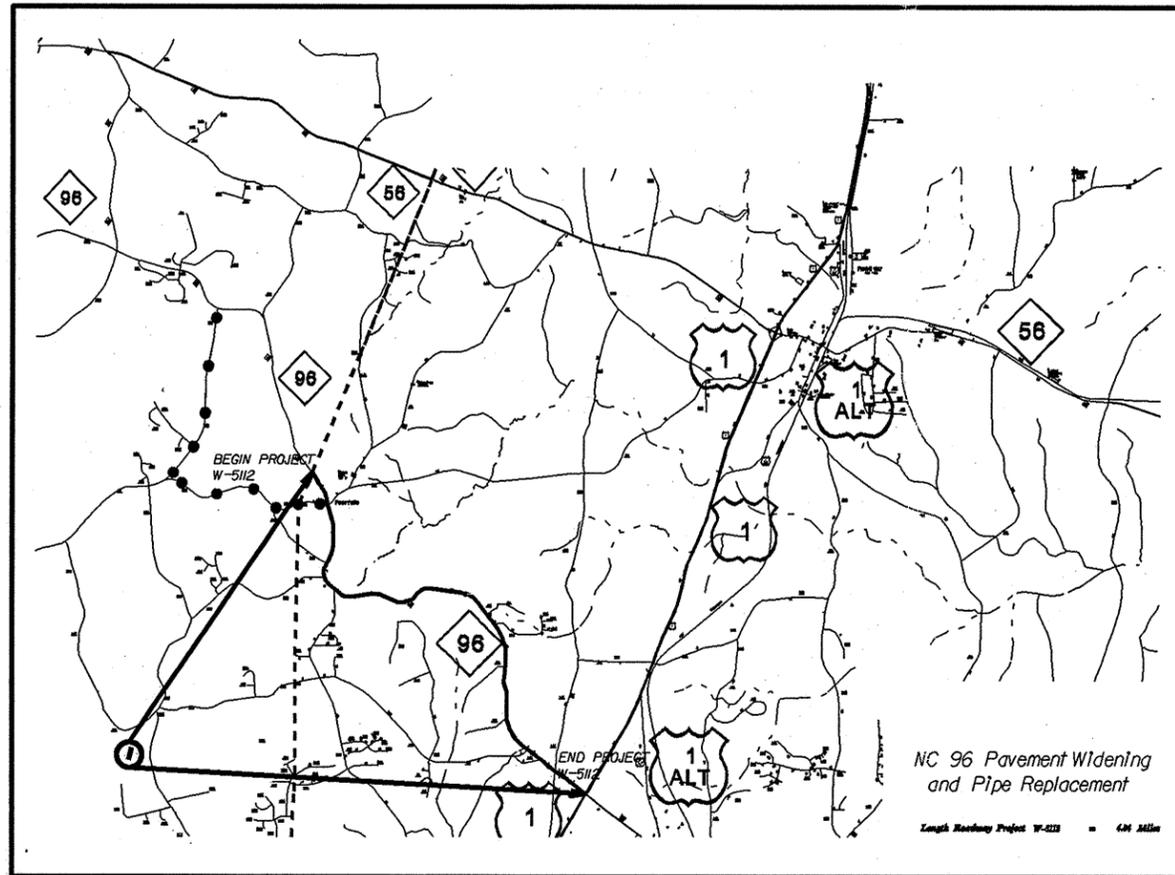
**THERMOPLASTIC AND PAINT QUANTITIES**

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	4400000000-E	4405000000-E	4410000000-E	4435000000-N	4445000000-E	4450000000-N	4685000000-E	4686000000-E			4695000000-E	4710000000-E	4725000000-E			4905000000-N
					STATIONARY WORK ZONE SIGN SF	PORTABLE WORK ZONE SIGN SF	BARRICADE MOUNTED WORK ZONE SIGN SF	CONES EA	BARRICADES (TYPE III) LF	FLAGGER (HOURLY) HR	4" X 90 M WHITE THERMO LF	4" X 120 M YELLOW THERMO LF	4" X 120 M WHITE THERMO LF	8" X 90 M YELLOW THERMO LF	24" X 120 M WHITE THERMO LF	THERMO LT ARROW 90 M EA	THERMO STR & RT ARROW 90 M EA	THERMO RT ARROW 90 M EA	SNOW PLOWABLE MARKERS EA	
41876.3.1	Franklin	1	NC 96	FROM GRANVILLE COUNTY LINE TO US 1 (CAPITAL BLVD)	107	492	78	130	104	1,960	52,078	51,110	565	360	86	13	2	2	445	
				<b>TOTAL FOR MAP NO. 1</b>	107	492	78	130	104	1,960	52,078	51,110	565	360	86	13	2	2	445	
				<b>TOTAL FOR PROJ NO. 41876.3.1</b>	107	492	78	130	104	1,960	52,078	51,110	565	360	86	13	2	2	445	
<b>GRAND TOTAL</b>					107	492	78	130	104	1,960	52,078	51,110	565	360	86	13	2	2	445	

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**TRANSPORTATION MANAGEMENT PLAN**

**FRANKLIN COUNTY**



**INDEX OF SHEETS**

SHEET NO.	TITLE
TMP-1	TITLE SHEET, AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND, AND TEMPORARY PAVEMENT MARKING
TMP-1B - 1C	TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES, GENERAL NOTES AND LOCAL NOTES)
TMP-2	DETAIL DRAWING FOR TWO-WAY UNDIVIDED AND URBAN FREEWAYS ADVANCED WORK ZONE WARNING SIGNS
TMP-3	PHASING
TMP-4	NC 96 OFFSITE DETOUR

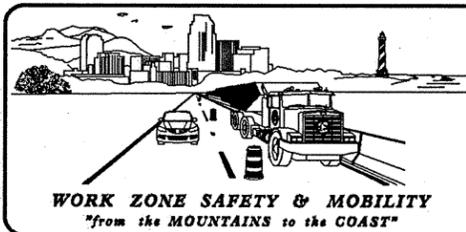
SHEET NO.

TMP-1

**W-5112**

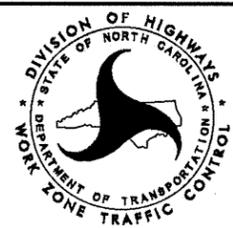
**TIP PROJECT:**

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sblennings AT WZTC244731



**N.C.D.O.T. WORK ZONE TRAFFIC CONTROL**  
1588 MAIL SERVICE CENTER (MSC) RALEIGH, NC 27699-1588  
1020 BIRCH RIDGE DRIVE, RALEIGH, NC 27610 (DELIVERY)  
PHONE: (919) 250-4094 FAX: (919) 250-4098

J. S. BOURNE, P.E. STATE TRAFFIC MANAGEMENT ENGINEER  
J. ISHAK, P.E. TRAFFIC CONTROL PROJECT ENGINEER  
TRAFFIC CONTROL PROJECT DESIGN ENGINEER  
S. B. JENNINGS TRAFFIC CONTROL DESIGN ENGINEER



APPROVED: \_\_\_\_\_  
DATE: \_\_\_\_\_

*Joseph Ishak*  
SEAL  
028380  
ENGINEER  
JOSHAH ISHAK  
DEC 18 2010

## 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 JULY 2006 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

<u>STD. NO.</u>	<u>TITLE</u>
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1180.01	SKINNY - DRUM

## LEGEND

### GENERAL

-  DIRECTION OF TRAFFIC FLOW
-  DIRECTION OF PEDESTRIAN TRAFFIC FLOW
-  EXIST. PVMT.
-  NORTH ARROW
-  PROPOSED PVMT.

 WORK AREA

 REMOVAL

 USER DEFINED (IF NEEDED)

 USER DEFINED (IF NEEDED)

### TEMPORARY PAVEMENT MARKING

### TRAFFIC CONTROL DEVICES

-  BARRICADE (TYPE III)
-  CONE
-  DRUM     SKINNY DRUM     TUBULAR MARKER
-  TEMPORARY CRASH CUSHION
-  FLASHING ARROW PANEL (TYPE C)
-  FLAGGER
-  LAW ENFORCEMENT
-  TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)
-  CHANGEABLE MESSAGE SIGN

### TEMPORARY SIGNING

-  PORTABLE SIGN
-  STATIONARY SIGN
-  STATIONARY OR PORTABLE SIGN

### SIGNALS

-  EXISTING
-  PROPOSED
-  TEMPORARY

### PAVEMENT MARKINGS

-  EXISTING LINES
-  TEMPORARY LINES

### PAVEMENT MARKERS

-  CRYSTAL/CRYSTAL
-  CRYSTAL/RED
-  YELLOW/YELLOW

### PAVEMENT MARKING SYMBOLS

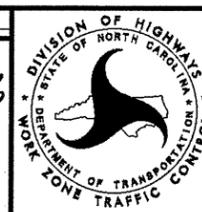
-  PAVEMENT MARKING SYMBOLS

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

*Joseph P. [Signature]*

Seal: NORTH CAROLINA PROFESSIONAL ENGINEERS SEAL 028380

Dec 13, 2010



ROADWAY STANDARD  
DRAWINGS & LEGEND

## MANAGEMENT STRATEGIES

## GENERAL NOTES

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 UNDESIRABLE 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 DURING HOLIDAYS AND SPECIAL EVENTS AS FOLLOWS:

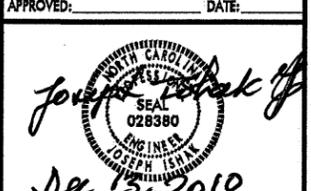
#### ROAD NAME

NC 98

#### 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 7:00 P.M. DECEMBER 31st TO 7:00 A.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 7:00 A.M. THE FOLLOWING TUESDAY.
3. FOR EASTER, BETWEEN THE HOURS OF 7:00 P.M. THURSDAY AND 7:00 A.M. MONDAY.
4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 7:00 P.M. FRIDAY TO 7:00 A.M. TUESDAY.
5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 7:00 P.M. THE DAY BEFORE INDEPENDENCE DAY AND 7:00 A.M. THE DAY AFTER INDEPENDENCE DAY.  
  
IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 7:00 P.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 7:00 A.M. THE TUESDAY AFTER INDEPENDENCE DAY.
6. FOR LABOR DAY, BETWEEN THE HOURS OF 7:00 P.M. FRIDAY AND 7:00 A.M. TUESDAY.
7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 7:00 P.M. TUESDAY TO 7:00 A.M. MONDAY.
8. FOR CHRISTMAS, BETWEEN THE HOURS OF 7:00 P.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 7:00 A.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

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APPROVED: _____ 	DATE: _____		<h1 style="margin: 0;">TRANSPORTATION OPERATIONS PLAN</h1>
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## GENERAL NOTES

### LANE AND SHOULDER CLOSURE REQUIREMENTS

- B) 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.
- C) 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.
- D) 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.
- E) 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.
- F) 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.
- G) DO NOT INSTALL MORE THAN 1.5 MILES OF LANE CLOSURE ON NC 96 MEASURED FROM THE BEGINNING OF THE MERGE TAPER TO THE END OF THE LANE CLOSURE.
- H) DO NOT INSTALL MORE THAN 2 SIMULTANEOUS LANE CLOSURES IN ANY ONE DIRECTION ON NC 96.
- I) PROVIDE A MINIMUM OF 1.5 MILES BETWEEN LANE CLOSURES, MEASURED FROM THE END OF ONE CLOSURE TO THE FIRST SIGN OF THE NEXT LANE CLOSURE.
- J) PROVIDE TRAFFIC CONTROL FOR APPROPRIATE LANE CLOSURES FOR SURVEYING DONE BY THE DEPARTMENT.

### PAVEMENT EDGE DROP OFF REQUIREMENTS

- K) 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.
- L) 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) 350 FT IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

### TRAFFIC PATTERN ALTERATIONS

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

### SIGNING

- N) 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.
- O) PROVIDE PERMANENT SIGNING.
- P) 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.
- Q) 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.
- R) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.
- S) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 350 FT IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

### TRAFFIC CONTROL DEVICES

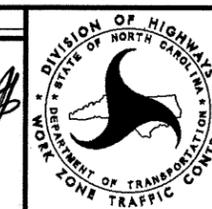
- T) SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH), EXCEPT 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY WHEN LANE CLOSURES ARE NOT IN EFFECT. WHEN SKINNY DRUMS ARE ALLOWED REFER TO SECTION 1180 OF STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES OR AS SHOWN IN THE PLANS.
- U) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

### PAVEMENT MARKINGS AND MARKERS

- V) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS SHOWN IN THE PAVEMENT MARKING PLAN.
- W) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:  
  

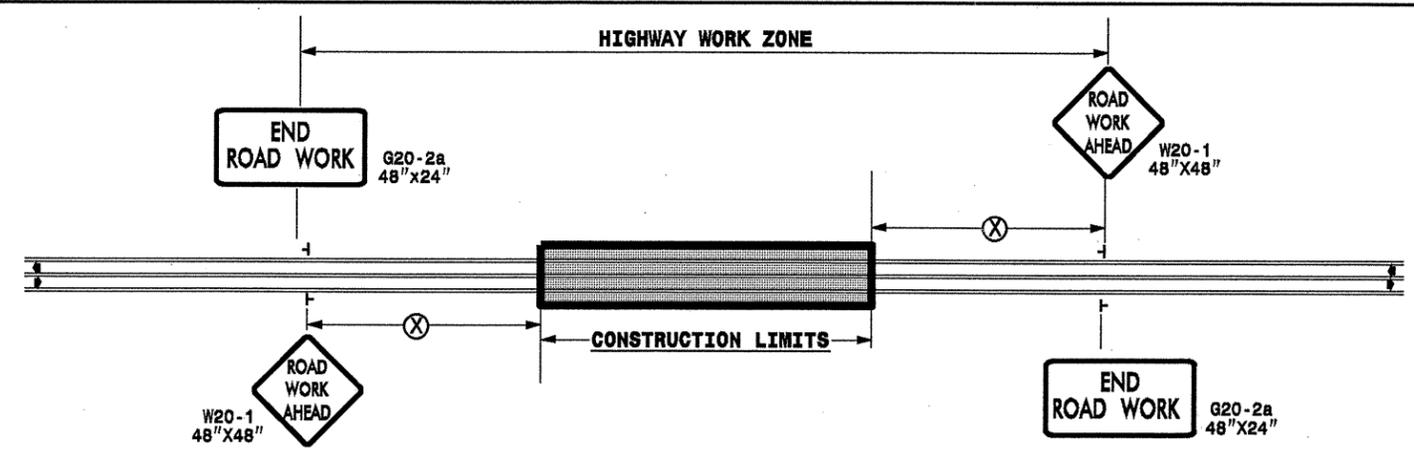
ROAD NAME	MARKING	MARKER
NC 96	PAINT	NONE
- X) PLACE ONE APPLICATION OF PAINT FOR TEMPORARY TRAFFIC PATTERNS. PLACE A SECOND APPLICATION OF PAINT SIX (6) MONTHS AFTER THE INITIAL APPLICATION AND EVERY SIX MONTHS AS DIRECTED BY THE ENGINEER.
- Y) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- Z) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_  
  
  
 Dec 13, 2010



**TRANSPORTATION  
OPERATIONS  
PLAN**

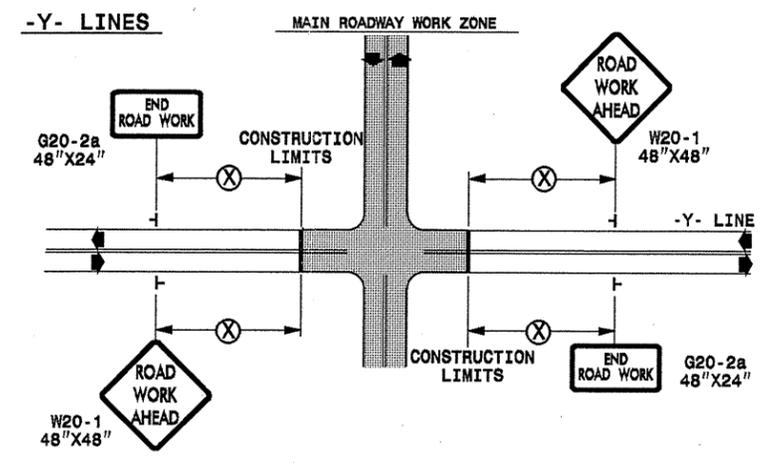
**TWO-WAY UNDIVIDED \*\* (L-LINES)**



POSTED SPEED LIMIT (M.P.H.)	RECOMMENDED MINIMUM SIGN SPACING
≤ 50	500'
≥ 55	1000'

STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

**ROADWAYS INTERSECTING ALONG 2 WAY UNDIVIDED WORK ZONE (Y-LINES)**



**GENERAL NOTES**

- USE FLUORESCENT ORANGE SHEETING (TYPE VII OR HIGHER) ON ALL ADVANCED WORK ZONE SIGNS.
- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK.
- SIGNS SHOWN ARE REQUIRED FOR WORK ZONES THAT WILL REMAIN IN EFFECT OVERNIGHT. FOR SHORT-TERM DAILY MAINTENANCE TYPE OPERATIONS, THIS SIGNING APPLICATION IS OPTIONAL; MAY USE ONLY APPLICABLE ROADWAY STANDARD DRAWINGS INSTEAD. HOWEVER, IF THIS SIGNING APPLICATION IS USED, SIGNS MAY BE PORTABLE MOUNTED.
- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE, FIELD ADJUST AS NECESSARY OR AS DIRECTED.
- USE 3LB STEEL U-CHANNEL POST OR 4" X 4" WOOD POST FOR ALL WORK ZONE SIGNS. 3LB STEEL U-CHANNEL POSTS MUST MEET THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 1094-1(B), MAY BE GALVANIZED STEEL, OR MAY BE PAINTED GREEN BY THE POST MANUFACTURER. SQUARE STEEL TUBING POSTS HAVING EQUIVALENT STRENGTH OF THE 3 LB STEEL U-CHANNEL POST ARE ALSO ACCEPTABLE FOR USE. ERECT SIGNS PER ROADWAY STANDARD DRAWING 1110.01. PAYMENT FOR WOOD POSTS, 3LB STEEL U-CHANNEL AND SQUARE STEEL TUBING POSTS WITH SIGNS WILL BE MADE ACCORDING TO STANDARD SPECIFICATION "WORK ZONE SIGNS" SECTION 1110.
- WHEN NECESSARY, USE SPLICING IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1110.01. REMOVE ENTIRE POST WHEN REMOVING SIGNS WITH SPLICED POSTS.
- DO NOT BACK BRACE SIGN SUPPORTS.
- \*\* TWO-WAY UNDIVIDED ADVANCE WARNING SIGN CONFIGURATION MAY BE USED ON URBAN MULTI-LANE FACILITIES WHERE CONDITIONS LIMIT THE USE OF DUAL MOUNTED SIGNS AS DETERMINED BY THE ENGINEER.

**LEGEND**

┆ STATIONARY SIGN

◀ DIRECTION OF TRAFFIC FLOW

DETAIL DRAWING FOR  
TWO-WAY UNDIVIDED  
WORK ZONE WARNING SIGNS

APPROVED: *Joseph Ishen* DATE: *See 12/2010*

SEAL 028380  
ENGINEER  
JOSEPH ISHEN

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

DETAIL DRAWING FOR TWO-WAY UNDIVIDED AND URBAN FREEWAYS  
WORK ZONE WARNING SIGNS

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## PHASING

NOTES:

1) MAINTAIN ACCESS TO ALL RESIDENCES AND BUSINESS AT ALL TIMES WITHIN THE PROJECT LIMITS, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

2) THERE IS NO COMPENSATION FOR TEMPORARY PAVEMENT MARKING. THE COST FOR TEMPORARY PAVEMENT MARKING WILL BE INCIDENTAL TO THE COST OF FINAL PAVEMENT MARKING.

STEP 1  
- INSTALL ADVANCED WORK ZONE WARNING SIGNS ON EXISTING NC 96 AS REQUIRED IN PROJECT NOTES. (SEE TMP-1B AND TMP-1C)

STEP 2  
- USING FLAGGERS, RSD 1101.02, SHEET 1 OF 9, BEGIN WIDENING AND DRAINAGE WORK. (SEE ROADWAY PLANS)

- INSTALL DETOUR SIGNS AND COVER. (SEE SHEET TMP-4)

ICT (3 DAYS)

COMPLETE THE WORK REQUIRED IN STEPS 3 THROUGH 5 IN THREE (3) CONSECUTIVE CALENDAR DAYS. SEE INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES.

STEP 3  
- INSTALL ROAD CLOSURE SIGNS AND BARRICADES. CLOSE NC 96 AND DETOUR TRAFFIC OFFSITE AS SHOWN ON SHEET TMP-4.

STEP 4  
- AWAY FROM TRAFFIC INSTALL 48" PIPE. (SEE ROADWAY PLANS)

STEP 5  
- REMOVE ALL TRAFFIC CONTROL DEVICES AND DETOUR SIGNING AND OPEN NC 96 TO TRAFFIC.

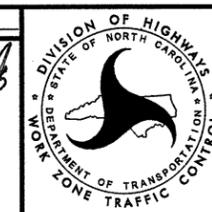
STEP 6  
- USING FLAGGERS, RSD 1101.02, SHEET 1 OF 9, COMPLETE THE FOLLOWING: (SEE ROADWAY PLANS)  
\* COMPLETE WIDENING AND REMAINING DRAINAGE WORK.  
\* COMPLETE RESURFACING; PLACE TEMPORARY PAVEMENT MARKING (PAINT) AT THE END OF EACH WORK DAY (CENTER LINES AND EDGE LINES).

STEP 7  
- USING FLAGGERS, RSD 1101.02, SHEET 1 OF 9, PLACE FINAL PAVEMENT MARKINGS. (SEE FINAL PAVEMENT MARKING PLANS)

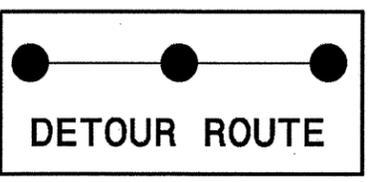
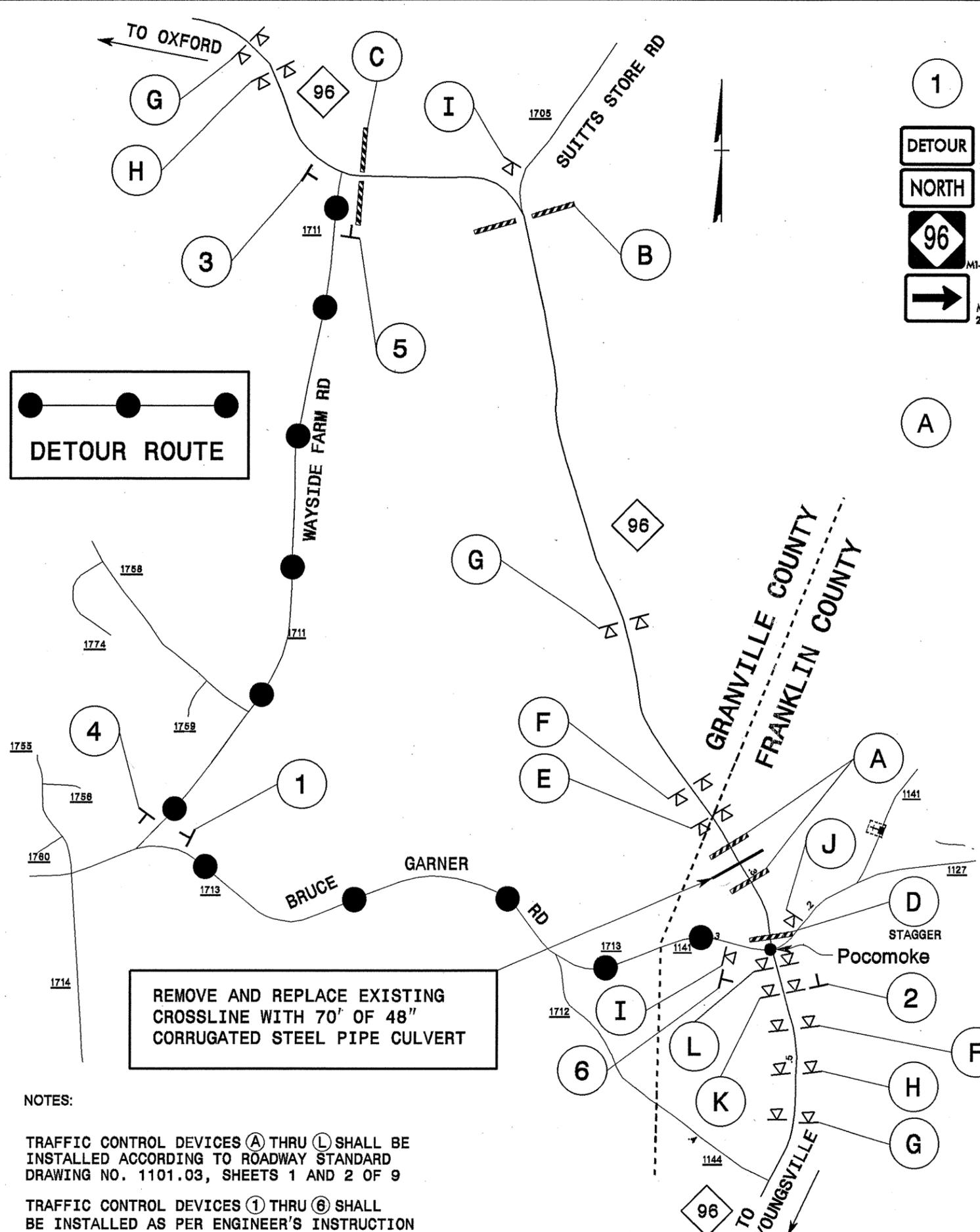
STEP 8  
- REMOVE ALL WORK ZONE TRAFFIC CONTROL DEVICES AND SIGNS.

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APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_  
*Joseph Isham*  
SEAL  
028380  
ENGINEER  
JOSEPH ISHAM  
Dec 14, 2010



PHASING

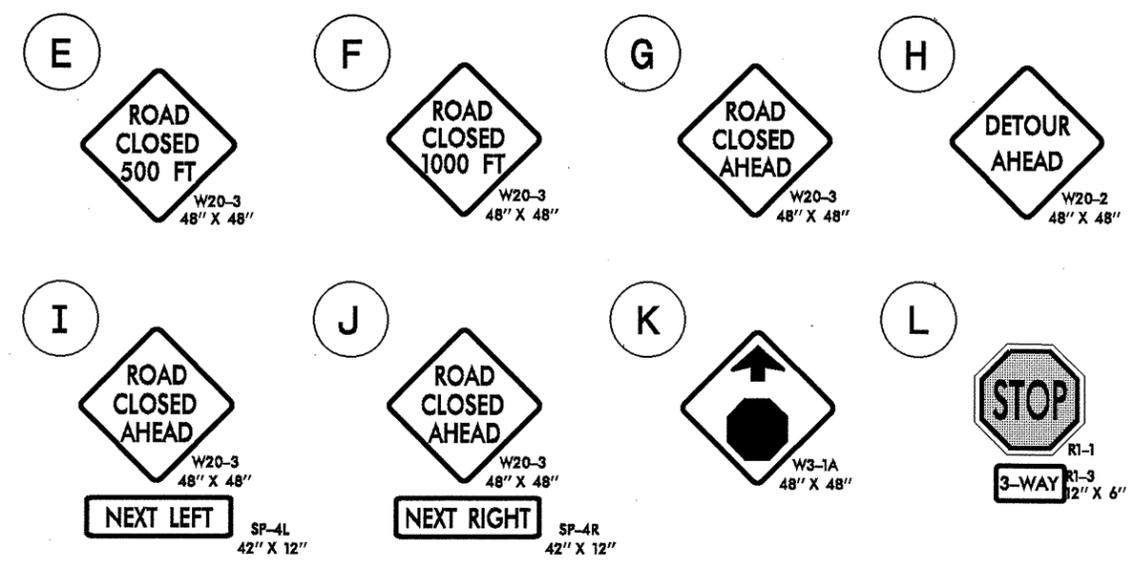
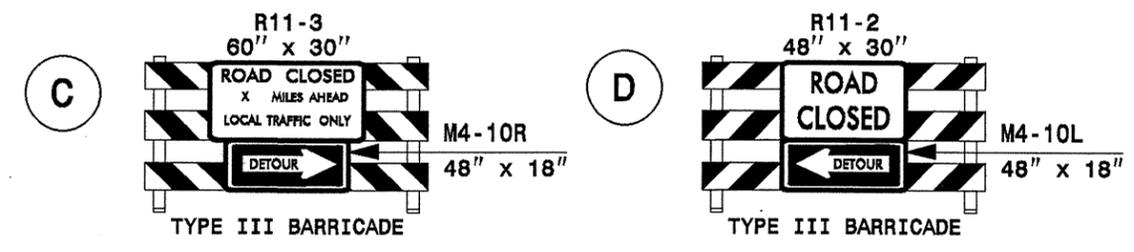
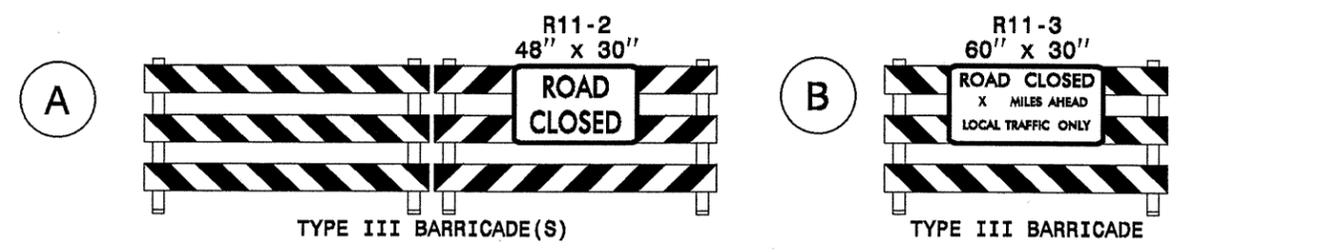
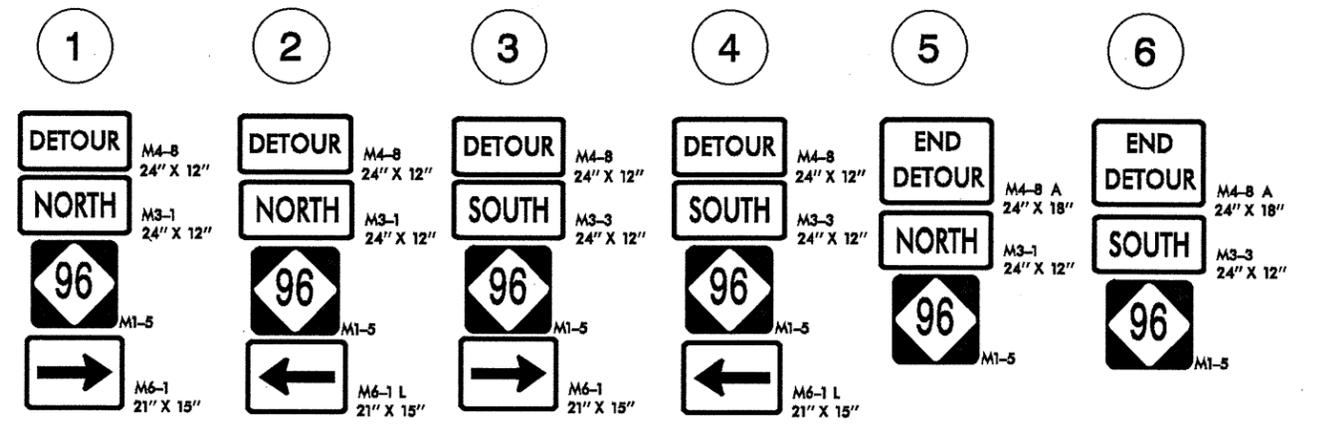


REMOVE AND REPLACE EXISTING  
CROSSLINE WITH 70' OF 48"  
CORRUGATED STEEL PIPE CULVERT

NOTES:

TRAFFIC CONTROL DEVICES (A) THRU (L) SHALL BE  
INSTALLED ACCORDING TO ROADWAY STANDARD  
DRAWING NO. 1101.03, SHEETS 1 AND 2 OF 9

TRAFFIC CONTROL DEVICES (1) THRU (6) SHALL  
BE INSTALLED AS PER ENGINEER'S INSTRUCTION



APPROVED:	DATE: Dec 15, 2010		<p>NC 96 OFFSITE DETOUR</p>

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