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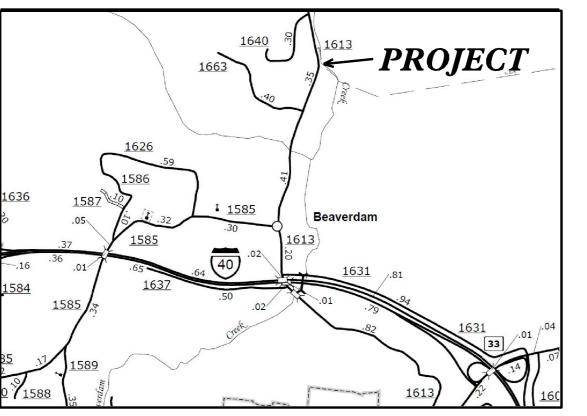
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This file or an individual page shall not be considered a certified document.

# PROJECT: W-5601GP

## ACT: DN00548

See Sheet 1A For Index of Sheets



VICINITY MAP

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

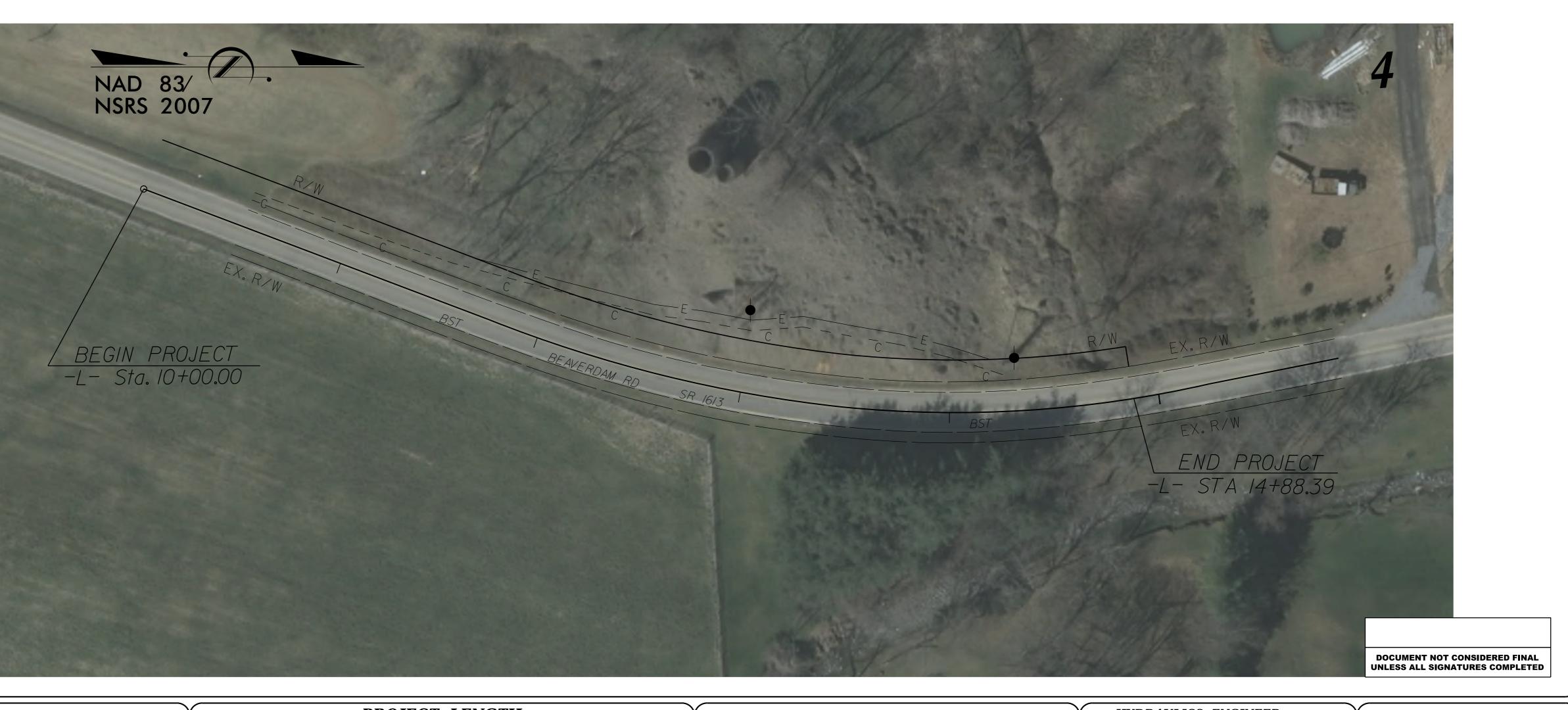
### HAYWOOD COUNTY

LOCATION: SR 1613 - BEAVERDAM ROAD

FROM: 10+00 TO: 14+88.39

TYPE OF WORK: GRADING, TRAFFIC CONTROL, EROSION CONTROL

STATE	STATE PROJECT REFERENCE NO.		NO.	SHEETS
N.C.	W-	1		
STAT	E PROJ. NO.	F. A. PROJ. NO.	DESCRIPT	NOI
501	38.1.119	HSIP-1613(009)	PE	
5013	38.3.199	HSIP-1613(009)	CON:	ST.
<u> </u>				



GRAPHIC SCALES				
30′	15′	0	30′	60′
PLANS				
30′	15′	0	30′	60′
PROFILE (HORIZONTAL)				
5′	2.5′	0	5′	10′
PROFILE (VERTICAL)				

<b>DESIGN</b>		DA	<b>TA</b>
AADT	=	200	(2015)
ADT	=		
K	=		%
D	=		%
Т	=		% *
V	=	40	MPH
* TTST	=	D	UAL
FUNC	CL	ASS	=
LOCAL			

PROJECT LENGTH

LENGTH OF TIP PROJECT NO. W-5601GP = 0.092 mi.

Prepared in the Office of:  DIVISION OF HIGHWAYS  1000 Birch Ridge Dr., Raleigh NC, 27610				
2012 STANDARD SPECIFICATIONS				
RIGHT OF WAY DATE:	JONATHAN WOODARD, PE  PROJECT ENGINEER			
LETTING DATE: 02/14/2017	MARK HILL, PE PROJECT DESIGN ENGINEER			

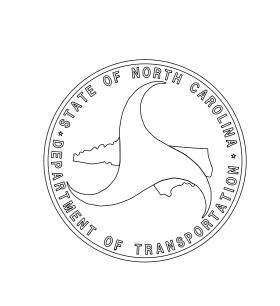
HYDRAULICS ENGINEER

P.E.

SIGNATURE:

SIGNATURE:

ROADWAY DESIGN
ENGINEER



PROJECT REFERENCE NO.

W-560IGP

ROADWAY DESIGN ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

INDEX OF SHEETS

SHEET NUMBER SHEET

1 TITLE SHEET

1A INDEX OF SHEETS, GENERAL NOTES, AND STANDARD DRAWINGS

1B CONVENTIONAL SYMBOLS

2A-1 PAVEMENT SCHEDULE AND TYPICAL SECTIONS

4 PLAN SHEET

TMP-1 TRAFFIC MANAGEMENT PLANS

EC-1 THRU EC-4 EROSION CONTROL PLANS

GENERAL NOTES:

2012 SPECIFICATIONS

EFFECTIVE:

01-17-2012

REVISED:

10-31-2014

CLEARING:

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

SHOULDER CONSTRUCTION:

ASPHALT, EARTH, AND CONCRETE SHOULDER CONSTRUCTION ON THE HIGH SIDE OF SUPERELEVATED CURVES SHALL BE IN ACCORDANCE WITH STD. NO. 560.01

UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE AT&T

ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS.

RIGHT-OF-WAY MARKERS:

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

2012 ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch – N. C. Department of Transportation – Raleigh, N. C., Dated January, 2012 are applicable to this project and by reference hereby are considered a part of these plans:

EFF. 01-17-2012 REV. 02-29-2016

STD.NO. TITLE

DIVISION 2 - EARTHWORK 200.02 Method of Clearing - Method II

DIVISION 5 - SUBGRADE, BASES, AND SHOULDERS

560.01 Method of Shoulder Construction - High Side of Superelevated Curve - Method 1

ign Files\Haywood\DNØØ548 - Beaverdam Rd\Plans\W-56Ø1GP\_Rdy\_typ.dgn

### STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS

CONVENTIONAL
Note: Not to Scale

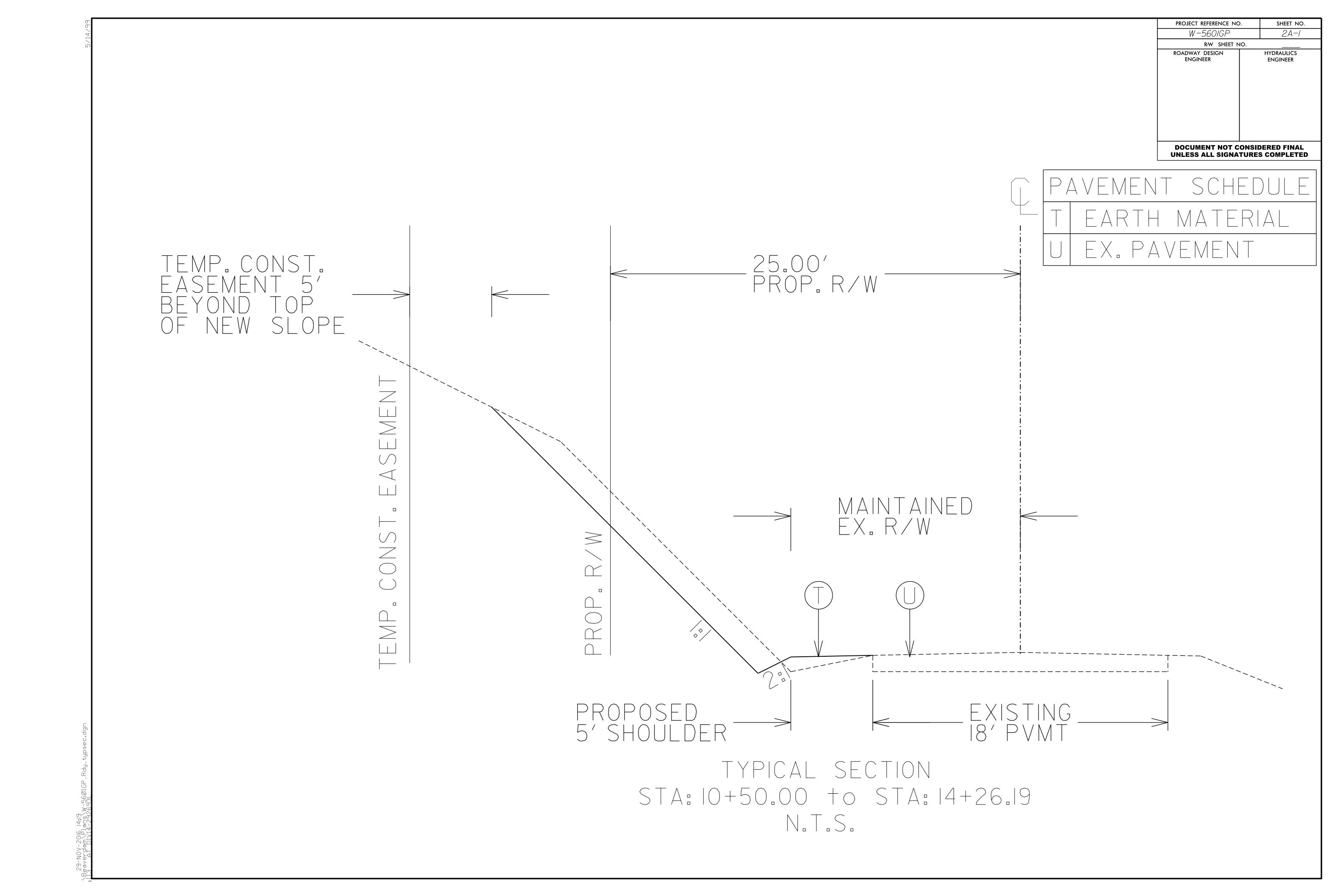
PLAN
SHEET SYMBOLS
\*S.U.E. = Subsurface Utility Engineering

State Line	
County Line	
Township Line	
City Line	
Reservation Line	
Property Line	
Existing Iron Pin	C
Property Corner	
Property Monument	
Parcel/Sequence Number	
Existing Fence Line	×××-
Proposed Woven Wire Fence	<del></del>
Proposed Chain Link Fence	
Proposed Barbed Wire Fence	
Existing Wetland Boundary	
Proposed Wetland Boundary	
Existing Endangered Animal Boundary —	
Existing Endangered Plant Boundary ——	
Existing Historic Property Boundary	
Known Contamination Area: Soil	
Potential Contamination Area: Soil	
Known Contamination Area: Water	
Potential Contamination Area: Water	
Potential Contamination Area: Water  Contaminated Site: Known or Potential	
Known Contamination Area: Water  Potential Contamination Area: Water  Contaminated Site: Known or Potential  BUILDINGS AND OTHER CUI	——————————————————————————————————————
Potential Contamination Area: Water  Contaminated Site: Known or Potential  BUILDINGS AND OTHER CUI  Gas Pump Vent or U/G Tank Cap	——————————————————————————————————————
Potential Contamination Area: Water  Contaminated Site: Known or Potential  BUILDINGS AND OTHER CUI  Gas Pump Vent or U/G Tank Cap  Sign	——————————————————————————————————————
Potential Contamination Area: Water  Contaminated Site: Known or Potential  BUILDINGS AND OTHER CUI  Gas Pump Vent or U/G Tank Cap  Sign	——————————————————————————————————————
Potential Contamination Area: Water  Contaminated Site: Known or Potential  BUILDINGS AND OTHER CUI  Gas Pump Vent or U/G Tank Cap  Sign  Well	
Potential Contamination Area: Water  Contaminated Site: Known or Potential  BUILDINGS AND OTHER CUL  Gas Pump Vent or U/G Tank Cap  Sign  Well  Small Mine	
Potential Contamination Area: Water  Contaminated Site: Known or Potential  BUILDINGS AND OTHER CUI  Gas Pump Vent or U/G Tank Cap	
Potential Contamination Area: Water  Contaminated Site: Known or Potential  BUILDINGS AND OTHER CUL  Gas Pump Vent or U/G Tank Cap  Sign  Well  Small Mine  Foundation	
Potential Contamination Area: Water  Contaminated Site: Known or Potential  BUILDINGS AND OTHER CUL  Gas Pump Vent or U/G Tank Cap  Sign  Well  Small Mine  Foundation  Area Outline	
Potential Contamination Area: Water  Contaminated Site: Known or Potential  BUILDINGS AND OTHER CUL  Gas Pump Vent or U/G Tank Cap  Sign  Well  Small Mine  Foundation  Area Outline  Cemetery	
Potential Contamination Area: Water  Contaminated Site: Known or Potential  BUILDINGS AND OTHER CUL  Gas Pump Vent or U/G Tank Cap  Sign  Well  Small Mine  Foundation  Area Outline  Cemetery  Building  School	
Potential Contamination Area: Water  Contaminated Site: Known or Potential  BUILDINGS AND OTHER CUL  Gas Pump Vent or U/G Tank Cap  Sign  Well  Small Mine  Foundation  Area Outline  Cemetery  Building	
Potential Contamination Area: Water Contaminated Site: Known or Potential  BUILDINGS AND OTHER CUI Gas Pump Vent or U/G Tank Cap  Sign Well Small Mine Foundation Area Outline Cemetery Building School Church Dam	
Potential Contamination Area: Water Contaminated Site: Known or Potential  BUILDINGS AND OTHER CUI Gas Pump Vent or U/G Tank Cap  Sign Well Small Mine Foundation Area Outline Cemetery Building School Church Dam	
Potential Contamination Area: Water Contaminated Site: Known or Potential  BUILDINGS AND OTHER CUI  Gas Pump Vent or U/G Tank Cap  Sign  Well  Small Mine  Foundation  Area Outline  Cemetery  Building  School  Church  Dam  HYDROLOGY:  Stream or Body of Water	
Potential Contamination Area: Water  Contaminated Site: Known or Potential  BUILDINGS AND OTHER CUI  Gas Pump Vent or U/G Tank Cap  Sign  Well  Small Mine  Foundation  Area Outline  Cemetery  Building  School  Church  Dam  HYDROLOGY:  Stream or Body of Water  Hydro, Pool or Reservoir	
Potential Contamination Area: Water Contaminated Site: Known or Potential  BUILDINGS AND OTHER CUI  Gas Pump Vent or U/G Tank Cap  Sign  Well  Small Mine  Foundation  Area Outline  Cemetery  Building  School  Church  Dam  HYDROLOGY:  Stream or Body of Water	
Potential Contamination Area: Water  Contaminated Site: Known or Potential  BUILDINGS AND OTHER CUI  Gas Pump Vent or U/G Tank Cap  Sign  Well  Small Mine  Foundation  Area Outline  Cemetery  Building  School  Church  Dam  HYDROLOGY:  Stream or Body of Water  Hydro, Pool or Reservoir  Jurisdictional Stream	
Potential Contamination Area: Water  Contaminated Site: Known or Potential  BUILDINGS AND OTHER CUI  Gas Pump Vent or U/G Tank Cap  Sign  Well  Small Mine  Foundation  Area Outline  Cemetery  Building  School  Church  Dam  HYDROLOGY:  Stream or Body of Water  Hydro, Pool or Reservoir  Jurisdictional Stream  Buffer Zone 1	
Potential Contamination Area: Water  Contaminated Site: Known or Potential  BUILDINGS AND OTHER CUI  Gas Pump Vent or U/G Tank Cap  Sign  Well  Small Mine  Foundation  Area Outline  Cemetery  Building  School  Church  Dam  HYDROLOGY:  Stream or Body of Water  Hydro, Pool or Reservoir  Jurisdictional Stream  Buffer Zone 1  Buffer Zone 2	
Potential Contamination Area: Water  Contaminated Site: Known or Potential  BUILDINGS AND OTHER CUI  Gas Pump Vent or U/G Tank Cap  Sign  Well  Small Mine  Foundation  Area Outline  Cemetery  Building  School  Church  Dam  HYDROLOGY:  Stream or Body of Water  Hydro, Pool or Reservoir  Jurisdictional Stream  Buffer Zone 1  Buffer Zone 2  Flow Arrow  Disappearing Stream	
Potential Contamination Area: Water  Contaminated Site: Known or Potential  BUILDINGS AND OTHER CUI  Gas Pump Vent or U/G Tank Cap  Sign  Well  Small Mine  Foundation  Area Outline  Cemetery  Building  School  Church  Dam  HYDROLOGY:  Stream or Body of Water  Hydro, Pool or Reservoir  Jurisdictional Stream  Buffer Zone 1  Buffer Zone 2  Flow Arrow	
Potential Contamination Area: Water Contaminated Site: Known or Potential  BUILDINGS AND OTHER CUI  Gas Pump Vent or U/G Tank Cap  Sign  Well  Small Mine  Foundation  Area Outline  Cemetery  Building  School  Church  Dam  HYDROLOGY:  Stream or Body of Water  Hydro, Pool or Reservoir  Jurisdictional Stream  Buffer Zone 1  Buffer Zone 2  Flow Arrow  Disappearing Stream  Spring	

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	$\triangle$
Existing Right of Way Line	
Proposed Right of Way Line	$\frac{R}{W}$
Proposed Right of Way Line with Iron Pin and Cap Marker	$-\frac{R}{W}$
Proposed Right of Way Line with  Concrete or Granite R/W Marker	
Proposed Control of Access Line with Concrete C/A Marker	
Existing Control of Access	$\frac{\overline{C}}{\underline{A}}$
Proposed Control of Access ————	
Existing Easement Line ————————————————————————————————————	——— E ———
Proposed Temporary Construction Easement –	——Е——
Proposed Temporary Drainage Easement ——	TDE
Proposed Permanent Drainage Easement ——	PDE
Proposed Permanent Drainage / Utility Easemer	nt —— 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	<b>♦</b>
ROADS AND RELATED FEATURE	ES:
Existing Edge of Pavement	
Existing Curb	
Proposed Slope Stakes Cut	<u>C</u>
Proposed Slope Stakes Fill ————	<del>F</del>
Proposed Curb Ramp	CR
Existing Metal Guardrail ————	
Proposed Guardrail ————	
Existing Cable Guiderail	
Proposed Cable Guiderail	
Equality Symbol	lacktriangle
Pavement Removal ————	
VEGETATION:	
Single Tree	슌
Single Shrub	₿
Hedge ————	
Woods Line —	_(;,_(;,_(;,_(;,_(;,_(;,_

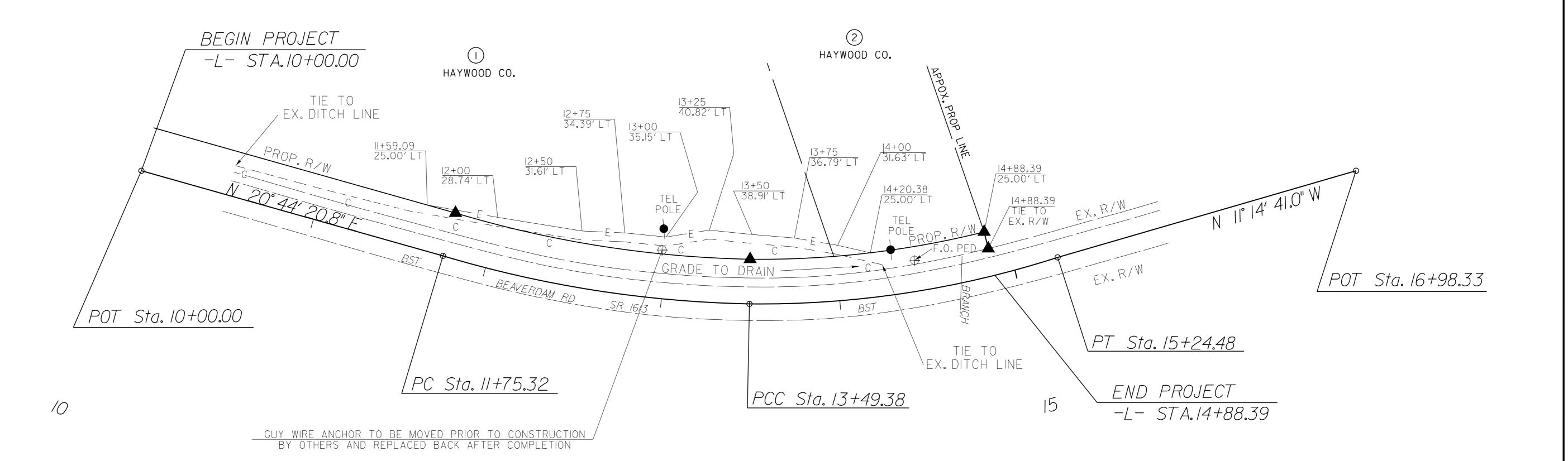
Orchard —	
Vineyard	Vineyard
EXISTING STRUCTURES:	
MAJOR:	
Bridge, Tunnel or Box Culvert	CONC
Bridge Wing Wall, Head Wall and End Wall –	CONC WW
MINOR:  Head and End Wall ——————————————————————————————————	CONC HW
Pipe Culvert	
Footbridge	
Drainage Box: Catch Basin, DI or JB	СВ
Paved Ditch Gutter	
Storm Sewer Manhole	(S)
Storm Sewer Marinole	<u> </u>
UTILITIES:	
POWER:	I
Existing Power Pole	•
Proposed Power Pole ————	Ŏ
Existing Joint Use Pole	- <b>⊕</b> - 1
Proposed Joint Use Pole	<b>-</b> O-
Power Manhole	(P)
Power Line Tower	
Power Transformer	$\square$
U/G Power Cable Hand Hole	
H-Frame Pole	•—•
U/G Power Line LOS B (S.U.E.*)	
U/G Power Line LOS C (S.U.E.*)	
U/G Power Line LOS D (S.U.E.*)	
TELEPHONE:	
Existing Telephone Pole	-•-
Proposed Telephone Pole	-0-
Telephone Manhole	$\bigcirc$
Telephone Pedestal	
Telephone Cell Tower	<u>,</u>
U/G Telephone Cable Hand Hole ———	H <sub>H</sub>
U/G Telephone Cable LOS B (S.U.E.*)	t
U/G Telephone Cable LOS C (S.U.E.*)	
U/G Telephone Cable LOS D (S.U.E.*)	Т ———
U/G Telephone Conduit LOS B (S.U.E.*)	— — — TC— — — —
U/G Telephone Conduit LOS C (S.U.E.*)	
U/G Telephone Conduit LOS D (S.U.E.*)	ТС ———
U/G Fiber Optics Cable LOS B (S.U.E.*)	— — — T FO— — ·
U/G Fiber Optics Cable LOS C (S.U.E.*)	—— — т FO— — ——
U/G Fiber Optics Cable LOS D (S.U.E.*)	T FO

WATER:	
Water Manhole	W
Water Meter	
Water Valve	$\otimes$
Water Hydrant	<b>©</b>
U/G Water Line LOS B (S.U.E*)	
U/G Water Line LOS C (S.U.E*)	
U/G Water Line LOS D (S.U.E*)	
Above Ground Water Line	A/G Water
TV:	
TV Pedestal ————————————————————————————————————	C
TV Tower	$\bigotimes$
U/G TV Cable Hand Hole	H <sub>H</sub>
U/G TV Cable LOS B (S.U.E.*)	Tv
U/G TV Cable LOS C (S.U.E.*)	
U/G TV Cable LOS D (S.U.E.*)	
U/G Fiber Optic Cable LOS B (S.U.E.*)	
U/G Fiber Optic Cable LOS C (S.U.E.*)	
U/G Fiber Optic Cable LOS D (S.U.E.*)	
GAS:	
Gas Valve	$\Diamond$
Gas Meter —	•
U/G Gas Line LOS B (S.U.E.*)	·
U/G Gas Line LOS C (S.U.E.*)	
U/G Gas Line LOS D (S.U.E.*)	
Above Ground Gas Line	
SANITARY SEWER:	
Sanitary Sewer Manhole	
Sanitary Sewer Cleanout —————	Ÿ
U/G Sanitary Sewer Line ————————————————————————————————————	
Above Ground Sanitary Sewer	
SS Forced Main Line LOS B (S.U.E.*)	
SS Forced Main Line LOS C (S.U.E.*)	
SS Forced Main Line LOS D (S.U.E.*)———	FSS
MISCELLANEOUS:	
Utility Pole —	•
Utility Pole with Base —	
Utility Located Object —	
Utility Traffic Signal Box —	S
Utility Unknown U/G Line LOS B (S.U.E.*)	
U/G Tank; Water, Gas, Oil ———————————————————————————————————	
Underground Storage Tank, Approx. Loc. ——	
A/G Tank; Water, Gas, Oil ———————————————————————————————————	
Geoenvironmental Boring	
U/G Test Hole LOS A (S.U.E.*)	O
Abandoned According to Utility Records ——	
End of Information —	, , , , , , , , , , , , , , , , , , , ,



PROJECT REFERENCE NO	).	SHEET NO.
W-560IGP		4
R/W SHEET NO.		
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETEI		

NAD 83/ NSRS 2007



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PROJ. REFERENCE NO. SHEET NO. W-5601GP TMP - 1

### **MANAGEMENT STRATEGIES**

USING ROADWAY STANDARD DRAWING 1101.02 SHEET LOF 15, TEMPORARILY CLOSE THE SOUTHBOUND LANE OF SR 1613 (BEAVERDAM RD) AND SHIFT TRAFFIC INTO A ONE-LANE TWO WAY PATTERN WHILE WORK IS BEING PERFORMED.

USING ROADWAY STANDARD DRAWING 1101.02, SHEET LOF 15, REMOVE THE TEMPORARY LANE CLOSURE AND SHIFT TRAFFIC BACK INTO A TWO-LANE TWO-WAY PATTERN AT THE END OF THE WORK DAY OR WHEN WORK IS COMPLETED. WHICH EVER OCCURS FIRST.

### **STANDARD DRAWINGS**

REV. SEPTEMBER 2011

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" -PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD.NO. TITLE

HOLOI WORK ZONE ADVANCE WARNING SIGNS 1101.02 TEMPORARY LANE CLOSURES IIIO.02 PORTABLE WORK ZONE SIGNS 1150.01 FLAGGING DEVICES

### GENERAL NOTES / LOCAL 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 UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

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

TIME RESTRICTIONS

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

ROAD NAME

SR 1613 – Beaverdam Rd

### HOLIDAY

FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.

FOR NEW YEAR'S, BETWEEN THE HOURS OF 7:00 A.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.

FOR EASTER, BETWEEN THE HOURS OF 5:00 P.M. THURSDAY AND 7:00 A.M. MONDAY.

FOR MEMORIAL DAY, BETWEEN THE HOURS OF 7:00 A.M. FRIDAY TO 7:00 A.M. TUESDAY.

FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 5:00 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 5:00 P.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 7:00 A.M. THE TUESDAY AFTER

FOR LABOR DAY, BETWEEN THE HOURS OF 5:00 P.M. FRIDAY AND 7:00 A.M. TUESDAY.

FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 5:00 P.M. TUESDAY TO 7:00 A.M.

FOR CHRISTMAS, BETWEEN THE HOURS OF 5:00 P.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 7:00 A.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

LANE AND SHOULDER CLOSURE REQUIREMENTS

B) 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 BYBARRIER 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.

TRAFFIC PATTERN ALTERATIONS

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

D) 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.

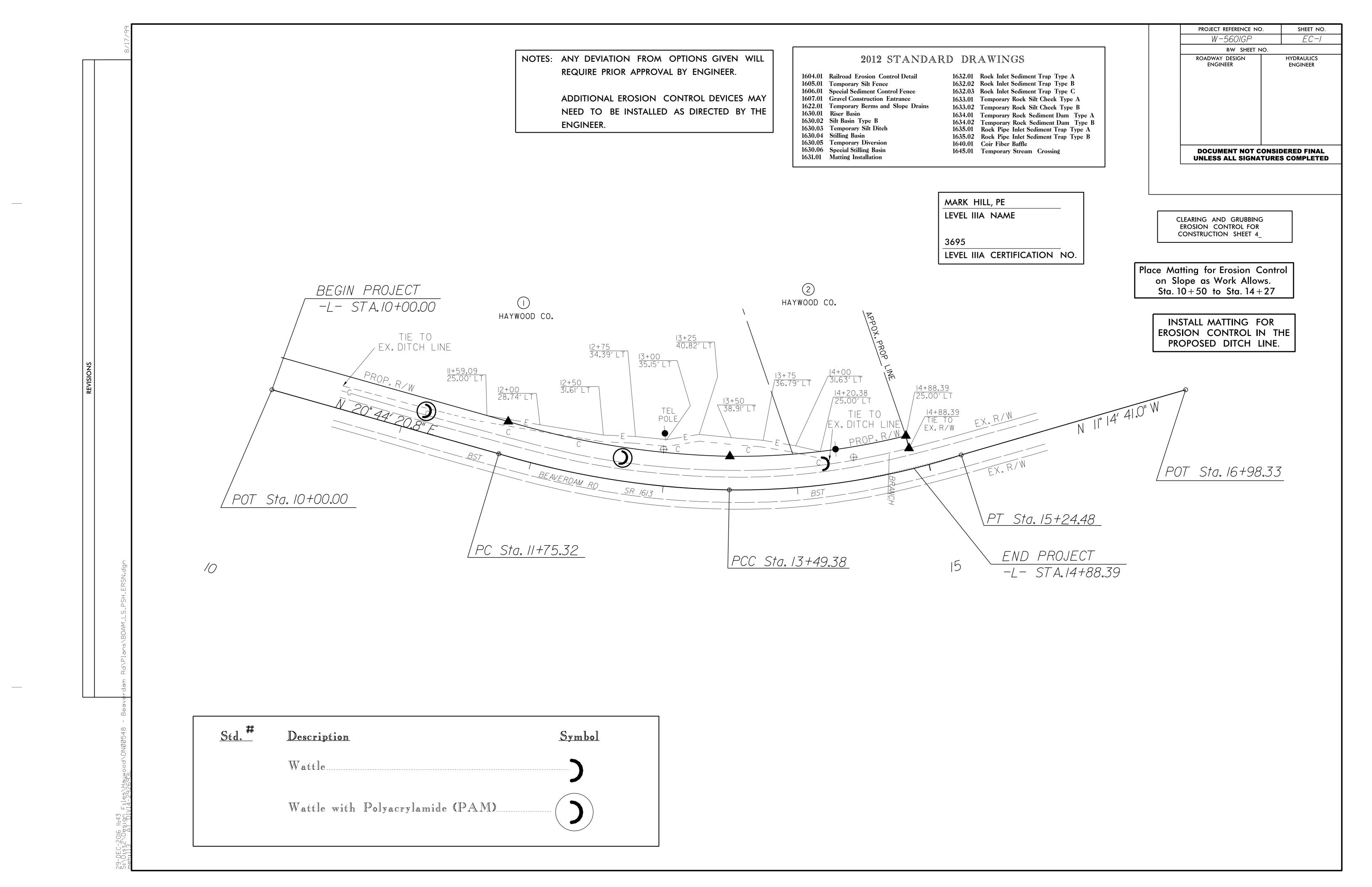
E) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LAND CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.

F) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING THE TRAFFIC PATTERN.



TRANSPORTATION MANAGEMENT PLAN

DOCUMENT NOT CONSIDERED FINAL **UNLESS ALL SIGNATURES COMPLETED** 



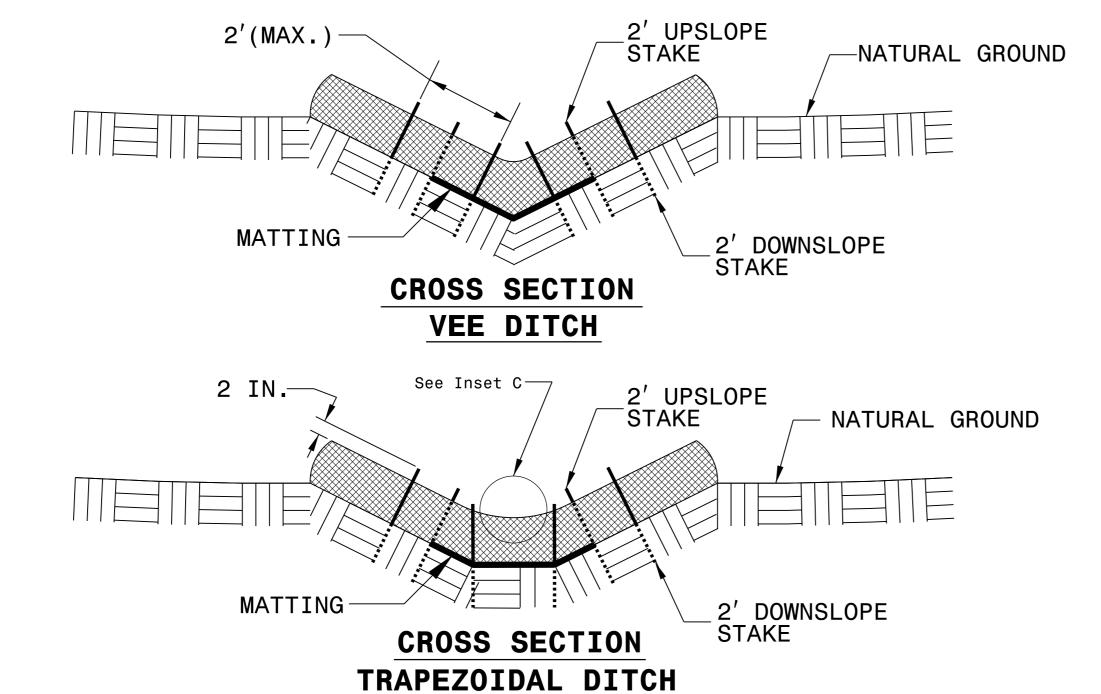
### WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL

EXCELSIOR WATTLE

MATTING

BACK
SLOPE

ISOMETRIC VIEW



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.

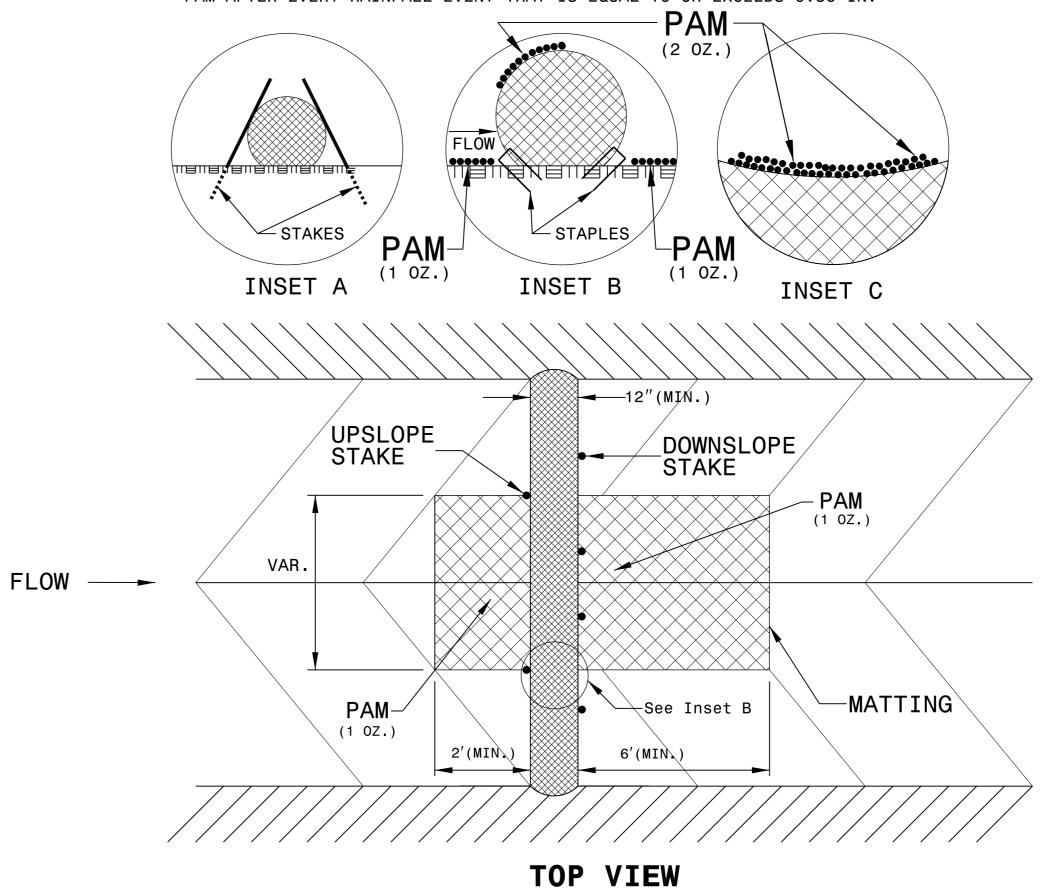
AND AT EACH END TO SECURE IT TO THE SOIL.

INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE

PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.

INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.



PROJECT REFERENCE NO.

W-560/GP

RW SHEET NO.

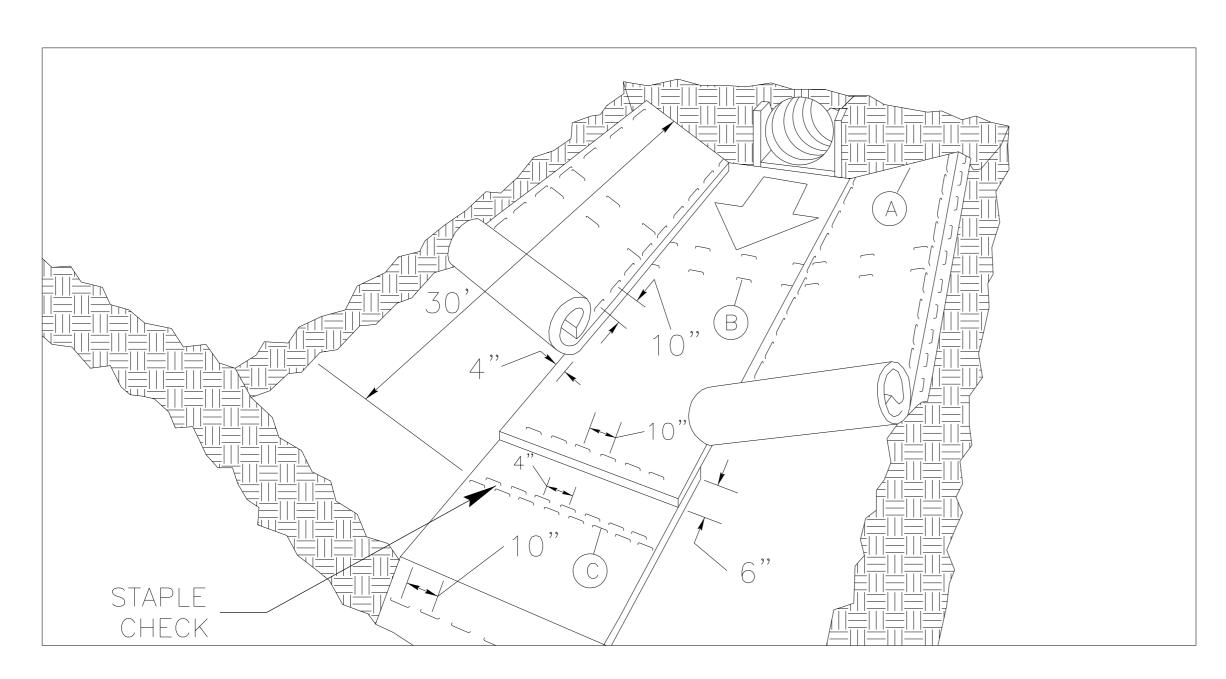
ROADWAY DESIGN
ENGINEER

HYDRAULICS
ENGINEER

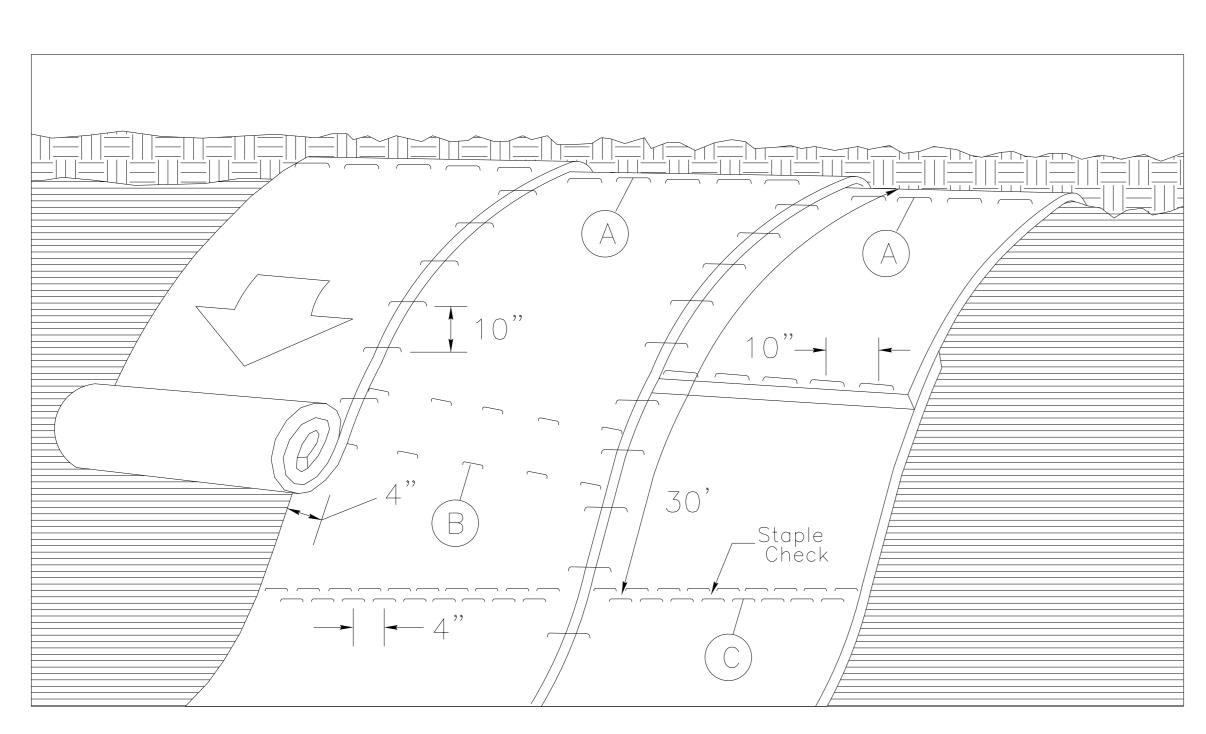
BOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

### MATTING INSTALLATION DETAIL

PROJECT REFE	PROJECT REFERENCE NO.		SHEET NO.
W-56	W−560IGP		EC-3
R/V	V SHEET NO	Ο.	
ROADWAY DE ENGINEER	SIGN		HYDRAULICS ENGINEER



MATTING IN DITCHES



**MATTING ON SLOPES** 

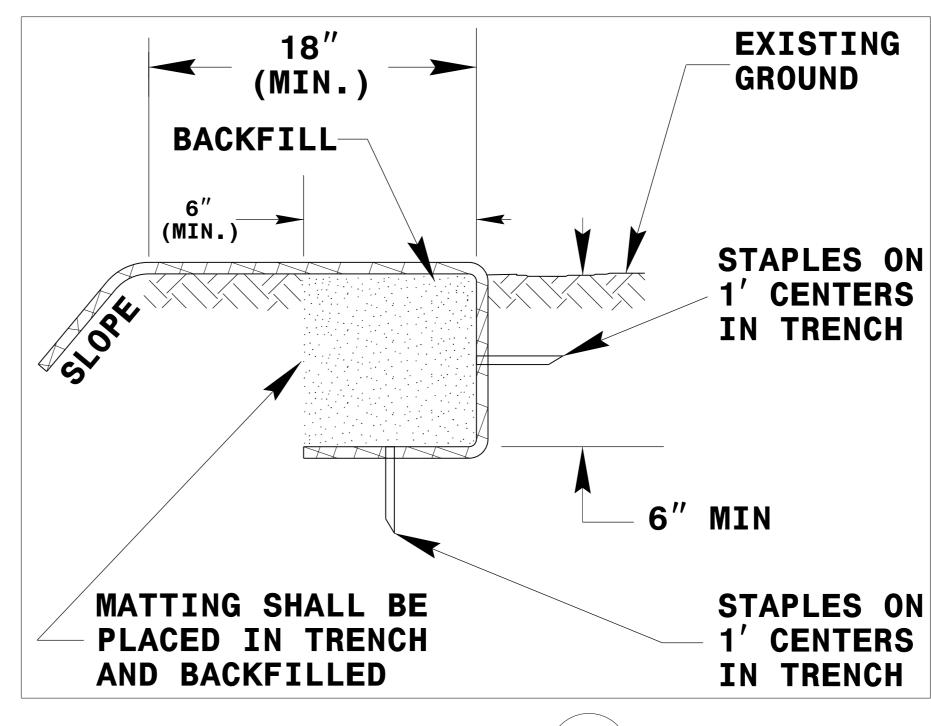
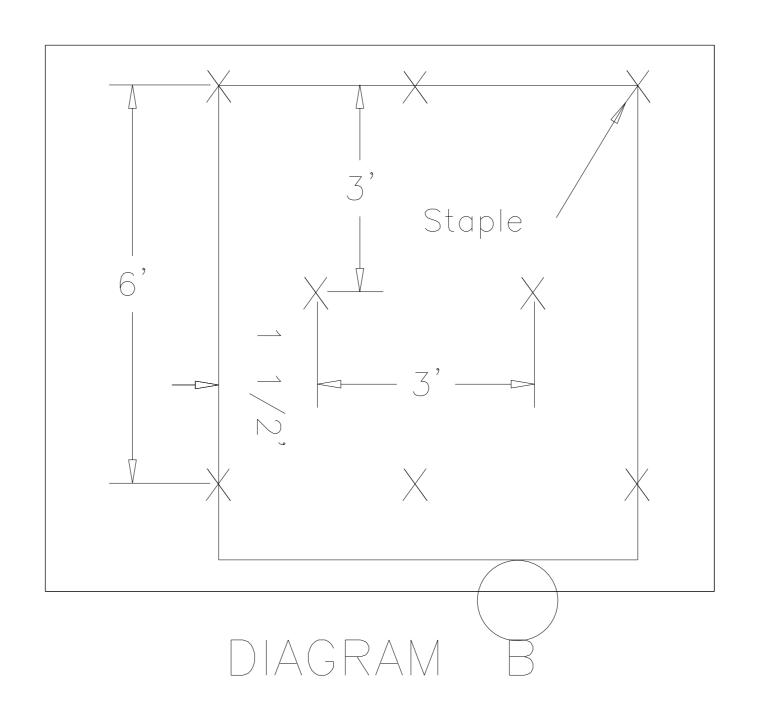
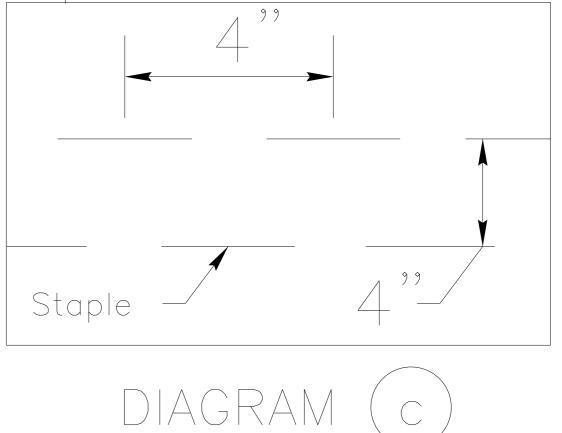


DIAGRAM (



Staple Check Pattern



NOTES:

THIS DETAIL APPLIES TO STRAW, EXCELSIOR, AND PERMANENT SOIL REINFORCEMENT MAT (PSRM) INSTALLATION.

STAPLES SHALL BE NO. 11 GAUGE STEEL WIRE FORMED INTO A "U" SHAPE WITH A MINIMUM THROAT WIDTH OF 1 INCH AND NOT LESS THAN 6 INCHES IN LENGTH.

NOT TO SCALE

### DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA

PROJECT REFERENCE NO.		SHEET NO.
W-5601 GP		EC-4
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER

### SOIL STABILIZATION TIMEFRAMES

SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10'OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1,14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	I4 DAYS	7 DAYS FOR SLOPES GREATER THAN 50'IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	I4 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.