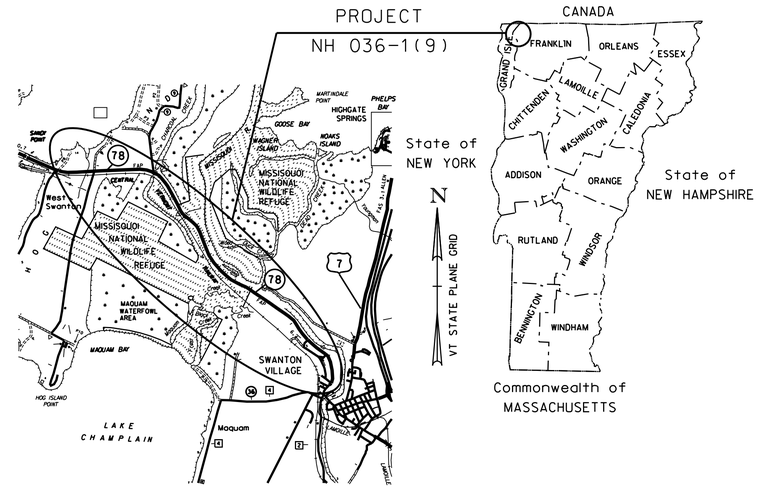
STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC DATA

SECTION	DESIGN SPEED	ADT		DHV		ADTT		%T		%D		10 YR ESALs	20 YR ESALs
		2014	2024	2014	2024	2014	2024	2014	2024	2014	2024		
SECTION 1	50	6100	6300	690	710	620	730	10.0	11.4	57	57	2,482,000	5,369,000
SECTION 2	50	5900	6100	750	770	710	850	13.5	15.6	59	59	2,808,000	6,104,000
SECTION 3	40	7000	7200	850	870	740	870	10.0	11.4	57	57	3,369,000	7,661,000
SECTION 4	30	9500	9800	1000	1000	900	1000	6.6	7.3	57	57	4,441,000	10,039,000

SECTION 1 BEGIN PROJECT TO TABOR/CHURCH RD
SECTION 2 TABOR/CHURCH RD TO JONERGIN DR
SECTION 3 JONERGIN DR TO BROOKLYN ST
SECTION 4 BROOKLYN ST TO END PROJECT

BITUMINOUS CONCRETE PAVEMENT SUPERPAVE MIXTURE DESIGN CRITERIA	
DESIGN LIFE ESALS	3.686.910
DESIGN NUMBER OF GYRATIONS	65
PERFORMANCE GRADED ASPHALT BINDER	58-28

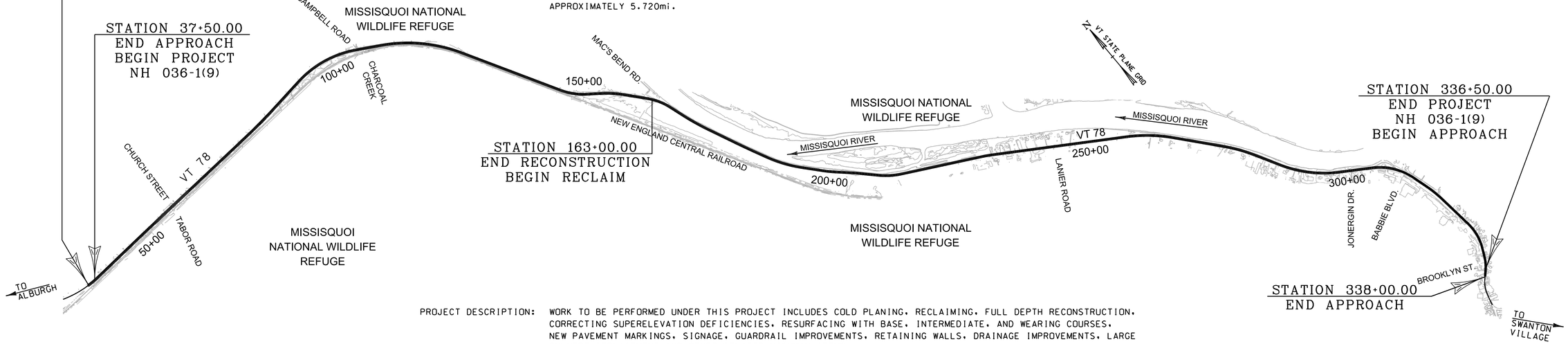


VICINITY MAP

0 1 2 3
SCALE IN MILES

PROPOSED IMPROVEMENT
ROADWAY PROJECT
TOWN OF SWANTON
COUNTY OF FRANKLIN
VT 78 (PRINCIPAL ARTERIAL) (NHS)

PROJECT LOCATION: BEGINING AT A POINT APPROXIMATELY 0.682 mi. FROM THE ALBURG/SWANTON TOWN LINE AND ENDING AT THE SWANTON VILLAGE LINE (MM 6.402) FOR A TOTAL DISTANCE OF APPROXIMATELY 5.720mi.



PROJECT DESCRIPTION: WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES COLD PLANING, RECLAIMING, FULL DEPTH RECONSTRUCTION, CORRECTING SUPERELEVATION DEFICIENCIES, RESURFACING WITH BASE, INTERMEDIATE, AND WEARING COURSES, NEW PAVEMENT MARKINGS, SIGNAGE, GUARDRAIL IMPROVEMENTS, RETAINING WALLS, DRAINAGE IMPROVEMENTS, LARGE CULVERT REPLACEMENT AND OTHER RELATED HIGHWAY ITEMS.

LENGTH OF ROADWAY: 30,200 ft
LENGTH OF BRIDGE: 0 ft
LENGTH OF PROJECT: 29,900 ft

0 2000 4000 6000
SCALE IN FEET

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JULY 20, 2011 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

QUALITY ASSURANCE PROGRAM : LEVEL I

SURVEYED BY : VTRANS
SURVEYED DATE : -

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

PRELIMINARY PLANS
3/7/2019

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATOR
APPROVED _____ DATE _____

DIRECTOR OF PROJECT DELIVERY
APPROVED _____ DATE _____

PROJECT MANAGER : KEN UPMAL, P.E.

PROJECT NAME : SWANTON
PROJECT NUMBER : NH 036-1(9)

SHEET 1 OF 307 SHEETS

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13	DRIVE DETAILS
14	HORIZONTAL ALIGNMENT TABLE SHEET
15-16	VERTICAL ALIGNMENT TABLE SHEETS
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174	PRECAST CONCRETE STRUCTURE PLAN
175	PRECAST CONCRETE WALL ELEVATION
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303	TCP DETAILS
304-307	TCP TYPICAL SECTIONS

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	CAST IRON GRATE W/FRAME, TYPE D,	
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vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032ios.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M.BOGUE
INDEX OF SHEETS

PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G. BAKOS
SHEET 2 OF 305

GENERAL INFORMATION

SYMBOLOGY LEGEND NOTE

THE SYMBOLOGY ON THIS SHEET IS INTENDED TO COVER STANDARD CONVENTIONAL SYMBOLOGY. THE SYMBOLOGY IS USED FOR EXISTING & PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROJECT ANNOTATION, AS NOTED ON PROJECT PLAN SHEETS. THIS LEGEND SHEET COVERS THE BASICS. SYMBOLOGY ON PLANS MAY VARY, PLAN ANNOTATIONS AND NOTES SHOULD BE USED TO CLARIFY AS NEEDED.

R.O.W. ABBREVIATIONS (CODES) & SYMBOLS

POINT	CODE	DESCRIPTION
	CH	CHANNEL EASEMENT
	CONST	CONSTRUCTION EASEMENT
	CUL	CULVERT EASEMENT
	D&C	DISCONNECT & CONNECT
	DIT	DITCH EASEMENT
	DR	DRAINAGE EASEMENT
	DRIVE	DRIVEWAY EASEMENT
	EC	EROSION CONTROL
	HWY	HIGHWAY EASEMENT
	I&M	INSTALL & MAINTAIN EASEMENT
	LAND	LANDSCAPE EASEMENT
	R&RES	REMOVE & RESET
	R&REP	REMOVE & REPLACE
	SR	SLOPE RIGHT
	UE	UTILITY EASEMENT
	(P)	PERMANENT EASEMENT
	(T)	TEMPORARY EASEMENT
	TCP	TRAFFIC CONTROL PLAN
■	BNDNS	BOUND SET
⧈	BNDNS	BOUND TO BE SET
●	IPNS	IRON PIN SET
◎	IPNS	IRON PIN TO BE SET
⊠	CALC	EXISTING ROW POINT
○	PROW	PROPOSED ROW POINT
[LENGTH]		LENGTH CARRIED ON NEXT SHEET

COMMON TOPOGRAPHIC POINT SYMBOLS

POINT	CODE	DESCRIPTION
	APL	BOUND APPARENT LOCATION
	BM	BENCHMARK
	BND	BOUND
	CB	CATCH BASIN
	COMB	COMBINATION POLE
	DITHR	DROP INLET THROATED DNC
	EL	ELECTRIC POWER POLE
	FPOLE	FLAGPOLE
	GASFIL	GAS FILLER
	GP	GUIDE POST
	GSO	GAS SHUT OFF
	GUY	GUY POLE
	GUYW	GUY WIRE
	GV	GATE VALVE
	H	TREE HARDWOOD
	HCTRL	CONTROL HORIZONTAL
	HVCTRL	CONTROL HORIZ. & VERTICAL
	HYD	HYDRANT
	IP	IRON PIN
	IPIPE	IRON PIPE
	LI	LIGHT - STREET OR YARD
	MB	MAILBOX
	MH	MANHOLE (MH)
	MM	MILE MARKER
	PM	PARKING METER
	PMK	PROJECT MARKER
	POST	POST STONE/WOOD
	RRSIG	RAILROAD SIGNAL
	RRSL	RAILROAD SWITCH LEVER
	S	TREE SOFTWOOD
	SAT	SATELLITE DISH
	SHRUB	SHRUB
	SIGN	SIGN
	STUMP	STUMP
	TEL	TELEPHONE POLE
	TIE	TIE
	TSIGN	SIGN W/DOUBLE POST
	VCTRL	CONTROL VERTICAL
	WELL	WELL
	WSO	WATER SHUT OFF

THESE ARE COMMON VAOT SURVEY POINT SYMBOLS FOR EXISTING FEATURES, ALSO USED FOR PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROPOSED ANNOTATION.

PROPOSED GEOMETRY CODES

CODE	DESCRIPTION
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
CC	CENTER OF CURVE
PT	POINT OF TANGENCY
PCC	POINT OF COMPOUND CURVE
PRC	POINT OF REVERSE CURVE
POB	POINT OF BEGINNING
POE	POINT OF ENDING
STA	STATION PREFIX
AH	AHEAD STATION SUFFIX
BK	BACK STATION SUFFIX
D	CURVE DEGREE OF (100FT)
R	CURVE RADUIS OF
T	CURVE TANGENT LENGTH
L	CURVE LENGTH OF
E	CURVE EXTERNAL DISTANCE

UTILITY SYMBOLOGY

UNDERGROUND UTILITIES

- UTILITY (GENERIC-UNKNOWN)
- UT — TELEPHONE
- UE — ELECTRIC
- UC — CABLE (TV)
- UEC — ELECTRIC+CABLE
- UET — ELECTRIC+TELEPHONE
- UCT — CABLE+TELEPHONE
- UECT — ELECTRIC+CABLE+TELEP.
- G — GAS LINE
- W — WATER LINE
- S — SANITARY SEWER (SEPTIC)

ABOVE GROUND UTILITIES (AERIAL)

- UTILITY (GENERIC-UNKNOWN)
- T — TELEPHONE
- E — ELECTRIC
- C — CABLE (TV)
- EC — ELECTRIC+CABLE
- ET — ELECTRIC+TELEPHONE
- AER E&T — ELECTRIC+TELEPHONE
- CT — CABLE+TELEPHONE
- ECT — ELECTRIC+CABLE+TELEP.
- UTILITY POLE GUY WIRE

PROJECT CONSTRUCTION SYMBOLOGY

PROJECT DESIGN & LAYOUT SYMBOLOGY

- CZ — CLEAR ZONE
- PLAN LAYOUT MATCHLINE

PROJECT CONSTRUCTION FEATURES

- TOP OF CUT SLOPE
- TOE OF FILL SLOPE
- STONE FILL
- BOTTOM OF DITCH ℄
- CULVERT PROPOSED
- STRUCTURE SUBSURFACE
- PDF — PDF — PROJECT DEMARCATION FENCE
- BF — BF — BARRIER FENCE
- TREE PROTECTION ZONE (TPZ)
- STRIPING LINE REMOVAL
- SHEET PILES

CONVENTIONAL BOUNDARY SYMBOLOGY

BOUNDARY LINES

- TOWN LINE — TOWN BOUNDARY LINE
- COUNTY LINE — COUNTY BOUNDARY LINE
- STATE LINE — STATE BOUNDARY LINE
- PROPOSED STATE R.O.W. (LIMITED ACCESS)
- PROPOSED STATE R.O.W.
- STATE ROW (LIMITED ACCESS)
- STATE ROW
- TOWN ROW
- PERMANENT EASEMENT LINE (P)
- TEMPORARY EASEMENT LINE (T)
- SURVEY LINE
- P/L — PROPERTY LINE (P/L)
- SR SR SR — SLOPE RIGHTS
- 6f — 6F PROPERTY BOUNDARY
- 4f — 4F PROPERTY BOUNDARY
- HAZ — HAZARDOUS WASTE

EPSC LAYOUT PLAN SYMBOLOGY

EPSC MEASURES

- FILTER CURTAIN
- SILT FENCE
- SILT FENCE WOVEN WIRE
- CHECK DAM
- DISTURBED AREAS REQUIRING RE-VEGETATION
- EROSION MATTING

SEE EPSC DETAIL SHEETS FOR ADDITIONAL SYMBOLOGY

ENVIRONMENTAL RESOURCES

- WETLAND BOUNDARY
- RIPARIAN BUFFER ZONE
- WETLAND BUFFER ZONE
- SOIL TYPE BOUNDARY
- T&E — THREATENED & ENDANGERED SPECIES
- HAZ — HAZ — HAZARDOUS WASTE AREA
- AG — AGRICULTURAL LAND
- HABITAT — FISH & WILDLIFE HABITAT
- FLOOD PLAIN — FLOOD PLAIN
- OHW — ORDINARY HIGH WATER (OHW)
- STORM WATER
- USDA FOREST SERVICE LANDS
- WILDLIFE HABITAT SUIT/CONN

ARCHEOLOGICAL & HISTORIC

- ARCH — ARCHEOLOGICAL BOUNDARY
- HISTORIC DIST — HISTORIC DISTRICT BOUNDARY
- HISTORIC — HISTORIC AREA
- (H) HISTORIC STRUCTURE

CONVENTIONAL TOPOGRAPHIC SYMBOLOGY

EXISTING FEATURES

- ROAD EDGE PAVEMENT
- ROAD EDGE GRAVEL
- DRIVEWAY EDGE
- DITCH
- FOUNDATION
- FENCE (EXISTING)
- FENCE WOOD POST
- FENCE STEEL POST
- GARDEN
- ROAD GUARDRAIL
- RAILROAD TRACKS
- CULVERT (EXISTING)
- STONE WALL
- WALL
- WOOD LINE
- BRUSH LINE
- HEDGE
- BODY OF WATER EDGE
- LEDGE EXPOSED

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-I(9)

FILE NAME: z96b032LegendSheet.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M.BOGUE
CONVENTIONAL SYMBOLOGY LEGEND

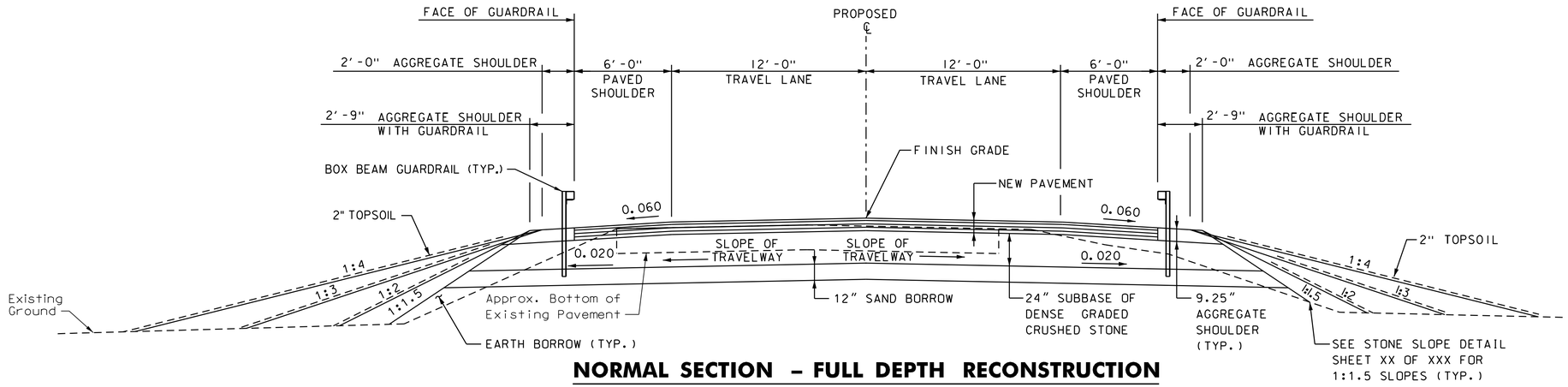
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G. BAKOS
SHEET 3 OF 305

MATERIAL TOLERANCES	
MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT (TOTAL DEPTH)	1/4''
SUBBASE (TOTAL DEPTH)	1''
SAND (TOTAL DEPTH)	1''

TYPICAL SECTIONS

VT ROUTE 78

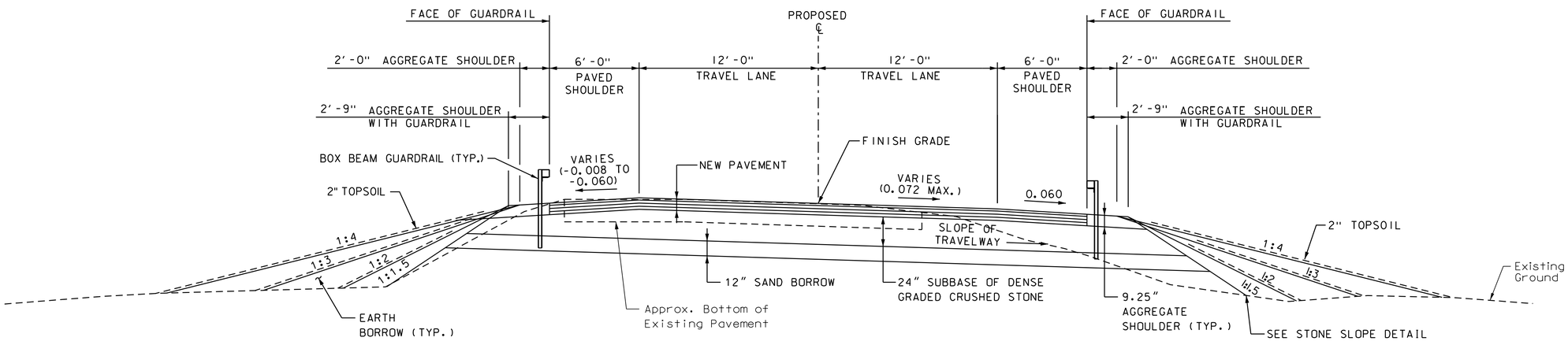
1.75" SUPERPAVE BITUMINOUS PAVEMENT - TYPE IIIS (PG 70-28)
2.50" SUPERPAVE BITUMINOUS PAVEMENT - TYPE IIS (PG 70-28)
2.50" SUPERPAVE BITUMINOUS PAVEMENT - TYPE IIS (PG 70-28)
2.50" SUPERPAVE BITUMINOUS PAVEMENT - TYPE IIS (PG 70-28)
24" SUBBASE OF DENSE GRADED CRUSHED STONE
12" SAND BORROW (USED AT DISCRETION OF RESIDENT ENGINEER)



NORMAL SECTION – FULL DEPTH RECONSTRUCTION

STA. 39+75 – STA. 53+50
STA. 62+50 – STA. 90+50
STA. 106+00 – STA. 108+25
STA. 126+50 – STA. 143+50

NTS



SUPERELEVATED SECTION – FULL DEPTH RECONSTRUCTION

STA. 36+00 – STA. 39+75
STA. 90+50 – STA. 106+00
STA. 108+25 – STA. 126+50
STA. 143+50 – STA. 163+00

NTS

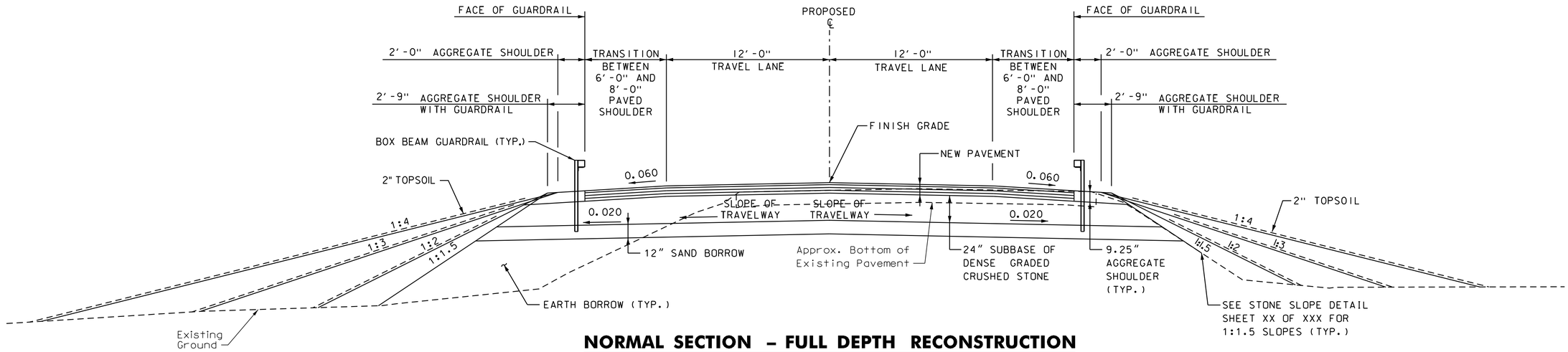
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PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032typ_01.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G. BAKOS
TYPICAL SECTION 1	SHEET 4 OF 305

MATERIAL TOLERANCES	
MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT (TOTAL DEPTH)	1/4''
SUBBASE (TOTAL DEPTH)	1''
SAND (TOTAL DEPTH)	1''

TYPICAL SECTIONS

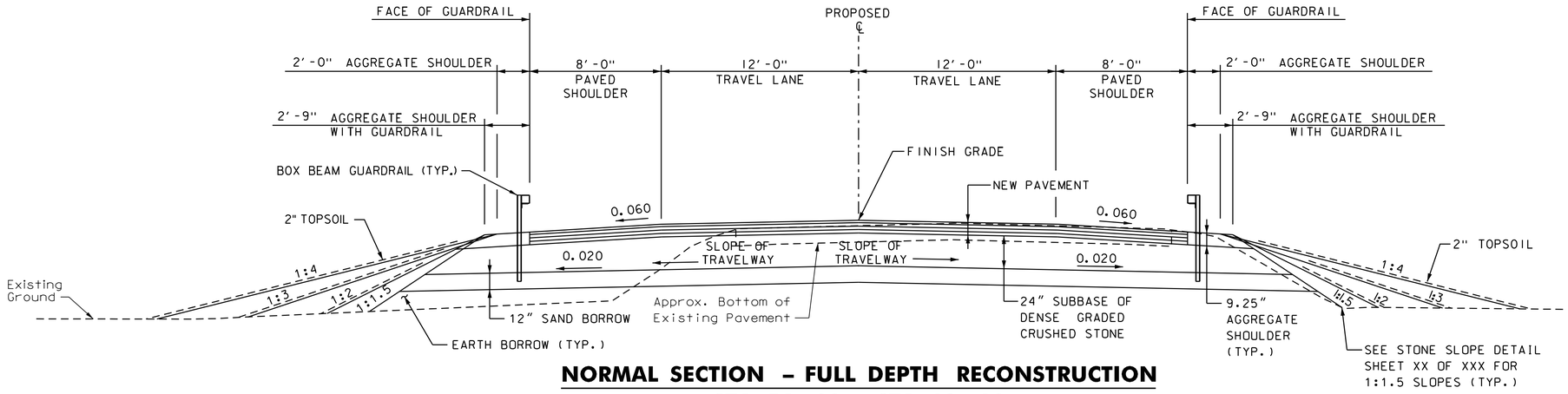
VT ROUTE 78

1.75" SUPERPAVE BITUMINOUS PAVEMENT - TYPE IIIS (PG 70-28)
2.50" SUPERPAVE BITUMINOUS PAVEMENT - TYPE IIS (PG 70-28)
2.50" SUPERPAVE BITUMINOUS PAVEMENT - TYPE IIS (PG 70-28)
2.50" SUPERPAVE BITUMINOUS PAVEMENT - TYPE IIS (PG 70-28)
24" SUBBASE OF DENSE GRADED CRUSHED STONE
12" SAND BORROW (USED AT DISCRETION OF RESIDENT ENGINEER)



NORMAL SECTION – FULL DEPTH RECONSTRUCTION
STA. 53+50 – STA. 54+00
STA. 62+00 – STA. 62+50

NTS



NORMAL SECTION – FULL DEPTH RECONSTRUCTION
STA. 54+00 – STA. 62+00

NTS

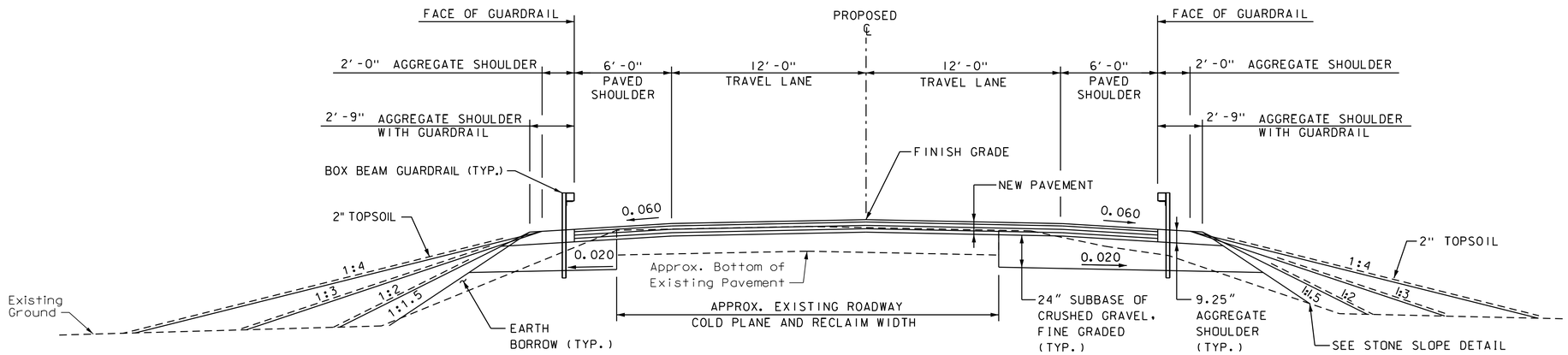
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PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032typ_02.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G. BAKOS
TYPICAL SECTION 2	SHEET 5 OF 305

MATERIAL TOLERANCES	
MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT (TOTAL DEPTH)	1/4''
SUBBASE (TOTAL DEPTH)	1''
SAND (TOTAL DEPTH)	1''

TYPICAL SECTIONS

VT ROUTE 78

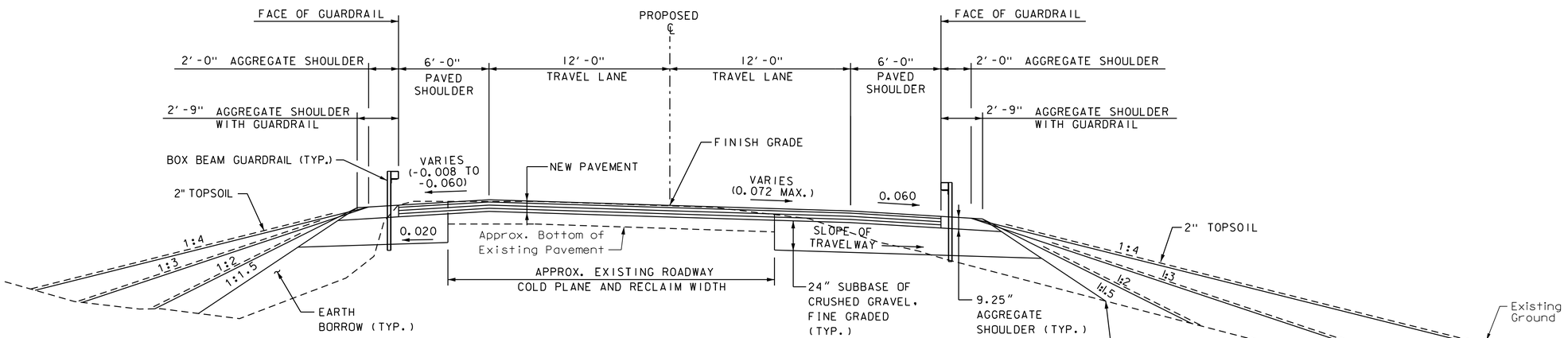
1.75"	SUPERPAVE BITUMINOUS PAVEMENT - TYPE IIIS (PG 70-28)
2.50"	SUPERPAVE BITUMINOUS PAVEMENT - TYPE IIS (PG 70-28)
2.50"	SUPERPAVE BITUMINOUS PAVEMENT - TYPE IIS (PG 70-28)
2.50"	SUPERPAVE BITUMINOUS PAVEMENT - TYPE IIS (PG 70-28)
8"	COLD PLANING - EXISTING B.C.P. / PAVEMENT RECYCLE
12"	PAVEMENT/SUB-BASE RECLAIM
24"	SUBBASE OF CRUSHED GRAVEL, FINE GRADED (FOR WIDENED SECTIONS)



NORMAL SECTION – PAVEMENT RECLAMATION WITH BOX WIDENING

STA. 176+25 – STA. 186+25
STA. 195+75 – STA. 197+25
STA. 215+50 – STA. 228+00
STA. 232+75 – STA. 256+00
STA. 267+50 – STA. 274+75
STA. 283+50 – STA. 286+25
STA. 300+00 – STA. 303+50

NTS



SUPERELEVATED SECTION – PAVEMENT RECLAMATION WITH BOX WIDENING

STA. 163+00 – STA. 176+25
STA. 186+25 – STA. 195+75
STA. 197+25 – STA. 215+50
STA. 228+00 – STA. 232+75
STA. 256+00 – STA. 267+50
STA. 274+75 – STA. 283+50
STA. 286+25 – STA. 300+00
STA. 303+50 – STA. 309+50

NTS

vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)

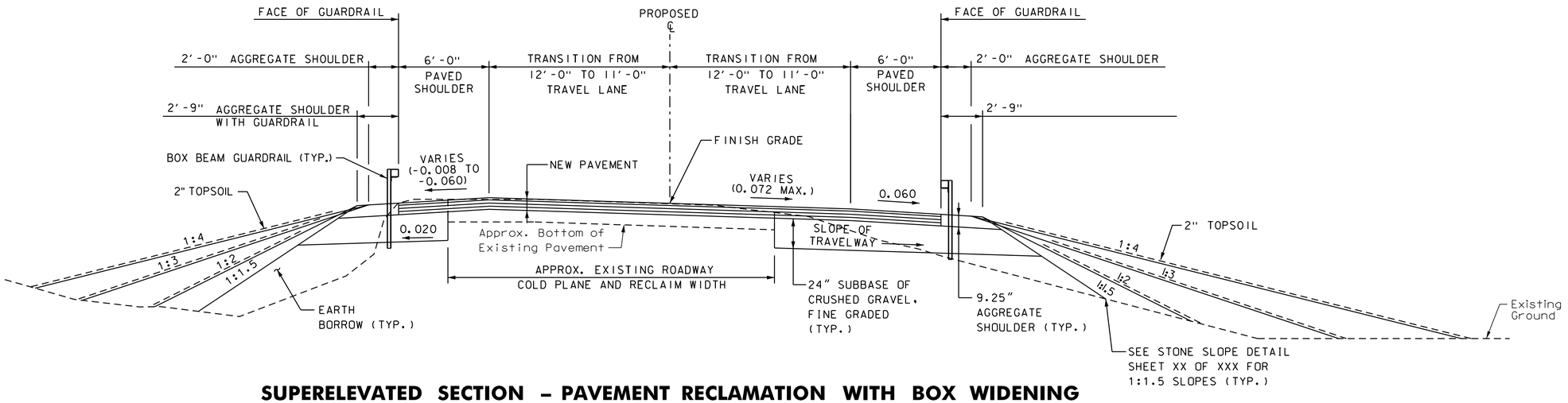
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PROJECT LEADER: G. BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G. BAKOS
TYPICAL SECTION 3	SHEET 6 OF 305

MATERIAL TOLERANCES	
MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT (TOTAL DEPTH)	1/4''
SUBBASE (TOTAL DEPTH)	1''
SAND (TOTAL DEPTH)	1''

TYPICAL SECTIONS

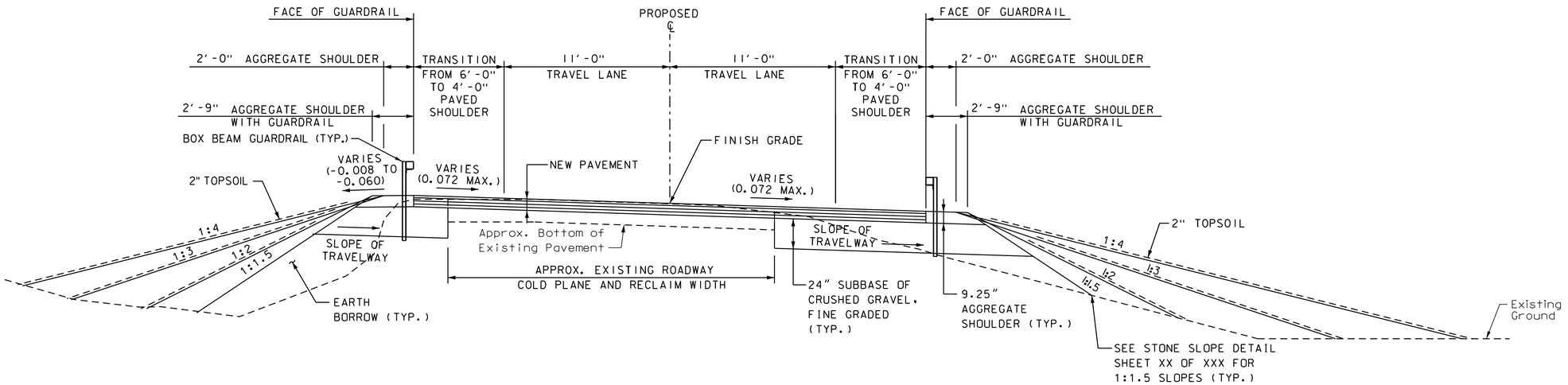
VT ROUTE 78

1.75" SUPERPAVE BITUMINOUS PAVEMENT - TYPE IIIS (PG 70-28)
2.50" SUPERPAVE BITUMINOUS PAVEMENT - TYPE IIS (PG 70-28)
2.50" SUPERPAVE BITUMINOUS PAVEMENT - TYPE IIS (PG 70-28)
2.50" SUPERPAVE BITUMINOUS PAVEMENT - TYPE IIS (PG 70-28)
8" COLD PLANING - EXISTING B.C.P. / PAVEMENT RECYCLE
12" PAVEMENT/SUB-BASE RECLAIM
24" SUBBASE OF CRUSHED GRAVEL, FINE GRADED (FOR WIDENED SECTIONS)



SUPERELEVATED SECTION - PAVEMENT RECLAMATION WITH BOX WIDENING
STA. 309+50 - STA. 310+00

NTS



SUPERELEVATED SECTION - PAVEMENT RECLAMATION WITH BOX WIDENING
STA. 310+00 - STA. 311+00

NTS

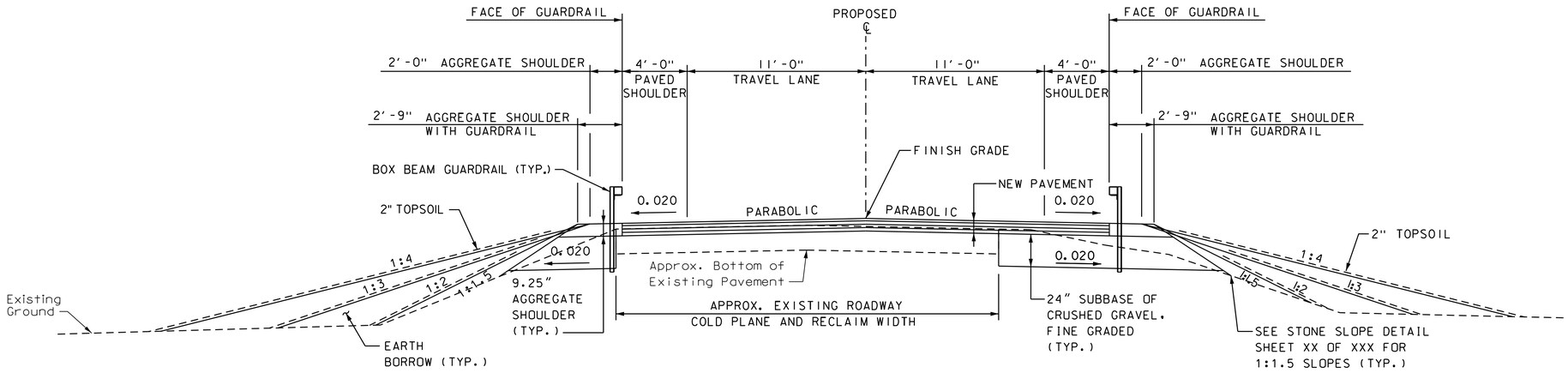
PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032typ_04.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G. BAKOS
TYPICAL SECTION 4	SHEET 7 OF 305

MATERIAL TOLERANCES	
MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT (TOTAL DEPTH)	1/4''
SUBBASE (TOTAL DEPTH)	1''
SAND (TOTAL DEPTH)	1''

TYPICAL SECTIONS

VT ROUTE 78

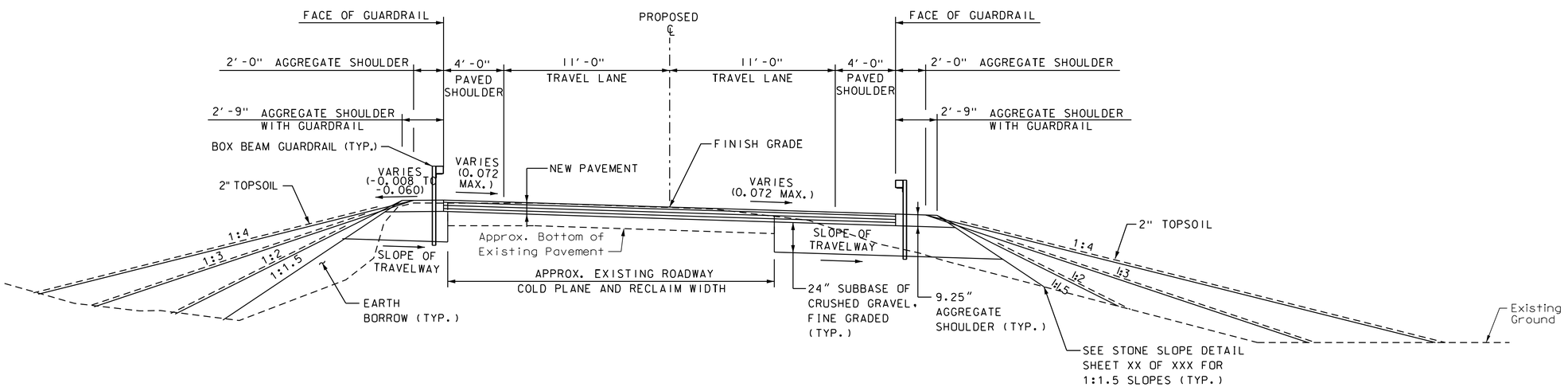
1.75" SUPERPAVE BITUMINOUS PAVEMENT - TYPE IIIS (PG 70-28)
2.50" SUPERPAVE BITUMINOUS PAVEMENT - TYPE IIS (PG 70-28)
2.50" SUPERPAVE BITUMINOUS PAVEMENT - TYPE IIS (PG 70-28)
2.50" SUPERPAVE BITUMINOUS PAVEMENT - TYPE IIS (PG 70-28)
8" COLD PLANING - EXISTING B.C.P. / PAVEMENT RECYCLE
12" PAVEMENT/SUB-BASE RECLAIM
24" SUBBASE OF CRUSHED GRAVEL, FINE GRADED (FOR WIDENED SECTIONS)



NORMAL SECTION – PAVEMENT RECLAMATION WITH BOX WIDENING

STA. 321+25 – STA. 325+75

NTS



SUPERELEVATED SECTION – PAVEMENT RECLAMATION WITH BOX WIDENING

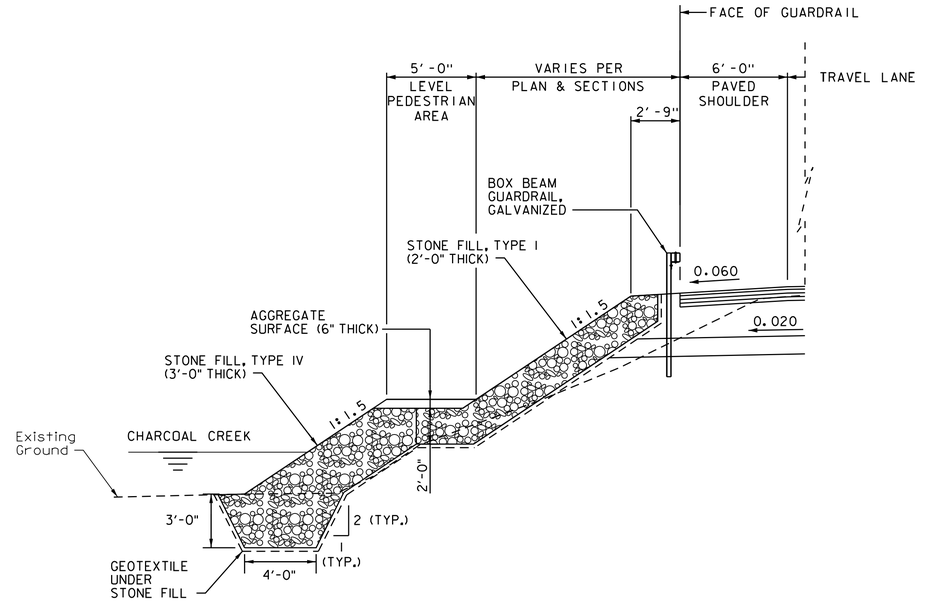
STA. 311+00 – STA. 321+25
STA. 325+75 – STA. 338+00

NTS

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032typ_05.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G. BAKOS
TYPICAL SECTION 5	SHEET 8 OF 305

DETAILS

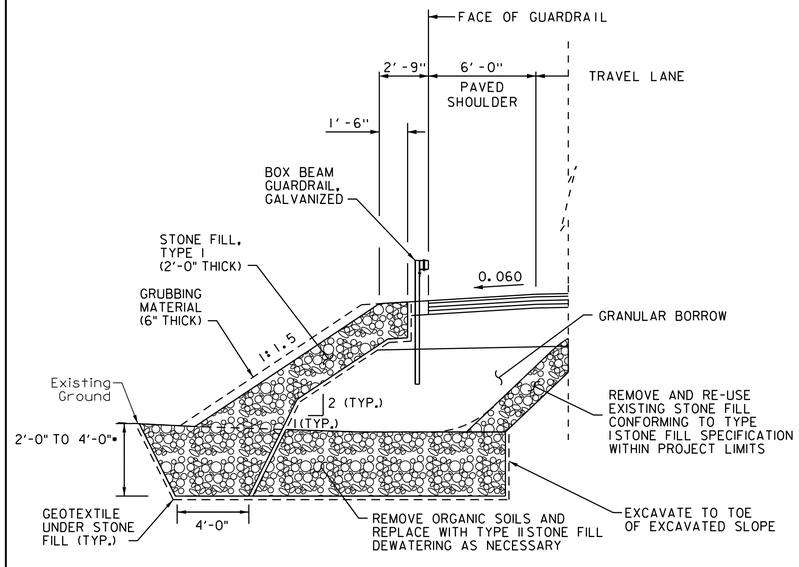
MATERIAL TOLERANCES	
MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT (TOTAL DEPTH)	1/4''
SUBBASE (TOTAL DEPTH)	1''
SAND (TOTAL DEPTH)	1''



CHARCOAL CREEK SLOPE DETAIL

STA. 105+00.00 TO STA. 107+50.00 LT

NTS

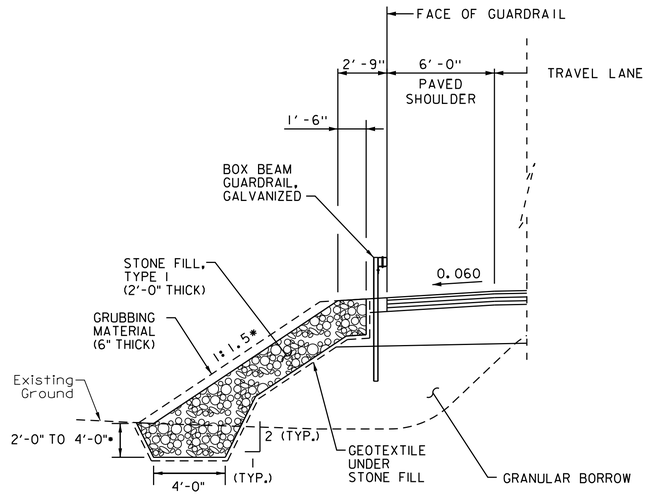


WETLAND STONE SLOPE DETAIL

• OR AS NOTED ON CROSS SECTIONS

STA. 107+50 – STA. 147+00 LT

NTS



STONE SLOPE DETAIL

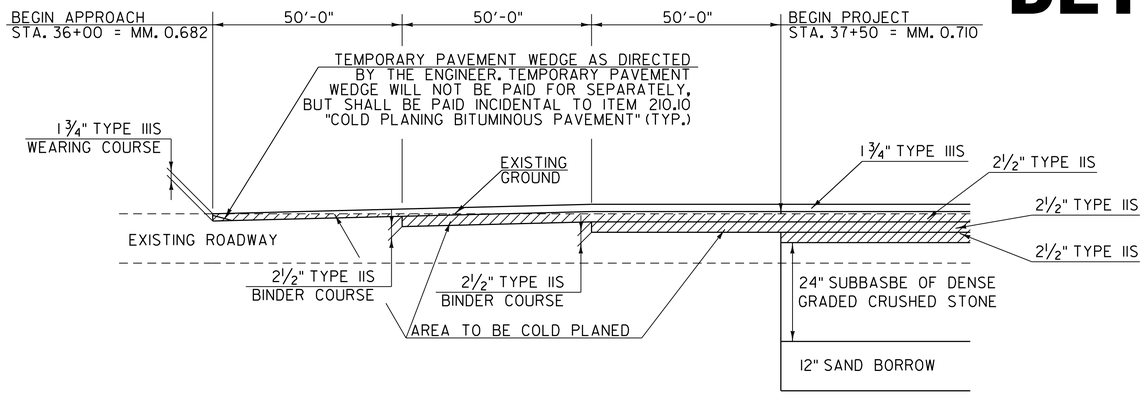
• OR AS NOTED ON CROSS SECTIONS

STA. 45+00 – STA. 57+00 LT
STA. 45+00 – STA. 47+50 RT
STA. 53+50 – STA. 55+50 RT
STA. 68+00 – STA. 69+00 LT
STA. 73+00 – STA. 74+00 LT
STA. 287+50 – STA. 289+50 LT
STA. 296+50 – STA. 298+00 LT

NTS

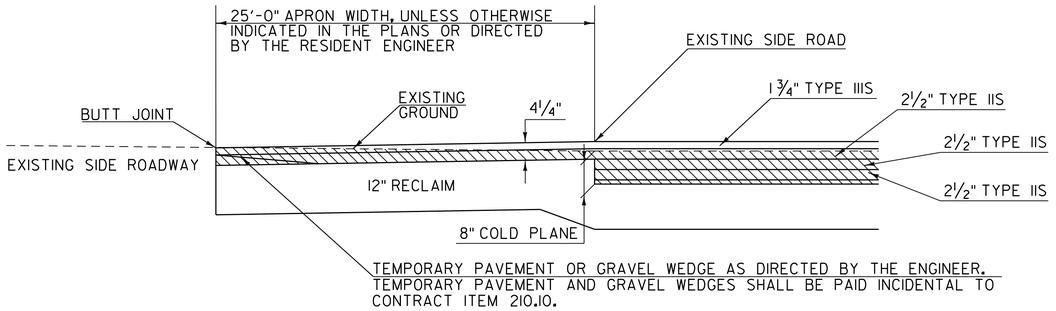
PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032det_01.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G. BAKOS
ROADWAY DETAILS 1	SHEET 9 OF 305

DETAILS



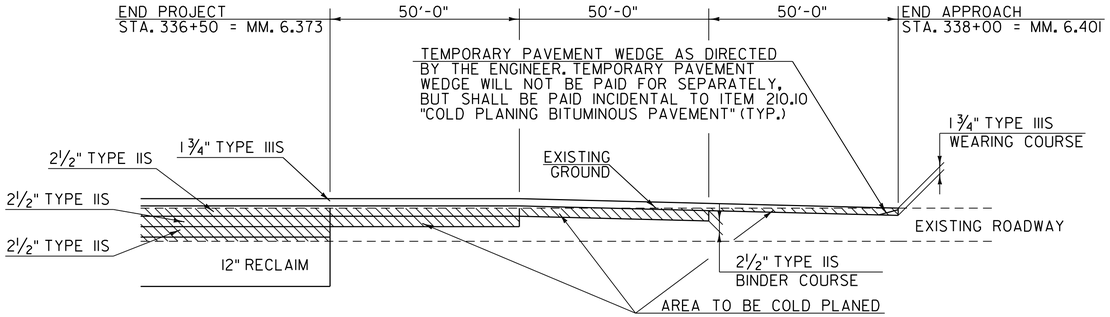
APPROACH AREA DETAIL (BEGIN PROJECT)

NTS



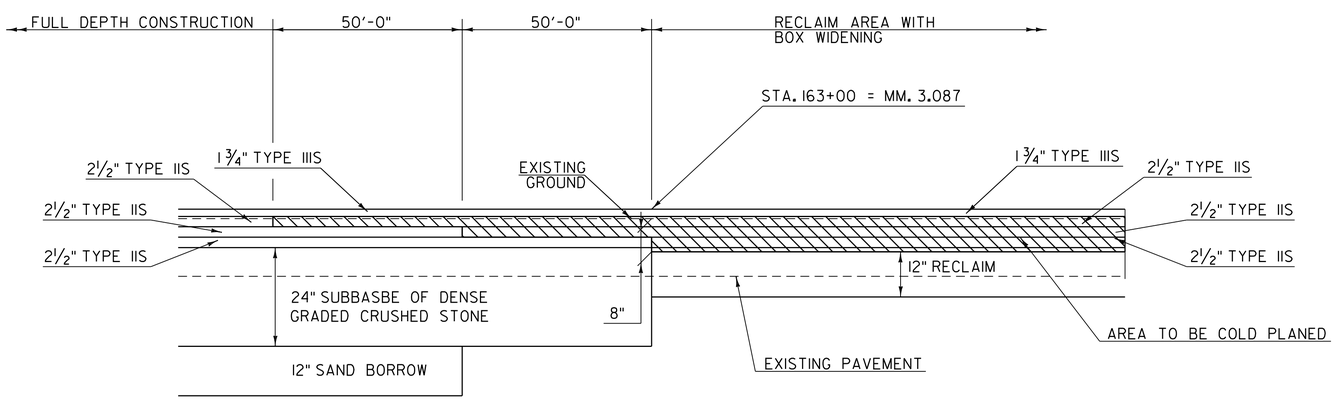
TRANSITION AREA FOR PAVED SIDE ROADS

NTS



APPROACH AREA DETAIL (END PROJECT)

NTS



NOTE: STAGGER PAVEMENT JOINTS 50' AS SHOWN NORTH OR SOUTH DEPENDING ON WHICH SECTION IS CONSTRUCTED FIRST

TRANSITION AREA FOR FULL DEPTH CONSTRUCTION TO RECLAIM AREA

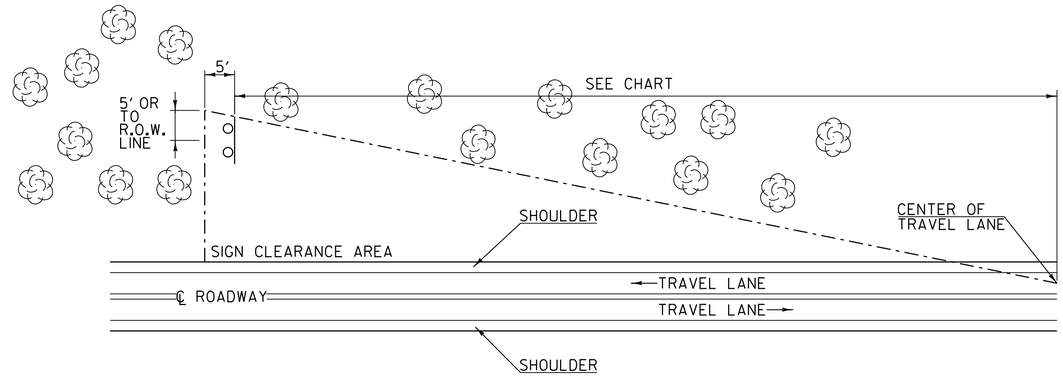
NTS

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032det_01.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G. BAKOS
ROADWAY DETAILS 2	SHEET 10 OF 305

DETAILS

TYPICAL ORDER OF OPERATIONS FOR RECLAIMED STABILIZED BASE WITH PORTLAND CEMENT PAVEMENT REHABILITATION		
STEP	DESCRIPTION	PAYMENT ITEM(S)
1	INSTALL 6" UNDERDRAIN PIPE, WHERE REQUIRED	ITEM 605.10 "6" UNDERDRAIN PIPE"
2	COLD PLANE EXISTING ROADBED 8 INCHES	ITEM 210.10 "COLD PLANING, BITUMINOUS PAVEMENT"
3	REPAIR EXISTING SHOULDERS AS DIRECTED BY THE RESIDENT ENGINEER	ITEM 301.28 "SUBBASE OF CRUSHED GRAVEL, FINE GRADED"
4	RECLAIM EXISTING ROADBED 12" FROM TOP OF SLOPE TO TOP OF SLOPE USING WATER FOR STABILIZATION AND COMPACTION	ITEM 310.20 "RECLAIMED STABILIZED BASE"
5	CORRECT SUPERELEVATION DEFICIENCIES	ITEM 301.28 "SUBBASE OF CRUSHED GRAVEL, FINE GRADED"
6	RECLAIM AREAS OF SUPERELEVATION CORRECTION 8" AS DIRECTED BY THE ENGINEER.	INCIDENTAL TO ITEM 310.20 "RECLAIM STABILIZED BASE"
7	PLACE 5" TYPE IIS BASE COURSE IN (2) LIFTS	ITEM 490.30 "SUPERPAVE BITUMINOUS CONCRETE PAVEMENT"
8	PLACE 2½" TYPE IIS BINDER COURSE	ITEM 490.30 "SUPERPAVE BITUMINOUS CONCRETE PAVEMENT"
9	PLACE 1¾" TYPE IIIS WEARING COURSE	ITEM 490.30 "SUPERPAVE BITUMINOUS CONCRETE PAVEMENT"

NOTES: THIS LIST OF PROCEDURES FOR REHABILITATING THE EXISTING ROADBED IS PRESENTED FOR INFORMATIONAL PURPOSES ONLY AND SHALL NOT BE CONSIDERED ALL INCLUSIVE. THE CONTRACTOR SHALL PREPARE THEIR OWN SCHEDULE OF OPERATIONS TO COMPLETE THE PROPOSED WORK IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS WHILE UTILIZING THE APPROPRIATE PAY ITEMS AS SHOWN IN THE PLANS AND AS DIRECTED BY THE ENGINEER.



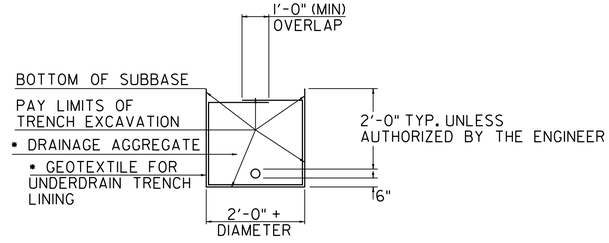
THINNING AND TRIMMING FOR SIGNS DETAIL

NTS

THE CONTRACTOR SHALL REMOVE ALL WOODY STEMMED GROWTH INCLUDING BRUSH, SAPLINGS AND TREE LIMBS GROWING WITHIN OR PROJECTING INTO THE CLEARANCE AREA AND DOWN TO GROUND LEVEL OR AT LEAST 10 FT BELOW THE BOTTOM OF THE SIGN. PAYMENT WILL BE FOR THINNING AND TRIMMING FOR SIGNS, ITEM 201.31, AND PAID FOR PER EACH, NO CHEMICALS POISONS OR DEFOLIANTS ALLOWED.

MINIMUM SIGN SIGHT DISTANCE CHART

APPROACH SPEED (mph)	SIGHT DISTANCE (feet)
30 OR LESS	300
35	350
40	400
45	450
50	500
55	550



DRAINAGE AGGREGATE SHALL MEET THE REQUIREMENTS OF SUBSECTION 704.16
• ITEMS ARE INCLUDED IN THE UNIT PRICE BID FOR PAY ITEM 605.10 - "6 INCH UNDERDRAIN PIPE"

UNDERDRAIN DETAIL

NTS

DETAILS ARE NOT TO SCALE

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032det_01.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M.BOGUE
ROADWAY DETAILS 3

PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G. BAKOS
SHEET 11 OF 305

GENERAL NOTES:

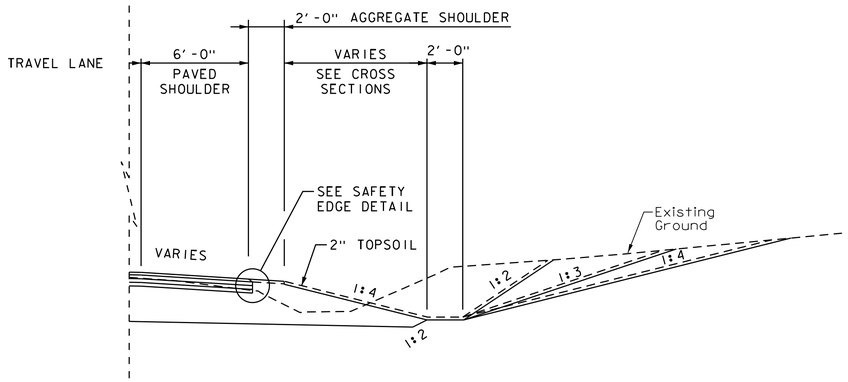
1. PLACEMENT OF THE WEARING COURSE SHALL INCLUDE THE SAFETY EDGE, UNLESS THE FOLLOWING APPLIES:

   A. THE ADJACENT SLOPE IS STEEPER THEN THE SAFETY EDGE.
   B. THE EDGE OF PAVEMENT BEING PLACED ABUTS BOUND MATERIAL.
   C. VEHICLES ARE RESTRICTED FROM LEAVING THE PAVED SURFACE (EXAMPLE: GUARDRAIL).

2. THE SAFETY EEDGE SHALL BE FORMED IN SUCH A WAY THAT THE BITUMINOUS CONCRETE PAVEMENT IS EXTRUDED OR COMPRESSED TO FOR THE SLOPE. DEVICES THAT SIMPLY STRIKE-OFF THE MIX WITHOUT PROVIDING ANY COMPACTIVE EFFORT WILL NOT BE ALLOWED.

3. THE SAFETY EDGE SHALL NOT BE CONSIDERED PART OF THE PAVED SHOULDER.

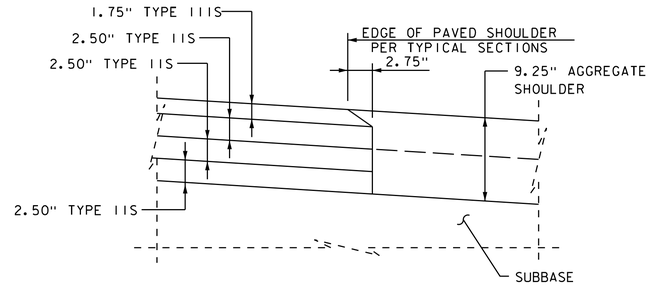
4. THIS WORK SHALL BE INCIDENTAL TO THE RESPECTIVE BITUMINOUS CONCRETE PAVEMENT ITEM.



DITCH DETAIL

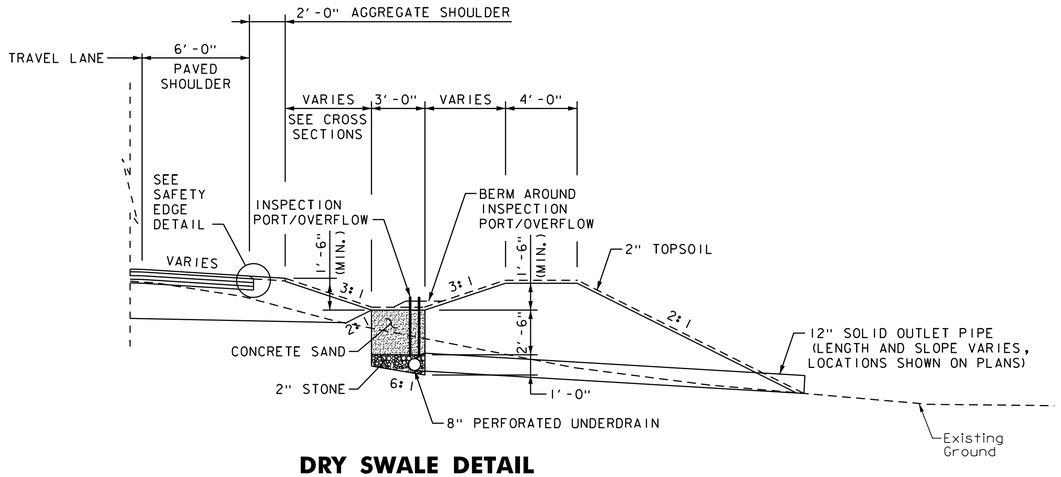
STA. 88+00 – STA. 90+25 LT
STA. 205+50 – STA. 206+75 RT
STA. 262+75 – STA. 263+50 RT
STA. 263+80 – STA. 265+60 RT
STA. 266+00 – STA. 266+25 RT
STA. 276+10 – STA. 276+50 RT
STA. 279+25 – STA. 280+30 RT
STA. 303+15 – STA. 307+75 RT
STA. 308+15 – STA. 310+50 RT
STA. 312+00 – STA. 314+00 LT

NTS



SAFETY EDGE DETAIL

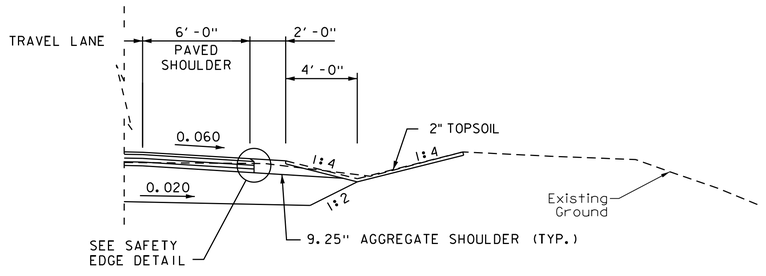
NTS



DRY SWALE DETAIL

STA. 327+00 – STA. 333+50 RT
STA. 333+88 – STA. 335+25 RT

NTS



V-DITCH DETAIL

STA. 108+00 – STA. 145+50 RT
STA. 317+00 – STA. 318+50 LT

NTS

DETAILS ARE NOT TO SCALE

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)

FILE NAME: z96b032det_01.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G. BAKOS
ROADWAY DETAILS 4	SHEET 12 OF 305

COMMERCIAL - GRAVEL DRIVES

3" AGGREGATE SURFACE COURSE
2" SUPERPAVE BITUMINOUS PAVEMENT TYPE IIIS (PG 70-28) (4' PAVED APRON)
18" SUBBASE OF DENSE GRADED CRUSHED STONE

COMMERCIAL - PAVED DRIVES

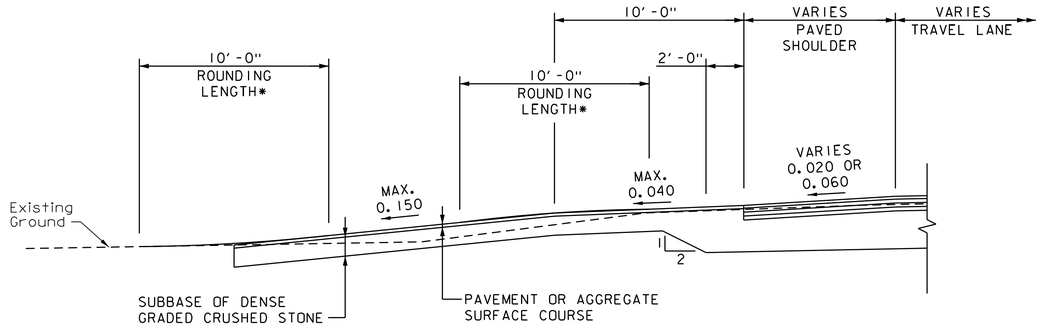
2" SUPERPAVE BITUMINOUS PAVEMENT - TYPE IIIS (PG 70-28)
18" SUBBASE OF DENSE GRADED CRUSHED STONE

RESIDENTIAL - PAVED DRIVES

2" SUPERPAVE BITUMINOUS PAVEMENT - TYPE IIIS (PG 70-28)
12" SUBBASE OF DENSE GRADED CRUSHED STONE

RESIDENTIAL - GRAVEL DRIVES

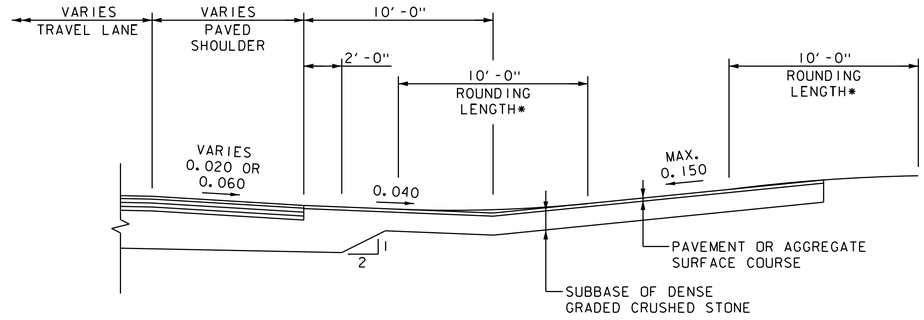
3" AGGREGATE SURFACE COURSE
2" SUPERPAVE BITUMINOUS PAVEMENT TYPE IIIS (PG 70-28) (4' PAVED APRON)
12" SUBBASE OF DENSE GRADED CRUSHED STONE



DRIVE DETAIL IN FILL
NORMAL SECTION

* IF ALGEBRAIC DIFFERENCE IN GRADES IS LESS THAN 8%, NO ROUNDING IS NEEDED.

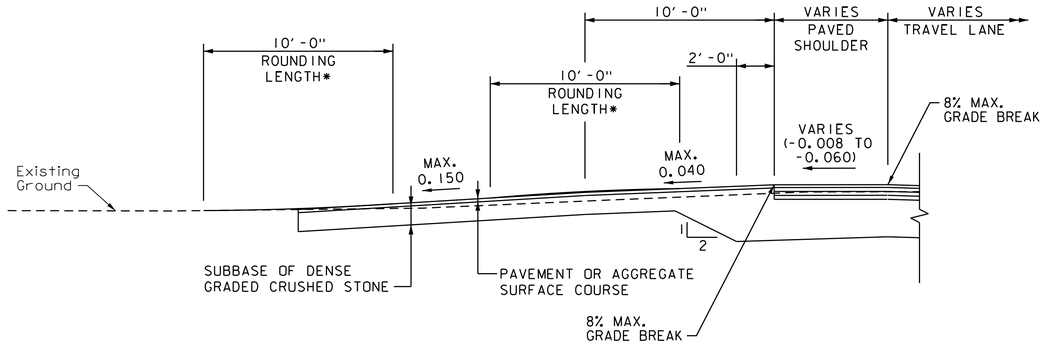
NTS



DRIVE DETAIL IN CUT
NORMAL SECTION

* IF ALGEBRAIC DIFFERENCE IN GRADES IS LESS THAN 8%, NO ROUNDING IS NEEDED.

NTS



DRIVE DETAIL IN FILL
SUPERELEVATED SECTION

* IF ALGEBRAIC DIFFERENCE IN GRADES IS LESS THAN 8%, NO ROUNDING IS NEEDED.

NTS

MATERIAL TOLERANCES	
MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT (TOTAL DEPTH)	1/2"
SUBBASE (TOTAL DEPTH)	1"

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032det_02.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M.BOGUE
DRIVE DETAILS

PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G. BAKOS
SHEET 13 OF 305

Element	Point Type	Station	Northing	Easting	Radius	Length	Delta / Theta	Rotation Direction	Maximum Banking	Design Speed
Tangent	POB	24+50.65	901288.673	1456228.362						
	PC	29+07.02	901107.644	1456647.288						
Arc	PC	29+07.02	901107.644	1456647.288	1968.5	933.81	27°10'47.50"	LEFT	0.052	50
	PI	33+82.88	900918.880	1457084.111						
	CC		902914.646	1457428.144						
	PT	38+40.83	900950.495	1457558.924						
Tangent	PT	38+40.83	900950.495	1457558.924						
	PC	48+34.66	901016.522	1458550.563						
Arc	PC	48+34.66	901016.522	1458550.563	35000	331.25	0°32'32.13"	RIGHT	NC	50
	PI	50+00.29	901027.525	1458715.822						
	CC		866093.849	1460875.840						
	PT	51+65.91	901036.964	1458881.177						
Tangent	PT	51+65.91	901036.964	1458881.177						
	PC	77+39.66	901183.643	1461450.742						
Arc	PC	77+39.66	901183.643	1461450.742	9850	721.47	4°11'48.09"	LEFT	NC	50
	PI	81+00.56	901204.211	1461811.054						
	CC		911017.634	1460889.387						
	PT	84+61.13	901251.091	1462168.894						
Tangent	PT	84+61.13	901251.091	1462168.894						
	PC	91+97.83	901346.788	1462899.352						
Arc	PC	91+97.83	901346.788	1462899.352	1950	654.20	37°05'30.94"	RIGHT	0.052	50
	PI	98+52.03	901431.768	1463548.009						
	CC		899413.310	1463152.655						
	PT	104+60.21	901108.351	1464116.675						
Tangent	PT	104+60.21	901108.351	1464116.675						
	PC	109+42.86	900869.748	1464536.212						
Arc	PC	109+42.86	900869.748	1464536.212	2900	1573.44	31°05'12.07"	RIGHT	0.038	50
	PI	117+49.46	900470.988	1465237.354						
	CC		898348.917	1463102.541						
	PT	125+16.29	899767.471	1465631.910						
Tangent	PT	125+16.29	899767.471	1465631.910						
	PC	145+27.27	898013.510	1466615.590						
Arc	PC	145+27.27	898013.510	1466615.590	1250	521.00	23°52'50.74"	LEFT	0.070	50
	PI	147+91.60	897782.956	1466744.892						
	CC		898624.955	1467705.835						
	PT	150+48.26	897624.487	1466956.460						
Tangent	PT	150+48.26	897624.487	1466956.460						
	PC	153+19.50	897461.881	1467173.550						
Arc	PC	153+19.50	897461.881	1467173.550	2000	438.68	12°34'02.01"	RIGHT	0.052	50
	PI	155+39.72	897329.857	1467349.811						
	CC		895861.131	1465974.550						
	PT	157+58.18	897162.645	1467493.122						
Tangent	PT	157+58.18	897162.645	1467493.122						
	PC	162+14.86	896815.889	1467790.315						
Arc	PC	162+14.86	896815.889	1467790.315	1150	464.69	23°09'06.46"	RIGHT	0.072	50
	PI	164+50.42	896637.034	1467943.605						
	CC		896067.519	1466917.135						
	PT	166+79.55	896412.314	1468014.230						
Tangent	PT	166+79.55	896412.314	1468014.230						
	PC	169+48.26	896155.968	1468094.794						
Arc	PC	169+48.26	896155.968	1468094.794	4950	576.52	6°40'23.41"	LEFT	0.024	50
	PI	172+36.85	895880.658	1468181.319						
	CC		897640.085	1472817.071						
	PT	175+24.78	895617.267	1468299.250						

Element	Point Type	Station	Northing	Easting	Radius	Length	Delta / Theta	Rotation Direction	Maximum Banking	Design Speed
Tangent	PT	175+24.78	895617.267	1468299.250						
	PC	180+92.23	895099.364	1468531.137						
Arc	PC	180+92.23	895099.364	1468531.137	16000	435.57	1°33'35.13"	LEFT	NC	50
	PI	183+10.02	894900.583	1468620.140						
	CC		901637.766	1483134.195						
	PT	185+27.79	894704.298	1468714.520						
Tangent	PT	185+27.79	894704.298	1468714.520						
	PC	187+45.98	894507.664	1468809.068						
Arc	PC	187+45.98	894507.664	1468809.068	2600	711.30	15°40'29.55"	LEFT	0.042	50
	PI	191+03.86	894185.126	1468964.155						
	CC		895634.353	1471152.265						
	PT	194+57.28	893916.484	1469200.618						
Tangent	PT	194+57.28	893916.484	1469200.618						
	PC	198+59.36	893614.670	1469466.279						
Arc	PC	198+59.36	893614.670	1469466.279	2300	223.70	5°34'21.84"	LEFT	0.046	50
	PI	199+71.30	893530.644	1469540.240						
	CC		895134.323	1471192.736						
	PT	200+83.06	893454.198	1469622.011						
Tangent	PT	200+83.06	893454.198	1469622.011						
	PC	203+53.54	893269.481	1469819.593						
Arc	PC	203+53.54	893269.481	1469819.593	5600	251.23	2°34'13.50"	RIGHT	0.022	50
	PI	204+79.18	893183.682	1469911.368						
	CC		889178.740	1465995.218						
	PT	206+04.77	893093.853	1469999.203						
Tangent	PT	206+04.77	893093.853	1469999.203						
	PC	209+16.88	892870.695	1470217.407						
Arc	PC	209+16.88	892870.695	1470217.407	1475	458.54	17°48'42.84"	LEFT	0.064	50
	PI	211+48.01	892705.434	1470379.001						
	CC		893901.908	1471272.028						
	PT	213+75.42	892597.524	1470583.400						
Tangent	PT	213+75.42	892597.524	1470583.400						
	PC	229+34.91	891869.452	1471962.499						
Arc	PC	229+34.91	891869.452	1471962.499	2650	209.11	4°31'15.90"	RIGHT	0.042	50
	PI	230+39.52	891820.614	1472055.006						
	CC		889525.983	1470725.303						
	PT	231+44.01	891764.637	1472143.375						
Tangent	PT	231+44.01	891764.637	1472143.375						
	PC	257+21.22	890385.517	1474320.536						
Arc	PC	257+21.22	890385.517	1474320.536	2950	899.96	17°28'45.16"	RIGHT	0.038	50
	PI	261+74.72	890142.839	1474703.642						
	CC		887893.431	1472741.927						
	PT	266+21.18	889796.297	1474996.168						
Tangent	PT	266+21.18	889796.297	1474996.168						
	PC	275+97.63	889050.142	1475626.017						
Arc	PC	275+97.63	889050.142	1475626.017	3100	616.22	11°23'21.54"	RIGHT	0.036	50
	PI	279+06.76	888813.921	1475825.418						
	CC		887050.520	1473257.154						
	PT	282+13.85	888542.975	1475974.244						
Tangent	PT	282+13.85	888542.975	1475974.244						
	PC	287+35.42	888085.830	1476225.347						
Arc	PC	287+35.42	888085.830	1476225.347	2300	1160.69	28°54'51.43"	LEFT	0.034	40
	PI	293+28.41	887566.090	1476510.832						
	CC		889193.135	1478241.252						
	PT	298+96.11	887249.171	1477012.025						

Element	Point Type	Station	Northing	Easting	Radius	Length	Delta / Theta	Rotation Direction	Maximum Banking	Design Speed
Tangent	PT	298+96.11	887249.171	1477012.025						
	PC	304+86.21	886933.798	1477510.772						
Arc	PC	304+86.21	886933.798	1477510.772	1200	873.64	41°42'47.87"	RIGHT	0.054	40
	PI	309+43.40	886689.451	1477897.194						
	CC		885919.555	1476869.436						
	PT	313+59.85	886249.923	1478023.063						
Tangent	PT	313+59.85	886249.923	1478023.063						
	PC	316+29.88	885990.328	1478097.405						
Arc	PC	316+29.88	885990.328	1478097.405	2350	390.12	9°30'42.08"	RIGHT	0.032	40
	PI	318+25.39	885802.372	1478151.230						
	CC		885343.357	1475838.217						
	PT	320+20.00	885608.106	1478173.256						
Tangent	PT	320+20.00	885608.106	1478173.256						
	PC	327+13.45	884919.072	1478251.379						
Arc	PC	327+13.45	884919.072	1478251.379	950	531.89	32°04'44.63"	RIGHT	0.062	40
	PI	329+86.57	884647.693	1478282.148						
	CC		884812.046	1477307.427						
	PT	332+45.34	884401.408	1478164.093						
Tangent	PT	332+45.34	884401.408	1478164.093						
	PC	334+15.98	884247.535	1478090.335						
Arc	PC	334+15.98	884247.535	1478090.335	800	259.83	18°36'31.68"	RIGHT	0.068	40
	PI	335+47.05	884129.344	1478033.681						
	CC		884593.335	1477368.932						
	PT	336+75.81	884035.411	1477942.273						
Tangent	PT	336+75.81	884035.411	1477942.273						
	PC	338+77.56	883890.817	1477801.568						
Arc	PC	338+77.56	883890.817	1477801.568	525	251.52	27°26'57.25"	LEFT		
	PI	340+05.78	883798.925	1477712.146						
	CC		883524.679	1478177.823						
	PT	341+29.08	883676.158	1477675.151						
Tangent	PT	341+29.08	883676.158	1477675.151						
	PC	341+85.25	883622.372	1477658.943						
Arc	PC	341+85.25	883622.372	1477658.943	2500	140.52	3°13'13.52"	LEFT		
	PI	342+55.53	883555.083	1477638.666						
	CC		882901.045	1480052.619						
	PT	343+25.77	883486.762	1477622.200						
Tangent	PT	343+25.77	883486.762	1477622.200						
	PC	343+72.79	883441.055	1477611.185						

POB = POINT OF BEGINNING
PC = POINT OF CURVATURE
PCC = POINT OF COMPOUND CURVATURE
PRC = POINT OF REVERSE CURVATURE

PT = POINT OF TANGENCY
PI = POINT OF INTERSECTION
CC = CENTER OF CURVE
POE = POINT OF ENDING

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83/ CORS 96

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032_Horizontal_Table.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M.BOGUE
HORIZONTAL ALIGNMENT TABLE SHEET 1

PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G. BAKOS

Element	Type	Station	Elevation	Length	Entrance Grade	Exit Grade	K	Middle Ordinate	Crest or Sag	Design Speed
Symmetrical Parabola	PVC	36+00.00	105.75	200.00	0.06%	-0.05%	386.04	-0.13	Crest	80.00
	PVI	37+00.00	105.81							
	PVT	38+00.00	105.36							
Linear	POB	38+00.00	105.36							
	PVC	39+00.00	104.90							
Symmetrical Parabola	PVC	39+00.00	104.90	400.00	-0.05%	0.33%	510.17	0.39	Sag	80.00
	PVI	41+00.00	103.98							
	PVT	43+00.00	104.64							
Linear	POB	43+00.00	104.64							
	PVC	43+50.00	104.80							
Symmetrical Parabola	PVC	43+50.00	104.80	200.00	0.33%	-0.23%	359.14	-0.14	Crest	75.00
	PVI	44+50.00	105.13							
	PVT	45+50.00	104.89							
Linear	POB	45+50.00	104.89							
	PVC	48+50.00	104.20							
Symmetrical Parabola	PVC	48+50.00	104.20	300.00	-0.23%	0.19%	721.24	0.16	Sag	80.00
	PVI	50+00.00	103.86							
	PVT	51+50.00	104.14							
Linear	POB	51+50.00	104.14							
	PVC	55+50.00	104.88							
Symmetrical Parabola	PVC	55+50.00	104.88	300.00	0.19%	-0.13%	955.91	-0.12	Crest	80.00
	PVI	57+00.00	105.16							
	PVT	58+50.00	104.96							
Linear	POB	58+50.00	104.96							
	PVC	64+75.00	104.16							
Symmetrical Parabola	PVC	64+75.00	104.16	250.00	-0.13%	0.22%	710.40	0.11	Sag	80.00
	PVI	66+00.00	104.00							
	PVT	67+25.00	104.28							
Linear	POB	67+25.00	104.28							
	PVC	73+50.00	105.68							
Symmetrical Parabola	PVC	73+50.00	105.68	200.00	0.22%	0.49%	754.60	0.07	Sag	80.00
	PVI	74+50.00	105.90							
	PVT	75+50.00	106.39							
Linear	POB	75+50.00	106.39							
	PVC	76+50.00	106.88							
Symmetrical Parabola	PVC	76+50.00	106.88	300.00	0.49%	-0.24%	412.33	-0.27	Crest	80.00
	PVI	78+00.00	107.61							
	PVT	79+50.00	107.25							
Linear	POB	79+50.00	107.25							
	PVC	86+75.00	105.52							
Symmetrical Parabola	PVC	86+75.00	105.52	250.00	-0.24%	-0.17%	3863.13	0.02	Sag	80.00
	PVI	88+00.00	105.22							
	PVT	89+25.00	105.00							
Linear	POB	89+25.00	105.00							
	PVC	93+75.00	104.22							
Symmetrical Parabola	PVC	93+75.00	104.22	250.00	-0.17%	0.00%	1434.43	0.05	Sag	80.00
	PVI	95+00.00	104.00							
	PVT	96+25.00	104.00							
Linear	POB	96+25.00	104.00							
	PVC	98+00.00	104.00							
Symmetrical Parabola	PVC	98+00.00	104.00	300.00	0.00%	0.10%	3000.00	0.04	Sag	80.00
	PVI	99+50.00	104.00							
	PVT	101+00.00	104.15							
Linear	POB	101+00.00	104.15							
	PVC	102+00.00	104.25							
Symmetrical Parabola	PVC	102+00.00	104.25	300.00	0.10%	-0.08%	1651.38	-0.07	Crest	80.00
	PVI	103+50.00	104.40							
	PVT	105+00.00	104.28							
Linear	POB	105+00.00	104.28							
	PVC	108+25.00	104.01							
Symmetrical Parabola	PVC	108+25.00	104.01	250.00	-0.08%	0.01%	2602.36	0.03	Sag	80.00
	PVI	109+50.00	103.91							
	PVT	110+75.00	103.93							
Linear	POB	110+75.00	103.93							
	PVC	113+25.00	103.96							
Symmetrical Parabola	PVC	113+25.00	103.96	500.00	0.01%	-0.06%	6377.55	-0.05	Crest	80.00
	PVI	115+75.00	104.00							
	PVT	118+25.00	103.84							
Linear	POB	118+25.00	103.84							
	PVC	120+25.00	103.71							
Symmetrical Parabola	PVC	120+25.00	103.71	350.00	-0.06%	0.09%	2259.39	0.07	Sag	80.00
	PVI	122+00.00	103.60							
	PVT	123+75.00	103.76							

Element	Type	Station	Elevation	Length	Entrance Grade	Exit Grade	K	Middle Ordinate	Crest or Sag	Design Speed
Linear	POB	123+75.00	103.76							
	PVC	125+75.00	103.94							
Symmetrical Parabola	PVC	125+75.00	103.94	350.00	0.09%	0.00%	3918.05	-0.04	Crest	80.00
	PVI	127+50.00	104.10							
	PVT	129+25.00	104.10							
Linear	POB	129+25.00	104.10							
	PVC	145+25.00	104.13							
Symmetrical Parabola	PVC	145+25.00	104.13	250.00	0.00%	0.10%	2569.95	0.03	Sag	80.00
	PVI	146+50.00	104.13							
	PVT	147+75.00	104.25							
Linear	POB	147+75.00	104.25							
	PVC	148+00.00	104.28							
Symmetrical Parabola	PVC	148+00.00	104.28	400.00	0.10%	-0.09%	2157.47	-0.09	Crest	80.00
	PVI	150+00.00	104.48							
	PVT	152+00.00	104.30							
Linear	POB	152+00.00	104.30							
	PVC	154+00.00	104.13							
Symmetrical Parabola	PVC	154+00.00	104.13	300.00	-0.09%	0.17%	1162.91	0.10	Sag	80.00
	PVI	155+50.00	104.00							
	PVT	157+00.00	104.26							
Linear	POB	157+00.00	104.26							
	PVC	157+50.00	104.34							
Symmetrical Parabola	PVC	157+50.00	104.34	300.00	0.17%	-0.38%	546.88	-0.21	Crest	80.00
	PVI	159+00.00	104.60							
	PVT	160+50.00	104.03							
Linear	POB	160+50.00								
	PVC	161+00.00								
Symmetrical Parabola	PVC	161+00.00	103.85	300.00	-0.38%	0.17%	544.04	0.21	Sag	80.00
	PVI	162+50.00	103.28							
	PVT	164+00.00	103.54							
Linear	POB	164+00.00	103.54							
	PVC	164+75.00	103.67							
Symmetrical Parabola	PVC	164+75.00	103.67	250.00	0.17%	0.53%	695.00	0.11	Sag	80.00
	PVI	166+00.00	103.89							
	PVT	167+25.00	104.56							
Linear	POB	167+25.00	104.56							
	PVC	167+50.00	104.69							
Symmetrical Parabola	PVC	167+50.00	104.69	200.00	0.53%	-0.24%	258.40	-0.19	Crest	70.00
	PVI	168+50.00	105.23							
	PVRC	169+50.00	104.99							
Symmetrical Parabola	PVRC	169+50.00	104.99	200.00	-0.24%	-0.03%	946.75	0.05	Sag	80.00
	PVI	170+50.00	104.75							
	PVT	171+50.00	104.72							
Linear	POB	171+50.00	104.72							
	PVC	173+50.00	104.66							
Symmetrical Parabola	PVC	173+50.00	104.66	200.00	-0.03%	-0.17%	1376.94	-0.04	Crest	80.00
	PVI	174+50.00	104.63							
	PVT	175+50.00	104.46							
Linear	POB	175+50.00	104.46							
	PVC	176+00.00	104.37							
Symmetrical Parabola	PVC	176+00.00	104.37	200.00	-0.17%	-0.08%	2127.66	0.02	Sag	80.00
	PVI	177+00.00	104.20							
	PVT	178+00.00	104.12							
Linear	POB	178+00.00	104.12							
	PVC	178+75.00	104.06							
Symmetrical Parabola	PVC	178+75.00	104.06	250.00	-0.08%	0.07%	1648.35	0.05	Sag	80.00
	PVI	180+00.00	103.96							
	PVT	181+25.00	104.04							
Linear	POB	181+25.00	104.04							
	PVC	182+00.00	104.10							
Symmetrical Parabola	PVC	182+00.00	104.10	200.00	0.07%	-0.13%	991.74	-0.05	Crest	80.00
	PVI	183+00.00	104.17							
	PVT	184+00.00	104.04							
Linear	POB	184+00.00	104.04							
	PVC	184+25.00	104.01							
Symmetrical Parabola	PVC	184+25.00	104.01	200.00	-0.13%	0.19%	618.35	0.08	Sag	80.00
	PVI	185+25.00	103.88							
	PVT	186+25.00	104.07							
Linear	POB	186+25.00	104.07							
	PVC	187+00.00	104.22							
Symmetrical Parabola	PVC	187+00.00	104.22	200.00	0.19%	-0.07%	756.67	-0.07	Crest	80.00
	PVI	188+00.00	104.41							
	PVRC	189+00.00	104.34							

Element	Type	Station	Elevation	Length	Entrance Grade	Exit Grade	K	Middle Ordinate	Crest or Sag	Design Speed
Symmetrical Parabola	PVRC	189+00.00	104.34	250.00	-0.07%	0.17%	1049.78	0.07	Sag	80.00
	PVI	190+25.00	104.25							
	PVT	191+50.00	104.46							
Linear	POB	191+50.00	104.46							
	PVC	192+00.00	104.54							
Symmetrical Parabola	PVC	192+00.00	104.54	200.00	0.17%	0.04%	1523.55	-0.03	Crest	80.00
	PVI	193+00.00	104.71							
	PVT	194+00.00	104.75							
Linear	POB	194+00.00	104.75							
	PVC	194+50.00	104.76							
Symmetrical Parabola	PVC	194+50.00	104.76	200.00	0.04%	0.17%	1461.63	0.03	Sag	80.00
	PVI	195+50.00	104.80							
	PVCC	196+50.00	104.97							
Symmetrical Parabola	PVCC	196+50.00	104.97	200.00	0.17%	0.40%	872.09	0.06	Sag	80.00
	PVI	197+50.00	105.15							
	PVRC	198+50.00	105.55							
Symmetrical Parabola	PVRC	198+50.00	105.55	200.00	0.40%	-0.12%	383.02	-0.13	Crest	75.00
	PVI	199+50.00	105.95							
	PVT	200+50.00	105.83							
Linear	POB	200+50.00	105.83							
	PVC	201+00.00	105.77							
Symmetrical Parabola	PVC	201+00.00	105.77	200.00	-0.12%	-0.46%	588.24	-0.09	Crest	80.00
	PVI	202+00.00	105.65							
	PVRC	203+00.00	105.19							
Symmetrical Parabola	PVRC	203+00.00	105.19	200.00	-0.46%	-0.33%	1562.50	0.03	Sag	80.00
	PVI	204+00.00	104.73							
	PVT	205+00.00	104.40							
Linear	POB	205+00.00	104.40							
	PVC	205+25.00	104.32							
Symmetrical Parabola	PVC	205+25.00	104.32	250.00	-0.33%	0.10%	574.27	0.14	Sag	80.00
	PVI	206+50.00	103.90							
	PVT	207+75.00	104.03							
Linear	POB	207+75.00	104.03							
	PVC	208+50.00	104.11							
Symmetrical Parabola	PVC	208+50.00	104.11	200.00	0.10%	-0.02%	1621.62	-0.03	Crest	80.00
	PVI	209+50.00	104.21							
	PVT	210+50.00	104.19							
Linear	POB	210+50.00	104.19							
	PVC	211+50.00	104.17							
Symmetrical Parabola	PVC	211+50.00	104.17	200.00	-0.02%	0.05%	2857.14	0.02	Sag	80.00
	PVI	212+50.00	104.15							
	PVCC	213+50.00	104.20							
Symmetrical Parabola	PVCC	213+50.00	104.20	200.00	0.05%	0.14%	2105.26	0.02	Sag	80.00
	PVI	214+50.00	104.25							
	PVRC	215+50.00	104.40							
Symmetrical Parabola	PVRC	215+50.00	104.40	200.00	0.14%	0.06%	2434.78	-0.02	Crest	80.00
	PVI	216+50.00	104.54							
	PVT	217+50.00	104.60							
Linear	POB	217+50.00	104.60							
	PVC	219+00.00	104.70							
Symmetrical Parabola	PVC	219+00.00	104.70	200.00	0.06%	0.29%	880.50	0.06	Sag	80.00
	PVI	220+00.00	104.76							
	PVRC	221+00.00	105.05							
Symmetrical Parabola	PVRC	221+00.00	105.05	200.00	0.29%	-0.12%	485.18	-0.10	Crest	80.00
	PVI	222+00.00	105.34							
	PVRC	223+00.00	105.22							
Symmetrical Parabola	PVRC	223+00.00	105.22	250.00	-0.12%	-0.07%	4687.50	0.02	Sag	80.00
	PVI	224+25.00	105.07							
	PVCC	225+50.00	104.98							
Symmetrical Parabola	PVCC	225+50.00	104.98	200.00	-0.07%	-0.02%	3891.89	0.01	Sag	80.00
	PVI	226+50.00	104.91							
	PVCC	227+50.00	104.89							
Symmetrical Parabola	PVCC	227+50.00	104.89	200.00	-0.02%	0.13%	1333.33	0.04	Sag	80.00
	PVI	228+50.00	104.88							
	PVT	229+50.00	105.01							
Linear	POB	229+50.00	105.01							
	PVC	230+50.00	105.14							
Symmetrical Parabola	PVC	230+50.00	105.14	200.00	0.13%	0.15%	11707.32	0.00	Sag	80.00
	PVI	231+50.00	105.27							
	PVRC	232+50.00	105.42							
Symmetrical Parabola	PVRC	232+50.00	105.42	200.00	0.15%	0.10%	4324.32	-0.01	Crest	80.00
	PVI	233+50.00	105.57							
	PVT	234+50.00	105.68							

PVC = POINT OF VERTICAL CURVATURE
PVT = POINT OF VERTICAL TANGENCY
PVI = POINT OF VERTICAL INTERSECTION
POVT = POINT ON VERTICAL TANGENT
POVC = POINT ON VERTICAL CURVE

PVCC = POINT OF VERTICAL COMPOUND CURVATURE
PVRC = POINT OF VERTICAL REVERSE CURVATURE
VHIGH = VERTICAL HIGH POINT
VLOW = VERTICAL LOW POINT

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032_Vertical_Table.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M.BOGUE
VERTICAL ALIGNMENT TABLE SHEET 1

PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G. BAKOS

Element	Type	Station	Elevation	Length	Entrance Grade	Exit Grade	K	Middle Ordinate	Crest or Sag	Design Speed
Linear	POB	234+50.00	105.68							
	PVC	235+00.00	105.73							
Symmetrical Parabola	PVC	235+00.00	105.73							
	PVI	236+00.00	105.83	200.00	0.10%	0.09%	22105.26	0.00	Crest	80.00
	PVT	237+00.00	105.92							
Linear	POB	237+00.00	105.92							
	PVC	238+50.00	106.07							
Symmetrical Parabola	PVC	238+50.00	106.07							
	PVI	239+50.00	106.16	200.00	0.09%	0.06%	6363.64	-0.01	Crest	80.00
	PVT	240+50.00	106.22							
Linear	POB	240+50.00	106.22							
	PVC	242+00.00	106.32							
Symmetrical Parabola	PVC	242+00.00	106.32							
	PVI	243+00.00	106.38	200.00	0.06%	0.08%	11666.67	0.00	Sag	80.00
	PVT	244+00.00	106.46							
Linear	POB	244+00.00	106.46							
	PVC	245+50.00	106.58							
Symmetrical Parabola	PVC	245+50.00	106.58							
	PVI	246+50.00	106.66	200.00	0.08%	0.09%	25000.00	0.00	Sag	80.00
	PVT	247+50.00	106.75							
Linear	POB	247+50.00	106.75							
	PVC	248+00.00	106.79							
Symmetrical Parabola	PVC	248+00.00	106.79							
	PVI	249+00.00	106.88	200.00	0.09%	-0.08%	1190.48	-0.04	Crest	80.00
	PVT	250+00.00	106.80							
Linear	POB	250+00.00	106.80							
	PVC	251+00.00	106.72							
Symmetrical Parabola	PVC	251+00.00	106.72							
	PVI	252+00.00	106.64	200.00	-0.08%	0.02%	1945.95	0.03	Sag	80.00
	PVT	253+00.00	106.66							
Linear	POB	253+00.00	106.66							
	PVC	254+00.00	106.69							
Symmetrical Parabola	PVC	254+00.00	106.69							
	PVI	255+00.00	106.71	200.00	0.02%	0.26%	855.11	0.06	Sag	80.00
	PVT	256+00.00	106.96							
Linear	POB	256+00.00	106.96							
	PVC	256+50.00	107.09							
Symmetrical Parabola	PVC	256+50.00	107.09							
	PVI	257+50.00	107.35	200.00	0.26%	-0.05%	652.17	-0.08	Crest	80.00
	PVT	258+50.00	107.30							
Linear	POB	258+50.00	107.30							
	PVC	260+02.50	107.22							
Symmetrical Parabola	PVC	260+02.50	107.22							
	PVI	261+50.00	107.15	295.00	-0.05%	2.01%	143.03	0.76	Sag	60.00
	PVT	262+97.50	110.12							
Linear	POB	262+97.50	110.12							
	PVC	263+50.00	111.18							
Symmetrical Parabola	PVC	263+50.00	111.18							
	PVI	265+50.00	115.20	400.00	2.01%	-0.47%	161.42	-1.24	Crest	60.00
	PVT	267+50.00	114.27							
Linear	POB	267+50.00	114.27							
	PVC	268+25.00	113.92							
Symmetrical Parabola	PVC	268+25.00	113.92							
	PVI	269+75.00	113.22	300.00	-0.47%	-1.84%	218.45	-0.51	Crest	65.00
	PVT	271+25.00	110.46							
Linear	POB	271+25.00	110.46							
	PVC	271+90.00	109.27							
Symmetrical Parabola	PVC	271+90.00	109.27							
	PVI	273+40.00	106.51	300.00	-1.84%	-0.23%	186.19	0.60	Sag	70.00
	PVT	274+90.00	106.17							
Linear	POB	274+90.00	106.17							
	PVC	275+15.00	106.11							
Symmetrical Parabola	PVC	275+15.00	106.11							
	PVI	277+40.00	105.60	450.00	-0.23%	3.93%	108.32	2.34	Sag	50.00
	PVT	279+65.00	114.44							
Linear	POB	279+65.00	114.44							
	PVC	280+50.00	117.77							
Symmetrical Parabola	PVC	280+50.00	117.77							
	PVI	281+50.00	121.70	200.00	3.93%	0.54%	58.98	-0.85	Crest	40.00
	PVT	282+50.00	122.24							
Linear	POB	282+50.00	122.24							
	PVC	283+00.00	122.50							

Element	Type	Station	Elevation	Length	Entrance Grade	Exit Grade	K	Middle Ordinate	Crest or Sag	Design Speed
Symmetrical Parabola	PVC	283+00.00	122.50							
	PVI	284+00.00	123.04	200.00	0.54%	-0.32%	234.89	-0.21	Crest	65.00
	PVRC	285+00.00	122.72							
Symmetrical Parabola	PVRC	285+00.00	122.72							
	PVI	286+00.00	122.41	200.00	-0.32%	-0.08%	853.53	0.06	Sag	80.00
	PVT	287+00.00	122.33							
Linear	POB	287+00.00	122.33							
	PVC	288+50.00	122.21							
Symmetrical Parabola	PVC	288+50.00	122.21							
	PVI	289+50.00	122.13	200.00	-0.08%	-0.14%	3132.65	-0.02	Crest	80.00
	PVT	290+50.00	121.98							
Linear	POB	290+50.00	121.98							
	PVC	291+50.00	121.84							
Symmetrical Parabola	PVC	291+50.00	121.84							
	PVI	292+50.00	121.69	200.00	-0.14%	0.11%	792.79	0.06	Sag	80.00
	PVT	293+50.00	121.80							
Linear	POB	293+50.00	121.80							
	PVC	297+00.00	122.17							
Symmetrical Parabola	PVC	297+00.00	122.17							
	PVI	298+00.00	122.28	200.00	0.11%	-0.61%	278.06	-0.18	Crest	70.00
	PVT	299+00.00	121.67							
Linear	POB	299+00.00	121.67							
	PVC	299+50.00	121.36							
Symmetrical Parabola	PVC	299+50.00	121.36							
	PVI	300+50.00	120.75	200.00	-0.61%	-0.67%	3333.33	-0.02	Crest	80.00
	PVT	301+50.00	120.08							
Linear	POB	301+50.00	120.08							
	PVC	302+00.00	119.74							
Symmetrical Parabola	PVC	302+00.00	119.74							
	PVI	303+00.00	119.07	200.00	-0.67%	-0.47%	990.10	0.05	Sag	80.00
	PVRC	304+00.00	118.60							
Symmetrical Parabola	PVRC	304+00.00	118.60							
	PVI	305+00.00	118.13	200.00	-0.47%	-0.48%	20000.00	0.00	Crest	80.00
	PVCC	306+00.00	117.65							
Symmetrical Parabola	PVCC	306+00.00	117.65							
	PVI	307+00.00	117.17	200.00	-0.48%	-0.56%	2586.21	-0.02	Crest	80.00
	PVT	308+00.00	116.61							
Linear	POB	308+00.00	116.61							
	PVC	309+05.00	116.03							
Symmetrical Parabola	PVC	309+05.00	116.03							
	PVI	310+75.00	115.08	340.00	-0.56%	4.29%	70.21	2.06	Sag	40.00
	PVT	312+45.00	122.37							
Linear	POB	312+45.00	122.37							
	PVC	313+30.00	126.01							
Symmetrical Parabola	PVC	313+30.00	126.01							
	PVI	314+50.00	131.15	240.00	4.29%	0.07%	56.93	-1.26	Crest	40.00
	PVT	315+70.00	131.23							
Linear	POB	315+70.00	131.23							
	PVC	316+50.00	131.29							
Symmetrical Parabola	PVC	316+50.00	131.29							
	PVI	317+50.00	131.36	200.00	0.07%	-1.96%	98.52	-0.51	Crest	50.00
	PVRC	318+50.00	129.40							

Element	Type	Station	Elevation	Length	Entrance Grade	Exit Grade	K	Middle Ordinate	Crest or Sag	Design Speed
Symmetrical Parabola	PVRC	318+50.00	129.40							
	PVI	319+50.00	127.44	200.00	-1.96%	0.46%	82.64	0.61	Sag	45.00
	PVT	320+50.00	127.90							
Linear	POB	320+50.00	127.90							
	PVC	322+50.00	128.82							
Symmetrical Parabola	PVC	322+50.00	128.82							
	PVI	323+50.00	129.28	200.00	0.46%	0.45%	3000.00	0.00	Crest	80.00
	PVT	324+50.00	129.73							
Linear	POB	324+50.00	129.73							
	PVC	325+50.00	130.19							
Symmetrical Parabola	PVC	325+50.00	130.19							
	PVI	326+50.00	130.64	200.00	0.45%	0.29%	1209.68	-0.04	Crest	80.00
	PVT	327+50.00	130.93							
Linear	POB	327+50.00	130.93							
	PVC	329+25.00	131.43							
Symmetrical Parabola	PVC	329+25.00	131.43							
	PVI	330+25.00	131.72	200.00	0.29%	-5.02%	37.70	-1.33	Crest	35.00
	PVT	331+25.00	126.70							
Linear	POB	331+25.00	126.70							
	PVC	331+35.00	126.20							
Symmetrical Parabola	PVC	331+35.00	126.20							
	PVI	332+65.00	119.68	260.00	-5.02%	-0.58%	58.62	1.44	Sag	35.00
	PVT	333+95.00	118.92							
Linear	POB	333+95.00	118.92							
	PVC	336+00.00	117.73							
Symmetrical Parabola	PVC	336+00.00	117.73							
	PVI	337+00.00	117.15	200.00	-0.58%	1.00%	126.46	0.40	Sag	55.00
	PVT	338+00.00	118.15							

PVC = POINT OF VERTICAL CURVATURE
PVT = POINT OF VERTICAL TANGENCY
PVI = POINT OF VERTICAL INTERSECTION
POVT = POINT ON VERTICAL TANGENT
POVC = POINT ON VERTICAL CURVE

PVCC = POINT OF VERTICAL COMPOUND CURVATURE
PVRC = POINT OF VERTICAL REVERSE CURVATURE
VHIGH = VERTICAL HIGH POINT
VLOW = VERTICAL LOW POINT

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032_Vertical_Table.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M.BOGUE
VERTICAL ALIGNMENT TABLE SHEET 2

PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G. BAKOS

SOIL CLASSIFICATION

AASHTO	
A1	Gravel and Sand
A3	Fine Sand
A2	Silty or Clayey Gravel and Sand
A4	Silty Soil - Low Compressibility
A5	Silty Soil - Highly Compressible
A6	Clayey Soil - Low Compressibility
A7	Clayey Soil - Highly Compressible

ROCK QUALITY DESIGNATION

R.Q.D. (%)	ROCK DESCRIPTION
<25	Very Poor
25 to 50	Poor
51 to 75	Fair
76 to 90	Good
>90	Excellent

SHEAR STRENGTH

UNDRAINED SHEAR STRENGTH IN P.S.F.	CONSISTENCY
<250	Very Soft
250-500	Soft
500-1000	Med. Stiff
1000-2000	Stiff
2000-4000	Very Stiff
>4000	Hard

CORRELATION GUIDE OF "N" TO DENSITY/CONSISTENCY

DENSITY (GRANULAR SOILS)		CONSISTENCY (COHESIVE SOILS)	
N	DESCRIPTIVE TERM	N	DESCRIPTIVE TERM
<5	Very Loose	<2	Very Soft
5-10	Loose	2-4	Soft
11-24	Med. Dense	5-8	Med. Stiff
25-50	Dense	9-15	Stiff
>50	Very Dense	16-30	Very Stiff
		31-60	Hard
		>60	Very Hard

COMMONLY USED SYMBOLS

▼	Water Elevation
⊗	Standard Penetration Boring
⊕	Auger Boring
⊙	Rod Sounding
S	Sample
N	Standard Penetration Test Blow Count Per Foot For: 2" O.D. Sampler 1 3/8" I.D. Sampler Hammer Weight Of 140 Lbs. Hammer Fall Of 30"
VS	Field Vane Shear Test
US	Undisturbed Soil Sample
B	Blast
DC	Diamond Core
MD	Mud Drill
WA	Wash Ahead
HSA	Hollow Stem Auger
AX	Core Size 1 1/8"
BX	Core Size 1 5/8"
NX	Core Size 2 1/8"
M	Double Tube Core Barrel Used
LL	Liquid Limit
PL	Plastic Limit
PI	Plasticity Index
NP	Non Plastic
w	Moisture Content (Dry Wgt. Basis)
D	Dry
M	Moist
MTW	Moist To Wet
W	Wet
Sat	Saturated
Bo	Boulder
Gr	Gravel
Sa	Sand
Si	Silt
Cl	Clay
HP	Hardpan
Le	Ledge
NLTD	No Ledge To Depth
CNPF	Can Not Penetrate Further
TLOB	Top of Ledge Or Boulder
NR	No Recovery
Rec.	Recovery
%Rec.	Percent Recovery
ROD	Rock Quality Designation
CBR	California Bearing Ratio
<	Less Than
>	Greater Than
R	Refusal (N > 100)
VTSPG	NAD83 - See Note 7

COLOR			
blk	Black	pnk	Pink
bl	Blue	pu	Purple
brn	Brown	rd	Red
dk	Dark	tn	Tan
gry	Gray	wh	White
gn	Green	yel	Yellow
lt	Light	mltc	Multicolored
or	Orange		

Boring	Existing Centerline Station Field	Existing Centerline Offset (ft) Field	Proposed Centerline Station CADD	Proposed Centerline Offset (ft) CADD	Northing (ft) Field	Easting (ft) Field	Elevation (ft) CADD	CNPF-TLOB
B-101	1113+40	25	41+04.66	24.86	900943.21	1457823.82	99.49	87.89
B-102	1118+50	-34	45+99.54	-23.47	901024.32	1458314.4	97.22	75.22
B-103	1143+50	21	70+87.30	25.68	901120.82	1460800.92	103.26	95.26
B-104	1168+45	23.8	96+06.19	17.78	901339.48	1463305.42	99.42	80.62
B-105	1173+55	26	101+09.00	23.88	901231.09	1463789.54	97.75	92.75
B-105A	1173+80	26	101+38.88	-41.74	901282.7	1463839.96	99.14	90.14
B-106	1178+56	25.4	105+99.50	25.07	901017.7	1464225.35	100.82	84.92
B-107	1178+22	-14.5	105+78.40	-12.19	901060.52	1464225.43	103.78	95.78
HA-14			106+23.04	3.02	901025.23	1464256.72	103.89	93.89
B-108	1183+50	-40	111+08.90	-37.12	900814.74	1464698.29	94.91	72.91
B-109	1190+49	-35	118+08.38	-19.36	900350.01	1465228.17	98.87	76.87
B-110	1198+48	-40	125+98.74	-31.54	899710.99	1465699.75	96.17	74.17
B-111	1213+42	-18.2	141+02.67	-16.47	898391.89	1466422.26	98.92	76.92
B-112	1223+25	27.5	150+75.21	18.53	897593.5	1466966.92	98.02	82.02
B-113	1231+50	36	159+14.89	27.98	897025.44	1467573.86	98.49	76.49
B-114	1236+85	38.5	164+46.00	14.44	896619.48	1467909.52	101.27	79.27
B-115	1246+60	39	174+26.05	31.43	895695.5	1468230.87	100.72	78.72
B-116	1261+85	32	189+43.79	22.45	894321.58	1468882.05	101.50	79.50
B-117	1230+00	21	157+64.02	17.69	897146.7	1467483.49	98.75	76.75
B-118	1228+50	28	156+12.95	18.5	897256.36	1467381.56	97.89	85.89
B-118A	1228+50	33	156+14.37	23.32	897251.97	1467379.13	97.51	77.11
B-119	1226+75	28	154+42.46	19.79	897370.11	1467256.82	97.50	89.50
B-119A	1226+75	33	154+38.22	26.56	897367.65	1467249.25	96.80	74.80
B-120	1225+50	28	153+16.62	21.41	897446.47	1467158.41	97.87	75.87
B-121	1224+00	26	151+65.96	20.36	897537.63	1467038.45	97.31	85.71
B-122	1222+50	26	150+14.75	19.61	897629.56	1466917.73	98.45	82.65
B-123	1220+77	36	148+41.69	33.91	897737.97	1466777.57	96.63	82.13

DEFINITIONS (AASHTO)

BEDROCK (LEDGE) - Rock in its native location of indefinite thickness.

BOULDER - A rock fragment with an average dimension > 12 inches.

COBBLE - Rock fragments with an average dimension between 3 and 12 inches.

GRAVEL - Rounded particles of rock < 3" and > 0.0787" (#10 sieve).

SAND - Particles of rock < 0.0787" (#10 sieve) and > 0.0029" (#200 sieve).

SILT - Soil < 0.0029" (#200 sieve), non or slightly plastic and exhibits no strength when air-dried.

CLAY - Fine grained soil, exhibits plasticity when moist and considerable strength when air-dried.

VARVED - Alternate layers of silt and clay.

HARDPAN - Extremely dense soil, cemented layer, not softened when wet.

MUCK - Soft organic soil (containing > 10% organic material.

MOISTURE CONTENT - Weight of water divided by dry weight of soil.

FLOWING SAND - Granular soil so saturated (loose) that it flows into drill casing during extraction of wash rod.

STRIKE - Angle from magnetic north to line of intersection of bed with a horizontal plane.

DIP - Inclination of bed with a horizontal plane.

1. The subsurface explorations shown herein were made between June 2001 and March 2014 by the Agency.

2. Soil and rock classifications, properties and descriptions are based on engineering interpretation from available subsurface information by the Agency and may not necessarily reflect actual variations in subsurface conditions that may be encountered between individual boring or sample locations.

3. Observed water levels and/or conditions indicated are as recorded at the time of exploration and may vary according to the prevailing rainfall, methods of exploration and other factors.

GENERAL NOTES

4. Engineering judgment was exercised in preparing the subsurface information presented herein. Analysis and interpretation of subsurface data was performed and interpreted for Agency design and estimating purposes. Presentation of the information in the Contract is intended to provide the Contractor access to the same data available to the Agency. The subsurface information is presented in good faith and is not intended as a substitute for personal investigation, independent interpretation, independent analysis or judgment by the Contractor.

5. Pictorial structure details shown on the boring plan layout or soils profile are for illustrative purposes only and may not accurately portray final contract details.

6. Terminology used on boring logs to describe the hardness, degree of weathering, and spacing of fractures, joints and other discontinuities in the bedrock is defined in the AASHTO Manual on Subsurface Investigations, 1988.

7. Northing and Easting coordinates are shown in Vermont State Plane Grid North American Datum 1983 in meters and survey feet.

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032_Boring_Info.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
BORING INFORMATION SHEET

PLOT DATE: 3/7/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 17 OF 305

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

SWANTON
NH 036-1(9)
VT-78 ROADWAY

Boring No.: **B101**
Page No.: 1 of 1
Pin No.: 96B032
Checked By: CEE

Boring Crew: GARROW, NIETO, JUDKINS
Date Started: 3/20/14 Date Finished: 3/20/14
VTSPG NAD83: N 900943.21 ft E 1457823.82 ft
Station: 1113+40 Offset: 25.00
Ground Elevation: 99.5 ft

	Casing	Sampler
Type:	H.S.A.	SS
I.D.:	3.25 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 45C TRACK	C_E = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
03/20/14	1.1	After drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		A-4, GrSaSi, gry-Lt/brn, Moist, Rec. = 2.0 ft, Lab Note: A small layer of clay was noticeable. Sticks & wood were within sample.	4-11-11-22 (22)	16.7	24.0	34.9	41.1
		A-4, GrSiSa, Lt/brn, Moist, Rec. = 1.7 ft	17-20-23-26 (43)	12.5	21.5	39.8	38.7
5		A-4, GrSaSi, Lt/brn, Moist, Rec. = 1.4 ft	8-11-16-9 (27)	11.5	29.6	34.5	35.9
		A-4, GrSaSi, gry, Moist, Rec. = 0.6 ft	5-7-39-10 (46)	10.6	22.7	30.5	46.8
		Tested, SaGr, gry, Dry, Rec. = 0.3 ft, Lab Note: Lots of Broken & pulverized rock was within sample.	WH-3-8-12 (11)	3.4	56.0	33.8	10.2
		A-2-4, SaSiGr, gry, Wet, Rec. = 1.0 ft		15.2	44.9	21.1	34.0
10		A-4, SaGrSi, gry, Wet, Rec. = 0.7 ft	10-16-48-R@1.0" (64)	10.4	32.2	26.4	41.4
		Tested, SaGr, gry, Wet, Lab Note: Mostly Broken Rock. Could not penatrate further.		9.1	56.3	23.9	19.8
		Hole stopped @ 11.6 ft CNPF-TLOB					
15							
20							
25							

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. C_E is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 SWANTON NH 036-1(9).GPJ VERMONT AOT.GDT 7/16/14

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

SWANTON
NH 036-1(9)
VT-78 ROADWAY

Boring No.: **B-102**
Page No.: 1 of 1
Pin No.: 96B032
Checked By: CEE

Boring Crew: GARROW, NIETO, JUDKINS
Date Started: 3/20/14 Date Finished: 3/20/14
VTSPG NAD83: N 901024.32 ft E 1458314.40 ft
Station: 1118+50 Offset: -34.00
Ground Elevation: 97.2 ft

	Casing	Sampler
Type:	H.S.A.	SS & TUBE
I.D.:	3.25 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 45C TRACK	C_E = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
03/20/14	5.3	After drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
		A-7-6, SiCl, brn, MTW, Rec. = 0.9 ft, Lab Note: Roots & sticks were within sample. Sample tested: Trace of Organics (3.9%)	2-1-1-1 (2)	52.0	0.3	13.9	85.8	46	18
		A-7-6, Cl, brn-gry, Moist, Rec. = 1.5 ft	1-3-4-5 (7)	35.0	3.7	3.5	92.8	48	22
5		Field Note:, Attempted Shelby Tube sample., No Recovery.							
		A-7-6, Cl, brn-Lt/gry, MTW, Rec. = 2.0 ft	2-2-2-3 (4)	44.1	0.8	2.6	96.6	50	24
		Shelby Tube, gry, Moist, Rec. = 1.3 ft, 8.0 ft - 10.0 ft							
10		A-2-4, GrSiSa, gry, Moist, Rec. = 1.0 ft	3-6-6-9 (12)	13.1	23.5	46.7	29.8		
15		A-2-4, SiGrSa, gry, Wet, Rec. = 1.4 ft	12-24-30-R@5.0" (54)	7.9	35.2	34.5	30.3		
20		A-4, SaGrSi, gry, Wet, Rec. = 1.4 ft	6-17-18-39 (35)	7.3	31.3	30.8	37.9		
		Hole stopped @ 22.0 ft							
25									

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. C_E is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 SWANTON NH 036-1(9).GPJ VERMONT AOT.GDT 7/16/14

NOTES:

1. SEE PROJECT LAYOUT SHEETS FOR THE LOCATION OF BORE HOLES.

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032_Borings.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M.BOGUE
BORING AND CORING SHEET 1

PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G. BAKOS
SHEET 18 OF 305

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

SWANTON
NH 036-1(9)
VT-78 ROADWAY

Boring No.: **B-103**
Page No.: 1 of 1
Pin No.: 96B032
Checked By: CEE

Boring Crew: DAIGNEAULT, GARROW, NIETO
Date Started: 3/18/14 Date Finished: 3/18/14
VTSPG NAD83: N 910020.82 ft E 1460800.92 ft
Station: 1143+50 Offset: 21.00
Ground Elevation: 103.3 ft

	Casing	Sampler
Type:	H.S.A.	SS
I.D.:	3.25 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 45C TRACK	C_E = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
03/18/14	5.2	After drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		A-2-4, GrSiSa, Lt/brn, MTW, Rec. = 1.4 ft, Sample tested: Trace of Organics (7.7%)	5-7-5-5 (12)	33.7	31.0	37.9	31.1
		Visual Description:, Broken Rock with silty sand, Lt/brn, Moist, Rec. = 0.6 ft, Insufficient sample for testing.	3-5-9-13 (14)	9.7			
5		A-2-4, SiSaGr, gry-Lt/brn, Moist, Rec. = 1.6 ft, Lab Note: Broke Rock was within sample.	6-27-10-9 (37)	11.1	41.6	31.4	27.0
		A-1-b, SiSaGr, gry-brn, MTW, Rec. = 1.5 ft, Auger could not penatrate further. To ledge or boulder.	5-14-14-13 (28)	11.5	43.1	33.8	23.1
		Hole stopped @ 8.0 ft CNPF-TLOB					
10		Remarks: 1. Hole collapsed at 5.3 ft.					
15							
20							
25							

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. C_E is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 SWANTON NH 036-1(9).GPJ VERMONT AOT.GDT 7/16/14

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

SWANTON
NH 036-1(9)
VT-78 ROADWAY

Boring No.: **B-104**
Page No.: 1 of 1
Pin No.: 96B032
Checked By: CEE

Boring Crew: GARROW, NIETO
Date Started: 3/11/14 Date Finished: 3/11/14
VTSPG NAD83: N 901339.48 ft E 1463305.42 ft
Station: 1168+45 Offset: 24.00
Ground Elevation: 99.4 ft

	Casing	Sampler
Type:	H.S.A.	SS & TUBE
I.D.:	3.25 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 45C TRACK	C_E = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
03/11/14	4.3	After drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
		A-1-b, SaGr, brn, Moist, Rec. = 0.4 ft, Lab Note: Sticks & grass were within sample.	1-1-1-1 (2)	22.7	42.1	41.0	16.9		
		A-7-5, CI, Lt/brn, MTW, Rec. = 0.6 ft, Sample tested: Trace of Organics (6.2%)	WH-WH-1-2 (1)	58.0	0.6	2.9	96.5	62	25
5		A-7-5, CI, brn, MTW, Rec. = 2.0 ft, Sample tested: Trace of Organics (6.0%)		50.5		2.2	97.8	61	25
		A-7-6, CI, Lt/brn, MTW, Rec. = 0.5 ft, Sample tested: Trace of Organics (5.5%)	1-2-4-9 (6)	44.2	0.3	3.0	96.7	54	24
		A-6, SiCl, gry-Lt/brn, MTW, Rec. = 1.5 ft, Sample tested: Trace of Organics (1.2%)		28.4	0.8	16.3	82.9	30	12
		A-2-4, SiGrSa, gry, MTW, Rec. = 1.3 ft	7-13-13-15 (26)	9.5	34.4	38.8	26.8		
10		A-1-b, SiSaGr, gry, MTW, Rec. = 1.1 ft	5-13-12-10 (25)	9.1	39.3	35.7	25.0		
15		A-2-4, SaSiGr, gry, MTW, Rec. = 1.6 ft	2-25-24-33 (49)	7.8	42.7	27.3	30.0		
		A-4, GrSaSi, gry, MTW, Rec. = 0.8 ft, Augers could not penatrate further. To ledge or boulder.	30-R@3.5" (R)	8.2	28.4	32.6	39.0		
		Hole stopped @ 18.8 ft CNPF-TLOB							
20									
25									

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. C_E is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 SWANTON NH 036-1(9).GPJ VERMONT AOT.GDT 7/16/14

NOTES:

1. SEE PROJECT LAYOUT SHEETS FOR THE LOCATION OF BORE HOLES.

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032_Borings.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M.BOGUE
BORING AND CORING SHEET 2

PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G. BAKOS
SHEET 19 OF 305

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

SWANTON
NH 036-1(9)
VT-78 ROADWAY

Boring No.: **B-105**
Page No.: 1 of 1
Pin No.: 96B032
Checked By: CEE

Boring Crew: GARROW, NIETO
Date Started: 3/11/14 Date Finished: 3/11/14
VTSPG NAD83: N 901231.09 ft E 1463789.54 ft
Station: 1173+55 Offset: 26.00
Ground Elevation: 97.8 ft

	Casing	Sampler
Type:	H.S.A.	SS
I.D.:	3.25 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 45C TRACK	C_E = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
03/11/14	2.9	After drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		A-2-4, SaGrSi, brn, MTW, Rec. = 0.7 ft, Lab Notes: Roots & sticks were within sample. Broken Rock was within sample.	1-1-1-1 (2)	33.4	32.7	32.4	34.9
		A-2-4, GrSiSa, Lt/brn, MTW, Rec. = 1.3 ft, Lab Note: Wood & sticks were within sample.	1-2-4-6 (6)	23.0	31.2	35.1	33.7
		Field Note:, Augers could not penatrate further. To ledge or boulder.					
5		Hole stopped @ 5.0 ft CNPF-TLOB					
10							
15							
20							
25							

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. C_E is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 SWANTON NH 036-1(9).GPJ VERMONT AOT.GDT 7/16/14

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

SWANTON
NH 036-1(9)
VT-78 ROADWAY

Boring No.: **B-105A**
Page No.: 1 of 1
Pin No.: 96B032
Checked By: CEE

Boring Crew: GARROW, NIETO
Date Started: 3/11/14 Date Finished: 3/11/14
VTSPG NAD83: N 901282.70 ft E 1463839.96 ft
Station: 1173+80 Offset: 26.00
Ground Elevation: 99.1 ft

	Casing	Sampler
Type:	H.S.A.	SS
I.D.:	3.25 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 45C TRACK	C_E = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
03/11/14		No water after drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		A-4, SaGrSi, gry-Lt/brn, MTW, Rec. = 0.5 ft, Lab Note: Broken Rock was within sample.	R@6.0"	11.5	32.7	30.3	37.0
		Field Note:, Augers could not penatrate further. To ledge or boulder.					
5		Hole stopped @ 9.0 ft CNPF-TLOB					
10							
15							
20							
25							

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. C_E is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 SWANTON NH 036-1(9).GPJ VERMONT AOT.GDT 7/16/14

NOTES:

1. SEE PROJECT LAYOUT SHEETS FOR THE LOCATION OF BORE HOLES.

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032_Borings.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G. BAKOS
BORING AND CORING SHEET 3	SHEET 20 OF 305

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

SWANTON
NH 036-1(9)
VT-78 ROADWAY

Boring No.: **B-106**
Page No.: 1 of 1
Pin No.: 96B032
Checked By: CEE

Boring Crew: GARROW, NIETO, JUDKINS
Date Started: 3/21/14 Date Finished: 3/21/14
VTSPG NAD83: N 901017.70 ft E 1464225.35 ft
Station: 1178+56 Offset: 25.00
Ground Elevation: 100.8 ft

	Casing	Sampler
Type:	H.S.A.	SS
I.D.:	3.25 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 45C TRACK	C_E = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
03/21/14	6.8	After drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		A-1-b, SaGr, brn, Moist, Rec. = 1.5 ft, Lab Note: Broken Rock was within sample.	9-15-31-17 (46)	15.4	50.3	33.7	16.0
		A-1-b, SaGr, brn, Moist, Rec. = 0.7 ft, Lab Note: Broken Rock was within sample.	11-5-4-4 (9)	10.7	49.2	33.8	17.0
5		Visual Description:, Broken Rock, gry, Moist, Rec. = 0.1 ft	7-9-10-22 (19)				
		A-1-a, SaGr, Lt/brn-Lt/gry, Moist, Rec. = 0.7 ft, Lab Note: Broken Rock was within sample.	9-21-20-7 (41)	7.8	56.2	30.2	13.6
		A-1-b, SiSaGr, brn, Moist, Rec. = 0.7 ft, Lab Note: Broken Rock was within sample.	6-21-13-7 (34)	12.9	45.9	33.8	20.3
10		A-1-a, SaGr, brn-white, Dry, Rec. = 0.3 ft, Lab Note: Broken Rock was within sample.		2.9	54.5	36.3	9.2
		A-1-b, SaGr, gry, Wet, Rec. = 0.7 ft, Lab Note: Broken Rock was within sample.	2-6-8-2 (14)	50.2	47.9	34.6	17.5
15		A-1-b, SaGr, gry, Wet, Rec. = 0.9 ft, Lab Note: Broken Rock was within sample. Could not penatrate further.	22-50-R@5.0" (R)	12.8	47.7	40.9	11.4
		Hole stopped @ 15.9 ft CNPF-TLOB					
20							
25							

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. C_E is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 SWANTON NH 036-1(9).GPJ VERMONT AOT.GDT 7/16/14

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

SWANTON
NH 036-1(9)
VT-78 ROADWAY

Boring No.: **B-107**
Page No.: 1 of 1
Pin No.: 96B032
Checked By: CEE

Boring Crew: GARROW, JUDKINS
Date Started: 3/25/14 Date Finished: 3/25/14
VTSPG NAD83: N 901060.52 ft E 1464225.43 ft
Station: 1178+22 Offset: -14.50
Ground Elevation: 103.8 ft

	Casing	Sampler
Type:	H.S.A.	SS
I.D.:	3.25 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 45C TRACK	C_E = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
03/25/14		No water to depth.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		A-1-b, SaGr, Dk/brn, Moist, Rec. = 1.3 ft, Lab Note: Broken Rock was within sample.	25-39-R@6.0" (R)	12.4	42.6	38.1	19.3
		A-1-b, SiSaGr, Dk/brn, Moist, Rec. = 1.0 ft, Lab Note: Broken Rock was within sample.	17-49-R@1.0" (R)	8.2	38.6	38.3	23.1
5		Tested, SaGr, Dk/gry, Moist, Rec. = 1.0 ft, Lab Note: Mostly Broken Rock	14-22-19-6 (41)	6.2	65.6	25.5	8.9
		A-1-b, SiGrSa, brn, Moist, Rec. = 0.4 ft	4-4-5-3 (9)	13.4	34.2	44.4	21.4
		Field Note:, Could not penatrate further, No Recovery	R@0.0"				
		Hole stopped @ 8.0 ft CNPF-TLOB					
10							
15							
20							
25							

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. C_E is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 SWANTON NH 036-1(9).GPJ VERMONT AOT.GDT 7/16/14

NOTES:

1. SEE PROJECT LAYOUT SHEETS FOR THE LOCATION OF BORE HOLES.

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032_Borings.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M.BOGUE
BORING AND CORING SHEET 4

PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G. BAKOS
SHEET 21 OF 305

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

SWANTON
NH 036-1(9)
VT-78 ROADWAY

Boring No.: **B-108**
Page No.: 1 of 1
Pin No.: 96B032
Checked By: CEE

Boring Crew: GARROW, NIETO
Date Started: 3/07/14 Date Finished: 3/07/14
VTSPG NAD83: N 900814.74 ft E 1464698.29 ft
Station: 1183+50 Offset: -40.00
Ground Elevation: 94.9 ft

	Casing	Sampler
Type:	H.S.A.	SS & TUBE
I.D.:	3.25 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 45C TRACK	C_E = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
03/07/14	5.2	

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
		A-4, SaSi, brn, MTW, Rec. = 1.0 ft, Sample tested: Little Organics (13.3%)	4-9-6-1 (15)	197.1		27.8	72.2		
		A-4, SaSi, brn, MTW, Rec. = 0.3 ft, Sample tested: Trace of Organics (9.6%)	1-1-1-1 (2)	141.9		27.2	72.8		
5		A-4, SaSi, gry-brn, MTW, Rec. = 1.7 ft	WH-WH-1-1 (1)	39.1	0.6	21.8	77.6	28	1
		A-4, SiSa, gry, Wet, Rec. = 0.8 ft		26.1	1.8	57.3	40.9		
		A-4, SiSa, Lt/gry, MTW, Rec. = 1.2 ft	WH-WH-WH-WH (WH)	34.2	0.4	55.2	44.4		
10		A-4, SaSi, gry, MTW, Rec. = 2.0 ft, Sample tested: Trace of Organics (2.1%)	WH-WH-WH-WH (WH)	38.2	0.3	41.4	58.3		
15		A-4, SaSi, gry, Wet, Rec. = 2.0 ft, Sample tested: Trace of Organics (1.5%)	WH-WH-WH-WH (WH)	39.0	0.2	26.8	73.0		
20		A-4, Si, gry, MTW, Rec. = 2.0 ft, Sample tested: Trace of Organics (1.5%)	WR-WR-WH-1 (WH)	36.6	0.2	14.6	85.2		
		Hole stopped @ 22.0 ft							
25									

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. C_E is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 SWANTON NH 036-1(9).GPJ VERMONT AOT.GDT 7/16/14

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

SWANTON
NH 036-1(9)
VT-78 ROADWAY

Boring No.: **B-109**
Page No.: 1 of 1
Pin No.: 96B032
Checked By: CEE

Boring Crew: GARROW, NIETO
Date Started: 3/10/14 Date Finished: 3/10/14
VTSPG NAD83: N 900350.01 ft E 1465228.17 ft
Station: 1190+49 Offset: -35.00
Ground Elevation: 98.9 ft

	Casing	Sampler
Type:	H.S.A.	SS
I.D.:	3.25 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 45C TRACK	C_E = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
03/10/14	9.8	While drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		A-2-4, GrSiSa, brn, Moist, Rec. = 1.3 ft, Lab Note: Sticks & roots were within sample.	8-17-26-38 (43)	23.4	21.0	55.8	23.2
		A-4, SaSi, gry-brn, MTW, Rec. = 1.2 ft, Lab Note: Sample was rusty colored.	10-6-2-3 (8)	29.1	12.3	23.7	64.0
5		A-4, SaSi, gry-brn, MTW, Rec. = 1.4 ft, Lab Note: Sample was rusty-orange colored.	1-2-2-2 (4)	28.3	0.8	21.9	77.3
		A-4, SaSi, gry-brn, MTW, Rec. = 1.4 ft	1-2-1-2 (3)	29.2	1.6	35.7	62.7
		A-4, SaSi, gry, MTW, Rec. = 1.9 ft	1-1-1-1 (2)	35.7		35.1	64.9
10		A-4, SaSi, gry, MTW, Rec. = 2.0 ft	WH-1-1-1 (2)	39.4	0.2	31.9	67.9
15		A-2-4, SiSa, gry, Wet, Rec. = 0.5 ft	WH-WH-1-1 (1)	26.9	1.7	75.3	23.0
		A-4, Si, gry, Wet, Rec. = 0.7 ft, Lab Note: a very small section of clay was noticeable.		42.7	0.4	9.7	89.9
		Field Note:, Attempted Shelby Tube sample, No Recovery.					
20		A-4, SiSa, gry, Wet, Rec. = 1.8 ft	1-2-5-6 (7)	29.9	0.4	62.4	37.2
		Hole stopped @ 22.0 ft					
25							

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. C_E is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 SWANTON NH 036-1(9).GPJ VERMONT AOT.GDT 7/16/14

NOTES:

1. SEE PROJECT LAYOUT SHEETS FOR THE LOCATION OF BORE HOLES.

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032_Borings.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M.BOGUE
BORING AND CORING SHEET 5

PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G. BAKOS
SHEET 22 OF 305

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

SWANTON
NH 036-1(9)
VT-78 ROADWAY

Boring No.: **B-110**
Page No.: 1 of 1
Pin No.: 96B032
Checked By: CEE

Boring Crew: GARROW, DAIGNEAULT, NIETO
Date Started: 3/06/14 Date Finished: 3/06/14
VTSPG NAD83: N 899710.99 ft E 1465699.75 ft
Station: 1198+48 Offset: -40.00
Ground Elevation: 96.2 ft

	Casing	Sampler
Type:	H.S.A.	SS
I.D.:	3.25 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 45C TRACK	C_E = 1.34

Groundwater Observations

Date	Depth (ft)	Notes

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		A-8, Organic silt with sticks & grass pieces, brn, MTW, Rec. = 0.2 ft, Lab Note: Removed a lot of sticks & grass pieces and tested for organics. Sample tested: Organic silt (29.2%)	3-4-1-1 (5)	118.0		19.5	80.5
		A-4, SaSi, gry-brn, MTW, Rec. = 1.2 ft, Sample tested: Trace of Organics (3.7%)	WH-1-3-1 (4)	33.0		20.3	79.7
5		A-4, SaSi, gry-brn, MTW, Rec. = 1.6 ft, Sample tested: Trace of Organics (2.9%)	WH-1-1-1 (2)	35.6		29.3	70.7
		A-4, SaSi, gry, Wet, Rec. = 1.6 ft, Sample tested: Trace of Organics (2.6%)	WH-1-1-1 (2)	40.7	0.1	47.2	52.7
		A-3, Sa, gry, Wet, Rec. = 1.5 ft	WH-WH-1-1 (1)	25.5	0.8	97.3	1.9
10		A-4, SaSi, gry, MTW, Rec. = 0.7 ft, Sample tested: Trace of Organics (2.3%)	WH-WH-1-1 (1)	42.7	0.4	23.2	76.4
15		A-4, Si, gry, Wet, Rec. = 1.4 ft, Sample tested: Trace of Organics (3.0%)	WH-WH-1-1 (1)	39.8	0.1	17.4	82.5
20		A-4, SiSa, gry, Wet, Rec. = 1.7 ft, Sample tested: Trace of Organics (2.9%)	WR-WR-4-4 (4)	34.5	0.4	57.0	42.6
		Hole stopped @ 22.0 ft					
25							

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. C_E is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG Z:\SWANTON NH 036-1(9).GPJ VERMONT AOT.GDT 7/16/14

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

SWANTON
NH 036-1(9)
VT-78 ROADWAY

Boring No.: **B-111**
Page No.: 1 of 1
Pin No.: 96B032
Checked By: CEE

Boring Crew: GARROW, NIETO
Date Started: 3/05/14 Date Finished: 3/05/14
VTSPG NAD83: N 898391.89 ft E 1466422.26 ft
Station: 1213+42 Offset: -18.00
Ground Elevation: 98.9 ft

	Casing	Sampler
Type:	H.S.A.	SS & TUBE
I.D.:	3.25 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 45C TRACK	C_E = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
03/05/14	14.4	While drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Visual Description:, Broken Rock (Limestone), gry, Moist, Rec. = 0.3 ft	45-R@1.0" (R)	6.3			
		Field Note:, No Recovery	14-8-8-7 (16)				
5		A-1-a, SaGr, brn, Moist, Rec. = 0.9 ft, Lab Note: Broken Rock was within sample.	2-4-4-4 (8)	19.6	53.8	34.3	11.9
		A-2-4, SaSiGr, gry, Moist, Rec. = 0.8 ft, Lab Note: Broken Rock was within sample.	1-2-3-3 (5)	16.7	42.2	28.2	29.6
		Field Note:, SiCl Shelby Tube, Moist, Rec. = 1.9 ft					
10		A-4, Si, gry, MTW, Rec. = 0.5 ft, Lab Note: A very small section of clay was noticeable.	1-2-1-1 (3)	28.6	0.9	13.3	85.8
		A-4, SaSi, gry, MTW, Rec. = 1.1 ft, Lab Note: A very small section of clay was noticeable.		29.7		25.9	74.1
15		A-3, Sa, Lt/gry, Wet, Rec. = 1.6 ft	1-1-1-1 (2)	23.4	0.4	96.7	2.9
20		A-4, Si, gry, Wet, Rec. = 1.3 ft, Sample tested: Trace of Organics (2.3%)	WR-WR-WH-1 (WH)	36.7	0.2	11.6	88.2
		Hole stopped @ 22.0 ft					
25		Remarks: 1. Hole collapsed at 4.0 ft. 2. Moved hole due to utilities.					

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. C_E is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG Z:\SWANTON NH 036-1(9).GPJ VERMONT AOT.GDT 7/16/14

NOTES:

1. SEE PROJECT LAYOUT SHEETS FOR THE LOCATION OF BORE HOLES.

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032_Borings.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M.BOGUE
BORING AND CORING SHEET 6

PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G. BAKOS
SHEET 23 OF 305

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

SWANTON
NH 036-1(9)
VT-78 ROADWAY

Boring No.: **B-112**
Page No.: 1 of 1
Pin No.: 96B032
Checked By: CEE

Boring Crew: GARROW, DAIGNEAULT, NIETO
Date Started: 3/03/14 Date Finished: 3/03/14
VTSPG NAD83: N 897593.50 ft E 1466966.92 ft
Station: 1223+25 Offset: 27.50
Ground Elevation: 98.0 ft

	Casing	Sampler
Type:	H.S.A.	SS & TUBE
I.D.:	3.25 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 45C TRACK	C_E = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
03/03/14	10.4	

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		A-4, SaSi, gry, MTW, Rec. = 1.0 ft, Lab Note: Roots & sticks were within sample. A very small section of clay was noticeable.	WH-1-WH-1 (1)	48.2	0.1	20.0	79.9
		Field Note:, ClSi Shelby Tube, gry-brn, MTW, Rec. = 1.4 ft					
5		A-4, SaSi, rust-brn, MTW, Rec. = 0.9 ft	1-2-1-2 (3)	28.2	3.1	26.2	70.7
		A-4, SaSi, Lt/gry, MTW, Rec. = 0.5 ft		29.6		23.2	76.8
		A-4, SaSi, gry, MTW, Rec. = 1.4 ft	WH-1-2-2 (3)	34.2		40.0	60.0
		A-4, SaSi, gry, MTW, Rec. = 1.4 ft	WH-1-WH-1 (1)	35.5		43.1	56.9
10		A-4, SaSi, gry, MTW, Rec. = 1.4 ft	WH-WH-3-3 (3)	34.1	7.0	23.7	69.3
15		A-4, GrSaSi, Dk/gry, Moist, Rec. = 0.7 ft	17-25-R@0.0" (R)	12.3	25.7	37.0	37.3
		Hole stopped @ 16.0 ft TLOB					
20							
25							

Remarks:
1. Could not penatrate past 16.0 ft.

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. C_E is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 SWANTON NH 036-1(9).GPJ VERMONT AOT.GDT 7/16/14

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

SWANTON
NH 036-1(9)
VT-78 ROADWAY

Boring No.: **B-113**
Page No.: 1 of 1
Pin No.: 96B032
Checked By: CEE

Boring Crew: GARROW, HOOK, NIETO
Date Started: 2/28/14 Date Finished: 2/28/14
VTSPG NAD83: N 897025.44 ft E 1467573.86 ft
Station: 1231+50 Offset: 36.00
Ground Elevation: 98.5 ft

	Casing	Sampler
Type:	H.S.A.	SS & TUBE
I.D.:	3.25 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 45C TRACK	C_E = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
02/28/14	14.5	While drilling.
02/28/14	3.6	Auger removed.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		A-4, SaSi, brn, MTW, Rec. = 0.6 ft, Lab Note: Roots, sticks, & leaves were within sample.	1-3-2-1 (5)	52.1	5.6	37.8	56.6
		A-4, SaSi, brn, MTW, Rec. = 0.7 ft	WH-1-2-4 (3)	41.2	0.7	27.6	71.7
5		A-4, Si, brn, MTW, Rec. = 1.8 ft		23.0		14.2	85.8
		A-4, SaSi, Lt/brn, Wet, Rec. = 1.3 ft	2-2-3-4 (5)	29.8	0.2	42.4	57.4
		A-2-4, SiSa, gry, MTW, Rec. = 0.8 ft	2-1-2-2 (3)	29.8	0.2	67.9	31.9
10		A-2-4, SiSa, gry, Wet, Rec. = 0.7 ft	WH-1-1-1 (2)	42.6	0.2	66.3	33.5
15		A-4, SaSi, gry, Wet, Rec. = 1.2 ft, Lab Note: No Organics were noticed.	WH-WH-2-2 (2)	32.6	0.2	23.9	75.9
20		A-4, SiSa, gry, Wet, Rec. = 2.0 ft, Sample tested: Trace of Organics (6.8%).	WR-WH-WH-2 (WH)	54.0	0.5	50.4	49.1
		Hole stopped @ 22.0 ft					
25							

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. C_E is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 SWANTON NH 036-1(9).GPJ VERMONT AOT.GDT 7/16/14

NOTES:

1. SEE PROJECT LAYOUT SHEETS FOR THE LOCATION OF BORE HOLES.

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032_Borings.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M.BOGUE
BORING AND CORING SHEET 7

PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G. BAKOS
SHEET 24 OF 305

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

SWANTON
NH 036-1(9)
VT-78 ROADWAY

Boring No.: **B-114**
Page No.: 1 of 1
Pin No.: 96B032
Checked By: CEE

Boring Crew: GARROW, NIETO
Date Started: 2/27/14 Date Finished: 2/27/14
VTSPG NAD83: N 896619.48 ft E 1467909.52 ft
Station: 1236+85 Offset: 38.50
Ground Elevation: 101.3 ft

	Casing	Sampler
Type:	H.S.A.	SS & TUBE
I.D.:	3.25 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 45C TRACK	C_E = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
02/27/14		No water to depth.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
		A-4, SiSa, brn, MTW, Rec. = 0.6 ft, Lab Note: Roots & sticks were within sample.	4-3-3-3 (6)	55.7	0.2	50.7	49.1		
		A-4, SaSi, brn, MTW, Rec. = 1.0 ft, Lab Note: No Organics were noticed.	1-1-1-2 (2)	28.4		31.1	68.9		
5		Field Note:, Attempted Shelby Tube sample, No Recovery.							
		A-4, Si, Lt/brn, MTW, Rec. = 1.5 ft	2-2-2-3 (4)	29.2		10.1	89.9	27	1
		Field Note:, Shelby Tube, Rec. = 1.0 ft							
10		A-4, Si, gry-Lt/brn, MTW, Rec. = 1.0 ft	WH-2-3-3 (5)	28.0		19.7	80.3		
15		A-4, Si, gry, MTW, Rec. = 1.0 ft	WH-3-3-4 (6)	32.3		12.7	87.3		
20		A-4, Si, gry, MTW, Rec. = 1.3 ft	WH-WH-WH-WH (WH)	34.7		7.4	92.6		
		Hole stopped @ 22.0 ft							
25		Remarks: 1. Moved hole due to under ground utilities.							

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. C_E is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 SWANTON NH 036-1(9).GPJ VERMONT AOT.GDT 7/16/14

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

SWANTON
NH 036-1(9)
VT-78 ROADWAY

Boring No.: **B-115**
Page No.: 1 of 1
Pin No.: 96B032
Checked By: CEE

Boring Crew: GARROW, NIETO
Date Started: 2/27/14 Date Finished: 2/27/14
VTSPG NAD83: N 895695.50 ft E 1468230.87 ft
Station: 1246+60 Offset: 39.00
Ground Elevation: 100.7 ft

	Casing	Sampler
Type:	H.S.A.	SS
I.D.:	3.25 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 45C TRACK	C_E = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
02/27/14		No water to depth.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		A-4, SaSi, brn, MTW, Rec. = 1.5 ft, Lab Note: Roots & sticks were within sample.	4-3-2-3 (5)	35.8		41.0	59.0
		A-5, SaSi, gry-Lt/brn, MTW, Rec. = 2.0 ft, Lab Note: No Organics were noticed.	1-1-1-1 (2)	33.0		20.5	79.5
5		Field Note:, Attempted Shelby Tube sample, No Recovery.					
		A-4, Si, gry-Lt/brn, MTW, Rec. = 1.2 ft	1-4-4-7 (8)	28.1		4.7	95.3
		A-4, Si, gry-Lt/brn, Wet, Rec. = 1.3 ft	1-5-6-5 (11)	29.7		6.0	94.0
10		A-4, Si, gry-Lt/brn, MTW, Rec. = 1.1 ft, Lab Note: No Organics were noticed.	3-5-4-3 (9)	29.8		4.4	95.6
15		A-4, SaSi, gry-Lt/brn, MTW, Rec. = 1.1 ft	1-3-3-3 (6)	28.1		33.4	66.6
20		A-4, Si, gry, MTW, Rec. = 1.1 ft	WH-1-2-3 (3)	30.9		12.0	88.0
		Hole stopped @ 22.0 ft					
25							

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. C_E is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 SWANTON NH 036-1(9).GPJ VERMONT AOT.GDT 7/16/14

NOTES:

1. SEE PROJECT LAYOUT SHEETS FOR THE LOCATION OF BORE HOLES.

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032_Borings.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M.BOGUE
BORING AND CORING SHEET 8

PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G. BAKOS
SHEET 25 OF 305

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

SWANTON
NH 036-1(9)
VT-78 ROADWAY

Boring No.: **B-116**
Page No.: 1 of 1
Pin No.: 96B032
Checked By: CEE

Boring Crew: GARROW, NIETO
Date Started: 2/26/14 Date Finished: 2/26/14
VTSPG NAD83: N 894321.58 ft E 1468882.05 ft
Station: 1261+85 Offset: 32.00
Ground Elevation: 101.5 ft

	Casing	Sampler
Type:	H.S.A.	SS
I.D.:	3.25 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 45C TRACK	C_E = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
02/26/14		No water to depth.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		A-4, SiSa, brn, MTW, Rec. = 1.6 ft	3-2-3-2 (5)	27.3	0.1	56.9	43.0
		A-4, SaSi, brn, MTW, Rec. = 1.8 ft	3-2-1-1 (3)	33.5	0.1	40.7	59.2
5		A-4, SaSi, brn-gry, MTW, Rec. = 1.6 ft	1-1-1-1 (2)	27.6		43.7	56.3
		A-4, SaSi, brn-gry, MTW, Rec. = 1.4 ft	2-3-3-3 (6)	24.3		46.0	54.0
		A-4, SaSi, brn, MTW, Rec. = 2.0 ft	1-2-3-3 (5)	24.7		33.4	66.6
10		A-4, SaSi, brn-gry, MTW, Rec. = 1.9 ft	2-2-2-2 (4)	27.3		30.7	69.3
		Field Note:, Attempted Shelby Tube sample, No Recovery.					
15		A-4, Si, gry, MTW, Rec. = 1.4 ft	3-3-3-3 (6)	32.1		6.2	93.8
20		A-4, Si, gry, MTW, Rec. = 2.0 ft	WH-2-2-2 (4)	30.2		12.4	87.6
		Hole stopped @ 22.0 ft					
25							

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. C_E is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 SWANTON NH 036-1(9).GPJ VERMONT AOT.GDT 7/16/14

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

SWANTON
NH 036-1(9)
VT-78 ROADWAY

Boring No.: **B-117**
Page No.: 1 of 1
Pin No.: 96B032
Checked By: CEE

Boring Crew: GARROW, HOOK, NIETO
Date Started: 4/01/14 Date Finished: 4/01/14
VTSPG NAD83: N 897146.70 ft E 1467483.49 ft
Station: 1230+00 Offset: 21.00
Ground Elevation: 98.8 ft

	Casing	Sampler
Type:	H.S.A.	SS
I.D.:	3.25 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 45C TRACK	C_E = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
04/01/14	14.0	After drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		A-4, SaSi with roots & sticks, brn, Moist, Rec. = 0.8 ft, Lab Note: A very small layer of clay was noticeable.	1-1-1-1 (2)	32.1	18.3	35.7	46.0
		A-4, Si, brn, MTW, Rec. = 1.7 ft	WH-WH-WH-WH (WH)	39.1	0.1	14.8	85.1
5		A-4, Si, gry-Lt/brn, Wet, Rec. = 1.3 ft, Lab Note: A small layer of clay was noticeable.	2-3-4-5 (7)	24.6		11.4	88.6
		A-4, SaSi, gry, Wet, Rec. = 1.8 ft, Lab Note: Wood & sticks were within sample.	2-3-4-3 (7)	40.5		43.9	56.1
		A-4, SiSa, gry, Wet, Rec. = 1.4 ft, Lab Note: Wood pieces were within sample.	2-2-2-2 (4)	35.5	0.1	54.3	45.6
10		A-3, Sa, gry, Wet, Rec. = 1.8 ft	WH-3-4-2 (7)	24.7		93.5	6.5
15		A-4, Si, gry, Wet, Rec. = 1.3 ft, Lab Note: A very small layer of clay was noticeable.	WH-WH-WH-2 (WH)	34.6		11.9	88.1
20		A-2-4, SiSa, gry, Wet, Rec. = 1.3 ft	WH-WH-WH-WH (WH)	38.3	0.4	75.4	24.2
		Hole stopped @ 22.0 ft					
25		Remarks: 1. Hole collapsed at 2.0 ft.					

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. C_E is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 SWANTON NH 036-1(9).GPJ VERMONT AOT.GDT 7/16/14

NOTES:

1. SEE PROJECT LAYOUT SHEETS FOR THE LOCATION OF BORE HOLES.

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032_Borings.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M.BOGUE
BORING AND CORING SHEET 9

PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G. BAKOS
SHEET 26 OF 305

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

SWANTON
NH 036-1(9)
VT-78 ROADWAY

Boring No.: **B-118**
Page No.: 1 of 1
Pin No.: 96B032
Checked By: CEE

Boring Crew: JUDKINS, GARROW, HOOK
Date Started: 3/31/14 Date Finished: 3/31/14
VTSPG NAD83: N 897256.36 ft E 1467381.56 ft
Station: 1228+50 Offset: 28.00
Ground Elevation: 97.9 ft

	Casing	Sampler
Type:	H.S.A.	SS
I.D.:	3.25 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 45C TRACK	C_E = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
03/31/14	0.0	After drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		A-4, SaSi, brn, MTW, Rec. = 0.7 ft, Sample tested: Trace of Organics (6.4%)	1-1-1-1 (2)	59.8	16.9	32.4	50.7
		A-4, Si, gry-Lt/brn, MTW, Rec. = 1.2 ft, Lab Note: A small layer of clay was noticeable.	WH-WH-4-4 (4)	29.0	1.0	7.7	91.3
5		Field Note:, Attempted Shelby Tube sample, No Recovery					
		A-4, SaSi, gry, MTW, Rec. = 1.5 ft	1-1-1-2 (2)	38.4	0.1	49.1	50.8
		A-2-4, Sa, gry, Wet, Rec. = 1.1 ft	WH-WH-2-2 (2)	27.9	0.4	82.3	17.3
10		A-3, Sa, gry, Wet, Rec. = 1.5 ft	1-2-3-4 (5)	23.5	1.1	94.0	4.9
		Hole stopped @ 12.0 ft Due to flowing sand.					
15		Remarks: Driller's set over because of flowing sand and started boring B-118A					
20							
25							

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. C_E is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG Z SWANTON NH 036-1(9).GPJ VERMONT AOT.GDT 7/16/14

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

SWANTON
NH 036-1(9)
VT-78 ROADWAY

Boring No.: **B-118A**
Page No.: 1 of 1
Pin No.: 96B032
Checked By: CEE

Boring Crew: HOOK, GARROW, NIETO
Date Started: 3/31/14 Date Finished: 3/31/14
VTSPG NAD83: N 897251.97 ft E 1467379.13 ft
Station: 1228+50 Offset: 33.00
Ground Elevation: 97.5 ft

	Casing	Sampler
Type:	H.S.A.	SS & TUBE
I.D.:	3.25 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 45C TRACK	C_E = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
03/31/14	2.0	After drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
5							
10							
15		Field Note:, SiSa with Broken Rock, gry-brn, Wet, Rec. = 1.6 ft					
20		A-1-b, SiSaGr, gry, Wet, Rec. = 0.4 ft, Lab Note: Lots of Broken Rock was within sample.	R@5.0"	11.1	37.7	36.8	25.5
		Hole stopped @ 20.4 ft CNPF-TLOB					
25							

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. C_E is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG Z SWANTON NH 036-1(9).GPJ VERMONT AOT.GDT 7/16/14

NOTES:

1. SEE PROJECT LAYOUT SHEETS FOR THE LOCATION OF BORE HOLES.

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032_Borings.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M.BOGUE
BORING AND CORING SHEET 10

PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G. BAKOS
SHEET 27 OF 305

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

SWANTON
NH 036-1(9)
VT-78 ROADWAY

Boring No.: **B-119**
Page No.: 1 of 1
Pin No.: 96B032
Checked By: CEE

Boring Crew: GARROW, HOOK, NIETO
Date Started: 3/31/14 Date Finished: 3/31/14
VTSPG NAD83: N 897370.11 ft E 1467256.82 ft
Station: 1226+75 Offset: 28.00
Ground Elevation: 97.5 ft

	Casing	Sampler
Type:	H.S.A.	SS
I.D.:	3.25 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 45C TRACK	C_E = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
03/31/14	0.0	After drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
		A-4, Si, gry, Wet, Rec. = 0.6 ft, Lab Note: Pieces of wood were within sample.	2-2-2-3 (4)	34.7	0.1	5.4	94.5	28	1
		Field Note:, Attempted Shelby Tube sample, No Recovery							
5		A-4, SiSa, gry, MTW, Rec. = 1.1 ft	WH-2-3-2 (5)	32.9		53.1	46.9		
		A-4, SiSa, gry, Wet, Rec. = 1.0 ft, Lab Note: Removed a large piece of wood before testing. Sample tested: Trace of Organics (2.0%)	1-1-1-3 (2)	36.2	0.3	55.8	43.9		
10		Hole stopped @ 8.0 ft Due to flowing sand.							
		Remarks: Driller's set over because of flowing sand and started boring B-119A							
15									
20									
25									

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. C_E is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 SWANTON NH 036-1(9).GPJ VERMONT AOT.GDT 7/16/14

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

SWANTON
NH 036-1(9)
VT-78 ROADWAY

Boring No.: **B-119A**
Page No.: 1 of 1
Pin No.: 96B032
Checked By: CEE

Boring Crew: GARROW, HOOK, NIETO
Date Started: 3/31/14 Date Finished: 3/31/14
VTSPG NAD83: N 897367.65 ft E 1467249.25 ft
Station: 1226+75 Offset: 33.00
Ground Elevation: 96.8 ft

	Casing	Sampler
Type:	H.S.A.	SS & TUBE
I.D.:	3.25 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 45C TRACK	C_E = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
03/31/14	0.0	After drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
5									
10		A-2-4, SiSa, gry, Wet, Rec. = 1.1 ft	1-1-1-1 (2)	32.0		65.7	34.3		
		A-2-4, SiSa, gry, Wet, Rec. = 0.7 ft	WH-WH-2-1 (2)	29.2	1.5	76.4	22.1		
15		A-4, ClSi, gry, MTW, Rec. = 1.4 ft	1-2-3-3 (5)	29.4	1.5	11.4	87.1	28	10
		Field Note:, SaGr Shelby Tube, gry, Wet, Rec. = 2.0 ft							
20		A-1-b, SiSaGr, gry, Wet, Rec. = 0.9 ft, Lab Note: Lots of Broken Rock was within sample.	27-19-10-9 (29)	9.3	47.4	30.1	22.5		
		Hole stopped @ 22.0 ft							
25									

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. C_E is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 SWANTON NH 036-1(9).GPJ VERMONT AOT.GDT 7/16/14

NOTES:

1. SEE PROJECT LAYOUT SHEETS FOR THE LOCATION OF BORE HOLES.

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032_Borings.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M.BOGUE
BORING AND CORING SHEET II

PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G. BAKOS
SHEET 28 OF 305

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

SWANTON
NH 036-1(9)
VT-78 ROADWAY

Boring No.: **B-120**
Page No.: 1 of 1
Pin No.: 96B032
Checked By: CEE

Boring Crew: GARROW, HOOK
Date Started: 3/28/14 Date Finished: 3/28/14
VTSPG NAD83: N 897446.47 ft E 1467158.41 ft
Station: 1225+50 Offset: 28.00
Ground Elevation: 97.9 ft

	Casing	Sampler
Type:	H.S.A.	SS & TUBE
I.D.:	3.25 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 45C TRACK	C_E = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
03/28/14	4.2	While drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
		Field Note:, No Recovery	1-1-WH-WH (1)						
		A-4, Si, brn-gry, Moist, Rec. = 1.4 ft	1-1-3-3 (4)	26.3	1.1	7.6	91.3	27	1
5		A-4, SaSi, gry, Moist, Rec. = 1.2 ft	1-1-1-1 (2)	29.5		29.0	71.0		
		A-4, SaSi, gry, MTW, Rec. = 1.4 ft	WH-1-1-WH (2)	35.0	1.0	27.1	71.9		
		A-4, SaSi, gry, MTW, Rec. = 1.1 ft	WH-WH-WH-1 (WH)	38.4	0.1	43.2	56.7		
10		A-3, Sa, brn, Wet, Rec. = 0.9 ft	WH-WH-WH-1 (WH)	27.0	0.6	93.0	6.4		
15		A-2-4, SiSa, gry, MTW, Rec. = 0.9 ft	1-4-4-3 (8)	23.0	0.6	67.9	31.5		
		A-4, ClSi, gry, Moist, Rec. = 1.0 ft		29.9		1.6	98.4	30	10
		Field Note:, Shelby Tube. Silty sand with weathered rock, gry, Moist, Rec. = 1.5 ft							
20		A-1-b, GrSa, gry, Moist, Rec. = 1.5 ft, Lab Note: Broken Rock was within sample.	10-13-14-12 (27)	13.1	33.1	50.4	16.5		
		Hole stopped @ 22.0 ft							
25		Remarks: 1. Hole collapsed at 1.6 ft.							

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. C_E is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 SWANTON NH 036-1(9).GPJ VERMONT AOT.GDT 7/16/14

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

SWANTON
NH 036-1(9)
VT-78 ROADWAY

Boring No.: **B-121**
Page No.: 1 of 1
Pin No.: 96B032
Checked By: CEE

Boring Crew: GARROW, HOOK
Date Started: 3/28/14 Date Finished: 3/28/14
VTSPG NAD83: N 897537.63 ft E 1467038.45 ft
Station: 1224+00 Offset: 26.00
Ground Elevation: 97.3 ft

	Casing	Sampler
Type:	H.S.A.	SS
I.D.:	3.25 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 45C TRACK	C_E = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
03/28/14	2.5	While drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Field Note:, No Recovery	2-WH-WH-WH (WH)				
		A-8, Organic silt with sand, brn, MTW, Rec. = 0.8 ft, Sample tested: Little Organics (14.3%), (A-8 because of moisture content of 120%)	1-2-2-1 (4)	120.3	3.4	22.3	74.3
		A-4, SaSi, gry, Moist, Rec. = 1.0 ft		28.5		38.2	61.8
5		A-4, SaSi, gry, MTW, Rec. = 1.4 ft, Sample tested: Trace of Organics (2.2%)	1-1-1-2 (2)	35.2		29.8	70.2
		A-4, SaSi, gry, MTW, Rec. = 1.7 ft, Sample tested: Trace of Organics (3.0%)	WH-WH-WH-WH (WH)	42.3	0.5	29.4	70.1
		A-4, SaSi, gry, MTW, Rec. = 1.6 ft, Sample tested: Trace of Organics (2.1%)	WH-1-1-2 (2)	35.3		27.9	72.1
10		A-1-a, SaGr, gry, Moist, Rec. = 1.4 ft, Lab Note: Broken Rock was within sample. Augers could not penatrate past 11.6 ft.	10-30-27-R@1.0" (57)	10.5	55.2	30.2	14.6
		Hole stopped @ 11.6 ft CNPF-TLOB					
15		Remarks: 1. Hole collapsed at 2.5 ft.					
20							
25							

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. C_E is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 SWANTON NH 036-1(9).GPJ VERMONT AOT.GDT 7/16/14

NOTES:

1. SEE PROJECT LAYOUT SHEETS FOR THE LOCATION OF BORE HOLES.

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032_Borings.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G. BAKOS
BORING AND CORING SHEET 12	SHEET 29 OF 305

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

SWANTON
NH 036-1(9)
VT-78 ROADWAY

Boring No.: **B-122**
Page No.: 1 of 1
Pin No.: 96B032
Checked By: CEE

Boring Crew: GARROW, HOOK
Date Started: 3/27/14 Date Finished: 3/27/14
VTSPG NAD83: N 897629.56 ft E 1466917.73 ft
Station: 1222+50 Offset: 26.00
Ground Elevation: 98.5 ft

	Casing	Sampler
Type:	H.S.A.	SS & TUBE
I.D.:	3.25 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 45C TRACK	C_E = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
03/27/14	0.6	While drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
		A-4, SaSi, brn-gry, Moist, Rec. = 0.5 ft, Lab Note: A very small layer of clay was noticeable.	1-1-1-1 (2)	28.5	10.3	21.6	68.1		
		A-4, SaSi, Lt/brn-gry, MTW, Rec. = 0.9 ft	WH-WH-1-1 (1)	29.8	3.1	30.7	66.2		
5		A-4, SaSi, brn-gry, MTW, Rec. = 1.3 ft	WH-2-2-2 (4)	27.7	0.1	42.6	57.3		
		A-4, SaSi, brn, MTW, Rec. = 1.2 ft	WH-1-2-1 (3)	29.8		46.5	53.5		
		A-4, SaSi, brn, MTW, Rec. = 1.8 ft, Sample tested: Trace of Organics (4.1%)	WH-WH-WH-WH (WH)	43.7		25.9	74.1		
10		A-8, Organic Soil, gry, MTW, Rec. = 0.9 ft, Sample tested: Organic Soil (21.7%)	WH-1-2-2 (3)	91.5	5.7	30.4	63.9		
		A-4, ClSi, gry, MTW, Rec. = 1.0 ft		27.7	0.8	8.2	91.0	26	9
		Field Note:, Shelby Tube, gry, Moist, Rec. = 1.6 ft, Si Cl Weathered Rock							
		A-1-b, SiSaGr, gry, Moist, Rec. = 1.3 ft, Broken & weather Rock was within sample. Augers would not penatrate past 15.8 ft.	4-10-38-R@3.5" (48)	10.2	39.1	36.2	24.7		
15		Hole stopped @ 15.8 ft CNPF-TLOB							
		Remarks: 1. Hole collapsed at 2.0 ft.							
20									
25									

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. C_E is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 SWANTON NH 036-1(9).GPJ VERMONT AOT.GDT 7/16/14

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

SWANTON
NH 036-1(9)
VT-78 ROADWAY

Boring No.: **B-123**
Page No.: 1 of 1
Pin No.: 96B032
Checked By: CEE

Boring Crew: GARROW, HOOK
Date Started: 3/27/14 Date Finished: 3/27/14
VTSPG NAD83: N 897737.97 ft E 1466777.57 ft
Station: 1220+77 Offset: 36.00
Ground Elevation: 96.6 ft

	Casing	Sampler
Type:	H.S.A.	SS & TUBE
I.D.:	3.25 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 45C TRACK	C_E = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
03/27/14	5.8	While drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
		A-1-b, SiGrSa, brn, Moist, Rec. = 0.5 ft	1-5-3-10 (8)	31.3	25.3	52.0	22.7		
		Visual Description:, GrSiSa, brn, Wet, Rec. = 0.2 ft, Insufficient sample for testing.	5-6-2-2 (8)	28.9					
5		A-4, SaSi, brn, MTW, Rec. = 1.6 ft	WH-1-1-1 (2)	30.4	0.1	45.6	54.3		
		A-4, SaSi, brn, MTW, Rec. = 0.6 ft, Sample tested: Trace of Organics (2.9%)	WH-1-1-1 (2)	33.9	0.1	44.2	55.7		
		A-4, SaSi, brn, MTW, Rec. = 0.5 ft	WH-WH-WH-2 (WH)	41.0	0.2	20.1	79.7		
10		A-4, ClSi, brn, MTW, Rec. = 0.7 ft, Sample tested: Trace of Organics (3.2%)		37.4	1.8	33.4	64.8	32	9
		Field Note:, SaSi Shelby Tube, brn, Moist, Rec. = 1.5 ft							
		A-2-4, GrSiSa, gry, Moist, Rec. = 1.5 ft	4-13-14-18 (27)	12.3	24.8	47.6	27.6		
15		Field Note:, Augers could not penatrate past 14.5 ft. Hole stopped @ 14.5 ft CNPF-TLOB							
		Remarks: 1. Hole collapsed at 6.2 ft. 2. Two feet of ice above the hole.							
20									
25									

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. C_E is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 SWANTON NH 036-1(9).GPJ VERMONT AOT.GDT 7/16/14

NOTES:

1. SEE PROJECT LAYOUT SHEETS FOR THE LOCATION OF BORE HOLES.

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032_Borings.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M.BOGUE
BORING AND CORING SHEET 13

PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G. BAKOS
SHEET 30 OF 305

HALEY & ALDRICH — Manchester, New Hampshire

TEST BORING REPORT

BORING NO. **HA-14**

PROJECT: Route 78 Improvement
VTRANS NO.: Swanton-NH036-1(9)-Vermont 78
CLIENT: Vanasse Hangen Brustlin, Inc. CONTRACTOR: New Hampshire Boring, Inc.

FILE NO. 27785-000
SHEET NO. 1 OF 1
LOCATION N 274633.04
E 446306.34
ELEVATION 31.70
DATUM NGVD
START 13 June 2001
FINISH 13 June 2001
DRILLER S. Garside
H&A REP C. Toscano

ITEM	CASING	DRIVE SAMPLER	CORE BARREL	DRILLING EQUIPMENT & PROCEDURES
TYPE	HSA	S	-	RIG TYPE CME 550
INSIDE DIAMETER (MM)	57	35		BIT TYPE Cutting Head
HAMMER WEIGHT (KG)		63.5	-	DRILL MUD None
HAMMER FALL (M)		0.76	-	OTHER -

DEPTH (M)	CASING BLOWS PER 0.30M	SAMPLER BLOWS PER 0.15M	SAMPLE NUMBER & REC. (M)	SAMPLE DEPTH (M)	ELEV./ DEPTH (M)	VISUAL DESCRIPTION AND REMARKS
0.0					31.39	-BITUMINOUS ASPHALT-
		9		0.30	0.30	-PROCESSED STONE-
		6	S1	0.46	31.24	Medium dense dark brown silty medium to fine
		6	0.30	0.46	0.46	SAND, little coarse sand, trace coarse to
		5		0.91		fine gravel (loosely bonded)
1.0		11		0.91		Medium dense gray coarse to fine sandy
		8	0.38	1.52		GRAVEL (loosely bonded)
		8				
		9				
		11	S2	1.52		Medium dense dark gray coarse to fine sandy
		11	0.33	2.13		SILT, little coarse to fine gravel
		10				(moderately bonded)
2.0		10				
		7		2.13		Medium dense dark gray silty medium to fine
		7	0.36	2.74		SAND, little coarse sand, trace coarse to
		5				fine gravel (loosely bonded, no structure)
		15				Note: Stone stuck in tip of spoon. Possible
		100/0.08m	0.05	2.74		bedrock or boulder.
3.0				2.82	28.65	-FILL-
					3.05	2.74m-3.05m: Fragments of boulders. Augered to 3.05m.
						Bottom of Exploration at 3.05m.

WATER LEVEL DATA					
DATE	TIME	ELAPSED TIME (HR)	DEPTH (M) TO: BOTTOM OF CASING	BOTTOM OF HOLE	WATER
6/13/01					2.59

SAMPLE IDENTIFICATION

O	OPEN END ROD
T	THIN WALL TUBE
U	UNDISTURBED SAMPLE
S	SPLIT SPOON

SUMMARY

OVERBURDEN (M)	3.05
ROCK CORED (M)	0.00
SAMPLES	S2

NH **METRIC**

BEDFORD_LI 27785-000

NOTES:

1. SEE PROJECT LAYOUT SHEETS FOR THE LOCATION OF BORE HOLES.

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032_Borings.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M.BOGUE
BORING AND CORING SHEET 14

PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G. BAKOS
SHEET 31 OF 305

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 1

SUMMARY OF ESTIMATED QUANTITIES

								ROADWAY	TRAINING	EROSION CONTROL	FULL C.E. ITEMS

TOTALS

GRAND TOTAL	FINAL

DESCRIPTIONS

UNIT	ITEMS	ITEM NUMBER	ROUND
LS	CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS	201.10	
EACH	THINNING AND TRIMMING FOR SIGNS	201.31	
CY	UNCLASSIFIED EXCAVATION	203.17	
CY	MUCK EXCAVATION	203.20	
CY	EARTH BORROW	203.30	
CY	SAND BORROW	203.31	
CY	TRENCH EXCAVATION OF EARTH	204.20	
CY	TRENCH EXCAVATION OF ROCK	204.21	
CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	204.22	
CY	STRUCTURE EXCAVATION	204.25	
CY	GRANULAR BACKFILL FOR STRUCTURES	204.30	
SY	COLD PLANING, BITUMINOUS PAVEMENT	210.10	
CY	SUBBASE OF CRUSHED GRAVEL, FINE GRADED	301.26	
CY	SUBBASE OF DENSE GRADED CRUSHED STONE	301.35	
SY	RECLAIMED STABILIZED BASE	310.20	
CY	AGGREGATE SURFACE COURSE	401.10	
TON	AGGREGATE SHOULDERS	402.12	
LU	PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.)	406.50	
TON	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT	490.30	
LU	AIR VOIDS PAY ADJUSTMENT (N.A.B.I.)	490.31	
LU	MAT DENSITY PAY ADJUSTMENT (N.A.B.I.)	490.32	
LU	SURFACE TOLERANCE PAY ADJUSTMENT (N.A.B.I.)	490.33	
LU	LONGITUDINAL JOINT COMPACTION PAY ADJUSTMENT (N.A.B.I.)	490.34	
SF	TEMPORARY STEEL SHEET PILING	505.36	
LB	REINFORCING STEEL, LEVEL I	507.11	
EACH	REMOVAL OF STRUCTURE (8' x 13.5' x 45' CMP)	529.15	
LS	PRECAST CONCRETE STRUCTURE (10' x 14' x 46' BOX)	540.10	
LS	PRECAST CONCRETE STRUCTURE (4' x 4' x 60' BOX)	540.10	
LS	PRECAST CONCRETE STRUCTURE (4' x 4' x 62' BOX)	540.10	
LS	PRECAST CONCRETE STRUCTURE (4' x 4' x 64' BOX)	540.10	
LS	PRECAST CONCRETE STRUCTURE (4' x 4' x 66' BOX)	540.10	
LS	PRECAST CONCRETE STRUCTURE (4' x 4' x 68' BOX)	540.10	
CY	CONCRETE, CLASS B	541.25	
LF	12" RCP CLASS III	601.0805	
LF	24" RCP CLASS III	601.0825	
LF	36" RCP CLASS III	601.0845	
LF	18" CPEP(SL)	601.2615	
LF	24" CPEP(SL)	601.2620	
LF	36" CPEP(SL)	601.2630	
EACH	18" RCPES CLASS III	601.6815	

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032Quantity_Summary.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M.BOGUE
QUANTITY SHEET 1
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G. BAKOS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 2

SUMMARY OF ESTIMATED QUANTITIES													TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
									ROADWAY	TRAINING	EROSION CONTROL	FULL C.E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
															EACH	24" RCPES CLASS III	601.6825				
															EACH	36" RCPES CLASS III	601.6845				
															EACH	18" CPEPES	601.7015				
															EACH	24" CPEPES	601.7020				
															EACH	36" CPEPES	601.7030				
															EACH	PRECAST REINFORCED CONCRETE PIPE DI WITH CAST IRON GRATE	604.25				
															EACH	CHANGING ELEVATION OF DROP INLETS, CATCH BASINS, OR MANHOLES	604.40				
															LF	6 INCH UNDERDRAIN PIPE	605.10				
															EACH	UNDERDRAIN FLUSHING BASIN	605.95				
															HR	POWER GRADER RENTAL	608.15				
															HR	ALL PURPOSE EXCAVATOR RENTAL, TYPE I	608.25				
															HR	POWER BROOM RENTAL, TYPE I	608.30				
															HR	TRUCK RENTAL	608.37				
															HR	LOADER RENTAL, TYPE I	608.40				
															MGAL	DUST CONTROL WITH WATER	609.10				
															CY	STONE FILL, TYPE I	613.10				
															CY	STONE FILL, TYPE II	613.11				
															EACH	RELOCATE MAILBOX, SINGLE SUPPORT	617.10				
															EACH	RELOCATE MAILBOX, MULTIPLE SUPPORT	617.12				
															EACH	YIELDING MARKER POSTS	619.17				
															LF	BOX BEAM GUARDRAIL	621.30				
															LF	REMOVAL AND DISPOSAL OF GUARDRAIL	621.80				
															TON	CRUSHED STONE BEDDING	629.54				
															HR	UNIFORMED TRAFFIC OFFICERS	630.10				
															HR	FLAGGERS	630.15				
															LS	FIELD OFFICE, ENGINEERS	631.10				
															LS	TESTING EQUIPMENT, CONCRETE	631.16				
															LS	TESTING EQUIPMENT, BITUMINOUS	631.17				
															DL	FIELD OFFICE TELEPHONE (N.A.B.I.)	631.26				
															HR	EMPLOYEE TRAINEESHIP	634.10				
															LS	MOBILIZATION/DEMOBILIZATION	635.11				
															EACH	PORTABLE CHANGEABLE MESSAGE SIGN	641.15				
															LF	DURABLE 4 INCH WHITE LINE, THERMOPLASTIC	646.402				
															LF	DURABLE 4 INCH YELLOW LINE, THERMOPLASTIC	646.412				
															LF	DURABLE 24 INCH STOP BAR, THERMOPLASTIC	646.482				
															LF	TEMPORARY 4 INCH WHITE LINE	646.600				
															LF	TEMPORARY 4 INCH YELLOW LINE	646.610				
															LF	TEMPORARY 24 INCH STOP BAR	646.680				
															EACH	LINE STRIPING TARGETS	646.76				
															SY	GEOTEXTILE FOR ROADBED SEPARATOR	649.11				

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032Quantity_Summary.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M.BOGUE
QUANTITY SHEET 2
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G. BAKOS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 3

SUMMARY OF ESTIMATED QUANTITIES / TOTALS / DESCRIPTIONS

ROADWAY	TRAINING	EROSION CONTROL	FULL C.E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND
						SY	GEOTEXTILE UNDER STONE FILL	649.31	
						SY	GEOTEXTILE FOR SILT FENCE	649.51	
						LB	SEED	651.15	
						LB	FERTILIZER	651.18	
						TON	AGRICULTURAL LIMESTONE	651.20	
						TON	HAY MULCH	651.25	
						CY	TOPSOIL	651.35	
						SY	GRUBBING MATERIAL	651.40	
						LS	EPSC PLAN	652.10	
						HR	MONITORING EPSC PLAN	652.20	
						LU	MAINTENANCE OF EPSC PLAN (N.A.B.I.)	652.30	
						SY	TEMPORARY EROSION MATTING	653.20	
						CY	VEHICLE TRACKING PAD	653.35	
						EACH	INLET PROTECTION DEVICE, TYPE I	653.40	
						LF	BARRIER FENCE	653.50	
						LF	PROJECT DEMARCATION FENCE	653.55	
						LF	EROSION LOG	653.60	
						SF	TRAFFIC SIGNS, TYPE A	675.20	
						LF	FLANGED CHANNEL SIGN POST	675.301	
						LF	SQUARE TUBE SIGN POST AND ANCHOR	675.341	
						EACH	REMOVING SIGNS	675.50	
						EACH	ERECTING SALVAGED SIGNS	675.60	
						EACH	DELINEATOR WITH STEEL POST	676.10	
						LU	PRICE ADJUSTMENT, FUEL (N.A.B.I.)	690.50	
						CY	SPECIAL PROVISION (GABION WALL)	900.608	
						CY	SPECIAL PROVISION (STONE FILL, STREAM BED MATERIAL, TYPE I)	900.608	
						EACH	SPECIAL PROVISION (TEMPORARY TRAFFIC SIGNAL SYSTEM, PORTABLE)	900.620	
						LS	SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)	900.645	
						SF	SPECIAL PROVISION (CONCRETE RETAINING WALL)	900.670	
						SY	SPECIAL PROVISION (HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES)	900.675	
						TON	SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT SURFACE PREPARATION, TYPIE I)	900.680	
						TON	SPECIAL PROVISION (MATERIAL TRANSFER VEHICLE)	900.680	
						CWT	SPECIAL PROVISION (EMULSIFIED ASPHALT)(RS-1H OR CRS-1H)	900.683	
						CWT	SPECIAL PROVISION (FOG SEAL SURFACE TREATMENT)	900.683	

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032Quantity_Summary.dgn PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE CHECKED BY: G. BAKOS
QUANTITY SHEET 3

STATE OF VERMONT
AGENCY OF TRANSPORTATION

ITEM DETAIL SHEET

CURB

BEGIN STATION	END STATION	POSITION		REMARKS
		LEFT FT	RIGHT FT	

SIDEWALK

BEGIN STATION	END STATION	POSITION		REMARKS
		LEFT CY	RIGHT CY	

BOX BEAM GUARD RAIL

BEGIN STATION	END STATION	POSITION		END TREATMENT	
		LEFT FT	RIGHT FT	BEGIN EA	END EA
43+70	57+44		1374		
44+05	58+00	1440			
67+50	69+00	414			
69+70	75+46		576		
94+43	104+27	1044			
102+70	107+44		474		
104+61	163+38	5904			
146+70	162+48		1578		
165+81	201+30	3588			
202+86	212+40	954			
262+58	273+80		1134		
277+01	306+32	2940			
308+00	310+87	300			

UNDERDRAIN

BEGIN STATION	END STATION	TYPE	POSITION	DIA.	LENGTH	TRENCH		GRAN BKFILL	FB	MKR PST
						EARTH	ROCK			
				IN	FT	CY	CY	CY	EA	EA
107+50	108+48	II	RT/LT	6	119					
111+00	108+52	II	RT/LT	6	269					
111+00	113+48	II	RT/LT	6	271					
113+52	115+48	II	RT/LT	6	218					
115+52	117+48	II	RT/LT	6	217					
117+52	119+48	II	RT/LT	6	221					
119+52	121+48	II	RT/LT	6	217					
121+52	123+48	II	RT/LT	6	217					
123+52	125+48	II	RT/LT	6	220					
125+52	127+48	II	RT/LT	6	218					
127+52	129+48	II	RT/LT	6	217					
129+52	131+48	II	RT/LT	6	218					
131+52	133+48	II	RT/LT	6	218					
133+52	135+48	II	RT/LT	6	218					
135+52	137+48	II	RT/LT	6	217					
137+52	139+48	II	RT/LT	6	218					
139+48	141+48	II	RT/LT	6	217					
144+98	141+52	II	RT/LT	6	367					
248+48	276+15	II	RT/LT	6	254					
280+97	278+52	II	RT/LT	6	264					
284+00	281+05	II	RT/LT	6	317					
284+00	288+48	II	RT/LT	6	466					
291+00	288+52	II	RT/LT	6	466					

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032ItemDetail.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M.BOGUE
ITEM DETAIL SHEET

PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G. BAKOS
SHEET 35 OF 305

STATE OF VERMONT
AGENCY OF TRANSPORTATION

DRAINAGE DETAIL SHEET

STATION	STATION	POS.	ASKEW	INLET/OUTLET TYPE		DITCH		PIPE ARCH			PIPE		ALLOWABLE OPTIONS						PIPE ELBOW	ES	CB	PRCCDI	DEPTH DI	CONC CLASS B	REINF STEEL	DI GRATE	CHAN ELEV	CRM	TRENCH EXCAVATION		COMM EXC	UNC CHAN EXC	STRUCT EXCAV	GRAN BKFILL STRUCT	GRAN BORR	EROS MATT	STONE FILL		MARKER POSTS		PIPE ID		REMARKS
				INLET	OUTLET	IN	OUT	SPAN	RISE	L	D	L	PCCSP	CAAP	RCP	CSP	CPEP	PCCSP PI										EARTH	ROCK									LT	RT	EXISTING	PROPOSED	
			NO. DEG.					IN	IN	FT	IN	FT	TH	TH	CL	TH	SL	TH	NO. DEG.	EA	EA		FT	CY	LBS	TYPE	EA	CY	CY	CY	CY	CY	CY	CY	SY	CY	TYPE	EA	EA			
40+00	40+00	LT/RT		CPEPES	CPEPES						18	54					X																				1	1		1	
39+83	39+79	LT/RT																																					R1		REMOVE 67' OF EXISTING 18"
43+50	43+50	RT/LT		CPEPES	CPEPES						18	58					X																				1	1		2	
45+65	45+65	LT/RT																																					R2		REMOVE 110' OF EXISTING 18"
47+50	47+50	RT/LT		CPEPES	CPEPES						18	62					X																					1		3	
50+47	50+45	LT/RT																																					R3		REMOVE 37' OF EXISTING 18"
50+50	50+50	RT/LT		HDW	CPEPES						18	68					X																					1		4	
52+50	52+50	RT/LT		CPEPES	CPEPES						18	66					X																					1		5	
57+50	58+15	RT		CPEPES	CPEPES						18	66					X																				1	1		6	
68+35	68+35	RT/LT		CPEPES	CPEPES						24	66					X																				1	1		7	
73+00	73+00	RT/LT		CPEPES	CPEPES						18	66					X																				1	1		8	
68+30	68+35	LT/RT																																					R4		REMOVE 38' OF EXISTING 18"
72+83	72+97	LT/RT																																					R5		REMOVE 38' OF EXISTING 12"
86+04	86+04	RT/LT		CPEPES	CPEPES						36	54					X																								9	
90+90	90+79	LT/RT		RCPES	RCPES						18	50			X																						1	1		10	
96+00	96+00	LT/RT		CPEPES	CPEPES						18	58					X																				1	1		11	
85+94	86+04	LT/RT																																					R6		REMOVE 40' OF EXISTING 36"
90+89	90+79	LT/RT																																					R7		REMOVE 34' OF EXISTING 18"
95+79	95+87	LT/RT																																					R8		REMOVE 36' OF EXISTING 18"
100+50	100+50	LT/RT		CPEPES	CPEPES						18	62					X																				1	1		12	
100+30	100+35	LT/RT																																					R9		REMOVE 45' OF EXISTING 18"
108+50	108+50	RT/LT		DI	CPEPES						18	56					X						4															1		13	CAST IRON GRATE
113+50	113+50	RT/LT		DI	CPEPES						18	56					X						4															1		14	CAST IRON GRATE
115+50	115+50	RT/LT		DI	CPEPES						18	55					X						4.2															1		15	CAST IRON GRATE
117+50	117+50	RT/LT		DI	CPEPES						18	56					X						4															1		16	CAST IRON GRATE
119+50	119+50	RT/LT		DI	CPEPES						18	56					X						4															1		17	CAST IRON GRATE
121+50	121+50	RT/LT		DI	CPEPES						18	56					X						4															1		18	CAST IRON GRATE
123+50	123+50	RT/LT		DI	CPEPES						18	55					X						4															1		19	CAST IRON GRATE
125+50	125+50	RT/LT		DI	CPEPES						18	56					X						4														1	1		20	CAST IRON GRATE
127+50	127+50	RT/LT		DI	CPEPES						18	54					X						4															1		21	CAST IRON GRATE
129+50	129+50	RT/LT		DI	CPEPES						18	56					X						4															1		22	CAST IRON GRATE
131+50	131+50	RT/LT		DI	CPEPES						18	55					X						4															1		23	CAST IRON GRATE
133+50	133+50	RT/LT		DI	CPEPES						18	56					X						4															1		24	CAST IRON GRATE
135+50	135+50	RT/LT		DI	CPEPES						18	54					X						4															1		25	CAST IRON GRATE
137+50	137+50	RT/LT		DI	CPEPES						18	56					X						4															1		26	CAST IRON GRATE
139+50	139+50	RT/LT		DI	CPEPES						18	56					X						4															1		27	CAST IRON GRATE
141+50	141+50	RT/LT		DI	CPEPES						18	56					X						4															1		28	CAST IRON GRATE
145+00	145+00	RT/LT		DI	CPEPES						18	56					X						4															1		29	CAST IRON GRATE
148+41	148+41	RT/LT																																							30	4' X 4' PRECAST BOX CULVERT
150+00	150+00	RT/LT																																							31	4' X 4' PRECAST BOX CULVERT
148+36	148+37	LT/RT																																					R10		REMOVE 48' OF EXISTING 48"

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032DrainageDetail.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M.BOGUE
DRAINAGE DETAIL SHEET 1

PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G. BAKOS
SHEET 36 OF 305

STATE OF VERMONT
AGENCY OF TRANSPORTATION

DRAINAGE DETAIL SHEET

STATION	STATION	POS.	ASKEW	INLET/OUTLET TYPE		DITCH		PIPE ARCH			PIPE		ALLOWABLE OPTIONS						PIPE ELBOW	ES	CB	PRCCDI	DEPTH DI	CONC CLASS B	REINF STEEL	DI GRATE	CHAN ELEV	CRM	TRENCH EXCAVATION		COMM EXC	UNC CHAN EXC	STRUCT EXCAV	GRAN BKFILL STRUCT	GRAN BORR	EROS MATT	STONE FILL		MARKER POSTS		PIPE ID		REMARKS
																													EARTH	ROCK									LT	RT	EXISTING	PROPOSED	
			NO. DEG.	INLET	OUTLET	IN	OUT	SPAN IN	RISE IN	L FT	D IN	L FT	PCCSP TH	CAAP TH	RCP CL	CSP TH	CPEP SL	PCCSP PI TH	NO. DEG.	EA	EA		FT	CY	LBS	TYPE	EA	CY	CY	CY	CY	CY	CY	CY	CY	SY	CY	TYPE	EA	EA			
151+50	151+50	LT/RT																																							32	4' X 4' PRECAST BOX CULVERT
153+00	153+00	LT/RT																																							33	4' X 4' PRECAST BOX CULVERT
154+50	154+50	RT/LT																																							34	4' X 4' PRECAST BOX CULVERT
156+00	156+00	RT/LT																																							35	4' X 4' PRECAST BOX CULVERT
157+50	157+50	RT/LT																																							36	4' X 4' PRECAST BOX CULVERT
159+00	159+00	LT.RT																																							37	4' X 4' PRECAST BOX CULVERT
170+00	170+00	RT/LT		CPEPES	CPEPES						18	52					X																						1	1		38	
176+50	176+50	RT/LT		CPEPES	CPEPES						18	52					X																						1	1		39	
183+00	183+00	RT/LT		CPEPES	CPEPES						18	54					X																						1	1		40	
190+00	190+00	RT/LT		CPEPES	CPEPES						18	52					X																						1	1		41	
196+00	196+00	RT/LT		CPEPES	CPEPES						18	52					X																						1	1		42	
201+50	201+50	RT/LT		CPEPES	CPEPES						18	52					X																						1	1		43	
206+50	206+50	RT/LT		CPEPES	CPEPES						18	56					X																						1	1		44	
206+59	206+41	LT.RT																																							R11		REMOVE 51' OF EXISTING 18" AND EXISTING DI
261+65	262+00	RT		RCPES	RCPES						12	36			X																						1	1		45	
264+00	264+00	RT/LT		DI	CPEPES						18	56					X						4																1	1		46	CAST IRON GRATE
266+00	266+00	RT/LT		DI	CPEPES						18	56					X						4																1	1		47	CAST IRON GRATE
261+74	261+95	RT																																						R12		REMOVE 22' OF EXISTING 15"
267+10	267+10	RT/LT		CPEPES	CPEPES						24	66					X																						1	1		48	
278+50	278+50	RT/LT		CPEPES	CPEPES						18	52					X																						1	1		49	
281+00	281+00	RT/LT		DI	CPEPES						18	56					X						4																1	1		50	CAST IRON GRATE
274+24	274+58	RT																																						R14		REMOVE 34' OF EXISTING 18"
276+15	276+14	RT/LT																																						R15		REMOVE 47' OF EXISTING 24"
288+50	288+50	RT/LT		CPEPES	CPEPES						18	66					X																							1		51	
288+65	288+60	RT/LT																																						R16		REMOVE 42' OF EXISTING 15"
294+41	294+41	RT/LT		CPEPES	CPEPES						18	60					X																							1		52	
300+59	300+15	RT/LT		CPEPES	CPEPES						24	78					X																							1		53	
305+00	305+00	RT/LT		CPEPES	CPEPES						18	54					X																							1		54	
294+41	294+41	RT/LT																																						R17		REMOVE 40' OF EXISTING 18"
309+30	309+30	RT/LT		CPEPES	CPEPES						36	60					X																									55	
305+16	305+24	RT/LT																																						R18		REMOVE 42' OF EXISTING 18"
307+70	308+20	RT																																						R19		REMOVE 49' OF EXISTING 12"
309+38	309+30	RT/LT																																						R20		REMOVE EXISTING 3' X 3' BOX CULVERT (45')
319+50	319+50	LT/RT		DI	CPEPES						18	52					X						4																1	1		56	CAST IRON GRATE
319+24	319+39	RT/LT																																						R21		REMOVE 38' OF EXISTING 15" AND EXISTING DI

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032DrainageDetail.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M.BOGUE
DRAINAGE DETAIL SHEET 2

PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G. BAKOS
SHEET 37 OF 305

NEW DRAINAGE

(1) STA. 40+00 RT 26.5' - STA. 40+00 LT 26.5'
NEW 24" x 54' CPEP (SL)
24" CPEPES, LT & RT
INV. IN = 99.20
INV. OUT = 99.10

DRAINAGE REMOVAL

(RI) STA. 39+83 LT 31.8' - STA. 39+79 RT 34.9'
REMOVE EXISTING 67'X18"

CONSTRUCT DRIVE
STA. 39+27, LT

STONE FILL, TYPE I
GEOTEXTILE UNDER STONE FILL
GRUBBING MATERIAL
STA. 40+00 LT (6'L X 3'W X 2'D)
STA. 40+00 RT (6'L X 3'W X 2'D)

N
VT STATE PLANE GRID

CURVE #1
DELTA = 27°10'48"
D = 2°54'38"
R = 1968.50'
T = 475.86'
L = 933.81'
E = 56.70'
BANKING 0.052 FT/FT
DESIGN SPEED 50 MPH

PC
STA 29+07.02

STATE OF VERMONT,
AGENCY OF NATURAL RESOURCES

VERMONT AGENCY OF NATURAL RESOURCES
DEPARTMENT OF FISH AND WILDLIFE
PER EXECUTIVE ORDER NO. 06-13, DATED 10/2/2013
FOR PROJECT ALBURG-SWANTON BRF 036-1(7)

S66°37'46"E

28+00 29+00 30+00 31+00 32+00 33+00 34+00 35+00 36+00 37+00 38+00 39+00

PI
STA 33+82.88

N86°11'26"E

STA 36+00.00
BEGIN APPROACH

STA 37+50.00
END APPROACH
BEGIN PROJECT
NH 036-1(9)

PT
STA 38+40.83

REMOVE EXISTING
UTILITY GUY
(BY OTHERS)

TEMPORARY SLOPE
LIMITS FOR TCP

STORMWATER (P)

14' R

14' R

MATCH TO STA. 40+00 (SHEET #1)

AER E&T

CZ

EXISTING UE(P)

N/F
PFENNING HOLDING LLC

CV PROPERTIES INCORPORATED, LESSOR
NEW ENGLAND CENTRAL RAILROAD, LESSEE

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

0 40 80
SCALE IN FEET

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
PLAN SHEET #1

PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 38 OF 305

NEW DRAINAGE

(2) STA. 43+50 RT 28.0' - STA. 43+50 LT 29.0'
NEW 24" x 58' CPEP (SL)
24" CPEPES, LT & RT
INV. IN = 99.60
INV. OUT = 98.20

(3) STA. 47+50 RT 31.0' - STA. 47+50 LT 30.0'
NEW 24" x 62' CPEP (SL)
24" CPEPES, LT & RT
INV. IN = 97.20
INV. OUT = 96.00

(4) STA. 50+50 RT 37.0' - STA. 50+50 LT 30.0'
RC STRAIGHT HEADWALL, RT
NEW 24" x 68' CPEP (SL)
24" CPEPES, LT
INV. IN = 95.60
INV. OUT = 95.40

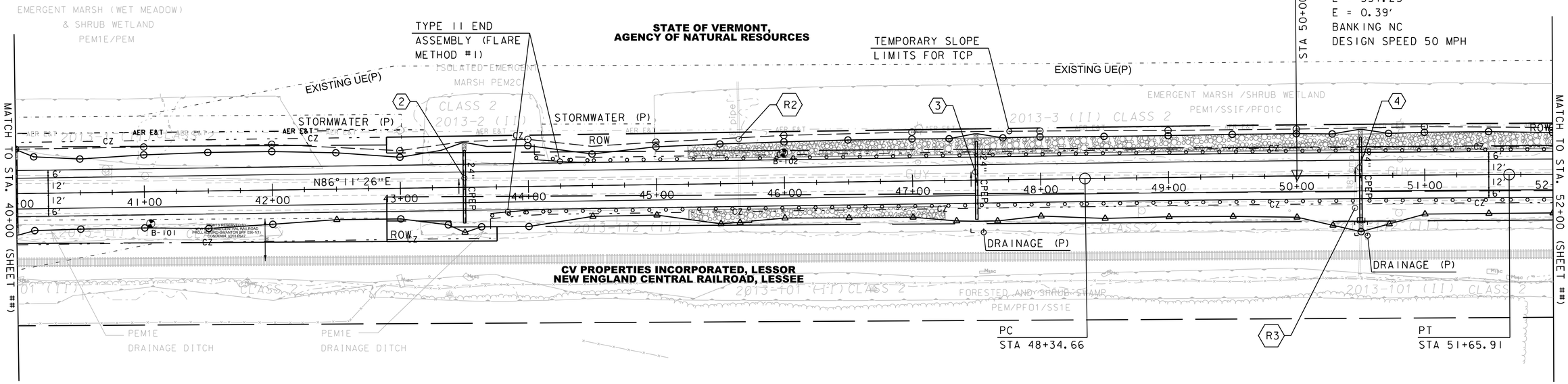
DRAINAGE REMOVAL

(R2) STA. 45+65 LT 79.7' - RT 30.6'
REMOVE EXISTING 110'X18"

(R3) STA. 50+47 LT 11.7' - STA. 50+45 RT 25.5'
REMOVE EXISTING 37'X18"

N
VT STATE PLANE GRID

CURVE #2
DELTA = 0°32'32"
D = 0°09'49"
R = 35000.00'
T = 165.62'
L = 331.25'
E = 0.39'
BANKING NC
DESIGN SPEED 50 MPH



STONE FILL, TYPE I
GEOTEXTILE UNDER STONE FILL
GRUBBING MATERIAL
STA. 43+50 LT (6'L X 3'W X 2'D)
STA. 45+25 - STA. 52+00 LT
STA. 45+25 - STA. 47+25 RT
STA. 47+50 LT (6'L X 3'W X 2'D)
STA. 50+50 LT (6'L X 3'W X 2'D)
STA. 50+50 RT (6'L X 3'W X 2'D)

BOX BEAM GUARDRAIL
STA. 43+70.0 - STA. 52+00.0 RT
STA. 44+05.0 - STA. 52+00.0 LT

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

0 40 80
SCALE IN FEET

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
PLAN SHEET #2

PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 39 OF 305

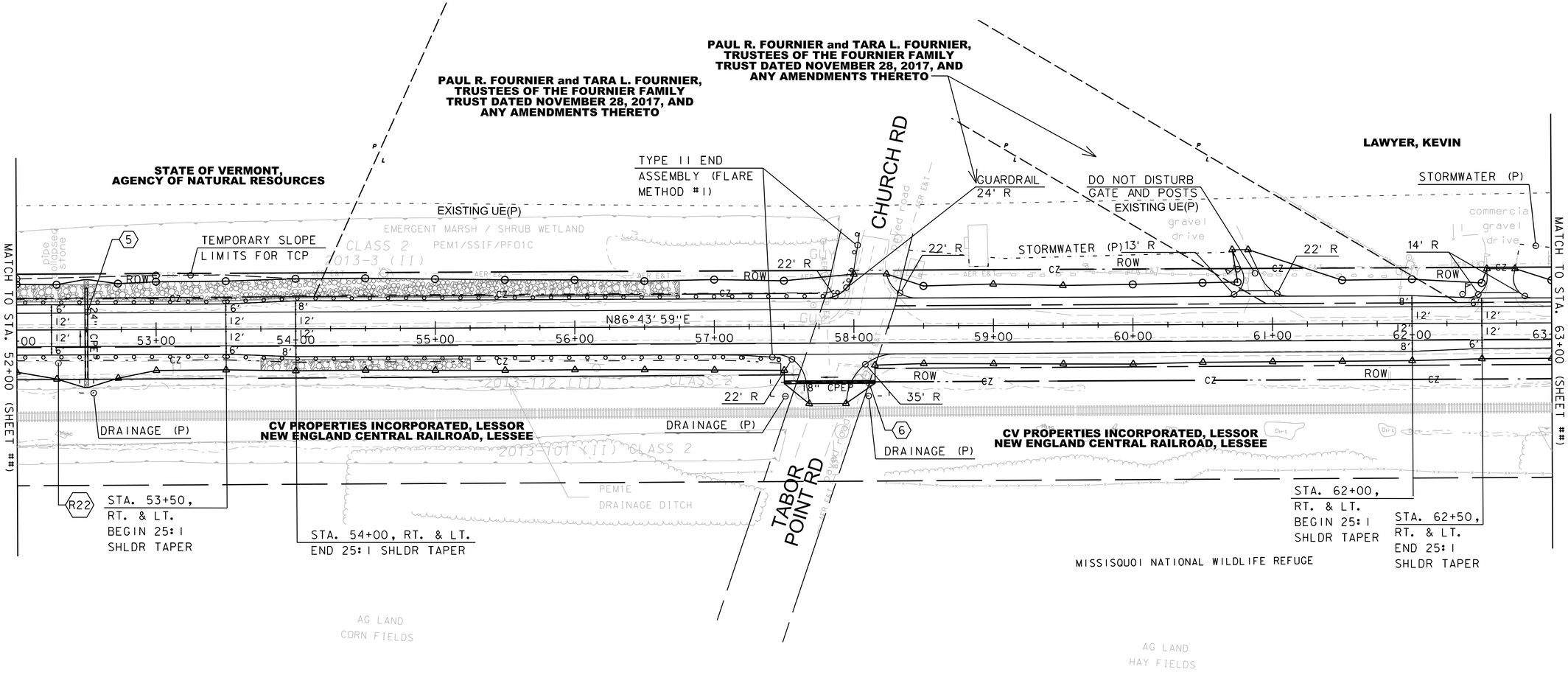
NEW DRAINAGE

(5) STA. 52+50 RT 35.5' - STA. 52+50 LT 30.0'
NEW 24" x 66' CPEP (SL)
24" CPEPES, LT & RT
INV. IN = 96.00
INV. OUT = 96.00

(6) STA. 57+50 RT 40.0' - STA. 58+15 RT 40.0'
NEW 18" x 66' CPEP (SL)
18" CPEPES, +50 & +15
INV. IN = 100.50
INV. OUT = 99.60

DRAINAGE REMOVAL

(R22) STA. 52+30 RT 23.8' - STA. 52+30 LT 26.6'
REMOVE EXISTING 50'X15"



STONE FILL, TYPE I
GEOTEXTILE UNDER STONE FILL
GRUBBING MATERIAL
STA. 52+50 LT (6'L X 3'W X 2'D)
STA. 52+50 RT (6'L X 3'W X 2'D)
STA. 52+00 - STA. 56+75 LT
STA. 53+75 - STA. 55+25 RT

BOX BEAM GUARDRAIL
STA. 52+00.0 - STA. 57+44.0 RT
STA. 52+00.0 - STA. 30+65.5 LT

CONSTRUCT DRIVE
STA. 60+91, LT
STA. 62+65, LT

RELOCATE MAILBOX, SINGLE SUPPORT
STA. 60+75, LT
STA. 62+36, LT

REMOVAL OF EXISTING FENCE
STA. 61+91, LT 15.0' - STA. 61+93, LT 39.5'
(SALVAGE TO PROPERTY OWNER)

REMOVING AND RESETTING BOULDERS (SPECIAL PROVISION)
STA. 59+00 - STA. 59+70, LT
STA. 60+95 - STA. 61+85, LT

REMOVING AND RESETTING FENCE
STA. 62+46, LT 13.9' - STA. 62+81, LT 14.8'

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

0 40 80
SCALE IN FEET

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
PLAN SHEET #3

PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 40 OF 305

NEW DRAINAGE

(7) STA. 68+35 RT 35.0' - STA. 68+35 LT 31.0'
NEW 24" x 66' CPEP (SL)
24" CPEPES, LT & RT
INV. IN = 96.80
INV. OUT = 96.80

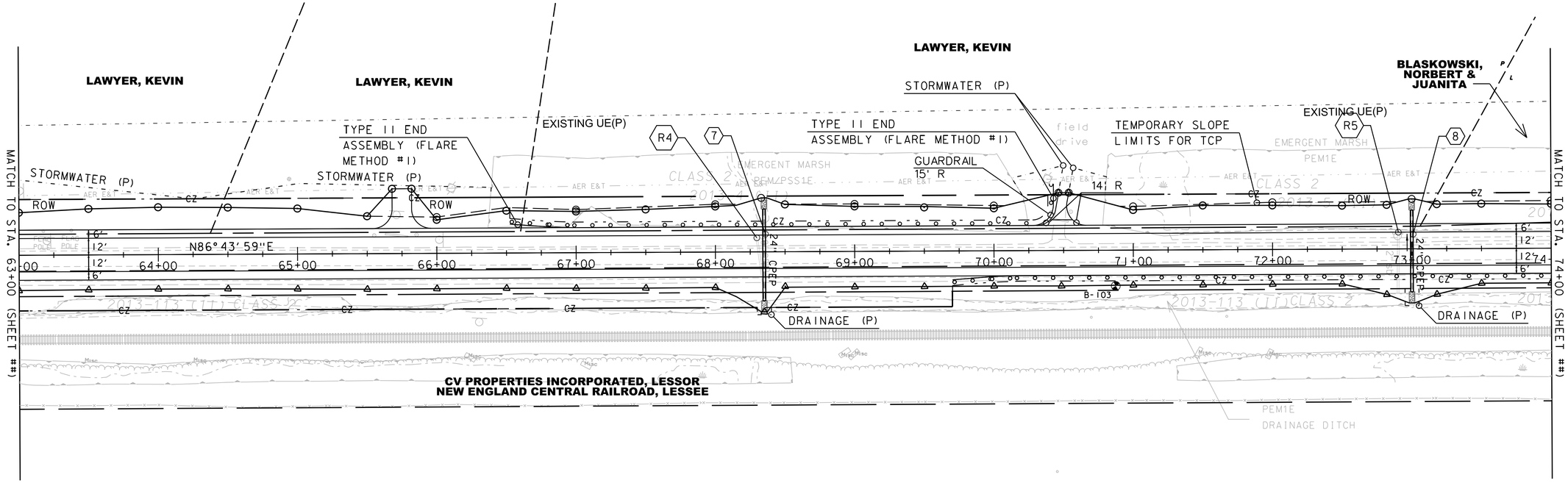
(8) STA. 73+00 RT 31.0' - STA. 73+00 LT 28.0'
NEW 18" x 66' CPEP (SL)
24" CPEPES, LT & RT
INV. IN = 99.20
INV. OUT = 98.90

DRAINAGE REMOVAL

(R4) STA. 68+30 LT 10.1' - STA. 68+35 RT 27.0'
REMOVE EXISTING 38'X18"

(R5) STA. 72+83 LT 7.1' - STA. 72+97 RT 26.2'
REMOVE EXISTING 38'X12"

N
VT STATE PLANE GRID



STONE FILL, TYPE I
GEOTEXTILE UNDER STONE FILL
GRUBBING MATERIAL
STA. 68+35 LT (8'L X 4'W X 2'D)
STA. 68+35 RT (8'L X 4'W X 2'D)
STA. 73+00 LT (8'L X 4'W X 2'D)
STA. 73+00 RT (8'L X 4'W X 2'D)

CONSTRUCT DRIVE
STA. 70+48, LT

BOX BEAM GUARDRAIL
STA. 66+53.5 - STA. 70+50.0 LT
STA. 69+70.0 - STA. 74+00.0 RT

REMOVING AND RESETTING FENCE
STA. 65+55, LT 13.0' - STA. 65+86, LT 13.4'
STA. 70+41, LT 27.5' - STA. 70+55, LT 27.8'

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

0 40 80
SCALE IN FEET

vhb

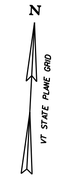
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
PLAN SHEET #4

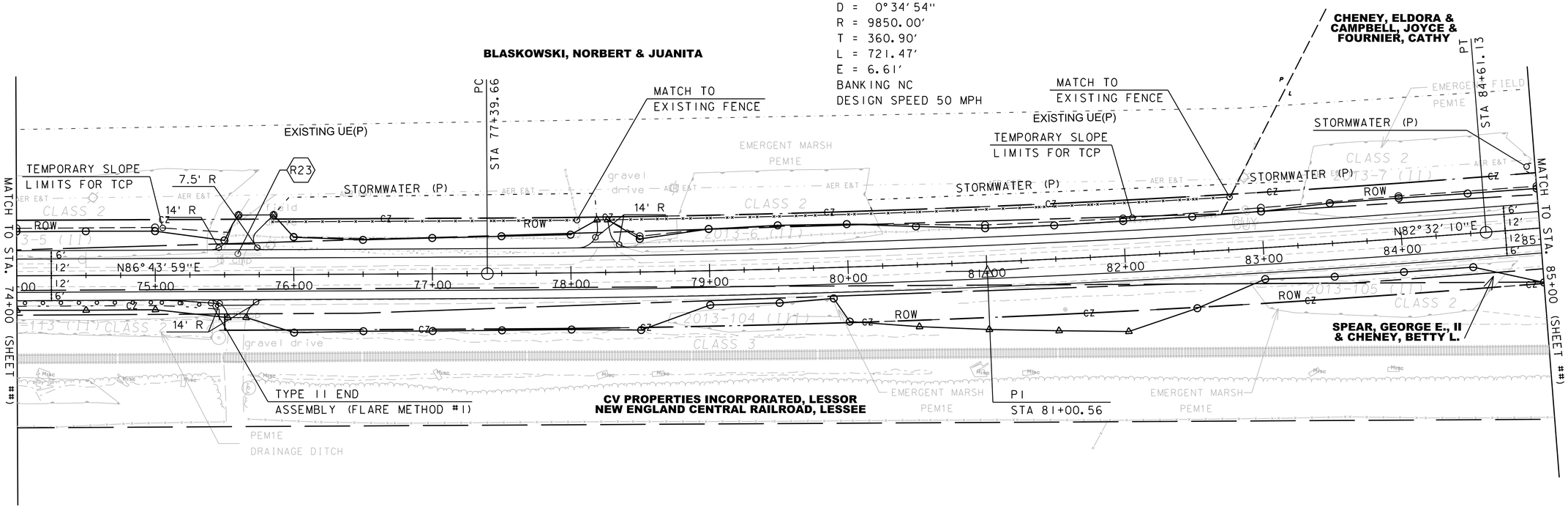
PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 41 OF 305

DRAINAGE REMOVAL

R23 STA. 75+42 LT 15.5' - STA. 75+77 LT 14.7'
REMOVE EXISTING 34"X15"



CURVE #3
DELTA = 4°11'48"
D = 0°34'54"
R = 9850.00'
T = 360.90'
L = 721.47'
E = 6.61'
BANKING NC
DESIGN SPEED 50 MPH



CONSTRUCT DRIVE
STA. 75+65, LT
STA. 75+59, RT
STA. 78+23, LT

BOX BEAM GUARDRAIL
STA. 74+00.0 - STA. 75+46.0 RT

REMOVAL OF EXISTING FENCE
STA. 74+49, LT 29.2' - STA. 78+05, LT 38.0'
STA. 78+36, LT 20.4' - STA. 82+78, LT 38.0'

2-STRAND BARB WIRE FENCE WITH WOOD POSTS (SPECIAL PROVISION)
STA. 75+83, LT 38.0' - STA. 78+05, LT 38.0'
STA. 78+30, LT 38.0' - STA. 82+78, LT 38.0'

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

0 40 80
SCALE IN FEET

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
PLAN SHEET #5

PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 42 OF 305

NEW DRAINAGE

(9) STA. 86+04 RT 26.0' - STA. 86+04 LT 26.0'
NEW 36" x 54' CPEP (SL)
36" CPEPES, LT & RT
INV. IN = 100.00
INV. OUT = 99.90

(10) STA. 90+90 LT 23.5' - STA. 90+79 RT 25.0'
NEW 18" x 50' RCP
18" RCPES, LT & RT
INV. IN = 101.50
INV. OUT = 100.80

(11) STA. 96+00 LT 29.0' - STA. 96+00 RT 26.6'
NEW 24" x 56' CPEP (SL)
24" CPEPES, LT & RT
INV. IN = 98.20
INV. OUT = 97.60

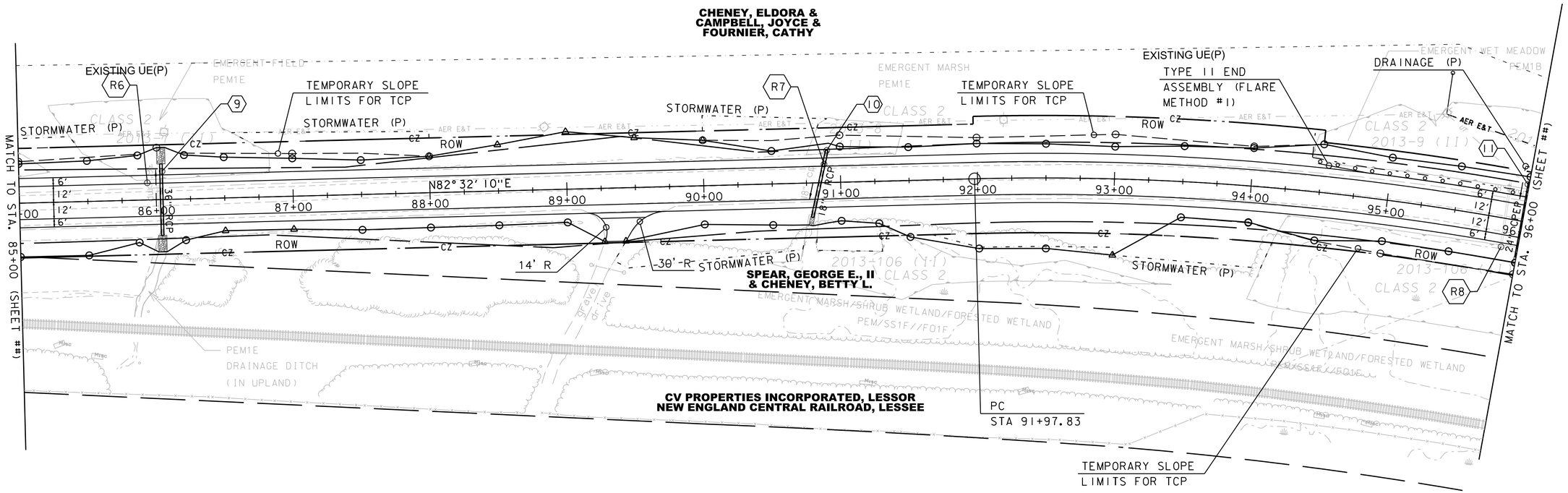
DRAINAGE REMOVAL

(R6) STA. 85+94 LT 12.5' - STA. 86+04 RT 26.1'
REMOVE EXISTING 40'X36"

(R7) STA. 90+89 LT 14.9' - STA. 90+79 RT 18.8'
REMOVE EXISTING 34'X18"

(R8) STA. 95+79 LT 22.0' - STA. 95+87 RT 14.0'
REMOVE EXISTING 36'X18"

N
VT STATE PLANE GRID



STONE FILL, TYPE I
GEOTEXTILE UNDER STONE FILL
GRUBBING MATERIAL
STA. 90+85 RT (6'L X 3'W X 2'D)
STA. 96+00 RT (6'L X 3'W X 2'D)

STONE FILL, TYPE II
GEOTEXTILE UNDER STONE FILL
STA. 86+04 LT (12'L X 4.5'W X 3'D)
STA. 86+04 RT (12'L X 4.5'W X 3'D)

BOX BEAM GUARDRAIL
STA. 94+47.0 - STA. 96+00.0 LT

CONSTRUCT DRIVE
STA. 89+35, RT

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

0 40 80
SCALE IN FEET

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
PLAN SHEET #6

PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 43 OF 305

NEW DRAINAGE

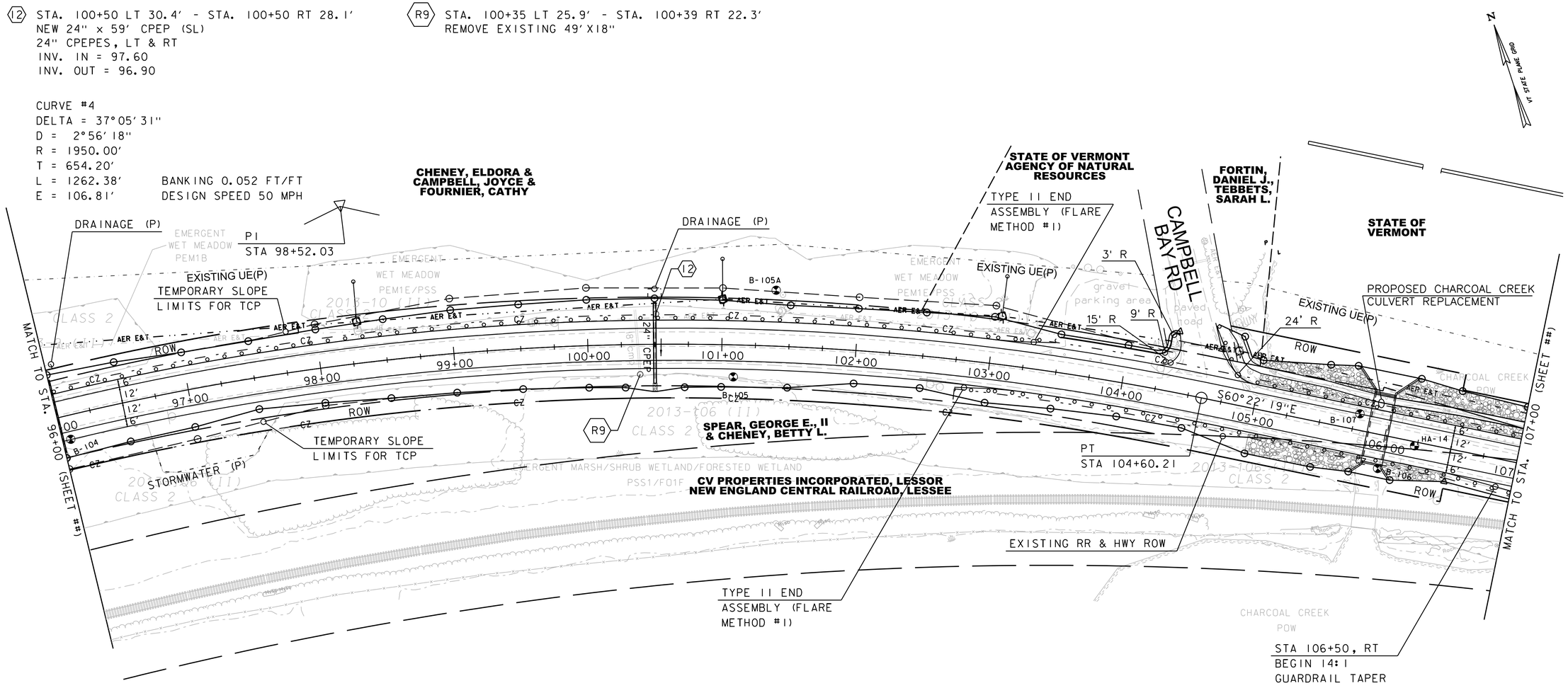
(12) STA. 100+50 LT 30.4' - STA. 100+50 RT 28.1'
NEW 24" x 59' CPEP (SL)
24" CPEPES, LT & RT
INV. IN = 97.60
INV. OUT = 96.90

CURVE #4
DELTA = 37°05'31"
D = 2°56'18"
R = 1950.00'
T = 654.20'
L = 1262.38'
E = 106.81'

BANKING 0.052 FT/FT
DESIGN SPEED 50 MPH

DRAINAGE REMOVAL

(R9) STA. 100+35 LT 25.9' - STA. 100+39 RT 22.3'
REMOVE EXISTING 49'X18"



STONE FILL, TYPE I
GEOTEXTILE UNDER STONE FILL
GRUBBING MATERIAL
STA. 100+50 RT (6'L X 3'W X 2'D)
STA. 105+00 - STA. 105+80 LT
STA. 106+00 - STA. 107+00 LT

REMOVAL AND DISPOSAL OF GUARDRAIL
STA. 104+64 - STA. 107+00 LT
STA. 104+43 - STA. 106+44 RT

BOX BEAM GUARDRAIL
STA. 96+00.0 - STA. 103+47.0 LT
STA. 102+76.0 - STA. 107+00.0 RT
STA. 104+61.0 - STA. 107+00.0 LT

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

0 40 80
SCALE IN FEET

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
PLAN SHEET #7

PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 44 OF 305

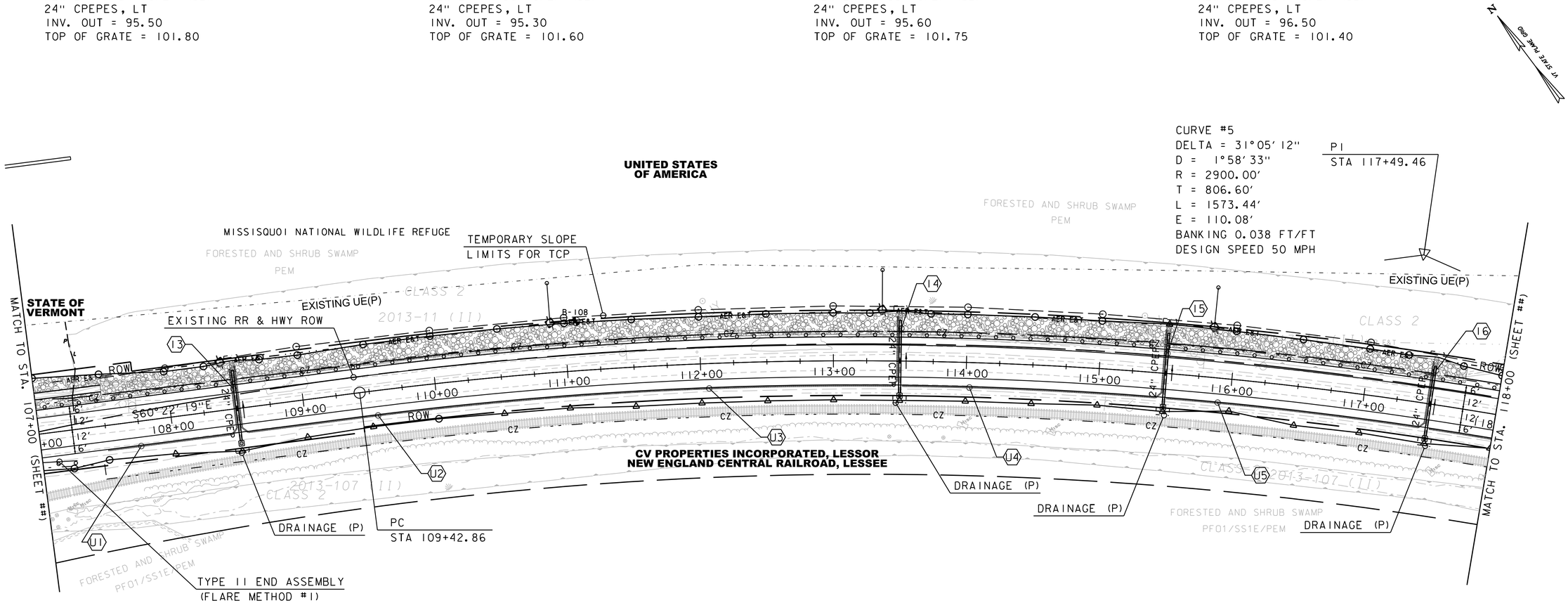
NEW DRAINAGE

(13) STA. 108+50 RT 26.5' - STA. 108+50 LT 29.1'
RCP PIPE DI, +50, RT 26.5'
INV. OUT = 98.30
NEW 24" x 54' CPEP (SL)
24" CPEPES, LT
INV. OUT = 95.50
TOP OF GRATE = 101.80

(14) STA. 113+50 RT 26.0' - STA. 113+50 LT 30.6'
RCP PIPE DI, +50, RT 26.0'
INV. OUT = 98.10
NEW 24" x 56' CPEP (SL)
24" CPEPES, LT
INV. OUT = 95.30
TOP OF GRATE = 101.60

(15) STA. 115+50 RT 25.6' - STA. 115+50 LT 30.3'
RCP PIPE DI, +50, RT 25.6'
INV. OUT = 98.10
NEW 24" x 55' CPEP (SL)
24" CPEPES, LT
INV. OUT = 95.60
TOP OF GRATE = 101.75

(16) STA. 117+50 RT 26.5' - STA. 117+50 LT 28.7'
RCP PIPE DI, +50, RT 26.5'
INV. OUT = 97.90
NEW 24" x 54' CPEP (SL)
24" CPEPES, LT
INV. OUT = 96.50
TOP OF GRATE = 101.40



MISSISQUOI NATIONAL WILDLIFE REFUGE

STONE FILL, TYPE I
GEOTEXTILE UNDER STONE FILL
GRUBBING MATERIAL
STA. 107+00 - STA. 117+75 LT
STA. 108+50 LT (6'L X 3'W X 2'D)
STA. 113+50 LT (6'L X 3'W X 2'D)
STA. 117+50 LT (6'L X 3'W X 2'D)

BOX BEAM GUARDRAIL
STA. 107+00.0 - 107+26.0 RT
STA. 107+00.0 - 118+00.0 LT

REMOVAL AND DISPOSAL OF GUARDRAIL
STA. 107+00 - STA. 107+53 LT

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

0 40 80
SCALE IN FEET

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
PLAN SHEET #8

PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 45 OF 305

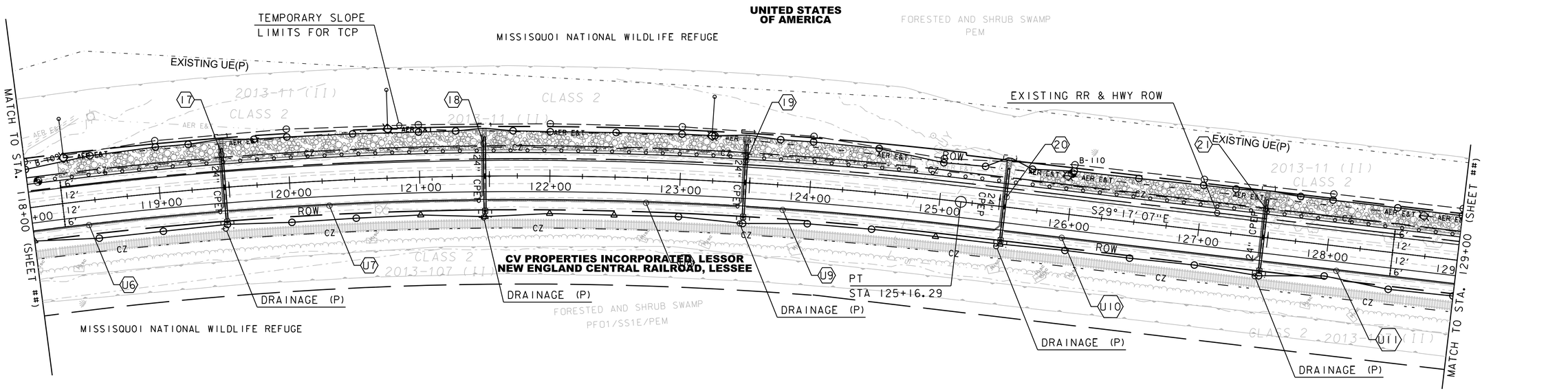
NEW DRAINAGE

(17) STA. 119+50 RT 26.5′ - STA. 119+50 LT 30.0′
RCP PIPE D1, +50, RT 26.5′
INV. OUT = 97.80
NEW 24" x 56′ CPEP (SL)
24" CPEPES, LT
INV. OUT = 95.50
TOP OF GRATE = 101.25

(18) STA. 121+50 RT 27.0′ - STA. 121+50 LT 30.1′
RCP PIPE D1, +50, RT 27.0′
INV. OUT = 97.60
NEW 24" x 56′ CPEP (SL)
24" CPEPES, LT
INV. OUT = 95.60
TOP OF GRATE = 101.10

(19) STA. 123+50 RT 26.4′ - STA. 123+50 LT 29.6′
RCP PIPE D1, +50, RT 26.4′
INV. OUT = 97.80
NEW 24" x 55′ CPEP (SL)
24" CPEPES, LT
INV. OUT = 95.80
TOP OF GRATE = 101.25

(20) STA. 125+50 RT 26.0′ - STA. 125+50 LT 29.9′
RCP PIPE D1, +50, RT 26.0′
INV. OUT = 98.40
NEW 24" x 54′ CPEP (SL)
24" CPEPES, LT
INV. OUT = 97.80
TOP OF GRATE = 101.90



(21) STA. 127+50 RT 25.9′ - STA. 127+50 LT 29.2′
RCP PIPE D1, +50, RT 25.9′
INV. OUT = 98.50
NEW 24" x 54′ CPEP (SL)
24" CPEPES, LT
INV. OUT = 95.60
TOP OF GRATE = 102.00

STONE FILL, TYPE I
GEOTEXTILE UNDER STONE FILL
GRUBBING MATERIAL
STA. 118+25 - STA. 124+75 LT
STA. 125+75 - STA. 129+00 LT
STA. 121+50 LT (6′L X 3′W X 2′D)
STA. 125+50 LT (6′L X 3′W X 2′D)

BOX BEAM GUARDRAIL
STA. 118+00.0 - STA. 129+00.0 LT

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

0 40 80
SCALE IN FEET

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
PLAN SHEET #9
PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 46 OF 305

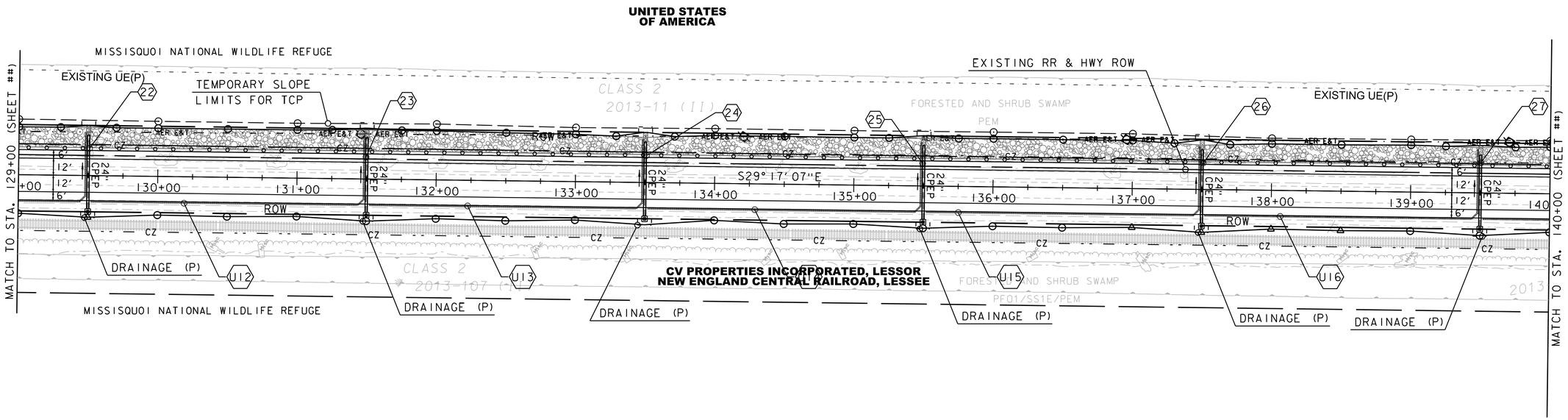
NEW DRAINAGE

(22) STA. 129+50 RT 26.0′ - STA. 129+50 LT 29.1′
RCP PIPE D1, +50, RT 26.0′
INV. OUT = 98.50
NEW 24" x 54′ CPEP (SL)
24" CPEPES, LT
INV. OUT = 95.80
TOP OF GRATE = 102.00

(23) STA. 131+50 RT 26.0′ - STA. 131+50 LT 29.8′
RCP PIPE D1, +50, RT 26.0′
INV. OUT = 98.50
NEW 24" x 55′ CPEP (SL)
24" CPEPES, LT
INV. OUT = 95.20
TOP OF GRATE = 102.00

(24) STA. 133+50 RT 26.0′ - STA. 133+50 LT 29.1′
RCP PIPE D1, +50, RT 26.0′
INV. OUT = 98.50
NEW 24" x 54′ CPEP (SL)
24" CPEPES, LT
INV. OUT = 95.70
TOP OF GRATE = 102.00

(25) STA. 135+50 RT 26.0′ - STA. 135+50 LT 29.1′
RCP PIPE D1, +50, RT 26.0′
INV. OUT = 98.50
NEW 24" x 54′ CPEP (SL)
24" CPEPES, LT
INV. OUT = 95.7
TOP OF GRATE = 102.00



(26) STA. 137+50 RT 26.5′ - STA. 137+50 LT 28.5′
RCP PIPE D1, +50, RT 26.5′
INV. OUT = 98.40
NEW 24" x 54′ CPEP (SL)
24" CPEPES, LT
INV. OUT = 96.10
TOP OF GRATE = 101.90

(27) STA. 139+50 RT 26.0′ - STA. 139+50 LT 27.2′
RCP PIPE D1, +50, RT 26.0′
INV. OUT = 98.50
NEW 24" x 52′ CPEP (SL)
24" CPEPES, LT
INV. OUT = 97.00
TOP OF GRATE = 102.00

STONE FILL, TYPE I
GEOTEXTILE UNDER STONE FILL
GRUBBING MATERIAL
STA. 129+00 - STA. 140+00 LT
STA. 129+50 LT (6′L X 3′W X 2′D)
STA. 133+50 LT (6′L X 3′W X 2′D)
STA. 137+50 LT (6′L X 3′W X 2′D)

BOX BEAM GUARDRAIL
STA. 129+00.0 - STA. 140+00.0 LT

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

0 40 80
SCALE IN FEET

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
PLAN SHEET #10

PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 47 OF 305

NEW DRAINAGE

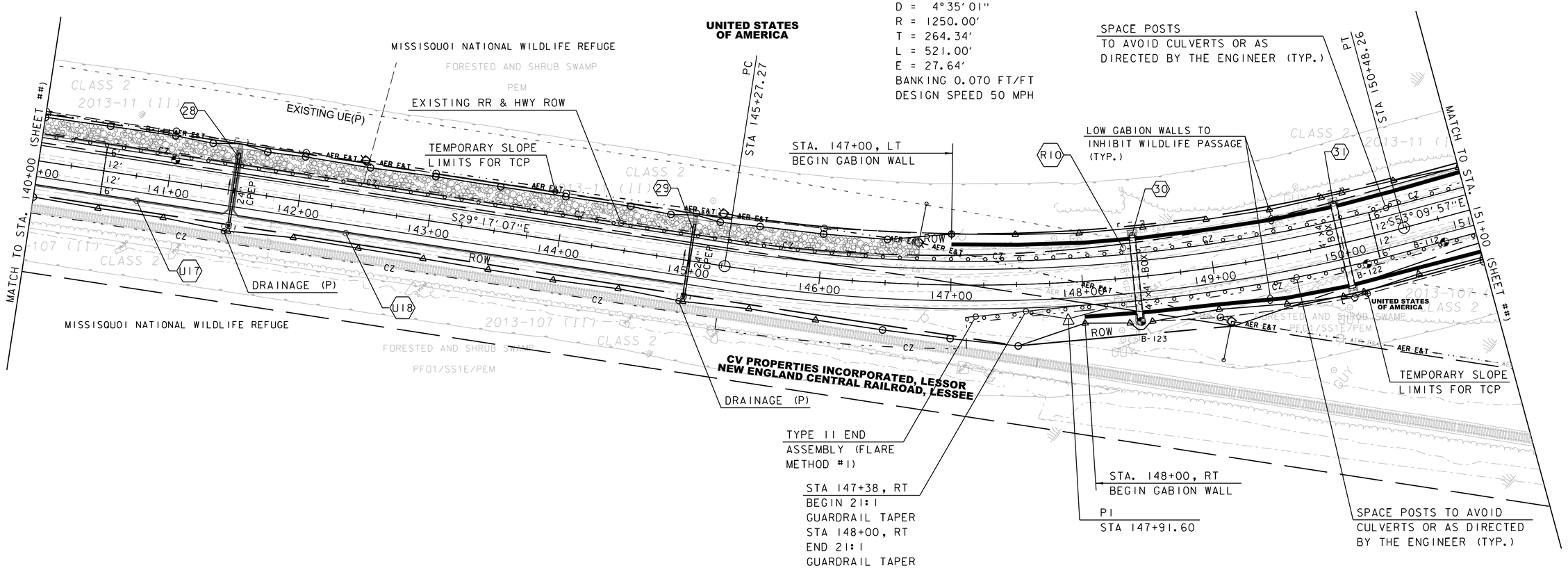
(28) STA. 141+50 RT 26.5' - STA. 141+50 LT 29.1'
RCP PIPE D1, +50, RT 26.5'
INV. OUT = 98.30
NEW 24" x 56' CPEP (SL)
24" CPEPES, LT
INV. OUT = 95.70
TOP OF GRATE = 101.80

(29) STA. 145+00 RT 27.0' - STA. 145+00 LT 28.1'
RCP PIPE D1, +00, RT 27.0'
INV. OUT = 98.90
NEW 24" x 54' CPEP (SL)
24" CPEPES, LT
INV. OUT = 96.20
TOP OF GRATE = 102.40

(30) STA. 148+41 LT 32.0' - RT 32.0'
4'X4' PRECAST BOX CULVERT
INV. IN = 95.95
INV. OUT = 95.63

(31) STA. 150+00 LT 31.0' - RT 35.0'
4'X4' PRECAST BOX CULVERT
INV. IN = 95.80
INV. OUT = 95.47

CURVE #6
DELTA = 23°52'51"
D = 4°35'01"
R = 1250.00'
T = 264.34'
L = 521.00'
E = 27.64'
BANKING 0.070 FT/FT
DESIGN SPEED 50 MPH



DRAINAGE REMOVAL

(R10) STA. 148+35 LT 26.7' - STA. 148+42 RT 25.1'
REMOVE EXISTING 53'X48"

STONE FILL, TYPE I
GEOTEXTILE UNDER STONE FILL
GRUBBING MATERIAL
STA. 140+00 - STA. 146+75 LT
STA. 141+50 LT (6'L X 3'W X 2'D)
STA. 145+00 LT (6'L X 3'W X 2'D)
STA. 148+41 LT (4'L X 7'W X 2'D)
STA. 148+41 RT (4'L X 7'W X 2'D)
STA. 150+00 LT (4'L X 7'W X 2'D)
STA. 150+00 RT (4'L X 7'W X 2'D)

BOX BEAM GUARDRAIL
STA. 140+00.0 - STA. 151+00.0 LT
STA. 147+11.0 - STA. 151+00.0 RT

REMOVAL AND DISPOSAL OF GUARDRAIL
STA. 147+60 - STA. 151+00 RT

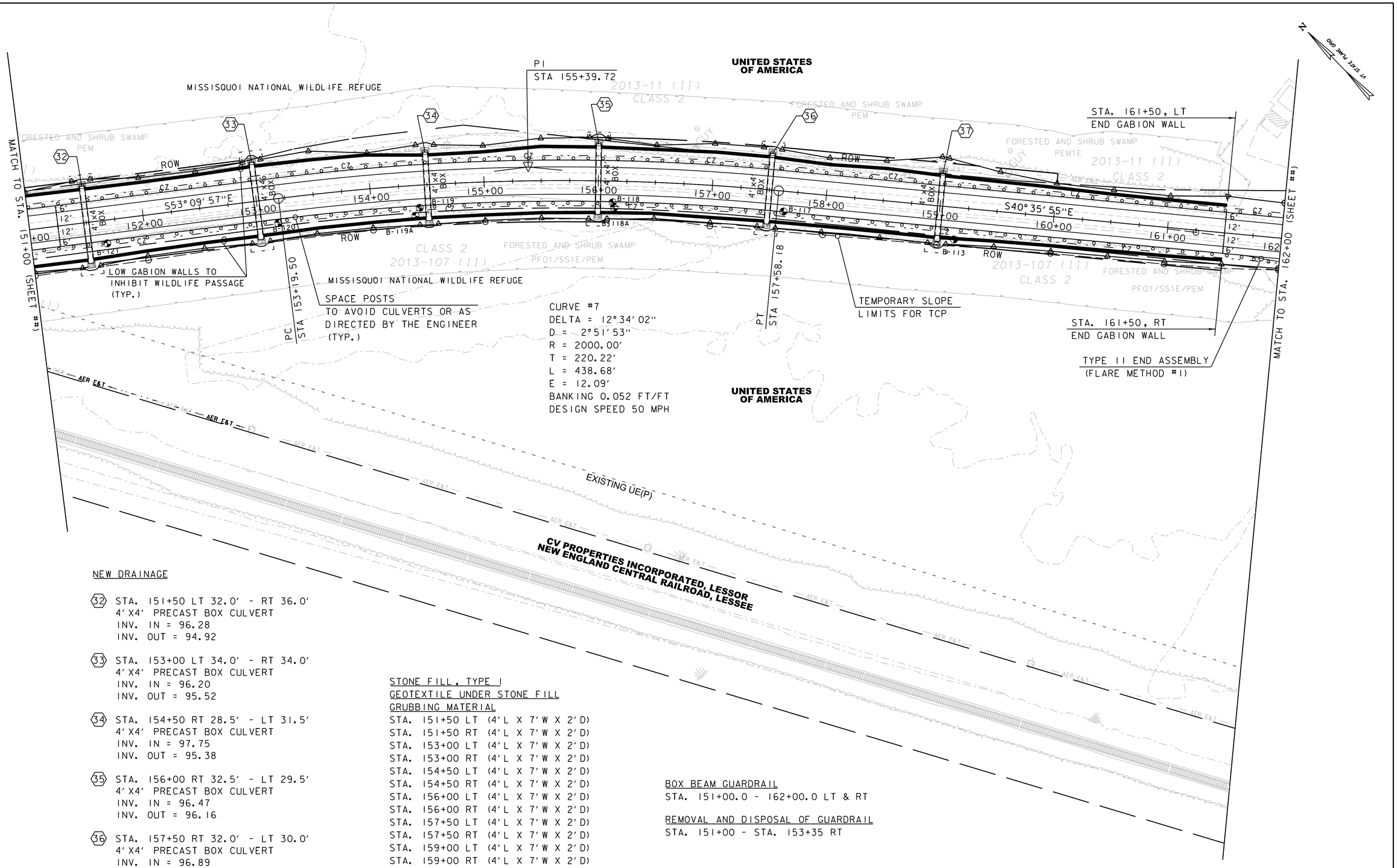
DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

0 40 80
SCALE IN FEET

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
PLAN SHEET #11
PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 48 OF 305



NEW DRAINAGE

32 STA. 151+50 LT 32.0' - RT 36.0'
4'X4' PRECAST BOX CULVERT
INV. IN = 96.28
INV. OUT = 94.92

33 STA. 153+00 LT 34.0' - RT 34.0'
4'X4' PRECAST BOX CULVERT
INV. IN = 96.20
INV. OUT = 95.52

34 STA. 154+50 RT 28.5' - LT 31.5'
4'X4' PRECAST BOX CULVERT
INV. IN = 97.75
INV. OUT = 95.38

35 STA. 156+00 RT 32.5' - LT 29.5'
4'X4' PRECAST BOX CULVERT
INV. IN = 96.47
INV. OUT = 96.16

36 STA. 157+50 RT 32.0' - LT 30.0'
4'X4' PRECAST BOX CULVERT
INV. IN = 96.89
INV. OUT = 96.53

37 STA. 159+00 LT 29.0' - RT 31.0'
4'X4' PRECAST BOX CULVERT
INV. IN = 96.63
INV. OUT = 96.88

STONE FILL, TYPE I
GEOTEXTILE UNDER STONE FILL
GRUBBING MATERIAL
STA. 151+50 LT (4'L X 7'W X 2'D)
STA. 151+50 RT (4'L X 7'W X 2'D)
STA. 153+00 LT (4'L X 7'W X 2'D)
STA. 153+00 RT (4'L X 7'W X 2'D)
STA. 154+50 LT (4'L X 7'W X 2'D)
STA. 154+50 RT (4'L X 7'W X 2'D)
STA. 156+00 LT (4'L X 7'W X 2'D)
STA. 156+00 RT (4'L X 7'W X 2'D)
STA. 157+50 LT (4'L X 7'W X 2'D)
STA. 157+50 RT (4'L X 7'W X 2'D)
STA. 159+00 LT (4'L X 7'W X 2'D)
STA. 159+00 RT (4'L X 7'W X 2'D)

BOX BEAM GUARDRAIL
STA. 151+00.0 - 162+00.0 LT & RT

REMOVAL AND DISPOSAL OF GUARDRAIL
STA. 151+00 - STA. 153+35 RT

0 40 80
SCALE IN FEET

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
PLAN SHEET #12

PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 49 OF 305

NEW DRAINAGE

(38) STA. 170+00 RT 25.0' - STA. 170+00 LT 26.1'
NEW 24" x 56' CPEP (SL)
24" CPEPES, LT & RT
INV. IN = 100.10
INV. OUT = 99.50

CURVE #8
DELTA = 23°09'06"
D = 4°58'56"
R = 1150.00'
T = 235.56'
L = 464.69'
E = 23.88'
BANKING 0.072 FT/FT
DESIGN SPEED 50 MPH

CURVE #9
DELTA = 6°40'23"
D = 1°09'27"
R = 4950.00'
T = 288.59'
L = 576.52'
E = 8.41'
BANKING 0.024 FT/FT
DESIGN SPEED 50 MPH

STONE FILL, TYPE I
GEOTEXTILE UNDER STONE FILL
GRUBBING MATERIAL
STA. 166+75 - STA. 167+25 LT
STA. 171+25 - STA. 172+25 LT
STA. 170+00 LT (6'L X 3'W X 2'D)

BOX BEAM GUARDRAIL
STA. 162+00.0 - STA. 162+05.0 RT
STA. 162+00.0 - STA. 163+38.0 LT
STA. 165+36.0 - STA. 173+00.0 LT

REMOVAL AND DISPOSAL OF GUARDRAIL
STA. 162+62 - STA. 173+00 LT

CONTRUCT DRIVE
STA. 162+21, RT
STA. 163+76, LT
STA. 164+00, RT
STA. 165+52, LT
STA. 170+93, RT

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

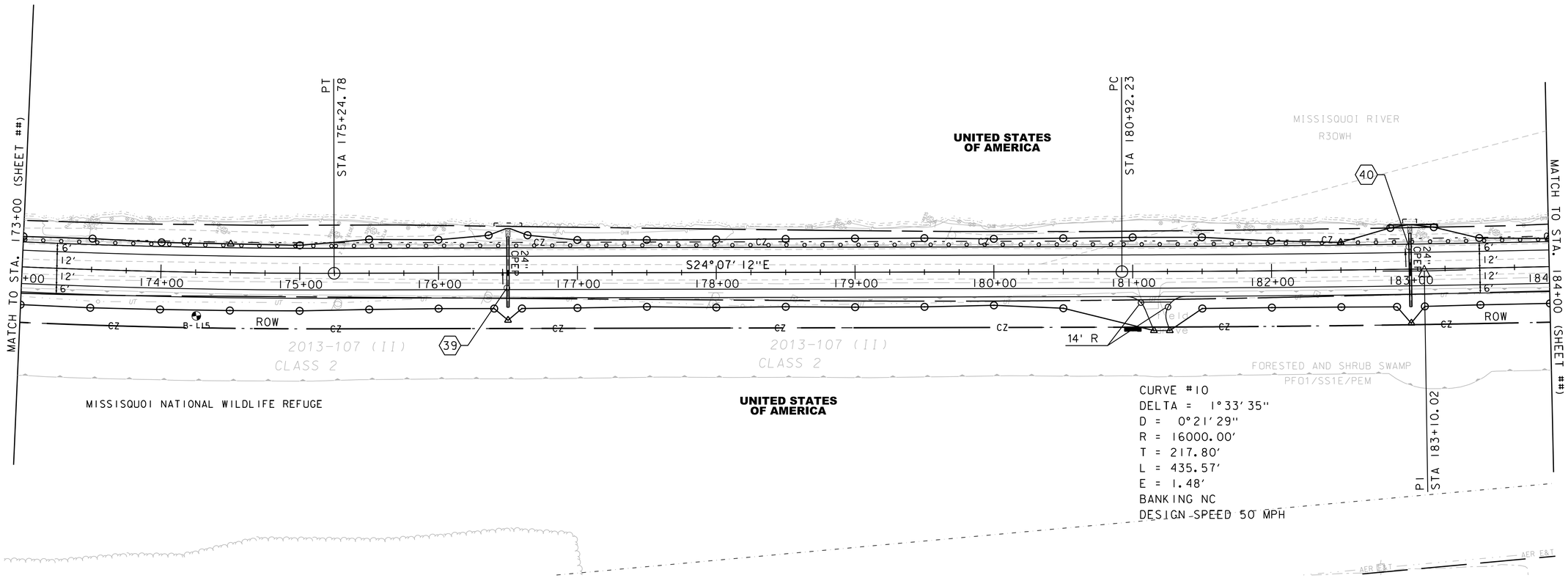
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SCALE IN FEET

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032bdr_gen.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
PLAN SHEET #13	SHEET 50 OF 305

NEW DRAINAGE

(39) STA. 176+50 RT 25.0' - STA. 176+50 LT 26.0'
NEW 24" x 52' CPEP (SL)
24" CPEPES, LT & RT
INV. IN = 99.20
INV. OUT = 98.90

(40) STA. 183+00 RT 27.0' - STA. 183+00 LT 26.0'
NEW 24" x 54' CPEP (SL)
24" CPEPES, LT & RT
INV. IN = 99.00
INV. OUT = 98.80



STONE FILL, TYPE I
GEOTEXTILE UNDER STONE FILL
GRUBBING MATERIAL
STA. 176+50 LT (6'L X 3'W X 2'D)
STA. 183+00 LT (6'L X 3'W X 2'D)

BOX BEAM GUARDRAIL
STA. 173+00.0 - STA. 184+00.0 LT

REMOVAL AND DISPOSAL OF GUARDRAIL
STA. 173+00 - STA. 184+00 LT

CONTRUCT DRIVE
STA. 181+00, RT

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

0 40 80
SCALE IN FEET

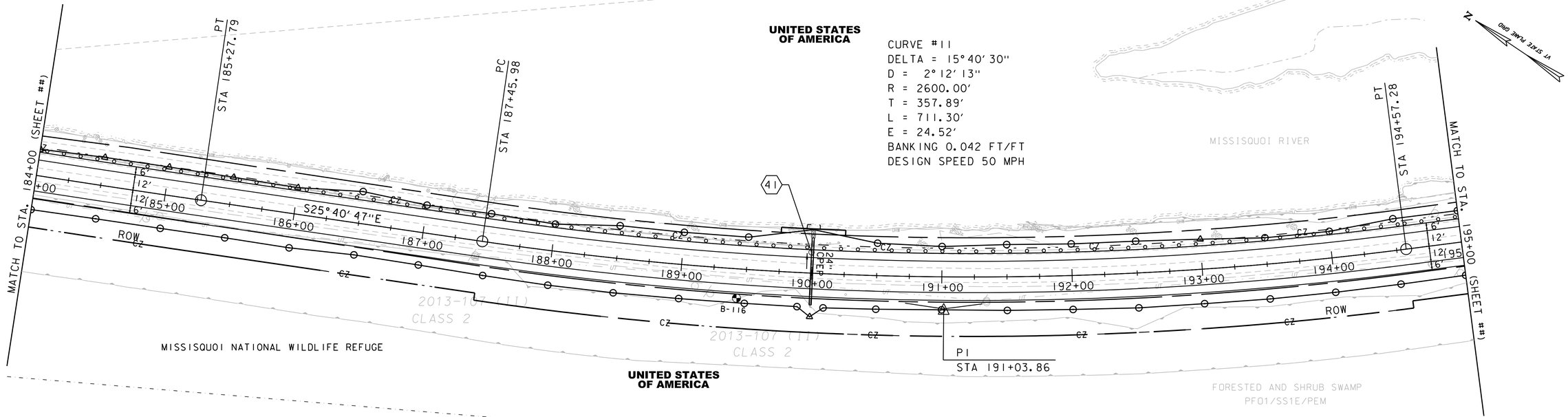
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
PLAN SHEET #14

PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 51 OF 305

NEW DRAINAGE

(41) STA. 190+00 RT 24.5' - STA. 190+00 LT 27.0'
NEW 24" x 52' CPEP (SL)
24" CPEPES, LT & RT
INV. IN = 100.20
INV. OUT = 98.10



STONE FILL, TYPE I
GEOTEXTILE UNDER STONE FILL
GRUBBING MATERIAL
STA. 190+00 LT (6'L X 3'W X 2'D)

BOX BEAM GUARDRAIL
STA. 184+00.0 - 195+00.0 LT

REMOVAL AND DISPOSAL OF GUARDRAIL
STA. 184+00 - STA. 190+21 LT

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

0 40 80
SCALE IN FEET

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

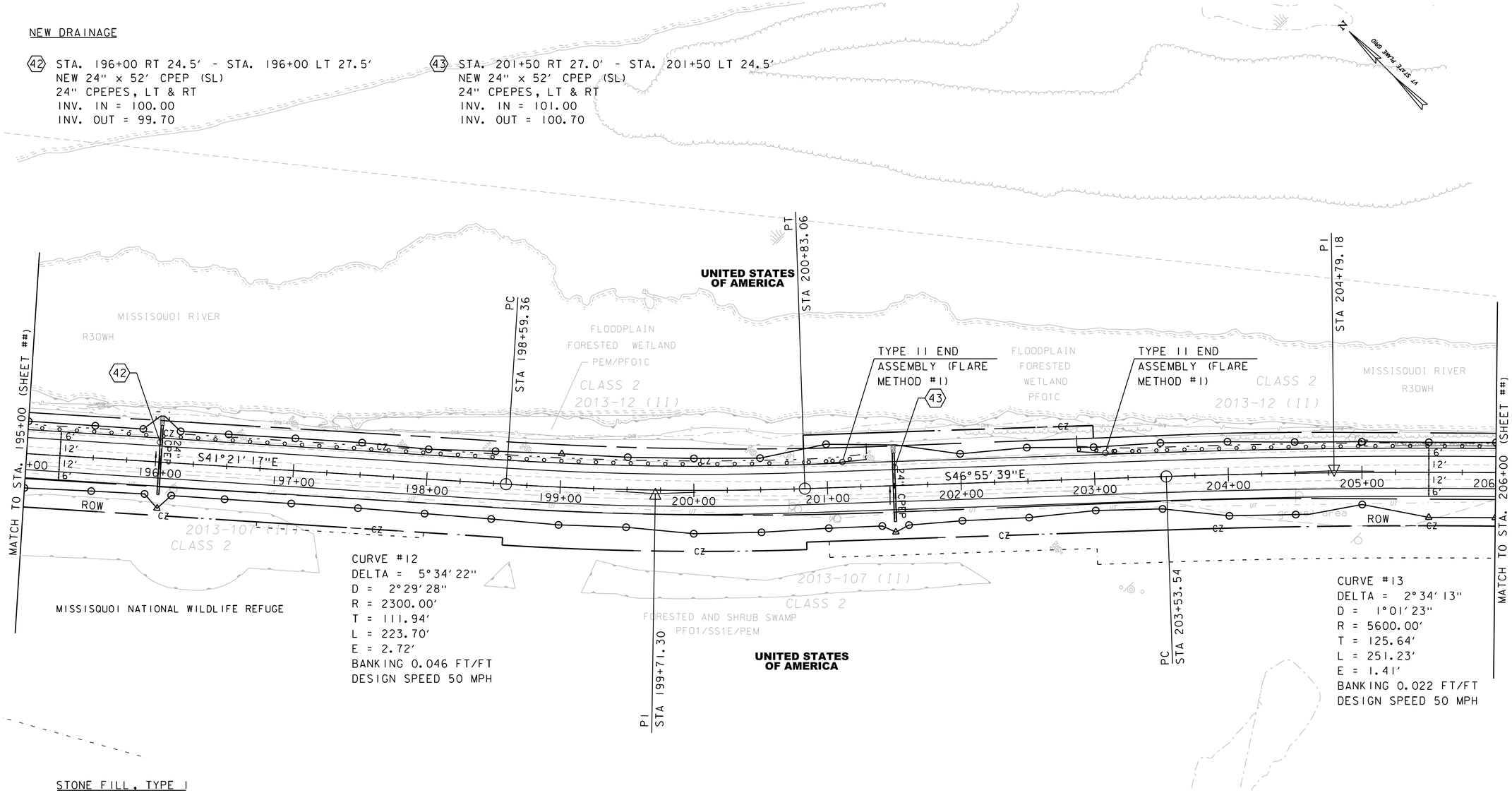
FILE NAME: z96b032bdr_gen.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
PLAN SHEET #15

PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 52 OF 305

NEW DRAINAGE

(42) STA. 196+00 RT 24.5' - STA. 196+00 LT 27.5'
NEW 24" x 52' CPEP (SL)
24" CPEPES, LT & RT
INV. IN = 100.00
INV. OUT = 99.70

(43) STA. 201+50 RT 27.0' - STA. 201+50 LT 24.5'
NEW 24" x 52' CPEP (SL)
24" CPEPES, LT & RT
INV. IN = 101.00
INV. OUT = 100.70



STONE FILL, TYPE I
GEOTEXTILE UNDER STONE FILL
GRUBBING MATERIAL
STA. 205+25 - STA. 206+00 LT
STA. 196+00 LT (6'L X 3'W X 2'D)
STA. 201+50 LT (6'L X 3'W X 2'D)

BOX BEAM GUARDRAIL
STA. 195+00.0 - 201+30.0 LT
STA. 202+86.0 - 206+00.0 LT

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

0 40 80
SCALE IN FEET

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
PLAN SHEET #16

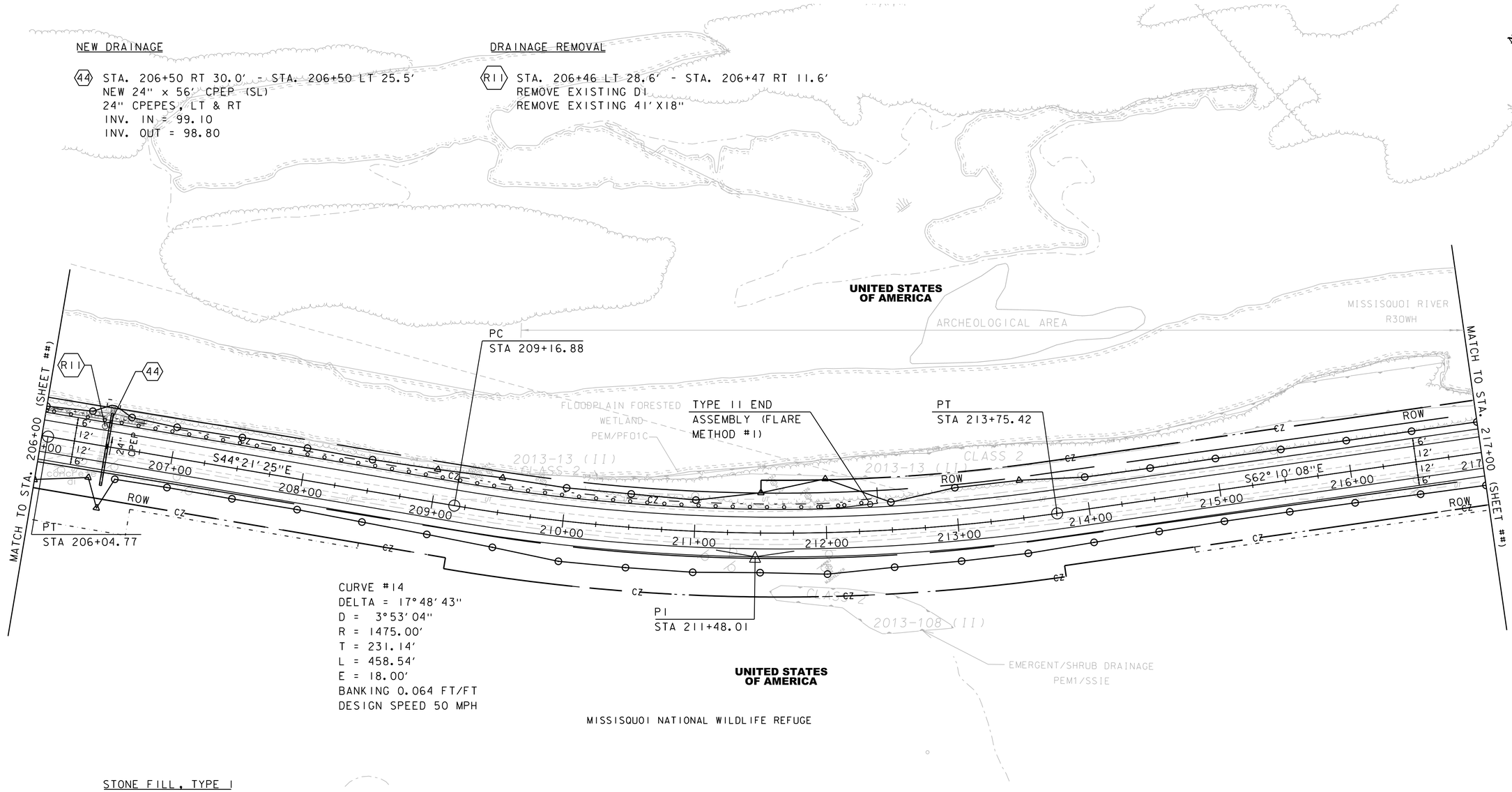
PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 53 OF 305

NEW DRAINAGE

(44) STA. 206+50 RT 30.0' - STA. 206+50 LT 25.5'
NEW 24" x 56' CPEP (SL)
24" CPEPES, LT & RT
INV. IN = 99.10
INV. OUT = 98.80

DRAINAGE REMOVAL

(R11) STA. 206+46 LT 28.6' - STA. 206+47 RT 11.6'
REMOVE EXISTING D1
REMOVE EXISTING 41'X18"



CURVE #14
DELTA = 17°48'43"
D = 3°53'04"
R = 1475.00'
T = 231.14'
L = 458.54'
E = 18.00'
BANKING 0.064 FT/FT
DESIGN SPEED 50 MPH

STONE FILL, TYPE I
GEOTEXTILE UNDER STONE FILL
GRUBBING MATERIAL
STA. 206+50 LT (6'L X 3'W X 2'D)

BOX BEAM GUARDRAIL
STA. 206+00.0 - STA. 212+40.0 LT

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

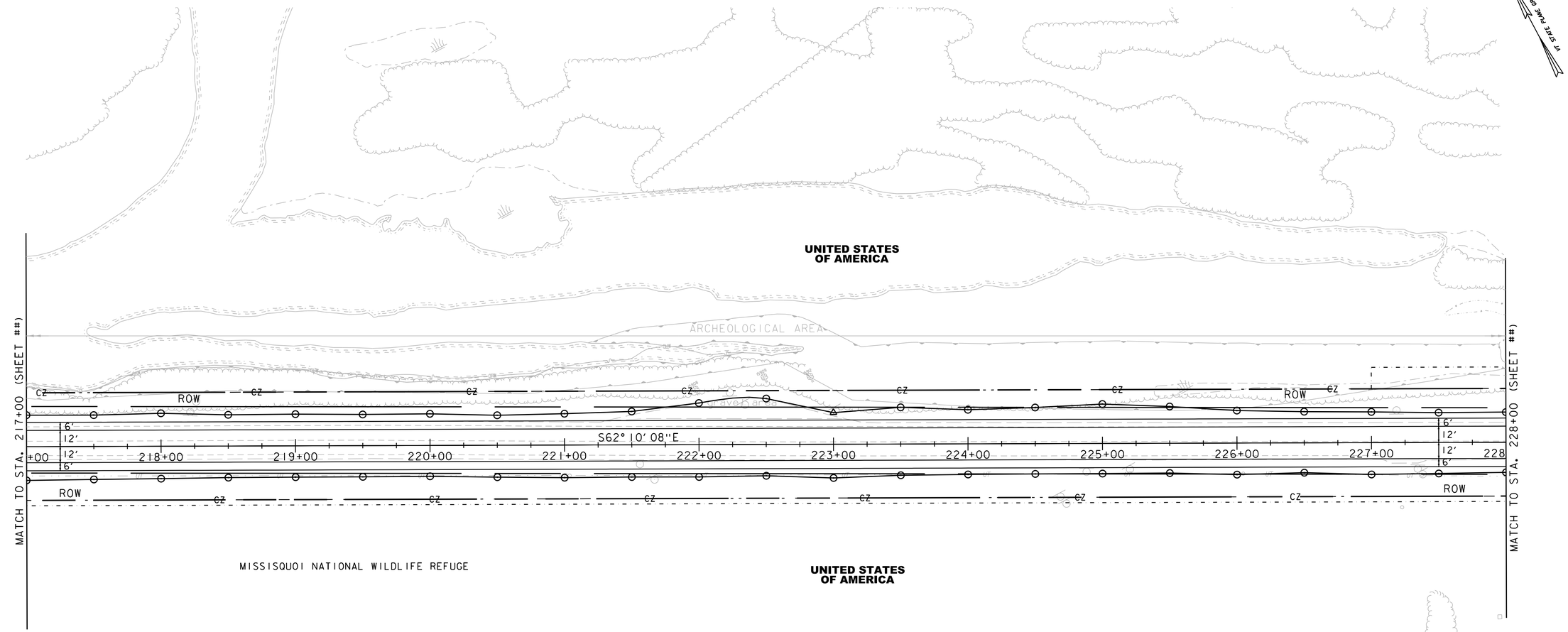
0 40 80
SCALE IN FEET

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
PLAN SHEET #17

PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 54 OF 305



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

0 40 80

SCALE IN FEET

vhb

PROJECT NAME: SWANTON

PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn

PROJECT LEADER: G. BAKOS

DESIGNED BY: M. BOGUE

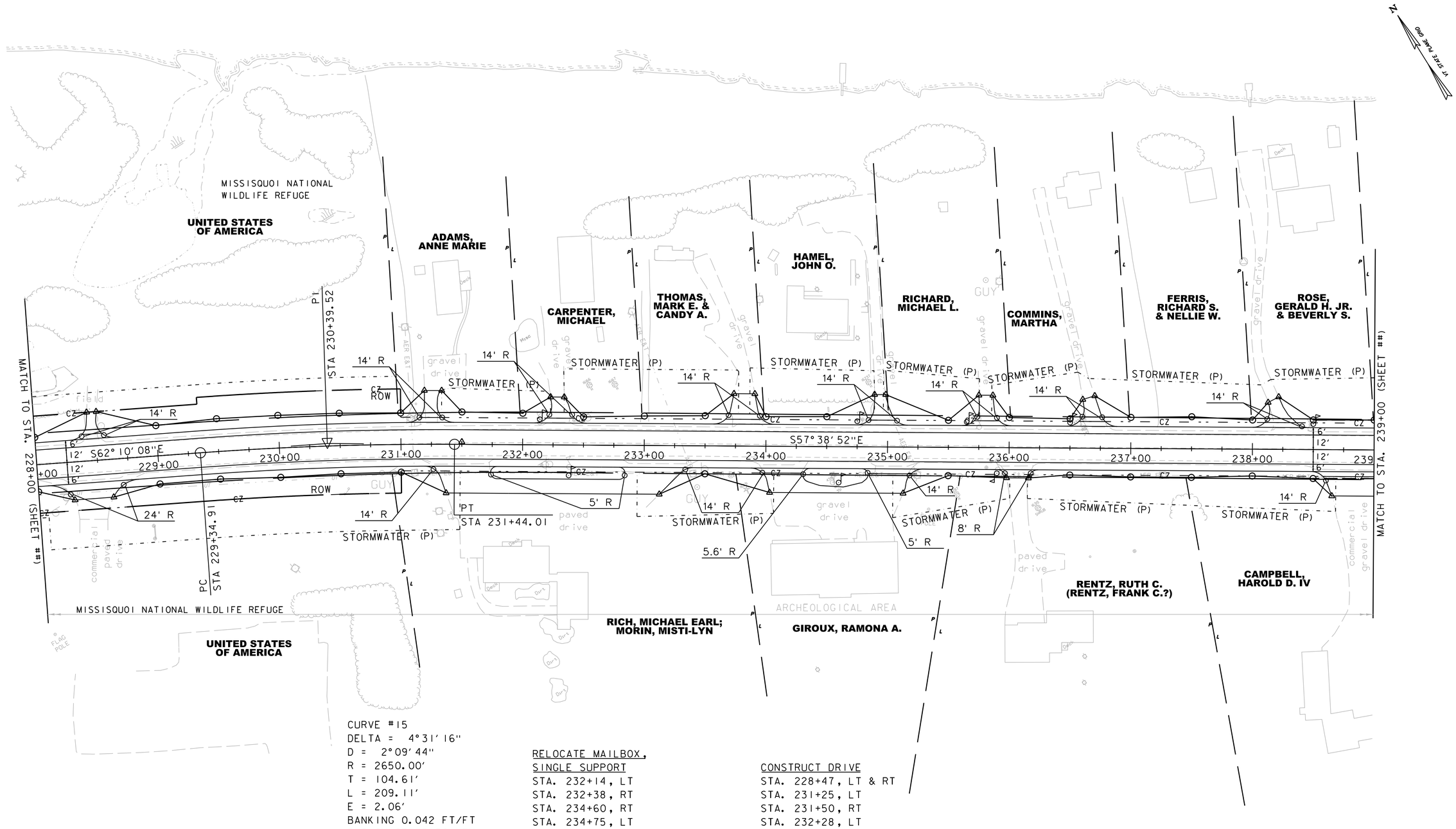
PLAN SHEET #18

PLOT DATE: 3/6/2019

DRAWN BY: C. CILLEY

CHECKED BY: G. BAKOS

SHEET 55 OF 305



CURVE #15
DELTA = 4°31' 16"
D = 2°09' 44"
R = 2650.00'
T = 104.61'
L = 209.11'
E = 2.06'
BANKING 0.042 FT/FT
DESIGN SPEED 50 MPH

RELOCATE MAILBOX, SINGLE SUPPORT
STA. 232+14, LT
STA. 232+38, RT
STA. 234+60, RT
STA. 234+75, LT
STA. 235+65, LT
STA. 235+90, RT
STA. 236+50, LT
STA. 238+50, LT

CONSTRUCT DRIVE
STA. 228+47, LT & RT
STA. 231+25, LT
STA. 231+50, RT
STA. 232+28, LT
STA. 233+00, RT
STA. 233+83, LT
STA. 234+14, RT
STA. 234+93, LT
STA. 235+00, RT
STA. 235+82, LT
STA. 236+07, RT
STA. 236+79, LT
STA. 238+37, LT
STA. 239+00, RT

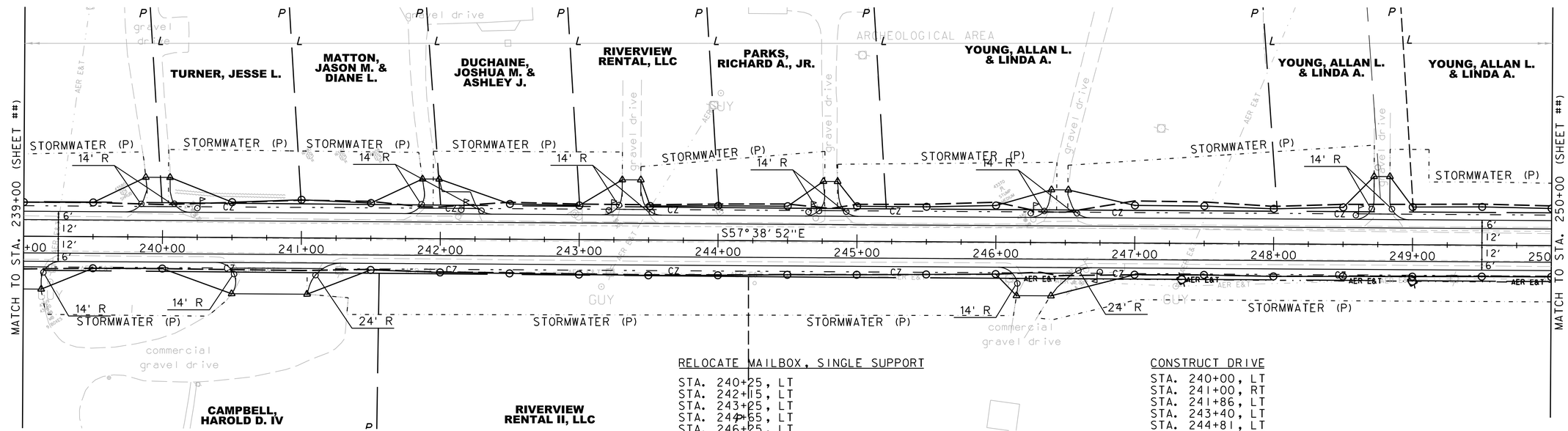
0 40 80
SCALE IN FEET

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
PLAN SHEET #19

PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 56 OF 305



RELOCATE MAILBOX, SINGLE SUPPORT

STA. 240+25, LT
STA. 242+15, LT
STA. 243+25, LT
STA. 244+65, LT
STA. 246+25, LT
STA. 246+75, RT
STA. 248+65, LT

CONSTRUCT DRIVE

STA. 240+00, LT
STA. 241+00, RT
STA. 241+86, LT
STA. 243+40, LT
STA. 244+81, LT
STA. 246+32, RT
STA. 246+46, LT
STA. 248+80, LT

DATUM

VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

0 40 80
SCALE IN FEET

vhb

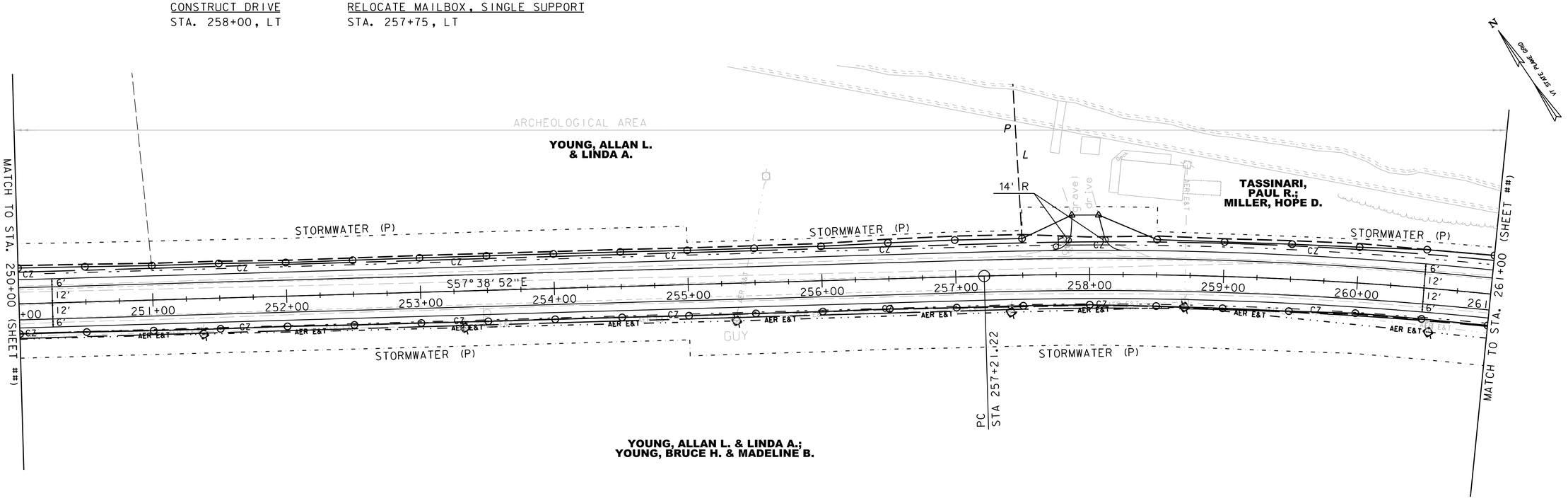
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
PLAN SHEET #20

PLOT DATE: 3/7/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 57 OF 305

CONSTRUCT DRIVE
STA. 258+00, LT

RELOCATE MAILBOX, SINGLE SUPPORT
STA. 257+75, LT



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

0 40 80
SCALE IN FEET

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
PLAN SHEET #21

PLOT DATE: 3/7/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 58 OF 305

BOX BEAM TRANSITION
STA. 262+00.0 RT TO STA. 272+00.0 LT

CURVE #16
DELTA = 17°28'45"
D = 1°56'32"
R = 2950.00'
T = 453.50'
L = 899.96'
E = 34.65'
BANKING 0.038 FT/FT
DESIGN SPEED 50 MPH

RELOCATE MAILBOX, SINGLE SUPPORT
STA. 262+10, RT
STA. 264+05, RT
STA. 265+95, RT

TYPE II END ASSEMBLY (FLARE METHOD #1)

STA 261+74.72 PI

MATCH TO STA. 261+00 (SHEET #)

MATCH TO STA. 272+00 (SHEET #)

STORMWATER (P)

ROW

CZ

AER E&T

12" RCP

24" CPEP

18" CPEP

14' R

DRAINAGE (P)

R12

CONSTRUCT DRIVE
STA. 261+83, RT
STA. 263+65, RT
STA. 265+10, RT

STA 266+21.18 PT

S40°10'07"E

ARCHEOLOGICAL AREA

UNKNOW OWNER
STA. 265+39 TO 300+08

STONE FILL, TYPE I
GEOTEXTILE UNDER STONE FILL
GRUBBING MATERIAL
STA. 264+00 LT (6'L X 3'W X 2'D)
STA. 266+00 LT (6'L X 3'W X 2'D)

TASSINARI, PAUL R.; MILLER, HOPE D.

YOUNG, GINETTE L.

YOUNG, ALLAN L. & LINDA A.; YOUNG, BRUCE H. & MADELINE B.

BUSHEY, ROYAL P.

TRAHAN, JILL; ROYEA, TIMOTHY

BUSHEY, RAYMOND

paved drive

gravel drive

Dwlg

VT STATE PLANE GRID N

0 40 80
SCALE IN FEET

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
PLAN SHEET #22

PLOT DATE: 3/7/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 59 OF 305

NEW DRAINAGE

(48) STA. 276+10 RT 27.0' - STA. 276+10 LT 37.0'
NEW 24" x 66' CPEP (SL)
24" CPEPES, LT & RT
INV. IN = 100.00
INV. OUT = 98.50

(49) STA. 278+50 RT 24.5' - STA. 278+50 LT 27.5'
NEW 18" x 52' CPEP (SL)
18" CPEPES, LT & RT
INV. IN = 105.90
INV. OUT = 105.70

(50) STA. 281+00 RT 25.0' - STA. 281+00 LT 33.0'
RCP PIPE D1, +00, RT 25.0'
INV. OUT = 114.30
NEW 18" x 56' CPEP (SL)
18" CPEPES, LT
INV. OUT = 114.00
TOP OF GRATE = 117.80

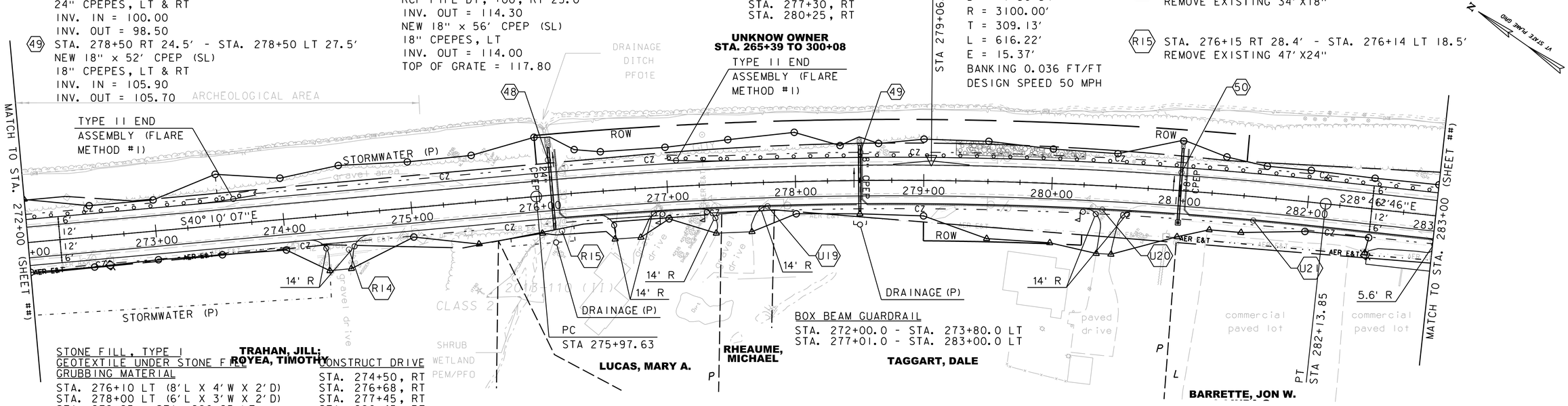
RELOCATE MAILBOX, SINGLE SUPPORT
STA. 276+95, RT
STA. 277+30, RT
STA. 280+25, RT

CURVE #17
DELTA = 11°23'22"
D = 1°50'54"
R = 3100.00'
T = 309.13'
L = 616.22'
E = 15.37'
BANKING 0.036 FT/FT
DESIGN SPEED 50 MPH

DRAINAGE REMOVAL

(R14) STA. 274+24 RT 29.0' - STA. 274+58 RT 27.6'
REMOVE EXISTING 34'X18"

(R15) STA. 276+15 RT 28.4' - STA. 276+14 LT 18.5'
REMOVE EXISTING 47'X24"



STONE FILL, TYPE I
GEOTEXTILE UNDER STONE FILL
GRUBBING MATERIAL
STA. 276+10 LT (8'L X 4'W X 2'D)
STA. 278+00 LT (6'L X 3'W X 2'D)
STA. 279+25 - STA. 280+25 LT
STA. 281+00 LT (6'L X 3'W X 2'D)

CONSTRUCT DRIVE
STA. 274+50, RT
STA. 276+68, RT
STA. 277+45, RT
STA. 280+45, RT

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

0 40 80
SCALE IN FEET

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
PLAN SHEET #23

PLOT DATE: 3/7/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 60 OF 305

NEW DRAINAGE

(51) STA. 288+50 RT 24.0' - STA. 288+50 LT 25.0'
NEW 18" x 66' CPEP (SL)
18" CPEPES, LT & RT
INV. IN = 118.70
INV. OUT = 117.10

DRAINAGE REMOVAL

(R16) STA. 288+65 RT 24.9' - STA. 288+60 LT 16.8'
REMOVE EXISTING 42"X15"

UNKNOW OWNER
STA. 265+39 TO 300+08

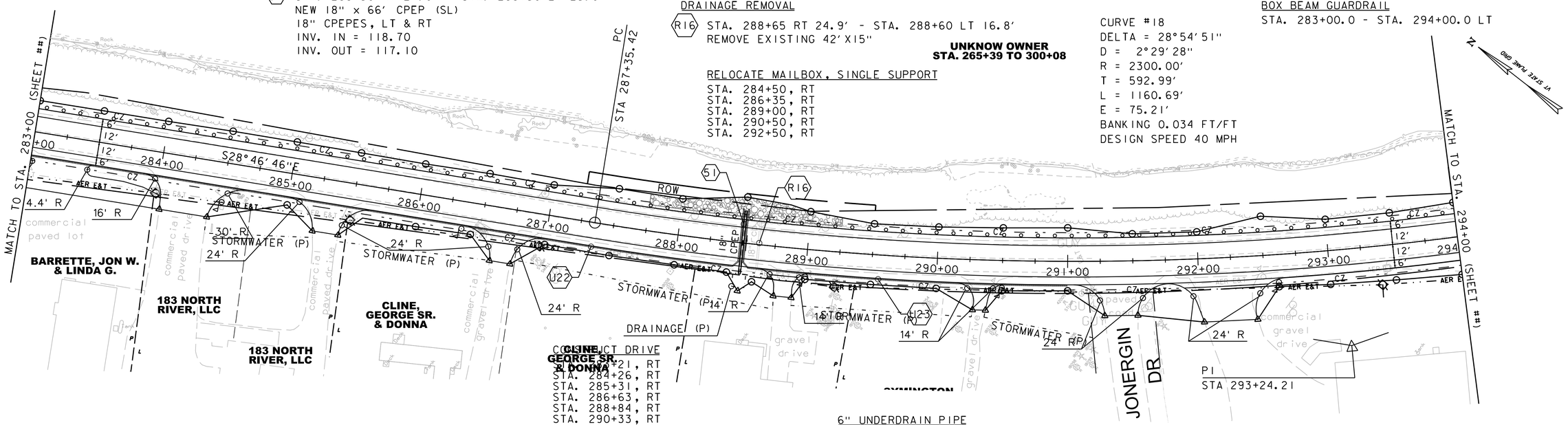
RELOCATE MAILBOX, SINGLE SUPPORT

STA. 284+50, RT
STA. 286+35, RT
STA. 289+00, RT
STA. 290+50, RT
STA. 292+50, RT

CURVE #18
DELTA = 28°54'51"
D = 2°29'28"
R = 2300.00'
T = 592.99'
L = 1160.69'
E = 75.21'
BANKING 0.034 FT/FT
DESIGN SPEED 40 MPH

BOX BEAM GUARDRAIL

STA. 283+00.0 - STA. 294+00.0 LT



STONE FILL, TYPE I
GEOTEXTILE UNDER STONE FILL
GRUBBING MATERIAL
STA. 287+75 - STA. 289+25 LT

6" UNDERDRAIN PIPE
STA. 284+00, RT - STA. 291+00, RT

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

0 40 80
SCALE IN FEET

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032bdr_gen.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
PLAN SHEET #24	SHEET 61 OF 305

CONSTRUCT DRIVE
STA. 294+89, RT
STA. 296+28, RT
STA. 296+66, RT
STA. 298+75, RT
STA. 299+65, RT
STA. 301+23, RT
STA. 302+48, RT
STA. 303+00, RT

RELOCATE MAILBOX, SINGLE SUPPORT
STA. 295+10, RT
STA. 296+85, RT
STA. 298+60, RT
STA. 299+50, RT
STA. 300+80, RT
STA. 302+80, RT

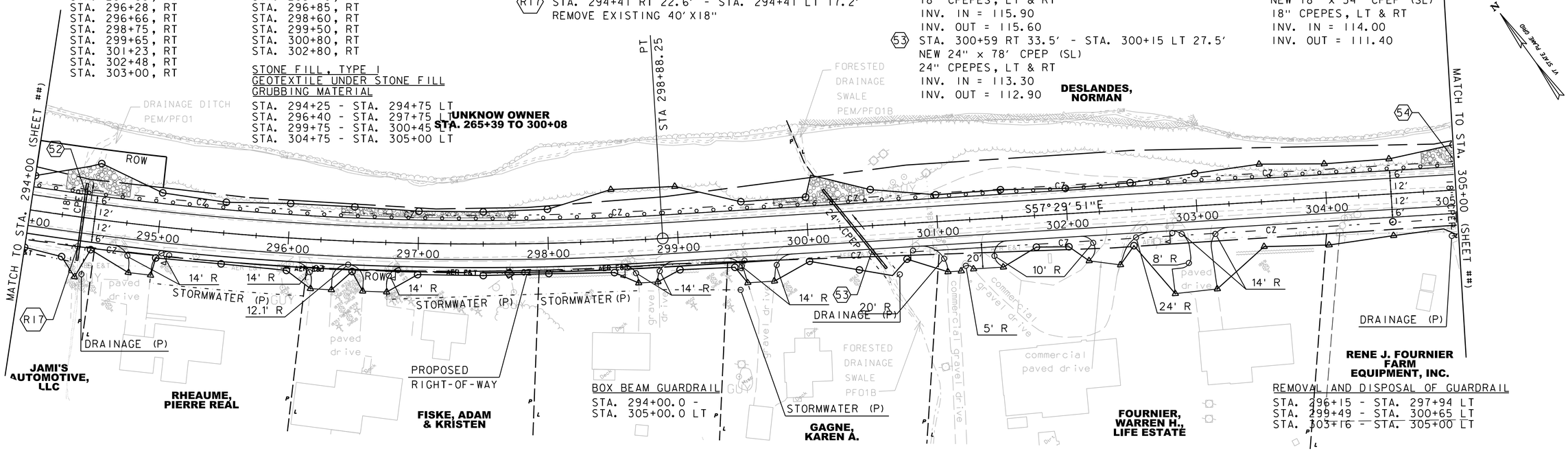
STONE FILL, TYPE I
GEOTEXTILE UNDER STONE FILL
GRUBBING MATERIAL
STA. 294+25 - STA. 294+75 LT
STA. 296+40 - STA. 297+75 LT
STA. 299+75 - STA. 300+45 LT
STA. 304+75 - STA. 305+00 LT

DRAINAGE REMOVAL
(R17) STA. 294+41 RT 22.6' - STA. 294+41 LT 17.2'
REMOVE EXISTING 40'X18"

NEW DRAINAGE
(52) STA. 294+41 RT 33.5' - STA. 294+41 LT 26.5'
NEW 18" x 60' CPEP (SL)
18" CPEPES, LT & RT
INV. IN = 115.90
INV. OUT = 115.60

(53) STA. 300+59 RT 33.5' - STA. 300+15 LT 27.5'
NEW 24" x 78' CPEP (SL)
24" CPEPES, LT & RT
INV. IN = 113.30
INV. OUT = 112.90

(54) STA. 305+00 RT 25.0' -
STA. 305+00 LT 28.0'
NEW 18" x 54' CPEP (SL)
18" CPEPES, LT & RT
INV. IN = 114.00
INV. OUT = 111.40



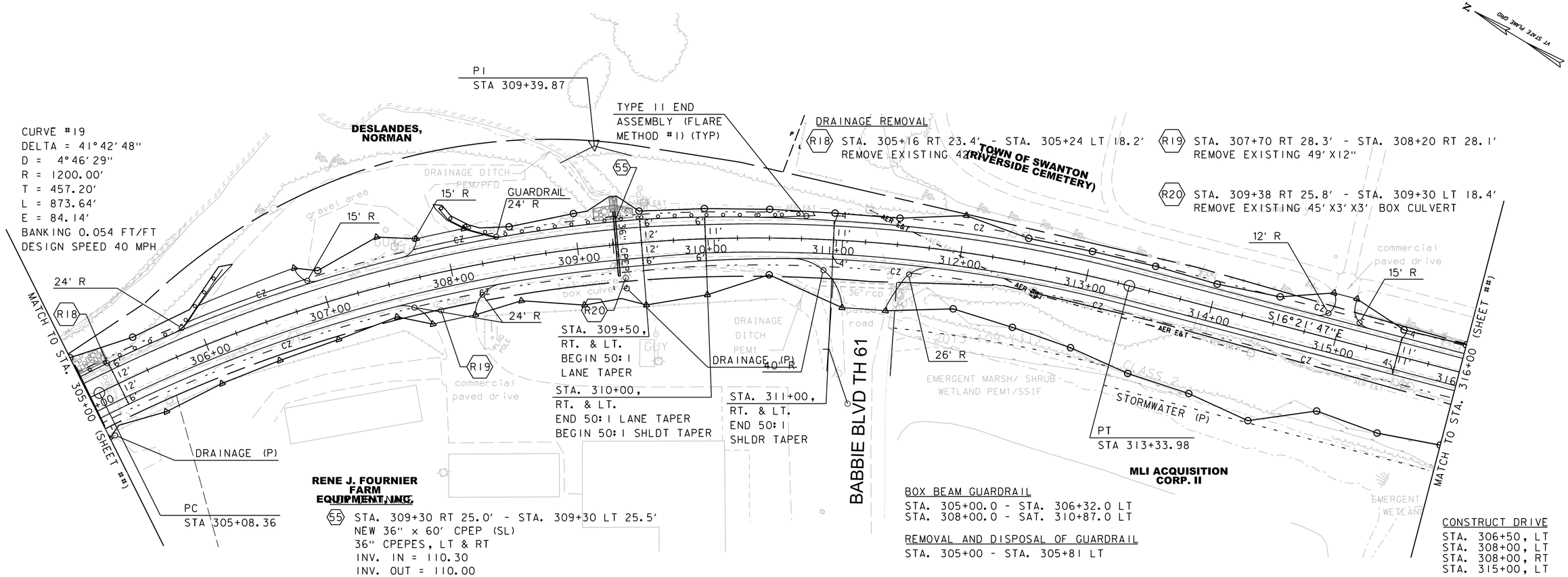
DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

0 40 80
SCALE IN FEET

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
PLAN SHEET #25

PLOT DATE: 3/7/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 62 OF 305



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032bdr_gen.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
PLAN SHEET #26	SHEET 63 OF 305

CURVE #20
DELTA = 9°30'42"
D = 2°26'17"
R = 2350.00'
T = 195.51'
L = 390.12'
E = 8.12'
BANKING 0.032 FT/FT
DESIGN SPEED 40 MPH

CONSTRUCT DRIVE
STA. 318+84, LT
STA. 323+81, LT
STA. 325+50, RT
STA. 325+89, LT
STA. 326+50, RT

RELOCATE MAILBOX, SINGLE SUPPORT WITH MAILBOX TURNOUT
STA. 323+50, LT
STA. 326+10, LT
STA. 326+44, LT
STA. 326+47, LT
STA. 326+50, LT
STA. 326+53, LT
STA. 326+56, LT

STONE FILL, TYPE I
GEOTEXTILE UNDER STONE FILL
GRUBBING MATERIAL
STA. 319+50 RT (6'L X 3'W X 2'D)

TOWN OF SWANTON (RIVERSIDE CEMETERY)

LIVING TRUST

DESLANDES, NOR

MATCH TO STA. 316+00 (SHEET #)

PI STA 318+18.98

PC STA 316+15.56

PT STA 320+21.38

S6°28'07"E

MATCH TO STA. 327+00 (SHEET #)

MLI ACQUISITION CORP. II

MLI ACQUISITION CORP. II

N/F PLUMROSE USA, INC.

RICE, GARY B.; RICE, TERRANCE K.

12' J REALTY, LLC

EMERGENT MARSH / SHRUB WETLAND PEM1/SS1F

MARSH/ SHRUB PEM1/SS1F

DRAINAGE REMOVAL
R21 STA. 319+24 RT 19.2' - STA. 319+39 LT 19.2'
REMOVE EXISTING DI
REMOVE EXISTING 38"X15"

NEW DRAINAGE
56 STA. 319+50 LT 27.0' - STA. 319+50 LT 25.0'
RCP PIPE DI, +50, LT 27.0'
INV. OUT = 122.20
NEW 18" x 52' CPEP (SL)
18" CPEPES, RT
INV. OUT = 121.90
TOP OF GRATE = 125.70

0 40 80
SCALE IN FEET

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
PLAN SHEET #27

PLOT DATE: 3/7/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 64 OF 305

RELOCATE MAILBOX, SINGLE
SUPPORT WITH MAILBOX TURNOUT

STA. 328+50, LT
STA. 328+90, LT
STA. 331+90, LT
STA. 331+94, LT
STA. 333+55, LT
STA. 334+64, LT
STA. 335+60, LT
STA. 336+30, LT
STA. 337+38, LT

RELOCATE MAILBOX, MULTIPLE
SUPPORT WITH MAILBOX TURNOUT

STA. 330+10, LT (6 BOXES, 2 POSTS)

CONSTRUCT DRIVE

STA. 327+54, LT
STA. 328+13, RT
STA. 328+33, LT
STA. 329+05, LT
STA. 329+61, LT
STA. 329+85, LT

CONSTRUCT DRIVE

STA. 330+78, LT
STA. 332+43, LT
STA. 333+38, LT
STA. 333+70, RT
STA. 334+08, LT
STA. 335+45, RT

CONSTRUCT DRIVE

STA. 336+06, RT
STA. 337+17, LT
STA. 337+75, RT

CURVE #21
DELTA = 32°04'45"
D = 6°01'52"
R = 950.00'
T = 273.12'
L = 531.89'
E = 38.48'
BANKING 0.062 FT/FT
DESIGN SPEED 40 MPH

CURVE #22
DELTA = 18°36'32"
D = 7°09'43"
R = 800.00'
T = 131.07'
L = 259.83'
E = 10.67'
BANKING 0.068 FT/FT
DESIGN SPEED 40 MPH

VT STATE PLANE GRID N

SHEETS, STEV G.
IVES, ELAINE P.
MURRAY, GLENN & SHARON
DUPREY, LLC
DUPREY, SCOTT B. & THERESA M.
SWEET, ROB D. & JUDY A.
COVILLON, CHRISTOPHER J; COSTELLA, KAYLEIGH M.
CARTY, TIMOTHY P.
DYKEMAN, NAKIAH & EMILY
BAKER, NICOLE L.
CHEVALIER, ROCK
BROOKLYN VENTURES, LLC
JC CAMS LLC
GREGOIRE, JOSEPH & LAURA
BRUYETTE, RONNIE M. & PATRICIA A.
RICE, GARY B.; RICE, TERRANCE K.
TRIPLE A & S LLC

PI STA 329+86.65
PI STA 335+47.13
STA 336+50.00 END PROJECT NH 036-1(9) BEGIN APPROACH
STA 336+75.89
STA 338+00.00 END APPROACH
PT STA 332+45.42
PC STA 334+16.66
PC STA 327+13.53
MATCH TO STA. 327+00 (SHEET #1)
S25°36'38"W
S44°13'09"W
CLASS 2
EMERGENT MARSH/ SHRUB WETLAND PEM1/SS1F
DRAINAGE DITCH (IN UPLAND) PEM1E
PROPOSED DRY SWALE BMP
STORMWATER (P)
BROOKLYN ST
GALLUP CT

UNDERDRAIN

U24 STA. 327+00 RT 25.4' - STA. 330+50 RT 23.3'
NEW 8" x 342' TYPE II UD
WITH FLUSHING BASIN AT 327+00 RT
INV. IN = 125.28
INV. OUT = 123.95

U25 STA. 330+50 RT 23.3' - STA. 330+50 RT 52.9'
NEW 12" x 32' TYPE I UD
INV. IN = 123.95
INV. OUT = 117.22

U26 STA. 330+50 RT 23.3' - STA. 333+00 RT 23.9'
NEW 8" x 247' TYPE II UD
INV. IN = 123.95
INV. OUT = 114.95

U27 STA. 333+00 RT 23.9' - STA. 333+00 RT 45.1'
NEW 12" x 23' TYPE I UD
INV. IN = 114.95
INV. OUT = 113.63

U28 STA. 333+00 RT 23.9' - STA. 333+40 RT 25.4'
NEW 8" x 42' TYPE II UD
WITH FLUSHING BASIN AT 333+40 RT
INV. IN = 115.15
INV. OUT = 114.95

U29 STA. 334+50 RT 28.9' - STA. 334+03 RT 32.8'
NEW 8" x 48' TYPE I UD
INV. IN = 110.83
INV. OUT = 110.50

U30 STA. 336+00 RT 25.4' - STA. 334+50 RT 28.9'
NEW 8" x 147' TYPE II UD
WITH FLUSHING BASIN AT 336+00 RT
INV. IN = 111.88
INV. OUT = 110.83

NEW DRAINAGE

57 STA. 333+99 RT 10.7' SMH
CHANGING ELEVATION OF DROP INLETS, CATCH BASINS, OR MANHOLES

58 STA. 336+61 RT 18.0' CB
CHANGING ELEVATION OF DROP INLETS, CATCH BASINS, OR MANHOLES

59 STA. 336+79 RT 11.3' SMH
CHANGING ELEVATION OF DROP INLETS, CATCH BASINS, OR MANHOLES

60 STA. 336+96 RT 15.6' CB
CHANGING ELEVATION OF DROP INLETS, CATCH BASINS, OR MANHOLES

0 40 80
SCALE IN FEET

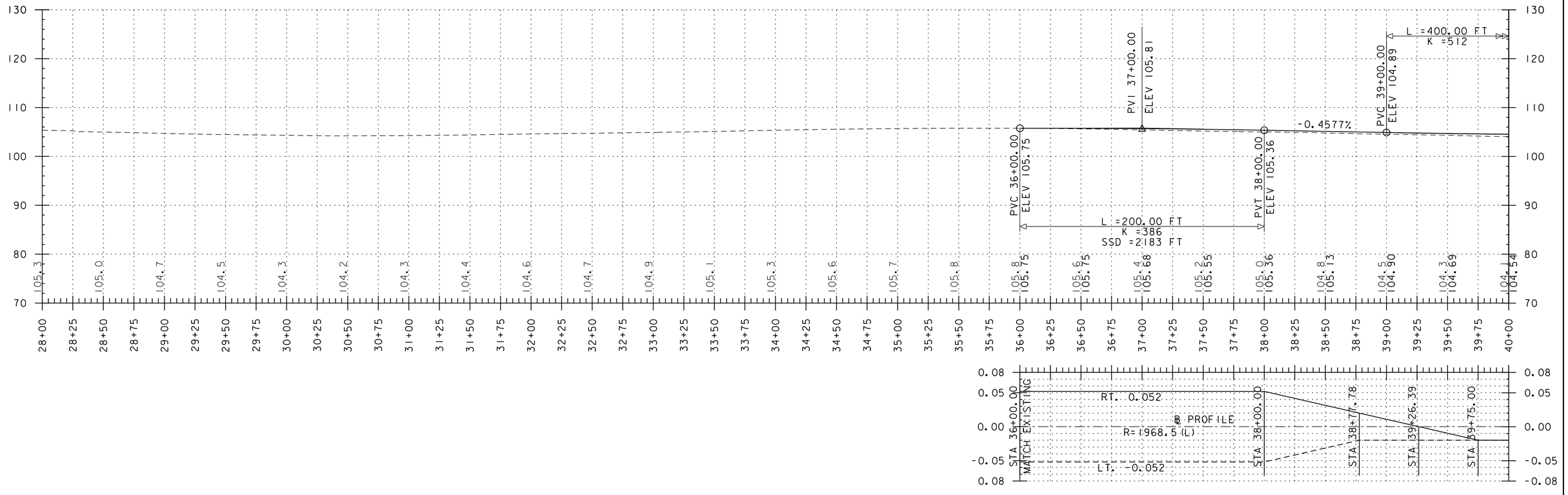
DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
PLAN SHEET #28

PLOT DATE: 3/7/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 65 OF 305



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

0 40 80

SCALE IN FEET

vhb

PROJECT NAME: SWANTON

PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn

PROJECT LEADER: G. BAKOS

DESIGNED BY: M. BOGUE

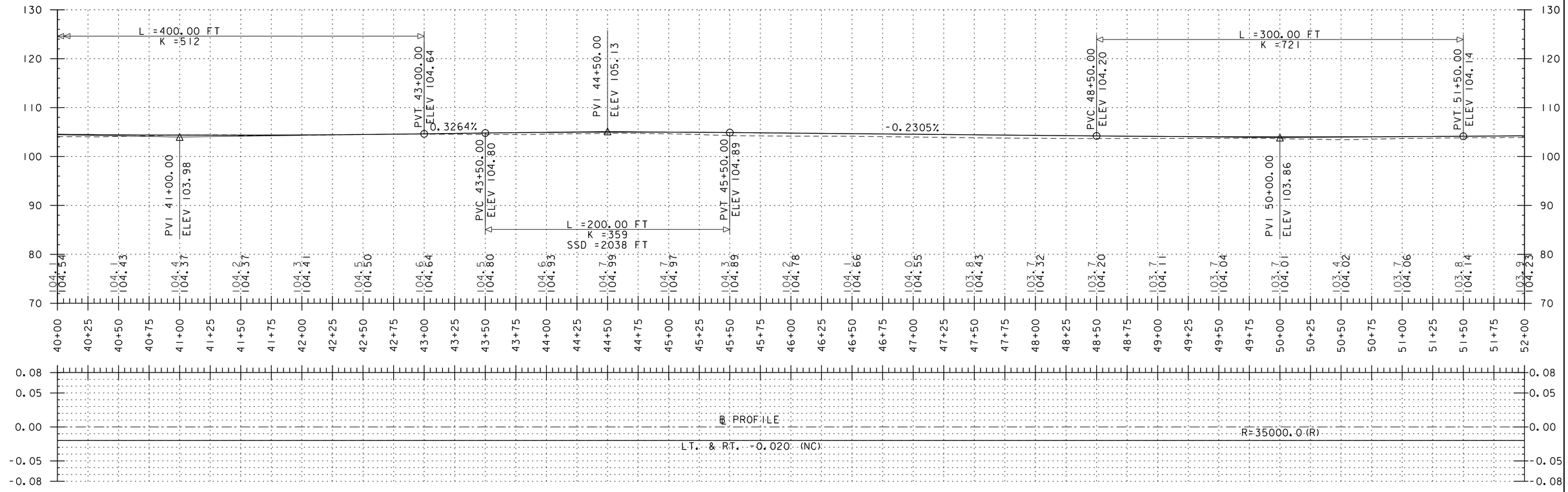
PROFILE SHEET #1

PLOT DATE: 3/7/2019

DRAWN BY: C. CILLEY

CHECKED BY: G. BAKOS

SHEET 66 OF 305



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

0 40 80

SCALE IN FEET

vhb

PROJECT NAME: SWANTON

PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn

PROJECT LEADER: G. BAKOS

DESIGNED BY: M. BOGUE

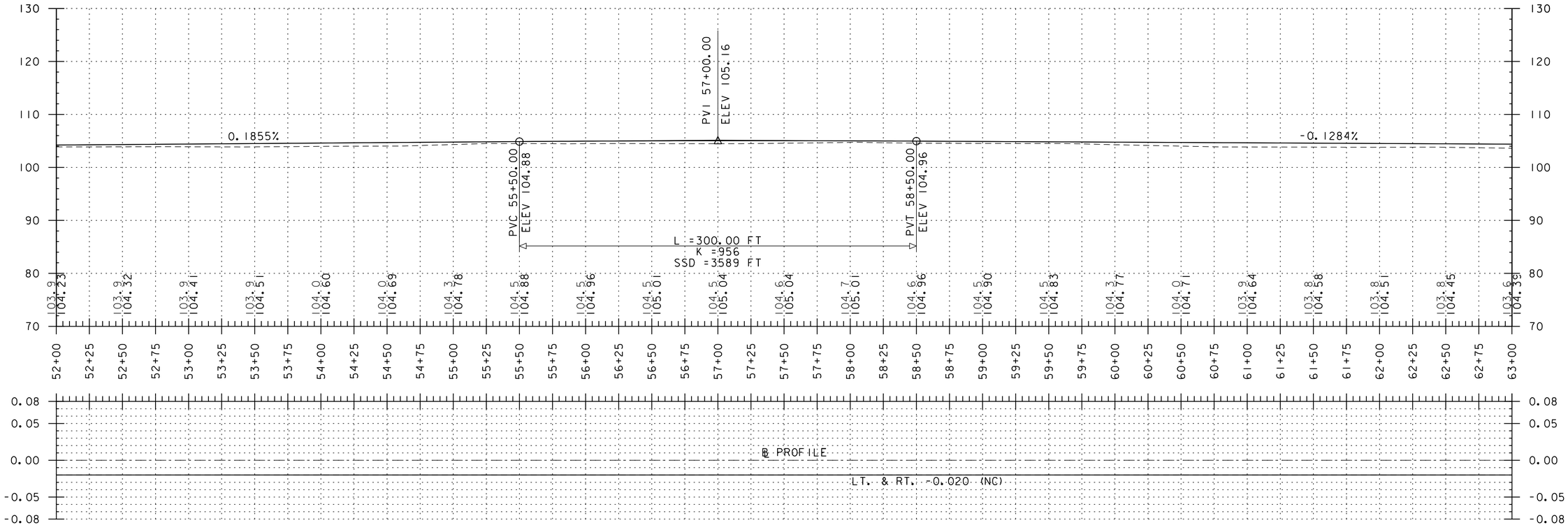
PROFILE SHEET #2

PLOT DATE: 3/7/2019

DRAWN BY: C. CILLEY

CHECKED BY: G. BAKOS

SHEET 67 OF 305



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

0 40 80

SCALE IN FEET

PROJECT NAME: SWANTON

PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn

PROJECT LEADER: G. BAKOS

DESIGNED BY: M. BOGUE

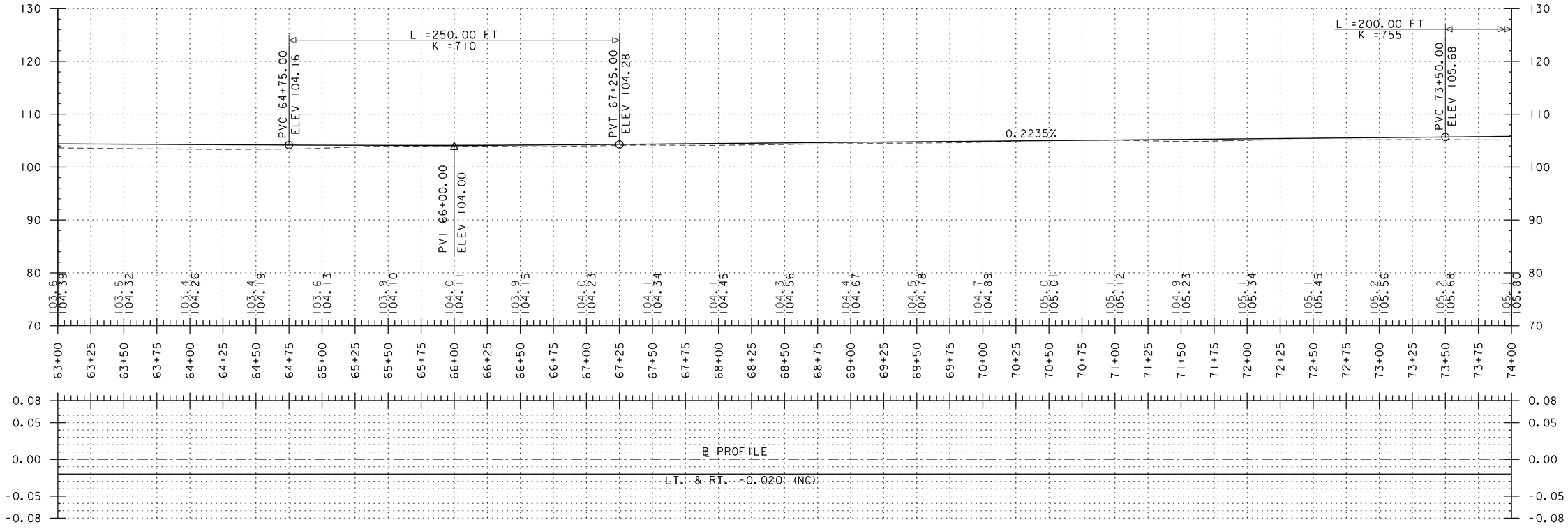
PROFILE SHEET #3

PLOT DATE: 3/7/2019

DRAWN BY: C. CILLEY

CHECKED BY: G. BAKOS

SHEET 68 OF 305



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

0 40 80

SCALE IN FEET

PROJECT NAME: SWANTON

PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn

PROJECT LEADER: G. BAKOS

DESIGNED BY: M. BOGUE

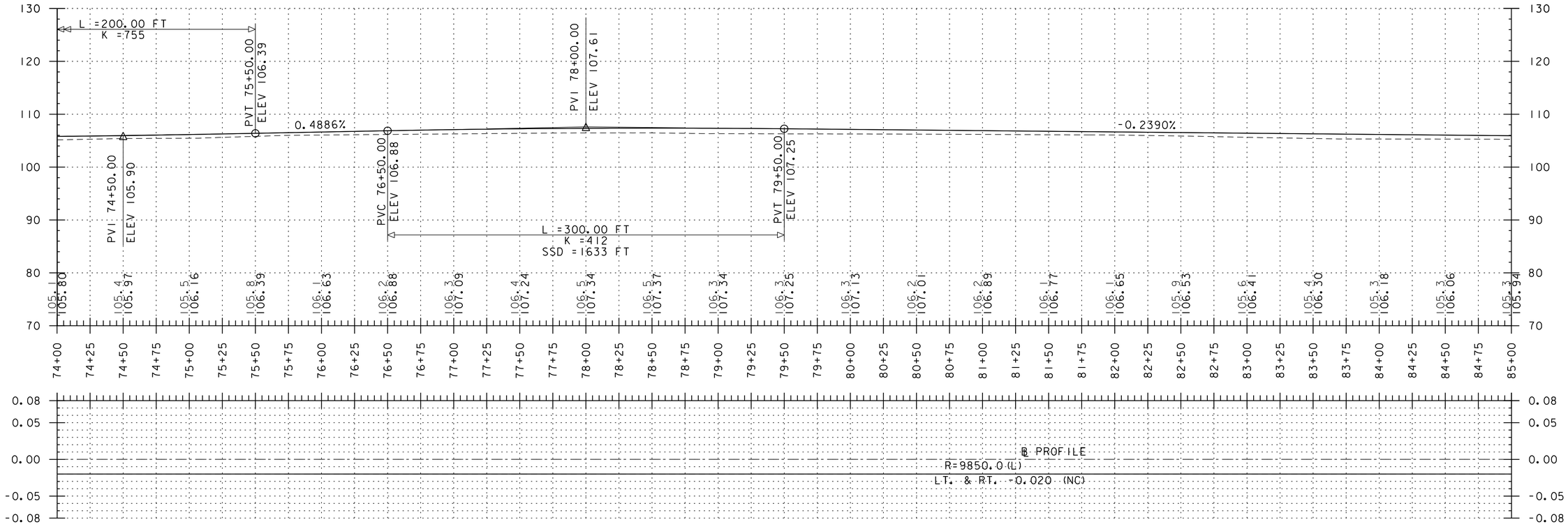
PROFILE SHEET #4

PLOT DATE: 3/7/2019

DRAWN BY: C. CILLEY

CHECKED BY: G. BAKOS

SHEET 69 OF 305



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

0 40 80

SCALE IN FEET

vhb

PROJECT NAME: SWANTON

PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn

PROJECT LEADER: G. BAKOS

DESIGNED BY: M. BOGUE

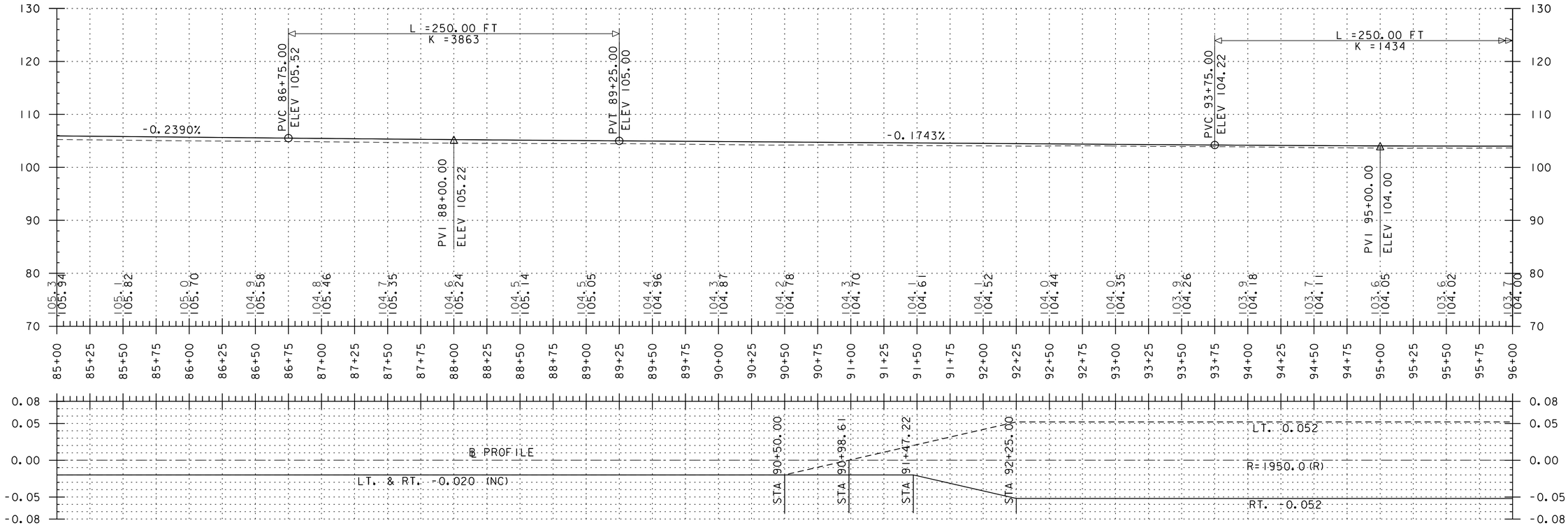
PROFILE SHEET #5

PLOT DATE: 3/7/2019

DRAWN BY: C. CILLEY

CHECKED BY: G. BAKOS

SHEET 70 OF 305



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

0 40 80

SCALE IN FEET

vhb

PROJECT NAME: SWANTON

PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn

PROJECT LEADER: G. BAKOS

DESIGNED BY: M. BOGUE

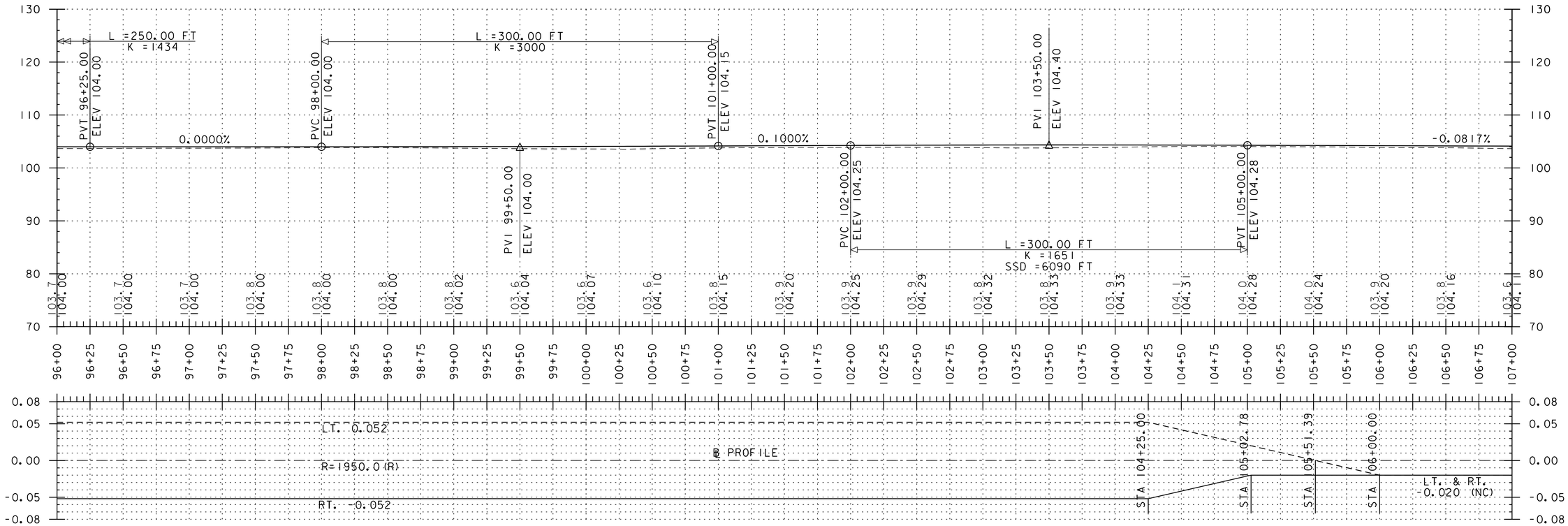
PROFILE SHEET #6

PLOT DATE: 3/7/2019

DRAWN BY: C. CILLEY

CHECKED BY: G. BAKOS

SHEET 71 OF 305



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

0 40 80

SCALE IN FEET

PROJECT NAME: SWANTON

PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn

PROJECT LEADER: G. BAKOS

DESIGNED BY: M. BOGUE

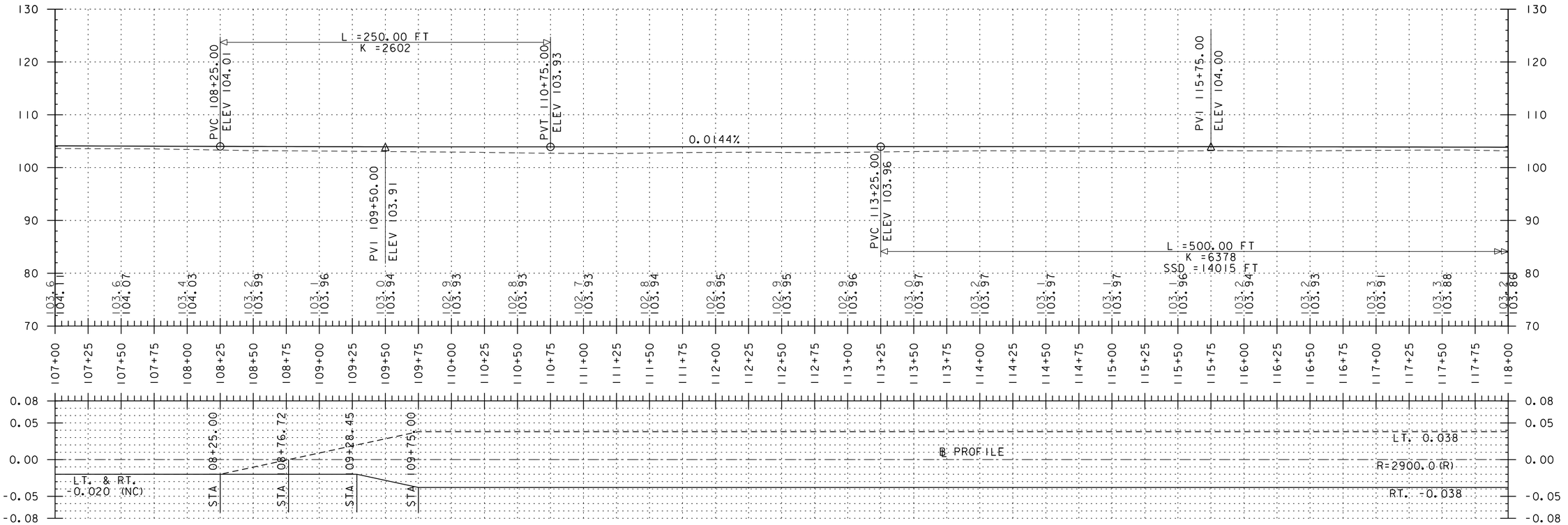
PROFILE SHEET #7

PLOT DATE: 3/7/2019

DRAWN BY: C. CILLEY

CHECKED BY: G. BAKOS

SHEET 72 OF 305



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

0 40 80

SCALE IN FEET

PROJECT NAME: SWANTON

PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn

PROJECT LEADER: G. BAKOS

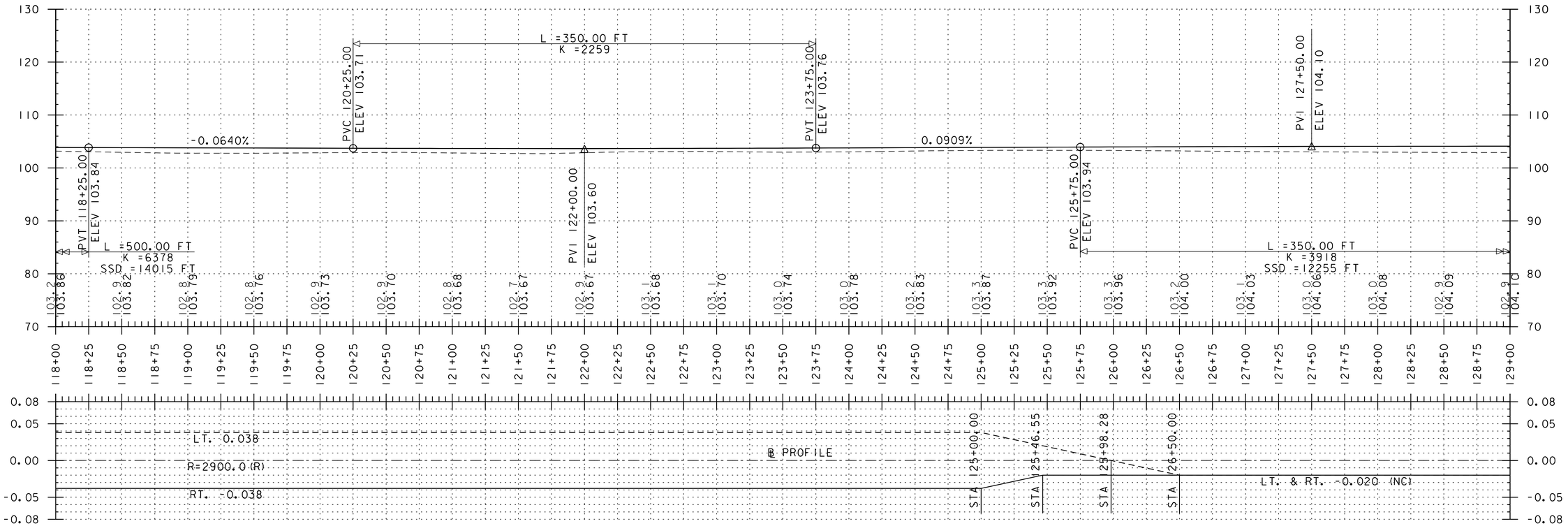
DESIGNED BY: M. BOGUE

PROFILE SHEET #8

PLOT DATE: 3/7/2019

DRAWN BY: C. CILLEY

CHECKED BY: G. BAKOS



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

0 40 80

SCALE IN FEET

PROJECT NAME: SWANTON

PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn

PROJECT LEADER: G. BAKOS

DESIGNED BY: M. BOGUE

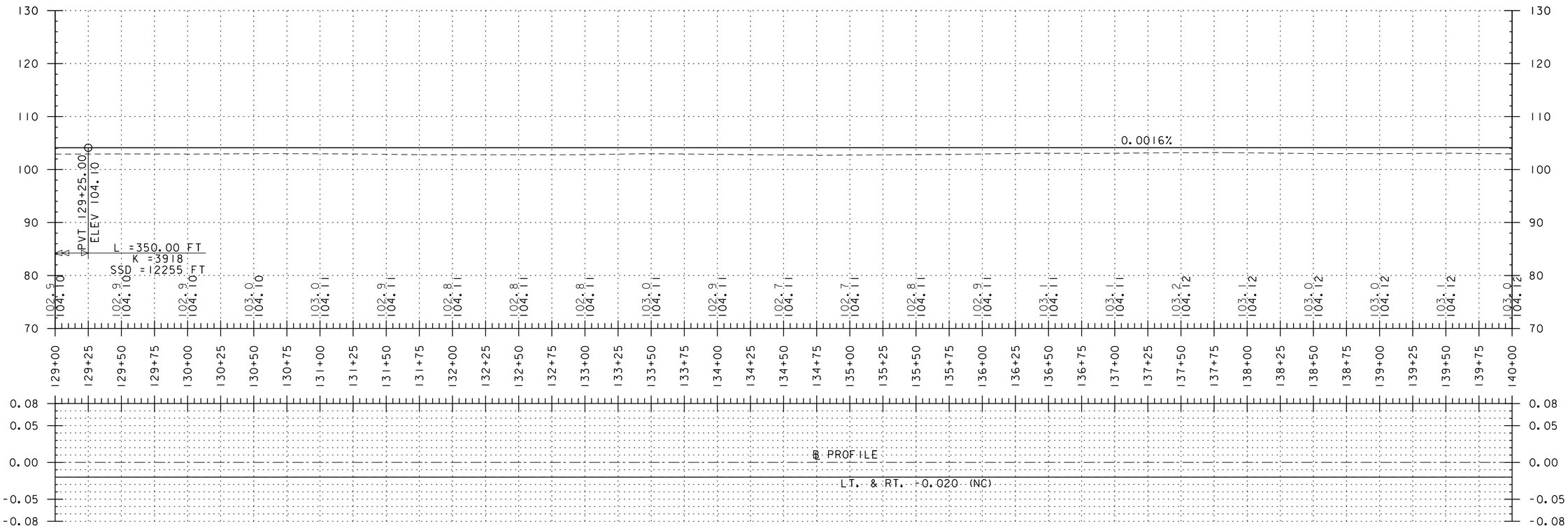
PROFILE SHEET #9

PLOT DATE: 3/7/2019

DRAWN BY: C. CILLEY

CHECKED BY: G. BAKOS

SHEET 74 OF 305



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

0 40 80

SCALE IN FEET

PROJECT NAME: SWANTON

PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn

PROJECT LEADER: G. BAKOS

DESIGNED BY: M. BOGUE

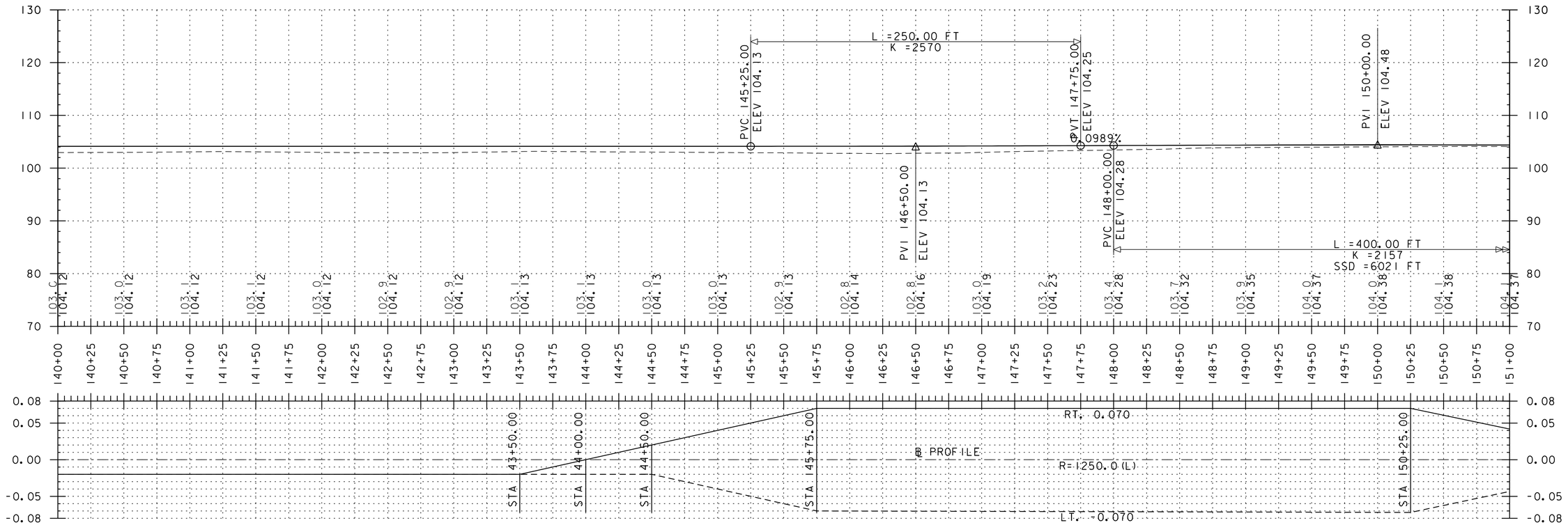
PROFILE SHEET #10

PLOT DATE: 3/7/2019

DRAWN BY: C. CILLEY

CHECKED BY: G. BAKOS

SHEET 75 OF 305



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

0 40 80

SCALE IN FEET

PROJECT NAME: SWANTON

PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn

PROJECT LEADER: G. BAKOS

DESIGNED BY: M. BOGUE

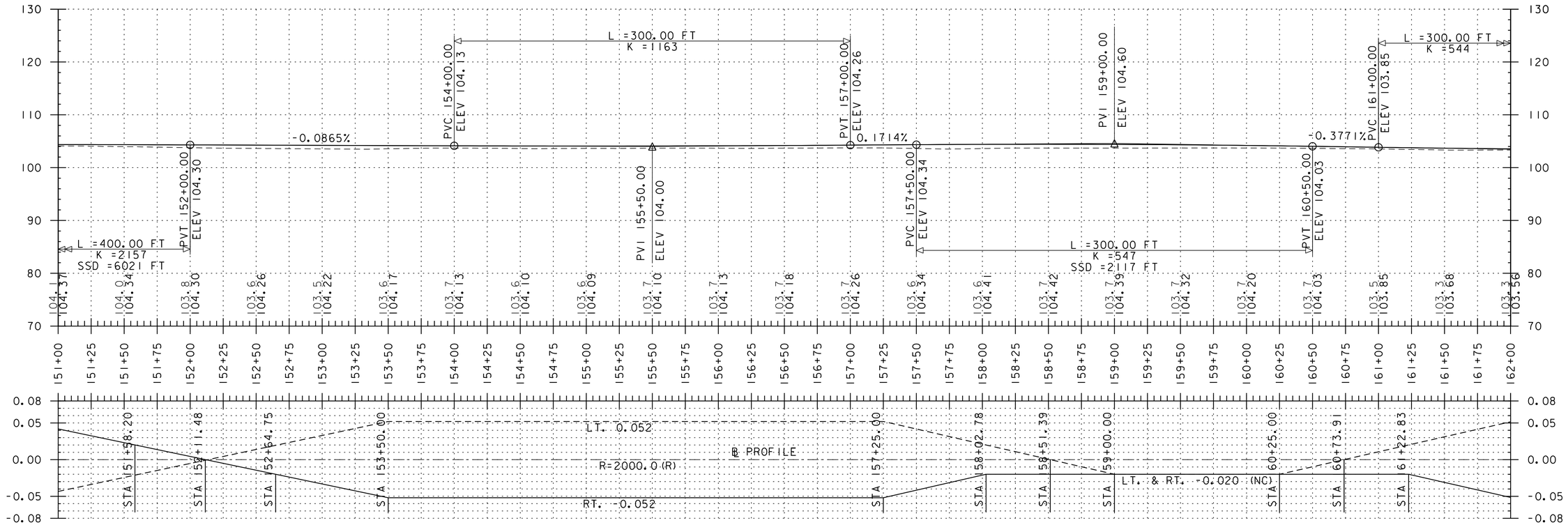
PROFILE SHEET #11

PLOT DATE: 3/7/2019

DRAWN BY: C. CILLEY

CHECKED BY: G. BAKOS

SHEET 76 OF 305



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

0 40 80

SCALE IN FEET

PROJECT NAME: SWANTON

PROJECT NUMBER: NH 036-I(9)

FILE NAME: z96b032bdr_gen.dgn

PROJECT LEADER: G. BAKOS

DESIGNED BY: M. BOGUE

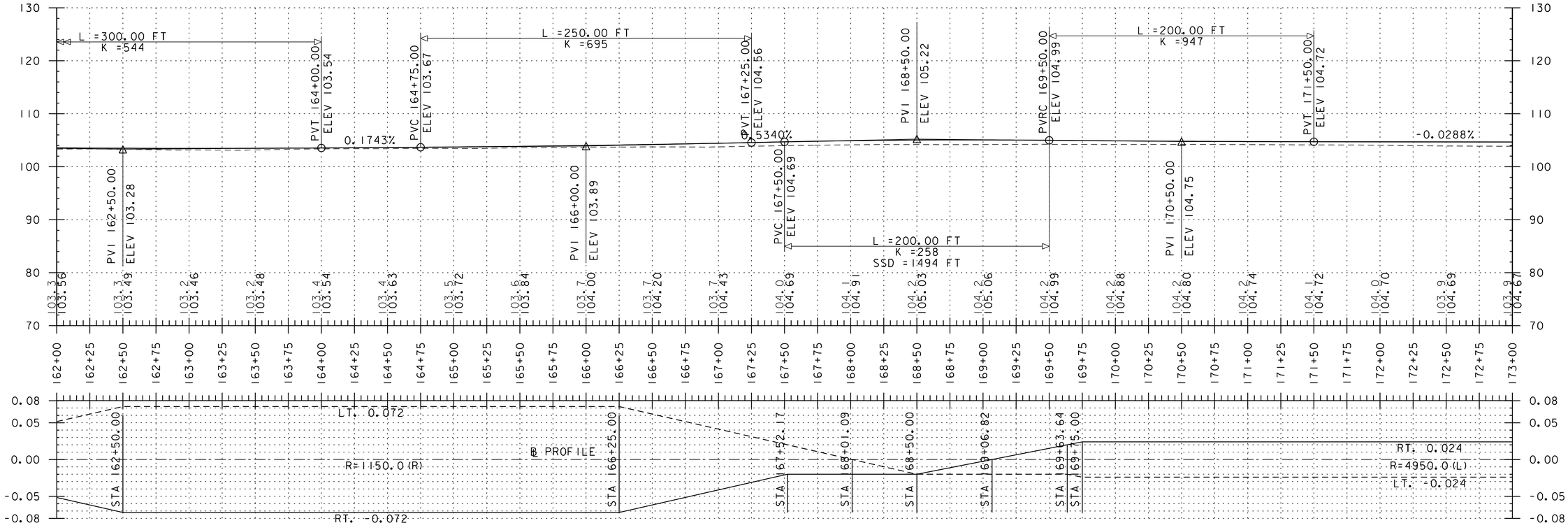
PROFILE SHEET #12

PLOT DATE: 3/7/2019

DRAWN BY: C. CILLEY

CHECKED BY: G. BAKOS

SHEET 77 OF 305



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

0 40 80

SCALE IN FEET

vhb

PROJECT NAME: SWANTON

PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn

PROJECT LEADER: G. BAKOS

DESIGNED BY: M. BOGUE

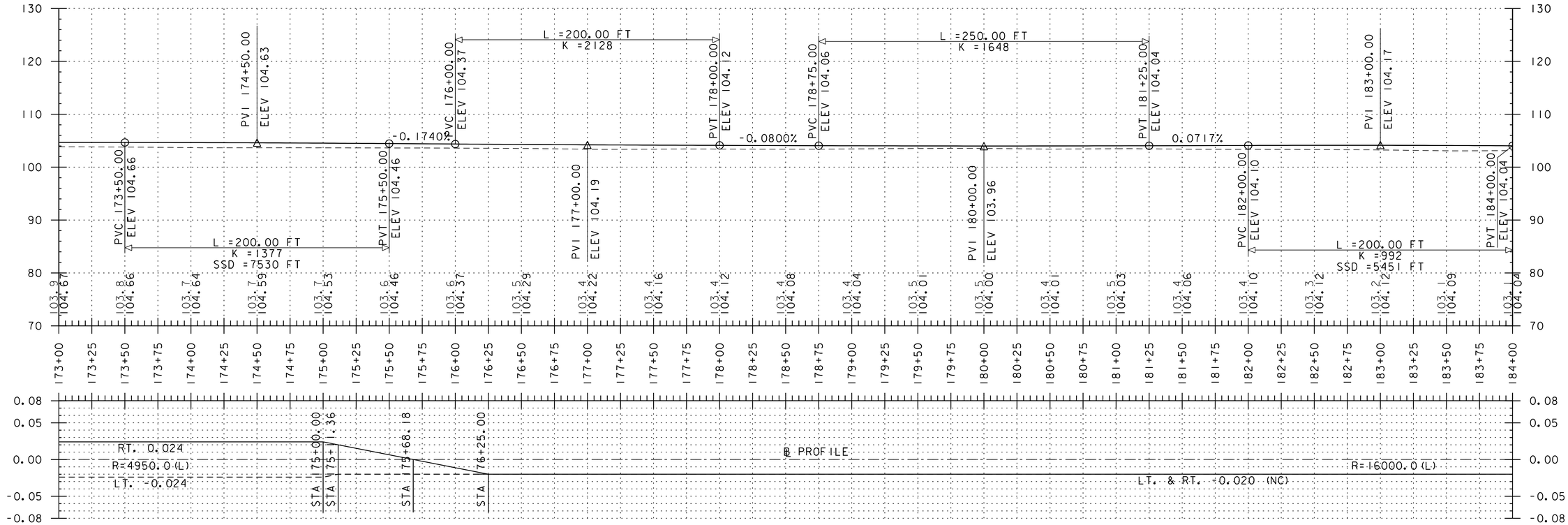
PROFILE SHEET #13

PLOT DATE: 3/7/2019

DRAWN BY: C. CILLEY

CHECKED BY: G. BAKOS

SHEET 78 OF 305



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

0 40 80

SCALE IN FEET

PROJECT NAME: SWANTON

PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn

PROJECT LEADER: G. BAKOS

DESIGNED BY: M. BOGUE

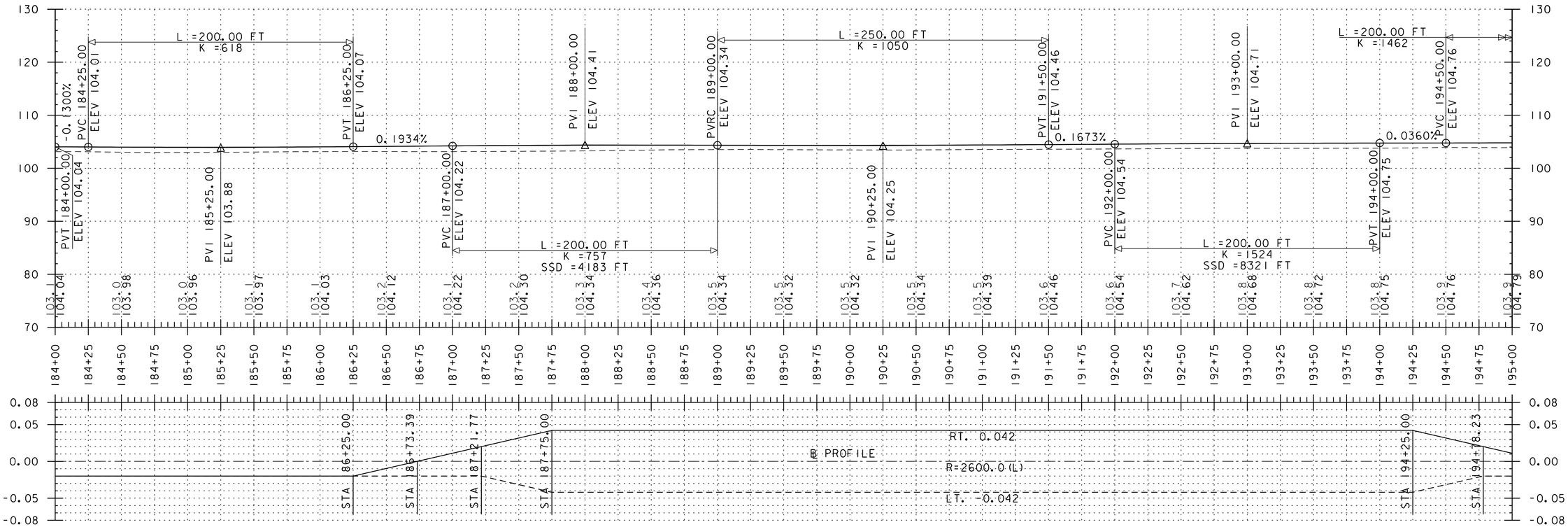
PROFILE SHEET #14

PLOT DATE: 3/7/2019

DRAWN BY: C. CILLEY

CHECKED BY: G. BAKOS

SHEET 79 OF 305



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

0 40 80

SCALE IN FEET

vhb

PROJECT NAME: SWANTON

PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn

PROJECT LEADER: G. BAKOS

DESIGNED BY: M. BOGUE

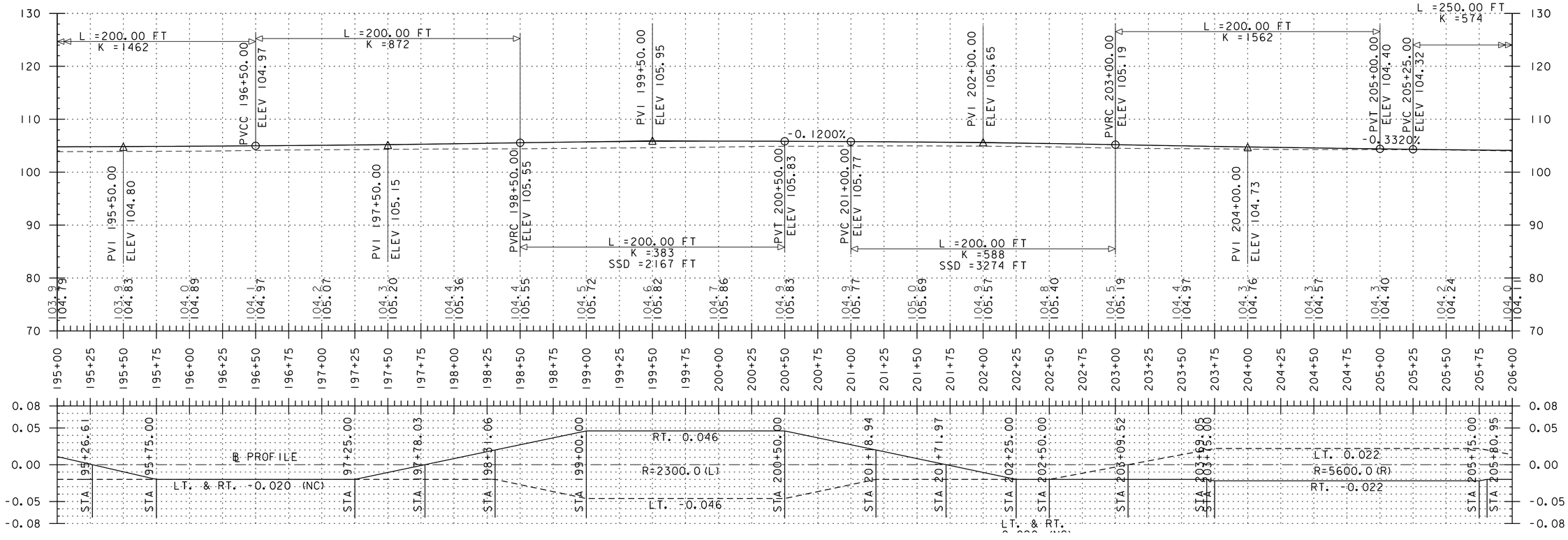
PROFILE SHEET #15

PLOT DATE: 3/7/2019

DRAWN BY: C. CILLEY

CHECKED BY: G. BAKOS

SHEET 80 OF 305



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

0 40 80

SCALE IN FEET

vhb

PROJECT NAME: SWANTON

PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn

PROJECT LEADER: G. BAKOS

DESIGNED BY: M. BOGUE

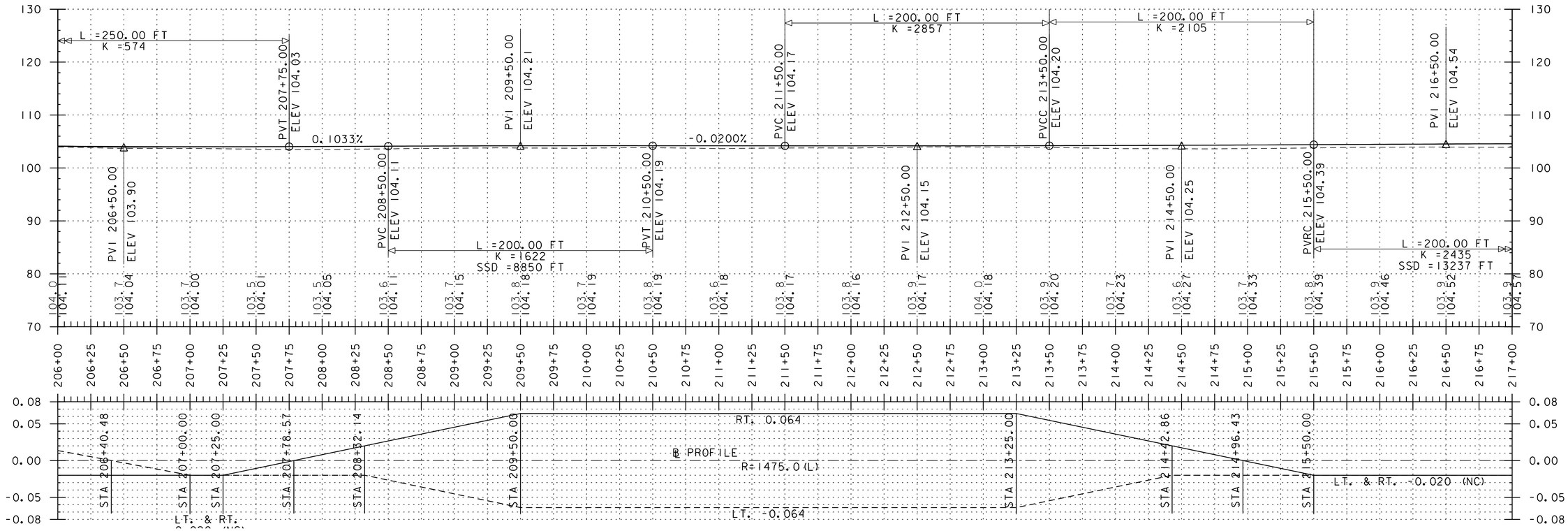
PROFILE SHEET #16

PLOT DATE: 3/7/2019

DRAWN BY: C. CILLEY

CHECKED BY: G. BAKOS

SHEET 81 OF 305



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

0 40 80

SCALE IN FEET

PROJECT NAME: SWANTON

PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn

PROJECT LEADER: G. BAKOS

DESIGNED BY: M. BOGUE

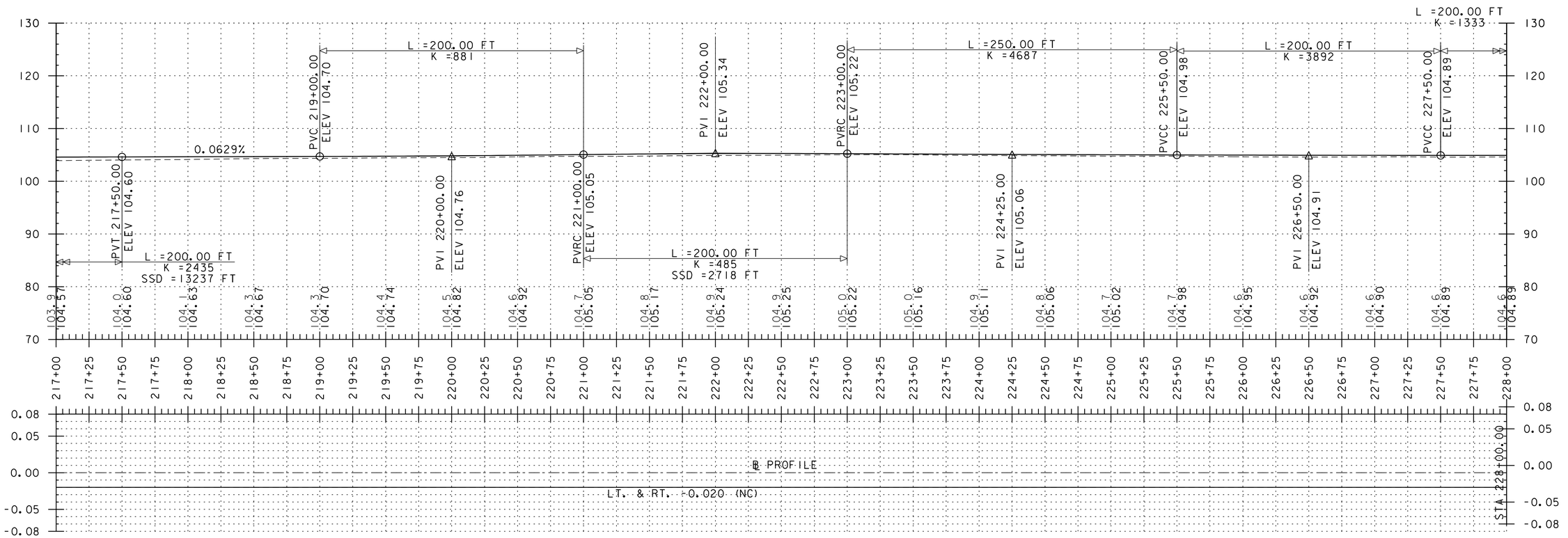
PROFILE SHEET #17

PLOT DATE: 3/7/2019

DRAWN BY: C. CILLEY

CHECKED BY: G. BAKOS

SHEET 82 OF 305



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

0 40 80

SCALE IN FEET

PROJECT NAME: SWANTON

PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn

PROJECT LEADER: G. BAKOS

DESIGNED BY: M. BOGUE

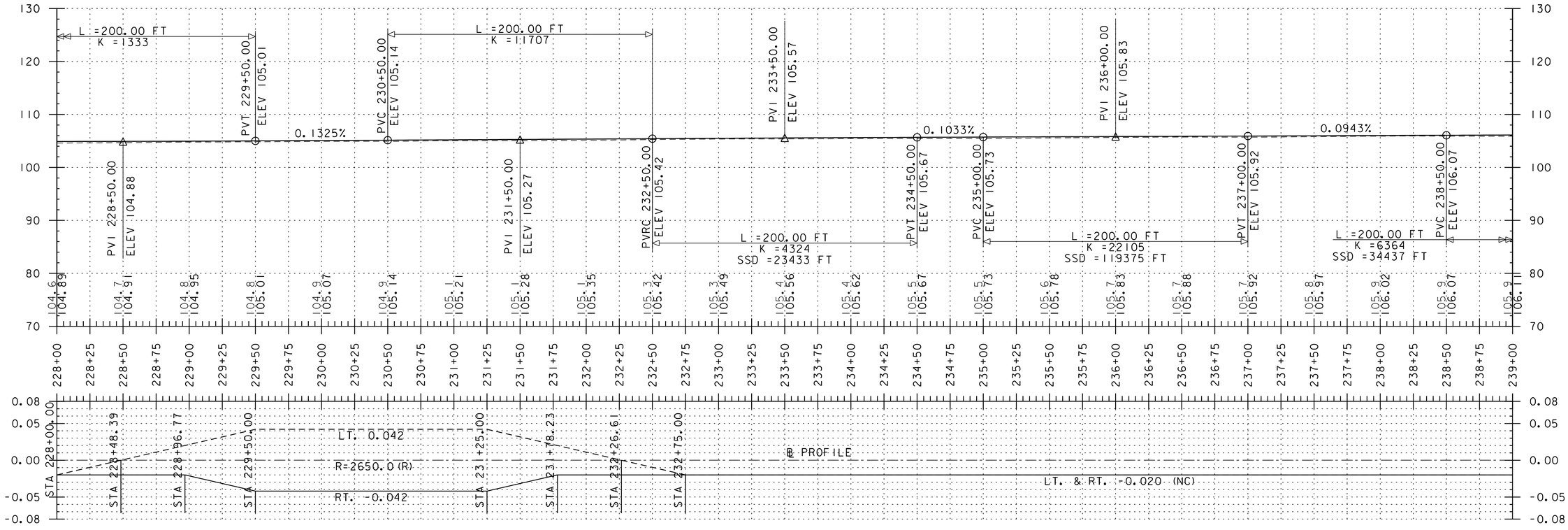
PROFILE SHEET #18

PLOT DATE: 3/7/2019

DRAWN BY: C. CILLEY

CHECKED BY: G. BAKOS

SHEET 83 OF 305



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

0 40 80

SCALE IN FEET

vhb

PROJECT NAME: SWANTON

PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn

PROJECT LEADER: G. BAKOS

DESIGNED BY: M. BOGUE

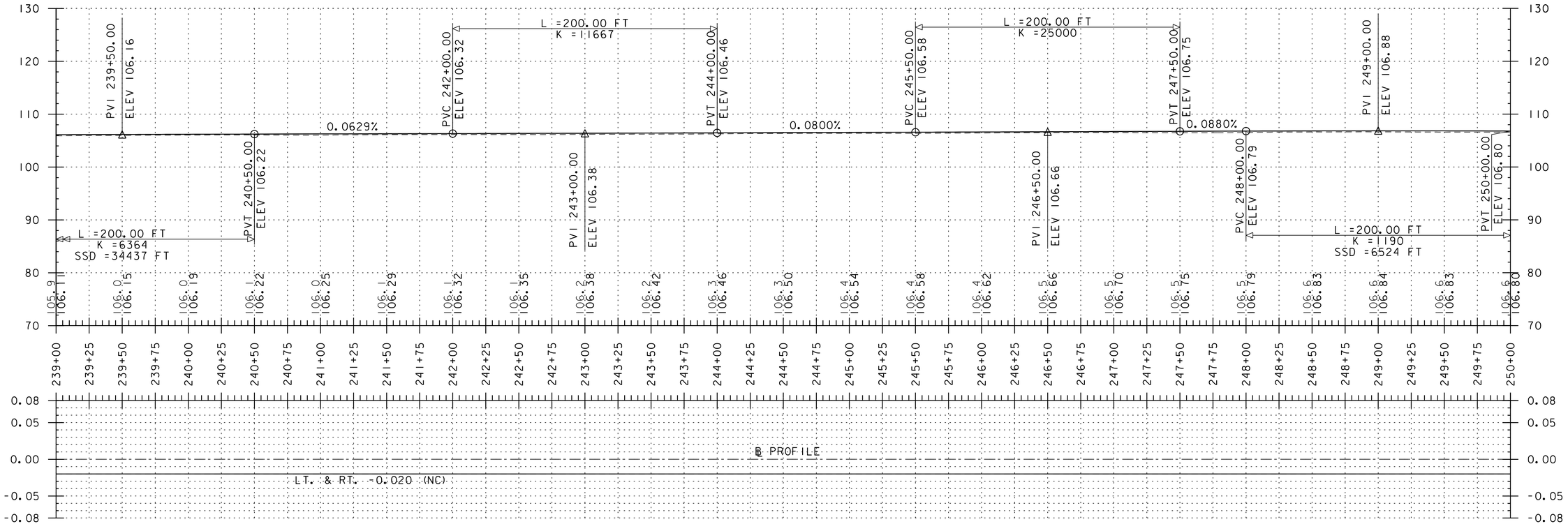
PROFILE SHEET #19

PLOT DATE: 3/7/2019

DRAWN BY: C. CILLEY

CHECKED BY: G. BAKOS

SHEET 84 OF 305



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

0 40 80

SCALE IN FEET

PROJECT NAME: SWANTON

PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn

PROJECT LEADER: G. BAKOS

DESIGNED BY: M. BOGUE

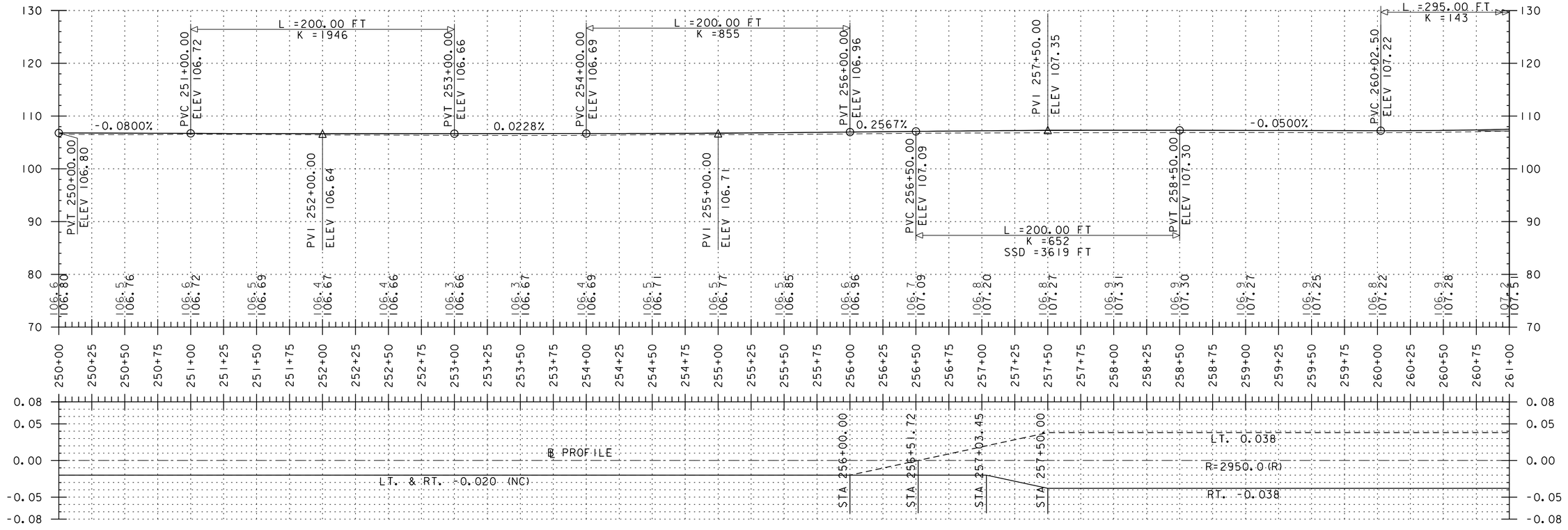
PROFILE SHEET #20

PLOT DATE: 3/7/2019

DRAWN BY: C. CILLEY

CHECKED BY: G. BAKOS

SHEET 85 OF 305



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

0 40 80

SCALE IN FEET

vhb

PROJECT NAME: SWANTON

PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn

PROJECT LEADER: G. BAKOS

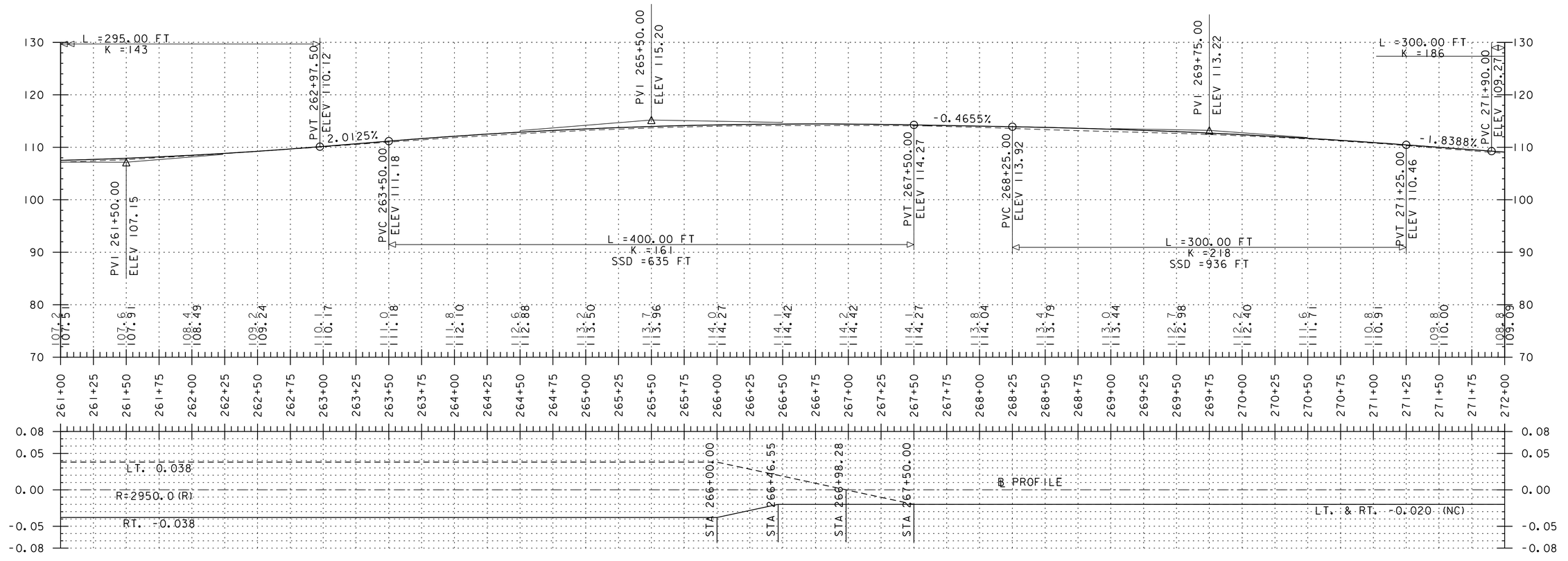
DESIGNED BY: M. BOGUE

PROFILE SHEET #21

PLOT DATE: 3/7/2019

DRAWN BY: C. CILLEY

CHECKED BY: G. BAKOS



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

0 40 80

SCALE IN FEET

vhb

PROJECT NAME: SWANTON

PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn

PROJECT LEADER: G. BAKOS

DESIGNED BY: M. BOGUE

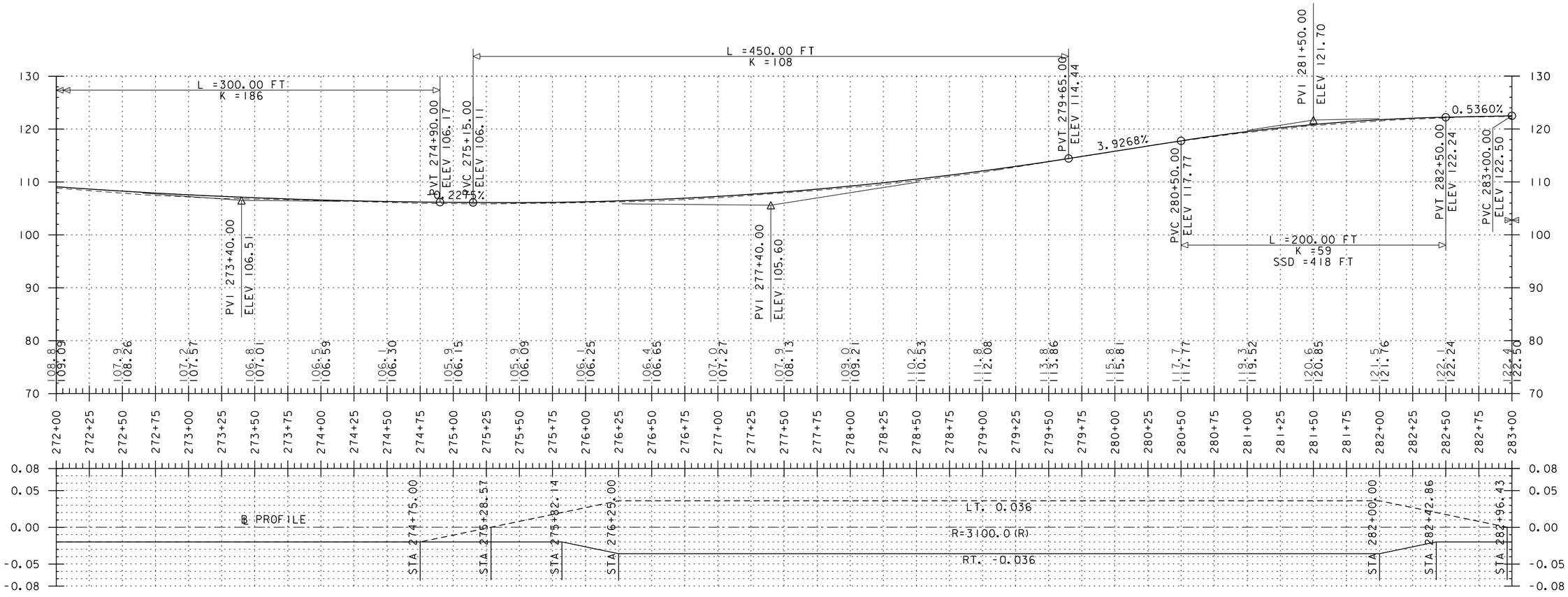
PROFILE SHEET #22

PLOT DATE: 3/7/2019

DRAWN BY: C. CILLEY

CHECKED BY: G. BAKOS

SHEET 87 OF 305



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

0 40 80

SCALE IN FEET

vhb

PROJECT NAME: SWANTON

PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn

PROJECT LEADER: G. BAKOS

DESIGNED BY: M. BOGUE

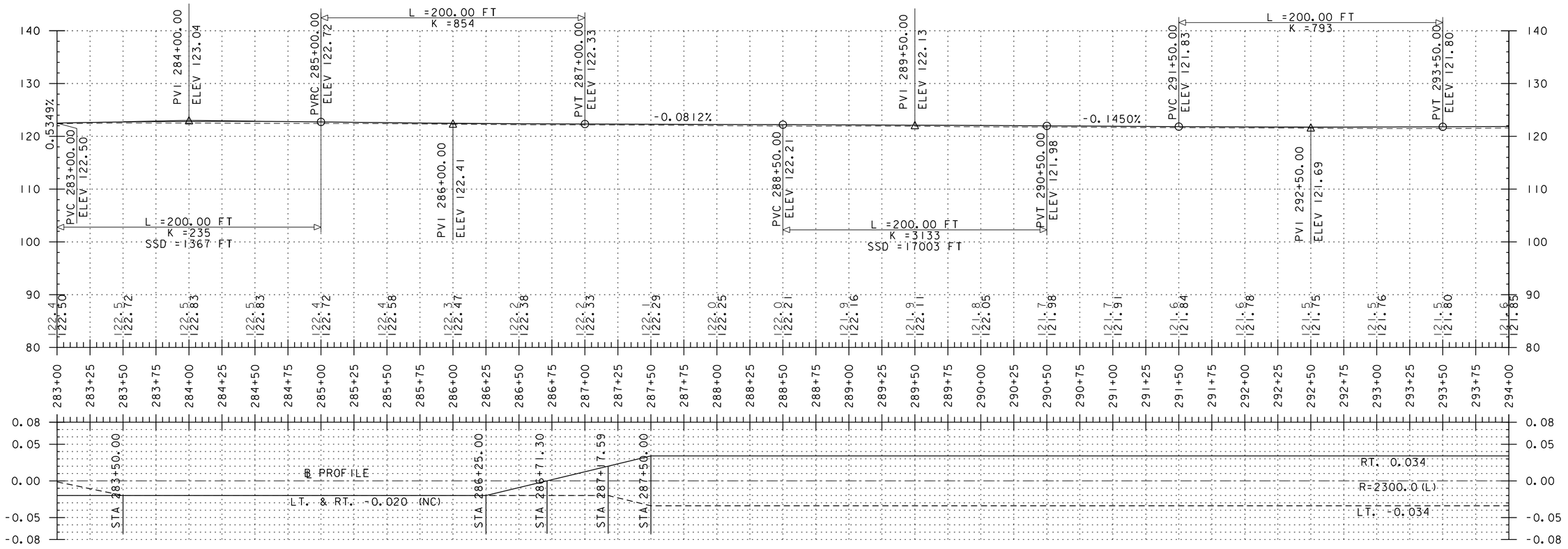
PROFILE SHEET #23

PLOT DATE: 3/7/2019

DRAWN BY: C. CILLEY

CHECKED BY: G. BAKOS

SHEET 88 OF 305



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

0 40 80

SCALE IN FEET

vhb

PROJECT NAME: SWANTON

PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn

PROJECT LEADER: G. BAKOS

DESIGNED BY: M. BOGUE

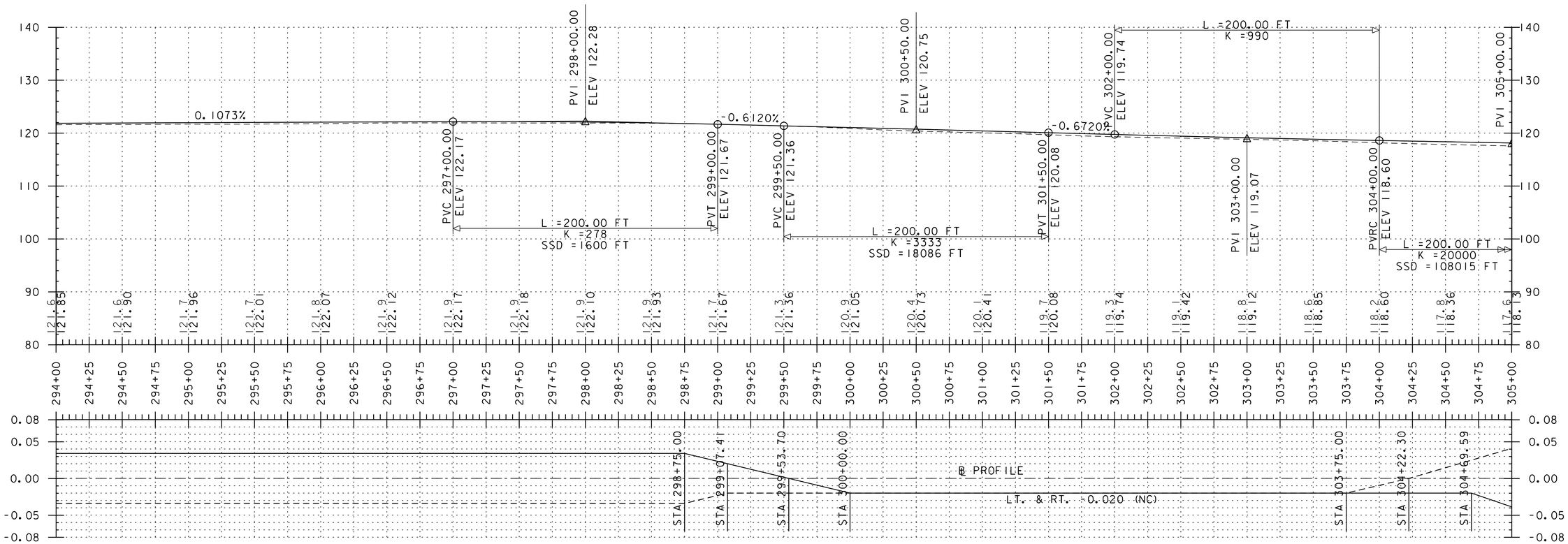
PROFILE SHEET #24

PLOT DATE: 3/7/2019

DRAWN BY: C. CILLEY

CHECKED BY: G. BAKOS

SHEET 89 OF 305



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

0 40 80

SCALE IN FEET

PROJECT NAME: SWANTON

PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn

PROJECT LEADER: G. BAKOS

DESIGNED BY: M. BOGUE

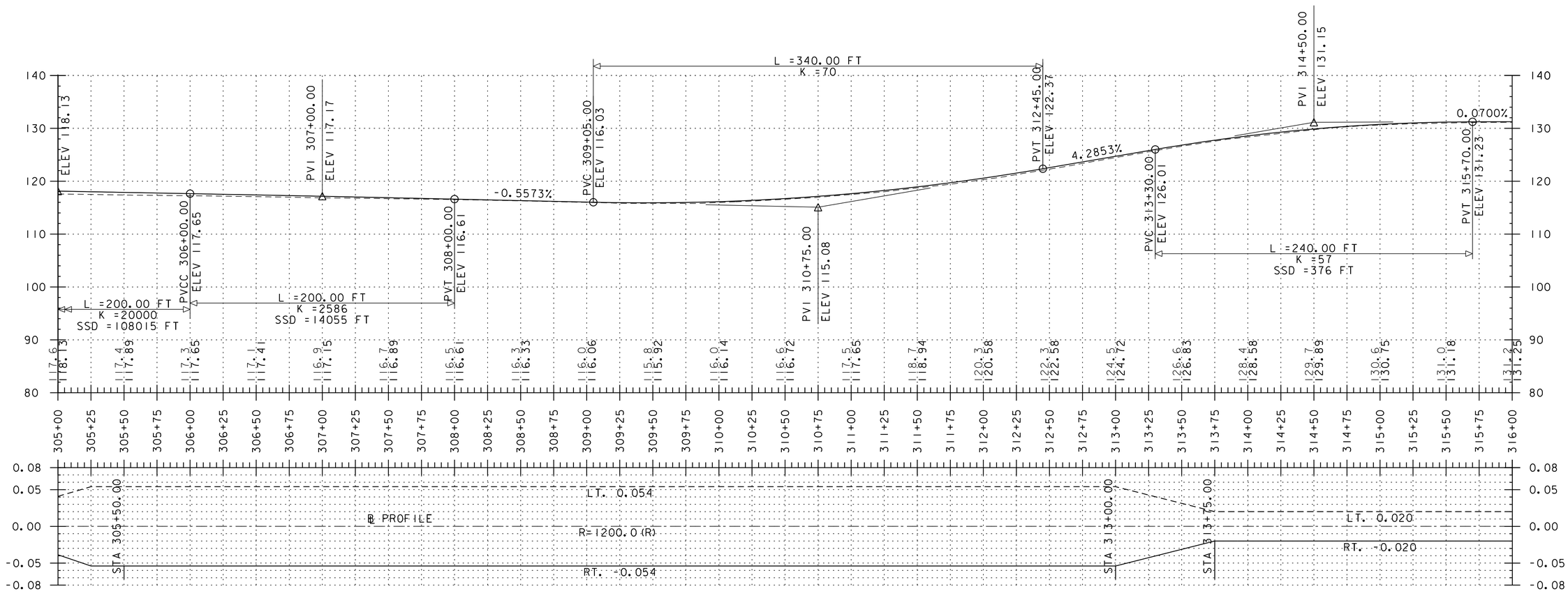
PROFILE SHEET #25

PLOT DATE: 3/7/2019

DRAWN BY: C. CILLEY

CHECKED BY: G. BAKOS

SHEET 90 OF 305



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

0 40 80

SCALE IN FEET

vhb

PROJECT NAME: SWANTON

PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn

PROJECT LEADER: G. BAKOS

DESIGNED BY: M. BOGUE

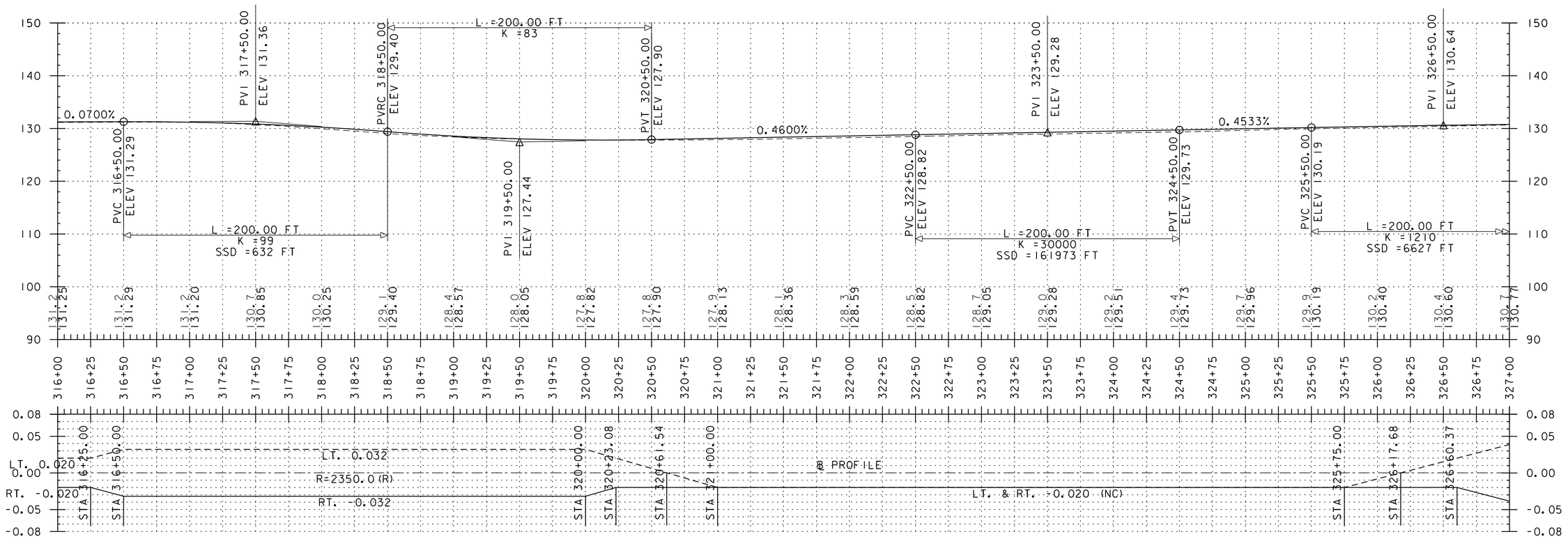
PROFILE SHEET #26

PLOT DATE: 3/7/2019

DRAWN BY: C. CILLEY

CHECKED BY: G. BAKOS

SHEET 91 OF 305



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

0 40 80

SCALE IN FEET

vhb

PROJECT NAME: SWANTON

PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn

PROJECT LEADER: G. BAKOS

DESIGNED BY: M. BOGUE

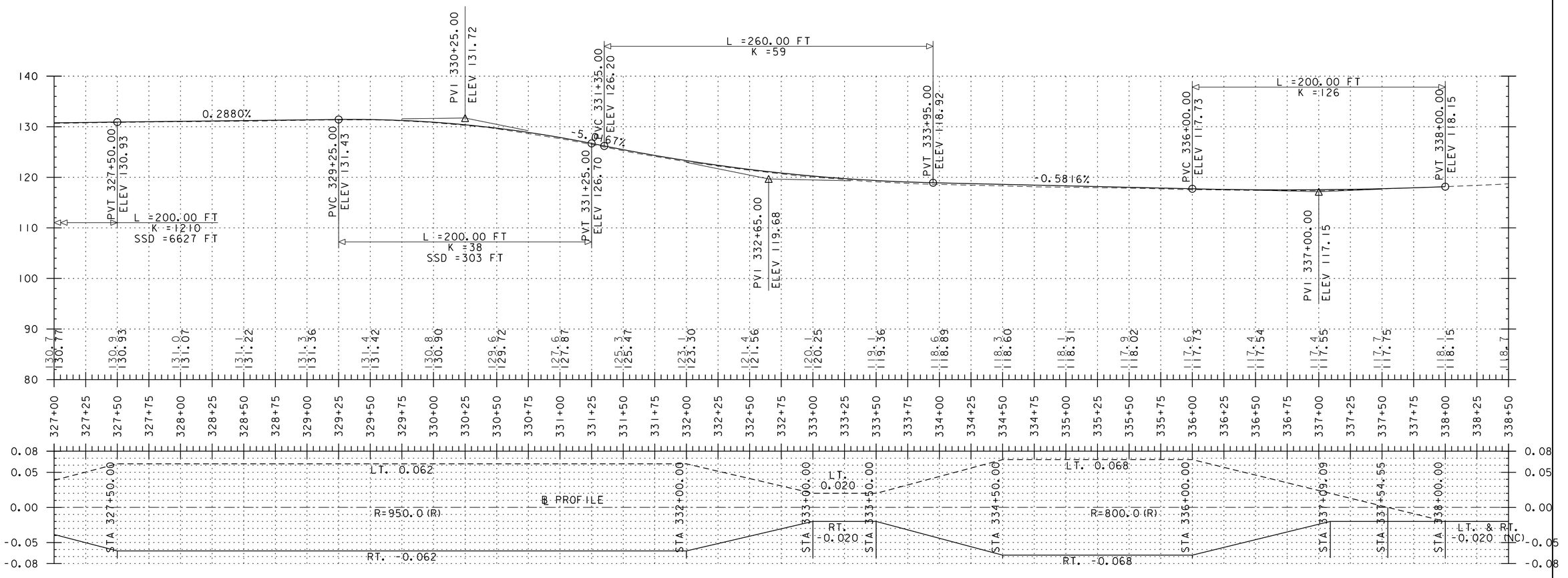
PROFILE SHEET #27

PLOT DATE: 3/7/2019

DRAWN BY: C. CILLEY

CHECKED BY: G. BAKOS

SHEET 92 OF 305



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

0 40 80

SCALE IN FEET

vhb

PROJECT NAME: SWANTON

PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_gen.dgn

PROJECT LEADER: G. BAKOS

DESIGNED BY: M. BOGUE

PROFILE SHEET #28

PLOT DATE: 3/7/2019

DRAWN BY: C. CILLEY

CHECKED BY: G. BAKOS

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EPSC PLAN NARRATIVE

DOCUMENT USE

1. THESE PLANS AND CORRESPONDING CADD DOCUMENTS ARE INSTRUMENTS OF PROFESSIONAL SERVICE, AND SHALL NOT BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN FOR WHICH IT WAS CREATED WITHOUT THE EXPRESSED, WRITTEN CONSENT OF VHB. ANY UNAUTHORIZED USE, REUSE, MODIFICATION OR ALTERATION, INCLUDING AUTOMATED CONVERSION OF THIS DOCUMENT SHALL BE AT THE USER'S SOLE RISK WITHOUT LIABILITY OR LEGAL EXPOSURE TO VHB.

EROSION PREVENTION AND SEDIMENT CONTROL NOTES:

1. CONTRACTOR ACTIVITIES SHALL ADHERE TO THIS SITE PLAN, THE CONDITIONS OF GENERAL PERMIT 3-9020, THE VERMONT EROSION PREVENTION AND SEDIMENT CONTROL FIELD GUIDE (2006), AND THE VERMONT STANDARDS AND SPECIFICATIONS FOR EROSION PREVENTION AND SEDIMENT CONTROL (2006, AMENDED 2008).

2. EPSC MEASURES SHALL BE INSTALLED PRIOR TO EARTH DISTURBING ACTIVITIES WITH THE EXCEPTION OF LAND DISTURBANCE THAT MAY RESULT FROM ACCESSING THE AREA(S) WITH EQUIPMENT IN ORDER TO INSTALL THOSE EPSC MEASURES. TEMPORARY EPSC MEASURES INTENDED TO TRAP SEDIMENT SHALL BE INSTALLED AS A FIRST STEP IN LAND DISTURBING ACTIVITIES AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE, WITH THE EXCEPTION OF THOSE LAND DISTURBING ACTIVITIES THAT ARE NECESSARY TO INSTALL MEASURES.

3. PROPOSED CHANGES TO THE EPSC PLAN SHALL BE APPROVED BY THE PERMITTEE OR HIS/HER DESIGNEE PRIOR TO IMPLEMENTATION.

4. PERMISSION MUST BE GRANTED BY VT DEC PRIOR TO USE OF ANY SUPPORT ACTIVITIES OCCURRING OUTSIDE OF THE APPROVED PROJECT BOUNDARIES. THIS INCLUDES USE OF OFF-SITE WASTE AND BORROW AREAS.

5. ALL PARTIES ASSOCIATED WITH CONSTRUCTION ACTIVITIES WHO MEET EITHER OF THE FOLLOWING TWO CRITERIA OF "PRINCIPAL OPERATOR" MUST OBTAIN COVERAGE UNDER THE CONSTRUCTION STORMWATER DISCHARGE PERMIT FOR THE PROJECT PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES BY THAT OPERATOR:

   a. THE PARTY HAS OPERATIONAL CONTROL OVER CONSTRUCTION PLANS AND SPECIFICATIONS, INCLUDING BUT NOT LIMITED TO THE ABILITY TO MAKE MODIFICATIONS TO THOSE PLANS AND SPECIFICATIONS; OR
   b. THE PARTY HAS CONTINUOUS DAY-TO-DAY OPERATIONAL CONTROL OF THOSE ACTIVITIES AT THE PROJECT THAT ARE NECESSARY TO ENSURE COMPLIANCE WITH AN EPSC PLAN FOR THE SITE OR OTHER PERMIT CONDITIONS (E.G., THEY ARE AUTHORIZED TO DIRECT WORKERS AT A SITE TO CARRY OUT ACTIVITIES REQUIRED BY THE EPSC PLAN OR COMPLY WITH OTHER PERMIT CONDITIONS).

CONSTRUCTION EPSC NOTES:

1. EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED TO THE EXTENT PRACTICABLE.

2. A VEGETATED BUFFER SHALL BE MAINTAINED FOR WATER RESOURCES (E.G., WETLANDS AND STREAMS) TO THE EXTENT PRACTICABLE.

3. TO THE EXTENT PRACTICABLE, SURFACE FLOW SHALL BE DIVERTED AWAY FROM EXPOSED SOILS AND WATER RESOURCES.

4. RESOURCE AREAS (E.G. WETLANDS AND STREAMS) WITHIN THE PROJECT AREA SHALL BE FLAGGED PRIOR TO ANY CONSTRUCTION RELATED ACTIVITIES OCCURRING WITHIN CLOSE PROXIMITY TO THOSE AREAS.

5. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH A SEDIMENT TRAPPING DEVICE AND DISCHARGED IN A MANNER THAT DOES NOT RESULT IN IMPACTS TO WATER QUALITY OR CONTRIBUTE TO EROSION. SEE DETAILS FOR MORE INFORMATION.

6. UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO THE OTHER APPLICABLE CRITERIA:

   a. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
   b. EXCAVATED MATERIAL SHALL BE PLACED IN UPLAND AREAS ON THE UPHILL SIDE OF THE TRENCHES, WHERE FEASIBLE.

10. SEDIMENT REMOVED FROM SEDIMENT CONTROL PRACTICES SHALL BE DISPOSED OF IN AN UPLAND AREA WITH STABILIZATION FOLLOWING DISPOSAL OF MATERIAL.

11. IN ADVANCE OF FORECASTED RAINFALL OR SNOWMELT, EPSC MEASURES THAT ARE LOCATED IN AREAS OF ACTIVE EARTH DISTURBANCE SHALL BE INSPECTED AND REPAIRED, AS NEEDED.

12. DUST CONTROL SHALL BE HANDLED VIA WATER OR CALCIUM CHLORIDE APPLICATION TO ROADWAYS AND OTHER AREAS WHERE DUST MAY BE GENERATED.

13. STABILIZED CONSTRUCTION ENTRANCES SHALL BE REGULARLY MAINTAINED TO CONTROL EQUIPMENT AND VEHICLES FROM TRACKING MATERIAL OFF SITE.

14. PERIMETER CONTROLS (E.G., SILT FENCE) SHALL BE INSTALLED ON THE DOWNSLOPE SIDE OF AREAS WHERE THERE IS POTENTIAL FOR SOIL EROSION AND/OR SEDIMENT RUNOFF. IN SOME AREAS WHERE THE GROUND SURFACE IS LEVEL AND THERE ARE NO PATHWAYS (E.G., DITCHES OR RUTS) THAT COULD TRANSPORT RUNOFF FROM THE PROJECT AREA, INSTALLATION OF PERIMETER CONTROLS MAY NOT BE NECESSARY PER APPROVAL BY THE ON-SITE PLAN COORDINATOR (OSPC).

15. LOGGING ACTIVITIES SHALL BE CONDUCTED IN ACCORDANCE WITH ACCEPTABLE MANAGEMENT PRACTICES FOR MAINTAINING WATER QUALITY ON LOGGING JOBS IN VERMONT (AMPS, 2006). CONSTRUCTION MATS AND MAT BRIDGES SHALL BE IN PLACE IN WETLANDS AND STREAM CROSSINGS PRIOR TO ACCESS BY ANY TREE CLEARING EQUIPMENT.

16. STUMPING AND GRUBBING ACTIVITIES SHALL BE CONDUCTED IN ACCORDANCE WITH THE PROJECTS CONSTRUCTION STORMWATER DISCHARGE PERMIT AND EPSC PLAN.

17. CONSTRUCTION DEMARCATION AND PERIMETER CONTROLS SHALL COMPLY WITH THE FOLLOWING:

   CONSTRUCTION DEMARCATION:
   a. CONSTRUCTION DEMARCATION SHALL BE INSTALLED ALONG PERIMETER OF LIMITS OF DISTURBANCE PER THE EPSC PLANS
   b. WITHIN 50 FEET OF RESOURCE AREA, DEMARCATION MUST INCLUDE:
      - 2 TO 3 ROWS OF STAKED (OR STAPLED) 3-INCH (MIN.) ORANGE BARRIER MESH TAPE,
      - ORANGE CONSTRUCTION FENCE, OR
      - ORANGE SNOW FENCE
   c. WHEN GREATER THAN 50 FEET FROM A WATER RESOURCE AREA, DEMARCATION MAY INCLUDE:
      - ONE ROW OF STAKED (OR STAPLED) 3-INCH (MIN.) ORANGE BARRIER MESH TAPE,
      - ORANGE CONSTRUCTION FENCE, OR
      - ORANGE SNOW FENCE

   PERIMETER CONTROLS:
   a. PERIMETER CONTROLS ARE TO BE INSTALLED ON THE DOWNSLOPE SIDE OF AREAS OF DISTURBANCE WHERE THERE IS POTENTIAL FOR SEDIMENT RUNOFF AND/OR SOIL EROSION.
   b. PERIMETER CONTROLS ARE NOT TO CROSS ACTIVE ACCESS ROUTES OR PERENNIAL FLOW PATHS (E.G. A STREAM).
   c. PARTICULAR CARE IS TO BE TAKEN WHEN INSTALLING PERIMETER CONTROLS IN A WETLAND.
   d. WITHIN 50 FEET OF A WATER RESOURCE AREA, PERIMETER CONTROLS MUST INCLUDE:
      - REINFORCED SILT FENCE - TO BE REINFORCED WITH WIRE MESH, STAKED HAY BALES, STAKED FIBER ROLLS, EROSION CONTROL MIX BERMS, OR WOOD CHIP BERMS
   e. WHEN GREATER THAN 50 FEET FROM A WATER RESOURCE AREA, PERIMETER CONTROLS MAY INCLUDE:
      - SILT FENCE (NON-REINFORCED),
      - STAKED FIBER ROLLS,
      - EROSION CONTROL MIX BERMS, OR
      - WOOD CHIP BERMS

18. PROJECT DEMARCATION OF AN AREA SHALL BE INSTALLED PRIOR TO EARTH DISTURBING ACTIVITIES WITHIN THAT AREA. AN EXCEPTION IS LAND DISTURBANCE THAT MAY BE NEEDED TO ACCESS THE AREA WITH EQUIPMENT OR TO INSTALL THE EPSC MEASURES.

PRE-CONSTRUCTION AND PERMITTING NOTES:

1. THE NAME AND DAYTIME PHONE NUMBER OF THE OSPC SHALL BE PROVIDED IN WRITING TO VT DEC PRIOR TO THE START OF CONSTRUCTION.

2. THE NOTICE OF AUTHORIZATION (NOA) ISSUED BY VT DEC SHALL BE POSTED IN A LOCATION THAT IS VISIBLE TO THE PUBLIC (E.G., NEAR THE CONSTRUCTION ENTRANCE).

3. A COPY OF THE EPSC PLAN SHALL BE MAINTAINED ON-SITE DURING NORMAL WORKING HOURS FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE OF FINAL STABILIZATION. THE EPSC PLAN SHALL BE MADE AVAILABLE TO VT DEC UPON REQUEST.

WINTER CONSTRUCTION NOTES:

1. WINTER CONSTRUCTION SEASON IS DEFINED BY VT DEC AS OCTOBER 15 TO APRIL 15.

2. THE FOLLOWING WINTER CONSTRUCTION CONDITIONS APPLY TO THOSE CONSTRUCTION ACTIVITIES INVOLVING EARTH DISTURBANCE BETWEEN OCTOBER 15 AND APRIL 15:

   a. FOR AREAS STABILIZED BY VEGETATION, SEED SHALL BE APPLIED NO LATER THAN SEPTEMBER 15.
   b. MULCH SHALL BE APPLIED AT DOUBLE THE REGULAR CONSTRUCTION SEASON RATE OR ROUGHLY 2 INCHES OF MULCH WITH 80 TO 90% COVER (SEE MULCH DETAIL). MULCH SHALL BE TRACKED IN OR STABILIZED WITH NETTING.
   c. ENLARGE ACCESS POINTS AS PERMITTABLE TO PROVIDE SPACE FOR SNOW STOCKPILING.
   d. LIMITS OF DISTURBANCE SHALL BE MOVED OR REPLACED TO REFLECT BOUNDARY OF WINTER WORK, AS NEEDED.
   e. CLEARED SNOW SHALL BE PLACED DOWN GRADIENT OF ALL AREAS OF DISTURBANCE WHERE FEASIBLE.
   f. SNOW SHALL NOT BE PLACED IN STORMWATER TREATMENT STRUCTURES. (E.G. BASINS)
   g. TO THE EXTENT PRACTICABLE, A MINIMUM 25-FOOT BUFFER FROM PERIMETER CONTROLS (E.G., SILT FENCE) SHALL BE MAINTAINED TO ALLOW FOR SNOW CLEARING AND MAINTENANCE.
   h. FOR AREAS OF DISTURBANCE WITHIN 100 FEET OF A RECEIVING WATER, SILT FENCE SHALL BE REINFORCED OR ELSE REPLACED WITH PERIMETER DIKES, SWALES, OR OTHER PRACTICES RESISTANT TO THE FORCES OF SNOW LOADS.
   i. DRAINAGE STRUCTURES ARE TO BE KEPT OPEN AND FREE OF SNOW AND ICE DAMS AS DETERMINED BY THE ON SITE PROJECT COORDINATOR.
   j. EPSC MEASURES THAT REQUIRE SOIL DISTURBANCE TO INSTALL (E.G., SILT FENCE) SHALL BE INSTALLED PRIOR TO GROUND FREEZING.
   k. SNOW AND ICE SHALL BE REMOVED TO LESS THAN 1 INCH THICKNESS PRIOR TO STABILIZATION.
   l. A 10 TO 20-FOOT WIDE STONE PAD SHALL BE USED IN AREAS WHERE CONSTRUCTION VEHICLE TRAFFIC IS ANTICIPATED (E.G., AROUND THE PERIMETER OF A BUILDING, WHERE APPLICABLE.
   m. TO ENSURE COVER OF DISTURBED SOIL IN ADVANCE OF A SNOWMELT EVENT, AREAS OF DISTURBED SOIL SHALL BE STABILIZED AT THE END OF EACH WORKDAY, UNLESS
      i. WORK IS TO CONTINUE WITHIN THE AREA WITHIN THE NEXT 24 HOURS AND THERE IS NO PRECIPITATION FORECAST FOR THE NEXT 24 HOURS OR
      ii. WORK IS OCCURRING IN A SELF-CONTAINED EXCAVATION (I.E., NO OUTLET) WITH A DEPTH OF 2 FEET OR GREATER (E.G., UTILITY TRENCHES).

TEMPORARY AND FINAL STABILIZATION NOTES:

1. DURING REGULAR CONSTRUCTION SEASON, ALL AREAS OF EARTH DISTURBANCE MUST BE STABILIZED WITHIN 14 DAYS OF INITIAL DISTURBANCE. AFTER THIS INITIAL 14-DAY PERIOD, ALL EARTH DISTURBANCE AREAS MUST BE STABILIZED ON A DAILY BASIS, WITH THE FOLLOWING EXCEPTIONS:

   a. STABILIZATION IS NOT REQUIRED IF WORK IS TO CONTINUE WITHIN THE AREA WITHIN THE NEXT 24 HOURS AND THERE IS NO PRECIPITATION FORECAST FOR THE NEXT 24 HOURS.
   b. STABILIZATION IS NOT REQUIRED IF THE WORK IS OCCURRING IN A SELF-CONTAINED EXCAVATION (I.E., NO OUTLET FOR STORMWATER) WITH A DEPTH OF 2 FEET OR GREATER (E.G., UNDERGROUND UTILITY INSTALLATION).

2. DURING "WINTER CONSTRUCTION" (OCTOBER 15 TO APRIL 15) DISTURBED SOIL MUST BE STABILIZED AT THE END OF EACH DAY, WITH THE FOLLOWING EXCEPTIONS:
   a. IF NO PRECIPITATION WITHIN 24 HOURS IS FORECAST AND WORK WILL RESUME IN THE SAME DISTURBED AREA WITHIN 24 HOURS, DAILY STABILIZATION IS NOT NECESSARY.
   b. STABILIZATION IS NOT REQUIRED IF THE WORK IS OCCURRING IN A SELF-CONTAINED EXCAVATION (I.E., NO OUTLET FOR STORMWATER) WITH A DEPTH OF 2 FEET OR GREATER (E.G., UNDERGROUND UTILITY INSTALLATION).

3. DISTURBANCE ACTIVITIES MUST BE COORDINATED TO ENSURE THAT THE ALLOWABLE CONCURRENT EARTH DISTURBANCE IS NOT EXCEEDED. THE MAXIMUM AREA OF EARTH DISTURBANCE THAT IS ALLOWED AT ANY ONE TIME IS 5.00 ACRES. THE TOTAL AREA OF EARTH DISTURBANCE SHOWN ON THE EPSC PLANS IS 27.1 ACRES, INCLUDING THE FULL DEPTH ROADWAY RECONSTRUCTION AREA AND WIDENING AREAS BUT NOT THE PAVEMENT RECLAMATION AREA.

4. WORK IS TO PROCEED INCREMENTALLY, WITH STABILIZATION OCCURRING IMMEDIATELY FOLLOWING COMPLETION OF AN INDIVIDUAL AREA.

5. TEMPORARY SOIL STABILIZATION SHALL BE ACHIEVED BY MULCH, SEED AND MULCH, HYDROSEEDING WITH MULCH TACKIFIER, SOD, STONE, AND/OR ROLLED EROSION CONTROL PRODUCTS (E.G., EROSION CONTROL BLANKET). MULCH SHALL BE COMPRISED OF STRAW, HAY, COMPOST, WOOD CHIPS, WOOD STUMP GRINDINGS, AND/OR EROSION CONTROL MIX.

PROJECT NAME:	VAOT PROJECT NAME
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032_epsc_Narr.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
EPSC NARRATIVE SHEET 1	SHEET 94 OF 305

TEMPORARY AND FINAL STABILIZATION NOTES (CONTINUED):

6. PERMANENT STABILIZATION SHALL BE ACHIEVED BY 80% VEGETATION COVER, STONE, ASPHALT, BEDROCK, OR OTHER PERMANENT MATERIAL THAT PROVIDES COMPLETE COVER OF EXPOSED SOILS

7. AREAS THAT HAVE REACHED TEMPORARY OR FINAL STABILIZATION SHALL NOT BE CONSIDERED PART OF TOTAL AREA OF EARTH DISTURBANCE.

8. APPROPRIATE SEED MIX SHALL BE APPLIED TO DESIGNATED AREAS PER THE SEED DETAIL SPECIFICATIONS.

9. AREAS TO BE STABILIZED FOR WINTER THAT DO NOT HAVE ESTABLISHED VEGETATION BY OCTOBER 15 SHALL BE STABILIZED BY ANCHORED MULCH AT THE WINTER APPLICATION RATE, OR OTHER APPROVED STABILIZATION MEASURES (E.G., ROLLED EROSION CONTROL PRODUCT). DORMANT SEEDING WITH WINTER RYE IS RECOMMENDED.

10. ALL FINAL GRADE SLOPES STEEPER THAN 3H:1V SHALL BE STABILIZED WITH BIODEGRADABLE EROSION CONTROL MATTING, UNLESS SHOWN OTHERWISE ON THE SITE STABILIZATION PLAN.

11. ALL TEMPORARY EPSC MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY EPSC MEASURES ARE NO LONGER NEEDED.

OSPC INSPECTION REQUIREMENTS:

1. THE CONTRACTOR IS RESPONSIBLE FOR INSPECTING AND MAINTAINING EROSION PREVENTION AND SEDIMENT CONTROLS THAT MINIMIZE OR ELIMINATE POLLUTANTS IN STORMWATER DISCHARGE.

Z. INSPECTIONS BY THE ON-SITE PLAN COORDINATOR (OSPC) SHALL BE CONDUCTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS, WITH ADDITIONAL INSPECTION FREQUENCY REQUIRED FOR RAIN EVENTS, WINTER CONSTRUCTION, AND VISIBLE DISCHARGES PER THE CONDITIONS OF PART 6 OF GENERAL PERMIT 3-9020. A WRITTEN REPORT SHALL BE COMPLETED FOR EACH INSPECTION AND SIGNED BY THE OSPC. ALL REPORTS ARE TO BE MAINTAINED ON SITE AND MADE AVAILABLE TO STATE DEC REPRESENTATIVES UPON REQUEST. SEE SECTION 6.Z (G) OF GENERAL PERMIT 3-9020 FOR INSPECTION REPORT REQUIREMENTS.

3. IF VISIBLY DISCOLORED STORMWATER RUNS OFF THE CONSTRUCTION SITE OR RUNS OFF THE CONSTRUCTION SITE AND DISCHARGES TO RECEIVING WATERS, THE CONTRACTOR SHALL TAKE IMMEDIATE CORRECTIVE ACTION TO CORRECT THE DISCHARGE, INCLUDING MAINTAINING EXISTING EPSC MEASURES, AND INSTALLING SUPPLEMENTAL EPSC MEASURES.

4. THE OSPC IS RESPONSIBLE FOR MONITORING, INSPECTING, AND SAMPLING DISCHARGES FROM THE SITE TO MAINTAIN COMPLIANCE WITH GENERAL PERMIT 3-9020. THIS INCLUDES VISUAL MONITORING OF EPSC MEASURES AND DISCHARGES, DISCHARGE SAMPLING, TURBIDITY MONITORING, AND REPORTING. THE MAXIMUM TURBIDITY PERMISSIBLE FOR CONSTRUCTION SITE DISCHARGE IS 25 NTU.

5. SEE PARTS 6, 6.2, AND 6.3 OF GENERAL PERMIT 3-9020 AT HTTP://WWW.VTWATERQUALITY.ORG/STORMWATER/DOCS/CONSTRUCTION/SW_CGP_AMENDED_FINAL.PDF FOR MORE INFORMATION.

ON-SITE PLAN COORDINATOR (OSPC) NOTES:

1. THE OSPC DESIGNATED TO THE PROJECT (AND HIS/HER DESIGNEE) SHALL:

   a. REVIEW VT DEC'S "ON-SITE PLAN COORDINATOR MANUAL",
   b. BE ON-SITE ON A DAILY BASIS (OR HAVE A DESIGNEE THAT IS ON SITE WHEN HE/SHE CANNOT BE),
   c. BE DIRECTLY RESPONSIBLE FOR ON-SITE IMPLEMENTATION OF THE EPSC PLAN,
   d. BE KNOWLEDGEABLE IN THE PRINCIPLES AND PRACTICES OF EPSC,
   e. POSSESS THE SKILLS TO ASSESS CONDITIONS AT THE CONSTRUCTION SITE THAT COULD IMPACT STORMWATER QUALITY,
   f. POSSESS THE SKILLS TO ASSESS THE EFFECTIVENESS OF EPSC MEASURES SELECTED TO CONTROL THE QUALITY OF STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITY,
   g. POSSESS THE SKILLS AND EQUIPMENT TO CONDUCT TURBIDITY MONITORING PURSUANT TO THE CONSTRUCTION STORMWATER DISCHARGE PERMIT, AND
   h. HAVE THE AUTHORITY TO STOP AND/OR MODIFY CONSTRUCTION ACTIVITIES AS NECESSARY TO COMPLY WITH THE EPSC PLAN AND THE CONSTRUCTION STORMWATER DISCHARGE PERMIT.

2. ALL PROPOSED CHANGES TO THE EPSC PLAN MUST BE APPROVED BY THE OSPC OR HIS/HER DESIGNEE, THE PLAN DESIGNER OR A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC) PRIOR TO IMPLEMENTATION, AND BE CONSIDERED MINOR AMENDMENTS AS DEFINED IN THE OSPC HANDBOOK. ALL MINOR AMENDMENTS ARE TO BE RECORDED USING THE MINOR AMENDMENT RECORD FORM AND MARKED ON THE MASTER OSPC PLAN SET. ALL MODIFICATIONS THAT FALL OUTSIDE OF THE MINOR AMENDMENT DEFINITION MUST BE APPROVED BY VT-DEC.

3. DURING THE REGULAR CONSTRUCTION SEASON (APRIL 15 TO OCT 15), THE OSPC OR HIS/HER DESIGNEE SHALL CONDUCT INSPECTIONS AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HRS FOLLOWING A STORM EVENT RESULTING IN DISCHARGE OF STORMWATER FROM THE CONSTRUCTION SITE.

4. DURING THE WINTER CONSTRUCTION SEASON (OCT 15 TO APRIL 15), THE OSPC OR HIS/HER DESIGNEE SHALL CONDUCT INSPECTIONS ON A DAILY BASIS DURING ACTIVE EARTHWORK.

5. THE OSPC AND HIS/HER DESIGNEE(S) SHALL FOLLOW TURBIDITY MONITORING PROTOCOLS OUTLINED IN VT DEC'S "MONITORING OF TURBIDITY IN STORMWATER RUNOFF FROM CONSTRUCTION ACTIVITIES" MANUAL.

6. INSPECTIONS CONDUCTED BY THE OSPC OR HIS/HER DESIGNEE SHALL COVER ALL AREAS OF THE SITE THAT ARE BEING ACTIVELY DISTURBED BY CONSTRUCTION OR CONSTRUCTION-RELATED ACTIVITIES, INCLUDING AREAS THAT HAVE BEEN TEMPORARILY STABILIZED.

7. OSPC INSPECTIONS SHALL BE DOCUMENTED USING THE VT DEC INSPECTION REPORT FORM OR A VT DEC-ACCEPTED INSPECTION REPORT FORM.

8. OSPC INSPECTION REPORTS SHALL BE MAINTAINED ON-SITE FOR THE DURATION OF THE PROJECT AND MADE AVAILABLE TO VT DEC UPON REQUEST.

SEQUENCING AND STAGING

CONSTRUCTION WILL NEED TO BE COMPLETED IN PHASES TO LIMIT THE TOTAL AMOUNT OF EARTH DISTURBANCE AT ANY GIVEN TIME TO LESS THAN 5 ACRES. THE CONCEPTUAL PHASING OF THE PROJECT ASSUMES THE PROJECT WILL BE CONSTRUCTED IN SEGMENTS AND WORK WITHIN EACH SEGMENT WILL GENERALLY OCCUR IN THE FOLLOWING ORDER:
PHASE 1: WIDEN ROADWAY TO ONE SIDE, INCLUDING OVER-WIDENING AS NEEDED TO MAINTAIN TRAFFIC
PHASE 2: MOVE TRAFFIC TO WIDENED SIDE AND RECONSTRUCT OR REHABILITATE OPPOSITE SIDE
PHASE 3: COMPLETE SHOULDERS AND SLOPES AND FINAL PAVEMENT

THE GENERALLY ANTICIPATED SEQUENCE OF CONSTRUCTION FOR EACH ROADWAY SEGMENT IS AS FOLLOWS:
1. FLAG RESOURCE AREAS
2. IDENTIFY PROJECT LIMITS AND INSTALL BOUNDARY FENCING
3. INSTALL EPSC MEASURES AS SHOWN IN THE EPSC PLANS
4. INSTALL DRAINAGE PIPES AND UNDERGROUND UTILITIES, IF ANY
5. CLEAR/GRUB VEGETATION ALONG THE PROPOSED ROW
6. REMOVE OR RECLAIM EXISTING PAVEMENT WHERE REQUIRED
7. CONSTRUCT FULL DEPTH RECONSTRUCTION AND/OR WIDENING
8. INSTALL GUARDRAIL
9. COMPLETE PAVING
10. REMOVE TEMPORARY FILLS IN OVER-WIDENED SEGMENTS
11. STABILIZE ALL REMAINING EXPOSED SOILS AND RESTORE SITE

PROJECT NAME: VAOT PROJECT NAME
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032_epsc_narr.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
EPSC NARRATIVE SHEET 2

PLOT DATE: 3/7/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS

BARRIER FENCE (LINE STYLE) -BF-×-×-×-BF-
653.50

BRUSH LAYER (BL)
653.75, DETAIL

CHECK DAM (LINE STYLE)
653.25, DETAIL

COFFERDAM (LINE STYLE)
208.40

CURB DROP INLET PROTECTION
653.40, DETAIL

DUST CONTROL (DC)
609.10 & 15

PIPE INLET PROTECTION
653.40, DETAIL

EXCAVATED DROP INLET PROTECTION
653.40, DETAIL

FIBER ROLL (EROSION LOG) (FR)
653.60, DETAIL

FILTER BAG
653.45, DETAIL

FILTER FABRIC DROP INLET PROTECTION
653.40, DETAIL

LIVE CUTTINGS/LIVE STAKES PLANTING (LS)
653.70, DETAIL

LIVE FASCINE (LF)
653.65, DETAIL

PROJECT DEMARCATION FENCE (LINE STYLE) -PDF——PDF-
653.55

ROLLED EROSION CONTROL PRODUCT (RECP)
653.20 (TEMP. EROSION MATTING)

SEDIMENT BASIN
INCIDENTAL TO COFFERDAM 208.40

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

STANDARD SYMBOLS

SILT FENCE(LINE STYLE)
649.51, DETAIL

SILT FENCE WOVEN WIRE(LINE STYLE)
649.515, DETAIL

STABILIZED CONSTRUCTION ENTRANCE
653.35, DETAIL, VEHICLE TRACKING PAD

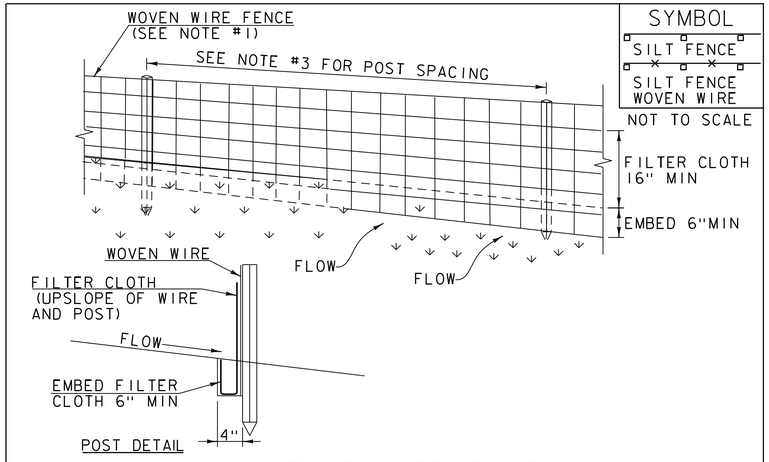
STONE & BLOCK DROP INLET PROTECTION
653.40, DETAIL

SURFACE ROUGHENING
INCIDENTAL TO CONTRACT

TURBIDITY CURTAIN
649.61, DETAIL, FILTER CURTAIN

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

STANDARD SYMBOLS



SYMBOL
SILT FENCE
SILT FENCE WOVEN WIRE
NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE REINFORCED FENCE IS REQUIRED WITHIN 100' UPSLOPE OF RECEIVING WATERS WHEN THE PROJECT FALLS UNDER A CONSTRUCTION STORMWATER PERMIT. WOVEN WIRE SHALL BE A MIN. 14 GAUGE WITH A 6" MAX. MESH OPENING.
2. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI100X, STABILINKA T140N OR APPROVED EQUIVALENT.
3. POST SPACING FOR WIRE-BACKED FENCE SHALL BE 10' MAXIMUM. FOR FILTER-CLOTH FENCE, WHEN ELONGATION IS >50%, POST SPACING SHALL NOT EXCEED 4' AND WHEN ELONGATION IS <50%, POST SPACING SHALL NOT EXCEED 6'.
4. WOVEN WIRE FENCE IS TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES. FILTER CLOTH IS TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY 6" AND FOLDED.
6. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN SEDIMENT REACHES HALF OF FABRIC HEIGHT.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SILT FENCE

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 649 AND AS SHOWN IN THE PLANS FOR GEOTEXTILE FOR SILT FENCE (PAY ITEM 649.51) OR GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED (PAY ITEM 649.515).

REVISIONS	
MARCH 21, 2008	WHF
DECEMBER 11, 2008	WHF
JANUARY 13, 2009	WHF

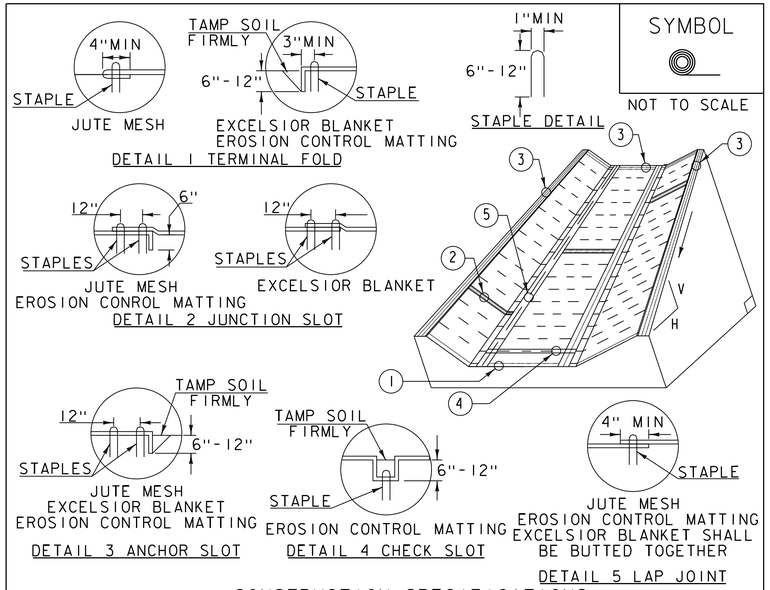
DETAILS ARE NOT TO SCALE

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032_epsc_det.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
EPSC DETAILS (1 of 5)

PLOT DATE: 3/7/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 96 OF 305



SYMBOL

NOT TO SCALE

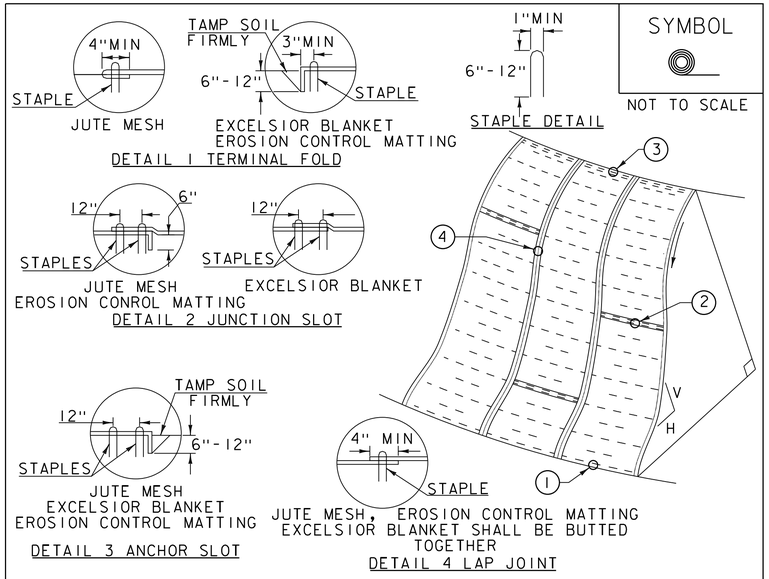
CONSTRUCTION SPECIFICATIONS

1. EROSION MATTING, CHECK SLOTS, SHALL BE SPACED IN DITCH CHANNEL SO THAT ONE OCCURS WITHIN EACH 50' ON SLOPES OF MORE THAN 4% AND LESS THAN 6%. ON SLOPES OF 6% OR MORE, THEY SHALL BE SPACED SO THAT ONE OCCURS WITHIN EACH 25'.
2. APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
3. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4'X225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4'X150' ROLL OF MATERIAL.
4. DISTURBED AREAS SHALL BE SMOOTHLY GRADED. EROSION CONTROL MATERIAL SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH.
5. ALL TERMINAL ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION	ROLLED EROSION CONTROL PRODUCT (RECP) DITCH

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- "FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 AND AS SHOWN IN THE PLANS FOR TEMPORARY EROSION MATTING (PAY ITEM 653.20) OR PERMANENT EROSION MATTING (PAY ITEM 653.21).

REVISIONS	
MARCH 8, 2007	JMF
APRIL 16, 2007	WHF
JANUARY 13, 2009	WHF



SYMBOL

NOT TO SCALE

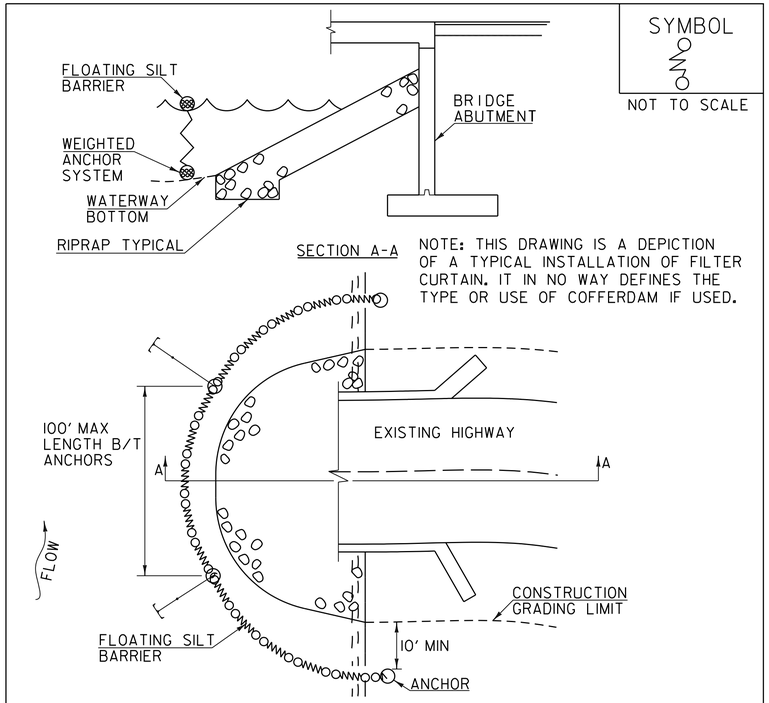
CONSTRUCTION SPECIFICATIONS

1. APPLY TO SLOPES GREATER THAN 3H: IV OR WHERE NECESSARY TO AID IN ESTABLISHING VEGETATION.
2. APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
3. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4'X225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4'X150' ROLL OF MATERIAL.
4. DISTURBED AREAS SHALL BE SMOOTHLY GRADED. EROSION CONTROL MATERIAL SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH.
5. ALL TERMINAL ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION	ROLLED EROSION CONTROL PRODUCT (RECP) SIDE SLOPE

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- "FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 AND AS SHOWN IN THE PLANS FOR TEMPORARY EROSION MATTING (PAY ITEM 653.20) OR PERMANENT EROSION MATTING (PAY ITEM 653.21).

REVISIONS	
APRIL 16, 2007	JMF
JANUARY 13, 2009	WHF



SYMBOL

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. FILTER CURTAIN SHALL NOT BE PLACED ACROSS A FLOWING WATERWAY, OR IN A WATERWAY WITH STREAM VELOCITIES GREATER THAN 1.5 FEET/SECOND.
2. MAXIMUM 100' LENGTH BETWEEN ANCHORS.
3. LAST SECTION SHALL TERMINATE A MINIMUM OF 10' BEYOND LIMIT OF DISTURBANCE.
4. THE WEIGHTED ANCHOR SYSTEM SHALL BE A TYPE WHICH ALLOWS THE CURTAIN TO CONFORM TO THE BOTTOM OF THE WATERWAY.
5. THE CURTAIN SHALL BE REMOVED BY SLOWLY PULLING TOWARD THE SHORE MINIMIZING THE ESCAPE OF SEDIMENTS INTO WATERWAY.

	FILTER CURTAIN

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 649 FOR GEOTEXTILE FOR FILTER CURTAIN (PAY ITEM 649.61).

REVISIONS	
APRIL 1, 2008	WHF
JANUARY 13, 2009	WHF
SEPTEMBER 4, 2009	WHF

DETAILS ARE NOT TO SCALE

vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032_epsc_det.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
EPSC DETAILS (2 of 5)	SHEET 97 OF 305

VAOT LOW GROW/FINE FESCUE MIX

LBS/AC						
WEIGHT	BROADCAST	HYDROSEED	NAME	LATIN NAME	GERM	PURITY
38%	57	95	CREEPING RED FESCUE	FESTUCA RUBRA VAR. RUBRA	90%	98%
29%	43.5	72.5	HARD FESCUE	FESTUCA LONGIFOLIA	85%	95%
15%	22.5	37.5	CHEWINGS FESCUE	FESTUCA RUBRA VAR. COMMUTATA	87%	95%
15%	22.5	37.5	ANNUAL RYEGRASS	LOLIUM MULTIFLORUM	90%	95%
3%	4.5	7.5	INERTS			
100%	150	250				

VAOT RURAL AREA MIX

LBS/AC						
WEIGHT	BROADCAST	HYDROSEED	NAME	LATIN NAME	GERM	PURITY
37.5%	22.5	45	CREEPING RED FESCUE	FESTUCA RUBRA VAR. RUBRA	85%	98%
37.5%	22.5	45	TALL FESCUE	FESTUCA ARUNDINACEA	90%	95%
5.0%	3	6	RED TOP	AGROSTIS GIGANTEA	90%	95%
15.0%	9	18	WHITE FIELD CLOVER	TRIFOLIUM REPENS	85%	98%
5.0%	3	6	ANNUAL RYE GRASS	LOLIUM MULTIFLORUM	85%	95%
100%	60	120				

GENERAL AMENDMENT GUIDANCE		
FERTILIZER	LIME	
10/20/10	AG LIME	PELLITIZED
500 LBS/AC	2 TONS/AC	1 TONS/AC

CONSTRUCTION GUIDANCE

1. SEED MIX: THE CONTRACTOR SHALL COORDINATE WITH THE RESIDENT ENGINEER ON WHICH SEED MIX TO USE.
2. SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED UPLAND (NON WETLAND) AREAS DISTURBED BY THE CONTRACTOR.
3. ALL SEED MIXTURES: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.
4. FERTILIZER AND LIMESTONE: SHALL FOLLOW RATES SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER.
5. HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, ACHIEVE 90% GROUND COVER OR AS DIRECTED BY THE ENGINEER.
6. HYDROSEEDING: ALTHOUGH GUIDANCE IS GIVEN ABOVE THE SITE CONDITIONS AND THE TYPE OF HYDROSEED PROPOSED FOR USE WILL ULTIMATELY DICTATE THE AMOUNTS AND TYPES OF SOIL AMENDMENTS TO BE APPLIED.
7. TURF ESTABLISHMENT: PLACING SEED, FERTILIZER, LIME AND MULCH PRIOR TO SEPTEMBER 15 AND AFTER APRIL 15 CAN BETTER ENSURE A VIGOROUS GROWTH OF GRASS.

ADAPTED FROM VTRANS TECHNICAL LANDSCAPE MANUAL FOR ROADWAYS AND TRANSPORTATION FACILITIES

TURF ESTABLISHMENT

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 651 FOR SEED (PAY ITEM 651.15)

REVISIONS	
JANUARY 12, 2015	WHF

VAOT URBAN LAWN MIX

LBS/AC						
WEIGHT	BROADCAST	HYDROSEED	NAME	LATIN NAME	GERM	PURITY
42.5%	34	68	CREEPING RED FESCUE	FESTUCA RUBRA X RUBRA	85%	98%
20.0%	16	32	PERENNIAL RYE GRASS	LOLIUM PERENNE	90%	95%
32.5%	26	52	KENTUCKY BLUE GRASS	POA PRATENSIS	85%	85%
5.0%	4	8	ANNUAL RYE GRASS	LOLIUM MULTIFLORUM	85%	95%
100%	80	160				

GENERAL AMENDMENT GUIDANCE		
FERTILIZER	LIME	
10/20/10	AG LIME	PELLITIZED
500 LBS/AC	2 TONS/AC	1 TONS/AC

CONSTRUCTION GUIDANCE

1. SEED MIX: THE URBAN AREA MIX SHALL NOT BE USED IN WETLANDS OR ANY WATERS OF THE STATE OF VERMONT.
2. SEED MIX: USE ONLY AS INDICATED IN THE PLANS.
3. SEED MIX: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.
4. FERTILIZER AND LIMESTONE: SHALL FOLLOW RATES SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER
5. HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, ACHIEVE 90% GROUND COVER OR AS DIRECTED BY THE ENGINEER.
6. HYDROSEEDING: ALTHOUGH GUIDANCE IS GIVEN ABOVE THE SITE CONDITIONS AND THE TYPE OF HYDROSEED WILL ULTIMATELY DICTATE THE AMOUNTS AND TYPES OF SOIL AMENDMENTS TO BE APPLIED
7. TURF ESTABLISHMENT: PLACING SEED, FERTILIZER, LIME AND MULCH PRIOR TO SEPTEMBER 15 AND AFTER APRIL 15 CAN BETTER ENSURE A VIGOROUS GROWTH OF GRASS.

ADAPTED FROM VTRANS TECHNICAL LANDSCAPE MANUAL FOR ROADWAYS AND TRANSPORTATION FACILITIES

TURF ESTABLISHMENT

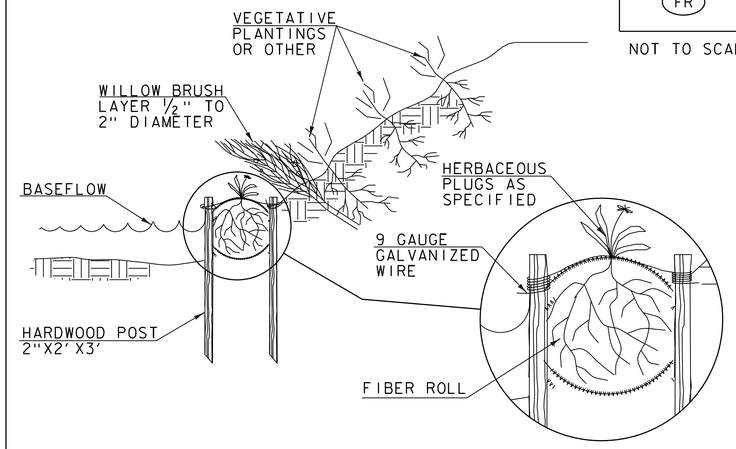
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 651 FOR SEED (PAY ITEM 651.15)

REVISIONS	
JANUARY 22, 2015	WHF

SYMBOL

FR

NOT TO SCALE



CONSTRUCTION SPECIFICATIONS

1. EXCAVATE A SHALLOW TRENCH SLIGHTLY BELOW BASEFLOW OR A 4" TRENCH ON SLOPE CONTOURS
2. PLACE THE ROLL IN THE TRENCH AND ANCHOR WITH 2"X2" POSTS PLACED ON BOTH SIDES FO THE ROLL AND SPACED LATERALLY ON 2' TO 4' CENTERS. TRIM THE TOP OF THE POSTS EVEN WITH THE EDGE OF THE ROLL, IF NECESSARY.
3. NOTCH THE POSTS AND TIE TOGETHER, ACROSS THE ROLL, WITH 9 GAUGE GALVANIZED WIRE OR 1/8" DIAMETER BRAIDED NYLON ROPE.
4. PLACE SOIL EXCAVATED FROM THE TRENCH BEHIND THE ROLL AND HAND TAMP. PLANTWITH SUITABLE HERBACEOUS OR WOODY VEGETATION AS SPECIFIED ELSEWHERE IN THE CONTRACT DOCUMENTS. VEGETATION SHALL BE PLACED IMMEDIATELY ADJACENT TO THE ROLL TO PROMOTE ROOT GROWTH INTO THE FIBER. HERBACEOUS VEGETATION, IF SPECIFIED, SHALL BE PLANTED INTO THE FIBER ROLL.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FIBER ROLL (EROSION LOG)

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- "FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR EROSION LOG (PAY ITEM 653.60)

REVISIONS	
MARCH 21, 2008	WHF
JANUARY 13, 2009	WHF

DETAILS ARE NOT TO SCALE

vhb

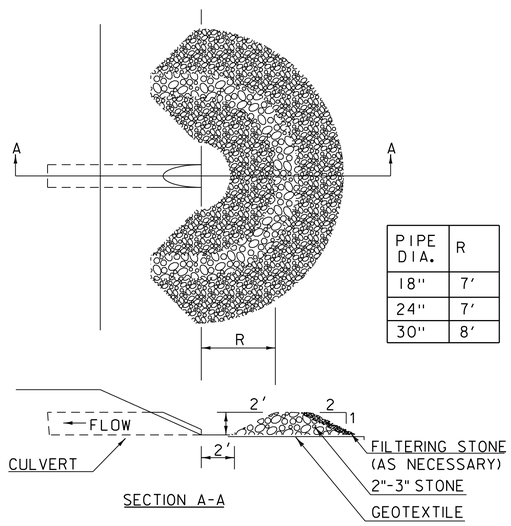
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032_epsc_det.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
EPSC DETAILS (3 of 5)

PLOT DATE: 3/7/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 98 OF 305

SYMBOL

NOT TO SCALE



SECTION A-A

PIPE DIA.	R
18"	7'
24"	7'
30"	8'

CONSTRUCTION SPECIFICATIONS

1. USE 2" TO 3" STONE. FILTERING STONE SHALL BE 3/4".
2. PLACE STONE OVER GEOTEXTILE.
3. ONCE THE AREAS UPSTREAM FROM THE CHECK DAM ARE STABILIZED WITH VEGETATION, THE SEDIMENT TRAPPED BEHIND THE DAM SHALL BE DISPOSED OF IN AN APPROVED WASTE AREA.
4. THE CHECK DAM(S) SHALL BE FLATTENED AND GRADED IN A MANNER WHICH PROTECTS THE AREA FROM EROSION AND CHANNEL BLOCKAGE . (GEOTEXTILE MUST BE REMOVED).
5. THE GEOTEXTILE MUST BE DISPOSED OF APPROPRIATELY.
6. THE AREA CONTRIBUTING TO THE CHECK DAM SHALL NOT EXCEED 4 ACRES.

ADAPTED FROM DETAILS PROVIDED BY: ILLINOIS USDA-NRCS
ORIGINALLY DEVELOPED BY USDA-NRCS

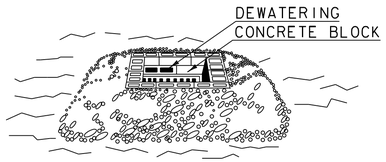
PIPE INLET PROTECTION

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR INLET PROTECTION DEVICE, TYPE I (PAY ITEM 653.40).

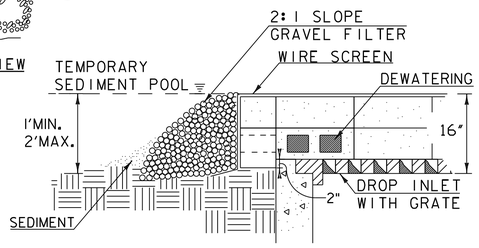
REVISIONS	
MARCH 6, 2008	WHF
JANUARY 13, 2009	WHF

SYMBOL

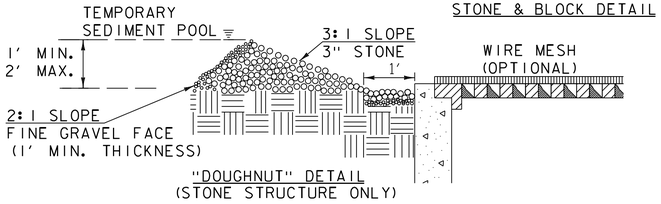
NOT TO SCALE



STONE & BLOCK PLAN VIEW



STONE & BLOCK DETAIL



"DOUGHNUT" DETAIL
(STONE STRUCTURE ONLY)

CONSTRUCTION SPECIFICATIONS

1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2" MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
2. HARDWARE CLOTH OR ½" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
3. USE CLEAN STONE OR GRAVEL ½"- ¾" IN DIAMETER PLACED 2" BELOW TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER.
4. FOR STONE STRUCTURES ONLY, A 1' THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3" STONE AS SHOWN ON THE DRAWINGS.
5. MAXIMUM DRAINAGE AREA 1 ACRE

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

STONE & BLOCK DROP INLET PROTECTION

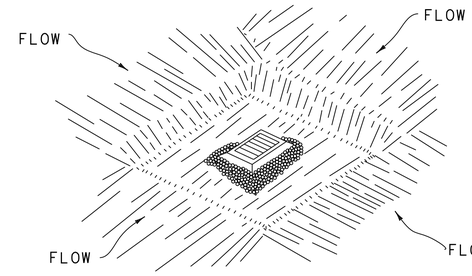
NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- "FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

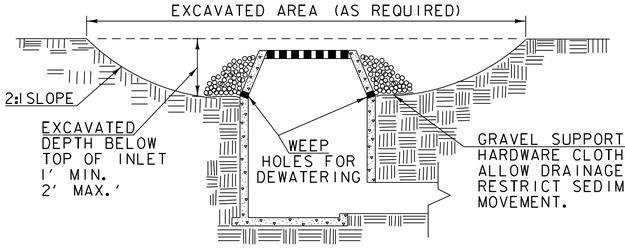
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR INLET PROTECTION DEVICE, TYPE I (PAY ITEM 653.40).

REVISIONS	
MARCH 6, 2008	WHF
JANUARY 13, 2009	WHF

SYMBOL

NOT TO SCALE





CONSTRUCTION SPECIFICATIONS

1. CLEAR THE AREA OF ALL DEBRIS THAT WILL HINDER EXCAVATION.
2. GRADE APPROACH TO THE INLET UNIFORMLY AROUND THE BASIN.
3. WEEP HOLES SHALL BE PROTECTED BY GRAVEL.
4. UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA, SEAL WEEP HOLES, FILL BASIN WITH STABLE SOIL TO FINAL GRADE, COMPACT IT PROPERLY AND STABILIZE WITH PERMANENT SEEDING.
5. MAXIMUM DRAINAGE AREA 1 ACRE

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

EXCAVATED DROP INLET PROTECTION

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- "FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

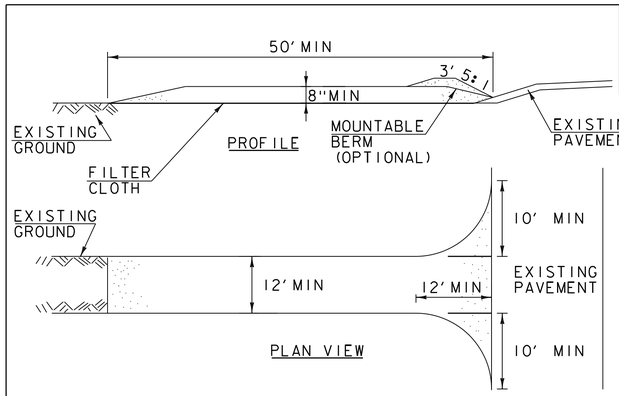
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR INLET PROTECTION DEVICE, TYPE I (PAY ITEM 653.40).

REVISIONS	
MARCH 6, 2008	WHF
JANUARY 13, 2009	WHF

DETAILS ARE NOT TO SCALE

vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032_epsc_det.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
EPSC DETAILS (4 of 5)	SHEET 99 OF 305



SYMBOL

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. STONE SIZE- USE 1-4" STONE, RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH- NOT LESS THAN 50' (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30' MINIMUM LENGTH APPLIES).
3. THICKNESS- NOT LESS THAN 8".
4. WIDTH- 12' MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24' IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE MUST BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE.
6. SURFACE WATER- ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED ACCORDING TO PERMIT REQUIREMENTS.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

STABILIZED CONSTRUCTION ENTRANCE

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- "FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR VEHICLE TRACKING PAD (PAY ITEM 653.35) OR AS SPECIFIED IN THE CONTRACT.

REVISIONS	
MARCH 24, 2008	WHF
JANUARY 13, 2009	WHF

DETAILS ARE NOT TO SCALE

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032_epsc_det.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
EPSC DETAILS (5 of 5)

PLOT DATE: 3/7/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 100 OF 305

LYONS STONY LOAM

MASSENA STONY LOAM
0 TO 3 PERCENT SLOPES

CARMAN'S MARSH WILDLIFE
MANAGEMENT AREA

COVINGTON CLAY

MARSH

MATCH TO STA. 40+00 (SEE BELOW)

N

VT STATE PLANE GRID

28+00 29+00 30+00 31+00 32+00 33+00 34+00 35+00 36+00 37+00 38+00 39+00 40+00

50' RIPARIAN BUFFER

2013-1 (II) CLASS 2

2013-111 (II) CLASS 2

2013-101 (II) CLASS 2

2013-

AER E&T

GUY

AG LAND

HAYFIELD

COVINGTON CLAY

MASSENA STONY LOAM
0 TO 3 PERCENT SLOPES

COVINGTON CLAY

EMERGENT MARSH (WET MEADOW)
& SHRUB WETLAND
PEM1E/PEM

WINOOSKI SILT LOAM

50' RIPARIAN BUFFER

ISOLATED EMERGENT MARSH: PEM2C

CLASS 2
2013-2 (II)

COVINGTON CLAY

2013-1 (II) CLASS 2

MARSH

CARMAN'S MARSH WILDLIFE
MANAGEMENT AREA

EMERGENT MARSH /SHRUB WETLAND
PEM1/SSIF/PF01C

2013-3 (II) CLASS 2

B-102

MATCH TO STA. 40+00 (SHEET ##)

41+00 42+00 43+00 44+00 45+00 46+00 47+00 48+00 49+00 50+00 51+00 52

2013-111 (II) CLASS 2

2013-112 (II)

CLASS 2

2013-101 (II) CLASS 2

50' RIPARIAN BUFFER

FORESTED AND SHRUB SWAMP
PEM/PF01/SS1E

2013-101 (II) CLASS 2

PEM1E
DRAINAGE DITCH

PEM1E
DRAINAGE DITCH

COVINGTON CLAY

BORDER
MEADOW-RUE

MARSH

COVINGTON CLAY

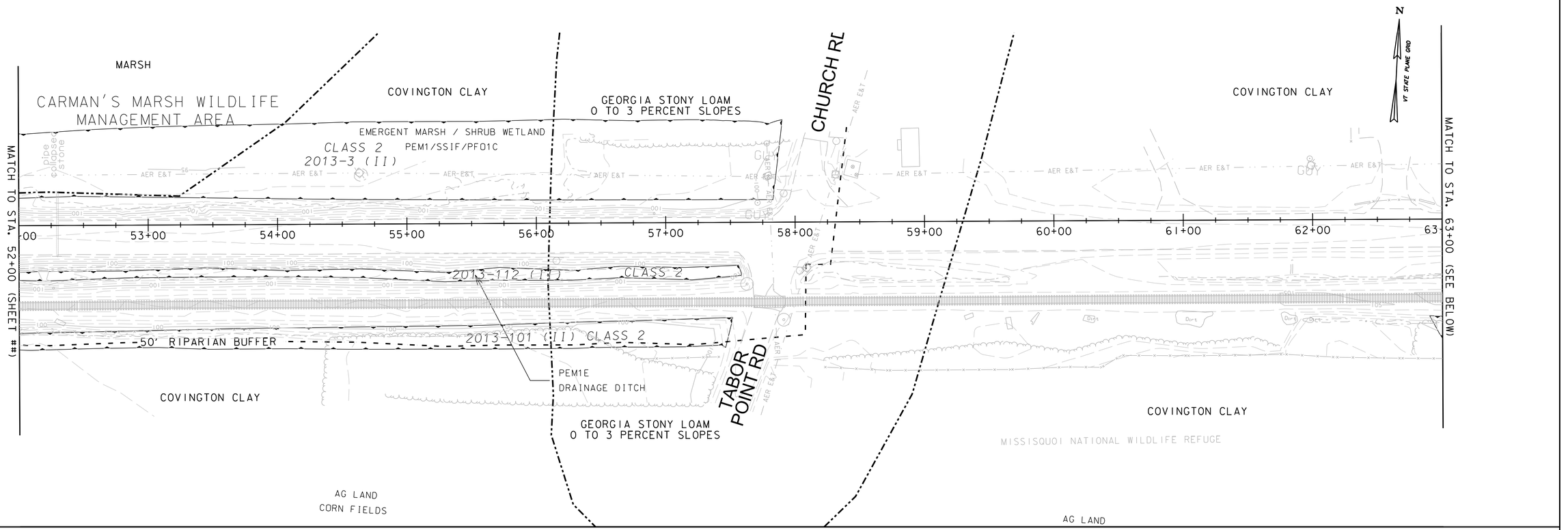
EPSC EXISTING NOTES

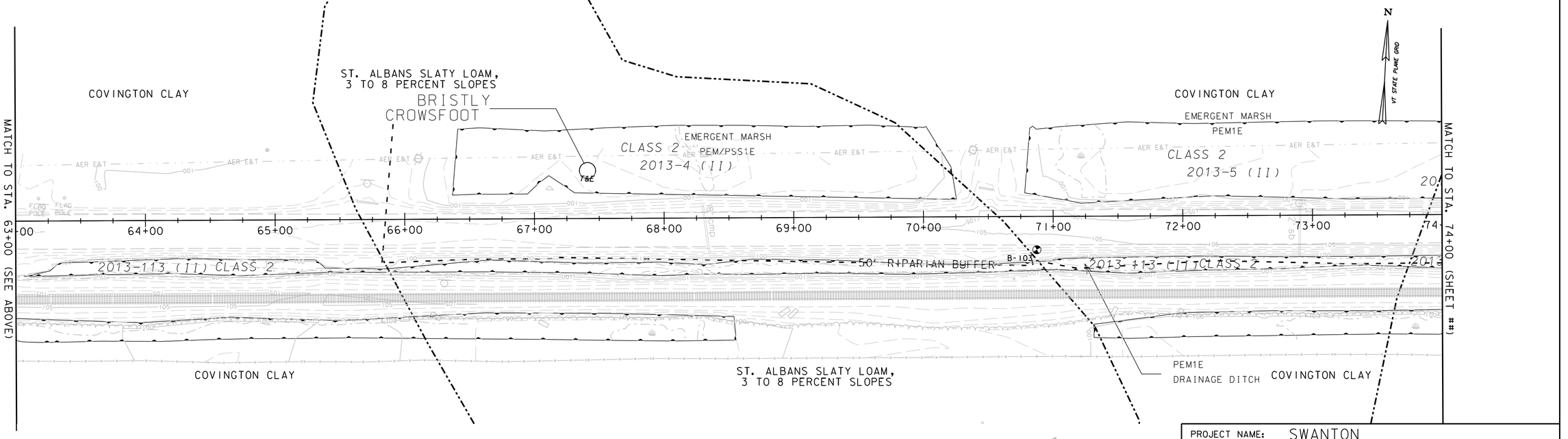
1. SEE CONVENTIONAL SYMBOLOGY LEGEND FOR EPSC PLAN SYMBOLOGY.

0 40 80
SCALE IN FEET

vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032bdr_ECSP_Ex.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
EPSC EXISTING CONDITIONS PLAN #1	SHEET 101 OF 305





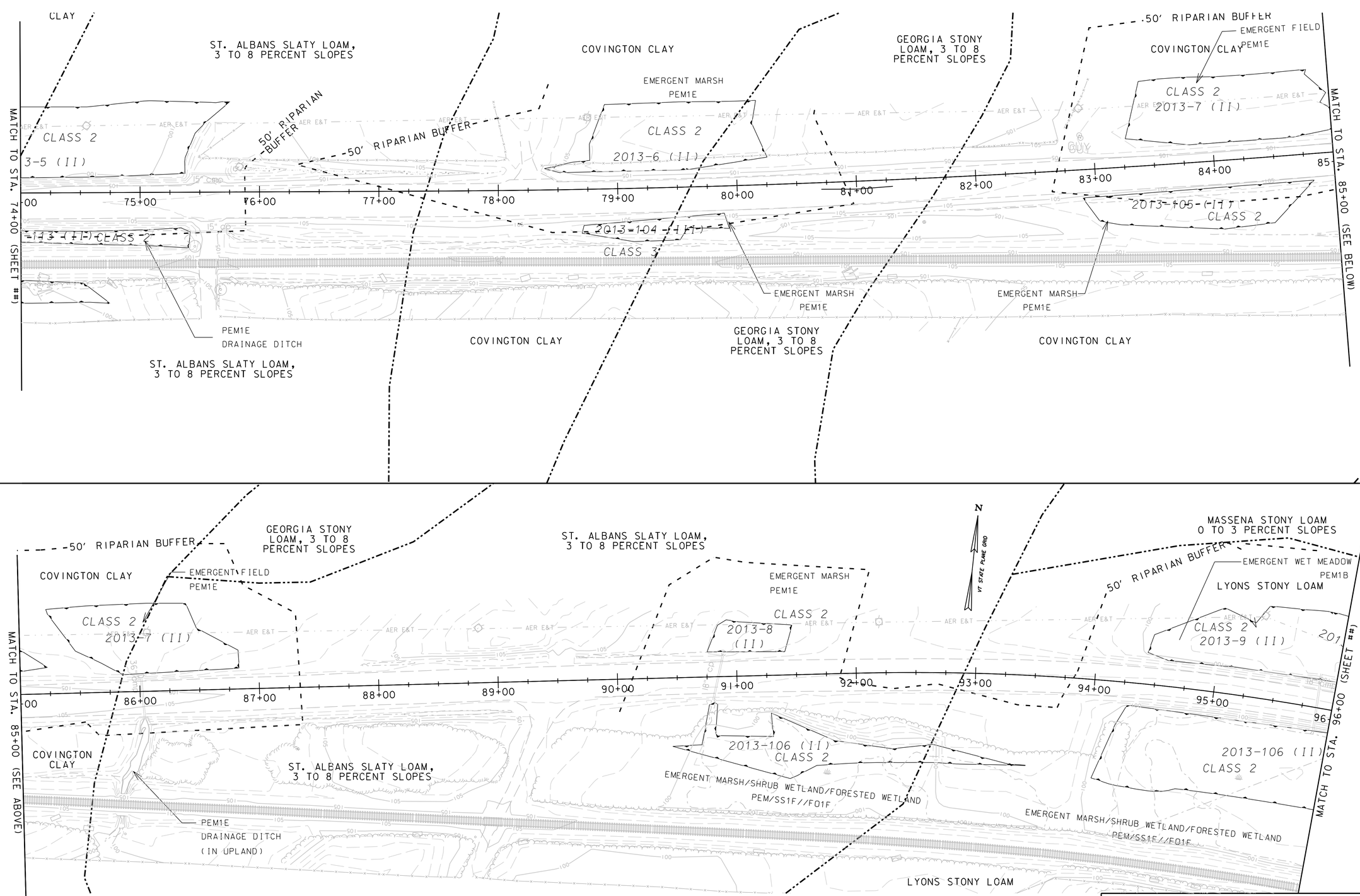
EPSC EXISTING NOTES

1. SEE CONVENTIONAL SYMBOLOGY LEGEND FOR EPSC PLAN SYMBOLOGY.

0 40 80
SCALE IN FEET

vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032bdr_ECSP_Ex.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
EPSC EXISTING CONDITIONS PLAN #2	SHEET 102 OF 305



EPSC EXISTING NOTES

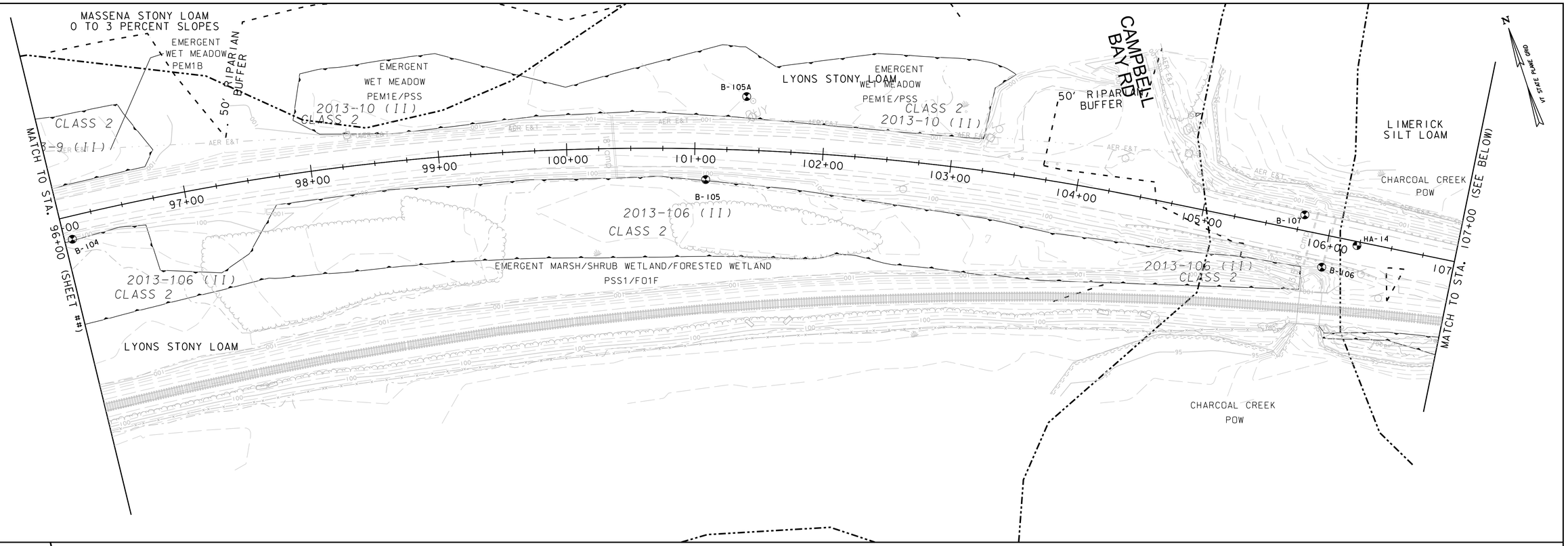
1. SEE CONVENTIONAL SYMBOLOGY LEGEND FOR EPSC PLAN SYMBOLOGY.

0 40 80
SCALE IN FEET

vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)

FILE NAME: z96b032bdr_ECSP_Ex.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
EPSC EXISTING CONDITIONS PLAN #3	SHEET 103 OF 305

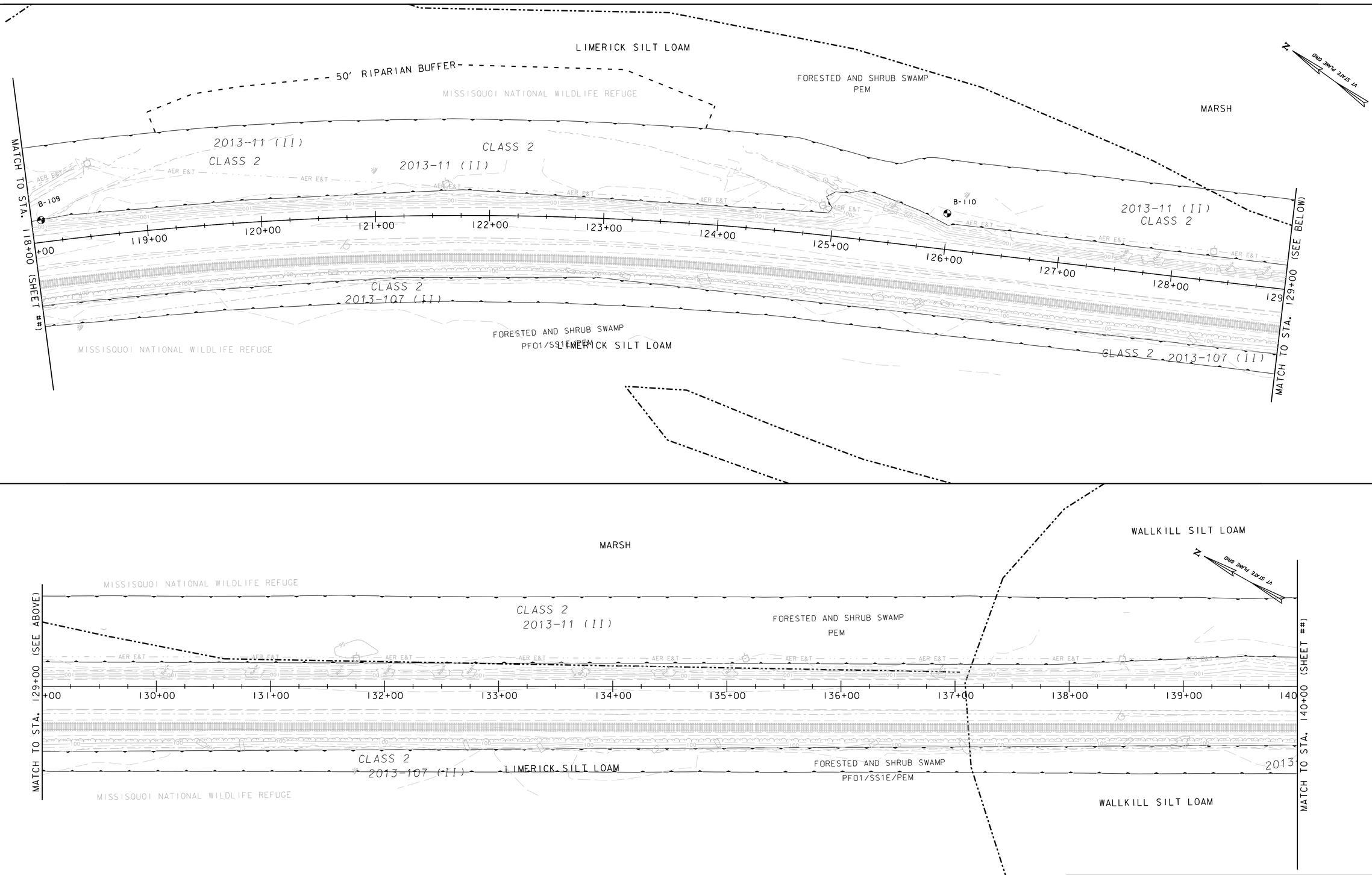


EPSC EXISTING NOTES

1. SEE CONVENTIONAL SYMBOLOGY LEGEND FOR EPSC PLAN SYMBOLOGY.

0 40 80
SCALE IN FEET

PROJECT NAME: SWANTON	
PROJECT NUMBER: NH 036-1(9)	
FILE NAME: z96b032bdr_ECSP_Ex.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
EPSC EXISTING CONDITIONS PLAN #4	SHEET 104 OF 305



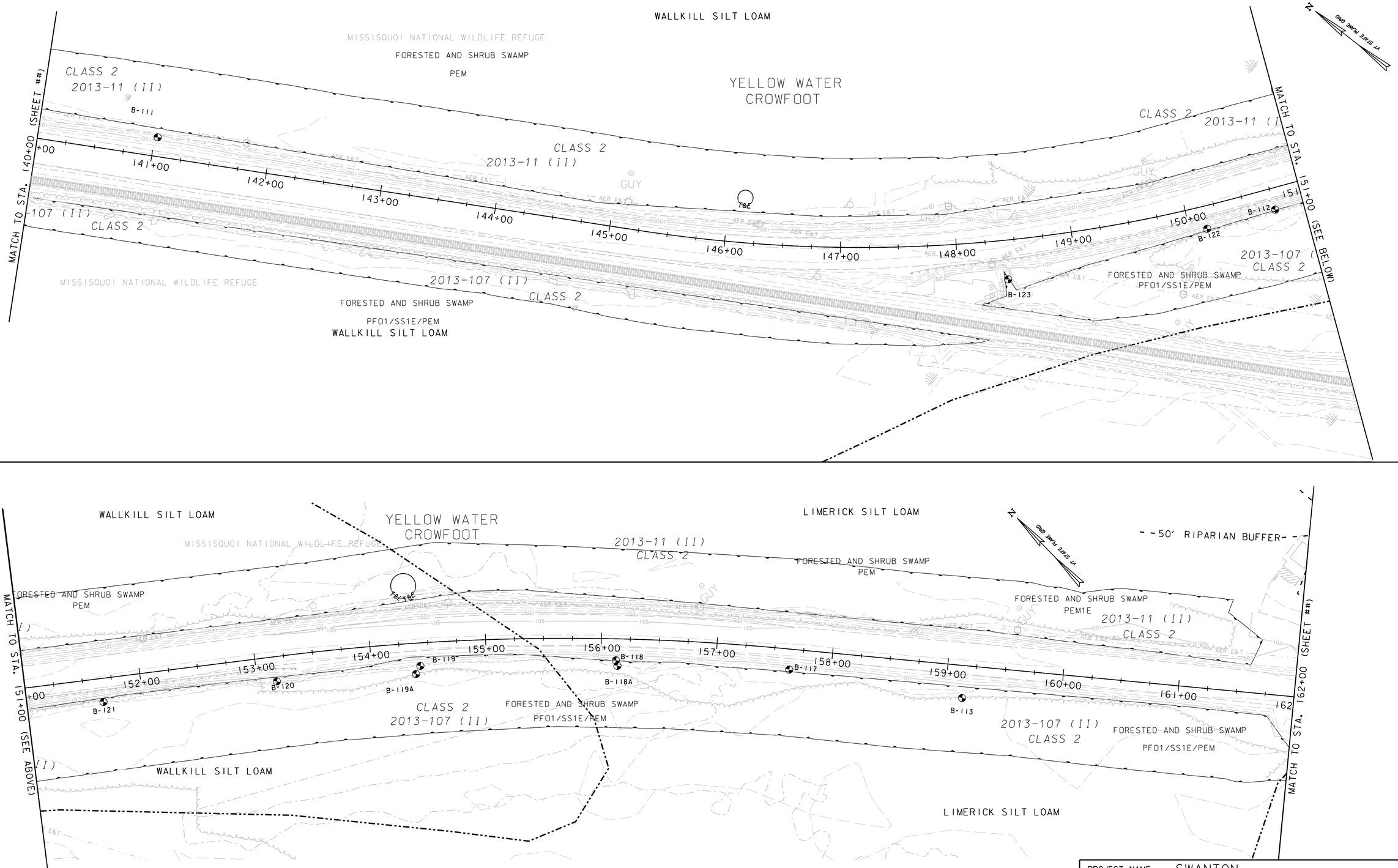
EPSC EXISTING NOTES

1. SEE CONVENTIONAL SYMBOLOGY LEGEND FOR EPSC PLAN SYMBOLOGY.

0 40 80
SCALE IN FEET

vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032bdr_ECSP_Ex.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
EPSC EXISTING CONDITIONS PLAN #5	SHEET 105 OF 305



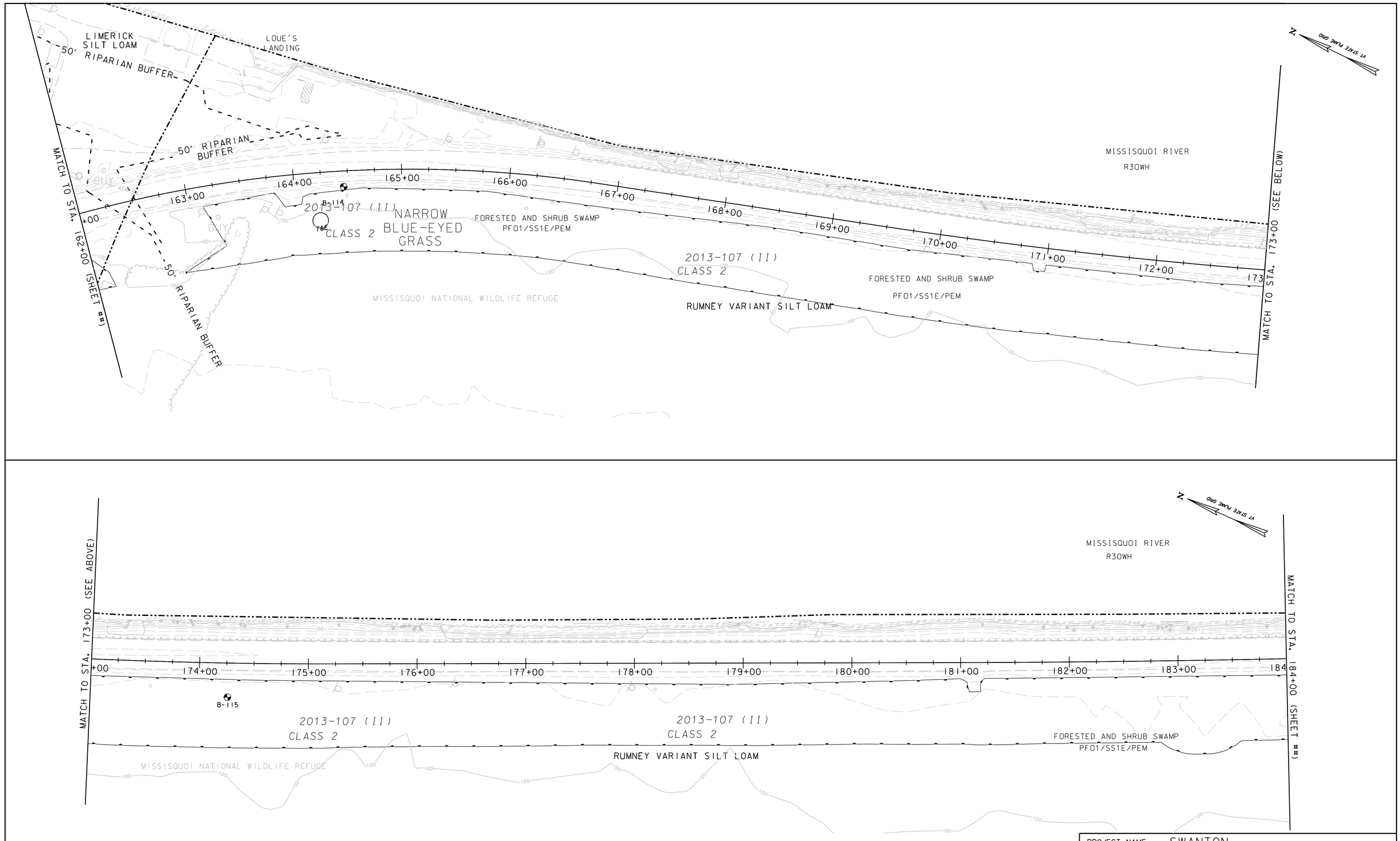
EPSC EXISTING NOTES

1. SEE CONVENTIONAL SYMBOLOGY LEGEND FOR EPSC PLAN SYMBOLOGY.

0 40 80
SCALE IN FEET

vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032bdr_ECSP_Ex.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
EPSC EXISTING CONDITIONS PLAN #6	SHEET 106 OF 305



EPSC EXISTING NOTES

1. SEE CONVENTIONAL SYMBOLOGY LEGEND FOR EPSC PLAN SYMBOLOGY.

0 40 80
SCALE IN FEET

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032bdr_ECSP_Ex.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
EPSC EXISTING CONDITIONS PLAN #7	SHEET 107 OF 305

MISSISQUOI RIVER

MATCH TO STA. 184+00 (SHEET ##)

MATCH TO STA. 195+00 (SEE BELOW)

184+00 185+00 186+00 187+00 188+00 189+00 190+00 191+00 192+00 193+00 194+00 195

2013-107 (II)
CLASS 2

B-116

2013-107 (II)
CLASS 2

MISSISQUOI NATIONAL WILDLIFE REFUGE

RUMNEY VARIANT SILT LOAM

FORESTED AND SHRUB SWAMP
PFO1/SS1E/PEM

AER E&T

MISSISQUOI RIVER
R3OWH

MATCH TO STA. 195+00 (SEE ABOVE)

FLOODPLAIN
FORESTED WETLAND
PEM/PFO1C

CLASS 2
2013-12 (II)

WINOOSKI SILT LOAM

FLOODPLAIN
FORESTED
WETLAND
PFO1C

CLASS 2
2013-12 (II)

MISSISQUOI RIVER
R3OWH

MATCH TO STA. 206+00 (SHEET ##)

196+00 197+00 198+00 199+00 200+00 201+00 202+00 203+00 204+00 205+00 206

50' RIPARIAN BUFFER

2013-107 (II)
CLASS 2

MISSISQUOI NATIONAL WILDLIFE REFUGE

RUMNEY VARIANT SILT LOAM

2013-107 (II)
CLASS 2

FORESTED AND SHRUB SWAMP
PFO1/SS1E/PEM

LIMERICK SILT LOAM

VT STATE PLANE GRID N

EPSC EXISTING NOTES

1. SEE CONVENTIONAL SYMBOLOGY LEGEND FOR EPSC PLAN SYMBOLOGY.

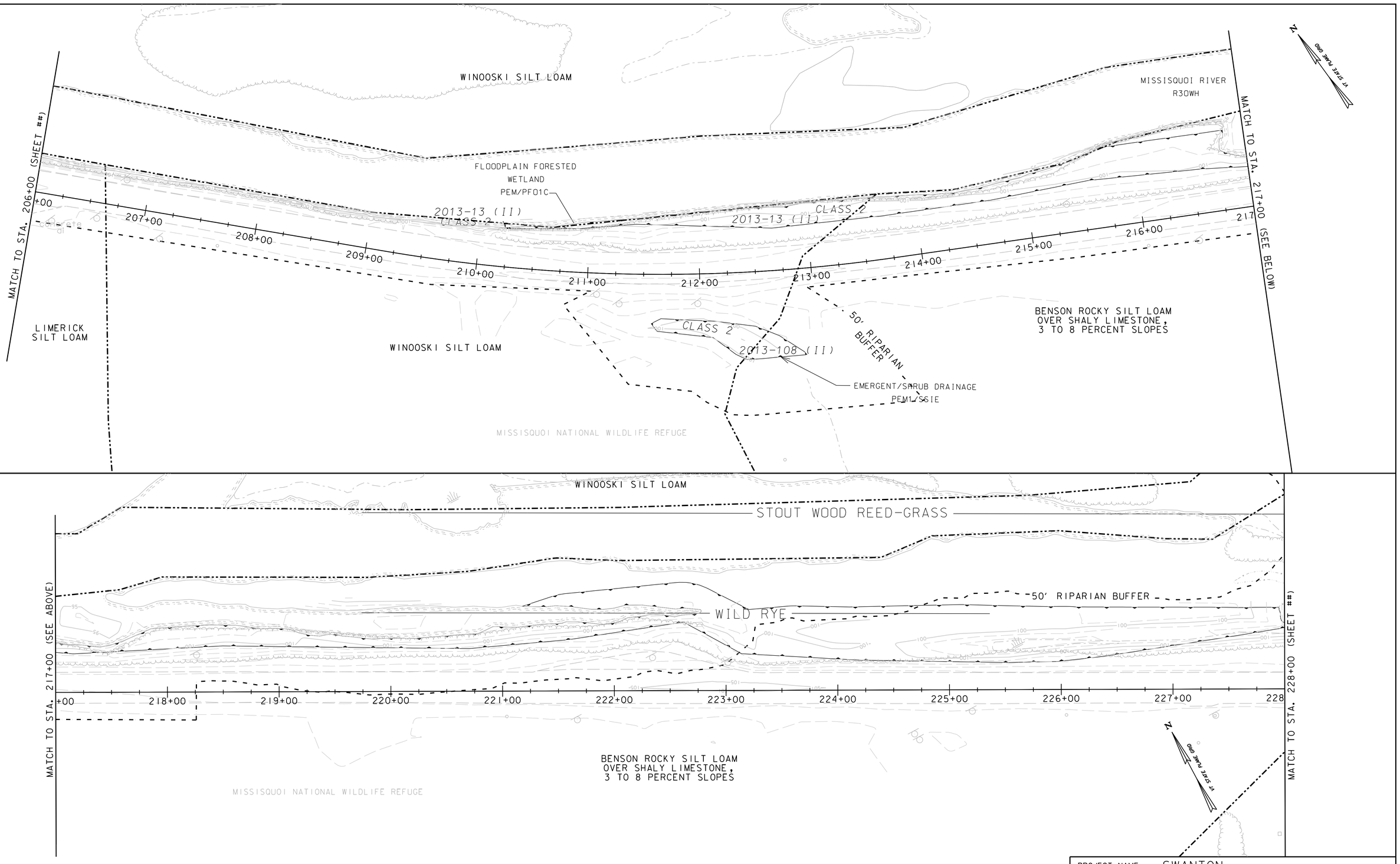
0 40 80
SCALE IN FEET

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_ECSP_Ex.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
EPSC EXISTING CONDITIONS PLAN #8

PLOT DATE: 3/7/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 108 OF 305



EPSC EXISTING NOTES

1. SEE CONVENTIONAL SYMBOLOGY LEGEND FOR EPSC PLAN SYMBOLOGY.

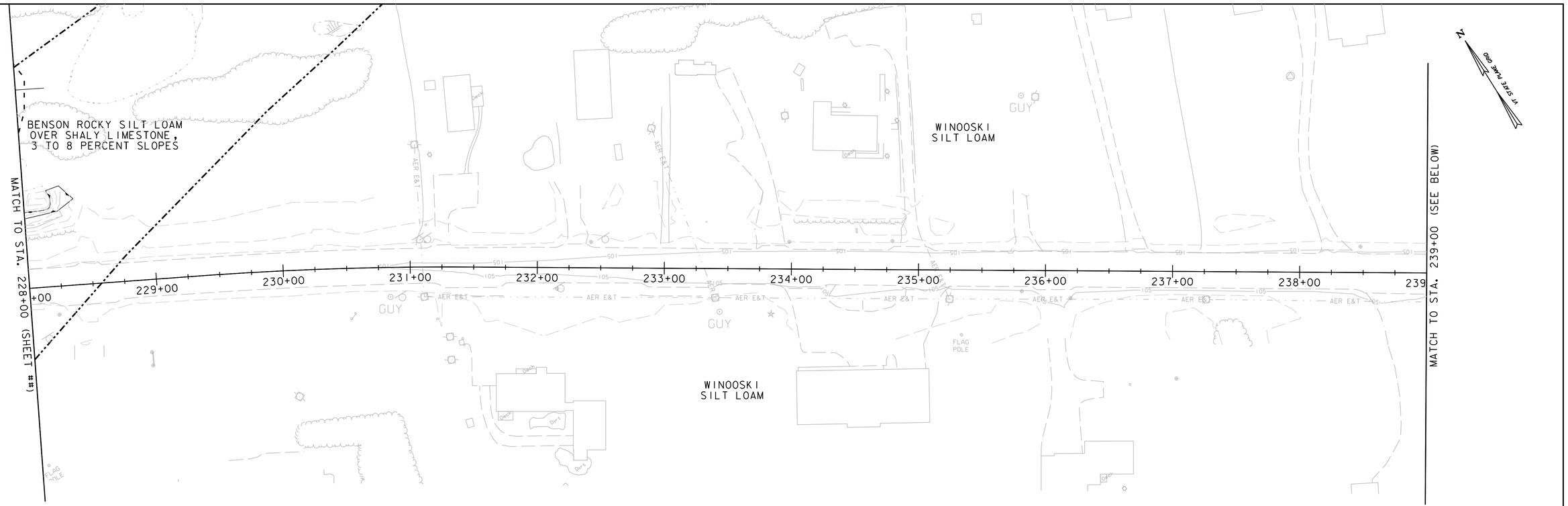
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SCALE IN FEET

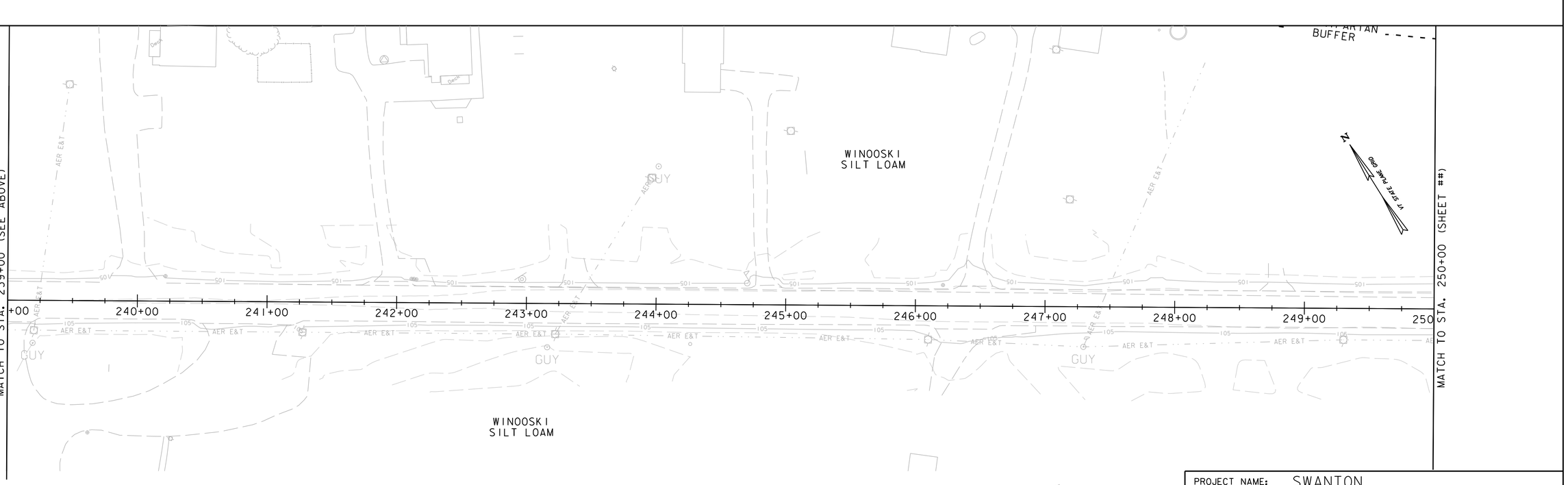
vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_ECSP_Ex.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
EPSC EXISTING CONDITIONS PLAN #9

PLOT DATE: 3/7/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 109 OF 305





EPSC EXISTING NOTES

1. SEE CONVENTIONAL SYMBOLOGY LEGEND FOR EPSC PLAN SYMBOLOGY.

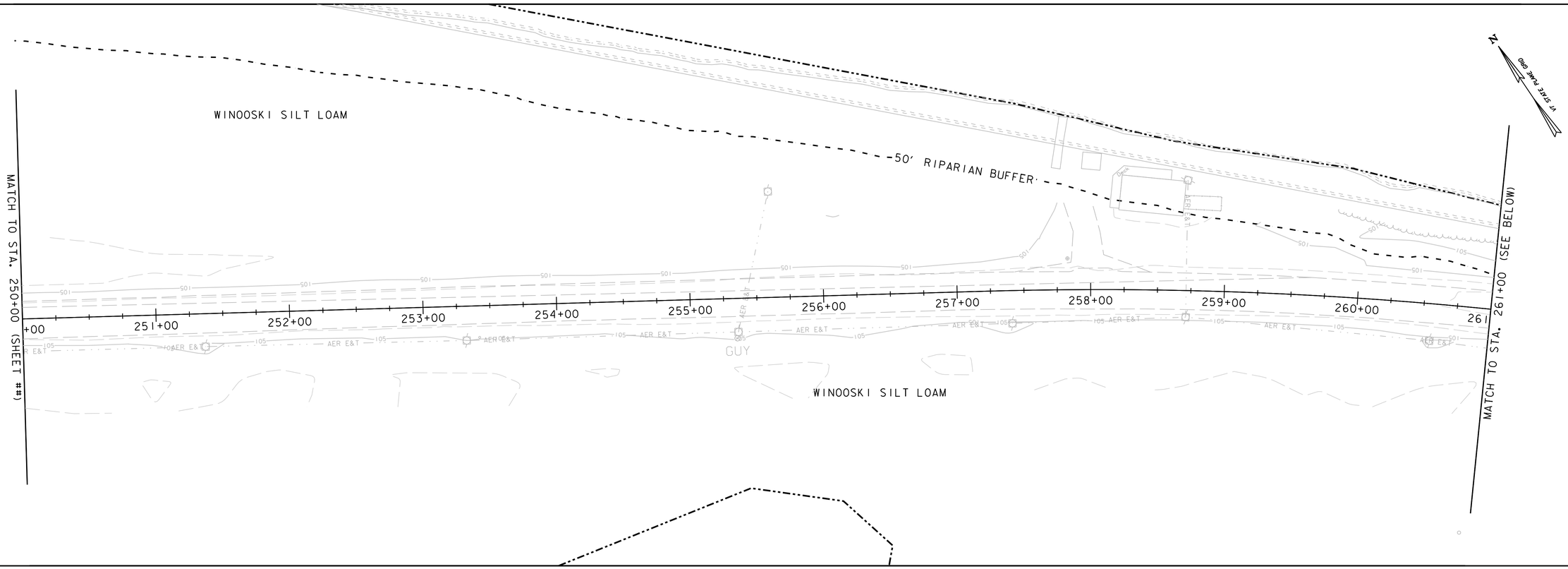
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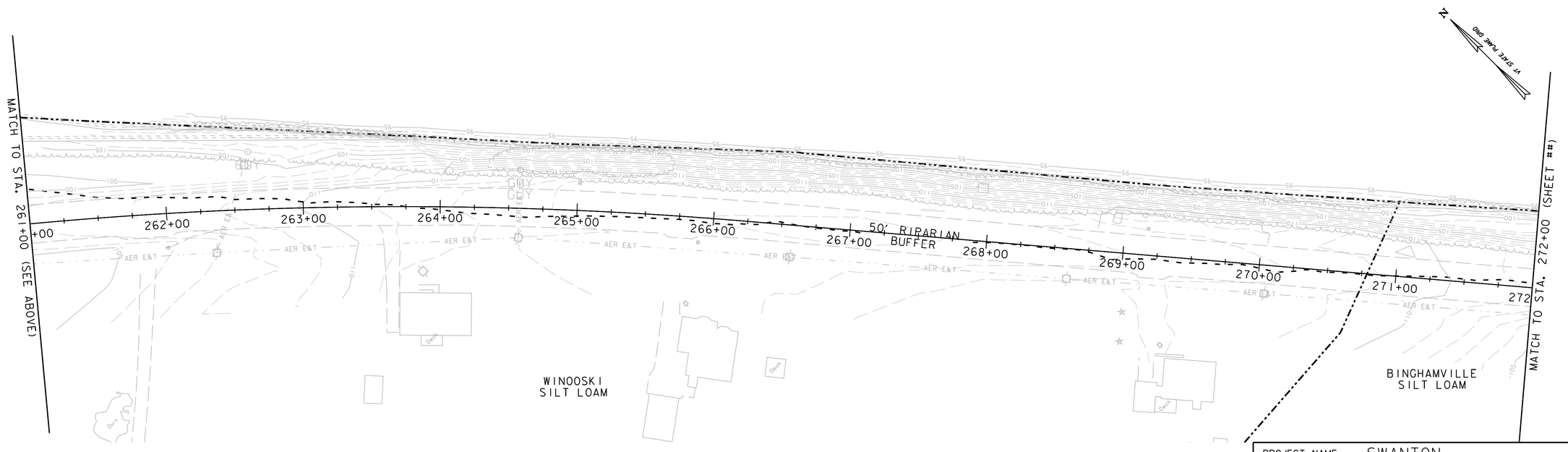
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PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_ECSP_Ex.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
EPSC EXISTING CONDITIONS PLAN #10

PLOT DATE: 3/7/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 110 OF 305





EPSC EXISTING NOTES

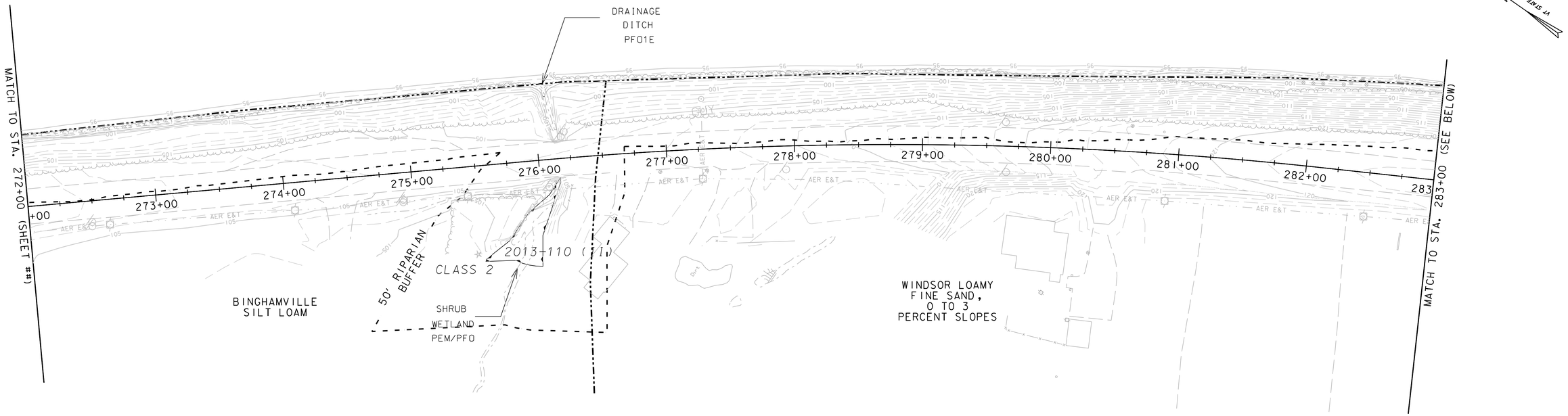
1. SEE CONVENTIONAL SYMBOLOGY LEGEND FOR EPSC PLAN SYMBOLOGY.

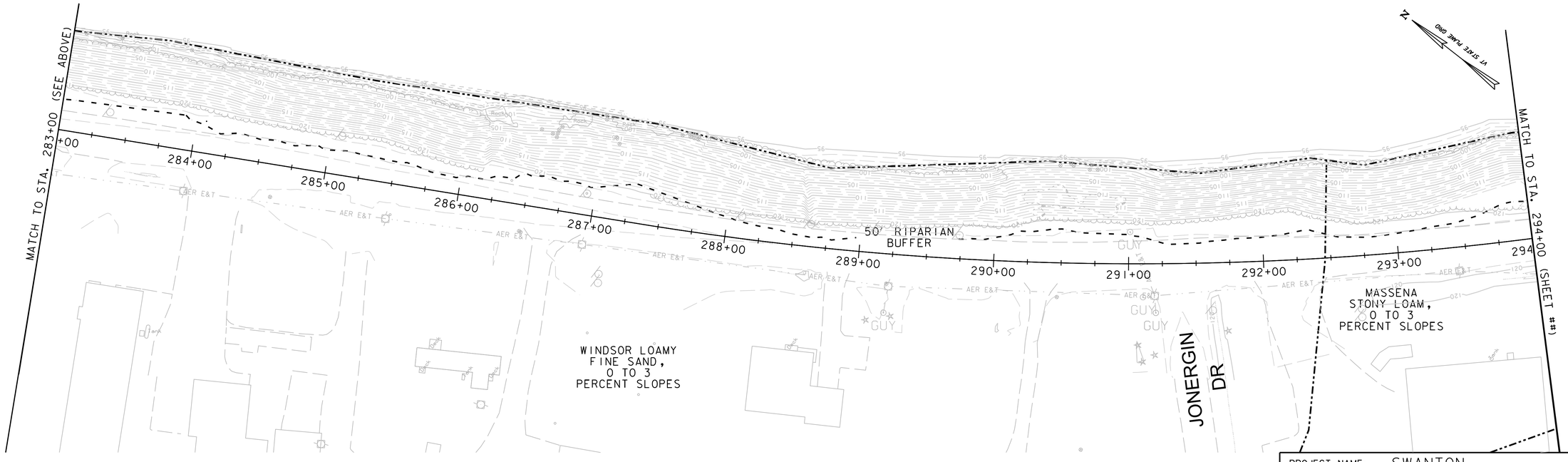
0 40 80
SCALE IN FEET

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_ECSP_Ex.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
EPSC EXISTING CONDITIONS PLAN #II

PLOT DATE: 3/7/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET III OF 305





EPSC EXISTING NOTES

1. SEE CONVENTIONAL SYMBOLOGY LEGEND FOR EPSC PLAN SYMBOLOGY.

0 40 80
SCALE IN FEET

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_ECSP_Ex.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
EPSC EXISTING CONDITIONS PLAN #12

PLOT DATE: 3/7/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 112 OF 305

MATCH TO STA. 294+00 (SHEET ##)

DRAINAGE DITCH
PEM/PFO1

FORESTED
DRAINAGE
SWALE
PEM/PFO1B

50' RIPARIAN BUFFER

294+00
295+00
296+00
297+00
298+00
299+00
300+00
301+00
302+00
303+00
304+00
305

MATCH TO STA. 305+00 (SEE BELOW)

FORESTED
DRAINAGE
SWALE
PFO1B

MASSENA
STONY LOAM,
0 TO 3
PERCENT SLOPES

MATCH TO STA. 305+00 (SEE ABOVE)

DRAINAGE DITCH
PEM/PFO

50' RIPARIAN BUFFER

306+00
307+00
308+00
309+00
310+00
311+00
312+00
313+00
314+00
315+00
316

3'x3' concrete box culvert

12" cpep

DRAINAGE
DITCH
PEM1

MASSENA
STONY LOAM,
0 TO 3
PERCENT SLOPES

BABBIE BLVD TH 61

50' RIPARIAN BUFFER

2013-109 (II)

CLASS 2

EMERGENT MARSH/ SHRUB
WETLAND PEM1/SSIF

WINDSOR LOAMY
FINE SAND,
0 TO 3
PERCENT SLOPES

Cemetary

MASSENA
STONY LOAM,
3 TO 8
PERCENT SLOPES

EMERGENT
WETLAND

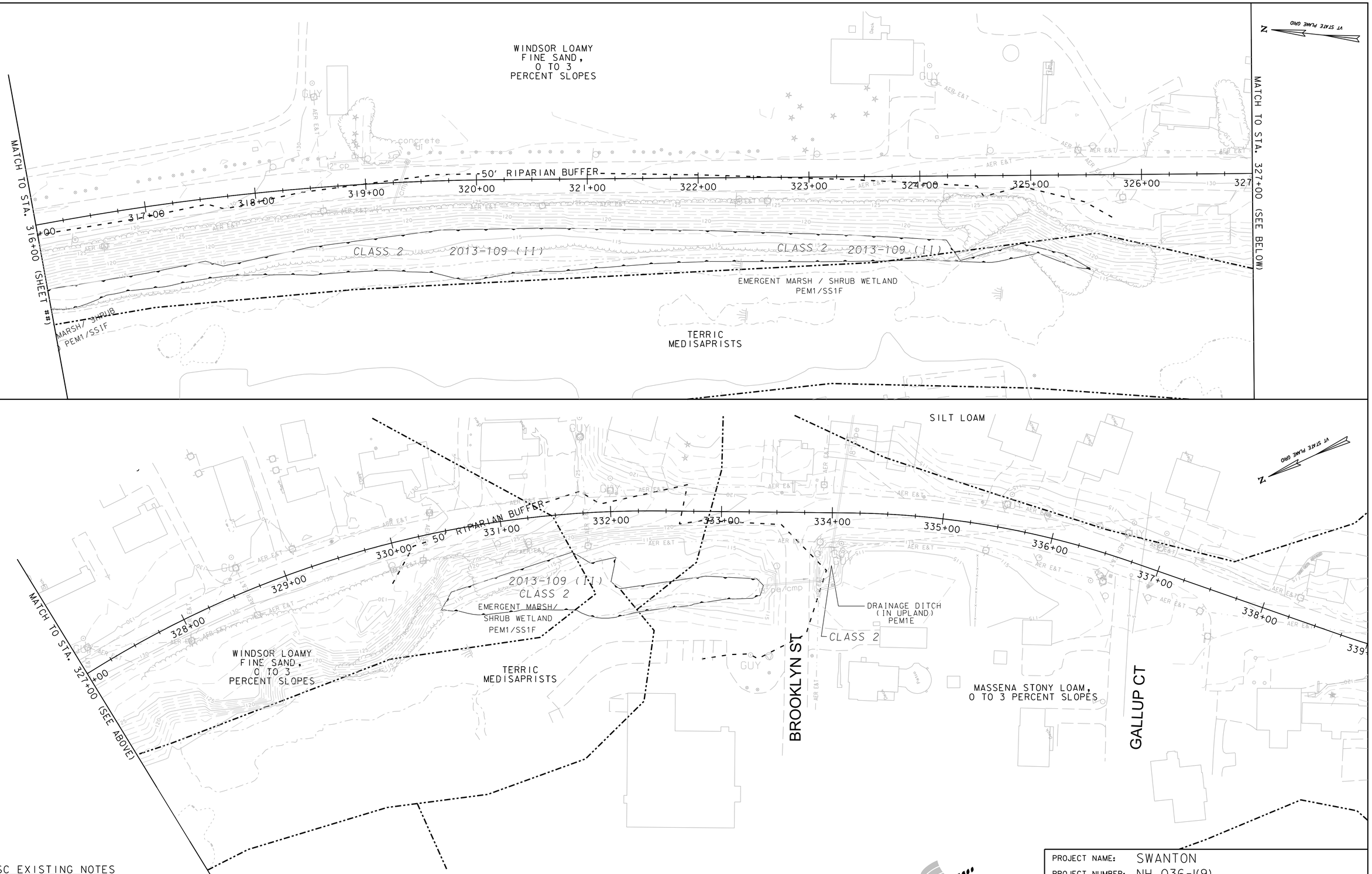
MATCH TO STA. 316+00 (SHEET ##)

EPSC EXISTING NOTES

1. SEE CONVENTIONAL SYMBOLOGY LEGEND FOR EPSC PLAN SYMBOLOGY.

0 40 80
SCALE IN FEET

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032bdr_ECSP_Ex.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
EPSC EXISTING CONDITIONS PLAN #13	SHEET 113 OF 305

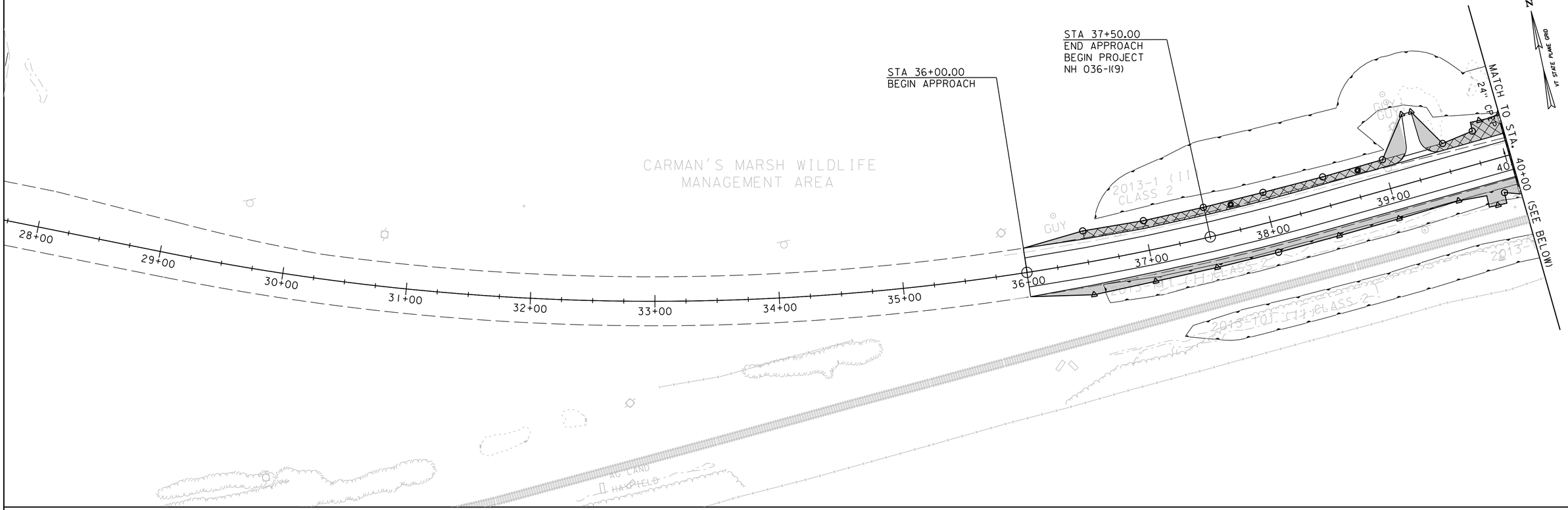


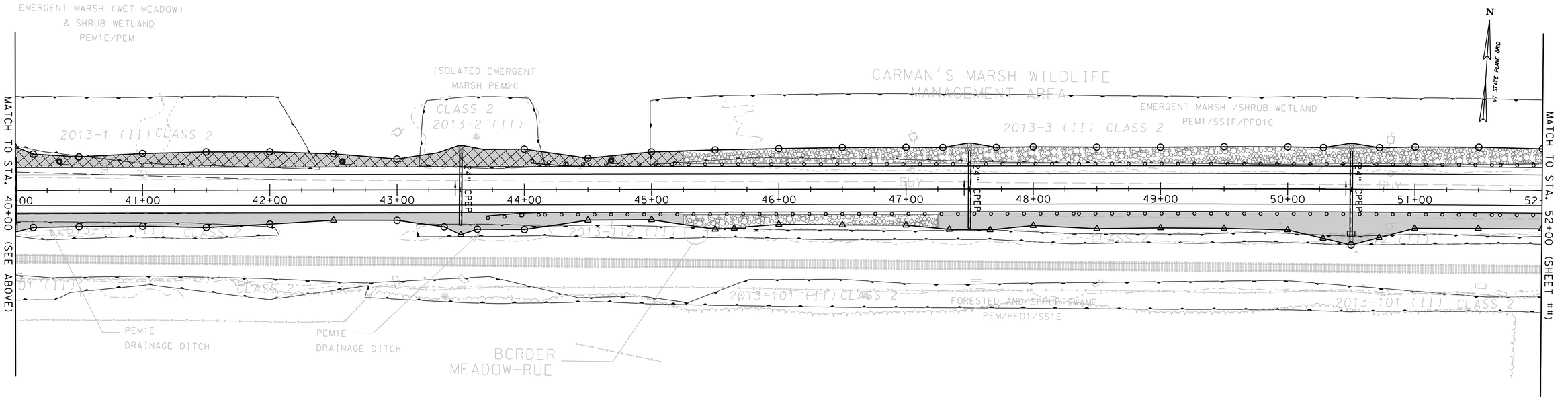
EPSC EXISTING NOTES

1. SEE CONVENTIONAL SYMBOLOGY LEGEND FOR EPSC PLAN SYMBOLOGY.

0 40 80
SCALE IN FEET

PROJECT NAME: SWANTON	
PROJECT NUMBER: NH 036-1(9)	
FILE NAME: z96b032bdr_ECSP_Ex.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
EPSC EXISTING CONDITIONS PLAN #14	SHEET 114 OF 305





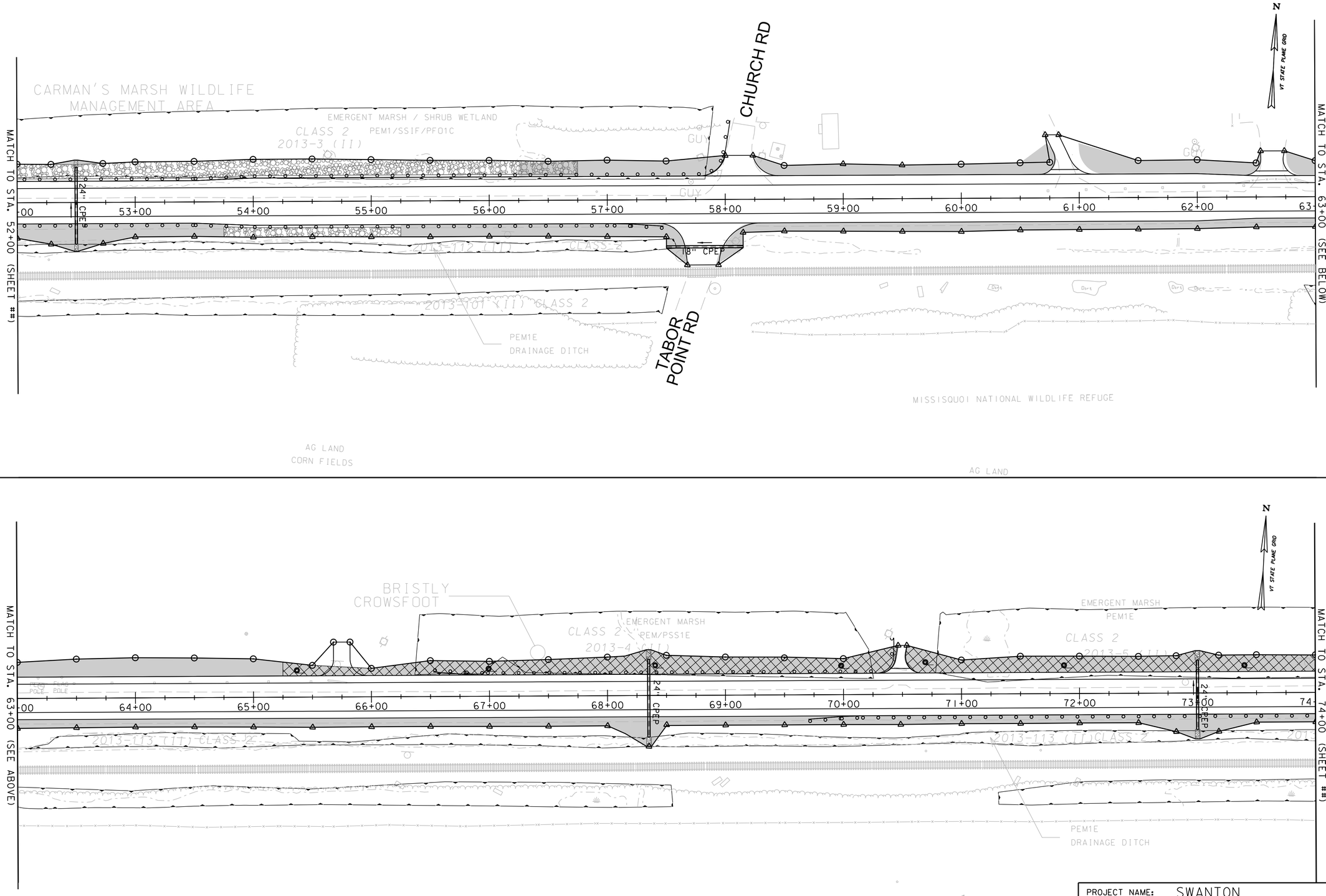
EPSC FINAL NOTES

1. SEE CONVENTIONAL SYMBOLOGY LEGEND FOR EPSC PLAN SYMBOLOGY.
2. EROSION MATTING SHOWN FOR FINAL SLOPES AFTER TEMPORARY WIDENING HAS BEEN REMOVED.

0 40 80
SCALE IN FEET

vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032bdr_ECSP_Final.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
EPSC FINAL CONDITIONS PLAN #1	SHEET 129 OF 305



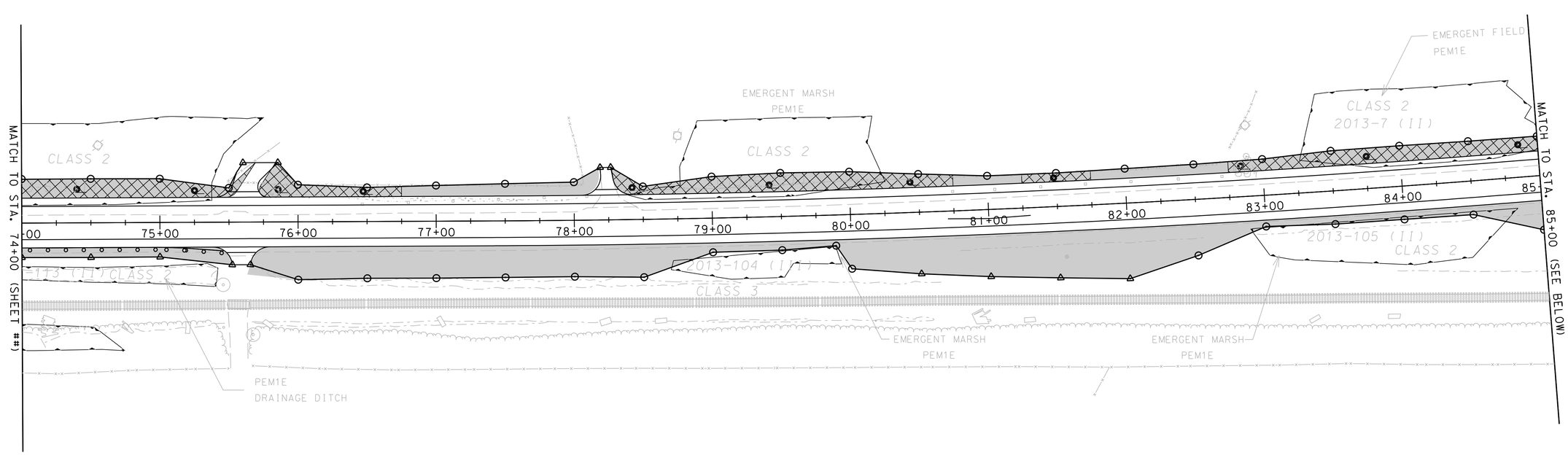
EPSC FINAL NOTES

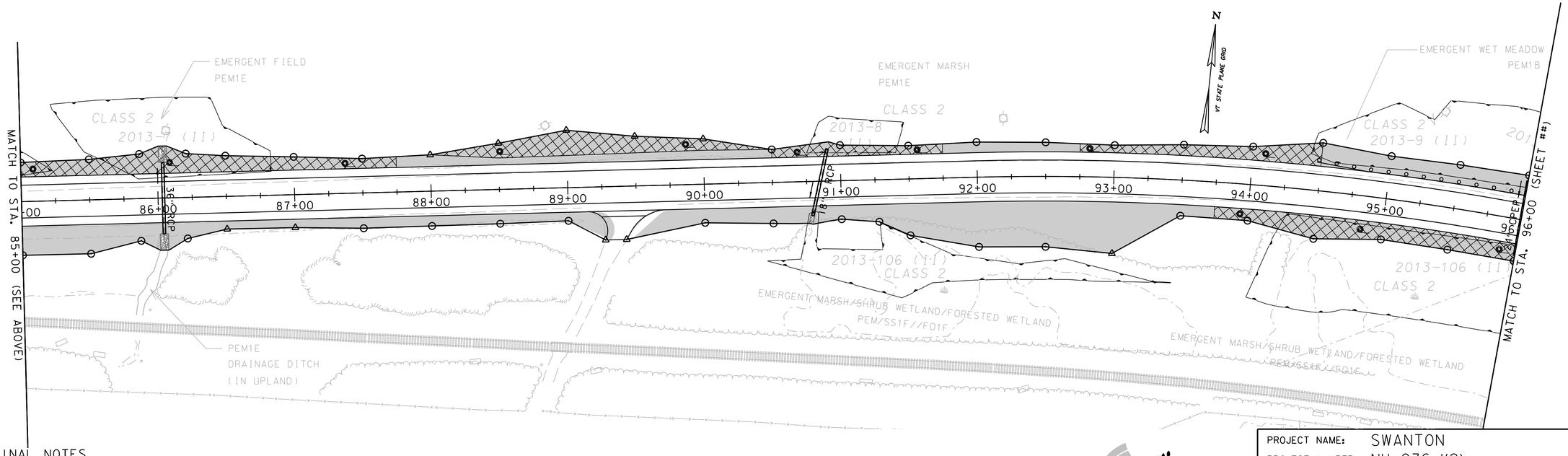
1. SEE CONVENTIONAL SYMBOLOGY LEGEND FOR EPSC PLAN SYMBOLOGY.
2. EROSION MATTING SHOWN FOR FINAL SLOPES AFTER TEMPORARY WIDENING HAS BEEN REMOVED.

0 40 80
SCALE IN FEET

vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032bdr_ECSP_Final.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
EPSC FINAL CONDITIONS PLAN #2	SHEET 130 OF 305





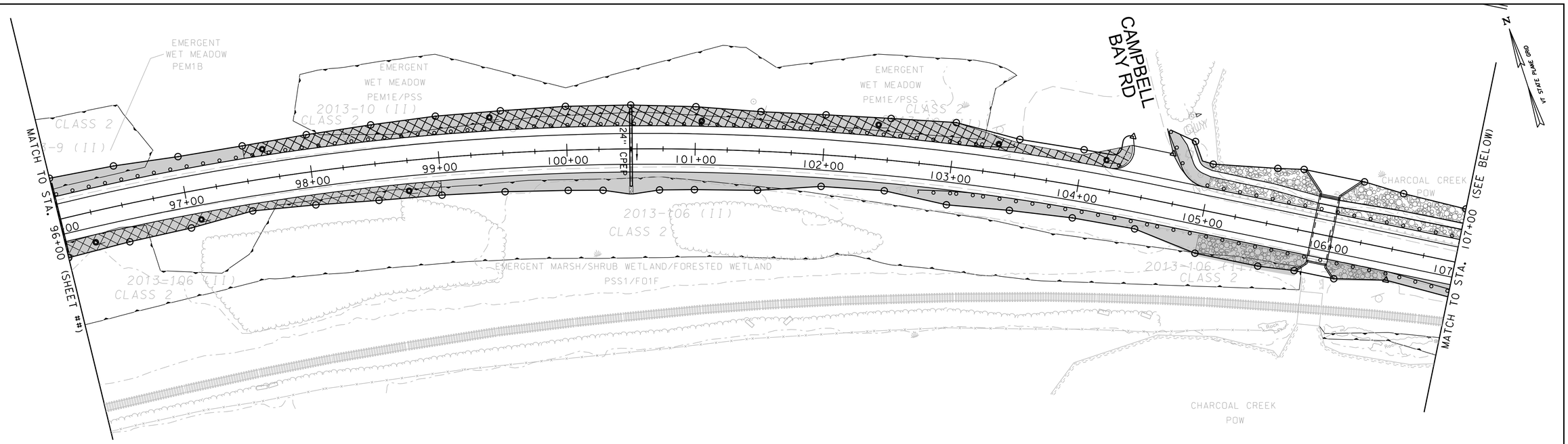
EPSC FINAL NOTES

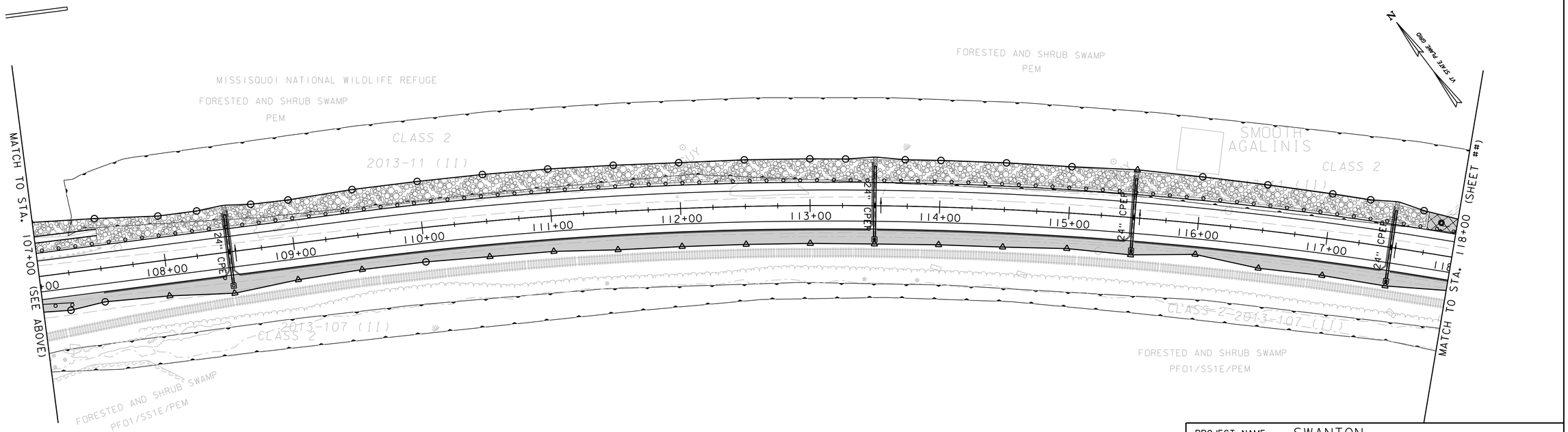
1. SEE CONVENTIONAL SYMBOLOGY LEGEND FOR EPSC PLAN SYMBOLOGY.
2. EROSION MATTING SHOWN FOR FINAL SLOPES AFTER TEMPORARY WIDENING HAS BEEN REMOVED.

0 40 80
SCALE IN FEET

vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032bdr_ECSP_Final.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
EPSC FINAL CONDITIONS PLAN #3	SHEET 131 OF 305





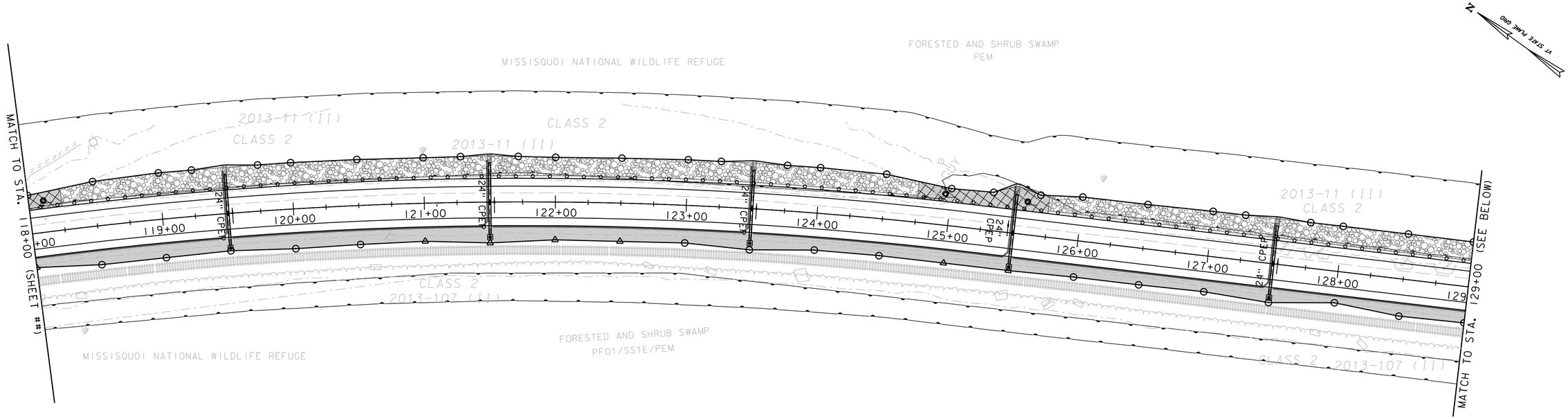
EPSC FINAL NOTES

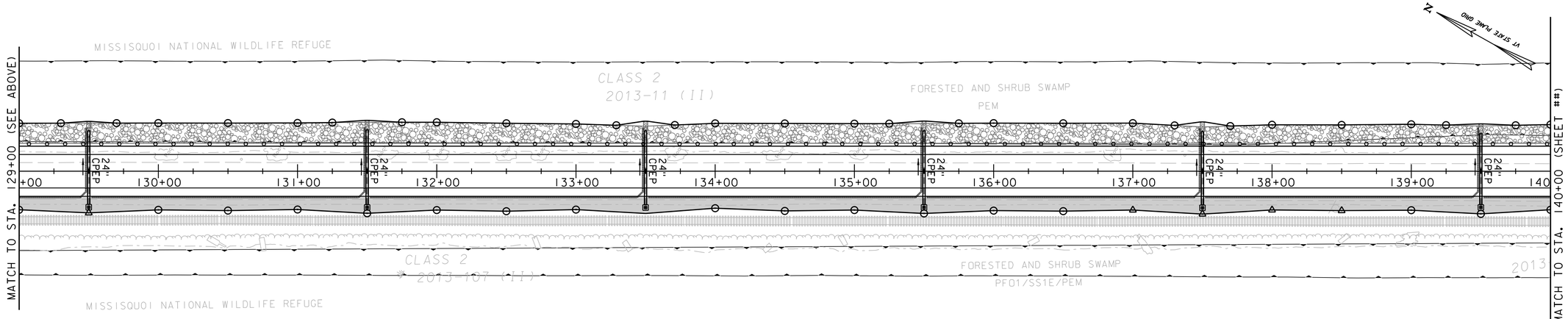
1. SEE CONVENTIONAL SYMBOLOGY LEGEND FOR EPSC PLAN SYMBOLOGY.
2. EROSION MATTING SHOWN FOR FINAL SLOPES AFTER TEMPORARY WIDENING HAS BEEN REMOVED.

0 40 80
SCALE IN FEET

vhb

PROJECT NAME: SWANTON	
PROJECT NUMBER: NH 036-1(9)	
FILE NAME: z96b032bdr_ECSP_Final.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
EPSC FINAL CONDITIONS PLAN #4	SHEET 132 OF 305





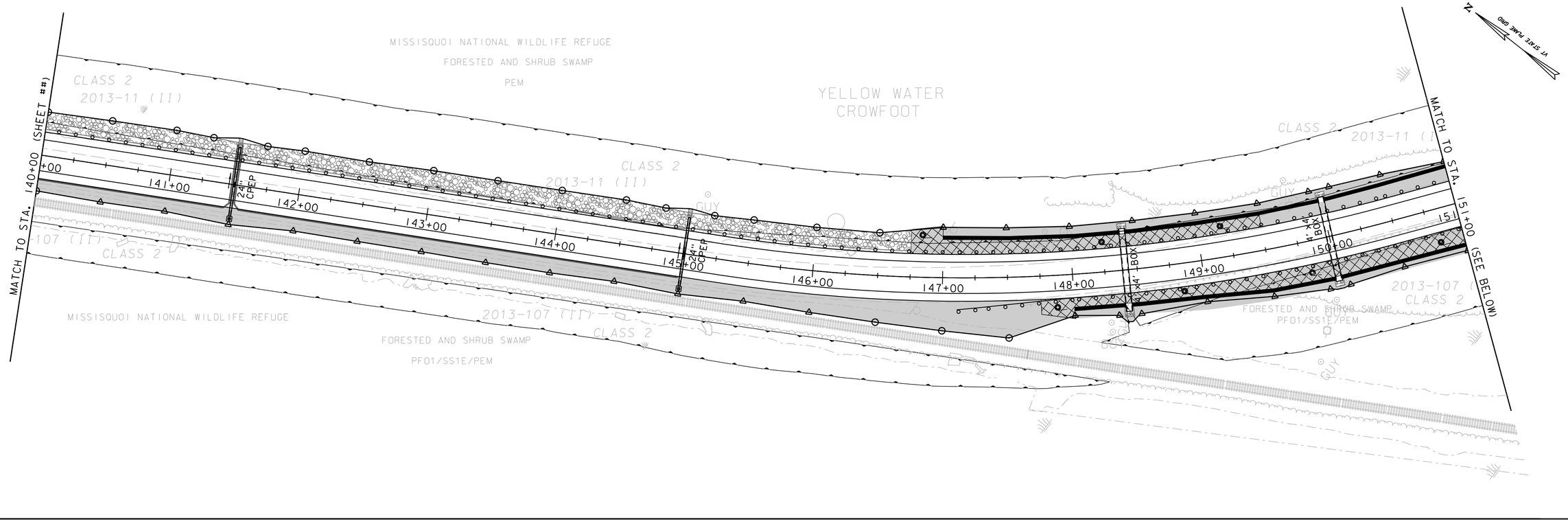
EPSC FINAL NOTES

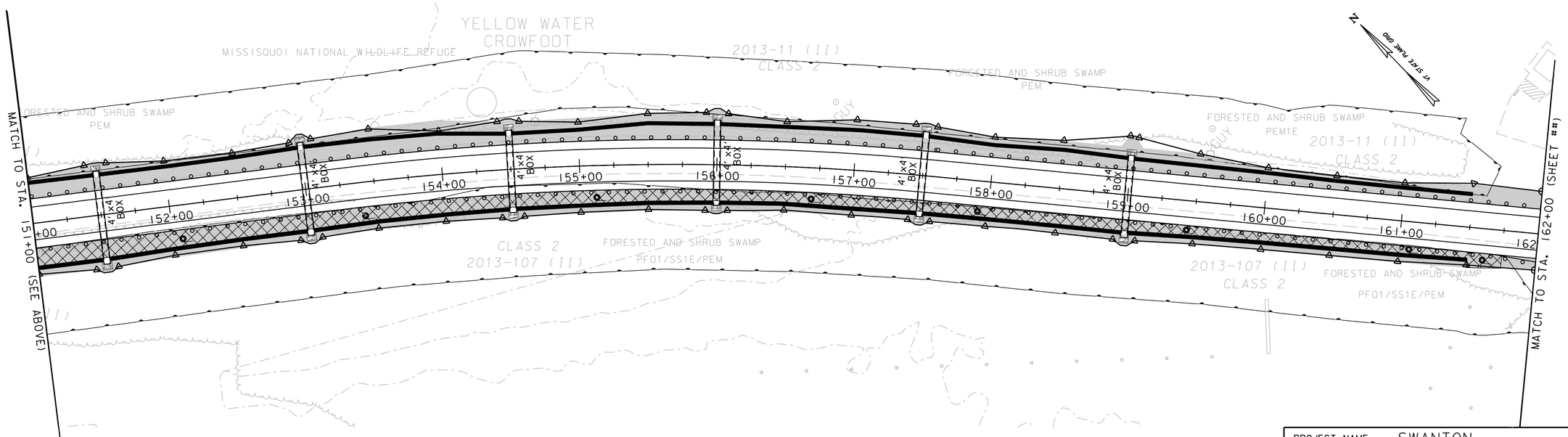
1. SEE CONVENTIONAL SYMBOLOGY LEGEND FOR EPSC PLAN SYMBOLOGY.
2. EROSION MATTING SHOWN FOR FINAL SLOPES AFTER TEMPORARY WIDENING HAS BEEN REMOVED.

0 40 80
SCALE IN FEET

vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032bdr_ECSP_Final.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
EPSC FINAL CONDITIONS PLAN #5	SHEET 133 OF 305





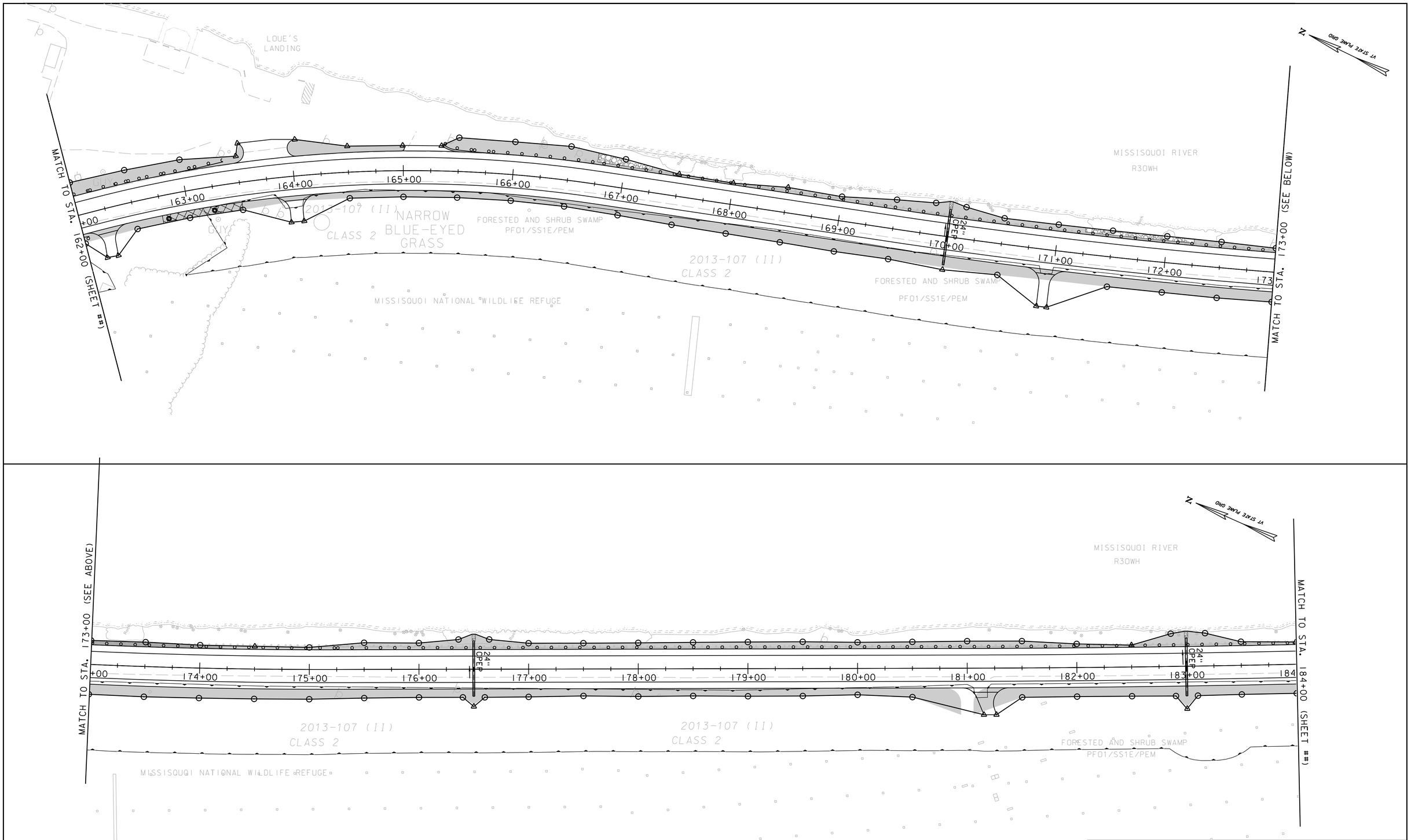
EPSC FINAL NOTES

1. SEE CONVENTIONAL SYMBOLOGY LEGEND FOR EPSC PLAN SYMBOLOGY.
2. EROSION MATTING SHOWN FOR FINAL SLOPES AFTER TEMPORARY WIDENING HAS BEEN REMOVED.

0 40 80
SCALE IN FEET

vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032bdr_ECSP_Final.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
EPSC FINAL CONDITIONS PLAN #6	SHEET 134 OF 305

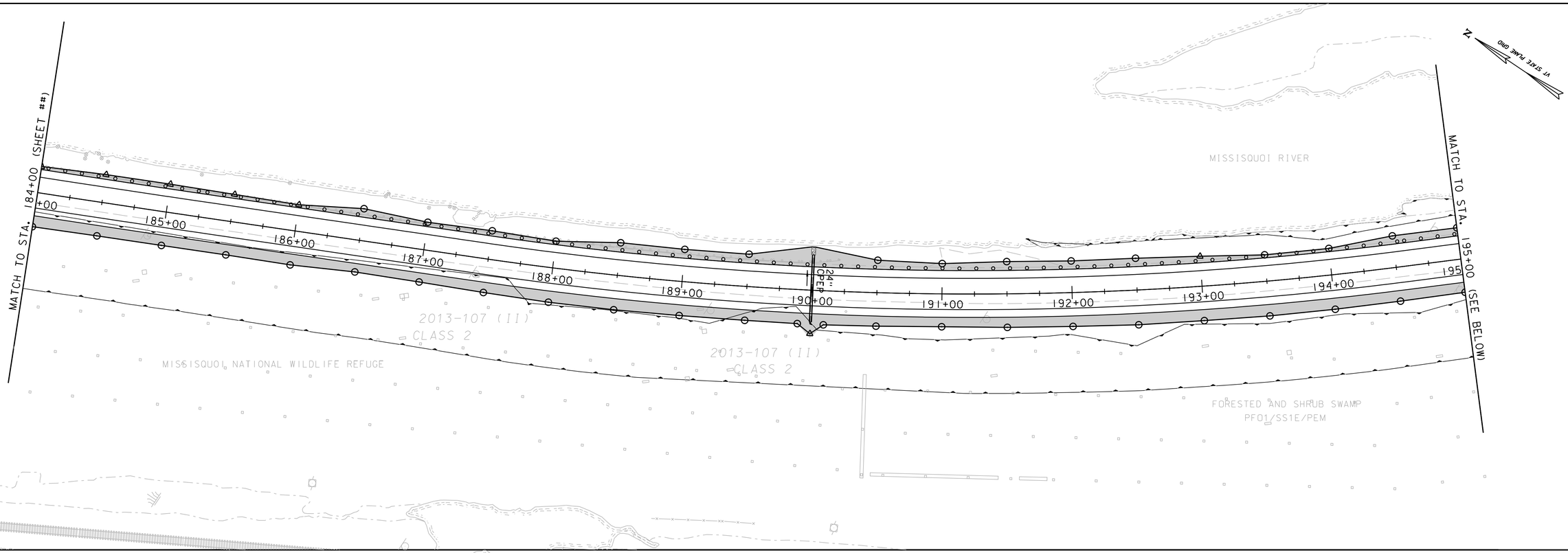


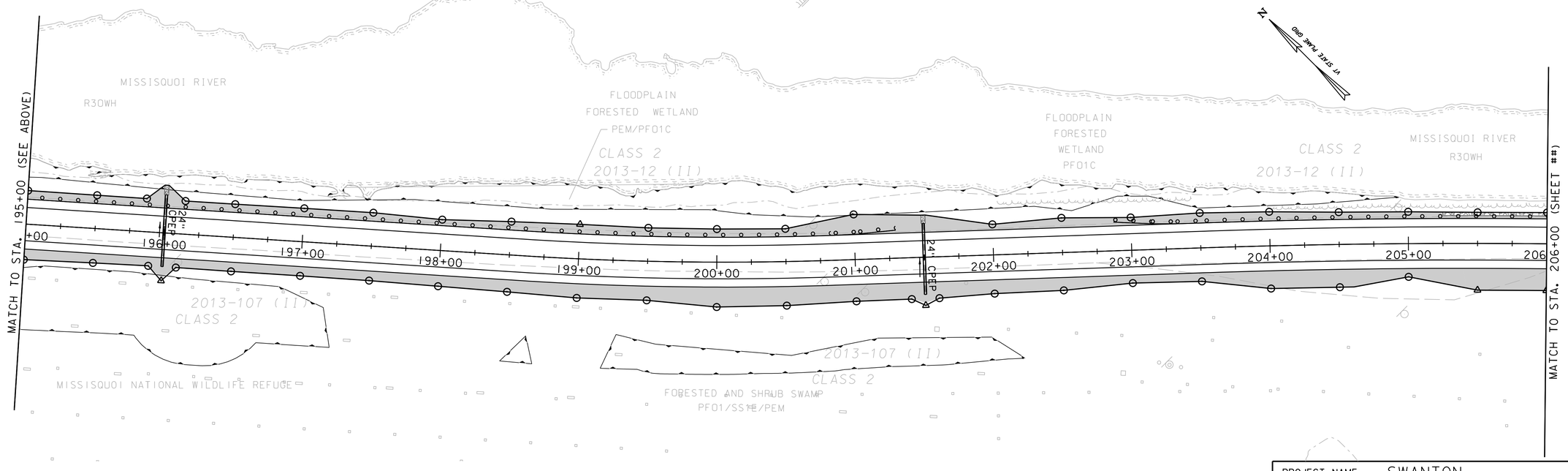
EPSC FINAL NOTES

1. SEE CONVENTIONAL SYMBOLOGY LEGEND FOR EPSC PLAN SYMBOLOGY.
2. EROSION MATTING SHOWN FOR FINAL SLOPES AFTER TEMPORARY WIDENING HAS BEEN REMOVED.

0 40 80
SCALE IN FEET

PROJECT NAME: SWANTON	
PROJECT NUMBER: NH 036-1(9)	
FILE NAME: z96b032bdr_ECSP_Final.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
EPSC FINAL CONDITIONS PLAN #7	SHEET 135 OF 305





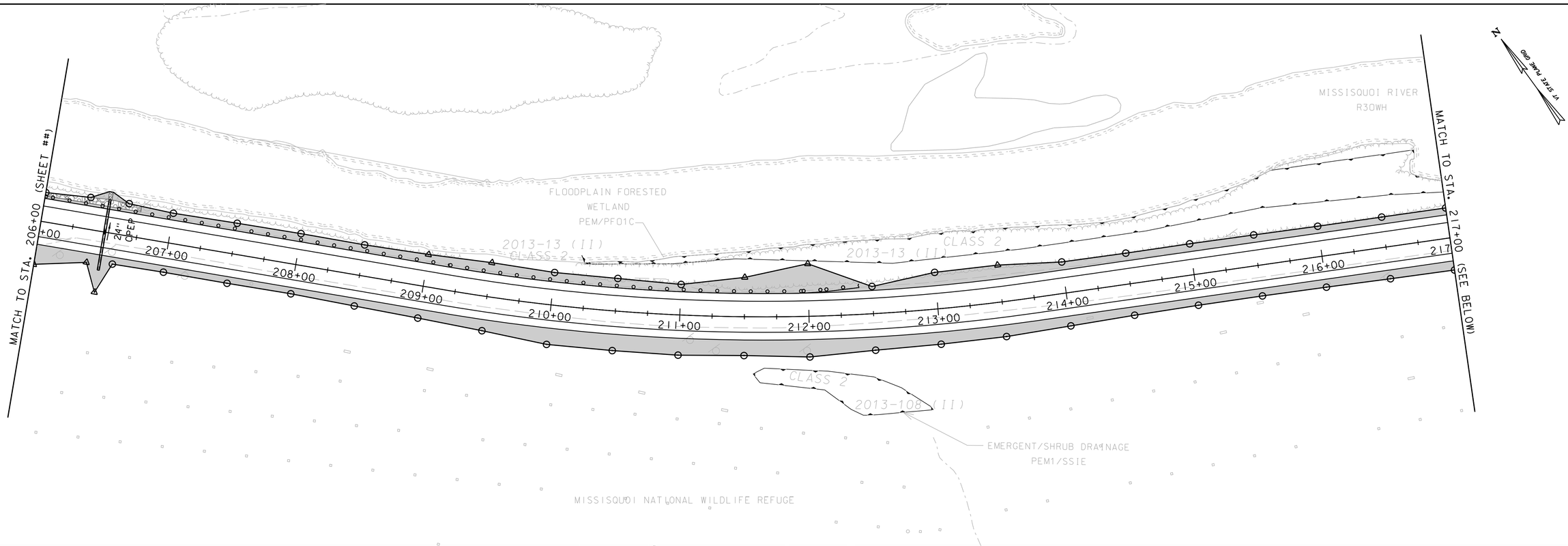
EPSC FINAL NOTES

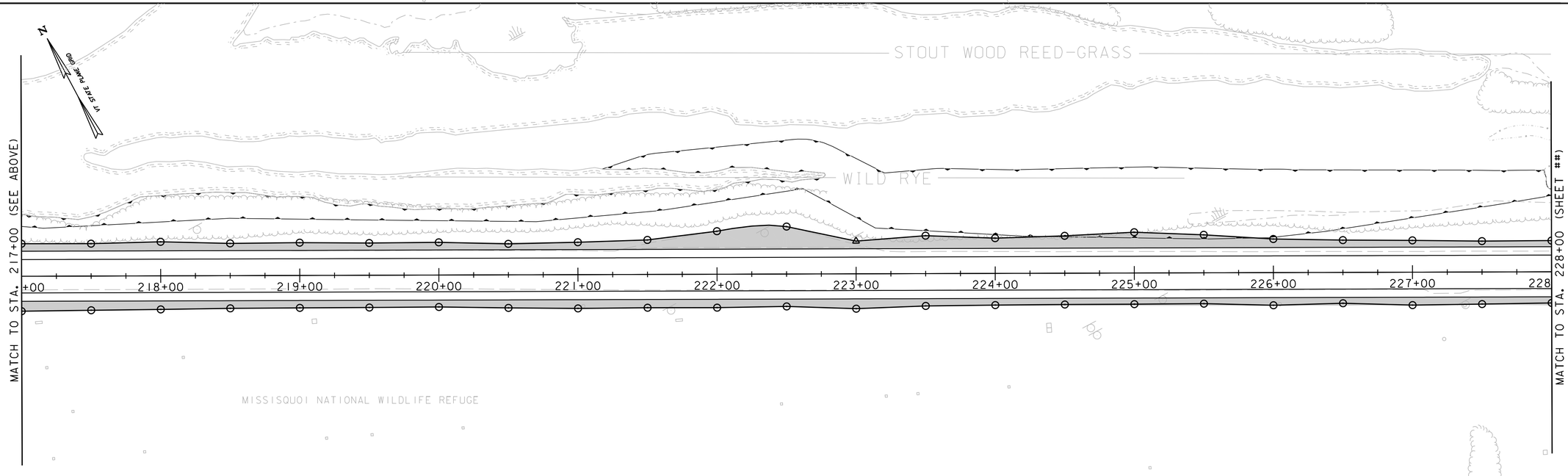
1. SEE CONVENTIONAL SYMBOLOGY LEGEND FOR EPSC PLAN SYMBOLOGY.
2. EROSION MATTING SHOWN FOR FINAL SLOPES AFTER TEMPORARY WIDENING HAS BEEN REMOVED.

0 40 80
SCALE IN FEET

vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032bdr_ECSP_Final.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
EPSC FINAL CONDITIONS PLAN #8	SHEET 136 OF 305





EPSC FINAL NOTES

1. SEE CONVENTIONAL SYMBOLOGY LEGEND FOR EPSC PLAN SYMBOLOGY.
2. EROSION MATTING SHOWN FOR FINAL SLOPES AFTER TEMPORARY WIDENING HAS BEEN REMOVED.

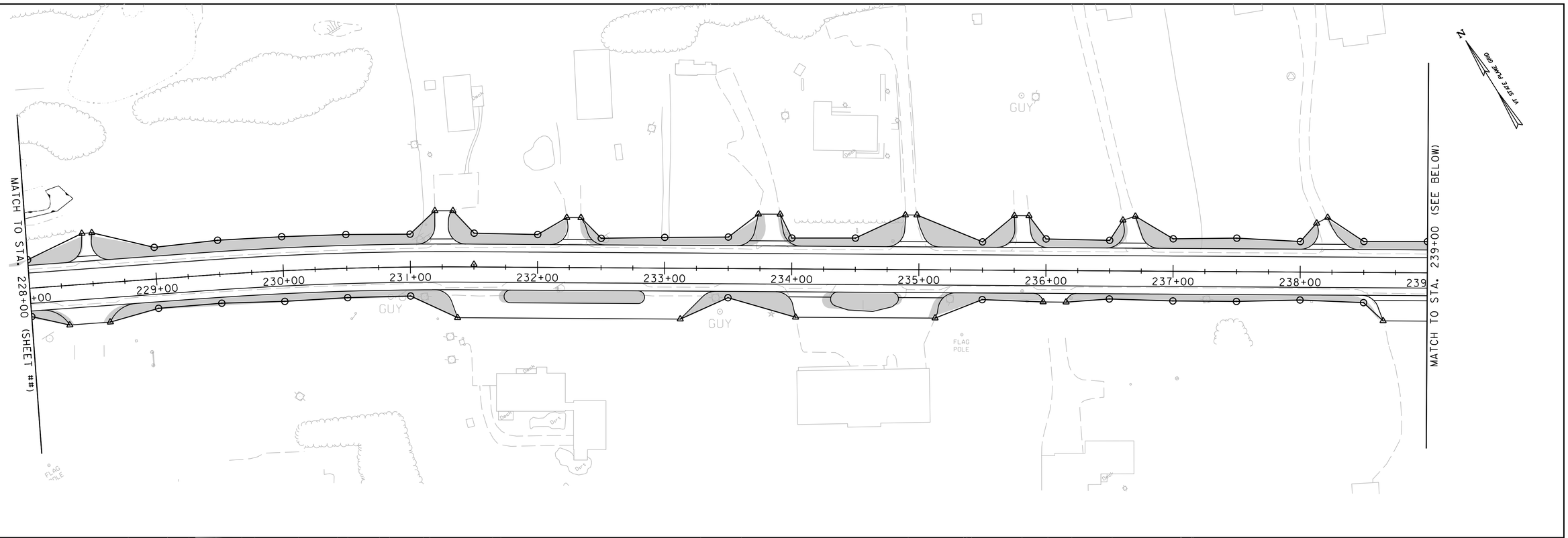
0 40 80
SCALE IN FEET

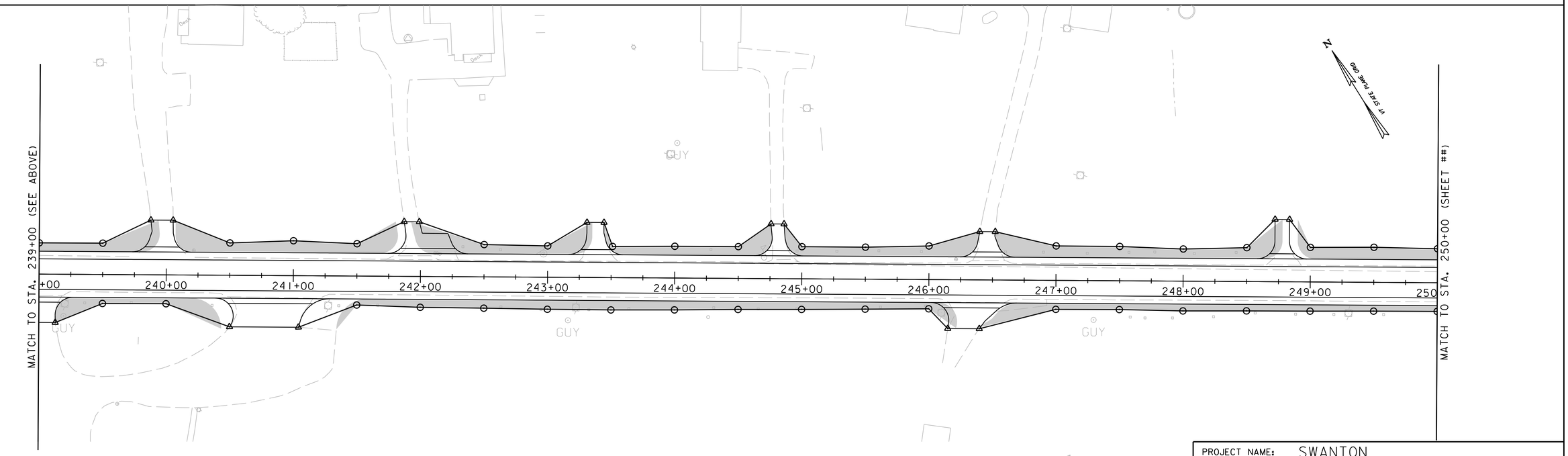
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PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_ECSP_Final.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
EPSC FINAL CONDITIONS PLAN #9

PLOT DATE: 3/7/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 137 OF 305





EPSC FINAL NOTES

1. SEE CONVENTIONAL SYMBOLOGY LEGEND FOR EPSC PLAN SYMBOLOGY.
2. EROSION MATTING SHOWN FOR FINAL SLOPES AFTER TEMPORARY WIDENING HAS BEEN REMOVED.

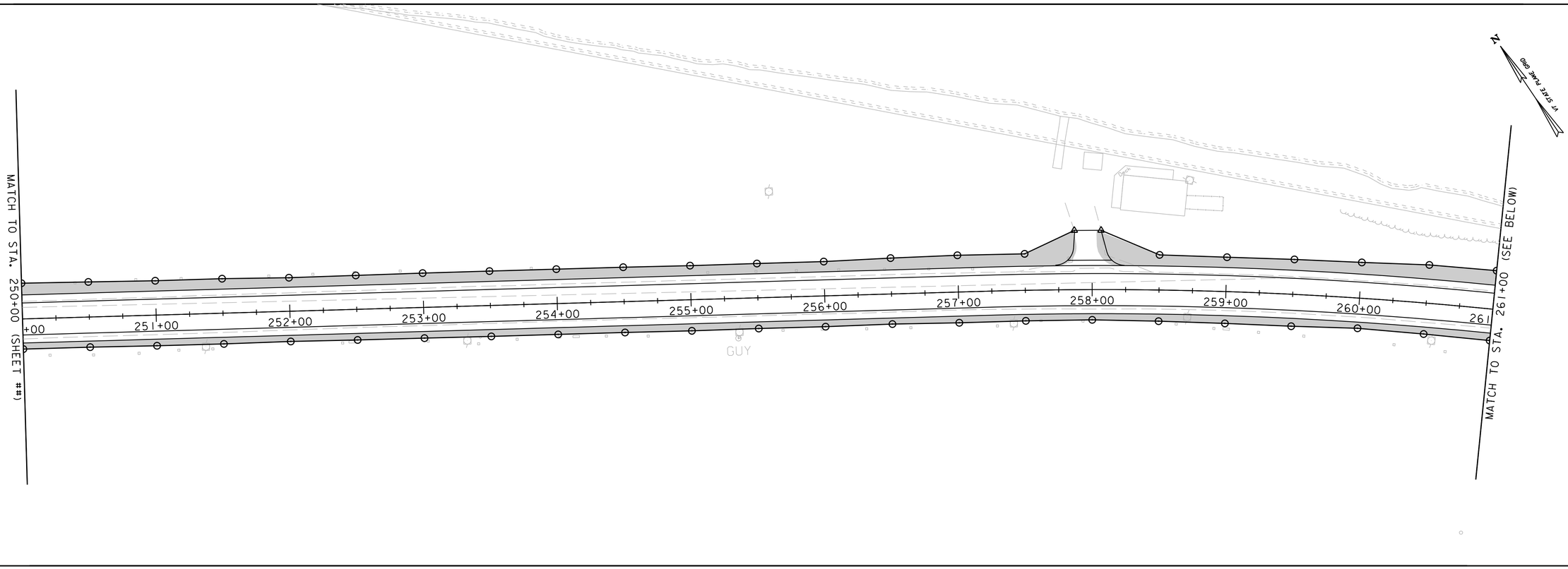
0 40 80
SCALE IN FEET

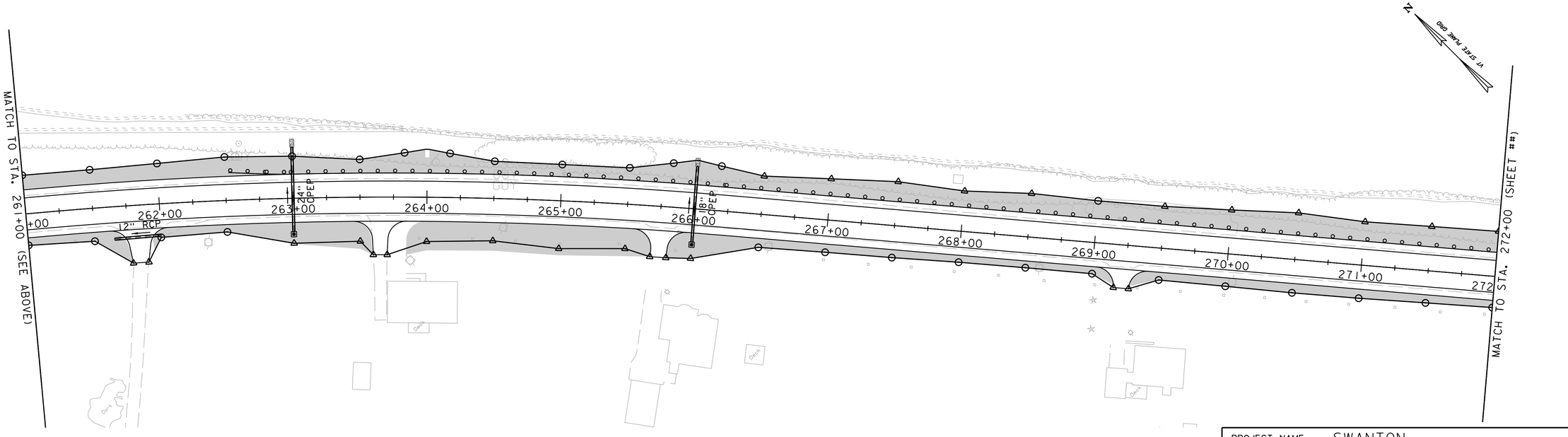
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PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_ECSP_Final.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
EPSC FINAL CONDITIONS PLAN #10

PLOT DATE: 3/7/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 138 OF 305





EPSC FINAL NOTES

1. SEE CONVENTIONAL SYMBOLOGY LEGEND FOR EPSC PLAN SYMBOLOGY.
2. EROSION MATTING SHOWN FOR FINAL SLOPES AFTER TEMPORARY WIDENING HAS BEEN REMOVED.

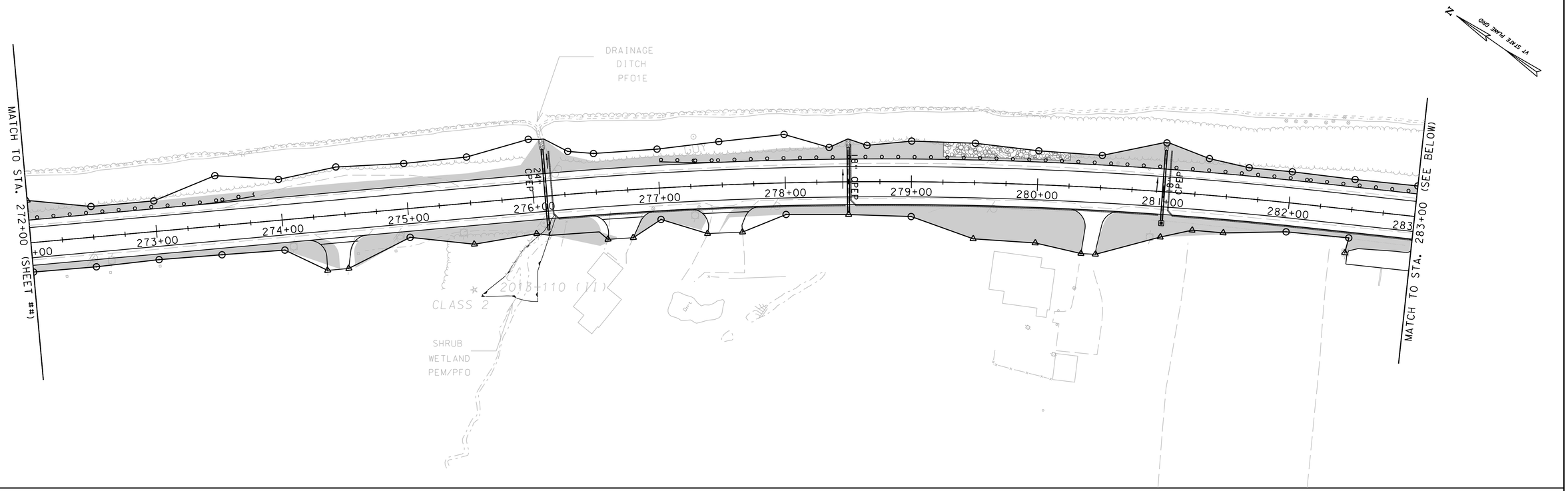
0 40 80
SCALE IN FEET

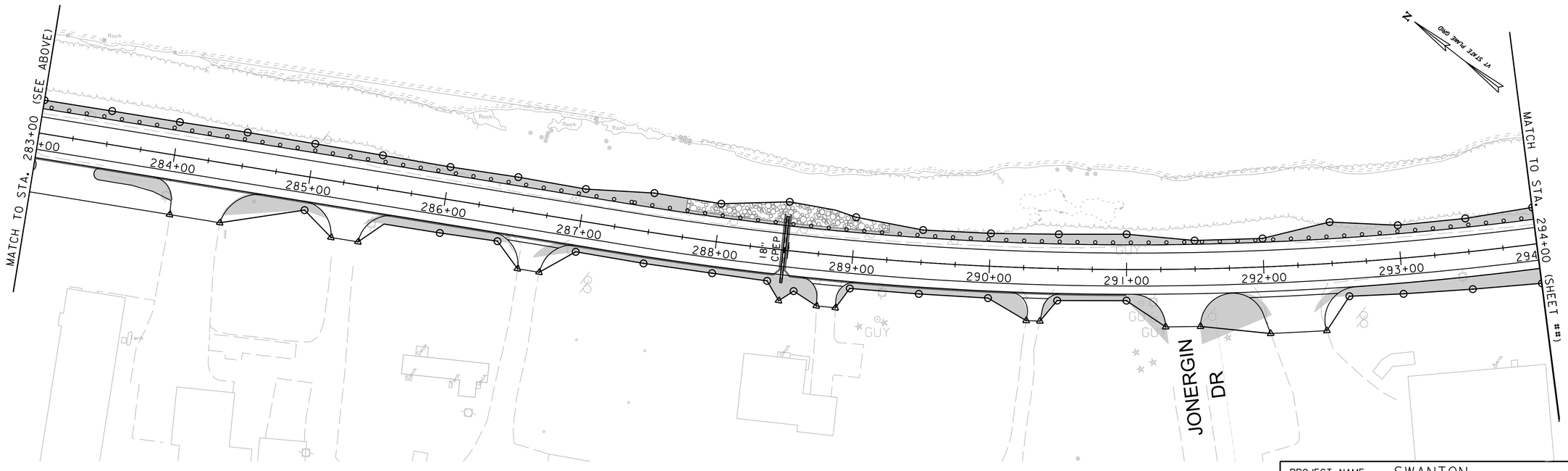
vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_ECSP_Final.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
EPSC FINAL CONDITIONS PLAN #11

PLOT DATE: 3/7/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 139 OF 305





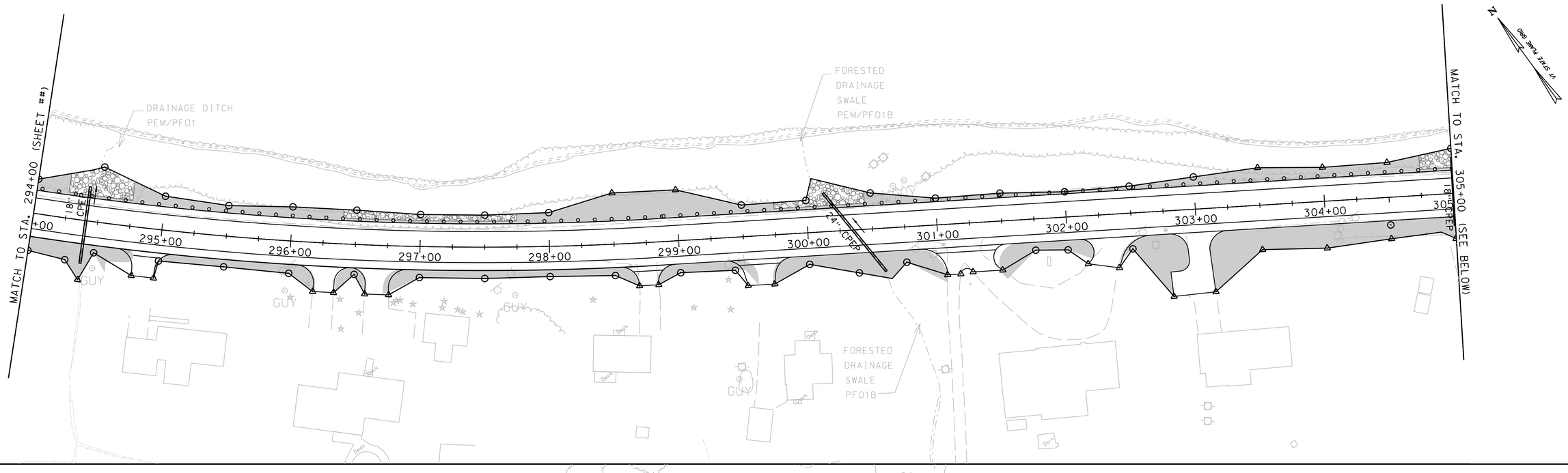
EPSC FINAL NOTES

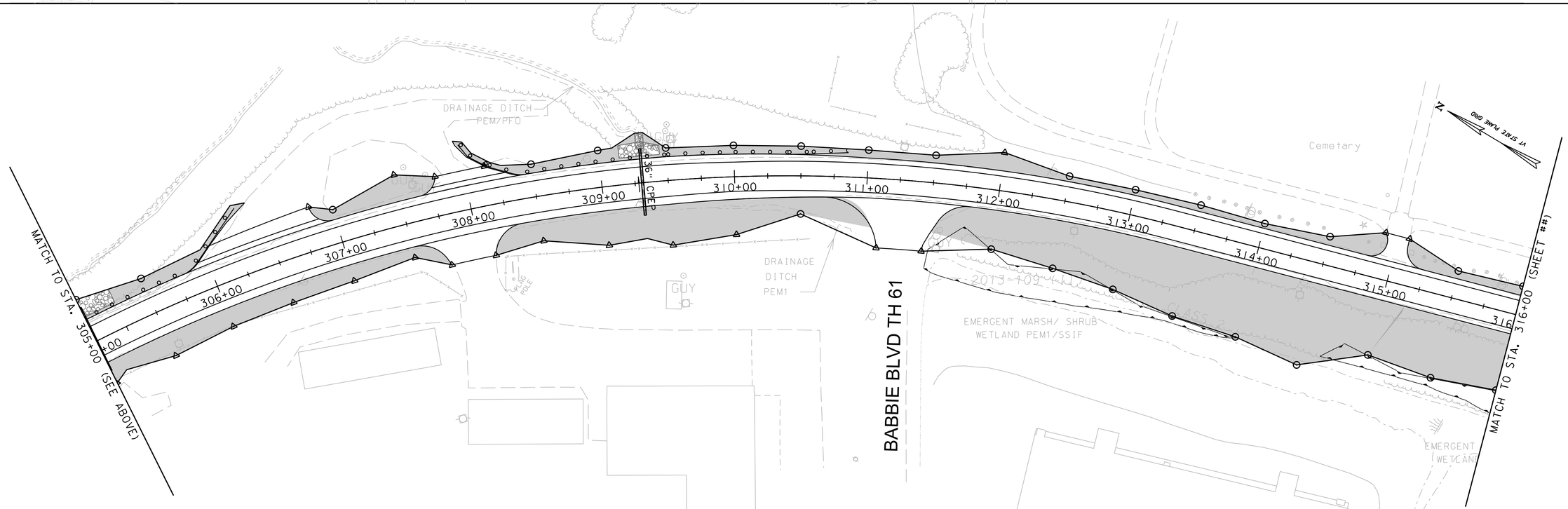
1. SEE CONVENTIONAL SYMBOLOGY LEGEND FOR EPSC PLAN SYMBOLOGY.
2. EROSION MATTING SHOWN FOR FINAL SLOPES AFTER TEMPORARY WIDENING HAS BEEN REMOVED.

0 40 80
SCALE IN FEET

vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032bdr_ECSP_Final.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
EPSC FINAL CONDITIONS PLAN #12	SHEET 140 OF 305





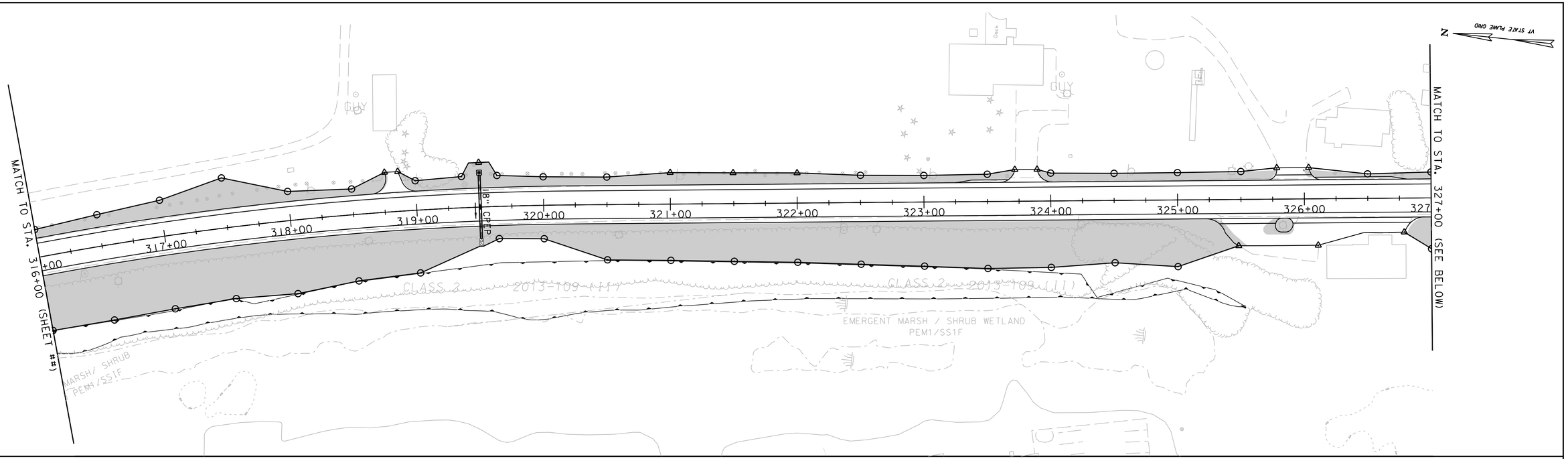
EPSC FINAL NOTES

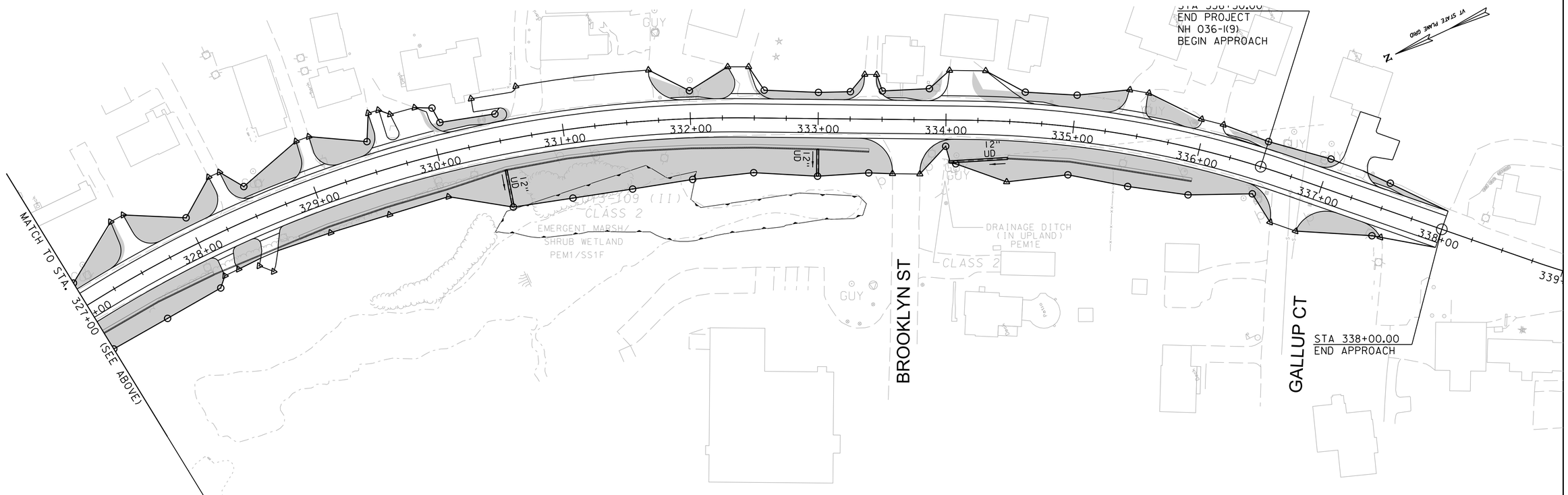
1. SEE CONVENTIONAL SYMBOLOGY LEGEND FOR EPSC PLAN SYMBOLOGY.
2. EROSION MATTING SHOWN FOR FINAL SLOPES AFTER TEMPORARY WIDENING HAS BEEN REMOVED.

0 40 80
SCALE IN FEET

vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032bdr_ECSP_Final.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
EPSC FINAL CONDITIONS PLAN #13	SHEET 141 OF 305





EPSC FINAL NOTES

1. SEE CONVENTIONAL SYMBOLOGY LEGEND FOR EPSC PLAN SYMBOLOGY.
2. EROSION MATTING SHOWN FOR FINAL SLOPES AFTER TEMPORARY WIDENING HAS BEEN REMOVED.

0 40 80
SCALE IN FEET

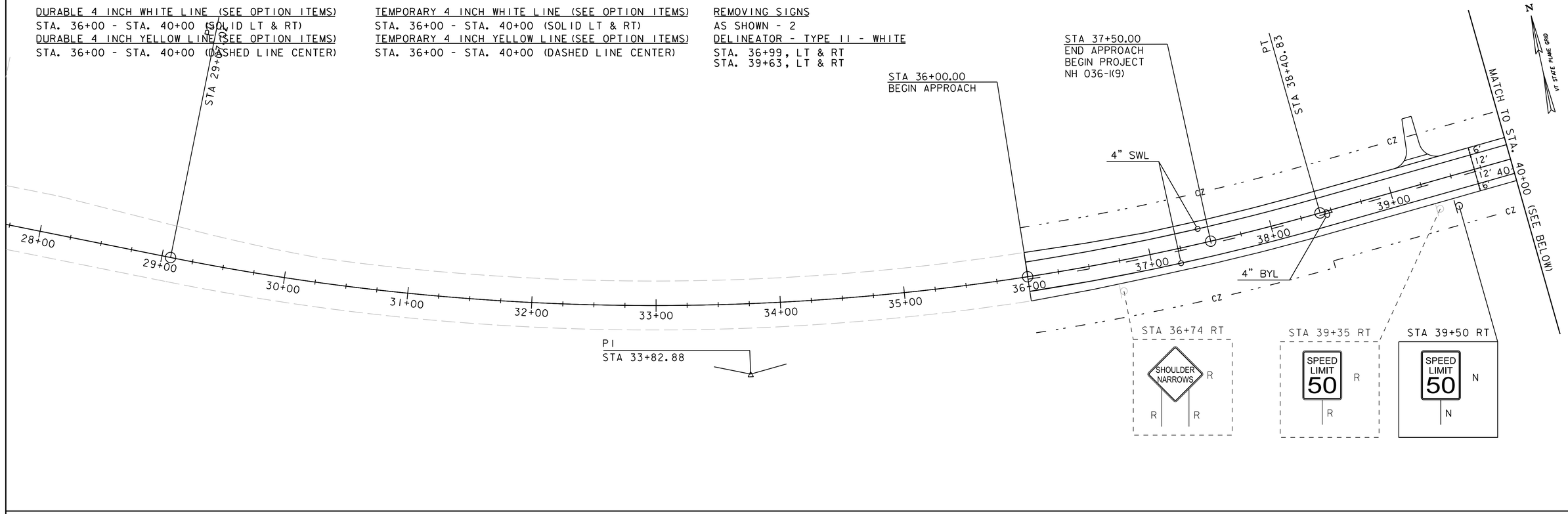
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PROJECT NAME: SWANTON	
PROJECT NUMBER: NH 036-1(9)	
FILE NAME: z96b032bdr_ECSP_Final.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
EPSC FINAL CONDITIONS PLAN #14	SHEET 142 OF 305

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 36+00 - STA. 40+00 (SOLID LT & RT)
DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 36+00 - STA. 40+00 (DASHED LINE CENTER)

TEMPORARY 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 36+00 - STA. 40+00 (SOLID LT & RT)
TEMPORARY 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 36+00 - STA. 40+00 (DASHED LINE CENTER)

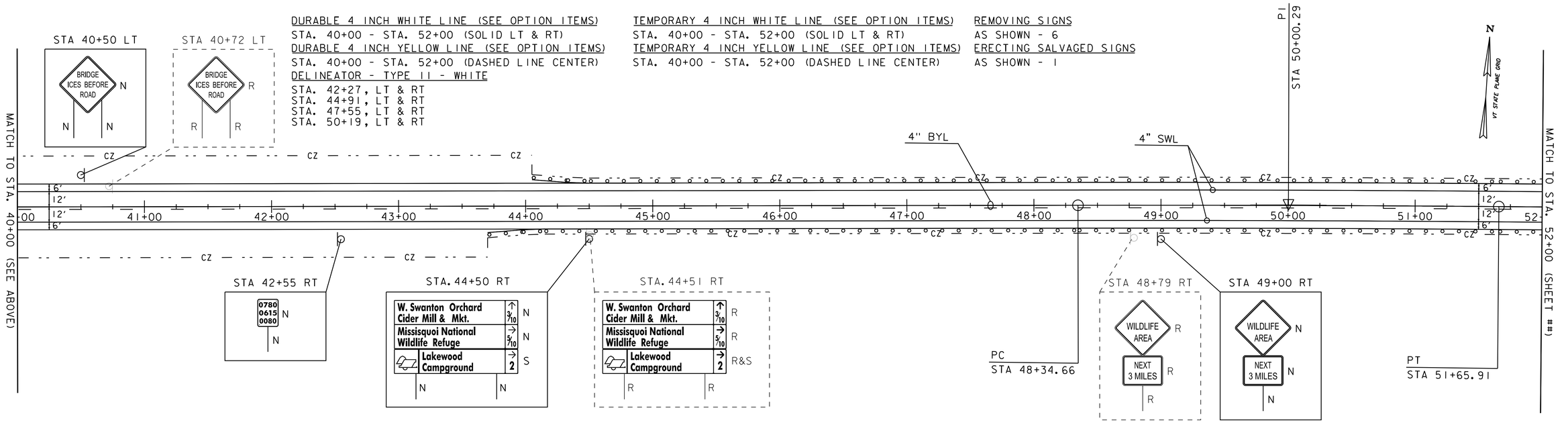
REMOVING SIGNS
AS SHOWN - 2
DELINEATOR - TYPE II - WHITE
STA. 36+99, LT & RT
STA. 39+63, LT & RT



DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 40+00 - STA. 52+00 (SOLID LT & RT)
DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 40+00 - STA. 52+00 (DASHED LINE CENTER)
DELINEATOR - TYPE II - WHITE
STA. 42+27, LT & RT
STA. 44+91, LT & RT
STA. 47+55, LT & RT
STA. 50+19, LT & RT

TEMPORARY 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 40+00 - STA. 52+00 (SOLID LT & RT)
TEMPORARY 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 40+00 - STA. 52+00 (DASHED LINE CENTER)

REMOVING SIGNS
AS SHOWN - 6
ERECTING SALVAGED SIGNS
AS SHOWN - 1



DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

PAVEMENT MARKING LEGEND
4" SYL = 4" SINGLE YELLOW LINE
4" SWL = 4" SINGLE WHITE LINE
4" DYL = 4" DOUBLE YELLOW LINE
4" BYL = 4" SINGLE DASHED YELLOW LINE

0 40 80
SCALE IN FEET

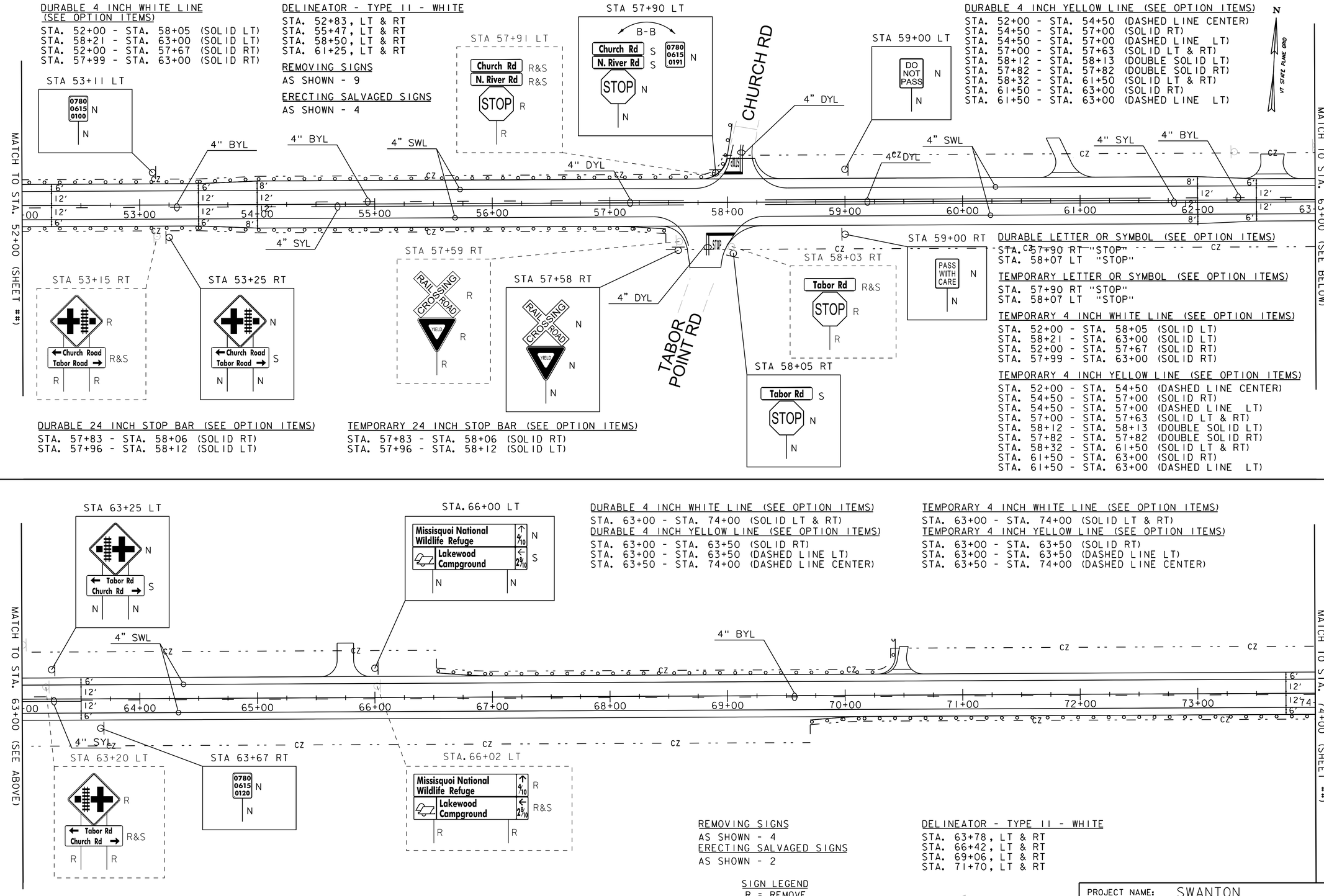
SIGN LEGEND
R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
R&S = REMOVE AND SALVAGE
B-B = BACK TO BACK
EXISTING = ----------
NEW = ———

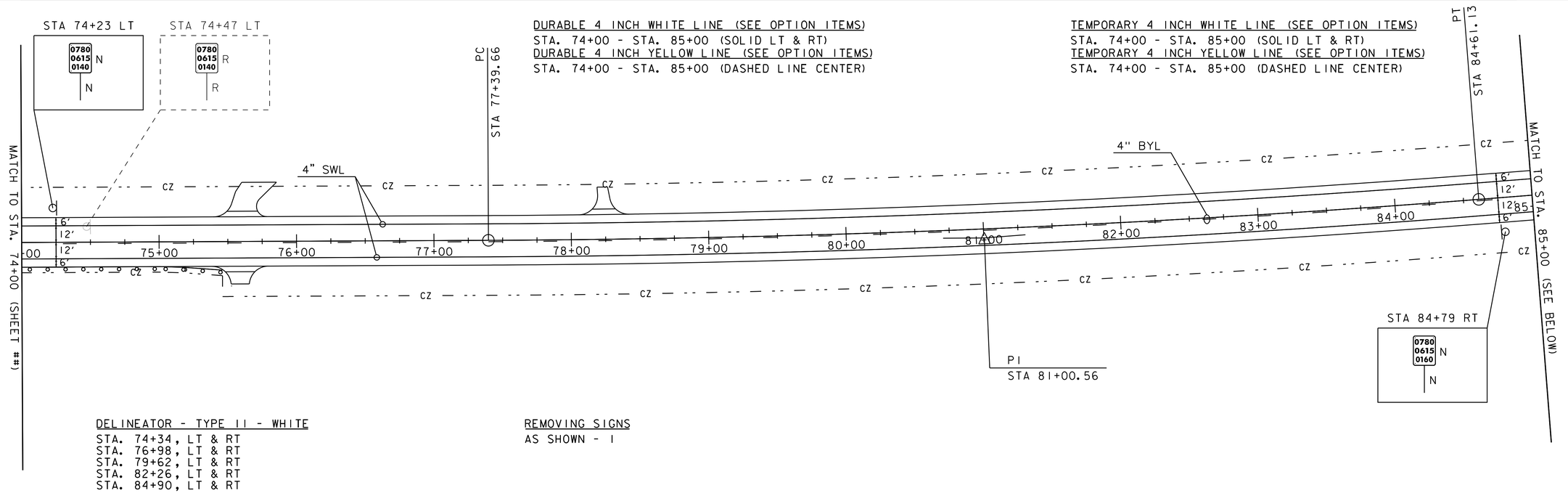
vhb

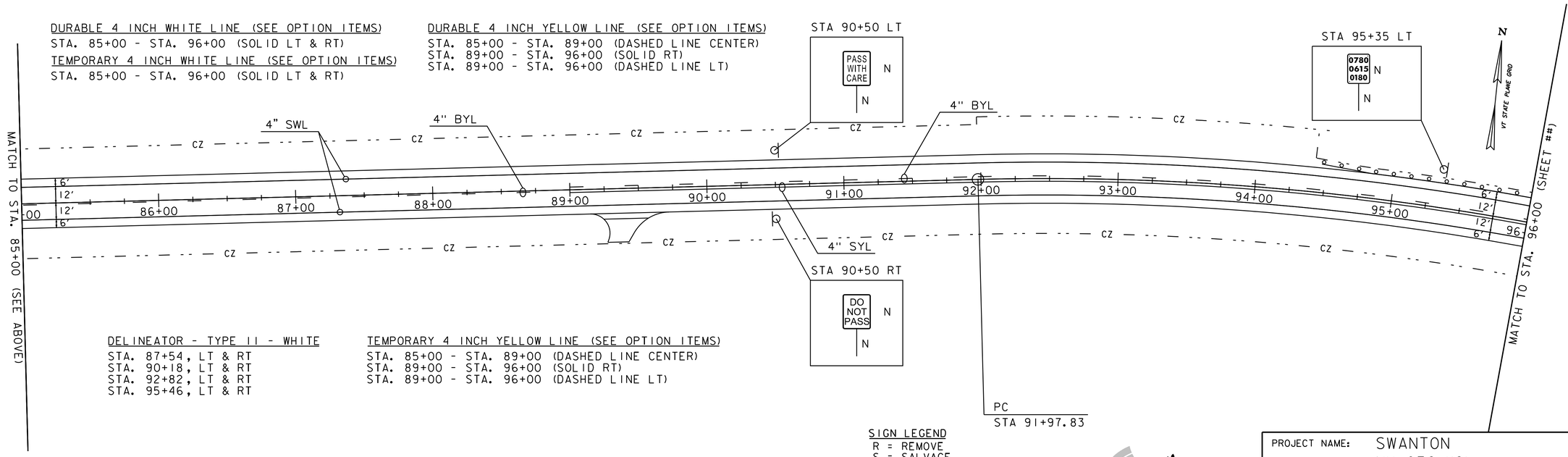
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_spm.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. GRAHAM
SIGNING & PAVEMENT MARKING SHEET #1

PLOT DATE: 3/7/2019
DRAWN BY: J. ROBERT
CHECKED BY: G. BAKOS
SHEET 143 OF 305


DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 52+00 - STA. 58+05 (SOLID LT)
STA. 58+21 - STA. 63+00 (SOLID LT)
STA. 52+00 - STA. 57+67 (SOLID RT)
STA. 57+99 - STA. 63+00 (SOLID RT)
DELINEATOR - TYPE II - WHITE
STA. 52+83, LT & RT
STA. 55+47, LT & RT
STA. 58+50, LT & RT
STA. 61+25, LT & RT
REMOVING SIGNS
AS SHOWN - 9
ERECTING SALVAGED SIGNS
AS SHOWN - 4
STA 57+90 LT
STA 57+91 LT
STA 53+11 LT
STA 59+00 LT
DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 52+00 - STA. 54+50 (DASHED LINE CENTER)
STA. 54+50 - STA. 57+00 (SOLID RT)
STA. 54+50 - STA. 57+00 (DASHED LINE LT)
STA. 57+00 - STA. 57+63 (SOLID LT & RT)
STA. 58+12 - STA. 58+13 (DOUBLE SOLID LT)
STA. 57+82 - STA. 57+82 (DOUBLE SOLID RT)
STA. 58+32 - STA. 61+50 (SOLID LT & RT)
STA. 61+50 - STA. 63+00 (SOLID RT)
STA. 61+50 - STA. 63+00 (DASHED LINE LT)
N
VT STATE PLANE GRID
MATCH TO STA. 52+00 (SHEET ##)
MATCH TO STA. 63+00 (SEE BELOW)
CHURCH RD
4" BYL
4" SWL
4" DYL
4" SYL
CZ
53+00
54+00
55+00
56+00
57+00
58+00
59+00
60+00
61+00
62+00
STA 53+15 RT
STA 53+25 RT
STA 57+59 RT
STA 57+58 RT
STA 58+03 RT
STA 59+00 RT
STA 58+05 RT
TABOR POINT RD
DURABLE LETTER OR SYMBOL (SEE OPTION ITEMS)
STA. 57+90 RT "STOP"
STA. 58+07 LT "STOP"
TEMPORARY LETTER OR SYMBOL (SEE OPTION ITEMS)
STA. 57+90 RT "STOP"
STA. 58+07 LT "STOP"
TEMPORARY 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 52+00 - STA. 58+05 (SOLID LT)
STA. 58+21 - STA. 63+00 (SOLID LT)
STA. 52+00 - STA. 57+67 (SOLID RT)
STA. 57+99 - STA. 63+00 (SOLID RT)
TEMPORARY 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 52+00 - STA. 54+50 (DASHED LINE CENTER)
STA. 54+50 - STA. 57+00 (SOLID RT)
STA. 54+50 - STA. 57+00 (DASHED LINE LT)
STA. 57+00 - STA. 57+63 (SOLID LT & RT)
STA. 58+12 - STA. 58+13 (DOUBLE SOLID LT)
STA. 57+82 - STA. 57+82 (DOUBLE SOLID RT)
STA. 58+32 - STA. 61+50 (SOLID LT & RT)
STA. 61+50 - STA. 63+00 (SOLID RT)
STA. 61+50 - STA. 63+00 (DASHED LINE LT)
DURABLE 24 INCH STOP BAR (SEE OPTION ITEMS)
STA. 57+83 - STA. 58+06 (SOLID RT)
STA. 57+96 - STA. 58+12 (SOLID LT)
TEMPORARY 24 INCH STOP BAR (SEE OPTION ITEMS)
STA. 57+83 - STA. 58+06 (SOLID RT)
STA. 57+96 - STA. 58+12 (SOLID LT)
STA 63+25 LT
STA. 66+00 LT
STA 63+20 LT
STA 63+67 RT
STA. 66+02 LT
DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 63+00 - STA. 74+00 (SOLID LT & RT)
DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 63+00 - STA. 63+50 (SOLID RT)
STA. 63+00 - STA. 63+50 (DASHED LINE LT)
STA. 63+50 - STA. 74+00 (DASHED LINE CENTER)
TEMPORARY 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 63+00 - STA. 74+00 (SOLID LT & RT)
TEMPORARY 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 63+00 - STA. 63+50 (SOLID RT)
STA. 63+00 - STA. 63+50 (DASHED LINE LT)
STA. 63+50 - STA. 74+00 (DASHED LINE CENTER)
64+00
65+00
66+00
67+00
68+00
69+00
70+00
71+00
72+00
73+00
74
MATCH TO STA. 63+00 (SEE ABOVE)
MATCH TO STA. 74+00 (SHEET ##)
REMOVING SIGNS
AS SHOWN - 4
ERECTING SALVAGED SIGNS
AS SHOWN - 2
DELINEATOR - TYPE II - WHITE
STA. 63+78, LT & RT
STA. 66+42, LT & RT
STA. 69+06, LT & RT
STA. 71+70, LT & RT
SIGN LEGEND
R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
R&S = REMOVE AND SALVAGE
B-B = BACK TO BACK
EXISTING = ----------
NEW = ——————
PAVEMENT MARKING LEGEND
4" SYL = 4" SINGLE YELLOW LINE
4" SWL = 4" SINGLE WHITE LINE
4" DYL = 4" DOUBLE YELLOW LINE
4" BYL = 4" SINGLE DASHED YELLOW LINE
0 40 80
SCALE IN FEET
DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)
FILE NAME: z96b032bdr_spm.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. GRAHAM
SIGNING & PAVEMENT MARKING SHEET #2
PLOT DATE: 3/7/2019
DRAWN BY: J. ROBERT
CHECKED BY: G. BAKOS
SHEET 144 OF 305





DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

PAVEMENT MARKING LEGEND

4" SYL = 4" SINGLE YELLOW LINE
4" SWL = 4" SINGLE WHITE LINE
4" DYL = 4" DOUBLE YELLOW LINE
4" BYL = 4" SINGLE DASHED YELLOW LINE

0 40 80

SCALE IN FEET

SIGN LEGEND

R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
R&S = REMOVE AND SALVAGE
B-B = BACK TO BACK
EXISTING = ----------
NEW = ——————

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_spm.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. GRAHAM
SIGNING & PAVEMENT MARKING SHEET #3

PLOT DATE: 3/7/2019
DRAWN BY: J. ROBERT
CHECKED BY: G. BAKOS
SHEET 145 OF 305

REMOVING SIGNS
AS SHOWN - 12
ERECTING SALVAGED SIGNS
AS SHOWN - 3
DURABLE LETTER OR SYMBOL (SEE OPTION ITEMS)
STA. 104+49 LT "STOP"

PI
STA 98+52.03

STA 99+76 LT
WEST R
VERMONT
78 R
R

DELINEATOR - TYPE II - WHITE
STA. 98+10, LT & RT
STA. 100+74, LT & RT
STA. 103+38, LT & RT
STA. 106+02, LT & RT

STA 104+26 LT
N. River Rd R&S
Campbell Bay Rd R&S
R R

STA 104+33 LT
STOP R
R

CAMPBELL BAY RD

STA 104+25 LT
B-B
N. River Rd S
Campbell Bay Rd S
STOP N
0780
0615
0197
N
N N

STA 106+25 LT
BRIDGE 3 VT78 N
N

VT STATE PLANE GRID

MATCH TO STA. 96+00 (SHEET #)

4" BYL
4" DYL
4" SWL
4" SYL
cz
12'
6'
97+00
98+00
99+00
100+00
101+00
102+00
103+00
104+00
105+00
106+00
107

STA 100+00 LT
WEST N
VERMONT
78 N
N

STA 104+50 RT
N
N

PT
STA 104+60.21

STA 96+84 RT
Campbell Bay RD R&S
R R

STA 97+00 RT
Campbell Bay RD S
N N

STA 100+00 RT
NO PARKING ON TRAVELED LANE N
N

STA 102+58 RT
NO PARKING ON TRAVELED LANE R
R

STA 104+62 RT
R
R

STA 105+50 RT
BRIDGE 3 VT78 N
N

STA 105+50 RT
STA 106+08 LT
BRIDGE 3 VT78 R
R

STA 106+18 RT
EAST R
VERMONT
78 R
R

STA 106+18 RT
EAST N
VERMONT
78 N
N

MATCH TO STA. 107+00 (SEE BELOW)

TEMPORARY LETTER OR SYMBOL (SEE OPTION ITEMS)
STA. 104+49 LT "STOP"

TEMPORARY 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 96+00 - STA. 104+36 (SOLID LT)
STA. 104+62 - STA. 107+00 (SOLID LT)
STA. 96+00 - STA. 107+00 (SOLID RT)

DURABLE 24 INCH STOP BAR (SEE OPTION ITEMS)
STA. 104+41 - STA. 104+59 (SOLID LT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 96+00 - STA. 97+50 (SOLID RT)
STA. 96+00 - STA. 97+50 (DASHED LINE LT)
STA. 97+50 - STA. 104+39 (SOLID LT & RT)
STA. 104+50 - STA. 104+59 (DOUBLE SOLID LT)
STA. 104+79 - STA. 107+00 (SOLID LT & RT)

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 96+00 - STA. 104+36 (SOLID LT)
STA. 104+62 - STA. 107+00 (SOLID LT)
STA. 96+00 - STA. 107+00 (SOLID RT)

TEMPORARY 24 INCH STOP BAR (SEE OPTION ITEMS)
STA. 104+41 - STA. 104+59 (SOLID LT)

TEMPORARY 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 96+00 - STA. 97+50 (SOLID RT)
STA. 96+00 - STA. 97+50 (DASHED LINE LT)
STA. 97+50 - STA. 104+39 (SOLID LT & RT)
STA. 104+50 - STA. 104+59 (DOUBLE SOLID LT)
STA. 104+79 - STA. 107+00 (SOLID LT & RT)

DELINEATOR - TYPE II - WHITE
STA. 108+66, LT & RT
STA. 111+30, LT & RT
STA. 113+94, LT & RT
STA. 116+58, LT & RT

STA 107+46 LT
NATIONAL WILDLIFE REFUGE R
AREA BEYOND THIS SIGN CLOSED R
R

STA 107+75 LT
NATIONAL WILDLIFE REFUGE N
AREA BEYOND THIS SIGN CLOSED N
N

STA 111+42 LT
NATIONAL WILDLIFE REFUGE R
AREA BEYOND THIS SIGN CLOSED R
R

STA 111+75 LT
NATIONAL WILDLIFE REFUGE N
AREA BEYOND THIS SIGN CLOSED N
N

STA 113+50 LT
N
Campbell Bay RD S
N N

STA 115+70 LT
NATIONAL WILDLIFE REFUGE R
AREA BEYOND THIS SIGN CLOSED R
R

STA 115+75 LT
NATIONAL WILDLIFE REFUGE N
AREA BEYOND THIS SIGN CLOSED N
N

PI
STA 117+49.46

STA 116+47 LT
0780
0615
0220
N
N

MATCH TO STA. 107+00 (SEE ABOVE)

4" DYL
4" SWL
cz
12'
6'
108+00
109+00
110+00
111+00
112+00
113+00
114+00
115+00
116+00
117+00
118

STA 107+72 LT
NO PARKING ON TRAVELED LANE R
R

PC
STA 109+42.86

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 107+00 STA. 118+00 (SOLID LT & RT)
DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 107+00 - STA. 118+00 (SOLID LT & RT)
TEMPORARY 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 107+00 - STA. 118+00 (SOLID LT & RT)
TEMPORARY 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 107+00 - STA. 118+00 (SOLID LT & RT)

STA 113+47 LT
R
Campbell Bay RD R&S
R R

STA 115+00 RT
SPEED LIMIT 50 N
N

STA 115+09 RT
SPEED LIMIT 50 R
R

STA 115+75 LT
0780
0615
0220
R
R

REMOVING SIGNS
AS SHOWN - 11
ERECTING SALVAGED SIGNS
AS SHOWN - 1

PAVEMENT MARKING LEGEND
4" SYL = 4" SINGLE YELLOW LINE
4" SWL = 4" SINGLE WHITE LINE
4" DYL = 4" DOUBLE YELLOW LINE
4" BYL = 4" SINGLE DASHED YELLOW LINE

0 40 80
SCALE IN FEET

SIGN LEGEND
R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
R&S = REMOVE AND SALVAGE
B-B = BACK TO BACK
EXISTING = ----------
NEW = ——————

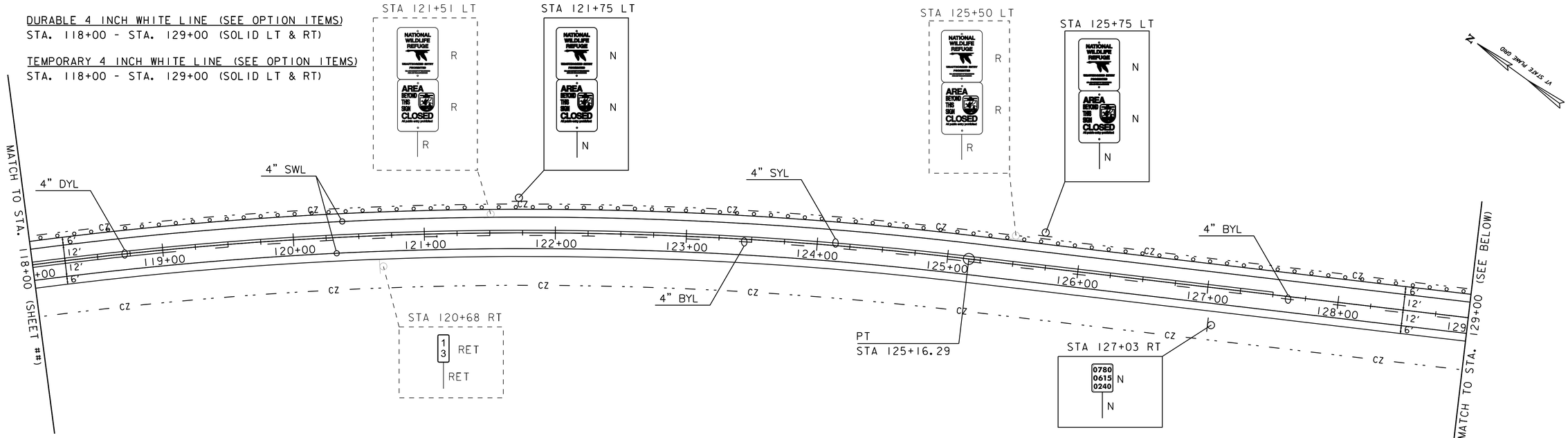
DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_spm.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. GRAHAM
SIGNING & PAVEMENT MARKING SHEET #4

PLOT DATE: 3/7/2019
DRAWN BY: J. ROBERT
CHECKED BY: G. BAKOS
SHEET 146 OF 305

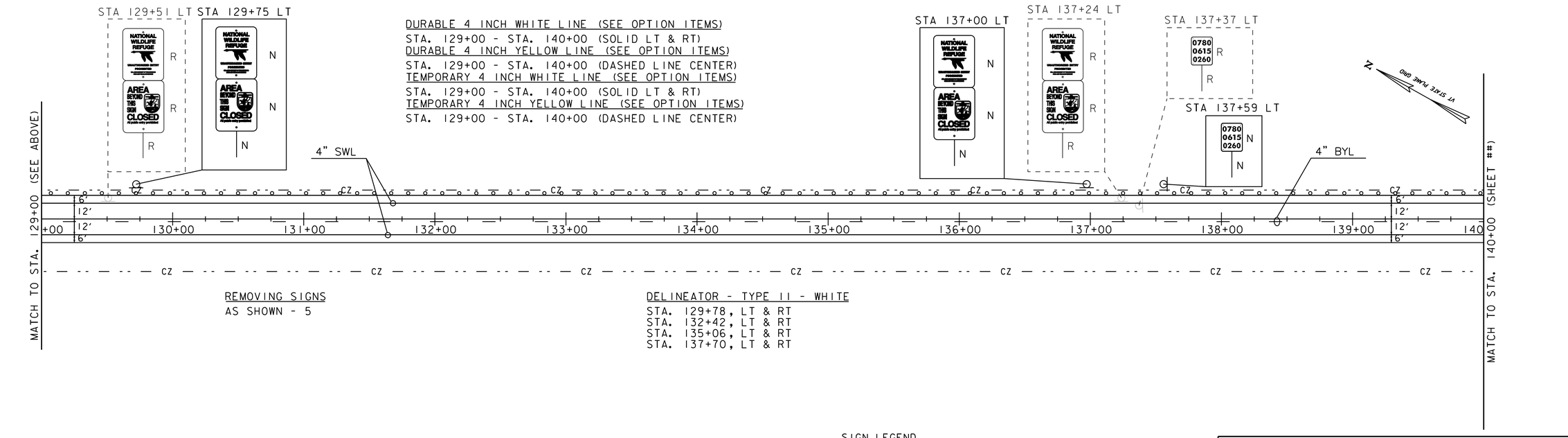


REMOVING SIGNS
AS SHOWN - 4

DELINEATOR - TYPE II - WHITE
STA. 119+22, LT & RT
STA. 121+86, LT & RT
STA. 124+50, LT & RT
STA. 127+14, LT & RT

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 118+00 - STA. 119+00 (SOLID LT & RT)
STA. 119+00 - STA. 127+50 (SOLID LT)
STA. 119+00 - STA. 127+50 (DASHED LINE RT)
STA. 127+50 - STA. 129+00 (DASHED LINE CENTER)

TEMPORARY 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 118+00 - STA. 119+00 (SOLID LT & RT)
STA. 119+00 - STA. 127+50 (SOLID LT)
STA. 119+00 - STA. 127+50 (DASHED LINE RT)
STA. 127+50 - STA. 129+00 (DASHED LINE CENTER)



DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 129+00 - STA. 140+00 (SOLID LT & RT)
DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 129+00 - STA. 140+00 (DASHED LINE CENTER)
TEMPORARY 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 129+00 - STA. 140+00 (SOLID LT & RT)
TEMPORARY 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 129+00 - STA. 140+00 (DASHED LINE CENTER)

REMOVING SIGNS
AS SHOWN - 5

DELINEATOR - TYPE II - WHITE
STA. 129+78, LT & RT
STA. 132+42, LT & RT
STA. 135+06, LT & RT
STA. 137+70, LT & RT

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

PAVEMENT MARKING LEGEND
4" SYL = 4" SINGLE YELLOW LINE
4" SWL = 4" SINGLE WHITE LINE
4" DYL = 4" DOUBLE YELLOW LINE
4" BYL = 4" SINGLE DASHED YELLOW LINE

0 40 80
SCALE IN FEET

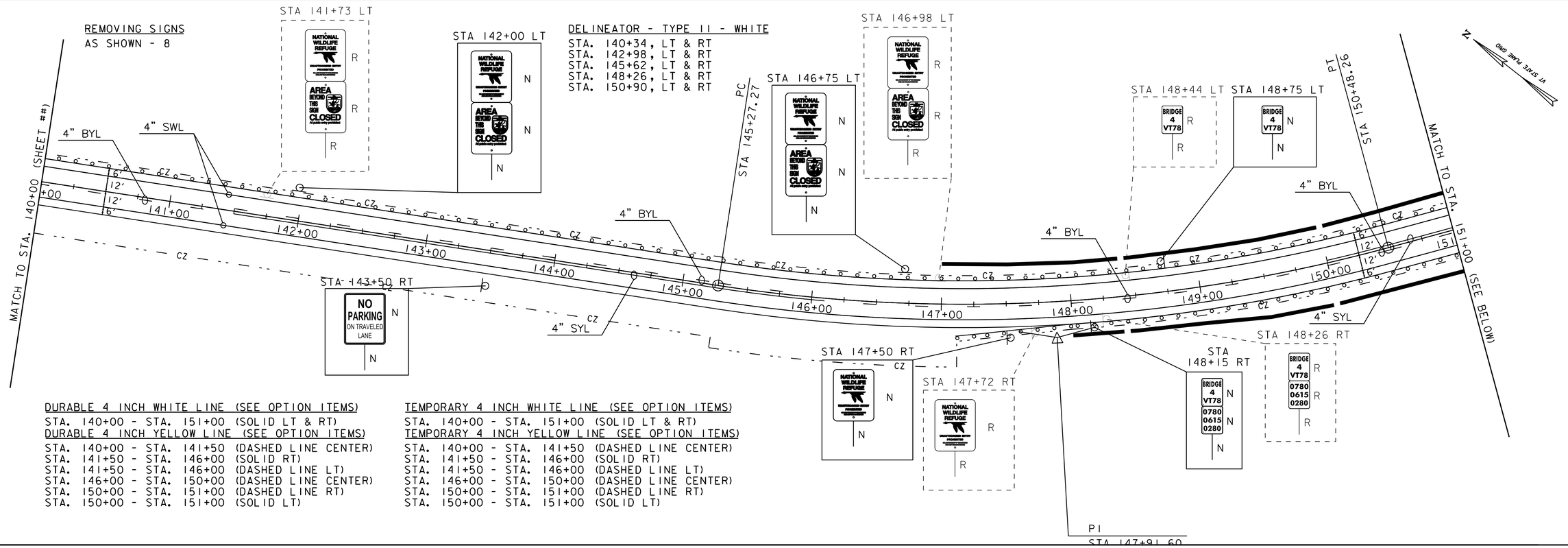
SIGN LEGEND
R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
R&S = REMOVE AND SALVAGE
B-B = BACK TO BACK
EXISTING = ----------
NEW = ——————

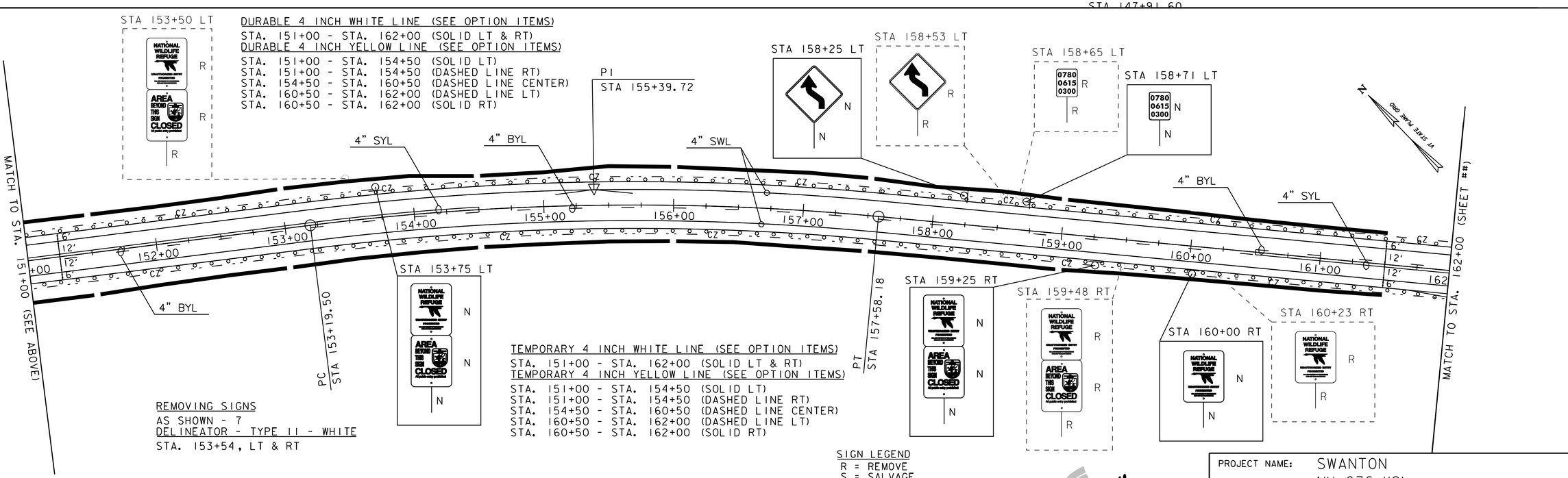
vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_spm.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. GRAHAM
SIGNING & PAVEMENT MARKING SHEET #5

PLOT DATE: 3/7/2019
DRAWN BY: J. ROBERT
CHECKED BY: G. BAKOS
SHEET 147 OF 305





DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

PAVEMENT MARKING LEGEND

4" SYL = 4" SINGLE YELLOW LINE
4" SWL = 4" SINGLE WHITE LINE
4" DYL = 4" DOUBLE YELLOW LINE
4" BYL = 4" SINGLE DASHED YELLOW LINE

0 40 80

SCALE IN FEET

SIGN LEGEND

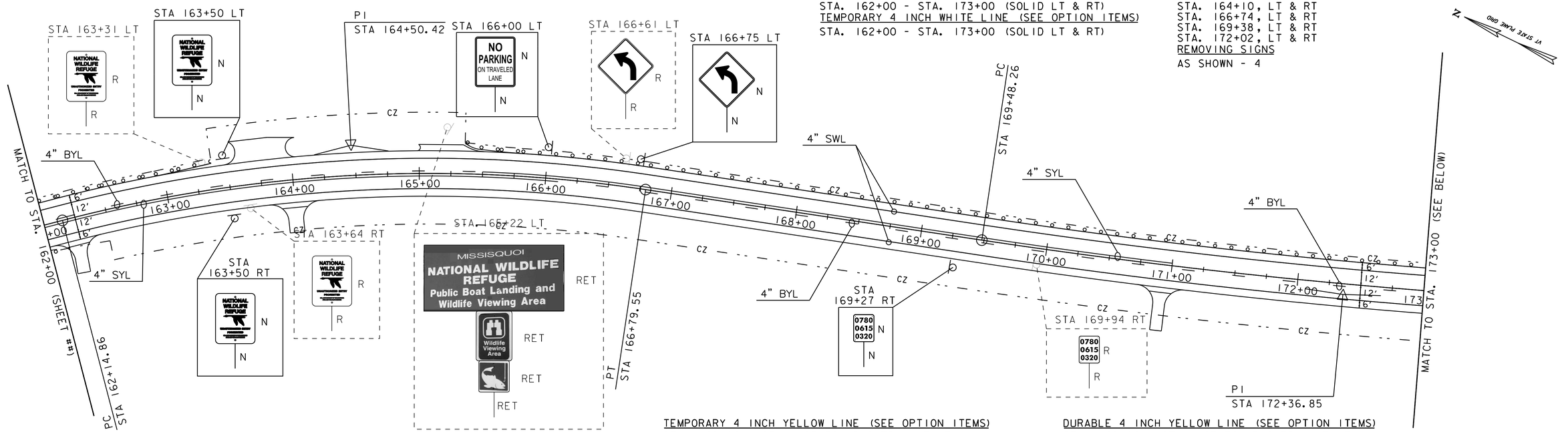
R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
R&S = REMOVE AND SALVAGE
B-B = BACK TO BACK
EXISTING = ----------
NEW = ——————

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_spm.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. GRAHAM
SIGNING & PAVEMENT MARKING SHEET #6

PLOT DATE: 3/7/2019
DRAWN BY: J. ROBERT
CHECKED BY: G. BAKOS
SHEET 148 OF 305



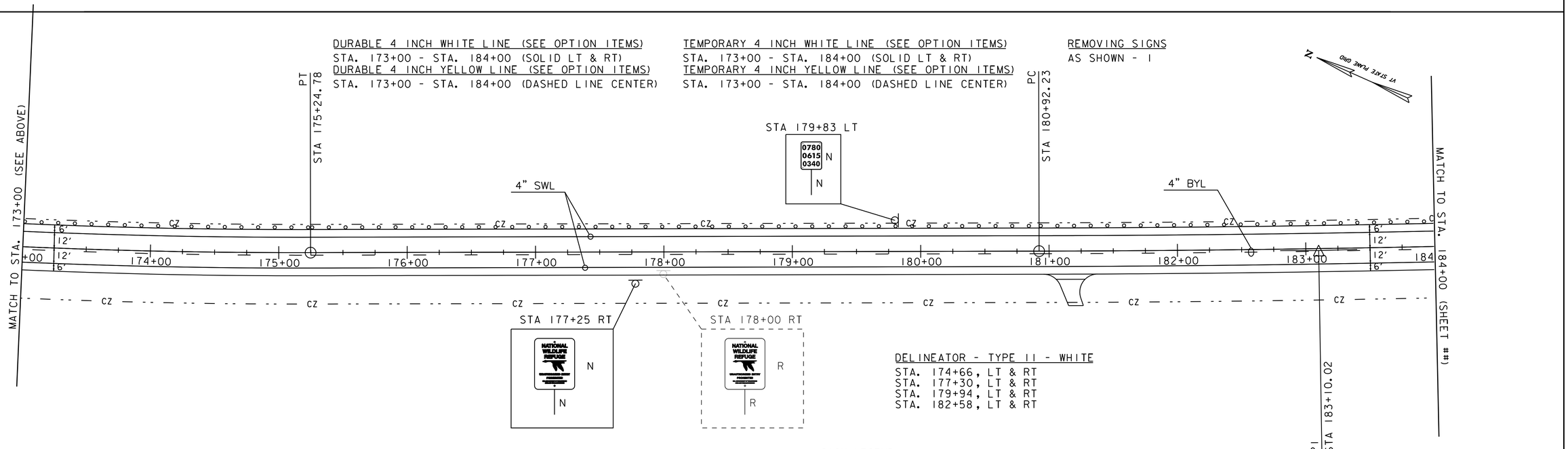
DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 162+00 - STA. 173+00 (SOLID LT & RT)
TEMPORARY 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 162+00 - STA. 173+00 (SOLID LT & RT)

DELINEATOR - TYPE II - WHITE
STA. 164+10, LT & RT
STA. 166+74, LT & RT
STA. 169+38, LT & RT
STA. 172+02, LT & RT

REMOVING SIGNS
AS SHOWN - 4

TEMPORARY 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 162+00 - STA. 165+50 (DASHED LINE LT)
STA. 162+00 - STA. 166+00 (SOLID RT)
STA. 165+50 - STA. 171+00 (SOLID LT)
STA. 166+00 - STA. 171+00 (DASHED LINE RT)
STA. 171+00 - STA. 173+00 (DASHED LINE CENTER)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 162+00 - STA. 165+50 (DASHED LINE LT)
STA. 162+00 - STA. 166+00 (SOLID RT)
STA. 165+50 - STA. 171+00 (SOLID LT)
STA. 166+00 - STA. 171+00 (DASHED LINE RT)
STA. 171+00 - STA. 173+00 (DASHED LINE CENTER)



DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 173+00 - STA. 184+00 (SOLID LT & RT)
DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 173+00 - STA. 184+00 (DASHED LINE CENTER)

TEMPORARY 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 173+00 - STA. 184+00 (SOLID LT & RT)
TEMPORARY 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 173+00 - STA. 184+00 (DASHED LINE CENTER)

REMOVING SIGNS
AS SHOWN - 1

DELINEATOR - TYPE II - WHITE
STA. 174+66, LT & RT
STA. 177+30, LT & RT
STA. 179+94, LT & RT
STA. 182+58, LT & RT

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

PAVEMENT MARKING LEGEND
4" SYL = 4" SINGLE YELLOW LINE
4" SWL = 4" SINGLE WHITE LINE
4" DYL = 4" DOUBLE YELLOW LINE
4" BYL = 4" SINGLE DASHED YELLOW LINE

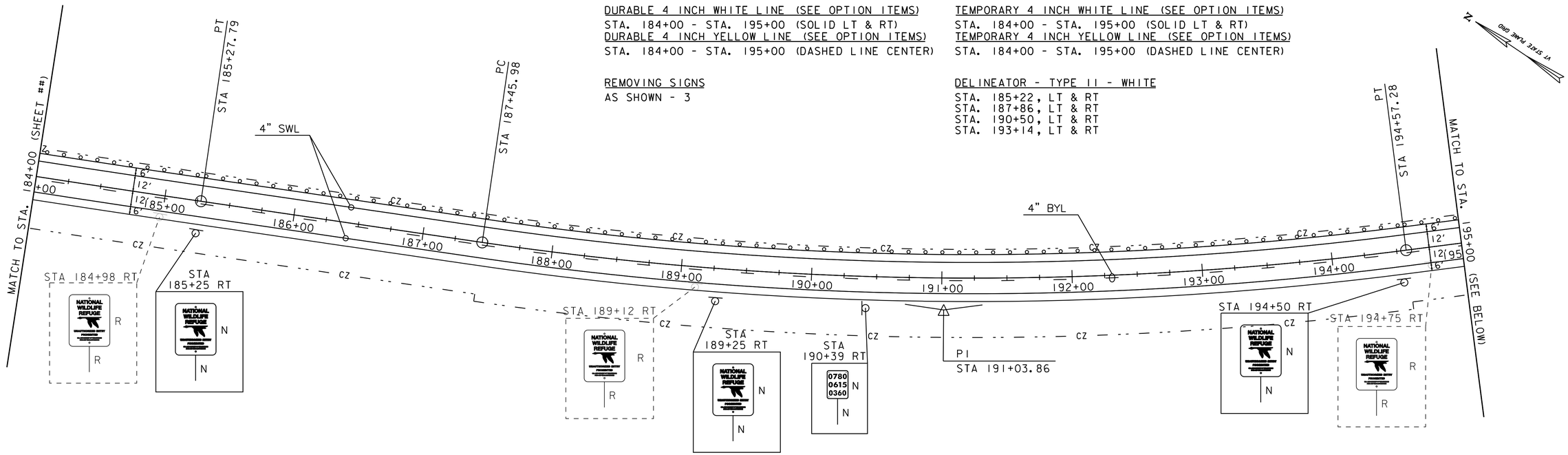
0 40 80
SCALE IN FEET

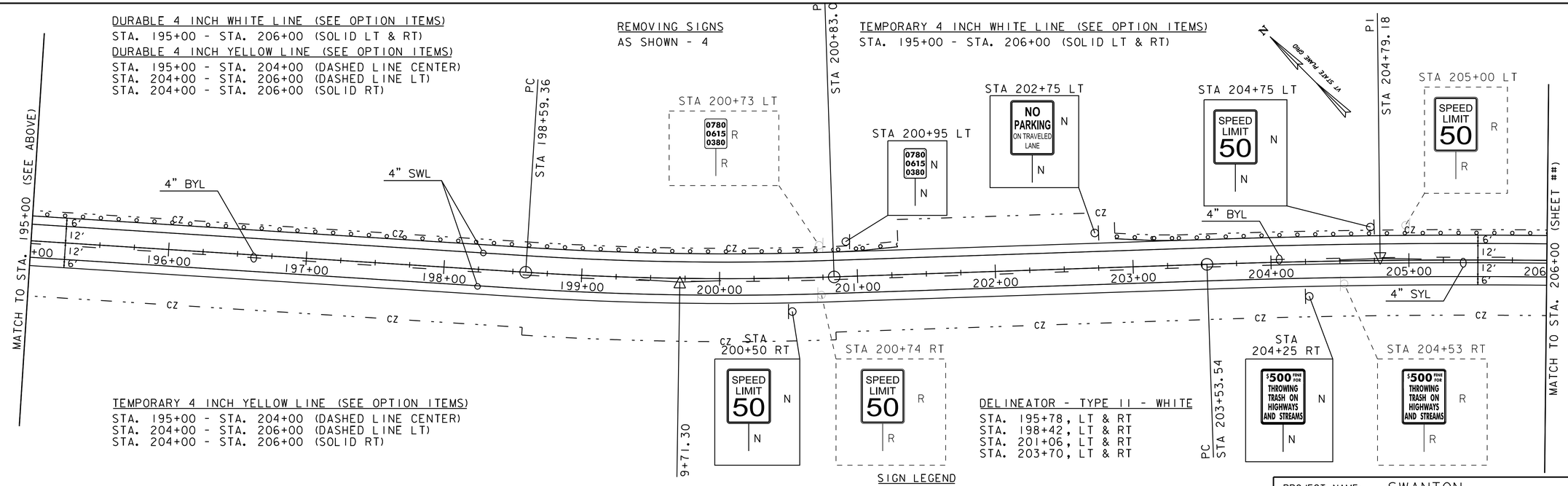
SIGN LEGEND
R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
R&S = REMOVE AND SALVAGE
B-B = BACK TO BACK
EXISTING = ----------
NEW = ——————

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_spm.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. GRAHAM
SIGNING & PAVEMENT MARKING SHEET #7

PLOT DATE: 3/7/2019
DRAWN BY: J. ROBERT
CHECKED BY: G. BAKOS
SHEET 149 OF 305





DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (92)

PAVEMENT MARKING LEGEND

4" SYL = 4" SINGLE YELLOW LINE
4" SWL = 4" SINGLE WHITE LINE
4" DYL = 4" DOUBLE YELLOW LINE
4" BYL = 4" SINGLE DASHED YELLOW LINE

0 40 80

SCALE IN FEET

SIGN LEGEND

R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
R&S = REMOVE AND SALVAGE
B-B = BACK TO BACK
EXISTING = ----------
NEW = ——————

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_spm.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. GRAHAM
SIGNING & PAVEMENT MARKING SHEET #8

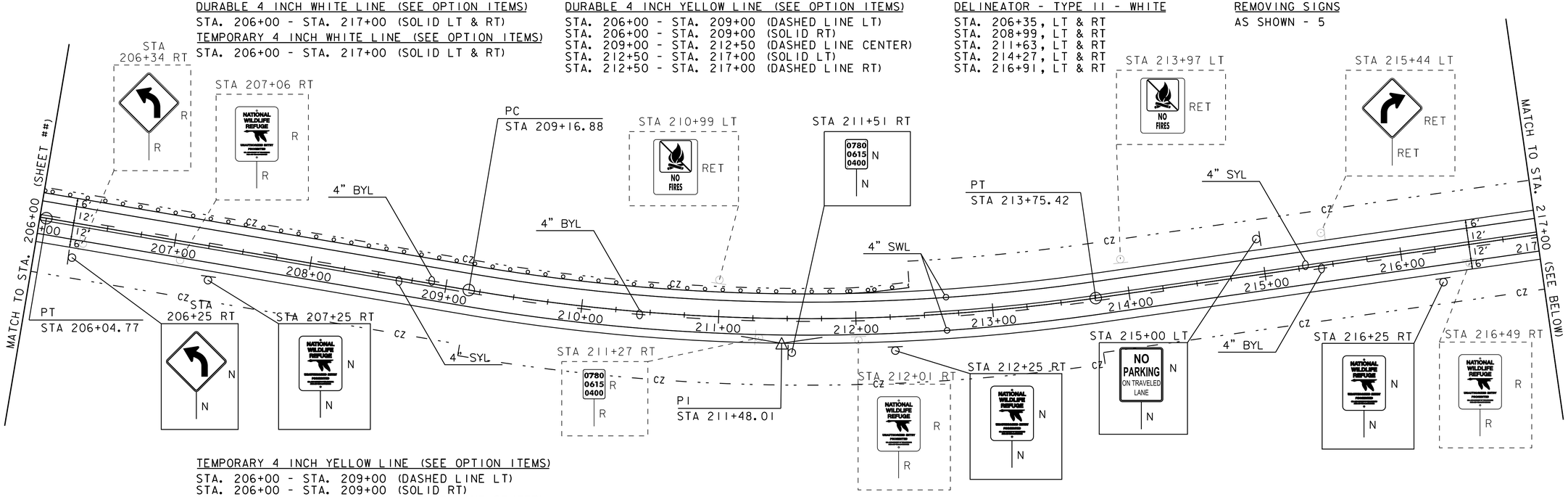
PLOT DATE: 3/7/2019
DRAWN BY: J. ROBERT
CHECKED BY: G. BAKOS
SHEET 150 OF 305

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 206+00 - STA. 217+00 (SOLID LT & RT)
TEMPORARY 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 206+00 - STA. 217+00 (SOLID LT & RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 206+00 - STA. 209+00 (DASHED LINE LT)
STA. 206+00 - STA. 209+00 (SOLID RT)
STA. 209+00 - STA. 212+50 (DASHED LINE CENTER)
STA. 212+50 - STA. 217+00 (SOLID LT)
STA. 212+50 - STA. 217+00 (DASHED LINE RT)

DELINEATOR - TYPE II - WHITE
STA. 206+35, LT & RT
STA. 208+99, LT & RT
STA. 211+63, LT & RT
STA. 214+27, LT & RT
STA. 216+91, LT & RT

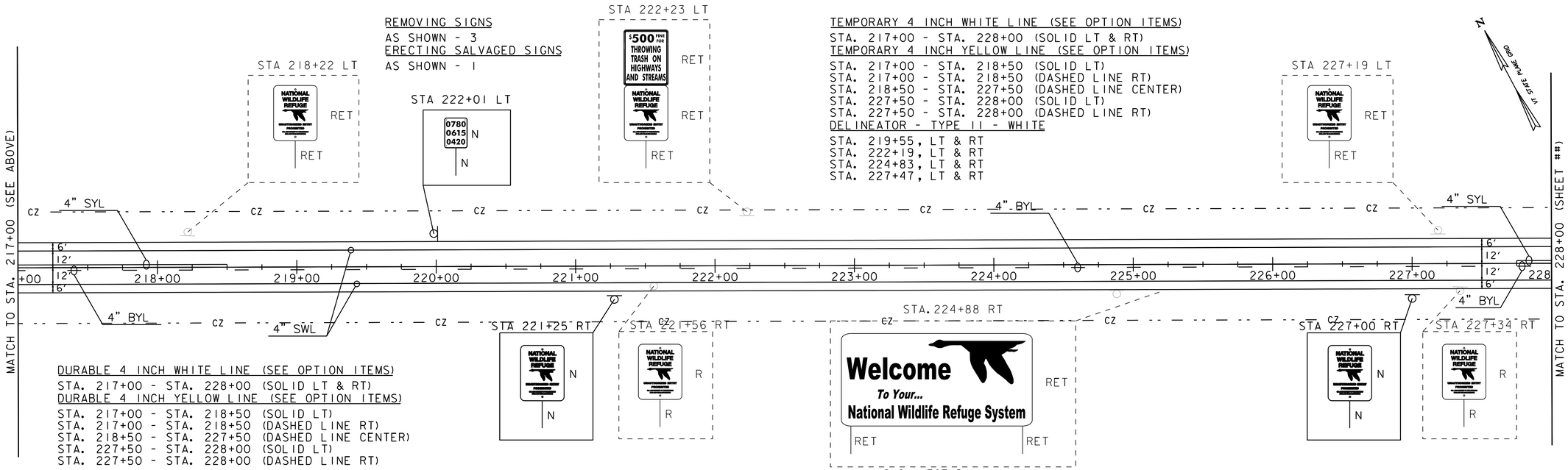
REMOVING SIGNS
AS SHOWN - 5



TEMPORARY 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 206+00 - STA. 209+00 (DASHED LINE LT)
STA. 206+00 - STA. 209+00 (SOLID RT)
STA. 209+00 - STA. 212+50 (DASHED LINE CENTER)
STA. 212+50 - STA. 217+00 (SOLID LT)
STA. 212+50 - STA. 217+00 (DASHED LINE RT)

REMOVING SIGNS
AS SHOWN - 3
ERECTING SALVAGED SIGNS
AS SHOWN - 1

TEMPORARY 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 217+00 - STA. 228+00 (SOLID LT & RT)
TEMPORARY 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 217+00 - STA. 218+50 (SOLID LT)
STA. 217+00 - STA. 218+50 (DASHED LINE RT)
STA. 218+50 - STA. 227+50 (DASHED LINE CENTER)
STA. 227+50 - STA. 228+00 (SOLID LT)
STA. 227+50 - STA. 228+00 (DASHED LINE RT)
DELINEATOR - TYPE II - WHITE
STA. 219+55, LT & RT
STA. 222+19, LT & RT
STA. 224+83, LT & RT
STA. 227+47, LT & RT



DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 217+00 - STA. 228+00 (SOLID LT & RT)
DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 217+00 - STA. 218+50 (SOLID LT)
STA. 217+00 - STA. 218+50 (DASHED LINE RT)
STA. 218+50 - STA. 227+50 (DASHED LINE CENTER)
STA. 227+50 - STA. 228+00 (SOLID LT)
STA. 227+50 - STA. 228+00 (DASHED LINE RT)

SIGN LEGEND
R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
R&S = REMOVE AND SALVAGE
B-B = BACK TO BACK
EXISTING = ----------
NEW = ——————

PAVEMENT MARKING LEGEND
4" SYL = 4" SINGLE YELLOW LINE
4" SWL = 4" SINGLE WHITE LINE
4" DYL = 4" DOUBLE YELLOW LINE
4" BYL = 4" SINGLE DASHED YELLOW LINE

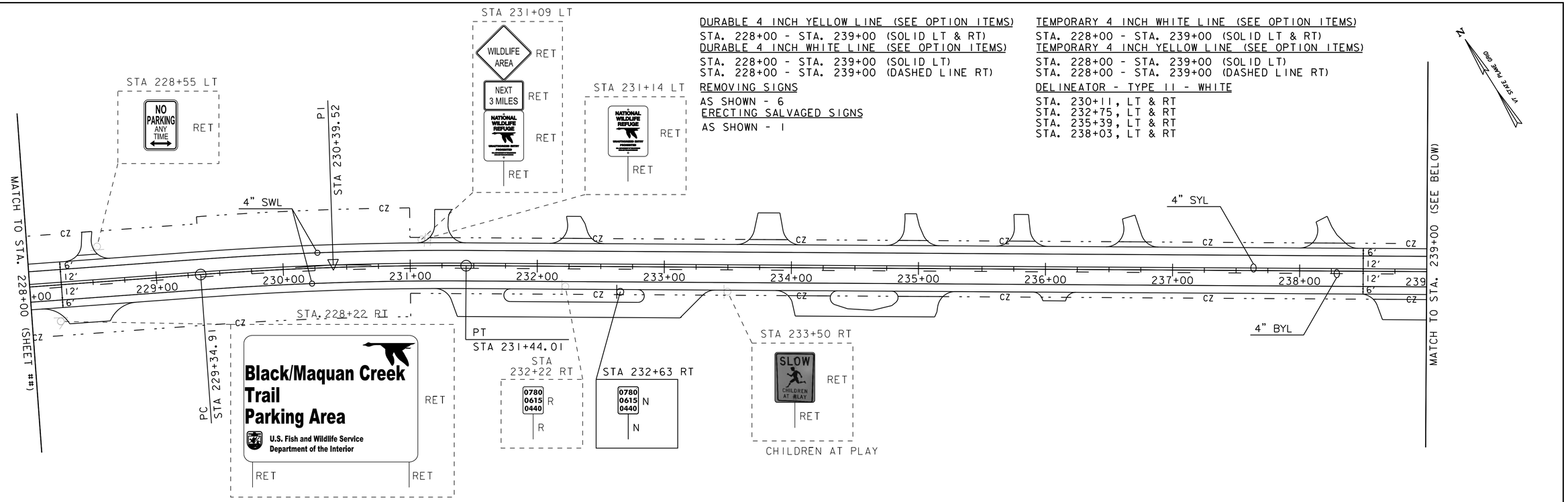
0 40 80
SCALE IN FEET

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_spm.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. GRAHAM
SIGNING & PAVEMENT MARKING SHEET #9

PLOT DATE: 3/7/2019
DRAWN BY: J. ROBERT
CHECKED BY: G. BAKOS
SHEET 151 OF 305



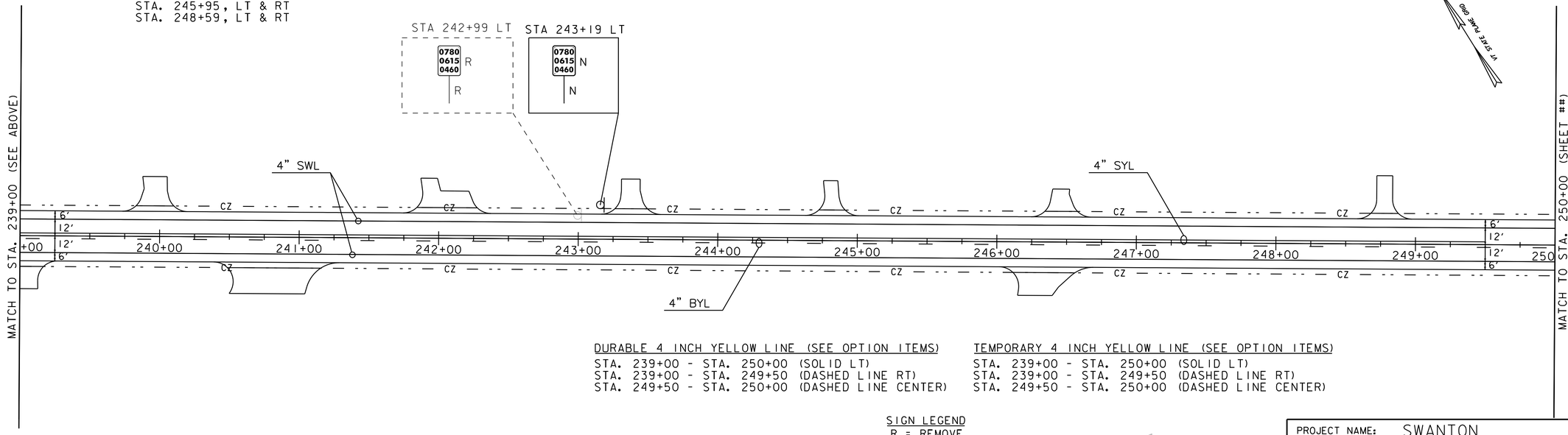
DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 228+00 - STA. 239+00 (SOLID LT & RT)
DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 228+00 - STA. 239+00 (SOLID LT)
STA. 228+00 - STA. 239+00 (DASHED LINE RT)

REMOVING SIGNS
AS SHOWN - 6

ERECTING SALVAGED SIGNS
AS SHOWN - 1

TEMPORARY 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 228+00 - STA. 239+00 (SOLID LT & RT)
TEMPORARY 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 228+00 - STA. 239+00 (SOLID LT)
STA. 228+00 - STA. 239+00 (DASHED LINE RT)

DELINEATOR - TYPE II - WHITE
STA. 230+11, LT & RT
STA. 232+75, LT & RT
STA. 235+39, LT & RT
STA. 238+03, LT & RT



DELINEATOR - TYPE II - WHITE
STA. 240+25, LT & RT
STA. 243+20, LT & RT
STA. 245+95, LT & RT
STA. 248+59, LT & RT

REMOVING SIGNS
AS SHOWN - 1

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 239+00 - STA. 250+00 (SOLID LT & RT)

TEMPORARY 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 239+00 - STA. 250+00 (SOLID LT & RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 239+00 - STA. 250+00 (SOLID LT)
STA. 239+00 - STA. 249+50 (DASHED LINE RT)
STA. 249+50 - STA. 250+00 (DASHED LINE CENTER)

TEMPORARY 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 239+00 - STA. 250+00 (SOLID LT)
STA. 239+00 - STA. 249+50 (DASHED LINE RT)
STA. 249+50 - STA. 250+00 (DASHED LINE CENTER)

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

PAVEMENT MARKING LEGEND
4" SYL = 4" SINGLE YELLOW LINE
4" SWL = 4" SINGLE WHITE LINE
4" DYL = 4" DOUBLE YELLOW LINE
4" BYL = 4" SINGLE DASHED YELLOW LINE

0 40 80
SCALE IN FEET

SIGN LEGEND
R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
R&S = REMOVE AND SALVAGE
B-B = BACK TO BACK
EXISTING = ----------
NEW = ——————

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_spm.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. GRAHAM
SIGNING & PAVEMENT MARKING SHEET #10

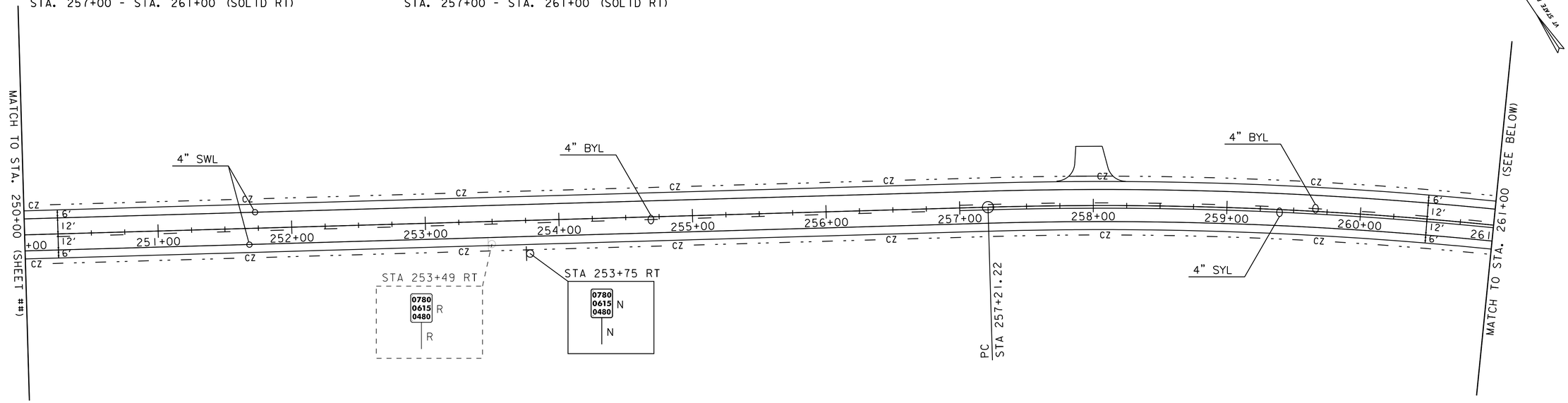
PLOT DATE: 3/7/2019
DRAWN BY: J. ROBERT
CHECKED BY: G. BAKOS
SHEET 152 OF 305

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 250+00 - STA. 261+00 (SOLID LT & RT)
DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 250+00 - STA. 257+00 (DASHED LINE CENTER)
STA. 257+00 - STA. 261+00 (DASHED LINE LT)
STA. 257+00 - STA. 261+00 (SOLID RT)

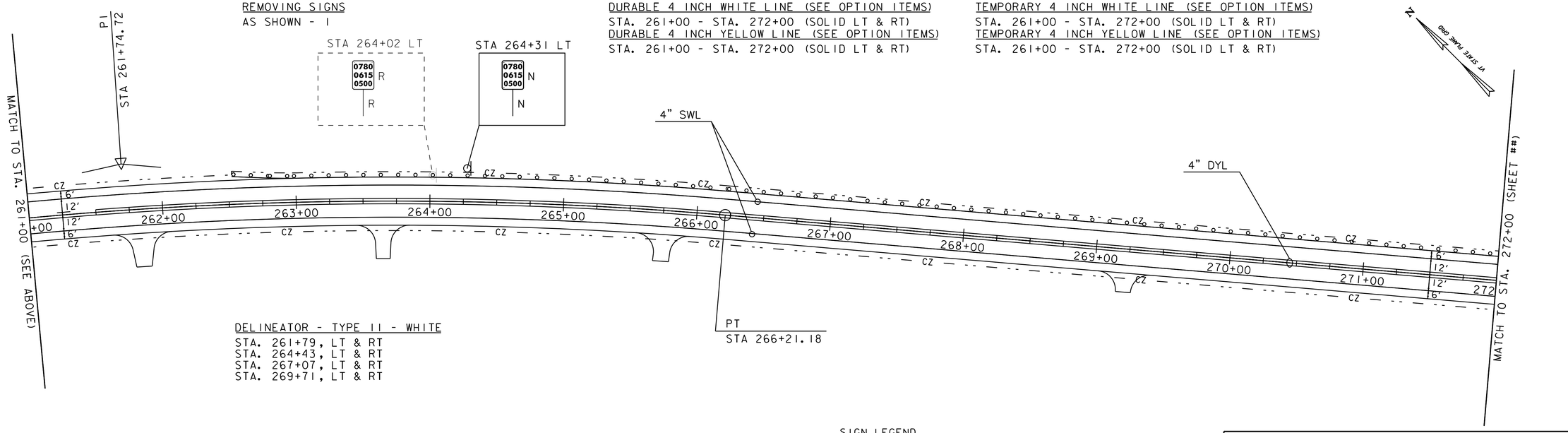
TEMPORARY 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 250+00 - STA. 261+00 (SOLID LT & RT)
TEMPORARY 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 250+00 - STA. 257+00 (DASHED LINE CENTER)
STA. 257+00 - STA. 261+00 (DASHED LINE LT)
STA. 257+00 - STA. 261+00 (SOLID RT)

REMOVING SIGNS
AS SHOWN - 1

DELINEATOR - TYPE II - WHITE
STA. 251+23, LT & RT
STA. 253+87, LT & RT
STA. 256+51, LT & RT
STA. 259+15, LT & RT



REMOVING SIGNS
AS SHOWN - 1



DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 261+00 - STA. 272+00 (SOLID LT & RT)
DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 261+00 - STA. 272+00 (SOLID LT & RT)

TEMPORARY 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 261+00 - STA. 272+00 (SOLID LT & RT)
TEMPORARY 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 261+00 - STA. 272+00 (SOLID LT & RT)

DELINEATOR - TYPE II - WHITE
STA. 261+79, LT & RT
STA. 264+43, LT & RT
STA. 267+07, LT & RT
STA. 269+71, LT & RT

PAVEMENT MARKING LEGEND
4" SYL = 4" SINGLE YELLOW LINE
4" SWL = 4" SINGLE WHITE LINE
4" DYL = 4" DOUBLE YELLOW LINE
4" BYL = 4" SINGLE DASHED YELLOW LINE

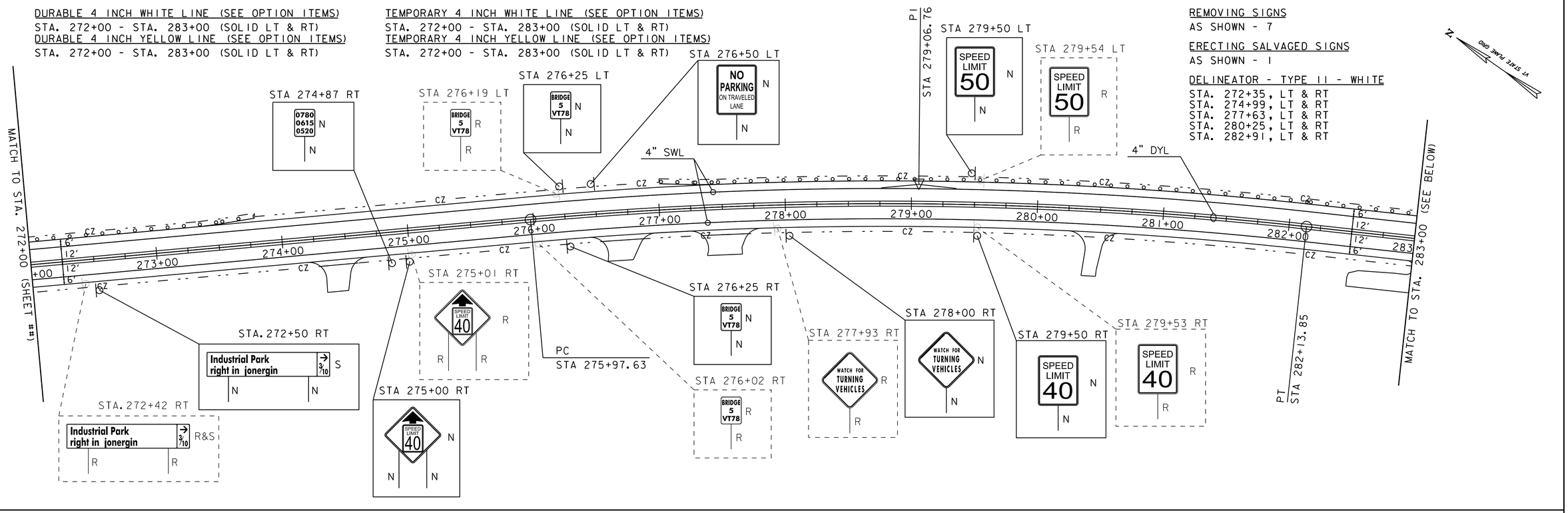
0 40 80
SCALE IN FEET

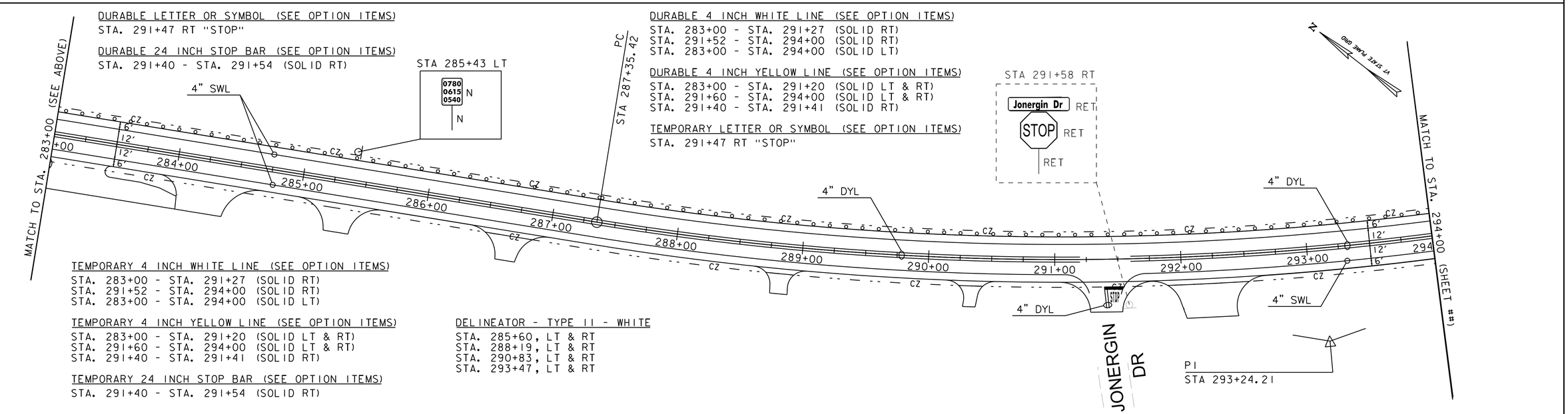
SIGN LEGEND
R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
R&S = REMOVE AND SALVAGE
B-B = BACK TO BACK
EXISTING = ----------
NEW = ——————

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_spm.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. GRAHAM
SIGNING & PAVEMENT MARKING SHEET #11
PLOT DATE: 3/7/2019
DRAWN BY: J. ROBERT
CHECKED BY: G. BAKOS
SHEET 153 OF 305





PAVEMENT MARKING LEGEND
4" SYL = 4" SINGLE YELLOW LINE
4" SWL = 4" SINGLE WHITE LINE
4" DYL = 4" DOUBLE YELLOW LINE
4" BYL = 4" SINGLE DASHED YELLOW LINE

0 40 80
SCALE IN FEET

SIGN LEGEND
R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
R&S = REMOVE AND SALVAGE
B-B = BACK TO BACK
EXISTING = ----------
NEW = ——————

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_spm.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. GRAHAM
SIGNING & PAVEMENT MARKING SHEET #12

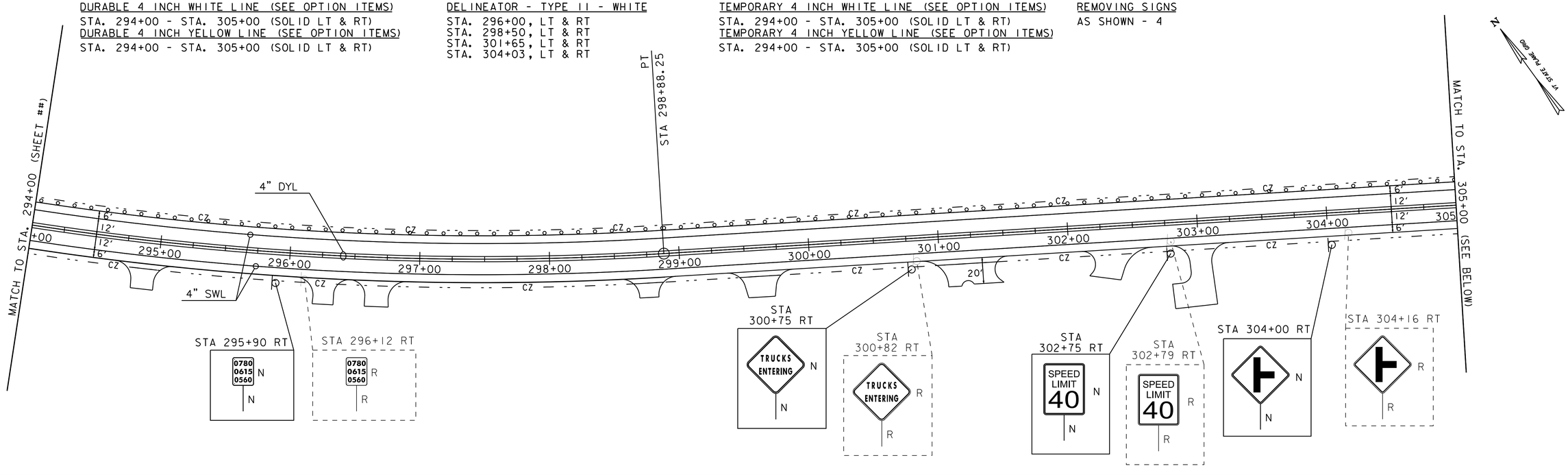
PLOT DATE: 3/7/2019
DRAWN BY: J. ROBERT
CHECKED BY: G. BAKOS
SHEET 154 OF 305

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 294+00 - STA. 305+00 (SOLID LT & RT)
DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 294+00 - STA. 305+00 (SOLID LT & RT)

DELINEATOR - TYPE II - WHITE
STA. 296+00, LT & RT
STA. 298+50, LT & RT
STA. 301+65, LT & RT
STA. 304+03, LT & RT

TEMPORARY 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 294+00 - STA. 305+00 (SOLID LT & RT)
TEMPORARY 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 294+00 - STA. 305+00 (SOLID LT & RT)

REMOVING SIGNS
AS SHOWN - 4



REMOVING SIGNS
AS SHOWN - 2

DELINEATOR - TYPE II - WHITE
STA. 307+00, LT & RT
STA. 309+31, LT & RT
STA. 311+95, LT & RT
STA. 314+59, LT & RT

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 305+00 - STA. 311+02 (SOLID RT)
STA. 311+53 - STA. 316+00 (SOLID RT)
STA. 305+00 - STA. 316+00 (SOLID LT)
TEMPORARY 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 305+00 - STA. 311+02 (SOLID RT)
STA. 311+53 - STA. 316+00 (SOLID RT)
STA. 305+00 - STA. 316+00 (SOLID LT)

DURABLE 24 INCH STOP BAR (SEE OPTION ITEMS)
STA. 311+25 - STA. 311+60 (SOLID RT)

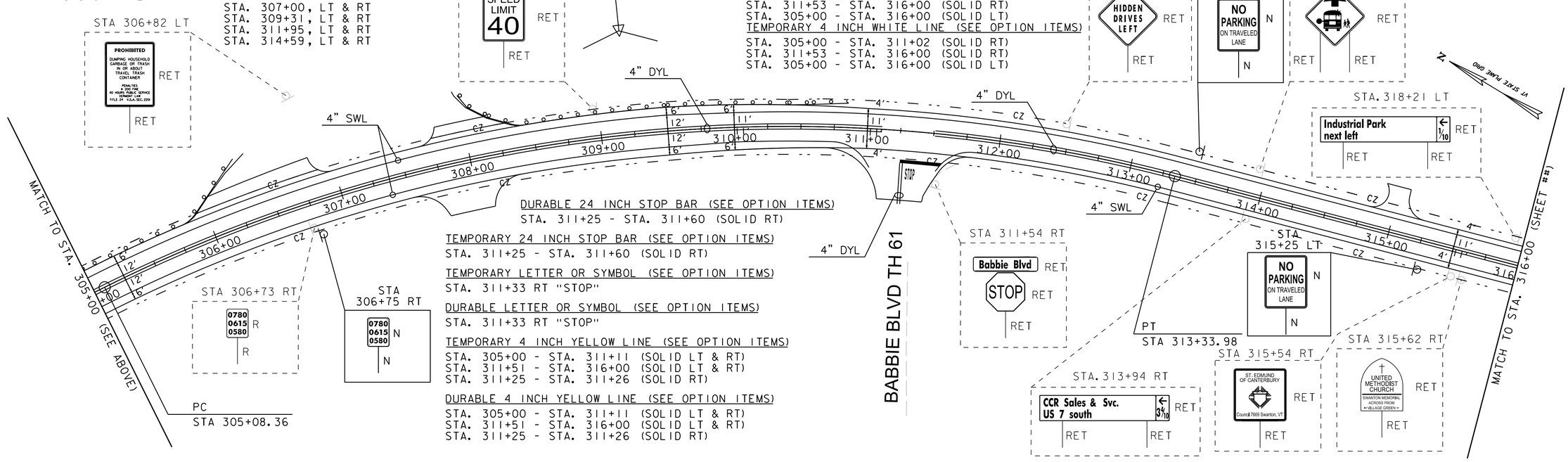
TEMPORARY 24 INCH STOP BAR (SEE OPTION ITEMS)
STA. 311+25 - STA. 311+60 (SOLID RT)

TEMPORARY LETTER OR SYMBOL (SEE OPTION ITEMS)
STA. 311+33 RT "STOP"

DURABLE LETTER OR SYMBOL (SEE OPTION ITEMS)
STA. 311+33 RT "STOP"

TEMPORARY 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 305+00 - STA. 311+11 (SOLID LT & RT)
STA. 311+51 - STA. 316+00 (SOLID LT & RT)
STA. 311+25 - STA. 311+26 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 305+00 - STA. 311+11 (SOLID LT & RT)
STA. 311+51 - STA. 316+00 (SOLID LT & RT)
STA. 311+25 - STA. 311+26 (SOLID RT)



PAVEMENT MARKING LEGEND
4" SYL = 4" SINGLE YELLOW LINE
4" SWL = 4" SINGLE WHITE LINE
4" DYL = 4" DOUBLE YELLOW LINE
4" BYL = 4" SINGLE DASHED YELLOW LINE

0 40 80
SCALE IN FEET

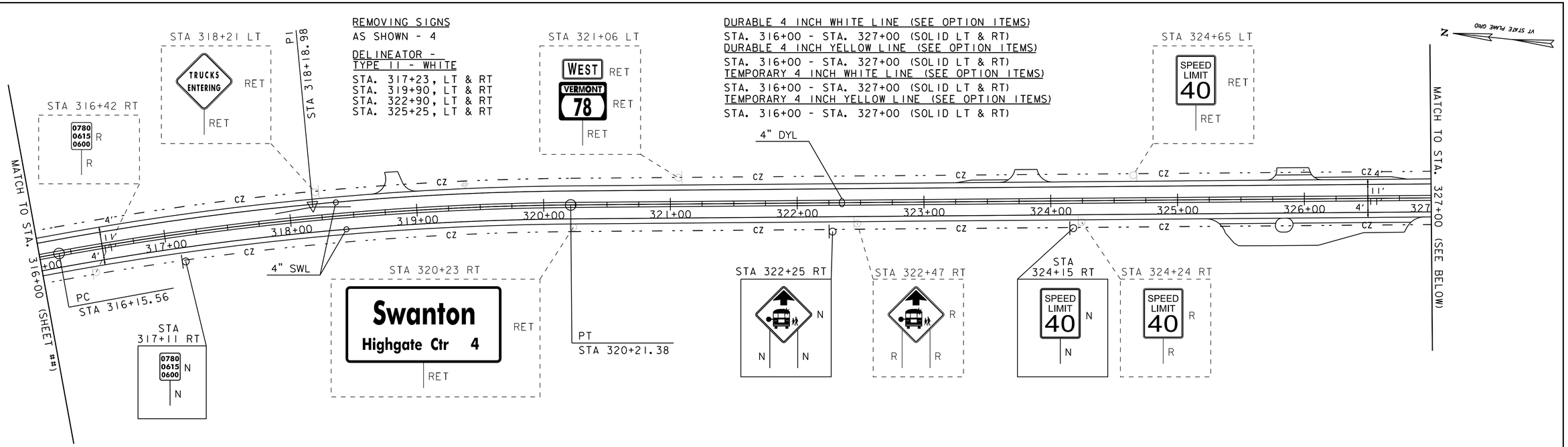
SIGN LEGEND
R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
R&S = REMOVE AND SALVAGE
B-B = BACK TO BACK
EXISTING = ----------
NEW = ——————

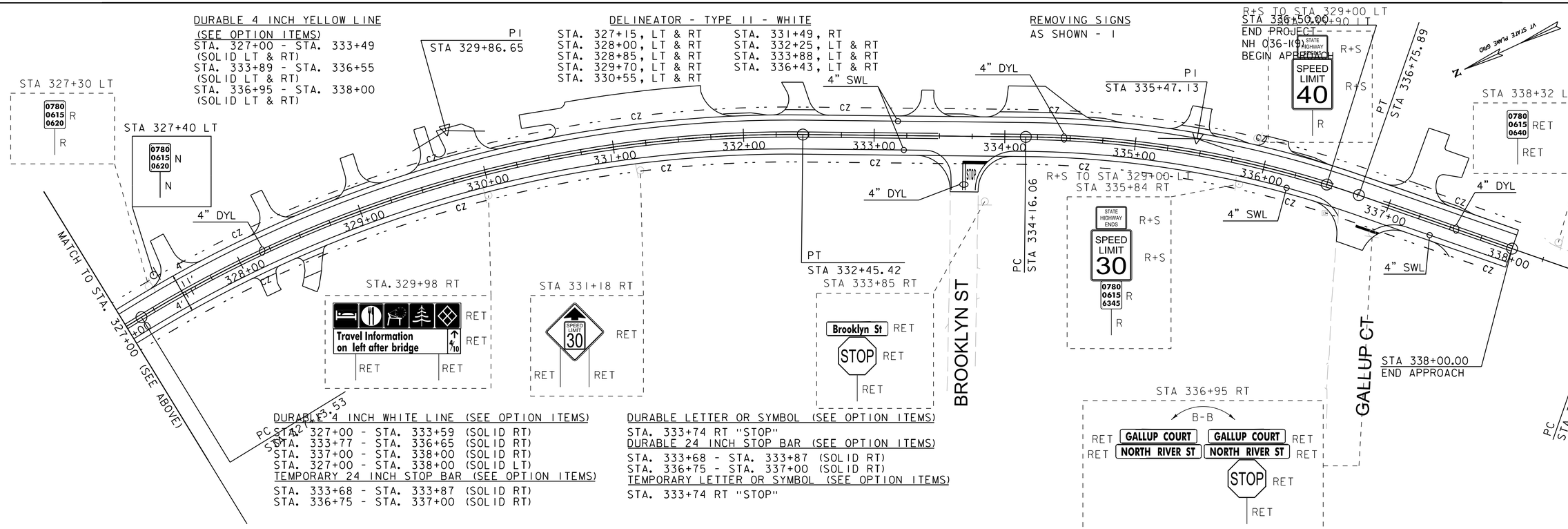
DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032bdr_spm.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. GRAHAM
SIGNING & PAVEMENT MARKING SHEET #13
PLOT DATE: 3/7/2019
DRAWN BY: J. ROBERT
CHECKED BY: G. BAKOS
SHEET 155 OF 305





DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 327+00 - STA. 333+59 (SOLID RT)
STA. 333+77 - STA. 336+65 (SOLID RT)
STA. 337+00 - STA. 338+00 (SOLID RT)
STA. 327+00 - STA. 338+00 (SOLID LT)
TEMPORARY 24 INCH STOP BAR (SEE OPTION ITEMS)
STA. 333+68 - STA. 333+87 (SOLID RT)
STA. 336+75 - STA. 337+00 (SOLID RT)

DURABLE LETTER OR SYMBOL (SEE OPTION ITEMS)
STA. 333+74 RT "STOP"
DURABLE 24 INCH STOP BAR (SEE OPTION ITEMS)
STA. 333+68 - STA. 333+87 (SOLID RT)
STA. 336+75 - STA. 337+00 (SOLID RT)
TEMPORARY LETTER OR SYMBOL (SEE OPTION ITEMS)
STA. 333+74 RT "STOP"

PAVEMENT MARKING LEGEND
4" SYL = 4" SINGLE YELLOW LINE
4" SWL = 4" SINGLE WHITE LINE
4" DYL = 4" DOUBLE YELLOW LINE
4" BYL = 4" SINGLE DASHED YELLOW LINE

0 40 80
SCALE IN FEET

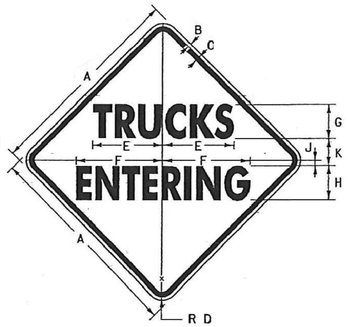
SIGN LEGEND
R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
R&S = REMOVE AND SALVAGE
B-B = BACK TO BACK
EXISTING = ----------
NEW = ——————

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-I(9)

FILE NAME: z96b032bdr_spm.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. GRAHAM
SIGNING & PAVEMENT MARKING SHEET #14

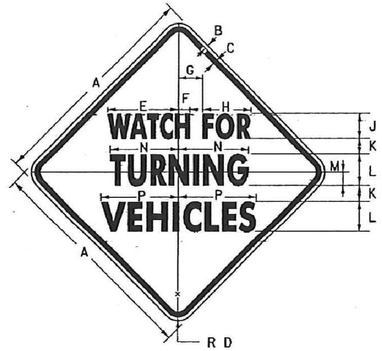
PLOT DATE: 3/7/2019
DRAWN BY: J. ROBERT
CHECKED BY: G. BAKOS
SHEET 156 OF 305



VW-202

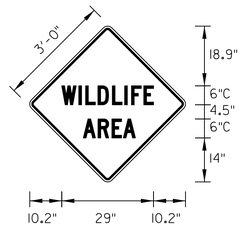
SIGN	DIMENSIONS (INCHES)									
	A	B	C	D	E	F	G	H	J	K
MIN.	30	1/2	3/4	1 7/8	14 7/16	6 11/16	5C	5C	3/4	4
STD.	36	5/8	7/8	2 1/4	17 3/8	8	6C	6C	7/8	4 3/16
SPECIAL	48	3/4	1 1/4	3	23 1/8	10 11/16	8B	8C	1 3/16	6 3/8

(ALL DIMENSIONS SHOWNIN INCHES EXCEPT WHERE NOTED)



VW-205

SIGN	DIMENSIONS (INCHES)														
	A	B	C	D	E	F	G	H	J	K	L	M	N	P
MIN.	30	1/2	3/4	1 7/8	9 5/8	1 1/2	3 3/8	6 3/8	4B	2	5B	2	9 1/4	10 1/4
STD.	36	5/8	7/8	2 1/4	11 3/4	1 7/8	4	8	4C	2 1/2	5C	2	11 1/2	12 7/8
SPECIAL	48	3/4	1 1/4	3	14 3/4	2 3/8	5 3/8	10	5C	3 3/8	8B	2 5/8	14 11/16	16 3/16



Panel Style: warning.ssi
M.U.T.C.D.: 2009 Edition



* REDUCE SPACING 40%
** REDUCE SPACING 60%

VR-023b

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032tsss.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: J. ROBERT
DESIGNED BY: M. GRAHAM	CHECKED BY: G. BAKOS
GUIDE SIGN SUMMARY SHEET	SHEET 157 OF 305

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (in)	HEIGHT (in)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	EXIST POST SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL lb/ft 1.12	2.0	3.0	SQUARE STEEL (in) lb/ft 1.75 1.88	2.0 2.42	2.5 3.35	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (in) lb/ft 3.0 1.3	4.0 1.7	4.0 MOD 1.7	TUBULAR STEEL Ø (in) FOUNDATION	lb/ft 3.0 7.6	3.5 9.0	4.0 10.8	5.0 14.6	W-SHAPE STEEL FTG. SIZE 24"	30"	WEIGHT	POST SIZE	SIGN REMOVED & REUSED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
											OPTION ITEMS																									
39+50 RT	SPEED LIMIT 50	1	24	30	5.00						1					X		X															SHSM R2-1(50)		
40+50 LT	BRIDGE ICES BEFORE ROAD	1	36	36	9.00						2					X		X															SHSM W8-13		
42+55 RT	0780 0615 0080	1	6	10	0.42						1				X			X															VD-700 WOG		T-44
44+50 RT	W. Swanton Orchard Cider Mill & Mkt. ↑ 3/10	1	72	16	8.00																														E-125
44+50 RT	Missisquoi National Wildlife Refuge → 3/10	1	72	16	8.00						2						X	X																	E-125
44+50 RT	Lakewood Campground → 2						1																										EXISTING SIGN REMOVED & RESET FROM STA 44+51RT		
49+00 RT	WILDLIFE AREA	1	36	36	9.00						1						X	X															WII-3 (MOD)		
49+00 RT	NEXT 3 MILES	1	30	24	5.00																												SHSM WI6-4P		
53+11 LT	0780 0615 0100	1	6	10	0.42						1				X			X															VD-700 WOG		T-44
53+25 RT		1	36	36	9.00						2					X		X															SHSM WI0-2R		
53+25 RT	← Church Road Tabor Road →						1																										EXISTING SIGN REMOVED & RESET FROM STA 53+15 RT		
												FT	FT	FT	FT 30	FT 75	FT 45		EA	LB	LB	LB		LB	LB	LB	LB								
	TOTALS				SF 53.84	SF	EA. 2	SF				FT			FT 150					LB			EA.	LB				EA.	EA.	LB					

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE."

POST LENGTH AVERAGES 15 FEET
POST LENGTH WITH '+' AVERAGES 20 FEET

BOW = BLACK LEGEND ON WHITE BACKGROUND - PLAQUE
GOW = GREEN LEGEND ON WHITE BACKGROUND
ROW = RED LEGEND ON WHITE BACKGROUND
WOG = WHITE LEGEND ON GREEN BACKGROUND - PLAQUE
FYG = BLACK LEGEND ON FLUORESCENT YELLOW-GREEN BACKGROUND
SHSM = FHWA STANDARD HIGHWAY SIGNS AND MARKINGS BOOK (WITH 2012 SUPPLEMENT)

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032tsss.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. GRAHAM
TRAFFIC SIGN SUMMARY SHEET 1

PLOT DATE: 3/7/2019
DRAWN BY: J. ROBERT
CHECKED BY: G. BAKOS
SHEET 158 OF 305

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS			NEW & SALVAGED SIGNS				EXIST POST		NEW SIGN POSTS																						REMARKS	SIGN DETAIL	
		EA	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN	SALV TIS	RETAIN	SALVAGE	NO. OF POSTS	FLANGED CHANNEL lb/ft			SQUARE STEEL (in) lb/ft			ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (in) lb/ft			TUBULAR STEEL Ø (in)					W-SHAPE STEEL				SIGN REQUIRED		DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
																							FOUNDATION	lb/ft				FTG. SIZE		WEIGHT	POST SIZE				
											OPTION ITEMS	1.12	2.0	3.0	1.75	2.0	2.5			3.0	4.0	4.0 MOD		3.0	3.5	4.0	5.0	24"	30"						
															1.88	2.42	3.35			1.3	1.7	1.7		7.6	9.0	10.8	14.6								
57+58 RT	RAIL CROSSING ROAD	1	48	9	6.00						1						X	X															SHSM RI5-1		
57+58 RT	YIELD	1	36x36x36		4.50																												SHSM RI-2		
57+90 LT	Church Rd						1																										EXISTING SIGN REMOVED & RESET FROM STA 57+91 RT		
57+90 LT	N. River Rd						1																										EXISTING SIGN REMOVED & RESET FROM STA 57+91 RT		
57+90 LT	STOP	1	30	30	6.25						1						X	X															SHSM RI-1		
57+90 LT	0780 0615 0191	1	6	10	0.42																												VD-700 WOG		T-44
58+05 RT	Tabor Rd						1																										EXISTING SIGN REMOVED & RESET FROM STA 58+03		
58+05 RT	STOP	1	30	30	6.25						1						X	X															SHSM RI-1		
59+00 LT	DO NOT PASS	1	24	30	5.00						1					X		X															SHSM R4-1		
59+00 RT	PASS WITH CARE	1	24	30	5.00						1					X		X															SHSM R4-2		
63+25 LT		1	36	36	9.00						2					X		X															SHSM W10-2L		
63+25 LT	← Tabor Rd Church Rd →						1																										EXISTING SIGN REMOVED & SALVAGED FROM STA 53+20 LT		
												FT	FT	FT	FT	FT	FT		EA	LB	LB	LB		LB	LB	LB	LB							
																60	45																		
TOTALS		SF 42.42	SF	EA. 4	SF							FT			FT 105					LB			EA.	LB				EA.	EA.	LB				

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE."

POST LENGTH AVERAGES 15 FEET

POST LENGTH WITH '+' AVERAGES 20 FEET

BOW = BLACK LEGEND ON WHITE BACKGROUND - PLAQUE
GOW = GREEN LEGEND ON WHITE BACKGROUND
ROW = RED LEGEND ON WHITE BACKGROUND
WOG = WHITE LEGEND ON GREEN BACKGROUND - PLAQUE
FYG = BLACK LEGEND ON FLUORESCENT YELLOW-GREEN BACKGROUND
SHSM = FHWA STANDARD HIGHWAY SIGNS AND MARKINGS BOOK (WITH 2012 SUPPLEMENT)

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032tsss.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. GRAHAM
TRAFFIC SIGN SUMMARY SHEET 2

PLOT DATE: 3/7/2019
DRAWN BY: J. ROBERT
CHECKED BY: G. BAKOS
SHEET 159 OF 305

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (in)	HEIGHT (in)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	EXIST POST SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL lb/ft 1.12	2.0	3.0	SQUARE STEEL (in) 1.75 lb/ft 1.88	2.0 lb/ft 2.42	2.5 lb/ft 3.35	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (in) 3.0 lb/ft 1.3	4.0 lb/ft 1.7	4.0 MOD lb/ft 1.7	TUBULAR STEEL Ø (in) FOUNDATION	3.0 lb/ft 7.6	3.5 lb/ft 9.0	4.0 lb/ft 10.8	5.0 lb/ft 14.6	W-SHAPE STEEL FTG. SIZE 24"	30"	WEIGHT	POST SIZE	SIGN REQUIRED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
											OPTION ITEMS																									
63+67 RT	0780 0615 0120	1	6	10	0.42						1				X			X																VD-700 WOG		T-44
66+00 LT	Missisquoi National Wildlife Refuge 4/10	1	72	16	8.00						2					X		X																		
66+00 LT	Lakewood Campground 2 8/10						1																													
74+23 LT	0780 0615 0140	1	6	10	0.42						1				X			X																VD-700 WOG		T-44
84+79 RT	0780 0615 0160	1	6	10	0.42						1				X			X																VD-700 WOG		T-44
90+50 LT	PASS WITH CARE	1	24	30	5.00						1					X		X																SHSM R4-2		
90+50 RT	DO NOT PASS	1	24	30	5.00						1					X		X																SHSM R4-1		
95+35 LT	0780 0615 0180	1	6	10	0.42						1				X			X																VD-700 WOG		T-44
97+00 RT		1	30	30	6.25						2					X		X																SHSM W2-2		
97+00 RT	Campbell Bay RD						1																											EXISTING SIGN REMOVED & SALVAGED FROM STA 96+84 RT		
												FT	FT	FT	FT	FT 60	FT 90		EA	LB	LB	LB		LB	LB	LB	LB								
	TOTALS				SF 25.93	SF	EA. 2	SF				FT			FT 150					LB			EA.	LB				EA.	EA.	LB					

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE."

POST LENGTH AVERAGES 15 FEET
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GOW = GREEN LEGEND ON WHITE BACKGROUND
ROW = RED LEGEND ON WHITE BACKGROUND
WOG = WHITE LEGEND ON GREEN BACKGROUND - PLAQUE
FYG = BLACK LEGEND ON FLUORESCENT YELLOW-GREEN BACKGROUND
SHSM = FHWA STANDARD HIGHWAY SIGNS AND MARKINGS BOOK (WITH 2012 SUPPLEMENT)

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032tsss.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. GRAHAM
TRAFFIC SIGN SUMMARY SHEET 3

PLOT DATE: 3/7/2019
DRAWN BY: J. ROBERT
CHECKED BY: G. BAKOS
SHEET 160 OF 305

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS			NEW & SALVAGED SIGNS				EXIST POST		NEW SIGN POSTS																						REMARKS	SIGN DETAIL	
		EA	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN	SALV TIS	RETAIN	SALVAGE	NO. OF POSTS	FLANGED CHANNEL lb/ft			SQUARE STEEL (in) lb/ft			ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (in) lb/ft			FOUNDATION	TUBULAR STEEL Ø (in) lb/ft				W-SHAPE STEEL FTG. SIZE		WEIGHT	POST SIZE	SIGN REQUIRED		DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
												1.12	2.0	3.0	1.75	2.0	2.5			3.0	4.0	4.0 MOD		3.0	3.5	4.0	5.0	24"	30"						
															1.88	2.42	3.35			1.3	1.7	1.7		7.6	9.0	10.8	14.6								
											OPTION ITEMS																									
100+00 LT	WEST	1	24	12	2.00																												SHSM M3-4 GOW		
100+00 LT	VERMONT 78	1	24	24	4.00						1					X		X															MI-5(VT) GOW		E-136B
100+00 RT	NO PARKING ON TRAVELED LANE	1	24	30	5.00						1					X		X															VR-020 ROW		E-146
104+25 LT	N. River Rd						1																										EXISTING SIGN REMOVED & RESET FROM STA 104+26		
104+25 LT	Campbell Bay Rd						1																										EXISTING SIGN REMOVED & RESET FROM STA 104+26		
104+25 LT	STOP	1	30	30	6.25						2					X		X															SHSM R1-1		
104+25 LT	0780 0615 0197	1	6	10	0.42																												VD-700 WOG		T-44
104+50 RT		1	48	24	8.00						1					X		X															SHSM W1-7		
105+50 RT	BRIDGE 3 VT78	1	6	10	0.42						1				X			X															VD-701 WOG		T-42
106+18 RT	EAST	1	24	12	2.00																												SHSM M3-2 GOW		
106+18 RT	VERMONT 78	1	24	24	4.00						1					X		X															MI-5(VT) GOW		E-136B
												FT	FT	FT	FT	FT	FT		EA	LB	LB	LB		LB	LB	LB	LB								
															15	90																			
	TOTALS	SF 32.09	SF	EA. 2	SF							FT			FT 105					LB			EA.	LB				EA.	EA.	LB				

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE."

POST LENGTH AVERAGES 15 FEET

POST LENGTH WITH '+' AVERAGES 20 FEET

BOW = BLACK LEGEND ON WHITE BACKGROUND - PLAQUE
GOW = GREEN LEGEND ON WHITE BACKGROUND
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WOG = WHITE LEGEND ON GREEN BACKGROUND - PLAQUE
FYG = BLACK LEGEND ON FLUORESCENT YELLOW-GREEN BACKGROUND
SHSM = FHWA STANDARD HIGHWAY SIGNS AND MARKINGS BOOK (WITH 2012 SUPPLEMENT)

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032tsss.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. GRAHAM
TRAFFIC SIGN SUMMARY SHEET 4

PLOT DATE: 3/7/2019
DRAWN BY: J. ROBERT
CHECKED BY: G. BAKOS
SHEET 161 OF 305

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	SIGN DIMENSIONS WIDTH (in)	SIGN DIMENSIONS HEIGHT (in)	NEW & SALVAGED SIGNS "A"	NEW & SALVAGED SIGNS "B"	NEW & SALVAGED SIGNS SALV SIGN	NEW & SALVAGED SIGNS SALV TIS	EXIST POST RETAIN	EXIST POST SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL lb/ft 1.12	FLANGED CHANNEL lb/ft 2.0	FLANGED CHANNEL lb/ft 3.0	SQUARE STEEL (in) 1.75 lb/ft 1.88	SQUARE STEEL (in) 2.0 lb/ft 2.42	SQUARE STEEL (in) 2.5 lb/ft 3.35	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (in) 3.0 lb/ft 1.3	TUBULAR ALUMINUM Ø (in) 4.0 lb/ft 1.7	TUBULAR ALUMINUM Ø (in) 4.0 MOD lb/ft 1.7	TUBULAR STEEL Ø (in) FOUNDATION	TUBULAR STEEL Ø (in) 3.0 lb/ft 7.6	TUBULAR STEEL Ø (in) 3.5 lb/ft 9.0	TUBULAR STEEL Ø (in) 4.0 lb/ft 10.8	TUBULAR STEEL Ø (in) 5.0 lb/ft 14.6	W-SHAPE STEEL FTG. SIZE 24"	W-SHAPE STEEL FTG. SIZE 30"	W-SHAPE STEEL WEIGHT	W-SHAPE STEEL POST SIZE	SIGN REQUIRED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	SIGN DETAIL STD. SHEET NUMBER
											OPTION ITEMS																								
106+25 LT	BRIDGE 3 VT78	1	6	10	0.42						1				X			X															VD-701 WOG		T-42
107+75 LT 111+75 LT	NATIONAL WILDLIFE REFUGE	2			*						2				X			X														SIGN TO BE PROVIDED BY US DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE		
107+75 LT 111+75 LT	AREA BEYOND THIS SIGN CLOSED	2			*																											SIGN TO BE PROVIDED BY US DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE		
113+50 LT		1	30	30	6.25						2					X		X														SHSM W2-2		
113+50 LT	Campbell Bay RD						1																									EXISTING SIGN REMOVED & RESET FROM STA 113+47 RT		
115+00 RT	SPEED LIMIT 50	1	24	30	5.00						1					X		X														SHSM R2-1(50)		
115+75 LT	NATIONAL WILDLIFE REFUGE	1			*						1				X			X														SIGN TO BE PROVIDED BY US DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE		
115+75 LT	AREA BEYOND THIS SIGN CLOSED	1			*																											SIGN TO BE PROVIDED BY US DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE		
116+47 LT	0780 0615 0220	1	6	10	0.42						1				X			X														VD-700 WOG		T-44
												FT	FT	FT	FT 75	FT 45	FT		EA	LB	LB	LB		LB	LB	LB	LB							
	TOTALS				SF 12.09	SF	EA. 1	SF				FT			FT 120					LB			EA.	LB				EA.	EA.	LB				

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE."

POST LENGTH AVERAGES 15 FEET

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GOW = GREEN LEGEND ON WHITE BACKGROUND
ROW = RED LEGEND ON WHITE BACKGROUND
WOG = WHITE LEGEND ON GREEN BACKGROUND - PLAQUE
FYG = BLACK LEGEND ON FLUORESCENT YELLOW-GREEN BACKGROUND
SHSM = FHWA STANDARD HIGHWAY SIGNS AND MARKINGS BOOK (WITH 2012 SUPPLEMENT)

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032tsss.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. GRAHAM
TRAFFIC SIGN SUMMARY SHEET 5

PLOT DATE: 3/7/2019
DRAWN BY: J. ROBERT
CHECKED BY: G. BAKOS
SHEET 162 OF 305

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (in)	HEIGHT (in)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL lb/ft 1.12	2.0	3.0	SQUARE STEEL (in) lb/ft 1.75 1.88	2.0 2.42	2.5 3.35	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (in) lb/ft 3.0 1.3	4.0 1.7	4.0 MOD 1.7	FOUNDATION	TUBULAR STEEL Ø (in) lb/ft 3.0 7.6	3.5 9.0	4.0 10.8	5.0 14.6	W-SHAPE STEEL FTG. SIZE 24"	30"	WEIGHT	POST SIZE	SIGN REQUIRED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
											OPTION ITEMS																									
121+75 LT 125+75 LT	NATIONAL WILDLIFE REFUGE	2			*						2				X			X															SIGN TO BE PROVIDED BY US DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE		
121+75 LT 125+75 LT	AREA BEYOND THIS SIGN CLOSED	2			*																											SIGN TO BE PROVIDED BY US DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE		
127+03 RT	0780 0615 0240	1	6	10	0.42						1				X			X															VD-700 WOG		T-44
129+75 LT 137+00 LT	NATIONAL WILDLIFE REFUGE	2			*						2				X			X															SIGN TO BE PROVIDED BY US DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE		
129+75 LT 137+00 LT	AREA BEYOND THIS SIGN CLOSED	2			*																											SIGN TO BE PROVIDED BY US DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE		
137+59 LT	0780 0615 0260	1	6	10	0.42						1				X			X															VD-700 WOG		T-44
142+00 LT	NATIONAL WILDLIFE REFUGE	1			*						1				X			X															SIGN TO BE PROVIDED BY US DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE		
142+00 LT	AREA BEYOND THIS SIGN CLOSED	1			*																											SIGN TO BE PROVIDED BY US DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE		
143+50 RT	NO PARKING ON TRAVELED LANE	1	24	30	5.00						1					X		X															VR-020 ROW		E-146
											FT	FT	FT		FT 105	FT 15	FT		EA	LB	LB	LB		LB	LB	LB	LB								
TOTALS		SF 5.84	SF	EA.	SF						FT				FT 120					LB			EA.	LB				EA.	EA.	LB					

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE."

POST LENGTH AVERAGES 15 FEET

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ROW = RED LEGEND ON WHITE BACKGROUND
WOG = WHITE LEGEND ON GREEN BACKGROUND - PLAQUE
FYG = BLACK LEGEND ON FLUORESCENT YELLOW-GREEN BACKGROUND
SHSM = FHWA STANDARD HIGHWAY SIGNS AND MARKINGS BOOK (WITH 2012 SUPPLEMENT)

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032tsss.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. GRAHAM
TRAFFIC SIGN SUMMARY SHEET 6

PLOT DATE: 3/7/2019
DRAWN BY: J. ROBERT
CHECKED BY: G. BAKOS
SHEET 163 OF 305

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	SIGN DIMENSIONS WIDTH (in)	SIGN DIMENSIONS HEIGHT (in)	NEW & SALVAGED SIGNS "A"	NEW & SALVAGED SIGNS "B"	NEW & SALVAGED SIGNS SALV SIGN	NEW & SALVAGED SIGNS SALV TIS	EXIST POST RETAIN	EXIST POST SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL lb/ft 1.12	FLANGED CHANNEL lb/ft 2.0	FLANGED CHANNEL lb/ft 3.0	SQUARE STEEL (in) 1.75 lb/ft 1.88	SQUARE STEEL (in) 2.0 lb/ft 2.42	SQUARE STEEL (in) 2.5 lb/ft 3.35	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (in) 3.0 lb/ft 1.3	TUBULAR ALUMINUM Ø (in) 4.0 lb/ft 1.7	TUBULAR ALUMINUM Ø (in) 4.0 MOD lb/ft 1.7	TUBULAR STEEL Ø (in) FOUNDATION	TUBULAR STEEL Ø (in) 3.0 lb/ft 7.6	TUBULAR STEEL Ø (in) 3.5 lb/ft 9.0	TUBULAR STEEL Ø (in) 4.0 lb/ft 10.8	TUBULAR STEEL Ø (in) 5.0 lb/ft 14.6	W-SHAPE STEEL FTG. SIZE 24"	W-SHAPE STEEL FTG. SIZE 30"	W-SHAPE STEEL WEIGHT	W-SHAPE STEEL POST SIZE	SIGN REQUIRED	REMARKS	SIGN DETAIL: DETAIL ON SHEET NUMBER	SIGN DETAIL: STD. SHEET NUMBER
											OPTION ITEMS																								
146+75 LT	NATIONAL WILDLIFE REFUGE	1			*						1				X			X															SIGN TO BE PROVIDED BY US DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE		
146+75 LT	AREA BEYOND THIS SIGN CLOSED	1			*																											SIGN TO BE PROVIDED BY US DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE		
147+50 RT	NATIONAL WILDLIFE REFUGE	1			*						1				X			X															SIGN TO BE PROVIDED BY US DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE		
148+15 RT	BRIDGE 4 VT78	1	6	10	0.42						1				X			X															VD-701 WOG		T-42
148+15 RT	0780 0615 0280	1	6	10	0.42						1				X			X															VD-700 WOG		T-44
148+75 LT	BRIDGE 4 VT78	1	6	10	0.42						1				X			X															VD-701 WOG		T-42
153+75 LT	NATIONAL WILDLIFE REFUGE	1			*						1				X			X															SIGN TO BE PROVIDED BY US DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE		
153+75 LT	AREA BEYOND THIS SIGN CLOSED	1			*																											SIGN TO BE PROVIDED BY US DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE		
158+25 LT		1	30	30	6.25						1					X		X														SHSM W1-4		
158+71 LT	0780 0615 0300	1	6	10	0.42						1				X			X															VD-700 WOG		T-44
												FT	FT	FT	FT 90	FT 15	FT		EA	LB	LB	LB		LB	LB	LB	LB								
	TOTALS				SF 7.93	SF	EA.	SF				FT			FT 105					LB			EA.	LB				EA.	EA.	LB					

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE."

POST LENGTH AVERAGES 15 FEET

POST LENGTH WITH '+' AVERAGES 20 FEET

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GOW = GREEN LEGEND ON WHITE BACKGROUND
ROW = RED LEGEND ON WHITE BACKGROUND
WOG = WHITE LEGEND ON GREEN BACKGROUND - PLAQUE
FYG = BLACK LEGEND ON FLUORESCENT YELLOW-GREEN BACKGROUND
SHSM = FHWA STANDARD HIGHWAY SIGNS AND MARKINGS BOOK (WITH 2012 SUPPLEMENT)

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032tsss.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. GRAHAM
TRAFFIC SIGN SUMMARY SHEET 7

PLOT DATE: 3/7/2019
DRAWN BY: J. ROBERT
CHECKED BY: G. BAKOS
SHEET 164 OF 305

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS			NEW & SALVAGED SIGNS				EXIST POST		NEW SIGN POSTS																						REMARKS	SIGN DETAIL	
		EA	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN	SALV TIS	RETAIN	SALVAGE	NO. OF POSTS	FLANGED CHANNEL lb/ft			SQUARE STEEL (in) lb/ft			ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (in) lb/ft			TUBULAR STEEL Ø (in)					W-SHAPE STEEL				SIGN REQUIRED		DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
															1.75	2.0	2.5			3.0	4.0	4.0 MOD	FOUND-ATION	3.0	3.5	4.0	5.0	FTG. SIZE 24"	FTG. SIZE 30"	WEIGHT	POST SIZE			
												1.12	2.0	3.0	1.88	2.42	3.35			1.3	1.7	1.7		7.6	9.0	10.8	14.6							
	OPTION ITEMS																																	
159+25 RT	NATIONAL WILDLIFE REFUGE	1			*						1				X			X														SIGN TO BE PROVIDED BY US DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE		
159+25 RT	AREA BEYOND THIS SIGN CLOSED	1			*																													
160+00 RT 163+50 LT 163+50 RT	NATIONAL WILDLIFE REFUGE	3			*						3				X			X														SIGN TO BE PROVIDED BY US DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE		
166+00 LT	NO PARKING ON TRAVELED LANE	1	24	30	5.00						1					X		X														VR-020 ROW		E-146
166+75 LT		1	30	30	6.25						1					X		X														SHSM WI-2		
169+27 RT	0780 0615 0320	1	6	10	0.42						1				X			X														VD-700 WOG		T-44
177+25 RT	NATIONAL WILDLIFE REFUGE	1			*						1				X			X														SIGN TO BE PROVIDED BY US DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE		
179+83 LT	0780 0615 0340	1	6	10	0.42						1				X			X														VD-700 WOG		T-44
185+25 RT 189+25 RT	NATIONAL WILDLIFE REFUGE	2			*						1				X			X														SIGN TO BE PROVIDED BY US DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE		
190+39 RT	0780 0615 0360	1	6	10	0.42						1				X			X														VD-700 WOG		T-44
												FT	FT	FT	FT	FT	FT		EA	LB	LB	LB		LB	LB	LB	LB							
															135	30																			
	TOTALS	SF 12.51	SF	EA.	SF							FT			FT 165					LB			EA.	LB				EA.	EA.	LB				

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE."

POST LENGTH AVERAGES 15 FEET

POST LENGTH WITH '+' AVERAGES 20 FEET

BOW = BLACK LEGEND ON WHITE BACKGROUND - PLAQUE
GOW = GREEN LEGEND ON WHITE BACKGROUND
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WOG = WHITE LEGEND ON GREEN BACKGROUND - PLAQUE
FYG = BLACK LEGEND ON FLUORESCENT YELLOW-GREEN BACKGROUND
SHSM = FHWA STANDARD HIGHWAY SIGNS AND MARKINGS BOOK (WITH 2012 SUPPLEMENT)

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032tsss.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. GRAHAM
TRAFFIC SIGN SUMMARY SHEET 8

PLOT DATE: 3/7/2019
DRAWN BY: J. ROBERT
CHECKED BY: G. BAKOS
SHEET 165 OF 305

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	SIGN DIMENSIONS WIDTH (in)	SIGN DIMENSIONS HEIGHT (in)	NEW & SALVAGED SIGNS "A"	NEW & SALVAGED SIGNS "B"	NEW & SALVAGED SIGNS SALV SIGN	NEW & SALVAGED SIGNS SALV TIS	EXIST POST RETAIN	EXIST POST SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL lb/ft 1.12	FLANGED CHANNEL lb/ft 2.0	FLANGED CHANNEL lb/ft 3.0	SQUARE STEEL (in) 1.75 lb/ft 1.88	SQUARE STEEL (in) 2.0 lb/ft 2.42	SQUARE STEEL (in) 2.5 lb/ft 3.35	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (in) 3.0 lb/ft 1.3	TUBULAR ALUMINUM Ø (in) 4.0 lb/ft 1.7	TUBULAR ALUMINUM Ø (in) 4.0 MOD lb/ft 1.7	TUBULAR STEEL Ø (in) FOUNDATION	TUBULAR STEEL Ø (in) 3.0 lb/ft 7.6	TUBULAR STEEL Ø (in) 3.5 lb/ft 9.0	TUBULAR STEEL Ø (in) 4.0 lb/ft 10.8	TUBULAR STEEL Ø (in) 5.0 lb/ft 14.6	W-SHAPE STEEL FTG. SIZE 24"	W-SHAPE STEEL FTG. SIZE 30"	W-SHAPE STEEL WEIGHT	W-SHAPE STEEL POST SIZE	SIGN REQUIRED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	SIGN DETAIL STD. SHEET NUMBER
											OPTION ITEMS																								
194+50 RT	NATIONAL WILDLIFE REFUGE	1			*						1				X			X															SIGN TO BE PROVIDED BY US DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE		
200+50 RT	SPEED LIMIT 50	1	24	30	5.00						1					X		X															SHSM R2-1(50)		
200+95 LT	0780 0615 0380	1	6	10	0.42						1				X			X															VD-700 WOG		T-44
202+75 LT	NO PARKING ON TRAVELED LANE	1	24	30	5.00						1					X		X															VR-020 ROW		E-146
204+25 RT	$500 FINE FOR THROWING TRASH ON HIGHWAYS AND STREAMS	1	24	30	5.00						1					X		X															VR-023b BOW		
204+75 LT	SPEED LIMIT 50	1	24	30	5.00						1					X		X															SHSM R2-1(50)		
206+25 RT		1	30	30	6.25						1					X		X															SHSM W1-2		
207+25 RT	NATIONAL WILDLIFE REFUGE	1			*						1				X			X															SIGN TO BE PROVIDED BY US DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE		
211+51 RT	0780 0615 0400	1	6	10	0.42						1				X			X															VD-700 WOG		T-44
212+25 RT	NATIONAL WILDLIFE REFUGE	1			*						1				X			X															SIGN TO BE PROVIDED BY US DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE		
												FT	FT	FT	FT 75	FT 75	FT		EA	LB	LB	LB		LB	LB	LB	LB								
TOTALS		SF 27.09	SF	EA.	SF							FT			FT 150					LB			EA.	LB				EA.	EA.	LB					

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE."

POST LENGTH AVERAGES 15 FEET

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SHSM = FHWA STANDARD HIGHWAY SIGNS AND MARKINGS BOOK (WITH 2012 SUPPLEMENT)

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032tsss.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. GRAHAM
TRAFFIC SIGN SUMMARY SHEET 9

PLOT DATE: 3/7/2019
DRAWN BY: J. ROBERT
CHECKED BY: G. BAKOS
SHEET 166 OF 305

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (in)	HEIGHT (in)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	EXIST POST SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL lb/ft 1.12	2.0	3.0	SQUARE STEEL (in) lb/ft 1.75 1.88	2.0 2.42	2.5 3.35	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (in) lb/ft 3.0 1.3	4.0 1.7	4.0 MOD 1.7	TUBULAR STEEL Ø (in) FOUNDATION	lb/ft 3.0 7.6	3.5 9.0	4.0 10.8	5.0 14.6	W-SHAPE STEEL FTG. SIZE 24"	30"	WEIGHT	POST SIZE	SIGN REQUIRED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
											OPTION ITEMS																									
215+00 LT	NO PARKING ON TRAVELED LANE	1	24	30	5.00						1					X		X															VR-020 ROW		E-146
216+25 RT	NATIONAL WILDLIFE REFUGE	1			*						1				X			X															SIGN TO BE PROVIDED BY US DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE		
222+01 LT	0780 0615 0420	1	6	10	0.42						1				X			X															VD-700 WOG		T-44
221+25 RT 227+00 RT	NATIONAL WILDLIFE REFUGE	2			*						2				X			X															SIGN TO BE PROVIDED BY US DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE		
232+63 RT	0780 0615 0440	1	6	10	0.42						1				X			X															VD-700 WOG		T-44
243+19 LT	0780 0615 0460	1	6	10	0.42						1				X			X															VD-700 WOG		T-44
253+75 RT	0780 0615 0480	1	6	10	0.42						1				X			X															VD-700 WOG		T-44
264+31 LT	0780 0615 0500	1	6	10	0.42						1				X			X															VD-700 WOG		T-44
272+50 RT	Industrial Park right in Jonergin 3/10						1				2					X		X															EXISTING SIGN REMOVED & RESET FROM STA 272+42 RT		
274+87 RT	0780 0615 0520	1	6	10	0.42						1				X			X															VD-700 WOG		T-44
												FT	FT	FT	FT 135	FT 45	FT		EA	LB	LB	LB		LB	LB	LB	LB								
	TOTALS	SF 7.52	SF		EA. 1	SF						FT			FT 180					LB			EA.	LB				EA.	EA.	LB					

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vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032tsss.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. GRAHAM
TRAFFIC SIGN SUMMARY SHEET 10

PLOT DATE: 3/7/2019
DRAWN BY: J. ROBERT
CHECKED BY: G. BAKOS
SHEET 167 OF 305

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (in)	HEIGHT (in)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL lb/ft 1.12	2.0	3.0	SQUARE STEEL (in) lb/ft 1.75 1.88	2.0 2.42	2.5 3.35	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (in) lb/ft 3.0 1.3	4.0 1.7	4.0 MOD 1.7	TUBULAR STEEL Ø (in) FOUNDATION	3.0 7.6	3.5 9.0	4.0 10.8	5.0 14.6	W-SHAPE STEEL FTG. SIZE 24"	30"	WEIGHT	POST SIZE	SIGN REQUIRED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
											OPTION ITEMS																									
275+00 RT		1	36	36	9.00						2					X		X															SHSM W3-5(40)		
276+25 LT 276+25 RT		2	6	10	0.84						2				X			X															VD-701 WOG		T-42
276+50 LT		1	24	30	5.00						1					X		X															VR-020 ROW		E-146
278+00 RT		1	36	36	9.00						1						X	X															VW-205		
279+50 LT		1	24	30	5.00						1					X		X															SHSM R2-1(50)		
279+50 RT		1	24	30	5.00						1					X		X															SHSM R2-1(40)		
285+43 LT		1	6	10	0.42						1				X			X															VD-700 WOG		T-44
295+90 RT		1	6	10	0.42						1				X			X															VD-700 WOG		T-44
300+75 RT		1	36	36	9.00						1						X	X															VW-202		
302+75 RT		1	24	30	5.00						1					X		X															SHSM R2-1(40)		
												FT	FT	FT	FT 60	FT 90	FT 30		EA	LB	LB	LB		LB	LB	LB	LB								
	TOTALS				SF 48.68	SF	EA.	SF				FT			FT 180					LB			EA.	LB				EA.	EA.	LB					

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vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032tsss.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. GRAHAM
TRAFFIC SIGN SUMMARY SHEET II

PLOT DATE: 3/7/2019
DRAWN BY: J. ROBERT
CHECKED BY: G. BAKOS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (in)	HEIGHT (in)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL lb/ft 1.12	2.0	3.0	SQUARE STEEL (in) lb/ft 1.75 1.88	2.0 2.42	2.5 3.35	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (in) lb/ft 3.0 1.3	4.0 1.7	4.0 MOD 1.7	TUBULAR STEEL Ø (in) FOUNDATION	lb/ft 3.0 7.6	3.5 9.0	4.0 10.8	5.0 14.6	W-SHAPE STEEL FTG. SIZE 24"	30"	WEIGHT	POST SIZE	SIGN REQUIRED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
											OPTION ITEMS																									
304+00 RT		1	30	30	6.25						1					X		X														SHSM W2-2		
306+75 RT		1	6	10	0.42						1				X			X														VD-700 WOG		T-44
313+50 LT 315+25 RT		2	24	30	10.00						2					X		X														VR-020 ROW		E-146
317+11 RT		1	6	10	0.42						1				X			X														VD-700 WOG		T-44
322+25 RT		1	36	36	9.00						2					X		X														SHSM S3-1 FYG		
324+15 RT		1	24	30	5.00						1					X		X														SHSM R2-1(40)		
327+40 LT		1	6	10	0.42						1				X			X														VD-700 WOG		T-44

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											FT	FT	FT	FT	FT	FT		EA	LB	LB	LB		LB	LB	LB	LB									
														45	90																				
TOTALS	SF	SF	EA.	SF		FT			FT								LB		EA.	LB						EA.	EA.	LB							
	31.51								135																										

POST LENGTH AVERAGES 15 FEET
POST LENGTH WITH '+' AVERAGES 20 FEET

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vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032tsss.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. GRAHAM
TRAFFIC SIGN SUMMARY SHEET 12

PLOT DATE: 3/7/2019
DRAWN BY: J. ROBERT
CHECKED BY: G. BAKOS
SHEET 169 OF 305

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS			NEW & SALVAGED SIGNS				EXIST POST		NEW SIGN POSTS																				REMARKS	SIGN DETAIL	
		EA	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN	SALV TIS	RETAIN	SALVAGE	NO. OF POSTS	FLANGED CHANNEL lb/ft			SQUARE STEEL (in) lb/ft			ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (in) lb/ft			FOUNDATION	TUBULAR STEEL Ø (in) lb/ft				W-SHAPE STEEL FTG. SIZE		WEIGHT	POST SIZE	SIGN REQUIRED		DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
												1.12	2.0	3.0	1.75	2.0	2.5			3.0	4.0	4.0 MOD		3.0	3.5	4.0	5.0	24"	30"						
															1.88	2.42	3.35			1.3	1.7	1.7		7.6	9.0	10.8	14.6								
OPTION ITEMS																																			
												FT	FT	FT	FT	FT 165	FT		EA	LB	LB	LB		LB	LB	LB	LB								

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POST LENGTH AVERAGES 15 FEET
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TOTALS SHEET __	SF 53.84	SF	EA. 2	SF		FT	FT 150	LB	EA.	LB	EA.	EA.	LB
TOTALS SHEET __	SF 42.42	SF	EA. 4	SF		FT	FT 105	LB	EA.	LB	EA.	EA.	LB
TOTALS SHEET __	SF 25.93	SF	EA. 2	SF		FT	FT 150	LB	EA.	LB	EA.	EA.	LB
TOTALS SHEET __	SF 32.09	SF	EA. 2	SF		FT	FT 105	LB	EA.	LB	EA.	EA.	LB
TOTALS SHEET __	SF 12.09	SF	EA. 1	SF		FT	FT 120	LB	EA.	LB	EA.	EA.	LB
TOTALS SHEET __	SF 5.84	SF	EA.	SF		FT	FT 120	LB	EA.	LB	EA.	EA.	LB
TOTALS SHEET __	SF 7.93	SF	EA.	SF		FT	FT 105	LB	EA.	LB	EA.	EA.	LB
TOTALS SHEET __	SF 12.51	SF	EA.	SF		FT	FT 165	LB	EA.	LB	EA.	EA.	LB
TOTALS SHEET __	SF 27.09	SF	EA.	SF		FT	FT 150	LB	EA.	LB	EA.	EA.	LB
TOTALS SHEET __	SF 7.52	SF	EA. 1	SF		FT	FT 180	LB	EA.	LB	EA.	EA.	LB
TOTALS SHEET __	SF 48.68	SF	EA.	SF		FT	FT 180	LB	EA.	LB	EA.	EA.	LB
TOTALS SHEET __	SF 31.51	SF	EA.	SF		FT	FT 135	LB	EA.	LB	EA.	EA.	LB
TOTALS	SF 307.45	SF	EA. 12	SF		FT	FT 1665	LB	EA.	LB	EA.	EA.	LB

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vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032tsss.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. GRAHAM
TRAFFIC SIGN SUMMARY SHEET 13

PLOT DATE: 3/7/2019
DRAWN BY: J. ROBERT
CHECKED BY: G. BAKOS
SHEET 170 OF 305

GENERAL

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AND ITS LATEST REVISIONS, AND THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, DATED 2012, AND ITS LATEST REVISIONS.

2. ALL PRECAUTIONS SHALL BE TAKEN TO PREVENT SILTATION OR POLLUTION INTO THE STREAM, INCLUDING THE DISCHARGE OF RAW CONCRETE. ALL WATER PUMPED FROM EXCAVATION AREA SHALL MEET STATE WATER QUALITY STANDARDS.

3. IN-STREAM CONSTRUCTION SHALL BE RESTRICTED TO JULY 1 TO OCTOBER 1, UNLESS THE CONTRACTOR OBTAINS WRITTEN PERMISSION FROM THE AGENCY OF NATURAL RESOURCES TO DO WORK OUTSIDE OF THAT TIMEFRAME.

4. ALL REINFORCING STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH APPLICABLE PUBLICATIONS OF THE "CONCRETE REINFORCING STEEL INSTITUTE".

PRECAST CONCRETE BOX CULVERT NOTES

1. ITEM 540.10 PRECAST CONCRETE STRUCTURE WILL INCLUDE THE DESIGN, FABRICATION, DELIVERY, HANDLING, REPAIR AND CONSTRUCTION OF ALL THE PRECAST BRIDGE ELEMENTS, INCLUDING THE BOX CULVERT, HEADWALLS, CUT-OFF WALLS, WINGWALLS, WINGWALL FOOTINGS, REINFORCING STEEL, MEMBRANE WATERPROOFING, WATER REPELLENT, SILANE, AND DRAINAGE MATERIALS.

2. THE FABRICATOR SHALL DESIGN THE PRECAST STRUCTURE ELEMENTS, INCLUDING, BUT NOT LIMITED TO, THE BOX CULVERT, HEADWALLS, CUT-OFF WALLS, WINGWALLS, WINGWALL FOOTINGS AND ALL CONNECTIONS INCLUDING CLOSURE HARDWARE. THE JOINTS BETWEEN THE PRECAST BOX CULVERT SECTIONS SHALL BE MADE WATERTIGHT UTILIZING FLEXIBLE RUBBER OR PLASTIC GASKETS. MECHANICAL DEVICES SHALL BE USED TO LOCK THE INDIVIDUAL SECTIONS TOGETHER. THE MANUFACTURER SHALL PROVIDE ST AMPED DESIGN CALCULATIONS PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN VERMONT. THE MANUFACTURER SHALL CONSIDER STRENGTH, SERVICEABILITY, STIFFNESS AND STABILITY OF THE PRECAST ELEMENTS FOR LOADS GENERATED DURING FABRICATION, TRANSPORTATION, ERECTION, CONSTRUCTION OPERATIONS, AND ULTIMATE TRAFFIC CONDITIONS. THE CONTRACTOR SHALL SUBMIT FABRICATION DRAWINGS TO THE ENGINEER FOR APPROVAL IN ACCORDANCE WITH SUBSECTION 105.03. ALL COSTS WILL BE INCLUDED IN THE APPLICABLE 540.10, PRECAST CONCRETE STRUCTURE PAY ITEM.

3. THE PRECAST BOX SECTIONS ARE SHOWN FOR REFERENCE ONLY. THE ACTUAL THICKNESS OF THE WALLS WILL BE DEPENDENT ON THE FABRICATOR. ALL UNITS EXCEPT THE FIRST AND LAST WILL BE THE SAME SHAPE AND THE SAME LENGTH.

4. ALL REINFORCING STEEL SHALL BE LEVEL 1 (UNCOATED). MINIMUM CLEAR COVER SHALL BE 2 INCHES.

5. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1" X 1".

6. A MINIMUM OF 1'-0" COVER OVER THE BOX MUST BE PROVIDED BEFORE ALLOWING ANY VEHICLE OVER THE STRUCTURE.

7. SOIL BORINGS WERE COMPLETED IN MARCH 2014. BORING LOGS ARE INCLUDED IN THIS PLAN SET. A GEOTECHNICAL REPORT SUMMARIZING THE SUBSURFACE CONDITIONS AND DESIGN RECOMMENDATIONS FOR THE BOX CULVERTS AND WINGWALLS WAS COMPLETED BY TERRACON CONSULTANTS INC. JULY 31, 2014. THIS REPORT IS THE BASIS FOR THE GEOTECHNICAL RECOMMENDATION INCORPORATED IN THIS PLAN SET. DUE TO CONCERNS ABOUT THE VARIABILITY OF SUBGRADE CONDITIONS, THE ENGINEER WILL EVALUATE THE EXPOSED SUBGRADES AFTER EXCAVATION AND PRIOR TO PLACING BEDDING MATERIAL.

8. THE PRECAST CONCRETE STRUCTURE SYSTEM SHALL BE DESIGNED PER THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 7TH EDITION, DATED 2014, AND ITS LATEST REVISIONS, AND SHALL CONSIDER THE FOLLOWING DESIGN CRITERIA:

   A. SOIL UNIT WEIGHT = 140 PCF

   B. DESIGN LIVE LOAD = AASHTO HL- 93

   C. SEE GEOTECHNICAL REPORT FOR FACTORED SOIL BEARING RESISTANCES FOR BOX AND WINGWALLS. SWANTON NH 036-1(9) DATED 8/1/2014.

   D. MINIMUM FOOTING EMBEDMENT = 5'-0" BELOW STREAMBED

   E. PRECAST CONCRETE COMPRESSIVE STRENGTH: f'c = 5000 PSI

   F. REINFORCING STEEL: Fy = 60,000 PSI

9. WEEP HOLES IN THE WINGWALLS AND HEADWALLS SHALL BE PLACED APPROXIMATELY EVERY 10' OR AS INDICATED ON THE PLANS. WEEP HOLES SHALL BE SCREENED TO RETAIN CRUSHED STONE (MAXIMUM 1/2" SQUARE OPENINGS) AND TO PREVENT ENTRY BY ANIMALS.

10. THE CONTRACTOR SHALL FOLLOW THE MANUFACTURER'S RECOMMENDATIONS REGARDING BACKFILL AND COMPACTION LIMITS, PROPERTIES, AND PROCEDURES, INCLUDING RESTRICTIONS OF CONSTRUCTION MACHINERY AND OPERATIONS.

11. THE CONTRACTOR SHALL PROVIDE EQUIPMENT CAPABLE OF UNLOADING, LIFTING, AND PLACING PRECAST UNITS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND UNDER THE DIRECTION OF THE MANUFACTURER'S FIELD REPRESENTATIVE. PAYMENT WILL BE CONSIDERED INCIDENTAL TO THE APPLICABLE 540.10, PRECAST CONCRETE STRUCTURE PAY ITEM.

12. THE DRILLING OF HOLES IN THE PRECAST ELEMENTS SHALL NOT BE PERMITTED, UNLESS APPROVED IN WRITING BY THE VERMONT AGENCY OF TRANSPORTATION. ANY LIFTING HOLES SHALL BE FILLED WITH MORTAR, TYPE IV. PAYMENT WILL BE CONSIDERED INCIDENTAL TO THE APPLICABLE 540.10, PRECAST CONCRETE STRUCTURE PAY ITEM.

13. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO PRECAST CONCRETE ELEMENTS AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE ENGINEER.

14. A TWO FOOT WIDE STRIP OF MEMBRANE WATERPROOFING SHALL BE APPLIED AT EACH SIDEJOINT. THE MEMBRANE SHALL BE CENTERED ON THE JOINT AND COVER THE FULL HEIGHT OF THE SIDE JOINTS. THE ENTIRE TOP SHALL THEN BE COVERED WITH MEMBRANE. THE MEMBRANE SHALL OVERLAP THE EDGES BY 2'-6" ON EACH SIDE. PAYMENT FOR THE MEMBRANE AND INSTALLATION WILL BE CONSIDERED INCIDENTAL TO THE APPLICABLE 540.10 ITEM.

15. WATER REPELLENT, SILANE SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES OF THE HEADWALLS, WINGWALLS, AND EXPOSED INTERIOR SURFACES OF THE ENTIRE BOX CUL VERT, INCLUDING THE BOTTOM SURFACE OF THE TOP SLAB, THE TOP SURFACE OF THE BOTTOM SLAB, AND THE VERTICAL WALLS. PAYMENT AND APPLICATION WILL BE CONSIDERED INCIDENTAL TO THE APPLICABLE 540.10 ITEM.

16. MATERIAL SHALL MEET THE FOLLOWING REQUIREMENTS:

REINFORCING STEEL:	SECTION 507 FOR LEVEL 1 REINFORCING, UNCOATED.
MEMBRANE WATERPROOFING:	SECTION 519 FOR TOP OF BOX CULVERT AND SECTION 540 FOR BOX CULVERT JOINTS.
WATER REPELLENT, SILANE:	SECTION 514

17. REINFORCING STEEL PLACEMENT TOLERANCES SHALL BE AS FOLLOWS:

   A. SPACING +/- 1/2"

   B. CLEARANCE +/- 1/4"

vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032culvert_notes.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: K. D'URSO	CHECKED BY: G. GOODRICH
PROJECT CULVERT NOTES	SHEET 171 OF 305

STATE OF VERMONT
AGENCY OF TRANSPORTATION

PRELIMINARY INFORMATION SHEET (CULVERT)

Version 12.01.01c

LRFD

INDEX OF SHEETS

PLAN SHEETS

SEE SHEET 2 FOR INDEX OF
SHEETS AND LIST OF STANDARDS

STANDARDS LIST

FINAL HYDRAULIC REPORT

HYDROLOGIC DATA

Date: 12/5/2016

DRAINAGE AREA :
CHARACTER OF TERRAIN :
STREAM CHARACTERISTICS :
NATURE OF STREAMBED :

PEAK FLOW DATA

Q 2.33 =
Q 10 =
Q 25 =
Q 50 =
Q 100 =
Q 500 =

DATE OF FLOOD OF RECORD
ESTIMATED DISCHARGE:
WATER SURFACE ELEV.:
NATURAL STREAM VELOCITY :
ICE CONDITIONS :
DEBRIS:
DOES THE STREAM REACH MAXIMUM HIGHWATER ELEV. RAPIDLY?
IS ORDINARY RISE RAPID?
IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? No
IF YES, DESCRIBE:

WATERSHED STORAGE:
HEADWATERS:
UNIFORM:
IMMEDIATELY ABOVE SITE:

EXISTING STRUCTURE INFORMATION

STRUCTURE TYPE: 13.5'x8' CMP
YEAR BUILT:
CLEAR SPAN(NORMAL TO STREAM): 13.5'
VERTICAL CLEARANCE ABOVE STREAMBED: 8'
WATERWAY OF FULL OPENING: 108 sq. ft.
DISPOSITION OF STRUCTURE:
TYPE OF MATERIAL UNDER SUBSTRUCTURE:

WATER SURFACE ELEVATIONS AT:

Q2.33 =
Q10 =
Q25 =
Q50 =
Q100 =
VELOCITY =
"
"
"
"

LONG TERM STREAMBED CHANGES:

IS THE ROADWAY OVERTOPPED BELOW Q100:
FREQUENCY:
RELIEF ELEVATION:
DISCHARGE OVER ROAD @Q100:

UPSTREAM STRUCTURE

TOWN:
HIGHWAY # :
CLEAR SPAN:
YEAR BUILT:
STRUCTURE TYPE:
DISTANCE:
STRUCTURE #:
CLEAR HEIGHT:
FULL WATERWAY:

DOWNSTREAM STRUCTURE

TOWN:
HIGHWAY # :
CLEAR SPAN:
YEAR BUILT:
STRUCTURE TYPE:
DISTANCE:
STRUCTURE #:
CLEAR HEIGHT:
FULL WATERWAY:

PROPOSED STRUCTURE

STRUCTURE TYPE: Precast Concrete Box Culvert

CLEAR SPAN(NORMAL TO STREAM): 12'-0"
VERTICAL CLEARANCE ABOVE STREAMBED: 8'-0"
WATERWAY OF FULL OPENING: 96 Sq. Ft.

WATER SURFACE ELEVATIONS AT:

Q2.33 =
Q10 =
Q25 =
Q50 =
Q100 =
VELOCITY=
"
"
"
"

IS THE ROADWAY OVERTOPPED BELOW Q100:
FREQUENCY:
RELIEF ELEVATION:
DISCHARGE OVER ROAD @Q100:

AVERAGE LOW ELEVATION OF SUPERSTRUCTURE:
VERTICAL CLEARANCE:

SCOUR: Scour is not calculated for a box
REQUIRED CHANNEL PROTECTION:

PERMIT INFORMATION

AVERAGE DAILY FLOW:
ORDINARY LOW WATER:
ORDINARY HIGH WATER:
DEPTH OR ELEVATION:

TEMPORARY BRIDGE REQUIREMENTS

STRUCTURE TYPE: None Required
CLEAR SPAN (NORMAL TO STREAM):
VERTICAL CLEARANCE ABOVE STREAMBED:
WATERWAY AREA OF FULL OPENING:

ADDITIONAL INFORMATION

TRAFFIC MAINTENANCE NOTES

1. MAINTAIN ONE-WAY TRAFFIC ON THE EXISTING STRUCTURE.
2. INSTALL AND MAINTAIN TRAFFIC SIGNALS.
3. SIDEWALKS ARE NOT NECESSARY

DESIGN VALUES

1.	DESIGN LIVE LOAD		HL-93
2.	FUTURE PAVEMENT	d_p:	9.25 INCH
3.	CULVERT OPENING	D:	96.0 SF
4.	MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS)	Δ:	---
5.	PRESTRESSING STRAND	f_y:	---
6.	PRESTRESSED CONCRETE STRENGTH	f'_c:	---
7.	PRESTRESSED CONCRETE RELEASE STRENGTH	f'_{ci}:	---
8.	CONCRETE, HIGH PERFORMANCE CLASS AA	f'_c:	KSI
9.	CONCRETE, HIGH PERFORMANCE CLASS A	f'_c:	KSI
10.	CONCRETE, HIGH PERFORMANCE CLASS B	f'_c:	KSI
11.	CONCRETE, CLASS C	f'_c:	KSI
12.	REINFORCING STEEL	f_y:	60 KSI
13.	STRUCTURAL STEEL AASHTO M270	f_y:	---
14.	SOIL UNIT WEIGHT	γ:	KCF
15.	NOMINAL BEARING RESISTANCE OF SOIL	q_n:	KSF
16.	SOIL BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)	ϕ:	---
17.	NOMINAL BEARING RESISTANCE OF ROCK	q_n:	KSF
18.	ROCK BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)	ϕ:	---
19.	NOMINAL AXIAL PILE RESISTANCE	q_p:	---
20.	PILE YIELD STRENGTH ASTM A572	f_y:	---
21.	PILE SIZE		---
22.	EST. PILE LENGTH	L_p:	
23.	PILE RESISTANCE FACTOR	ϕ:	---
24.	LATERAL PILE DEFLECTION	Δ:	---
25.	BASIC WIND SPEED	V_{3s}:	---
26.	MINIMUM GROUND SNOW LOAD	p_g:	---
27.	SEISMIC DATA	PGA: ---	S_s: ---
			S_1: ---

LRFR LOAD RATING FACTORS

LOADING LEVELS	TRUCK						
	H-20	HL-93	3S2	6 AXLE	3A. STR.	4A. STR.	5A. SEMI
TONNAGE	20	36	36	66	30	34.5	38
INVENTORY							
POSTING							
OPERATING							
COMMENTS:	TABLE TO BE COMPLETED BY CONTRACTOR'S DESIGNER						

AS BUILT "REBAR" DETAILS

LEVEL I	LEVEL II	LEVEL III
TYPE:	TYPE:	TYPE:
GRADE:	GRADE:	GRADE:

CULVERT DESIGN CRITERIA

1. PROPOSED CULVERT IS A PRESTRESS CONCRETE STRUCTURE (12'-0" X 10'-0" X 46'-0" BOX).
2. CULVERT ENDS ARE NOT SKEWED.
3. CULVERT WILL BE SET AT A SLOPE OF 0.00 IN. ON 0 FT.
4. CULVERT WILL NOT REQUIRE SPECIAL FISH PASSAGE ACCOMODATIONS

TRAFFIC DATA

YEAR	ADT	DHV	% D	% T	ADTT
2014	5900	750	59	13.5	710
2034	6100	770	59	15.6	850

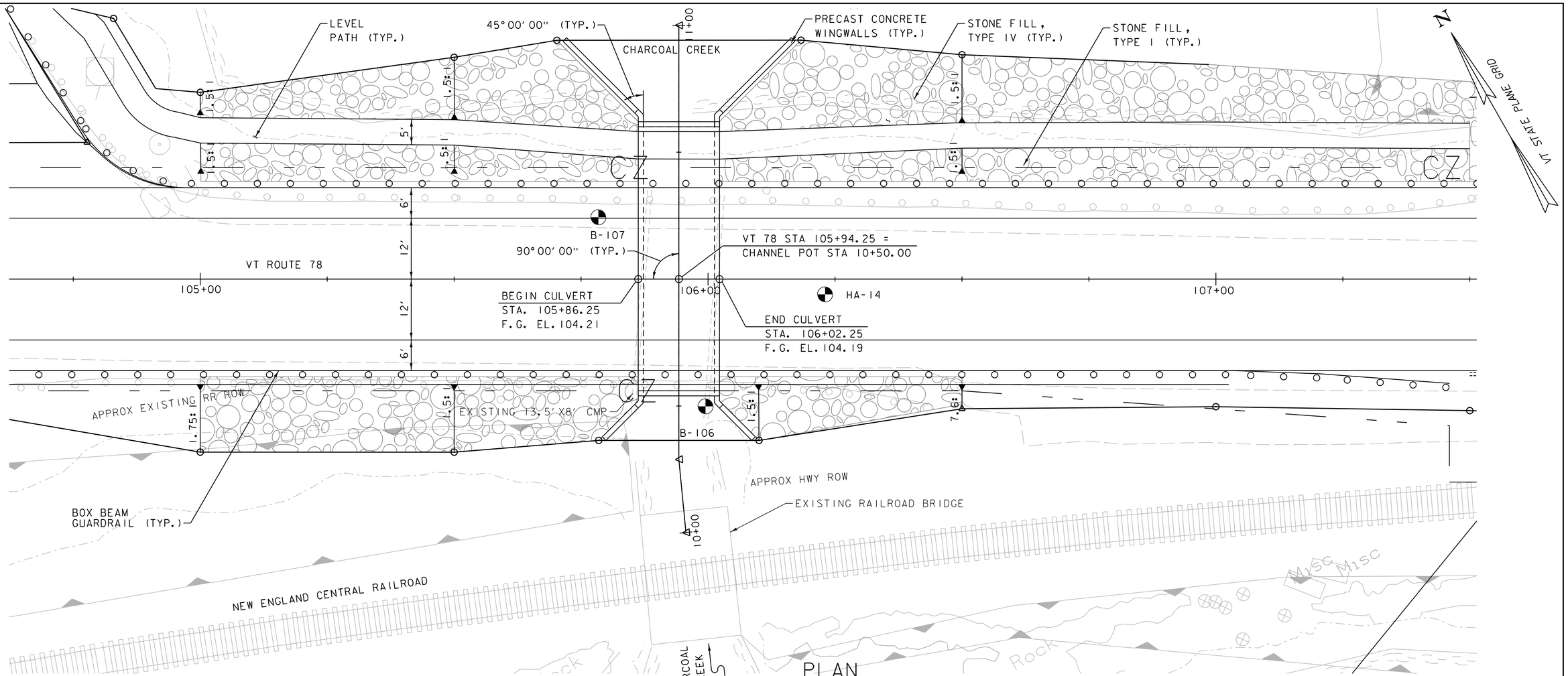
20 year ESAL for flexible pavement from 2014 to 2024 : 2808000
40 year ESAL for flexible pavement from 2014 to 2034 : 6104000
Design Speed : 50 mph

PROJECT NAME: **SWANTON**
PROJECT NUMBER: **NH 036-1(9)**

FILE NAME: **z96b032PI Sheet-NEW.xls**
PROJECT LEADER: **G. BAKOS**
DESIGNED BY: **K. D'URSO**
PRELIMINARY INFORMATION SHEET

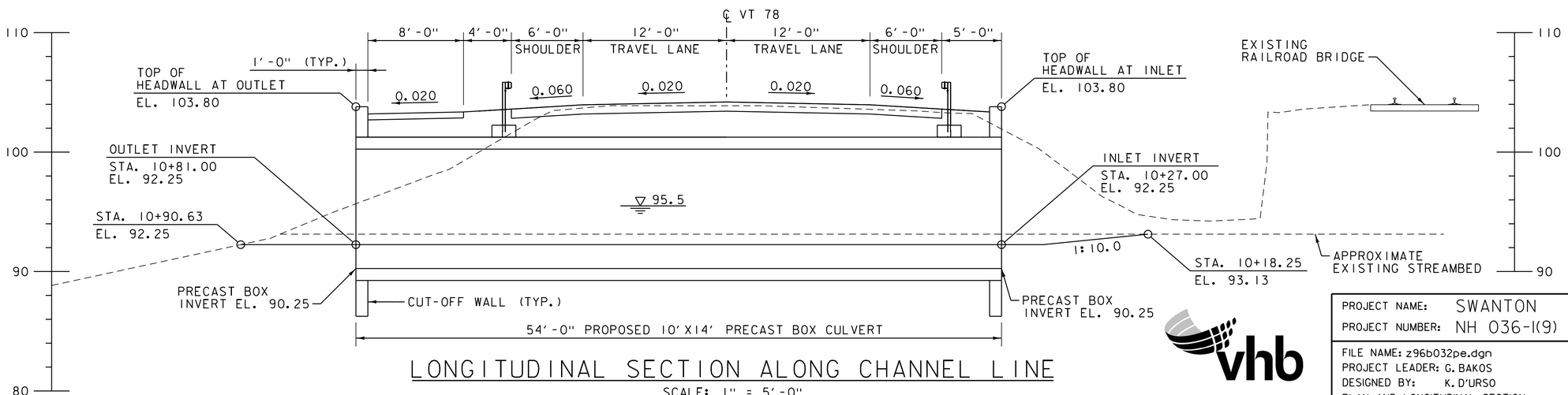
PLOT DATE: 3/7/2019
DRAWN BY: **C. CILLEY**
CHECKED BY: **G. GOODRICH**
SHEET 172 OF 305

VHB 50959



PLAN

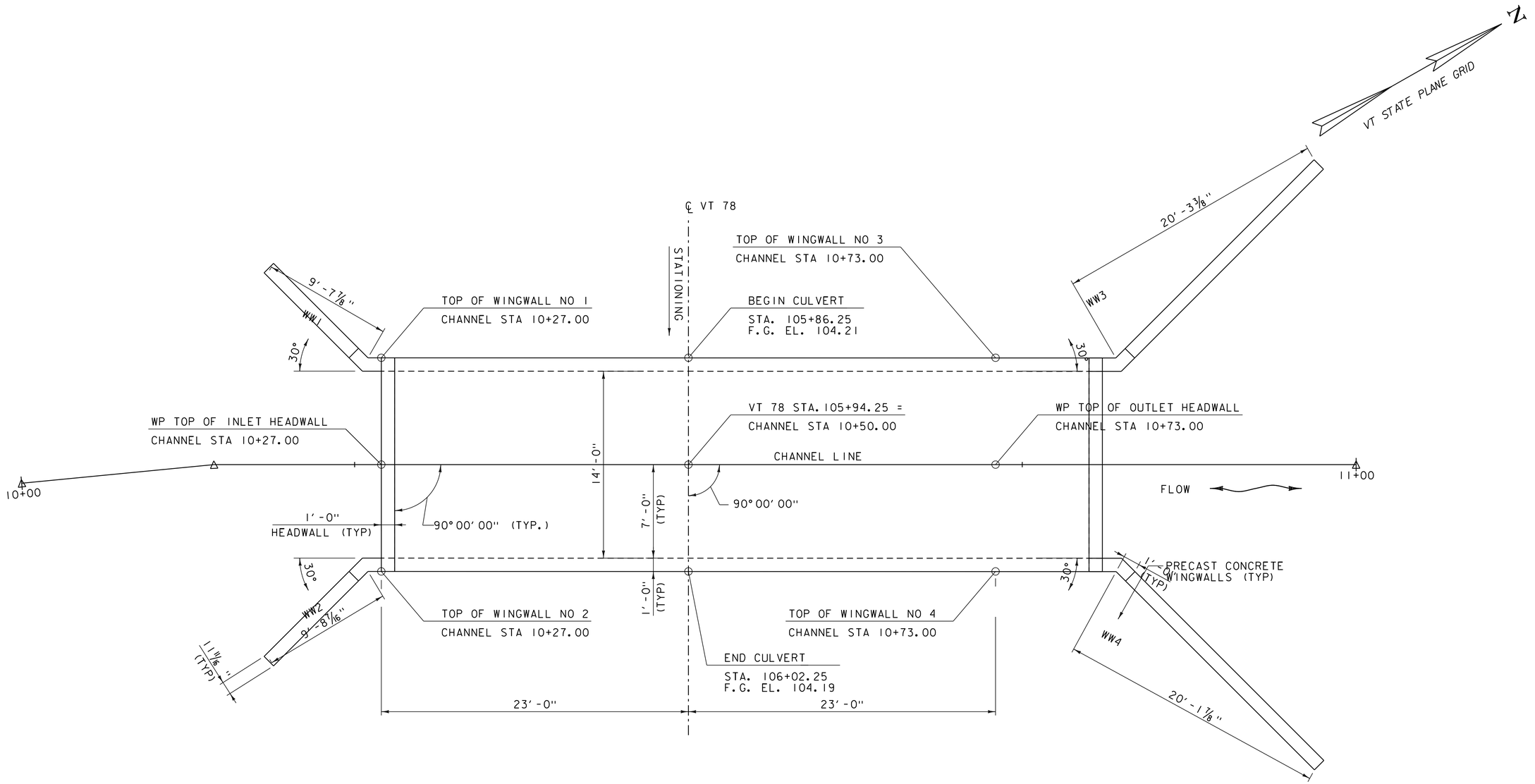
SCALE 1" = 10'-0"



LONGITUDINAL SECTION ALONG CHANNEL LINE

SCALE: 1" = 5'-0"

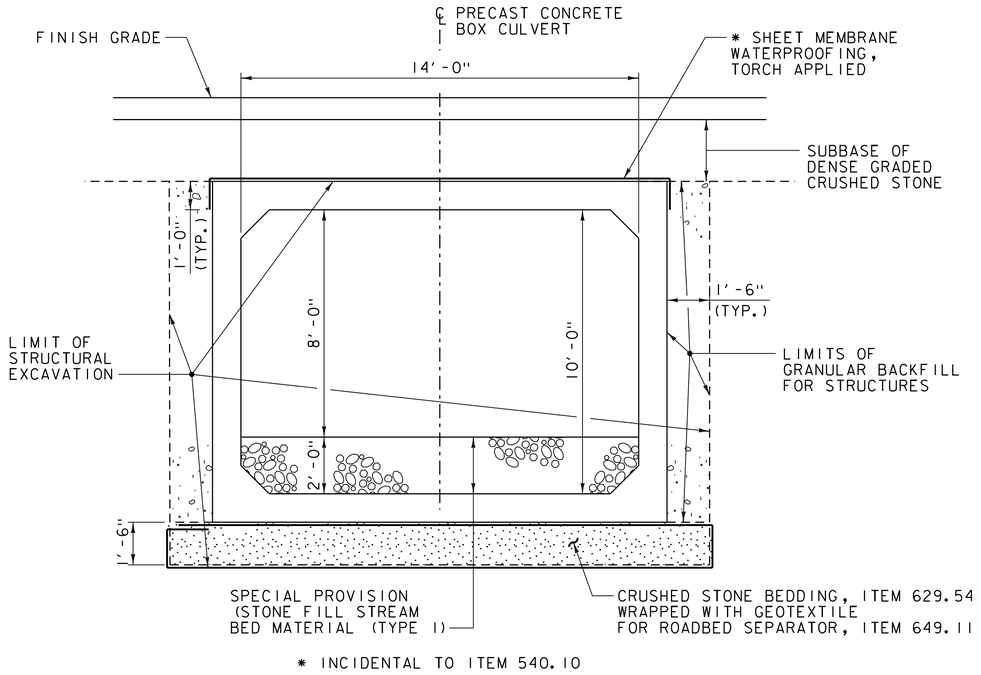
PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032pe.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: K. D'URSO	CHECKED BY: G. GOODRICH
PLAN AND LONGITUDINAL SECTION	SHEET 173 OF 305



PRECAST CONCRETE STRUCTURE PLAN

SCALE 1/4" = 1'-0"

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032sub.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: K. D'URSO	CHECKED BY: G. GOODRICH
PRECAST CONCRETE STRUCTURE PLAN	SHEET 174 OF 305

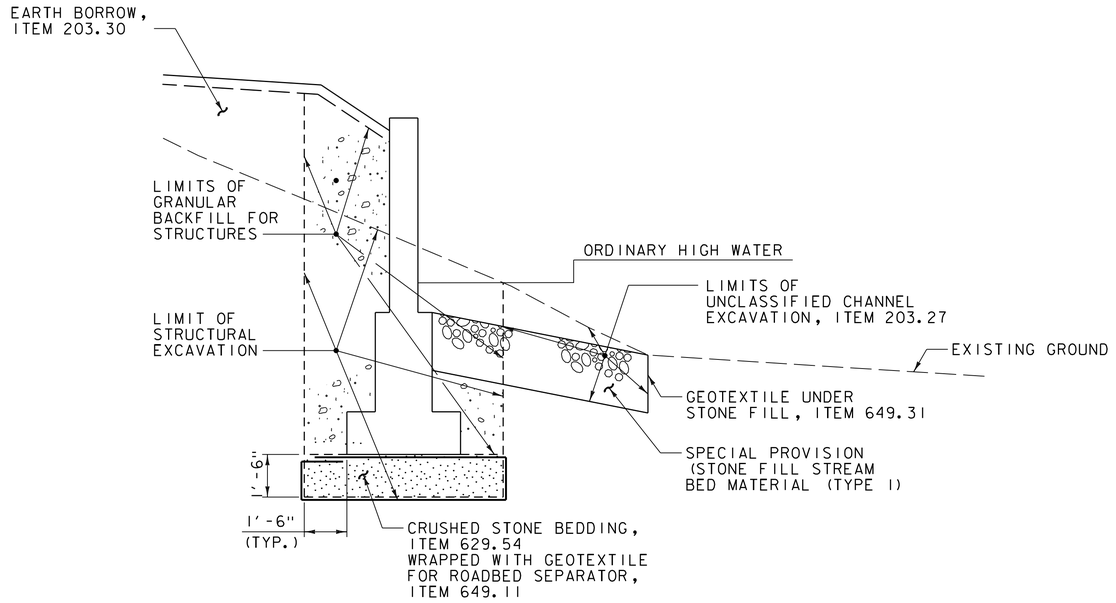


* INCIDENTAL TO ITEM 540.10

CHARCOAL CREEK

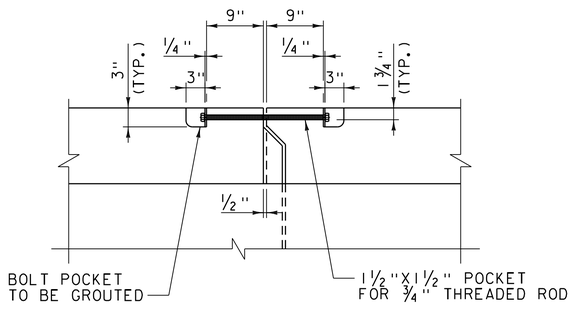
PRECAST CONCRETE BOX CULVERT EARTHWORK TYPICAL

NOT TO SCALE



WINGWALL EXCAVATION AND FILL DETAIL

NOT TO SCALE



4 LOCATIONS PER JOINT, 2 PER WALL, EXACT LOCATION PER FABRICATOR

PERMANENT CLOSURE DETAIL

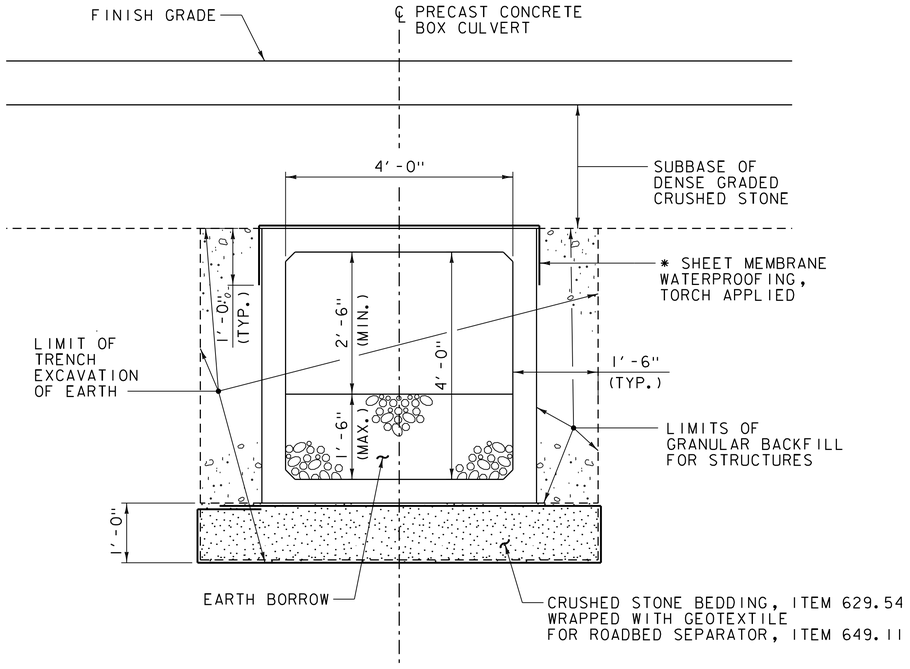
NOT TO SCALE

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032culvert_det_01.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: K. D'URSO
CULVERT DETAILS (SHEET 1 OF 2)

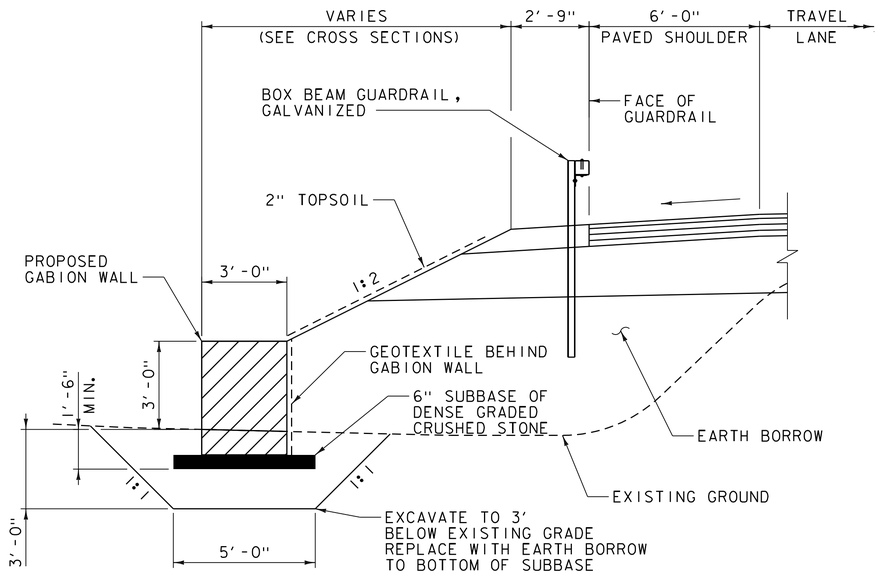
PLOT DATE: 3/7/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. GOODRICH
SHEET 176 OF 305



* INCIDENTAL TO ITEM 540.10

4'X4' PRECAST CONCRETE BOX CULVERT EARTHWORK TYPICAL

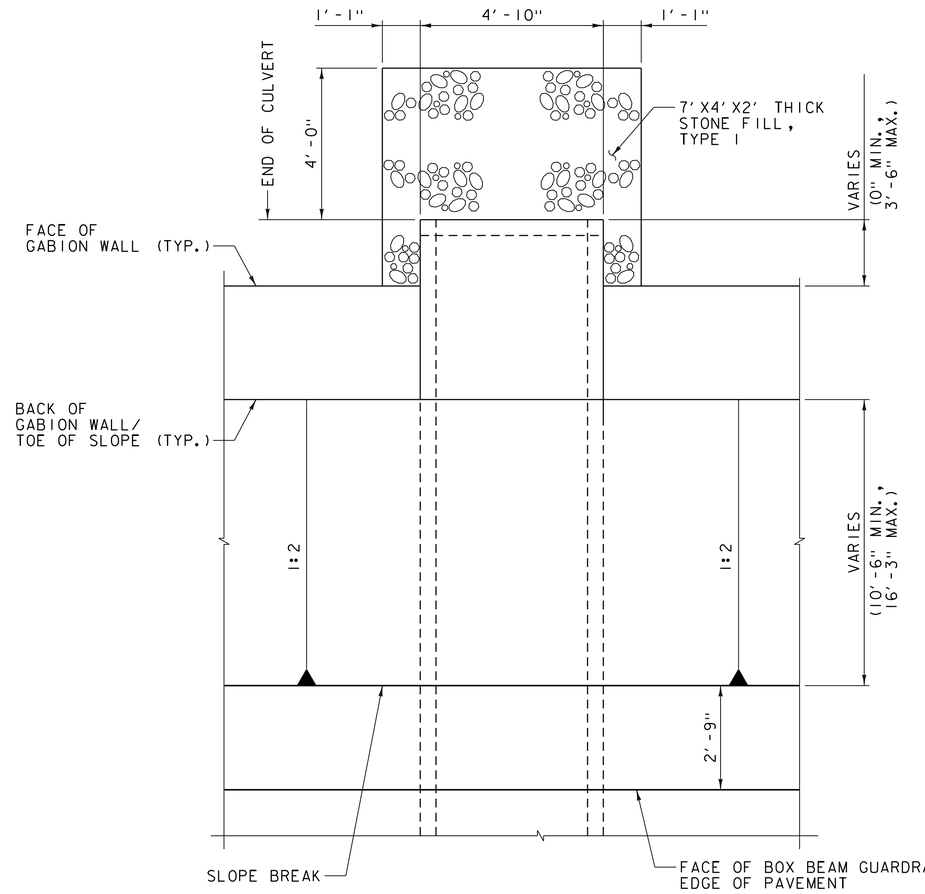
NOT TO SCALE



GABION WALL DETAIL

NOT TO SCALE

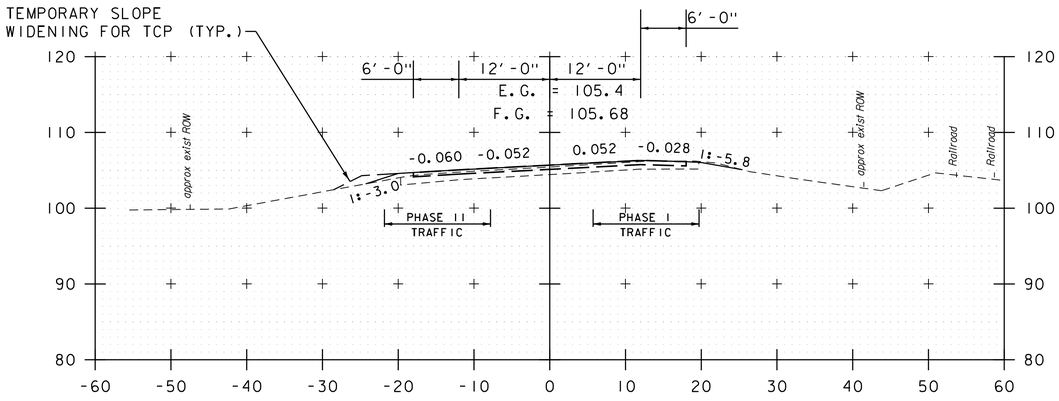
STA. 147+00 - STA. 161+50 LT
STA. 148+00 - STA. 161+50 RT

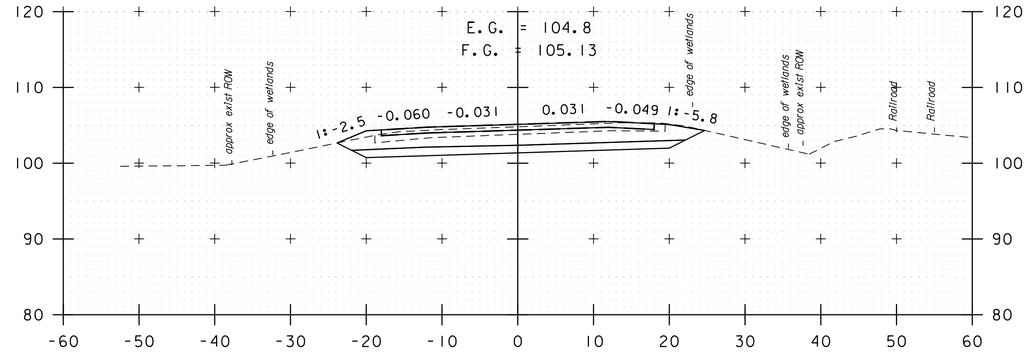


4'X4' PRECAST CONCRETE BOX/GABION WALL DETAIL (PLAN VIEW)

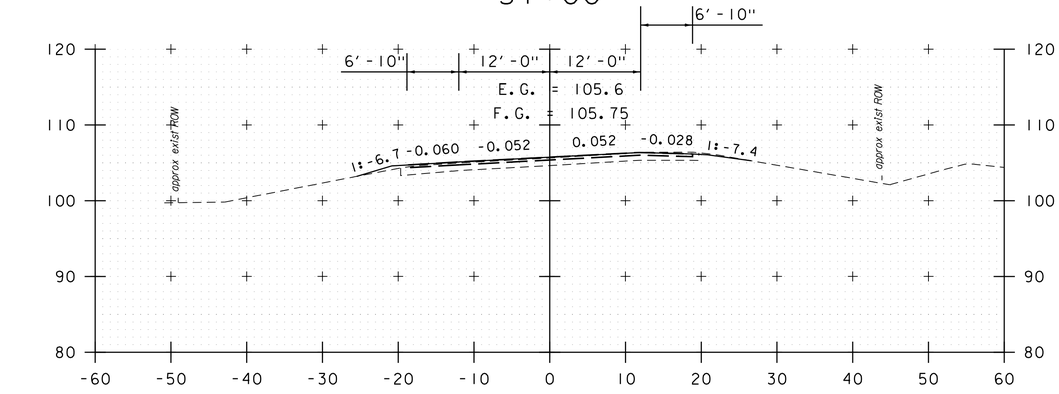
NOT TO SCALE

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032culvert_det_02.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: K. D'URSO	CHECKED BY: G. GOODRICH
CULVERT DETAILS (SHEET 2 OF 2)	SHEET 177 OF 305

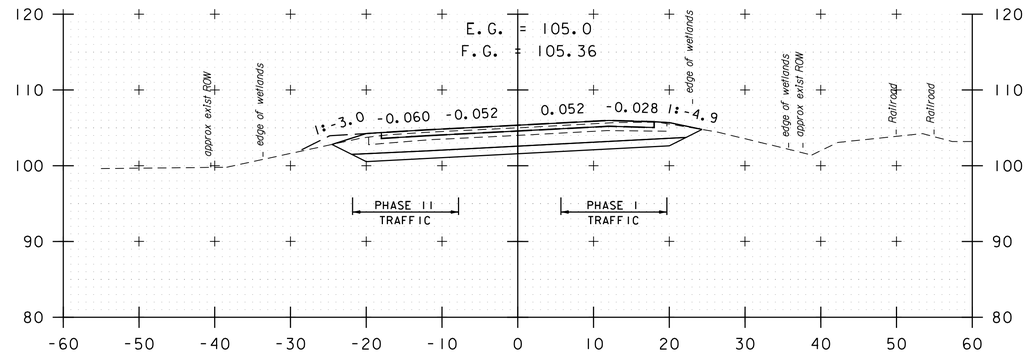




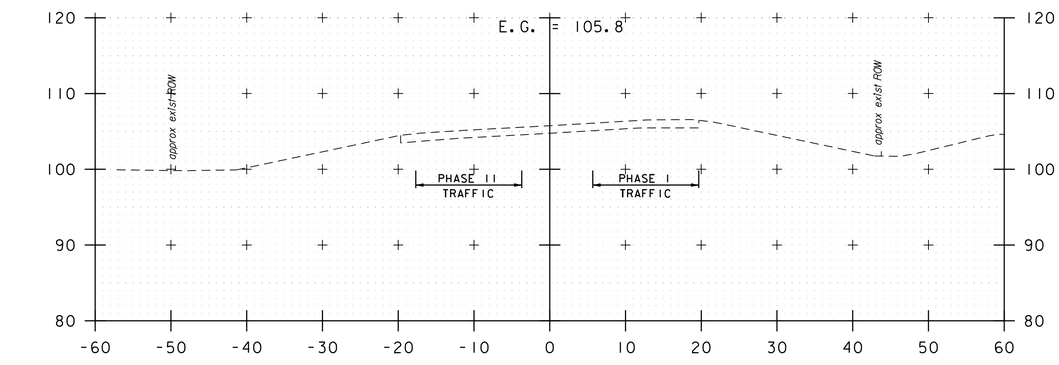
37+00



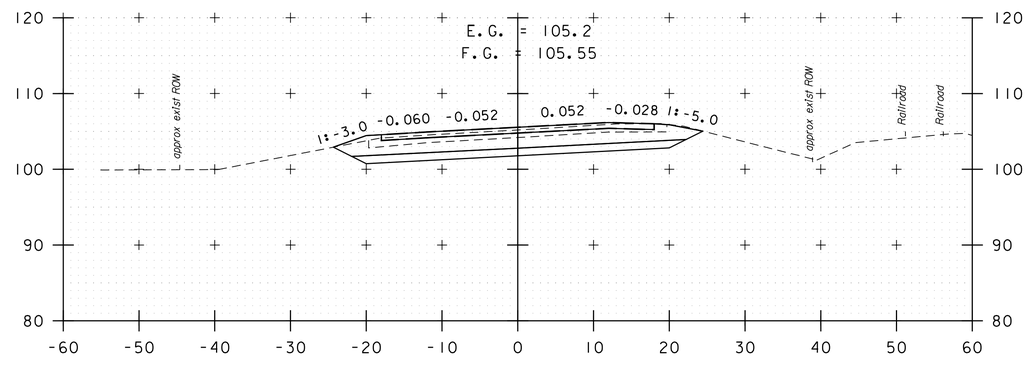
38+50



36+50



38+00



STATION 36+00.00
BEGIN APPROACH

36+00

STA 37+50
END APPROACH
BEGIN PROJECT
NH 036-1(9)

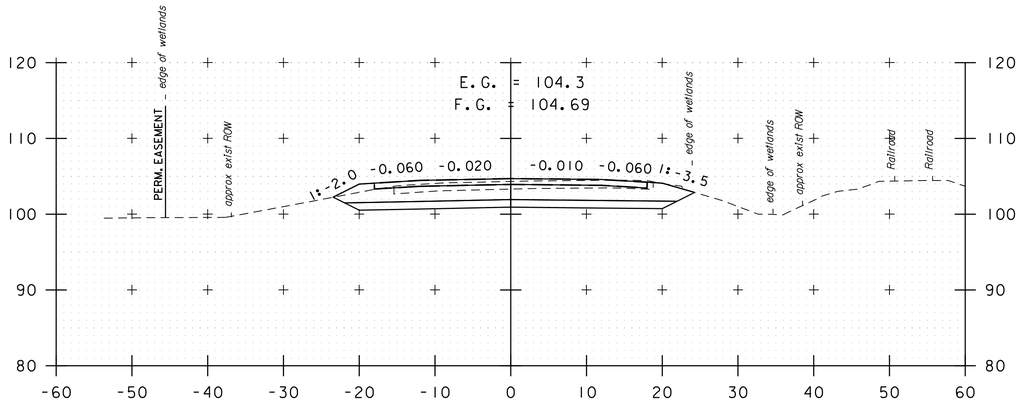
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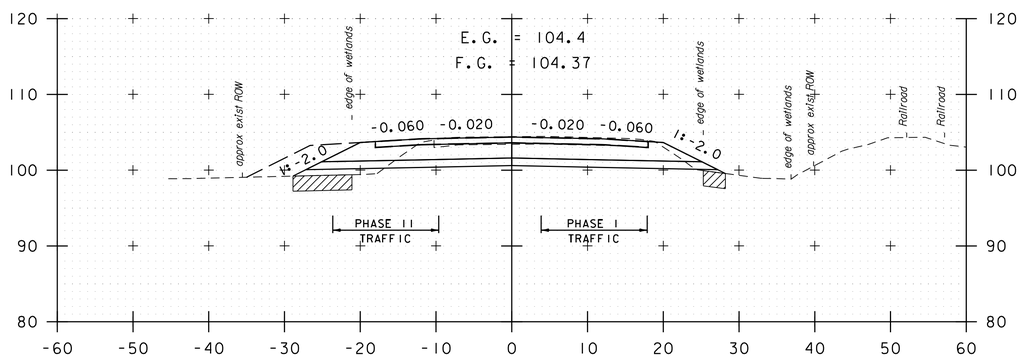
STA. 36+00 TO STA. 38+50

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

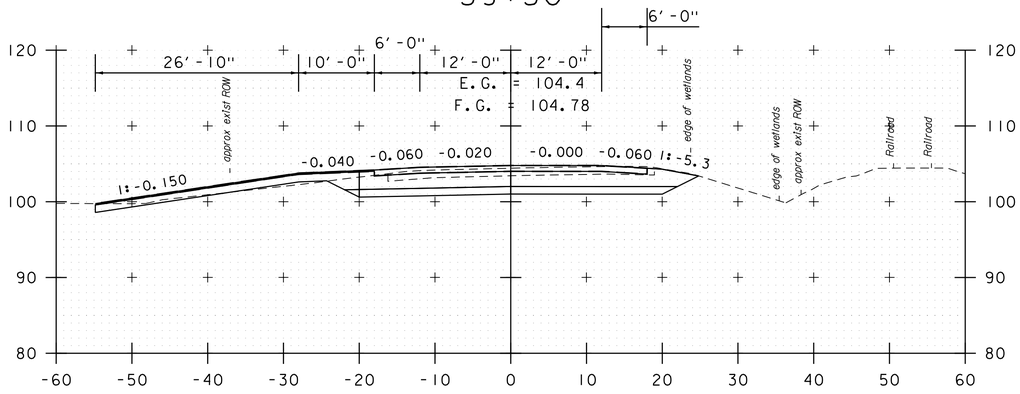
FILE NAME: z96b032xs_3600-16300.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
CROSS SECTION SHEET 1

PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: ------

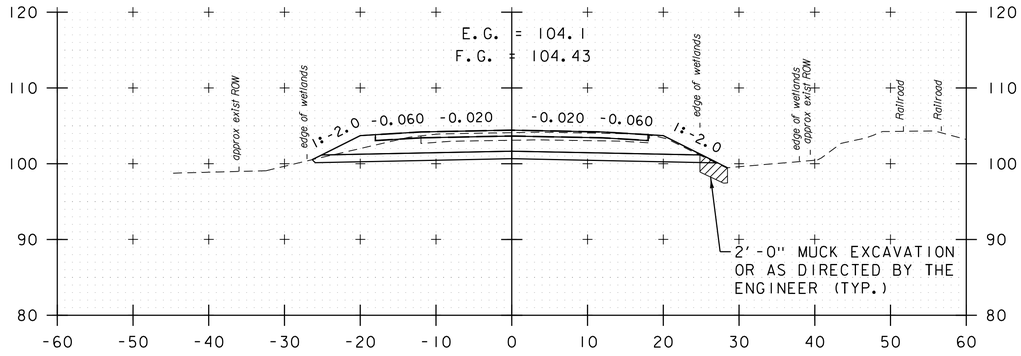




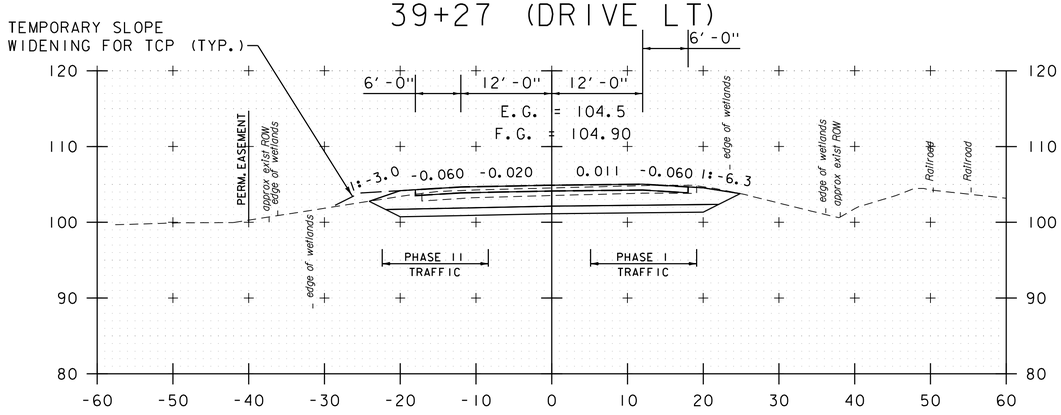
39+50



41+00

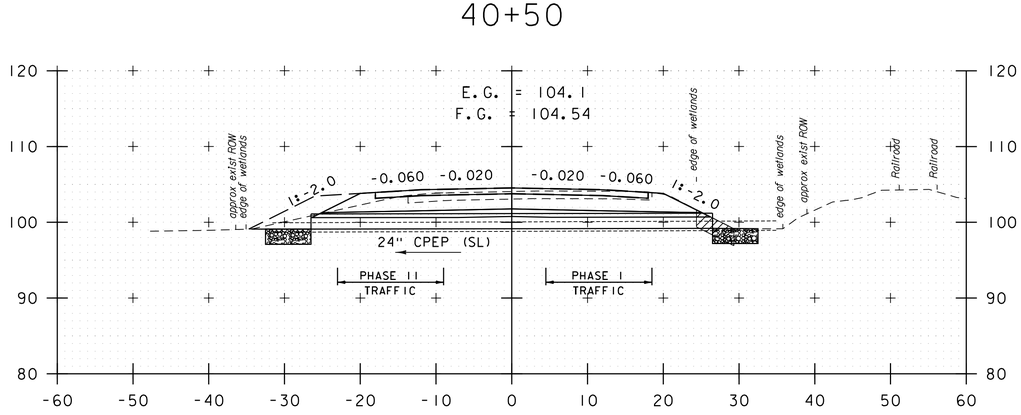


39+27 (DRIVE LT)



39+00

40+50

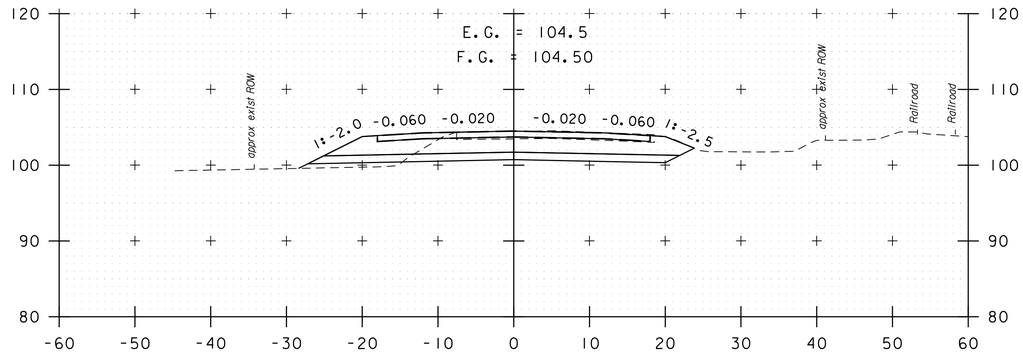


40+00 (NEW 24" CPEP)

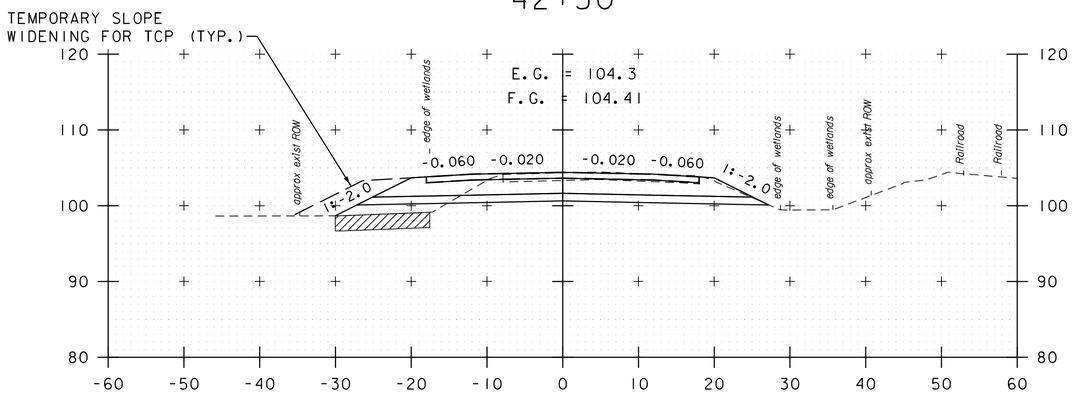
STA. 39+00 TO STA. 41+00

vhb

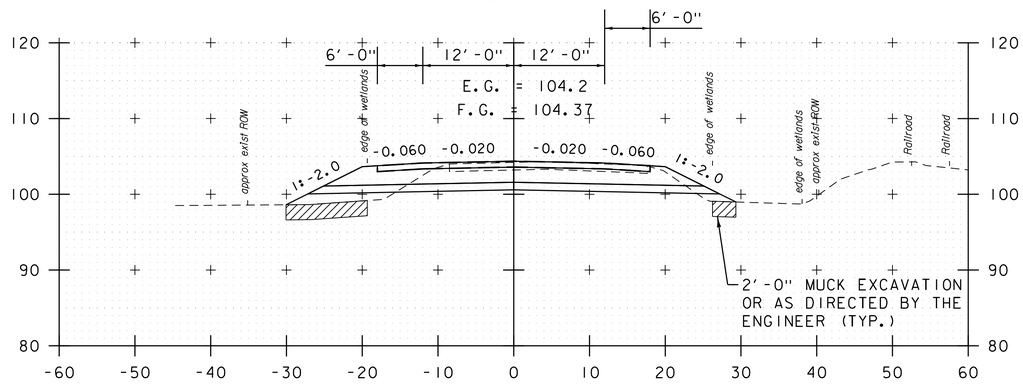
PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032xs_3600-16300.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
CROSS SECTION SHEET 2	SHEET 179 OF 305



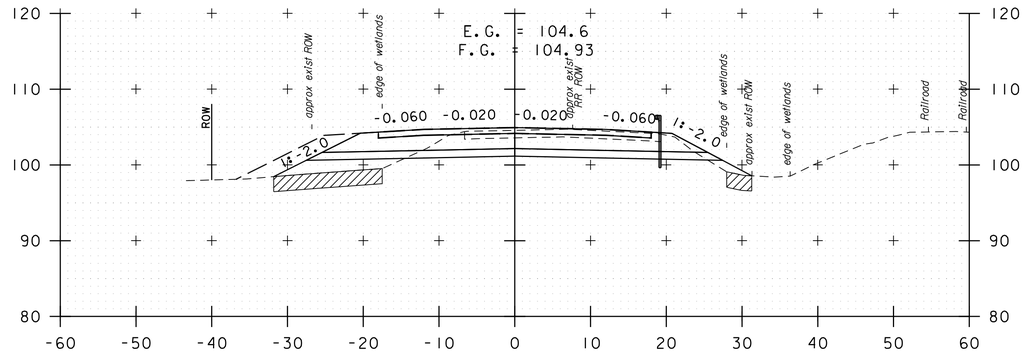
42+50



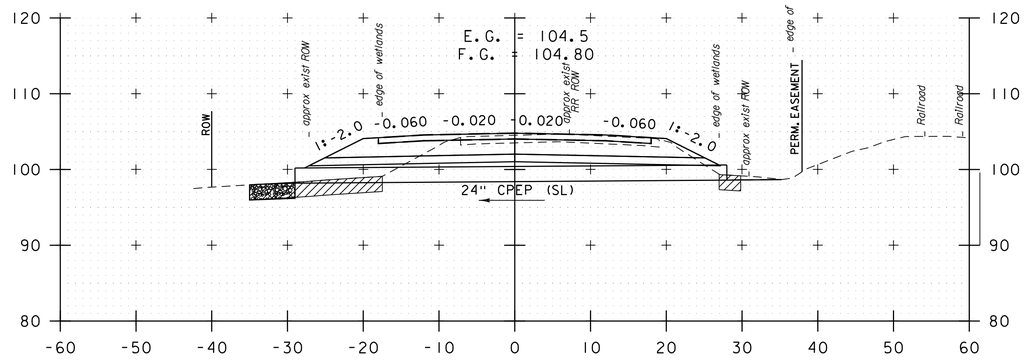
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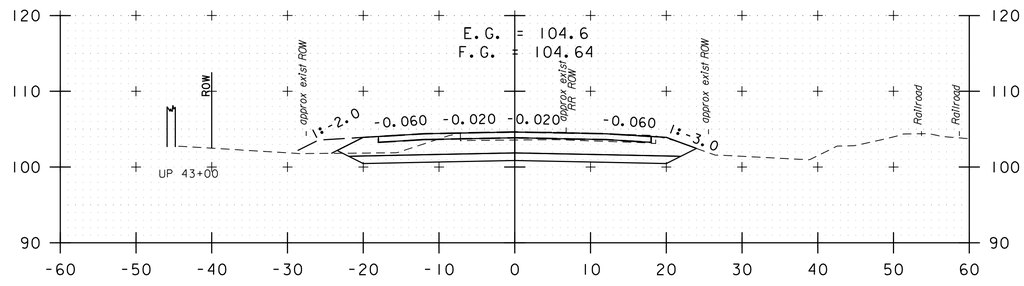
41+50



44+00



43+50 (NEW 24" CPEP)



43+00

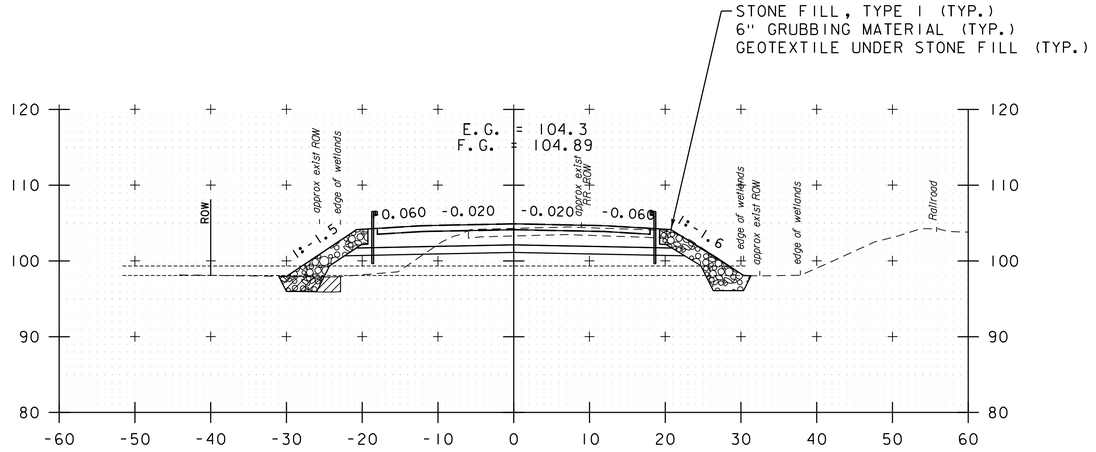
STA. 41+50 TO STA. 44+00

vhb

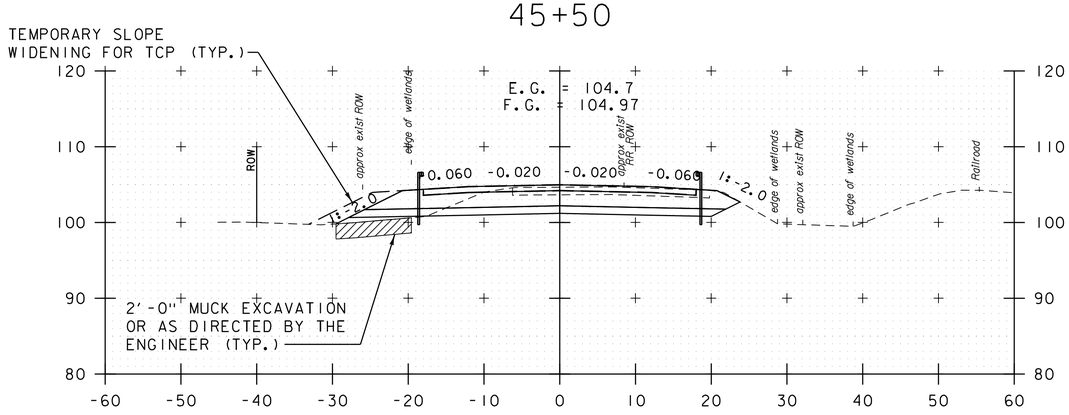
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_3600-16300.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
CROSS SECTION SHEET 3

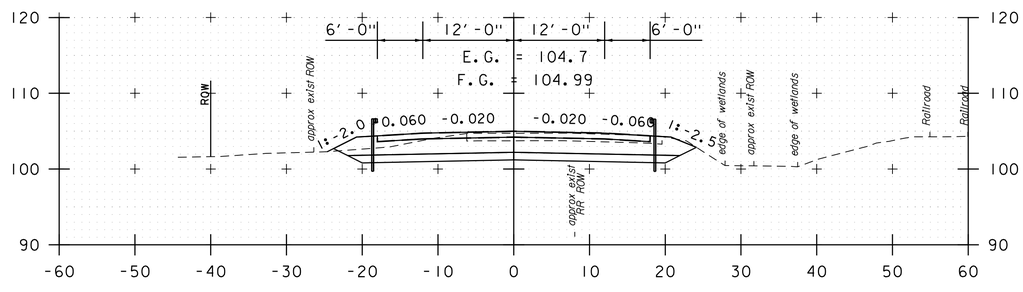
PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 180 OF 305



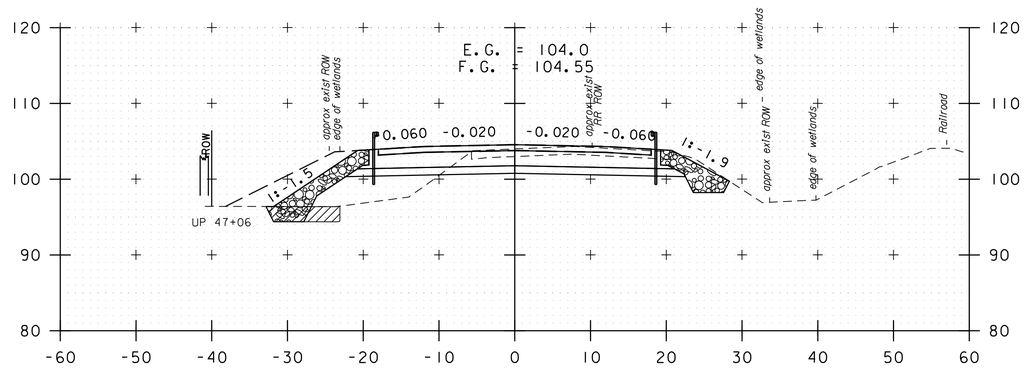
45+50



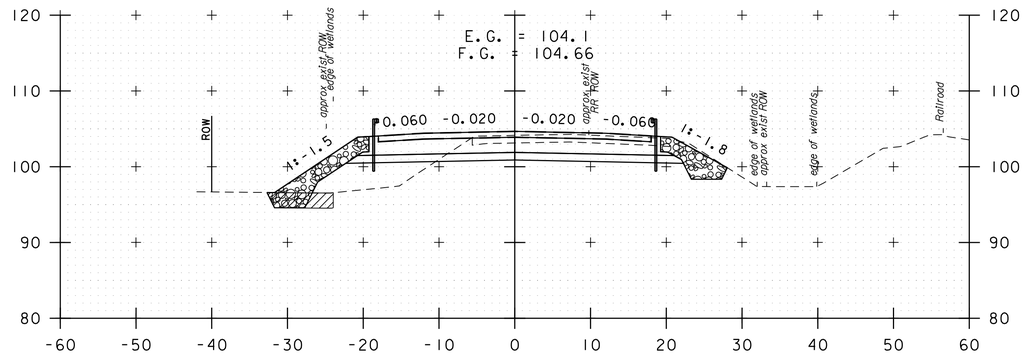
45+00



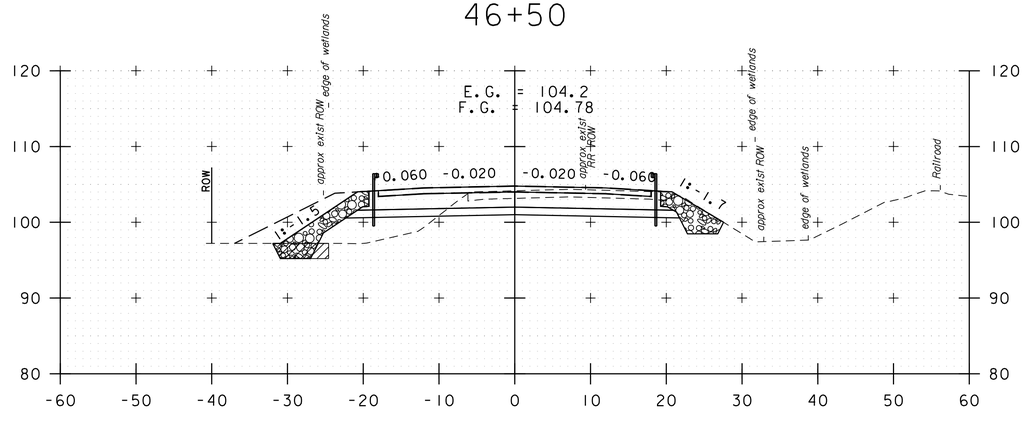
44+50



47+00



46+50

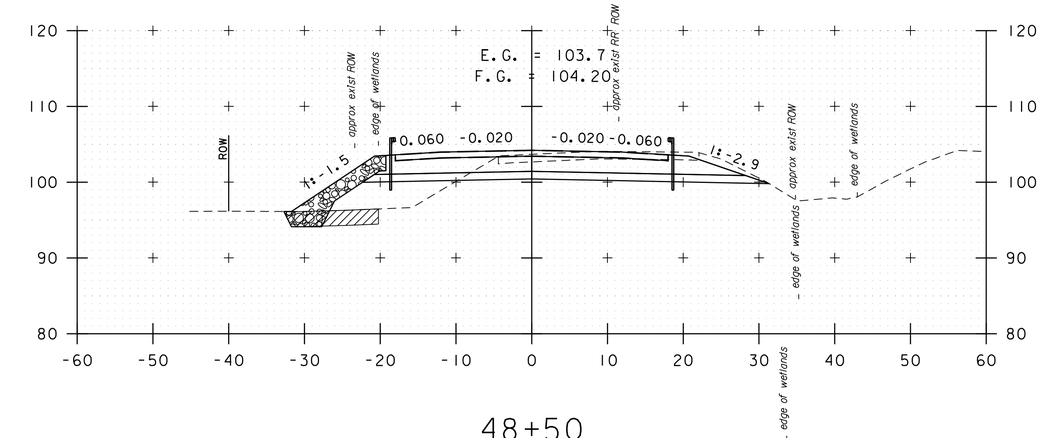


46+00

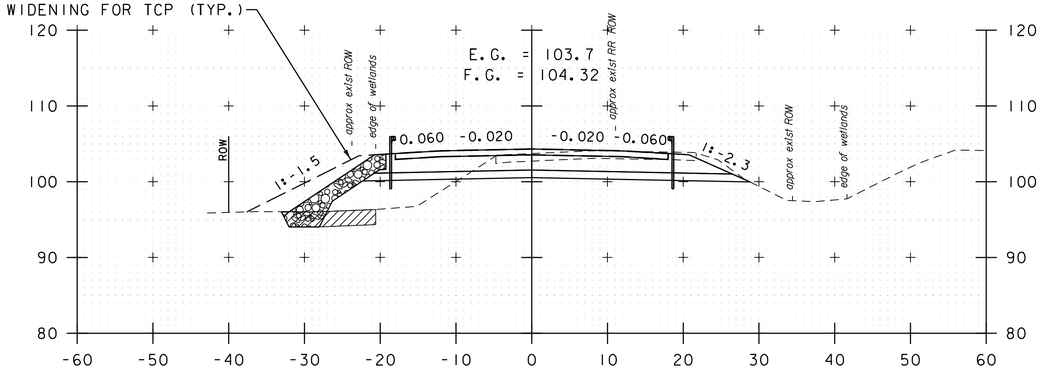
STA. 44+50 TO STA. 47+00

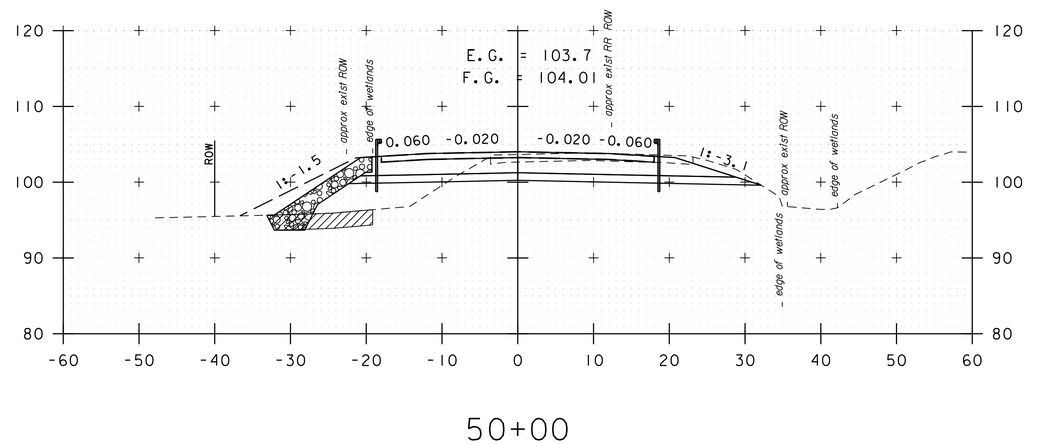
vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032xs_3600-16300.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
CROSS SECTION SHEET 4	SHEET 181 OF 305

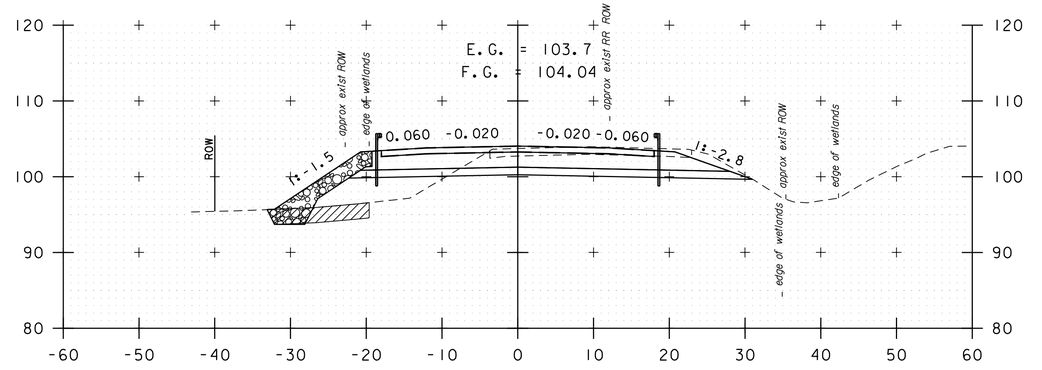


48+50



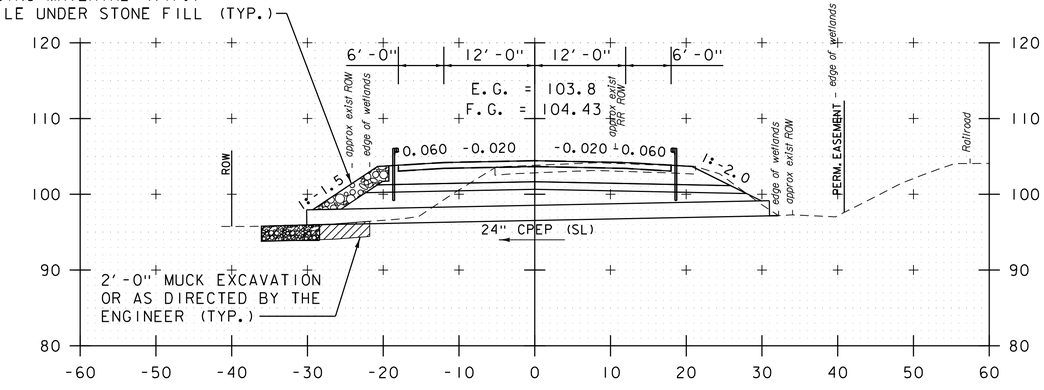


50+00

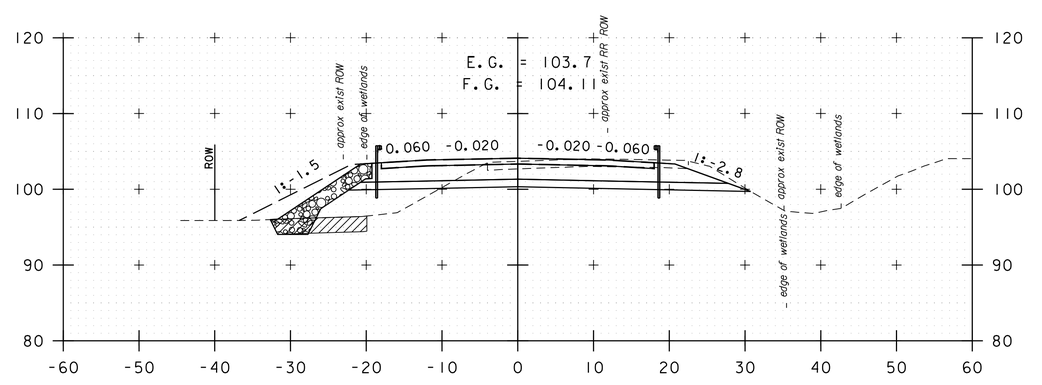


STONE FILL, TYPE I (TYP.)
6" GRUBBING MATERIAL (TYP.)
GEOTEXTILE UNDER STONE FILL (TYP.)

48+00



47+50 (NEW 24" CPEP)



49+50

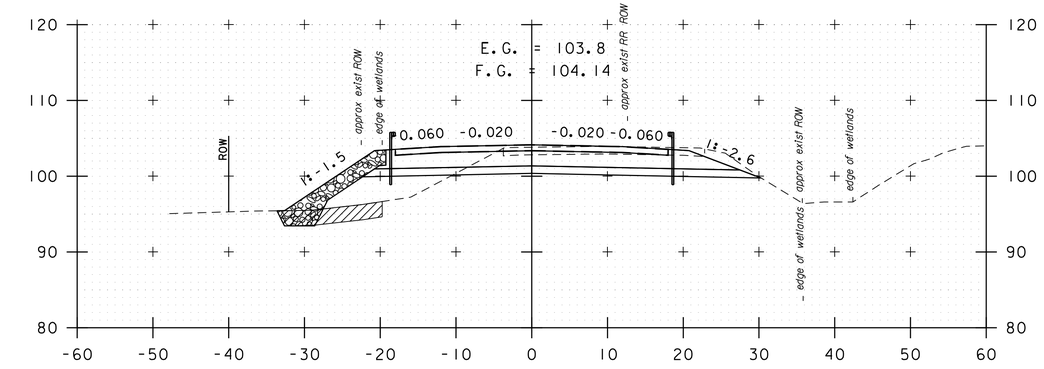
49+00

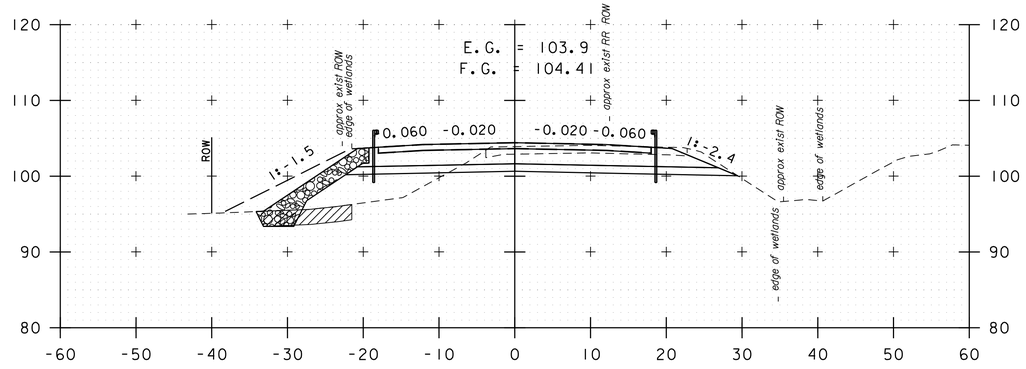
STA. 47+50 TO STA. 50+00

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

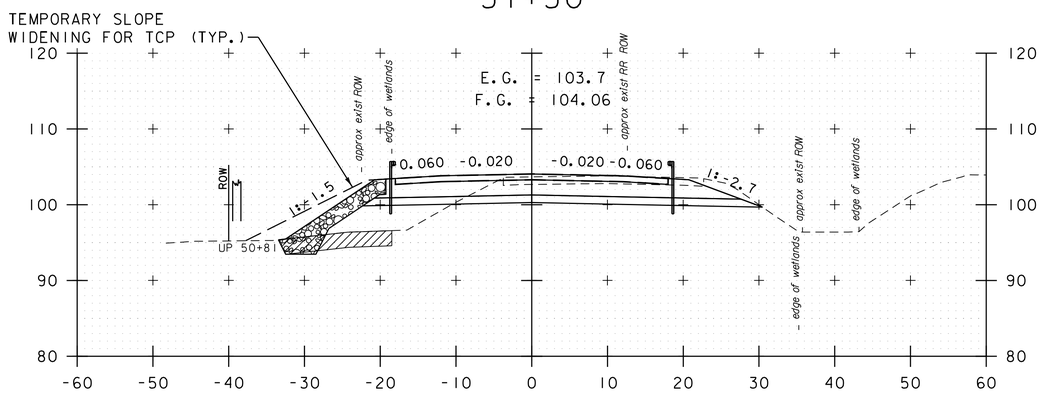
FILE NAME: z96b032xs_3600-16300.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
CROSS SECTION SHEET 5

PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 182 OF 305

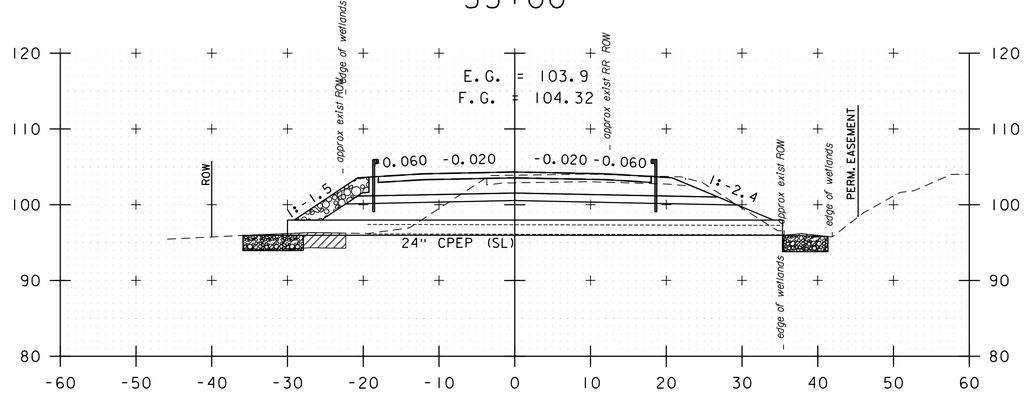




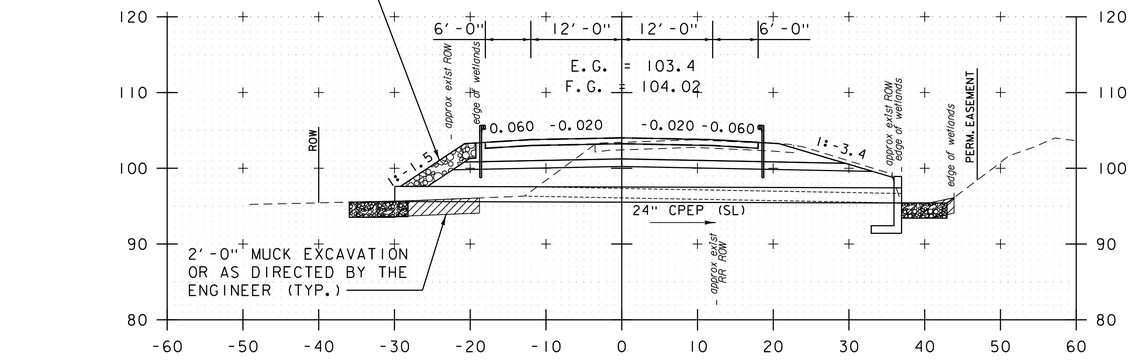
51+50



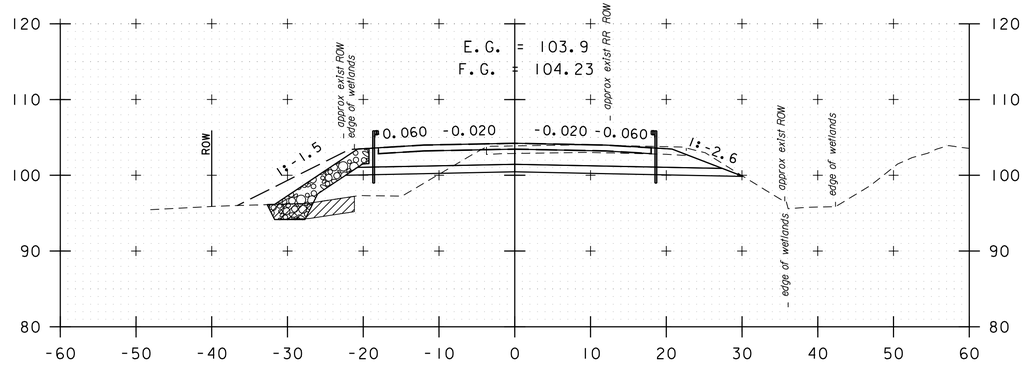
53+00



51+00



52+50 (NEW 24" CPEP)



50+50 (NEW 24" CPEP)

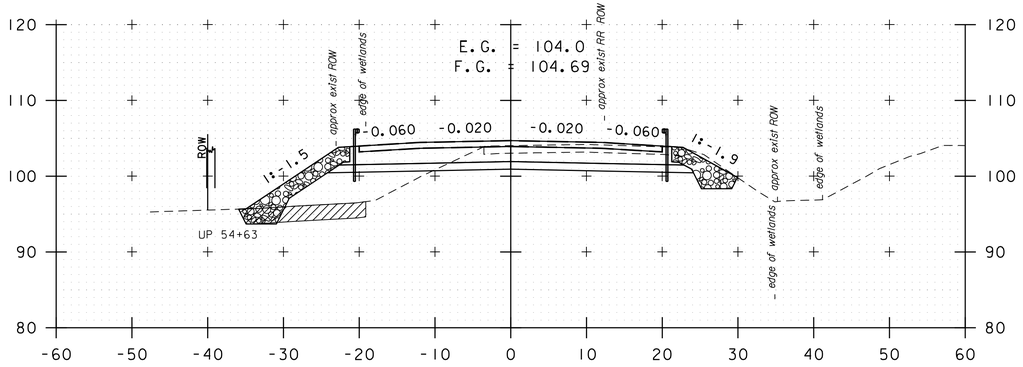
52+00

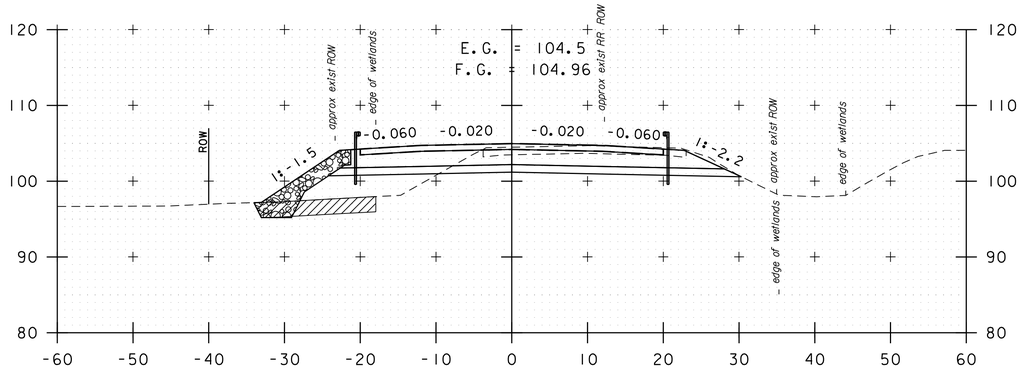
STA. 50+50 TO STA. 53+00

vhb

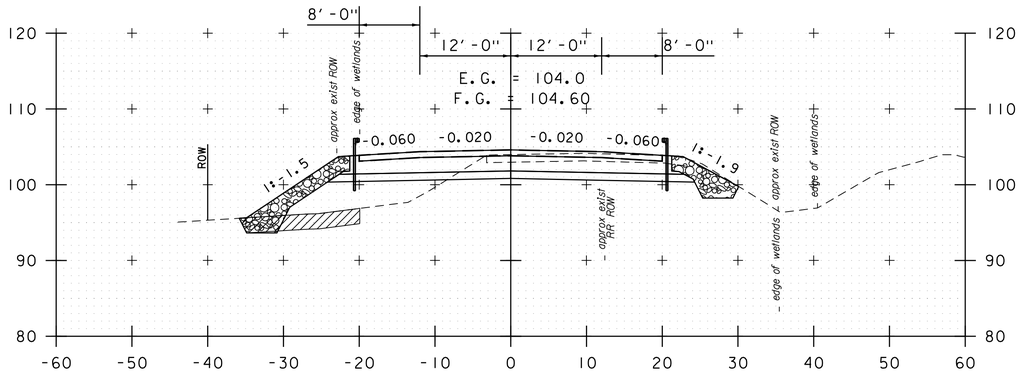
PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)

FILE NAME: z96b032xs_3600-16300.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
CROSS SECTION SHEET 6	SHEET 183 OF 305

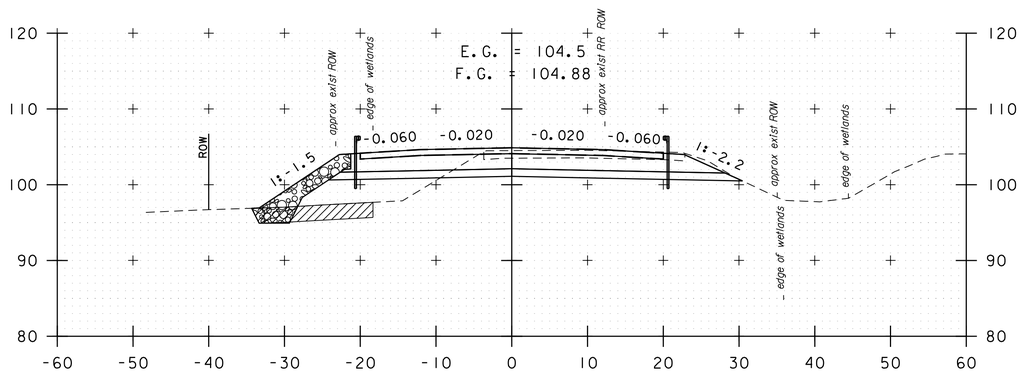




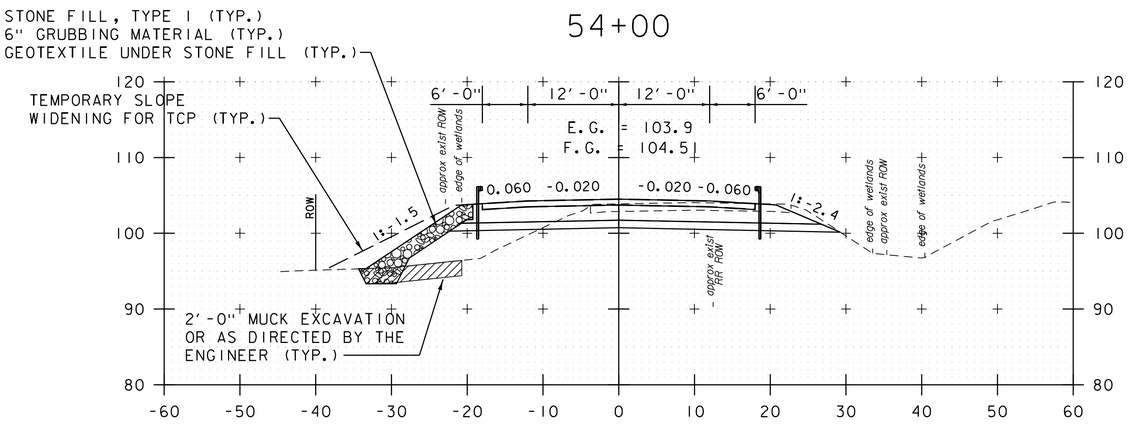
54+50



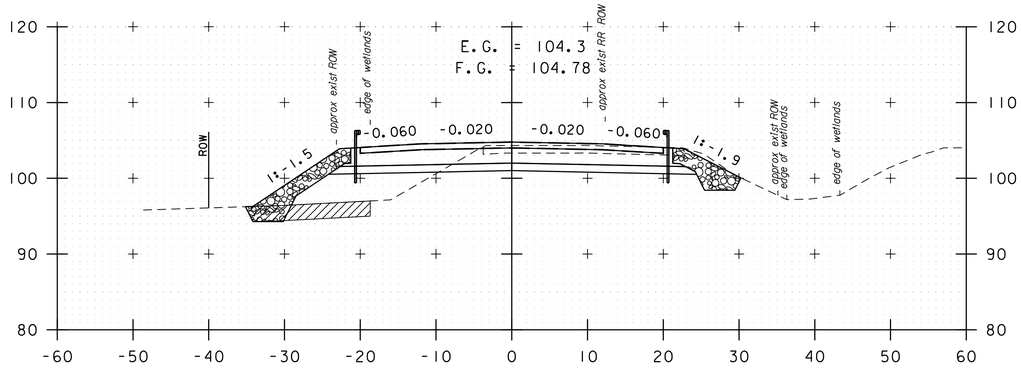
56+00



54+00



55+50



53+50

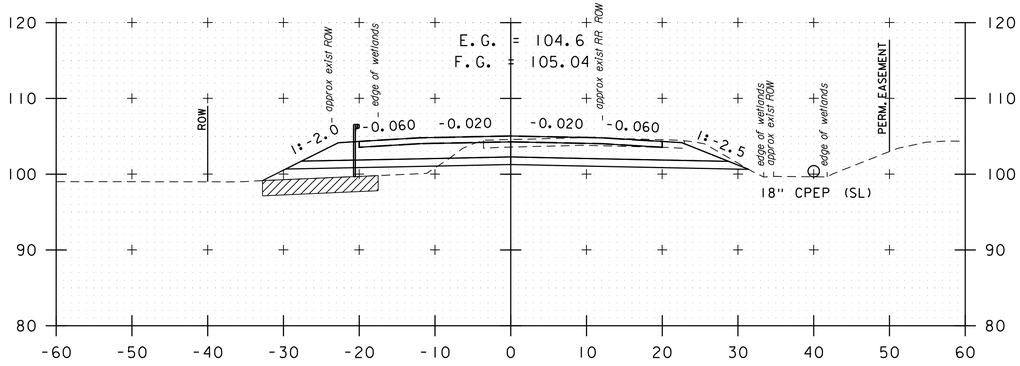
55+00

STA. 53+50 TO STA. 56+00

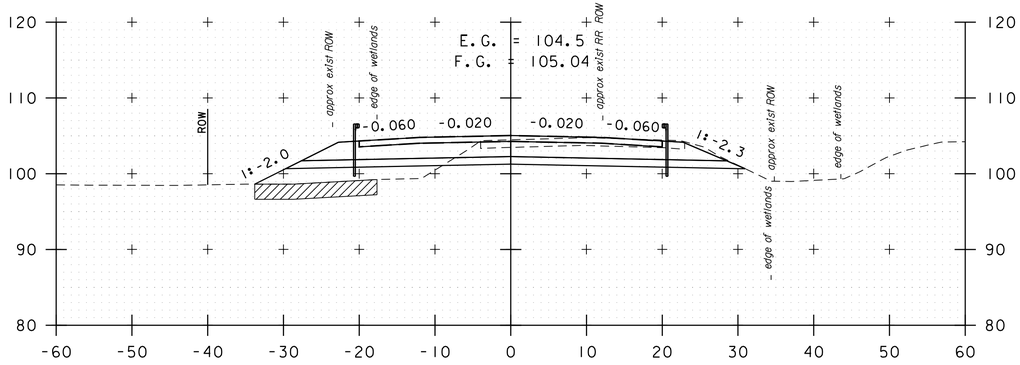
vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)

FILE NAME: z96b032xs_3600-16300.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
CROSS SECTION SHEET 7	SHEET 184 OF 305

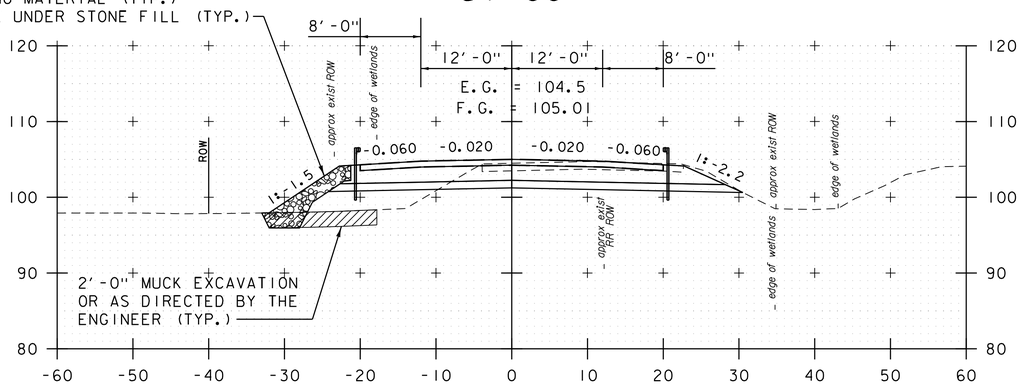


57+50

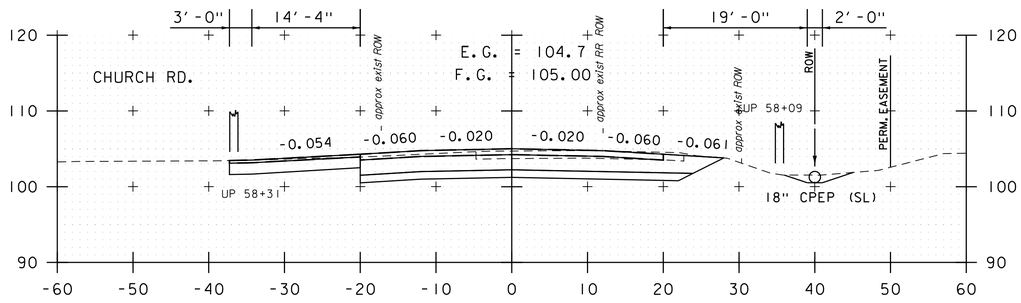


57+00

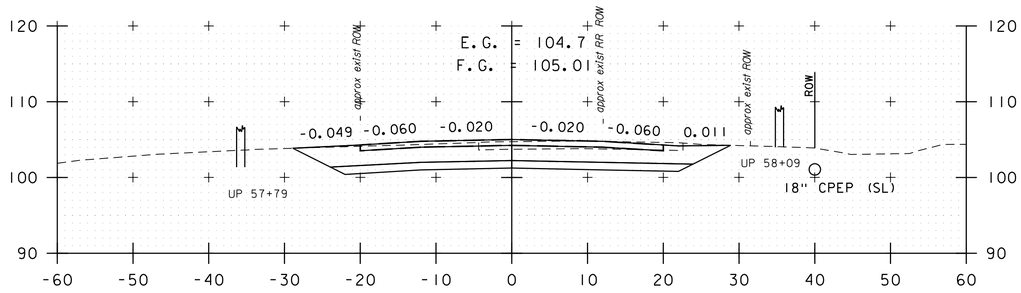
STONE FILL, TYPE I (TYP.)
6" GRUBBING MATERIAL (TYP.)
GEOTEXTILE UNDER STONE FILL (TYP.)



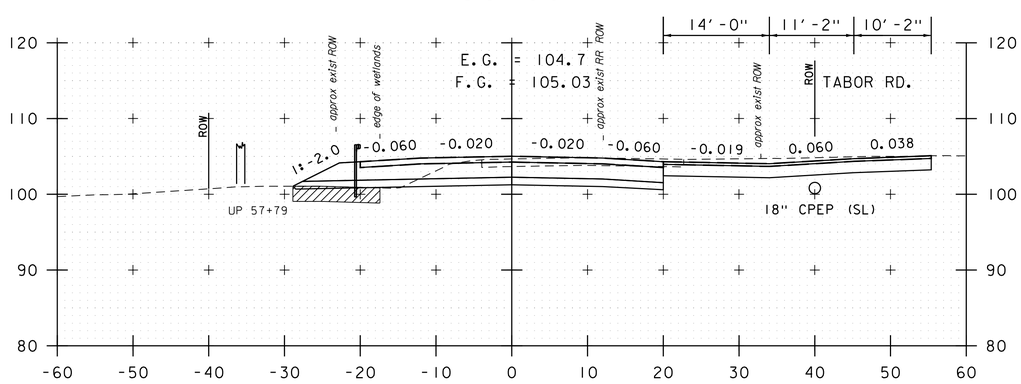
56+50



58+15 (CHURCH RD LT)



58+00



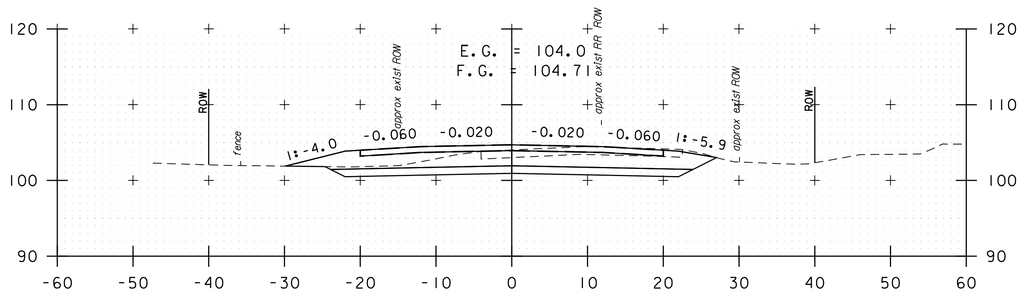
57+83 (TABOR POINT RD RT) STA. 56+50 TO STA. 58+15

vhb

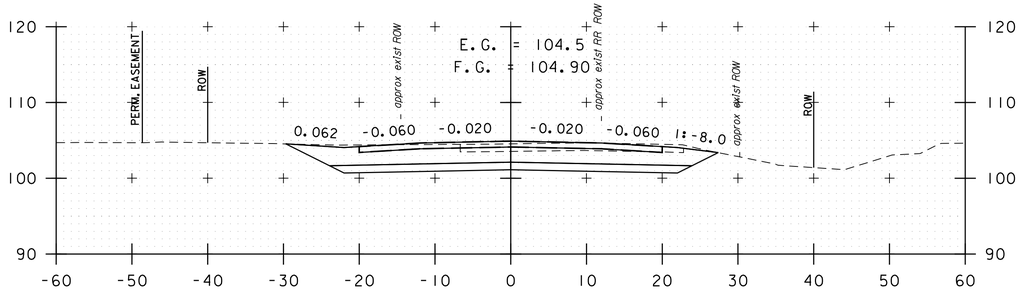
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_3600-16300.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
CROSS SECTION SHEET 8

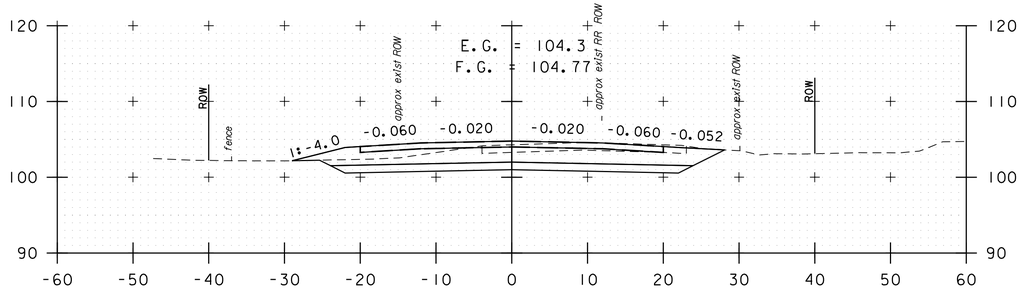
PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 185 OF 305



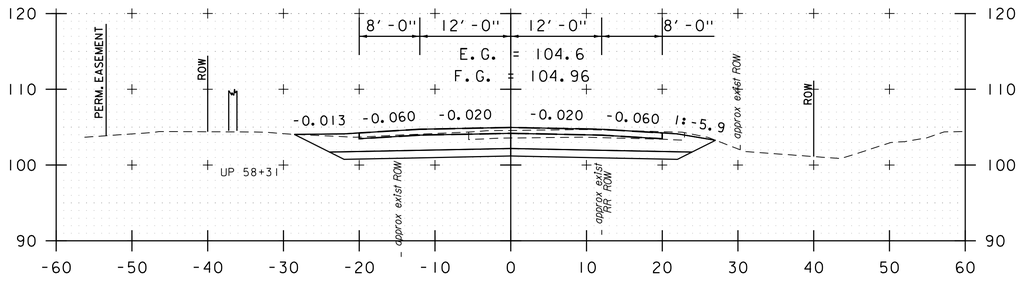
60+50



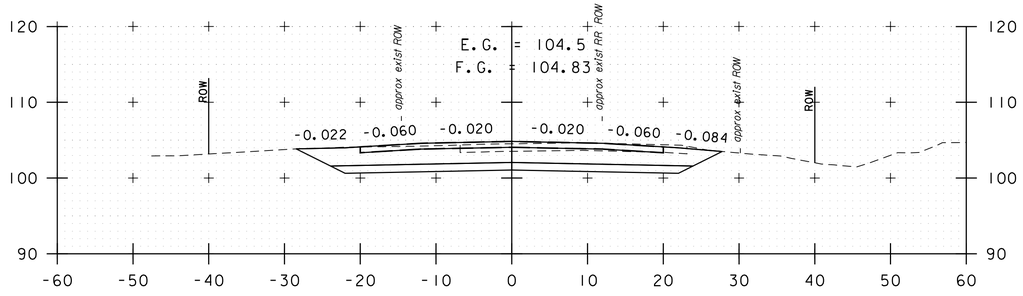
59+00



60+00



58+50



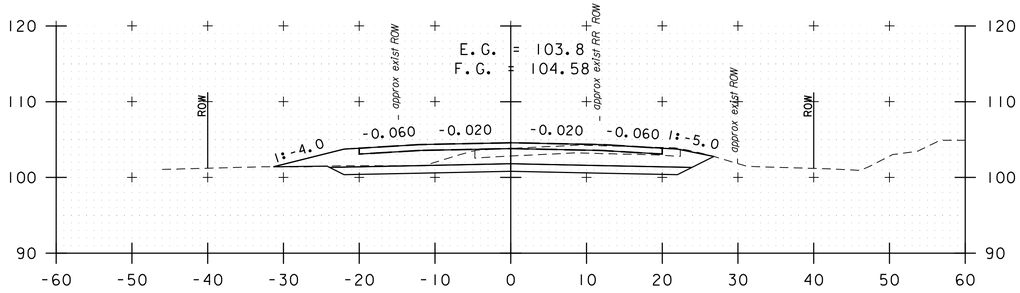
59+50

STA. 58+50 TO STA. 60+50

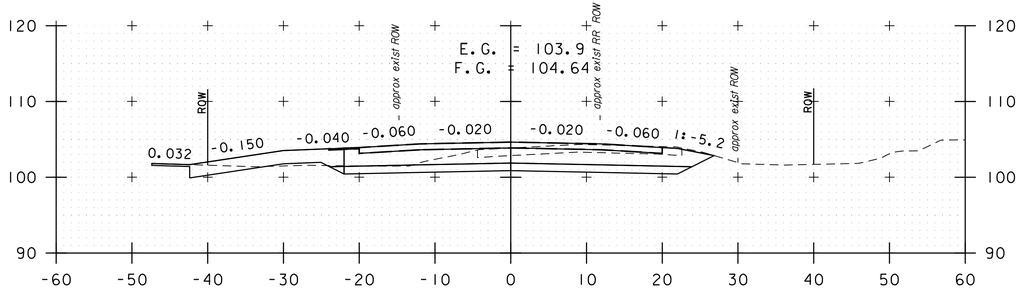
vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)

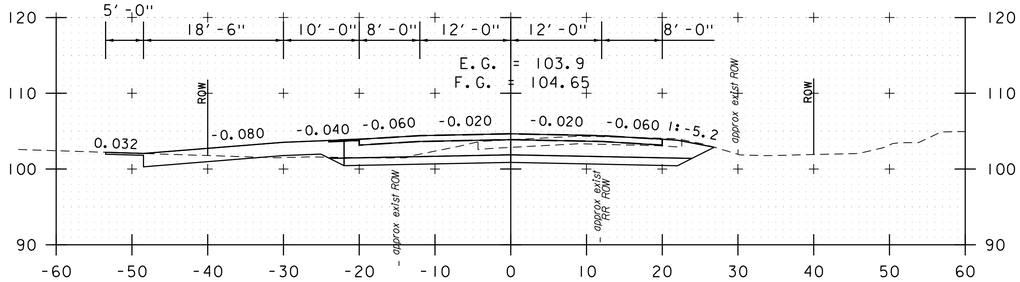
FILE NAME: z96b032xs_3600-16300.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
CROSS SECTION SHEET 9	SHEET 186 OF 305



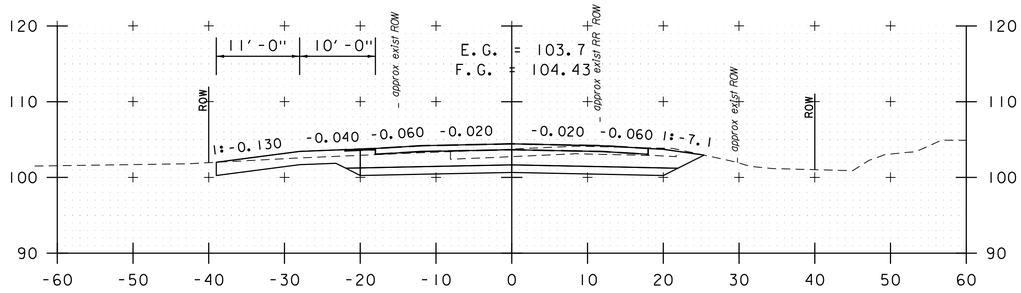
61+50



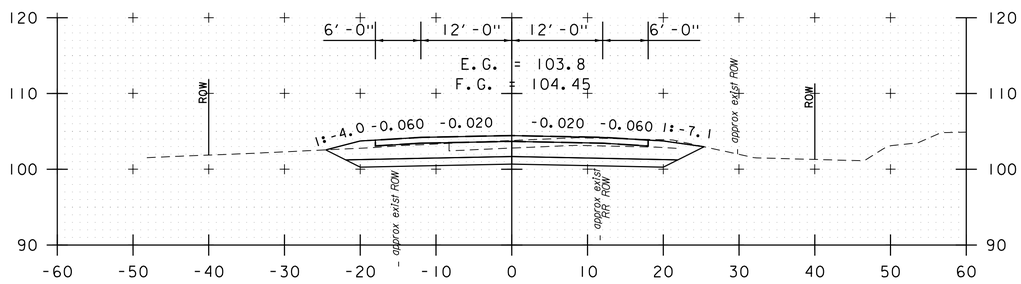
61+00 (DRIVE LT)



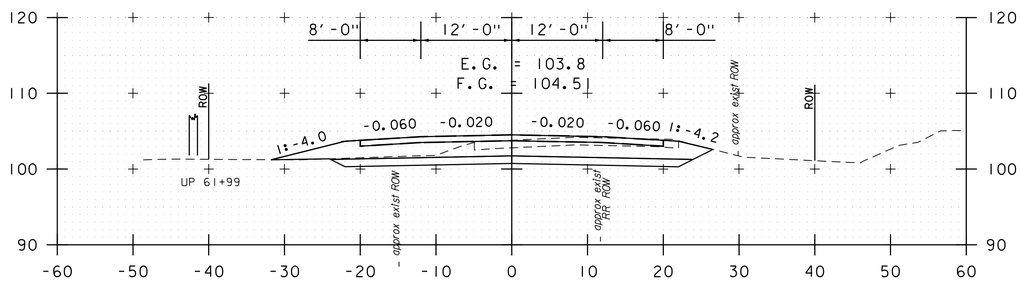
60+91 (DRIVE LT)



62+65 (DRIVE LT)



62+50



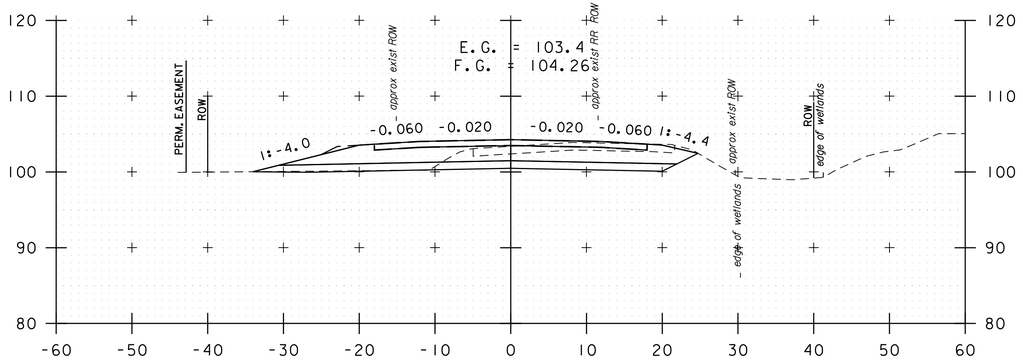
62+00

STA. 60+91 TO STA. 62+65

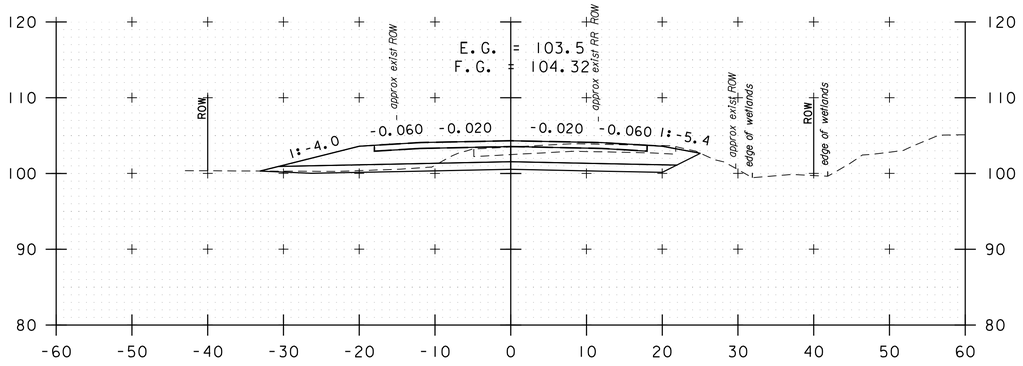
vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)

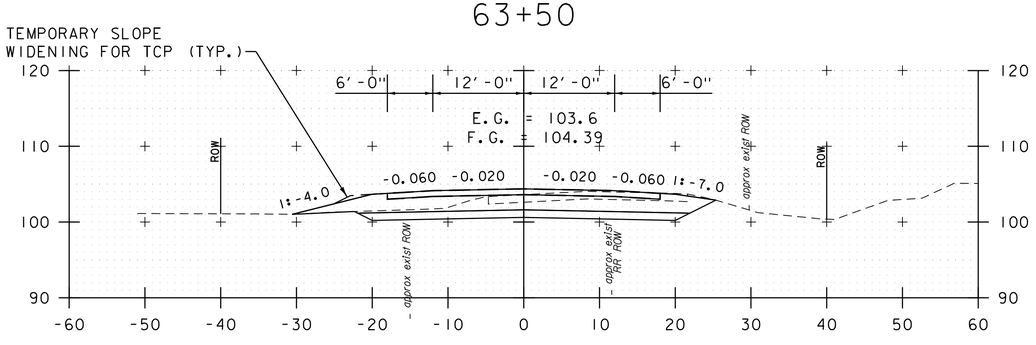
FILE NAME: z96b032xs_3600-16300.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
CROSS SECTION SHEET 10	SHEET 187 OF 305



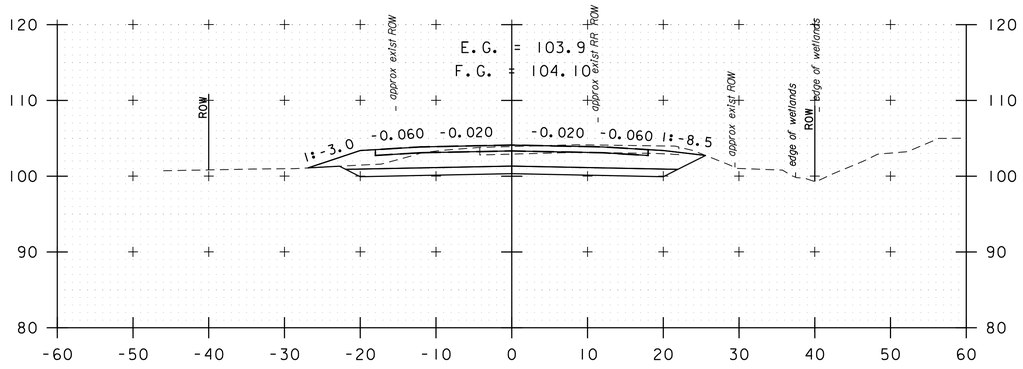
64+00



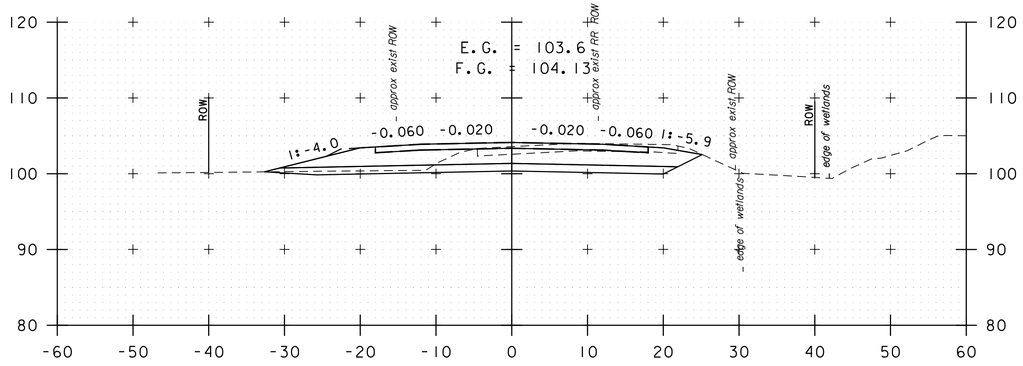
63+50



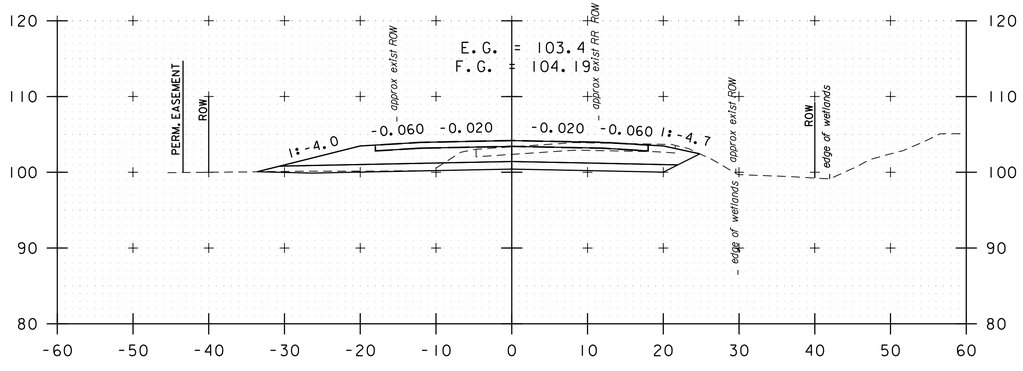
63+00



65+50



65+00

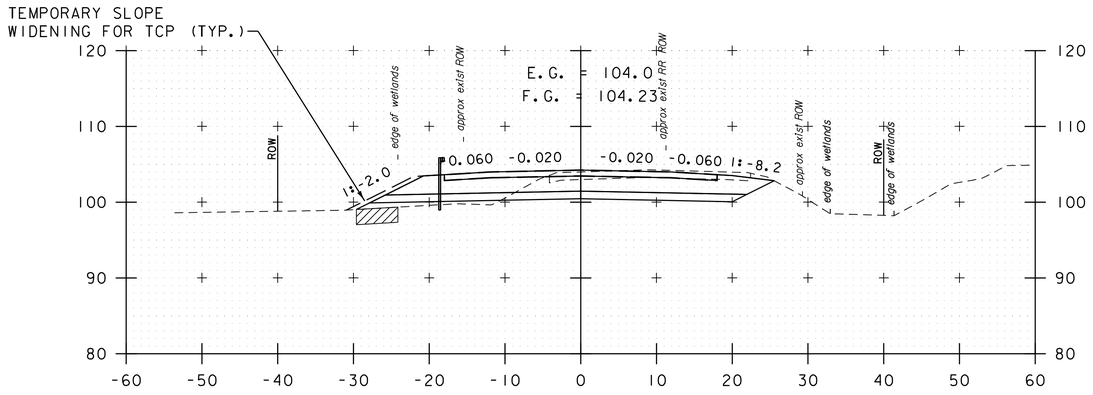


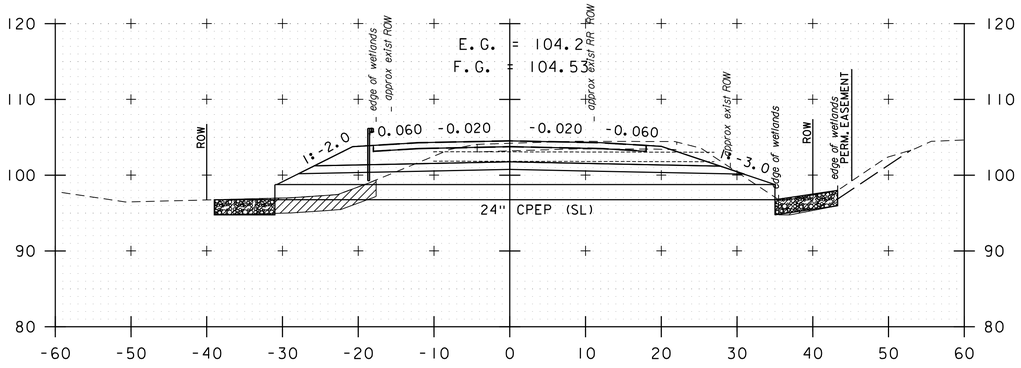
64+50

STA. 63+00 TO STA. 65+50

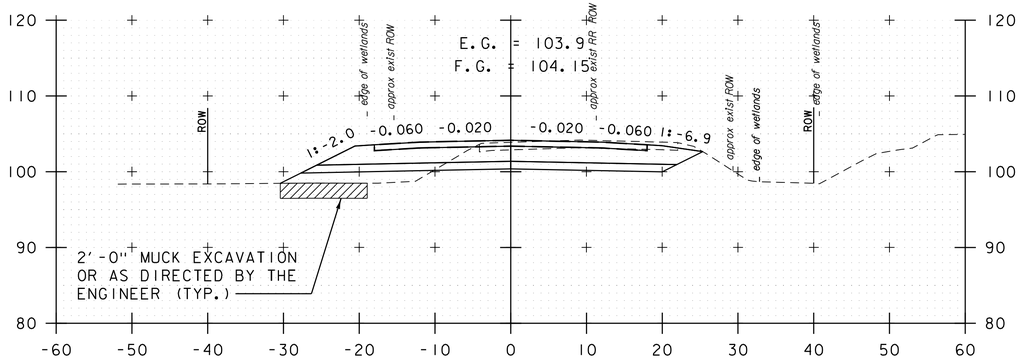
vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032xs_3600-16300.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
CROSS SECTION SHEET II	SHEET 188 OF 305

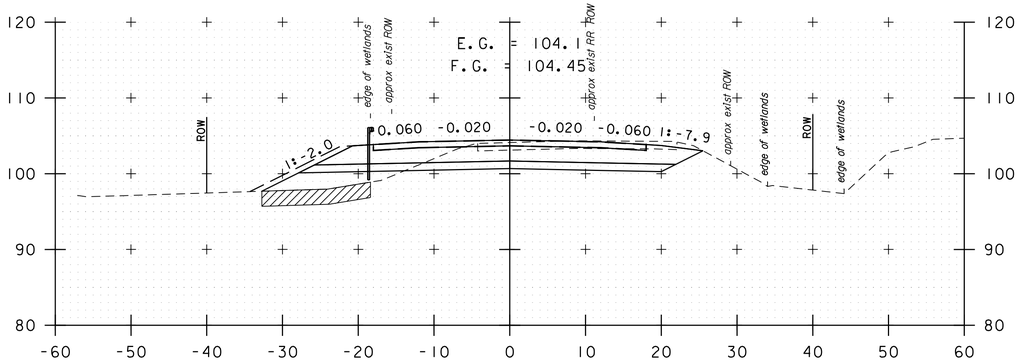




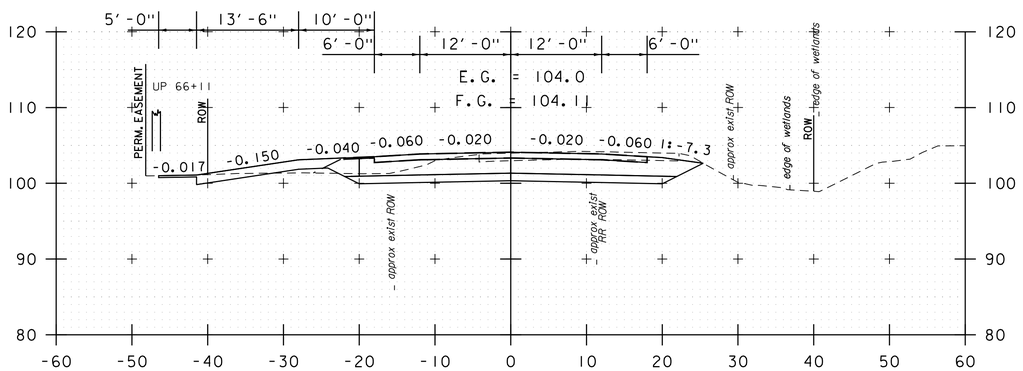
67+00



68+35 (NEW 24" CPEP)

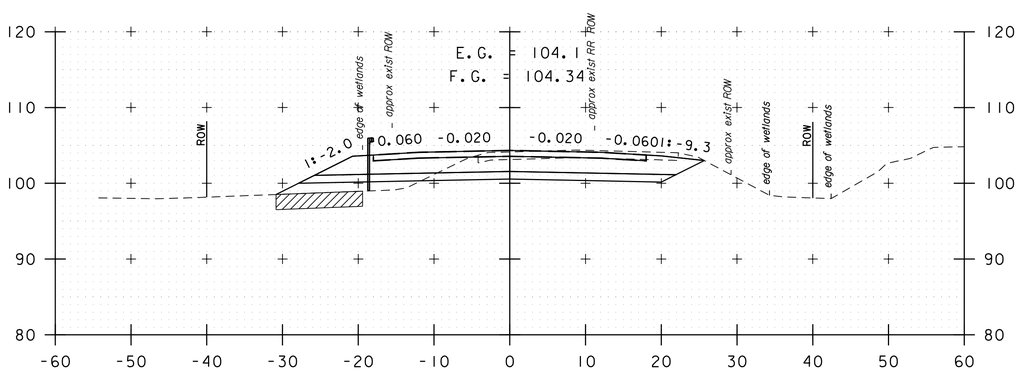


66+50



66+00 (DRIVE LT)

68+00



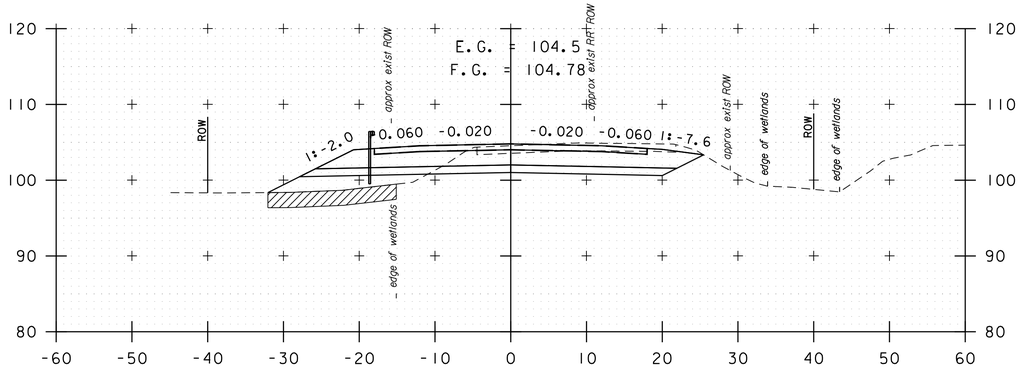
67+50

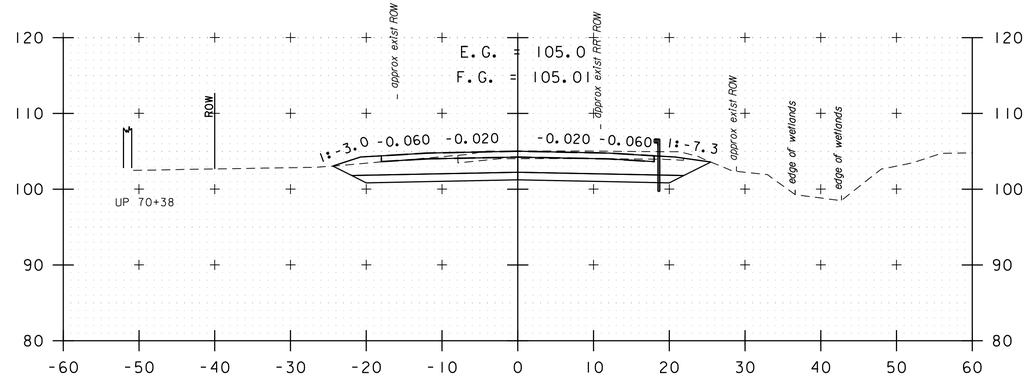
STA. 66+00 TO STA. 68+35

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

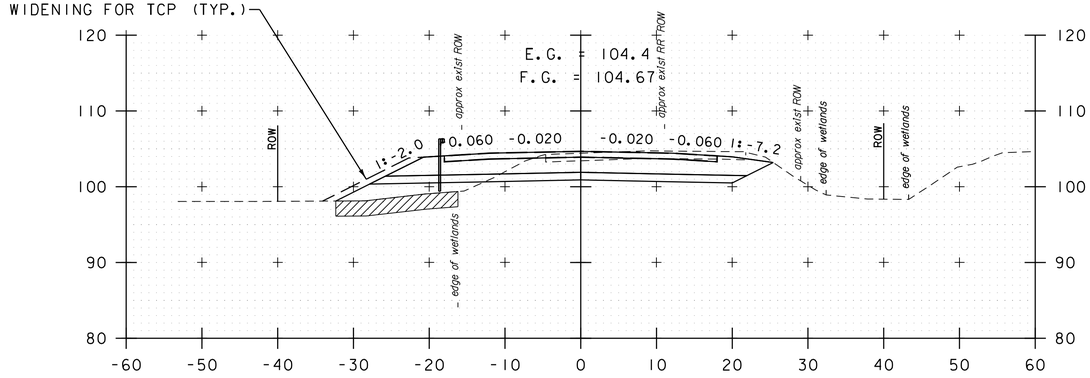
FILE NAME: z96b032xs_3600-16300.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
CROSS SECTION SHEET 12

PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 189 OF 305

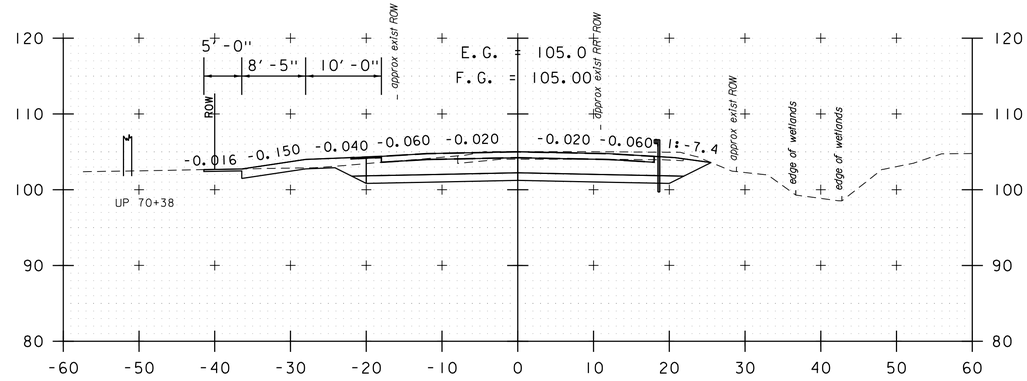




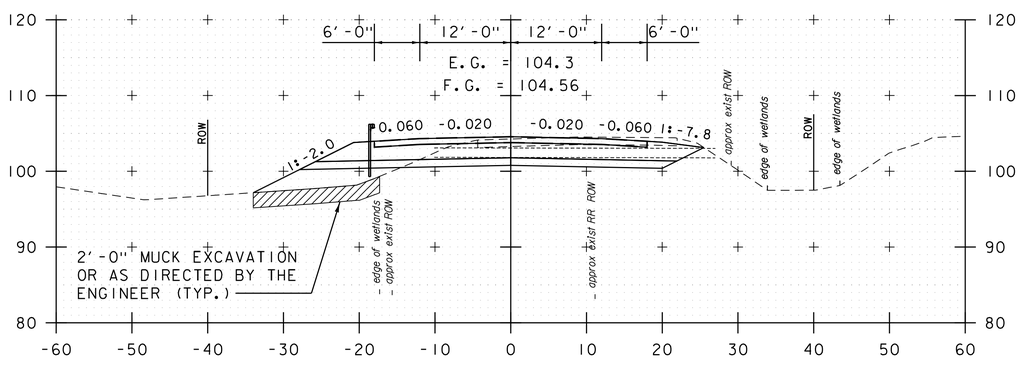
69+50



70+50

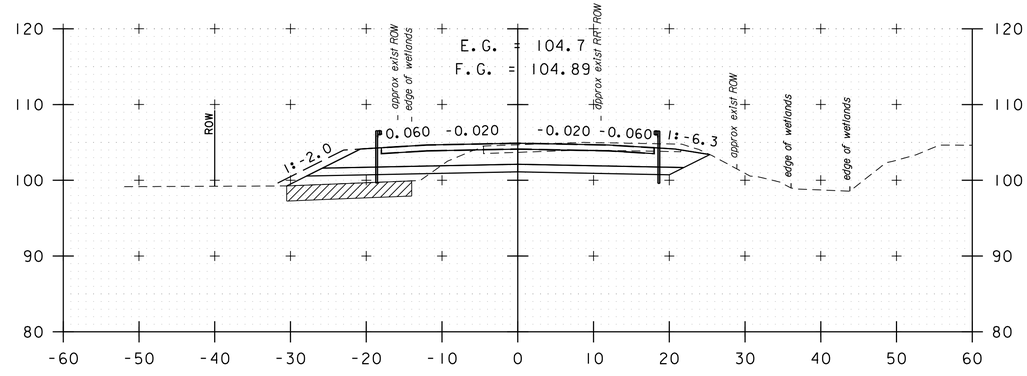


69+00



68+50

70+48 (DRIVE LT)



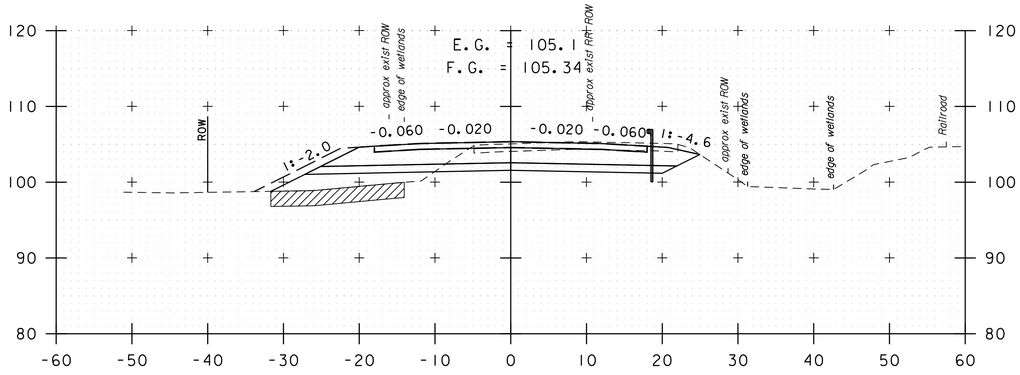
70+00

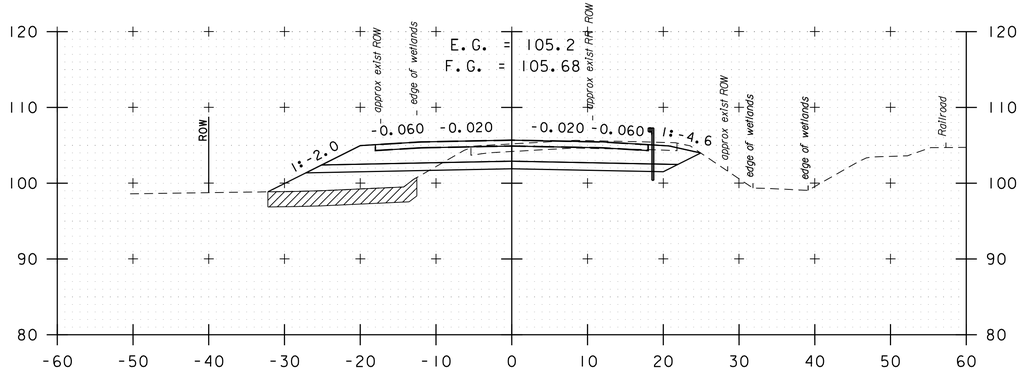
STA. 68+50 TO STA. 70+50

vhb

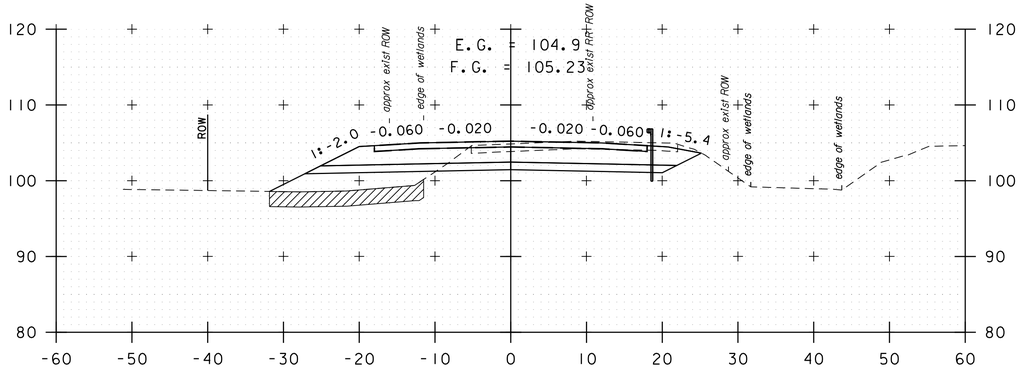
PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)

FILE NAME: z96b032xs_3600-16300.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
CROSS SECTION SHEET 13	SHEET 190 OF 305

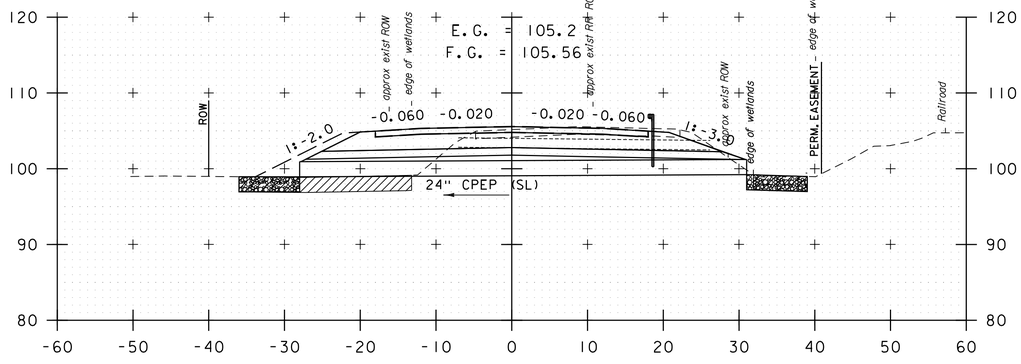




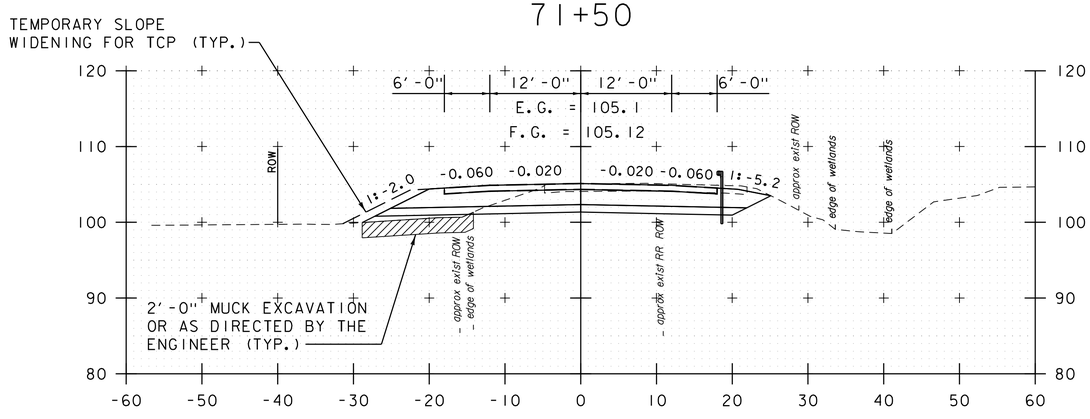
72+00



73+50

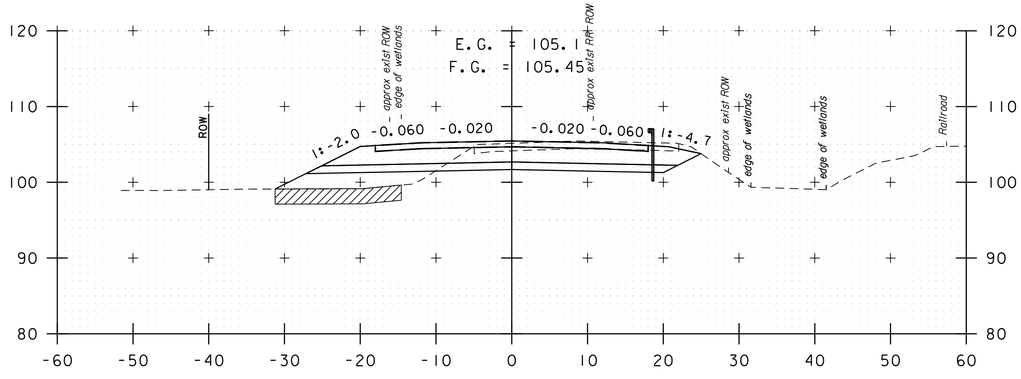


71+50



71+00

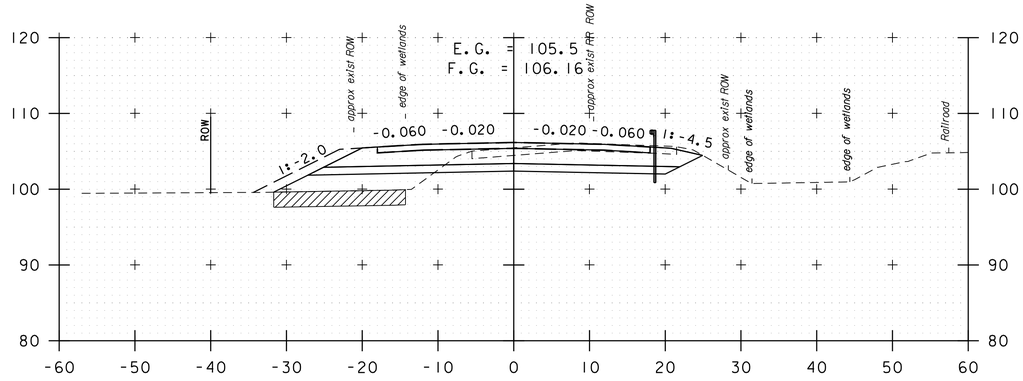
73+00 (NEW 24" CPEP)



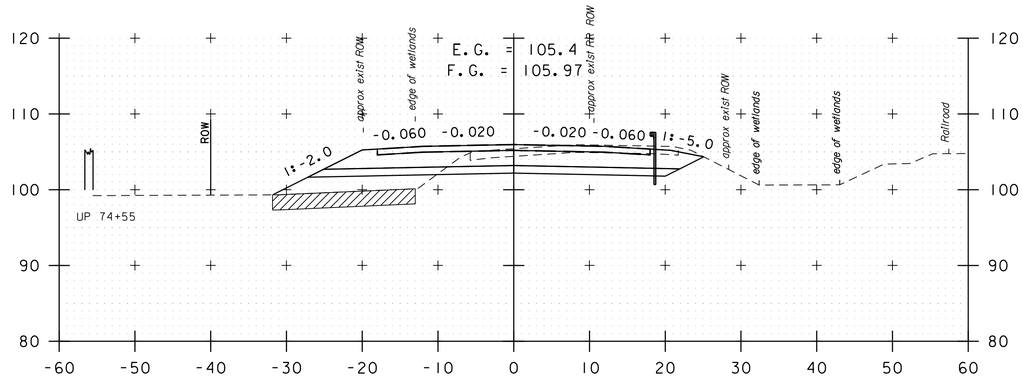
72+50

STA. 71+00 TO STA. 73+50

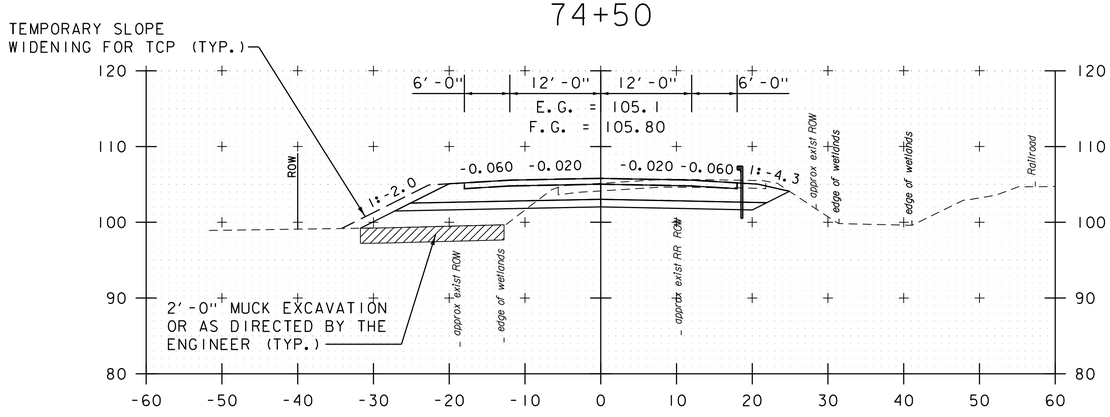
PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032xs_3600-16300.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
CROSS SECTION SHEET 14	SHEET 191 OF 305



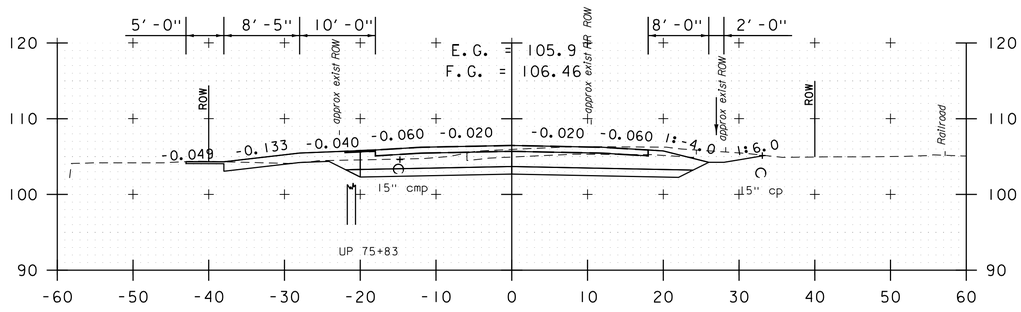
75+00



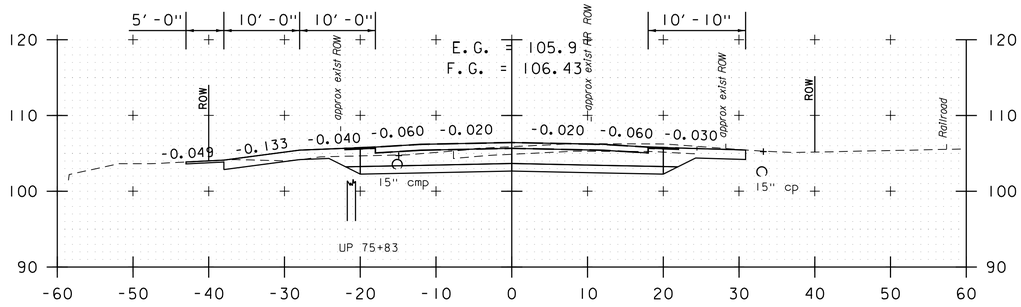
74+50



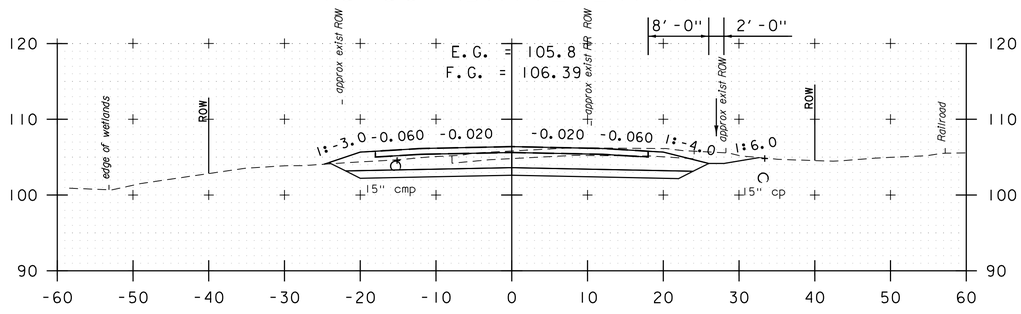
74+00



75+65 (DRIVE LT)



75+59 (DRIVE LT/RT)



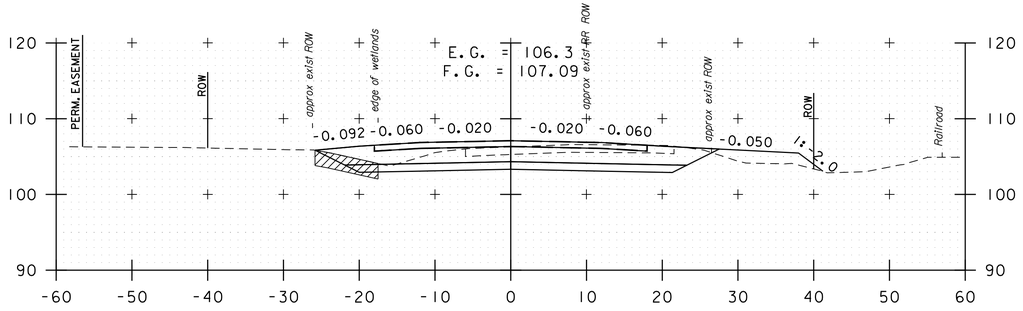
75+50

STA. 74+00 TO STA. 75+65

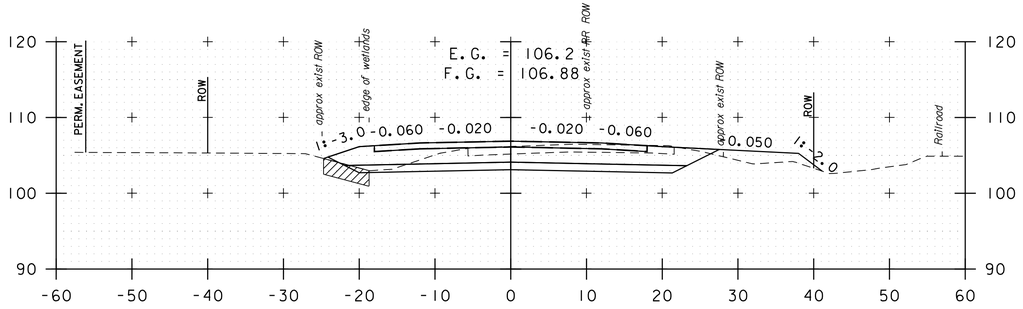
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_3600-16300.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
CROSS SECTION SHEET 15

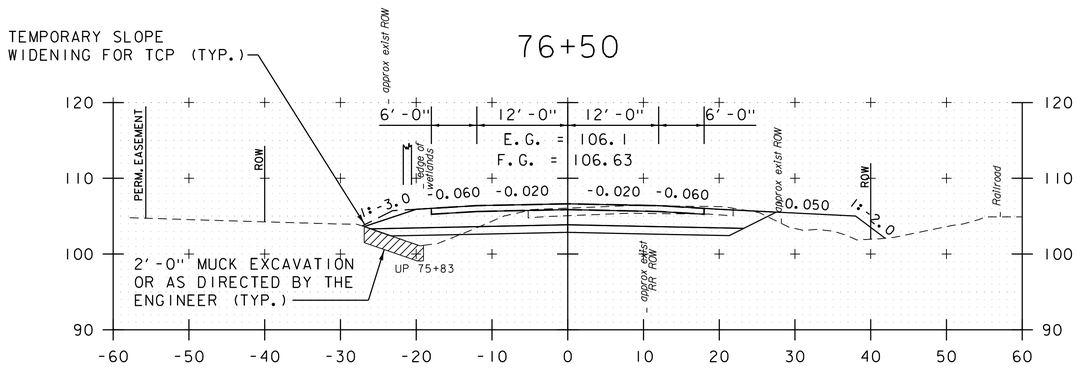
PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 192 OF 305



77+00

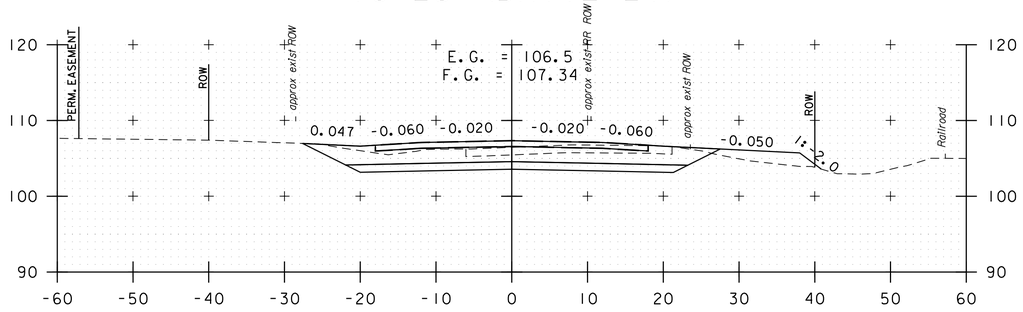


76+50

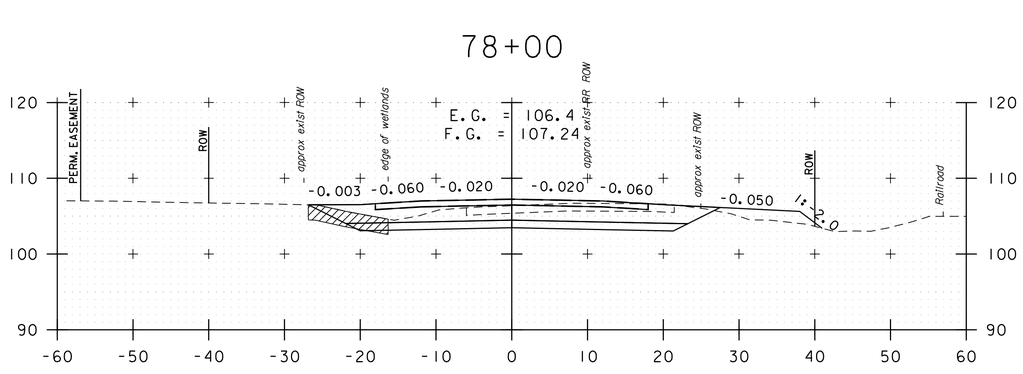


76+00

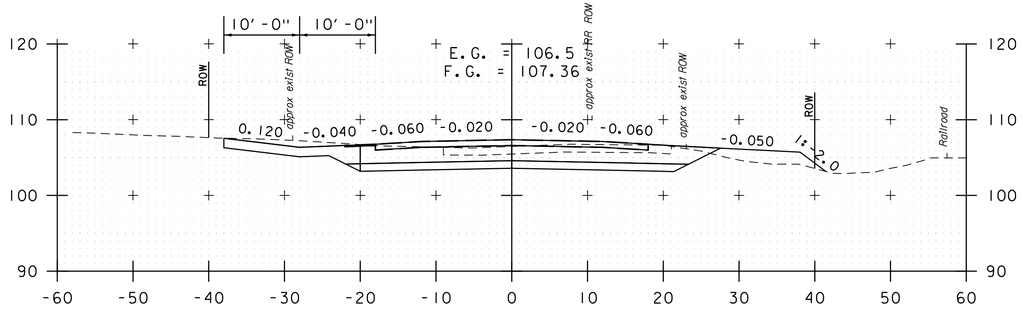
78+23 (DRIVE LT)



78+00



77+50

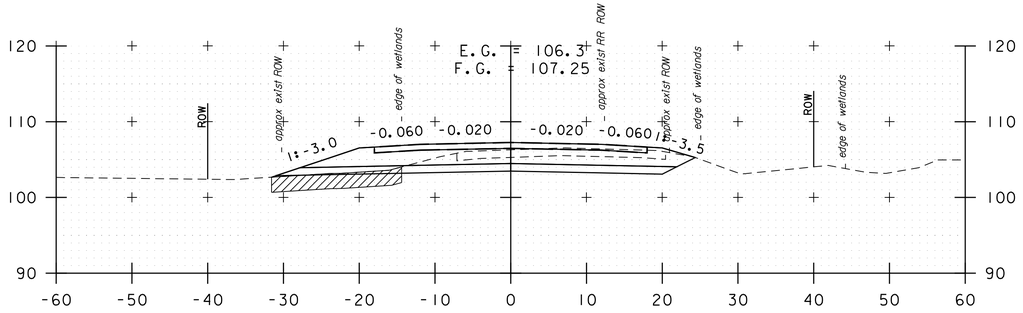


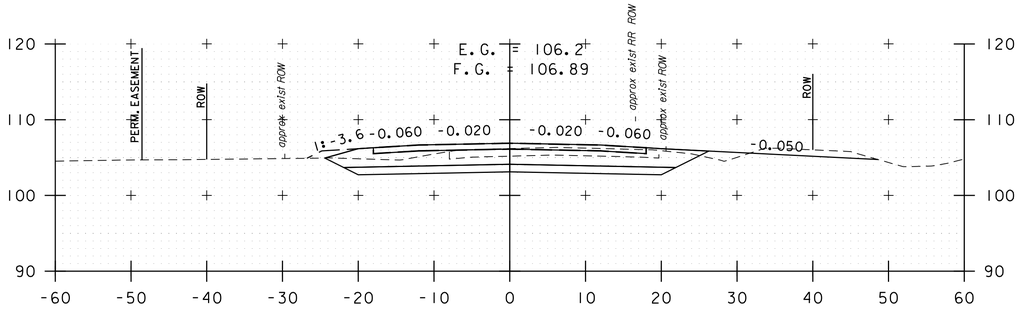
STA. 76+00 TO STA. 78+23

vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)

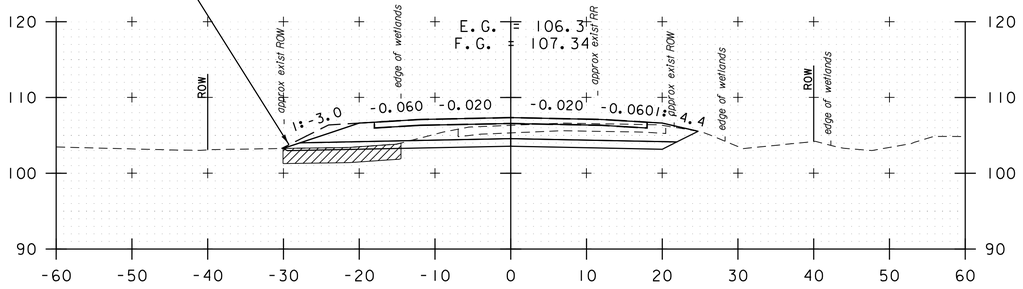
FILE NAME: z96b032xs_3600-16300.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
CROSS SECTION SHEET 16	SHEET 193 OF 305



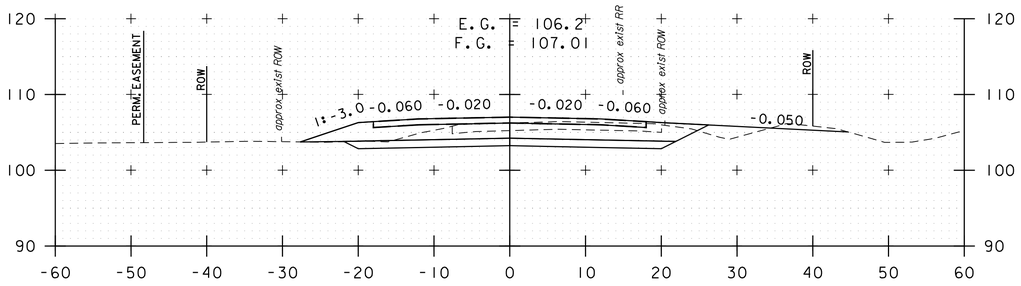


TEMPORARY SLOPE
WIDENING FOR TCP (TYP.)

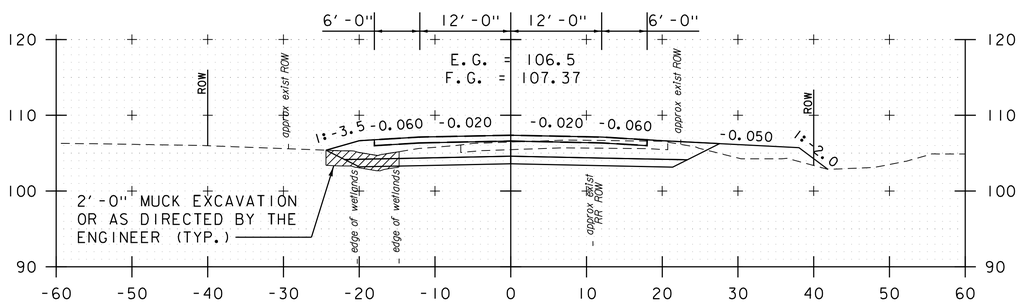
79+50



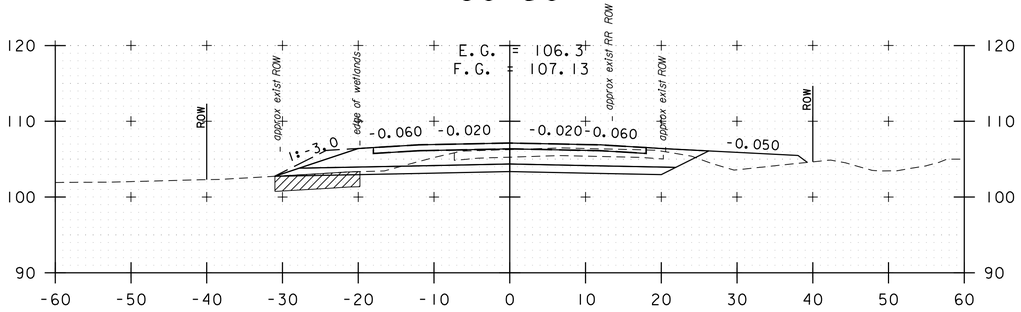
81+00



79+00



80+50



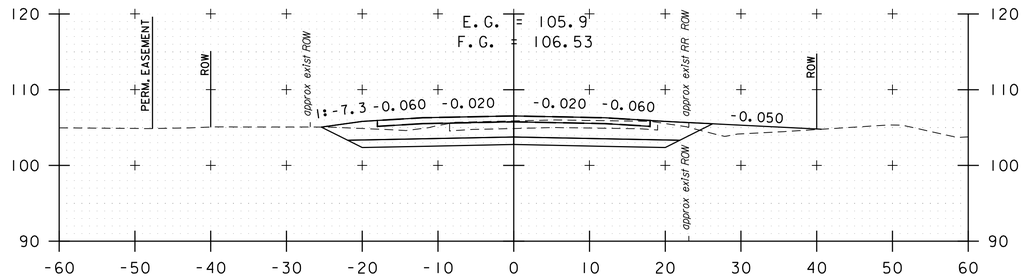
78+50

80+00

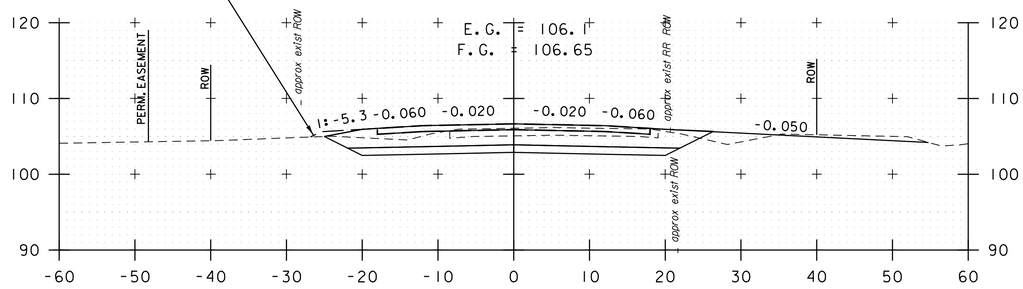
STA. 78+50 TO STA. 81+00

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)

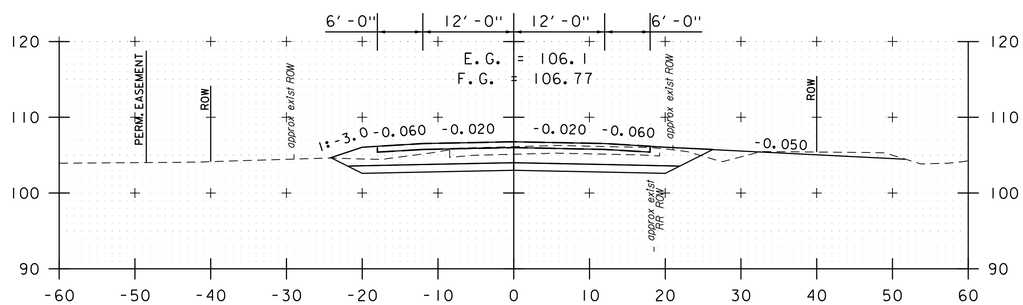
FILE NAME: z96b032xs_3600-16300.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
CROSS SECTION SHEET 17	SHEET 194 OF 305



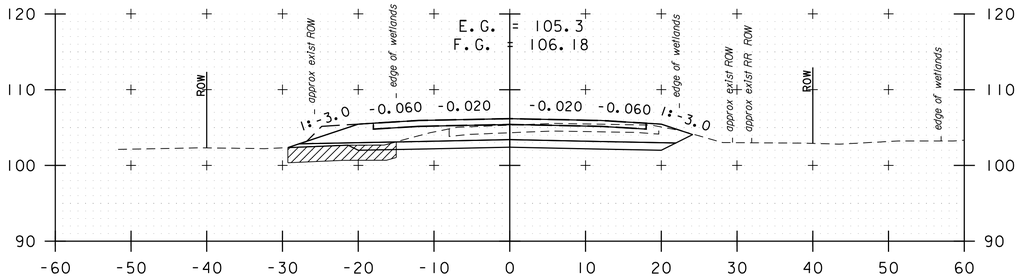
82+50



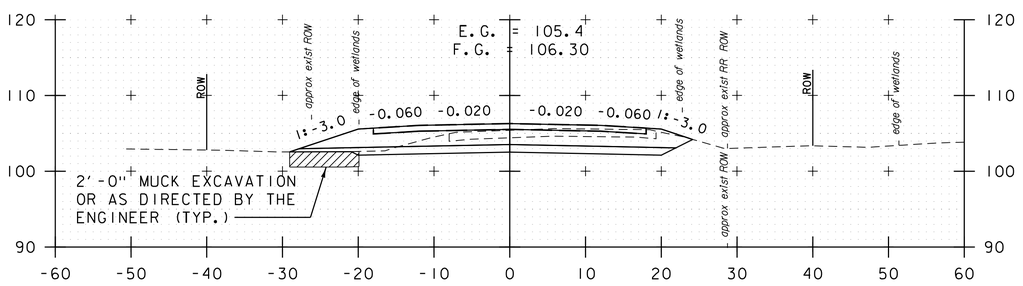
82+00



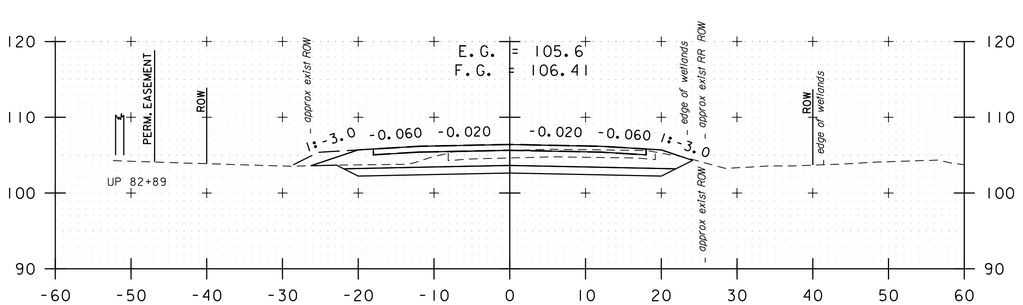
81+50



84+00



83+50



83+00

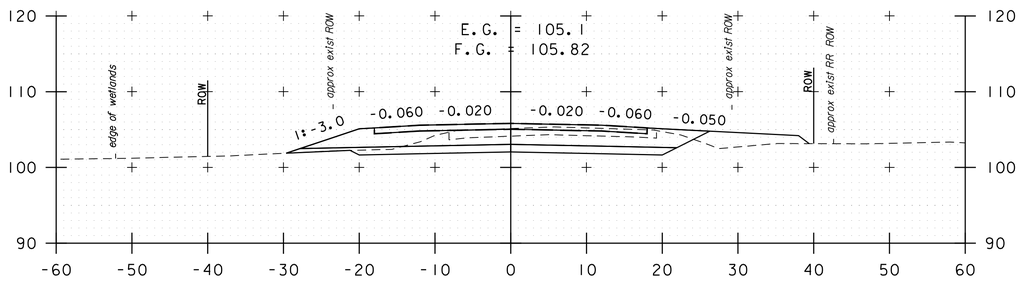
STA. 81+50 TO STA. 84+00

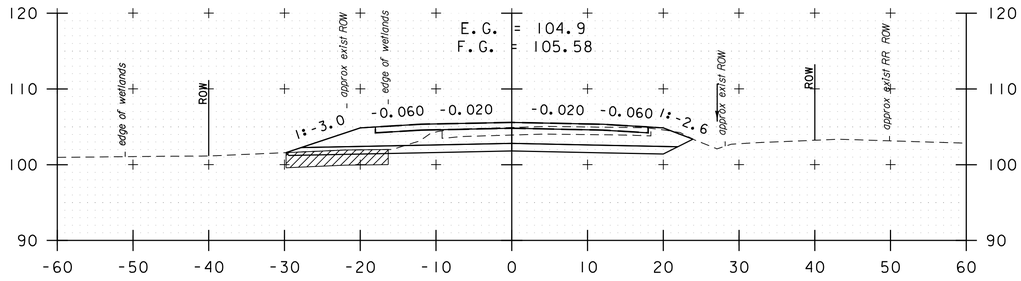
vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

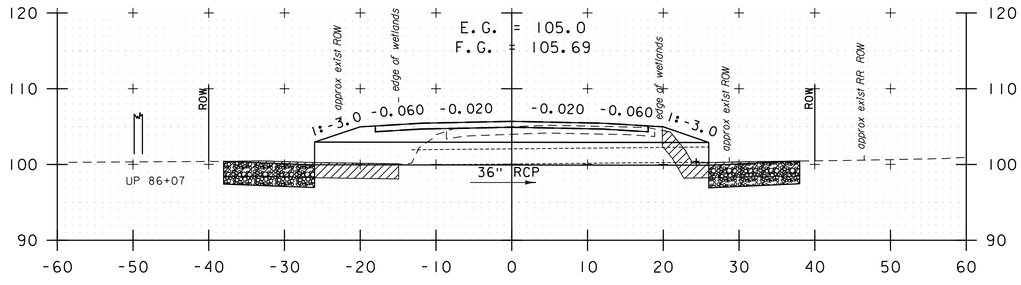
FILE NAME: z96b032xs_3600-16300.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
CROSS SECTION SHEET 18

PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 195 OF 305

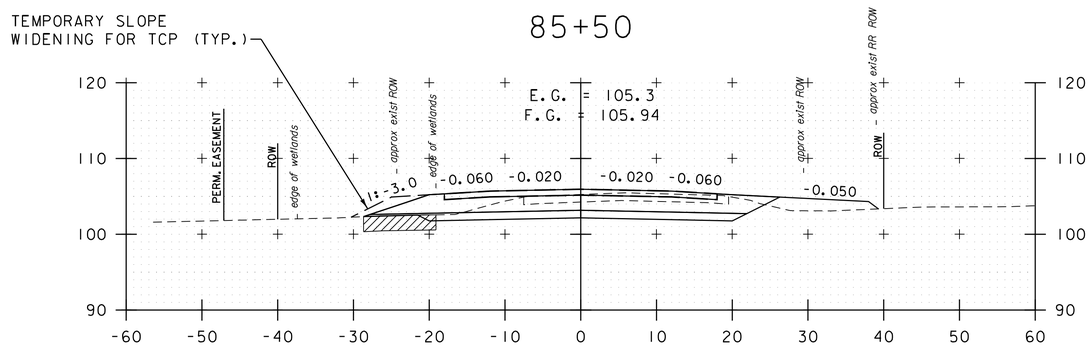




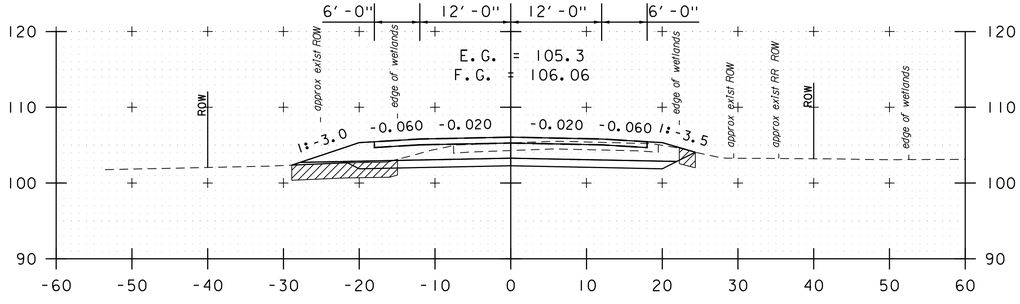
86+50



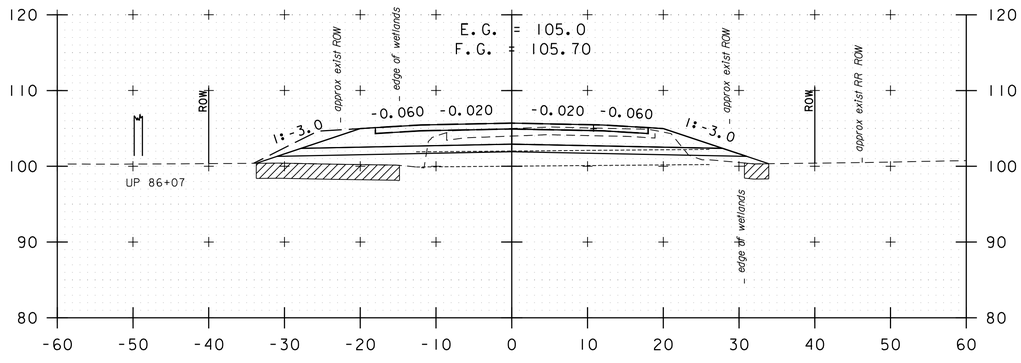
86+04 (NEW 36" RCP)



85+50



85+00



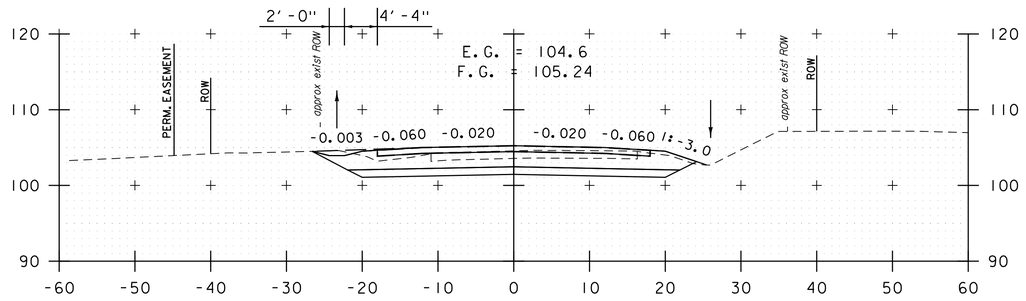
84+50

86+00

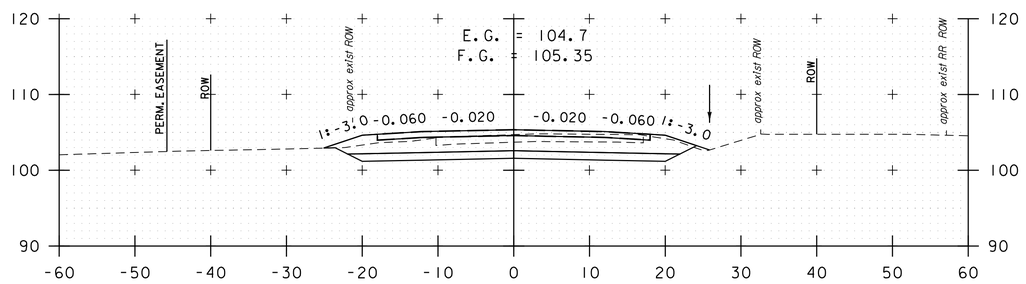
STA. 84+50 TO STA. 86+50

vhb

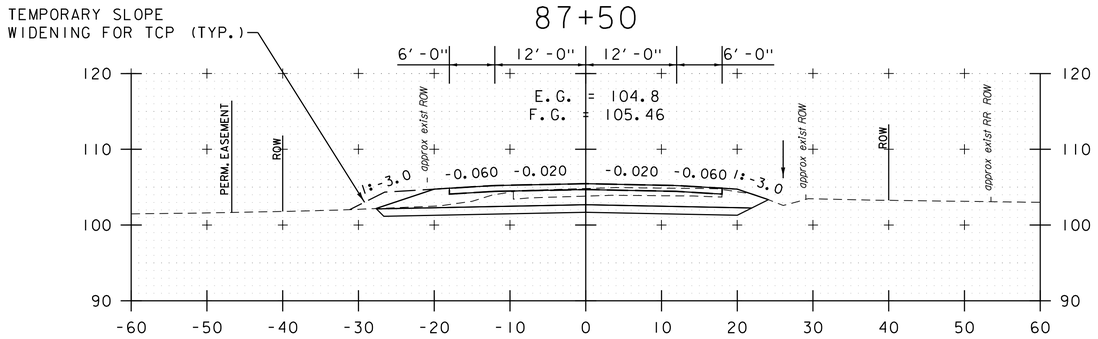
PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032xs_3600-16300.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
CROSS SECTION SHEET 19	SHEET 196 OF 305



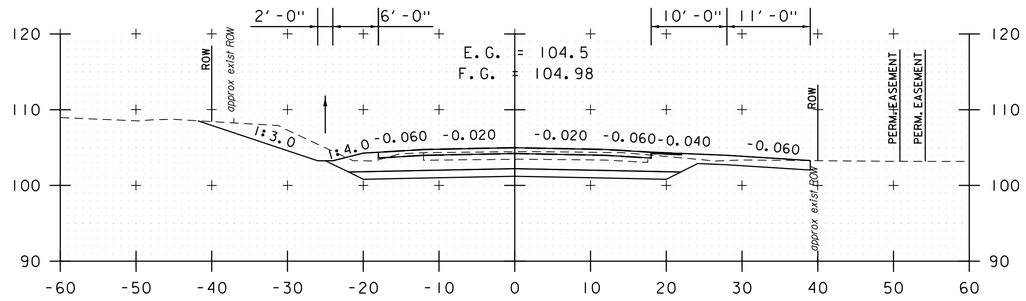
88+00



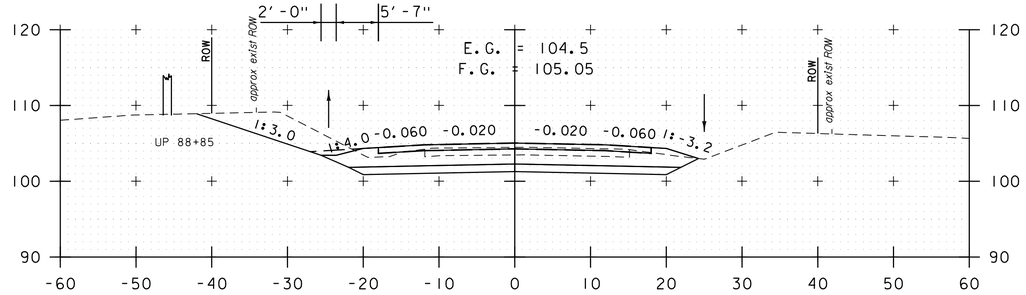
87+50



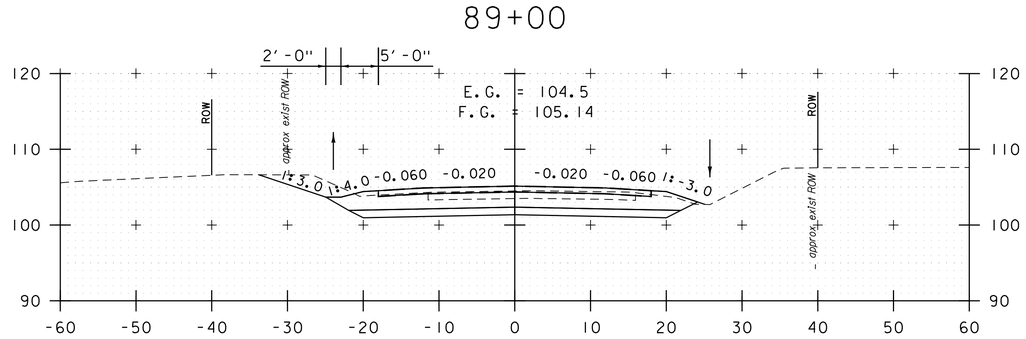
87+00



89+35 (DRIVE RT)



89+00

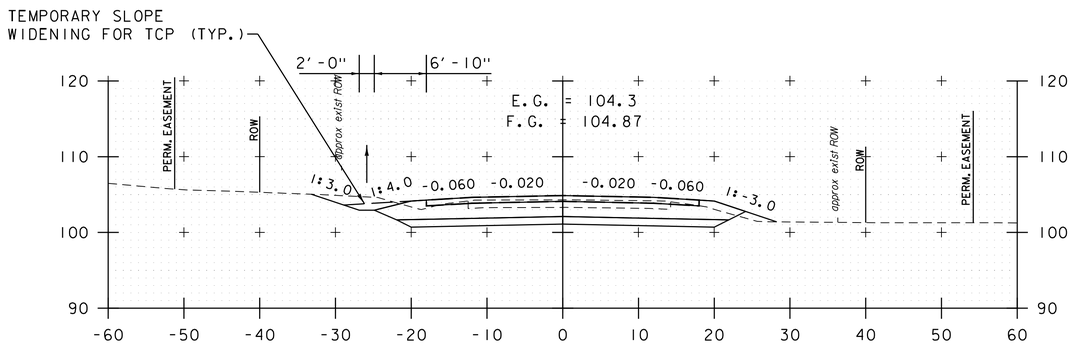


88+50

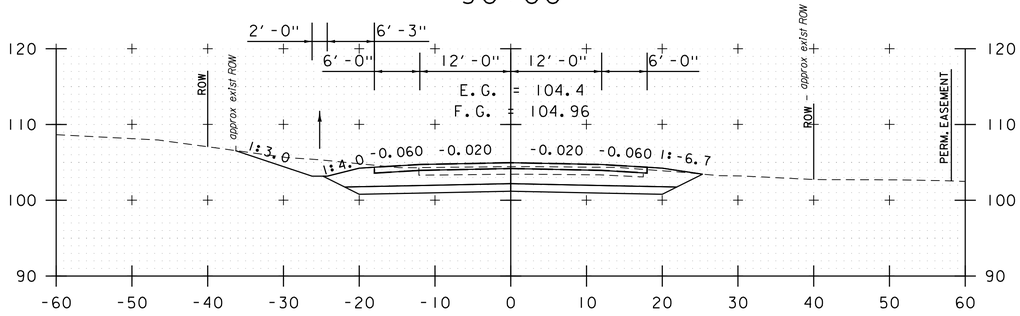
STA. 87+00 TO STA. 89+35

vhb

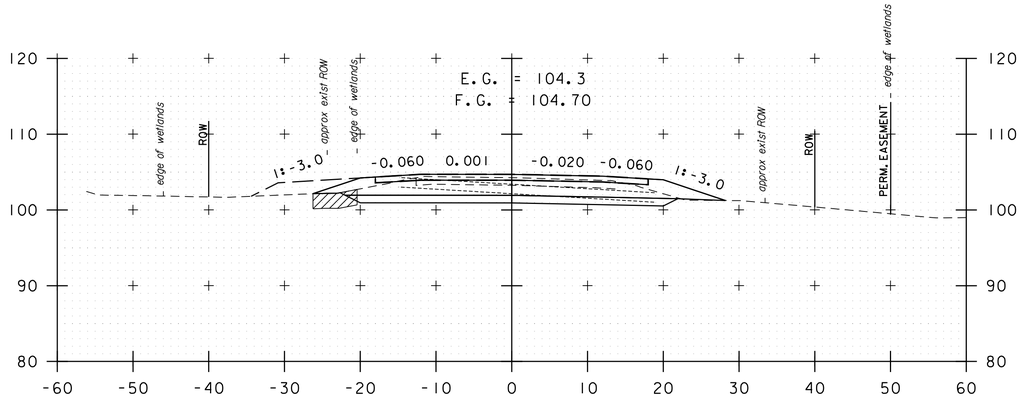
PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032xs_3600-16300.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
CROSS SECTION SHEET 20	SHEET 197 OF 305



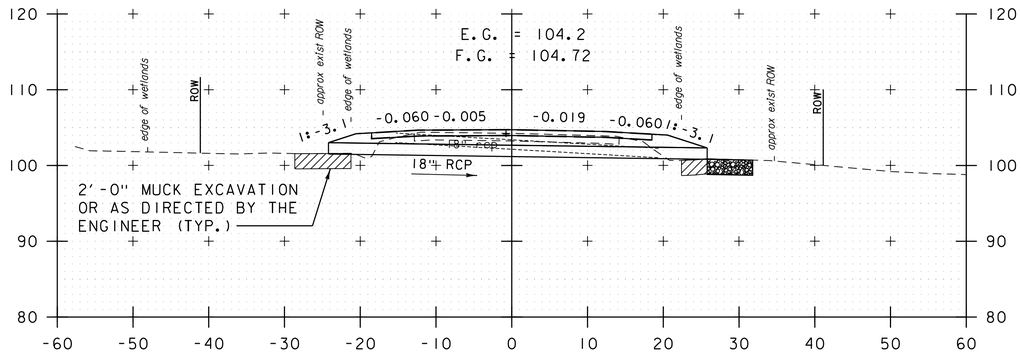
90+00



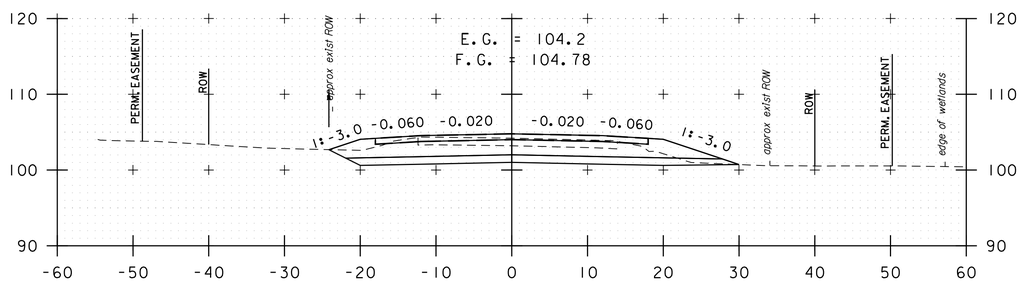
89+50



91+00



90+85 SKEWED (NEW 18" RCP)



90+50

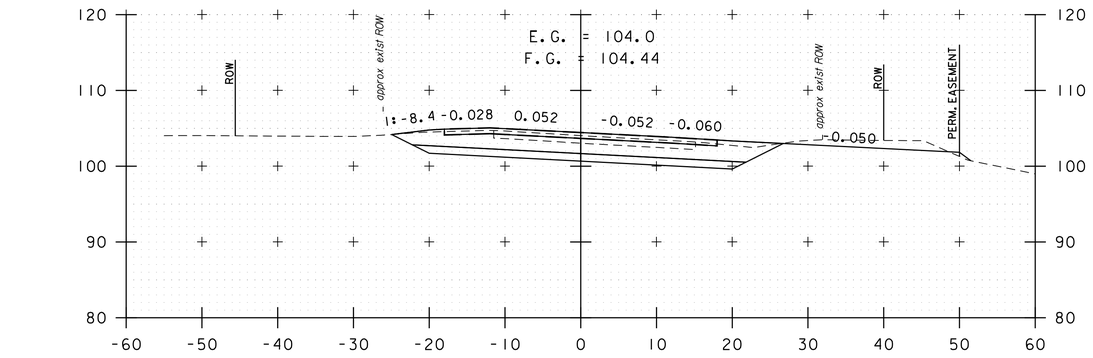
STA. 89+40 TO STA. 91+00

vhb

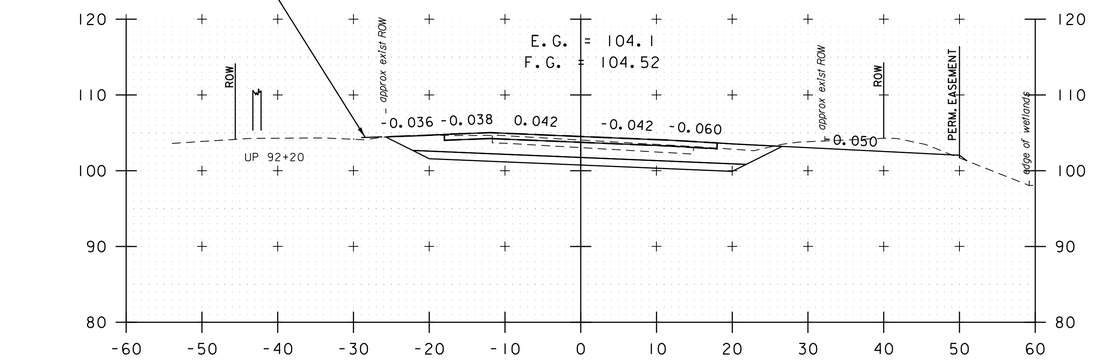
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_3600-16300.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
CROSS SECTION SHEET 21

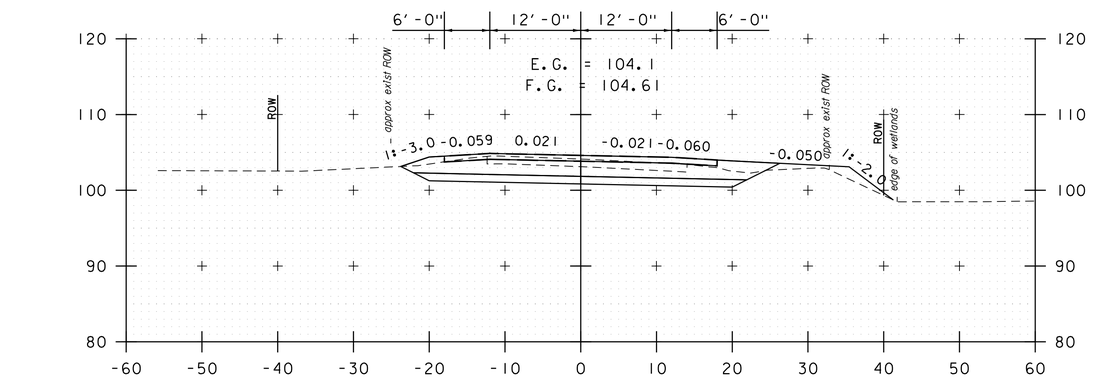
PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 198 OF 305



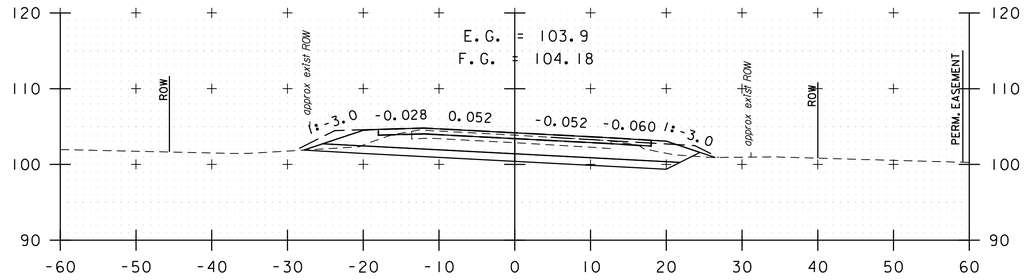
92+50



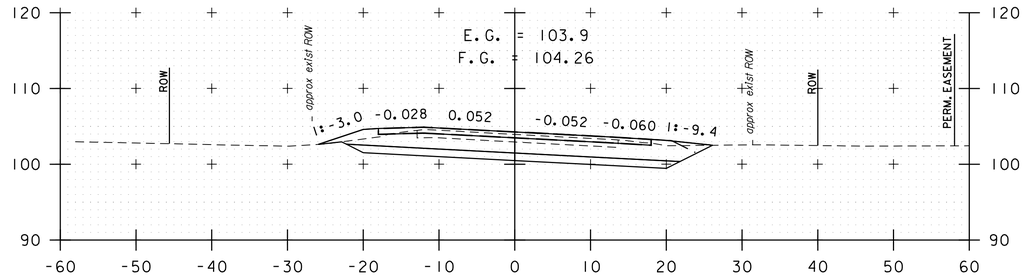
92+00



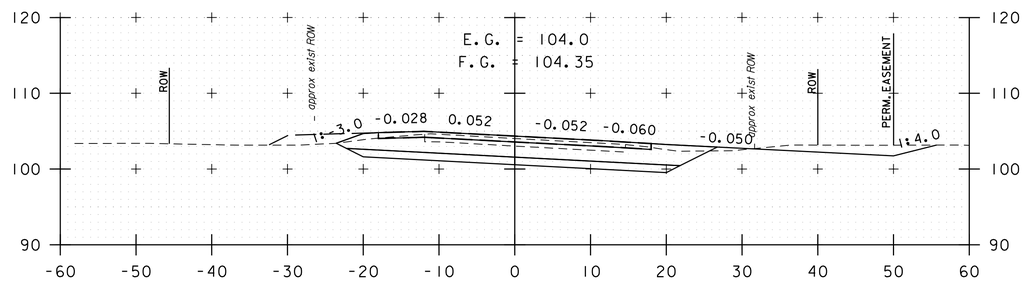
91+50



94+00



93+50



93+00

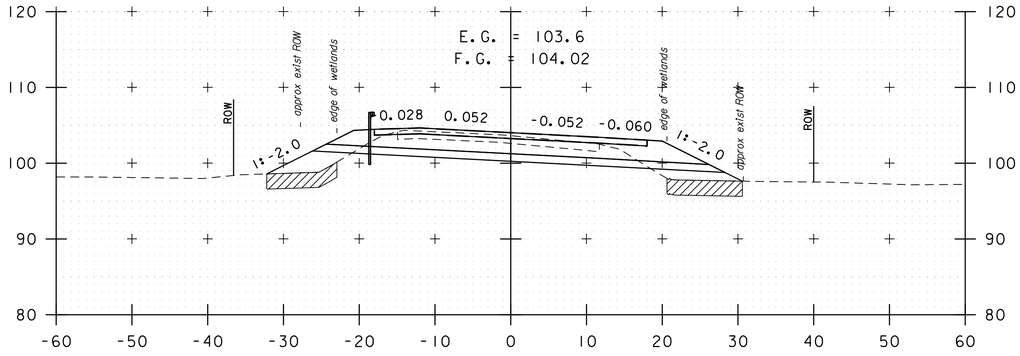
STA. 91+50 TO STA. 94+00

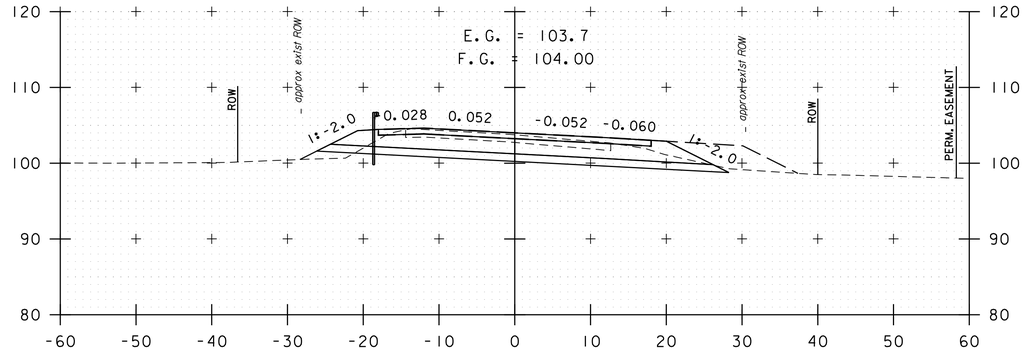
vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

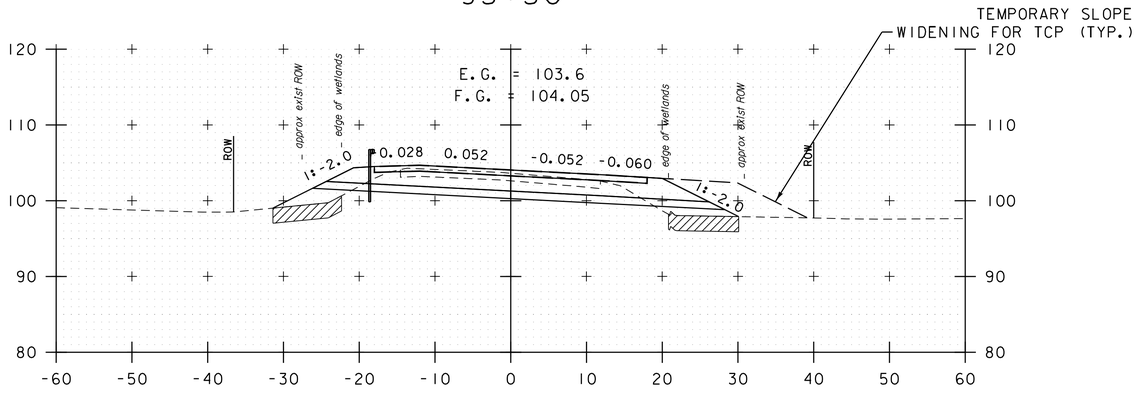
FILE NAME: z96b032xs_3600-16300.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
CROSS SECTION SHEET 22

PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 199 OF 305

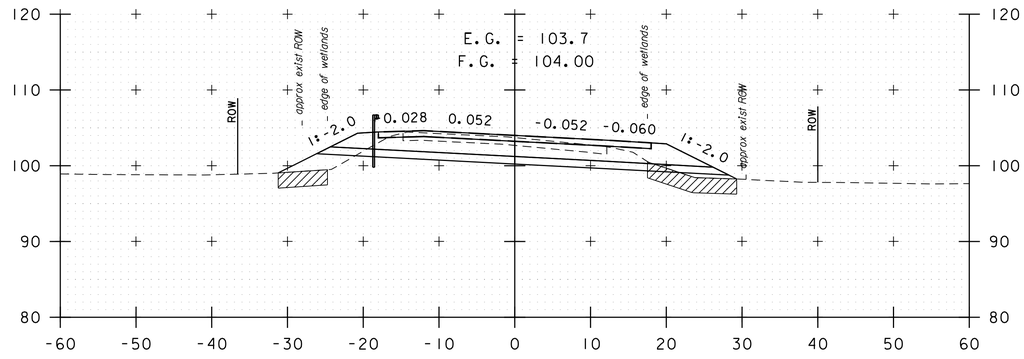




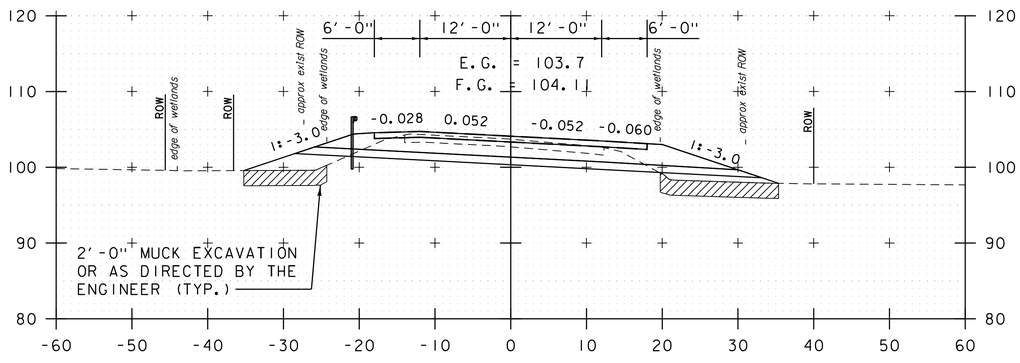
95+50



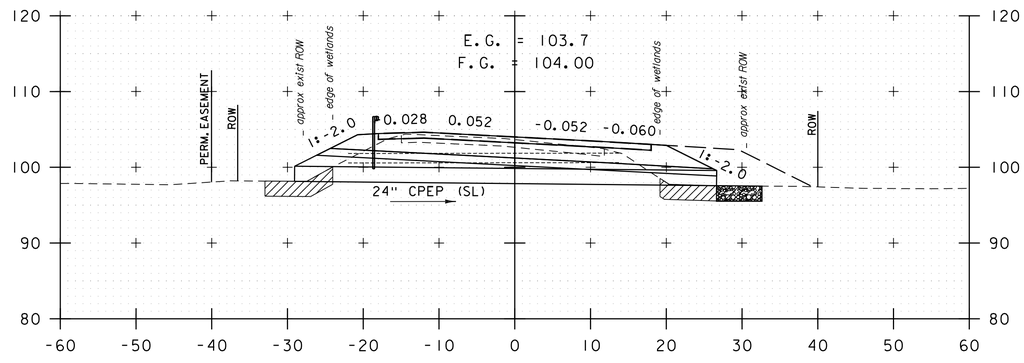
97+00



95+00



96+50



94+50

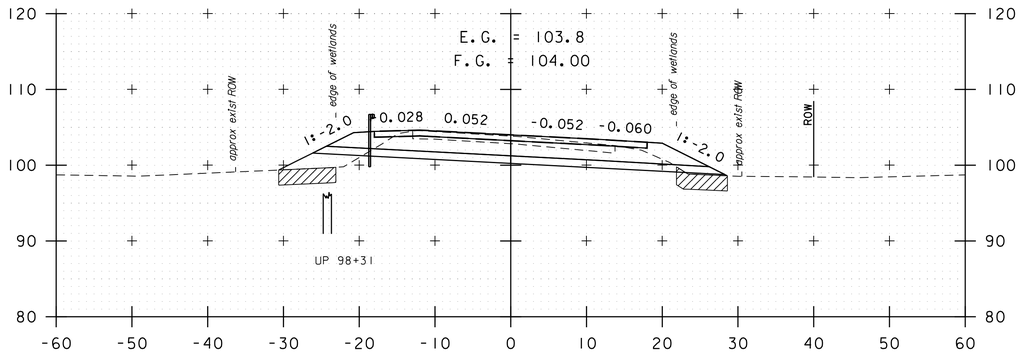
96+00 (NEW 24" CPEP)

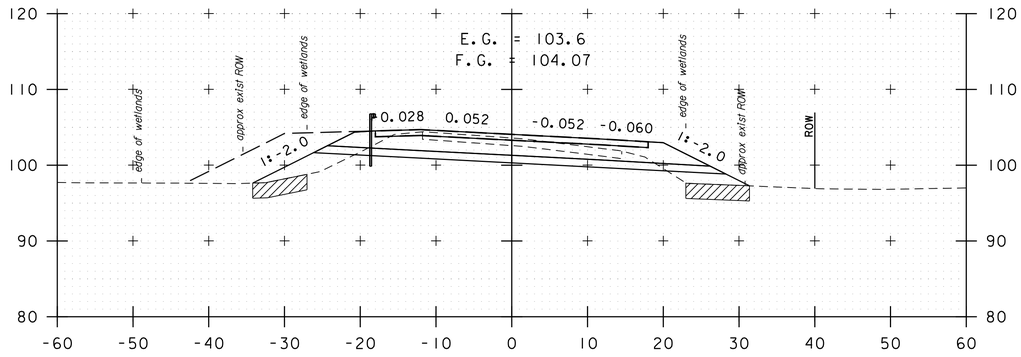
STA. 94+50 TO STA. 97+00

vhb

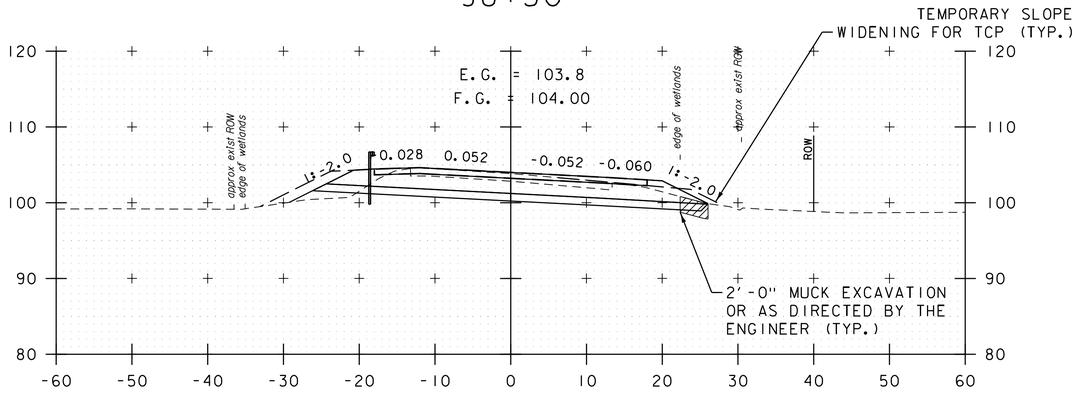
PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)

FILE NAME: z96b032xs_3600-16300.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
CROSS SECTION SHEET 23	SHEET 200 OF 305

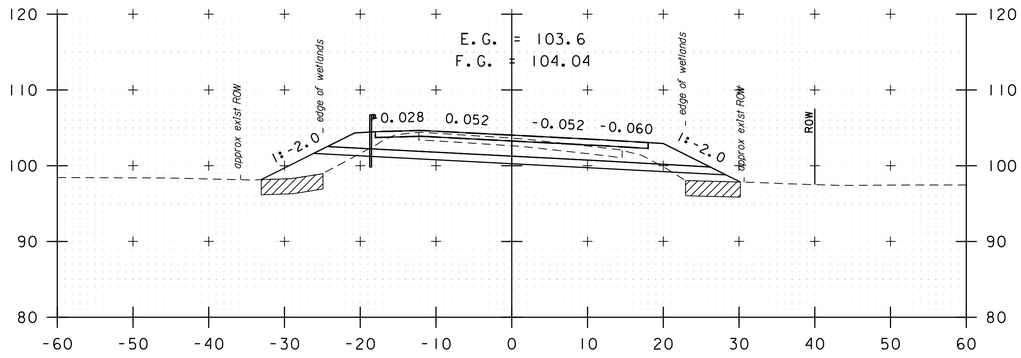




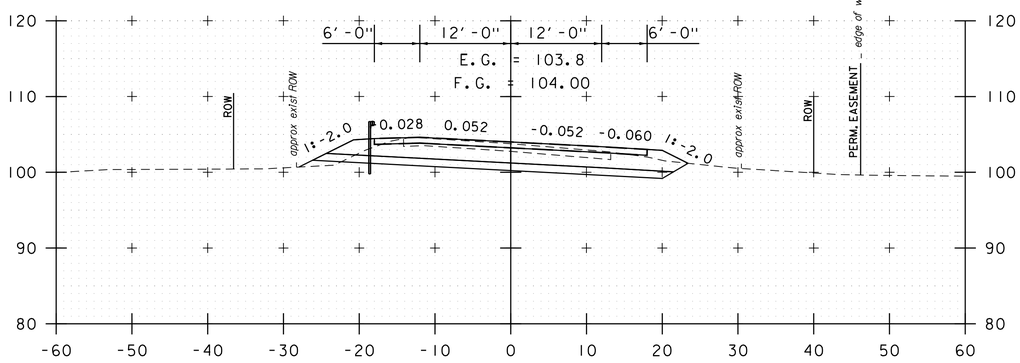
98+50



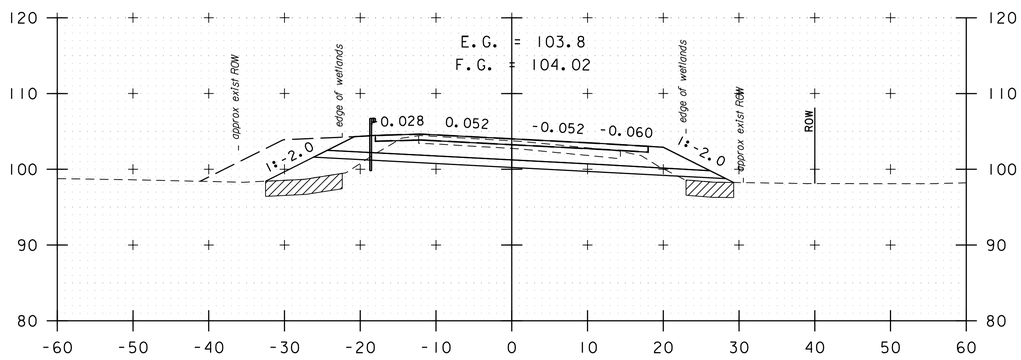
100+00



98+00



99+50

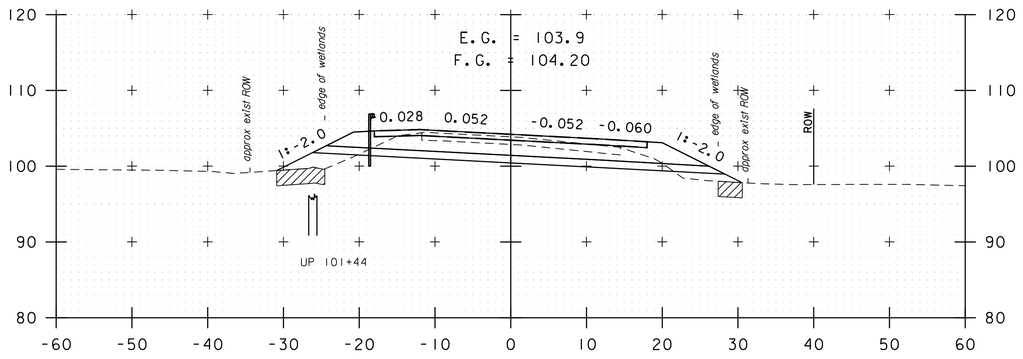


97+50

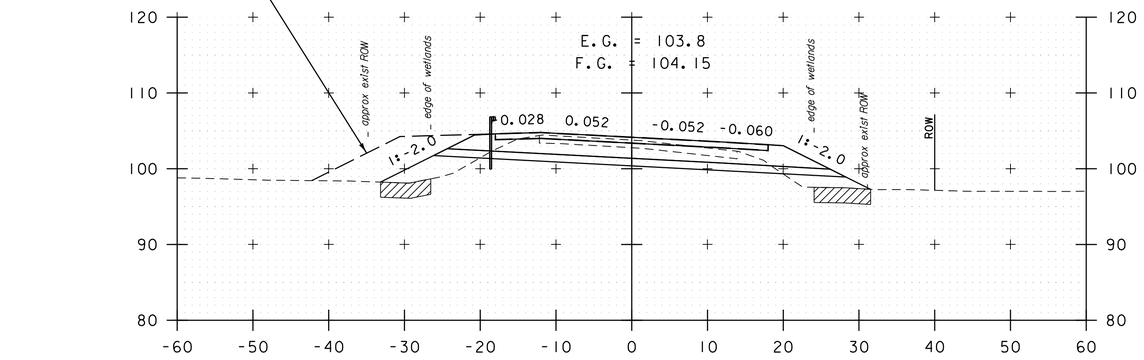
99+00

STA. 97+50 TO STA. 100+00

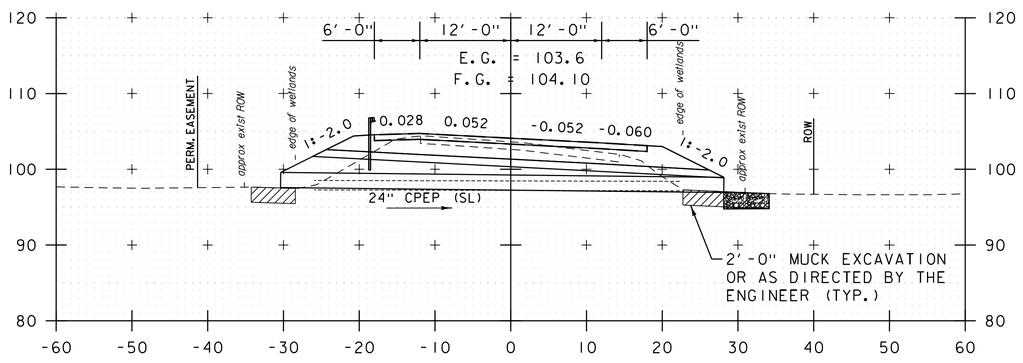
PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032xs_3600-16300.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
CROSS SECTION SHEET 24	SHEET 201 OF 305



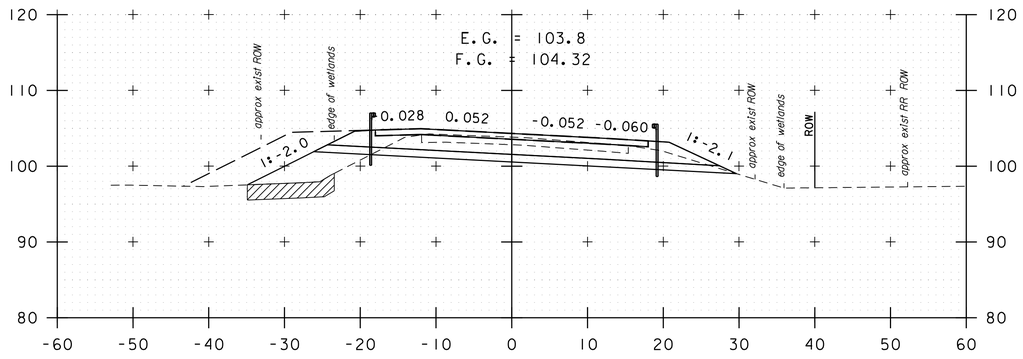
101+50



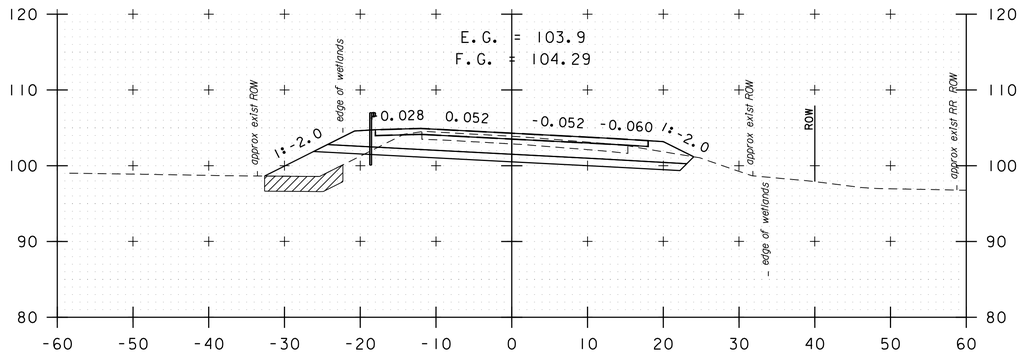
101+00



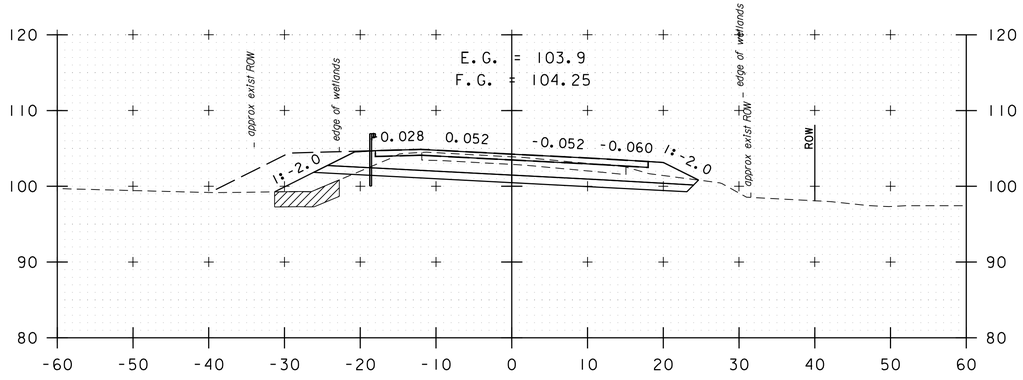
100+50 (NEW 24" CPEP)



103+00



102+50

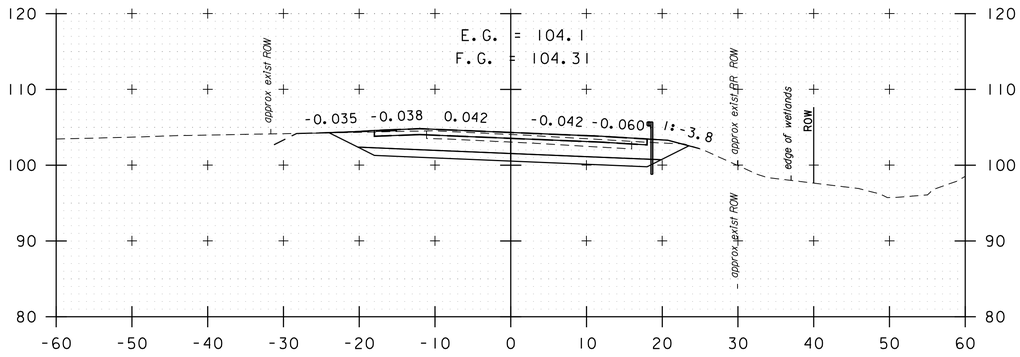


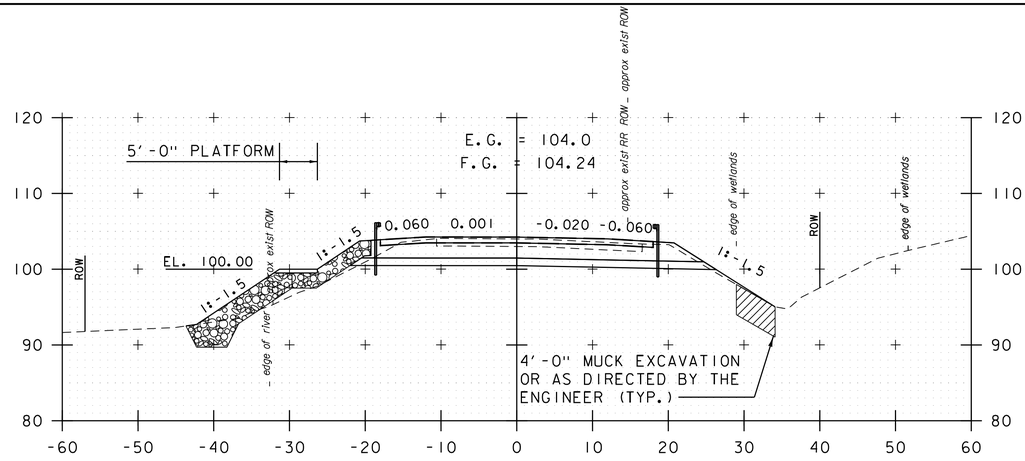
102+00

STA. 100+50 TO STA. 103+00

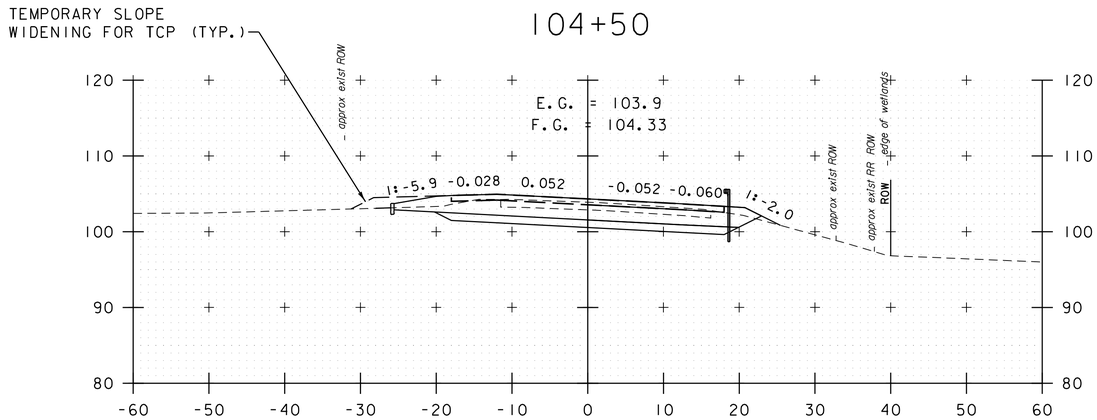
PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)

FILE NAME: z96b032xs_3600-16300.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
CROSS SECTION SHEET 25	SHEET 202 OF 305

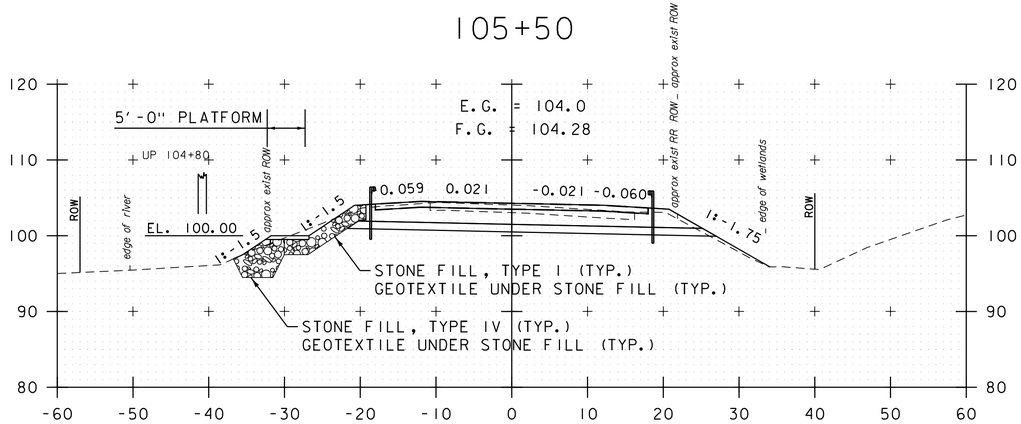




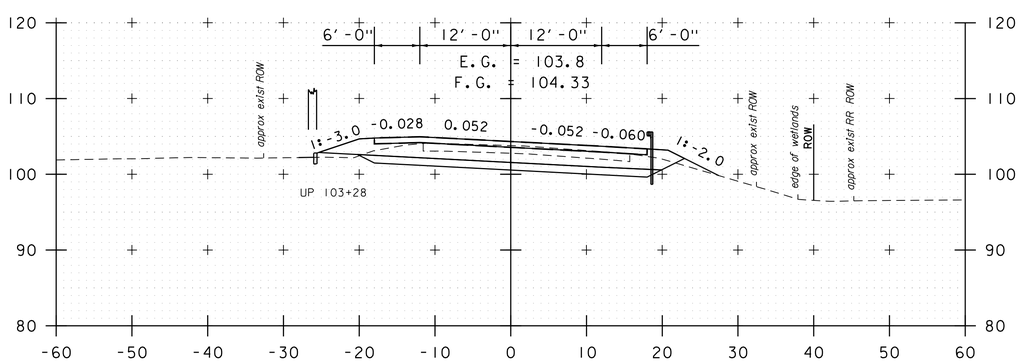
104+50



105+50

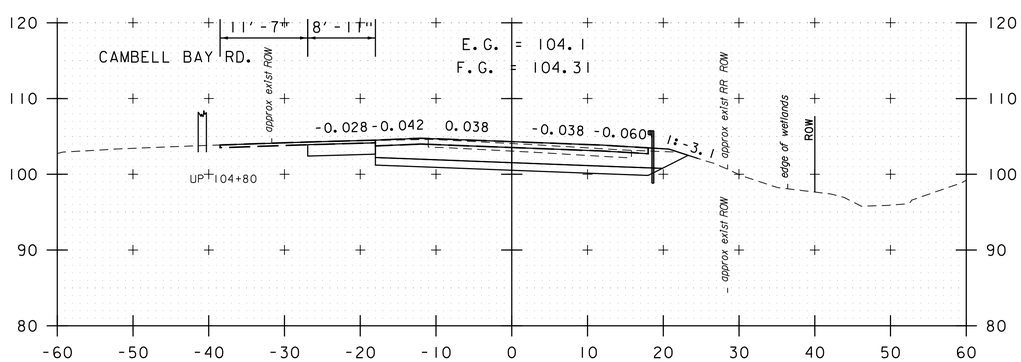


104+00



103+50

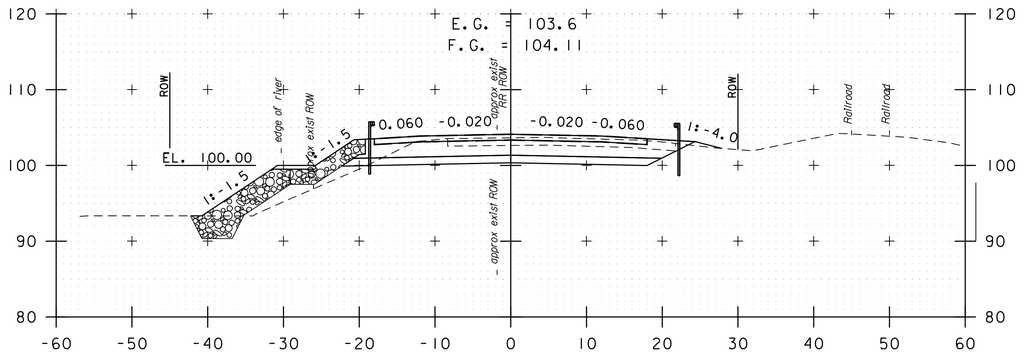
105+00



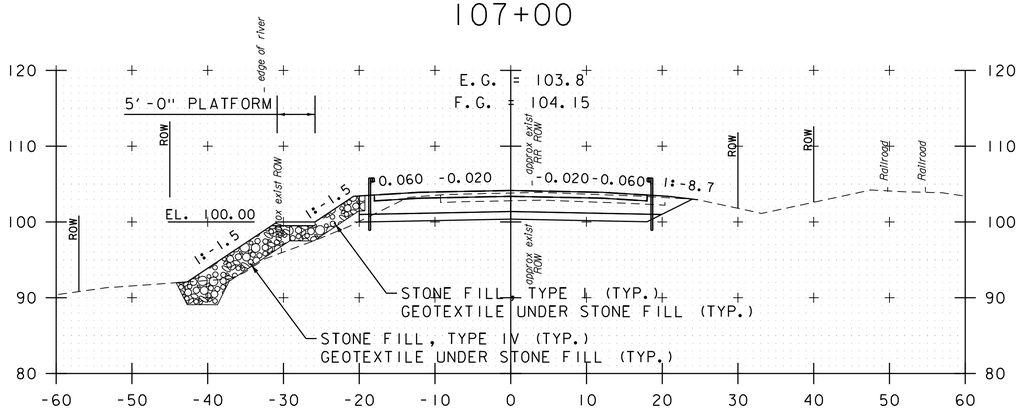
104+59 (CAMPBELL BAY RD LT)

STA. 103+50 TO STA. 105+50

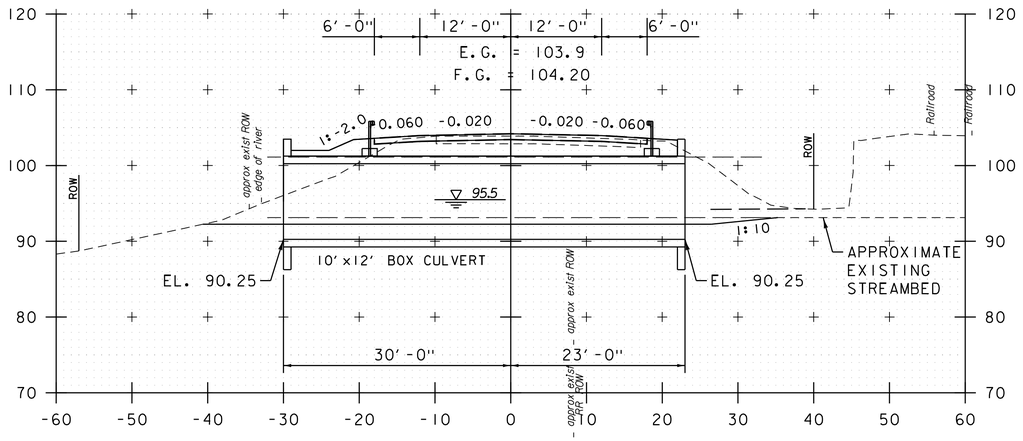
PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032xs_3600-16300.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
CROSS SECTION SHEET 26	SHEET 203 OF 305



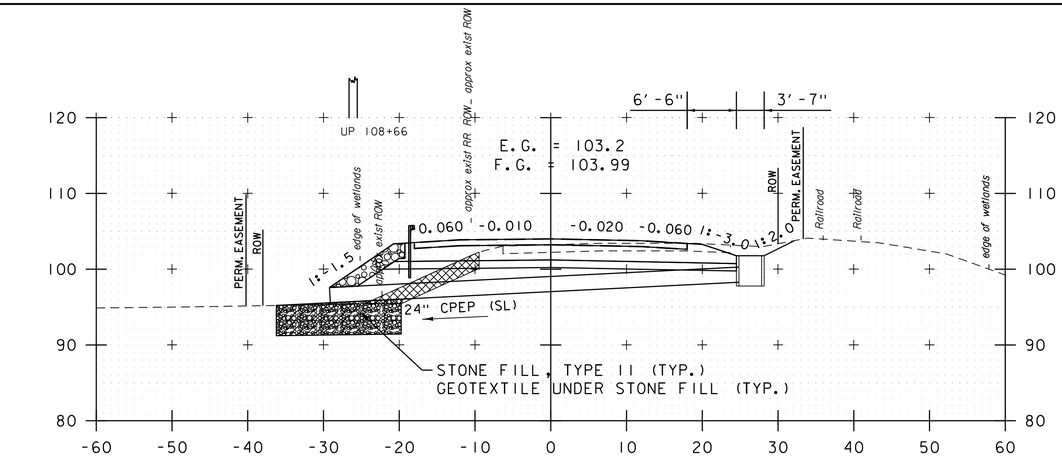
107+00



106+50

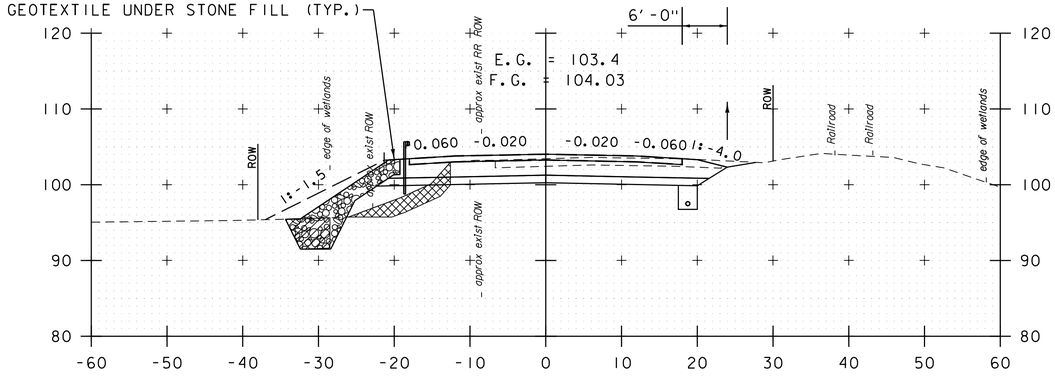


106+00 (NEW 10'X12" BOX)

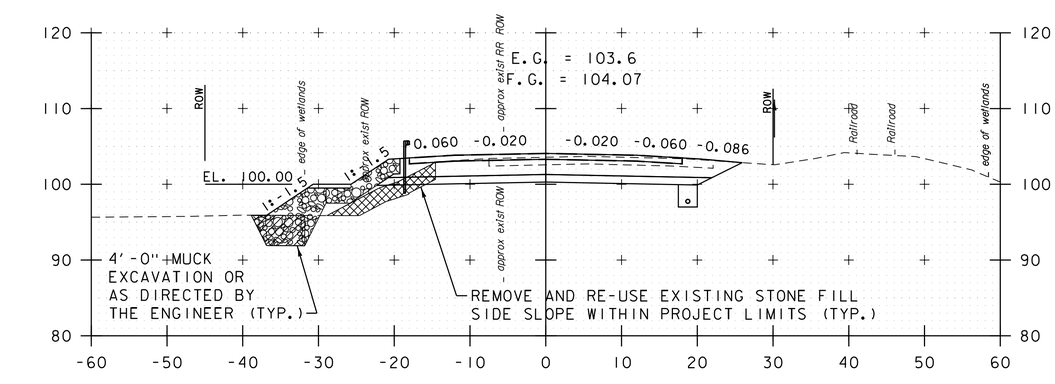


STONE FILL, TYPE I (TYP.)
6" GRUBBING MATERIAL (TYP.)
GEOTEXTILE UNDER STONE FILL (TYP.)

108+50 (NEW 24" CPEP)



108+00



107+50

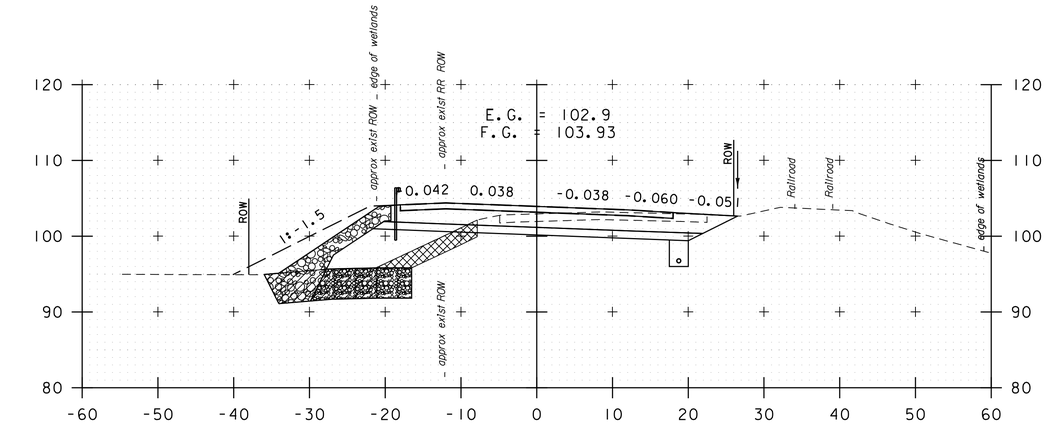
STA. 106+00 TO STA. 108+50

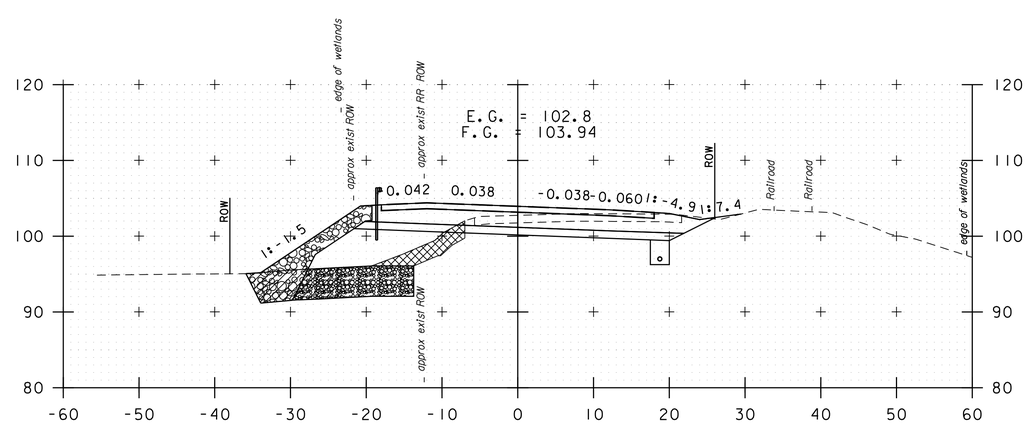
vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

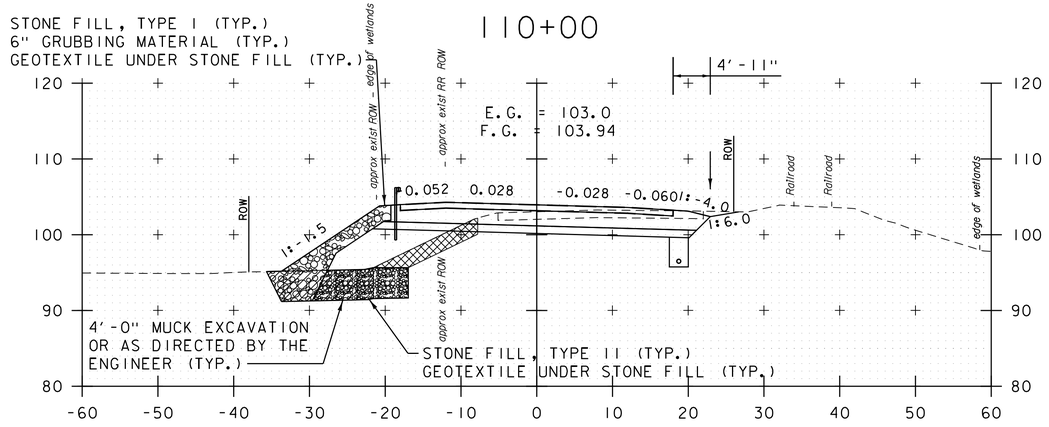
FILE NAME: z96b032xs_3600-16300.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
CROSS SECTION SHEET 27

PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 204 OF 305

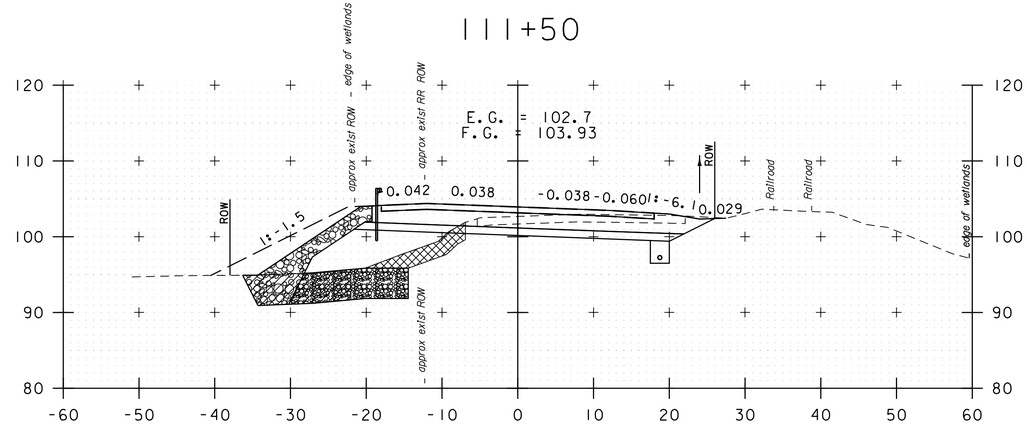




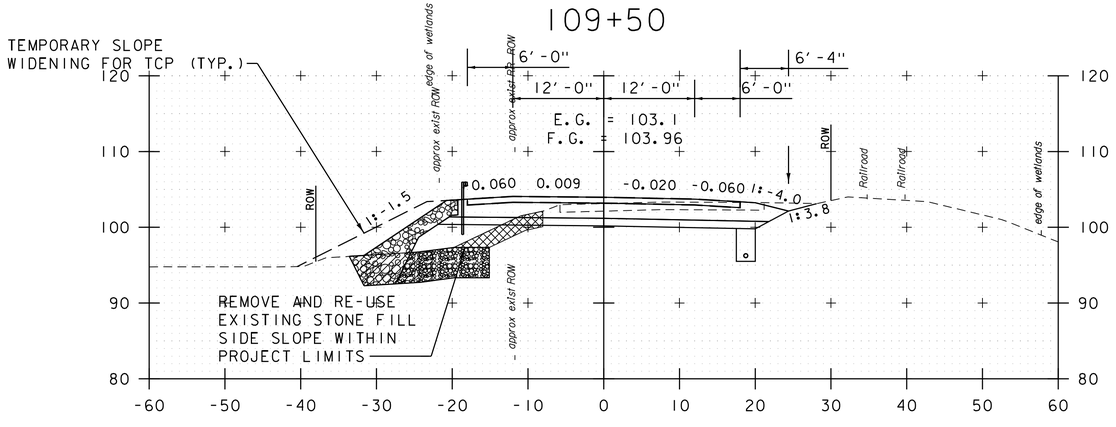
110+00



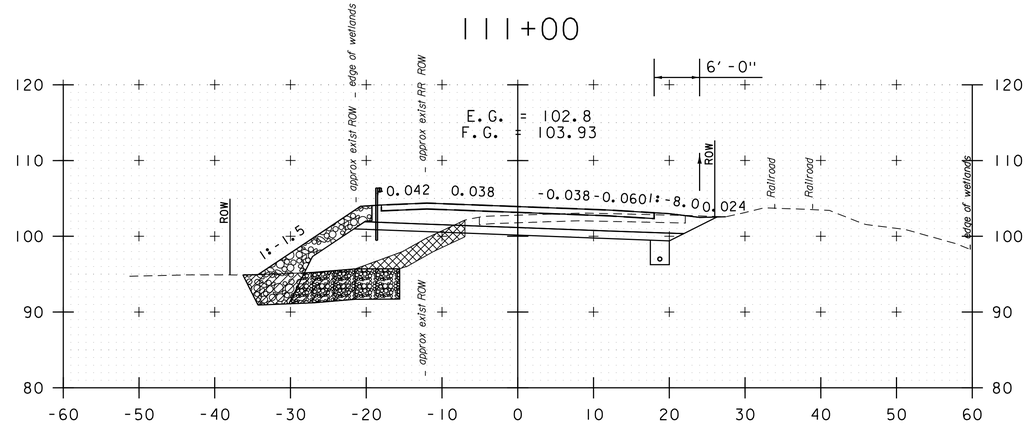
111+50



109+50



111+00



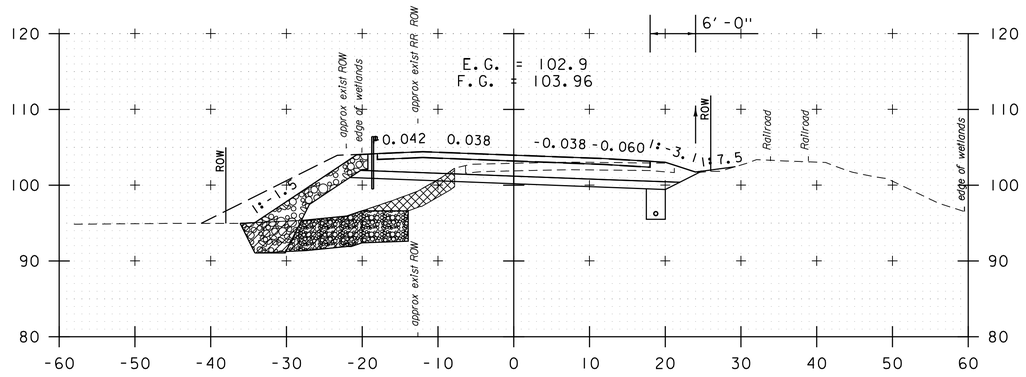
109+00

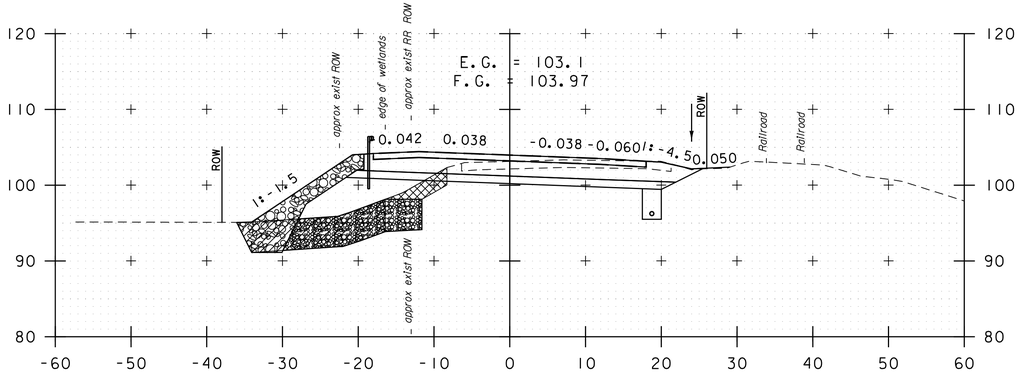
110+50

STA. 109+00 TO STA. 111+50

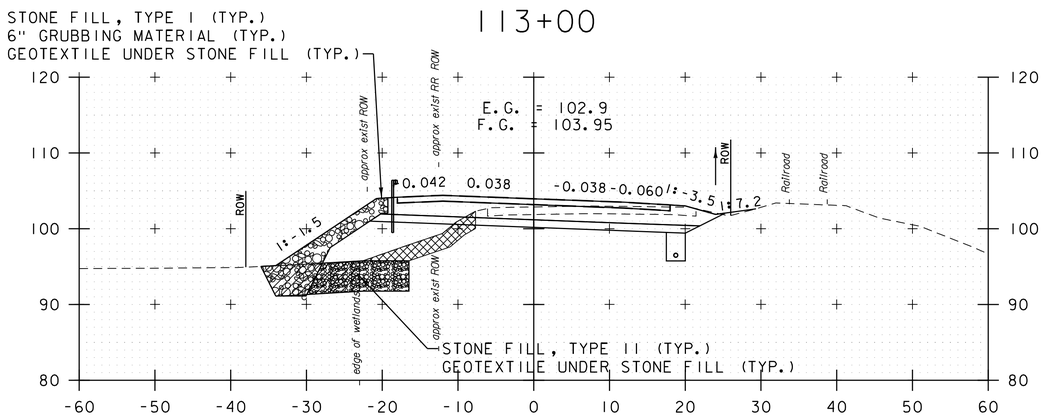
vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032xs_3600-16300.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
CROSS SECTION SHEET 28	SHEET 205 OF 305

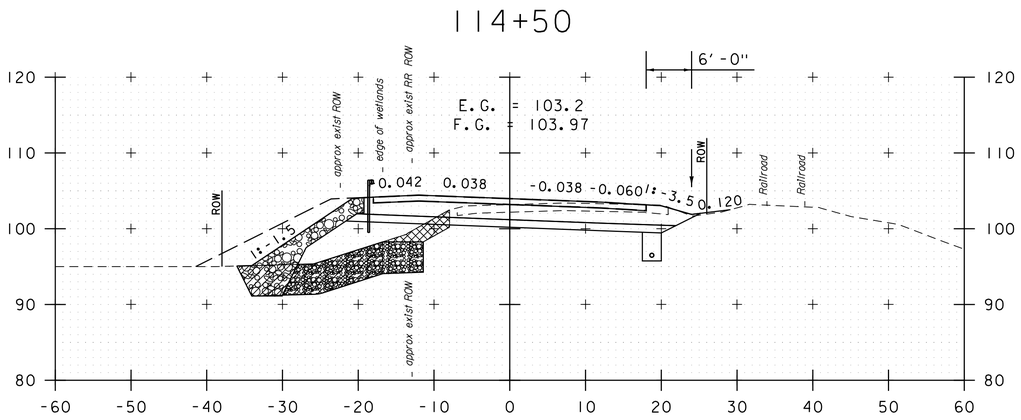




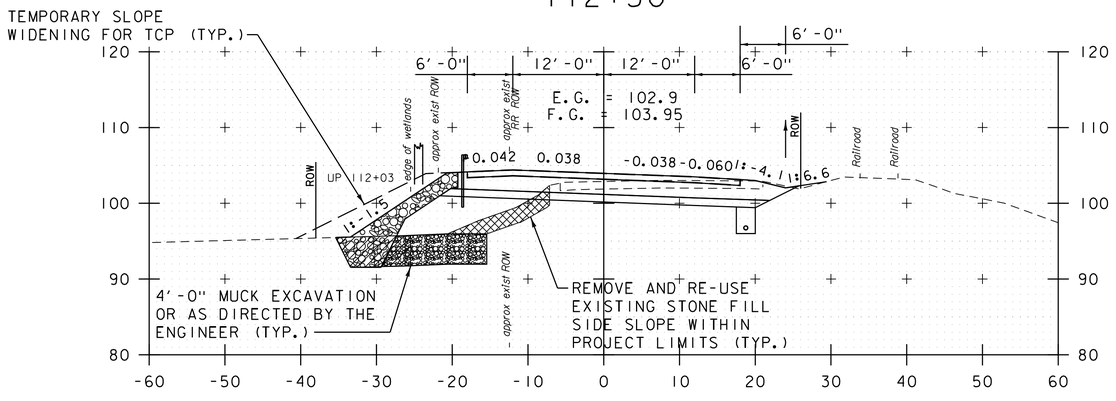
113+00



114+50

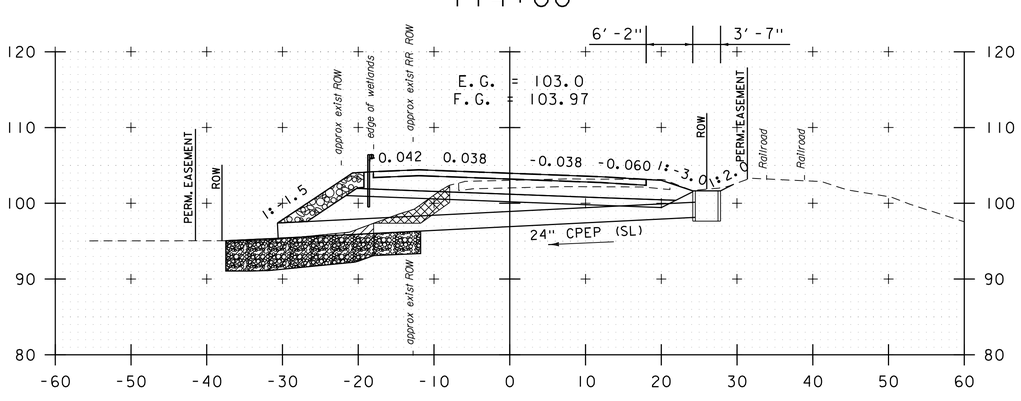


112+50



112+00

114+00



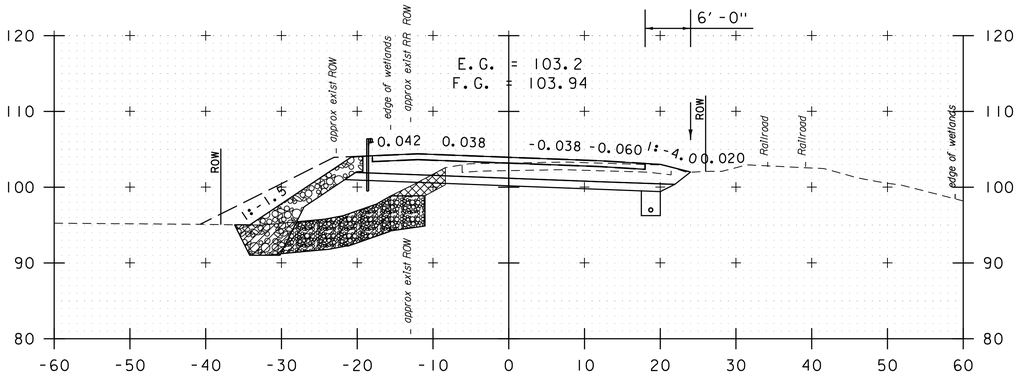
113+50 (NEW 24" CPEP)

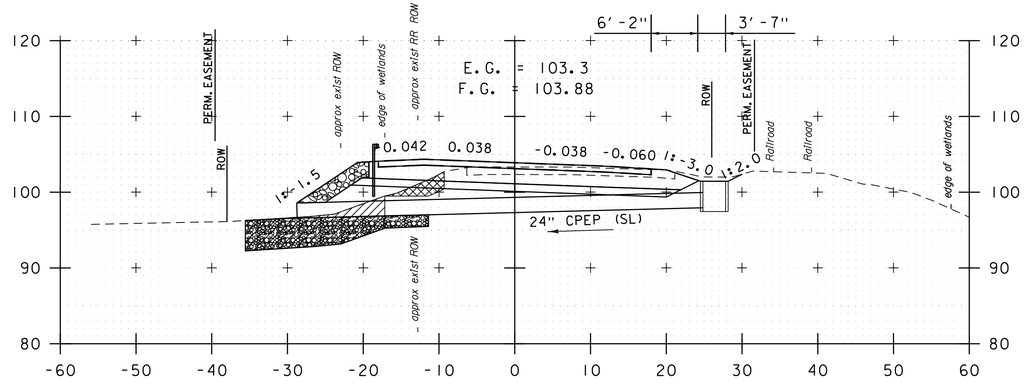
STA. 112+00 TO STA. 114+50

vhb

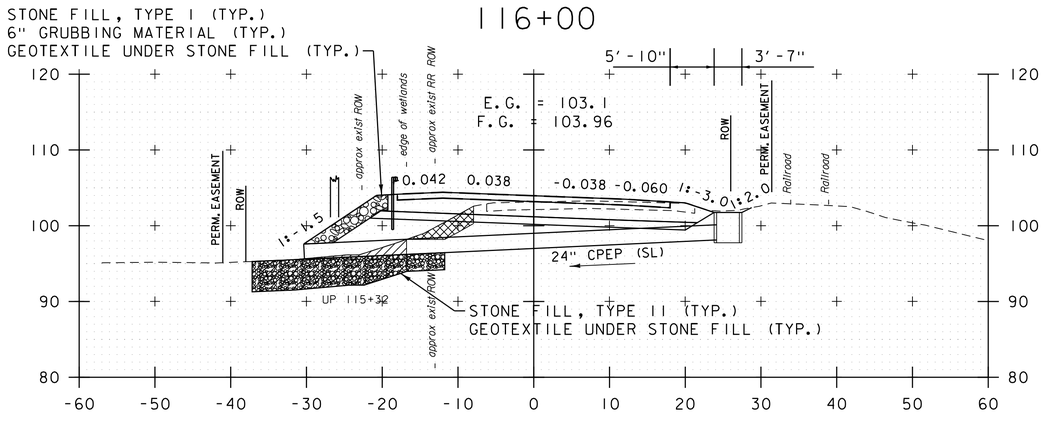
PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)

FILE NAME: z96b032xs_3600-16300.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
CROSS SECTION SHEET 29	SHEET 206 OF 305

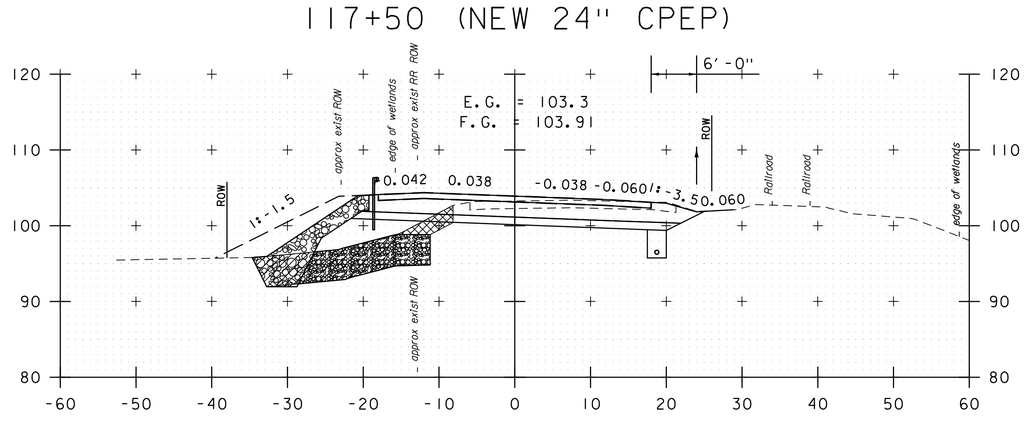




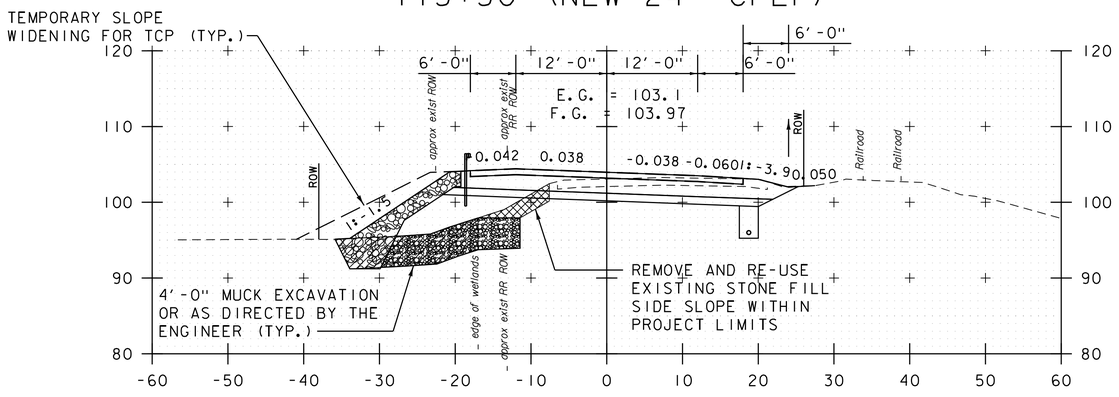
116+00



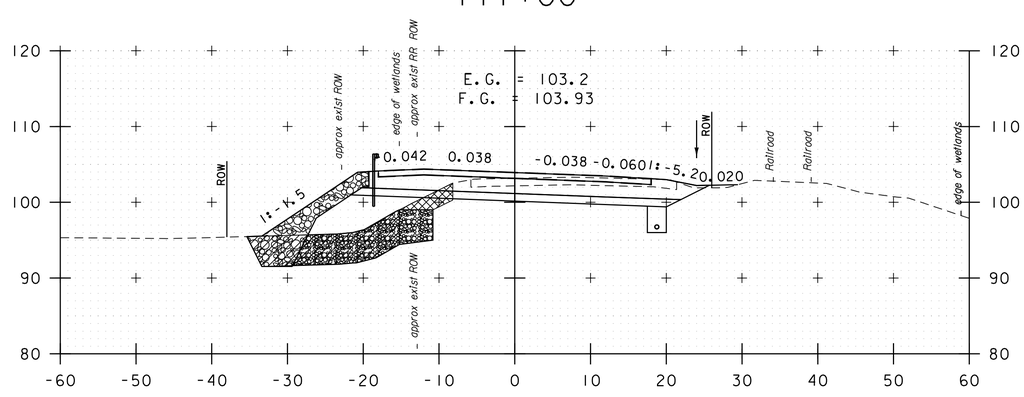
117+50 (NEW 24" CPEP)



115+50 (NEW 24" CPEP)



117+00



115+00

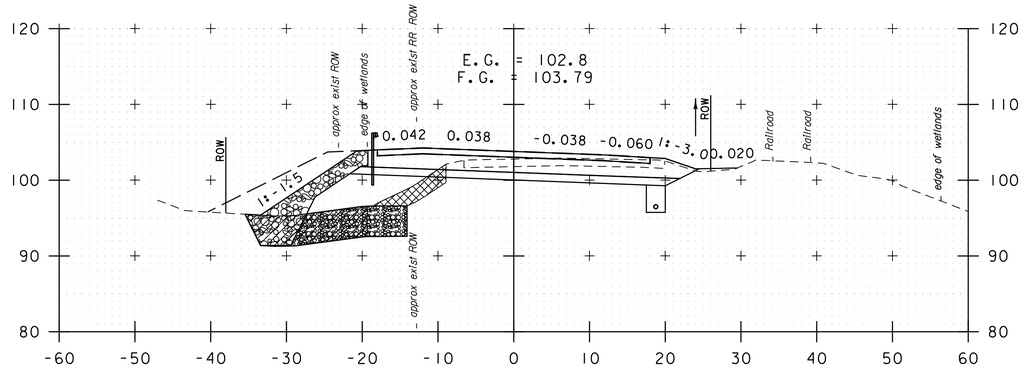
116+50

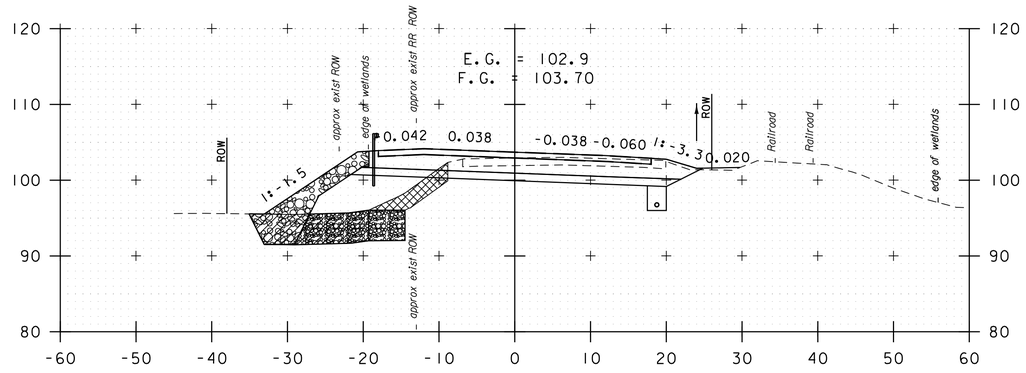
STA. 115+00 TO STA. 117+50

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

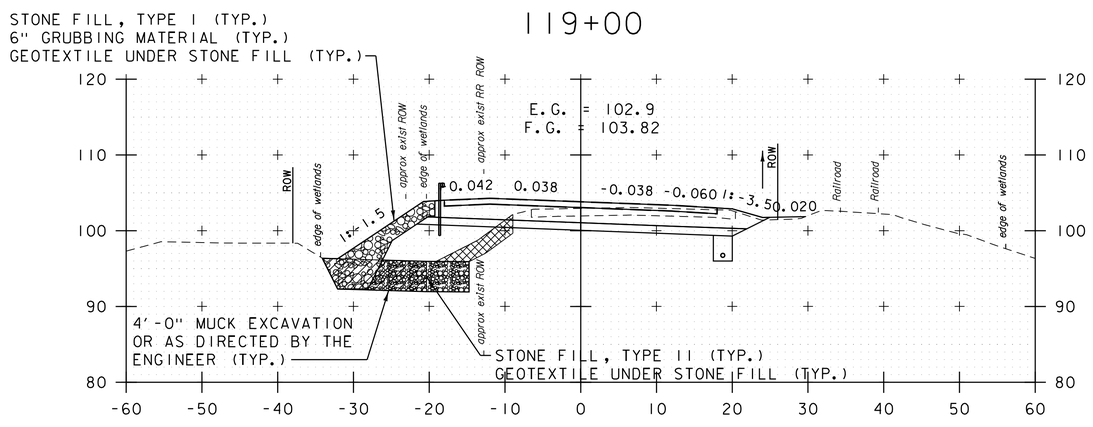
FILE NAME: z96b032xs_3600-16300.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
CROSS SECTION SHEET 30

PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 207 OF 305

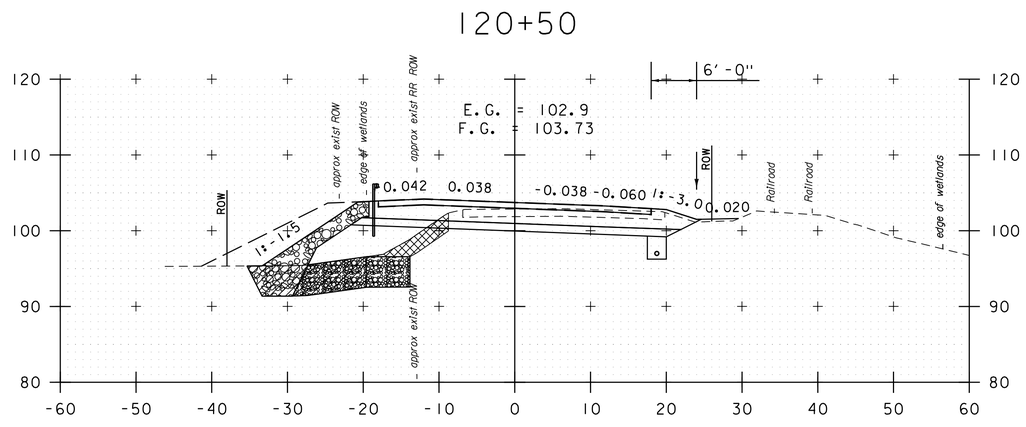




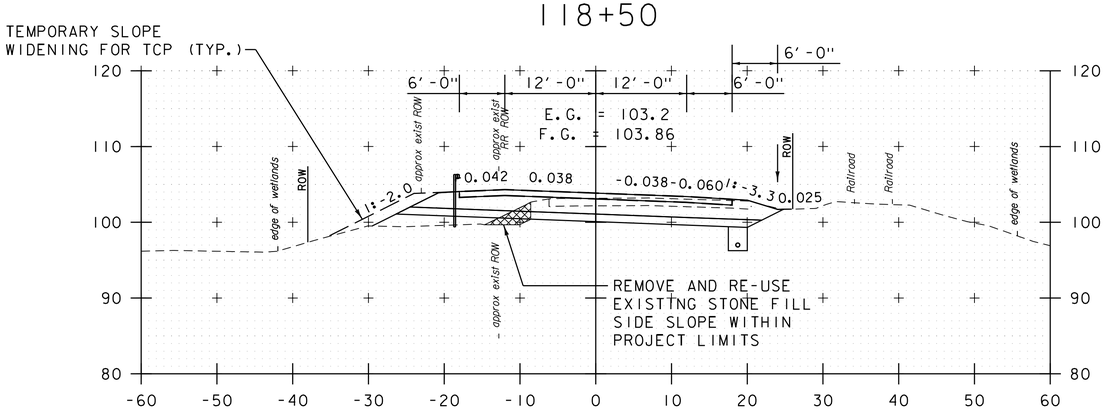
119+00



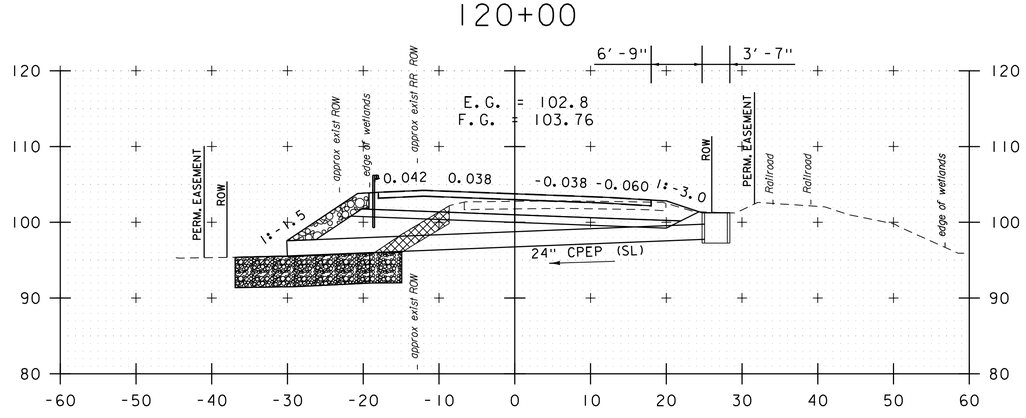
120+50



118+50



120+00



118+00

119+50 (NEW 24" CPEP)

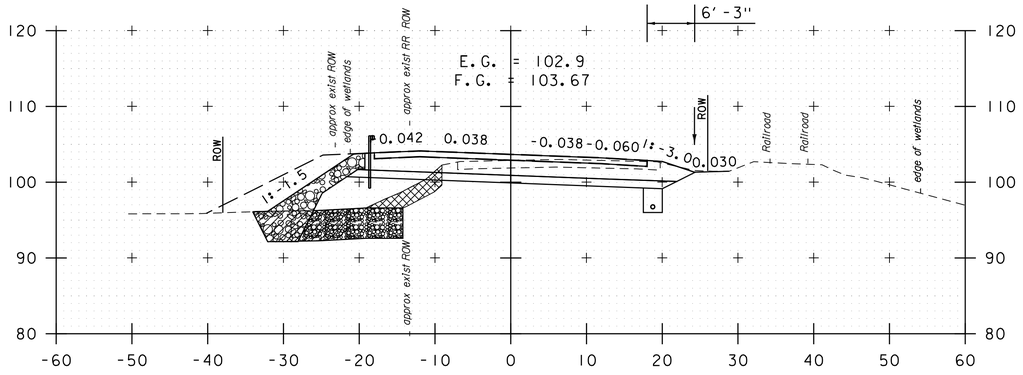
STA. 118+00 TO STA. 120+50

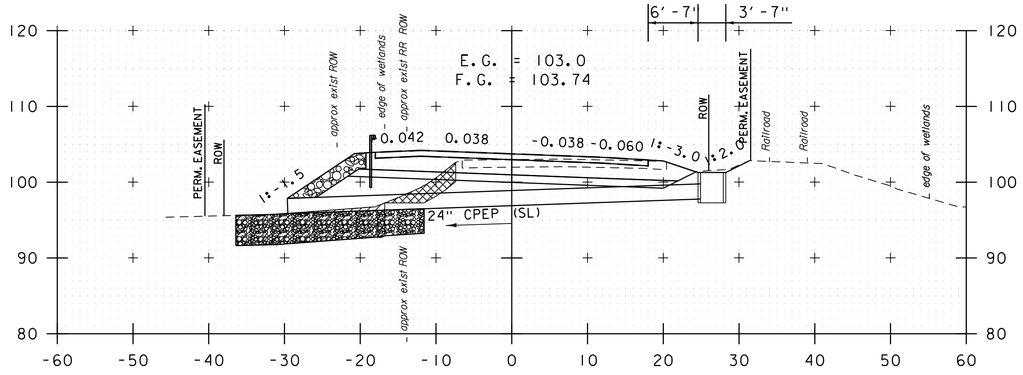
vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_3600-16300.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
CROSS SECTION SHEET 31

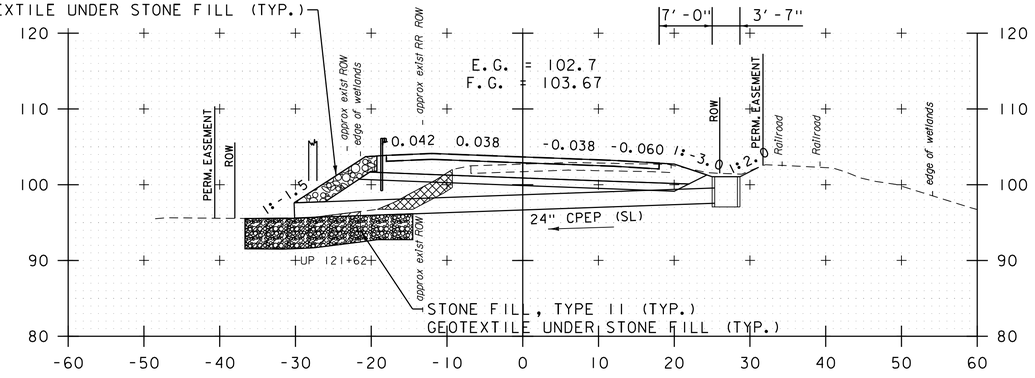
PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 208 OF 305



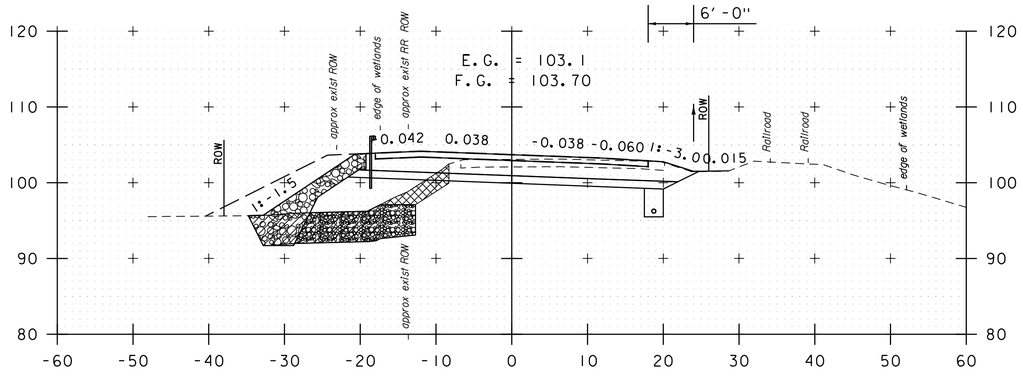


122+00

STONE FILL, TYPE I (TYP.)
6" GRUBBING MATERIAL (TYP.)
GEOTEXTILE UNDER STONE FILL (TYP.)

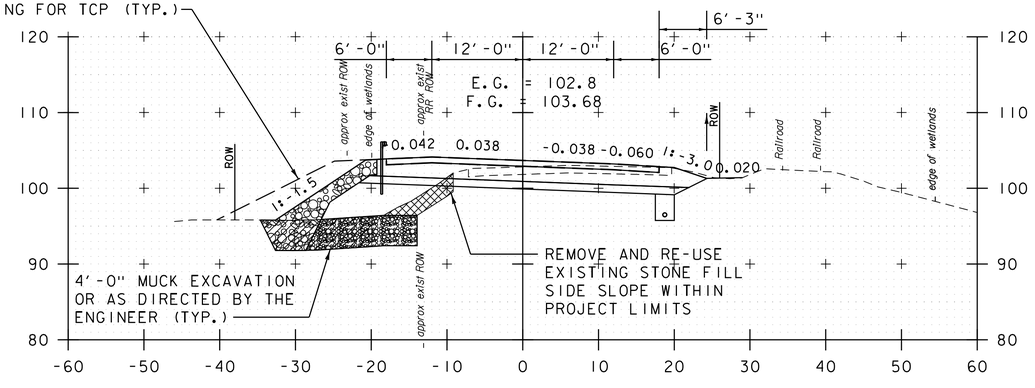


123+50 (NEW 24" CPEP)

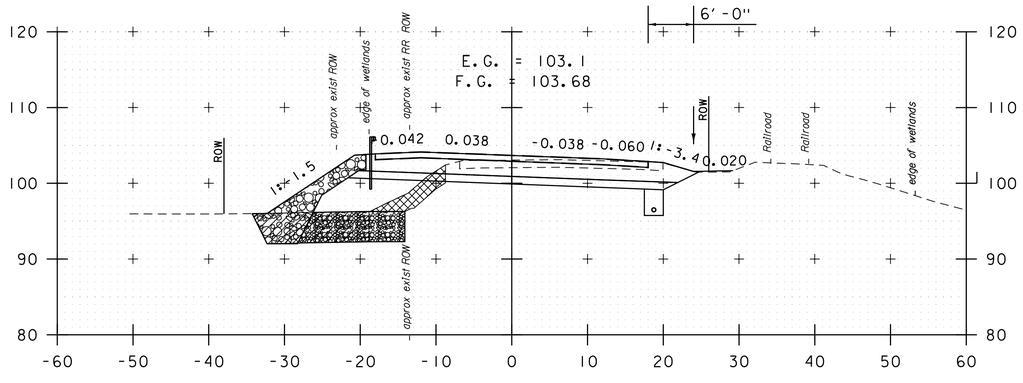


121+50 (NEW 24" CPEP)

TEMPORARY SLOPE
WIDENING FOR TCP (TYP.)



123+00



121+00

122+50

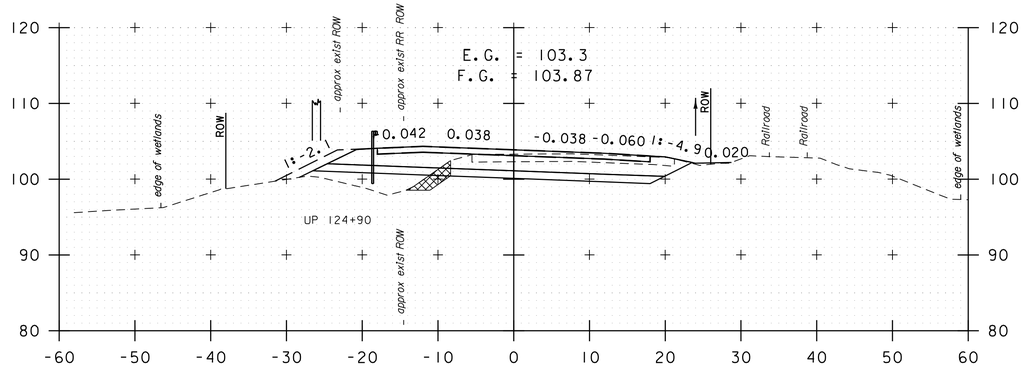
STA. 121+00 TO STA. 123+50

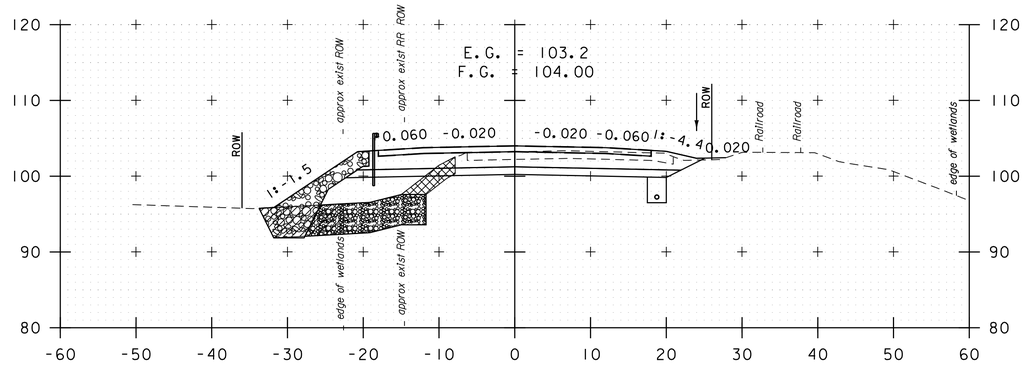
vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

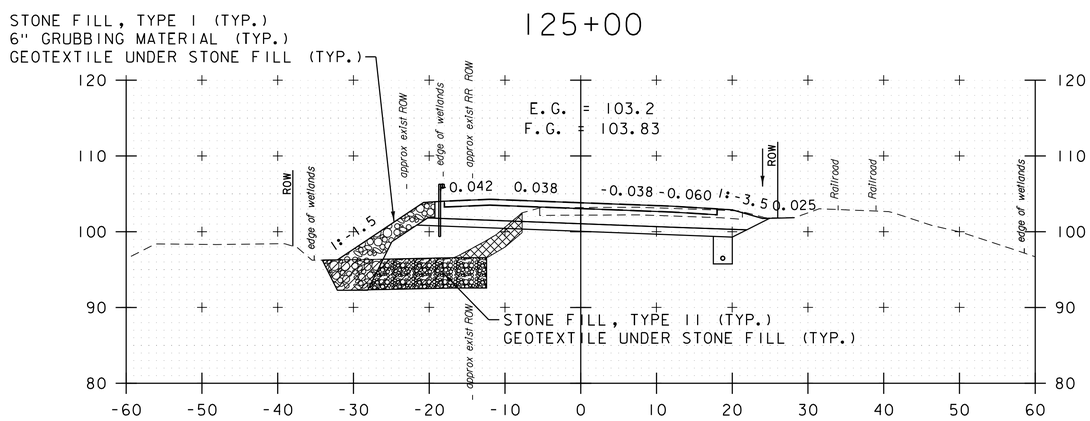
FILE NAME: z96b032xs_3600-16300.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
CROSS SECTION SHEET 32

PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 209 OF 305

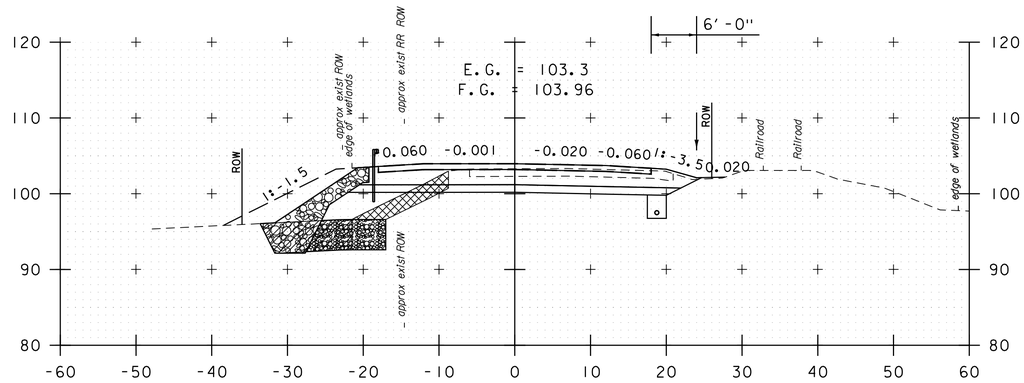




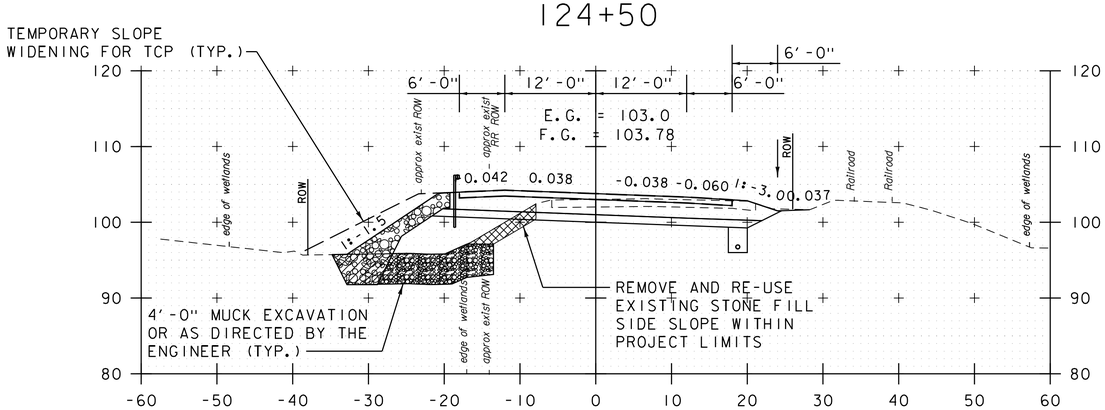
125+00



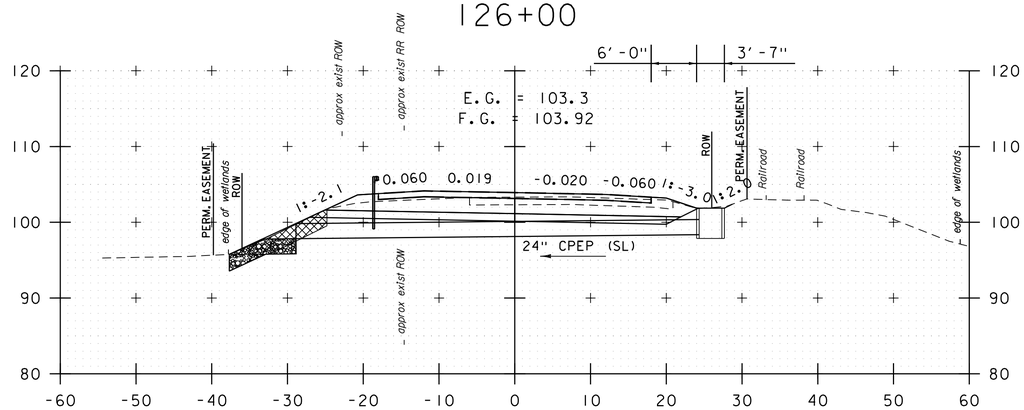
126+50



124+50



126+00



124+00

125+50 (NEW 24" CPEP)

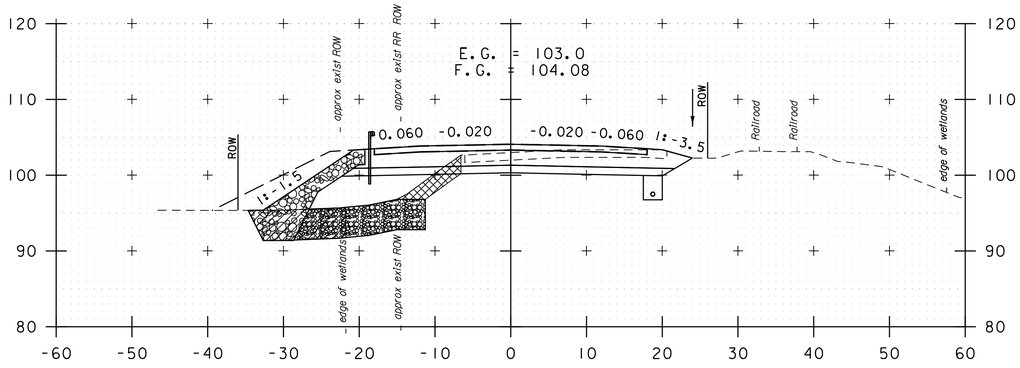
STA. 124+00 TO STA. 126+50

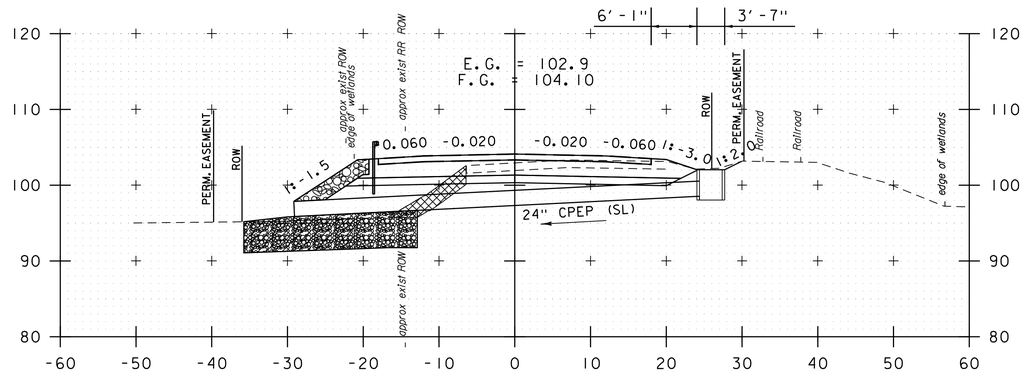
vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_3600-16300.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
CROSS SECTION SHEET 33

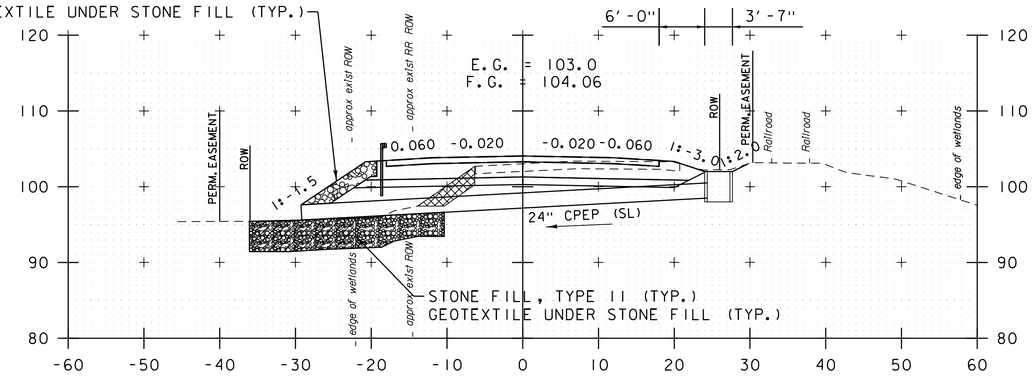
PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 210 OF 305



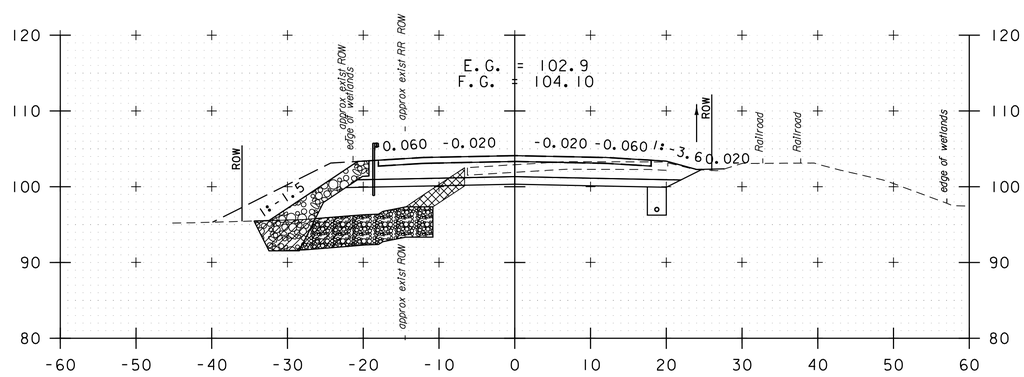


128+00

STONE FILL, TYPE I (TYP.)
6" GRUBBING MATERIAL (TYP.)
GEOTEXTILE UNDER STONE FILL (TYP.)

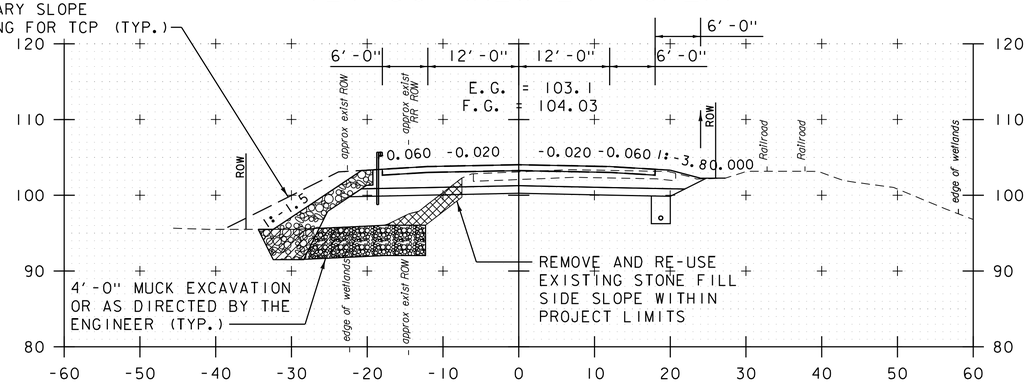


129+50 (NEW 24" CPEP)

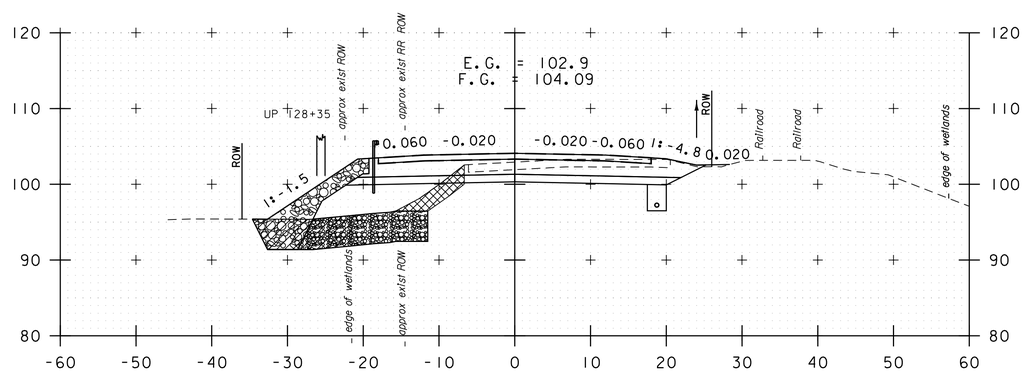


127+50 (NEW 24" CPEP)

TEMPORARY SLOPE
WIDENING FOR TCP (TYP.)



129+00



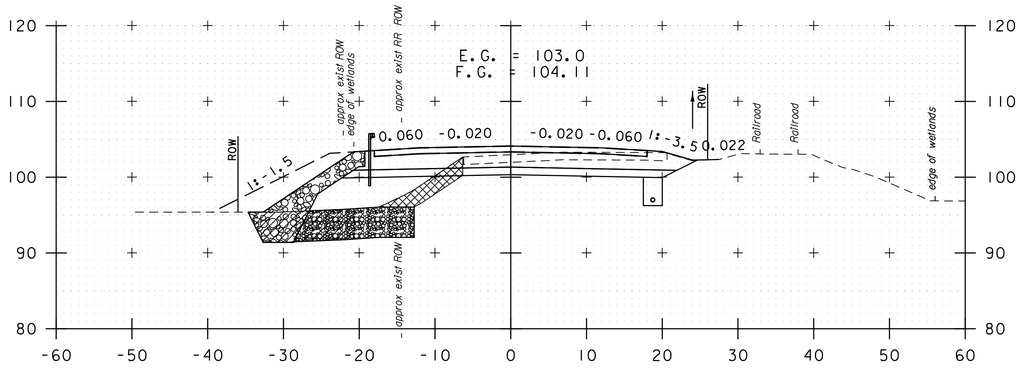
127+00

128+50

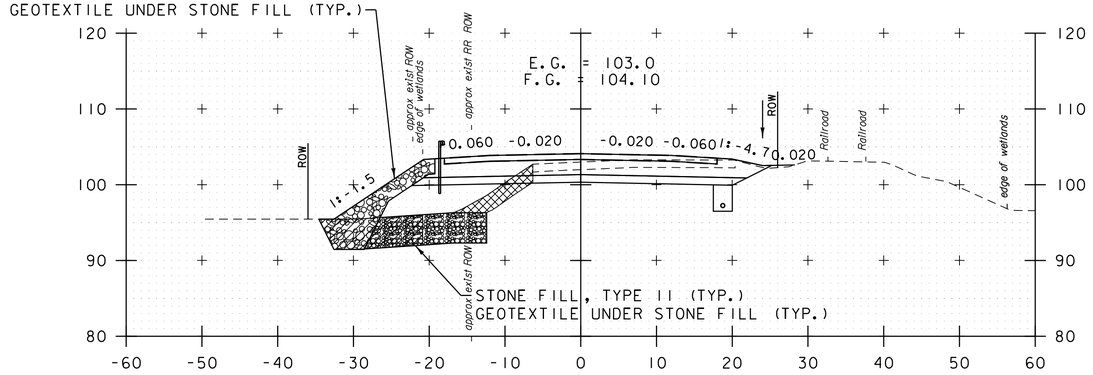
STA. 127+00 TO STA. 129+50

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)

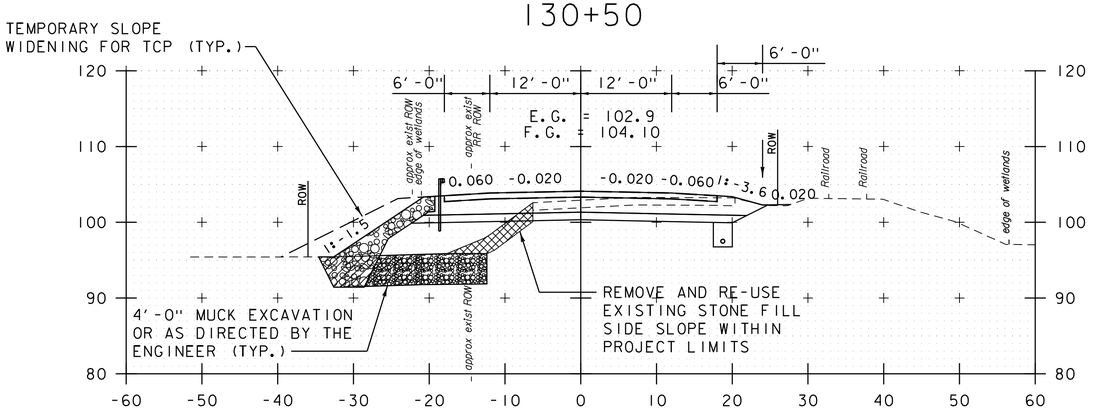
FILE NAME: z96b032xs_3600-16300.dgn		PLOT DATE:	3/6/2019
PROJECT LEADER:	G. BAKOS	DRAWN BY:	C. CILLEY
DESIGNED BY:	M. BOGUE	CHECKED BY:	G. BAKOS
CROSS SECTION SHEET 34		SHEET	211 OF 305



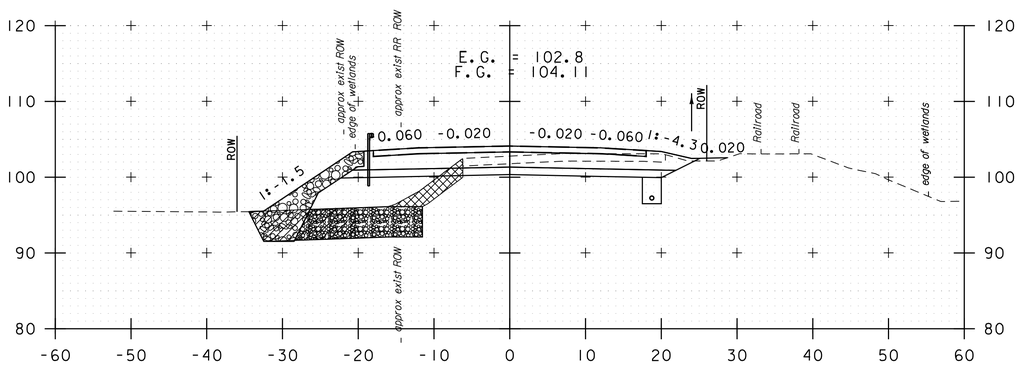
131+00



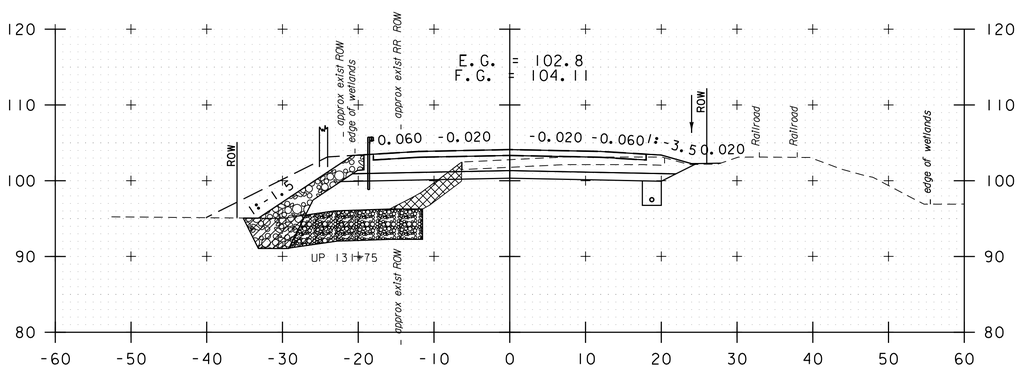
130+50



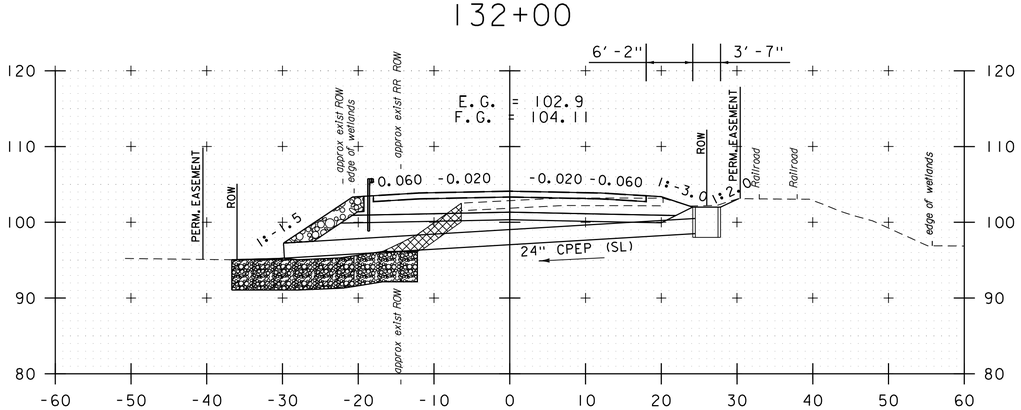
130+00



132+50



132+00



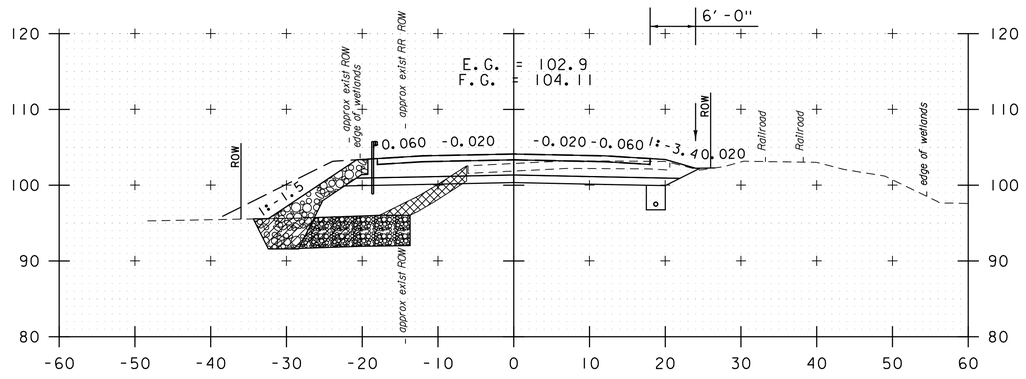
131+50 (NEW 24" CPEP)

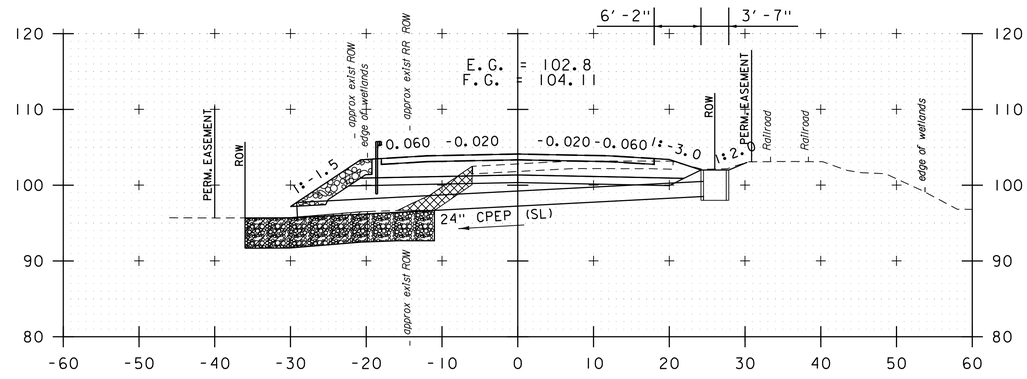
STA. 130+00 TO STA. 132+50

vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)

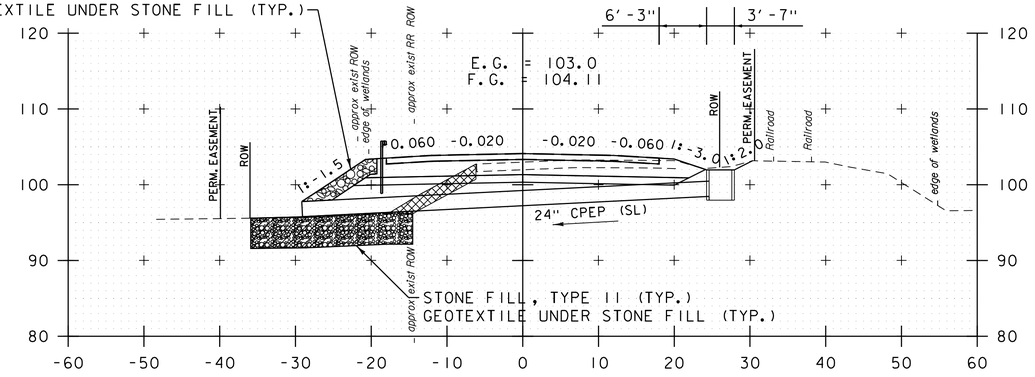
FILE NAME: z96b032xs_3600-16300.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
CROSS SECTION SHEET 35	SHEET 212 OF 305



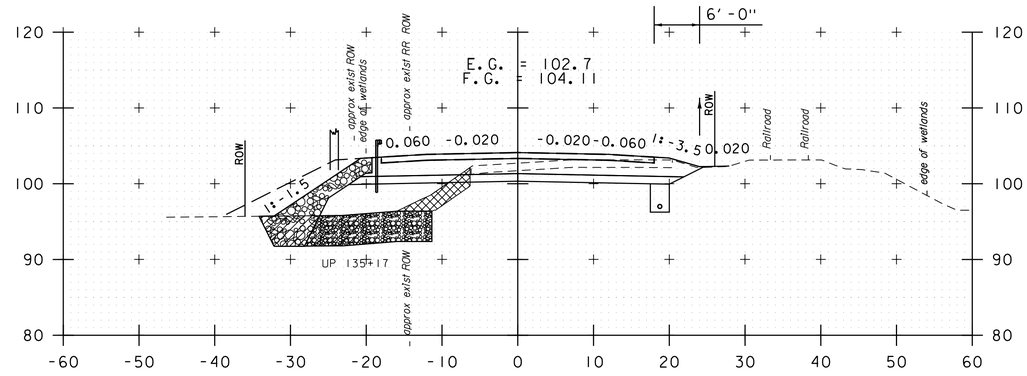


134+00

STONE FILL, TYPE I (TYP.)
6" GRUBBING MATERIAL (TYP.)
GEOTEXTILE UNDER STONE FILL (TYP.)

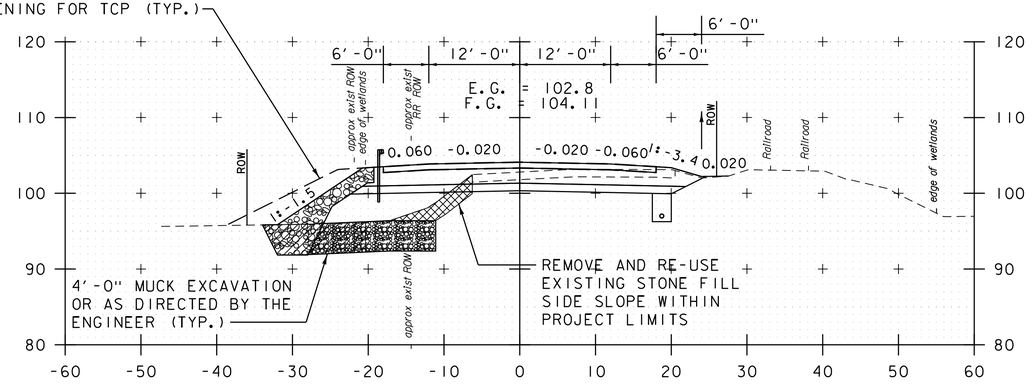


135+50 (NEW 24" CPEP)

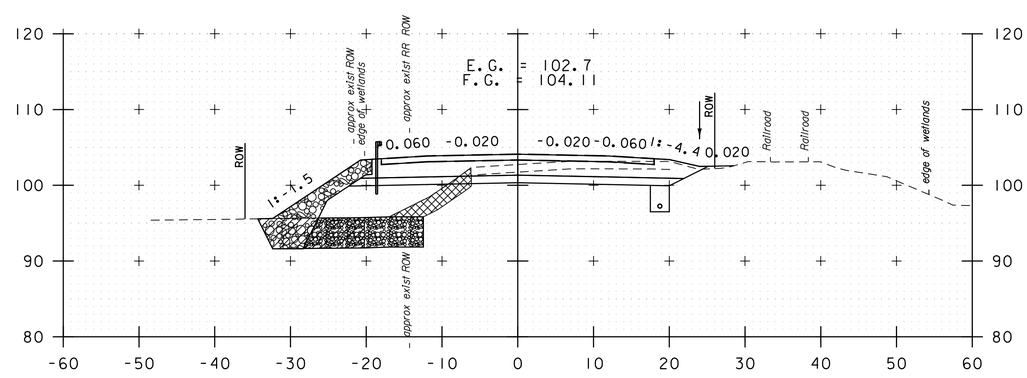


133+50 (NEW 24" CPEP)

TEMPORARY SLOPE
WIDENING FOR TCP (TYP.)



135+00

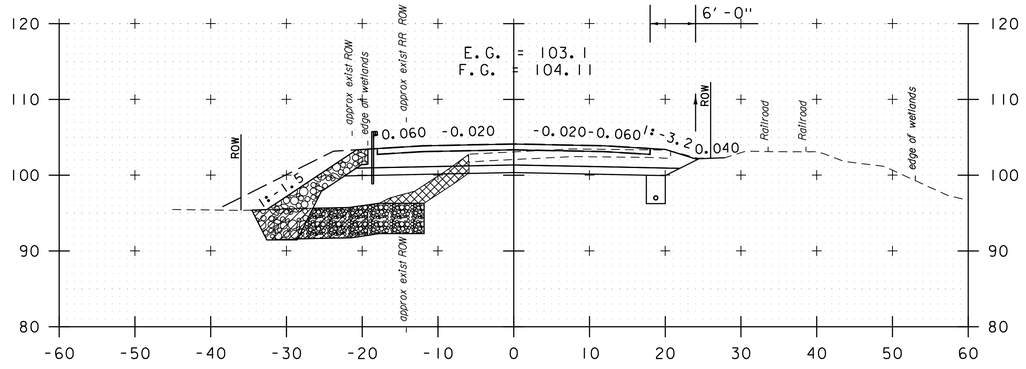


133+00

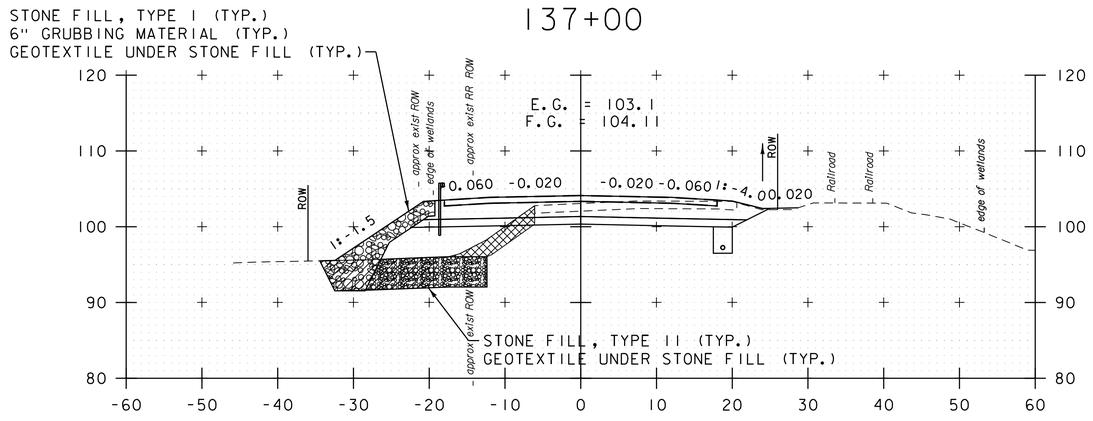
134+50

STA. 133+00 TO STA. 135+50

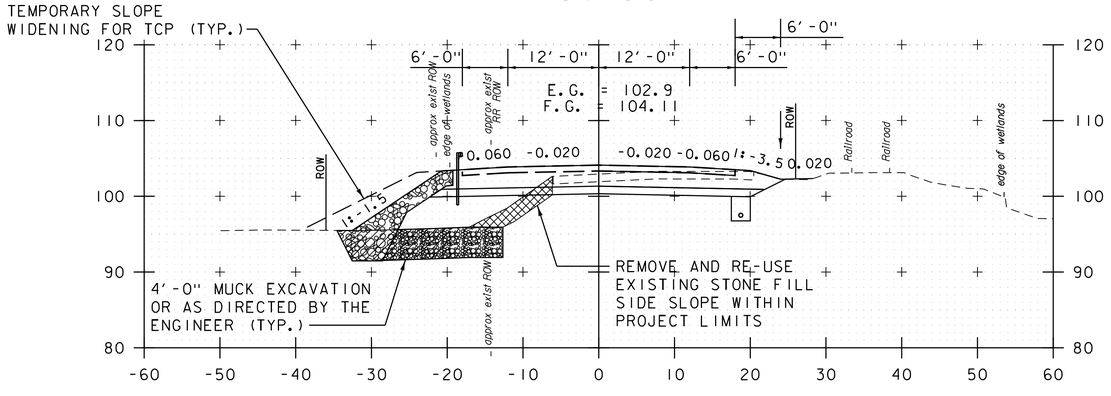
PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032xs_3600-16300.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
CROSS SECTION SHEET 36	SHEET 213 OF 305



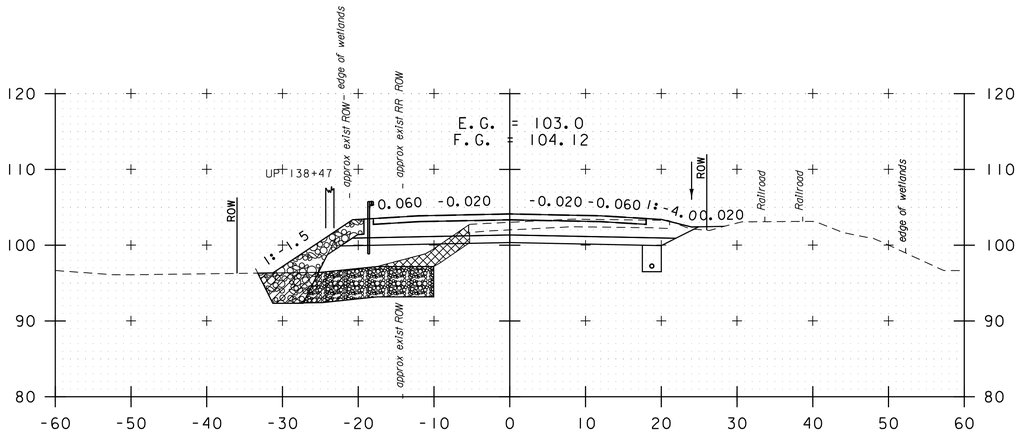
137+00



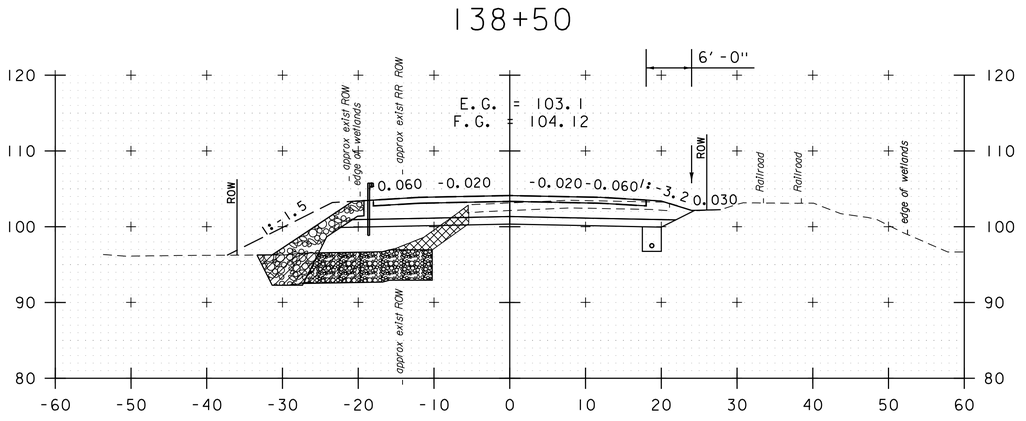
136+50



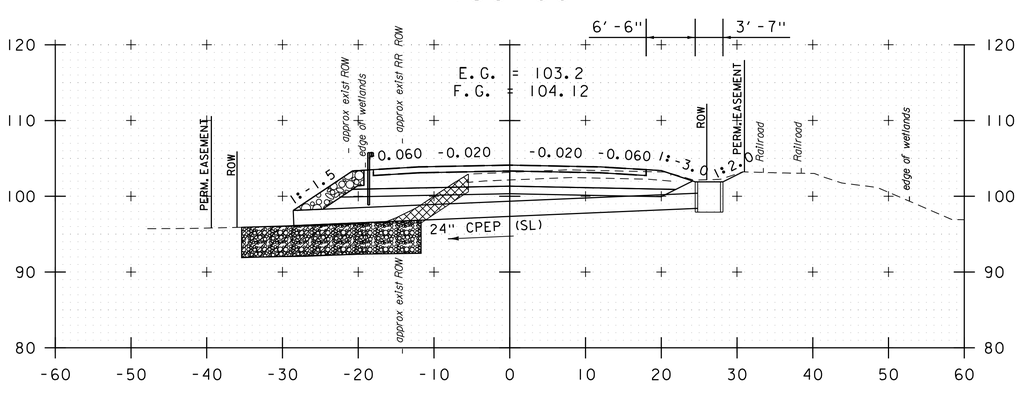
136+00



138+50



138+00



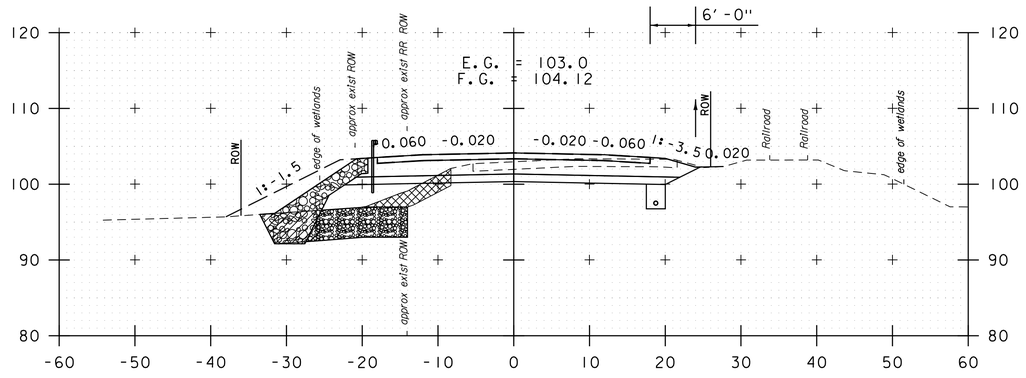
137+50 (NEW 24" CPEP)

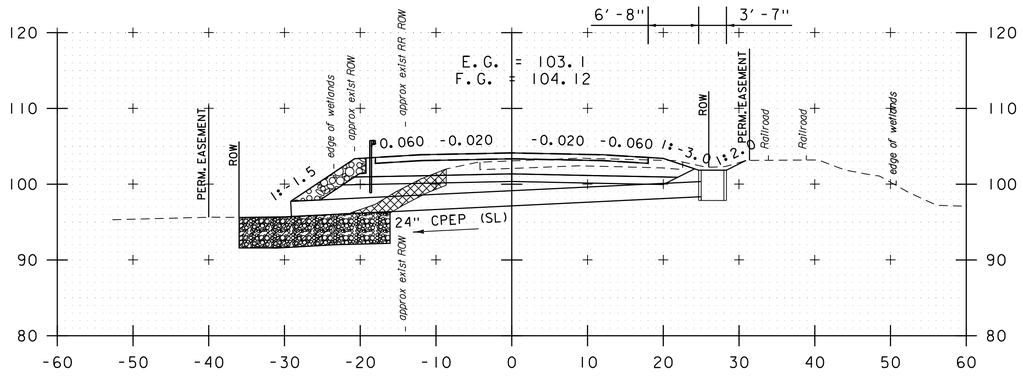
STA. 136+00 TO STA. 138+50

vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)

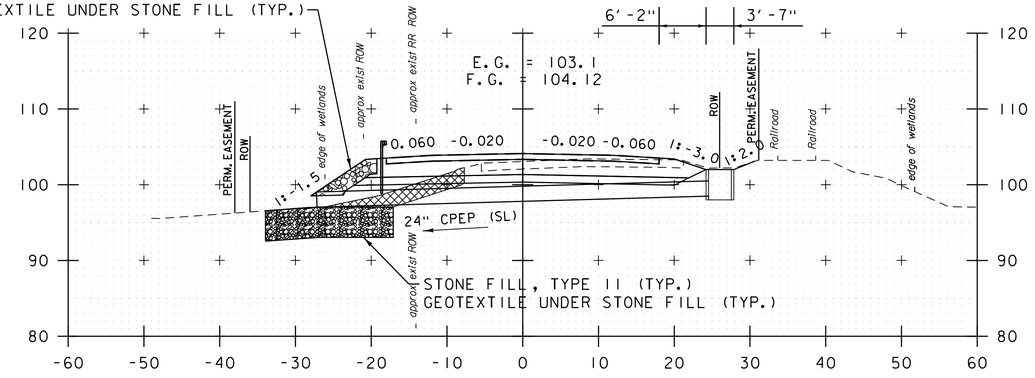
FILE NAME: z96b032xs_3600-16300.dgn		PLOT DATE:	3/6/2019
PROJECT LEADER:	G. BAKOS	DRAWN BY:	C. CILLEY
DESIGNED BY:	M. BOGUE	CHECKED BY:	G. BAKOS
CROSS SECTION SHEET 37		SHEET	214 OF 305



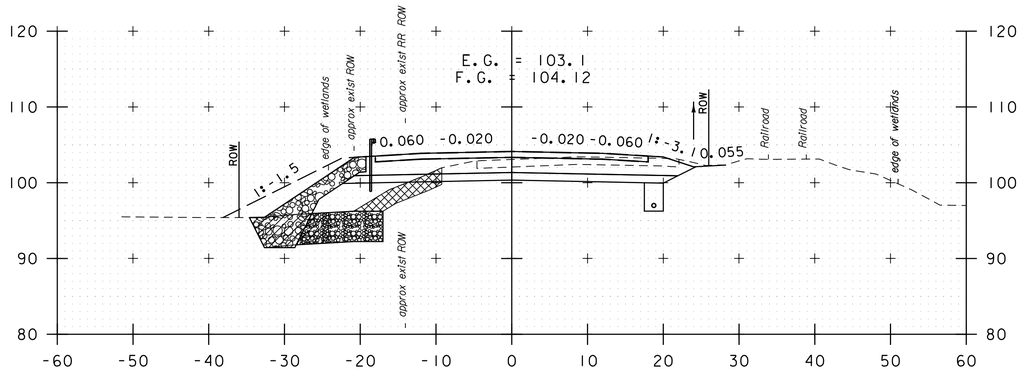


140+00

STONE FILL, TYPE I (TYP.)
6" GRUBBING MATERIAL (TYP.)
GEOTEXTILE UNDER STONE FILL (TYP.)

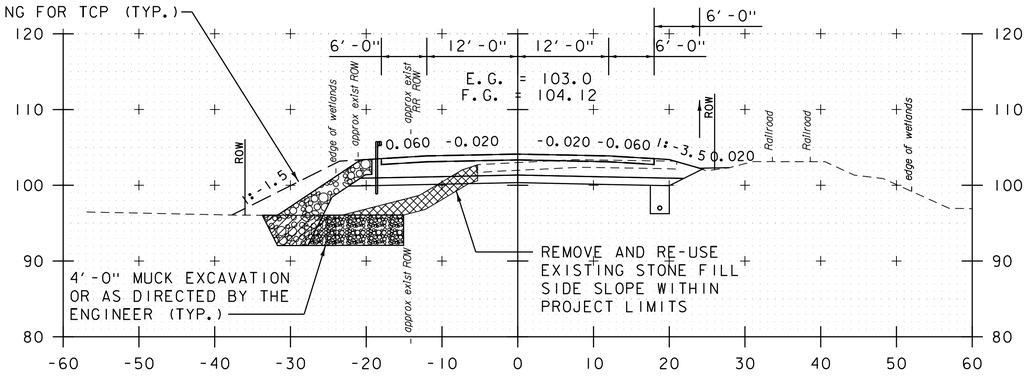


141+50 (NEW 24" CPEP)



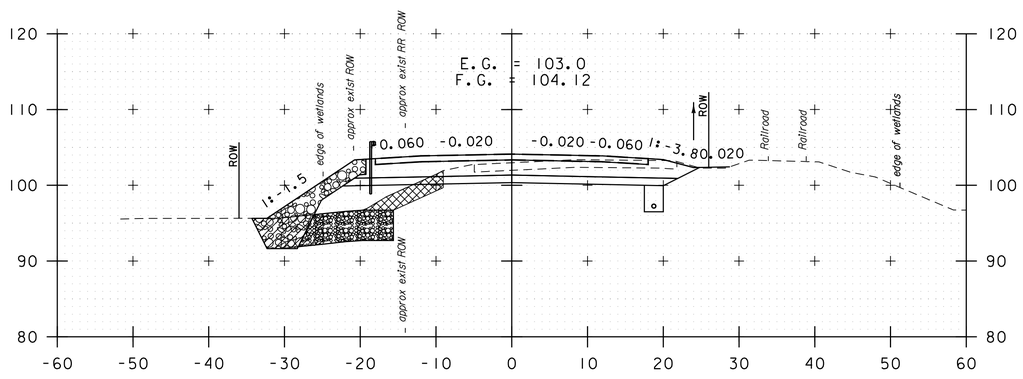
139+50 (NEW 24" CPEP)

TEMPORARY SLOPE
WIDENING FOR TCP (TYP.)



139+00

140+00



141+00

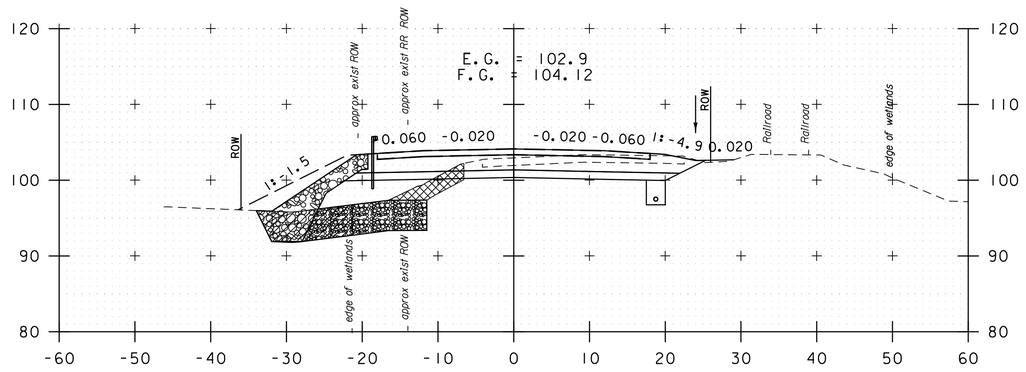
140+50

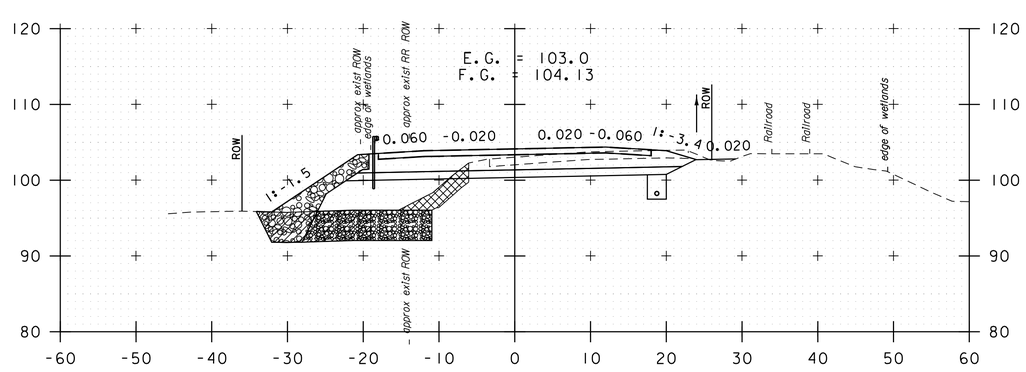
STA. 139+00 TO STA. 141+50

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_3600-16300.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
CROSS SECTION SHEET 38

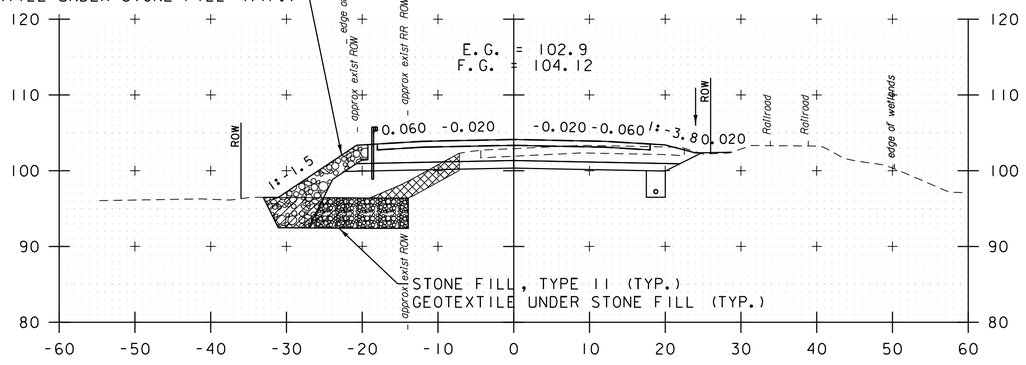
PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 215 OF 305



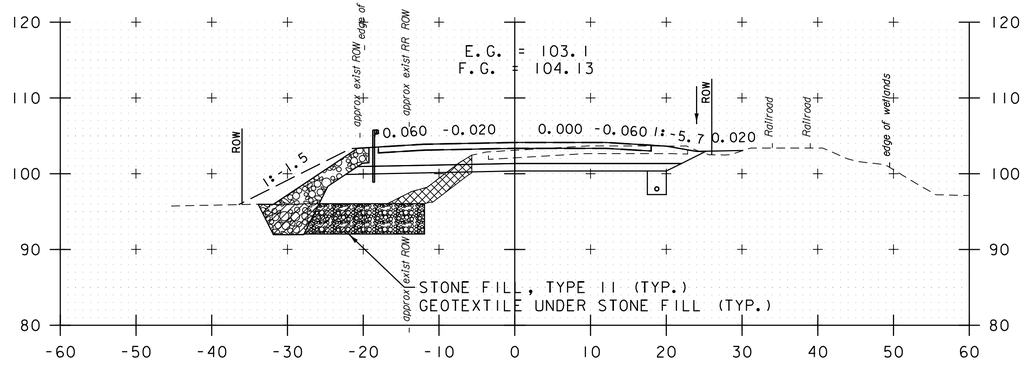


STONE FILL, TYPE I (TYP.)
6" GRUBBING MATERIAL (TYP.)
GEOTEXTILE UNDER STONE FILL (TYP.)

143+00

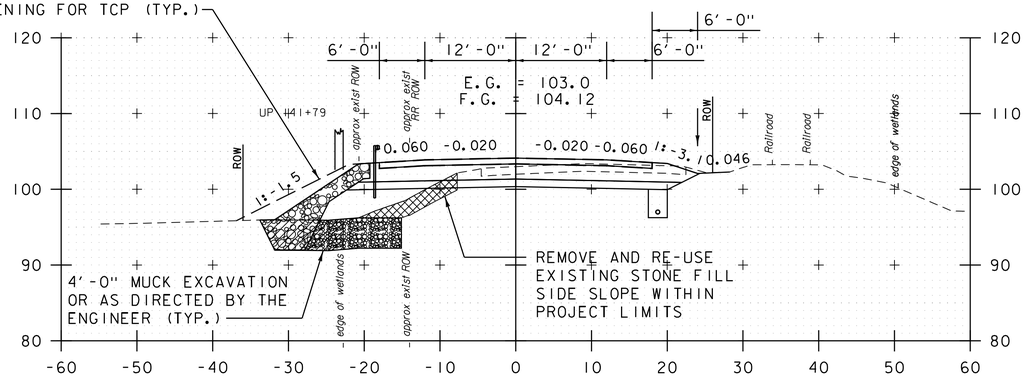


144+50



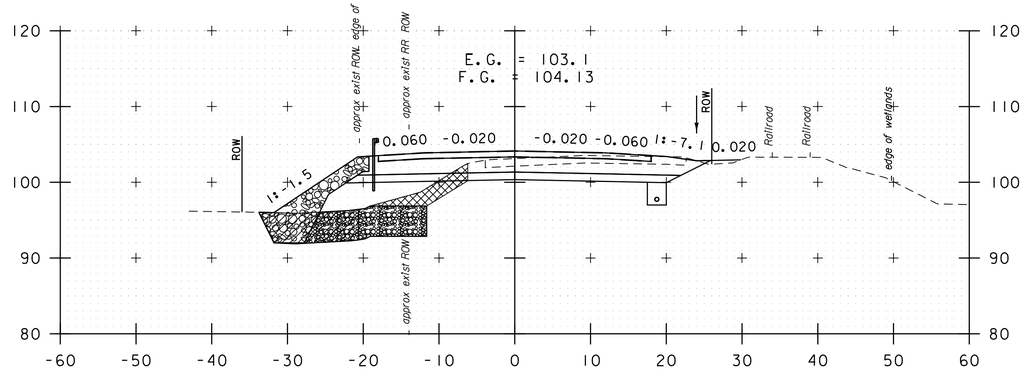
TEMPORARY SLOPE
WIDENING FOR TCP (TYP.)

142+50



142+00

144+00



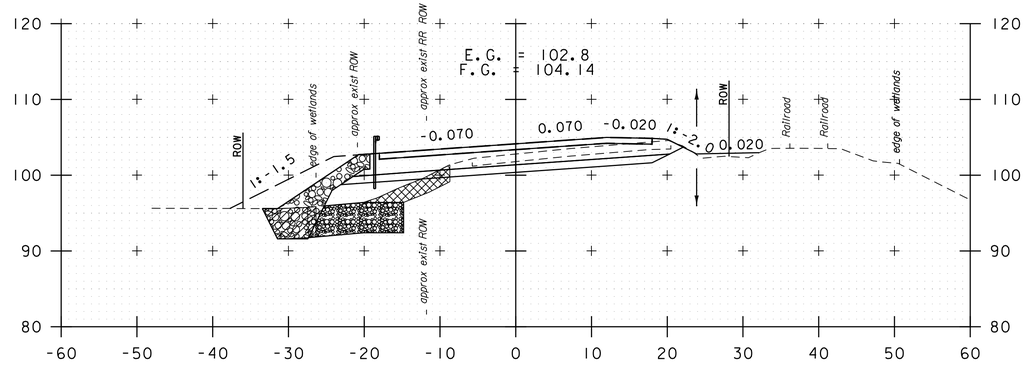
143+50

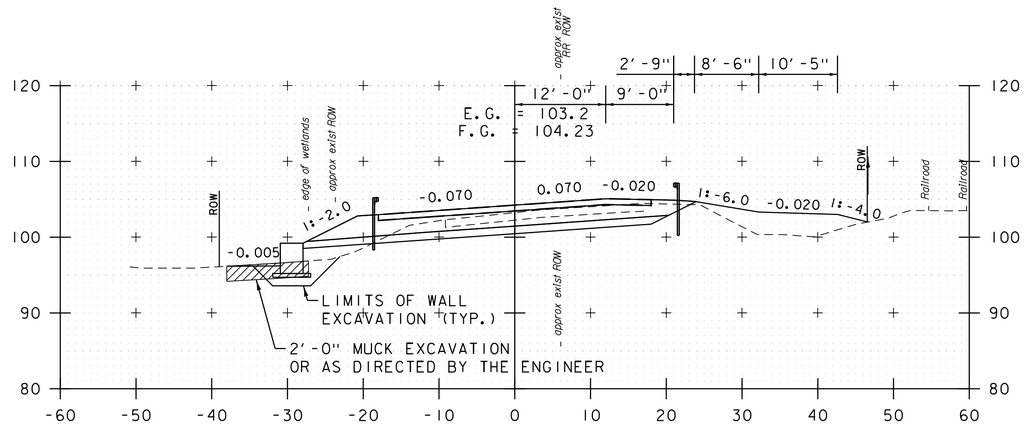
STA. 142+00 TO STA. 144+50

vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)

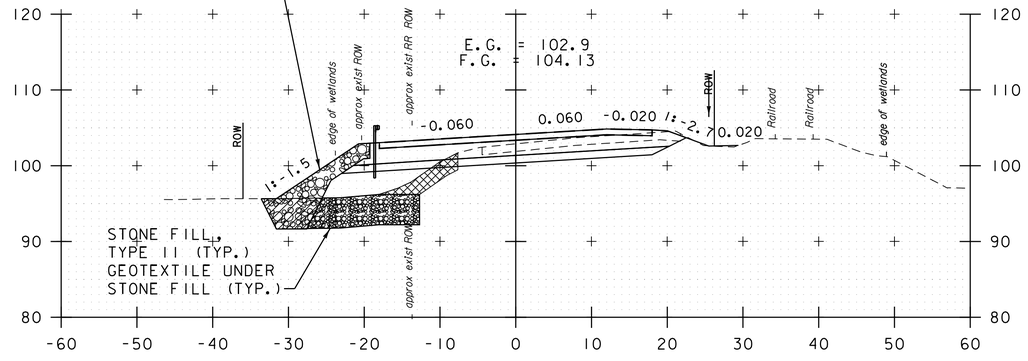
FILE NAME: z96b032xs_3600-16300.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
CROSS SECTION SHEET 39	SHEET 216 OF 305



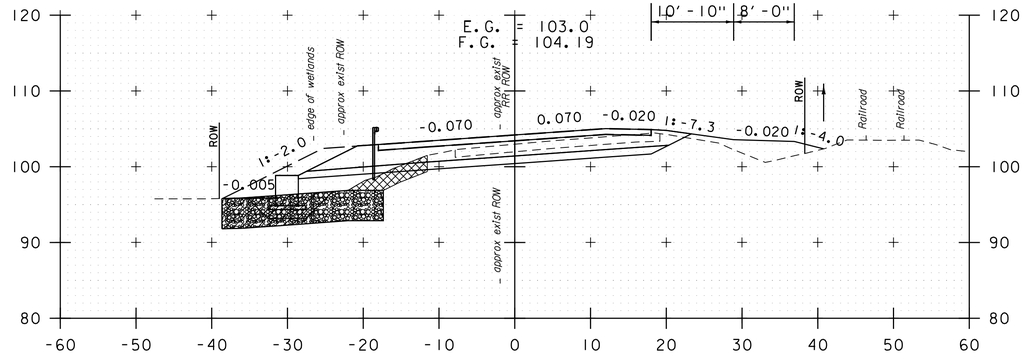


146+00

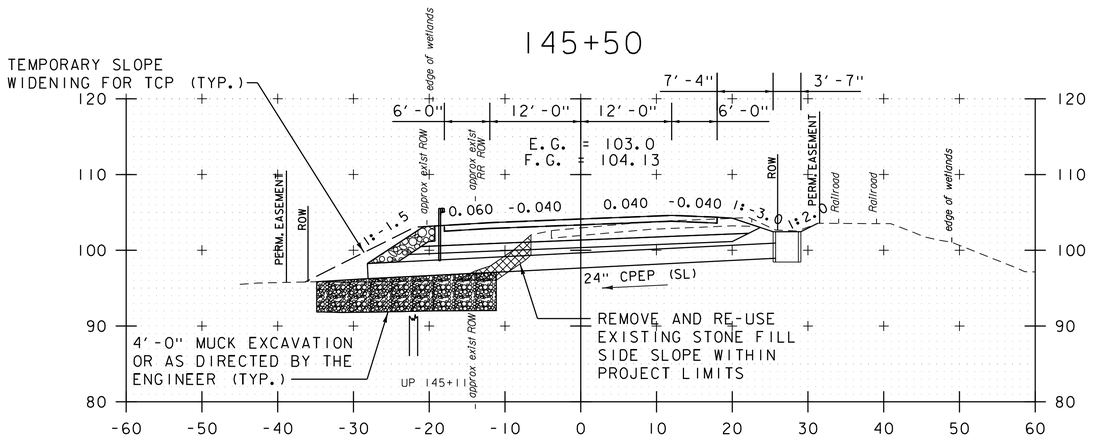
STONE FILL, TYPE I (TYP.)
6" GRUBBING MATERIAL (TYP.)
GEOTEXTILE UNDER STONE FILL (TYP.)



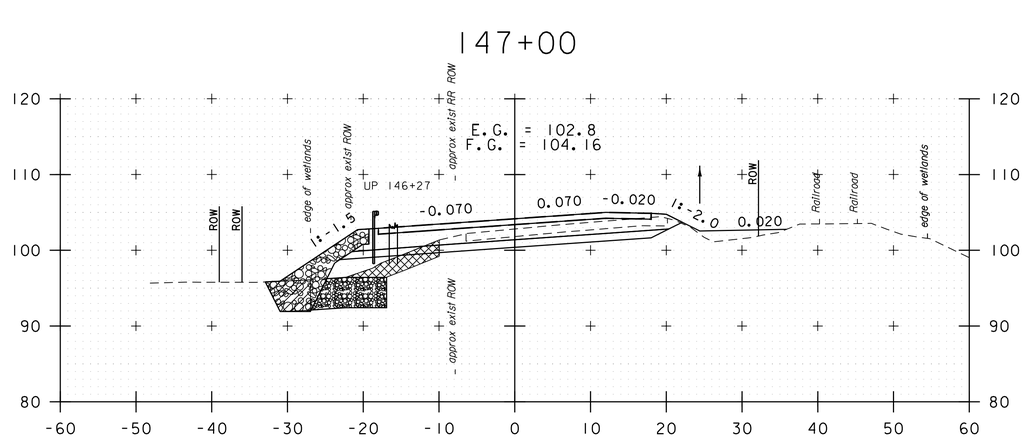
147+50



145+50



147+00



145+00 (NEW 24" CPEP)

146+50

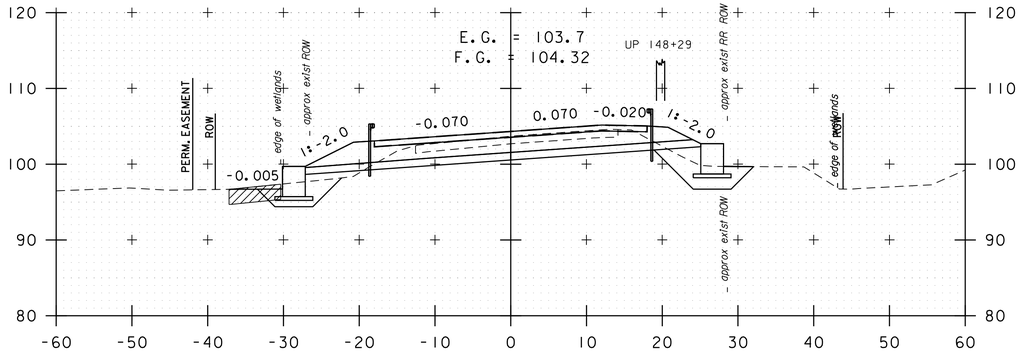
STA. 145+00 TO STA. 147+50

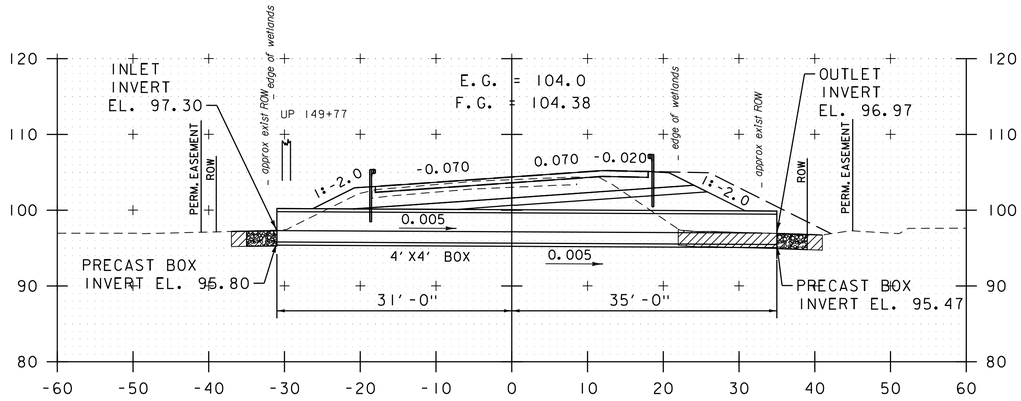
vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

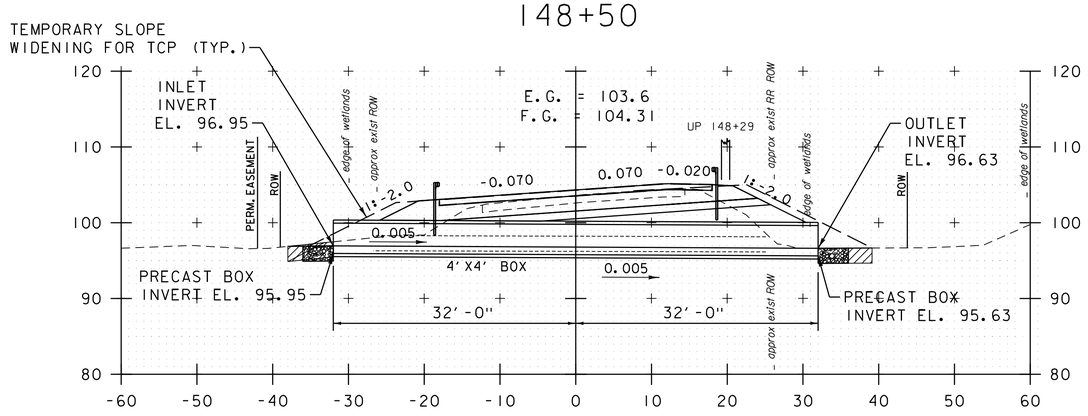
FILE NAME: z96b032xs_3600-16300.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
CROSS SECTION SHEET 40

PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 217 OF 305

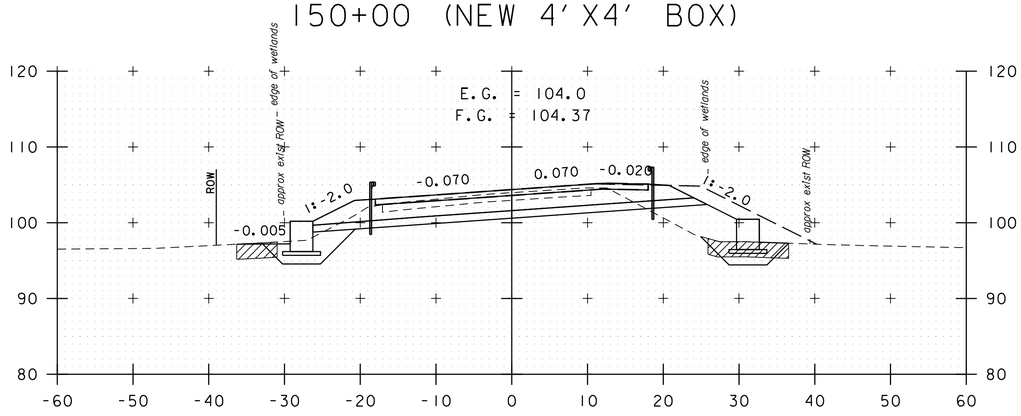




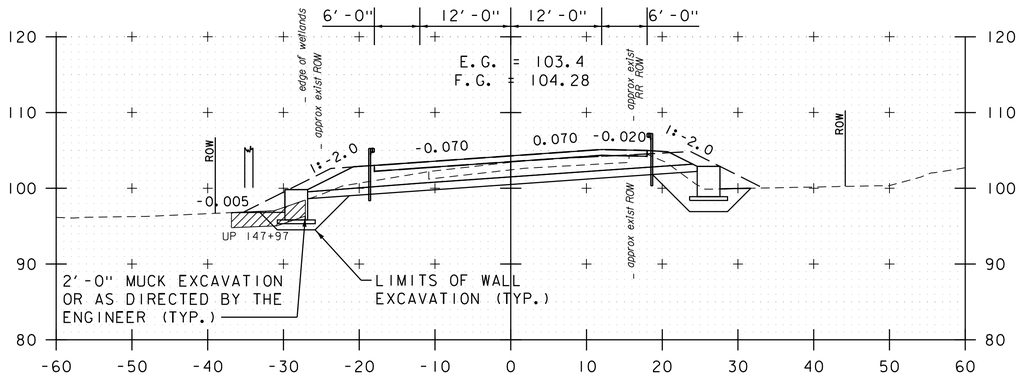
148+50



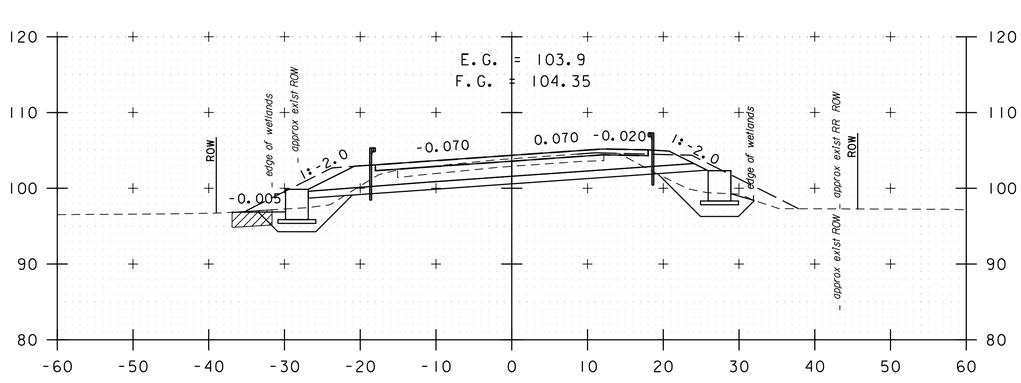
150+00 (NEW 4' X4' BOX)



148+41 (NEW 4' X4' BOX)



149+50



148+00 149+00

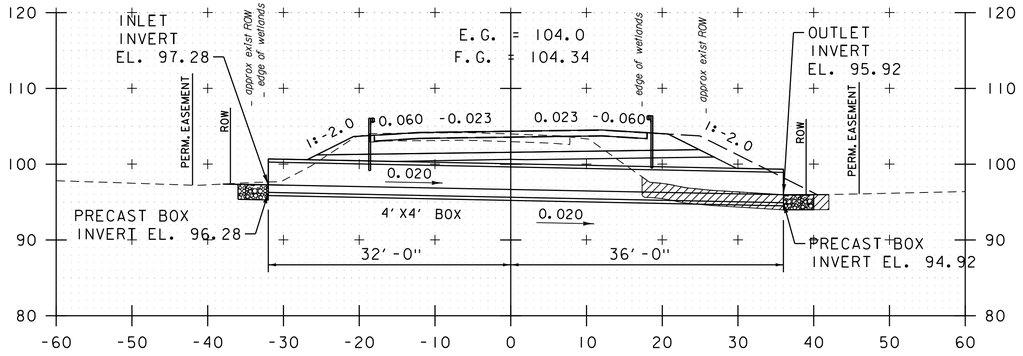
STA. 148+00 TO STA. 150+00

vhb

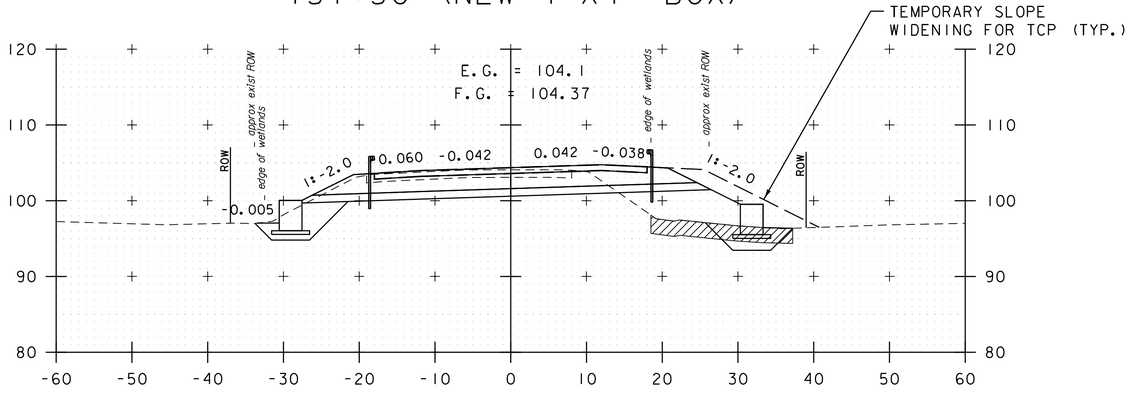
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_3600-16300.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
CROSS SECTION SHEET 41

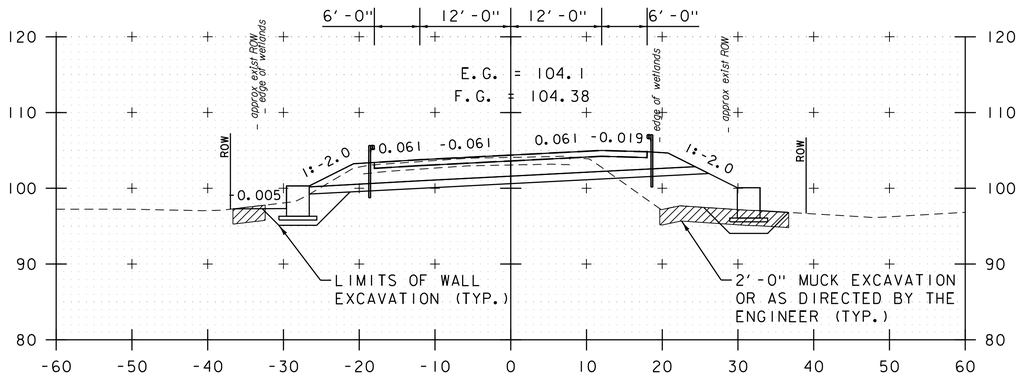
PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS



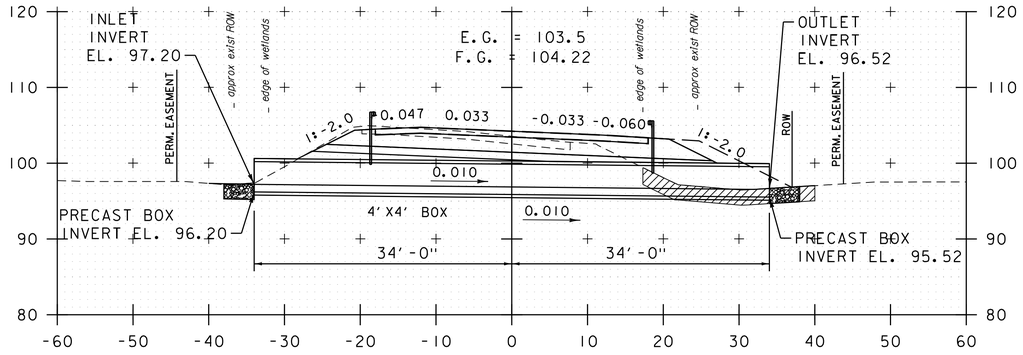
151+50 (NEW 4' X4' BOX)



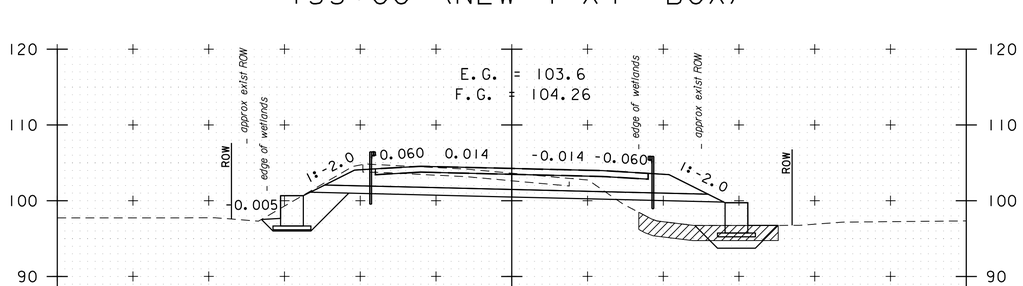
151+00



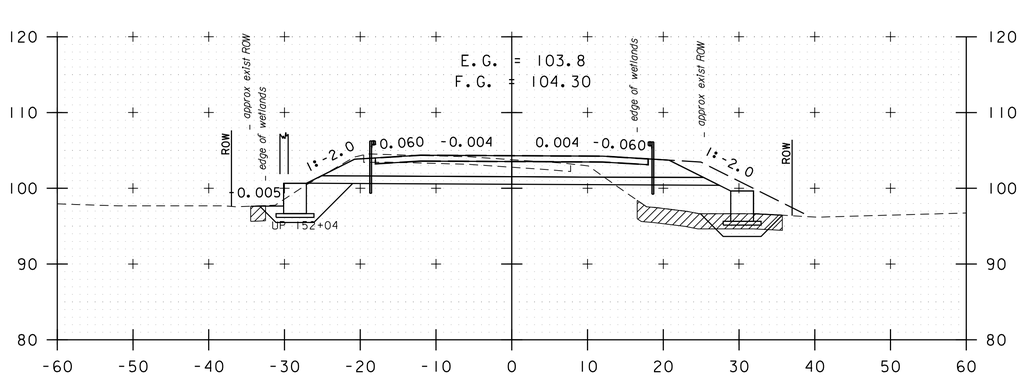
150+50



153+00 (NEW 4' X4' BOX)



152+50

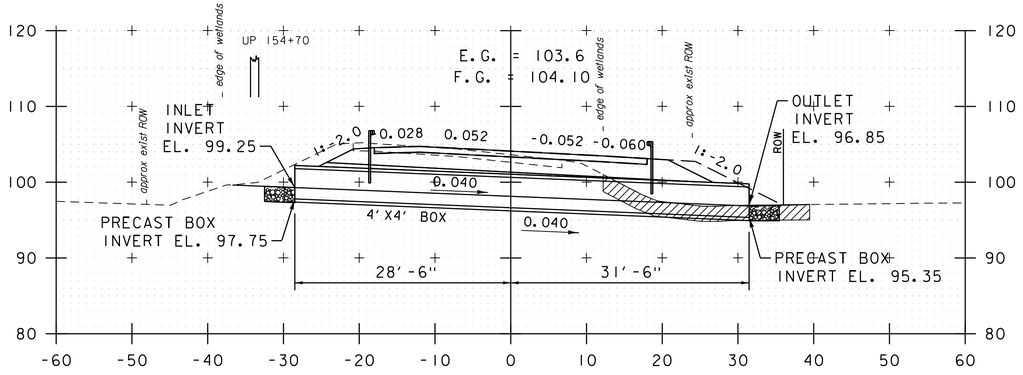


152+00

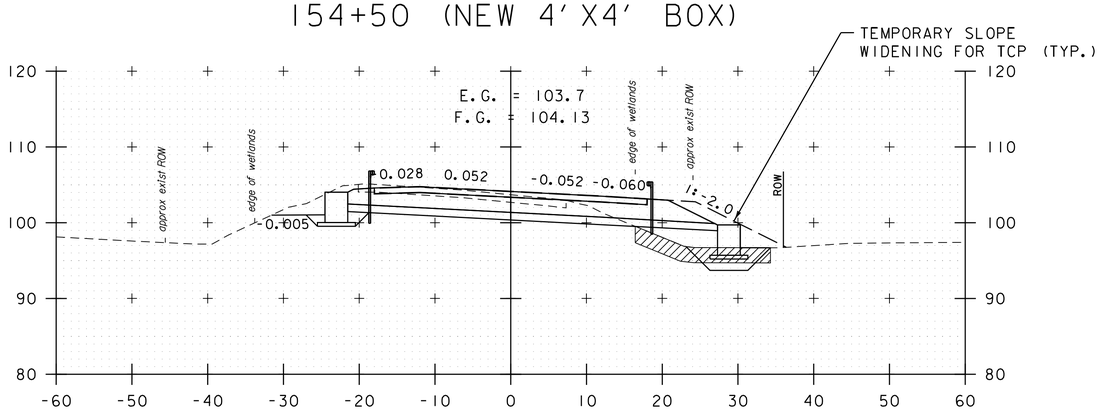
STA. 150+50 TO STA. 153+00

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)

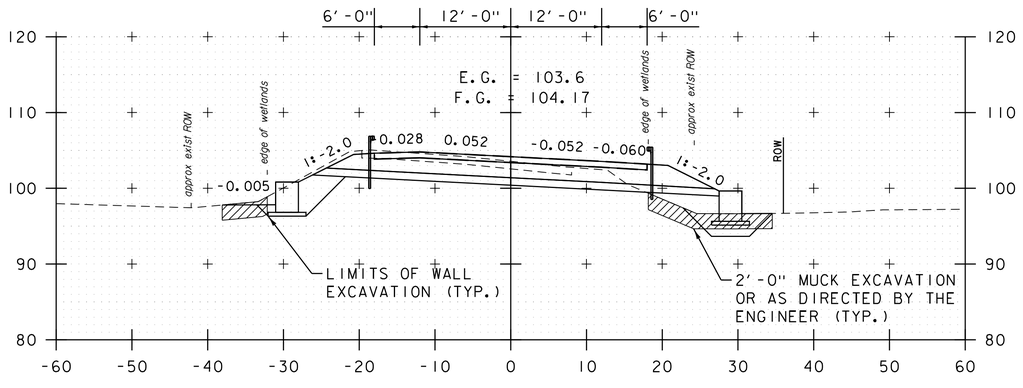
FILE NAME: z96b032xs_3600-16300.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
CROSS SECTION SHEET 42	SHEET 219 OF 305



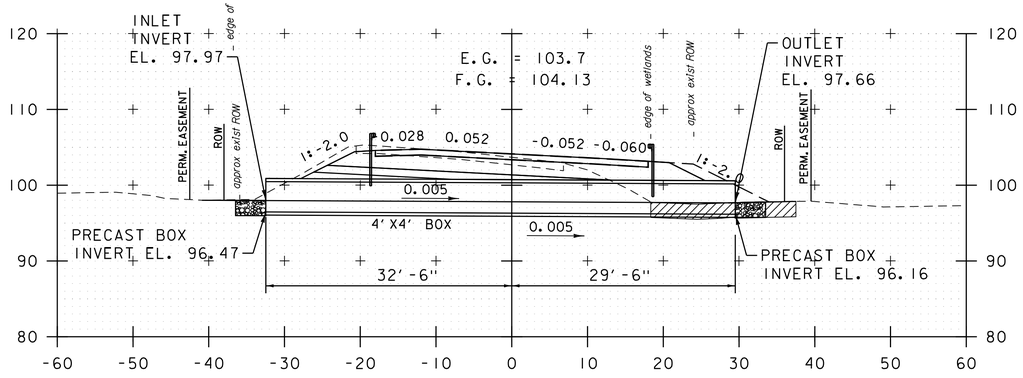
154+50 (NEW 4' X4' BOX)



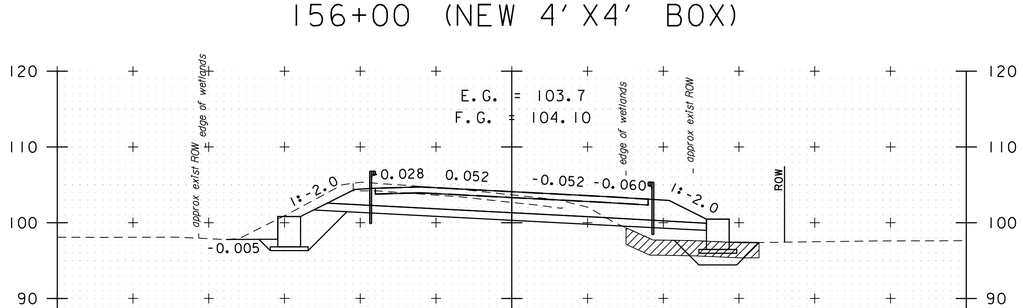
154+00



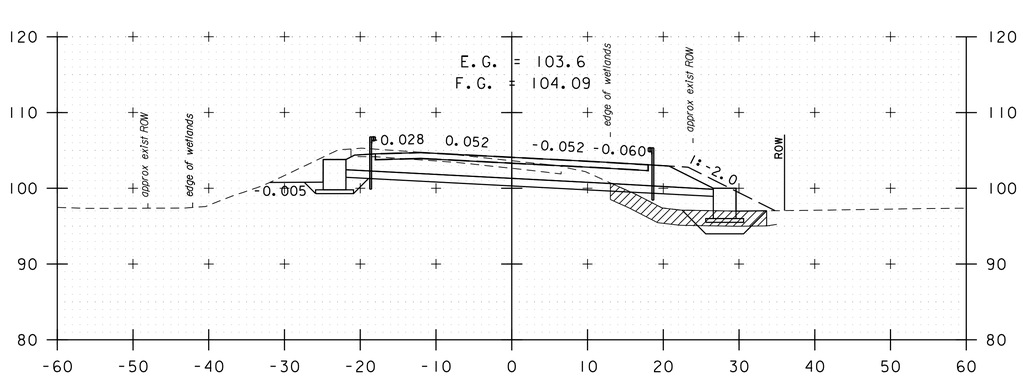
153+50



156+00 (NEW 4' X4' BOX)



155+50

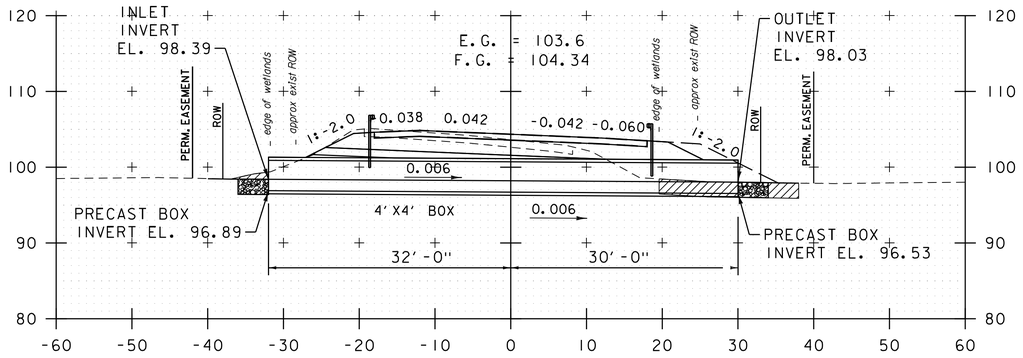


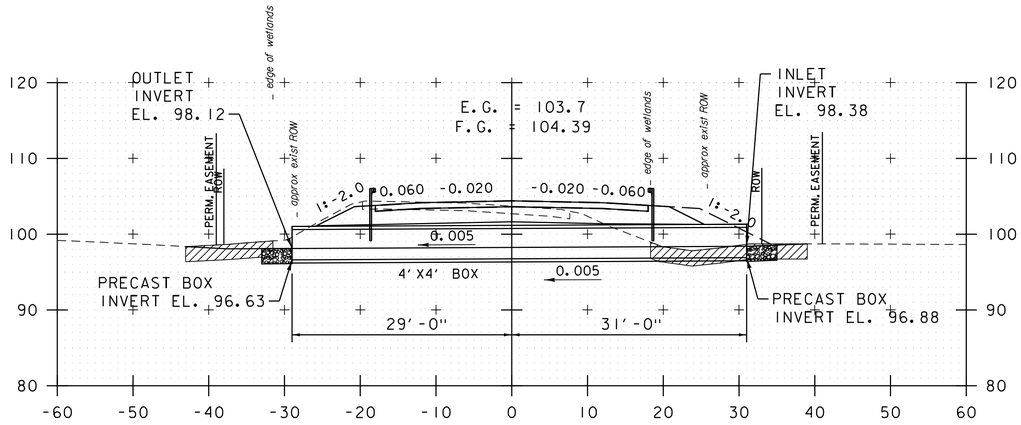
155+00

STA. 153+50 TO STA. 156+00

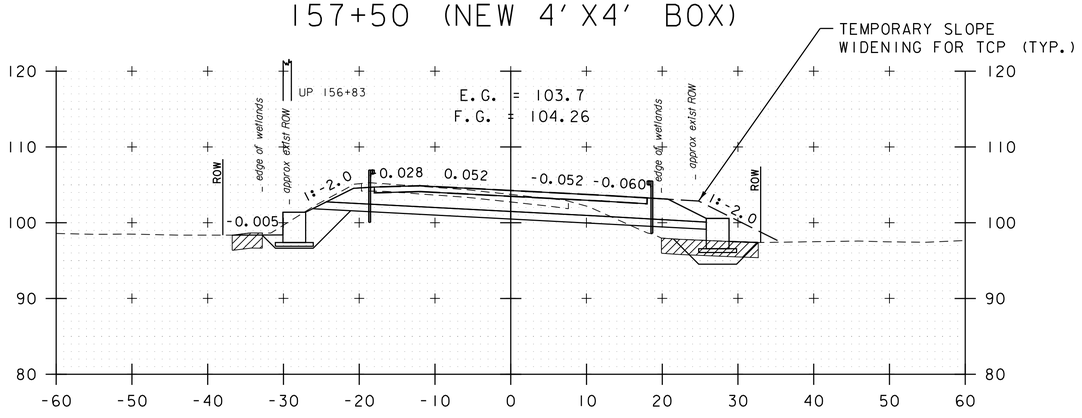
PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)

FILE NAME: z96b032xs_3600-16300.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
CROSS SECTION SHEET 43	SHEET 220 OF 305

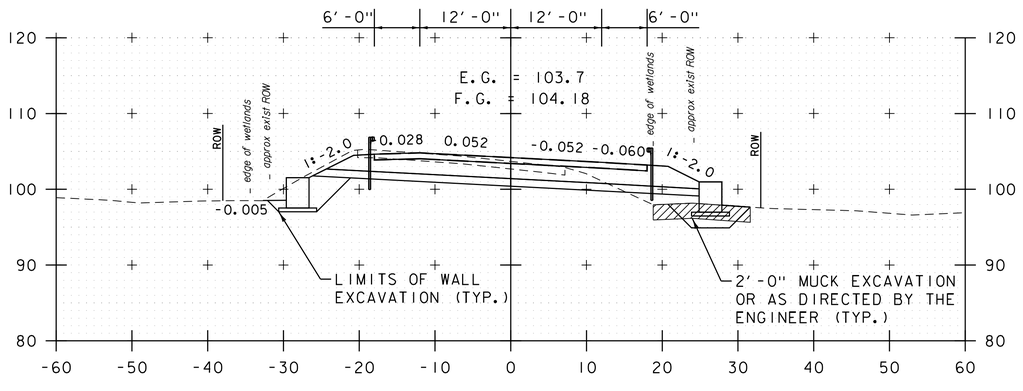




157+50 (NEW 4'X4' BOX)

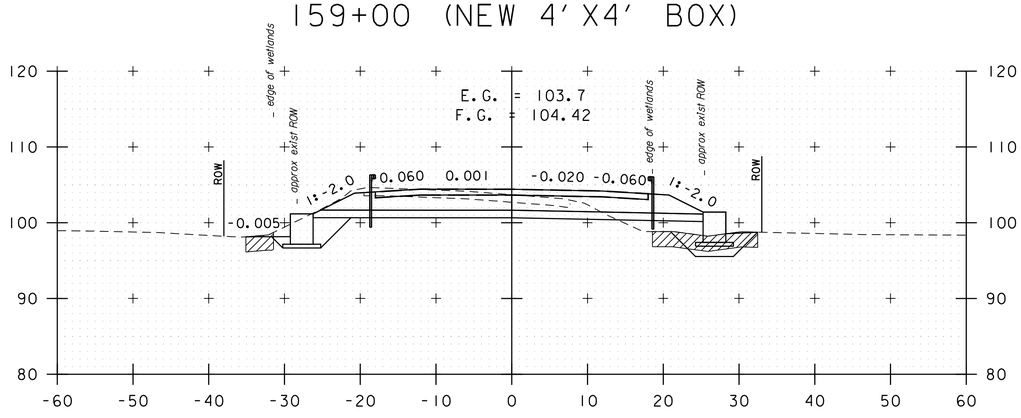


157+00

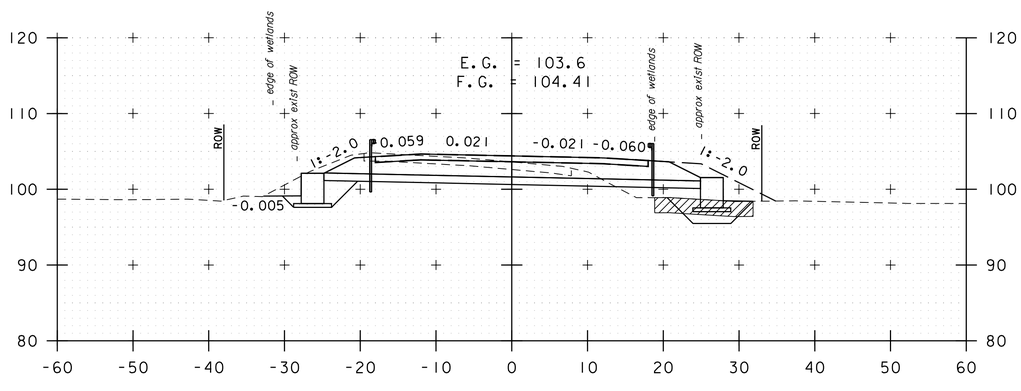


156+50

159+00 (NEW 4'X4' BOX)



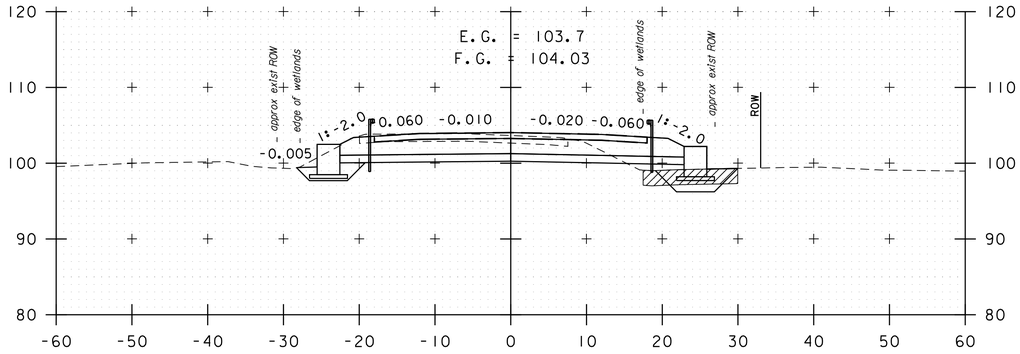
158+50

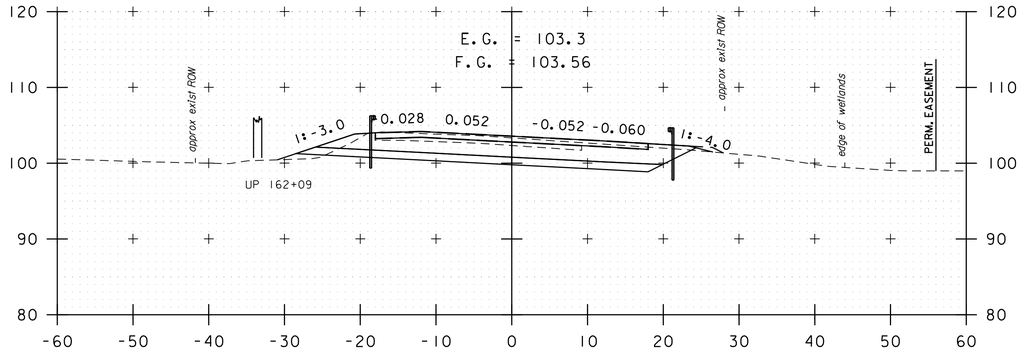


158+00

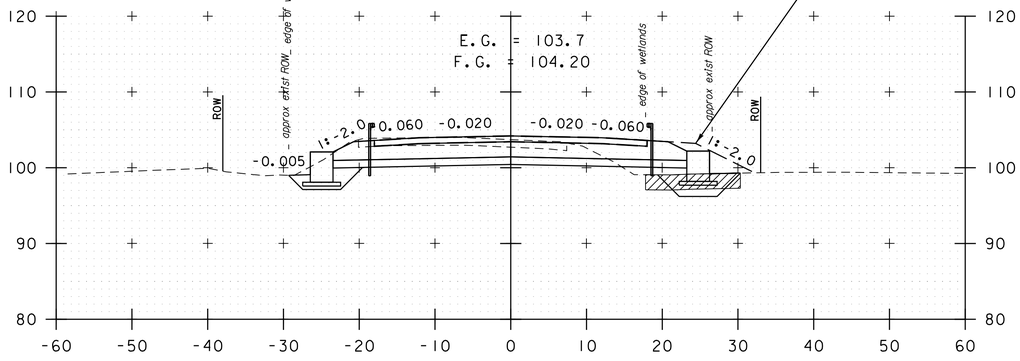
STA. 156+50 TO STA. 159+00

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032xs_3600-16300.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
CROSS SECTION SHEET 44	SHEET 221 OF 305

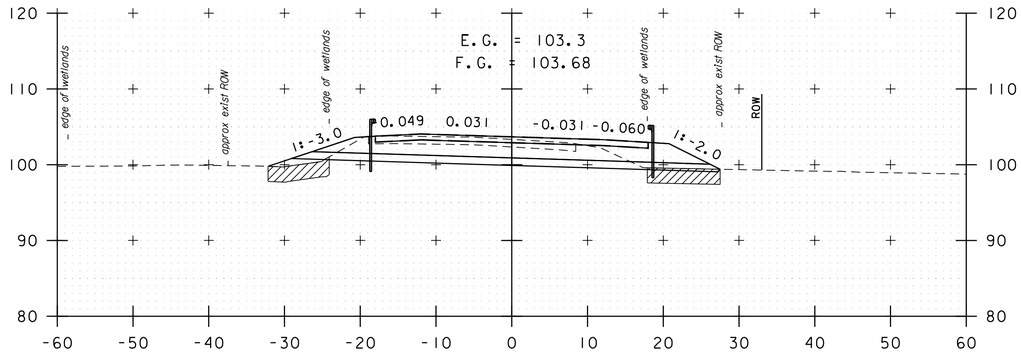




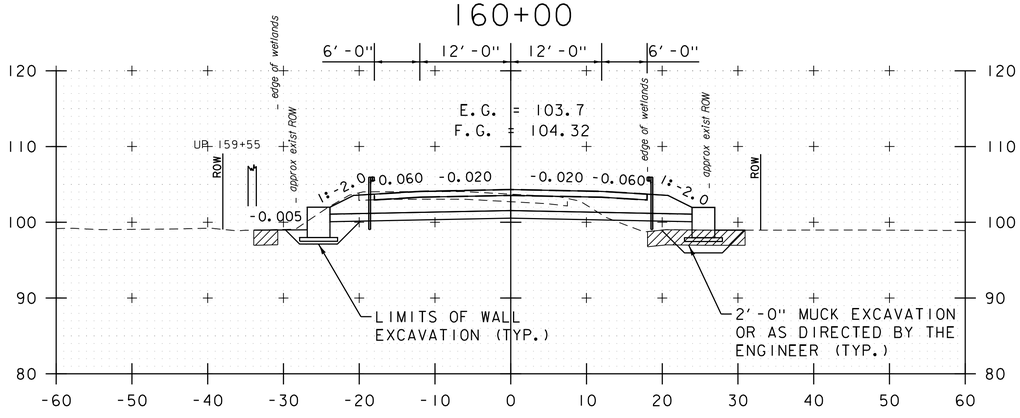
160+50



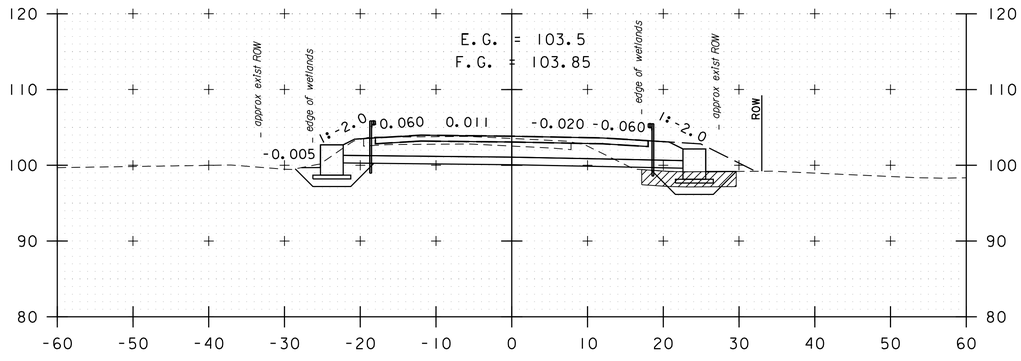
162+00



160+00



161+50



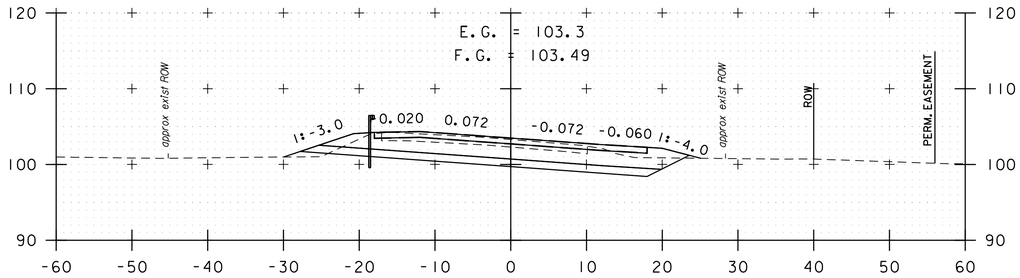
159+50

161+00

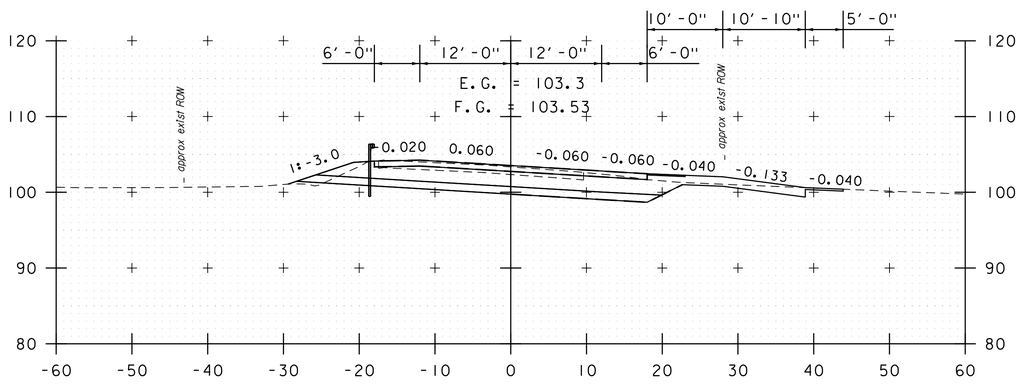
STA. 159+50 TO STA. 162+00

vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032xs_3600-16300.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
CROSS SECTION SHEET 45	SHEET 222 OF 305



162+50



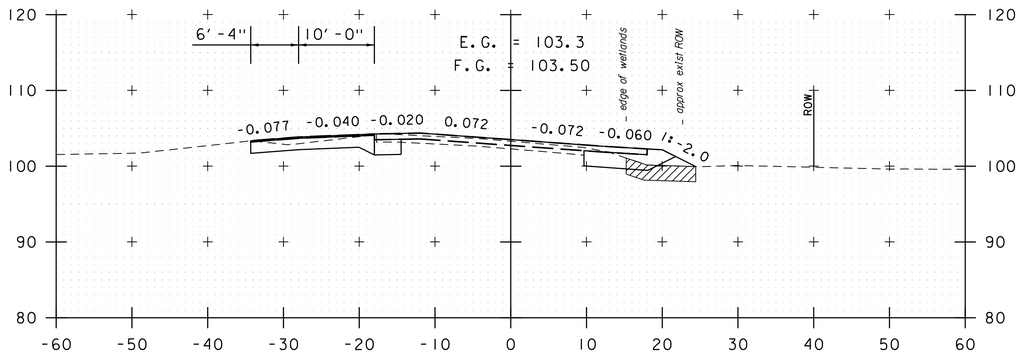
162+20 (DRIVE RT)

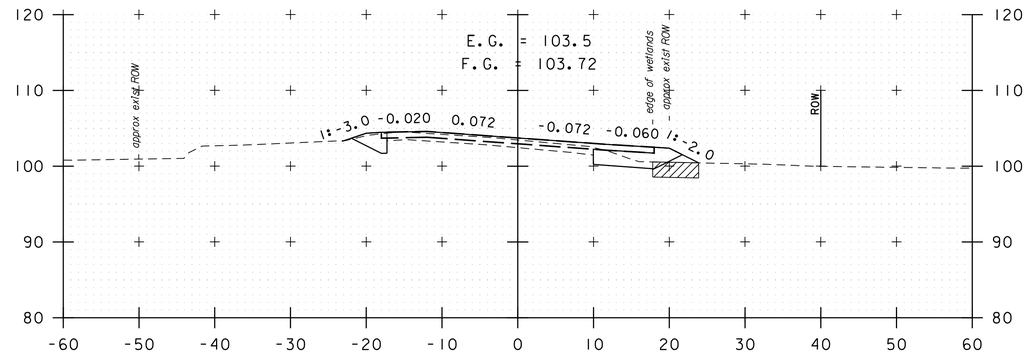
STA. 162+20 TO STA. 162+50

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

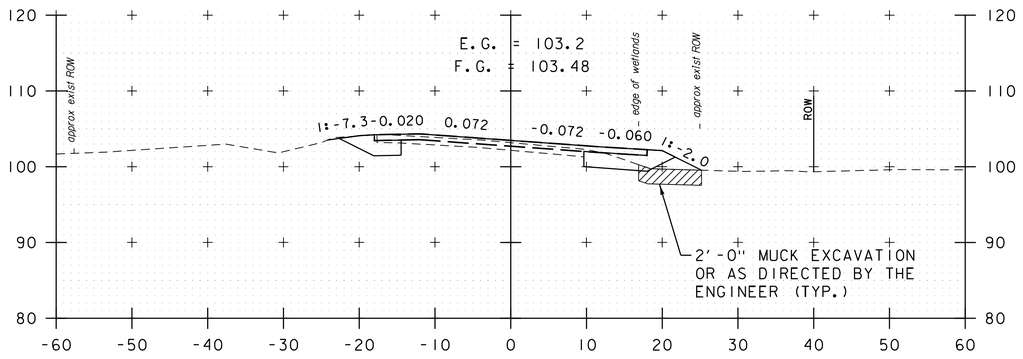
FILE NAME: z96b032xs_3600-16300.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
CROSS SECTION SHEET 46

PLOT DATE: 3/6/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 223 OF 305

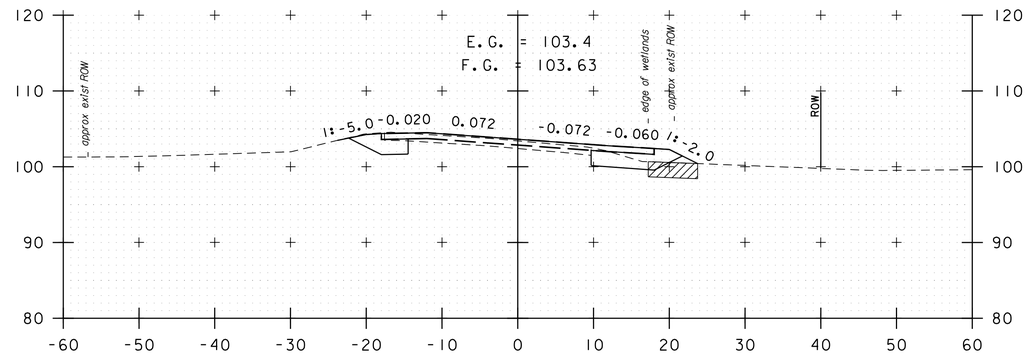




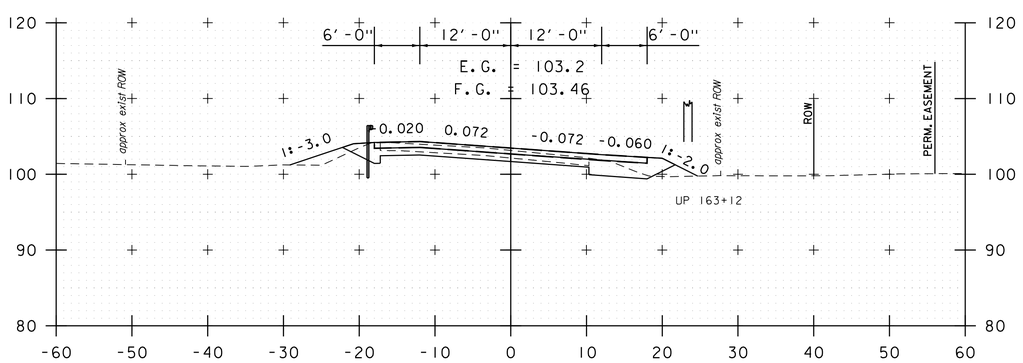
163+76 (DRIVE LT)



165+00



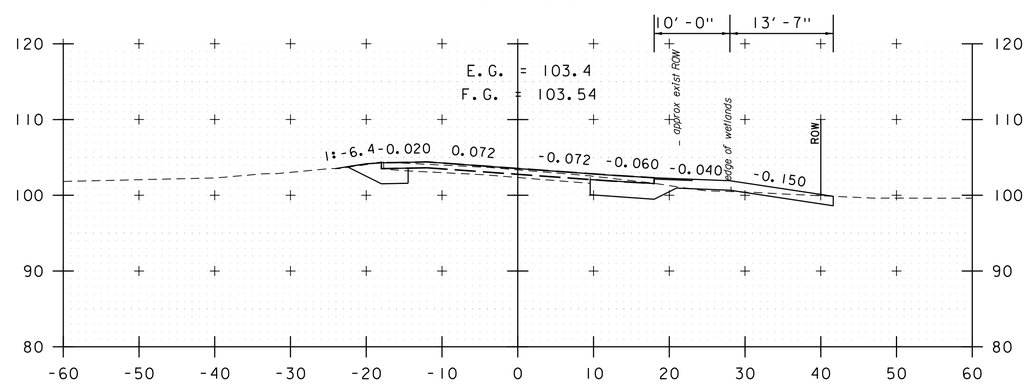
163+50



END RECONSTRUCTION
BEGIN RECLAIM

163+00

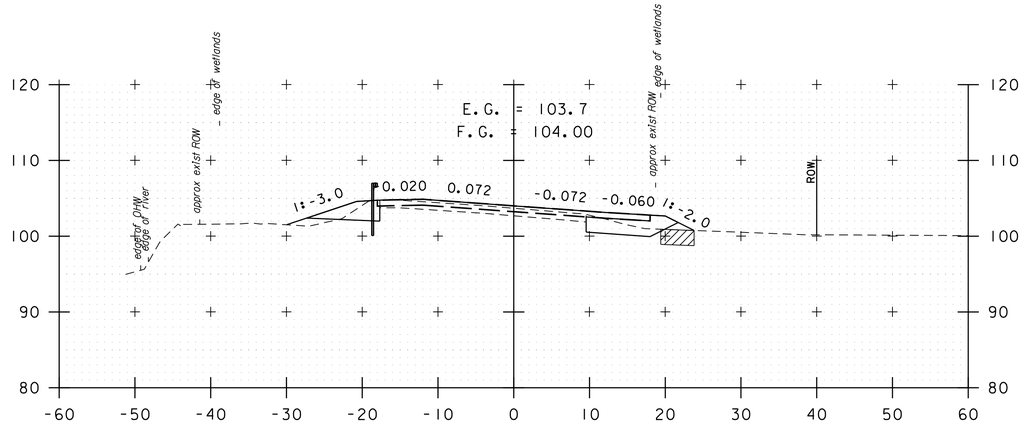
164+50

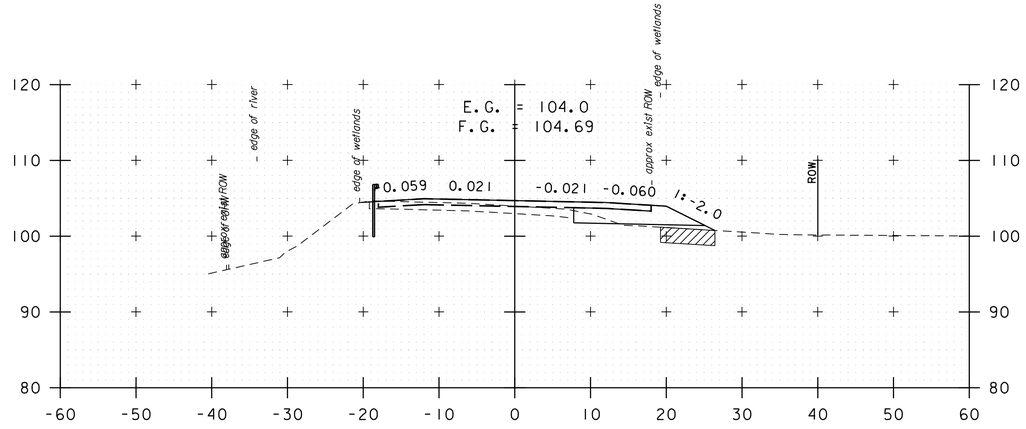


164+00 (DRIVE RT)

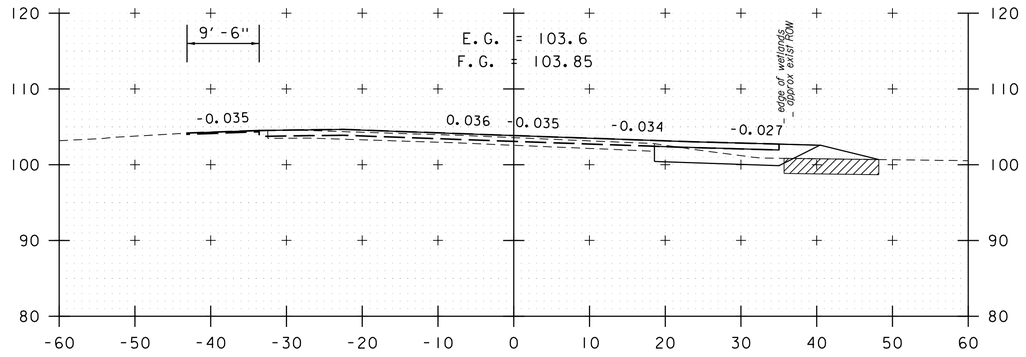
STA. 163+00 TO STA. 165+00

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032xs_16300_25000.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G.BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G.BAKOS
CROSS SECTION SHEET 47	SHEET 224 OF 305

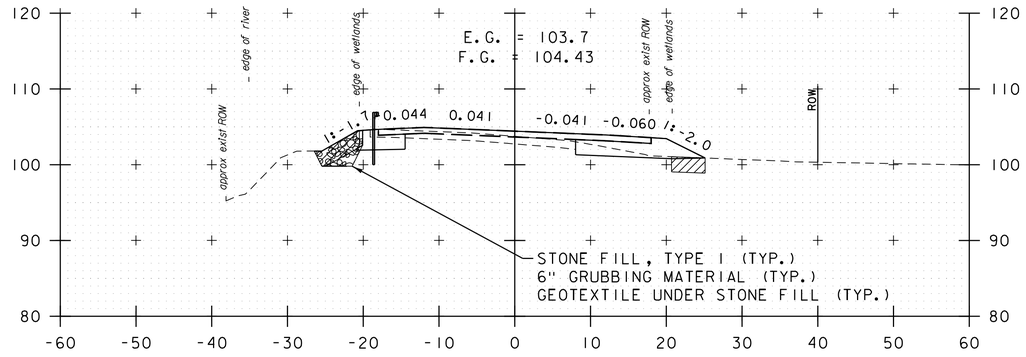




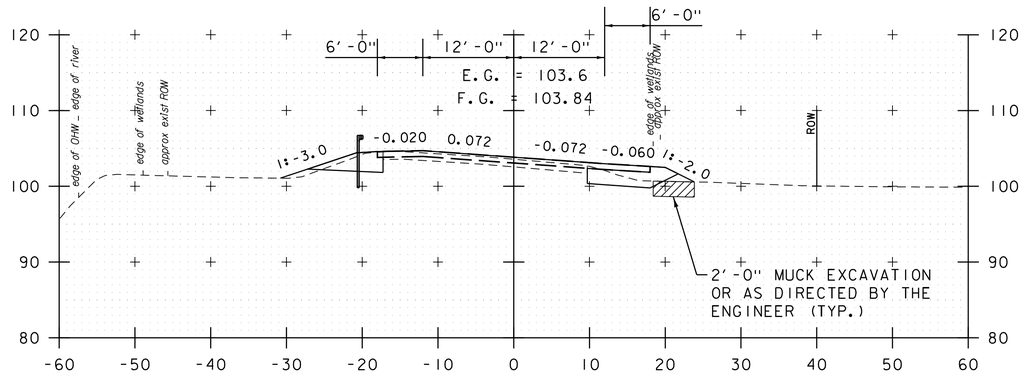
166+00



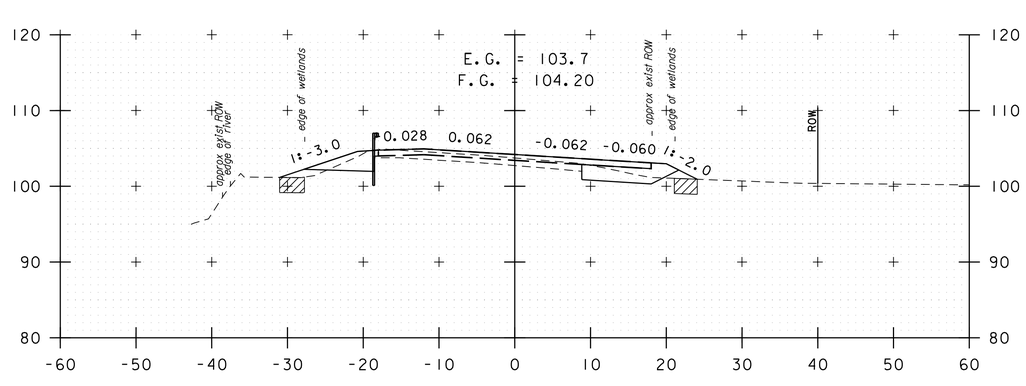
167+50



165+52 SKEWED (DRIVE LT)



167+00

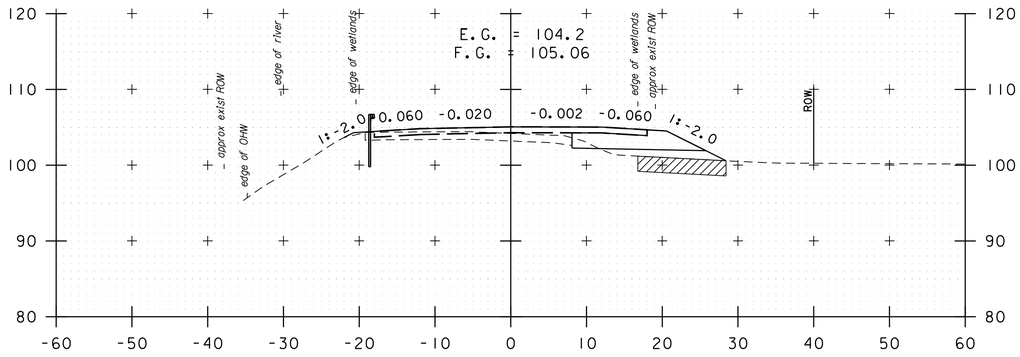


165+50

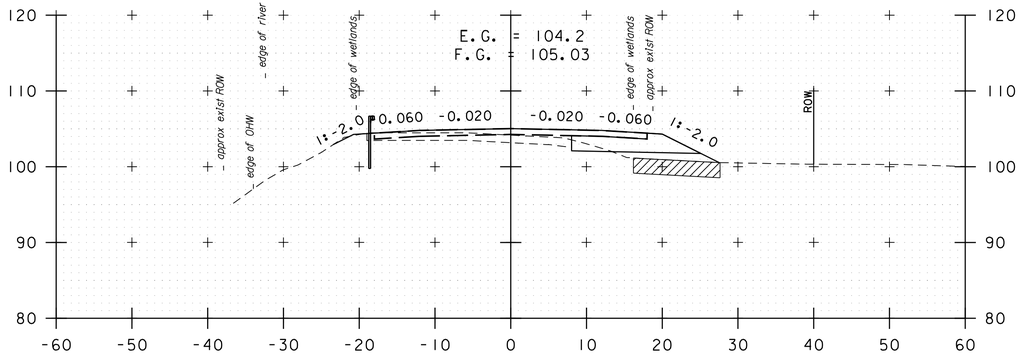
166+50

STA. 165+50 TO STA. 167+50

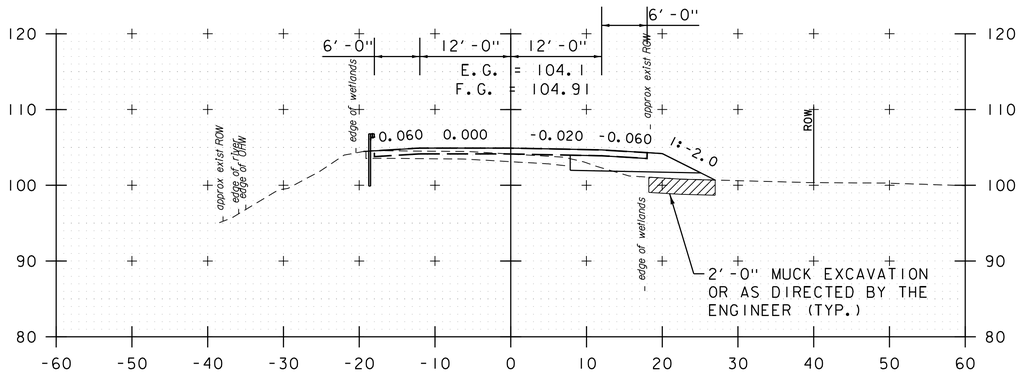
PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032xs_16300_25000.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G.BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G.BAKOS
CROSS SECTION SHEET 48	SHEET 225 OF 305



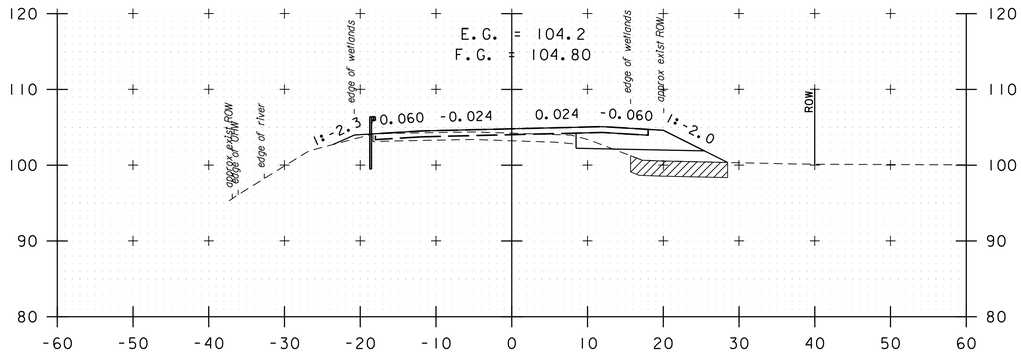
169+00



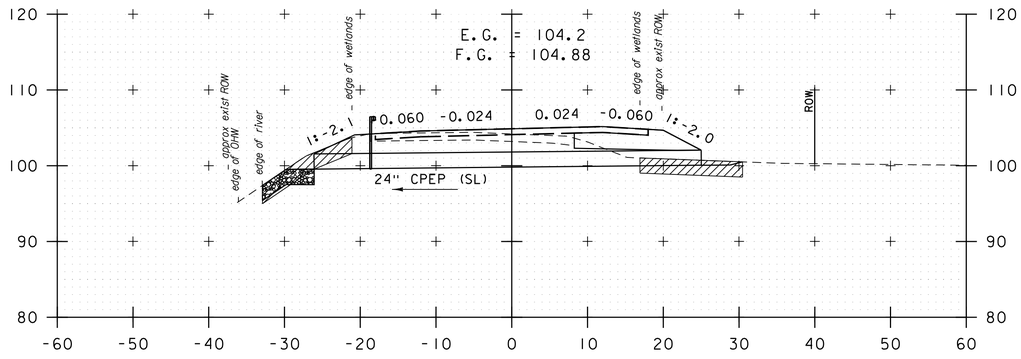
168+50



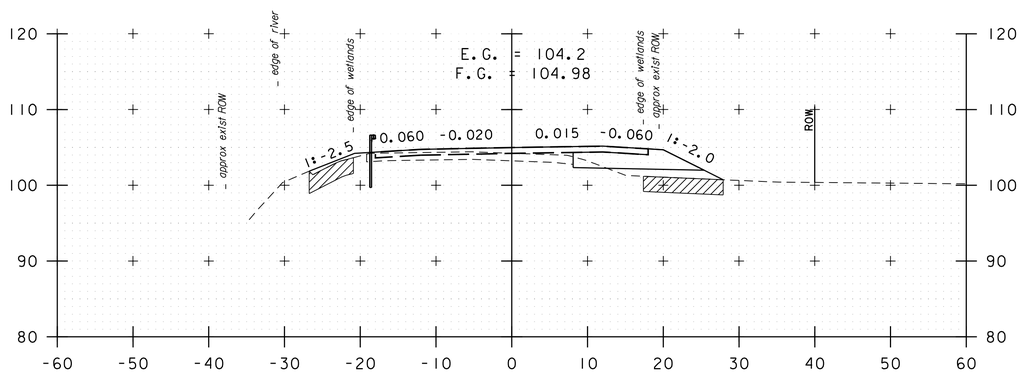
168+00



170+50



170+00 (NEW 24" CPEP)



169+50

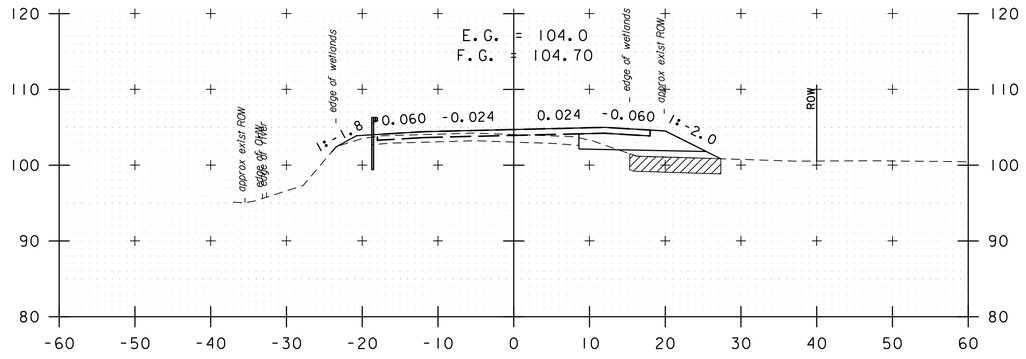
STA. 168+00 TO STA. 170+50

vhb

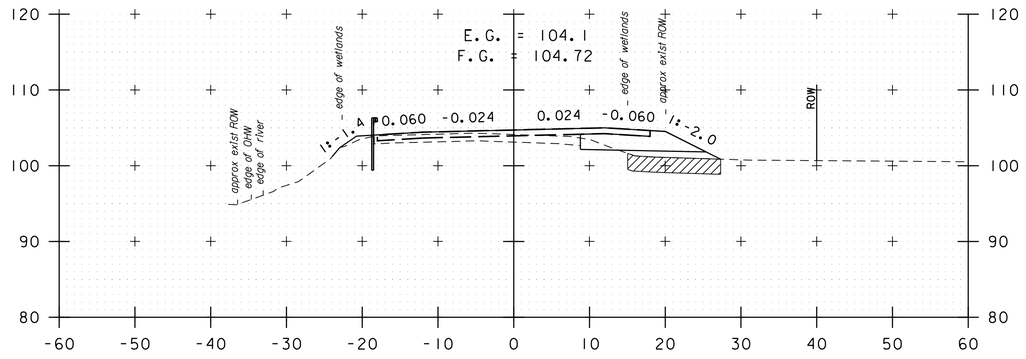
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_16300_25000.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 49

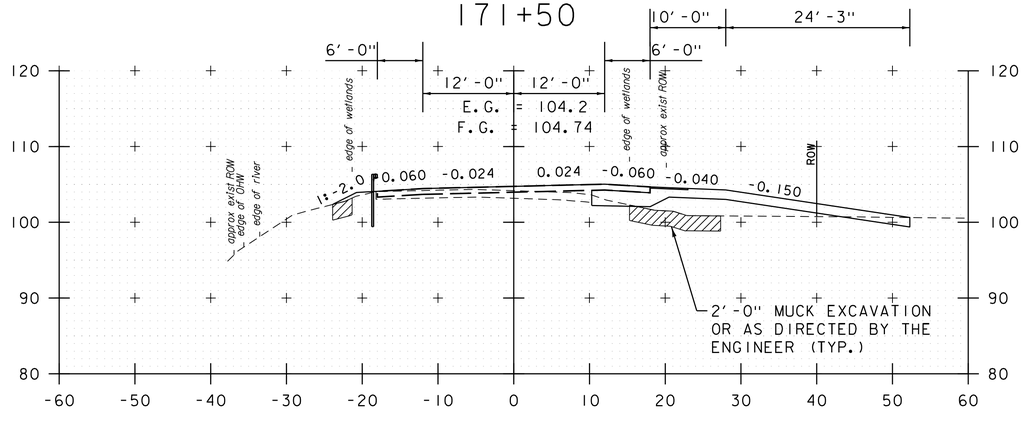
PLOT DATE: 3/6/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 226 OF 305



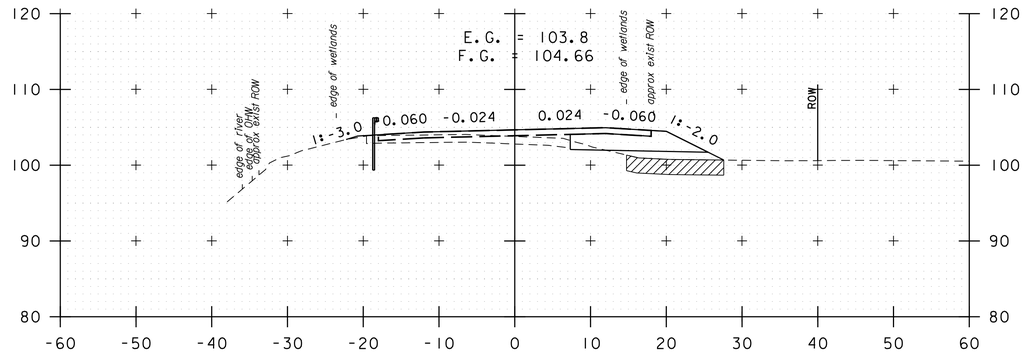
172+00



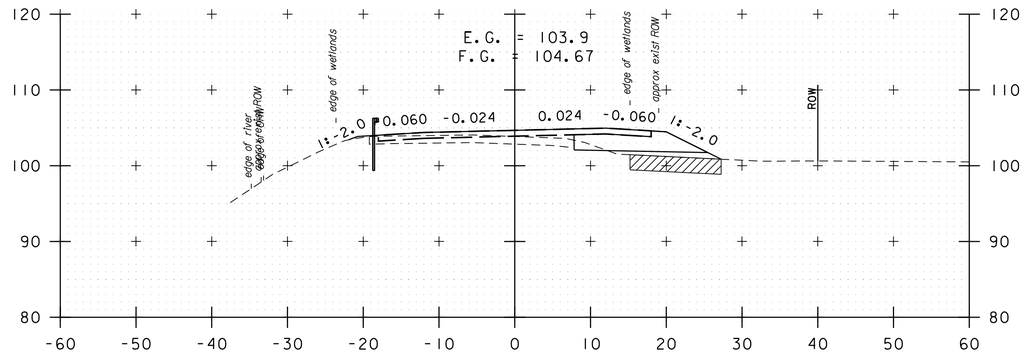
171+50



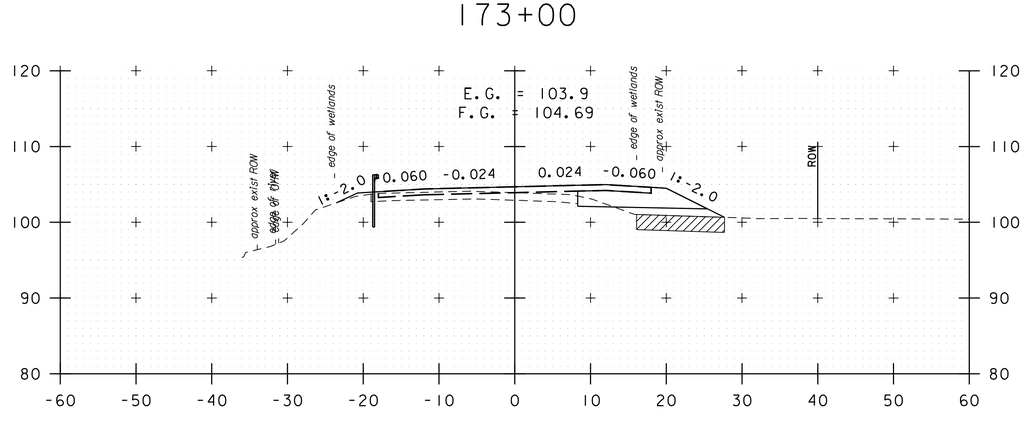
171+00



173+50



173+00



172+50

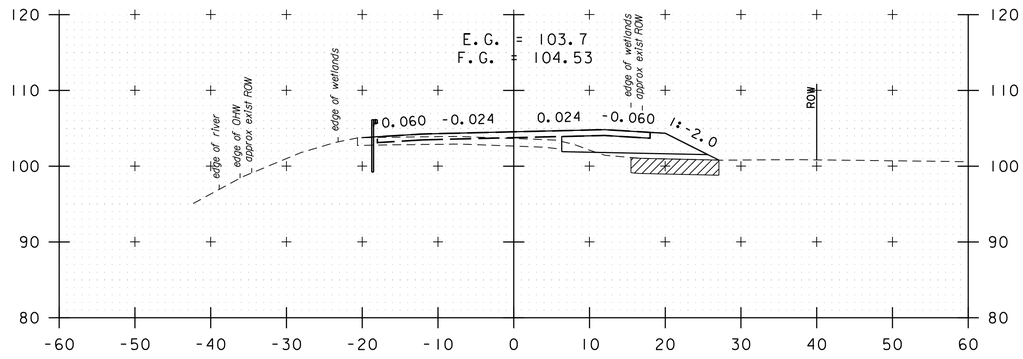
STA. 171+00 TO STA. 173+50

vhb

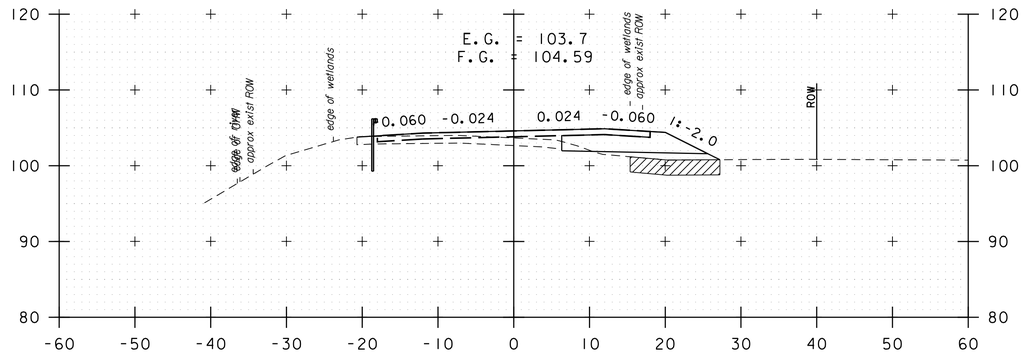
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_16300_25000.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 50

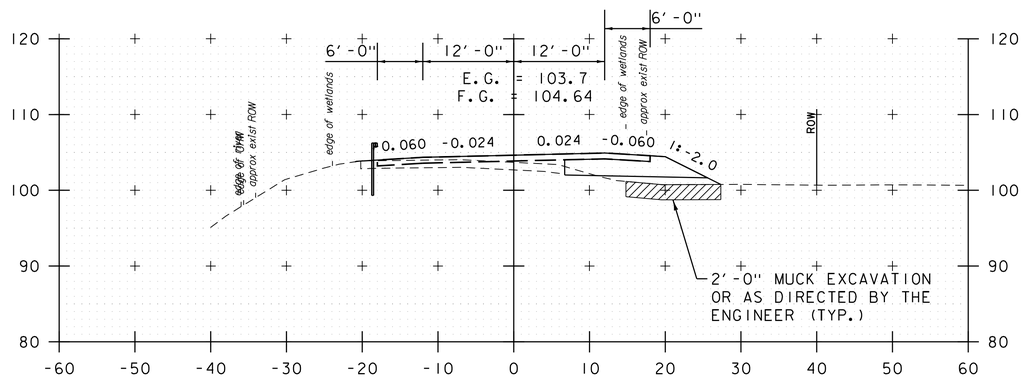
PLOT DATE: 3/6/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 227 OF 305



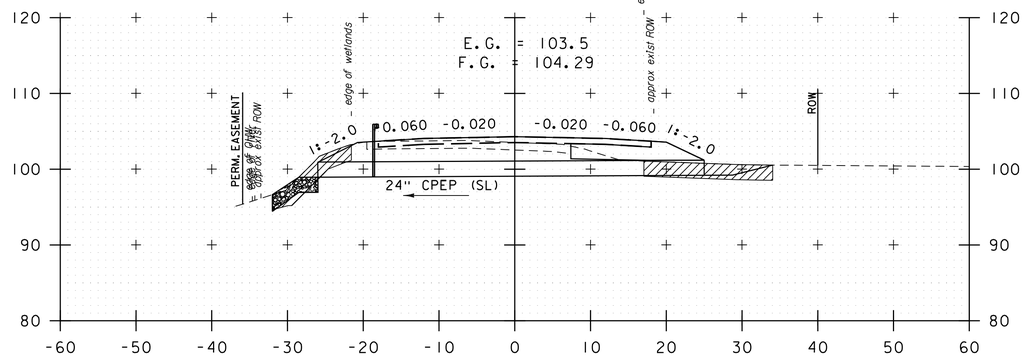
175+00



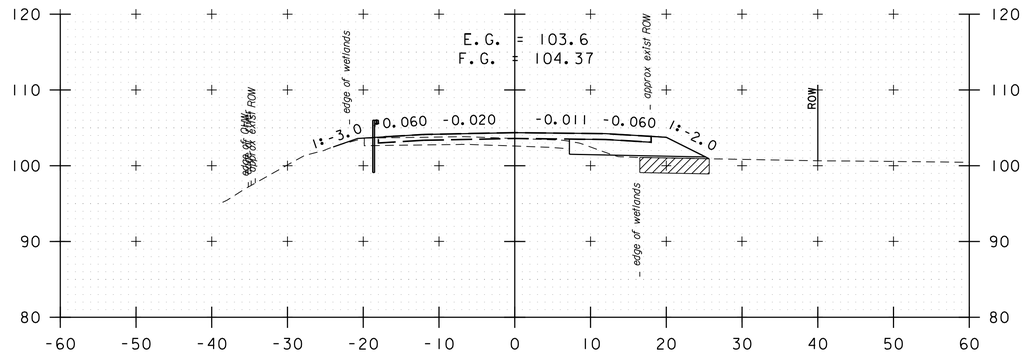
174+50



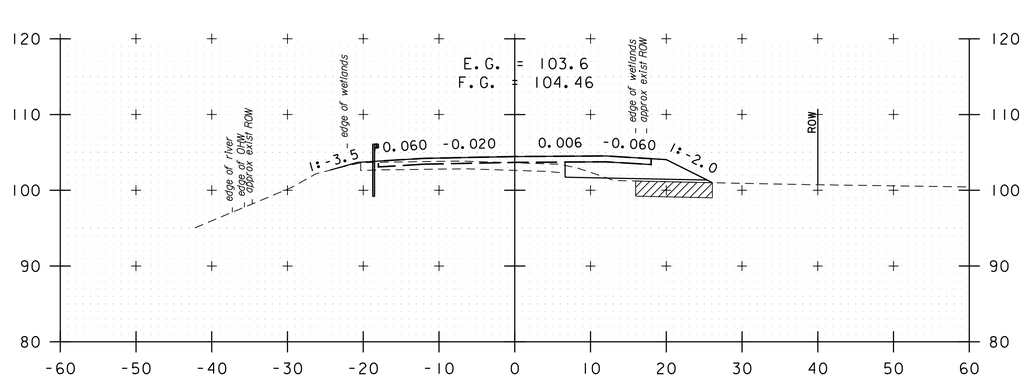
174+00



176+50 (NEW 24" CPEP)



176+00



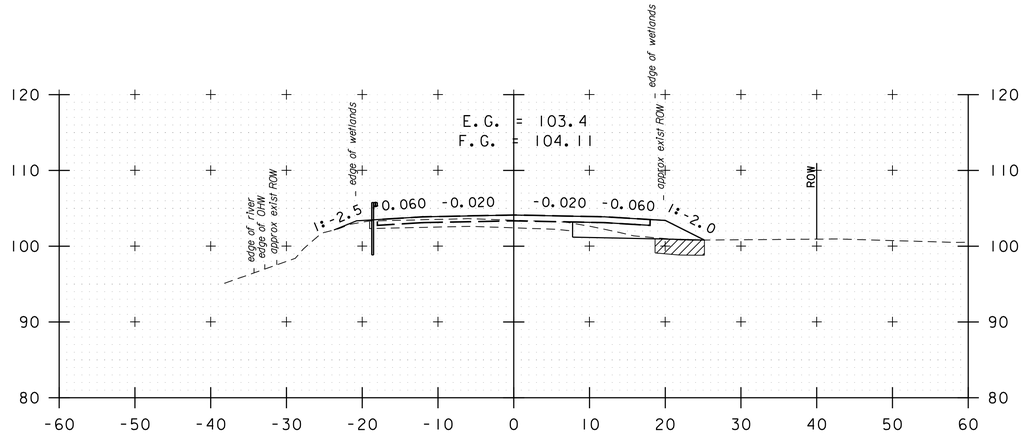
175+50

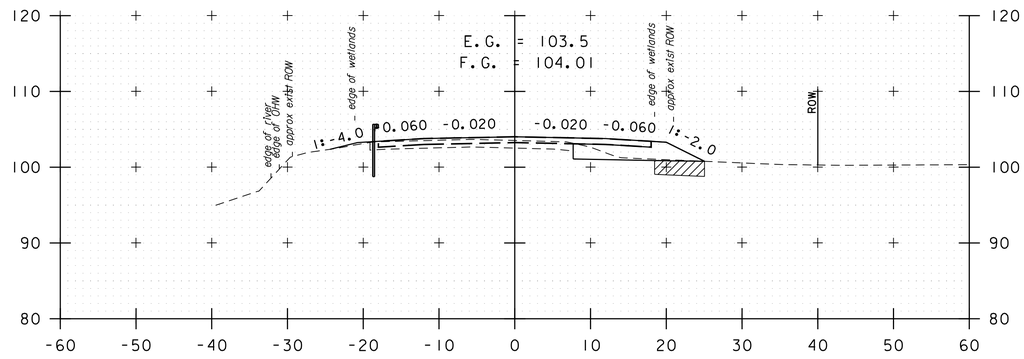
STA. 174+00 TO STA. 176+50

vhb

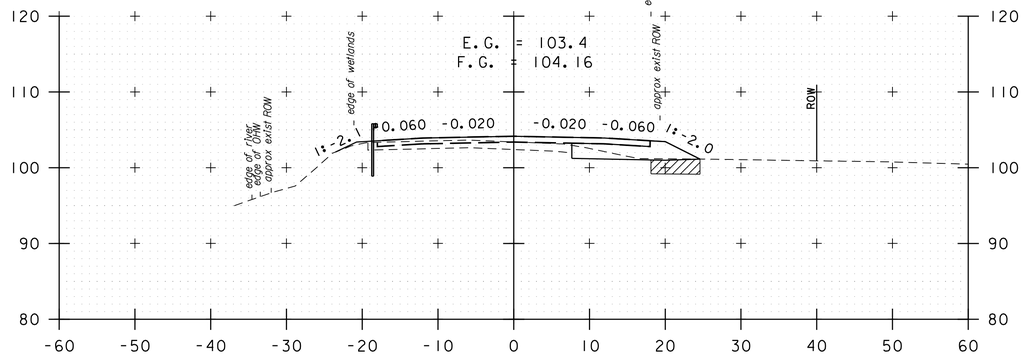
PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)

FILE NAME: z96b032xs_16300_25000.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G.BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G.BAKOS
CROSS SECTION SHEET 51	SHEET 228 OF 305

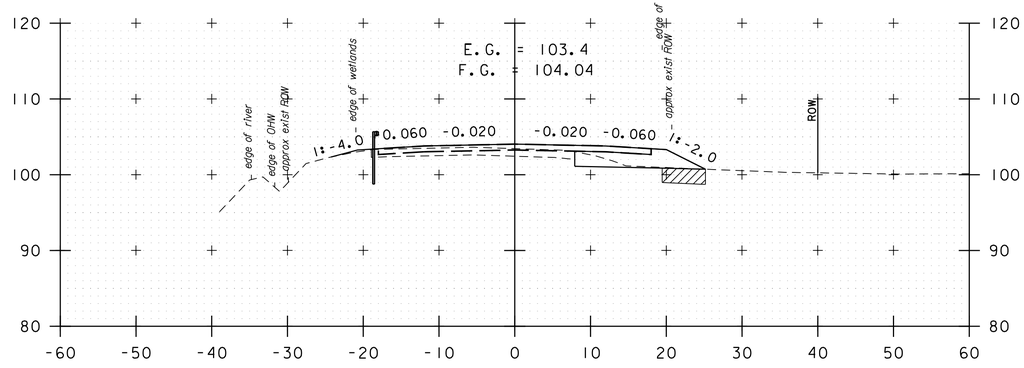




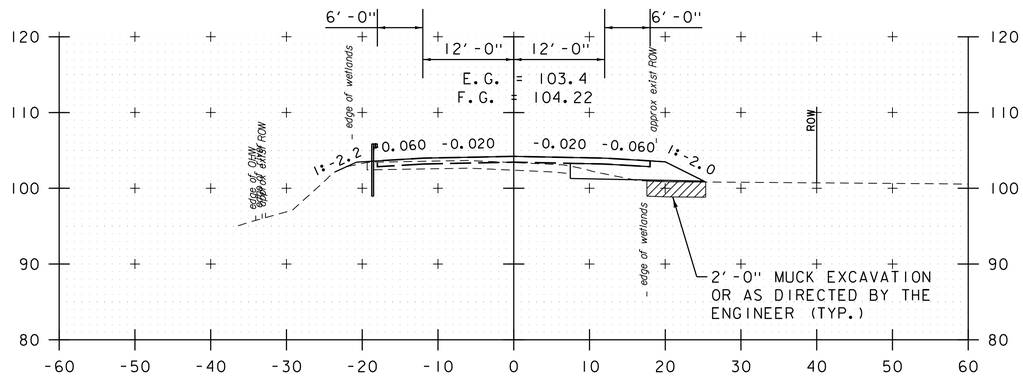
178+00



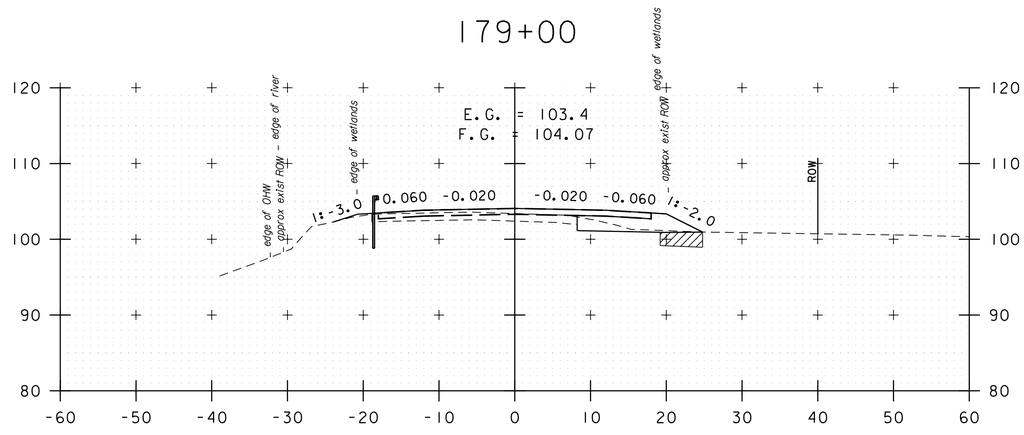
179+50



177+50



179+00



177+00

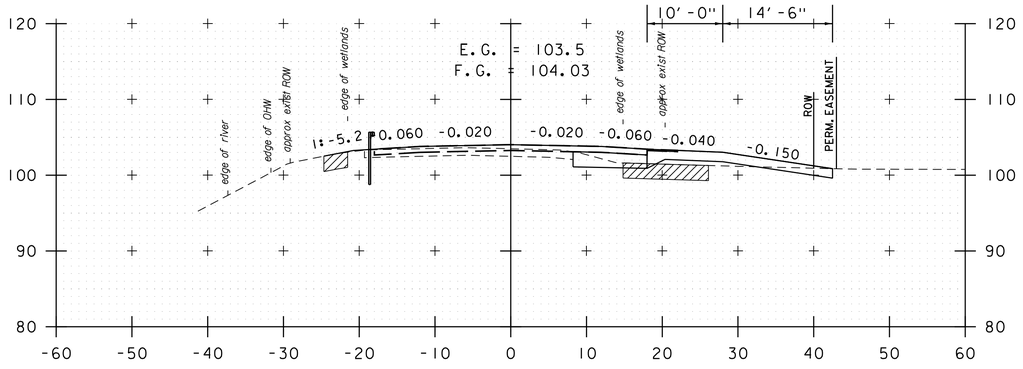
178+50

STA. 177+00 TO STA. 179+50

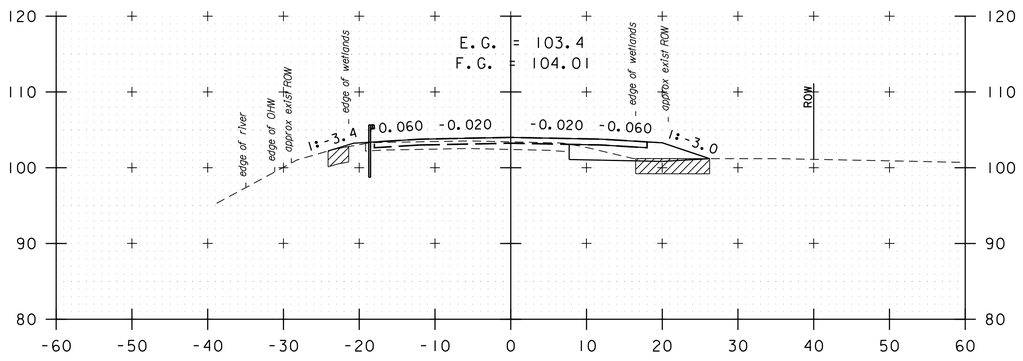
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_16300_25000.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 52

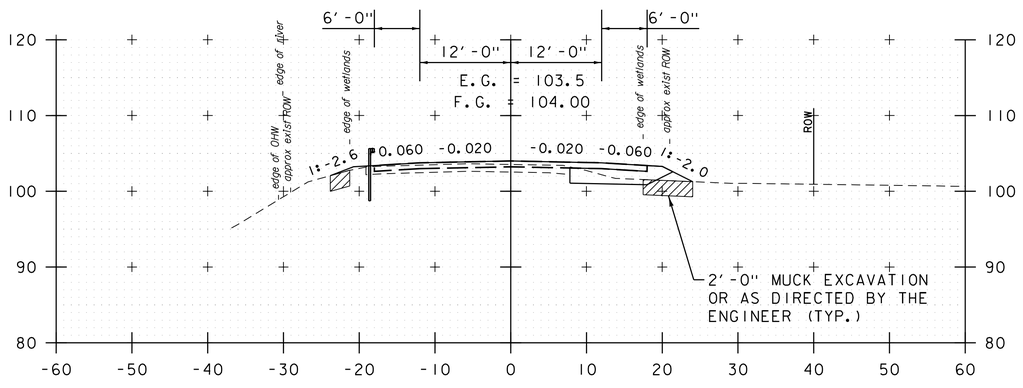
PLOT DATE: 3/6/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 229 OF 305



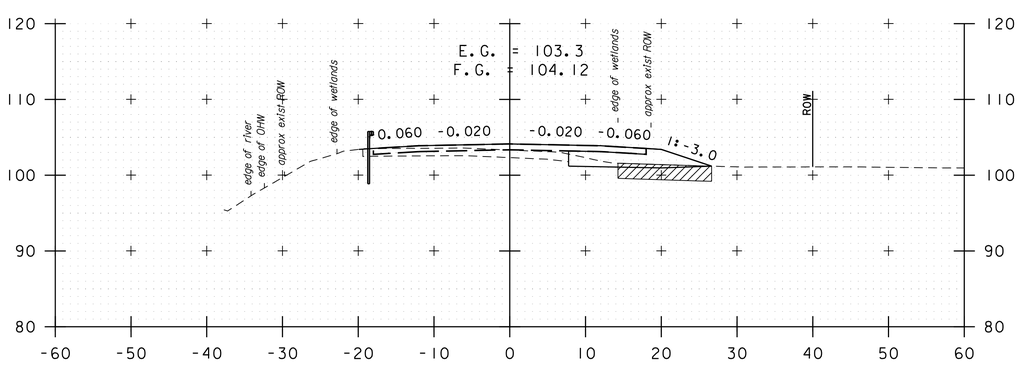
181+00 (DRIVE RT)



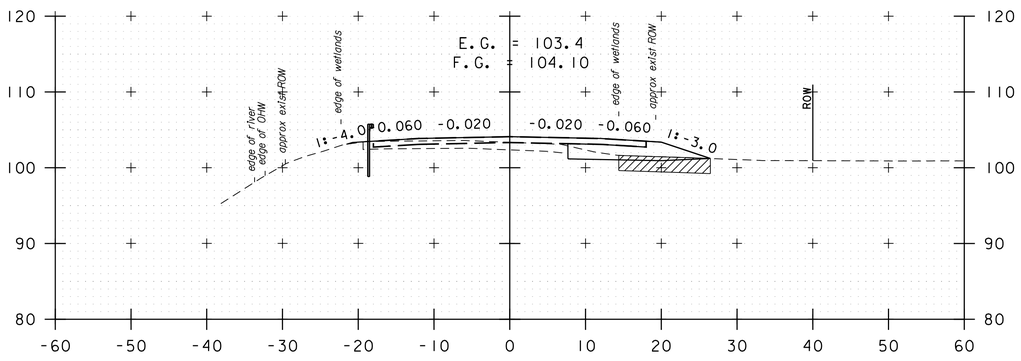
180+50



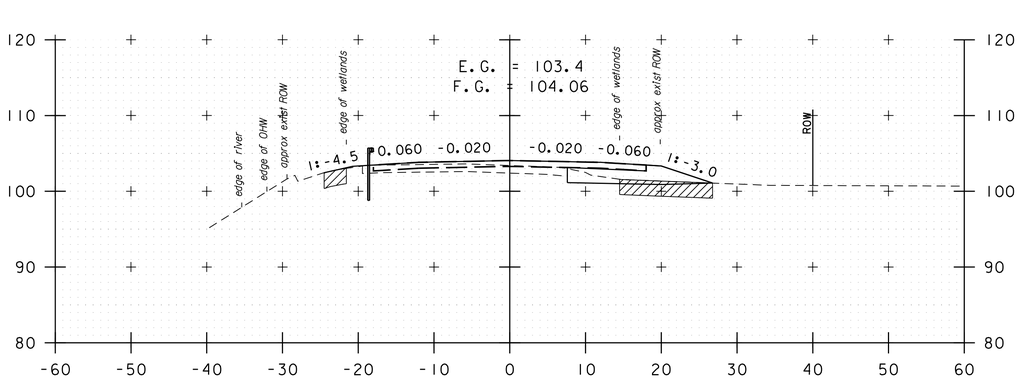
180+00



182+50



182+00



181+50

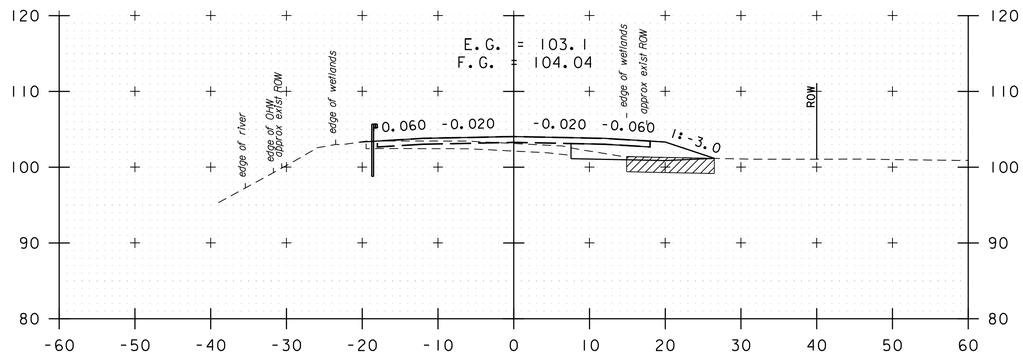
STA. 180+00 TO STA. 182+50

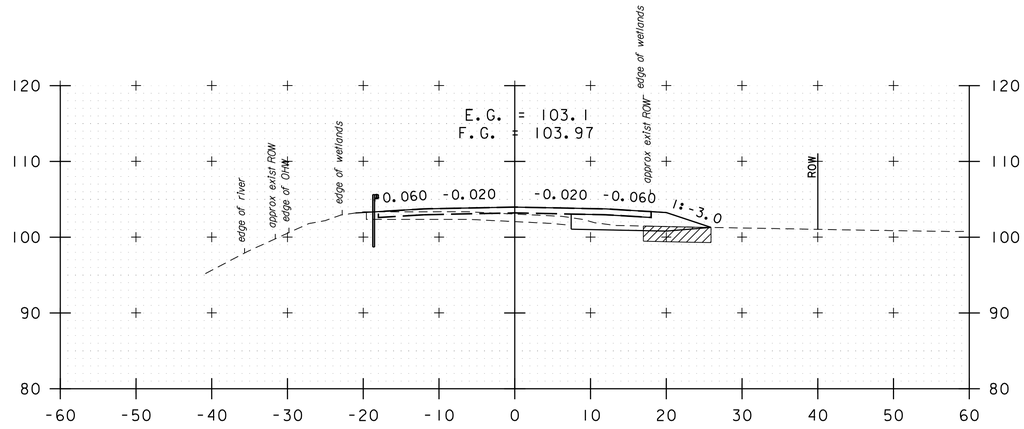
vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

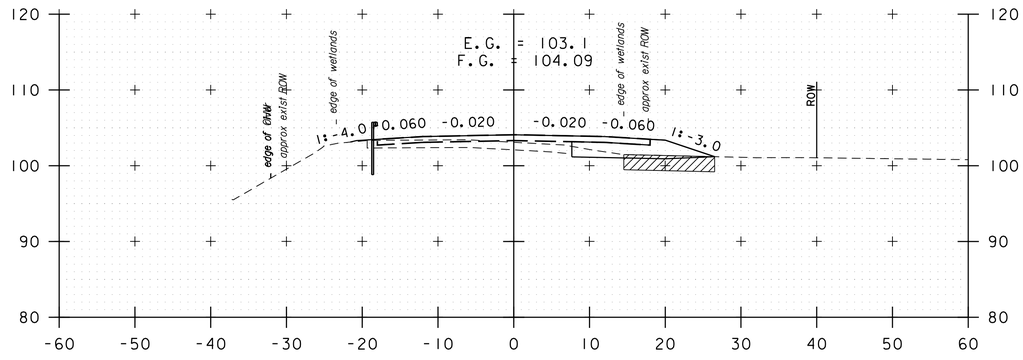
FILE NAME: z96b032xs_16300_25000.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 53

PLOT DATE: 3/6/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 230 OF 305

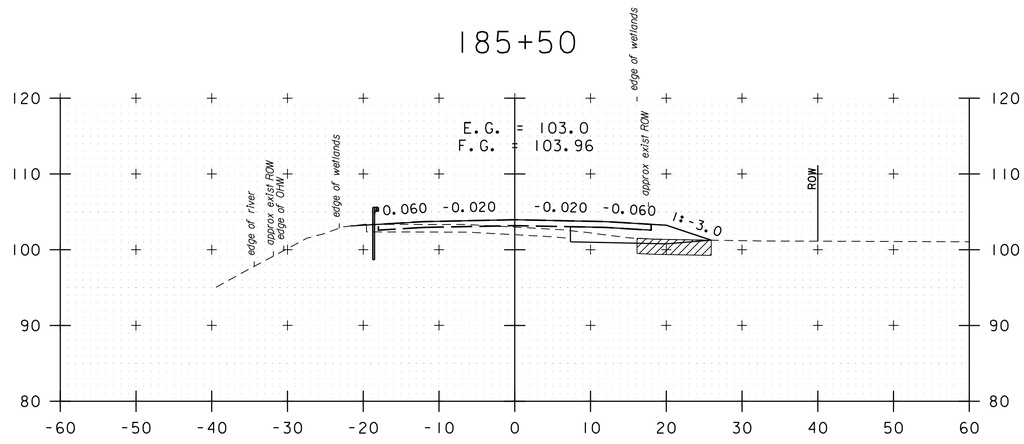




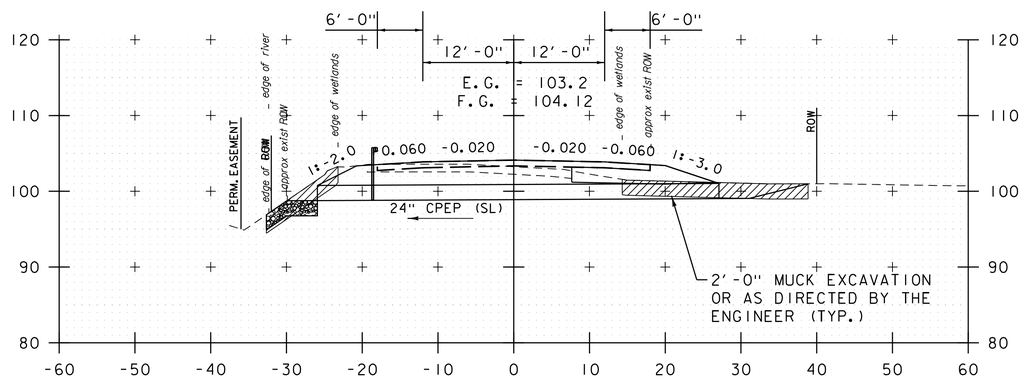
184+00



185+50

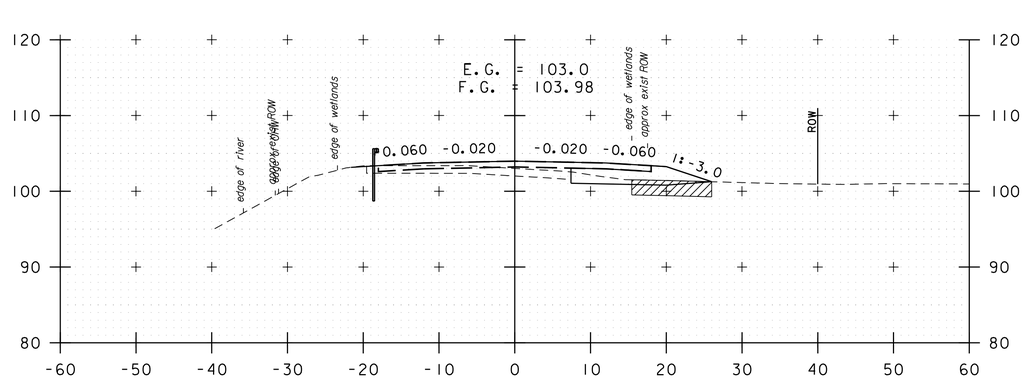


183+50



183+00 (NEW 24" CPEP)

185+00

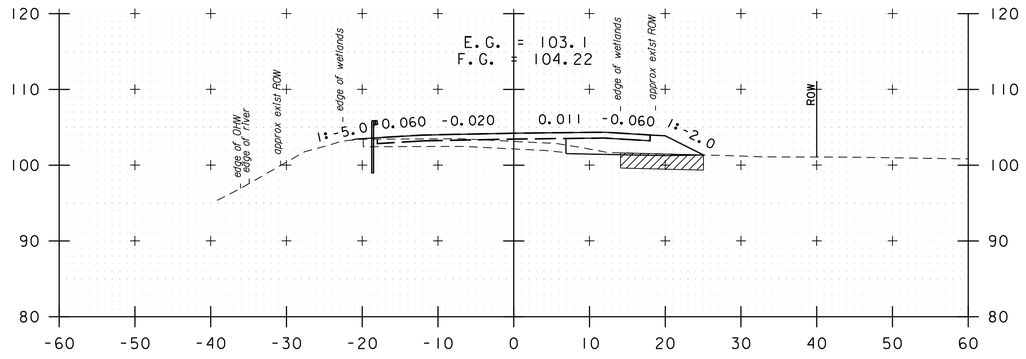


184+50

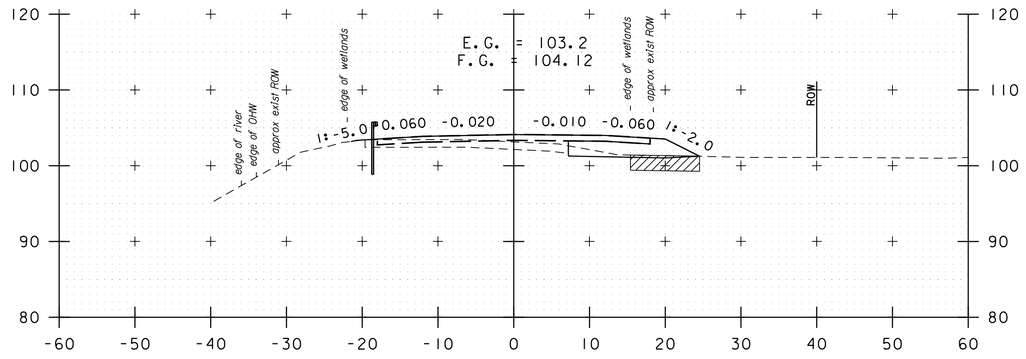
STA. 183+00 TO STA. 185+50

vhb

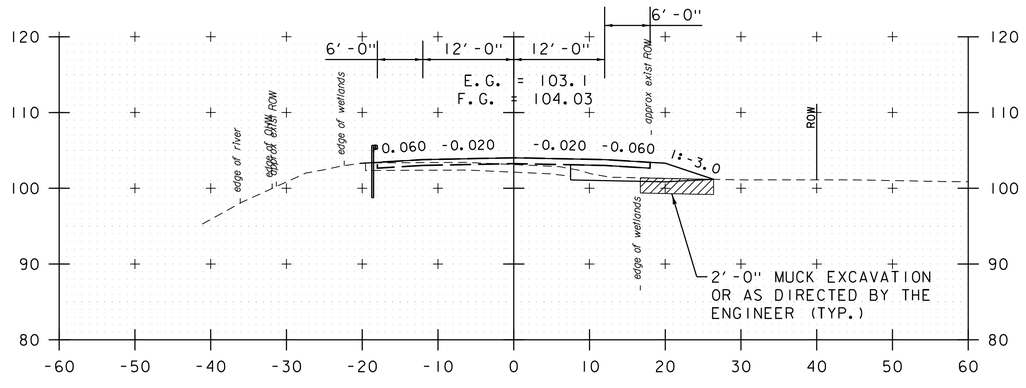
PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032xs_16300_25000.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G.BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G.BAKOS
CROSS SECTION SHEET 54	SHEET 231 OF 305



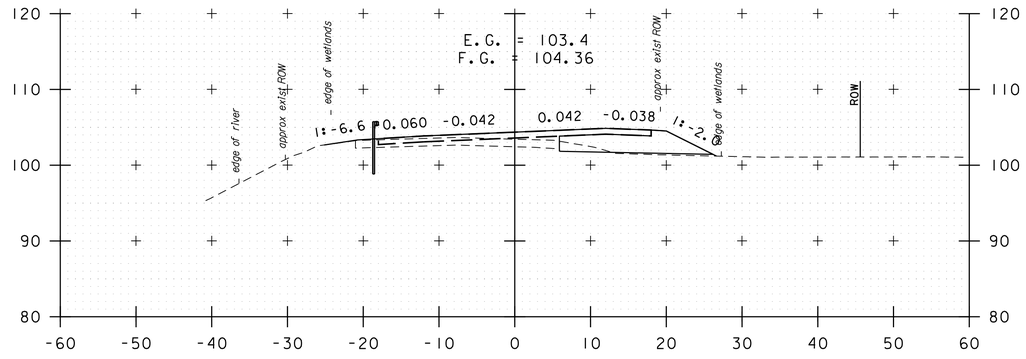
187+00



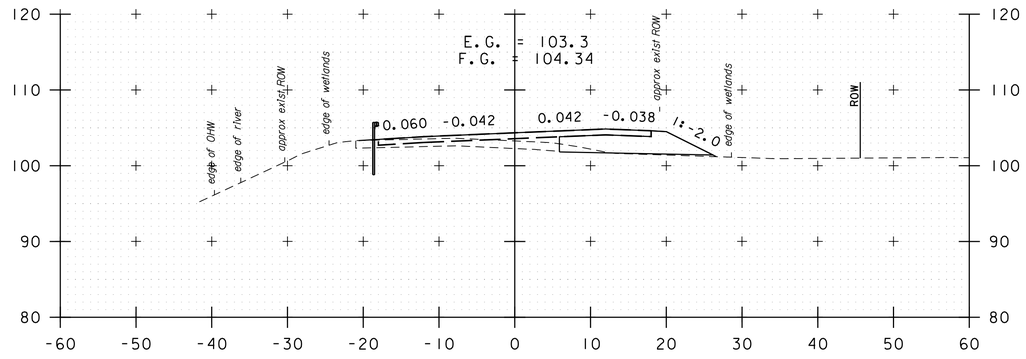
186+50



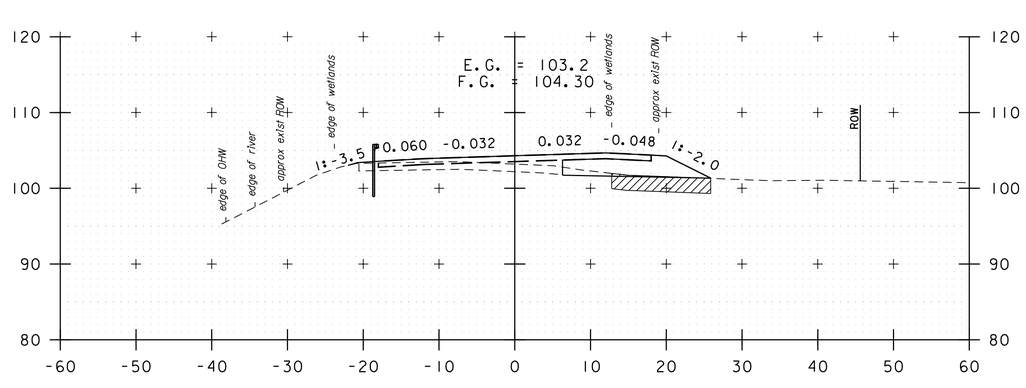
186+00



188+50



188+00



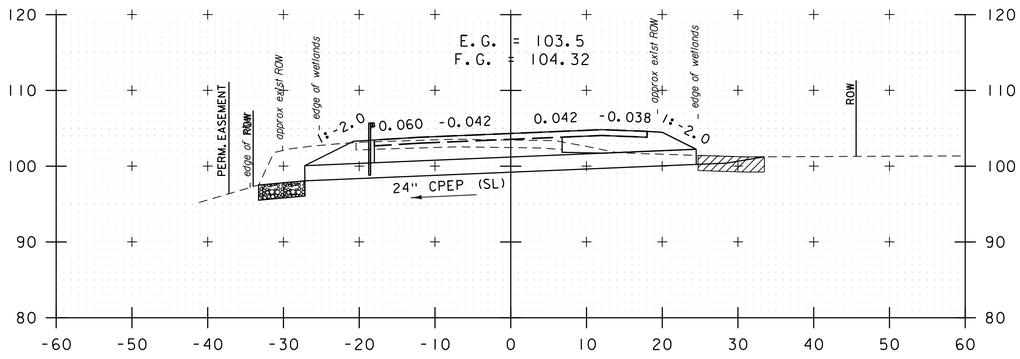
187+50

STA. 186+00 TO STA. 188+50

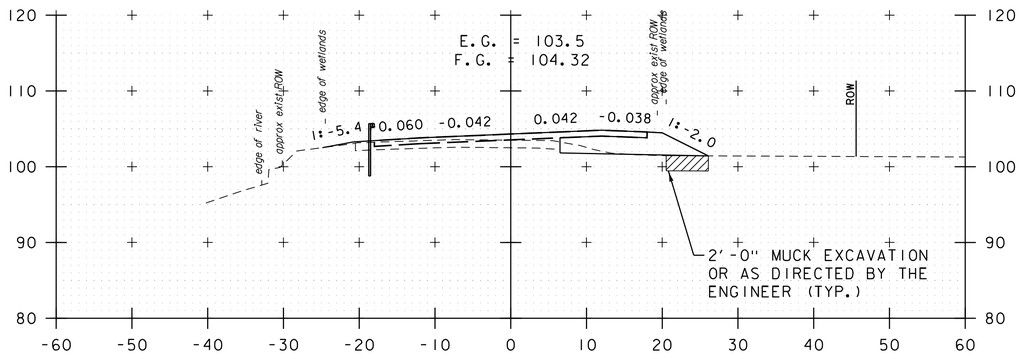
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_16300_25000.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 55

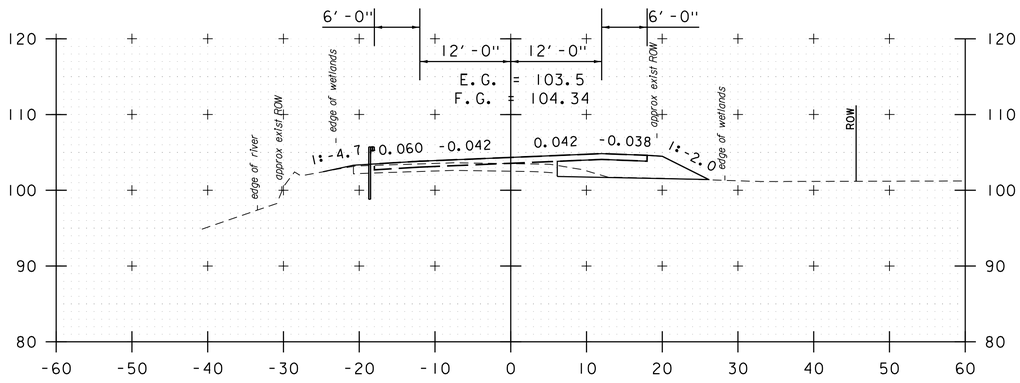
PLOT DATE: 3/6/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 232 OF 305



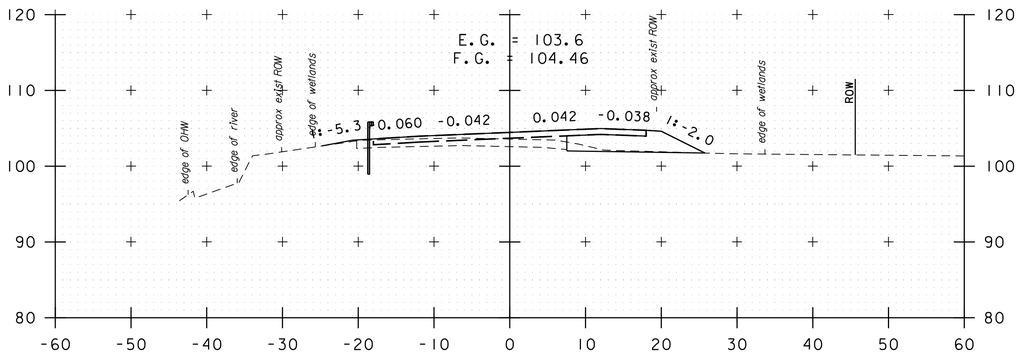
190+00 (NEW 24" CPEP)



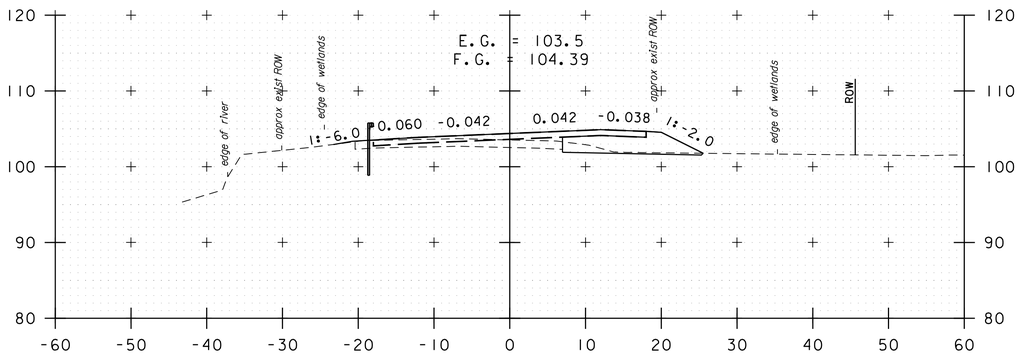
189+50



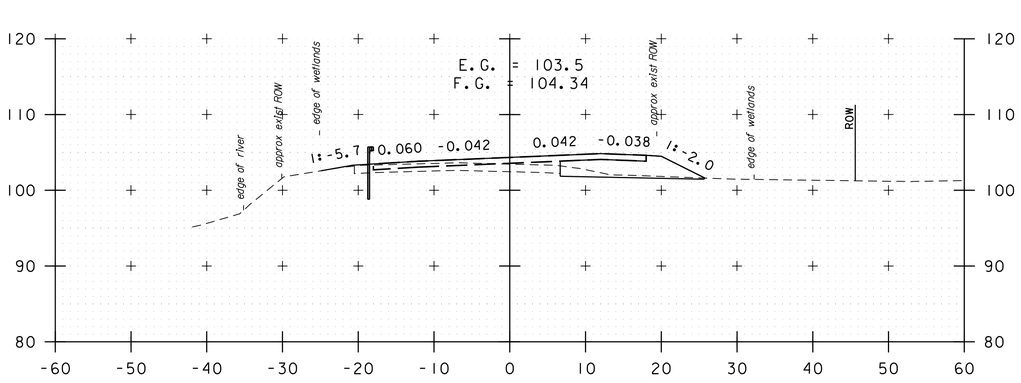
189+00



191+50



191+00



190+50

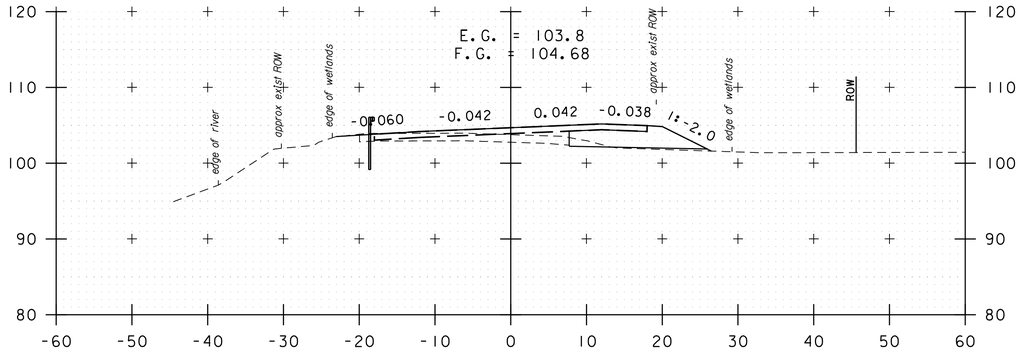
STA. 189+00 TO STA. 191+50

vhb

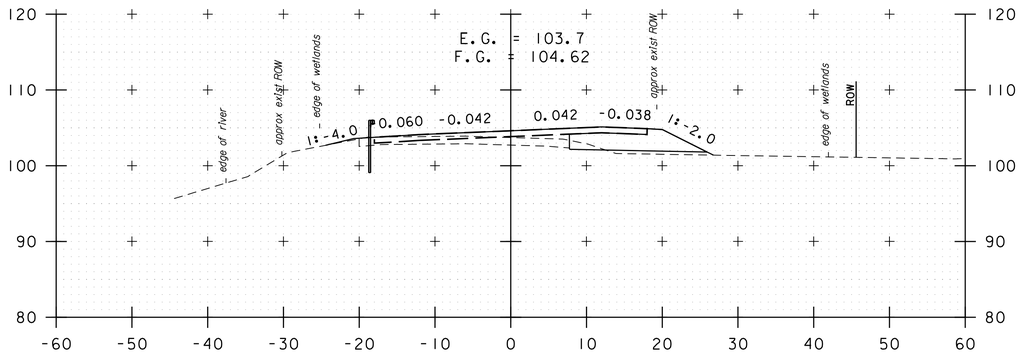
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_16300_25000.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 56

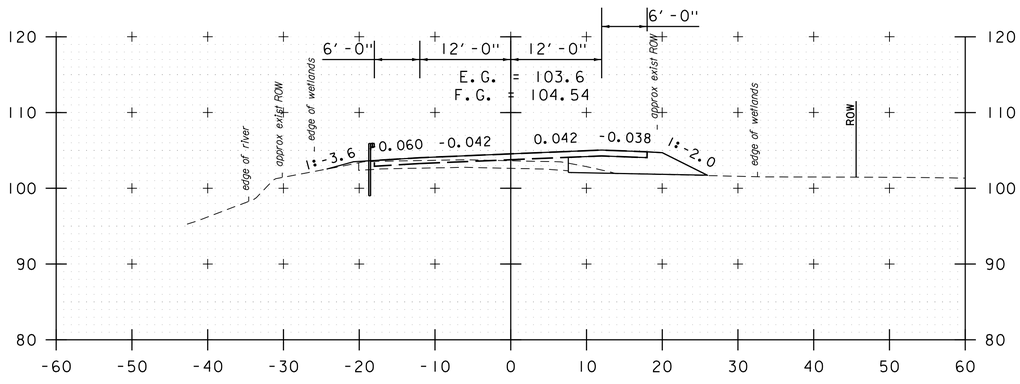
PLOT DATE: 3/6/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 233 OF 305



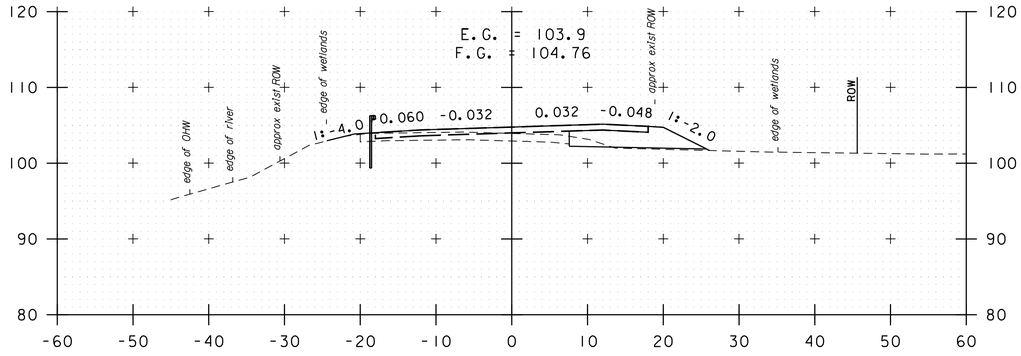
193+00



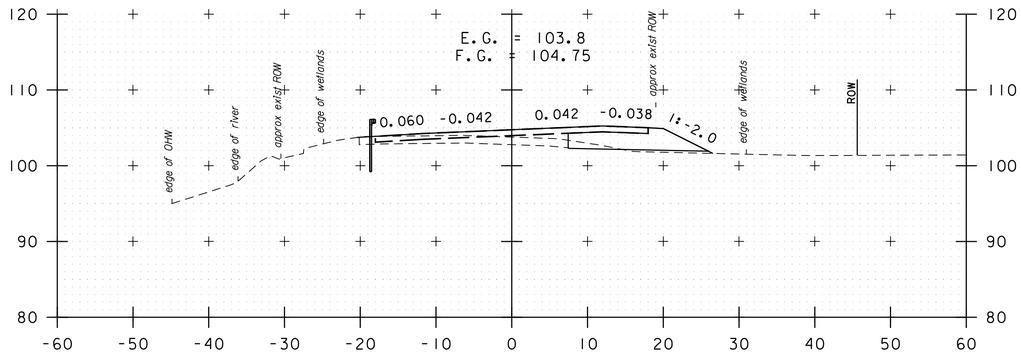
192+50



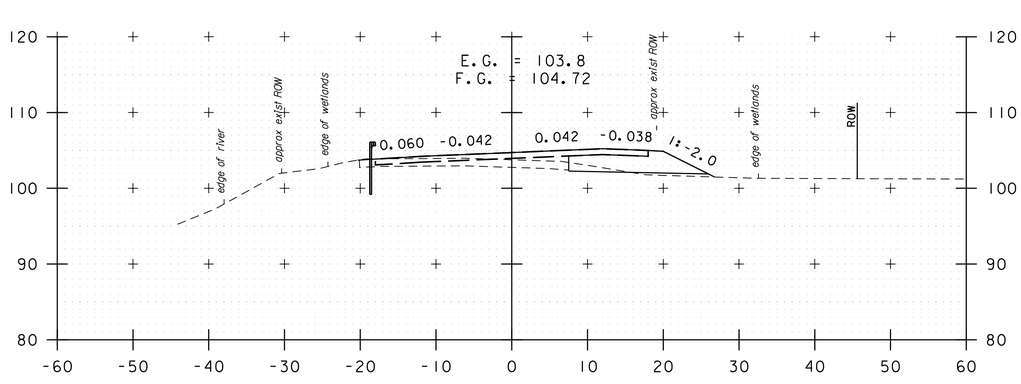
192+00



194+50



194+00



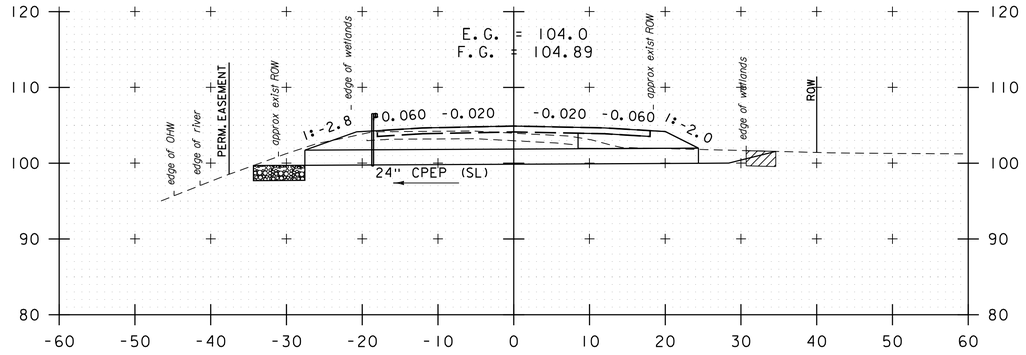
193+50

STA. 192+00 TO STA. 194+50

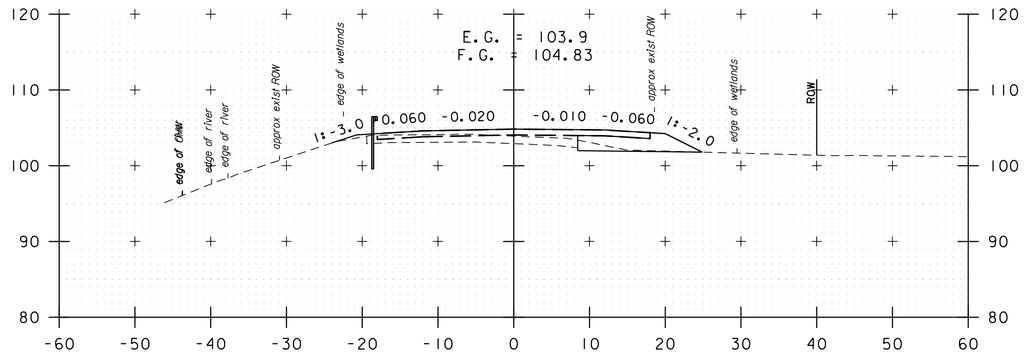
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_16300_25000.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 57

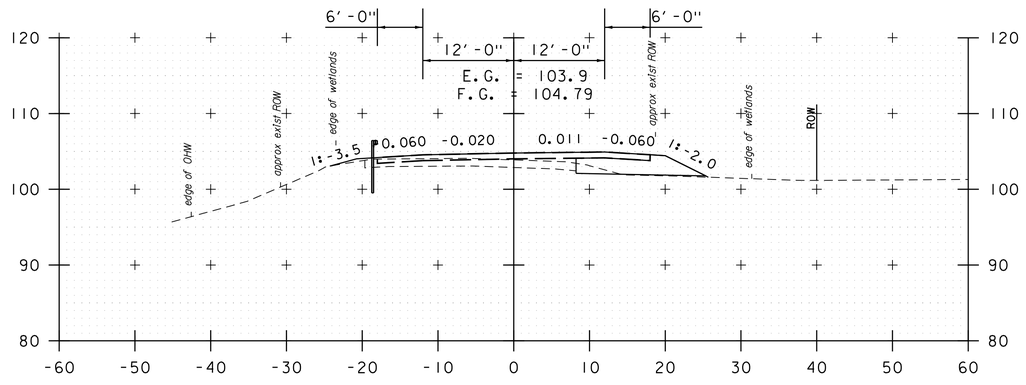
PLOT DATE: 3/6/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 234 OF 305



196+00 (NEW 24" CPEP)

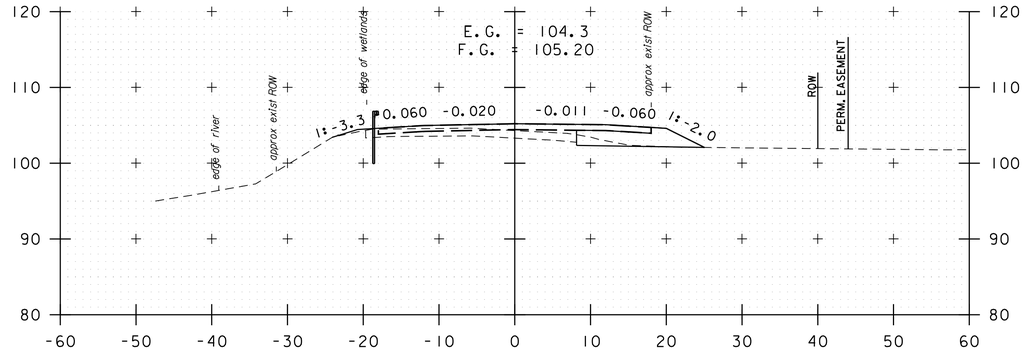


195+50

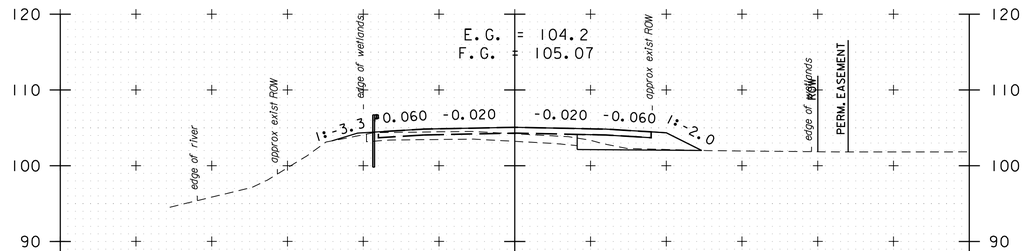


195+00

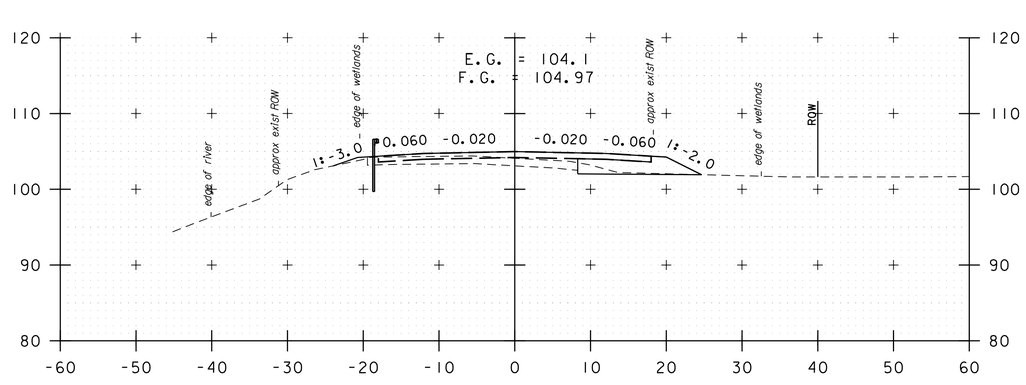
197+50



197+00



196+50



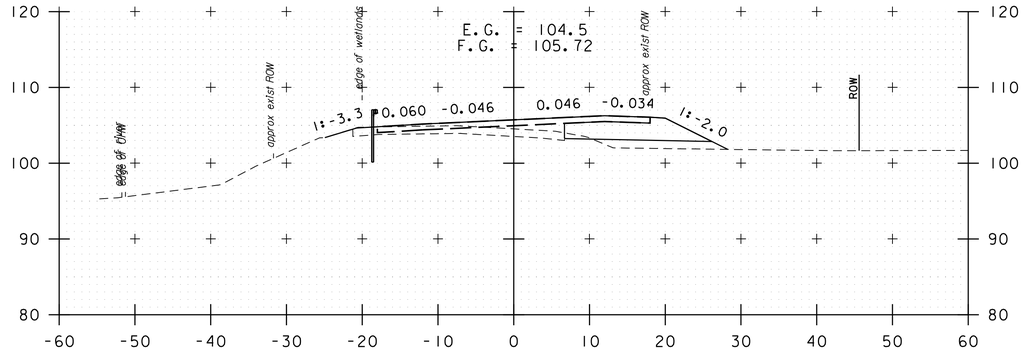
STA. 195+00 TO STA. 197+50

vhb

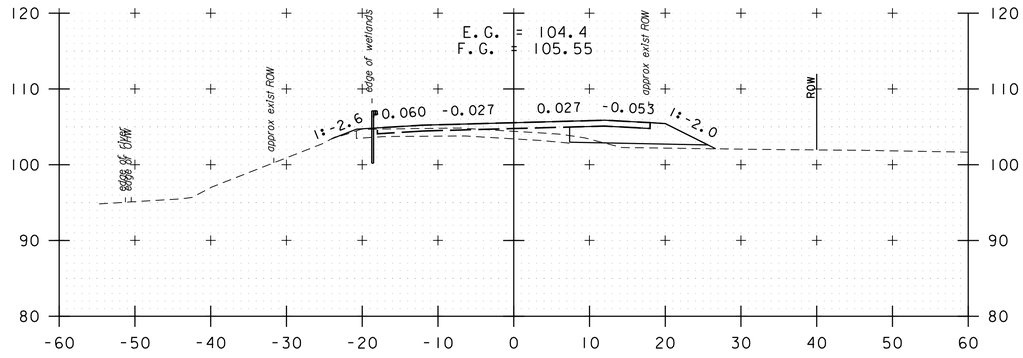
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_16300_25000.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 58

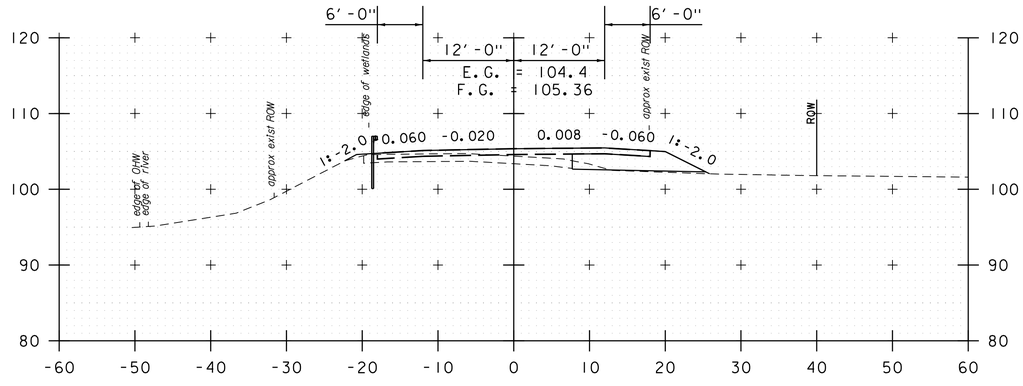
PLOT DATE: 3/6/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 235 OF 305



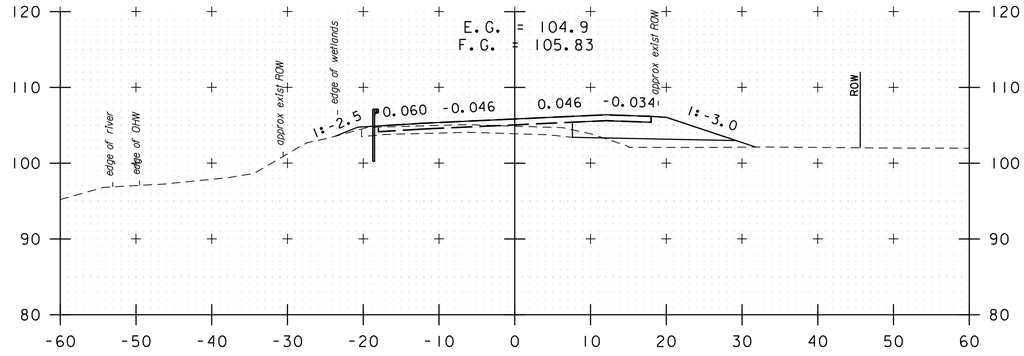
199+00



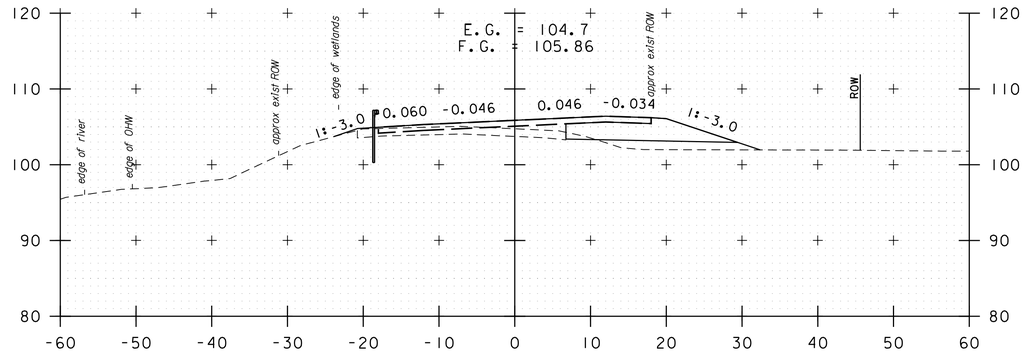
198+50



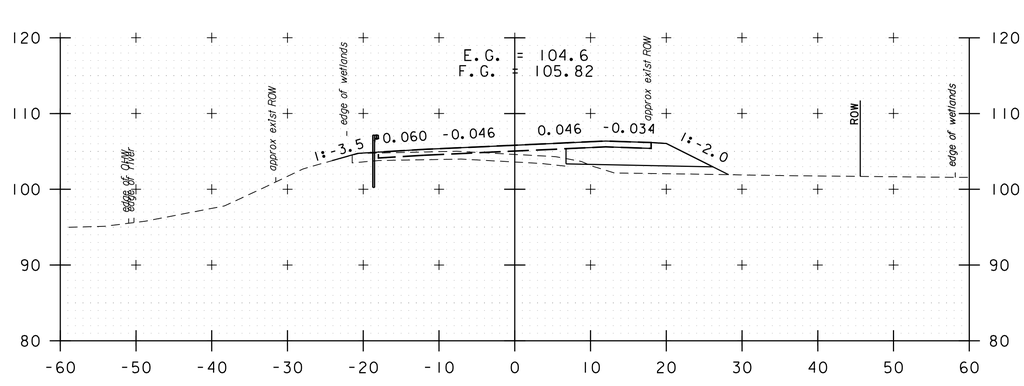
198+00



200+50



200+00



199+50

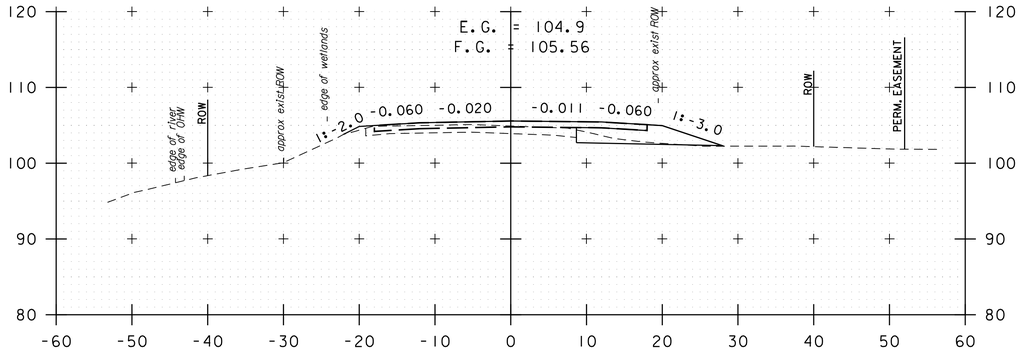
STA. 198+00 TO STA. 200+50

vhb

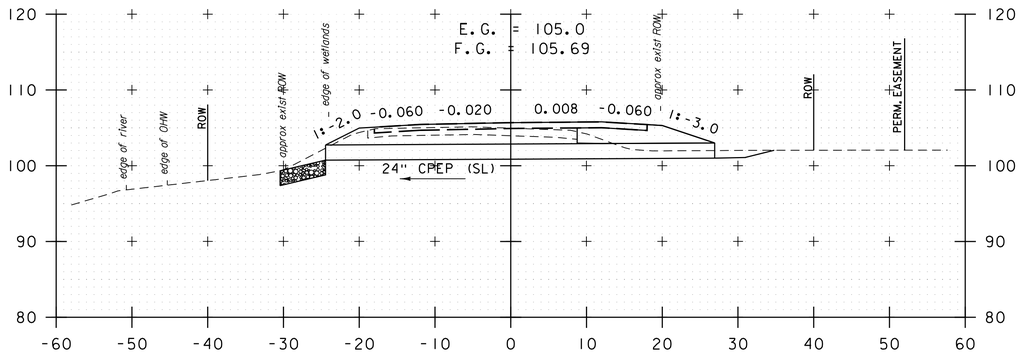
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_16300_25000.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 59

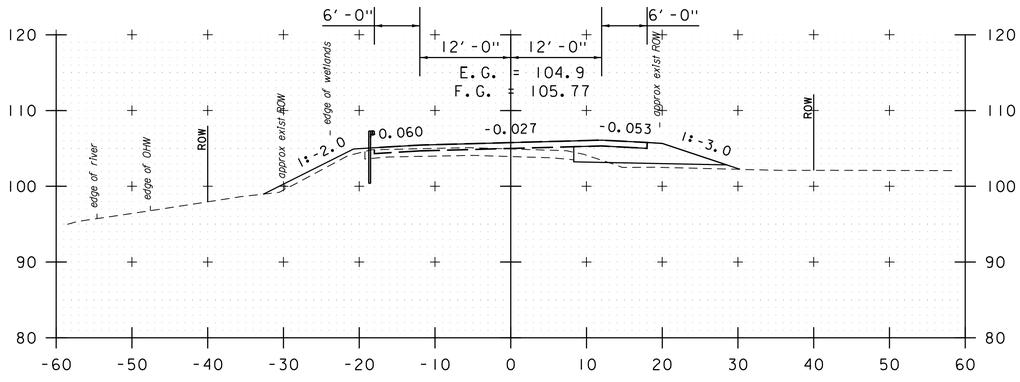
PLOT DATE: 3/6/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 236 OF 305



202+00

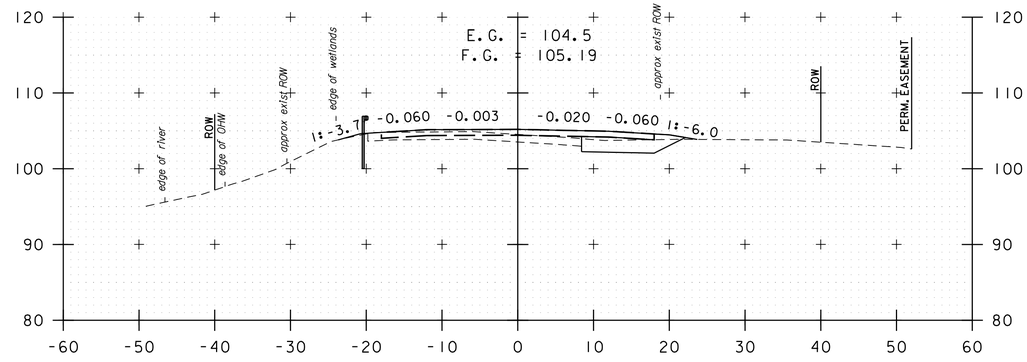


201+50 (NEW 24" CPEP)

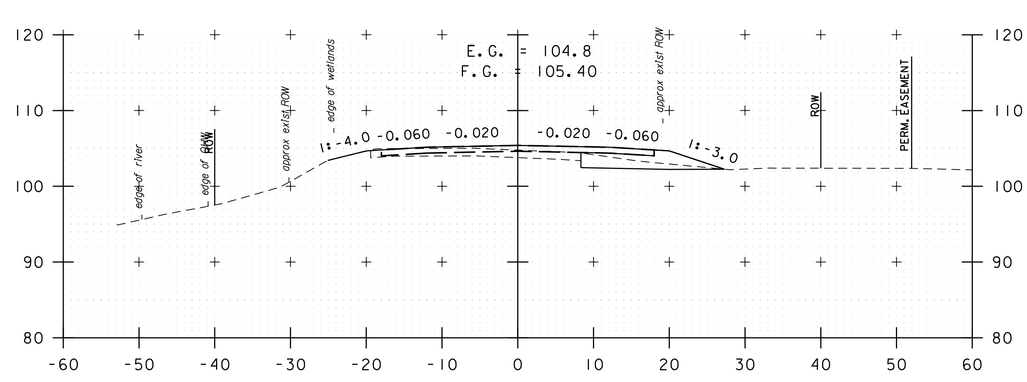


201+00

203+50



203+00



202+50

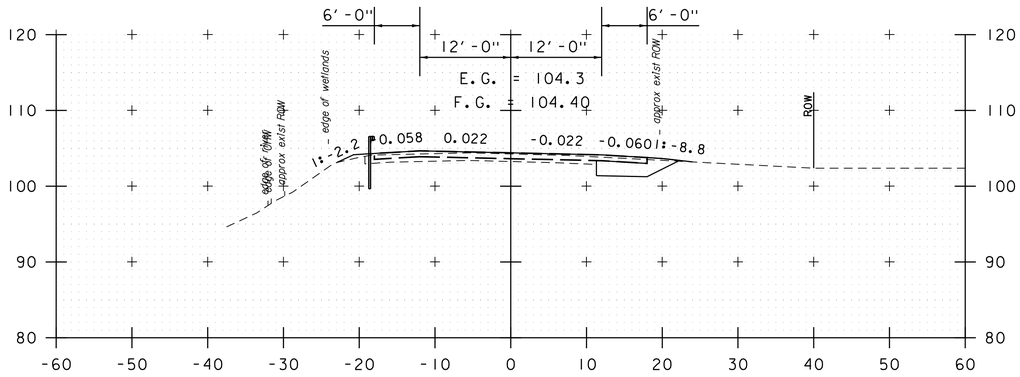
STA. 201+00 TO STA. 203+50

vhb

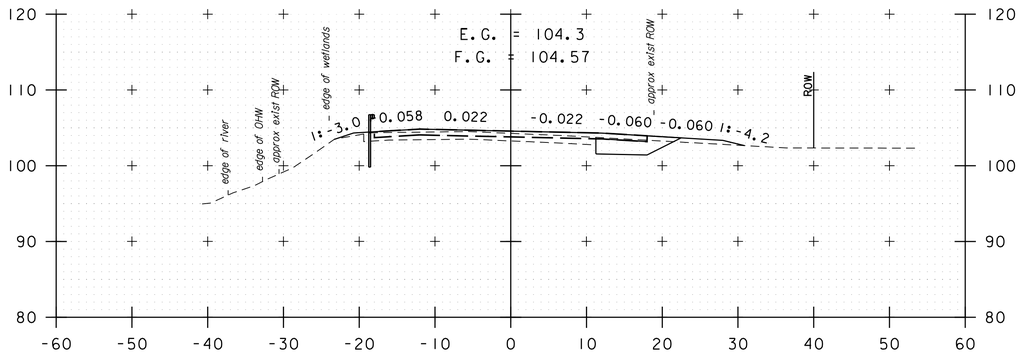
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_16300_25000.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 60

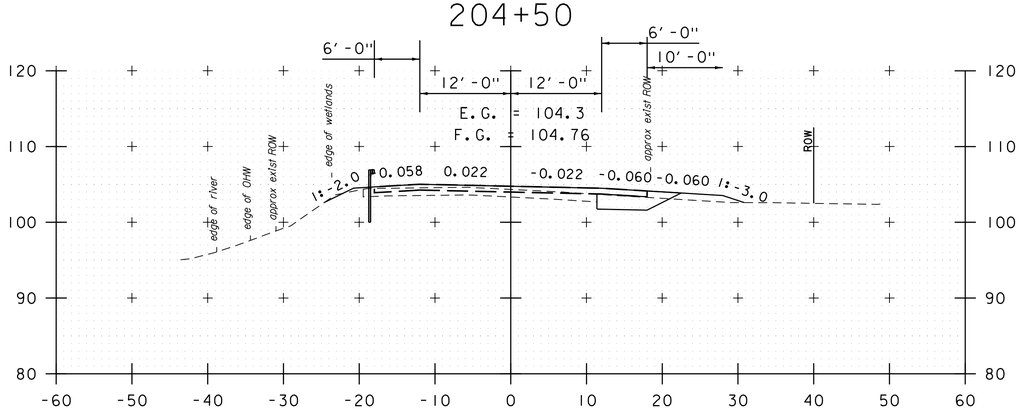
PLOT DATE: 3/6/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 237 OF 305



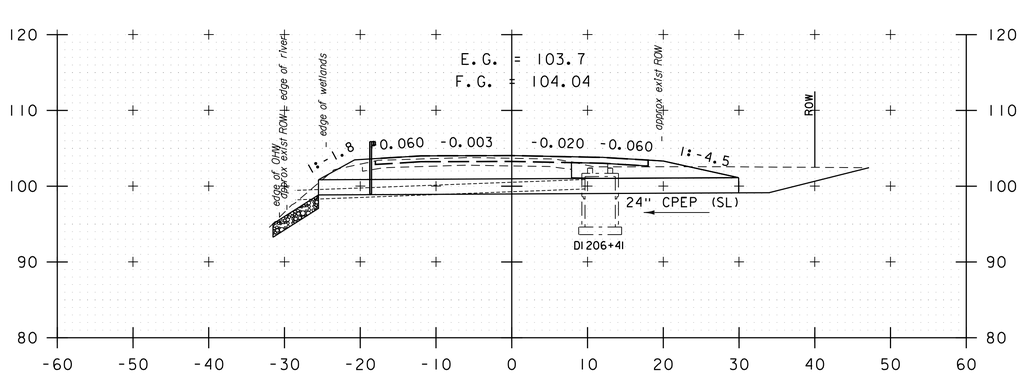
205+00



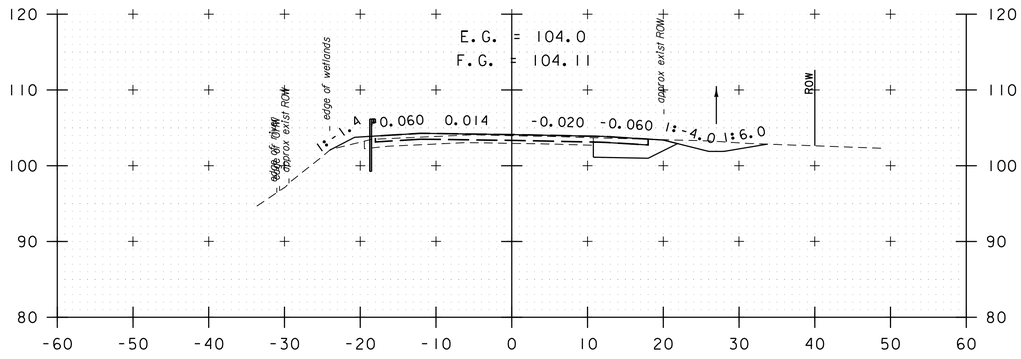
204+50



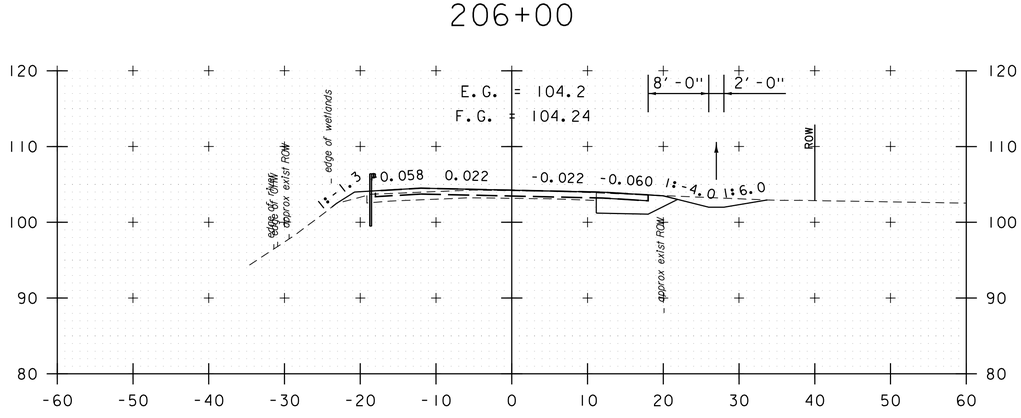
204+00



206+50 (NEW 24" CPEP)



206+00



205+50

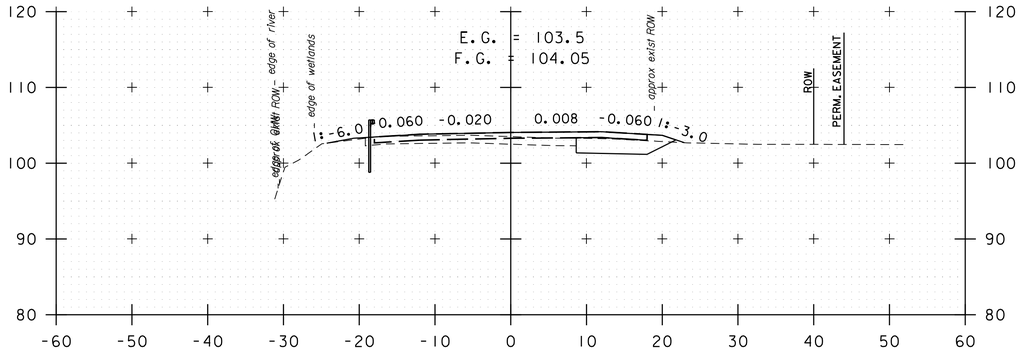
STA. 204+00 TO STA. 206+50

vhb

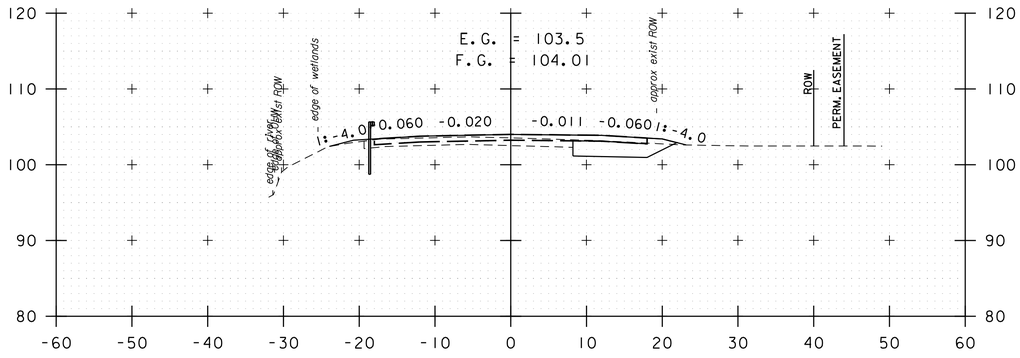
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_16300_25000.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 61

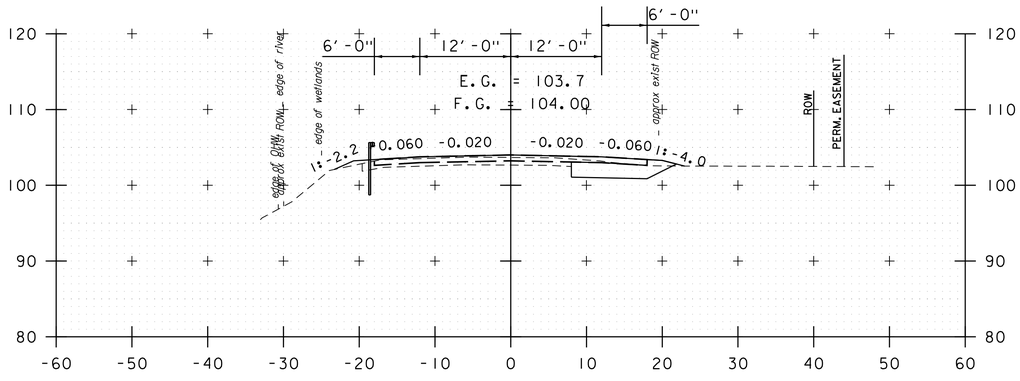
PLOT DATE: 3/6/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 238 OF 305



208+00

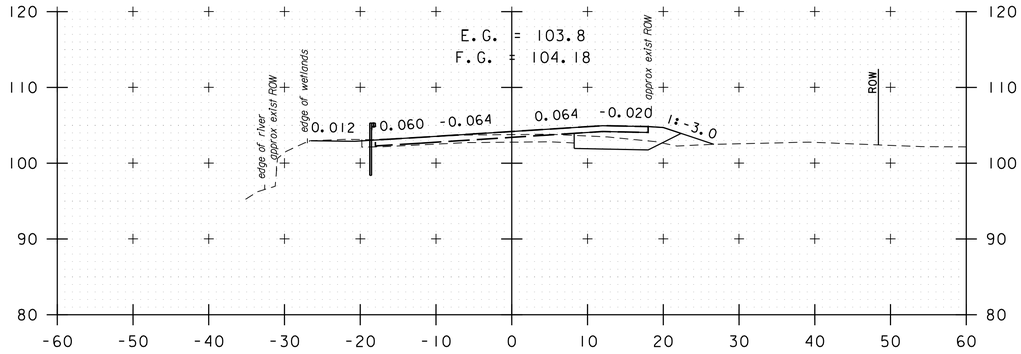


207+50

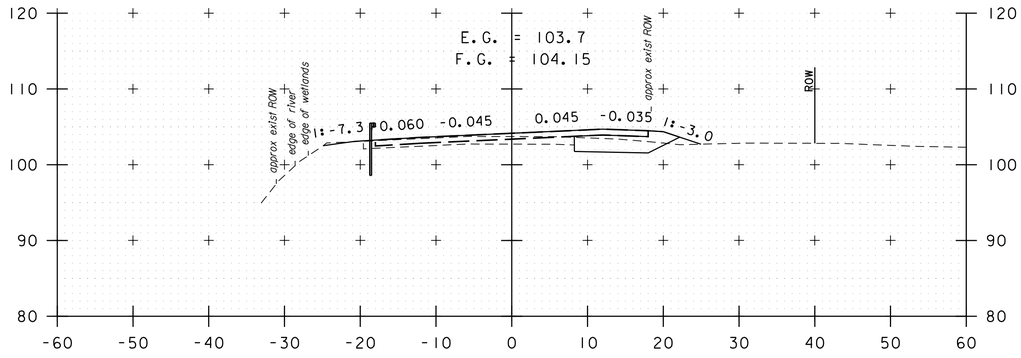


207+00

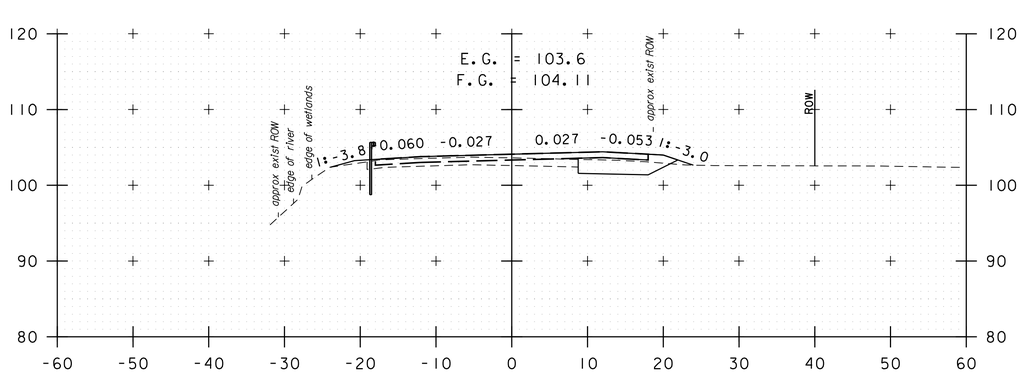
209+50



209+00



208+50



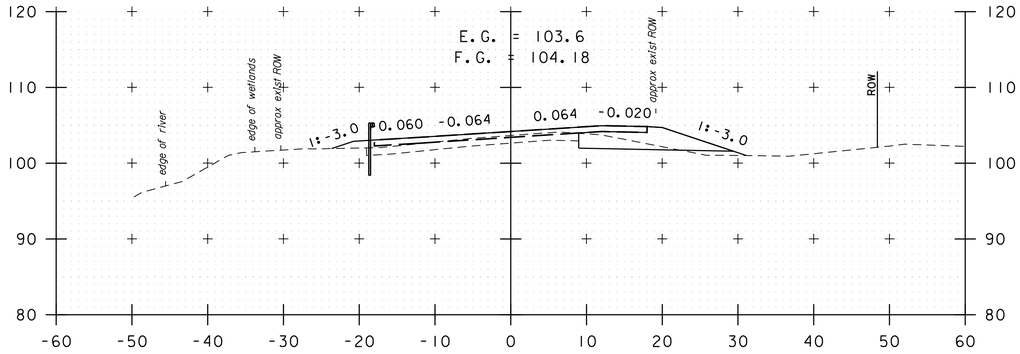
STA. 207+00 TO STA. 209+50

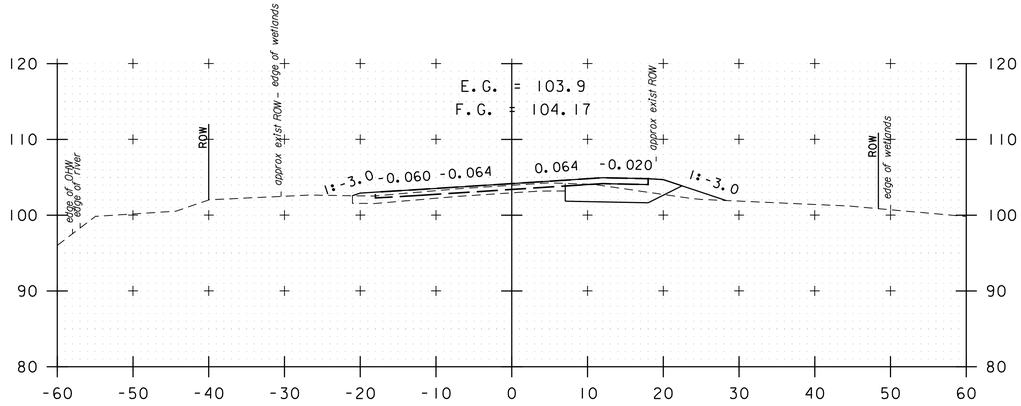
vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

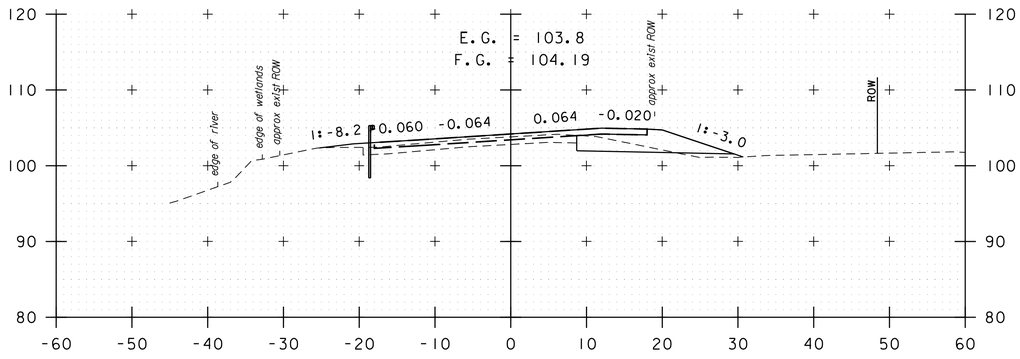
FILE NAME: z96b032xs_16300_25000.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 62

PLOT DATE: 3/6/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 239 OF 305

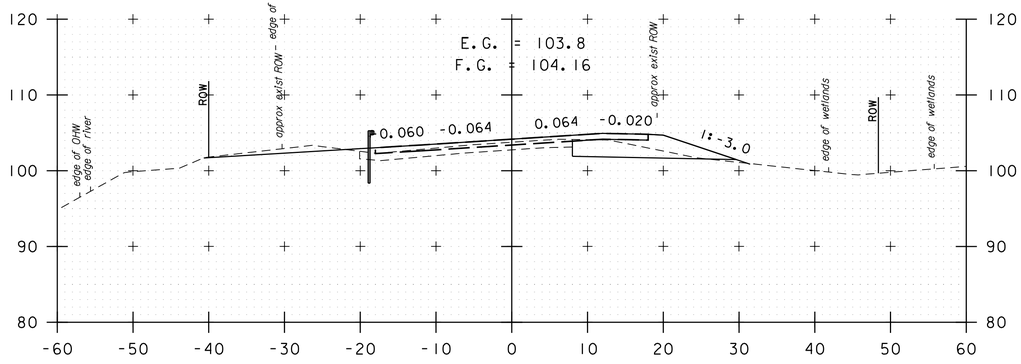




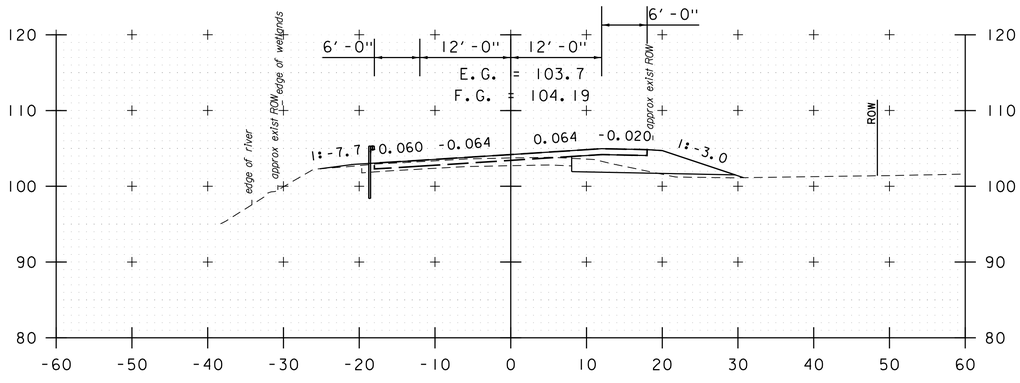
211+00



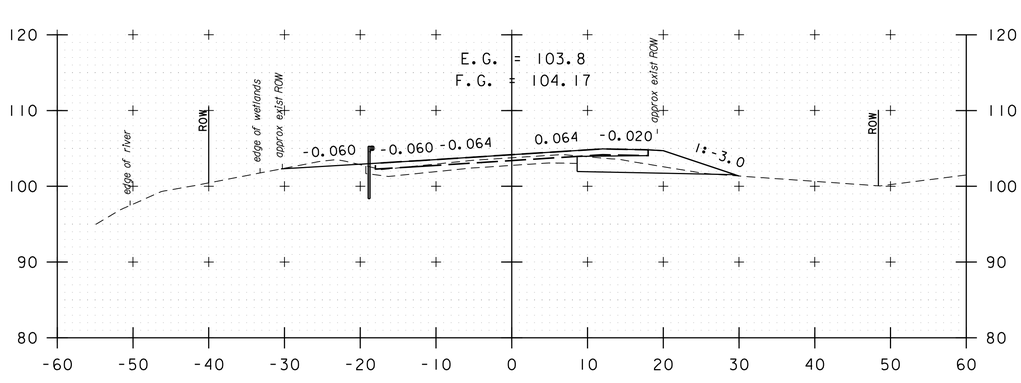
212+50



210+50



212+00



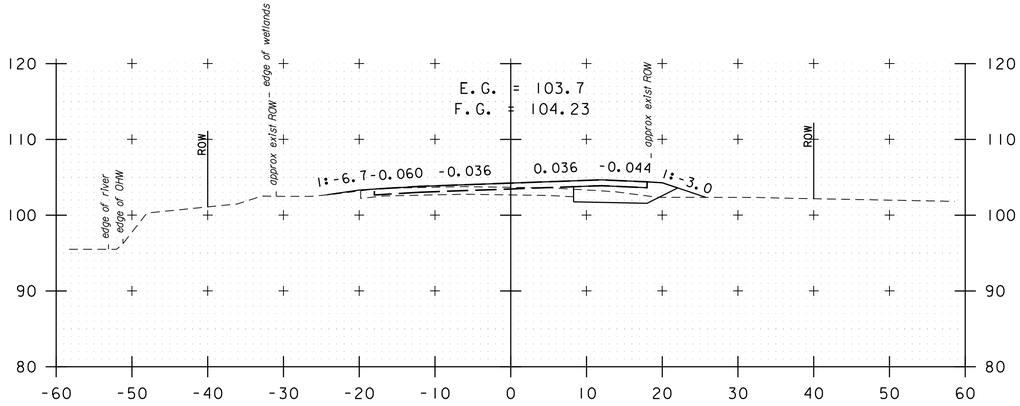
210+00

211+50

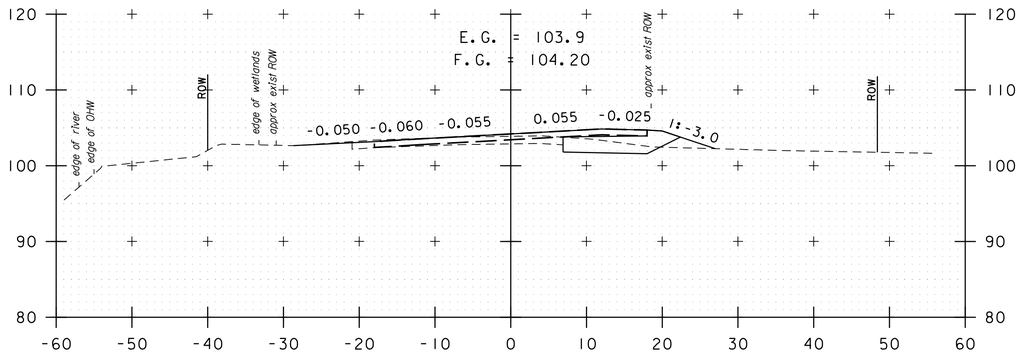
STA. 210+00 TO STA. 212+50

vhb

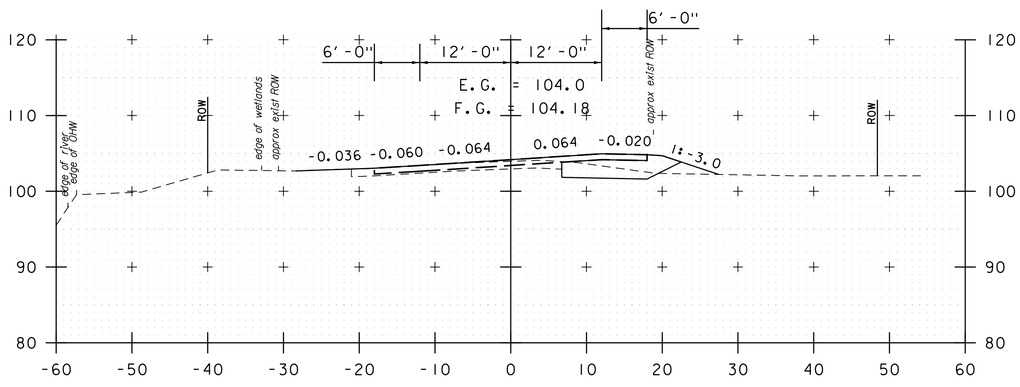
PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032xs_16300_25000.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G.BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G.BAKOS
CROSS SECTION SHEET 63	SHEET 240 OF 305



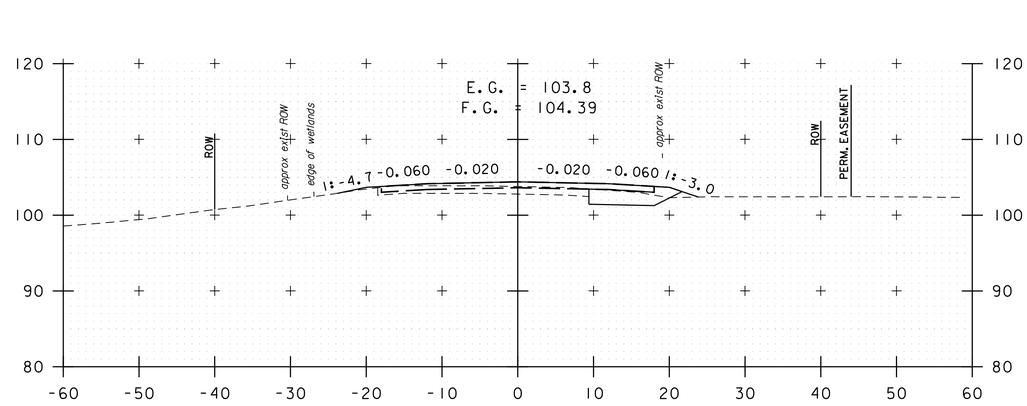
214+00



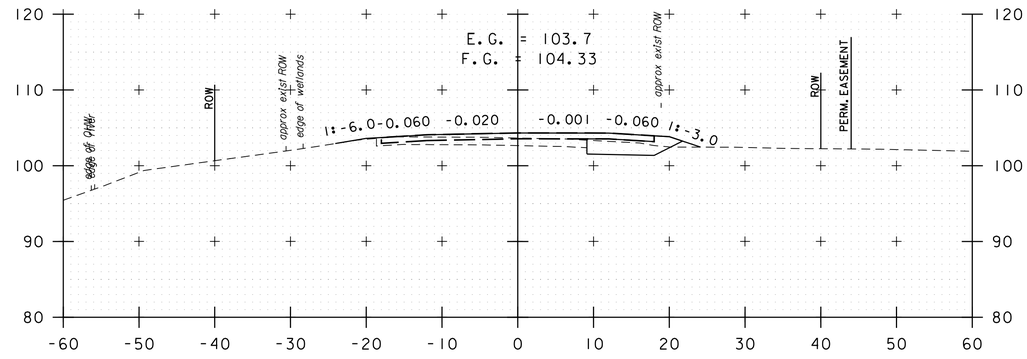
213+50



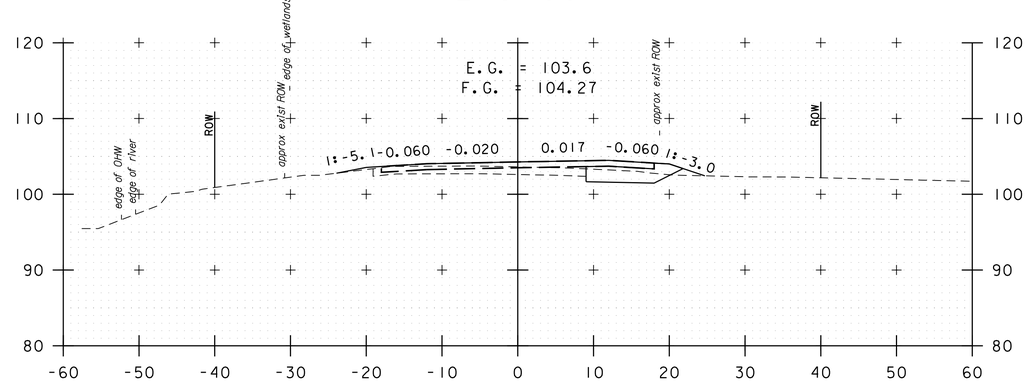
213+00



215+50



215+00



214+50

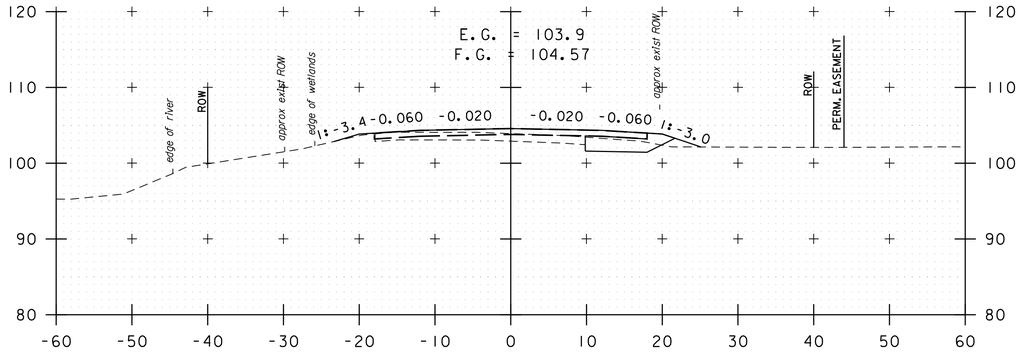
STA. 213+00 TO STA. 215+50

vhb

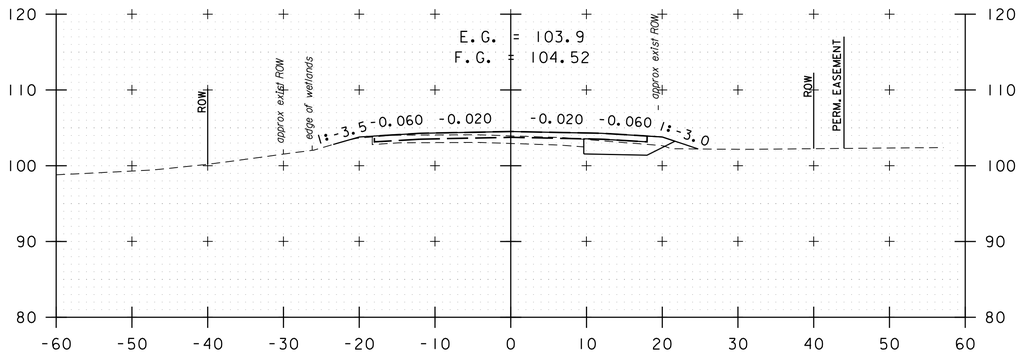
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_16300_25000.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 64

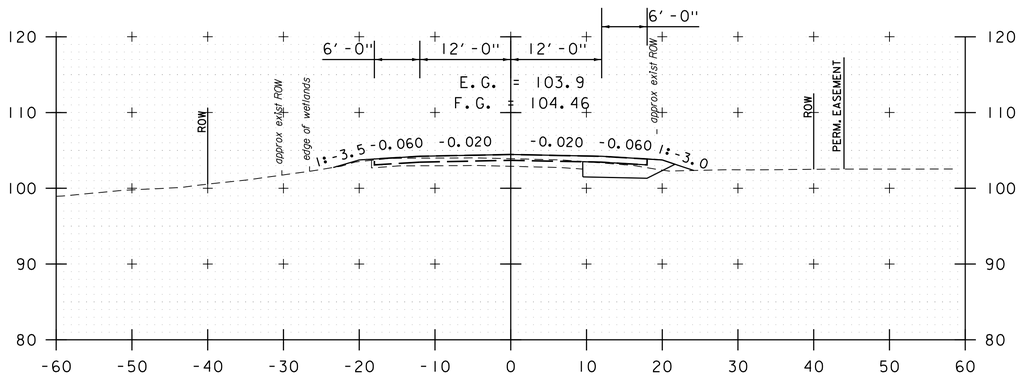
PLOT DATE: 3/6/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 241 OF 305



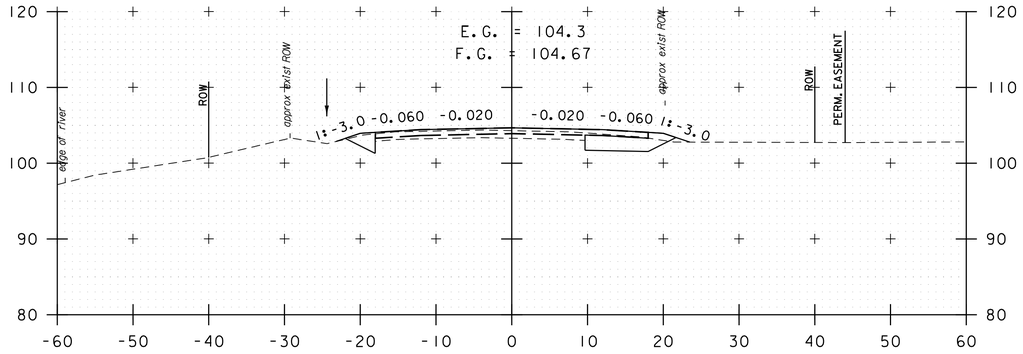
217+00



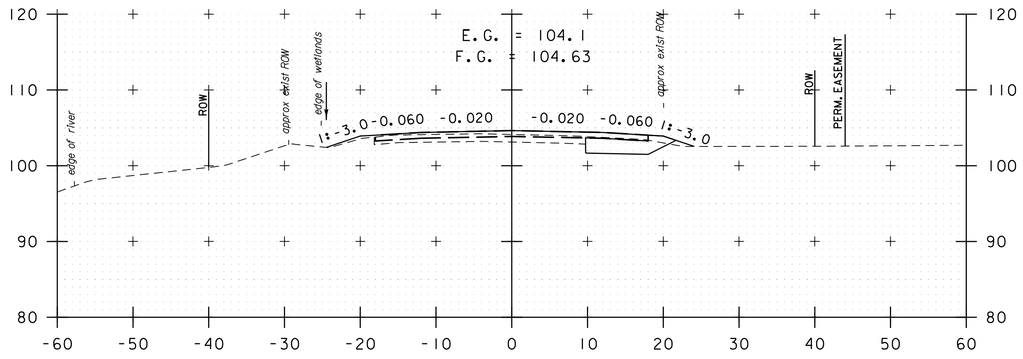
216+50



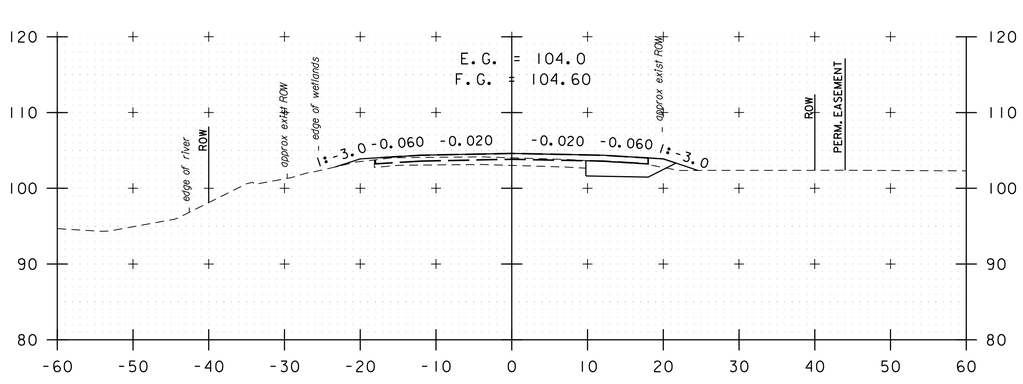
216+00



218+50



218+00



217+50

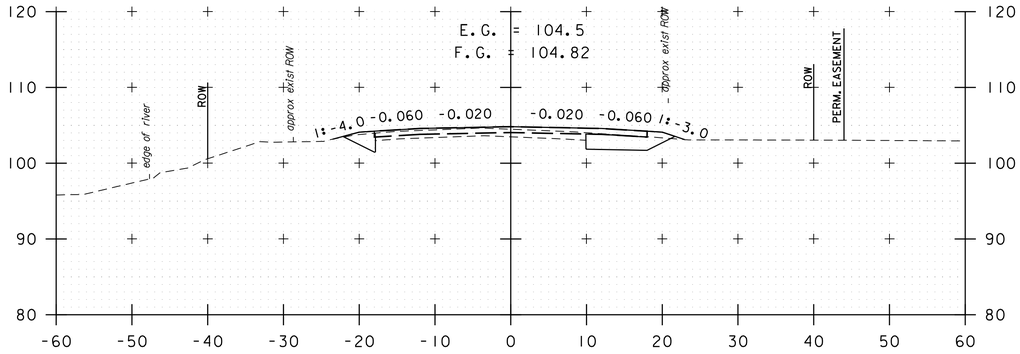
STA. 216+00 TO STA. 218+50

vhb

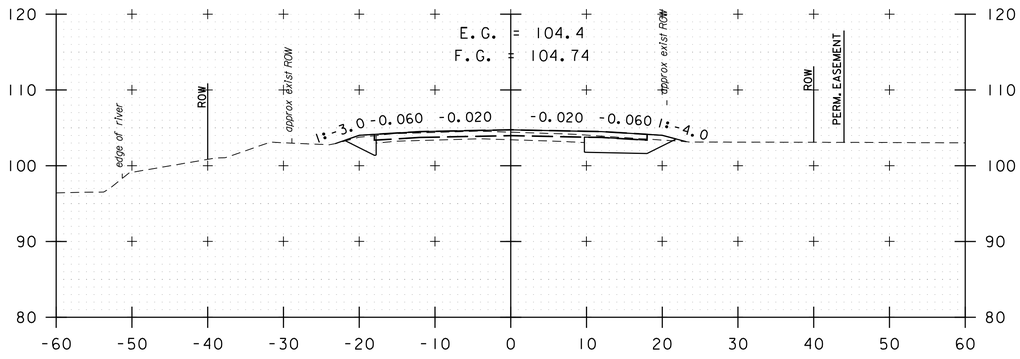
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_16300_25000.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 65

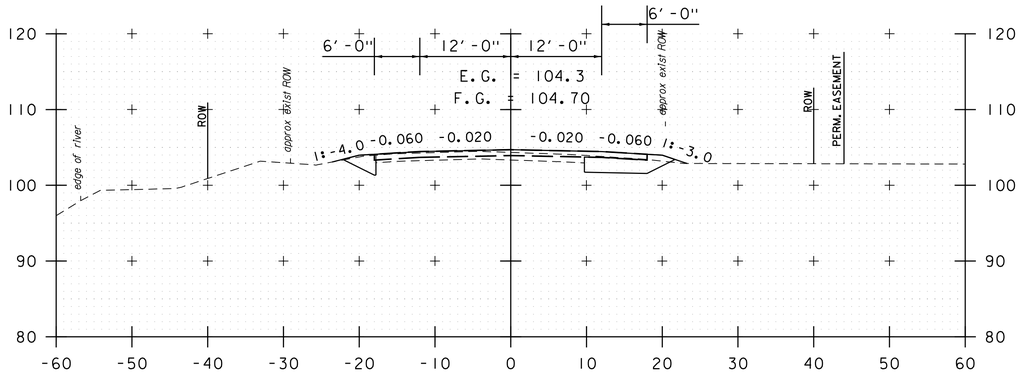
PLOT DATE: 3/6/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 242 OF 305



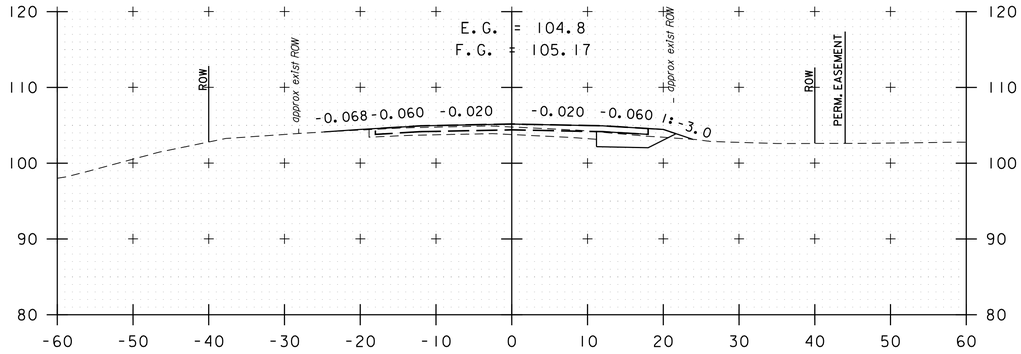
220+00



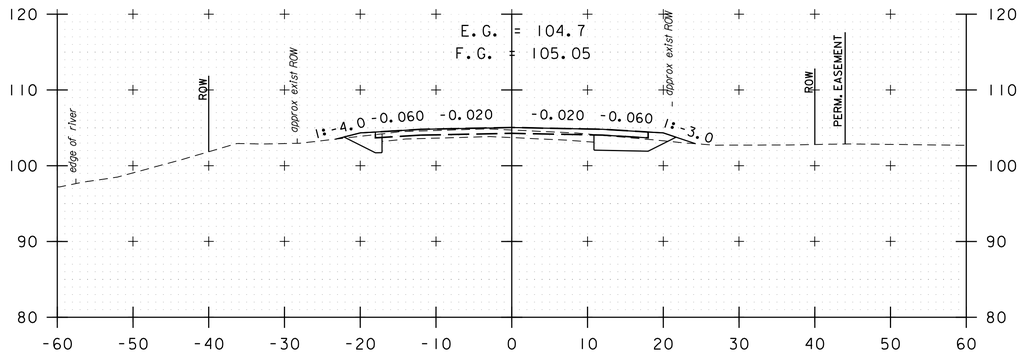
219+50



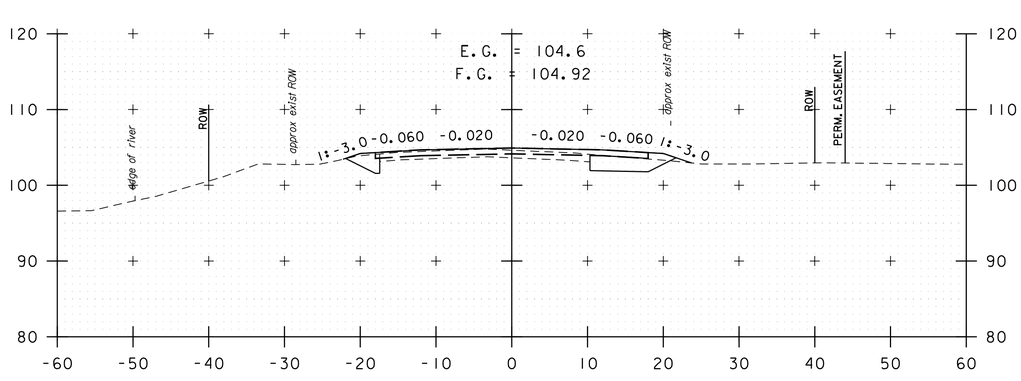
219+00



221+50



221+00



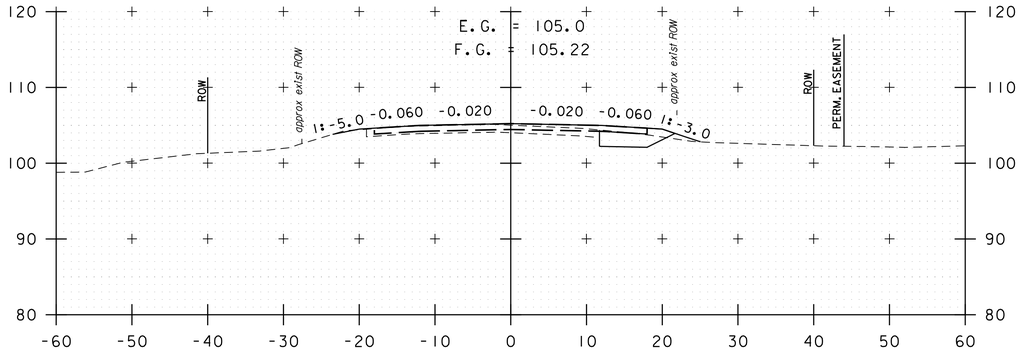
220+50

STA. 219+00 TO STA. 221+50

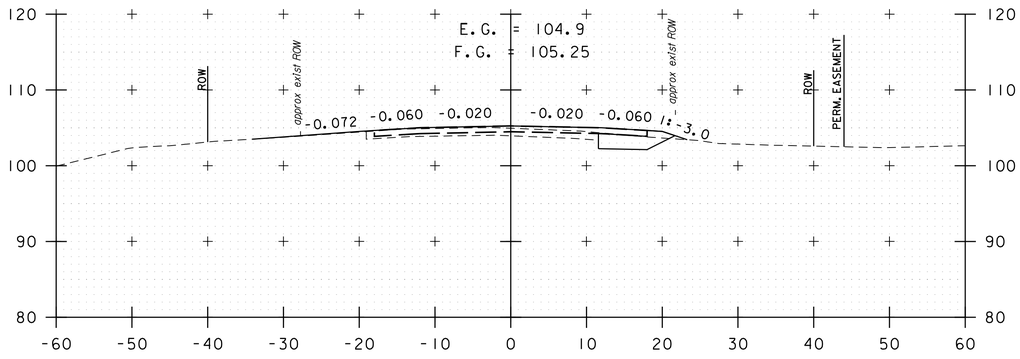
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_16300_25000.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 66

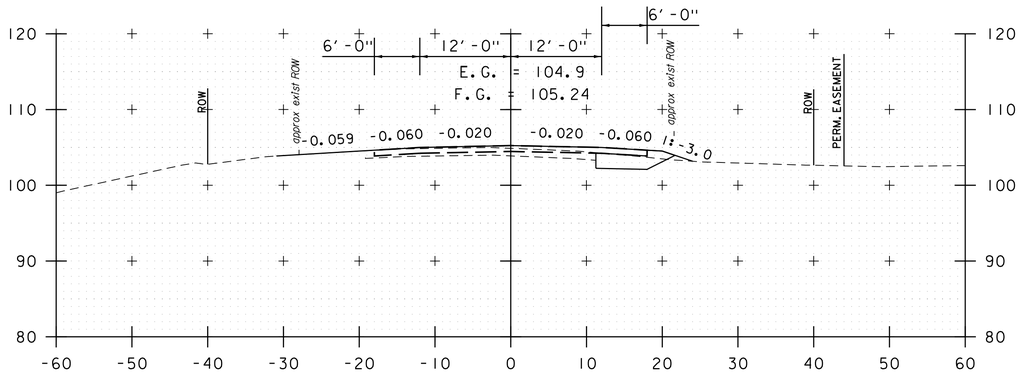
PLOT DATE: 3/6/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 243 OF 305



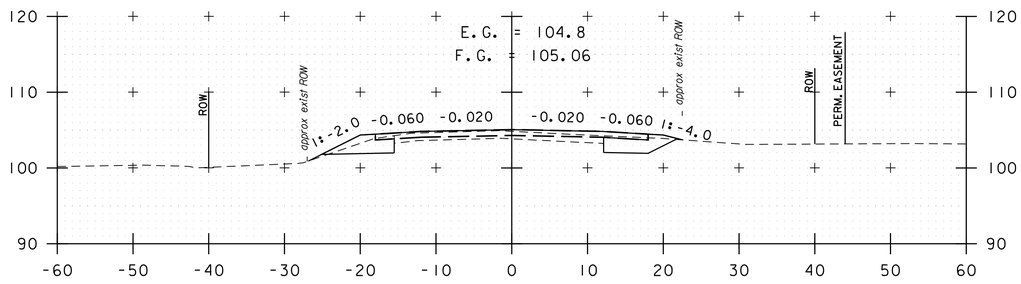
223+00



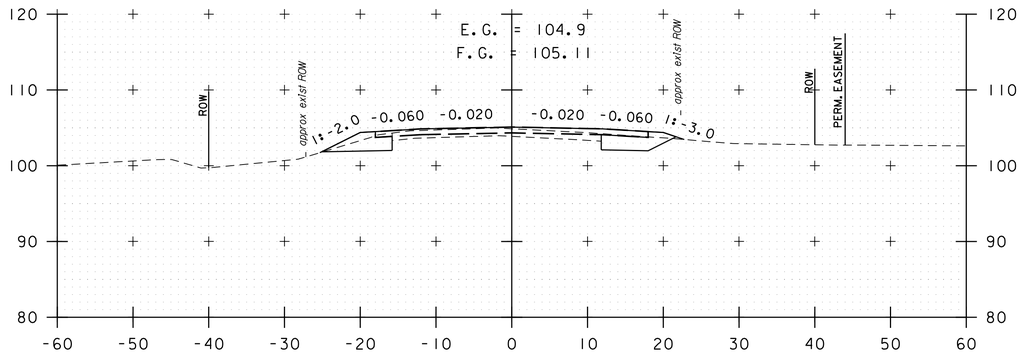
222+50



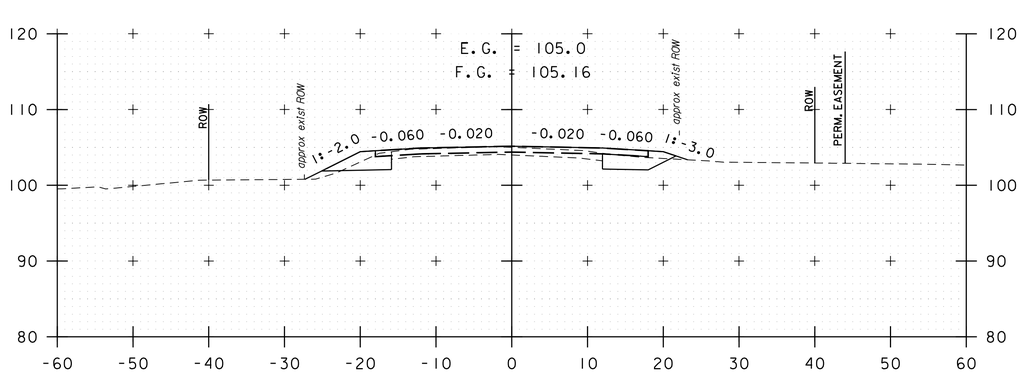
222+00



224+50



224+00



223+50

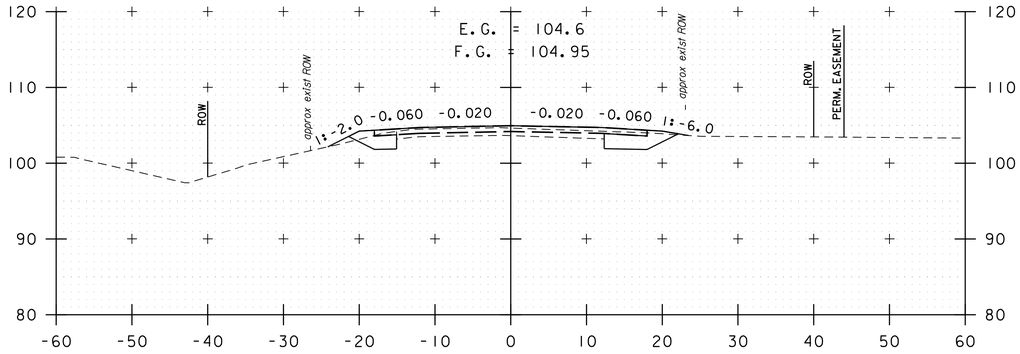
STA. 222+00 TO STA. 224+50

vhb

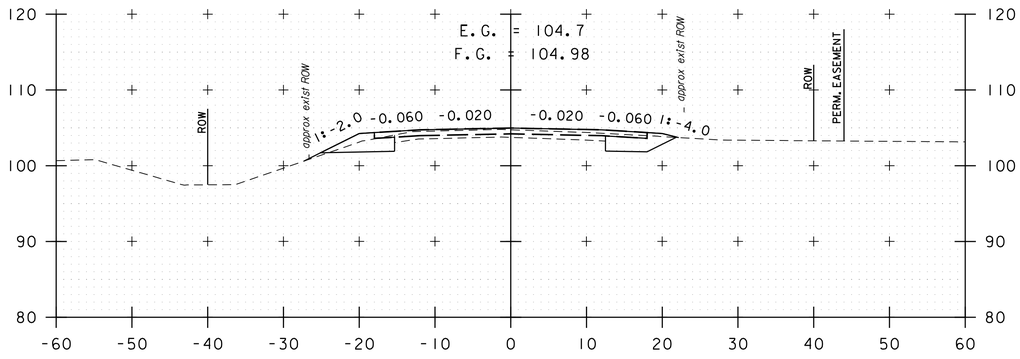
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_16300_25000.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 67

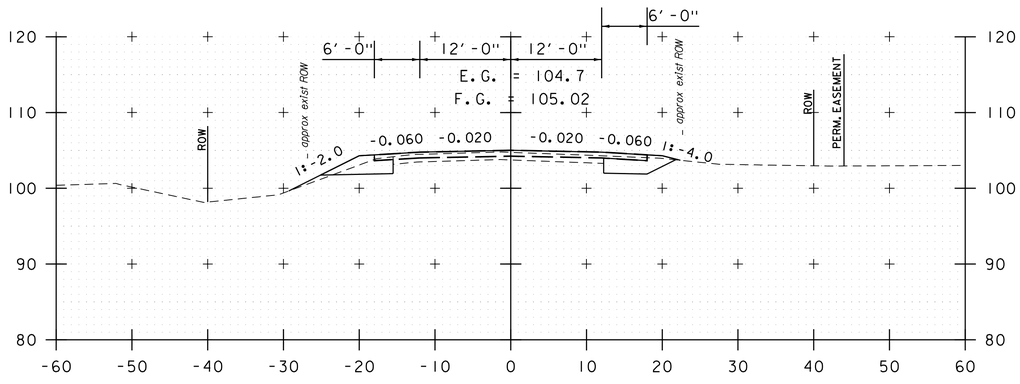
PLOT DATE: 3/6/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 244 OF 305



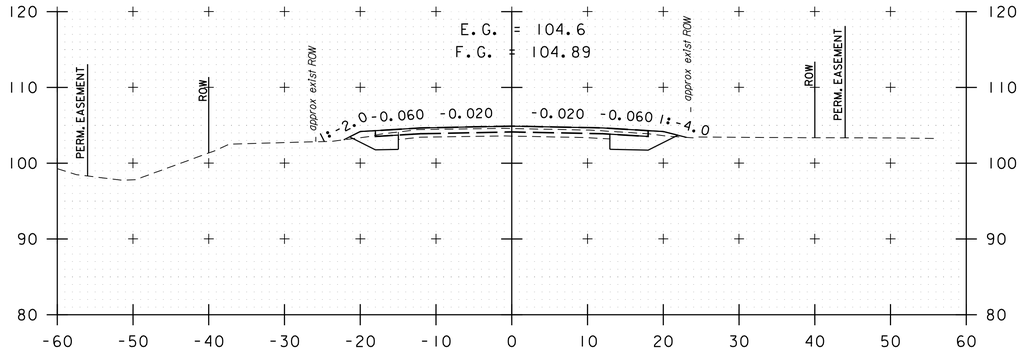
226+00



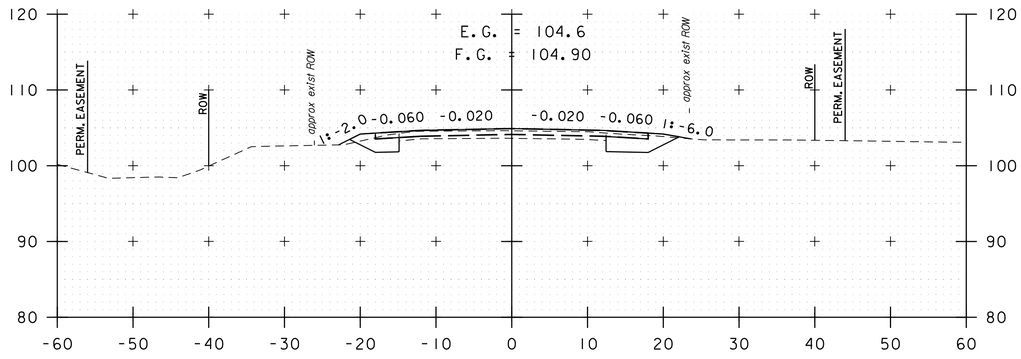
225+50



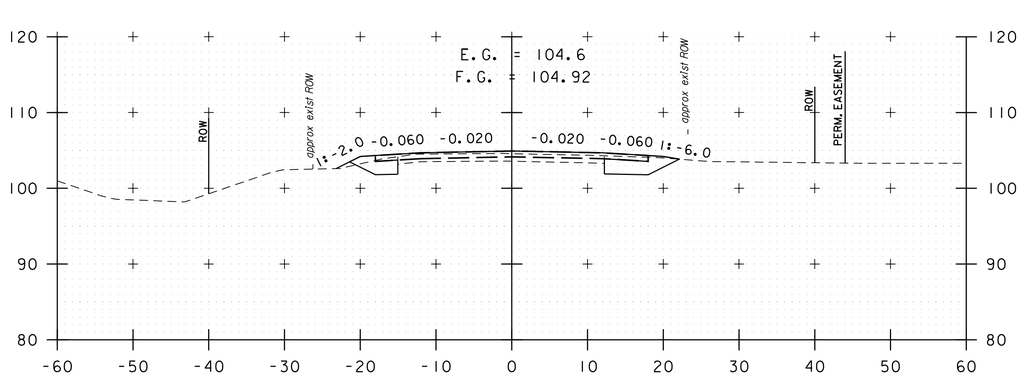
225+00



227+50



227+00



226+50

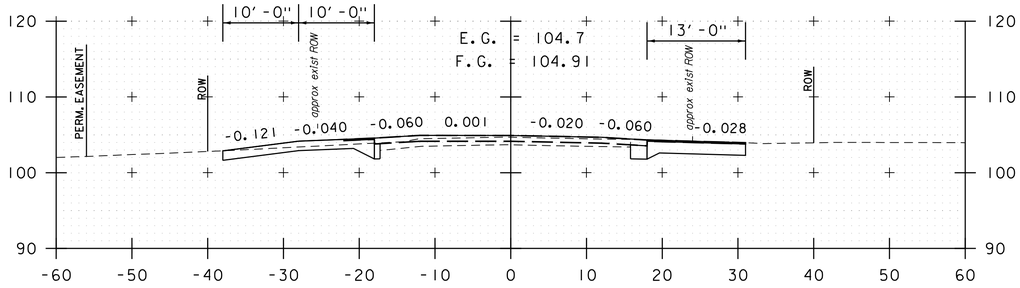
STA. 225+00 TO STA. 227+50

vhb

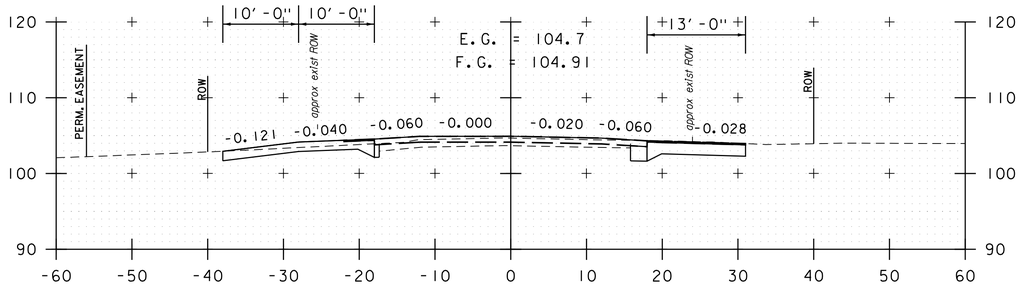
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_16300_25000.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 68

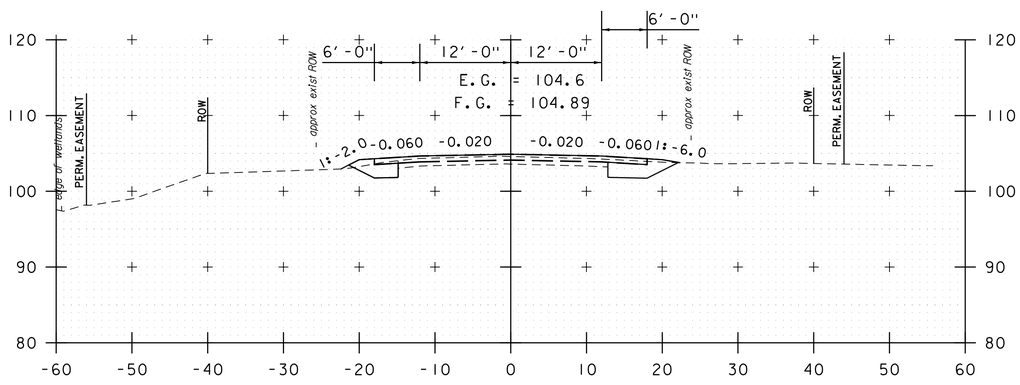
PLOT DATE: 3/6/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 245 OF 305



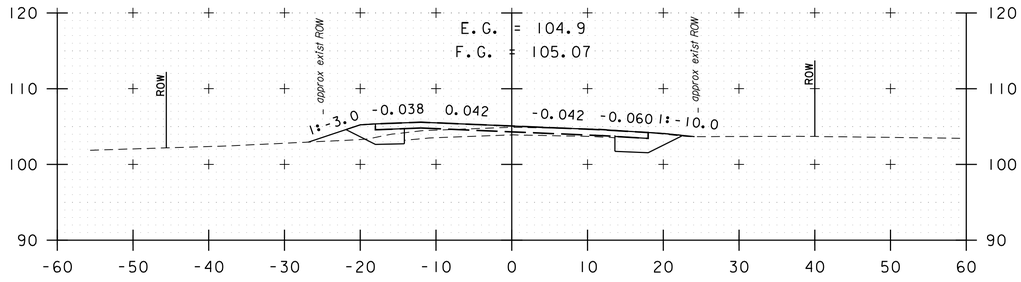
228+50 (DRIVE LT/RT)



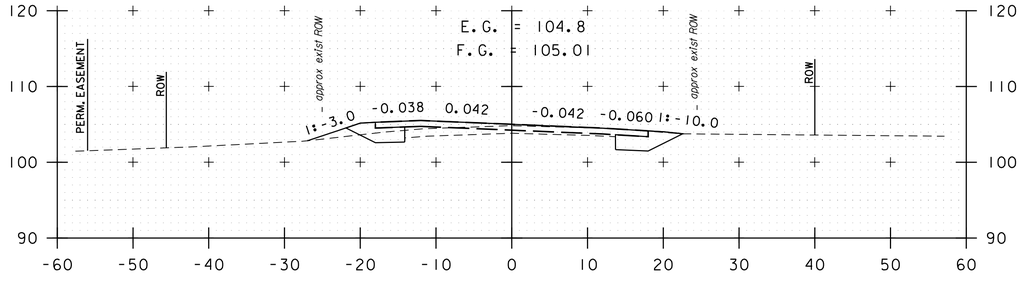
228+47 (DRIVE LT/RT)



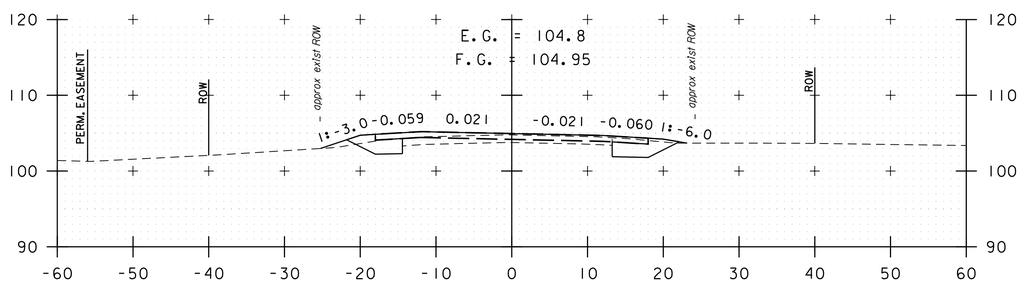
228+00



230+00



229+50



229+00

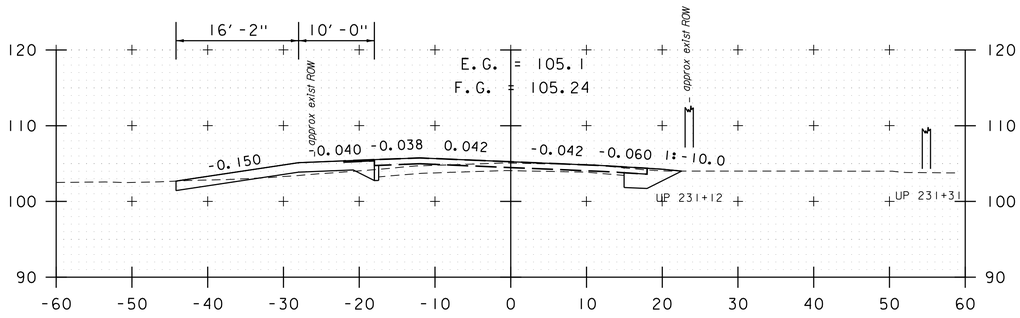
STA. 228+00 TO STA. 230+00

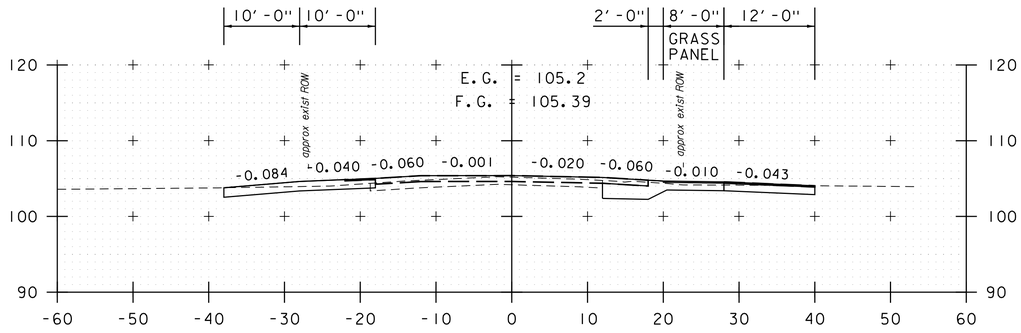
vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

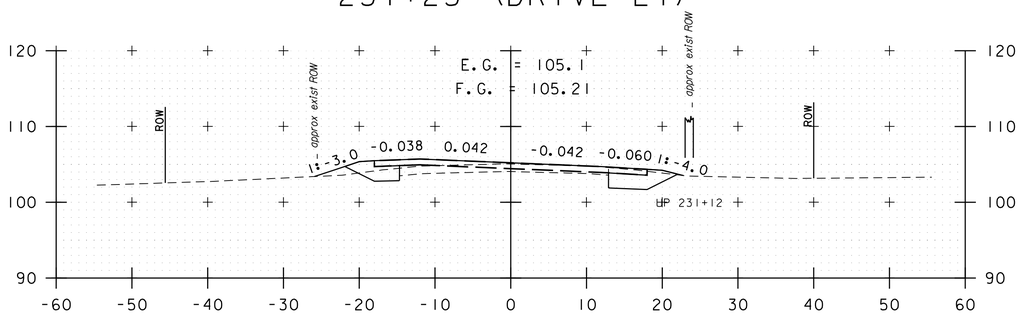
FILE NAME: z96b032xs_16300_25000.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 69

PLOT DATE: 3/6/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS

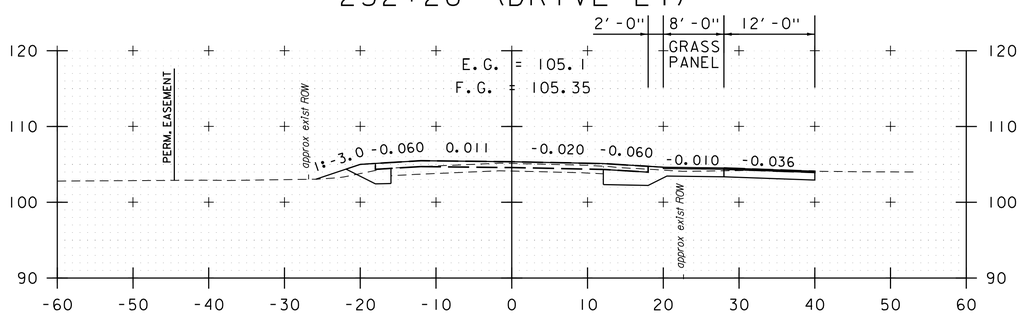




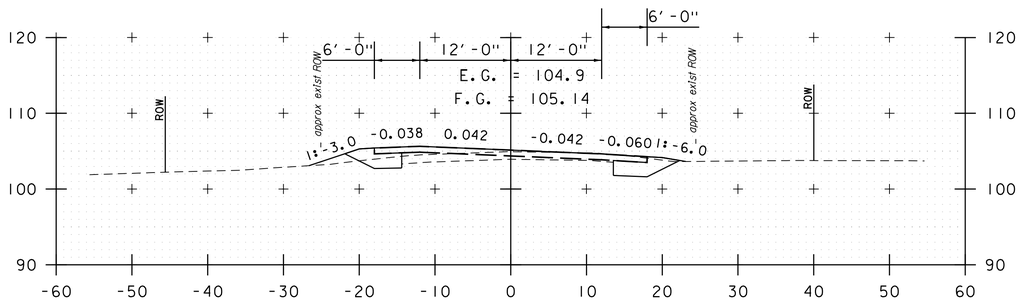
231+25 (DRIVE LT)



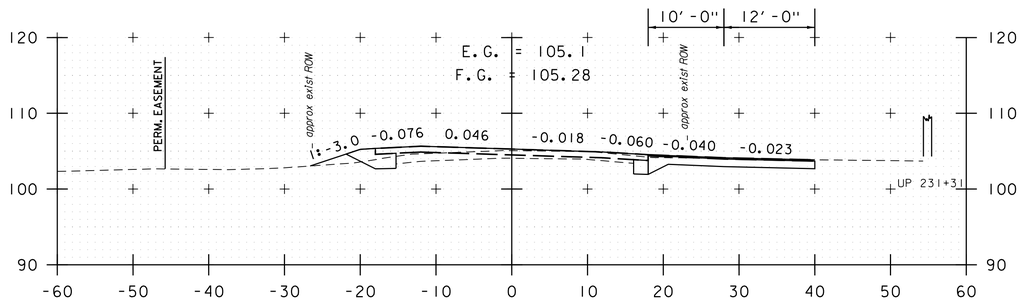
232+28 (DRIVE LT)



231+00



232+00



230+50

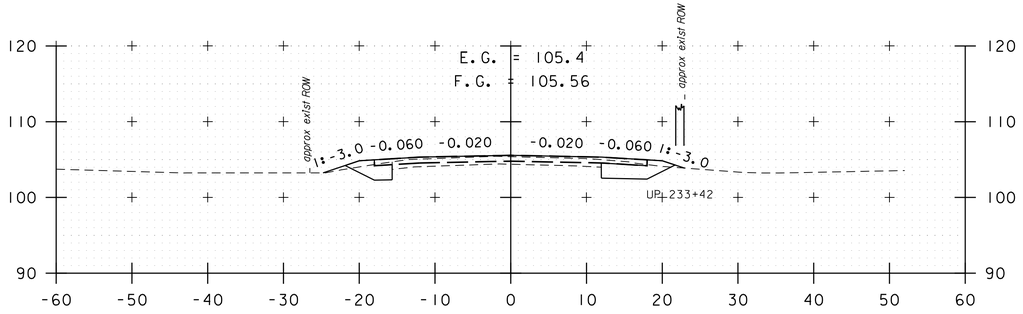
231+50 (DRIVE RT)

STA. 230+50 TO STA. 232+28

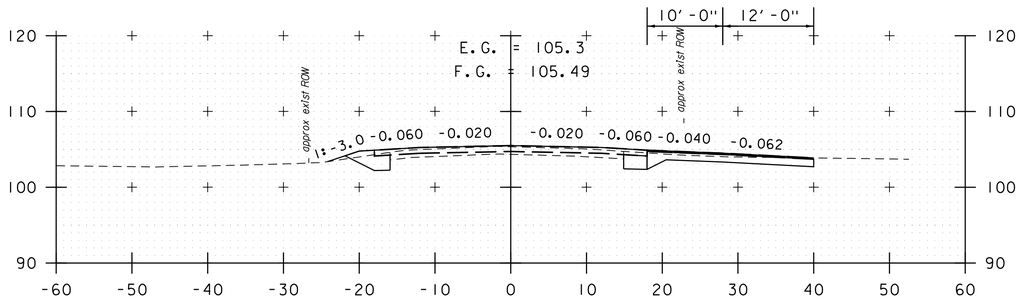
vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)

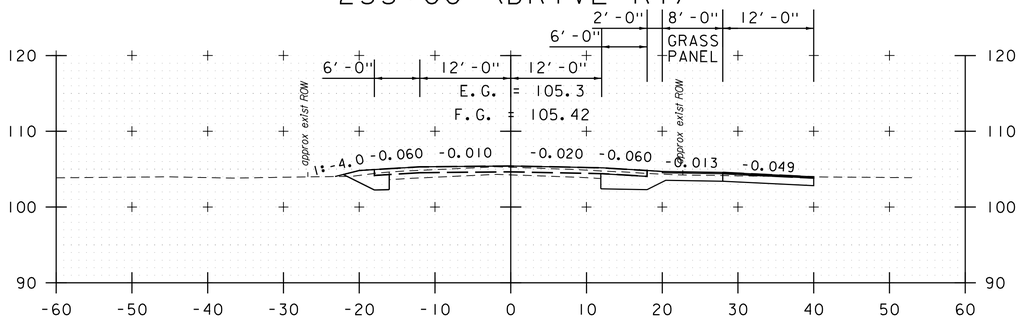
FILE NAME: z96b032xs_16300_25000.dgn	PLOT DATE: 3/6/2019
PROJECT LEADER: G.BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G.BAKOS
CROSS SECTION SHEET 70	SHEET 247 OF 305



233+50

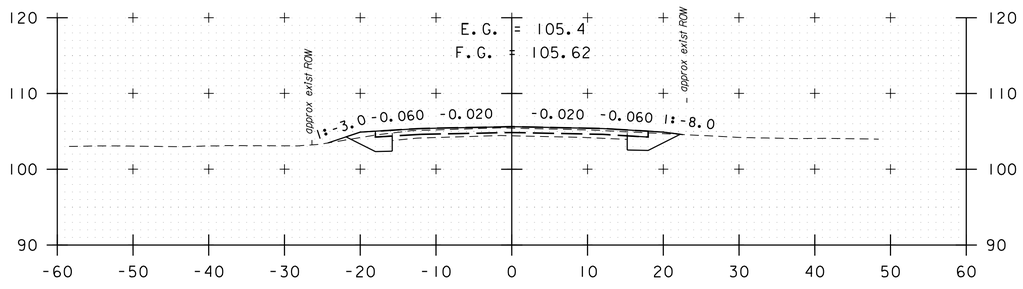


233+00 (DRIVE RT)

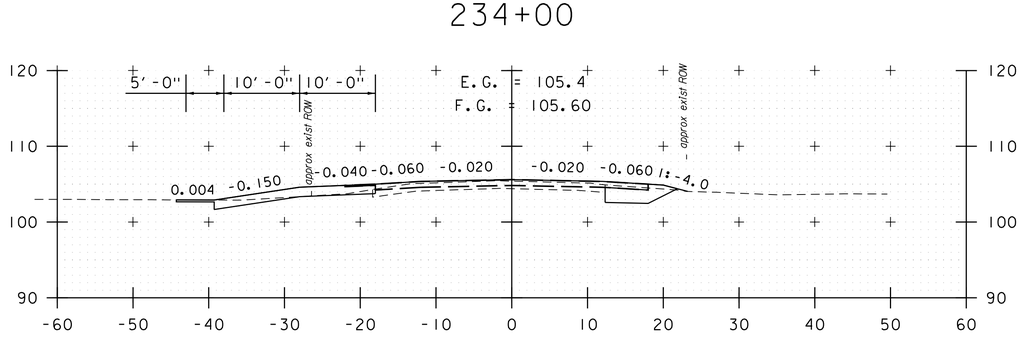


232+50

234+14 (DRIVE RT)



234+00

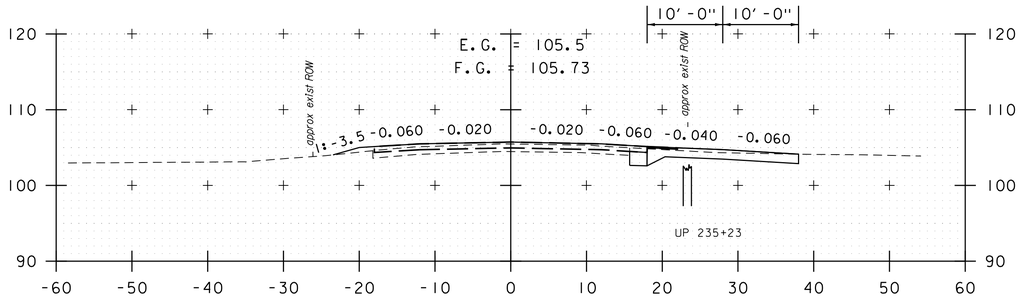


233+83 (DRIVE LT)

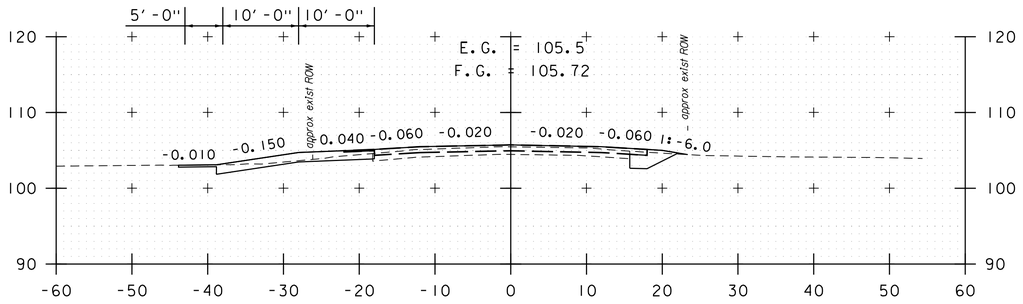
STA. 232+50 TO STA. 234+14

vhb

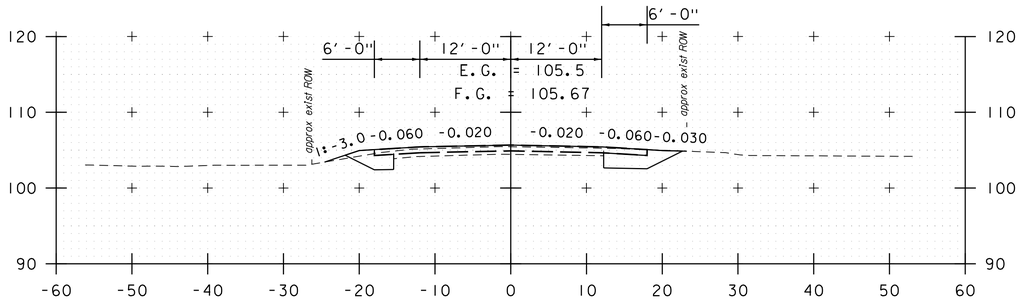
PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032xs_16300_25000.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G.BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G.BAKOS
CROSS SECTION SHEET 71	SHEET 248 OF 305



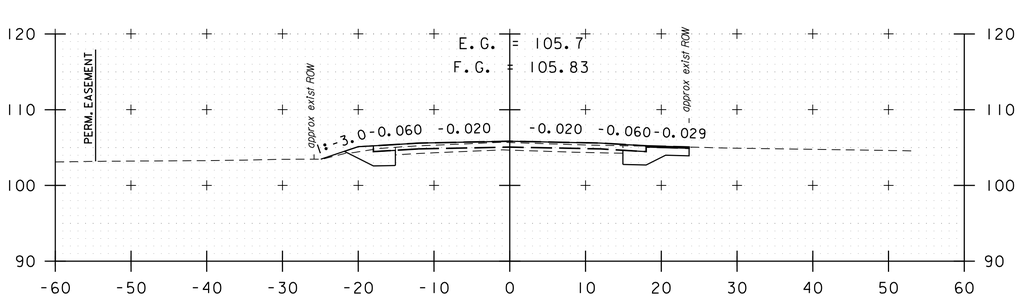
235+00 (DRIVE RT)



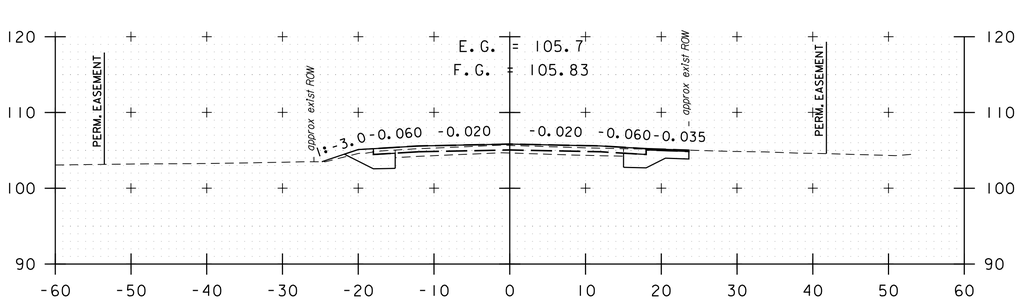
234+93 (DRIVE LT)



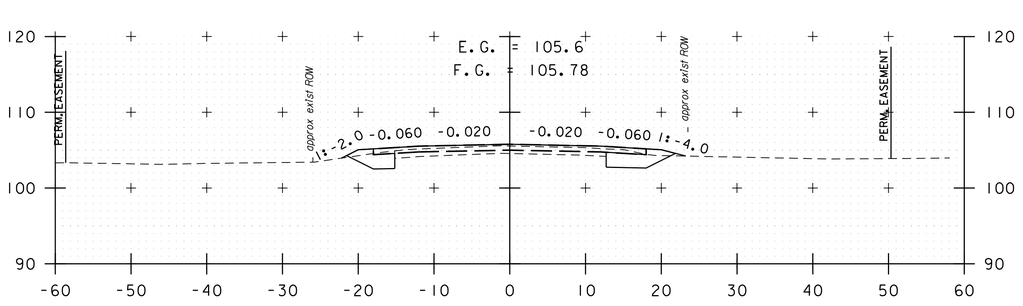
234+50



236+07 (DRIVE RT)



236+00



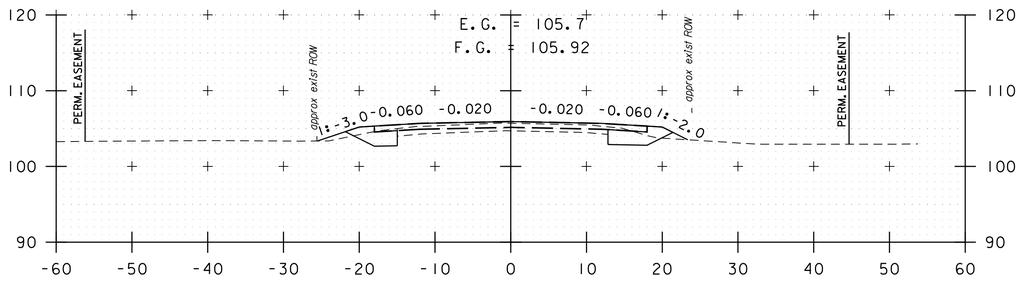
235+50

STA. 234+50 TO STA. 236+07

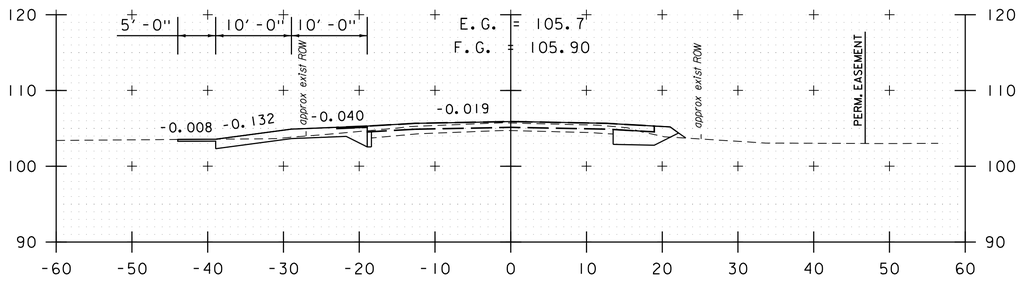
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_16300_25000.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 72

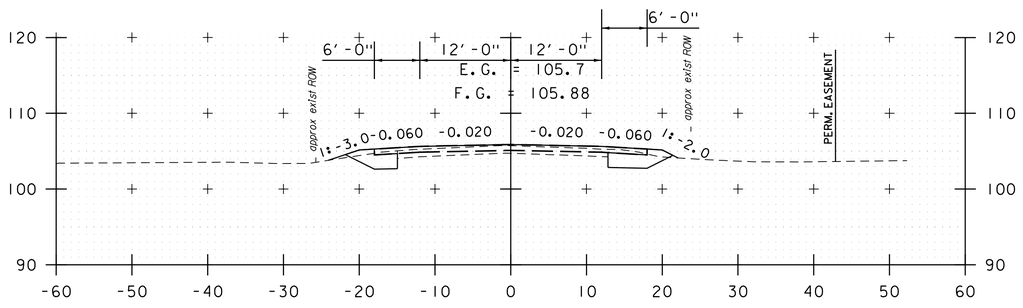
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 249 OF 305



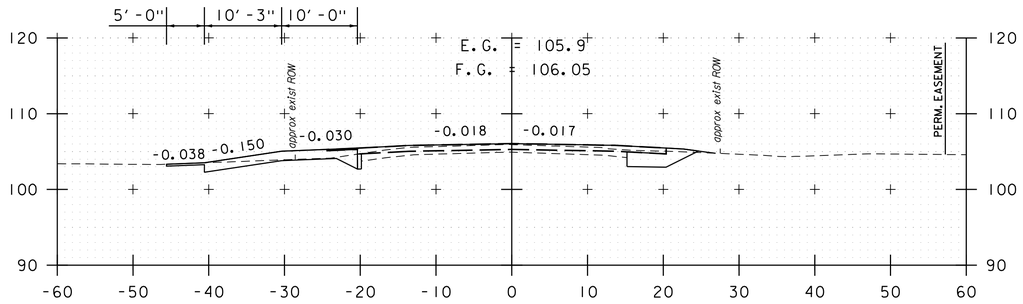
237+00



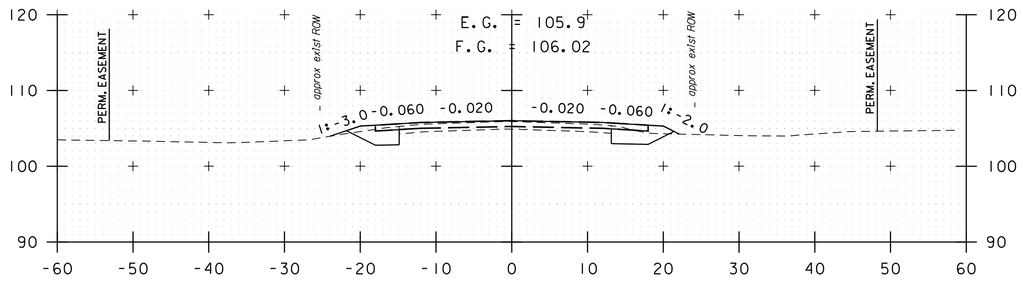
236+79 SKEWED (DRIVE LT)



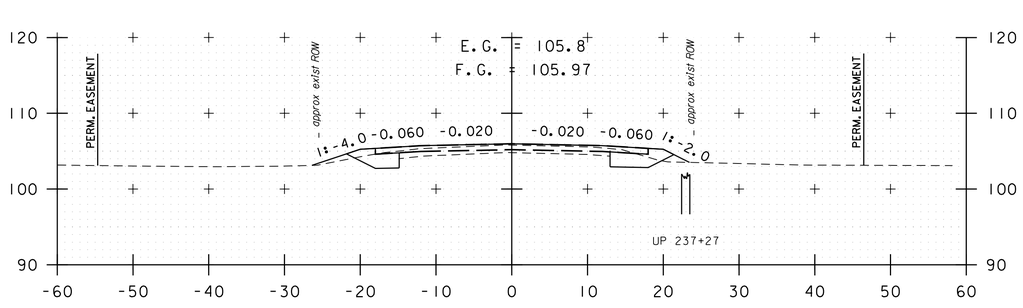
236+50



238+37 SKEWED (DRIVE LT)



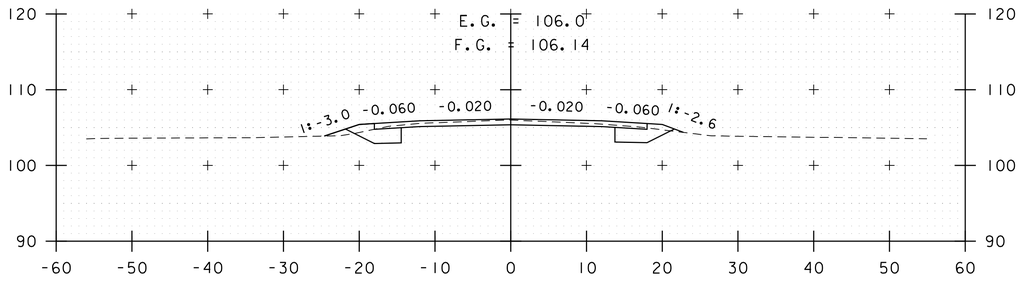
238+00



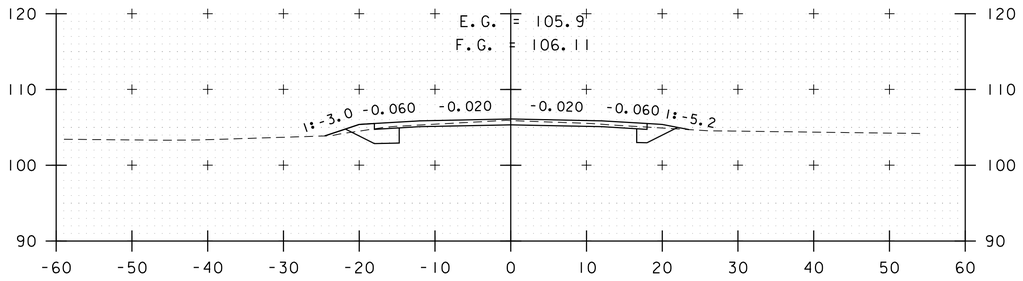
237+50

STA. 236+50 TO STA. 238+37

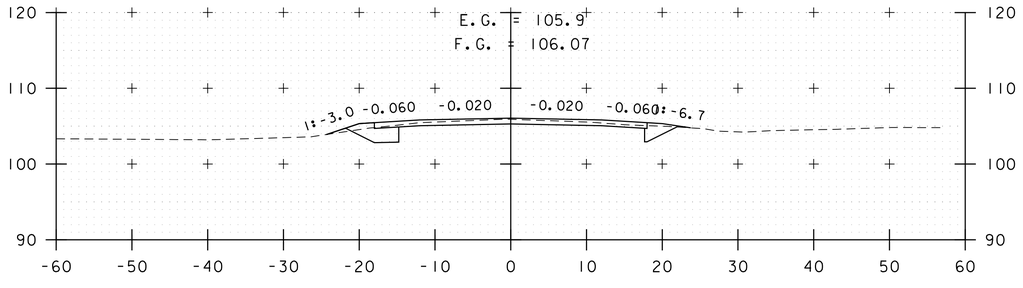
PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032xs_16300_25000.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G.BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G.BAKOS
CROSS SECTION SHEET 73	SHEET 250 OF 305



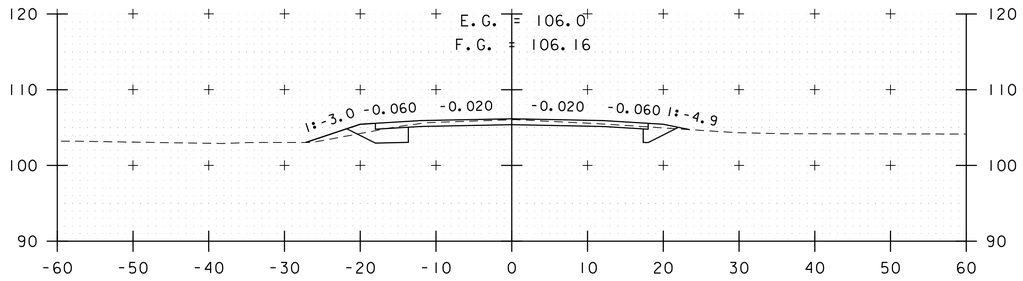
239+50



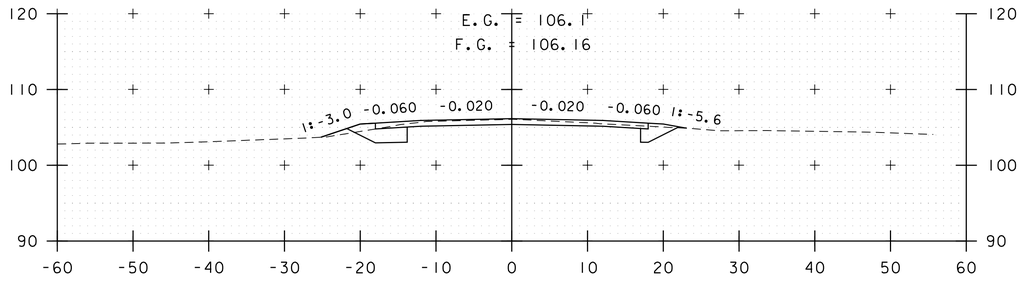
239+00 (DRIVE RT)



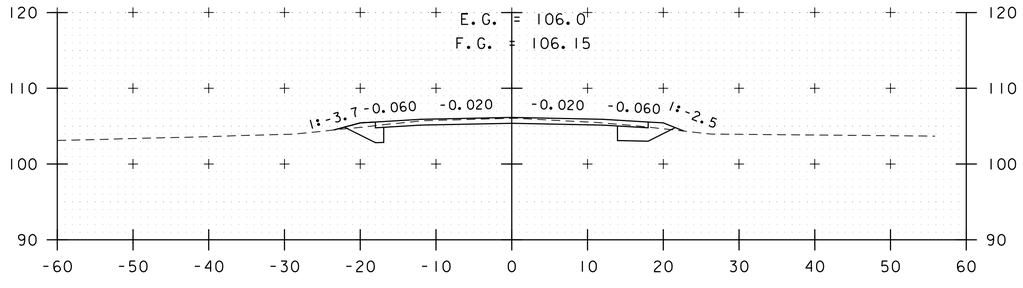
238+50



241+00 (DRIVE RT)

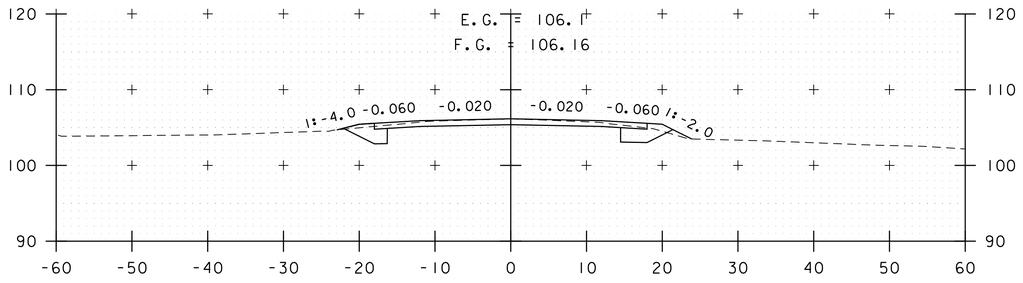


240+50

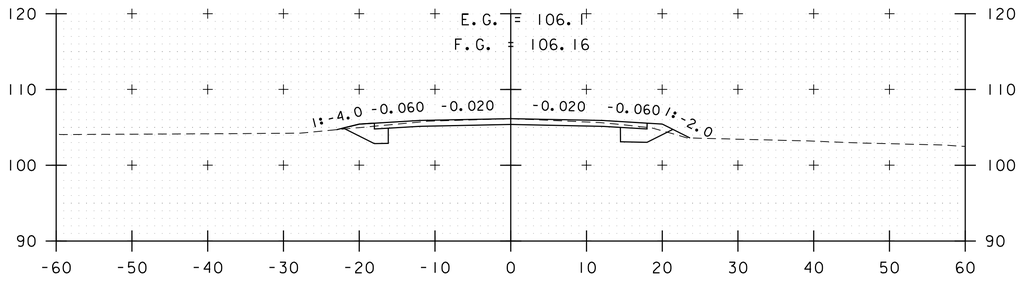


240+00 (DRIVE LT) STA. 238+50 TO STA. 240+60

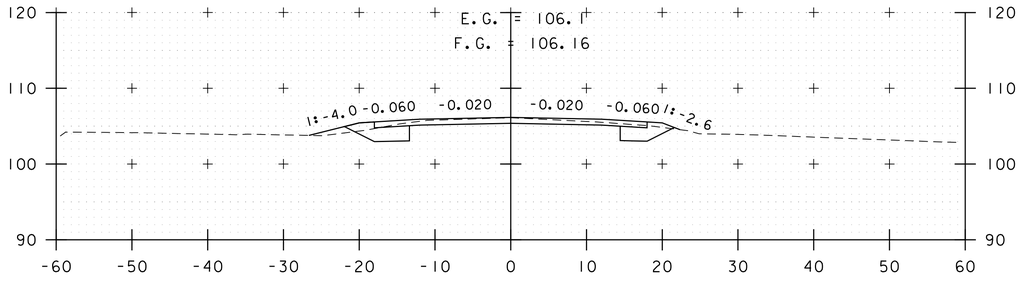
PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032xs_16300_25000.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G.BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G.BAKOS
CROSS SECTION SHEET 74	SHEET 251 OF 305



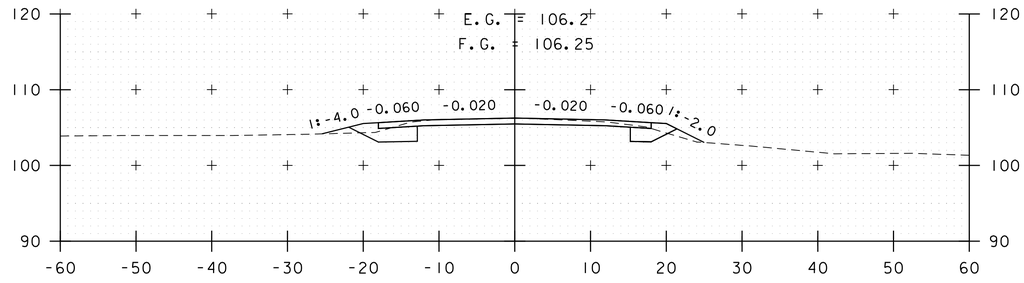
242+00



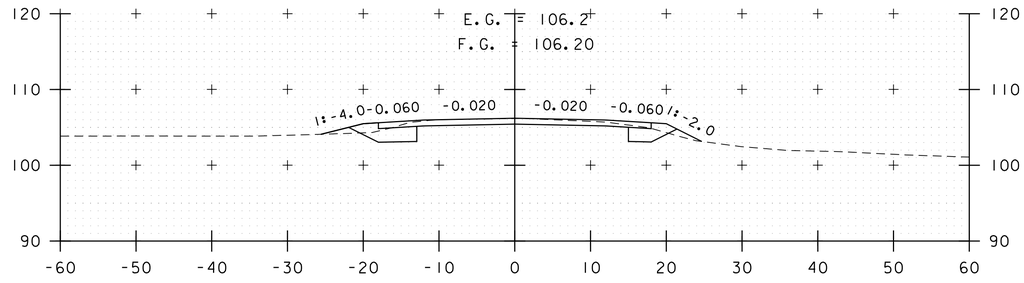
241+86 (DRIVE LT)



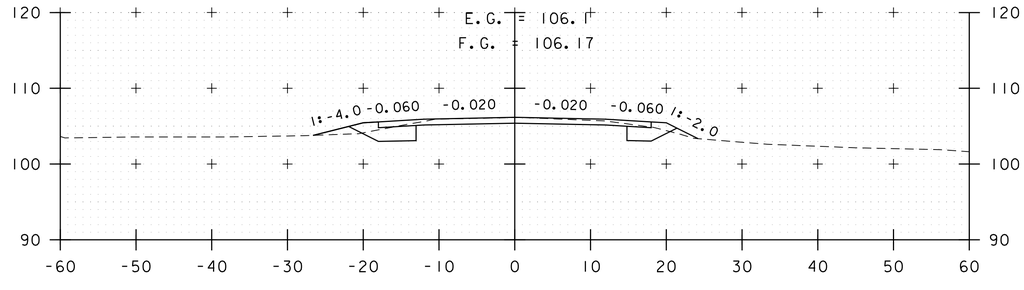
241+50



243+50



243+00



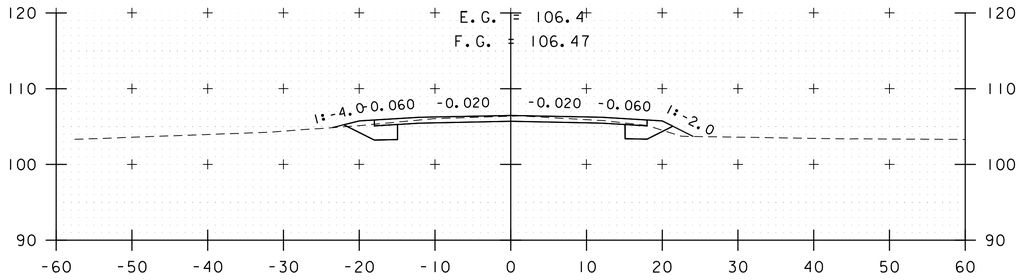
242+50

STA. 241+50 TO STA. 243+50

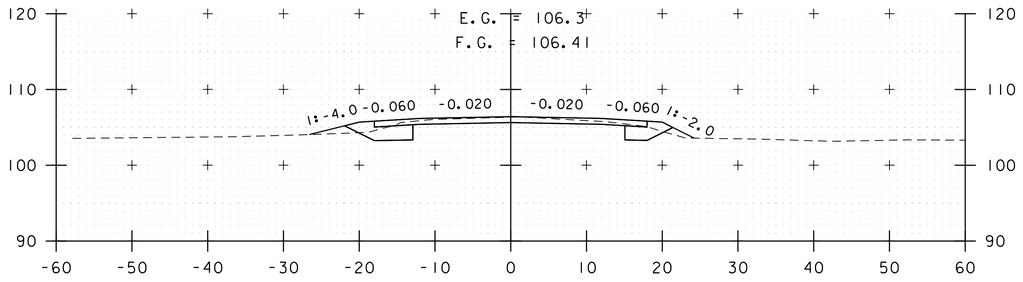
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_16300_25000.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 75

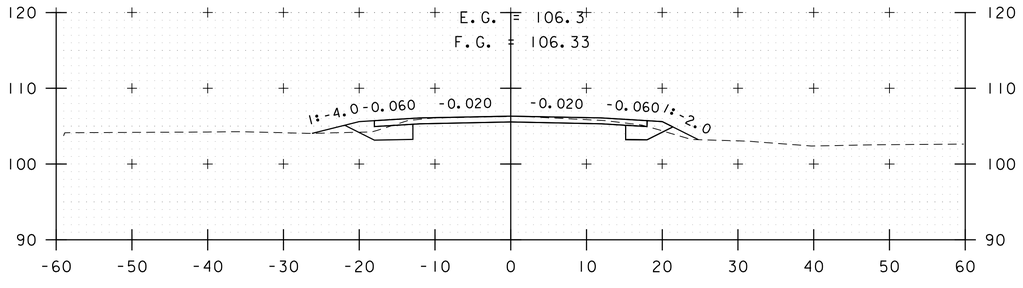
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 252 OF 305



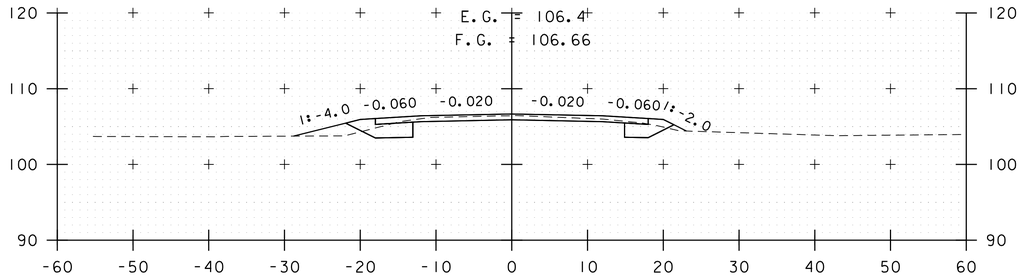
244+81 (DRIVE LT)



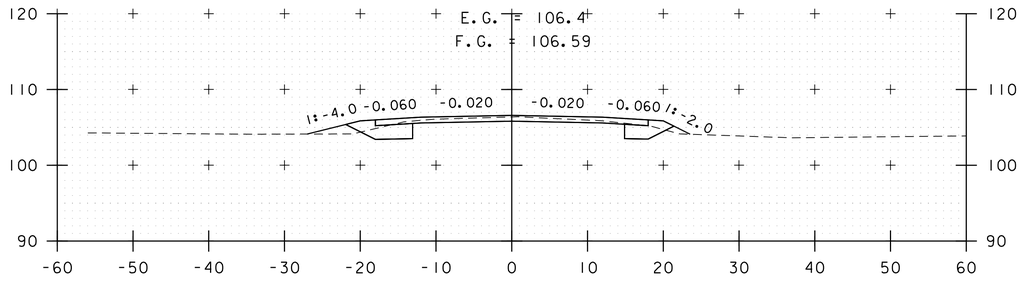
244+50



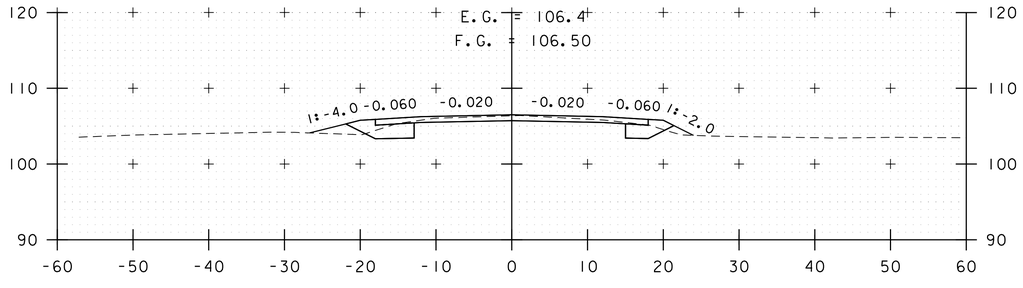
244+00



246+00



245+50



245+00

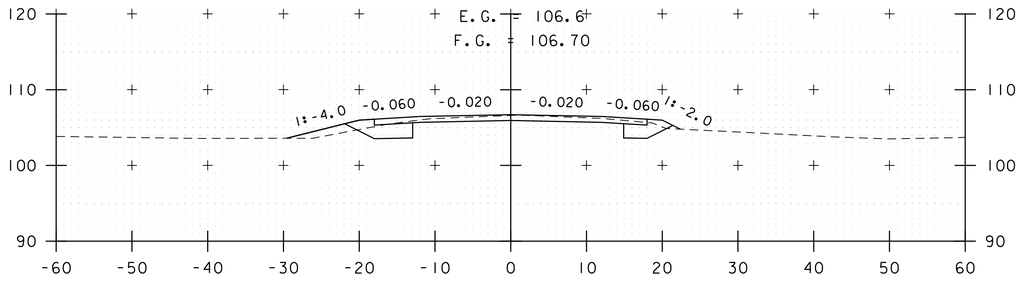
STA. 244+00 TO STA. 246+00

vhb

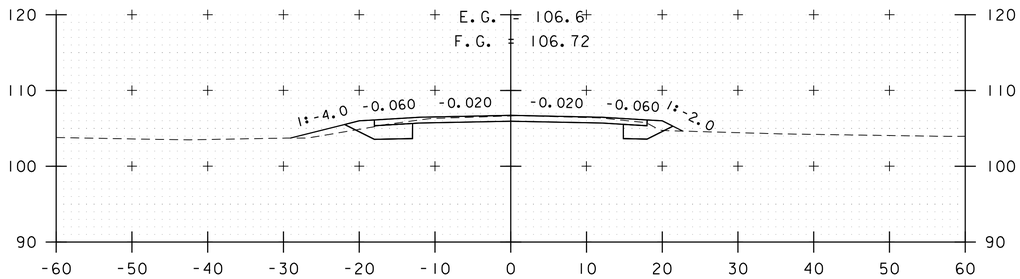
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_16300_25000.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 76

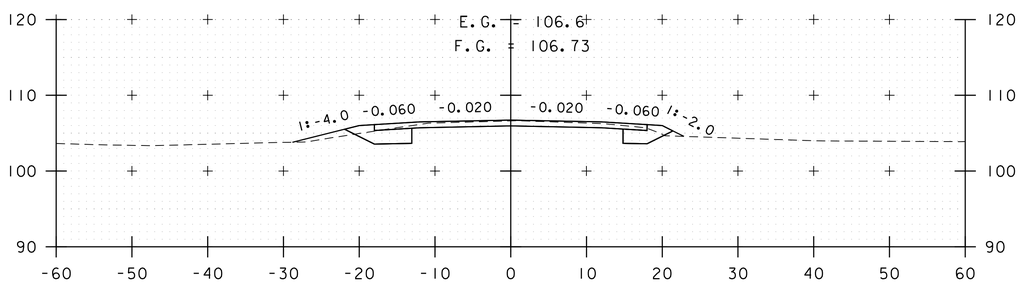
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 253 OF 305



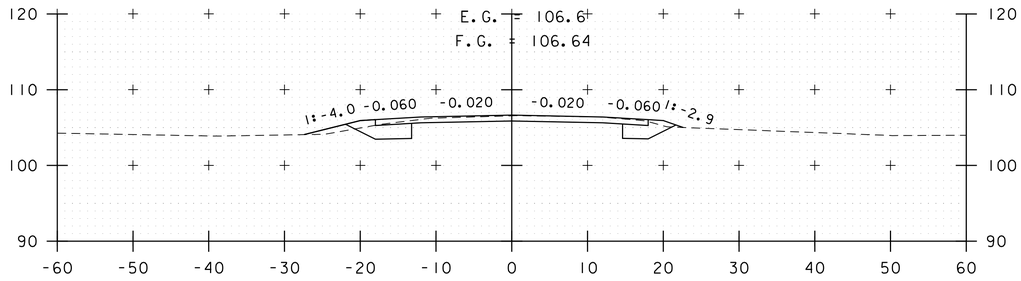
249+50



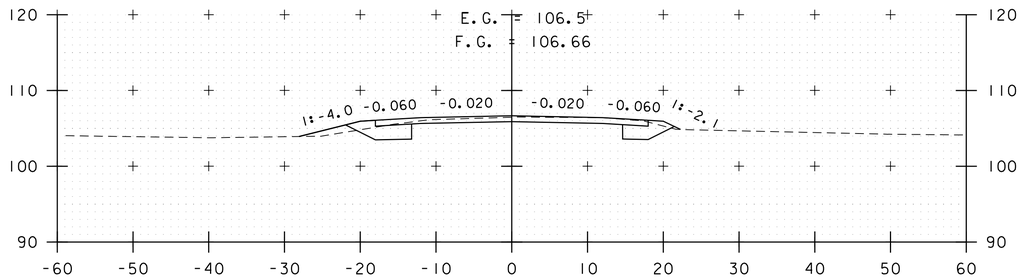
249+00



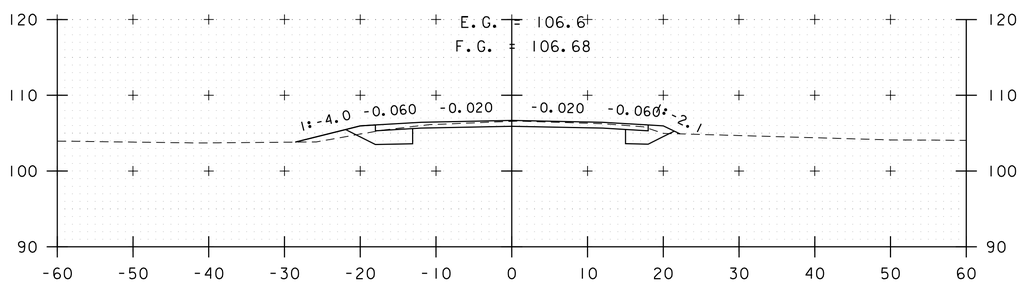
248+50



251+00



250+50



250+00

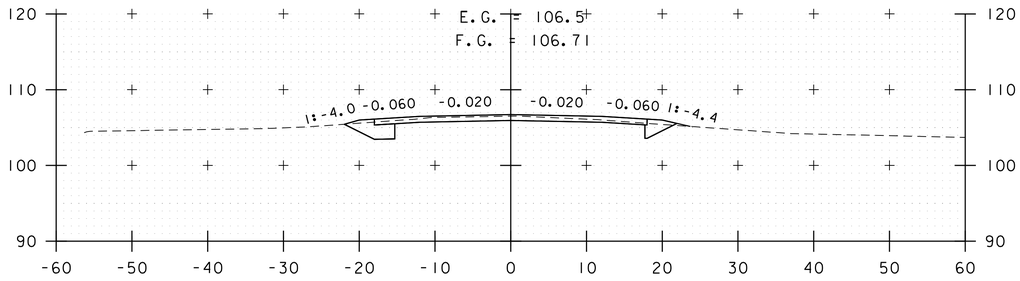
STA. 248+50 TO STA. 251+00

vhb

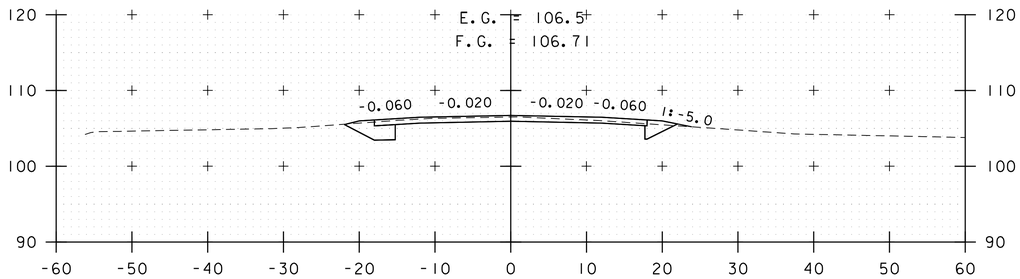
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_16300_25000.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 78

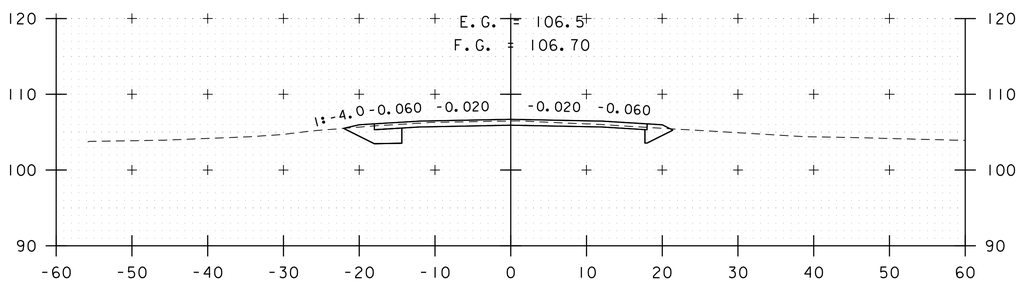
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 255 OF 305



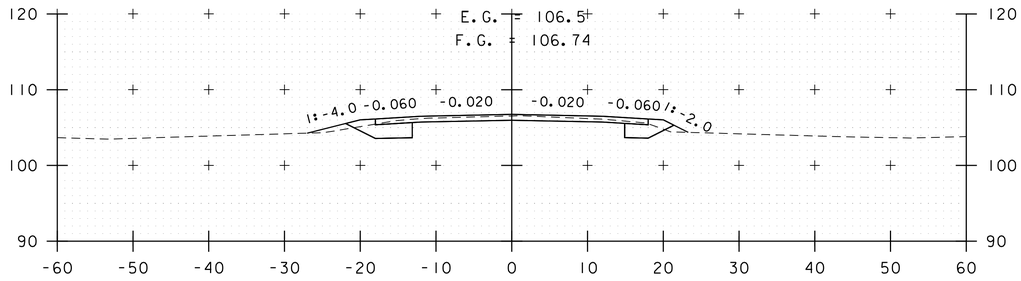
246+50



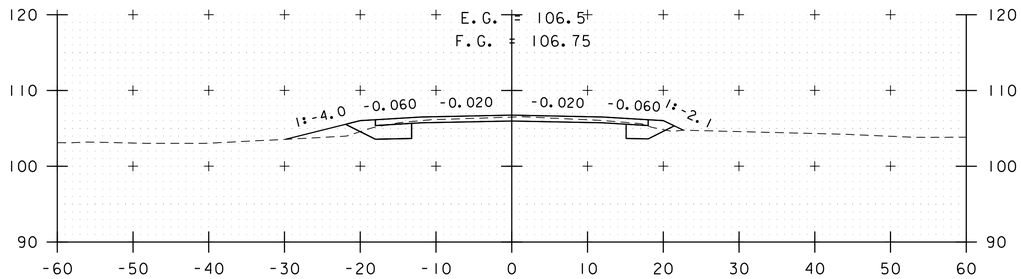
246+46 (DRIVE LT)



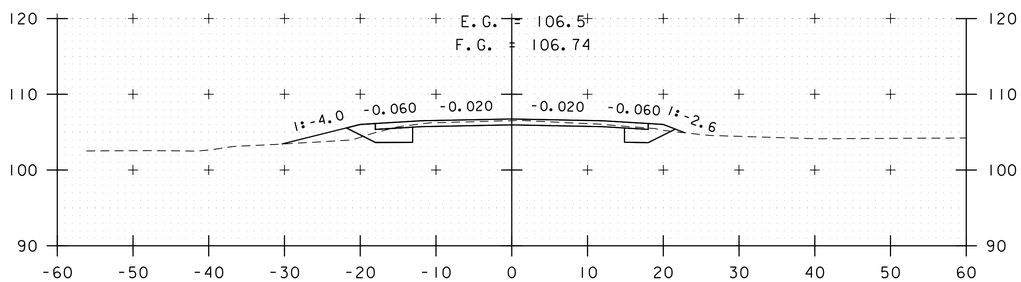
246+32 (DRIVE RT)



248+00



247+50



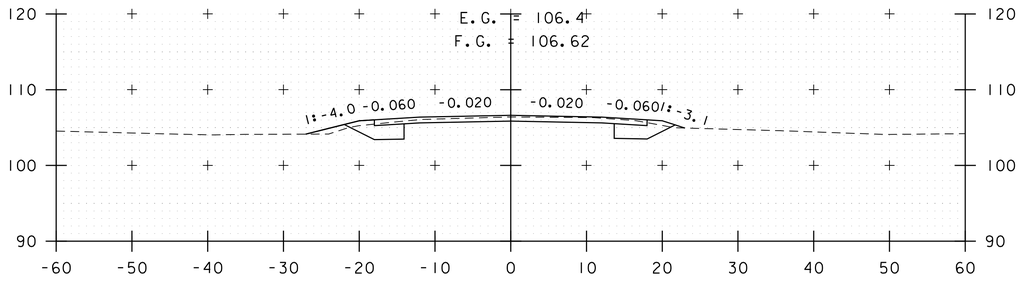
247+00

STA. 246+32 TO STA. 248+00

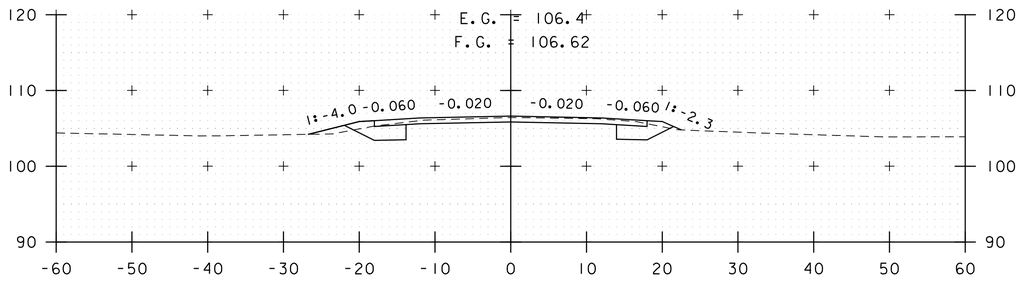
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_16300_25000.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 77

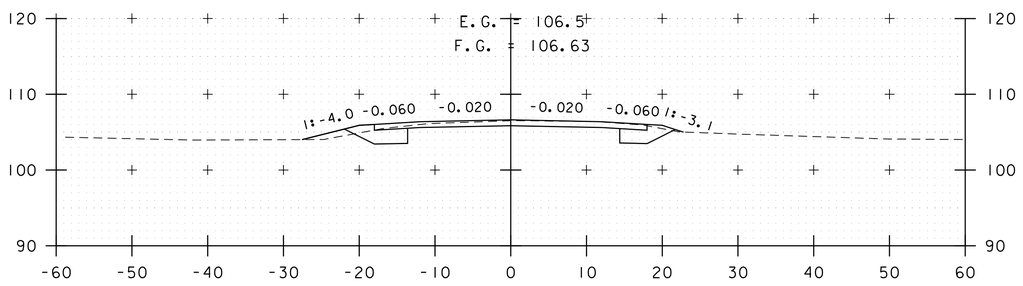
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 254 OF 305



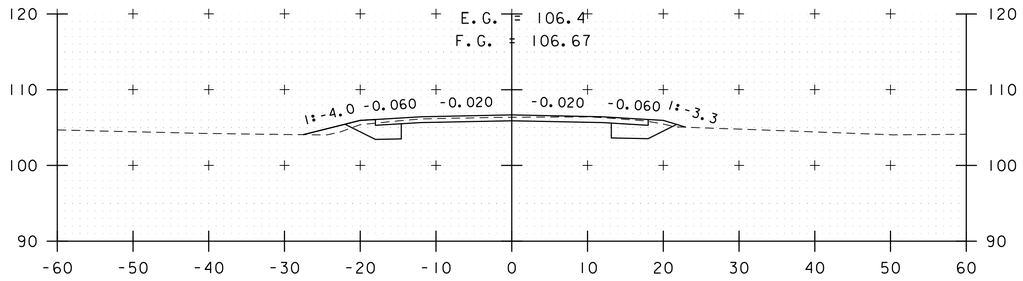
252+50



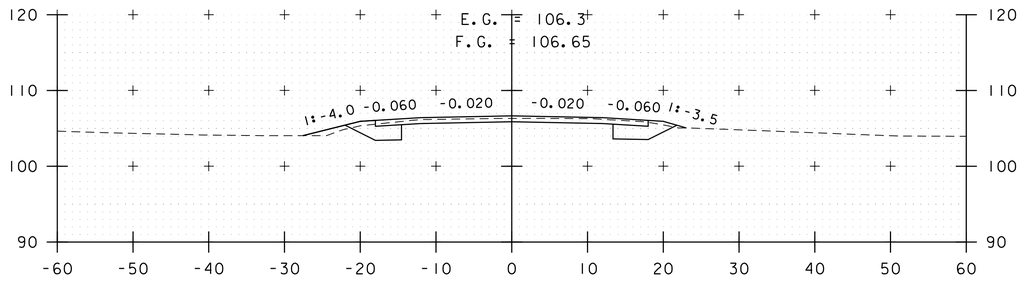
252+00



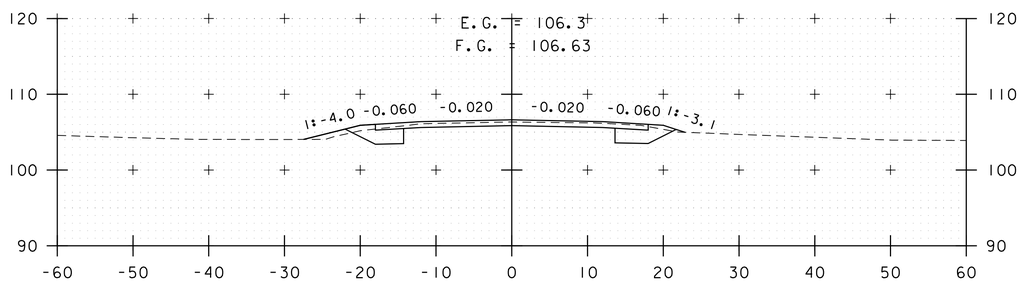
251+50



254+00



253+50



253+00

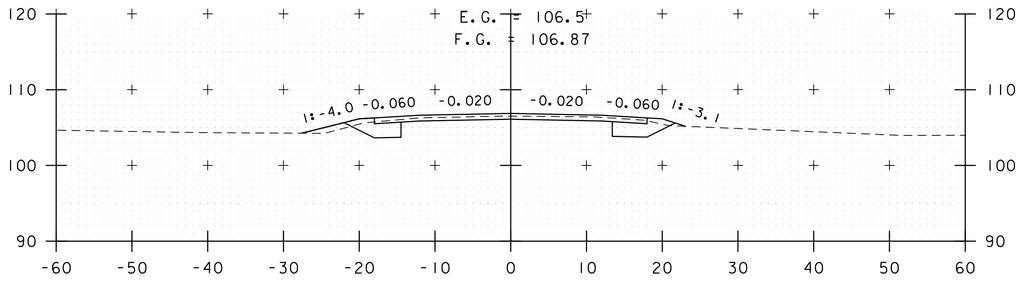
STA. 251+50 TO STA. 254+00

vhb

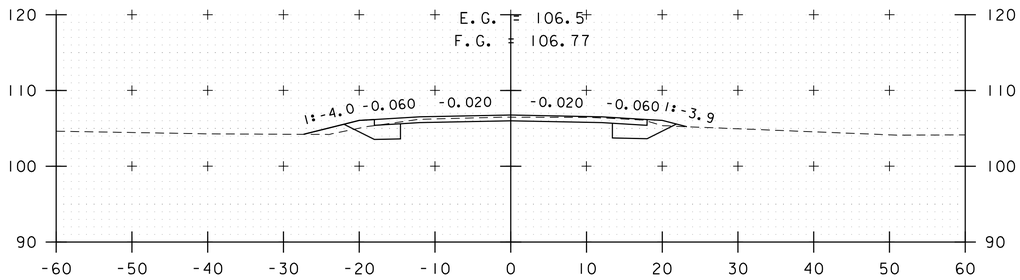
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 79

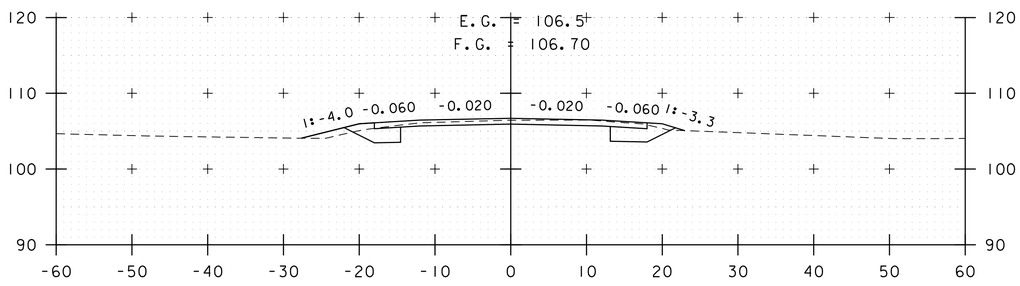
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 256 OF 305



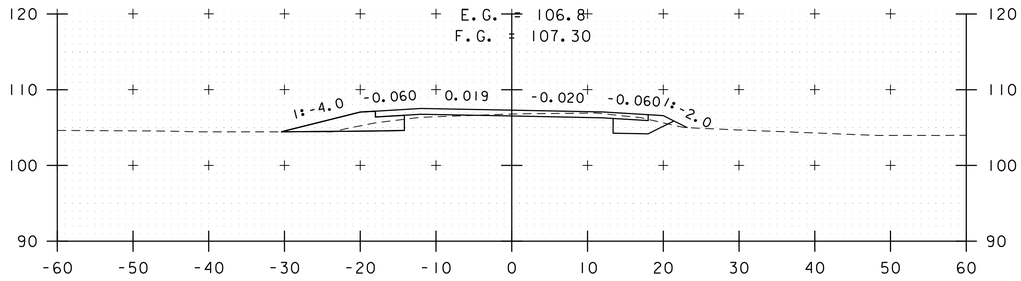
255+50



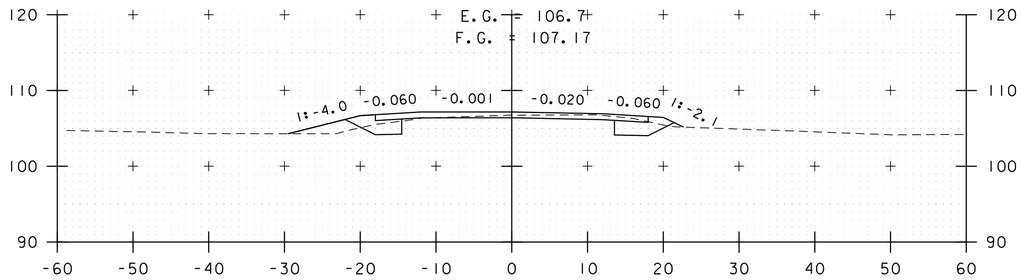
255+00



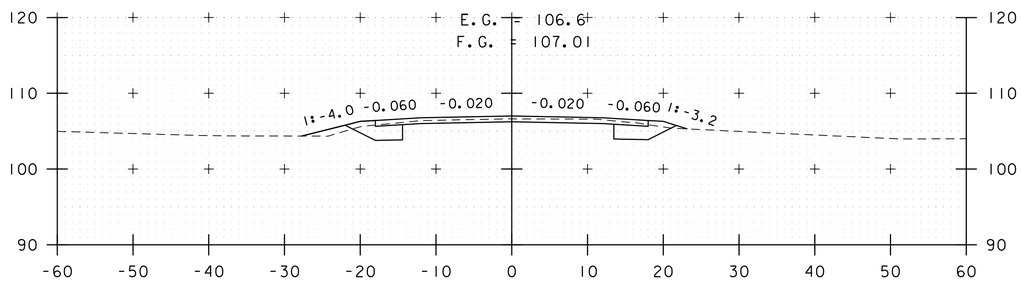
254+50



257+00



256+50



256+00

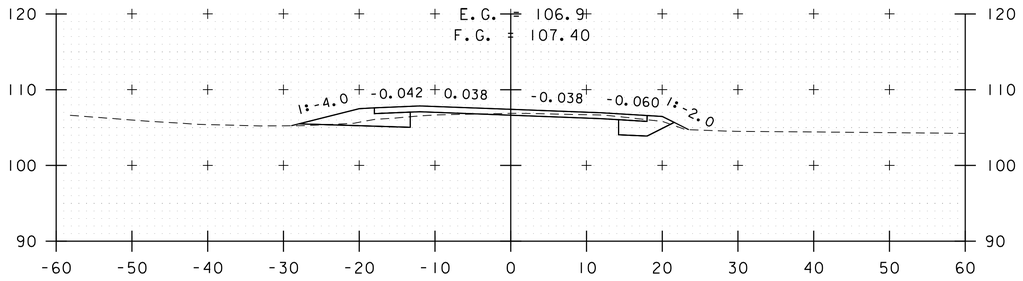
STA. 254+50 TO STA. 257+00

vhb

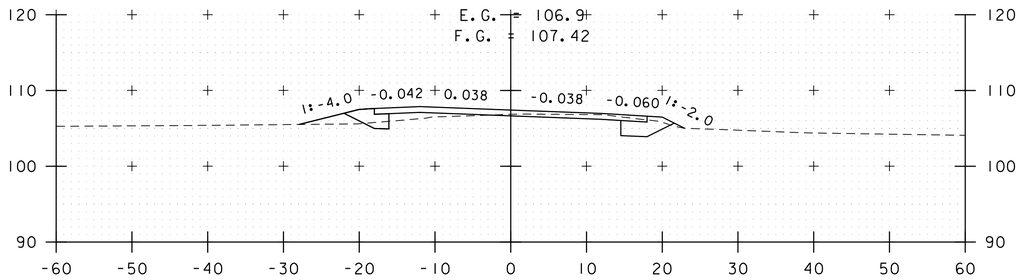
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 80

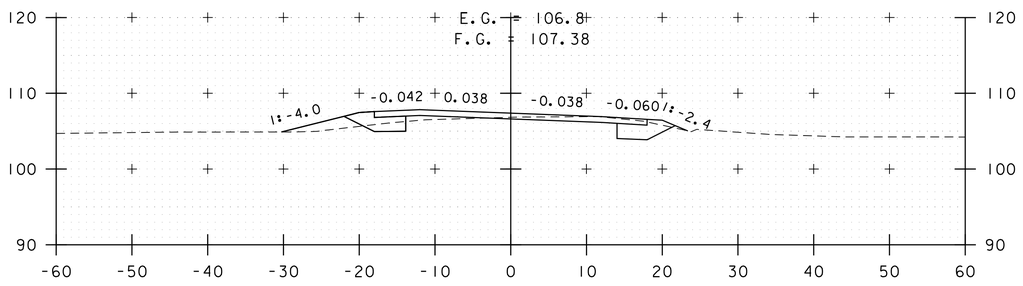
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 257 OF 305



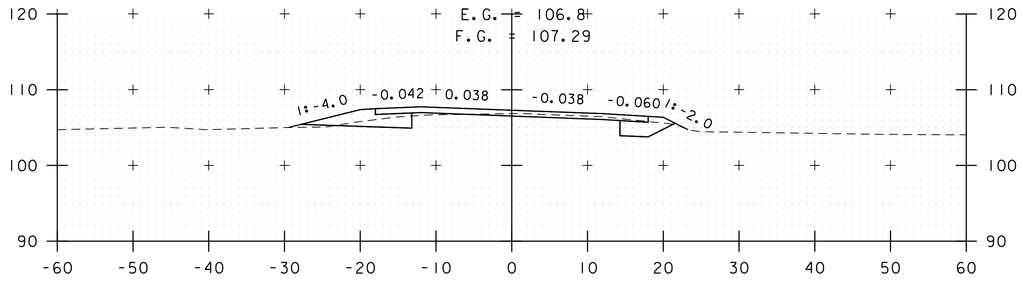
258+50



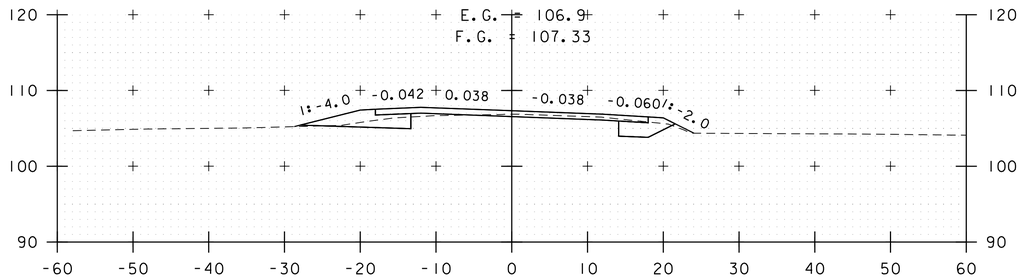
258+00 (DRIVE LT)



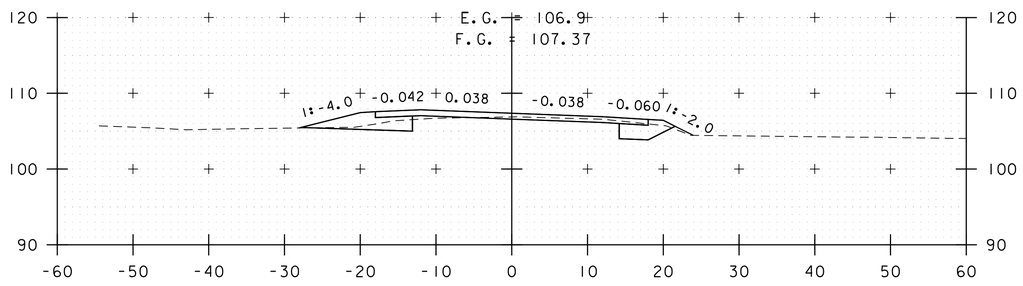
257+50



260+00



259+50



259+00

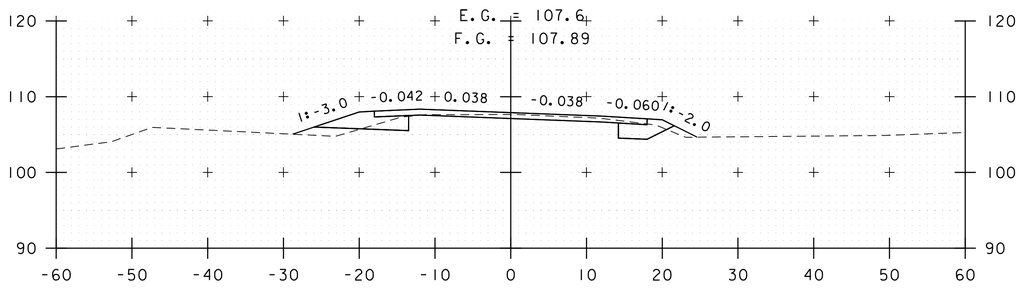
STA. 257+50 TO STA. 260+00

vhb

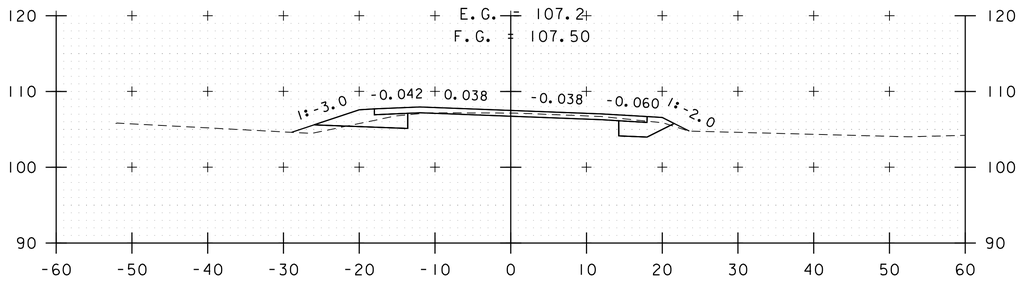
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 81

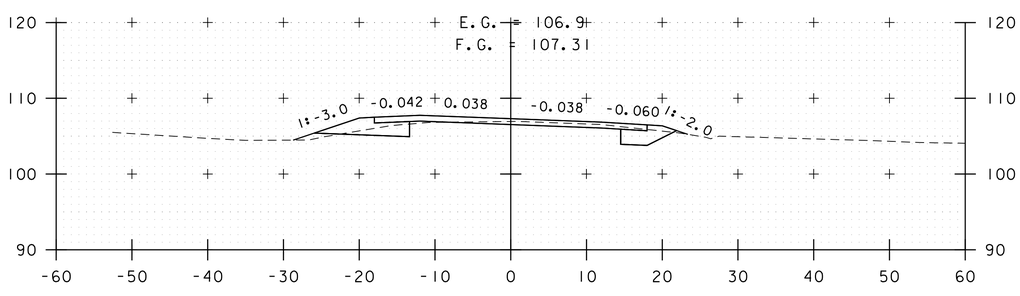
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 258 OF 305



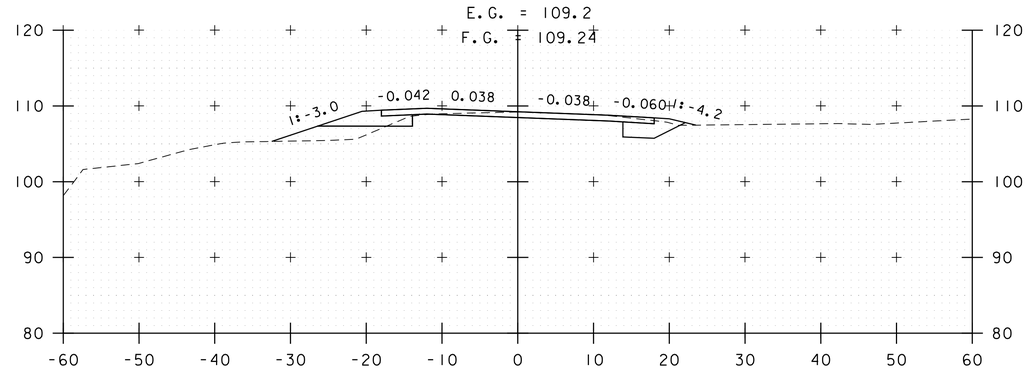
261+50



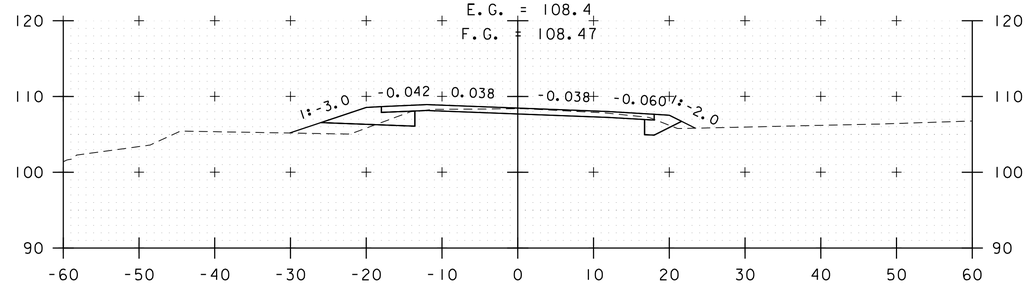
261+00



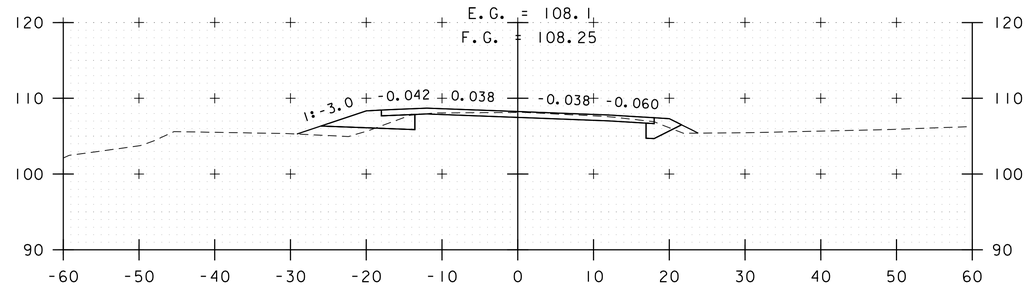
260+50



262+50



262+00



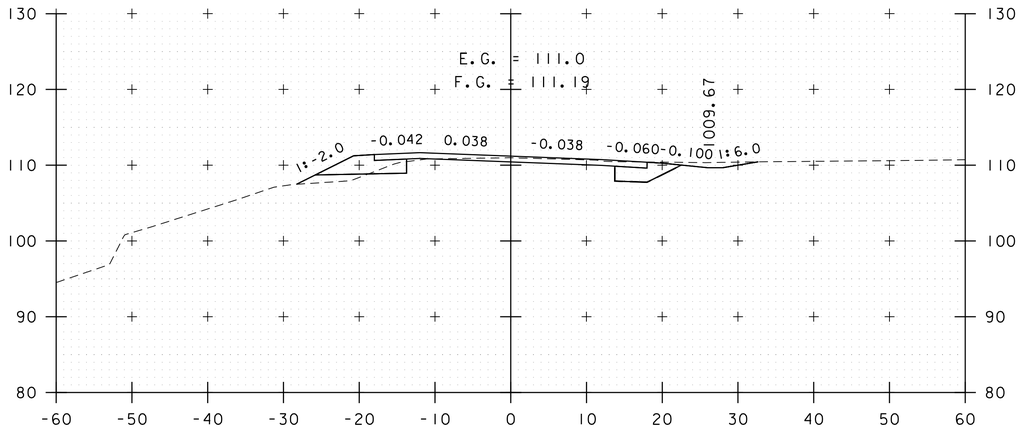
261+83 (DRIVE RT) STA. 260+50 TO STA. 262+50

vhb

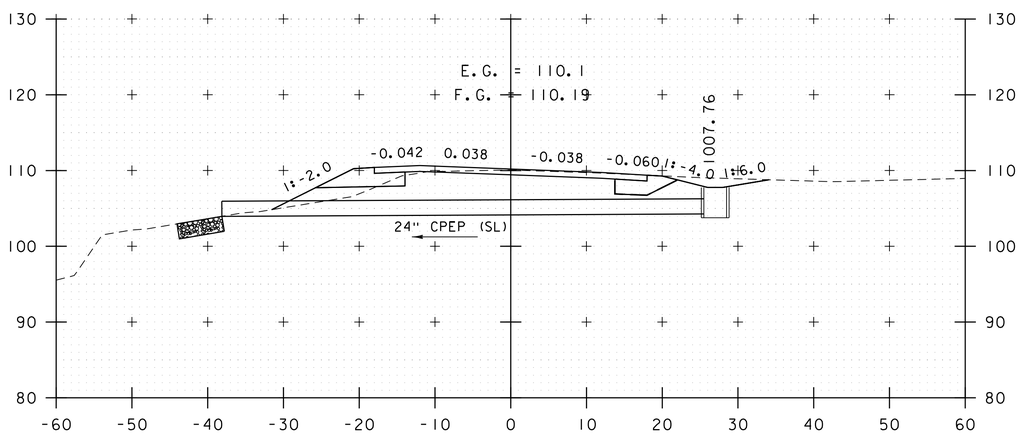
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 82

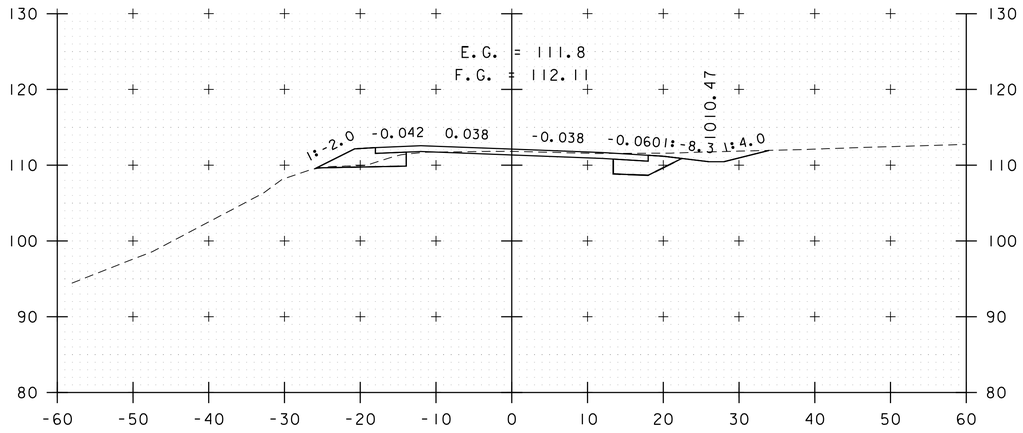
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 259 OF 305



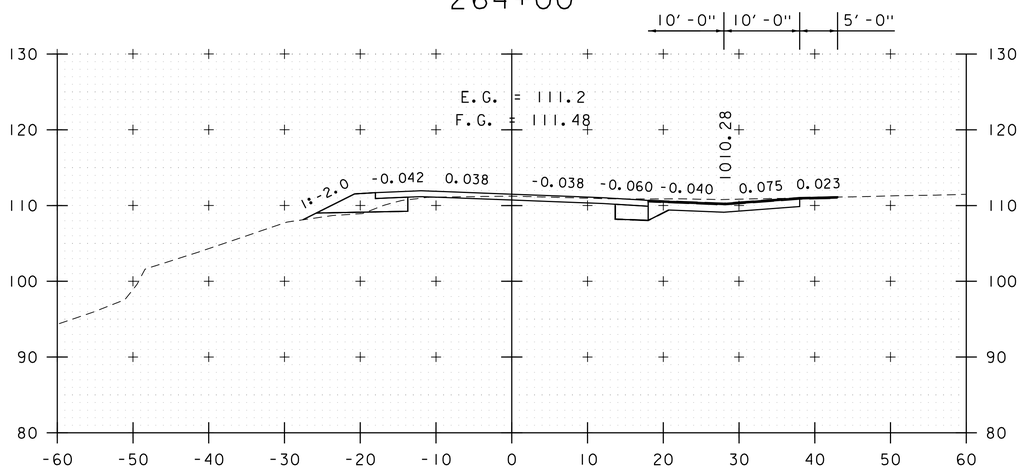
263+50



263+00 (NEW 24" CPEP)



264+00

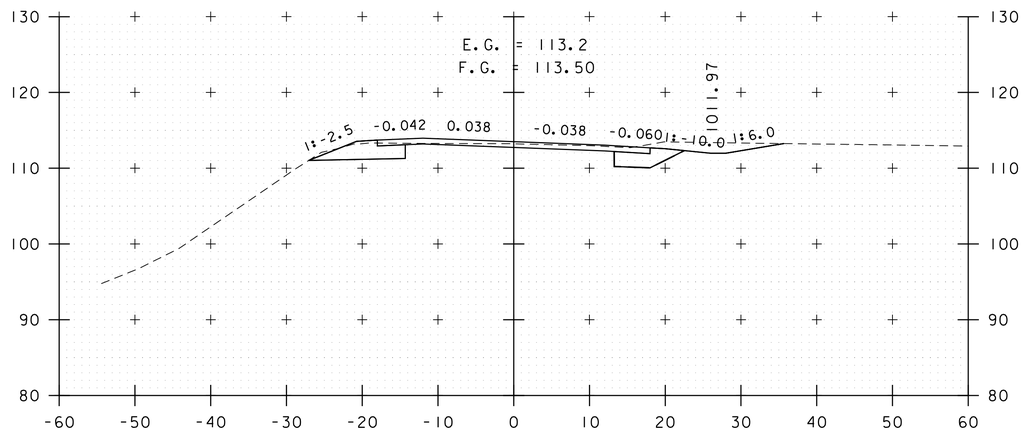


263+65 (DRIVE RT)

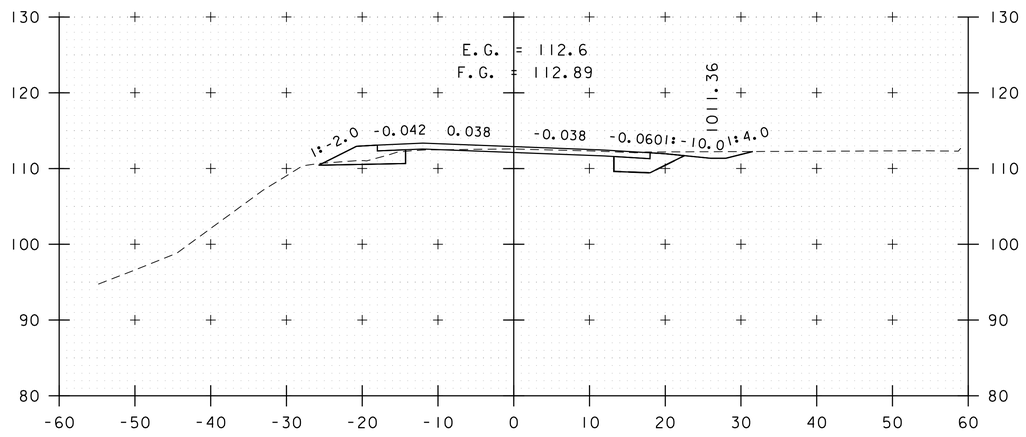
STA. 263+00 TO STA. 264+00

vhb

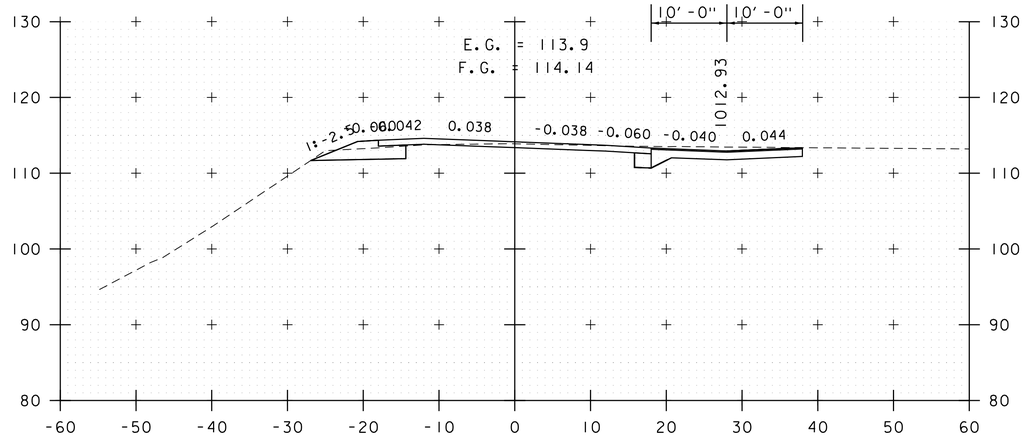
PROJECT NAME: SWANTON	
PROJECT NUMBER: NH 036-1(9)	
FILE NAME: z96b032xs_25000_33800.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G.BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G.BAKOS
CROSS SECTION SHEET 83	SHEET 260 OF 305



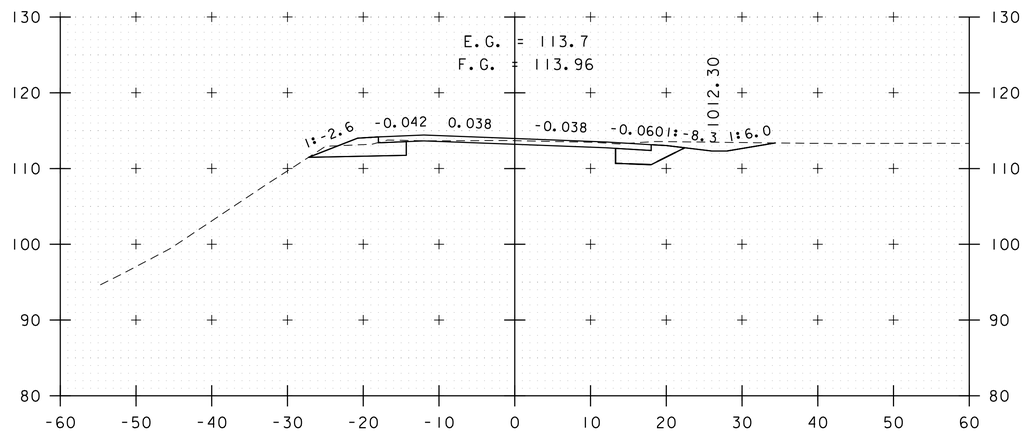
265+00



264+50



265+76 (DRIVE RT)



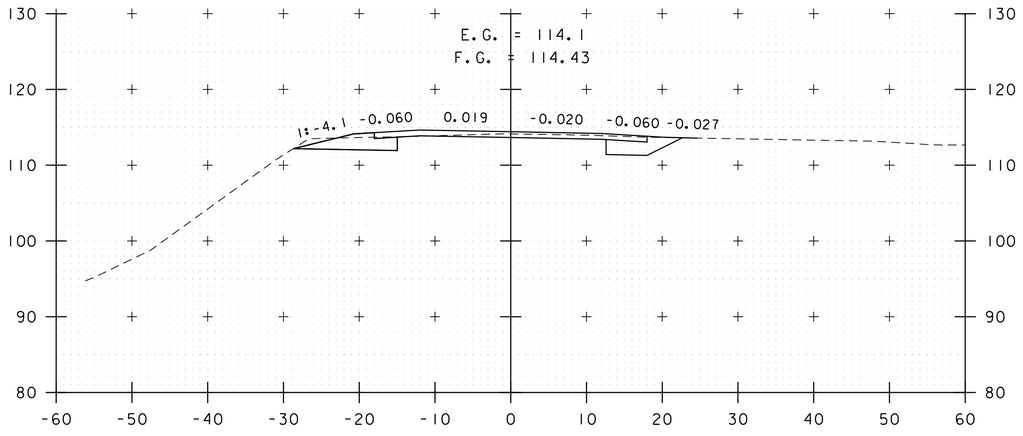
265+50

STA. 264+50 TO STA. 265+76

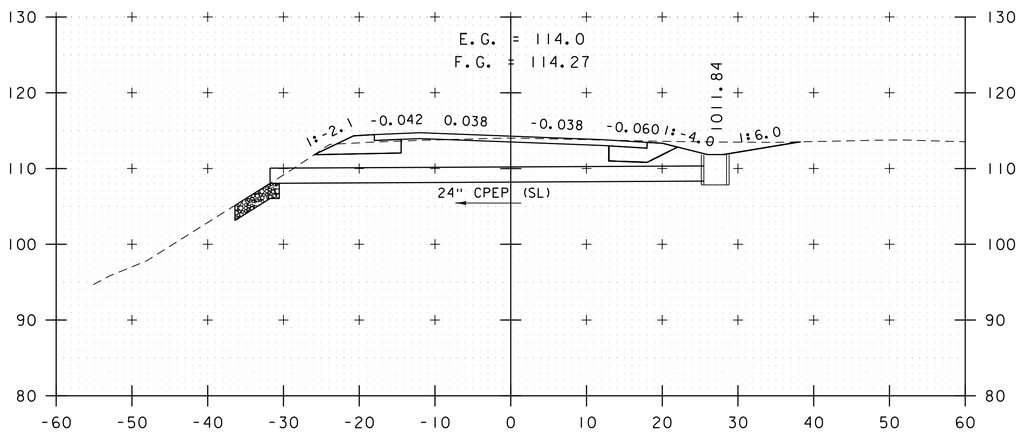
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 84

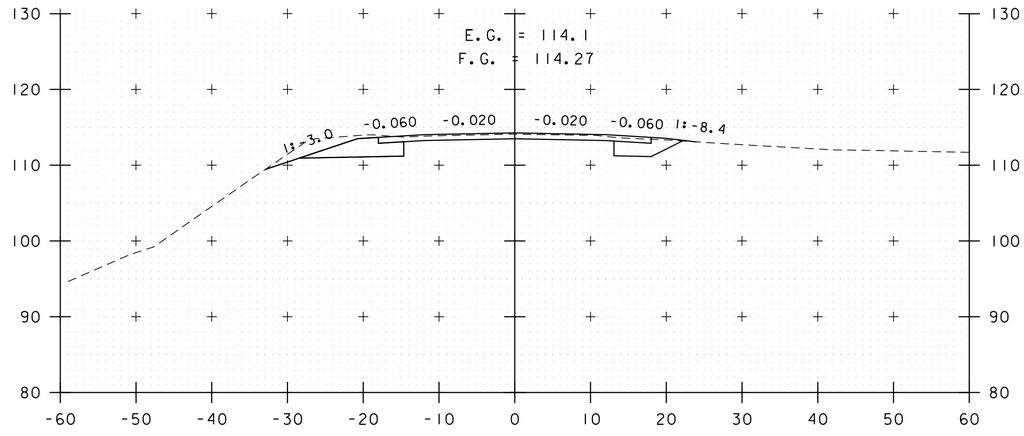
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 261 OF 305



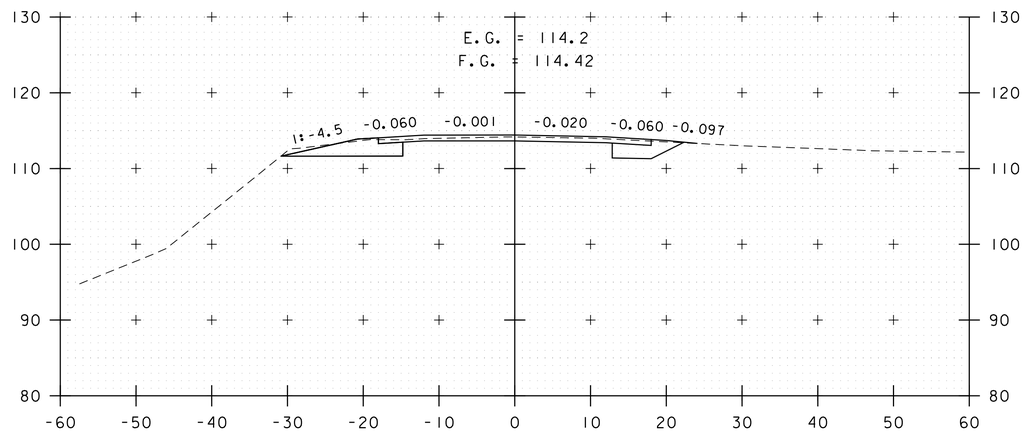
266+50



266+00 (NEW 24" CPEP)



267+50



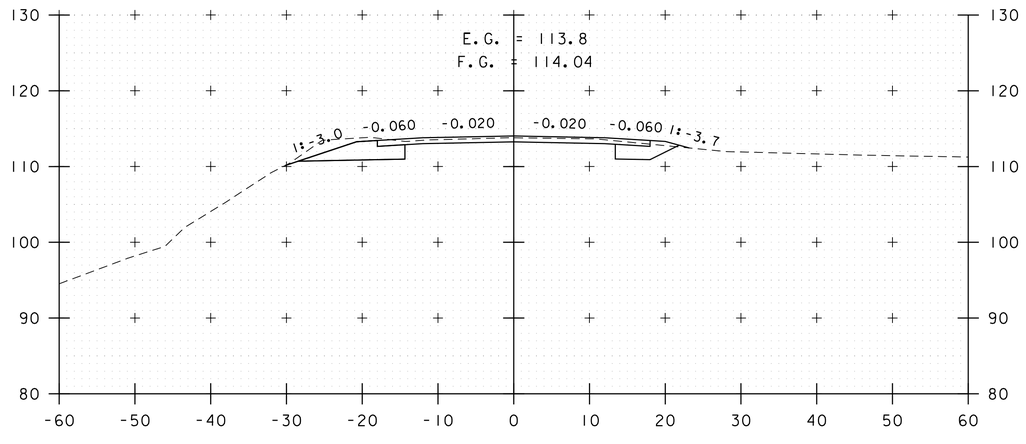
267+00

STA. 266+00 TO STA. 267+50

vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G.BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G.BAKOS
CROSS SECTION SHEET 85	SHEET 262 OF 305



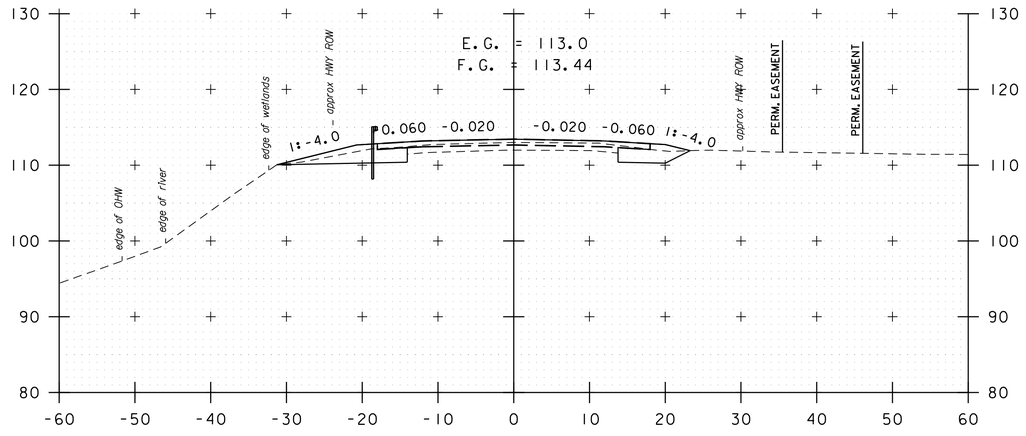
268+00

STA. 268+00 TO STA. 268+00

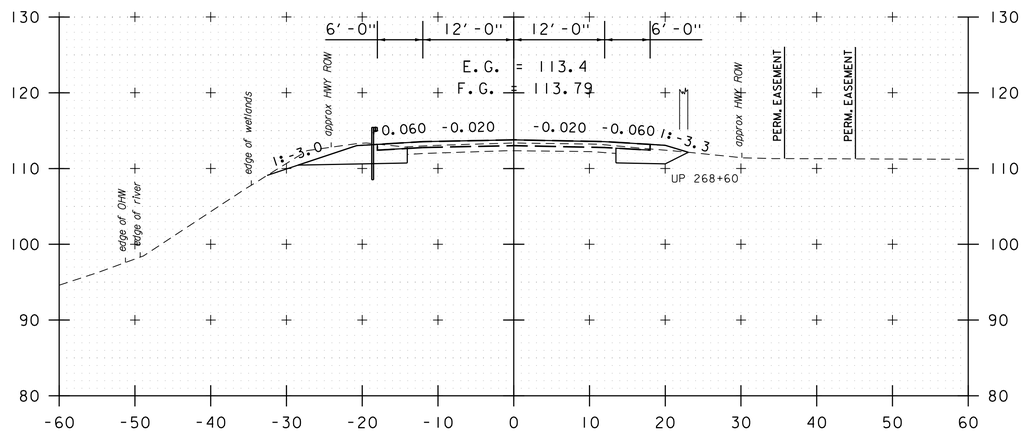
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 86

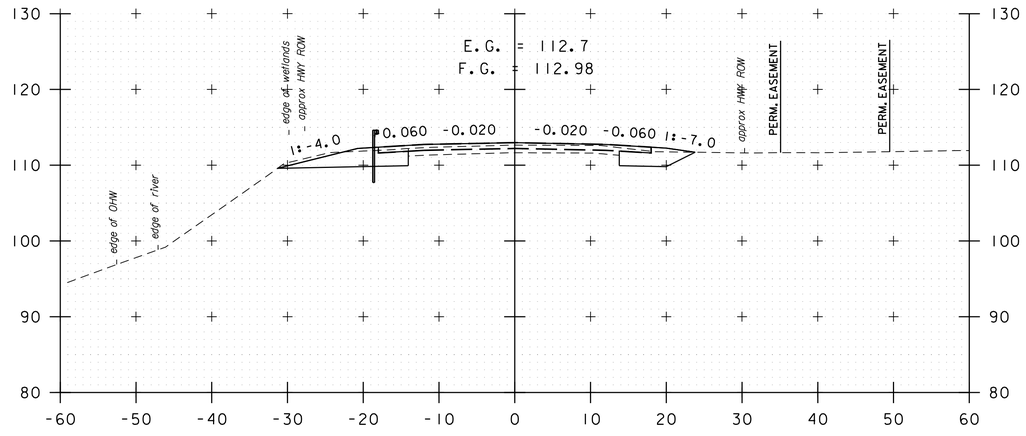
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 263 OF 305



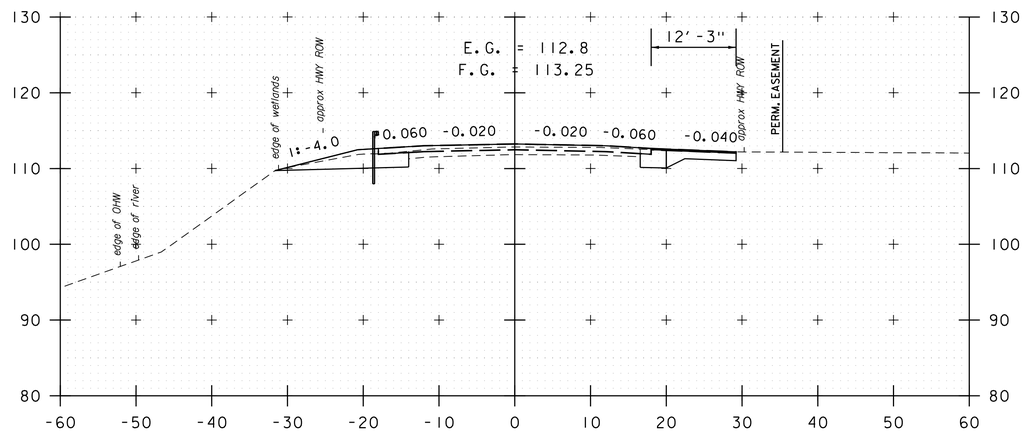
269+00



268+50



269+50



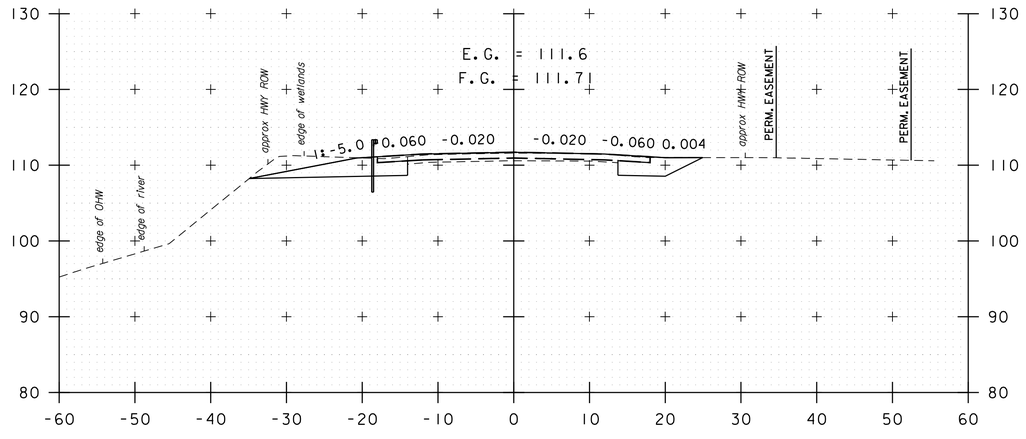
269+23 (DRIVE RT) STA. 268+50 TO STA. 269+50

vhb

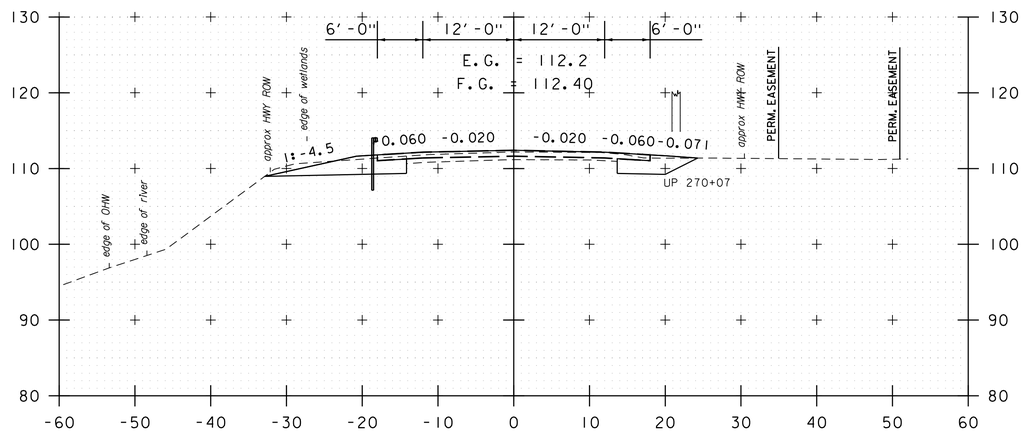
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 87

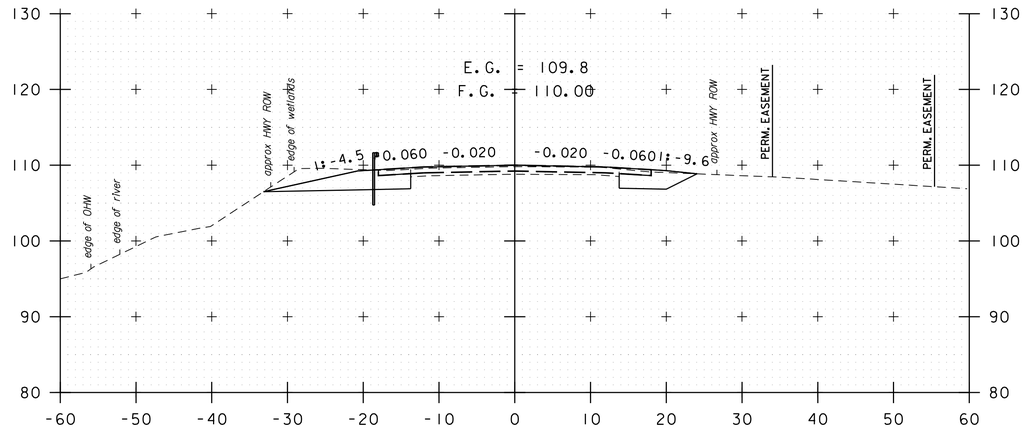
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 264 OF 305



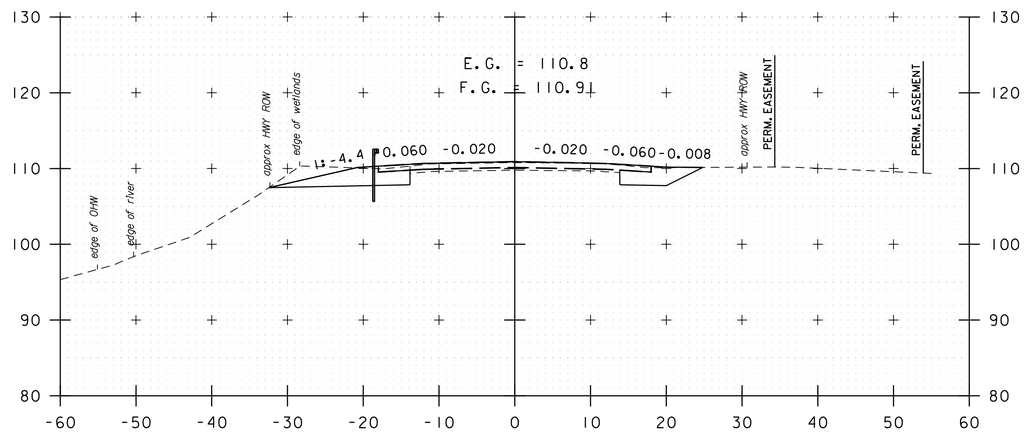
270+50



270+00



271+50



271+00

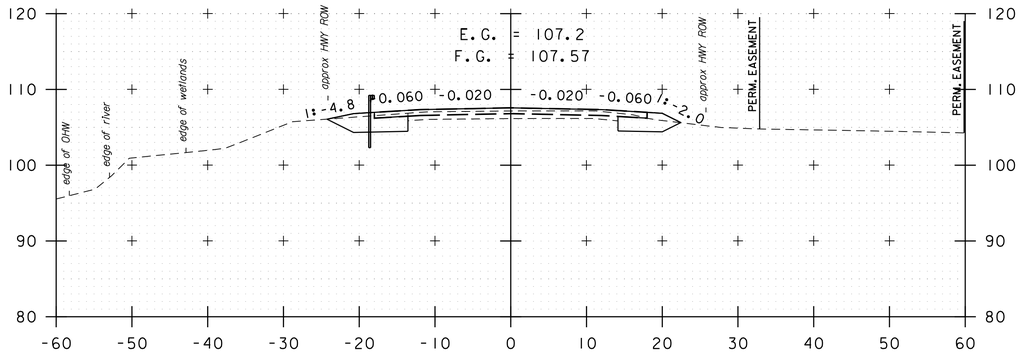
STA. 270+00 TO STA. 271+50

vhb

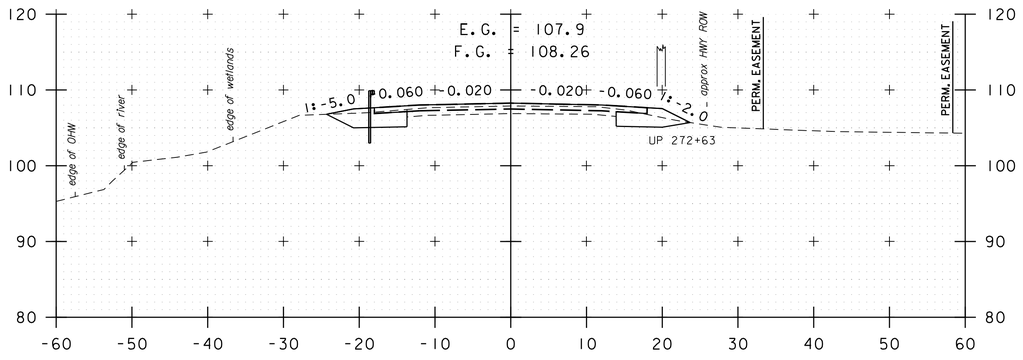
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 88

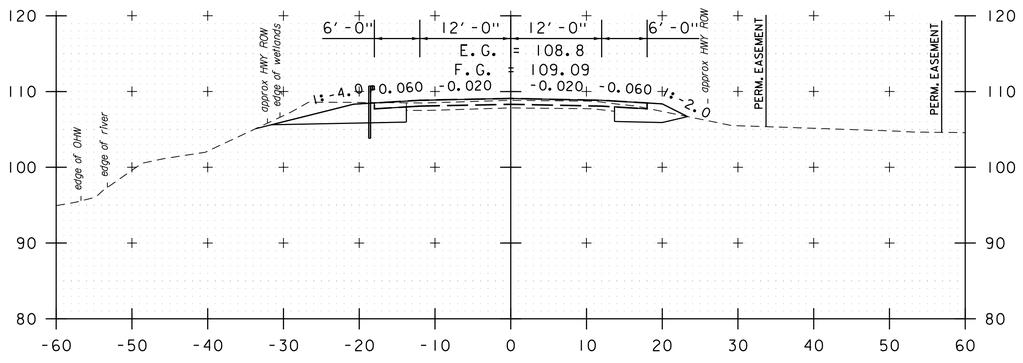
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 265 OF 305



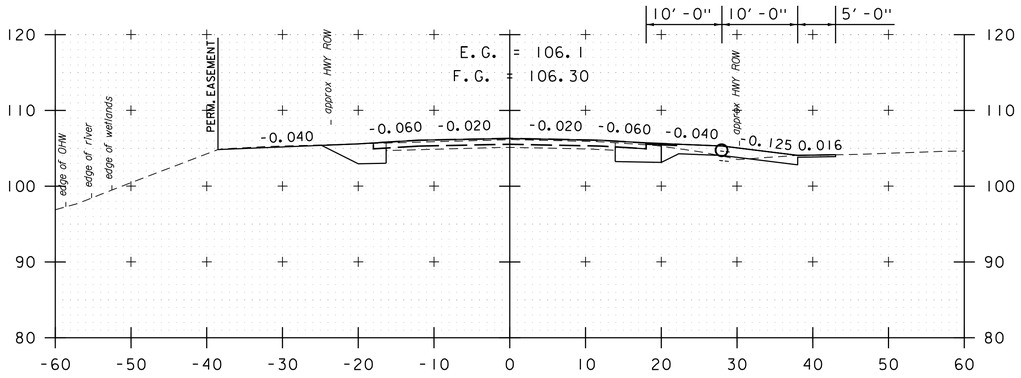
273+00



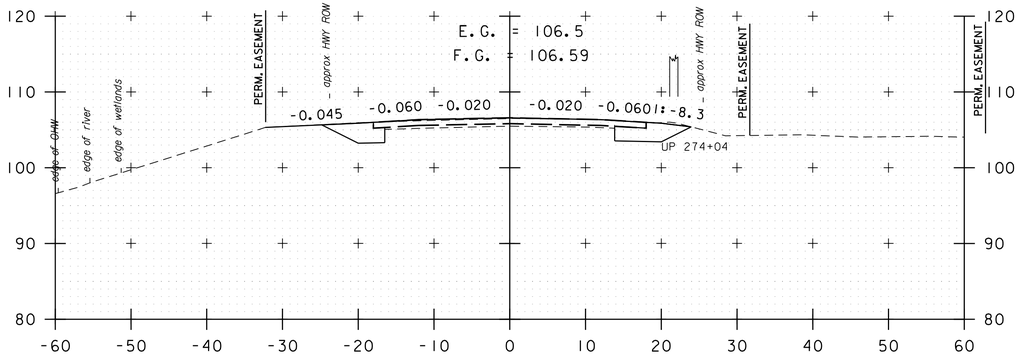
272+50



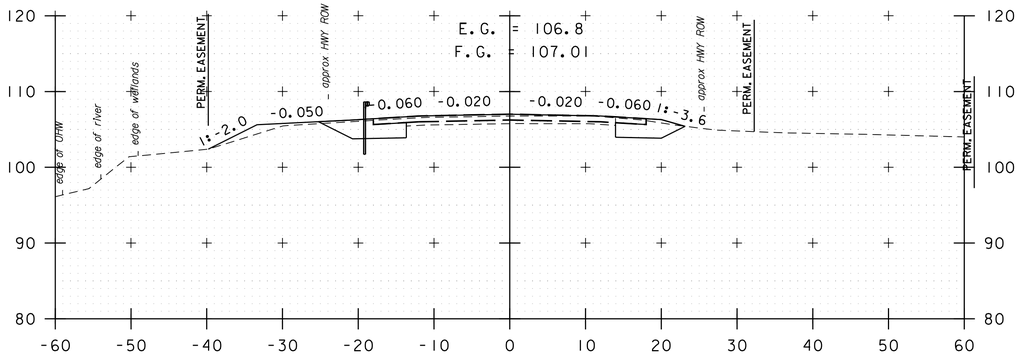
272+00



274+50 (DRIVE RT)



274+00

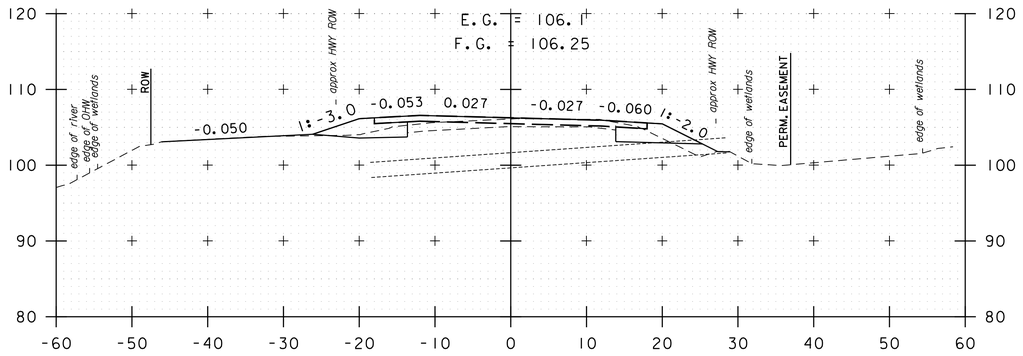


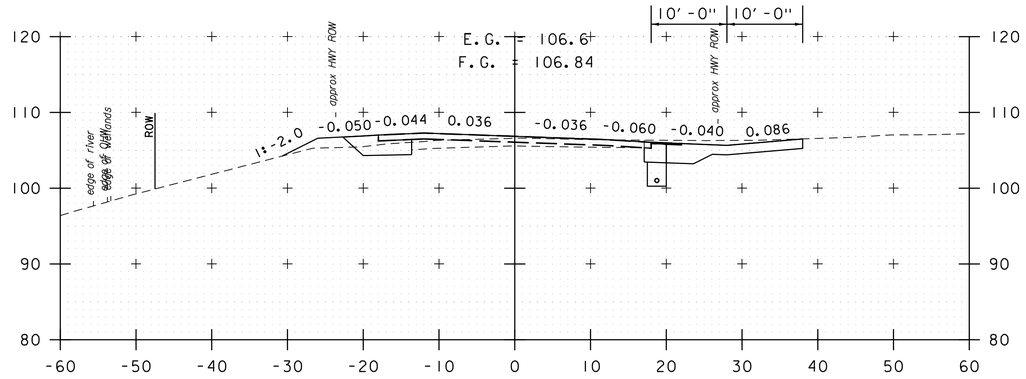
273+50

STA. 272+00 TO STA. 274+50

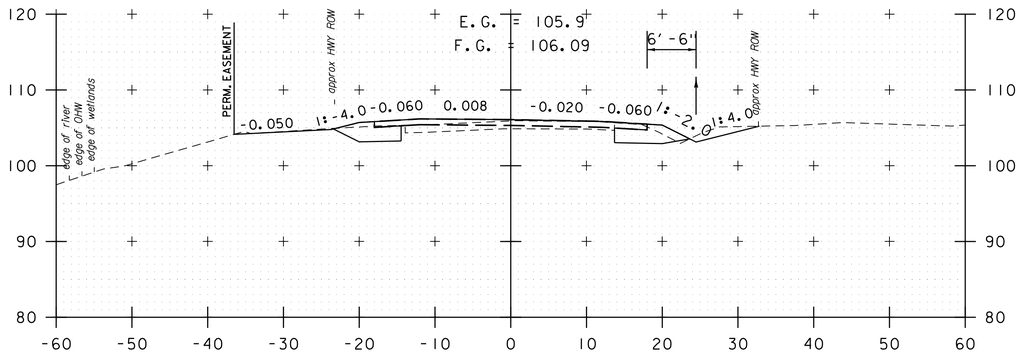
vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032xs_25000_33800.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G.BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G.BAKOS
CROSS SECTION SHEET 89	SHEET 266 OF 305

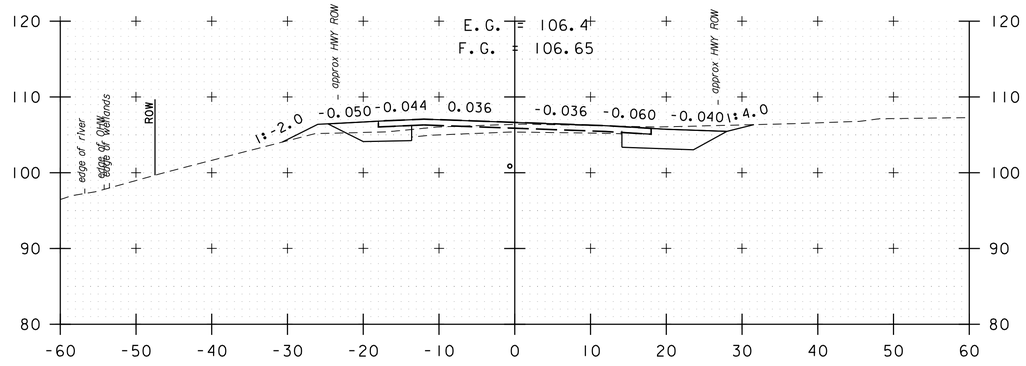




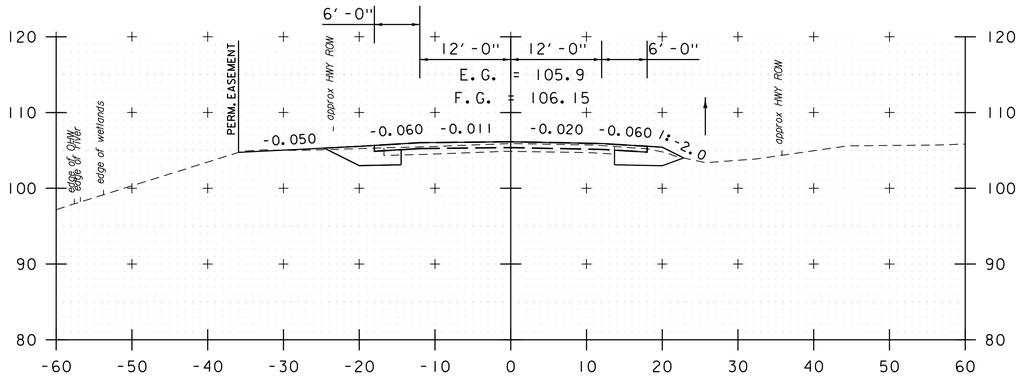
276+00



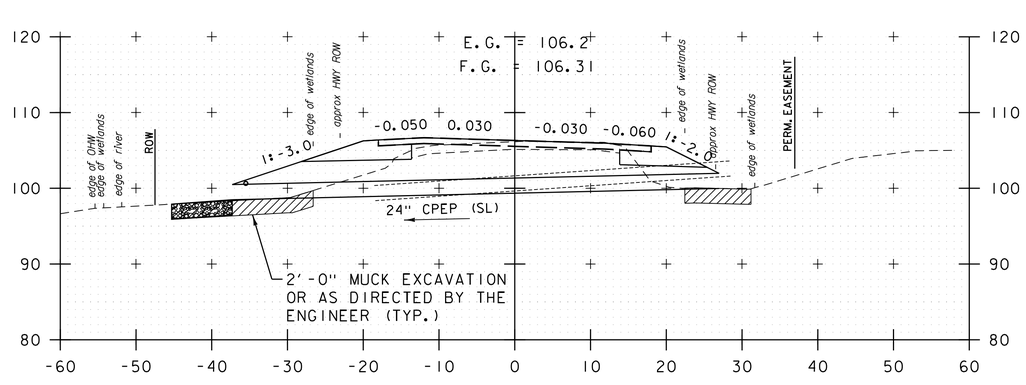
276+68 (DRIVE RT)



275+50



276+50



275+00

276+10 (NEW 24" CPEP)

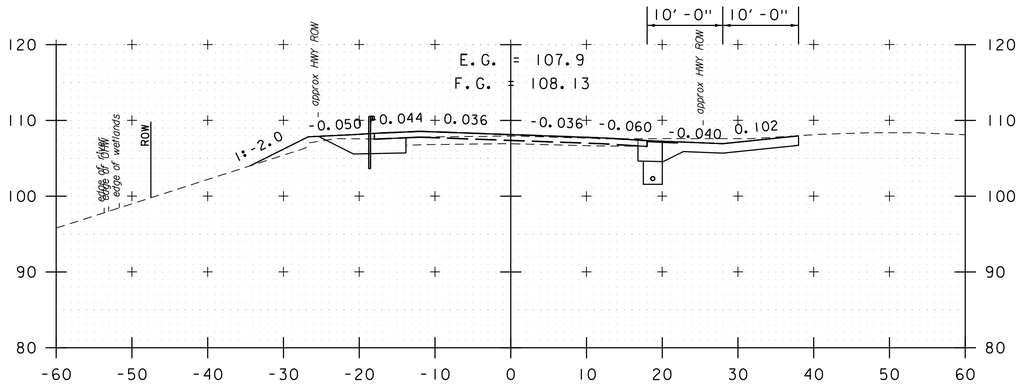
STA. 275+00 TO STA. 276+68

vhb

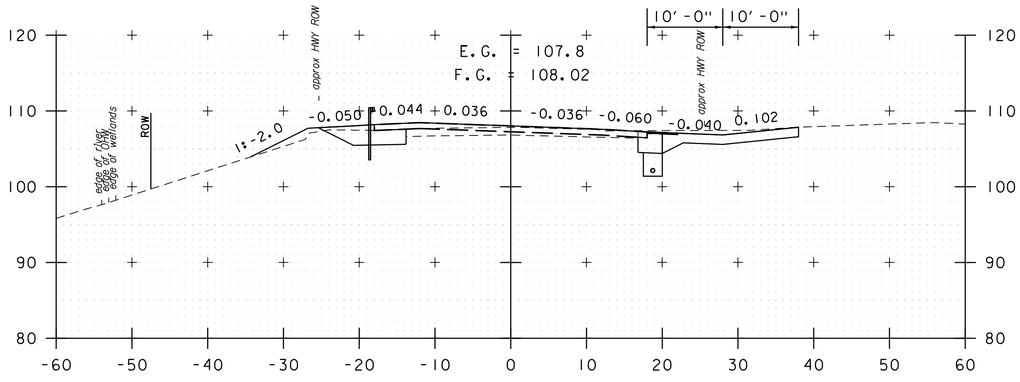
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 90

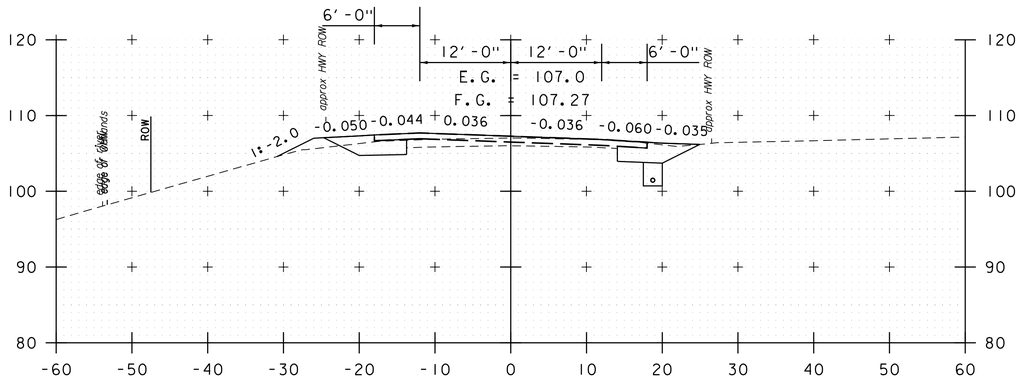
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 267 OF 305



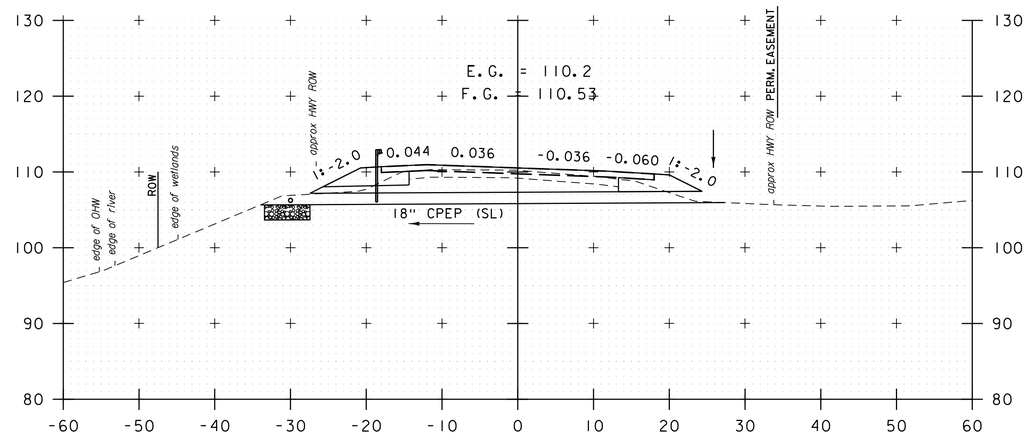
277+50



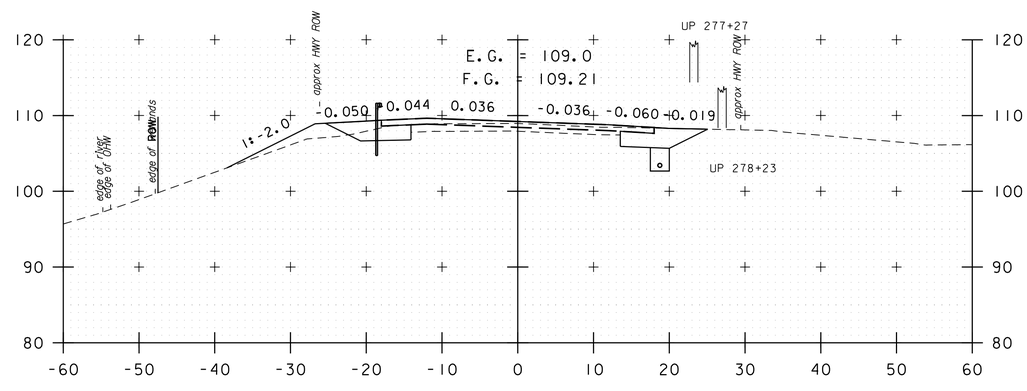
277+45 (DRIVE RT)



277+00



278+50 (NEW 18" CPEP)

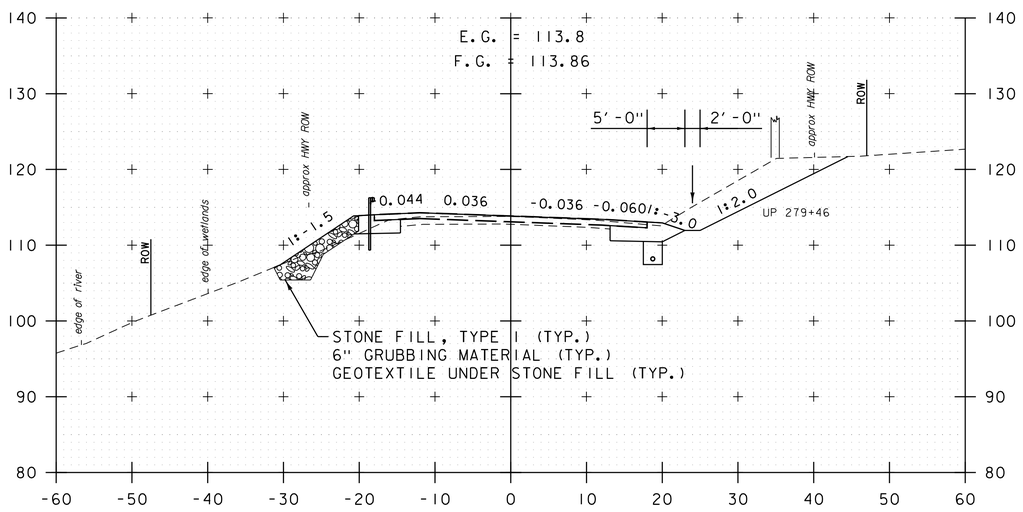


278+00

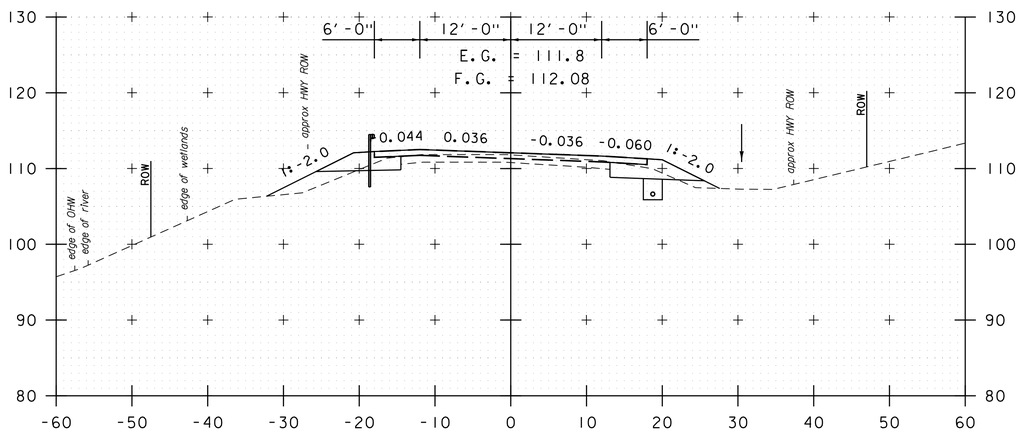
STA. 277+00 TO STA. 278+50

vhb

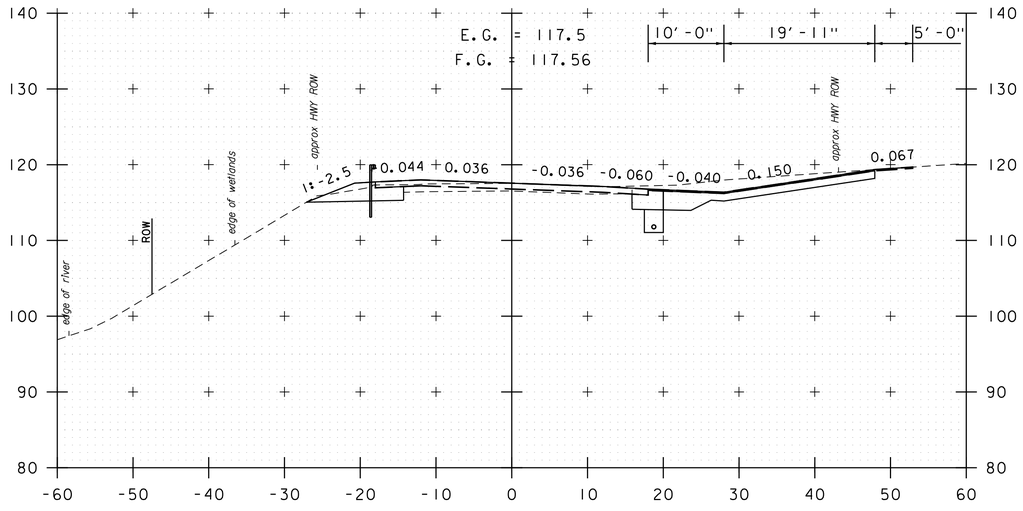
PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032xs_25000_33800.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G.BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G.BAKOS
CROSS SECTION SHEET 91	SHEET 2678 OF 305



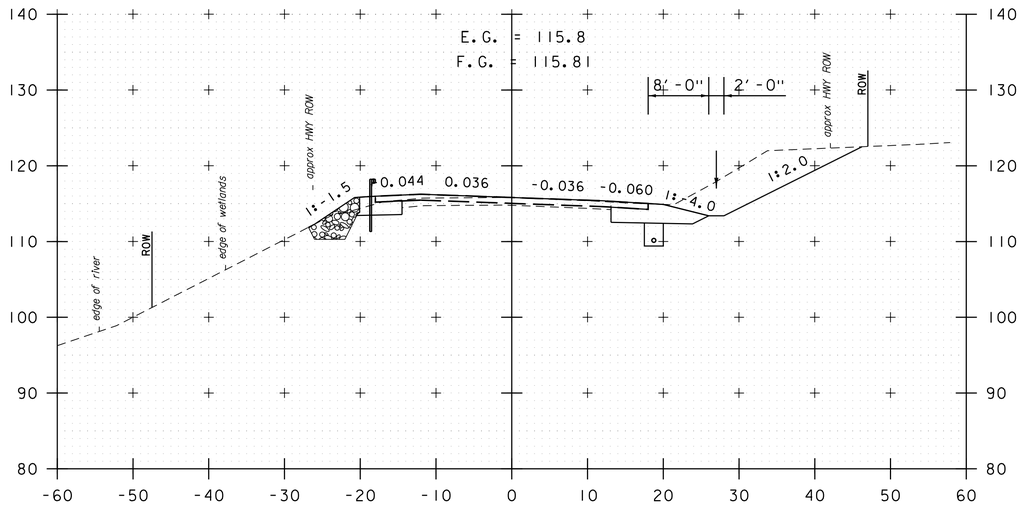
279+50



279+00



280+45 (DRIVE RT)



280+00

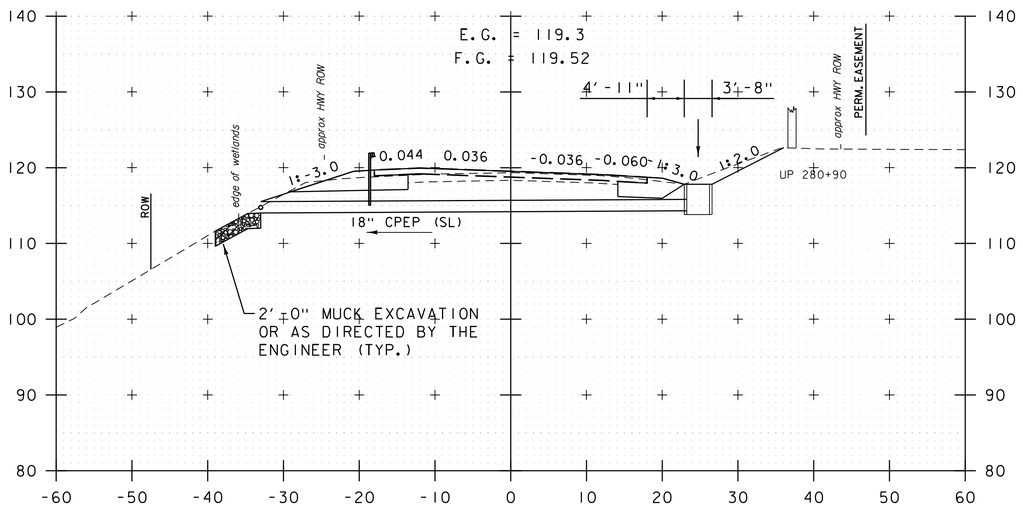
STA. 279+00 TO STA. 280+45

vhb

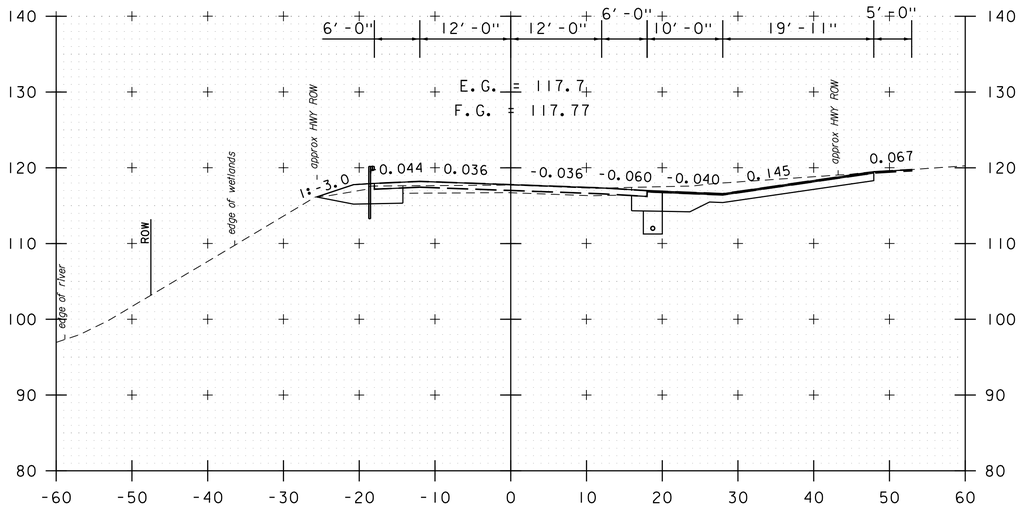
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 92

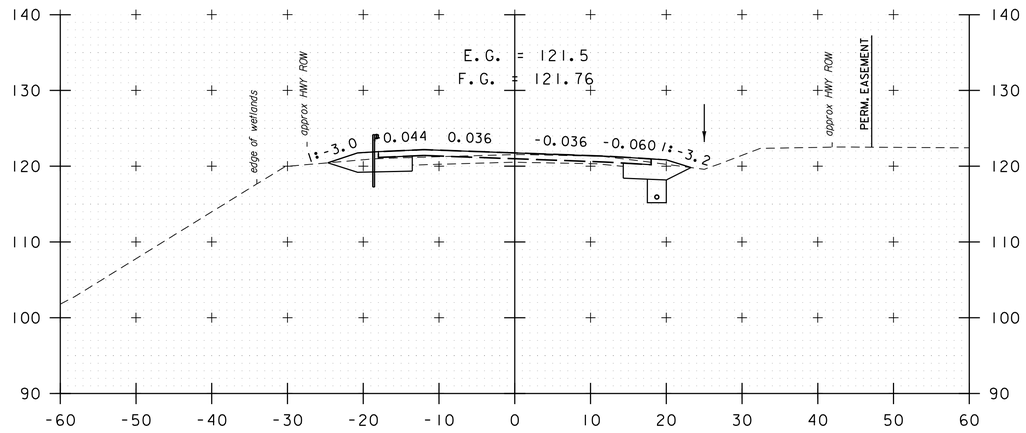
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 269 OF 305



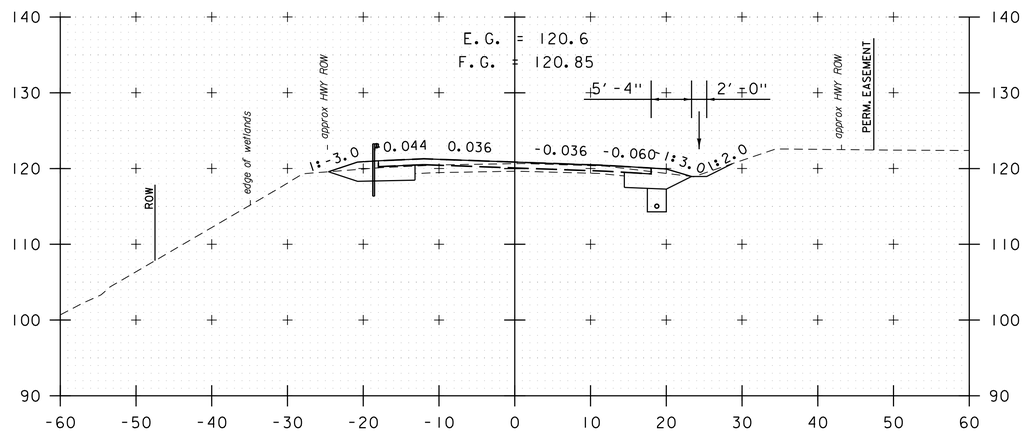
281+00 (NEW 18" CPEP)



280+50



282+00



281+50

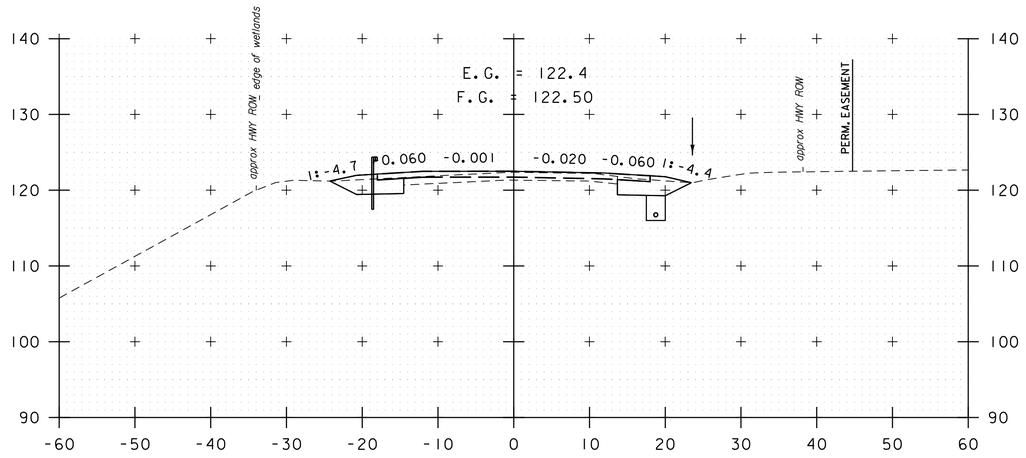
STA. 280+50 TO STA. 282+00

vhb

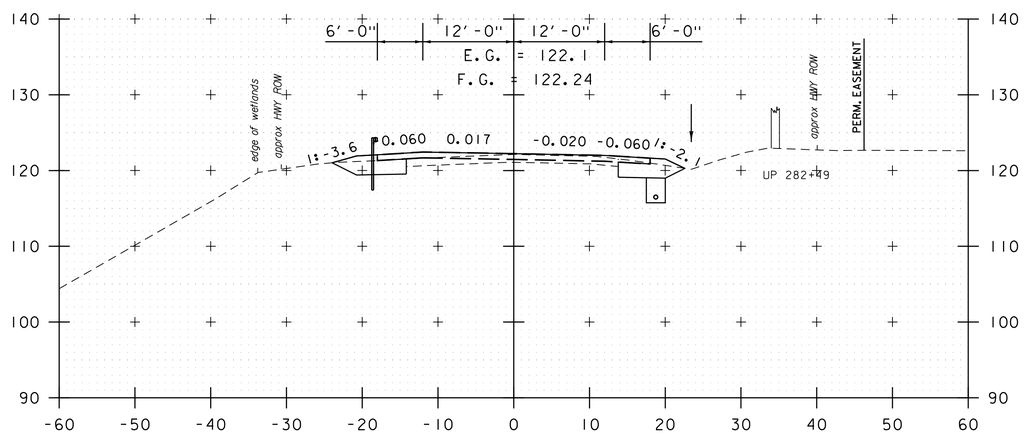
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 93

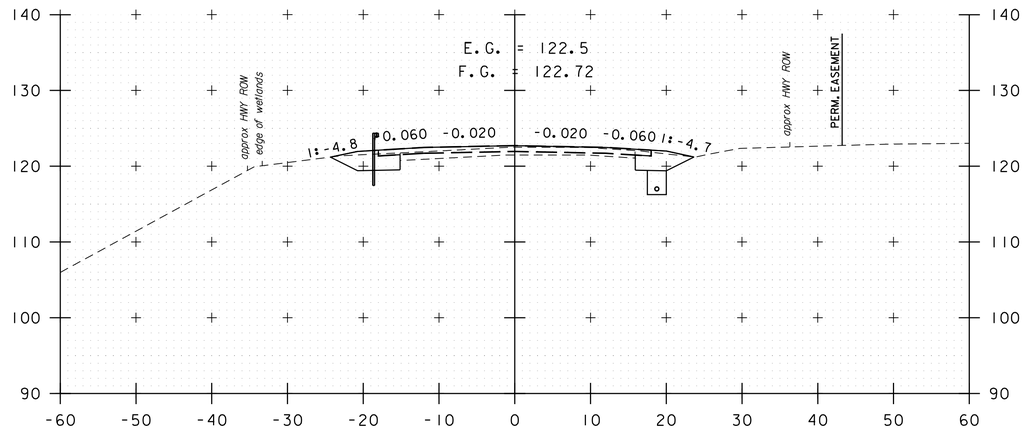
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 270 OF 305



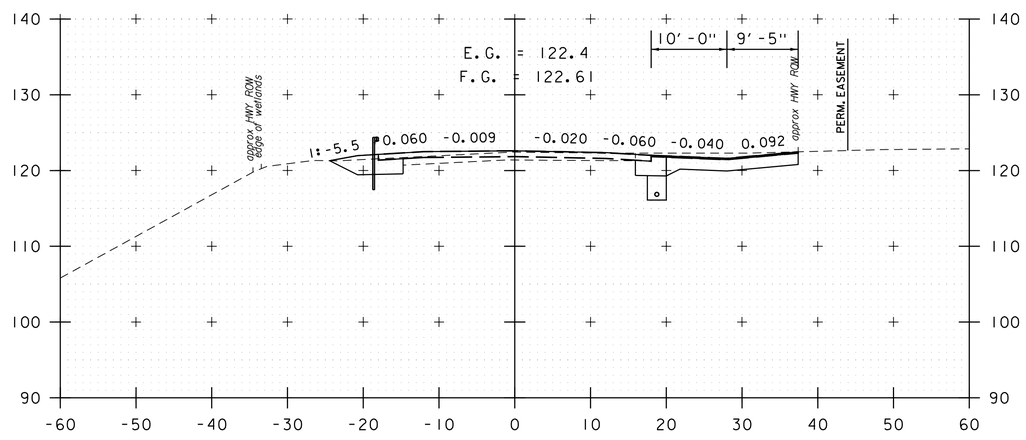
283+00



282+50



283+50



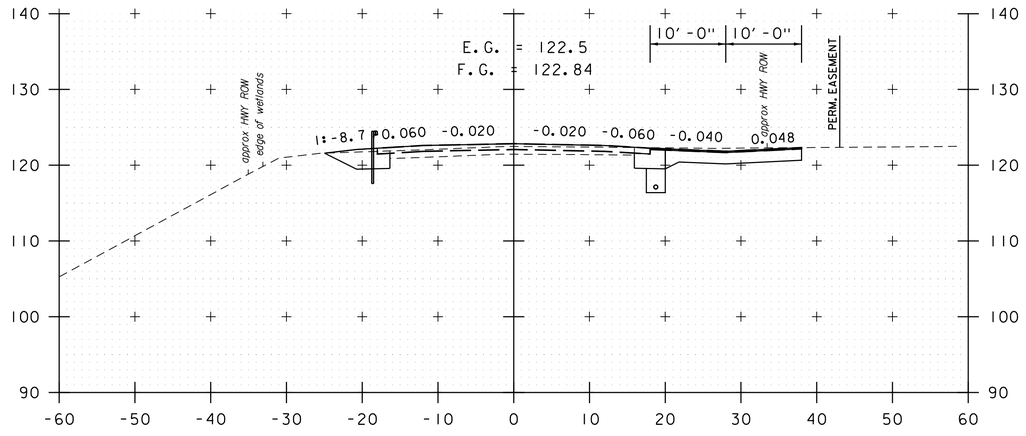
283+21 (DRIVE RT) STA. 282+50 TO STA. 283+50

vhb

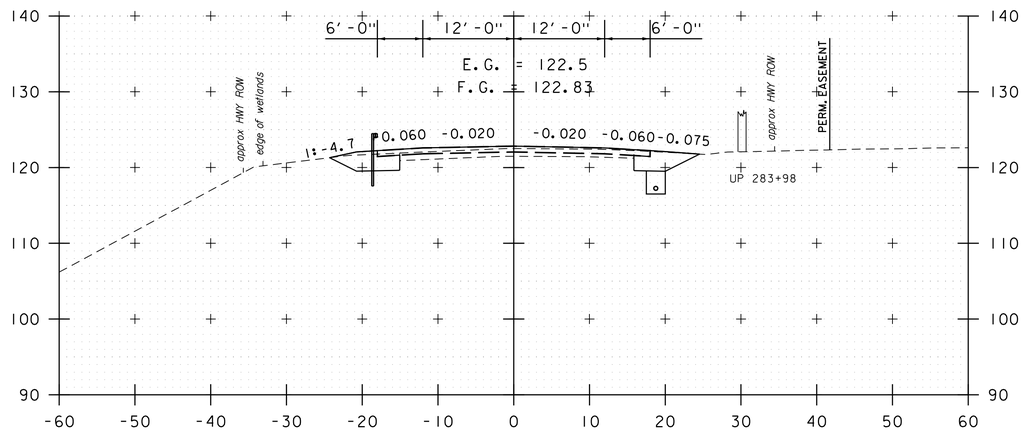
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 94

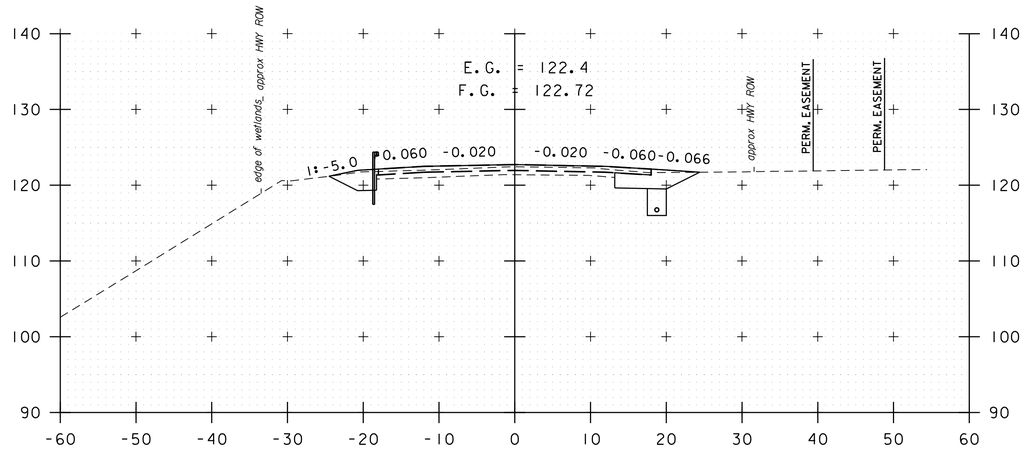
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS



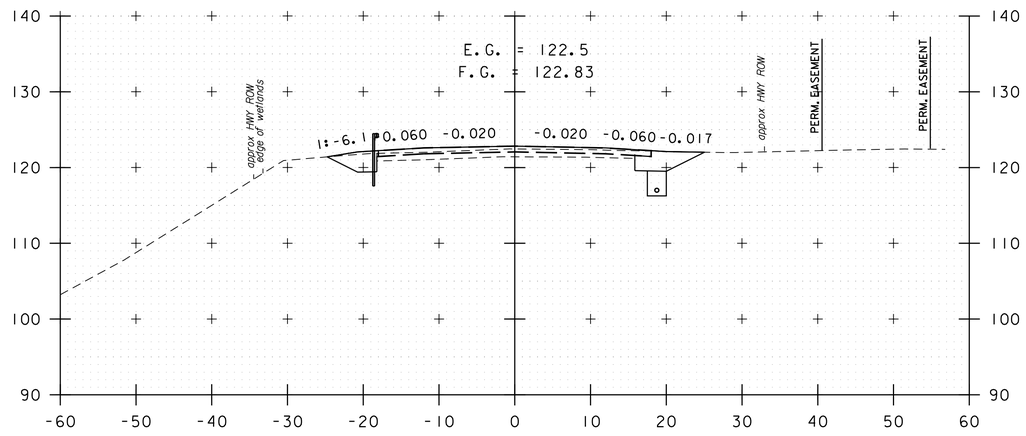
284+26 (DRIVE RT)



284+00



285+00



284+50

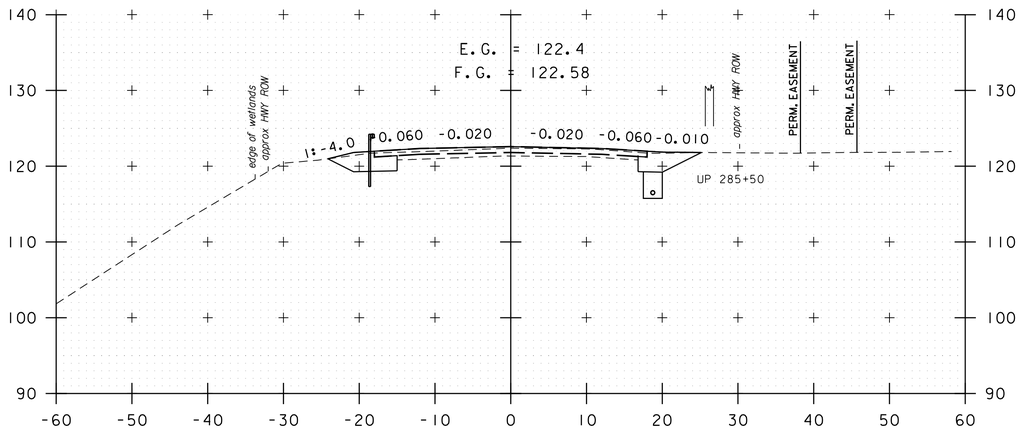
STA. 284+00 TO STA. 285+00

vhb

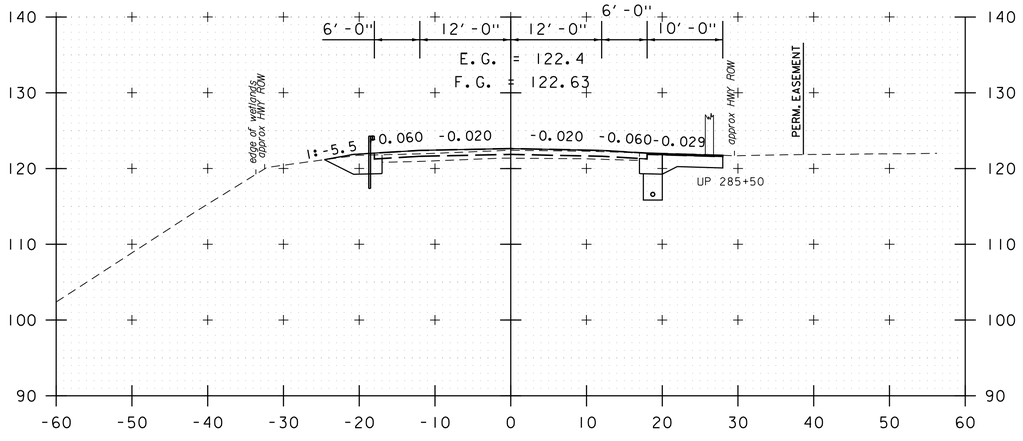
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 95

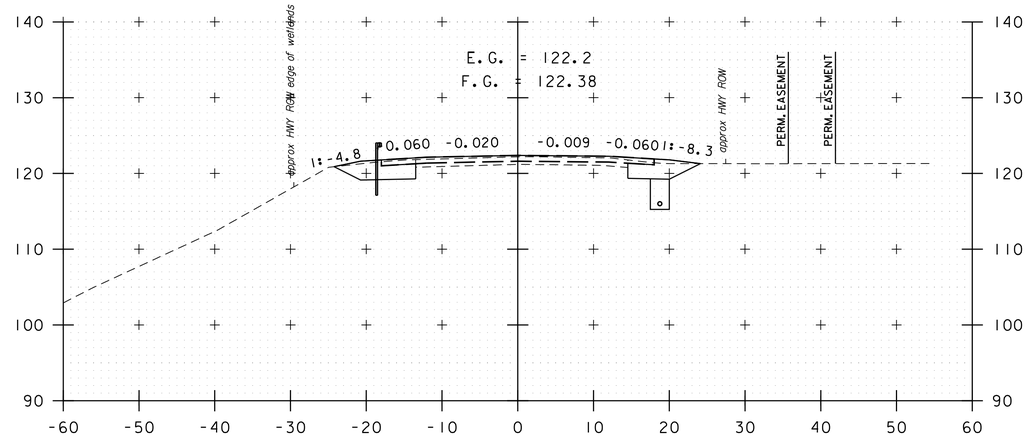
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 272 OF 305



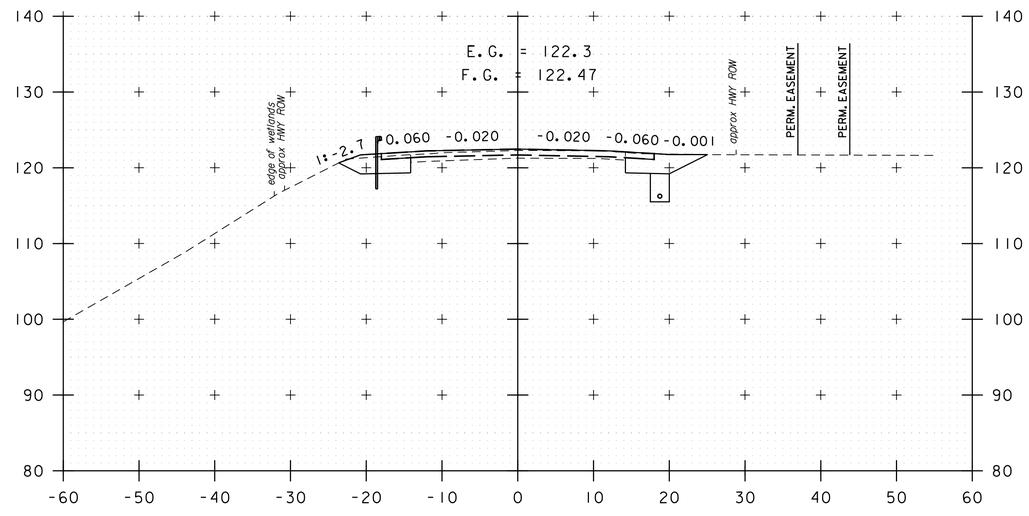
285+50



285+31 (DRIVE RT)



286+50



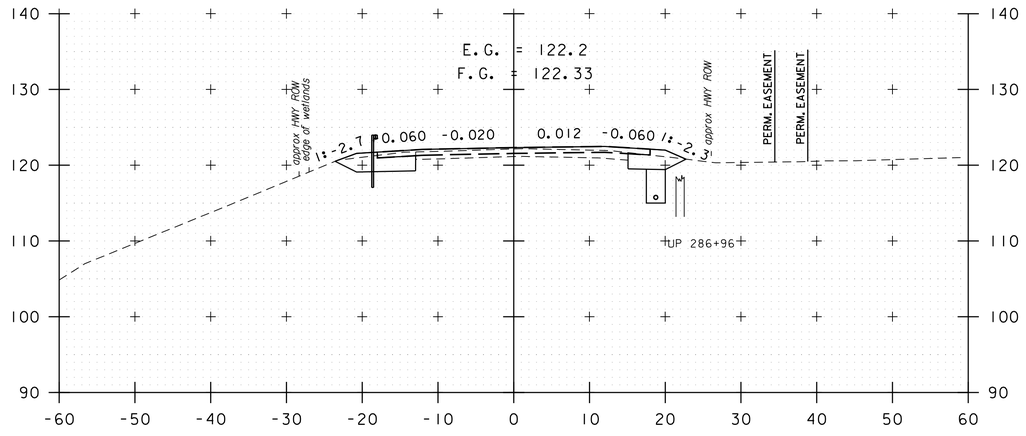
286+00

STA. 285+31 TO STA. 286+50

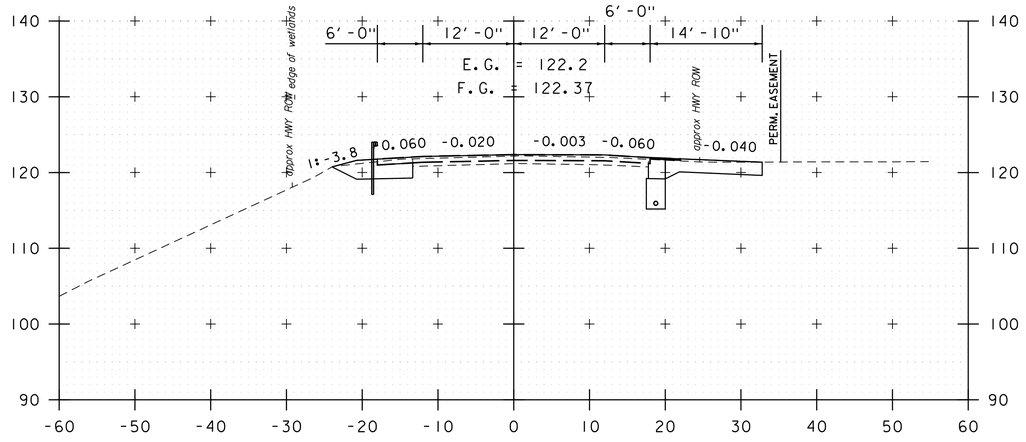
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 96

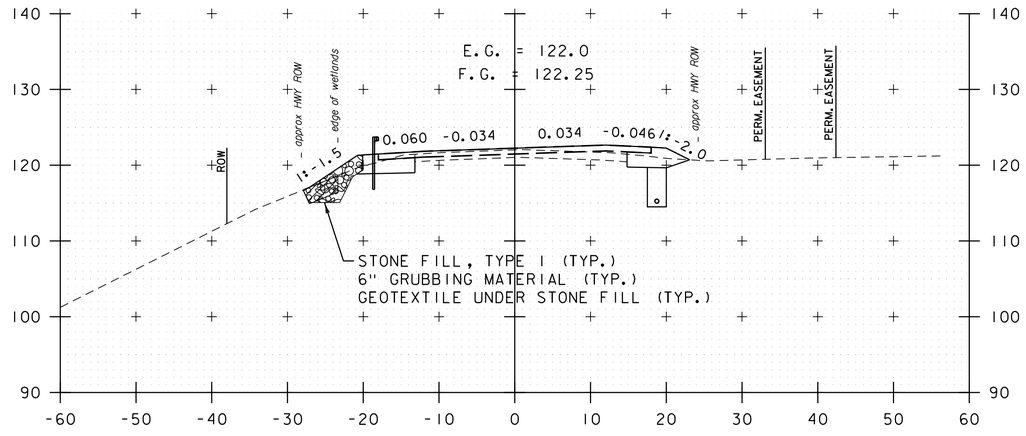
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 273 OF 305



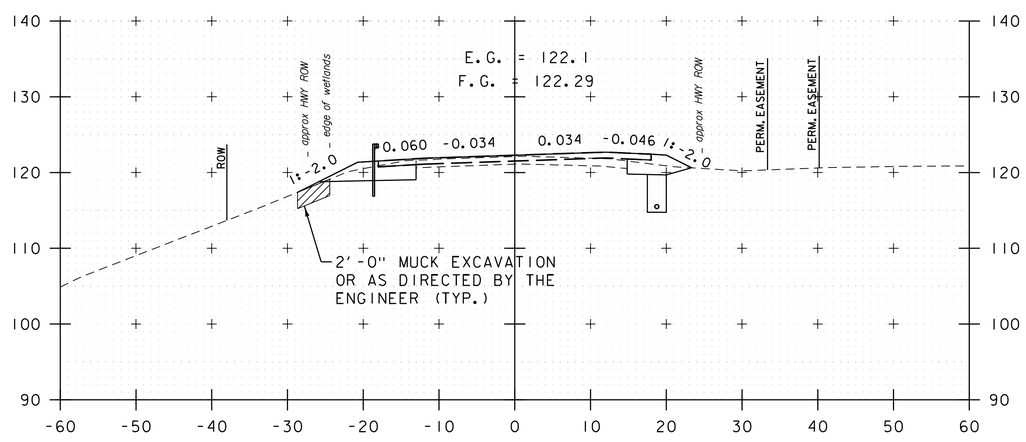
287+00



286+63 (DRIVE RT)



288+00



287+50

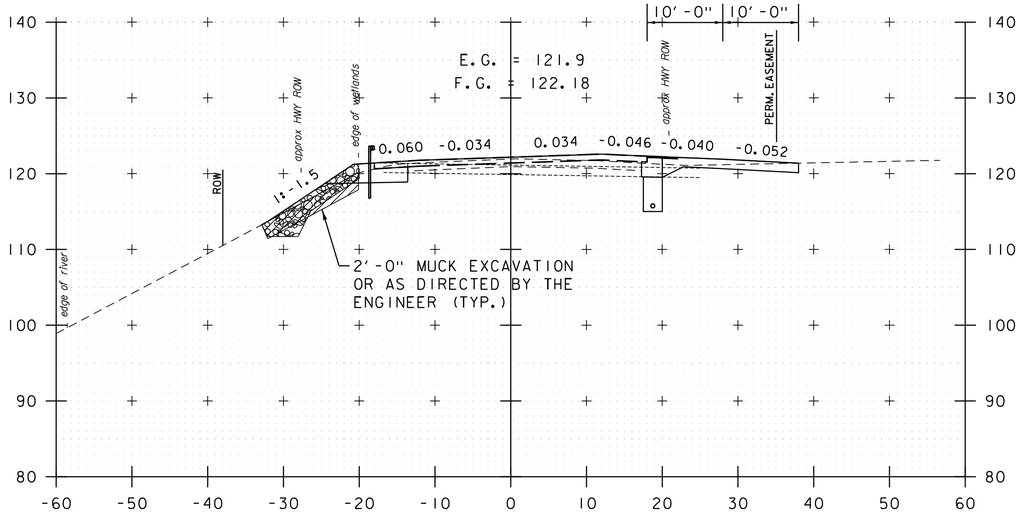
STA. 286+63 TO STA. 288+00

vhb

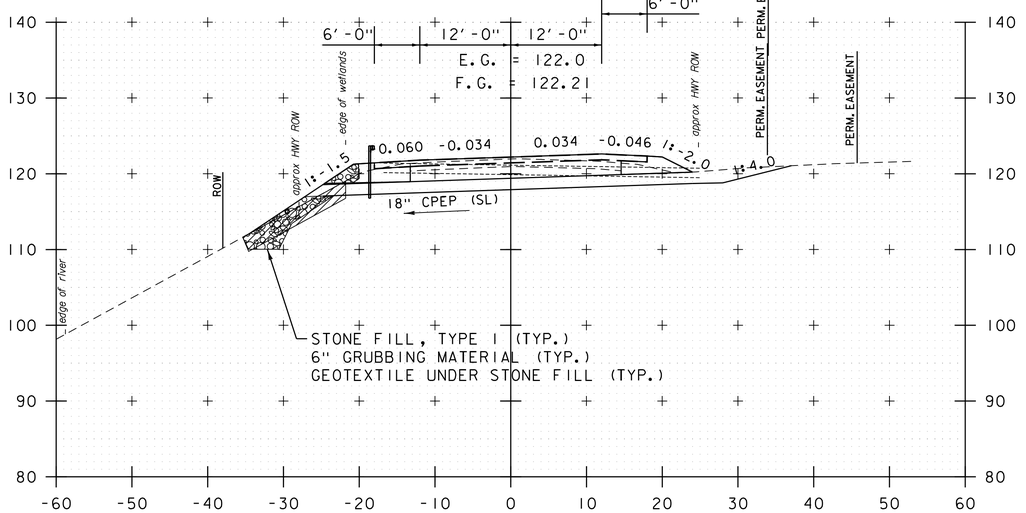
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 97

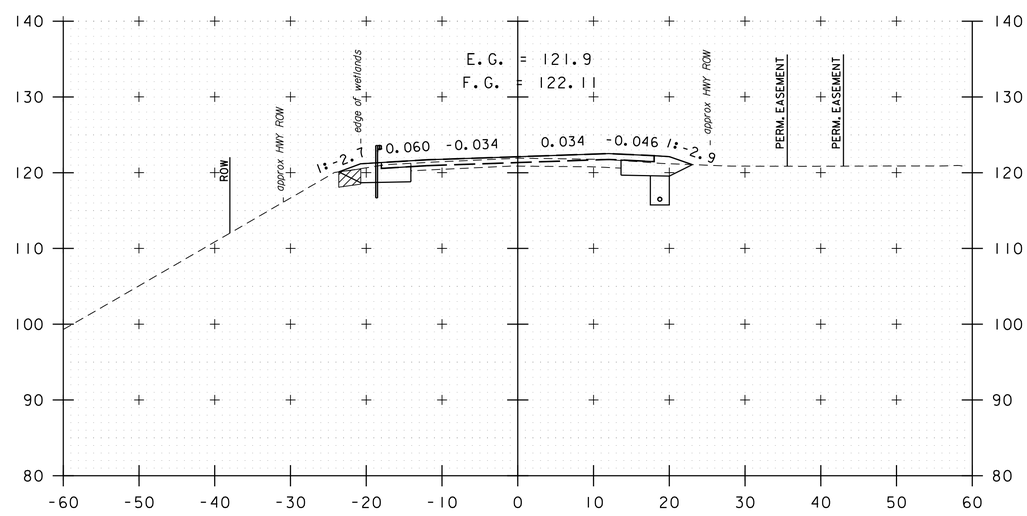
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 274 OF 305



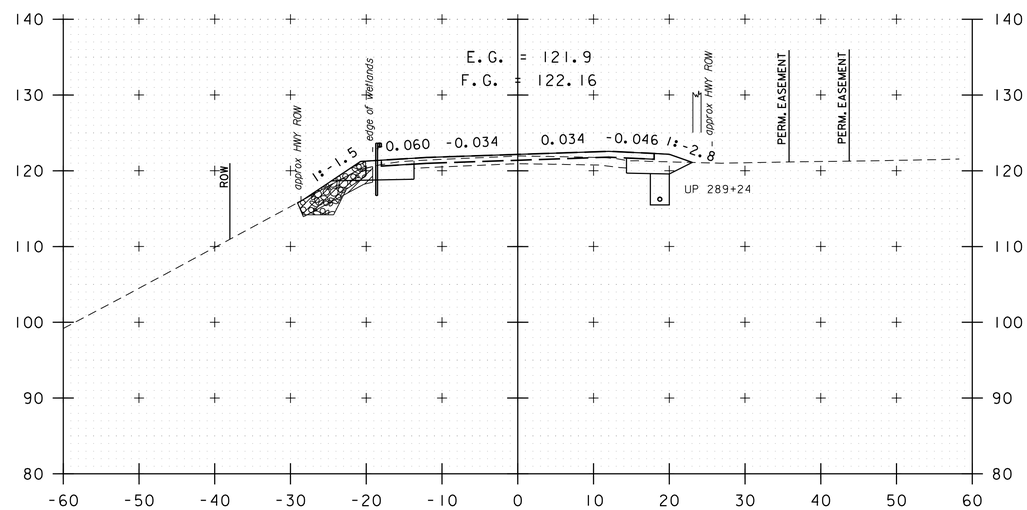
288+84 (DRIVE RT)



288+50 (NEW 18" CPEP)



289+50



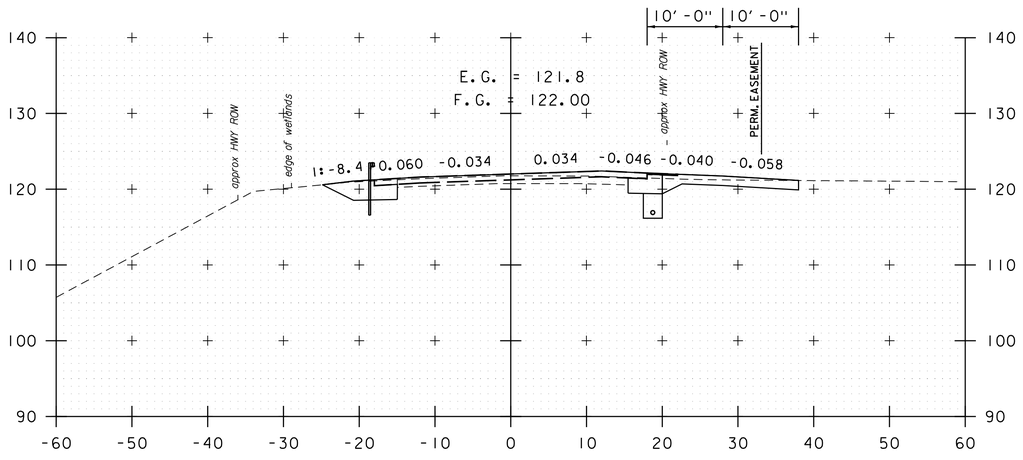
289+00

STA. 288+50 TO STA. 289+50

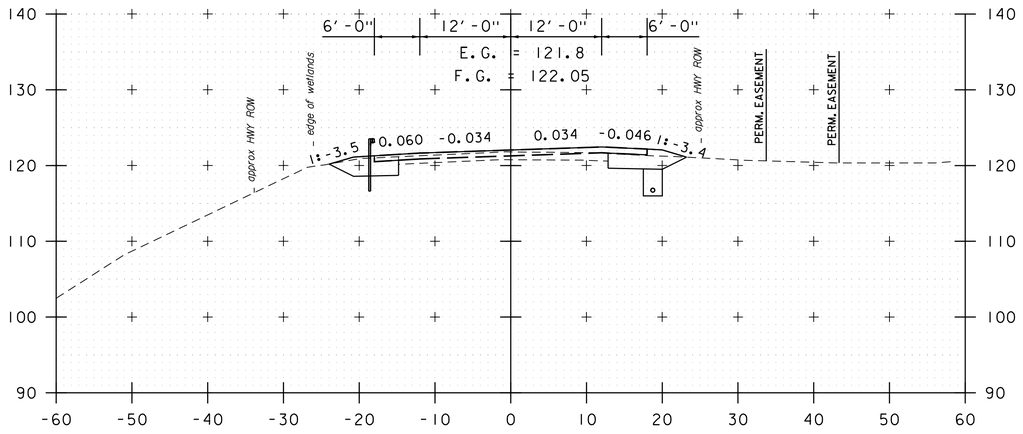
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 98

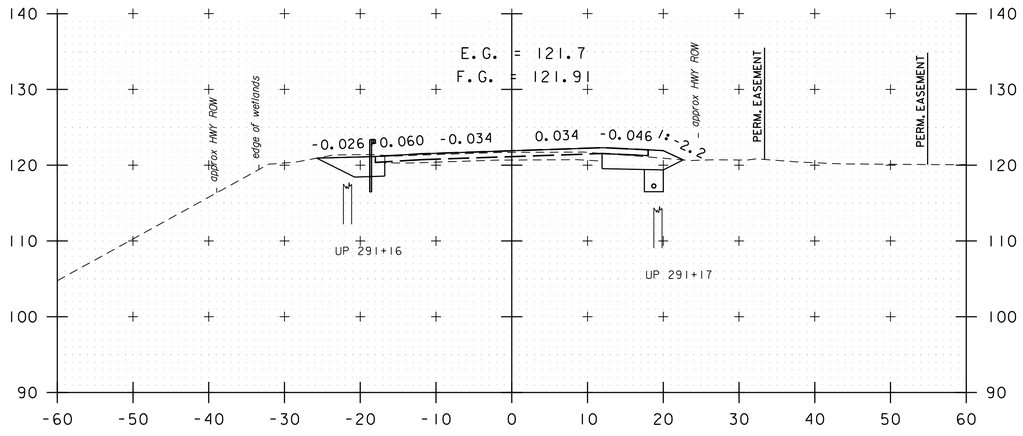
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 275 OF 305



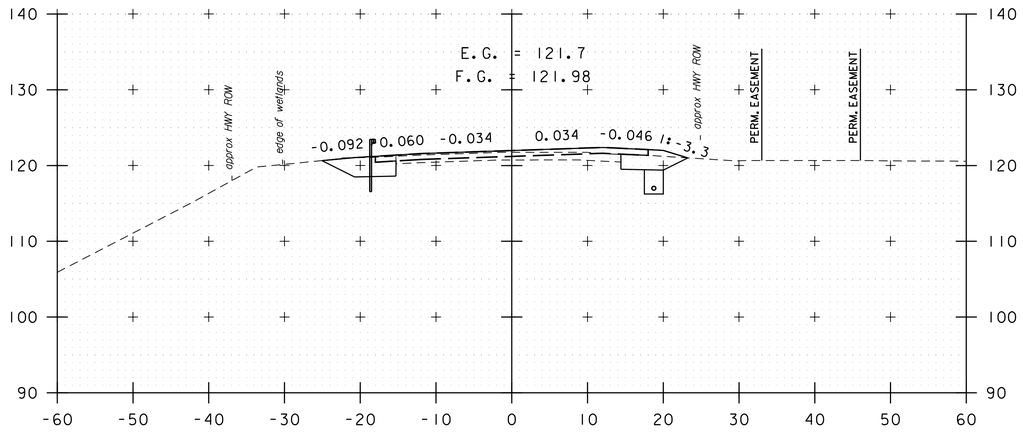
290+33 (DRIVE RT)



290+00



291+00



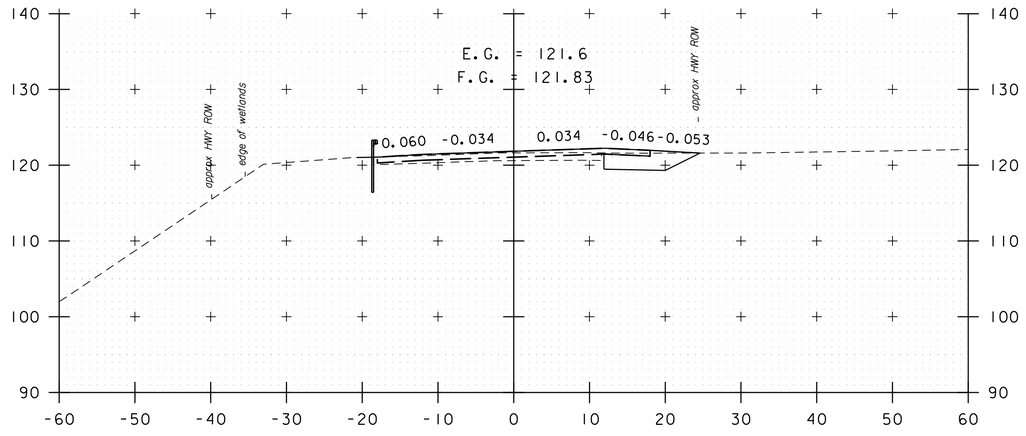
290+50

STA. 290+00 TO STA. 291+00

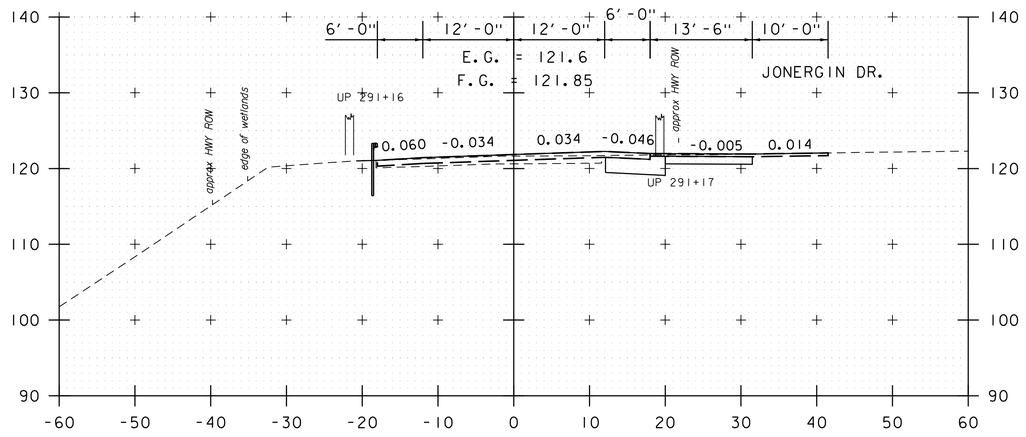
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 99

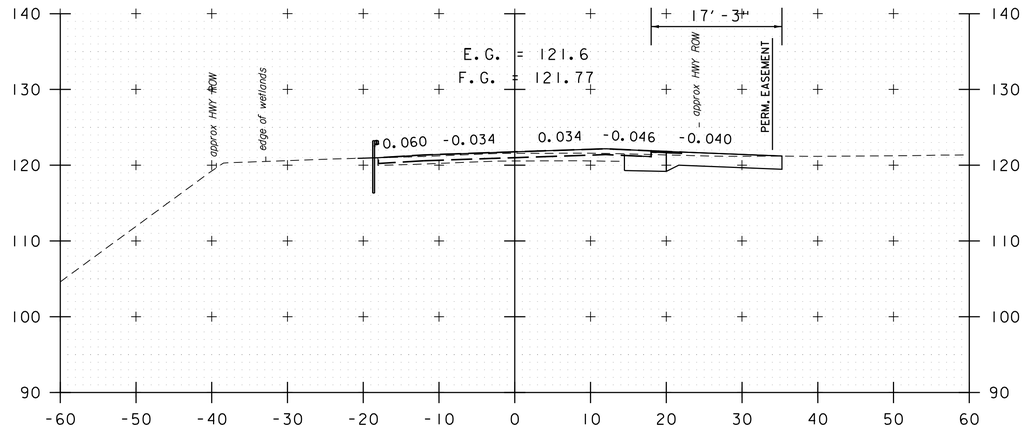
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 276 OF 305



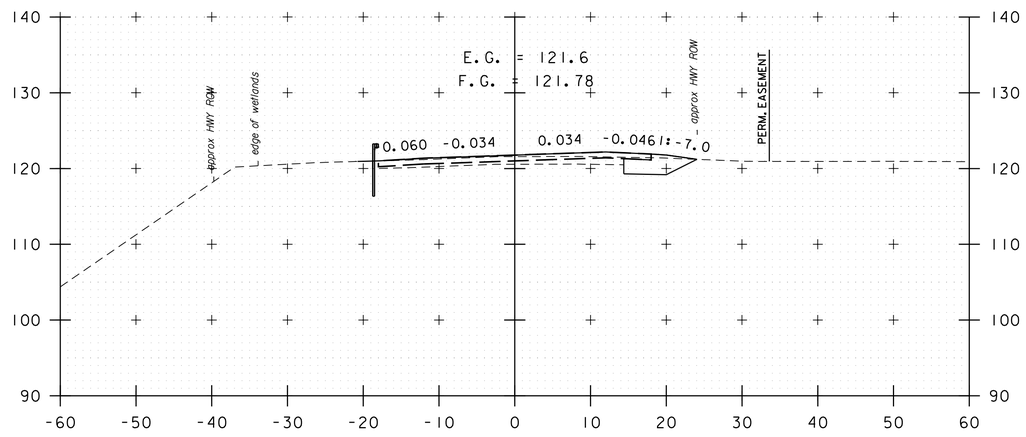
291+50



291+40 (JONERGIN DR RT)



292+19 (DRIVE RT)



292+00

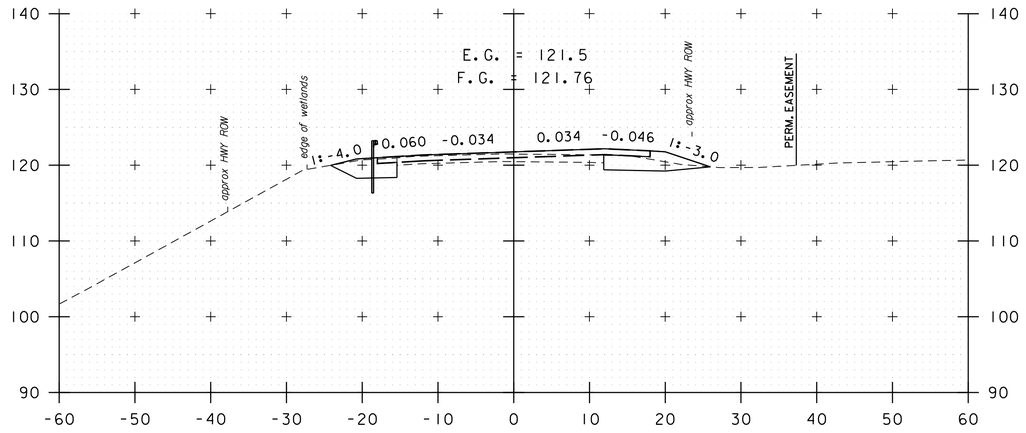
STA. 291+40 TO STA. 292+19

vhb

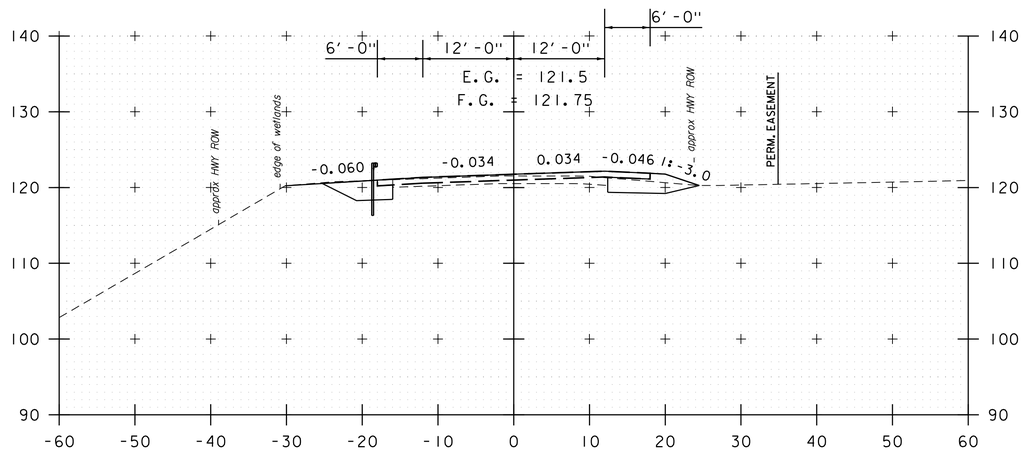
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 100

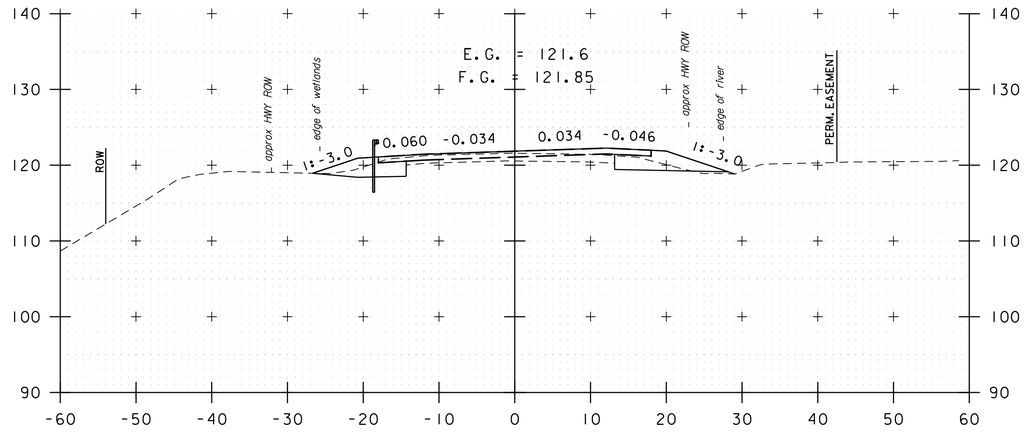
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 277 OF 305



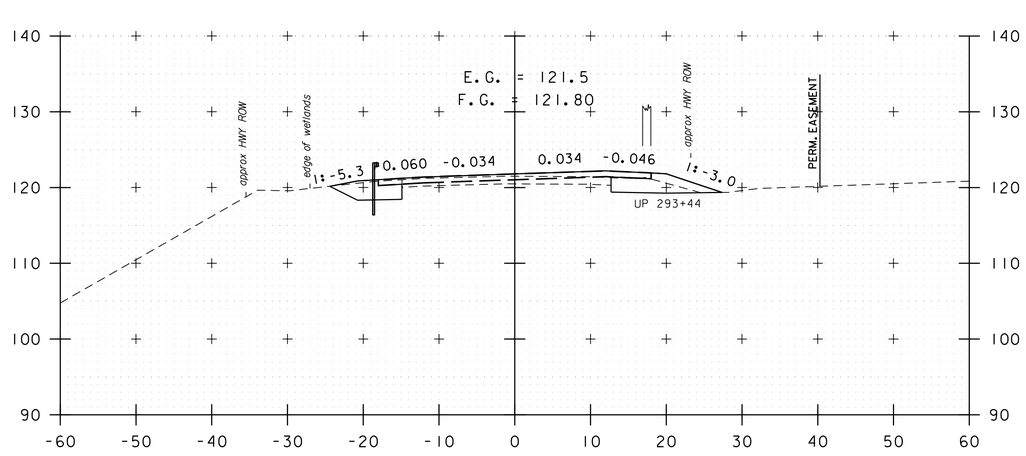
293+00



292+50



294+00



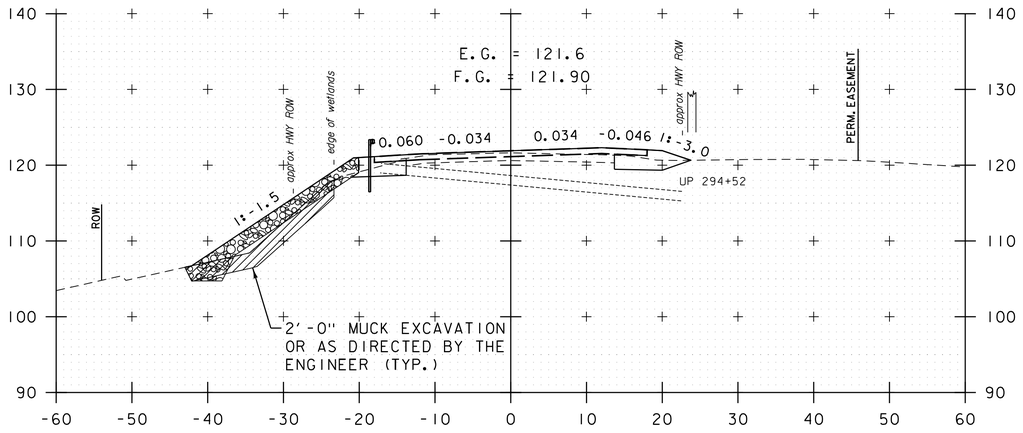
293+50

STA. 292+50 TO STA. 294+00

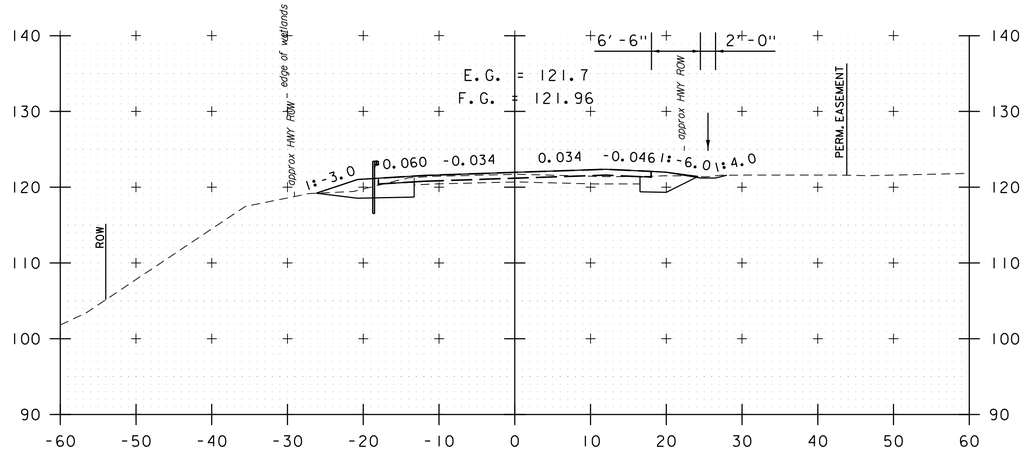
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 101

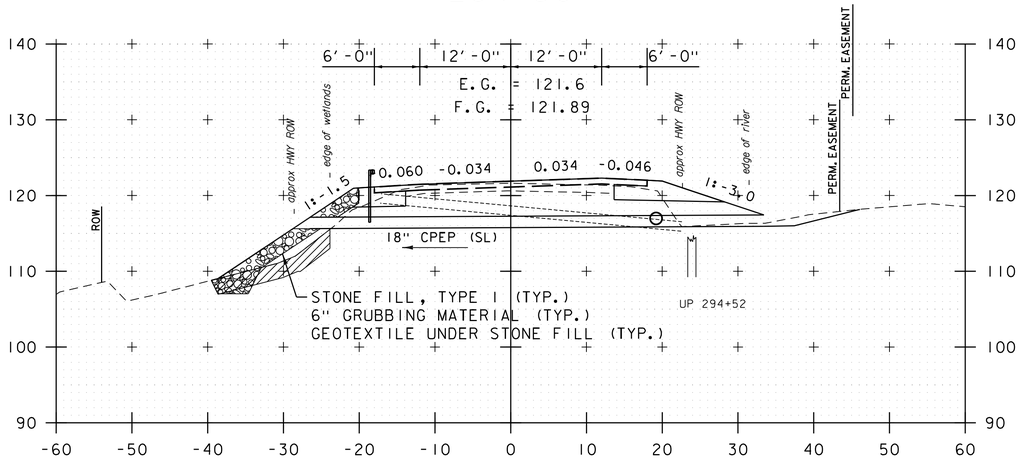
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 278 OF 305



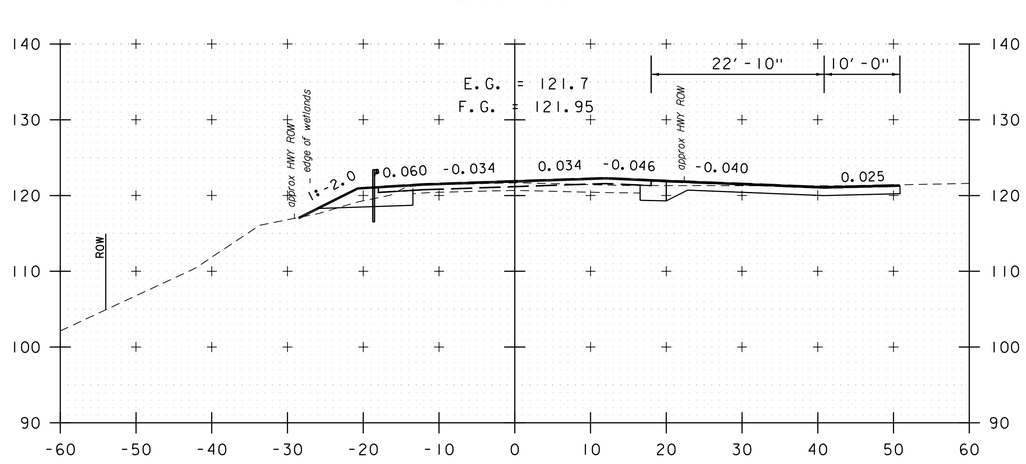
294+41 (NEW 18" CPEP)



294+89 (DRIVE RT)



294+50



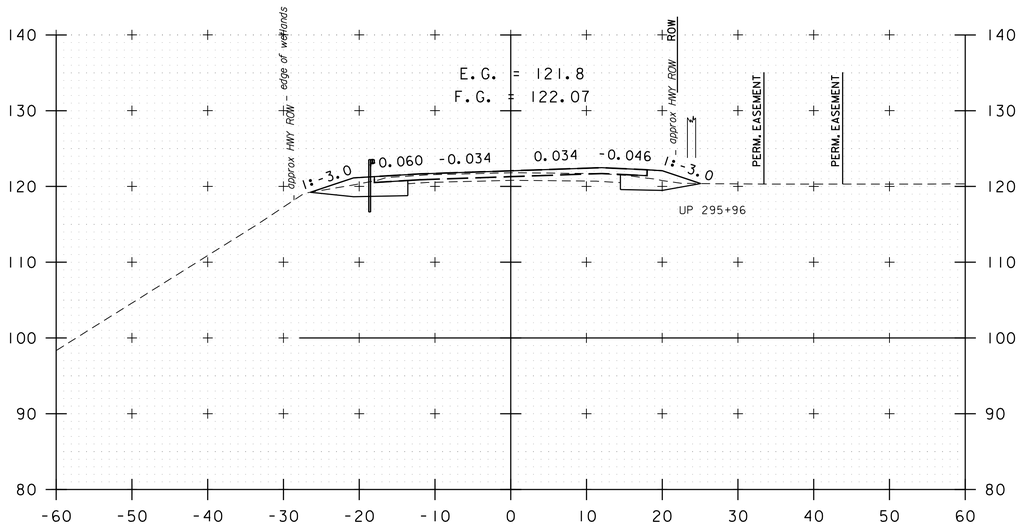
295+00

STA. 294+41 TO STA. 295+00

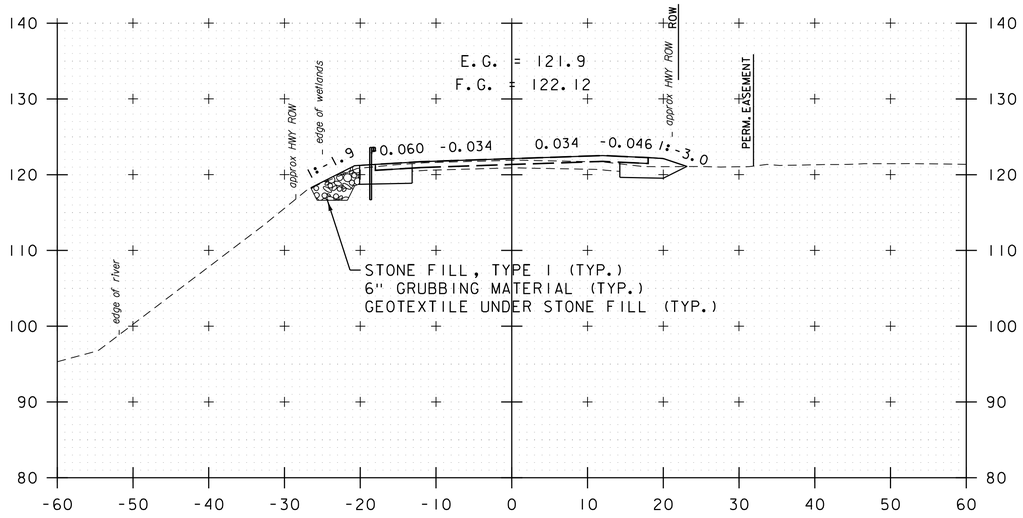
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 102

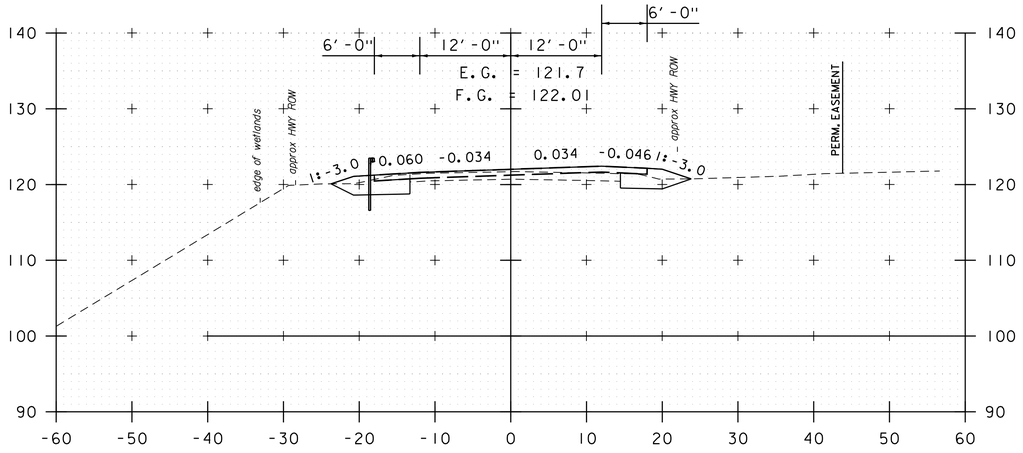
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS



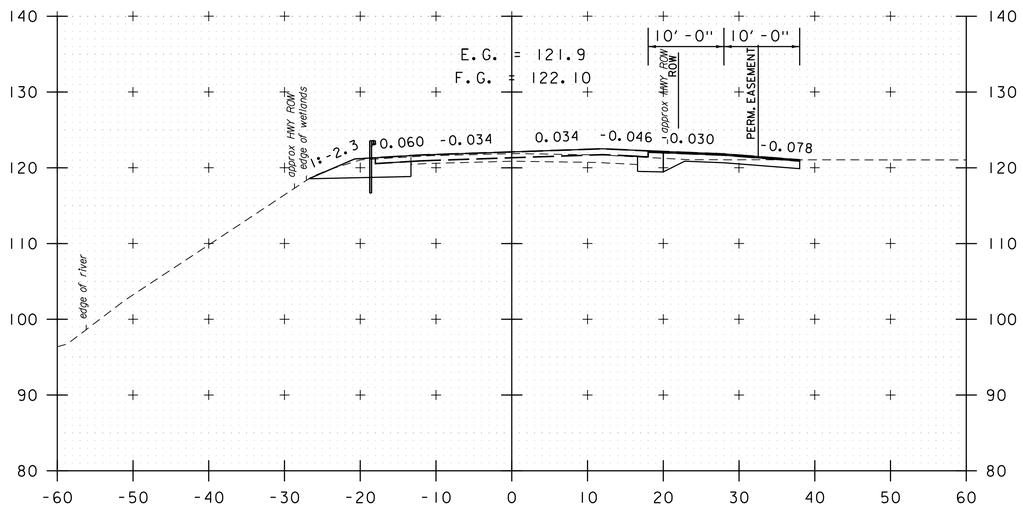
295+50



296+50



296+00

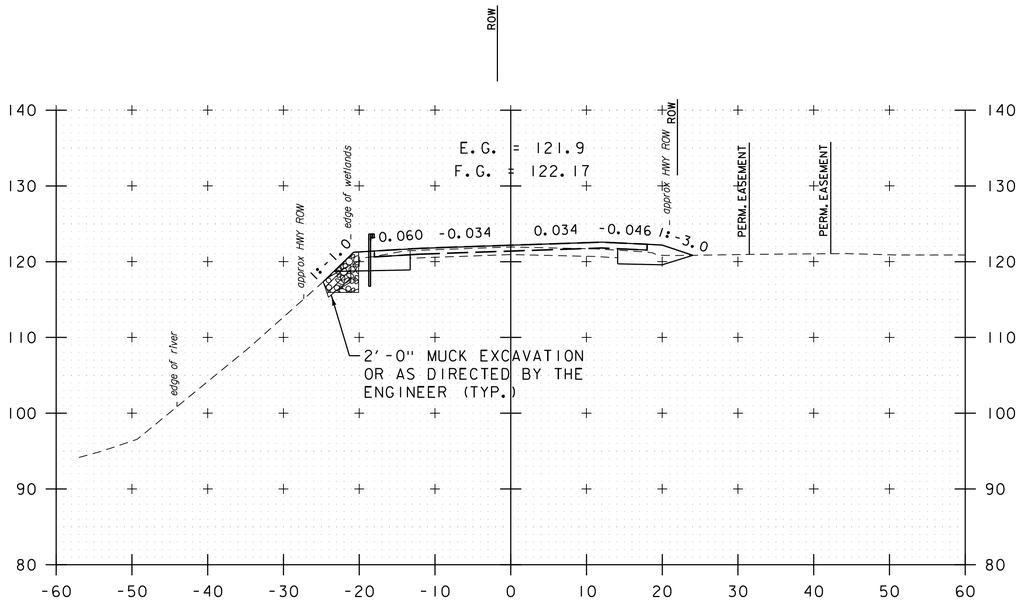


296+28 (DRIVE RT)

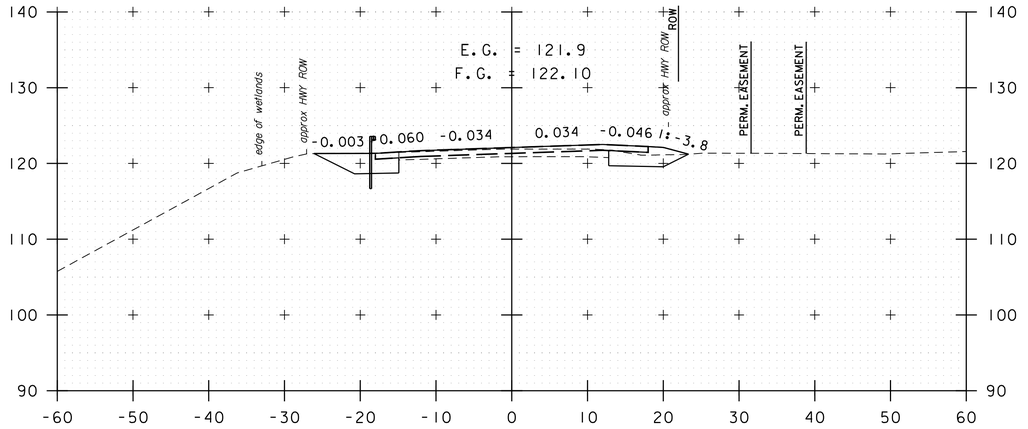
STA. 295+50 TO STA. 296+50

vhb

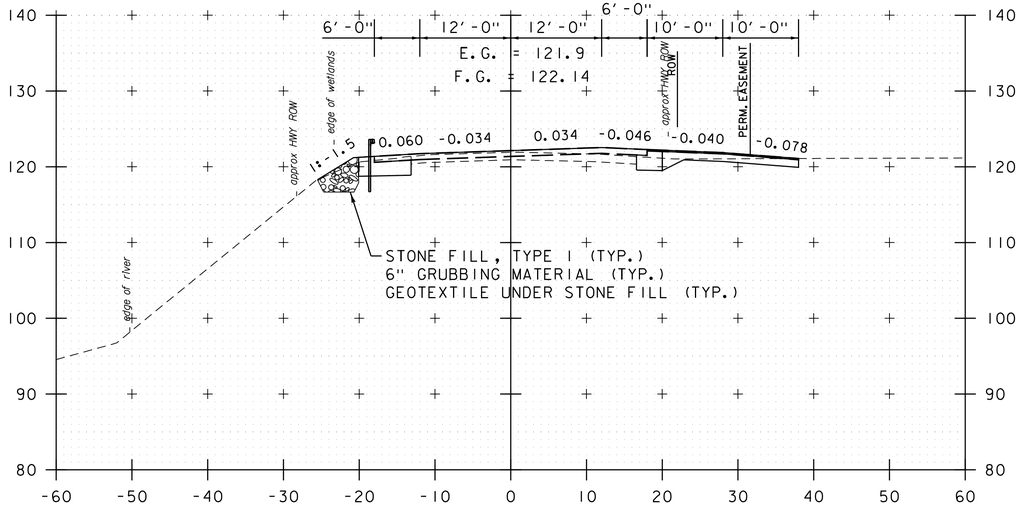
PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032xs_25000_33800.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G.BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G.BAKOS
CROSS SECTION SHEET 103	SHEET 280 OF 305



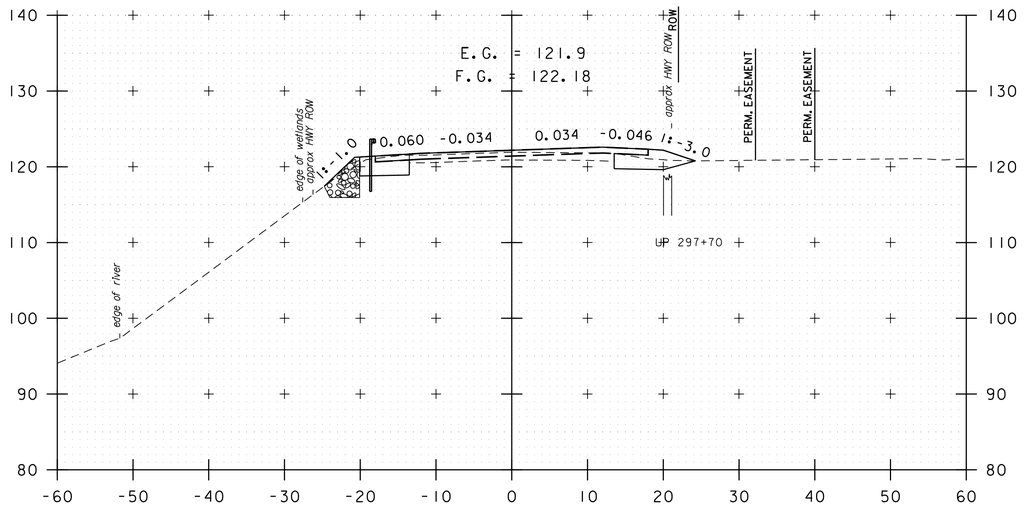
297+00



298+00



296+66 (DRIVE RT)



297+50

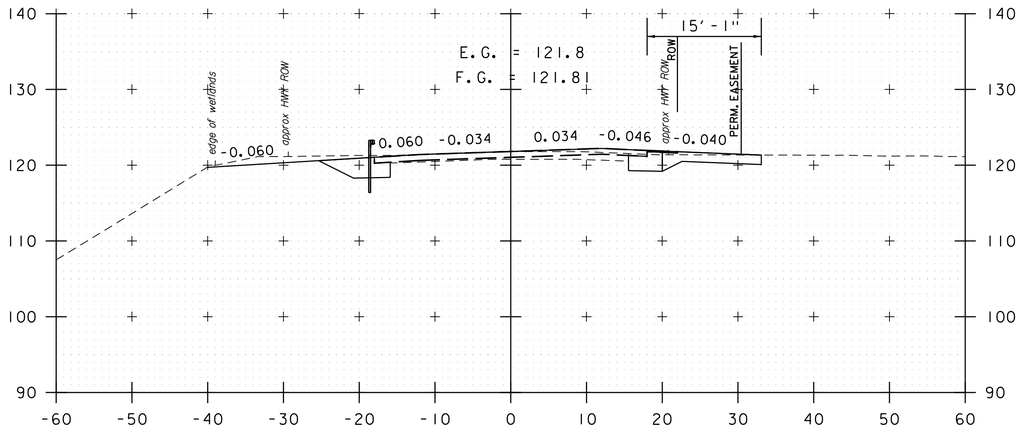
STA. 296+66 TO STA. 298+00

vhb

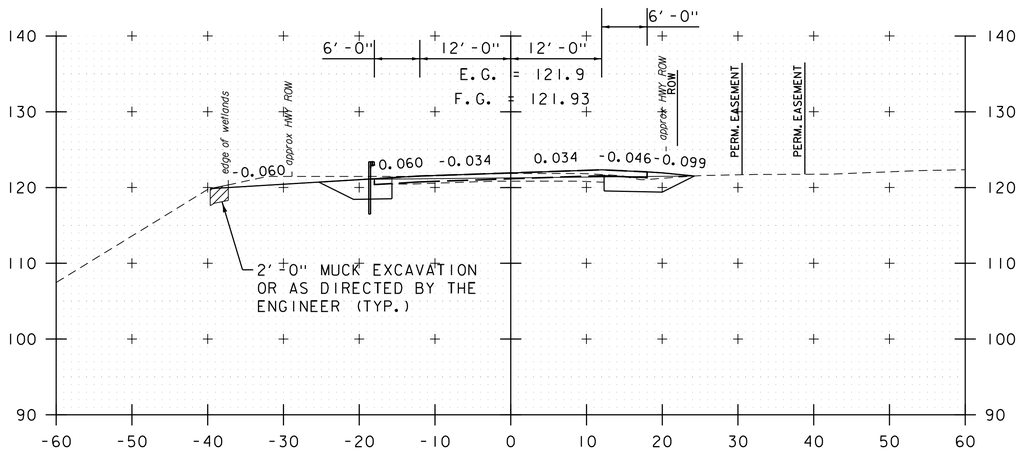
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 104

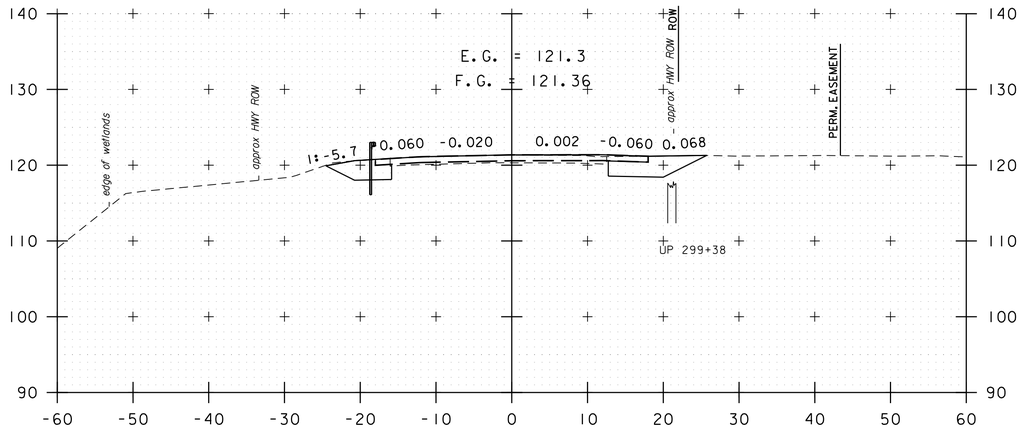
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 281 OF 305



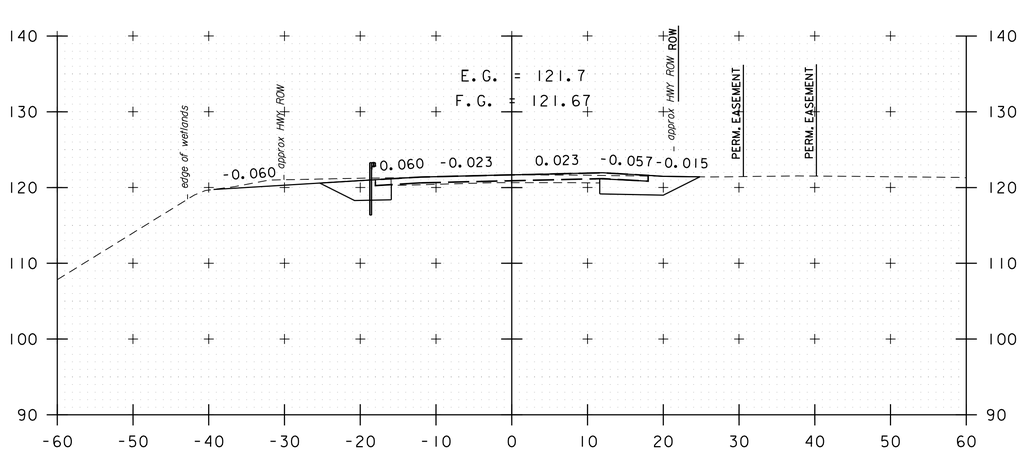
298+75 (DRIVE RT)



298+50



299+50



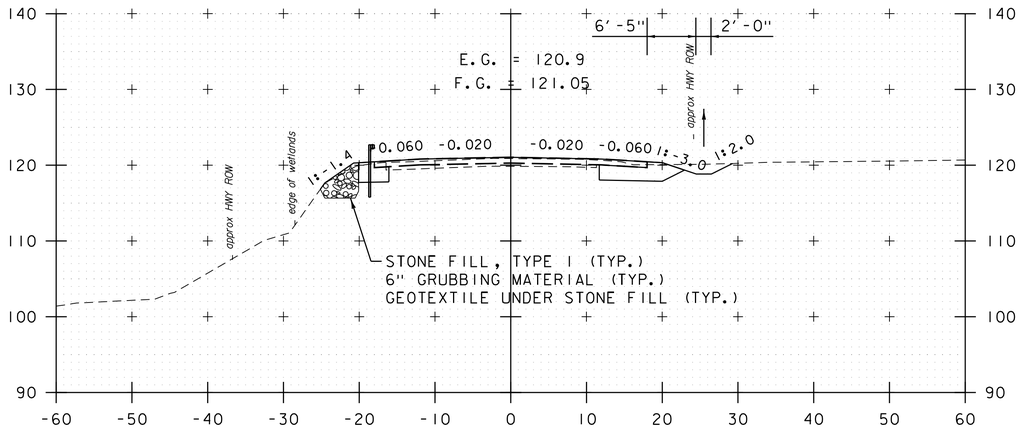
299+00

STA. 298+50 TO STA. 299+50

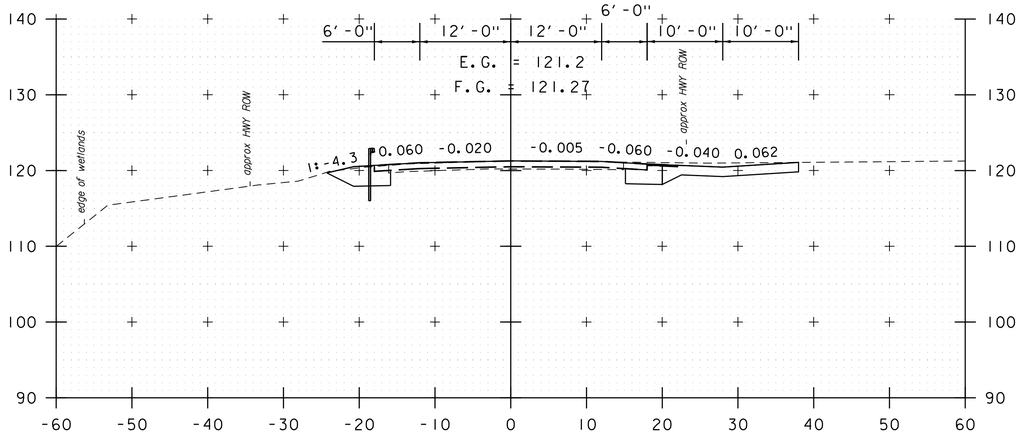
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 105

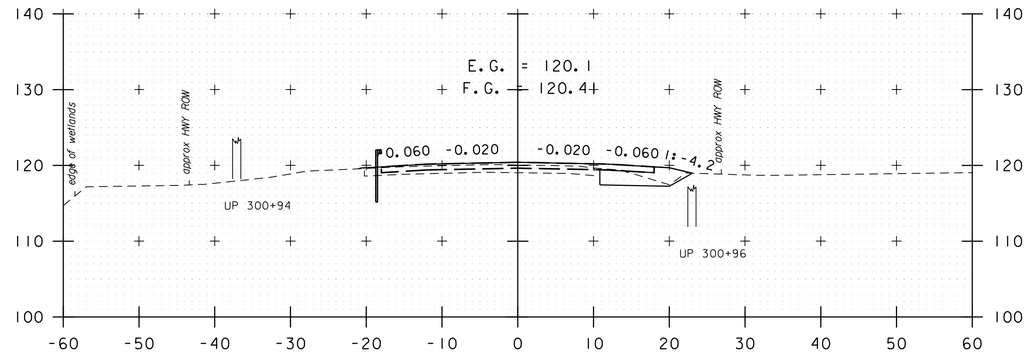
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 282 OF 305



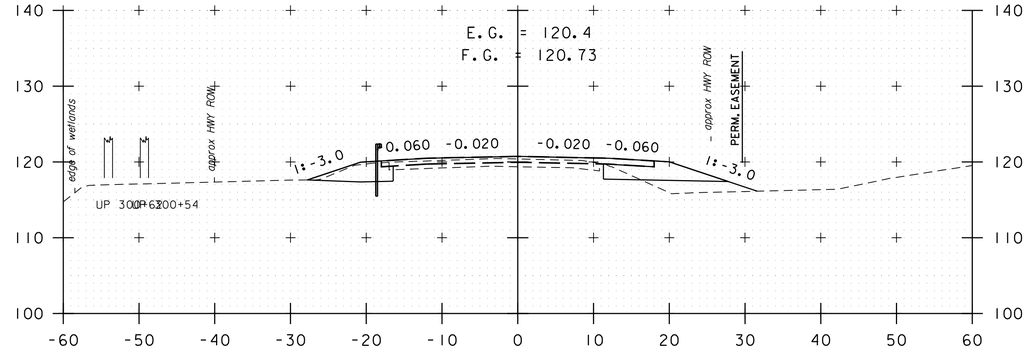
300+00



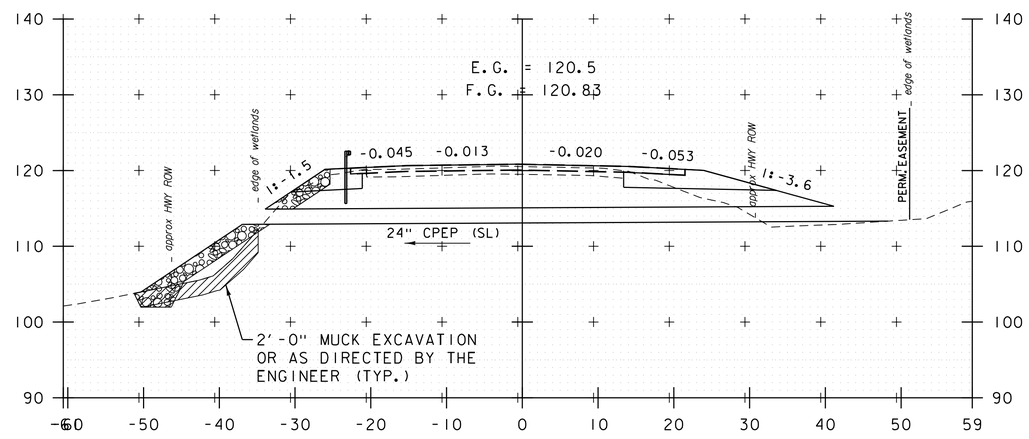
299+65 (DRIVE RT)



301+00

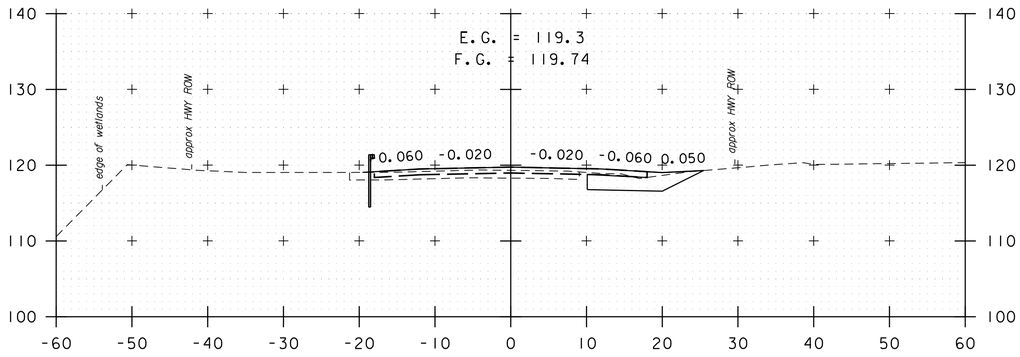


300+50

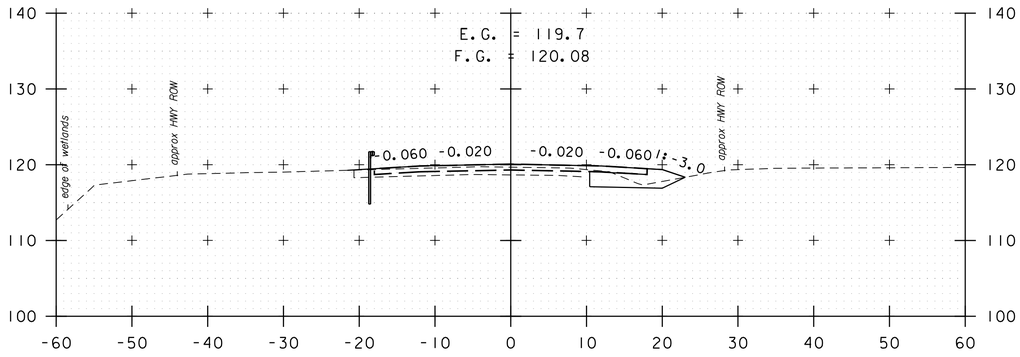


300+35 SKEWED (NEW 24" CPEP) STA. 299+65 TO STA. 301+00

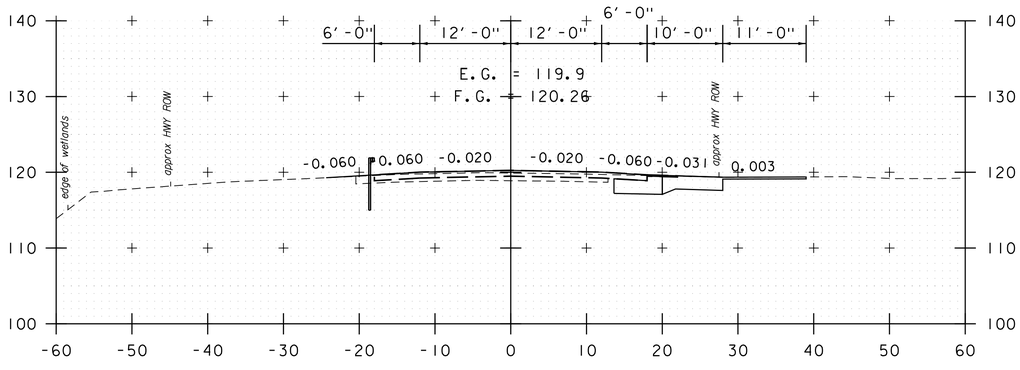
PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032xs_25000_33800.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G.BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G.BAKOS
CROSS SECTION SHEET 106	SHEET 283 OF 305



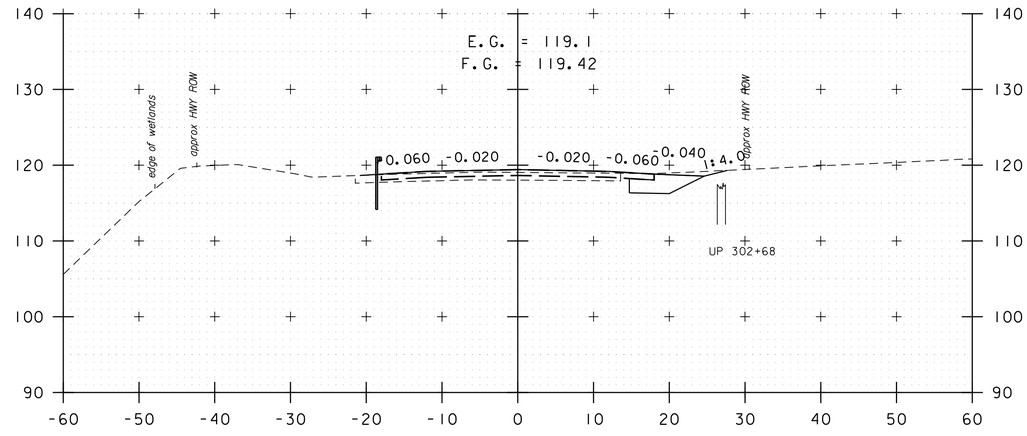
302+00



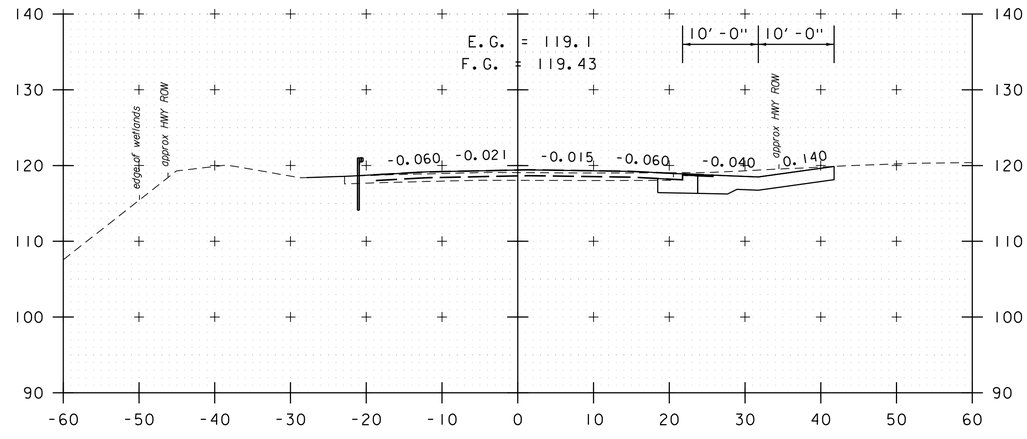
301+50



301+23 (DRIVE RT)



302+50



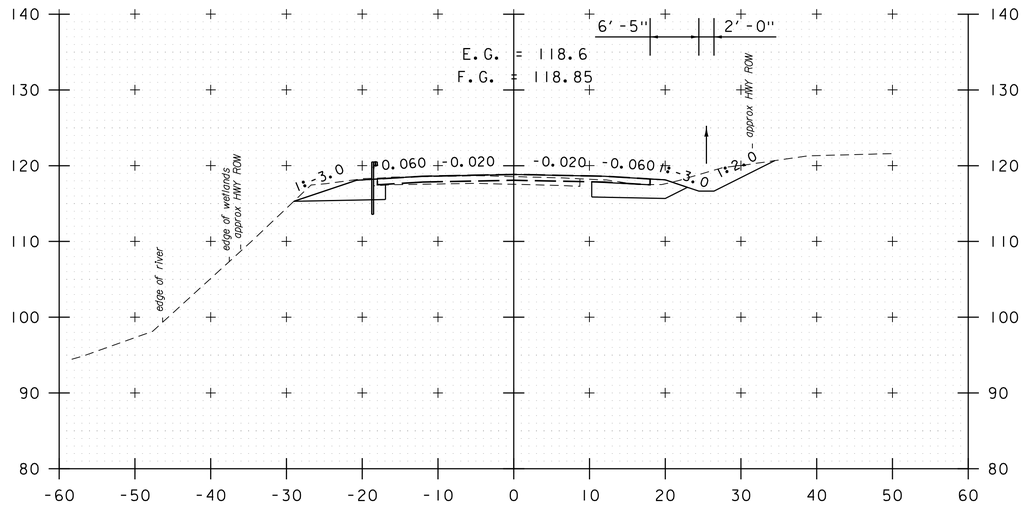
302+48 SKEWED (DRIVE RT) STA. 301+23 TO STA. 302+50

vhb

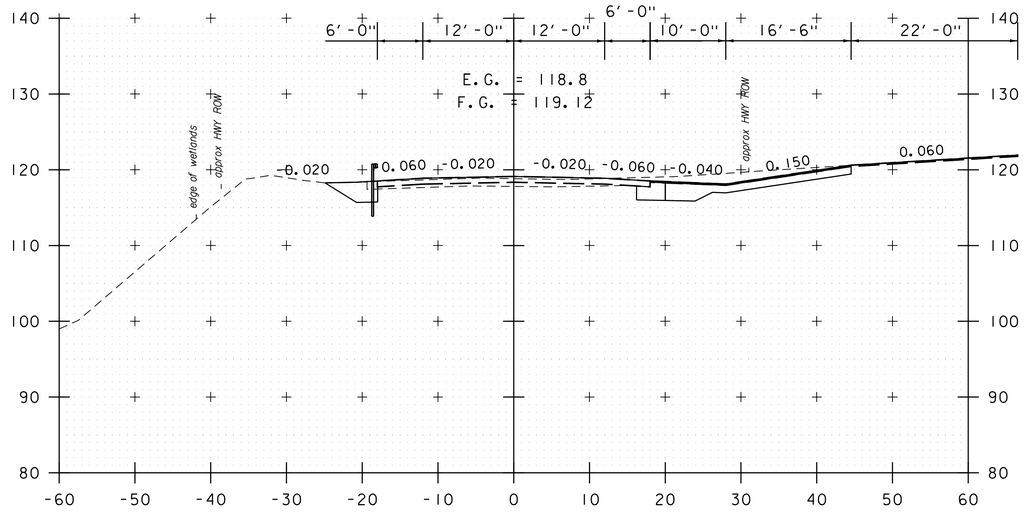
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 107

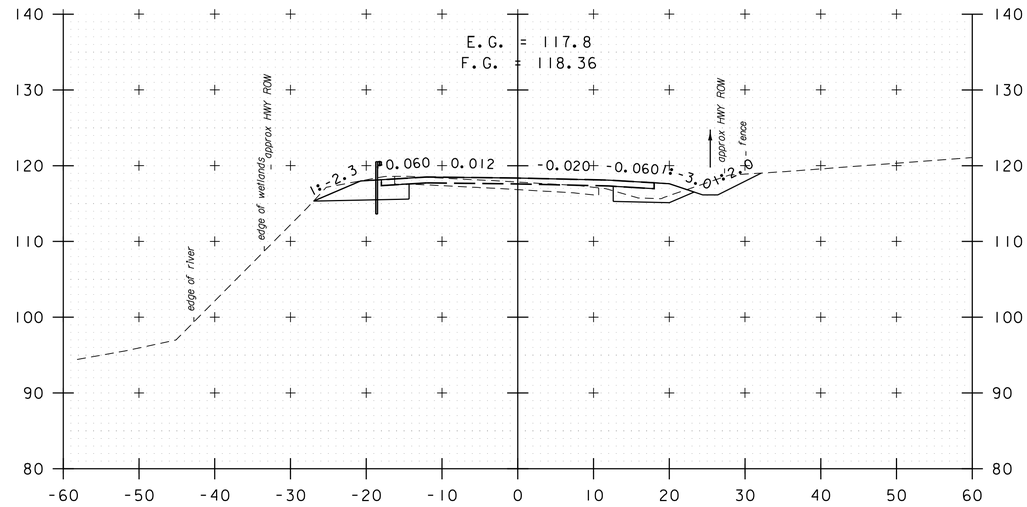
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 284 OF 305



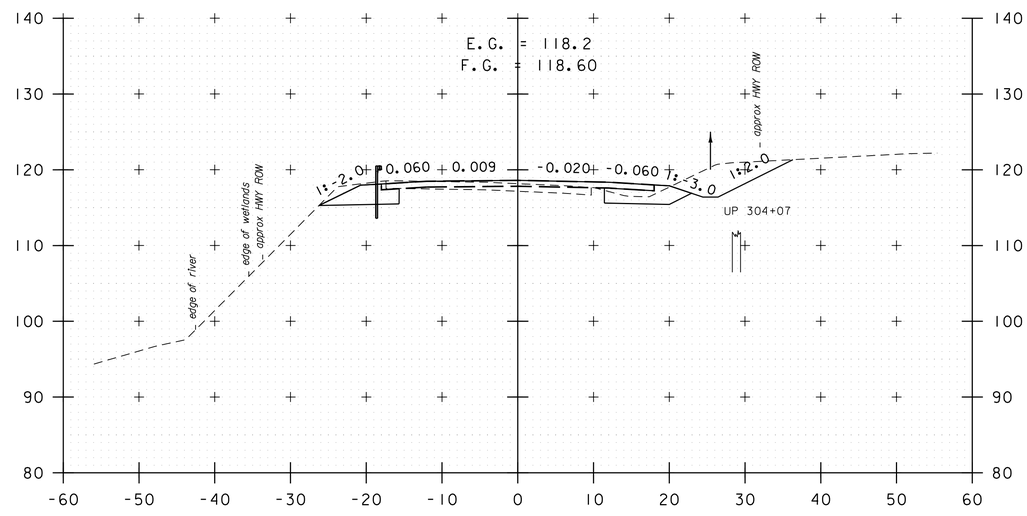
303+50



303+00



304+50



304+00

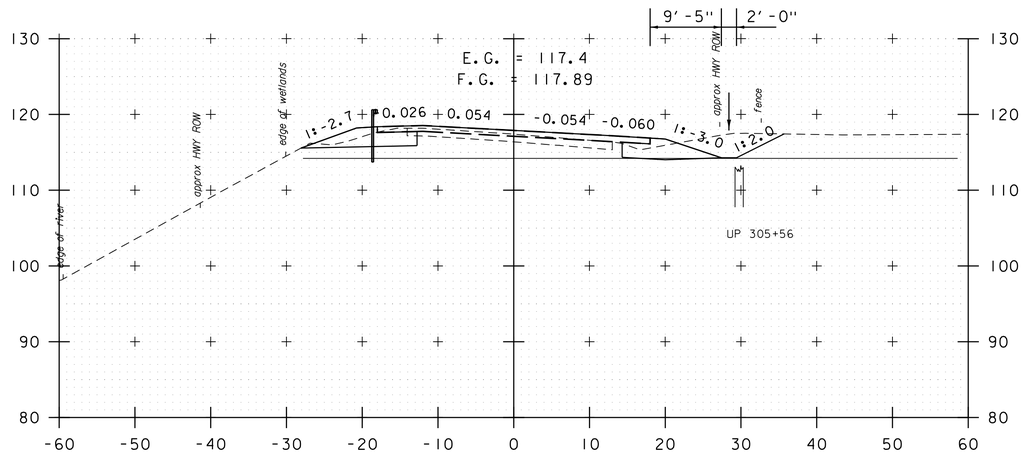
STA. 303+00 TO STA. 304+50

vhb

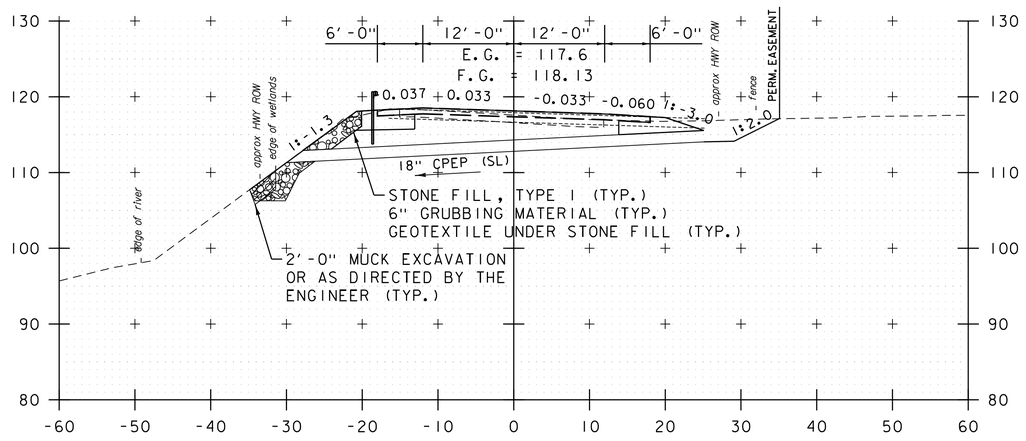
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 108

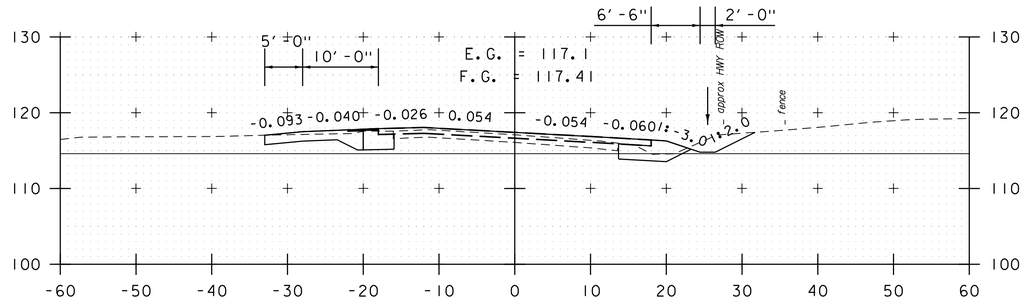
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 285 OF 305



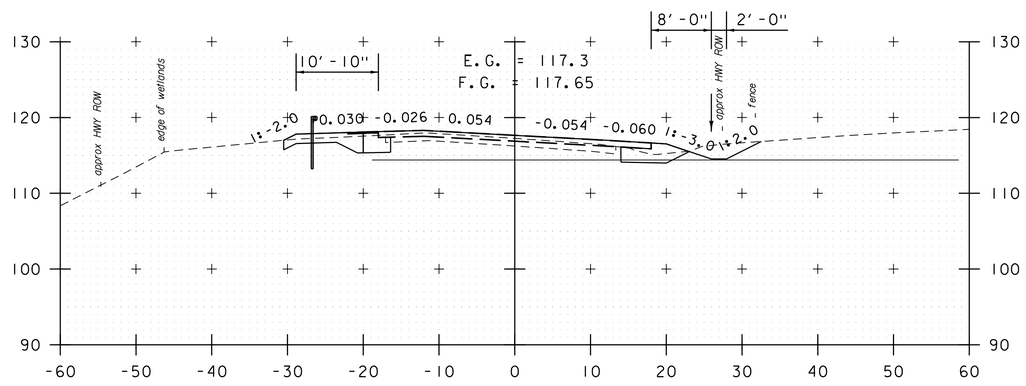
305+50



305+00 (NEW 18" CPEP)



306+50 (DRIVE LT)

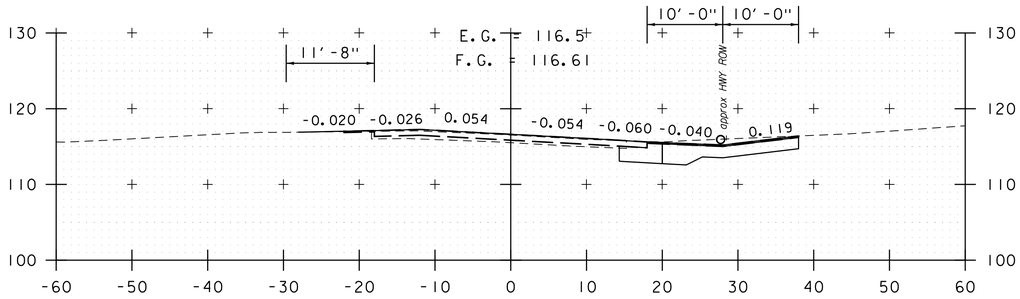


306+00 (DRIVE LT) STA. 305+00 TO STA. 306+68

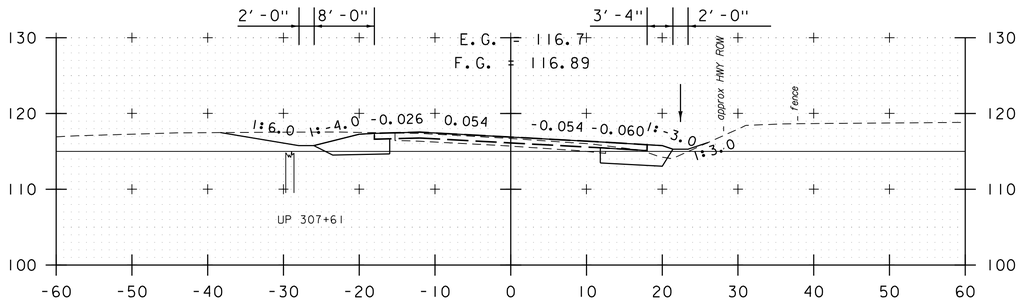
vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)

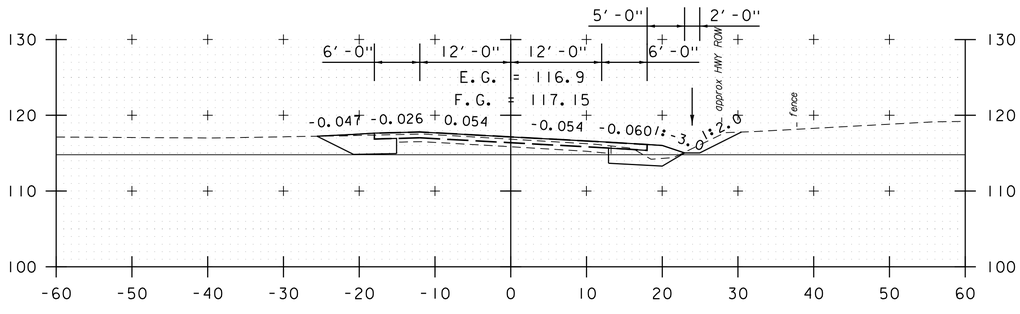
FILE NAME: z96b032xs_25000_33800.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G.BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G.BAKOS
CROSS SECTION SHEET 109	SHEET 286 OF 305



308+00 (DRIVE LT/RT)

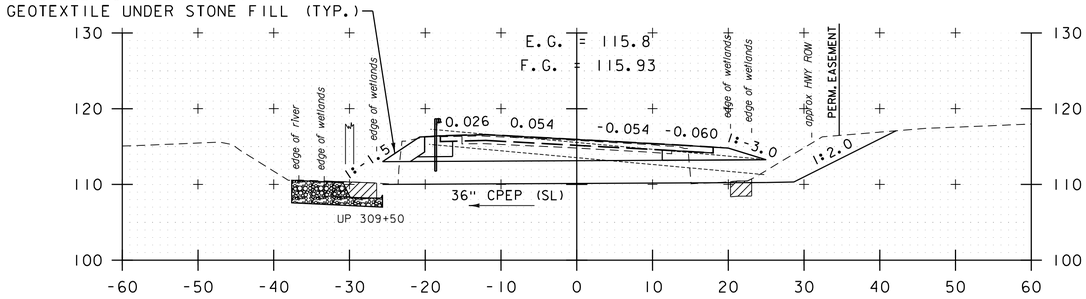


307+50

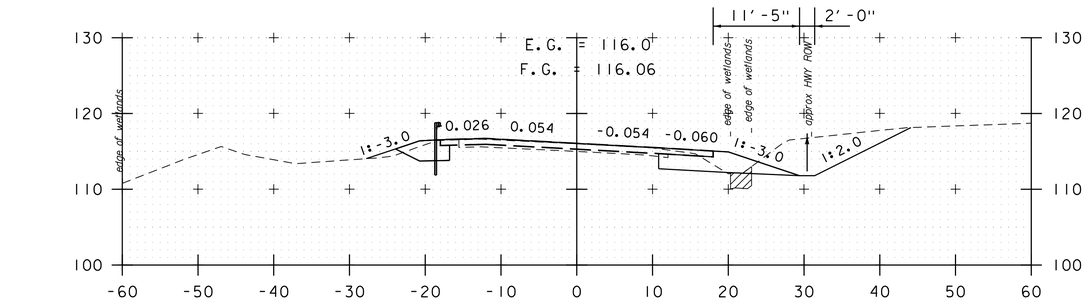


307+00

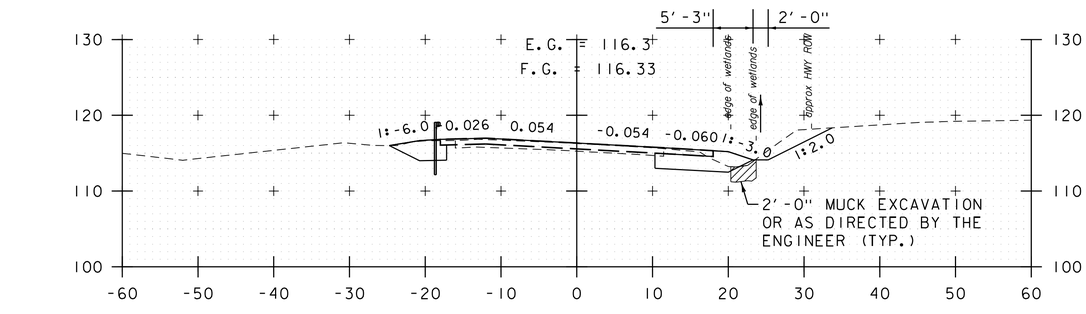
STONE FILL, TYPE I (TYP.)
6" GRUBBING MATERIAL (TYP.)
GEOTEXTILE UNDER STONE FILL (TYP.)



309+30 (NEW 36" CPEP)



309+00

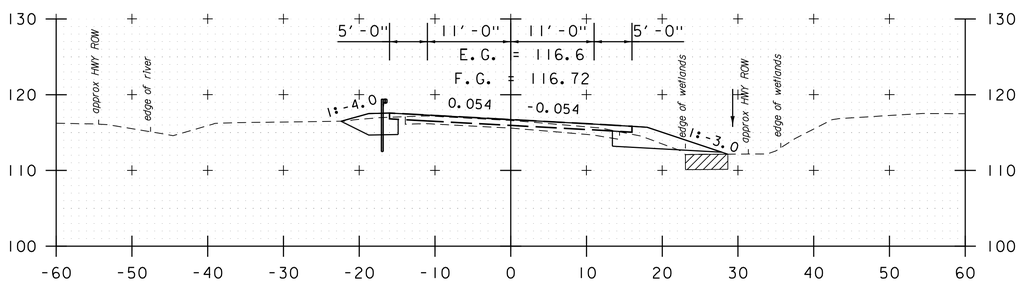


308+50

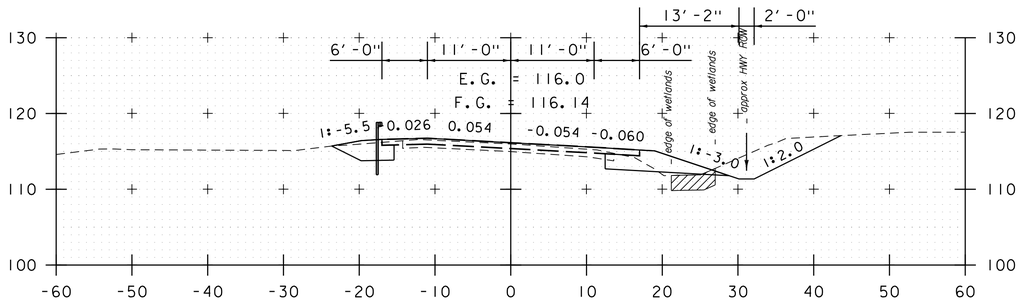
STA. 307+00 TO STA. 309+30

vhb

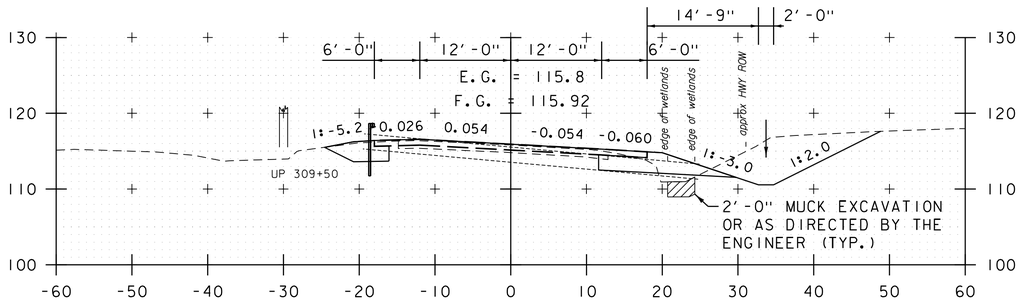
PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032xs_25000_33800.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G.BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G.BAKOS
CROSS SECTION SHEET 110	SHEET 287 OF 305



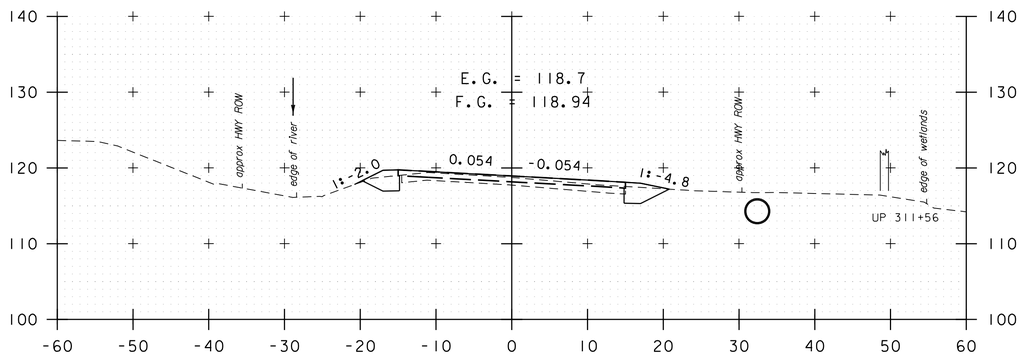
310+50



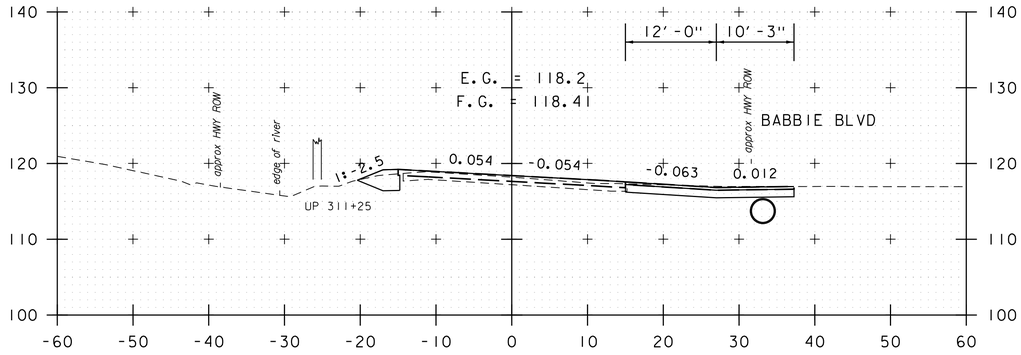
310+00



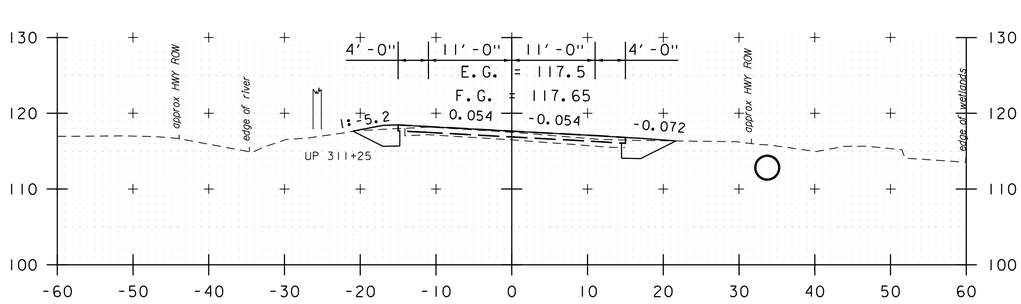
309+50



311+50



311+31 (BABBIE BLVD RT)

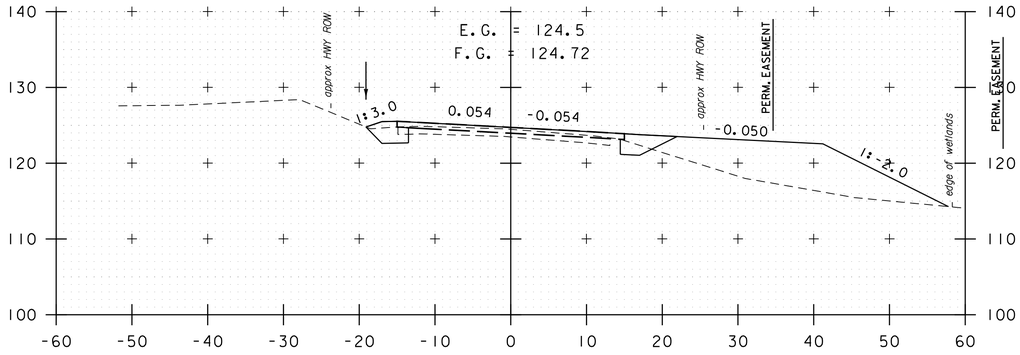


311+00

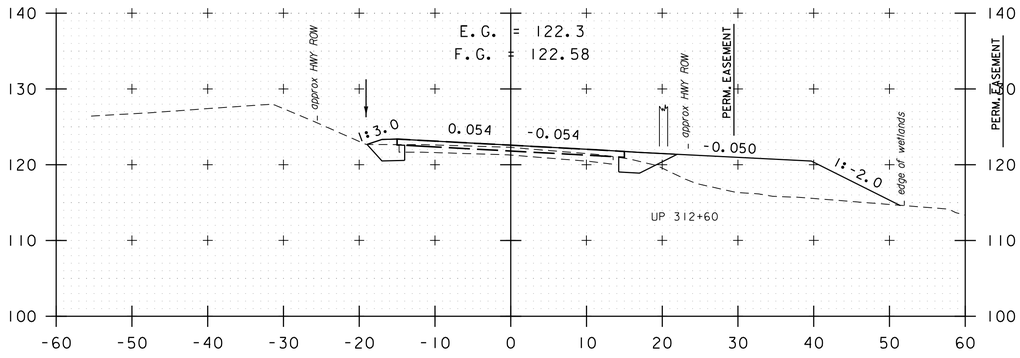
STA. 309+50 TO STA. 311+50

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)

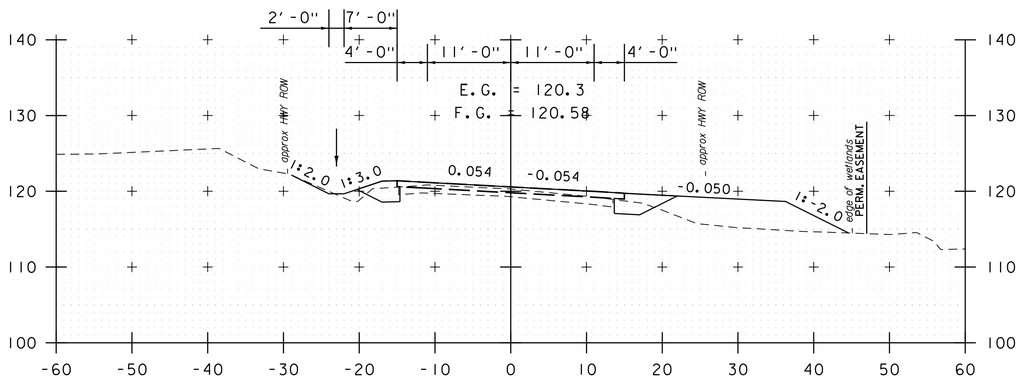
FILE NAME: z96b032xs_25000_33800.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G.BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G.BAKOS
CROSS SECTION SHEET III	SHEET 288 OF 305



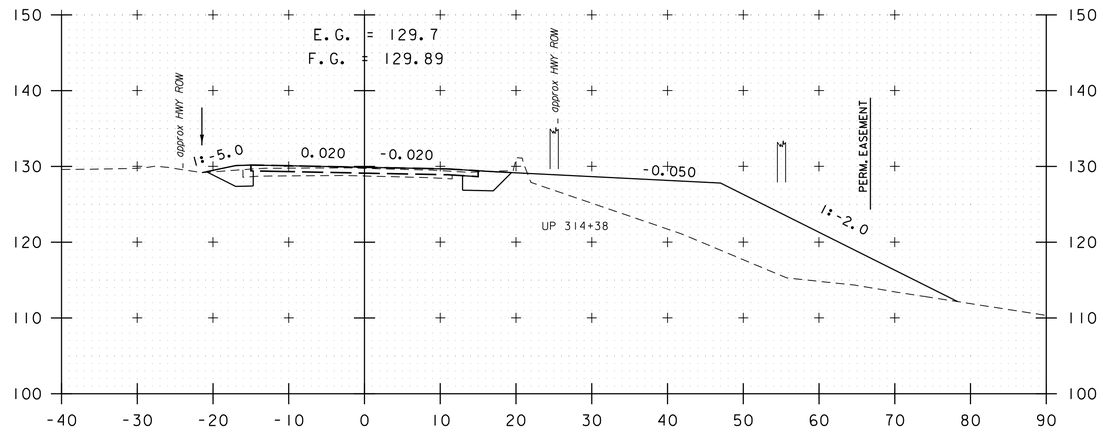
313+00



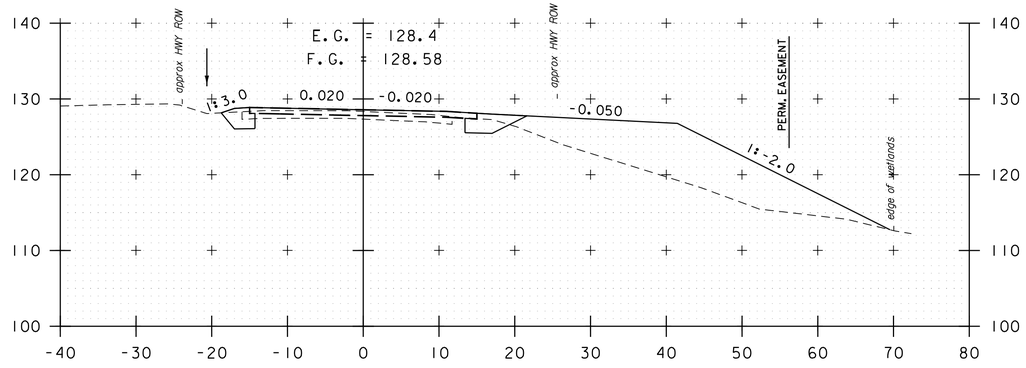
312+50



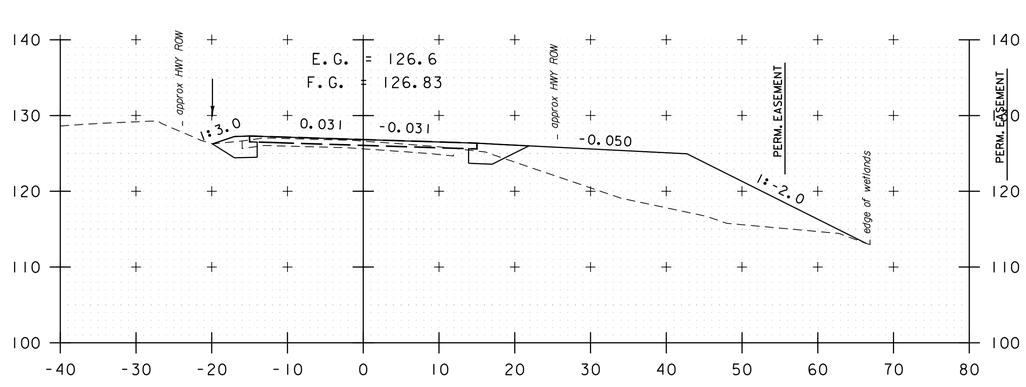
312+00



314+50



314+00



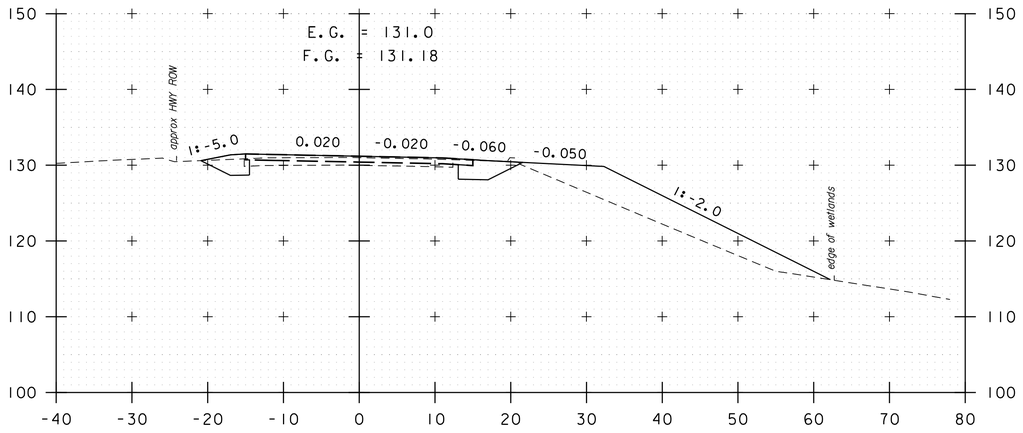
313+50

STA. 312+00 TO STA. 314+50

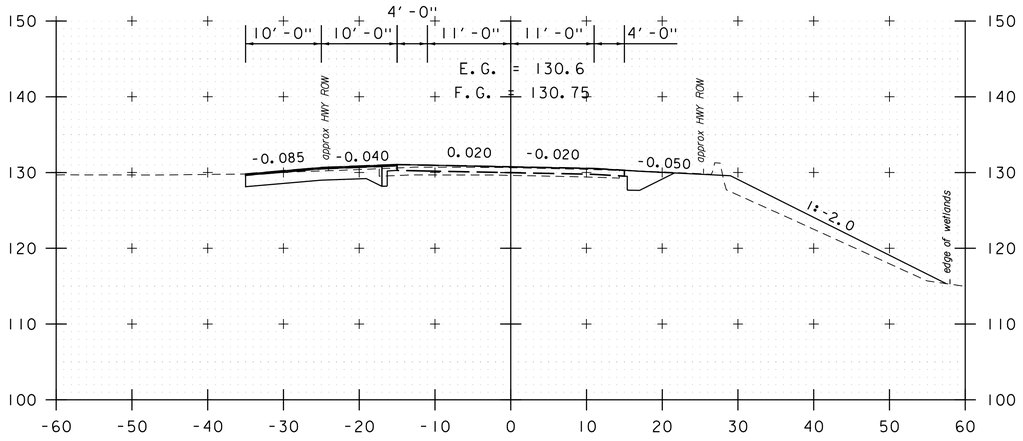
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 112

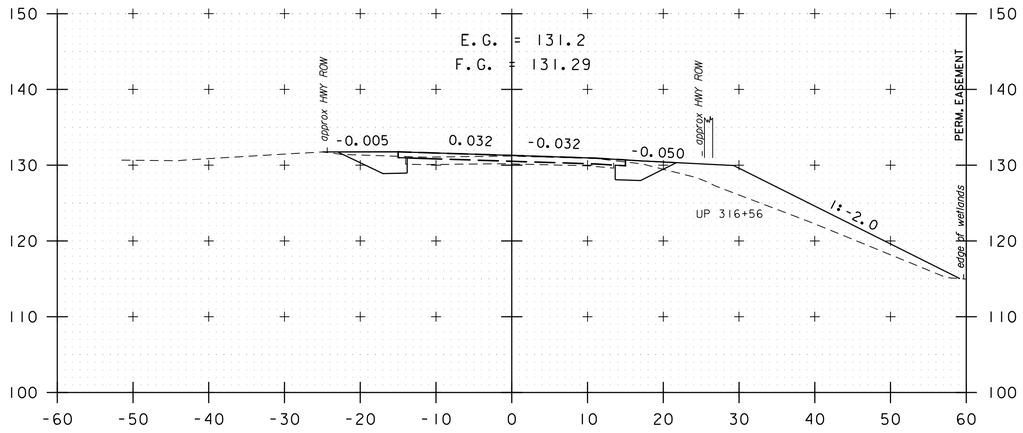
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 289 OF 305



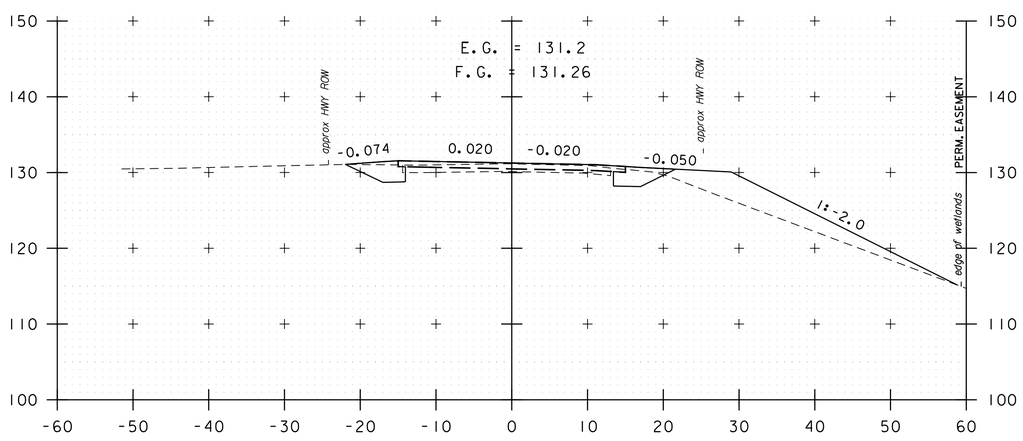
315+50



315+00 (DRIVE LT)



316+50



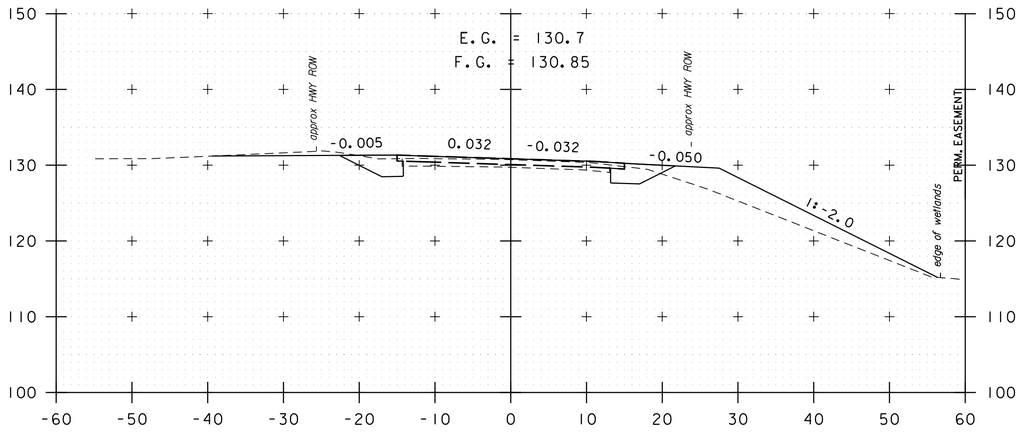
316+00

STA. 315+00 TO STA. 316+50

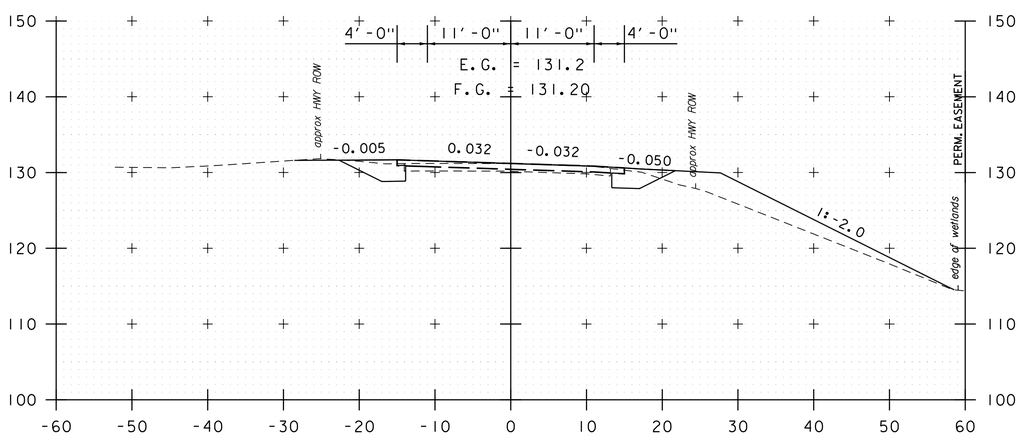
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 113

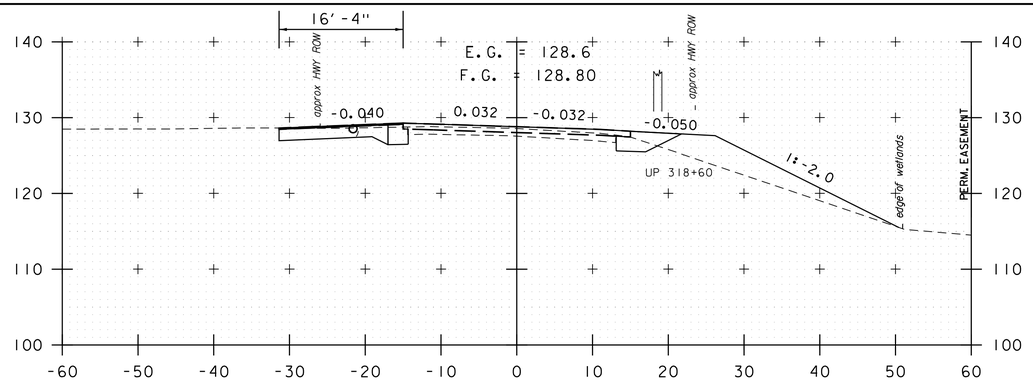
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 290 OF 305



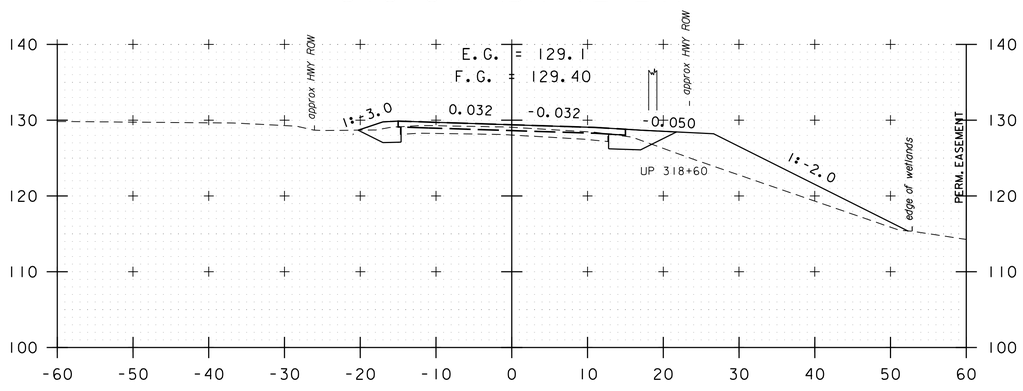
317+50



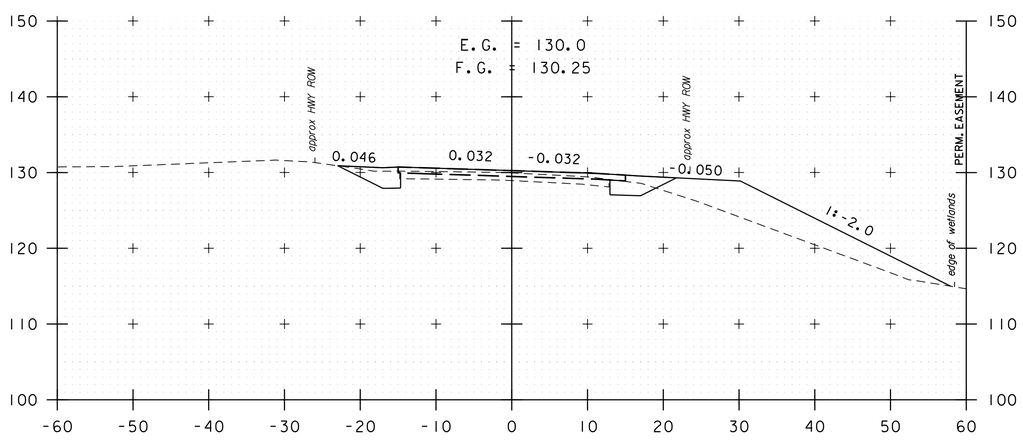
317+00



318+84 (DRIVE LT)



318+50



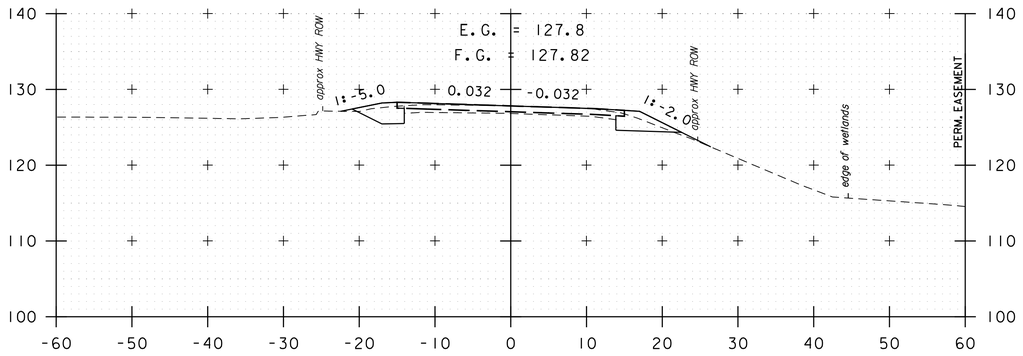
318+00

STA. 317+00 TO STA. 318+84

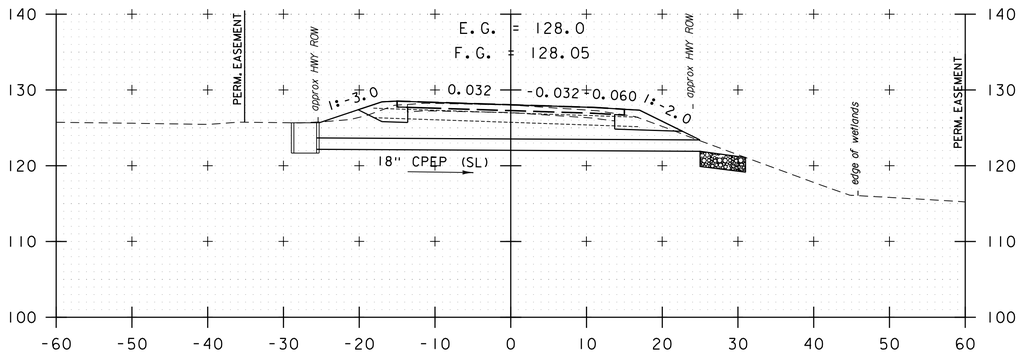
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 114

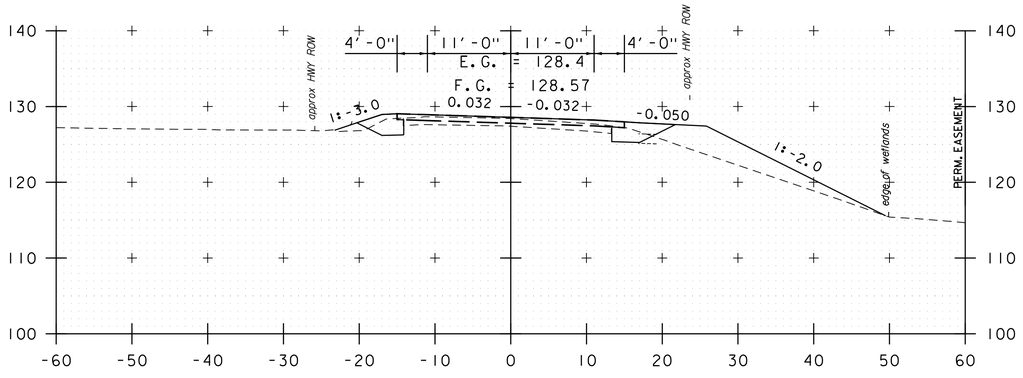
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 291 OF 305



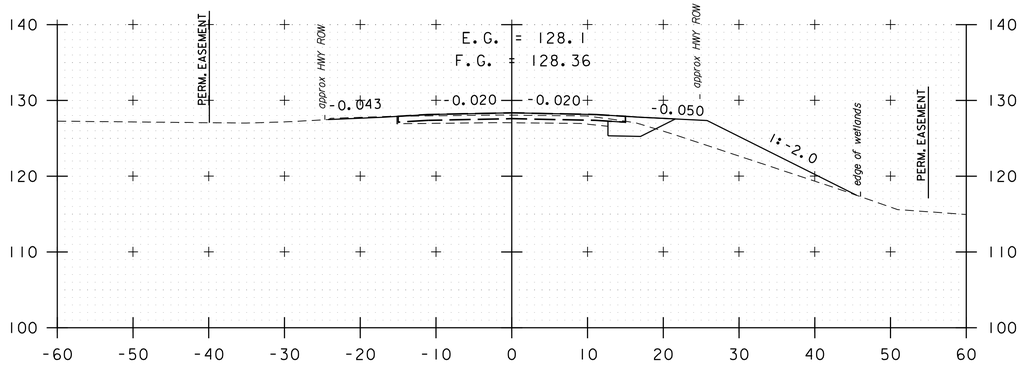
320+00



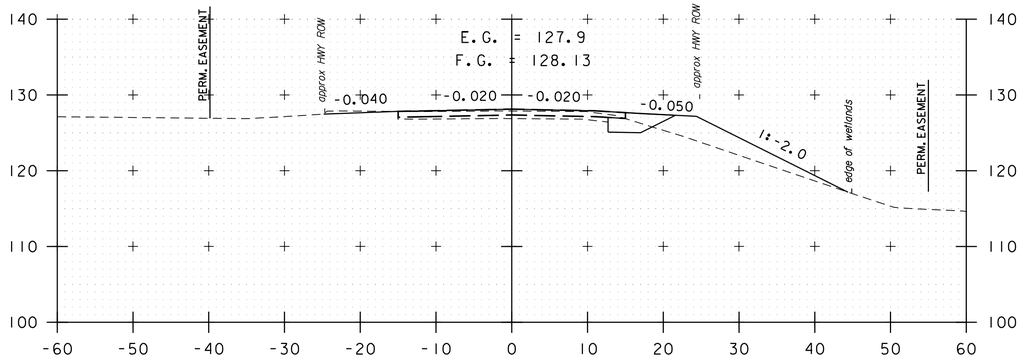
319+50 (NEW 18" CPEP)



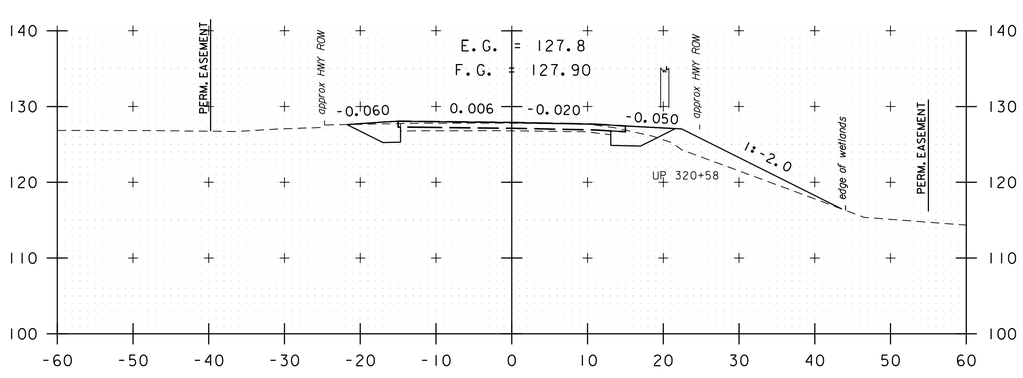
319+00



321+50



321+00



320+50

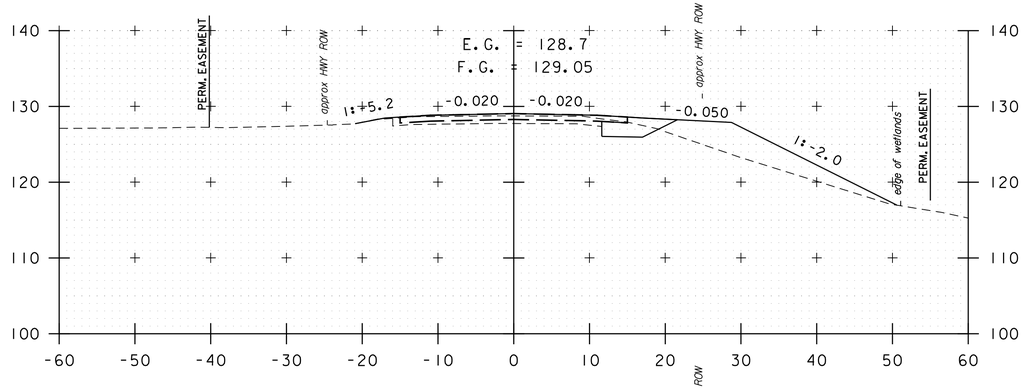
STA. 319+00 TO STA. 321+50

vhb

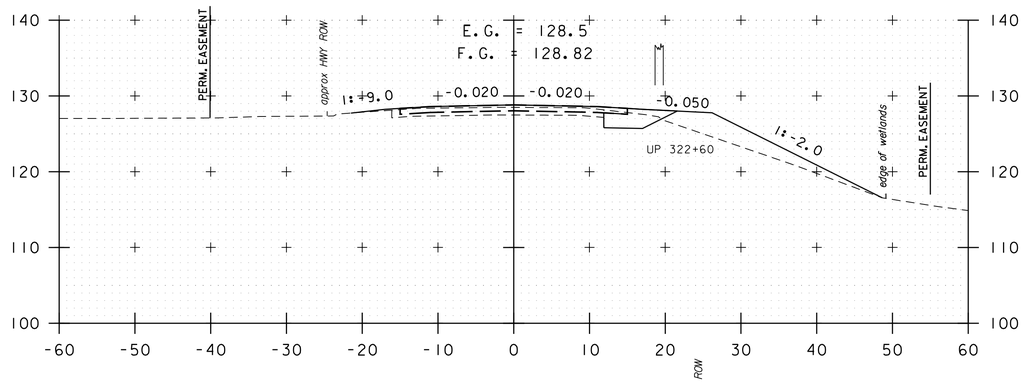
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 115

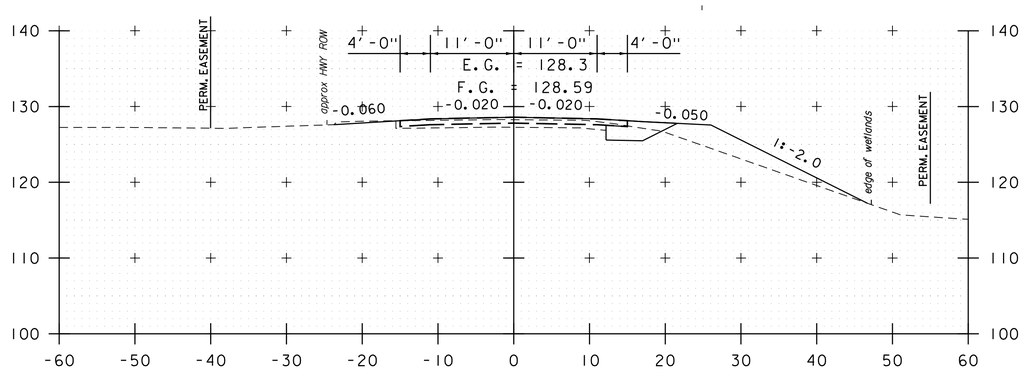
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 292 OF 305



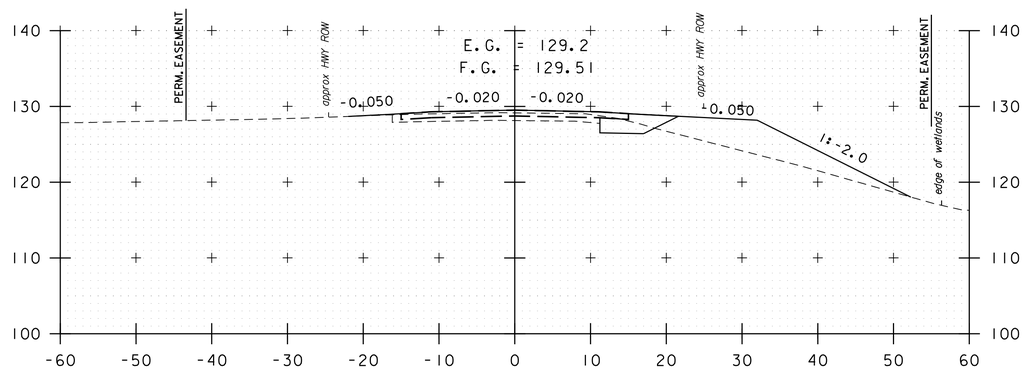
323+00



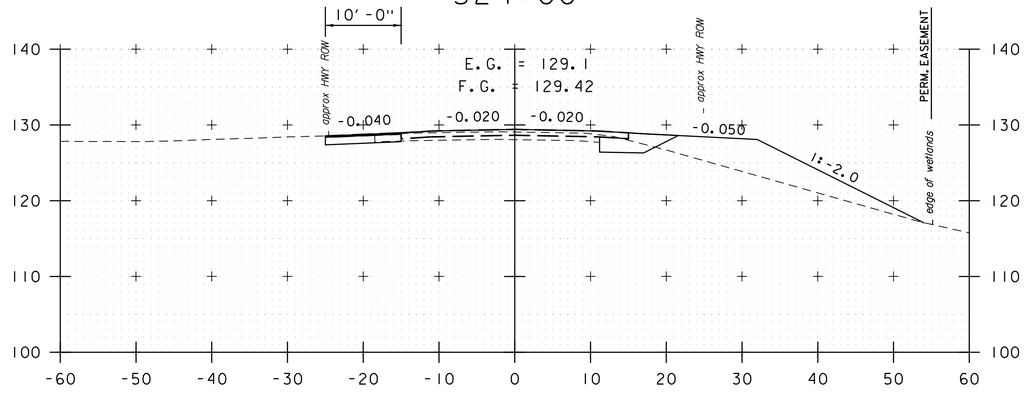
322+50



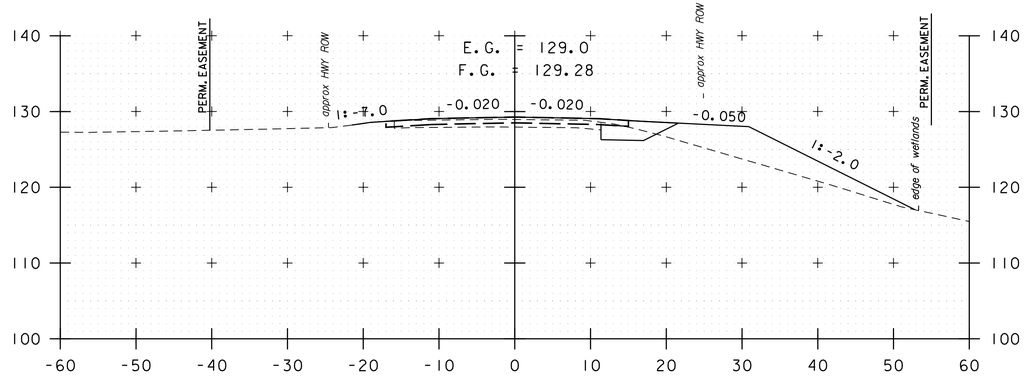
322+00



324+00



323+81 (DRIVE LT)



323+50

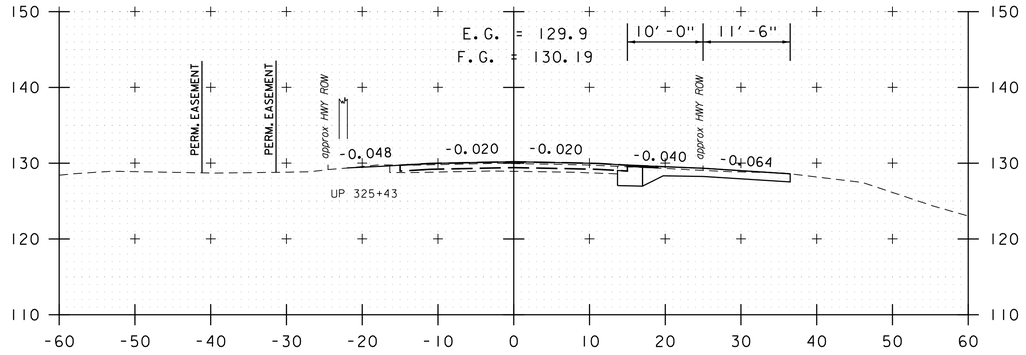
STA. 322+00 TO STA. 324+00

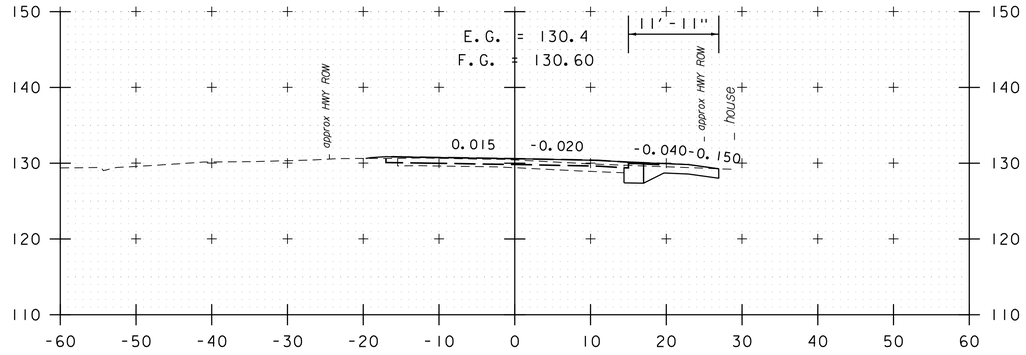
vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

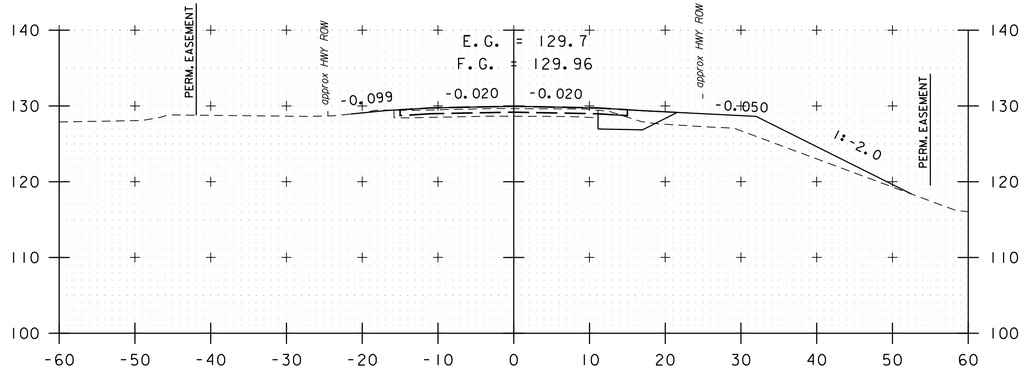
FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 116

PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 293 OF 305

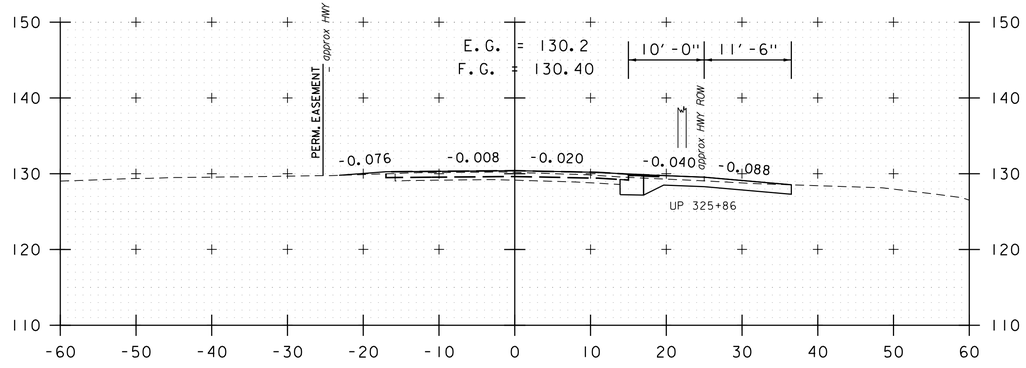




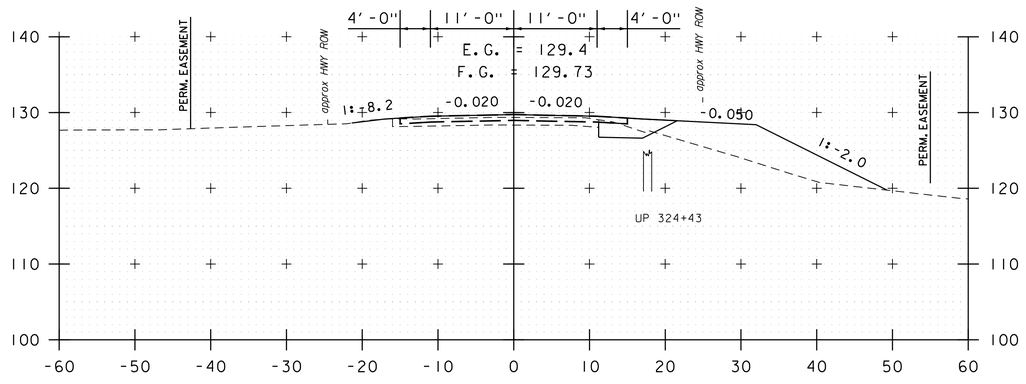
325+50 (DRIVE RT)



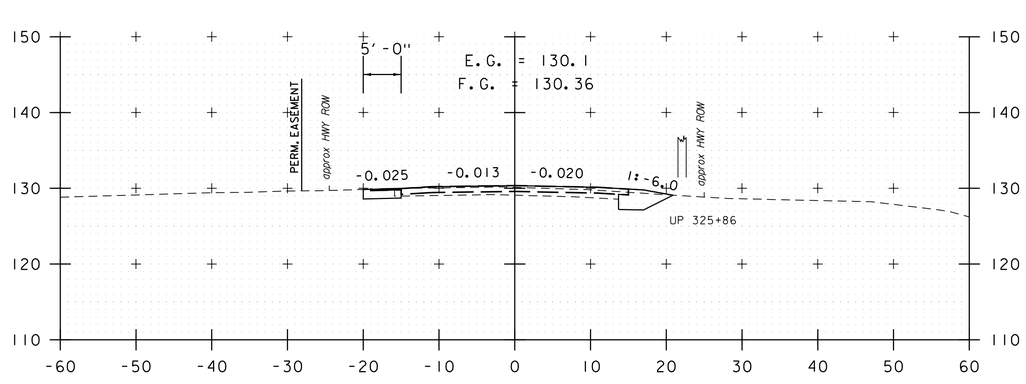
326+50 (DRIVE RT)



325+00



326+00 (DRIVE RT)



324+50

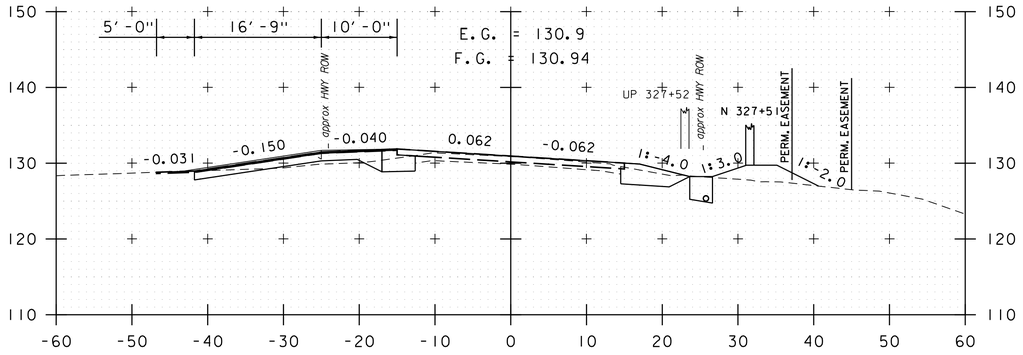
325+89 (DRIVE LT)

STA. 324+50 TO STA. 326+50

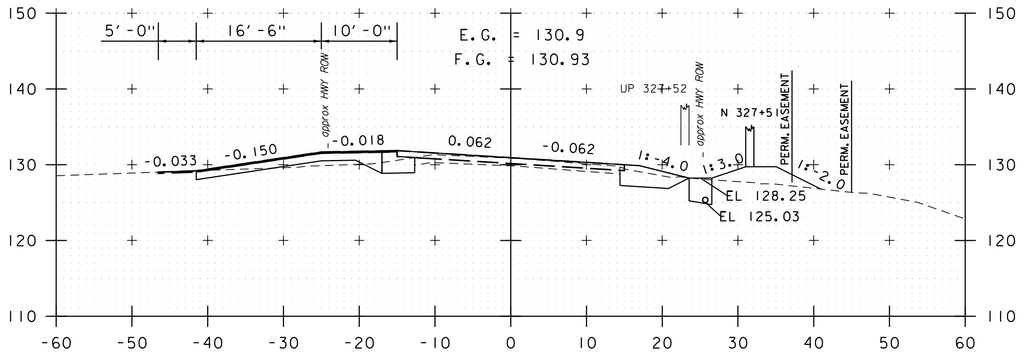
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 117

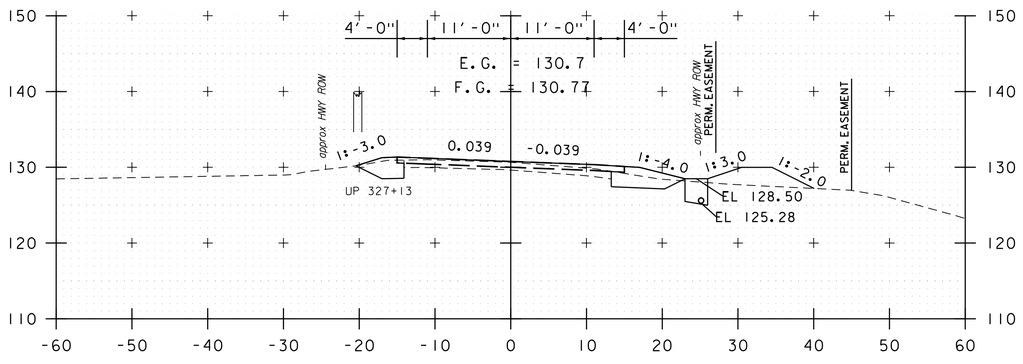
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 294 OF 305



327+54 (DRIVE LT)

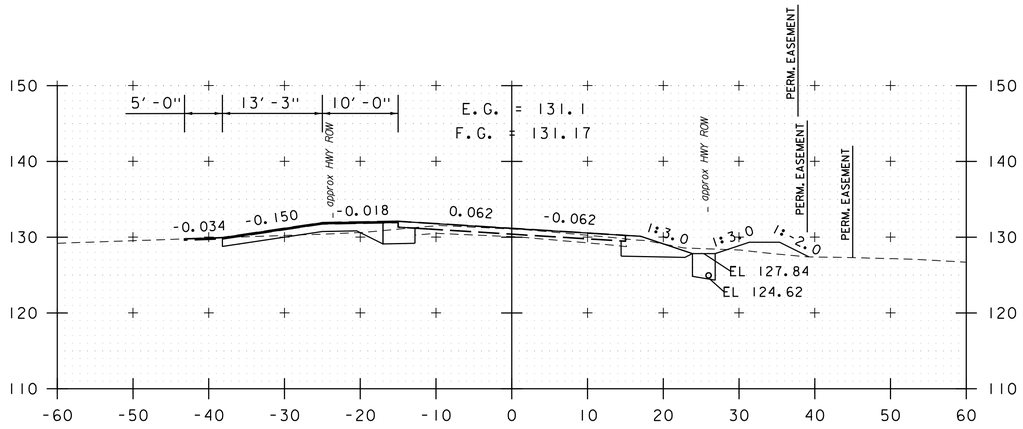


327+50 (DRIVE LT)

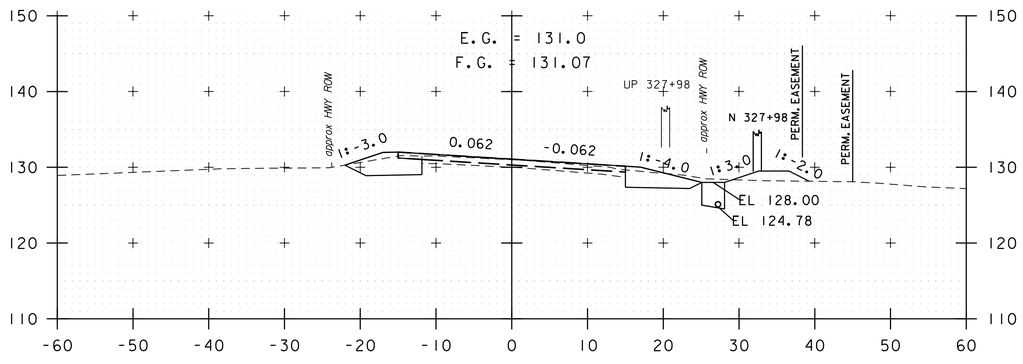


327+00

328+33 (DRIVE LT)



328+13 (DRIVE RT)



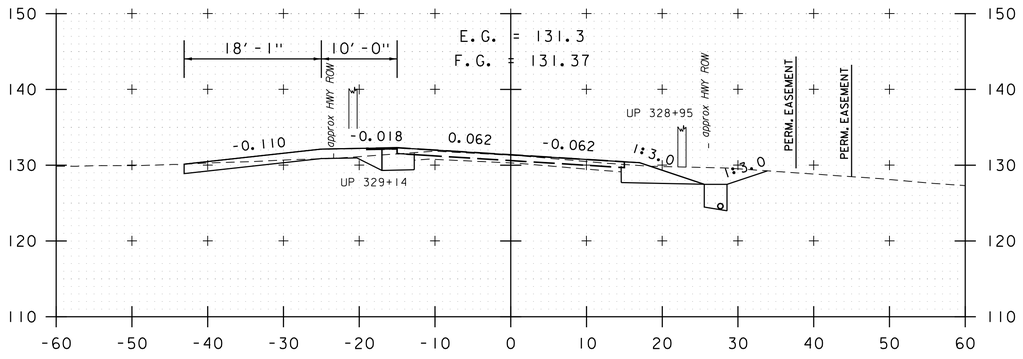
328+00

STA. 327+00 TO STA. 328+33

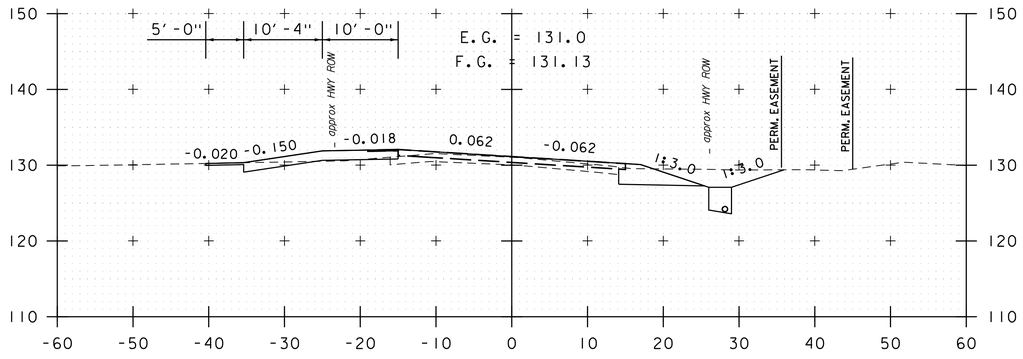
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 118

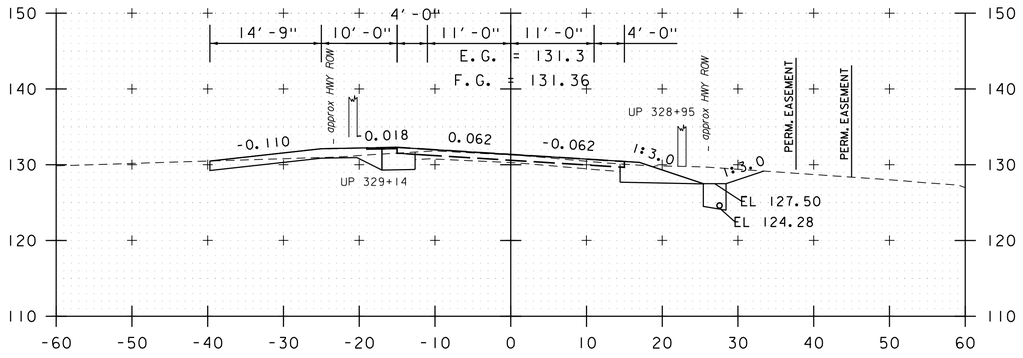
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 295 OF 305



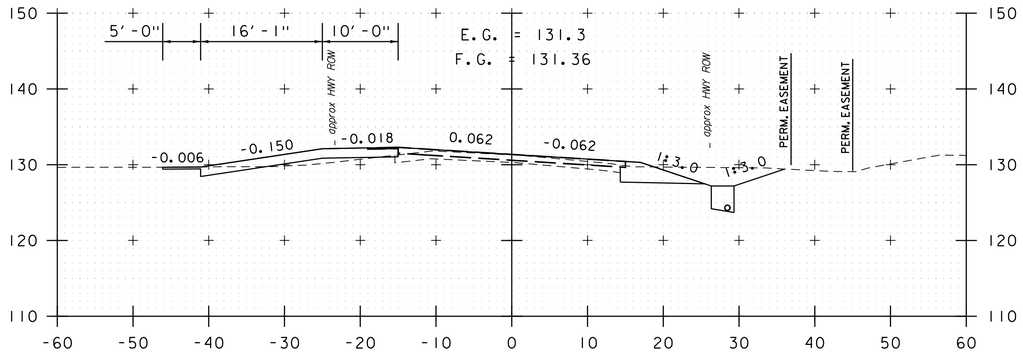
329+05 (DRIVE LT)



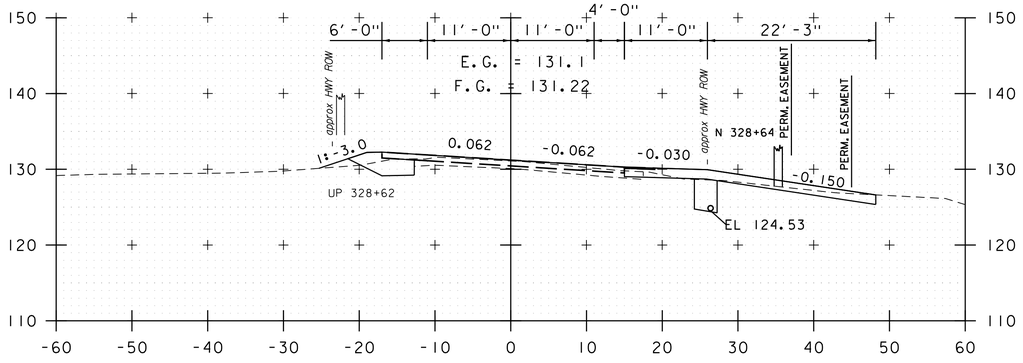
329+85 (DRIVE LT)



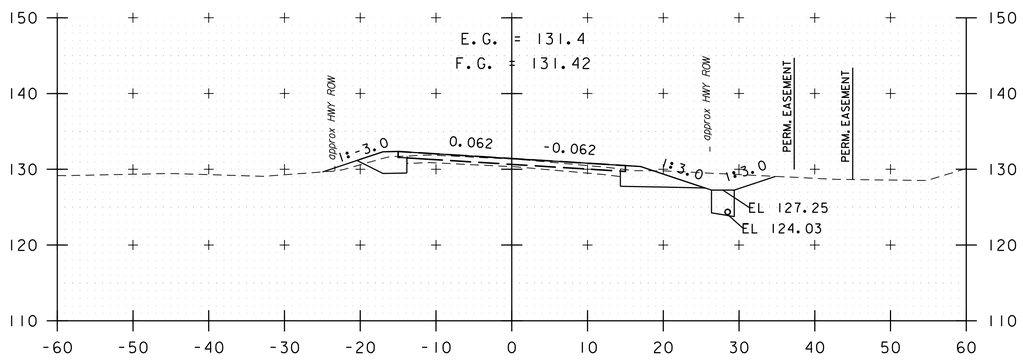
329+00 (DRIVE LT)



329+61 (DRIVE LT)



328+50 (DRIVE RT)



329+50

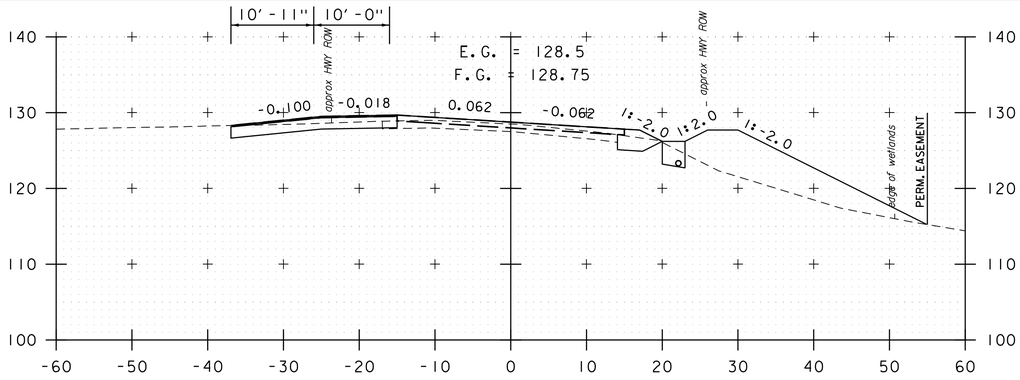
STA. 328+50 TO STA. 329+85

vhb

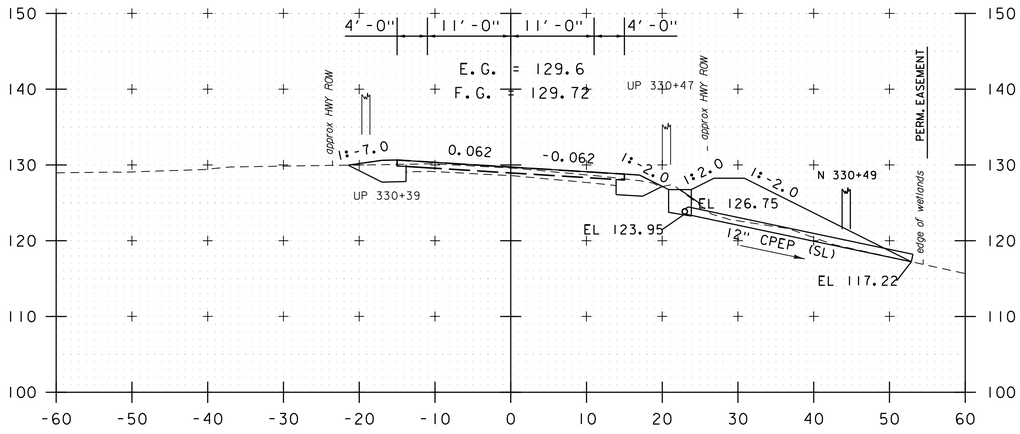
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 119

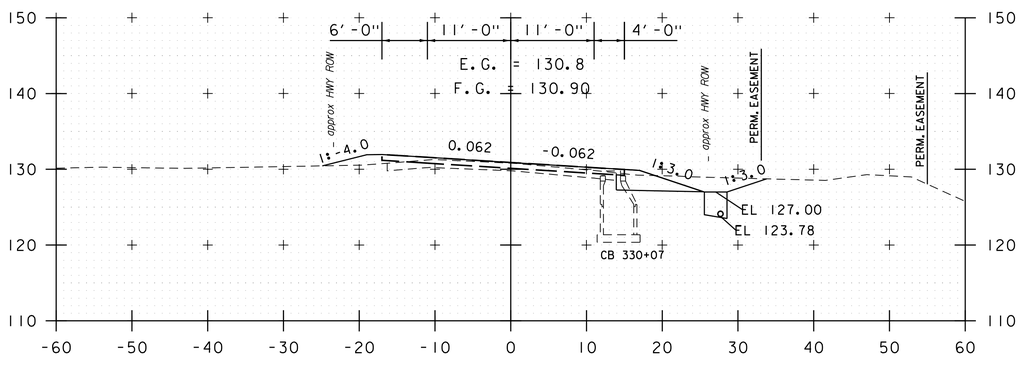
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS



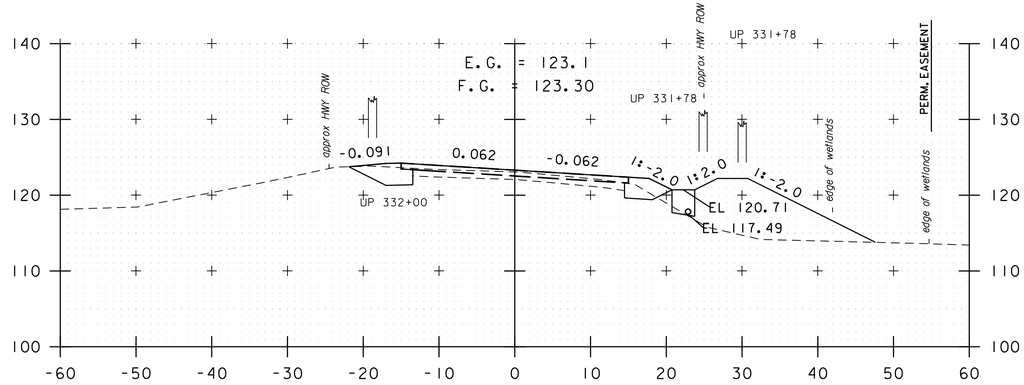
330+78 (DRIVE LT)



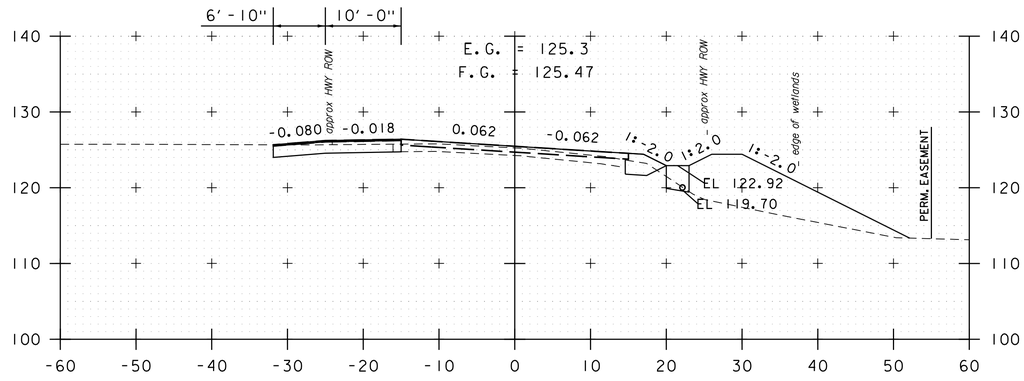
330+50



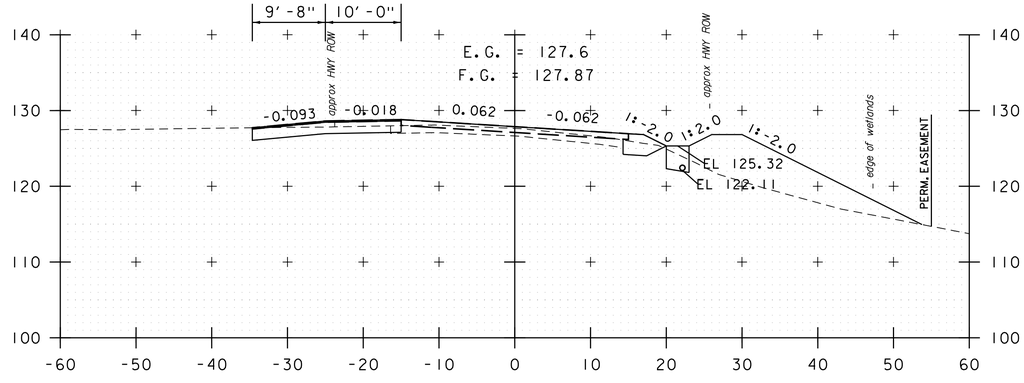
330+00



332+00



331+50 (DRIVE LT)

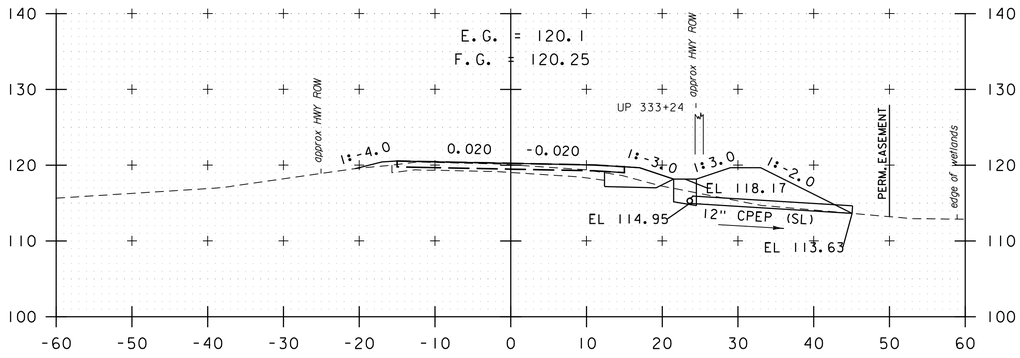


331+00 (DRIVE LT)

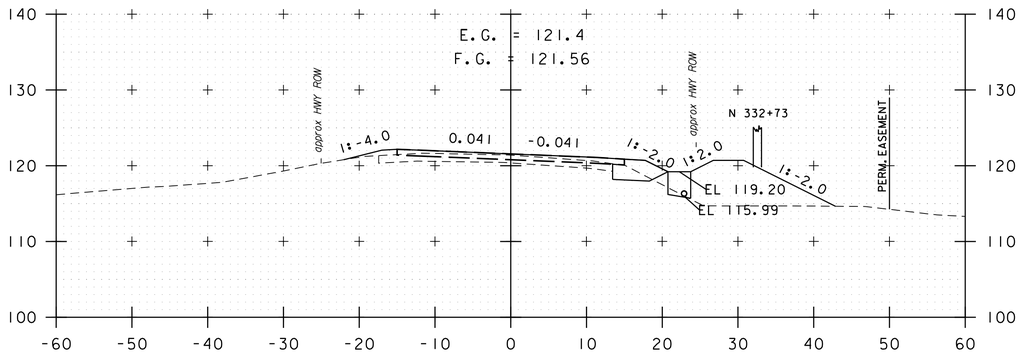
STA. 330+00 TO STA. 332+00

vhb

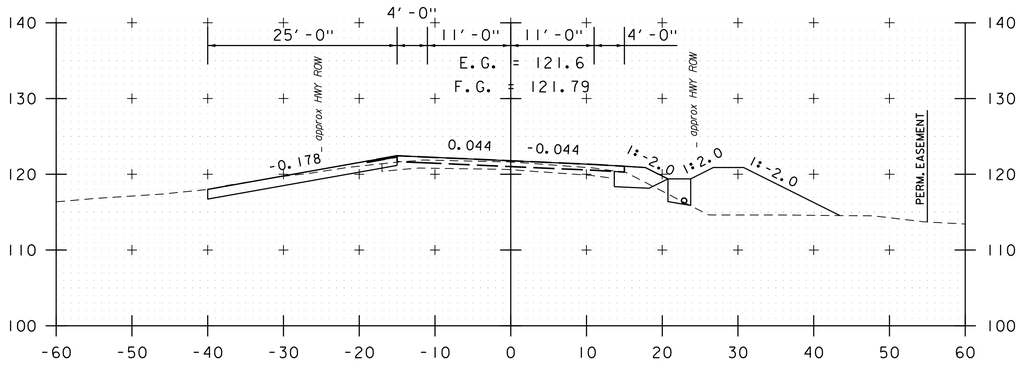
PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032xs_25000_33800.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G.BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G.BAKOS
CROSS SECTION SHEET 120	SHEET 297 OF 305



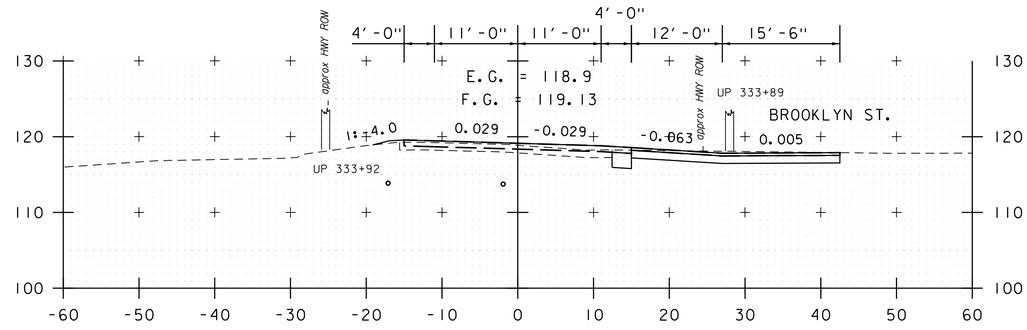
333+00



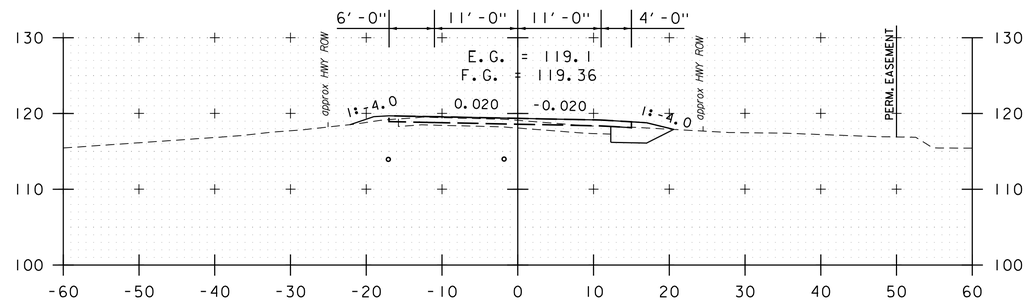
332+50



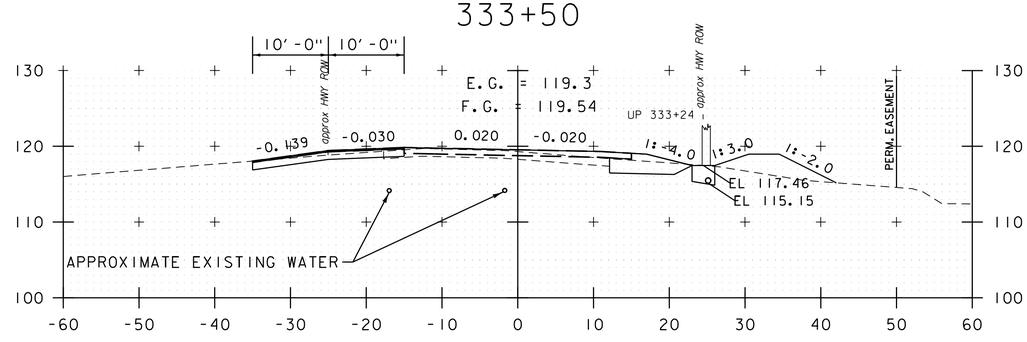
332+43 (DRIVE LT)



333+70 (BROOKLYN ST RT)



333+50

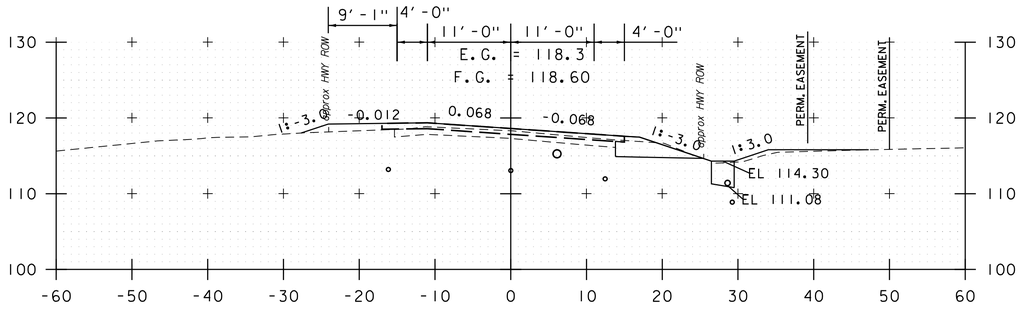


333+38 (DRIVE LT) STA. 332+43 TO STA. 333+70

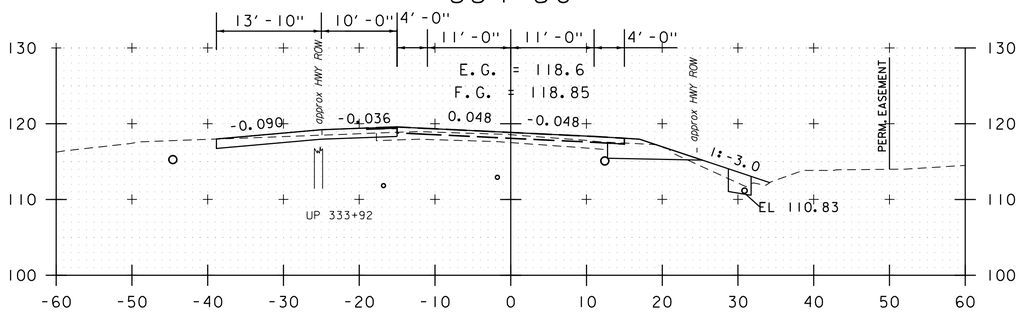
vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)

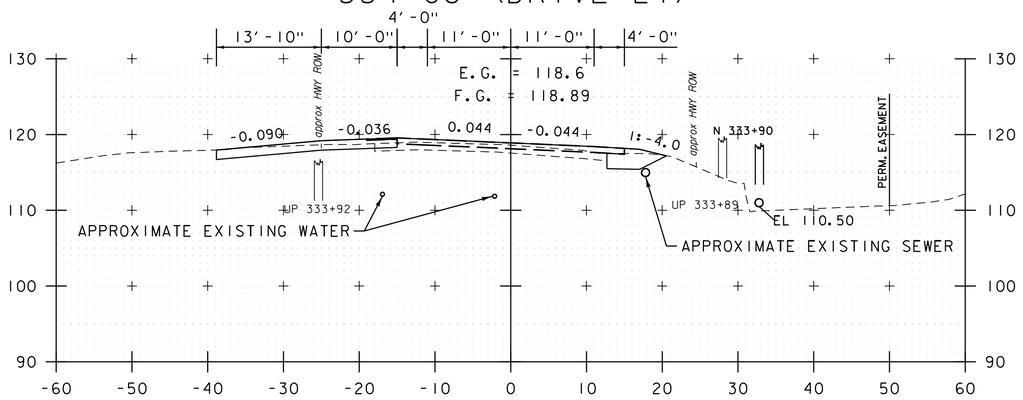
FILE NAME: z96b032xs_25000_33800.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G.BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G.BAKOS
CROSS SECTION SHEET 121	SHEET 298 OF 305



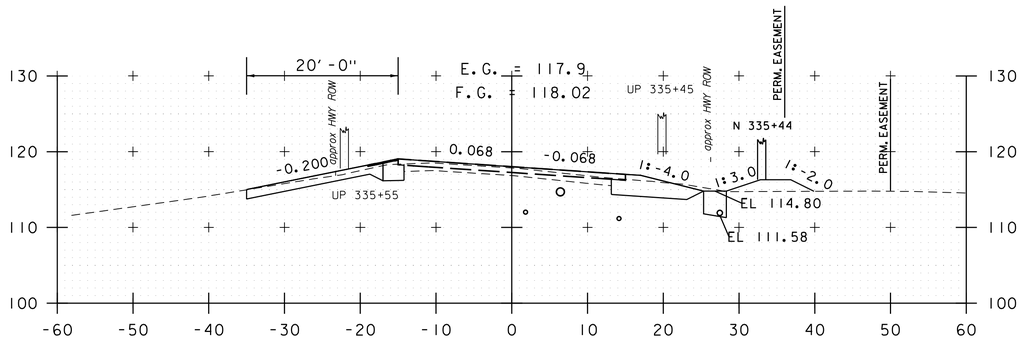
334+50



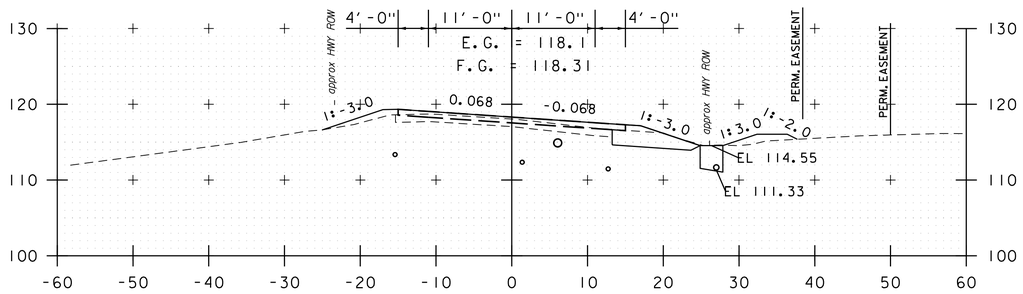
334+08 (DRIVE LT)



334+00 (DRIVE LT)



335+50 (DRIVE LT)



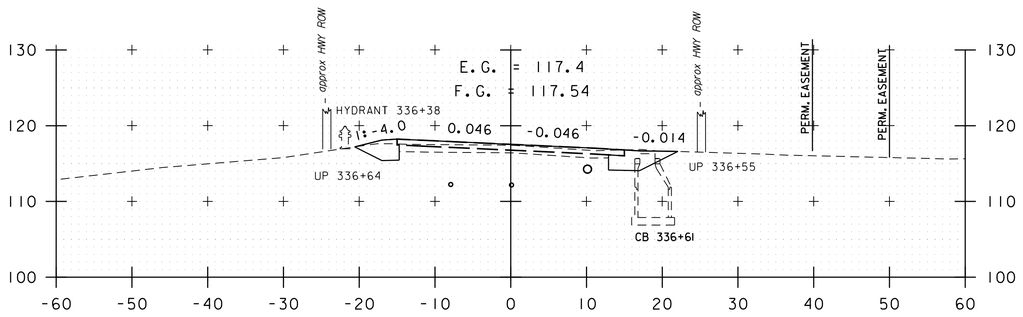
335+00

STA. 334+00 TO STA. 335+50

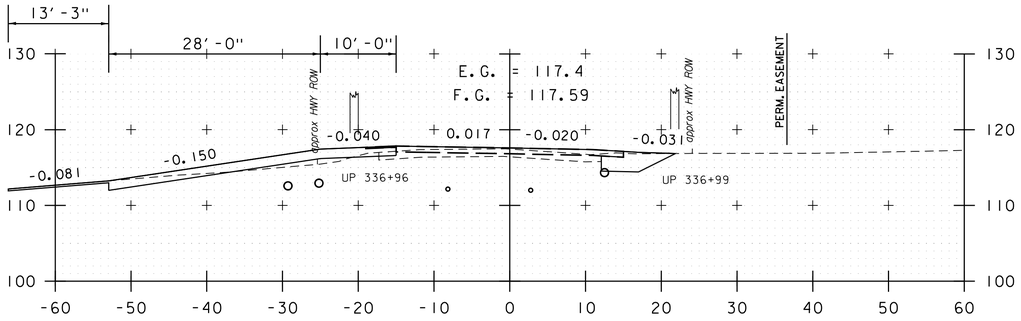
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 122

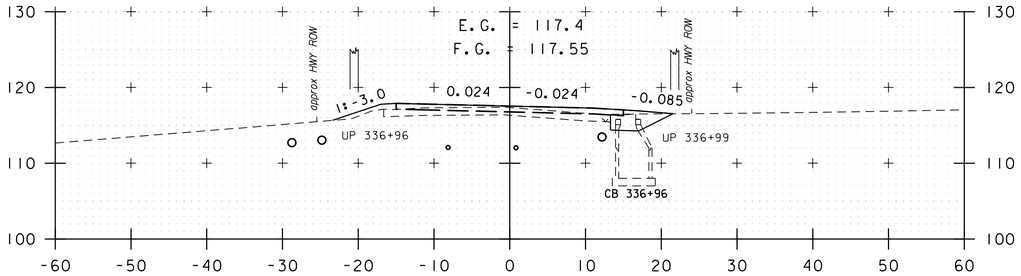
PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 299 OF 305



336+50

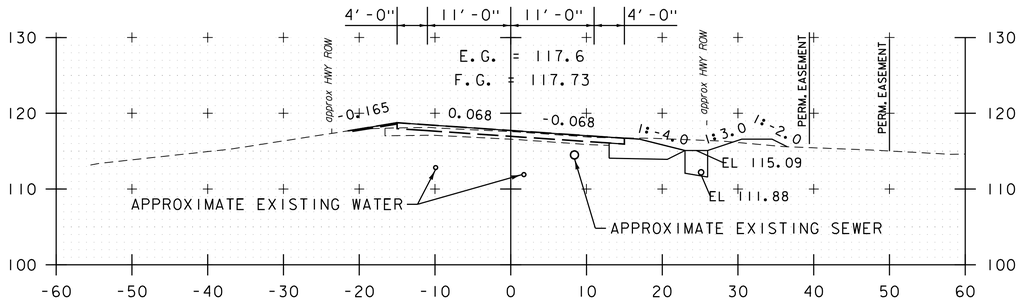


337+17 (DRIVE LT)

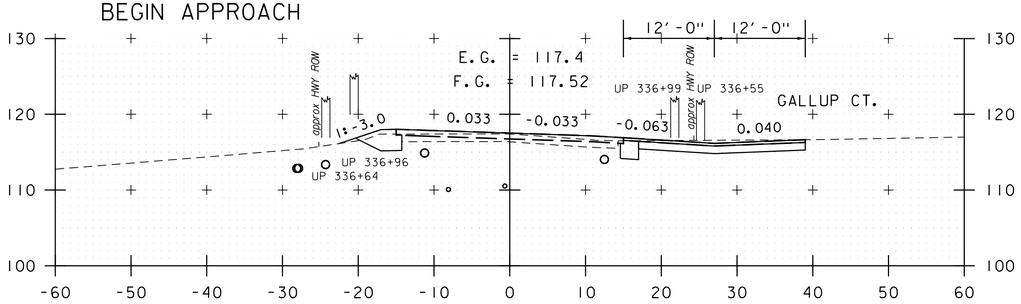


STA 337+00
END PROJECT
BEGIN APPROACH

337+00



336+00 (DRIVE LT)



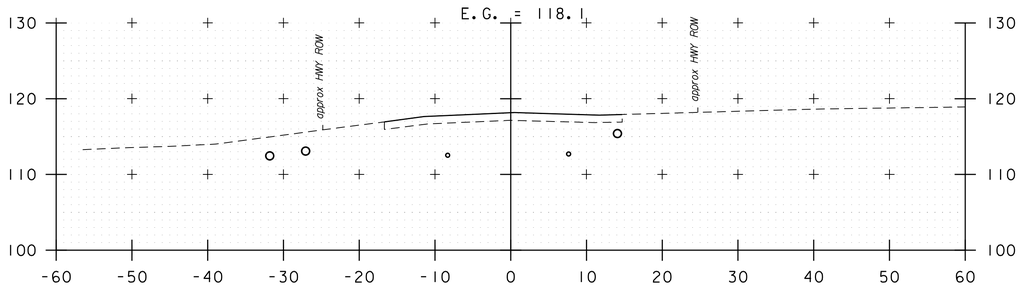
336+79 (GALLUP CT RT) STA. 336+00 TO STA. 337+17

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

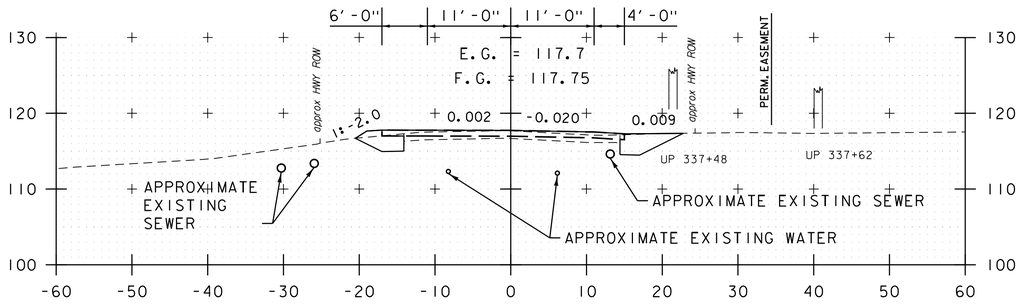
FILE NAME: z96b032xs_25000_33800.dgn
PROJECT LEADER: G.BAKOS
DESIGNED BY: M.BOGUE
CROSS SECTION SHEET 123

PLOT DATE: 3/7/2019
DRAWN BY: C.CILLEY
CHECKED BY: G.BAKOS
SHEET 300 OF 305



STA 338+00
END APPROACH

338+00



337+50

STA. 337+50 TO STA. 338+00

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032xs_25000_33800.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G.BAKOS	DRAWN BY: C.CILLEY
DESIGNED BY: M.BOGUE	CHECKED BY: G.BAKOS
CROSS SECTION SHEET 124	SHEET 301 OF 305

TCP NARRATIVE

GENERAL

THE FOLLOWING TRAFFIC CONTROL INFORMATION AND PROPOSED PHASING ARE INTENDED TO BE A CONCEPTUAL PLAN FOR HOW THE WORK MAY PROCEED. THE CONTRACTOR SHALL SUBMIT A DETAILED TRAFFIC CONTROL PLAN TO THE RESIDENT ENGINEER. THE CONTRACTOR SHALL ALLOW AT LEAST ONE (1) WEEK FOR REVIEW AND APPROVAL. NO WORK SHALL COMMENCE UNTIL THE TRAFFIC CONTROL PLAN HAS BEEN APPROVED. ALL CHANGES TO THE TRAFFIC CONTROL PLAN MUST BE APPROVED BY THE ENGINEER. MODIFICATIONS TO THE APPROVED TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO THE ENGINEER AT LEAST ONE (1) WEEK PRIOR TO THE IMPLEMENTATION OF THE CHANGE.

THE CONTRACTOR'S TRAFFIC CONTROL PLAN SHALL BE DEVELOPED IN ACCORDANCE WITH THE 2011 EDITION OF VTRANS STANDARD SPECIFICATIONS SECTION 541 - TRAFFIC CONTROL, VTRANS STANDARD DETAILS AND IN SUBSTANTIAL CONFORMANCE WITH THE 2009 EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) WITH LATEST INTERIMS. THE TRAFFIC CONTROL PLAN SHALL INCLUDE ALL TEMPORARY SIGNS, PAVEMENT MARKINGS, CHANNELIZING DEVICES, PORTABLE MESSAGE BOARDS, ARROW PANELS, TEMPORARY SIGNALS AND OTHER DEVICES REQUIRED TO PROVIDE COMPLETE MANAGEMENT OF TRAFFIC. TRAFFIC SHALL BE MAINTAINED AT ALL TIMES.

TRAFFIC MANAGEMENT AND ROADWAY CONSTRUCTION SEQUENCING

THIS PROJECT INCLUDES APPROXIMATELY 2.4 MILES OF FULL DEPTH RECONSTRUCTION AND 3.3 MILES OF RECLAMATION AND WIDENING. IN THE FULL DEPTH RECONSTRUCTION AREAS THE USE OF TEMPORARY TRAFFIC BARRIER WILL BE REQUIRED TO SEPARATE THE WORK ZONE FROM TRAFFIC. IN THE RECLAMATION AND WIDENING AREAS REFLECTORIZED DRUMS SHALL BE USED TO DELINEATE THE WORK ZONE FROM THE TRAVELED WAY FOR VERTICAL DROP OFFS OF NOT MORE THAN THREE INCHES. FOR VERTICAL GRADE CHANGES GREATER THAN THREE INCHES, THE SLOPE ADJACENT TO THE TRAVELED WAY SHALL BE AT LEAST 4H:1 V OR FLATTER WHEN UNATTENDED AND SHALL BE SEPARATED FROM THE TRAVELED WAY BY THREE HORIZONTAL FEET AND REFLECTORIZED DRUMS. FOR SHORT DURATIONS OF NOT MORE THAN THREE DAYS, THE SLOPE ADJACENT TO THE TRAVELED WAY MAY BE 3H:1 V BEHIND DRUMS. DURING ACTIVE AND ATTENDED CONSTRUCTION ACTIVITIES, AND IN THE PRESENCE OF UNIFORMED TRAFFIC OFFICERS, THE ADJACENT ROADWAY TRAFFIC SHALL BE A MINIMUM OF THREE FEET FROM THE EDGE OF THE EXCAVATION AND DELINEATED BY REFLECTORIZED DRUMS. IF THE GRADE CHANGE ADJACENT TO THE TRAVELED WAY IS MORE SEVERE THAN THESE CONDITIONS IN A WORK AREA, TEMPORARY CONCRETE BARRIER SHALL BE USED TO SEPARATE THE WORK ZONE FROM ADJACENT TRAFFIC. ALL TEMPORARY CONCRETE BARRIER SHALL HAVE THE BLUNT ENDS THAT FACE ON-COMING TRAFFIC PROTECTED IN ACCORDANCE WITH THE AASHTO ROADSIDE DESIGN GUIDE AND VAOT STANDARDS.

ALTERNATING ONE-WAY TRAFFIC WILL BE REQUIRED ON THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTING AND MAINTAINING TEMPORARY DETOURS INCLUDING OVER WIDENING TO SUPPORT THE ALTERNATING ONE-WAY TRAFFIC ADJACENT TO THE ACTIVE WORK ZONES. THE OVER WIDENING INCLUDES PLACEMENT AND EVENTUAL REMOVAL OF ANY REQUIRED TEMPORARY EARTHWORK, SUBBASE OF SAND AND CRUSHED GRAVEL, BITUMINOUS CONCRETE PAVEMENT, TEMPORARY DRAINAGE PIPES AND STRUCTURES, SLOPE STABILIZATION AND EROSION CONTROLS. ALL ASSOCIATED COSTS WILL BE INCLUDED UNDER ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE). UNIFORMED TRAFFIC OFFICERS, FLAGGERS, PORTABLE CHANGEABLE MESSAGE SIGNS AND TEMPORARY TRAFFIC SIGNAL SYSTEM, PORTABLE WILL ALL BE MEASURED AND PAID ACCORDING TO THEIR RESPECTIVE ITEMS.

IN THE FULL RECONSTRUCTION AREAS TEMPORARY SIGNALS WILL BE REQUIRED TO CONTROL THE ALTERNATING ONE-WAY TRAFFIC DAY AND NIGHT. THE MAXIMUM LENGTH OF THE ALTERNATING ONE-WAY TRAFFIC ZONES WILL BE _____ FEET WHICH IS BASED ON THE ANTICIPATED TRAFFIC VOLUMES AND MAXIMUM ALLOWABLE DELAY. THE ALLOWABLE ALTERNATING ONE-WAY TRAFFIC ZONE LENGTH MAY BE ADJUSTED UP OR DOWN DEPENDING ON ACTUAL CONDITIONS AS DETERMINED BY THE ENGINEER. IN AREAS WHERE THE CONTRACTOR IS ABLE TO RESTORE TWO-WAY TRAFFIC AT THE END OF EACH DAY THE DAYTIME ALTERNATING ONE-WAY WORK ZONES MAY BE CONTROLLED BY FLAGGERS WITH TWO-WAY RADIOS. UNLESS AGREED TO BY THE ENGINEER, NO MORE THAN TWO ALTERNATING ONE-WAY TRAFFIC DETOURS WILL BE ALLOWED WITHIN THE PROJECT AT THE SAME TIME AND THOSE DETOURS MUST BE SEPARATED BY AT LEAST 1/2 MILE.

ACCESS TO PROPERTIES ALONG THE CORRIDOR MAY BE RESTRICTED FOR SHORT DURATIONS OF NOT MORE THAN TWO HOURS WITH THE PERMISSION AND PRIOR NOTIFICATION OF THE OWNERS DURING BUSINESS HOURS. CONTRACTOR SHALL COORDINATE MAJOR WORK ADJACENT TO COMMERCIAL AREAS WITH THE OWNERS AT LEAST ONE WEEK PRIOR TO STARTING THE WORK IN THE AREA.

SPECIAL CARE MUST BE TAKEN TO PROVIDE ACCESS THROUGH THE WORK ZONES FOR EMERGENCY VEHICLES. THE CONTRACTOR SHALL COORDINATE WITH BOTH POLICE AND FIRE DEPARTMENTS TO DETERMINE THEIR MINIMUM ACCESS REQUIREMENTS BEFORE IMPLEMENTING DETOURS.

SIGNS AND MARKINGS

EXISTING SIGNS SHALL REMAIN UNTIL THEY ARE NO LONGER REQUIRED. EXISTING SIGNS WHICH CONFLICT WITH TEMPORARY TRAFFIC CONTROLS SHALL BE COMPLETELY COVERED WITH SOLID COVERS PAINTED BLACK OR REMOVED/RELOCATED AS NEEDED. TEMPORARY SIGNS SHALL BE INSTALLED AS SHOWN IN THE PLANS AND THE CONTRACTOR'S APPROVED TRAFFIC CONTROL PLANS. NEW SIGNING SHALL BE INSTALLED AS IT BECOMES APPLICABLE. ALL PROPOSED SIGNING SHALL BE INSTALLED AND ALL SIGNS TO BE REMOVED SHALL BE REMOVED PRIOR TO THE APPLICATION OF THE FINAL PAVEMENT MARKINGS.

THE WORK SHALL INCLUDE FURNISHING, ERECTING, MAINTAINING, AND REMOVING ALL TEMPORARY SIGNING AS SHOWN IN THE PLANS, AS REQUIRED BY SITE SPECIFIC WORK, AND AS DIRECTED BY THE ENGINEER. ANY SIGNS NOT INCLUDED IN THE FHWA STANDARD HIGHWAY SIGNS BOOK SHALL INCLUDE SIGN FACE DIMENSIONS AND LAYOUT.

THE WORK SHALL BE STAGED ACCORDING TO THE TRAFFIC CONTROL PLAN OR AS APPROVED BY THE ENGINEER. DURING THE STAGED CONSTRUCTION OF VT78, TRAFFIC CONTROL PLANS SHALL BE ESTABLISHED TO MAINTAIN THE CONTINUITY OF VEHICLE AND PEDESTRIAN TRAFFIC THROUGH THE CORRIDOR. SIGNS SHALL BE ADJUSTED AT THE COMPLETION OF EACH CONSTRUCTION PHASE AS SHOWN ON THE TRAFFIC CONTROL PLANS AND AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL MAINTAIN TEMPORARY SIGNING AND PAVEMENT MARKINGS, TEMPORARY CONCRETE BARRIER AND OTHER SUPPORTING TRAFFIC CONTROLS THROUGHOUT CONSTRUCTION. INSTALLING, MAINTAINING, ADJUSTING, MODIFYING, AND REMOVING TRAFFIC CONTROLS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE).

TRAFFIC SHALL NOT BE CHANGED FROM ONE PHASE TO THE NEXT UNTIL ALL TEMPORARY MARKINGS, SIGNING, AND TEMPORARY TRAFFIC SIGNAL WORK REQUIRED FOR THE SUBSEQUENT PHASE IS COMPLETED. ANY CONFLICTING PAVEMENT MARKINGS SHALL BE MASKED WITH PAVEMENT MARKING MASK OR REMOVED BY GRINDING. EXISTING PAVEMENT MARKINGS THAT ARE TO REMAIN FOR LATER USE SHALL BE MASKED WITH PAVEMENT MARKING MASK. TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED ON ALL RECONSTRUCTED ROADWAY SEGMENTS PRIOR TO OPENING THAT SEGMENT TO TRAFFIC. AT THE COMPLETION OF ALL CONSTRUCTION PHASES, THE CONTRACTOR SHALL APPLY THE TOP COURSE PAVEMENT AND APPLY THE FINAL PAVEMENT MARKINGS.

WINTER SHUTDOWN

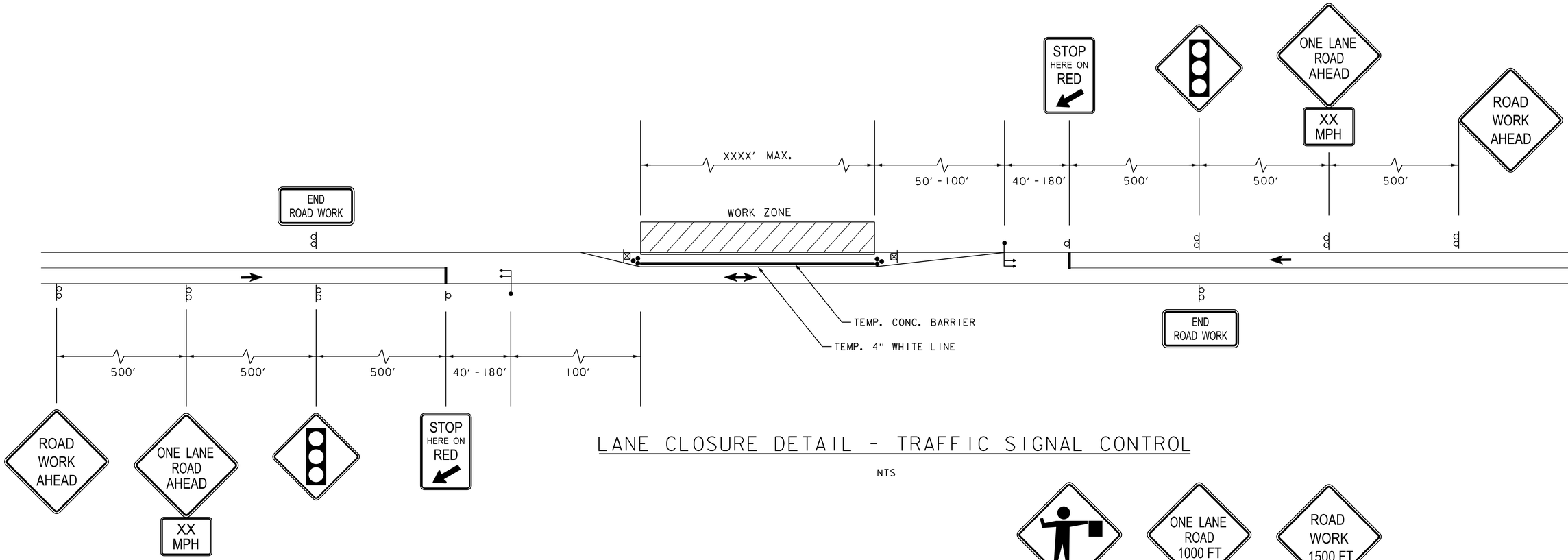
THE CONSTRUCTION IS EXPECTED TO TAKE PLACE DURING MORE THAN ONE CONSTRUCTION SEASON. THIS WILL LIKELY REQUIRE AT LEAST ONE (1) WINTER SHUTDOWN PERIOD WHEN THE WEATHER IS NOT CONDUCIVE TO CONTINUED CONSTRUCTION ACTIVITIES. THE CONTRACTOR AND ENGINEER SHALL COORDINATE THE BEGINNING AND ENDING OF THE WINTER SHUTDOWN PERIODS IN ACCORDANCE WITH VAOT PROCEDURES. AT LEAST TWO (2) WEEKS PRIOR TO THE ANTICIPATED WINTER SHUTDOWN, THE CONTRACTOR SHALL PREPARE ALL WORK AREAS TO BE REOPENED TO TRAFFIC. THIS INCLUDES PROVIDING A PAVED SURFACE FOR ALL STREETS AND PAVED DRIVES, FRESH PAINTED PAVEMENT MARKINGS, AND ALL NECESSARY TRAFFIC SIGNS AND EROSION CONTROLS.

vhb

PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

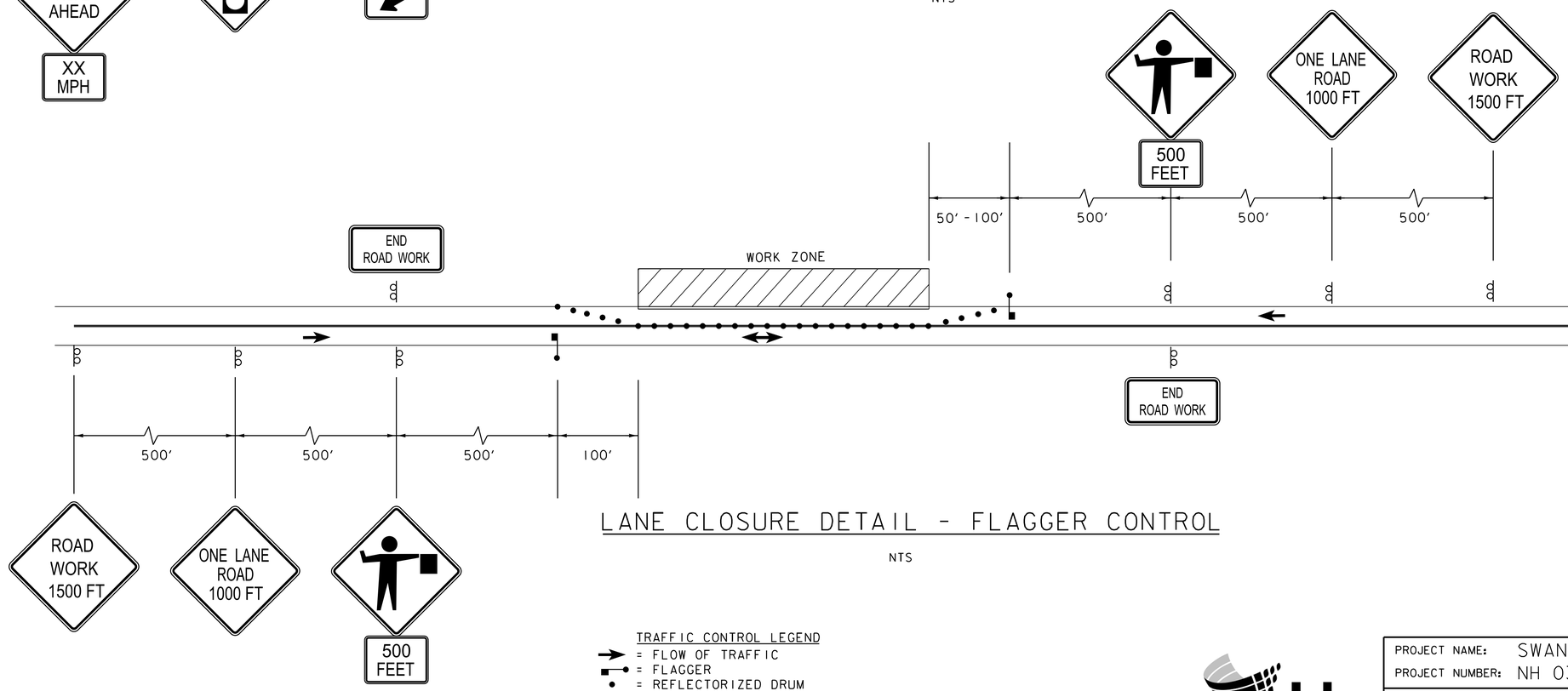
FILE NAME: z96b032tcp_Narr.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
TCP NARRATIVE

PLOT DATE: 3/7/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 302 OF 305



LANE CLOSURE DETAIL - TRAFFIC SIGNAL CONTROL

NTS



LANE CLOSURE DETAIL - FLAGGER CONTROL

NTS

TRAFFIC CONTROL LEGEND

= FLOW OF TRAFFIC
= FLAGGER
= REFLECTORIZED DRUM
= TEMPORARY CONCRETE BARRIER
= WORK AREA
= TEMPORARY SIGN

vhb

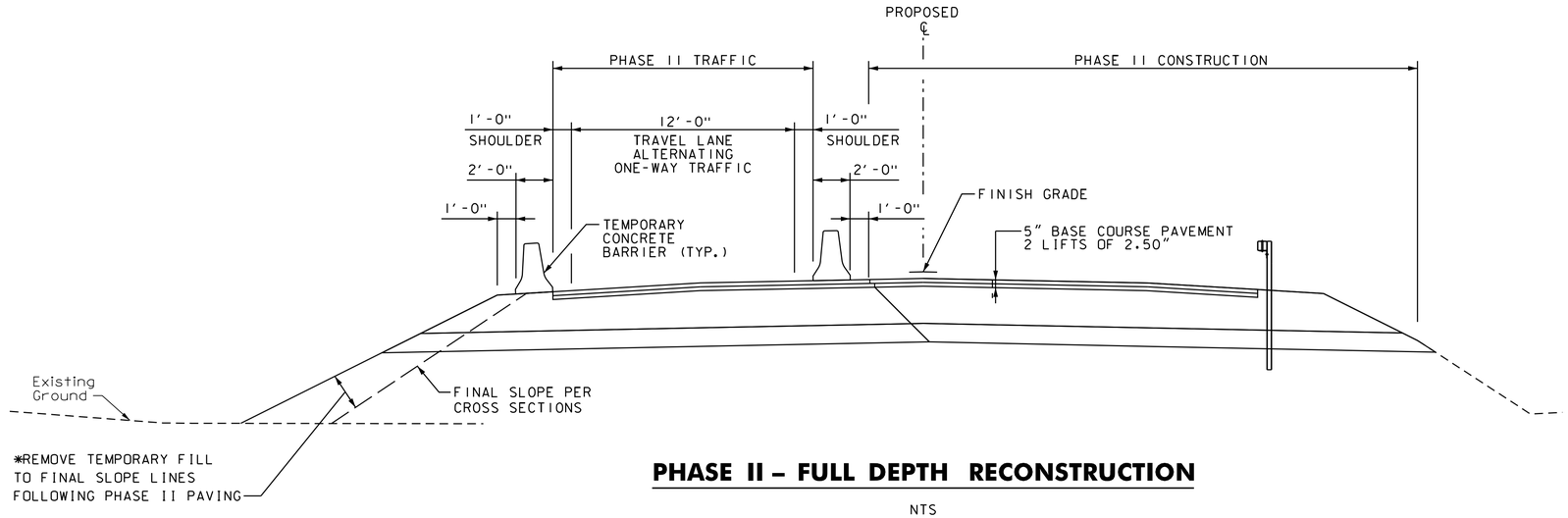
PROJECT NAME: SWANTON
PROJECT NUMBER: NH 036-1(9)

FILE NAME: z96b032tcp_det.dgn
PROJECT LEADER: G. BAKOS
DESIGNED BY: M. BOGUE
TCP DETAILS

PLOT DATE: 3/7/2019
DRAWN BY: C. CILLEY
CHECKED BY: G. BAKOS
SHEET 303 OF 305

TCP TYPICAL SECTIONS

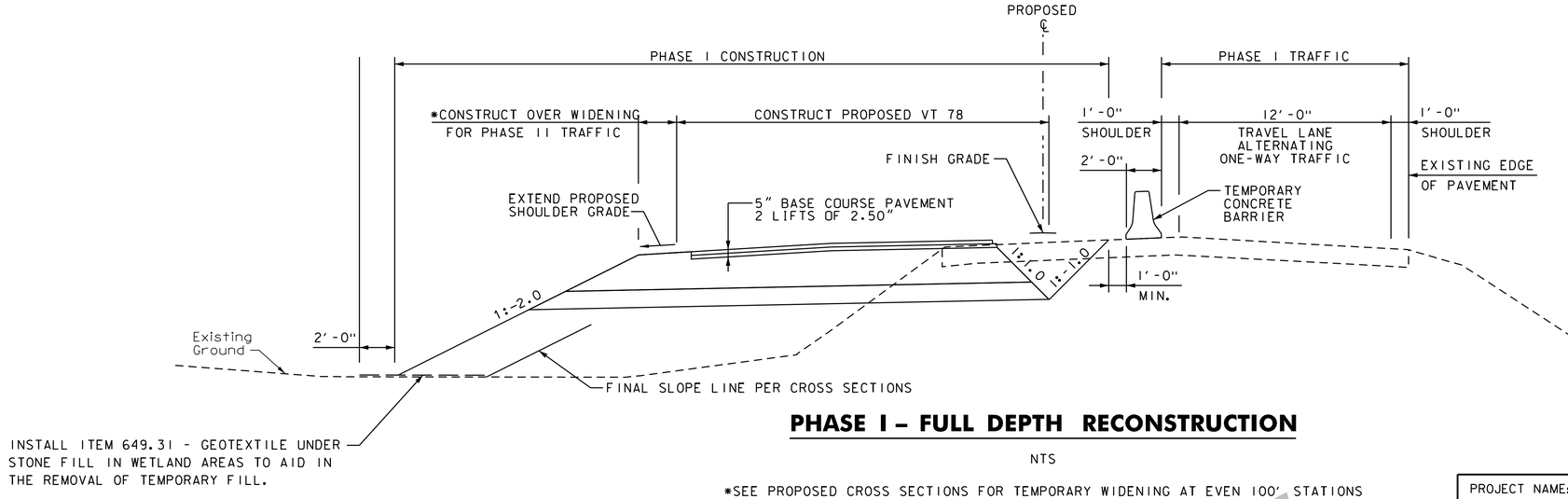
MATERIAL TOLERANCES	
MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT (TOTAL DEPTH)	½"
SUBBASE (TOTAL DEPTH)	1"
SAND (TOTAL DEPTH)	1"



PHASE II – FULL DEPTH RECONSTRUCTION

NTS

*SEE PROPOSED CROSS SECTIONS FOR TEMPORARY WIDENING AT EVEN 100' STATIONS



PHASE I – FULL DEPTH RECONSTRUCTION

NTS

*SEE PROPOSED CROSS SECTIONS FOR TEMPORARY WIDENING AT EVEN 100' STATIONS

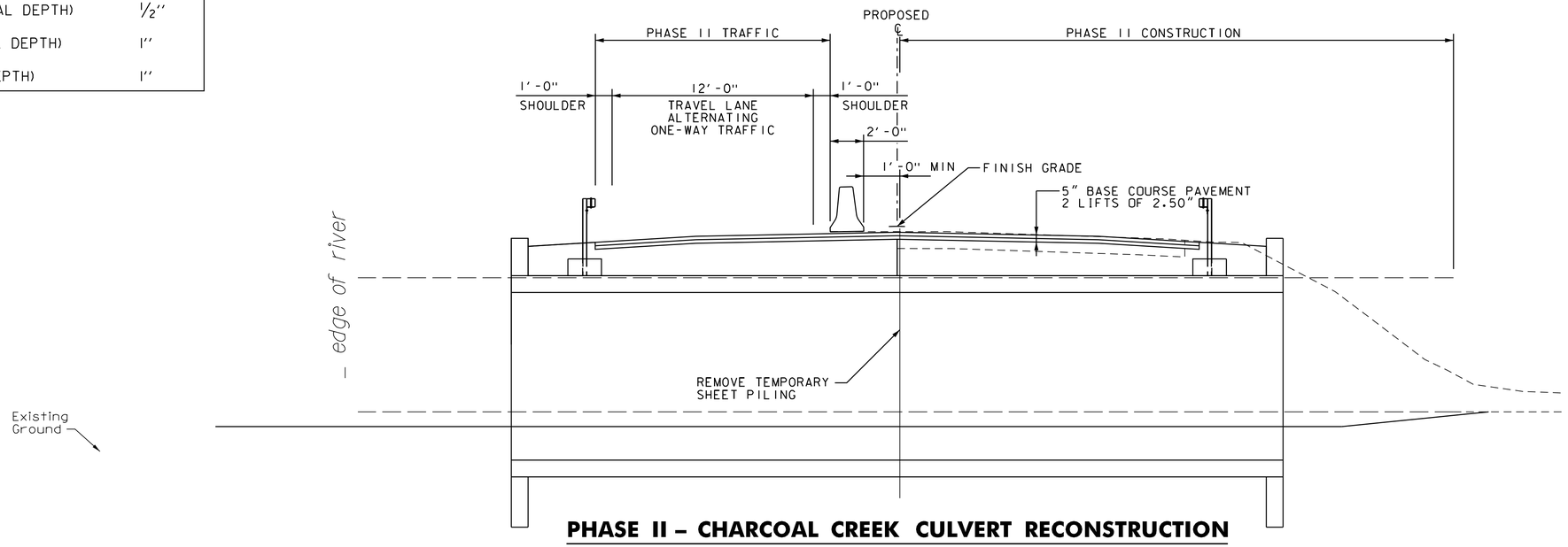
vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)

FILE NAME: z96b032tcp_01.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
TCP TYPICAL 1	SHEET 304 OF 305

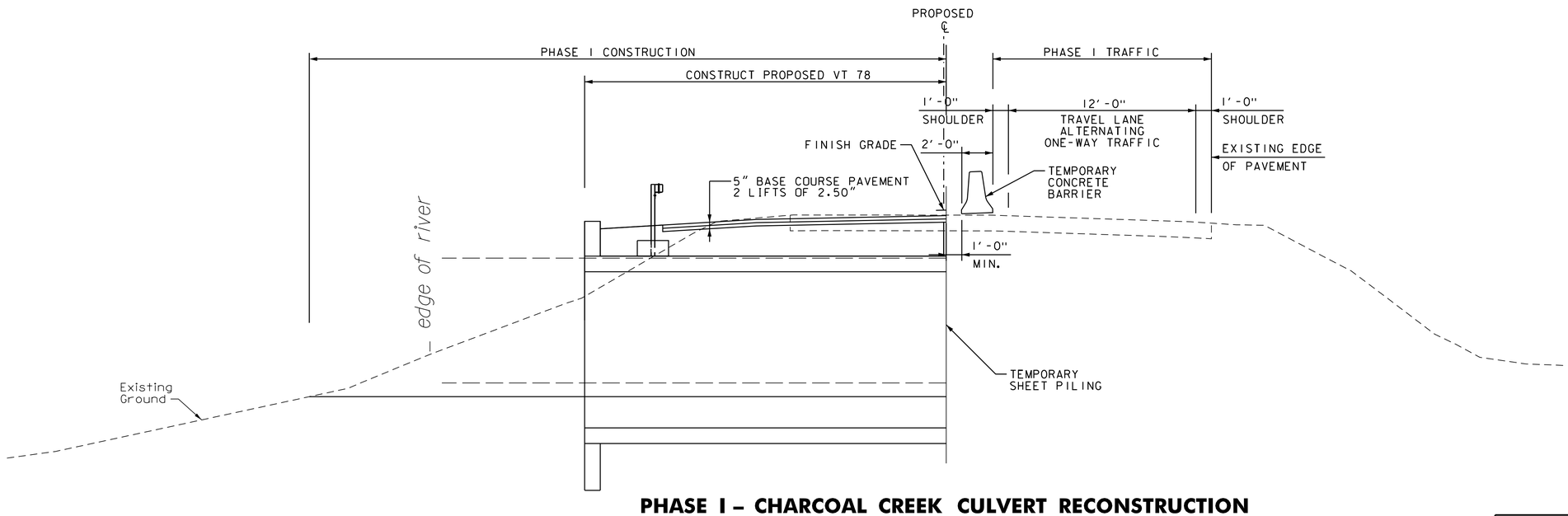
TCP TYPICAL SECTIONS

MATERIAL TOLERANCES	
MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT (TOTAL DEPTH)	½''
SUBBASE (TOTAL DEPTH)	1''
SAND (TOTAL DEPTH)	1''



PHASE II – CHARCOAL CREEK CULVERT RECONSTRUCTION

NTS



PHASE I – CHARCOAL CREEK CULVERT RECONSTRUCTION

NTS

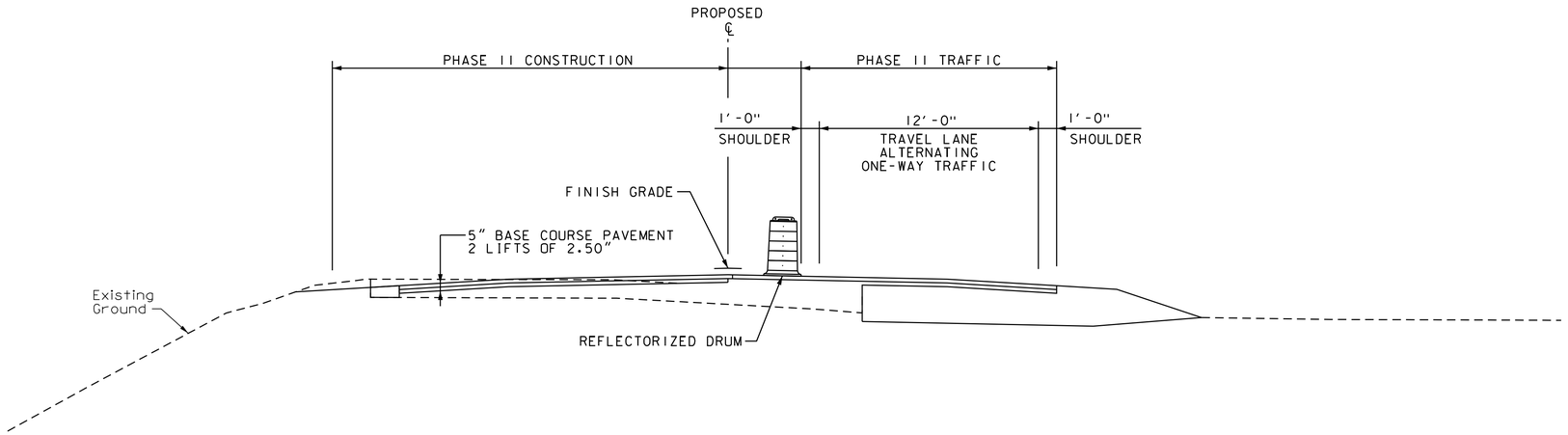
vhb

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)

FILE NAME: z96b032tcp_02.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
TCP TYPICAL 2	SHEET 305 OF 305

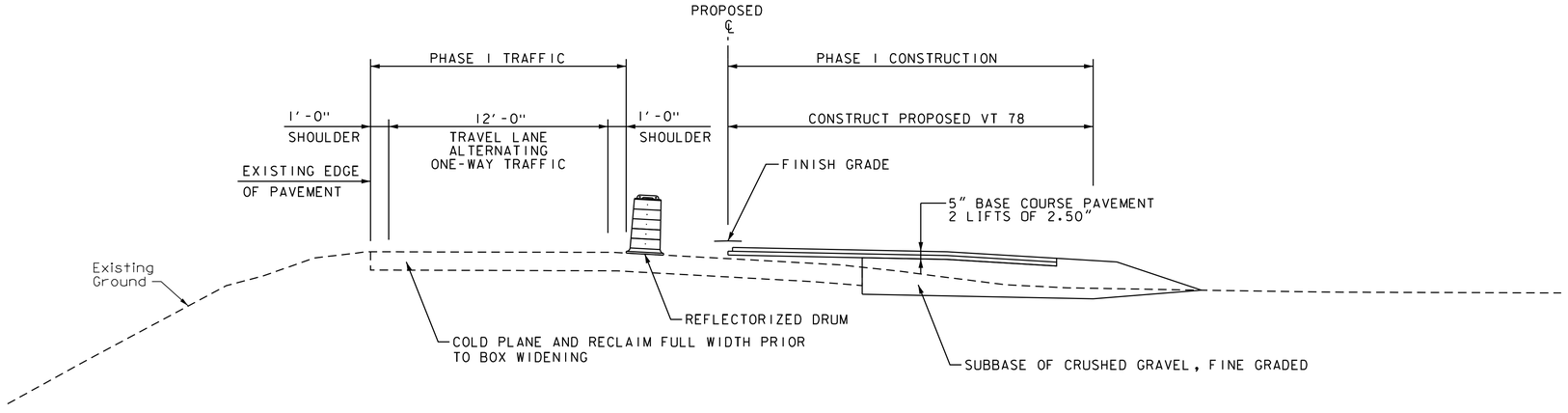
TCP TYPICAL SECTIONS

MATERIAL TOLERANCES	
MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT (TOTAL DEPTH)	½''
SUBBASE (TOTAL DEPTH)	1''
SAND (TOTAL DEPTH)	1''



PHASE II – PAVEMENT RECLAIMATION WITH BOX WIDENING (12' PROPOSED LANE WIDTH)

NTS



PHASE I – PAVEMENT RECLAIMATION WITH BOX WIDENING (12' PROPOSED LANE WIDTH)

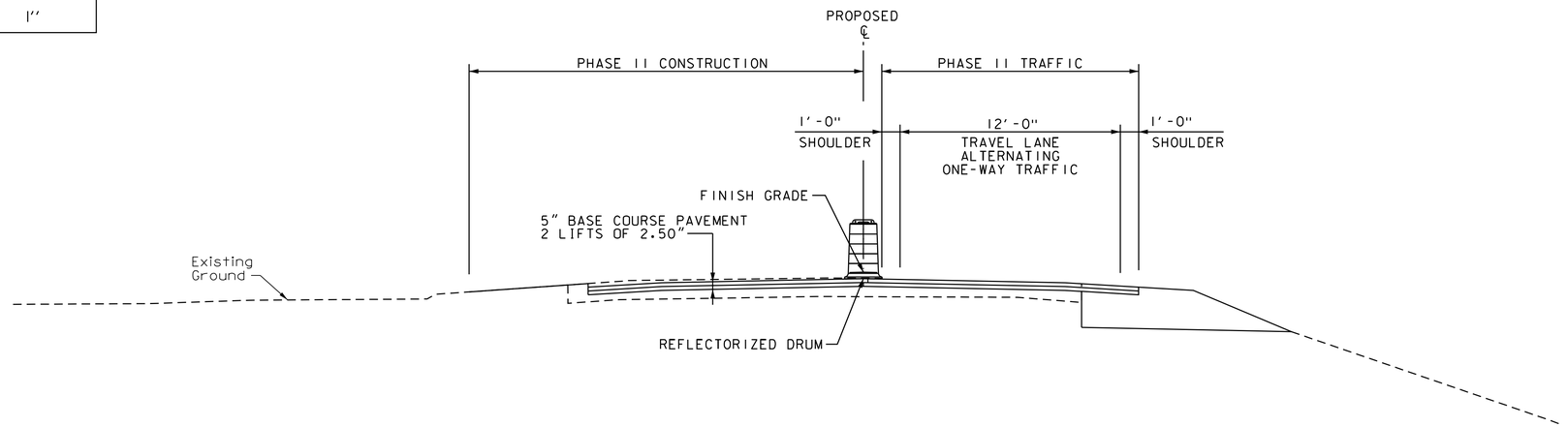
STA. 163+00 TO STA. 310+00

NTS

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032tcp_03.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
TCP TYPICAL 3	SHEET 306 OF 305

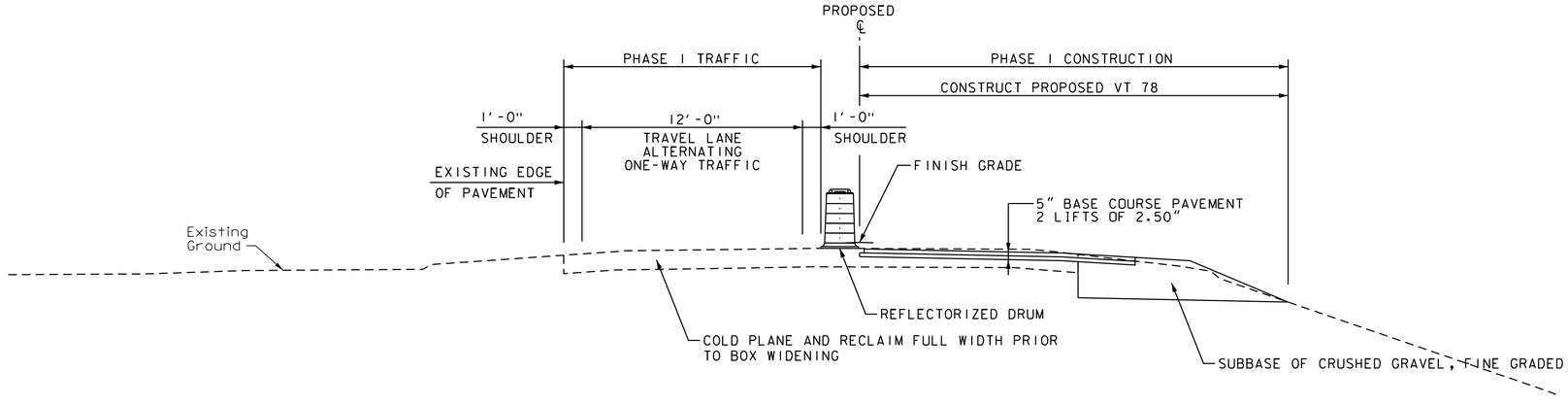
TCP TYPICAL SECTIONS

MATERIAL TOLERANCES	
MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT (TOTAL DEPTH)	½''
SUBBASE (TOTAL DEPTH)	1''
SAND (TOTAL DEPTH)	1''



PHASE II – PAVEMENT RECLAIMATION WITH BOX WIDENING (11' PROPOSED LANE WIDTH)

NTS



PHASE I – PAVEMENT RECLAIMATION WITH BOX WIDENING (11' PROPOSED LANE WIDTH)

STA. 310+00 TO STA. 336+00

NTS

PROJECT NAME:	SWANTON
PROJECT NUMBER:	NH 036-1(9)
FILE NAME: z96b032tcp_04.dgn	PLOT DATE: 3/7/2019
PROJECT LEADER: G. BAKOS	DRAWN BY: C. CILLEY
DESIGNED BY: M. BOGUE	CHECKED BY: G. BAKOS
TCP TYPICAL 4	SHEET 307 OF 305