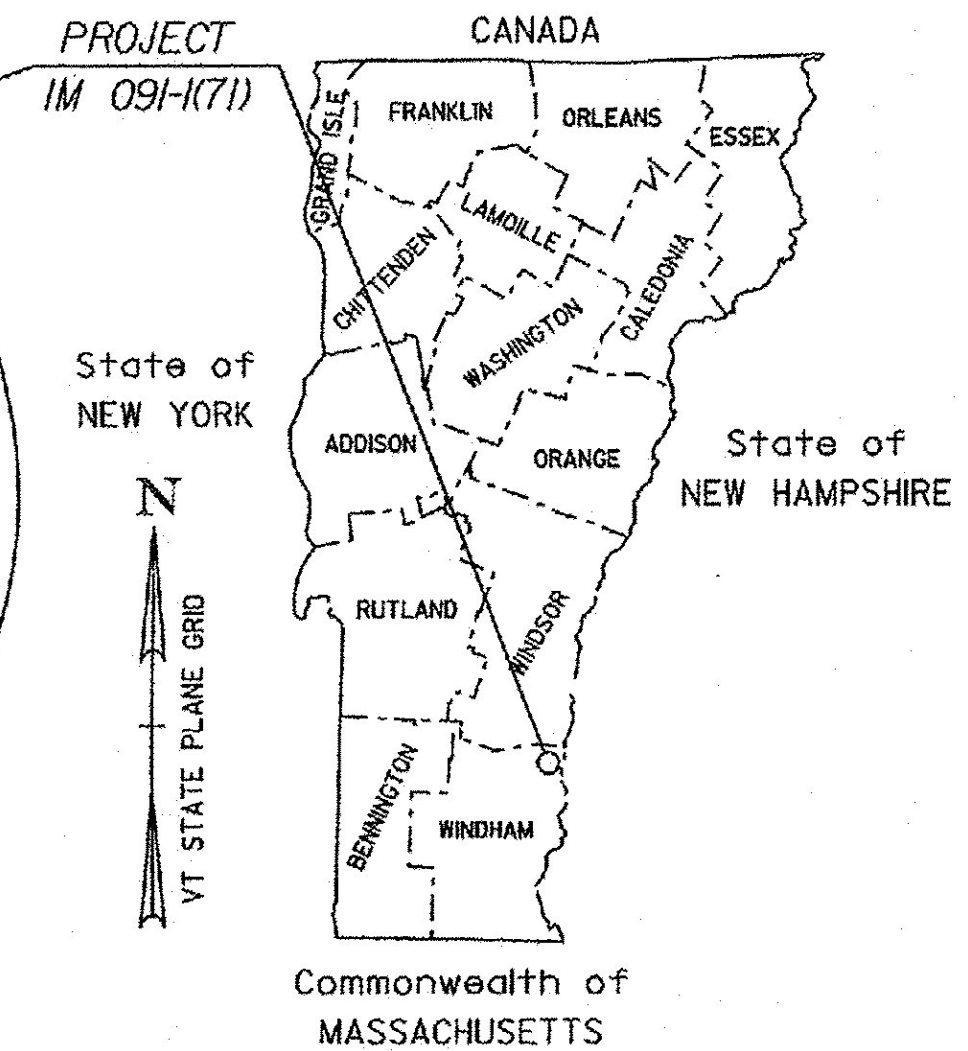
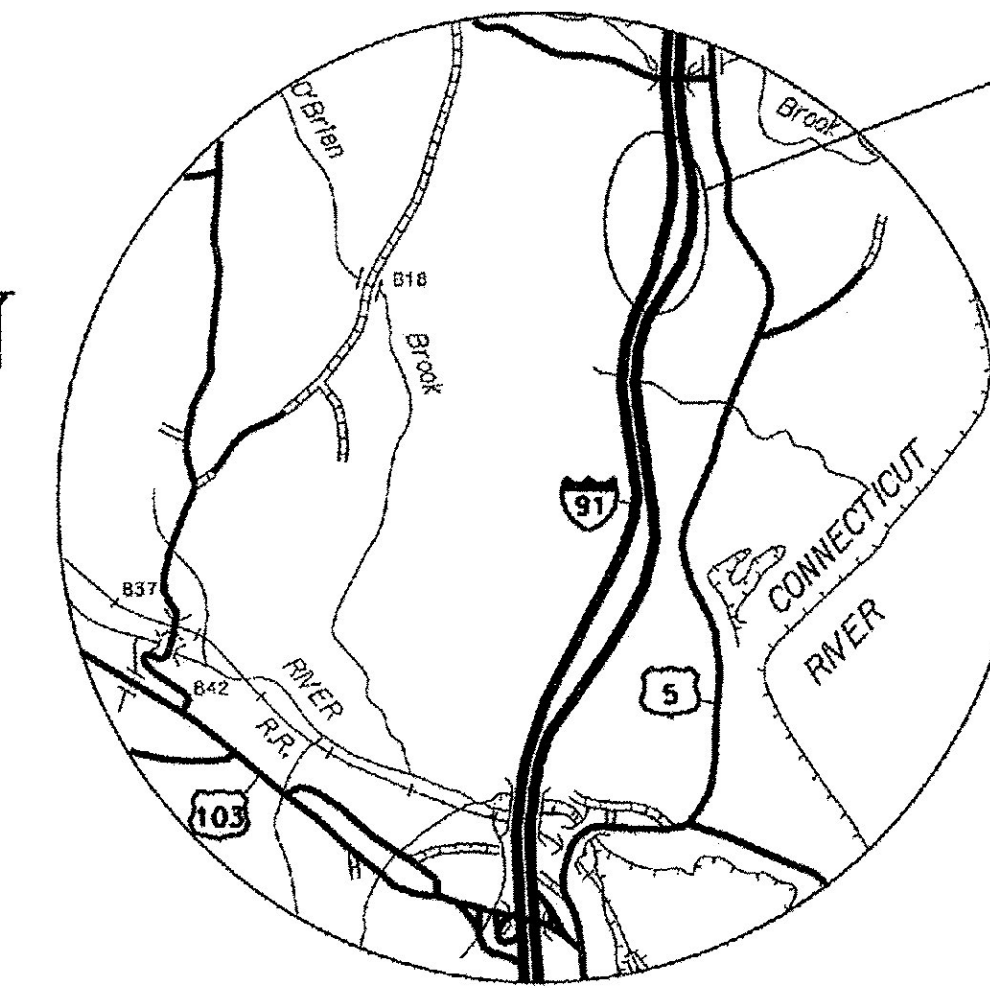
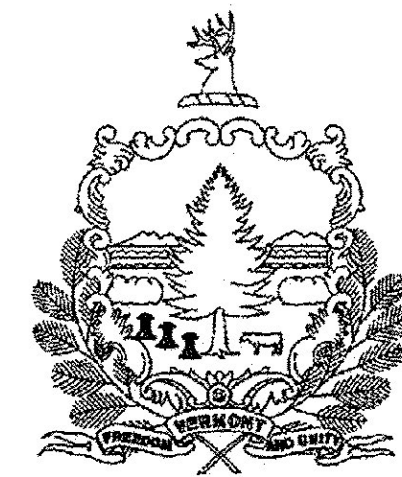


STATE OF VERMONT AGENCY OF TRANSPORTATION



RECORD PLANS	
CONTRACTOR:	BAZIN BROTHERS, INC. - WESTMINSTER, VT
RESIDENT ENGINEER:	DARYL BASSETT
CONSTRUCTION BEGAN:	APRIL 28, 2016
CONSTRUCTION COMPLETE:	OCTOBER 1, 2016
RECORD PLANS BY:	DARYL BASSETT & KEVIN KING
I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.	
BY	RESIDENT ENGINEER
DATE <u>5/8/17</u>	
NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found at Central Files in the electronic archives.	

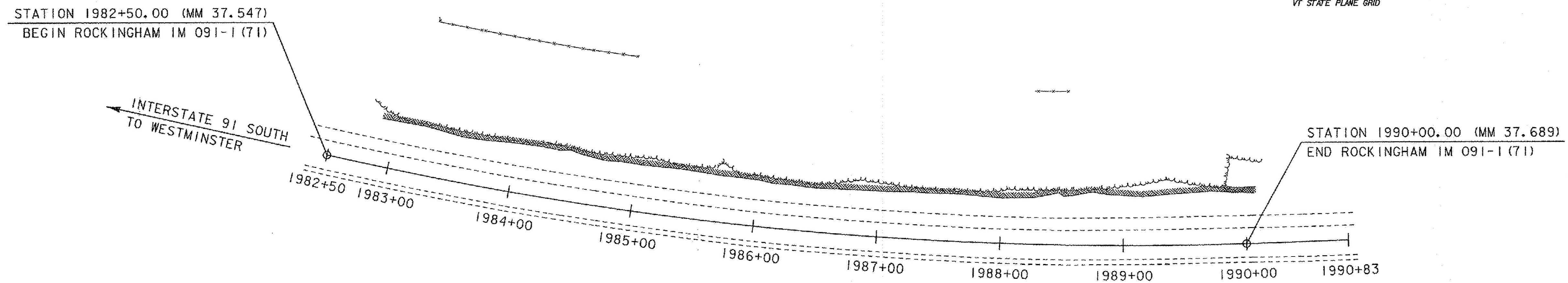
PROPOSED IMPROVEMENT TOWN OF ROCKINGHAM COUNTY OF WINDHAM

INTERSTATE 91 (PRINCIPAL ARTERIAL-INTERSTATE)(NHS)

PROJECT LOCATION: BEGINNING IN THE TOWN OF ROCKINGHAM ON INTERSTATE 91 SOUTHBOUND AT STATION 1982+50.00 (MM 37.547) AND EXTENDING NORTHERLY 750.00 FEET (0.142 MILES) TO STATION 1990+00.00 (MM 37.689)

PROJECT DESCRIPTION: WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES THE CONSTRUCTION OF A ROADSIDE CATCHMENT DITCH, LEDGE REMOVAL, AND OTHER HIGHWAY RELATED ITEMS.

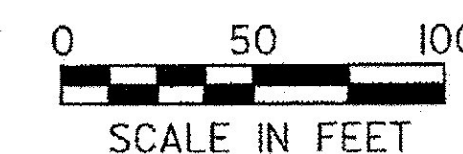
LENGTH OF PROJECT: 750.00 FEET = 0.142 MILES



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 1	
SURVEYED BY :	VTRANS
SURVEYED DATE :	02/2014
DATUM	
VERTICAL	NAVD88
HORIZONTAL	NAD83(2011)

TRAFFIC DATA						
YEAR	AADT	DHV	ADTT	% T	% D	
2015	6900	1400	1500	14.6	100	
2035	7100	1500	2200	21.3	100	
18 kip ESAL for flexible pavement from 2015 to 2035: 7,522,000						
18 kip ESAL for flexible pavement from 2035 to 2055: 16,579,000						
Design speed: 65 MPH						



DIRECTOR OF PROJECT DELIVERY	
APPROVED	DATE 12/22/2015
PROJECT MANAGER : BRUCE MARTIN, P.E.	
PROJECT NAME : ROCKINGHAM	
PROJECT NUMBER : IM 091-I(71)	
SHEET 1 OF 35 SHEETS	

INDEX OF SHEETS

1	TITLE SHEET
2	INDEX OF SHEETS
3	CONVENTIONAL SYMBOLOGY LEGEND SHEET
4	TYPICAL SECTIONS SHEET
5 - 6	TIE SHEETS
7	QUANTITY SHEET
8	EARTHWORKS SHEET
9	GENERAL NOTES SHEET
10 - 11	PLAN SHEETS
12	EPSC NARRATIVE
13 - 16	EPSC PLAN SHEETS
17 - 19	EPSC DETAIL SHEETS
20 - 27	CROSS SECTION SHEETS
28	TRAFFIC CONTROL NOTES SHEET
29 - 34	TRAFFIC CONTROL PLAN SHEETS
35	TRAFFIC CONTROL PROFILE SHEET

VAOT DESIGN STANDARDS

A-60	06/01/1994
B-5	06/01/1994
T-1	08/06/2012
T-11	08/06/2012
T-12	08/06/2012
T-13	08/06/2012
T-14	08/06/2012
T-15	08/06/2012
T-30	08/06/2012
T-31	08/06/2012
T-40	01/02/2013

PROJECT NAME: ROCKINGHAM	
PROJECT NUMBER: IM 091-1(71)	
FILE NAME: d13a366frm.dgn	PLOT DATE: 29-JAN-2016
PROJECT LEADER: B. MARTIN	DRAWN BY: S. ZWICK
DESIGNED BY: S. ZWICK	CHECKED BY: A. KEMPTON
INDEX OF SHEETS	SHEET 2 OF 35

GENERAL INFORMATION

SYMBOLGY LEGEND NOTE

THE SYMBOLGY ON THIS SHEET IS INTENDED TO COVER STANDARD CONVENTIONAL SYMBOLGY. THE SYMBOLGY 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. SYMBOLGY 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
■	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 VALUE
⊕	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 SYMBOLGY

UNDERGROUND UTILITIES	
— UGU —	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)	
— AGU —	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 SYMBOLGY	
— — — — — 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 SYMBOLGY	
— — — — —	TOWN BOUNDARY LINE
— — — — —	COUNTY BOUNDARY 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 — — — — — P	PROPERTY LINE (P/L)
SR — — — — — SR	SLOPE RIGHTS
6f — — — — — 6f	6F PROPERTY BOUNDARY
4f — — — — — 4f	4F PROPERTY BOUNDARY
HAZ — — — — — HAZ	HAZARDOUS WASTE

**EPSC LAYOUT PLAN SYMBOLGY**

EPSC MEASURES	
ONNOONNOONNO	FILTER CURTAIN
— — — — —	SILT FENCE
— X — X — X — X — X —	SILT FENCE WOVEN WIRE
— — — — —	CHECK DAM
▣	DISTURBED AREAS REQUIRING RE-VEGETATION
▣	EROSION MATTING

SEE EPSC DETAIL SHEETS FOR ADDITIONAL SYMBOLGY

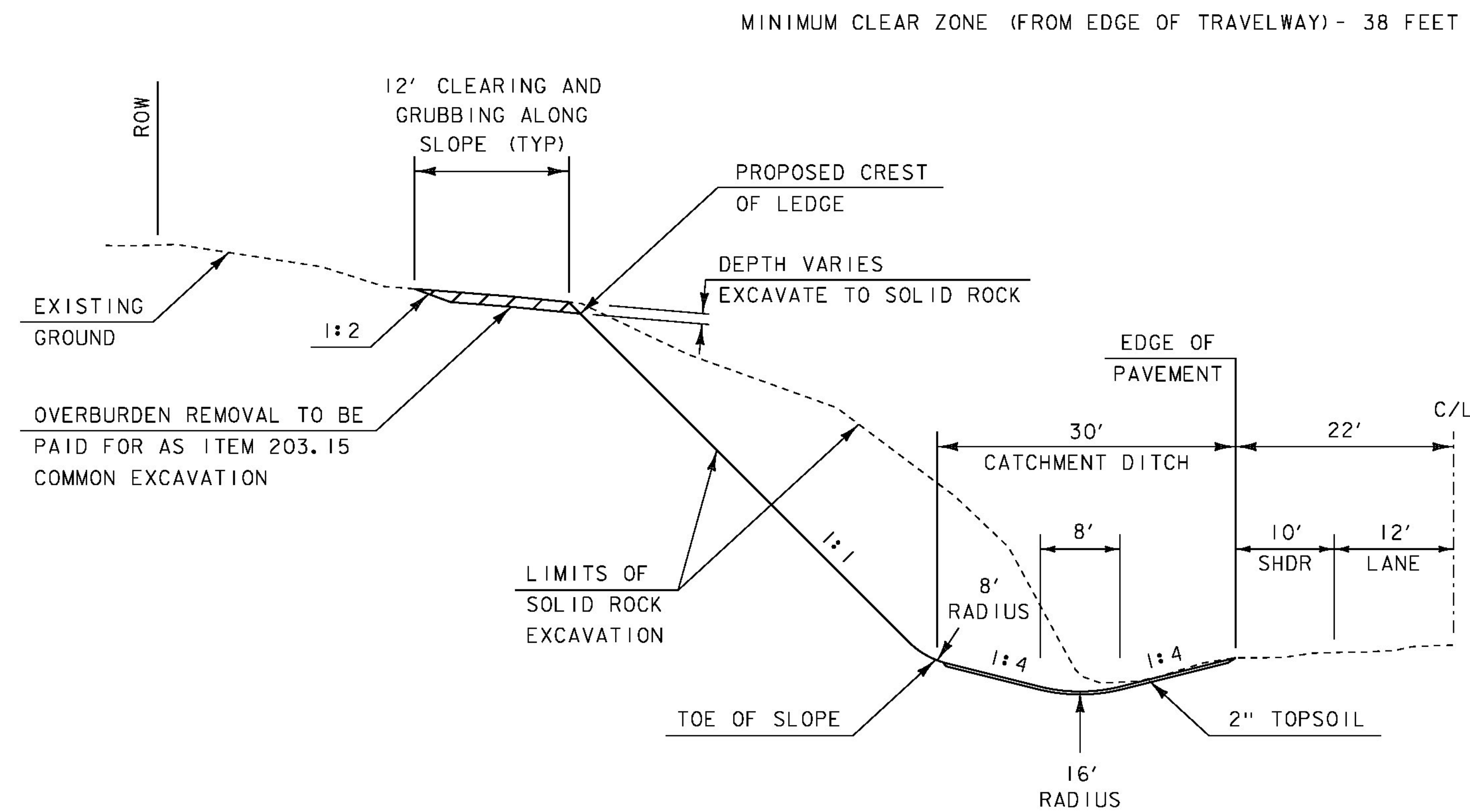
ENVIRONMENTAL RESOURCES	
— — — — —	WETLAND BOUNDARY
— — — — —	RIPARIAN BUFFER ZONE
— — — — —	WETLAND BUFFER ZONE
— — — — —	SOIL TYPE BOUNDARY
— T&E —	THREATENED & ENDANGERED SPECIES
HAZ — — — — — HAZ	HAZARDOUS WASTE AREA
AG — — — — —	AGRICULTURAL LAND
HABITAT — — — — —	FISH & WILDLIFE HABITAT
FLOOD PLAIN — — — — —	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 SYMBOLGY**

EXISTING FEATURES	
— — — — —	ROAD EDGE PAVEMENT
— — — — —	ROAD EDGE GRAVEL
— — — — —	DRIVEWAY EDGE
— — — — —	DITCH
— — — — —	FOUNDATION
x — x — x — x —	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

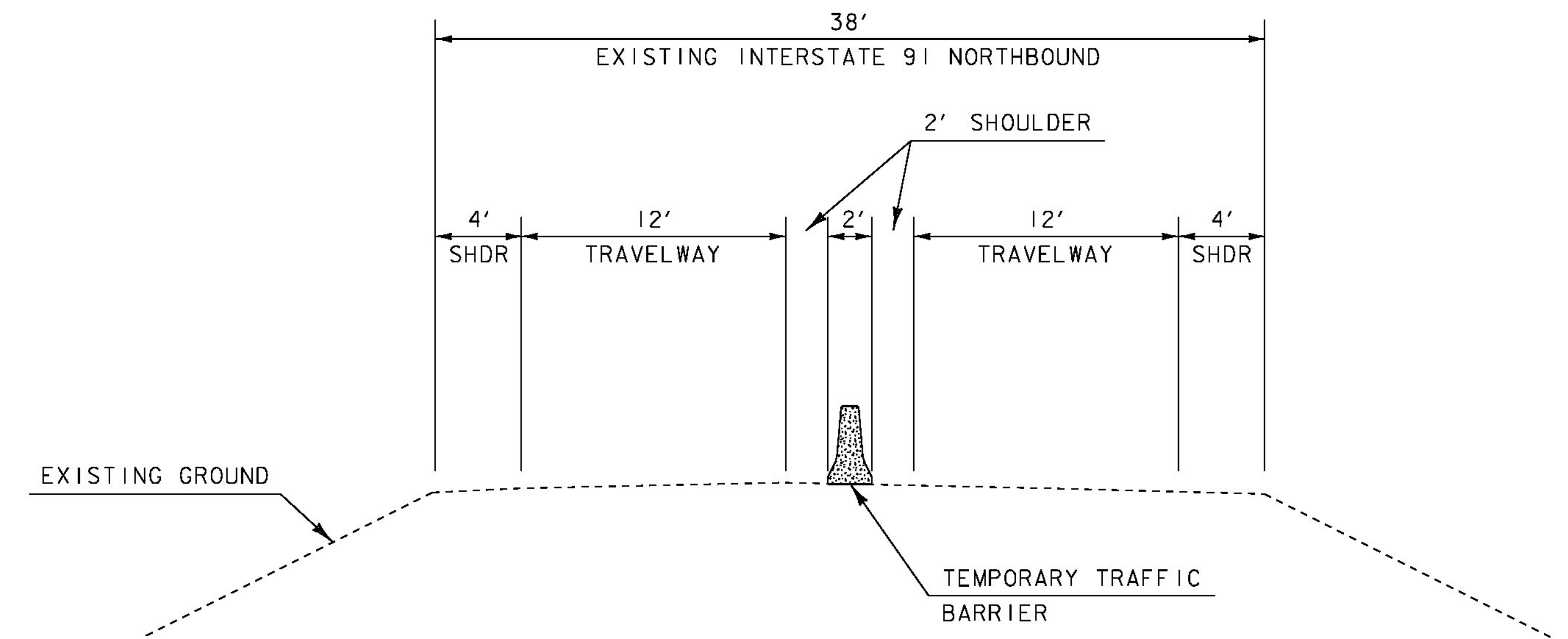
PROJECT NAME: ROCKINGHAM  
 PROJECT NUMBER: IM 09I-1(7I)  
 FILE NAME: d13a366frrm.dgn PLOT DATE: 29-JAN-2016  
 PROJECT LEADER: B. MARTIN DRAWN BY: S. ZWICK  
 DESIGNED BY: S. ZWICK CHECKED BY: A. KEMPTON  
 CONVENTIONAL SYMBOLGY LEGEND SHEET SHEET 3 OF 35



**INTERSTATE 91 LEDGE CUT TYPICAL SECTION**

STA 1983+00 LT - STA 1989+50 LT  
NOT TO SCALE

**NOTE:**  
ALL RUMBLE STRIPS ADJACENT TO TEMPORARY TRAVELED LANES SHALL BE FILLED PRIOR TO SHIFTING TRAFFIC AND REPAIRED FOLLOWING CONSTRUCTION. ALL WORK ASSOCIATED WITH THE FILLING AND REPAIR OF THE RUMBLE STRIPS WILL BE CONSIDERED INCIDENTAL TO ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE).

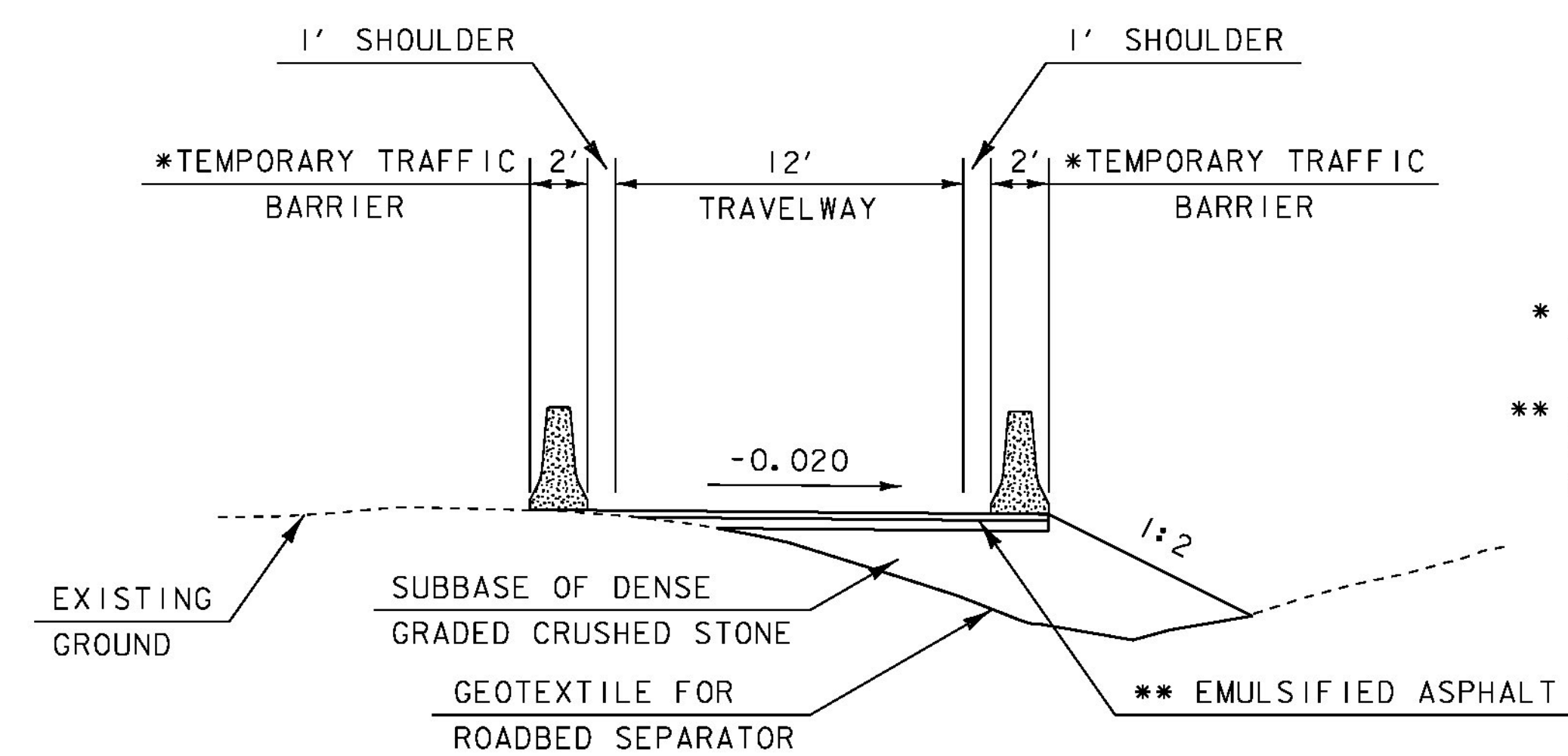


**NORTHBOUND BARREL TYPICAL SECTION**

STA 108+00 - STA 139+00  
NOT TO SCALE

THE THICKNESS TOLERANCE FOR PAVEMENT WILL BE 1/4" +/- THE TOTAL DEPTH OF PAVEMENT  
THE THICKNESS TOLERANCE FOR SUBBASE WILL BE 1" +/- THE TOTAL DEPTH OF SUBBASE

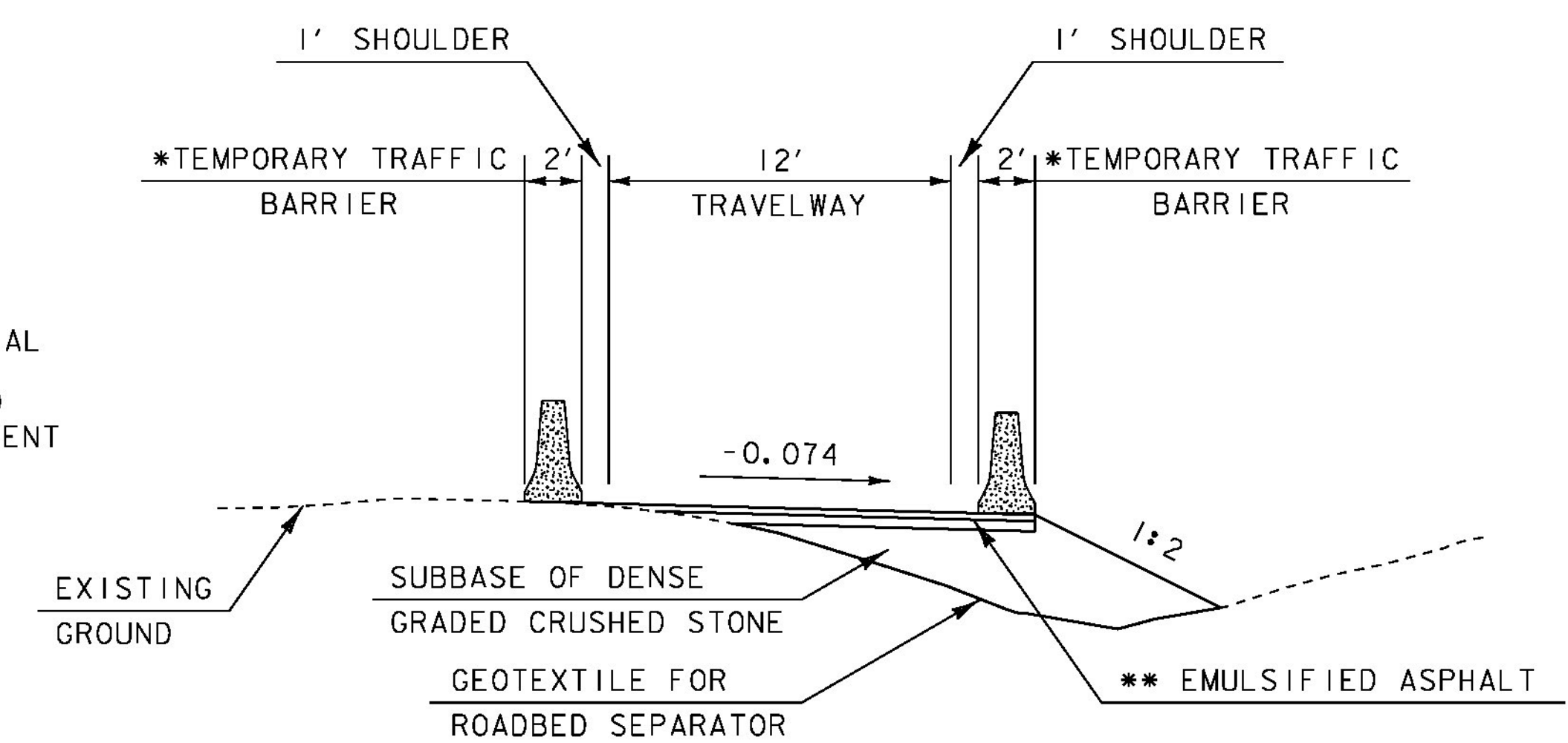
1.5" BITUMINOUS CONCRETE PAVEMENT (TYPE IVS)  
2.5" BITUMINOUS CONCRETE PAVEMENT (TYPE IIS) (2 - 1.25" LIFTS)



**CROSSOVER NORMAL SECTION**

NOT TO SCALE

1.5" BITUMINOUS CONCRETE PAVEMENT (TYPE IVS)  
2.5" BITUMINOUS CONCRETE PAVEMENT (TYPE IIS) (2 - 1.25" LIFTS)



**CROSSOVER MAX BANKED SECTION**

NOT TO SCALE

* TEMPORARY TRAFFIC BARRIER SHALL BE PINNED TO REDUCE DEFLECTION POTENTIAL  
** EMULSIFIED ASPHALT SHALL BE APPLIED BETWEEN SUCCESSIVE COURSES OF PAVEMENT AT A RATE OF 0.025 GAL/SY

**NOTE:**  
ALL ITEMS SHOWN IN THESE CROSSOVER TYPICAL SECTIONS WILL BE INCLUDED IN ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE). SEE TRAFFIC CONTROL NOTES.

PROJECT NAME: ROCKINGHAM	PLOT DATE: 29-JAN-2016
PROJECT NUMBER: IM 09I-1(7I)	DRAWN BY: A. KEMPTON
FILE NAME: d13a366typ.dgn	CHECKED BY: M. GAMELIN
DESIGNED BY: A. KEMPTON	SHEET 4 OF 35
TYPICAL SECTIONS SHEET	

GPS CONTROL POINTS

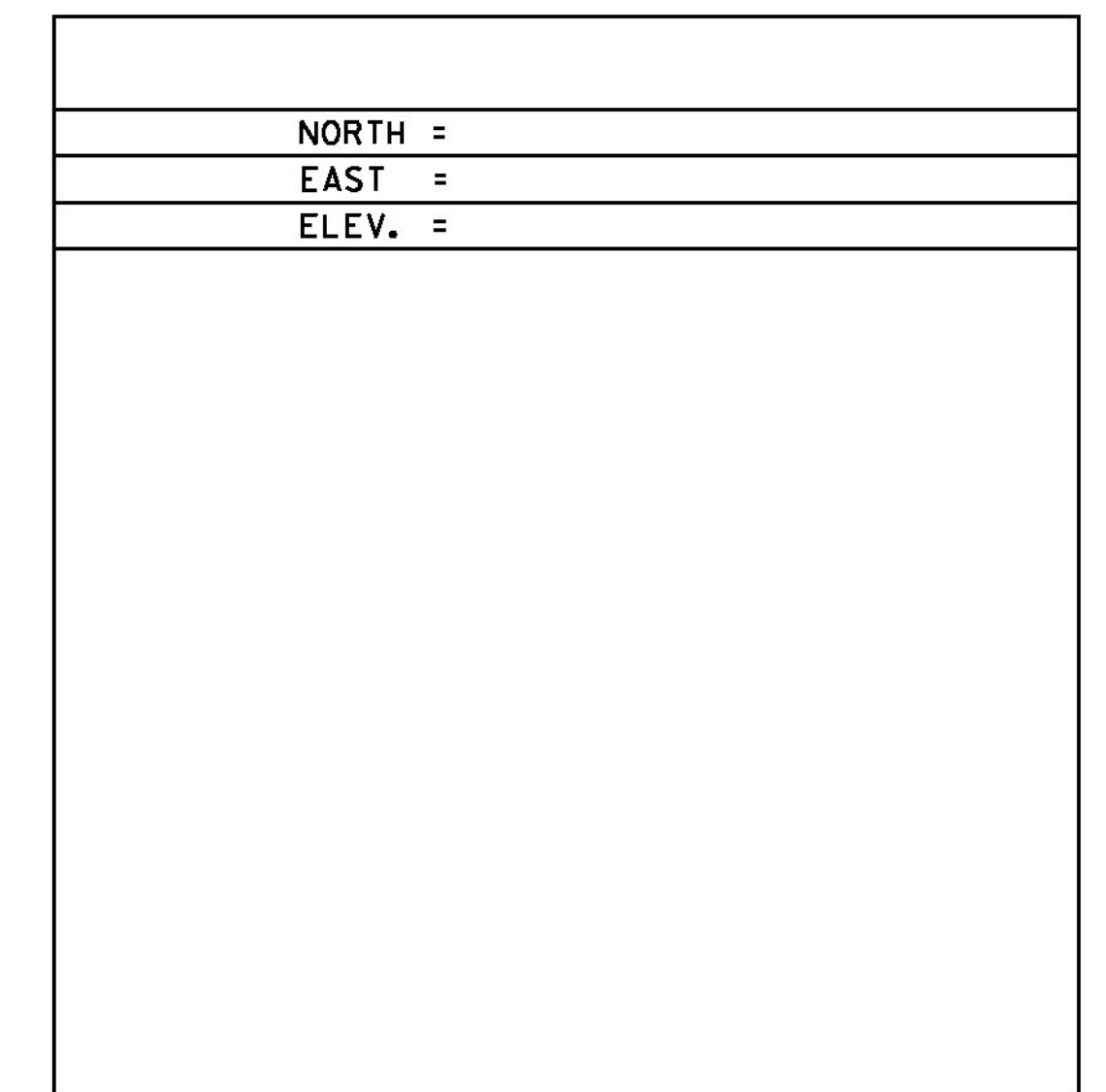
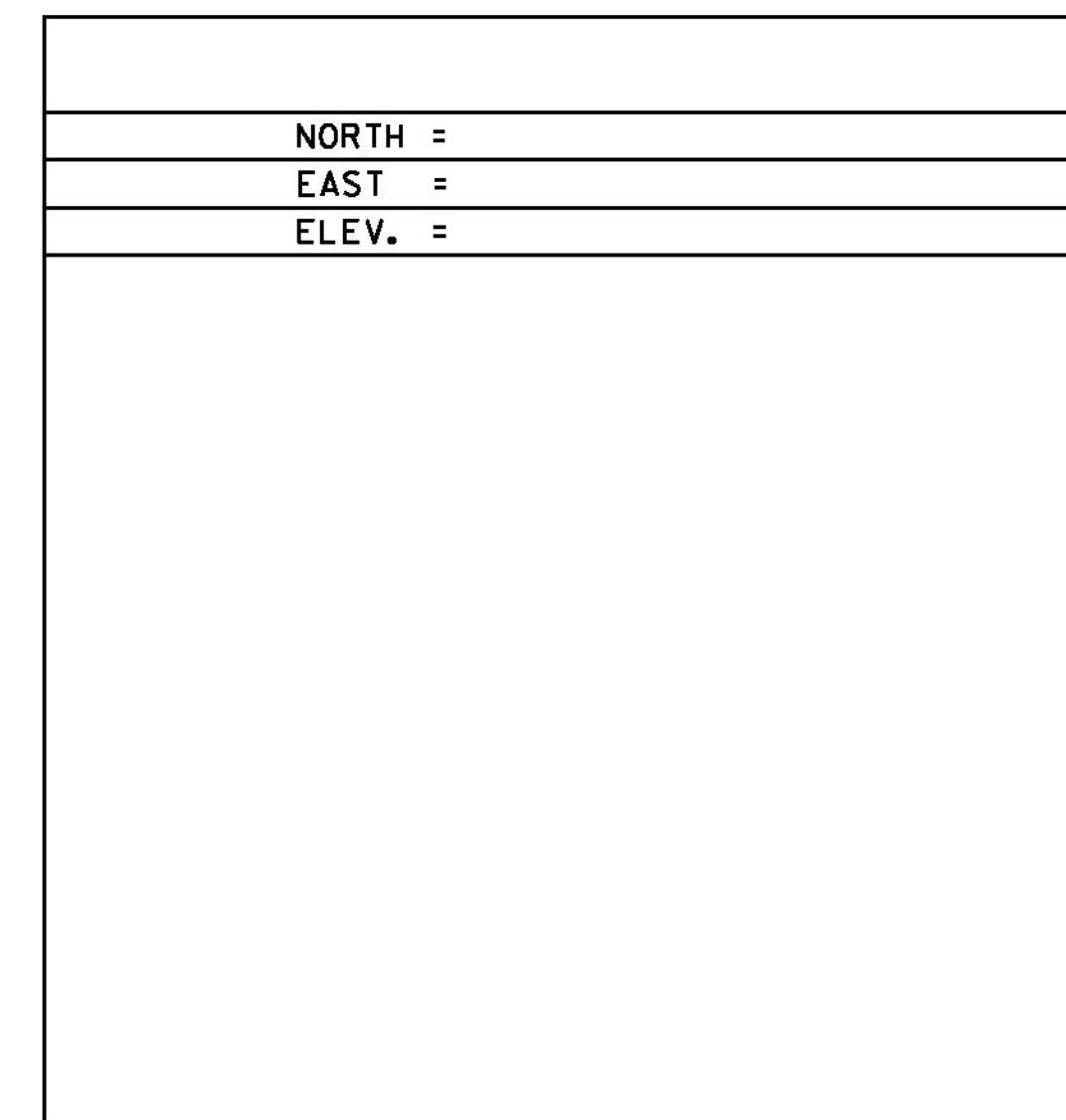
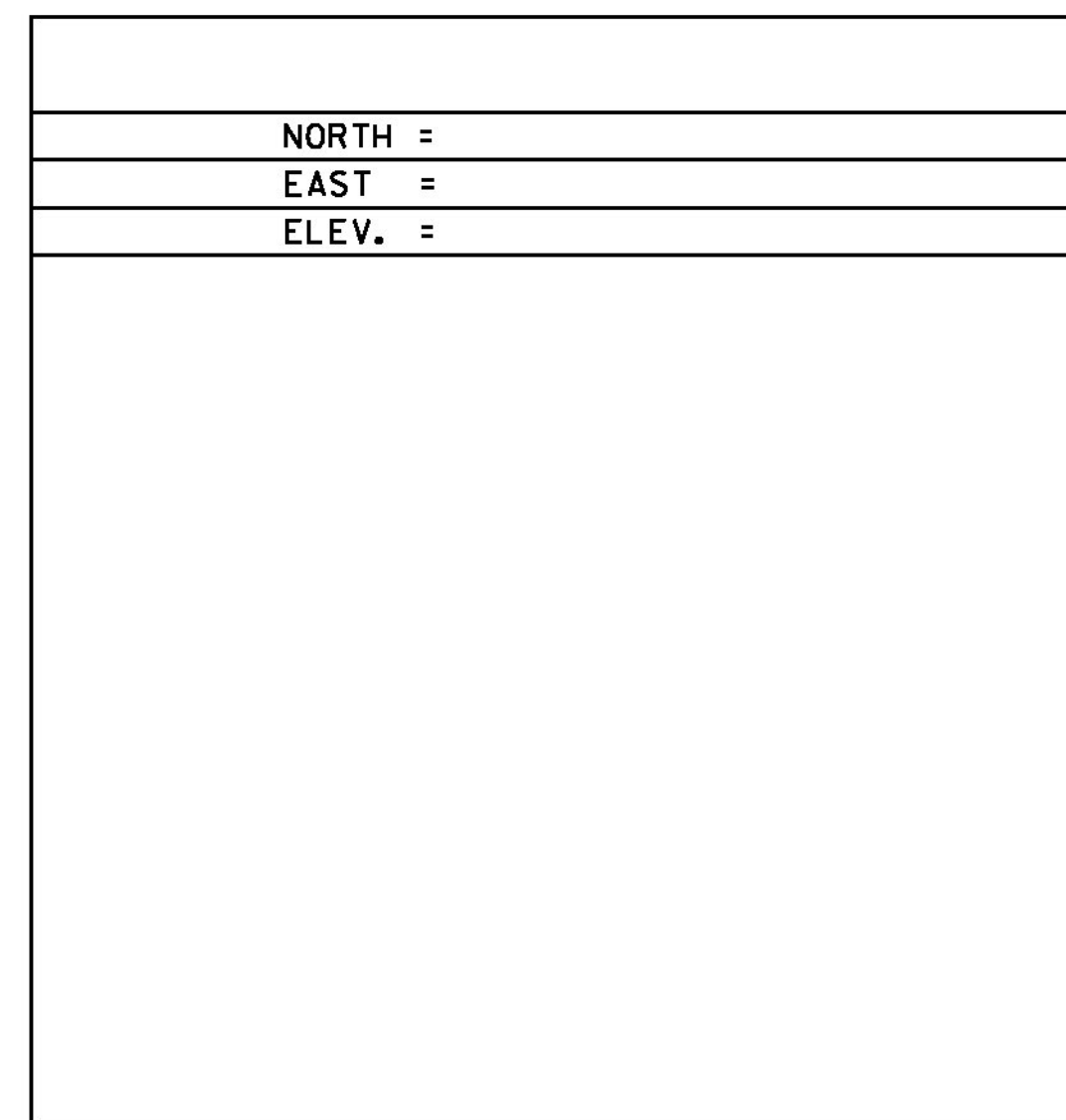
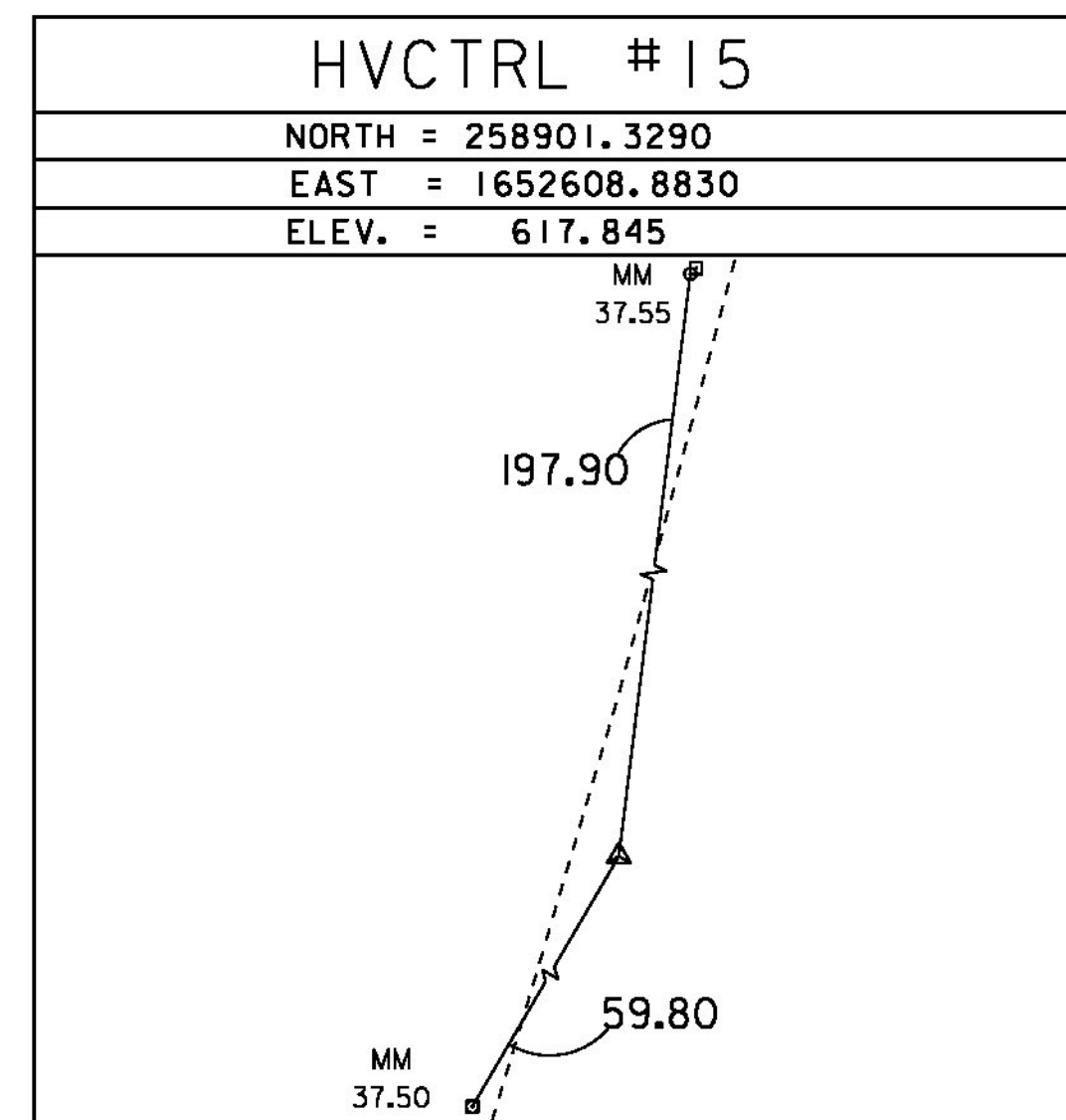
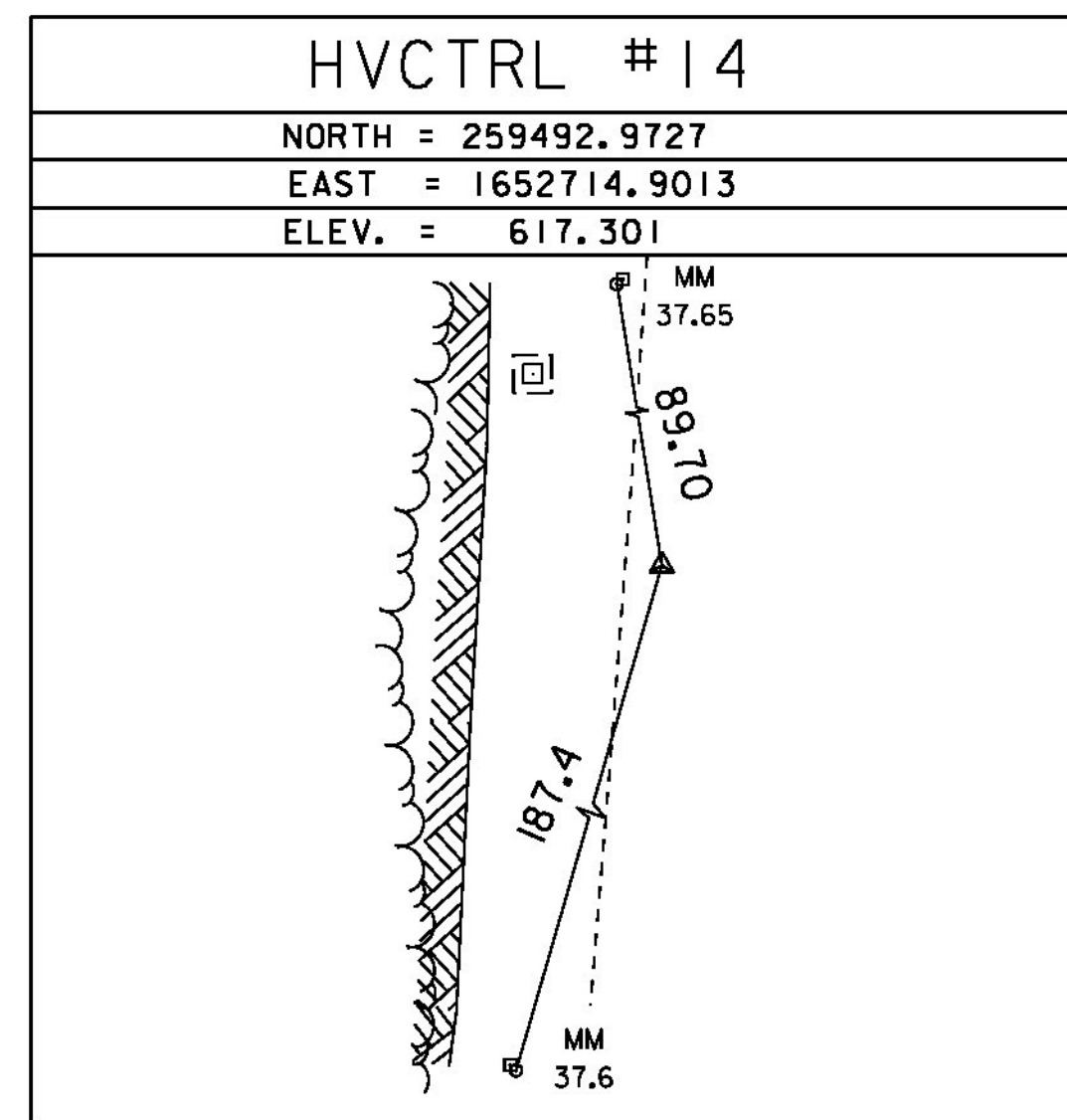
PT #1 191 EXIT 6  
 NORTH = 247458.0100  
 EAST = 1650238.2400  
 ELEV. = 504.130

GENERAL LOCATION ROCKINGHAM VT, LOCATED IN THE MEDIAN BETWEEN I-91 NB MILE MARKER'S 35.20 AND 35.25. SET FLUSH WITH GROUND SURFACE IN THE TOP OF A 30 CM DIAMETER CONCRETE MONUMENT. IT IS 6.1 M E OF AND ABOUT LEVEL WITH THE EDGE OF PAVEMENT OF THE SB LANE, 7.1 M W OF AND ABOUT LEVEL WITH THE EDGE OF PAVEMENT OF THE NB LANE, 6.6 M NE OF THE NORTHEAST CORNER OF THE CONCRETE CURB OF A SB BRIDGE, 9.0 M NW OF THE NORTHWEST CORNER OF THE CONCRETE CURB OF A NB BRIDGE, 4.6 M S OF A GUARD RAIL, AND 0.3 M N OF A WITNESS POST.

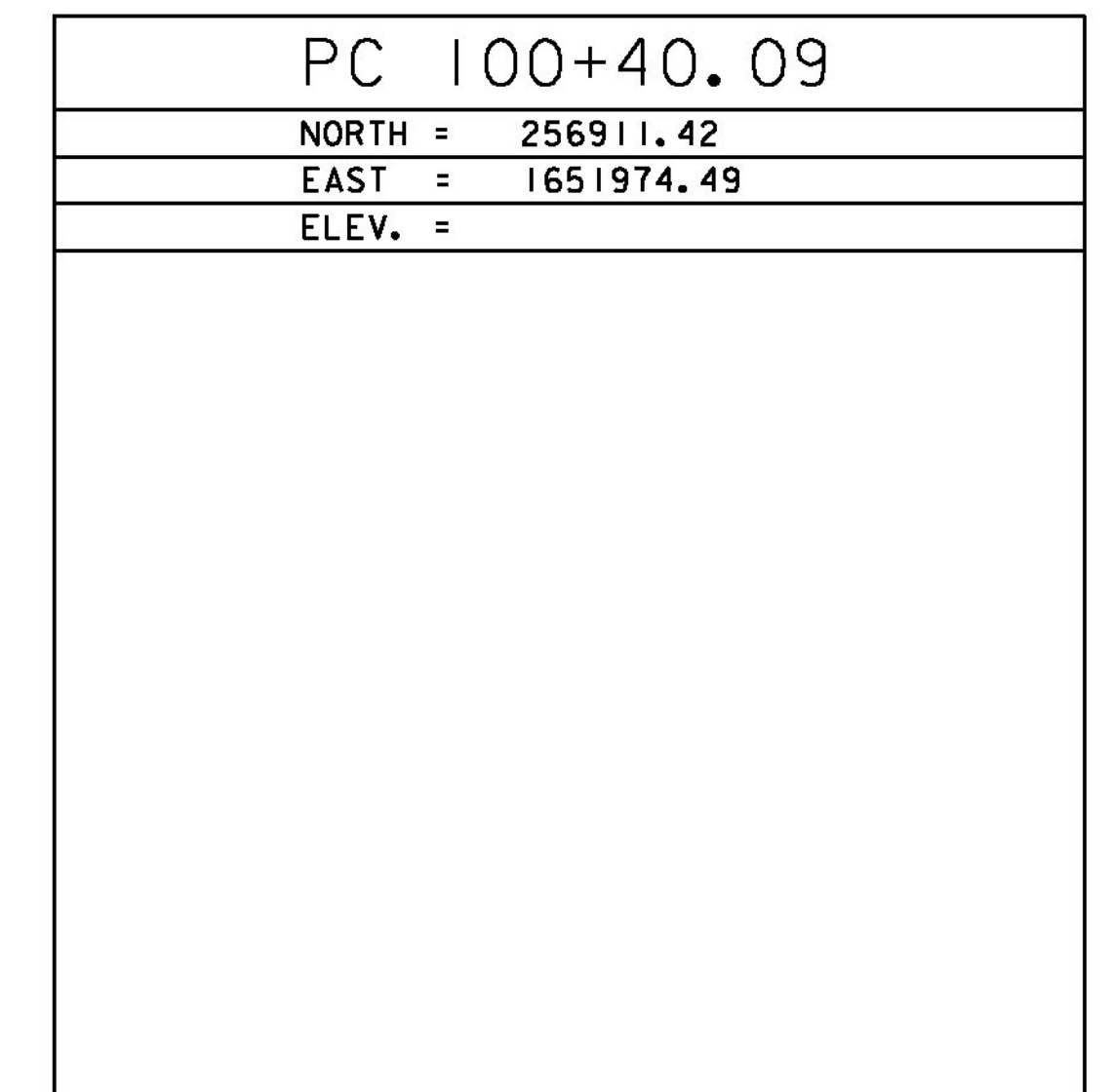
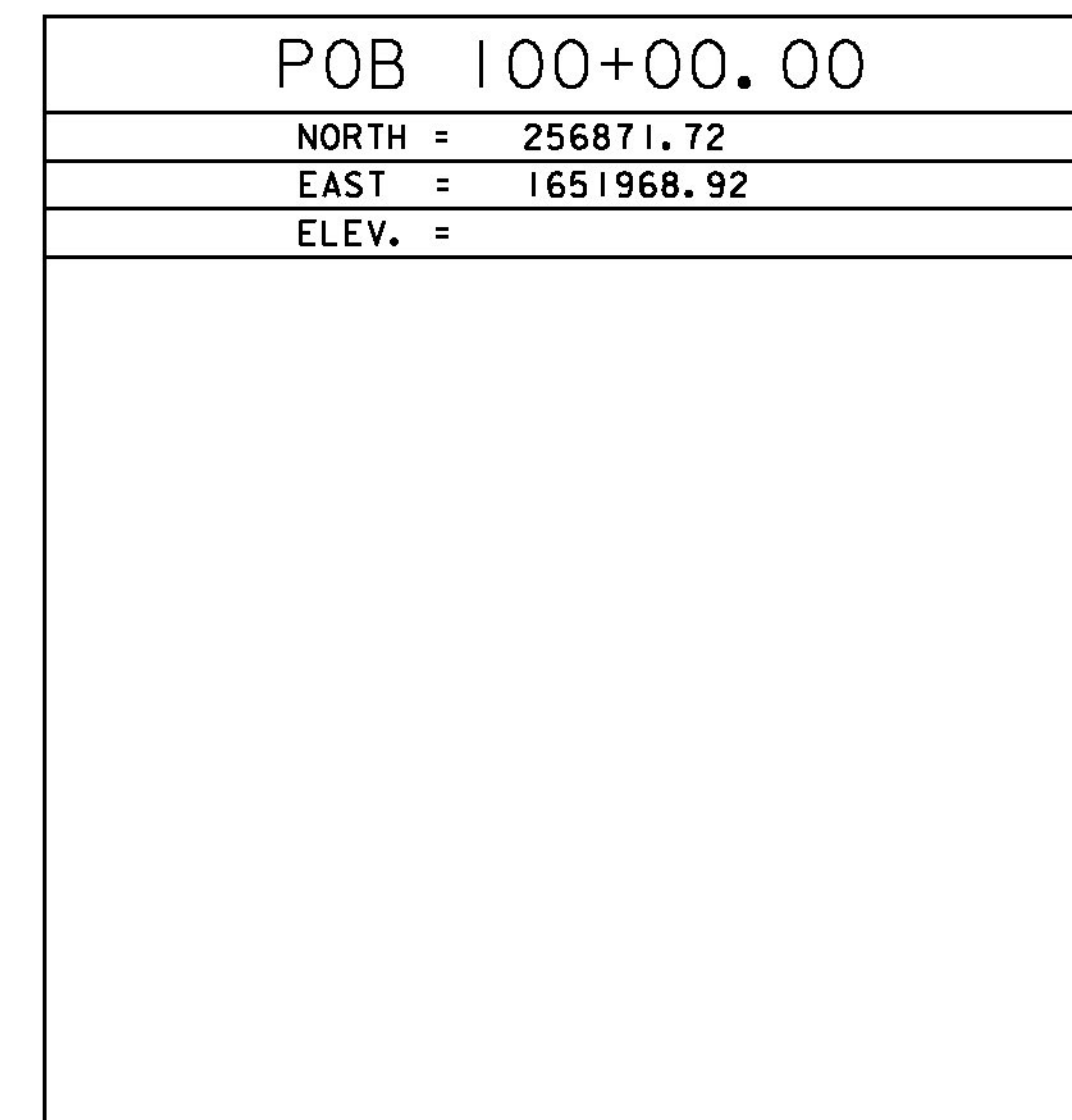
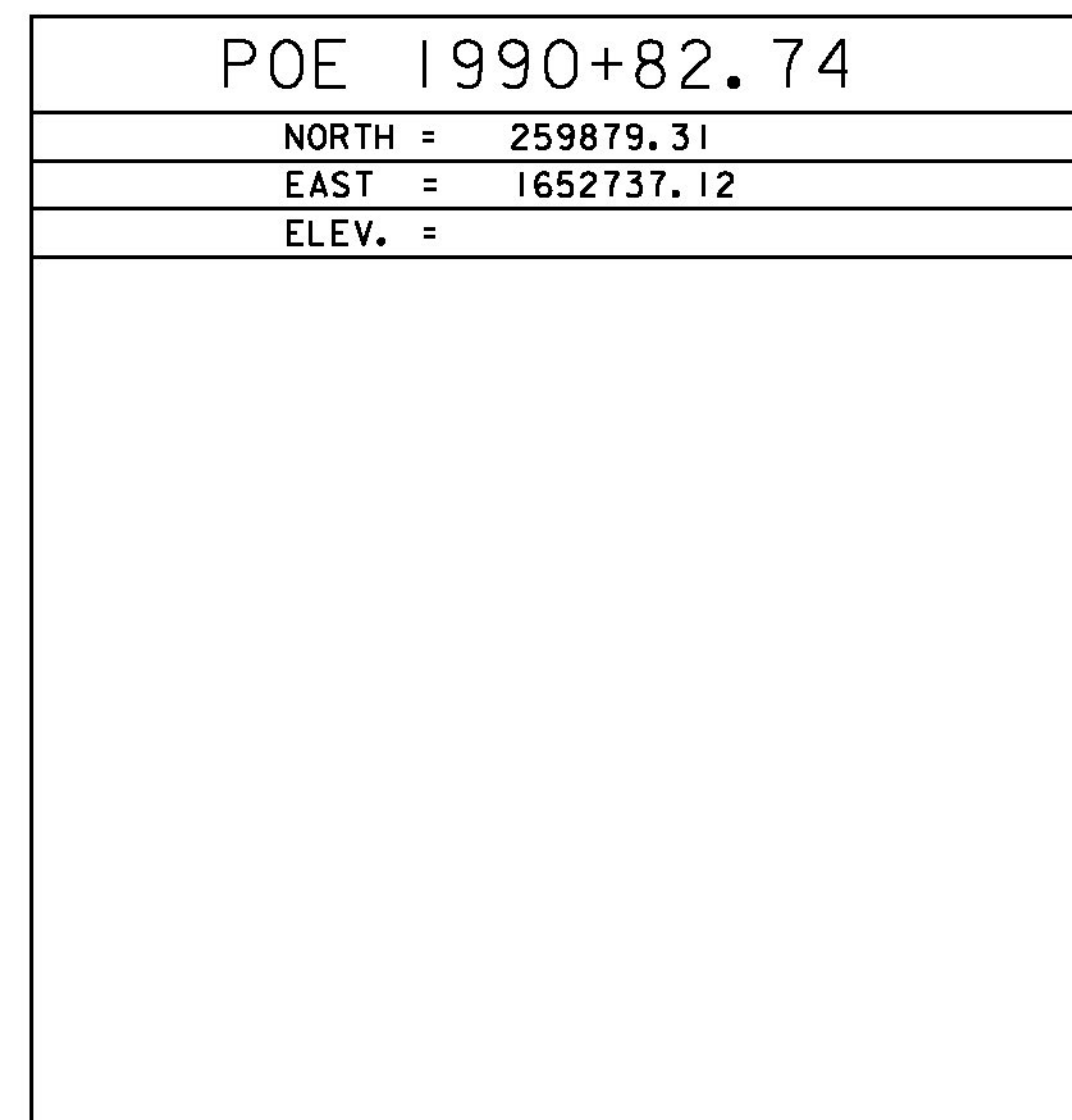
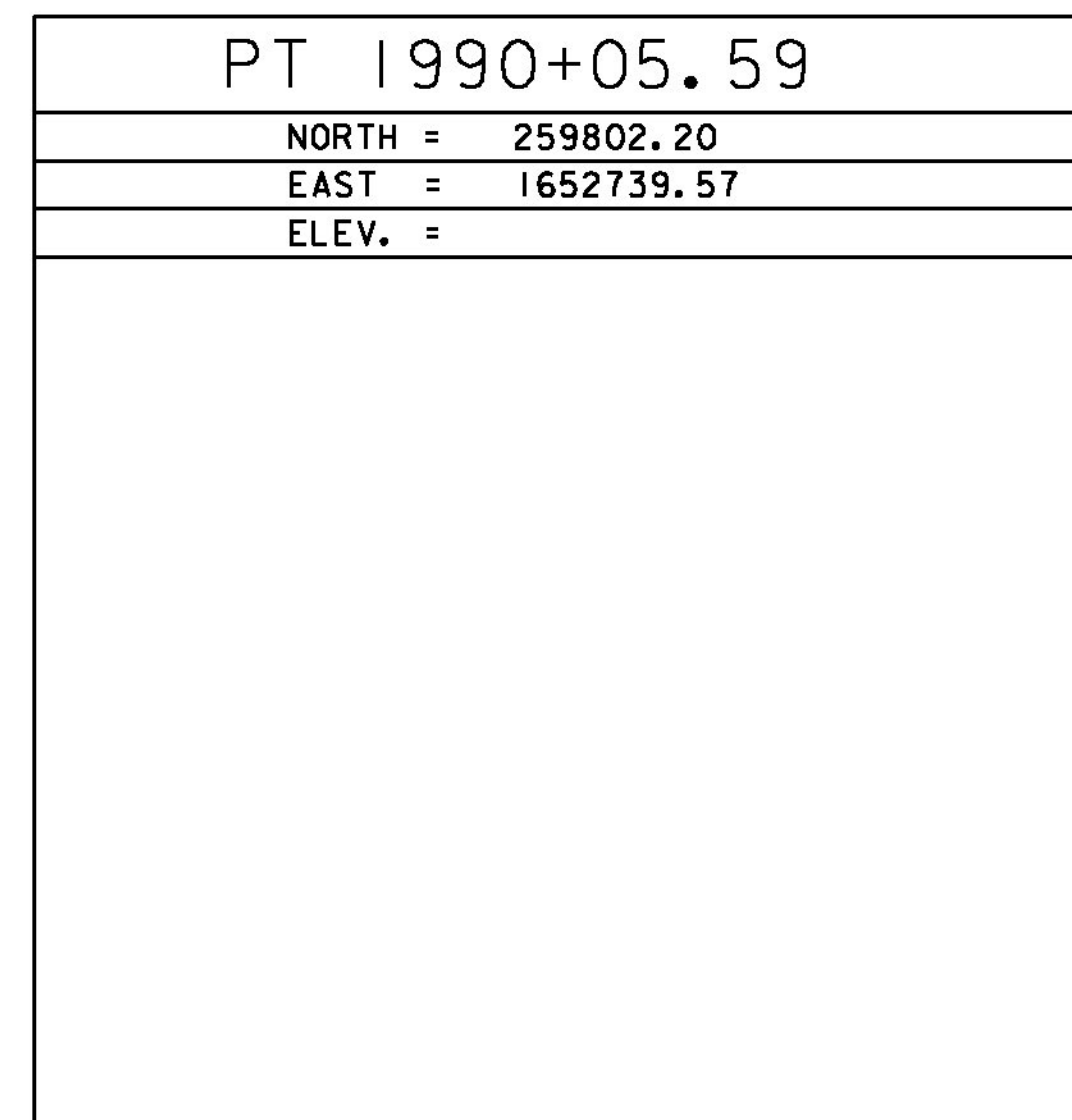
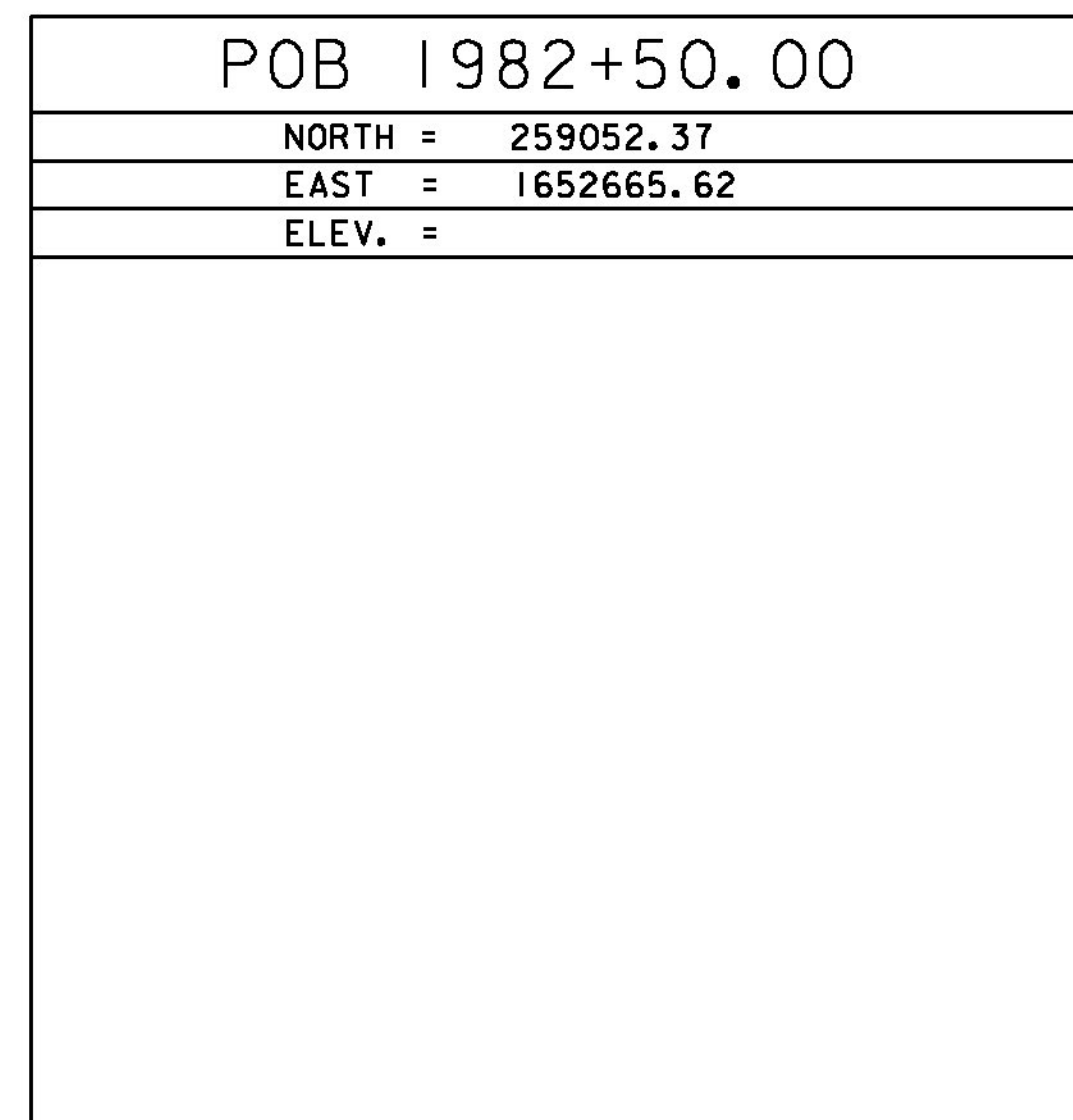
PT #2 191 EXIT 6 AZ MK  
 NORTH = 249990.8100  
 EAST = 1650387.6100  
 ELEV. = 383.950

GENERAL LOCATION, ROCKINGHAM VT. I-91 NORTHBOUND MILE MARKER 35.60, THE SITE OF THE MARK ON THE LEFT IN THE MEDIAN JUST SOUTH OF A U-TURN. IT IS 2.6 M E OF AND ABOUT 0.1 M LOWER THAN THE EAST EDGE OF PAVEMENT OF THE I-91 SOUTHBOUND LANE, 11.1 M W OF AND ABOUT 0.4 M LOWER THAN THE WEST EDGE OF PAVEMENT OF THE I-91 NORTHBOUND LANE. 9.2 M S OF THE CENTERLINE OF THE U-TURN, 6.5 M NW OF THE CENTER OF A 60 CM SQUARE METAL DRAIN GRATE, AND 0.3 M N OF A FIBERGLASS WITNESS.

TRAVERSE TIES



ALIGNMENT TIES



DATUM  
 VERTICAL NAVD88  
 HORIZONTAL NAD83(2011)  
 ADJUSTMENT COMPASS

PROJECT NAME: ROCKINGHAM  
 PROJECT NUMBER: IM 091-1(71)  
 FILE NAME: X13A366T1.DGN PLOT DATE: 29-JAN-2016  
 PROJECT LEADER: B. MARTIN DRAWN BY: C. CYR  
 DESIGNED BY: VTRANS CHECKED BY: P. BEYOR  
 TIE SHEET SHEET 5 OF 35

GPS CONTROL POINTS

ALIGNMENT TIES

ALIGNMENT TIES

PT 104+48.07
NORTH = 257294.76
EAST = 1652106.62
ELEV. =

PC 115+97.31
NORTH = 258289.59
EAST = 1652682.00
ELEV. =

PT 129+95.50
NORTH = 259639.12
EAST = 1652910.44
ELEV. =

PC 138+50.52
NORTH = 260478.92
EAST = 1652749.81
ELEV. =

PT 139+70.49
NORTH = 260595.23
EAST = 1652720.65
ELEV. =

PC 142+95.36
NORTH = 260905.38
EAST = 1652623.97
ELEV. =

PT 145+26.13
NORTH = 261131.40
EAST = 1652579.73
ELEV. =

POE 148+28.68
NORTH = 261432.87
EAST = 1652554.20
ELEV. =

NORTH =
EAST =
ELEV. =

NORTH =
EAST =
ELEV. =

DATUM
VERTICAL <u>NAVD88</u>
HORIZONTAL <u>NAD83(2011)</u>
ADJUSTMENT <u>COMPASS</u>

PROJECT NAME: ROCKINGHAM
PROJECT NUMBER: IM 091-1(71)
FILE NAME: d13a366+1e.dgn
PROJECT LEADER: B. MARTIN
DESIGNED BY: A. KEMPTON
TIE SHEET 2
PLOT DATE: 29-JAN-2016
DRAWN BY: A. KEMPTON
CHECKED BY: M. GAMELIN
SHEET 6 OF 35

# QUANTITY SHEET

SUMMARY OF ESTIMATED QUANTITIES										TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES			
								ROADWAY	EROSION CONTROL	FULL C.E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
								0.2			0.2		ACRE	CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS	201.11	0.01			
								500			500		CY	COMMON EXCAVATION	203.15	28			
								20000			20000		CY	SOLID ROCK EXCAVATION	203.16	613			
								1			1		CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	204.22	EST			
								30			30		HR	POWER BROOM RENTAL, TYPE II	608.31	EST			
								240			240		HR	UNIFORMED TRAFFIC OFFICERS	630.10	EST			
								200			200		HR	FLAGGERS	630.15	EST			
										1	1		LS	FIELD OFFICE, ENGINEERS	631.10	-			
										3000	3000		DL	FIELD OFFICE TELEPHONE (N.A.B.I.)	631.26	-			
								1			1		LS	MOBILIZATION/DEMobilIZATION	635.11	-			
								2			2		EACH	PORTABLE CHANGEABLE MESSAGE SIGN	641.15	-			
									250		250		SY	GEOTEXTILE FOR SILT FENCE	649.51	43			
									80		80		LB	SEED	651.15	8			
									250		250		LB	FERTILIZER	651.18	9			
									1		1		TON	AGRICULTURAL LIMESTONE	651.20	0.1			
									1.5		1.5		TON	HAY MULCH	651.25	0.1			
									100		100		CY	TOPSOIL	651.35	23			
									1		1		LS	EPSC PLAN	652.10	-			
									10		10		HR	MONITORING EPSC PLAN	652.20	EST			
									1		1		LU	MAINTENANCE OF EPSC PLAN (N.A.B.I.)	652.30	-			
									2400		2400		SY	TEMPORARY EROSION MATTING	653.20	65			
									36		36		CY	VEHICLE TRACKING PAD	653.35	-			
									1		1		EACH	INLET PROTECTION DEVICE, TYPE I	653.40	-			
									2300		2300		LF	PROJECT DEMARCATION FENCE	653.55	24			
								1			1		EACH	REMOVING SIGNS	675.50	-			
								1			1		EACH	ERECTING SALVAGED SIGNS	675.60	-			
								1			1		EACH	SETTING SALVAGED POSTS	675.61	-			
								2			2		EACH	DELINEATOR WITH STEEL POST	676.10	-			
								2			2		EACH	REMOVAL OF EXISTING DELINEATOR	676.12	-			
								1			1		LU	PRICE ADJUSTMENT, FUEL (N.A.B.I.)	690.50	-			
								1			1		LS	SPECIAL PROVISION (TEMPORARY ACCESS ROAD, LEDGE REMOVAL)	900.645	-			
								1			1		LS	SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)	900.645	-			

PROJECT NAME: ROCKINGHAM	PLOT DATE: 29-JAN-2016
PROJECT NUMBER: IM 091-1(71)	DRAWN BY: S. ZWICK
FILE NAME: d13a366frm.dgn	CHECKED BY: A. KEMPTON
DESIGNED BY: A. KEMPTON	QUANTITY SHEET
	SHEET 7 OF 35

STATE OF VERMONT  
AGENCY OF TRANSPORTATION

# EARTHWORKS

		TOTAL EXCAVATION EARTH AND ROCK				ROCK EXCAVATION		EMBANKMENT						TOTAL EXCAVATION EARTH AND ROCK				ROCK EXCAVATION		EMBANKMENT								SUMMARY AND BALANCES															
STATION	DIST	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	STATION TO STATION	TOT EXC EARTH & ROCK C.Y.	ROCK EXCAV C.Y.	EMBANK C.Y.	EXCESSES		ACUMULATIVE EXCESSES									
	FT.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.					CUT	FILL	CUT	FILL								
Mainline Ledge											Overburden											Mainline Ledge																					
1982+50	25	2.64	117	2.64	117									1982+50	25	0.00	5										1982+50	1985+00	5948	5948	0	7733	7733										
1982+75	25	250.42	327	250.42	327									1982+75	25	11.59	11										1985+00	1990+00	13439	13439	0	17471	25204										
1983+00	25	456.72	397	456.72	397									1983+00	25	12.12	11										Overburden																
1983+25	25	401.46	426	401.46	426									1983+25	25	12.71	11										1982+50	1985+00	155	0	0	155	25359										
1983+50	25	518.65	561	518.65	561									1983+50	25	11.44	11										1985+00	1990+00	317	0	0	317	25676										
1983+75	25	693.36	676	693.36	676									1983+75	25	11.37	11										Total																
1984+00	25	767.36	747	767.36	747									1984+00	25	11.82	11										Note: All overburden quantities have been multiplied by a factor of 1.5 to account for voids in the ledge in the overburden removal areas.																
1984+25	25	845.16	811	845.16	811									1984+25	25	11.58	11																										
1984+50	25	906.17	907	906.17	907									1984+50	25	11.50	11																										
1984+75	25	1052.54	979	1052.54	979									1984+75	25	11.45	11																										
1985+00	25	1062.45	989	1062.45	989									1985+00	25	11.48	11																										
1985+25	25	1074.18	991	1074.18	991									1985+25	25	11.45	11																										
1985+50	25	1066.99	954	1066.99	954									1985+50	25	11.75	11																										
1985+75	25	993.87	932	993.87	932									1985+75	25	11.71	11																										
1986+00	25	1019.53	948	1019.53	948									1986+00	25	11.66	11																										
1986+25	25	1027.07	950	1027.07	950									1986+25	25	11.44	11																										
1986+50	25	1025.17	940	1025.17	940									1986+50	25	11.64	11																										
1986+75	25	1004.17	925	1004.17	925									1986+75	25	12.11	11																										
1987+00	25	992.84	914	992.84	914									1987+00	25	11.51	11																										
1987+25	25	982.16	895	982.16	895									1987+25	25	11.52	11																										
1987+50	25	951.56	853	951.56	853									1987+50	25	11.46	11																										
1987+75	25	891.07	778	891.07	778									1987+75	25	11.46	10																										
1988+00	25	788.52	657	788.52	657									1988+00	25	11.11	11																										
1988+25	25	631.66	497	631.66	497									1988+25	25	11.67	10																										
1988+50	25	442.84	350	442.84	351									1988+50	25	9.58	9																										
1988+75	25	314.15	277	314.15	277									1988+75	25	10.73	10																										
1989+00	25	284.09	227	284.09	227									1989+00	25	11.57	11																										
1989+25	25	205.54	185	205.54	185									1989+25	25	11.39	10																										
1989+50	25	194.90	131	194.90	131									1989+50	25	11.29	10																										
1989+75	25	88.16	45	88.16	45									1989+75	25	11.29	11																										
1990+00		9.56		9.56										1990+00		12.65																											

PROJECT NAME: ROCKINGHAM  
 PROJECT NUMBER: IM 091-1(71)  
 FILE NAME: d13a366frrm.dgn  
 PROJECT LEADER: B. MARTIN  
 DESIGNED BY: A. KEMPTON  
 EARTHWORKS SHEET

PLOT DATE: 29-JAN-2016  
 DRAWN BY: A. KEMPTON  
 CHECKED BY: M. GAMELIN  
 SHEET 8 OF 35

**GENERAL NOTES**

1. EXISTING DIMENSIONS SHOWN IN THE PLANS WERE DEVELOPED FROM LIMITED FIELD SURVEY AND ORIGINAL DESIGN PLANS AND ARE SHOWN FOR INFORMATION ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD CHECKING ALL DIMENSIONS APPLICABLE TO THIS WORK.
2. IN ACCORDANCE WITH SUBSECTION 107.12 THE CONTRACTOR SHALL TAKE CARE NOT TO DAMAGE THE EXISTING PAVEMENT, PAVEMENT MARKINGS, GUARDRAIL, FENCING, PIPES, DROP INLETS, CONCRETE SIGN FOUNDATIONS AND HEADWALLS. THE CONTRACTOR, AT NO ADDITIONAL COMPENSATION, SHALL REPAIR ALL EXISTING PAVEMENT, PAVEMENT MARKINGS, GUARDRAIL, FENCING, PIPES, DROP INLETS, CONCRETE SIGN FOUNDATIONS AND HEADWALLS DAMAGED DURING CONSTRUCTION ACTIVITIES TO THE SATISFACTION OF THE ENGINEER.
3. THE CONTRACTOR SHALL TAKE CARE DURING THE LEDGE REMOVAL NOT TO DAMAGE OR DISTURB EXISTING UTILITIES IN THE PROJECT AREA. ANY DAMAGE DONE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.
4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS OF BURIED CABLE THROUGH DIG SAFE PRIOR TO THE START OF CONSTRUCTION. SEE UTILITIES SPECIAL PROVISION FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
5. THE CONTRACTOR SHALL REMOVE, STOCKPILE AND REINSTALL SIGNS, MILE MARKER POSTS, AND DELINEATORS WHERE REQUIRED WORK MAY CAUSE DAMAGE TO THEM. REMOVAL AND REINSTALLATION OF SIGNS WILL BE PAID UNDER ITEM 675.50 "REMOVING SIGNS", ITEM 675.60 "ERECTING SALVAGED SIGNS". REMOVAL AND REINSTALLATION OF MILE MARKER POSTS AND DELINEATORS WILL BE PAID UNDER ITEM 676.10 "DELINEATOR WITH STEEL POSTS" AND ITEM 676.12 "REMOVAL OF EXISTING DELINEATOR".
6. ALL WORK SHALL BE COMPLETED WITHIN THE EXISTING STATE OF VERMONT RIGHT OF WAY.

**CLEARING NOTES:**

1. THROUGHOUT THE PROJECT AREA (STA. 1982+50 TO STA. 1990+00) CLEARING SHALL CONSIST OF REMOVAL OF ALL TREES AND SHRUBS 12 FEET PAST THE FINAL CREST OF THE LEDGE. THE FINAL CREST OF THE LEDGE SHALL BE ACCEPTED BY THE ENGINEER AND THE VTRANS GEOLOGIST.
2. ALL VEGETATION SHALL BE CLEARED AND DISPOSED OF IN ACCORDANCE WITH SECTION 201. ALL VEGETATION REMOVED IN THE OVERBURDEN REMOVAL AREA WILL BE PAID FOR UNDER ITEM 201.11 "CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS".
3. INDIVIDUAL TREES THAT ARE REMOVED WITHIN THE SOLID ROCK EXCAVATION LIMITS WILL BE CONSIDERED INCIDENTAL TO ITEM 203.16 SOLID ROCK EXCAVATION.
4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN A NEAT TREE LINE ALONG THE AREA TO BE CLEARED TO THE SATISFACTION OF THE ENGINEER.
5. SEE INTERSTATE 91 LEDGE CUT TYPICAL SECTION.

PROJECT NAME: ROCKINGHAM	
PROJECT NUMBER: IM 091-1(71)	
FILE NAME: d13a366frm.dgn	PLOT DATE: 29-JAN-2016
PROJECT LEADER: B. MARTIN	DRAWN BY: S. ZWICK
DESIGNED BY: S. ZWICK	CHECKED BY: A. KEMPTON
GENERAL NOTES SHEET	SHEET 9 OF 35

CLEARING AND GRUBBING, INCLUDING  
INDIVIDUAL TREES AND STUMPS  
STA 1982+63 LT - STA 1987+00 LT

COMMON EXCAVATION (OVERBURDEN REMOVAL)  
STA 1982+63 LT - STA 1987+00 LT

SOLID ROCK EXCAVATION  
STA 1982+50 LT - STA 1987+00 LT

REMOVING SIGNS  
STA 1985+06 LT

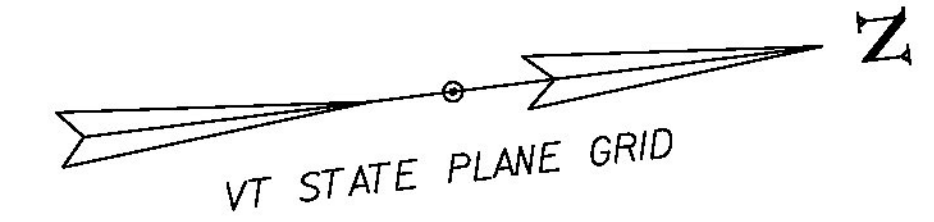
ERECTING SALVAGED SIGNS  
STA 1985+06 LT

SETTING SALVAGED POST  
STA 1985+06 LT

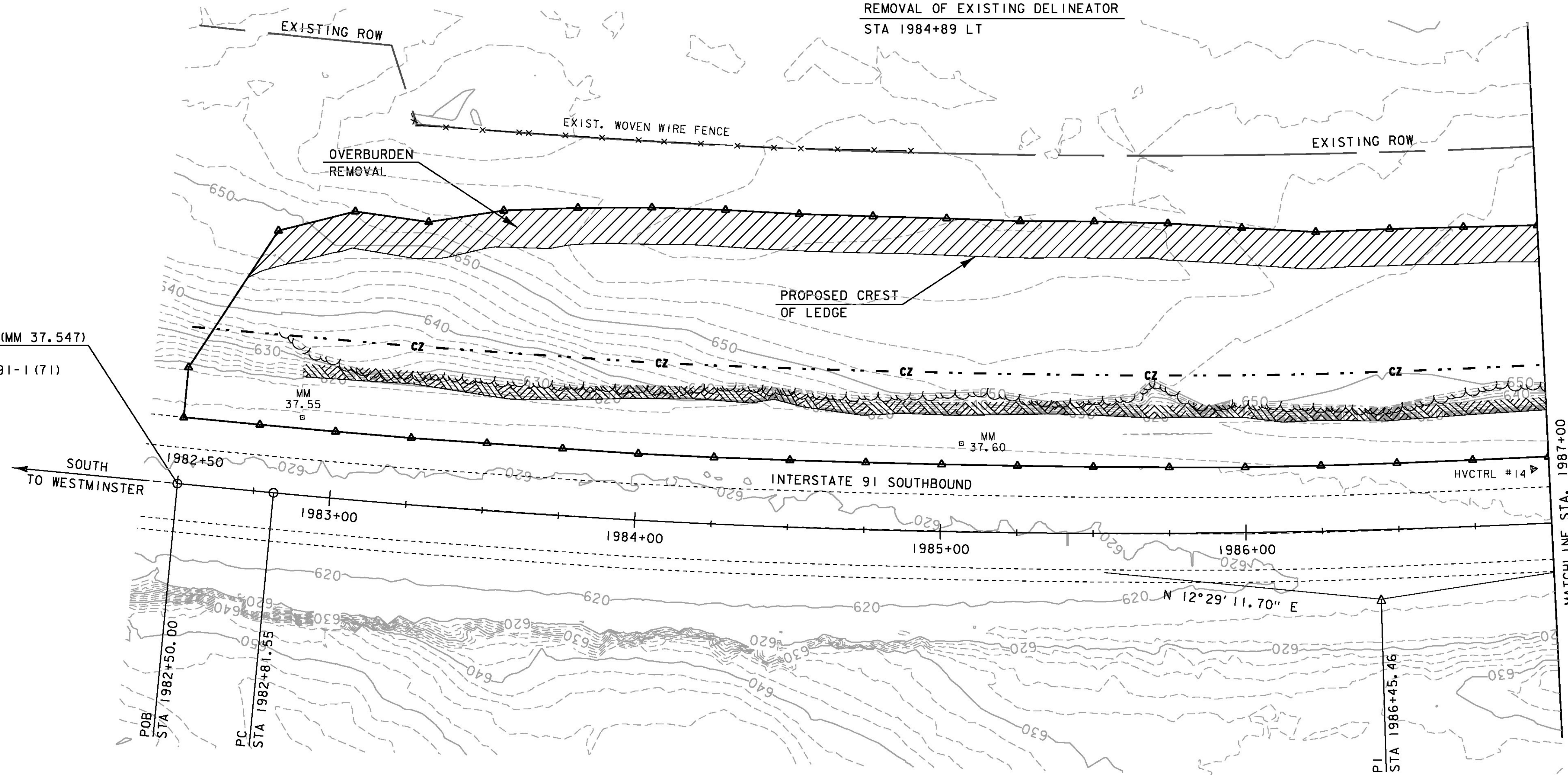
DELINEATOR WITH STEEL POST  
STA 1984+89 LT

REMOVAL OF EXISTING DELINEATOR  
STA 1984+89 LT

I-91 CURVE 1	
DELTA =	14° 18' 18"
D =	1° 58' 33"
R =	2900.00'
T =	363.91'
L =	724.04'
E =	22.74'



STA 1982+50.00 (MM 37.547)  
BEGIN PROJECT  
ROCKINGHAM 1M 091-1 (71)



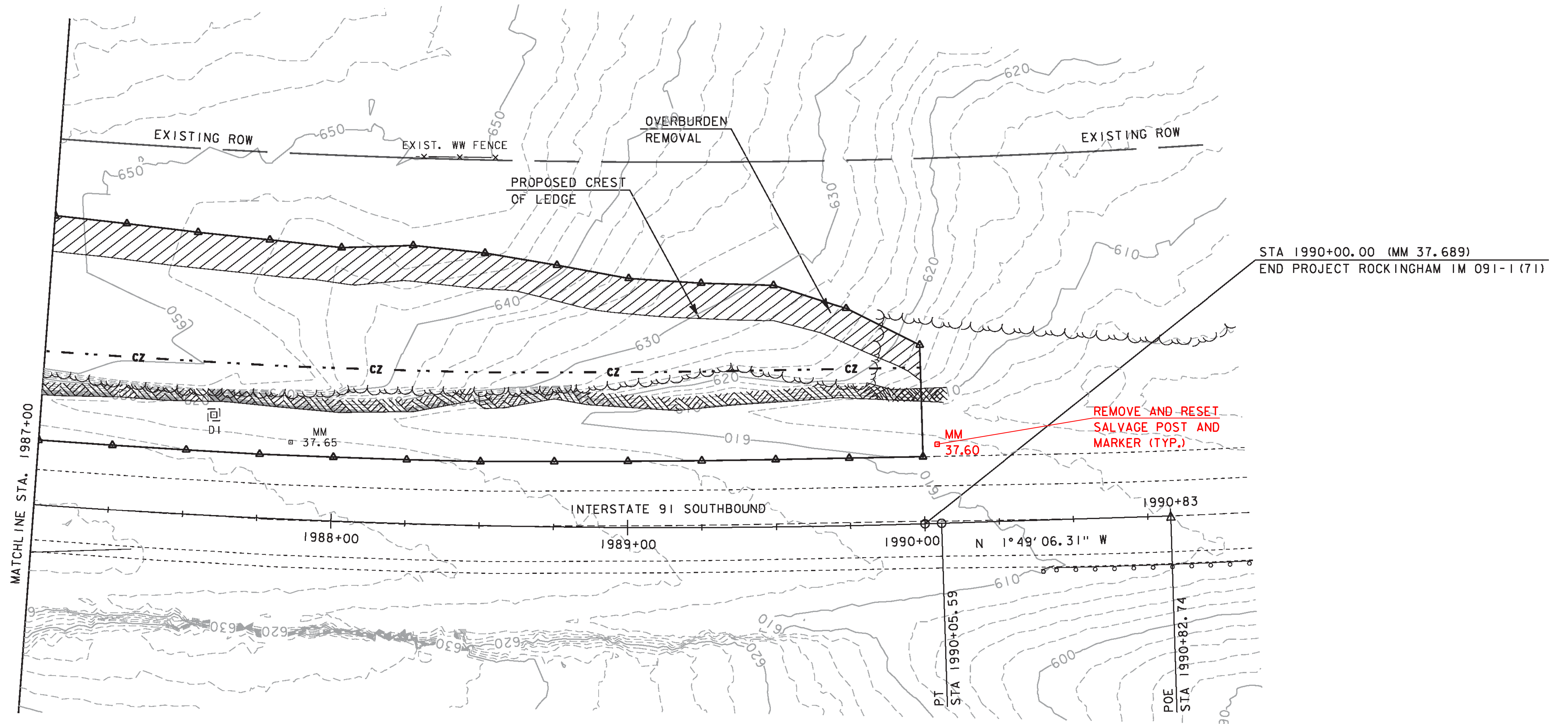
0 20 40  
SCALE IN FEET

PROJECT NAME:	ROCKINGHAM	PLOT DATE:	29-JAN-2016
PROJECT NUMBER:	1M 091-1(71)	DRAWN BY:	A. KEMPTON
FILE NAME:	d:\3a366nu1.dgn	CHECKED BY:	M. GAMELIN
PROJECT LEADER:	B. MARTIN	PLAN SHEET 1	SHEET 10 OF 35

CLEARING AND GRUBBING, INCLUDING  
INDIVIDUAL TREES AND STUMPS  
STA 1987+00 LT - STA 1990+00 LT

COMMON EXCAVATION (OVERBURDEN REMOVAL)  
STA 1987+00 LT - STA 1990+00 LT  
  
SOLID ROCK EXCAVATION  
STA 1987+00 LT - STA 1990+00 LT

DELINEATOR WITH STEEL POST  
STA 1987+85 LT  
  
REMOVAL OF EXISTING DELINEATOR  
STA 1987+85 LT



STA 1990+00.00 (MM 37.689)  
END PROJECT ROCKINGHAM IM 091-1(71)



PROJECT NAME:	ROCKINGHAM	PLOT DATE:	05-FEB-2016
PROJECT NUMBER:	IM 091-(71)	DRAWN BY:	A. KEMPTON
FILE NAME:	d13a366n.dgn	CHECKED BY:	M. GAMELIN
PROJECT LEADER:	B. MARTIN	SHEET	II OF 35
DESIGNED BY:	A. KEMPTON		
PLAN SHEET 2			

## **EPSC PLAN NARRATIVE**

### **1.1 PROJECT DESCRIPTION**

THIS PROJECT INVOLVES THE REMEDIATION OF AN EXISTING LEDGE FACE LOCATED IN THE TOWN OF ROCKINGHAM, ON INTERSTATE 91 SOUTHBOUND BETWEEN MM 37.547 AND MM 37.689. WORK WILL INCLUDE DRILLING AND BLASTING, SOLID ROCK EXCAVATION AND CLEARING AND GRUBBING 12 FEET PAST THE FINAL CREST OF LEDGE.

NOTE: AREA OF DISTURBANCE INCLUDES LIMITS OF EARTH DISTURBANCE WITHIN THE PROJECT AREA, TRAFFIC CONTROL DETOUR, AS WELL AS WASTE, BORROW AND STAGING AREAS, AND OTHER EARTH DISTURBING ACTIVITIES WITHIN OR DIRECTLY ADJACENT TO THE PROJECT LIMITS AS SHOWN ON THE ATTACHED EPSC PLAN.

AREA OF DISTURBANCE AS SHOWN ON THE ATTACHED EPSC PLAN IS APPROXIMATELY 0.97 ACRES (EXCLUDES LEDGE FACE AREA) FOR THE PROPOSED PROJECT AND TRAFFIC CONTROL CROSSEOVERS.

IT IS ANTICIPATED THAT THIS PROJECT WILL LAST ONE CONSTRUCTION SEASON.

### **1.2 SITE INVENTORY**

#### **1.2.1 TOPOGRAPHY**

THE TOPOGRAPHY OF THE AREA IS MOUNTAINOUS THAT IS MOSTLY WELL ESTABLISHED FOREST WITH OCCASIONAL OPEN AREAS.

#### **1.2.2 DRAINAGE, WATERWAYS, BODIES OF WATER, AND PROXIMITY TO NATURAL OR MAN-MADE WATER FEATURES**

THERE ARE NO IDENTIFIABLE WATER SOURCES ON THE PROJECT SITE, ONLY STORM WATER CONVEYANCE FEATURES. THE CLOSEST RECEIVING WATER IS THE CONNECTICUT RIVER. THE PROPERTY SURROUNDING THE PROJECT SITE CONSISTS OF MINIMAL STEEP SLOPES. DUE TO THE NATURE OF THE SURROUNDING TERRAIN THE PROJECT SITE COULD RECEIVE RUNOFF FROM NEARBY SLOPES.

#### **1.2.3 VEGETATION**

THE VEGETATION IN THE PROJECT AREA CONSISTS OF MIXED FOREST AND UNDERGROWTH. THE IMPACT TO VEGETATION WILL BE LIMITED TO THAT WHICH IS DIRECTLY AFFECTED BY LEDGE REMEDIATION AND CONSTRUCTION OF CROSSEOVERS. DISTURBED VEGETATION WILL BE REESTABLISHED WITH STANDARD SEED AND MULCH PRACTICES.

#### **1.2.4 SOILS**

ALL SOIL DATA CAME FROM THE U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE FOR THE COUNTY OF WINDSOR, VERMONT. SOILS ON THE PROJECT SITE ARE DUMMERSTON-MACOMBER COMPLEX, 8% TO 15% SLOPES, VERY STONY, "K FACTOR" = 0.32. THE SOIL IS CONSIDERED MODERATELY ERODIBLE DUE TO SIGNIFICANT SLOPES. SOILS ON THE CROSSEOVER AREAS ARE DUMMERSTON-MACOMBER COMPLEX, 8% TO 15% SLOPES, VERY STONY, "K FACTOR"=0.32. THE SOILS ARE CONSIDERED MODERATELY ERODIBLE DUE TO SIGNIFICANT SLOPES.

NOTE: K-VALUES GENERALLY INDICATE THE FOLLOWING:  
0.0-0.23 = LOW EROSION POTENTIAL  
0.24-0.36 = MODERATE EROSION POTENTIAL  
0.37 AND HIGHER = HIGH EROSION POTENTIAL

#### **1.2.5 SENSITIVE RESOURCE AREAS**

CRITICAL HABITATS: NO  
HISTORICAL OR ARCHEOLOGICAL AREAS: NO  
PRIME AGRICULTURAL LAND: NO  
THREATENED AND ENDANGERED SPECIES: YES (NLEB)  
WATER RESOURCE: NO  
WETLANDS: NO

### **1.3 RISK EVALUATION**

THIS PROJECT DOES NOT FALL UNDER THE JURISDICTION OF GENERAL PERMIT 3-9020 FOR STORMWATER RUNOFF FROM CONSTRUCTION SITES. SHOULD CHANGES PRIOR TO OR DURING CONSTRUCTION RESULT IN ONE OR MORE ACRES OF EARTH DISTURBANCE OR SHOULD THE PROJECT BECOME PART OF A LARGER PLAN OF DEVELOPMENT, THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY ADDITIONAL PERMITTING.

### **1.4 EROSION PREVENTION AND SEDIMENT CONTROL**

THE EROSION CONTROL PLANS ARE MEANT AS A GUIDELINE FOR PREVENTING EROSION AND CONTROLLING SEDIMENT TRANSPORT. THE PRINCIPLES OUTLINED IN THIS NARRATIVE CONSIST OF APPLYING MEASURES THROUGHOUT CONSTRUCTION OF THE PROJECT IN ORDER TO MINIMIZE SEDIMENT TRANSPORT TO THE RECEIVING WATERS. THE MEASURES INCLUDE STABILIZATION AND STRUCTURAL PRACTICES, STORM WATER CONTROLS AND OTHER POLLUTION PREVENTION PRACTICES. THEY HAVE BEEN PROPOSED BY THE DESIGNER AS A BASIS FOR PROTECTING RESOURCES AND WILL NEED TO BE BUILT UPON BASED ON THE SPECIFIC MEANS AND METHODS OF THE CONTRACTOR. REFER TO THE LOW RISK SITE HANDBOOK AND APPROPRIATE DETAIL SHEETS FOR SPECIFIC GUIDANCE AND CONSTRUCTION DETAILING.

ALL MEASURES SHALL BE REGULARLY MAINTAINED AND SHALL BE CHECKED FOR SEDIMENT BUILD-UP. SEDIMENT SHALL BE DISPOSED OF AT AN APPROVED SITE WHERE IT WILL NOT BE SUBJECT TO EROSION.

#### **1.4.1 MARK SITE BOUNDARIES**

SITE BOUNDARIES AND AREAS CONSTRUCTION EQUIPMENT CAN ACCESS SHALL BE DELINEATED.

PROJECT DEMARCATION FENCING (PDF) SHALL BE USED TO PHYSICALLY MARK SITE BOUNDARIES.

#### **1.4.2 LIMIT DISTURBANCE AREA**

PREVENTING INITIAL SOIL EROSION BY MINIMIZING THE EXPOSED AREA IS MUCH MORE EFFECTIVE THAN TREATING ERODED SEDIMENT. EARTH DISTURBANCE CAN BE MINIMIZED THROUGH CONSTRUCTION PHASING BY ONLY OPENING UP EARTH AS NECESSARY. THIS CAN LIMIT THE AREA THAT WILL BE DISTURBED AND EXPOSED TO EROSION. EMPLOY TEMPORARY CONSTRUCTION STABILIZATION PRACTICES IN INCREMENTAL STAGES AS PHASES CHANGE. FOR PROJECTS WHICH FALL UNDER THE CONSTRUCTION GENERAL PERMIT, ONLY THE ACREAGE LISTED ON THE PERMIT AUTHORIZATION MAY BE EXPOSED AT ANY GIVEN TIME.

MAINTAINING VEGETATED BUFFERS ALONG STREAM BANKS, WETLANDS OR OTHER SENSITIVE AREAS IS A CRUCIAL EROSION AND SEDIMENT CONTROL MEASURE THAT SHOULD BE ESTABLISHED WHEREVER POSSIBLE.

#### **1.4.3 SITE ENTRANCE/EXIT STABILIZATION**

TRACKING OF SEDIMENT ONTO PUBLIC HIGHWAYS SHALL BE MINIMIZED TO REDUCE THE POTENTIAL FOR RUNOFF ENTERING RECEIVING WATERS. INSTALLATION SHALL COINCIDE WITH THE CONTRACTORS PROGRESS SCHEDULE.

STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AS PROPOSED ON THE EPSC PLAN AND ANYWHERE EQUIPMENT WILL BE GOING FROM AREAS OF EXPOSED SOILS TO PAVED SURFACES.

#### **1.4.4 INSTALL SEDIMENT BARRIERS**

SEDIMENT BARRIERS SHALL BE UTILIZED TO INTERCEPT RUNOFF AND ALLOW SUSPENDED SEDIMENT TO SETTLE OUT. THEY SHALL BE INSTALLED PRIOR TO ANY UP SLOPE WORK.

A DROP INLET PROTECTION DEVICE AND SILT FENCE WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN.

#### **1.4.5 DIVERT UPLAND RUNOFF**

DIVERSIONARY MEASURES SHALL BE USED TO INTERCEPT RUNOFF FROM ABOVE THE CONSTRUCTION AND DIRECT IT AROUND THE DISTURBED AREA SO THAT CLEAN WATER DOES NOT BECOME MUDDIED WHILE TRAVELING OVER EXPOSED SOILS ON THE CONSTRUCTION SITE.

IT IS NOT ANTICIPATED THAT DIVERSION MEASURES WILL BE NECESSARY.

#### **1.4.6 SLOW DOWN CHANNELIZED RUNOFF**

CHECK STRUCTURES SHALL BE UTILIZED TO REDUCE THE VELOCITY, AND THUS THE EROSION POTENTIAL, OF CONCENTRATED FLOW IN CHANNELS.

THE PORTION OF THE PROJECT AREA WITH CHANNELIZED FLOW IS RELATIVELY FLAT. THEREFORE IT IS NOT ANTICIPATED THAT CHECK STRUCTURES WILL BE NECESSARY.

#### **1.4.7 CONSTRUCT PERMANENT CONTROLS**

THE PROJECT AREA IS STABLE AND THE PROJECT INVOLVES VERY LITTLE DISTURBANCE THEREFORE PERMANENT STORMWATER TREATMENT DEVICES ARE NOT ANTICIPATED.

#### **1.4.8 STABILIZE EXPOSED SOILS DURING CONSTRUCTION**

ALL AREAS OF DISTURBANCE MUST HAVE TEMPORARY STABILIZATION IN PLACE WITHIN 48 HOURS OF DISTURBANCE OR IN ACCORDANCE WITH THE CONSTRUCTION GENERAL PERMIT 3-9020 AUTHORIZATION.

TEMPORARY MULCHING SHALL BE UTILIZED ON A REGULAR BASIS. BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED TO STABILIZE ALL SLOPES STEEPER THAN 1:3.

THE FORECAST OF RAINFALL EVENTS SHALL TRIGGER IMMEDIATE PROTECTION OF EXPOSED SOILS.

#### **1.4.9 WINTER STABILIZATION**

VARIOUS MEASURES SPECIFIC TO WINTER MAY BE NECESSARY SHOULD THE PROJECT EXTEND INTO WINTER (OCTOBER 15 THROUGH APRIL 15). REFER TO THE LOW RISK SITE HANDBOOK FOR GUIDANCE.

#### **1.4.10 STABILIZE SOIL AT FINAL GRADE**

EXPOSED SOIL MUST BE STABILIZED WITHIN 48 HOURS OF REACHING FINAL GRADE.

SEED, MULCH, FERTILIZER AND LIME SHALL BE USED TO ESTABLISH PERMANENT VEGETATION. FOR SLOPES STEEPER THAN 1:3, BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED INSTEAD OF MULCH.

THE LOW GROW SEEDING FORMULA SHALL BE USED FOR THIS PROJECT.

#### **1.4.11 DE-WATERING ACTIVITIES**

DISCHARGE FROM DEWATERING ACTIVITIES THAT FLOWS OFF OF THE CONSTRUCTION SITE MUST NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF THE VERMONT WATER QUALITY STANDARDS.

IT IS NOT ANTICIPATED THAT DE-WATERING ACTIVITIES WILL BE NECESSARY.

#### **1.4.12 INSPECT YOUR SITE**

INSPECT THE PROJECT SITE BASED ON SPECIAL PROVISION REQUIREMENTS OR CONSTRUCTION GENERAL PERMIT AUTHORIZATION STIPULATIONS.

### **1.5 SEQUENCE AND STAGING**

THIS SECTION WILL BE DEVELOPED BY THE CONTRACTOR USING THE GUIDANCE OUTLINED IN THE VTRANS EPSC PLAN CONTRACTOR CHECKLIST.

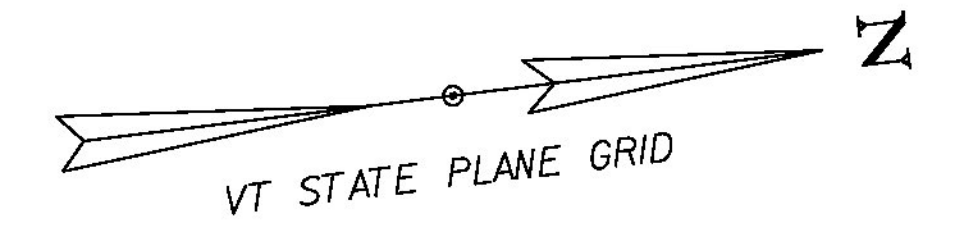
**1.5.1 OFF-SITE ACTIVITIES**  
IN ADDITION TO THE CONTRACTOR CHECKLIST ANY ACTIVITIES OUTSIDE THE CONSTRUCTION LIMITS SHALL FOLLOW SUBSECTIONS 105.25- 105.29 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.

PROJECT NAME:	ROCKINGHAM
PROJECT NUMBER:	IM 091-1(71)
FILE NAME:	d13a366frrm.dgn
PROJECT LEADER:	B. MARTIN
DESIGNED BY:	S. ZWICK
EPSC NARRATIVE	
PLOT DATE:	29-JAN-2016
DRAWN BY:	S. ZWICK
CHECKED BY:	A. AGRAWAL
SHEET	12 OF 35

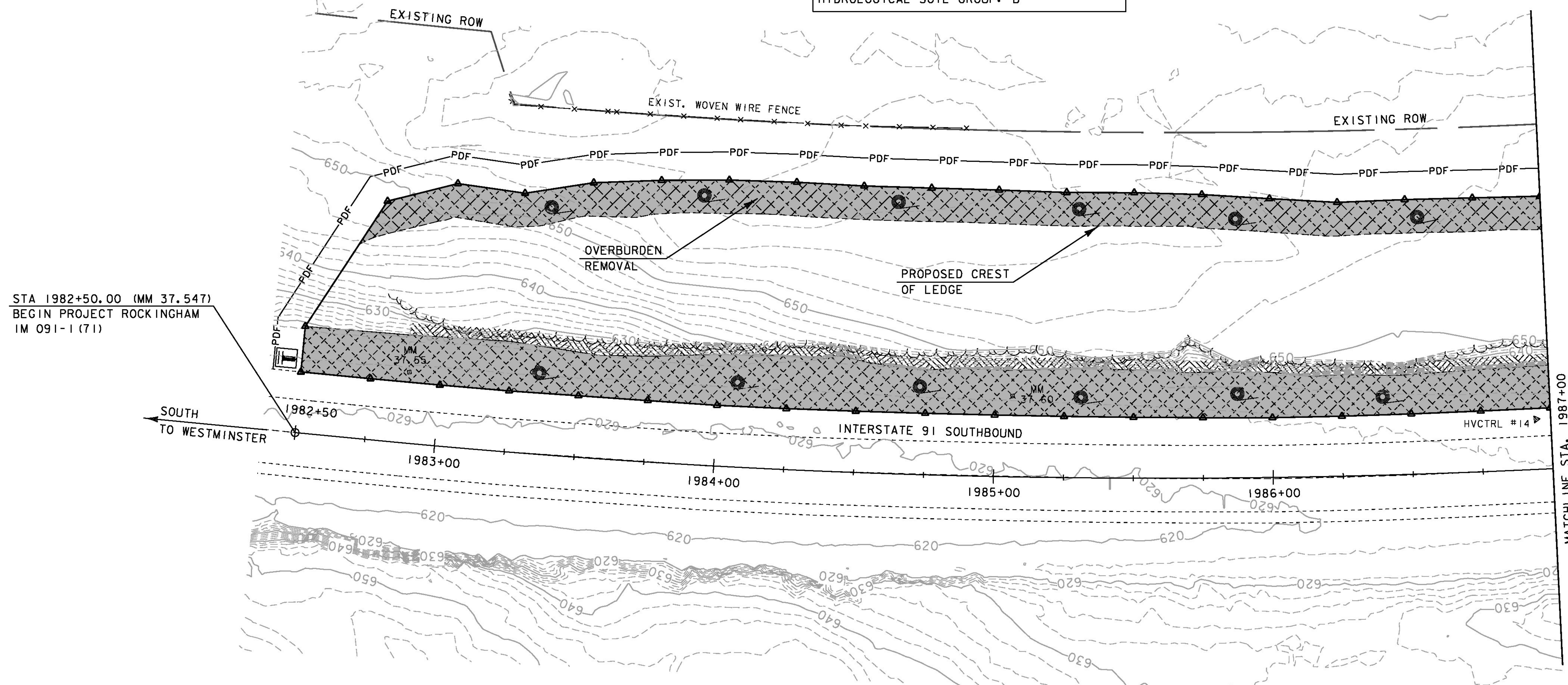
PROJECT DEMARCATION FENCE  
STA 1982+40 LT - STA 1987+00 LT

TEMPORARY EROSION MATTING  
STA 1982+50 LT - STA 1987+00 LT

VEHICLE TRACKING PAD  
STA 1982+50 LT



SOIL INFORMATION:  
DUMMERSTON-MACOMBER COMPLEX, VERY STONY  
K-FACTOR = .32, 8%-15% SLOPES  
HYDROLOGICAL SOIL GROUP: B



STA 1982+50.00 (MM 37.547)  
BEGIN PROJECT ROCKINGHAM  
IM 091-1 (71)

SOUTH  
TO WESTMINSTER

MATCHLINE STA. 1987+00

LEGEND	
	EROSION MATTING
	PERMANENT SLOPE LIMITS
	PROJECT DEMARCATION FENCE
	STABILIZED CONSTRUCTION ENTRANCE

AREA OF DISTURBANCE  
SHEET AREA (SHADED AREA) : 0.28 ACRES  
PROJECT TOTAL : 0.97 ACRES

PROJECT NAME: ROCKINGHAM	PLOT DATE: 29-JAN-2016
PROJECT NUMBER: IM 091-1(71)	DRAWN BY: A. AGRAWAL
FILE NAME: d13a366ero.dgn	CHECKED BY: A. KEMPTON
PROJECT LEADER: B. MARTIN	SHEET 13 OF 35
DESIGNED BY: A. AGRAWAL	
EPSC PLAN SHEET 1	

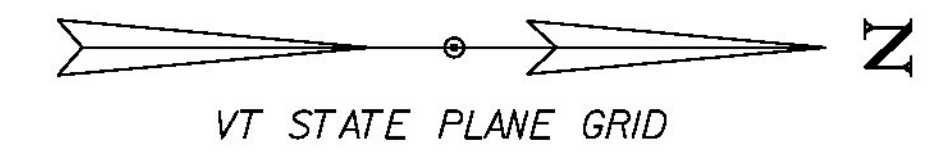
0 20 40  
SCALE IN FEET

PROJECT DEMARCATION FENCE  
STA 1987+00 LT - STA 1990+10 LT

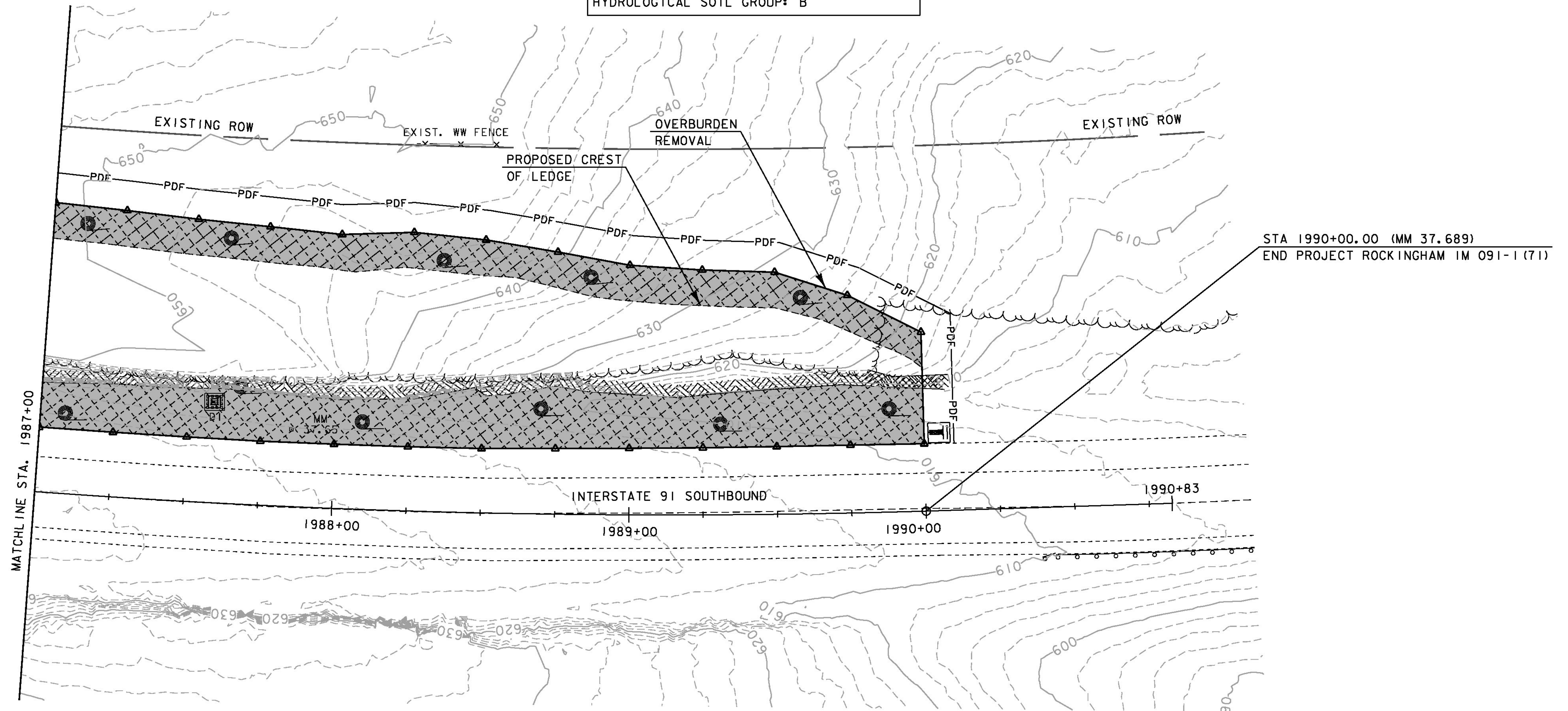
TEMPORARY EROSION MATTING  
STA 1987+00 LT - STA 1990+00 LT

INLET PROTECTION DEVICE, TYPE I  
STA 1987+59 LT

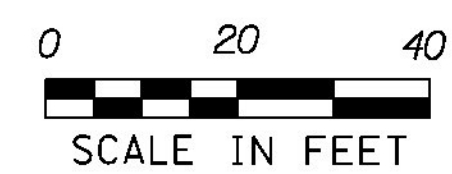
VEHICLE TRACKING PAD  
STA 1990+00 LT



SOIL INFORMATION:  
DUMMERSTON-MACOMBER COMPLEX, VERY STONY  
K-FACTOR = .32, 8%-15% SLOPES  
HYDROLOGICAL SOIL GROUP: B



LEGEND	
	EROSION MATTING
	PERMANENT SLOPE LIMITS
	PROJECT DEMARCATION FENCE
	STABILIZED CONSTRUCTION ENTRANCE



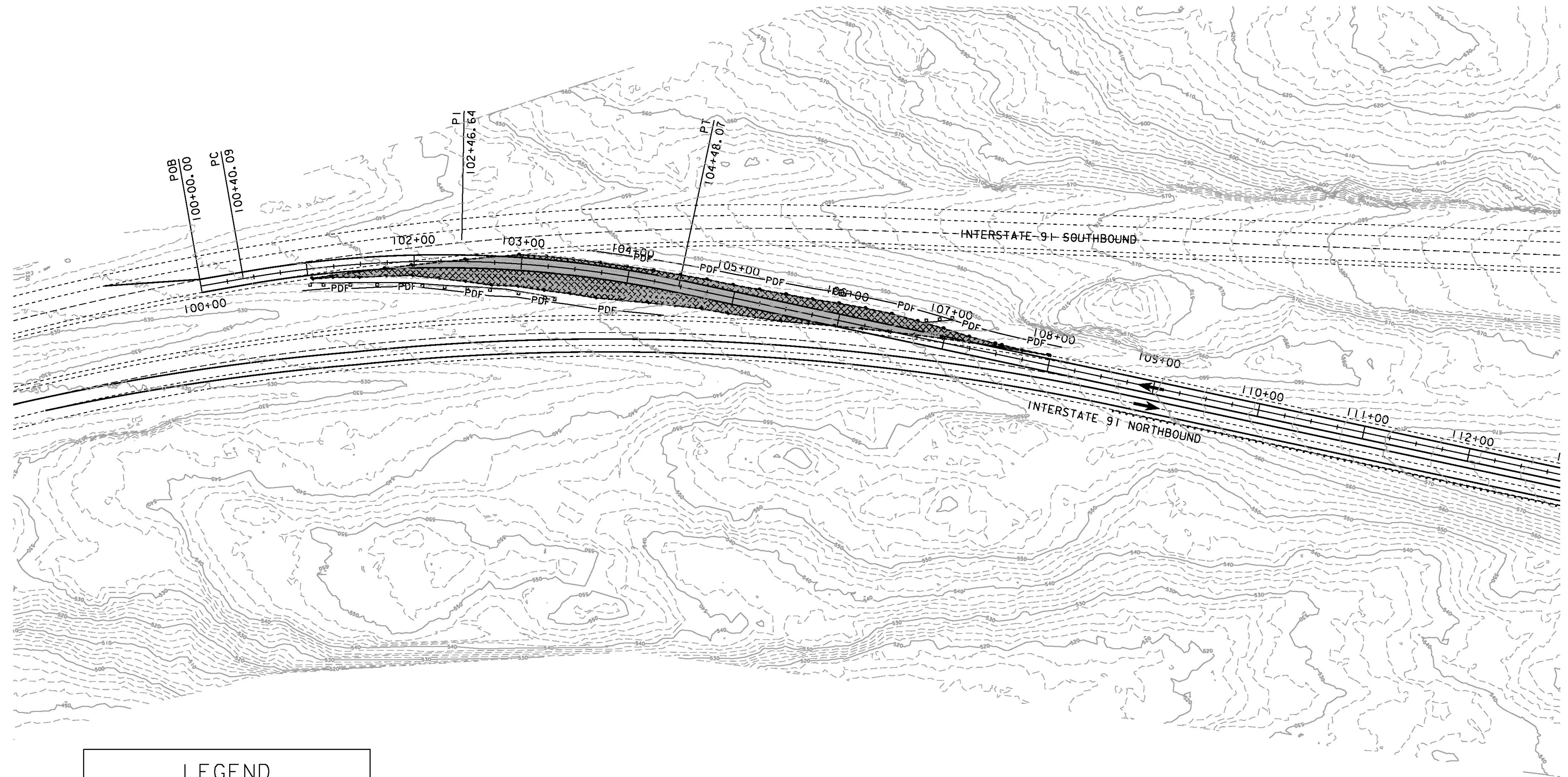
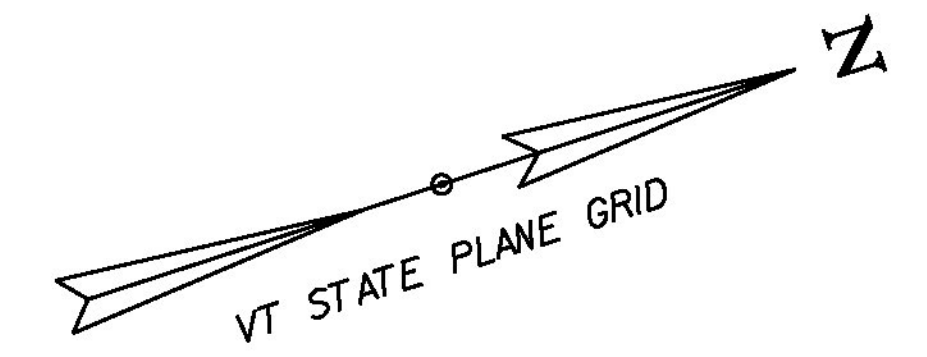
AREA OF DISTURBANCE  
SHEET AREA (SHADED AREA) : 0.20  
PROJECT TOTAL : 0.97 ACRES

PROJECT NAME: ROCKINGHAM	PLOT DATE: 29-JAN-2016
PROJECT NUMBER: IM 091-1(71)	DRAWN BY: A. AGRAWAL
FILE NAME: d13a366ero.dgn	CHECKED BY: A. KEMPTON
PROJECT LEADER: B. MARTIN	SHEET 14 OF 35
DESIGNED BY: A. AGRAWAL	
EPSC PLAN SHEET 2	

PROJECT DEMARCATION FENCE  
 STA 100+93 RT - STA 104+48 RT  
 STA 103+58 LT - STA 108+09 LT

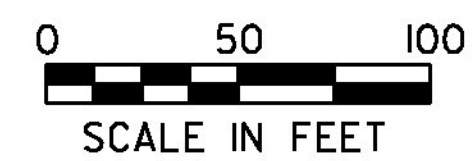
TEMPORARY EROSION MATTING  
 STA 101+04 RT - STA 105+98 RT  
 STA 102+80 LT - STA 108+00 LT

GEOTEXTILE FOR SILT FENCE  
 STA 101+00 RT - STA 103+35 RT  
 STA 106+80 LT - STA 107+08 LT



LEGEND	
	EROSION MATTING
	CROSSOVER SLOPE LIMITS
	PROJECT DEMARCATION FENCE
	SILT FENCE

AREA OF DISTURBANCE  
 SHEET TOTAL (SHADED AREA) : 0.30 ACRES  
 PROJECT TOTAL : 0.97 ACRES

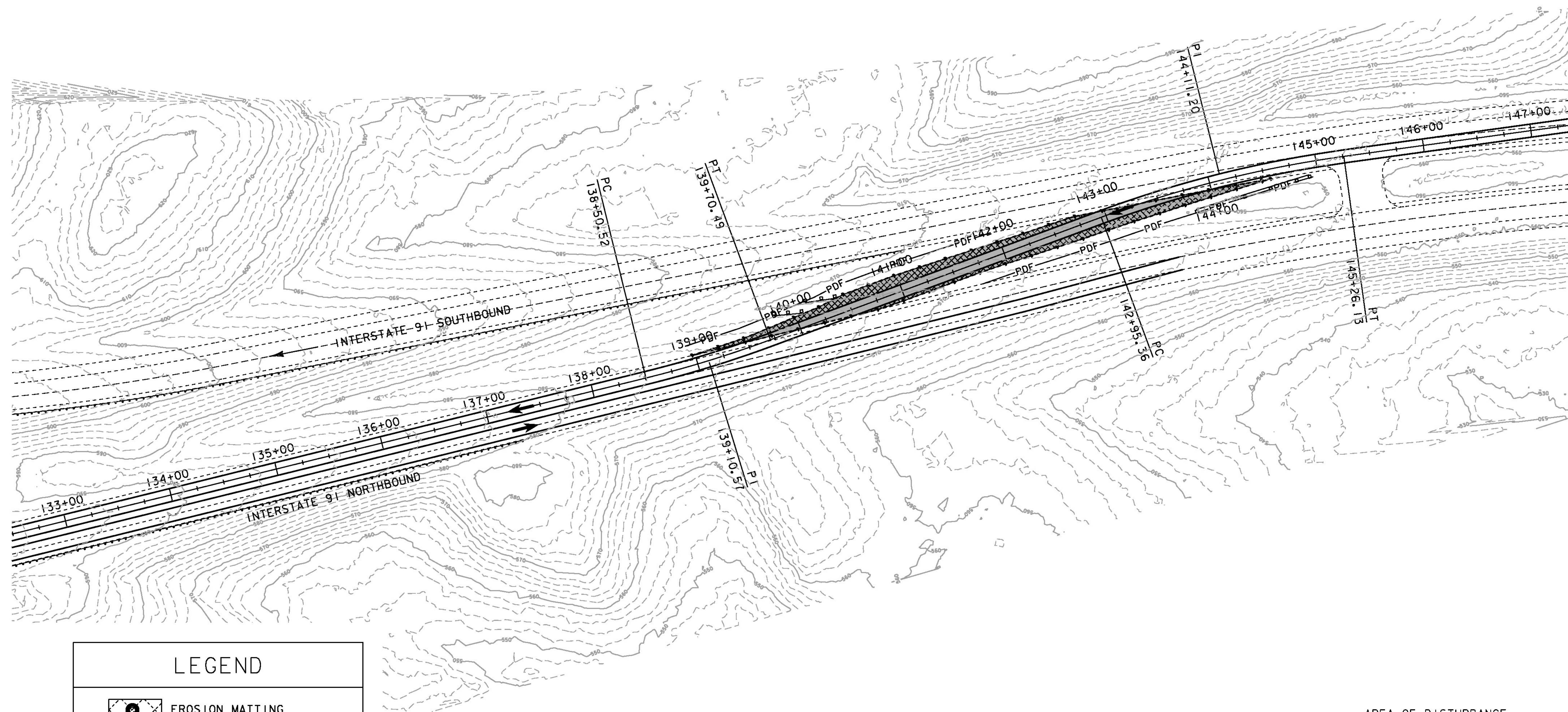
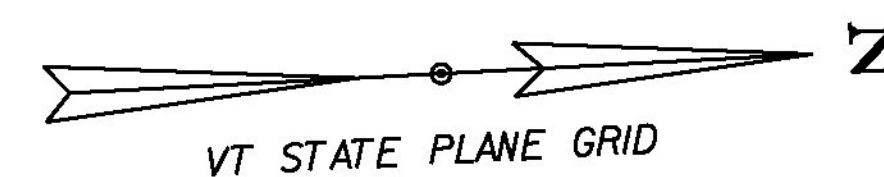


PROJECT NAME: ROCKINGHAM	PLOT DATE: 29-JAN-2016
PROJECT NUMBER: IM 091-I(71)	DRAWN BY: A. AGRAWAL
FILE NAME: d13a366ero.dgn	DESIGNED BY: A. AGRAWAL
PROJECT LEADER: B. MARTIN	CHECKED BY: A. KEMPTON
EPSC PLAN SHEET 3	SHEET 15 OF 35

PROJECT DEMARCATION FENCE  
 STA 138+93 LT - STA 142+00 LT  
 STA 141+75 RT - STA 145+00 RT

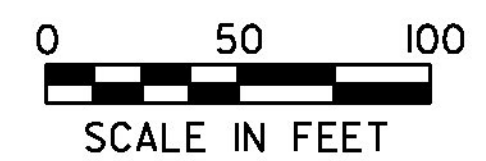
TEMPORARY EROSION MATTING  
 STA 139+00 LT - STA 142+85 LT  
 STA 140+50 RT - STA 144+50 RT

GEOTEXTILE FOR SILT FENCE  
 STA 139+79 LT - STA 140+06 LT  
 STA 140+13 LT - STA 140+39 LT  
 STA 143+81 RT - STA 144+91 RT

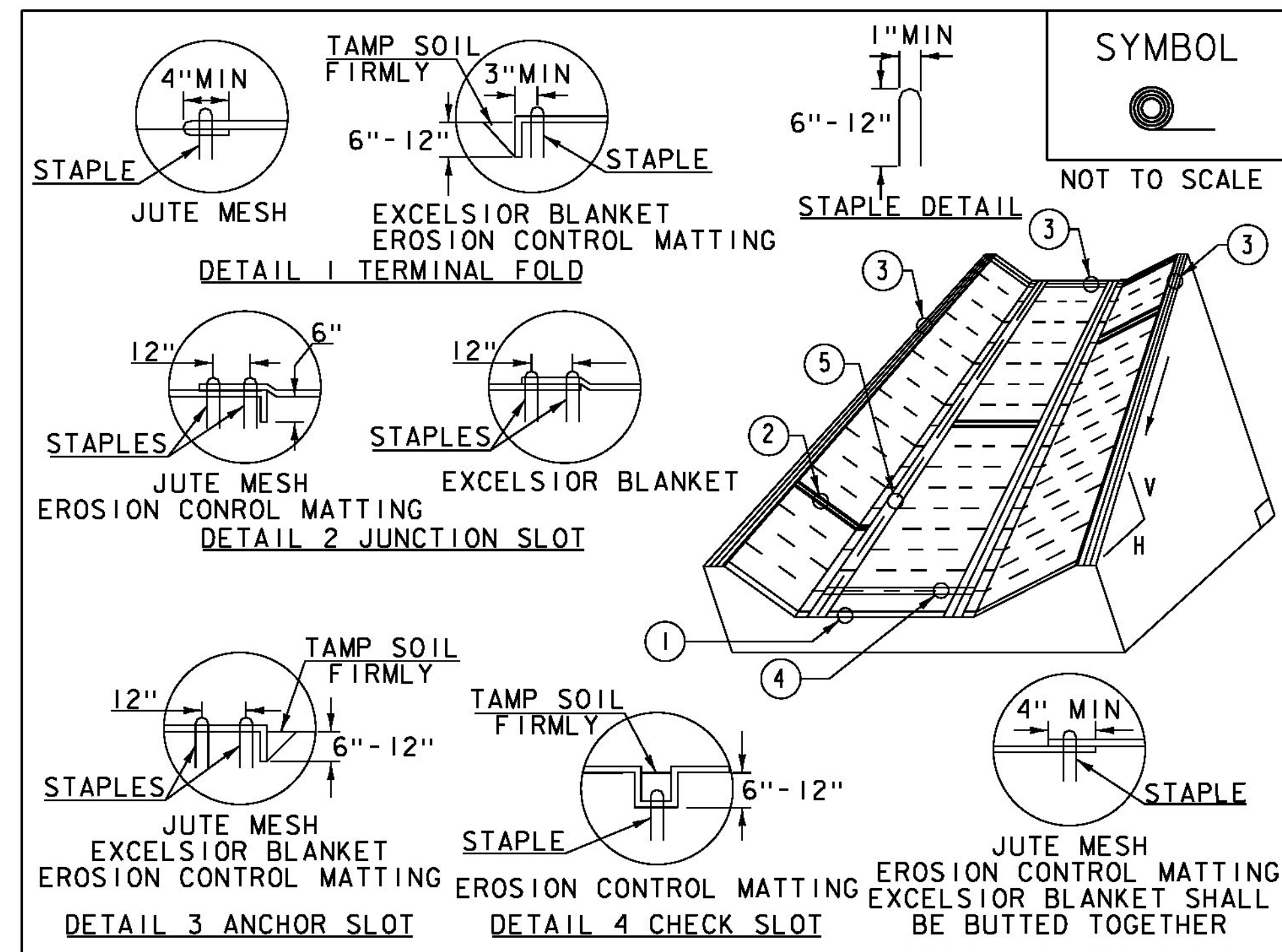


LEGEND	
	EROSION MATTING
	CROSSOVER SLOPE LIMITS
	PDF - PROJECT DEMARCATION FENCE
	SILT FENCE

AREA OF DISTURBANCE  
 SHEET TOTAL (SHADED AREA) : 0.19 ACRES  
 PROJECT TOTAL : 0.97 ACRES



PROJECT NAME: ROCKINGHAM	PLOT DATE: 29-JAN-2016
PROJECT NUMBER: IM 091-1(71)	DRAWN BY: A. AGRAWAL
FILE NAME: d13a366ero.dgn	DESIGNED BY: A. AGRAWAL
PROJECT LEADER: B. MARTIN	CHECKED BY: A. KEMPTON
EPSC PLAN SHEET 4	SHEET 16 OF 35



**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' X 225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4' X 150' 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.

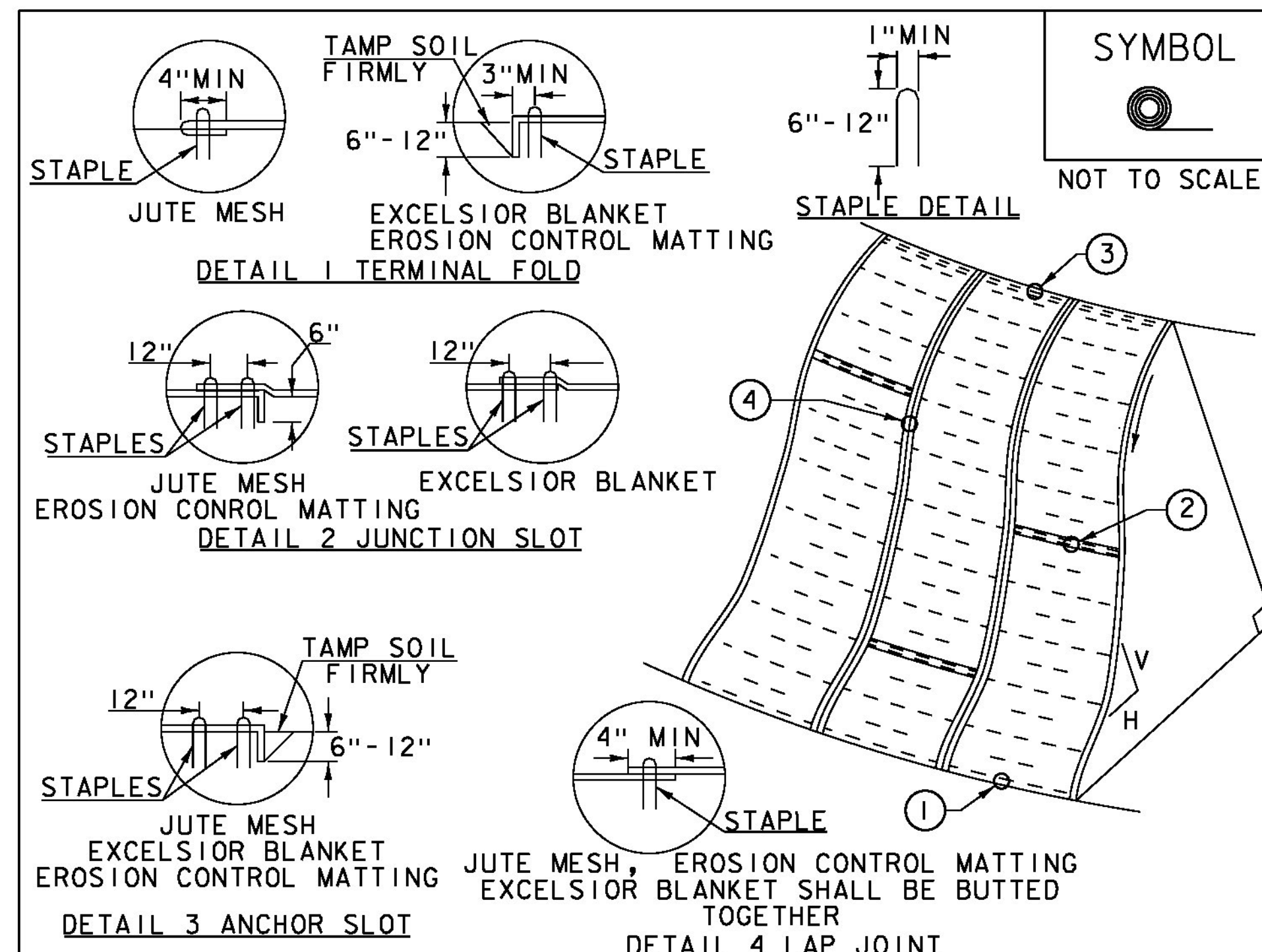
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC  
ORIGINALLY DEVELOPED BY USDA-NRCS  
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

**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	



**CONSTRUCTION SPECIFICATIONS**

1. APPLY TO SLOPES GREATER THAN 3H:1V 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' X 225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4' X 150' 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.

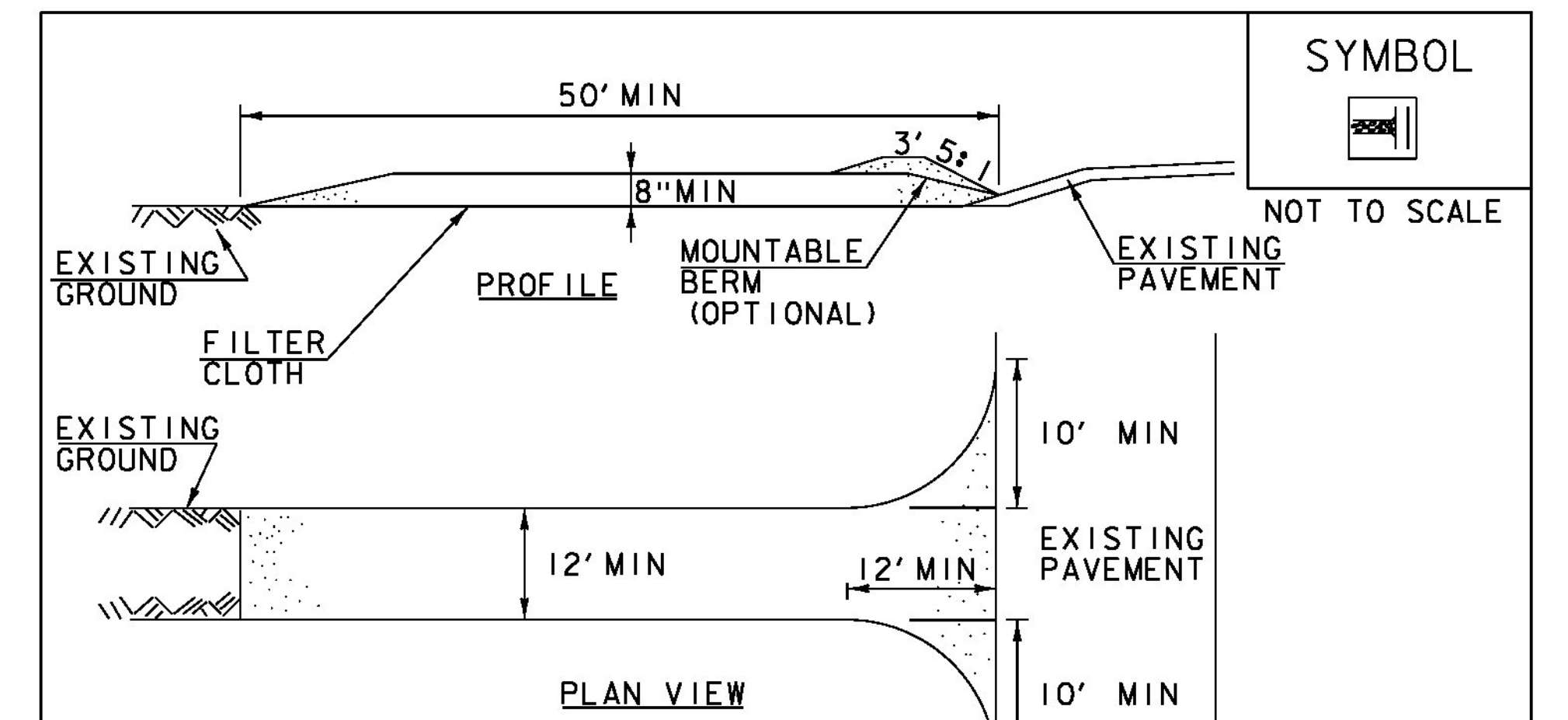
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC  
ORIGINALLY DEVELOPED BY USDA-NRCS  
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

**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	



**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.

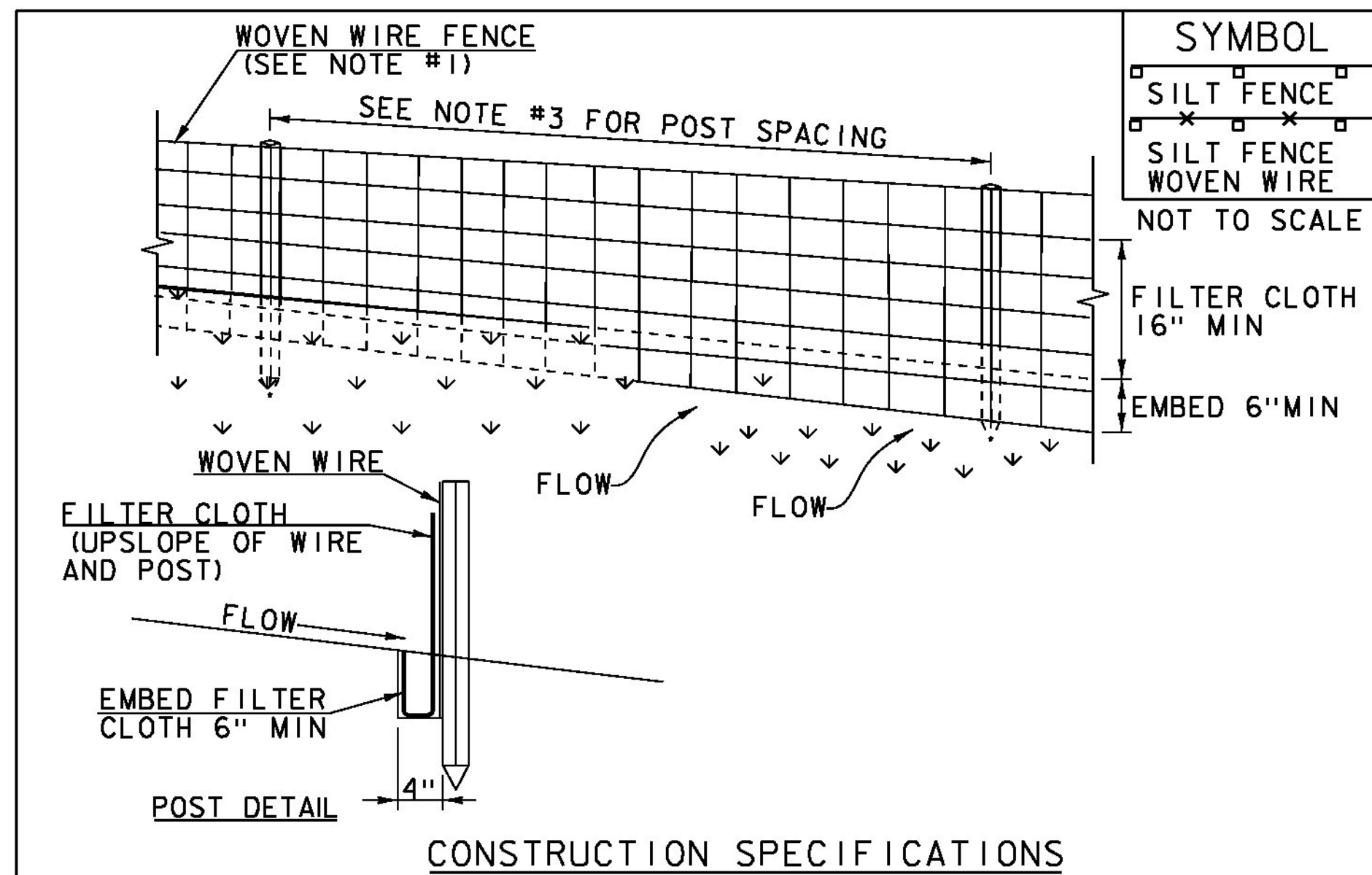
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR VEHICLE TRACKING PAD (PAY ITEM 653.35) OR AS SPECIFIED IN THE CONTRACT.

REVISIONS		
MARCH 24, 2008	WHF	
JANUARY 13, 2009	WHF	

PROJECT NAME: ROCKINGHAM  
PROJECT NUMBER: IM 091-1(71)

FILE NAME: d13a366det.dgn  
PROJECT LEADER: B. MARTIN  
DESIGNED BY: A. AGRAWAL  
EPSC DETAIL SHEET 1

PLOT DATE: 29-JAN-2016  
DRAWN BY: A. AGRAWAL  
CHECKED BY: A. KEMPTON  
SHEET 17 OF 35



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, MIRAF1100X, 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 649.5) 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

VAOT LOW GROW/FINE FESCUE MIX						
WEIGHT	LBS/AC		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						
WEIGHT	LBS/AC		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**

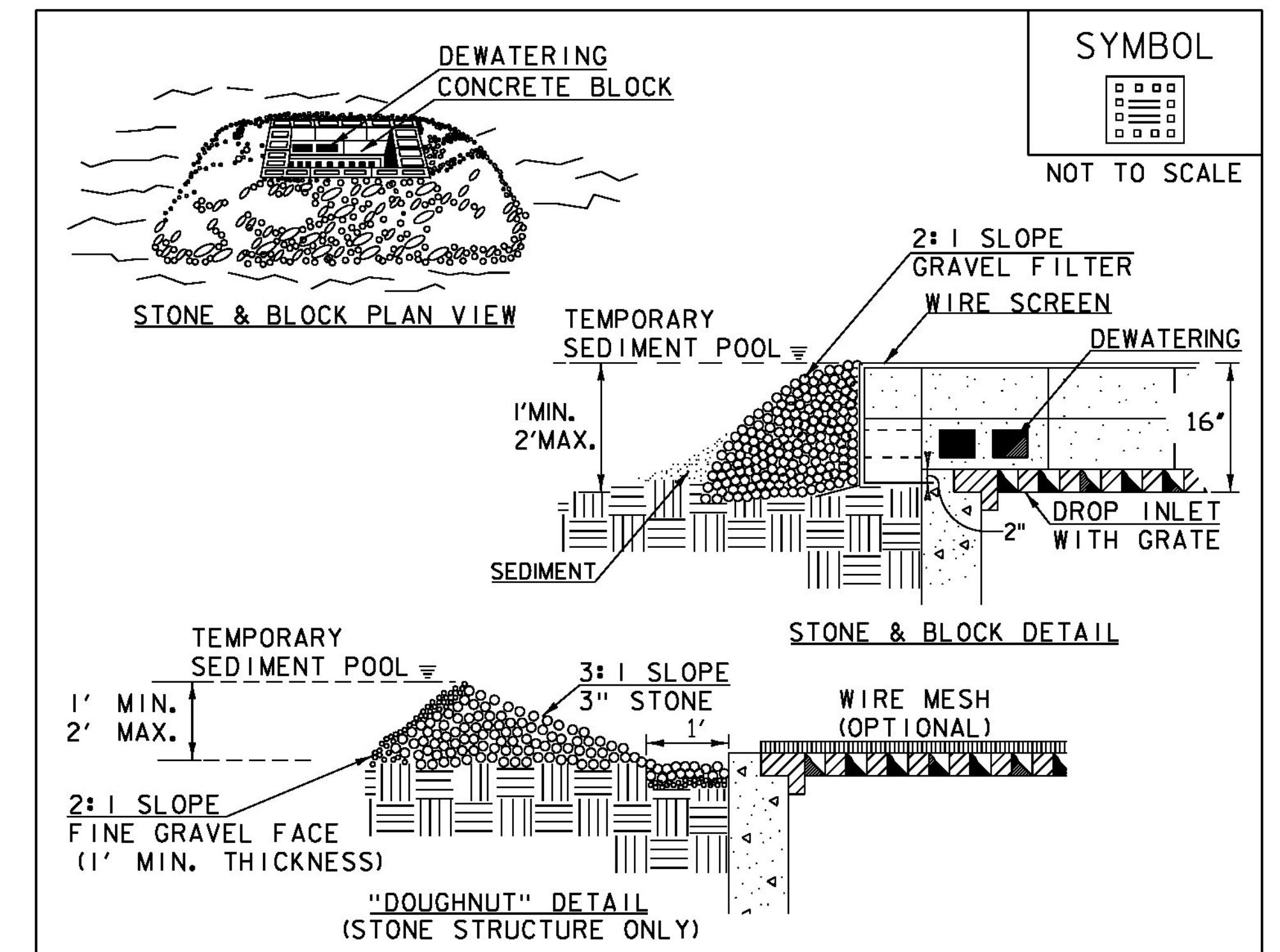
1. SEED MIX: THE CONTRACTOR SHALL COORDINATE WITH THE RESIDENT ENGINEER ON WHICH SEED MIX TO USE.
2. SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED UPLAND (NON WETLAND) AREAS DISTURBED BY THE CONTRACTOR.
3. ALL SEED MIXTURES: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT 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



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 1/2" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
3. USE CLEAN STONE OR GRAVEL 1/2" - 3/4" 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

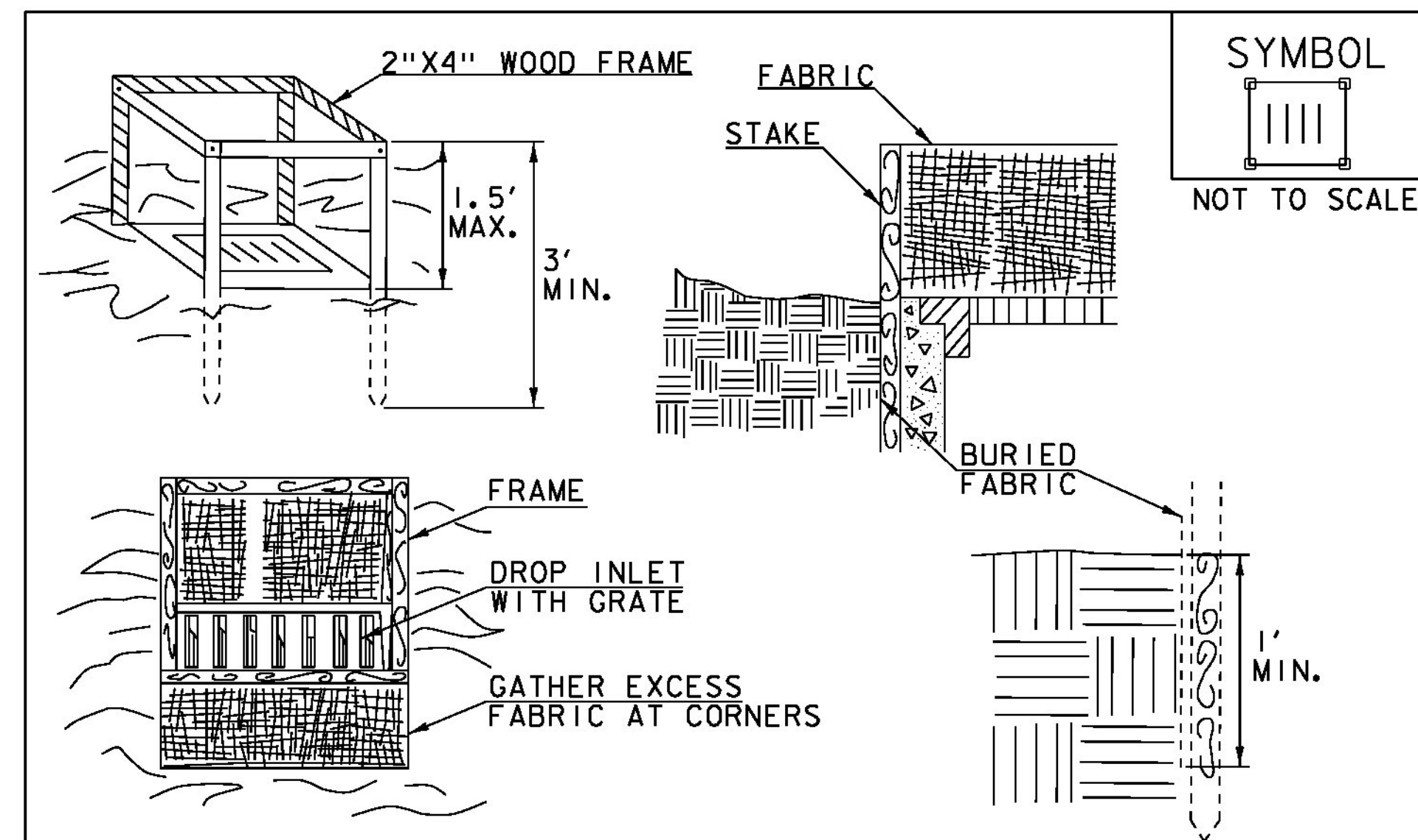
**STONE & BLOCK DROP INLET PROTECTION**

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 1 (PAY ITEM 653.40).

REVISIONS	
MARCH 6, 2008	WHF
JANUARY 13, 2009	WHF

PROJECT NAME: ROCKINGHAM	PLOT DATE: 29-JAN-2016
PROJECT NUMBER: IM 091-1(71)	DRAWN BY: A. AGRAWAL
FILE NAME: d13a366det.dgn	CHECKED BY: A. KEMPTON
PROJECT LEADER: B. MARTIN	SHEET 18 OF 35
DESIGNED BY: A. AGRAWAL	
EPSC DETAIL SHEET 2	



**CONSTRUCTION SPECIFICATIONS**

1. FILTER FABRIC SHALL HAVE AN APPARENT OPENING SIZE OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2"x 4" WOOD OR EQUIVALENT METAL WITH A MINIMUM LENGTH OF 3'.
4. SPACE STAKES EVENLY AROUND INLET 3' APART AND DRIVE A MINIMUM 18" DEEP. SPANS GREATER THAN 3' MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1' MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.
7. MAXIMUM DRAINAGE AREA 1 ACRE

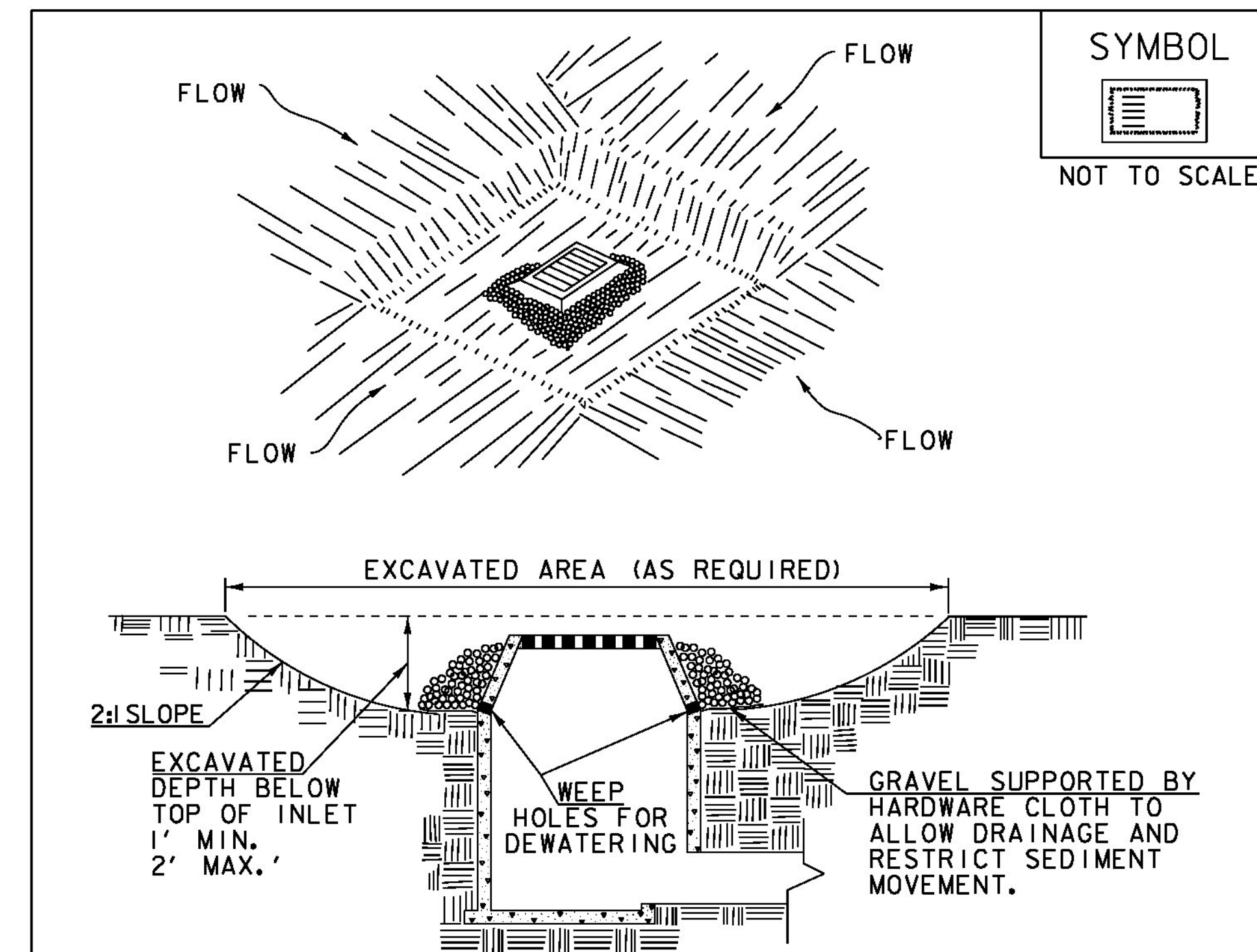
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC  
ORIGINALLY DEVELOPED BY USDA-NRCS  
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

**FILTER FABRIC  
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 7, 2008	WHF
JANUARY 13, 2009	WHF



**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.

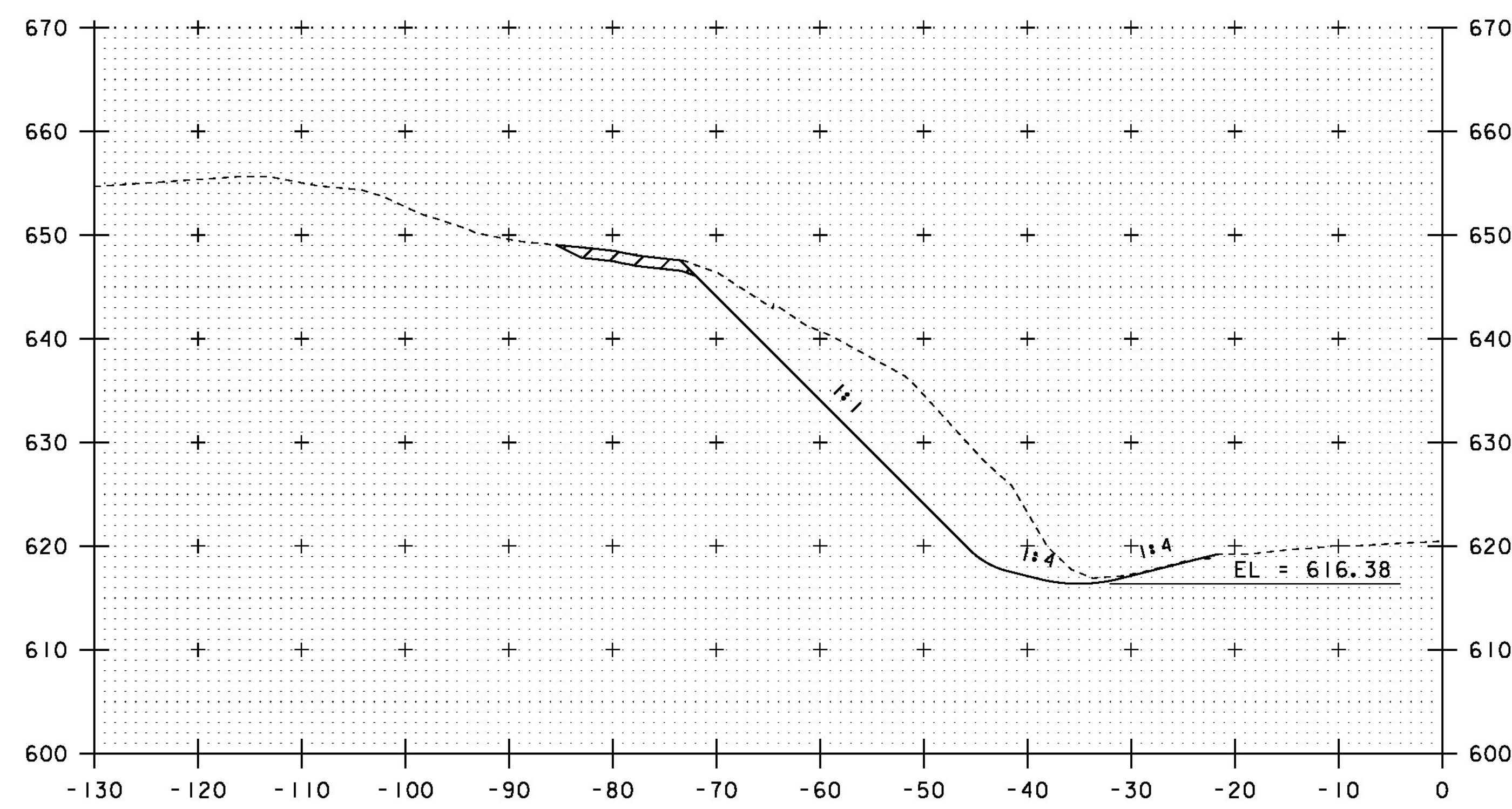
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH  
SECTION 653 FOR INLET PROTECTION DEVICE, TYPE I(PAY  
ITEM 653.40).

REVISIONS	
MARCH 6, 2008	WHF
JANUARY 13, 2009	WHF

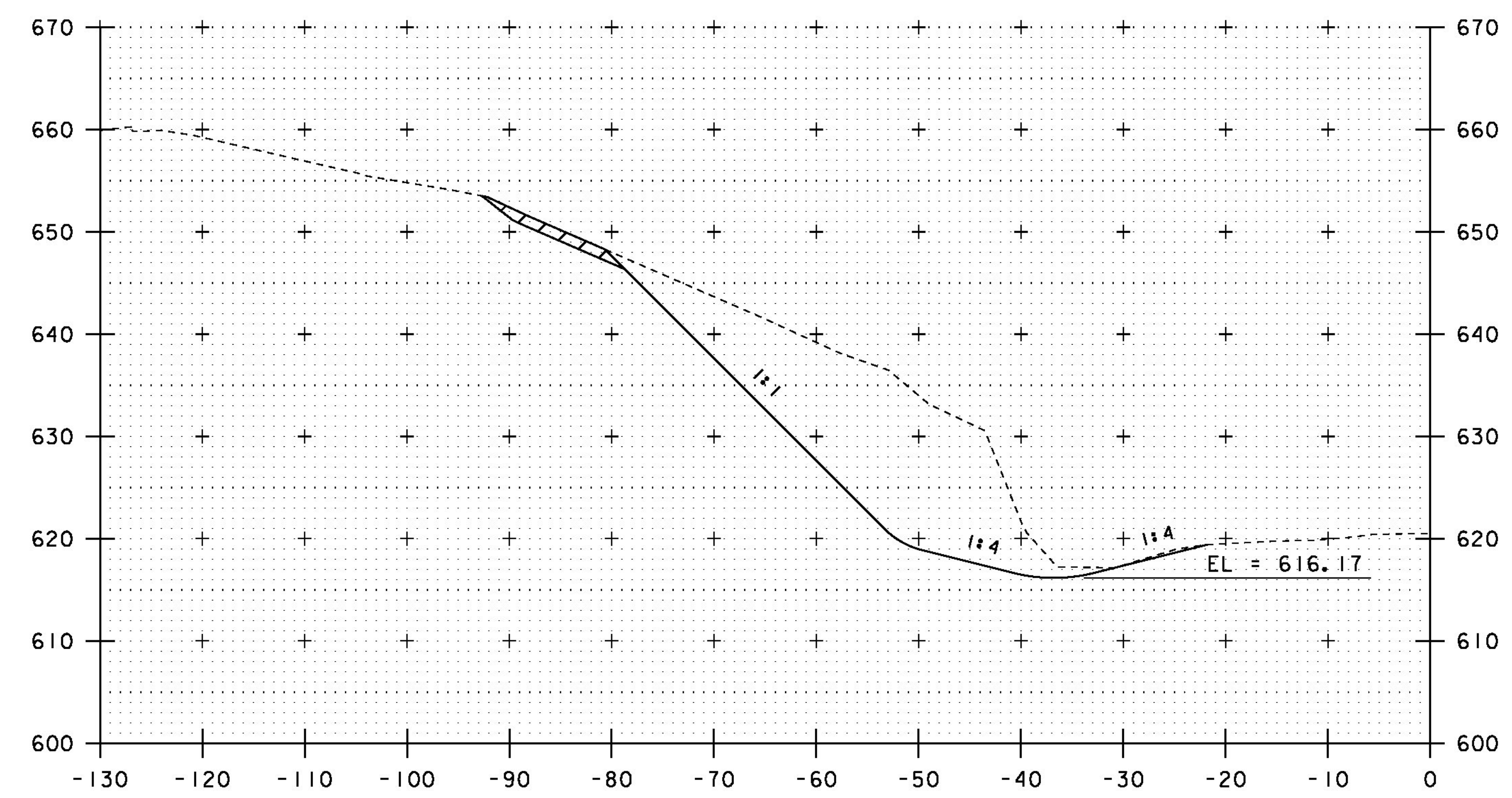
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PROJECT NUMBER: IM 091-1(71)

FILE NAME: d13a366det.dgn  
PROJECT LEADER: B. MARTIN  
DESIGNED BY: A. AGRAWAL  
EPSC DETAIL SHEET 3

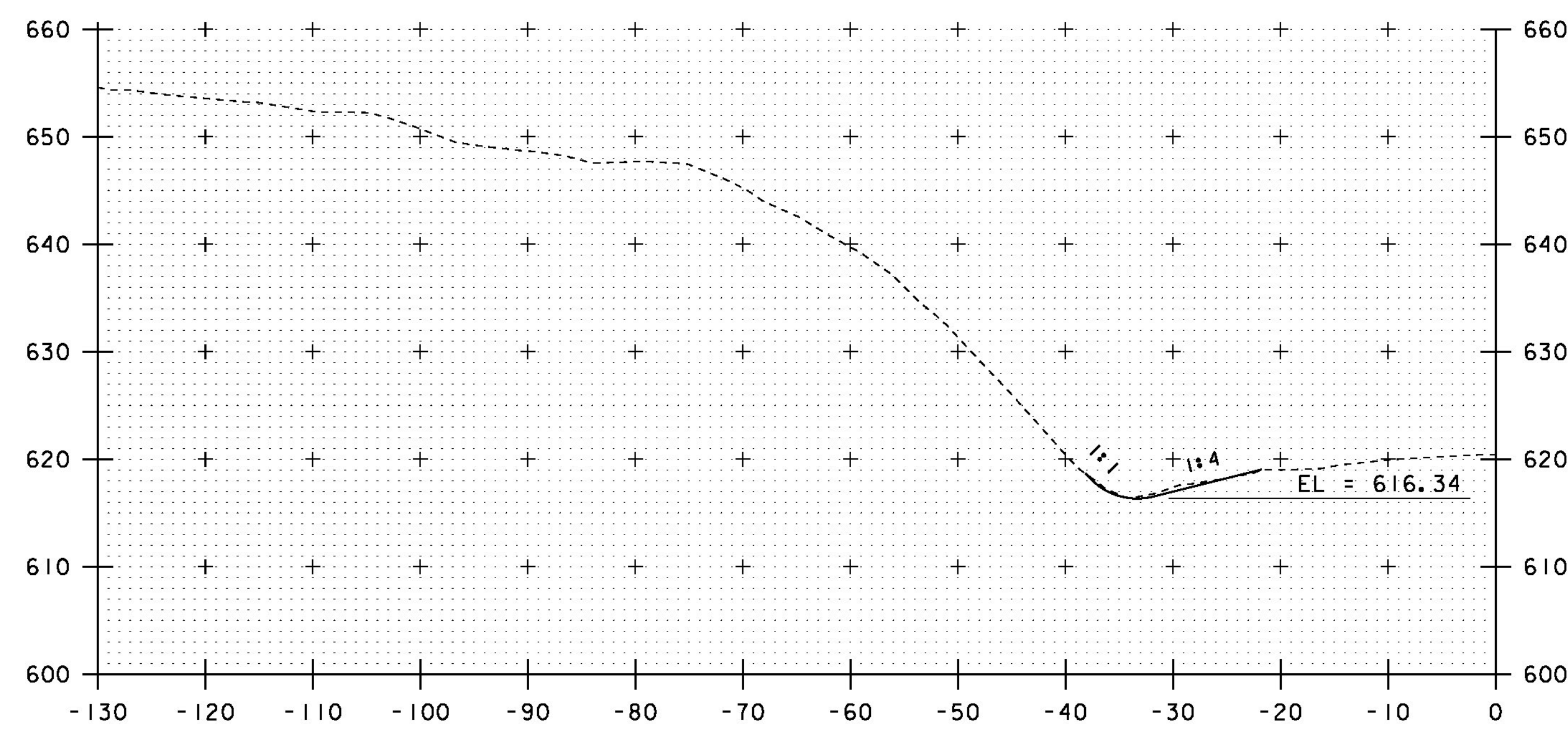
PLOT DATE: 29-JAN-2016  
DRAWN BY: A. AGRAWAL  
CHECKED BY: A. KEMPTON  
SHEET 19 OF 35



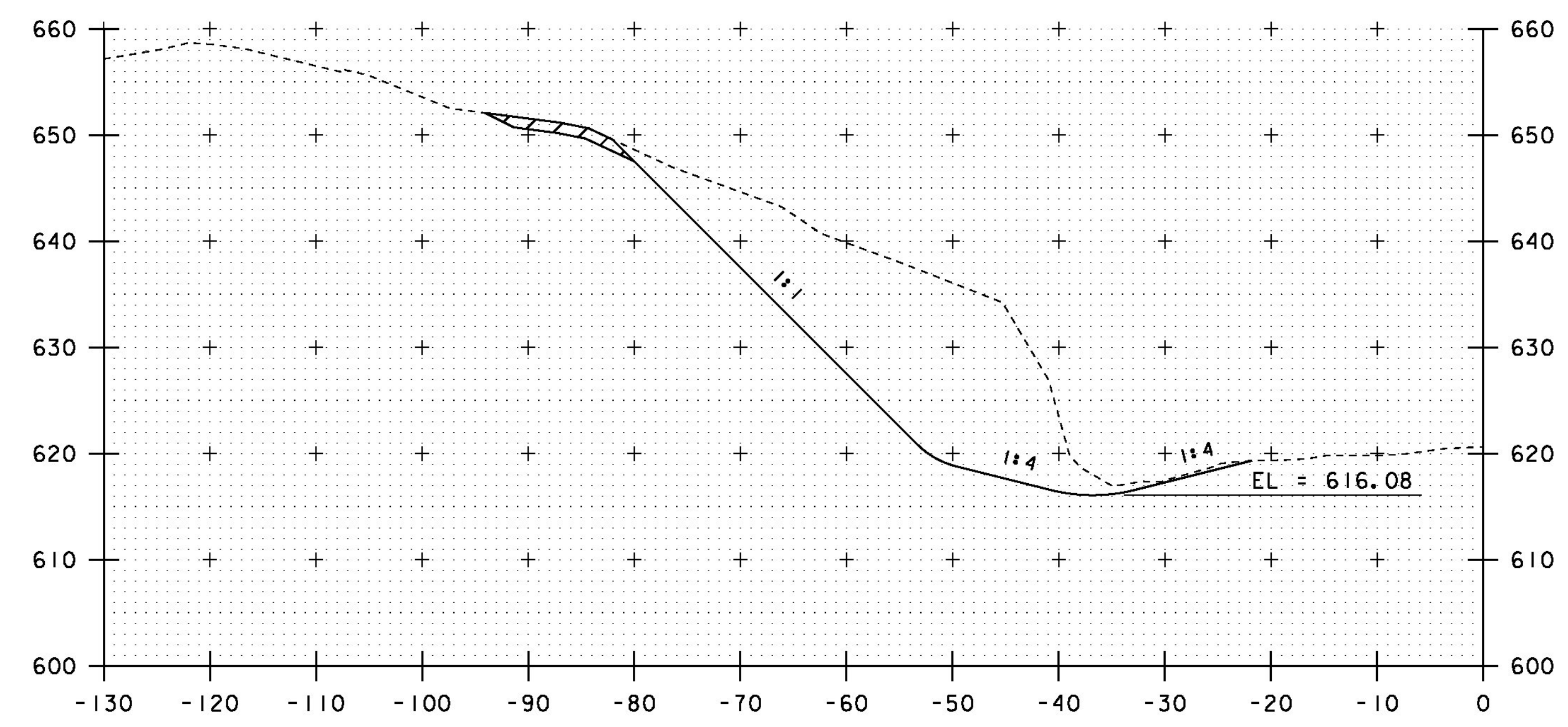
1982+75



1983+25



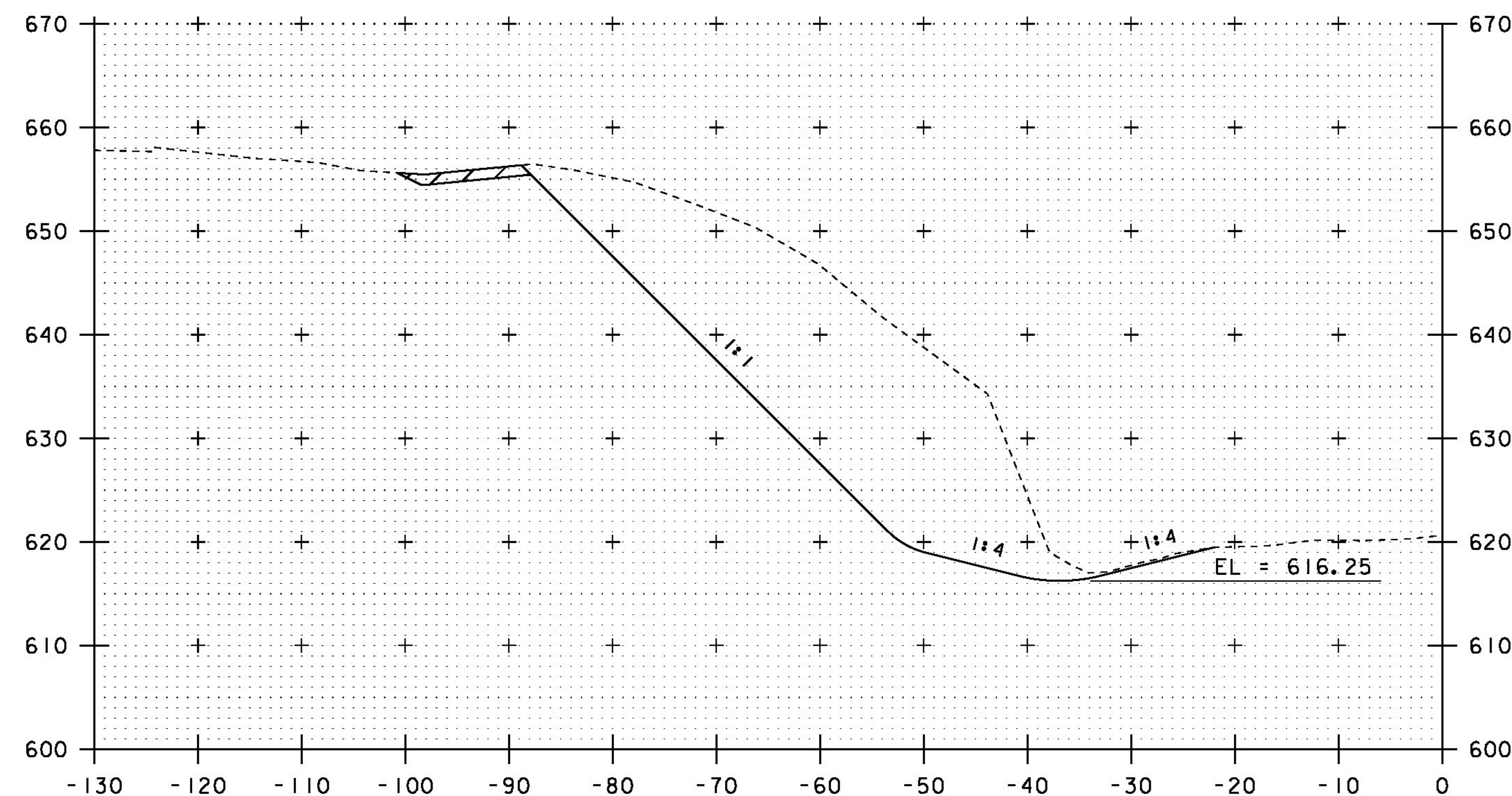
1982+50  
BEGIN PROJECT



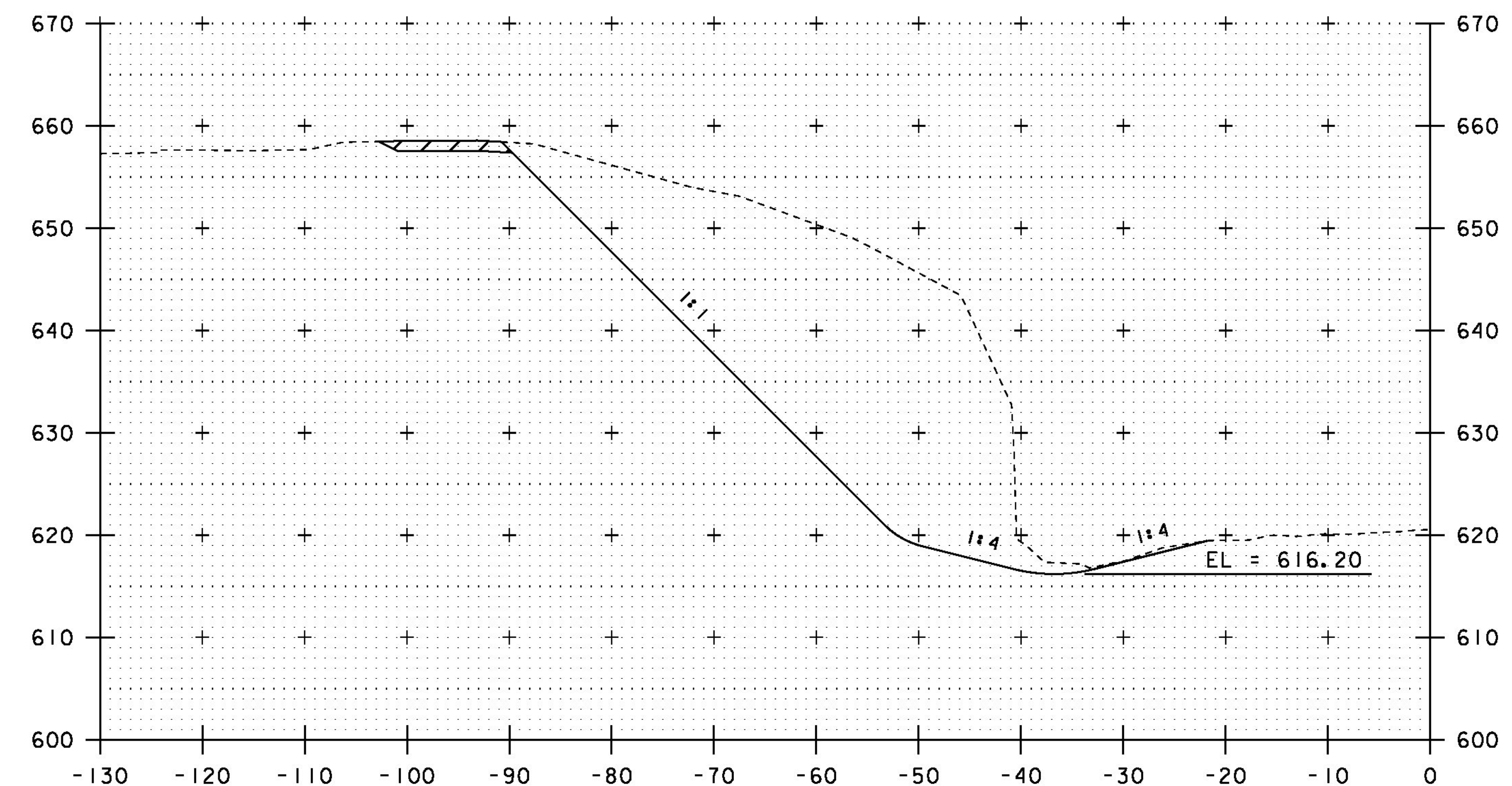
1983+00

STA. 1982+50 TO STA. 1983+25

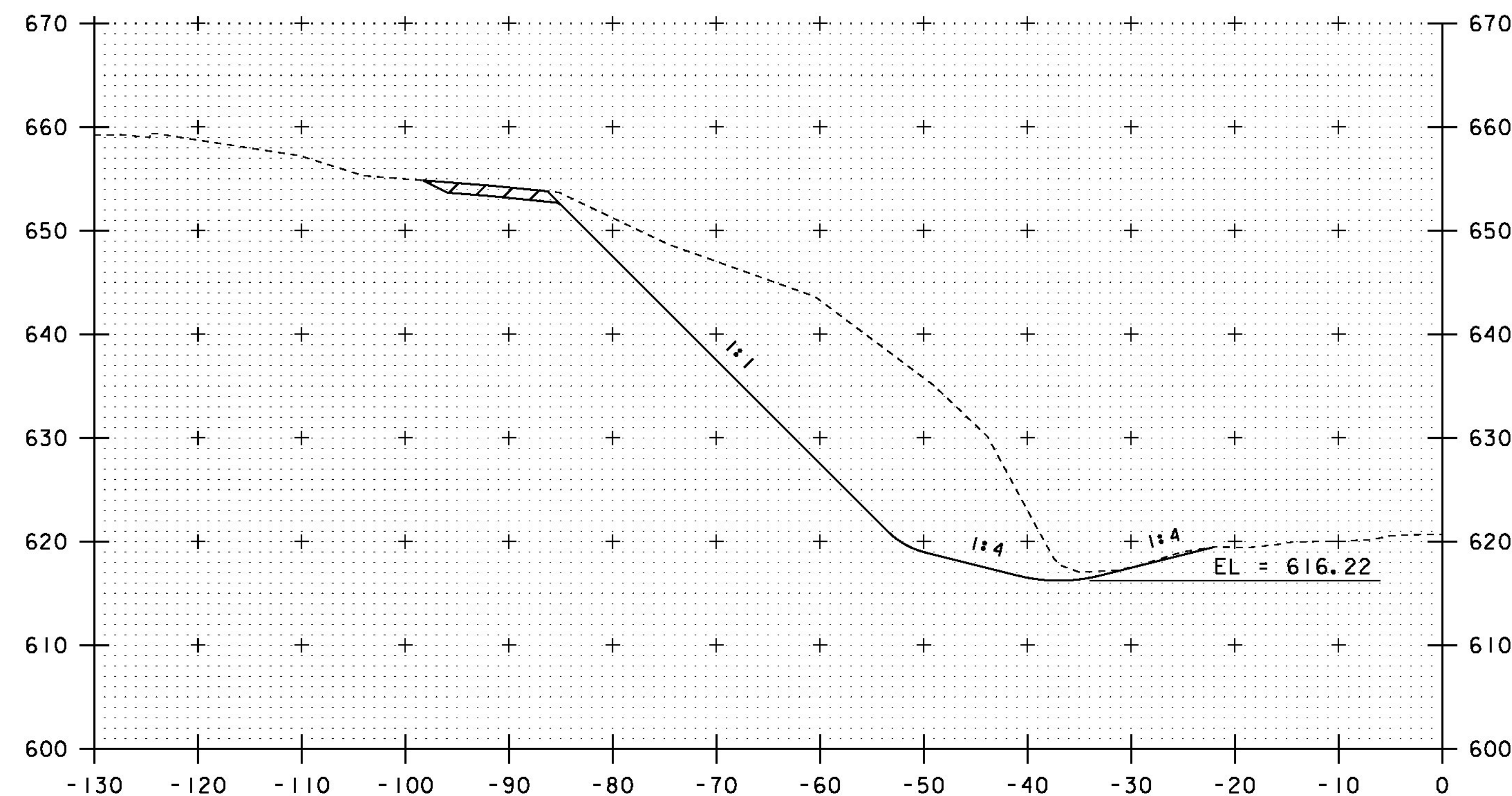
PROJECT NAME: ROCKINGHAM	PLOT DATE: 29-JAN-2016
PROJECT NUMBER: IM 091-I(71)	DRAWN BY: A. KEMPTON
FILE NAME: d13a366xs.dgn	CHECKED BY: M. GAMELIN
PROJECT LEADER: B. MARTIN	SHEET 20 OF 35
DESIGNED BY: A. KEMPTON	
CROSS SECTION SHEET 1	



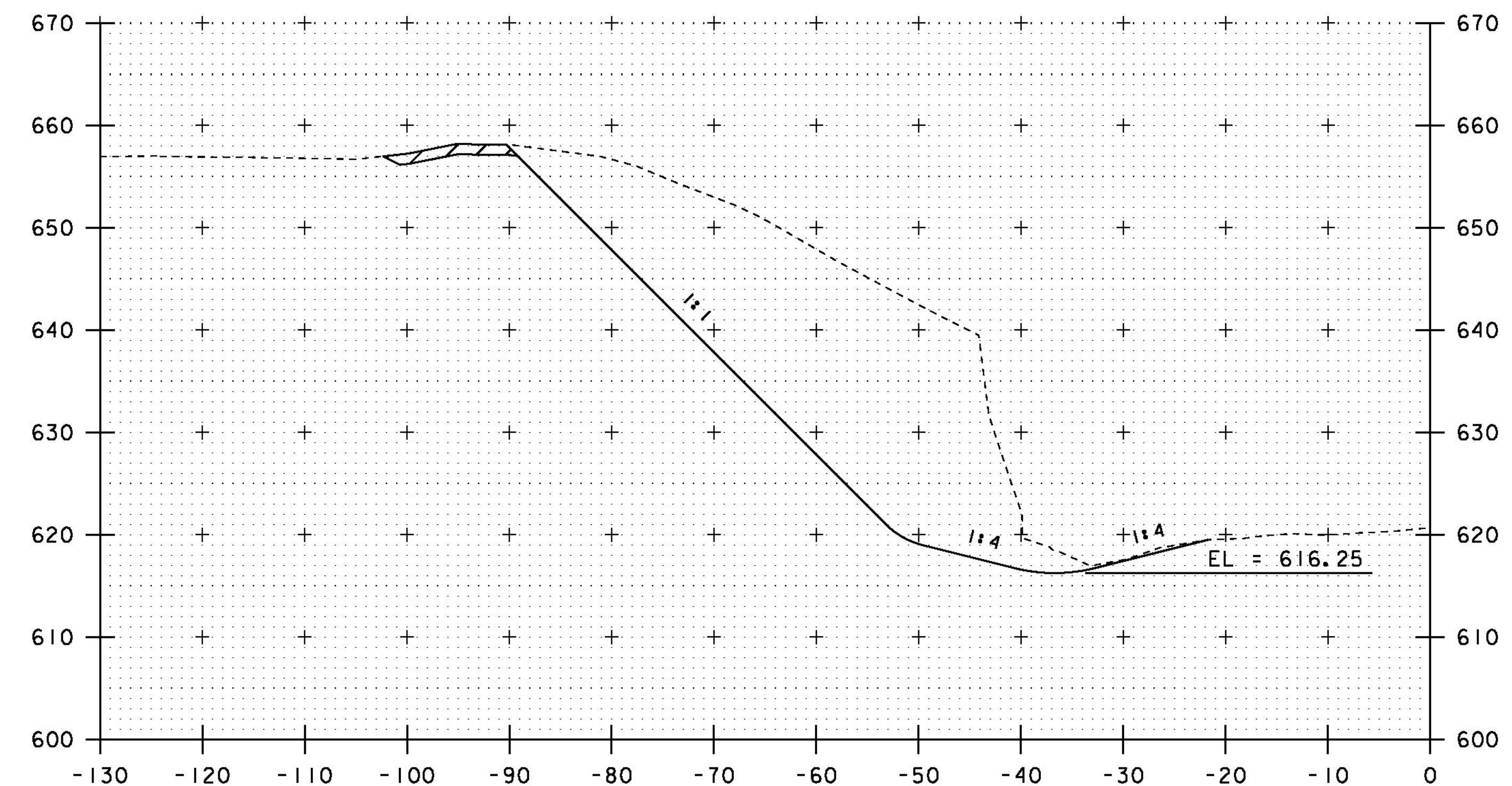
1983+75



1984+25



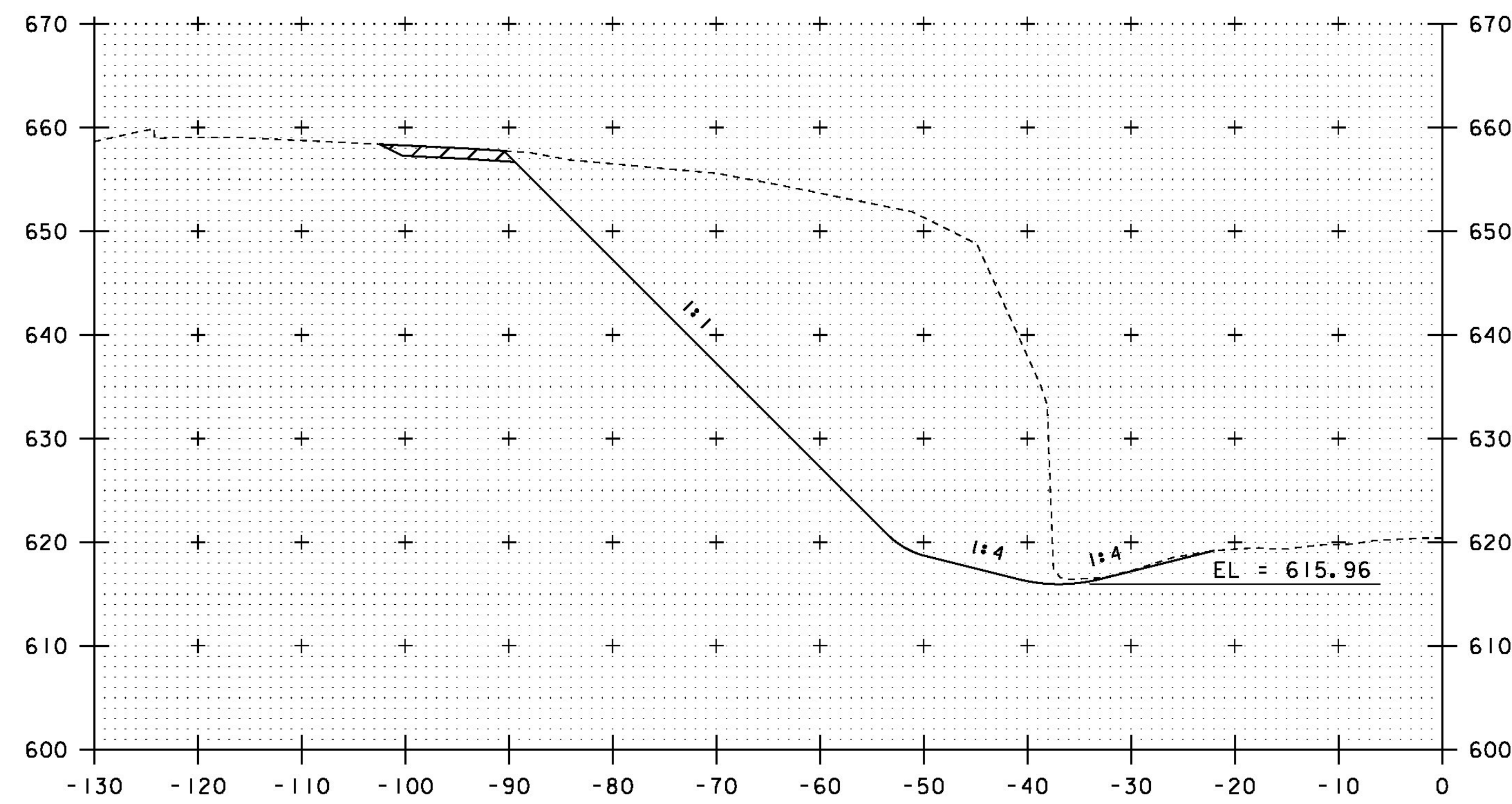
1983+50



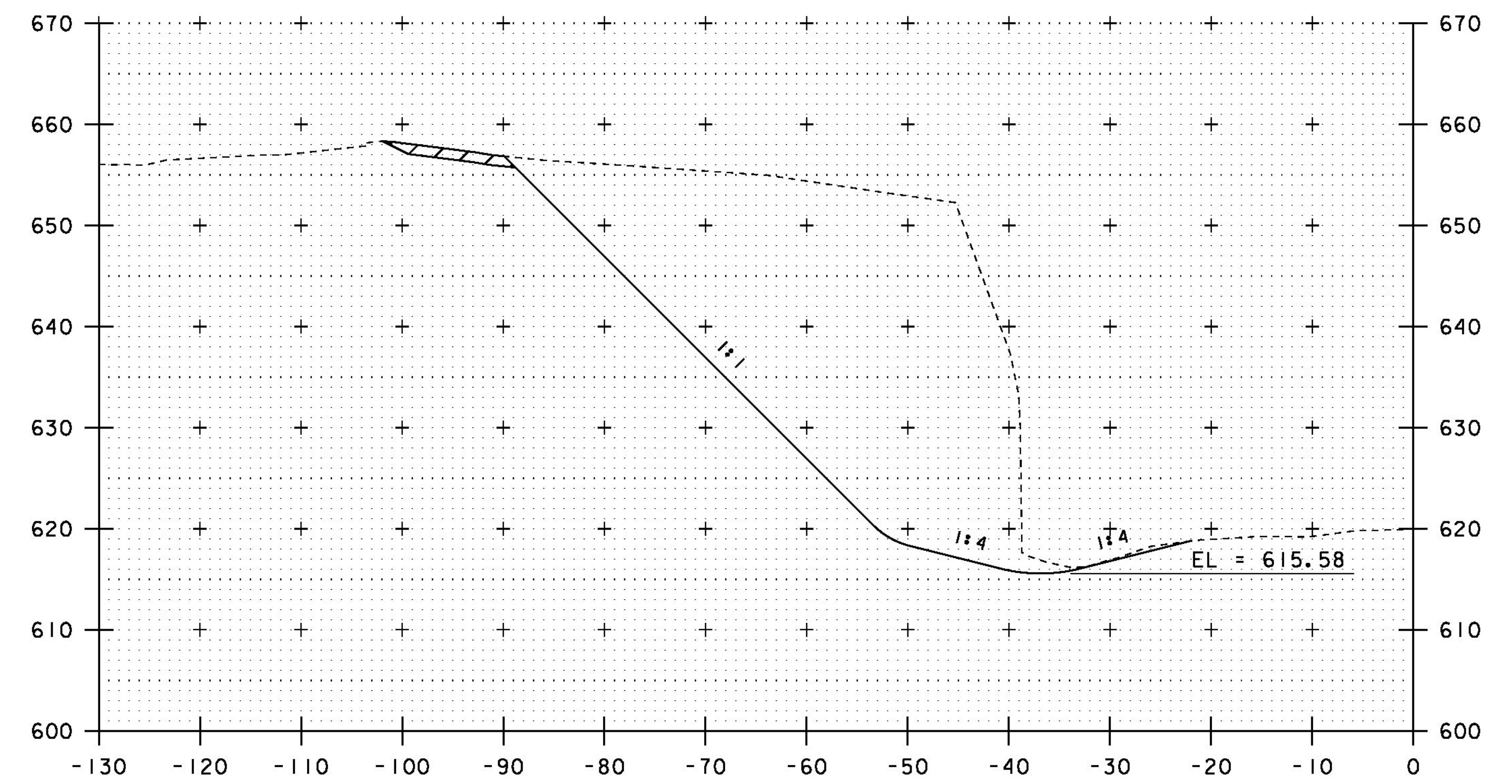
1984+00

STA. 1983+50 TO STA. 1984+25

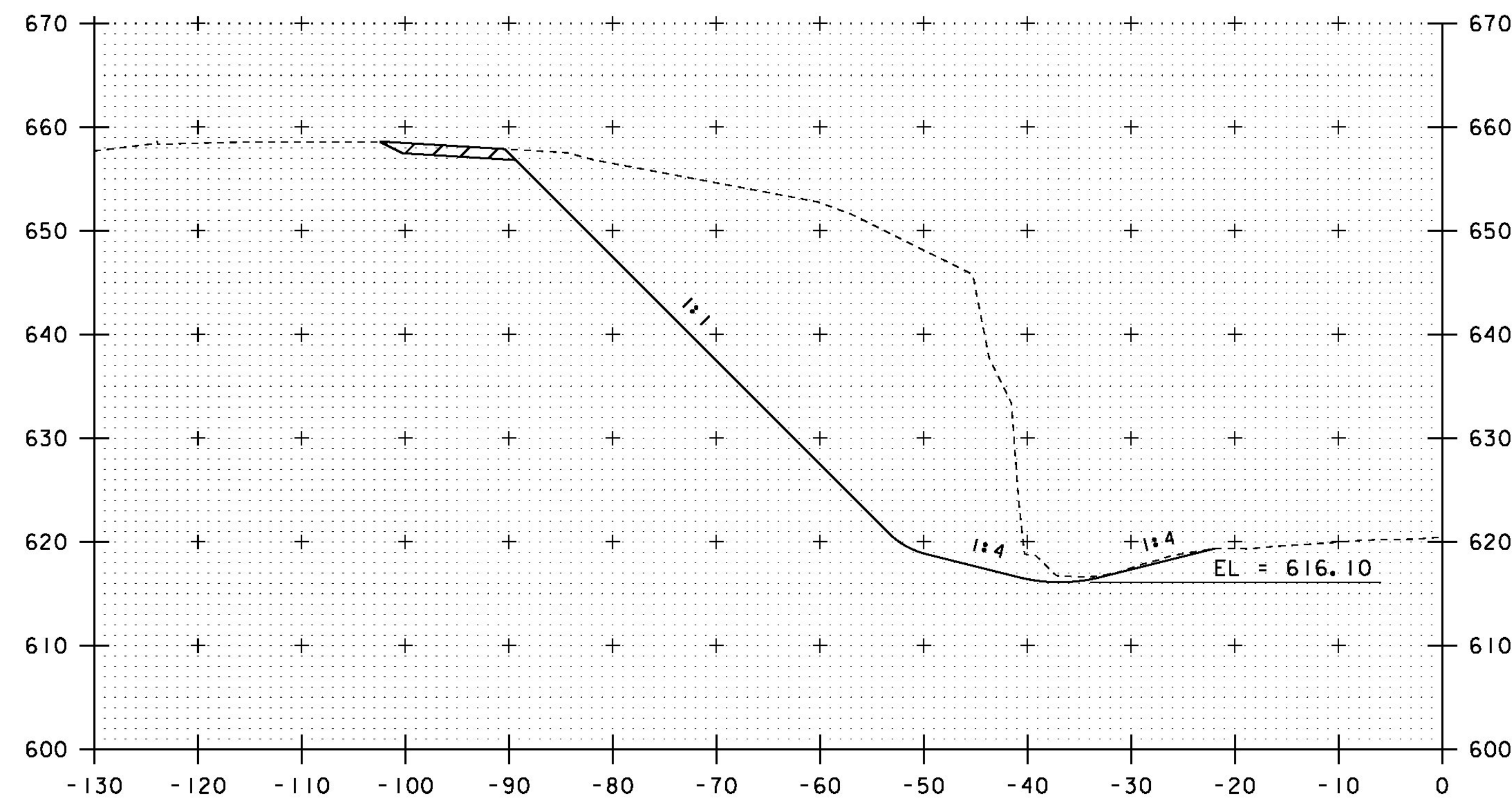
PROJECT NAME: ROCKINGHAM	PLOT DATE: 29-JAN-2016
PROJECT NUMBER: IM 091-1(71)	DRAWN BY: A. KEMPTON
FILE NAME: d13a366xs.dgn	CHECKED BY: M. GAMELIN
DESIGNED BY: A. KEMPTON	SHEET 21 OF 35
CROSS SECTION SHEET 2	



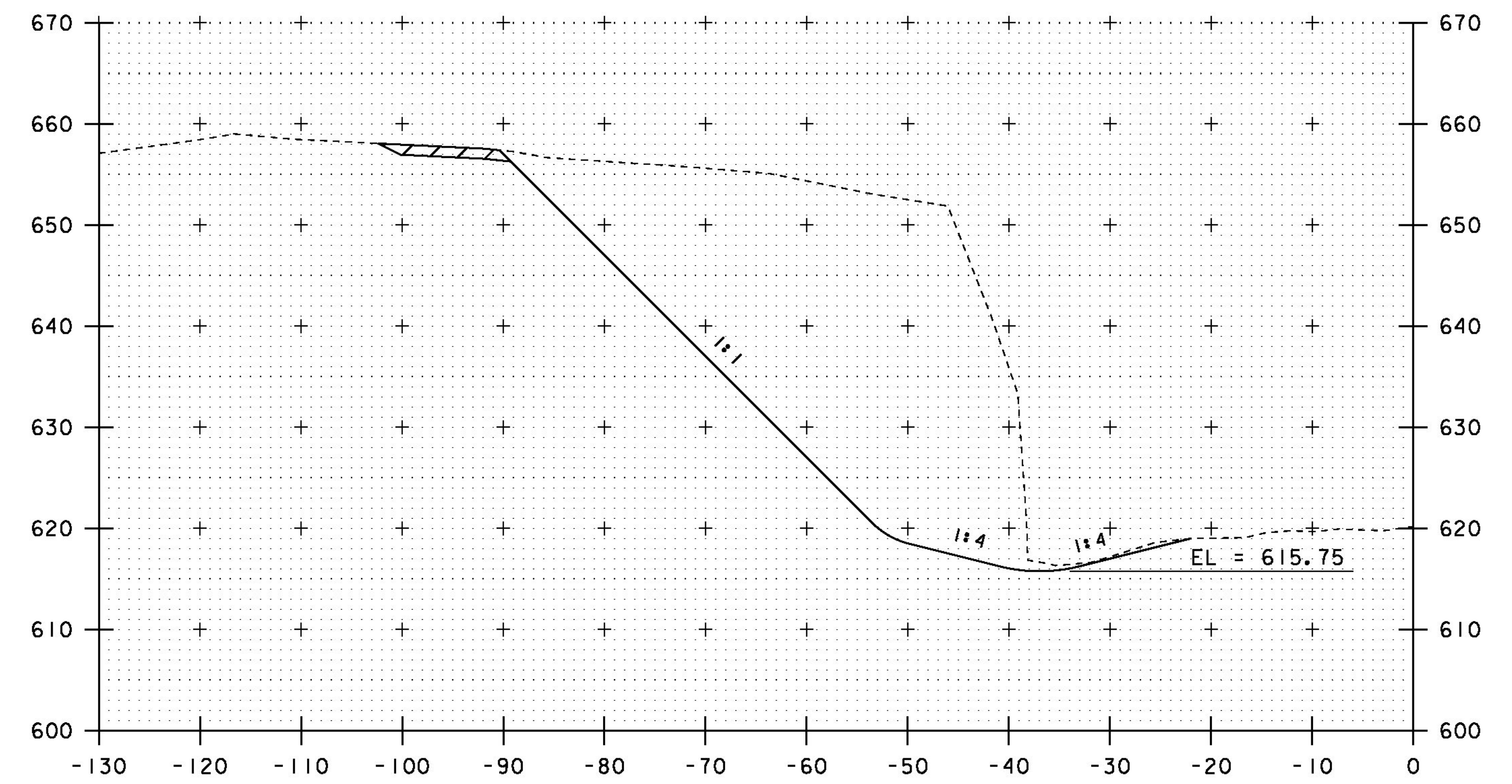
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1985+25



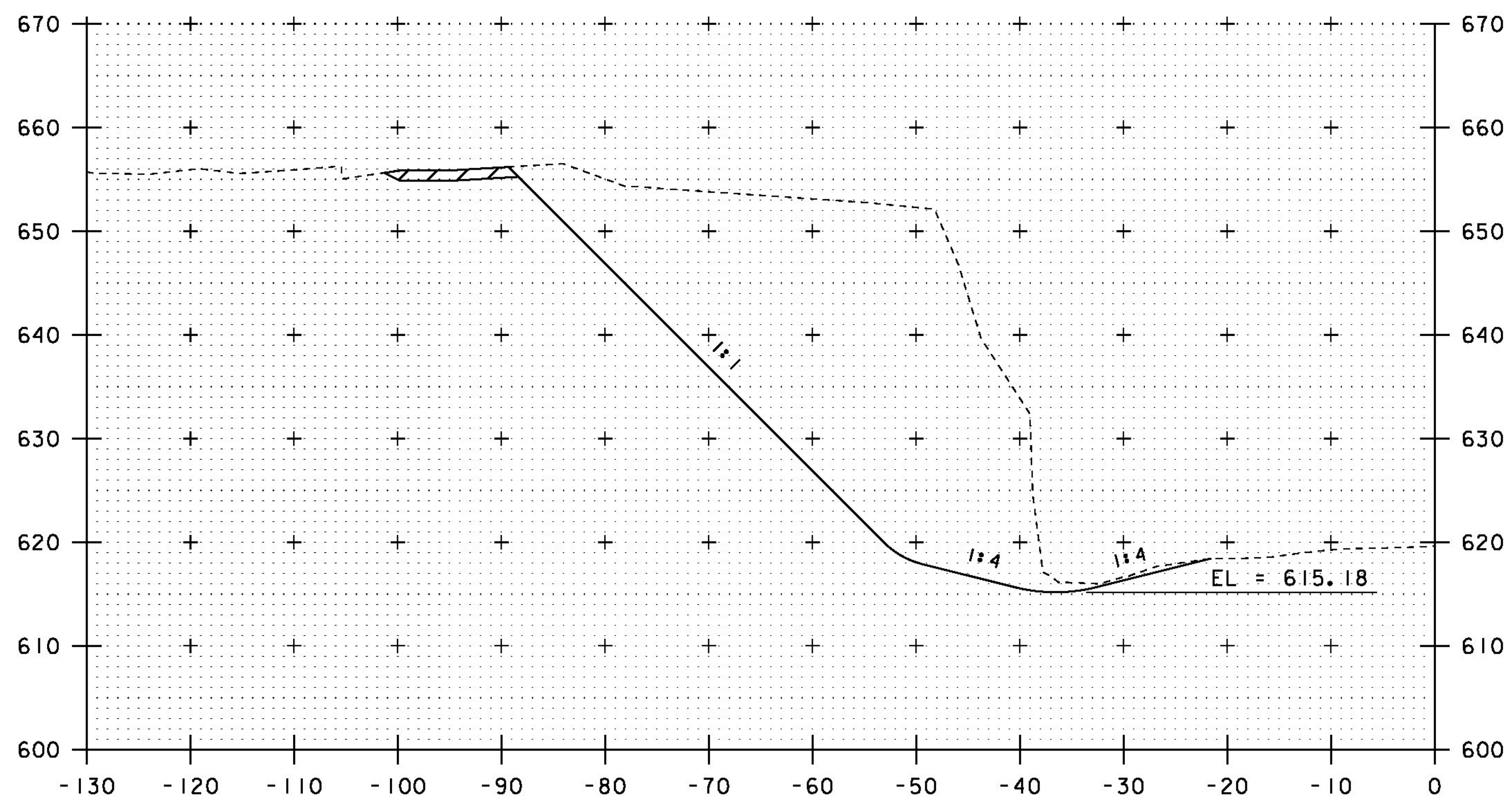
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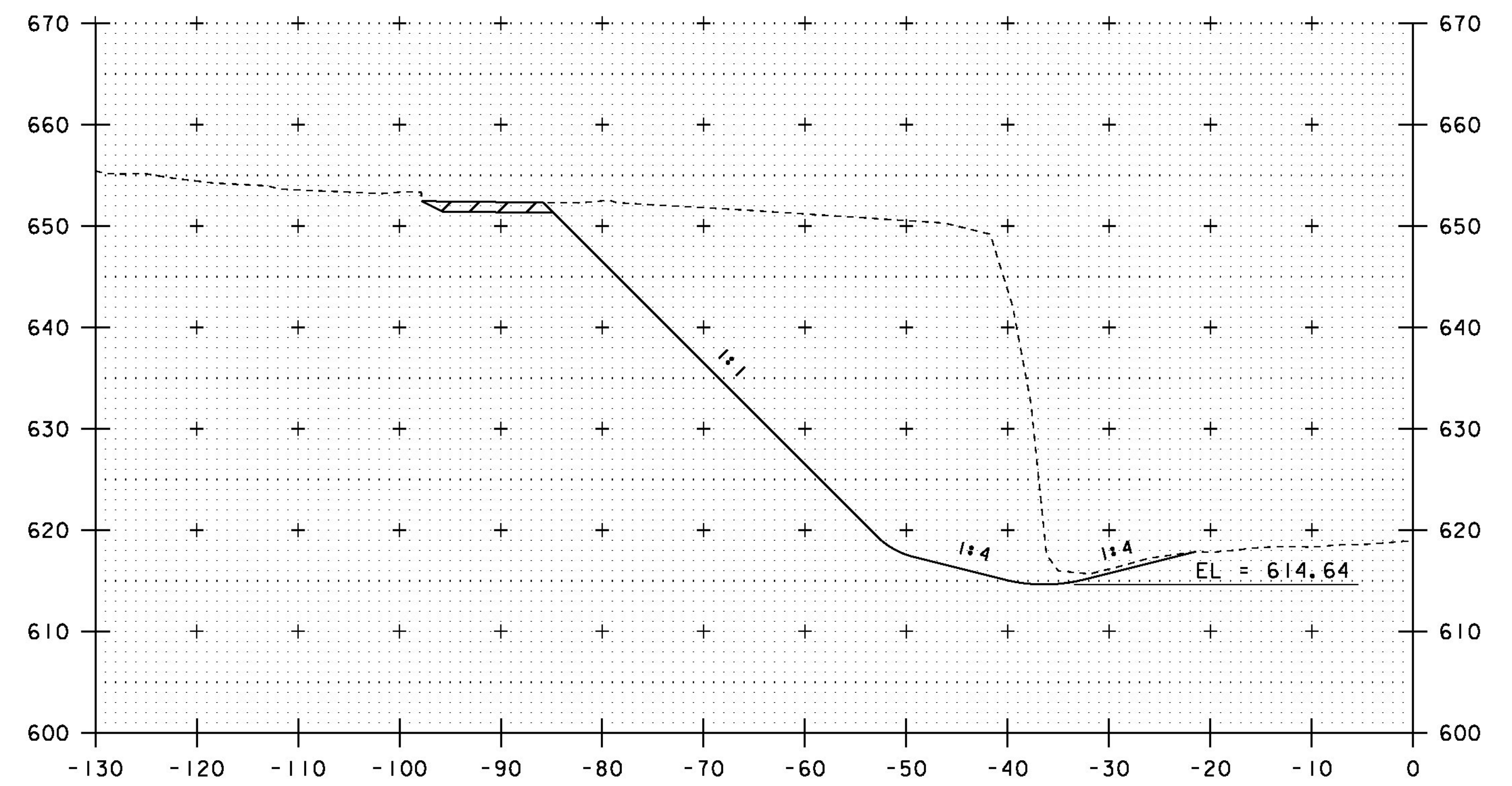
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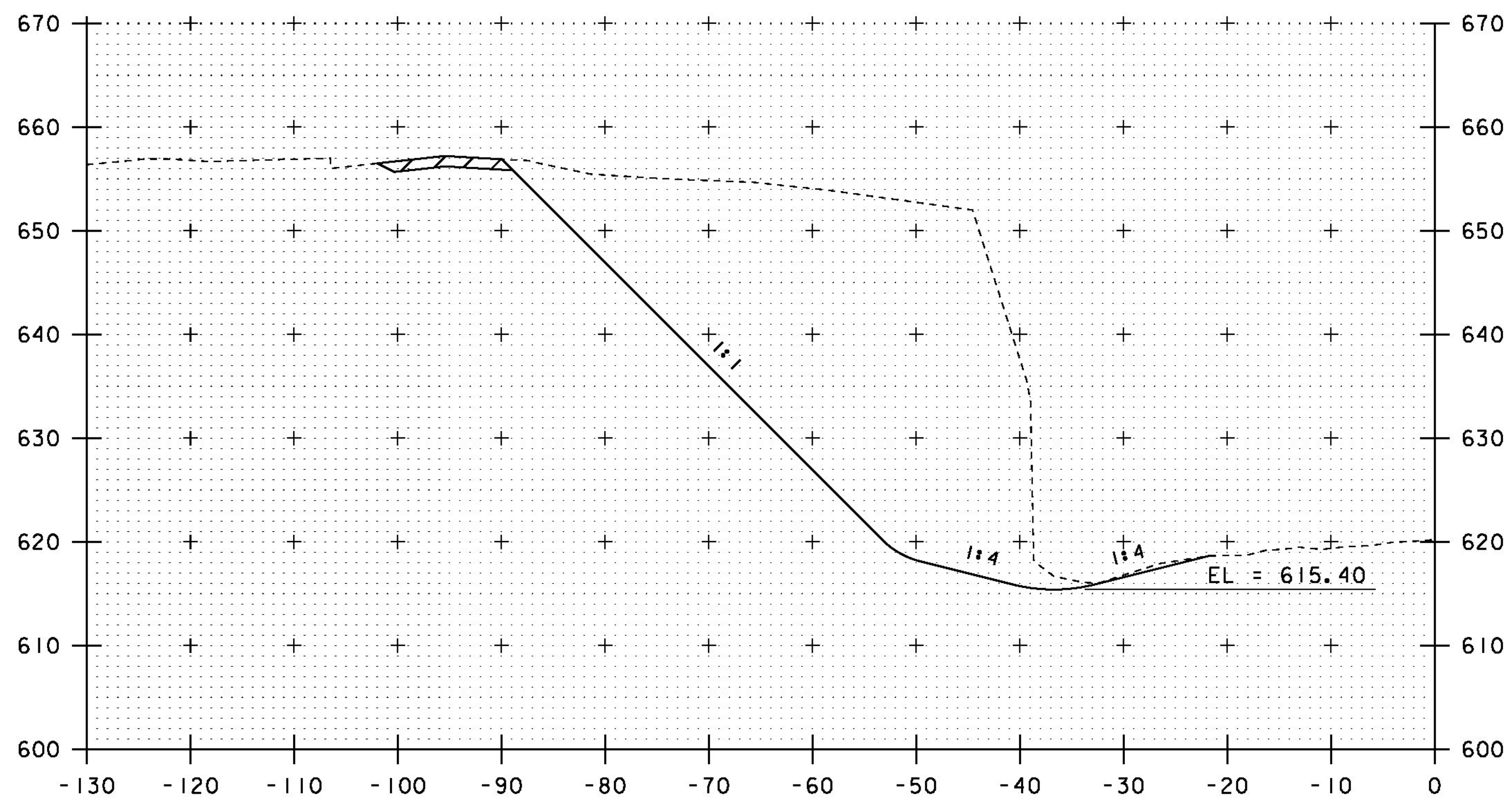
PROJECT NAME: ROCKINGHAM	PLOT DATE: 29-JAN-2016
PROJECT NUMBER: IM 091-1(71)	DRAWN BY: A. KEMPTON
FILE NAME: d13a366xs.dgn	CHECKED BY: M. GAMELIN
PROJECT LEADER: B. MARTIN	SHEET 22 OF 35
DESIGNED BY: A. KEMPTON	
CROSS SECTION SHEET 3	



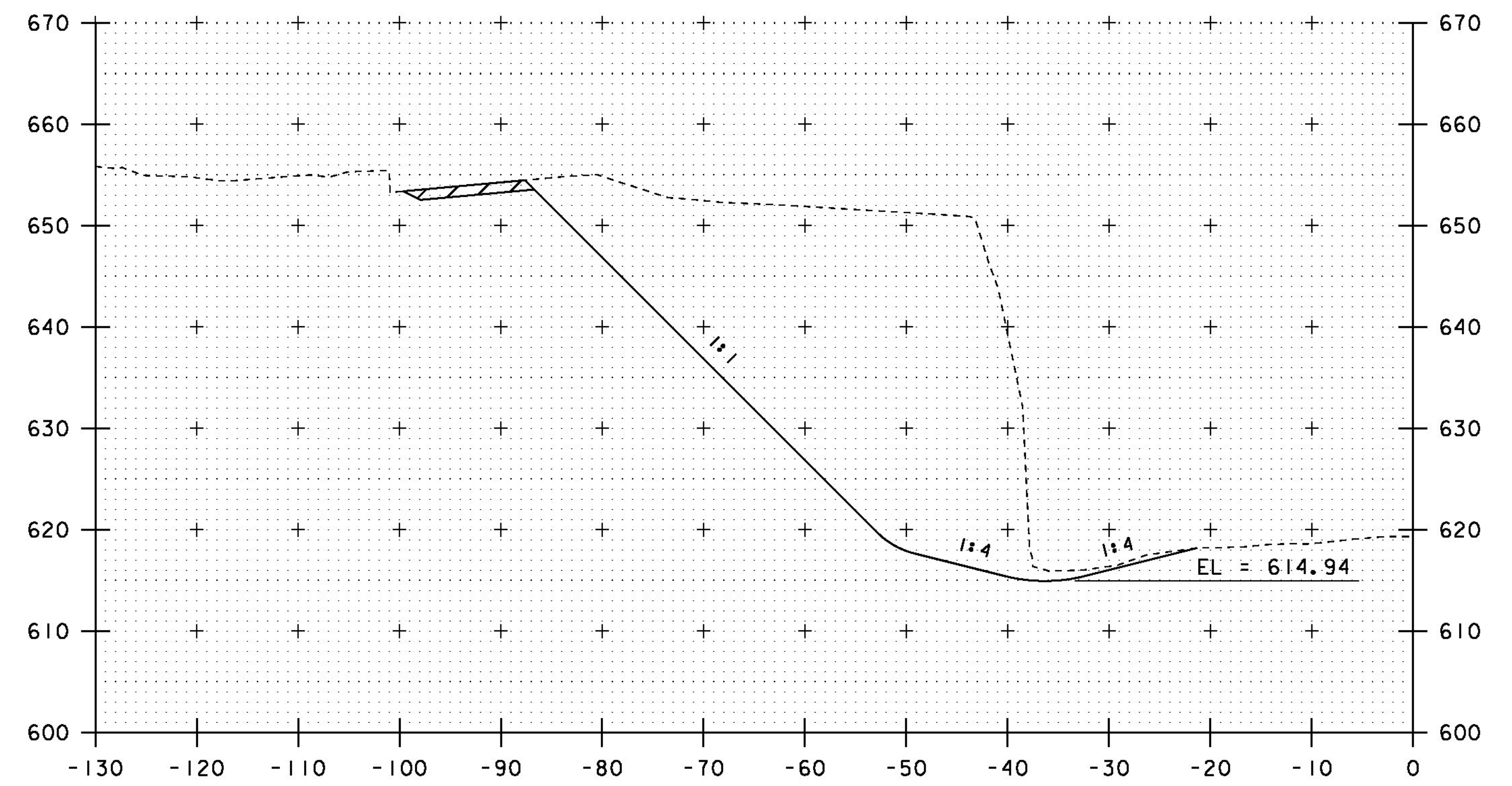
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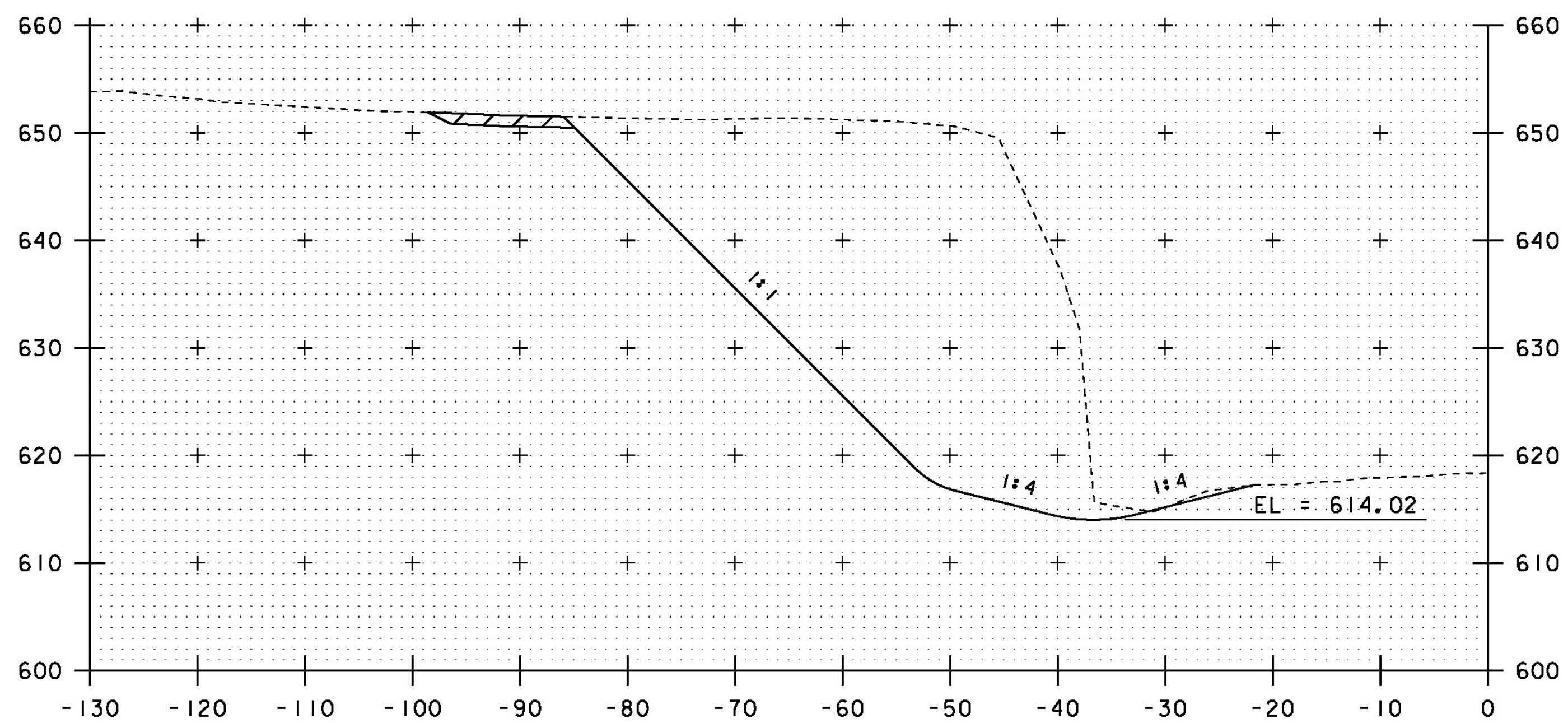
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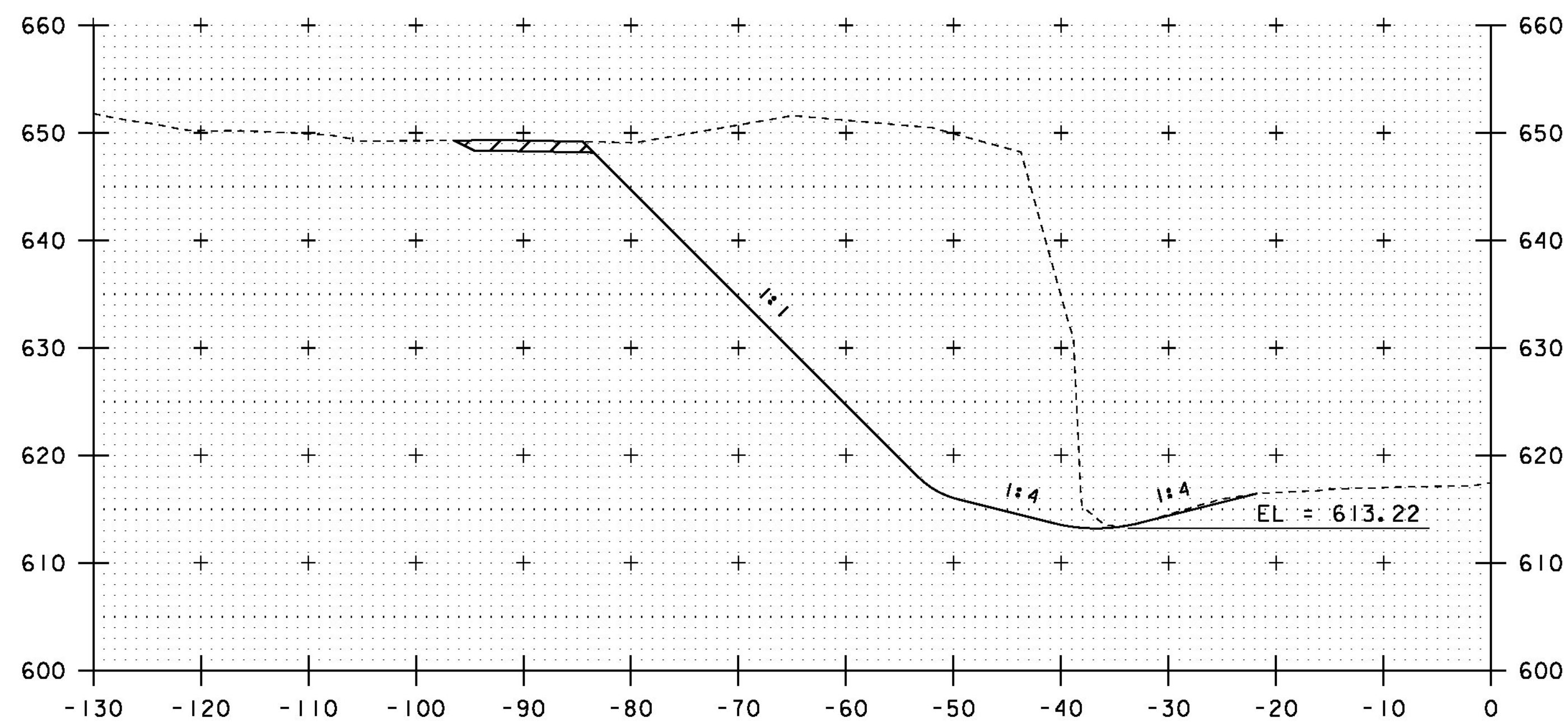
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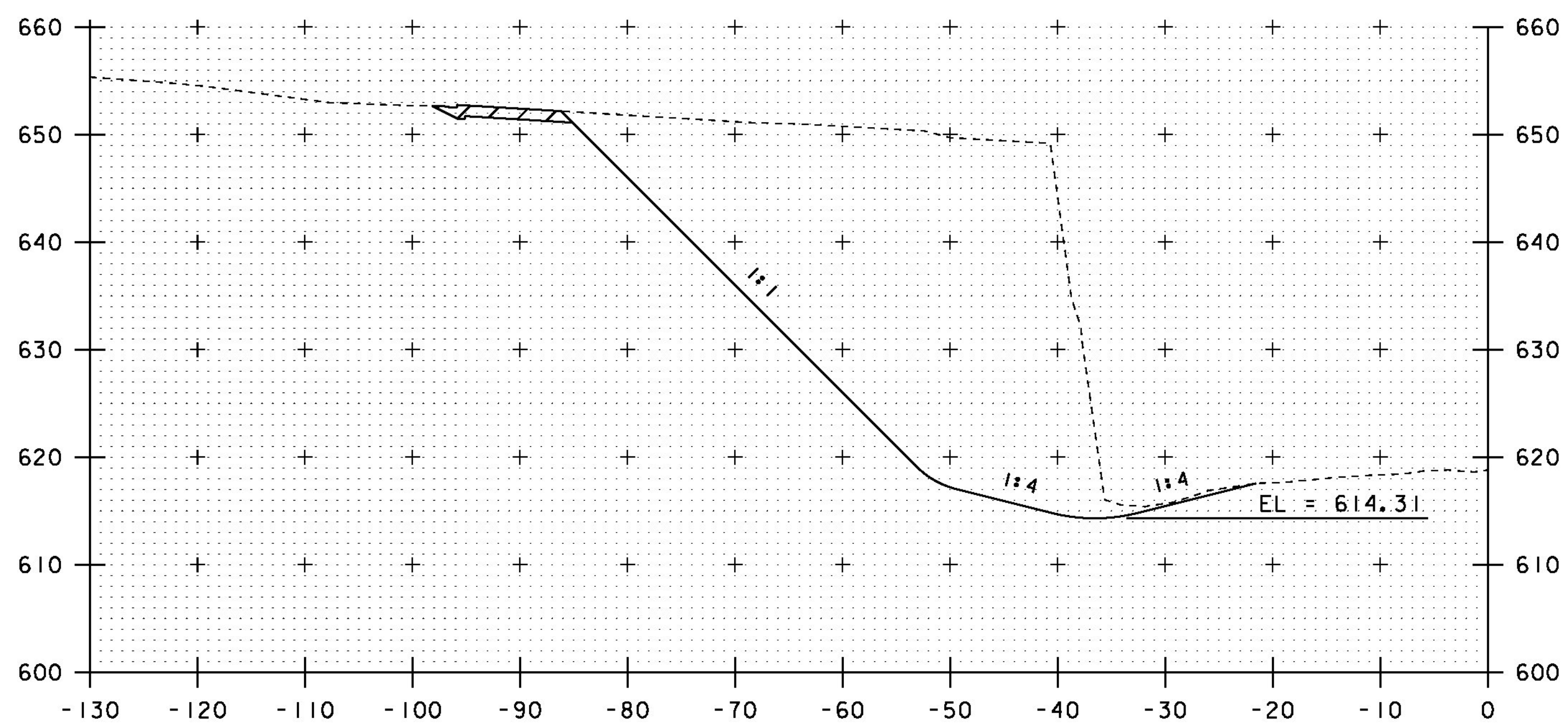
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PROJECT NUMBER: IM 091-1(71)	DRAWN BY: A. KEMPTON
FILE NAME: d13a366xs.dgn	CHECKED BY: M. GAMELIN
DESIGNED BY: A. KEMPTON	SHEET 23 OF 35
CROSS SECTION SHEET 4	



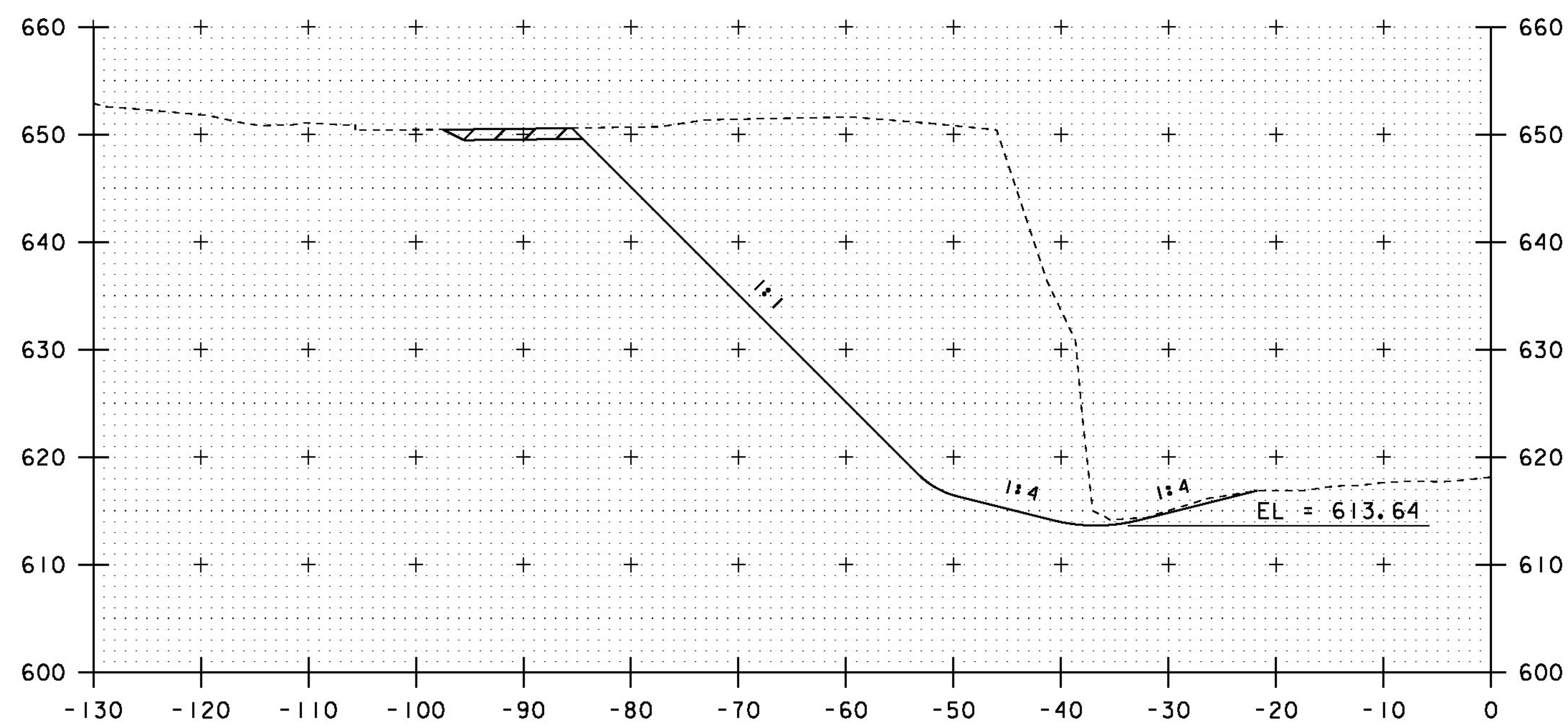
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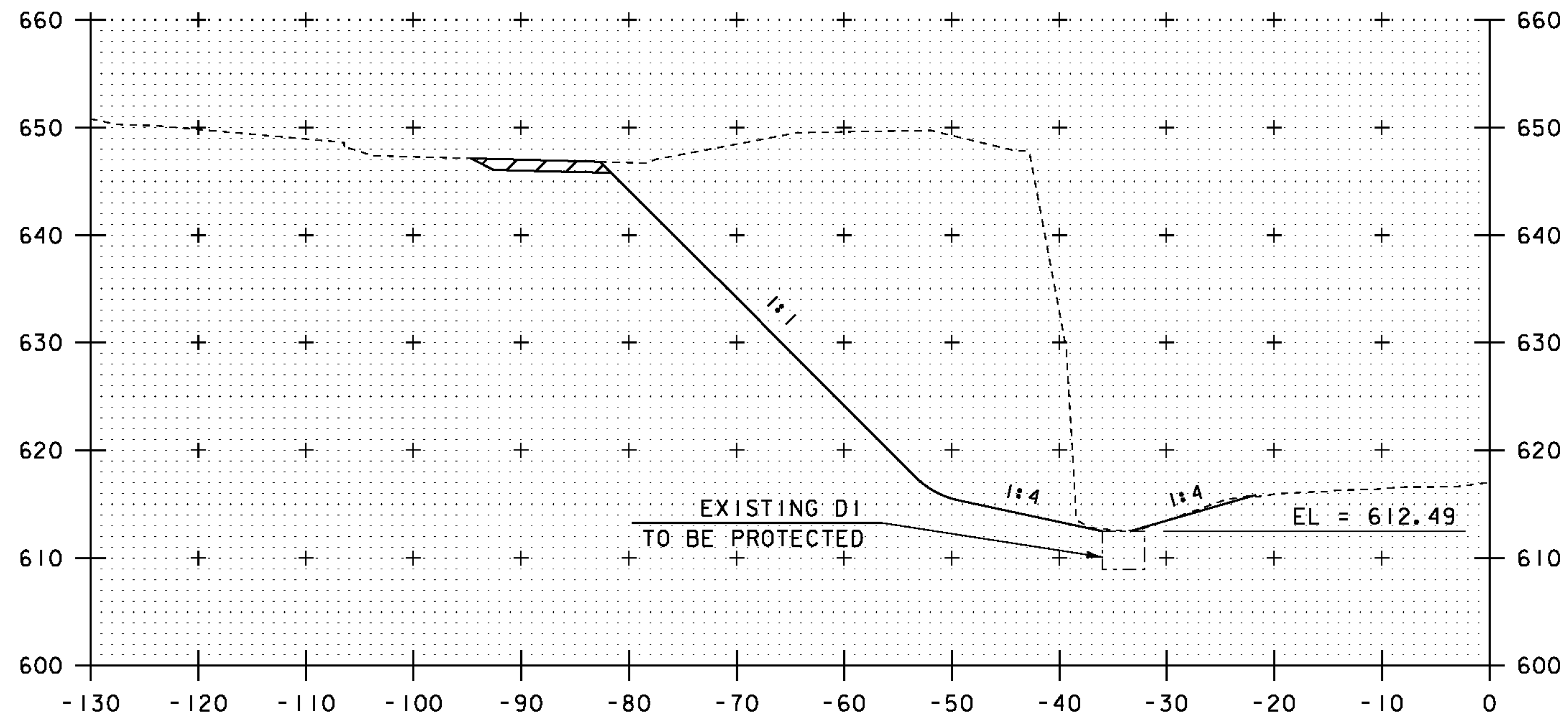
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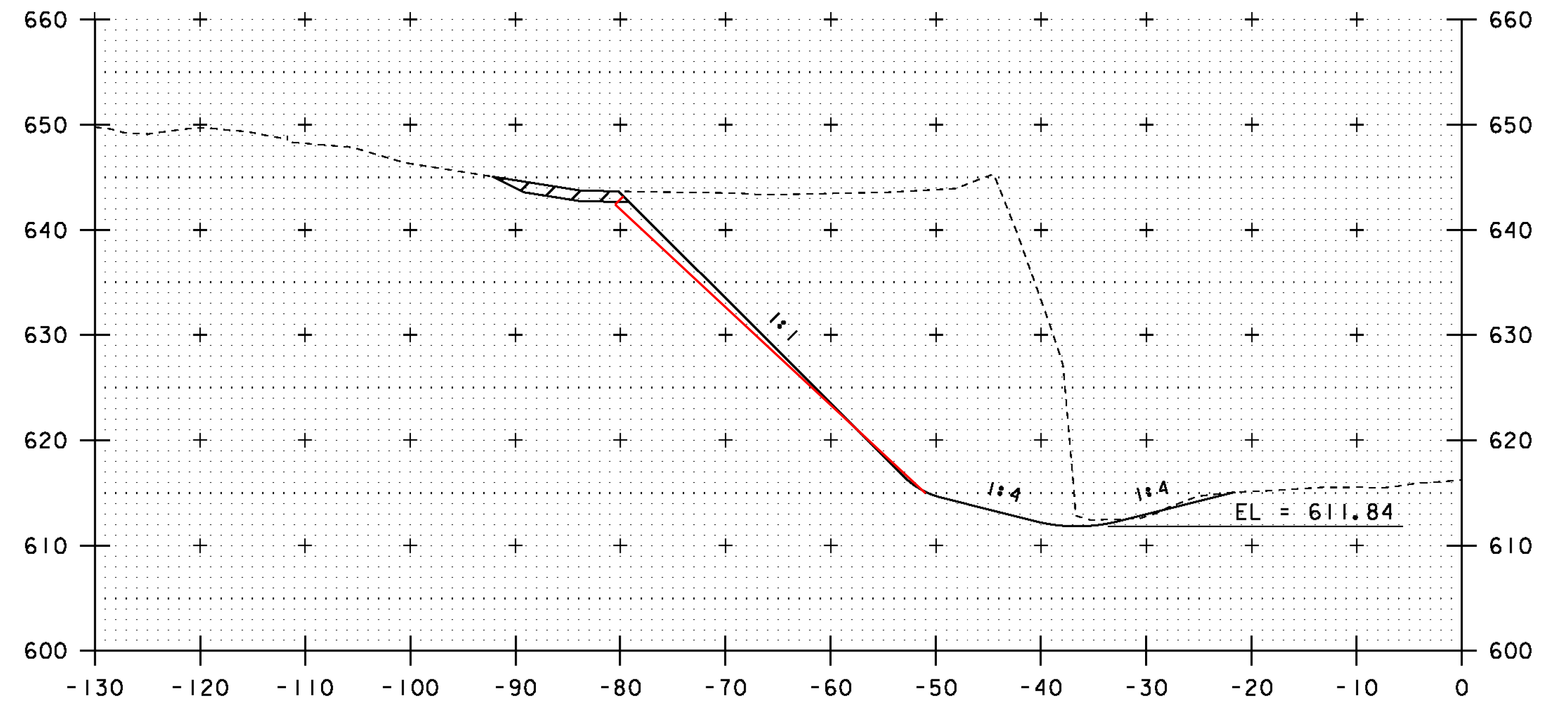
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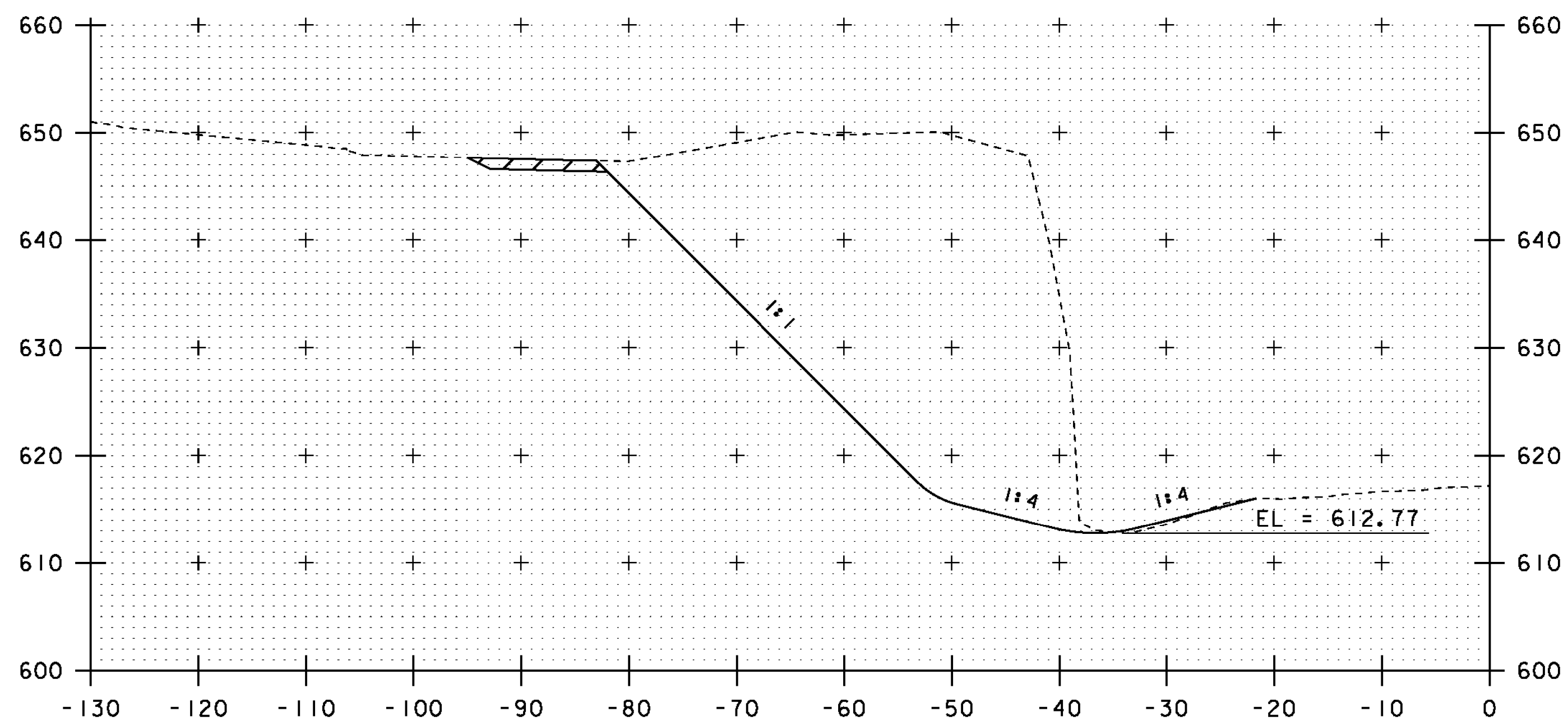
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PROJECT NUMBER: IM 091-1(71)	DRAWN BY: A. KEMPTON
FILE NAME: d13a366xs.dgn	CHECKED BY: M. GAMELIN
PROJECT LEADER: B. MARTIN	SHEET 24 OF 35
DESIGNED BY: A. KEMPTON	
CROSS SECTION SHEET 5	



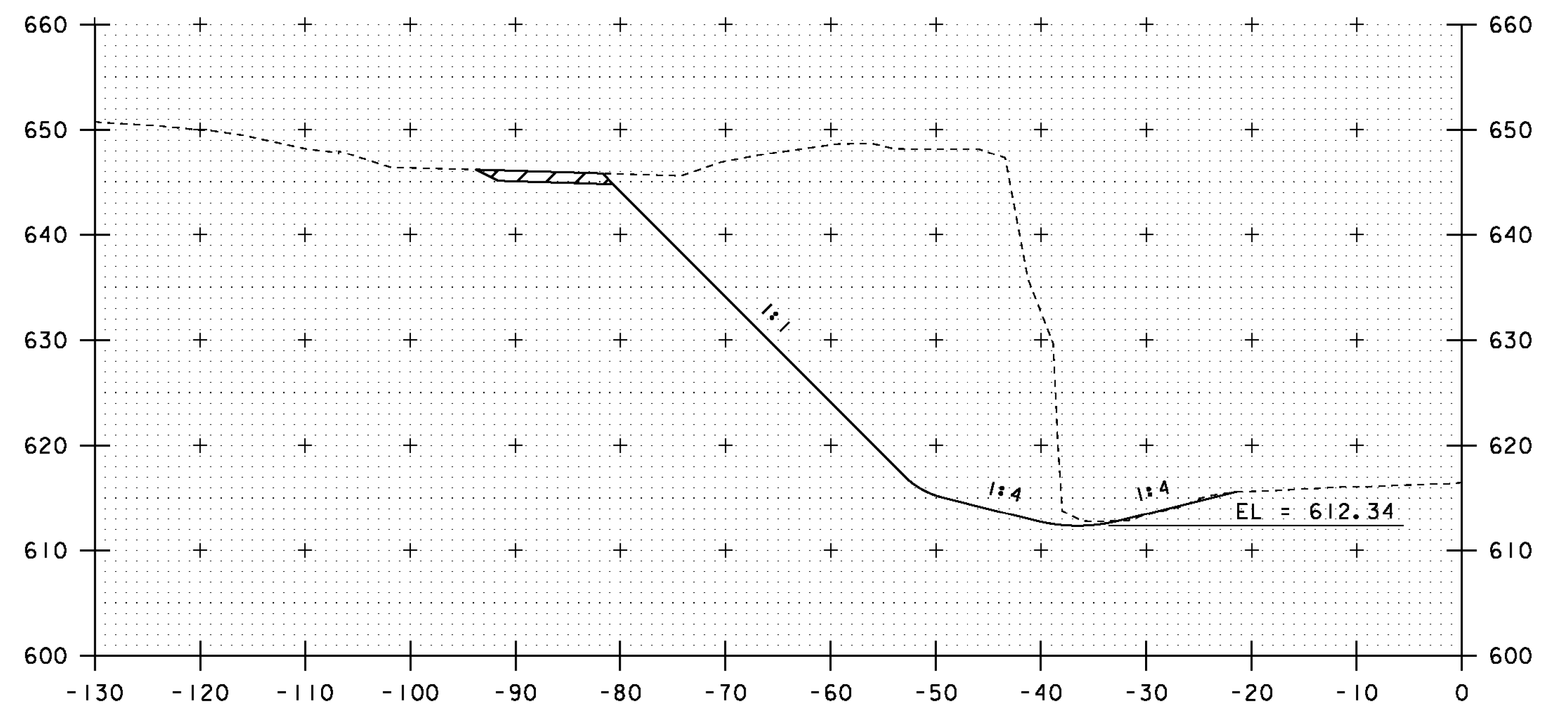
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1988+00



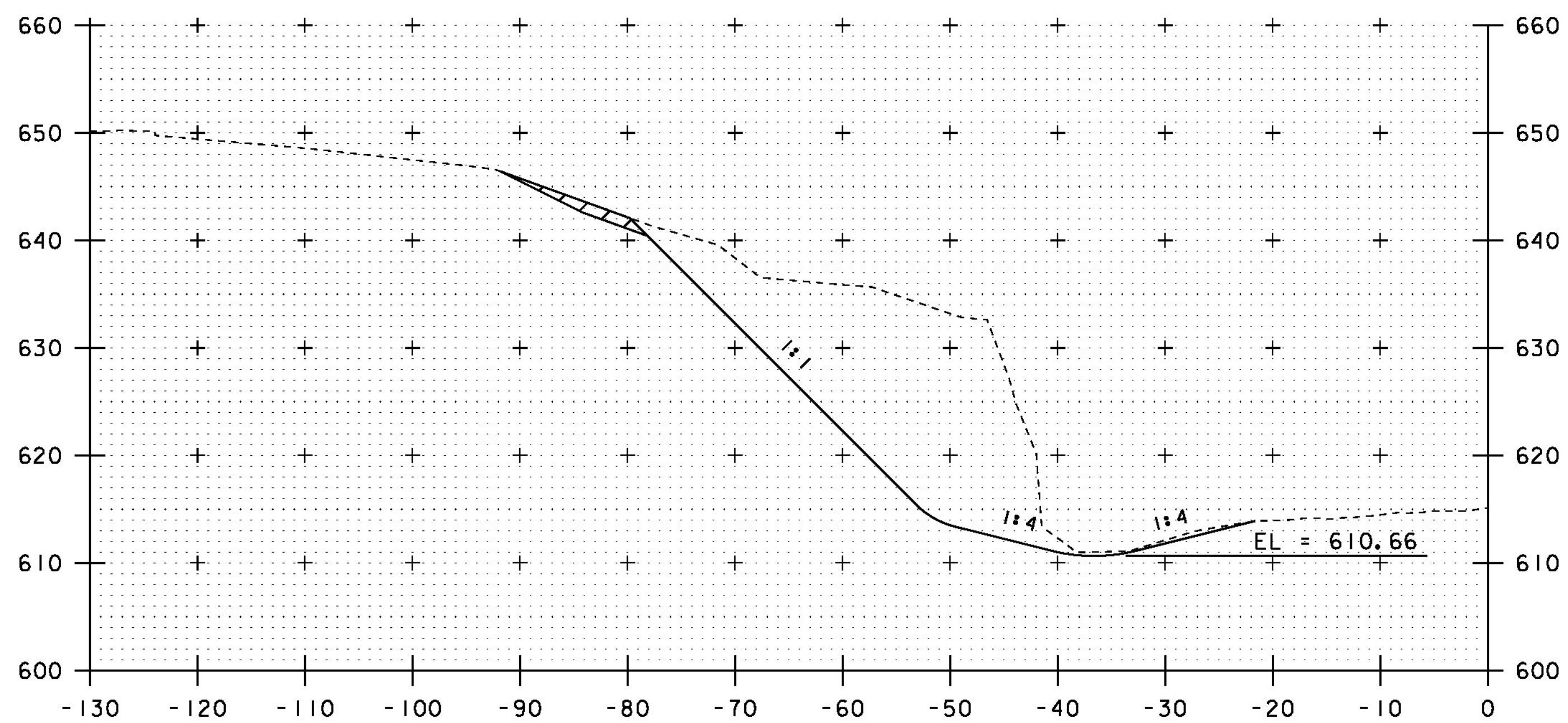
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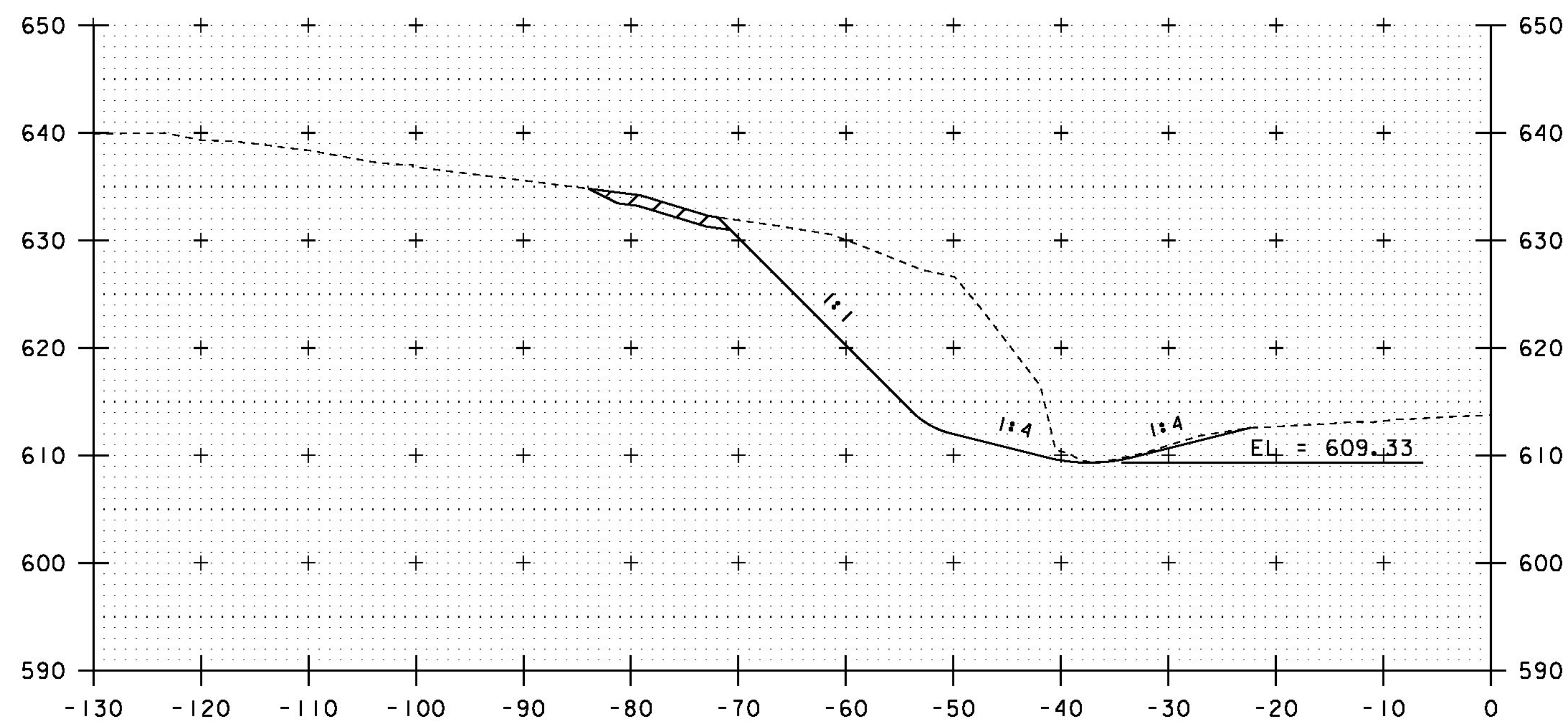
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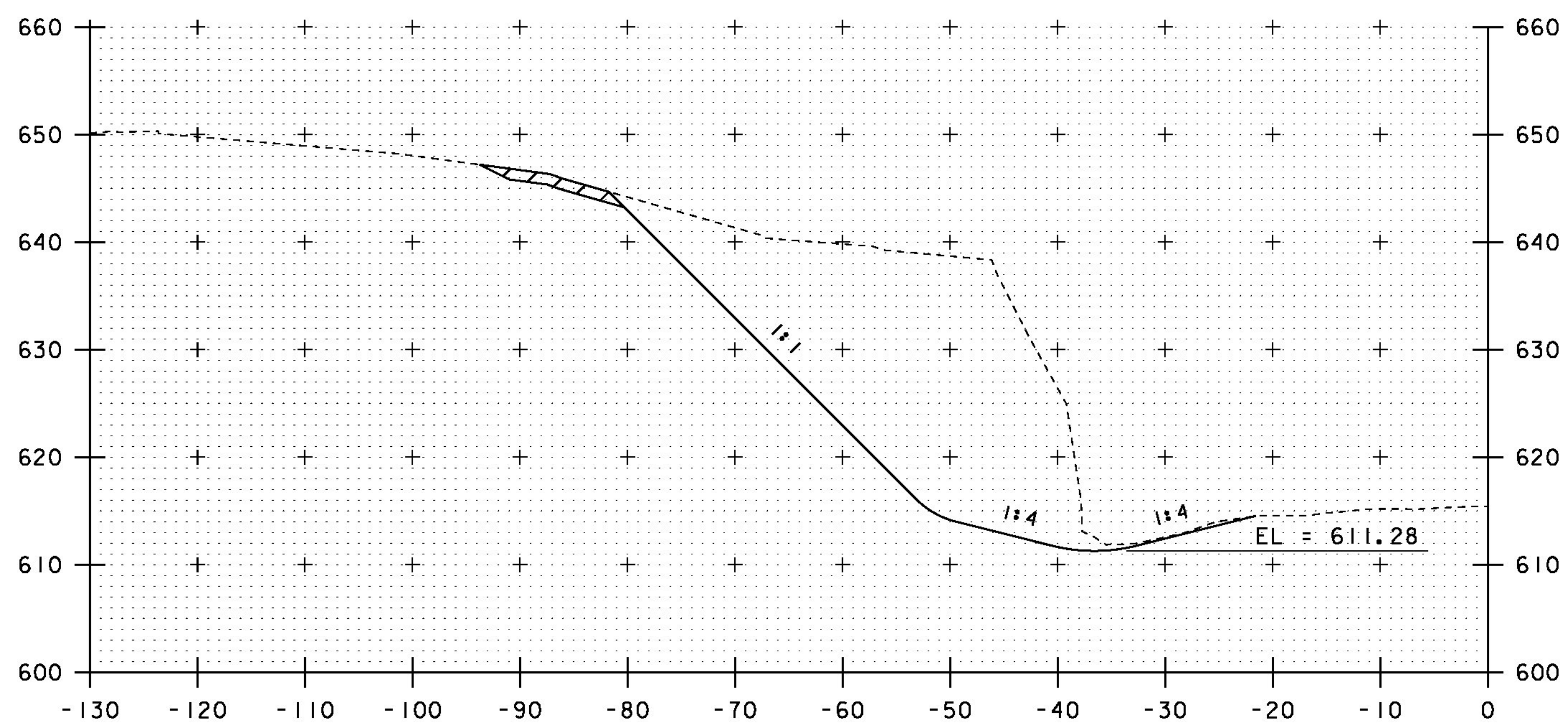
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PROJECT NUMBER: IM 091-(7)	DRAWN BY: A. KEMPTON
FILE NAME: d13a366xs.dgn	CHECKED BY: M. GAMELIN
PROJECT LEADER: B. MARTIN	SHEET 25 OF 35
DESIGNED BY: A. KEMPTON	
CROSS SECTION SHEET 6	



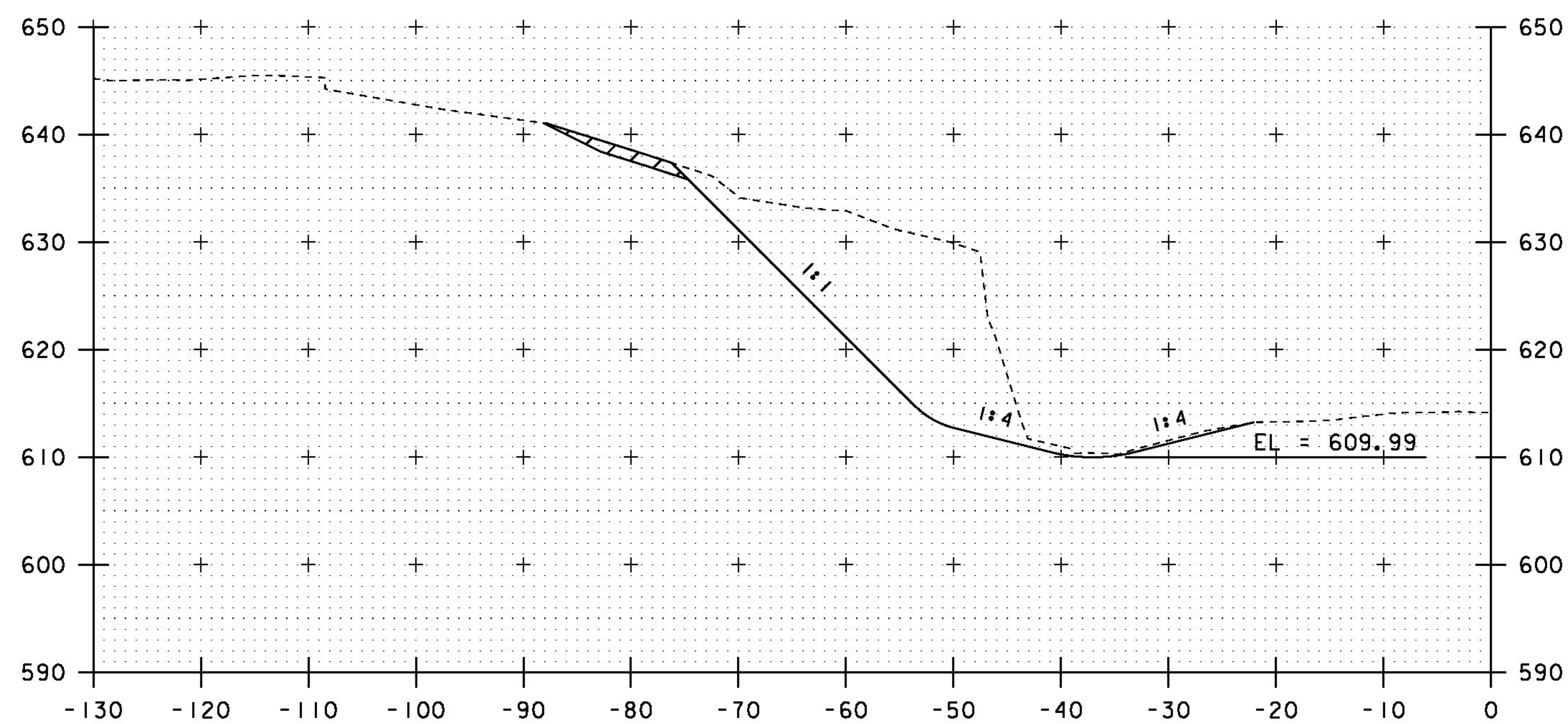
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1989+00



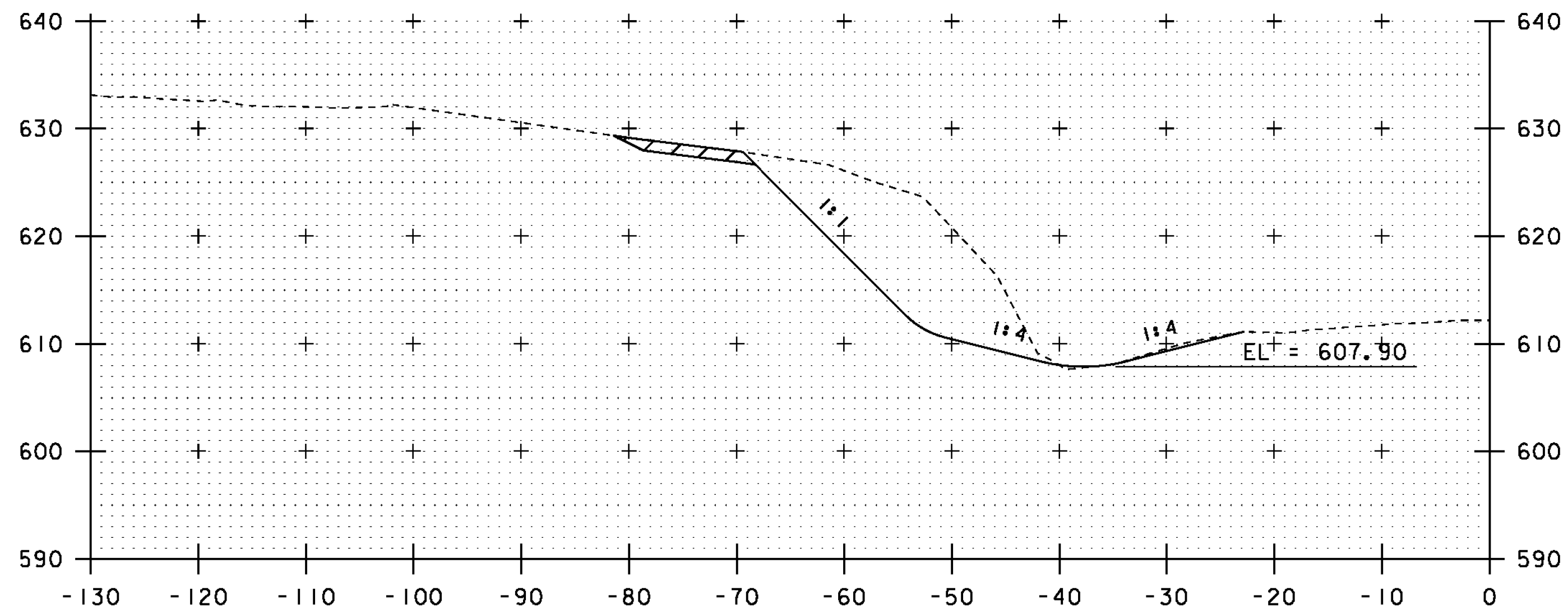
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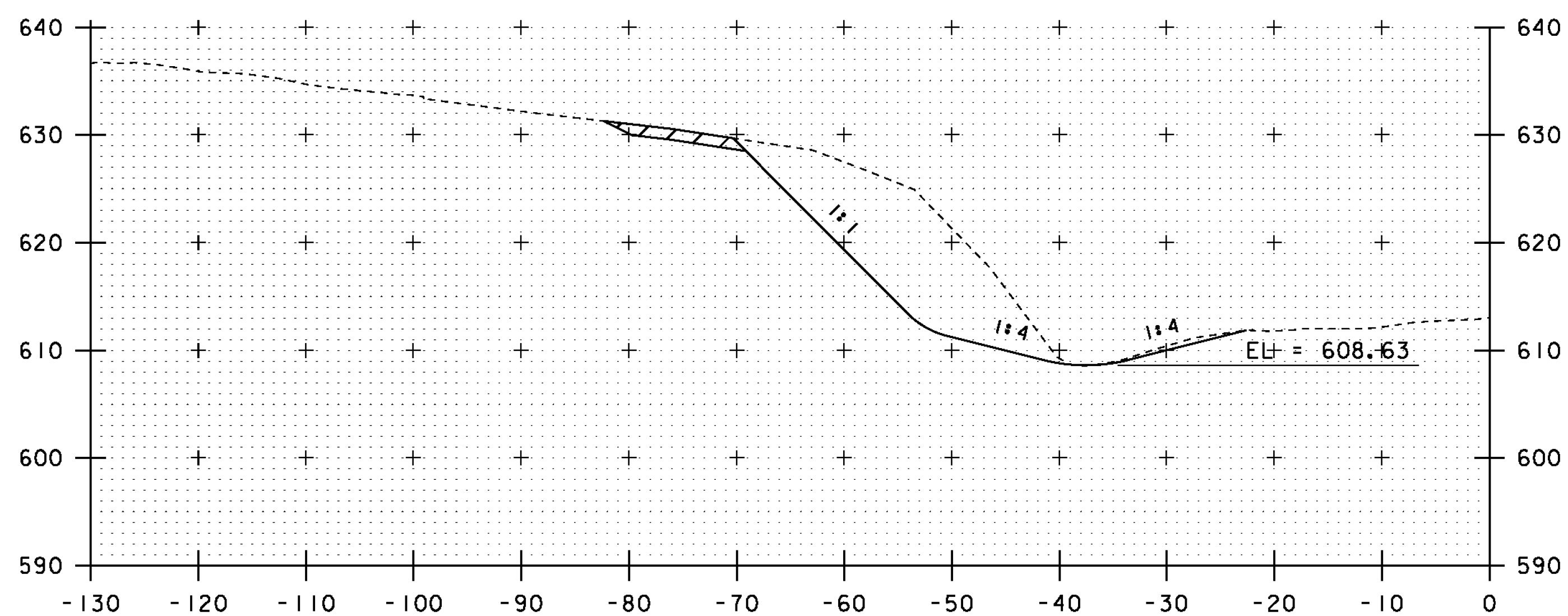
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STA. 1988+25 TO STA. 1989+00

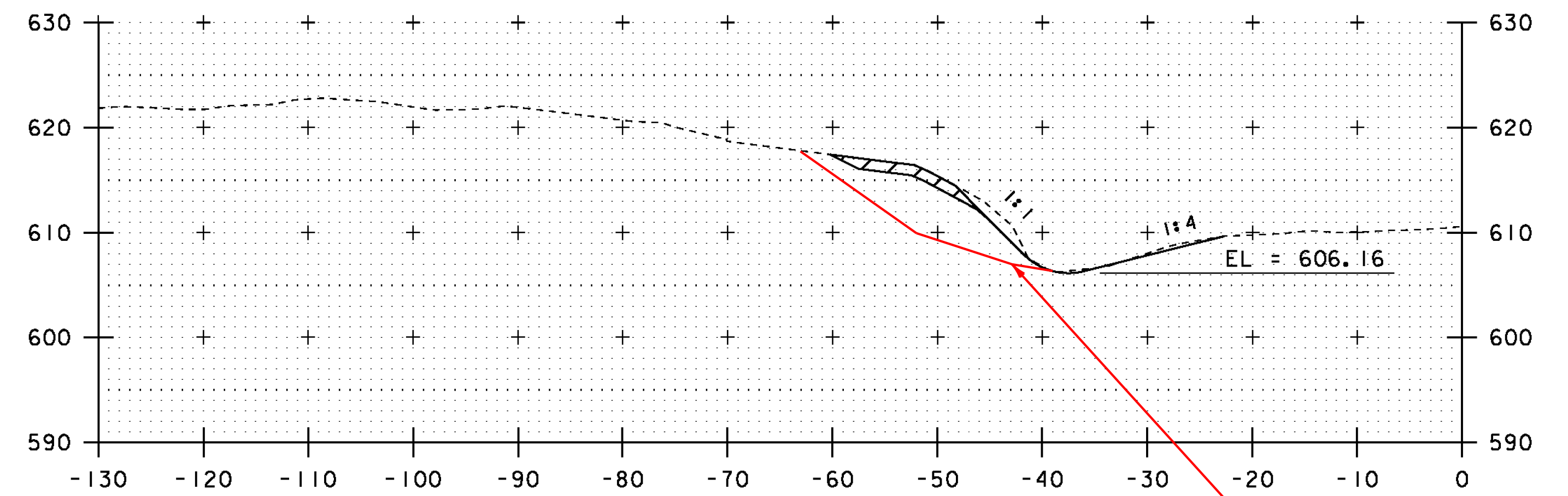
PROJECT NAME: ROCKINGHAM	PLOT DATE: 29-JAN-2016
PROJECT NUMBER: IM 091-I(71)	DRAWN BY: A. KEMPTON
FILE NAME: d13a366xs.dgn	CHECKED BY: M. GAMELIN
PROJECT LEADER: B. MARTIN	SHEET 26 OF 35
DESIGNED BY: A. KEMPTON	
CROSS SECTION SHEET 7	



1989+50

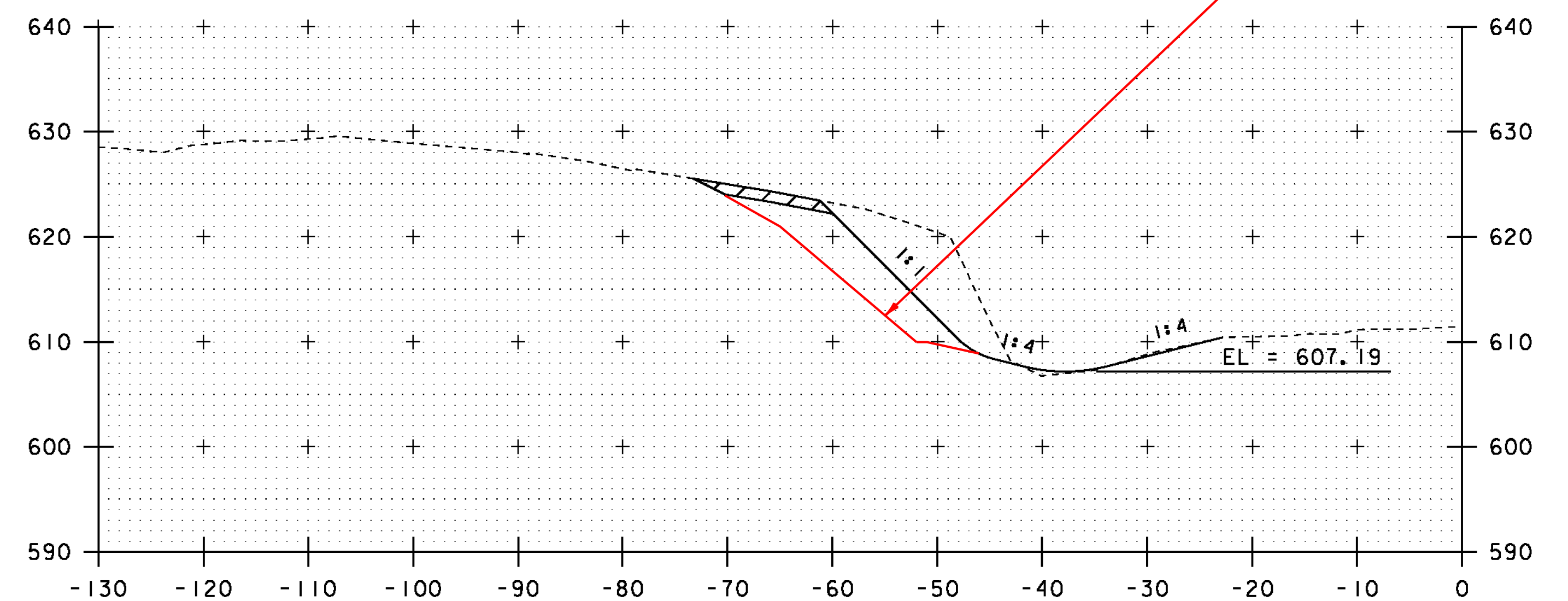


1989+25



1990+00  
END PROJECT

RED LINES INDICATE FINAL LIMITS  
OF SOLID ROCK EXCAVATION (TYP.)



1989+75

STA. 1989+25 TO STA. 1990+00

PROJECT NAME: ROCKINGHAM	PLOT DATE: 29-JAN-2016
PROJECT NUMBER: IM 091-(71)	DRAWN BY: A. KEMPTON
FILE NAME: d13a366xs.dgn	CHECKED BY: M. GAMELIN
PROJECT LEADER: B. MARTIN	SHEET 27 OF 35
DESIGNED BY: A. KEMPTON	
CROSS SECTION SHEET 8	

## **LONG TERM CLOSURE AND TEMPORARY TRAFFIC DETOUR NOTES**

1. THE WORK ZONE IS ANTICIPATED TO BE A TEMPORARY LONG TERM CLOSURE (3 DAYS OR GREATER) OF INTERSTATE 91 SOUTHBOUND. A TWO-WAY TEMPORARY TRAFFIC DETOUR SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST VERSION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), VTRANS STANDARDS AND THESE PLANS.
2. ALL EARTHWORKS AND MATERIALS REQUIRED TO CONSTRUCT THE CROSSOVERS INCLUDING, BUT NOT LIMITED TO EXCAVATION, SUBBASE OF DENSE GRADED CRUSHED STONE, BITUMINOUS CONCRETE PAVEMENT, EMULSIFIED ASPHALT AND GEOTEXTILE FOR ROADBED SEPARATOR WILL BE PAID UNDER ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE).
3. THE TRAFFIC CONTROL DETOUR SHALL BE IN PLACE NO LONGER THAN ONE YEAR FROM THE PROJECT COMPLETION DATE. IF FOR SOME REASON THE CROSSOVERS ARE NOT REMOVED AND RESTORED TO A PVIOUS CONDITION WITHIN THREE YEARS, THEN AN OPERATIONAL STORMWATER PERMIT FOR THE PROJECT WILL NEED TO BE OBTAINED BY THE CONTRACTOR. FOLLOWING CONSTRUCTION ALL DISTURBANCE CAUSED BY THE TRAFFIC CONTROL DETOUR SHALL BE RESTORED TO ITS ORIGINAL STATE. THIS WORK MAY INCLUDE, BUT IS NOT LIMITED TO, EXCAVATION, TEMPORARY EROSION MATTING, SEED, MULCH, FERTILIZER AND TOPSOIL. THE REMOVAL OF THE TRAFFIC CONTROL DETOUR, AS WELL AS, THE RESTORATION OF ANY DISTURBANCE ASSOCIATED WITH THE TRAFFIC CONTROL DETOUR WILL BE PAID UNDER ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE).
4. TEMPORARY TRAFFIC BARRIER SHALL BE DELINEATED IN ACCORDANCE WITH THE MUTCD. TEMPORARY TRAFFIC BARRIER SHALL USED AS INDICATED IN THE TEMPORARY TRAFFIC CONTROL PLANS AND WILL BE PAID FOR UNDER ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE). ANY INTERIM REMOVING AND RE-SETTING OF TEMPORARY TRAFFIC BARRIER WILL BE CONSIDERED INCIDENTAL TO ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE).
5. THE TEMPORARY TRAFFIC BARRIER SHALL HAVE A 1:11 TAPER EXTENDING OUTSIDE OF THE CLEAR ZONE. IF IT IS NOT POSSIBLE TO GET THE TEMPORARY TRAFFIC BARRIER OUTSIDE OF THE CLEAR ZONE THEN AN ENERGY ABSORPTION ATTENUATOR SHALL BE USED AND WILL BE CONSIDERED INCIDENTAL TO ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE).
6. TEMPORARY LINE STRIPING AND MASKING, DELINEATING DEVICES AND SIGNS USED TO DIVERT TRAFFIC WILL BE PAID FOR UNDER ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE).
7. ALL RUMBLE STRIPS ADJACENT TO TEMPORARY TRAVELED LANES SHALL BE FILLED PRIOR TO SHIFTING TRAFFIC AND REPAIRED FOLLOWING CONSTRUCTION. ALL WORK ASSOCIATED WITH THE FILLING AND REPAIR OF THE RUMBLE STRIPS WILL BE CONSIDERED INCIDENTAL TO ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE).
8. ALL SIGNS ASSOCIATED WITH THE LONG TERM CLOSURE AND TWO-WAY TEMPORARY TRAFFIC DETOUR SHALL BE POST MOUNTED AND SHALL BE VISIBLE TO THE TRAVELING PUBLIC FOR THE DURATION OF THE CLOSURE. THIS WORK WILL BE CONSIDERED INCIDENTAL TO ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE).

## **GENERAL TRAFFIC CONTROL NOTES**

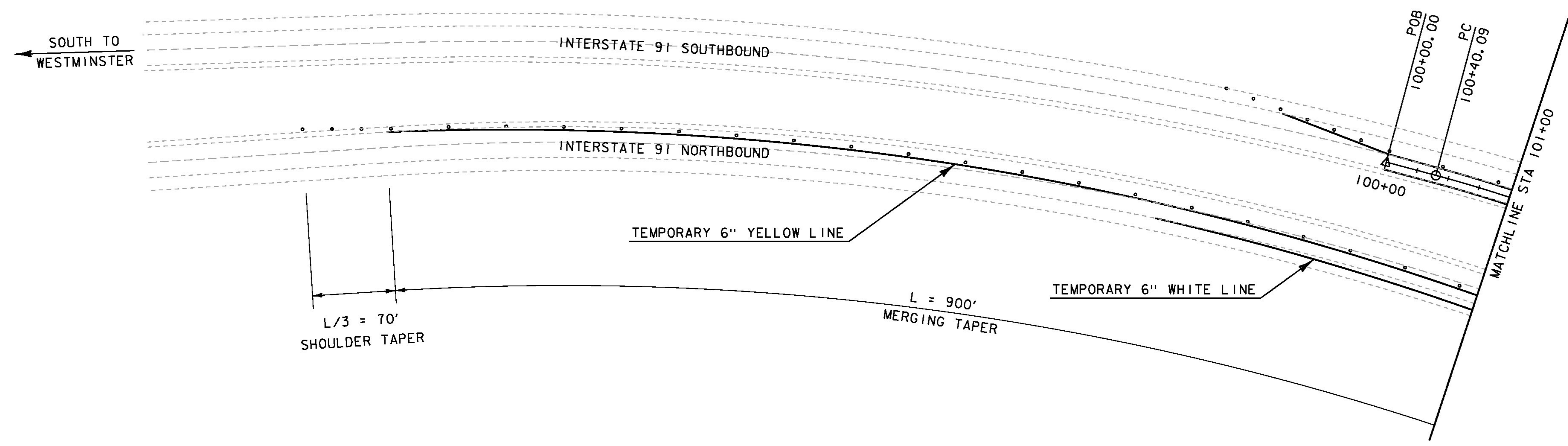
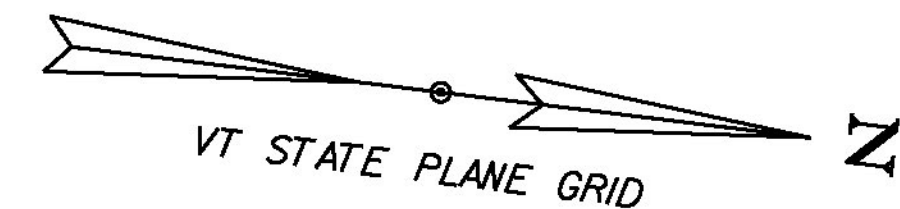
1. THE CONTRACTOR SHALL SUBMIT A SITE SPECIFIC TRAFFIC CONTROL PLAN TO THE ENGINEER AND VTRANS TRAFFIC SYSTEMS MANAGEMENT AND OPERATIONS SECTION FOR REVIEW 30 DAYS PRIOR TO PERFORMING ANY CONSTRUCTION ACTIVITY. THE PLAN SHALL INCLUDE PROVISIONS FOR IMPLEMENTATION AND MAINTENANCE OF TRAFFIC CONTROL FOR ALL WORK ASSOCIATED WITH THIS PROJECT. UPON WRITTEN APPROVAL FROM THE ENGINEER, THE CONTRACTOR SHALL IMPLEMENT THE TRAFFIC CONTROL PLAN AND COMMENCE CONSTRUCTION ACTIVITIES. ALL COSTS ASSOCIATED WITH THE DEVELOPMENT AND ANY NECESSARY REVISION OF A TRAFFIC CONTROL PLAN WILL BE PAID FOR UNDER ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE).
2. THE TRAFFIC CONTROL PLANS SHOWN HEREIN ARE APPROXIMATE AND INTENDED TO BE UTILIZED IN CONJUNCTION WITH APPLICABLE VTRANS STANDARD DRAWINGS AND THE MUTCD.
3. PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE PLACED IN THE NORTHBOUND AND SOUTHBOUND BARRELS APPROACHING THE PROJECT LOCATION. THE MESSAGE SIGNS SHALL BE PLACED ONE WEEK PRIOR TO ANY CONSTRUCTION ACTIVITY TO ADVISE THE TRAVELING PUBLIC OF THE PROJECT. THE MESSAGE SIGNS SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT. PAYMENT FOR THIS WORK will BE MADE UNDER ITEM 641.15 "PORTABLE CHANGEABLE MESSAGE SIGN".
4. TEMPORARY DRAINAGE STRUCTURES WILL BE REQUIRED TO CONVEY WATER UNDER THE CROSSOVERS. INSTALLING, MAINTAINING AND REMOVING THESE STRUCTURES WILL BE CONSIDERED INCIDENTAL TO ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE).
5. INITIATION OF TRAFFIC CONTROL MEASURES WILL NOT BE PERMITTED BETWEEN THE DATES OF NOVEMBER 15 AND APRIL 15 UNLESS OTHERWISE APPROVED BY THE ENGINEER. ONCE TRAFFIC CONTROL DEVICES HAVE BEEN INSTALLED, THE CONTRACTOR SHALL BEGIN WORK IMMEDIATELY AND PROCEED IN A TIMELY MANNER THROUGH TO COMPLETION OF CONSTRUCTION IN ORDER TO MINIMIZE HAZARD AND INCONVENIENCE TO THE TRAVELING PUBLIC.
6. ALL SIGNS, BARRICADES, AND OTHER TRAFFIC CONTROL DEVICES SHALL BE CLEANED WEEKLY OR AS DIRECTED BY THE ENGINEER. EXISTING PERMANENT SIGNS THAT CONTRADICT TEMPORARY TRAFFIC CONTROL SIGNS (NOT SHOWN IN PLANS) SHALL BE REMOVED AND REPLACED OR COVERED FOR THE PERIOD OF TIME THAT THE TRAFFIC CONTROL PLAN IS IMPLEMENTED. COST FOR THIS WORK WILL BE CONSIDERED INCIDENTAL TO ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE).
7. THE CONTRACTOR IS NOTIFIED THAT ALL ROADWAYS INCLUDED IN AND ASSOCIATED WITH THIS PROJECT ARE SUBJECT TO OCCASIONAL USE AND TRAVEL BY EMERGENCY RESPONSE VEHICLES. THE CONTRACTOR SHALL MAKE AND IMPLEMENT PLANS AND PROCEDURES DESIGNED TO ENSURE SWIFT AND UNIMPEDED TRAVEL OF EMERGENCY RESPONSE VEHICLES THROUGH CONSTRUCTION ZONES AND SHALL SUBMIT THEM TO THE ENGINEER WITH THE OVERALL TRAFFIC CONTROL PLAN. ANY COSTS ASSOCIATED WITH SUCH PLANS AND PROCEDURES WILL BE CONSIDERED INCIDENTAL TO ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE).
8. DURING BLASTING TIMES ROLLING ROAD BLOCKS WILL BE REQUIRED TO KEEP THE TRAVELING PUBLIC OUTSIDE THE BLASTING RADIUS. A PLAN FOR THE UTILIZATION OF ROLLING ROAD BLOCKS SHALL BE SUBMITTED TO THE ENGINEER WITH THE OVERALL TRAFFIC CONTROL PLAN. ROLLING ROADBLOCKS WILL BE PAID FOR UNDER ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE).
9. THE ATTACHED TRAFFIC CONTROL PLAN HAS BEEN DESIGNED FOR A POSTED SPEED OF 50 MPH WITH AN ADVISORY SPEED OF 45 MPH ON THE SOUTHERN CROSSOVER. SHOULD THE CONTRACTOR USE THE ALIGNMENT IN THE ATTACHED PLAN, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO IMPLEMENT A SPEED REDUCTION AND ADVISORY SPEED IN ACCORDANCE WITH THE MUTCD AND VERMONT STATE STANDARDS. THIS WORK WILL BE CONSIDERED INCIDENTAL TO ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE).

## **ESTIMATED QUANTITIES FOR SIGNIFICANT TRAFFIC CONTROL DETOUR ITEMS**

THE FOLLOWING ITEMS ARE ESTIMATED BASED ON THE TRAFFIC CONTROL DETOUR AS SHOWN IN THESE PLANS AND ARE PROVIDED FOR REFERENCE ONLY. THE CONTRACTOR SHALL SUBMIT A SITE SPECIFIC TRAFFIC CONTROL PLAN, SEE GENERAL TRAFFIC CONTROL NOTE 1. PAYMENT FOR THE FOLLOWING ITEMS WILL BE PAID UNDER ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE).

1,250	(CY)	SUBBASE OF DENSE GRADED CRUSHED STONE
4	(CWT)	EMULSIFIED ASPHALT
200	(TON)	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT
5,700	(LF)	TEMPORARY TRAFFIC BARRIER
9,750	(LF)	TEMPORARY 6 INCH WHITE LINE
10,980	(LF)	TEMPORARY 6 INCH YELLOW LINE
7,450	(SF)	PAVEMENT MARKING MASK
2,400	(SY)	GEOTEXTILE FOR ROADBED SEPARATOR

PROJECT NAME: ROCKINGHAM	
PROJECT NUMBER: IM 091-1(71)	
FILE NAME: d13a366frrm.dgn	PLOT DATE: 05-FEB-2016
PROJECT LEADER: B. MARTIN	DRAWN BY: A. KEMPTON
DESIGNED BY: A. KEMPTON	CHECKED BY: M. GAMELIN
TRAFFIC CONTROL NOTES SHEET	SHEET 28 OF 35

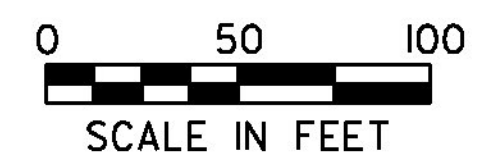


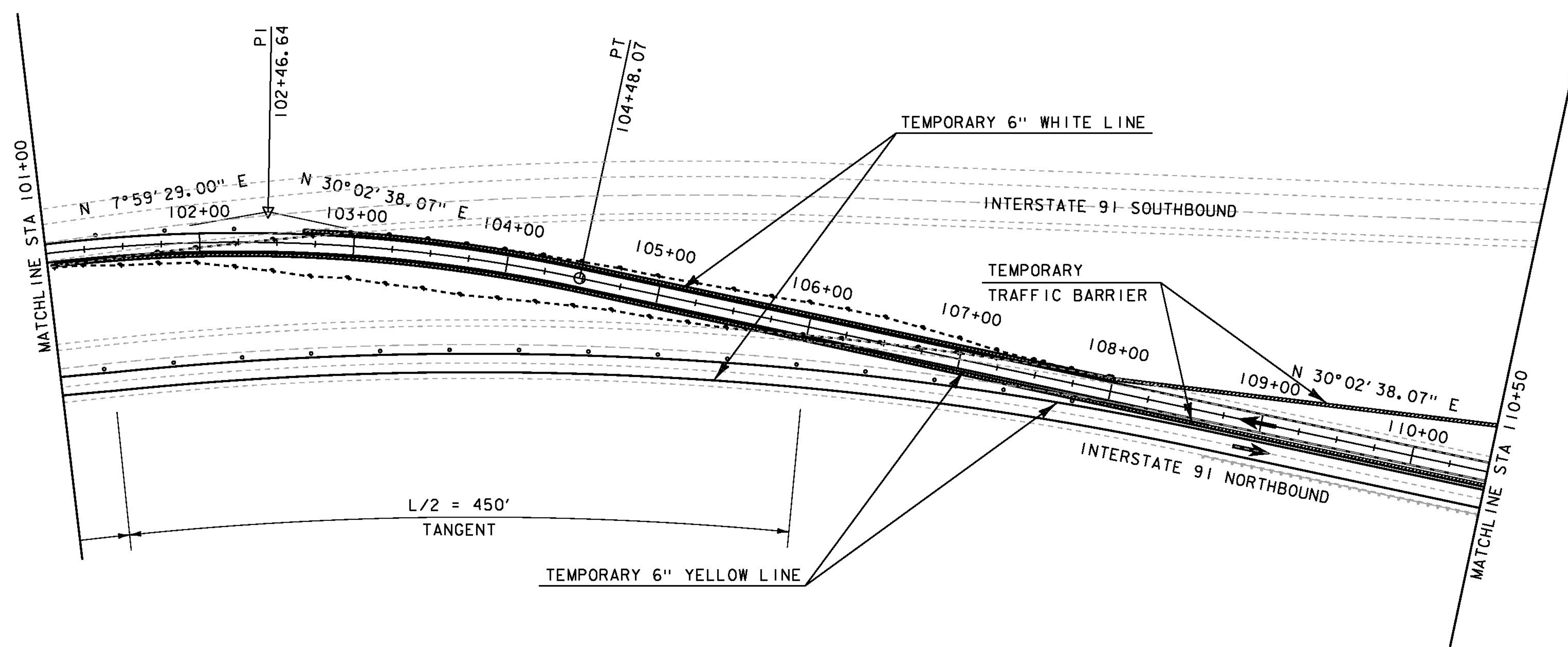
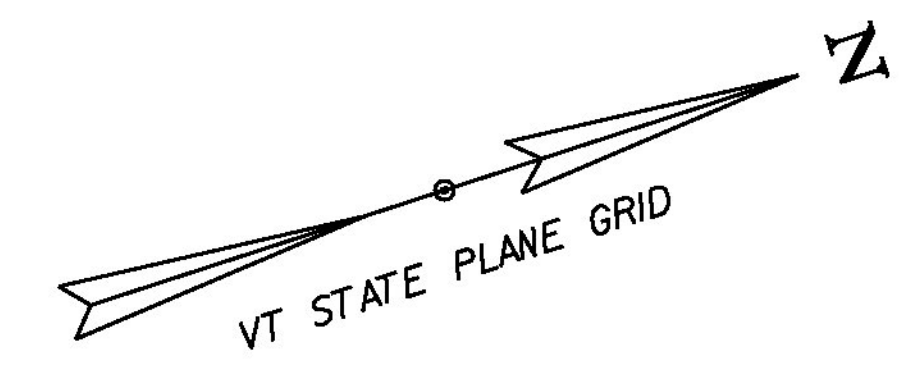
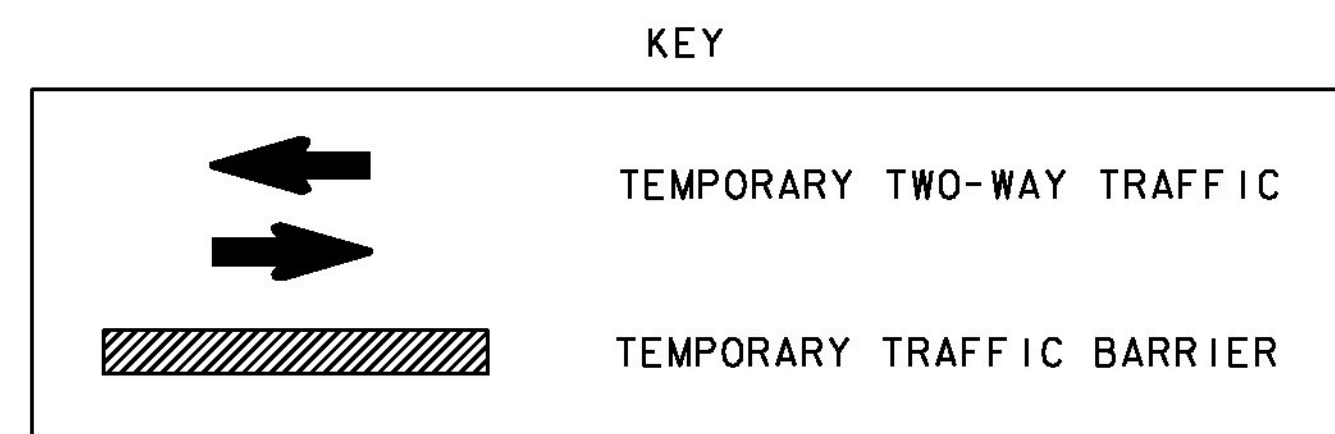
NOTES:  
 LINWORK WAS CREATED FROM ORTHO PHOTOGRAPHY AND REPRESENTS APPROXIMATE EDGE OF PAVEMENT, EDGE OF TRAVELWAY, CENTERLINE AND GUARDRAIL. PROVIDED FOR REFERENCE ONLY.

THE SOUTHERN CROSSOVER IS DESIGNED FOR AN ADVISORY SPEED OF 45 MPH. THE REMAINDER OF THE DETOUR IS DESIGNED FOR A SPEED OF 50 MPH.

TEMPORARY SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MUTCD AND VERMONT STATE STANDARDS.

PROJECT NAME:	ROCKINGHAM
PROJECT NUMBER:	IM 091-1(71)
FILE NAME:	d13a366tc.dgn
PROJECT LEADER:	B. MARTIN
DESIGNED BY:	A. KEMPTON
TRAFFIC CONTROL PLAN SHEET 1	
PLOT DATE:	29-JAN-2016
DRAWN BY:	A. KEMPTON
CHECKED BY:	M. GAMELIN
SHEET	29 OF 35



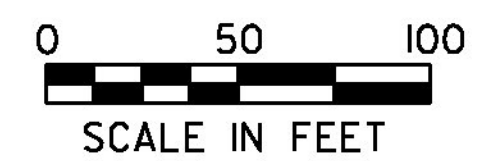


CURVE (1)	
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D	= 5° 24' 19"
R	= 1060.00'
T	= 206.55'
L	= 407.98'
E	= 19.94'

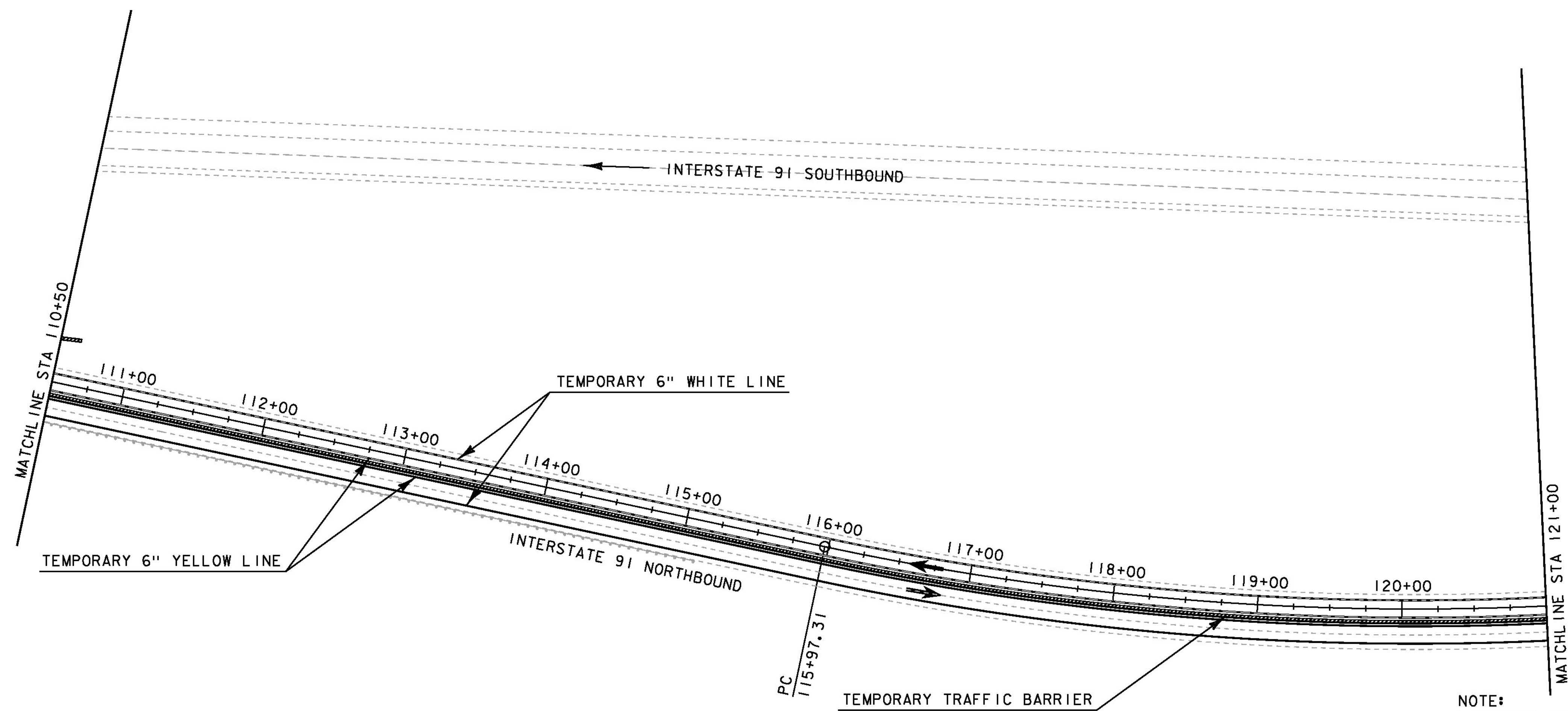
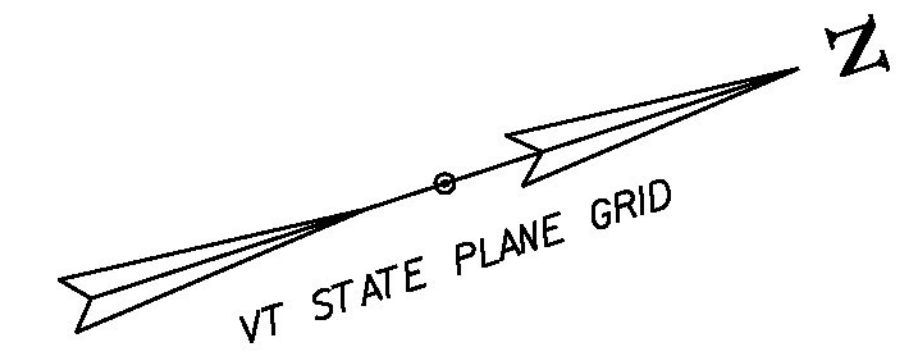
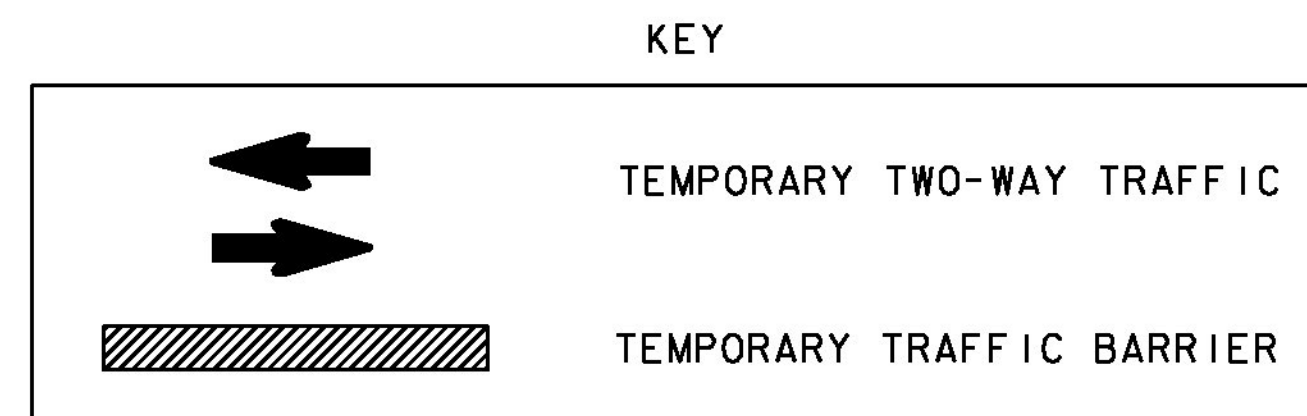
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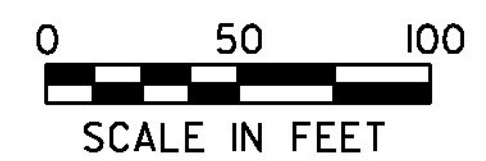
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PROJECT NUMBER:	IM 091-1(71)	DRAWN BY:	A. KEMPTON
FILE NAME:	d13a366tc.dgn	DESIGNED BY:	A. KEMPTON
TRAFFIC CONTROL PLAN SHEET 2		CHECKED BY:	M. GAMELIN
		SHEET	30 OF 35



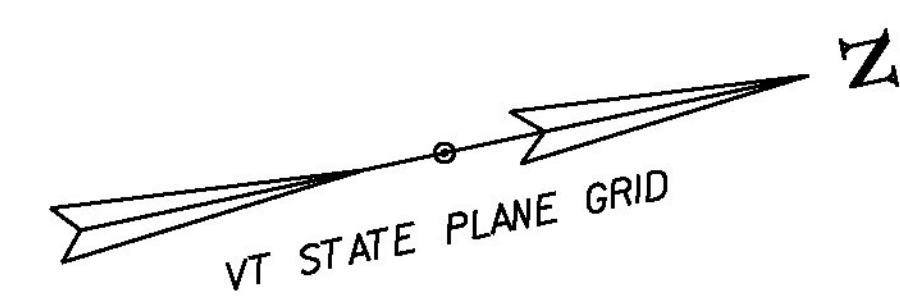
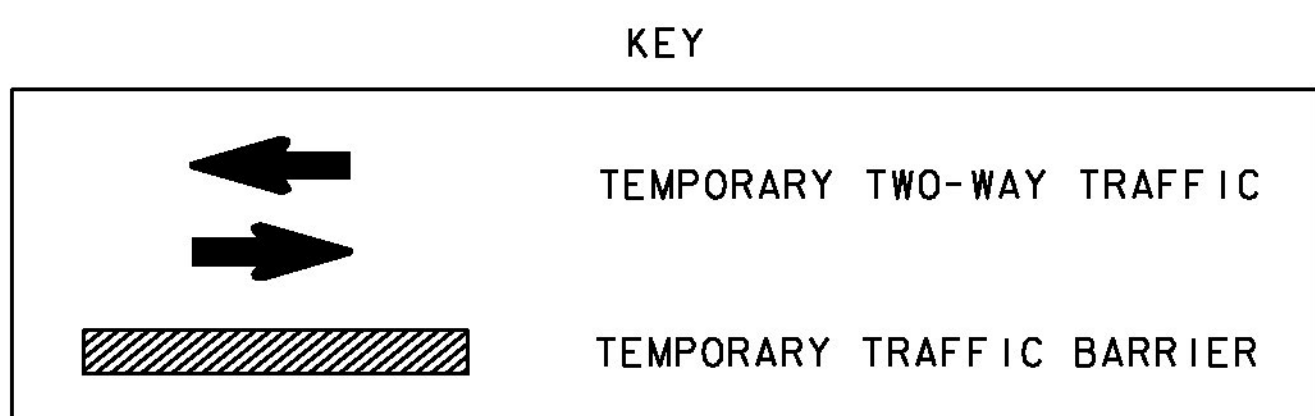
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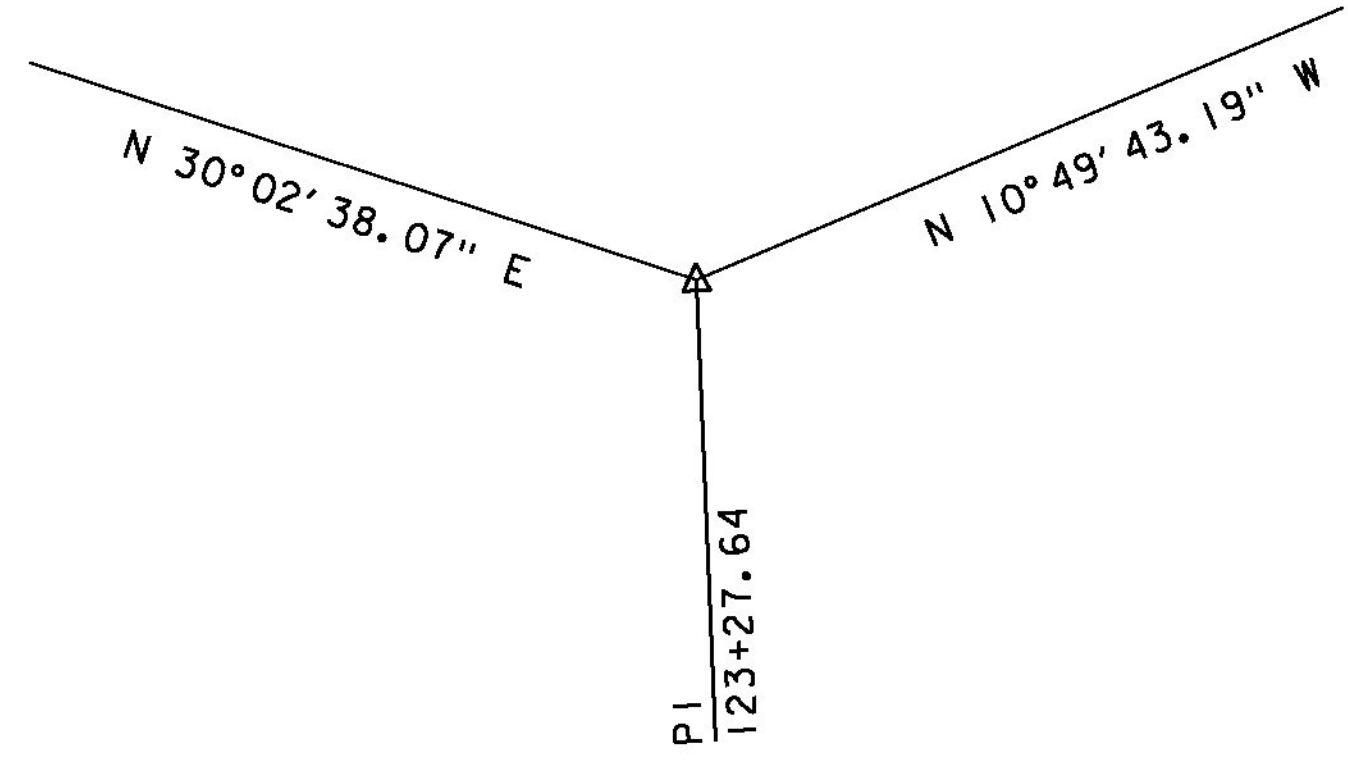
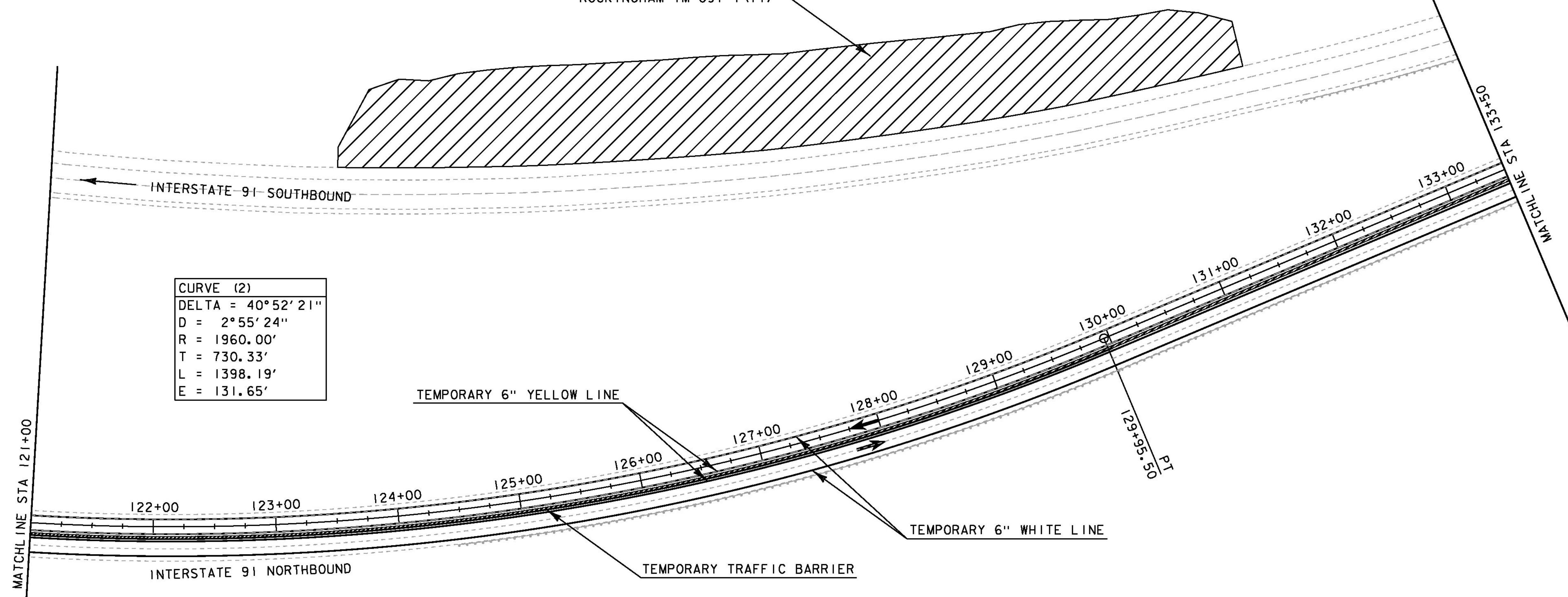
TEMPORARY SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MUTCD AND VERMONT STATE STANDARDS.



PROJECT NAME:	ROCKINGHAM
PROJECT NUMBER:	IM 091-1(71)
FILE NAME:	d13a366tc.dgn
PROJECT LEADER:	B. MARTIN
DESIGNED BY:	A. KEMPTON
TRAFFIC CONTROL PLAN SHEET 3	
PLOT DATE:	29-JAN-2016
DRAWN BY:	A. KEMPTON
CHECKED BY:	M. GAMELIN
SHEET	31 OF 35



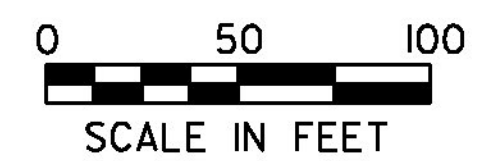
PROJECT LOCATION  
ROCKINGHAM IM 091-1 (71)



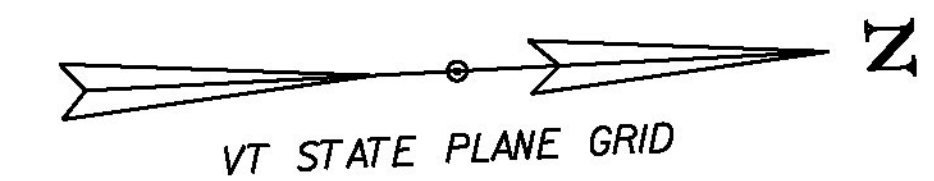
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TEMPORARY SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MUTCD AND VERMONT STATE STANDARDS.



PROJECT NAME:	ROCKINGHAM
PROJECT NUMBER:	IM 091-1(71)
FILE NAME:	d\3a366tc.dgn
PROJECT LEADER:	B. MARTIN
DESIGNED BY:	A. KEMPTON
TRAFFIC CONTROL PLAN SHEET 4	
PLOT DATE:	29-JAN-2016
DRAWN BY:	A. KEMPTON
CHECKED BY:	M. GAMELIN
SHEET	32 OF 35

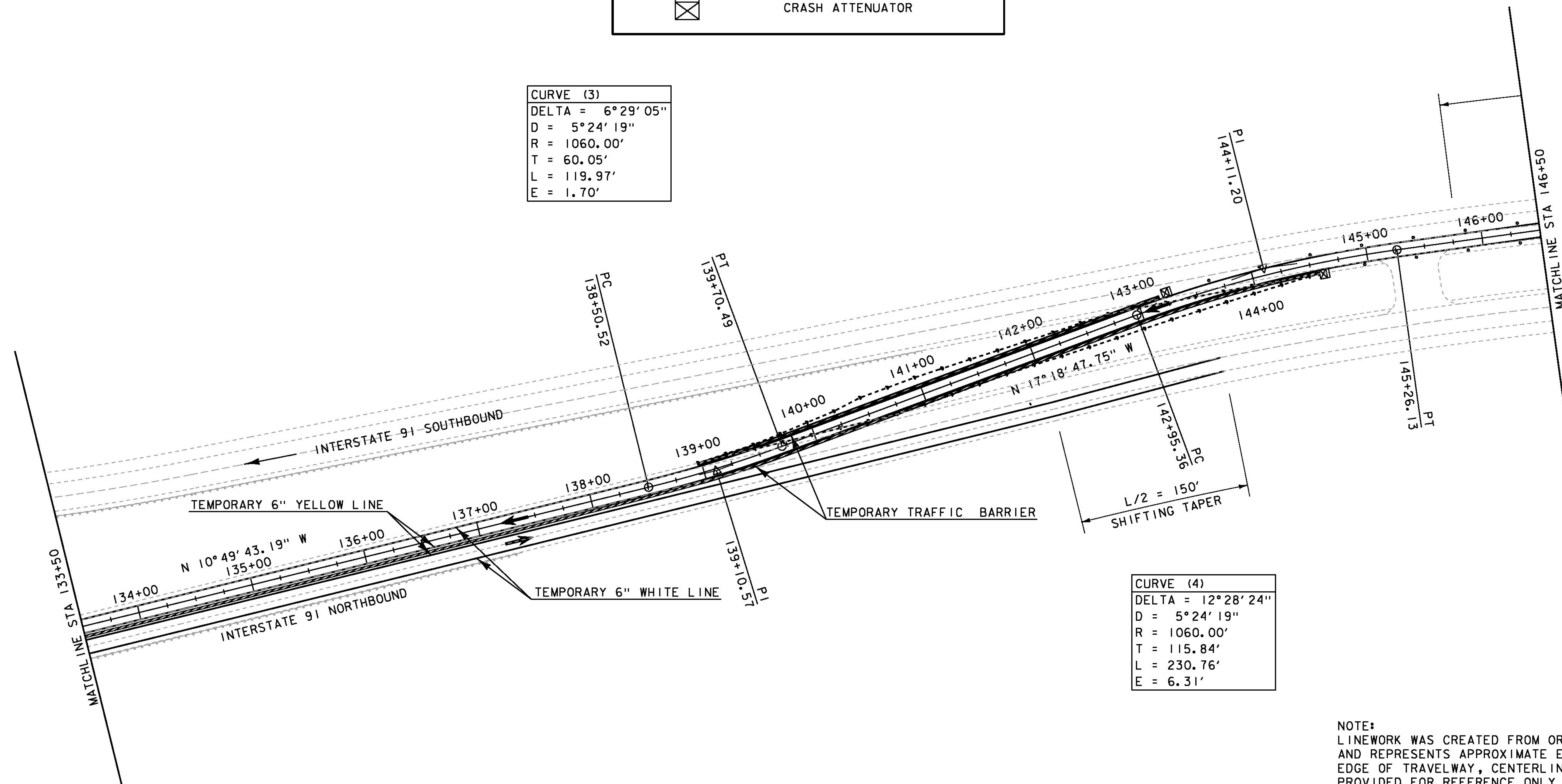


KEY

	TEMPORARY TWO-WAY TRAFFIC
	TEMPORARY TRAFFIC BARRIER
	CRASH ATTENUATOR

CURVE (3)	
DELTA =	6°29'05"
D =	5°24'19"
R =	1060.00'
T =	60.05'
L =	119.97'
E =	1.70'

CURVE (4)	
DELTA =	12°28'24"
D =	5°24'19"
R =	1060.00'
T =	115.84'
L =	230.76'
E =	6.31'

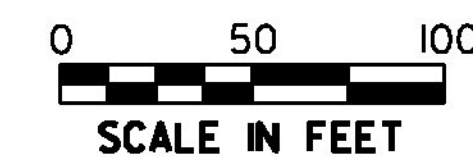


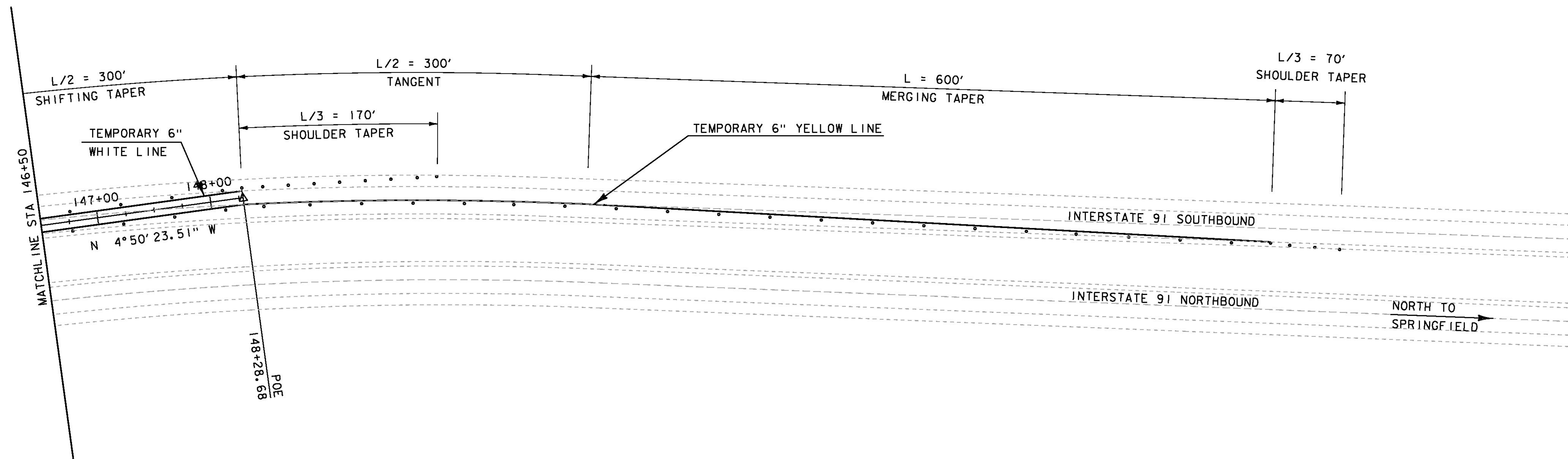
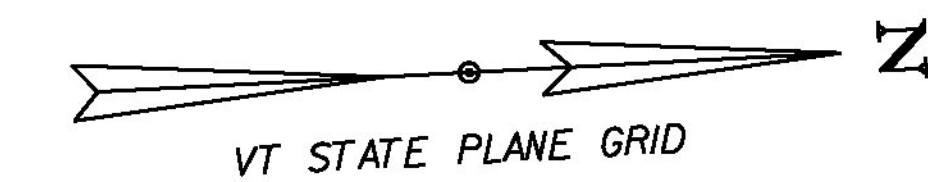
NOTE:  
 LINWORK WAS CREATED FROM ORTHO PHOTOGRAPHY AND REPRESENTS APPROXIMATE EDGE OF PAVEMENT, EDGE OF TRAVELWAY, CENTERLINE AND GUARDRAIL. PROVIDED FOR REFERENCE ONLY.

THE SOUTHERN CROSSOVER IS DESIGNED FOR AN ADVISORY SPEED OF 45 MPH. THE REMAINDER OF THE DETOUR IS DESIGNED FOR A SPEED OF 50 MPH.

TEMPORARY SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MUTCD AND VERMONT STATE STANDARDS.

PROJECT NAME:	ROCKINGHAM
PROJECT NUMBER:	IM 091-1(71)
FILE NAME:	d13a366tc.dgn
PROJECT LEADER:	B MARTIN
DESIGNED BY:	A. KEMPTON
TRAFFIC CONTROL PLAN SHEET 5	
PLOT DATE:	29-JAN-2016
DRAWN BY:	A. KEMPTON
CHECKED BY:	M. GAMELIN
SHEET	33 OF 35



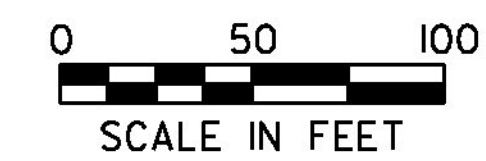


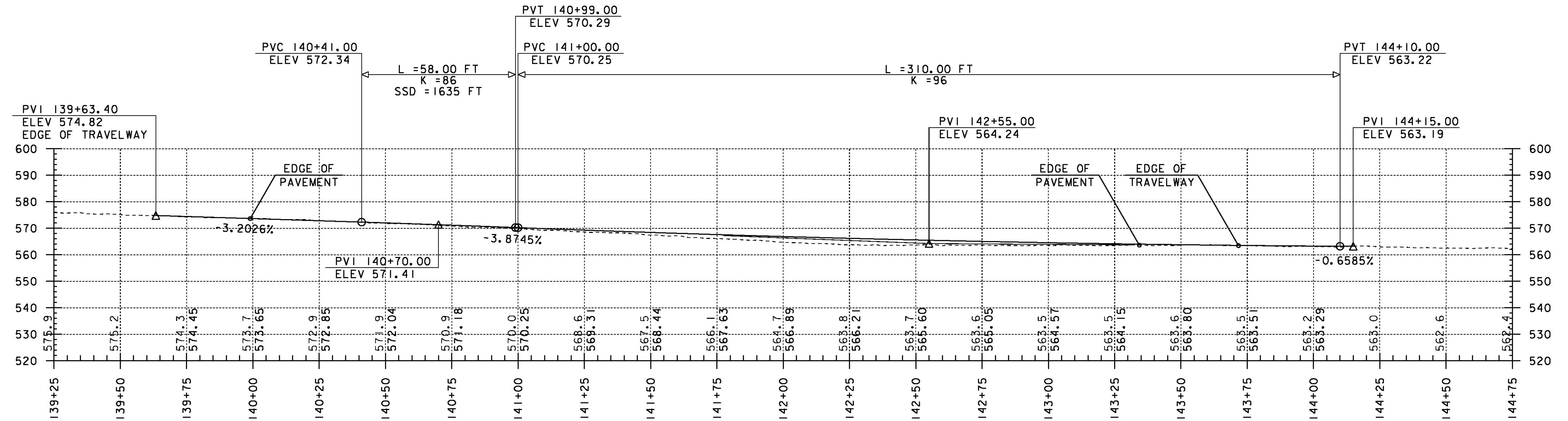
NOTES:  
 LINWORK WAS CREATED FROM ORTHO PHOTOGRAPHY AND REPRESENTS APPROXIMATE EDGE OF PAVEMENT, EDGE OF TRAVELWAY, CENTERLINE AND GUARDRAIL. PROVIDED FOR REFERENCE ONLY.

THE SOUTHERN CROSSOVER IS DESIGNED FOR AN ADVISORY SPEED OF 45 MPH. THE REMAINDER OF THE DETOUR IS DESIGNED FOR A SPEED OF 50 MPH.

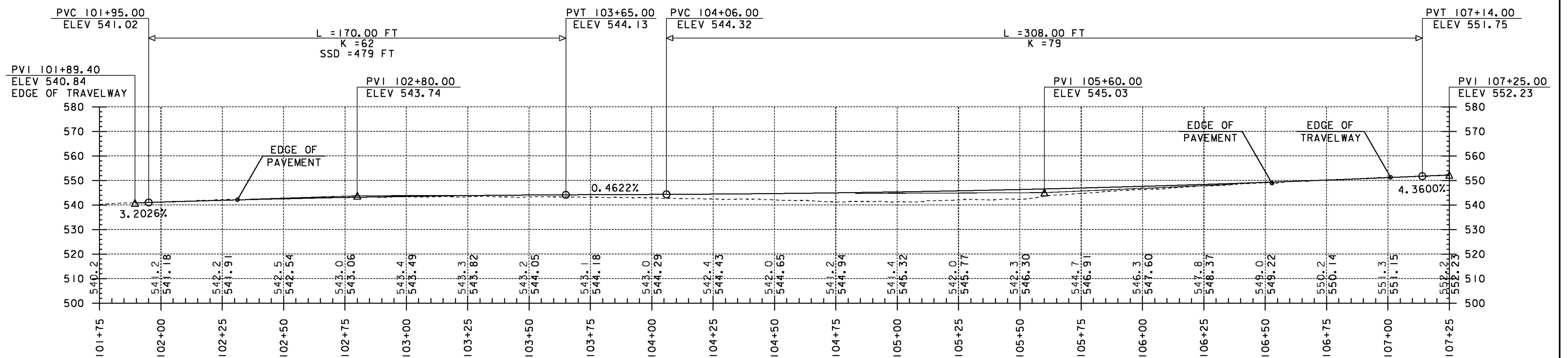
TEMPORARY SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MUTCD AND VERMONT STATE STANDARDS.

PROJECT NAME:	ROCKINGHAM
PROJECT NUMBER:	IM 091-1(71)
FILE NAME:	d13a366tc.dgn
PROJECT LEADER:	B MARTIN
DESIGNED BY:	A. KEMPTON
TRAFFIC CONTROL PLAN SHEET 6	
PLOT DATE:	29-JAN-2016
DRAWN BY:	A. KEMPTON
CHECKED BY:	M. GAMELIN
SHEET	34 OF 35





NORTHERN CROSSOVER PROFILE



SOUTHERN CROSSOVER PROFILE

NOTES:  
STATIONS AND ELEVATIONS ARE IN FEET.

ELEVATIONS SHOWN TO THE NEAREST HUNDRETH ARE FINISHED GRADE ALONG THE CENTERLINE.  
ELEVATIONS SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG THE CENTERLINE.

THE PROFILES ARE SHOWN BEYOND THE EDGE OF TRAVELWAY FOR LAYOUT PURPOSES ONLY.  
NO EARTHWORK OR PAVING SHALL OCCUR BEYOND THE EXISTING EDGE OF TRAVELWAY.

THE SOUTHERN CROSSOVER IS DESIGNED FOR AN ADVISORY SPEED OF 45 MPH.

PROJECT NAME: ROCKINGHAM	PLOT DATE: 29-JAN-2016
PROJECT NUMBER: IM 091-I(7I)	DRAWN BY: A. KEMPTON
FILE NAME: d13a366pro.dgn	CHECKED BY: M. GAMELIN
PROJECT LEADER: B. MARTIN	TRAFFIC CONTROL PROFILE SHEET
DESIGNED BY: A. KEMPTON	SHEET 35 OF 35