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STATE OF VERMONT
AGENCY OF TRANSPORTATION

RECORD PLANS

CONTRACTOR: KUBRICKY CONSTURCTION CORP.- GLENS FALLS, NY
RESIDENT ENGINEER: CHRIS BARKER
CONSTRUCTION BEGAN: FEBRUARY 27, 2001
CONSTRUCTION COMPLETE: JULY 27, 2004
RECORD PLANS BY: CHRIS BARKER & NICK GARBACIK

I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.

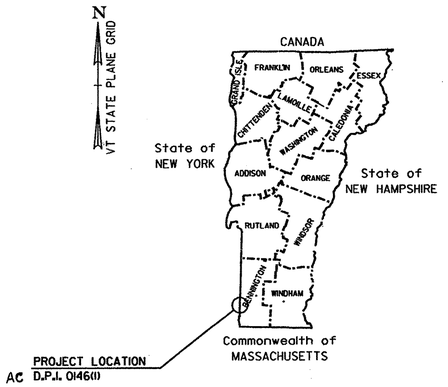
BY MM FOR Chris Barker RESIDENT ENGINEER
DATE Oct. 14, 2013

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 BENNINGTON
COUNTY OF BENNINGTON
VT. ROUTE 9
BENNINGTON-HOOSICK D.P.I. 0146(1) C/4

BEGINNING APPROXIMATELY 4565 m (2.837 MILES) EAST OF THE VERMONT/NEW YORK STATE LINE AT STA. 16+695.000, BENNINGTON - HOOSICK D.P.I. 0146(1) C/4 PROCEEDS EASTERLY 610.027 m (0.379 MILE) CROSSING SILK ROAD AND THE WALLOOMSAC RIVER BEFORE TERMINATING AT THE VT. ROUTE 67A INTERCHANGE AT STA. 810+064.800 = W.B. STA. 17+305.027. THE PROJECT WILL INCLUDE RECONSTRUCTION OF THE EXISTING RAMPS FOR THE VT. ROUTE 67A INTERCHANGE RESULTING IN 1193.040 m (0.741 MILE) OF NEW RAMP CONSTRUCTION TO PROVIDE FULL-DIRECTIONAL ACCESS BETWEEN THE NEW HIGHWAY AND VT. ROUTE 67A, COLD PLANING AND PAVING 604.000 m (0.375 MILE) OF VT. ROUTE 67A, AND PAVING 251.723 m (0.156 MILE) OF SILK ROAD.

LENGTH OF ROADWAY	348.873 m	(0.217 MILE)
LENGTH OF STRUCTURE	261.154 m	(0.162 MILE)
LENGTH OF PROJECT	610.027 m	(0.379 MILE)



TRAFFIC DATA

2000 ADT = 5300
2020 ADT = 6600
2020 ADTT = 460
2020 DHV = 840
T = 7%
D = 52%
V = 100 km/h
2000 ~ 2020 CUM. ESALS = 4,825,000
2000 ~ 2040 CUM. ESALS = 17,229,000
PRINCIPAL ARTERIAL

WORK TO BE PERFORMED UNDER THE VERMONT PORTION OF THIS PROJECT INCLUDES CONSTRUCTION OF A LIMITED ACCESS HIGHWAY AROUND THE NORTHWEST PORTION OF BENNINGTON (RELOCATION OF VT. ROUTE 9) AND WILL CONSIST OF ROADWAY AND BRIDGE CONSTRUCTION - WITH ASSOCIATED GRADING, PAVING, DRAINAGE, PAVEMENT MARKINGS, SIGNING AND INCIDENTAL ITEMS.

BITUMINOUS CONCRETE PAVEMENT SUPERPAVE MIXTURE DESIGN CRITERIA	
DESIGN LANE / DESIGN LIFE ESAL	8,614,500
DESIGN NUMBER OF GYRATIONS	100
PERFORMANCE GRADED ASPHALT BINDER	PG 58-28

STATE OF VERMONT THOMAS P. BARIS No. 6298 REGISTERED PROFESSIONAL ENGINEER

PLANS PREPARED BY

CHA CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
III WINNERS CIRCLE ALBANY, NEW YORK, 12205
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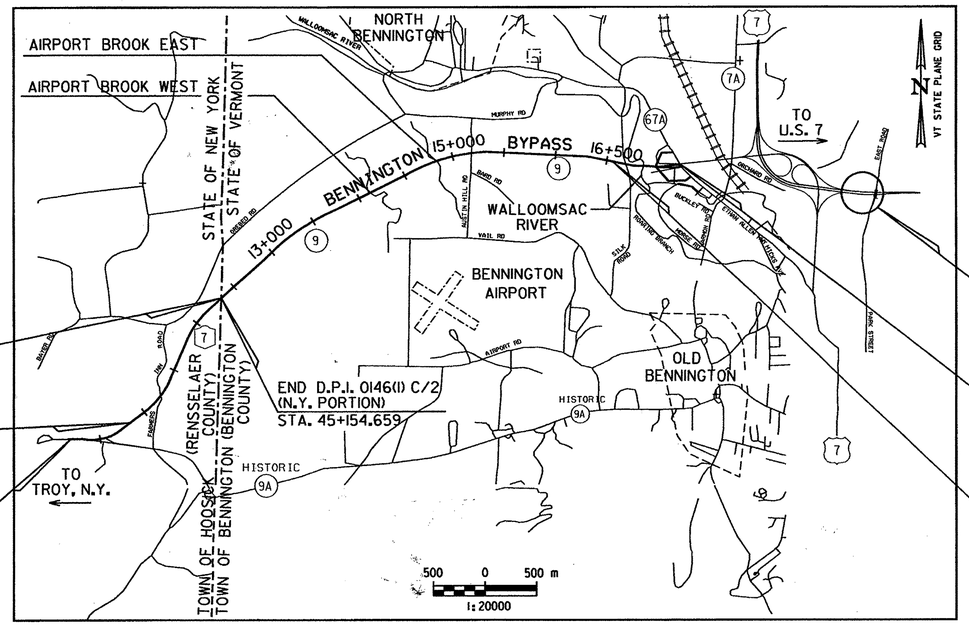
BY Thomas P. Baris



BEGIN D.P.I. 0146(1) C/3 (VT. PORTION)
STA. 12+130.455

END D.P.I. 0146(1) C/1
BEGIN D.P.I. 0146(1) C/2
(N.Y. PORTION)
STA. 43+275.000

BEGIN D.P.I. 0146(1) C/1
(N.Y. PORTION)
STA. 42+880.000

END D.P.I. 0146(1) C/2
(N.Y. PORTION)
STA. 45+154.659

OFF-SITE BORROW AREA

END D.P.I. 0146(1) C/4
BEGIN D.P.I. 0146(1) C/6
(VT. PORTION)
STA. 810+064.800 =
W.B. STA. 17+305.027

END D.P.I. 0146(1) C/3
BEGIN D.P.I. 0146(1) C/4
(VT. PORTION)
STA. 16+695.000

CONVENTIONAL SIGNS

COUNTY LINE
TOWN LINE
LIMITS OF ACCESS
POINT OF ACCESS
FENCE LINE
STONE WALL
TRAVELED WAY
GUARD RAIL
RAILROAD
SURVEY LINE
CULVERT
POWER POLE
TELEPHONE POLE
TREES
CONTROL OF ACCESS
PROPERTY LINE
R.O.W. TAKING LINE
SLOPE RIGHTS
TOP OF CUT
TOE OF SLOPE

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

CONTRACT PLANS
SEPTEMBER 15, 2000

THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE CHIEF ENGINEER.

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 1995, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON AUGUST 21, 1995 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

Not Metric

SUBMITTED BY ORDER OF THE STATE TRANSPORTATION BOARD
APPROVED _____ DATE 9/21/00
SPECIAL PROJECTS ENGINEER

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED _____ DATE _____
DIVISION ADMINISTRATOR

PROJECT BENNINGTON-HOOSICK
AC-NH D.P.I. 0146(1) C/4
P.I.N. 1306.60

DWG. NO. T-1 SHEET 1 OF 385 SHEETS

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USER =1459

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IPARM FILE NAME:	PLOT DATE: 9/00
SURVEYED BY: N/A	SURVEY DATE: N/A
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ABBREVIATIONS

ALIGNMENT

AHD.	= AHEAD
BK.	= BACK
ℬ	= BASELINE
℄	= HORIZONTAL CONTROL LINE
Δ	= ANGLE OF INTERSECTION
E	= EXTERNAL DISTANCE
e	= SUPERELEVATION RATE
E.O.L.	= EDGE OF LANE
E.O.P.	= EDGE OF PAVEMENT
H.C.L.	= HORIZONTAL CONTROL LINE
H.S.D.	= HEADLIGHT SIGHT DISTANCE
K	= RATE OF VERTICAL CURVE
L	= LENGTH
L.V.C.	= LENGTH OF VERTICAL CURVE
M.O.	= MIDDLE ORDINATE
O/S	= OFFSET
P.C.	= POINT OF CURVATURE
P.C.C.	= POINT OF COMPOUND CURVATURE
P.I.	= POINT OF INTERSECTION
P.O.C.	= POINT ON CURVE
P.O.V.C.	= POINT ON VERTICAL CURVE
P.R.C.	= POINT OF REVERSE CURVATURE
P.R.V.C.	= POINT OF REVERSE VERTICAL CURVATURE
P.T.	= POINT OF TANGENT
P.V.C.	= POINT OF VERTICAL CURVATURE
P.V.I.	= POINT OF VERTICAL INTERSECTION
P.V.T.	= POINT OF VERTICAL TANGENT
R	= RADIUS
S.S.D.	= STOPPING SIGHT DISTANCE
STA.	= STATION
T	= TANGENT

TOPOGRAPHY (DRAINAGE)

CAAP	= CORRUGATED ALUMINUM ALLOY PIPE
CMP	= CORRUGATED METAL PIPE
CPEP	= CORRUGATED POLYETHYLENE PIPE
D.I.	= DROP INLET
DIA.	= DIAMETER
MH	= MANHOLE
PCCSP	= POLYMERIC COATED CORRUGATED STEEL PIPE
PI	= PAVED INVERT
Q100	= 100 YEAR FLOOD ELEVATION
R.C.D.I.	= REINFORCED CONCRETE DROP INLET
RCP	= REINFORCED CONCRETE PIPE
S/N	= DISCHARGE POINT SERIAL NUMBER
SL	= SMOOTH LINED

TOPOGRAPHY (UTILITIES)

CU.	= COPPER
DHV	= DESIGN HOUR VOLUME
ø	= SIGNAL PHASE
GND.	= GROUND
HYD	= HYDRANT
JB	= JUNCTION BOX
MB	= MAILBOX
PB	= PULLBOX
PVC	= POLYVINYL CHLORIDE PIPE

TOPOGRAPHY (MISCELLANEOUS)

ASH.	= ASH TREE
CHY.	= CHERRY MAPLE TREE
D.S.K.	= DISC MONUMENT
MAP.	= MAPLE TREE
(P)	= PERMANENT EASEMENT
PK	= SURVEY NAIL
POP.	= POPLAR TREE
R.O.W.	= RIGHT OF WAY
R.O.W. (W.O.A.)	= RIGHT OF WAY WITHOUT ACCESS
R.R.S.I.R.	= RAILROAD SPIKE IN ROOT
R.R.S.I.T.	= RAILROAD SPIKE IN TREE
(T)	= TEMPORARY EASEMENT

VAOT Metric

PROJECT: BENNINGTON - HOOSICK	PROJECT NO.: D.P.I. 0146(1) C/4
DESIGN FILE NAME:	
IPARM FILE NAME:	PLOT DATE: 9/00
SURVEYED BY: N/A	SURVEY DATE: N/A
SQUAD LEADER: T.P.K.	DRAWN BY: E.C.D.
DWG. NO. IND-2	SHEET: 3 OF 385

FILE NAME =u:\5116\vaot\contract4\index.dgn
DATE/TIME =11 SEP 2000
USER =1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET

Metric

SUMMARY OF ESTIMATED QUANTITIES

NON GOV'T PARTICIPATING	EMPLOYEE TRAINEESHIP	BORROW AREA	EROSION CONTROL	BRIDGE 700	BRIDGE 900	BRIDGE 1000	ROADWAY	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NUMBER	RND
-	-	-	-	-	-	-	1	1	LS	CLEARING AND GRUBBING (PLUS INDIVIDUAL TREES AND SHRUBS)	201.10	-
-	-	55237	3492	5910	-	-	32333	96972	m^3	COMMON EXCAVATION	203.15	-
-	-	-	-	-	-	-	4100	4100	m^3	MUCK EXCAVATION	203.20	EST.
-	-	-	-	-	86	40	5	131	m^3	CHANNEL EXCAVATION OF EARTH	203.25	-
-	-	-	-	1250	-	-	-	1250	m^3	UNCLASSIFIED CHANNEL EXCAVATION	203.27	-
-	-	-	-	-	-	-	1950	1950	m^3	EXCAVATION OF SURFACES AND PAVEMENTS	203.28	14
-	-	-	-	-	-	-	51500	51500	m^3	EARTH BORROW	203.30	1661
-	-	-	-	-	-	-	17200	17200	m^3	SAND BORROW	203.31	108
-	-	-	-	20640	-	-	7360	28000	m^3	GRANULAR BORROW	203.32	83
-	-	-	-	-	-	-	29900	29900	m^2	FINE GRADING - SUBGRADE	203.40	96
-	-	323	-	-	-	-	2127	2450	m^3	TRENCH EXCAVATION OF EARTH	204.20	13
-	-	-	-	-	-	-	16.4	16.4	m^3	TRENCH EXCAVATION OF ROCK	204.21	-
-	-	-	-	330	210	100	-	640	m^3	STRUCTURE EXCAVATION	204.25	-
-	-	-	-	160	800	40	-	1000	m^3	GRANULAR BACKFILL FOR STRUCTURES	204.30	5
-	-	-	-	1	-	-	-	1	LS	COFFERDAM (STA. 16+804.000) (MOD.)	204.40	-
-	-	-	-	1	-	-	-	1	LS	COFFERDAM (STA. 16+861.000)	204.40	-
-	-	-	-	1	-	-	-	1	LS	COFFERDAM (STA. 16+918.000)	204.40	-
-	-	-	-	1	-	-	-	1	LS	COFFERDAM (STA. 16+975.000)	204.40	-
-	-	-	-	-	-	-	13700	13700	m^2	COLD PLANING - BITUMINOUS PAVEMENT	210.10	3
-	-	1380	-	75	86	20	19239	20800	m^3	SUBBASE OF CRUSHED GRAVEL (COARSE GRADED)	301.25	110
-	-	-	-	-	-	-	140	140	m^3	SUBBASE OF CRUSHED GRAVEL (FINE GRADED)	301.26	1.3
-	-	-	-	-	-	-	135	135	t	AGGREGATE SHOULDERS	402.12	1
-	-	-	-	-	-	-	8100	8100	kg	EMULSIFIED ASPHALT	404.65	81
-	-	24	-	-	-	-	-	24	t	BITUMINOUS CONCRETE PAVEMENT (PG 58-28)	406.25	-
-	-	-	-	-	-	-	1	1	LS	PRICE ADJUSTMENT ASPHALT CEMENT (NOT A BID ITEM)	406.50	-
-	-	-	-	-	-	-	13820	13820	t	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28)	490.30	1
-	-	-	-	1610	-	-	-	1610	m^3	CONCRETE, CLASS A QA/QC	501.221	-
-	-	3	-	1575	-	-	97	1675	m^3	CONCRETE, CLASS B	501.25	0.4
-	-	-	-	500	-	-	12	512	m^3	CONCRETE, CLASS C	501.30	0.9
-	-	-	-	73	-	-	-	73	m^3	CONCRETE, SILICA FUME	501.60	-

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
		EXCAVATION OF SURFACES AND PAVEMENTS
1206	m^3	RAMP Z
470	m^3	DETOURS
260	m^3	VT. ROUTE 67A
14	m^3	ROUNDING
1950	m^3	TOTAL
		SAND BORROW
836	m^3	VT. ROUTE 9
11899	m^3	RAMPS
176	m^3	VT. ROUTE 67A
81	m^3	SANITARY SEWER
4100	m^3	DRAINAGE
108	m^3	ROUNDING
17200	m^3	TOTAL
		GRANULAR BORROW
4860	m^3	VT. ROUTE 9 (ESTIMATED)
2417	m^3	DRAINAGE
20640	m^3	BR 700
83	m^3	ROUNDING
28000	m^3	TOTAL
		FINE GRADING-SUBGRADE
1767	m^2	VT. ROUTE 9
28037	m^2	RAMPS
96	m^2	ROUNDING
29900	m^2	TOTAL
		TRENCH EXCAVATION OF EARTH
327	m^3	UNDERDRAIN
1090	m^3	DRAINAGE
299	m^3	SANITARY SEWER
298	m^3	WATERLINE
100	m^3	EXPLORATORY TEST PITS
323	m^3	BORROW AREA
13	m^3	ROUNDING
2450	m^3	TOTAL

PROJECT: BENNINGTON - HOOSICK

PROJECT NO.: D.P.I. 0146(1) C/4

DESIGN FILE NAME: 5116/VAOT/CON4/QUAN.DGN
IPARM FILE NAME: N/A
SURVEYED BY: N/A
SQUAD LEADER: T.P.K.
DWG. NO. 0-1

PLOT DATE: 9/00
SURVEY DATE: N/A
DRAWN BY: E.C.D.
SHEET: 4 OF 385

FILE NAME =u:\5116\vaot\contract4\quan.dgn
DATE/TIME =11 SEP 2000
USER =1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET

NOT Metric

SUMMARY OF ESTIMATED QUANTITIES

							NON GOV'T PARTICIPATING	EMPLOYEE TRAINEESHIP	BORROW AREA	EROSION CONTROL	BRIDGE 700	BRIDGE 900	BRIDGE 1000	ROADWAY	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NUMBER	RND
							-	-	-	-	1	-	-	-	1	LS	FURNISHING EQUIPMENT FOR DRIVING PILING	504.10	-
							-	-	-	-	2890	-	-	-	2890	m	STEEL PILING (HP 360 X 132)	505.18	-
							-	-	-	-	2555	-	-	-	2555	m^2	PERMANENT STEEL SHEET PILING	505.35	-
							-	-	-	-	8	-	-	-	8	EA	DYNAMIC PILE LOADING TEST	505.45	-
							-	-	-	-	1200000	-	-	-	1200000	kg	STRUCTURAL STEEL (PLATE GIRDER)	506.55	-
							-	-	-	-	1	-	-	-	1	LS	STRUCTURAL STEEL (SCUPPERS, DOWNSPOUTS)	506.75	-
							-	-	138	-	159585	-	-	4972	164695	kg	REINFORCING STEEL	507.15	1
							-	-	-	-	242665	-	-	-	242665	kg	EPOXY COATED REINFORCING STEEL	507.17	-
							-	-	-	-	1	-	-	-	1	LS	SHEAR CONNECTORS (11532-22 mm DIA. x 175 mm LONG) (BR 700)	508.15	-
							-	-	-	-	1	-	-	-	1	LS	STRUCTURAL PAINTING, SHOP APPLIED (24 t)	513.25	-
							-	-	-	-	1	-	-	-	1	LS	CONTAINMENT AND ENVIRONMENTAL PROTECTION, SHOP	513.35	-
							-	-	-	-	1	-	-	-	1	LS	SURFACE PREPARATION, SHOP	513.40	-
							-	-	-	-	241	-	-	-	241	L	WATER REPELLENT	514.10	-
							-	-	-	-	23	-	-	-	23	m	BRIDGE EXPANSION JOINT (FINGER JT. @ ABUT 1)	516.10	-
							-	-	-	-	24	-	-	-	24	m	BRIDGE EXPANSION JOINT (FINGER JT. @ ABUT 2)	516.10	-
							-	-	-	-	-	155	34	-	189	m^2	SHEET MEMBRANE WATERPROOFING (TORCH APPLIED) (MOD.)	519.20	-
							-	-	-	-	582	-	-	-	582	m	BRIDGE RAILING - NETC - 2 RAIL	525.33	-
							-	-	-	-	8	-	-	-	8	EA	BEARING DEVICE ASSEMBLY (EXP. @ ABUT 1)	531.10	-
							-	-	-	-	8	-	-	-	8	EA	BEARING DEVICE ASSEMBLY (EXP. @ PIER 1)	531.10	-
							-	-	-	-	8	-	-	-	8	EA	BEARING DEVICE ASSEMBLY (EXP. @ PIER 2)	531.10	-
							-	-	-	-	8	-	-	-	8	EA	BEARING DEVICE ASSEMBLY (FIX. @ PIER 3)	531.10	-
							-	-	-	-	8	-	-	-	8	EA	BEARING DEVICE ASSEMBLY (EXP. @ PIER 4)	531.10	-
							-	-	-	-	8	-	-	-	8	EA	BEARING DEVICE ASSEMBLY (EXP. @ ABUT 2)	531.10	-
							-	-	-	-	-	1	-	-	1	LS	PRECAST CONCRETE BOX CULVERT (RAMP AB)	540.10	-
							-	-	-	-	-	-	1	-	1	LS	PRECAST CONCRETE BOX CULVERT (SILK ROAD)	540.10	-
																	BEGIN 300 mm OPTION PIPES		
							-	-	-	-	-	-	-	91	91	m	300 mm CAAP 1.6 mm (67 mm x 13 mm)	601.0205	-
							-	-	-	-	-	-	-	91	91	m	300 mm PCCSP 1.7 mm (67 mm x 13 mm)	601.0405	-
							-	-	-	-	-	-	-	61	61	m	300 mm RCP CLASS III	601.0805	-
							-	-	-	-	-	-	-	91	91	m	300 mm CPEP	601.0905	-
							-	-	-	-	-	-	-	61	61	m	300 mm CPEP (SL)	601.2605	-
																	END 300 mm OPTION PIPES		

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
		SUBBASE OF CRUSHED GRAVEL (COARSE GRADED)
1151	m^3	VT. ROUTE 9
16593	m^3	RAMPS
455	m^3	VT. ROUTE 67A
930	m^3	DETOURS
1380	m^3	BORROW AREA
75	m^3	BR 700
86	m^3	BR 900
20	m^3	BR 1000
110	m^3	ROUNDING
20800	m^3	TOTAL

PROJECT: BENNINGTON - HOOSICK	PROJECT NO.: D.P.J. 0146(1) C/4
DESIGN FILE NAME: 5116/VAOT/CON4/QUAN.DGN	
IPARM FILE NAME: N/A	PLOT DATE: 9/00
SURVEYED BY: N/A	SURVEY DATE: N/A
SQUAD LEADER: T.P.K.	DRAWN BY: E.C.D.
DWG. NO. 0-2	SHEET: 5 OF 385

FILE NAME =u:\5116\vaot\contract4\quan.dgn
DATE/TIME =15 SEP 2000
USER =1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET

Metric

SUMMARY OF ESTIMATED QUANTITIES

							NON GOV'T PARTICIPATING	EMPLOYEE TRAINEESHIP	BORROW AREA	EROSION CONTROL	BRIDGE 700	BRIDGE 900	BRIDGE 1000	ROADWAY	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NUMBER	RND
																	BEGIN 450 mm OPTION PIPES		
							-	-	-	-	-	-	-	476	476	m	450 mm CAAP 1.6 mm (67 mm x 13 mm)	601.0215	-
							-	-	-	-	-	-	-	476	476	m	450 mm PCCSP 1.7 mm (67 mm x 13 mm)	601.0415	-
							-	-	16	-	-	-	-	444	460	m	450 mm RCP CLASS III	601.0815	-
							-	-	-	-	-	-	-	476	476	m	450 mm CPEP	601.0915	-
							-	-	55	-	-	-	-	422	477	m	450 mm CPEP (SL)	601.2615	-
																	END 450 mm OPTION PIPES		
																	BEGIN 750 mm OPTION PIPES		
							-	-	-	-	-	-	-	51	51	m	750 mm CAAP 2.0 mm (67 mm x 13 mm)	601.0236	-
							-	-	-	-	-	-	-	51	51	m	750 mm PCCSP 2.1mm (67 mm x 13 mm)	601.0436	-
							-	-	-	-	-	-	-	51	51	m	750 mm PCCSP (PI) 2.1mm (67 mm x 13 mm)	601.0636	-
							-	-	-	-	-	-	-	51	51	m	750 mm RCP CLASS III	601.0835	-
							-	-	-	-	-	-	-	51	51	m	750 mm CPEP	601.0925	-
							-	-	-	-	-	-	-	51	51	m	750 mm CPEP (SL)	601.2625	-
																	END 750 mm OPTION PIPES		
																	BEGIN 300 mm OPTION ELBOWS		
							-	-	-	-	-	-	-	6	6	EA	300 mm CAAP ELBOW 1.6 mm (67 mm x 13 mm)	601.5205	-
							-	-	-	-	-	-	-	6	6	EA	300 mm PCCSP ELBOW 1.7 mm (67 mm x 13 mm)	601.5405	-
							-	-	-	-	-	-	-	6	6	EA	300 mm CPEP ELBOW	601.5802	-
																	END 300 mm OPTION ELBOWS		
																	BEGIN 450 mm OPTION ELBOWS		
							-	-	-	-	-	-	-	2	2	EA	450 mm CAAP ELBOW 1.6 mm (67 mm x 13 mm)	601.5215	-
							-	-	-	-	-	-	-	2	2	EA	450 mm PCCSP ELBOW 1.7 mm (67 mm x 13 mm)	601.5415	-
							-	-	-	-	-	-	-	2	2	EA	450 mm CPEP ELBOW	601.5814	-
																	END 450 mm OPTION ELBOWS		
																	BEGIN 300 mm OPTION PIPE END SECTIONS		
							-	-	-	-	-	-	-	11	11	EA	300 mm CSPES 1.7 mm (67 mm x 13 mm)	601.6005	-
							-	-	-	-	-	-	-	11	11	EA	300 mm CPEPES	601.7005	-
																	END 300 mm OPTION PIPE END SECTIONS		
																	BEGIN 450 mm OPTION PIPE END SECTIONS		
							-	-	-	-	-	-	-	11	11	EA	450 mm CSPES 1.7 mm (67 mm x 13 mm)	601.6015	-
							-	-	-	-	-	-	-	11	11	EA	450 mm CAAPES 1.6 mm (67 mm x 13 mm)	601.6215	-
							-	-	2	-	-	-	-	11	13	EA	450 mm RCPES CLASS III	601.6815	-
							-	-	1	-	-	-	-	11	12	EA	450 mm CPEPES	601.7015	-
																	END 450 mm OPTION PIPE END SECTIONS		
																	BEGIN 750 mm OPTION PIPE END SECTIONS		
							-	-	-	-	-	-	-	2	2	EA	750 mm CSPES 2.1mm (67 mm x 13 mm)	601.6036	-
							-	-	-	-	-	-	-	2	2	EA	750 mm CAAPES 1.6 mm (67 mm x 13 mm)	601.6236	-
							-	-	-	-	-	-	-	2	2	EA	750 mm RCPES CLASS III	601.6835	-
							-	-	-	-	-	-	-	2	2	EA	750 mm CPEPES	601.7025	-
																	END 750 mm OPTION PIPE END SECTIONS		
							-	-	-	-	-	-	-	14	14	m	900 mm RCP CLASS III	601.0845	-
							-	-	-	-	-	-	-	4	4	EA	900 mm RCPES CLASS III	601.6845	-
							-	-	-	-	-	-	-	103	103	m	CLEANING CULVERT PIPE IN PLACE (0-600 mm INCLUSIVE)	601.995	0.5
							-	-	-	-	-	-	-	52	52	m	CLEANING CULVERT PIPE IN PLACE (0-600 mm INCLUSIVE) (MOD.)	601.995	0.7
							-	-	-	-	-	-	-	2	2	EA	SANITARY SEWER MANHOLE	604.22	-

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
		SUPERPAVE BITUMINOUS CONCRETE PAVEMENT
		(PG 58-28) TYPE IS
225	†	VT. ROUTE 9
3540	†	RAMPS
114	†	VT. ROUTE 67A
506	†	DETOURS
4385	†	TOTAL
		SUPERPAVE BITUMINOUS CONCRETE PAVEMENT
		(PG 58-28) TYPE IIS
475	†	VT. ROUTE 9
3386	†	RAMPS
97	†	VT. ROUTE 67A
3958	†	TOTAL
		SUPERPAVE BITUMINOUS CONCRETE PAVEMENT
		(PG 58-28) TYPE IIIS
141	†	VT. ROUTE 9
2116	†	RAMPS
1658	†	VT. ROUTE 67A
203	†	SILK ROAD
352	†	DETOURS
4	†	DRIVES
4474	†	TOTAL
		SUPERPAVE BITUMINOUS CONCRETE PAVEMENT
		(PG 58-28) TYPE IVS
990	†	VT. ROUTE 67A
12	†	SILK ROAD
1002	†	TOTAL
		SUPERPAVE BITUMINOUS CONCRETE PAVEMENT
		(PG 58-28) SUMMARY
4385	†	TYPE IS
3958	†	TYPE IIS
4474	†	TYPE IIIS
1002	†	TYPE IVS
1	†	ROUNDING
13820	†	TOTAL

PROJECT: BENNINGTON - HOOSICK
PROJECT NO.: D.P.I. 0146(1) C/4

DESIGN FILE NAME: 5116/VAOT/CON4/QUAN.DGN
IPARM FILE NAME: N/A
SURVEYED BY: N/A
SQUAD LEADER: T.P.K.
DWG. NO. 0-3
PLOT DATE: 9/00
SURVEY DATE: N/A
DRAWN BY: E.C.D.
SHEET: 6 OF 385

FILE NAME =u:\5116\vaot\contract4\quan.dgn
DATE/TIME =11 SEP 2000
USER =1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET

Metric

SUMMARY OF ESTIMATED QUANTITIES

NON GOV'T PARTICIPATING	EMPLOYEE TRAINEESHIP	BORROW AREA	EROSION CONTROL	BRIDGE 700	BRIDGE 900	BRIDGE 1000	ROADWAY	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NUMBER	RND
-	-	-	-	-	-	-	5	5	EA	REHABING DI, CB, OR MH, CLASS I	604.412	-
-	-	-	-	-	-	-	2	2	EA	REHABING DI, CB, OR MH, CLASS II	604.415	-
-	-	-	-	-	-	-	5	5	EA	CHANGING ELEVATION OF SEWER MANHOLES	604.42	-
-	-	-	-	-	-	-	1	1	EA	CAST IRON GRATE WITH FRAME, TYPE A	604.45	-
-	-	1	-	-	-	-	11	12	EA	CAST IRON GRATE WITH FRAME, TYPE D	604.47	-
-	-	-	-	-	-	-	24	24	EA	CAST IRON GRATE WITH FRAME, TYPE E	604.48	-
-	-	-	-	-	-	-	216	216	m	150 mm UNDERDRAIN (MOD.)	605.10	-
-	-	-	-	-	-	-	48	48	m	150 mm UNDERDRAIN CARRIER PIPE	605.20	-
-	-	13	-	-	-	-	-	13	m	150 mm UNDERDRAIN CARRIER PIPE (SL)	605.20	-
-	-	-	-	-	-	-	10	10	EA	UNDERDRAIN FLUSHING BASINS	605.95	-
-	-	-	-	-	-	-	25	25	HR	POWER GRADER RENTAL	608.15	EST.
-	-	-	-	-	-	-	25	25	HR	ALL- PURPOSE EXCAVATOR RENTAL, TYPE I	608.25	EST.
-	-	-	-	-	-	-	15	15	HR	POWER BROOM RENTAL	608.30	EST.
-	-	-	-	-	-	-	15	15	HR	POWER BROOM RENTAL, TYPE II	608.31	EST.
-	-	-	-	-	-	-	25	25	HR	TRUCK RENTAL	608.37	EST.
-	-	-	-	-	-	-	25	25	HR	LOADER RENTAL, TYPE I	608.40	EST.
-	-	340	-	150	-	-	10	500	m^3	STONE FILL, TYPE I	613.10	3.5
-	-	-	424	-	66	-	540	1030	m^3	STONE FILL, TYPE II	613.11	4
-	-	-	3390	-	-	-	-	3390	m^3	STONE FILL, TYPE II (MOD.)	613.11	1
-	-	-	-	-	-	40	-	40	m^3	STONE FILL, TYPE III	613.12	-
-	-	-	-	2660	-	-	-	2660	m^3	STONE FILL, TYPE IV	613.13	-
-	-	-	-	-	-	-	1010	1010	m	GRANITE SLOPE EDGING	616.20	8
										BEGIN OPTION ITEM		
-	-	-	-	-	-	-	550	550	m	PRECAST REINFORCED CEMENT CONCETE CURB, TYPE B	616.26	3
-	-	-	-	-	-	-	550	550	m	CAST - IN - PLACE CEMENT CONCRETE CURB, TYPE B	616.28	3
										END OPTION ITEM		
-	-	-	-	-	-	-	560	560	m	TREATED TIMBER CURB	616.35	3.5
-	-	-	-	-	-	-	1010	1010	m	REMOVAL OF EXISTING CURB	616.41	3.5
-	-	-	-	-	-	-	47	47	t	BITUMINOUS CONCRETE GUTTERS AND TRAFFIC ISLANDS	616.47	-
-	-	2	-	-	-	-	37	39	EA	YIELDING MARKER POSTS	619.17	-
-	-	-	-	-	-	-	1750	1750	m	CHAIN-LINK FENCE, 1.8 m	620.12	8.4

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

PROJECT: BENNINGTON - HOOSICK

PROJECT NO.: D.P.I. 0146(1) C/4

DESIGN FILE NAME: 5116/VAOT/CON4/QUAN.DGN
IPARM FILE NAME: N/A
SURVEYED BY: N/A
SQUAD LEADER: T.P.K.
DWG. NO. 0-4

PLOT DATE: 9/00
SURVEY DATE: N/A
DRAWN BY: E.C.D.
SHEET: 7 OF 385

FILE NAME =u:\5116\vaot\contract4\quan.dgn
DATE/TIME =11 SEP 2000
USER =1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET

Metric

SUMMARY OF ESTIMATED QUANTITIES

NON GOV'T PARTICIPATING	EMPLOYEE TRAINEESHIP	BORROW AREA	EROSION CONTROL	BRIDGE 700	BRIDGE 900	BRIDGE 1000	ROADWAY	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NUMBER	RND
-	-	-	-	-	-	-	10.8	10.8	m	GATE FOR CHAIN-LINK FENCE, 1.8 m	620.16	-
-	-	-	-	-	-	-	45	45	EA	BRACING ASSEMBLY FOR CHAIN-LINK FENCE, 1.8 m	620.21	-
-	-	-	-	-	-	-	270	270	m	WOVEN WIRE FENCE WITH STEEL POSTS, 1.2 m	620.25	14.5
-	-	-	-	-	-	-	15	15	EA	STEEL BRACE FOR WOVEN WIRE FENCE, 1.2 m	620.40	3
-	-	-	-	-	-	-	1060	1060	m	REMOVAL OF EXISTING FENCE	620.55	-
-	-	-	2430	-	-	-	-	2430	m	SNOW FENCE (MOD.)	620.70	2
-	-	1151	-	-	-	-	-	1151	m	SNOW FENCE (MOD. 2)	620.70	-
-	-	-	-	60	-	-	-	60	m	SNOW BARRIER (GALVANIZED)	620.75	-
-	-	-	-	-	-	-	578.8	578.8	m	STEEL BEAM GUARDRAIL	621.20	-
-	-	-	-	-	-	-	111.4	111.4	m	STEEL BEAM GUARDRAIL W/2.4 m POSTS (MOD.)	621.20	-
-	-	-	-	-	-	-	2	2	EA	MANUFACTURED TERMINAL SECTION (FLARED)	621.505	-
-	-	-	-	-	-	-	2	2	EA	MANUFACTURED TERMINAL SECTION	621.52	-
-	-	-	-	-	-	-	6	6	EA	ANCHOR FOR STEEL BEAM RAIL	621.60	-
-	-	-	-	-	-	-	4	4	EA	GUARDRAIL APPROACH SECTION, NETC 2 RAIL (MOD.)	621.72	-
-	-	-	-	-	-	-	194.5	194.5	m	REMOVING AND RESETTING GUARDRAIL	621.75	-
-	-	-	-	-	-	-	119	119	m	REMOVAL AND DISPOSAL OF GUARDRAIL	621.80	-
-	-	-	-	-	-	-	1310	1310	m	TEMPORARY TRAFFIC BARRIER	621.90	4
-	-	-	-	-	-	-	156	156	m	TEMPORARY TRAFFIC BARRIER (MOD.)	621.90	-
-	-	-	-	5	-	-	-	5	EA	VIBRATING WIRE SETTLEMENT PLATFORM	623.23	-
-	-	-	-	2	-	-	-	2	EA	EARTH PRESSURE CELL	623.60	-
-	-	-	-	-	-	-	65	65	m	450 mm SLEEVES FOR UTILITIES	625.10	2
-	-	-	-	-	-	-	32	32	HR	PUMP TEST FOR YIELD (MOD.)	626.30	-
-	-	-	-	-	-	-	98	98	m	200 mm DUCTILE IRON PIPE CLASS 52, CEMENT LINED	628.28	-
-	-	-	-	-	-	-	1	1	LS	TRANSFER TO NEW SYSTEM - SANITARY SEWER	628.42	-
-	-	-	-	-	-	-	7	7	EA	ADJUST ELEVATION OF VALVE BOX	629.20	-
-	-	-	-	-	-	-	115	115	m	200 mm DUCTILE IRON PIPE CLASS 52, CEMENT LINED	629.24	-
-	-	-	-	-	-	-	1	1	EA	TAPPING SLEEVE AND VALVE WITH VALVE BOX	629.35	-
-	-	-	-	-	-	-	1	1	LS	TRANSFER TO NEW SYSTEM - WATER SYSTEM	629.42	-
-	-	-	-	-	-	-	500	500	HR	UNIFORMED TRAFFIC OFFICERS	630.10	EST.
-	-	1825	-	-	-	-	750	2575	HR	FLAGGERS	630.15	EST.

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

PROJECT: BENNINGTON - HOOSICK

PROJECT NO.: D.P.I. 0146(1) C/4

DESIGN FILE NAME: 5116/VAOT/CON4/QUAN.DGN
IPARM FILE NAME: N/A
SURVEYED BY: N/A
SQUAD LEADER: T.P.K.
DWG. NO. 0-5

PLOT DATE: 9/00
SURVEY DATE: N/A
DRAWN BY: E.C.D.
SHEET: 8 OF 385

FILE NAME =u:\5116\vaot\contract4\quan.dgn
DATE/TIME = 11 SEP 2000
USER =1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET

VAOT Metric

SUMMARY OF ESTIMATED QUANTITIES

NON GOV'T PARTICPATING	EMPLOYEE TRAINEESHIP	BORROW AREA	EROSION CONTROL	BRIDGE 700	BRIDGE 900	BRIDGE 1000	ROADWAY	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NUMBER	RND
-	2600	-	-	-	-	-	-	2600	HR	EMPLOYEE TRAINEESHIP	634.10	-
-	-	-	-	0.6	-	-	0.4	1	LS	MOBILIZATION	635.10	-
-	-	-	-	-	-	-	1	1	LS	TRAFFIC CONTROL	641.10	-
-	-	-	-	-	-	-	3	3	EA	PORTABLE CHANGEABLE MESSAGE SIGN	641.15	-
-	-	-	-	-	-	-	5520	5520	m	DURABLE 100 mm WHITE LINE	646.40	2
-	-	-	-	-	-	-	4130	4130	m	DURABLE 100 mm YELLOW LINE	646.41	6
-	-	-	-	-	-	-	790	790	m	DURABLE 200 mm WHITE LINE	646.42	4
-	-	-	-	-	-	-	30	30	m	DURABLE 200 mm YELLOW LINE	646.43	-
-	-	-	-	-	-	-	91	91	m	DURABLE 600 mm STOP BAR	646.46	-
-	-	-	-	-	-	-	122	122	EA	DURABLE LETTER OR SYMBOL	646.50	-
-	-	-	-	-	-	-	6700	6700	m	TEMPORARY 100 mm WHITE LINE	646.60	-
-	-	-	-	-	-	-	6240	6240	m	TEMPORARY 100 mm YELLOW LINE	646.61	3
-	-	-	-	-	-	-	230	230	m	TEMPORARY 100 mm YELLOW LINE (TYPE II TAPE)	646.61	-
-	-	-	-	-	-	-	6240	6240	m	TEMPORARY 100 mm YELLOW LINE	646.61	3
-	-	-	-	-	-	-	230	230	m	TEMPORARY 100 mm YELLOW LINE (TYPE II TAPE)	646.61	-
-	-	-	-	-	-	-	205	205	m	TEMPORARY 200 mm WHITE LINE	646.62	4
-	-	-	-	-	-	-	136	136	m	TEMPORARY 600 mm STOP BAR	646.66	-
-	-	-	-	-	-	-	42	42	EA	TEMPORARY LETTER OR SYMBOL	646.70	-
-	-	-	-	-	-	-	5	5	EA	TEMPORARY LETTER OR SYMBOL (TYPE II TAPE)	646.70	-
-	-	-	-	-	-	-	1710	1710	EA	LINE STRIPING TARGETS	646.76	-
-	-	-	-	-	-	-	630	630	m	PAINTED CURB	646.81	3
-	-	-	-	-	-	-	44	44	m^2	REMOVAL OF EXISTING PAVEMENT MARKINGS	646.85	-
-	-	4470	-	-	-	-	41445	45915	m^2	GEOTEXTILE FOR ROADBED SUBGRADE SEPARATOR	649.11	3
-	-	940	1925	1405	305	90	665	5330	m^2	GEOTEXTILE UNDER STONE FILL	649.31	3
-	-	-	5635	-	-	-	-	5635	m^2	GEOTEXTILE UNDER STONE FILL (MOD.)	649.31	-
-	-	-	-	-	-	-	1210	1210	m^2	GEOTEXTILE FOR UNDERDRAIN TRENCH LINING	649.41	-
-	-	18	4642	-	-	-	-	4660	m^2	GEOTEXTILE FOR SILT FENCE	649.51	3

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

PROJECT: BENNINGTON - HOOSICK

PROJECT NO.: D.P.I. 0146(1) C/4

DESIGN FILE NAME: 5116/VAOT/CON4/QUAN.DGN
IPARM FILE NAME: N/A
SURVEYED BY: N/A
SQUAD LEADER: T.P.K.
DWG. NO. 0-6

PLOT DATE: 9/00
SURVEY DATE: N/A
DRAWN BY: E.C.D.
SHEET: 9 OF 385

FILE NAME =u:\5116\vaot\contract4\quan.dgn
DATE/TIME =11 SEP 2000
USER =1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET

VAOT Metric

SUMMARY OF ESTIMATED QUANTITIES

NON GOV'T PARTICIPATING	EMPLOYEE TRAINEESHIP	BRIDGE AREA	EROSION CONTROL	BRIDGE 700	BRIDGE 900	BRIDGE 1000	ROADWAY	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NUMBER	RND
-	-	110	-	-	-	-	290	400	kg	SEED	651.15	2
-	-	870	-	-	-	-	2330	3200	kg	FERTILIZER	651.18	28
-	-	7	-	-	-	-	19	26	t	AGRICULTURAL LIMESTONE	651.20	-
-	-	7	-	-	-	-	19	26	t	HAY MULCH	651.25	-
-	-	275	660	-	-	-	-	935	EA	HAY BALES FOR EROSION CONTROL	651.26	4
-	-	-	-	-	-	-	2070	2070	m^3	TOPSOIL	651.35	15
-	-	-	-	500	40	30	-	570	m^2	GRUBBING MATERIAL	651.40	-
-	-	-	-	-	-	-	90.28	90.28	m^2	TRAFFIC SIGNS, TYPE A	675.20	-
-	-	-	-	-	-	-	110.96	110.96	m^2	TRAFFIC SIGNS, TYPE B	675.21	-
-	-	-	-	-	-	-	565.4	565.4	m	FLANGED CHANNEL SIGN POSTS	675.301	-
-	-	-	-	-	-	-	1263.9	1263.9	kg	TUBULAR STEEL SIGN POSTS	675.33	-
-	-	-	-	-	-	-	26	26	EA	FOUNDATION FOR TUBULAR STEEL POSTS	675.43	-
-	-	-	-	-	-	-	107	107	EA	REMOVING SIGNS	675.50	-
-	-	-	-	-	-	-	140	140	EA	DELINEATORS W/STEEL POSTS	676.10	-
-	-	-	-	-	-	-	18	18	EA	DELINEATORS W/STEEL POSTS (MOD.)	676.10	-
-	-	-	-	-	-	-	2	2	EA	OVERHEAD TRAFFIC SIGN SUPPORT, TRI-CHORD	677.10	-

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

PROJECT: BENNINGTON - HOOSICK

PROJECT NO.: D.P.I. 0146(1) C/4

DESIGN FILE NAME: 5116/VAOT/CON4/QUAN.DGN
IPARM FILE NAME: N/A
SURVEYED BY: N/A
SQUAD LEADER: T.P.K.
DWG. NO. 0-7

PLOT DATE: 9/00
SURVEY DATE: N/A
DRAWN BY: E.C.D.
SHEET: 10 OF 385

FILE NAME =u:\5116\vaot\contract4\quan.dgn
DATE/TIME =11 SEP 2000
USER =1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET

Metric

SUMMARY OF ESTIMATED QUANTITIES

							NON GOV'T PARTICIPATING	EMPLOYEE TRAINEESHIP	BORROW AREA	EROSION CONTROL	BRIDGE 700	BRIDGE 900	BRIDGE 1000	ROADWAY	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NUMBER	RND
							-	-	-	-	-	-	-	1	1	EA	TRAFFIC CONTROL SIGNAL SYSTEM - RAMP CD INTERSECTION	678.15	-
							-	-	-	-	-	-	-	1	1	EA	TRAFFIC CONTROL SIGNAL SYSTEM - RAMP AB INTERSECTION	678.15	-
							-	-	-	-	-	-	-	16	16	m	ELECTRICAL CONDUIT (50 mm DIA.)	678.21	-
							-	-	-	-	-	-	-	750	750	m	VEHICLE LOOP DETECTOR	678.22	-
							-	-	-	-	-	-	-	532	532	m	WIRED CONDUIT (40 mm DIA.)	678.23	-
							-	-	-	-	-	-	-	1873	1873	m	WIRED CONDUIT (50 mm DIA.)	678.23	-
							-	-	-	-	-	-	-	385	385	m	WIRED CONDUIT (80 mm DIA.)	678.23	-
							-	-	-	-	-	-	-	8	8	EA	PULLBOX - STANDARD	678.25	-
							-	-	-	-	-	-	-	9	9	EA	JUNCTION BOX	678.26	-
							-	-	-	-	-	-	-	231	231	m	ELECTRICAL CONDUIT SLEEVE (150 mm DIA.)	678.30	-
							-	-	-	-	-	-	-	1	1	EA	TEMPORARY TRAFFIC SIGNAL SYSTEM	678.40	-
							-	-	-	-	-	-	-	44	44	EA	LIGHT POLE BASE	679.21	-
							-	-	-	-	-	-	-	11	11	EA	BREAKAWAY FEATURE FOR LIGHT POLE	679.23	-
							-	-	-	-	-	-	-	3	3	EA	REMOVING AND RESETTING LIGHT POLE (MOD.)	679.25	-
							-	-	-	-	-	-	-	44	44	EA	LIGHT POLE	679.45	-
							-	-	-	-	-	-	-	44	44	EA	BRACKET ARM	679.47	-
							-	-	-	-	-	-	-	44	44	EA	LUMINAIRE	679.50	-

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

PROJECT: BENNINGTON - HOOSICK

PROJECT NO.: D.P.I. 0146(1) C/4

DESIGN FILE NAME: 5116/VAOT/CON4/QUAN.DGN
IPARM FILE NAME: N/A
SURVEYED BY: N/A
SQUAD LEADER: T.P.K.
DWG. NO. Q-8

PLOT DATE: 6/00
SURVEY DATE: N/A
DRAWN BY: E.C.D.
SHEET: 11 OF 385

FILE NAME =u:\5116\vaot\contract4\quan.dgn
DATE/TIME =11 SEP 2000
USER =1459

ITEM DETAIL SUMMARY SHEET

VAOT Metric

LOCATION			GUARDRAIL												REMARKS
STATION	STATION	POS.	616.20 GRANITE SLOPE EDGING m	616.26 OR 616.28 PRECAST OR CAST-IN-PLACE CONC. CURB, TYPE B m	616.35 TREATED TIMBER CURB m	616.41 REMOVAL OF EXISTING CURB m	621.20 STEEL BEAM G.R. m	621.20 S.B. G.R. W/2.4 m POSTS (MOD.) m	621.505 MANUFACT. TERM. SECT. (FLARED) EA	621.52 MANUFACT. TERM. SECT. EA	621.60 ANCHOR FOR G.R. EA	621.72 G.R. APPR. NETC 2 RAIL (MOD.) EA	621.75 REMOVE & RESET G.R. m	621.80 REMOVE & DISP. G.R. m	
VT. ROUTE 9:															
16+698.2	16+751.4	LT			55.3		45.6					1			INSTALL NEW APPROACH SECTION, NETC 2 RAIL (MOD.) FROM STA. 16+743.8 TO STA. 16+751.4. INSTALL TREATED TIMBER CURB FROM STA. 16+698.2 TO STA. 16+753.5.
16+697.7	16+762.3	RT			66.5		57					1			INSTALL NEW APPROACH SECTION, NETC 2 RAIL (MOD.) FROM STA. 16+754.7 TO STA. 16+762.3. INSTALL TREATED TIMBER CURB FROM STA. 16+697.7 TO STA. 16+764.2.
RAMPS:															
X10+281.1	X10+331.1	LT											50		
AB10+035.5	AB10+059.8	RT	71.4												
AB10+036.5	AB10+094.4	LT		82.6											
AB10+037.0	AB10+079.6	LT				48.7									
AB10+037.0	AB10+196.6	RT				430.3									
AB10+040.2	AB10+126.3	RT		95.2		42.9									
AB10+043.6	AB10+196.6	LT	152.5												
AB10+043.6	AB10+196.6	RT	152.5												
AB10+079.6	AB10+110.0	RT				42.0									
A10+000.0	A10+030.0	RT				28.3									
A10+059.0	A10+127.4	RT			89.9		68.4		1			1			INSTALL NEW MAN. TERM. SECTION (FLARED) AT STA. A10+059.0; INSTALL NEW APPROACH SECTION, NETC 2 RAIL (MOD.) AT STA. A10+127.4. INSTALL TREATED TIMBER CURB FROM STA. A10+053.1 TO STA. A10+143.0.
B10+059.4	B10+091.7	LT											32.3		
B10+065.7	B10+119.3	RT											53.6		
CD10+028.5	CD10+088.3	LT		83.1											
CD10+029.4	CD10+045.7	RT	51.8												
CD10+032.8	CD10+120.0	RT		89.8											
CD10+038.3	CD10+271.9	LT	233.6												
CD10+038.3	CD10+271.9	RT	233.6												
CD10+119.7	CD10+271.9	RT			151.9		152.2		1						INSTALL NEW MAN. TERM. SECTION (FLARED) AT STA. CD10+119.7. INSTALL TREATED TIMBER CURB FROM STA. CD10+120.0 TO STA. CD10+271.9.
C10+064.7	C10+239.5	RT			174.1		174.8			1	1	1			INSTALL NEW APPROACH SECTION, NETC 2 RAIL (MOD.) AT STA. C10+064.7. INSTALL TREATED TIMBER CURB FROM STA. C10+055.0 TO STA. C10+229.1. INSTALL NEW MANUFACTURED TERMINAL SECTION AT STA. C10+239.5. INSTALL ANCHOR AT STA. C10+243.3.
D10+000.0	D10+015.0	RT			18.8		15.0			1	1				INSTALL NEW MANUFACTURED TERMINAL SECTION AT STA D10+015.0. INSTALL ANCHOR AT STA. D10+018.8. INSTALL TREATED TIMBER CURB FROM STA. D10+000.0 TO STA. D10+018.8.
D10+194.8	D10+243.7	RT											48.9		
D10+227.8	D10+237.5	LT											9.7		
SHEET SUBTOTAL			895.4	350.7	556.5	592.2	513.0	-	2	2	2	4	194.5	-	

DATUM
VERTICAL N/A
HORIZONTAL N/A

ITEM DETAIL SHEET 1

SURVEYED BY N/A DATE N/A
DRAWN BY E.C.D. DATE 9/00
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VAOT/5116DSSI.DGN
IPARM FILE N/A DATE PLOTTED N/A
PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG. NO. DS-1 SHEET 12 OF 385

FILE NAME =u:\5116\vaot\contract4\5116dss1.dgn
DATE/TIME =08 SEP 2000
USER =1459

ITEM DETAIL SUMMARY SHEET

VDOT Metric

LOCATION			GUARDRAIL												REMARKS
STATION	STATION	POS.	616.20 GRANITE SLOPE EDGING	616.26 OR 616.28 PRECAST OR CAST-IN-PLACE CONC. CURB, TYPE B	616.35 TREATED TIMBER CURB	616.41 REMOVAL OF EXISTING CURB	621.20 STEEL BEAM G.R.	621.20 S.B. G.R. W/2.4 m POSTS (MOD.)	621.505 MANUFACT. TERM. SECT. (FLARED)	621.52 MANUFACT. TERM. SECT.	621.60 ANCHOR FOR G.R.	621.72 G.R. APPR. NETC 2 RAIL (MOD.)	621.75 REMOVE & RESET G.R.	621.80 REMOVE & DISP. G.R.	
			m	m	m	m	m	m	EA	EA	EA	EA	m	m	
SIDELINES:															
60+675.0	60+723.0	RT	48												
60+675.0	60+781.6	RT				110.5									
60+714.2	60+749.0	LT		36.6											
60+714.2	60+870.0	LT				160.0									
60+723.0	60+781.6	LT	58.6												
60+832.8	60+915.0	LT		84.5											
60+870.0	60+915.0	LT				45.0									
61+030.3	61+067.3	LT		37.0											
61+030.3	61+087.0	LT				57.6									
61+088.0	61+104.0	LT												26.7	
61+158.7	61+196.9	LT		38.2		41.2									
SILK ROAD:															
SR0+002.8	SR0+068.6	LT					65.8				2				INSTALL ANCHOR AT STA. SR0+005.3 & STA. SR0+066.1.
SR0+140.3	SR0+251.7	RT						111.4			2			92.3	INSTALL ANCHOR AT STA. SR0+142.8 & STA. SR0+249.2.
SHEET SUBTOTAL			106.6	196.3	-	414.3	65.8	111.4	-	-	4	-	-	119.0	
DWG. NO. DS-1 SUBTOTAL			895.4	350.7	556.5	592.2	513.0	-	2	2	2	4	194.5	-	
ROUNDING			8	3	3.5	3.5	-	-	-	-	-	-	-	-	
TOTAL			1010	550	560	1010	578.8	111.4	2	2	6	4	194.5	119.0	

DATUM
VERTICAL N/A
HORIZONTAL N/A

ITEM DETAIL SHEET 2

SURVEYED BY N/A DATE N/A
DRAWN BY E.C.D. DATE 9/00
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VAOT/5116DSSI.DGN
IPARM FILE N/A DATE PLOTTED N/A
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG. NO. DS-2 SHEET 13 OF 385

FILE NAME =u:\5116\vaot\contract4\5116dss1.dgn
DATE/TIME =08 SEP 2000
USER =1459

ITEM DETAIL SUMMARY SHEET

VAOT Metric

LOCATION			FENCE									REMARKS
STATION	STATION	POS.	620.12 CHAIN-LINK FENCE 1.8 m m	620.13 CHAIN-LINK FENCE 2.4 m m	620.13 CHAIN-LINK FENCE 2.4 m (MOD.) m	620.16 CHAIN-LINK GATE 1.8 m m	620.21 BRACE ASSEMBLY CHAIN-LINK FENCE, 1.8 m EA	620.22 BRACE ASSEMBLY CHAIN-LINK FENCE, 2.4 m EA	620.25 WOVEN WIRE FENCE W/1.2 m S.P. m	620.40 STEEL BRACE FOR WOVEN WIRE FENCE EA	620.55 REMOVAL OF FENCE m	
VT. ROUTE 9:												
16+675.400	16+700.000	RT							26.1	3		INSTALL WOVEN WIRE BRACING ASSEMBLIES AT STA. 16+675.400 AND STA. 16+700.000
16+675.851	16+706.280	LT							31.6	3		INSTALL WOVEN WIRE BRACING ASSEMBLIES AT STA. 16+675.851 AND STA. 16+706.280
16+700.000	16+729.100	RT							30.7	2		INSTALL WOVEN WIRE BRACING ASSEMBLIES AT STA. 16+729.100
16+706.280	16+749.100	LT							43.8	2		INSTALL WOVEN WIRE BRACING ASSEMBLIES AT STA. 16+749.100
16+729.100	16+767.400	RT							59.9	1		INSTALL WOVEN WIRE BRACING ASSEMBLY AT STA. 16+767.400
16+749.100	16+750.700	LT							63.4	1		INSTALL WOVEN WIRE BRACING ASSEMBLY AT STA. 16+750.700
SR0+020.900	SR0+141.368	RT	120.1				2					INSTALL CHAIN-LINK BRACING ASSEMBLIES AT STA. SR0+020.900 AND STA. SR0+141.368
SR0+141.368	SR0+201.600	RT	60.2				1					INSTALL CHAIN-LINK BRACING ASSEMBLY AT STA. SR0+201.600
SR0+201.600	SR0+234.500	RT	31.7				1					INSTALL CHAIN-LINK BRACING ASSEMBLY AT STA. SR0+234.500
16+796.800	16+877.100	LT	77				2					INSTALL CHAIN-LINK BRACING ASSEMBLIES AT STA. 16+796.800 AND STA. 16+877.100
16+850.780	16+895.400	RT	53.4				1					INSTALL CHAIN-LINK BRACING ASSEMBLY AT STA. 16+895.400
16+895.400	16+924.400	RT	41.4				1					INSTALL CHAIN-LINK BRACING ASSEMBLY AT STA. 16+924.400
16+940.400	16+955.200	RT	21.5				2					INSTALL CHAIN-LINK BRACING ASSEMBLIES AT STA. 16+940.400 AND STA. 16+955.200
16+955.400	16+963.100	LT	66.9				2					INSTALL CHAIN-LINK BRACING ASSEMBLIES AT STA. 16+955.400 AND STA. 16+963.100
16+957.000	16+978.085	RT	42.8				1				69.8	INSTALL CHAIN-LINK BRACING ASSEMBLY AT STA. 16+957.000
16+963.100	16+978.085	LT	28.1									
RAMPS:												
A10+000.000	A10+011.000	RT	12.3				1					INSTALL CHAIN-LINK BRACING ASSEMBLY AT STA. A10+011.000
AB10+068.700	AB10+162.200	RT									136.8	
AB10+072.500	AB10+102.300	RT	27.2				2					INSTALL CHAIN-LINK BRACING ASSEMBLIES AT STA. AB10+072.500 AND STA. AB10+102.300
AB10+102.300	AB10+171.900	RT	145.9				1					INSTALL CHAIN-LINK BRACING ASSEMBLY AT STA. AB10+171.900
AB10+171.900	AB10+196.564	RT	70.6									
C10+000.000	C10+250.186	RT									263.5	
C10+000.000	C10+034.100	RT	33.1				1					INSTALL CHAIN-LINK BRACING ASSEMBLY AT STA. C10+034.100
C10+034.100	C10+163.300	RT	62.6				1					INSTALL CHAIN-LINK BRACING ASSEMBLY AT STA. C10+163.300
C10+163.300	C10+181.300	RT	31				1					INSTALL CHAIN-LINK BRACING ASSEMBLY AT STA. C10+181.300
C10+181.300	C10+194.300	RT	14.5				1					INSTALL CHAIN-LINK BRACING ASSEMBLY AT STA. C10+194.300
C10+194.300	C10+208.900	RT	17.5				1					INSTALL CHAIN-LINK BRACING ASSEMBLY AT STA. C10+208.900
C10+208.900	C10+239.000	RT	47.3				1					INSTALL CHAIN-LINK BRACING ASSEMBLY AT STA. C10+239.000
C10+239.000	C10+247.200	RT	65.1				1					INSTALL CHAIN-LINK BRACING ASSEMBLY AT STA. C10+247.200
C10+247.200	C10+250.186	RT	3									
SHEET SUBTOTAL			1073.2	-	-	-	24	-	255.5	12	470.1	

DATUM
VERTICAL N/A
HORIZONTAL N/A

ITEM DETAIL SHEET 3

SURVEYED BY N/A DATE N/A
DRAWN BY E.C.D. DATE 9/00
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VAOT/5116DSSI.DGN
IPARM FILE N/A DATE PLOTTED N/A
PROJ. NAME BENNINGTON - HOOSICK
D.P.J. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG. NO. DS-3 SHEET 14 OF 385

FILE NAME =u:\5116\vaot\contract4\5116dss2.dgn
DATE/TIME =08 SEP 2000
USER =1459

ITEM DETAIL SUMMARY SHEET

VAOT Metric

LOCATION			FENCE									REMARKS
STATION	STATION	POS.	620.12 CHAIN-LINK FENCE 1.8 m m	620.13 CHAIN-LINK FENCE 2.4 m m	620.13 CHAIN-LINK FENCE 2.4 m (MOD.) m	620.16 CHAIN-LINK GATE 1.8 m m	620.21 BRACE ASSEMBLY CHAIN-LINK FENCE, 1.8 m EA	620.22 BRACE ASSEMBLY CHAIN-LINK FENCE, 2.4 m EA	620.25 WOVEN WIRE FENCE W/1.2 m S.P. m	620.40 STEEL BRACE FOR WOVEN WIRE FENCE EA	620.55 REMOVAL OF FENCE m	
RAMPS:												
CD10+034.100	CD10+271.929	LT									291.9	
CD10+040.200	CD10+057.500	LT	17.3				2					INSTALL CHAIN-LINK BRACING ASSEMBLIES AT STA. CD10+040.200 AND STA. CD10+057.500
CD10+057.500	CD10+060.400	LT				3.6						
CD10+060.400	CD10+088.300	LT	27.9				2					INSTALL CHAIN-LINK BRACING ASSEMBLIES AT STA. CD10+060.400 AND STA. CD10+088.300
CD10+078.400	CD10+081.600	LT	17.7				2					INSTALL CHAIN-LINK BRACING ASSEMBLIES AT STA. CD10+078.400 AND STA. CD10+081.600
CD10+078.400	CD10+092.100	LT	22				1					INSTALL CHAIN-LINK BRACING ASSEMBLY AT STA. CD10+092.100
CD10+088.300	CD10+090.800	LT				3.6						
CD10+090.800	CD10+125.400	LT	39.1				2					INSTALL CHAIN-LINK BRACING ASSEMBLIES AT STA. CD10+090.800 AND STA. CD10+125.400
CD10+092.100	CD10+096.900	LT	17.7				1					INSTALL CHAIN-LINK BRACING ASSEMBLY AT STA. CD10+096.900
CD10+125.400	CD10+227.500	LT	111.7				1					INSTALL CHAIN-LINK BRACING ASSEMBLY AT STA. CD10+227.500
CD10+227.500	CD10+271.929	LT	66.5									
VT. ROUTE 67A												
60+764.000	60+015.600	LT									298	
60+823.500	60+824.700	LT	26.4				2					INSTALL CHAIN-LINK BRACING ASSEMBLIES AT STA. 60+823.500 AND STA. 60+824.700
60+824.700	60+829.100	LT	5.4				1					INSTALL CHAIN-LINK BRACING ASSEMBLY AT STA. 60+829.100
60+829.100	60+832.000	LT				3.6						
60+832.000	60+840.500	LT	10.4				1					INSTALL CHAIN-LINK BRACING ASSEMBLY AT STA. 60+832.000
60+823.500	60+853.300	LT	31.9				1					INSTALL CHAIN-LINK BRACING ASSEMBLY AT STA. 60+853.300
60+831.800	60+840.500	LT	21.7				2					INSTALL CHAIN-LINK BRACING ASSEMBLIES AT STA. 60+831.800 AND STA. 60+840.500
60+853.300	60+914.800	LT	62.4				1					INSTALL CHAIN-LINK BRACING ASSEMBLY AT STA. 60+914.800
60+914.800	61+075.600	LT	160.8				1					INSTALL CHAIN-LINK BRACING ASSEMBLY AT STA. 61+075.600
61+075.600	61+093.100	LT	29.5				1					INSTALL CHAIN-LINK BRACING ASSEMBLY AT STA. 61+093.100
SHEET SUBTOTAL			668.4	-	-	10.8	21	-	-	-	589.9	
DWG. NO. DS-3 SUBTOTAL			1073.2	-	-	-	24	-	255.5	12	470.1	
ROUNDING			8.4	-	-	-	-	-	14.5	3	-	
TOTAL			1750	-	-	10.8	45	-	270	15	1060	

DATUM
VERTICAL N/A
HORIZONTAL N/A

ITEM DETAIL SHEET 4

SURVEYED BY N/A DATE N/A
DRAWN BY E.C.D. DATE 9/00
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VAOT/5116DSS1.DGN
IPARM FILE N/A DATE PLOTTED N/A
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG. NO. DS-4 SHEET 15 OF 385

FILE NAME =u:\5116\vaot\contract4\5116ds2.dgn
DATE/TIME =08 SEP 2000
USER =1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

ITEM DETAIL AND DRAINAGE SHEET

VAOT Metric

UNDERDRAIN

BEGIN STATION km + m	END STATION km + m	TYPE	POSITION	DIA. mm	LENGTH m	TRENCH EARTH m^3	TRENCH ROCK m^3	SAND BRW m^3	DRAINAGE STONE m^3	FB EA	MKR PST EA
RAMP Y:											
Y10+160	Y10+180	U	LT	150	20	23.2			24.8	2	2
Y10+160	Y10+200	U	RT	150	40	46.4			49.6	2	2
RAMP AB:											
AB10+140	AB10+183.7	U	LT	150	44	51.2			54.6	2	2
AB10+192.6	AB10+196.6	U	LT	150	4	4.7			5.0	1	1
RAMP B:											
B10+280	B10+323.8	U	RT	150	44	51.2			54.6	1	1
RAMP CD/VT. RTE. 67A:											
CD10+060	60+858.4	U	RT-LT	150	64	88.3			94.4	2	2
SUBTOTAL						216	265		283	10	10
ROUNDING						-	-		-	-	-
TOTAL						216	265		283	10	10

BEGIN STATION km + m	END STATION km + m	TYPE	POSITION	DIA. mm	LENGTH m	TRENCH EARTH m^3	TRENCH ROCK m^3	SAND BRW m^3	DRAINAGE STONE m^3	FB EA	MKR PST EA
RAMP Y:											
Y10+150	Y10+160	C	LT	150	14	16.3			17.4		1
Y10+160	Y10+160	C	LT-RT	150	8	9.2			10		
RAMP AB:											
AB10+183.7	AB10+183.7	C	LT	150	8	9.2			10.0		1
AB10+192.6	AB10+192.6	C	LT	150	9	10.5			11.2		1
VT. RTE. 67A:											
60+858.4	60+858.4	C	LT	150	9	16.8			17.9		1
SUBTOTAL						48	62		66.5		4
ROUNDING						-	-		-		-
TOTAL						48	62		66.5		4

BEGIN STATION km + m	END STATION km + m	TYPE	POSITION	DIA. mm	LENGTH m	TRENCH EARTH m^3	TRENCH ROCK m^3	SAND BRW m^3	DRAINAGE STONE m^3	FB EA	MKR PST EA
SUBTOTAL											
ROUNDING											
TOTAL											

PROJECT:	PROJECT NO.:
BENNINGTON - HOOSICK	D.P.I. 0146(1) C/4
DESIGN FILE NAME: /5116/VAOT/DETDR.DGN	
IPARM FILE NAME: N/A	PLOT DATE: 9/00
SURVEYED BY: N/A	SURVEY DATE: N/A
SQUAD LEADER: T.P.K.	DRAWN BY: E.C.D.
DWG. NO. DD-1	SHEET: 16 OF 385

FILE NAME =u:\5116\vaot\contract4\detdr.dgn
DATE/TIME =08 SEP 2000
USER =1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

DRAINAGE DETAIL SHEET

VAOT Metric

DRAINAGE STRUCTURES

STATION km + m	STATION km + m	POS.	ASKEW	INLET/OUTLET TYPE		D.I. REHAB CLASS		CLEANING CULVERT	PIPE		ALLOWABLE OPTIONS						PIPE ELBOW	ES	CB	PRCCDI	DEPTH DI	CONC CL B	REINF STEEL	DI GRATE	CHAN ELEV	TRENCH EXCAVATION		COMMON EXCAVATION		CHANNEL EXCAVATION		GEOT FABR	GRAN BKFILL STRUCT	GRAN BORR	EROS MATT	STONE FILL		MARKER POSTS		REMARKS
				INLET	OUTLET	I	II	L	D	L	PCCSP	CAAP	RCP	CPEP	CPEP SL	PCCSP PI										EARTH	ROCK	EARTH	ROCK	EARTH	ROCK							LT	RT	
						ea	ea	m	mm	m	mm	mm	CL	mm	mm	mm	NO. DEG	ea	ea		m	m^3	kg	TYPE	ea	m^3	m^3	m^3	m^3	m^3	m^3	m^2	m^3	m^3	m^2	m^3	TYPE	ea	ea	
S10+006	S10+153	C/L																									795				665				303	II			CONSTRUCT A SPECIAL DITCH; INSTALL STONE FILL, TYPE II
16+700.0	16+700.0	RT		RCDI	ES				450	32	1.7	1.6		450			2/22.5°	1			5.18	5.9	324	E									115.9					1	CONSTRUCT A RCDI WITH A PRECAST COVER AND A TYPE "E" FRAME & GRATE. INSTALL A 450 mm DOWNSPOUT.
16+700.0	16+737.5	RT		RCDI	RCDI				450	38	1.7	1.6	III	450	450						3.30	3.9	211	E									135.8						CONSTRUCT A RCDI WITH A PRECAST COVER AND A TYPE "E" FRAME & GRATE. INSTALL A 450 mm PIPE TO OUTLET INTO RCDI.
16+737.5	16+743.8	RT/LT		RCDI	RCDI				450	22	1.7	1.6	III	450				1			2.13	2.7	141	E									79.7						CONSTRUCT A RCDI WITH A PRECAST COVER AND A TYPE "E" FRAME & GRATE. INSTALL A 450 mm PIPE TO OUTLET INTO RCDI.
X10+196.5	X10+200	RT		(RCDI)	(ES)																					59	2.2					59						REMOVE EXISTING 600 mm x 600 mm DI & 450 mm CAAP WITH END SECTION.
A10+109.5	A10+138.2	RT		(ES)	(ES)																					53						53						REMOVE EXISTING 450 mm CMP WITH END SECTIONS.
A10+056	A10+056	RT		RCDI	ES				300	10	1.7	1.6	III	300	300			1			1.80	2.3	121	E				1					24.3		0.2	1		1	CONSTRUCT A RCDI WITH A PRECAST COVER AND A TYPE "E" FRAME & GRATE. INSTALL A 300 mm PIPE WITH A STONE PAD AT OUTLET.
B10+139.4	B10+139.4	RT		RCDI	ES				450	20	1.7	1.6	III	450	450			1			4.0	4.8	250	E		41		1					72.5		0.5	1		1	CONSTRUCT A RCDI WITH A PRECAST COVER AND A TYPE "E" FRAME & GRATE. INSTALL A 450 mm PIPE WITH A STONE PAD AT OUTLET.
B10+139.4	B10+139.4	LT/RT		RCDI	RCDI				450	19	1.7	1.6	III	450	450						1.65	1.6	86	A		100							68.8						CONSTRUCT A RCDI (FOR DITCH BOTTOM) WITH A PRECAST COVER & A TYPE "A" FRAME & GRATE. INSTALL A 450 mm PIPE TO OUTLET INTO RCDI.
AB10+041.3	AB10+042.5	LT/RT		(RCDI)	(RCDI)																					15	2.9					15						REMOVE EXISTING 600 mm x 600 mm DI & 450 mm CMP.
AB10+041.3	AB10+049.7	LT		(RCDI)	(ES)																					18	2.9					18						REMOVE EXISTING 600 mm x 600 mm DI & 450 mm CMP WITH END SECTION.
AB10+095.6	AB10+099.0	LT/RT		(RCDI)	(ES)																					16	3.2					16						REMOVE EXISTING 600 mm x 600 mm DI & 450 mm CAAP WITH END SECTION.
AB10+163.2	AB10+180.7	RT		(ES)	(ES)																					81												REMOVE EXISTING 900 mm RCP WITH END SECTIONS.
AB10+183.6	AB10+187.4	RT		(RCDI)	(ES)																					23	2.9					15						REMOVE EXISTING 600 mm x 600 mm DI & 450 mm CMP.
AB10+042.5	AB10+046.0	RT/LT		RCDI	RCDI				450	12	1.7	1.6	III	450	450						1.95	2.5	129	D		35							43.5						CONSTRUCT A RCDI WITH A COVER AND A TYPE "D" FRAME & GRATE. INSTALL A 450 mm PIPE TO OUTLET INTO RCDI.
SUBTOTAL									300		10	10	10	10	10			1			23.7	1262	1(A)		441	14.1	797				665		701.5		0.7	1		3	
									450		143	143	III	143	89		2	3					1(D)												303	II			
																							5(E)															

FILE NAME =u:\5116\vaot\contract1\dradet2.dgn
DATE/TIME =08 SEP 2000
USER =1459

PROJECT NAME :	PROJECT NO. :
BENNINGTON - HOOSICK	D.P.I. 0146(1) C/4
DESIGN FILE NAME: /5116/VAOT/DRADET2.DGN	
IPARM FILE NAME: N/A	PLOT DATE: 9/00
SURVEYED BY: N/A	SURVEY DATE: N/A
SQUAD LEADER: T.P.K.	DRAWN BY: E.C.D.
DWG. NO. DT-1	SHEET: 17 OF 385

STATE OF VERMONT
AGENCY OF TRANSPORTATION

DRAINAGE DETAIL SHEET

VAOT Metric

DRAINAGE STRUCTURES

STATION km + m	STATION km + m	POS.	ASKEW	INLET/OUTLET TYPE		D.I. REHAB CLASS		CLEANING CULVERT	PIPE		ALLOWABLE OPTIONS						PIPE ELBOW	ES	CB	PRCCDI	DEPTH DI	CONC CL B	REINF STEEL	DI GRATE	CHAN ELEV	TRENCH EXCAVATION		COMMON EXCAVATION		CHANNEL EXCAVATION		GEOT FABR	GRAN BKFILL STRUCT	GRAN BORR	EROS MATT	STONE FILL		MARKER POSTS		REMARKS
				INLET	OUTLET	I	II	L	D	L	PCCSP	CAAP	RCP	CPEP	CPEP SL	PCCSP PI										EARTH	ROCK	EARTH	ROCK	EARTH	ROCK							LT	RT	
						ea	ea	m	mm	m	mm	mm	CL	mm	mm	mm	NO. DEG	ea	ea		m	m^3	kg	TYPE	ea	m^3	m^3	m^3	m^3	m^3	m^3	m^2	m^3	m^3	m^2	m^3	TYPE	ea	ea	
AB10+046.0	AB10+051.0	LT		RCDI	RCDI				450	15	1.7	1.6	III	450	450						2.20	2.8	151	D		46							50.7						CONSTRUCT A RCDI WITH A COVER AND A TYPE "D" FRAME & GRATE.
																																						INSTALL A 450 mm PIPE TO OUTLET INTO RCDI.
AB10+051.0	AB10+055.0	LT		RCDI	ES				450	12	1.7	1.6	III	450	450			1			2.20	2.8	137	D		17		1					43.5		0.5	1	1		CONSTRUCT A RCDI WITH A COVER AND A TYPE "D" FRAME & GRATE.
																																						INSTALL A 450 mm PIPE WITH A STONE PAD AT OUTLET.
AB10+087.620		RT		RCDI	ES				450	15	1.7	1.6	III	450	450			1			1.95	2.5	129	E		67		1					54.3		0.5	1		1	CONSTRUCT A RCDI WITH A COVER AND A TYPE "E" FRAME & GRATE.
																																						INSTALL A 450 mm PIPE WITH A STONE PAD AT OUTLET.
AB10+093.7	AB10+093.7	LT		RCDI	ES				300	8	1.7	1.6	III	300	300			1			1.80	2.3	118	E		5		1					19.4		0.2	1	1		CONSTRUCT A RCDI WITH A COVER AND A TYPE "E" FRAME & GRATE.
																																						INSTALL A 300 mm PIPE WITH A STONE PAD AT OUTLET.
AB10+126.0	AB10+126.0	RT		RCDI	RCDI				450	6	1.7	1.6	III	450	450						1.80	2.3	125	E		32							21.7						CONSTRUCT A RCDI WITH A COVER AND A TYPE "E" FRAME & GRATE.
																																						INSTALL A 450 mm PIPE TO OUTLET INTO RCDI.
AB10+126.0	AB10+126.0	RT		RCDI	ES				450	11	1.7	1.6	III	450	450			1			2.80	3.4	170	E		108		1					68.8		0.5	1		1	CONSTRUCT A RCDI WITH A COVER AND A TYPE "E" FRAME & GRATE.
																																						INSTALL A 450 mm PIPE WITH A STONE PAD AT OUTLET.
AB10+196.4	A10+003.0	LT/RT		RCDI	ES				450	15	1.7	1.6	III	450	450			1			1.95	2.5	130	E		25							50.7		0.5	1		1	CONSTRUCT A RCDI WITH A PRECAST COVER AND A TYPE "E" FRAME
																																						& GRATE. INSTALL A 450 mm PIPE WITH A STONE PAD AT OUTLET.
B10+074.1	B10+086.7	LT/RT		RCDI	ES		1	31.6																														PAYMENT FOR CLEANING CULVERT UNDER ITEM 601.995.
B10+074.4	B10+074.4	RT		RCDI	ES	1		9.8																														PAYMENT FOR CLEANING CULVERT UNDER ITEM 601.995.
C10+130.0	C10+130.0	RT		RCDI	ES				300	8	1.7	1.6		300			2/22.5°	1			1.80	2.3	121	E				1					19.4		0.2	1		1	CONSTRUCT A RCDI WITH A PRECAST COVER AND A TYPE "E" FRAME &
																																						GRATE. INSTALL A 300 mm DOWNSPOUT WITH A STONE PAD AT OUTLET.
C10+228.0	C10+228.0	RT		RCDI	ES				300	8	1.7	1.6		300			2/22.5°	1			1.80	2.3	121	E				1					19.4		0.2	1		1	CONSTRUCT A RCDI WITH A PRECAST COVER AND A TYPE "E" FRAME &
																																						GRATE. INSTALL A 300 mm DOWNSPOUT WITH A STONE PAD AT OUTLET.
D10+217.0	D10+217.0	RT		RCDI	ES				300	14	1.7	1.6		300			2/22.5°	1			1.80	2.3	121	E				1					34.0		0.2	1		1	CONSTRUCT A RCDI WITH A PRECAST COVER AND A TYPE "E" FRAME &
																																						GRATE. INSTALL A 300 mm DOWNSPOUT WITH A STONE PAD AT OUTLET.
D10+222.8	D10+222.8	RT		RCDI	ES	1		14.1																														PAYMENT FOR CLEANING CULVERT UNDER ITEM 601.995.
CD10+019.2	CD10+021.9	LT		(RCDI)	(RCDI)																				21	2.3						21						REMOVE EXISTING 600 mm x 600 mm DI & 450 mm RCP.
CD10+019.2	CD10+077.0	LT		RCDI	ES				450	61	1.7	1.6	III	450	450			1						E		40		1					221.0		0.5	1	1		CONSTRUCT A 450 mm - 61m PIPE FROM EXISTING RCDI. INSTALL TYPE "E"
																																						FRAME & GRATE ONTO EXISTING RCDI.
CD10+021.9	CD10+021.9	LT		RCDI	RCDI		1																															
CD10+021.9	CD10+043.0	LT		(RCDI)	(ES)																				48													REMOVE EXISTING 450 mm RCP WITH END SECTION AT OUTLET.
CD10+043.0	CD10+065.0	LT		RCDI	RCDI				450	22	1.7	1.6	III	450	450						1.95	2.5	128	D		16		1					94.2						CONSTRUCT A RCDI WITH A COVER AND A TYPE "D" FRAME & GRATE.
																																						INSTALL A 450 mm PIPE TO OUTLET INTO RCDI.
CD10+065.0	CD10+087.6	LT		RCDI	RCDI				450	23	1.7	1.6	III	450	450						1.95	2.5	129	E		17							83.3						CONSTRUCT A RCDI WITH A COVER AND A TYPE "E" FRAME & GRATE.
																																						INSTALL A 450 mm PIPE TO OUTLET INTO RCDI.
SUBTOTAL						2	2	55.5/0.0	300		38	38	8	38	8		6	4			30.5	1580	3(D)		442	2.3	9					801.4		3.3	1	3	6	
									450		180	180	180	180	180			5					10(E)														

PROJECT NAME : BENNINGTON - HOOSICK
PROJECT NO. : D.P.I. 0146(1) C/4

DESIGN FILE NAME: /5116/VAOT/DRADET2.DGN
IPARM FILE NAME: N/A
SURVEYED BY: N/A
SQUAD LEADER: T.P.K.
DWG. NO. DT-2
PLOT DATE: 9/00
SURVEY DATE: N/A
DRAWN BY: E.C.D.
SHEET: 18 OF 385

FILE NAME =u:\5116\vaot\contract4\dradet2.dgn
DATE/TIME =08 SEP 2000
USER =1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

DRAINAGE DETAIL SHEET

VAOT Metric

DRAINAGE STRUCTURES

STATION km + m	STATION km + m	POS.	ASKEW	INLET/OUTLET TYPE		D.I. REHAB CLASS		CLEANING CULVERT	PIPE		ALLOWABLE OPTIONS						PIPE ELBOW	ES	CB	PRCCDI	DEPTH DI	CONC CL B	REINF STEEL	DI GRATE	CHAN ELEV	TRENCH EXCAVATION		COMMON EXCAVATION		CHANNEL EXCAVATION		GEOT FABR	GRAN BKFILL STRUCT	GRAN BORR	EROS MATT	STONE FILL		MARKER POSTS		REMARKS
				INLET	OUTLET	I ea	II ea	L m	D mm	L m	PCCSP mm	CAAP mm	RCP CL	CPEP mm	CPEP SL mm	PCCSP PI mm	NO. DEG	ea	ea		m	m^3	kg	TYPE	ea	EARTH m^3	ROCK m^3	EARTH m^3	ROCK m^3	EARTH m^3	ROCK m^3	m^2	m^3	m^3	m^2	m^3	TYPE	LT ea	RT ea	
CDIO+087.6	CDIO+087.6	LT		RCDI	RCDI				450	10	1.7	1.6	III	450	450						2.50	3.1	183	E		7								36.2						CONSTRUCT A RCDI WITH A COVER AND A TYPE "E" FRAME & GRATE.
																																						INSTALL A 450 mm PIPE TO OUTLET INTO RCDI.
CDIO+087.6	CDIO+087.6	LT		RCDI	ES				450	8	1.7	1.6	III	450	450			1			2.90	3.5	160	E		6		1					29.0		0.5	I	1		CONSTRUCT A RCDI WITH A COVER AND A TYPE "E" FRAME & GRATE.
																																						INSTALL A 450 mm PIPE WITH A STONE PAD AT OUTLET.
CDIO+112.5	CDIO+087.6	LT		RCDI	RCDI				450	25	1.7	1.6	III	450	450						1.95	2.5	130	E		7								90.6						CONSTRUCT A RCDI WITH A PRECAST COVER AND A TYPE "E" FRAME & GRATE.
																																						INSTALL A 450 mm PIPE TO OUTLET INTO RCDI.
CDIO+119.4	CDIO+119.4	RT		RCDI	ES				300	9	1.7	1.6	III	300	300			1			1.80	2.3	118	E				1					21.9		0.2	I		1	CONSTRUCT A RCDI WITH A COVER AND A TYPE "E" FRAME & GRATE.
																																						INSTALL A 300 mm PIPE WITH A STONE PAD AT OUTLET.
CDIO+200.0	CDIO+200.0	LT/RT		RCDI	RCDI				450	12	1.7	1.6	III	450	450						1.95	2.5	129	E										43.5						CONSTRUCT A RCDI WITH A COVER AND A TYPE "E" FRAME & GRATE.
																																						INSTALL A 450 mm PIPE TO OUTLET INTO RCDI.
CDIO+200.0	CDIO+200.0	RT		RCDI	ES				450	7	1.7	1.6	III	450	450			1			3.20	4.2	169	E				3					25.4		0.5	I		1	CONSTRUCT A RCDI WITH A PRECAST COVER AND A TYPE "E" FRAME & GRATE.
																																						INSTALL A 450 mm PIPE WITH A STONE PAD AT OUTLET.
CDIO+224.0	CDIO+224.0	LT/RT		RCDI	RCDI				450	12	1.7	1.6	III	450	450						2.12	2.8	140	E										43.5						CONSTRUCT A RCDI WITH A COVER AND A TYPE "E" FRAME & GRATE.
																																						INSTALL A 450 mm PIPE WITH A STONE PAD AT OUTLET.
CDIO+224.0	CDIO+200.0	RT		RCDI	RCDI				450	24	1.7	1.6	III	450	450						1.95	2.5	130	E										86.9						CONSTRUCT A RCDI WITH A COVER AND A TYPE "E" FRAME & GRATE.
																																						INSTALL A 450 mm PIPE TO OUTLET INTO RCDI.
CDIO+245.0	CDIO+224.0	LT		RCDI	RCDI				450	21	1.7	1.6	III	450	450						1.95	2.5	129	E										76.1						CONSTRUCT A RCDI WITH A COVER AND A TYPE "E" FRAME & GRATE.
																																						INSTALL A 450 mm PIPE TO OUTLET INTO RCDI.
CDIO+247.0	CDIO+247.0	RT/LT	120°	ES	ES				750	51	2.1	1.6	III	750	750	2.1		2										5		5				144.5		5	II	1	1	CONSTRUCT A 51m - 750 mm CROSS-CULVERT WITH AN END SECTION
																																						AT INLET AND OUTLET.
60+701.3	60+701.3	RT/LT		RCDI	ES			33.4																															PAYMENT FOR CLEANING CULVERT UNDER ITEM 601.995 (MOD.)
60+701.4	60+701.3	RT		RCDI	RCDI	1		12.5																															PAYMENT FOR CLEANING CULVERT UNDER ITEM 601.995 (MOD.)
60+701.5	60+701.4	RT		RCDI	RCDI			5.4																															PAYMENT FOR CLEANING CULVERT UNDER ITEM 601.995 (MOD.)
60+760.0	60+760.0	LT		RCDI	ES				300	6	1.7	1.6	III	300	300			1			1.80	2.3	118	D		15		1					14.6		0.2	II	1		CONSTRUCT A RCDI WITH A COVER AND A TYPE "D" FRAME & GRATE.
																																						INSTALL A 300 mm PIPE WITH A STONE PAD AT OUTLET.
60+800.0	60+826.0	LT		RCDI	RCDI				450	26	1.7	1.6	III	450	450						1.95	2.5	129	D		41							94.2						CONSTRUCT A RCDI WITH A COVER AND A TYPE "D" FRAME & GRATE.
																																						INSTALL A 450 mm PIPE TO OUTLET INTO RCDI.
60+826.0	60+826.0	LT		RCDI	ES				450	8	1.7	1.6	III	450	450			1			1.95	2.5	122	D		19		1					19.4		0.5	I	1		CONSTRUCT A RCDI WITH A COVER AND A TYPE "D" FRAME & GRATE.
																																						INSTALL A 450 mm PIPE TO OUTLET INTO RCDI.
60+859.4	60+859.4	LT		RCDI	ES				300	9	1.7	1.6	III	300	300			1			1.80	2.3	118	D				1					21.9		0.2	I	1		CONSTRUCT A RCDI WITH A COVER AND A TYPE "D" FRAME & GRATE.
																																						INSTALL A 300 mm PIPE WITH A STONE PAD AT OUTLET.
60+891.9	60+874.7	LT		RCDI	ES	1		26.5																															PAYMENT FOR CLEANING CULVERT UNDER ITEM 601.995.
SUBTOTAL						2		26.5/51.3	300		24	24	24	24	24			3				35.5	1775	4(D)		95		13		5			747.7		1.9	I	5	3	
									450		153	153	153	153	153			3						9(E)										5.2	II			
									750		51	51	51	51	51	51		2																				

PROJECT NAME : BENNINGTON - HOOSICK
PROJECT NO. : D.P.I. 0146(1) C/4

DESIGN FILE NAME: /5116/VAOT/DRADET2.DGN
IPARM FILE NAME: N/A
SURVEYED BY: N/A
SQUAD LEADER: T.P.K.
DWG. NO. DT-3
PLOT DATE: 9/00
SURVEY DATE: N/A
DRAWN BY: E.C.D.
SHEET: 19 OF 385

FILE NAME =u:\5116\vaot\contract4\dradet2.dgn
DATE/TIME =08 SEP 2000
USER =1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

DRAINAGE DETAIL SHEET

VAOT Metric

DRAINAGE STRUCTURES

STATION km + m	STATION km + m	POS.	ASKEW	INLET/OUTLET TYPE		D.I. REHAB CLASS I ea	D.I. REHAB CLASS II ea	CLEANING CULVERT L m	PIPE D mm	PIPE L m	ALLOWABLE OPTIONS PCCSP mm	CAAP mm	RCP CL	CPEP mm	CPEP SL mm	PCCSP PI mm	PIPE ELBOW NO. DEG	ES ea	CB ea	PRCCDI	DEPTH DI m	CONC CL B m^3	REINF STEEL kg	DI GRATE TYPE	CHAN ELEV ea	TRENCH EXCAVATION EARTH m^3	TRENCH EXCAVATION ROCK m^3	COMMON EXCAVATION EARTH m^3	COMMON EXCAVATION ROCK m^3	CHANNEL EXCAVATION EARTH m^3	CHANNEL EXCAVATION ROCK m^3	GEOT FABR m^2	GRAN BKFILL STRUCT m^3	GRAN BORR m^3	EROS MATT m^2	STONE FILL m^3	STONE FILL TYPE	MARKER POSTS LT ea	MARKER POSTS RT ea	REMARKS
60+893.5	60+893.5	LT		RCDI	ES				300	7	1.7	1.6	III	300	300			1			1.80	2.3	118	D		16		1						17.0		0.2	1	1		CONSTRUCT A RCDI WITH A COVER AND A TYPE "D" FRAME & GRATE.
																																							INSTALL A 300 mm PIPE WITH A STONE PAD AT OUTLET.
61+006.2	61+006.2	℄ /LT		RCDI	ES	1		20.5																															PAYMENT FOR CLEANING CULVERT UNDER ITEM 601.995.
61+064.0	61+064.0	LT		RCDI	ES				300	5	1.7	1.6	III	300	300			1			1.80	2.3	118	D		14		1						12.2		0.2	1	1		CONSTRUCT A RCDI WITH A COVER AND A TYPE "D" FRAME & GRATE.
																																							INSTALL A 300 mm PIPE WITH A STONE PAD AT OUTLET.
61+143.0	61+143.0	LT		RCDI	ES				300	7	1.7	1.6	III	300	300			1			1.80	2.3	118	D		14		1						17.0		0.2	1	1		CONSTRUCT A RCDI WITH A COVER AND A TYPE "D" FRAME & GRATE.
																																							INSTALL A 300 mm PIPE WITH A STONE PAD AT OUTLET.
S10+067.0	S10+074.0	℄		ES	ES				900	7			III					2								34								60.0						CONSTRUCT A 900 mm CROSS-CULVERT WITH END SECTION AT INLET
																																							AND OUTLET.
S10+106.0	S10+113.0	℄		ES	ES				900	7			III					2								34								60.0						CONSTRUCT A 900 mm CROSS-CULVERT WITH END SECTION AT INLET
																																							AND OUTLET.
SUBTOTAL						1		20.5/0.0	300		19	19	19	19	19			3				6.9	354	3(D)		112		3						166.2		0.6	1	3		
									900				14					4																						
SUBTOTAL	DWG. NO. DT-1								300		10	10	10	10	10			1				23.7	1262	K(A)		441	14.1	797				665		701.5		0.7	1		3	
									450		143	143	III	143	89		2	3						K(D)											303	II			
																								5(E)															
SUBTOTAL	DWG. NO. DT-2					2	2	55.5/0.0	300		38	38	8	38	8		6	4				30.5	1580	3(D)		442	2.3	9						801.4		3.3	1	3	6	
									450		180	180	180	180	180			5						10(E)															
SUBTOTAL	DWG. NO. DT-3					2		26.5/51.3	300		24	24	24	24	24			3				35.5	1775	4(D)		95		13		5				747.7		1.9	1	5	3	
									450		153	153	153	153	153			3						9(E)											5.2	II			
									750		51	51	51	51	51	51		2																					
TOTALS						5	2	102.5/51.3	300		91	91	61	91	61		6	II				96.6	4971	K(A)		1090	16.4	822		5		665		2416.8		6.5	1	II	12	
									450		476	476	444	476	422		2	II						II(D)											308.2	II			
									750		51	51	51	51	51	51		2						24(E)															
									900				14					4																						

PROJECT NAME : BENNINGTON - HOOSICK

PROJECT NO. : D.P.I. 0146(1) C/4

DESIGN FILE NAME: /5116/VAOT/DRADET2.DGN
IPARM FILE NAME: N/A
SURVEYED BY: N/A
SQUAD LEADER: T.P.K.
DWG. NO. DT-4

PLOT DATE: 9/00
SURVEY DATE:
DRAWN BY: E.C.D.
SHEET: 20 OF 385

FILE NAME =u:\5116\vaot\contract4\dradet2.dgn
DATE/TIME =08 SEP 2000
USER =1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

EARTHWORKS

VAOT Metric

STATION km + m	DIST m	TOTAL EXCAVATION EARTH AND ROCK AREA m^2	TOTAL EXCAVATION EARTH AND ROCK VOLUME m^3	ROCK EXCAVATION AREA m^2	ROCK EXCAVATION VOLUME m^3	EMBANKMENT AREA m^2	EMBANKMENT VOLUME m^3	AREA m^2	VOLUME m^3
16+624		0		0		0			
	50		0		0		11375		
16+674		0		0		455		F	52278
	6		0		0		2778	FAC	1.15
16+680		0		0		471		EXF	60120
	20		0		0		10010		
16+700		0		0		530			
	20		0		0		10880		
16+720		0		0		558			
	20		0		0		11330		
16+740		0		0		575			
	20		0		0		5590*		
16+760		0		0		522			
	20		0		0		315*		
16+780		0		0		0			
	20		0		0		0		
16+800		0		0		0			
	20		0		0		0		
16+820		0		0		0			
	20		0		0		0		
16+840		0		0		0		F	0
	20		0		0		0	FAC	1.15
16+860		0		0		0		EXF	0
	20		0		0		0		
16+880		0		0		0			
	20		0		0		0		
16+900		0		0		0			
	20		0		0		0		
16+920		0		0		0			
	20		0		0		0		
16+940		0		0		0			
	20		0		0		0		
16+960		0		0		0			
	18		0		0		0		
16+978.091		0		0		0			
COLUMN FOOTING			0		0		52278		

*VOLUME IS REDUCED TO ACCOUNT FOR GRANULAR BORROW AND STRUCTURAL ITEMS

STATION km + m	DIST m	TOTAL EXCAVATION EARTH AND ROCK AREA m^2	TOTAL EXCAVATION EARTH AND ROCK VOLUME m^3	ROCK EXCAVATION AREA m^2	ROCK EXCAVATION VOLUME m^3	EMBANKMENT AREA m^2	EMBANKMENT VOLUME m^3	AREA m^2	VOLUME m^3
X10+000		0		0		0			
	20		0		0		0		
X10+020		0		0		0			
	20		0		0		0		
X10+040		0		0		0			
	20		0		0		0*		
X10+060		0		0		19			
	20		0		0		260*		
X10+080		0		0		14		C	1430
	20		0		0		380	FAC	1.00
X10+100		0		0		24		F	2570
	20		0		0		490	FAC	1.15
X10+120		0		0		25		EXF	1526
	20		200		0		470		
X10+140		20		0		22			
	20		440		0		400		
X10+160		24		0		18			
	20		480		0		320		
X10+180		24		0		14			
	20		310		0		250		
X10+200		7		0		11			
	20		80		0		170		
X10+220		1		0		6			
	20		20		0		110		
X10+240		1		0		5		C	660
	20		50		0		70	FAC	1.00
X10+260		4		0		2		F	370
	20		100		0		20	FAC	1.15
X10+280		6		0		0		EXC	235
	20		140		0		0		
X10+300		8		0		0			
	20		160		0		0		
X10+320		8		0		0			
	11		110		0		0		
X10+331		12		0		0			
Y10+000		0		0		0			
	20		0		0		0		
Y10+020		0		0		0			
	20		0		0		0		
Y10+040		0		0		0			
	20		0		0		0*		
Y10+060		0		0		22			
	20		0		0		390*		
Y10+080		0		0		24			
	20		0		0		420		
Y10+100		0		0		18		C	10
	20		0		0		280	FAC	1.00
Y10+120		0		0		10		F	1440
	20		0		0		190	FAC	1.15
Y10+140		0		0		9		EXF	1646
	20		0		0		120		
Y10+160		0		0		3			
	20		10		0		40		
Y10+180		1		0		1			
COLUMN FOOTING			2100		0		4380		

STATION km + m	DIST m	TOTAL EXCAVATION EARTH AND ROCK AREA m^2	TOTAL EXCAVATION EARTH AND ROCK VOLUME m^3	ROCK EXCAVATION AREA m^2	ROCK EXCAVATION VOLUME m^3	EMBANKMENT AREA m^2	EMBANKMENT VOLUME m^3	AREA m^2	VOLUME m^3
Y10+180		1		0		1		C	46
	20		20		0		20	FAC	1.00
Y10+200		1		0		1		F	29
	17		26		0		9	FAC	1.15
Y10+216.991		2		0		0		EXC	13
ABI0+000		0		0		0			
	20		0		0		0		
ABI0+020		0		0		0			
	20		1120		0		10		
ABI0+040		112		0		1			
	20		1550		0		60		
ABI0+060		43		0		5			
	20		840		0		70	C	5227
ABI0+080		41		0		2		FAC	1.00
	20		650		0		70	F	1376
ABI0+100		24		0		5		FAC	1.15
	20		590		0		70	EXC	3645
ABI0+120		35		0		2			
	20		400		0		120		
ABI0+140		5		0		10			
	20		50		0		330		
ABI0+160		0		0		23			
	20		10		0		380		
ABI0+180		1		0		15			
	16.6		17		0		266		
ABI0+196.565		1		0		17			
AI0+000		0		0		9			
	20		0		0		200		
AI0+020		0		0		11			
	20		0		0		260		
AI0+040		0		0		15		C	300
	20		0		0		310	FAC	1.00
AI0+060		0		0		16		F	3320
	20		0		0		760	FAC	1.15
AI0+080		0		0		60		EXF	3518
	20		70		0		900		
AI0+100		7		0		30			
	20		150		0		430*		
AI0+120		8		0		20			
	20		80		0		0*		
AI0+140		0		0		46			
	20		0		0		460		
AI0+160		0		0		0			
	20		0		0		0		
AI0+180		0		0		0			
	4.5		0				0		
AI0+184.529		0		0	0	0			
COLUMN FOOTING			5573		0		4725		

STATION km + m	DIST m	TOTAL EXCAVATION EARTH AND ROCK AREA m^2	TOTAL EXCAVATION EARTH AND ROCK VOLUME m^3	ROCK EXCAVATION AREA m^2	ROCK EXCAVATION VOLUME m^3	EMBANKMENT AREA m^2	EMBANKMENT VOLUME m^3	AREA m^2	VOLUME m^3
BI0+064.800		9		0		0		C	391
	15.2		251		0		0	FAC	1.00
BI0+080		24		0		0		F	1660
	20		490		0		0	FAC	1.15
BI0+100		25		0		0		EXC	2002
	20		490		0		10		
BI0+120		24		0		1			
	20		1270		0		50		
BI0+140		103		0		4			
	20		1140		0		100		
BI0+160		11		0		6			
	20		160		0		60		
BI0+180		5		0		0			
	20		80		0		30		
BI0+200		3		0		3			
	20		30		0		190		
BI0+220		0		0		16			
	20		0		0		580		
BI0+240		0		0		42			
	20		0		0		640		
BI0+260		0		0		22			
	20		0		0		380	C	34
BI0+280		0		0		16		FAC	1.00
	20		10		0		250	F	817
BI0+300		1		0		9		FAC	1.15
	20		20		0		160	EXF	906
BI0+320		1		0		7			
	3.8		4		0		27		
BI0+323.782		1		0		7			
CDI0+000		0		0		0			
	20		0		0		0		
CDI0+020		0		0		0			
	20		300		0		10	C	630
CDI0+040		30		0		1		FAC	1.00
	20		300		0		260	F	2090
CDI0+060		0		0		25		FAC	1.15
	20		0		0		370	EXF	1774
CDI0+080		0		0		12			
	20		0		0		320		
CDI0+100		0		0		20			
	20		0		0		490		
CDI0+120		0		0		29			
	20		30		0		640		
CDI0+140		3		0		35			
COLUMN FOOTING			4575		0		4567		

PROJECT: BENNINGTON - HOOSICK
PROJECT NO.: D.P.I. 0146(1) C/4

DESIGN FILE NAME: EARTHWK.DGN
IPARM FILE NAME:
SURVEYED BY: V.S.E.
SQUAD LEADER: T.P.K.
DWG. NO. EW-1

PLOT DATE: 9/00
SURVEY DATE: 12/93
DRAWN BY: E.C.D.
SHEET 21 OF 385

FILE NAME =u:\5116\vaot\contract4\earthwk.dgn
DATE/TIME =08 SEP 2000
USER =1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

EARTHWORKS

VAOT Metric

STATION km + m	DIST m	TOTAL EXCAVATION EARTH AND ROCK AREA m²	TOTAL EXCAVATION EARTH AND ROCK VOLUME m³	ROCK EXCAVATION AREA m²	ROCK EXCAVATION VOLUME m³	EMBANKMENT AREA m²	EMBANKMENT VOLUME m³	AREA m²	VOLUME m³
CD10+140		3		0		35		C	200
	20		60		0		840	FAC	1.00
CD10+160		3		0		49		F	2190
	20		30		0		820	FAC	1.15
CD10+180		0		0		33		EXF	2319
	20		110		0		530		
CD10+200		11		0		20			
	20		110		0		610		
CD10+220		0		0		41		C	110
	20		0		0		890	FAC	1.00
CD10+240		0		0		48		F	3510
	20		0		0		1000	FAC	1.15
CD10+260		0		0		52		EXF	3927
	11.9		0		0		1010		
CD10+271.929		0		0		49			
C10+000		0		0		0			
	20		0		0		0		
C10+020		0		0		0			
	20		0		0		0		
C10+040		0		0		0			
	20		0		0		0 *		
C10+060		0		0		53			
	20		0		0		890 *	C	40
C10+080		0		0		43		FAC	1.00
	20		0		0		710	F	5450
C10+100		0		0		28		FAC	1.15
	20		0		0		550	EXF	6228
C10+120		0		0		27			
	20		20		0		770		
C10+140		2		0		50			
	20		20		0		930		
C10+160		0		0		43			
	20		0		0		840		
C10+180		0		0		41			
	20		0		0		760		
C10+200		0		0		35			
	20		0		0		700		
C10+220		0		0		35			
	20		0		0		690	F	2240
C10+240		0		0		34		FAC	1.15
	10.2		0		0		850	EXF	2576
C10+250.186		0		0		51			
COLUMN FOOTING			350		0		13390		

* VOLUME IS REDUCED TO ACCOUNT FOR GRANULAR BORROW AND STRUCTURAL ITEMS

STATION km + m	DIST m	TOTAL EXCAVATION EARTH AND ROCK AREA m²	TOTAL EXCAVATION EARTH AND ROCK VOLUME m³	ROCK EXCAVATION AREA m²	ROCK EXCAVATION VOLUME m³	EMBANKMENT AREA m²	EMBANKMENT VOLUME m³	AREA m²	VOLUME m³
D10+000		0		0		17			
	20		0		0				
D10+020		0		0		25	420		
	20		0		0			C	650
D10+040		0		0		37	620	FAC	1.00
	20		0		0			F	4150
D10+060		0		0		42	790	FAC	1.15
	20		0		0			EXF	4123
D10+080		0		0		41	830		
	20		0		0				
D10+100		0		0		43	840		
	20		10		0				
D10+120		1		0		11	540		
	20		80		0				
D10+140		7		0		0	110		
	20		160		0				
D10+160		9		0		0	0		
	20		190		0				
D10+180		10		0		0	0		
	20		210		0				
D10+200		11		0		0	0		
	20		240		0			C	445
D10+220		13		0		0	0	FAC	1.00
	16.4		205		0			EXC	445
D10+236.439		12		0		0	0		
Z10+000		73		0		0			
	20		1490		0		0		
Z10+020		76		0		0			
	20		1450		0		0		
Z10+040		69		0		0			
	20		1350		0		0		
Z10+060		66		0		0			
	20		1380		0		0		
Z10+080		72		0		0			
	20		1760		0		0	C	15060
Z10+100		104		0		0		FAC	1.00
	20		1750		0		0	EXC	15060
Z10+120		71		0		0			
	20		1380		0		0		
Z10+140		67		0		0			
	20		1420		0		0		
Z10+160		75		0		0			
	20		1570		0		0		
Z10+180		82		0		0			
	20		1510		0		0		
Z10+200		69		0		0			
	20		1580		0		0		
Z10+220		89		0		0		C	2140
	8		560		0		0	FAC	1.00
Z10+228		51		0		0		EXC	2140
COLUMN FOOTING			18295		0		4150		

STATION km + m	DIST m	TOTAL EXCAVATION EARTH AND ROCK AREA m²	TOTAL EXCAVATION EARTH AND ROCK VOLUME m³	ROCK EXCAVATION AREA m²	ROCK EXCAVATION VOLUME m³	EMBANKMENT AREA m²	EMBANKMENT VOLUME m³	AREA m²	VOLUME m³
61+120		3		0		0		C	630
	20		260		0			FAC	1.00
61+140		23		0		0		EXC	630
	20		300		0		0		
61+160		7		0		0			
	20		70		0		0		
61+180		0		0		0			
	20		0		0		0		
61+200		0		0		0			
	20		0		0		0		
61+220		0		0		0		C	0
	20		0		0		0	FAC	1.00
61+240		0		0		0		F	0
	20		0		0		0	FAC	1.15
61+260		0		0		0		EXC	0
	20		0		0		0		
61+280		0		0		0			
ROADSIDE DRAINAGE FEATURES									
SI0+006									
TO								C	810
ABI0+093.7			799		0		0	FAC	1.00
								EXC	810
ABI0+087.6									
TO									
CD10+200			7		0		0		
CD10+200									
TO									
SI0+113.0			4		0		0		
EROSION CONTROL SEDIMENT TRAPS									
SI0+165									
			897		0		0		
16+840									
			633		0		633		
16+975								C	3492
			1124		0		1124	FAC	1.00
ABI0+192								F	1757
			334		0		0	FAC	1.15
CD10+070								EXC	1471
			98		0		0		
CD10+100									
			271		0		0		
CD10+160									
			81		0		0		
CD10+200									
			54		0		0		
BR700/COMMON EXCAVATION									
			5910		0		0	C	5910
								FAC	1.00
								EXC	5910
UNDERDRAIN EXCAVATION								C	265
								FAC	1.00
			265		0		0	EXC	265
TRENCH EXCAVATION								C	1090
								FAC	1.00
			1090		0		0	EXC	1090
COLUMN FOOTING			12197		0		1757		

STATION km + m	DIST m	TOTAL EXCAVATION EARTH AND ROCK AREA m²	TOTAL EXCAVATION EARTH AND ROCK VOLUME m³	ROCK EXCAVATION AREA m²	ROCK EXCAVATION VOLUME m³	EMBANKMENT AREA m²	EMBANKMENT VOLUME m³	AREA m²	VOLUME m³
STRUCTURE/COFFERDAM EXCAVATION									
BR700			3220		0		0	C	3530
								FAC	0.30
BR900			210		0		0	EXC	1059
BR1000			100		0		0		
CHANNEL EXCAVATION									
BR700			1250		0		0		
BR900			86		0		0	C	1381
								FAC	0.30
BR1000			40		0		0	EXC	414
CD10+247			5		0		0		
MUCK EXCAVATION									
16+624									
			151		0		0		
16+670									
			96		0		0		
16+700								C	4100
			1866		0		0	FAC	1.00
16+785								EXC	4100
C10+235									
			1987		0		0		
CD10+120									
CONSTRUCTION SEQUENCING									
DETOUR 1			635		0		693	C	1970
								FAC	1.00
DETOUR 2			250		0		250	F	2639
								FAC	1.15
DETOUR 3			281		0		281	EXF	1065
DETOUR 4			804		0		1415		
SANITARY SEWER TRENCH EXCAVATION									
SSI+000.0									
TO			208		0		0		
SSI+062.1									
								C	597
SSI+062.1								FAC	1.00
TO			91		0		0	EXC	597
SSI+097.6									
CD10+010.2									
TO			298		0		0		
CD10+095.8									
COLUMN FOOTING			11578		0		2639		

PROJECT: BENNINGTON - HOOSICK

PROJECT NO.: D.P.I. 0146(1) C/4

DESIGN FILE NAME: EARTHWK.DGN
IPARM FILE NAME:
SURVEYED BY: V.S.E.
SQUAD LEADER: T.P.K.
DWG. NO. EW-2

PLOT DATE: 9/00
SURVEY DATE: 12/93
DRAWN BY: E.C.D.
SHEET 22 OF 385

FILE NAME =u:\5116\vaot\contract4\earthwk.dgn
DATE/TIME =08 SEP 2000
USER =1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

EARTHWORKS

VAOT Metric

SUMMARY AND BALANCES

STATION TO STATION km + m		TOTAL EXC. EARTH+ROCK m^3	ROCK EXCAVATION m^3	EMBANKMENT m^3	EXCESSES CUT	EXCESSES FILL	ACCUMULATIVE EXCESSES CUT	ACCUMULATIVE EXCESSES FILL
16+670	16+800			28455		32723		32723
MUCK EXCAVATION								
16+670	16+785	1962	0	0	1962			30761
BR 700/COMMON EXCAVATION		5910	0	0	5910			24851
CONSTRUCTION SEQUENCING		1970	0	2639		1065		25916
X10+200	X10+331	660	0	370	235			25681
CD10+000	CD10+140	630	0	2090		1774		27455
CD10+140	CD10+200	200	0	2190		2319		29774
CD10+200	CD10+271.929	110	0	3510		3927		33701
C10+100	C10+200	40	0	3850		4388		38089
C10+200	C10+250.786	0	0	2240		2576		40665
MUCK EXCAVATION								
C10+235	CD10+120	1987	0	0	1987			38678
D10+000	D10+200	650	0	4150		4123		42801
D10+200	D10+236.439	445	0	0	445			42356
Z10+000 RT	Z10+200 RT	4520	0	0	4520			37836
Z10+200 RT	Z10+228 RT	640	0	0	640			37196
Y10+180	Y10+216.991	46	0	29	13			37183
AB10+000	AB10+196.565	5227	0	1376	3645			33538
B10+064.800	B10+260	3911	0	1660	2002			31536
B10+280	B10+323.782	34	0	817		906		32442
Z10+000 LT	Z10+200 LT	10540	0	0	10540			21902
Z10+200 LT	Z10+288 LT	1500	0	0	1500			20402
Y10+000	Y10+180	10	0	1440		1646		22048
X10+000	X10+200	1430	0	2570		1526		23574
C10+000	C10+100	0	0	1600		1840		25414
A10+000	A10+184.529	300	0	3320		3518		28932
61+120	61+200	630	0	0	630			28302
61+200	61+280	0	0	0		0		28302
ROADSIDE DRAINAGE FEATURES		810	0	0	810			27492

SUMMARY AND BALANCES

STATION TO STATION km + m		TOTAL EXC. EARTH+ROCK m^3	ROCK EXCAVATION m^3	EMBANKMENT m^3	EXCESSES CUT	EXCESSES FILL	ACCUMULATIVE EXCESSES CUT	ACCUMULATIVE EXCESSES FILL
EROSION CONTROL SEDIMENT TRAPS		3492	0	1757	1471			26021
UNDERDRAIN EXCAVATION		265	0	0	265			25756
TRENCH EXCAVATION		1090	0	0	1090			24666
STRUCTURE/COFFERDAM EXCAVATION		3530	0	0	1059			23607
CHANNEL EXCAVATION		1381	0	0	414			23193
SAN. SEWER TRENCH EXCAVATION		597	0	0	597			22596
MUCK EXCAVATION								
16+624	16+670	151	0	0	151			22445
16+624	16+670	0	0	23823		27396		49841

SUMMARY BY COLUMNS

DWG. NO.	COL NO.	EXCAVATION TOTAL m^3	EXCAVATION ROCK m^3	FILL m^3
EW-1	1	0	0	52278
EW-1	2	2100	0	4380
EW-1	3	5573	0	4725
EW-1	4	4575	0	4567
EW-2	1	350	0	13390
EW-2	2	18295	0	4150
EW-2	3	12197	0	1757
EW-2	4	11578	0	2639
TOTAL		54668	0	87886

REMARKS

EARTH AND ROCK EXCAVATION	54668 m^3
SOLID ROCK EXCAVATION	0 m^3
EARTH EXCAVATION	54668 m^3
PLANIMETERED FILL	87886 m^3
SOLID ROCK FACTOR	1.30
LESS FACTORED SOLID ROCK	0
LESS DISPLACEMENT OF ANY LARGE STRUCTURES	0
NET PLANIMETERED FILL	87886 m^3
FACTOR	1.15
PLANIMETERED FILL INCLUDING FACTOR	101069 m^3
MATERIALS AVAILABLE FOR FILL	
ROADWAY/DRAINAGE/EROSION CONTROL EXCAVATION	35825 m^3
BR700/COMMON EXCAVATION	5910 m^3
MUCK EXCAVATION	4100 m^3
UNDERDRAIN EXCAVATION	265 m^3
STRUCTURE/COFFERDAM EXCAVATION (3530 x 0.30)	1059 m^3
TRENCH EXCAVATION	1090 m^3
CHANNEL EXCAVATION (1381 x 0.30)	414 m^3
CONSTRUCTION SEQUENCING	1970 m^3
SANITARY SEWER TRENCH EXCAVATION	597 m^3
TOTAL MATERIAL AVAILABLE FOR FILL	51230 m^3
TOTAL FILL INCLUDING FACTOR	101069 m^3
TOTAL MATERIAL FOR FILL	51230 m^3
BORROW SUBTOTAL	49839 m^3
BORROW ROUNDING	1661 m 3
BORROW	51500 m^3
EXCESS EXCAVATION	0 m^3

PROJECT: BENNINGTON - HOOSICK

PROJECT NO.: D.P.I. 0146(1) C/4

DESIGN FILE NAME: EARTHWK.DGN
IPARM FILE NAME:
SURVEYED BY: V.S.E.
SQUAD LEADER: T.P.K.
DWG. NO. EW-3

PLOT DATE: 9/00
SURVEY DATE: 12/93
DRAWN BY: E.C.D.
SHEET 23 OF 385

FILE NAME =u:\5116\vaot\contract4\earthwk.dgn
DATE/TIME =08 SEP 2000
USER =1459

TABLE OF PROJECT PROPERTY ACQUISITION

STATE OF VERMONT
AGENCY OF TRANSPORTATION
RIGHT OF WAY PLANS
DETAIL SHEET

Metric

PARCEL NO.	GRANTOR	DWG. NO.	BEGINNING STATION	ENDING STATION	TAKING	REM.	RIGHTS	TITLE TAKEN	DATE	TOWN OR CITY RECORDED	BK.	PG.	REMARKS
1A	WOODLAND HEIGHTS REALTY CO.	43, 44, 45, 46, 47, 48, A, B, D	NY 45+086.49 RT	14+021.78 RT	20.30 ha					BENNINGTON			LIMITED ACCESS 50.16 A
		44	12+520.00 LT				DRAIN (P)						
		44	12+600.00 LT				DRAIN (P)						
		44	12+622.29 LT				DRAIN (P)						
		44	12+650.00 LT				DRAIN (P)						
		44	12+700.00 LT				DRAIN (P)						
		44	12+750.00 LT				DRAIN (P)						
		45	12+802.00 LT				DRAIN (P)						
		45, 46	13+115.00 RT	13+187.00 RT									STONE WALL
		46, 47	13+456.00 LT	13+501.00 RT									STONE WALL
		48	13+923.21 LT	14+021.78 RT									STONE WALL
		43, 44, 45, 46, 47, 48, A, B, D	12+175.25 LT	13+923.21 LT		127.11 ha							314.10 A
1B		43, 44, 45, 46, 47, 48, A, B	NY 45+086.49 RT	13+992.84 RT	175.94 ha								434.74 A BY OPTION WITH WOODLAND HEIGHTS DEER YARD MITIGATION
				TOTAL	196.24 ha	127.11 ha							
2	GEANNELIS, MARY N.	48, 49, 50, D, E	13+923.21 LT	14+740.31 LT	7.38 ha					BENNINGTON			LIMITED ACCESS 18.24 A
		48	13+923.21 LT	14+124.84 RT									STONE WALL
		48	14+052.53 LT				DRAIN (P)						
		48	14+120.00 LT				DRAIN (P)						
		49	14+165.00 RT	14+183.00 LT									STONE WALL
		49	14+262.00 LT				DRAIN (P)						
		49	14+282.00 RT				DRAIN (P)						
		49	14+308.15 RT	14+353.00 LT									STONE WALLS (3)
		50	14+549.96 LT				DRAIN (P)						
		50	14+697.12 RT	14+740.31 LT									STONE WALL
		48, 49, 50	13+923.21 LT	14+740.31 LT		27.22 ha							67.26 A
		48, 49, D, E	14+124.84 RT	14+308.15 RT		0.73 ha							LOSS OF ACCESS 1.80 A
		49, 50, E	14+348.77 RT	14+697.12 RT		2.35 ha							LOSS OF ACCESS 5.81 A
				TOTAL	7.38 ha	30.30 ha							
3	STROHMAIER, WILLIAM A. & GENEVIEVE	48, B, D	13+992.84 RT	14+124.84 RT	0.38 ha	5.69 ha				BENNINGTON			LIMITED ACCESS 0.94 A 14.06 A STONE WALL
		48	14+021.78 RT	14+124.84 RT									
				TOTAL	0.38 ha	5.69 ha							

REVISION NO.	SHEET	DESCRIPTION OF REVISION	DATE	MADE BY	APPROVED BY

DR. (P) - DRAINAGE RIGHT
DIT. (P) - DITCHING RIGHT
CH. (P) - CHANNEL RIGHT
DRIVE (T) - DRIVE RIGHT
CUL. (P) - CULVERT RIGHT
W - WATER SOURCES

PRESENT R.O.W.
TAKING WITHOUT ACCESS
TAKING WITHOUT ACCESS ALONG PROPERTY LINE
TAKING WITH ACCESS
(P) PERMANENT EASEMENT
(T) TEMPORARY EASEMENT

LEGEND
CZ (P) CLEAR ZONE
CONST. (T) CONSTRUCTION EASEMENT
SR SR SLOPE RIGHTS
P/L PROPERTY LINE
TOP OF CUT
TOE OF SLOPE

APPROVED: *MILAN LAWSON* DATE: *09-06-00*
SPECIAL PROJECTS ENGINEER

R.O.W. PLANS

BENNINGTON
D.P.I. 0146(1)
DWG. NO. ROW-38
SHEET 24 OF 385

TABLE OF PROJECT PROPERTY ACQUISITION

STATE OF VERMONT
AGENCY OF TRANSPORTATION
RIGHT OF WAY PLANS
DETAIL SHEET

VAOT Metric

PARCEL NO.	GRANTOR	DWG. NO.	BEGINNING STATION	ENDING STATION	TAKING	REM.	RIGHTS	TITLE TAKEN	DATE	TOWN OR CITY RECORDED	BK.	PG.	REMARKS
4	WOODWARD, DENNIS S. & NICOLE C.	49, E	14+308.15 RT	14+348.77 RT	0.04 ha	19.88 ha				BENNINGTON			LIMITED ACCESS 0.09 A 49.13 A
		49	14+308.15 RT	14+348.77 RT									STONE WALLS (2)
				TOTAL	0.04 ha	19.88 ha							
5	NAUGHTON, ELIZABETH NAUGHTON, JOHN C. NAUGHTON, THOMAS	50, 51, E	14+697.12 RT	14+915.50 LT	2.09 ha					BENNINGTON			LIMITED ACCESS 5.16 A
		50	14+697.12 RT	14+740.31 LT									STONE WALL
		51	14+895.35 RT	14+915.50 LT									STONE WALL
		50, 51, E	14+697.12 RT	14+895.35 RT		3.37 ha							LOSS OF ACCESS 8.33 A
		50, 51, E	14+740.31 LT	14+919.30 LT		5.44 ha							13.44 A
				TOTAL	2.09 ha	8.81 ha							
6A	ROGERS, MARCIA M. & WILLIAM R., JR.	51, E	14+895.35 RT	15+172.23 LT	3.18 ha					BENNINGTON			LIMITED ACCESS 7.86 A
		51	14+895.35 RT	14+919.30 LT									STONE WALL
		51	14+920.00 RT				DRAIN (P)						
		51	15+030.00 RT				DRAIN (P)						
		51	15+149.30 RT	15+172.23 LT									STONE WALL
		51, E	14+895.35 RT	15+149.30 RT		5.39 ha							13.32 A
6B		51, E	15+149.30 RT	15+179.72 LT	0.09 ha		ALL RT & I						HIGHWAY EASEMENT AUSTIN HILL RD. 0.22 A
				TOTAL	3.27 ha	5.39 ha							
7A	BARD, DAVID T. & DORIS F.	51, 52, 53, 54, C, E	15+157.71 RT	16+133.81 RT	5.96 ha					BENNINGTON			LIMITED ACCESS 14.73 A
		51	15+165.21 RT	15+186.08 LT									STONE WALL
		52	15+460.21 LT				DRAIN (P)						
		53, 54	15+743.46 RT	16+133.81 RT									STONE WALL
		51, 52, 53, 54, C, E	15+157.71 RT	16+133.81 RT		27.86 ha							68.84 A
		51, 52, 53, E	15+186.08 LT	15+576.47 LT		3.76 ha							9.29 A
7B		51	15+157.21 RT	15+187.18 LT	0.09 ha		ALL RT & I						HIGHWAY EASEMENT AUSTIN HILL RD. 0.22 A
				TOTAL	6.05 ha	31.62 ha							
8	MAXON, RANDY G. & DONNA M.	53, E	15+569.24 RT	15+743.46 RT	1.13 ha					BENNINGTON			LIMITED ACCESS 2.79 A
		53, E	15+573.86 LT	15+739.47 LT		8.87 ha							21.92 A
		53	15+739.47 LT	15+743.46 RT									STONE WALL
				TOTAL	1.13 ha	8.87 ha							

REVISION NO.	SHEET	DESCRIPTION OF REVISION	DATE	MADE BY	APPROVED BY

DR. (P) - DRAINAGE RIGHT
DIT. (P) - DITCHING RIGHT
CH. (P) - CHANNEL RIGHT
DRIVE (T) - DRIVE RIGHT
CUL. (P) - CULVERT RIGHT
W - WATER SOURCES

PRESENT R.O.W.
TAKING WITHOUT ACCESS
TAKING WITHOUT ACCESS ALONG PROPERTY LINE
TAKING WITH ACCESS
(P) PERMANENT EASEMENT
(T) TEMPORARY EASEMENT

LEGEND
CZ (P) CLEAR ZONE
CONST. (T) CONSTRUCTION EASEMENT
SR SR SLOPE RIGHTS
P/L PROPERTY LINE
TOP OF CUT
TOE OF SLOPE

APPROVED: *MILAN LAWSON* DATE: *09-06-00*
SPECIAL PROJECTS ENGINEER

R.O.W. PLANS

BENNINGTON
D.P.I. 0146(1)
DWG. NO. ROW-39
SHEET 25 OF 385

TABLE OF PROJECT PROPERTY ACQUISITION

STATE OF VERMONT
AGENCY OF TRANSPORTATION
RIGHT OF WAY PLANS
DETAIL SHEET

VAOT Metric

PARCEL NO.	GRANTOR	DWG. NO.	BEGINNING STATION	ENDING STATION	TAKING	REM.	RIGHTS	TITLE TAKEN	DATE	TOWN OR CITY RECORDED	BK.	PG.	REMARKS
9	ARMSTRONG, R. KEITH	53, 54, 55, E, F	15+739.47 LT	16+360.08 RT	4.74 ha					BENNINGTON			LIMITED ACCESS 11.71 A
		53, 54, 55, E, F	15+739.47 LT	16+340.90 LT		32.74 ha							80.90 A
		54, 55, F	16+210.27 RT	16+360.08 RT		0.56 ha							LOSS OF ACCESS 1.38 A
		53, 54	15+739.47 LT	16+210.27 RT									STONE WALL
		54, E	16+080 LT				ALL RT & I						SPRING, 16+080, 22 m LT
		54	16+074.14 RT	16+074.14 LT									STONE WALL
		54	16+082.50 LT				DRAIN (P)						
		55	16+340.90 LT	16+360.08 RT									STONE WALL
				TOTAL	4.74 ha	33.30 ha							
10	CARTER, GERTRUDE C.	54, E, F	16+130.25 RT	16+210.27 RT	0.17 ha					BENNINGTON			LIMITED ACCESS 0.42 A
		54, E, F	16+133.81 RT	16+210.27 RT		28.47 ha							70.35 A
				TOTAL	0.17 ha	28.47 ha							
11	VERMONT ELECTRIC POWER COMPANY, INC.	55, F	16+340.90 LT	16+468.22 RT	1.25 ha					BENNINGTON			LIMITED ACCESS 3.09 A
		55, F	16+340.90 LT	16+452.10 LT		4.12 ha							10.18 A
		55, F	16+360.08 RT	16+468.22 RT		0.70 ha							LOSS OF ACCESS 1.73 A
		55	16+340.90 LT	16+360.08 RT									STONE WALL
		55	16+440.00 LT				DRAIN (P)						
		55	16+441.80 LT	16+468.22 RT									STONE WALL
				TOTAL	1.25 ha	4.82 ha							
12	SENECAL, ARTHUR J., SR. & SENECAL, SANDRA T.	54, E	16+080 LT				ALL RT & I			BENNINGTON			SPRING, 16+080, 22 m LT
13	CENTRAL VERMONT PUBLIC SERVICE CORP.	55, 56, F	16+460.45 LT	16+811.15 RT	1.03 ha					BENNINGTON			LIMITED ACCESS 2.55 A
		55, 56, F	16+468.22 RT	16+811.15 RT		3.73 ha							9.22 A
		56	16+724.00 RT				CULVERT (P)						
		56	16+726.00 RT	16+746.00 RT			DITCH & DRAIN (P)						
		56	16+748.00 RT				CULVERT (P)						
		56	16+751.00 RT	16+836.00 RT			DITCH & DRAIN (P)						
				TOTAL	1.03 ha	3.73 ha							

REVISION NO.	SHEET	DESCRIPTION OF REVISION	DATE	MADE BY	APPROVED BY

DR. (P) - DRAINAGE RIGHT
DIT. (P) - DITCHING RIGHT
CH. (P) - CHANNEL RIGHT
DRIVE (T) - DRIVE RIGHT
CUL. (P) - CULVERT RIGHT
W - WATER SOURCES

PRESENT R.O.W.
TAKING WITHOUT ACCESS
TAKING WITHOUT ACCESS ALONG PROPERTY LINE
TAKING WITH ACCESS
(P) PERMANENT EASEMENT
(T) TEMPORARY EASEMENT

LEGEND
CZ (P) CLEAR ZONE
CONST. (T) CONSTRUCTION EASEMENT
SR SR SLOPE RIGHTS
P/L PROPERTY LINE
TOP OF CUT
TOE OF SLOPE

APPROVED: MILAN LAWSON DATE: 09-06-00
SPECIAL PROJECTS ENGINEER

R.O.W. PLANS

BENNINGTON
D.P.I. 0146(1)
DWG. NO. ROW-40
SHEET 26 OF 385

TABLE OF PROJECT PROPERTY ACQUISITION

STATE OF VERMONT
AGENCY OF TRANSPORTATION
RIGHT OF WAY PLANS
DETAIL SHEET

VAOT Metric

PARCEL NO.	GRANTOR	DWG. NO.	BEGINNING STATION	ENDING STATION	TAKING	REM.	RIGHTS	TITLE TAKEN	DATE	TOWN OR CITY RECORDED	BK.	PG.	REMARKS
14	CONE, ALICE	58, F	CD10+256.61 LT	CD10+261.99 LT			DITCH & DRAIN (P)			BENNINGTON			
15													DELETED FEB. 1999
16	BENNINGTON ACRES	56, 57, F	16+852.62 LT	16+955.43 LT			EASE (T) 0.30 ha						EROSION CONTROL 0.74 A
17	DEEP, MICHAEL A. TRUSTEE NORTH BRANCH REALTY TRUST	H			21.81 ha					BENNINGTON			DEER MITIGATION 53.90 A
						4.65 ha							11.50 A
				TOTAL	21.81 ha	4.65 ha							
18	FURNACE GROVE CORP.	I			8.78 ha					BENNINGTON			DEER MITIGATION 21.69 A
						38.20 ha							94.30 A NORTH OF VT RTE. 9
						4.53 ha							11.20 A SOUTH OF VT RTE. 9
				TOTAL	8.78 ha	42.73 ha							
19A	HARRISON, THOMAS J.	G			10.70 ha		ALL RT & I TO R.O.W.			BENNINGTON			WETLANDS MITIGATION 26.44 A
19B													DELETED 5-5-99 NOW PARCEL 21
19C		G				0.40 ha							1.00 A
				TOTAL	10.70 ha	0.40 ha							
20A	TOWN OF BENNINGTON	51, E	15+149.30 RT	15+187.18 LT	0.18 ha		ALL RT & I			BENNINGTON			HIGHWAY EASE AUSTIN HILL RD. 0.44 A
20 B		61, F	CD10+086 LT	CD10+089 LT			DITCH & DRAIN (P)						
		61, F	CD10+058 LT	CD10+077 LT			CULVERT (P)						
		61, F	CD10+077 LT	CD10+096 LT			DITCH & DRAIN (P)						
		61, F	CD10+082 LT	60+740 LT			INSTALL (T)						SILT FENCE
		61, F	CD10+082 LT	60+720 LT			SLOPE (T) 447 sq. m						4809 sq. ft.
		61, F	60+756 LT	60+762 LT			CULVERT DITCH & DRAIN (P)						
		61, F	60+767 LT				INSTALL & MAINT. (P)						STRAIN POLE
20C		61, F	60+791 RT	60+794 RT			INSTALL & MAINT. (P)						TRAFFIC ISLAND
		61, F	60+794 RT	60+801 RT			INSTALL & MAINT.						TRAFFIC LOOPS & PAVEMENT MARKINGS
				TOTAL	0.18 ha								
21	HARRISON, HAZEL M. HARRISON, ELAINE	G			0.04 ha	1.16 ha				BENNINGTON			WETLANDS MITIGATION 0.10 A 2.90 A

REVISION NO.	SHEET	DESCRIPTION OF REVISION	DATE	MADE BY	APPROVED BY

DR. (P) - DRAINAGE RIGHT
DIT. (P) - DITCHING RIGHT
CH. (P) - CHANNEL RIGHT
DRIVE (T) - DRIVE RIGHT
CUL. (P) - CULVERT RIGHT
W - WATER SOURCES

PRESENT R.O.W.
TAKING WITHOUT ACCESS
TAKING WITHOUT ACCESS ALONG PROPERTY LINE
TAKING WITH ACCESS
(P) PERMANENT EASEMENT
(T) TEMPORARY EASEMENT

LEGEND
CZ (P) CLEAR ZONE
CONST. (T) CONSTRUCTION EASEMENT
SR SR SLOPE RIGHTS
P/L PROPERTY LINE
TOP OF CUT
TOE OF SLOPE

APPROVED: *MILAN LAWSON* DATE: *09-06-00*
SPECIAL PROJECTS ENGINEER

R.O.W. PLANS

BENNINGTON
D.P.I. 0146(1)
DWG. NO. ROW-41
SHEET 27 OF 385

TABLE OF PROJECT PROPERTY ACQUISITION

STATE OF VERMONT
AGENCY OF TRANSPORTATION
RIGHT OF WAY PLANS
DETAIL SHEET

VAOT Metric

PARCEL NO.	GRANTOR	DWG. NO.	BEGINNING STATION	ENDING STATION	TAKING	REM.	RIGHTS	TITLE TAKEN	DATE	TOWN OR CITY RECORDED	BK.	PG.	REMARKS
	BELL ATLANTIC												UTILITY
	ADELPHIA TELEVISION												UTILITY
	HYPERION TELECOMMUNICATIONS OF VERMONT (NOT AFFECTED ON THIS PROJECT)												UTILITY
	CENTRAL VERMONT PUBLIC SERVICE CORPORATION												UTILITY
	TOWN OF BENNINGTON WATER & SEWER												UTILITY
	MAINT. AGREE AREA NO. 1	51, E	15+157.21 RT	15+179.72 LT						BENNINGTON			AUSTIN HILL RD. 120.02 m
	MAINT. AGREE AREA NO. 2	56, F	16+755.65 LT	16+848.15 RT						BENNINGTON			SILK RD. 214.48 m

REVISION NO.	SHEET	DESCRIPTION OF REVISION	DATE	MADE BY	APPROVED BY

DR. (P) – DRAINAGE RIGHT
DIT. (P) – DITCHING RIGHT
CH. (P) – CHANNEL RIGHT
DRIVE (T) – DRIVE RIGHT
CUL. (P) – CULVERT RIGHT
W – WATER SOURCES

PRESENT R.O.W.
TAKING WITHOUT ACCESS
TAKING WITHOUT ACCESS ALONG PROPERTY LINE (P/L)
TAKING WITH ACCESS
(P) PERMANENT EASEMENT
(T) TEMPORARY EASEMENT

LEGEND
CZ (P) CLEAR ZONE
CONST. (T) CONSTRUCTION EASEMENT
SR SR SLOPE RIGHTS
P/L PROPERTY LINE
TOP OF CUT
TOE OF SLOPE

APPROVED: *MILAN LAWSON* DATE: *09-06-00*
SPECIAL PROJECTS ENGINEER

R.O.W. PLANS

BENNINGTON
D.P.I. 0146(1)
DWG. NO. ROW-42
SHEET 28 OF 385

VAOT Metric

E 436550
N 44000

VT. STATE PLANE GRID

E 436700
N 44100

WOODLAND HEIGHTS REALTY CO

12+175.25
46.00 m (150.92') LT

TOWN OF HOOSICK (RENSSELAER COUNTY)
TOWN OF BENNINGTON (BENNINGTON COUNTY)

DENSE TREES

BEGIN BENNINGTON-HOOSICK D.P.I. 0146(1) C/S
BEGIN ROADWAY STA. 12+130.455

1993 SURVEY BASELINE

EQUALITY
STA. 45+154.659 BK. (NEW YORK) =
STA. 12+130.455 AHD. (VERMONT)

FIELD DRIVE

12+800

PROPOSED R.O.W. (W.O.A.)

STATE OF NEW YORK
STATE OF VERMONT

84.75 m (278.05')

END EASTBOUND CLIMBING LANE TAPER
END EASTBOUND SHOULDER WIDENING
END WESTBOUND CLIMBING LANE WIDENING
BEGIN FULL-WIDTH WESTBOUND CLIMBING LANE
BEGIN WESTBOUND SHOULDER WIDENING
END WESTBOUND SHOULDER TAPER
STA. 12+230.000

12+260.000
46.000 m (150.92') LT

25.00 m (82.02')

PROPOSED MAINTENANCE VEHICLE TURN-AROUND
SEE DWG. NO. MD-1

[540.00 m (1771.65')]

12+280.000
31.000 m (101.71') LT

BEGIN WESTBOUND SHOULDER TAPER
STA. 12+430.544

MATCH LINE ROW SHEET 44

1.797 m
1.642 m
1.2 m
3.6 m
3.6 m
3.48 m
1.2 m
3.3 m
3.6 m
3.6 m
3.3 m
4.25 m
1.2 m
4.25 m
3.3 m
3.6 m
3.6 m
3.3 m
4.25 m
4.25 m
3.3 m
3.6 m
3.6 m
3.3 m
1.2 m

45+100
N47°48'53.3"E
12+200
VT. ROUTE 9
12+300
12+400

S.H. 98- CONNECTOR

1997 SURVEY BASELINE
50+500
1997 SURVEY BASELINE
50+600
50+700
50+800

℄ A 803
℄ A STA. 50+504.234

℄ A 804
℄ A STA. 50+609.354

℄ A 805
℄ A STA. 50+722.314

161.92 m (531.23')

PROPOSED R.O.W. (W.O.A.)

BM 489
R.R.S.I.T.
WHITE BIRCH
ELEV.=256.143

BM 490
R.R.S.I.T.
0.35 m OAK
ELEV.=261.427

1A

WOODLAND HEIGHTS REALTY CO

PROPOSED MAINTENANCE VEHICLE TURN-AROUND
SEE DWG. NO. MD-1

12+300.00
75.00 m (246.06') RT

[300.24 m (985.04')]

237.77 m (780.08')

APPROXIMATE ULTIMATE EARTHWORK LIMIT

BEGIN EASTBOUND SHOULDER WIDENING
STA. 12+210.000

BEGIN R.O.W. PROJECT
STA. NY 45+086.49
70.00 m (229.66') RT.

E 436650
N 43800

WOODLAND HEIGHTS REALTY CO

1B

E 436800
N 43950

LINES SHOWN ON THIS PLAN AS EXISTING PROPERTY LINES P/L ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE STATE OF VERMONT'S ACQUISITION OF LAND AND RIGHTS FOR THIS PROJECT.

THIS SHEET TO BE USED FOR RIGHT-OF-WAY INFORMATION ONLY

0 10 20 30
SCALE 1:500

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

PROJECT:	PROJECT NO.:
BENNINGTON - HOOSICK	D.P.I. 0146 (1)
DESIGN FILE NAME:	
IPARM FILE NAME:	PLOT DATE: 09-05-00
SURVEYED BY:	SURVEY DATE:
SQUAD LEADER: DHH	DRAWN BY: VSE
DWG. NO. ROW-43	SHEET: 29 OF 385

VAOT Metric

VT. STATE PLANE GRID

E 436850
N 44250

E 436960
N 44310

WOODLAND HEIGHTS REALTY CO

END WESTBOUND SHOULDER TAPER
STA. 12+450.544

BEGIN WESTBOUND SHOULDER WIDENING
STA. 12+500.000

END WESTBOUND SHOULDER WIDENING
STA. 12+520.000

DR (P)

[540.00 m (1771.65')]

INV. = 254.50

1.2 m

1.8 m

12+500

VT. ROUTE 9

12+600

N47°48'53.3"E

12+700

3.3 m
3.6 m
3.6 m
3.3 m

MATCH LINE ROW SHEET 43

MATCH LINE ROW SHEET 45

WOODLAND HEIGHTS REALTY CO

1A

INV. = 258.10

APPROXIMATE ULTIMATE EARTHWORK LIMIT

50+900

[300.24 m (985.04')]

℄ A 806
℄ A STA. 50+893.619

12+600.000
63.000 m (206.69') RT

E 437025
N 44185

[220.00 m (721.78')]

51+200

℄ A 809
℄ A STA. 51+141.722

℄ A 810
℄ A STA. 51+226.654

℄ A 807
℄ A STA. 50+974.228

51+000

WOODLAND HEIGHTS REALTY CO

1B

℄ A 808
℄ A STA. 51+051.520

51+100

BM 493
R.R.S.I.T.
1.0 m ASH
ELEV.=265.784

BM 492
R.R.S.I.T.
0.3 m POLE PINE
ELEV.=265.759

BM 491
R.R.S.I.R.
0.3 m PINE ROOT
ELEV.=265.746

THIS SHEET TO BE USED FOR RIGHT-OF-WAY INFORMATION ONLY

E 443650
N 44070

LINES SHOWN ON THIS PLAN AS EXISTING PROPERTY LINES P/L ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE STATE OF VERMONT'S ACQUISITION OF LAND AND RIGHTS FOR THIS PROJECT.

0 10 20 30
SCALE 1:500

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

PROJECT: BENNINGTON – HOOSICK	PROJECT NO.: D.P.I. 0146 (1)
DESIGN FILE NAME:	
IPARM FILE NAME:	PLOT DATE:
SURVEYED BY:	SURVEY DATE:
SQUAD LEADER: DHH	DRAWN BY: VSE
DWG. NO. ROW-44	SHEET: 30 OF 385

MDOT Metric

VT. STATE PLANE GRID N

MATCH LINE ROW SHEET 44

MATCH LINE ROW SHEET 46

WOODLAND HEIGHTS REALTY CO

E 437250
N 44550

[540.00 m (1771.65')]

12+820.000
31.000 m (101.71') LT

12+900.000
40.000 m (131.23') LT

81.36 m (266.93')

DR (P)

END EASTBOUND CLIMBING LANE
BEGIN EASTBOUND CLIMBING LANE TAPER
BEGIN EASTBOUND SHOULDER WIDENING
STA. 12+920.000

[447.04 m (1466.66')]

BEGIN WESTBOUND SHOULDER TAPER
STA. 13+080.000

END WESTBOUND SHOULDER TAPER
STA. 13+100.000

END EASTBOUND CLIMBING LANE TAPER
END EASTBOUND SHOULDER WIDENING
STA. 13+120.000

N47°48'53.3"E

1.8 m
3.3 m
3.6 m
3.6 m
3.3 m
1.2 m

VT. ROUTE 9

12+900

13+000

CURVE W.B. 5

13+100

1.8 m
1.2 m
3.3 m
3.6 m
3.6 m
2.4 m

℄ A 812
℄ A STA. 51+405.258

1A

WOODLAND HEIGHTS REALTY CO

51+400

51+300

BM 494
R.R.S.I.R.
0.7 m BIRCH ROOT
ELEV.=263.776

℄ A 811
℄ A STA. 51+302.042

P.C.
STA. 12+841.309

[220.00 m (721.78')]

104.14 m (341.67')

54.12 m (177.56')

APPROXIMATE ULTIMATE EARTHWORK LIMIT

12+820.000
64.000 m (209.97') RT

E 437200
N 44340

12+926.290
62.760 m (205.91') RT

12+980.000
77.000 m (252.62') RT

E 437260
N 44380

BM 495
R.R.S.I.R.
BASE OF WHITE BIRCH
ELEV.=268.548

[271.23 m (889.86')]

51+500

℄ A 813
℄ A STA. 51+495.041

P.I. STA. WI+019.573 BK. =
P.I. STA. WI+016.486 AHD.

P.I.
STA. WI+019.573

BM 496
R.R.S.I.R.
0.8 m OAK ROOT
ELEV.=267.095

BEGIN ACCESS ROAD
STA. WI+000.000

STA. WI+002.533
P.C.

WOODLAND HEIGHTS REALTY CO

1B

LINES SHOWN ON THIS PLAN AS EXISTING PROPERTY LINES P/L ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE STATE OF VERMONT'S ACQUISITION OF LAND AND RIGHTS FOR THIS PROJECT.

THIS SHEET TO BE USED FOR RIGHT-OF-WAY INFORMATION ONLY

0 10 20 30
SCALE 1:500

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

PROJECT: BENNINGTON – HOOSICK	PROJECT NO.: D.P.I. 0146 (1)
DESIGN FILE NAME:	
IPARM FILE NAME:	PLOT DATE:
SURVEYED BY:	SURVEY DATE:
SQUAD LEADER: DHH	DRAWN BY: VSE
DWG. NO. ROW-45	SHEET: 31 OF 385

VAST Metric

VT. STATE PLANE GRID
E 437500
N 44730

WOODLAND HEIGHTS REALTY CO

P.I. STA. 13+192.276 BK.=
P.I. STA. 13+187.719 AHD.

13+340.000
40.000 m (131.23') LT

13+380.000
31.000 m (101.71') LT

[447.04 m (1466.66')]

41.55 m (136.32')

[461.97 m (1515.65')]

N47°48'53.3"E

N63°47'47.8"E

MATCH LINE ROW SHEET 45

MATCH LINE ROW SHEET 47

1.2 m
3.3 m
3.6 m
3.6 m
2.4 m

13+200
CURVE W.B.5
13+300
VT. ROUTE 9
13+400

℄ A 815
℄ A STA. 51+687.035

WOODLAND HEIGHTS REALTY CO

1A

℄ A 816
℄ A STA. 51+764.257

BM 498
R.R.S.I.T.
0.4 m ASH
ELEV.=251.731

51+700

51+800

13+440.000
58.000 m (190.29') RT

[257.74 m (845.60')]

51+900

13+260.000
77.000 m (252.62') RT

51+600

[271.23 m (889.86')]

W1+100

P.I. STA. W1+159.254 BK.
P.I. STA. W1+185.991 AHD.

39.18 m (128.54')

96.67 m (317.16')

℄ A 817
℄ A STA. 51+832.239

46.22 m (151.64')

APPROXIMATE ULTIMATE EARTHWORK LIMIT

13+300.000
83.000 m (272.31') RT

BM 497
R.R.S.I.R.
0.4 m CHERRY ROOT
ELEV.=256.196

E 437580
N 44575

13+400.000
83.000 m (272.31') RT

℄ A 818
℄ A STA. 51+914.664

P.C.
STA. W1+141.858

CURVE W-2

P.T.
STA. W1+173.387

END ACCESS ROAD
STA. W1+177.242

P.T.
STA. W1+033.526

℄ A 814
℄ A STA. 51+589.867

1B

LINES SHOWN ON THIS PLAN AS EXISTING PROPERTY LINES P/L ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE STATE OF VERMONT'S ACQUISITION OF LAND AND RIGHTS FOR THIS PROJECT.

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0 10 20 30
SCALE 1:500

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

PROJECT:	PROJECT NO.:
BENNINGTON – HOOSICK	D.P.I. 0146 (1)
DESIGN FILE NAME:	
IPARM FILE NAME:	PLOT DATE:
SURVEYED BY:	SURVEY DATE:
SQUAD LEADER: DHH	DRAWN BY: VSE
DWG. NO. ROW-46	SHEET: 32 OF 385

Metric

MATCH LINE ROW SHEET 46

MATCH LINE ROW SHEET 48

VT. STATE PLANE GRID

E 437650
N 44830

E 437850
N 44930

BM 100
R.R.S.I.T.
0.28 m POP.
ELEV.=228.244

BM 101
R.R.S.I.R.
0.23 m POP.
ELEV.=223.794

WOODLAND HEIGHTS REALTY CO

[461.97 m (1515.65')]

END WESTBOUND CLIMBING LANE
BEGIN WESTBOUND CLIMBING LANE TAPER
BEGIN WESTBOUND SHOULDER WIDENING
STA. 13+675.000

END WESTBOUND CLIMBING LANE TAPER
END WESTBOUND SHOULDER WIDENING
STA. 13+760.000

BEGIN WESTBOUND SHOULDER WIDENING
STA. 13+800.000

1.2 m
3.3 m
3.6 m
3.6 m
2.4 m

VT. ROUTE 9

CURVE W.B. 5

13+600

N63° 47' 47.8"E

13+700

13+800

3.6 m
3.6 m
2.4 m
2.4 m
3.0 m
3.0 m

52+100

52+200

52+000

BM 500
R.R.S.I.R.
0.3 m SPRUCE ROOT
ELEV.=231.279

℄ A 820
℄ A STA. 52+048.229

1A

℄ A 821
℄ A STA. 52+091.372

℄ A 824
℄ A STA. 52+256.732

℄ A 823
℄ A STA. 52+208.843

P.T.
STA. 13+538.666

APPROXIMATE ULTIMATE EARTHWORK LIMIT
[257.74 m (845.60')]

BM 499
R.R.S.I.R.
0.2 m ASH ROOT
ELEV.=236.104

℄ A 819
℄ A STA. 51+969.417

13+700.000
65.000 m (213.25') RT

BEGIN EASTBOUND SHOULDER WIDENING
STA. 13+700.000

END EASTBOUND SHOULDER WIDENING
STA. 13+720.000

[138.23 m (453.51')]

E 437935
N 44790

E 437800
N 44700

WOODLAND HEIGHTS REALTY CO

1B

℄ A 822
℄ A STA. 52+163.740

LINES SHOWN ON THIS PLAN AS EXISTING PROPERTY LINES P/L ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE STATE OF VERMONT'S ACQUISITION OF LAND AND RIGHTS FOR THIS PROJECT.

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0 10 20 30
SCALE 1:500

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

PROJECT:	PROJECT NO.:
BENNINGTON – HOOSICK	D.P.I. 0146 (1)
DESIGN FILE NAME:	
IPARM FILE NAME:	PLOT DATE:
SURVEYED BY:	SURVEY DATE:
SQUAD LEADER: DHH	DRAWN BY: VSE
DWG. NO. ROW-47	SHEET: 33 OF 385

VAOT Metric

MATCH LINE ROW SHEET 47

MATCH LINE ROW SHEET 49

14+025.500
90.500 m (296.92') LT

13+988.500
90.500 m (296.92') LT

37.00 m (121.39')

DR (P)

FEDERAL JURISDICTIONAL WETLAND BOUNDARY

BM 103
R.R.S.I.R.
9.34 m BIR.
ELEV.=197.606

AIRPORT BROOK WEST

DR (P)

[222.60 m (730.31')]

VT. STATE PLANE GRID N

BM 102
R.R.S.I.T.
0.21m MAP
ELEV.=206.591

E 438000
N 44990

13+923.210
48.600 m (159.45') LT

77.58 m (254.53')

P
L

GEANNELIS
WOODLAND HEIGHTS

[461.97 m (1515.65')]

13+840.000
31.000 m (101.71') LT

85.05 m (279.03')

END WESTBOUND SHOULDER WIDENING
STA. 13+830.000

114.56 m (375.85')

STOP ROADWAY
BEGIN BRIDGE
STA. 14+128.200

GEANNELIS, MARY N.

1A

2

3.0 m
3.6 m
3.6 m

13+900

VT. ROUTE 9

14+000

N63°47'47.8"E

3.0 m
3.6 m
3.6 m
3.0 m

14+100

3.0 m
52+300

WOODLAND HEIGHTS REALTY CO

52+400

14+021.78
10.14 m (33.27') RT

52+500

52+600

℄ A 825
℄ A STA. 52+356.919

118.83 m (389.86')

℄ A 826
℄ A STA. 52+479.118

GEANNELIS
STROHMAIER

℄ A 827
℄ A STA. 52+598.288

64.42 m (211.35')

APPROXIMATE ULTIMATE EARTHWORK LIMIT

14+124.84
69.00 m (226.38') RT

[55.20 m (181.10')]

72.84 m (238.98')

FEDERAL JURISDICTIONAL
WETLAND BOUNDARY

107.16 m (351.57')

24.86 m (81.56')

13+992.84
68.00 m (223.10') RT

14+100.000
68.000 m (223.10') RT

13+920.000
68.000 m (223.10') RT

PROPOSED SINGLE ALUMINUM MULTI-PLATE
PIPE CULVERT, 1650 mm DIAMETER
REFER TO DWG. SERIES BR300
FOR ADDITIONAL INFORMATION

STROHMAIER, WILLIAM A.
& GENEVIEVE

E 438200
N 44900

E 438050
N 44830

54.41 m (178.51')

1B

58.00 m (190.29')

13+830.000
112.000 m (367.45') RT

13+888.000
112.000 m (367.45') RT

WOODLAND HEIGHTS
STROHMAIER

STROHMAIER
DEBELL

DEBELL, JOHN H.
& MARION M.

IPF

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0 10 20 30
SCALE 1:500

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

PROJECT: BENNINGTON – HOOSICK	PROJECT NO.: D.P.I. 0146 (1)
DESIGN FILE NAME:	PLOT DATE:
IPARM FILE NAME:	SURVEY DATE:
SURVEYED BY:	DRAWN BY: VSE
SQUAD LEADER: DHH	SHEET: 34 OF 385
DWG NO. ROW-48	

VAOT Metric

MATCH LINE ROW SHEET 48

MATCH LINE ROW SHEET 50

N

VT. STATE PLANE GRID

E 438300
N 45150

E 438500
N 45230

BM 104
R.R.S.I.R.
0.15 m MAP.
ELEV.=214.088

BM 105
R.R.S.I.T.
0.23 m POP.
ELEV.=218.102

[222.60 m (730.31')]

END BRIDGE
RESUME ROADWAY
STA. 14+184.750

14+240.000
31.000 m (101.71') LT

DR (P)

GEANNELIS, MARY N.

BEGIN EASTBOUND SHOULDER TAPER
STA. 14+360.000

END EASTBOUND SHOULDER TAPER
BEGIN WESTBOUND SHOULDER TAPER
STA. 14+380.000

END WESTBOUND SHOULDER TAPER
STA. 14+400.000

P.C.
STA. 14+424.255

[362.24 m (1188.45')]

3.0 m
3.6 m
3.6 m
3.0 m

14+200

VT. ROUTE 9

14+300

N62°47'47.8"E

14+400

3.6 m
3.6 m

3.0 m
2.4 m

2.4 m
3.6 m
3.6 m
2.4 m

CURVE W.B. 6

52+700

52+800

52+900

℄ A 828
℄ A STA. 52+782.562

14+308.07
34.60 m (113.52') RT

20.03 m
(65.72')

35.29 m (115.78')

8.15 m (26.74')

APPROXIMATE ULTIMATE EARTHWORK LIMIT

40.62 m (133.27')

121.50 m (398.62')

14+300.000
52.000 m (170.60') RT

DR (P)

14+348.770
52.000 m (170.60') RT

14+308.15
52.00 m (170.60') RT

[188.62 m (618.83')]

[55.20 m
(181.10')]

WEST

14+180.000
71.000 m (232.92') RT

AMPERSAT BROOK

℄ A 829
℄ A STA. 52+910.085

GEANNELIS, MARY N.

GEANNELIS
WOODWARD

WOODWARD, DENNIS S.
& NICOLE C.

E 438500
N 45050

E 438400
N 44975

GEANNELIS
DEBELL

DEBELL, JOHN H.
& MARION M.

GEANNELIS
NICHOLS

NICHOLS, KEITH M.
& LYNNE A.

P
L

LINES SHOWN ON THIS PLAN AS EXISTING PROPERTY LINES P/L ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE STATE OF VERMONT'S ACQUISITION OF LAND AND RIGHTS FOR THIS PROJECT.

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0 10 20 30
SCALE 1:500

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

PROJECT: BENNINGTON – HOOSICK	PROJECT NO.: D.P.I. 0146 (1)
DESIGN FILE NAME:	
IPARM FILE NAME:	PLOT DATE:
SURVEYED BY:	SURVEY DATE:
SQUAD LEADER: DHH	DRAWN BY: VSE
DWG. NO. ROW-49	SHEET: 35 OF 385

VAOT Metric

N

VT. STATE PLANE GRID

NAUGHTON
WEINSTEIN

WEINSTEIN
NAUGHTON

NAUGHTON
GEANNELIS

P
L

E 438750
N 45350

GEANNELIS, MARY N.

E 436600
N 45300

14+700.000
46.000 m (150.92') LT

14+740.31
46.00 m (150.92') LT

BM 106
R.R.S.I.R.
0.25 m ASH
ELEV.=213.102

DR (P)
[362.24 m (1188.45')]

14+600.000
31.000 m (101.71') LT

102.68 m (336.88')

40.76 m (133.73')

[179.04 m (587.40')]

BM 107
R.R.S.I.R.
0.20 m ASH
ELEV.=208.262

(350.06')

106.70 m

N63°47'47.8"E

NAUGHTON, ELIZABETH

NAUGHTON, JOHN C.

NAUGHTON, THOMAS

BEGIN WESTBOUND SHOULDER WIDENING
STA. 14+520.000

END WESTBOUND SHOULDER WIDENING
STA. 14+540.000

2.4 m

3.0 m

GEANNELIS, MARY N.

14+600

VT. ROUTE 9

14+700

CURVE W.B. 6

14+800

3.6 m
3.6 m
2.4 m

2.4 m
3.0 m

3.0 m
3.6 m
3.6 m
3.0 m

53+000

53+100

53+200

53+300

℄ A 831
℄ A STA. 53+146.492

℄ A 830
℄ A STA. 53+039.341

℄ A 832
℄ A STA. 53+246.104

GEANNELIS
NAUGHTON

[188.62 m (618.83')]

153.20 m (502.62')

22.30 m
(73.16')

[126.70 m (415.68')]

14+540.000
59.000 m (193.57') RT

BEGIN EASTBOUND SHOULDER WIDENING
STA. 14+560.000

END EASTBOUND SHOULDER WIDENING
STA. 14+580.000

E 438120
N 45175

14+697.12
62.34 m (204.53') RT

APPROXIMATE ULTIMATE EARTHWORK LIMIT

14+720.000
62.000 m (203.41') RT

P
L

NAUGHTON, ELIZABETH

NAUGHTON, JOHN C.

NAUGHTON, THOMAS

GEANNELIS, MARY N.

E 436600
N 45100

MATCH LINE ROW SHEET 49

MATCH LINE ROW SHEET 51

1

2

5

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0 10 20 30
SCALE 1:500

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

PROJECT: BENNINGTON – HOOSICK	PROJECT NO.: D.P.I. 0146 (1)
DESIGN FILE NAME:	PLOT DATE:
IPARM FILE NAME:	SURVEY DATE:
SURVEYED BY:	DRAWN BY: VSE
SQUAD LEADER: DHH	SHEET: 36 OF 385
DWG. NO. ROW-50	

VAOT Metric

MATCH LINE ROW SHEET 50

MATCH LINE ROW SHEET 52

WEINSTEIN, EDWARD & MARY ANNE

WEINSTEIN

MONROE

N 438950 E N 45430

14+919.300
70.100 m (229.99') LT

BROOK

AIRPORT

NAUGHTON

P.I. STA. 14+871.379 BK.=
P.I. STA. 14+861.447 AHD.

14+915.500
46.000 m (150.92') LT

END BRIDGE
RESUME ROADWAY
STA. 14+910.050

24.41 m (80.09')

[179.04 m (587.40')]

STOP ROADWAY
BEGIN BRIDGE
STA. 14+861.650

BM 108
R.R.S.I.R.
0.37 m ASH
ELEV.=203.835

MONROE, GARY H. & PAMELA J.

FEDERAL JURISDICTIONAL WETLAND BOUNDARY

MONROE
ROGERS

259.96 m (852.89')

N84°41'25.5"E

BM 109
R.R.S.I.R.
0.23 m BIR.
ELEV.=204.958

6A

14+900

15+000

15+100

CURVE W.B. 6

3.0 m
3.6 m
3.6 m
3.0 m

P.I.
STA. AH0+073.331

ROGERS, MARCIA M. & WILLIAM R. JR.

5

382.61' 116.62 m

NAUGHTON
ROGERS

℄ A 834
℄ A STA. 53+502.279

53+500

53+600

53+400

℄ A 833
℄ A STA. 53+369.654

℄ A 835
℄ A STA. 53+615.129

P.I.
STA. AH0+045.569

383.0' 116.74 m

N2 16°29.8'E

6B

BEGIN LIMITED ACCESS
STA. 15+187.18 46.18 m (151.51') LT

END MAINT. AGREE AREA NO. 1
STA. 15+179.72 46.41 m (152.26') LT

N 433150 E N 45450

VT. STATE PLANE GRID

7.66 m (25.13')

END LIMITED ACCESS
STA. 15+172.23 46.51 m (152.59') LT

AUSTIN HILL ROAD

BM 110
R.R.S.I.R.
0.24 m ASH
ELEV.=213.145

END AUSTIN HILL ROAD
STA. AH0+120.000

STOP ROADWAY
BEGIN BRIDGE
STA. 15+155.509

7.24 m (23.75')

15+186.08
39.00 m (127.95') LT

7.26 m (23.82')

[318.14 m (1043.76')]

7A

AH0+100

108.46 m (355.84')

N 16°08'07.3"E

7B

APPROXIMATE ULTIMATE EARTHWORK LIMIT

[126.70 m (415.68')]

101.68 m (333.60')

145.10 m (476.05')

DR (P)

44.04 m (144.49')

14+850.000
70.000 m (229.66') RT

NAUGHTON, ELIZABETH
NAUGHTON, JOHN C.
NAUGHTON, THOMAS

P/L IP

14+895.35
70.35 m (230.81') RT

N 439000 E N 45250

15+000.000
68.000 m (223.10') RT

BEGIN LIMITED ACCESS
STA. 15+149.30
67.79 m (222.41') RT

N 439150 E N 45275

7.57 m (24.84')

BEGIN MAINT. AGREE AREA NO. 1
STA. 15+157.21 67.63 m (221.88') RT
(LENGTH=120.02 m (393.77'))

END BRIDGE
RESUME ROADWAY
STA. 15+188.290

TOWN OF BENNINGTON

BEGIN AUSTIN HILL ROAD
STA. AH0+000.000

N 37°11'06.7"E

20A

BARD, DAVID T. & DORIS F.

7.90 m (25.92')

15+165.21
67.45 m (221.26') RT

15+200.000
105.000 m (344.49') RT

40.77 m (133.76')

END LIMITED ACCESS
STA. 15+157.71
100.25 m (328.90') RT

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ROGERS, MARCIA M. & WILLIAM R. JR.

0 10 20 30
SCALE 1:500

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

PROJECT: BENNINGTON - HOOSICK	PROJECT NO.: D.P.I. 0146 (1)
DESIGN FILE NAME:	
IPARM FILE NAME:	PLOT DATE:
SURVEYED BY:	SURVEY DATE:
SQUAD LEADER: DHH	DRAWN BY: VSE
DWG. NO. ROW-51	SHEET: 37 OF 385

VAOT Metric

N

VT. STATE PLANE GRID

MATCH LINE ROW SHEET 51

MATCH LINE ROW SHEET 53

N/F BRUSO

BRUSO

BARD

BRUSO

MAXON

MAXON, RANDY G. & DONNA M.

P L

MAXON

BARD

E 439250 N 45450

BARD, DAVID T. & DORIS F.

BEGIN WESTBOUND CLIMBING LANE WIDENING
BEGIN WESTBOUND SHOULDER TAPER
STA. 15+280.000

BM 111
R.R.S.I.R.
0.28 m CHY.
ELEV.=214.617

[318.14 m (1043.76')]

FEDERAL JURISDICTIONAL WETLAND BOUNDARY

DR (P)
INV. = 212.80

BEGIN FULL-WIDTH WESTBOUND CLIMBING LANE
END WESTBOUND CLIMBING LANE WIDENING
END WESTBOUND SHOULDER TAPER
STA. 15+480.000

15+500.000
39.000 m (127.95') LT

[61.12 m (200.52')]

BM 112
R.R.S.I.R.
0.27 m ELM
ELEV.=214.251

BARD, DAVID T. & DORIS F.

1.8 m

3.0 m
3.6 m
3.6 m
3.0 m

CURVE W.B. 6

15+300

3.0 m
3.6 m
3.6 m
3.0 m

CURVE W.B. 7

15+400

N84°41'25.5"E

3.3 m
3.6 m
3.6 m
3.0 m

15+500

53+700

P.C.C.
STA.15+308.571

53+800

53+900

7A

℄ A 836
℄ A STA. 53+823.223

INV. = 215.40

℄ A 837
℄ A STA. 53+977.352

[275.42 m (903.61')]

APPROXIMATE ULTIMATE EARTHWORK LIMIT

102.08 m (334.91')

15+520.000
61.000 m (200.13') RT

E 439350 N 45300

155.42 m (509.91')

E 439500 N 45300

BARD, DAVID T. & DORIS F.

15+420.000
90.000 m (295.27') RT

[60.07 m (197.08')]

15+260.000
88.000 m (288.71') RT

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0 10 20 30
SCALE 1:500

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

PROJECT: BENNINGTON – HOOSICK	PROJECT NO.: D.P.I. 0146 (1)
DESIGN FILE NAME:	
IPARM FILE NAME:	PLOT DATE:
SURVEYED BY:	SURVEY DATE:
SQUAD LEADER: DHH	DRAWN BY: VSE
DWG. NO. ROW-52	SHEET: 38 OF 385

VIOT Metric

N

VT. STATE PLANE GRID

MATCH LINE ROW SHEET 52

MATCH LINE ROW SHEET 54

IRF

BARD, DAVID T. & DORIS F.

P L

15+560.000
31.000 m (101.71') LT

13.99 m (45.90')

15+573.86
30.56 m (100.26') LT

BM 113
R.R.S.I.R.
0.62 m PINE
ELEV.=220.025

[61.12 m (200.52')]

BARD

MAXON

7A

8

9

MAXON, RANDY G. & DONNA M.

E 439675
N 45475

MAXON

ARMSTRONG

ARMSTRONG, R. KEITH

15+739.466
29.457 m (96.64') LT

BM 114
R.R.S.I.T.
0.35 m BIR.
ELEV.=219.457

P.I. STA. 15+834.288 BK.=
P.I. STA. 15+826.702 AHD.

N84°41'25.5"E

S78°27'44.0"E

166.32 m (545.67')

[262.62 m (861.61')]

1.8 m

3.3 m
3.6 m
3.6 m
3.0 m

[208.97']

64.00 m

3.0 m

2.4 m

15+600

15+700

15+800

CURVE W.B. 7

[226.48']

69.03 m

54+000

54+100

54+200

54+300

IRF

MAXON 172.53 m (566.04')

℄ A 838
℄ A STA. 54+090.549

℄ A 839
℄ A STA. 54+250.650

FEDERAL JURISDICTIONAL WETLAND BOUNDARY

ARMSTRONG

BARD

P

L

[382.98 m (1256.49')]

15+569.24
33.28 m (109.19') RT

15+743.46
39.45 m (129.43') RT

[295.07 m (968.08')]

APPROXIMATE ~~ULTIMATE~~ EARTHWORK LIMIT

[275.42 m (903.61')]

15+800.000
55.000 m (180.45') RT

BEGIN EASTBOUND SHOULDER TAPER
STA. 15+620.000

END EASTBOUND SHOULDER TAPER
STA. 15+640.000

BARD, DAVID T. & DORIS F.

E 439700
N 45300

E 439845
N 45310

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0 10 20 30
SCALE 1:500

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

PROJECT: BENNINGTON - HOOSICK	PROJECT NO.: D.P.I. 0146 (1)
DESIGN FILE NAME:	PLOT DATE:
IPARM FILE NAME:	SURVEY DATE:
SURVEYED BY:	DRAWN BY: VSE
SQUAD LEADER: DHH	SHEET: 39 OF 385
DWG. NO. ROW-53	

MDOT Metric

N
VT. STATE PLANE GRID

E 440000
N 45460

ARMSTRONG, R. KEITH

BM 115
R.R.S.I.R.
0.25 m PINE
ELEV.=219.088

16+000.000
29.000 m (95.14') LT

16+074.142
30.000 m (98.42') LT

BM 116
R.R.S.I.R.
0.22 m ASH
ELEV.=217.108

12

SENECAL, ARTHUR J., SR. &
SENECAL, SANDRA T.

E 440200
N 45415

16+100.000
31.000 m (101.71') LT

16+160.000
31.000 m (101.71') LT

[262.62 m (861.61')]

74.76 m (245.28')

26.10 m (85.63')

60.52 m (198.56')

[182.43 m (598.52')]

DRIVE (P)

SPRING

INV. = 213.80

S78°27'44.0"E

MATCH LINE ROW SHEET 53

1.8 m
3.3 m
3.6 m
3.6 m
2.4 m

1.8 m
3.3 m
3.6 m
3.6 m
2.4 m

ARMSTRONG, R. KEITH

VT. ROUTE 9

16+000

16+100

16+200

CURVE W.B. 7

9

54+400

54+500

54+600

INV. = 217.90

IRF

℄ A 840
℄ A STA. 54+354.834

ARMSTRONG
BARD

FEDERAL JURISDICTIONAL
WETLAND BOUNDARY

15.56 m
(51.05')

16+130.25
29.34 m (96.26') RT

℄ A 842
℄ A STA. 54+607.238

78.96 m (259.05')

16+145.82
27.42 m (89.96') RT

16+210.27
74.33 m (243.86') RT

P
L

[382.98 m (1256.49')]

℄ A 841
℄ A STA. 54+454.872

7A

10

APPROXIMATE ULTIMATE EARTHWORK LIMIT

36.78 m (120.67')

[295.07 m (968.08')]

33.49 m (109.88')

16+100.000
61.000 m (200.13') RT

75.50 m (247.70')

ARMSTRONG
CARTER

BARD, DAVID T. & DORIS F.

E 440040
N 45290

16+133.81
65.46 m (214.76') RT

BARD
CARTER

CARTER, GERTRUDE C.

E 440200
N 45275

MATCH LINE ROW SHEET 55

LINES SHOWN ON THIS PLAN AS EXISTING PROPERTY LINES P/L ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE STATE OF VERMONT'S ACQUISITION OF LAND AND RIGHTS FOR THIS PROJECT.

THIS SHEET TO BE USED FOR RIGHT-OF-WAY INFORMATION ONLY

0 10 20 30
SCALE 1:500

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

PROJECT: BENNINGTON – HOOSICK	PROJECT NO.: D.P.I. 0146 (1)
DESIGN FILE NAME:	
IPARM FILE NAME:	PLOT DATE:
SURVEYED BY:	SURVEY DATE:
SQUAD LEADER: DHH	DRAWN BY: VSE
DWG. NO. ROW-54	SHEET: 40 OF 385

MAT Metric

MATCH LINE ROW SHEET 54

MATCH LINE ROW SHEET 56

VT. STATE PLANE GRID

ROW PROJECT F012-1(1)
STA. 265+57 50.29 m (165.00') LT

ARMSTRONG, R. KEITH

E 440340
N 45390

E 440555
N 45355

BM 117
R.R.S.I.R.
0.52 m ASH
ELEV.=213.238

16+340.90
29.73 m (97.54') LT

VELCO

16+452.100
31.000 m (101.71') LT

[182.43 m (598.52')]

P.T. STA.16+352.419

111.31 m (365.19')

BEGIN WESTBOUND ACCELERATION LANE WIDENING
END FULL-WIDTH WESTBOUND CLIMBING LANE
BEGIN WESTBOUND SHOULDER WIDENING STA. 16+400.000

DR (P)

65.38 m (214.50')

16+441.80
95.57 m (313.55') LT

[236.80 m (776.90')]

BEGIN WESTBOUND ACCELERATION LANE
END WESTBOUND ACCELERATION LANE WIDENING
END WESTBOUND SHOULDER WIDENING STA. 16+490.000

STATE OF VERMONT

1.8 m
3.3 m
3.6 m
3.6 m
2.4 m

16+300
CURVE W.B. 7

118.29 m (388.09')

16+400

101.14 m (331.51')

16+500

S78°27'44.0"E

3.0 m
3.6 m
3.6 m
3.6 m
3.0 m

54+700
54+800
54+900
55+000

℄ A 843
℄ A STA. 54+713.625

9

ARMSTRONG

VELCO

11

PROJECT F012-1(1)
STA. 266+61 60.96 m (200.00') RT

BM 118
R.R.S.I.R.
0.62 m CHY.
ELEV.=205.962

℄ A 844
℄ A STA. 54+887.704

BEGIN EASTBOUND SHOULDER WIDENING STA. 16+440.000

END EASTBOUND SHOULDER WIDENING STA. 16+460.000

55.94 m (183.53')

16+460.45
19.52 m (64.04') RT

[281.87 m (924.77')]

13

CENTRAL VERMONT PUBLIC SERVICE CORP.

147.12 m (482.68')

APPROXIMATE ULTIMATE EARTHWORK LIMIT

108.82 m (357.02')

80.36 m (263.65')

[127.12 m (419.03')]

CENTRAL VERMONT PUBLIC SERVICE CORP.

16+360.077
87.000 m (285.43') RT

E 440310
N 45230

ARMSTRONG, R. KEITH

VELCO

16+468.221
74.921 m (245.80') RT

16+547.949
85.000 m (278.87') RT

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0 10 20 30
SCALE 1:500

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

PROJECT:	PROJECT NO.:
BENNINGTON – HOOSICK	D.P.I. 0146 (1)
DESIGN FILE NAME:	PLOT DATE:
IPARM FILE NAME:	SURVEY DATE:
SURVEYED BY:	DRAWN BY: VSE
SQUAD LEADER: DHH	SHEET: 41 OF 385
DWG. NO. ROW-55	

LINES SHOWN ON THIS PLAN AS EXISTING PROPERTY LINES P/L ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE STATE OF VERMONT'S ACQUISITION OF LAND AND RIGHTS FOR THIS PROJECT.

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MATCH LINE ROW SHEET 55

MATCH LINE ROW SHEET 57

WEINFURT, BRUCE

MILLER, THOMAS JR. & JANET

S.T.

100' drilled well

BENNINGTON ACRES

VT. STATE PLANE GRID

BEGIN MAINT. AGREE AREA NO.2
STA 16+755.65 80.03 m (262.57') LT
(LENGTH=214.48 m (703.67'))

16+778.469
82.712 m (271.36') LT

16+784.571
57.526 m (188.73') LT

EASE (T)
65.00 m (213.26')

16

25.84 m (84.78')

[93.25 m (305.94')]

65.25 m (214.07')

END SLK ROAD
STA. SRO+168.284

STATE OF VERMONT

16+852.620
60.828 m (199.57') LT

BM 121
R.R.S.I.R.
0.50 m MAP.
ELEV.=174.138

16+675.815
59.401 m (194.88') LT

[236.80 m (776.90')]

P L

31.61 m (103.71')

ST. OF VT.

16+706.280
67.817 m (222.50') LT

50.08 m (164.30')

END BENNINGTON-HOOSICK D.P.I. 0146(1) C/3
BEGIN BENNINGTON-HOOSICK D.P.I. 0146(1) C/4
BEGIN ROADWAY
STA. 16+695.000

P.C. STA.16+744.201

BM 120
R.R.S.I.R.
0.45 m PINE
ELEV.=177.470

STATE OF VERMONT

16+700

16+800

S78°27'44.0"E

S88°02'03.5"E

℄ A 845
℄ A STA. 55+040.097

55+100

55+200

16+749.70
45.31 m (148.65') RT

16+811.15
36.63 m (120.18') RT

55+300

BM 119
R.R.S.I.R.
0.95 m MAP.
ELEV.=194.501

P L [281.87 m (924.77')]

ST. OF VT.

CVPSC

℄ A 846
℄ A STA. 55+157.035

8.15 m (26.74')

63.83 m (209.42')

43.83 m (143.80')

DISK

IPF

19.21 m (63.02')

16+771.084
51.264 m (168.19') RT

16+752.635
52.916 m (173.63') RT

16+740.500
51.501 m (168.97') RT

CENTRAL VERMONT PUBLIC SERVICE CORP.

STATE OF VERMONT

℄ A 847
℄ A STA. 55+271.514

N11°45'12"W 83.56 m (274.15')

P.I. STA.16+861.49 BK. =
P.I. STA.16+860.873 AHD.

P.I. STA. SRO+023.921 BK. =
P.I. STA. SRO+023.847 AHD.

16+895.372
107.439 m (352.73') RT

55.38 m (181.69')

IPF WOLFE, WILLIAM

13

5.42 m (17.78')

21.67 m (71.10')

27.81 m (91.24')

20.64 m (67.72')

[127.72 m (419.03')]

16+674.008
64.459 m (211.48') RT

16+679.395
65.038 m (213.38') RT

APPROXIMATE ULTIMATE EARTHWORK LIMIT

16+699.751
72.464 m (237.74') RT

16+720.307
70.622 m (231.70') RT

DIT. & DR (P)

CUL. (P)

PROPOSED PRECAST CONCRETE BOX CULVERT
SEE SHEET BRI000
END MAINT. AGREE AREA NO.2
16+848.15 112.65 m (369.59') RT

P.T. STA. SRO+047.766

CONC MON

CURVE ST

IPF

DIT. & DR (P) IPF P L

KATZ, RONALD L.
SMITH, RONALD W

15

DIT. & DR (P)

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

0 10 20 30
SCALE 1:500

PROJECT: BENNINGTON – HOOSICK	PROJECT NO.: D.P.I. 0146 (1)
DESIGN FILE NAME:	PLOT DATE:
IPARM FILE NAME:	SURVEY DATE:
SURVEYED BY:	DRAWN BY: VSE
SQUAD LEADER: DHH	SHEET: 42 OF 385
DWG NO. ROW-56	

NOT Metric

BENNINGTON ACRES

STATE OF VERMONT

EASE (T)
53.20 m (174.54')
16+901.08
107.21 m (351.74') LT

16+963.089
130.545 m (428.30') LT

28.13 m (92.29')

16+955.43
90.53 m (297.01') LT

31.12 m (102.10')

[93.25 m (305.94')]

16+949.878
59.854 m (196.37') LT

E 441000
E N 45360
E 440950
E N 45300
E 441065
E N 45330

BM 122
R.R.S.I.R.
0.50 m POP.
ELEV.=173.050

BM 123
R.R.S.I.R.
0.44 m POP.
ELEV.=174.148

WALLOOMSAC RIVER

MATCH LINE ROW SHEET 56

MATCH LINE ROW SHEET 58

MATCH LINE ROW SHEET 60

MATCH LINE ROW SHEET 59

VT. STATE PLANE GRID

N

PROPOSED PRECAST CONCRETE BOX CULVERT
SEE SHEET BR900
STA. ABIO+183.6 RT

P.I. STA. ABIO+162.105 BK.=
P.I. STA. ABIO+152.068 AHD.

END RAMP AB P.T. STA. ABIO+196.564 =
RAMP A STA. A10+000.000, 2.4 m LT.

S89°25'41.3W RAMP AB

CURVE AB-2

S22°33'52.7E

BEGIN RIGHT TURN LANE TAPER
STA. ABIO+140.000

P.C.
STA. ABIO+117.306

BEGIN RIGHT TURN LANE
END RIGHT TURN LANE TAPER
STA. ABIO+100.000

ABIO+100

RAMP AB

END RAMP B P.T. STA. BIO+323.782 =
RAMP AB P.T. STA. ABIO+196.564, 2.4 m LT

BEGIN RAMP A SHOULDER WIDENING
STA. A10+040.000

END RAMP A SHOULDER WIDENING
STA. A10+060.000

P.C.
STA. A10+050.080

STATE OF VERMONT

BIO+300

CURVE B-2

N59°47'52.2W

RAMP B

P.T.
STA. Y10+165.001
P.C.C.
STA. BIO+230.348

BEGIN RAMP X
SHOULDER WIDENING
STA. X10+200.000

END RAMP B LANE WIDENING
END RAMP B SHOULDER TAPER
END RAMP X STA. Y10+216.946 =
RAMP B P.C.C. STA. BIO+175.097, 3.6 m LT

BEGIN RAMP B SHOULDER TAPER
STA. BIO+155.000

STA. X10+236.136
BEGIN RAMP B LANE WIDENING
BEGIN RAMP B SHOULDER TAPER

P.I. STA. BIO+131.970 BK.=
P.I. STA. BIO+130.450 AHD.

P.C.C.
STA. A10+154.799
BEGIN RAMP A LANE TAPER
BEGIN RAMP A SHOULDER WIDENING

END BRIDGE
RESUME ROADWAY
STA. X10+046.006
STA. Y10+046.006

P.I. STA. BIO+287.211 BK.=
P.I. STA. BIO+286.916 AHD.

P.I. STA. A10+109.638 BK.=
P.I. STA. A10+095.240 AHD.

P.I. STA. Y10+114.646 BK.=
P.I. STA. Y10+114.528 AHD.

P.I. STA. BIO+203.623 BK.=
P.I. STA. BIO+201.819 AHD.

P.C.C.
STA. DIO+059.074

N51°45'09.0"E
CURVE D-2 RAMP D

CURVE D-1

DIO+100

STA. X10+196.5
600 mm x 600 mm
DROP INLET

RAMP C 10+032.163
99.980 m (328.02') RT

16+925.649
99.186 m 325.41') RT

16+955.232
97.596 m (320.20') RT

16+957.038
101.283 m (332.29') RT

31.70 m (104.00')

4.16 m (13.65')

54.80 m (179.79')

P.C.C.
STA. A10+169.665 BK.=
P.I. STA. A10+169.668 AHD.

P.C.C.
STA. A10+066.653

P.C.
STA. Y10+066.773

BEGIN RAMP C LANE WIDENING
BEGIN RAMP C SHOULDER TAPER
P.O.C. STA. A10+000.000 =
RAMP C STA. C10+000.000, 3.6 m RT

END RAMP C LANE WIDENING
END RAMP C SHOULDER TAPER
STA. X10+000.000

BEGIN RAMP C LANE WIDENING
BEGIN RAMP C SHOULDER TAPER
P.O.C. STA. X10+000.000 =
RAMP C STA. C10+978.091, 3.6 m RT

END RAMP C LANE WIDENING
END RAMP C SHOULDER TAPER
STA. X10+184.528, 3.6 m LT

B A 848
E A STA. 55+472.623

CURVE A-1
CURVE A-2
CURVE W-B
CURVE B-1
CURVE Y-1
CURVE X-1
CURVE C-1
CURVE C-2
RAMP A
RAMP C
RAMP Y
RAMP X

S88°02'03.5"E
N89°15'15.0"W
S40°52'09.4"E
N85°01'48.0"E

55+400

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0 10 20 30
SCALE 1:500

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

PROJECT: BENNINGTON – HOOSICK	PROJECT NO.: D.P.I. 0146 (1)
DESIGN FILE NAME:	PLOT DATE:
IPARM FILE NAME:	SURVEY DATE:
SURVEYED BY:	DRAWN BY: VSE
SQUAD LEADER: DHH	SHEET: 43 OF 385
DWG. NO. ROW-57	

VAOT Metric

MATCH LINE
ROW SHEET 57

MATCH LINE
ROW SHEET 57

MATCH LINE
ROW SHEET 61

VT. STATE PLANE GRID
N

CURVE C-1

P.T.
STA. C10+147.902

P.I.STA. D10+068.042 BK.=
P.I.STA. D10+037.032 AHD.

N51°45'09"E

RAMP C

S40°52'02"E

C10+200

RAMP D

END RAMP X SHOULDER WIDENING
STA. X0+220.000

END RAMP D SHOULDER TAPER
STA. D10+040.000

BEGIN RAMP D SHOULDER TAPER
STA. D10+020.000

CURVE D-1

E 441260
N 45140

INV.=174.35

P.C.
STA. CD10+212.197

STATE OF VERMONT

VT. ROUTE [illegible]
SEE DWG. NO. TS-21 [illegible]

BEGIN RIGHT TURN [illegible]
END RIGHT TURN [illegible]
STA. 60+860.00[illegible]

E 441110
N 45095

RAMP C 10+247.245
26.524 m (87.02') RT

CURVE CD-2

S40°52'02"E

CD10+200

S88°21'18.0"W

WET AREA

WET AREA

RAMP C 10+238.963
91.071 m (298.79') RT

65.08 BEGIN RAMP C SHOULDER TAPER
STA. C10+240.000

64.11 m (210.33')

DIT & DR (P)

14

CONE, ALICE

INV.=174.10

P.I.STA. CD10+244.185 BK.=
P.I.STA. CD10+239.994 AHD.

END RAMP CD SHOULDER TAPER
STA. CD10+260.000

END RIGHT TURN LANE TAPER
RAMP CD SHOULDER WIDENING
STA. CD10+140.000

E 441160
N 44980

E 441295
N 44990

RAMP CD 10+130.887
56.870 m (186.58') LT

RAMP CD 10+125.391
49.511 m (162.44') LT

DIRT PILE

0 10 20 30
SCALE 1:500

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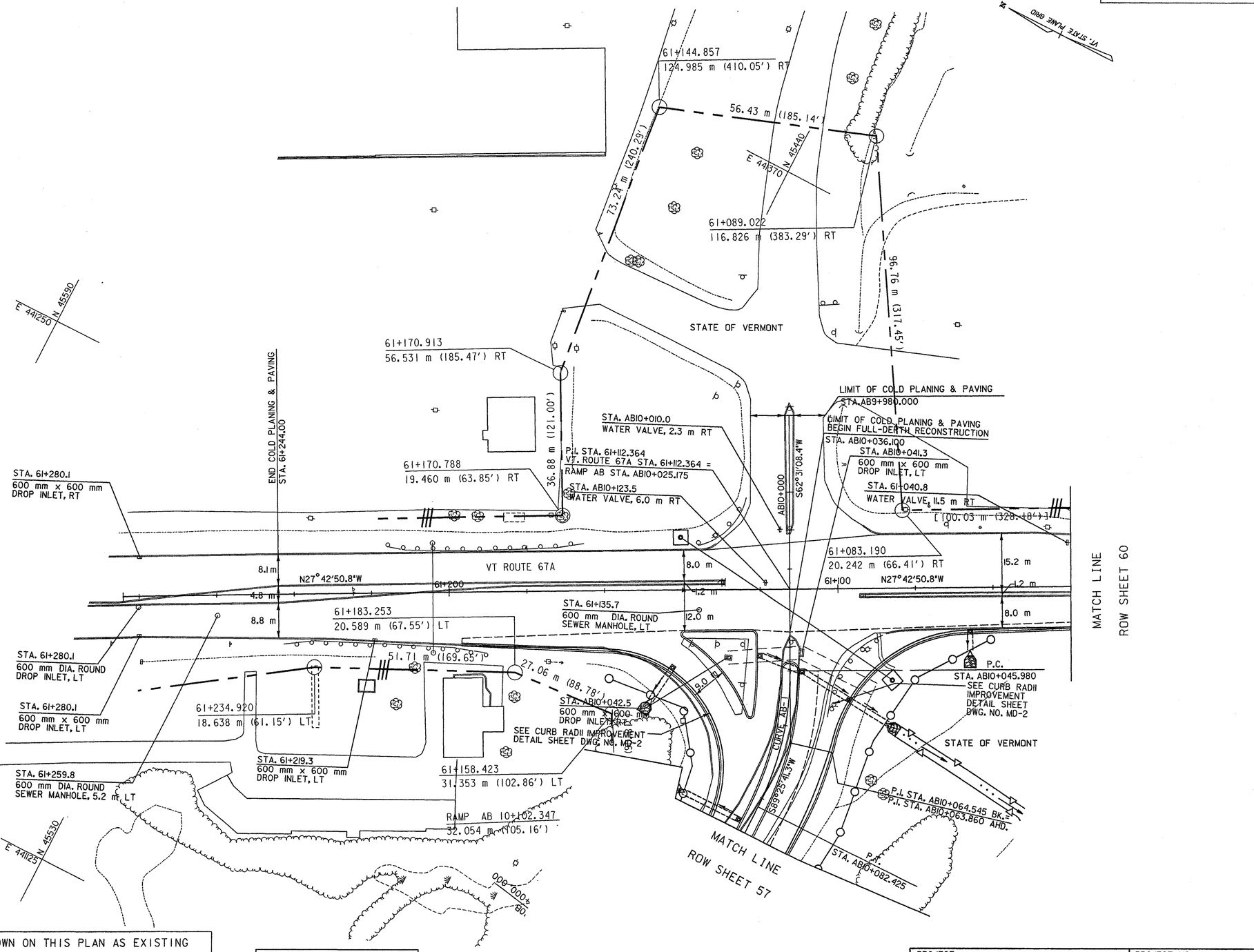
DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

PROJECT: BENNINGTON – HOOSICK	PROJECT NO.: D.P.I. 0146 (1)
DESIGN FILE NAME:	
IPARM FILE NAME:	PLOT DATE:
SURVEYED BY:	SURVEY DATE:
SQUAD LEADER: DHH	DRAWN BY: VSE
DWG. NO. ROW-58	SHEET: 44 OF 385

VTrans Metric



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0 10 20 30
SCALE 1:500

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

PROJECT:	PROJECT NO.:
BENNINGTON - HOOSICK	D.P.I. 0146 (1)
DESIGN FILE NAME:	
IPARM FILE NAME:	PLOT DATE:
SURVEYED BY:	
SQUAD LEADER: DHH	DRAWN BY: VSE
DWG. NO. ROW-59	SHEET: 45 OF 385

MDOT Metric

END ROADWAY
END BENNINGTON-HOOSICK D.P.I. 0146(1) C/4
BEGIN BENNINGTON-HOOSICK D.P.I. 0146(1) C/6
STA. B 10+064.800 = STA. 17+305.027

MATCH LINE
ROW SHEET 59

L=100.03 m (328.18')

60+983.162
20.915 m (68.62') RT

N22° 42'50.8"W 61+000

VT. ROUTE 67A

BM 125
D.S.K.
NE COR BBG
ELEV.=183.400

BM 124
R.R.S.I.R.
0.20 m ASH
ELEV.=176.170

MATCH LINE
ROW SHEET 57

B10+100

S85°01'48.0"W

17+400

17+500

STATE OF VERMONT

P.I.
STA. 60+937.402

STATE OF VERMONT

S88°02'03.5"E

N85°01'48.0"E

X10+300

D10+200

N85°01'48.0"E

17+400

17+500

P.C.
STA. D10+157.346

P.I. STA. X10+278.556 BK. =
P.I. STA. X10+278.451 AHD.

RAMP X P.T. STA. X10+320.871 =
RAMP D STA. D10+217.568
END RAMP D LANE TAPER
END RAMP D SHOULDER WIDENING

60.300

P.T.
STA. 60+870.830

MATCH LINE
ROW SHEET 61

LINES SHOWN ON THIS PLAN AS EXISTING PROPERTY LINES P/L ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE STATE OF VERMONT'S ACQUISITION OF LAND AND RIGHTS FOR THIS PROJECT.

END ROADWAY
END BENNINGTON-HOOSICK D.P.I. 0146(1) C/4
BEGIN BENNINGTON-HOOSICK D.P.I. 0146(1) C/6
STA. D 10+236.469 = STA. 17+298.377

N
VT. STATE PLANE GRID

0 10 20 30
SCALE 1:500

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DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

PROJECT:	PROJECT NO.:
BENNINGTON - HOOSICK	D.P.I. 0146 (1)

DESIGN FILE NAME:
IPARM FILE NAME:
SURVEYED BY:
SQUAD LEADER: DHH
DWG. NO. ROW-60

PLOT DATE:
SURVEY DATE:
DRAWN BY: VSE
SHEET: 46 OF 385

VAOT Metric

ROUTE 67A STA. 60+789.574 = RAMP CD STA. CD10+019.604

LIMIT OF COLD PLANING & PAVING
BEGIN FULL-DEPTH RECONSTRUCTION
STA. CD10+028.800

STA. 60+775.1
600 mm x 600 mm
DROP INLET, ℄

E 441595 N 45095

STA. 60+675.0 - STA. 60+781.6 RT/LT
VT. ROUTE 67A TURN LANE WIDENING
SEE DWG. NO. TS-21 FOR DETAILS

STA. 60+708.3
600 mm DIA. ROUND
SEWER MANHOLE, 6.5 m RT

STA. 60+701.5
600 mm x 600 mm
DROP INLET, RT

STA. 60+701.4
600 mm x 600 mm
DROP INLET, RT

BEGIN LEFT-TURN LANE
END LEFT-TURN LANE TAPER
STA. 60+730.000

BEGIN LEFT-TURN TAPER
STA. 60+675.000

P.C. STA. 60+663.932

BEGIN COLD PLANING & PAVING
STA. 60+640.000

9.75 m (31.99')

60+630.083
21.821 m (71.59') RT

60+593.186
17.539 m (57.54') RT

37.16 m (121.92')

14.41 m (47.28')

60+639.834
21.745 m (71.34') RT

60+578.830
16.128 m (52.91') RT

VT ROUTE 67A

N54°52'43.4"W

STATE OF VERMONT

TOWN OF BENNINGTON

STA. 60+869.0 - STA. 60+870.0
VT. ROUTE 67A PAVEMENT WIDENING
SEE DWG. NO. TS-21 FOR DETAILS

E 441500 N 45160

TOWN OF BENNINGTON

STA. 60+816.7
600 mm DIA. ROUND
SEWER MANHOLE
7.8 m LT

20C

INSTALL & MAINT. (P)

STATE OF VERMONT

LIMIT OF COLD PLANING & PAVING
STA. CD9+980.000

STA. 60+812.1
WATER VALVE, 5.7 m RT

STA. 60+811.2
WATER VALVE,
7.4 m LT

MATCH LINE
ROW SHEET 60

7.7 m
L2 m
22.116 m (72.56') RT

60+852.799

11.6 m

5.6 m

N27°42'50.8"W

CD10+000

100.34 m (329.20')

60+746.790
22.546 m (73.97') RT

102.53 m (336.38')

S52°04'42.3"W

60+800

CURVE 67A-1

12.0 m
3.6 m
8.2 m
1.2 m
8.5 m
2.4 m
2.4 m
8.2 m
7.8 m
2.1 m
2.3 m
8.1 m

60+700

60+600

P.C. STA. CD10+041.786

9.0 m

CUL. DIT. SR (T)
& DR (P)

STA. 60+774.9
600 mm x 600 mm
DROP INLET, LT

20B

STA. 60+701.3
600 mm x 600 mm
DROP INLET, LT

P.I. STA. 60+769.314 BK.
P.I. STA. 60+765.348 AHD.

P.T. STA. CD10+097.161

CURVE CD-1

Radius 568.2'
218.0'

SR (T)

CUL (P)

INSTALL & MAINT.

FURNACE BROOK

RUN

E 445200 N 44960

P.I. STA. CD10+070.439 BK.
P.I. STA. CD10+068.389 AHD.

DIT
DR (P)

1.2 m
2 m
5.6 m
2.4 m
4.8 m
3.6 m
2.4 m
2.4 m
6.0 m
2.4 m
1.2 m
1.2 m

MATCH LINE
ROW SHEET 58

DIT
DR (P)

BEGIN RAMP CD SHOULDER WIDENING
BEGIN RIGHT TURN LANE TAPER
END RIGHT TURN LANE
STA. CD10+105.000

END R.O.W. PROJECT
STA. VT. 67A 60+766.12 (11.45 m (37.55')) LT.

THIS SHEET TO BE USED FOR RIGHT-OF-WAY INFORMATION ONLY

LINES SHOWN ON THIS PLAN AS EXISTING PROPERTY LINES P/L ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE STATE OF VERMONT'S ACQUISITION OF LAND AND RIGHTS FOR THIS PROJECT.

0 10 20 30
SCALE 1:500

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

PROJECT: BENNINGTON – HOOSICK	PROJECT NO.: D.P.I. 0146 (1)
DESIGN FILE NAME:	
IPARM FILE NAME:	PLOT DATE:
SURVEYED BY:	SURVEY DATE:
SQUAD LEADER: DHH	DRAWN BY: VSE
DWG. NO. ROW-61	SHEET: 47 OF 385

STATE OF NEW YORK – TOWN OF HOOSICK
STATE OF VERMONT – TOWN OF BENNINGTON

N

VAOT Metric

P/L WOODLAND HEIGHTS

P/L W.E. DAILEY INC. / WOODLAND HEIGHTS

P/L R. SMITH / WOODLAND HEIGHTS

P/L WOODLAND HEIGHTS

P/L WOODLAND HEIGHTS

P/L

(APPROX. LOCATION OF ACCESS)

AIRPORT BEACON NO. 1
WHIPSTOCK HILL

WOODLAND HEIGHTS / P/L

P/L WOODLAND HEIGHTS

BEGIN R.O.W. PROJECT
STA. NY 45+086.49
70.00 m (229.66') RT

12+200

12+400

N47°48'53.3"E

12+600

12+800

P.C.
STA.12+841.329

ORE BED RD.
WOODLAND HEIGHTS

FOUNDATION

1A

1B

DEER YARD MITIGATION

13+000

13+200

13+400

DIRT ROAD

1A

1B

1B

MATCH LINE ROW SHEET B

MATCH LINE ROW SHEET D

WATER AND SEWER SYSTEMS WITHIN AND IMMEDIATELY ADJACENT TO THE PROPOSED ACQUISITION AREAS ARE SHOWN TO THE BEST OF OUR KNOWLEDGE.

BENNINGTON–HOOSICK
D.P.I. 0146(1)

DWG. NO. ROW–A SHEET 48 OF 385

SCALE: 1" = 200' (1" = 60.96 m)

MATCH LINE ROW SHEET A

N

VADOT Metric

APPROX. LOCATION OF ACCESS TO AIRPORT BEACON NO. 1

HOURAN ROAD

WOODLAND HEIGHTS

P L

1B

DEER YARD MITIGATION

WHIPSTOCK ROAD

13+600

MATCH LINE ROW SHEET D

1A

WOODLAND HEIGHTS / STROHMAIER

STROHMAIER / DEBELL

DEBELL / NICHOLS

NICHOLS / D & N WOODWARD

D & N WOODWARD / WRIGHT

WRIGHT / D. WOODWARD

D. WOODWARD / D. & N. WOODWARD

D. & N. WOODWARD / D. WOODWARD

VAIL ROAD

MATCH LINE ROW SHEET E

WOODLAND HEIGHTS / STATE OF VERMONT

WALLOOMSAC ROAD

AIRPORT ROAD

13

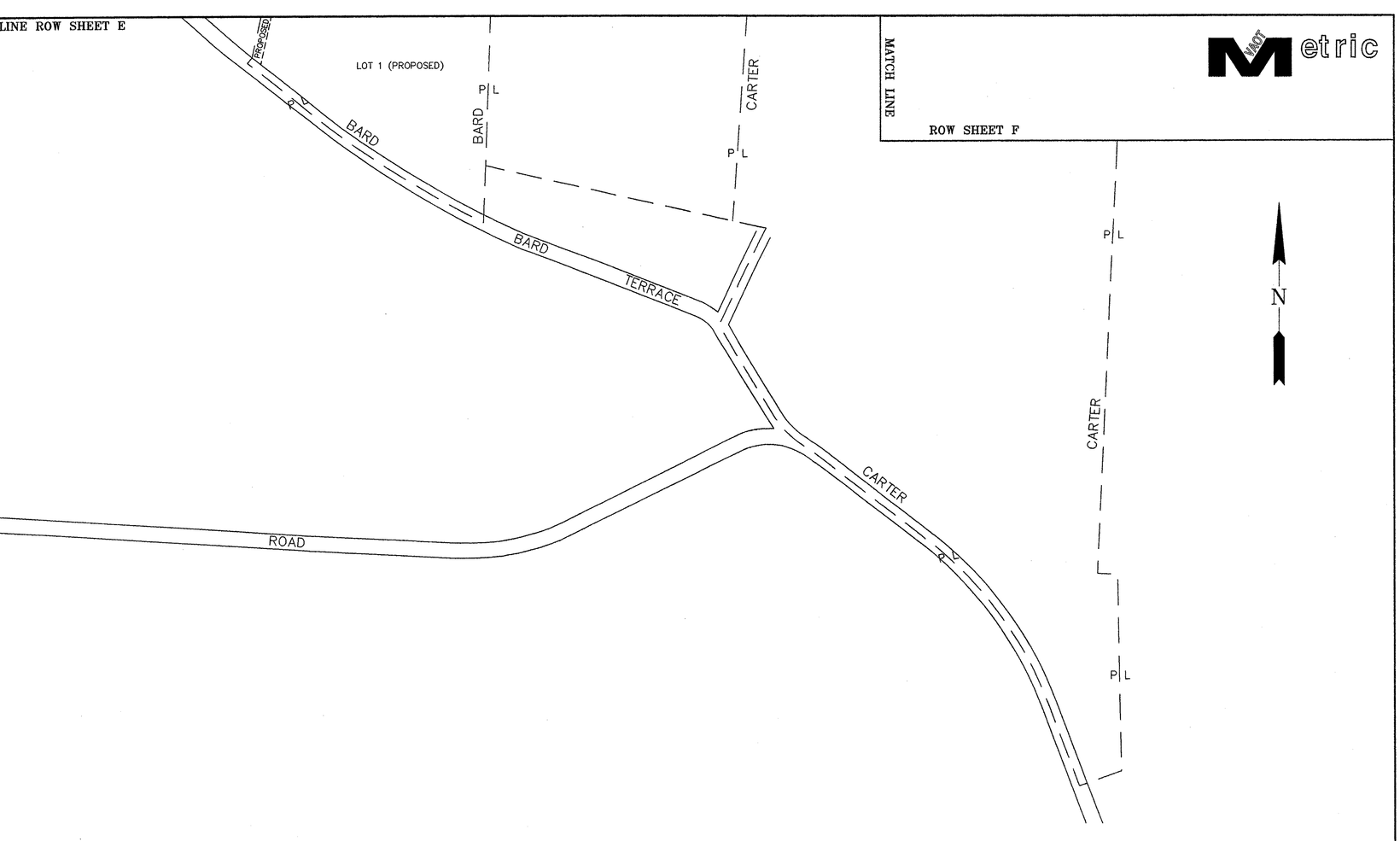
MATCH LINE ROW SHEET C

WATER AND SEWER SYSTEMS WITHIN AND IMMEDIATELY ADJACENT TO THE PROPOSED ACQUISITION AREAS ARE SHOWN TO THE BEST OF OUR KNOWLEDGE.

BENNINGTON–HOOSICK
D.P.I. 0146(1)

DWG. NO. ROW–B SHEET 49 OF 385

SCALE: 1" = 200' (1" = 60.96 m)



WATER AND SEWER SYSTEMS WITHIN AND IMMEDIATELY ADJACENT TO THE PROPOSED ACQUISITION AREAS ARE SHOWN TO THE BEST OF OUR KNOWLEDGE.

BENNINGTON–HOOSICK
D.P.I. 0146(1)

DWG. NO. ROW–C SHEET 50 OF 385

SCALE: 1" = 200' (1" = 60.96 m)

Metric

STATE OF NEW YORK - TOWN OF HOOSICK
STATE OF VERMONT - TOWN OF BENNINGTON

WOODLAND HEIGHTS
WOODLAND HEIGHTS
GILBAR
WOODLAND HEIGHTS
WOODLAND HEIGHTS
WOODLAND HEIGHTS
ORE BED ROAD
ORE BED ROAD
WOODLAND HEIGHTS
150' EASE.
ABANDONED
TETREAULT
JEPSON
JEPSON
CENTER & DEPOLLO
CENTER & DEPOLLO
COREY
COREY
GEANNELIS
150' EASE.
JEPSON
GEANNELIS
JEPSON
GEANNELIS
GEANNELIS
GEANNELIS
WOODLAND HEIGHTS
GEANNELIS
WOODLAND HEIGHTS
STROHMAIER
DEBELI
NICHOLS
14+200
N63°47'47.8"E
14+000
1A
2
3

N

MATCH LINE ROW SHEET A

MATCH LINE ROW SHEET B

MATCH LINE ROW SHEET E

MATCH LINE

WATER AND SEWER SYSTEMS WITHIN AND IMMEDIATELY ADJACENT TO THE PROPOSED ACQUISITION AREAS ARE SHOWN TO THE BEST OF OUR KNOWLEDGE.

BENNINGTON–HOOSICK
D.P.I. 0146(1)

DWG. NO. ROW–D SHEET 51 OF 385

SCALE: 1" = 200' (1" = 60.96 m)

Metric

N

MURPHY ROAD

CORCORANS ISLAND

ARMSTRONG

HILLARD JR.

HILLARD JR. ARMSTRONG

150' EASE.

COREY HALL

COREY GEANNELIS

HALL GEANNELIS

HALL NAUGHTON

WEINSTEIN NAUGHTON

MONROE WEINSTEIN

BRUSO MAXON

BRUSO BARD

MAXON ARMSTRONG

MAXON BARD

END MAINT. AGREE AREA NO. 1
STA. 15+179.72 46.41 m (152.26') LT

BEGIN MAINT. AGREE AREA NO. 1
STA. 15+157.21 67.63 m (221.88') RT
(LENGTH=120.02 m (393.77'))

P.C.C. STA.15+308.571

P.C. STA.14+424.255

N63°47'47.8"E

12 SENECAL, ARTHUR J., SR.
SENECAL, SANDRA T.

SPRING

MONROE ROGERS

GEANNELIS NAUGHTON

NICHOLS GEANNELIS

D. & N. WOODWARD

WRIGHT D. WOODWARD

D. WOODWARD MARONEY

ROGERS NAUGHTON

HILL AUSTIN

BARD CARTER

LOT 1 (PROPOSED)

LOT 2 (PROPOSED)

LOT 3 (PROPOSED)

LOT 4 (PROPOSED)

LOT 5 (PROPOSED)

BARD TERRACE

14+400 14+600 14+800 15+000 15+200 15+400 15+600 15+800 16+000

MATCH LINE ROW SHEET D

MATCH LINE ROW SHEET F

MATCH LINE ROW SHEET B

MATCH LINE ROW SHEET C

WATER AND SEWER SYSTEMS WITHIN AND IMMEDIATELY ADJACENT TO THE PROPOSED ACQUISITION AREAS ARE SHOWN TO THE BEST OF OUR KNOWLEDGE.

BENNINGTON–HOOSICK
D.P.I. 0146(1)

DWG. NO. ROW–E SHEET 52 OF 385

SCALE: 1" = 200' (1" = 60.96 m)

Metric

MATCH LINE ROW SHEET E

MATCH LINE ROW SHEET C

N

VT. RTE. 67A

WALLOOMSAC

ARMSTRONG

RIVER

SILK ROAD

ARMSTRONG

ARMSTRONG CVPSC

VELCO

150' EASE.

100' EASE.

ARMSTRONG VELCO

P.T. STA.16+352.419

16+200

16+400

16+600

16+800

STATE OF VT.

P.C. STA.16+744.201

ARMSTRONG CARTER

VELCO CVPSC

CARTER

CVPSC

CARTER

BENNINGTON ACRES

16

BEGIN MAINT. AGREE AREA NO. 2
STA. 16+755.65 80.03 m (262.57') LT
(LENGTH=214.48 m (703.67'))

BENNINGTON ACRES

STATE OF VT.

VT. RTE. 67A

END MAINT. AGREE AREA NO. 2
STA. 16+848.15 112.65 m (369.59') RT

WALLOOMSAC RIVER

STATE OF VT.

FURNACE BROOK

STATE OF VT.

CONE, ALICE

14

TOWN OF BENNINGTON

20B

20C

END R.O.W. PROJECT
STA. VT 67A 60+766.12
11.45 m (37.55') LT

WATER AND SEWER SYSTEMS WITHIN AND IMMEDIATELY ADJACENT TO THE PROPOSED ACQUISITION AREAS ARE SHOWN TO THE BEST OF OUR KNOWLEDGE.

BENNINGTON–HOOSICK
D.P.I. 0146(1)

DWG. NO. ROW–F SHEET 53 OF 385

SCALE: 1" = 200' (1" = 60.96 m)

Metric

15°30'±
MAG. 1998

N/F WRIGHT

N/F THOMSON

N/F SULLIVAN

I.P.F.

N 65°10'31" E
138.198 m (453.27')

S 73°10'54" E
319.278 m (1047.49')

I.P.F.

10.668 m (35') EASEMENT

I.P.F.

N 11°40'54" E
10.668 m (35.00')

BARNEY ROAD

APPROXIMATE PROPERTY LINES

19C

HARRISON, T.J.
0.40 HECTARES (1.00 ACRES)

N 11°40'54" E
56.388 m (185.00')

I.R.S.

HARRISON, HAZEL M. &
HARRISON, ELAINE

PARCEL AREA BY DEED = APPROX. 1.2 HECTARES (3 ACRES)
AREA TO BE PURCHASED = 0.04 HECTARES (0.10 ACRES)

THOMAS J. HARRISON
AREA = 10.70 HECTARES (26.44 ACRES)

21

19A

N 28°23'30" E
79.653 m (261.33')

N 21°16'45" E
77.528 m (254.36')

I.R.S.

I.P.F.

N 77°25'04" W
10.000 m (32.81')

N 19°14'56" E
34.442 m (113.00')

N 44°53'56" E
10.104 m (33.15')

I.R.S.

I.R.S.

N/F DAVIS

N 30°42'04" W
33.839 m (111.02')

I.R.S.

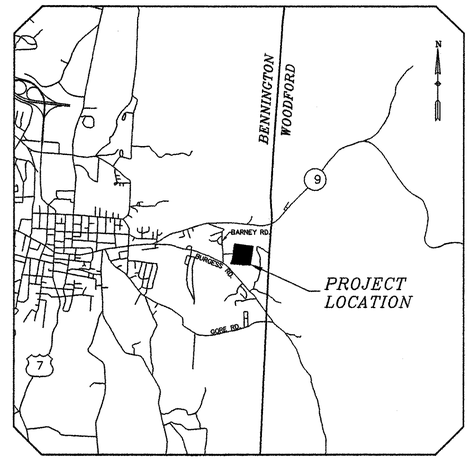
S 16°35'06" W
324.865 m (1066.16')

N/F BURGESS

301.227 m (988.28')
N 77°38'38" W

N/F BURGESS

I.P.F.



2 1½ 1 ½ 0 1 2 4

SCALE IN KILOMETERS

LEGEND

●I.P.F.	IRON PIPE FOUND
○I.R.S.	IRON ROD SET
	PROPERTY LINE
	EASEMENT LINE
	PURCHASE LINE
	APPROX. PROPERTY LINE
	FENCE LINE
	STONE WALL

The following information was considered during compilation of this plan:

1. Those deeds to which reference is made on this plan, and deeds in the chains of title to the parcels shown hereon. These deeds are a matter of public record in the Town of Bennington, Vermont.

2. The premises conveyed in Book 0-232, Page 186 (Burgess to Harrison) are subject to such rights as the Water Department of the Village of Bennington and the Village of Bennington itself may have, if any, to take water from said premises, or to enter thereon to construct or maintain pipes or conduits for the purpose of conducting water over said premises.

GRAPHIC SCALE
(IN METERS)

20 0 10 20 40 60 80 100

1 : 1000

WATER AND SEWER SYSTEMS WITHIN AND IMMEDIATELY ADJACENT TO THE PROPOSED ACQUISITION AREAS ARE SHOWN TO THE BEST OF OUR KNOWLEDGE.

BENNINGTON–HOOSICK
D.P.I. 0146(1)

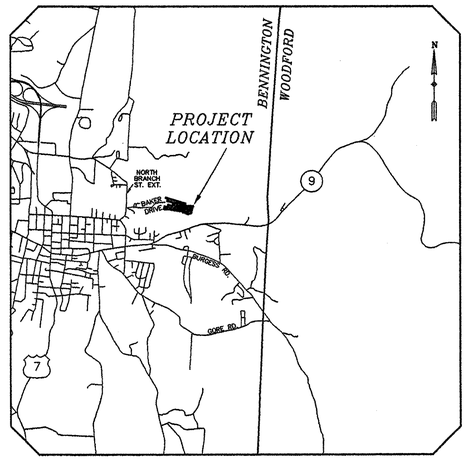
DWG. NO. ROW-G SHEET 54 OF 385

SCALE: 1:1000 (1"=83.33')

VAOT Metric

15°30'±

MAG. 1998



2 1½ 1 ½ 0 1 2 4

SCALE IN KILOMETERS

N/F MORSE TRUST

I.P.F.

N 15°50'23" E 123.804 m (406.18') (TIE LINE ONLY)

N 15°50'23" E 26.510 m (86.98')

S 73°16'21" E 37.605 m (123.38')

I.R.S.

I.P.F.

N/F NORTH BRANCH REALTY TRUST
MICHAEL A. DEEP, TRUSTEE
REMAINDER = 4.65 HECTARES (11.50 ACRES)

I.P.F. N 74°46'33" W 81.991 m (269.00') I.R.S.

RESERVOIR

N 15°54'10" E 98.573 m (323.40')

I.P.F.

N/F BURT

S 73°16'21" E

YELLOW BLAZED LINE

691.791 m (2269.66')

N/F UNITED STATES OF AMERICA
BK. 0-331, PG. 154

I.P.F. N 75°26'53" W 212.563 m (697.39') I.P.F.

0.851 m (2.79') SW OF PROP. LINE

N/F BAKER
BK. 0-286, PG. 47

TWIN STATE GAS & ELECTRIC COMPANY
now
CENTRAL VT. PUBLIC SERVICE CORP.
BK. 0-64, PG. 121
45.720 m (150') EASEMENT

I.P.F.

N 11°52'34" E 110.968 m (364.07')

I.P.F. S 73°07'07" E 160.873 m (527.80') I.P.F.

45.720 m 150'

I.P.F.

S 15°37'33" W 57.149 m (187.50')

S 15°37'33" W 19.713 m (64.67')

S.B.F.

I.R.S.

I.R.S. S 75°22'54" E 108.631 m (356.40') I.R.S.

N 14°37'06" E 85.497 m (280.50')

N 11°07'06" E 124.906 m (409.80')

PROPERTY OF
NORTH BRANCH REALTY TRUST, MICHAEL A. DEEP, TRUSTEE
BK. 0-305, PG. 55
AREA = 21.81 HECTARES (53.90 ACRES)

17

S 15°37'33" W 245.000 m (803.81')

N/F FURNACE GROVE CORP.
BK. 0-227, PG. 76

I.R.S. N 89°42'07" W 131.058 m (429.98') I.R.S.

WALLOOMSAC RIVER

N 81°24'45" W 564.047 m (1850.55')

ROARING BRANCH

I.R.S.

S 15°37'33" W 38.788 m (127.26')

N/F CVPSC

APPROXIMATE EDGE OF RIVER

S 15°37'33" W 96.614 m (316.97') (TIE LINE ONLY)

N/F TOWN OF BENNINGTON

S.B.F.
"BELL CORNER"

N/F AARON AND SONS, INC.
BK. 0-328, PG. 71

VERMONT ROUTE 9

LEGEND

⊡S.B.F.	STONE BOUND FOUND
◉I.P.F.	IRON PIPE FOUND
○I.R.S.	IRON ROD SET
	PROPERTY LINE
	EASEMENT LINE
	TIE LINE
	CHAIN-LINK FENCE
	BARBED WIRE FENCE
	UTILITY POLE
	DIRECTION OF FLOW

GRAPHIC SCALE

(IN METERS)

40 0 20 40 60 120 160 200

1 : 2000

The following information was considered during compilation of this plan:

1. Those deeds to which reference is made on this plan, and deeds in the chains of title to the parcels shown hereon. These deeds are a matter of public record in the Town of Bennington, Vermont.

2. A compilation plat entitled, "FURNACE GROVE CORPORATION, TRACT 246", prepared by Allan Hopkins, recorded on Jan. 9, 1997, in Map Slide #99 of the Bennington land records.

WATER AND SEWER SYSTEMS WITHIN AND IMMEDIATELY ADJACENT TO THE PROPOSED ACQUISITION AREAS ARE SHOWN TO THE BEST OF OUR KNOWLEDGE.

BENNINGTON–HOOSICK
D.P.I. 0146(1)

DWG. NO. ROW-H SHEET 55 OF 385

SCALE: 1:2000 (1"=166.67')

Metric

N/F BURT

N/F UNITED STATES OF AMERICA
BK. 0-331, PG. 154

YELLOW BLAZED LINE

I.P.F.

TWIN STATE GAS & ELECTRIC COMPANY
now
CENTRAL VT. PUBLIC SERVICE CORP.
BK. 0-64, PG. 153
45.720 m (150') EASEMENT

CENTERLINE UTILITY EASEMENT

S.B.F.

I.R.S.

S 86°14'44" E
288.317 m (945.92')

S 86°14'44" E
6.914 m (22.68')

I.R.S.

N/F NORTH BRANCH REALTY TRUST
MICHAEL A. DEEP, TRUSTEE
BK. 0-305, PG. 55

UNITED STATES OF AMERICA
BK. 0-331, PG. 154
20.117 m (66') RIGHT-OF-WAY

20.117 m
66'

N15°37'33" E
245.000 m (803.81')

PROPERTY OF
FURNACE GROVE CORP.
BK. 0-227, PG. 76
AREA = 8.78 HECTARES (21.69 ACRES)

18

S 15°04'41" W
275.972 m (905.42')
(TIE LINE ONLY)

I.R.S.

N 15°37'33" E
38.788 m (127.26')

ACQUISITION LINE = CENTERLINE
OF UNNAMED BROOK

ROARING BRANCH

APPROXIMATE EDGE OF RIVER

N 72°50'22" W 177.500 m (582.35')
PROPERTY LINE = CENTERLINE RIVER

S 72°54'24" W
135.641 m (445.01')
(TIE LINE ONLY)

S 15°37'33" W
96.614 m (316.97')
(TIE LINE ONLY)

S.B.F.
"BELL CORNER"

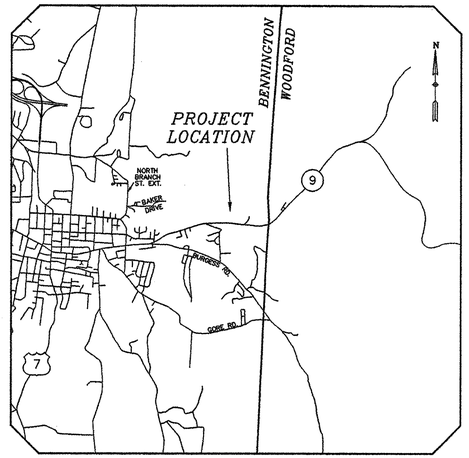
N/F TOWN OF
BENNINGTON

N/F AARON AND SONS, INC.
BK. 0-328, PG. 71

15°30'±

MAG. 1998

LANDS BEING RETAINED BY
FURNACE GROVE CORP.
REMAINDER = 42.73 HECTARES (105.50 ACRES)



2 1½ 1 ½ 0 1 2 4

SCALE IN KILOMETERS

BENNINGTON
WOODFORD

N\F CAMPBELL

N\F LEAKE

VERMONT ROUTE 9

N\F FURNACE GROVE CORP.

LEGEND

⊡S.B.F.	STONE BOUND FOUND
◉I.P.F.	IRON PIPE FOUND
○I.R.S.	IRON ROD SET
	PROPERTY LINE
	EASEMENT LINE
	TIE LINE
	CHAIN-LINK FENCE
	BARBED WIRE FENCE
	UTILITY POLE
	DIRECTION OF FLOW

GRAPHIC SCALE
(IN METERS)
40 0 20 40 80 120 160 200

1 : 2000

The following information was considered during compilation of this plan:

1. Those deeds to which reference is made on this plan, and deeds in the chains of title to the parcels shown hereon. These deeds are a matter of public record in the Town of Bennington, Vermont.

2. A compilation plat entitled, "FURNACE GROVE CORPORATION, TRACT 246", prepared by Allan Hopkins, recorded on Jan. 9, 1997, in Map Slide #99 of the Bennington land records.

WATER AND SEWER SYSTEMS WITHIN AND IMMEDIATELY ADJACENT TO THE PROPOSED ACQUISITION AREAS ARE SHOWN TO THE BEST OF OUR KNOWLEDGE.

BENNINGTON-HOOSICK
D.P.I. 0146(1)

DWG. NO. ROW-1 SHEET 56 OF 385

SCALE: 1:2000 (1"=166.67')

TYPICAL SECTIONS - ULTIMATE CONSTRUCTION

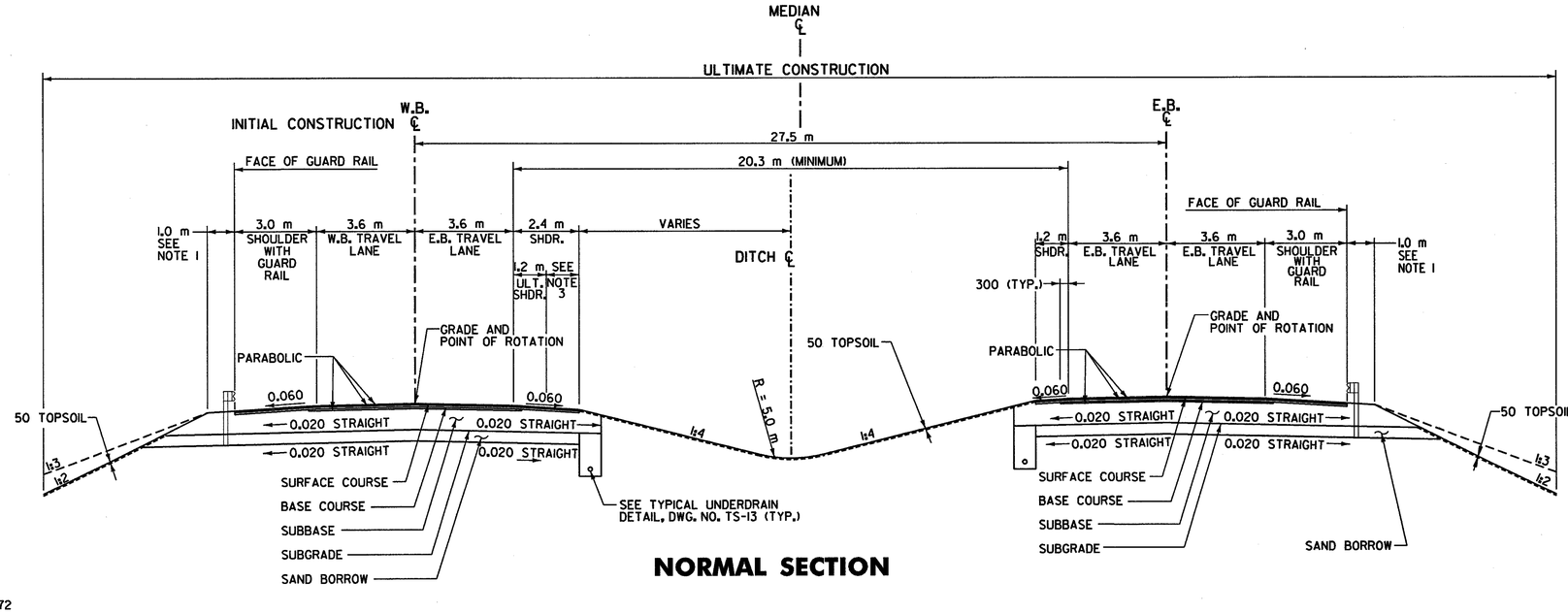
Metric

MATERIAL ITEM		THICKNESS TOLERANCE
PAVEMENT COURSES	(TOTAL DEPTH)	± 5
BASE COURSES	(TOTAL DEPTH)	± 10
SUBBASE		± 30
SAND BORROW		± 30

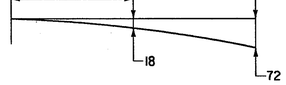
	130	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) (50 TYPE III S, 80 TYPE II S)
	100	BASE COURSE, SUPERPAVE BITUMINOUS CONCRETE (PG 58-28), TYPE I S
	600	SUBBASE OF CRUSHED GRAVEL (COARSE GRADED)
	400	SAND BORROW
SHOULDERS:	130	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) (50 TYPE III S, 80 TYPE II S)
NOTE:		DESIGN FROST DEPTH - 1200

NOTES:

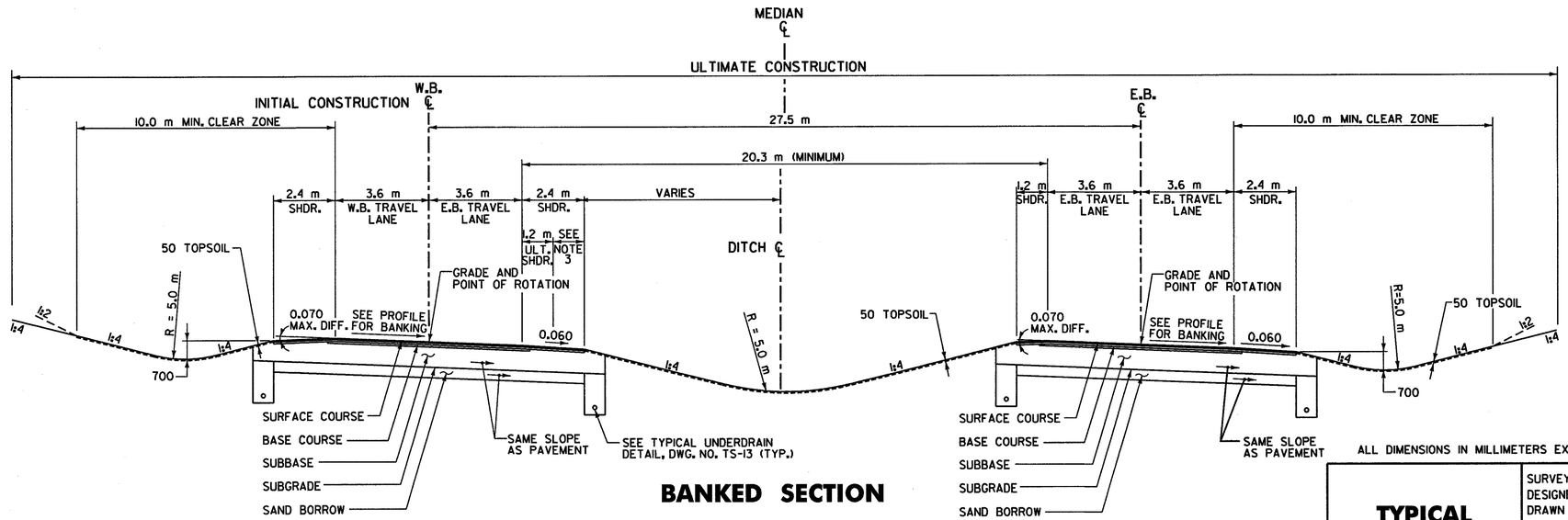
1. ELIMINATE TOPSOIL AND SEEDING BEHIND GUARDRAIL TO SUBGRADE CATCH POINT.
2. FOR DETAILS OF INITIAL CONSTRUCTION TYPICAL SECTIONS, SEE DWG. NO. TS-3 TO DWG. NO. TS-13.
3. FOR ULTIMATE CONSTRUCTION, REMOVE PAVEMENT, TOPSOIL AND SEED.



NORMAL SECTION



PARABOLIC DETAIL
NORMAL SECTION



BANKED SECTION

ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

TYPICAL SECTION SHEET

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.N.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. /5116/VAOT/TS-1.DGN

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. TS - 1 SHEET 57 OF 385

FILE NAME = u:\5116\vaot\contract4\ts-1.dgn
DATE/TIME = 07 SEP 2000
USER = 1451

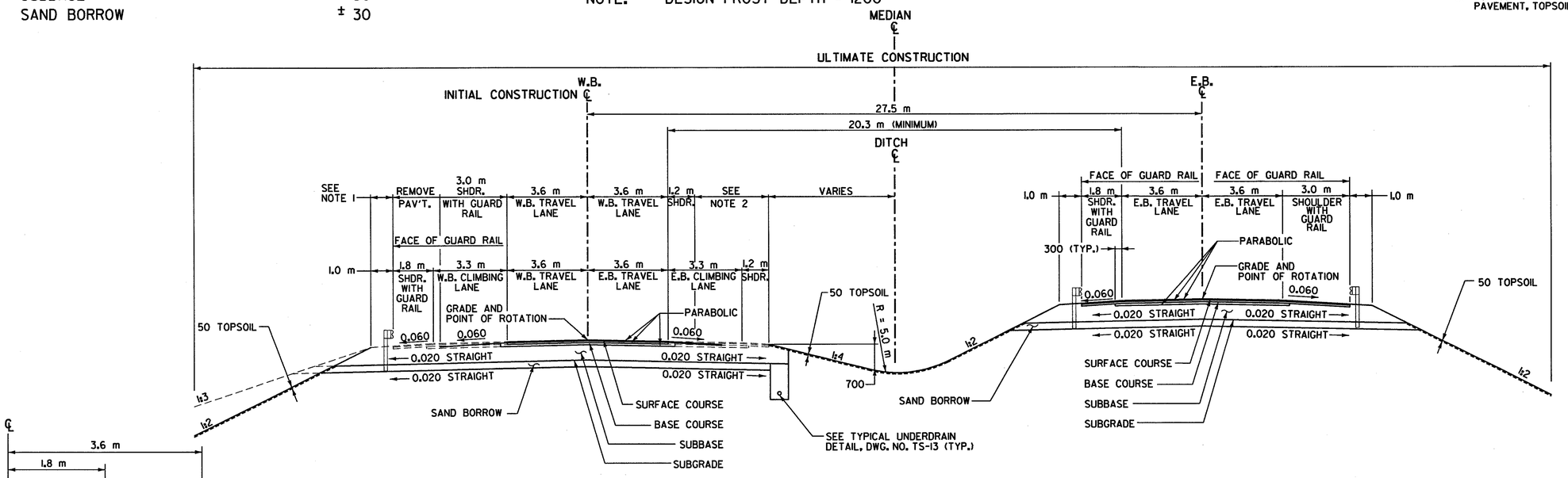
TYPICAL SECTIONS - ULTIMATE CONSTRUCTION
WITH CLIMBING LANE (INITIAL CONSTRUCTION)

MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT COURSES (TOTAL DEPTH)	± 5
BASE COURSES (TOTAL DEPTH)	± 10
SUBBASE	± 30
SAND BORROW	± 30

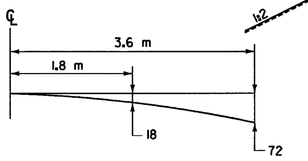
	130	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) (50 TYPE III S, 80 TYPE II S)
	100	BASE COURSE, SUPERPAVE BITUMINOUS CONCRETE (PG 58-28), TYPE I S
	600	SUBBASE OF CRUSHED GRAVEL (COARSE GRADED)
	400	SAND BORROW
SHOULDERS:	130	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) (50 TYPE III S, 80 TYPE II S)
NOTE:		DESIGN FROST DEPTH - 1200

NOTES:

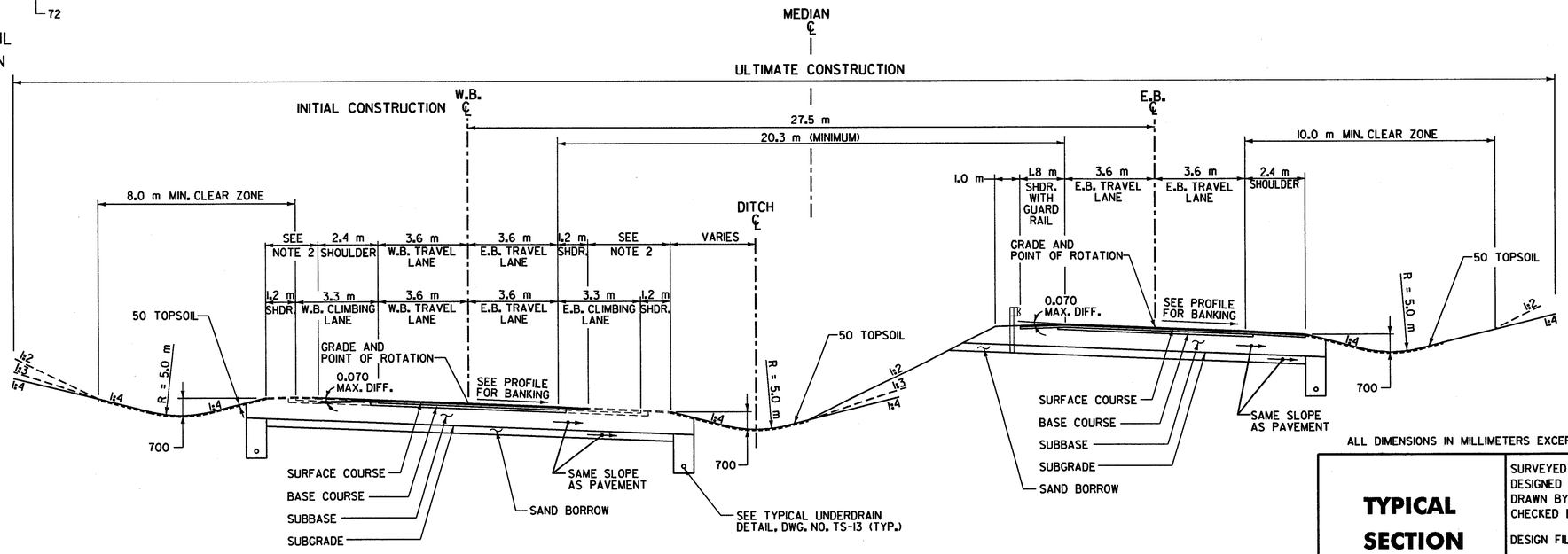
1. ELIMINATE TOPSOIL AND SEEDING BEHIND GUARDRAIL TO SUBGRADE CATCH POINT.
2. FOR DETAILS OF INITIAL CONSTRUCTION TYPICAL SECTIONS, SEE DWG. NO. TS-3 TO DWG. NO. TS-13.
3. FOR ULTIMATE CONSTRUCTION, REMOVE PAVEMENT, TOPSOIL AND SEED.



NORMAL SECTION



PARABOLIC DETAIL
NORMAL SECTION



BANKED SECTION

ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

TYPICAL SECTION SHEET

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.N.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. /5116/VAOT/TS-2.DGN

PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. TS-2 SHEET 58 OF 385

FILE NAME =u:\5116\vaot\contract4\ts-2.dgn
DATE/TIME =07 SEP 2000
USER =1459

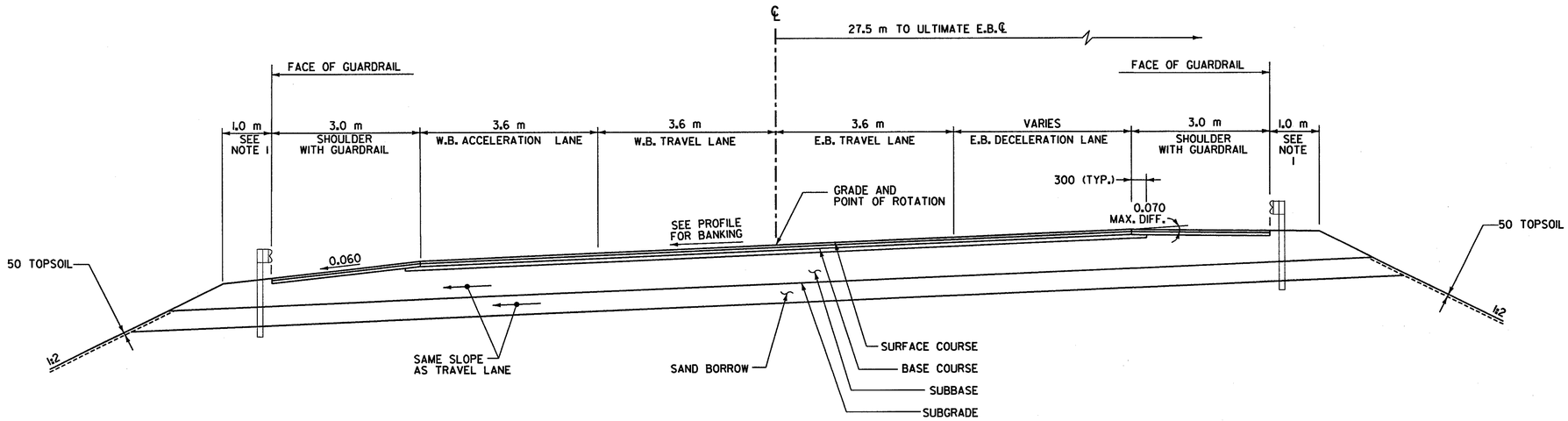
TYPICAL SECTIONS - ACCELERATION / DECELERATION LANES

MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT COURSES (TOTAL DEPTH)	± 5
BASE COURSES (TOTAL DEPTH)	± 10
SUBBASE	± 30
SAND BORROW	± 30

	130	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) (50 TYPE III S, 80 TYPE II S)
	100	BASE COURSE, SUPERPAVE BITUMINOUS CONCRETE (PG 58-28), TYPE I S
	600	SUBBASE OF CRUSHED GRAVEL (COARSE GRADED)
	400	SAND BORROW
SHOULDERS:	130	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) (50 TYPE III S, 80 TYPE II S)
NOTE:		DESIGN FROST DEPTH - 1200

NOTE:

1. ELIMINATE TOPSOIL AND SEEDING BEHIND GUARDRAIL TO SUBGRADE CATCH POINT.



BANKED SECTION
STA. 16+695.000 – STA. 16+756.943

ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

TYPICAL SECTION SHEET

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.N.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. 5116/VAOT/TS-13.DGN

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. TS-3 SHEET 59 OF 385

FILE NAME =u:\5116\vaot\contract4\ts-13.dgn
DATE/TIME =07 SEP 2000
USER =1459

TYPICAL SECTIONS - VT RTE. 67A INTERCHANGE RAMPS

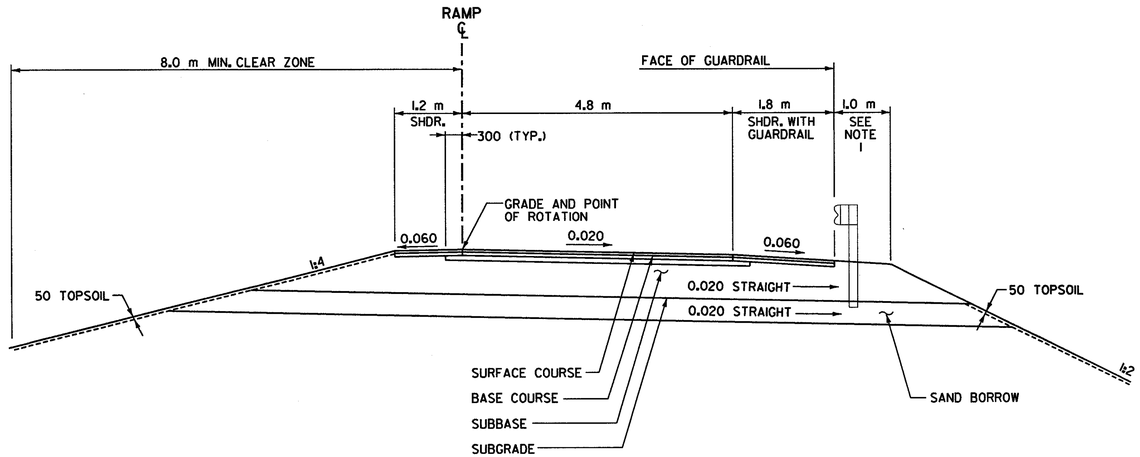
MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT COURSES (TOTAL DEPTH)	± 5
BASE COURSES (TOTAL DEPTH)	± 10
SUBBASE	± 30
SAND BORROW	± 30

	130	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) (50 TYPE III S, 80 TYPE II S)
	100	BASE COURSE, SUPERPAVE BITUMINOUS CONCRETE (PG 58-28), TYPE I S
	600	SUBBASE OF CRUSHED GRAVEL (COARSE GRADED)
	400	SAND BORROW
SHOULDERS:	130	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) (50 TYPE III S, 80 TYPE II S)
NOTE:		DESIGN FROST DEPTH - 1200

NOTES:

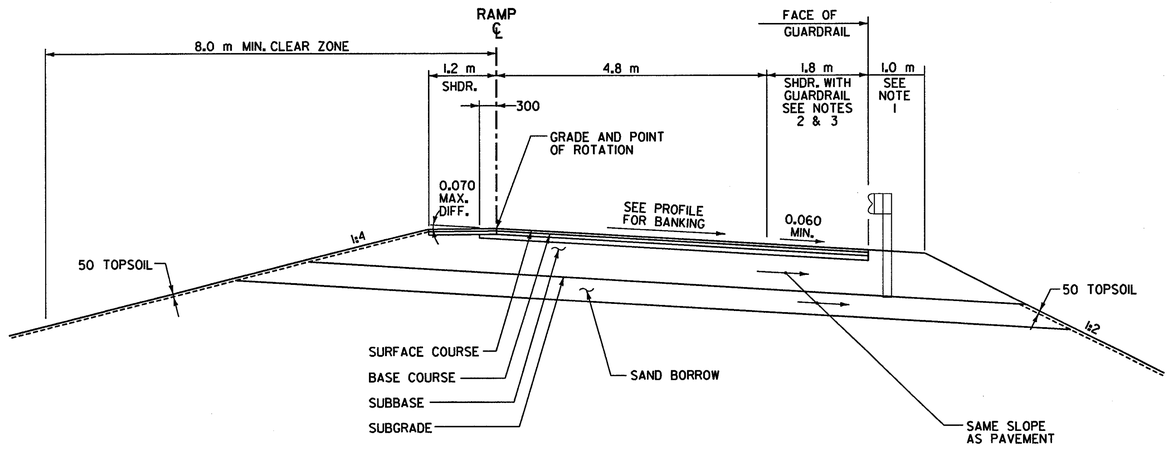
1. ELIMINATE TOPSOIL AND SEEDING BEHIND GUARDRAIL TO SUBGRADE CATCH POINT.
2. THE LOWER SHOULDER SLOPE SHALL MATCH PAVEMENT SLOPE GREATER THAN 0.060.
3. THE INSIDE SHOULDER OF THE FOLLOWING RAMPS SHALL BE PAVED TO THE SAME DEPTH AS THE TRAVEL LANE AT THE LOCATIONS SHOWN:

RAMP	STATION
RAMP A	STA. A10+050.080 - STA. A10+134.300
RAMP C	STA. C10+054.200 - STA. C10+147.902



RAMP C & D NORMAL SECTION

STA. C10+171.000 – STA. C10+210.000
STA. D10+176.000 – STA. D10+227.791



RAMP A & C BANKED SECTION

STA. A10+047.600 – STA. A10+134.300
STA. C10+054.200 – STA. C10+171.000
STA. C10+210.000 – STA. C10+250.186

ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

TYPICAL SECTION SHEET

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.N.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. /5116/VAOT/TS-14.DGN

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(11) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. TS-4 SHEET 60 OF 385

FILE NAME =u:\5116\vaot\contract4\ts-14.dgn
DATE/TIME =07 SEP 2000
USER =1459

TYPICAL SECTIONS - VT RTE. 67A INTERCHANGE RAMPS

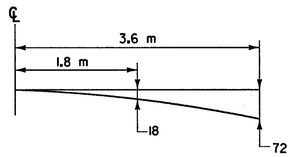
Metric

MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT COURSES (TOTAL DEPTH)	± 5
BASE COURSES (TOTAL DEPTH)	± 10
SUBBASE	± 30
SAND BORROW	± 30

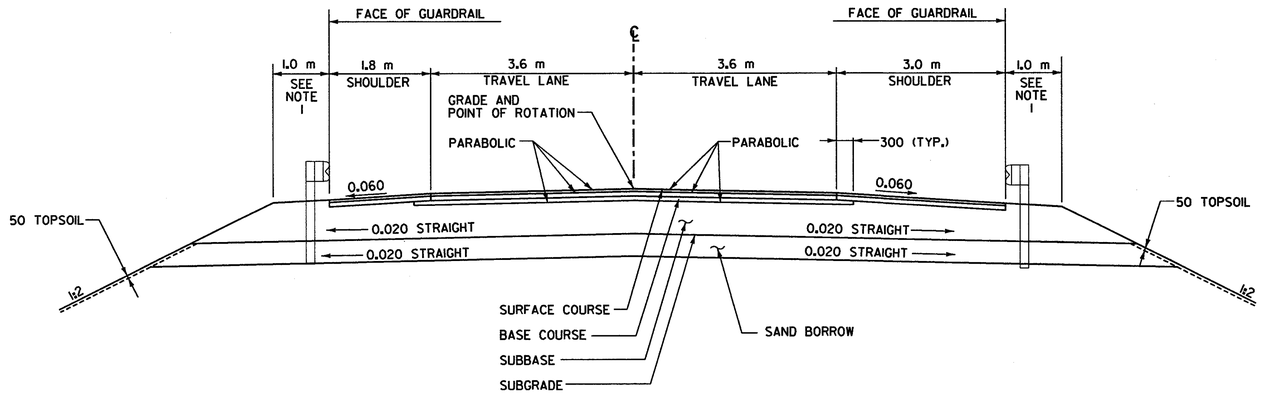
	130	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) (50 TYPE III S, 80 TYPE II S)
	100	BASE COURSE, SUPERPAVE BITUMINOUS CONCRETE (PG 58-28), TYPE I S
	600	SUBBASE OF CRUSHED GRAVEL (COARSE GRADED)
	400	SAND BORROW
SHOULDERS:	130	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) (50 TYPE III S, 80 TYPE II S)
	NOTE:	DESIGN FROST DEPTH - 1200

NOTE:

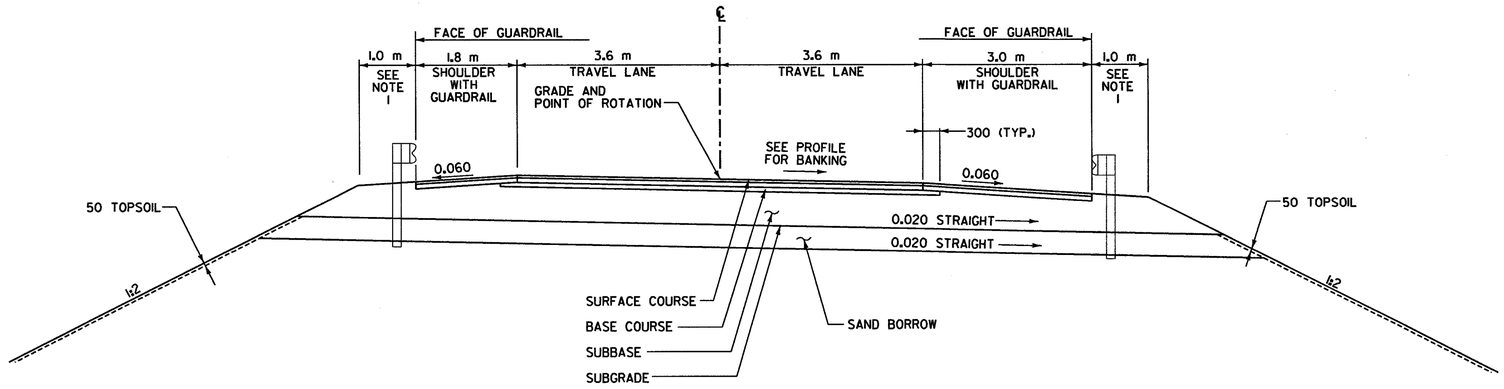
1. ELIMINATE TOPSOIL AND SEEDING BEHIND GUARDRAIL TO SUBGRADE CATCH POINT.



PARABOLIC DETAIL
NORMAL SECTION



RAMP B & D NORMAL SECTION
STA. B10+064.800 – STA. B10+070.000
STA. D10+227.791 – STA. D10+236.439



RAMP B BANKED SECTION
STA. B10+070.000 – STA. B10+175.097

ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

TYPICAL SECTION SHEET

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.N.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. /5116/VAOT/TS-15.DGN
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(11) C/4
PROJ. NO. P.I.N. 1306.60
DWG NO. TS-5 SHEET 61 OF 385

FILE NAME =u\5116\vaot\contract4\ts-15.dgn
DATE/TIME =07 SEP 2000
USER =1459

TYPICAL SECTIONS - VT RTE. 67A INTERCHANGE RAMPS

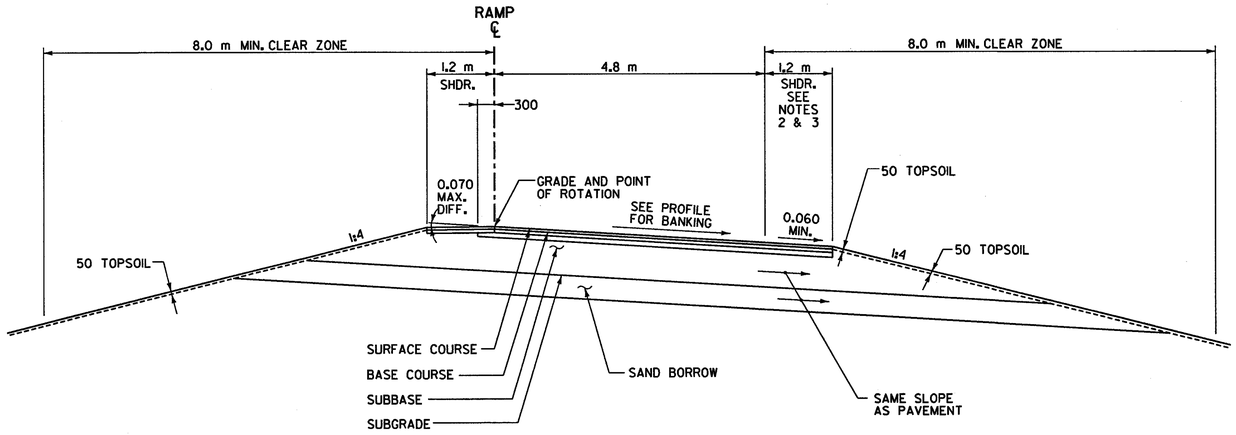
MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT COURSES (TOTAL DEPTH)	± 5
BASE COURSES (TOTAL DEPTH)	± 10
SUBBASE	± 30
SAND BORROW	± 30

	130	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) (50 TYPE III S, 80 TYPE II S)
	100	BASE COURSE, SUPERPAVE BITUMINOUS CONCRETE (PG 58-28), TYPE I S
	600	SUBBASE OF CRUSHED GRAVEL (COARSE GRADED)
	400	SAND BORROW
SHOULDERS:	130	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) (50 TYPE III S, 80 TYPE II S)
NOTE:		DESIGN FROST DEPTH - 1200

NOTES:

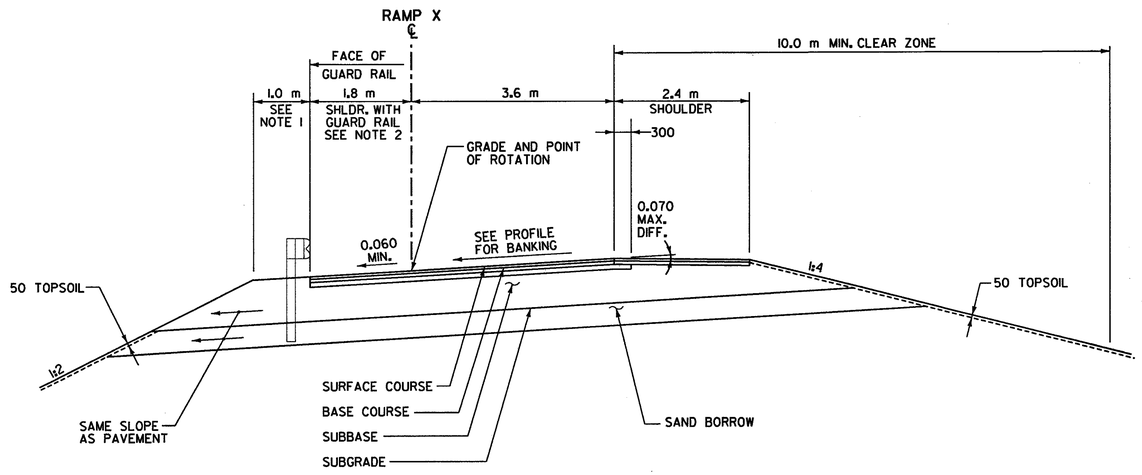
1. ELIMINATE TOPSOIL AND SEEDING BEHIND GUARDRAIL TO SUBGRADE CATCH POINT.
2. THE LOWER SHOULDER SLOPE SHALL MATCH PAVEMENT SLOPE GREATER THAN 0.060.
3. THE INSIDE SHOULDER OF THE FOLLOWING RAMPS SHALL BE PAVED TO THE SAME DEPTH AS THE TRAVEL LANE AT THE LOCATIONS SHOWN:

RAMP	STATION
RAMP B	STA. B10+175.097 - STA. B10+323.782
RAMP D	STA. D10+000.000 - STA. D10+157.346
RAMP X	STA. X10+236.132 - STA. X10+320.876



RAMP A, B & D BANKED SECTION

STA. A10+000.000 – STA. A10+047.600
STA. B10+175.097 – STA. B10+323.782
STA. D10+000.000 – STA. D10+176.000



RAMP X BANKED SECTION

STA. X10+214.662 – STA. X10+331.094

ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

TYPICAL SECTION SHEET

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.N.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00
DESIGN FILE NO.	/5116/VAOT/TS-16.DGN	
PROJ. NAME	BENNINGTON - HOOSICK D.P.I. 0146(1) C/4	
PROJ. NO.	P.I.N. 1306.60	
DWG NO. TS-6		SHEET 62 OF 385

FILE NAME =u:\5116\vaot\contract1\ts-16.dgn
DATE/TIME =07 SEP 2000
USER =1459

TYPICAL SECTIONS - VT RTE. 67A INTERCHANGE RAMPS

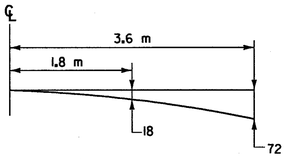
MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT COURSES (TOTAL DEPTH)	± 5
BASE COURSES (TOTAL DEPTH)	± 10
SUBBASE	± 30
SAND BORROW	± 30

	130	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) (50 TYPE III S, 80 TYPE II S)
	100	BASE COURSE, SUPERPAVE BITUMINOUS CONCRETE (PG 58-28), TYPE I S
	600	SUBBASE OF CRUSHED GRAVEL (COARSE GRADED)
	400	SAND BORROW
SHOULDERS:	130	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) (50 TYPE III S, 80 TYPE II S)
NOTE:		DESIGN FROST DEPTH - 1200

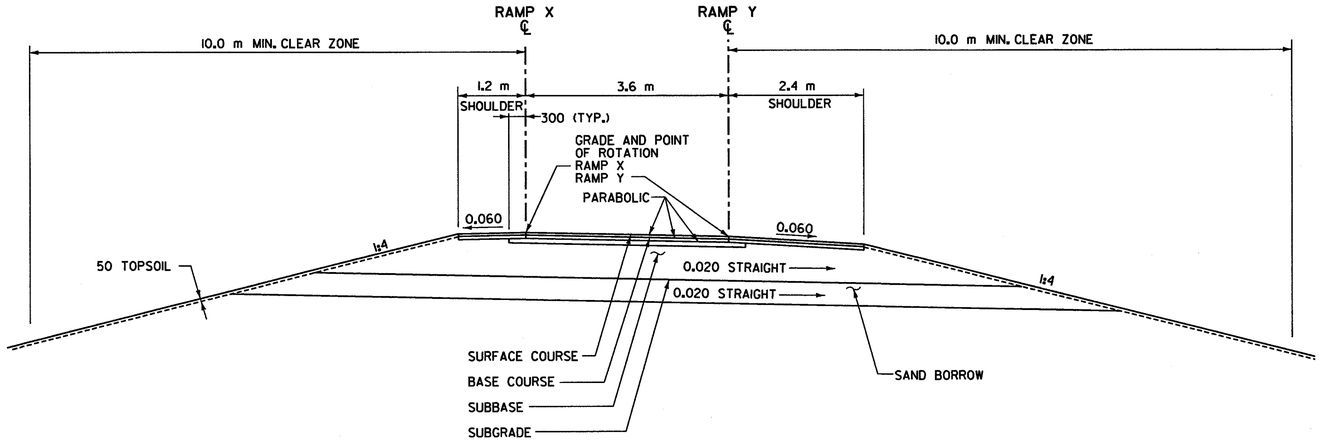
NOTES:

1. THE LOWER SHOULDER SLOPE SHALL MATCH PAVEMENT SLOPE GREATER THAN 0.060.
2. THE INSIDE SHOULDER OF THE FOLLOWING RAMPS SHALL BE PAVED TO THE SAME DEPTH AS THE TRAVEL LANE AT THE LOCATIONS SHOWN:

RAMP	STATION
RAMP Y	STA. Y10+066.173 - STA. Y10+163.001



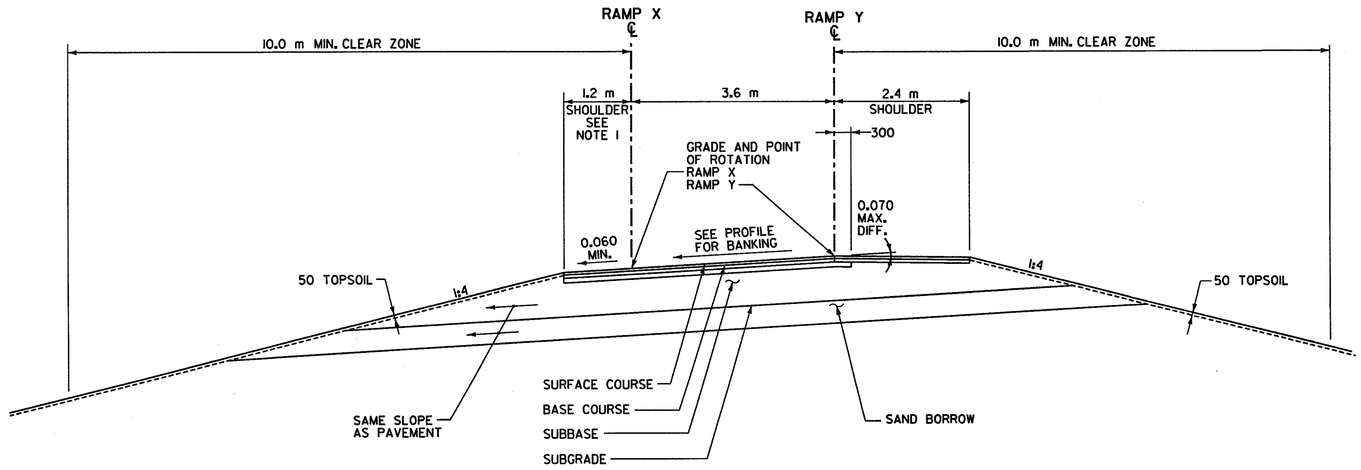
PARABOLIC DETAIL
NORMAL SECTION



RAMP X & Y NORMAL SECTION

(SHOWN IN DIRECTION OF TRAVEL)

STA. X10+072.000 - STA. X10+214.662
STA. Y10+173.000 - STA. Y10+216.946



RAMP X & Y BANKED SECTION

(SHOWN IN DIRECTION OF TRAVEL)

STA. X10+052.006 - STA. X10+072.000
STA. Y10+052.006 - STA. Y10+173.000

ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

TYPICAL SECTION SHEET

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.N.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. /5116/VAOT/TS-17.DGN

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. TS-7 SHEET 63 OF 385

FILE NAME =u:\5116\vaot\contract4\ts-17.dgn
DATE/TIME =07 SEP 2000
USER =1459

TYPICAL SECTIONS - VT RTE. 67A INTERCHANGE RAMPS

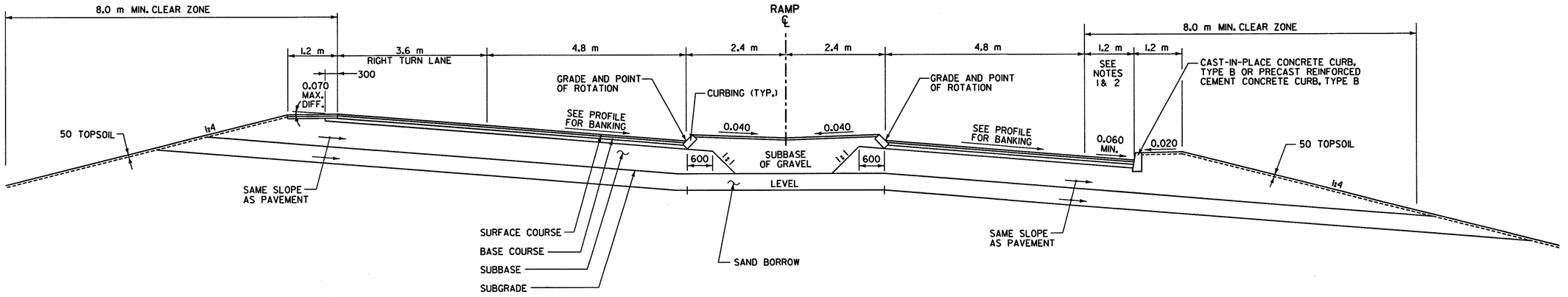
MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT COURSES (TOTAL DEPTH)	± 5
BASE COURSES (TOTAL DEPTH)	± 10
SUBBASE	± 30
SAND BORROW	± 30

	130	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) (50 TYPE III S, 80 TYPE II S)
	100	BASE COURSE, SUPERPAVE BITUMINOUS CONCRETE (PG 58-28), TYPE I S
	600	SUBBASE OF CRUSHED GRAVEL (COARSE GRADED)
	400	SAND BORROW
SHOULDERS:	130	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) (50 TYPE III S, 80 TYPE II S)
NOTE:		DESIGN FROST DEPTH - 1200

NOTES:

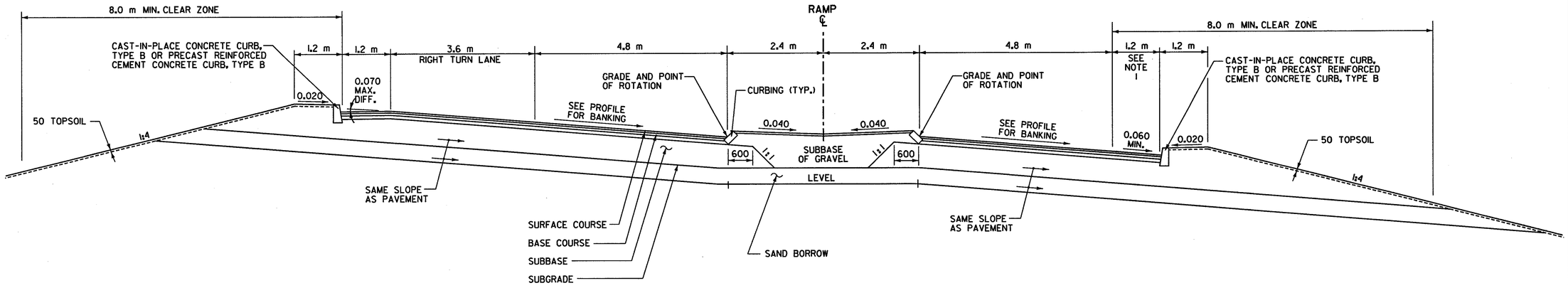
1. THE LOWER SHOULDER SLOPE SHALL MATCH PAVEMENT SLOPE GREATER THAN 0.060.
2. THE INSIDE SHOULDER ON THE FOLLOWING RAMPS SHALL BE PAVED TO THE SAME DEPTH AS THE TRAVEL LANE AT THE LOCATIONS SHOWN.

RAMP	STATION
RAMP AB	STA. AB10+117.900 - STA. AB10+140.000



RAMP AB & CD BANKED SECTION

STA. AB10+090.000 - STA. AB10+140.000
STA. CD10+088.300 - STA. CD10+119.500



RAMP AB & CD BANKED SECTION

STA. AB10+036.100 - STA. AB10+090.000
STA. CD10+028.800 - STA. CD10+088.300

ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

TYPICAL SECTION SHEET

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.N.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. /5116/VAOT/TS-18.DGN

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. TS-8 SHEET 64 OF 385

FILE NAME =u:\5116\vaot\contract4\ts-18.dgn
DATE/TIME =07 SEP 2000
USER =1459

TYPICAL SECTIONS - VT RTE. 67A INTERCHANGE RAMPS

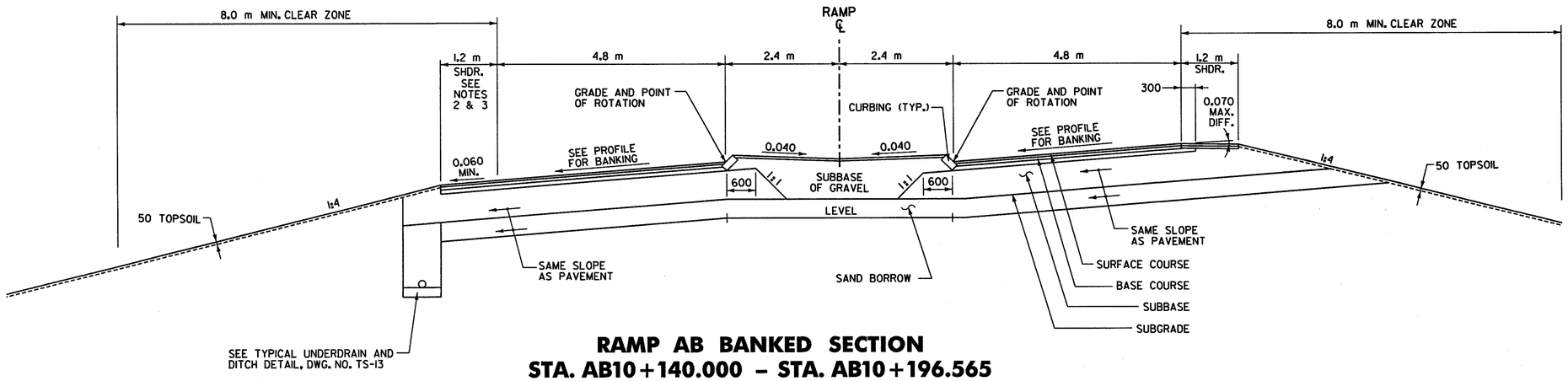
MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT COURSES (TOTAL DEPTH)	± 5
BASE COURSES (TOTAL DEPTH)	± 10
SUBBASE	± 30
SAND BORROW	± 30

	130	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) (50 TYPE III S, 80 TYPE II S)
	100	BASE COURSE, SUPERPAVE BITUMINOUS CONCRETE (PG 58-28), TYPE I S
	600	SUBBASE OF CRUSHED GRAVEL (COARSE GRADED)
	400	SAND BORROW
SHOULDERS:	130	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) (50 TYPE III S, 80 TYPE II S)
NOTE:		DESIGN FROST DEPTH - 1200

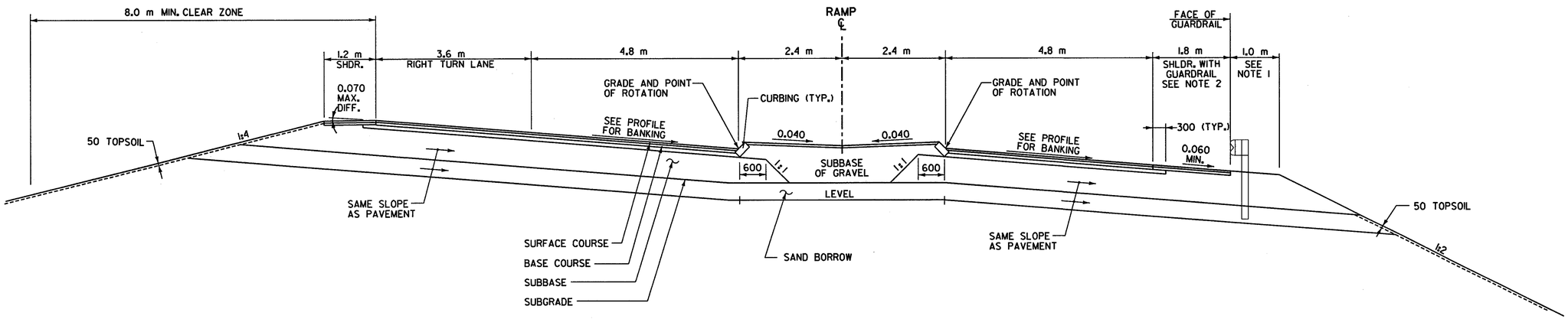
NOTES:

1. ELIMINATE TOPSOIL AND SEEDING BEHIND GUARDRAIL TO SUBGRADE CATCH POINT.
2. THE LOWER SHOULDER SLOPE SHALL MATCH PAVEMENT SLOPE GREATER THAN 0.060.
3. THE INSIDE SHOULDER ON THE FOLLOWING RAMPS SHALL BE PAVED TO THE SAME DEPTH AS THE TRAVEL LANE AT THE LOCATIONS SHOWN.

RAMP	STATION
RAMP AB	STA. AB10+140.000 - STA. AB10+196.565



RAMP AB BANKED SECTION
STA. AB10+140.000 - STA. AB10+196.565



RAMP CD BANKED SECTION
STA. CD10+119.500 - STA. CD10+140.000

ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

TYPICAL SECTION SHEET

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.N.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. /5116/VAOT/TS-19.DGN

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. TS-9 SHEET 65 OF 385

FILE NAME = g:\5116\vaot\contract4\ts-19.dgn
DATE/TIME = 07 SEP 2000
USER = LISA

TYPICAL SECTIONS - VT RTE.67A INTERCHANGE RAMPS

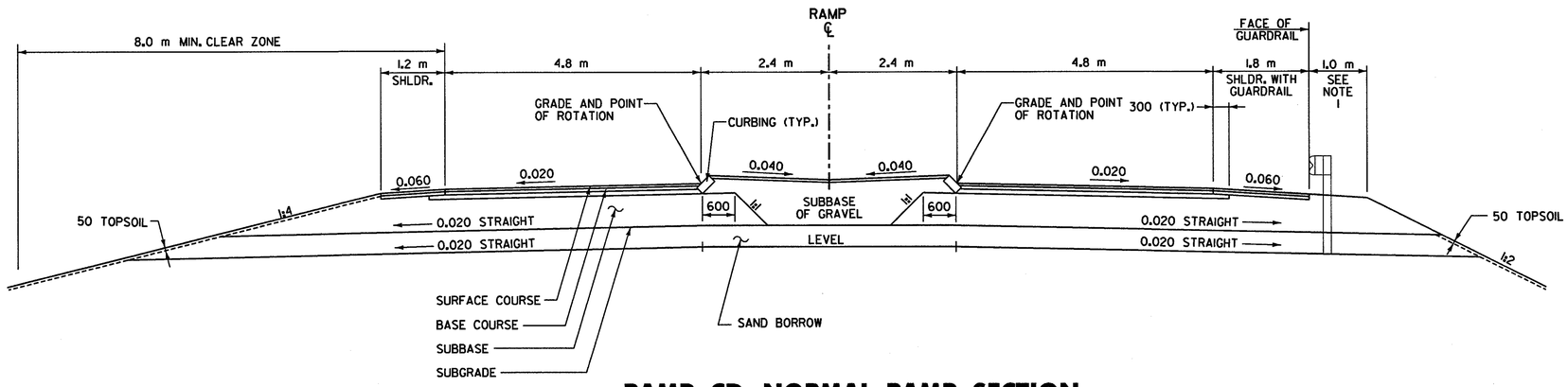
MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT COURSES (TOTAL DEPTH)	± 5
BASE COURSES (TOTAL DEPTH)	± 10
SUBBASE	± 30
SAND BORROW	± 30

	130	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) (50 TYPE III S, 80 TYPE II S)
	100	BASE COURSE, SUPERPAVE BITUMINOUS CONCRETE (PG 58-28), TYPE I S
	600	SUBBASE OF CRUSHED GRAVEL (COARSE GRADED)
	400	SAND BORROW
SHOULDERS:	130	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) (50 TYPE III S, 80 TYPE II S)
NOTE:		DESIGN FROST DEPTH - 1200

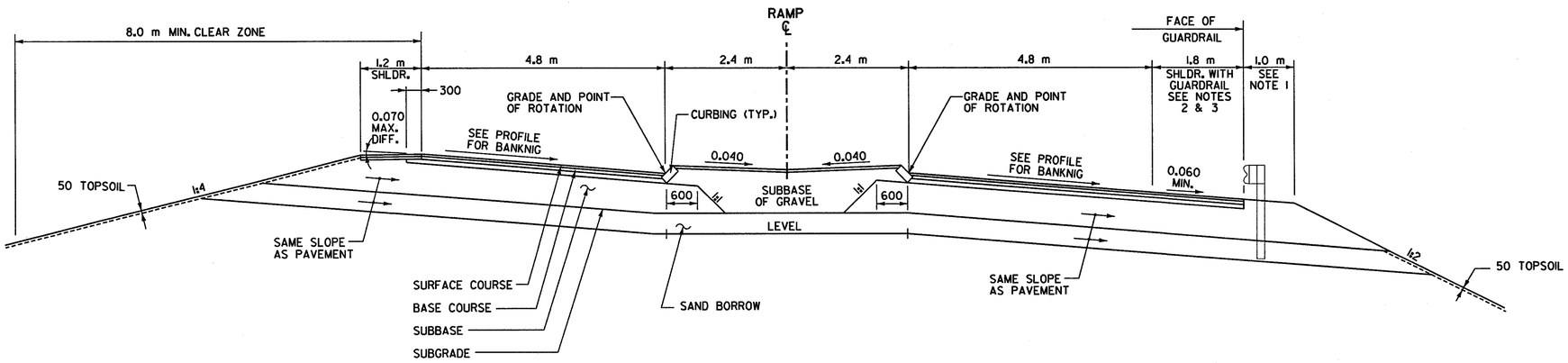
NOTES:

1. ELIMINATE TOPSOIL AND SEEDING BEHIND GUARDRAIL TO SUBGRADE CATCH POINT.
2. THE LOWER SHOULDER SLOPE SHALL MATCH PAVEMENT SLOPE GREATER THAN 0.060.
3. THE INSIDE SHOULDER ON THE FOLLOWING RAMPS SHALL BE PAVED TO THE SAME DEPTH AS THE TRAVELWAY AT THE LOCATIONS SHOWN:

RAMP	STATION
RAMP CD	STA. CD10+212.196 - STA. CD10+271.929



RAMP CD NORMAL RAMP SECTION
STA. CD10+140.000 – STA. CD10+174.000



RAMP CD BANKED SECTION
STA. CD10+174.000 – STA. CD10+271.929

ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

TYPICAL SECTION SHEET

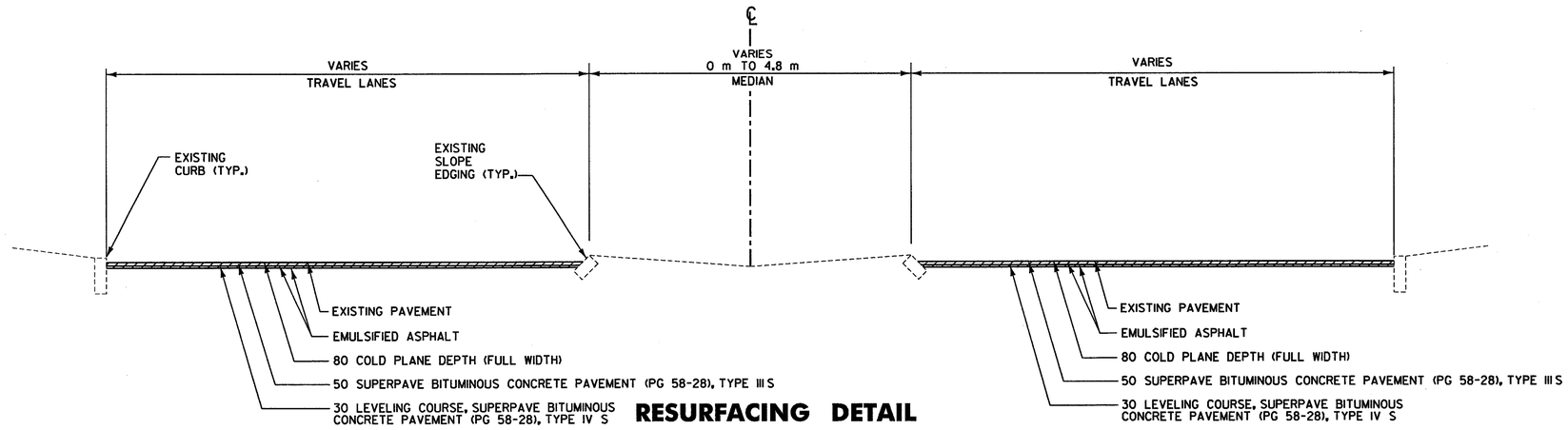
SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.N.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00
DESIGN FILE NO.	/5116/VAOT/TS-20.DGN	
PROJ. NAME	BENNINGTON - HOOSICK D.P.I. 0146(1) C/4	
PROJ. NO.	P.I.N. 1306.60	
DWG NO. TS-10		SHEET 66 OF 385

FILE NAME =u:\5116\vaot\contract4\ts-20.dgn
DATE/TIME = 07 SEP 2000
USER =1459

TYPICAL SECTION - VT. ROUTE 67A

MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT COURSES (TOTAL DEPTH)	± 5
BASE COURSES (TOTAL DEPTH)	± 10
SUBBASE	± 30
SAND BORROW	± 30

130 SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) (50 TYPE III S, 80 TYPE II S)
100 BASE COURSE, SUPERPAVE BITUMINOUS CONCRETE (PG 58-28), TYPE I S
600 SUBBASE OF CRUSHED GRAVEL (COARSE GRADED)

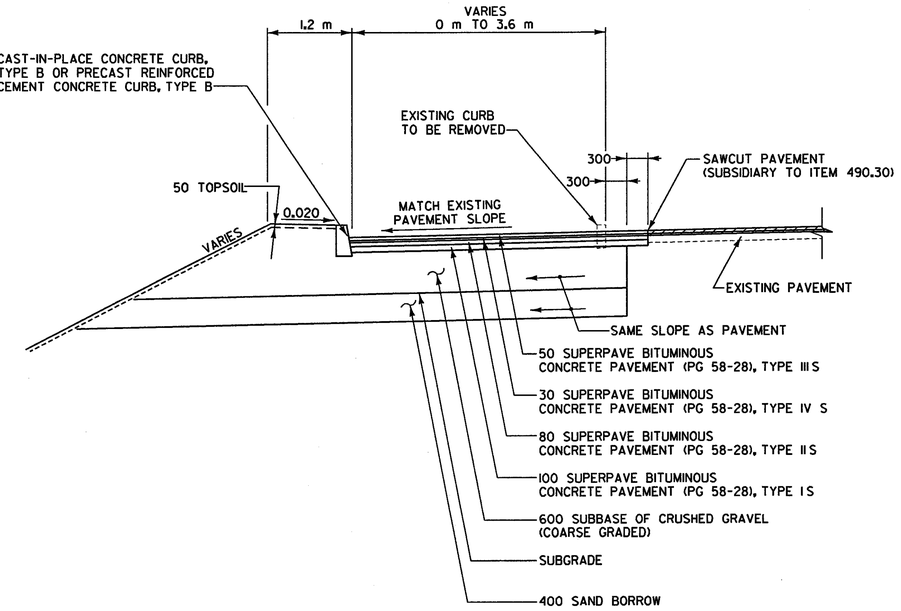


RESURFACING DETAIL

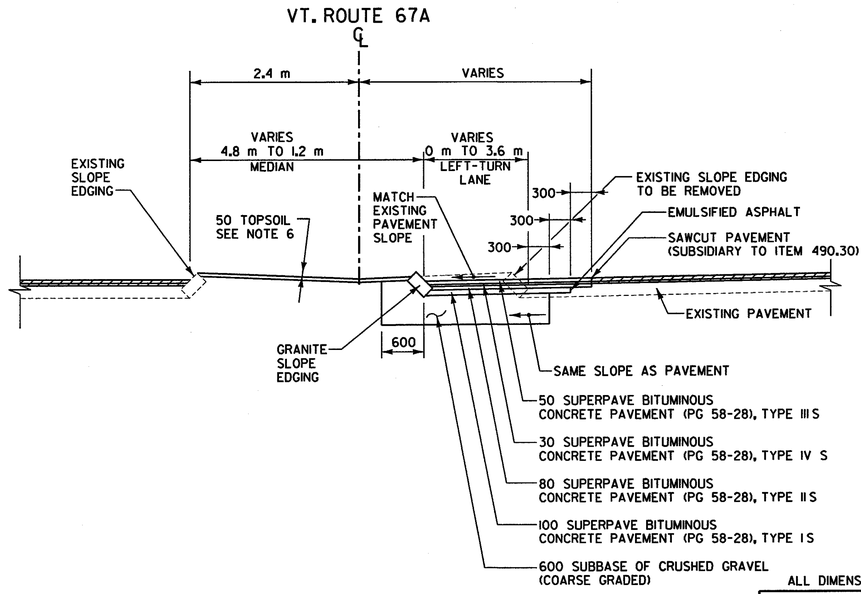
VT. RTE. 67A STA. 60+640.000 – STA. 61+244.000
RAMP AB STA. AB9+980.000 – STA. AB10+013.000
RAMP CD STA. CD9+980.000 – STA. CD10+008.000

NOTES:

1. THE SURFACE COURSE SHALL BE TYPE III S SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28). THE LEVELING COURSE SHALL BE TYPE IV S SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) OR AS DIRECTED BY THE RESIDENT ENGINEER. THE BINDER COURSE SHALL BE TYPE II S SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28).
2. COLD PLANING SHALL BE COMPLETED ACCORDING TO TYPICAL OR AS DENOTED OTHERWISE ON THE PLANS. EACH COLD PLANED AREA SHALL BE PAVED WITHIN 14 DAYS OF COMPLETION TO RECEIVE PAYMENT FOR ITEM 210.10 COLD PLANING-BITUMINOUS PAVEMENT.
3. EMULSIFIED ASPHALT SHALL BE APPLIED ON ALL EXISTING PAVEMENT SURFACES, ON ALL COLD PLANED SURFACES AND BETWEEN ALL COURSES OF PAVEMENT AT THE RATE OF 0.12 L/m^2 OR AS DIRECTED BY THE RESIDENT ENGINEER.
4. THE ENTIRE WIDTH OF THE EXISTING PAVEMENT SURFACE SHALL BE COLD PLANED TO A DEPTH OF 80 mm. THE PAVEMENT WIDENING SHALL BE CONSTRUCTED USING 100 mm OF TYPE I S BASE COURSE AND 80 mm TYPE II S BINDER COURSE. THE BINDER COURSE FOR THE PAVEMENT WIDENINGS SHALL BE PLACED TO MATCH THE ELEVATION OF THE ADJOINING MILLED SURFACE. A 50 mm TYPE III S SURFACE COURSE AND A 30 mm TYPE IV S LEVELING COURSE SHALL BE PLACED OVER THE ENTIRE WIDTH OF THE EXISTING ROADWAY AND THE AREA OF PAVEMENT WIDENING.
5. ALL COLD PLANED AREAS SHALL BE PAVED WITH A LEVELING COURSE FOR THE TRAVELING PUBLIC.
6. THE MEDIAN FROM STA. 60+730.0 TO STA. 60+781.6 SHALL BE PAVED WITH 80 mm OF TYPE II S APPLIED OVER 150 mm SUBBASE OF CRUSHED GRAVEL (COURSE GRADED) OR AS DIRECTED BY THE RESIDENT ENGINEER. THE BITUMINOUS CONCRETE PAVEMENT FOR THE MEDIAN SHALL BE PAID FOR UNDER ITEM 616.47 BITUMINOUS CONCRETE GUTTERS AND TRAFFIC ISLANDS.
7. TREATED TIMBER CURB SHALL BE BACKED UP TO FULL HEIGHT WITH ITEM 402.12 AGGREGATE SHOULDERS AS DIRECTED BY THE RESIDENT ENGINEER. AN ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE PLANS.



VT. ROUTE 67A PAVEMENT WIDENING



VT. ROUTE 67A TURN LANE WIDENING

ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

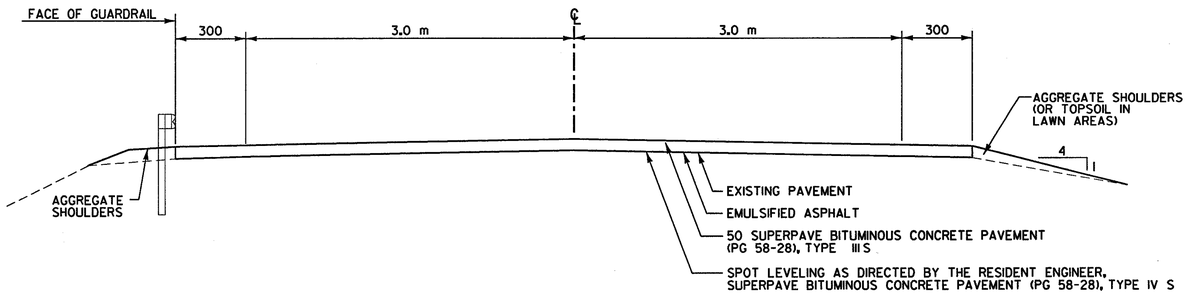
TYPICAL SECTION SHEET

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.N.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. /5116/VAOT/TS-21.DGN
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG NO. TS-11 SHEET 67 OF 385

FILE NAME =u:\5116\vaot\contract4\ts-21.dgn
DATE/TIME =07 SEP 2000
USER =1459

TYPICAL SECTION - SILK ROAD



OVERLAY DETAIL
STA. SR0+000.000 – STA. SR0+251.723

NOTES:

1. THE SURFACE COURSE SHALL BE TYPE III S SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28). THE LEVELING COURSE SHALL BE TYPE IV S SUPERPAVE CONCRETE PAVEMENT (PG 58-28) OR AS DIRECTED BY THE RESIDENT ENGINEER.
2. EMULSIFIED ASPHALT SHALL BE APPLIED ON ALL EXISTING PAVEMENT SURFACES AND BETWEEN ALL COURSES OF PAVEMENT AT THE RATE OF 0.12 L/m^2 OR AS DIRECTED BY THE RESIDENT ENGINEER.
3. SUPERPAVE BITUMINOUS CONCRETE PAVEMENT TOLERANCE = ± 5 mm (TOTAL PAVEMENT THICKNESS EXCLUDING LEVELING).
4. SPOT LEVELING HAS BEEN ESTIMATED AT 25% OF THE ENTIRE AREA OF PAVEMENT AND SHALL BE PERFORMED AS DIRECTED BY THE RESIDENT ENGINEER.

ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

TYPICAL SECTION SHEET

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.N.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. /5116/VAOT/TS-21.DGN

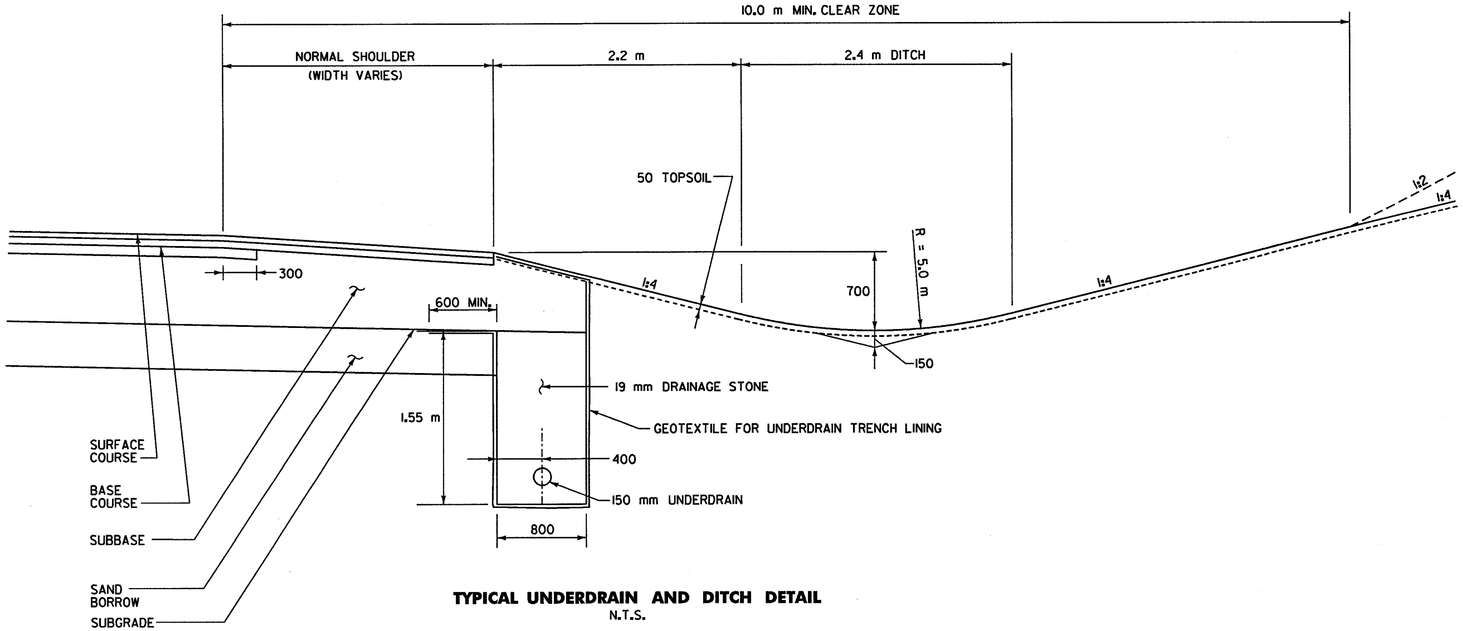
PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

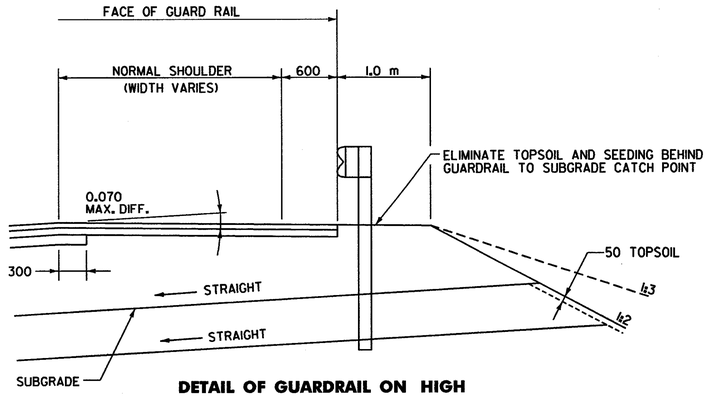
DWG NO. TS-12 SHEET 68 OF 385

FILE NAME =u:\5116\vaot\contract4\ts-21.dgn
DATE/TIME =07 SEP 2000
USER =1459

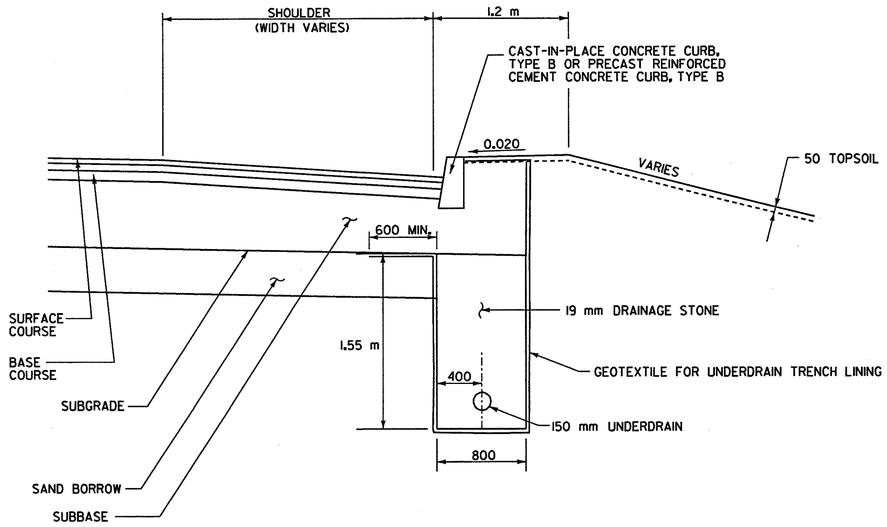
TYPICAL SECTIONS - MISCELLANEOUS DETAILS



TYPICAL UNDERDRAIN AND DITCH DETAIL
N.T.S.



DETAIL OF GUARDRAIL ON HIGH SIDE OF BANKED SECTION
N.T.S.



TYPICAL UNDERDRAIN AND CURB DETAIL
N.T.S.

NOTES

SEED MIXTURE: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.

SEED: TO BE APPLIED PER SEEDING FORMULAS OR AS DIRECTED BY THE RESIDENT ENGINEER.

FERTILIZER: FORMULA 10-20-10, TO BE USED WITH SEED, APPLIED AT THE RATE OF 560 kg/ha. (HYDRO SEEDERS MAY USE 19-19-19 FORMULA).

AGRICULTURAL LIMESTONE: TO BE APPLIED AT THE RATE OF 4500 kg/ha OR AS DIRECTED BY THE RESIDENT ENGINEER.

HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 4500 kg/ha OR AS DIRECTED BY THE RESIDENT ENGINEER.

MARKER POSTS: TO BE PLACED AS INDICATED OR AS DIRECTED BY THE RESIDENT ENGINEER.

TOP SOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER.

SLOPE ROUNDING: ALL CUT SLOPES TO BE ROUNDED IN ACCORDANCE WITH STANDARD SHEET B-5M.

TACK COAT: EMULSIFIED ASPHALT IS TO BE APPLIED AT THE RATE OF 0.12 L/m^2 BETWEEN SUCCESSIVE COURSES OF PAVEMENT AS DIRECTED BY THE RESIDENT ENGINEER.

CONSERVATION SEED MIX

RURAL AREA - SEED MIXTURE

% MASS	kg/ha	NAME	PUR %	GERM %
37.14	26.0	CREEPING RED FESCUE	98	85
37.14	26.0	TALL FESCUE	95	90
5.71	4.0	RED TOP	95	90
14.30	10.0	BIRDSFOOT TREFOIL	98	85
5.71	4.0	ANNUAL RYE GRASS	95	85
100.0	70.0			

ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

TYPICAL SECTION SHEET

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY D.E.G. DATE 9/00
DRAWN BY J.N. DATE 9/00
CHECKED BY T.P.K. DATE 9/00

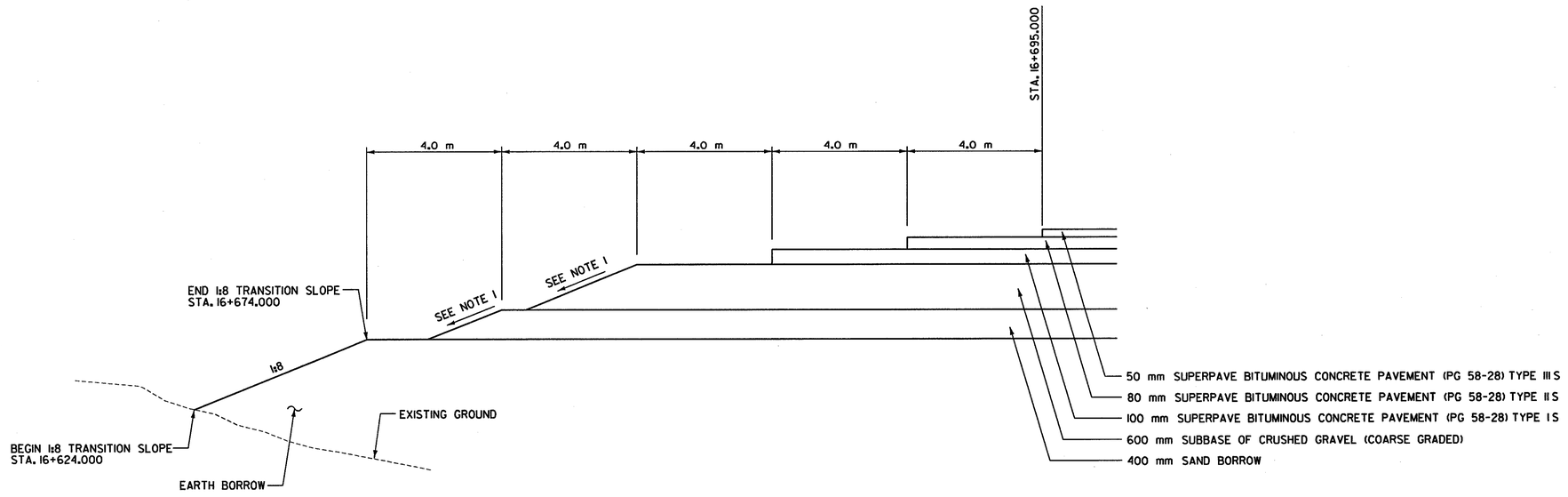
DESIGN FILE NO. 5116/VAOT/TS-22.DGN

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(11) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. TS-13 SHEET 69 OF 385

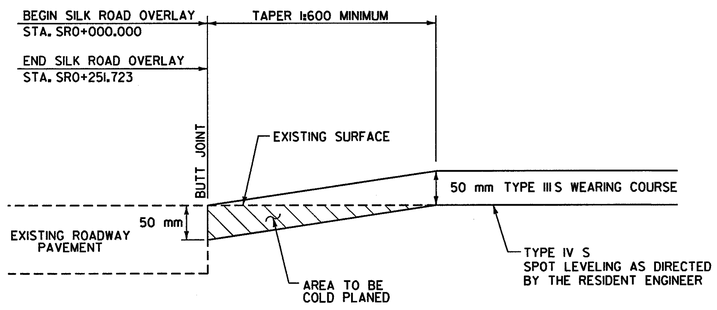
FILE NAME =u:\5116\vaot\contract4\ts-22.dgn
DATE/TIME =07 SEP 2000
USER =1459



PAVEMENT TERMINATION DETAIL

N.T.S.
STA. 16+695.000

NOTE:
1. SLOPE SHALL BE AS DIRECTED BY THE RESIDENT ENGINEER.



APPROACH TRANSITION DETAIL

N.T.S.
STA. SR0+000.000
STA. SR0+251.723

PAVING DETAILS SHEET

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	T.J.B.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. /5516/VAOT/PTDI.DGN

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. PDT-1 SHEET 70 OF 385

FILE NAME =u:\5116\vaot\contract4\ptdi.dgn
DATE/TIME =07 SEP 2000
USER =1459

VTrans Metric

VT STATE PLANE GRID

WALLOOMSAC RIVER

SILK ROAD

END SILK ROAD
END PAVING
STA. SR0+251.723

END BENNINGTON - HOOSICK D.P.I. 0146(1) C/3
BEGIN BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
BEGIN ROADWAY
STA. 16+695.000

STOP VT. ROUTE 9 H.C.L.
BEGIN RAMP X STA. X10+000.000 =
BEGIN RAMP Y STA. Y10+000.000 =
STA. 16+978.091

END ROADWAY
END BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
BEGIN BENNINGTON - HOOSICK D.P.I. 0146(1) C/6
STA. B10+064.800 = W.B. STA. 17+305.027

BEGIN RAMP B STA. B10+000.000 =
ULTIMATE W.B. STA. 17+369.827
RESUME VT. ROUTE 9

TED GLADSTONE DEVELOPMENT

VT. ROUTE 67A

END COLD PLANING & PAVING
STA. 61+244.000

MAYER, FOREST & EILEEN

BENNINGTON ACRES

STATE OF VERMONT

WILLIAM MORSE (TRUSTEE)

JOHNSON CONTROLS, INC.

END ULTIMATE W.B.
STA. 17+725.355

VELCO

16+400

16+600

STATE OF VERMONT

MILLER, THOMAS JR. & JANET

VT. ROUTE 9

RAMP Z

RAMP AB

RAMP A

RAMP B

RAMP Y

RAMP X

RAMP D

RAMP C

RAMP CD

VT. ROUTE 9 (WESTBOUND)

VT. ROUTE 9 (EASTBOUND)

TO BENNINGTON

VELCO

CENTRAL VERMONT PUBLIC SERVICE CORP.

STOP ROADWAY
BEGIN BRIDGE
STA. 16+762.943

BEGIN SILK ROAD
BEGIN PAVING
STA. SR0+000.000

END BRIDGE
RESUME ROADWAY
STA. X10+046.006 &
STA. Y10+046.006

BEGIN COLD PLANING & PAVING
STA. 60+640.000

WILLIAM MORSE (TRUSTEE)

CONE, ALICE

FURNACE BROOK

MORSE ROAD

WOLFE, WILLIAM

BEGIN RAMP C STA. C10+000.000 =
P.O.C. STA. 16+978.085

END ROADWAY
END BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
BEGIN BENNINGTON - HOOSICK D.P.I. 0146(1) C/6
STA. D10+236.439

TOWN OF BENNINGTON

END RAMP D STA. D10+297.827 =
ULTIMATE E.B. STA. 17+359.765
RESUME VT. ROUTE 9

40 0 40 m
1: 2000

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

FILE NAME =u:\5116\vaot\contract4\g2.dgn
DATE/TIME =08 SEP 2000
USER =1459

GENERAL PLAN

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.N.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. G2.DGN

PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. G-1

CURVE W.B. 8	CURVE Z-1	CURVE Z-2
P.C.= STA. 16+744.201	P.C.=STA. Z10+035.612	P.C.C.=STA. Z10+181.281
P.T.= STA. 16+978.091	P.C.C.= STA. Z10+181.281	P.T.= STA. Z10+240.000
Δ= 09°34'19.5" LT	Δ=104°19'38.9" LT	Δ= 37°27'52.3" LT
R= 1400.000 m	R= 80.000 m	R= 89.801 m
T= 117.218 m	T=103.001 m	T= 30.452 m
L= 233.890 m	L=145.669 m	L= 58.719 m
E= 4.899 m	E= 50.419 m	E= 5.023 m
e_{max}=0.036 DN. LT	e_{max}=N/A	e_{max}=N/A

VT STATE PLANE GRID

END ROADWAY
END BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
BEGIN BENNINGTON - HOOSICK D.P.I. 0146(1) C/6
STA. B10+064.800 = W.B. STA. 17+305.027

END VT. ROUTE 67A
STA. 61+284.113

BEGIN RAMP B STA. B10+000.000 = ULTIMATE W.B. STA. 17+369.827
RESUME VT. ROUTE 9

TED GLADSTONE DEVELOPMENT

SEE ALIGNMENT PLAN
SEE DWG. NO. A-2

WALLOOMSAC RIVER

END BENNINGTON - HOOSICK D.P.I. 0146(1) C/3
BEGIN BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
BEGIN ROADWAY
STA. 16+695.000

SILK ROAD

END SILK ROAD
STA. SR0+251.723

MAYER, FOREST & EILEEN

VELCO

MILLER, THOMAS JR. & JANET

BENNINGTON ACRES

STOP VT. ROUTE 9 H.C.L.
BEGIN RAMP X STA. X10+000.000 = STA. 16+978.091
BEGIN RAMP Y STA. Y10+000.000 =

P.C. STA. 16+744.201

BEGIN RAMP Z
STA. Z10+000.000

P.I. STA. Z10+138.613 BK. =
P.I. STA. Z10+078.280 AHD. =

P.C. STA. Z10+181.281

CURVE Z-1

P.C. Z10+035.612

RAMP AB

Z10+000

61+200

STATE OF VERMONT

JOHNSON CONTROLS, INC.

WILLIAM MORSE (TRUSTEE)

END ULTIMATE W.B.
STA. 17+725.355

TO BENNINGTON

16+400

16+600

STATE OF VERMONT

CURVE W.B. 8

CURVE Z-2

RAMP Z

Z10+240.000 P.T.

RAMP A

61+000

VT. ROUTE 9

VT. ROUTE 9 (WESTBOUND)

17+400

17+600

VT. ROUTE 9 (EASTBOUND)

RAMP B B10+200

RAMP Y

X10+200

RAMP X

C10+000

B10+200

STATE OF VERMONT

C10+200

CURVE SR-1

60+800

WILLIAM MORSE (TRUSTEE)

END ULTIMATE E.B.
STA. 17+733.554

BEGIN SILK ROAD CHANNEL
STA. S10+006.000 =
STA. 16+680.524 O/S 36.71m RT

CENTRAL VERMONT PUBLIC SERVICE CORP.

CURVE S-1

STOP ROADWAY
BEGIN BRIDGE
STA. 16+762.943

CURVE S-2

BEGIN SILK ROAD
STA. SR0+000.000

END SILK ROAD CHANNEL
STA. S10+238.626

WOLFE, WILLIAM

END RAMP Z
STA. Z10+240.000

D10+200

CD10+100

TOWN OF BENNINGTON

FURNACE BROOK

MORSE ROAD

60+500

CONE, ALICE

P.I. STA. Z10+211.733 BK. =
P.I. STA. Z10+209.548 AHD. =

SEE ALIGNMENT PLAN
SEE DWG. NO. A-3

BEGIN RAMP C STA. C10+000.000 =
STA. 16+978.085

END BRIDGE
RESUME ROADWAY
STA. X10+046.006 &
STA. Y10+046.006

END ROADWAY
END BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
BEGIN BENNINGTON - HOOSICK D.P.I. 0146(1) C/6
STA. D10+236.439

END RAMP D STA. D10+297.827 =
ULTIMATE E.B. STA. 17+359.765
RESUME VT. ROUTE 9

40 0 40 m
1: 2000

CURVE S-1	CURVE S-2	CURVE SR-1	CURVE SR-2
P.C.=STA. S10+007.858	P.C.=STA. S10+118.446	P.C.=STA. SR0+000.000	P.C.=STA. SR0+199.392
P.T.= STA. S10+023.675	P.T.= STA. S10+140.038	P.T.= STA. SR0+047.768	P.T.=STA. SR0+251.868
Δ= 45°18'44.9" RT	Δ= 6°51'24.0" LT	Δ= 07°49'11.4" LT	Δ= 20° 02'40.0" RT
R= 20.000 m	R= 20.000 m	R= 350.000 m	R= 150.000 m
T= 8.348 m	T= 11.983 m	T= 23.921m	T= 26.509 m
L= 15.817 m	L= 21.592 m	L= 47.768 m	L= 52.477 m
E= 1.672 m	E= 3.315 m	E= 0.817 m	E= 2.324 m
e_{max}=N/A	e_{max}=N/A	e_{max}=N/A	e_{max}=N/A

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

ALIGNMENT PLAN

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.N.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. /5116/VAOT/C/4/A1

PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. A-1 SHEET 72 OF 385

FILE NAME =u:\5116\vaot\contract4\a1.dgn
DATE/TIME =08 SEP 2000
USER =1459

Not Metric

CURVE AB-1
P.C. = STA. AB10+045.980
P.T. = STA. AB10+082.425
Δ= 26°54'32.9" RT
R= 77.600 m
T= 18.565 m
L= 36.445 m
E= 2.190 m
e_{max}= 0.020 DN. RT

CURVE AB-2
P.C.= STA. AB10+117.909
P.T.= STA. AB10+196.564
Δ= 66°51'48.6" LT
R= 67.400 m
T= 44.496 m
L= 78.655 m
E= 13.363 m
e_{max}= 0.077 DN. LT

CURVE A-2
P.C.C.= STA. A10+154.799
P.T.= STA. A10+184.529
Δ= 01°13'11.5" RT
R= 1396.400 m
T= 14.866 m
L= 29.730 m
E= 0.079 m
e_{max}= 0.036 DN. RT

CURVE B-2
P.C.C.= STA. B10+230.345
P.T.= STA. B10+323.782
Δ= 82°21'44.9" RT
R= 65.000 m
T= 56.866 m
L= 93.437 m
E= 21.364 m
e_{max}= 0.077 DN. RT

CURVE A-1
P.C.= STA. A10+050.080
P.C.C.= STA. A10+154.799
Δ= 68°10'52.3" RT
R= 88.000 m
T= 59.559 m
L= 104.719 m
E= 18.261 m
e_{max}= 0.036 DN. RT

CURVE B-1
P.C.= STA. B10+175.097
P.C.C.= STA. B10+230.345
Δ= 35°10'19.8" RT
R= 90.000 m
T= 28.526 m
L= 55.248 m
E= 4.412 m
e_{max}= 0.069 DN. RT

CURVE X-1
P.C.= STA. X10+236.136
P.T.= STA. X10+320.871
Δ= 06°56'08.5" LT
R= 700.000 m
T= 42.420 m
L= 84.735 m
E= 1.284 m
e_{max}= 0.063 DN. LT

CURVE Y-1
P.C.= STA. Y10+066.173
P.T.= STA. Y10+163.001
Δ= 06°56'05.3" LT
R= 800.000 m
T= 48.473 m
L= 96.828 m
E= 1.467 m
e_{max}= 0.057 DN. LT

CURVE C-1
P.C.= STA. C10+032.651
P.T.= STA. C10+147.902
Δ= 47°10'01.4" RT
R= 140.000 m
T= 61.117 m
L= 115.251 m
E= 12.759 m
e_{max}= 0.056 DN. RT

CURVE D-1
P.C.= STA. D10+000.000
P.C.C.= STA. D10+105.074
Δ= 92°37'11.1" RT
R= 65.000 m
T= 68.042 m
L= 105.074 m
E= 29.100 m
e_{max}= 0.077 DN. RT

CURVE D-2
P.C.C.= STA. D10+105.074
P.T.= STA. D10+157.346
Δ= 33°16'39.0" RT
R= 90.000 m
T= 26.896 m
L= 52.272 m
E= 3.933 m
e_{max}= 0.069 DN. RT

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

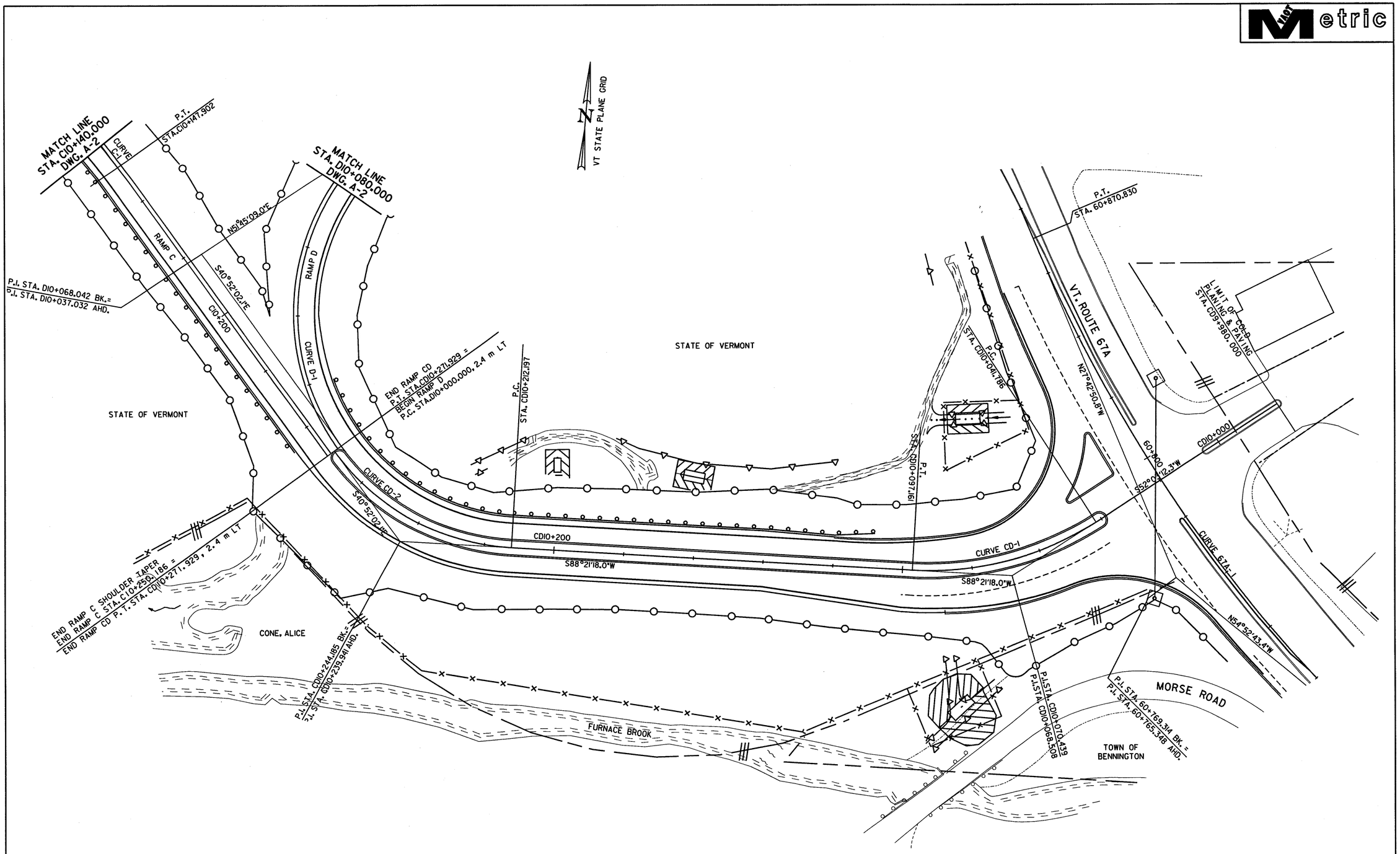
BENNINGTON ACRES
VT STATE PLANE GRID
STATE OF VERMONT
WILLIAM MORSE (TRUSTEE)
VT. ROUTE 67A
LIMIT OF COLD PLANING & PAVING STA. AB9+980.000
P.I. STA. 61+112.364 = VT. ROUTE 67A STA. 61+112.364
P.I. STA. AB10+162.405 BK.= P.I. STA. AB10+152.068 AHD.
END RAMP AB P.T. STA. AB10+196.564 = RAMP A STA. A10+000.000, 2.4 m LT.
END RAMP B P.T. STA. B10+323.782 = RAMP AB P.T. STA. AB10+196.564, 2.4 m LT
P.I. STA. AB10+064.545 BK.= P.I. STA. AB10+063.860 AHD.
P.I. STA. B10+287.211 BK.= P.I. STA. B10+266.916 AHD.
P.I. STA. C10+093.768 BK.= P.I. STA. C10+086.785 AHD.
P.I. STA. A10+109.639 BK.= P.I. STA. A10+095.240 AHD.
P.I. STA. Y10+114.646 BK.= P.I. STA. Y10+114.528 AHD.
P.I. STA. B10+203.623 BK.= P.I. STA. B10+201.819 AHD.
P.I. STA. D10+131.970 BK.= P.I. STA. D10+130.450 AHD.
P.I. STA. X10+278.556 BK.= P.I. STA. X10+278.451 AHD.
P.I. STA. 60+937.3412
MATCH LINE STA. C10+140.000 DWG. A-3
MATCH LINE STA. D10+080.000 DWG. A-3
RAMP X P.T. STA. X10+320.871 = RAMP D STA. D10+217.568 END RAMP D LANE TAPER END RAMP D SHOULDER WIDENING P.T. STA. X10+320.871 = STA. D10+217.568
BEGIN RAMP B STA. B10+000.000 ULTIMATE W.B. STA. I7+369.827
END RAMP D STA. D10+297.827 = ULTIMATE E.B. STA. I7+359.765
ABI0+000 S62°31'08.4"W
N27°42'50.8"W 61+000
S89°25'41.3"W
N89°15'15.0"W
S88°02'03.5"E
N85°01'48.0"E
S85°01'48.0"W
S40°52'02.1"E
N59°47'52.2"W
N22°33'52.7"E
N57°45'09.0"E
10 0 10 m
1: 500 @ FULL SIZE

ALIGNMENT PLAN

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY D.E.G. DATE 9/00
DRAWN BY K.H.D. DATE 9/00
CHECKED BY T.P.K. DATE 9/00
DESIGN FILE NO. 5116/VAOT/A4.DGN
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(11) C/4
PROJ. NO. P.I.N. 1306.60
DWG NO. A-2 SHEET 73 OF 385

FILE NAME =ut\5116\vaot\contract4\a4.dgn
DATE/TIME =08 SEP 2000
USER =1459

Metric



VT STATE PLANE GRID

CURVE C-1
P.C.= STA. C10+032.651
P.T.= STA. C10+147.902
Δ= 47°10'01.4" RT
R= 140.000 m
T= 61.117 m
L= 115.251 m
E= 12.759 m
e_{max}= 0.056 DN. RT

CURVE D-1
P.C.= STA. D10+000.000
P.C.C.= STA. D10+105.074
Δ= 92°37'11.1" RT
R= 65.000 m
T= 68.042 m
L= 105.074 m
E= 29.100 m
e_{max}= 0.077 DN. RT

CURVE CD-1
P.C.= STA. CD10+041.786
P.T.= STA. CD10+097.161
Δ= 36°18'05.7" RT
R= 87.400 m
T= 28.653 m
L= 55.375 m
E= 4.577 m
e_{max}= 0.020 DN. RT

CURVE CD-2
P.C.= STA. CD10+212.197
P.T.= STA. CD10+271.929
Δ= 50° 46'39.9" RT
R= 67.400 m
T= 31.988 m
L= 59.732 m
E= 7.206 m
e_{max}= 0.077 DN. RT

CURVE 67A-1
P.C.= STA. 60+663.832
P.T.= STA. 60+870.830
Δ= 27°09'52.9" RT
R= 436.600 m
T= 105.482 m
L= 206.998 m
E= 12.562 m
e_{max}= N/A

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

10 0 10 m
1: 500
@ FULL SIZE

ALIGNMENT PLAN

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY D.E.G. DATE 9/00
DRAWN BY K.H.D. DATE 9/00
CHECKED BY T.P.K. DATE 9/00

DESIGN FILE NO. 5116/VAOT/A3.DGN
PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG NO. A-3 SHEET 74 OF 385

FILE NAME =u:\5116\vaot\contract4\a3.dgn
DATE/TIME =08 SEP 2000
USER =1459

HORIZONTAL CONTROL TABLE

HCL POINT	COORDINATES NORTH	COORDINATES EAST	HCL STATION	DESCRIPTION
VT. ROUTE 9				
BEGIN VT. ROUTE 9 D.P.I. 0146(1) C/4	45264.892	440709.875	16+695.000	BEGIN VT. ROUTE 9 D.P.I. 0146(1) C/4
P.C. CURVE W.B. 8	45255.051	440758.080	16+744.201	
P.I. CURVE W.B. 8	45214.430	440957.064	P.I. STA. 16+947.288 BK. = P.I. STA. 16+944.475 AHD.	
P.T. CURVE W.B. 8 STOP VT. ROUTE 9	45232.025	441159.388	16+978.091	
RESUME VT. ROUTE 9	45251.281	441380.817	17+369.827	RESUME WESTBOUND INITIAL H.C.L. STA. 17+369.827 = STA. B10+000.000
END VT. ROUTE 9	45282.081	441735.010	17+725.355	
RAMPS				
BEGIN RAMP X	45227.585	440990.079	X10+000.000	
P.C. CURVE X-1	45219.486	441226.076	X10+236.136	
P.I. CURVE X-1	45218.031	441268.470	P.I. STA. X10+278.556 BK. = P.I. STA. X10+278.452 AHD.	
P.T. CURVE X-1	45221.706	441310.730	X10+320.871	
END RAMP X	45222.592	441320.916	X10+331.096	
BEGIN RAMP Y	45227.585	440990.079	Y10+000.000	
P.C. CURVE Y-1	45225.316	441056.213	Y10+066.173	
P.I. CURVE Y-1	45223.653	441104.657	P.I. STA. Y10+114.646 BK. = P.I. STA. Y10+114.528 AHD.	
P.T. CURVE Y-1	45227.852	441152.949	Y10+163.001	
END RAMP Y	45232.525	441206.691	Y10+216.946	
BEGIN RAMP AB	45411.117	441314.385	AB9+980.000	
P.C. CURVE AB-1	45380.670	441255.850	AB10+045.980	
P.I. CURVE AB-1	45372.103	441239.380	P.I. STA. AB10+064.545 BK. = P.I. STA. AB10+063.860 AHD.	
P.T. CURVE AB-1	45371.918	441220.815	AB10+082.425	
P.C. CURVE AB-2	45371.563	441185.333	AB10+117.909	
P.I. CURVE AB-2	45371.119	441140.839	P.I. STA. AB10+162.405 BK. = P.I. STA. AB10+152.068 AHD.	
P.T. CURVE AB-2 / END RAMP AB	45330.030	441123.765	AB10+196.564	
BEGIN RAMP A	45330.951	441121.549	A10+000.000	
P.C. CURVE A-1	45284.705	441102.332	A10+050.080	
P.I. CURVE A-1	45229.705	441079.478	P.I. STA. A10+109.639 BK. = P.I. STA. A10+095.240 AHD.	
P.C.C. CURVE A-1 / A-2	45230.480	441019.923	AB10+154.799	
P.I. CURVE A-2	45230.673	441005.059	P.I. STA. A10+169.665 BK. = P.I. STA. A10+169.663 AHD.	
P.T. CURVE A-2 / END RAMP A	45231.183	440990.202	A10+184.529	
BEGIN RAMP B	45251.281	441380.817	B10+000.000	
P.C. CURVE B-1	45236.112	441206.379	B10+175.097	
P.I. CURVE B-1	45233.640	441177.961	P.I. STA. B10+203.623 BK. = P.I. STA. B10+201.819 AHD.	
P.C.C. CURVE B-1 / B-2	45247.990	441153.307	B10+230.345	
P.I. CURVE B-2	45276.597	441104.161	P.I. STA. B10+287.211 BK. = P.I. STA. B10+266.916 AHD.	
P.T. CURVE B-2 / END RAMP B	45329.109	441125.982	B10+323.782	
BEGIN RAMP CD	45135.239	441460.248	CD9+980.000	
P.C. CURVE CD-1	45097.245	441411.525	CD10+041.786	
P.I. CURVE CD-1	45079.625	441388.930	P.I. STA. CD10+070.439 BK. = P.I. STA. CD10+068.508 AHD.	
P.T. CURVE CD-1	45078.804	441360.290	CD10+097.161	
P.C. CURVE CD-2	45075.501	441245.301	CD10+212.197	
P.I. CURVE CD-2	45074.583	441213.327	P.I. STA. CD10+244.185 BK. = P.I. STA. CD10+239.941 AHD.	
P.T. CURVE CD-2 / END RAMP CD	45098.773	441192.397	CD10+271.929	
BEGIN RAMP C	45223.988	440989.955	C10+000.000	
P.C. CURVE C-1	45222.868	441022.587	C10+032.651	
P.I. CURVE C-1	45220.771	441083.667	P.I. STA. CD10+093.768 BK. = P.I. STA. C10+086.785 AHD.	
P.T. CURVE C-1	45174.553	441123.657	C10+147.902	
END RAMP C	45097.203	441190.582	C10+250.186	
BEGIN RAMP D / P.C. CURVE D-1	45100.344	441194.212	D10+000.000	
P.I. CURVE D-1	45151.799	441149.691	P.I. STA. D10+068.042 BK. = P.I. STA. D10+037.032 AHD.	

HORIZONTAL CONTROL TABLE

HCL POINT	COORDINATES NORTH	COORDINATES EAST	HCL STATION	DESCRIPTION
RAMPS (CONT.)				
P.C.C. CURVE D-1 / D-2	45193.921	441203.128	D10+105.074	
P.I. CURVE D-2	45210.572	441224.251	P.I. STA. D10+131.970 BK. = P.I. STA. D10+130.450 AHD.	
P.T. CURVE D-2	45212.902	441251.046	D10+157.346	
END RAMP D	45225.072	441390.999	D10+297.827	
RAMP Z				
BEGIN RAMP Z	45383.611	441165.452	Z10+000.000	
P.C. CURVE Z-1	45389.840	441130.389	Z10+035.612	
P.I. CURVE Z-1	45407.856	441028.976	P.I. STA. Z10+138.613 BK. = P.I. STA. Z10+078.280 AHD.	
P.C.C. CURVE Z-1 / Z-2	45305.139	441036.616	Z10+181.281	
P.I. CURVE Z-2	45274.771	441038.875	P.I. STA. Z10+211.733 BK. = P.I. STA. Z10+209.548 AHD.	
P.T. CURVE Z-2 / END RAMP Z	45252.040	441059.140	Z10+240.000	
VT. ROUTE 67A				
BEGIN VT. ROUTE 67A	44.965.439	441602.981	60+564.828	
P.C. CURVE 67A-1	45022.397	441522.002	60+663.832	
P.I. CURVE 67A-1	45083.082	441435.724	P.I. STA. 60+769.314 BK. = P.I. STA. 60+765.348 AHD.	
P.T. CURVE 67A-1	45176.463	441386.669	60+870.830	
P.I.	45235.407	441355.704	60+937.412	ANGLE POINT
P.I.	45390.288	441274.341	61+112.364	ANGLE POINT
END VT. ROUTE 67A	45542.334	441194.467	61+284.113	
SILK ROAD				
BEGIN SILK ROAD	45105.020	440847.119	SR0+000.000	
P.C. CURVE SR-1	45105.020	440847.119	SR0+000.000	
P.I. CURVE SR-1	45128.620	440843.201	P.I. STA. SR0+023.921 BK. = P.I. STA. SR0+023.847 AHD.	
P.T. CURVE SR-1	45151.466	440836.109	SR0+047.770	
P.C. CURVE SR-2	45296.271	440791.157	SR0+199.392	
P.I. CURVE SR-2	45321.588	440783.298	P.I. STA. SR0+225.901 BK. = P.I. STA. SR0+225.358 AHD.	
P.T. CURVE SR-2/ END SILK ROAD	45348.066	440784.592	SR0+251.868	
SILK ROAD CHANNEL				
BEGIN SILK ROAD CHANNEL	45235.455	440688.556	S10+006.000	
P.C. CURVE S-1	45234.890	440690.326	S10+007.858	
P.I. CURVE S-1	45232.351	440698.279	P.I. STA. S0+016.206 BK. = P.I. STA. S0+016.204 AHD.	
P.T. CURVE S-1	45224.912	440702.067	S10+023.675	
P.C. CURVE S-2	45140.458	440745.069	S10+118.446	
P.I. CURVE S-2	45129.779	440750.506	P.I. STA. S0+130.429 BK. = P.I. STA. S0+128.055 AHD.	
P.T. CURVE S-2	45129.537	440762.487	S10+140.038	
P.I.	45128.458	440815.768	S10+193.331	ANGLE POINT
P.I.	45130.310	440826.504	S10+204.225	ANGLE POINT
P.I.	45131.282	440835.186	S10+212.961	ANGLE POINT
P.I.	45132.254	440846.628	S10+224.445	ANGLE POINT
P.I.	45132.092	440850.356	S10+228.176	ANGLE POINT
P.I.	45131.174	440854.419	S10+232.342	ANGLE POINT
END SILK ROAD CHANNEL	45128.149	440859.928	S10+238.626	ANGLE POINT
RESUME EASTBOUND				
BEGIN EASTBOUND	45225.072	441390.999	17+359.765	BEGIN EASTBOUND H.C.L. STA. 17+359.765 = D10+297.827
END EASTBOUND	45257.458	441763.384	17+733.554	
RAMP AB CULVERT				
BEGIN RAMP AB CULVERT	45325.337	441167.925	RAB1+000.000	
P.I.	45342.361	441094.516	RAB1+075.357	ANGLE POINT
P.I.	45343.798	441091.717	RAB1+078.503	ANGLE POINT
END RAMP AB CULVERT	45351.613	441085.316	RAB1+088.605	

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

HORIZONTAL CONTROL TABLE

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY D.E.G. DATE 9/00
DRAWN BY T.J.B. DATE 9/00
CHECKED BY T.P.K. DATE 9/00

DESIGN FILE NO. /5116/VAOT/VTHVC-1.DGN

PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. HC-1 SHEET 75 OF 385

FILE NAME =u:\5116\vaot\contract4\vthvc-1.dgn
DATE/TIME =07 SEP 2000
USER =1459

Metric

HORIZONTAL CONTROL TABLE

HCL POINT	COORDINATES NORTH	COORDINATES EAST	HCL STATION	DESCRIPTION
WALLOOMSAC RIVER CHANNEL				
BEGIN WALLOOMSAC RIVER	45179.871	440928.319	WRI+000.000	
P.I.	45200.475	440938.227	WRI+022.862	ANGLE POINT
P.I.	45204.253	440955.566	WRI+040.608	ANGLE POINT
P.I.	45202.879	440994.491	WRI+079.558	ANGLE POINT
P.I.	45216.616	441012.892	WRI+102.521	ANGLE POINT
P.I.	45238.594	441019.969	WRI+125.610	ANGLE POINT
P.I.	45261.946	440995.199	WRI+159.652	ANGLE POINT
P.I.	45283.580	440955.566	WRI+204.805	ANGLE POINT
P.I.	45289.762	440933.273	WRI+227.939	ANGLE POINT
P.I.	45290.792	440913.103	WRI+248.136	ANGLE POINT
P.I.	45281.520	440896.471	WRI+267.178	ANGLE POINT
P.I.	45258.511	440881.255	WRI+294.763	ANGLE POINT
P.I.	45235.160	440864.624	WRI+323.431	ANGLE POINT
P.I.	45234.129	440850.116	WRI+337.975	ANGLE POINT
P.I.	45241.684	440834.546	WRI+355.282	ANGLE POINT
P.I.	45260.915	440822.160	WRI+378.156	ANGLE POINT
END WALLOOMSAC RIVER	45320.089	440804.185	WRI+440.000	
TOWN OF BENNINGTON SANITARY SEWER				
BEGIN SANITARY SEWER LINE	45053.039	441349.095	SSI+000.000	
P.I.	45108.952	441377.309	SSI+062.628	ANGLE POINT
END SANITARY SEWER LINE	45125.775	441408.341	SSI+097.927	

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

FILE NAME =u:\5116\vaot\contract4\vthvc-2.dgn
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USER =1459

HORIZONTAL CONTROL TABLE

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY D.E.G. DATE 9/00
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CHECKED BY T.P.K. DATE 9/00

DESIGN FILE NO. /5116/VAOT/VTHVC-2.DGN

PROJ. NAME BENNINGTON - HOOSICK
D.P.J. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. HC-2 SHEET 76 OF 385

BASELINE TIES

℄ A 845, STA. 55+040.097
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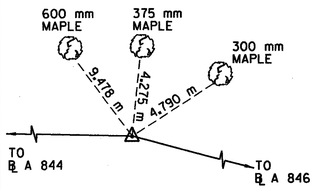
E=440600.088



℄ A 846, STA. 55+157.035
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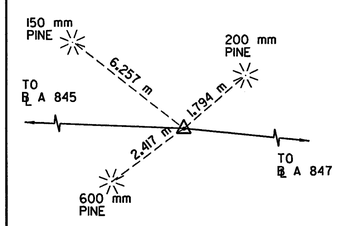
E=440711.135



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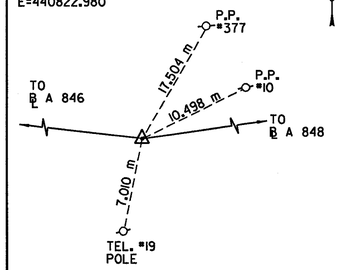

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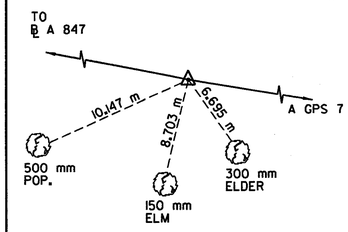

℄ A GPS 7, STA. 55+840.906
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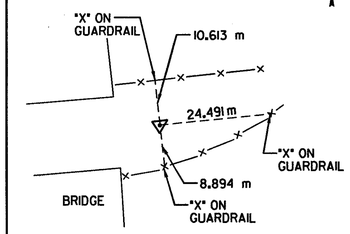

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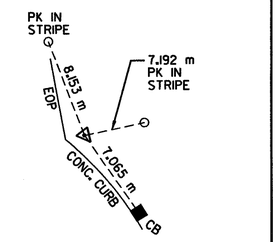


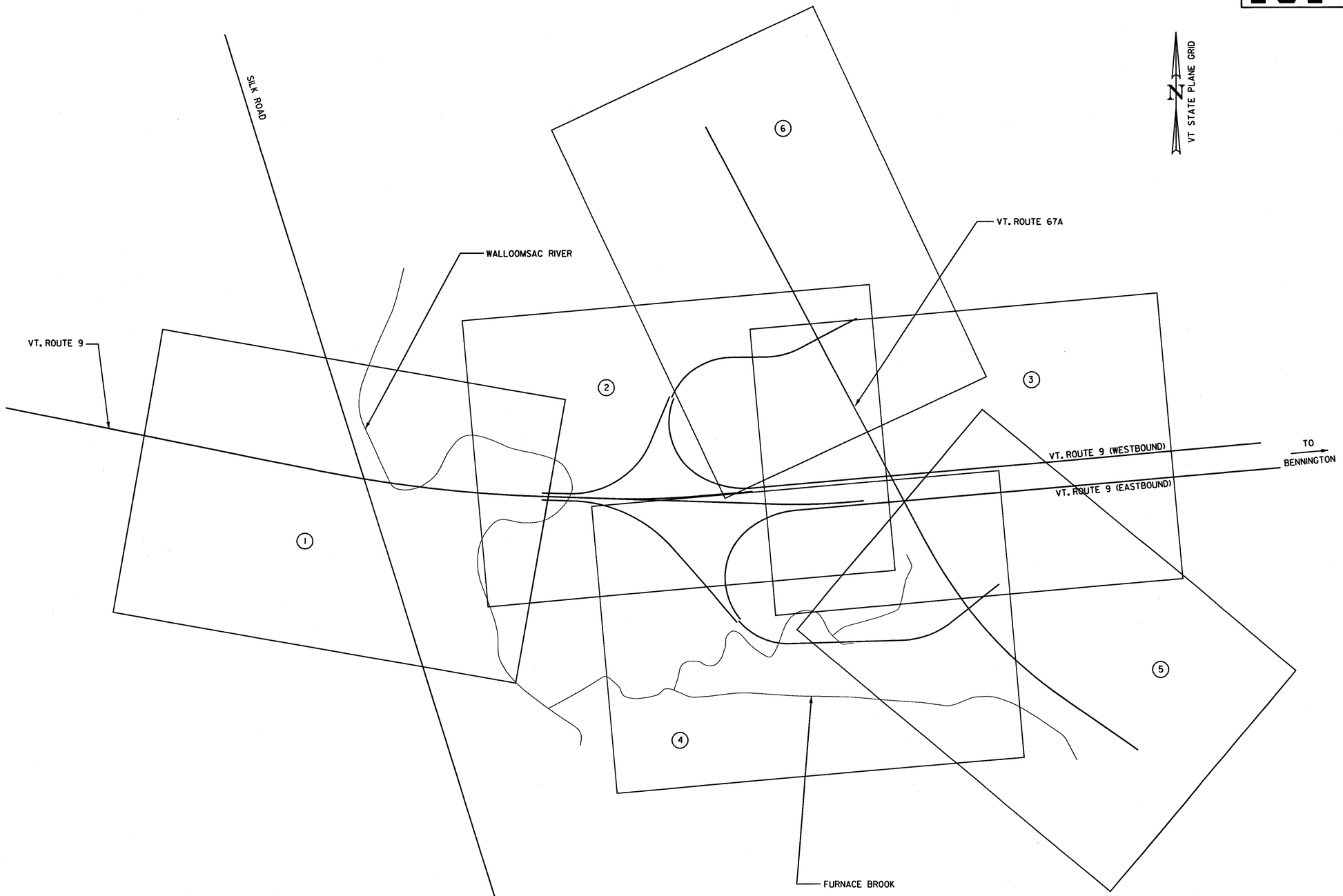
DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

BASELINE TIE DATA SHEET

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY J.F.C. DATE 9/00
DRAWN BY K.H.D. DATE 9/00
CHECKED BY T.P.K. DATE 9/00
DESIGN FILE NO. /5116/BL-TIE.dgn
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG NO. BL-1 SHEET 77 OF 385

FILE NAME =u:\5116\vast\contract4\bl_tie.dgn
DATE/TIME = 07 SEP 2000
USER = 1459

VAOT Metric



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@ FULL SIZE

LAYOUT KEY PLAN

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY D.E.G. DATE 9/00
DRAWN BY J.N. DATE 9/00
CHECKED BY T.P.K. DATE 9/00

DESIGN FILE NO. LAYOUT.DGN

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. L-1 SHEET 78 OF 385

FILE NAME =u:\5116\vaot\contract4\layout.dgn
DATE/TIME =08 SEP 2000
USER =1459

616.35 TREATED TIMBER CURB
STA. 16+697.7 - STA. 16+764.2 RT (66.5 m)
STA. 16+698.2 - STA. 16+753.5 LT (55.3 m)
~~STA. SR0+140.3 - STA. SR0+282.5 RT (100.3m)~~

621.20 STEEL BEAM GUARDRAIL
STA. SR0+002.8 - STA. SR0+068.6 LT (65.8 m)
~~STA. 16+697.7225 - STA. 16+754.767 RT (57 m)~~ (41.9m)
STA. 16+698.2 - STA. 16+743.8 LT (45.6 m)

621.20 STEEL BEAM GUARDRAIL W/2.4 m POSTS (MOD.)
STA. SR0+140.3 - STA. SR0+251.7 RT (111.4 m)

621.60 ANCHOR FOR STEEL BEAM RAIL
STA. SR0+005.3 LT
STA. SR0+066.1 LT
STA. SR0+142.8 RT
STA. SR0+249.2 RT

~~620.21 CHAIN LINK FENCE (1.8m)~~

621.72 GUARDRAIL APPROACH SECTION, NETC 2 RAIL (MOD.)
STA. 16+743.8 - STA. 16+751.4 LT
STA. 16+754.7 - STA. 16+762.3 RT

620.25 WOVEN WIRE FENCE W/1.2 m STEEL POSTS
STA. 16+675.400 - STA. 16+700.000 RT (26.1 m)
STA. 16+675.851 - STA. 16+706.280 LT (31.6 m)
STA. 16+700.000 - STA. 16+729.100 RT (30.7 m)
STA. 16+706.280 - STA. 16+749.100 LT (43.8 m)
STA. 16+729.100 - STA. 16+767.400 RT (59.9 m)
STA. 16+749.100 - STA. 16+750.700 LT (63.4 m)

620.21 BRACING ASSEMBLY FOR CHAIN-LINK FENCE, 1.8 m
STA. SR0+020.900 RT (1EA)
STA. SR0+141.368 RT (1EA)
STA. SR0+201.600 RT (1EA)
STA. SR0+234.500 RT (1EA)
STA. 16+796.800 LT (1EA)
STA. 16+877.100 LT (1EA)
STA. 16+895.400 RT (1EA)
STA. 16+924.400 RT (1EA)
STA. 16+940.400 RT (1EA)
STA. 16+955.200 RT (1EA)
STA. 16+955.400 LT (1EA)
STA. 16+957.000 RT (1EA)

620.40 STEEL BRACE FOR WOVEN WIRE FENCE
STA. 16+675.400 RT (1EA)
STA. 16+675.815 LT (1EA)
STA. 16+700.000 RT (2 EA)
STA. 16+706.280 LT (2 EA)
STA. 16+729.100 RT (2 EA)
STA. 16+749.100 LT (2 EA)
STA. 16+750.700 LT (1EA)
STA. 16+767.400 RT (1EA)

620.12 CHAIN-LINK FENCE, 1.8 m
~~STA. SR0+020.900 - STA. SR0+141.368 RT (120.1m)~~
~~STA. SR0+141.368 - STA. SR0+201.600 RT (60.2 m)~~
~~STA. SR0+201.600 - STA. SR0+234.500 RT (31.7 m)~~
~~STA. 16+796.800 - STA. 16+877.100 LT (77.0 m)~~
~~STA. 16+850.780 - STA. 16+895.400 RT (53.4 m)~~
~~STA. 16+895.400 - STA. 16+924.400 RT (41.4 m)~~
~~STA. 16+940.400 - STA. 16+955.200 RT (21.5 m)~~
~~STA. 16+955.400 - STA. 16+960.000 LT (45.3 m)~~
~~STA. 16+957.000 - STA. 16+960.000 RT (23.3 m)~~

CURVE W.B. 8
P.C.= STA. 16+744.201
P.T.= STA. 16+978.091
Δ= 09° 34' 19.5" LT
R= 1400.000 m
T= 117.218 m
L= 233.890 m
E= 4.899 m
emax= 0.036 DN. LT

CURVE SR-2
P.C.=STA. SR0+199.392
P.T.=STA. SR0+251.868
Δ= 20° 02' 40.0" RT
R= 150.000 m
T= 26.509 m
L= 52.477 m
E= 2.324 m
emax= N/A

CURVE S-1
P.C.=STA. S10+007.858
P.T.= STA. S10+023.675
Δ= 45° 18' 44.9" RT
R= 20.000 m
T= 8.348 m
L= 15.817 m
E= 1.672 m
emax= N/A

CURVE S-2
P.C.=STA. S10+118.446
P.T.= STA. S10+140.038
Δ= 61° 51' 24.0" LT
R= 20.000 m
T= 11.983 m
L= 21.592 m
E= 3.315 m
emax= N/A

CURVE SR-1
P.C.=STA. SR0+000.000
P.T.= STA. SR0+047.768
Δ= 07° 49' 11.4" LT
R= 350.000 m
T= 23.921 m
L= 47.768 m
E= 0.817 m
emax= N/A

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

NOTE:
1. ITEM 626.30 PUMP TEST FOR YIELD (MOD.) SHALL BE USED TO TEST THE WELLS ON THE LANDS REPUTEDLY OWNED BY WILLIAM WOLFE, AND JANET & THOMAS MILLER, JR. SAMPLING OF THE WELL WATER SHALL BE SUBSIDIARY TO ITEM 626.30 PUMP TEST FOR YIELD (MOD.) OR AS DIRECTED BY THE RESIDENT ENGINEER.

1:500 @ FULL SIZE

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.S.L.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. 5116/vaot/vtp21.dgn
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG NO. P-1 SHEET 79 OF 385

PLAN

FILE NAME = u:\5116\vaot\contract4\vtp21.dgn
DATE/TIME = 08 SEP 2000
USER = 1459

621.20 STEEL BEAM GUARDRAIL
STA. A10+059.0 - STA. A10+127.4 RT (68.4 m)
STA. C10+064.7 - STA. C10+140.0 RT (75.3 m)

621.505 MANUFACTURED TERMINAL SECTION (FLARED)
STA. A10+059.0 RT

616.41 REMOVAL OF EXISTING CURB
STA. AB10+110.0 - STA. A10+030.0 RT (366.5 m)

616.20 GRANITE SLOPE EDGING
STA. AB10+110.0 - STA. AB10+196.6 LT (86.6 m)
STA. AB10+110.0 - STA. AB10+196.6 RT (86.6 m)

616.26 PRECAST REINFORCED CONCRETE CURB, TYPE B OR
616.28 CAST-IN-PLACE CEMENT CONCRETE CURB, TYPE B

STA. AB10+110.0 - STA. AB10+126.3 RT (16.9 m)

621.72 GUARDRAIL APPROACH SECTION, NETC 2 RAIL (MOD.)
STA. A10+127.4 - STA. A10+135.0 RT
STA. C10+057.1 - STA. C10+064.7 RT

620.12 CHAIN-LINK FENCE, 1.8 m
STA. 16+960.000 - STA. 16+978.085 RT (19.5 m)
STA. 16+960.000 - STA. 16+963.100 LT (21.6 m)
STA. 16+963.100 - STA. 16+978.085 LT (28.1 m)
STA. C10+000.000 - STA. C10+034.100 RT (33.1 m)
STA. C10+034.100 - STA. C10+140.000 RT (41.0 m)
STA. AB10+110.000 - STA. AB10+171.900 RT (138.1 m)
STA. AB10+171.900 - STA. AB10+196.564 RT (70.6 m)
STA. A10+000.000 - STA. A10+011.000 RT (12.3 m)

620.21 BRACING ASSEMBLY FOR CHAIN-LINK FENCE, 1.8 m
STA. 16+963.100 LT (1 EA)
STA. C10+034.100 RT (1 EA)
STA. C10+032.200 RT (1 EA)
STA. AB10+171.900 RT (1 EA)
STA. A10+011.000 RT (1 EA)

620.55 REMOVAL OF EXISTING FENCE
STA. 16+960.000 - STA. 16+978.091 RT (69.8 m) 13.07
STA. C10+000.000 - STA. C10+140.000 RT (61.1 m)
STA. AB10+110.000 - STA. AB10+162.200 RT (100.4 m) 105.2

616.35 TREATED TIMBER CURB
STA. A10+053.1 - STA. A10+143.0 RT (89.9 m)
STA. C10+055.0 - STA. C10+140.0 RT (85.0 m)

CURVE X-1
P.C.= STA. X10+236.136
P.T.= STA. X10+320.871
Δ= 06° 56'08.5" LT
R= 700.000 m
T= 42.420 m
L= 84.735 m
E= 1.284 m
emax= 0.063 DN. LT

CURVE Y-1
P.C.= STA. Y10+066.173
P.T.= STA. Y10+163.001
Δ= 06° 56'05.3" LT
R= 800.000 m
T= 48.473 m
L= 96.828 m
E= 1.467 m
emax= 0.057 DN. LT

CURVE A-1
P.C.= STA. A10+050.080
P.C.C.= STA. A10+154.799
Δ= 68° 10'52.3" RT
R= 88.000 m
T= 59.559 m
L= 104.719 m
E= 18.261 m
emax= 0.036 DN. RT

CURVE Z-1
P.C.C.= STA. Z10+035.612
P.C.C.= STA. Z10+181.281
Δ= 104° 19'38.9" LT
R= 80.000 m
T= 103.001 m
L= 145.669 m
E= 50.419 m
emax= N/A

CURVE Z-2
P.C.C.= STA. Z10+181.281
P.T.= STA. Z10+240.000
Δ= 37° 27'52.3" LT
R= 89.801 m
T= 30.452 m
L= 58.719 m
E= 5.023 m
emax= N/A

CURVE B-1
P.C.= STA. B10+175.097
P.C.C.= STA. B10+230.345
Δ= 35° 10'19.8" RT
R= 90.000 m
T= 28.526 m
L= 55.248 m
E= 4.412 m
emax= 0.069 DN. RT

CURVE A-2
P.C.C.= STA. A10+154.799
P.T.= STA. A10+184.529
Δ= 01° 13'11.5" RT
R= 1396.400 m
T= 14.866 m
L= 29.730 m
E= 0.079 m
emax= 0.036 DN. RT

CURVE B-2
P.C.C.= STA. B10+230.345
P.T.= STA. B10+323.782
Δ= 82° 21'44.9" RT
R= 65.000 m
T= 56.866 m
L= 93.437 m
E= 21.364 m
emax= 0.077 DN. RT

CURVE AB-2
P.C.= STA. AB10+117.909
P.T.= STA. AB10+196.564
Δ= 66° 51'48.6" LT
R= 67.400 m
T= 44.496 m
L= 78.655 m
E= 13.363 m
emax= 0.077 DN. LT

CURVE C-1
P.C.= STA. C10+032.651
P.T.= STA. C10+147.902
Δ= 47° 10'01.4" RT
R= 140.000 m
T= 61.117 m
L= 115.251 m
E= 12.759 m
emax= 0.056 DN. RT

CURVE W.B. 8
P.C.= STA. 16+744.201
P.T.= STA. 16+978.091
Δ= 09° 34'19.5" LT
R= 1400.000 m
T= 117.218 m
L= 233.890 m
E= 4.899 m
emax= 0.036 DN. LT

CURVE D-1
P.C.= STA. D10+000.000
P.C.C.= STA. D10+105.074
Δ= 92° 37'11.1" RT
R= 65.000 m
T= 68.042 m
L= 105.074 m
E= 29.100 m
emax= 0.077 DN. RT

CURVE D-2
P.C.C.= STA. D10+105.074
P.T.= STA. D10+157.346
Δ= 33° 16'39.0" RT
R= 90.000 m
T= 26.896 m
L= 52.272 m
E= 3.933 m
emax= 0.069 DN. RT

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

NOTE:
1. SEE DWG. NO. SLP-1 TO SLP-3 FOR PROPOSED STREET LIGHTING PLANS.

1:500 @ FULL SIZE

PLAN	SURVEYED BY C.H.A. & V.S.E. DATE 12/93
	DESIGNED BY D.E.G. DATE 9/00
	DRAWN BY J.S.L. DATE 9/00
	CHECKED BY T.P.K. DATE 9/00
	DESIGN FILE NO. 5116/vaot/vtp22.dgn
	PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
	PROJ. NO. P.I.N. 1306.60
	DWG NO. P-2 SHEET 80 OF 385

FILE NAME =u:\5116\vaot\contract4\vtp22.dgn
DATE/TIME =08 SEP 2000
USER =1459

CURVE D-2

P.C.C.=STA. 10+105.074
P.T.= STA. 10+157.346
Δ=33°16'39.0" RT
R= 90.000 m
T=26.896 m
L=52.272 m
E=3.933 m
e_{max}=0.069 DN. RT

CURVE X-1

P.C.= STA. X10+236.136
P.T.= STA. X10+320.871
Δ=06°56'08.5" LT
R= 700.000 m
T=42.420 m
L=84.735 m
E=1.284 m
e_{max}=0.063 DN. LT

CURVE 67A-1

P.C.= STA. 60+663.832
P.T.= STA. 60+870.830
Δ=27°09'52.9" RT
R= 436.600 m
T=105.482 m
L=206.998 m
E=12.562 m
e_{max}=N/A

616.26 PRECAST REINFORCED CONCRETE CURB, TYPE B OR 616.28 CAST-IN-PLACE CEMENT CONCRETE CURB, TYPE B

STA. 60+870.0 - STA. 60+915.0 LT (45.4 m)
STA. 61+030.3 - STA. 61+040.0 LT (9.7 m)

604.42 CHANGING ELEVATION OF SEWER MANHOLE

STA. 60+899.6 LT
STA. 61+013.8 LT

616.47 BITUMINOUS CONCRETE GUTTERS AND TRAFFIC ISLANDS

STA. B10+053.1 - STA. B10+073.2 LT (4.4 t)
STA. B10+060.6 - STA. B10+073.2 LT (3.1 t)

621.75 REMOVING AND RESETTING GUARDRAIL

STA. B10+059.4 - STA. B10+091.7 LT (32.3 m)
STA. B10+065.7 - STA. B10+119.3 RT (53.6 m)
STA. D10+194.8 - STA. D10+243.7 RT ~~(48.9 m)~~ 24.45 m
STA. D10+227.8 - STA. D10+237.5 LT (9.7 m)
STA. X10+281.1 - STA. X10+331.1 LT (50.0 m)

616.41 REMOVAL OF EXISTING CURB

STA. 60+870.0 - STA. 60+915.0 LT (45.0 m)
STA. 61+030.3 - STA. 61+040.0 LT (9.7 m)

620.12 CHAIN-LINK FENCE, 1.8 m

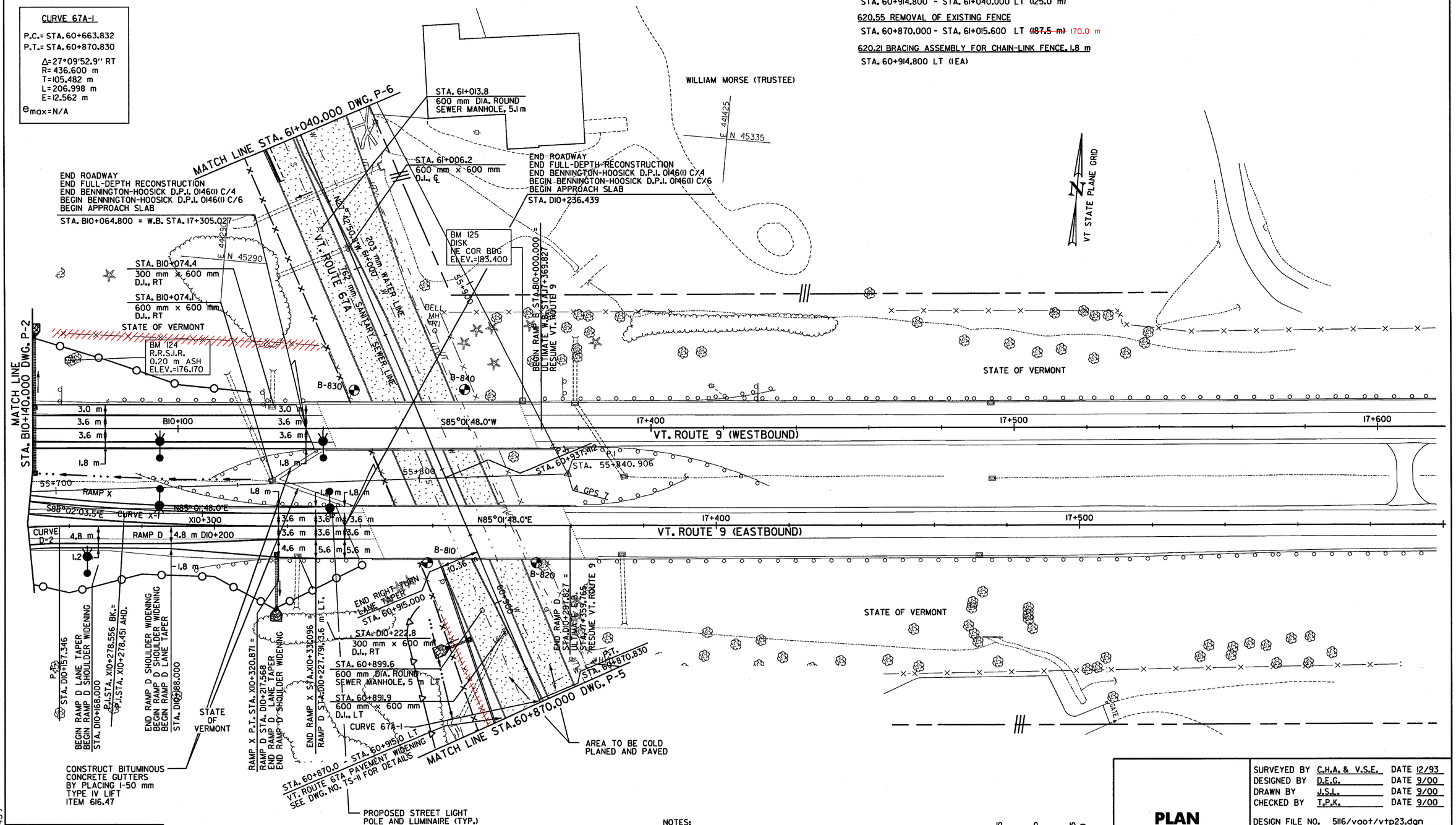
STA. 60+870.000 - STA. 60+914.800 LT (44.0 m)
STA. 60+914.800 - STA. 61+040.000 LT (125.0 m)

620.55 REMOVAL OF EXISTING FENCE

STA. 60+870.000 - STA. 61+015.600 LT ~~(187.5 m)~~ 170.0 m

620.21 BRACING ASSEMBLY FOR CHAIN-LINK FENCE, 1.8 m

STA. 60+914.800 LT (1 EA)



DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

NOTES:
1. SEE DWG. NO. SLP-1 TO SLP-3 FOR PROPOSED STREET LIGHTING PLANS.
2. ALL COLD PLANED AREAS SHALL BE PAVED WITH A LEVELING COURSE FOR THE TRAVELING PUBLIC.

10 0 10 m
1: 500
@ FULL SIZE

PLAN

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.S.L.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. 5116/vaot/vtp23.dgn
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG NO. P-3

FILE NAME =u:\5116\vaot\contract4\vtp23.dgn
DATE/TIME =08 SEP 2000
USER =1459

VT Metric

620.12 CHAIN-LINK FENCE, 1.8 m

STA. C10+140.000	- STA. C10+163.300	RT	(21.6 m)
STA. C10+163.300	- STA. C10+181.300	RT	(31.0 m)
STA. C10+181.300	- STA. C10+194.300	RT	(14.5 m)
STA. C10+194.300	- STA. C10+208.900	RT	(17.5 m)
STA. C10+208.900	- STA. C10+239.000	RT	(47.3 m)
STA. C10+239.000	- STA. C10+247.200	RT	(65.1 m)
STA. C10+247.200	- STA. C10+250.186	RT	(3.0 m)
STA. CD10+110.000	- STA. CD10+125.400	LT	(17.4 m)
STA. CD10+125.400	- STA. CD10+227.500	LT	(111.7 m)
STA. CD10+227.500	- STA. CD10+271.929	LT	(66.5 m)

620.21 BRACING ASSEMBLY FOR CHAIN-LINK FENCE, 1.8 m

STA. C10+163.300	RT	(1 EA)
STA. C10+181.300	RT	(1 EA)
STA. C10+194.300	RT	(1 EA)
STA. C10+208.900	RT	(1 EA)
STA. C10+239.000	RT	(1 EA)
STA. C10+247.200	RT	(1 EA)
STA. CD10+125.400	LT	(1 EA)
STA. CD10+227.500	LT	(1 EA)

620.55 REMOVAL OF EXISTING FENCE

STA. C10+140.000 - STA. C10+250.186 RT (202.4 m)
STA. CD10+110.000 - STA. CD10+271.929 LT (193.8 m)

616.20 GRANITE SLOPE EDGING

STA. CD10+110.0 - STA. CD10+271.9 LT (161.9 m)
STA. CD10+110.0 - STA. CD10+271.9 RT (161.9 m)

616.26 PRECAST REINFORCED CONCRETE CURB, TYPE B OR 616.28 CAST-IN-PLACE CEMENT CONCRETE CURB, TYPE B

STA. CD10+110.0 - STA. CD10+120.0 RT (10.0 m)

616.35 TREATED TIMBER CURB

STA. CD10+120.0 - STA. CD10+271.9 RT (151.9 m)
STA. C10+140.0 - STA. C10+229.1 RT (89.1 m)
STA. D10+000.0 - STA. D10+018.8 RT (18.8 m)

621.52 MANUFACTURED TERMINAL SECTION

STA. C10+239.5 - STA. C10+243.9 RT (1 EA)
STA. D10+015.0 - STA. D10+019.4 RT (1 EA)

621.20 STEEL BEAM GUARDRAIL

STA. CD10+119.7 - STA. CD10+271.9 RT (152.2 m)
STA. C10+140.0 - STA. C10+239.5 RT (99.5 m)
STA. D10+000.0 - STA. D10+015.0 RT (15.0 m)

621.505 MANUFACTURED TERMINAL SECTION (FLARED)

STA. CD10+108.3 RT

621.60 ANCHOR FOR STEEL BEAM GUARDRAIL

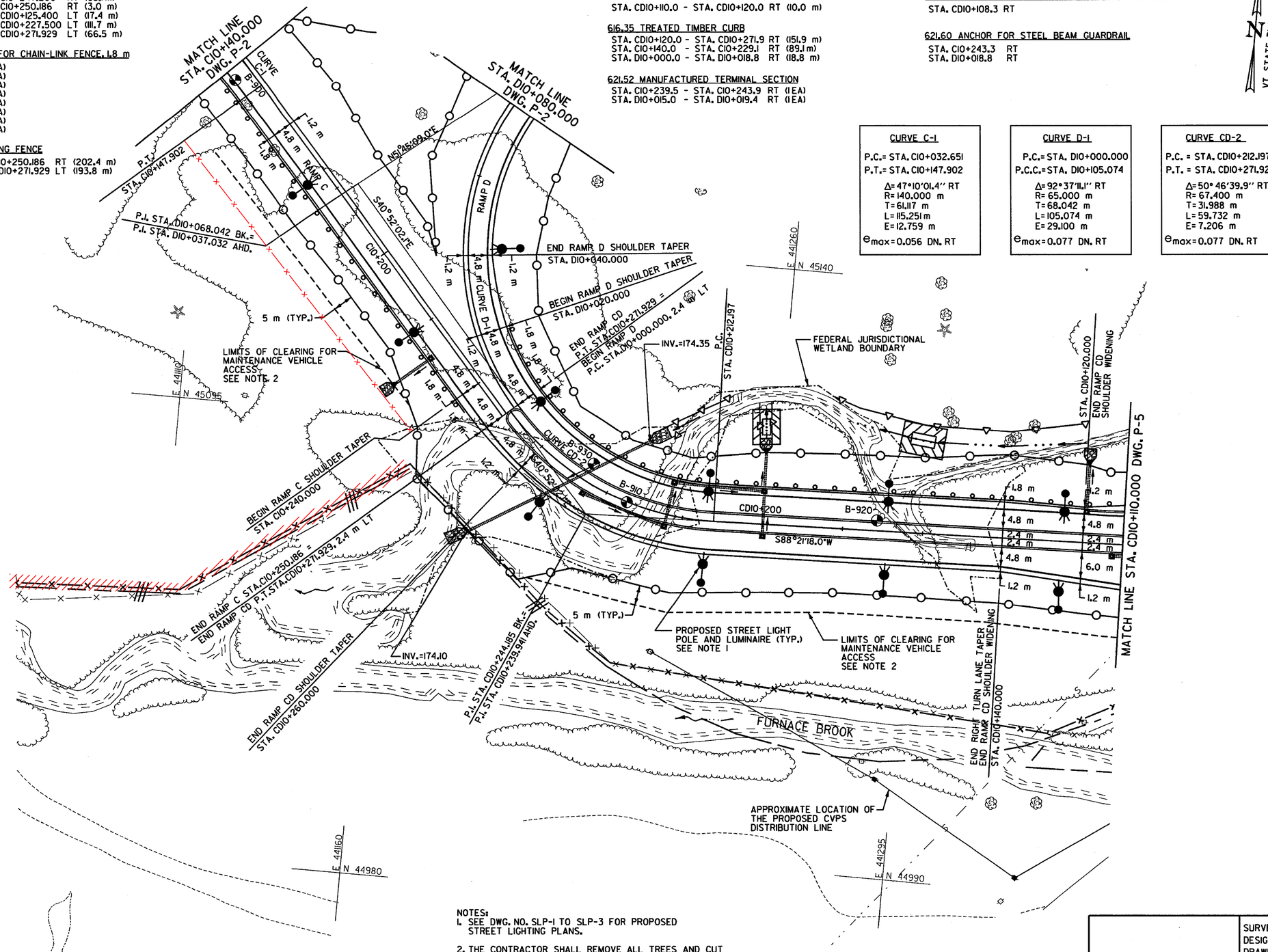
STA. C10+243.3 RT
STA. D10+018.8 RT

VT STATE PLANE GRID N

CURVE C-1
P.C.= STA. C10+032.651
P.T.= STA. C10+147.902
Δ= 47°10'01.4" RT
R= 140.000 m
T= 61.117 m
L= 115.251 m
E= 12.759 m
e_{max}= 0.056 DN. RT

CURVE D-1
P.C.= STA. D10+000.000
P.C.C.= STA. D10+105.074
Δ= 92°37'11.1" RT
R= 65.000 m
T= 68.042 m
L= 105.074 m
E= 29.100 m
e_{max}= 0.077 DN. RT

CURVE CD-2
P.C. = STA. CD10+212.197
P.T. = STA. CD10+271.929
Δ= 50° 46'39.9" RT
R= 67.400 m
T= 31.988 m
L= 59.732 m
E= 7.206 m
e_{max}= 0.077 DN. RT



NOTES:
1. SEE DWG. NO. SLP-1 TO SLP-3 FOR PROPOSED STREET LIGHTING PLANS.
2. THE CONTRACTOR SHALL REMOVE ALL TREES AND CUT ALL STUMPS FLUSH TO THE GROUND WITHIN 5 m OF THE EARTHWORK LIMITS IN THIS VICINITY. THIS WILL FACILITATE MAINTENANCE VEHICLE ACCESS TO THE UTILITY LINES THAT ARE NOT IMMEDIATELY ADJACENT TO THE PROPOSED CONSTRUCTION.

10 0 10 m
1: 500 @ FULL SIZE

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

PLAN

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.S.L.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. 5116/vaot/vtp24.dgn
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG NO. P-4 SHEET 82 OF 385

FILE NAME =u:\5116\vaot\contract4\vtp24.dgn
DATE/TIME =08 SEP 2000
USER =1459

CURVE CD-1

P.C. = STA. CD10+041.786
P.T. = STA. CD10+097.161
Δ= 36°18'05.7" RT
R= 87.400 m
T= 28.653 m
L= 55.375 m
E= 4.577 m
e_{max}=0.020 DN. RT

CURVE 67A-1

P.C.= STA. 60+663.832
P.T.= STA. 60+870.830
Δ= 27°09'52.9" RT
R= 436.600 m
T=105.482 m
L= 206.998 m
E= 12.562 m
e_{max}=N/A

VT STATE PLANE GRID

STATE OF VERMONT

GATE

VT. ROUTE 67A STA. 60+789.574 = RAMP CD STA. CD10+019.604

LIMIT OF COLD PLANING & PAVING
BEGIN FULL-DEPTH RECONSTRUCTION
STA. CD10+028.800

STA. 60+775.1
600 mm x 600 mm
DROP INLET, 1.6 m RT

STA. 60+675.0 - STA. 60+781.6 RT/LT
VT. ROUTE 67A TURN LANE WIDENING
SEE DWG. NO. TS-11 FOR DETAILS

E 441500 N 45160

E 441595 N 45095

STA. 60+744.1
WATER VALVE, 13.7 m RT

STA. 60+860.0 - STA. 60+870.0
VT. ROUTE 67A PAVEMENT WIDENING
SEE DWG. NO. TS-11 FOR DETAILS

WILLIAM MORSE (TRUSTEE)

MELVIN STEWART

STA. 60+708.3
600 mm DIA. ROUND
SEWER MANHOLE, 6.5 m RT

STA. 60+812.8
WATER VALVE, 8.2 m RT

STA. 60+810.5
600 mm DIA. ROUND
SEWER MANHOLE,
24.5 m RT

LIMIT OF COLD PLANING & PAVING STA.CD9+980.000

STA. 60+701.5
600 mm x 600 mm
DROP INLET, RT

STA. 60+701.4
600 mm x 600 mm
DROP INLET, RT

STA. 60+812.1
WATER VALVE, 5.7 m RT

STA. 60+811.2
WATER VALVE,
7.4 m LT

STA. 60+816.7
600 mm DIA. ROUND
SEWER MANHOLE,
7.8 m LT

BEGIN LEFT-TURN LANE
END LEFT-TURN LANE TAPER
STA. 60+730.000

BEGIN LEFT-TURN TAPER
STA. 60+676.000

P.C. STA. 60+663.832

STA. 60+655.7
WATER VALVE, 13.2 m RT

BEGIN COLD PLANING & PAVING STA. 60+640.000

STA. 60+605.3
WATER VALVE, 9.1 m RT

STA. 60+591.0
WATE VALVE, 14.5 m RT

STA. 60+565.4
WATER VALVE, 19.8 m RT

STA. 60+597.7
600 mm DIA. ROUND
SEWER MANHOLE,
1.9 m LT

MATCH LINE STA. 60+870.000 DWG. P-3

MATCH LINE STA. CD10+110.000 DWG. P-4

BEGIN RIGHT TURN TAPER
END RIGHT TURN LANE
STA. 60+860.000

P.C. STA. CD10+041.786

P.T. STA. CD10+097.161

CURVE CD-1

203 mm SANITARY SEWER LINE

203 mm WATER LINE

N27°42'50.8"W

S52°00'12.3"W

S88°21'18.0"W

N54°52'43.4"W

60+600

60+700

CURVE 67A-1

VT. ROUTE 67A

STATE OF VERMONT

TOWN OF BENNINGTON

MORSE ROAD

STA. 60+774.9
600 mm x 600 mm
DROP INLET, LT

STA. 60+701.3
600 mm x 600 mm
DROP INLET, LT

PROPOSED STRAIN POLE AND LUMINAIRE (TYP.) SEE NOTE 1

P.I. STA. 60+769.314 BK.
P.I. STA. 60+765.348 AHD.

SEE CURB RADII IMPROVEMENT DETAIL SHEET SEE DWG. NO. MD-1

P.I. STA. CD10+070.439 BK.
P.I. STA. CD10+068.588 AHD.

FURNACE BROOK

RUN

E 441520 N 44960

AREA TO BE COLD PLANED AND PAVED

SEE CURB RADII IMPROVEMENT DETAIL SHEET SEE DWG. NO. MD-1

PROPOSED STREET LIGHT POLE AND LUMINAIRE (TYP.) SEE NOTE 2

APPROXIMATE LOCATION OF THE PROPOSED CVPS DISTRIBUTION LINE

BEGIN RAMP CD SHOULDER WIDENING
BEGIN RIGHT TURN LANE TAPER
END RIGHT TURN LANE
STA. CD10+100.000

LIMITS OF CLEARING FOR MAINTENANCE VEHICLE ACCESS SEE NOTE 4

10 0 10 m
1: 500
@ FULL SIZE

604.42 CHANGING ELEVATION OF SEWER MANHOLE

STA. 60+708.3 RT
STA. 60+816.7 LT

616.20 GRANITE SLOPE EDGING

STA. CD10+029.4 - STA. CD10+045.7 RT (51.8 m)
STA. CD10+038.3 - STA. CD10+110.0 LT (71.7 m)
STA. CD10+038.3 - STA. CD10+110.0 RT (71.7 m)
STA. 60+675.0 - STA. 60+723.0 RT (48.0 m)
STA. 60+723.0 - STA. 60+781.6 LT (58.6 m)

616.26 PRECAST REINFORCED CONCRETE CURB, TYPE B OR 616.28 CAST-IN-PLACE CEMENT CONCRETE CURB, TYPE B

STA. CD10+028.5 - STA. CD10+088.3 LT (83.1 m)
STA. CD10+032.8 - STA. CD10+110.0 RT (79.8 m)
STA. 60+714.2 - STA. 60+749.9 LT (36.6 m)
STA. 60+832.3 - STA. 60+870.0 LT (39.1 m)

616.41 REMOVAL OF EXISTING CURB

STA. 60+675.0 - STA. 60+781.6 RT (110.5 m)
STA. 60+714.2 - STA. 60+870.0 LT (160.0 m)

621.505 MANUFACTURED TERMINAL SECTION (FLARED)

STA. CD10+108.3 RT

629.20 ADJUST ELEVATION OF VALVE BOX

STA. 60+744.1 RT
STA. 60+811.2 LT
STA. 60+812.1 RT

620.12 CHAIN-LINK FENCE, 1.8 m

STA. CD10+060.400 - STA. CD10+088.300 LT (27.9 m)
STA. CD10+078.400 - STA. CD10+081.600 LT (17.7 m)
STA. CD10+078.400 - STA. CD10+092.100 LT (22.0 m)
STA. CD10+092.100 - STA. CD10+096.900 LT (17.7 m)
STA. 60+823.500 - STA. 60+824.700 LT (26.4 m)
STA. 60+823.500 - STA. 60+853.300 LT (31.9 m)
STA. 60+824.700 - STA. 60+829.100 LT (5.4 m)
STA. 60+831.800 - STA. 60+840.500 LT (21.7 m)
STA. 60+832.000 - STA. 60+840.500 LT (110.4 m)
STA. 60+853.300 - STA. 60+870.000 LT (18.4 m)
STA. CD10+090.800 - STA. CD10+110.000 LT (21.7 m)
STA. CD10+040.200 - STA. CD10+057.500 LT (17.3 m)

620.16 GATE FOR CHAIN-LINK FENCE, 1.8 m

STA. CD10+057.500 - STA. CD10+060.400 LT (3.6 m)
STA. CD10+088.300 - STA. CD10+090.800 LT (3.6 m)
STA. 60+829.100 - STA. 60+832.000 LT (3.6 m)

620.21 BRACING ASSEMBLY FOR CHAIN-LINK FENCE, 1.8 m

STA. CD10+040.200 LT (1 EA)
STA. CD10+057.500 LT (1 EA)
STA. CD10+060.400 LT (1 EA)
STA. CD10+078.400 LT (1 EA)
STA. CD10+081.600 LT (1 EA)
STA. CD10+090.800 LT (1 EA)
STA. CD10+092.100 LT (1 EA)
STA. CD10+096.900 LT (1 EA)
STA. 60+823.500 LT (1 EA)
STA. 60+824.700 LT (1 EA)
STA. 60+826.900 LT (1 EA)
STA. 60+829.100 LT (1 EA)
STA. 60+831.800 LT (1 EA)
STA. 60+832.000 LT (1 EA)
STA. 60+840.500 LT (1 EA)
STA. 60+853.300 LT (1 EA)

620.55 REMOVAL OF EXISTING FENCE

STA. CD10+034.100 - STA. CD10+110.000 LT ~~(98.1 m)~~ 92.8 m
STA. 60+764.000 - STA. 60+870.000 LT (110.5 m)

NOTES:
1. SEE DWG. NO. SD-1 TO SD-8 FOR PROPOSED TRAFFIC SIGNAL PLANS.
2. SEE DWG. NO. SLP-1 TO SLP-3 FOR PROPOSED STREET LIGHTING PLANS.
3. ALL COLD PLANED AREAS SHALL BE PAVED WITH A LEVELING COURSE FOR THE TRAVELING PUBLIC.
4. THE CONTRACTOR SHALL REMOVE ALL TREES AND CUT ALL STUMPS FLUSH TO THE GROUND WITHIN 5 m OF THE EARTHWORK LIMITS IN THIS VICINITY. THIS WILL FACILITATE MAINTENANCE VEHICLE ACCESS TO THE UTILITY LINES THAT ARE NOT IMMEDIATELY ADJACENT TO THE PROPOSED CONSTRUCTION.

DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

PLAN

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.C.	DATE 9/00
DRAWN BY	J.S.L.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. /5116/VAOT/VTP25.DGN
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG NO. P-5 SHEET 83 OF 385

FILE NAME =u:\5116\vaot\contract4\vtp25.dgn
DATE/TIME =08 SEP 2000
USER =1459

604.42 CHANGING ELEVATION OF SEWER MANHOLE
STA. 61+135.7 LT

616.20 GRANITE SLOPE EDGING
STA. ABI0+035.5 - STA. ABI0+059.8 RT (71.4 m)
STA. ABI0+043.6 - STA. ABI0+110.0 LT (65.9 m)
STA. ABI0+043.6 - STA. ABI0+110.0 RT (65.9 m)

616.26 PRECAST REINFORCED CONCRETE CURB, TYPE B OR 616.28 CAST-IN-PLACE CEMENT CONCRETE CURB, TYPE B
STA. ABI0+036.5 - STA. ABI0+094.4 LT (82.6 m)
STA. ABI0+040.2 - STA. ABI0+110.0 RT (78.3 m)
STA. 61+040.0 - STA. 61+067.3 LT (27.3 m)
STA. 61+158.7 - STA. 61+196.9 LT (38.2 m)

616.41 REMOVAL OF EXISTING CURB
STA. 61+040.0 - STA. 61+087.0 LT ~~(47.9 m)~~ 54.9 m
STA. 61+158.7 - STA. 61+196.9 LT ~~(41.2 m)~~ 38.25 m
STA. ABI0+040.2 - STA. ABI0+080.0 RT (42.9 m)
STA. ABI0+037.0 - STA. ABI0+079.6 LT (48.7 m)
STA. ABI0+037.0 - STA. ABI0+110.0 RT (92.1 m)
STA. ABI0+079.6 - STA. ABI0+110.0 RT (42.0 m)

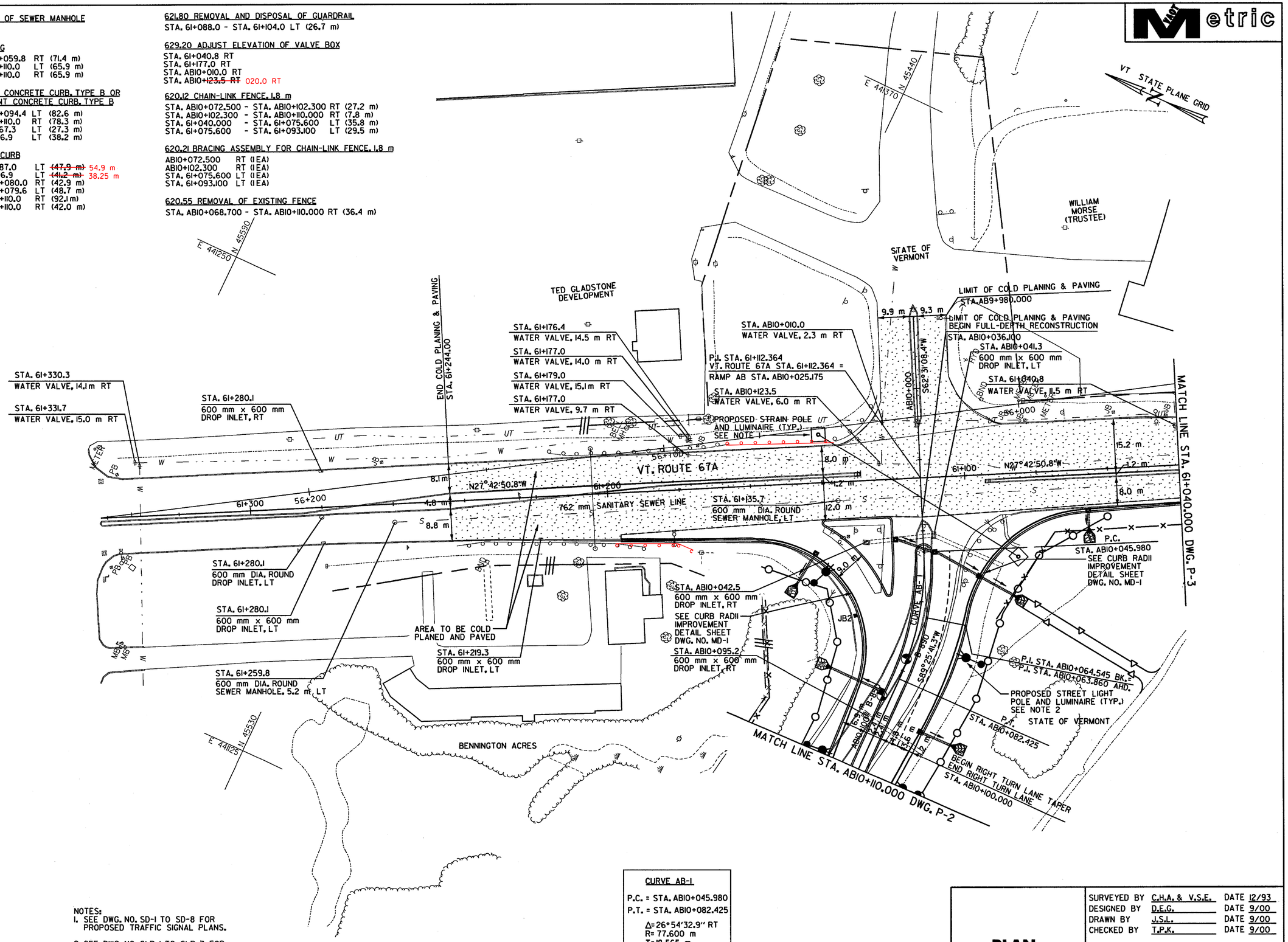
621.80 REMOVAL AND DISPOSAL OF GUARDRAIL
STA. 61+088.0 - STA. 61+104.0 LT (26.7 m)

629.20 ADJUST ELEVATION OF VALVE BOX
STA. 61+040.8 RT
STA. 61+177.0 RT
STA. ABI0+010.0 RT
STA. ABI0+~~123.5 RT~~ 020.0 RT

620.12 CHAIN-LINK FENCE, 1.8 m
STA. ABI0+072.500 - STA. ABI0+102.300 RT (27.2 m)
STA. ABI0+102.300 - STA. ABI0+110.000 RT (7.8 m)
STA. 61+040.000 - STA. 61+075.600 LT (35.8 m)
STA. 61+075.600 - STA. 61+093.100 LT (29.5 m)

620.21 BRACING ASSEMBLY FOR CHAIN-LINK FENCE, 1.8 m
ABI0+072.500 RT (1EA)
ABI0+102.300 RT (1EA)
STA. 61+075.600 LT (1EA)
STA. 61+093.100 LT (1EA)

620.55 REMOVAL OF EXISTING FENCE
STA. ABI0+068.700 - STA. ABI0+110.000 RT (36.4 m)



NOTES:
1. SEE DWG. NO. SD-1 TO SD-8 FOR PROPOSED TRAFFIC SIGNAL PLANS.
2. SEE DWG. NO. SLP-1 TO SLP-3 FOR PROPOSED STREET LIGHTING PLANS.
3. ALL COLD PLANED AREAS SHALL BE PAVED WITH A LEVELING COURSE FOR THE TRAVELING PUBLIC.

CURVE AB-1
P.C. = STA. ABI0+045.980
P.T. = STA. ABI0+082.425
Δ=26°54'32.9" RT
R= 77.600 m
T=18.565 m
L= 36.445 m
E= 2.190 m
e_{max}=0.020 DN. RT

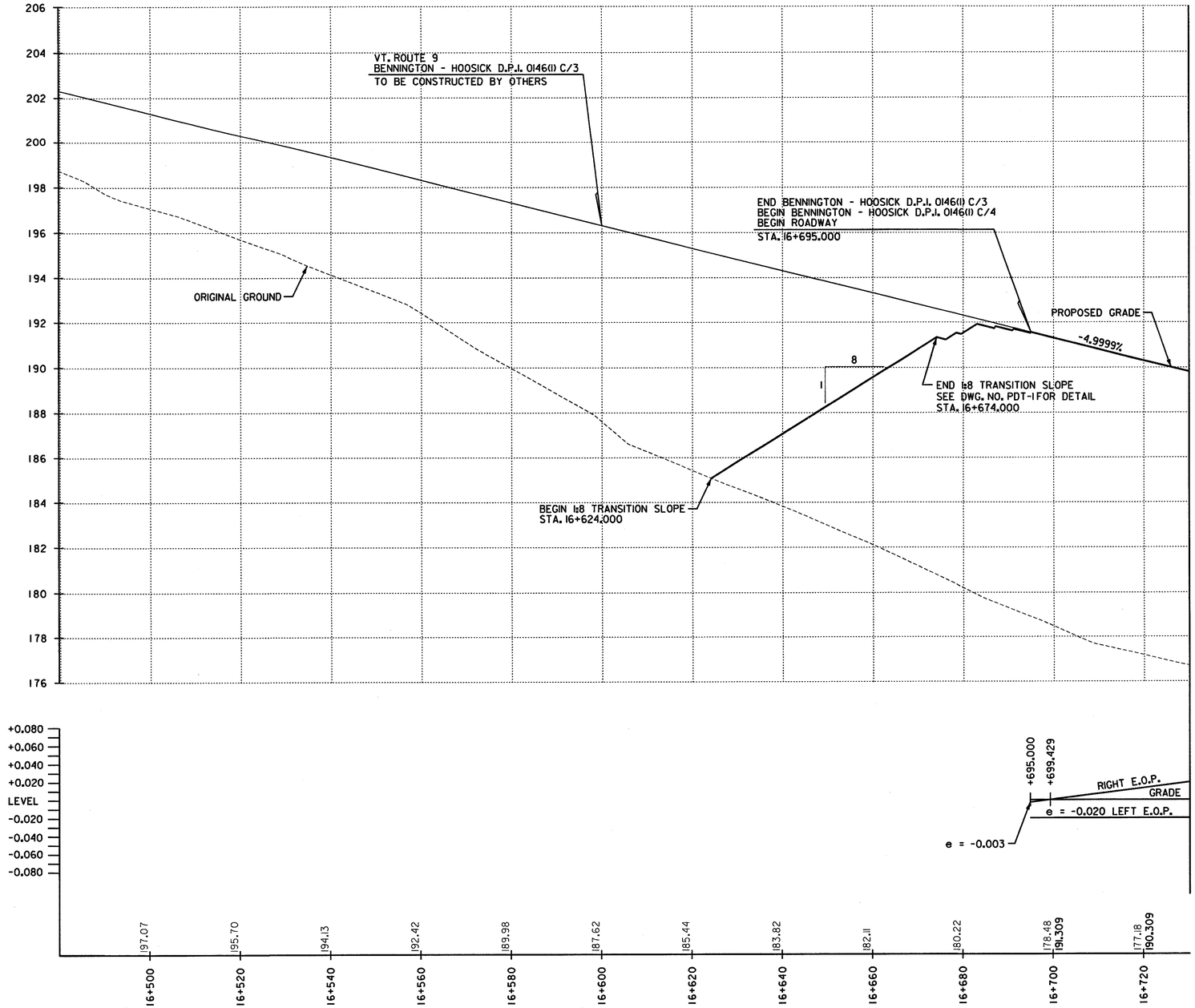
10 0 10 m
1: 500
@ FULL SIZE

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

PLAN

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY D.E.G. DATE 9/00
DRAWN BY J.S.L. DATE 9/00
CHECKED BY T.P.K. DATE 9/00
DESIGN FILE NO. 5116/vaot/vtp26.dgn
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N 1306.60
DWG NO. P-6 SHEET 84 OF 385

FILE NAME =u:\5116\vaot\contract1\vtp26.dgn
DATE/TIME =08 SEP 2000
USER =1459



4 m
2
10 20 m
H 1:500
V 1:100
@ FULL SIZE

PROFILE
VT. ROUTE 9

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.S.L.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. /5116/prf20.dgn

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. PF-1 SHEET 85 OF 385

DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

FILE NAME =u:\5116\vaot\contract4\vtprf20.dgn
DATE/TIME =07-SEP-2000
USER =145

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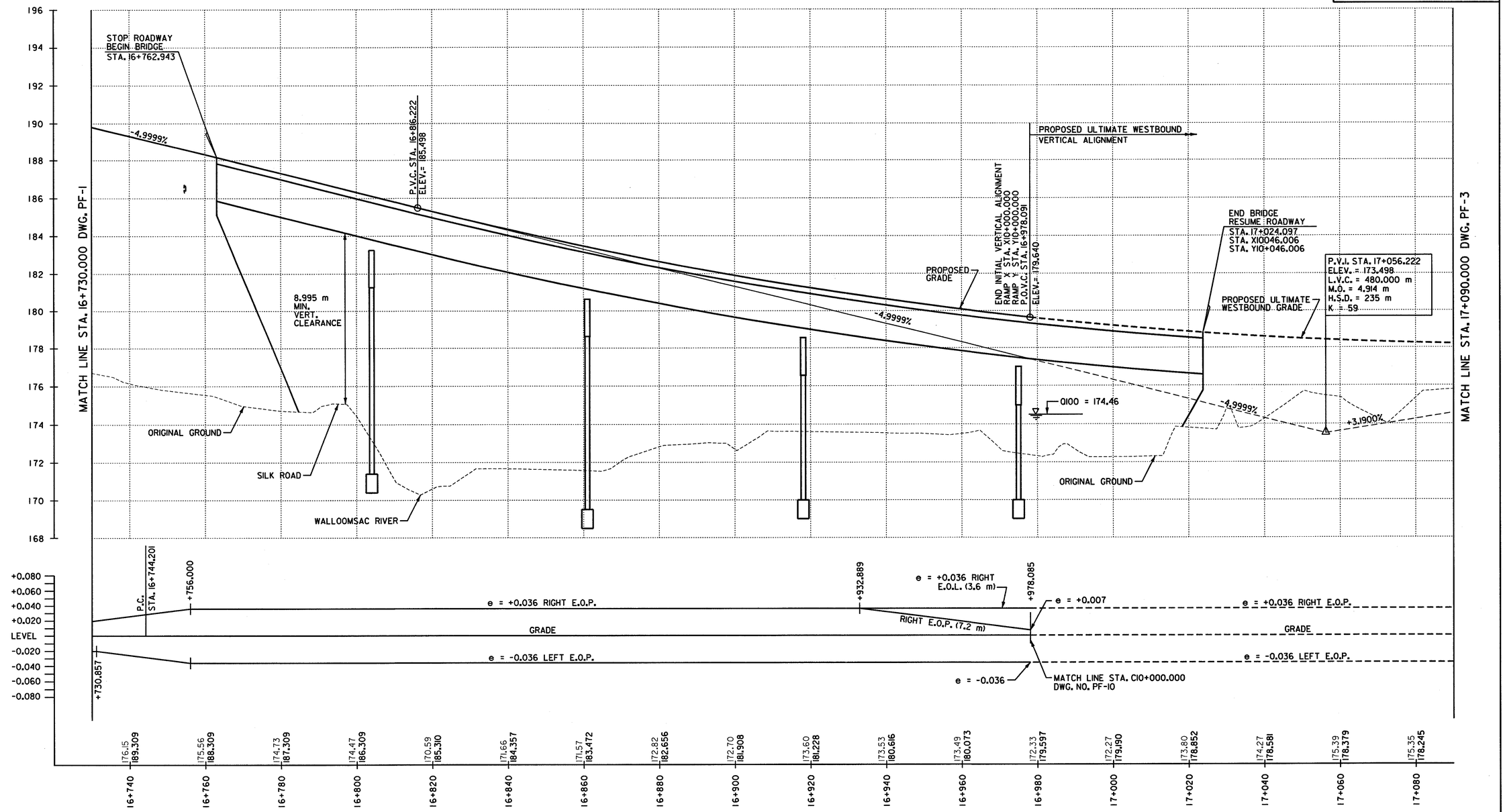


SEE DWG. NO. PF-4
FOR RAMP X PROFILE

SEE DWG. NO. PF-5
FOR RAMP Y PROFILE

SEE DWG. NO. PF-10
FOR RAMP C PROFILE

SEE DWG. NO. PF-7
FOR RAMP A PROFILE

DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

4 m
2
10 20 m
H 1:500
V 1:100
@ FULL SIZE

PROFILE
VT. ROUTE 9

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.S.L.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. /5116/prf21.dgn

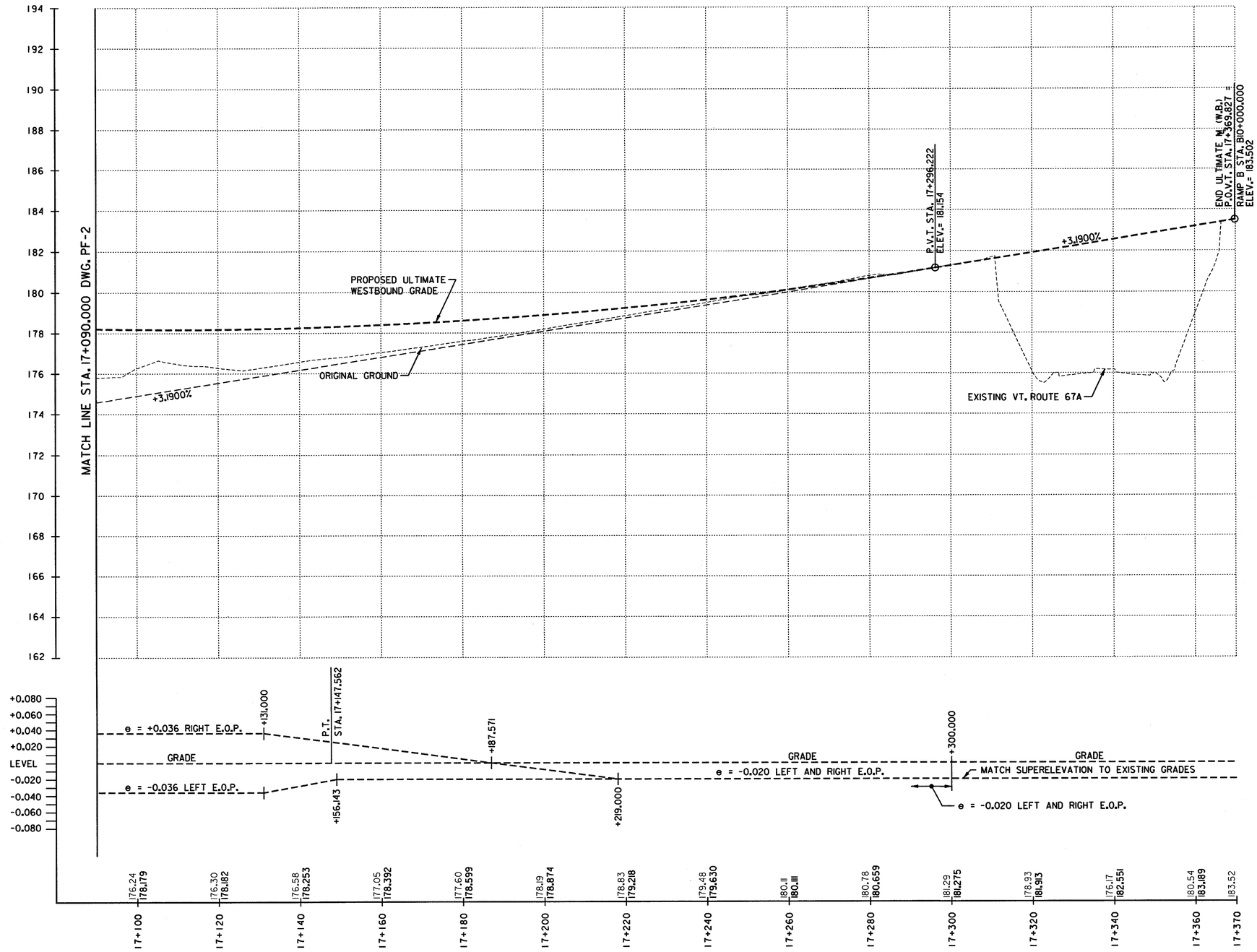
PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. PF-2 SHEET 86 OF 385

FILE NAME =u:\5116\vaot\contract4\vtprf21.dgn
DATE/TIME =07 SEP 2000
USER =1459

VAOT Metric



4 m
2
10 20 m
H 1:500
V 1:100
@ FULL SIZE

PROFILE VT. ROUTE 9

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.S.L.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. /5116/prf22.dgn

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. PF-3 SHEET 87 OF 385

DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

FILE NAME =u:\5116\vaot\contract4\vtprf22.dgn
DATE/TIME =07 SEP 2000
USER =1459

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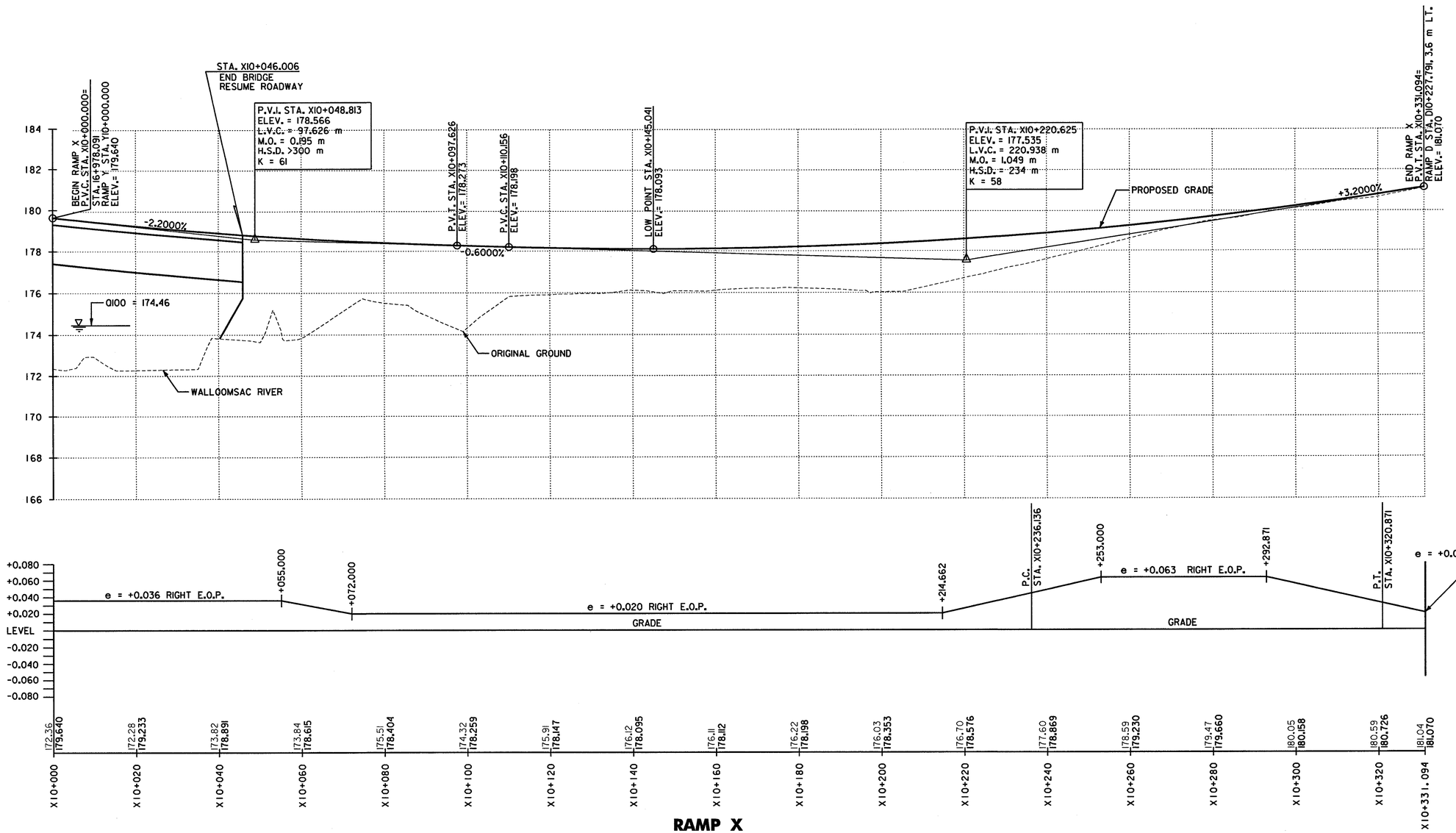

RAMP X

SEE DWG. NO. PF-2
FOR VT. ROUTE 9 PROFILE

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

4 m
2
10 20 m
H 1:500
V 1:100
@ FULL SIZE

PROFILE
RAMP X

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY D.E.G. DATE 9/00
DRAWN BY J.S.L. DATE 9/00
CHECKED BY T.P.K. DATE 9/00
DESIGN FILE NO. /5116/prf25.dgn
PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(11) C/4
PROJ. NO. P.I.N. 1306.60
DWG NO. PF-4 SHEET 88 OF 385

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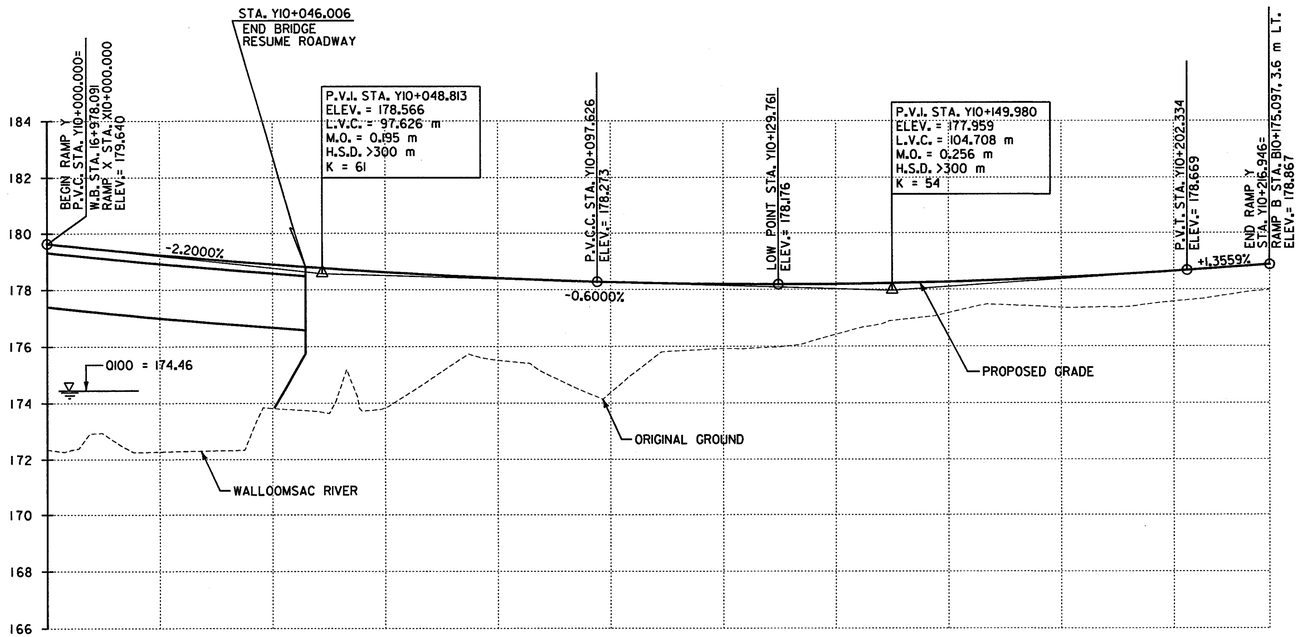

RAMP Y

SEE DWG. NO. PF-2
FOR VT. ROUTE 9 PROFILE

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

4 m
2
10 20 m
H 1:500
V 1:100
@ FULL SIZE

PROFILE
RAMP Y

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY D.E.G. DATE 9/00
DRAWN BY J.S.L. DATE 9/00
CHECKED BY T.P.K. DATE 9/00
DESIGN FILE NO. /5116/prf26.dgn
PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG NO. PF-5 SHEET 89 OF 385

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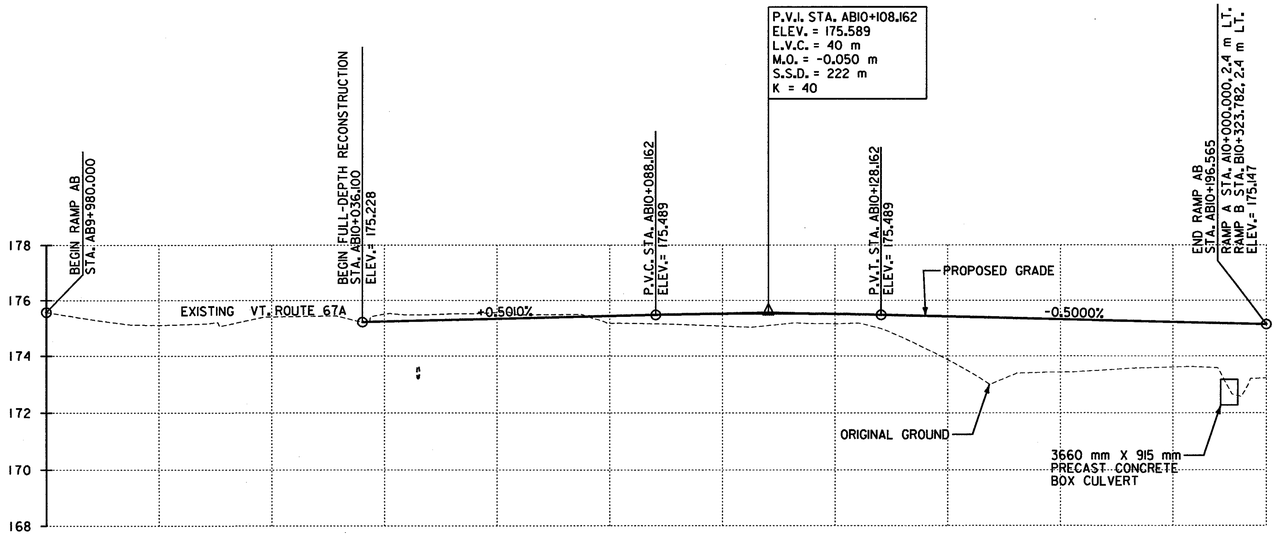
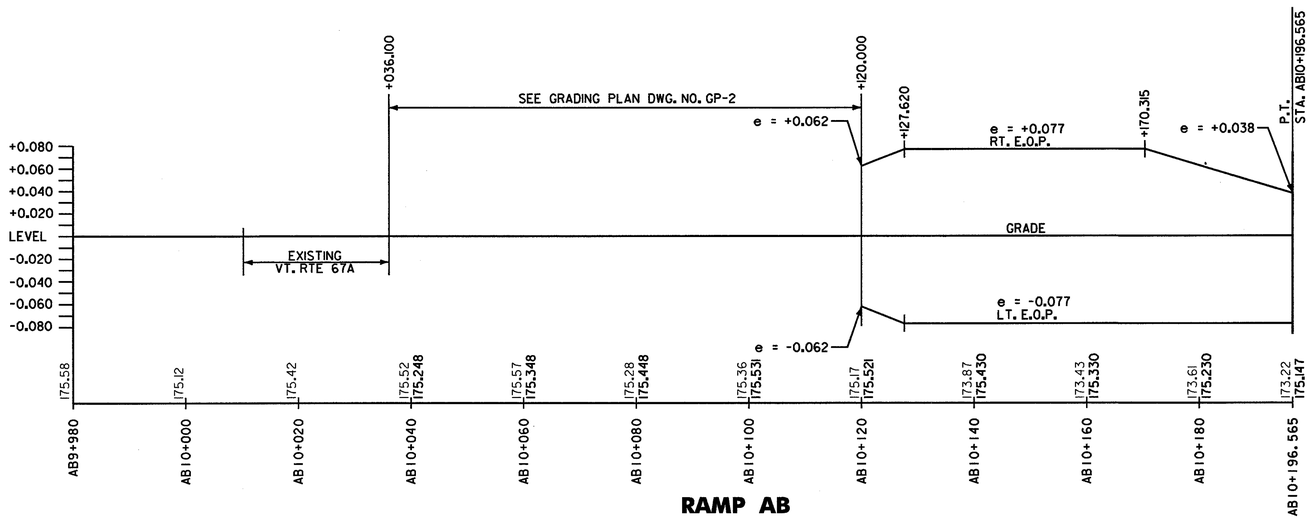




RAMP AB

SEE DWG. NO. PF-7
FOR RAMP A PROFILE

SEE DWG. NO. PF-8
FOR RAMP B PROFILE

4 m
2
10 20 m
H 1:500
V 1:100
@ FULL SIZE

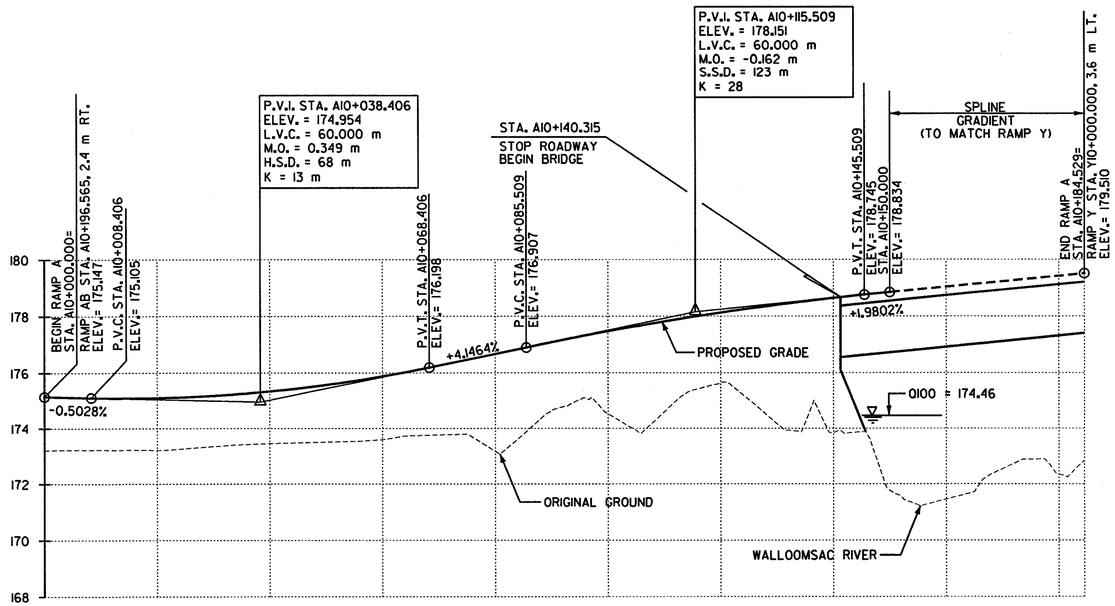
PROFILE
RAMP AB

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.S.L.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. /5116/vaot/prf27.dgn
PROJ. NAME BENNINGTON - HOOSICK
D.P.J. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG NO. PF-6 SHEET 90 OF 385

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

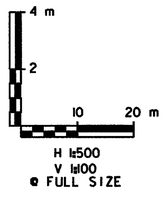
FILE NAME =\5116\vaot\contract1\vtprf27.dgn
DATE/TIME =07 SEP 2000
USER =1453



RAMP A

SEE DWG. NO. PF-2
FOR VT. ROUTE 9 PROFILE

SEE DWG. NO. PF-6
FOR RAMP AB PROFILE



DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

PROFILE
RAMP A

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.S.L.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. /5116/VAOT/prf28.dgn
PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(11) C/4
PROJ. NO. P.I.N. 1306.60
DWG NO. PF-7 SHEET 91 OF 385

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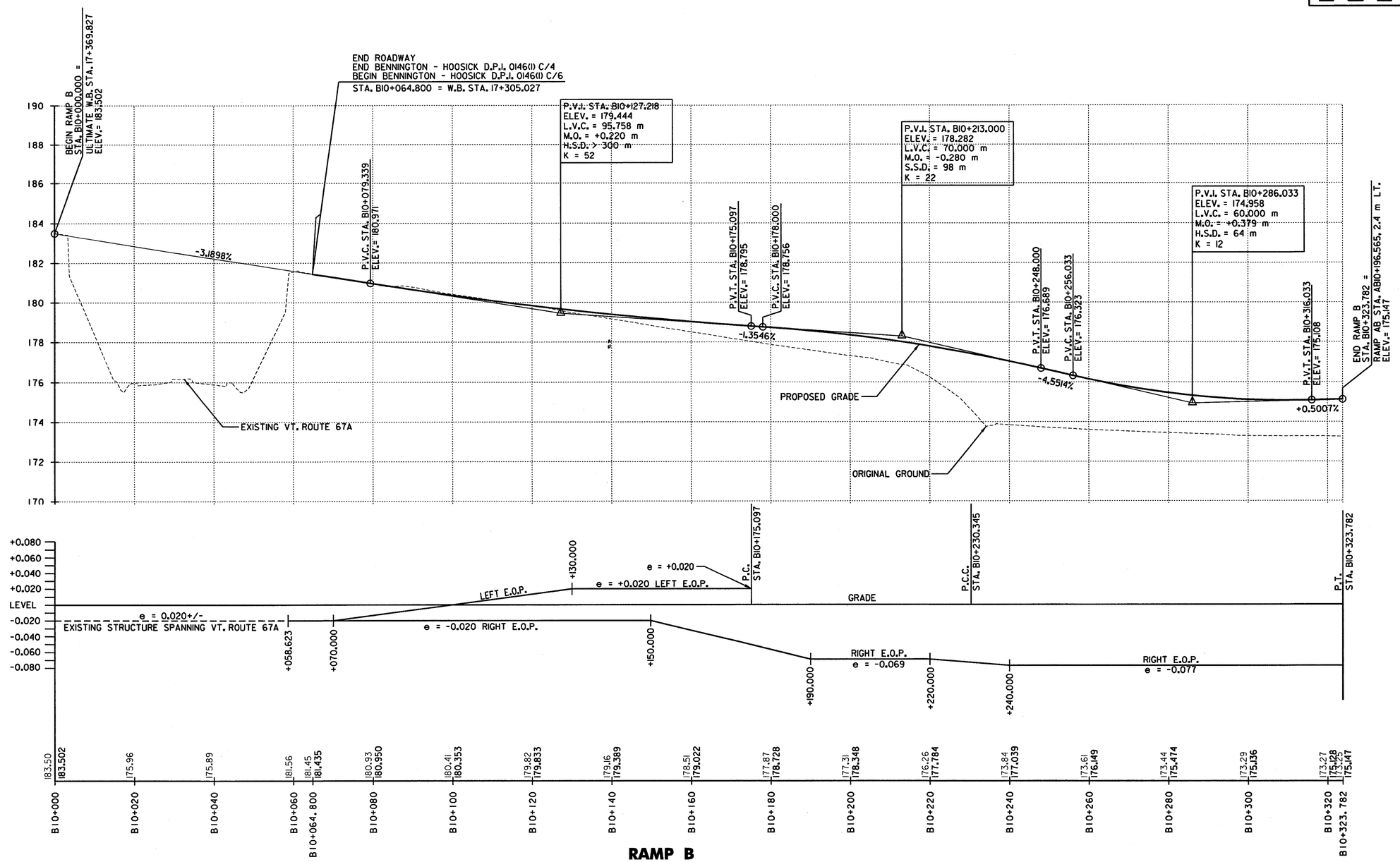
DATE/TIME = 07 SEP 2000
USER = 1459



RAMP B

SEE DWG. NO. PF-6
FOR RAMP AB PROFILE

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

4 m
2
10 20 m
H 1:500
V 1:100
@ FULL SIZE

PROFILE
RAMP B

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY D.E.G. DATE 9/00
DRAWN BY J.S.L. DATE 9/00
CHECKED BY T.P.K. DATE 9/00

DESIGN FILE NO. /5116/vtprf29.dgn

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. PF-8 SHEET 92 OF 385

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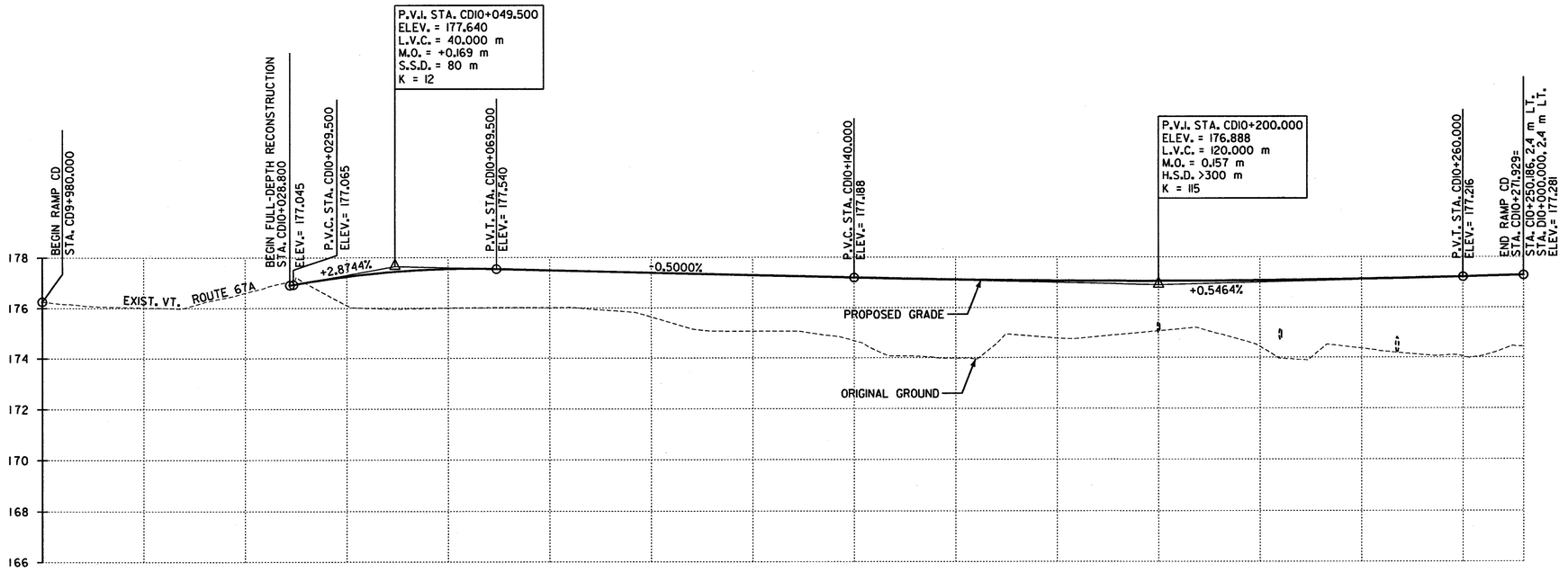
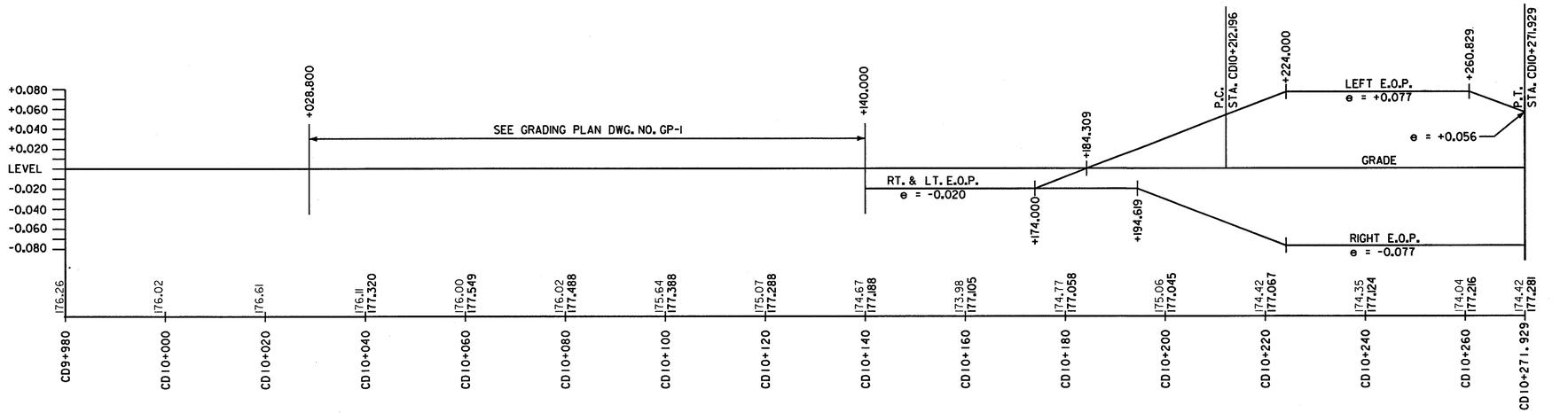
USER =1459





RAMP CD

SEE DWG. NO. PF-10
FOR RAMP C PROFILE

SEE DWG. NO. PF-11
FOR RAMP D PROFILE

4 m
2
10 20 m
H 1:500
V 1:100
@ FULL SIZE

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

PROFILE
RAMP CD

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY D.E.G. DATE 9/00
DRAWN BY J.S.L. DATE 9/00
CHECKED BY T.P.K. DATE 9/00
DESIGN FILE NO. /5116/VAOT/VTprf30.dgn
PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG NO. PF-9 SHEET 93 OF 385

FILE NAME =u:\5116\vaot\contract4\vtprf30.dgn
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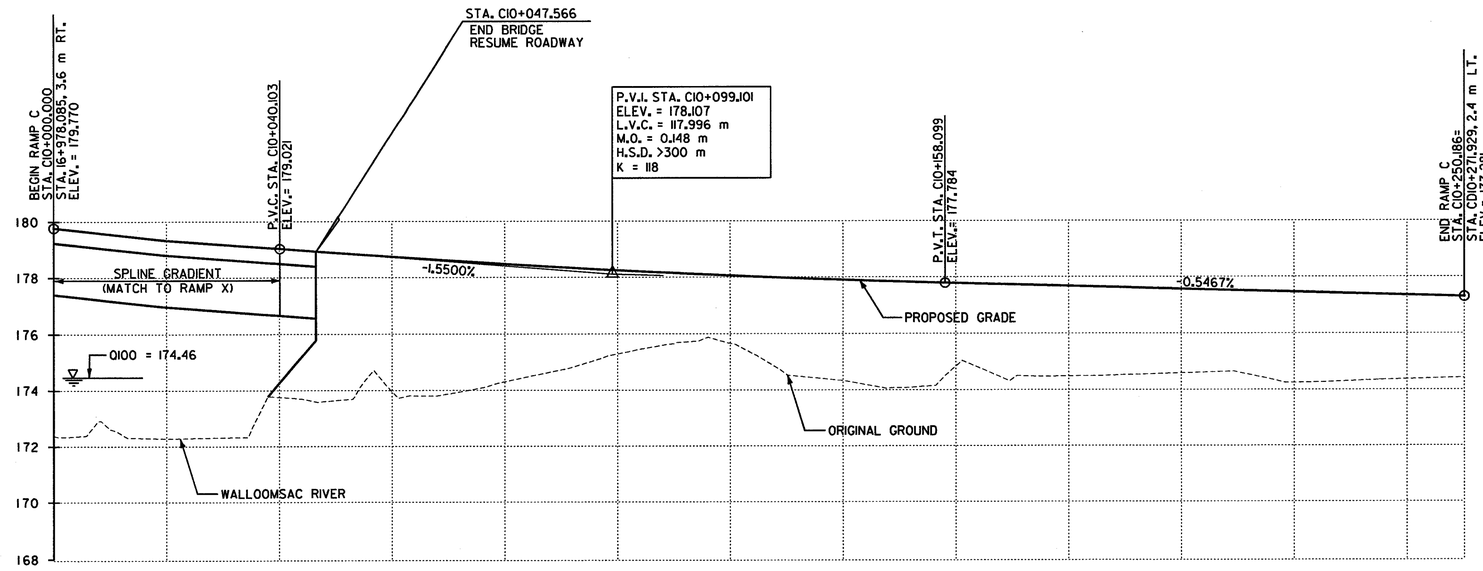
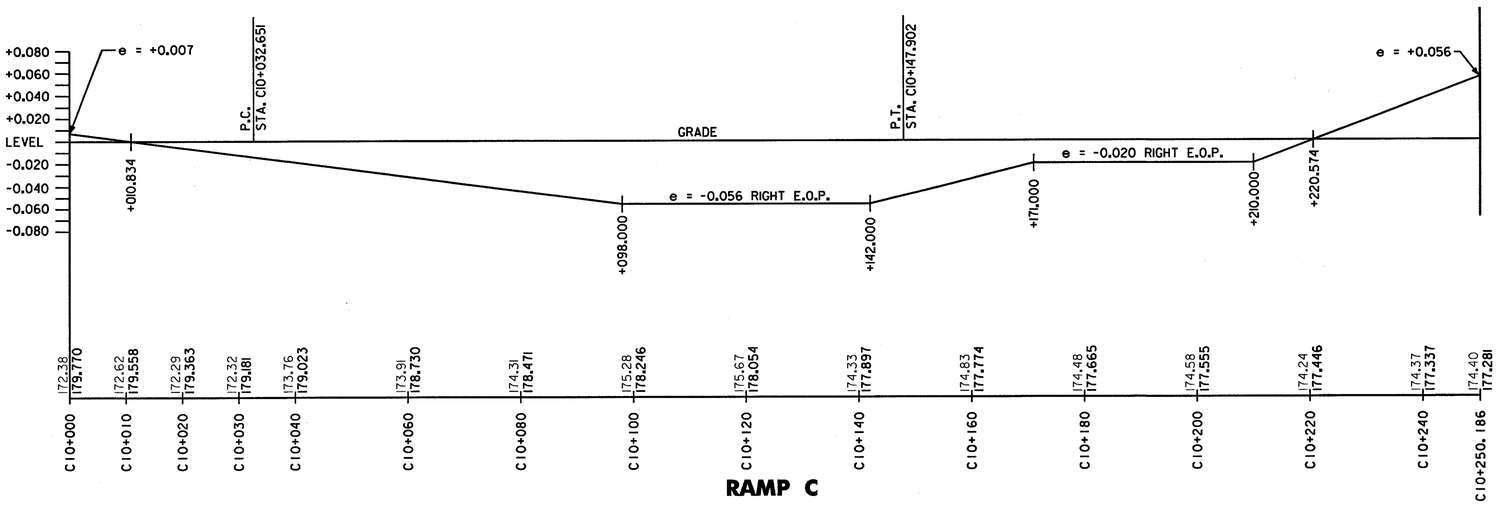
USER =1459





RAMP C

SEE DWG. NO. PF-2
FOR VT. ROUTE 9 PROFILE

SEE DWG. NO. PF-9
FOR RAMP CD PROFILE

4 m
2
10 20 m
H 1:500
V 1:100
@ FULL SIZE

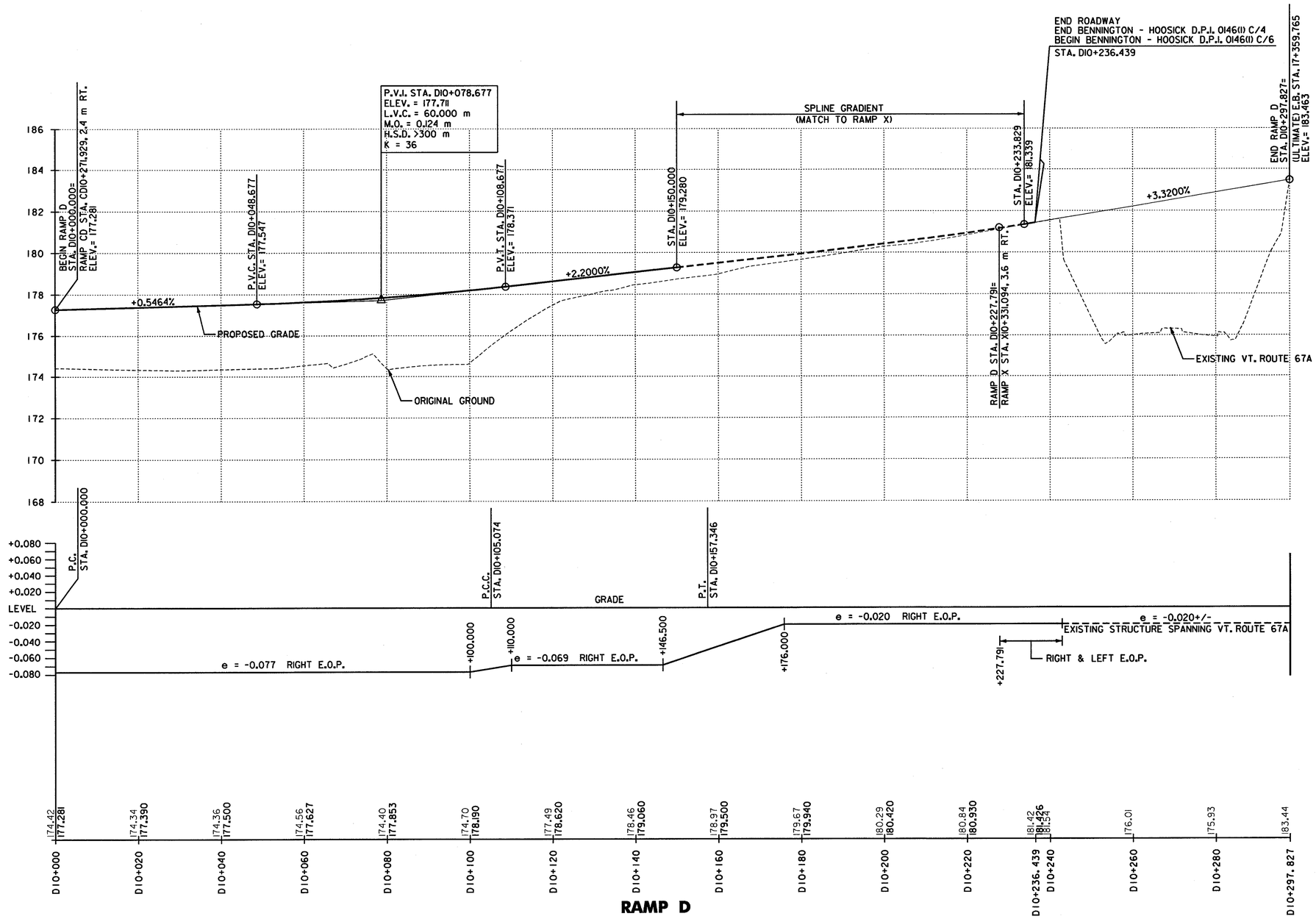
DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

PROFILE
RAMP C

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY D.E.G. DATE 9/00
DRAWN BY J.S.L. DATE 9/00
CHECKED BY T.P.K. DATE 9/00
DESIGN FILE NO. /5116/VAOT/prf31.dgn
PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG NO. PF-10 SHEET 94 OF 385

FILE NAME =u:\5116\vaot\contract4\vtprf31.dgn
DATE/TIME = 07 SEP 2000
USER =1459

VAOT Metric



RAMP D

SEE DWG. NO. PF-9
FOR RAMP CD PROFILE

4 m
2
10 20 m
H 1:500
V 1:100
@ FULL SIZE

PROFILE
RAMP D

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.S.L.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. /5116/prf32.dgn

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. PF-11 SHEET 95 OF 385

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

FILE NAME =u:\5116\vaot\contract4\vtprf32.dgn
DATE/TIME =07 SEP 2000
USER =1459

Metric

VT STATE PLANE GRID

N

BEGIN FULL-DEPTH RECONSTRUCTION
STA. CD10+028.800

CD10+000

60+800

VT. ROUTE 67A

177.5 m

CD10+100

RAMP CD

DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

4 0 4 m
1: 200
@ FULL SIZE

VT. ROUTE 67A /RAMP CD GRADING PLAN

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	K.H.D.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. /5116/VAOT/GP1.DGN

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. GP-1 SHEET 96 OF 385

FILE NAME =u:\5116\vaot\contract4\gp1.dgn
DATE/TIME =08 SEP 2000
USER =1459

Metric

VT STATE PLANE GRID

N

175.0 m

175.5 m

175.5 m

175.5 m

AB10+100

AB10+000

61+100

BEGIN FULL-DEPTH RECONSTRUCTION
STA. AB10+036.100

RAMP AB

VT. ROUTE 67A

4 0 4 m
1: 200
@ FULL SIZE

DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

VT. ROUTE 67A /RAMP AB GRADING PLAN

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	K.H.D	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. 5116/vaot/GP2.DGN

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4

PROJ. NO. P.I.N 1306.60

DWG NO. GP-2 SHEET 97 OF 385

FILE NAME =u:\5116\vaot\contract4\gp2.dgn
DATE/TIME =08 SEP 2000
USER =1459

PHASE I CONSTRUCTION NOTES:

SEE SPECIAL PROVISIONS

INTRODUCTION:

THE OBJECTIVE OF THE CONSTRUCTION SEQUENCING SHOWN ON THE FOLLOWING SHEETS IS TO MINIMIZE IMPACTS TO TRAFFIC FLOW WHILE PROVIDING SAFE PASSAGE FOR VEHICLES DURING AND AFTER CONSTRUCTION HOURS.

THE FOLLOWING TRAFFIC CONTROL INFORMATION IS INTENDED TO BE A GENERAL OUTLINE REGARDING HOW THE WORK SHOULD PROCEED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE SPECIFIC DETAILS TO ADDRESS SPECIFIC SITUATIONS. HIS RESPONSIBILITY INCLUDES PROVIDING A PLAN DETAILING THE USE AND PLACEMENT OF SIGNS, CHANNELIZING DEVICES, ARROW PANELS, FLAGGERS AND UNIFORMED TRAFFIC OFFICERS DURING LANE CLOSURES. IF THE CONTRACTOR DOES NOT WISH TO FOLLOW THIS OUTLINE, HE MAY SUBMIT AN ALTERNATE PROPOSAL TO THE SPECIAL PROJECTS UNIT VIA THE RESIDENT ENGINEER. THE CONTRACTOR MUST ALLOW AT LEAST FOUR WEEKS FOR REVIEW AND APPROVAL OF THE COMPREHENSIVE PLAN AND TWO WEEKS FOR REVIEW AND APPROVAL OF MINOR CHANGES / DETAILS. ALL TRAFFIC CONTROL DEVICES MUST BE DESIGNED AND IMPLEMENTED IN ACCORDANCE WITH THE MUTCD AND VAOT STANDARDS E-100M, E-101M, E-102M, E-102AM, E-103M, E-106M, E-107M, E-107AM, E-108M AND E-110M.

Metric

GENERAL NOTES:

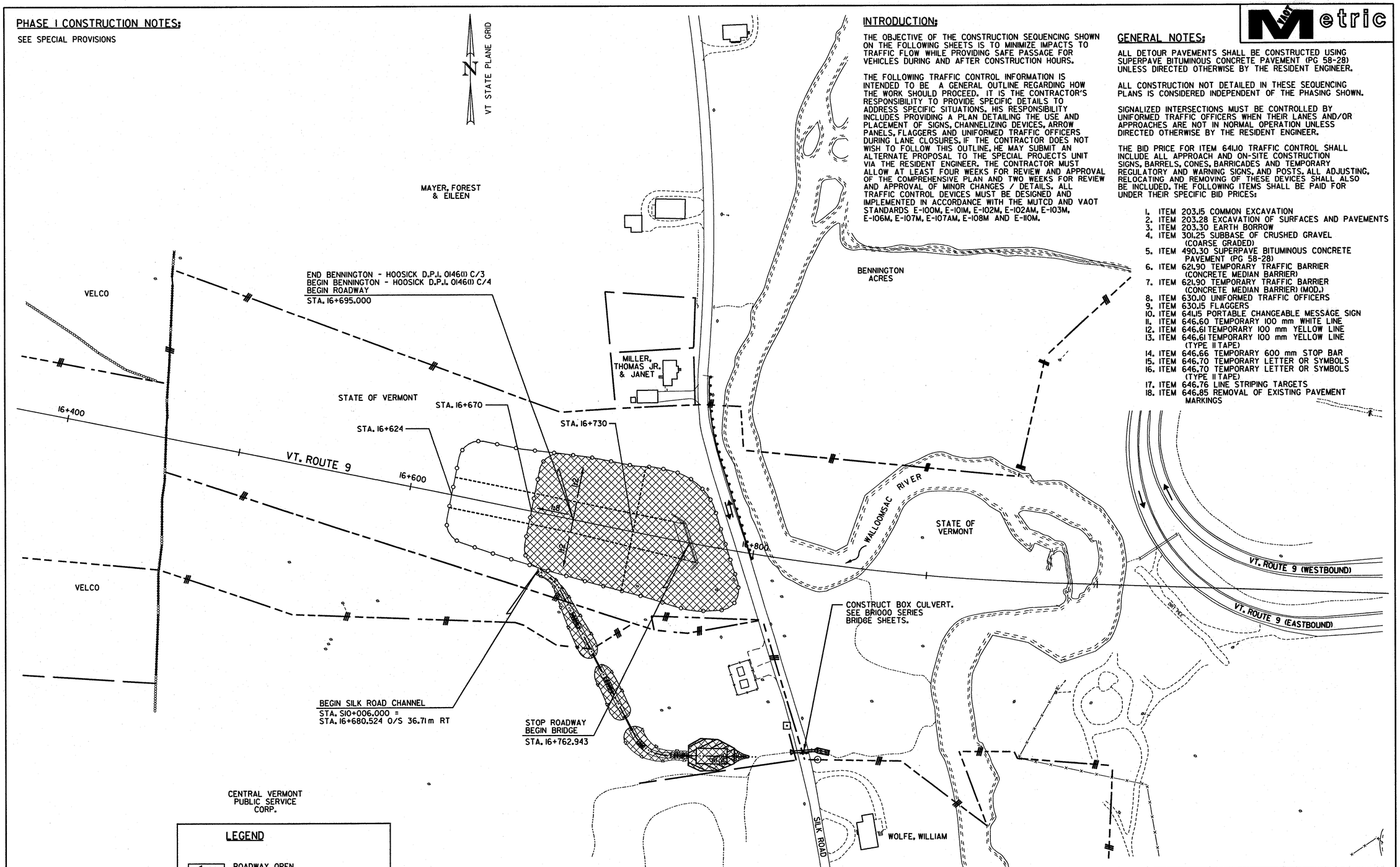
ALL DETOUR PAVEMENTS SHALL BE CONSTRUCTED USING SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) UNLESS DIRECTED OTHERWISE BY THE RESIDENT ENGINEER.

ALL CONSTRUCTION NOT DETAILED IN THESE SEQUENCING PLANS IS CONSIDERED INDEPENDENT OF THE PHASING SHOWN.

SIGNALIZED INTERSECTIONS MUST BE CONTROLLED BY UNIFORMED TRAFFIC OFFICERS WHEN THEIR LANES AND/OR APPROACHES ARE NOT IN NORMAL OPERATION UNLESS DIRECTED OTHERWISE BY THE RESIDENT ENGINEER.

THE BID PRICE FOR ITEM 641.10 TRAFFIC CONTROL SHALL INCLUDE ALL APPROACH AND ON-SITE CONSTRUCTION SIGNS, BARRELS, CONES, BARRICADES AND TEMPORARY REGULATORY AND WARNING SIGNS, AND POSTS. ALL ADJUSTING, RELOCATING AND REMOVING OF THESE DEVICES SHALL ALSO BE INCLUDED. THE FOLLOWING ITEMS SHALL BE PAID FOR UNDER THEIR SPECIFIC BID PRICES:

1. ITEM 203.15 COMMON EXCAVATION
2. ITEM 203.28 EXCAVATION OF SURFACES AND PAVEMENTS
3. ITEM 203.30 EARTH BORROW
4. ITEM 301.25 SUBBASE OF CRUSHED GRAVEL (COARSE GRADED)
5. ITEM 490.30 SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28)
6. ITEM 621.90 TEMPORARY TRAFFIC BARRIER (CONCRETE MEDIAN BARRIER)
7. ITEM 621.90 TEMPORARY TRAFFIC BARRIER (CONCRETE MEDIAN BARRIER) (MOD.)
8. ITEM 630.10 UNIFORMED TRAFFIC OFFICERS
9. ITEM 630.15 FLAGGERS
10. ITEM 641.15 PORTABLE CHANGEABLE MESSAGE SIGN
11. ITEM 646.60 TEMPORARY 100 mm WHITE LINE
12. ITEM 646.61 TEMPORARY 100 mm YELLOW LINE
13. ITEM 646.61 TEMPORARY 100 mm YELLOW LINE (TYPE II TAPE)
14. ITEM 646.66 TEMPORARY 600 mm STOP BAR
15. ITEM 646.70 TEMPORARY LETTER OR SYMBOLS
16. ITEM 646.70 TEMPORARY LETTER OR SYMBOLS (TYPE II TAPE)
17. ITEM 646.76 LINE STRIPING TARGETS
18. ITEM 646.85 REMOVAL OF EXISTING PAVEMENT MARKINGS



LEGEND

- ROADWAY OPEN TO TRAFFIC
- TEMPORARY CONSTRUCTION
- PERMANENT CONSTRUCTION THIS PHASE
- EXISTING OR TEMPORARY ROADWAYS TO BE REMOVED
- ITEM 621.90 TEMPORARY TRAFFIC BARRIER (CONCRETE MEDIAN BARRIER)

PHASE 1 GENERAL CONSTRUCTION SEQUENCING PLAN

20 0 20 m

1: 1000

@ FULL SIZE

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

CONSTRUCTION SEQUENCING PHASE 1

SURVEYED BY	C.H.A. & V.S.E.	DATE	12/93
DESIGNED BY	T.Y.B.	DATE	9/00
DRAWN BY	K.H.D.	DATE	9/00
CHECKED BY	T.P.K.	DATE	9/00

DESIGN FILE NO. 5116/VAOT/CSP/CSP-1.DGN

PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N 1306.60

DWG NO. CSP-1 SHEET 98 OF 385

FILE NAME =u:\5116\vaot\contract4\csp\csp-p1.dgn
DATE/TIME =08 SEP 2000
USER =tk59

VT. ROUTE 9
BENNINGTON - HOOSICK D.P.I. 0146(1) C/3
TO BE CONSTRUCTED BY OTHERS

END BENNINGTON - HOOSICK D.P.I. 0146(1) C/3
BEGIN BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
BEGIN ROADWAY
STA. 16+695.000

STOP ROADWAY
BEGIN BRIDGE
STA. 16+762.943

PROPOSED GRADE

-4.9999%

-4.9999%

P.V.C. STA. 16+886.222
ELEV.= 185.498

8
1
END 1:8 TRANSITION SLOPE
SEE DWG. NO. PDT-1 FOR DETAIL
STA. 16+674.000

8
1
STA. 16+730

BEGIN 1:8 TRANSITION SLOPE
STA. 16+624.000

ITEM 203.30
EARTH BORROW

ITEM 203.30
EARTH BORROW

STA. 16+670

ITEM 203.30
EARTH BORROW

ITEM 203.32
GRANULAR BORROW
SEE BR700
SERIES DRAWINGS

1.5 m

8.995 m
MIN.
VERT.
CLEARANCE

SILK ROAD

16+540	16+560	16+580	16+600	16+620	16+640	16+660	16+680	16+700	16+720	16+740	16+760	16+780	16+800	16+820	16+840	16+860	16+880
192.42	189.98	187.62	185.44	183.82	182.11	180.22	178.48	177.18	176.15	175.56	174.73	174.47	170.59	171.66	171.57	172.82	
								191.309	190.309	189.309	188.309	187.309	186.309	185.310	184.357	183.472	182.656

NOTE:

NUMBERED SECTIONS OF EMBANKMENT SHALL BE PLACED AS DESCRIBED IN THE SPECIAL PROVISIONS. NUMBERS SHOWN WITHIN THE CIRCLES ARE FOR REFERENCE PURPOSES ONLY.

4 m
2
10 20 m
H 1:500
V 1:100
@ FULL SIZE

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

CONSTRUCTION SEQUENCING PHASE 1

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY D.E.G. DATE 9/00
DRAWN BY J.S.L. DATE 9/00
CHECKED BY T.P.K. DATE 9/00
DESIGN FILE NO. /5116/VAOT/CSP/CSP-PRO.DGN
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG NO. CSP-2 SHEET 99 OF 385

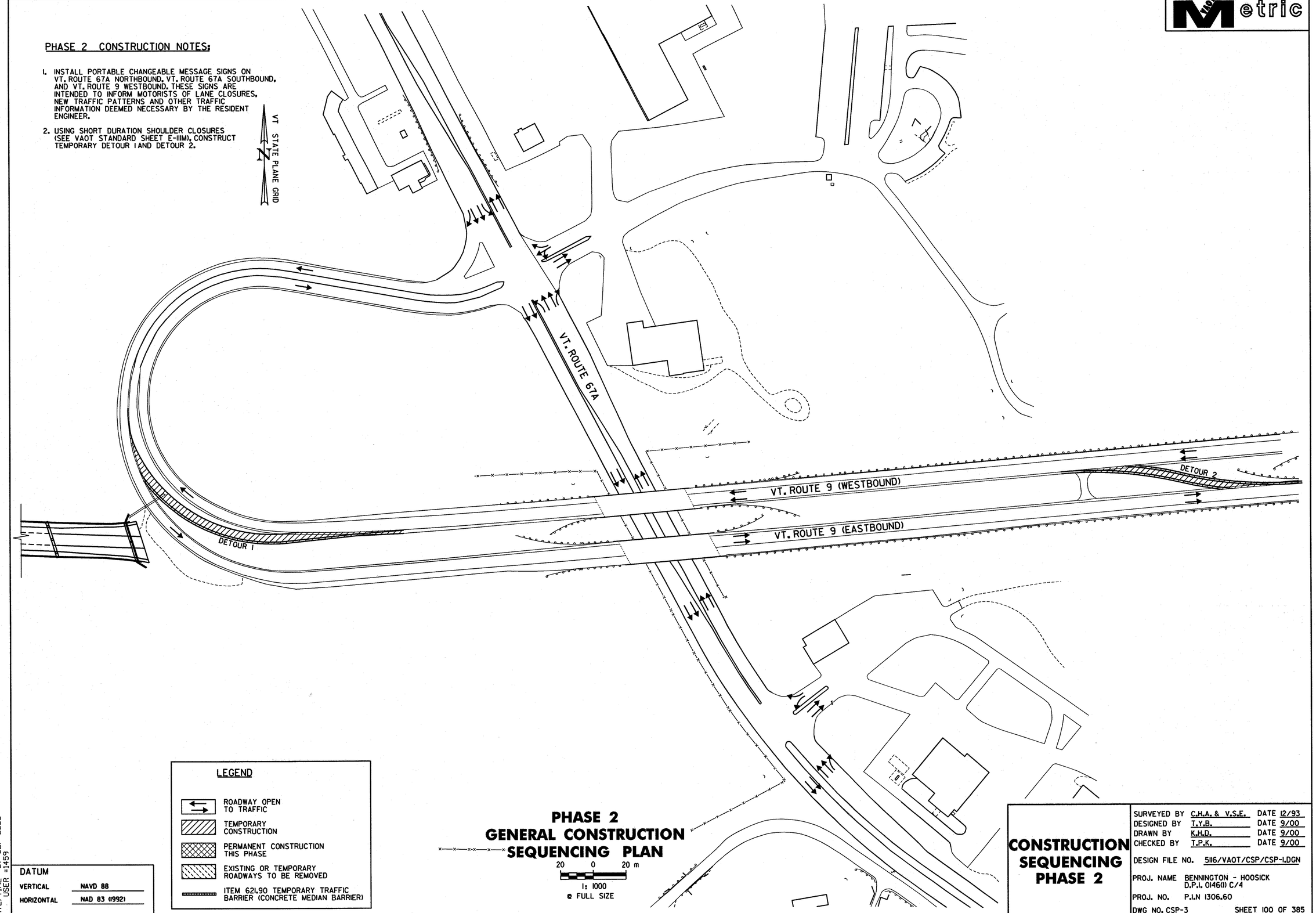
FILE NAME =u:\5116\vaot\csp\csp-pro.dgn
DATE/TIME =08 SEP 2000
USER =1459

Metric

PHASE 2 CONSTRUCTION NOTES:

1. INSTALL PORTABLE CHANGEABLE MESSAGE SIGNS ON VT. ROUTE 67A NORTHBOUND, VT. ROUTE 67A SOUTHBOUND, AND VT. ROUTE 9 WESTBOUND. THESE SIGNS ARE INTENDED TO INFORM MOTORISTS OF LANE CLOSURES, NEW TRAFFIC PATTERNS AND OTHER TRAFFIC INFORMATION DEEMED NECESSARY BY THE RESIDENT ENGINEER.
2. USING SHORT DURATION SHOULDER CLOSURES (SEE VAOT STANDARD SHEET E-IIIM), CONSTRUCT TEMPORARY DETOUR 1 AND DETOUR 2.

VT STATE PLANE GRID



LEGEND

- ROADWAY OPEN TO TRAFFIC
- TEMPORARY CONSTRUCTION
- PERMANENT CONSTRUCTION THIS PHASE
- EXISTING OR TEMPORARY ROADWAYS TO BE REMOVED
- ITEM 621.90 TEMPORARY TRAFFIC BARRIER (CONCRETE MEDIAN BARRIER)

PHASE 2
GENERAL CONSTRUCTION SEQUENCING PLAN

20 0 20 m
1: 1000
@ FULL SIZE

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

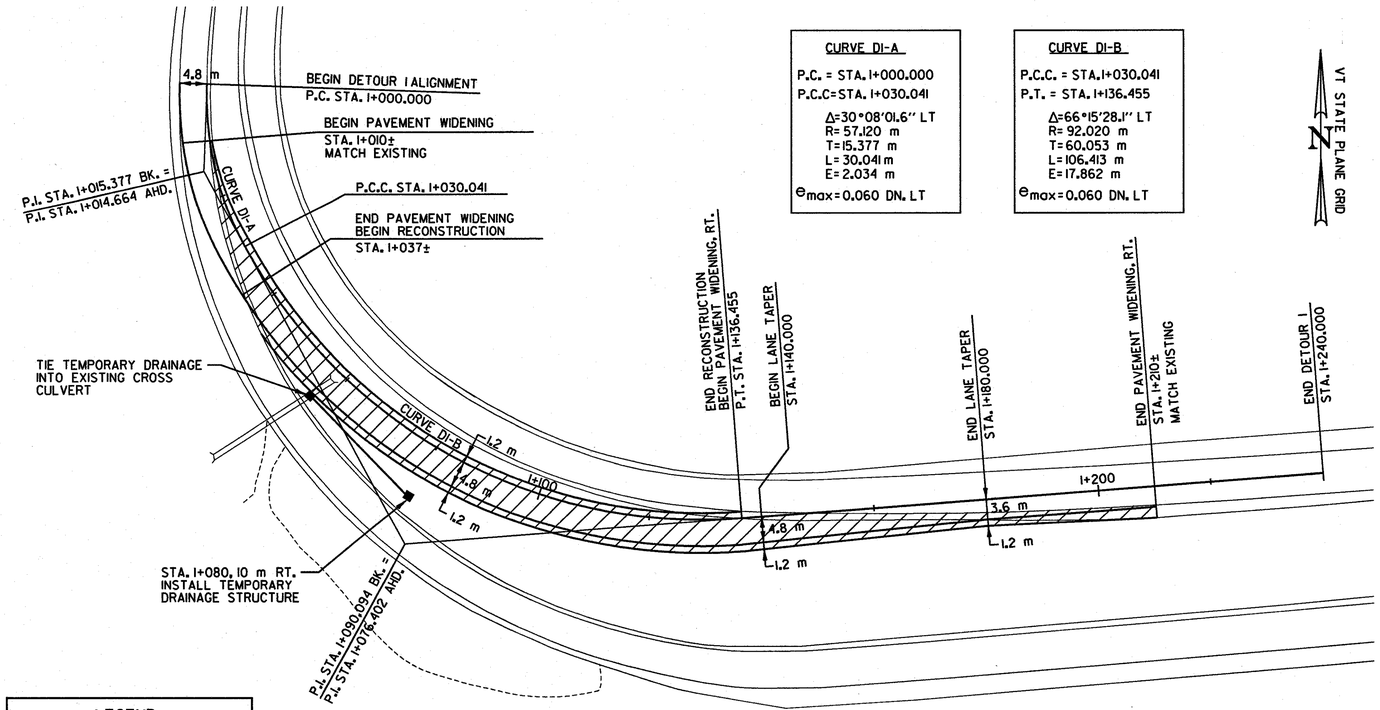
CONSTRUCTION SEQUENCING PHASE 2

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	T.Y.B.	DATE 9/00
DRAWN BY	K.H.D.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. 5116/VAOT/CSP/CSP-1.DGN
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N 1306.60
DWG NO. CSP-3 SHEET 100 OF 385

FILE NAME =u:\5116\vaot\contract4\csp\csp-1.dgn
DATE/TIME =07 SEP 2000
USER =1459

Metric



CURVE DI-A

P.C. = STA. 1+000.000
P.C.C= STA. 1+030.041
Δ=30°08'01.6" LT
R= 57.120 m
T= 15.377 m
L= 30.041 m
E= 2.034 m
e_{max}=0.060 DN. LT

CURVE DI-B

P.C.C. = STA. 1+030.041
P.T. = STA. 1+136.455
Δ=66°15'28.1" LT
R= 92.020 m
T= 60.053 m
L= 106.413 m
E= 17.862 m
e_{max}=0.060 DN. LT

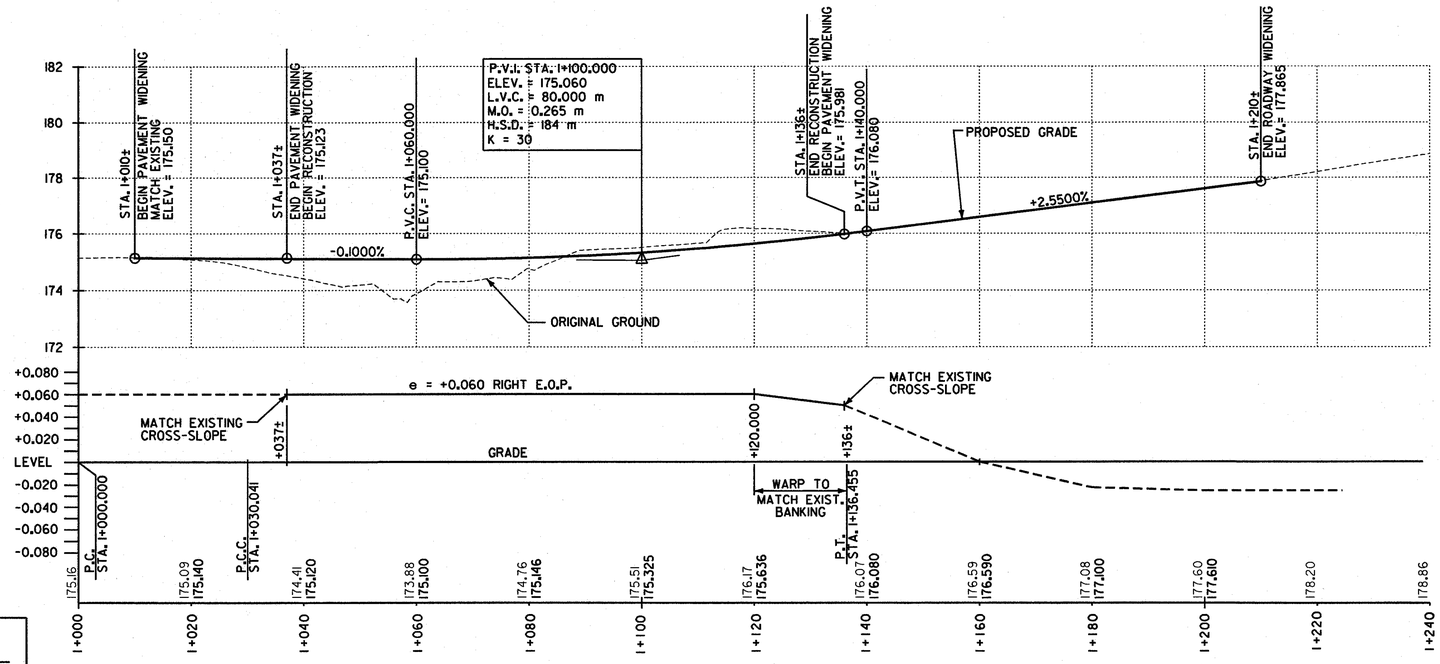
LEGEND

TEMPORARY CONSTRUCTION

DETOUR 1 LAYOUT

10 0 10 m
1 : 500
@ FULL SIZE

DETOUR HORIZONTAL CONTROLTABLE				
HCL POINT	COORDINATES NORTH	COORDINATES EAST	HCL STATION	DESCRIPTION
DETOUR 1				
BEGIN/ P.C. DI-A	45308.120	441033.482	1+000.000	BEGIN DETOUR 1/ P.C. CURVE DI-A
P.I. DI-A	45292.752	441032.943	1+015.377 BK.= 1+014.664 AHD.	P.I. CURVE DI-A
P.C.C. DI-A/ DI-B	45279.191	441040.192	1+030.041	P.C.C. CURVE DI-A/DI-B
P.I. DI-B	45226.229	441068.500	1+090.094 BK.= 1+076.402 AHD.	P.I. CURVE DI-B
P.T. DI-B	45230.818	44128.378	1+136.455	P.T. CURVE DI-B
END	45238.731	441231.620	1+240.000	END DETOUR 1
DETOUR 2				
BEGIN/P.C. D2-A	45270.703	441604.165	2+000.000	BEGIN DETOUR 2/ P.C. CURVE D2-A
P.I. D2-A	45273.955	441641.563	2+037.539 BK.= 2+036.910 AHD.	P.I. CURVE D2-A
P.R.C. D2-A/ D2-B	45265.394	441678.113	2+074.449	P.R.C. CURVE D2-A/D2-B
P.I. D2-B	45256.834	441714.661	2+111.986 BK= 2+111.357 AHD.	P.I. CURVE D2-B
P.T. D2-B/END	45260.087	441752.057	2+148.894	P.T. CURVE D2-B



4 m
2
10 20 m
H 1:500
V 1:100
@ FULL SIZE

DETOUR 1 PROFILE /BANKING DIAGRAM

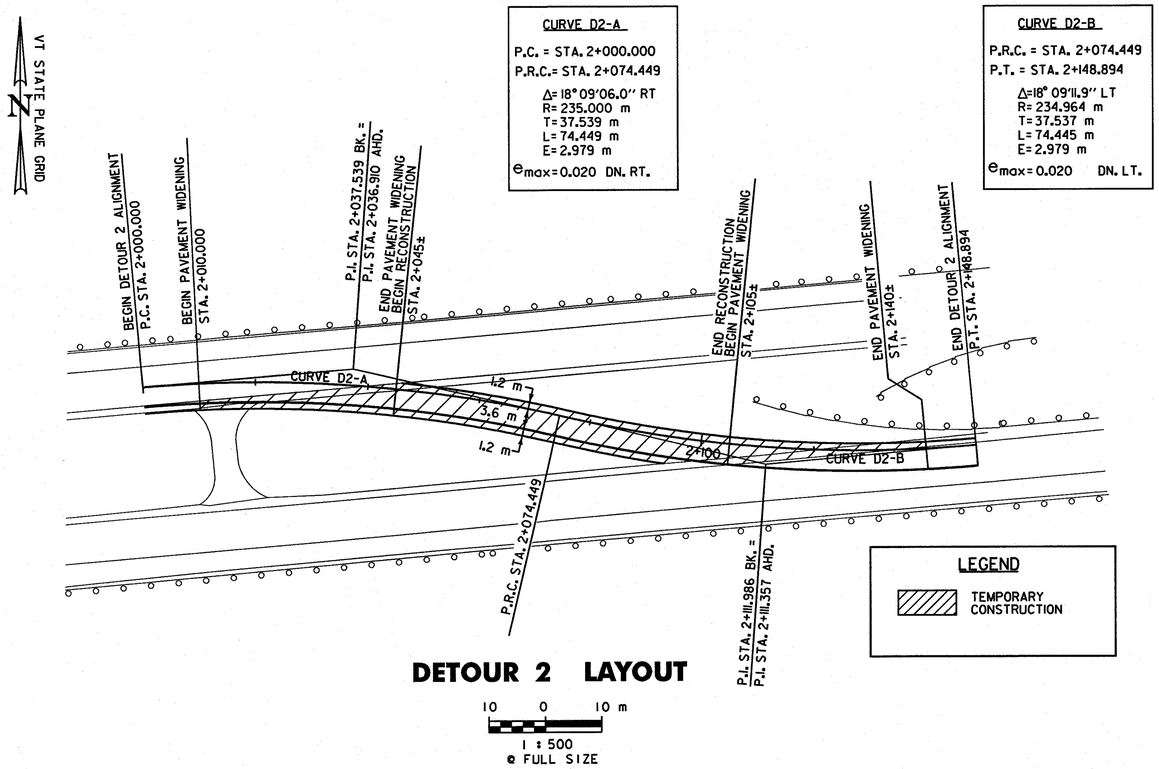
DATUM

VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

CONSTRUCTION SEQUENCING PHASE 2

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY T.Y.B. DATE 9/00
DRAWN BY K.H.D. DATE 9/00
CHECKED BY T.P.K. DATE 9/00
DESIGN FILE NO. 5116/VAOT/CSP/CSP-2.DGN
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N 1306.60
DWG NO. CSP-4 SHEET 101 OF 385

FILE NAME = g:\5116\vaot\contract4\csp\csp-2.dgn
DATE/TIME = 27 SEP 2000
USER = LHS

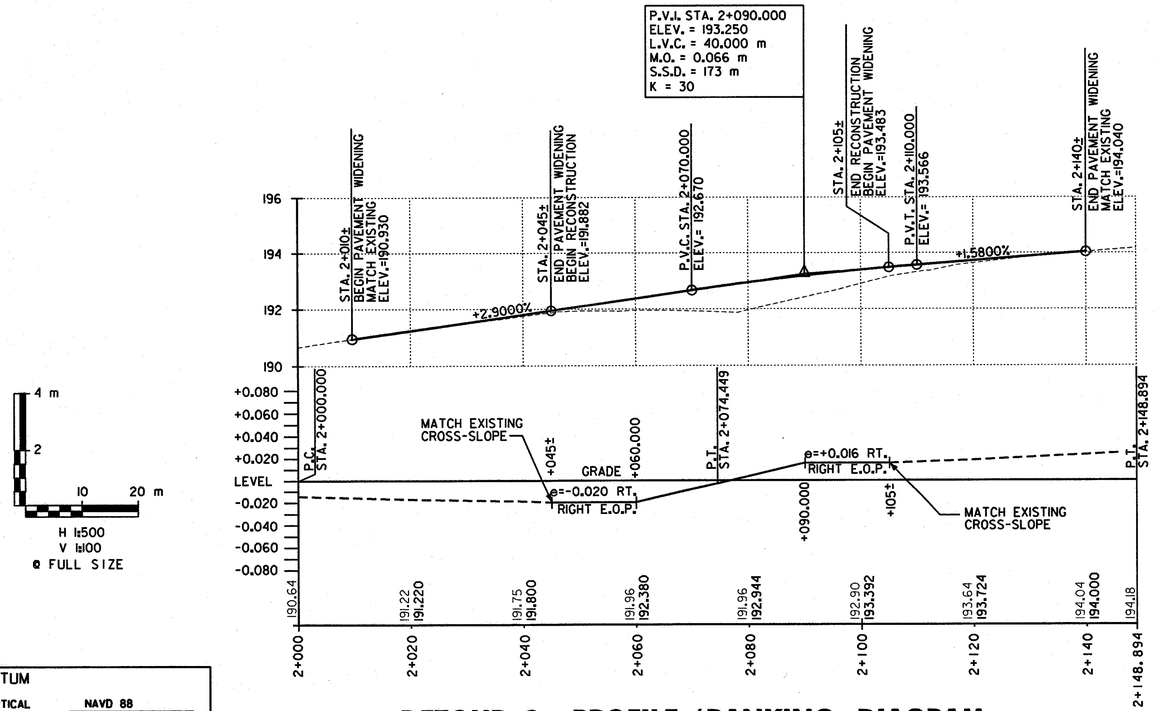


DETOUR 2 LAYOUT

10 0 10 m

1 : 500

@ FULL SIZE



DETOUR 2 PROFILE / BANKING DIAGRAM

4 m
2
10 20 m

H 1:500
V 1:100

@ FULL SIZE

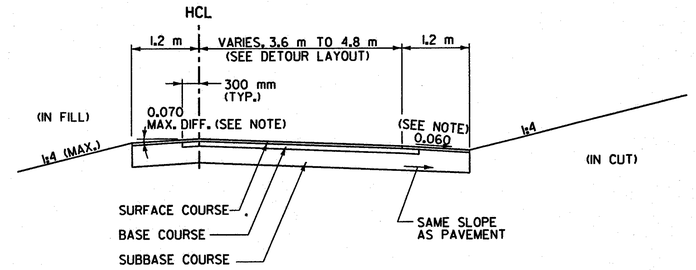
DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

TYPICAL SECTIONS – DETOUR 1 AND DETOUR 2

50 SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) TYPE III S

100 BASE COURSE, SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) TYPE IS

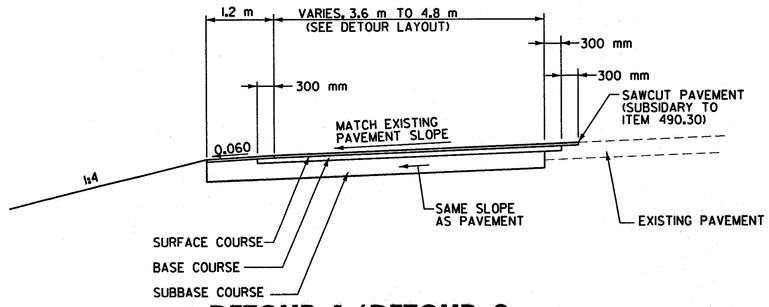
300 SUBBASE OF CRUSHED GRAVEL (COARSE GRADED)



DETOUR 1 / DETOUR 2 TYPICAL RECONSTRUCTION SECTION – BANKED RIGHT (SEE NOTE)

N.T.S.

NOTE:
FOR A "BANKED LEFT" ROADWAY, THE LEFT SHOULDER SLOPE WILL BE 0.060 (DOWN LEFT) AND THE RIGHT SHOULDER WILL BE BANKED RIGHT WITH A 0.070 MAXIMUM DIFFERENCE.



DETOUR 1 / DETOUR 2 TYPICAL WIDENING SECTION

N.T.S.

CONSTRUCTION SEQUENCING PHASE 2

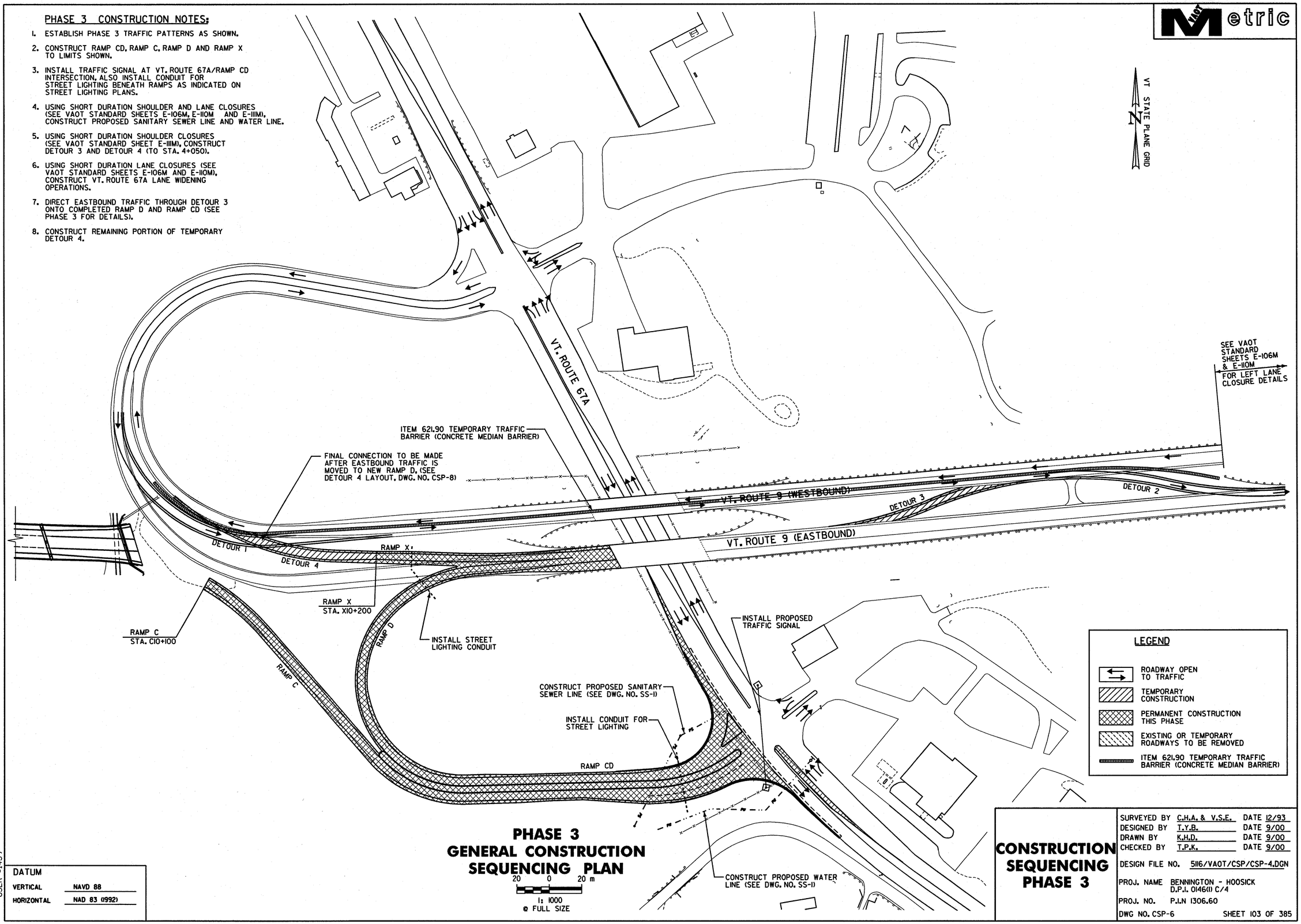
SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	T.Y.B.	DATE 9/00
DRAWN BY	K.H.D.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00
DESIGN FILE NO.	5116/VAOT/CSP/CSP-3.DGN	
PROJ. NAME	BENNINGTON - HOOSICK D.P.I. 0146(1) C/4	
PROJ. NO.	P.I.N 1306.60	
DWG NO. CSP-5		SHEET 102 OF 385

FILE NAME =u:\5116\vaot\contract4\csp\csp-3.dgn
DATE/TIME =07 SEP 2000
USER =1459

Metric

PHASE 3 CONSTRUCTION NOTES:

1. ESTABLISH PHASE 3 TRAFFIC PATTERNS AS SHOWN.
2. CONSTRUCT RAMP CD, RAMP C, RAMP D AND RAMP X TO LIMITS SHOWN.
3. INSTALL TRAFFIC SIGNAL AT VT. ROUTE 67A/RAMP CD INTERSECTION. ALSO INSTALL CONDUIT FOR STREET LIGHTING BENEATH RAMPS AS INDICATED ON STREET LIGHTING PLANS.
4. USING SHORT DURATION SHOULDER AND LANE CLOSURES (SEE VAOT STANDARD SHEETS E-106M, E-110M AND E-111M), CONSTRUCT PROPOSED SANITARY SEWER LINE AND WATER LINE.
5. USING SHORT DURATION SHOULDER CLOSURES (SEE VAOT STANDARD SHEET E-111M), CONSTRUCT DETOUR 3 AND DETOUR 4 (TO STA. 4+050).
6. USING SHORT DURATION LANE CLOSURES (SEE VAOT STANDARD SHEETS E-106M AND E-110M), CONSTRUCT VT. ROUTE 67A LANE WIDENING OPERATIONS.
7. DIRECT EASTBOUND TRAFFIC THROUGH DETOUR 3 ONTO COMPLETED RAMP D AND RAMP CD (SEE PHASE 3 FOR DETAILS).
8. CONSTRUCT REMAINING PORTION OF TEMPORARY DETOUR 4.



LEGEND

- ROADWAY OPEN TO TRAFFIC
- TEMPORARY CONSTRUCTION
- PERMANENT CONSTRUCTION THIS PHASE
- EXISTING OR TEMPORARY ROADWAYS TO BE REMOVED
- ITEM 621.90 TEMPORARY TRAFFIC BARRIER (CONCRETE MEDIAN BARRIER)

PHASE 3 GENERAL CONSTRUCTION SEQUENCING PLAN

20 0 20 m

1: 1000
@ FULL SIZE

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

CONSTRUCTION SEQUENCING PHASE 3

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	T.Y.B.	DATE 9/00
DRAWN BY	K.H.D.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. 5116/VAOT/CSP/CSP-4.DGN

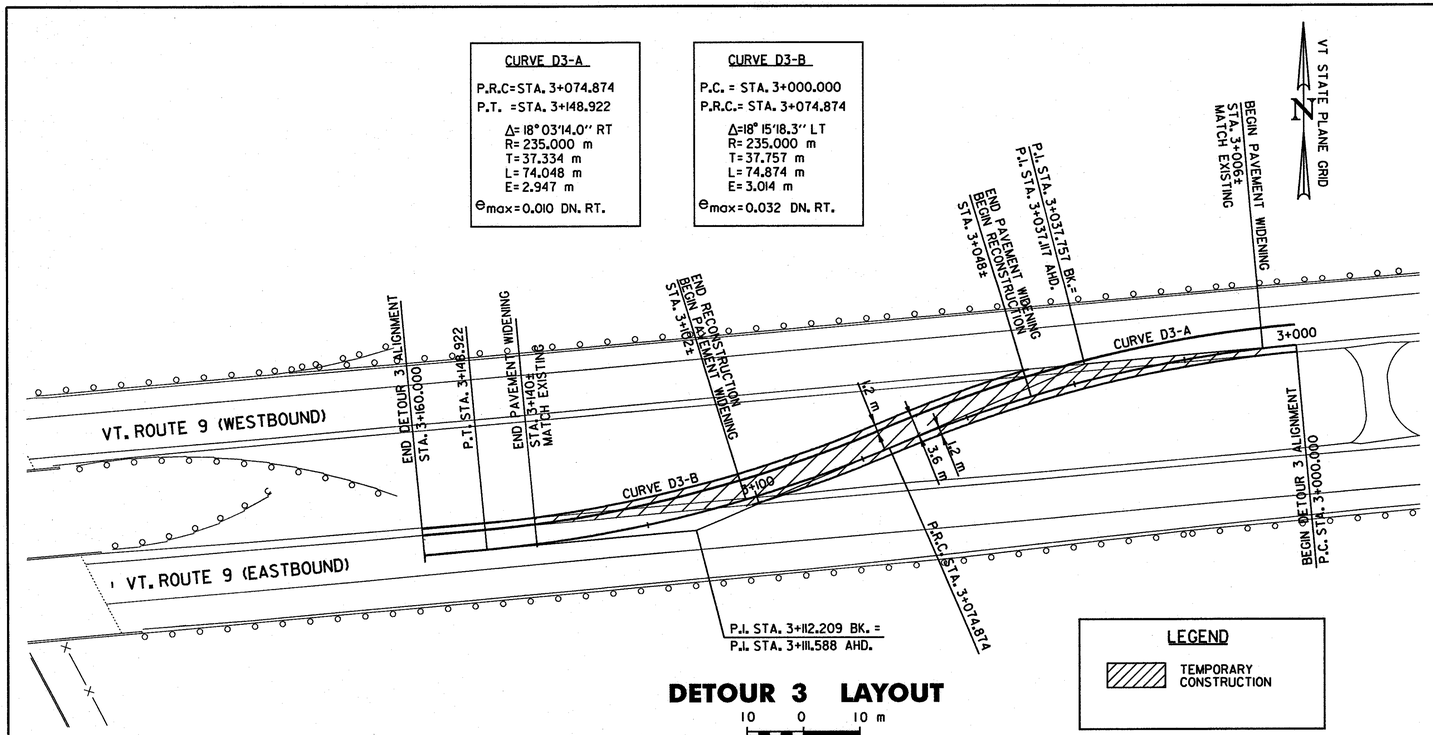
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N 1306.60

DWG NO. CSP-6 SHEET 103 OF 385

FILE NAME =\5116\vaot\contract4\csp\csp-4.dgn
DATE/TIME =07 SEP 2000
USER =1459

Metric

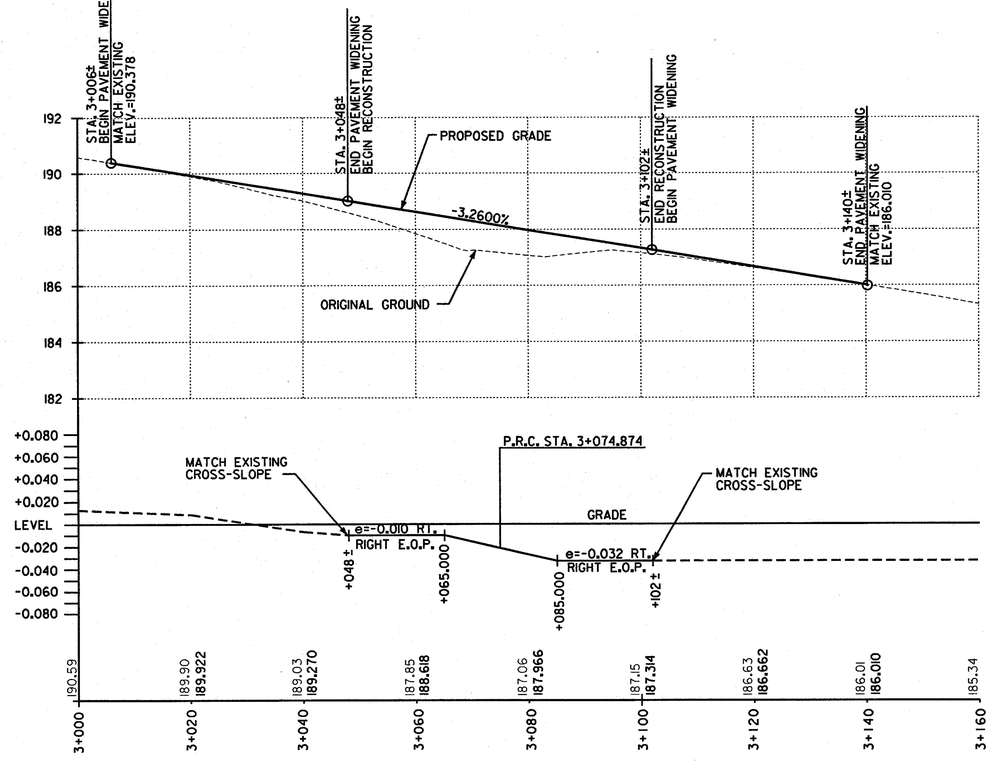


DETOUR 3 LAYOUT

10 0 10 m

1 : 500
@ FULL SIZE

DETOUR HORIZONTAL CONTROL TABLE				
HCL POINT	COORDINATES NORTH	COORDINATES EAST	HCL STATION	DESCRIPTION
DETOUR 3				
BEGIN/ P.C. D3-A	45267.338	441604.447	3+000.000	BEGIN DETOUR 3/ P.C. CURVE D3-A
P.I. D3-A	45264.066	441566.832	3+037.757 BK.= 3+037.117 AHD.	P.I. CURVE D3-A
P.R.C. D3-A/ D3-B	45249.176	441532.136	3+074.874	P.R.C. CURVE D3-A/D3-B
P.I. D3-B	45234.453	441497.828	3+112.208 BK.= 3+111.588 AHD.	P.I. CURVE D3-B
P.T. D3-B	45231.087	441460.646	3+148.922	P.T. CURVE D3-B
END	45230.088	441449.613	3+160.000	END DETOUR 3
DETOUR 4				
BEGIN	45217.127	441189.837	4+000.000	BEGIN DETOUR 4
P.C. D4-A	45218.074	441162.265	4+027.589	P.C. CURVE D4-A
P.I. D4-A	45220.008	441105.924	4+083.963 BK.= 4+079.352 AHD.	P.I. CURVE D4-A
P.T. D4-A/ END	45257.685	441063.990	4+135.726	P.T. CURVE D4-A/ END DETOUR 4



DETOUR 3 PROFILE /BANKING DIAGRAM

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

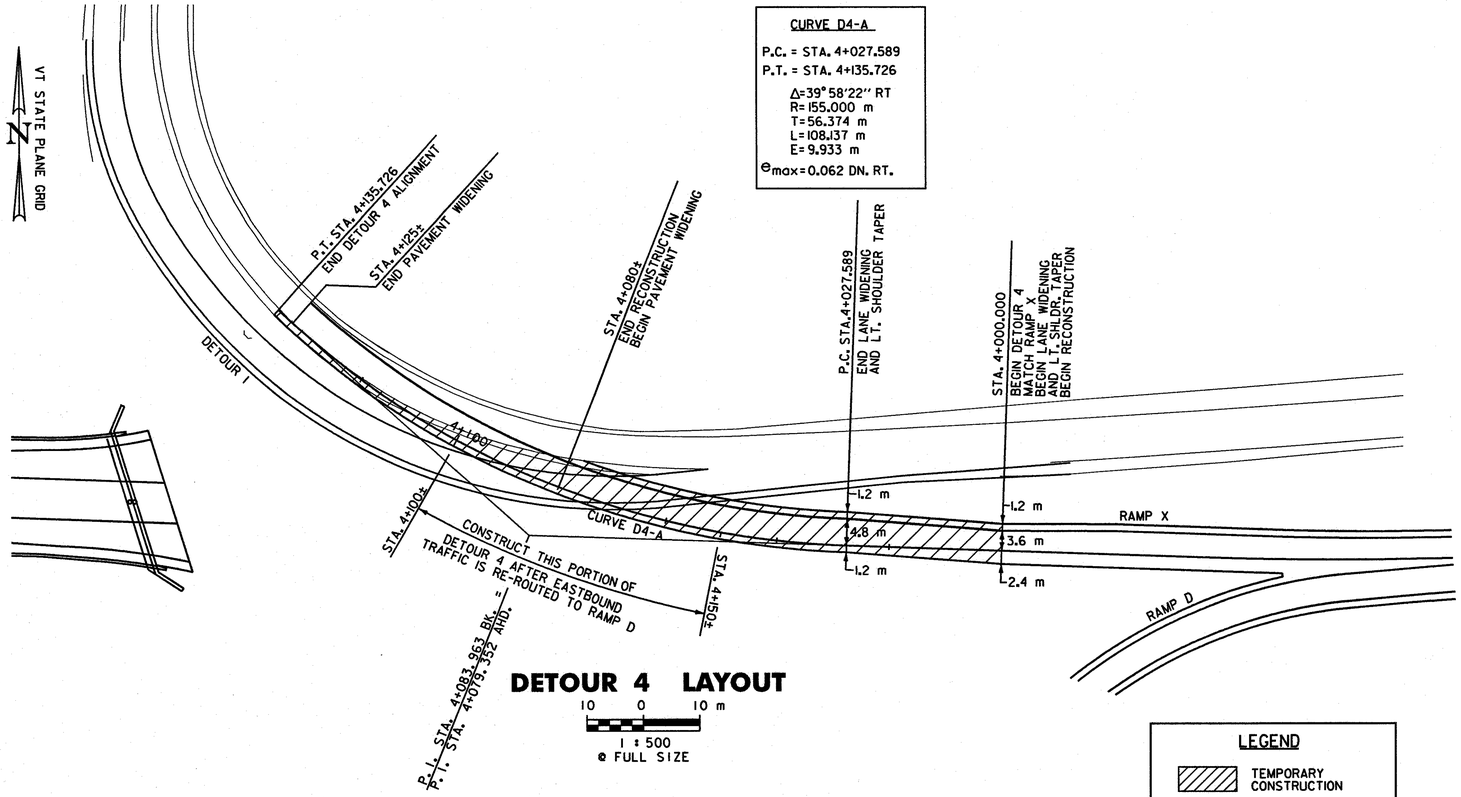
CONSTRUCTION SEQUENCING PHASE 3

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	T.Y.B.	DATE 9/00
DRAWN BY	K.H.D.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. 5116/VAOT/CSP/CSP-5.DGN
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N 1306.60
DWG NO. CSP-7 SHEET 104 OF 385

FILE NAME =u:\5116\vaot\contract4\csp\csp-5.dgn
DATE/TIME =07 SEP 2000
USER =1459

Metric



CURVE D4-A

P.C. = STA. 4+027.589
P.T. = STA. 4+135.726

Δ=39°58'22" RT
R=155.000 m
T=56.374 m
L=108.137 m
E=9.933 m
e_{max}=0.062 DN. RT.

DETOUR 4 LAYOUT

10 0 10 m
1 : 500
@ FULL SIZE

LEGEND

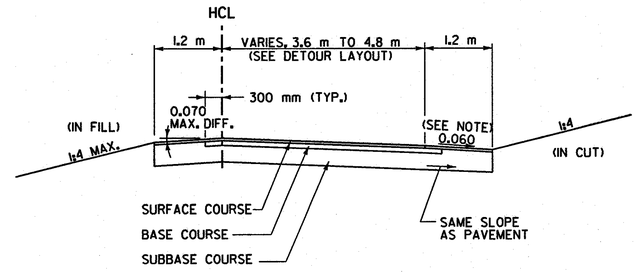
TEMPORARY CONSTRUCTION

TYPICAL SECTIONS – DETOUR 3 AND DETOUR 4

50 SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) TYPE III S

100 BASE COURSE, SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) TYPE IS

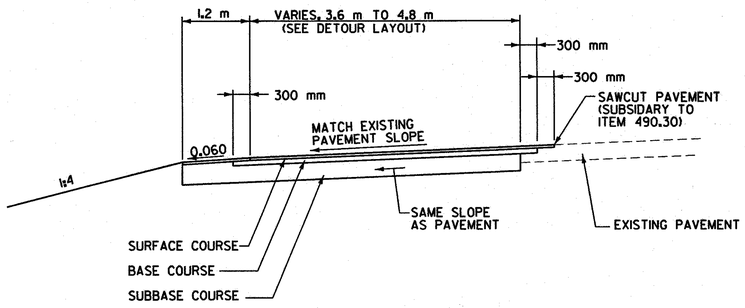
300 SUBBASE OF CRUSHED GRAVEL (COARSE GRADED)



DETOUR 3 / DETOUR 4 TYPICAL RECONSTRUCTION SECTION

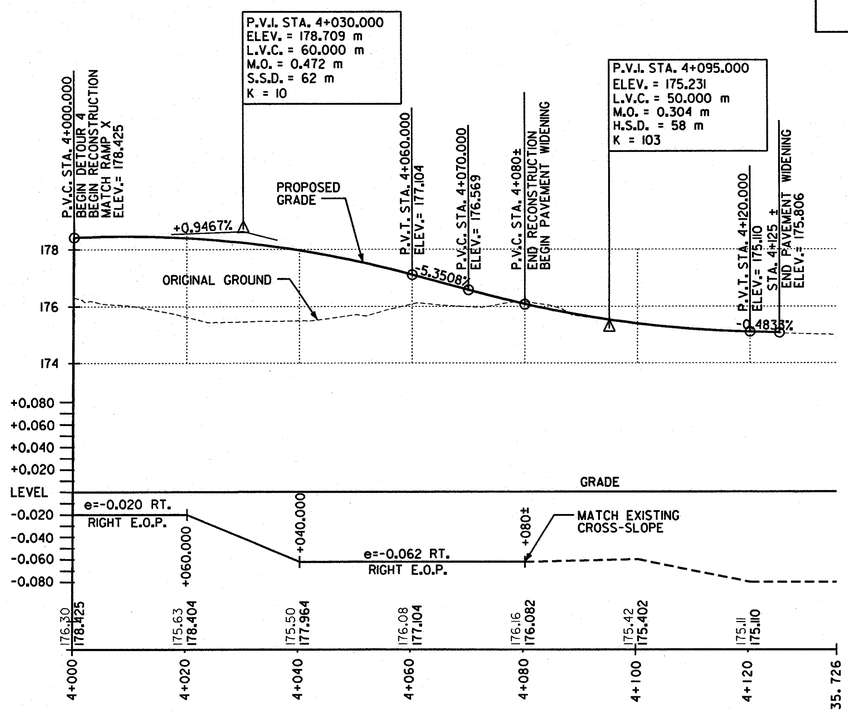
N.T.S.

NOTE:
WHERE BANKING IS GREATER THAN 0.060 DOWN RIGHT, THE RIGHT SHOULDER SLOPE SHALL MATCH ADJACENT PAVEMENT SLOPE.



DETOUR 3 / DETOUR 4 TYPICAL WIDENING SECTION

N.T.S.



DETOUR 4 PROFILE

4 m
2
10 20 m
H 1:500
V 1:100
@ FULL SIZE

DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

CONSTRUCTION SEQUENCING PHASE 3

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	T.Y.B.	DATE 9/00
DRAWN BY	K.H.D.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. 5116/VAOT/CSP/CSP-6.DGN

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4

PROJ. NO. P.I.N 1306.60

DWG NO. CSP-8 SHEET 105 OF 385

FILE NAME = y:\5116\vaot\contract4\csp\csp-6.dgn
DATE/TIME = 07 SEP 2000
USER = ljs

PHASE 4 CONSTRUCTION NOTES:

1. INSTALL SIGNS AND LANE CONFIGURATION ON VT. ROUTE 67A AS SHOWN ON DWG. NO. CSP-11 AND CSP-12.
2. ESTABLISH PHASE 4 TRAFFIC PATTERNS AS SHOWN.
3. CONSTRUCT RAMP B, RAMP AB AND RAMP Y TO LIMITS SHOWN. STAGE CONSTRUCTION OF VT. ROUTE 67A/RAMP AB TIE-IN AS DETAILED ON DWG. NO. CSP-10.
4. INSTALL NEW TRAFFIC SIGNAL AT VT. ROUTE 67/RAMP AB INTERSECTION. ALSO INSTALL CONDUIT FOR STREET LIGHTING BENEATH RAMPS AS INDICATED ON THE STREET LIGHTING PLANS (SEE SLP SERIES SHEETS).
5. USING SHORT DURATION SHOULDER CLOSURES (SEE VAOT STANDARD SHEET E-111M), REMOVE TEMPORARY DETOURS 1 AND 2 AND EXISTING VT. ROUTE 9 WESTBOUND RAMP TO VT. ROUTE 67A (LIMITS SHOWN ON THIS DWG.).
6. CONCRETE BARRIER DELINEATORS, REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ALONG VT. ROUTE 9 AND DETOUR 3 IN ACCORDANCE WITH THE LAYOUT SHOWN ON THE VAOT STANDARD SHEETS E-103M AND E-104M. THE COST OF THESE ITEMS SHALL BE INCLUDED IN ITEM 621.90 TEMPORARY TRAFFIC BARRIER (CONCRETE MEDIAN BARRIER).

Metric

VT STATE PLANE GRID N

INSTALL PROPOSED TRAFFIC SIGNAL

INSTALL STREET LIGHTING CONDUIT

RAMP AB

STAGE CONSTRUCT INTERSECTION (SEE DETAILS, DWG. NO. CSP-8)

VT. ROUTE 67A

RAMP B

INSTALL STREET LIGHTING CONDUIT

RAMP Y STA. Y10+220

ITEM 621.90 TEMPORARY TRAFFIC BARRIER (CONCRETE MEDIAN BARRIER)

SEE VAOT STANDARD SHEETS E-106M & E-110M FOR RIGHT LANE CLOSURE DETAILS

VT. ROUTE 9 (WESTBOUND)

DETOUR 3

DETOUR 2

DETOUR 1

DETOUR 4

RAMP Y

VT. ROUTE 9 (EASTBOUND)

REMOVE DETOUR PAVEMENT AND RETURN MEDIAN SLOPES TO ORIGINAL CONDITION

ITEM 621.90 TEMPORARY TRAFFIC BARRIER (CONCRETE MEDIAN BARRIER)

RAMP D

RAMP C

RAMP CD

LEGEND

- ROADWAY OPEN TO TRAFFIC
- TEMPORARY CONSTRUCTION
- PERMANENT CONSTRUCTION THIS PHASE
- EXISTING OR TEMPORARY ROADWAYS TO BE REMOVED
- ITEM 621.90 TEMPORARY TRAFFIC BARRIER (CONCRETE MEDIAN BARRIER)

PHASE 4 GENERAL CONSTRUCTION SEQUENCING PLAN

20 0 20 m

1: 1000

@ FULL SIZE

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

FILE NAME =u:\5116\vaot\contract4\csp\csp-7.dgn
DATE/TIME =07 SEP 2000
USER =1459

CONSTRUCTION SEQUENCING PHASE 4

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	T.Y.B.	DATE 9/00
DRAWN BY	K.H.D.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. 5116/VAOT/CSP/CSP-7.DGN

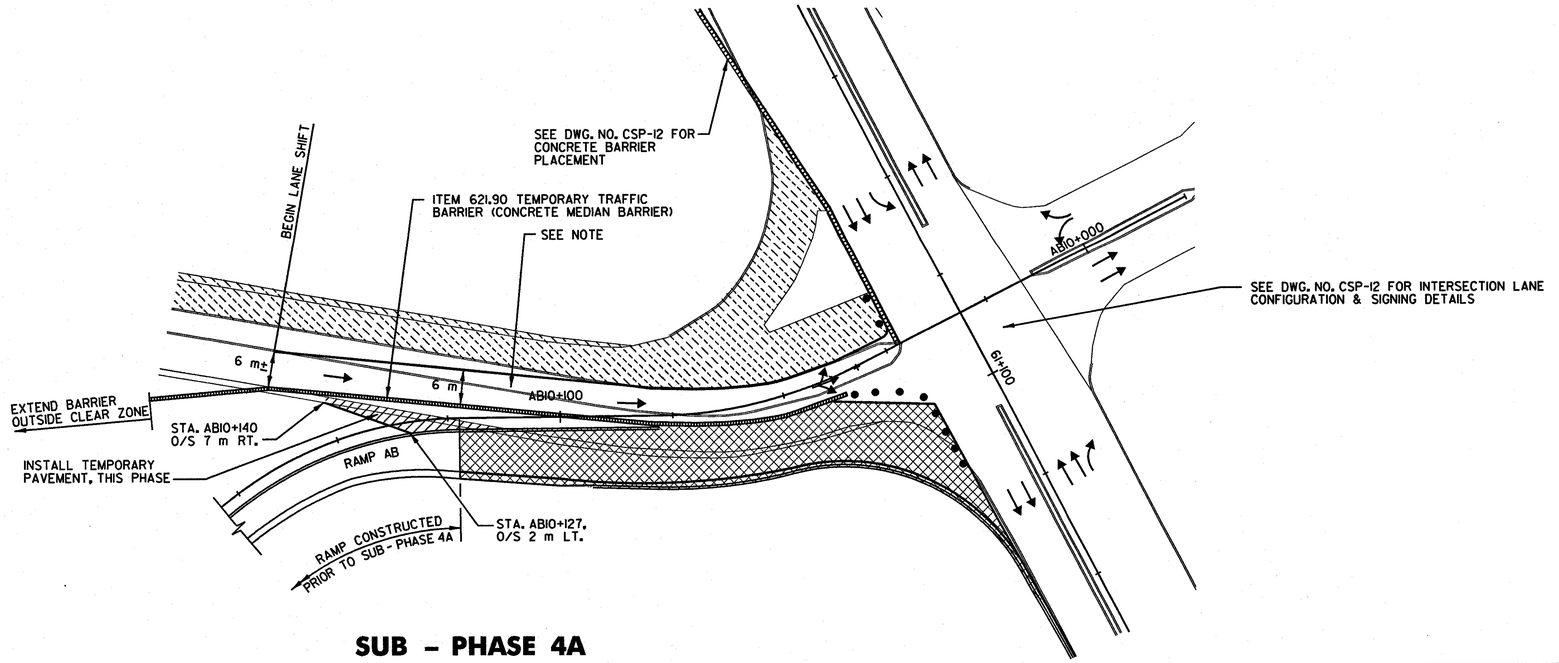
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N 1306.60

DWG NO. CSP-9 SHEET 106 OF 385

Metric

VT STATE PLANE GRID

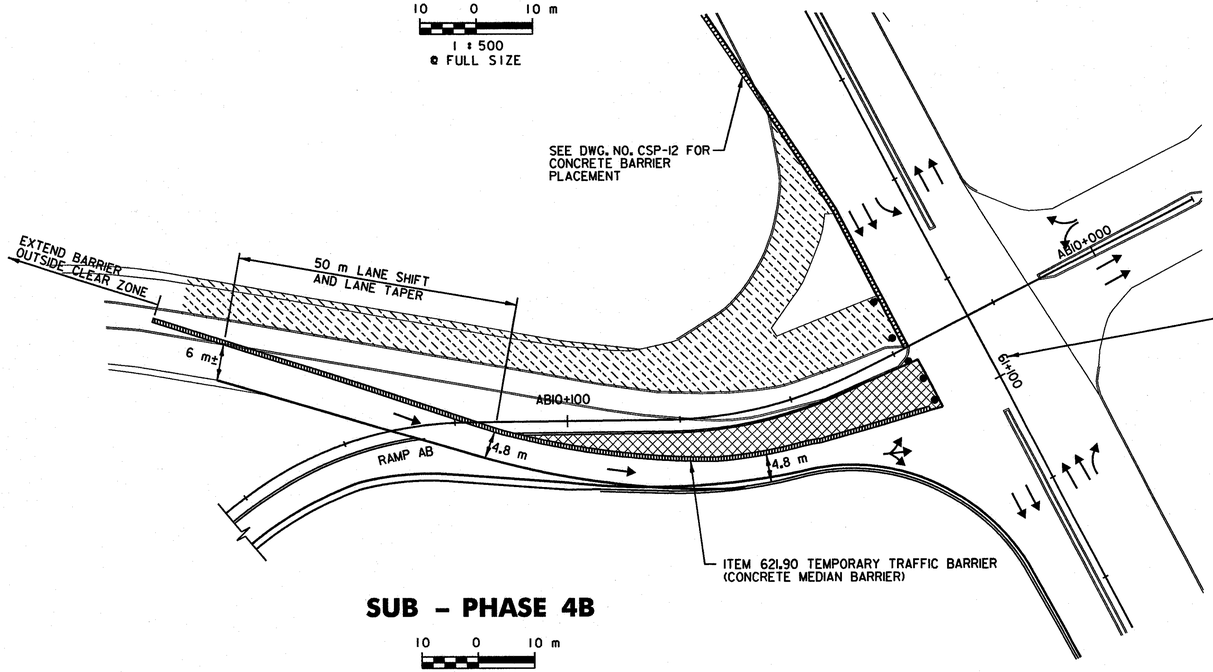


SUB - PHASE 4A

NOTE:
PRIOR TO THE START OF PHASE 4A, TEMPORARY PAVEMENT SHALL BE CONSTRUCTED IN THE EXISTING RAISED MEDIAN BETWEEN THE RAMPS AT THE INTERSECTIONS. USE WIDENING DETAIL, DWG. NO. CSP-8

10 0 10 m
1 : 500
@ FULL SIZE

VT STATE PLANE GRID



SUB - PHASE 4B

10 0 10 m
1 : 500
@ FULL SIZE

LEGEND

- ITEM 621.90 TEMPORARY TRAFFIC BARRIER (CONCRETE MEDIAN BARRIER)
- CONSTRUCTION SIGN
- PERMANENT SIGN (AS PER DWG. NOS. SSP-3, SSP-5 AND SSP-6)
- TYPE III BARRICADE
- REFLECTORIZED PLASTIC DRUM
- EXISTING SIGN
- TRAVEL LANE DIRECTION
- COVER SIGN FACE (OR PORTION THEREOF)

DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

CONSTRUCTION SEQUENCING PHASE 4

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	T.Y.B.	DATE 9/00
DRAWN BY	K.H.D.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. 5116/VAOT/CSP/CSP-8.DGN

PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N 1306.60

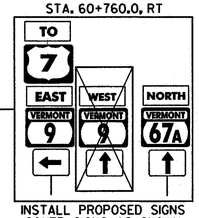
DWG NO. CSP-10 SHEET 107 OF 385

FILE NAME =u:\5116\vaot\contract4\csp\csp-8.dgn
DATE/TIME =07 SEP 2000
USER =1459

Metric

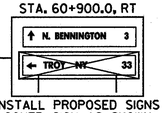
VT STATE PLANE GRID

STA. 60+760.0, RT



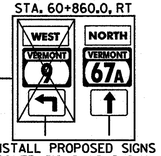
INSTALL PROPOSED SIGNS
COVER SIGNS AS SHOWN

STA. 60+900.0, RT



INSTALL PROPOSED SIGNS
COVER SIGNS AS SHOWN

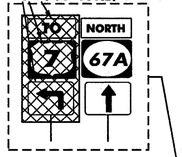
STA. 60+860.0, RT



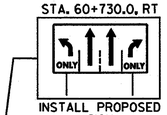
INSTALL PROPOSED SIGNS
COVER SIGNS AS SHOWN

REMOVE EXISTING SIGNS

STA. 60+938.2, RT

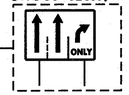


STA. 60+730.0, RT



INSTALL PROPOSED SIGN

STA. 60+620.0, RT



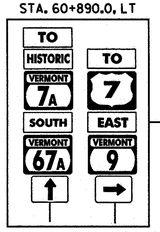
REMOVE EXISTING SIGN

ROAD CLOSED

VT. ROUTE 67A

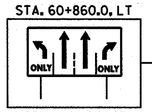
MORSE ROAD

STA. 60+890.0, LT



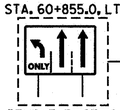
INSTALL PROPOSED SIGNS

STA. 60+860.0, LT



INSTALL PROPOSED SIGN

STA. 60+855.0, LT



REMOVE EXISTING SIGN

OPEN NEW RIGHT TURN LANE TO TRAFFIC

INSTALL PROPOSED SIGNING ON RAMP CD AS NECESSARY PRIOR TO OPENING RAMP TO TRAFFIC

RAMP CD

OPEN NEW LEFT TURN LANE TO TRAFFIC

ALL ITEM 621.90 TEMPORARY TRAFFIC BARRIER (CONCRETE MEDIAN BARRIER) (MOD.) SHOWN ON THIS SHEET WILL BECOME THE PROPERTY OF THE AGENCY AT THE CLOSE OF THIS CONTRACT. THIS CONCRETE MEDIAN BARRIER SHALL REMAIN IN PLACE UNTIL VT. ROUTE 9 IS OPEN TO TRAFFIC DURING THE BENNINGTON - HOOSICK D.P.I. 0146(1) C/I CONTRACT. THE BENNINGTON - HOOSICK D.P.I. 0146(1) C/I CONTRACTOR SHALL REMOVE THIS TRAFFIC BARRIER. THE COST OF THIS WORK SHALL BE INCIDENTAL TO THE OTHER ITEMS IN THE BENNINGTON - HOOSICK D.P.I. 0146(1) C/I CONTRACT.

LEGEND

- ITEM 621.90 TEMPORARY TRAFFIC BARRIER (CONCRETE MEDIAN BARRIER)
- CONSTRUCTION SIGN
- PERMANENT SIGN (AS PER DWG. NOS. SSP-3, SSP-5 AND SSP-6)
- TYPE III BARRICADE
- REFLECTORIZED PLASTIC DRUM
- EXISTING SIGN
- TRAVEL LANE DIRECTION
- COVER SIGN FACE (OR PORTION THEREOF)

VT. ROUTE 67A /PROPOSED RAMP CD

10 0 10 m
1 : 500
@ FULL SIZE

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

CONSTRUCTION SEQUENCING PHASE 4

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY T.Y.B. DATE 9/00
DRAWN BY K.H.D. DATE 9/00
CHECKED BY T.P.K. DATE 9/00
DESIGN FILE NO. 5116/VAOT/CSP/CSP-10.DGN
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N 1306.60
DWG NO. CSP-11 SHEET 108 OF 385

FILE NAME =u:\5116\vaot\contract4\csp\csp-10.dgn
DATE/TIME =07 SEP 2000
USER =1459

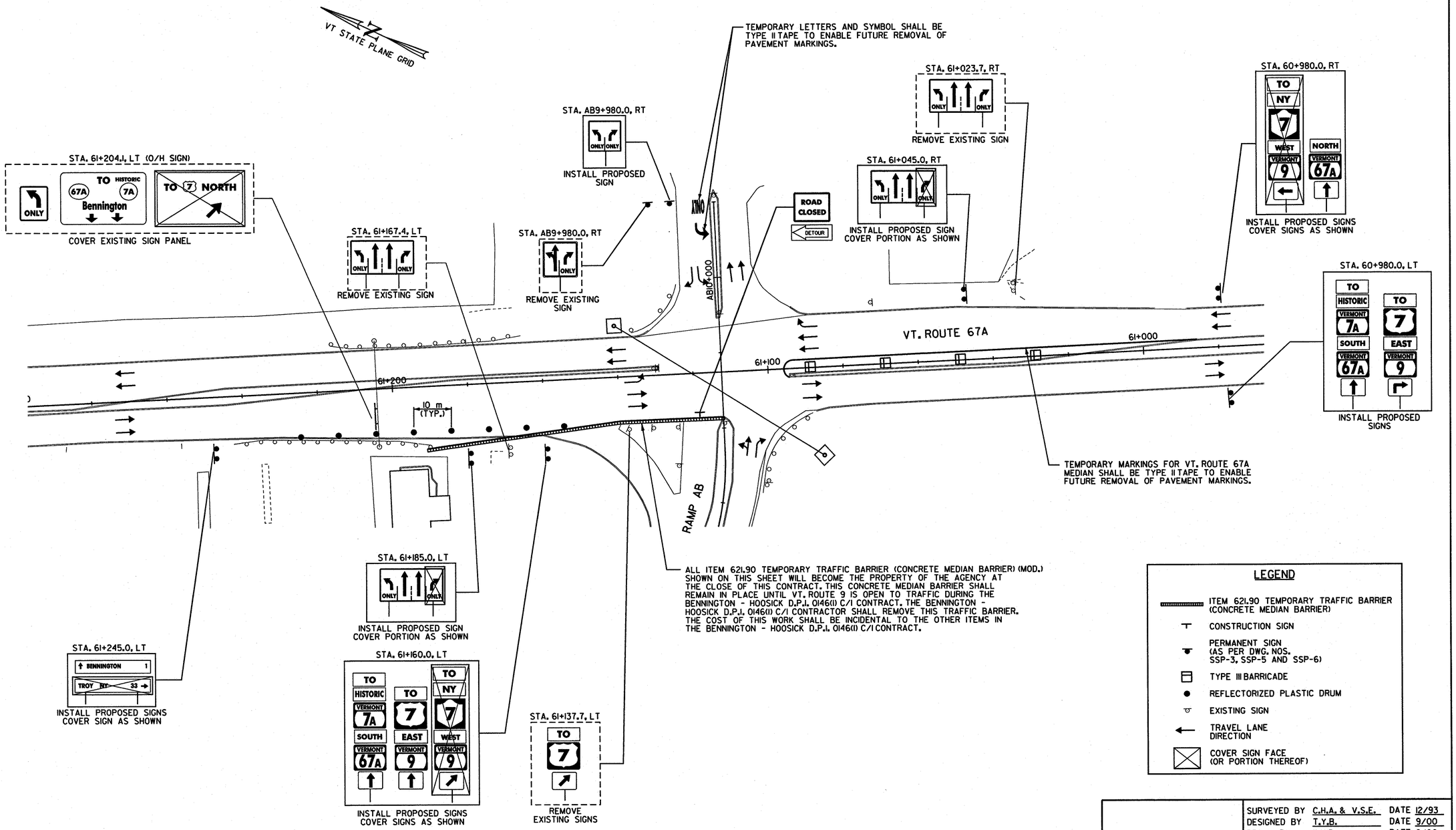
Metric

646.61 TEMPORARY 100 mm YELLOW LINE (TYPE II TAPE)

STA. 60+985.500 - STA. 61+095.777 SOLID RT (EDGE LINE)

646.70 TEMPORARY LETTER OR SYMBOL (TYPE II TAPE)

STA. AB9+981.250 RT = "O,N,L,Y"
STA. AB9+984.950 RT = ARROW



LEGEND

- ITEM 621.90 TEMPORARY TRAFFIC BARRIER (CONCRETE MEDIAN BARRIER)
- CONSTRUCTION SIGN
- PERMANENT SIGN (AS PER DWG. NOS. SSP-3, SSP-5 AND SSP-6)
- TYPE III BARRICADE
- REFLECTORIZED PLASTIC DRUM
- EXISTING SIGN
- TRAVEL LANE DIRECTION
- COVER SIGN FACE (OR PORTION THEREOF)

VT. ROUTE 67A /EXISTING VT. ROUTE 9 INTERCHANGE RAMP AB

10 0 10 m
1 : 500
@ FULL SIZE

DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

FILE NAME =u:\5116\vaot\contract4\csp\csp-9.dgn
DATE/TIME =07 SEP 2000
USER =1459

CONSTRUCTION SEQUENCING PHASE 4

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	T.Y.B.	DATE 9/00
DRAWN BY	K.H.D.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. 5116/VAOT/CSP/CSP-9.DGN

PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N 1306.60

DWG NO. CSP-12 SHEET 109 OF 385

Metric

VT STATE PLANE GRID

INSTALL STREET LIGHTING CONDUIT

RAMP AB

SEE SPECIAL LANE LAYOUT AND SIGNING DETAILS FOR VT. ROUTE 67A/RAMP AB INTERSECTION (DWG. NO. CSP-12)

VT. ROUTE 67A

RAMP A

RAMP B

DETOUR

RAMP Y
STA. Y10+220

CLOSE LEFT LANE
(SEE VAOT STANDARD SHEET E-110M)

VT. ROUTE 9 (WESTBOUND)

DETOUR 3

VT. ROUTE 9 (EASTBOUND)

DETOUR 4

RAMP Y

RAMP X

RAMP X
STA. X10+200

REMOVE DETOUR PAVEMENT AND RETURN MEDIAN SLOPES TO ORIGINAL CONDITION

RAMP C
STA. C10+100

RAMP D

DETOUR

SEE SPECIAL LANE LAYOUT AND SIGNING DETAILS FOR VT. ROUTE 67A/RAMP CD INTERSECTION (DWG. NO. CSP-11)

INSTALL ITEM 621.90 TEMPORARY TRAFFIC BARRIER (CONCRETE MEDIAN BARRIER) (MOD.) AFTER ALL RAMP CONSTRUCTION IS COMPLETE. CONCRETE MEDIAN BARRIER SHOWN ON THIS SHEET WILL BECOME THE PROPERTY OF THE AGENCY AT THE CLOSE OF THIS CONTRACT. THIS CONCRETE MEDIAN BARRIER SHALL REMAIN IN PLACE UNTIL VT. ROUTE 9 IS OPEN TO TRAFFIC DURING THE BENNINGTON - HOOSICK D.P.I. 0146(1) C/1 CONTRACT. THE BENNINGTON - HOOSICK D.P.I. 0146(1) C/1 CONTRACTOR SHALL REMOVE THIS TRAFFIC BARRIER. THE COST OF THIS WORK SHALL BE INCIDENTAL TO THE OTHER ITEMS IN THE BENNINGTON - HOOSICK D.P.I. 0146(1) C/1 CONTRACT.

RAMP CD

PHASE 5 GENERAL CONSTRUCTION SEQUENCING PLAN

20 0 20 m

1: 1000
@ FULL SIZE

PHASE 5 CONSTRUCTION NOTES:

1. ESTABLISH PHASE 5 TRAFFIC PATTERNS AS SHOWN.
2. INSTALL REMAINING PORTION OF CONDUIT FOR STREET LIGHTING BENEATH RAMP AB AS INDICATED ON STREET LIGHTING PLANS.
3. CONSTRUCT RAMPS A, AB, C, X AND Y TO LIMITS SHOWN. COLD PLANE AND PAVE FINAL SURFACE ON VT. ROUTE 67A. CONTRACTOR SHALL ENSURE THAT ALL CONDUITS AND DUCTS FOR TRAFFIC SIGNALS AND STREET LIGHTING ARE INSTALLED ALONG VT. ROUTE 67A PRIOR TO FINAL PAVING ON VT. ROUTE 67A.
4. USING SHORT DURATION SHOULDER CLOSURES (SEE VAOT STANDARD SHEET E-111M), REMOVE EXISTING WESTBOUND RAMP TO VT. ROUTE 67A. ALSO REMOVE TEMPORARY DETOUR 3 AND DETOUR 4 PAVEMENT.
5. COMPLETE REMAINING INCIDENTAL WORK ITEMS.

COLD PLANING AND PAVING NOTES:

1. THE MINIMUM LANE WIDTH OF 3 m SHALL BE MAINTAINED.
2. THERE SHALL BE NO LONGITUDINAL DROP OFFS DURING THE OVERNIGHT HOURS. THEREFORE, THE FULL ROADWAY WIDTH MUST BE COLD PLANED AND PAVED DURING THE DAILY WORK PERIOD.
3. ALL COLD PLANED AREAS SHALL BE PAVED WITH A LEVELING COURSE FOR THE TRAVELING PUBLIC.

LEGEND

- ROADWAY OPEN TO TRAFFIC
- TEMPORARY CONSTRUCTION
- PERMANENT CONSTRUCTION THIS PHASE
- EXISTING OR TEMPORARY ROADWAYS TO BE REMOVED
- ITEM 621.90 TEMPORARY TRAFFIC BARRIER (CONCRETE MEDIAN BARRIER)

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

CONSTRUCTION SEQUENCING PHASE 5

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	T.Y.B.	DATE 9/00
DRAWN BY	K.H.D.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. 5116/VAOT/CSP/CSP-11.DGN

PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N 1306.60

DWG NO. CSP-13 SHEET 110 OF 385

FILE NAME =u:\5116\vaot\contract4\csp\csp-11.dgn
DATE/TIME =07 SEP 2000
USER =1459

VAOT Metric

ROAD WORK AHEAD
ROAD WORK AHEAD
VT. ROUTE 67A
300 m
END ROAD WORK
ROAD WORK 500 FT
ROAD WORK AHEAD
END ROAD WORK
300 m
ROAD WORK 500 FT
END ROAD WORK
SILK ROAD
VT STATE PLANE GRID
N
U.S. ROUTE 7 (SOUTHBOUND OFF-RAMP)
ROAD WORK AHEAD
250 m
50 m
ROAD WORK AHEAD
VT. ROUTE 9 (WESTBOUND)
VT. ROUTE 9 (EASTBOUND)
HISTORIC VT. ROUTE 7A
VERMONT RAILWAY
ROAD WORK 500 FT
VT. ROUTE 9 (WESTBOUND)
VT. ROUTE 9 (EASTBOUND)
V.T. ROUTE 9 (EASTBOUND OFF-RAMP)
U.S. ROUTE 7 (SOUTHBOUND)
U.S ROUTE 7 (NORTHBOUND)
END ROAD WORK
ROAD WORK AHEAD
ROAD WORK 500 FT
ROAD WORK AHEAD
SEE NOTE 2
END ROAD WORK
ROAD WORK AHEAD
END ROAD WORK
ROAD WORK 500 FT
ROAD WORK AHEAD
300 m
VT. ROUTE 67A

50 0 50 m
1: 2500
@ FULL SIZE

NOTES:
1. SEE STANDARD E-100M FOR ADDITIONAL SIGN PLACEMENT.
2. ERECT SIGNS IN RAISED MEDIAN.

CONSTRUCTION APPROACH SIGNING DETAIL SHEET

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	C.K.	DATE 9/00
CHECKED BY	C.R.L.	DATE 9/00

DESIGN FILE NO. F:\5116\C/4\CSP\CASD-1

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. CAS-1 SHEET 111 OF 385

FILE NAME =u:\5116\vaot\contract4\csp\casd-1.dgn
DATE/TIME =08 SEP 2000
USER =1459

END BENNINGTON-HOOSICK D.P.I. 0146(1) C/3
BEGIN BENNINGTON-HOOSICK D.P.I. 0146(1) C/4
BEGIN ROADWAY
STA. 16+695.000

END 1:8 TRANSITION SLOPE
SEE DWG. NO. PDT-1 FOR DETAIL
STA. 16+674.000

MAYER, FOREST & EILEEN

BEGIN 1:8 TRANSITION SLOPE
STA. 16+624.000

MILLER, THOMAS JR. & JANET

END SILK ROAD
END PAVING
P.T. STA. SR0+281.723

BENNINGTON ACRES

VT STATE PLANE GRID

E 440950
E N 45300

END WALLOOMSAC RIVER CHANNEL
STA. WRI+440.000

STOP ROADWAY
BEGIN BRIDGE
STA. 16+762.943

STATE OF VERMONT

WALLOOMSAC RIVER

WRI+200

WRI+300

WRI+400

STATE OF VERMONT

PIPE EXTENSION AND END SECTION

NEW 450 mm X 22 m PIPE (OPTION A,B,C,D, & F)
W/1.2 m X 1.2 m R.C.D.I. & TYPE 'E' GRATE @ INLET
STA. 16+743.8 LT/RT

STATE OF VERMONT

END EASTBOUND DECELERATION LANE WIDENING
BEGIN EASTBOUND DECELERATION LANE
STA. 16+755.000

SILK ROAD

SR0+200

RT

FEDERAL JURISDICTIONAL WETLAND BOUNDARY

BM 120
R.R.S.I.R.
0.45 m PINE
ELEV.=177.470

BM 121
R.R.S.I.R.
0.50 m MAP.
ELEV.=174.138

BM 122
R.R.S.I.R.
0.50 m POP.
ELEV.=173.050

B-528

16+600 B-530

VT. ROUTE 9

3.0 m
3.6 m
3.6 m
4.3 m
3.0 m

16+700 B-600

B-720

B-710

B-724

B-726

16+800

B-728

B-734

B-740

B-730

B-732

B-754

B-760

16+900

B-750

B-752

3.0 m
3.6 m
3.6 m
3.6 m
3.6 m
3.0 m

MATCH LINE STA. 16+960.000 DWG. DP-2

BEGIN SILK ROAD CHANNEL STA. SI0+006.000 =
STA. 16+680.524, O/S 36.71m RT

55+100

B-532

180

B-620

NEW 450 mm x 38 m PIPE
(OPTION A,B,C,D, & F)
1.2 m x 1.2 m R.C.D.I. TYPE 'E' GRATE @ INLET
STA. 16+700.0 - STA. 16+737.5 RT

55+200

B-640

55+300

B-660

55+400

B-650

B-630

STATE OF VERMONT

B-534

B-610

NEW 450 mm X 32 m PIPE (OPTION B,C & F)
W/1.2 m X 1.2 m R.C.D.I. & TYPE 'E' GRATE @ INLET
STA. 16+700.0 RT

SR0+100

FEDERAL JURISDICTIONAL WETLAND BOUNDARY

BEGIN WALLOOMSAC RIVER CHANNEL
STA. WRI+000.000

APPROXIMATE LOCATION OF THE PROPOSED
BELL ATLANTIC, CVPS AND ADELPHIA TV CONDUIT

REMOVE EXISTING 450 mm X 10 m CPEP
STA. SR0+027.18 LT/RT

B A 846
B A STA. 55+157.035

B A 845
B A STA. 55+040.097

B A 847
B A STA. 55+271.514

STATE OF VERMONT

WALLOOMSAC RIVER

INV.=176.60

INV.=176.32

FEDERAL JURISDICTIONAL WETLAND BOUNDARY

APPROXIMATE LOCATION OF THE PROPOSED CVPS TRANSMISSION LINE

NEW 900 mm X 7 m PIPE
(OPTION A)
STA. SI0+067.0 - SI0+074.0

PROPOSED PRECAST CONCRETE BOX CULVERT
SEE DWG. NO. BRI000 AND BRI001
SPECIAL DITCH W/TYPE II STONE FILL
STA. SI0+006.0 - STA. SI0+153.0 CL

E 440875
E N 45150

END SILK ROAD CHANNEL
STA. SI0+238.626

SI0+100

FEDERAL JURISDICTIONAL WETLAND BOUNDARY

INV.=175.94

INV.=175.66

CENTRAL VERMONT PUBLIC SERVICE CORP.

SI0+200

WOLFE, WILLIAM

E 440640
E N 45150

NEW 900 mm X 7 m
PIPE (OPTION A)
STA. SI0+106.0 - SI0+113.0

KATZ, RONALD L.
SMITH, RONALD W.

180

BEGIN SILK ROAD
BEGIN PAVING
P.C. STA. SR0+000.000

0.3 m
3.0 m
0.3 m

SILK ROAD

NOTES:

1. DIMENSIONS FOR STONE PADS ARE GIVEN IN THE FOLLOWING FORMAT: (WIDTH x LENGTH).

2. DRAINAGE PIPE OPTIONS ARE AS FOLLOWS:
OPTION A - RCP
OPTION B - PCCSP
OPTION C - CAAP
OPTION D - CPEP(SL)
OPTION E - PCCSP(W/PI)
OPTION F - CPEP

10 0 10 m
1: 500
@ FULL SIZE

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

DRAINAGE PLAN

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.S.L.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. 5116/vaot/vtdp21.dgn

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. DP-1 SHEET 112 OF 385

FILE NAME =u:\5116\vaot\contract4\vtdp21.dgn
DATE/TIME =08 SEP 2000
USER =1459

N
VT STATE PLANE GRID

REMOVE EXISTING 900 mm RCP
STA. ABI0+163.2 - STA. ABI0+180.7 RT

REMOVE EXISTING 600 mm X 600 mm D.I.
AND 450 mm CMP
STA. ABI0+183.6 - STA. ABI0+187.4 RT

BENNINGTON ACRES

BENNINGTON ACRES

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END RAMP AB P.T. STA. ABI0+196.564 2.4 m LT
RAMP A STA. AI0+000.000

PROPOSED PRECAST CONCRETE
BOX CULVERT
SEE DWG. NO. BR900 AND BR901

END RAMP AB CHANNEL
STA. RABI+088.605

NEW 450 mm X 15 m PIPE (OPTION A,B,C,D, & F)
W/1.2 m X 1.2 m R.C.D.I. & TYPE "E" GRATE
@ INLET AND 900 mm X 1.8 m STONE FILL.
TYPE I PAD @ OUTLET
STA. ABI0+196.4 RT - STA. AI0+003.0 RT

STATE
OF
VERMONT

NEW 300 mm X 10 m PIPE (OPTION A,B,C,D, & F)
W/1.2 m X 1.2 m R.C.D.I. & TYPE "E" GRATE
@ INLET AND 600 mm X 1.2 m STONE FILL.
TYPE I PAD @ OUTLET
STA. AI0+056.0 RT

NEW 300MM PIPE AND END SECTION
LT/RT AI0+064 A.O.B.E.

REMOVE EXISTING 450 mm CMP
STA. AI0+109.5 - STA. AI0+138.2 RT

BEGIN RAMP C LANE WIDENING
SHOULDER TAPER
BEGIN RAMP C STA.CI0+000.000
P.O.C. STA.16+978.085, 3.6 m RT

END RAMP C LANE WIDENING
SHOULDER TAPER
END RAMP C P.C. STA.CI0+032.665

B A 848
B A STA. 55+472.623

STOP VT ROUTE 9 LANE WIDENING
END RAMP A LANE/TAPER
END RAMP A SHOULDER WIDENING
BEGIN RAMP A STA.AI0+000.000
BEGIN RAMP Y STA. Y10+000.000
END RAMP A P.T. STA. 16+978.091

WALLOOMSAC RIVER

MATCH LINE STA. 16+960.000 DWG. DP-1

B-680
B-670
B-780
B-770
B-690
B-700
B-800
B-790
B-860
B-870
B-880
B-940

BM 123
R.R.S.I.=
0.44 m POP.
ELEV.=174.148

END BRIDGE
RESUME ROADWAY
STA. XI0+046.006
STA. YI0+046.006

RAMP A
RAMP B
RAMP C
RAMP D
RAMP Y
RAMP X

AI0+100
AI0+200
BI0+100
BI0+200
BI0+300
CI0+100
CI0+200
DI0+100
WRI+100
XI0+100
XI0+200
YI0+100
YI0+200

NEW 150 mm x 14 m
CARRIER PIPE
YI0+160.0 LT

NEW UNDERDRAIN FLUSHING BASIN
STA. YI0+160.0 LT

NEW UNDERDRAIN FLUSHING BASIN
STA. YI0+160.0 RT

NEW 150 mm x 40 m
UNDERDRAIN PIPE
STA. YI0+160.0 - STA. YI0+200.0 RT

STATE
OF
VERMONT

STA. XI0+196.5
600 mm x 600 mm
DROP INLET

MATCH LINE
STA. CI0+140.000
DWG. DP-4

MATCH LINE
STA. DI0+080.000
DWG. DP-4

STATE OF VERMONT

NEW 300 mm X 8 m PIPE (OPTION B,C, & F)
W/1.2 m X 1.2 m R.C.D.I. & TYPE "E" GRATE
@ INLET AND 600 mm X 1.2 m STONE FILL.
TYPE I PAD @ OUTLET
STA. CI0+130.0 RT

REMOVE 600 mm x 600 mm D.I.
AND 450 mm CAAP
STA. XI0+196.5 RT

BEGIN RAMP AB CHANNEL
STA. RABI+000.000

NEW 150 mm x 4 m
UNDERDRAIN PIPE W/
150 mm x 9 m CARRIER PIPE
STA. ABI0+192.6 - STA. ABI0+196.6

NEW 150 mm x 44 m
UNDERDRAIN PIPE
STA. BI0+280.0 - STA. BI0+323.8 RT

NEW UNDERDRAIN
FLUSHING BASIN
STA. BI0+280.0 RT

NEW 150 mm x 20 m
UNDERDRAIN PIPE
STA. YI0+160.0 - STA. YI0+180.0
LT

NEW 150 mm x 8 m
CARRIER PIPE
STA. YI0+160.0 LT & RT

NEW UNDERDRAIN
FLUSHING BASIN
STA. YI0+180.0 LT

NEW UNDERDRAIN FLUSHING BASIN
STA. YI0+200.0 RT

MATCH LINE STA. BI0+140.000 DWG. DP-3

END RAMP B P.T. STA. BI0+323.782 =
RAMP AB P.T. STA. ABI0+196.564, 2.4 m LT

END RAMP B LANE WIDENING
SHOULDER TAPER
END RAMP B STA. BI0+175.097, 3.6 m LT
END RAMP Y STA. YI0+216.946 =
RAMP B P.C. STA. BI0+175.097, 3.6 m LT

RAMP AB

NEW 450 mm X 11m PIPE (OPTION A,B,C,D, & F)
W/1.2 m X 1.2 m R.C.D.I. & TYPE "E" GRATE
@ INLET AND 900 mm X 1.8 m STONE FILL.
TYPE I PAD @ OUTLET
STA. ABI0+126.0 RT

NEW 450 mm X 6 m PIPE (OPTION A,B,C,D, & F)
W/1.2 m X 1.2 m R.C.D.I. & TYPE "E" GRATE @ INLET
STA. ABI0+126.0 RT

NEW 150MM x 10M UNDERDRAIN PIPE
STA ABI0+120, 1.52M RT TO ABI0+110, 1.52M RT

NEW 150 mm x 44 m UNDERDRAIN PIPE
W/ 150 mm x 8 m CARRIER PIPE
STA. ABI0+140 - STA. ABI0+183.7 LT

MATCH LINE STA. ABI0+110.000 DWG. DP-6

NEW UNDERDRAIN FLUSHING BASIN
STA. ABI0+140.0 LT

NEW UNDERDRAIN FLUSHING BASIN
STA. ABI0+183.7 LT

NEW UNDERDRAIN FLUSHING BASIN
STA. ABI0+192.6 LT

NOTES:

1. DIMENSIONS FOR STONE PADS ARE GIVEN IN THE FOLLOWING FORMAT: (WIDTH x LENGTH).

2. DRAINAGE PIPE OPTIONS ARE AS FOLLOWS:
   OPTION A - RCP
   OPTION B - PCCSP
   OPTION C - CAAP
   OPTION D - CPEP(SL)
   OPTION E - PCCSP(W/PI)
   OPTION F - CPEP

10 0 10 m
1: 500
@ FULL SIZE

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

DRAINAGE PLAN

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY D.E.G. DATE 9/00
DRAWN BY J.S.L. DATE 9/00
CHECKED BY T.P.K. DATE 9/00

DESIGN FILE NO. 5116/vaot/vtdp22.dgn

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. DP-2 SHEET 113 OF 385

FILE NAME =u:\5116\vaot\contract4\vtdp22.dgn
DATE/TIME =08 SEP 2000
USER =1459

NOT Metric

REHAB EXISTING 600 mm x 600 mm D.I. (CLASS I)
CLEAN EXISTING DRAINAGE SYSTEM
STA. 61+006.2 ℄/LT

REHAB EXISTING 600 mm x 600 mm D.I. (CLASS II)
CLEAN EXISTING DRAINAGE SYSTEM
STA. B10+074.1 LT/RT

WILLIAM MORSE (TRUSTEE)

VT STATE PLANE GRID

NEW 450 mm X 20 m PIPE
(OPTION A,B,C,D & F)W/
1.2 m X 1.2 m R.C.D.I. & TYPE "E"
GRATE @ INLET AND 900 mm X 1.8 m
STONE FILL, TYPE I PAD @ OUTLET
STA. B10+139.4 RT

MATCH LINE STA. 61+040.000 DWG. DP-6

END ROADWAY
END FULL-DEPTH RECONSTRUCTION
END BENNINGTON-HOOSICK D.P.J. 0146(1) C/4
BEGIN BENNINGTON-HOOSICK D.P.J. 0146(1) C/6
BEGIN APPROACH SLAB
STA. B10+064.800 = W.B. STA. 17+305.027

END ROADWAY
END FULL-DEPTH RECONSTRUCTION
END BENNINGTON-HOOSICK D.P.J. 0146(1) C/4
BEGIN BENNINGTON-HOOSICK D.P.J. 0146(1) C/6
BEGIN APPROACH SLAB
STA. D10+236.439

E 441425
N 45335
N 45290

VT. ROUTE 67A

162 mm SANITARY SEWER LINE

203 mm WATER LINE
61+000

BM 125
DISK
NE COR BDG
ELEV.=183.400

55+900

BELL MH

REHAB EXISTING 300 mm X 600 mm D.I. (CLASS I)
CLEAN EXISTING DRAINAGE SYSTEM
STA. B10+074.4 RT

STATE OF VERMONT

BM 124
R.R.S.H.R.
0.20 m ASH
ELEV.=176.170

B-830

B-840

BEGIN RAMP D STA.B10+000.000
ULTIMATE E.B. STA.17+369.827
RESUME VT. ROUTE 9

180

STATE OF VERMONT

3.0 m
3.6 m
3.6 m
1.8 m
55+700
RAMP X
4.8 m
RAMP D
1.2 m
1.8 m

B10+100

3.0 m
3.6 m
3.6 m
1.8 m
180
1.8 m
1.8 m
X10+300
3.6 m 3.6 m 3.6 m
4.8 m DI0+200
3.6 m 3.6 m 3.6 m
4.6 m 5.6 m 5.6 m

55+800

60+000

B-810

10.36 m

B-820

END RIGHT-TURN LANE TAPER
STA. 60+915.000

END RAMP X STA.X10+330.096
RAMP D STA.D10+227.791 3.6 m LT.

END RAMP D
STA.D10+297.827 =
ULTIMATE E.B.
STA. 17+359.765
RESUME VT. ROUTE 9

HYD

MATCH LINE STA. B10+140.000 DWG. DP-2

MATCH LINE STA.60+870.000 DWG. DP-5

17+400
17+500
17+600

VT. ROUTE 9 (WESTBOUND)

STA. 55+840.906

GPS T

VT. ROUTE 9 (EASTBOUND)

17+400
17+500

190

END APPROACH

180

STATE OF VERMONT

180

STATE OF VERMONT

REHAB EXISTING 600 mm x 600 mm D.I. (CLASS I)
CLEAN EXISTING DRAINAGE SYSTEM
STA. 60+891.9 LT

NEW 300 mm X 7 m PIPE (OPTIONS A,B,C,D & F)
W/ 1.2 m X 1.2 m R.C.D.I. & TYPE "D" GRATE
@ INLET AND 600 mm X 1.2 m STONE FILL,
TYPE I PAD @ OUTLET.
STA. 60+893.5 LT

NEW 450 mm X 19 m PIPE (OPTION A,B,C,D & F)
W/1.2 m X 1.2 m R.C.D.I. & TYPE "A" GRATE @ INLET
STA.B10+139.4 LT/RT

REHAB EXISTING 600 mm X 600 mm D.I. (CLASS I)
CLEAN EXISTING DRAINAGE SYSTEM
STA. D10+222.8 RT

NEW 300 mm X 14 m PIPE
(OPTION B,C, & F)
W/1.2 m X 1.2 m R.C.D.I. &
TYPE "E" GRATE
@ INLET AND 600 mm X 1.2 m
STONE FILL, TYPE I PAD @ OUTLET
STA. D10+217.0 RT

NOTES:

1. DIMENSIONS FOR STONE PADS ARE GIVEN IN THE FOLLOWING FORMAT: (WIDTH x LENGTH).
2. DRAINAGE PIPE OPTIONS ARE AS FOLLOWS:
   OPTION A - RCP
   OPTION B - PCCSP
   OPTION C - CAAP
   OPTION D - CPEP(SL)
   OPTION E - PCCSP(W/PI)
   OPTION F - CPEP

10 0 10 m
1: 500
@ FULL SIZE

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

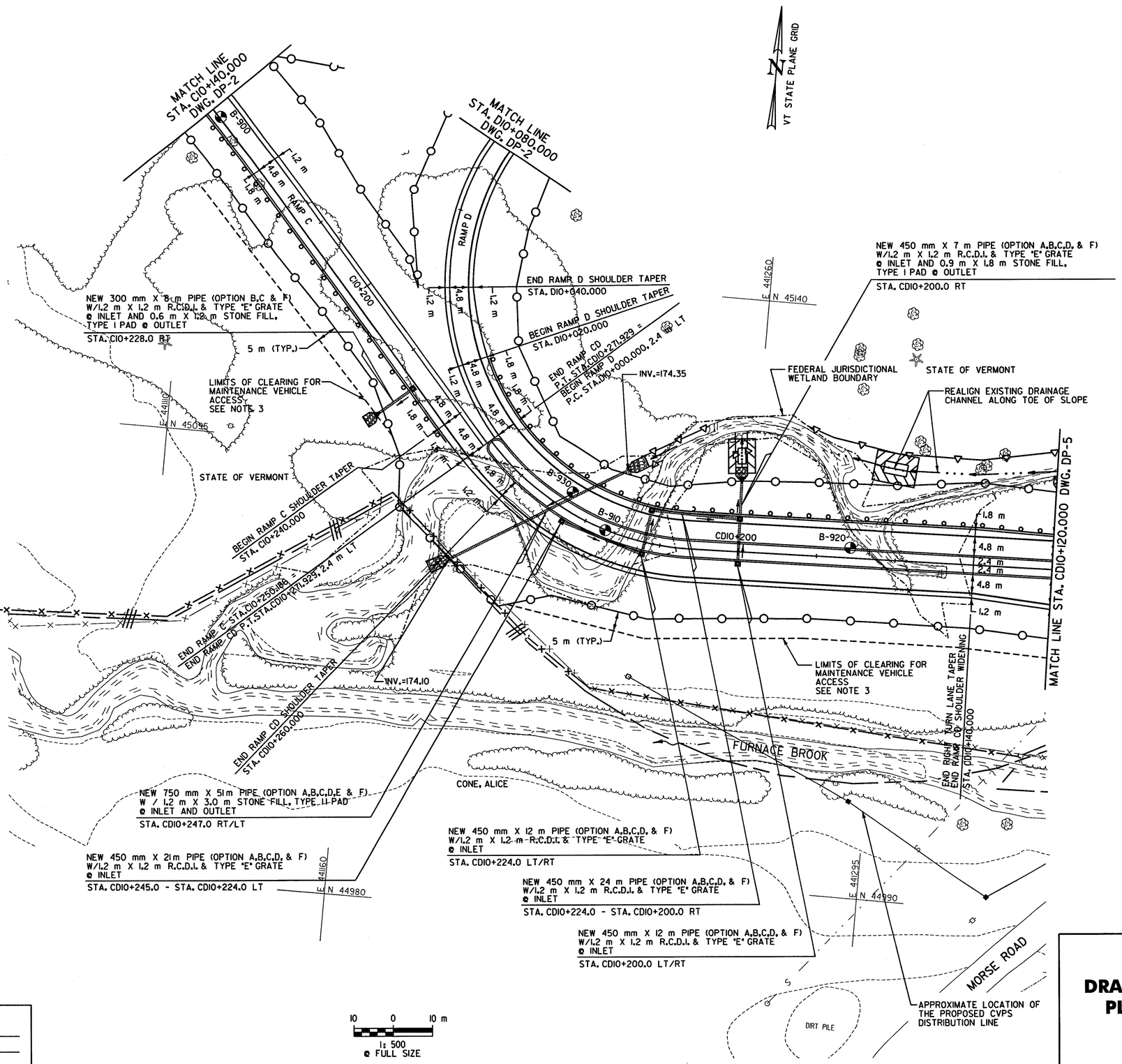
DRAINAGE PLAN

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.S.L.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. 5116/vaot/vtdp23.dgn
PROJ. NAME BENNINGTON - HOOSICK D.P.J. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG NO. DP-3 SHEET 114 OF 385

FILE NAME =u:\5116\vaot\contract1\vtdp23.dgn
DATE/TIME =08 SEP 2000
USER =1459

Metric



NOTES:

1. DIMENSIONS FOR STONE PADS ARE GIVEN IN THE FOLLOWING FORMAT: (WIDTH x LENGTH).
2. DRAINAGE PIPE OPTIONS ARE AS FOLLOWS:
   OPTION A - RCP
   OPTION B - PCCSP
   OPTION C - CAAP
   OPTION D - CPEP(SL)
   OPTION E - PCCSP(W/PI)
   OPTION F - CPEP
3. THE CONTRACTOR SHALL REMOVE ALL TREES AND CUT ALL STUMPS FLUSH TO THE GROUND WITHIN 5 m OF THE EARTHWORK LIMITS IN THIS VICINITY. THIS WILL FACILITATE MAINTENANCE VEHICLE ACCESS TO THE UTILITY LINES THAT ARE NOT IMMEDIATELY ADJACENT TO THE PROPOSED CONSTRUCTION.

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

10 0 10 m
1: 500
@ FULL SIZE

DRAINAGE PLAN

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.S.L.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. 5116/vaot/vtdp24.dgn

PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. DP-4 SHEET 115 OF 385

FILE NAME =u:\5116\vaot\contract4\vtdp24.dgn
DATE/TIME =08 SEP 2000
USER =1459

NEW 450 mm x 26 m (OPTIONS A,B,C,D & F)
W/ 1.2 m x 1.2 m R.C.D.I. & TYPE "D" GRATE @ INLET
STA. 60+800.0 - STA. 60+826.0 LT

PROPOSED SANITARY SEWER RELOCATION
SEE DWG. NO. SS-1 AND DWG. NO. SS-3

NEW 450 mm x 8 m PIPE (OPTIONS A,B,C,D & F)
W/ 1.2 m x 1.2 m R.C.D.I. & TYPE "D" GRATE @ INLET AND
900 mm x 1.8 m STONE FILL, TYPE I PAD @ OUTLET
STA. 60+826.0 LT

NEW 300 mm X 9 m PIPE (OPTION A,B,C,D, & F)
W/1.2 m X 1.2 m R.C.D.I. & TYPE "D" GRATE
@ INLET AND 600 mm X 1.2 m STONE FILL,
TYPE I PAD @ OUTLET
STA. 60+859.4 LT

NEW UNDERDRAIN
FLUSHING BASIN
STA. 60+858.4 LT

STATE OF VERMONT

WILLIAM MORSE (TRUSTEE)

STA. 60+812.8
WATER VALVE, 8.2 m RT

STA. 60+810.5
600 mm DIA. ROUND
SEWER MANHOLE,
24.5 m RT

LIMIT OF COLD PLANING & PAVING
STA.CD9+980.000

STA. 60+812.1
WATER VALVE, 5.7 m RT

STA. 60+811.2
WATER VALVE,
7.4 m LT

MATCH LINE STA. 60+870.000 DWG. DP-3

STA. 60+816.7
600 mm DIA. ROUND
SEWER MANHOLE,
7.8 m LT

BEGIN RIGHT TURN TAPER
END RIGHT TURN LANE
STA. 60+860.000

STATE OF VERMONT

NEW 150 mm X 64 m UNDERDRAIN
PIPE W/ 150 mm X 9 m CARRIER
PIPE TO OUTLET INTO STONE PAD
STA. CD10+060.0 - 60+859.4 LT

BEGIN RAMP CD SHOULDER WIDENING
BEGIN RIGHT TURN LANE TAPER
END RIGHT TURN LANE
STA. CD10+100.000

NEW 300 mm X 9 m
PIPE (OPTION A,B,C,D, & F)
W/1.2 m X 1.2 m R.C.D.I.
& TYPE "E" GRATE
@ INLET AND 600 mm X
1.2 m STONE FILL,
TYPE I PAD @ OUTLET
STA. CD10+119.4 RT

NEW UNDERDRAIN
FLUSHING BASIN
STA. CD10+060.0 RT

MATCH LINE STA. CD10+120.000 DWG. DP-4

203 mm SANITARY SEWER LINE
203 mm WATER LINE
CURVE CD-1

LIMIT OF CLEARING FOR MAINTENANCE
VEHICLE ACCESS (SEE NOTE 4)

NEW 450 mm x 25 m PIPE (OPTION A,B,C,D & F)
W/ 1.2 m x 1.2 m R.C.D.I. & TYPE "E" GRATE @ INLET
STA. CD10+112.5 - STA. CD10+087.6 LT

VT. ROUTE 67A STA. 60+789.574 =
RAMP CD STA. CD10+019.604

LIMIT OF COLD PLANING & PAVING
BEGIN FULL-DEPTH RECONSTRUCTION
STA. CD10+028.800

NEW 450 mm x 22 m PIPE (OPTIONS A,B,C,D & F)
W/ 1.2 m X 1.2 m R.C.D.I. & TYPE "D" GRATE @ INLET
STA. CD10+043.0 - STA. CD10+065.0 LT

STA. 60+775.1
600 mm x 600 mm DROP INLET, 1.6 m RT

REMOVE EXISTING 600 mm X 600 mm
D.I. AND 450 mm RCP
STA. CD10+019.2 LT - STA. CD10+021.9 LT

PROPOSED WATERLINE RELOCATION
SEE DWG. SS-1 AND DWG. SS-3

E 441500 N 45160

STA. 60+744.1
WATER VALVE, 13.7 m RT

STA. 60+708.3
600 mm DIA. ROUND
SEWER MANHOLE, 6.5 m RT

MELVIN STEWART

CLEAN EXISTING DRAINAGE SYSTEM
(SEE NOTE 3)
STA. 60+701.5 RT

STA. 60+655.7
WATER VALVE, 13.2 m RT

STA. 60+675.0 - STA. 60+781.6 RT/LT
VT. ROUTE 67A TURN LANE WIDENING
SEE DWG. NO. TS-11 FOR DETAILS

BEGIN LEFT-TURN LANE
END LEFT-TURN LANE TAPER
STA. 60+730.000

BEGIN LEFT TURN TAPER
STA. 60+675.000

BEGIN COLD PLANING & PAVING
STA. 60+640.000

E 441585 N 45095

WILLIAM MORSE (TRUSTEE)

REHAB EXISTING 600 mm x 600 mm
D.I. (CLASS II)
STA. CD10+021.9 LT

TOWN OF BENNINGTON

CLEAN EXISTING DRAINAGE SYSTEM
(SEE NOTE 3)
STA. 60+701.3 RT/LT

NEW 300 mm x ~~6~~ 54.77 m PIPE (OPTION A,B,C,D & F)
W/ 1.2 m x 1.2 m R.C.D.I. & TYPE "D" GRATE @ INLET
AND 600 mm x 1.2 m STONE FILL, TYPE I PAD @ OUTLET
STA. 60+760.0 LT

NEW 450 mm x 61m (OPTIONS A,B,C,D & F)
W/ 900 mm x 1.8 m STONE FILL, TYPE I PAD @ OUTLET
STA. CD10+019.2 - STA. CD10+077.0 LT

REMOVE EXISTING 450 mm RCP W/ END SECTION
STA. CD10+021.9 LT- STA. CD10+043.0 LT

NEW 450 mm x 23 m PIPE (OPTION A,B,C,D & F)
W/ 1.2 m x 1.2 m R.C.D.I. & TYPE "E" GRATE @ INLET
STA. CD10+065.0 - STA. CD10+087.6 LT

NEW 450 mm x 10 m PIPE (OPTION A,B,C,D & F)
W/ 1.2 m x 1.2 m R.C.D.I. & TYPE "E" GRATE @ INLET
STA. CD10+087.6 LT

NEW 450 mm X 8 m PIPE (OPTION A, B, C, D, & F)
W/1.2 m X 1.2 m R.C.D.I. & TYPE "E" GRATE
@ INLET AND 900 mm X 1.8 m STONE FILL,
TYPE I PAD @ OUTLET
STA. CD10+087.6 LT

APPROXIMATE LOCATION OF THE
PROPOSED CVPS DISTRIBUTION LINE

VT. ROUTE 67A

MORSE ROAD

FURNACE BROOK

E 441520 N 44960

REHAB EXISTING 600 mm x 600 mm D.I. (CLASS I)
CLEAN EXISTING DRAINAGE SYSTEM
(SEE NOTE 3)
STA. 60+701.4 RT

NOTES:

1. DIMENSIONS FOR STONE PADS ARE GIVEN IN THE FOLLOWING FORMAT: (WIDTH x LENGTH).
2. DRAINAGE PIPE OPTIONS ARE AS FOLLOWS:
   OPTION A - RCP
   OPTION B - PCCSP
   OPTION C - CAAP
   OPTION D - CPEP(SL)
   OPTION E - PCCSP(W/PI)
   OPTION F - CPEP
3. SEDIMENT FROM CLEANING CULVERT OPERATIONS SHALL NOT BE DISCHARGED INTO FURNACE BROOK AS PER ITEM 601.995 CLEANING CULVERT PIPE IN PLACE (0-600 mm INCLUSIVE) (MOD.).
4. THE CONTRACTOR SHALL REMOVE ALL TREES AND CUT ALL STUMPS FLUSH TO THE GROUND WITHIN 5 m OF THE EARTHWORK LIMITS IN THIS VICINITY. THIS WILL FACILITATE MAINTENANCE VEHICLE ACCESS TO THE UTILITY LINES THAT ARE NOT IMMEDIATELY ADJACENT TO THE PROPOSED CONSTRUCTION.

10 0 10 m
1: 500
@ FULL SIZE

DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

DRAINAGE PLAN

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.S.L.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. /5116/VAOT/VTDP25.DGN

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. DP-5 SHEET 116 OF 385

FILE NAME =u:\5116\vaot\contract4\vtdp25.dgn
DATE/TIME =08 SEP 2000
USER =1459

VT STATE PLANE GRID

E 441250 N 45590

E 441370 N 45440

E 441125 N 45530

REMOVE EXISTING 600 mm X 600 mm DROP INLET AND 450 mm CMP
STA. ABIO+041.3 LT- STA. ABIO+042.5 RT

NEW 300 mm X 5 m PIPE (OPTION A,B,C,D, & F) W/1.2 m X 1.2 m R.C.D.I. & TYPE "D" GRATE @ INLET AND 600 mm X 1.2 m STONE FILL, TYPE I PAD @ OUTLET
STA. 61+064.0 LT

WILLIAM MORSE (TRUSTEE)

STATE OF VERMONT

TED GLADSTONE DEVELOPMENT

END COLD PLANING & PAVING
STA. 61+244.00

NEW 300 mm X 7 m PIPE (OPTION A,B,C,D, & F) W/1.2 m X 1.2 m R.C.D.I. & TYPE "D" GRATE @ INLET AND 600 mm X 1.2 m STONE FILL, TYPE I PAD @ OUTLET
STA. 61+143.0 LT

LIMIT OF COLD PLANING & PAVING
STA. AB9+980.000

LIMIT OF COLD PLANING & PAVING BEGIN FULL-DEPTH RECONSTRUCTION
STA. ABIO+036.100

9.9 m
9.3 m

ABIO+000

ABIO+000

MATCH LINE STA. 61+040.000 DWG. DP-3

VT. ROUTE 67A

762 mm SANITARY SEWER LINE

8.1 m
8.8 m
4.8 m
8.0 m
12.0 m
15.2 m
1.2 m

61+200
61+100
56+100

PROPOSED STRAIN POLE AND LUMINAIRE (TYP.)

REHABING DI'S, CB'S OR MH'S, CLASS I
STA. 61+219.3 LT

BENNINGTON ACRES

MATCH LINE STA. ABIO+110.000 DWG. DP-2

STATE OF VERMONT
NEW 450 mm X 12 m PIPE (OPTION A,B,C,D, & F) W/1.2 m X 1.2 m R.C.D.I. & TYPE "D" GRATE @ INLET AND 900 mm X 1.8 m STONE FILL, TYPE I PAD @ OUTLET
STA. ABIO+051.0 - STA. ABIO+055.0 LT

NEW 450 mm X 12 m PIPE (OPTION A,B,C,D, & F) W/1.2 m X 1.2 m R.C.D.I. & TYPE "D" GRATE @ INLET
STA. ABIO+042.5 RT - STA. ABIO+046.0 RT

REMOVE EXISTING 600 mm X 600 mm DROP INLET AND 450 mm CMP W/END SECTION.
STA. ABIO+041.3 - STA. ABIO+049.7 LT

NEW 450 mm X 15 m PIPE (OPTION A,B,C,D, & F) W/1.2 m X 1.2 m R.C.D.I. & TYPE "E" GRATE @ INLET AND 900 mm X 1.2 m STONE FILL, TYPE I PAD @ OUTLET
STA. ABIO+087.620 RT

NEW 450 mm X 14 m PIPE (OPTION A,B,C,D, & F) W/1.8 m X 1.2 m R.C.D.I. & TYPE "D" GRATE @ INLET
STA. ABIO+046.0 - STA. ABIO+051.0 LT

NEW 150MM x 4.8M UNDERDRAIN PIPE W/ 150MM x 21.5M CARRIER PIPE
STA ABIO+110, 1.52 RT TO ABIO+093.7 RT

REMOVE EXISTING 600 mm X 600 mm DROP INLET AND 450 mm CAAP W/END SECTION
STA. ABIO+095.6 LT - STA. ABIO+099.0 RT

NEW 300 mm X 8 m PIPE (OPTION A,B,C,D, & F) W/1.2 m X 1.2 m R.C.D.I. & TYPE "E" GRATE @ INLET AND 600 mm X 1.2 m STONE FILL, TYPE I PAD @ OUTLET
STA. ABIO+093.7 LT

NOTES:

1. DIMENSIONS FOR STONE PADS ARE GIVEN IN THE FOLLOWING FORMAT: (WIDTH x LENGTH).
2. DRAINAGE PIPE OPTIONS ARE AS FOLLOWS:
   OPTION A - RCP
   OPTION B - PCCSP
   OPTION C - CAAP
   OPTION D - CPEP(SL)
   OPTION E - PCCSP(W/PI)
   OPTION F - CPEP

10 0 10 m
1: 500
@ FULL SIZE

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

DRAINAGE PLAN

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.S.L.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. 5116/vaot/vtdp26.dgn

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. DP-6 SHEET 117 OF 385

FILE NAME =u:\5116\vaot\contract4\vtdp26.dgn
DATE/TIME =08 SEP 2000
USER =1459

Metric

613.11 STONE FILL, TYPE II

STA. S10+157.6- STA. S10+175.2 C/L 167 m^3 (5,890 CF)

613.11 STONE FILL, TYPE II (MOD.)

STA. 16+800.0- STA. 16+960.0 C/L 2685 m^3 (94,820 CF)

620.70 SNOW FENCE (MOD.)

STA. 16+720.0 - STA. 16+800.0 RT 80 m (262 FT)
STA. 16+800.0 - STA. 16+960.0 C/L 1,315 m (4,314 FT)
STA. SR0+066.0 - STA. SR0+091.0 RT 94 m (308 FT)

649.31 GEOTEXTILE UNDER STONE FILL

STA. S10+157.6 - STA. S10+175.2 C/L 434 m^2 (4,669 SF)

649.31 GEOTEXTILE UNDER STONE FILL (MOD.)

STA. 16+800.0 - STA. 16+960.0 C/L 4475 m^2 (48,169 SF)

649.51 GEOTEXTILE FOR SILT FENCE

STA. 16+622.5 - STA. 16+790.0 LT 270 m^2 (2,906 SF)
STA. 16+622.5 - STA. 16+680.0 RT 95 m^2 (1023 SF)
STA. 16+700.0 - STA. 16+790.0 RT 160 m^2 (1,722 SF)
STA. 16+800.0 - STA. 16+960.0 C/L 1,605 m^2 (17,761 SF)
STA. S10+076.0 C/L 14 m^2 (151 SF)
STA. S10+117.0 C/L 14 m^2 (151 SF)
STA. SR0+027.1 RT 14 m^2 (151 SF)

651.26 HAYBALES FOR EROSION CONTROL

STA. 16+640.0 - STA. 16+765.0 LT 125 EA
STA. 16+640.0 - STA. 16+790.0 RT 150 EA
STA. 16+655.0 - STA. 16+775.0 RT 120 EA
STA. 16+660.0 - STA. 16+760.0 LT 100 EA
STA. 16+675.0 - STA. 16+765.0 LT 90 EA
STA. S10+006.0 - STA. S10+153.0 C/L 35 EA

MAYER, FOREST & EILEEN

MILLER, THOMAS JR. & JANET

END 1:8 TRANSITION SLOPE
SEE DWG. NO. PDT-1 FOR DETAIL
STA. 16+674.000

END BENNINGTON-HOOSICK D.P.I. 0146(11) C/3
BEGIN BENNINGTON-HOOSICK D.P.I. 0146(11) C/4
BEGIN ROADWAY
STA. 16+695.000

BEGIN 1:8 TRANSITION SLOPE
STA. 16+624.000

STATE OF VERMONT

FEDERAL JURISDICTIONAL WETLAND BOUNDARY

BM #20
R.R.S.I.R.
0.45 m PINE
ELEV.=177.470

VT. ROUTE 9

B-528 B-530 B-532 B-534 B-600 B-610 B-620 B-630 B-710 B-720 B-730 B-734 B-740 B-750 B-752 B-754 B-760 B-770 B-780 B-790 B-800 B-810 B-820 B-830 B-840 B-850

16+600 16+700 55+100 55+200 55+400

BEGIN SILK ROAD CHANNEL STA. S10+006.000 = STA. 16+680.524, 0.5 36.71 m RT

B A 845 B A STA. 55+040.097

B A 846 B A STA. 55+157.035

B A 847 B A STA. 55+271.514

FM 3/20/01 70.9 m

SILT FENCE AOBE 11/20/01 225.2 m

APPROXIMATE LOCATION OF THE PROPOSED CVPS TRANSMISSION LINE

FEDERAL JURISDICTIONAL WETLAND BOUNDARY

PROPOSED PRECAST CONCRETE BOX CULVERT
SEE DWG. NO. BR1000 AND BR1001

NEW 17.7 m x 8.8 m x 1.2 m BASIN
EROSION CONTROL SEDIMENT TRAP
STA. S10+157.6 - STA. S10+175.2 LT

CENTRAL VERMONT PUBLIC SERVICE CORP.

END WALLOOMSAC RIVER CHANNEL
STA. WR1+440.000

BENNINGTON ACRES

STOP ROADWAY
BEGIN BRIDGE
STA. 16+762.943

STATE OF VERMONT

WALLOOMSAC RIVER

BM #21
R.R.S.I.R.
0.56 m MAP
ELEV.=174.138

BM #22
R.R.S.I.R.
0.50 m POP
ELEV.=173.950

WR1+200 WR1+400

SR0+200 SR0+400

NEW 13.7 m x 13.7 m x 900 mm
TEMPORARY DETENTION POND

APPROXIMATE LOCATION OF THE PROPOSED BELL ATLANTIC CVPS AND ADELPHIA TV CONDUIT

FEDERAL JURISDICTIONAL WETLAND BOUNDARY

BEGIN WALLOOMSAC RIVER CHANNEL
STA. WR1+000.000

STATE OF VERMONT

WALLOOMSAC RIVER

END SILK ROAD CHANNEL
STA. S10+238.626
TO S7N 006
AT WALLOOMSAC RIVER

KATZ, RONALD L.
SMITH, RONALD W.

WOLFE, WILLIAM

BEGIN SILK ROAD
BEGIN PAVING
P.C. STA. SR0+000.000

13.0 m SILK ROAD

MATCH LINE STA. 16+960.000 DWG. SP-2

E 440875 N 45150

E 440940 N 45150

VT STATE PLANE GRID

LEGEND

DESCRIPTION	SYMBOL
HAY/STRAWBALE CHECK DAM	
STONE CHECK DAM	
HAY/STRAWBALE (HAYBALE DIKE)	
SILT FENCE	
SILT FENCE FOR CULVERT INLET PROTECTION	
SNOW FENCE (MOD.)	
COFFERDAM/STREAM DIVERSION DAM	
TEMPORARY CONSTRUCTION ACCESS / WORK AREAS	
EROSION CONTROL SEDIMENT TRAP	
GEOTEXTILE FABRIC	

GENERAL NOTES:

1. SLOPES WILL BE SEEDED AND MULCHED AS SOON AS PRACTICABLE.
2. WHERE STONE FILL IS SHOWN AT STREAM LOCATIONS IT SHALL BE PLACED CONCURRENT WITH EXCAVATION / FILLING OPERATIONS.
3. SILT FENCE SHALL BE INSTALLED IN FILL AREAS PRIOR TO COMMENCING FILL OPERATIONS. WHERE SILT FENCE IS SHOWN AT THE TOP OF STONE FILL, NO FILL SHALL BE PLACED ABOVE THE STONE FILL ELEVATION UNTIL THE SILT FENCE IS INSTALLED.
4. SILT FENCE MAY BE USED IN LIEU OF HAY BALE CHECK DAMS IN DITCHES AND AT DROP INLET LOCATIONS AS DIRECTED BY THE RESIDENT ENGINEER.
5. DIMENSIONS ARE WRITTEN IN THE FORMAT: (LxWxH).
6. TEMPORARY CONSTRUCTION ACCESS/WORK AREAS SHALL BE CONSTRUCTED WITH 600 mm OF 613.11 STONE FILL, TYPE II (MOD.) OVER 649.31 GEOTEXTILE UNDER STONE FILL (MOD.). UPON THE COMPLETION OF CONSTRUCTION OR AS DIRECTED BY THE RESIDENT ENGINEER, THE CONTRACTOR SHALL REMOVE THE STONE FILL AND GEOTEXTILE FABRIC USED TO CONSTRUCT THE TEMPORARY CONSTRUCTION ACCESS/WORK AREAS.

DATUM

VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

NOTE:

ADDITIONAL CONTROLS AND PROTECTION OF THE ENVIRONMENT NOT SHOWN ON THE PLANS MAY BE WARRANTED DURING CONSTRUCTION AND SHALL BE INCORPORATED INTO THE PROJECT AS REQUIRED AS DIRECTED BY THE RESIDENT ENGINEER.

649.11 GEOTEXTILE FOR ROADBED SUBGRADE SEPARATOR

STA. SR0+098.0 - STA. SR0+130.0 RT 426 m^2 (4585 SF)

10 0 10 m
1: 500
@ FULL SIZE

STORMWATER MANAGEMENT PLAN

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY D.E.G. DATE 9/00
DRAWN BY C.A.K. DATE 9/00
CHECKED BY T.P.K. DATE 9/00

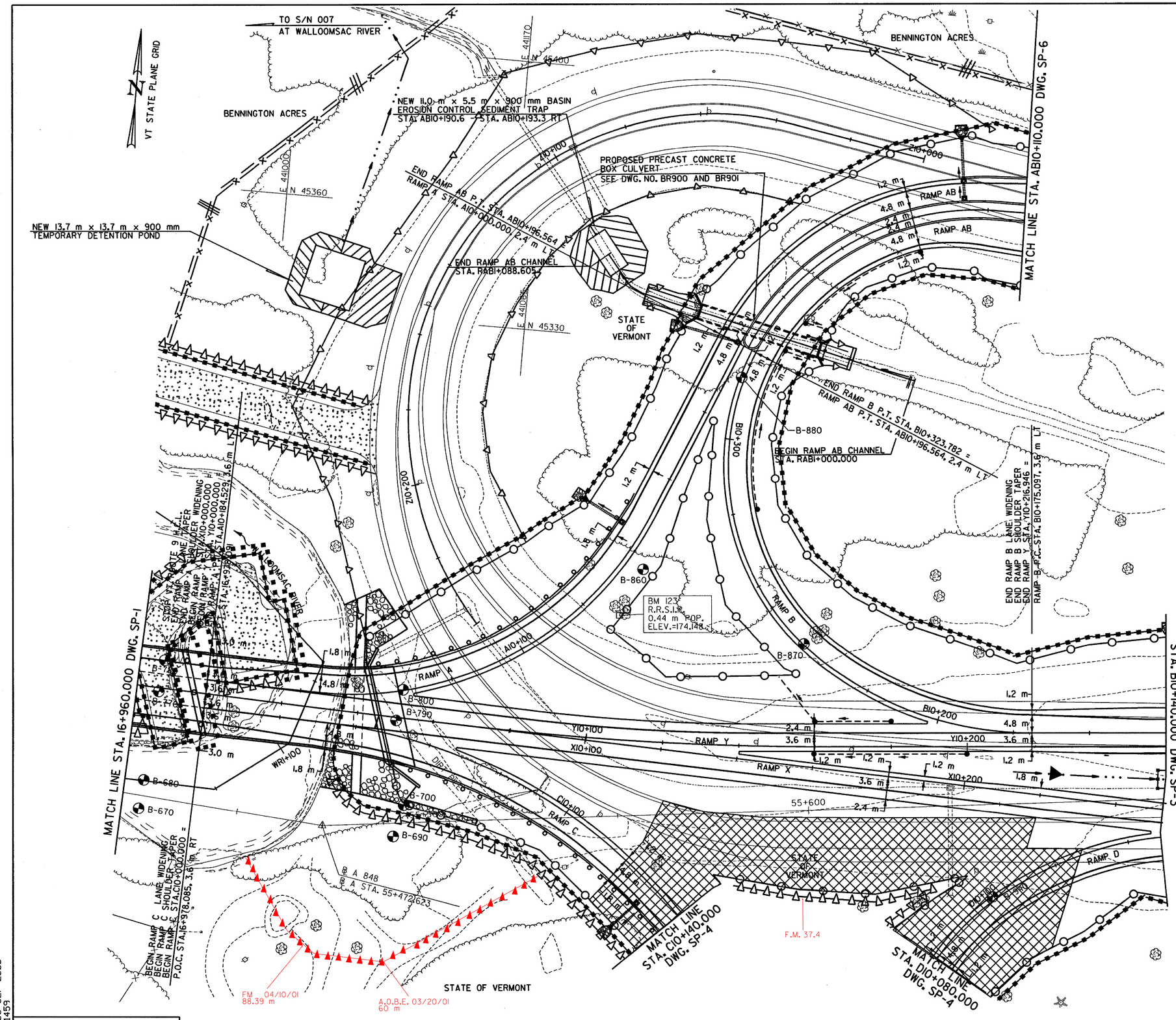
DESIGN FILE NO. 5116/vaot/vtspl4.dgn

PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(11) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. SP-1 SHEET 118 OF 385

FILE NAME =u:\5116\vaot\contract4\vtspl4.dgn
DATE/TIME =08 SEP 2000
USER =1459



Metric

613.11 STONE FILL, TYPE II

STA. ABIO+190.6 - STA. ABIO+193.3 RT 85 m^3 (3,005 CF)

613.11 STONE FILL, TYPE II (MOD.)

STA. I6+960.0 - STA. I6+978.091 C/L 330 m^3 (11,780 CF)
STA. XI0+000.0 - STA. XI0+040.0 C/L 374 m^3 (13,208 CF)

620.70 SNOW FENCE (MOD.)

STA. I6+960.0 - STA. I6+978.091 C/L 30 m (97 FT)
STA. XI0+000.0 - STA. XI0+040.0 C/L 270 m (886 FT)
STA. CI0+035.0 - STA. CI0+140.0 RT 105 m (345 FT)
STA. XI0+140.0 - STA. XI0+195.0 RT 75 m (246 FT)

649.31 GEOTEXTILE UNDER STONE FILL

STA. ABIO+190.6 - STA. ABIO+193.3 RT 202 m^2 (2,178 SF)

649.31 GEOTEXTILE UNDER STONE FILL (MOD.)

STA. I6+960.0 - STA. I6+978.091 C/L 536 m^2 (5,769 SF)
STA. XI0+000.0 - STA. XI0+040.0 C/L 624 m^2 (6,717 SF)

649.51 GEOTEXTILE FOR SILT FENCE

STA. I6+960.0 - STA. I6+978.091 C/L 100 m^2 (1,077 SF)
STA. XI0+000.0 - STA. XI0+040.0 C/L 260 m^2 (2,798 SF)
STA. AI0+100.0 - STA. AI0+150.0 RT 152 m^2 (1,636 SF)
STA. ABIO+190.0 LT 14 m^2 (151 SF)
STA. ABIO+110.0 - STA. ABIO+180.0 LT 84 m^2 (904 SF)
STA. ABIO+110.0 - STA. ABIO+195.0 RT 98 m^2 (1,052 SF)
STA. BIO+140.0 - STA. BIO+320.0 RT 216 m^2 (2,325 SF)
STA. CIO+035.0 - STA. CIO+140.0 RT 126 m^2 (1,356 SF)
STA. DIO+080.0 - STA. DIO+130.0 RT 65 m^2 (700 SF)

651.26 HAYBALES FOR EROSION CONTROL

STA. BIO+170 LT 4 EA

649.11 GEOTEXTILE FOR ROADBED SUBGRADE SEPARATOR

STA. CIO+120.0 - STA. CIO+140.0 C/L 287 m^2 (3,089 SF)
STA. DIO+080.0 - STA. DIO+130.0 C/L 679 m^2 (7,309 SF)
STA. XIO+110.0 - STA. XIO+230.0 RT 2177 m^2 (23,433 SF)

GENERAL NOTES:

1. SLOPES WILL BE SEEDED AND MULCHED AS SOON AS PRACTICABLE.
2. WHERE STONE FILL IS SHOWN AT STREAM LOCATIONS IT SHALL BE PLACED CONCURRENT WITH EXCAVATION / FILLING OPERATIONS.
3. SILT FENCE SHALL BE INSTALLED IN FILL AREAS PRIOR TO COMMENCING FILL OPERATIONS. WHERE SILT FENCE IS SHOWN AT THE TOP OF STONE FILL, NO FILL SHALL BE PLACED ABOVE THE STONE FILL ELEVATION UNTIL THE SILT FENCE IS INSTALLED.
4. SILT FENCE MAY BE USED IN LIEU OF HAY BALE CHECK DAMS IN DITCHES AND AT DROP INLET LOCATIONS AS DIRECTED BY THE RESIDENT ENGINEER.
5. TEMPORARY CONSTRUCTION ACCESS/WORK AREAS SHALL BE CONSTRUCTED WITH 600 mm OF 613.11 STONE FILL, TYPE II (MOD.) OVER 649.31 GEOTEXTILE UNDER STONE FILL (MOD.). UPON COMPLETION OF CONSTRUCTION OR AS DIRECTED BY THE RESIDENT ENGINEER, THE CONTRACTOR SHALL REMOVE THE STONE FILL AND GEOTEXTILE FABRIC USED TO CONSTRUCT THE TEMPORARY CONSTRUCTION ACCESS/WORK AREAS.

LEGEND	
DESCRIPTION	SYMBOL
HAY/STRAWBALE CHECK DAM	
STONE CHECK DAM	
HAY/STRAWBALE (HAYBALE DIKE)	
SILT FENCE	
SILT FENCE FOR CULVERT INLET PROTECTION	
SNOW FENCE (MOD.)	
COFFERDAM/STREAM DIVERSION DAM	
TEMPORARY CONSTRUCTION ACCESS / WORK AREAS	
EROSION CONTROL SEDIMENT TRAP	
GEOTEXTILE FABRIC	

NOTE:
ADDITIONAL CONTROLS AND PROTECTION OF THE ENVIRONMENT NOT SHOWN ON THE PLANS MAY BE WARRANTED DURING CONSTRUCTION AND SHALL BE INCORPORATED INTO THE PROJECT AS REQUIRED AS DIRECTED BY THE RESIDENT ENGINEER.

10 0 10 m
1: 500
@ FULL SIZE

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

STORMWATER MANAGEMENT PLAN

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY D.E.G. DATE 9/00
DRAWN BY C.A.K. DATE 9/00
CHECKED BY T.P.K. DATE 9/00
DESIGN FILE NO. 5116/vaot/CON4/vtspl5.dgn
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG NO. SP-2 SHEET 119 OF 385

FILE NAME =u:\5116\vaot\contract4\vtspl5.dgn
DATE/TIME =08 SEP 2000
USER =1459

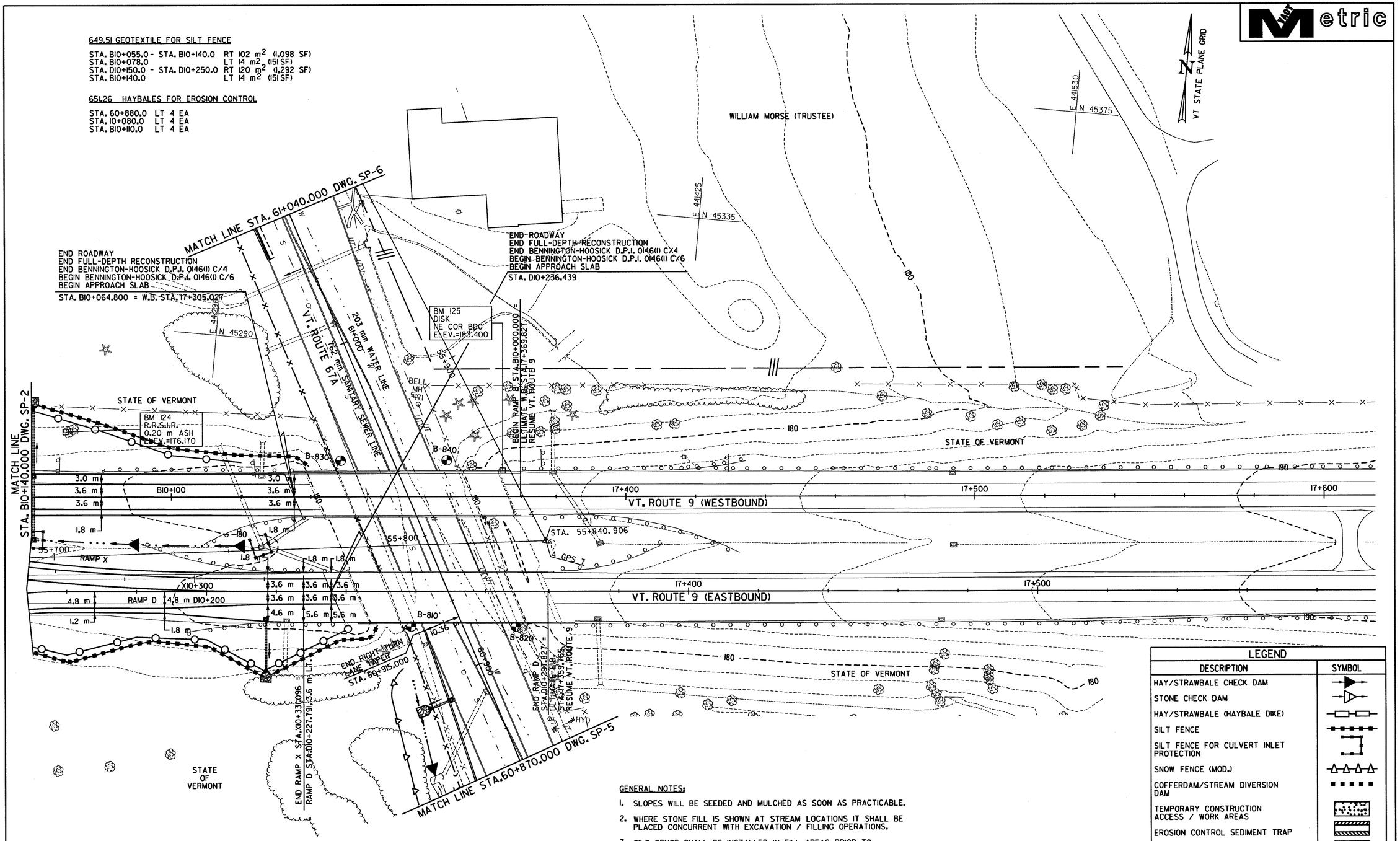
Metric

649.51 GEOTEXTILE FOR SILT FENCE

STA. B10+055.0 - STA. B10+140.0 RT 102 m^2 (1,098 SF)
STA. B10+078.0 LT 14 m^2 (151 SF)
STA. D10+150.0 - STA. D10+250.0 RT 120 m^2 (1,292 SF)
STA. B10+140.0 LT 14 m^2 (151 SF)

651.26 HAYBALES FOR EROSION CONTROL

STA. 60+880.0 LT 4 EA
STA. 10+080.0 LT 4 EA
STA. B10+110.0 LT 4 EA



LEGEND	
DESCRIPTION	SYMBOL
HAY/STRAWBALE CHECK DAM	
STONE CHECK DAM	
HAY/STRAWBALE (HAYBALE DIKE)	
SILT FENCE	
SILT FENCE FOR CULVERT INLET PROTECTION	
SNOW FENCE (MOD.)	
COFFERDAM/STREAM DIVERSION DAM	
TEMPORARY CONSTRUCTION ACCESS / WORK AREAS	
EROSION CONTROL SEDIMENT TRAP	
GEOTEXTILE FABRIC	

GENERAL NOTES:

1. SLOPES WILL BE SEEDED AND MULCHED AS SOON AS PRACTICABLE.
2. WHERE STONE FILL IS SHOWN AT STREAM LOCATIONS IT SHALL BE PLACED CONCURRENT WITH EXCAVATION / FILLING OPERATIONS.
3. SILT FENCE SHALL BE INSTALLED IN FILL AREAS PRIOR TO COMMENCING FILL OPERATIONS. WHERE SILT FENCE IS SHOWN AT THE TOP OF STONE FILL, NO FILL SHALL BE PLACED ABOVE THE STONE FILL ELEVATION UNTIL THE SILT FENCE IS INSTALLED.
4. SILT FENCE MAY BE USED IN LIEU OF HAY BALE CHECK DAMS IN DITCHES AND AT DROP INLET LOCATIONS AS DIRECTED BY THE RESIDENT ENGINEER.

NOTE:

ADDITIONAL CONTROLS AND PROTECTION OF THE ENVIRONMENT NOT SHOWN ON THE PLANS MAY BE WARRANTED DURING CONSTRUCTION AND SHALL BE INCORPORATED INTO THE PROJECT AS REQUIRED AS DIRECTED BY THE RESIDENT ENGINEER.

10 0 10 m
1: 500
@ FULL SIZE

DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

STORMWATER MANAGEMENT PLAN

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	C.A.K.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. 5116/vaot/CON4/vtspl6.dgn
PROJ. NAME BENNINGTON - HOOSICK D.P.J. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG NO. SP-3 SHEET 120 OF 385

FILE NAME = u:\5116\vaot\contract4\vtspl6.dgn
DATE/TIME = 08 SEP 2000
USER = 1459

Metric

613.11 STONE FILL, TYPE II

STA. C10+158.4 - STA. CD10+164.4 RT 42 m^3 (1,480 CF)
STA. CD10+200.0 RT 33 m^3 (1,160 CF)

649.31 GEOTEXTILE UNDER STONE FILL

STA. CD10+158.4 - STA. CD10+164.4 RT 88 m^2 (9455 SF)
STA. CD10+200.0 RT 63 m^2 (675 SF)

620.70 SNOW FENCE (MOD.)

STA. C10+140.0 - STA. C10+194.0 LT 54 m (177 FT)
STA. C10+140.0 - STA. CD10+250.186 RT 85 m (279 FT)
STA. CD10+120.0 - STA. CD10+271.929 LT 180 m (591FT)
STA. CD10+170.0 - STA. CD10+260.0 RT 80 m (263 FT)
STA. D10+055.0 - STA. D10+080.0 LT 25 m (82 FT)

649.51 GEOTEXTILE FOR SILT FENCE

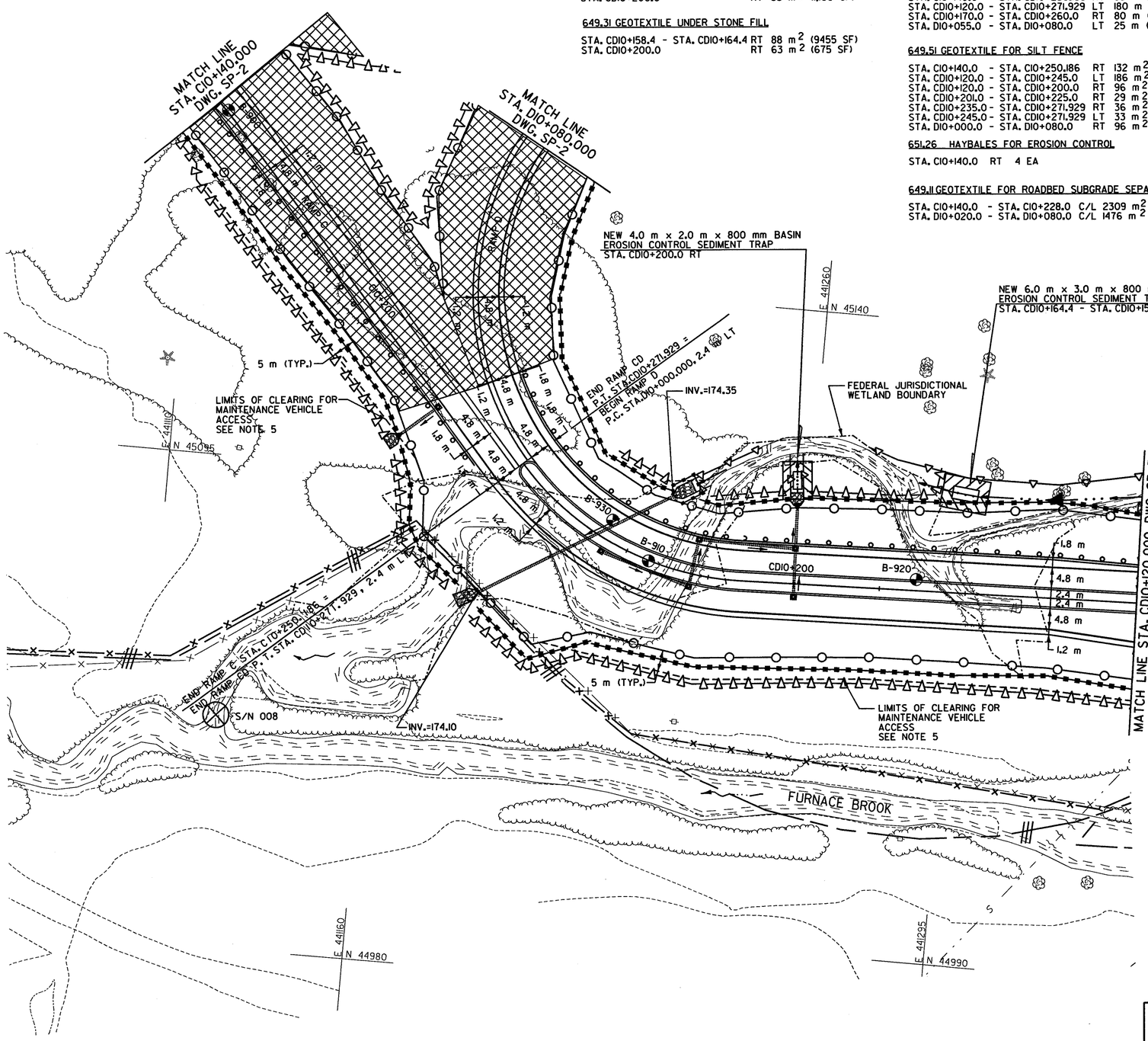
STA. C10+140.0 - STA. C10+250.186 RT 132 m^2 (1,421SF)
STA. CD10+120.0 - STA. CD10+245.0 LT 186 m^2 (2,002 SF)
STA. CD10+120.0 - STA. CD10+200.0 RT 96 m^2 (1,034 SF)
STA. CD10+201.0 - STA. CD10+225.0 RT 29 m^2 (310 SF)
STA. CD10+235.0 - STA. CD10+271.929 RT 36 m^2 (388 SF)
STA. CD10+245.0 - STA. CD10+271.929 LT 33 m^2 (349 SF)
STA. D10+000.0 - STA. D10+080.0 RT 96 m^2 (1,034 SF)

651.26 HAYBALES FOR EROSION CONTROL

STA. C10+140.0 RT 4 EA

649.11 GEOTEXTILE FOR ROADBED SUBGRADE SEPARATOR

STA. C10+140.0 - STA. C10+228.0 C/L 2309 m^2 (24,822 SF)
STA. D10+020.0 - STA. D10+080.0 C/L 1476 m^2 (15,888 SF)



LEGEND	
DESCRIPTION	SYMBOL
HAY/STRAWBALE CHECK DAM	
STONE CHECK DAM	
HAY/STRAWBALE (HAYBALE DIKE)	
SILT FENCE	
SILT FENCE FOR CULVERT INLET PROTECTION	
SNOW FENCE (MOD.)	
COFFERDAM/STREAM DIVERSION DAM	
TEMPORARY CONSTRUCTION ACCESS / WORK AREAS	
EROSION CONTROL SEDIMENT TRAP	
GEOTEXTILE FABRIC	

N
VT STATE PLANE GRID

GENERAL NOTES:

1. SLOPES WILL BE SEEDED AND MULCHED AS SOON AS PRACTICABLE.
2. WHERE STONE FILL IS SHOWN AT STREAM LOCATIONS IT SHALL BE PLACED CONCURRENT WITH EXCAVATION / FILLING OPERATIONS.
3. SILT FENCE SHALL BE INSTALLED IN FILL AREAS PRIOR TO COMMENCING FILL OPERATIONS. WHERE SILT FENCE IS SHOWN AT THE TOP OF STONE FILL, NO FILL SHALL BE PLACED ABOVE THE STONE FILL ELEVATION UNTIL THE SILT FENCE IS INSTALLED.
4. SILT FENCE MAY BE USED IN LIEU OF HAY BALE CHECK DAMS IN DITCHES AND AT DROP INLET LOCATIONS AS DIRECTED BY THE RESIDENT ENGINEER.
5. THE CONTRACTOR SHALL REMOVE ALL TREES AND CUT ALL STUMPS FLUSH TO THE GROUND WITHIN 5 m OF THE EARTHWORK LIMITS IN THIS VICINITY. THIS WILL FACILITATE MAINTENANCE VEHICLE ACCESS TO THE UTILITY LINES THAT ARE NOT IMMEDIATELY ADJACENT TO THE PROPOSED CONSTRUCTION.

NOTE:

ADDITIONAL CONTROLS AND PROTECTION OF THE ENVIRONMENT NOT SHOWN ON THE PLANS MAY BE WARRANTED DURING CONSTRUCTION AND SHALL BE INCORPORATED INTO THE PROJECT AS REQUIRED AS DIRECTED BY THE RESIDENT ENGINEER.

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

10 0 10 m
1: 500
@ FULL SIZE

STORMWATER MANAGEMENT PLAN

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	C.A.K.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00
DESIGN FILE NO.	5116/vaot/vtspl7.dgn	
PROJ. NAME	BENNINGTON - HOOSICK D.P.I. 0146(1) C/4	
PROJ. NO.	P.I.N. 1306.60	
DWG NO. SP-4		SHEET 121 OF 385

FILE NAME =u:\5116\vaot\contract4\vtspl7.dgn
DATE/TIME =08 SEP 2000
USER =1459

Metric

613.11 STONE FILL, TYPE II

STA. CD10+065.3 - STA. CD10+078.0 RT 46 m^3 (1,640 CF)
STA. CD10+084.5 - STA. CD10+088.7 LT 51 m^3 (1,801 CF)

620.70 SNOW FENCE (MOD.)

STA. CD10+085.0 - STA. CD10+120.0 LT 35 m (115 FT)

649.31 GEOTEXTILE UNDER STONE FILL

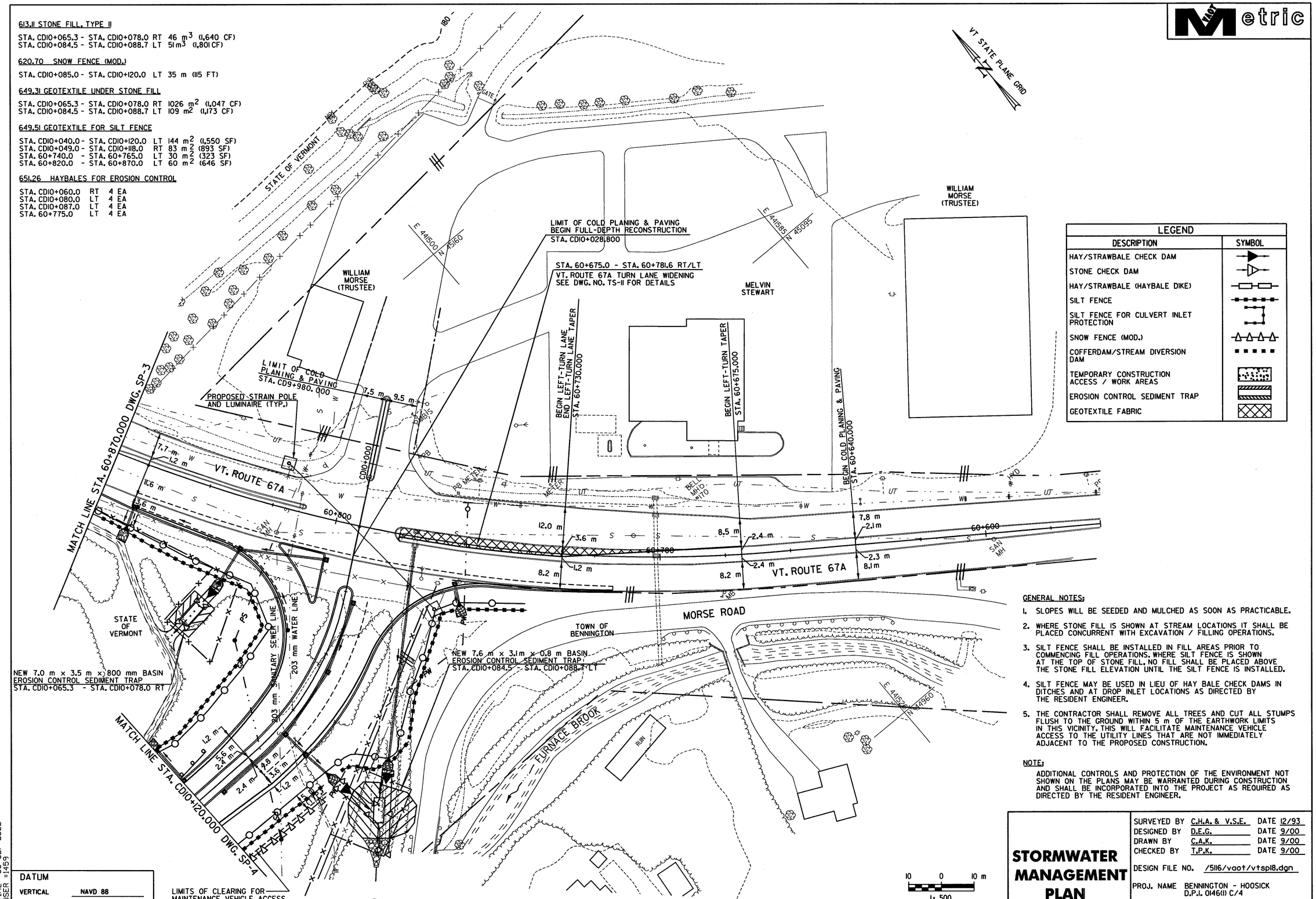
STA. CD10+065.3 - STA. CD10+078.0 RT 1026 m^2 (1,047 CF)
STA. CD10+084.5 - STA. CD10+088.7 LT 109 m^2 (1,173 CF)

649.51 GEOTEXTILE FOR SILT FENCE

STA. CD10+040.0 - STA. CD10+120.0 LT 144 m^2 (1,550 SF)
STA. CD10+049.0 - STA. CD10+118.0 RT 83 m^2 (893 SF)
STA. 60+740.0 - STA. 60+765.0 LT 30 m^2 (323 SF)
STA. 60+820.0 - STA. 60+870.0 LT 60 m^2 (646 SF)

651.26 HAYBALES FOR EROSION CONTROL

STA. CD10+060.0 RT 4 EA
STA. CD10+080.0 LT 4 EA
STA. CD10+087.0 LT 4 EA
STA. 60+775.0 LT 4 EA



LEGEND	
DESCRIPTION	SYMBOL
HAY/STRAWBALE CHECK DAM	
STONE CHECK DAM	
HAY/STRAWBALE (HAYBALE DIKE)	
SILT FENCE	
SILT FENCE FOR CULVERT INLET PROTECTION	
SNOW FENCE (MOD.)	
COFFERDAM/STREAM DIVERSION DAM	
TEMPORARY CONSTRUCTION ACCESS / WORK AREAS	
EROSION CONTROL SEDIMENT TRAP	
GEOTEXTILE FABRIC	

GENERAL NOTES:

1. SLOPES WILL BE SEEDED AND MULCHED AS SOON AS PRACTICABLE.
2. WHERE STONE FILL IS SHOWN AT STREAM LOCATIONS IT SHALL BE PLACED CONCURRENT WITH EXCAVATION / FILLING OPERATIONS.
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4. SILT FENCE MAY BE USED IN LIEU OF HAY BALE CHECK DAMS IN DITCHES AND AT DROP INLET LOCATIONS AS DIRECTED BY THE RESIDENT ENGINEER.
5. THE CONTRACTOR SHALL REMOVE ALL TREES AND CUT ALL STUMPS FLUSH TO THE GROUND WITHIN 5 m OF THE EARTHWORK LIMITS IN THIS VICINITY. THIS WILL FACILITATE MAINTENANCE VEHICLE ACCESS TO THE UTILITY LINES THAT ARE NOT IMMEDIATELY ADJACENT TO THE PROPOSED CONSTRUCTION.

NOTE:

ADDITIONAL CONTROLS AND PROTECTION OF THE ENVIRONMENT NOT SHOWN ON THE PLANS MAY BE WARRANTED DURING CONSTRUCTION AND SHALL BE INCORPORATED INTO THE PROJECT AS REQUIRED AS DIRECTED BY THE RESIDENT ENGINEER.

DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

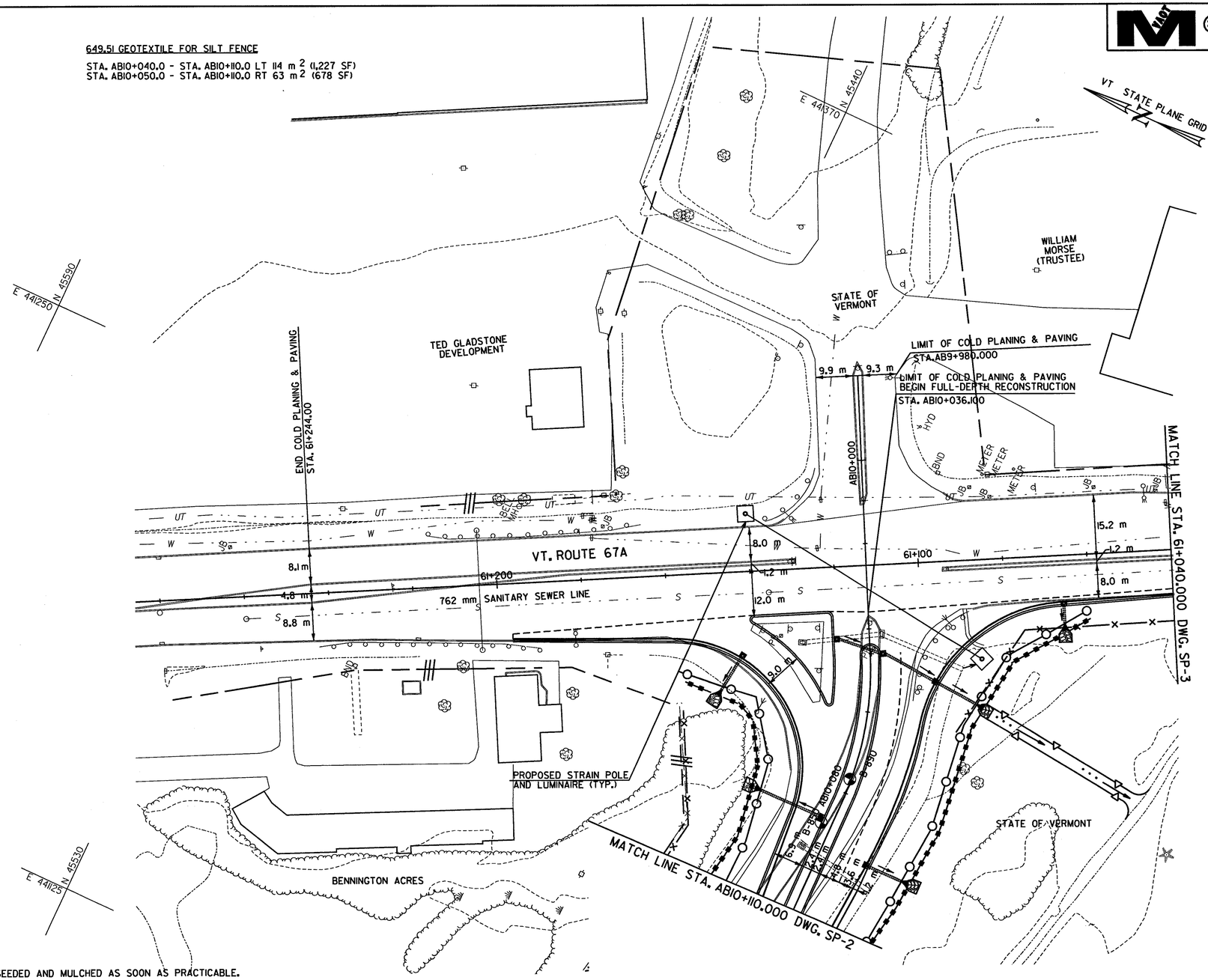
STORMWATER MANAGEMENT PLAN

SURVEYED BY	C.H.A. & V.S.E. DATE 12/93
DESIGNED BY	D.E.G. DATE 9/00
DRAWN BY	C.A.K. DATE 9/00
CHECKED BY	T.P.K. DATE 9/00
DESIGN FILE NO.	/5116/vaot/vtspl8.dgn
PROJ. NAME	BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO.	P.I.N. 1306.60
DWG NO. SP-5	SHEET 122 OF 385

FILE NAME =u:\5116\vaot\contract4\vtspl8.dgn
DATE/TIME =08 SEP 2000
USER =1459

649.51 GEOTEXTILE FOR SILT FENCE

STA. AB10+040.0 - STA. AB10+110.0 LT 114 m^2 (1,227 SF)
STA. AB10+050.0 - STA. AB10+110.0 RT 63 m^2 (678 SF)



LEGEND	
DESCRIPTION	SYMBOL
HAY/STRAWBALE CHECK DAM	
STONE CHECK DAM	
HAY/STRAWBALE (HAYBALE DIKE)	
SILT FENCE	
SILT FENCE FOR CULVERT INLET PROTECTION	
SNOW FENCE (MOD.)	
COFFERDAM/STREAM DIVERSION DAM	
TEMPORARY CONSTRUCTION ACCESS / WORK AREAS	
EROSION CONTROL SEDIMENT TRAP	
GEOTEXTILE FABRIC	

GENERAL NOTES:

1. SLOPES WILL BE SEEDED AND MULCHED AS SOON AS PRACTICABLE.
2. WHERE STONE FILL IS SHOWN AT STREAM LOCATIONS IT SHALL BE PLACED CONCURRENT WITH EXCAVATION / FILLING OPERATIONS.
3. SILT FENCE SHALL BE INSTALLED IN FILL AREAS PRIOR TO COMMENCING FILL OPERATIONS. WHERE SILT FENCE IS SHOWN AT THE TOP OF STONE FILL, NO FILL SHALL BE PLACED ABOVE THE STONE FILL ELEVATION UNTIL THE SILT FENCE IS INSTALLED.
4. SILT FENCE MAY BE USED IN LIEU OF HAY BALE CHECK DAMS IN DITCHES AND AT DROP INLET LOCATIONS AS DIRECTED BY THE RESIDENT ENGINEER.

NOTE:

ADDITIONAL CONTROLS AND PROTECTION OF THE ENVIRONMENT NOT SHOWN ON THE PLANS MAY BE WARRANTED DURING CONSTRUCTION AND SHALL BE INCORPORATED INTO THE PROJECT AS REQUIRED AS DIRECTED BY THE RESIDENT ENGINEER.

DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

10 0 10 m
1: 500
@ FULL SIZE

STORMWATER MANAGEMENT PLAN

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	C.A.K.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. 5116/vaot/vtspl9.dgn

PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. SP-6 SHEET 123 OF 385

FILE NAME =u:\5116\vaot\contract4\vtspl9.dgn
DATE/TIME =08 SEP 2000
USER =1459

NOT Metric

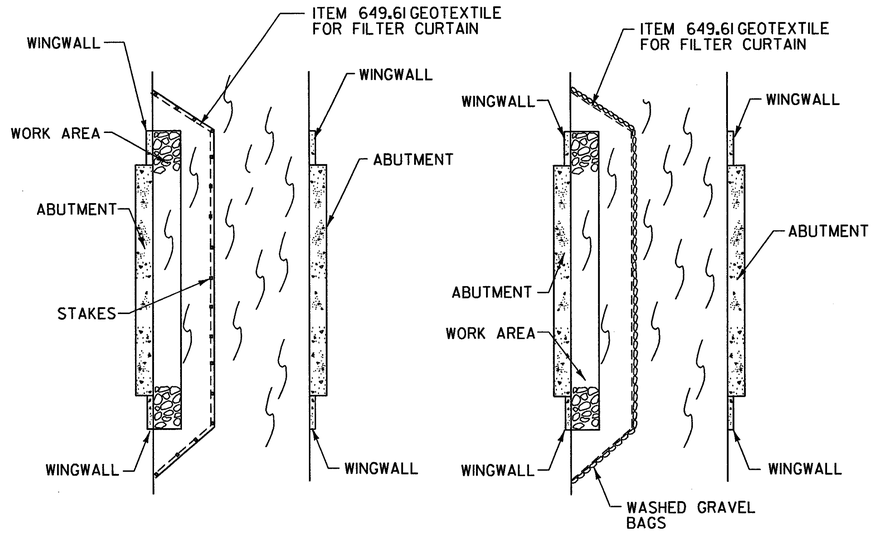
GENERAL NOTES FOR TEMPORARY SOIL EROSION & SEDIMENT CONTROL

THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT THROUGHOUT THE DURATION OF THE CONTRACT IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ALL WATER COURSES FROM WATER BORNE SEDIMENT OR POLLUTANTS ORIGINATING FROM ANY WORK DONE ON, OR IN SUPPORT OF THIS PROJECT.

THE POLLUTION CONTROL NOTES AND DETAILS SHOWN IN THESE DRAWINGS ARE NOT INTENDED TO BE ALL INCLUSIVE BUT TO SERVE AS A GUIDELINE FOR THE DEVELOPMENT OF THE CONTRACTOR'S EROSION CONTROL SCHEME REQUIRED UNDER SECTION 105.22 THROUGH 105.30, OF THE STANDARD SPECIFICATIONS AND ALSO INCLUDING STANDARD SHEETS T-1M AND T-2M.

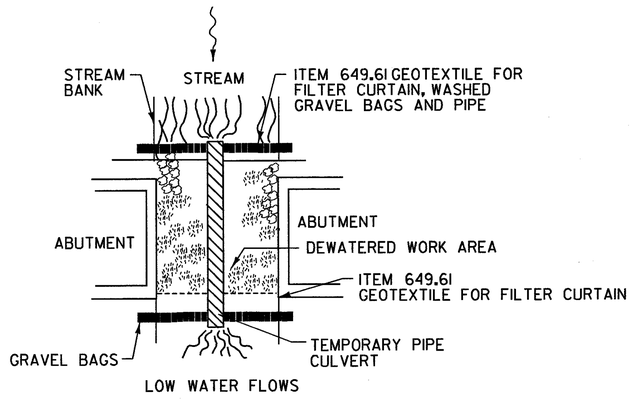
THE PURPOSE OF TEMPORARY SOIL EROSION AND SEDIMENT CONTROL IS TO PROTECT ABUTTING PROPERTY, WATER COURSES, PONDS, DITCHES, ETC., FROM THE DETRIMENTAL EFFECTS OF SOIL EROSION AND/OR SEDIMENT ORIGINATING FROM WITHIN THE WORK LIMITS AND/OR FROM AREAS SPECIFICALLY DESIGNATED FOR CONTRACTUAL OPERATIONS BY THE STATE. TEMPORARY EROSION CONTROL WORK DONE BY THE CONTRACTOR IN ACCORDANCE WITH THE PRE-APPROVED SCHEME, OR AS DIRECTED BY THE RESIDENT ENGINEER, SHALL BE PAID FOR UNDER THE APPROPRIATE ITEMS. TO PROTECT PRIVATE PROPERTY, WATER COURSES, PONDS, DITCHES, ETC, IT REMAINS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT HIS/HER OWN WORK AT NO ADDITIONAL COST TO THE STATE, IN ACCORDANCE WITH THE PROVISIONS OF SECTION 105.29 OF THE STANDARD SPECIFICATIONS.

1. INSPECTION OF SOIL EROSION & POLLUTION CONTROL MEASURES SHALL BE DONE ON A WEEKLY BASIS AND AFTER EVERY STORM OF 12 mm OR GREATER OR AS DIRECTED BY THE RESIDENT ENGINEER. REPAIRS SHALL BE MADE AS NEEDED AND SEDIMENT SHALL BE REMOVED WHEN THE STORAGE VOLUME OF AN EROSION CONTROL MEASURE IS APPROACHING ONE HALF OF ITS INTENDED CAPACITY OR AS DIRECTED BY THE RESIDENT ENGINEER.
2. IMMEDIATELY UPON COMPLETION OF EXCAVATION OR EMBANKMENT, THE CONTRACTOR SHALL INSTALL THE APPROPRIATE FINAL DITCH LINING AS SHOWN IN THE CONTRACT DOCUMENTS AND/OR PLACE TEMPORARY DITCH CHECKS IN ALL ROADWAY AND OUTLET DITCHES AS DIRECTED BY THE RESIDENT ENGINEER.
3. A TEMPORARY LINING MATERIAL MAY BE REQUIRED WHERE THE CONTRACTOR PROVIDES TEMPORARY CHANNELS TO KEEP CONTRACTOR'S WORK SITES FREE FROM WATER DURING CONSTRUCTION, AS DIRECTED BY THE RESIDENT ENGINEER. NO DIRECT PAYMENT WILL BE MADE FOR THIS WORK; THE COST IS TO BE INCLUDED IN THE PRICE BID FOR THE OTHER ITEMS OF THE CONTRACT.
4. THE CONTRACTOR SHALL GRADE AND TRIM ALL SLOPES AS THE EXCAVATION PROGRESSES AND SEED ALL SLOPES AS DIRECTED BY THE RESIDENT ENGINEER AND AS REQUIRED BY STANDARD T-1M.
5. THE CONTRACTOR SHALL HAVE A HYDROSEEDER AND/OR A MULCHING MACHINE AVAILABLE ON THE PROJECT SITE OR AVAILABLE AT ONE WEEK'S NOTICE (MAXIMUM) UNTIL THE PERMANENT SEEDING IS COMPLETED.
6. CONSTRUCTION OPERATIONS SHALL BE CONDUCTED IN SUCH A MANNER AS TO PREVENT ANY DAMAGE TO THE WATERS OF THE UNITED STATES FROM POLLUTION BY DEBRIS, SEDIMENT, OR OTHER FOREIGN MATERIAL, OR FROM MANIPULATION OF EQUIPMENT AND/OR MATERIALS IN OR NEAR THE WATERS OF THE UNITED STATES. THE CONTRACTOR SHALL NOT RETURN DIRECTLY TO THE WATERS OF THE UNITED STATES ANY WATER WHICH HAS BEEN USED FOR WASH PURPOSES OR OTHER SIMILAR OPERATIONS WHICH WOULD CAUSE THIS WATER TO BECOME POLLUTED WITH SAND, SILT, CEMENT, OIL OR OTHER IMPURITIES. IF THE CONTRACTOR USES WATER FROM THE WATERS OF THE UNITED STATES, THE CONTRACTOR SHALL CONSTRUCT AN INTAKE OR TEMPORARY DAM TO PROTECT AND MAINTAIN STREAM WATER QUALITY.
7. DURING CONSTRUCTION, NO WET OR FRESH CONCRETE OR LEACHATE SHALL BE ALLOWED TO ESCAPE INTO THE WATERS OF THE UNITED STATES, NOR SHALL WASHING FROM CONCRETE TRUCKS, MIXERS OR OTHER DEVICES BE ALLOWED TO ENTER ANY WETLANDS OR WATERS OF THE UNITED STATES.
8. THE SCHEME PROPOSED BY THE CONTRACTOR TO ACCOMPLISH EROSION AND POLLUTION CONTROL SHALL BE SUBJECT TO APPROVAL BY THE RESIDENT ENGINEER AND THE VT ANR STREAM ALTERATION ENGINEER.
9. GRAVEL BAGS SHALL BE AS DESCRIBED IN SECTION 203 EXCEPT THAT ONLY GRAVEL FILL IS ACCEPTABLE. GRAVEL FILL SHALL BE FREE OF SILT AND GRAVEL BAGS WILL BE REMOVED IN THEIR ENTIRETY AT THE COMPLETION OF THE PROJECT.
10. STRAW BALES MAY BE USED AS A SUBSTITUTE FOR HAY BALES.
11. SNOW FENCE (MOD.) SHALL BE ERECTED PRIOR TO ANY ACTIVITY THAT WILL ALTER THE SITE SUCH AS PLACING TRAILERS, STOCK PILES, STORAGE AREAS, DEMOLITION, OR CONSTRUCTION.
12. STRAW BALE / HAY BALE, SILT FENCE & COFFERDAMS MAY BE SUBSTITUTED WITH COMMERCIALLY AVAILABLE EROSION / SEDIMENT CONTROL DEVICES AS APPROVED IN WRITING BY THE RESIDENT ENGINEER. THE DEVICES SHALL OFFER EROSION / SEDIMENT CONTROL EQUAL TO OR BETTER THAN THE ITEMS THEY ARE SUBSTITUTING.



NOTE: WORKS WELL FOR FLOWING WATER

OPTIONAL TURBIDITY CONTROL



OPTIONAL POLLUTION CONTROL

EROSION CONTROL DETAILS

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.S.L.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

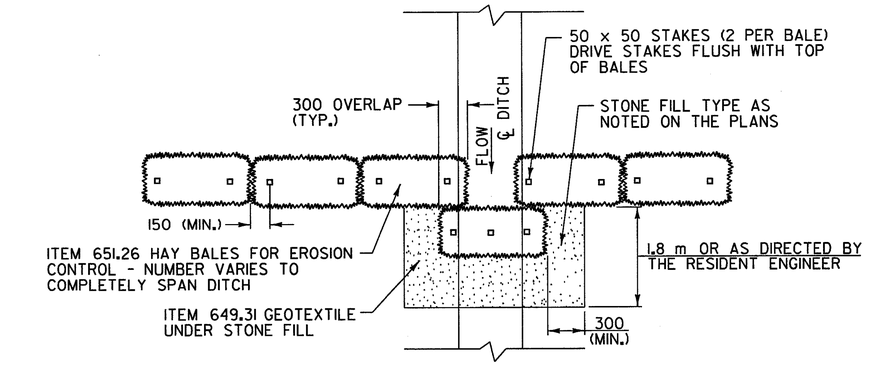
DESIGN FILE NO. 5116/VAOT/VTEC.DGN

PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

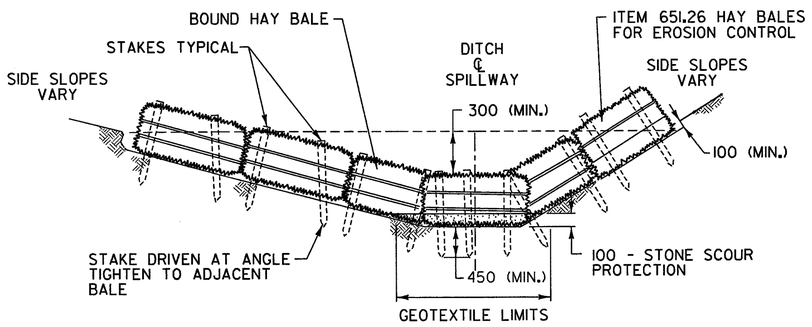
PROJ. NO. P.I.N. 1306.60

DWG NO. EC-1 SHEET 124 OF 385

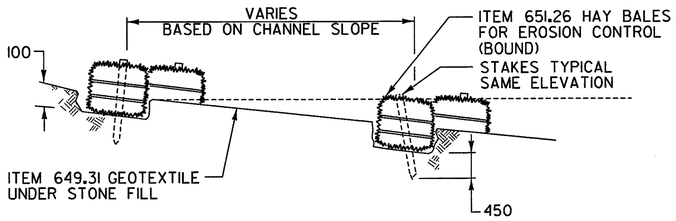
FILE NAME =u:\5116\vaot\contract4\vtec.dgn
DATE/TIME =07 SEP 2000
USER =1459



PLAN



ELEVATION



PROFILE

BOTTOM OF DITCH

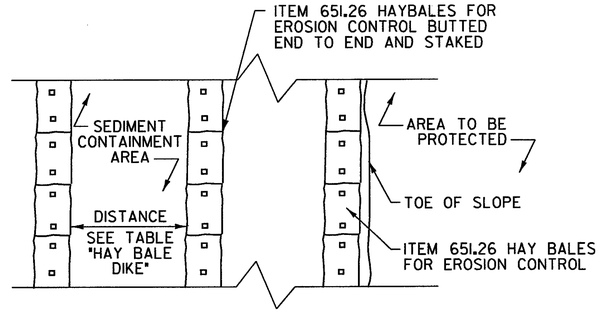
NOTES:

1. SET SPACING OF CHECK DAMS TO ENSURE THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION AS THE TOE OF THE UPSTREAM DAM.
2. FOR DITCH PROFILES STEEPER THAN 1:8 (12%) IN UNCONSOLIDATED SOIL USE STONE CHECK DAM.

CHECK DAM (HAY / STRAW BALE)

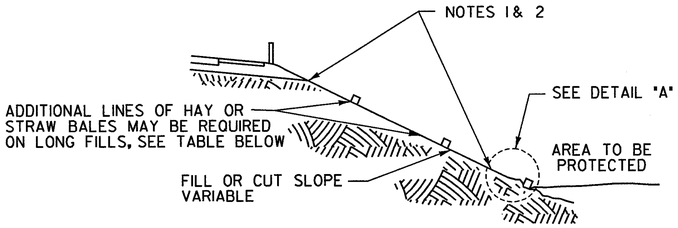
STANDARD SYMBOL

CHECK DAM SPACING	
DITCH SLOPE	PLACEMENT INTERVAL
< 3% 3% - 5% > 5%	35 m 25 m 15 m



PLAN DETAIL "A"

USE FOR PROTECTION OF
DITCH OR EXISTING GROUND



NOTES:

TEMPORARY EROSION CONTROL PROTECTION BY MULCHING MUST BE CARRIED OUT AS THE FILL IS PROGRESSED TO AVOID ANY POSSIBLE CONTAMINATION OF THE STREAM OR PROPERTY.

PERMANENT EROSION CONTROL BY SEEDING AND MULCHING SHALL BE DONE AS SOON AS THE FILL IS BROUGHT TO FINAL GRADE.

AN ESTIMATED QUANTITY OF HAY BALES WAS INCLUDED FOR EACH CHECK DAM LOCATION IN STONE - LINED DITCHES. FOUR HAY BALES WERE ESTIMATED FOR STONE - LINED DITCHES WITH TYPE I STONE AND SIX HAY BALES WERE ESTIMATED FOR STONE - LINED DITCHES WITH TYPE II STONE.

TEMPORARY SOIL EROSION CONTROL IN FILL OR CUT SECTIONS

STANDARDS AND SPECIFICATIONS FOR HAY BALE DIKE

DEFINITION

A TEMPORARY BARRIER OF HAY OR SIMILAR MATERIAL USED TO INTERCEPT SEDIMENT LADEN RUNOFF FROM SMALL DRAINAGE AREAS OF DISTURBED SOIL.

PURPOSE

THE PURPOSE OF A BALE DIKE IS TO REDUCE RUNOFF VELOCITY AND EFFECT DEPOSITION OF THE TRANSPORTED SEDIMENT LOAD.

CONDITIONS WHERE PRACTICE APPLIES

THE BALE DIKE IS USED WHERE:

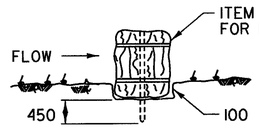
1. NO OTHER PRACTICE IS FEASIBLE
2. THERE IS NO CONCENTRATION OF WATER IN A CHANNEL OR OTHER DRAINAGE WAY ABOVE THE BARRIER.
3. EROSION WOULD OCCUR IN THE FORM OF SHEET EROSION.
4. LENGTH OF SLOPE ABOVE THE HAY BALE DIKE DOES NOT EXCEED THESE LIMITS:

CONSTRUCTED SLOPE	DISTANCE BETWEEN ROWS OF BALE DIKES
1:2	8 m
1:2/2.5	15 m
1:3	25 m
1:3/3.5	30 m
1:4	40 m

WHERE SLOPE GRADIENT CHANGES THROUGH THE DRAINAGE AREA, STEEPNESS REFERS TO THE STEEPEST SLOPE SECTION CONTRIBUTING TO THE BALE DIKE.

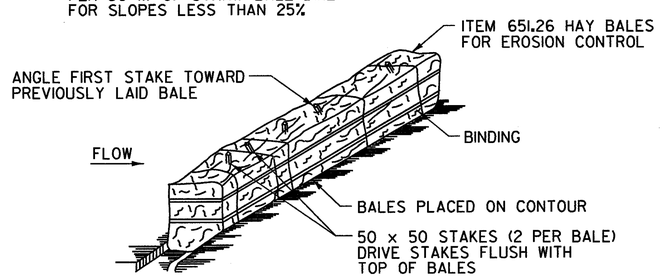
HAY BALE DIKE

STANDARD SYMBOL



BEDDING DETAIL

DRAINAGE AREA NO MORE THAN 0.10 HECTARES
PER 30 m OF STRAW BALE DIKE
FOR SLOPES LESS THAN 25%



ANCHORING DETAIL
CONSTRUCTION SPECIFICATIONS

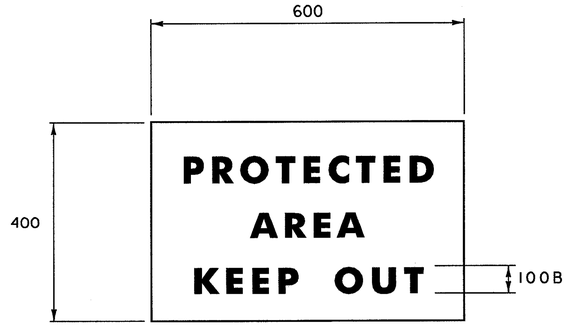
1. BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 100 mm, AND PLACED SO THE BINDINGS ARE HORIZONTAL
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE AND INTO THE UNDISTURBED GROUND A MINIMUM OF 450 mm. STAKES IN EACH BALE SHALL BE DRIVEN TOWARDS THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE TOP OF THE BALE.
4. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS AND SURROUNDING AREA IS STABILIZED FROM EROSION BY STONE LINED DITCHES, TURF, ETC.

ALL DIMENSIONS IN MILLIMETERS EXCEPT
WHERE OTHERWISE INDICATED.

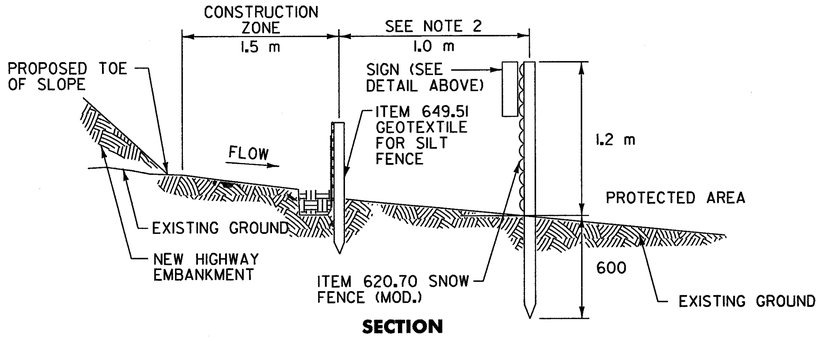
EROSION CONTROL DETAILS

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.S.L.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00
DESIGN FILE NO.	5116/VAOT/VTEC.DGN	
PROJ. NAME	BENNINGTON - HOOSICK D.P.J. 0146(1) C/4	
PROJ. NO.	P.I.N. 1306.60	
DWG NO. EC-2		SHEET 125 OF 385

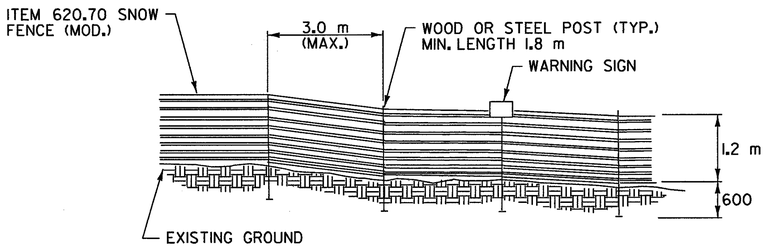
FILE NAME =u:\5116\vaot\contract4\vtec.dgn
DATE/TIME =07 SEP 2000
USER =1459



WARNING SIGN DETAIL



SECTION



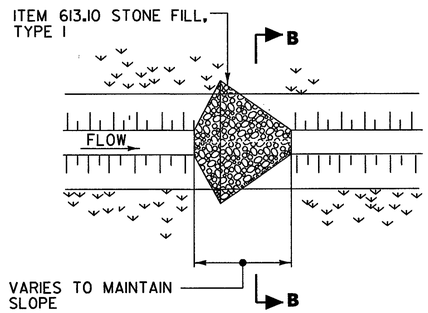
ELEVATION

NOTES:

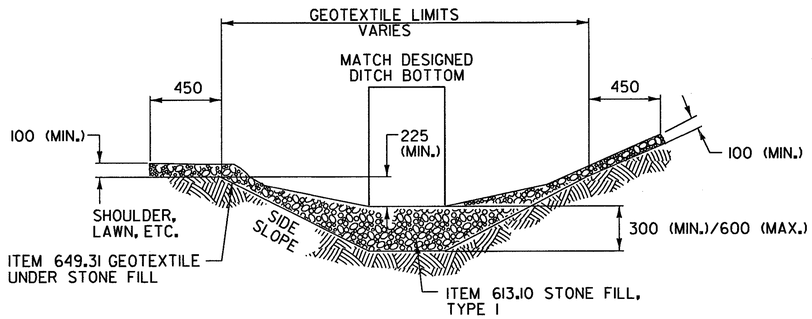
1. ITEM 620.70 SNOW FENCE (MOD.) SHALL BE INSTALLED IN THE LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER PRIOR TO BEGINNING ANY WORK IN THESE AREAS.
2. IN AREAS ADJACENT TO OR WITHIN A WETLAND OR IN THE VICINITY OF THE LIMITS OF CLEARING FOR THE MAINTENANCE VEHICLE ACCESS, THE RESIDENT ENGINEER MAY REQUIRE ITEM 620.70 SNOW FENCE (MOD.) TO BE PLACED IN COMBINATION WITH THE SILT FENCE.
3. THE RESIDENT ENGINEER MAY EXTEND THE DISTANCE BETWEEN THE PROPOSED TOE OF SLOPE AND SILT FENCE PROVIDING IT DOES NOT TAKE PLACE IN A WETLAND/WATERBODY AND DOES NOT REQUIRE THE REMOVAL OF EXISTING VEGETATION.
4. THE CONTRACTOR SHALL INSTALL AT THE BEGINNING OF THE CONTRACT, AND MAINTAIN THROUGHOUT ITS DURATION ITEM 620.70 SNOW FENCE (MOD.) AROUND THE EXISTING WETLAND AREAS/STREAM COURSE AREAS AS SHOWN. THE CONTRACTOR SHALL NOT DISTURB THE FENCED AREAS. THE COST SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 620.70 SNOW FENCE (MOD.)

SNOW FENCE (MOD.)

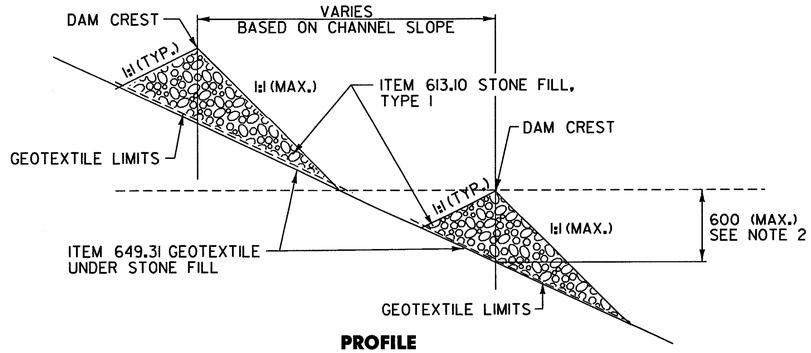
STANDARD SYMBOL



PLAN



SECTION B-B



PROFILE

BOTTOM OF DITCH

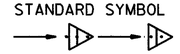
NOTES:

1. MAXIMUM DRAINAGE AREA ABOVE THE CHECK DAM SHALL NOT EXCEED 0.8 HECTARES.
2. SET SPACING OF CHECK DAMS TO ENSURE THAT THE ELEVATION OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION AS THE TOE OF THE UPSTEAM DAM.
3. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
4. ENSURE THAT THE CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONES.

ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

CHECK DAM (STONE)

STANDARD SYMBOL



EROSION CONTROL DETAILS

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.S.L.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00
DESIGN FILE NO.	5116/VAOT/CON4/VTEC.DGN	
PROJ. NAME	BENNINGTON - HOOSICK D.P.I. 0146(1) C/4	
PROJ. NO.	P.I.N. 1306.60	
DWG NO. EC-3	SHEET 126 OF 385	

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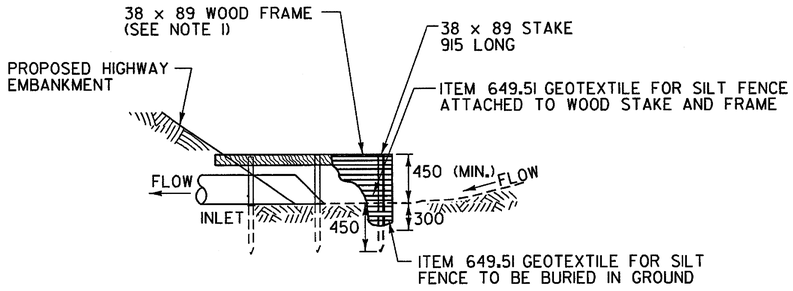
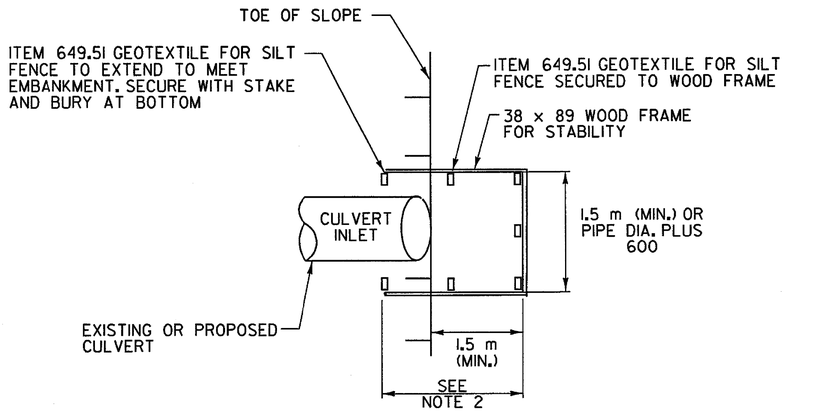


ELEVATION



PLAN

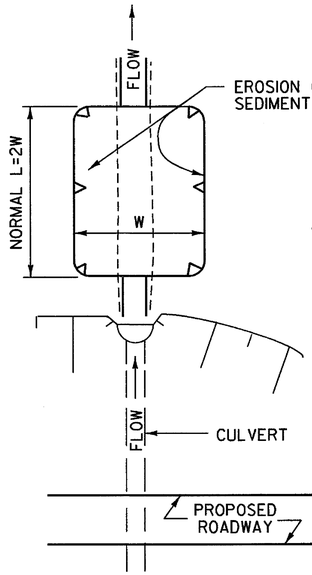
NOTES:

1. A 38 mm x 89 mm WOOD FRAME SHALL BE COMPLETED AROUND THE TOP OF THE STAKES OVER THE ATTACHED ITEM 649.5I GEOTEXTILE FOR SILT FENCE FOR OVERFLOW STABILITY.

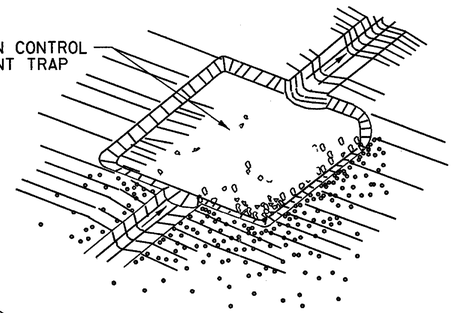
2. SPACE STAKES EVENLY AROUND INLET TO A MAXIMUM OF 900 mm APART.

SILT FENCE FOR TEMPORARY SEDIMENT CONTROL AT CULVERT INLETS

STANDARD SYMBOL:



PLAN VIEW
N.T.S.

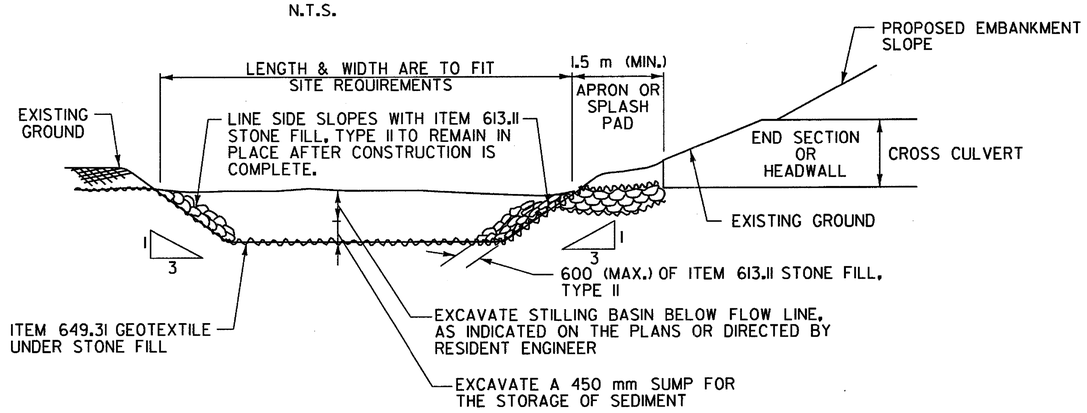


ISOMETRIC VIEW
N.T.S.

NOTES:

1. SEE DWG. NO. SP-1 TO DWG. NO. SP-6 FOR LOCATIONS, LENGTH, WIDTH AND DEPTH REQUIREMENTS.

2. UNLESS OTHERWISE NOTED, ALL EROSION CONTROL SEDIMENT TRAPS ARE PART OF THE PROJECT'S PERMANENT CONSTRUCTION.



EROSION CONTROL SEDIMENT TRAP

STANDARD SYMBOL

NOTE: ITEM 613.II FOR SEDIMENT TRAP TO BE PAID IN CATEGORY 105I EROSION CONTROL

ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

EROSION CONTROL DETAILS

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.S.L.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. 5116/VAOT/CON4/VTEC.DGN

PROJ. NAME BENNINGTON - HOOSICK
D.P.J. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. EC-4 SHEET 127 OF 385

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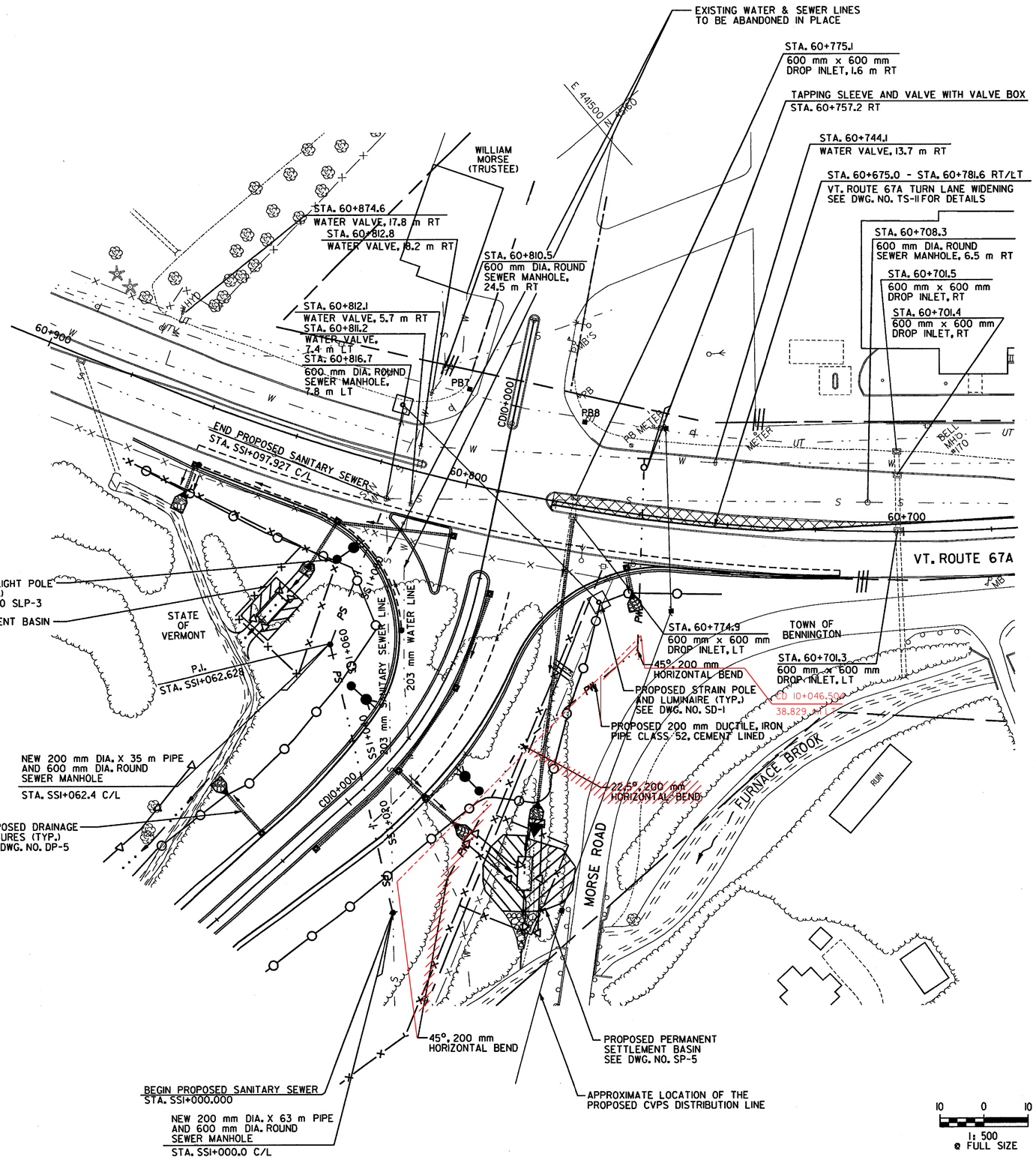

203.31 SAND BORROW

STA. SSI+000.0 - STA. SSI+062.1 C/L (27.0 m^3)
STA. SSI+062.7 - STA. SSI+097.6 C/L (12.6 m^3)
STA. CD10+010.2 - STA. CD10+095.8 LT (41.4 m^3)

301.26 SUBBASE OF CRUSHED GRAVEL (FINE GRADED)

STA. SSI+000.0 - STA. SSI+062.1 C/L (54.9 m^3)
STA. SSI+062.7 - STA. SSI+097.6 C/L (19.6 m^3)
STA. CD10+010.2 - STA. CD10+095.8 LT (64.2 m^3)

204.20 TRENCH EXCAVATION OF EARTH

STA. SSI+000.0 - STA. SSI+062.1 C/L (208.0 m^3)
STA. SSI+062.7 - STA. SSI+097.6 C/L (91.0 m^3)
STA. CD10+010.2 - STA. CD10+095.8 LT (298.0 m^3)

604.22 SANITARY SEWER MANHOLE

STA. SSI+000.0 C/L
STA. SSI+062.4 C/L

625.10 450 mm SLEEVES FOR UTILITIES

STA. SSI+000.0 - STA. SSI+062.1 C/L (63 m)

628.28 200 mm DUCTILE IRON PIPE CLASS 52, CEMENT LINED

STA. SSI+000.0 - STA. SSI+062.1 C/L (63 m)
STA. SSI+062.7 - STA. SSI+097.6 C/L (35 m)

628.42 TRANSFER TO NEW SYSTEM-SANITARY SEWER

STA. SSI+000.0 C/L / STA. SSI+097.927 C/L (ILS)

629.24 200 mm DUCTILE IRON PIPE CLASS 52, CEMENT LINED

STA. CD10+010.2 - STA. CD10+095.8 LT (115 m)

629.35 TAPPING SLEEVE AND VALVE WITH VALVE BOX

STA. 60+757.2 RT

629.42 TRANSFER TO NEW SYSTEM-WATER SYSTEM

STA. 60+757.2 RT / STA. CD10+095.755 LT (ILS)

501.30 CONCRETE, CLASS C

STA. SSI+000.0 C/L (0.8 m^3)
STA. SSI+062.6 C/L (2.9 m^3)
STA. CD10+046.4 LT (2.9 m^3)
STA. CD10+068.6 LT (1.6 m^3)
STA. CD10+095.8 LT (2.9 m^3)

NOTES:

1. THE PLANS SHOW UTILITIES BELIEVED TO EXIST IN THE WORKING AREA. EXACT LOCATION OF WHICH MAY VARY FROM THE LOCATIONS INDICATED. THE CONTRACTOR IS WARNED THAT THE EXACT OR EVEN APPROXIMATE LOCATION OF SUCH PIPELINES, SUBSURFACE STRUCTURES AND/OR UTILITIES IN THE AREA MAY BE DIFFERENT FROM THAT SHOWN OR MAY NOT BE SHOWN, AND IT SHALL BE HIS/HER RESPONSIBILITY TO PROCEED WITH GREAT CARE IN EXECUTING ANY WORK. THE CONTRACTOR SHALL CONTACT "DIG SAFE" AT 1-888-344-7233 AT LEAST 48 HOURS PRIOR TO EXCAVATION OPERATIONS. CONTRACTOR SHALL BE RESPONSIBLE TO CONDUCT EXPLORATORY TEST PITS AS MAY BE REQUIRED TO DETERMINE UNDERGROUND CONDITIONS INCLUDING THE EXACT HORIZONTAL AND VERTICAL LOCATION OF THE EXISTING WATERLINE AT TIE-IN DEPTH. THE COST OF WHICH SHALL BE INCLUDED UNDER ITEM 204.20 TRENCH EXCAVATION OF EARTH AT 500% OF THE UNIT BID PRICE.
2. ALL PROPOSED WATERLINES SHALL HAVE A MINIMUM COVERAGE OF 1.7 m TO TOP OF PIPE.
3. DELINEATION AND DROP-OFF PROTECTION, AS PER VAOT STANDARDS E-108M AND E-111M, WILL BE PROVIDED ALONG VT. ROUTE 67A AT PAVEMENT CUTS REQUIRED FOR WATER AND SANITARY SEWER LINE INSTALLATION AS DIRECTED BY THE RESIDENT ENGINEER. NO LANE CLOSURES WILL BE ALLOWED TO REMAIN IN PLACE ON VT. ROUTE 67A OVERNIGHT.
4. THE PAVEMENT COURSES THAT ARE DETAILED ON DWG. NO. TS-11 SHALL BE USED TO REPLACE PAVEMENT REMOVED IN THE PAVEMENT CUT AREAS. THE VT. ROUTE 67A RESURFACING COURSE SHALL BE PLACED AFTER THE PROPOSED WATER AND SANITARY SEWER LINE INSTALLATION IS COMPLETE.

DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

PROPOSED SANITARY SEWER AND WATERLINE DETAIL SHEET

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.S.L.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. /5116/VAOT/VTP25A.DGN
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG NO. SS-1

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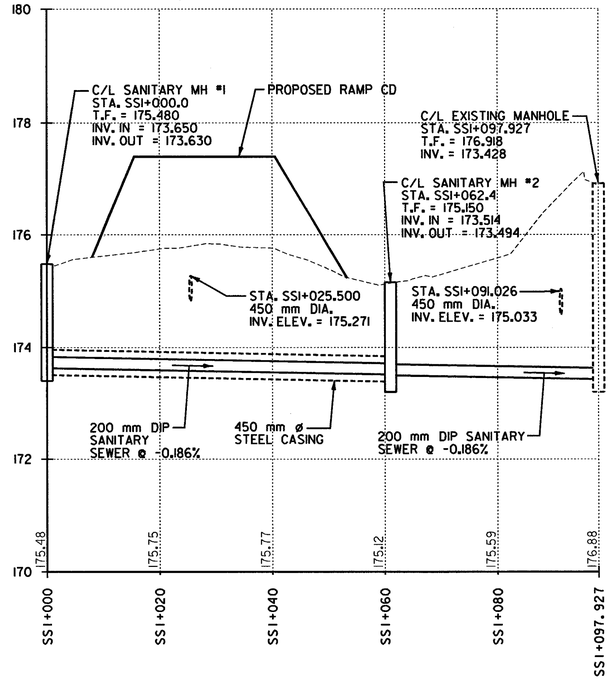
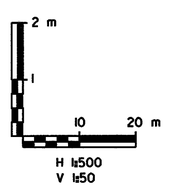
USER =1459



PROPOSED SANITARY SEWER



H 1:500
V 1:50
@ FULL SIZE

PROPOSED SANITARY SEWER PROFILE

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.N.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. SANDET1.DGN

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. SS-2 SHEET 129 OF 385

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

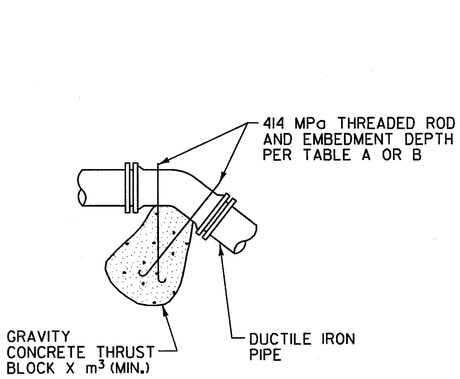
FILE NAME =u:\5116\vaot\contract4\sandet1.dgn
DATE/TIME =07 SEP 2000
USER =1459

TYPE A BLOCKING FOR 11¼° & 22½° VERT BENDS					
PIPE SIZE NOM DIA (mm)	VERTICAL BEND	NO. OF m^3 OF CONC BLOCKING	SIDE OF CUBE (m)	DIA OF SHACKLE RODS (2)	DEPTH OF RODS IN CONC (mm)
200	11¼°	0.8	0.90	19 mm	490
	22½°	1.6	1.16		

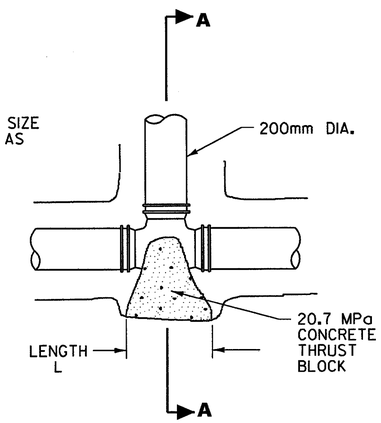
TYPE B BLOCKING FOR 45° VERICAL BENDS				
PIPE SIZE NOM DIA (mm)	NO. OF m^3 OF CONC BLOCKING	SIDE OF CUBE (m)	DIA OF SHACKLE RODS (2)	DEPTH OF RODS IN CONC (mm)
200	2.9	1.43	19 mm	490

REQUIRED BEARING AREAS & DIMENSIONS
FOR CONCRETE THRUST BLOCKS

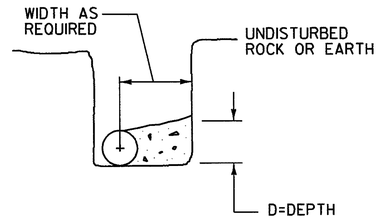
PIPE SIZE (mm)	TEE (See Note 4)		90° (1/4) BEND		45° (1/8) BEND		22-½° (1/16) BEND		11-¼° (1/32) BEND	
	AREA m^2	Dimen. D x L (m)	AREA m^2	Dimen. D x L (m)	AREA m^2	Dimen. D x L (m)	AREA m^2	Dimen. D x L (m)	AREA m^2	Dimen. D x L (m)
200	0.53	0.6 x 0.9	0.74	0.6 x 1.2	0.4	0.6 x 0.8	0.2	0.5 x 0.5	0.1	0.3 x 0.5



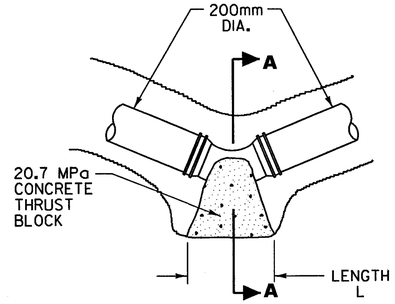
VERTICAL BEND



TEE

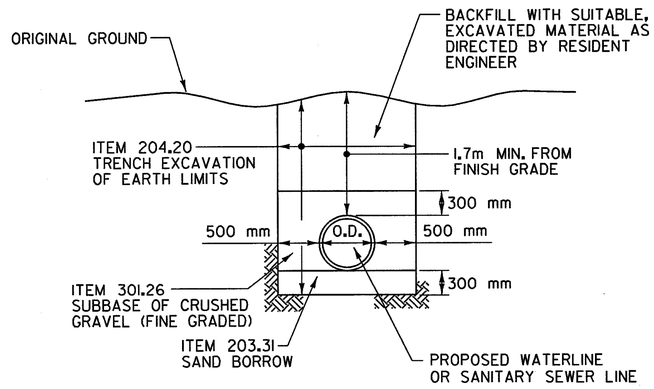


SECTION A-A



BEND

THRUST BLOCK DETAILS
N.T.S.



TYPICAL WATERLINE AND SEWER TRENCH DETAIL
N.T.S.

THRUST BLOCK NOTES

1. FOR REQUIRED BEARING AREA DIMENSIONS D & L SEE TABLE. DIMENSIONS OF D & L OTHER THAN THOSE SHOWN IN THE TABLE MAY BE USED PROVIDED THEY YIELD A BEARING AREA EQUAL TO OR LARGER THAN THAT REQUIRED.
2. CONCRETE SHALL NOT OVERLAP ANY JOINT.
3. CONCRETE SHALL BE PLACED SO AS NOT TO INTERFERE WITH REMOVING OR INSTALLING ANY OF THE JOINTING HARDWARE.
4. VALUES FOR TEE ALSO APPLY TO END PLUGS, CAPS, AND TAPPING SLEEVES.
5. REQUIRED BEARING AREAS ARE DUE TO THRUSTS CAUSED BY 1 MPa WORKING PRESSURE PLUS 50% (0.5 MPa) SURGE ALLOWANCE RESULTING IN 1.5 MPa TOTAL INTERNAL PRESSURE. NOMINAL PIPE DIAMETER USED.
6. REQUIRED BEARING AREAS ARE BASED ON ALLOWABLE SOIL BEARING CAPACITY OF 13.8 MPa FOR SAND. DUE TO OTHER SOIL CONDITIONS ENCOUNTERED, BEARING AREAS MAY BE MODIFIED AS DIRECTED BY THE RESIDENT ENGINEER.
7. IN MUCK, PEAT, OR RECENTLY PLACED FILL ALL THRUST SHALL BE RESISTED BY PILES OR TIE RODS TO SOLID FOUNDATIONS, OR BY REMOVAL OF SUCH UNSTABLE MATERIAL AND REPLACEMENT WITH BALLAST OF SUFFICIENT STABILITY TO RESIST THE THRUSTS AS DIRECTED BY THE RESIDENT ENGINEER.

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

THRUST BLOCK AND TRENCH DETAIL SHEET

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY D.E.G. DATE 9/00
DRAWN BY E.C.D. DATE 9/00
CHECKED BY T.P.K. DATE 9/00
DESIGN FILE NO. \5116\VAOT\CONTRACT4
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG NO. SS-3 SHEET 130 OF 385

FILE NAME =u:\5116\vaot\contract4\ss-3.dgn
DATE/TIME =07 SEP 2000
USER =1459

646.41 DURABLE 100 mm YELLOW LINE

STA. SR0+000.000 - STA. SR0+251.723 DOUBLE SOLID (CENTER LINE)
STA. 16+695.000 - STA. 16+960.000 DOUBLE SOLID (CENTER LINE)

646.40 DURABLE 100 mm WHITE LINE

STA. SR0+000.000 - STA. SR0+251.723 SOLID LT & RT (EDGE LINE)
STA. 16+695.000 - STA. 16+960.000 DASHED 3.6 m LT (LANE LINE)
STA. 16+695.000 - STA. 16+960.000 SOLID LT & RT (EDGE LINE)
STA. 16+695.000 - STA. 16+866.000 DOTTED 3.6 m RT (LANE LINE)
STA. 16+866.000 - STA. 16+960.000 DASHED 3.6 m RT (LANE LINE)

VAST Metric

VT STATE PLANE GRID

END SILK ROAD
END PAVING
P.T. STA. SR0+251.723

0.3 m
3.0 m
3.6 m
3.0 m
0.3 m

END BENNINGTON - HOOSICK D.P.I. 0146(1) C/3
BEGIN BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
BEGIN ROADWAY
STA. 16+695.000

END EASTBOUND DECELERATION LANE WIDENING
BEGIN EASTBOUND DECELERATION LANE
STA. 16+755.000

SR0+200

WALLOOMSAC RIVER

MATCH LINE STA. 16+960.000 DWG. SSP-2

3.0 m
3.6 m
3.6 m
3.6 m
3.6 m
3.0 m
0.7 m

16+700
16+800
16+900

STA. 16+958.5, RT

0090
0202
0300
N

MOUNT SIGN TO EXISTING BRIDGE RAIL. SEE VAOT STANDARD SHEET E-199M.

SILK ROAD
SR0+100

STA. 16+767.0, RT

BRIDGE 5 VT-9 279
N
N

STA. 16+740.0, RT

Walloomsac River
N
N N

10 0 10 m
1: 500
@ FULL SIZE

SIGN LEGEND

R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
B-B = BACK TO BACK
EXISTING = - - - - - -
NEW = ———

BEGIN SILK ROAD
BEGIN PAVING
P.C. STA. SR0+000.000

0.3 m
3.0 m
5.0 m
0.3 m

SIGNING AND STRIPING PLAN

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.S.L.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. /5116/VAOT/VTSSP14

PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. SSP-1 SHEET 131 OF 385

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

FILE NAME =u:\5116\vaot\contract4\vtssp14.dgn
DATE/TIME =08 SEP 2000
USER =1459

NOT Metric

646.61 TEMPORARY 100 mm WHITE LINE

STA. B10+140.000 - STA. B10+323.782 SOLID RT (EDGE LINE)
STA. D10+080.000 - STA. D10+148.500 SOLID RT (EDGE LINE)

646.61 TEMPORARY 100 mm YELLOW LINE

STA. B10+206.600 - STA. B10+323.782 SOLID ℄ (EDGE LINE)
STA. D10+080.000 - STA. D10+142.000 SOLID ℄ (EDGE LINE)

646.62 TEMPORARY 200 mm WHITE LINE

STA. B10+140.000 - STA. B10+206.600 SOLID ℄ (GORE LINE)
STA. D10+142.000 - STA. D10+149.925 SOLID ℄ (GORE LINE)

646.41 DURABLE 100 mm YELLOW LINE

STA. 16+960.000	- STA. 16+978.091	DOUBLE SOLID (CENTER LINE)
STA. Y10+000.000	- STA. Y10+114.700	DOUBLE SOLID (CENTER LINE)
STA. Y10+114.700	- STA. Y10+140.444	DOUBLE SOLID (CENTER LINE)
STA. X10+114.700	- STA. X10+140.444	DOUBLE SOLID (CENTER LINE)
STA. AB10+110.000	- STA. AB10+196.565	SOLID 2.4 m LT & 2.4 m RT (EDGE LINE)
STA. A10+000.000	- STA. A10+126.600	SOLID ℄ (EDGE LINE)
STA. B10+206.600	- STA. B10+323.782	SOLID ℄ (EDGE LINE)
STA. C10+069.700	- STA. C10+140.000	SOLID ℄ (EDGE LINE)
STA. D10+080.000	- STA. D10+142.000	SOLID ℄ (EDGE LINE)
STA. X10+140.444	- STA. X10+252.500	SOLID ℄ (EDGE LINE)
STA. Y10+140.444	- STA. Y10+216.991	SOLID ℄ (EDGE LINE)
STA. B10+140.000	- STA. B10+175.097	SOLID LT (EDGE LINE)

646.40 DURABLE 100 mm WHITE LINE

STA. 16+960.000	- STA. 16+978.091	SOLID LT & RT (EDGE LINE)
STA. 16+960.000	- STA. 16+978.091	DASHED 3.6 m LT & 3.6 m RT (LANE LINE)
STA. AB10+110.000	- STA. AB10+196.565	SOLID LT & RT (EDGE LINE)
STA. A10+000.000	- STA. A10+184.529	SOLID RT (EDGE LINE)
STA. B10+140.000	- STA. B10+323.782	SOLID RT (EDGE LINE)
STA. C10+000.000	- STA. C10+140.000	SOLID RT (EDGE LINE)
STA. D10+080.000	- STA. D10+148.500	SOLID RT (EDGE LINE)
STA. X10+071.500	- STA. X10+246.000	SOLID RT (EDGE LINE)
STA. Y10+059.000	- STA. Y10+184.000	SOLID LT (EDGE LINE)
STA. AB10+110.000	- STA. AB10+140.000	DOTTED 7.2 m LT (EDGE LINE)

646.43 DURABLE 200 mm YELLOW LINE

STA. X10+114.700 - STA. X10+140.444 SOLID DIAGONALS LT (GORE AREA)

646.42 DURABLE 200 mm WHITE LINE

STA. X10+000.000	- STA. X10+071.500	SOLID 3.6 m RT (GORE LINE)
STA. X10+032.645	- STA. X10+071.500	SOLID DIAGONALS RT (GORE AREA)
STA. X10+246.000	- STA. X10+253.500	SOLID 3.6 m RT (GORE LINE)
STA. Y10+000.000	- STA. Y10+059.000	SOLID 3.6 m LT (GORE LINE)
STA. Y10+184.000	- STA. Y10+216.991	SOLID 3.6 m LT (GORE LINE)
STA. Y10+184.000	- STA. Y10+216.991	SOLID DIAGONALS LT (GORE AREA)
STA. A10+126.600	- STA. A10+154.799	SOLID ℄ (GORE LINE)
STA. B10+140.000	- STA. B10+206.600	SOLID ℄ (GORE LINE)
STA. C10+032.651	- STA. C10+069.700	SOLID ℄ (GORE LINE)
STA. D10+142.000	- STA. D10+149.925	SOLID ℄ (GORE LINE)

675.50 REMOVING SIGNS
AS SHOWN - 22

646.50 DURABLE LETTER OR SYMBOL
STA. AB10+171.450 LT = "AHEAD"
STA. AB10+183.550 LT = "SIGNAL"

646.81 PAINTED CURB (YELLOW)

STA. AB10+131.000 - STA. AB10+149.000 LT
STA. AB10+187.565 - STA. AB10+196.565 LT & RT (MEDIAN CURB)

NOTE:
1. PORTION OF SIGN PANEL SHALL BE COVERED FROM MOTORISTS' VIEW, AS SHOWN ABOVE. SIGN COVER SHALL BE BOLTED ONTO THE SIGN AND CONSTRUCTED OF WOOD, STEEL, OR OTHER DURABLE MATERIAL AS DIRECTED BY THE RESIDENT ENGINEER.

SIGN LEGEND

R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
B-B = BACK TO BACK
EXISTING = — — — — —
NEW = ————

DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

I: 500
@ FULL SIZE

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.S.L.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. /5116/SSP15.DGN
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG NO. SSP-2 SHEET 132 OF 385

SIGNING AND STRIPING PLAN

FILE NAME =u:\5116\root\contract4\vtssp15.dgn
DATE/TIME =26 SEP 2000
USER =1459

Metric

646.41 DURABLE 100 mm YELLOW LINE

STA. X10+252.500	STA. X10+331.094	SOLID LT (EDGE LINE)
STA. B10+064.800	STA. B10+140.000	SOLID LT (EDGE LINE)
STA. D10+227.791	STA. D10+236.439	SOLID LT (EDGE LINE)
STA. 60+870.000	STA. 61+040.000	SOLID LT & RT (EDGE LINE)

646.40 DURABLE 100 mm WHITE LINE

STA. B10+064.800	STA. B10+140.000	SOLID RT (EDGE LINE)
STA. B10+064.800	STA. B10+100.000	DASHED ℄ (LANE LINE)
STA. D10+148.500	STA. D10+236.439	SOLID RT (EDGE LINE)
STA. 60+870.000	STA. 61+040.000	SOLID LT & RT (EDGE LINE)
STA. 60+870.000	STA. 61+040.000	DASHED 6.3 m LT & 6.3 m RT (LANE LINE)
STA. 60+870.000	STA. 60+915.000	DOTTED 2.7 m LT (LANE LINE)
STA. 60+870.000	STA. 60+915.000	DOTTED 9.9 m LT (LANE LINE)
STA. 60+985.500	STA. 61+040.000	DOTTED 9.9 m RT (LANE LINE)

646.42 DURABLE 200 mm WHITE LINE

STA. X10+253.500	STA. X10+320.871	SOLID 3.6 m RT (GORE LINE)
STA. B10+100.000	STA. B10+140.000	SOLID ℄ (GORE LINE)
STA. D10+149.925	STA. D10+236.439	SOLID ℄ GORE LINE)
STA. D10+187.200	STA. D10+236.439	DIAGONALS RT (SHOULDER AREA)

646.81 PAINTED CURB (YELLOW)

STA. 60+870.000	STA. 60+873.000	RT (MEDIAN CURB)
STA. 60+901.000	STA. 60+919.000	LT (MEDIAN CURB)
STA. 60+976.500	STA. 60+994.500	RT (MEDIAN CURB)
STA. 61+025.000	STA. 61+040.000	LT (MEDIAN CURB)

646.81 PAINTED CURB (WHITE)

STA. 60+901.000	STA. 60+919.000	LT (EDGE CURB)
STA. 60+976.500	STA. 60+994.500	RT (EDGE CURB)
STA. 61+036.000	STA. 61+040.000	RT (EDGE CURB)

646.61 TEMPORARY 100 mm YELLOW LINE

STA. 60+870.000 - STA. 61+040.000 SOLID LT & RT (EDGE LINE)

646.60 TEMPORARY 100 mm WHITE LINE

STA. B10+064.800	STA. B10+140.000	SOLID RT (EDGE LINE)
STA. B10+064.800	STA. B10+100.000	DASHED ℄ (LANE LINE)
STA. D10+148.500	STA. D10+236.439	SOLID RT (EDGE LINE)
STA. 60+870.000	STA. 61+040.000	SOLID LT & RT (EDGE LINE)
STA. 60+870.000	STA. 61+040.000	DASHED 6.3 m LT & 6.3 m RT (LANE LINE)
STA. 60+870.000	STA. 60+915.000	DOTTED 2.7 m LT (LANE LINE)
STA. 60+870.000	STA. 60+915.000	DOTTED 9.9 m LT (LANE LINE)
STA. 60+985.500	STA. 61+040.000	DOTTED 9.9 m RT (LANE LINE)

646.62 TEMPORARY 200 mm WHITE LINE

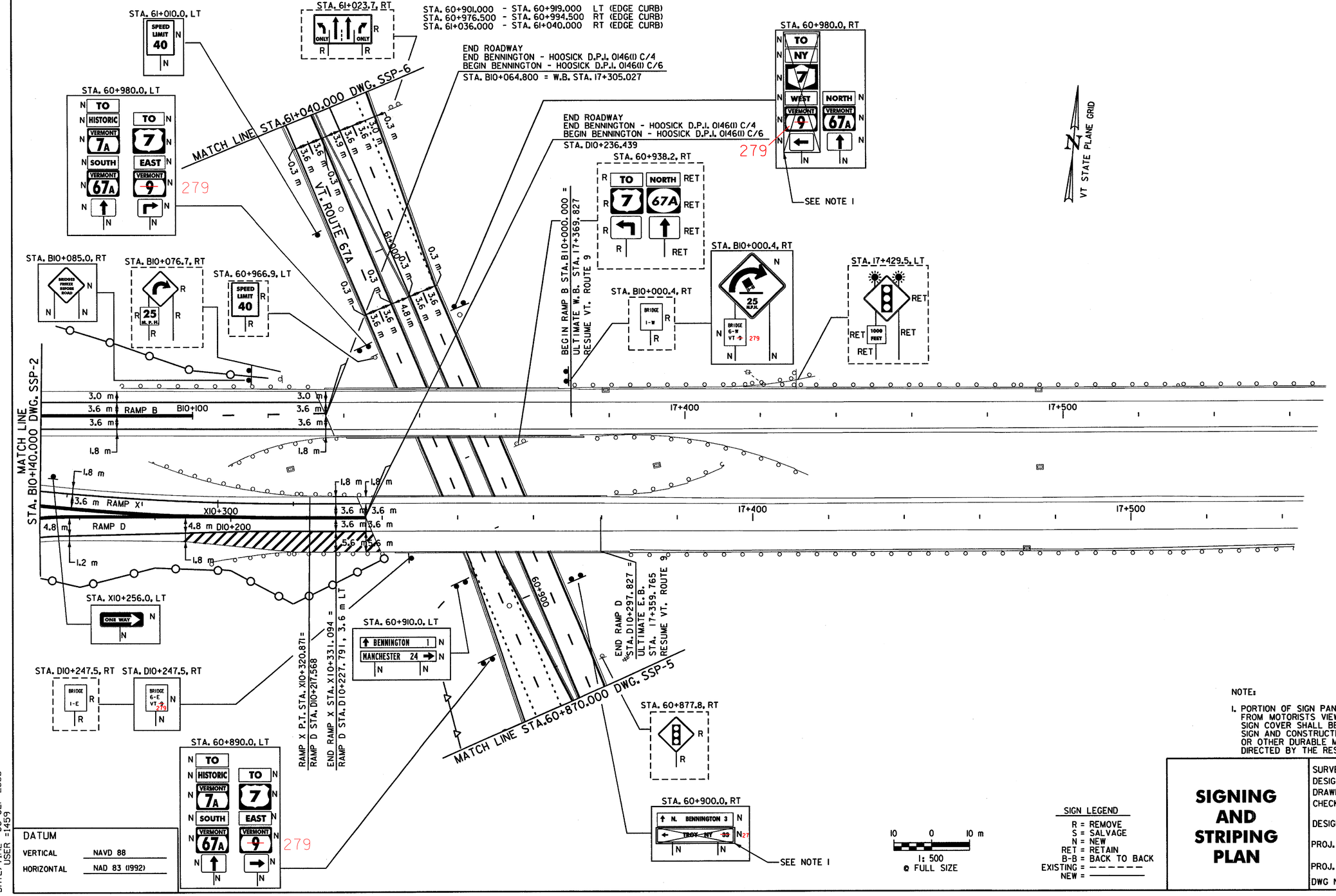
STA. B10+100.000	STA. B10+140.000	SOLID ℄ (GORE LINE)
STA. D10+149.925	STA. D10+236.439	SOLID ℄ (GORE LINE)

646.85 REMOVAL OF EXISTING PAVEMENT MARKINGS

STA. 17+369.827 - STA. 17+400.000 RT (16 m^2)
STA. B10+003.344 - STA. B10+058.623 LT (28 m^2)

675.50 REMOVING SIGNS

AS SHOWN - 10



NOTE:

1. PORTION OF SIGN PANEL SHALL BE COVERED FROM MOTORISTS VIEW, AS SHOWN ABOVE. SIGN COVER SHALL BE BOLTED ONTO THE SIGN AND CONSTRUCTED OF WOOD, STEEL, OR OTHER DURABLE MATERIAL, OR AS DIRECTED BY THE RESIDENT ENGINEER.

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

10 0 10 m
1: 500
@ FULL SIZE

SIGN LEGEND
R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
B-B = BACK TO BACK
EXISTING = - - - - - -
NEW = ———

SIGNING AND STRIPING PLAN

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY D.E.G. DATE 9/00
DRAWN BY J.S.L. DATE 9/00
CHECKED BY T.P.K. DATE 9/00
DESIGN FILE NO. /5116/SSP16.DGN
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG NO. SSP-3 SHEET 133 OF 385

FILE NAME =u:\5116\vsot\contract4\vtssp16.dgn
DATE/TIME =08 SEP 2000
USER =1459

646.41 DURABLE 100 mm YELLOW LINE

STA. C10+140.000 - STA. C10+250.186 SOLID ℄ (EDGE LINE)
STA. D10+000.000 - STA. D10+080.000 SOLID ℄ (EDGE LINE)
STA. CD10+120.000 - STA. CD10+271.929 SOLID LT & RT (EDGE LINE)

646.41 TEMPORARY 100 mm YELLOW LINE

STA. D10+000.000 - STA. C10+080.000 SOLID ℄ (EDGE LINE)
STA. CD10+120.000 - STA. CD10+271.929 SOLID RT (EDGE LINE)

646.81 PAINTED CURB (YELLOW)

STA. CD10+262.929 - STA. CD10+271.929 LT & RT (MEDIAN CURB)

646.81 PAINTED CURB (WHITE)

STA. CD10+131.000 - STA. CD10+149.000 LT

646.41 TEMPORARY 100 mm WHITE LINE

STA. D10+000.000 - STA. D10+080.000 SOLID RT (EDGE LINE)
STA. CD10+120.000 - STA. CD10+271.929 SOLID RT (EDGE LINE)

646.61 TEMPORARY 100 mm YELLOW LINE

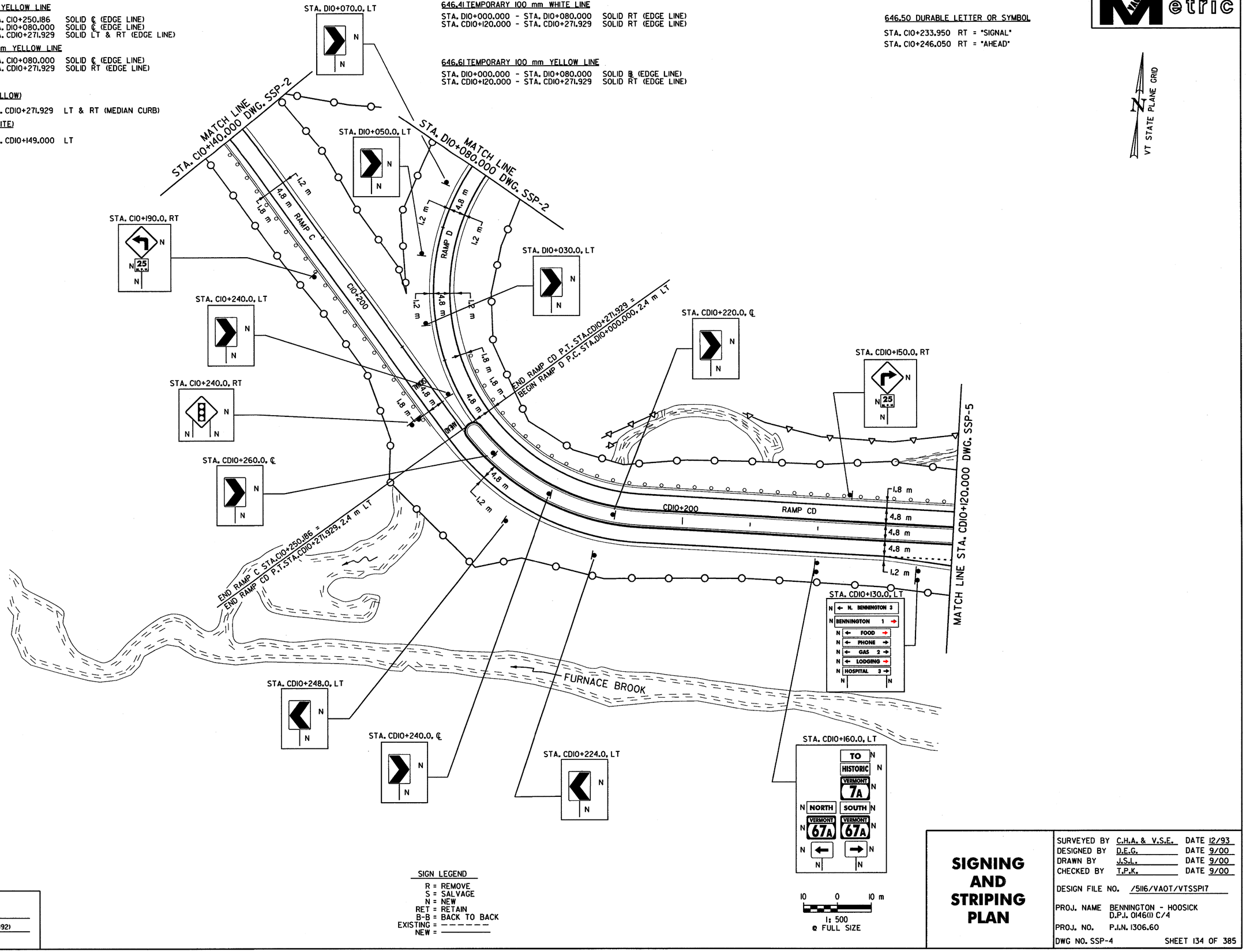
STA. D10+000.000 - STA. D10+080.000 SOLID ℄ (EDGE LINE)
STA. CD10+120.000 - STA. CD10+271.929 SOLID RT (EDGE LINE)

646.50 DURABLE LETTER OR SYMBOL

STA. C10+233.950 RT = "SIGNAL"
STA. C10+246.050 RT = "AHEAD"

Metric

VT STATE PLANE GRID



SIGN LEGEND

R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
B-B = BACK TO BACK
EXISTING = ————
NEW = ————

10 0 10 m
1: 500
@ FULL SIZE

DATUM

VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

FILE NAME =u:\5116\vaot\contract4\vtssp17.dgn
DATE/TIME =08 SEP 2000
USER =1459

SIGNING AND STRIPING PLAN

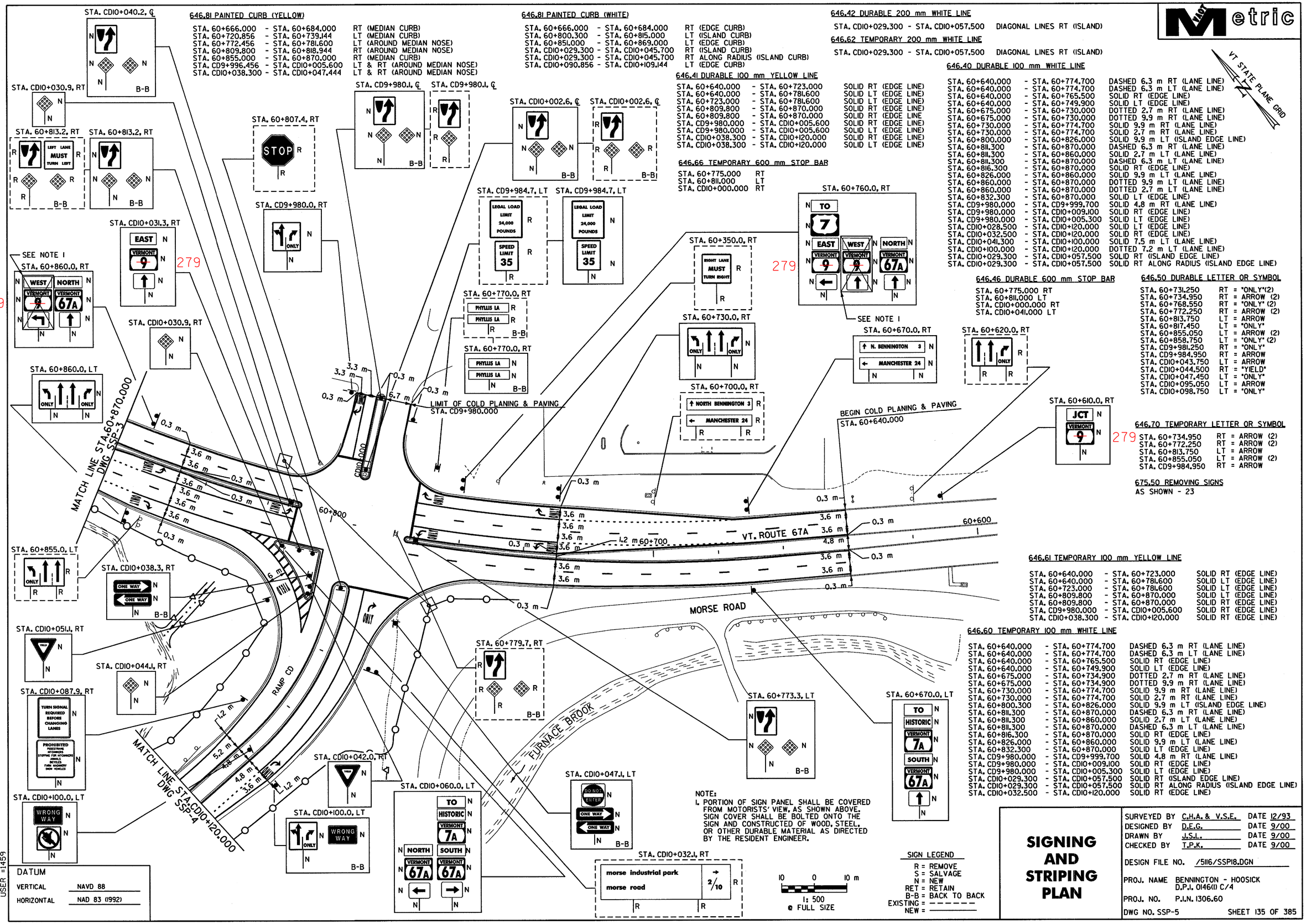
SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY D.E.G. DATE 9/00
DRAWN BY J.S.L. DATE 9/00
CHECKED BY T.P.K. DATE 9/00

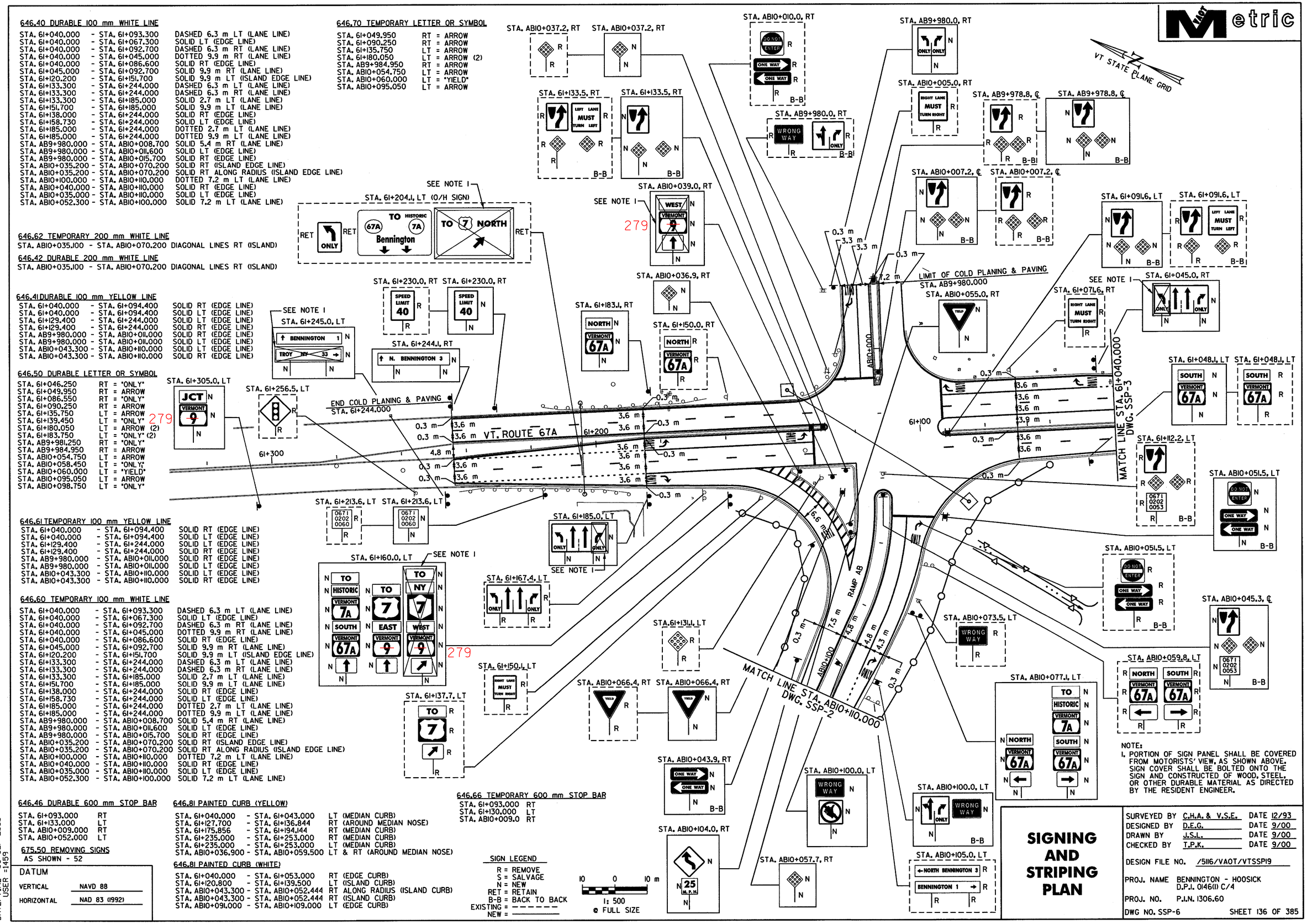
DESIGN FILE NO. /5116/VAOT/VTSSP17

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. SSP-4 SHEET 134 OF 385


STA. CD10+040.2, ℄
B-B
STA. CD10+030.9, RT
STA. 60+813.2, RT
LEFT LANE MUST TURN LEFT
STA. 60+813.2, RT
STA. 60+807.4, RT
STOP
STA. CD9+980.0, RT
ONLY
STA. CD10+031.3, RT
EAST
VERMONT
9
279
SEE NOTE 1
STA. 60+860.0, RT
WEST
NORTH
VERMONT
67A
279
STA. CD10+030.9, RT
STA. 60+860.0, LT
ONLY
ONLY
646.81 PAINTED CURB (YELLOW)
STA. 60+666.000 - STA. 60+684.000 RT (MEDIAN CURB)
STA. 60+720.856 - STA. 60+739.144 LT (MEDIAN CURB)
STA. 60+772.456 - STA. 60+781.600 LT (AROUND MEDIAN NOSE)
STA. 60+809.800 - STA. 60+818.944 RT (AROUND MEDIAN NOSE)
STA. 60+855.000 - STA. 60+870.000 RT (MEDIAN CURB)
STA. CD9+996.456 - STA. CD10+005.600 LT & RT (AROUND MEDIAN NOSE)
STA. CD10+038.300 - STA. CD10+047.444 LT & RT (AROUND MEDIAN NOSE)
646.81 PAINTED CURB (WHITE)
STA. 60+666.000 - STA. 60+684.000 RT (EDGE CURB)
STA. 60+800.300 - STA. 60+815.000 LT (ISLAND CURB)
STA. 60+851.000 - STA. 60+869.000 LT (EDGE CURB)
STA. CD10+029.300 - STA. CD10+045.700 RT (ISLAND CURB)
STA. CD10+029.300 - STA. CD10+045.700 RT ALONG RADIUS (ISLAND CURB)
STA. CD10+090.856 - STA. CD10+109.144 LT (EDGE CURB)
646.41 DURABLE 100 mm YELLOW LINE
STA. 60+640.000 - STA. 60+723.000 SOLID RT (EDGE LINE)
STA. 60+640.000 - STA. 60+781.600 SOLID LT (EDGE LINE)
STA. 60+723.000 - STA. 60+781.600 SOLID RT (EDGE LINE)
STA. 60+809.800 - STA. 60+870.000 SOLID RT (EDGE LINE)
STA. 60+809.800 - STA. 60+870.000 SOLID RT (EDGE LINE
STA. CD9+980.000 - STA. CD10+005.600 SOLID RT (EDGE LINE)
STA. CD9+980.000 - STA. CD10+005.600 SOLID LT (EDGE LINE)
STA. CD10+038.300 - STA. CD10+120.000 SOLID RT (EDGE LINE)
STA. CD10+038.300 - STA. CD10+120.000 SOLID LT (EDGE LINE)
646.66 TEMPORARY 600 mm STOP BAR
STA. 60+775.000 RT
STA. 60+811.000 LT
STA. CD10+000.000 RT
646.42 DURABLE 200 mm WHITE LINE
STA. CD10+029.300 - STA. CD10+057.500 DIAGONAL LINES RT (ISLAND)
646.62 TEMPORARY 200 mm WHITE LINE
STA. CD10+029.300 - STA. CD10+057.500 DIAGONAL LINES RT (ISLAND)
646.40 DURABLE 100 mm WHITE LINE
STA. 60+640.000 - STA. 60+774.700 DASHED 6.3 m RT (LANE LINE)
STA. 60+640.000 - STA. 60+774.700 DASHED 6.3 m LT (LANE LINE)
STA. 60+640.000 - STA. 60+765.500 SOLID RT (EDGE LINE)
STA. 60+640.000 - STA. 60+749.900 SOLID LT (EDGE LINE)
STA. 60+675.000 - STA. 60+730.000 DOTTED 2.7 m RT (LANE LINE)
STA. 60+675.000 - STA. 60+730.000 DOTTED 9.9 m RT (LANE LINE)
STA. 60+730.000 - STA. 60+774.700 SOLID 9.9 m RT (LANE LINE)
STA. 60+730.000 - STA. 60+774.700 SOLID 2.7 m RT (LANE LINE)
STA. 60+800.000 - STA. 60+826.000 SOLID 9.9 m LT (ISLAND EDGE LINE)
STA. 60+811.300 - STA. 60+870.000 DASHED 6.3 m RT (LANE LINE)
STA. 60+811.300 - STA. 60+860.000 SOLID 2.7 m LT (LANE LINE)
STA. 60+811.300 - STA. 60+870.000 DASHED 6.3 m LT (LANE LINE)
STA. 60+816.300 - STA. 60+870.000 SOLID RT (EDGE LINE)
STA. 60+826.000 - STA. 60+860.000 SOLID 9.9 m LT (LANE LINE)
STA. 60+860.000 - STA. 60+870.000 DOTTED 9.9 m LT (LANE LINE)
STA. 60+860.000 - STA. 60+870.000 DOTTED 2.7 m LT (LANE LINE)
STA. 60+832.300 - STA. 60+870.000 SOLID LT (EDGE LINE)
STA. CD9+980.000 - STA. CD9+999.700 SOLID 4.8 m RT (LANE LINE)
STA. CD9+980.000 - STA. CD10+009.100 SOLID RT (EDGE LINE)
STA. CD9+980.000 - STA. CD10+005.300 SOLID LT (EDGE LINE)
STA. CD10+028.500 - STA. CD10+120.000 SOLID LT (EDGE LINE)
STA. CD10+032.500 - STA. CD10+120.000 SOLID RT (EDGE LINE)
STA. CD10+041.300 - STA. CD10+100.000 SOLID 7.5 m LT (LANE LINE)
STA. CD10+100.000 - STA. CD10+120.000 DOTTED 7.2 m LT (LANE LINE)
STA. CD10+029.300 - STA. CD10+057.500 SOLID RT (ISLAND EDGE LINE)
STA. CD10+029.300 - STA. CD10+057.500 SOLID RT ALONG RADIUS (ISLAND EDGE LINE)
646.46 DURABLE 600 mm STOP BAR
STA. 60+775.000 RT
STA. 60+811.000 LT
STA. CD10+000.000 RT
STA. CD10+041.000 LT
646.50 DURABLE LETTER OR SYMBOL
STA. 60+731.250 RT = "ONLY"(2)
STA. 60+734.950 RT = ARROW (2)
STA. 60+768.550 RT = "ONLY" (2)
STA. 60+772.250 RT = ARROW (2)
STA. 60+813.750 LT = ARROW
STA. 60+817.450 LT = "ONLY"
STA. 60+855.050 LT = ARROW (2)
STA. 60+858.750 LT = "ONLY" (2)
STA. CD9+981.250 RT = "ONLY"
STA. CD9+984.950 RT = ARROW
STA. CD10+043.750 LT = ARROW
STA. CD10+044.500 RT = "YIELD"
STA. CD10+047.450 LT = "ONLY"
STA. CD10+095.050 LT = ARROW
STA. CD10+098.750 LT = "ONLY"
646.70 TEMPORARY LETTER OR SYMBOL
STA. 60+734.950 RT = ARROW (2)
STA. 60+772.250 RT = ARROW (2)
STA. 60+813.750 LT = ARROW
STA. 60+855.050 LT = ARROW (2)
STA. CD9+984.950 RT = ARROW
675.50 REMOVING SIGNS
AS SHOWN - 23
646.61 TEMPORARY 100 mm YELLOW LINE
STA. 60+640.000 - STA. 60+723.000 SOLID RT (EDGE LINE)
STA. 60+640.000 - STA. 60+781.600 SOLID LT (EDGE LINE)
STA. 60+723.000 - STA. 60+781.600 SOLID LT (EDGE LINE)
STA. 60+809.800 - STA. 60+870.000 SOLID LT (EDGE LINE)
STA. 60+809.800 - STA. 60+870.000 SOLID RT (EDGE LINE)
STA. CD9+980.000 - STA. CD10+005.600 SOLID RT (EDGE LINE)
STA. CD10+038.300 - STA. CD10+120.000 SOLID RT (EDGE LINE)
646.60 TEMPORARY 100 mm WHITE LINE
STA. 60+640.000 - STA. 60+774.700 DASHED 6.3 m RT (LANE LINE)
STA. 60+640.000 - STA. 60+774.700 DASHED 6.3 m LT (LANE LINE)
STA. 60+640.000 - STA. 60+765.500 SOLID RT (EDGE LINE)
STA. 60+640.000 - STA. 60+749.900 SOLID LT (EDGE LINE)
STA. 60+675.000 - STA. 60+734.900 DOTTED 2.7 m RT (LANE LINE)
STA. 60+675.000 - STA. 60+734.900 DOTTED 9.9 m RT (LANE LINE)
STA. 60+730.000 - STA. 60+774.700 SOLID 9.9 m RT (LANE LINE)
STA. 60+730.000 - STA. 60+774.700 SOLID 2.7 m RT (LANE LINE)
STA. 60+800.300 - STA. 60+826.000 SOLID 9.9 m LT (ISLAND EDGE LINE)
STA. 60+811.300 - STA. 60+870.000 DASHED 6.3 m RT (LANE LINE)
STA. 60+811.300 - STA. 60+860.000 SOLID 2.7 m LT (LANE LINE)
STA. 60+811.300 - STA. 60+870.000 DASHED 6.3 m LT (LANE LINE)
STA. 60+816.300 - STA. 60+870.000 SOLID RT (EDGE LINE)
STA. 60+826.000 - STA. 60+860.000 SOLID 9.9 m LT (LANE LINE)
STA. 60+832.300 - STA. 60+870.000 SOLID LT (EDGE LINE)
STA. CD9+980.000 - STA. CD9+999.700 SOLID 4.8 m RT (LANE LINE)
STA. CD9+980.000 - STA. CD10+009.100 SOLID RT (EDGE LINE)
STA. CD9+980.000 - STA. CD10+005.300 SOLID LT (EDGE LINE)
STA. CD10+029.300 - STA. CD10+057.500 SOLID RT (ISLAND EDGE LINE)
STA. CD10+029.300 - STA. CD10+057.500 SOLID RT ALONG RADIUS (ISLAND EDGE LINE)
STA. CD10+032.500 - STA. CD10+120.000 SOLID RT (EDGE LINE)
STA. CD9+980.1, ℄
STA. CD9+980.1, ℄
B-B
STA. CD10+002.6, ℄
STA. CD10+002.6, ℄
B-B
STA. CD9+984.7, LT
LEGAL LOAD LIMIT 24,000 POUNDS
SPEED LIMIT 35
STA. CD9+984.7, LT
STA. 60+770.0, RT
PHYLLIS LA
B-B
STA. 60+770.0, RT
PHYLLIS LA
B-B
STA. 60+760.0, RT
TO 7
EAST VERMONT 9
WEST VERMONT 9
NORTH VERMONT 67A
279
SEE NOTE 1
STA. 60+350.0, RT
RIGHT LANE MUST TURN RIGHT
279
STA. 60+730.0, RT
ONLY
ONLY
STA. 60+700.0, RT
NORTH BENNINGTON 3
MANCHESTER 24
STA. 60+670.0, RT
N. BENNINGTON 3
MANCHESTER 24
STA. 60+620.0, RT
ONLY
STA. 60+610.0, RT
JCT VERMONT 9
279
BEGIN COLD PLANING & PAVING
STA. 60+640.000
LIMIT OF COLD PLANING & PAVING
STA. CD9+980.000
3.3 m
0.3 m
6.7 m
CD10.000
MATCH LINE STA. 60+870.000 DWG SSP-3
MATCH LINE STA. CD10+120.000 DWG SSP-4
3.6 m
4.8 m
1.2 m
6 m
5.2 m
60+800
60+700
60+600
VT. ROUTE 67A
MORSE ROAD
RAMP CD
FURNACE BROOK
STA. 60+855.0, LT
ONLY
ONLY
STA. CD10+038.3, RT
ONE WAY
ONE WAY
B-B
STA. CD10+051.1, RT
STA. CD10+044.1, RT
STA. CD10+087.9, RT
TURN SIGNAL REQUIRED BEFORE CHANGING LANES
PROHIBITED PEDESTRIANS MOTORBIKES STOPPING FOR MOTORISTS ANIMALS BICYCLES FARM MACHINERY SLOW VEHICLES
STA. CD10+100.0, LT
WRONG WAY
STA. CD10+042.0, RT
STA. CD10+100.0, LT
ONLY
WRONG WAY
B-B
STA. CD10+060.0, LT
TO HISTORIC VERMONT 7A
NORTH VERMONT 67A
SOUTH VERMONT 67A
STA. 60+779.7, RT
B-B
STA. 60+773.3, LT
B-B
STA. 60+670.0, LT
TO HISTORIC VERMONT 7A SOUTH VERMONT 67A
STA. CD10+047.1, LT
DO NOT ENTER
ONE WAY
ONE WAY
B-B
STA. CD10+032.1, RT
morse industrial park
morse road
2/10
NOTE:
1. PORTION OF SIGN PANEL SHALL BE COVERED FROM MOTORISTS' VIEW, AS SHOWN ABOVE. SIGN COVER SHALL BE BOLTED ONTO THE SIGN AND CONSTRUCTED OF WOOD, STEEL, OR OTHER DURABLE MATERIAL AS DIRECTED BY THE RESIDENT ENGINEER.
SIGN LEGEND
R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
B-B = BACK TO BACK
EXISTING = - - - - - -
NEW = ———
10 0 10 m
1: 500
@ FULL SIZE
DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)
FILE NAME =u:\5116\vsoft\contract4\vtssp18.dgn
DATE/TIME =08 SEP 2000
USER =1459
SIGNING AND STRIPING PLAN
SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY D.E.G. DATE 9/00
DRAWN BY J.S.L. DATE 9/00
CHECKED BY T.P.K. DATE 9/00
DESIGN FILE NO. /5116/SSP18.DGN
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG NO. SSP-5
SHEET 135 OF 385


646.40 DURABLE 100 mm WHITE LINE
STA. 61+040.000 - STA. 61+093.300 DASHED 6.3 m LT (LANE LINE)
STA. 61+040.000 - STA. 61+067.300 SOLID LT (EDGE LINE)
STA. 61+040.000 - STA. 61+092.700 DASHED 6.3 m RT (LANE LINE)
STA. 61+040.000 - STA. 61+045.000 DOTTED 9.9 m RT (LANE LINE)
STA. 61+040.000 - STA. 61+086.600 SOLID RT (EDGE LINE)
STA. 61+045.000 - STA. 61+092.700 SOLID 9.9 m RT (LANE LINE)
STA. 61+120.200 - STA. 61+151.700 SOLID 9.9 m LT (ISLAND EDGE LINE)
STA. 61+133.300 - STA. 61+244.000 DASHED 6.3 m LT (LANE LINE)
STA. 61+133.300 - STA. 61+244.000 DASHED 6.3 m RT (LANE LINE)
STA. 61+133.300 - STA. 61+185.000 SOLID 2.7 m LT (LANE LINE)
STA. 61+151.700 - STA. 61+185.000 SOLID 9.9 m LT (LANE LINE)
STA. 61+138.000 - STA. 61+244.000 SOLID RT (EDGE LINE)
STA. 61+158.730 - STA. 61+244.000 SOLID LT (EDGE LINE)
STA. 61+185.000 - STA. 61+244.000 DOTTED 2.7 m LT (LANE LINE)
STA. 61+185.000 - STA. 61+244.000 DOTTED 9.9 m LT (LANE LINE)
STA. AB9+980.000 - STA. ABI0+008.700 SOLID 5.4 m RT (LANE LINE)
STA. AB9+980.000 - STA. ABI0+011.600 SOLID LT (EDGE LINE)
STA. AB9+980.000 - STA. ABI0+015.700 SOLID RT (EDGE LINE)
STA. ABI0+035.200 - STA. ABI0+070.200 SOLID RT (ISLAND EDGE LINE)
STA. ABI0+035.200 - STA. ABI0+070.200 SOLID RT ALONG RADIUS (ISLAND EDGE LINE)
STA. ABI0+100.000 - STA. ABI0+110.000 DOTTED 7.2 m LT (LANE LINE)
STA. ABI0+040.000 - STA. ABI0+110.000 SOLID RT (EDGE LINE)
STA. ABI0+035.000 - STA. ABI0+110.000 SOLID LT (EDGE LINE)
STA. ABI0+052.300 - STA. ABI0+100.000 SOLID 7.2 m LT (LANE LINE)
646.62 TEMPORARY 200 mm WHITE LINE
STA. ABI0+035.100 - STA. ABI0+070.200 DIAGONAL LINES RT (ISLAND)
646.42 DURABLE 200 mm WHITE LINE
STA. ABI0+035.100 - STA. ABI0+070.200 DIAGONAL LINES RT (ISLAND)
646.41 DURABLE 100 mm YELLOW LINE
STA. 61+040.000 - STA. 61+094.400 SOLID RT (EDGE LINE)
STA. 61+040.000 - STA. 61+094.400 SOLID LT (EDGE LINE)
STA. 61+129.400 - STA. 61+244.000 SOLID LT (EDGE LINE)
STA. 61+129.400 - STA. 61+244.000 SOLID RT (EDGE LINE)
STA. AB9+980.000 - STA. ABI0+011.000 SOLID RT (EDGE LINE)
STA. AB9+980.000 - STA. ABI0+011.000 SOLID LT (EDGE LINE)
STA. ABI0+043.300 - STA. ABI0+110.000 SOLID LT (EDGE LINE)
STA. ABI0+043.300 - STA. ABI0+110.000 SOLID RT (EDGE LINE)
646.50 DURABLE LETTER OR SYMBOL
STA. 61+046.250 RT = "ONLY"
STA. 61+049.950 RT = ARROW
STA. 61+086.550 RT = "ONLY"
STA. 61+090.250 RT = ARROW
STA. 61+135.750 LT = ARROW
STA. 61+139.450 LT = "ONLY" (2)
STA. 61+180.050 LT = ARROW (2)
STA. 61+183.750 LT = "ONLY" (2)
STA. AB9+981.250 RT = "ONLY"
STA. AB9+984.950 RT = ARROW
STA. ABI0+054.750 LT = ARROW
STA. ABI0+058.450 LT = "ONLY"
STA. ABI0+060.000 LT = "YIELD"
STA. ABI0+095.050 LT = ARROW
STA. ABI0+098.750 LT = "ONLY"
646.70 TEMPORARY LETTER OR SYMBOL
STA. 61+049.950 RT = ARROW
STA. 61+090.250 RT = ARROW
STA. 61+135.750 LT = ARROW
STA. 61+180.050 LT = ARROW (2)
STA. AB9+984.950 RT = ARROW
STA. ABI0+054.750 LT = ARROW
STA. ABI0+060.000 LT = "YIELD"
STA. ABI0+095.050 LT = ARROW
646.61 TEMPORARY 100 mm YELLOW LINE
STA. 61+040.000 - STA. 61+094.400 SOLID RT (EDGE LINE)
STA. 61+040.000 - STA. 61+094.400 SOLID LT (EDGE LINE)
STA. 61+129.400 - STA. 61+244.000 SOLID LT (EDGE LINE)
STA. 61+129.400 - STA. 61+244.000 SOLID RT (EDGE LINE)
STA. AB9+980.000 - STA. ABI0+011.000 SOLID RT (EDGE LINE)
STA. AB9+980.000 - STA. ABI0+011.000 SOLID LT (EDGE LINE)
STA. ABI0+043.300 - STA. ABI0+110.000 SOLID LT (EDGE LINE)
STA. ABI0+043.300 - STA. ABI0+110.000 SOLID RT (EDGE LINE)
646.60 TEMPORARY 100 mm WHITE LINE
STA. 61+040.000 - STA. 61+093.300 DASHED 6.3 m LT (LANE LINE)
STA. 61+040.000 - STA. 61+067.300 SOLID LT (EDGE LINE)
STA. 61+040.000 - STA. 61+092.700 DASHED 6.3 m RT (LANE LINE)
STA. 61+040.000 - STA. 61+045.000 DOTTED 9.9 m RT (LANE LINE)
STA. 61+040.000 - STA. 61+086.600 SOLID RT (EDGE LINE)
STA. 61+045.000 - STA. 61+092.700 SOLID 9.9 m RT (LANE LINE)
STA. 61+120.200 - STA. 61+151.700 SOLID 9.9 m LT (ISLAND EDGE LINE)
STA. 61+133.300 - STA. 61+244.000 DASHED 6.3 m LT (LANE LINE)
STA. 61+133.300 - STA. 61+244.000 DASHED 6.3 m RT (LANE LINE)
STA. 61+133.300 - STA. 61+185.000 SOLID 2.7 m LT (LANE LINE)
STA. 61+151.700 - STA. 61+185.000 SOLID 9.9 m LT (LANE LINE)
STA. 61+138.000 - STA. 61+244.000 SOLID RT (EDGE LINE)
STA. 61+158.730 - STA. 61+244.000 SOLID LT (EDGE LINE)
STA. 61+185.000 - STA. 61+244.000 DOTTED 2.7 m LT (LANE LINE)
STA. 61+185.000 - STA. 61+244.000 DOTTED 9.9 m LT (LANE LINE)
STA. AB9+980.000 - STA. ABI0+008.700 SOLID 5.4 m RT (LANE LINE)
STA. AB9+980.000 - STA. ABI0+011.600 SOLID LT (EDGE LINE)
STA. AB9+980.000 - STA. ABI0+015.700 SOLID RT (EDGE LINE)
STA. ABI0+035.200 - STA. ABI0+070.200 SOLID RT (ISLAND EDGE LINE)
STA. ABI0+035.200 - STA. ABI0+070.200 SOLID RT ALONG RADIUS (ISLAND EDGE LINE)
STA. ABI0+100.000 - STA. ABI0+110.000 DOTTED 7.2 m LT (LANE LINE)
STA. ABI0+040.000 - STA. ABI0+110.000 SOLID RT (EDGE LINE)
STA. ABI0+035.000 - STA. ABI0+110.000 SOLID LT (EDGE LINE)
STA. ABI0+052.300 - STA. ABI0+100.000 SOLID 7.2 m LT (LANE LINE)
646.46 DURABLE 600 mm STOP BAR
STA. 61+093.000 RT
STA. 61+133.000 LT
STA. ABI0+009.000 RT
STA. ABI0+052.000 LT
675.50 REMOVING SIGNS
AS SHOWN - 52
646.81 PAINTED CURB (YELLOW)
STA. 61+040.000 - STA. 61+043.000 LT (MEDIAN CURB)
STA. 61+127.700 - STA. 61+136.844 RT (AROUND MEDIAN NOSE)
STA. 61+175.856 - STA. 61+194.144 RT (MEDIAN CURB)
STA. 61+235.000 - STA. 61+253.000 RT (MEDIAN CURB)
STA. 61+235.000 - STA. 61+253.000 LT (MEDIAN CURB)
STA. ABI0+036.900 - STA. ABI0+059.500 LT & RT (AROUND MEDIAN NOSE)
646.81 PAINTED CURB (WHITE)
STA. 61+040.000 - STA. 61+053.000 RT (EDGE CURB)
STA. 61+120.800 - STA. 61+139.500 LT (ISLAND CURB)
STA. ABI0+043.300 - STA. ABI0+052.444 RT ALONG RADIUS (ISLAND CURB)
STA. ABI0+043.300 - STA. ABI0+052.444 RT (ISLAND CURB)
STA. ABI0+091.000 - STA. ABI0+109.000 LT (EDGE CURB)
646.66 TEMPORARY 600 mm STOP BAR
STA. 61+093.000 RT
STA. 61+130.000 LT
STA. ABI0+009.0 RT
SIGN LEGEND
R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
B-B = BACK TO BACK
EXISTING = - - - - - -
NEW = ———
DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)
10 0 10 m
1: 500
@ FULL SIZE
FILE NAME =u:\5116\vaot\contract4\vtsspl9.dgn
DATE/TIME =08 SEP 2000
USER =1459
VT STATE PLANE GRID
MATCH LINE STA. 61+040.000 DWG. SSP-3
MATCH LINE STA. ABI0+110.000 DWG. SSP-2
END COLD PLANING & PAVING STA. 61+244.000
LIMIT OF COLD PLANING & PAVING STA. AB9+980.000
VT. ROUTE 67A
RAMP AB
ABI0+000
ABI0+100
SEE NOTE I
STA. 61+204.1, LT (O/H SIGN)
TO HISTORIC 67A 7A Bennington
TO 7 NORTH
ONLY
STA. 61+305.0, LT
JCT VERMONT 9
STA. 61+256.5, LT
STA. 61+245.0, LT
BENNINGTON 1
TROY 33
STA. 61+244.1, RT
N. BENNINGTON 3
STA. 61+230.0, RT
SPEED LIMIT 40
STA. 61+183.1, RT
NORTH VERMONT 67A
STA. 61+150.0, RT
STA. ABI0+039.0, RT
WEST VERMONT 9
STA. ABI0+036.9, RT
STA. 61+213.6, LT
STA. 61+213.6, LT
0671 0202 0060
STA. 61+185.0, LT
ONLY ONLY
STA. 61+167.4, LT
STA. 61+160.0, LT
TO HISTORIC VERMONT 7A SOUTH VERMONT 67A
TO 7 EAST VERMONT 9
TO NY 7 WEST VERMONT 9
STA. 61+137.7, LT
TO 7
STA. 61+131.1, LT
STA. 61+150.1, LT
RIGHT LANE MUST TURN RIGHT
STA. ABI0+066.4, RT
STA. ABI0+043.9, RT
ONE WAY ONE WAY
STA. ABI0+104.0, RT
N 25 M.P.H.
STA. ABI0+057.7, RT
STA. ABI0+100.0, LT
WRONG WAY
STA. ABI0+105.0, LT
NORTH BENNINGTON 3
BENNINGTON 1
STA. ABI0+010.0, RT
DO NOT ENTER
ONE WAY ONE WAY
STA. AB9+980.0, RT
WRONG WAY ONLY
STA. ABI0+005.0, RT
RIGHT LANE MUST TURN RIGHT
STA. AB9+978.8, ℄
STA. ABI0+007.2, ℄
STA. 61+091.6, LT
LEFT LANE MUST TURN LEFT
STA. 61+045.0, RT
ONLY ONLY
STA. 61+071.6, RT
RIGHT LANE MUST TURN RIGHT
STA. ABI0+055.0, RT
YIELD
STA. 61+048.1, LT
SOUTH VERMONT 67A
STA. 61+048.1, LT
STA. 61+112.2, LT
0671 0202 0053
STA. ABI0+051.5, LT
DO NOT ENTER ONE WAY ONE WAY
STA. ABI0+045.3, ℄
STA. ABI0+073.5, LT
WRONG WAY
STA. ABI0+059.8, LT
NORTH VERMONT 67A
SOUTH VERMONT 67A
STA. ABI0+077.1, LT
TO HISTORIC VERMONT 7A
NORTH VERMONT 67A
SOUTH VERMONT 67A
NOTE:
1. PORTION OF SIGN PANEL SHALL BE COVERED FROM MOTORISTS' VIEW, AS SHOWN ABOVE. SIGN COVER SHALL BE BOLTED ONTO THE SIGN AND CONSTRUCTED OF WOOD, STEEL, OR OTHER DURABLE MATERIAL AS DIRECTED BY THE RESIDENT ENGINEER.
SIGNING AND STRIPING PLAN
SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY D.E.G. DATE 9/00
DRAWN BY J.S.L. DATE 9/00
CHECKED BY T.P.K. DATE 9/00
DESIGN FILE NO. /5116/VAOT/VTSSPI9
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG NO. SSP-6
SHEET 136 OF 385

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

VAOT Metric

KILOMETER MARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (mm)	HEIGHT (mm)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	EXIST POST SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL kg/m 1.7	3.0	4.5	SQUARE STEEL (mm) kg/m 44 2.8	50 3.2	63 5.0	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (mm) kg/m 75 1.9	100 2.5	100 MOD 2.5	TUBULAR STEEL Ø (mm) FOUNDATION	kg/m 75 11.3	89 13.4	100 16.1	125 21.7	W-SHAPE STEEL FTG. SIZE 600 mm	750 mm	MASS	POST SIZE	SIGN FRAME REQUIRED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
VT. RTE 9 16+740.0, RT	Walloomsac River	1	1800	750	1.35						2			X																					TSD-1	
16+767.0, RT	BRIDGE 5 VT 9 / BRIDGE 5 VT 279	1	150	200	0.03						1	X																						[SIGN ID CODE VD-701]		E-134M
16+958.5, RT	0090 0202 0300	1	150	200	0.03																													[SIGN ID CODE VD-700] MOUNT ON PROPOSED BRIDGE RAIL. SEE VAOT STANDARD SHEET E-199M.		E-138M

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

Metric

KILOMETER MARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (mm)	HEIGHT (mm)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	EXIST POST SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL kg/m 1.7	3.0	4.5	SQUARE STEEL (mm) 44 kg/m 2.8	50 kg/m 3.2	63 kg/m 5.0	ANCHOR	SLIP SLEEVE	TUBULAR ALUMINUM Ø (mm) 75 kg/m 1.9	100 kg/m 2.5	100 MOD kg/m 2.5	TUBULAR STEEL Ø (mm) FOUNDATION	75 kg/m 11.3	89 kg/m 13.4	100 kg/m 16.1	125 kg/m 21.7	W-SHAPE STEEL FTG. SIZE 600 mm	750 mm	MASS	POST SIZE	SIGN FRAME REQUIRED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
RAMP X X10+040.0, RT O/H	279 TO 7 Bennington Manchester	1	5500	4200		23.10																													TSD-1	
X10+100.0, RT		1	900	900	0.81						2			X																			[SIGN ID CODE W6-1]		E-151M
X10+142.0, LT		1	900	1200	1.08						2			X																			[SIGN ID CODE R4-7]		E-144M
		1 1	450 450	450 450	0.20 0.20																											[SIGN ID CODE OM-1] [SIGN ID CODE OM-1] BACK-TO-BACK		E-150M E-150M
X10+200.0, RT		1	900	900	0.81						2			X																			[SIGN ID CODE W4-1]		E-150M
X10+256.0, LT	ONE WAY	1	900	300	0.27						1		X																			[SIGN ID CODE R6-1R]		E-142M
RAMP Y Y10+100.0, LT		1	900	900	0.81						2			X																			[SIGN ID CODE W4-1]		E-150M
Y10+160.0, RT	WRONG WAY	1	900	600	0.54						1			X																			[SIGN ID CODE R5-1A] MOUNT SIGN FACING OPPOSING TRAFFIC		E-143M
Y10+160.0, LT	WRONG WAY	1 1	900 900	900 600	0.81 0.54						2			X																			[SIGN ID CODE W6-3] [SIGN ID CODE R5-1A] BACK-TO-BACK		E-151M E-143M
Y10+163.0, RT		1	900	900	0.81						2			X																			[SIGN ID CODE W6-3]		E-151M
												m	m 3.6	m 60.1	m	m	m		EA	kg	kg	kg		kg	kg	kg	kg								
TOTALS					m^2 6.88	m^2 23.10	EA.	m^2				m 63.7			m					kg			EA.	kg				EA.	EA.	kg						

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."

PROJECT:	PROJECT NO.:
BENNINGTON - HOOSICK	D.P.I. 0146(1) C/4
DESIGN FILE NAME:	
IPARM FILE NAME: N/A	PLOT DATE: 9/00
SURVEYED BY: N/A	SURVEY DATE: N/A
SQUAD LEADER: T.P.K.	DRAWN BY: E.C.D.
DWG. NO. TSS-2	SHEET: 138 OF 385

FILE NAME =u:\5116\vaot\contract4\tss-1.dgn
DATE/TIME =07 SEP 2000
USER =1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

Metric

KILOMETER MARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (mm)	HEIGHT (mm)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	EXIST POST SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL kg/m 1.7	3.0	4.5	SQUARE STEEL (mm) kg/m 44 2.8	50 3.2	63 5.0	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (mm) kg/m 75 1.9	100 2.5	100 MOD 2.5	TUBULAR STEEL Ø (mm) FOUNDATION	75 11.3	89 13.4	100 16.1	125 21.7	W-SHAPE STEEL FTG. SIZE 600 mm	750 mm	MASS	POST SIZE	SIGN FRAME REQUIRED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
RAMP AB AB9+978.8, ℄		1	600	750	0.45						1			X																				[SIGN ID CODE R4-7]		E-144M
		1 1	450 450	450 450	0.20 0.20																												[SIGN ID CODE OM-1] [SIGN ID CODE OM-1] BACK-TO-BACK		E-150M E-150M
AB9+980.0, RT	ONLY ONLY	1	900	750	0.68						1			X																				[SIGN ID CODE VR-925]		E-145AM
AB10+007.2, ℄		1	600	750	0.45						1			X																				[SIGN ID CODE R4-7]		E-144M
		1 1	450 450	450 450	0.20 0.20																												[SIGN ID CODE OM-1] [SIGN ID CODE OM-1] BACK-TO-BACK		E-150M E-150M
AB10+036.9, RT		1	450	450	0.20						1	X																						[SIGN ID CODE OM-1]		E-150M
AB10+037.2, RT		1	450	450	0.20						1	X																						[SIGN ID CODE OM-1]		E-150M
AB10+039.0, RT	WEST	1	600	300	0.18						1			X																				[SIGN ID CODE M3-4]		E-136BM
	VERMONT 9 279	1	600	600	0.36																													[SIGN ID CODE MI-5]		E-136BM
		1	525	375	0.20																													[SIGN ID CODE M6-3]		E-136BM
AB10+043.9, RT	ONE WAY ONE WAY	1 1	900 900	300 300	0.27 0.27						1		X																					[SIGN ID CODE R6-1L] [SIGN ID CODE R6-1R] BACK-TO-BACK		E-142M E-142M
AB10+045.3, ℄		1	600	750	0.45						1			X																				[SIGN ID CODE R4-7]		E-144M
		1 1	450 450	450 450	0.20 0.20																													[SIGN ID CODE OM-1] [SIGN ID CODE OM-1] BACK-TO-BACK		E-150M E-150M
	0671 0202 0053	1	150	200	0.03																													[SIGN ID CODE VD-700]		E-138M
											m 5.0	m 3.6	m 25.6	m	m	m		EA	kg	kg	kg		kg	kg	kg	kg								
TOTALS		m^2 4.94	m^2	EA.	m^2						m 34.2			m					kg			EA.	kg				EA.	EA.	kg						

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."

PROJECT: BENNINGTON - HOOSICK
PROJECT NO.: D.P.I. 0146(1) C/4
DESIGN FILE NAME:
IPARM FILE NAME: N/A
SURVEYED BY: N/A
SQUAD LEADER: T.P.K.
DWG. NO. TSS-3
PLOT DATE: 9/00
SURVEY DATE: N/A
DRAWN BY: E.C.D.
SHEET: 139 OF 385

FILE NAME =u:\5116\vaot\contract4\tss-1.dgn
DATE/TIME =07 SEP 2000
USER =1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

Not Metric

KILOMETER MARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (mm)	HEIGHT (mm)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	EXIST POST SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL kg/m 1.7	3.0	4.5	SQUARE STEEL (mm) kg/m 44 2.8	50 3.2	63 5.0	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (mm) kg/m 75 1.9	100 2.5	100 MOD 2.5	TUBULAR STEEL Ø (mm) FOUND-ATION	kg/m 75 11.3	89 13.4	100 16.1	125 21.7	W-SHAPE STEEL FTG. SIZE 600 mm	750 mm	MASS	POST SIZE	SIGN FRAME REQUIRED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
RAMP AB AB10+051.5, LT	DO NOT ENTER	1	750	750	0.56						1			X																			[SIGN ID CODE R5-1]		E-143M
	ONE WAY / ONE WAY	1 1	900 900	300 300	0.27 0.27																											[SIGN ID CODE R6-1R] [SIGN ID CODE R6-1L] BACK-TO-BACK		E-142M E-142M
AB10+055.0, RT	YIELD 900x900x900	1			0.35						1			X																			[SIGN ID CODE R1-2]		E-146M
AB10+057.7, RT	DOUBLE CROSS	1	450	450	0.20						1	X																					[SIGN ID CODE OM-1]		E-150M
AB10+066.4, RT	YIELD 900x900x900	1			0.35						1			X																			[SIGN ID CODE R1-2]		E-146M
AB10+077.1, LT	TO	1	600	300	0.18						2												2	X							X	[SIGN ID CODE M4-5]		E-136BM
	HISTORIC	1	600	300	0.18																											[SIGN ID CODE VM-078]		E-136BM
	VERMONT 7A	1	600	600	0.36																											[SIGN ID CODE MI-5]		E-136BM
	NORTH / SOUTH	1 1	600 600	300 300	0.18 0.18																											[SIGN ID CODE M3-1] [SIGN ID CODE M3-3]		E-136BM E-136BM
	VERMONT 67A / VERMONT 67A	1 1	600 600	600 600	0.36 0.36																											[SIGN ID CODE MI-5] [SIGN ID CODE MI-5]		E-136BM E-136BM
	← / →	1 1	525 525	375 375	0.20 0.20																											[SIGN ID CODE M6-1] [SIGN ID CODE M6-1]		E-136BM E-136BM
AB10+100.0, LT	ONLY / WRONG WAY	1 1	900 900	750 600	0.68 0.54						1			X																			[SIGN ID CODE VR-922] [SIGN ID CODE R5-1A] BACK-TO-BACK		E-145AM E-143M
AB10+100.0, LT	WRONG WAY	1	900	600	0.54						1			X																			[SIGN ID CODE R5-1A] MOUNT SIGN FACING OPPOSING TRAFFIC		E-143M
		1	600	600	0.36																											[SIGN ID CODE R9-4A] MOUNT SIGN FACING OPPOSING TRAFFIC		E-143M
AB10+104.0, RT		1	750	750	0.56						1			X																			[SIGN ID CODE W1-4L]	TSD-1	
	25 M.P.H.	1	450	450	0.20																											[SIGN ID CODE W13-1]		E-155M
AB10+120.0, RT	PROHIBITED PEDESTRIANS BICYCLES FARM MACHINERY SNOW VEHICLES	1	900	900	0.81						1			X																			[SIGN ID CODE VR-046]		E-142M
												m 3.2	m	m 30.7	m	m	m	EA	kg	kg	kg		kg 104.0	kg	kg	kg							
TOTALS			m^2 7.89	m^2	EA.	m^2						m 33.9			m				kg			EA. 2	kg 104.0				EA.	EA.	kg					

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."

PROJECT:	PROJECT NO.:
BENNINGTON - HOOSICK	D.P.I. 0146(1) C/4
DESIGN FILE NAME:	
IPARM FILE NAME: N/A	PLOT DATE: 9/00
SURVEYED BY: N/A	SURVEY DATE: N/A
SQUAD LEADER: T.P.K.	DRAWN BY: E.C.D.
DWG. NO. TSS-4	SHEET: 140 OF 385

FILE NAME =u:\5116\vaot\contract4\tss-1.dgn
DATE/TIME =07 SEP 2000
USER =1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

Not Metric

KILOMETER MARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (mm)	HEIGHT (mm)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	EXIST POST SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL kg/m 1.7	FLANGED CHANNEL kg/m 3.0	FLANGED CHANNEL kg/m 4.5	SQUARE STEEL (mm) kg/m 44 2.8	SQUARE STEEL (mm) kg/m 50 3.2	SQUARE STEEL (mm) kg/m 63 5.0	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (mm) kg/m 75 1.9	TUBULAR ALUMINUM Ø (mm) kg/m 100 2.5	TUBULAR ALUMINUM Ø (mm) kg/m 100 MOD 2.5	TUBULAR STEEL Ø (mm) FOUNDATION	TUBULAR STEEL Ø (mm) kg/m 75 11.3	TUBULAR STEEL Ø (mm) kg/m 89 13.4	TUBULAR STEEL Ø (mm) kg/m 100 16.1	TUBULAR STEEL Ø (mm) kg/m 125 21.7	W-SHAPE STEEL FTG. SIZE 600 mm	W-SHAPE STEEL FTG. SIZE 750 mm	W-SHAPE STEEL MASS	W-SHAPE STEEL POST SIZE	SIGN FRAME REQUIRED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	SIGN DETAIL STD. SHEET NUMBER
RAMP AB ABIO+122.8, RT		1	450	600	0.27						1		X																				[SIGN ID CODE WI-8]		E-150M
ABIO+125.3, RT		1	450	600	0.27						1		X																				[SIGN ID CODE WI-8]		E-150M
ABIO+140.0, LT	← N. BENNINGTON 3	1	1800	250	0.45						2												2	X									[SIGN ID CODE DI-1]	TSD-3	
	BENNINGTON 1 →	1	1800	250	0.45																												[SIGN ID CODE DI-1]	TSD-3	
	FOOD →	1	1350	185	0.25																														E-133M
	← PHONE →	1	1350	185	0.25																														E-133M
	← GAS 2 →	1	1350	185	0.25																														E-133M
	LODGING →	1	1350	185	0.25																														E-133M
	HOSPITAL 3 →	1	1350	185	0.25																														E-133M
ABIO+142.8, RT		1	450	600	0.27						1		X																				[SIGN ID CODE WI-8]		E-150M
ABIO+149.3, RT		1	450	600	0.27						1		X																				[SIGN ID CODE WI-8]		E-150M
ABIO+162.8, RT		1	450	600	0.27						1		X																				[SIGN ID CODE WI-8]		E-150M
ABIO+173.3, RT		1	450	600	0.27						1		X																				[SIGN ID CODE WI-8]		E-150M
ABIO+177.5, LT		1	900	900	0.81						2			X																				[SIGN ID CODE W3-3]		E-152M
ABIO+182.8, RT		1	450	600	0.27						1		X																				[SIGN ID CODE WI-8]		E-150M
ABIO+188.0, RT	BRIDGE AB-1 VT 9 / BRIDGE AB-1 VT 279	1	150	200	0.03						1	X																						[SIGN ID CODE VD-701]		E-134M
ABIO+194.0, LT	BRIDGE AB-1 VT 9 / BRIDGE AB-1 VT 279	1	150	200	0.03						1	X																						[SIGN ID CODE VD-701]		E-134M
												m 6.6	m 28.0	m 9.4	m	m	m		EA	kg	kg	kg		kg 85.9										
	TOTALS				m^2 4.91	m^2	EA.	m^2				m 44.0			m					kg	EA. 2	kg 85.9					EA.	EA.	kg						

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."

PROJECT: BENNINGTON - HOOSICK
PROJECT NO.: D.P.I. 0146(1) C/4

DESIGN FILE NAME:
IPARM FILE NAME: N/A
SURVEYED BY: N/A
SQUAD LEADER: T.P.K.
DWG. NO. TSS-5

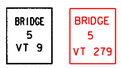
PLOT DATE: 9/00
SURVEY DATE: N/A
DRAWN BY: K.H.D.
SHEET: 141 OF 385

FILE NAME =u:\5116\vaot\contract4\tss-1.dgn
DATE/TIME =26 SEP 2000
USER =1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

Metric

KILOMETER MARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (mm)	HEIGHT (mm)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL kg/m 1.7	3.0	4.5	SQUARE STEEL (mm) kg/m 44 2.8	50 3.2	63 5.0	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (mm) kg/m 75 1.9	100 2.5	100 MOD 2.5	TUBULAR STEEL Ø (mm) FOUNDATION	kg/m 75 11.3	89 13.4	100 16.1	125 21.7	W-SHAPE STEEL FTG. SIZE 600 mm	750 mm	MASS	POST SIZE	SIGN FRAME REQUIRED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
RAMP A A10+000.7, RT		1	450	600	0.27						1		X																					[SIGN ID CODE WI-8]		E-150M
A10+030.0, RT		1	900	900	0.81						2			X																				[SIGN ID CODE VW-005]		E-150M
A10+050.0, LT		1	450	600	0.27						1		X																					[SIGN ID CODE WI-8]		E-150M
A10+080.0, LT		1	450	600	0.27						1		X																					[SIGN ID CODE WI-8]		E-150M
A10+100.0, RT		1	600	600	0.36						1			X																				[SIGN ID CODE R3-2]		E-143M
A10+110.0, LT		1	450	600	0.27						1		X																					[SIGN ID CODE WI-8]		E-150M
A10+123.8, RT		1	1800	750	1.35						2			X																					TSD-1	
A10+138.0, RT		1	150	200	0.03						1	X																						[SIGN ID CODE VD-701]		E-134M
											m	m	m	m	m	m	EA	kg	kg	kg		kg	kg	kg	kg									
											3.3	16.0	25.0																					
TOTALS			m^2 3.63	m^2	EA.	m^2					m 44.3			m				kg	EA.	kg		EA.	EA.	kg									

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."

PROJECT: BENNINGTON - HOOSICK
PROJECT NO.: D.P.I. 0146(1) C/4

DESIGN FILE NAME:
IPARM FILE NAME: N/A
SURVEYED BY: N/A
SQUAD LEADER: T.P.K.
DWG. NO. TSS-6

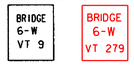
PLOT DATE: 9/00
SURVEY DATE: N/A
DRAWN BY: K.H.D.
SHEET: 142 OF 385

FILE NAME =u:\5116\root\contract4\tss-1.dgn
DATE/TIME =07 SEP 2000
USER =1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

NOT Metric

KILOMETER MARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (mm)	HEIGHT (mm)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	EXIST POST SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL kg/m 1.7	3.0	4.5	SQUARE STEEL (mm) 44 kg/m 2.8	50 kg/m 3.2	63 kg/m 5.0	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (mm) 75 kg/m 1.9	100 kg/m 2.5	100 MOD kg/m 2.5	TUBULAR STEEL Ø (mm) FOUNDATION	75 kg/m 11.3	89 kg/m 13.4	100 kg/m 16.1	125 kg/m 21.7	W-SHAPE STEEL FTG. SIZE 600 mm	750 mm	MASS	POST SIZE	SIGN FRAME REQUIRED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
RAMP B BI0+000.4, RT		1	900	900	0.81						2			X																				[SIGN ID CODE VD-701]	TSD-2	
		1	150	200	0.03																															E-134M
BI0+085.0, RT		1	900	900	0.81						2			X																				[SIGN ID CODE VW-005]		E-150M
BI0+146.5, RT O/H		1	7350	4800		35.28																												[SIGN ID CODE E2-1] OVERHEAD SIGN TO BE MOUNTED ON NEW TRI-CHORD	TSD-1	
BI0+146.5, LT O/H		1	3450	3450		11.90																												[SIGN ID CODE E1-1C] OVERHEAD SIGN TO BE MOUNTED ON NEW TRI-CHORD	TSD-2	
BI0+210.0, RT		1	600	750	0.45						1			X																				[SIGN ID CODE W13-3)		E-150M
BI0+210.0, LT		1	450	450	0.20						1	X																						[SIGN ID CODE OM-1)		E-150M
BI0+215.0, LT		1	1800	1500		2.70					2												2	X										[SIGN ID CODE E5-1]	TSD-1	
BI0+220.0, LT		1	450	600	0.27						1		X																					[SIGN ID CODE W1-8]		E-150M
BI0+240.0, LT		1	450	600	0.27						1		X																					[SIGN ID CODE W1-8]		E-150M
BI0+260.0, LT		1	450	600	0.27						1		X																					[SIGN ID CODE W1-8]		E-150M
BI0+280.0, LT		1	450	600	0.27						1		X																					[SIGN ID CODE W1-8]		E-150M
BI0+300.0, LT		1	450	600	0.27						1		X																					[SIGN ID CODE W1-8]		E-150M
BI0+320.0, LT		1	450	600	0.27						1		X																					[SIGN ID CODE W1-8]		E-150M
											m 3.3	m 24.0	m 27.1	m	m	m	EA	kg	kg	kg		kg 97.2	kg	kg	kg								
TOTALS					m^2 3.92	m^2 49.88	EA.	m^2			m 54.4			m				kg			EA. 2	kg 97.2				EA.	EA.	kg						

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."

PROJECT: BENNINGTON - HOOSICK
PROJECT NO.: D.P.I. 0146(1) C/4
DESIGN FILE NAME:
IPARM FILE NAME: N/A
SURVEYED BY: N/A
SQUAD LEADER: T.P.K.
DWG. NO. TSS-7
PLOT DATE: 9/00
SURVEY DATE: N/A
DRAWN BY: K.H.D.
SHEET: 143 OF 385

FILE NAME =u:\5116\vaot\cont-sect4\tss-1.dgn
DATE/TIME =07 SEP 2000
USER =1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

Metric

KILOMETER MARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (mm)	HEIGHT (mm)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	EXIST POST SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL kg/m 1.7	3.0	4.5	SQUARE STEEL (mm) 44 kg/m 2.8	50 kg/m 3.2	63 kg/m 5.0	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (mm) 75 kg/m 1.9	100 kg/m 2.5	100 MOD kg/m 2.5	TUBULAR STEEL Ø (mm) FOUNDATION	75 kg/m 11.3	89 kg/m 13.4	100 kg/m 16.1	125 kg/m 21.7	W-SHAPE STEEL FTG. SIZE 600 mm	750 mm	MASS	POST SIZE	SIGN FRAME REQUIRED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
RAMP CD CD9+980.0, RT	ONLY	1	900	750	0.68						1			X																				[SIGN ID CODE VR-922]		E-145AM
CD9+980.1, ℄		1	600	750	0.45						1			X																				[SIGN ID CODE R4-7]		E-144M
		1 1	450 450	450 450	0.20 0.20																												[SIGN ID CODE OM-1] [SIGN ID CODE OM-1] BACK-TO-BACK		E-150M E-150M
CD9+984.7, LT	LEGAL LOAD LIMIT 24,000 POUNDS	1	600	750	0.45						1			X																				[SIGN ID CODE VR-017]		E-141M
	SPEED LIMIT 35	1	600	750	0.45																												[SIGN ID CODE R2-1]		E-142M
CD10+002.6, ℄		1	600	750	0.45						1			X																				[SIGN ID CODE R4-7]		E-144M
		1 1	450 450	450 450	0.20 0.20																												[SIGN ID CODE OM-1] [SIGN ID CODE OM-1] BACK-TO-BACK		E-150M E-150M
CD10+030.9, RT		1	450	450	0.20						1	X																						[SIGN ID CODE OM-1]		E-150M
CD10+030.9, RT		1	450	450	0.20						1	X																						[SIGN ID CODE OM-1]		E-150M
CD10+031.3, RT	EAST	1	600	300	0.18						1			X																				[SIGN ID CODE M3-2]		E-136BM
	VERMONT ~~9~~ 279	1	600	600	0.36																												[SIGN ID CODE MI-5]		E-136BM
		1	525	375	0.20																												[SIGN ID CODE M6-3]		E-136BM
CD10+038.3, RT	ONE WAY ONE WAY	1 1	900 900	300 300	0.27 0.27						1		X																				[SIGN ID CODE R6-1R] [SIGN ID CODE R6-1L] BACK-TO-BACK		E-142M E-142M
											m 6.6	m 3.6	m 23.7	m	m	m		EA	kg	kg	kg		kg	kg	kg	kg								
TOTALS			m² 4.96	m²	EA.	m²					m 33.9			m					kg	EA.	kg						EA.	EA.	kg							

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."

PROJECT: BENNINGTON - HOOSICK
PROJECT NO.: D.P.I. 0146(1) C/4
DESIGN FILE NAME:
IPARM FILE NAME: N/A
SURVEYED BY: N/A
SQUAD LEADER: T.P.K.
DWG. NO. TSS-8
PLOT DATE: 9/00
SURVEY DATE: N/A
DRAWN BY: K.H.D.
SHEET: 144 OF 385

FILE NAME =u:\5116\vaot\contract4\tss-1.dgn
DATE/TIME =07 SEP 2000
USER =1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

Not Metric

KILOMETER MARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (mm)	HEIGHT (mm)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	EXIST POST SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL kg/m 1.7	FLANGED CHANNEL kg/m 3.0	FLANGED CHANNEL kg/m 4.5	SQUARE STEEL (mm) kg/m 44 2.8	SQUARE STEEL (mm) kg/m 50 3.2	SQUARE STEEL (mm) kg/m 63 5.0	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (mm) kg/m 75 1.9	TUBULAR ALUMINUM Ø (mm) kg/m 100 2.5	TUBULAR ALUMINUM Ø (mm) kg/m 100 MOD 2.5	TUBULAR STEEL Ø (mm) FOUNDATION	TUBULAR STEEL Ø (mm) kg/m 75 11.3	TUBULAR STEEL Ø (mm) kg/m 89 13.4	TUBULAR STEEL Ø (mm) kg/m 100 16.1	TUBULAR STEEL Ø (mm) kg/m 125 21.7	W-SHAPE STEEL FTG. SIZE 600 mm	W-SHAPE STEEL FTG. SIZE 750 mm	W-SHAPE STEEL MASS	W-SHAPE STEEL POST SIZE	SIGN FRAME REQUIRED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	SIGN DETAIL STD. SHEET NUMBER
RAMP CD CD10+040.2, ℄		1	600	750	0.45						1			X																			[SIGN ID CODE R4-7]		E-144M
		1 1	450 450	450 450	0.20 0.20																											[SIGN ID CODE OM-1] [SIGN ID CODE OM-1] BACK-TO-BACK		E-150M E-150M
CD10+042.0, RT	 900x900x900	1			0.35						1			X																			[SIGN ID CODE R1-2]		E-146M
CD10+044.1, RT		1	450	450	0.20						1	X																					[SIGN ID CODE OM-1]		E-150M
CD10+047.1, LT		1	750	750	0.56						1			X																			[SIGN ID CODE R5-1]		E-143M
		1 1	900 900	300 300	0.27 0.27																											[SIGN ID CODE R6-1L] [SIGN ID CODE R6-1R] BACK-TO-BACK		E-142M E-142M
CD10+051.1, RT	 900x900x900	1			0.35						1			X																			[SIGN ID CODE R1-2]		E-146M
CD10+060.0, LT		1	600	300	0.18						2													2	X							X	[SIGN ID CODE M4-5]		E-136BM
		1	600	300	0.18																												[SIGN ID CODE VM-078]		E-136BM
		1	600	600	0.36																												[SIGN ID CODE MI-5]		E-136BM
		1 1	600 600	300 300	0.18 0.18																												[SIGN ID CODE M3-1] [SIGN ID CODE M3-3]		E-136BM E-136BM
		1 1	600 600	600 600	0.36 0.36																												[SIGN ID CODE MI-5] [SIGN ID CODE MI-5]		E-136BM E-136BM
		1 1	525 525	375 375	0.20 0.20																												[SIGN ID CODE M6-1] [SIGN ID CODE M6-1]		E-136BM E-136BM
CD10+087.9, RT		1	900	900	0.81						1													1	X								[SIGN ID CODE VR-002]		E-142M
		1	900	900	0.81																												[SIGN ID CODE VR-046]		E-142M
CD10+100.0, LT		1 1	900 900	750 600	0.68 0.54						1			X																			[SIGN ID CODE VR-922] [SIGN ID CODE R5-1A] BACK-TO-BACK		E-145AM E-143M
												m 3.2	m	m 17.9	m	m	m		EA	kg	kg	kg		kg 154.0	kg	kg	kg								
TOTALS			m^2 7.89	m^2	EA.	m^2						m 21.1			m					kg			EA. 3	kg 154.0				EA.	EA.	kg					

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."

PROJECT:	PROJECT NO.:
BENNINGTON - HOOSICK	D.P.I. 0146(1) C/4
DESIGN FILE NAME:	
IPARM FILE NAME: N/A	PLOT DATE: 9/00
SURVEYED BY: N/A	SURVEY DATE: N/A
SQUAD LEADER: T.P.K.	DRAWN BY: K.H.D.
DWG. NO. TSS-9	SHEET: 145 OF 385

FILE NAME =u:\5116\vaot\contract4\tss-1.dgn
DATE/TIME =07 SEP 2000
USER =1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

Metric

KILOMETER MARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (mm)	HEIGHT (mm)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	EXIST POST SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL kg/m 1.7	3.0	4.5	SQUARE STEEL (mm) kg/m 44 2.8	50 3.2	63 5.0	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (mm) kg/m 75 1.9	100 2.5	100 MOD 2.5	TUBULAR STEEL Ø (mm) FOUNDATION	kg/m 75 11.3	89 13.4	100 16.1	125 21.7	W-SHAPE STEEL FTG. SIZE 600 mm	750 mm	MASS	POST SIZE	SIGN FRAME REQUIRED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
RAMP CD CD10+100.0, LT	WRONG WAY	1	900	600	0.54						1			X																				[SIGN ID CODE R5-1A] MOUNT SIGN FACING OPPOSING TRAFFIC		E-143M
		1	600	600	0.36																												[SIGN ID CODE R9-4A] MOUNT SIGN FACING OPPOSING TRAFFIC		E-143M
CD10+130.0, LT	← N. BENNINGTON 3	1	1800	250	0.45						2												2	X									[SIGN ID CODE DI-1]	TSD-3	
	BENNINGTON 1 →	1	1800	250	0.45																												[SIGN ID CODE DI-1]	TSD-3	
	← FOOD	1	1350	185	0.25																														E-133M
	← PHONE →	1	1350	185	0.25																														E-133M
	← GAS 2 →	1	1350	185	0.25																														E-133M
	← LODGING →	1	1350	185	0.25																														E-133M
	HOSPITAL 3 →	1	1350	185	0.25																														E-133M
CD10+150.0, RT		1	750	750	0.56						1			X																				[SIGN ID CODE W1-1R]		E-151M
	25 M. P. H.	1	450	450	0.20																												[SIGN ID CODE W13-1]		E-155M

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."

		m	m	m	m	m	m		EA	kg	kg	kg		kg	kg	kg	kg																		
				9.2										85.9																					
TOTALS	m^2	m^2	EA.	m^2		m			m				EA.	kg				EA.	EA.	kg															
	3.83					9.2							2	85.9																					

PROJECT: BENNINGTON - HOOSICK
PROJECT NO.: D.P.I. 0146(1) C/4

DESIGN FILE NAME:
IPARM FILE NAME: N/A
SURVEYED BY: N/A
SQUAD LEADER: T.P.K.
DWG. NO. TSS-10

PLOT DATE: 9/00
SURVEY DATE: N/A
DRAWN BY: K.H.D.
SHEET: 146 OF 385

FILE NAME =u:\5116\vaot\contract4\tss-1.dgn
DATE/TIME =07 SEP 2000
USER =1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

NOT Metric

KILOMETER MARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (mm)	HEIGHT (mm)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	EXIST POST SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL kg/m 1.7	FLANGED CHANNEL kg/m 3.0	FLANGED CHANNEL kg/m 4.5	SQUARE STEEL (mm) kg/m 44 (2.8)	SQUARE STEEL (mm) kg/m 50 (3.2)	SQUARE STEEL (mm) kg/m 63 (5.0)	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (mm) kg/m 75 (1.9)	TUBULAR ALUMINUM Ø (mm) kg/m 100 (2.5)	TUBULAR ALUMINUM Ø (mm) kg/m 100 MOD (2.5)	TUBULAR STEEL Ø (mm) FOUNDATION	TUBULAR STEEL Ø (mm) kg/m 75 (11.3)	TUBULAR STEEL Ø (mm) kg/m 89 (13.4)	TUBULAR STEEL Ø (mm) kg/m 100 (16.1)	TUBULAR STEEL Ø (mm) kg/m 125 (21.7)	W-SHAPE STEEL FTG. SIZE 600 mm	W-SHAPE STEEL FTG. SIZE 750 mm	W-SHAPE STEEL MASS	W-SHAPE STEEL POST SIZE	SIGN FRAME REQUIRED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	SIGN DETAIL STD. SHEET NUMBER
RAMP CD CD10+160.0, LT	TO	1	600	300	0.18						2												2	X								X	[SIGN ID CODE M4-5]		E-136BM
	HISTORIC	1	600	300	0.18																												[SIGN ID CODE VM-078]		E-136BM
	VERMONT 7A	1	600	600	0.36																												[SIGN ID CODE MI-5]		E-136BM
	NORTH / SOUTH	1 1	600 600	300 300	0.18 0.18																												[SIGN ID CODE M3-1] [SIGN ID CODE M3-3]		E-136BM E-136BM
	VERMONT 67A / VERMONT 67A	1 1	600 600	600 600	0.36 0.36																												[SIGN ID CODE MI-5] [SIGN ID CODE MI-5]		E-136BM E-136BM
	← / →	1 1	525 525	375 375	0.20 0.20																												[SIGN ID CODE M6-1] [SIGN ID CODE M6-1]		E-136BM E-136BM
CD10+220.0, ℄		1	450	600	0.27						1		X																				[SIGN ID CODE WI-8]		E-150M
CD10+224.0, LT		1	450	600	0.27						1		X																				[SIGN ID CODE WI-8]		E-150M
CD10+240.0, ℄		1	450	600	0.27						1		X																				[SIGN ID CODE WI-8]		E-150M
CD10+248.0, LT		1	450	600	0.27						1		X																				[SIGN ID CODE WI-8]		E-150M
CD10+260.0, ℄		1	450	600	0.27						1		X																				[SIGN ID CODE WI-8]		E-150M
TOTALS					m^2 3.55	m^2	EA.	m^2				m 20.0			m				EA	kg			EA. 2	kg 104.0				EA.	EA.	kg						

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."

PROJECT:	PROJECT NO.:
BENNINGTON - HOOSICK	D.P.I. 0146(1) C/4
DESIGN FILE NAME:	
IPARM FILE NAME: N/A	PLOT DATE: 9/00
SURVEYED BY: N/A	SURVEY DATE: N/A
SQUAD LEADER: T.P.K.	DRAWN BY: K.H.D.
DWG. NO. TSS-11	SHEET: 147 OF 385

FILE NAME =u:\5116\vaot\contract4\tss-1.dgn
DATE/TIME =07 SEP 2000
USER =1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

Metric NOT

KILOMETER MARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (mm)	HEIGHT (mm)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL kg/m 1.7	3.0	4.5	SQUARE STEEL (mm) kg/m 44 2.8	50 3.2	63 5.0	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (mm) kg/m 75 1.9	100 2.5	100 MOD 2.5	TUBULAR STEEL Ø (mm) FOUNDATION	kg/m 75 11.3	89 13.4	100 16.1	125 21.7	W-SHAPE STEEL FTG. SIZE 600 mm	750 mm	MASS	POST SIZE	SIGN FRAMED REQUIRED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
RAMP C C10+040.5, RT O/H	Bennington North Bennington EXIT ONLY	1	7350	4800		35.28																											[SIGN ID CODE E1-1C] OVERHEAD SIGN TO BE MOUNTED ON NEW TRI-CHORD	TSD-1	
C10+070.0, RT	RAMP 25 M.P.H.	1	600	750	0.45						1			X																			[SIGN ID CODE W13-3]		E-150M
C10+073.0, LT		1	450	450	0.20						1	X																					[SIGN ID CODE OM-1]		E-150M
C10+078.0, LT	EXIT	1	1800	1500		2.70					2												2	X									[SIGN ID CODE E5-1]	TSD-1	
C10+190.0, RT		1	750	750	0.56						1			X																			[SIGN ID CODE W1-1L]		E-151M
	25 M. P. H.	1	450	450	0.20																												[SIGN ID CODE W13-1]		E-155M
C10+240.0, LT		1	450	600	0.27						1		X																				[SIGN ID CODE W1-8]		E-150M
C10+240.0, RT		1	900	900	0.81						2			X																			[SIGN ID CODE W3-3]		E-152M

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."

											m 3.3	m 4.0	m 19.8	m	m	m		EA	kg	kg	kg		kg 97.2	kg	kg	kg								
TOTALS	m^2 2.49	m^2 37.98	EA.	m^2		m 27.1			m									kg	EA. 2		kg 97.2			EA.	EA.	kg								

PROJECT: BENNINGTON - HOOSICK
PROJECT NO.: D.P.I. 0146(1) C/4

DESIGN FILE NAME:
IPARM FILE NAME: N/A
SURVEYED BY: N/A
SQUAD LEADER: T.P.K.
DWG. NO. TSS-12

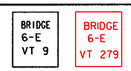
PLOT DATE: 9/00
SURVEY DATE: N/A
DRAWN BY: K.H.D.
SHEET: 148 OF 385

FILE NAME =u:\5116\vaot\contract4\tss-1.dgn
DATE/TIME =07 SEP 2000
USER =1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

NOT Metric

KILOMETER MARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (mm)	HEIGHT (mm)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	EXIST POST SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL kg/m 1.7	3.0	4.5	SQUARE STEEL (mm) kg/m 44 2.8	50 3.2	63 5.0	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (mm) kg/m 75 1.9	100 2.5	100 MOD 2.5	TUBULAR STEEL Ø (mm) FOUNDATION	kg/m 75 11.3	89 13.4	100 16.1	125 21.7	W-SHAPE STEEL FTG. SIZE 600 mm	750 mm	MASS	POST SIZE	SIGN FRAME REQUIRED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
RAMP D DIO+030.0, LT		1	450	600	0.27						1		X																				[SIGN ID CODE WI-8]		E-150M
DIO+050.0, LT		1	450	600	0.27						1		X																				[SIGN ID CODE WI-8]		E-150M
DIO+070.0, LT		1	450	600	0.27						1		X																				[SIGN ID CODE WI-8]		E-150M
DIO+090.0, LT		1	450	600	0.27						1		X																				[SIGN ID CODE WI-8]		E-150M
DIO+110.0, LT		1	450	600	0.27						1		X																				[SIGN ID CODE WI-8]		E-150M
DIO+130.0, LT		1	450	600	0.27						1		X																				[SIGN ID CODE WI-8]		E-150M
DIO+145.0, RT		1	600	600	0.36						1			X																				[SIGN ID CODE R3-2]		E-143M
DIO+247.5, RT		1	150	200	0.03						1	X																					[SIGN ID CODE VD-701]		E-134M

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

Metric

KILOMETER MARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	NEW & SALVAGED SIGNS: EA	SIGN DIMENSIONS: WIDTH (mm)	SIGN DIMENSIONS: HEIGHT (mm)	"A"	"B"	SALV SIGN	SALV TIS	EXIST POST: RETAIN	EXIST POST: SALVAGE	NEW SIGN POSTS: NO. OF POSTS	FLANGED CHANNEL kg/m: 1.7	FLANGED CHANNEL kg/m: 3.0	FLANGED CHANNEL kg/m: 4.5	SQUARE STEEL (mm) kg/m: 44 / 2.8	SQUARE STEEL (mm) kg/m: 50 / 3.2	SQUARE STEEL (mm) kg/m: 63 / 5.0	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (mm) kg/m: 75 / 1.9	TUBULAR ALUMINUM Ø (mm) kg/m: 100 / 2.5	TUBULAR ALUMINUM Ø (mm) kg/m: 100 MOD / 2.5	TUBULAR STEEL Ø (mm) FOUNDATION	TUBULAR STEEL Ø (mm) kg/m: 75 / 11.3	TUBULAR STEEL Ø (mm) kg/m: 89 / 13.4	TUBULAR STEEL Ø (mm) kg/m: 100 / 16.1	TUBULAR STEEL Ø (mm) kg/m: 125 / 21.7	W-SHAPE STEEL FTG. SIZE: 600 mm	W-SHAPE STEEL FTG. SIZE: 750 mm	W-SHAPE STEEL MASS	W-SHAPE STEEL POST SIZE	SIGN FRAME REQUIRED	REMARKS	SIGN DETAIL: DETAIL ON SHEET NUMBER	SIGN DETAIL: STD. SHEET NUMBER
VT. RTE 67A 60+610.0, RT	JCT	1	525	375	0.20						1			X																			[SIGN ID CODE M2-1]		E-136BM
	VERMONT 9 279	1	600	600	0.36																											[SIGN ID CODE MI-5]		E-136BM
60+670.0, RT	↑ N. BENNINGTON 3	1	1800	250	0.45						2		X																			[SIGN ID CODE DI-1]	TSD-3	
	← MANCHESTER 24	1	1800	250	0.45																											[SIGN ID CODE DI-1]	TSD-3	
60+670.0, LT	TO	1	600	300	0.18						1													1	X							[SIGN ID CODE M4-5]		E-136BM
	HISTORIC	1	600	300	0.18																											[SIGN ID CODE M3-3]		E-136BM
	VERMONT 7A	1	600	600	0.36																											[SIGN ID CODE MI-5]		E-136BM
	SOUTH	1	600	300	0.18																											[SIGN ID CODE M3-3]		E-136BM
	VERMONT 67A	1	600	600	0.36																											[SIGN ID CODE MI-5]		E-136BM
	↑	1	525	375	0.20																											[SIGN ID CODE M6-3]		E-136BM
60+730.0, RT	ONLY ↑ ↑ ONLY	1	1500	750	1.13						2			X																			[SIGN ID CODE M4-5]		E-145AM
60+760.0, RT	TO	1	600	300	0.18						2													2	X						X	[SIGN ID CODE VR-94I]		E-136AM
	7	1	600	600	0.36																											[SIGN ID CODE MI-4]		E-136AM
	EAST / WEST / NORTH	1 1 1	600 600 600	300 300 300	0.18 0.18 0.18																											[SIGN ID CODE M3-2] [SIGN ID CODE M3-4] [SIGN ID CODE M3-1]		E-136BM E-136BM E-136BM
	VERMONT 9 / VERMONT 9 / VERMONT 67A	1 1 1	600 600 600	600 600 600	0.36 0.36 0.36																											[SIGN ID CODE MI-5] [SIGN ID CODE MI-5] [SIGN ID CODE MI-5]		E-136BM E-136BM E-136BM
	279 279 ← ↑ ↑	1 1 1	525 525 525	375 375 375	0.20 0.20 0.20																											[SIGN ID CODE M6-1] [SIGN ID CODE M6-3] [SIGN ID CODE M6-3]		E-136BM E-136BM E-136BM
					m²	m²	EA.	m²				m	m	m	m	m	m		EA	kg	kg	kg		kg	kg	kg	kg								
												8.2	12.5											149.2											
	TOTALS				6.81							20.7											3	149.2										

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."

PROJECT: BENNINGTON - HOOSICK
PROJECT NO.: D.P.I. 0146(1) C/4
DESIGN FILE NAME:
IPARM FILE NAME: N/A
SURVEYED BY: N/A
SQUAD LEADER: T.P.K.
DWG. NO. TSS-14
PLOT DATE: 9/00
SURVEY DATE: N/A
DRAWN BY: K.H.D.
SHEET: 150 OF 385

FILE NAME =u:\516\vsot\contract4\tss-1.dgn
DATE/TIME =07 SEP 2000
USER =1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

THAT Metric

KILOMETER MARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (mm)	HEIGHT (mm)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	EXIST POST SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL kg/m 1.7	3.0	4.5	SQUARE STEEL (mm) kg/m 44 2.8	50 3.2	63 5.0	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (mm) kg/m 75 1.9	100 2.5	100 MOD 2.5	TUBULAR STEEL Ø (mm) FOUNDATION	kg/m 75 11.3	89 13.4	100 16.1	125 21.7	W-SHAPE STEEL FTG. SIZE 600 mm	750 mm	MASS	POST SIZE	SIGN FRAME REQUIRED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
VT. RTE 67A 60+770.0, RT	PHYLLIS LA / PHYLLIS LA	1 1	900 900	230 230	0.21 0.21						1	X																					[SIGN ID CODE D3] [SIGN ID CODE D3] BACK-TO-BACK	TSD-2 TSD-2	
60+773.3, LT		1	600	750	0.45						1			X																				[SIGN ID CODE R4-7]		E-144M
		1 1	450 450	450 450	0.20 0.20																													[SIGN ID CODE OM-1] [SIGN ID CODE OM-1] BACK-TO-BACK		E-150M E-150M
60+813.2, RT		1	600	750	0.45						1			X																				[SIGN ID CODE R4-7]		E-144M
		1 1	450 450	450 450	0.20 0.20																													[SIGN ID CODE OM-1] [SIGN ID CODE OM-1] BACK-TO-BACK		E-150M E-150M
60+860.0, LT	ONLY ONLY	1	1500	750	1.13						2			X																				[SIGN ID CODE VR-941]		E-145AM
60+860.0, RT	WEST NORTH	1 1	600 600	300 300	0.18 0.18						2			X																			X	[SIGN ID CODE M3-4] [SIGN ID CODE M3-1]		E-136BM E-136BM
	VERMONT 9 279 / VERMONT 67A	1 1	600 600	600 600	0.36 0.36																													[SIGN ID CODE M1-5] [SIGN ID CODE M1-5]		E-136BM E-136BM
		1 1	525 525	375 375	0.20 0.20																													[SIGN ID CODE M5-1] [SIGN ID CODE M6-3]		E-136BM E-136BM

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."

												m 4.0	m	m 25.2	m	m	m		EA	kg	kg	kg		kg	kg	kg	kg								
TOTALS	m^2 4.73	m^2	EA.	m^2		m 29.2		m			kg		EA.	kg						EA.	EA.	kg													

PROJECT: BENNINGTON - HOOSICK	PROJECT NO.: D.P.I. 0146(1) C/4
DESIGN FILE NAME:	
IPARM FILE NAME: N/A	PLOT DATE: 9/00
SURVEYED BY: N/A	SURVEY DATE: N/A
SQUAD LEADER: T.P.K.	DRAWN BY: K.H.D.
DWG. NO. TSS-15	SHEET: 151 OF 385

FILE NAME =u:\5116\vaot\contract1\tss-1.dgn
DATE/TIME =07 SEP 2000
USER =1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

Metric

KILOMETER MARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (mm)	HEIGHT (mm)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	EXIST POST SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL kg/m 1.7	3.0	4.5	SQUARE STEEL (mm) kg/m 44 2.8	50 3.2	63 5.0	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (mm) kg/m 75 1.9	100 2.5	100 MOD 2.5	TUBULAR STEEL Ø (mm) FOUNDATION	kg/m 75 11.3	89 13.4	100 16.1	125 21.7	W-SHAPE STEEL FTG. SIZE 600 mm	750 mm	MASS	POST SIZE	SIGN FRAME REQUIRED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
VT. RTE 67A 60+890.0, LT	TO	1	600	300	0.18						2												2	X							X	[SIGN ID CODE M4-5]		E-136BM
	HISTORIC TO	1 1	600 600	300 300	0.18 0.18																											[SIGN ID CODE VM-078] [SIGN ID CODE M4-5]		E-136BM E-136AM
	VERMONT 7A 7	1 1	600 600	600 600	0.36 0.36																											[SIGN ID CODE MI-5] [SIGN ID CODE MI-4]		E-136BM E-136AM
	SOUTH EAST	1 1	600 600	300 300	0.18 0.18																											[SIGN ID CODE M3-3] [SIGN ID CODE M3-2]		E-136BM E-136BM
	VERMONT 67A VERMONT ~~9~~ 279	1 1	600 600	600 600	0.36 0.36																											[SIGN ID CODE MI-5] [SIGN ID CODE MI-5]		E-136BM E-136BM
		1 1	525 525	375 375	0.20 0.20																											[SIGN ID CODE M6-3] [SIGN ID CODE M6-1]		E-136BM E-136BM
60+900.0, RT	N. BENNINGTON 3	1	1800	250	0.45						2		X																			[SIGN ID CODE DI-1]	TSD-3	
	TROY NY 27~~33~~	1	1800	250	0.45																											[SIGN ID CODE DI-1]	TSD-3	
60+910.0, LT	BENNINGTON 1	1	1800	250	0.45						2		X																			[SIGN ID CODE DI-1]	TSD-3	
	MANCHESTER 24	1	1800	250	0.45																											[SIGN ID CODE DI-1]	TSD-3	
60+980.0, LT	TO	1	600	300	0.18						2												2	X							X	[SIGN ID CODE M4-5]		E-136BM
	HISTORIC TO	1 1	600 600	300 300	0.18 0.18																											[SIGN ID CODE VM-078] [SIGN ID CODE M4-5]		E-136BM E-136AM
	VERMONT 7A 7	1 1	600 600	600 600	0.36 0.36																											[SIGN ID CODE MI-5] [SIGN ID CODE MI-4]		E-136BM E-136AM
	SOUTH EAST	1 1	600 600	300 300	0.18 0.18																											[SIGN ID CODE M3-3] [SIGN ID CODE M3-2]		E-136BM E-136BM
	VERMONT 67A VERMONT ~~9~~ 279	1 1	600 600	600 600	0.36 0.36																											[SIGN ID CODE MI-5] [SIGN ID CODE MI-5]		E-136BM E-136BM
		1 1	525 525	375 375	0.20 0.20																											[SIGN ID CODE M6-3] [SIGN ID CODE M5-1R]		E-136BM E-136BM
											m 16.8	m	m	m	m	m	EA	kg	kg	kg		kg 194.4	kg	kg	kg	EA.	EA.	kg					
	TOTALS	m^2 7.28	m^2	EA.	m^2						m 16.8			m				kg	EA. 4	kg 194.4		EA.	EA.	kg								

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."

PROJECT: BENNINGTON - HOOSICK
PROJECT NO.: D.P.I. 0146(1) C/4

DESIGN FILE NAME:
IPARM FILE NAME: N/A
SURVEYED BY: N/A
SQUAD LEADER: T.P.K.
DWG. NO. TSS-16

PLOT DATE: 9/00
SURVEY DATE: N/A
DRAWN BY: K.H.D.
SHEET: 152 OF 385

FILE NAME = u:\5116\vaot\contract4\tss-1.dgn
DATE/TIME = 07 SEP 2000
USER = 1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

Metric

KILOMETER MARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (mm)	HEIGHT (mm)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	EXIST POST SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL kg/m 1.7	3.0	4.5	SQUARE STEEL (mm) kg/m 44 2.8	50 3.2	63 5.0	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (mm) kg/m 75 1.9	100 2.5	100 MOD 2.5	TUBULAR STEEL Ø (mm) FOUNDATION	kg/m 75 11.3	89 13.4	100 16.1	125 21.7	W-SHAPE STEEL FTG. SIZE 600 mm	750 mm	MASS	POST SIZE	SIGN FRAME REQUIRED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
VT. RTE 67A 60+980.0, RT	TO	1	600	300	0.18						2												2	X								X	[SIGN ID CODE M4-5]		E-136BM
	NY	1	600	300	0.18																														TSD-2	
	7	1	600	600	0.36																													[SIGN ID CODE M5-1]	TSD-2	
	WEST NORTH	1 1	600 600	300 300	0.18 0.18																													[SIGN ID CODE M3-4] [SIGN ID CODE M3-1]		E-136BM E-136BM
	279 ~~9~~ VERMONT 67A	1 1	600 600	600 600	0.36 0.36																													[SIGN ID CODE M1-5] [SIGN ID CODE M1-5]		E-136BM E-136BM
		1 1	525 525	375 375	0.20 0.20																													[SIGN ID CODE M6-1] [SIGN ID CODE M6-3]		E-136BM E-136BM
61+010.0, LT	SPEED LIMIT 40	1	600	750	0.45						1			X																				[SIGN ID CODE R2-1]		E-142M
61+045.0, RT	ONLY ONLY	1	1500	750	1.13						2			X																				[SIGN ID CODE VR-94I]		E-145AM
61+048.1, LT	SOUTH	1	600	300	0.18						1			X																				[SIGN ID CODE M3-3]		E-136BM
	VERMONT 67A	1	600	600	0.36																													[SIGN ID CODE M1-5]		E-136BM
61+091.6, LT		1	600	750	0.45						1			X																				[SIGN ID CODE R4-7]		E-144M
		1 1	450 450	450 450	0.20 0.20																													[SIGN ID CODE OM-1] [SIGN ID CODE OM-1] BACK-TO-BACK		E-150M E-150M
61+133.5, RT		1	600	750	0.45						1			X																				[SIGN ID CODE R4-7]		E-144M
		1 1	450 450	450 450	0.20 0.20																													[SIGN ID CODE OM-1] [SIGN ID CODE OM-1] BACK-TO-BACK		E-150M E-150M
												m	m	m 25.2	m	m	m		EA	kg	kg	kg		kg 94.9	kg	kg	kg								
	TOTALS		m^2 6.02	m^2	EA.	m^2						m 25.2			m					kg			EA. 2	kg 94.9				EA.	EA.	kg					

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."

PROJECT:	PROJECT NO.:
BENNINGTON - HOOSICK	D.P.I. 0146(1) C/4
DESIGN FILE NAME:	
IPARM FILE NAME: N/A	PLOT DATE: 9/00
SURVEYED BY: N/A	SURVEY DATE: N/A
SQUAD LEADER: T.P.K.	DRAWN BY: K.H.D.
DWG. NO. TSS-17	SHEET: 153 OF 385

FILE NAME = u:\511GV\aot\contract4\tss-1.dgn
DATE/TIME = 27 SEP 2000
USER = 1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

NOT Metric

KILOMETER MARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	NEW & SALVAGED SIGNS: EA	SIGN DIMENSIONS: WIDTH (mm)	SIGN DIMENSIONS: HEIGHT (mm)	"A"	"B"	SALV SIGN	SALV TIS	EXIST POST: RETAIN	EXIST POST: SALVAGE	NEW SIGN POSTS: NO. OF POSTS	FLANGED CHANNEL kg/m: 1.7	FLANGED CHANNEL kg/m: 3.0	FLANGED CHANNEL kg/m: 4.5	SQUARE STEEL (mm) kg/m: 44	SQUARE STEEL (mm) kg/m: 50	SQUARE STEEL (mm) kg/m: 63	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (mm) kg/m: 75	TUBULAR ALUMINUM Ø (mm) kg/m: 100	TUBULAR ALUMINUM Ø (mm) kg/m: 100 MOD	TUBULAR STEEL Ø (mm): FOUNDATION	TUBULAR STEEL Ø (mm) kg/m: 75	TUBULAR STEEL Ø (mm) kg/m: 89	TUBULAR STEEL Ø (mm) kg/m: 100	TUBULAR STEEL Ø (mm) kg/m: 125	W-SHAPE STEEL FTG. SIZE: 600 mm	W-SHAPE STEEL FTG. SIZE: 750 mm	W-SHAPE STEEL: MASS	W-SHAPE STEEL: POST SIZE	SIGN PANEL REQUIRED	REMARKS	SIGN DETAIL: DETAIL ON SHEET NUMBER	SIGN DETAIL: STD. SHEET NUMBER
VT. RTE 67A 61+160.0, LT	TO TO	1 1	600 600	300 300	0.18 0.18						2												2	X							X	[SIGN ID CODE M4-5]		E-136BM E-136BM
	HISTORIC TO NY	1 1 1	600 600 600	300 300 300	0.18 0.18 0.18																											[SIGN ID CODE VM-078] [SIGN ID CODE M4-5]	TSD-2	E-136BM E-136AM
	VERMONT 7A 7 7	1 1 1	600 600 600	600 600 600	0.36 0.36 0.36																											[SIGN ID CODE MI-5] [SIGN ID CODE MI-5] [SIGN ID CODE M5-1]	TSD-2	E-136BM E-136AM
	SOUTH EAST WEST	1 1 1	600 600 600	300 300 300	0.18 0.18 0.18																											[SIGN ID CODE M3-3] [SIGN ID CODE M3-2] [SIGN ID CODE M3-4]		E-136BM E-136BM E-136BM
	VERMONT 67A VERMONT 9 (279) VERMONT 9 (279)	1 1 1	600 600 600	600 600 600	0.36 0.36 0.36																											[SIGN ID CODE MI-5] [SIGN ID CODE MI-5] [SIGN ID CODE MI-5]		E-136BM E-136BM E-136BM
		1 1 1	525 525 525	375 375 375	0.20 0.20 0.20																											[SIGN ID CODE M6-3] [SIGN ID CODE M6-3] [SIGN ID CODE M6-3]		E-136BM E-136BM E-136BM
61+183.1, RT	NORTH	1	600	300	0.18						1			X																			[SIGN ID CODE M3-1]		E-136BM
	VERMONT 67A	1	600	600	0.36																											[SIGN ID CODE MI-5]		E-136BM
61+185.0, LT	ONLY ONLY	1	1500	750	1.13						2			X																			[SIGN ID CODE VR-94]		E-145AM
61+213.6, LT	067 0202 0060	1	150	200	0.03						1	X																					[SIGN ID CODE VD-700]		E-138M
61+230.0, RT	SPEED LIMIT 40	1	600	750	0.45						1			X																			[SIGN ID CODE R2-1]		E-142M
											m 3.0	m	m 16.8	m	m	m		EA	kg	kg	kg		kg 97.2	kg	kg	kg								
	TOTALS	m^2 5.22	m^2	EA.	m^2						m 19.8			m				EA. 2	kg				kg 97.2				EA.	EA.	kg				

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."

PROJECT:	PROJECT NO.:
BENNINGTON - HOOSICK	D.P.I. 0146(1) C/4
DESIGN FILE NAME:	
IPARM FILE NAME: N/A	PLOT DATE: 9/00
SURVEYED BY: N/A	SURVEY DATE: N/A
SQUAD LEADER: T.P.K.	DRAWN BY: K.H.D.
DWG. NO. TSS-18	SHEET: 154 OF 385

FILE NAME =u:\5116\vaot\contract4\tss-1.dgn
DATE/TIME =07 SEP 2000
USER =1459

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

VAOT Metric

KILOMETER MARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (mm)	HEIGHT (mm)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	EXIST POST SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL kg/m 1.7	3.0	4.5	SQUARE STEEL (mm) kg/m 44 2.8	50 3.2	63 5.0	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (mm) kg/m 75 1.9	100 2.5	100 MOD 2.5	TUBULAR STEEL Ø (mm) FOUNDATION	kg/m 75 11.3	89 13.4	100 16.1	125 21.7	W-SHAPE STEEL FTG. SIZE 600 mm	750 mm	MASS	POST SIZE	SIGN FRAME REQUIRED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
VT. RTE 67A 61+244.1, RT	↑ N. BENNINGTON 3	1	1800	250	0.45						2		X																				[SIGN ID CODE D1-1]	TSD-3	
61+245.0, LT	↑ BENNINGTON 1	1	1800	250	0.45						2		X																				[SIGN ID CODE D1-1]	TSD-3	
	TROY NY 27 ~~33~~ →	1	1800	250	0.45																												[SIGN ID CODE D1-1]	TSD-3	
61+305.0, LT	JCT	1	525	375	0.20						1			X																				[SIGN ID CODE M2-1]		E-136BM
	VERMONT ~~9~~ 279	1	600	600	0.36																												[SIGN ID CODE M1-5]		E-136BM
	SHEET SUBTOTAL				1.91	-	-					-	17.2	4.3									-	-					-	-	-				
	DWG. NO. TSS-1 SUBTOTAL				1.41	-	-					3.3	-	11.8									-	-					-	-	-				
	DWG. NO. TSS-2 SUBTOTAL				6.88	23.10	-					-	3.6	60.1									-	-					-	-	-				
	DWG. NO. TSS-3 SUBTOTAL				4.94	-	-					5.0	3.6	25.6									-	-					-	-	-				
	DWG. NO. TSS-4 SUBTOTAL				7.89	-	-					3.2	-	30.7									2	104.0					-	-	-				
	DWG. NO. TSS-5 SUBTOTAL				4.91	-	-					6.6	28.0	9.4									2	85.9					-	-	-				
	DWG. NO. TSS-6 SUBTOTAL				3.63	-	-					3.3	16.0	25.0									-	-					-	-	-				
	DWG. NO. TSS-7 SUBTOTAL				3.92	49.88	-					3.3	24.0	27.1									2	97.2					-	-	-				
	DWG. NO. TSS-8 SUBTOTAL				4.96	-	-					6.6	3.6	23.7									-	-					-	-	-				
	DWG. NO. TSS-9 SUBTOTAL				7.89	-	-					3.2	-	17.9									3	154.0					-	-	-				
	DWG. NO. TSS-10 SUBTOTAL				3.83	-	-					-	-	9.2									2	85.9					-	-	-				
	DWG. NO. TSS-11 SUBTOTAL				3.55	-	-					-	20.0	-									2	104.0					-	-	-				
	DWG. NO. TSS-12 SUBTOTAL				2.49	37.98	-					3.3	4.0	19.8									2	97.2					-	-	-				
	DWG. NO. TSS-13 SUBTOTAL				2.01	-	-					3.3	24.0	4.0									-	-					-	-	-				
	DWG. NO. TSS-14 SUBTOTAL				6.81	-	-					-	8.2	12.5									3	149.2					-	-	-				
	DWG. NO. TSS-15 SUBTOTAL				4.73	-	-					4.0	-	25.2									-	-					-	-	-				
	DWG. NO. TSS-16 SUBTOTAL				7.28	-	-					-	16.8	-									4	194.4					-	-	-				
	DWG. NO. TSS-17 SUBTOTAL				6.02	-	-					-	-	25.2									2	94.9					-	-	-				
	DWG. NO. TSS-18 SUBTOTAL				5.22	-	-					3.0	-	16.8									2	97.2					-	-	-				
					m 48.1	m 169.0	m 348.3		m	m	m		EA	kg	kg	kg		kg 1263.9	kg	kg	kg														
	TOTALS				m^2 90.28	m^2 110.96	EA.	m^2			m 565.4				m						kg		EA. 26	kg 1263.9					EA.	EA.	kg				

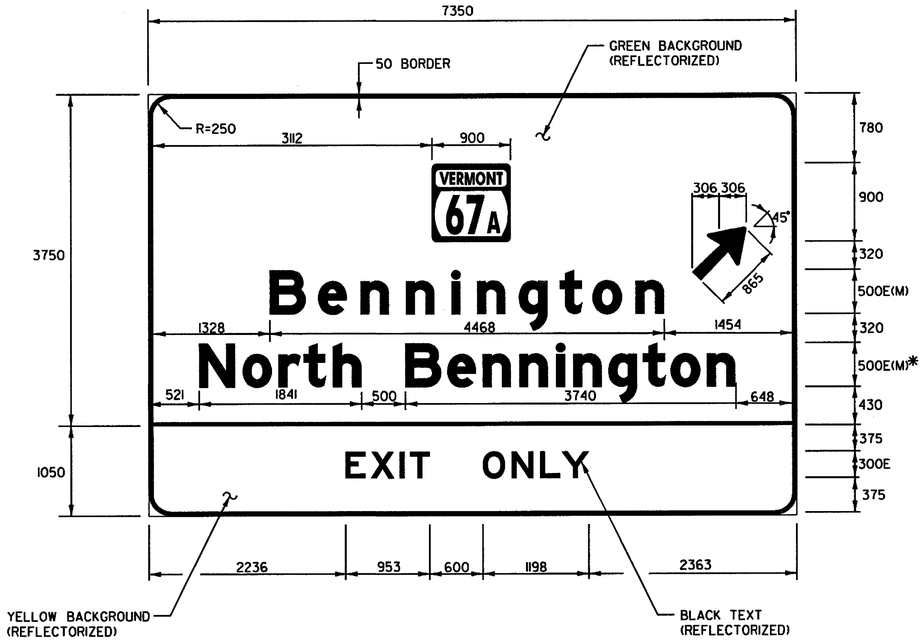
FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE."

PROJECT:	PROJECT NO.:
BENNINGTON - HOOSICK	D.P.I. 0146(1) C/4
DESIGN FILE NAME:	
IPARM FILE NAME: N/A	PLOT DATE: 9/00
SURVEYED BY: N/A	SURVEY DATE: N/A
SQUAD LEADER: T.P.K.	DRAWN BY: K.H.D.
DWG. NO. TSS-19	SHEET: 155 OF 385

FILE NAME =u:\516\vaot\contract4\tss-1.dgn
DATE/TIME =07 SEP 2000
USER =1459

COLOR: WHITE BORDER & TEXT (REFLECTORIZED)
GREEN BACKGROUND (REFLECTORIZED)

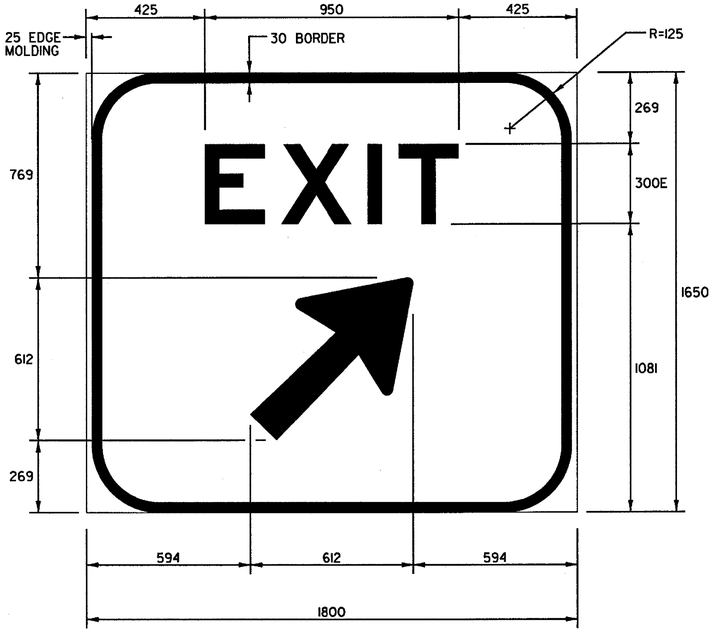
MATERIAL: PER VAOT STANDARD E-131M
SIGN - VT. ROUTE 9, RAMP X
STA. X10+040.0, RT



COLOR: WHITE BORDER & TEXT (REFLECTORIZED)
GREEN BACKGROUND (REFLECTORIZED)
BLACK TEXT (REFLECTORIZED)
YELLOW BACKGROUND (REFLECTORIZED)

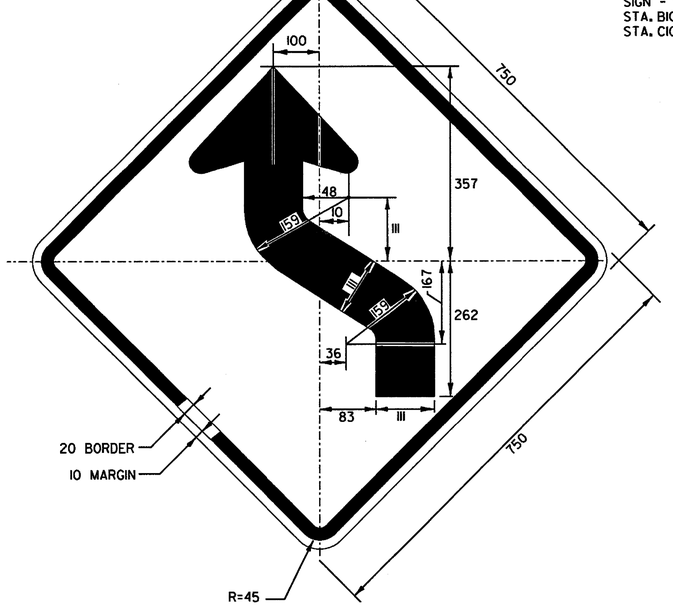
MATERIAL: PER VAOT STANDARD E-131M
*50% REDUCTION IN SPACING
SIGN - VT. ROUTE 9, RAMPS B & C
STA. B10+146.5, RT
STA. C10+040.5, RT

NOTE:
STANDARD 432 mm X 505 mm ARROW
HEAD - TAPER SHAFT 13 mm PER SIDE



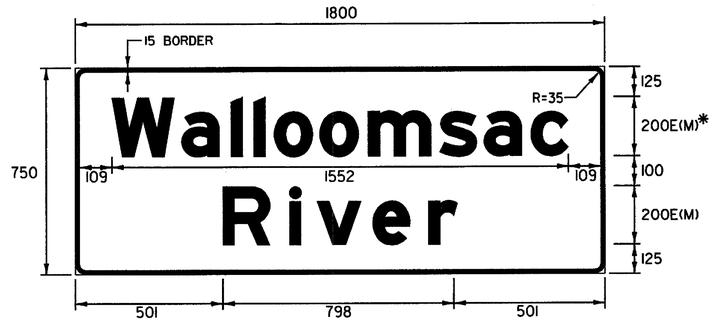
COLOR: WHITE BORDER & TEXT (REFLECTORIZED)
GREEN BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-131M
SIGN - VT. ROUTE 9, RAMPS B & C
STA. B10+215.0, LT
STA. C10+078.0, LT



COLOR: BLACK BORDER & SYMBOL (REFLECTORIZED)
YELLOW BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-155M
SIGN - VT. ROUTE 9, RAMP AB
STA. AB10+104.0, RT



COLOR: WHITE BORDER & TEXT (REFLECTORIZED)
GREEN BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-131M
*50% REDUCTION IN SPACING
SIGN - VT. ROUTE 9, VT. ROUTE 9 RAMP A
STA. 16+740.0, RT
STA. A10+123.8, RT

ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE NOTED.

TEXT LAYOUT DIMENSIONS ARE BASED ON THE "LETTER & NUMERAL WIDTHS AND SPACE" TABLES FOUND IN THE "STANDARD HIGHWAY SIGNS" BOOKLET. MINOR VARIATIONS IN TEXT DIMENSIONS ARE ACCEPTABLE BASED ON INDIVIDUAL MANUFACTURER'S LETTER FABRICATION. SIGNIFICANT CHANGES WHICH AFFECT SIGN APPEARANCE SHALL BE BROUGHT TO THE ATTENTION OF THE VAOT'S TRAFFIC & SAFETY DIVISION BEFORE FABRICATION.

TRAFFIC SIGN DETAIL SHEET 1

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	K.H.D.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

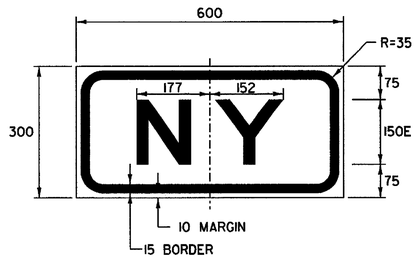
DESIGN FILE NO. /5116/5116SIGN.DGN

PROJ. NAME BENNINGTON - HOOSICK
D.P.J. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

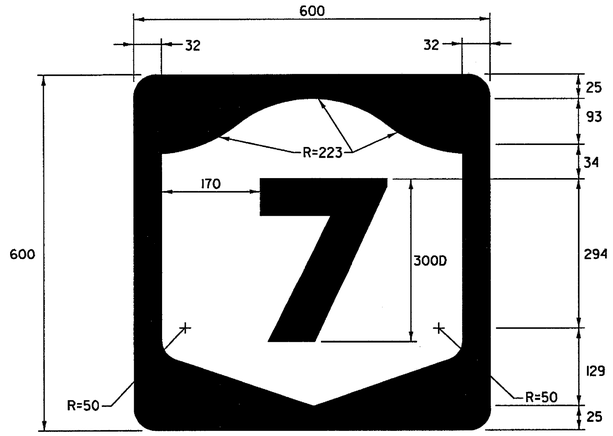
DWG NO. TSD-1 SHEET 156 OF 385

FILE NAME =u:\5116\vaot\contract4\5116sign.dgn
DATE/TIME =07 SEP 2000
USER =1459



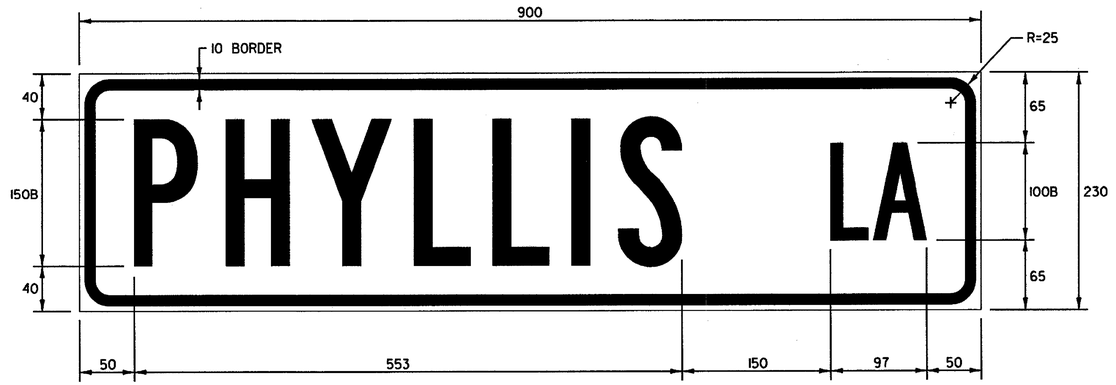
COLOR: BLACK BORDER & TEXT (REFLECTORIZED)
WHITE BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-136AM
SIGN - VT. ROUTE 67A
STA. 60+980.0, RT
STA. 61+160.0, LT



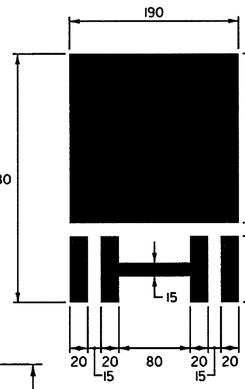
COLOR: BLACK BORDER & TEXT (REFLECTORIZED)
WHITE BACKGROUND (REFLECTORIZED)

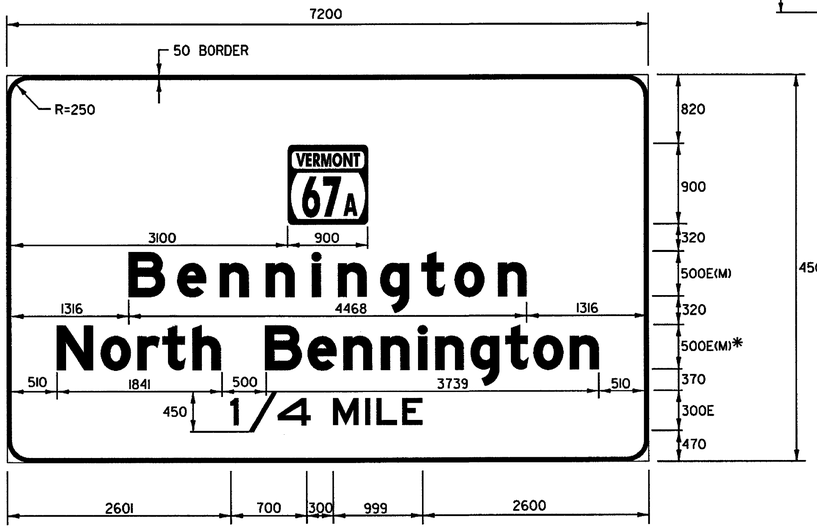
MATERIAL: PER VAOT STANDARD E-136AM
SIGN - VT. ROUTE 67A
STA. 60+980.0, RT
STA. 61+160.0, LT



COLOR: WHITE OR SILVER BORDER & TEXT (REFLECTORIZED)
GREEN BACKGROUND (REFLECTORIZED)

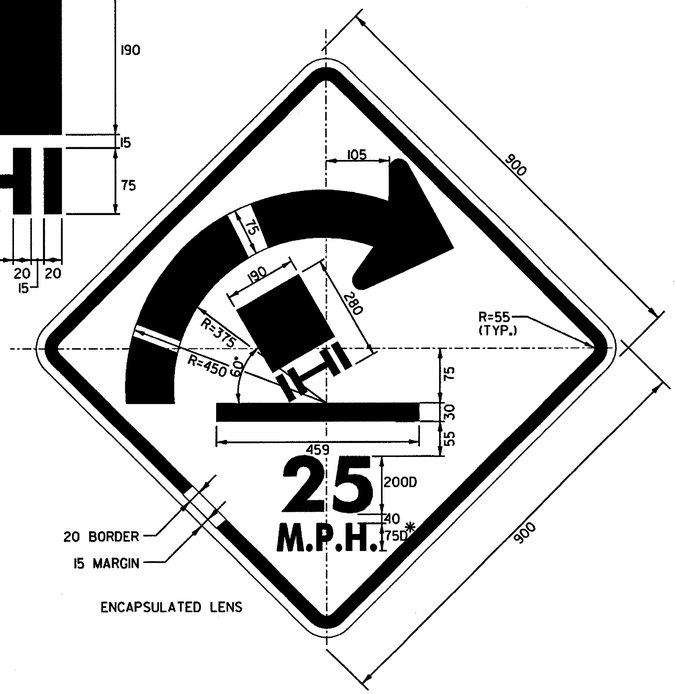
MATERIAL: PER VAOT STANDARD E-123M
SIGN - VT. ROUTE 67A
STA. 60+770.0, RT
STA. 60+770.0, RT





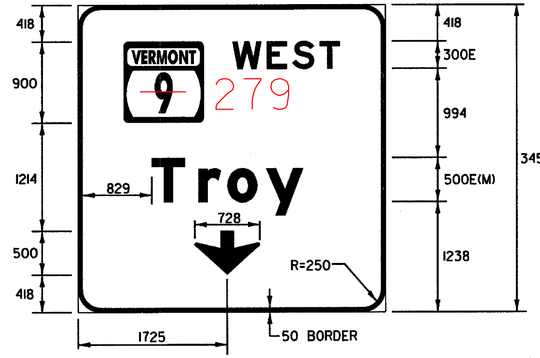
COLOR: WHITE BORDER & TEXT (REFLECTORIZED)
GREEN BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-131M
*50% REDUCTION IN SPACING
SIGN - VT. ROUTE 9
STA. 17+670.0, LT



COLOR: BLACK BORDER, SYMBOL & TEXT (REFLECTORIZED)
YELLOW BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-151M
* 100% INCREASE IN SPACING
SIGN - VT. ROUTE 9, RAMP B
STA. B10+000.4, RT



COLOR: WHITE BORDER & TEXT (REFLECTORIZED)
GREEN BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-131M
SIGN - VT. ROUTE 9, RAMP B
STA. B10+146.5, LT

TEXT LAYOUT DIMENSIONS ARE BASED ON THE "LETTER & NUMERAL WIDTHS AND SPACE" TABLES FOUND IN THE "STANDARD HIGHWAY SIGNS" BOOKLET. MINOR VARIATIONS IN TEXT DIMENSIONS ARE ACCEPTABLE BASED ON INDIVIDUAL MANUFACTURER'S LETTER FABRICATION. SIGNIFICANT CHANGES WHICH AFFECT SIGN APPEARANCE SHALL BE BROUGHT TO THE ATTENTION OF THE VAOT'S TRAFFIC & SAFETY DIVISION BEFORE FABRICATION.

ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE NOTED.

TRAFFIC SIGN DETAIL SHEET 2

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	J.A.R.	DATE 9/00
DRAWN BY	K.H.D.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. /5116/5116SIGN.DGN

PROJ. NAME BENNINGTON - HOOSICK
D.P.J. 0146(1) C/4

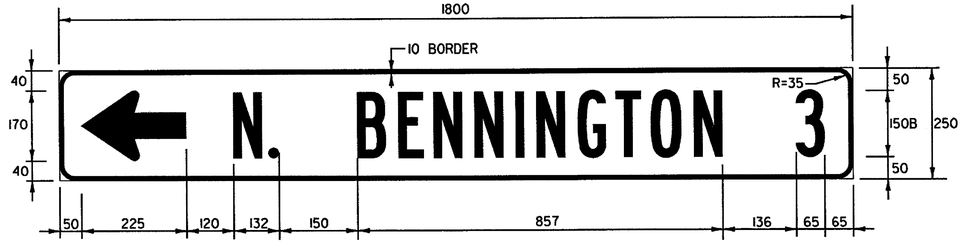
PROJ. NO. P.I.N. 1306.60

DWG NO. TSD-2 SHEET 157 OF 385

DATUM

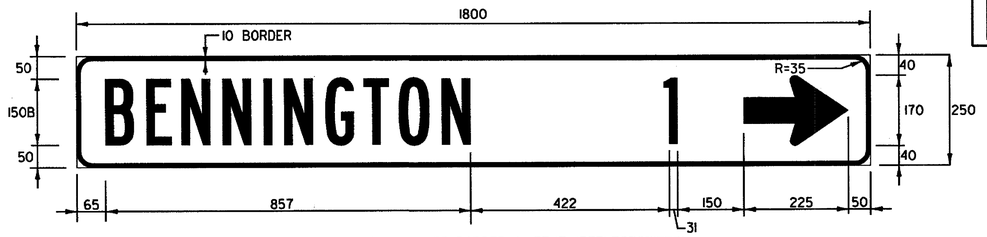
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

FILE NAME =u:\5116\vaot\contract4\5116sign.dgn
DATE/TIME =07 SEP 2000
USER =1459



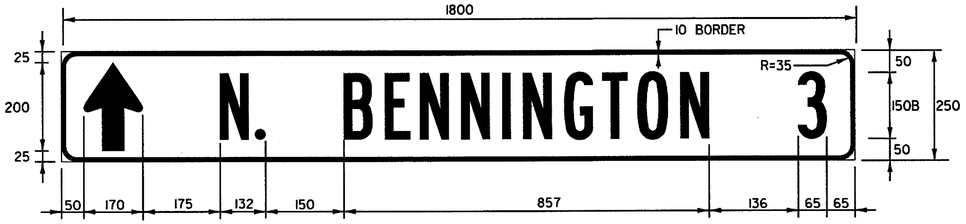
COLOR: WHITE BORDER & TEXT (REFLECTORIZED)
GREEN BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-123M
SIGN - VT. ROUTE 9, RAMPS AB & CD
STA. AB10+140.0, LT
STA. CD10+130.0, LT



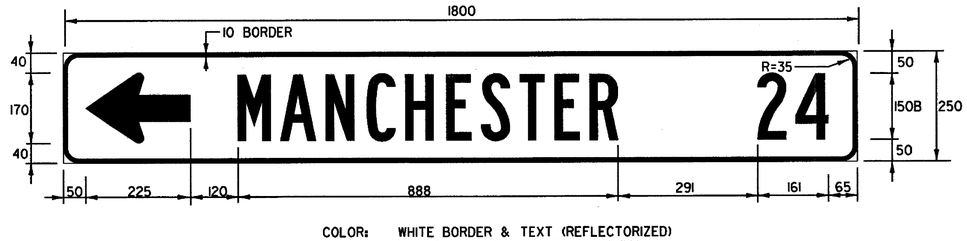
COLOR: WHITE BORDER & TEXT (REFLECTORIZED)
GREEN BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-123M
SIGN - VT. ROUTE 9, RAMPS AB & CD
STA. AB10+140.0, LT
STA. CD10+130.0, LT



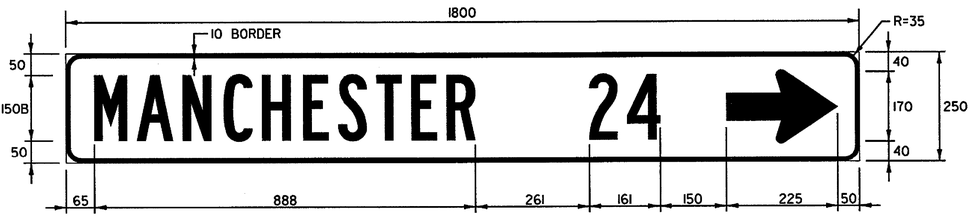
COLOR: WHITE BORDER & TEXT (REFLECTORIZED)
GREEN BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-123M
SIGN - VT. ROUTE 67A
STA. 60+670.0, RT
STA. 60+900.0, RT
STA. 61+244.1, RT



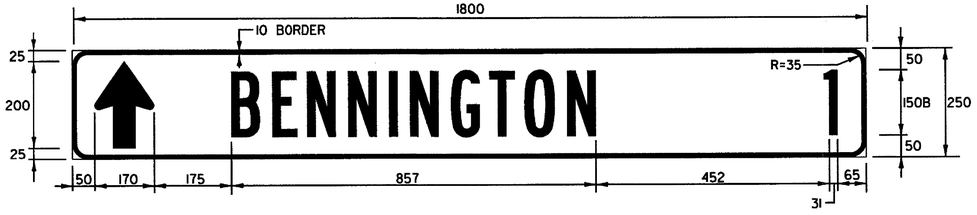
COLOR: WHITE BORDER & TEXT (REFLECTORIZED)
GREEN BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-123M
SIGN - VT. ROUTE 67A
STA. 60+670.0, RT



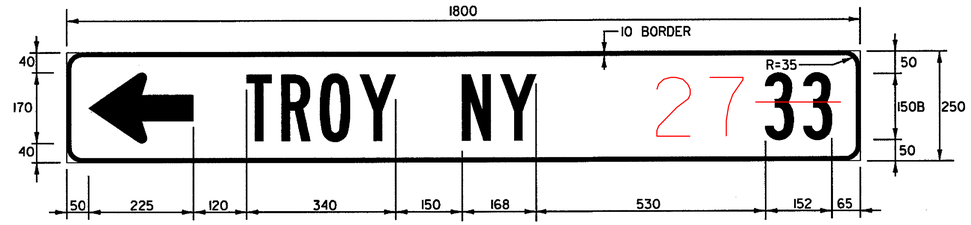
COLOR: WHITE BORDER & TEXT (REFLECTORIZED)
GREEN BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-123M
SIGN - VT. ROUTE 67A
STA. 60+910.0, LT



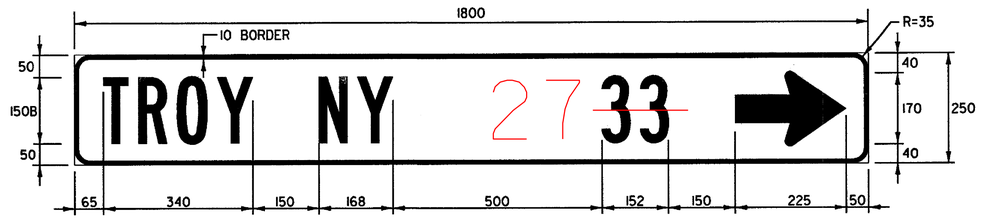
COLOR: WHITE BORDER & TEXT (REFLECTORIZED)
GREEN BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-123M
SIGN - VT. ROUTE 67A
STA. 60+910.0, LT



COLOR: WHITE BORDER & TEXT (REFLECTORIZED)
GREEN BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-123M
SIGN - VT. ROUTE 67A
STA. 60+900.0, RT



COLOR: WHITE BORDER & TEXT (REFLECTORIZED)
GREEN BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-123M
SIGN - VT. ROUTE 67A
STA. 61+245.0, LT

TEXT LAYOUT DIMENSIONS ARE BASED ON THE "LETTER & NUMERAL WIDTHS AND SPACE" TABLES FOUND IN THE "STANDARD HIGHWAY SIGNS" BOOKLET. MINOR VARIATIONS IN TEXT DIMENSIONS ARE ACCEPTABLE BASED ON INDIVIDUAL MANUFACTURER'S LETTER FABRICATION. SIGNIFICANT CHANGES WHICH AFFECT SIGN APPEARANCE SHALL BE BROUGHT TO THE ATTENTION OF THE VAOT'S TRAFFIC & SAFETY DIVISION BEFORE FABRICATION.

ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE NOTED.

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

TRAFFIC SIGN DETAIL SHEET 3

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	K.H.D.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. /5116/5116SIGN.DGN

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. TSD-3

FILE NAME =u:\5116\vaot\contract4\5116sign.dgn
DATE/TIME =07 SEP 2000
USER =1459

Metric

676.10 DELINEATORS W/ STEEL POSTS
AS SHOWN - 4

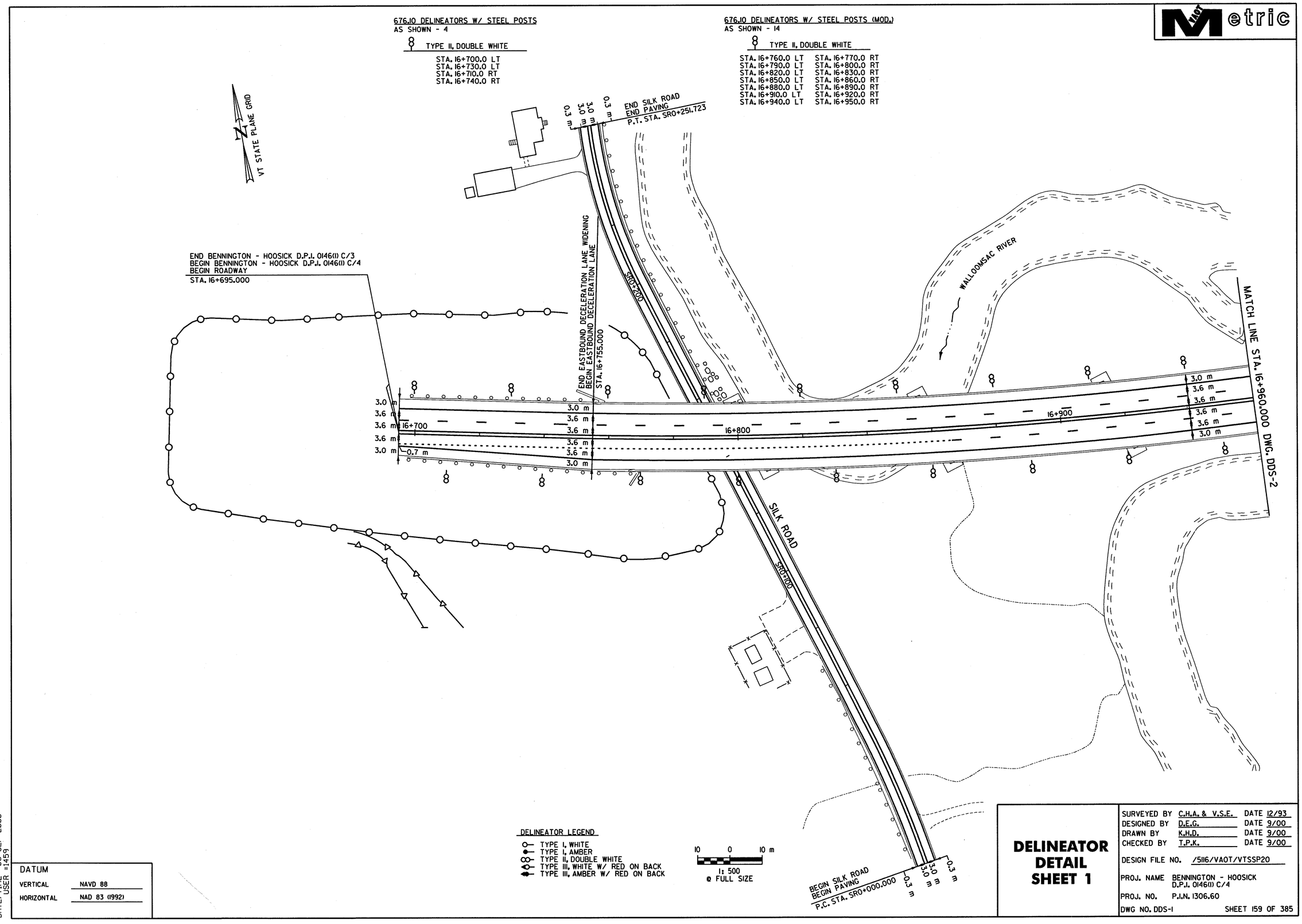
TYPE II, DOUBLE WHITE

STA. 16+700.0 LT
STA. 16+730.0 LT
STA. 16+710.0 RT
STA. 16+740.0 RT

676.10 DELINEATORS W/ STEEL POSTS (MOD.)
AS SHOWN - 14

TYPE II, DOUBLE WHITE

STA. 16+760.0 LT STA. 16+770.0 RT
STA. 16+790.0 LT STA. 16+800.0 RT
STA. 16+820.0 LT STA. 16+830.0 RT
STA. 16+850.0 LT STA. 16+860.0 RT
STA. 16+880.0 LT STA. 16+890.0 RT
STA. 16+910.0 LT STA. 16+920.0 RT
STA. 16+940.0 LT STA. 16+950.0 RT



DELINEATOR LEGEND
- TYPE I, WHITE
- TYPE I, AMBER
- TYPE II, DOUBLE WHITE
- TYPE III, WHITE W/ RED ON BACK
- TYPE III, AMBER W/ RED ON BACK

10 0 10 m
1: 500
@ FULL SIZE

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

DELINEATOR DETAIL SHEET 1

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY D.E.G. DATE 9/00
DRAWN BY K.H.D. DATE 9/00
CHECKED BY T.P.K. DATE 9/00

DESIGN FILE NO. /5116/VAOT/VTSSP20

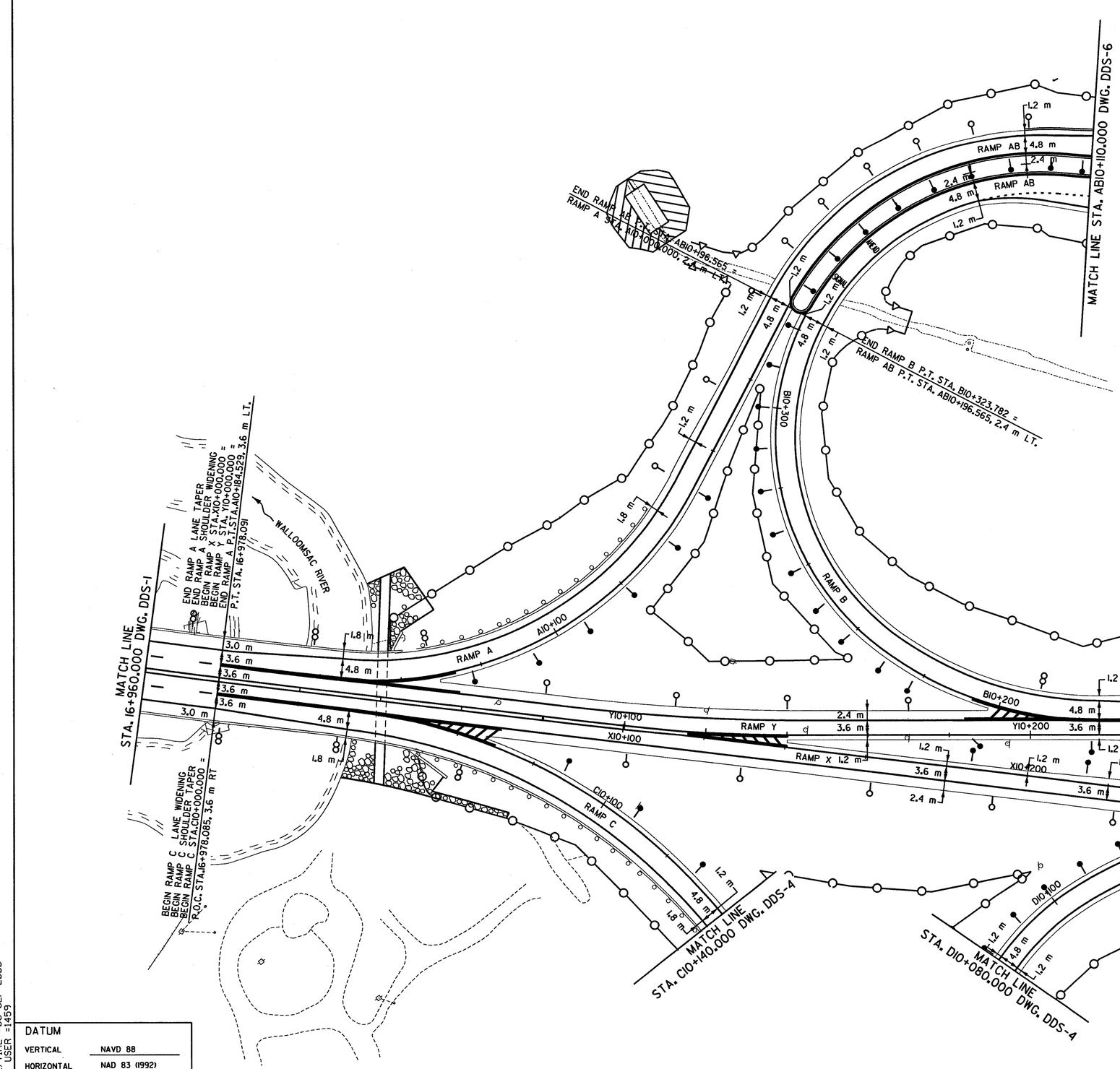
PROJ. NAME BENNINGTON - HOOSICK
D.P.J. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. DDS-1 SHEET 159 OF 385

FILE NAME =u:\5116\vaot\contract4\vtssp20.dgn
DATE/TIME =08 SEP 2000
USER =1459

VAOT Metric



N
VT STATE PLANE GRID

676.10 DELINEATORS W/ STEEL POSTS
AS SHOWN - 67

TYPE II, DOUBLE WHITE

STA. A10+132.6 RT
STA. B10+160.0 RT
STA. B10+190.0 RT
STA. C10+061.9 RT

TYPE I, WHITE

STA. AB10+125.3 RT
STA. AB10+137.3 RT
STA. AB10+149.3 RT
STA. AB10+161.3 RT
STA. AB10+173.3 RT
STA. AB10+185.3 RT
STA. A10+000.7 RT
STA. A10+025.0 RT
STA. A10+005.8 RT
STA. A10+028.3 RT
STA. A10+050.0 RT
STA. X10+102.0 RT
STA. X10+132.0 RT
STA. X10+162.0 RT
STA. X10+192.0 RT
STA. X10+222.0 RT
STA. X10+252.0 RT
STA. Y10+080.0 LT
STA. Y10+110.0 LT
STA. Y10+140.0 LT
STA. Y10+170.0 LT

TYPE I, AMBER

STA. B10+220.0 LT
STA. B10+230.0 LT
STA. B10+240.0 LT
STA. B10+250.0 LT
STA. B10+260.0 LT
STA. B10+270.0 LT
STA. B10+280.0 LT
STA. B10+290.0 LT
STA. B10+300.0 LT
STA. B10+310.0 LT
STA. B10+320.0 LT
STA. AB10+192.8 ℄
STA. AB10+182.8 ℄
STA. AB10+172.8 ℄
STA. AB10+162.8 ℄
STA. AB10+152.8 ℄
STA. AB10+142.8 ℄
STA. AB10+132.8 ℄
STA. AB10+122.8 ℄

TYPE I, AMBER

STA. AB10+112.8 ℄
STA. B10+153.0 LT
STA. B10+183.0 LT
STA. Y10+181.0 RT
STA. A10+050.0 LT
STA. A10+065.0 LT
STA. A10+080.0 LT
STA. A10+095.0 LT
STA. A10+110.0 LT
STA. A10+125.0 LT
STA. X10+241.0 LT
STA. X10+211.0 LT
STA. X10+181.0 LT
STA. C10+088.0 LT
STA. C10+108.0 LT
STA. C10+128.0 LT
STA. D10+080.0 LT
STA. D10+090.0 LT
STA. D10+100.0 LT
STA. D10+110.0 LT
STA. D10+120.0 LT
STA. D10+130.0 LT
STA. D10+140.0 LT

676.10 DELINEATORS W/ STEEL POSTS (MOD.)
AS SHOWN - 4

TYPE II, DOUBLE WHITE

STA. 16+970.0 LT
STA. A10+162.6 RT
STA. C10+001.9 RT
STA. C10+031.9 RT

DELINEATOR LEGEND

- TYPE I, WHITE
- TYPE I, AMBER
- TYPE II, DOUBLE WHITE
- TYPE III, WHITE W/ RED ON BACK
- TYPE III, AMBER W/ RED ON BACK

10 0 10 m
1: 500
@ FULL SIZE

DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

DELINEATOR DETAIL SHEET 2

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	K.H.D.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. /5116/SSP21.DGN

PROJ. NAME BENNINGTON - HOOSICK
D.P.J. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. DDS-2 SHEET 160 OF 385

FILE NAME =u:\5116\vaot\contract4\vtssp21.dgn
DATE/TIME =08 SEP 2000
USER =1459

VAOT Metric

676.10 DELINEATORS W/ STEEL POSTS
AS SHOWN - II

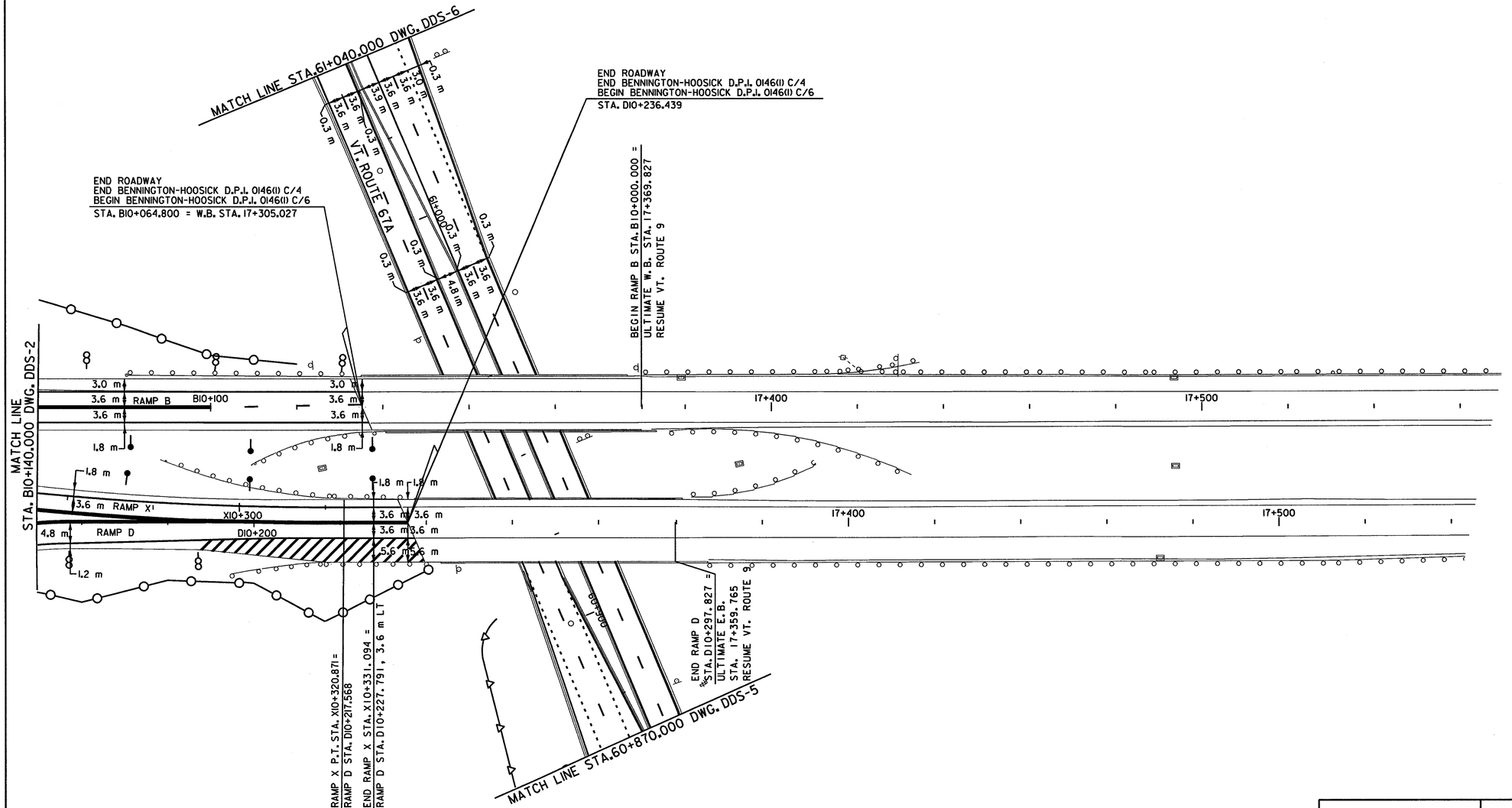
TYPE II, DOUBLE WHITE

STA. B10+070.0 RT
STA. B10+100.0 RT
STA. B10+130.0 RT
STA. D10+157.0 RT
STA. D10+187.0 RT

TYPE I, AMBER

STA. B10+063.0 LT
STA. B10+093.0 LT
STA. B10+123.0 LT
STA. X10+331.0 LT
STA. X10+301.0 LT
STA. X10+271.0 LT

N
VT STATE PLANE GRID



DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

DELINEATOR LEGEND
- TYPE I, WHITE
- TYPE I, AMBER
- TYPE II, DOUBLE WHITE
- TYPE III, WHITE W/ RED ON BACK
- TYPE III, AMBER W/ RED ON BACK

10 0 10 m
1: 500
@ FULL SIZE

DELINEATOR DETAIL SHEET 3

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.S.L.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. /5116/SSP22.DGN
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG NO. DDS-3 SHEET 161 OF 385

FILE NAME =u:\5116\vaot\contract4\vtssp22.dgn
DATE/TIME =08 SEP 2000
USER =1459

Metric

676.10 DELINEATORS W/ STEEL POSTS

AS SHOWN - 31

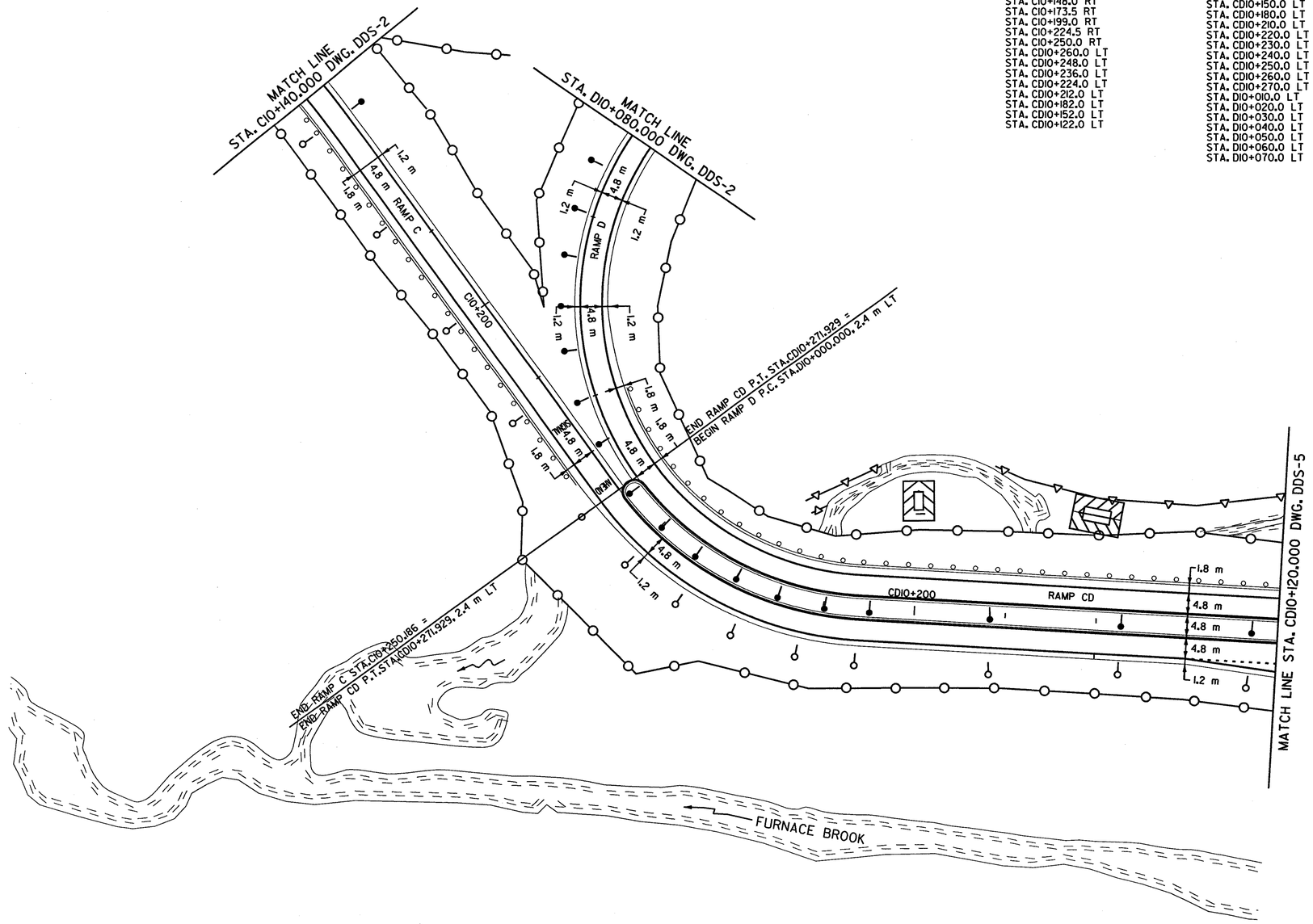
TYPE I, WHITE

STA. C10+148.0 RT
STA. C10+173.5 RT
STA. C10+199.0 RT
STA. C10+224.5 RT
STA. C10+250.0 RT
STA. CD10+260.0 LT
STA. CD10+248.0 LT
STA. CD10+236.0 LT
STA. CD10+224.0 LT
STA. CD10+212.0 LT
STA. CD10+182.0 LT
STA. CD10+152.0 LT
STA. CD10+122.0 LT

TYPE I, AMBER

STA. C10+148.0 LT
STA. CD10+120.0 LT
STA. CD10+150.0 LT
STA. CD10+180.0 LT
STA. CD10+210.0 LT
STA. CD10+220.0 LT
STA. CD10+230.0 LT
STA. CD10+240.0 LT
STA. CD10+250.0 LT
STA. CD10+260.0 LT
STA. CD10+270.0 LT
STA. D10+010.0 LT
STA. D10+020.0 LT
STA. D10+030.0 LT
STA. D10+040.0 LT
STA. D10+050.0 LT
STA. D10+060.0 LT
STA. D10+070.0 LT

N
VT STATE PLANE GRID



DELINEATOR LEGEND

- TYPE I, WHITE
- TYPE I, AMBER
- TYPE II, DOUBLE WHITE
- TYPE III, WHITE W/ RED ON BACK
- TYPE III, AMBER W/ RED ON BACK

10 0 10 m
1: 500
@ FULL SIZE

DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

DELINEATOR DETAIL SHEET 4

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.S.L.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. /5116/VAOT/VTSSP23

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(11) C/4

PROJ. NO. P.I.N. 1306.60

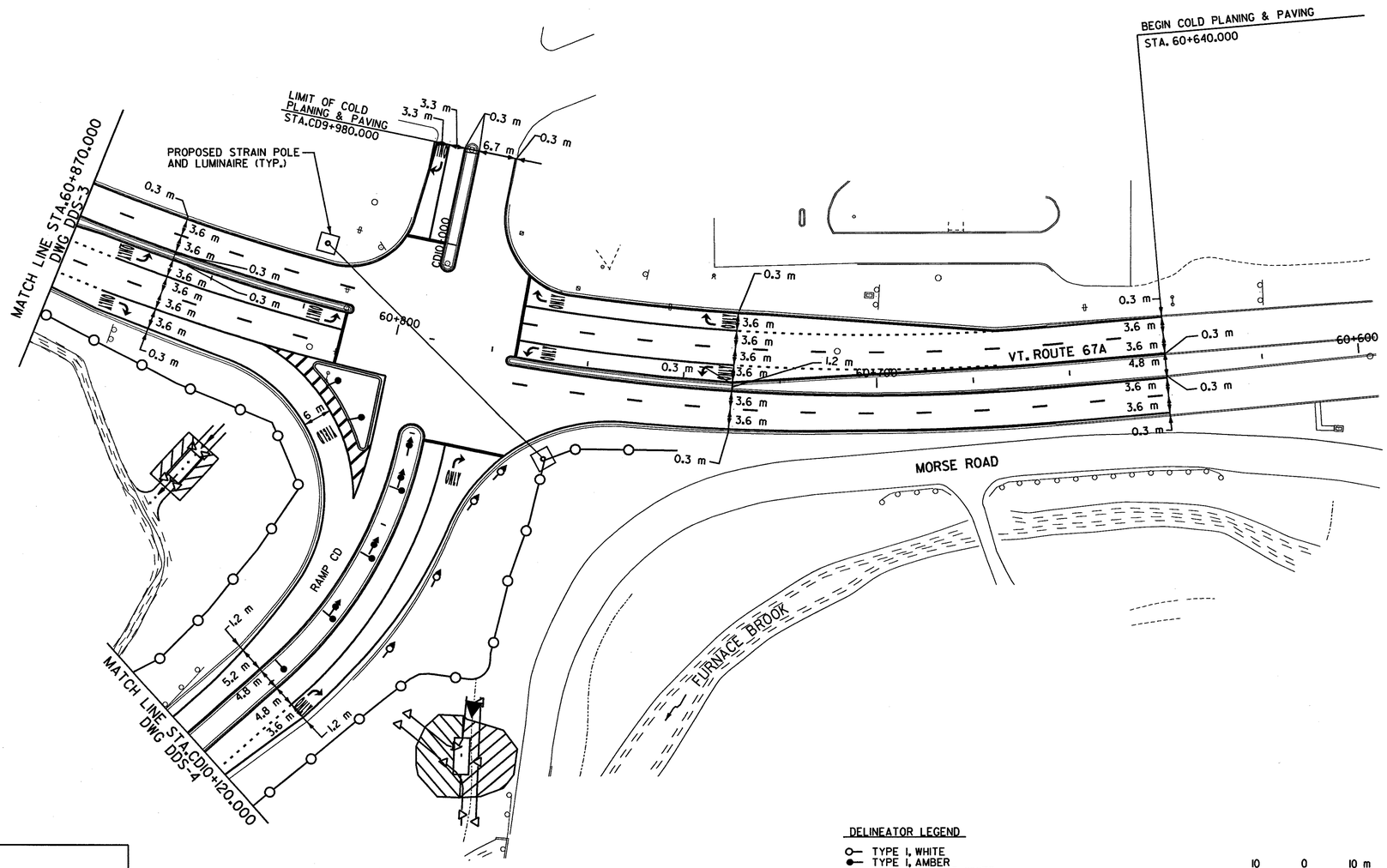
DWG NO. DDS-4 SHEET 162 OF 385

FILE NAME =u:\5116\vaot\contract4\vtssp23.dgn
DATE/TIME =08 SEP 2000
USER =1459

676.10 DELINEATORS W/ STEEL POSTS
AS SHOWN - 14

TYPE III, AMBER W/ RED ON BACK	TYPE III, WHITE W/ RED ON BACK	TYPE I, AMBER
STA. CD10+045.0 ℄	STA. CD10+045.0 LT	STA. CD10+032.5 RT
STA. CD10+052.0 ℄	STA. CD10+052.0 LT	STA. CD10+040.3 RT
STA. CD10+067.0 ℄	STA. CD10+067.0 LT	STA. CD10+052.0 LT
STA. CD10+082.0 ℄	STA. CD10+082.0 LT	STA. CD10+067.0 LT
		STA. CD10+082.0 LT
		STA. CD10+097.0 LT

VT STATE PLANE GRID



DELINEATOR LEGEND
- TYPE I, WHITE
- TYPE I, AMBER
- TYPE II, DOUBLE WHITE
- TYPE III, WHITE W/ RED ON BACK
- TYPE III, AMBER W/ RED ON BACK

10 0 10 m
1: 500
@ FULL SIZE

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

DELINEATOR DETAIL SHEET 5

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY D.E.G. DATE 9/00
DRAWN BY J.S.L. DATE 9/00
CHECKED BY T.P.K. DATE 9/00

DESIGN FILE NO. /5116/SSP24.DGN

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. DDS-5 SHEET 163 OF 385

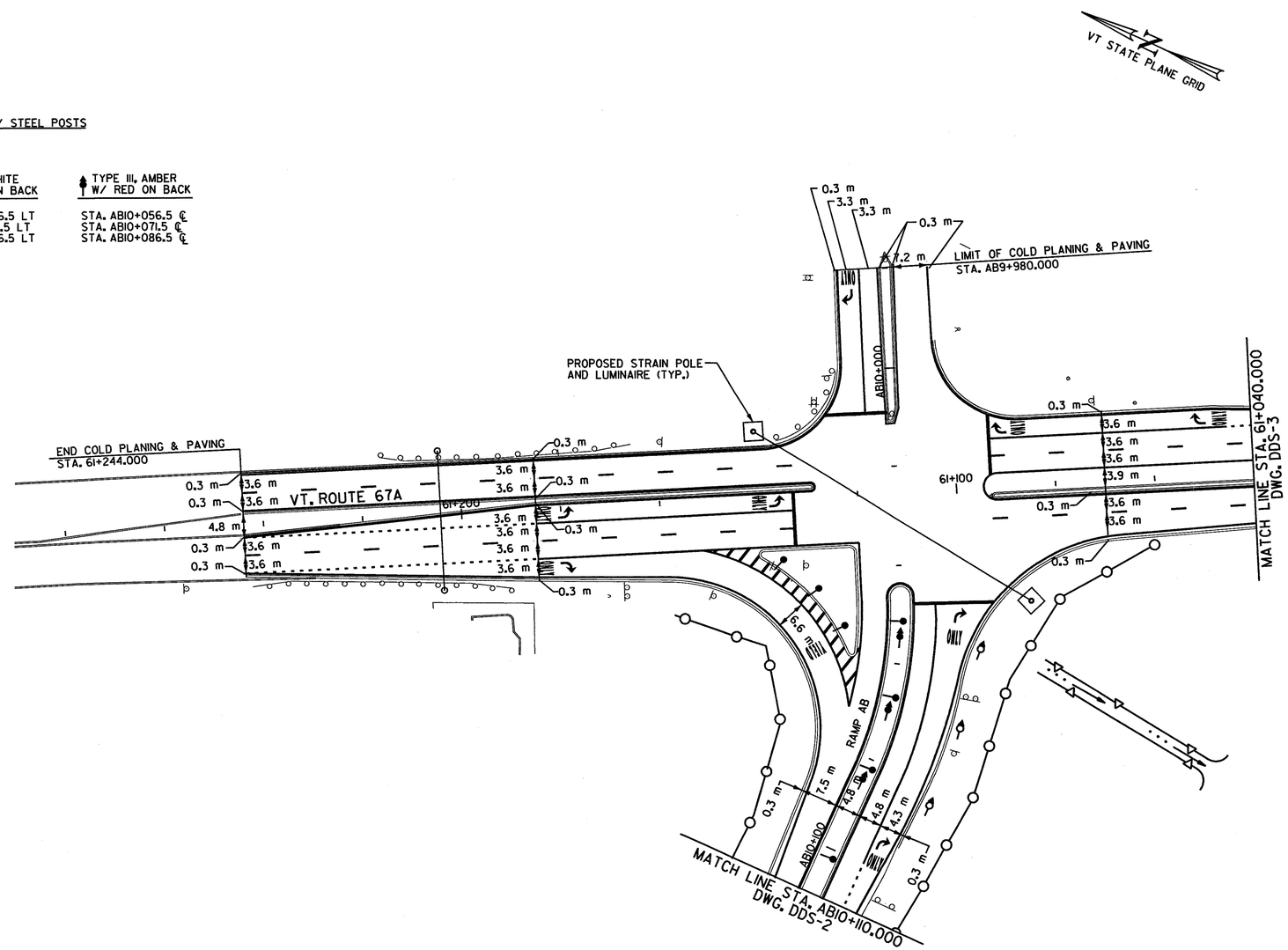
FILE NAME =u:\5116\vaot\contract4\vtssp24.dgn
DATE/TIME =08 SEP 2000
USER =1459

Metric

676.10 DELINEATORS W/ STEEL POSTS

AS SHOWN - 13

TYPE I, AMBER	TYPE III, WHITE W/ RED ON BACK	TYPE III, AMBER W/ RED ON BACK
STA. AB10+102.8 ℄	STA. AB10+056.5 LT	STA. AB10+056.5 ℄
STA. AB10+082.0 ℄	STA. AB10+071.5 LT	STA. AB10+071.5 ℄
STA. AB10+067.0 ℄	STA. AB10+086.5 LT	STA. AB10+086.5 ℄
STA. AB10+052.0 ℄		
STA. AB10+037.8 RT		
STA. AB10+044.8 RT		
STA. AB10+054.4 RT		



10 0 10 m

1: 500

@ FULL SIZE

DELINEATOR LEGEND

- TYPE I, WHITE
- TYPE I, AMBER
- TYPE II, DOUBLE WHITE
- TYPE III, WHITE W/ RED ON BACK
- TYPE III, AMBER W/ RED ON BACK

DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

DELINEATOR DETAIL SHEET 6

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	J.S.L.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

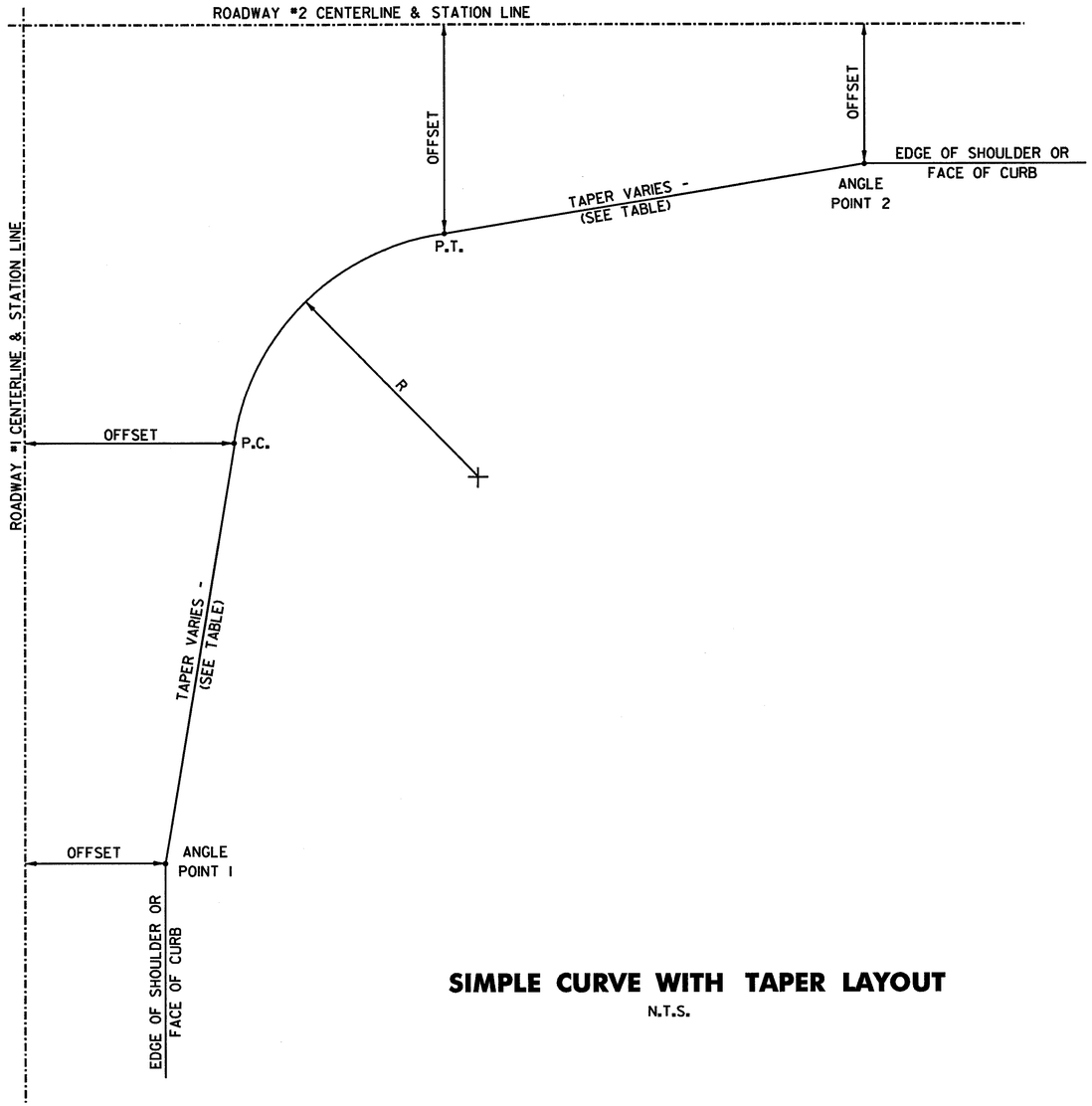
DESIGN FILE NO. /5116/VAOT/VTSSP25

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. DDS-6 SHEET 164 OF 385

FILE NAME =u:\5116\vaot\contract4\vtssp25.dgn
DATE/TIME =08 SEP 2000
USER =1459



LOCATION / CURVE DATA	CONTROL POINT	STATION	OFFSET
ROADWAY #1 - RAMP CD ROADWAY #2 - VT. RTE. 67A R=36 m TAPER = 30:1	ANGLE POINT 1 P.C. P.T. ANGLE POINT 2	CD10+088.295 CD10+056.015 60+750.952 60+714.180	11.993 m 13.210 m 11.614 m 10.538 m
ROADWAY #1 - VT. RTE. 67A ROADWAY #2 - RAMP CD R=30 m TAPER = 25:1	ANGLE POINT 1 P.C. P.T. ANGLE POINT 2	60+860.000 60+832.296 CD10+080.216 CD10+119.549	14.395 m 15.625 m 9.943 m 8.360 m
ROADWAY #1 - RAMP AB ROADWAY #2 - VT. RTE. 67A R=36 m TAPER = 30:1	ANGLE POINT 1 P.C. P.T. ANGLE POINT 2	AB10+094.279 AB10+061.726 61+067.298 61+030.242	12.001 m 13.202 m 11.560 m 10.395 m
ROADWAY #1 - VT. RTE. 67A ROADWAY #2 - RAMP AB R=30 m TAPER = 25:1	ANGLE POINT 1 P.C. P.T. ANGLE POINT 2	61+196.896 61+158.731 AB10+089.820 AB10+126.299	13.327 m 15.487 m 9.901 m 8.401 m

SIMPLE CURVE WITH TAPER LAYOUT

N.T.S.

SEE PLAN
DWG. NO. P-5

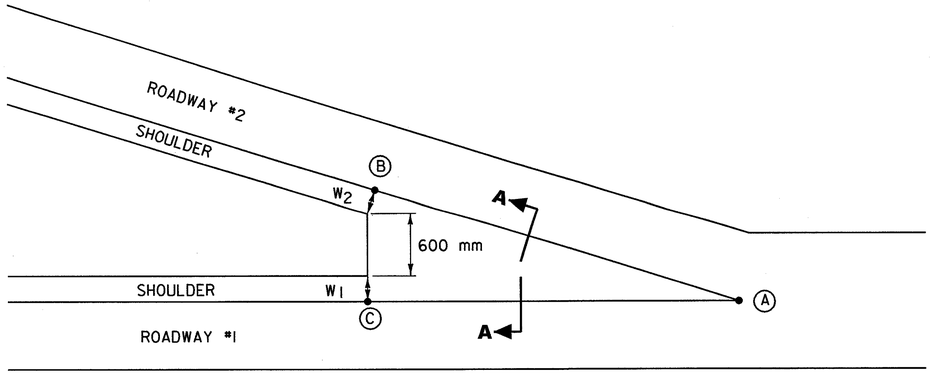
SEE PLAN
DWG. NO. P-6

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

FILE NAME =u:\5116\vaot\contract4\5116det1.dgn
DATE/TIME =07-SEP 2000
USER =1459

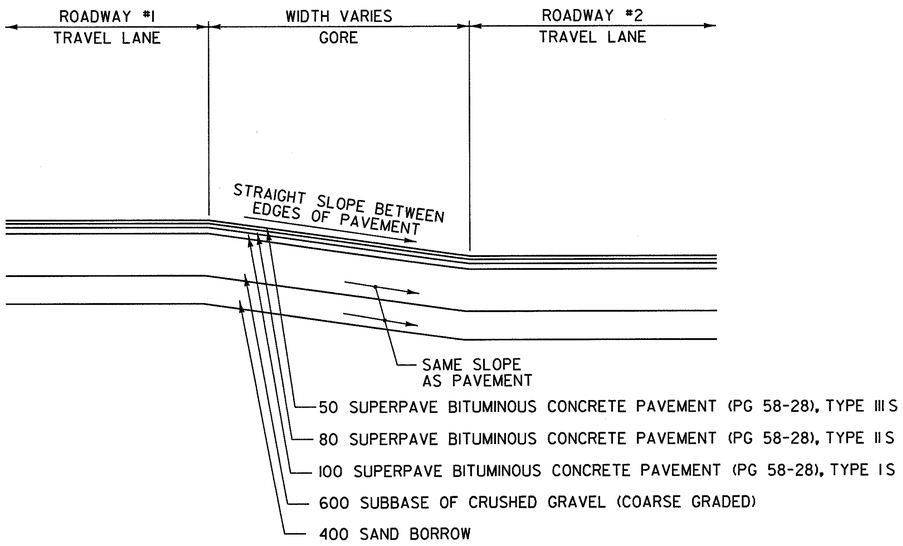
CURB RADII IMPROVEMENT DETAIL SHEET

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY D.E.G. DATE 9/00
DRAWN BY J.S.L. DATE 9/00
CHECKED BY T.P.K. DATE 9/00
DESIGN FILE NO. /5116/5116det1.dgn
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG NO. MD-1 SHEET 165 OF 385



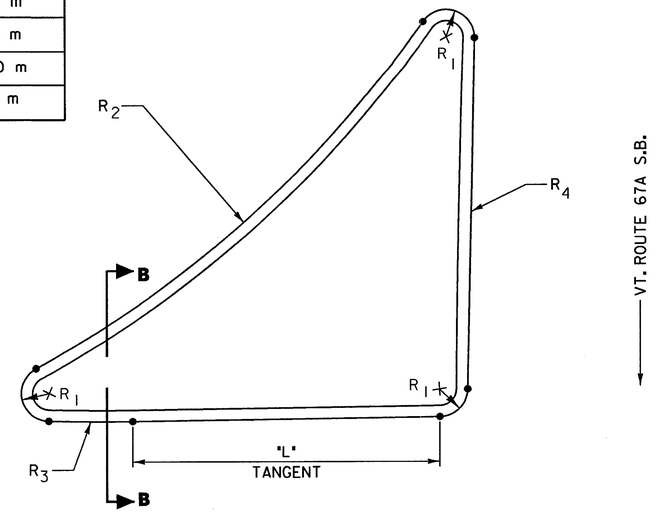
GORE DETAIL
N.T.S.

ROADWAY #1	ROADWAY #2	(A)	(B)	(C)	W_1	W_2
RAMP A	RAMP Y	A10+184.529	Y10+054.104	A10+130.493	1.2 m	2.4 m
RAMP Y	RAMP B	Y10+216.991	B10+202.458	Y10+189.552	2.4 m	1.2 m
RAMP X	RAMP C	X10+032.651	C10+066.858	X10+066.911	2.4 m	1.2 m
RAMP D	RAMP X	D10+217.568	X10+249.939	D10+146.163	1.2 m	2.4 m
RAMP Y	RAMP X	Y10+084.352	X10+140.439	Y10+140.394	1.2 m	1.2 m

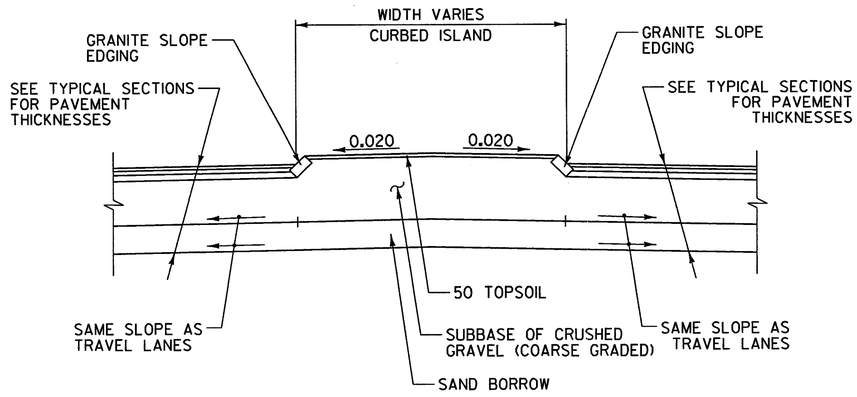


SECTION A-A
N.T.S.

	RAMP AB	RAMP CD
R_1	1.0 m	1.0 m
R_2	39.0 m	39.0 m
R_3	69.2 m	78.4 m
R_4	(TANGENT)	447.0 m
"L"	9.1 m	10.9 m



CURBED ISLAND DETAIL
N.T.S.



SECTION B-B
N.T.S.

ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

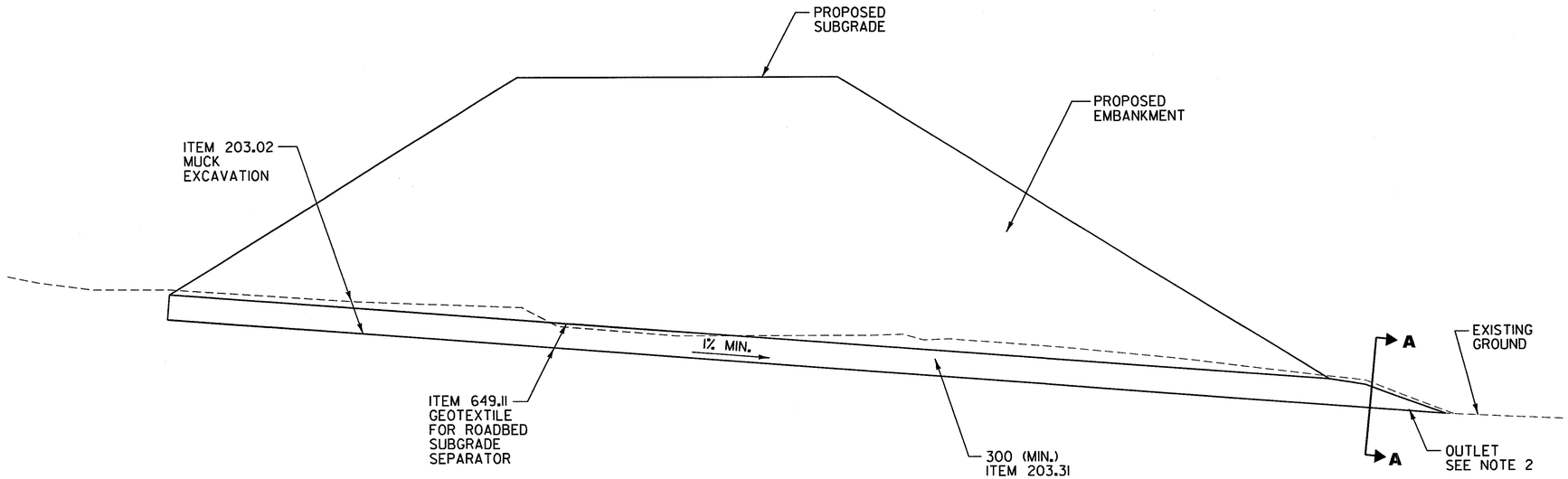
DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

GORE/CURBED ISLAND DETAIL SHEET

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY D.E.G. DATE 9/00
DRAWN BY E.C.D. DATE 9/00
CHECKED BY T.P.K. DATE 9/00
DESIGN FILE NO. N/A
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG NO. MD-2 SHEET 166 OF 385

FILE NAME =u:\5116\vaot\contract4\details.dgn
DATE/TIME =07 SEP 2000
USER =1459

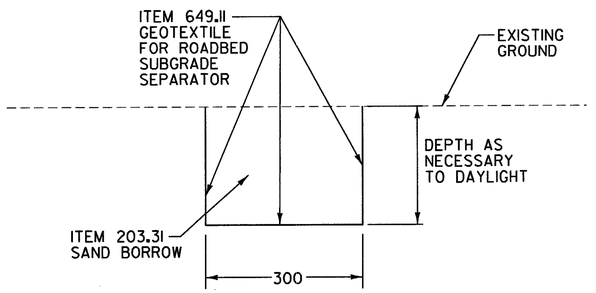
Metric



DRAINAGE BLANKET DETAIL
N.T.S.

NOTES:

1. IN AREAS WHERE SUBGRADE SOILS ARE WET OR COMPRISED OF ORGANIC MATERIALS, A DRAINAGE BLANKET SHALL BE INSTALLED, AS DIRECTED BY THE RESIDENT ENGINEER.
2. OUTLETS FOR THE DRAINAGE BLANKET SHALL BE INSTALLED AS DIRECTED BY THE RESIDENT ENGINEER.



SECTION A–A
N.T.S.

ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

DRAINAGE BLANKET DETAIL SHEET

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	D.E.G.	DATE 9/00
DRAWN BY	T.J.B.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

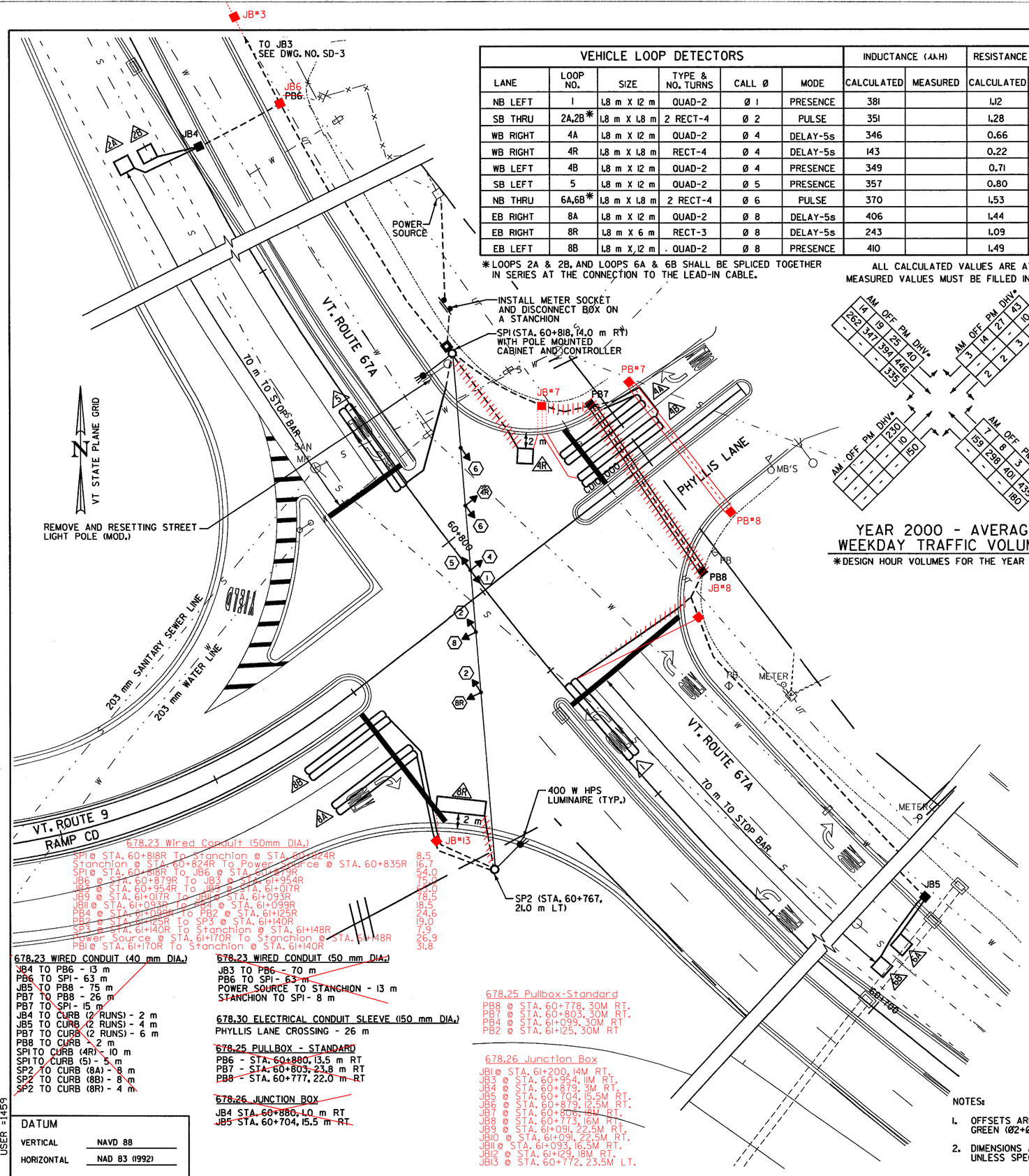
DESIGN FILE NO. N/A

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. MD-3 SHEET 167 OF 385

FILE NAME =u:\5116\vaot\contract4\md5.dgn
DATE/TIME =07 SEP 2000
USER =1459

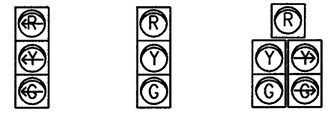


VEHICLE LOOP DETECTORS						INDUCTANCE (μH)		RESISTANCE Ω @ 25°C		(MΩ)
LANE	LOOP NO.	SIZE	TYPE & NO. TURNS	CALL Ø	MODE	CALCULATED	MEASURED	CALCULATED	MEASURED	LEAKAGE TO GROUND
NB LEFT	1	1.8 m X 12 m	QUAD-2	Ø 1	PRESENCE	381		1.12		
SB THRU	2A,2B*	1.8 m X 1.8 m	2 RECT-4	Ø 2	PULSE	351		1.28		
WB RIGHT	4A	1.8 m X 12 m	QUAD-2	Ø 4	DELAY-5s	346		0.66		
WB RIGHT	4R	1.8 m X 1.8 m	RECT-4	Ø 4	DELAY-5s	143		0.22		
WB LEFT	4B	1.8 m X 12 m	QUAD-2	Ø 4	PRESENCE	349		0.71		
SB LEFT	5	1.8 m X 12 m	QUAD-2	Ø 5	PRESENCE	357		0.80		
NB THRU	6A,6B*	1.8 m X 1.8 m	2 RECT-4	Ø 6	PULSE	370		1.53		
EB RIGHT	8A	1.8 m X 12 m	QUAD-2	Ø 8	DELAY-5s	406		1.44		
EB RIGHT	8R	1.8 m X 6 m	RECT-3	Ø 8	DELAY-5s	243		1.09		
EB LEFT	8B	1.8 m X 12 m	QUAD-2	Ø 8	PRESENCE	410		1.49		

*LOOPS 2A & 2B, AND LOOPS 6A & 6B SHALL BE SPLICED TOGETHER IN SERIES AT THE CONNECTION TO THE LEAD-IN CABLE.

ALL CALCULATED VALUES ARE AT THE CONTROLLER.
MEASURED VALUES MUST BE FILLED IN PRIOR TO TEST PERIOD.

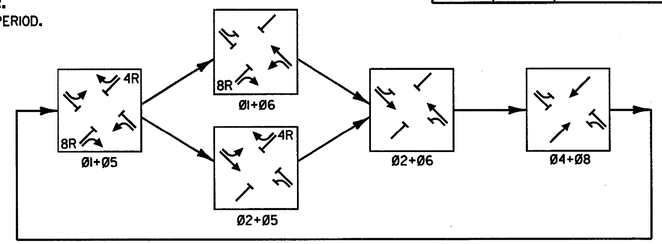
SIGNAL FACE ARRANGEMENT 300mm LENSES



LEGEND

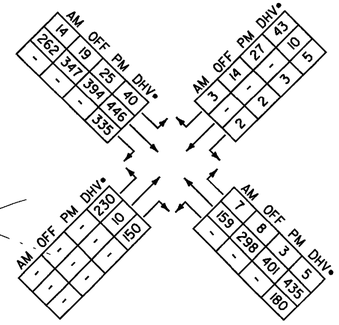
EXISTING	NEW	DESCRIPTION
		UTILITY POLE
		LUMINAIRE
		LIGHT OR WOOD POLE
		STRAIN POLE
		CONTROLLER CABINET
		PULLBOX/JUNCTION BOX
		SIGNAL HEAD
EX		CONDUIT
		VEHICLE LOOPS
		PEDESTAL POST
		OVERHEAD TRAFFIC SIGN
		STANCHION

PHASING DIAGRAM



YEAR 2000 - AVERAGE WEEKDAY TRAFFIC VOLUMES

*DESIGN HOUR VOLUMES FOR THE YEAR 2020



CONTROLLER TIMING CHART

LOCAL PROGRAMMING	PHASE							
	1	2	3	4	5	6	7	8
MINIMUM GREEN	8	17		12	8	17		12
EXTENSION	2.0	5.0		2.0	2.0	5.0		2.0
YELLOW CLEARANCE	4.0	4.0		4.0	4.0	4.0		4.0
ALL RED CLEARANCE	2.0	2.0		2.0	2.0	2.0		2.0
MAX. GREEN 1	14	34		24	14	34		24
WALK	-	-		-	-	-		-
FLASHING DON'T WALK	-	-		-	-	-		-
RECALL	OFF	MINIMUM		OFF	OFF	MINIMUM		OFF
MEMORY	LOCK	LOCK		NON-LOCK	LOCK	LOCK		NON-LOCK

COORDINATION DATA CHART

CYCLE	SPLIT								OFFSET
	1	2	3	4	5	6	7	8	
CYCLE 1 - 90 SEC. 6:00 AM - 9:00 AM	20s/22%	40s/45%		30s/33%	20s/22%	40s/45%		30s/33%	48s/53%
CYCLE 2 - 90 SEC. 9:00 AM - 10:00 PM	20s/22%	40s/45%		30s/33%	20s/22%	40s/45%		30s/33%	4s/4%
FREE OPERATION 10:00 PM - 12:00 AM									
FLASHING MODE 12:00 AM - 6:00 AM									

TABLE OF CHANGE SEQUENCE

FACE	R/W	Ø1+Ø5 CLEAR TO Ø1+Ø6	Ø1+Ø5 CLEAR TO Ø2+Ø5	Ø1+Ø5 CLEAR TO Ø2+Ø6	R/W	Ø1+Ø6 CLEAR TO Ø2+Ø6	R/W	Ø2+Ø5 CLEAR TO Ø2+Ø6	R/W	Ø2+Ø6 CLEAR TO Ø1+Ø6	Ø2+Ø6 CLEAR TO Ø2+Ø5	Ø2+Ø6 CLEAR TO ALL OTHERS	R/W	Ø4+Ø8 CLEAR TO ALL OTHERS	FLASHING OPERATION
1	~~G~~	~~G~~	~~G~~	~~Y~~	~~R~~	~~Y~~	~~R~~	~~R~~	~~G~~	~~Y~~	~~R~~	~~R~~	~~R~~	~~R~~	~~FR~~
2	R	R	R	R	R	R	R	R	G	G	G	Y	R	R	FY
4	R	R	R	R	R	R	R	R	R	R	R	R	R	G	FR
4R	~~R~~G	~~R~~Y	R	~~R~~G	~~R~~G	~~R~~Y	R	R	R	~~R~~G	~~R~~Y	R	R	G	FR
5	~~G~~	~~Y~~	~~R~~	~~G~~	~~G~~	~~Y~~	~~R~~	~~R~~	~~R~~	~~G~~	~~Y~~	~~R~~	~~R~~	~~R~~	~~FR~~
6	R	R	R	R	R	R	G	G	G	R	R	R	G	Y	FY
8	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	FR
8R	~~R~~G	~~R~~G	~~R~~G	~~R~~Y	R	~~R~~Y	R	~~R~~G	~~R~~Y	R	R	R	R	G	FR

678.23 Wired Conduit (50mm DIA.)

SPI @ STA. 60+818R To Stanchion @ STA. 61+824R	8.5
Stanchion @ STA. 60+824R To Power Source @ STA. 60+835R	16.7
SPI @ STA. 60+818R To JB6 @ STA. 60+879R	54.0
JB6 @ STA. 60+879R To JB3 @ STA. 61+954R	75.0
JB3 @ STA. 60+954R To JB9 @ STA. 61+017R	54.0
JB9 @ STA. 61+017R To JBII @ STA. 61+093R	78.5
JBII @ STA. 61+093R To PB4 @ STA. 61+099R	18.5
PB4 @ STA. 61+099R To PB2 @ STA. 61+125R	24.6
PB2 @ STA. 61+125R To SP3 @ STA. 61+140R	19.0
SP3 @ STA. 61+140R To Stanchion @ STA. 61+148R	7.9
Power Source @ STA. 61+170R To Stanchion @ STA. 61+148R	26.9
PBII @ STA. 61+170R To Stanchion @ STA. 61+140R	31.8

678.23 WIRED CONDUIT (40 mm DIA.)

JB4 TO PB6 - 13 m
PB6 TO SPI - 63 m
JB5 TO PB8 - 75 m
PB7 TO PB8 - 26 m
PB7 TO SPI - 15 m
JB4 TO CURB (2 RUNS) - 2 m
JB5 TO CURB (2 RUNS) - 4 m
PB7 TO CURB (2 RUNS) - 6 m
PB8 TO CURB - 2 m
SPI TO CURB (4R) - 10 m
SPI TO CURB (5) - 5 m
SP2 TO CURB (8A) - 8 m
SP2 TO CURB (8B) - 8 m
SP2 TO CURB (8R) - 4 m

678.23 WIRED CONDUIT (50 mm DIA.)

JB3 TO PB6 - 70 m
PB6 TO SPI - 63 m
POWER SOURCE TO STANCHION - 13 m
STANCHION TO SPI - 8 m

678.30 ELECTRICAL CONDUIT SLEEVE (150 mm DIA.)

PHYLLIS LANE CROSSING - 26 m

678.25 PULLBOX - STANDARD

PB6 - STA. 60+880, 13.5 m RT
PB7 - STA. 60+803, 23.8 m RT
PB8 - STA. 60+777, 22.0 m RT

678.26 JUNCTION BOX

JB4 STA. 60+880, 1.0 m RT
JB5 STA. 60+704, 15.5 m RT

678.25 Pullbox-Standard

PB8 @ STA. 60+778, 30M RT.
PB7 @ STA. 60+803, 30M RT.
PB4 @ STA. 61+099, 30M RT
PB2 @ STA. 61+125, 30M RT

678.26 Junction Box

JBI @ STA. 61+200, 14M RT.
JB3 @ STA. 60+954, 11M RT.
JB4 @ STA. 60+879, 3M RT.
JB5 @ STA. 60+704, 15.5M RT.
JB6 @ STA. 60+879, 12.5M RT.
JB7 @ STA. 60+806, 8M RT.
JB8 @ STA. 60+773, 16M RT.
JB9 @ STA. 61+091, 22.5M RT.
JBI0 @ STA. 61+091, 22.5M RT.
JBII @ STA. 61+093, 16.5M RT.
JBI2 @ STA. 61+129, 18M RT.
JBI3 @ STA. 60+772, 23.5M LT.

0 5 10 m
1:250 @ FULL SIZE

NOTES:
1. OFFSETS ARE REFERENCED TO BEGINNING OF VT. ROUTE 67A GREEN (Ø2+Ø6)
2. DIMENSIONS ARE MEASURED TO FACE OF CURB UNLESS SPECIFIED OTHERWISE.

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

TRAFFIC SIGNAL PLAN

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY M.R.W. DATE 9/00
DRAWN BY K.H.D. DATE 9/00
CHECKED BY T.R.J. DATE 9/00

DESIGN FILE NO. TSD-CD.DGN
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG. NO. SD-1 SHEET 168 OF 385

FILE NAME = u:\5116\vaot\contract4\tsd-cd.dgn
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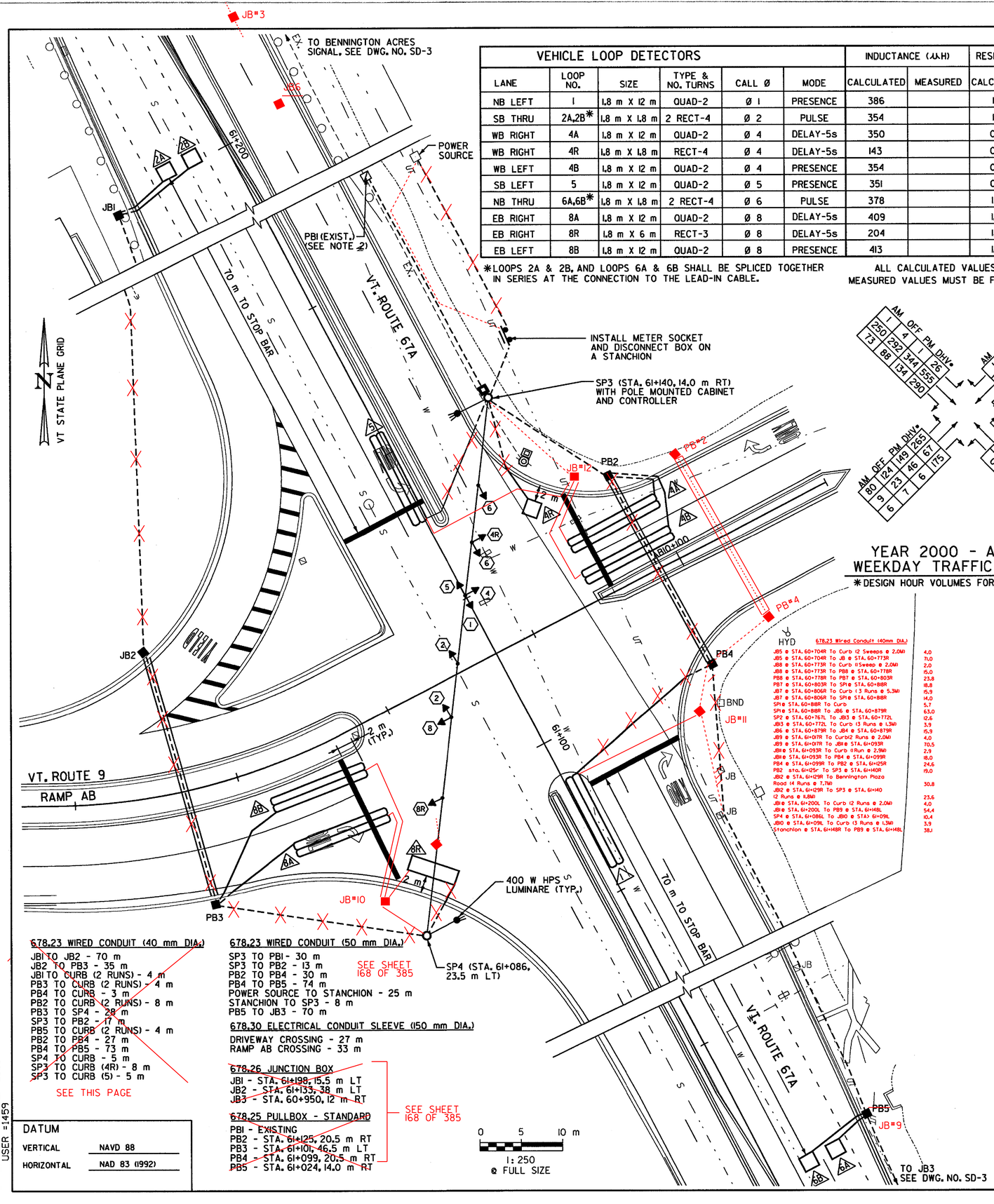
USER = 1459



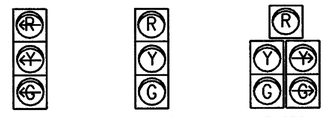
VEHICLE LOOP DETECTORS

LANE	LOOP NO.	SIZE	TYPE & NO. TURNS	CALL Ø	MODE	INDUCTANCE (μH) CALCULATED	INDUCTANCE (μH) MEASURED	RESISTANCE Ω @ 25°C CALCULATED	RESISTANCE Ω @ 25°C MEASURED	(MΩ) LEAKAGE TO GROUND
NB LEFT	1	1.8 m X 12 m	QUAD-2	Ø 1	PRESENCE	386		1.19		
SB THRU	2A,2B*	1.8 m X 1.8 m	2 RECT-4	Ø 2	PULSE	354		1.31		
WB RIGHT	4A	1.8 m X 12 m	QUAD-2	Ø 4	DELAY-5s	350		0.72		
WB RIGHT	4R	1.8 m X 1.8 m	RECT-4	Ø 4	DELAY-5s	143		0.22		
WB LEFT	4B	1.8 m X 12 m	QUAD-2	Ø 4	PRESENCE	354		0.77		
SB LEFT	5	1.8 m X 12 m	QUAD-2	Ø 5	PRESENCE	351		0.73		
NB THRU	6A,6B*	1.8 m X 1.8 m	2 RECT-4	Ø 6	PULSE	378		1.63		
EB RIGHT	8A	1.8 m X 12 m	QUAD-2	Ø 8	DELAY-5s	409		1.48		
EB RIGHT	8R	1.8 m X 6 m	RECT-3	Ø 8	DELAY-5s	204		1.00		
EB LEFT	8B	1.8 m X 12 m	QUAD-2	Ø 8	PRESENCE	413		1.54		

*LOOPS 2A & 2B, AND LOOPS 6A & 6B SHALL BE SPLICED TOGETHER IN SERIES AT THE CONNECTION TO THE LEAD-IN CABLE.

ALL CALCULATED VALUES ARE AT THE CONTROLLER. MEASURED VALUES MUST BE FILLED IN PRIOR TO TEST PERIOD.

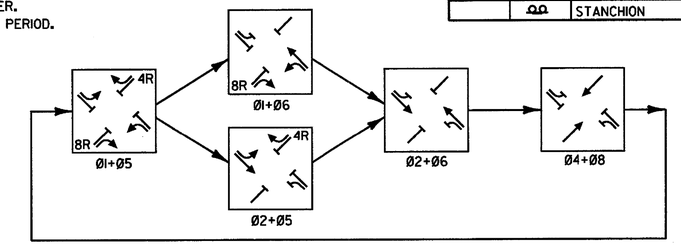
SIGNAL FACE ARRANGEMENT 300mm LENSES



LEGEND

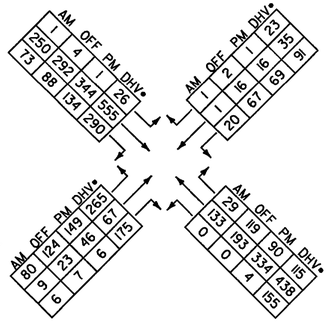
EXISTING	NEW	DESCRIPTION
		UTILITY POLE
		LUMINAIRE
		LIGHT OR WOOD POLE
		STRAIN POLE
		CONTROLLER CABINET
		PULLBOX/JUNCTION BOX
		SIGNAL HEAD
		CONDUIT
		VEHICLE LOOPS
		PEDESTAL POST
		OVERHEAD TRAFFIC SIGN
		STANCHION

PHASING DIAGRAM



YEAR 2000 - AVERAGE WEEKDAY TRAFFIC VOLUMES

*DESIGN HOUR VOLUMES FOR THE YEAR 2020



CONTROLLER TIMING CHART

LOCAL PROGRAMMING	PHASE 1	2	3	4	5	6	7	8
MINIMUM GREEN	8	17		12	8	17		12
EXTENSION	2.0	5.0		2.0	2.0	5.0		2.0
YELLOW CLEARANCE	4.0	4.0		4.0	4.0	4.0		4.0
ALL RED CLEARANCE	2.0	2.0		2.0	2.0	2.0		2.0
MAX. GREEN 1	14	29		29	14	29		29
WALK	-	-		-	-	-		-
FLASHING DON'T WALK	-	-		-	-	-		-
RECALL	OFF	MINIMUM		OFF	OFF	MINIMUM		OFF
MEMORY	LOCK	LOCK		NON-LOCK	LOCK	LOCK		NON-LOCK

COORDINATION DATA CHART

CYCLE	SPLIT 1	2	3	4	5	6	7	8	OFFSET
CYCLE 1- 90 SEC. 6:00 AM - 9:00 AM	20s/22%	35s/39%		35s/39%	20s/22%	35s/39%		35s/39%	10s/11%
CYCLE 2 - 90 SEC. 9:00 AM - 10:00 PM	20s/22%	35s/39%		35s/39%	20s/22%	35s/39%		35s/39%	8s/9%
FREE OPERATION 10:00 PM - 12:00 AM									
FLASHING MODE 12:00 AM - 6:00 AM									

TABLE OF CHANGE SEQUENCE

FACE	Ø1+Ø5 R/W	CLEAR TO Ø1+Ø6	Ø2+Ø5	Ø2+Ø6	Ø1+Ø6 R/W	CLEAR TO Ø2+Ø6	Ø2+Ø5 R/W	CLEAR TO Ø2+Ø6	Ø2+Ø6 R/W	CLEAR TO Ø1+Ø6	Ø2+Ø5	ALL OTHERS	Ø4+Ø8 R/W	CLEAR TO ALL OTHERS	FLASHING OPERATION
1	~~G~~	~~G~~	~~G~~	~~Y~~ ~~R~~	~~Y~~ ~~R~~	~~G~~	~~Y~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~ ~~R~~	~~FR~~
2	R	R	R	R	R	R	R	R	G	G	G	Y	R	R R	FY
4	R	R	R	R	R	R	R	R	R	R	R	R	G	Y R	FR
4R	~~R~~ ~~G~~	~~R~~ ~~Y~~	R	~~R~~ ~~G~~	~~R~~ ~~Y~~	R	R	R	~~R~~ ~~G~~	~~R~~ ~~Y~~	R	R	G	Y R	FR
5	~~G~~	~~Y~~	~~R~~	~~G~~ ~~G~~	~~Y~~	~~R~~	~~R~~	~~R~~	~~R~~	~~G~~	~~Y~~	~~R~~	~~R~~	~~R~~ ~~R~~	~~FR~~
6	R	R	R	R	R	R	G	G	G	R	R	R	G	G G	FY
8	R	R	R	R	R	R	R	R	R	R	R	R	G	Y R	FR
8R	~~R~~ ~~G~~	~~R~~ ~~G~~	~~R~~ ~~G~~	~~R~~ ~~Y~~	R	~~R~~ ~~Y~~	R	~~R~~ ~~G~~	~~R~~ ~~Y~~	R	R	R	G	Y R	FR

678.23 WIRED CONDUIT (40 mm DIA.)
JBI TO JB2 - 70 m
JB2 TO PB3 - 35 m
JBI TO CURB (2 RUNS) - 4 m
PB3 TO CURB (2 RUNS) - 4 m
PB4 TO CURB - 3 m
PB2 TO CURB (2 RUNS) - 8 m
PB3 TO SP4 - 28 m
SP3 TO PB2 - 17 m
PB5 TO CURB (2 RUNS) - 4 m
PB2 TO PB4 - 27 m
PB4 TO PB5 - 73 m
SP4 TO CURB - 5 m
SP3 TO CURB (4R) - 8 m
SP3 TO CURB (5) - 5 m
SEE THIS PAGE

678.23 WIRED CONDUIT (50 mm DIA.)
SP3 TO PBI - 30 m
SP3 TO PB2 - 13 m
PB2 TO PB4 - 30 m
PB4 TO PB5 - 74 m
POWER SOURCE TO STANCHION - 25 m
STANCHION TO SP3 - 8 m
PB5 TO JB3 - 70 m
SEE SHEET 168 OF 385

678.30 ELECTRICAL CONDUIT SLEEVE (150 mm DIA.)
DRIVEWAY CROSSING - 27 m
RAMP AB CROSSING - 33 m

678.26 JUNCTION BOX
JBI - STA. 61+198, 15.5 m LT
JB2 - STA. 61+133, 38 m LT
JB3 - STA. 60+950, 12 m RT

678.25 PULLBOX - STANDARD
PBI - EXISTING
PB2 - STA. 61+125, 20.5 m RT
PB3 - STA. 61+101, 46.5 m LT
PB4 - STA. 61+099, 20.5 m RT
PB5 - STA. 61+024, 14.0 m RT
SEE SHEET 168 OF 385

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

NOTES:
1. OFFSETS ARE REFERENCED TO BEGINNING OF VT ROUTE 67A GREEN (Ø2+Ø6)
2. THE EXISTING INTERCONNECT CABLE SHALL BE DISCONNECTED FROM THE EXISTING CONTROLLER AND PULLED BACK TO PBI. THIS CABLE SHALL THEN BE RUN THROUGH NEW CONDUIT TO THE PROPOSED CONTROLLER ON SP3. THIS WORK SHALL BE PAID FOR AS PART OF ITEM 678.23
3. DIMENSIONS ARE MEASURED TO FACE OF CURB UNLESS SPECIFIED OTHERWISE.

TRAFFIC SIGNAL PLAN

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	M.R.W.	DATE 9/00
DRAWN BY	K.H.D.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. TSD-AB.DGN
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG. NO. SD-2 SHEET 169 OF 385

FILE NAME =u:\5116\vaot\contract4\tsd-ab.dgn
DATE/TIME =07 SEP 2000
USER =1459

Metric

VT STATE PLANE GRID

SEE DWG. NO. SD-2 FOR SPECIFIC CONDUIT, PULLBOX/JUNCTION BOX, AND CABLE LOCATIONS AT THIS INTERSECTION.

SEE DWG. NO. SD-1 FOR SPECIFIC CONDUIT, PULLBOX/JUNCTION BOX, AND CABLE LOCATIONS AT THIS INTERSECTION.

AMES / PRICE CHOPPER PLAZA

BENNINGTON ACRES

EXISTING SYSTEM MASTER IN EXISTING BASE MOUNTED CABINET

PB1 PB2 PB4 PB5 JB3 PB6

EX. EX. EX.

VT. ROUTE 67A

VT. ROUTE 9 (WESTBOUND)

VT. ROUTE 9 (EASTBOUND)

VT. RTE. 9 - RAMP AB

VT. RTE. 9 - RAMP CD

PHYLLIS LANE

MORSE ROAD

LEGEND

EXISTING	NEW	DESCRIPTION
◎	○	STRAIN POLE
▣	■	CONTROLLER CABINET
▨	■	PULLBOX/JUNCTION BOX
–EX–	– – –	CONDUIT

NOTES:

1. SHIELDED COMMUNICATIONS CABLE WITH FOUR TWISTED PAIR OF TELEPHONE GRADE WIRE (19 AWG) SHALL BE USED FOR INTERCONNECTED SIGNAL COORDINATION. THIS CABLE SHALL BE PAID FOR UNDER ITEM 678.23 WIRED CONDUIT.
2. THE INTERCONNECT CABLE SHIELD MUST BE GROUNDED AT EACH LOCATION OR WHEREVER THE OUTSIDE INSULATION IS BROKEN.
3. MAXIMUM PULLBOX/JUNCTION BOX SPACING FOR INTERCONNECT CABLE RUN BETWEEN INTERSECTION IS 75 m.

0 20 40 m

1: 1000

@ FULL SIZE

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

SIGNAL INTERCONNECT PLAN

SURVEYED BY C.H.A. & V.S.E. DATE 12/93

DESIGNED BY M.R.W. DATE 9/00

DRAWN BY K.H.D. DATE 9/00

CHECKED BY T.R.J. DATE 9/00

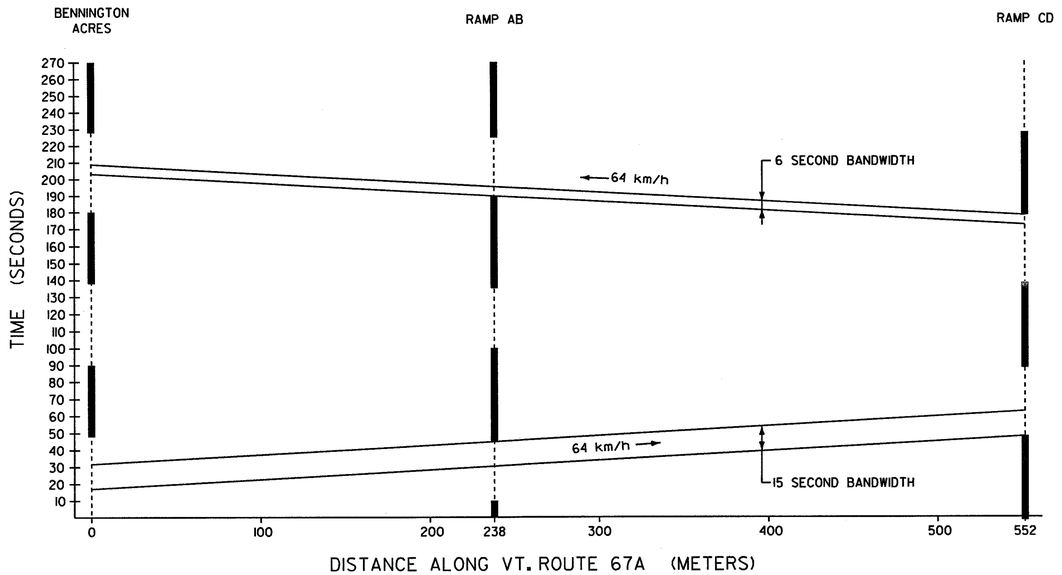
DESIGN FILE NO. SIPI.DGN

PROJ. NAME BENNINGTON - HOOSICK D.P.J. 014611 C14

PROJ. NO. P.I.N. 1306.60

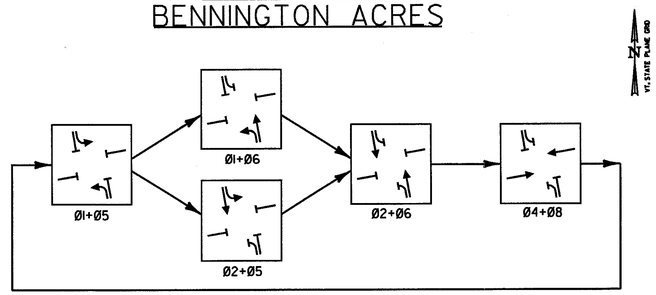
DWG NO. SD-3 SHEET 170 OF 385

FILE NAME =n:\5116\vat\contract4\sipi.dgn
DATE/TIME =07 SEP 2000
USER =1459



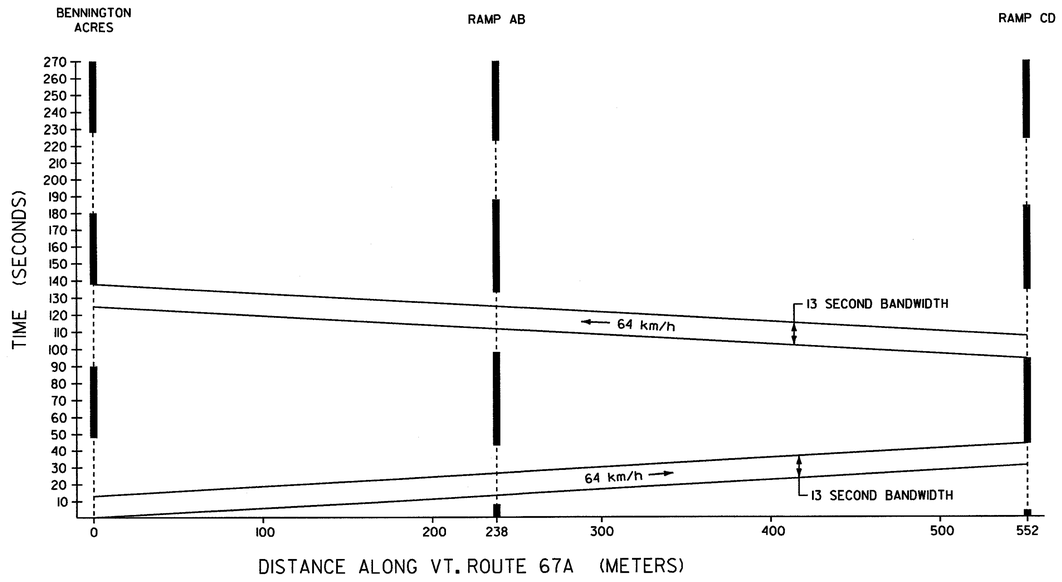
TIME - SPACE DIAGRAM - AM PEAK PERIOD

PHASING FOR BENNINGTON ACRES



NOTE:
Ø2 AND Ø6 REFER TO VT. ROUTE 67A THROUGH MOVEMENTS SOUTHBOUND AND NORTHBOUND RESPECTIVELY.

AM PEAK PERIOD - 90 SECOND CYCLE (6:00 AM - 9:00 AM)									
	SPLIT								
INTERSECTION	1	2	3	4	5	6	7	8	OFFSET
VT ROUTE 67A AT BENNINGTON ACRES	18s/20%	48s/53%		24s/27%	18s/20%	48s/53%		24s/27%	0s/0%
VT ROUTE 67A AT RAMP AB	20s/22%	35s/39%		35s/39%	20s/22%	35s/39%		35s/39%	10s/11%
VT ROUTE 67A AT RAMP CD	20s/22%	40s/45%		30s/33%	20s/22%	40s/45%		30s/33%	48s/53%



TIME - SPACE DIAGRAM - PM PEAK PERIOD

PM PEAK PERIOD - 90 SECOND CYCLE (9:00 AM - 10:00 PM)									
	SPLIT								
INTERSECTION	1	2	3	4	5	6	7	8	OFFSET
VT ROUTE 67A AT BENNINGTON ACRES	18s/20%	48s/53%		24s/27%	18s/20%	48s/53%		24s/27%	0s/0%
VT ROUTE 67A AT RAMP AB	20s/22%	35s/39%		35s/39%	20s/22%	35s/39%		35s/39%	8s/9%
VT ROUTE 67A AT RAMP CD	20s/22%	40s/45%		30s/33%	20s/22%	40s/45%		30s/33%	4s/4%

NOTES:

1. ALL SIGNALS SHALL RUN FREE OPERATIONS FROM 10:00 PM TO 12:00 AM, AND RUN IN FLASHING MODE 12:00 AM TO 6:00 AM.
2. SEE SIGNAL DESIGN PLANS (DWG. NOS. SD-1 AND SD-2) FOR PHASING AT THE PROPOSED RAMP SIGNALS.
3. OFFSETS ARE REFERENCED TO THE BEGINNING OF Ø2 + Ø6 GREEN.

SIGNAL COORDINATION DATA SHEET

SURVEYED BY N/A DATE N/A
DESIGNED BY M.R.W. DATE 9/00
DRAWN BY K.H.D. DATE 9/00
CHECKED BY T.R.J. DATE 9/00
DESIGN FILE NO. SCD1.DGN
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG. NO. SD-4 SHEET 171 OF 385

FILE NAME =u:\S1E6\vaot\contract4\scd1.dgn
DATE/TIME =07 SEP 2000
USER =1459

TRAFFIC SIGNAL NOTES

A. NEW EQUIPMENT

1.) ALL SIGNAL HEADS SHALL HAVE 300 mm POLYCARBONATE SECTIONS. THE HOUSING SHALL BE FEDERAL YELLOW WITH FLAT BLACK DOORS AND VISORS IN AREAS OF POOR VISIBILITY. ALL SPAN WIRE MOUNTED TRAFFIC SIGNALS SHALL HAVE DISCONNECT HANGERS WITH NON-ALUMINUM BALANCE ADJUSTER FITTINGS.

2.) TRAFFIC SIGNAL CONTROLLER & CABINET. EACH UNIT SHALL BE A VEHICLE, ACTUATED SOLID STATE CONTROLLER CAPABLE OF PRODUCING THE TIMING AND COORDINATION (IF REQUIRED) SHOWN ON THE PLANS. ALL CONTROLLERS SHALL HAVE A MINIMUM OF 8 PHASES. EACH PHASE (USED OR UNUSED) SHALL HAVE A LOAD SWITCH AND ALL NECESSARY FLASH TRANSFER RELAYS. EACH INSTALLATION SHALL INCLUDE TIME CLOCK(S) WITH BATTERY BACKUP, 12 CHANNEL CONFLICT MONITOR WITH STOP TIMING FUNCTION, LED DISPLAY LOAD SWITCHES (INPUT SIDE), REMOTE FLASHER, VEHICLE DETECTOR AMPLIFIERS, SURGE PROTECTION, LAMP RECEPTACLE AND CONVENIENCE OUTLET WITH GROUND FAULT INTERRUPTION. ALL CONFLICT MONITORS SHALL BE CAPABLE OF RECORDING AT LEAST 9 "EVENTS". ALL LOAD SWITCHES SHALL BE LABELED ON THE CABINET WALL. ALL CONTROLLERS SHALL HAVE DUAL MAXIMUM CAPABILITIES AND TIME BASE COORDINATORS (TBC), IF REQUIRED, WHICH SHALL PROVIDE FOUR CYCLE LENGTHS WITH MULTIPLE PROGRAMS PER CYCLE. EACH SYSTEM SHALL BE POLE OR GROUND MOUNTED IN A PREWIRED RAINPROOF NEMA (3R) CABINET WITH A POLICE DOOR HAVING STANDARD SWITCHES (MAIN ON/OFF, SIGNAL ON/OFF, AND FLASH). THERE SHALL BE A WATER PROOF PLASTIC ENVELOPE ATTACHED TO THE CABINET INTERIOR FOR STORAGE OF THE CONTROLLER MANUAL AND PLAN SHEETS. ALL CONTROLLERS SHALL BE MENU DRIVEN, KEYBOARD ENTRY. ALL CONTROLLERS SHALL BE CAPABLE OF TELEMETRY INTERCONNECTED COORDINATION WITH A KMC-10,000 (ECONOLITE) MASTER CONTROLLER.

3.) THE CONTROLLERS/TBC SHALL BE SHIPPED FROM THE FACTORY PRESET AND A REPRESENTATIVE OF THE MANUFACTURER SHALL BE ON THE PROJECT SITE FOR TURN ON OF THE UNITS. IN ADDITION TO EQUIPMENT FURNISHED TO PROVIDE A FUNCTIONAL SIGNAL SYSTEM, THE CONTRACTOR SHALL SUPPLY THE FOLLOWING SPARE PARTS: ONE LOAD SWITCH, ONE TRANSFER RELAY AND ONE EEPROM PER INTERSECTION. THIS EQUIPMENT MAY BE USED DURING THE CONSTRUCTION PERIOD IN THE CABINET PRIOR TO COMPLETION. THE CONTROLLER CABINET(S) SHALL HAVE A POLISHED ALUMINUM NATURAL FINISH AND BE PROVIDED WITH A #2 LOCK, A MASTER #3220 PADLOCK AND A STANDARD POLICE DOOR LOCK. EACH LOCK SHALL HAVE 2 KEYS. EACH CABINET SHALL INCLUDE A 50° C -110° C FAN/THERMOSTAT. THE CABINET DOOR SHALL BE SUPPLIED WITH TEST SWITCHES FOR EACH PHASE. ANY DOOR MOUNTED TOGGLE SWITCHES SHALL BE PROTECTED FROM ACCIDENTAL BUMPING. WHEN TBC'S ARE USED, THEY SHALL BE PROGRAMMED SO AS TO AUTOMATICALLY ADJUST FOR DAYLIGHT SAVINGS TIME CHANGES (APRIL - FIRST SUNDAY, OCTOBER - LAST SUNDAY).

4.) BACKPLATES SHALL BE PLACED ON ALL EAST/WEST FACING SIGNAL HEADS.

5.) ALL NEW EQUIPMENT SHALL MEET OR EXCEED NEMA STANDARDS AND IMSA OR ITE SPECIFICATIONS, WHERE APPLICABLE.

6.) THE ELECTRIC CABLE SHALL BE LASHED TO THE SPAN WIRE WITH STAINLESS ALLOY 430 LASHING (SPINNING) WIRE.

7.) STANDARD WIRE SHALL BE USED FOR ALL UNSUPPORTED AND SPAN WIRE SUPPORTED WIRE.

8.) A MAIN DISCONNECT BREAKER SHALL BE INSTALLED IN A RAINPROOF (NEMA 3R), LOCKED CABINET ON A STANCHION.

9.) STEEL STRAIN POLES SHALL BE DESIGNED USING THE LATEST REVISION OF AASHTO'S "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS". ALL STRAIN POLES SHALL BE BACKRAKED AS SPECIFIED ON THE PLANS. POLE DIAMETER, OR ON AN ATTACHED METAL TAG.

B. SIGNAL OPERATION

1.) SIGNAL TIMING SHOWN ON THE PLANS MAY REQUIRE FINE-TUNING IN THE FIELD BASED ON TRAFFIC OBSERVATION AND/OR ADDITIONAL FIELD STUDIES.

2.) NEW TRAFFIC SIGNAL(S) SHALL BE OPERATED IN THE FLASH MODE FOR A MINIMUM OF 48 HOURS PRIOR TO BEING PUT INTO FULL OPERATION. FULL OPERATION SHALL NOT BE INITIATED EXCEPT IN THE PRESENCE OF THE TRAFFIC AND SAFETY ENGINEER OR HIS DESIGNATED REPRESENTATIVE.

3.) THE TRAFFIC SIGNALS SHALL NOT OPERATE WITHOUT THE PAVEMENT MARKINGS AND SIGNAL RELATED SIGNING IN PLACE.

4.) ALL SIGNALS SHALL DWELL ON VT. ROUTE 67A THROUGH MOVEMENT UNLESS OTHERWISE NOTED.

5.) ALL SIGNALS SHALL BE WIRED SUCH THAT NO MORE THAN TWO THROUGH FACES (NORTH-SOUTH AND/OR EAST-WEST) ARE WIRED INTO ONE LOAD SWITCH EVEN THOUGH TWO APPROACHES MAY TIME DURING THE SAME PHASE.

C. PULLBOXES AND JUNCTION BOXES

1.) PULLBOXES AND JUNCTION BOXES ARE DETAILED ON VAOT STANDARD SHEET E-173M. MINIMUM JUNCTION BOX SIZE SHALL BE 450 mm X 300 mm X 300 mm (A X B X C), OR LARGER AS REQURED BY THE ELECTRICAL CODE.

D. TRAFFIC SIGNAL CONDUIT

1.) ALL TRAFFIC SIGNAL CONDUIT SHALL BE PVC, WITH SCHEDULE 40 MINIMUM USED UNDERGROUND AND SCHEDULE 80 USED ABOVE GROUND.

2.) MINIMUM CONDUIT SIZES SHALL BE:
A) 40 mm (DN41) FOR LOOP LEAD-INS
B) 50 mm (DN53) FOR ALL OTHERS
SEE CHART ON VAOT STANDARD E-172M FOR DESIGN VALUES

3.) WHEN CONDUIT IS PLACED BELOW THE ROADWAY OR ACROSS SIDE ROADS, IT SHALL BE PLACED IN A PVC ELECTRICAL CONDUIT SLEEVE, SIZE AS SHOWN ON THE PLANS (150 mm MINIMUM)

4.) THE MINIMUM DEPTH BELOW THE ROADWAY SURFACE FOR THE PLACEMENT OF SLEEVES & CONDUIT SHALL BE 1m. THE MINIMUM DEPTH BELOW GROUND FOR THE PLACEMENT OF SLEEVES AND CONDUIT SHALL BE 600 mm.

5.) 150 mm WIDE RED PLASTIC MARKING TAPE SHALL BE PLACED IN THE EXCAVATED TRENCH 150 mm TO 300 mm BELOW THE FINISHED GRADE FOR ALL CONDUIT AND SLEEVE RUNS EXCEPT THOSE JACKED UNDER THE ROADWAY.

6.) OPEN CUTS IN EXISTING BITUMINOUS CONCRETE PAVEMENT REQUIRED TO PLACE THE 150 mm PVC ELECTRICAL CONDUIT SLEEVE SHALL BE PERFORMED IN ACCORDANCE WITH VAOT STANDARD D-20M. A SAWCUT SHALL BE PERFORMED IN THE EXISTING PAVEMENT SURFACE PRIOR TO EXCAVATION. PAYMENT WILL BE CONSIDERED SUBSIDIARY TO ITEM 490.30. THE SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) PLACED SUBSEQUENT TO THE INSTALLATION OF THE 150 mm PVC ELECTRICAL SLEEVE AND BACKFILL MATERIAL WILL BE PAID UNDER ITEM 490.30 AND WILL CONSIST OF THE FOLLOWING:
50 mm SURFACE COURSE, TYPE III S
(AS DIRECTED BY RESIDENT ENGINEER)

30 mm LEVELING COURSE, TYPE IV S
(AS DIRECTED BY RESIDENT ENGINEER)

80 mm BINDER COURSE, TYPE II S
(AS DIRECTED BY RESIDENT ENGINEER)

100 mm BASE COURSE, TYPE I S

E. VEHICLE LOOP DETECTORS

1.) SEE VAOT STANDARD E-172M

2.) ALL LOOP AND LEAD-IN WIRE SHALL BE 3.31 mm^2

F. STREET LIGHTING

1.) EACH STRAIN POLE SHALL HAVE A 400 WATT HIGH PRESSURE SODIUM LUMINAIRE INSTALLED WITH A 10.7 m +/- MOUNTING HEIGHT ABOVE THE EDGE OF PAVEMENT. LUMINAIRES SHALL BE DESIGNED FOR STREET LIGHTING AND THE INDICATED LIGHT DISTRIBUTION, THEY SHALL INCLUDE AN ALUMINUM HOUSING WITH EASY ACCESS TO THE BALLAST ASSEMBLY, PHOTOELECTRIC CONTROL, FILTERED OPTICAL ASSEMBLY, AND REGULATOR BALLAST FOR 120 VOLT LAMPS. THE BALLAST SHALL BE MATCHED TO ITS STARTING CIRCUIT. WIRING SHALL BE NEAT, BUNDLED, AND KEPT AWAY FROM EXCESS HEAT.

A.) BRACKET ARM MOUNTED LUMINAIRES (PREFERRED) SHALL HAVE A MEDIUM CUT-OFF DISTRIBUTION. THE ARM ORIENTATION SHALL BE SHOWN ON THE PLANS.

B.) POLE TOP MOUNTED LUMINAIRES SHALL HAVE A NEMA BEAM TYPE 7 X 6 DISTRIBUTION AND SHALL BE PROVIDED WITH GLARE REDUCTION VISORS. THE AIM POINT MUST BE SHOWN ON THE PLANS.

2.) THE INSTALLED LUMINAIRE LIGHT UTILIZATION AND MINIMUM FOOTCANDLES SHALL BE AT LEAST AS GREAT AS THAT FOR THE DESIGN PHOTOMETRIC SHOWN IN THE PLANS.

3.) STREET LIGHTS ON STRAIN POLES SHALL UTILIZE THE SAME POWER SOURCE AS THE TRAFFIC SIGNAL BUT WITH A SEPARATE DISCONNECT BREAKER IN THE CONTROLLER CABINET.

4.) STREET LIGHT WIRING SHALL BE 5.26 mm^2 (MINIMUM) STRANDED COPPER BETWEEN THE CONTROLLER AND THE LUMINAIRE.

G. GENERAL

1.) ALL ELECTRICAL WORK AND MATERIALS SHALL BE SUBJECT TO INSPECTION AND APPROVAL OF THE DISTRICT ELECTRICAL INSPECTOR. ALL WORK MUST MEET THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE.

2.) ALL SPLICES SHALL BE SOLDERED USING ROSIN CORE SOLDER AND THEN SHALL BE FULLY SEALED BY THE APPLICATION OF DUAL-WALL, HEAT-SHRINKABLE, TUBING.

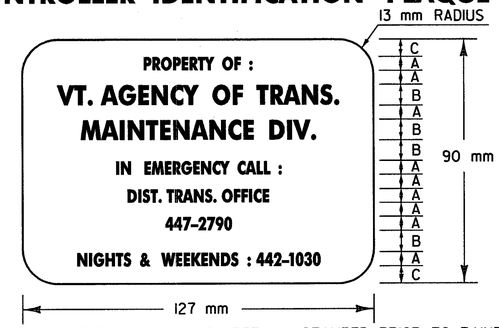
3.) AFTER FINAL PROJECT ACCEPTANCE, THE TRAFFIC SIGNAL INSTALLATION(S) SHALL BECOME THE PROPERTY AND RESPONSIBILITY OF THE AGENCY OF TRANSPORTATION AND THE AGENCY TRAFFIC DESIGN SECTION SHALL BE NOTIFIED IMMEDIATELY (802) 828-3594.

4.) THE CONTRACTOR SHALL ACQUIRE ALL NECESSARY PERMITS AND MAKE ALL NECESSARY ARRANGEMENTS WITH THE UTILITY COMPANY TO PROVIDE A PERMANENT POWER SUPPLY TO THE SIGNAL AND STREET LIGHTING EQUIPMENT. THE METER SOCKET SHALL BE INSTALLED ON A STANCHION. THE ROUTING OF POWER TO THE INTERSECTION SHALL BE SUCH THAT THE AGENCY HAS FULL RESPONSIBILITY FROM THE TRANSFORMER THROUGH THE SIGNAL. NO INTERVENING OWNERSHIP/RESPONSIBILITY SHALL BE ALLOWED.

5.) A METAL PLAQUE LISTING OWNERSHIP AND EMERGENCY PHONE NUMBERS SHALL BE ATTACHED TO THE OUTSIDE OF THE CONTROLLER CABINET. SEE DETAIL ON THIS SHEET. CONTACT THE AREA DISTRICT TRANSPORTATION ADMINISTRATOR AT (802) 447-2790 TO CONFIRM LISTED PHONE NUMBERS PRIOR TO CONSTRUCTION.

6.) THE REQUIRED 30 DAY TEST PERIOD FOR THE SIGNAL EQUIPMENT SHALL NOT BEGIN UNTIL ALL CONSTRUCTION IS COMPLETE AND ALL PAPERWORK HAS BEEN COMPLETED TO THE SATISFACTION OF THE AGENCY.

CONTROLLER IDENTIFICATION PLAQUE



LEGEND: - BLACK (NON-REFL.) - STAMPED PRIOR TO PAINTING
BACKGROUND: NATURAL ALUMINUM OR BRASS SURFACE
NOTES:

1.) THE PLAQUE SHALL BE MOUNTED ON ALL TRAFFIC SIGNAL CONTROLLER CABINETS. IT SHALL BE FASTENED TO THE CONTROLLER CABINET IN SUCH A MANNER AS TO BE RIVETED OR BOLTED WITH VANDAL PROOF BOLTS. NOT EASILY REMOVED, SUCH AS WELDED.

2.) THE LETTERS SHALL BE PUNCHED, STAMPED, OR ENGRAVED. SUCH STAMPING SHALL PENETRATE AT LEAST 1/2 THE BASE MATERIAL THICKNESS.

3.) THE BASE MATERIAL FOR THE PLAQUE SHALL BE BRASS OR ALUMINUM WITH A MINIMUM THICKNESS OF 2.5 mm.

A= 5 mm
B= 8 mm
C= 6.5 mm

TRAFFIC SIGNAL NOTE SHEET 1

SURVEYED BY	N/A	DATE	N/A
DESIGNED BY	M.R.W.	DATE	9/00
DRAWN BY	K.H.D.	DATE	9/00
CHECKED BY	T.R.J.	DATE	9/00

DESIGN FILE NO. TSN1.DGN
PROJ. NAME BENNINGTON - HOOSICK D.P.J. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG. NO. SD-5 SHEET 172 OF 385

FILE NAME =c:\516\vaot\contract4\tsn1.dgn
DATE/TIME =07 SEP 2000
USER =1459

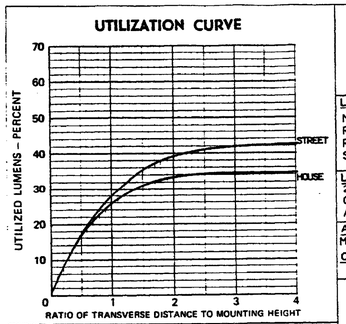
LIST OF MAJOR EQUIPMENT

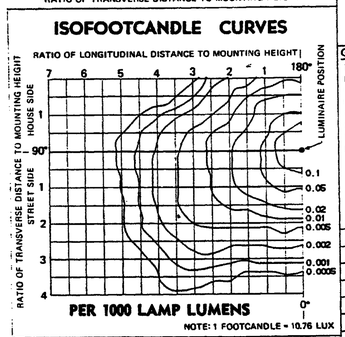
EQUIPMENT ITEM NO. 678.15	INTERSECTION QUANTITIES RAMP AB	RAMP CD
STRAIN POLES	2	2
NEW 300 mm TRAFFIC SIGNAL HEADS W/ TUNNEL VISORS, DISCONNECT HANGERS, AND MOUNTING HARDWARE		
1-WAY, 3-SECTION	2	1
2-WAY, 3-SECTION	1	1
3-WAY, 3 SECTION	1	1
1-WAY, 5-SECTION	1	0
2-WAY, 3-SECTION/5-SECTION	1	2
BACKPLATES	4	4
CONTROLLER/CABINET	1	1
POWER DROP STANCHION	1	1
400 W HPS LUMINAIRE	2	2
REMOVAL OF TRAFFIC CONTROL SYSTEM	1	0

EQUIPMENT	ITEM NO.	UNIT	INTERSECTION QUANTITIES RAMP AB	RAMP CD	TOTAL
VEHICLE LOOP DETECTORS*	678.22	m	380	370	750
WIRED CONDUIT (40 mm)	678.23	m	291	241	532
WIRED CONDUIT (50 mm)	678.23	m	265	154	419
PULLBOX - STANDARD	678.25	EA	5	3	8
JUNCTION BOX	678.26	EA	3	2	5
ELECTRICAL CONDUIT SLEEVE (150 mm)	678.30	m	60	26	86

* THE QUANTITY LISTED IS FOR SAWCUT ONLY. LEAD-IN WIRES AND/OR SHIELDED CABLE QUANTITIES FROM THE EDGE OF PAVEMENT OR CURB ARE NOT INCLUDED IN THE TOTAL.

THE QUANTITIES LISTED ABOVE ARE APPROXIMATE AND ARE FURNISHED FOR INFORMATION ONLY. MISCELLANEOUS (UNLISTED) WIRE, CABLE, HARDWARE ETC., ARE REQUIRED TO PROVIDE FOR A FUNCTIONING TRAFFIC SIGNAL SYSTEM. THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF THE NUMBER OF ITEMS AND THE TYPES OF EQUIPMENT REQUIRED.





MOUNTING HEIGHT CORRECTION FACTORS FOR OTHER THAN 30 FEET.
USE TABLE BELOW OR FACTOR = 900 / (ACTUAL MH)²

MOUNTING HEIGHT -- FEET	20	25	30	35	40	45	50
FACTOR	2.25	1.44	1.00	0.73	0.56	0.44	0.36

GENERAL ELECTRIC

PHOTOMETRIC DATA

LIGHTING SYSTEMS BUSINESS DEPARTMENT
HENDERSONVILLE, N.C. U.S.A. 28739

PER 1000 LAMP LUMENS

LUMINAIRE
M-400A2 CUTOFF
REFLECTOR 35-222829-01
REFRACTOR CLEAR FLAT GLASS
SOCKET POSITION A

LAMP
200, 250, 310 & 400 WATT HPS
GE NO. LU200 - LU400
ANSI NO. S68, S50, S67 & S51

ANSI/IES TYPE 1972
MEDIUM CUT-OFF III
CIE TYPE
SEMI CUT-OFF

GENERAL INFORMATION

TEST DISTANCE	7.0 METERS	
MAX CANDELA	272.9	
MAX CONE	75.0	
MAX VERTICAL PLANE	82.5/	297.5
MAX CANDELA AT 90°	0.6	
MAX CANDELA AT 80°	48.4	
NADIR FOOTCANDLES	0.1977	
NADIR CANDELA	178.0	

MULTIPLY ALL LUMEN, CANDELA, AND FOOTCANDLE VALUES BY THIS RATIO

RATIO = ACTUAL LAMP LUMENS / 1000

PHOTOMETRIC TEST IN ACCORDANCE WITH IES GUIDE

LIGHT FLUX VALUES

	LUMENS	PERCENT OF LAMP
DOWNWARD STREET SIDE	408	40.8
UPWARD STREET SIDE	0	0.0
DOWNWARD HOUSE SIDE	341	34.1
UPWARD HOUSE SIDE	0	0.0
TOTAL	750	75.0

TESTED [signature] DATE 9/27/89
APPROVED [signature] DATE 9/27/89
DATE

DRAWING NO. 35-177323 SHEET 2

TRAFFIC CONTROL NOTES

1. DURING CONSTRUCTION A MINIMUM OF ONE-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES. TWO-WAY TRAFFIC SHALL BE MAINTAINED AT NIGHT, ON WEEK-ENDS AND HOLIDAYS, DURING PEAK TRAFFIC AND WHENEVER POSSIBLE DURING CONSTRUCTION. AT THE DISCRETION OF THE DISTRICT TRANSPORTATION ADMINISTRATOR (OR OTHER DESIGNATED AGENCY REPRESENTATIVE), UNIFORMED TRAFFIC CONTROL OFFICERS SHALL DIRECT TRAFFIC, WHENEVER REQUIRED.

2. TRAFFIC CONTROL SIGNING AND CHANNELIZING DEVICES SHALL BE IN ACCORDANCE WITH THE APPROPRIATE VAOT STANDARD SHEETS (E-100M, E-101M, E-102M, E-102AM, E-103M, E-106M, E-107M, E-107AM, E-108M, E-110M) AND THE MUTCD.

3. AFTER SIGNAL INSTALLATION, ALL HEADS MUST BE COVERED (TURNING SHALL NOT BE ALLOWED) UNTIL TURN ON. THE METHOD OF COVERING SHALL BE AS FOLLOWS:

   ALL NEW TRAFFIC SIGNAL HEADS WHICH HAVE BEEN INSTALLED BUT NOT PLACED IN EITHER FLASHING OR FULL OPERATION SHALL BE COVERED. EXISTING SIGNAL HEADS WHICH ARE PLACED OUT OF SERVICE IN ORDER TO PERFORM WORK ON THE SIGNAL SYSTEM SHALL ALSO BE COVERED, EXCEPT WHEN SUCH WORK CAN BE COMPLETED IN A RELATIVELY SHORT PERIOD OF TIME (SEVERAL HOURS) AND TRAFFIC CONTROL HAS BEEN PROVIDED FOR.

   THE SIGNAL COVERS SHALL CONSIST OF A ONE PIECE PLASTIC BAG HAVING A MINIMUM THICKNESS OF 4 MIL. THE BAG SHALL BE OPAQUE. THE COVER SHALL SLIP OVER THE ENTIRE SIGNAL HEAD AND SHALL BE SECURELY TIED AT THE OPENING WITH A ROPE OF SUFFICIENT SIZE AND STRENGTH TO SECURE THE COVER. AN INTERMEDIATE ROPE OF THE SAME MATERIAL SHALL BE DRAWN AROUND THE CENTER OF THE COVER TO PREVENT EXCESS FLAPPING IN THE WIND.

   A DRAIN HOLE SHALL BE MADE AT THE BOTTOM OF THE BAG TO ALLOW THE ESCAPE OF MOISTURE. NO TAPE OR ADHESIVE WILL BE ALLOWED TO BE ATTACHED TO ANY SURFACE OF THE SIGNAL HOUSING OR LENSES. ALL COVERS SHALL BE PLACED IN A NEAT WORKMANLIKE MANNER. ANY COVER WHICH IS TORN OR MISSING SHALL BE IMMEDIATELY REPLACED. PAYMENT FOR THE COVERS, THEIR PLACEMENT, AND REMOVAL AND ALL INCIDENTALS FOR COMPLETION OF THE WORK SHALL BE CONSIDERED SUBSIDIARY TO THE INSTALLATION OF THE TRAFFIC SIGNAL.

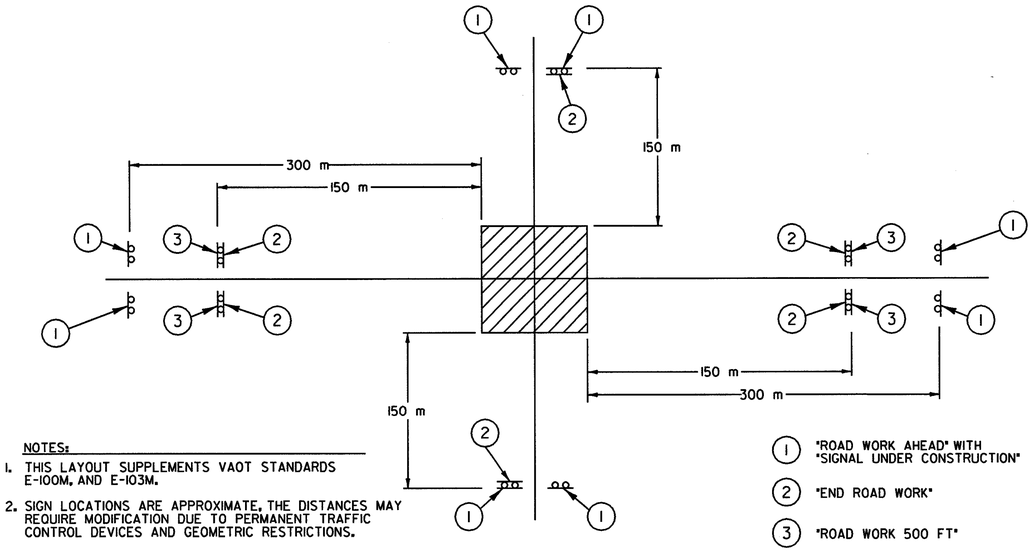
4. WHERE TWO-WAY TRAFFIC IS MAINTAINED DURING CONSTRUCTION, THE SIGN PACKAGE SHOWN ON VAOT STANDARD E-100M SHOULD BE USED. FOR ONE-WAY TRAFFIC, E-110M APPLIES. APPROACH CONSTRUCTION SIGNING SHALL REMAIN IN PLACE DURING THE ENTIRE CONSTRUCTION PERIOD. OTHER SIGNING SHALL BE REMOVED OR COVERED WHEN NOT APPLICABLE.

5. VARIATIONS IN THE SIGNING PACKAGES MAY BE DICTATED BY UNIQUE GEOMETRY AND/OR TRAFFIC CONDITIONS.

6. THE CONTRACTOR SHALL NOT WORK WITHIN THE HIGHWAY ROW WITHOUT THE APPROPRIATE CONSTRUCTION SIGNING IN PLACE AS SHOWN ON VAOT STANDARD E-100M AND THE CONSTRUCTION APPROACH SIGNING DETAIL SHOWN ON THIS SHEET.

7. AT LOCATIONS WHERE SIGNALS CURRENTLY EXIST, A WORKING SIGNAL SYSTEM SHALL BE IN PLACE AT THE END OF EACH DAY. IF THE SIGNAL SYSTEM IS NOT WORKING AT THE END OF THE DAY, THE CONTRACTOR SHALL PROVIDE UNIFORMED TRAFFIC OFFICERS TO CONTROL TRAFFIC UNTIL SUCH TIME THAT THE EXISTING OR NEW SIGNAL IS IN OPERATION.

8. "SIGNAL UNDER CONSTRUCTION" SIGN PANELS SHALL BE MOUNTED UNDER "ROAD WORK AHEAD" SIGNS ANY TIME SIGNAL SYSTEM WORK IS BEING PERFORMED. (SEE SIGN DETAIL ON VAOT STANDARD E-101M.)



NOTES:
1. THIS LAYOUT SUPPLEMENTS VAOT STANDARDS E-100M, AND E-103M.
2. SIGN LOCATIONS ARE APPROXIMATE, THE DISTANCES MAY REQUIRE MODIFICATION DUE TO PERMANENT TRAFFIC CONTROL DEVICES AND GEOMETRIC RESTRICTIONS.

(1) "ROAD WORK AHEAD" WITH "SIGNAL UNDER CONSTRUCTION"
(2) "END ROAD WORK"
(3) "ROAD WORK 500 FT"

CONSTRUCTION APPROACH SIGNING

NOT TO SCALE

TRAFFIC SIGNAL NOTE SHEET 2

SURVEYED BY	N/A	DATE N/A
DESIGNED BY	M.R.W.	DATE 9/00
DRAWN BY	K.H.D.	DATE 9/00
CHECKED BY	T.R.J.	DATE 9/00

DESIGN FILE NO. TSN2.DGN

PROJ. NAME BENNINGTON - HOOSICK D.P.J. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. SD-6 SHEET 173 OF 385

FILE NAME = u:\516\vaot\contract4\tsn2.dgn
DATE/TIME = 07-SEP 2000
USER = 1459

GENERAL NOTES:

1.) ALL MATERIAL AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND AASHTO'S STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, 1994 OR ITS LATEST EDITION.

2.) TRAFFIC CONTROL SIGNAL STRAIN POLES SHALL CONFORM TO THE REQUIREMENTS OF SUB-SECTION 752.02 - STRAIN POLES, AND SHALL BE FURNISHED AND INSTALLED IN ACCORD-ANCE WITH SECTION 678 - TRAFFIC CONTROL SIGNALS.

3.) STEEL POLE CAPS SHALL BE PROVIDED WITH A 50 mm BUSHED (BLIND) ELECTRICAL EN-TRANCE WHEN APPLICABLE. STRAIN POLES SHALL BE PROVIDED WITH A 50 mm (BLIND) HALF COUPLING FOR SIGNAL CABLE, LOCATED 150 mm BELOW THE SPANWIRE ATTACHMENT HEIGHT.

4.) FOUR STAINLESS STEEL ANCHOR BOLTS WITH TWO HEXAGON NUTS, ONE WASHER AND ONE LOCK WASHER PER BOLT SHALL BE FURNISHED WITH EACH POLE. (SEE SUBSECTION 714.09)

5.) BOLTS AND BASES SHALL BE OF ADEQUATE SIZE TO RESIST THE FULL BENDING MOMENT OF THE POLE AT YIELD STRENGTH STRESS.

6.) ADDITIONAL DESIGN CRITERIA:
CONCRETE f_c = 10 MPa, f_c = 25 MPa
REINFORCING STEEL f_s = 165.47 MPa (GRADE 420)

7.) CONCRETE FOR FOOTINGS SHALL CONFORM TO REQUIREMENTS OF CONCRETE CLASS "B" SECTION 501 - STRUCTURAL CONCRETE.

8.) BACKFILL MATERIAL PLACED ADJACENT TO THE FOOTINGS SHALL MEET THE REQUIREMENTS FOR GRANULAR BACKFILL FOR STRUCTURES. SUBSECTION 704.08.

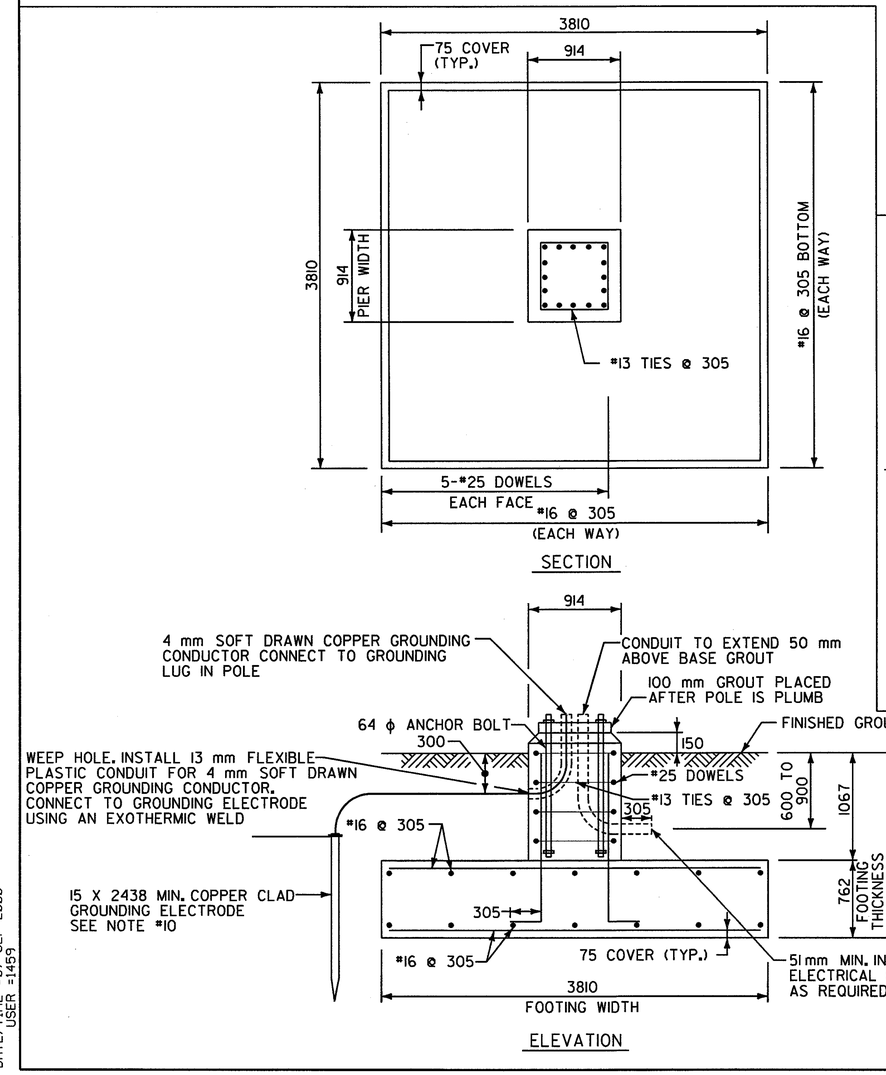
9.) WHEN THE DESIGN DEPTH OF A FOOTING CANNOT BE OBTAINED DUE TO UNFORESEEN FIELD CONDITIONS, THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER AND OBTAIN A REVISED FOOTING DETAIL FROM THE ENGINEER.

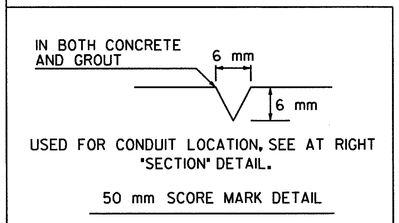
10.) EACH METAL POLE SUPPORTING VEHICLE TRAFFIC SIGNALS SHALL BE GROUNDED. THE GROUND SHALL CONSIST OF:
A) AN INTERNAL GROUND LUG OPPOSITE THE HAND HOLE.
B) A 4 mm (MIN.) SOFT DRAWN COPPER GROUNDING ELECTRODE CONDUCTOR.
C) A 16 mm X 2.44 m (MIN.) COPPER CLAD GROUNDING ELECTRODE.
THE RESISTANCE TO GROUND SHALL BE 25 OHMS OR LESS. ADDITIONAL GROUNDING ELEC-TRODES MAY BE REQUIRED (MINIMUM SPACING SHALL BE 1.8 m).
WHEN A POWER SERVICE, METER AND DISCONNECT ARE ATTACHED TO A STRAIN POLE, THERE SHALL BE A CONTINUOUS GROUNDING ELECTRODE CONDUCTOR FROM THE METER AND DISCONNECT WHICH MAY RUN INTERNAL TO THE STRAIN POLE, THROUGH THE 13 mm FLEX-IBLE TUBING IN THE CONCRETE BASE TO THE REQUIRED GROUNDING ELECTRODE(S). THE GROUNDING ELECTRODE CONDUCTOR FROM THE STRAIN POLE GROUNDING LUG, CONTROLLER CABINET AND/OR LUMINAIRE MAY ATTACH TO THIS CONTINUOUS GROUNDING ELECTRODE CON-DUCTOR FROM THE SERVICE METER AND DISCONNECT. THE CONTRACTOR SHALL PERFORM A RESISTANCE TO GROUND TEST ON THE CONTINUOUS GROUNDING ELECTRODE CONDUCTOR FROM THE SERVICE METER AND DISCONNECT AND PROVIDE A WRITTEN STATEMENT TO THE DISTRICT ELECTRICAL INSPECTOR THAT THE GROUNDING ELECTRODE CONDUCTOR IS CONTINUOUS FROM THE SERVICE METER AND DISCONNECT AND THE RESISTANCE TO GROUND IS 25 OHMS OR LESS.

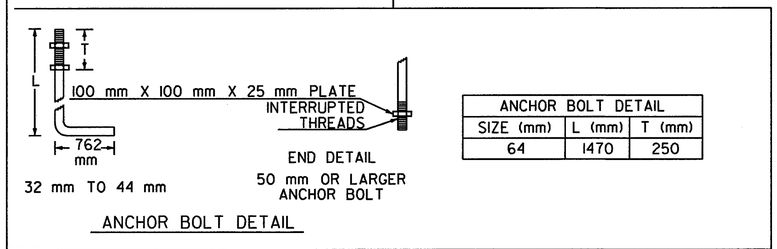
11.) STRAIN POLE BASE PLATES SHALL BE STAMPED WITH POLE DIAMETER, HEIGHT, YIELD STRENGTH, AND GAUGE. ALTERNATELY, THE INFORMATION MAY BE STAMPED ON A METAL TAG ATTACHED TO THE POLE NEAR THE HANDHOLE.

12.) IN ACCORDANCE WITH SUBSECTION 105.03, SHOP DRAWINGS (6 COPIES) SHALL BE SUB-MITTED TO THE STATE OF VERMONT, AGENCY OF TRANSPORTATION, FOR APPROVAL, PRIOR TO FABRICATION. THE SUBMITTAL SHALL INCLUDE THE FOLLOWING INFORMATION:
A) DETAILED DRAWING OF EACH COMPONENT OF THE STRAIN POLE.
B) MATERIAL SPECIFICATIONS FOR EACH COMPONENT OF THE STRAIN POLE BY COMPLETE SPECIFICATIONS OR BY REFERENCE TO APPLICABLE ASTM STANDARDS.
C) NOTATION OF PROJECT NAME, PROJECT NUMBER, ROUTE NUMBER, AND STRAIN POLE STATIONING. (TO BE INCLUDED ON EACH SHEET INCLUDING VAOT STANDARD SHEETS AND SPECIFICATION SHEETS).
D) DETAILS FOR LOCATION OF LUMINAIRE ARM(S) ON STRAIN POLES.
E) ALL ELEVATIONS AND DIMENSIONS NECESSARY TO PROVIDE A COMPLETE SET OF RECORD PLANS. [POLE HEIGHT, SPAN WIRE ATTACHMENT HEIGHT, POLE DIAMETER (TOP AND BOTTOM), POLE GAUGE, HANDHOLE (SIZE AND LOCATION), BASE PLATE, BOLT CIRCLE, ANCHOR BOLT SIZE]
F) POLE BASE STAMPING DETAIL
G) DEAD LOAD DEFLECTION INFORMATION
H) WELDING DETAILS AND PROCEDURES ARE REQUIRED FOR ALL WELDS. PROCEDURES SHALL BE SUBMITTED FOR APPROVAL WITH REFERENCE TO EACH WELD IDENTIFIED ON THE SHOP DRAWINGS. (SEE SUBSECTION 506.10)

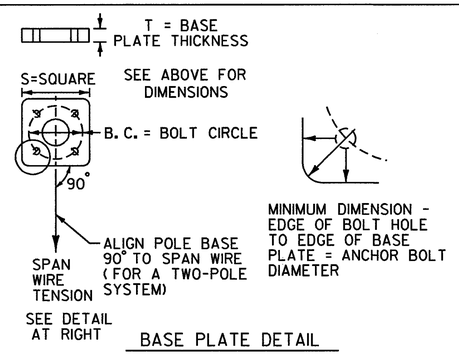
13.) WHEN USING STAINLESS STEEL BOLTS DO NOT INSTALL BOLT COVERS.







ANCHOR BOLT DETAIL		
SIZE (mm)	L (mm)	T (mm)
64	1470	250



STRAIN POLE

LOCATION	POLE NO.	POLE LENGTH GAUGE & DIAMETER	BASE CIRCLE	BASE PLATE S	BASE PLATE T	PIER WIDTH	FOOTING WIDTH	FOOTING THICK	FOOTING DEPTH	ANCHOR BOLTS	POLE BKRK
RAMP CD	SP1	11.6 m, 6.4, 559 OD, WITH 3.6 m TRUSS LUMINAIRE ARM	813	787	64	914	3810	762	1829	64	61
RAMP CD	SP2	11.6 m, 6.4, 559 OD, WITH 3.6 m TRUSS LUMINAIRE ARM	813	787	64	914	3810	762	1829	64	52
RAMP AB	SP3	11.6 m, 6.4, 559 OD, WITH 3.6 m TRUSS LUMINAIRE ARM	813	787	64	914	3810	762	1829	64	53
RAMP AB	SP4	11.6 m, 6.4, 559 OD, WITH 3.6 m TRUSS LUMINAIRE ARM	813	787	64	914	3810	762	1829	64	59

NOTES:
1. ANCHOR BOLTS, BASE PLATE, AND FOOTING DIMENSIONS ARE BASED ON DESIGN POLE DIMENSIONS AND YIELD STRENGTH SHOWN. POLES SUPPLIED OF DIFFERENT SIZE OR STRENGTH MAY REQUIRE CHANGES IN THE DIMENSIONS. BACKRAKE (BKRK) SHOWN IS AS MEASURED AT THE TOP OF THE POLE.

2. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

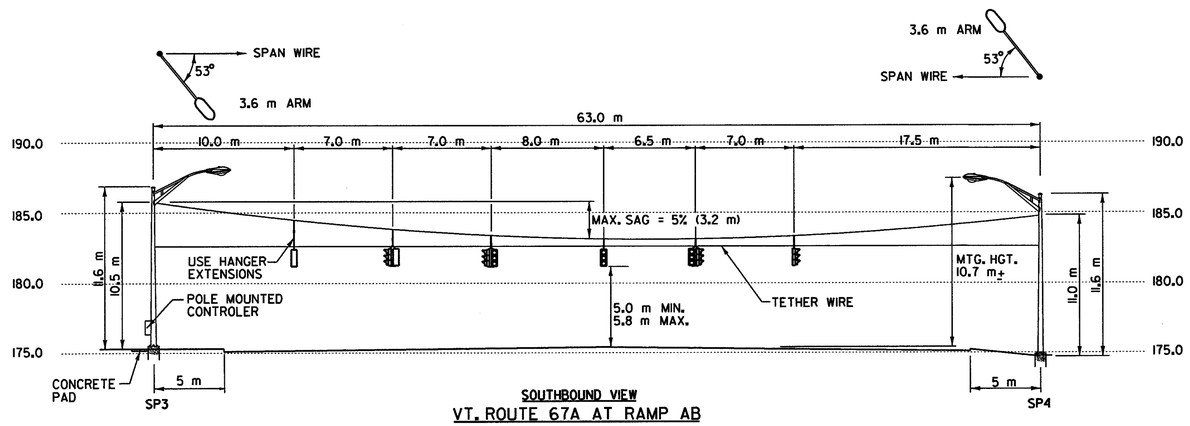
DESIGN CRITERIA USED:
POLE FY = 330 MPa
BASE PLATE FY = 250 MPa
ANCHOR BOLTS FY = 380 MPa

NOTE: ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

STRAIN POLE/ FOOTING DETAIL SHEET

SURVEYED BY	N/A	DATE N/A
DESIGNED BY	M.R.W.	DATE 9/00
DRAWN BY	K.H.D.	DATE 9/00
CHECKED BY	T.R.J.	DATE 9/00
DESIGN FILE NO.	SPDI.DGN	
PROJ. NAME	BENNINGTON - HOOSICK D.P.I. 0146(1) C/4	
PROJ. NO.	P.I.N. 1306.60	
DWG. NO. SD-7		SHEET 174 OF 385

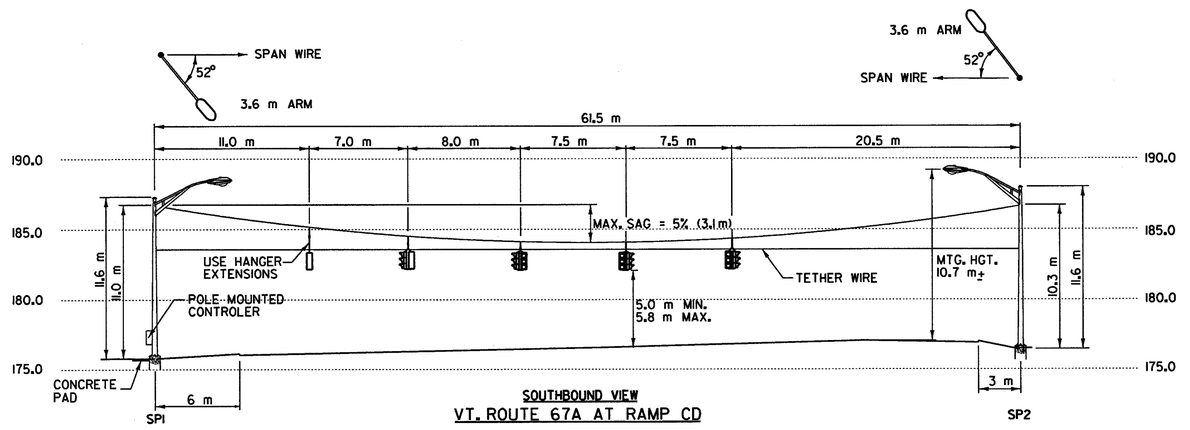
FILE NAME = p:\5116\vaot\contract4\spdi.dgn
DATE/TIME = 07 SEP 2000
USER = 1459



SOUTHBOUND VIEW

VT. ROUTE 67A AT RAMP AB

DEAD LOAD SPAN WIRE TENSION = 7830 N
DESIGN LOAD SPAN WIRE TENSION = 34800 N



SOUTHBOUND VIEW

VT. ROUTE 67A AT RAMP CD

DEAD LOAD SPAN WIRE TENSION = 8050 N
DESIGN LOAD SPAN WIRE TENSION = 36250 N

NOTES:

1. SEE DWG. NO. SD-1 AND DWG. NO. SD-2 FOR TRAFFIC SIGNAL DESIGN PLANS.
2. SEE DWG. NO. SD-7 FOR STRAIN POLE/FOOTING DETAIL.

0 4 8 m
1: 200
@ FULL SIZE

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

SPAN WIRE CROSS SECTION SHEET

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY M.R.W. DATE 9/00
DRAWN BY K.H.D. DATE 9/00
CHECKED BY T.R.J. DATE 9/00
DESIGN FILE NO. SPANW.DGN
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG NO. SD-8 SHEET 175 OF 385

FILE NAME =u:\516\vaot\contract4\spanw.dgn
DATE/TIME =07 SEP 2000
USER =1459

678.23 WIRED CONDUIT (50 mm DIA.)

A10+000 RT.	TO	A10+127 RT.	- 127 m
B10+200 RT.	TO	B10+325 RT.	- 125 m
AB10+010 RT.	TO	AB10+195 RT.	- 190 m
AB10+072 LT.	TO	AB10+195 LT.	- 110 m
C10+060 RT.	TO	C10+140 RT.	- 80 m
D10+126 RT.	TO	D10+165 RT.	- 38 m
X10+102 RT.	TO	X10+222 RT.	- 120 m
X10+222 LT.	TO	D10+231 LT.	- 140 m
B10+060 LT.	TO	B10+145 LT.	- 85 m
POLE 2	TO	POLE 9	- 34 m
POLE 13	TO	POLE 15	- 42 m
POLE 34	TO	PULLBOX #4	- 18 m
PULLBOX #4	TO	PULLBOX #3	- 16 m
POLE 39	TO	POLE 44	- 6 m

PB9 @ STA. 61+148L To Existing Light Pole @ STA. 61+180L - 35.0M
678.25 Pullbox Standard
61+148, 19.8ML

678.30 ELECTRICAL CONDUIT SLEEVE (150 mm DIA.)

61+150 RT.	TO	61+150 LT.	- 30 m
AB10+110 RT.	TO	AB10+110 LT.	- 25 m
B10+240 RT.	TO	B10+245 LT.	- 10 m
D10+126 RT.	TO	X10+222 RT.	- 10 m
X10+222 RT.	TO	X10+222 LT.	- 10 m

678.26 JUNCTION BOX

~~1 61+150 LT.~~
3 X10+222 LT.
4 X10+222 RT.

678.21 ELECTRICAL CONDUIT (50 mm DIA.)

POLE 8, POLE 14, POLE 7, POLE 16, POLE 35, POLE 41, POLE 42
7 SWEEPS @ 2.0 m EACH = 14 m

678.23 WIRED CONDUIT (80 mm DIA.)

D10+080 RT. TO D10+126 RT. 45 m

679.23 BREAKAWAY FEATURE FOR LIGHT POLE

STA. X10+102 RT. STA D10+088 RT.
STA. X10+152 RT. STA D10+126 RT.
STA. X10+195 RT.
STA. Y10+132 LT.
STA. AB10+151RT.
STA. AB10+186 RT.
STA. A10+037 RT.

679.25 REMOVE AND RESETTING LIGHT POLE (MOD.)

STA. AB10+065.7 RT.

ITEM 679.25 REMOVE AND RESETTING LIGHT POLE (MOD.)
50 mm CONDUIT 3-33.63 mm² CU. & 1-13.30 mm² CU. GND.
150 mm SLEEVE (TYP.)
POWER DROP STANCHION INSTALLED UNDER TRAFFIC SIGNAL PLANS (SEE DWG. NO. SD-2).
INSTALL SWEEP WITH PLUG FOR FUTURE USE
PROPOSED STRAIN POLE AND LUMINAIRE (TYP.)
50 mm CONDUIT 3-53.31 mm² CU. & 1-13.30 mm² CU. GND.
80 mm CONDUIT 6-53.31 mm² CU. & 1-13.30 mm² CU. GND.
MATCH LINE STA. C10+140.000 DWG. SLP-2
MATCH LINE STA. D10+080.000 DWG. SLP-2
RAMP A, RAMP B, RAMP C, RAMP D, RAMP X, RAMP Y, RAMP AB
AB10+000, AB10+100, B10+200, B10+300, B10+100, C10+100, D10+100, D10+200, X10+100, X10+200, X10+300, Y10+100, Y10+200
VT STATE PLANE GRID
VT. ROUTE 67A
762 mm SANITARY SEWER LINE
203 mm WATER LINE
WALLOOMSAC RIVER
HYD, BND, JB, METER, BELL MH

EXISTING	NEW	LEGEND
○	●	STREET LIGHT POLE
—○E	—●E	LUMINAIRE
▨	■	JUNCTION BOX
—EX—	— — —	CONDUIT
- - -	═══	SLEEVE
—◁	—◀	UTILITY POLE

L-3 = CIRCUIT NUMBER
(34) = LIGHT POLE NUMBER
4 = JUNCTION BOX NUMBER

10 0 10 m
1: 500
@ FULL SIZE

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

STREET LIGHTING PLAN

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	M.R.W.	DATE 9/00
DRAWN BY	J.S.L.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. SLP-1.DGN
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
DWG NO. SLP-1 SHEET 176 OF 385

FILE NAME =u:\5116\vaot\cont-oct4\slp-1.dgn
DATE/TIME =07 SEP 2000
USER =1459

Metric

MATCH LINE
STA. C10+140.000
DWG. SLP-1

MATCH LINE
STA. D10+080.000
DWG. SLP-1

VT STATE PLANE GRID

STATE OF VERMONT

RAMP C

RAMP D

C10+200

C10+100

D10+200

D10+100

80 mm CONDUIT
6-53.31 mm² CU.
& 1-13.30 mm² CU. GND.

50 mm CONDUIT
3-33.63 mm² CU.
& 1-13.30 mm² CU. GND.

80 mm CONDUIT
6-53.31 mm² CU.
& 1-13.30 mm² CU. GND.

50 mm CONDUIT
3-33.63 mm² CU.
& 1-13.30 mm² CU. GND.

19 L-3
20 L-4
21 L-3
22 L-4
23 L-3
24 L-4
25 L-3
26 L-3
27 L-4
28 L-3
29 L-4
30 L-3
31 L-4
32 L-3

CONE, ALICE

FURNACE BROOK

APPROXIMATE LOCATION OF
THE PROPOSED CVPS
DISTRIBUTION LINE

VT. ROUTE 67A

150 mm
SLEEVE (TYP.)

POWER DROP STANCHION
INSTALLED UNDER
TRAFFIC SIGNAL PLANS
(SEE DWG. NO. SD-1)

ITEM 679.25 REMOVE AND
RESETTING LIGHT POLE (MOD.)

INSTALL SWEEP WITH
PLUG FOR FUTURE
USE

SAN MH

HYD

PMB'S

PB PROPOSED STRAIN POLE
AND LUMINAIRE (TYP.)

PB METER

METER

SANITARY SEWER LINE

203 mm WATER LINE

60+900

TOWN OF
BENNINGTON

MORSE ROAD

678.21 ELECTRICAL CONDUIT (50 mm DIA.)

POLE 25, 1 SWEEP @ 2.0 m = 2 m

678.23 WIRED CONDUIT (50 mm DIA.)

C10+140 RT.	TO	C10+250 RT.	- 110 m
CD10+080 LT.	TO	CD10+272 LT.	- 190 m
POLE 25	TO	POLE 27	- 38 m

678.23 WIRED CONDUIT (80 mm DIA.)

CD10+005 RT.	TO	CD10+272 RT.	- 260 m
D10+000 RT.	TO	D10+080 RT.	- 80 m

678.26 JUNCTION BOX

2 60+828 LT.

678.30 ELECTRICAL CONDUIT SLEEVE (150 mm DIA.)

CD10+080 RT.	TO	CD10+080 LT.	- 25 m
60+825 RT.	TO	60+825 LT.	- 35 m

679.23 BREAKAWAY FEATURE FOR LIGHT POLE

STA. CD10+125 LT.	STA. CD10+125 RT.
STA. CD10+169 LT.	STA. CD10+169 RT.
STA. CD10+214 LT.	STA. CD10+214 RT.
STA. CD10+252 LT.	STA. CD10+269 RT.
STA. CD10+043 RT.	STA. CD10+042 RT.
STA. CD10+078 RT.	

679.25 REMOVE AND RESETTING LIGHT POLE (MOD.)

STA. 60+770.8 LT.
STA. 60+817.7 RT.

EXISTING	NEW	LEGEND
○	●	STREET LIGHT POLE
—○—	—●—	LUMINAIRE
▨	■	JUNCTION BOX
— EX —	— — —	CONDUIT
- - - -	═══	SLEEVE
⊓	⊓	UTILITY POLE
L-3 = CIRCUIT NUMBER		
(34) = LIGHT POLE NUMBER		
4 = JUNCTION BOX NUMBER		

10 0 10 m
1: 500
@ FULL SIZE

DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

STREET LIGHTING PLAN

SURVEYED BY	C.H.A. & V.S.E.	DATE 12/93
DESIGNED BY	M.R.W.	DATE 9/00
DRAWN BY	J.S.L.	DATE 9/00
CHECKED BY	T.P.K.	DATE 9/00

DESIGN FILE NO. SLP-2.DGN

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

DWG NO. SLP-2 SHEET 177 OF 385

FILE NAME =u:\5116\vaot\contract4\slp-2.dgn
DATE/TIME =07 SEP 2000
USER =1459

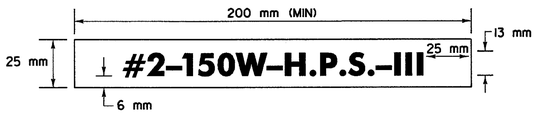
STREET LIGHT LOCATIONS

POLE NO.	LOCATION	OFFSET (m)	LENGTH OF POLE/ARM (m)	WALL THICKNESS (mm)	BREAKWAY BASE	LUMINAIRE WATTS	LUMINAIRE TYPE	MOUNT HEIGHT (m)	CONC. BASE (mm x mm)
1	ABI0+078 RT.	30.5	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
2	ABI0+110 RT.	16.0	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
3	ABI0+151 RT.	16.0	9.80/4.57	5.56	YES	250	III	10.67	750 x 1820
4	ABI0+186 RT.	17.0	9.80/4.57	5.56	YES	250	III	10.67	750 x 1820
5	AI0+037 RT.	14.0	9.80/4.57	5.56	YES	250	III	10.67	750 x 1820
6	AI0+080 RT.	10.0	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
7	AI0+127 RT.	10.0	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
8	ABI0+072 LT.	20.0	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
9	ABI0+110 LT.	18.0	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
10	ABI0+151 LT.	15.5	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
11	BI0+323 RT.	13.0	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
12	BI0+280 RT.	13.0	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
13	BI0+239 RT.	13.0	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
14	BI0+200 RT.	13.0	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
15	YI0+132 LT.	13.0	9.80/4.57	5.56	YES	250	III	10.67	750 x 1820
16	CI0+060 RT.	10.0	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
17	CI0+098 RT.	10.0	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
18	CI0+138 RT.	10.0	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
19	CI0+175 RT.	10.0	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
20	CI0+220 RT.	10.0	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
21	CDI0+252 LT.	15.5	9.80/4.57	5.56	YES	250	III	10.67	750 x 1820
22	CDI0+214 LT.	15.5	9.80/4.57	5.56	YES	250	III	10.67	750 x 1820
23	CDI0+169 LT.	15.5	9.80/4.57	5.56	YES	250	III	10.67	750 x 1820
24	CDI0+125 LT.	17.0	9.80/4.57	5.56	YES	250	III	10.67	750 x 1820
25	CDI0+080 LT.	20.0	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
26	CDI0+043 RT.	32.5	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
27	CDI0+078 RT.	17.6	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
28	CDI0+125 RT.	12.0	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
29	CDI0+169 RT.	12.0	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
30	CDI0+214 RT.	12.0	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
31	CDI0+269 RT.	12.0	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
32	DI0+042 RT.	13.0	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
33	DI0+088 RT.	13.0	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
34	DI0+126 RT.	13.0	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
35	DI0+165 RT.	13.0	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
36	XI0+102 RT.	13.0	9.80/4.57	5.56	YES	250	III	10.67	750 x 1820
37	XI0+152 RT.	13.0	9.80/4.57	5.56	YES	250	III	10.67	750 x 1820
38	XI0+195 RT.	13.0	9.80/4.57	5.56	YES	250	III	10.67	750 x 1820
39	XI0+248 LT.	6.0	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
40	XI0+288 LT.	6.0	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
41	DI0+231 LT.	10.0	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
42	BI0+060 LT.	8.0	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
43	BI0+105 LT.	8.0	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820
44	BI0+145 LT.	8.0	9.80/4.57	5.56	NO	250	III	10.67	750 x 1820

STREET LIGHTING DESIGN PARAMETERS

	REQ'D MIN.	ACTUAL
INTERCHANGE (EXPRESSWAY-INTERMEDIATE)	1.10	1.44
MINIMUM FC	0.20	0.50
UNIFORMITY RATIO	3:1	2.9:1
LUMINAIRE DIRT DEPRECIATION		0.95
LAMP LUMEN DEPRECIATION		0.73
COMBINED LAMP (MAINT.) FACTOR		0.69

DETAILS FOR TAGS ATTACHED TO STREET LIGHT POLES



LEGEND: BLACK OR WHITE (NON-REFL.) - STAMPED PRIOR TO PRINTING/PAINTING.
BACKGROUND: NATURAL ALUMINUM OR FLAT BLACK SURFACE. SAME AS POLE FINISH.

NOTES:
1. THE TAG SHALL BE MOUNTED ON ALL STREET LIGHT POLES IN SUCH A MANNER AS NOT TO BE EASILY REMOVED. SUCH AS WELDED, RIVETED, OR BOLTED WITH VANDAL PROOF BOLTS.
2. THE LETTERS SHALL BE PUNCHED, STAMPED, ENGRAVED, OR PHOTO-ETCHED. PUNCHING, STAMPING OR ENGRAVING SHALL PENETRATE ONE HALF THE BASE MATERIAL THICKNESS.
3. THE BASE MATERIAL FOR THE TAG SHALL BE ALUMINUM WITH A MINIMUM THICKNESS OF 2.54 mm.
4. THE TAG SHALL BE ATTACHED TO THE POLE ABOVE THE HANDHOLE, 150 mm MAXIMUM. IF THE POLE HAS A TRANSFORMER BASE, ATTACH TAG TO COVER.

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

GENERAL STREET LIGHT NOTES

CONCRETE BASES

1.) THE OFFSET FOR CONCRETE BASES (EDGE OF SHOULDER TO CENTER OF CONCRETE BASE) TO BE A MINIMUM OF 2.0 m OR AS OTHERWISE NOTED ON PLANS.

2.) WHEN GUARDRAIL EXISTS, THE GUARDRAIL DEFLECTION OR THE SIDE SLOPE WILL GOVERN MINIMUM OR MAXIMUM OFFSET. WITH A 1:3 OR 1:2 SIDE SLOPE THE PREFERRED LIGHT POLE OFFSET IS 1.2 m MAXIMUM.

3.) WHEN CONCRETE BASES ARE INSTALLED IN SLOPING GROUND, THE GREATEST EXPOSED HEIGHT TO KEEP ALL OF THE TOP ABOVE GROUND MUST BE DOUBLED AND THEN ADDED TO THE MINIMUM DEPTH FOR THE TOTAL BASE DEPTH.

4.) CARE SHOULD BE TAKEN WHEN CONCRETE BASES, DRAINAGE STRUCTURES OR UTILITIES ARE CLOSE TOGETHER.

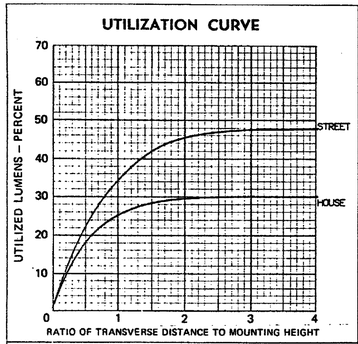
POLES, ANCHOR BASES AND ARMS

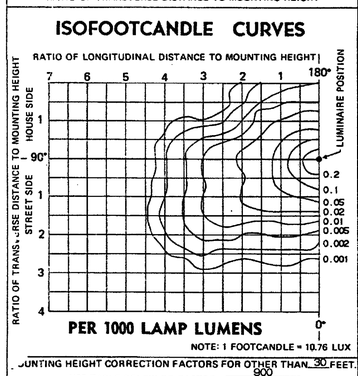
1.) ALUMINUM STREET LIGHT POLES SHALL BE DESIGNED IN ACCORDANCE WITH THE 1995 STANDARD SPECIFICATIONS, STANDARD SHEETS E-180AM, E-180BM, AND VARIOUS MANUFACTURER'S APPLICATION GUIDES. POLE SIZE AND SHAFT WALL THICKNESS SHALL BE GOVERNED BY MOUNTING HEIGHTS, ARM LENGTH, NUMBER OF ARMS, AND LUMINAIRE WEIGHT AND EFFECTIVE PROJECTED AREA (EPA).

2.) IT IS PREFERRED THAT ALL NEW STREET LIGHT POLES AND LUMINAIRE ARMS SHOULD BE ALUMINUM IN ACCORDANCE WITH SUBSECTION 753.01(B), POLE MATERIAL TO BE SPECIFIED ON THE PLANS.

3.) THE CONTRACTOR SHALL INSTALL METAL TAGS ON EACH LIGHT POLE WITH THE INFORMATION AS NOTED ON THE DETAIL SHOWN ON THIS SHEET.

4.) ALL LUMINARE SUPPORT ARMS INSTALLED SHALL BE "TRUSS-TYPE".





MOUNTING HEIGHT CORRECTION FACTORS FOR OTHER THAN 30 FEET.
USE TABLE BELOW OR FACTOR = 900 / (ACTUAL MH)²

MOUNTING HEIGHT - FEET	20	25	30	35	40	45	50
FACTOR	2.25	1.44	1.00	0.73	0.56	0.44	0.36

GENERAL ELECTRIC

PHOTOMETRIC DATA

LIGHTING SYSTEMS BUSINESS DEPARTMENT
HENDERSONVILLE, N.C. U.S.A. 28739

PER 1000 LAMP LUMENS

LUMINAIRE
M-250A2 CUTOFF
REFLECTOR 35-232433-03
REFRACTOR FLAT GLASS
SOCKET POSITION 1

LAMP
200 - 250 WATT HPS
LU200 OR LU250
S66 OR S50

ANSI/IES TYPE 1972
MEDIUM CUT-OFF III
CIE TYPE
CUT-OFF

GENERAL INFORMATION

TEST DISTANCE	7.0 METERS
MAX CANDELA	416.3
MAX CONE	72.5
MAX VERTICAL PLANE	62.5/ 297.5
MAX CANDELA AT 90°	0.0
MAX CANDELA AT 80°	8.5
NADIR FOOTCANDLES	0.2792
NADIR CANDELA	251.3

MULTIPLY ALL LUMEN, CANDELA, AND FOOTCANDLE VALUES BY THIS RATIO

RATIO = ACTUAL LAMP LUMENS / 1000

PHOTOMETRIC TEST IN ACCORDANCE WITH IES GUIDE

LIGHT FLUX VALUES

	LUMENS	PERCENT OF LAMP
DOWNWARD STREET SIDE	467	46.7
UPWARD STREET SIDE	0	0.0
DOWNWARD HOUSE SIDE	291	29.1
UPWARD HOUSE SIDE	0	0.0
TOTAL	758	75.8

TESTED J.M. Howell DATE 4-25-85
APPROVED D. Carter DATE 4-29-85
DATE

DRAWING NO. 35-177304 SHEET REVISION

LUMINAIRES

1.) LIGHT DISTRIBUTION IS BASED ON GENERAL ELECTRIC PHOTOMETRIC DATA DRAWINGS #35-177304, MEDIUM CUT-OFF TYPE III DISTRIBUTION, DATED 4-24-85.

2.) THE ABOVE PHOTOMETRIC DATA DRAWING WAS USED FOR DESIGN PURPOSES ON THIS PROJECT. OTHER MANUFACTURER'S PRODUCTS MAY BE SUBSTITUTED IF THE INSTALLED LUMINAIRE LIGHT UTILIZATION AND MINIMUM FOOTCANDLES ON THE ROADWAY, SHOULDER AND SIDEWALK ARE AT LEAST AS GREAT AS THAT INDICATED BY THE PHOTOMETRIC SHOWN ON THIS SHEET.

CONDUIT

1.) A 50 mm (DN 53) MINIMUM CONDUIT SHALL BE USED AT ALL LOCATIONS UNLESS OTHERWISE NOTED ON THE PLANS. ALL CONDUIT SHALL BE AT LEAST (SCHEDULE 40 P.V.C.) OR RIGID GALVANIZED STEEL ELECTRICAL CONDUIT (AND CONFORM TO THE REQUIREMENTS OF UL-6). TYPE OF CONDUIT (P.V.C. OR STEEL) SHALL BE NOTED ON THE PLANS.

CONDUIT SLEEVE

1.) MINIMUM WALL THICKNESS FOR RIGID PLASTIC PIPE SLEEVES SHALL BE 1/35TH THE DIAMETER. ALL CONDUIT RUNS UNDER ROADWAY SHALL BE INSTALLED IN RIGID PLASTIC OR STEEL PIPE SLEEVES. THE SLEEVE SHALL EXTEND TO WITHIN 600 mm OF THE SIDE OF A CONCRETE BASE OR PULLBOX. WHERE NO CONCRETE BASE OR PULLBOX IS PRESENT, THE SLEEVE SHALL EXTEND 1.2 m BEYOND THE OUTSIDE EDGE OF SHOULDER OR FACE OF CURB. BACKFILLING AROUND A SLEEVE SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

2.) WHEN JACKING A SLEEVE UNDER ROADWAY IT SHALL BE STEEL WITH A MINIMUM DIAMETER OF 200 mm AND MINIMUM WALL THICKNESS OF 10 mm. ACTUAL LENGTH TO BE DETERMINED IN THE FIELD BY THE RESIDENT ENGINEER.

WIRE

1.) ALL WIRING BETWEEN THE METER AND/OR POWER SOURCE AND THE FIRST POLE AND/OR PULLBOX AND BETWEEN POLES AND/OR PULLBOXES SHALL BE COPPER AND SIZED AS SPECIFIED ON THE PLANS. ALL WIRE SHALL HAVE TYPE XHHW INSULATION OR EQUIVALENT.

GROUNDING

1.) ALL CONDUIT MUST INCLUDE A GROUNDING CONDUCTOR. RIGID STEEL CONDUIT SHALL BE PROPERLY CONNECTED AT THE JOINTS SO AS TO BE WATERTIGHT AND MAINTAIN ELECTRICAL CONTINUITY AND HAVE GROUNDING BUSHINGS SO AS TO ACT AS A GROUND CONDUCTOR.

2.) ALUMINUM WIRE SHALL NOT BE USED FOR GROUND WIRE.

PULLBOXES

1.) FOR DETAILS SEE STANDARD SHEET E-173M.

GENERAL

1.) THE LOAD ON EACH BRANCH OF THE THREE WIRE CIRCUIT SHALL BE BALANCED AS POSSIBLE. LOAD TO NEUTRAL.

2.) THE LAST CONCRETE POLE BASE AT THE END OF EACH CIRCUIT AND SOME PULLBOXES SHALL HAVE A CONDUIT SWEEP WITH CAP INSTALLED FOR FUTURE USE.

3.) THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING NECESSARY ELECTRICAL PERMITS.

STREET LIGHTING TABLE

SURVEYED BY	C.H.A. & V.S.E. DATE 12/93
DESIGNED BY	D.E.G. DATE 9/00
DRAWN BY	K.H.D. DATE 9/00
CHECKED BY	T.P.K. DATE 9/00
DESIGN FILE NO.	SLP-3.DGN
PROJ. NAME	BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO.	P.I.N. 1306.60
DWG NO.	SLP-3

FILE NAME = u:\5116\vaot\contract4\slp-3.dgn
DATE/TIME = 07 SEP 2000
USER = 1459

VAOT **Metric**

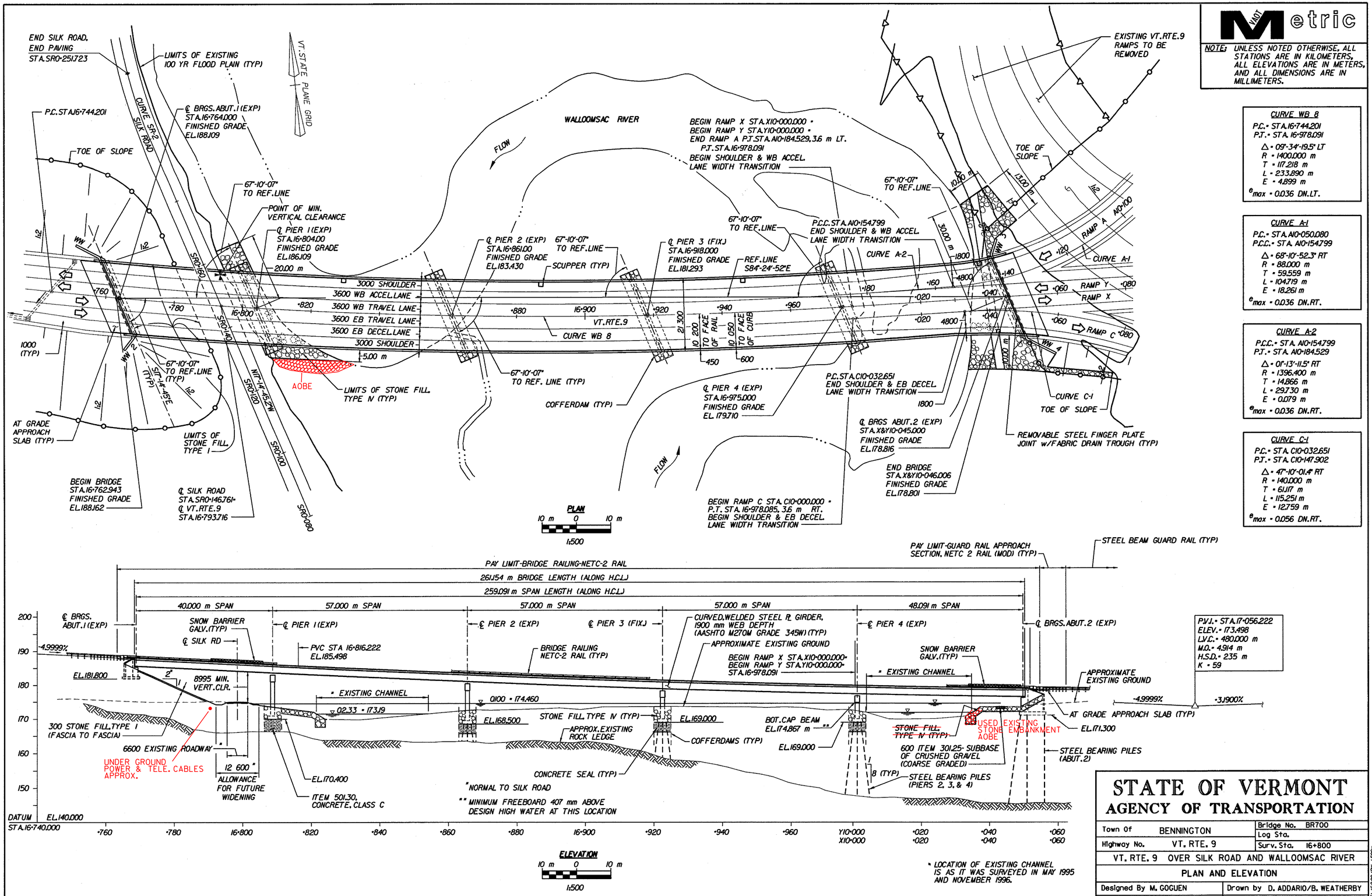
NOTE: UNLESS NOTED OTHERWISE, ALL STATIONS ARE IN KILOMETERS, ALL ELEVATIONS ARE IN METERS, AND ALL DIMENSIONS ARE IN MILLIMETERS.

CURVE WB 8
P.C. = STA. 16+744.201
P.T. = STA. 16+978.091
Δ = 09°-34'-19.5" LT
R = 1400.000 m
T = 117.218 m
L = 233.890 m
E = 4.899 m
e_{max} = 0.036 DN.LT.

CURVE A-1
P.C. = STA. A10+050.080
P.C.C. = STA. A10+154.799
Δ = 68°-10'-52.3" RT
R = 88.000 m
T = 59.559 m
L = 104.719 m
E = 18.261 m
e_{max} = 0.036 DN.RT.

CURVE A-2
P.C.C. = STA. A10+154.799
P.T. = STA. A10+184.529
Δ = 01°-13'-11.5" RT
R = 1396.400 m
T = 14.866 m
L = 29.730 m
E = 0.079 m
e_{max} = 0.036 DN.RT.

CURVE C-1
P.C. = STA. C10+032.651
P.T. = STA. C10+147.902
Δ = 47°-10'-01.4" RT
R = 140.000 m
T = 61.117 m
L = 115.251 m
E = 12.759 m
e_{max} = 0.056 DN.RT.



STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800

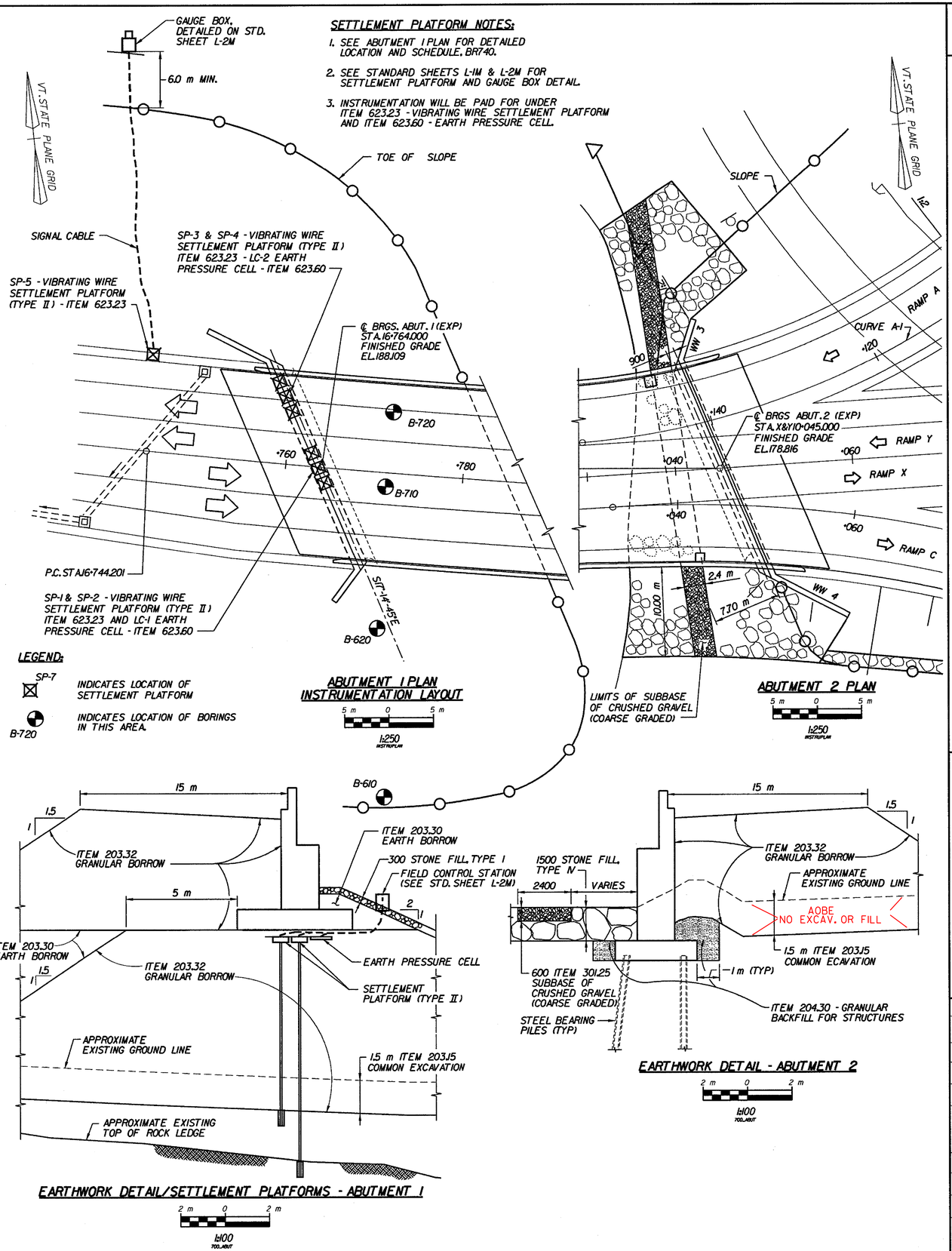
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER

PLAN AND ELEVATION

Designed By M. GOGUEN	Drawn by D. ADDARIO/B. WEATHERBY
Checked By D. VIENI Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
LG.C. Info.	
Bridge Sheet No. BR700	Sheet 183 OF 385

CHA CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

dw:3513/15/BR700/700-PLEV/6.0.00/BW 1:500m



SETTLEMENT PLATFORM NOTES:

1. SEE ABUTMENT 1 PLAN FOR DETAILED LOCATION AND SCHEDULE, BR740.
2. SEE STANDARD SHEETS L-1M & L-2M FOR SETTLEMENT PLATFORM AND GAUGE BOX DETAIL.
3. INSTRUMENTATION WILL BE PAID FOR UNDER ITEM 623.23 - VIBRATING WIRE SETTLEMENT PLATFORM AND ITEM 623.60 - EARTH PRESSURE CELL.

LEGEND:

SP-7 — INDICATES LOCATION OF SETTLEMENT PLATFORM

B-720 — INDICATES LOCATION OF BORINGS IN THIS AREA.

ABUTMENT 1 PLAN INSTRUMENTATION LAYOUT

5 m 0 5 m

1:250 INSTRUPLAN

ABUTMENT 2 PLAN

5 m 0 5 m

1:250 INSTRUPLAN

EARTHWORK DETAIL/SETTLEMENT PLATFORMS - ABUTMENT 1

2 m 0 2 m

1:100 700_ABUT

EARTHWORK DETAIL - ABUTMENT 2

2 m 0 2 m

1:100 700_ABUT

FINAL HYDRAULICS REPORT

VAOT Metric

HYDROLOGIC DATA

DRAINAGE AREA: 23 777 ha
CHARACTER OF TERRAIN: PRIMARILY UNDEVELOPED WOODED AREAS
CHARACTER & TYPE OF STREAM: MEDIUM, PERENNIAL, MEANDERING STREAM
NATURE OF STREAMBED: COBBLES, SMALL DIA. STONES AND SAND

Q2.33= 86.37 m³/sec — Q50= 230.78 m³/sec
Q10= 154.61 m³/sec — Q100= 266.18 m³/sec
Q25= 195.39 m³/sec — Q500= 359.62 m³/sec

DATE OF FLOOD OF RECORD: DECEMBER 1949
WATER SURFACE ELEV.: 174.1 ESTIMATED DISCHARGE: 156 m³/sec
NATURAL STREAM VELOCITY @ FLOOD OF RECORD < 1.0 m/sec
ICE CONDITIONS: MINOR DEBRIS: MINOR
DOES THE STREAM REACH MAXIMUM HIGHWATER ELEVATION RAPIDLY? YES
IS ORDINARY RISE RAPID? YES
IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? NO
IF YES, DESCRIBE. N/A

WATERSHED STORAGE IX HEADWATERS UNIFORM THROUGHOUT WATERSHED X
IMMEDIATELY ABOVE SITE

EXISTING STRUCTURE

STRUCTURE TYPE: N/A YEAR BUILT:
CLEAR SPAN (NORMAL TO STREAM):
VERTICAL CLEARANCE ABOVE STREAMBED:
WATERWAY OF FULL OPENING:
DISPOSITION OF STRUCTURE:
TYPE OF MATERIAL UNDER SUBSTRUCTURE:

WATER SURFACE ELEV. @ Q2.33= VELOCITY=
Q10= " =
Q25= " =
Q50= " =
Q100= " =

LONG TERM STREAM BED CHANGES:

IS THE ROADWAY OVERTOPPED BELOW THE Q100? FREQUENCY:
RELIEF ELEVATION: DISCHARGE OVER ROAD @ Q100:

UPSTREAM STRUCTURE #1: TOWN: BENNINGTON DISTANCE: 2.55 km
HIGHWAY NO.: HUNT STREET STRUCTURE NO.: 00057
STRUCTURE TYPE: STEEL STRINGER MULTI BEAM OR GIRDER
CLEAR SPAN: 76.8 m CLEAR HEIGHT: 3.0 m
YEAR BUILT: 1938 FULL WATERWAY: 230.4 m²

UPSTREAM STRUCTURE #2: TOWN: BENNINGTON DISTANCE: 2.56 km
HIGHWAY NO.: HUNT STREET EXTENSION STRUCTURE NO.: 00049
STRUCTURE TYPE: STEEL STRINGER MULTI BEAM OR GIRDER
CLEAR SPAN: 15.5 m CLEAR HEIGHT: 3.7 m
YEAR BUILT: 1975 FULL WATERWAY: 57.4 m²

DOWNSTREAM STRUCTURE: TOWN: BENNINGTON DISTANCE: 1.31 km
HIGHWAY NO.: C3026 (SILK ROAD) STRUCTURE NO.: 0030
STRUCTURE TYPE: TIMBER THROUGH TRUSS
CLEAR SPAN: 26.2 m CLEAR HEIGHT: 4.6 m
YEAR BUILT: 1840 FULL WATERWAY: 120.5 m²

PROPOSED STRUCTURE

STRUCTURE TYPE: 5-SPAN CURVED CONTINUOUS PLATE GIRDER

CLEAR SPAN (NORMAL TO STREAM): 255.00 m
VERTICAL CLEARANCE ABOVE STREAMBED: 8.00 m (AVERAGE)
WATERWAY OF FULL OPENING: 575 m²

WATER SURFACE ELEV. @ Q2.33 = 173.19 VELOCITY = 0.68 m/sec
" Q10 = 174.06 " = 0.69 m/sec
" Q25 = 174.22 " = 0.79 m/sec
" Q50 = 174.35 " = 0.88 m/sec
" Q100 = 174.46 " = 0.95 m/sec

IS THE ROADWAY OVERTOPPED BELOW THE Q100? NO FREQUENCY: N/A
RELIEF ELEVATION: N/A DISCHARGE OVER ROAD @ Q100: N/A

AVERAGE LOW ELEVATION OF SUPERSTRUCTURE: 179.00*
VERTICAL CLEARANCE @ Q100 = 0.407 m @ PIER 4

SCOUR: BRIDGE FOUNDATIONS ARE DESIGNED FOR THE 100-YEAR EVENT AND CHECKED FOR THE 500-YEAR EVENT
REQUIRED CHANNEL PROTECTION: TYPE IV STONE FILL AS BANK PROTECTION

PERMIT INFORMATION

AVERAGE DAILY FLOW: 5.4 m³/sec
ORDINARY LOW WATER: 2.4 m³/sec DEPTH: 0.1 m
ORDINARY HIGH WATER: 37.1 m³/sec DEPTH: 1.0 m

ADDITIONAL COMMENTS

*BOTTOM OF PIER 4 CAP = 174.760

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11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

DESIGN CRITERIA:
1. DESIGN LIVE LOAD AASHTO MS 22.5
2. DESIGN SPAN 259.091m
3. ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL 200 KPa ON LEDGE 480 kPa
4. ALLOWABLE LOAD FOR PILING 1376 kN TYPE HP 310 x 125 ESTIMATED LENGTH 15 m (AVERAGE)
5. STRUCTURAL STEEL AASHTO M270M GRADE 345W
6. REINFORCING STEEL GRADE 420 TENSION
7. CONCRETE CLASS A f_c' 30 MPa
CLASS B f_c' 25 MPa
SILICA FUME f_c' 35 MPa

TRAFFIC MAINTENANCE:
1. IS TRAFFIC TO BE MAINTAINED? N\A IF YES, ON EXISTING STRUCTURE OR ON TEMPORARY BRIDGE
2. TEMPORARY BRIDGE REQUIREMENTS: ONE OR TWO WAY TRAFFIC CONTROL SIGNALS REQUIRED
MINIMUM CLEAR SPAN (NORMAL TO STREAM): VERTICAL CLEARANCE ABOVE STREAMBED:
WATERWAY OF FULL OPENING:
ARE SIDEWALKS REQUIRED? IF SO, ON WHAT SIDE?
STRUCTURE TYPE:

LOAD FACTOR LOAD RATING (TONS)

LOADING LEVELS (LOAD FACTOR)	TRUCK M	MS	3S2	6 AXLE	3A.STR.	4A.STR.	5A.SEMI
INVENTORY A = 2.17; B = 1.00	44	44					
POSTED A = 1.55; B = 1.40	62	62	88		100	89	96
OPERATING A = 1.30; B = 1.67	74	74	123	151	140	124	

$$RF = \frac{\emptyset M_N - 1.3\,M_{DL}}{A \times M_{LL+I}}$$

$$\frac{.95\,F_y\,S_{LL+I} - M_{DL}\frac{S_{LL+I}}{S_{DL}} - M_{SDL}\frac{S_{LL+I}}{S_{SDL}}}{1.67\,M_{LL+I}}$$

PROJECTED TRAFFIC DATA

YEAR	ADT	DHV	% D	% T	% ADTT
2000	5300	675	52	7	370
2020	6600	840	52	7	460

20 year ESAL for flexible pavement from 2000 to 2020: 4,825,000
40 year ESAL for flexible pavement from 2000 to 2040: 17,229,000
Design speed: 100 KM/H

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800

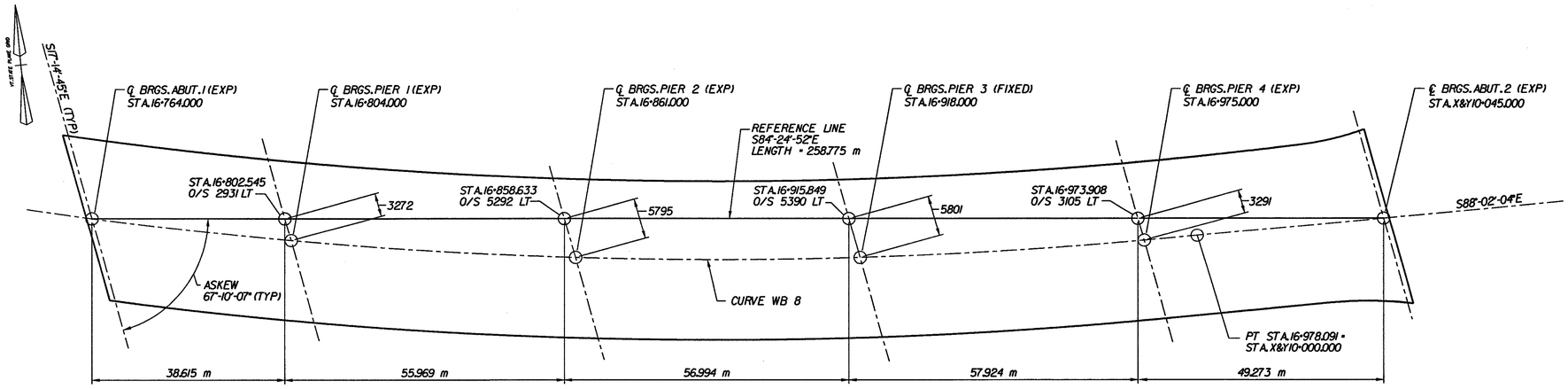
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER

PRELIMINARY INFORMATION & INSTRUMENTATION LAYOUT

Designed By M. GREEN	Drawn by D. ADDARIO/B. WEATHERBY
Checked By M. GOGUEN Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR701	Sheet 184 OF 385

F:\35\15\BR700\SHT2\2700.DGN 400mm

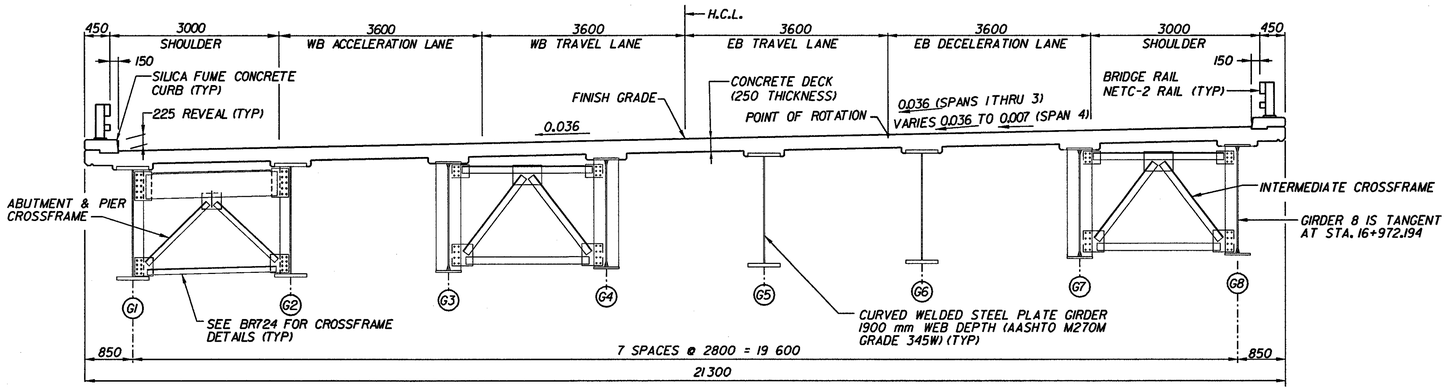
VAOT Metric



STRUCTURE GEOMETRY LAYOUT

N.T.S.

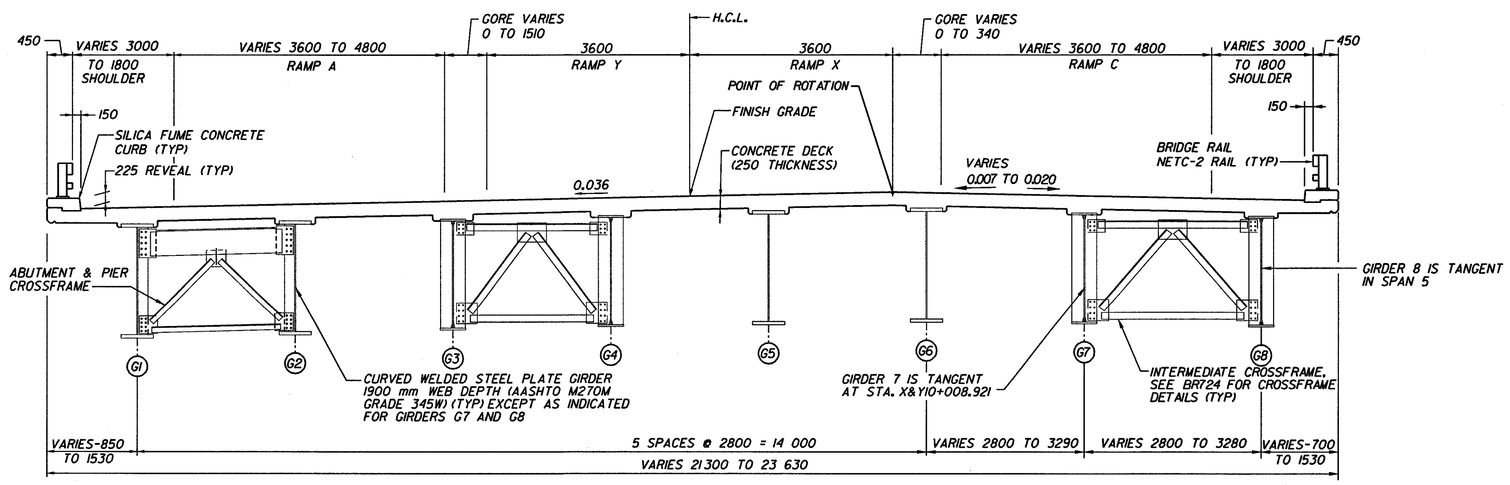
SCHEMATIC



TYPICAL BRIDGE SECTION (SPANS 1-4)

1m 0 1m

1:50



TYPICAL BRIDGE SECTION (SPAN 5)

1m 0 1m

1:50

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
Highway No. VT. RTE. 9	Log Sta.
	Surv. Sta. 16+800

VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER

BRIDGE SECTIONS & STRUCTURE GEOMETRY LAYOUT

Designed By M. GOGUEN	Drawn by B. WEATHERBY
Checked By Date K. BENTLEY 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR702	Sheet 185 OF 385

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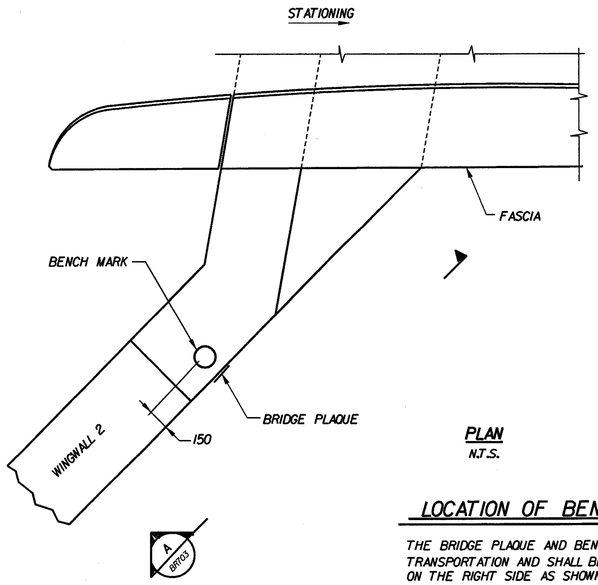
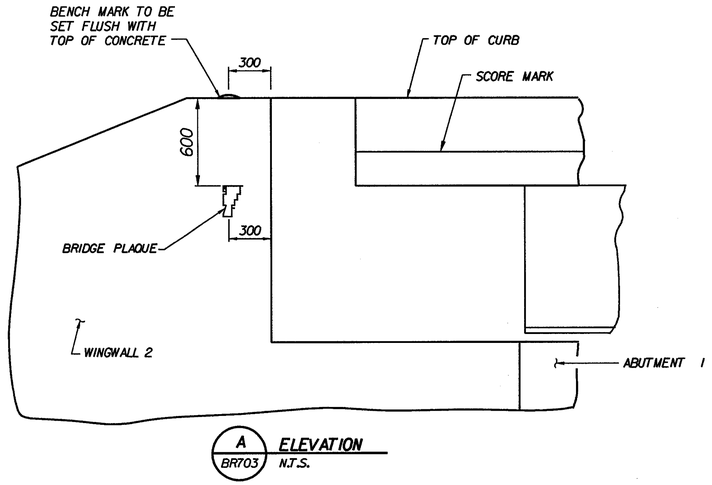
LA\3573/S/BR700/PRESECT/6.3.2000/BW/ 1:50mm



PLAN
N.T.S.



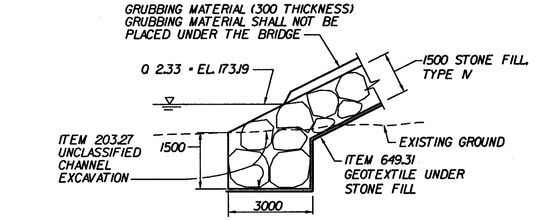
A BR703 ELEVATION
N.T.S.

LOCATION OF BENCH MARK AND BRIDGE PLAQUE

THE BRIDGE PLAQUE AND BENCH MARK WILL BE SUPPLIED BY THE AGENCY OF TRANSPORTATION AND SHALL BE INSTALLED BY THE CONTRACTOR AT ABUTMENT 1 ON THE RIGHT SIDE AS SHOWN OR AS DIRECTED BY THE ENGINEER.

LIST OF BRIDGE SHEETS

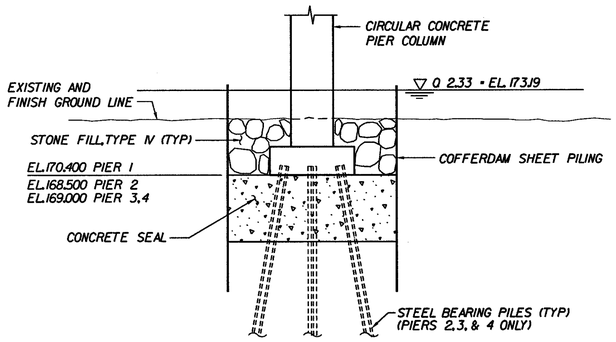
BR700	PLAN AND ELEVATION	BR738	CURB DETAILS
BR701	PRELIMINARY INFORMATION & INSTRUMENTATION LAYOUT	BR739	SCUPPER DETAILS
BR702	BRIDGE SECTIONS & STRUCTURE GEOMETRY LAYOUT	BR740	ABUT. 1 PLAN
BR703	GENERAL NOTES & DETAILS	BR741	ABUT. 1 ELEVATION
BR704	BRIDGE QUANTITY SHEET	BR742	ABUT. 1 REINF. DETAILS - 1
BR705	BORING LOCATION PLAN	BR743	ABUT. 1 REINF. DETAILS - 2
BR706 - BR713	SOIL BORING LOGS	BR744	ABUT. 1 REINF. DETAILS - 3
BR714	TYPICAL TRANSVERSE BRIDGE SECTIONS - 1	BR745	ABUT. 2 PLAN
BR715	TYPICAL TRANSVERSE BRIDGE SECTIONS - 2	BR746	ABUT. 2 ELEVATION
BR716	DECK SLAB REINFORCING	BR747	ABUT. 2 REINF. DETAILS - 1
BR717	DECK REINF. DETAILS & PLACEMENT SEQUENCE	BR748	ABUT. 2 REINF. DETAILS - 2
BR718	BRIDGE END SECTION & DETAILS	BR749	ABUT. 2 REINF. DETAILS - 3
BR719 - 723	FRAMING PLANS	BR750	PIER 1 PLAN AND ELEVATION
BR724	CROSSFRAME DETAILS	BR751	PIER 1 SECTIONS & DETAILS
BR725	GIRDER ELEVATION	BR752	PIER 1 COFFERDAM DETAILS
BR726	GIRDER DETAILS	BR753	PIER 2 PLAN AND ELEVATION
BR727	CAMBER DIAGRAM & DEADLOAD DEFLECTIONS	BR754	PIER 2 SECTIONS & DETAILS
BR728	GIRDER SPLICE DETAILS	BR755	PIER 2 PILE PLAN AND COFFERDAM DETAILS
BR729	EXPANSION BEARING DETAILS ABUTMENTS	BR756	PIER 3 PLAN AND ELEVATION
BR730	EXPANSION BEARING DETAILS PIERS 1,2 AND 4	BR757	PIER 3 SECTIONS & DETAILS
BR731	FIXED BEARING DETAILS PIER 3	BR758	PIER 3 PILE PLAN AND COFFERDAM DETAILS
BR732	BRIDGE EXPANSION JOINT DETAILS - 1	BR759	PIER 4 PLAN AND ELEVATION
BR733	BRIDGE EXPANSION JOINT DETAILS - 2	BR760	PIER 4 SECTIONS & DETAILS
BR734	BRIDGE EXPANSION JOINT DETAILS - 3	BR761	PIER 4 PILE PLAN AND COFFERDAM DETAILS
BR735	BRIDGE EXPANSION JOINT DETAILS - 4	BR762	COFFERDAM DETAILS
BR736	BRIDGE EXPANSION JOINT DETAILS - 5	BR763	REINF. STEEL SCHEDULE - 1
BR737	APPROACH SLAB DETAILS	BR764	REINF. STEEL SCHEDULE - 2



TYPICAL EMBANKMENT PROTECTION DETAIL

2 m 0 2 m

1:100 TYP.SAME



TYPICAL COFFERDAM SECTION

2 m 0 2 m

1:100 REMAIN

GENERAL NOTES:

1. THE FOLLOWING NOTES SHALL APPLY UNLESS OTHERWISE NOTED ON THE PLANS.
2. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION - 1995 (METRIC) AND ITS LATEST REVISIONS, AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, (16TH EDITION) AND ITS LATEST REVISIONS.
3. FIELD CONNECTIONS SHALL BE MADE WITH M22, AASHTO M164M, TYPE 3 BOLTS, EXCEPT IN AREAS OF PAINTED STEEL, WHERE TYPE I GALVANIZED BOLTS SHALL BE USED. HOLES SHALL BE 24 mm DIAMETER. CONNECTIONS NOT DESIGNED SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE STATE FOR APPROVAL.
4. ALL WELDING AND DIMENSIONAL TOLERANCES OF WELDED MEMBERS SHALL CONFORM TO THE LATEST ANSI/AASHTO/AWS WELDING CODE AND ITS LATEST REVISIONS.
5. AFTER SUPERSTRUCTURE STEEL HAS BEEN ERECTED, BEAM PROFILES SHALL BE TAKEN. CONCRETE SHALL NOT BE PLACED ABOVE BRIDGE SEAT ELEVATIONS UNTIL AFTER PROFILES ARE COMPLETE TO THE SATISFACTION OF THE ENGINEER.
6. ANY FORM BRACKET HOLES IN FASCIA GIRDER WEBS NOT OTHERWISE FILLED SHALL BE FILLED WITH BUTTON HEAD OR HEX HEAD, AASHTO M164M, TYPE 3 BOLTS, EXCEPT IN AREAS OF PAINTED STEEL, WHERE TYPE I GALVANIZED BOLTS SHALL BE USED.
7. MINIMUM COVER FOR REINFORCING STEEL IN SUBSTRUCTURE SHALL BE 50 mm ALONG BACK FACES OF WALLS AGAINST EARTH, AND 75 mm ELSEWHERE.
8. REINFORCEMENT PLACEMENT TOLERANCES SHALL BE:
   SPACING ±25 mm
   CLEARANCE ±5 mm
9. DECK CONCRETE SHALL BE "CONCRETE CLASS A", OA/OC. CURB CONCRETE SHALL BE "SILICA FUME CONCRETE". COFFERDAM SEALS SHALL BE "CONCRETE CLASS C". ALL OTHER CONCRETE SHALL BE "CONCRETE CLASS B" UNLESS OTHERWISE DESIGNATED ON THE PLANS.
10. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 25 mm BY 25 mm.
11. SURFACES OF BRIDGE SEATS UNDER BEARING DEVICES SHALL BE LEVEL. OTHER BRIDGE SEAT AREAS SHALL BE SLOPED 4%. ABUTMENT SEATS SHALL BE SLOPED FULL WIDTH TOWARD CENTER SPAN. THE ENTIRE BRIDGE SEAT SURFACE SHALL BE SMOOTH WITH FLOAT FINISH AS PER SUBSECTION 501.16.
12. WATER REPELLENT SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES EXCEPT THE UNDERSIDE OF DECK BETWEEN DRIP NOTCHES.
13. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL, AND ARE GIVEN AT 20 DEGREES CELSIUS UNLESS OTHERWISE NOTED.
14. JOINTS AND SCORE MARKS SHALL BE CONSTRUCTED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER.
15. THE KEY IN CONCRETE CONSTRUCTION JOINTS SHALL BE MONOLITHIC AND CONTINUOUS FOR THE FULL LENGTH OF THE JOINT.
16. FILL IN AREAS THROUGH WHICH PILES ARE TO BE DRIVEN SHALL HAVE A MAXIMUM STONE SIZE OF 225 mm.
17. STONE FILL SHALL BE PLACED IN FRONT OF THE ABUTMENTS BEFORE SUPERSTRUCTURE STEEL IS PLACED.
18. FASCIA OVERHANG BRACKET DESIGN SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR BUT THE MAXIMUM SPACING OF THESE BRACKETS SHALL NOT EXCEED 1200 mm.
19. LIMITS OF IN-STREAM CONSTRUCTION WILL BE AS SPECIFIED IN ALL APPLICABLE PERMITS.

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ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
GENERAL NOTES & DETAILS	
Designed By M. GOGUEN	Drawn by J. HOTALING/B. WEATHERBY
Checked By D. VIENI Date 11/99	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR703	Sheet 186 OF 385

Lu 3573.15/BR700/GENNOTES/5.26.00/BW 160mm

EARTHWORK

V.C.	% GRD	STATION	ELEVATION ON TANGENT	ELEVATION ON V.C.	CORR. V.C	DIST.	AREA	m^3	AREA	m^3	AREA	m^3	AREA	m^3

BRIDGE QUANTITY SHEET

STATE OF VERMONT
AGENCY OF TRANSPORTATION
STRUCTURES DIVISION

NO.	ITEM	UNIT	QUANTITY BREAKDOWN												TOTAL	FINAL
			SUPER-STRUCTURE	ABUTMENT 1	ABUTMENT 2	PIER 1	PIER 2	PIER 3	PIER 4	APPROACH SLABS	CHANNEL QUANTITIES	MISC.				
203.15	COMMON EXCAVATION	m^3		4600	1310										5910	
203.27	UNCLASSIFIED CHANNEL EXCAVATION	m^3									1250				1250	
203.32	GRANULAR BORROW	m^3		17440	3200										20640	
204.25	STRUCTURE EXCAVATION	m^3			330										330	
204.30	GRANULAR BACKFILL FOR STRUCTURES	m^3			155										155	
204.40	COFFERDAM (STA.16+804.000) (MOD)	LS				1									1	
204.40	COFFERDAM (STA.16+861.000)	LS					1								1	
204.40	COFFERDAM (STA.16+918.000)	LS						1							1	
204.40	COFFERDAM (STA.16+975.000)	LS							1						1	
301.25	SUBBASE OF CRUSHED GRAVEL (COARSE GRADED)	m^3			75										75	
501.221	CONCRETE CLASS A, OA/OC	m^3	1500							110					1610	
501.25	CONCRETE, CLASS B	m^3		355	396	210	217	203	194						1575	
501.30	CONCRETE, CLASS C	m^3				500									500	
501.60	CONCRETE, SILICA-FUME	m^3	73												73	
504.10	FURNISHING EQUIPMENT FOR DRIVING PILES	LS										1			1	
505.18	STEEL PILING (HP360x132)	m			1730		245	350	565						2890	
505.35	PERMANENT STEEL SHEET PILING	m^2				440	845	635	635						2555	
505.45	DYNAMIC PILE LOADING TEST	EA			2		2	2	2						8	
506.55	STRUCTURAL STEEL (PLATE GIRDER)	kg	1200000												1200000	
506.75	STRUCTURAL STEEL (SCUPPERS, DOWNSPOUTS)	LS	1												1	
507.15	REINFORCING STEEL	kg		13035	16950	30825	34590	33250	30525			410			159585	
507.17	EPOXY COATED REINFORCING STEEL	kg	234250	210	210					7720		275			242665	
508.15	SHEAR CONNECTORS (11532-22 mm DIA.x 175 mm LG.)	LS	1												1	
513.25	STRUCTURAL PAINTING, SHOP APPLIED (24 TONS)	LS	1												1	
513.35	CONTAINMENT AND ENVIRONMENTAL PROTECTION, SHOP	LS	1												1	
513.40	SURFACE PREPARATION, SHOP	LS	1												1	
514.10	WATER REPELLENT	L	175	10	11	11	9	8	8	9					241	
516.10	BRIDGE EXPANSION JOINT (FINGER JT. @ ABUT 1)	m		23											23	
516.10	BRIDGE EXPANSION JOINT (FINGER JT. @ ABUT 2)	m			24										24	
525.33	BRIDGE RAILING - NETC-2 RAIL	m	582												582	
531.10	BEARING DEVICE ASSEMBLY (EXP. @ ABUT 1)	EA		8											8	
531.10	BEARING DEVICE ASSEMBLY (EXP. @ PIER 1)	EA				8									8	
531.10	BEARING DEVICE ASSEMBLY (EXP. @ PIER 2)	EA					8								8	
531.10	BEARING DEVICE ASSEMBLY (FIX. @ PIER 3)	EA						8							8	
531.10	BEARING DEVICE ASSEMBLY (EXP. @ PIER 4)	EA							8						8	
531.10	BEARING DEVICE ASSEMBLY (EXP. @ ABUT 2)	EA			8										8	
613.10	STONE FILL, TYPE I	m^3		150											150	
613.13	STONE FILL, TYPE IV	m^3			1100	650	310	300	300						2660	
620.75	SNOW BARRIER (GALVANIZED)	m	60												60	
623.23	VIBRATING WIRE SETTLEMENT PLATFORM (TYPE II)	EA		5											5	
623.60	EARTH PRESSURE CELL	EA		2											2	
635.10	MOBILIZATION	LS													0.6	
649.31	GEOTEXTILE UNDER STONE FILL	m^2			1055	350									1405	
651.40	GRUBBING MATERIAL	m^2			375	125									500	

BRIDGE AT STATION (S) 16+800
LOCATION VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER

Prepared By: J. HOTALING/B. WEATHERBY | Checked By: M. GOGUEN
SUPERVISOR: M. W. OLSTAD

BENNINGTON-HOOSICK
BR 704 OF

PROJECT NO. DPI 0146(1) C/4
SHEET NO. 187 OF 385

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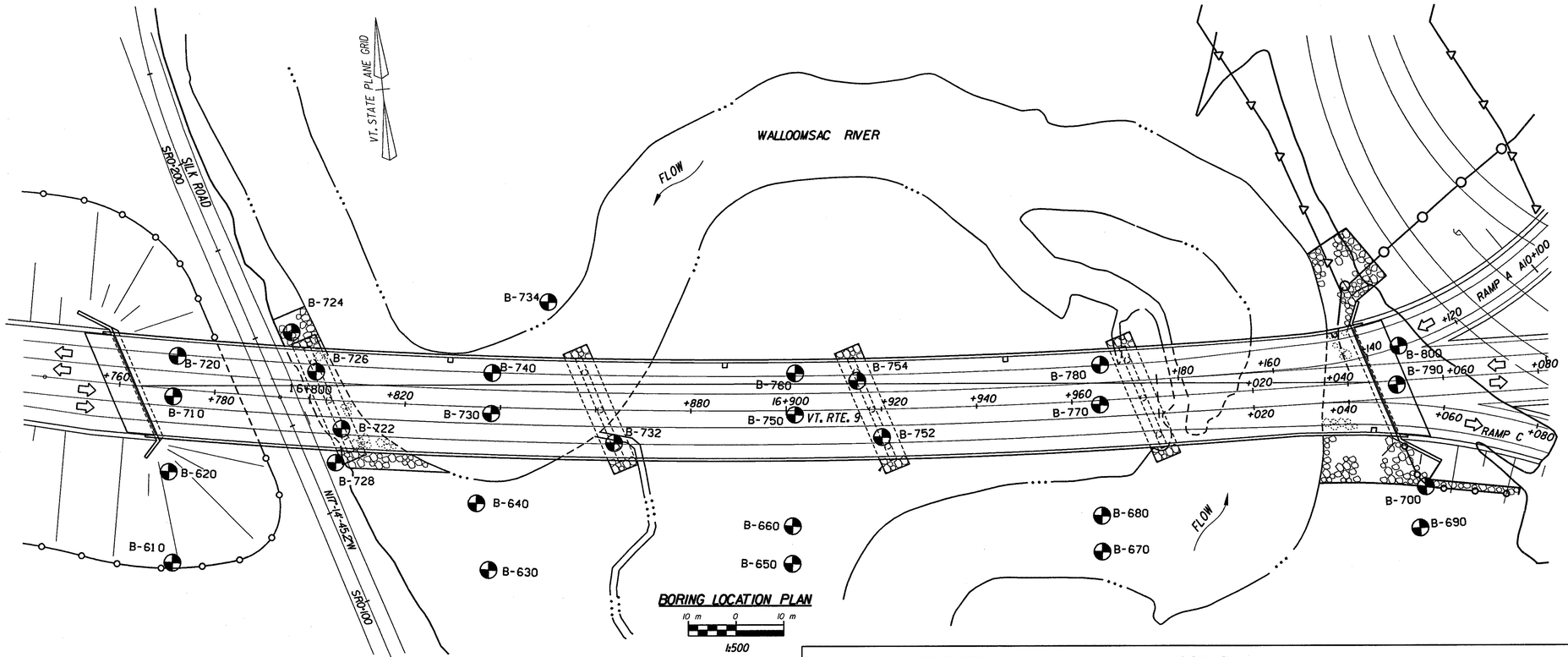
Metric (NOT)



BORING LOCATION PLAN

10 m 0 10 m

1:500

TABLE OF SOIL BORING LOCATIONS

BORING NO.	STATION (km)	OFFSET (m)	LEDGE ELEV.(m)	BORING NO.	STATION (km)	OFFSET (m)	LEDGE ELEV.(m)
B-610	16+774.0	36.5 RT	168.3	B-726	16+796.1	12.0 LT	166.8
B-620	16+771.7	17.6 RT	168.3	B-728	16+807.9	12.5 RT	165.8
B-630	16+838.7	34.3 RT	160.7	B-730	16+838.1	1.4 RT	163.0
B-640	16+835.7	20.5 RT	161.5	B-732	16+864.0	7.0 RT	159.8
B-650	16+901.0	32.3 RT	165.8	B-734	16+852.2	19.0 LT	152.75
B-660	16+901.1	24.4 RT	163.2	B-740	16+838.1	7.1 LT	163.8
B-670	16+964.6	36.3 RT	150.7	B-750	16+901.8	0.9 RT	163.8
B-680	16+965.0	24.2 RT	149.6	B-752	16.920.0	6.0 RT	156.9
B-690	C10+057.9	25.7 RT	141.8	B-754	16+915.0	6.0 LT	157.8
B-700	C10+058.1	17.0 RT	140.0	B-760	16+902.0	7.6 LT	163.4
B-710	16+771.4	1.6 RT	170.2	B-770	16+965.9	0.9 RT	149.1
B-720	16+771.6	6.9 LT	170.8	B-780	16+966.4	7.3 RT	149.1
B-722	16+806.9	6.0 RT	166.0	B-790	C10+049.8	3.9 LT	144.0
B-724	16+801.0	5.7 LT	166.8	B-800	A10+J32.9	0.2 LT	144.8

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

MOISTURE

DESCRIPTIVE TERM	OBSERVED IN FIELD	% • BY ANALYSIS
DRY	NO VISIBLE WATER	<10
MOIST	DAMP	10-20
MOIST TO WET	MOIST TO WET	21-50
WET	VISIBLE WATER	51-70
SATURATED		>70

SHEAR STRENGTH

UNDRAINED SHEAR STRENGTH

IN kPa	CONSISTENCY
<12	Very Soft
12-24	Soft
24-48	Med.Stiff
48-96	Stiff
96-192	Very Stiff
>192	Hard

UNIFIED SOIL SYSTEM

GW/GP	CLEAN GRAVELS (FEW FINES)
GM/GC	GRAVELS (APPRECIABLE FINES)
SW/SP	CLEAN SANDS (FEW FINES)
SM/SC	SAND (APPRECIABLE FINES)
ML/CL	LOW PLASTIC SILTS & CLAYS
OL	LOW PLASTIC ORGANIC SILT
MH/CH	HIGH PLASTIC SILTS & CALYS
OH	HIGH PLASTIC ORGANIC SILT
PT	HIGHY ORGANIC SOILS

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

CORRELATION GUIDE OF "N" TO DENSITY/CONSISTENCY

DENSITY (GRANULAR SOILS) N	DESCRIPTIVE TERM	CONSISTENCY (COHESIVE SOILS) 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 300 mm For: 50.8 mm O.D.Sampler 35.0 mm I.D.Sampler Hammer Weight Of 63.5 kg. Hammer Fall Of 762 mm
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 28.5 mm
BX	Core Size 41.2 mm
NX	Core Size 52.1 mm
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
Sl	Silt
Cl	Clay
HP	Hardpan
Le	Ledge
NLTD	No Ledge To Depth
CNPF	Can Not Penetrate Further
TLOB	To 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)

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		

DEFINITIONS (AASHTO)

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

BOULDER - A rock fragment with an average dimension > 304.8 mm.

COBBLE - Rock fragments with an average dimension between 76.2 and 304.8 mm.

GRAVEL - Rounded particles of rock < 76.2 mm and > 2 mm (#10 sieve).

SAND - Particles of rock < 2 mm (#10 sieve) and > 75μm (#200 sieve).

SILT - Soil < 75μm (#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.

GENERAL NOTES

1. The subsurface explorations shown herein were made between 2/95 & 4/98.

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.

4. Engineering judgement 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 judgement 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.

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800

VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER

BORING LOCATION PLAN

Designed By W. HARRIS	Drawn by B. WEATHERBY
Checked By M. QUINN Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.J. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR705	Sheet 188 OF 385

LH/3513/15/BR700/700BRPL/3.12000/ BW/ 1:250

VAOT Metric

CLOUGH, HARBOUR & ASSOCIATES LLP

PROJECT NUMBER: 3573.07.01 MAY 1995
LOCATION: Station: 16+774.0 Offset: 36.5m rt
CLIENT: VAOT
CONTRACTOR: ATLANTIC TESTING
DRILLER: M. H. INSPECTOR: H. SIMPSON
START DATE: 5/22/95 FINISH DATE: 5/23/95
SURFACE ELEV.: 175.2m CHECKED BY: CAR

BENNINGTON-HOOSICK D. P. I. 0146(1)

SUBSURFACE LOG
HOLE NUMBER B-610
PAGE 1 OF 1

DRILL FLUID: WATER
DRILLING METHOD: 0.10m FJC

WATER LEVEL OBSERVATIONS DURING DRILLING

DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
5-22-95	15:15	1.2m	6.1m	6.5m
5-23-95	06:30	1.3m	6.1m	6.5m
5-23-95	10:00	1.6m	6.1m	10m

SAMP./CORE NUMBER	SAMP. / KEY LEN CORE	RECOVERY	Blows per .152m on Split Spoon Sampler	'N' VALUE OR ROD %	SAMPLE	DEPTH (METERS)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (METERS)	REMARKS ON CHARACTER OF DRILLING, WATER RETURN, ETC	WATER LEVELS AND/OR WELL DATA
S1	.61m	.3m	woh-1-2-3	3		0		SILT, little f.m. sand, trace c. gravel, trace roots, brown, soft, moist (A-4)	175		
S2	.61m	.2m	2-2-2-5	4		1		grades to little f.c. gravel (A-4)	174.5		
S3	.61m	.3m	5-3-3-7	6		1.5		f.m.c.SAND, some Silt, little f.c. gravel, brown, loose, wet (A-2-4)	174		
S4	.61m	.2m	11-15-24-23	39		2			173.5		
S5	.61m	.4m	8-16-15-10	31		2.5		f.SAND and SILT, little f. gravel, little m.c. sand, gray, dense, wet (A-4) (TILL)	173		
S6	.61m	.4m	13-11-12-10	23		3		SILT, trace f.c. sand, trace f. gravel, gray, v.stiff, wetA-4) (TILL)	172.5		
						3.5			172		
						4			171.5		
						4.5			171		
S7	.61m	.5m	12-13-20-28	33		5		SILT and f. SAND, little m.c. sand, trace f. gravel, brown/gray, hard, wet (A-4) (TILL)	170.5	Laboratory AASHTO Classification performed on S7	
						5.5			170		
						6			169.5		
S8	.40m	.3m	25-60 50/.076m	Ref.		6.5		grades to trace f.c. gravel, red/brown, very hard, wet (A-4) (TILL)	169		
						7		DOLOSTONE, with quartz and calcite veining, gray, medium hard, slight weathering, thick bedding, close fracturing, poor RQD	168.5		
R1	1.52m	1.5m	NA	40%		7.5			168		
						8			167.5		
						8.5		Same as above, Fair RQD	167		
						9			166.5		
R2	1.52m	1.5m	NA	75%		9.5			166		
						10		Bottom of Boring at 10.06 meters	165.5		
									165		

CLOUGH, HARBOUR & ASSOCIATES LLP

PROJECT NUMBER: 3573.07.01 MAY 1995
LOCATION: STATION: 16+771.7 Offset: 17.6m rt
CLIENT: VAOT
CONTRACTOR: ATLANTIC TESTING
DRILLER: M. H. INSPECTOR: H. SIMPSON
START DATE: 5/23/95 FINISH DATE: 5/23/95
SURFACE ELEV.: 175.1m CHECKED BY: CAR

BENNINGTON-HOOSICK D. P. I. 0146(1)

SUBSURFACE LOG
HOLE NUMBER B-620
PAGE 1 OF 1

DRILL FLUID: WATER
DRILLING METHOD: 0.10m FJC

WATER LEVEL OBSERVATIONS DURING DRILLING

DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
5-23-95	15:15	0.5m	2m	3m

SAMP./CORE NUMBER	SAMP. / KEY LEN CORE	RECOVERY	Blows per .152m on Split Spoon Sampler	'N' VALUE OR ROD %	SAMPLE	DEPTH (METERS)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (METERS)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.61m	.5m	woh-1-2-3	3		0		SILT, little roots, brown, soft, moistA-4)	175		
S2	.61m	.4m	5-5-6-5	11		1		f.m. SAND, little silt, trace c. sand, brown, very loose, moist (A-2-4)	174.5		
S3	.61m	.3m	4-5-12-29	17		1.5		grades to some Silt, trace c. gravel, brown, medium dense, moist (A-2-4)	174		
S4	.61m	.3m	8-10-13-10	23		2		m.c. SAND, little f. gravel, little silt, trace c. gravel, brown, medium dense, wet (A-1-b)	173.5		
S5	.61m	.2m	10-19-18-19	37		2.5		SILT, little c. sand, little f. gravel, trace c. gravel, gray, very stiff, moist/wetA-4) (TILL)	173		
S6	.61m	.4m	9-7-9-16	16		3		grades to some f.m.c. Sand, little f. gravel, trace c. gravel, wet (A-4) (TILL)	172.5		
						3.5		grades to trace c. sand, wet (A-4) (TILL)	172		
						4			171.5		
						4.5			171		
S7	.61m	.6m	9-10-7-16	17		5		grades to some f.m.c. Sand, trace f.c. gravel, orange/brown, very stiff, moist (A-4) (TILL)	170.5	Laboratory AASHTO Classification performed on S7	
						5.5			170		
						6			169.5		
S8	.61m	.6m	4-3-4-4	7		6.5		Clayey SILT, trace c. sand, trace f. gravel, brown, medium stiff, moist/wet (A-4) (TILL)	169		
						7		DOLOSTONE, with orange staining on fracture faces, gray, medium hard, slight weathering, thick bedding, close/medium fracturing, excellent RQD	168.5		
R1	1.52m	1.5m	NA	90%		7.5			168		
						8			167.5		
						8.5		Same as above, with vertical fractures	167		
						9			166.5		
R2	1.52m	1.5m	NA	90%		9.5			166		
						10		Bottom of Boring at 9.91meters	165.5		
									165		

CLOUGH, HARBOUR & ASSOCIATES LLP

PROJECT NUMBER: 3573.07.01 MAY 1995
LOCATION: Station: 16+838.7 Offset: 34.3m rt
CLIENT: VAOT
CONTRACTOR: ATLANTIC TESTING
DRILLER: M. H. INSPECTOR: H. SIMPSON
START DATE: 5/9/95 FINISH DATE: 5/22/95
SURFACE ELEV.: 172.9m CHECKED BY: CAR

BENNINGTON-HOOSICK D. P. I. 0146(1)

SUBSURFACE LOG
HOLE NUMBER B-630
PAGE 1 OF 1

DRILL FLUID: WATER
DRILLING METHOD: 0.10m FJC

WATER LEVEL OBSERVATIONS DURING DRILLING

DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
5-9-95	18:30	2.3m	12.4m	12.8m
5-10-95	08:30	1.3m	12.4m	12.8m

SAMP./CORE NUMBER	SAMP. / KEY LEN CORE	RECOVERY	Blows per .152m on Split Spoon Sampler	'N' VALUE OR ROD %	SAMPLE	DEPTH (Meters)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION Meters	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.61m	.4m	woh-1-1	2		0		SILT, trace f. sand, brown, soft, moist	172.5		
S2	.61m	.4m	1-1-1	2		1		f. SAND, trace silt, brown, very loose, moist (A-3)	172		
S3	.61m	.4m	1-1-3-5	4		1.5		becomes wet (A-3)	171.5		
S4	.61m	.4m	8-8-10-9	18		2		f.c.GRAVEL, some c. Sand, brown/orange, medium dense, wet (A-1-a)	171		
S5	.61m	.2m	10-9-7-5	16		2.5		SILT and m.c. SAND, trace c. gravel, gray, v.stiff, wetA-4)	170.5		
S6	.61m	.3m	5-5-8-10	13		3		Clayey SILT, trace f. gravel, trace c. sand, gray, stiff, wet(A-4)	170		
						3.5			169.5		
						4			169		
						4.5			168.5		
S7	.61m	.2m	9-6-4-4	10		5		grades to some f. Sand, gray, stiff, wet (A-4)	168		
						5.5			167.5		
						6			167		
S8	.61m	.2m	8-9-5-7	14		6.5		m.c. SAND, little f. gravel, trace c. gravel, trace silt, gray, medium dense, wetA-3)	166.5		
						7			166		
						7.5			165.5		
S9	.61m	.2m	8-14-14-12	28		8		m.c. SAND and SILT, trace f.c. gravel, gray, v.stiff, wetA-4) (TILL)	165		
						8.5			164.5		
S10	.61m	.5m	24-29-27-26	56		9		SILT, little f.m.c. sand, little f. gravel, gray, hard, moist (A-4) (TILL)	164	Laboratory AASHTO Classification performed on S10	
						9.5			163.5		
S11	.02m	.1m	100/0.1	ref		10		becomes v.hard (A-4) (TILL)	163		
						10.5			162.5		
R1	1.52m	1.4m	NA	0%		11			162		
						11.5			161.5		
						12			161		
						12.5		DOLOSTONE, with orange staining on fracture faces, gray, high weathering, massive bedding, very close fracturing, very poor RQD	160.5		
						13			160		
						13.5			159.5		
R2	1.52m	1.4m	NA	13%		14		Same as above	159		
						14.5			158.5		
						15		Bottom of Boring at 15.09 meters.	158		
						15.5			157.5		
									157		

CLOUGH, HARBOUR & ASSOCIATES LLP

PROJECT NUMBER: 3573.07.01 MAY 1995
LOCATION: Station: 16+835.7 Offset: 20.5m rt
CLIENT: VAOT
CONTRACTOR: Atlantic Testing
DRILLER: MJL INSPECTOR: H.Simpson
START DATE: 5/18/95 FINISH DATE: 5/18/95
SURFACE ELEV.: 173.0m CHECKED BY: CAR

BENNINGTON-HOOSICK D. P. I. 0146(1)

SUBSURFACE LOG
HOLE NUMBER B-640
Page 1 of 1

DRILL FLUID: Water
DRILLING METHOD: 0.10m FJC

WATER LEVEL OBSERVATIONS DURING DRILLING

DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
5-18-95	20:15	1.6m	11.6m	14.7m

SAMP./CORE NUMBER	SAMP. / KEY LEN CORE	RECOVERY	Blows per .152m on Split Spoon Sampler	'N' VALUE OR ROD %	SAMPLE	DEPTH (Meters)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION Meters	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.61m	.5m	woh-1-1-1	2		0		SILT, trace f. sand, trace roots, brown, v. soft, moistA-4)	173		
S2	.61m	.5m	woh-woh woh-woh	0		0.5		Same as Above (A-4)	172.5		
S3	.61m	.3m	1-2-7-15	9		1		SILT, some f. Sand, brown, stiff, moist (A-4)	172		
S4	.61m	.2m	23-22-20-10	42		1.5			171.5		
S5	.61m	.1m	20-8-7-4	15		2		f.GRAVEL and f.m.c. SAND, little silt, trace c. gravel, brown, dense, moist/wet (A-1-b)	171		
S6	.61m	.0m	19-14-13-10	27		2.5			170.5		
						3		f.m.c. SAND, little f. gravel, little silt, brown, dense, wet (A-2-4)	170		
						3.5			169.5		
						4			169		
						4.5			168.5		
S7	.61m	.0m	20-26-15-6	41		5		SILT, little f. sand, trace f.c. gravel, gray, hard, wet (A-4) (TILL)	168		
						5.5			167.5		
						6		becomes v.stiff, insufficient recovery for soils description	167		
S8	.61m	.1m	14-14-8-10	22		6.5			166.5		
						7			166		
						7.5			165.5		
S9	.61m	.2m	25-9-5-6	14		8		SILT and f.m. SAND, some f.c. Gravel, gray, stiff, wetA-4) (TILL)	165		
						8.5			164.5		
						9			164		
S10	.61m	.2m	7-13-16-16	29		9.5		becomes v. stiffA-4) (TILL)	163.5		
						10			163		
						10.5			162.5		
S11	.61m	.2m	28-40-40-39	80		11			162		
						11.5		SILT and f. SAND, trace c. gravel, gray, v. hard, wet (A-4) (TILL)	161.5		
						12		DOLOSTONE, gray, hard, slight weathering, thin bedding, very close/close fracturing, very poor RQD	161		
						12.5			160.5		
R1	1.52m	1.2m	NA	7%		13			160		
						13.5		Same as Above, RQD becomes poor	159.5		
						14			159		
R2	1.52m	1.4m	NA	46%		14.5			158.5		
						15		Bottom of Boring at 14.63 meters.	158		
						15.5			157.5		

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
SOIL BORING LOGS - 1	
Designed By W. HARRIS	Drawn by M. CUEVAS/B. WEATHERBY
Checked By M. QUINN Date 6/00	Bridge Design Supervisor M. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
L.G.C. Info.	
Bridge Sheet No. BR706	Sheet 189 OF 385

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
III WINNERS CIRCLE ALBANY, NEW YORK, 12205

U:\3573\15\BR700\B-700(1)\X20000\BW/ 10dm

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.J. 0146(1)
SUBSURFACE LOG
HOLE NUMBER B-650

PROJECT NUMBER: 3573.07.01 MAY 1995 — PAGE 1 OF 1
LOCATION: Station: 16+901.0 Offset: 32.3m rt
CLIENT: VAOT
CONTRACTOR: ATLANTIC TESTING
DRILLER: M. H. INSPECTOR: H. SIMPSON
START DATE: 5/18/95 FINISH DATE: 5/18/95
SURFACE ELEV.: 173.3m CHECKED BY: CAR
DRILL FLUID: WATER
DRILLING METHOD: OJOm FJC

WATER LEVEL OBSERVATIONS DURING DRILLING

DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
5-18-95	12:00	1.4m	7.5m	10.8m

SAMP./CORE NUMBER	SAMP. ADV	CORE LEN	RECOVERY	Blows per .152m on Split Spoon Sampler	"N" VALUE OR ROD %	SAMPLE	DEPTH (METERS)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (METERS)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.61m	.59m		WOH-WOH-1/1'	1		0		f. SAND and SILT, trace roots, brown, v. loose, moist (A-4)	173		
S2	.61m	.46m		woh-woh woh-1	0		1		grades to trace m. sand, brown, v. loose, moist (A-4)	172.5		
S3	.61m	.30m		1-1-1-2	2		1.5			172		
S4	.61m	.20m		8-8-10-11	21		2		f. GRAVEL and f.m.c. SAND, little c. gravel, little silt, brown, medium dense, wet (A-1-b)	171.5		
S5	.61m	.31m		10-12-8-10	23		2.5		m.c. SAND, little f. gravel, trace c. gravel, trace silt, brown, medium dense, wet (A-1-b)	171		
S6	.61m	.20m		10-10-7-7	17		3		f. GRAVEL, some m.c. Sand, little c. gravel, trace silt, brown, medium dense, wet (A-1-a)	170.5		
							3.5			170		
							4			169.5		
							4.5			169		
S7	.61m	.20m		6-3-2-3	5		5		m. SAND, little silt, gray, loose, wet (A-1-b)	168.5		
							5.5			168		
							6			167.5		
S8	.61m	.20m		7-10-12-17	22		6.5		f.m. SAND and SILT, little f. gravel, gray, v. stiff, wet (A-4) (TILL)	167		
							7			166.5		
							7.5		DOLOSTONE, with trace calcite and quartz veining, gray, medium hard, slight weathering, thick bedding, close fracturing, fair RQD	166		
							8			165.5		
R1	1.52m	1.5m		NA	55%		8.5			165		
							9			164.5		
							9.5			164		
R2	1.52m	1.5m		NA	60%		10		SAME AS ABOVE, MODERATE WEATHERING	163.5		
							10.5			163		
							11		BOTTOM OF BORING AT 10.82 METERS.	162.5		
							11.5			162		
							12			161.5		
							12.5			161		
							13			160.5		
							13.5			160		
							14			159.5		

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.J. 0146(1)
SUBSURFACE LOG
HOLE NUMBER B-660

PROJECT NUMBER: 3573.07.01 MAY 1995 — PAGE 1 OF 1
LOCATION: STATION: 16+901.1 OFFSET: 24.4m rt
CLIENT: VAOT
CONTRACTOR: ATLANTIC TESTING
DRILLER: M. H. INSPECTOR: M. SIMPSON
START DATE: 5/17/95 FINISH DATE: 5/17/95
SURFACE ELEV.: 173.1M CHECKED BY: CAR
DRILL FLUID: WATER
DRILLING METHOD: OJOm FJC

WATER LEVEL OBSERVATIONS DURING DRILLING

DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
5-17-95	07:45	1.3m	9.6m	12.8m

SAMP./CORE NUMBER	SAMP. ADV	CORE LEN	RECOVERY	Blows per .152m on Split Spoon Sampler	"N" VALUE OR ROD %	SAMPLE	DEPTH (METERS)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (METERS)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.61m	.20m		1-1-2-2	3		0		f. SAND and SILT, little roots, brown, soft, moist (A-4)	173		
S2	.61m	.20m		2-2-2-3	4		0.5		SILT and f. SAND, little roots, brown, soft, moist (A-4)	172.5		
S3	.61m	.20m		2-2-1-woh	3		1			172		
S4	.61m	.31m		1-3-8-6	14		1.5		m.c. SAND, little silt, trace f. gravel, brown, v. loose, moist/wet (A-1-b)	171.5		
S5	.61m	.01m		15-12-10-15	22		2		grades to little f. sand, little f. gravel, little silt, trace c.c. gravel, brown, medium dense, WET (A-1-b)	171		
S6	.61m	.20m		21-12-11-10	21		2.5		c. SAND and f.c. GRAVEL, little silt, brown, medium dense, wet (A-1-a)	170.5		
							3		Same as Above (A-1-a)	170		
							3.5			169.5		
							4			169		
S7	.61m	.31m		1-1-3-2	4		4.5		f.c. GRAVEL and c. SAND, little silt, brown, v. loose, wet (A-1-a)	168.5		
							5			168		
							5.5			167.5		
S8	.61m	.31m		12-6-7-4	13		6			167		
							6.5		SILT, some f.m. Sand, gray, medium dense, wet (A-4)	166.5	Laboratory AASHTO Classification performed on S8, Non-Plastic.	
							7			166		
							7.5		grades with trace f. sand (A-4)	165.5		
S9	.61m	.31m		8-7-7-8	14		8		f.m. SAND, some Silt, little f. gravel, gray, medium dense, wet (A-2-4)	165		
							8.5			164.5		
							9			164		
S10	.58m	.31m		25-44 82-100/0.12m	REF		9.5		f.c. GRAVEL, little silt, little m. sand, v. compact, wet (A-1-b)	163.5		
							10			163		
R1	1.52m	1.31m		NA	51%		10.5		DOLOSTONE, little quartz veining, trace calcite veining, vertical and horizontal fractures, gray, medium hard, slight weathering, thick bedding, medium fracturing, fair RQD	162.5		
							11			162		
							11.5		ROD becomes good, trace pyrite	161.5		
							12			161		
R2	1.52m	1.5m		NA	80%		12.5			160.5		
							13		BOTTOM OF BORING AT 13.11 METERS.	160		
							13.5			159.5		
							14					

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.J. 0146(1)
SUBSURFACE LOG
HOLE NUMBER B-670

PROJECT NUMBER: 3573.07.01 MAY 1995 — PAGE 1 OF 1
LOCATION: Station: 16+964.6 Offset: 36.3m rt
CLIENT: VAOT
CONTRACTOR: ATLANTIC TESTING
DRILLER: M. H. INSPECTOR: S. M.
START DATE: 6/9/95 FINISH DATE: 6/11/95
SURFACE ELEV.: 171.6m CHECKED BY: CAR
DRILL FLUID: WATER
DRILLING METHOD: OJOm FJC

WATER LEVEL OBSERVATIONS DURING DRILLING

DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
6-9-95	06:30	0.0m	10.0m	10.7m

SAMP./CORE NUMBER	SAMP. ADV	CORE LEN	RECOVERY	Blows per .152m on Split Spoon Sampler	"N" VALUE OR ROD %	SAMPLE	DEPTH (METERS)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (METERS)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.61m	.0m		1-4-6-9	10		0		f.m.c. SAND and f.c. GRAVEL, little silt, brown, loose, wet (A-1-b)	171.5		
S2	.61m	.31m		12-13-8-7	24		0.5		grades to little f.c. gravel, little silt, brown, medium dense, wet (A-1-b)	171		
S3	.61m	.20m		4-8-8-2	16		1			170.5		
S4	.61m	.0m		1/0.30m 1-3	1		1.5		f. GRAVEL and c. SAND, little silt, little c. gravel, brown, medium dense, wet (A-1-a)	170		
S5	.61m	.0m		3-4-3-3	7		2		m.c. SAND, little silt, little f. gravel, trace c. gravel, brown, v. loose, wet (A-1-b)	169.5		
S6	.61m	.5m		4-3-2-1	5		2.5		f.m.c. SAND, little f.c. gravel, little silt, brown, loose, wet (A-1-b)	169		
							3			168.5		
							3.5		SILT, little f. sand, gray, m. stiff, wet (A-4)	168		
S7	.61m	.5m		2-1-3-2	4		4		becomes soft (A-4)	167.5		
							4.5			167		
							5			166.5		
							5.5			166		
S8	.61m	.5m		3-4-5-7	9		6		f. SAND, some Silt, gray, loose, wet (A-2-4)	165.5		
							6.5			165		
							7			164.5		
S9	.61m	.6m		2-3-3-5	6		7.5		Same as Above (A-2-4)	164		
							8			163.5		
							8.5			163		
S10	.61m	.6m		2-4-5-6	9		9		Same as Above (A-2-4)	162.5		
							9.5			162	Laboratory AASHTO Classification performed on S8	
							10			161.5		
S11	.61m	.6m		2-1-3-3	4		10.5		SILT, trace f. sand, gray, soft, wet (A-4)	161		
							11			160.5		
							11.5			160		
S12	.61m	.6m		11-13-14-13	27		12		f.m.c. SAND, trace silt, gray, dense, wet (A-3)	159.5		
							12.5			159		
							13			158.5		
S13	.61m	.3m		14-18-9-10	27		13.5		Same as Above (A-3)	158		
							14			157.5		
							14.5			157		
S14	.61m	.3m		12-15-10-10	25		15		f.m. SAND, some Silt, some c. Sand, gray, dense, wet (A-2-4)	156.5		
							15.5			156		
							16			155.5		
S15	.61m	.6m		16-17-46-45	63		16.5		f.m. SAND and SILT, some c. Sand, some f. Gravel, gray, very dense, wet (A-4) (TILL)	155		
							17			154.5		
							17.5			154		
S16	.55m	.3m		77-56 86-100/0.06m	REF		18		f.c. GRAVEL and SILT, some f.m.c. Sand, gray, very dense, wet (A-4) (TILL)	153.5		
							18.5		from 18.44m to 19.35m: BOULDER	153		
R1	.9m						19			152.5		
							19.5			152		
S17	.36m	.0m		29-23 100/0.06m	REF		20		SILT and f. GRAVEL, some f.m.c. Sand, gray, very dense, wet (A-4) (TILL)	151.5		
							20.5			151		
							21			150.5		
S18	.06m	.0m		100/0.06m	REF		21.5		DOLOSTONE, little calcite veining, gray, slight weathering, thick bedding, close fracturing, poor RQD	150		
R2	1.52m						22					

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Bennington-Hoosick D.P.J. 0146(1)
SUBSURFACE LOG
HOLE NUMBER B-670

PROJECT NUMBER: 3573.07.01 MAY 1995 — PAGE 2 OF 2

SAMP./CORE NUMBER	SAMP. ADV	CORE LEN	RECOVERY	Blows per .152m on Split Spoon Sampler	"N" VALUE OR ROD %	SAMPLE	DEPTH (METERS)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (METERS)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
							22.5		SAME AS ABOVE	149.5		
							23			149		
R3	1.52m	1.0m			28%		23.5			148.5		
							24		SAME AS ABOVE	148		
							24.5			147.5		
R4	1.52m	.9m			44%		25			147		
							25.5		ROD becomes very poor	146.5		
							26			146		
R5	1.52m	1.3m			8%		26.5			145.5		
							27		Same as Above, very poor ROD	145		
							27.5			144.5		
R6	1.52m	1.3m			0%		28			144		
							28.5		Same as Above	143.5		
							29			143		
R7	1.52m	.9m			0%		29.5			142.5		
							30		Same as Above	142		
							30.5			141.5		
R8	1.52m	1.0m			0%		31			141		
							31.5		Same as Above	140.5		
							32			140		
R9	1.52m	1.5m			7%		32.5			139.5		
							33		Same as Above	139		
							33.5		Bottom of Boring at 33.22 meters.	138.5		
										138		

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
SOIL BORING LOGS - 2	
Designed By W. HARRIS	Drawn by M. CUEVAS/B. WEATHERBY
Checked By M. QUINN Date 6/00	Bridge Design Supervisor M. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.J. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR707	Sheet 190 OF 385

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
III WINNERS CIRCLE ALBANY, NEW YORK, 12205

F:\351\15\BR700\15-1700-313000\GNF 1.0m

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Bennington-Hoosick D.P.J. 0146(1)

SUBSURFACE LOG
HOLE NUMBER B-680

PROJECT NUMBER: 3573.07.01 MAY 1995 PAGE1 OF1

LOCATION: Stations 16+965.0 OFFSET: 24.4m rt

CLIENT: VAOT

CONTRACTOR: ATLANTIC TESTING

DRILLER: M. H. INSPECTOR: S. PIDGEON

START DATE: 7/11/95 FINISH DATE: 7/13/95

SURFACE ELEV.: 171.0m CHECKED BY: CAR

DRILL FLUID: WATER

DRILLING METHOD: 0.10m FJC

WATER LEVEL OBSERVATIONS DURING DRILLING

DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM

SAMP./CORE NUMBER	SAMP. ADV LEN. CORE	RECOVERY	Blows per .52m on Split Spoon Sampler	'N' VALUE OR ROD %	SAMPLE	DEPTH (METERS)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (METERS)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
								f.c. GRAVEL, some m.c. Sand, trace f. sand, trace silt, brown, dense, wet (A-1-a)	171		
S1	.6m	.0m	7-9-22-20	31		0.5		f.c. GRAVEL and f.m.c. SAND, trace silt, brown, medium dense, wet (A-1-a)	170.5		
S2	.6m	.2m	11-13-7-7	20		1			170		
S3	.6m	.1m	19-10-6-6	16		1.5		grades to some m.c. Sand, trace f. sand, trace silt, brown, medium dense, wet (A-1-a)	169.5		
S4	.6m	.1m	12-5-5-4	10		2		becomes loose (A-1-a)	169		
S5	.6m	.2m	13-7-2-3	9		2.5		m.c. SAND, trace f. sand, brown, loose, wet (A-1-a)	168.5		
S6	.6m	.4m	7-4-3-3	7		3		SILT and f.m. SAND, gray, medium stiff, wet (A-4)	168	Laboratory AASHTO Classification Performed on S6.	
						3.5			167.5		
						4			167		
						4.5		becomes stiff (A-4)	166.5		
S7	.61m	.2m	17-8-5-6	13		5			166		
						5.5			165.5		
						6			165		
S8	.6m	.4m	7-6-7-7	13		6.5		f. SAND, trace silt, gray, medium dense, wet (A-3)	164.5		
						7			164		
						7.5			163.5		
S9	.6m	.5m	4-4-3-4	7		8		f. SAND, little silt, gray, loose, wet (A-2-4)	163		
						8.5			162.5		
						9		Same as above (A-2-4)	162		
S10	.6m	.4m	1-3-5-6	8		9.5			161.5		
						10			161		
						10.5			160.5		
S11	.6m	.4m	1-1-4-6	5		11		f. SAND and SILT, gray, loose, wet (A-4)	160		
						11.5			159.5		
						12			159		
S12	.6m	.0m	20-12-12-13	24		12.5		f.m.c. SAND, little silt, trace f.c. gravel, gray, medium dense, wet (A-1-b)	158.5		
						13			158		
						13.5			157.5		
S13	.6m	.1m	40-23-15-22	38		14		f.m.c. SAND and f.c. GRAVEL, little silt, gray, dense, wet (A-1-b)	157		
						14.5			156.5		
						15			156		
S14	.6m	.4m	12-12-20-23	32		15.5		f.m.c. SAND, little f. gravel, trace silt, gray, dense, wet (A-1-b)	155.5	Laboratory AASHTO Classification Performed on S14.	
						16			155		
						16.5			154.5		
S15	.6m	.0m	23-27-34-108	61		17		grades with little silt, trace f. gravel, becomes very dense, (A-1-b)	154		
						17.5			153.5		
						18			153		
S16	.6m	.1m	60-24-47-35	71		18.5		grades with some f.c. Gravel, trace silt (A-1-b)	152.5		
						19			152		
						19.5			151.5		
						20		SHALE, gray/black, soft, slight weathering, thin bedding, close fracturing, very poor RQD.	151		
R1	1.52m	1.0m		0%		20.5		QUARTZITE and DOLOSTONE, interbedded, some quartz and calcite veining, gray, hard, slight to moderate weathering, medium bedding, very close fracturing, v.poor RQD	150.5		
						21			150		
						21.5		from 21.09m to 21.34m Clay filled fracture. DOLOSTONE, little quartz and calcite veining, gray, hard, moderate weathering, thick bedding, very close fracturing, v.poor RQD	149.5		
R2	1.2m	0.4m		0%		22			149		
						22.5		Bottom of Boring at 22.56 meters.	148.5		
						23					

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.J. 0146(1)

SUBSURFACE LOG
HOLE NUMBER B-690

PROJECT NUMBER: 3573.07.01 MAY 1995 PAGE1 OF1

LOCATION: Stations C10+057.9 Offset: 25.7m rt

CLIENT: VAOT

CONTRACTOR: ATLANTIC TESTING

DRILLER: M. H. INSPECTOR: H. SIMPSON

START DATE: 5/25/95 FINISH DATE: 5/26/95

SURFACE ELEV.: 173.7m CHECKED BY: CAR

DRILL FLUID: WATER

DRILLING METHOD: 0.10m FJC

WATER LEVEL OBSERVATIONS DURING DRILLING

DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
5-23-95	19:00	6.0m	27.4m	28.0m
5-26-95	06:30	1.1m	27.4m	28.0m
5-26-95	17:00	1.0m	30.2m	32.9m

SAMP./CORE NUMBER	SAMP. ADV LEN. CORE	RECOVERY	Blows per .52m on Split Spoon Sampler	'N' VALUE OR ROD %	SAMPLE	DEPTH (METERS)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (METERS)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
								SILT, trace f. sand, trace roots, brown, medium stiff, moist (A-4)	173.5		
S1	.6m	.5m	WOH-2-3-3	5		0.5		SILT, little f. sand, brown medium stiff, moist (A-4)	173		▽
S2	.6m	.5m	2-2-3-4	5		1			172.5		
S3	.6m	.6m	6-13-15-14	28		1.5		f.m.c. SAND, little f.c. gravel, trace silt, brown, dense, moist (A-1-b)	172		
S4	.6m	.2m	20-15-9-8	14		2		grades with some f.c. Gravel, trace silt, becomes moist/wet (A-1-b)	171.5		
S5	.6m	.2m	7-6-5-3	11		2.5		grades with little f.c. gravel, little silt, becomes wet (A-1-b)	171		
S6	.6m	.2m	5-5-4-6	9		3		Clayey SILT, brown/gray, stiff, wet (A-6)	170.5		
						3.5			170		
						4			169.5		
						4.5		becomes gray (A-6)	169		
S7	.6m	.4m	5-8-7-10	15		5			168.5		
						5.5			168		
						6		Same as Above (A-6)	167.5		
S8	.6m	.5m	5-4-5-5	9		6.5			167		
						7			166.5		
						7.5			166		
S9	.6m	.5m	3-3-4-4	7		8		SILT, some f. Sand, gray, medium stiff, wet (A-6)	165.5	Laboratory AASHTO Classification Performed on S9. Non Plastic.	
						8.5			165		
						9		Clayey SILT, some f. Sand, layered with silt and clay, gray, medium stiff, wet (A-6)	164.5		
S10	.6m	.5m	6-3-3-4	6		9.5			164		
						10			163.5		
						10.5			163		
S11	.6m	.6m	5-5-5-6	10		11		f. SAND, little silt, gray, loose, wet (A-2-4)	162.5		
						11.5			162		
						12		becomes medium dense (A-2-4)	161.5		
S12	.6m	.4m	1-6-5-9	11		12.5			161		
						13			160.5		
						13.5		grades with some Silt (A-2-4)	160		
S13	.6m	.4m	3-5-6-8	11		14			159.5		
						14.5			159		
						15			158.5		
S14	.6m	.5m	WOH-2-5-2	7		15.5		m. SAND, little silt, trace f. gravel, gray, loose, wet (A-1-b)	158		
						16			157.5		
						16.5		f. GRAVEL and f.m.c. SAND, some Silt, trace c. gravel, gray, dense, wet (A-2-4)	157		
S15	.6m	.6m	17-14-20-18	34		17			156.5		
						17.5			156		
						18		becomes medium dense (A-2-4)	155.5		
S16	.6m	.2m	7-8-9-13	17		18.5			155		
						19			154.5		
						19.5			154		
S17	.6m	.6m	WOH-WOH 2-3	2		20		m. SAND, little silt, gray, very loose, wet (A-1-b)	153.5		
						20.5			153		
						21		f. GRAVEL and f.m.c. SAND, some Silt, trace c. gravel, gray, dense, wet (A-2-4)	152.5		
S18	.6m	.3m	6-11-11-10	22		21.5			152		
						22					

(CONTINUED)

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Bennington-Hoosick D.P.J. 0146(1)

SUBSURFACE LOG
HOLE NUMBER B-690

PROJECT NUMBER: 3573.07.01 MAY 1995 PAGE2 OF2

SAMP./CORE NUMBER	SAMP. ADV LEN. CORE	RECOVERY	Blows per .52m on Split Spoon Sampler	'N' VALUE OR ROD %	SAMPLE	DEPTH (METERS)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (METERS)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
						22.5			151.5		
						23			151		
S19	.6m	.2m	12-11-10-9	21		23.5		BECOMES M. DENSE (A-2-4)	150.5		
						24			150		
						24.5		f. SAND, some Silt, trace f.c. gravel, gray, loose, wet (A-2-4)	149.5		
S20	.6m	.2m	18-6-3-7	9		25			149		
						25.5			148.5		
						26		f.m.c. SAND, some Silt, some f. Gravel, little c. gravel, gray, loose, wet (A-2-4)	148		
S21	.6m	.3m	7-4-5-7	9		26.5			147.5		
						27			147		
						27.5			146.5		
S22	.6m	.2m	8-4-15-6	19		28		grades to some clayey Silt, some f. Gravel, trace c. gravel, becomes medium dense (A-2-4)	146		
						28.5			145.5		
						29			145		
S23	.6m	.2m	9-9-15-29	24		29.5		SILT, some f.m.c. Sand, little f. gravel, trace c. gravel, gray, very stiff, wet (A-6(11))	144.5		
						30			144		
						30.5		from 30.48m to 31.09m BOULDER	143.5		
R1	1.52m	1.0m	N/A	N/A		31		from 31.09m to 31.85m c. GRAVEL	143		
						31.5			142.5		
						32		DOLOSTONE, some quartz veining, medium hard, slight weathering, thick bedding, medium fracturing, poor RQD	142		
R2	0.9m	0.9m	N/A	N/A		32.5			141.5		
						33		Bottom of Boring at 32.92 meters.	141		
						33.5			140.5		
									140		

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
SOIL BORING LOGS - 3	
Designed By W. HARRIS	Drawn by M. CUEVAS/B.WEATHERBY
Checked By M. QUINN Date 6/00	Bridge Design Supervisor M. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.J. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR708	Sheet 191 OF 385

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

VAOT Metric

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VAOT Metric

BOT. OF FTG. EL. 171.30

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.I. 0146(1)
SUBSURFACE LOG
HOLE NUMBER B-700

PROJECT NUMBER: 3573.07.01 MAY 1995 — PAGE 1 OF 1
LOCATION: Station:C10+058.1 Offset: 17.0m rt
CLIENT: VAOT
CONTRACTOR: ATLANTIC TESTING
DRILLER: M. H. INSPECTOR: H. Simpson
START DATE: 5/30/95 FINISH DATE: 6/1/95
SURFACE ELEV.: 173.7m CHECKED BY: CAR

DRILL FLUID: WATER — DRILLING METHOD: OJOm FJC

WATER LEVEL OBSERVATIONS DURING DRILLING

DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
5-30-95	19:25	Lim	18.3m	18.9m
5-31-95	06:30	Lim	18.3m	18.9m
5-31-95	19:45	0.8m	32.0m	35.4m

SAMP./CORE NUMBER	SAMP. ADV LEN CORE	RECOVERY	Blows per .152m on Split Spoon Sampler	"N" VALUE OR ROD %	SAMPLE	DEPTH (METERS)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (METERS)	REMARKS ON CHARACTER OF DRILLING, WATER RETURN, ETC	WATER LEVELS AND/OR WELL DATA
S1	.6m	.6m	2-5-5-3	10				SILT, little f. sand, orange, stiff, moist (A-6)	173.5		
S2	.6m	.5m	2-2-3-3	5				f. SAND and SILT, orange/brown, medium stiff, moist(A-4)	173		
S3	.6m	.3m	2-8-8-8	19				f.m.c. SAND, little f. gravel, little silt, trace c. gravel, brown, medium dense, moist/wet (A-1-b)	172.5		
S4	.6m	.2m	20-19-12-8	27				becomes dense (A-1-b)	172		
S5	.6m	.1m	5-7-8-7	15				becomes medium dense (A-1-b)	171.5		
S6	.6m	.2m	9-4-6-7	10				Clayey SILT, brown/gray, stiff, wet(A-4)	171		
S7	.6m	.4m	5-7-6-6	13				becomes gray (A-4)	170.5		
S8	.6m	.5m	2-3-3-3	6				becomes medium stiff(A-4)	169.5		
S9	.6m	.5m	4-3-3-3	6				SILT and f. SAND, gray, medium stiff, wet (A-4)	168.5		
S10	.6m	.5m	3-2-4-3	6				f. SAND, some Silt, gray, loose, wet (A-2-4)	167		
S11	.6m	.5m	4-5-7-8	12				becomes medium dense (A-2-4)	166		
S12	.6m	.5m	4-4-4-4	8				becomes loose (A-2-4)	165		
S13	.6m	.4m	3-4-5-7	9				Same as Above (A-2-4)	164		
S14	.6m	.0m	7-9-8-14	20				f.m.c. SAND, little silt, trace f.c. gravel, gray, medium dense, wet (A-2-4)	163		
S15	.6m	.3m	8-8-7-8	15				Same as Above (A-2-4)	162		
S16	.6m	.2m	5-10-12-11	22				grades to some f. Gravel, little silt, gray, medium dense, wet (A-2-4)	161		
S17	.6m	.6m	WH-3-3	3				f.m.c. SAND, little silt, trace f. gravel, very loose, wet (A-2-4)	160	Laboratory AASHTO Classification Performed on S17.	
S18	.6m	.4m	13-10-8-7	18				grades to some clayey Silt, trace f. gravel, gray, medium dense, wet (A-2-4)	159		

(CONTINUED)

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.I. 0146(1)
SUBSURFACE LOG
HOLE NUMBER B-700

PROJECT NUMBER: 3573.07.01 MAY 1995 — PAGE 2 OF 2

SAMP./CORE NUMBER	SAMP. ADV LEN CORE	RECOVERY	Blows per .152m on Split Spoon Sampler	"N" VALUE OR ROD %	SAMPLE	DEPTH (METERS)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (METERS)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S9	.6m	.4m	3-6-6-8	12				m.c. SAND, some Silt, trace f. gravel, gray, medium dense, wet (A-2-4)	151.5		
S20	.6m	.2m	20-6-5-5	11				Same as Above (A-2-4)	151		
S21	.6m	.3m	8-6-7-9	13				Same as Above (A-2-4)	150.5		
S22	.6m	.2m	17-9-5-8	14				f.m.c. SAND and f.c. GRAVEL, some Silt, gray, stiff, wet(A-1-b)	150		
S23	.6m	.3m	33-46-72-65	REF.				becomes very hard(A-1-b)	149.5		
S24	.6m	.3m	18-9-98-54	REF.				Same as Above (A-1-b)	149		
S25	.6m	.3m	22-77-18-14	95				Clayey SILT little c. sand, orange, very hard, wet (A-4) (TILL)	148.5		
S26	.0m	.1m	100/0.1m	REF.				f.c. GRAVEL and Clayey SILT, gray/orange, very dense, wet(A-4) (TILL)	148		
R1	1.52m	1.1m	N/A	30%				DOLOSTONE, angled fractures, gray, medium hard, moderate weathering, thick bedding, close fracturing, poor RQD	147.5		
R2	1.52m	0.6m	N/A	10%				Same as Above, very poor RQD	147		
R3	1.52m	1.5m	N/A	77%				DOLOSTONE and PHYLLITE, interbedded, gray, medium hard, moderate weathering, close bedding, close fracturing, good RQD	146.5		
R4	1.52m	1.5m	N/A	33%				Same as Above, little quartz veining, poor RQD	146		
								Bottom of Boring at 39.93 meters.	145.5	Laboratory AASHTO Classification Performed on S23.	

BOT. OF FTG. EL. 181.80

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.I. 0146(1)
SUBSURFACE LOG
HOLE NUMBER B-710

PROJECT NUMBER: 3573.07.01 May 1995 — Page 1 of 1
LOCATION: Station6+771.4 Offset: 1.6m Rt
CLIENT: VAOT
CONTRACTOR: Atlantic Testing
DRILLER: M.H. INSPECTOR: H.Simpson
START DATE: 5/23/95 FINISH DATE: 5/24/95
SURFACE ELEV.: 174.93m CHECKED BY: WAH

DRILL FLUID: Water — DRILLING METHOD: F.J.C.

WATER LEVEL OBSERVATIONS DURING DRILLING

DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
5/23/95	19:30	.73m	4.53m	4.72m
5/24/95	07:00	.93m	4.53m	4.72m
5/24/95	09:30	1.22m	4.53m	7.73m

SAMP./CORE NUMBER	SAMP. ADV LEN CORE	RECOVERY	Blows per .152m on Split Spoon Sampler	"N" VALUE or ROD %	SAMPLE	DEPTH (Meters)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Meters)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.6m	.30m	WOH-3-3-4	6				SILT, some f. Sand, little f. gravel, little m.c. sand, trace roots, brown, m. stiff, moist (A-4)	174.5		
S2	.6m	.30m	3-4-6-5	10				f.m.c. SAND, little f.c. gravel, little silt, brown, loose, wet(A-2-4)	174		
S3	.6m	.10m	3-4-7-14	11				becomes m. dense (A-2-4)	173.5		
S4	.6m	.40m	8-11-11-12	22				similar soil(A-2-4)	173		
S5	.6m	.20m	17-13-10-11	23				SILT, trace f.c. gravel, brown/gray, v. stiff, wet (A-4) (TILL)	172.5		
S6	.42m	.0m	22-45-100/.12	R				SILT, Some f.m.c. Sand, little f.c. gravel, gray, v. hard, wet (A-4) (TILL)	172		
S7 R1	.5m .6m	.0m 1.40m	93-50/0 NA	R 70%				c. GRAVEL, some Silt, gray, v. dense, wet (A-2-4) (TILL)	171.5		
R2	.6m	1.40m	NA	60%				DOLOSTONE, vertical fractures, gray, m. hard, slight weathering, thick bedding, m. fracture, fair RQD	171	estimated pile tip elevation 170.20m	
								similar bedrock with close/medium vertical fractures	170.5		
									170		
									169.5		
									169		
									168.5		
									168		
									167.5		

Final Depth at 7.77 meters

BOT. OF FTG. EL. 181.80

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.I. 0146(1)
SUBSURFACE LOG
HOLE NUMBER B-720

PROJECT NUMBER: 3573.07.01 May 1995 — Page 1 of 1
LOCATION: Station: 16+771.6 Offset: 6.9m Lt
CLIENT: VAOT
CONTRACTOR: Atlantic Testing
DRILLER: M.H. INSPECTOR: H.Simpson
START DATE: 5/24/95 FINISH DATE: 5/24/95
SURFACE ELEV.: 174.79m CHECKED BY: WAH

DRILL FLUID: Water — DRILLING METHOD: F.J.C.

WATER LEVEL OBSERVATIONS DURING DRILLING

DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
5/24/95	13:50	174m	171m	167.8m

SAMP./CORE NUMBER	SAMP. ADV LEN CORE	RECOVERY	Blows per .152m on Split Spoon Sampler	"N" VALUE or ROD %	SAMPLE	DEPTH (Meters)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Meters)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.6m	.20m	WOH-3-4-5	7				SILT, little f. sand, little roots, brown, m. stiff, moist(A-4)	174.5		
S2	.6m	.0m	4-4-7-8	11				c. GRAVEL, some Silt, little f.m.c. sand, brown, m. dense, wet (A-2-4)	174		
S3	.6m	.30m	6-10-10-14	20				similar soils(A-2-4)	173.5		
S4	.6m	.30m	14-16-32-16	48				SILT, little f.m.c. sand, trace f. gravel, brown, v. stiff, wet (A-4) (TILL) becomes hard (A-4) (TILL)	173		
S5	.6m	.30m	12-11-14-14	25				f.c. GRAVEL and f.m.c. SAND, Some Silt, gray, dense, wet (A-2-4) (TILL)	172.5	Laboratory AASHTO classification performed on S5.	
S6	.6m	.20m	36-20-12-19	32				similar soils(A-2-4) (TILL)	172		
R1	1.52m	1.52m	NA	60%				DOLOSTONE, trace quartz and calcite veining, vertical fractures, gray, m. hard, moderate weathering, thick bedding, close fracturing, fair RQD	171.5	estimated pile tip elevation 170.83 m	
R2	1.52m	1.52m	NA	88%				similar bedrock, m. fracturing, good RQD	171		
									170.5		
									170		
									169.5		
									169		
									168.5		
									168		

Final Depth at 6.95 meters

BOT. OF FTG. EL. 170.40

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.I. 0146 (1)
SUBSURFACE LOG
HOLE NUMBER B-722

PROJECT NUMBER: 5863.42 November 1996 — Page 1 of 1
LOCATION: Station: 16+806.9 Offset: 6.0m Rt
CLIENT: VAOT
CONTRACTOR: New England Boring
DRILLER: S. Graves INSPECTOR: S. Pidgeon
START DATE: 11/20/96 FINISH DATE: 11/20/96
SURFACE ELEV.: 174.28m CHECKED BY: S. Pidgeon

DRILL FLUID: Water — DRILLING METHOD: NX Core

WATER LEVEL OBSERVATIONS DURING DRILLING

DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
11/20/96	.15:15	.762m	9.14m	12.2m

SAMP./CORE NUMBER	SAMP. ADV LEN CORE	RECOVERY	Blows per .152m on Split Spoon Sampler	"N" VALUE	SAMPLE	DEPTH (Meters)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Meters)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.6m	.5m	1-1-1-2	2				Clayey SILT, some f. Sand, little m.c. sand and organics, trace f.c. gravel, brown, soft, moist (A-4)	174	Use Solid Stem Augers to advance boring to 2.44m	
S2	.6m	.03m	3-1-1-2	2				similar soil(A-4)	173.5		
S3	.6m	.5m	2-7-14-7	21				Clayey SILT and f. SAND, little m.c. sand, trace f.c. gravel, brown, v. stiff, moist-wet (A-4)	173		
S4	.6m	.09m	5-3-4-9	7				f. SAND, some m.c. Sand, little clayey silt, trace f.c. gravel, brown, loose, wet(A-2-4)	172.5		
S5	.6m	.43m	18-10-7-8	17				SILT and f. SAND, gray, v. stiff, wet(A-4)	172		
S6	.6m	.30m	22-8-8-13	22				Clayey SILT, some f. Sand, little f. gravel and m.c. sand, gray, very stiff, wet(A-4)	171.5		
S7	.6m	.18m	19-23-15-12	38				f.c. GRAVEL, little f.m.c. sand, trace clayey silt, gray/ish, dense, wet (A-1-a)	171		
S8	.6m	.34m	15-21-30-34	51				Clayey SILT and f.c. GRAVEL little f.m.c. sand, olive gray, hard, moist-wet (A-4) (TILL)	170.5		
S9	.6m	.40m	26-31-54-55	85				becomes v. hard with dolostone fragments in tip of spoon(A-4) (TILL)	170		
R1	1.52m	1.34m	NA	34%				DOLOSTONE, gray, med. hard-hard, slightly weathered, close fracture spacing, poor RQD.	169.5	BOTTOM OF TREMIE CONCRETE SEAL	
R2	1.52m	1.52m	NA	38%				similar bedrock with high angle fractures, becomes coarser grained, salt and pepper colored, drusy secondary veins.	169		
									168.5		
									168		
									167.5		
									167		
									166.5		
									166		
									165.5		
									165		
									164.5		
									164		
									163.5		
									163		
									162.5		

Final Depth: 12.2 meters

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
SOIL BORING LOGS - 4	
Designed By W. HARRIS	Drawn by M. CUEVAS/B.WEATHERBY
Checked By M. QUINN Date 6/00	Bridge Design Supervisor M. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
L.G.C. Info.	
Bridge Sheet No. BR709	Sheet 192 OF 385

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Bennington-Hoosick D.P.I. 0146(1)
SUBSURFACE LOG
HOLE NUMBER B-726
Page 1 of 1

PROJECT NUMBER: 596J4.12 — November 1996
LOCATION: Station 16+801 Offset: 5.7m Lt
CLIENT: VAOT
CONTRACTOR: New England Boring
DRILLER: M.S.J. — INSPECTOR: S. Pidgeon
START DATE: 11/19/96 — FINISH DATE: 11/20/96
SURFACE ELEV.: 173.81m — CHECKED BY: S. Pidgeon

DRILL FLUID: Water — DRILLING METHOD: F.J.C.

WATER LEVEL OBSERVATIONS DURING DRILLING

DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
11/20/96	08:00	2.48m	None	6.1m

SAMP./CORE NUMBER	SAMP.-ADV. LEN. CORE	RECOVERY	Blows per .52m on Split Spoon Sampler	"N" VALUE or ROD %	SAMPLE	DEPTH (Meters)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Meters)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.6m	.5m	1-1-2-6	3		.5		Clayey SILT, some f. Sand, trace m.c. sand and organics, brown, soft, moist (A-2-4)	173.5		
S2	.6m	.06m	5-6-4-3	10		1		f.m. SAND, little clayey silt and c. sand, trace f.c. gravel, brown, loose, moist (A-2-4)	173	Use Solid Stem Augers to advance boring to 2.44m	
S3	.6m	.06m	3-4-4-5	8		1.5		becomes loose (A-2-4)	172.5		
S4	.6m	.5m	2-1-5-6	6		2		becomes wet (A-2-4)	172	Static Water Levels 2.32m on 11/25/96	
S5	.6m	.30m	6-9-12-14	21		2.5		f. SAND, some clayey Silt, dk. brown, m. dense, wet (A-2-4)	171.5	Use .10m FJC and Rollerbit to advance hole from 2.44m to bedrock	
S6	.6m	.5m	13-25-17-14	42		3		Clayey SILT some f.m.c. Sand, little f. gravel, trace c. gravel, olive gray, hard, moist(A-4)	171		
						3.5			170.5		
						4			170		
						4.5			169.5		
S7	.6m	.01m	13-21-21-21	42		5		f.c. GRAVEL, grayish, dense, wet (A-1-a)	169		
						5.5			168.5		
						6			168		
S8	.6m	.18m	44-43-55-63	98		6.5		SILT, some f.c. Gravel, little f.m.c. sand and clay, olive gray, v. hard, moist (A-4) (TILL)	167.5		
						7			167	BOTTOM OF TREMIE CONCRETE SEAL	
R1	1.52m	.43m	NA	26%		7.5		DOLOSTONE, gray, med. hard-hard, slightly weathered, close fracture spacing, poor RQD, with numerous secondary calcite and quartz veins with pyrite and arsenopyrite mineralization	166.5		
						8			166		
						8.5			165.5		
R2	1.52m	.46m	NA	70%		9		RQD becomes fair, becomes coarser grained, spotted brownish	165		
						9.5			164.5		
						10			164		

Final Depth: 10.06m

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Bennington-Hoosick D.P.I. 0146(1)
SUBSURFACE LOG
HOLE NUMBER B-730
Page 1 of 1

PROJECT NUMBER: 3573.07.01 — July 1995
LOCATION: Station 16+838J Offset: 1.4m Rt
CLIENT: VAOT
CONTRACTOR: Atlantic Testing
DRILLER: M.H. — INSPECTOR: H. Simpson
START DATE: 7/10/95 — FINISH DATE: 7/11/95
SURFACE ELEV.: 170.14m — CHECKED BY: WAH

DRILL FLUID: Water — DRILLING METHOD: F.J.C.

WATER LEVEL OBSERVATIONS DURING DRILLING

DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
7/11/95	6:30	0 m	7.3 m	10.55m

SAMP./CORE NUMBER	SAMP.-ADV. LEN. CORE	RECOVERY	Blows per .52m on Split Spoon Sampler	"N" VALUE or ROD %	SAMPLE	DEPTH (Meters)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Meters)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
								f.m.c. SAND, some f.c. Gravel, little silt, brown, fm. dense, wet (A-2-4)	170		
S1	.6m	.20m	8-9-7-8	16		.5		Silt and f. SAND, little c. sand, gray, v. stiff, wet(A-4)	169.5		
S2	.6m	.30m	9-8-8-8	19		1		Similar soils(A-4)	169		
S3	.6m	.30m	7-10-7-3	17		1.5		SILT, some f. Gravel, some c. Sand, gray, v. stiff, wet(A-4)	168.5		
S4	.6m	.20m	8-10-14-74	24		2		Similar soils (A-4)	168		
S5	.6m	.20m	34-44-12-13	56		2.5		becomes hard (A-4)	167.5		
S6	.45m	.20m	10-8-9-11	17		3		becomes v. stiff(A-4)	167		
						3.5			166.5		
						4			166		
						4.5			165.5		
S7	.6m	.20m	31-13-14-8	27		5		Similar soils (A-4)	165		
						5.5			164.5		
						6			164	Laboratory AASHTO classification performed on S8.	
S8	.6m	.30m	37-20-26-24	46		6.5		f.c. GRAVEL some f.m.c. Sand, some Silt, gray, dense, wet (A-2-4)	163.5		
						7			163	estimated pile tip elevation 163.0m	
R1	1.5m	1.8m		0%		7.5		DOLOSTONE, little quartz and calcite veining, gray, medium hard, moderate weathering, thick bedding, very close fracturing, very poor RQD.	162.5		
						8			162		
						8.5			161.5		
						9			161		
						9.5			160.5		
R2	1.5m	1.5m		0%		10		Similar bedrock	160		
						10.5					

Bottom of boring: 10.55 meters

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Bennington-Hoosick D.P.I. 0146 (1)
SUBSURFACE LOG
HOLE NUMBER B-732
Page 1 of 1

PROJECT NUMBER: 596J4.12 — November 1996
LOCATION: Station 16+864.0 Offset: 7m Rt
CLIENT: VAOT
CONTRACTOR: New England Boring
DRILLER: S. Graves — INSPECTOR: S. Pidgeon
START DATE: 11/15/96 — FINISH DATE: 11/9/96
SURFACE ELEV.: 171.89m — CHECKED BY: S. Pidgeon

DRILL FLUID: Water — DRILLING METHOD: NX Core

WATER LEVEL OBSERVATIONS DURING DRILLING

DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
11/9/96	13:30	1.25m	None	11.28m

SAMP./CORE NUMBER	SAMP.-ADV. LEN. CORE	RECOVERY	Blows per .52m on Split Spoon Sampler	"N" VALUE or ROD %	SAMPLE	DEPTH (Meters)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Meters)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.6m	.03m	1-1-2-2	3		.5		f. SAND, little silt and organics, brown, dry, very loose (A-2-4)	171.5	Insert 10m SSA after S1and S2. Auger to 1.22m	
S2	.6m	.37m	2-1-1-2	2		1		SILT, some f. Sand, trace organics, brown, v. soft, moist (A-4)	171		
S3	.6m	.24m	1-1-1-1	2		1.5		similar soils(A-4)	170.5	Static Water Levels 1.3m on 11/25/96	
S4	.6m	.2m	2-7-12-5	19		2		f. SAND, little silt, trace f.c. gravel, brown, dense, wet (A-2-4)	170		
S5	.6m	.09m	3-5-3-7	8		2.5		f.m.c. SAND, little f.c. gravel, trace silt, brown, loose, wet (A-3)	169.5		
S6	.6m	.15m	11-15-17-18	32		3		f.m.c. SAND and f.c. GRAVEL, trace silt, brown, dense, wet (A-1-b)	169	Insert 10m FJC. Pound to 3.05m, rollerbit then sample.	
						3.5			168.5		
						4			168		
						4.5		f. SAND and Clayey SILT, gray, stiff, wet (A-4)	167.5	Casing at 4.57m	
S7	.6m	.37m	9-7-7-6	14		5			167		
						5.5			166.5	Rollerbit rough from 5.49m-6.1m. Possible gravel-rich layer.	
						6			166	Casing at 6.1m	
S8	.6m	.5m	15-7-8-10	15		6.5		Clayey SILT, some f.c. Gravel, little f.m.c. sand, gray, stiff, wet(A-4)	165.5		
						7			165		
						7.5			164.5	Casing at 7.62m	
S9	.6m	.5m	18-18-22-19	40		8		f.m.c. SAND and f.c. GRAVEL, little clayey silt, gray, dense (A-2-4)	164		
						8.5			163.5		
						9		similar soils(A-2-4)	163		
S10	.6m	.30m	15-17-25-17	42		9.5			162.5	Casing at 9.14m	
						10			162		
						10.5			161.5	Casing at 10.67m	
S11	.6m	.02m	21-21-16-10	37		11		similar soils(A-2-4)	161		
						11.5			160.5	cobbles	
						12			160	casing refusal at 11.61m	
R1	1.52m	1.46m		14%		12.5		DOLOSTONE, gray, med. hard-hard, slightly weathered, close fracture spacing, v. poor RQD	159.5	estimated pile tip elevation 160.00m	
						13			159	Rollerbit to 12.5m through weathered rock	
						13.5			158.5		
R2	1.52m	1.46m		54%		14		becomes fair RQD	158		
						14.5			157.5		
						15			157		
						15.5			156.5		

Final Depth: 15.54 meters

BOT. OF FTG. EL. 170.40

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Bennington-Hoosick D.P.I. 0146(1)
SUBSURFACE LOG
HOLE NUMBER B-724
PAGE 1 OF 1

PROJECT NUMBER: 5116.07.04 — Apr 1998
LOCATION: STATION: 16+796.1 OFFSET: 12.0m Lt
CLIENT: VAOT
CONTRACTOR: ATLANTIC TESTING
DRILLER: R. P. — INSPECTOR: C. RICCARDI
START DATE: 4/6/98 — FINISH DATE: 4/7/98
SURFACE ELEV.: 174.40m — CHECKED BY: MSQ

DRILL FLUID: WATER — DRILLING METHOD: 0.10m FJC

WATER LEVEL OBSERVATIONS DURING DRILLING

DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
4-7-98	7:05am	2.7m	7.3m	7.6m
4-7-98	8:30am	2.2m	7.3m	9.1m

SAMP./CORE NUMBER	SAMP.-ADV. LEN. CORE	RECOVERY	Blows per .52m on Split Spoon Sampler	"N" VALUE or ROD %	SAMPLE	DEPTH (METERS)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (METERS)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
								SILT and ORGANICS, some roots, trace f.m.c. sand, dark brown, mottled, stiff, moist (A-4)	174	Test boring moved .10m ft'ft toward Silk Road from staked location	
S1	.6m	.18m	6-2-3-5	5		.5		f.m. SAND, little f. gravel, trace silt, light brown, loose, moist (A-3)	173.5		
S2	.6m	.24m	10-8-7-8	15		1		f.m.c. SAND, some f. Gravel, trace silt, light brown, medium dense, moist (A-3)	173		
S3	.6m	.06m	7-6-7-8	13		1.5		f.m.c. SAND, some f. Gravel, little f.sand, little silt, brown, medium dense, wet (A-1-b)	172.5		
S4	.6m	.2m	9-8-6-3	14		2		m.c. SAND, some f. Gravel, little f.sand, little silt, brown, mdense, wet (A-1-b)	172	c. gravel in shoe	
S5	.6m	.03m	7-6-10-63	16		2.5		Similar soils (A-1-b)	171.5		
S6	.6m	.30m	15-12-29-40	41		3		Similar soils (A-1-b)	171		
						3.5		f.m. SAND and SILT, some f. Gravel, gray, m. dense, wet (A-4)	170.5		
						4			170		
						4.5			169.5		
S7	.6m	.18m	29-17-14-17	31		5		Similar soils (A-4)	169		
						5.5			168.5		
						6			168		
S8	.6m	.37m	32-52-30-31	82		6.5		Clayey SILT, little m.c. sand, little f.gravel, gray, hard, wet (A-6) (TILL)	167.5		
						7			167		
R1	1.52m	1.52m	NA	30%		7.5		DOLOSTONE, gray with calcite seams, med hard-hard, slightly weathered, close fractures, thick bedding, poor RQD.	166.5		
						8			166		
						8.5			165.5		
						9			165		
						9.5			165		
						10		Bottom of Boring at 9.14 meters	164.5		

BOT. OF FTG. EL. 170.40

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.I. 0146(1)
SUBSURFACE LOG
HOLE NUMBER B-728
PAGE 1 OF 1

PROJECT NUMBER: 5116.07.04 — Apr 1998
LOCATION: Station 16+807.9 Offset: 12.5m Rt
CLIENT: VAOT
CONTRACTOR: ATLANTIC TESTING
DRILLER: R.P. — INSPECTOR: C. RICCARDI
START DATE: 4/7/98 — FINISH DATE: 4/7/98
SURFACE ELEV.: 174.43m — CHECKED BY: MSQ

DRILL FLUID: WATER — DRILLING METHOD: 0.10m FJC

WATER LEVEL OBSERVATIONS DURING DRILLING

DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
4-7-98	5:10pm	0.9m	out	10.5m

SAMP./CORE NUMBER	SAMP.-ADV. LEN. CORE	RECOVERY	Blows per .52m on Split Spoon Sampler	"N" VALUE or ROD %	SAMPLE	DEPTH (METERS)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (METERS)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.6m	.5m	1-1-1-2	2		.5		f. SAND and SILT, some organics, dark brown, v. soft, moist (A-4) (FILL)	174		
S2	.6m	.24m	3-4-5-4	9		1		f. SAND, some clayey Silt, trace m.c. sand, trace f. gravel, brown, stiff, moist (A-2-4) (FILL)	173.5		
S3	.6m	.24m	5-5-8-10	13		1.5		f.m.c. SAND, some f.c. Gravel, little silt, brown, m. dense, wet (A-2-4)	173		
S4	.6m	.34m	7-29-10-8	39		2		f.m. SAND, some Silt, trace c. sand, brown, dense, wet (A-2-4)	172.5		
S5	.55m	.37m	17-14 (2-50/0.03m	26		2.5		f.m. SAND and SILT, trace c. sand, trace f. gravel, gray, m. dense, wet (A-4)	172		
						3			171.5	BOULDER	
R1	.24m	.8m	NA	50%		3.5		DOLOSTONE. Boulder	171		
S6	.6m	.2m	11-21-18-13	39		4		f.m. SAND, some clayey Silt, some f. Gravel, gray, v. dense, wet (A-2-4)	170.5		
						4.5			170		
S7	.6m	.37m	15-19-17-20	36		5		SILT, some f. Sand, gray, m.dense, wet (A-4)	169.5		
						5.5			169		
						6			168.5		
S8	.6m	.49m	30-46-38-39	84		6.5		SILT, some f. Sand, little m.c. sand, little f. gravel, gray, v.dense, wet (A-4)	168		
						7			167.5		
						7.5			167		
S9	.5m	.5m	103/0.15m	R		8		f.c. GRAVEL, some f.m.c. Sand, some Silt, gray, v. dense, wet (A-2-4)	166.5	COBBLE/BOULDER	
						8.5			166		
						9			165.5		
R2	1.52m	.37m	NA	24%		9.5		DOLOSTONE, gray, med hard-hard, moderately weathered, close fractures, thick bedding, very poor RQD.	165		
						10			164.5		
						10.5		Bottom of Boring at 10.52 meters	164		
						11			163.5		

BOT. OF FTG. EL. 168.50

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Bennington-Hoosick D.P.I. 0146(1)
SUBSURFACE LOG
HOLE NUMBER B-734
PAGE 1 OF 1

PROJECT NUMBER: 5116.07.04 — Apr 1998
LOCATION: Station 16+852.2 Offset: 19.0m Lt
CLIENT: VAOT
CONTRACTOR: ATLANTIC TESTING
DRILLER: R. P. — INSPECTOR: C. RICCARDI
START DATE: 4/8/98 — FINISH DATE: 4/8/98
SURFACE ELEV.: 171.69m — CHECKED BY: MSQ

DRILL FLUID: WATER — DRILLING METHOD: 0.10m FJC

WATER LEVEL OBSERVATIONS DURING DRILLING

DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
4-8-98	1:28pm	0.2m	9.0m	10.8m

SAMP./CORE NUMBER	SAMP.-ADV. LEN. CORE	RECOVERY	Blows per .52m on Split Spoon Sampler	"N" VALUE or ROD %	SAMPLE	DEPTH (METERS)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (METERS)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.6m	.06m	2-6-14-10	20		.5		f.c. GRAVEL, little m.c. sand, brown, mdense, wet (A-1-a)	171.5	From 4/2/98 to 4/6/98 this location was under water due to snow melt. Walloomsac River water at 4/6/98 at Elevation ± 171.4m	
S2	.6m	.18m	7-3-3-6	6		1		grades with some f.m.c. Sand, little f. sand, trace silt, brown, mdense, wet (A-1-a)	171		
S3	.6m	.5m	20-13-9-10	22		1.5		f.c. GRAVEL and m.c. SAND, little f. sand, trace silt, brown, mdense, wet (A-1-a)	170.5		
S4	.6m	.27m	12-15-7-4	22		2		Similar soils (A-1-a)	170		
S5	.6m	.2m	7-7-7-7	14		2.5		f. SAND and SILT, gray, m. dense, wet (A-4)	169.5		
S6	.6m	.43m	8-8-10-8	18		3		grades with little f. gravel (A-4)	169		
						3.5			168.5		
						4			168		
						4.5			167.5		
S7	.6m	.2m	6-5-7-9	12		5		f.m.c. SAND, some clayey Silt, little f.c. gravel, gray, stiff, wet (A-2-4)	167		
						5.5			166.5		
						6			166		
						6.5		becomes hard (A-2-4)	165.5		
S8	.6m	.06m	12-18-17-8	35		7			165		
						7.5			164.5		
						8			164		
						8.5			163.5		
S9	.6m	.5m	24-32-25-31	57		9		f.c. GRAVEL and f.m.c. SAND, trace silt, gray, v. dense, wet (A-1-b)	163		
						9.5			162.5		
						10			162		
R1	1.52m	1.52m	NA	38%		10.5		DOLOSTONE, gray with interbedded calcite, medium hard-hard, slightly weathered, close fractures, massive bedding, poor RQD.	161.5		
						11		Bottom of Boring at 10.82 meters	161		
									160.5		

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
Highway No. VT. RTE. 9	Log Sta.
	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
SOIL BORING LOGS - 5	
Designed By W. HARRIS	Drawn by M. CUEVAS/B. WEATHERBY
Checked By M. QUINN — Date 6/00	Bridge Design Supervisor M.W. OLSTAD — Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR710	Sheet 193 OF 385

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ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

3573/SBR700/ B-L700-5.06N /3.12000/BW/sb00m

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.J. 0146(1)
SUBSURFACE LOG
HOLE NUMBER B-740
Page 1 of 1

PROJECT NUMBER: 3573.07.01 July 1995
LOCATION: Station 64+838.1 Offset: 7.1m Lt
CLIENT: VAOT
CONTRACTOR: Atlantic Testing
DRILLER: M.H. INSPECTOR: H.Simpson
START DATE: 7/6/95 FINISH DATE: 7/7/95
SURFACE ELEV.: 170.52m CHECKED BY: WAH

DRILL FLUID: Water | DRILLING METHOD: F.J.C.

WATER LEVEL OBSERVATIONS DURING DRILLING	DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
	7/6/95		0	6.7 m	6.7m
	7/7/95		0	6.7m	10.8m

SAMP./CORE NUMBER	SAMP./ADV LEN/CORE	RECOVERY	Blows per .52m on Split Spoon Sampler	"N" VALUE or ROD %	SAMPLE	DEPTH (Meters)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Meters)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.6m	0.2m	WH-WH-8-20	8		.5		f.m. SAND, little f.c. Gravel, trace clayey silt, brown, loose, wet (A-3)	170.5		
S2	.6m	0.2m	22-6-4-8	10		1		f.m. SAND, some f. Gravel, little clayey silt, little c. gravel, brown, loose, wet (A-2-4)	170		
S3	.6m	0.2m	13-13-9-9	22		1.5		f. GRAVEL and c. SAND, some c. Gravel, some m. Sand, little f. Sand, little clayey silt, gray, m. dense, wet (A-1-b)	169.5		
S4	.6m	0.2m	12-10-38-19	48		2		Clayey SILT and f. SAND, some m.c.Sand, some f. Gravel, little c. gravel, gray, hard, moist (A-4)	169		
S5	.6m	0.3m	5-4-6-3	10		2.5		becomes stiff(A-4)	168.5		
S6	.6m	0.5m	3-3-9-9	12		3		Similar soils (A-4)	168		
						3.5			167.5		
						4			167		
						4.5			166.5		
S7	.6m	0.1m	20-16-9-15	25		5		f.c. GRAVEL, little f.m.c. sand, little clayey silt, gray, dense, md/wet-b)	166		
						5.5			165.5		
						6			165		
S8	.6m	0.3m	11-6-5-10	11		6.5		f. SAND and Clayey SILT, some m.c. Sand, little f. gravel, trace c. gravel, gray, stiff, moist/wet (A-4)	164.5		
						7			164		
R1	1.0m	0.9m		38%		7.5		DOLOSTONE, little quartz and calcite veining gray, m.hard/hard, slight weathering, thick bedding, close fracture spacing, poor RQD.	163.5		
						8			163		
R2	1.2m	1.1m		46%		8.5		Similar bedrock	162.5		
						9			162		
						9.5			161.5		
R3	0.3	0.2		0%		10		RQD becomes very poor	161		
R4	1.22m					10.5		Similar bedrock	160.5		
									160	BOT. OF FTG. EL. 168.50	

Final Depth: 10.82 meters

estimated pile tip elevation 163.87m

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Bennington-Hoosick D.P.J. 0146(1)
SUBSURFACE LOG
HOLE NUMBER B-750
Page 1 of 1

PROJECT NUMBER: 3573.07.01 May 1995
LOCATION: Station 16+901.8 Offset: 0.9m Rt
CLIENT: VAOT
CONTRACTOR: Atlantic Testing
DRILLER: M.H. INSPECTOR: H.Simpson
START DATE: 5/16/95 FINISH DATE: 5/16/95
SURFACE ELEV.: 172.29m CHECKED BY: WAH

DRILL FLUID: Water | DRILLING METHOD: F.J.C.

WATER LEVEL OBSERVATIONS DURING DRILLING	DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
	5/16/95	17:30	0.9m	8m	11.58m

SAMP./CORE NUMBER	SAMP./ADV LEN/CORE	RECOVERY	Blows per .52m on Split Spoon Sampler	"N" VALUE or ROD %	SAMPLE	DEPTH (Meters)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Meters)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.6m	0.4m	WH-WH-WH-WH	0		.5		f. SAND and SILT, trace roots, brown, very loose, moist (A-4)	172		
S2	.6m	0.5m	WH-1-4-9	5		1		Similar soils (A-4)	171.5		
S3	.6m	0.2m	3-4-12-17	23		1.5		c. SAND, some Silt, trace f.c.Gravel, brown, m. dense, wet (A-2-4)	171		
S4	.6m	0.2m	9-8-6-7	14		2		m.c. SAND, little f.gravel, trace c.gravel, trace silt, brown, m. dense, wet (A-1-b)	170.5		
S5	.6m	NR	23-13-10-5	23		2.5		f. GRAVEL and c. SAND, little c. gravel, trace silt, brown, m. dense, wet (A-1-a)	170		
S6	.6m	0.4m	6-2-2-4	6		3		no recovery	169.5		
						3.5			169		
						4		f.m. SAND, little silt, gray, loose, wet (A-2-4)	168.5		
						4.5			168		
S7	.6m	0.3m	2-4-4-5	8		5		f.m.c. SAND, little silt, gray, loose, wet (A-2-4)	167.5	Laboratory AASHTO classification performed on S7.	
						5.5			167		
						6			166.5		
S8	.6m	0.3m	3-3-4-5	7		6.5		f. SAND, little silt, gray, loose, wet (A-2-4)	166		
						7			165.5		
						7.5			165		
S9	.20m	0.2m	24-100/0.2	100		8		f. GRAVEL and SILT, gray, v. hard, wet (A-4) (TILL)	164.5		
R1	1.5m	1.4m		23%		8.5		DOLOSTONE, some quartz and calcite veining, gray, m.hard, slight weathering, thick bedding, close fracture spacing, very poor RQD.	164		
						9			163.5	estimated pile tip elevation 163.76m	
						9.5			163		
R2	1.5m	1.5m		68%		10		weathering becomes moderate, RQD becomes fair.	162.5		
						10.5			162		
						11			161.5		
						11.5			161		

Final Depth: 11.58 meters

BOT. OF FTG. EL. 169.00

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Bennington-Hoosick D.P.J. 0146 (1)
SUBSURFACE LOG
HOLE NUMBER B-752
Page 1 of 1

PROJECT NUMBER: 586.J4.J2 November 1996
LOCATION: Station 16+920 Offset 6m Rt
CLIENT: VAOT
CONTRACTOR: New England Boring
DRILLER: M.S.J. INSPECTOR: S. Pidgeon
START DATE: 11/13/96 FINISH DATE: 11/14/96
SURFACE ELEV.: 173.42m CHECKED BY: S. Pidgeon

DRILL FLUID: Water | DRILLING METHOD: F.J.C.

WATER LEVEL OBSERVATIONS DURING DRILLING	DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
	11/13/96	09:00	1.55m	None	3.05m
	11/14/96	07:00	0.94m	16.46m	16.46m

SAMP./CORE NUMBER	SAMP./ADV LEN/CORE	RECOVERY	Blows per .52m on Split Spoon Sampler	"N" VALUE or ROD %	SAMPLE	DEPTH (Meters)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Meters)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.6m	.52m	1-2-2-1	4		.5		f. SAND, Some Silt, little organics, brown, v. loose, dry (A-2-4)	173	Use Solid Stem Augers to advance boring to 3.05m	
S2	.6m	.46m	2-1-2-3	3		1		becomes moist (A-2-4)	172.5		
S3	.6m	.55m	1-1-2-3	3		1.5		f.m. SAND, little c. sand, trace silt, light brown, v. loose, wet (A-3)	172	Static Water Level: 1.07m on 11/25/96	
S4	.6m	.52m	18-20-17-14	37		2		grades to little c. sand, trace f.c. gravel, dense, wet(A-3)	171.5		
S5	.6m	.6m	12-16-15-21	31		2.5		f.m.c. SAND and f.c. GRAVEL, trace silt, brown, dense, wet (A-3)	171		
S6	.6m	.46m	19-24-19-15	43		3		f.c. GRAVEL some f.m.c. Sand, trace silt, lt. brown, dense, wet (A-1-a)	170.5	Use JDm FJC and Rollerbit from 3.05m to 16.46m	
						3.5			170		
						4			169.5		
						4.5			169		
S7	.6m	.37m	7-7-6-7	13		5		f. SAND, trace clayey silt, gray, m. dense, wet(A-3)	168.5		
						5.5			168		
						6			167.5		
S8	.6m	.27m	5-7-7-10	14		6.5		similar soil A-3)	167		
						7			166.5		
						7.5			166		
S9	.6m	.49m	7-7-8-12	15		8		similar soil A-3)	165.5		
						8.5			165		
						9			164.5		
S10	.6m	.37m	5-4-8-14	22		9.5		f. SAND, little clayey silt, trace c. gravel, gray, m. dense, wet (A-2-4)	164		
						10			163.5		
						10.5			163		
S11	.6m	.5m	19-10-10-16	20		11		f.m.c. SAND, trace clayey silt, trace f.c. gravel, gray, med dense, wet (A-3)	162.5		
						11.5			162		
						12			161.5		
S12	.6m	.55m	16-50-35-53	85		12.5		f.c. GRAVEL, little f.m.c. sand and clayey silt, gray, v. dense, moist (A-1-b)	161		
						13			160.5		
						13.5			160		
S13	.6m	.37m	17-13-8-8	24		14		f. SAND, little clayey silt, trace f.c. gravel, gray, med. dense, wet (A-2-4)(TILL)	159.5		
						14.5			159		
						15			158.5		
S14	.6m	.37m	15-15-15-24	30		15.5		f. SAND, Some Clayey Silt and f.c. Gravel, trace m.c. sand, dense, moist (A-2-4)(TILL)	158		
						16			157.5		
R1	1.52m	1.4m	NA	32%		16.5		Weathered Bedrock	157	estimated pile tip elevation 157.1m	
						17		DOLOSTONE, gray, med. hard-hard, slightly weathered	156.5	Rollerbitting becomes difficult	
						17.5		PHYLLITE, soft, fresh, thinly bedded, close fracture spacing, poor RQD, with pyrite and other Xenocrysts, pearly or waxy luster on freshly broken surfaces.	156	Casing refused at 16.46m	
R2	1.52m	1.52m	NA	56%		18		RQD becomes fair	155.5		
						18.5			155		
						19			154.5		
						19.5			154		

Final Depth: 19.5m

BOT. OF FTG. EL. 169.00

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.J. 0146 (1)
SUBSURFACE LOG
HOLE NUMBER B-754
Page 1 of 1

PROJECT NUMBER: 586.J4.J2 November 1996
LOCATION: Station 16+915 Offset: 6m Lt
CLIENT: VAOT
CONTRACTOR: New England Boring
DRILLER: T. Carpenter INSPECTOR: S. Pidgeon
START DATE: 11/8/96 FINISH DATE: 11/12/96
SURFACE ELEV.: 173.29m CHECKED BY: S. Pidgeon

DRILL FLUID: Water | DRILLING METHOD: FJDX Core

WATER LEVEL OBSERVATIONS DURING DRILLING	DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
	11/8/96	15:00	1.40m	None	2.20m
	11/12/96	07:00	2.35m	6.10m	6.10m
	11/12/96	16:00	.94m	15.85m	19.35m

SAMP./CORE NUMBER	SAMP./ADV LEN/CORE	RECOVERY	Blows per .52m on Split Spoon Sampler	"N" VALUE or ROD %	SAMPLE	DEPTH (Meters)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Meters)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.6m	.46m	1-1-2-1	3		.5		f. SAND, little clayey silt and organics, brown, very loose, dry (A-2-4)	173		
S2	.6m	.43m	1-1-1-1	2		1		grades to trace organics, moist (A-2-4)	172.5		
S3	.6m	.46m	1-2-1-4	3		1.5		f. SAND and Clayey SILT, dk. brown, v. loose, moist (A-4)	172	Auger to 1.22m with JDm SSA	
S4	.6m	.28m	9-15-23-20	38		2		f.m. SAND, trace c. sand and silt, light brown, dense, wet (A-3)	171.5	Auger to 1.83m with JDm SSA	
S5	.6m	.12m	14-17-19-17	36		2.5		f.m.c. SAND, little f.c. gravel, trace silt, brown, dense, wet (A-3)	171		
S6	.6m	NR	19-15-10-5	25		3		no recovery	170.5	Insert JDm FJC rollerbit to 3.05m then sample	
						3.5			170	One piece of c. gravel in spoon, med. compact	
						4			169.5	Pound JDm FJC to 4.57m, then rollerbit	
						4.5			169		
S7	.6m	.03m	14-16-14-12	30		5		f. SAND, little silt, gray, dense, wet(A-2-4)	168.5		
						5.5			168	Pound casing to 6.1m	
						6			167.5		
S8	.6m	.58m	10-5-8-8	13		6.5		f. SAND, little silt, gray, m. dense, wet(A-2-4)	167		
						7			166.5	Pound FJC to 7.62m, rollerbit then sample	
						7.5			166		
S9	.6m	.6m	7-7-9-14	16		8		similar soil A-2-4)	165.5		
						8.5			165	Pound FJC to 9.14m, rollerbit then sample	
						9			164.5		
S10	.6m	.55m	7-8-8-8	16		9.5		grades to little clayey silt, trace f. gravel (A-2-4)	164		
						10			163.5		
						10.5			163		
S11	.6m	.55m	10-10-11-6	21		11		grades to little clayey silt, trace f.c. gravel (A-2-4)	162.5		
						11.5			162		
						12			161.5		
S12	.6m	.55m	31-24-13-15	37		12.5		f.m.c. SAND, little f. gravel, trace silt and gravel, gray, dense, wet (A-3) (TILL)	161		
						13			160.5		
						13.5			160		
S13	.6m	.34m	21-28-13-13	41		14		f.m. SAND, little c. sand and f. gravel, trace c. gravel and silt, gray, dense, wet(A-3) (TILL)	159.5	Boulders from 13.4m - 13.7m, casing stopped at 13.4m, rollerbit to 13.7m	
						14.5			159	Pound casing to 15.24m, then rollerbit	
						15			158.5		
S14	.6m	.46m	13-44-55-29	99		15.5		f.m.c. SAND, little f.c. gravel, trace clayey silt, dk. gray, v. dense, moist (A-3) (TILL)	158	Weathered rock, black with pyrite	
						16			157.5		
R1	1.52m	1.52m		58%		16.5		DOLOSTONE, gray, med. hard, slightly weathered	157	estimated pile tip elevation 156.98m	
						17		PHYLLITE, dk. gray, soft-med. hard with pyrite and calcite, slightly weathered, thinly bedded, close fracturing, fair RQD.	156.5		
						17.5			156		
R2	1.52m	1.37m		40%		18		RQD becomes poor	155.5		
						18.5			155		
						19			154.5		
									154		

Final Depth: 19.35 meters

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.J. 0146(1)
SUBSURFACE LOG
HOLE NUMBER B-760
Page 1 of 1

PROJECT NUMBER: 3573.07.01 May 1995
LOCATION: Station 65+902.0 Offset: 7.6m Lt
CLIENT: VAOT
CONTRACTOR: Atlantic Testing
DRILLER: M.H. INSPECTOR: H.Simpson
START DATE: 5/16/95 FINISH DATE: 5/17/95
SURFACE ELEV.: 172.85m CHECKED BY: WAH

DRILL FLUID: Water | DRILLING METHOD: F.J.C.

WATER LEVEL OBSERVATIONS DURING DRILLING	DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
	5/16/95	17:10	1.5m	3m	3.6m
	5/17/95	12:45	1.4m	9.1m	14.02m

SAMP./CORE NUMBER	SAMP./ADV LEN/CORE	RECOVERY	Blows per .52m on Split Spoon Sampler	"N" VALUE or ROD %	SAMPLE	DEPTH (Meters)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Meters)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.6m	0.4m	WH-WH-WH-WH	0		.5		SILT, some f. Sand, trace roots, brown, v. soft, moist(A-4)	172.5		
S2	.6m	0.6m	WH-WH-WH-1	0		1		Similar soils (A-4)	172		
S3	.6m	0.5m	WH-1-2-4	3		1.5		f.m. SAND, some Silt, brown, v. loose, moist (A-2-4)	171.5		
S4	.6m	0.4m	5-5-3-5	8		2		m. SAND, little silt, trace f. gravel, v. loose, wet (A-2-4)	171	Laboratory AASHTO classification performed on S4.	
S5	.6m	0.5m	13-15-15-11	30		2.5		f.m.c. SAND, some f.c. Gravel, trace silt, brown, loose, wet (A-1-b)	170.5		
S6	.6m	NR	15-10-8-7	18		3		f.m.c. SAND, some f. Gravel, little c. gravel, trace silt, brown, dense, wet (A-1-b)	170		
						3.5		becomes m. dense (A-1-b)	169.5	no recovery 1st attempt. 0.2m recovery in 2nd spoon	
						4			169		
						4.5			168.5		
S7	.6m	NR	9-7-4-5	11		5		m.c. SAND, little silt, gray, m. dense, wet (A-2-4)	168	no recovery 1st attempt. 0.2m recovery in 2nd spoon	
						5.5			167.5		
						6		becomes loose (A-2-4)	167		
S8	.6m	0.3m	2-3-5-6	8		6.5			166.5		
						7			166		
						7.5			165.5		
S9	.6m	0.5m	3-4-3-5	7		8		f. SAND and Clayey SILT, gray, m. stiff, wet (A-4) (TILL)	165		
						8.5			164.5		
						9			164		
S10	.12m	0.0m	100/0.12	R		9.5		f.c. GRAVEL and SILT, gray, v. hard, wet (A-4) (TILL)	163.5	estimated pile tip elevation 163.40m	
R1	1.5m	1.5m		65%		10		DOLOSTONE, some quartz and calcite veining, gray, m. hard, slight weathering, thick bedding, close fracture spacing, very poor RQD.	163		
						10.5			162.5		
R2	1.5m	1.5m		78%		11		weathering becomes moderate, medium fracture spacing, good RQD	162		
						11.5			161.5		
						12			161		
R3	1.5m	1.5m		58%		12.5		PHYLLITE, trace pyrite, black, slight weathering, thick bedding, medium fracturing, fair RQD.	160.5		
						13			160		
						13.5			159.5		
						14			159		

Final Depth: 14.02 meters

BOT. OF FTG. EL. 169.00

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
Highway No. VT. RTE. 9	Log Sta.
	Surv. Sta. 16+800

VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER

SOIL BORINGS LOGS - 6

Designed By W. HARRIS	Drawn by M. CUEVAS/B. WEATHERBY
Checked By M. QUINN Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.J. 0146(1) C/4
I.C.C. Info.	
Bridge Sheet No. BR711	Sheet 194 OF 385

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
3 WINNERS CIRCLE ALBANY, NEW YORK, 12205

3573/15/BR700/ B-L700-6.DGN 7/6/8.99/BW100m

VAOT Metric

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.J. 0146(1)
SUBSURFACE LOG
HOLE NUMBER B-770
Page1 of1

PROJECT NUMBER: 3573.07.01 May 1995
LOCATION: Station16+965.9 Offset:0.9m Rt
CLIENT: VAOT
CONTRACTOR: Atlantic Testing
DRILLER: M.H. INSPECTOR: N.Simpson
START DATE: 5/10/95 FINISH DATE: 5/11/95
SURFACE ELEV.: 173.8m CHECKED BY: WAH

DRILL FLUID: Water DRILLING METHOD: F.J.C.

WATER LEVEL OBSERVATIONS DURING DRILLING

DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
5/10/95	19:30	1m	22.9 m	23.9m
5/11/95	06:15	0.9 m	22.9 m	23.9m
5/11/95	17:30	1m	23.5 m	27.4m

SAMP./CORE NUMBER	SAMP. ADV. LEN. CORE	RECOVERY	Blows per .52m on Split Spoon Sampler	N° VALUE or ROD %	SAMPLE	DEPTH (Meters)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Meters)
						0			173
S1	.6m	0.5m	WH-WH-WH-1	0		.5		f. SAND, some Silt, brown, v. loose, moist (A-2-4)	
						1			172.5
S2	.6m	0.5m	H 2-WH	3				Similar soils (A-2-4)	
						1.5			172
S3	.6m	0.6m	WH-WH-WH-1	0				Similar soils (A-2-4)	
						2		becomes grey, wet (A-2-4)	171.5
S4	.6m	0.3m	1-2-2-1	4				n.c. SAND, some f. Gravel, trace c. gravel, brown, v.loose, wet (A-1-a)	171
S5	.6m	0.4m	6-5-8-8	26		2.5		f.c. GRAVEL, little c. sand, brown, dense, wet (A-1-a)	170.5
						3			
S6	.6m	0.2m	8-7-8-7	18				becomes m. dense (A-1-a)	170
						3.5			169.5
						4			169
						4.5			
S7	.6m	0.2m	6-8-9-9	17		5		Similar soils (A-1-a)	168.5
						5.5			168
						6			167.5
						6.5		f. SAND, little silt, gray/black, loose, wet (A-2-4)	167
S8	.6m	0.5m	4-3-5-6	8		7			166.5
						7.5			166
S9	.6m	0.3m	5-6-8-8	14		8		becomes m. dense (A-2-4)	165.5
						8.5			165
						9			164.5
S10	.6m	0.2m	5-7-8-7	15		9.5		Similar soils (A-2-4)	164
						10			163.5
						10.5			163
S11	.6m	0.5m	4-4-6-6	10		11		becomes loose (A-2-4)	162.5
						11.5			162
						12			161.5
S12	.6m	0.5m	6-5-6-7	11		12.5		Similar soils (A-2-4)	161
						13		Clayey Silt, gray, stiff, wet (A-4)	160.5
						13.5			160
S13	.6m	0.6m	3-4-3-5	7		14		becomes m. stiff (A-4)	159.5
						14.5			159
						15			158.5
S14	.6m	0.2m	25-14-15-11	29		15.5		f.c. GRAVEL, some Silt, little f.m. sand, gray, dense, wet (A-2-4)	158
						16			157.5
						16.5			157
S15	.6m	0.3m	5-6-7-10	13		17		c. SAND and f. GRAVEL, trace c. gravel, gray, m. dense, wet (A-1-a)	156.5
						17.5			156
						18			155.5
S16	.6m	0.1m	6-7-5-6	12		18.5		f.c. GRAVEL, some Silt, gray, m. dense, wet (A-2-4)	155
						19			154.5
						19.5			154
S17	.6m	0.3m	9-4-7-8	11		20		f.c. GRAVEL and f.m.c. SAND, trace silt, gray, m. dense, wet (A-1-a)	153.5
						20.5			153
						21			152.5
S18	.6m	0.2m	WR-4-3-8	7		21.5		f.m.c. SAND, some Silt, gray, loose, wet (A-2-4)	152
						22			151.5
						22.5			151
S19	.10m	NR	100/0.1m	R		23		c. GRAVEL, little silt, gray, v. dense, wet (A-1-b) (TILL)	150.5
S20	.42m	0.4m	26-50 100/0.02m	R		23.5		no recovery (A-1-b) (TILL)	150
						24			149.5
						24.5		DOLOSTONE, little quartz veining, gray, m. hard, slight weathering, thick bedding, close fracture spacing, v. poor RQD.	149
R1	1.5m	1.5m		17%		25			148.5
						25.5		Similar bedrock	148
						26			147.5
R2	1.5m	1.1m		21%		26.5			147
						27			146.5
									146

Remarks on Character of Drilling, water return, etc

BOT. OF FTG. EL. 169.00

Laboratory AASHTO classification performed on S17.

estimated pile tip elevation 149.8m
rollerbit to 24.4 m

WATER LEVELS AND/OR WELL DATA

Final Depth: 27.43 meters

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.J. 0146(1)
SUBSURFACE LOG
HOLE NUMBER B-780
Page1 of1

PROJECT NUMBER: 3573.07.01 May 1995
LOCATION: Station16+966.4 Offset: 7.3m Lt
CLIENT: VAOT
CONTRACTOR: Atlantic Testing
DRILLER: M.H. INSPECTOR: N.Simpson
START DATE: 5/11/95 FINISH DATE: 5/15/95
SURFACE ELEV.: 172.33m CHECKED BY:WAH

DRILL FLUID: Water DRILLING METHOD: F.J.C.

WATER LEVEL OBSERVATIONS DURING DRILLING

DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
5/12/95	13:00	2.9 m	16.7 m	17.3m
5/15/95	8:00	0.2 m	16.7 m	17.3m
5/15/95	18:00	0.3 m	23.3 m	27.9m

SAMP./CORE NUMBER	SAMP. ADV. LEN. CORE	RECOVERY	Blows per .52m on Split Spoon Sampler	N° VALUE or ROD %	SAMPLE	DEPTH (Meters)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Meters)
						0			172
S1	.6m	1.5m	WH-WH-H	0		.5		m. SAND, little silt, trace roots, brown, v. loose, moist (A-1-b)	
						1			171.5
S2	.6m	0.3m	H 1/0.3m	2				m. SAND, trace silt, gray, v.loose, wet (A-1-b)	
						1.5			171
S3	.6m	0.6m	2-1-1-1	2				f.m.c. SAND, trace silt, trace f. gravel, brown, v. loose, wet (A-1-b)	
						2			170.5
S4	.6m	0.6m	2-6-7-10	13				Similar soils (A-1-b)	
						2.5		f. GRAVEL and c. SAND, some m.Sand, little silt, brown, m. dense, wet (A-1-b)	170
S5	.6m	0.2m	10-14-6-7	20		3		f.c. GRAVEL, some m.c. Sand, little silt, brown, m. dense, wet (A-1-b)	
						3.5			169.5
S6	.6m	0.2m	4-7-4-7	11				Similar soils (A-1-b)	169
						4			
						4.5			168.5
S7	.6m	0.4m	WH-3-4-4	7		5		f. SAND, some Silt, gray, loose, wet (A-2-4)	168
						5.5			167.5
						6			167
						6.5			166.5
S8	.6m	0.4m	2-5-7-6	12		7		f.m.SAND, trace silt, gray, m.dense, wet (A-3)	166
						7.5			165.5
S9	.6m	0.3m	see remarks			8		Similar soils (A-3)	165
						8.5			164.5
						9			164
S10	.6m	0.6m	4-4-7-9	11		9.5		f.m.SAND, little silt, gray, m. dense, wet (A-2-4)	163.5
						10			163
						10.5			162.5
S11	.6m	0.5m	5-3-4-5	7		11		Silt and f. SAND, gray, m. stiff, wet (A-4)	162
						11.5			161.5
						12			161
S12	.6m	0.6m	6-4-4-6	8		12.5		Similar soils (A-4)	160.5
						13			160
						13.5			159.5
S13	.6m	0.4m	12-17-12-15	29		14		f. GRAVEL, some c. Sand, some Silt, trace c. gravel, gray, dense, wet (A-2-4)	159
						14.5			158.5
						15			158
S14	.6m	0.4m	7-8-9-13	17		15.5		f. GRAVEL, little c. sand, little silt, gray, m. dense, wet (A-2-4)	157.5
						16			157
						16.5			156.5
S15	.6m	0.4m	22-8-10-9	18		17		f. SAND and SILT, trace f. gravel, gray, m. dense, wet (A-4)	156
						17.5			155.5
						18			155
S16	.6m	0.2m	14-10-8-13	21		18.5		f. GRAVEL, some m.c. Sand, little silt, gray, m. dense, wet (A-1-b) (TILL)	154.5
						19			154
						19.5			153.5
S17	.6m	0.4m	13-12-15-14	27		20		m.c. SAND, trace c. Gravel, trace silt, gray, dense, wet (A-1-b) (TILL)	153
						20.5			152.5
						21			152
						21.5			151.5
S18	.6m	0.4m	19-14-16-24	30		22		f.m.c. SAND, some Silt, little f.c. gravel, brown, dense, wet (A-1-b) (TILL)	151
						22.5			150.5
						23			150
S19	.10m	0.2m	68-103/.05m	R		23.5		c. GRAVEL, little m. sand, little f. gravel, little silt, gray, v. dense, wet (A-1-b) (TILL)	149.5
R1	1.5	0.8		30%		24		DOLOSTONE, some quartz veining, gray, m. hard, moderate weathering, thick bedding, close fracture spacing, poor RQD.	149
						24.5			148.5
						25			148
R2	1.5m	1.4m		43%		25.5		Similar bedrock, poor RQD.	147.5
						26			147
						26.5			146.5
R3	1.5m	1.1m		21%		27		becomes slightly weathered, v. poor RQD	146
						27.5			145.5
									145
									144.5

Remarks on Character of Drilling, water return, etc

Laboratory AASHTO classification performed on S3.

BOT. OF FTG. EL. 169.00

Laboratory AASHTO classification performed on S11.

Laboratory AASHTO classification performed on S18.

D36 kg (300 lb) hammer used to obtain sample S9. Blow counts using D36 kg hammer were WH-1-2.

estimated pile tip elevation 149.0m

WATER LEVELS AND/OR WELL DATA

Final Depth: 27.89 meters

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
Highway No. VT. RTE. 9	Log Sta.
	Surv. Sta. 16+800

VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER

SOIL BORING LOGS - 7

Designed By W. HARRIS	Drawn by M. CUEVAS/B. WEATHREBY
Checked By M. QUINN Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.J. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR712	Sheet 195 OF 385

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
3 WINNERS CIRCLE ALBANY, NEW YORK, 12205

3573.15/BR700/ B-L700-700N 7.6.:59/BM/ALOO

Metric

BOT. OF FTG. EL. 171.30

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.I. 0146(1)
SUBSURFACE LOG
HOLE NUMBER B-790

Page1 of2

PROJECT NUMBER: 3573.07.01 June 1995
LOCATION: Station 210+049.8 Offset: 3.9m Lt
CLIENT: VAOT
CONTRACTOR: Atlantic Testing
DRILLER: M.H. INSPECTOR: H.Simpson
START DATE: 6/1/95 FINISH DATE: 6/6/95
SURFACE ELEV.: 173.55m CHECKED BY: WAH
DRILL FLUID: Water DRILLING METHOD: F.J.C.

WATER LEVEL OBSERVATIONS DURING DRILLING

DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
6/1/95	19:15	1.95m	16.76m	17.37m
6/2/95	13:00	3.85m	25.9m	26.52m
6/5/95	8:20	.85m	25.9m	26.52m

SAMP./CORE NUMBER	SAMP. ADV. LEN. CORE	RECOVERY	Blows per .52m on Split Spoon Sampler	N° VALUE or ROD %	SAMPLE	DEPTH (Meters)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Meters)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.6m	.5m	1-6-5-3	11		.5		Silt and f. SAND, trace roots, brown, stiff, moist/wet (A-4)	173.5		
S2	.6m	.3m	2-2-2-3	4		1		f.m. SAND, some Silt, brown, loose, wet (A-2-4)	173		
S3	.6m	.2m	3-14-12-7	26		1.5		m.c. SAND, some Silt, little f. gravel, brown, dense, wet (A-2-4)	172.5		
S4	.6m	.2m	7-15-11-6	26		2		grades to little c. gravel (A-2-4)	172		
S5	.6m	.2m	5-4-3-2	7		2.5		m.c. SAND, little f.c. gravel, little silt, loose (A-1-b)	171.5		
S6	.6m	NR	10-14-12-4	26		3		no recovery	171		
						3.5			170.5		
						4			170		
S7	.6m	NR	7-8-7-7	15		4.5		no recovery	169.5		
						5			169		
						5.5			168.5		
						6			168		
S8	.6m	.5m	5-3-4-4	7		6.5		Silt, little f. sand, gray, m. stiff, wet (A-4)	167.5		
						7			167		
						7.5			166.5		
S9	.6m	.4m	3-3-4-5	7		8		f. SAND, some Silt, gray, m. stiff, wet (A-2-4)	166		
						8.5			165.5		
						9		similar soil (A-2-4)	165		
S10	.6m	.6m	3-3-5-6	8		9.5			164.5		
						10			164		
						10.5			163.5		
S11	.6m	.3m	5-6-8-7	14		11		becomes m. dense (A-2-4)	163		
						11.5			162.5		
						12			162		
S12	.6m	.4m	WOR-3-4-4	7		12.5		f. SAND and SILT, gray, m. stiff, wet (A-4)	161.5		
						13			161		
						13.5		similar soil (A-4)	160.5		
S13	.6m	.4m	3-3-4-4	7		14			160		
						14.5			159.5		
						15			159		
S14	.6m	.2m	16-15-8-9	26		15.5		f. GRAVEL and m.c. SAND, some Silt, trace c. gravel, gray, dense, wet (A-2-4)	158.5		
						16			158		
						16.5			157.5		
S15	.6m	.4m	23-9-6-9	15		17		f.m.c. SAND, little silt, trace f. gravel, layered, gray, dense, wet (A-2-4)	157		
						17.5			156.5		
						18			156		
S16	.6m	.2m	29-15-8-8	23		18.5		f.m.c. SAND, some Silt, trace f. gravel, gray, dense, wet (A-2-4)	155.5		
						19			155		
						19.5			154.5		
S17	.6m	NR	21-16-18-18	34		20		no recovery	154		
						20.5			153.5		
						21			153		
S18	.6m	.3m	8-10-8-13	21		21.5		f.m.c. SAND, some Silt, little f.c. gravel, gray, dense wet (A-2-4)	152.5		
						22			152		

CONTINUED

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.I. 0146(1)
SUBSURFACE LOG
HOLE NUMBER B-790

PROJECT NUMBER: 586.14.12 March 1996
Page2 of2

SAMP./CORE NUMBER	SAMP. ADV. LEN. CORE	RECOVERY	Blows per .52m on Split Spoon Sampler	N° VALUE or ROD %	SAMPLE	DEPTH (Meters)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Meters)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
						22.5		becomes dense (A-2-4)	151		
S19	.6m	.3m	13-15-14-15	29		23			150.5		
						23.5			150		
						24			149.5		
S20	.6m	.2m	13-10-10-7	20		24.5		becomes m. dense (A-2-4)	149		
						25			148.5		
						25.5			148		
S21	.6m	.3m	25-65-57-18	R		26		f.m.c. SAND, some f.c. Gravel, some Silt, brown, v. dense, wet (A-1-b) (TILL)	147.5	Laboratory AASHTO classification performed on S21.	
						26.5			147		
						27			146.5		
S22	.6m	.2m	61-75-44-26	R		27.5		c. GRAVEL, some Silt, gray, v. dense, wet (A-1-a) (TILL)	146		
						28			145.5		
						28.5			145		
S23	.6m	.1m	150/.6	R		29		c. GRAVEL, gray, v. dense, wet (A-1-a) (TILL)	144.5		
						29.5			144	estimated pile type elevation 143.98 m	
R1	1.5m	1.5m	NA	46%		30		DOLOSTONE, some quartz and calcite veining, gray, m. hard, slight weathering, thick bedding, close fracturing, poor RQD	143.5		
						30.5			143		
						31			142.5		
R2	1.3m	1.3m	NA	53%		31.5		similar rock, moderate weathering, fair RQD	142		
						32			141.5		
						32.5			141		

Final Depth: 32.37 meters

BOT. OF FTG. EL. 171.30

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.I. 0146(1)
SUBSURFACE LOG
HOLE NUMBER B-800

Page1 of2

PROJECT NUMBER: 3573.07.01 June 1995
LOCATION: Station 410+132.9 Offset: 0.2m Rt
CLIENT: VAOT
CONTRACTOR: Atlantic Testing
DRILLER: M.H. INSPECTOR: H.Simpson
START DATE: 6/6/95 FINISH DATE: 6/7/95
SURFACE ELEV.: 173.79m CHECKED BY: WAH
DRILL FLUID: Water DRILLING METHOD: F.J.C.

WATER LEVEL OBSERVATIONS DURING DRILLING

DATE	TIME	WATER DEPTH	CASING BOTTOM	HOLE BOTTOM
1/6/95	15:30	2.69m	25.5m	25.6m
6/7/95	06:30	1.09m	25.5m	25.6m
6/7/95	15:30	1.29m	25.5m	32.6m

SAMP./CORE NUMBER	SAMP. ADV. LEN. CORE	RECOVERY	Blows per .52m on Split Spoon Sampler	N° VALUE or ROD %	SAMPLE	DEPTH (Meters)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Meters)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
S1	.6m	.46m	2-4-4-6	8		.5		Silt, trace f. sand, trace f. gravel, brown, m. stiff, moist (A-4)	173.5		
S2	.6m	.49m	4-4-4-4	8		1		Silt, little f. sand, brown, m. stiff, moist (A-4)	173		
S3	.6m	.30m	4-5-12-14	17		1.5		f.m. SAND, some Silt, some f.c. Gravel, brown, v. stiff, moist (A-2-4)	172.5	Laboratory AASHTO classification performed on S3.	
S4	.6m	.27m	15-8-12-10	23		2		f.m.c. SAND, some Silt, some f.c. Gravel, brown, m. dense, wet (A-2-4)	172		
S5	.6m	.2m	8-7-5-4	12		2.5		similar soil (A-2-4)	171.5		
S6	.6m	.1m	5-4-3-3	7		3		f.m.c. SAND, some Silt, trace f.c. gravel, brown, loose wet (A-2-4)	171		
						3.5			170.5		
						4			170		
						4.5			169.5		
S7	.6m	.0m	8-7-5-7	12		5		f.m.c. SAND, some Silt, little f. gravel, trace c. gravel, brown, m. dense, wet (A-2-4)	169		
						5.5			168.5		
						6			168		
S8	.6m	.46m	6-6-6-5	12		6.5		Silt, trace f. sand, gray, stiff, wet (A-4)	167.5		
						7			167		
						7.5			166.5		
S9	.6m	.52m	4-4-2-3	6		8		f. SAND and SILT, gray, m. stiff, wet (A-4)	166		
						8.5			165.5		
						9			165		
S10	.6m	.46m	4-3-3-4	6		9.5		similar soil (A-4)	164.5		
						10			164		
						10.5			163.5		
S11	.6m	.43m	4-5-7-8	12		11		f. SAND, some Silt, m. dense (A-2-4)	163		
						11.5			162.5		
						12			162		
S12	.6m	.55m	4-3-4-5	7		12.5		f. SAND, some Silt, trace layers of silty clay, gray, m. dense, wet (A-2-4)	161.5		
						13			161		
						13.5			160.5		
S13	.6m	.43m	1-2-4-5	6		14		f. SAND and SILT, gray, m. stiff, wet (A-4)	160		
						14.5			159.5		
						15			159		
S14	.6m	.30m	6-7-7-9	14		15.5		f.m.c. SAND, little f.c. gravel, trace silt, gray, m. dense, wet (A-1-b)	158.5	Laboratory AASHTO classification performed on S14.	
						16			158		
						16.5			157.5		
S15	.6m	.5m	17-18-20-19	38		17		becomes dense (A-1-b)	157		
						17.5			156.5	encounter running sands between 18.3 and 19.8 meters	
						18			156		
S16	.6m	.34m	8-8-8-10	19		18.5		f.m.c. SAND, some Silt, becomes m. dense (A-2-4)	155.5		
						19			155		
						19.5			154.5		
S17	.6m	.27m	2-8-8-12	19		20		similar soil (A-2-4)	154		
						20.5			153.5		
						21			153		
S18	.6m	.34m	16-40-35-16	75		21.5		f. SAND, some Silt, little gravel, trace c. gravel, brown and gray, v. dense, wet (A-2-4)	152.5	boulder to 21.49 meters	
						22			152		

CONTINUED

CLOUGH, HARBOUR & ASSOCIATES LLP

Bennington-Hoosick D.P.I. 0146(1)
SUBSURFACE LOG
HOLE NUMBER B-800

PROJECT NUMBER: 586.14.12 March 1996
Page2 of2

SAMP./CORE NUMBER	SAMP. ADV. LEN. CORE	RECOVERY	Blows per .52m on Split Spoon Sampler	N° VALUE or ROD %	SAMPLE	DEPTH (Meters)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	ELEVATION (Meters)	Remarks on Character of Drilling, water return, etc	WATER LEVELS AND/OR WELL DATA
						22.5			151.5		
						23			151		
S19	.6m	.27m	10-8-8-8	18		23.5		becomes gray, m. dense (A-2-4)	150.5		
						24			150		
						24.5			149.5		
S20	.6m	.6m	6-7-18-72	25		25		a. SAND and SILT, trace f.c. gravel, brown, dense, wet (A-4) (TILL)	149		
						25.5			148.5		
						26			148		
S21	.6m	.14m	16-14-18-55	32		26.5		a. SAND and SILT, little f. gravel, trace c. gravel, brown, dense, wet (A-4) (TILL)	147.5		
						27			147		
						27.5			146.5		
S22	.30m	.00m	100/.0	R		28			146		
R1	1.52m	.8m	NA	0%		28.5		m.c. SAND, boulders and cobbles (A-1-b) (TILL)	145.5		
						29			145		
R2	1.22m	1.0m	NA	82%		29.5		DOLOSTONE, gray, m. hard, moderate weathering, thick bedding, v. close fracturing, v. poor RQD	144.5	estimated pile tip elevation 144.84m	
						30			144		
R3	.9m	.3m	NA	0%		30.5		similar rock	143.5		
						31			143		
R4	1.52	1.2m	NA	92%		31.5		similar rock	142.5		
						32			142		
						32.5			141.5		
									141		

Final depth at 32.61 meters

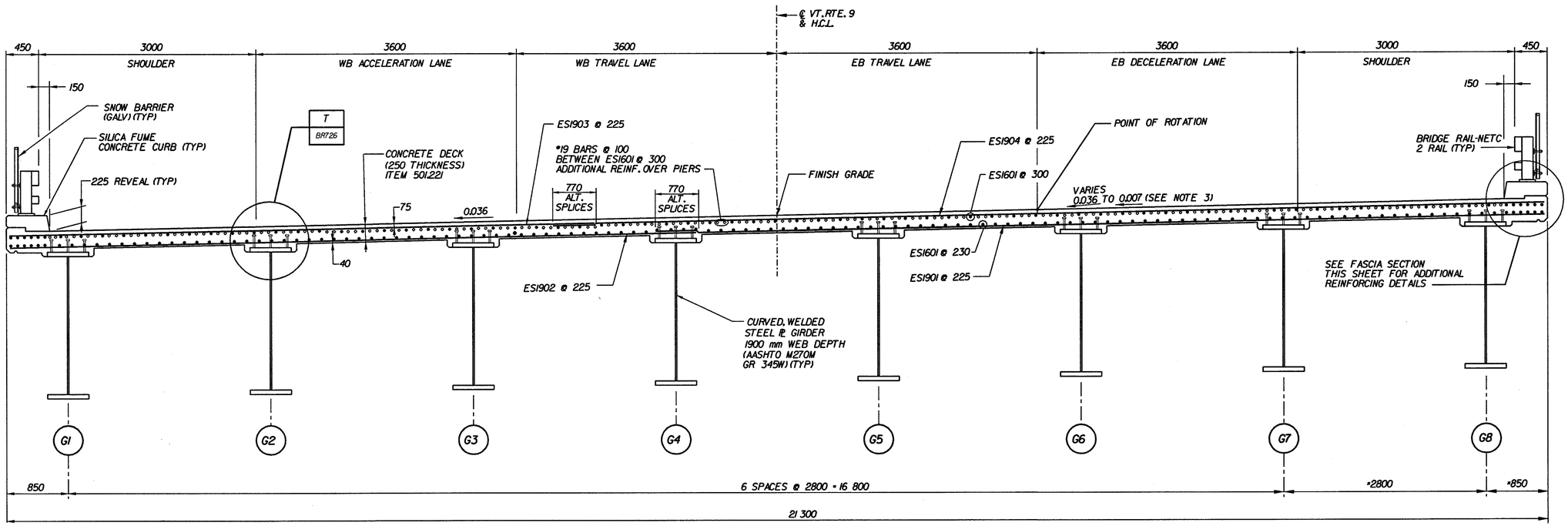
STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
Highway No. VT. RTE. 9	Log Sta.
	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
SOIL BORING LOGS - 8	
Designed By W. HARRIS	Drawn by M. CUEAVAS/B. WEATHERBY
Checked By Date M. QUINN 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR713	Sheet 196 OF 385

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
11 WINNERS CIRCLE ALBANY, NEW YORK 12205

FL/3513/15/BR700/8-1700-8.DGN/6.5.99/BM/ND0

VAOT Metric



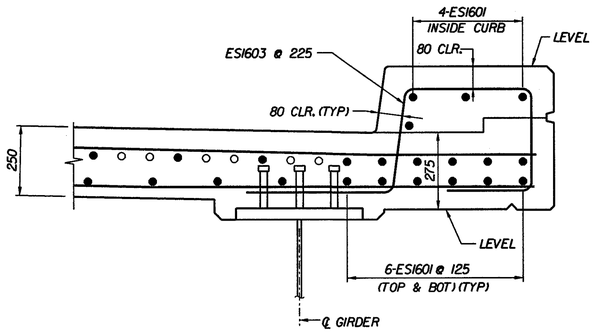
TYPICAL TRANSVERSE BRIDGE SECTION (TO STA. 16+978.085)

.6 m 0 .6 m

1:30

TRANSCS

*DIMENSIONS SHOWN ARE VALID UP TO STA. 16+972.194 AND VARY BETWEEN STA. 16+972.194 AND STA. 16+978.085



FASCIA SECTION

.2 m 0 .2 m

1:10

TRANSCS

NOTES:

1. ALL SUPERSTRUCTURE REINFORCING STEEL SHALL BE EPOXY COATED.
2. SEE TYPICAL CURB SECTIONS ON SHEET BR738.
3. A TRANSITION FROM 0.036 DN LT TO 0.007 DN LT BEGINS AT STATION 16+932.889 FOR THE EASTBOUND DECELERATION LANE FOR RAMP C. THE CROSS-SLOPE TRANSITIONS TO 0.007 DN LT AT THE EQUALITY ROUTE 9 STATION 16+978.085 = RAMP C STATION C10+000.000.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
TYPICAL TRANSVERSE BRIDGE SECTIONS - 1	
Designed By M. GOGUEN	Drawn by B. WEATHERBY
Checked By D. VIENI Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
L.G.C. Info.	
Bridge Sheet No. BR714	Sheet 197 OF 385

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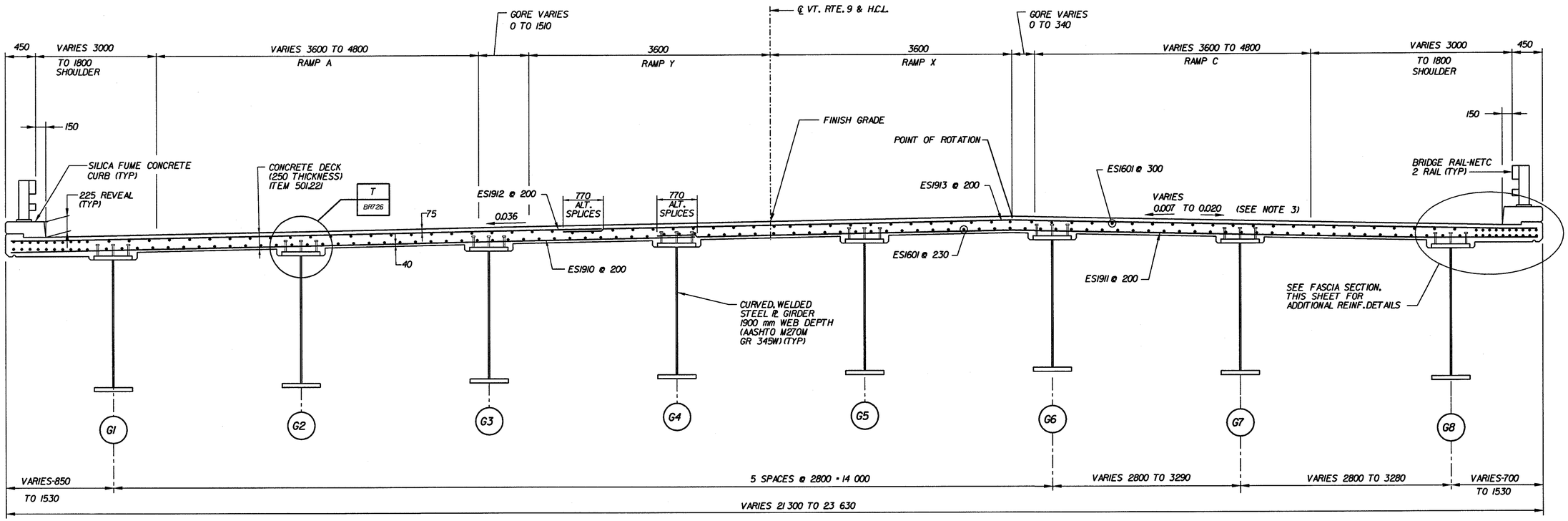
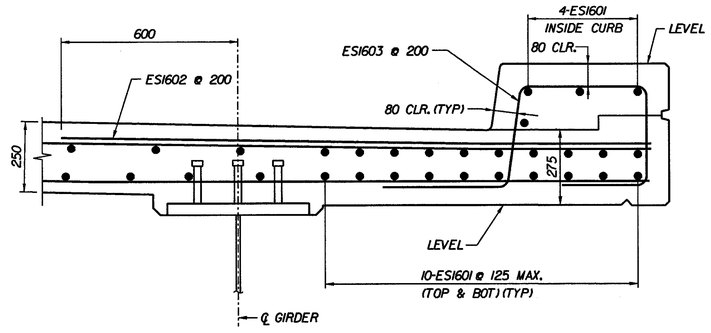
III WINNERS CIRCLE ALBANY, NEW YORK, 12205

Tr/2513/S/BR700/TRANSTR/2.1.2000.DGN MDimm

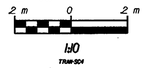
VAOT Metric



TYPICAL TRANSVERSE BRIDGE SECTION (STATION 16+978.085 TO END OF BRIDGE DECK)



FASCIA SECTION



NOTES:

1. ALL SUPERSTRUCTURE REINFORCING STEEL SHALL BE EPOXY COATED.
2. SEE TYPICAL CURB SECTIONS ON SHEET BR738.
3. A TRANSITION CONTINUES FROM 0.007 DN LT. AT EQUALITY STATION 16+978.085 + RAMP C STATION C10+000.000 TO 0.020 DN RT AT THE END OF THE BRIDGE.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
Highway No. VT. RTE. 9	Log Sta.
	Surv. Sta. 16+800

VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER

TYPICAL TRANSVERSE BRIDGE SECTIONS - 2

Designed By M. GOGUEN	Drawn by B. WEATHERBY
Checked By D. VIENI Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR715	Sheet 198 OF 385

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III WINNERS CIRCLE ALBANY, NEW YORK, 12205

M:\2513-05 (BR700) TRANSITZ-5.3.2000\BR715.dgn

VT. STATE PLANE GRID

10 000 (TYP)

770 MIN LAP (TYP)

1160 - ES1603 @ 225

*19 BARS @ 100 BETWEEN ES1601 @ 300 (TOP) (TYP)

ES1905

ES1905

ES1906

14 200

12 800

*19 BARS @ 100 BETWEEN ES1601 @ 300 (TOP) (TYP)

ES1905

ES1905

ES1907

14 400

14 800

16+800

℄ BRGS ABUT 1 STA. 16+764.000

℄ BRGS. PIER 1 STA. 16+804.000

770 LAP (TYP)

ES1601 @ 300 (TOP)
ES1601 @ 230 (BOT)

℄ BRGS PIER 2 STA. 16+861.000

600 LAP (TYP)

MATCH LINE A-A

FOR REINF. DETAILS NOT SHOWN, SEE SH. BR717

940 - ES1903 @ 225, LAP W/940-ES1904 @ 225 (TOP) ALTERNATE SPLICES

940 - ES1902 @ 225, LAP W/940 - ES1901 @ 225 (BOT), ALTERNATE SPLICES

1160 - ES1603 @ 225

4 - ES1601 IN CURB (TYP)

REFER TO FASCIA SECTIONS ON BR714 AND BR715 FOR ADDITIONAL LONGITUDINAL REINFORCEMENT IN OVERHANG AREAS (TYP)

1160 - ES1603 @ 225

4-ES1601 IN CURB (TYP)

*19 BARS @ 100 BETWEEN ES1601 @ 300 (TOP) (TYP)

ES1601 @ 300 (TOP)
ES1601 @ 230 (BOT)

*19 BARS @ 100 BETWEEN ES1601 @ 300 (TOP) (TYP)

PCC RAMP A

ES1905

ES1905

ES1908

14 200

14 200

ES1905

ES1905

ES1909

15 000

13 900

℄ BRGS. ABUT. 2 STA. X&Y10-045.000

STA. X&Y10-029.6

STA. X&Y10-015.0

16+900

℄ BRGS PIER 4 STA. 16+975.000

STA. X&Y10-032.6

℄ BRGS. PIER 3 STA. 16+918.000

770 LAP (TYP)

PT STA. 16+978.091+ STA. X&Y10-000.000

PCC RAMP C

FOR REINF. DETAILS NOT SHOWN, SEE SH. BR717

200

200

MATCH LINE A-A

940 - ES1903 @ 225, LAP W/940-ES1904 @ 225 (TOP) ALTERNATE SPLICES

940 - ES1902 @ 225, LAP W/940 - ES1901 @ 225 (BOT), ALTERNATE SPLICES

1160 - ES1603 @ 225

75 - ES1903 @ 200, LAP W/ 75 - ES1904 @ 200 (TOP) ALTERNATE SPLICES

75 - ES1902 @ 200, LAP W/ 75 - ES1901 @ 200 (BOT), ALTERNATE SPLICES

DECK PLAN

4 m 0 4 m

1:200

DECK SLAB NOTE:

ALL REINFORCING STEEL IN THE DECK SLAB SHALL BE EPOXY COATED, ITEM 507.17.

STATE OF VERMONT
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	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800

VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER

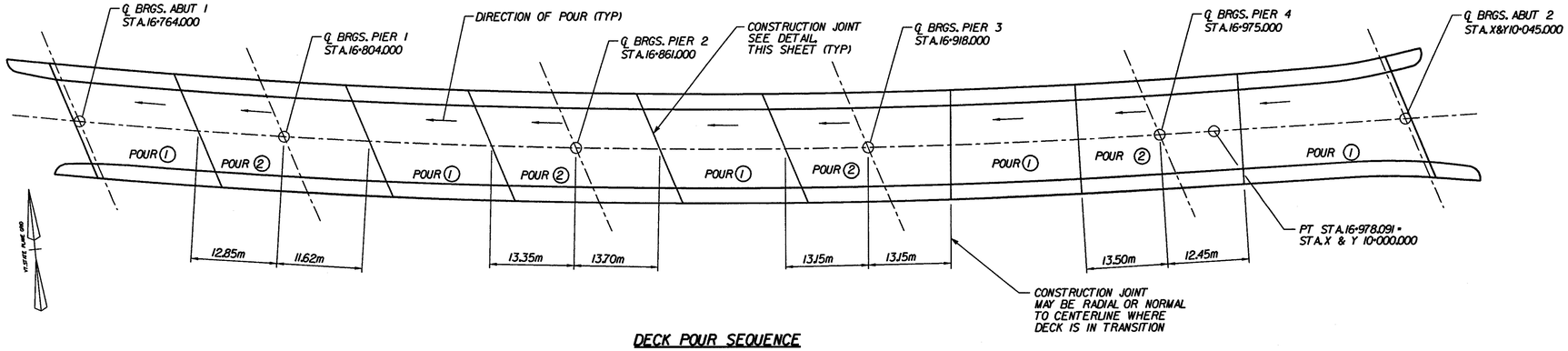
DECK SLAB REINFORCING

Designed By M. GOGUEN	Drawn by B. WEATHERBY
Checked By D. VIENI Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(11) C/4
L.G.C. Info.	
Bridge Sheet No. BR716	Sheet 199 OF 385

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

U:\157\BR700\DECK\PLAN\525300\BW\ 1:20:2m

VAOT Metric



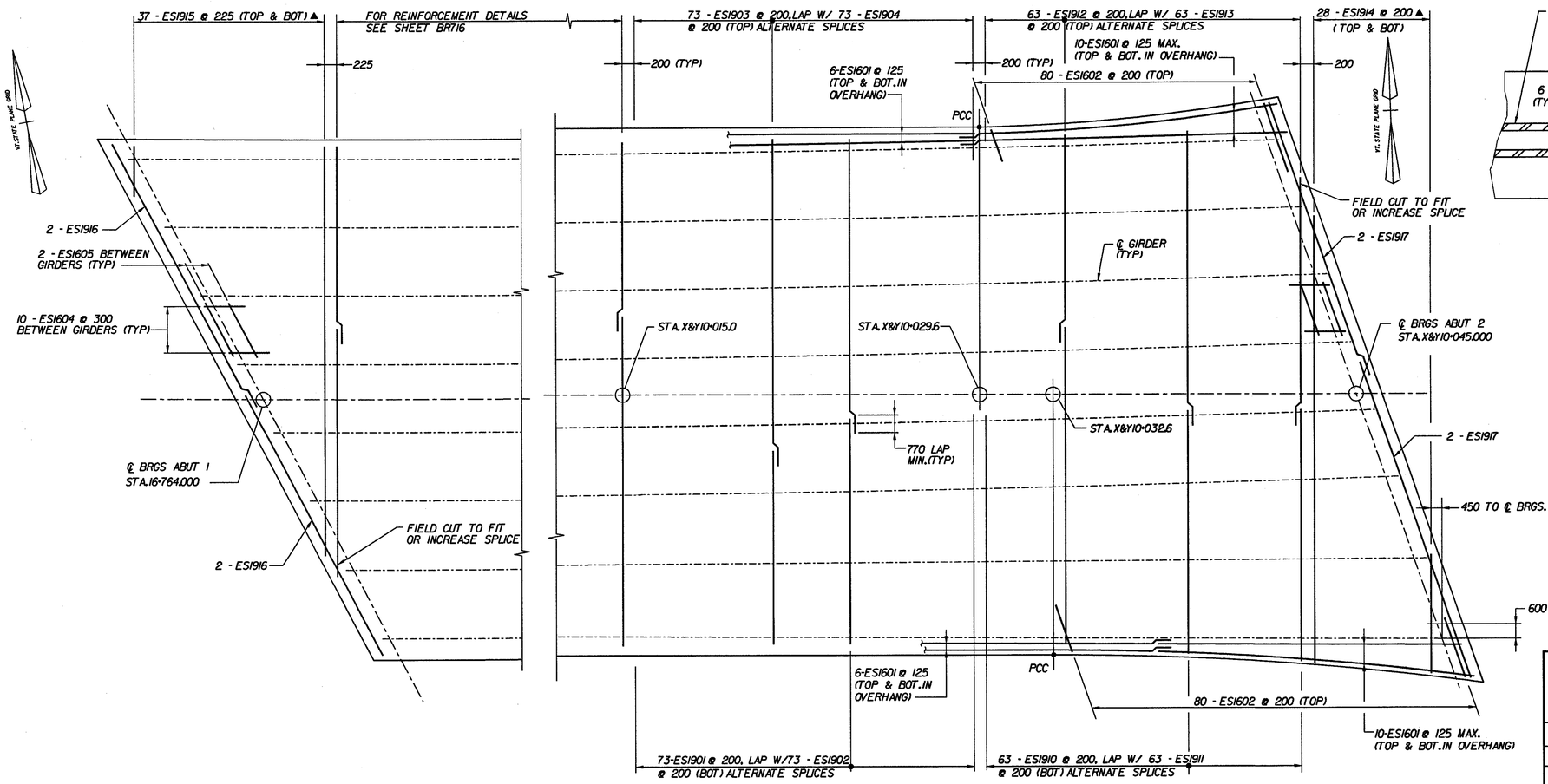
DECK POUR SEQUENCE

N.T.S.

SEQUENCE

NOTES:

1. EACH DECK POUR SHALL BE ACCOMPLISHED IN A MAXIMUM OF 8 HOURS. RETARDER SHALL BE USED AS DIRECTED BY THE ENGINEER.
2. A MINIMUM DELAY OF 96 HOURS BETWEEN POURS SHALL BE OBSERVED WHEN 2 ABUTING DECK SECTIONS ARE NOT IN THE SAME 8 HOUR PERIOD.
3. THE CONTRACTOR SHALL SUBMIT THE PROPOSED DECK POUR DATES AND THE PROPOSED SEQUENCE IF IT DIFFERS FROM THAT INDICATED HERE TO THE VTRANS RESIDENT ENGINEER FOR REVIEW AND APPROVAL PRIOR TO BEGINNING THE POURING.
4. ALL DECK REINFORCING BARS SHALL BE EPOXY COATED.

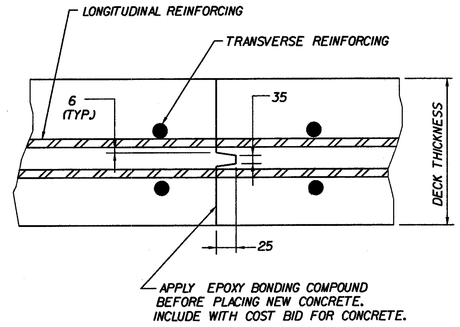


PARTIAL DECK REINFORCEMENT PLAN AT ABUTMENTS 1& 2

2 m 0 2 m

1:100

DKPL-2



TRANSVERSE BRIDGE SLAB CONSTRUCTION JOINT DETAILS

N.T.S.

DKDET-01

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
Highway No. VT. RTE. 9	Log Sta.
	Surv. Sta. 16+800

VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER

DECK REINFORCING DETAILS AND PLACEMENT SEQUENCE

Designed By M. GOGUEN	Drawn by B. WEATHERBY
Checked By D. VIENI Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.J. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR717	Sheet 200 OF 385

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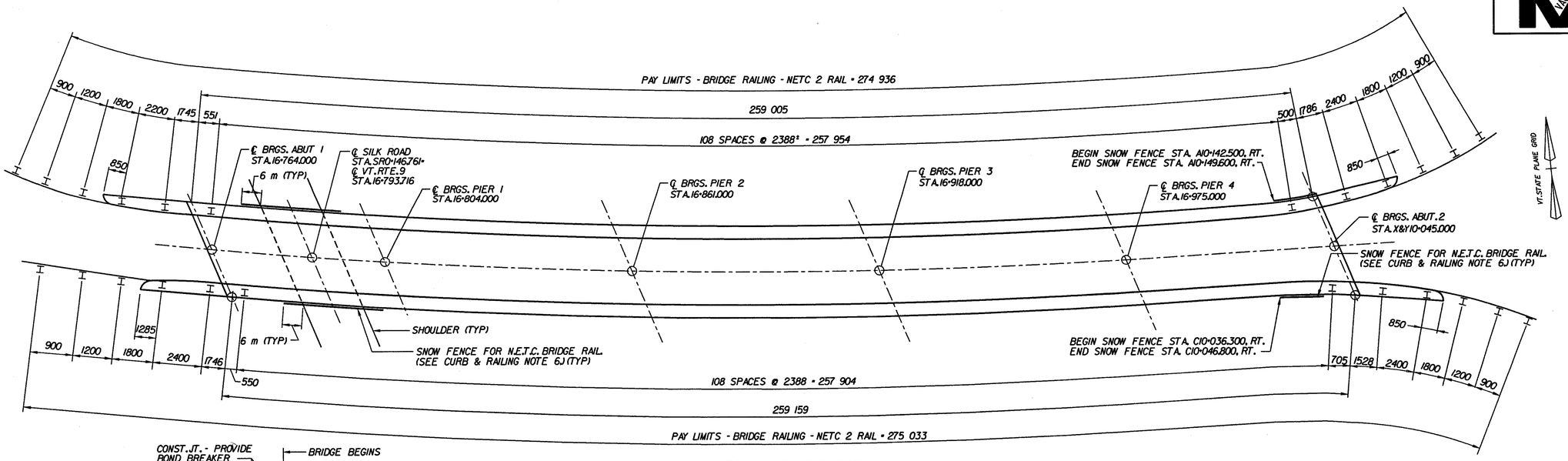
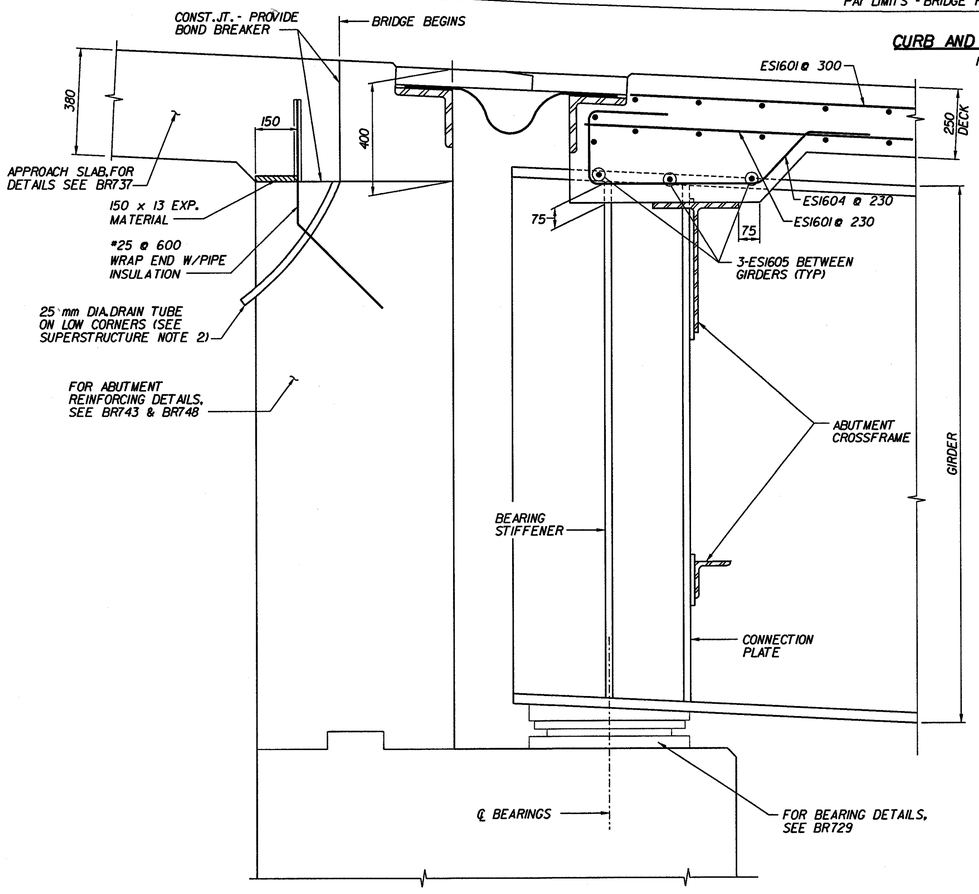
U:\357\15\BR700\DKPL-1\2100' WW 400mm



CURB AND RAILING PLAN

N.T.S.



TYPICAL SECTION NORMAL TO ABUTMENT

.2 m 0 .2 m

1:10

TRAN-071

CURB AND RAILING NOTES:

1. THE 600 mm CURB SHALL BE PLACED IN 4.50 m MAX. SECTIONS AS PER SHEET BR738, CURB JOINT DETAILS. PLACEMENT DETAILS FOR THE CURB SHALL BE SUBMITTED TO THE BRIDGE RAILING FABRICATOR BY THE CONTRACTOR.
2. BRIDGE RAIL POSTS SHALL BE 500 mm MINIMUM FROM CURB CONSTRUCTION JOINTS (UNLESS OTHERWISE NOTED).
3. FOR CURB JOINT DETAILS AND CURB DETAILS, SEE SHEET BR738 AND STANDARD SHEET BR2-97M.
4. FOR BRIDGE RAILING DETAILS, SEE STANDARD SHEET BRI-97M & BR2-97M.
5. FOR APPROACH RAIL DETAILS, SEE STANDARD SHEET BRI-97M & BR2-97M.
6. FOR SNOW BARRIER DETAILS, SEE STANDARD SHEET BR3-97M.

SUPERSTRUCTURE NOTES:

1. ALL SUPERSTRUCTURE REINFORCING STEEL SHALL BE EPOXY COATED.
2. THE COST OF 25 mm DIA. PLASTIC DRAIN TUBE IS SUBSIDIARY TO ITEM 501.221 *CONCRETE, CLASS A, QA/QC. CARE SHALL BE TAKEN TO KEEP TUBE CLEAR DURING CONSTRUCTION. DRAIN TUBE SHALL CONFORM TO SUBSECTION 740.01.
3. FOR HEADER AND EXPANSION JOINT DETAILS, SEE SHT. BR732 THRU BR736.
4. FOR APPROACH SLAB REINFORCEMENT AND BACKWALL DOWELS, SEE SHT. BR737.
5. FOR ABUTMENT REINFORCING SEE SHTS. BR740 THRU BR749.

STATE OF VERMONT
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Highway No. VT. RTE. 9	Surv. Sta. 16+800

VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER

BRIDGE END SECTION AND DETAILS

Designed By M. GOGUEN	Drawn by B. WEATHERBY
Checked By D. VIENI Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(11) C/4
I.G.C. Info.	
Bridge Sheet No. BR718	Sheet 201 OF 385

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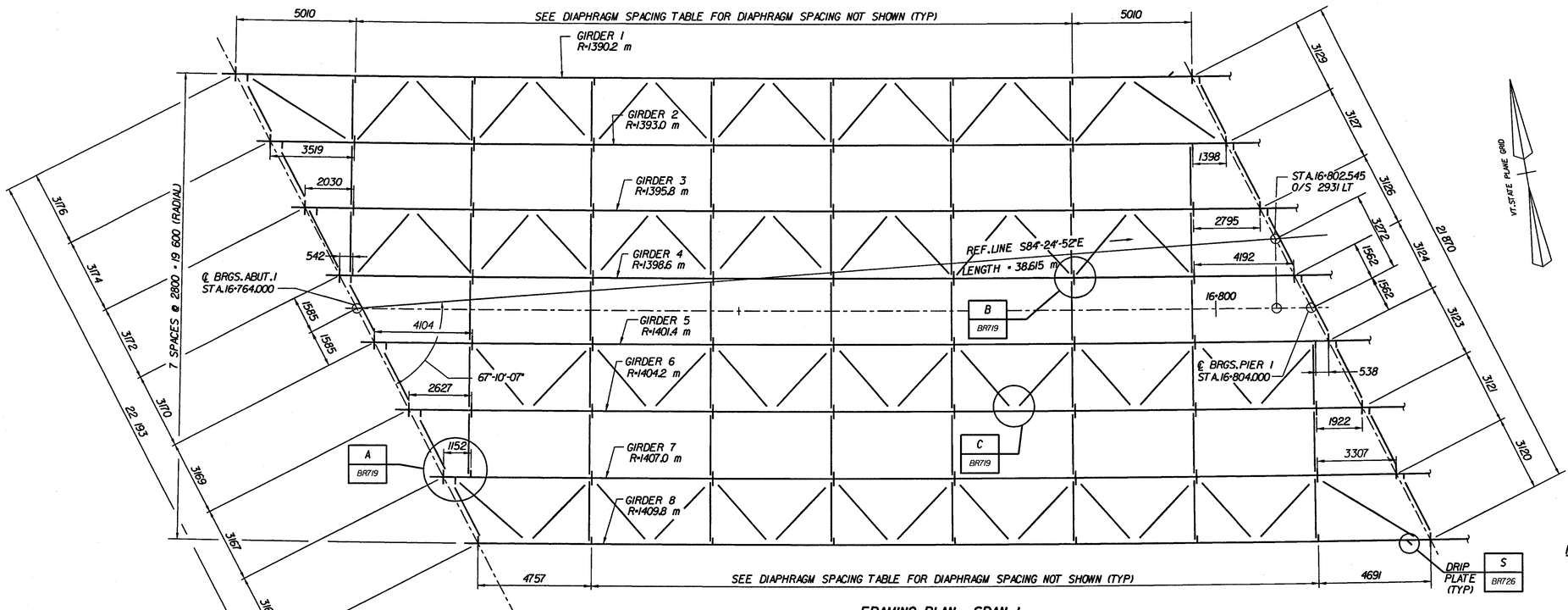
F:\3513\15\BR700\DWG\3-526.3000.DGN 1:1.0mm

VAOT Metric



FRAMING PLAN - SPAN 1

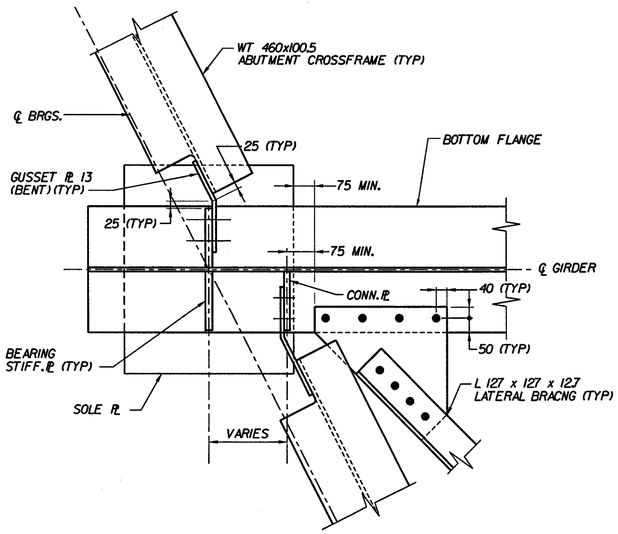
2 m 0 2 m

1:100

DIAPHRAGM SPACING TABLE	
GIRDER NO.	DIAPHRAGM SPACING (m)
1	6 EQ. SP. = 30.055
2	7 EQ. SP. = 35.136
3	7 EQ. SP. = 35.207
4	7 EQ. SP. = 35.276
5	7 EQ. SP. = 35.347
6	7 EQ. SP. = 35.420
7	7 EQ. SP. = 35.489
8	6 EQ. SP. = 30.479

NOTES:

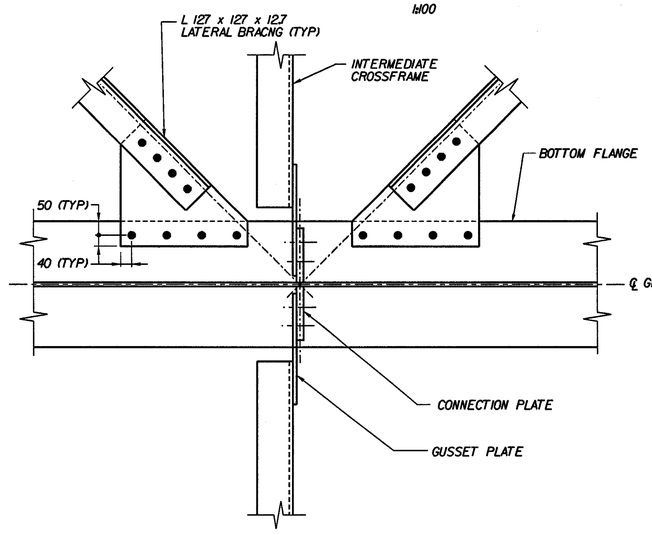
1. FOR STRUCTURAL NOTES SEE SHT. BR725.
2. FOR CROSSFRAME DETAILS SEE SHT. BR724.
3. FOR GIRDER ELEVATION AND DETAILS SEE SHT. BR725 & BR726.
4. FOR FRAMING PLANS (SPANS 2 THRU 5) SEE SHT. BR720 THRU BR723.



A BR719 — BEARING STIFFENERS AND BRACING CONNECTIONS
ABUTMENT 1 SHOWN, ABUTMENT 2 & PIERS SIMILAR

2 m 0 2 m

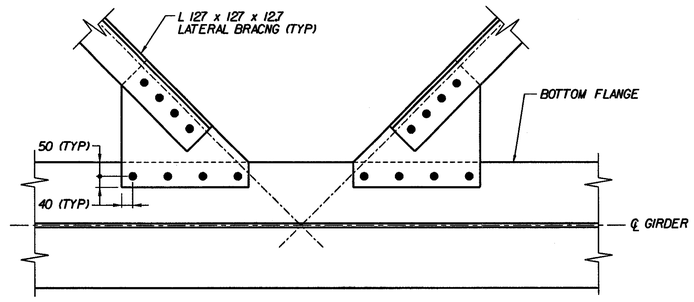
1:10



B BR719 — CROSSFRAME & BRACING CONNECTIONS

2 m 0 2 m

1:10



C BR719 — LATERAL BRACING CONNECTIONS

2 m 0 2 m

1:10

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800

VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER

FRAMING PLAN - SPAN 1

Designed By D. VIENI	Drawn by B. WEATHERBY
Checked By M. SCARDINO 6/00 Date	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(11) C/4
I.G.C. Info.	
Bridge Sheet No. BR719	Sheet 202 OF 385

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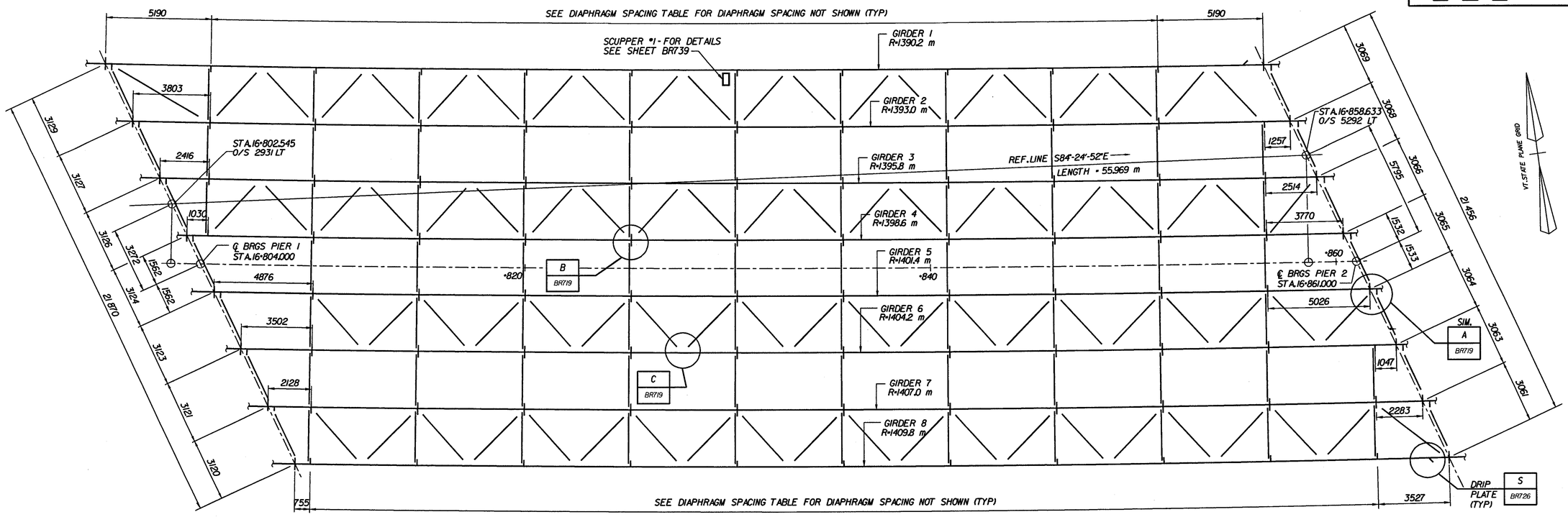

FRAMING PLAN - SPAN 2

2 m 0 2 m

1:100

DIAPHRAGM SPACING TABLE	
GIRDER NO.	DIAPHRAGM SPACING (m)
1	9 EQ. SP. = 4.709
2	10 EQ. SP. = 52.004
3	10 EQ. SP. = 52.108
4	10 EQ. SP. = 52.213
5	9 EQ. SP. = 47.085
6	10 EQ. SP. = 52.413
7	10 EQ. SP. = 52.527
8	10 EQ. SP. = 52.631

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
Highway No. VT. RTE. 9	Log Sta. 16+00
	Surv. Sta. 51+00

VT. RTE. OVER SILK ROAD AND WALLOOMSAC RIVER

FRAMING PLAN - SPAN 2

Designed By D. VIENI	Drawn by B. WEATHERBY
Checked By Date M. SCARDINO 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR720	Sheet 203 OF 385

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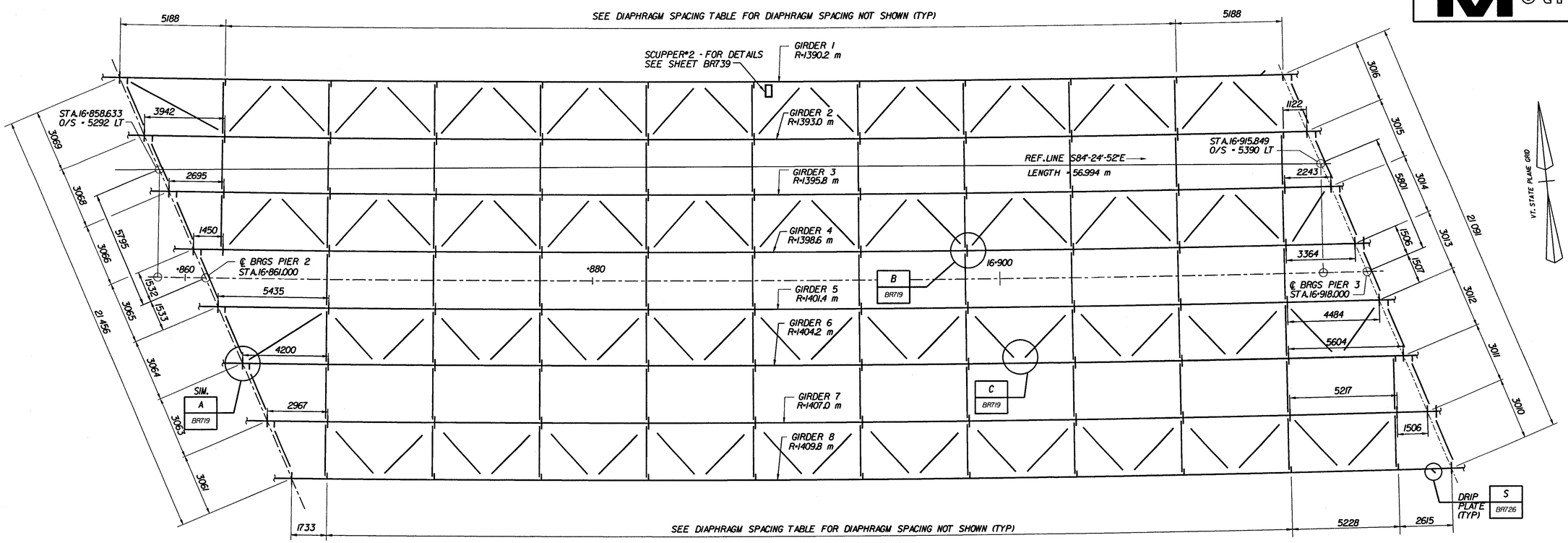

FRAMING PLAN - SPAN 3

2 m 0 2 m

1:100

DIAPHRAGM SPACING TABLE	
GIRDER NO.	DIAPHRAGM SPACING (m)
1	9 EQ.SP. = 46.696
2	10 EQ.SP. = 51.987
3	10 EQ.SP. = 52.093
4	10 EQ.SP. = 52.196
5	9 EQ.SP. = 47.071
6	9 EQ.SP. = 47.166
7	9 EQ.SP. = 47.260
8	9 EQ.SP. = 47.354

STATE OF VERMONT
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Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
FRAMING PLAN - SPAN 3	
Designed By D. VIENI	Drawn by B. WEATHERBY
Checked By Date M. SCARDINO 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR721	Sheet 204 OF 385

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11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

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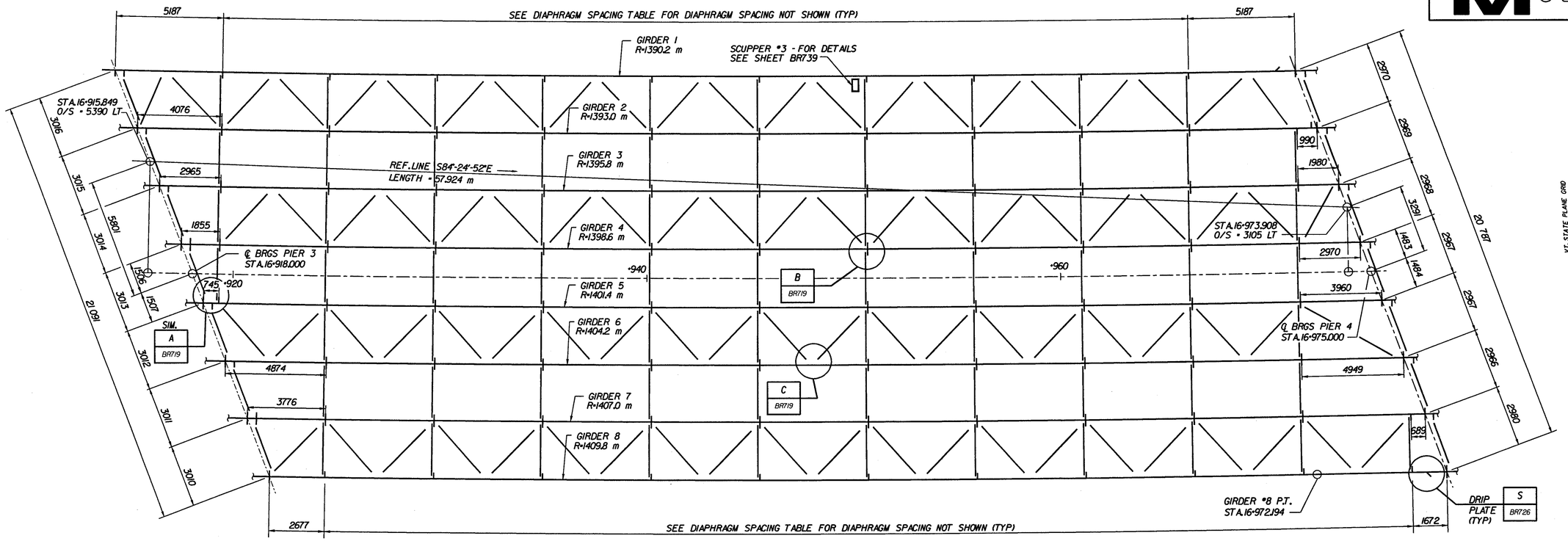

FRAMING PLAN - SPAN 4

2 m 0 2 m

1:100

DIAPHRAGM SPACING TABLE	
GIRDER NO.	DIAPHRAGM SPACING (m)
1	9 EQ.SP. = 46.683
2	10 EQ.SP.= 51.974
3	10 EQ.SP.= 52.079
4	10 EQ.SP. = 52.183
5	10 EQ.SP. =52.287
6	9 EQ.SP. =47.153
7	10 EQ.SP. =52.495
8	10 EQ.SP. = 52.601

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta. 16+00
Highway No. VT. RTE. 9	Surv. Sta. 51+00

VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER

FRAMING PLAN - SPAN 4

Designed By D. VIENI	Drawn by B. WEATHERBY
Checked By M. SCARDINO 6/00 Date	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR722	Sheet 205 OF 385

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11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

VAOT Metric

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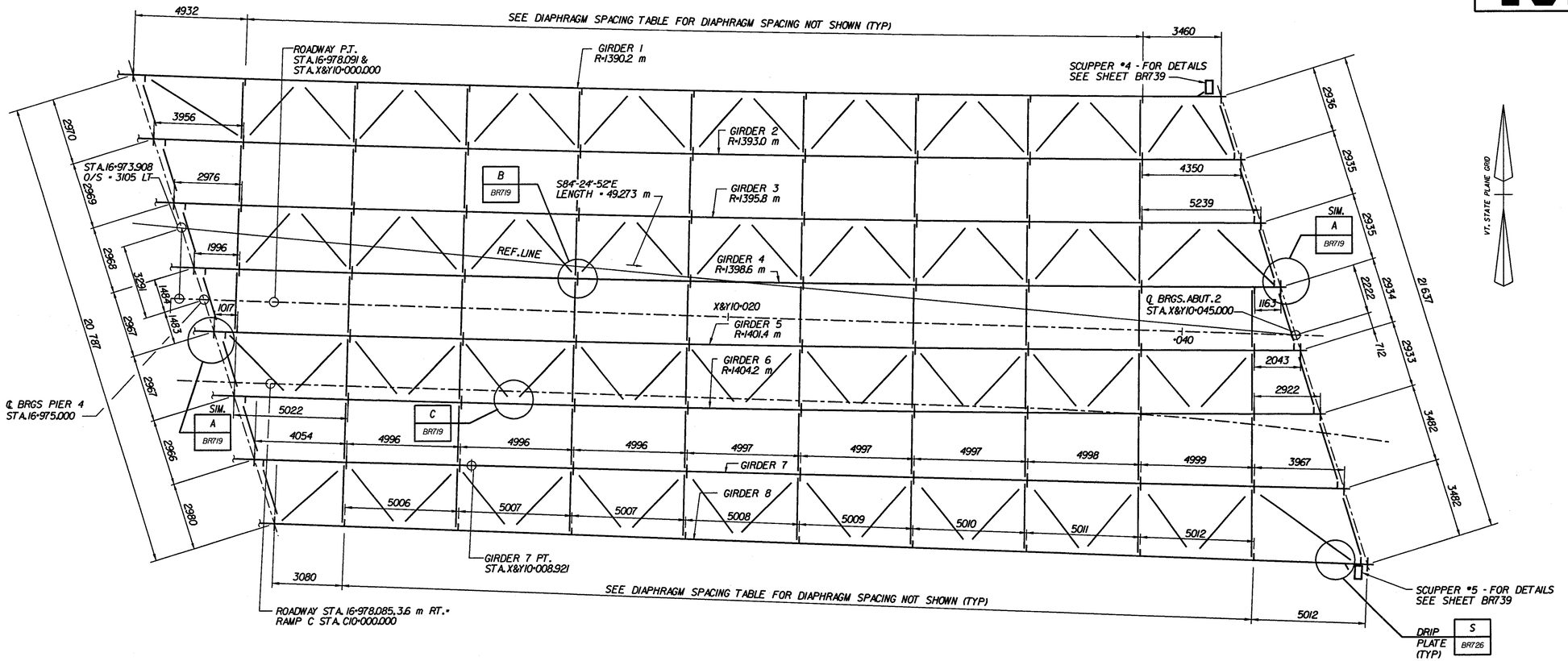
VAOT Metric



FRAMING PLAN - SPAN 5

2 m 0 2 m

1:100

DIAPHRAGM SPACING TABLE	
GIRDER NO.	DIAPHRAGM SPACING (m)
1	8 EQ. SP. = 39.496
2	8 EQ. SP. = 39.571
3	8 EQ. SP. = 39.651
4	9 EQ. SP. = 44.697
5	9 EQ. SP. = 44.785
6	8 EQ. SP. = 39.891

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
FRAMING PLAN - SPAN 5	
Designed By D. VIENI	Drawn by B. WEATHERBY
Checked By Date M. SCARDINO 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
L.C.C. Info.	
Bridge Sheet No. BR723	Sheet 206 OF 385

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III WINNERS CIRCLE ALBANY, NEW YORK, 12205

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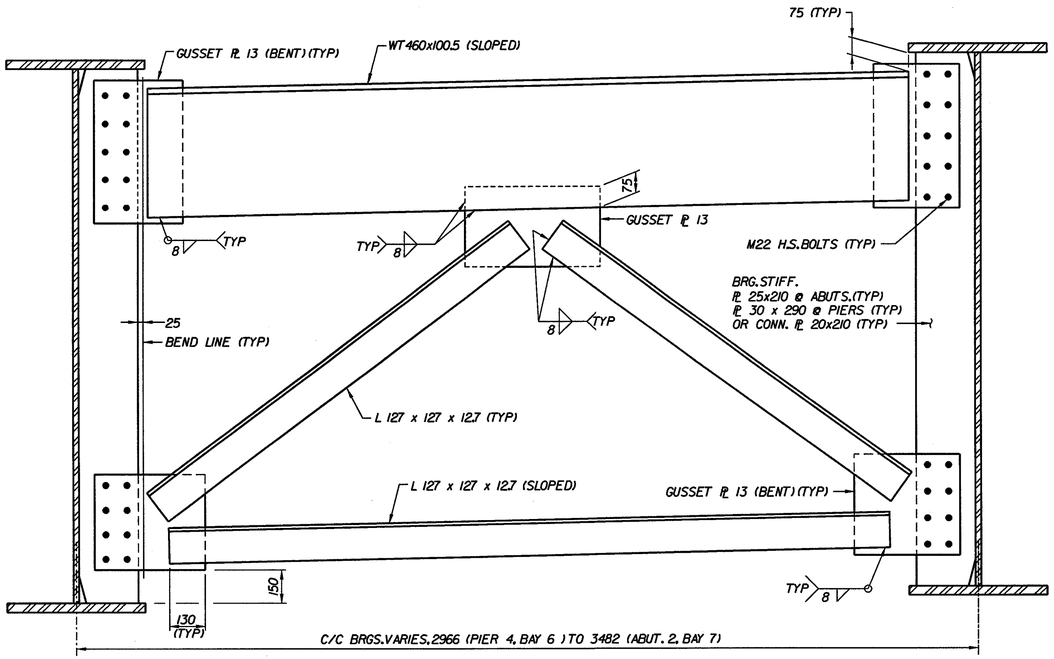
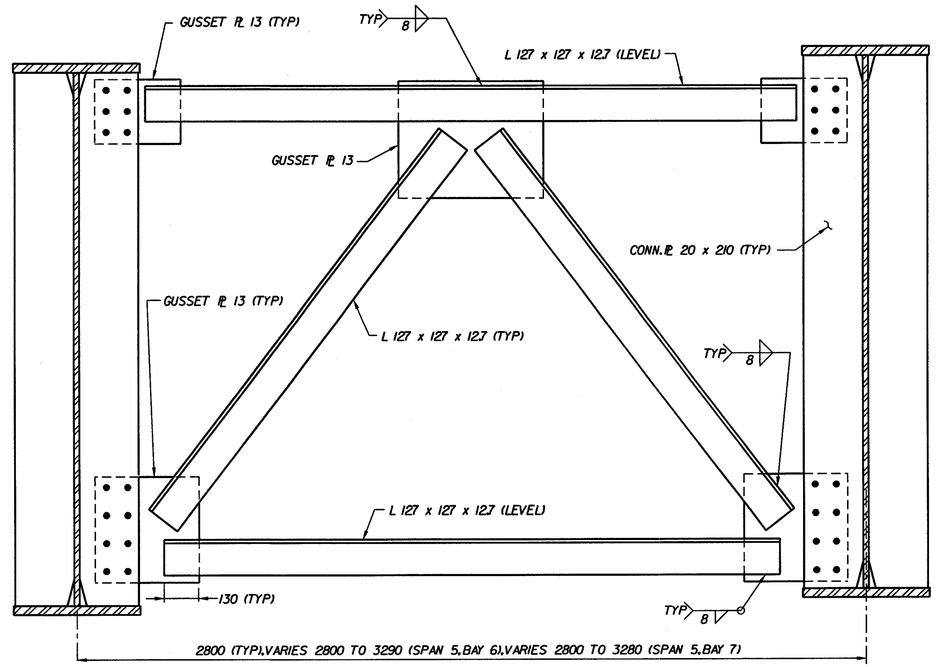


CROSSFRAMES AT ABUTMENTS & PIERS

2 m 0 2 m

1:10



INTERMEDIATE CROSSFRAME

2 m 0 2 m

1:10

NOTES:

1. ALL CONNECTIONS SHALL BE MADE USING M22 DIAMETER AASHTO M164M BOLTS. ALL HOLES IN THE CONNECTION PLATES SHALL BE 24 mm DIAMETER.
2. THE LENGTH OF WELDS ON EACH SIDE OF THE ANGLE SHALL BE PROPORTIONED TO MINIMIZE ECCENTRICITIES IN THE CONNECTION.
3. ALL CROSSFRAMES REQUIRE CVN TESTING.

STATE OF VERMONT
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Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
CROSSFRAME DETAILS	
Designed By M. GOGUEN	Drawn by B. WEATHERBY
Checked By R. SIPZNER Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR724	Sheet 207 OF 385

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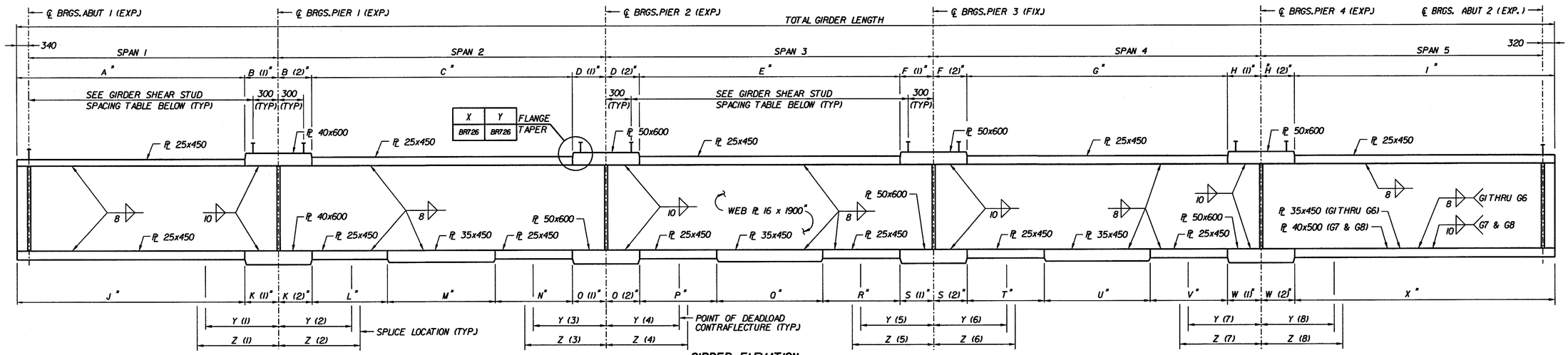


GIRDER ELEVATION
N.T.S.

NOTE:
" CHARPY V-NOTCH TEST REQUIRED

GIRDER SCHEDULE

GIRDER	POINT OF DEAD LOAD CONTRAFLEXURE (m)							
	Y (1)	Y (2)	Y (3)	Y (4)	Y (5)	Y (6)	Y (7)	Y (8)
G1	12.975	11.660	13.430	13.810	13.142	13.200	13.997	12.900
G2	12.953	11.660	13.420	13.810	13.130	13.190	14.000	12.890
G3	12.932	11.660	13.400	13.810	13.110	13.190	13.970	12.890
G4	12.950	11.650	13.410	13.800	13.130	13.190	14.000	12.890
G5	12.980	11.690	13.410	13.780	13.120	13.190	14.000	12.880
G6	12.920	11.640	13.380	13.790	13.100	13.180	14.000	12.880
G7	12.930	11.630	13.410	13.780	13.100	13.180	14.000	12.680
G8	13.160	11.820	13.390	13.740	13.100	13.180	14.100	12.670

GIRDER SPLICE LOCATION SCHEDULE (m)

GIRDER	Z (1)	Z (2)	Z (3)	Z (4)	Z (5)	Z (6)	Z (7)	Z (8)
G1	13.520	11.660	13.976	13.968	13.970	13.965	13.997	13.338
G2	12.953	11.660	13.420	13.342	13.130	13.190	14.000	12.852
G3	13.390	11.660	13.472	13.810	13.198	12.846	13.970	12.354
G4	12.950	12.007	13.217	13.800	12.807	13.289	14.406	12.926
G5	12.980	11.690	13.410	13.780	13.120	13.190	13.422	12.880
G6	12.920	12.365	13.151	13.790	12.470	13.730	14.000	13.500
G7	12.450	11.630	13.787	14.466	13.100	13.180	14.000	12.680
G8	13.308	11.820	13.390	13.746	12.571	12.662	13.827	12.559

GIRDER SHEAR STUD SPACING TABLE

GIRDER	SPAN 1 (m)	SPAN 2 (m)	SPAN 3 (m)	SPAN 4 (m)	SPAN 5 (m)	TOTAL SHEAR STUDS
G1	78 SP @ 0.506	95 SP @ 0.595	95 SP @ 0.594	95 SP @ 0.600	79 SP @ 0.598	1341
G2	97 SP @ 0.407	100 SP @ 0.565	100 SP @ 0.565	100 SP @ 0.564	87 SP @ 0.543	1467
G3	97 SP @ 0.407	100 SP @ 0.564	100 SP @ 0.564	100 SP @ 0.564	87 SP @ 0.543	1467
G4	97 SP @ 0.406	100 SP @ 0.564	100 SP @ 0.564	100 SP @ 0.564	87 SP @ 0.543	1467
G5	97 PS @ 0.406	100 PS @ 0.564	100 PS @ 0.564	100 PS @ 0.564	87 PS @ 0.543	1467
G6	97 SP @ 0.406	100 SP @ 0.564	100 SP @ 0.564	100 SP @ 0.564	87 SP @ 0.543	1467
G7	96 SP @ 0.410	100 SP @ 0.563	100 SP @ 0.564	103 SP @ 0.547	99 SP @ 0.479	1509
G8	78 SP @ 0.504	94 SP @ 0.599	94 SP @ 0.599	94 SP @ 0.599	84 SP @ 0.566	1347

SPAN LENGTHS

GIRDER	SPAN 1 (m)	SPAN 2 (m)	SPAN 3 (m)	SPAN 4 (m)	SPAN 5 (m)	TOTAL GIRDER LENGTH (m) *
G1	40.075	57.089	57.072	57.057	47.888	259.841
G2	40.053	57.064	57.051	57.040	47.877	259.745
G3	40.032	57.038	57.031	57.024	47.866	259.651
G4	40.010	57.013	57.010	57.008	47.856	259.557
G5	39.989	56.987	56.990	56.992	47.845	259.463
G6	39.969	56.962	56.970	56.976	47.835	259.372
G7	39.948	56.938	56.950	56.960	47.997	259.453
G8	39.927	56.913	56.930	56.950	48.162	259.542

* SEE NOTE 10

GIRDER SCHEDULE - TOP FLANGE (m)

GIRDER	A	B (1)	B (2)	C	D (1)	D (2)	E	F (1)	F (2)	G	H (1)	H (2)	I
G1	35.415	5.000	6.000	45.089	6.000	6.000	45.072	6.000	6.000	45.057	6.000	5.000	43.208
G2	35.393	5.000	6.000	45.064	6.000	6.000	45.051	6.000	6.000	45.040	6.000	5.000	43.197
G3	35.372	5.000	6.000	45.038	6.000	6.000	45.031	6.000	6.000	45.024	6.000	5.000	43.186
G4	35.350	5.000	6.000	45.013	6.000	6.000	45.010	6.000	6.000	45.008	6.000	5.000	43.176
G5	35.329	5.000	6.000	44.987	6.000	6.000	44.990	6.000	6.000	44.992	6.000	5.000	43.165
G6	35.309	5.000	6.000	44.962	6.000	6.000	44.970	6.000	6.000	44.976	6.000	5.000	43.155
G7	35.288	5.000	6.000	44.938	6.000	6.000	44.950	6.000	6.000	44.960	6.000	5.000	43.317
G8	35.267	5.000	6.000	44.913	6.000	6.000	44.930	6.000	6.000	44.950	6.000	5.000	43.482

GIRDER SCHEDULE - BOTTOM FLANGE (m)

GIRDER	J	K (1)	K (2)	L	M	N	O (1)	O (2)	P	Q	R	S (1)	S (2)	T	U	V	W (1)	W (2)	X
G1	35.415	5.000	6.000	12.544	20.0	12.545	6.000	6.000	12.536	20.0	12.536	6.000	6.000	12.528	20.0	12.529	6.000	5.000	43.208
G2	35.393	5.000	6.000	12.532	20.0	12.532	6.000	6.000	12.525	20.0	12.525	6.000	6.000	12.520	20.0	12.520	6.000	5.000	43.197
G3	35.372	5.000	6.000	12.519	20.0	12.519	6.000	6.000	12.515	20.0	12.515	6.000	6.000	12.512	20.0	12.512	6.000	5.000	43.186
G4	35.350	5.000	6.000	12.506	20.0	12.507	6.000	6.000	12.505	20.0	12.505	6.000	6.000	12.504	20.0	12.504	6.000	5.000	43.176
G5	35.329	5.000	6.000	12.494	20.0	12.493	6.000	6.000	12.495	20.0	12.495	6.000	6.000	12.496	20.0	12.496	6.000	5.000	43.165
G6	35.309	5.000	6.000	12.481	20.0	12.481	6.000	6.000	12.485	20.0	12.485	6.000	6.000	12.488	20.0	12.488	6.000	5.000	43.155
G7	35.288	5.000	6.000	12.469	20.0	12.469	6.000	6.000	12.475	20.0	12.480	6.000	6.000	12.480	20.0	12.480	6.000	5.000	43.317
G8	35.267	5.000	6.000	12.456	20.0	12.457	6.000	6.000	12.465	20.0	12.465	6.000	6.000	12.475	20.0	12.475	6.000	5.000	43.482

NOTES:

1. ALL STRUCTURAL STEEL SHALL BE AASHTO M270M GR 345W UNLESS OTHERWISE NOTED.
2. ALL BEARING STIFFENER PLATES SHALL BE VERTICAL IN THEIR FINAL ERECTED POSITION.
3. ENDS OF GIRDERS SHALL BE FABRICATED SO THAT THE ENDS WILL BE VERTICAL UNDER FULL DEAD LOAD.
4. IN AREAS OF UNPAINTED STEEL CONTACT SURFACES OF BOLTED CONNECTIONS SHALL BE BLAST CLEANED IF RUSTED BEFORE CONNECTION IS MADE. IN AREAS OF PAINTED STEEL, PRIMER SHALL REMAIN ON THE SURFACES OF STEEL CONNECTION CONTACTS.
5. TOP OF STUDS SHALL EXTEND ABOVE BOTTOM LAYER OF DECK REINFORCEMENT.
6. FOR CROSSFRAME DETAILS, SEE SHEET BR724.
7. BUTT WELDED FLANGE PLATES SHALL BE OFFSET 1600 mm FROM BUTT WELDED WEB PLATES.
8. ALL MEMBERS OR PLATES (AND ONLY THOSE MEMBERS OR PLATES) IDENTIFIED WITH THE CVN DESIGNATION MUST MEET THE CHARPY V-NOTCH REQUIREMENTS FOR MAIN MEMBERS AS INDICATED IN SECTION 714 OF THE STANDARD SPECIFICATIONS.
9. THE GIRDERS AND ALL OTHER STEEL COMPONENTS, INCLUDING CROSSFRAMES AND CONNECTION PLATES, THAT ARE A DISTANCE OF 2.60 m FROM THE END OF THE GIRDER AT ABUTMENT 1 AND ABUTMENT 2 SHALL BE COATED WITH A PROTECTIVE SYSTEM ACCORDING TO SECTION 513 OF THE STANDARD SPECIFICATIONS.
10. TOTAL GIRDER LENGTHS INCLUDE ENDS OF GIRDERS BEYOND CENTERLINE BEARING AT ABUTMENTS.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800

VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER

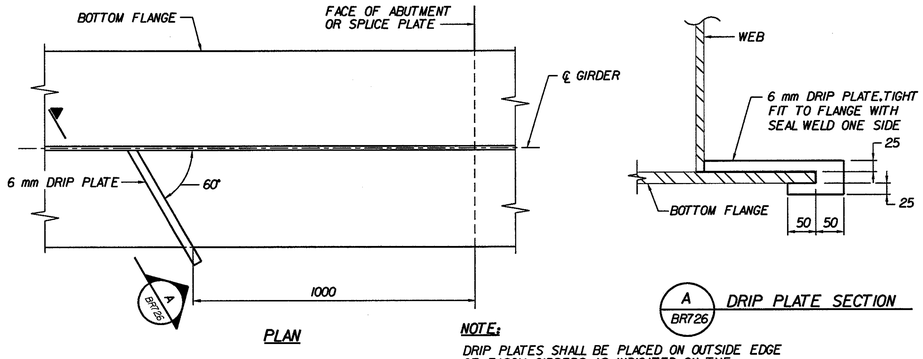
GIRDER ELEVATION

Designed By D. VIENI	Drawn by B. WEATHERBY
Checked By M. SCARDINO 11/99 Date	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR725	Sheet 208 OF 385

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
3 WINNERS CIRCLE ALBANY, NEW YORK, 12205

Metric

F:\3573\05\BR700\GRSHT01\13.2000 BW/ 400mm



PLAN

A BR726 DRIP PLATE SECTION

NOTE:

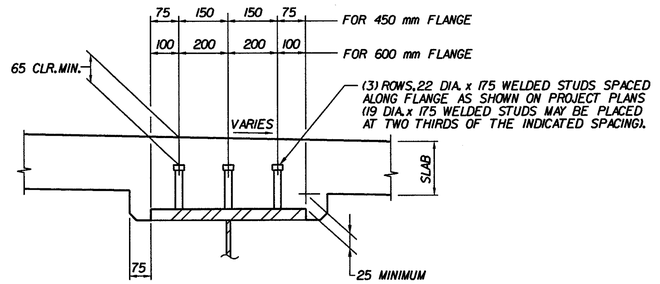
DRIP PLATES SHALL BE PLACED ON OUTSIDE EDGE OF FASCIA GIRDERS AS INDICATED ON THE FRAMING PLAN AND THE HIGH END OF FASCIA GIRDER SPLICE PLATES.

S	DRIP PLATE DETAILS
BR719 THRU BR724	

2 m 0 2 m

1:10

GRDET01

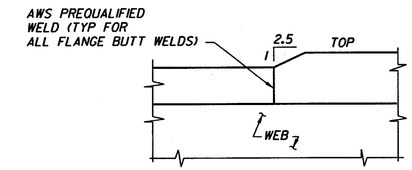


T	TYPICAL GIRDER HAUNCH &
BR714	SHEAR CONNECTOR DETAIL
BR715	

.2 M 0 .2 M

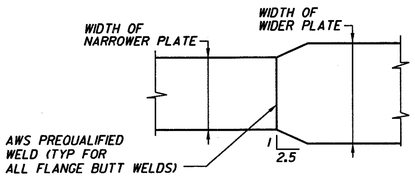
1:10

GRDET02



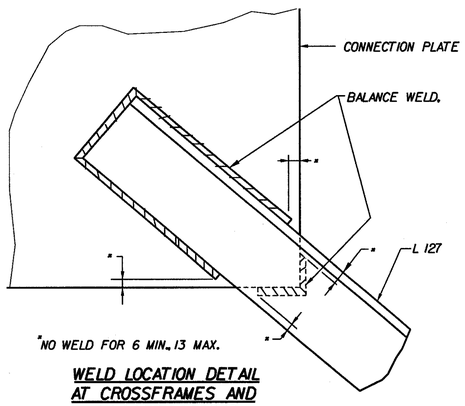
X	FLANGE THICKNESS TAPER DETAIL
BR725	N.T.S.

GRDET03



Y	FLANGE WIDTH TAPER DETAIL
BR725	N.T.S.

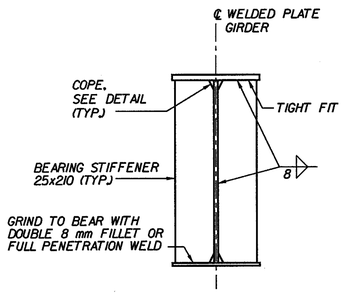
GRDET03



*NO WELD FOR 6 MIN., 13 MAX.

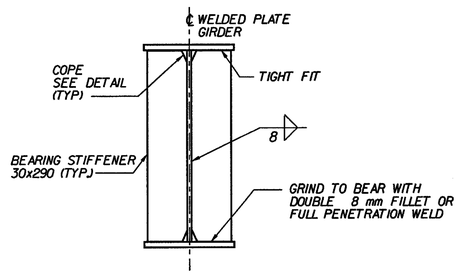
WELD LOCATION DETAIL AT CROSSFRAMES AND LATERAL BRACING

N.T.S.



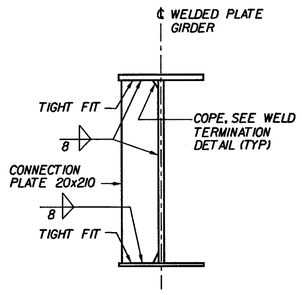
ABUTMENT BEARING STIFFENERS FOR WELDED PLATE GIRDERS

N.T.S.



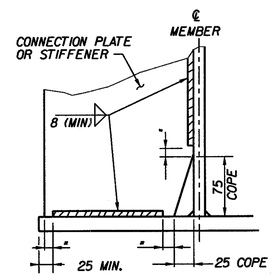
PIER BEARING STIFFENERS FOR WELDED PLATE GIRDERS

N.T.S.



INTERMEDIATE CONNECTION PLATES AND/OR STIFFENERS FOR WELDED PLATE GIRDERS

N.T.S.



* NO WELD FOR 6 MIN. 13 MAX.
(EXCEPT MUST MAINTAIN 25 MINIMUM FROM EDGE OF FLANGE)

WELD TERMINATION AND COPING DETAILS FOR STEEL MEMBERS

N.T.S.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
GIRDER DETAILS	
Designed By M. GOGUEN	Drawn by B. WEATHERBY
Checked By D. VIENI Date 11/99	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR726	Sheet 209 OF 385

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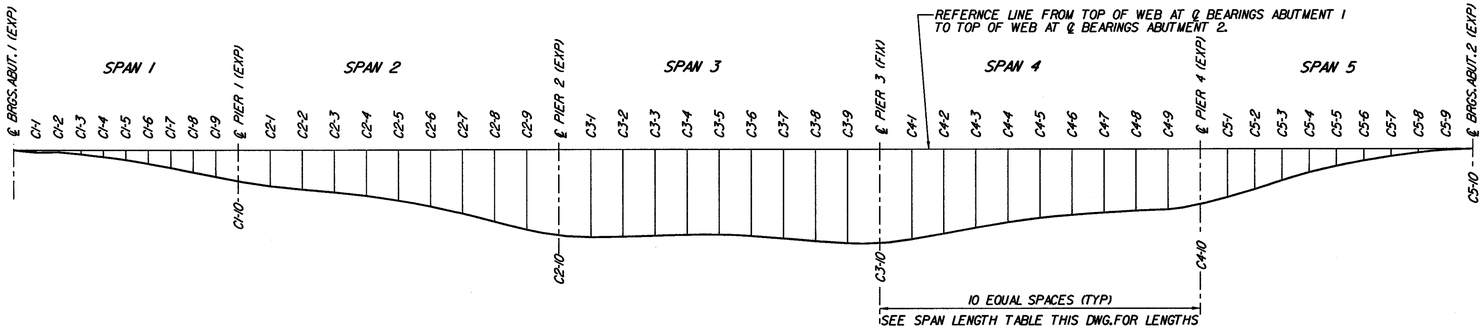
III WINNERS CIRCLE ALBANY, NEW YORK, 12205

F:\537\15\BR700\GIRSHT02\5.23.2000\BW\ 40mm



CAMBER DIAGRAM
N.T.S.

CAMBER NOTES :

1. CAMBERS ARE TABULATED IN METERS
2. THE TOTAL CAMBER IS THE SUM OF VERTICAL CURVE, STEEL DEAD LOAD, CONCRETE DEAD LOAD, SUPERIMPOSED DEAD LOAD AND RESIDUAL CAMBER. ALL CAMBER OFFSETS ARE MEASURED VERTICALLY TO THE TOP OF WEB FROM A STRAIGHT REFERENCE LINE DRAWN FROM THE INTERSECTION OF TOP OF WEB AND CENTERLINE OF BEARINGS AT ONE END OF GIRDER TO THE CORRESPONDING POINT AT THE OTHER END OF THE GIRDER.
3. POSITIVE NUMBERS IN THE TABLE ARE ABOVE THE STRAIGHT REFERENCE LINE.
4. NEGATIVE NUMBERS IN THE TABLE ARE BELOW THE STRAIGHT REFERENCE LINE.

CAMBER TABLE

	℄ BRGS ABUT 1	C1-1	C1-2	C1-3	C1-4	C1-5	C1-6	C1-7	C1-8	C1-9	C1-10	C2-1	C2-2	C2-3	C2-4	C2-5	C2-6	C2-7	C2-8	C2-9	C2-10	C3-1	C3-2	C3-3	C3-4	C3-5	C3-6	C3-7	C3-8	C3-9	C3-10	C4-1	C4-2	C4-3	C4-4	C4-5	C4-6	C4-7	C4-8	C4-9	C4-10	C5-1	C5-2	C5-3	C5-4	C5-5	C5-6	C5-7	C5-8	C5-9	℄ BRGS ABUT 2
G1	0.000	-0.025	-0.056	-0.095	-0.143	-0.199	-0.264	-0.333	-0.404	0.476	-0.543	-0.583	-0.618	-0.659	-0.707	-0.769	-0.844	-0.930	-1.021	-1.106	-1.177	-1.186	-1.181	-1.170	-1.163	-1.168	-1.181	-1.205	-1.235	-1.260	-1.273	-1.224	-1.161	-1.096	-1.034	-0.983	-0.942	-0.910	-0.885	-0.852	-0.805	-0.714	-0.613	-0.507	-0.305	-0.306	-0.220	-0.148	-0.087	-0.042	0.000
G2	0.000	-0.023	-0.054	-0.092	-0.139	-0.197	-0.263	-0.335	-0.408	0.481	-0.548	-0.586	-0.619	-0.655	-0.700	-0.762	-0.836	-0.925	-1.020	-1.108	-1.182	-1.189	-1.181	-0.166	-1.157	-1.158	-1.173	-1.200	-1.233	-1.261	-1.275	-1.224	-1.159	-1.090	-1.026	-0.973	-0.934	-0.906	-0.884	-0.853	-0.807	-0.716	-0.612	-0.501	-0.393	-0.294	-0.208	-0.137	-0.080	-0.037	0.000
G3	0.000	-0.023	-0.054	-0.093	-0.141	-0.199	-0.266	-0.338	-0.411	0.484	-0.553	-0.591	-0.624	-0.660	-0.705	-0.766	-0.840	-0.928	-1.022	-1.110	-1.183	-1.190	-1.181	-1.165	-1.156	-1.157	-1.171	-1.198	-1.231	-1.258	-1.272	-1.221	-1.156	-1.086	-1.022	-0.969	-0.930	-0.901	-0.879	-0.849	-0.803	-0.711	-0.607	-0.496	-0.389	-0.290	-0.204	-0.132	-0.073	-0.027	0.000
G4	0.000	-0.025	-0.057	-0.096	-0.146	-0.204	-0.270	-0.343	-0.416	0.489	-0.558	-0.600	-0.635	-0.672	-0.719	-0.778	-0.852	-0.938	-1.029	-1.116	-1.187	-1.195	-1.187	-1.172	-1.164	-1.165	-1.178	-1.203	-1.235	-1.261	-1.274	-1.223	-1.161	-1.092	-1.030	-0.978	-0.938	-0.908	-0.884	-0.852	-0.806	-0.714	-0.611	-0.503	-0.397	-0.302	-0.217	-0.146	-0.087	-0.040	0.000
G5	0.000	-0.025	-0.057	-0.096	-0.146	-0.204	-0.270	-0.343	-0.416	0.489	-0.558	-0.600	-0.635	-0.672	-0.719	-0.778	-0.852	-0.938	-1.029	-1.116	-1.187	-1.195	-1.187	-1.172	-1.164	-1.165	-1.178	-1.203	-1.235	-1.261	-1.274	-1.223	-1.161	-1.092	-1.030	-0.978	-0.938	-0.908	-0.884	-0.852	-0.806	-0.714	-0.611	-0.503	-0.397	-0.302	-0.217	-0.146	-0.087	-0.040	0.000
G6	0.000	-0.026	-0.058	-0.099	-0.150	-0.209	-0.275	-0.349	-0.424	0.497	-0.567	-0.611	-0.647	-0.682	-0.728	-0.787	-0.860	-0.944	-1.033	-1.119	-1.190	-1.197	-1.188	-1.173	-1.163	-1.164	-1.178	-1.201	-1.233	-1.257	-1.271	-1.220	-1.157	-1.089	-1.029	-0.979	-0.941	-0.913	-0.891	-0.861	-0.818	-0.727	-0.626	-0.519	-0.413	-0.317	-0.229	-0.155	-0.088	-0.039	0.000
G7	0.000	-0.023	-0.054	-0.092	-0.141	-0.198	-0.264	-0.337	-0.410	0.483	-0.551	-0.591	-0.622	-0.654	-0.694	-0.749	-0.819	-0.901	-0.989	-1.073	-1.140	-1.143	-1.130	-1.111	-1.097	-1.094	-1.104	-1.126	-1.155	-1.180	-1.189	-1.135	-1.066	-1.004	-0.949	-0.906	-0.876	-0.856	-0.844	-0.823	-0.787	-0.702	-0.606	-0.505	-0.406	-0.315	-0.236	-0.169	-0.112	-0.064	0.000
G8	0.000	-0.023	-0.054	-0.091	-0.136	-0.192	-0.253	-0.320	-0.390	0.458	-0.524	-0.562	-0.595	-0.625	-0.664	-0.714	-0.777	-0.850	-0.930	-1.003	-1.064	-1.063	-1.047	-1.027	-1.011	-1.005	-1.009	-1.024	-1.044	-1.060	-1.065	-1.008	-0.939	-0.886	-0.840	-0.804	-0.778	-0.761	-0.750	-0.733	-0.700	-0.621	-0.533	-0.478	-0.350	-0.267	-0.193	-0.131	-0.083	-0.038	0.000

DEAD LOAD DEFLECTION DIAGRAM
N.T.S.

DEFLECTION NOTES :

1. DEAD LOAD DEFLECTIONS AS SHOWN INCLUDES STEEL, DECK CONCRETE, CURB AND RAILING.
2. DEFLECTIONS ARE TABULATED IN METERS

DEAD LOAD DEFLECTION TABLE

	℄ BRGS ABUT 1	D1-1	D1-2	D1-3	D1-4	D1-5	D1-6	D1-7	D1-8	D1-9	D1-10	D2-1	D2-2	D2-3	D2-4	D2-5	D2-6	D2-7	D2-8	D2-9	D2-10	D3-1	D3-2	D3-3	D3-4	D3-5	D3-6	D3-7	D3-8	D3-9	D3-10	D4-1	D4-2	D4-3	D4-4	D4-5	D4-6	D4-7	D4-8	D4-9	D4-10	D5-1	D5-2	D5-3	D5-4	D5-5	D5-6	D5-7	D5-8	D5-9	℄ BRGS ABUT 2
G1	0.000	0.014	0.026	0.033	0.034	0.030	0.022	0.012	0.003	-0.002	0.000	0.016	0.042	0.066	0.085	0.090	0.080	0.059	0.032	0.010	0.000	0.005	0.023	0.045	0.063	0.069	0.064	0.048	0.026	0.008	0.000	0.006	0.025	0.046	0.062	0.067	0.061	0.044	0.021	0.004	0.000	0.009	0.027	0.050	0.069	0.084	0.088	0.080	0.062	0.033	0.000
G2	0.000	0.017	0.029	0.038	0.040	0.035	0.026	0.014	0.004	-0.002	0.000	0.019	0.048	0.078	0.099	0.104	0.094	0.069	0.038	0.012	0.000	0.006	0.026	0.053	0.072	0.081	0.075	0.056	0.030	0.009	0.000	0.008	0.029	0.054	0.072	0.079	0.071	0.051	0.024	0.005	0.000	0.010	0.030	0.057	0.082	0.098	0.102	0.093	0.072	0.039	0.000
G3	0.000	0.017	0.029	0.038	0.040	0.035	0.026	0.014	0.004	-0.002	0.000	0.019	0.048	0.078	0.099	0.104	0.094	0.069	0.038	0.012	0.000	0.006	0.026	0.053	0.072	0.081	0.075	0.056	0.030	0.009	0.000	0.008	0.029	0.054	0.072	0.079	0.071	0.051	0.024	0.005	0.000	0.010	0.030	0.057	0.082	0.098	0.102	0.093	0.072	0.039	0.000
G4	0.000	0.016	0.028	0.036	0.037	0.033	0.025	0.013	0.003	-0.002	0.000	0.017	0.044	0.073	0.092	0.098	0.087	0.064	0.036	0.011	0.000	0.005	0.024	0.049	0.068	0.076	0.071	0.053	0.028	0.009	0.000	0.008	0.026	0.050	0.067	0.073	0.065	0.047	0.022	0.005	0.000	0.010	0.029	0.054	0.078	0.092	0.097	0.088	0.068	0.037	0.000
G5	0.000	0.016	0.028	0.036	0.037	0.033	0.025	0.013	0.003	-0.002	0.000	0.016	0.043	0.072	0.091	0.097	0.086	0.064	0.036	0.011	0.000	0.005	0.024	0.050	0.068	0.076	0.071	0.053	0.028	0.009	0.000	0.008	0.026	0.050	0.067	0.073	0.065	0.047	0.022	0.005	0.000	0.010	0.029	0.054	0.078	0.092	0.097	0.088	0.068	0.037	0.000
G6	0.000	0.016	0.028	0.036	0.037	0.033	0.025	0.013	0.003	-0.002	0.000	0.016	0.044	0.073	0.092	0.097	0.086	0.064	0.036	0.011	0.000	0.005	0.024	0.049	0.068	0.076	0.069	0.053	0.028	0.009	0.000	0.008	0.026	0.050	0.067	0.073	0.065	0.047	0.022	0.005	0.000	0.010	0.029	0.054	0.078	0.092	0.097	0.088	0.068	0.037	0.000
G7	0.000	0.017	0.029	0.038	0.040	0.035	0.026	0.014	0.004	-0.002	0.000	0.018	0.047	0.077	0.097	0.103	0.092	0.068	0.038	0.012	0.000	0.006	0.026	0.052	0.072	0.080	0.074	0.056	0.030	0.008	0.000	0.007	0.029	0.054	0.072	0.078	0.070	0.051	0.023	0.005	0.000	0.010	0.030	0.056	0.079	0.094	0.098	0.089	0.068	0.037	0.000
G8	0.000	0.014	0.024	0.031	0.033	0.028	0.021	0.012	0.002	-0.002	0.000	0.015	0.039	0.065	0.082	0.087	0.078	0.058	0.031	0.010	0.000	0.005	0.023	0.045	0.062	0.069	0.064	0.048	0.026	0.008	0.000	0.006	0.024	0.046	0.061	0.066	0.059	0.043	0.020	0.003	0.000	0.009	0.027	0.049	0.070	0.082	0.086	0.079	0.059	0.033	0.000

SPAN LENGTH TABLE (ALONG CURVE)

GIRDER	SPAN 1 (m)	SPAN 2 (m)	SPAN 3 (m)	SPAN 4 (m)	SPAN 5 (m)	TOTAL SPAN LENGTH (m)
G1	40.075	57.089	57.072	57.057	47.888	259.181
G2	40.053	57.064	57.051	57.040	47.877	259.085
G3	40.032	57.038	57.031	57.024	47.866	258.991
G4	40.010	57.013	57.010	57.008	47.856	258.897
G5	39.989	56.987	56.990	56.992	47.845	258.803
G6	39.969	56.962	56.970	56.976	47.835	258.712
G7	39.948	56.938	56.950	56.960	47.997	258.793
G8	39.927	56.913	56.930	56.950	48.162	258.882

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ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800

VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER

CAMBER DIAGRAM & DEAD LOAD DEFLECTIONS

Designed By D. VIENI	Drawn by B. WEATHERBY
Checked By M. SCARDINO Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 01461) C/4
I.G.C. Info.	
Bridge Sheet No. BR727	Sheet 210 OF 385

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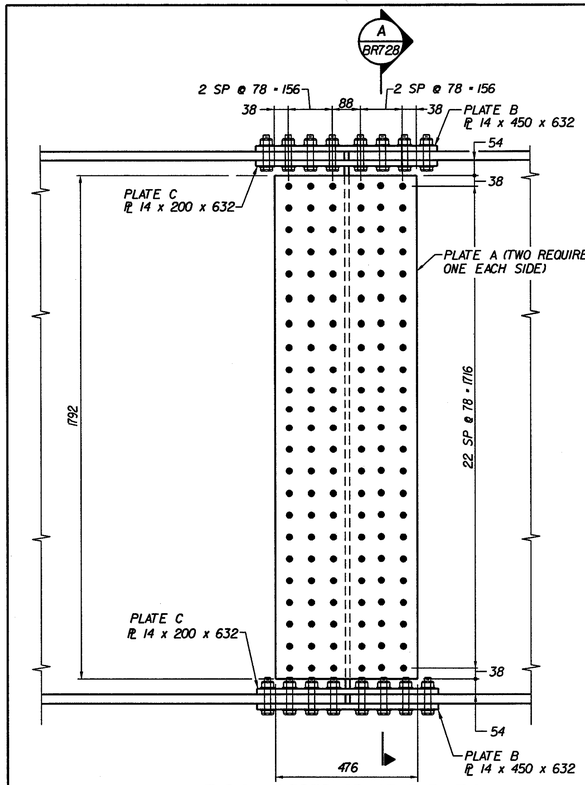
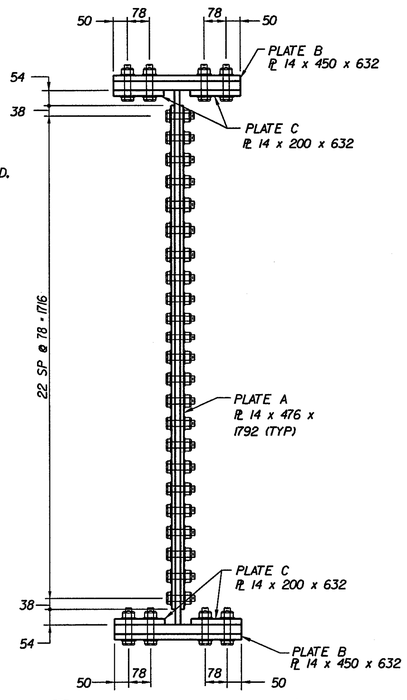


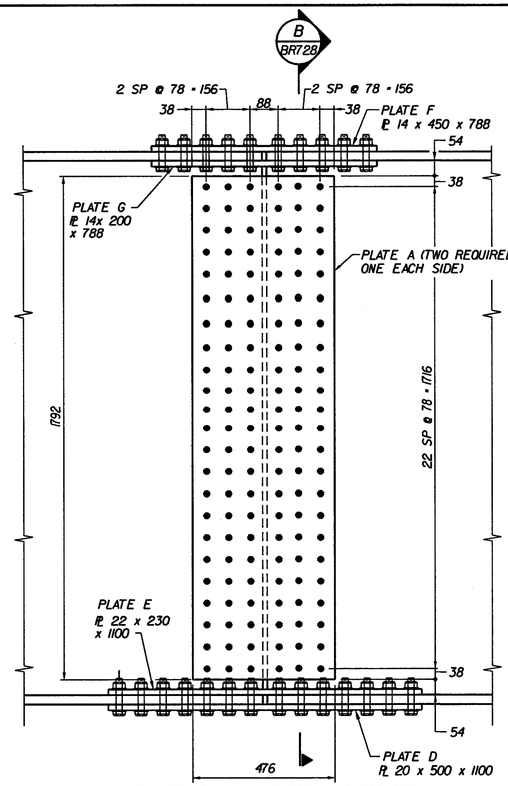
TYPICAL GIRDER SPLICE ELEVATION
SPAN 1 THRU SPAN 4

1:10



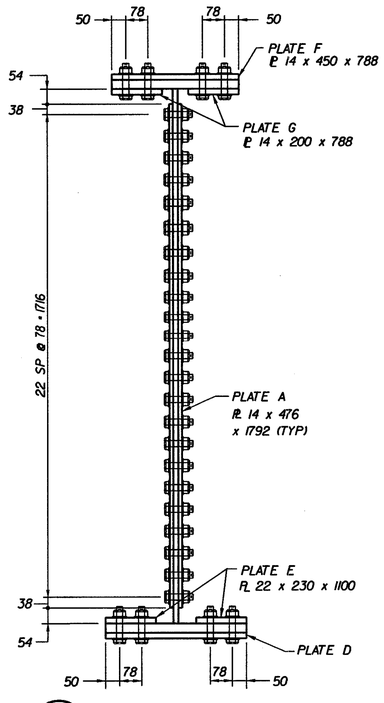
A BR728 GIRDER SPLICE SECTION
SPAN 1 THRU SPAN 4

1:10



TYPICAL GIRDER SPLICE ELEVATION
AT SPAN 5

1:10

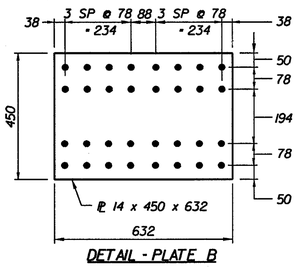


B BR728 GIRDER SPLICE SECTION
AT SPAN 5

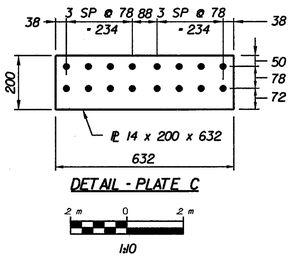
1:10

FIELD SPLICE NOTES:

1. FOR LOCATION OF GIRDER SPLICES SEE BR725.
2. ALL BOLTS SHALL BE M22 BOLTS AND SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M164M.
3. ALL SPLICE PLATES AND FILLER PLATES SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M270M GR345W STEEL.
4. NUTS TO BE ON INSIDE FACE OF WEB SPLICE AT FASCIA GIRDERS.
5. NUTS TO BE UP ON ALL FLANGE SPLICES.
6. COST OF FIELD SPLICES TO BE INCLUDED IN THE PRICE BID FOR ITEM 506.55.
7. BOLTED CONNECTIONS SHALL HAVE THREADS EXCLUDED FROM THE SHEAR PLANES.
8. CONTACT SURFACES OF BOLTED PARTS SHALL BE CLASS B (SLIP COEF. 0.50).

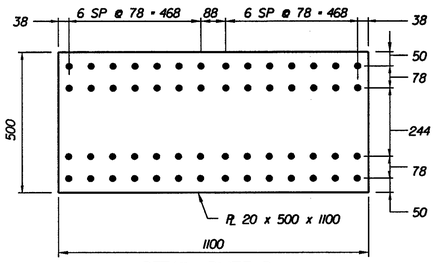


DETAIL - PLATE B

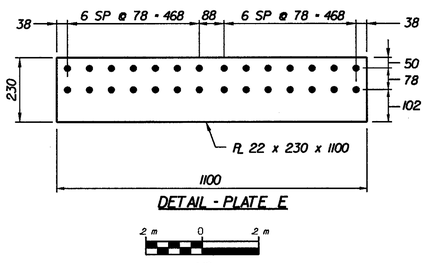


DETAIL - PLATE C

1:10

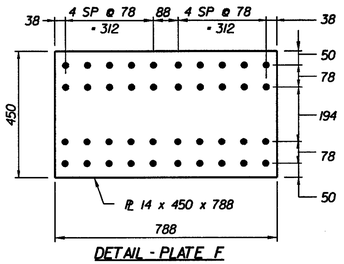


DETAIL - PLATE D

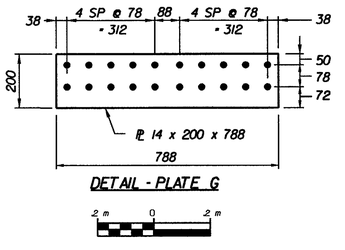


DETAIL - PLATE E

1:10



DETAIL - PLATE F



DETAIL - PLATE G

1:10

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800

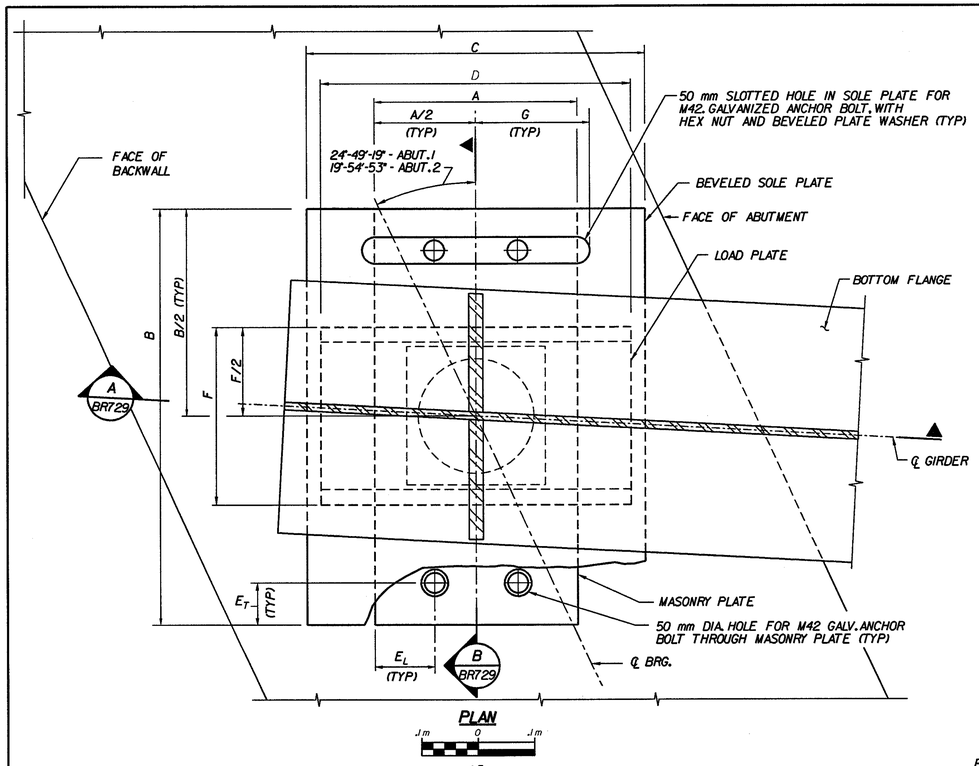
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER

GIRDER SPLICE DETAILS

Designed By D. VIENI	Drawn by B. WEATHERBY
Checked By Date M. SCARDINO 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
L.G.C. Info.	
Bridge Sheet No. BR728	Sheet 211 OF 385

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
3 WINNERS CIRCLE ALBANY, NEW YORK, 12205

U:\2575\10\BR700\SPLSHT\526-2000.DW\ 10mm



PLAN

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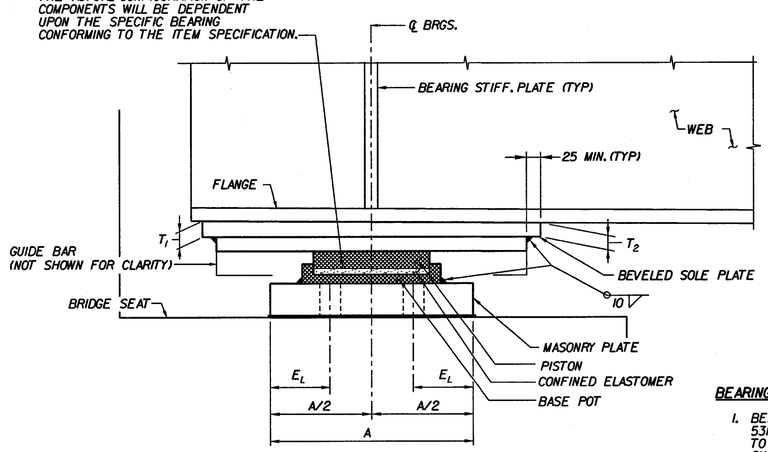
THE CROSS HATCHED COMPONENTS OF THE BEARING ARE SHOWN FOR REPRESENTATIVE PURPOSES ONLY. THE ACTUAL CONFIGURATION OF THE COMPONENTS WILL BE DEPENDENT UPON THE SPECIFIC BEARING CONFORMING TO THE ITEM SPECIFICATION.



A BR729 EXPANSION BEARING

1m 0 1m

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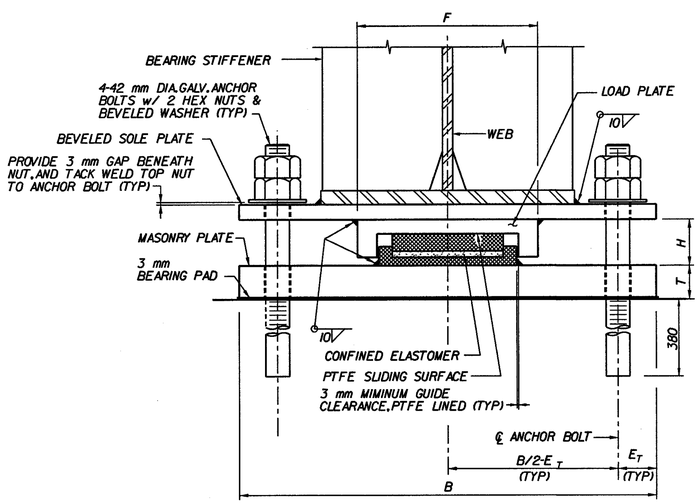

B BR729 EXPANSION BEARING

1m 0 1m

1:5

T_2 IS UPSTATION OF T_1

BEARING TABLE

LOCATION	QTY. REQ'D	MAX. VERT. LOAD (KN) ***	MAX. HORIZ. LOAD (KN) ***	MIN. VERT. LOAD (KN) **	MAX. BEARING LOAD (KN)	DL+SDL (KN)	LL W/ I (KN)	ONE WAY * LONGIT. MOVEMENT	MASONRY PL. A	MASONRY PL. B	MASONRY PL. T	SOLE PL. C	SOLE PL. B	SOLE PL. G	SOLE PL. T_1	SOLE PL. T_2	LOAD PL. D	LOAD PL. F	LOAD PL. H	BRG. DIA.	ANCHOR BOLTS E_T	ANCHOR BOLTS E_L
ABUT.1	8	795	79	200	1000	395	400	135	376	760	60	600	760	202	50	20	550	320	70	42	72	106
ABUT.2 (G1 THRU G6)	6	1044	112	250	1250	562	482	107	370	740	70	570	740	172	32	24	520	350	73	42	72	106
ABUT.2 (G7 & G8)	2	1044	112	250	1250	562	482	107	370	800	70	570	800	172	32	24	520	410	73	42	72	106

BEARING DEVICE NOTES:

1. BEARING SHALL CONFORM TO REQUIREMENTS OF SECTION 531 AND SUBSECTION 531.04h (CONFINED ELASTOMER (POT) BEARING. COMPONENTS SHALL CONFORM TO DESIGN, FABRICATION AND MATERIAL REQUIREMENTS OF THE APPLICABLE SUBSECTIONS OF SECTION 731
2. BEARINGS SHALL BE PAID FOR UNDER ITEM 531.10 "BEARING DEVICE ASSEMBLY."
3. SHOP DRAWINGS CONFORMING TO SUBSECTION 531.03 SHALL BE SUBMITTED AND SHALL INCLUDE WELDING AND BONDING PROCEDURES. SHOP DRAWINGS SHALL ALSO INDICATE WHETHER BEARING COMPONENTS ARE TO BE GALVANIZED OR METALIZED. IF METALIZED IS USED, THE SHOP DRAWINGS SHALL DENOTE THE TYPE OF SEAL COATING THAT WILL BE PLACED ON THE METALIZING.
4. SOLE PLATES AND WASHERS ARE TO BE GALVANIZED OR METALIZED AS PER SUBSECTION 506.15 (a) OR (b).
5. THE WELD BETWEEN THE SOLE PLATE AND BOTTOM FLANGE SHALL BE SMAW 8018 (C3). AREAS OF GALVANIZING ON THE SOLE PLATE DESTROYED IN THE WELDING PROCESS SHALL BE PAINTED WITH A ZINC-RICH PAINT. REFER TO SUPPLEMENTAL SPECIFICATION 513.
6. THE CONCRETE SURFACE UNDER THE BEARING SHALL BE LEVEL.
7. ANCHOR BOLTS SHALL HAVE A 380 mm MINIMUM EMBEDMENT INTO CONCRETE. ANCHOR BOLTS SHALL CONFORM TO AASHTO M183/M 183M, NUTS SHALL BE HEAVY HEX CONFORMING TO ASTM A307 AND WASHERS SHALL CONFORM TO ASTM F844, PER SUBSECTION 714.08.
8. AN ALTERNATE BEARING CONFIGURATION MAY BE SUBMITTED FOR APPROVAL. THE ALTERNATE SUBMITTED SHALL BE DESIGNED AND CERTIFIED TO MEET THE DESIGN LOADS AND CRITERIA SHOWN BELOW AND SHALL MAINTAIN THE ANCHORAGE SYSTEM SHOWN.
9. IF AN ALTERNATE BEARING CONFIGURATION IS USED, BRIDGE SEAT ELEVATIONS SHALL BE ADJUSTED ACCORDINGLY.

* ONE WAY LONGITUDINAL MOVEMENT IS THE MAXIMUM MOVEMENT (CONTRACTION) OF THE SUPERSTRUCTURE WHEN BEARINGS ARE SET @ TC. PLUS ELONGATION DUE TO CAMBER. PLUS AN ADDITIONAL 25 mm FOR TOLERANCE.

** BEARINGS SHALL BE CAPABLE OF MAINTAINING A MINIMUM LOAD OF 20% OF MAXIMUM DESIGN CAPACITY AT ALL TIMES.

*** ALL BEARINGS SHALL BE CAPABLE OF RESISTING BOTH THEIR MAXIMUM HORIZONTAL AND VERTICAL DESIGN LOADS

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
III WINNERS CIRCLE ALBANY, NEW YORK 12205

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700 Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
EXPANSION BEARING DETAILS-ABUTMENTS	
Designed By F. GOGUEN	Drawn by B. WEATHERBY
Checked By R. SIPZNER Date 6/00	Bridge Design Supervisor M. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(11) C/4
I.G.C. Info.	
Bridge Sheet No. BR729	Sheet 212 OF 385

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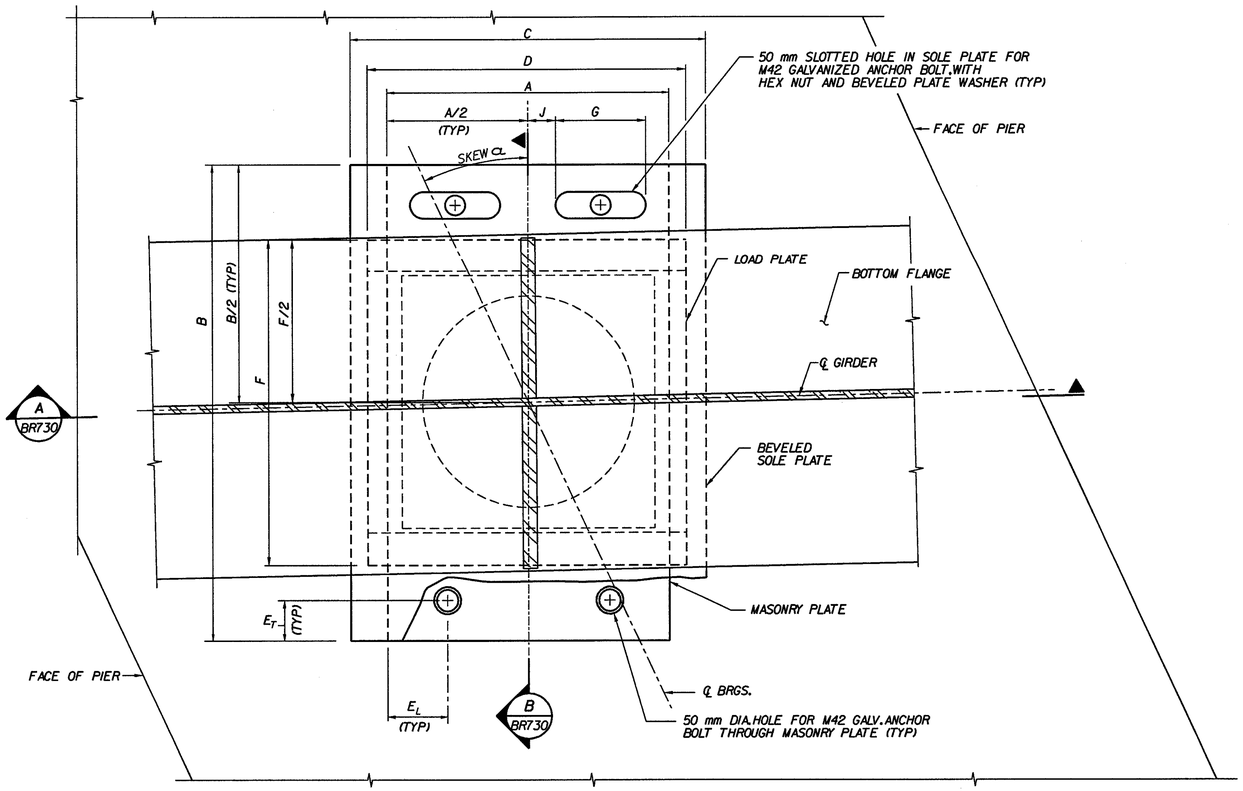
VAOT Metric



PLAN

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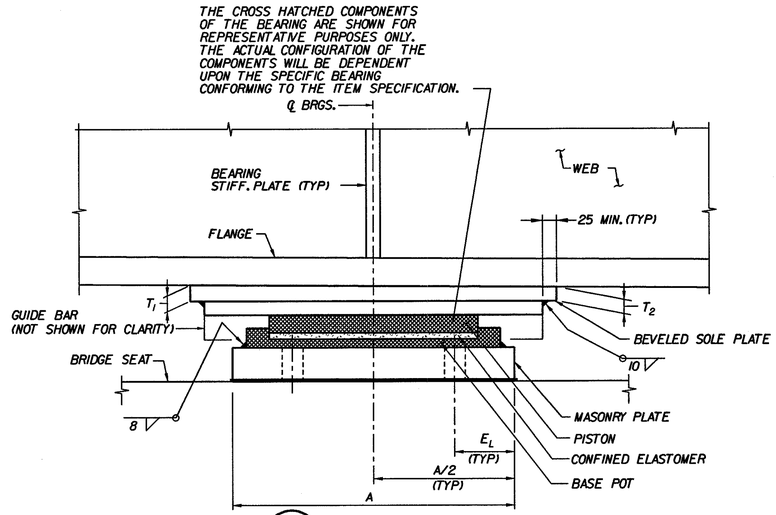
LOCATION	SKEW ∝
PIER 1	24°-00'-13"
PIER 2	22°-50'-14"
PIER 4	20°-30'-16"



A BR730 EXPANSION BEARING

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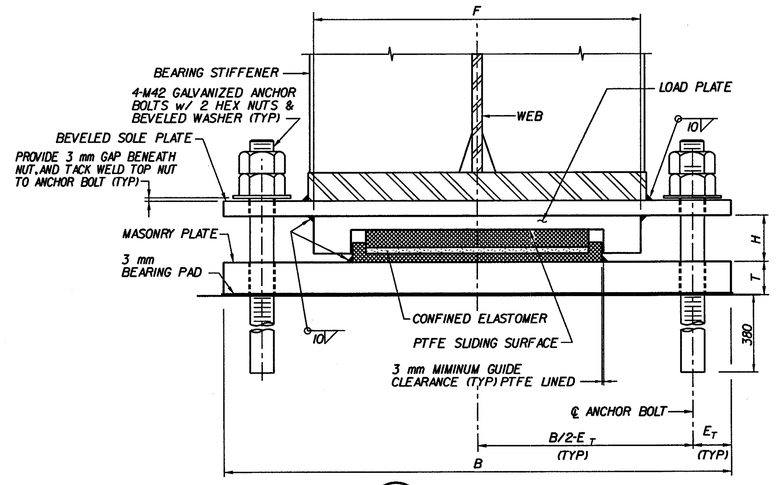

B BR730 EXPANSION BEARING

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NOTES:

FOR BEARING NOTES, SEE SHEET BR729.

* ONE WAY LONGITUDINAL MOVEMENT IS THE MAXIMUM MOVEMENT (CONTRACTION) OF THE SUPERSTRUCTURE WHEN BEARINGS ARE SET @ 7°C. PLUS ELONGATION DUE TO CAMBER. PLUS AN ADDITIONAL 25 mm FOR TOLERANCE.

** BEARINGS SHALL BE CAPABLE OF MAINTAINING A MINIMUM LOAD OF 20% OF MAXIMUM DESIGN CAPACITY AT ALL TIMES.

*** ALL BEARINGS SHALL BE CAPABLE OF RESISTING BOTH THEIR MAXIMUM HORIZONTAL AND VERTICAL DESIGN LOADS

BEARING TABLE

LOCATION	QTY. REQ'D	MAX. VERT. LOAD (KN) ***	MAX. HORIZ. LOAD (KN) ***	MIN. VERT. LOAD (KN) **	MAX. BEARING LOAD (KN)	DL-SDL (KN)	LL W/ I (KN)	ONE WAY * LONGIT. MOVEMENT	MASONRY PL			SOLE PL					LOAD PL		BRG.	ANCHOR BOLTS		
									A	B	T	C	B	T_1	T_2	G	J	D	F	H	DIA.	E_T	E_L
PIER 1	8	2365	308	500	2500	1545	820	109	470	900	82	690	900	52	20	170	44	640	560	107	42	72	106
PIER 2	8	2568	336	600	3000	1680	888	65	490	900	82	620	900	44	20	80	109	570	576	109	42	72	106
PIER 4	8	2732	344	600	3000	1720	1012	65	500	900	82	630	900	34	20	70	99	585	590	112	42	72	106

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
111 WINNERS CIRCLE ALBANY, NEW YORK, 12205

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
EXPANSION BEARING DETAILS (PIERS 1, 2 & 4)	
Designed By F. GOGUEN	Drawn by B. WEATHERBY
Checked By R. SIPZNER Date 6/00	Bridge Design Supervisor M. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR730	Sheet 213 OF 385

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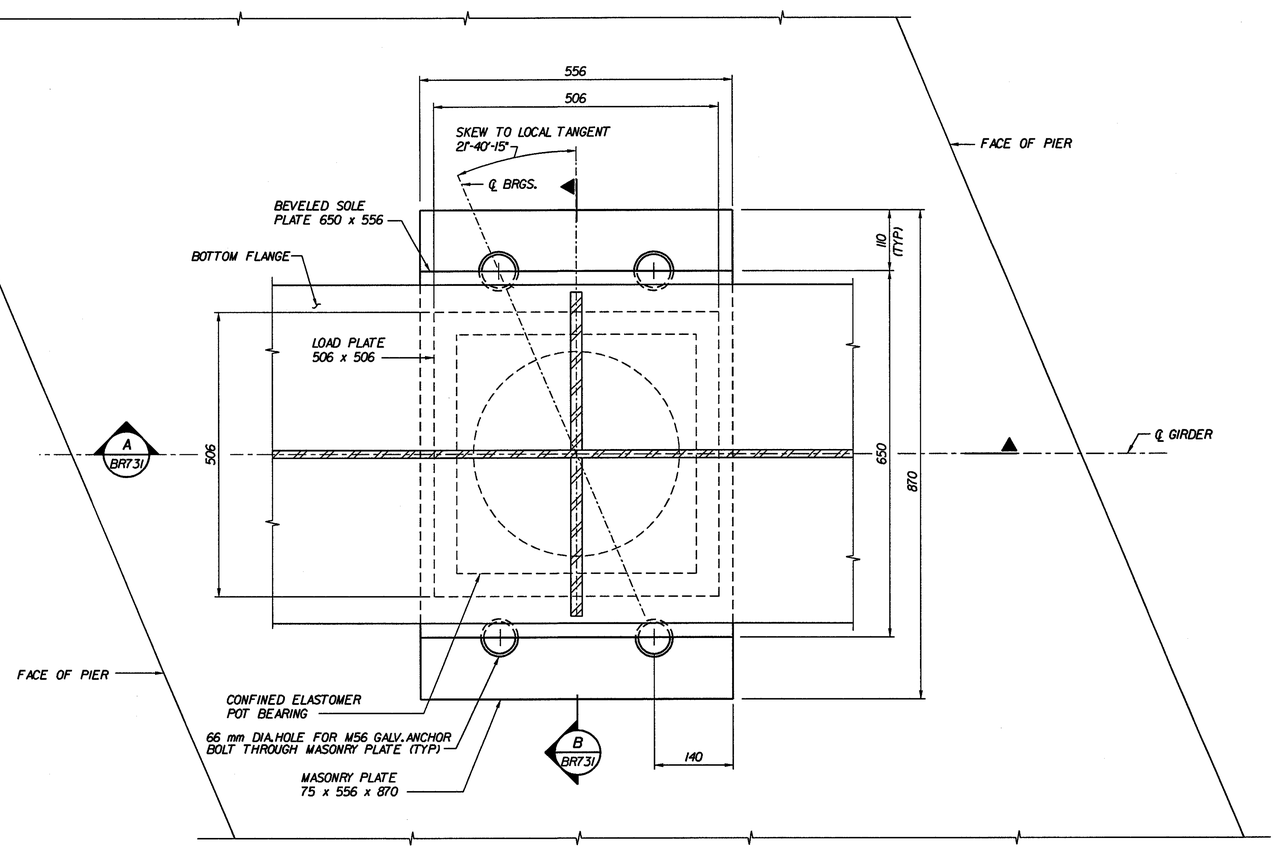
Metric



PLAN

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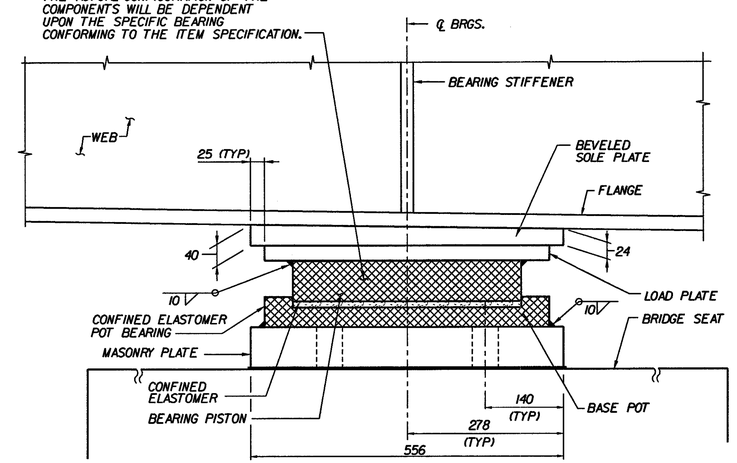
THE CROSS HATCHED COMPONENTS OF THE BEARING ARE SHOWN FOR REPRESENTATIVE PURPOSES ONLY. THE ACTUAL CONFIGURATION OF THE COMPONENTS WILL BE DEPENDENT UPON THE SPECIFIC BEARING CONFORMING TO THE ITEM SPECIFICATION.



A BR731 FIXED BEARING

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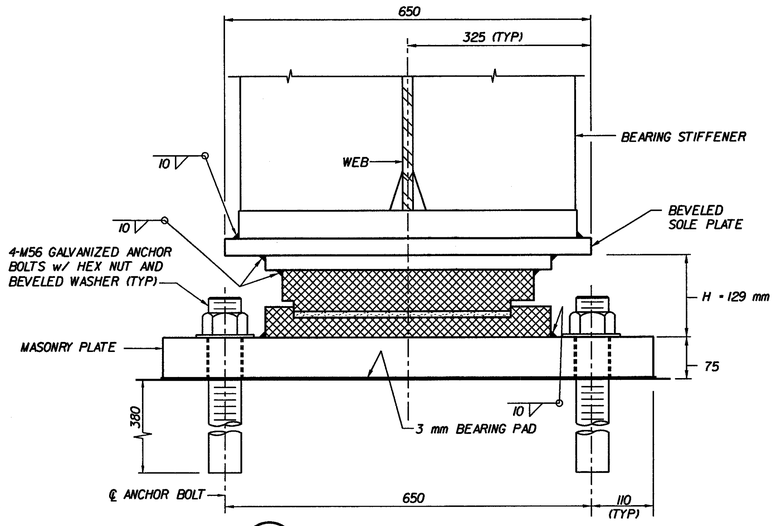

B BR731 FIXED BEARING

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BEARING TABLE

LOCATION	QTY. REQ'D	MAX VERT. LOAD (KN) xxx	MAX.HORIZ. LOAD (KN) xxx	MIN.VERT. LOAD (KN) xx	MAX.BEARING LOAD (KN)	DL-SDL (KN)	LL W/ I (KN)
PIER 3	8	2576	1347	600	3000	1629	948

xx BEARINGS SHALL BE CAPABLE OF MAINTAINING A MINIMUM LOAD OF 20% OF MAXIMUM DESIGN CAPACITY AT ALL TIMES.

xxx ALL BEARINGS SHALL BE CAPABLE OF RESISTING BOTH THEIR MAXIMUM HORIZONTAL AND VERTICAL DESIGN LOADS

NOTE:

1. FOR BEARING NOTES, SEE SHEET BR729.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800

VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER

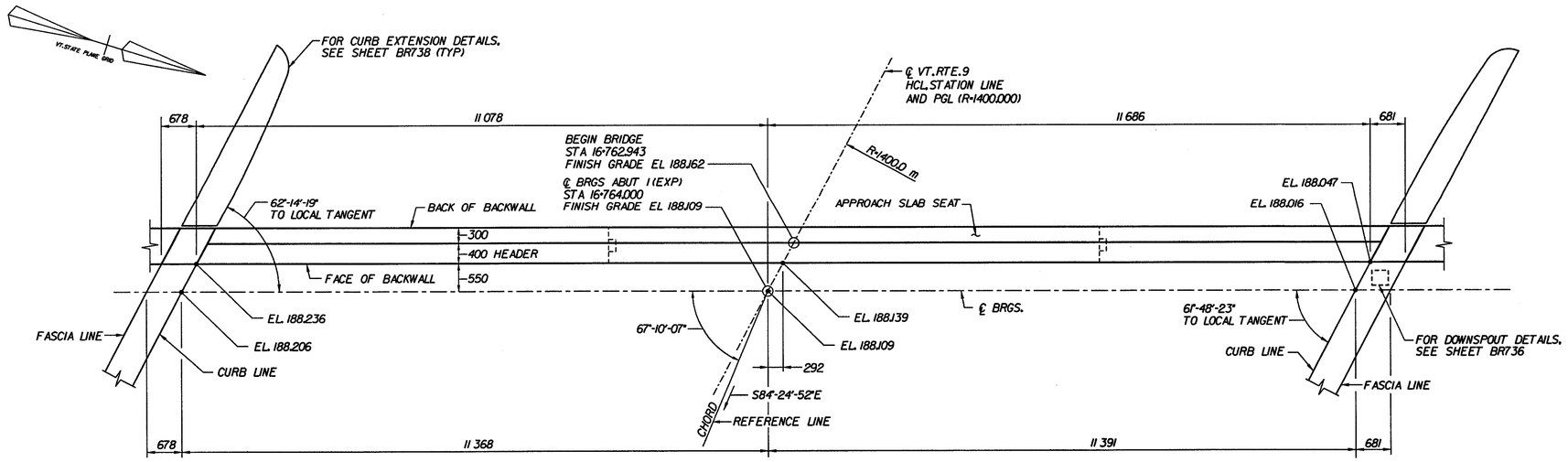
FIXED BEARING DETAILS (PIER 3)

Designed By M. GOGUEN	Drawn by B. WEATHERBY
Checked By Date R. SIPZNER 6/00	Bridge Design Supervisor M. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR731	Sheet 214 OF 385

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
18 WINNERS CIRCLE ALBANY, NEW YORK, 12205

U:\257\15\BR700\BRSHT-3\312000.DW 15mm

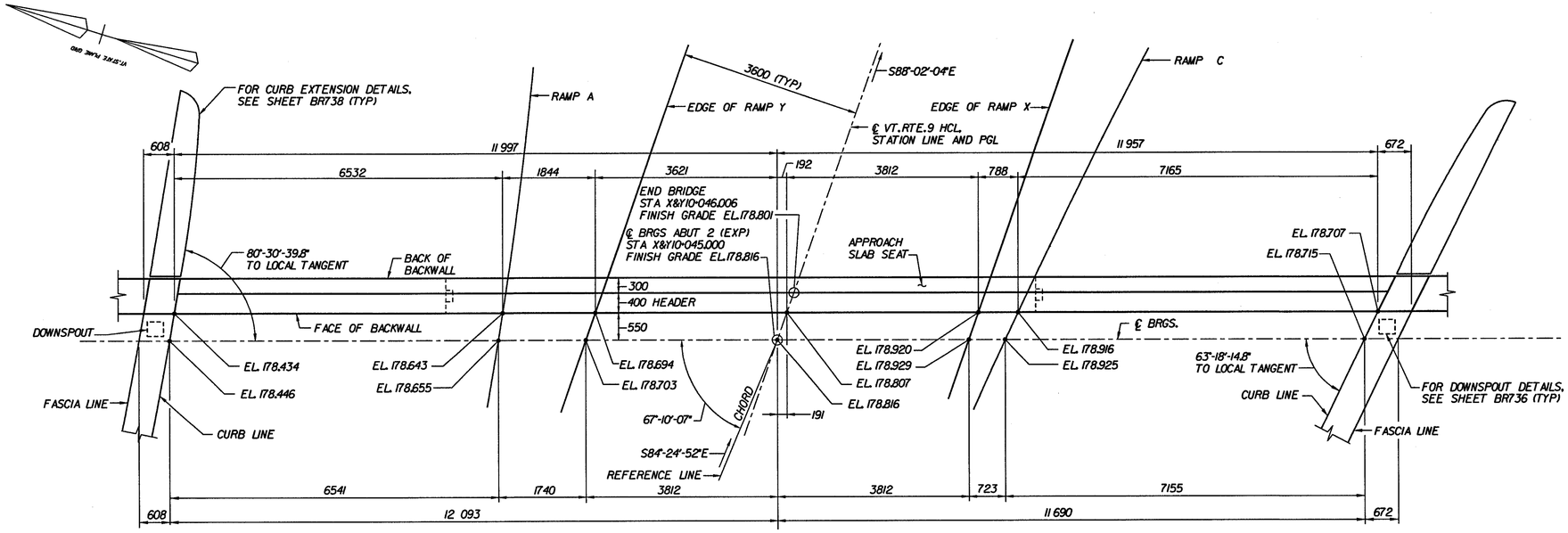
VAOT Metric



EXPANSION JOINT LAYOUT - ABUTMENT 1

1m 0 1m

1:50 ANY PLANS



EXPANSION JOINT LAYOUT - ABUTMENT 2

1m 0 1m

1:50 ANY PLANS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700 / Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
BRIDGE EXPANSION JOINT DETAILS - 1	
Designed By M. GOGUEN	Drawn by D. ADDARIO/B. WEATHERBY
Checked By R. SIPZNER Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
L.G.C. Info.	
Bridge Sheet No. BR732	Sheet 215 OF 385

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11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

F:/2573/05/BR700/JNTSHT-1/5.23.2000/RM blOmm

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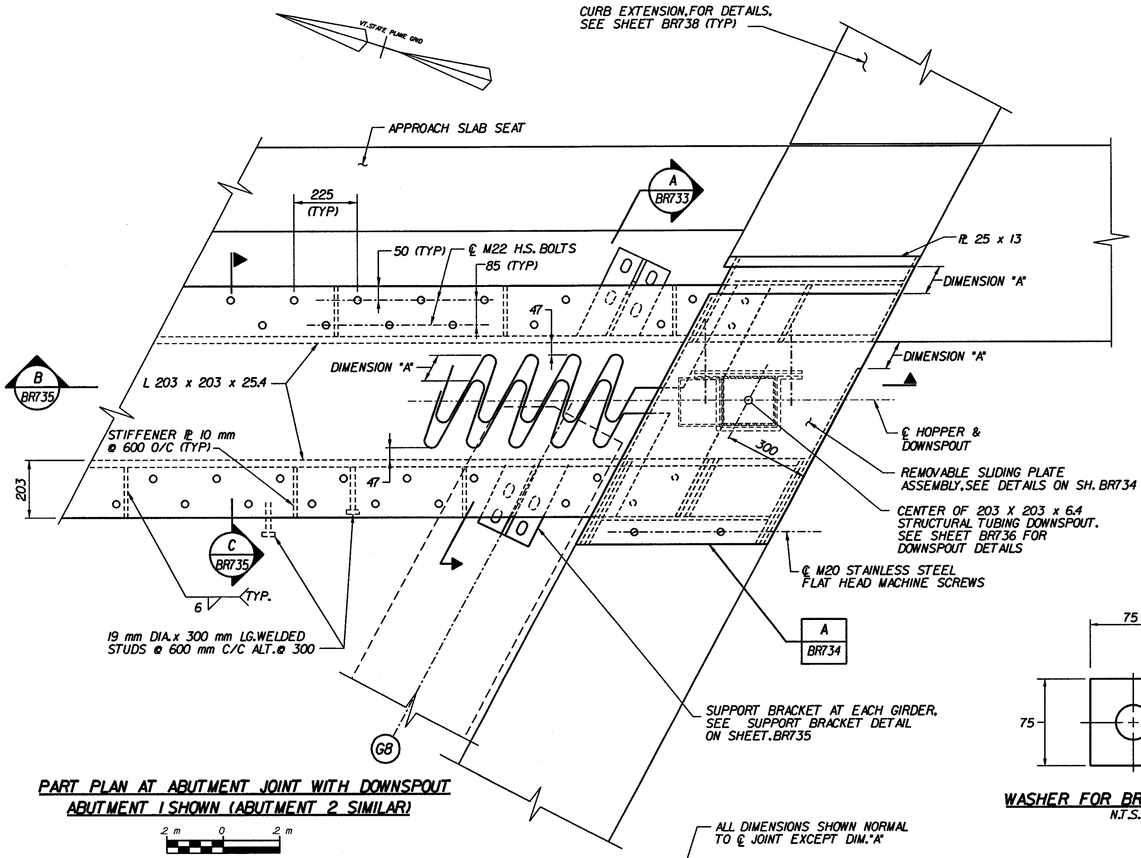
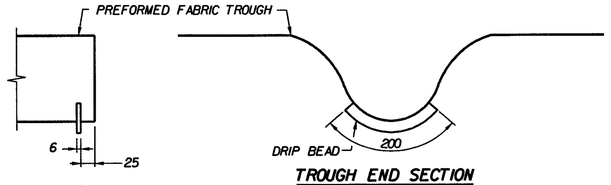


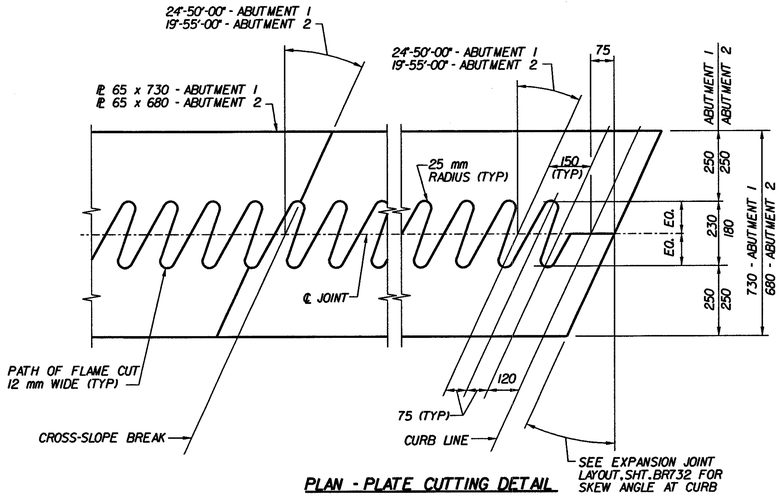
PART PLAN AT ABUTMENT JOINT WITH DOWNSPOUT
ABUTMENT 1 SHOWN (ABUTMENT 2 SIMILAR)

2 m 0 2 m
1:10
INTSECT1

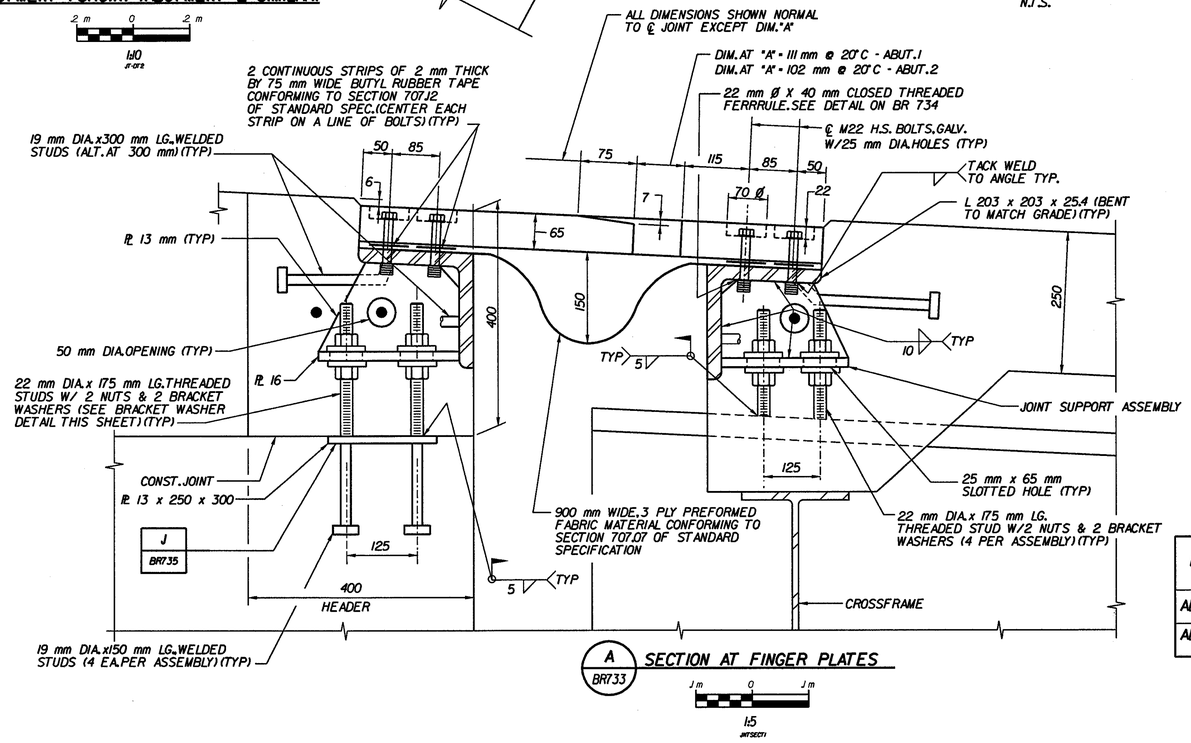
WASHER FOR BRACKET DETAIL
N.T.S.



TROUGH END SECTION
(SEE NOTE 5)
1:5
INTSECT1



PLAN - PLATE CUTTING DETAIL
N.T.S.
INTSECT1



A BR733 SECTION AT FINGER PLATES

1 m 0 1 m
1:5
INTSECT1

LOCATION	DIMENSION "A" GIVEN AT 20°C									
	-9°C	-4°C	2°C	7°C	12°C	18°C	20°C	24°C	29°C	35°C
ABUTMENT 1	160	151	142	133	124	115	111	106	97	88
ABUTMENT 2	137	131	124	118	112	105	102	99	92	86

-DIMENSION "A" MEASURED ALONG SKEW

BRIDGE EXPANSION JOINT NOTES:

1. EXPANSION JOINTS SHALL MEET THE REQUIREMENTS OF SECTION 516. EXPANSION DEVICES AND PAID AS ITEM 516J0. BRIDGE EXPANSION JOINT (FINGER JOINT). ALL STRUCTURAL STEEL FOR THE BRIDGE EXPANSION JOINTS SHALL BE AASHTO M270/M 270M, GRADE 250 GALVANIZED OR METALIZED. HIGH STRENGTH BOLTS, SHALL CONFORM TO AASHTO M 164M (ASTM A325M). NUTS - AASHTO M 294/M 294M AND AASHTO M 291M PER SUBSECTION 714.05. THREADED RODS, BOLTS, NUTS AND FERRULES SHALL CONFORM TO SUBSECTION 714.04.
2. THE 65 mm THICK EXPANSION JOINT PLATES SHALL BE CUT FROM 65 mm x 680 mm AND 730 mm PLATE AND FURNISHED IN 4.0 m (MAX.) LENGTHS. THE FABRIC TROUGH SHALL BE CONTINUOUS PREFORMED FABRIC MATERIAL CONFORMING TO SECTION 707.07 OF STANDARD SPECIFICATION.
3. THE CURB PLATES SHALL BE AASHTO M270/M 270M, GRADE 250 GALVANIZED OR METALIZED.
4. THE HOPPERS AND DOWNSPOUTS SHALL BE GALVANIZED. PAYMENT FOR THE HOPPERS AND DOWNSPOUTS SHALL BE INCLUDED IN THE UNIT PRICE BID STRUCTURAL STEEL (ITEM 506.75).
5. DRIP BEADS OF 6 mm x 200 mm TWO-PLY POLYESTER MATERIAL SHALL BE CEMENTED TO THE CENTER OF EACH END OF THE FABRIC TROUGH WITH AN ADHESIVE APPROVED BY THE MANUFACTURER.
6. ALL STEEL SURFACES THAT WILL BE EMBEDDED IN CONCRETE SHALL BE COATED WITH EPOXY BONDING COMPOUND. (INCLUDED IN ITEM 516J0.).
7. BRIDGE EXPANSION JOINT SHALL BE THE UNIT PRICE BID PER METER. (ITEM 516J0).
8. ALL CURB PLATES, WELDED STUDS AND EPOXY COATING OF STRUCTUAL STEEL SHALL BE INCLUDED IN ITEM 516J0.

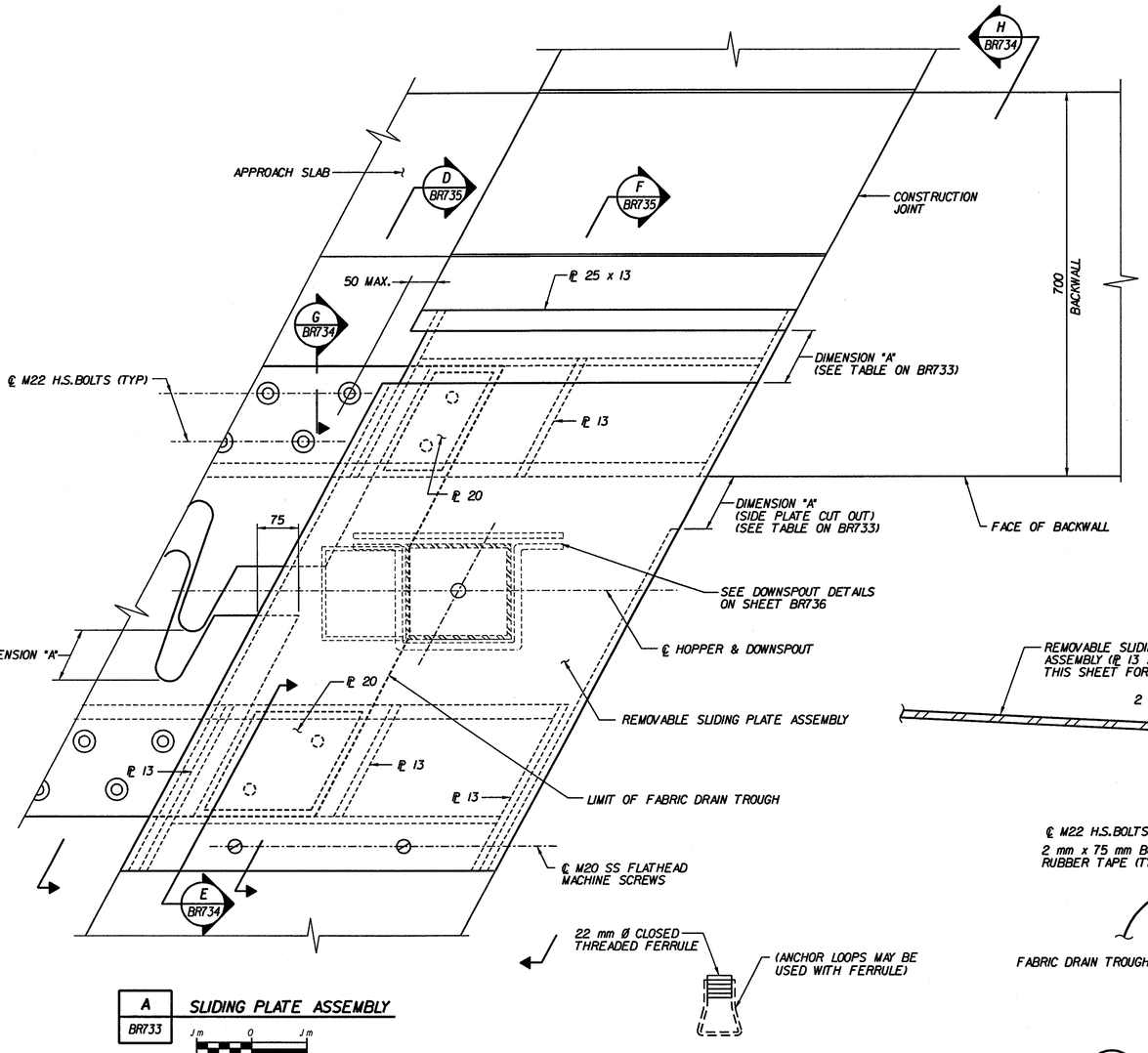
STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
BRIDGE EXPANSION JOINT DETAILS - 2	
Designed By M. GOGUEN	Drawn by B. WEATHERBY
Checked By D. VIENI Date 11/99	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.J. 0146(1) C/4
L.G.C. Info.	
Bridge Sheet No. BR733	Sheet 216 OF 385

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

U:\357J\15\BR700\INTSHT-2\25.3000.DGN 140mm

VAOT Metric

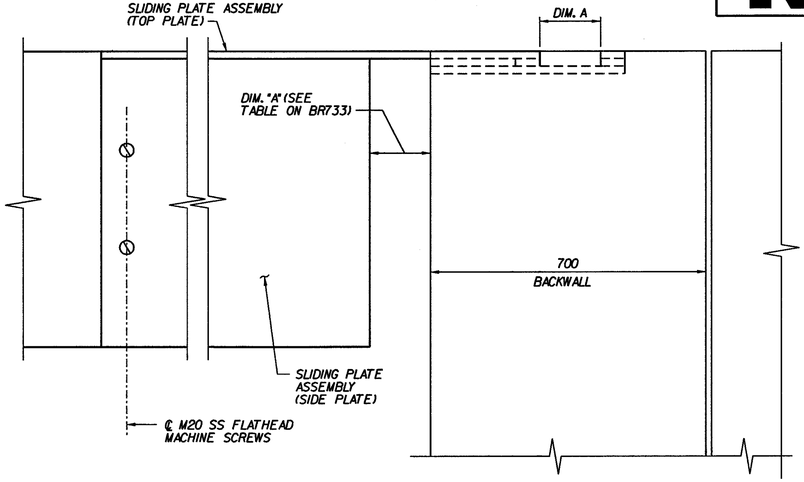


A BR733 **SLIDING PLATE ASSEMBLY**

1m 0 1m

1:5 in ams

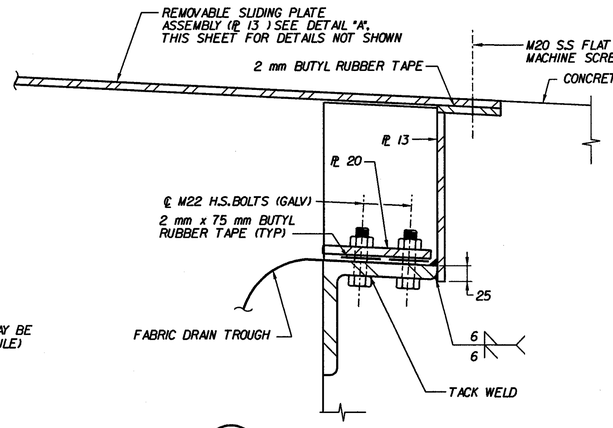
FERRULE DETAIL
N.T.S.



H BR734 **SLIDING PLATE ASSEMBLY**

1m 0 1m

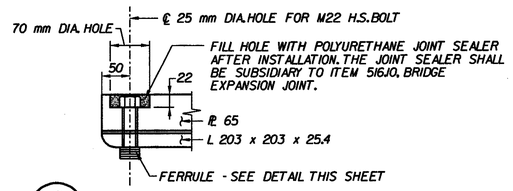
1:5 in ams



E BR734 **FABRIC DRAIN TROUGH ATTACHMENT**

1m 0 1m

1:5 in ams



G BR734 **EXPANSION JOINT PLATE**

1m 0 1m

1:5 in ams

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
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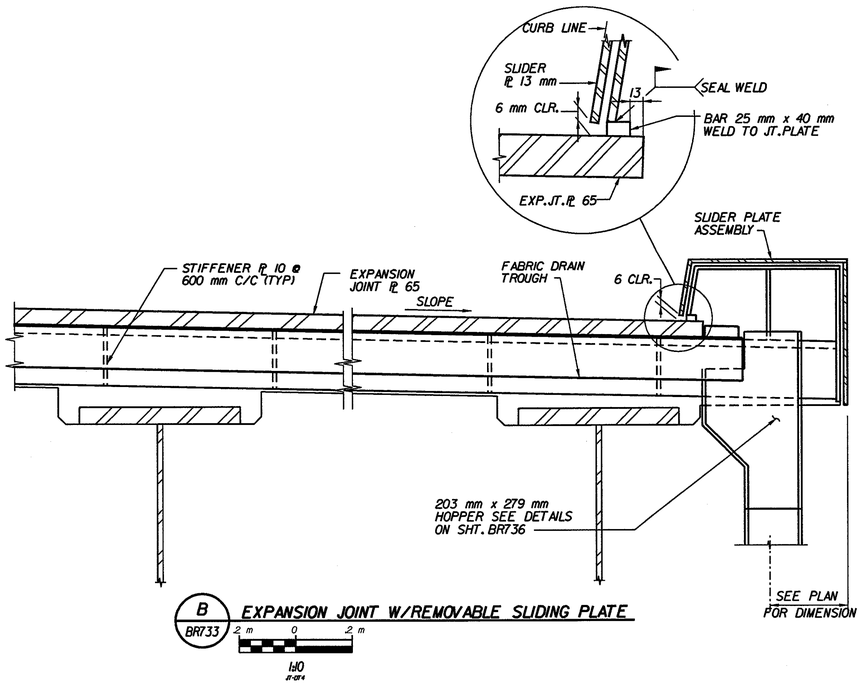
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
BRIDGE EXPANSION JOINT DETAILS - 3	
Designed By M. GOGUEN	Drawn by B. WEATHERBY
Checked By Date D. VIENI 11/99	Bridge Design Supervisor M. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
L.G.C. Info.	
Bridge Sheet No. BR734	Sheet 217 OF 385

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
3 WINNERS CIRCLE ALBANY, NEW YORK, 12205

F:\3513\15\BR700\UNTSHT-4\534200GM 40mm

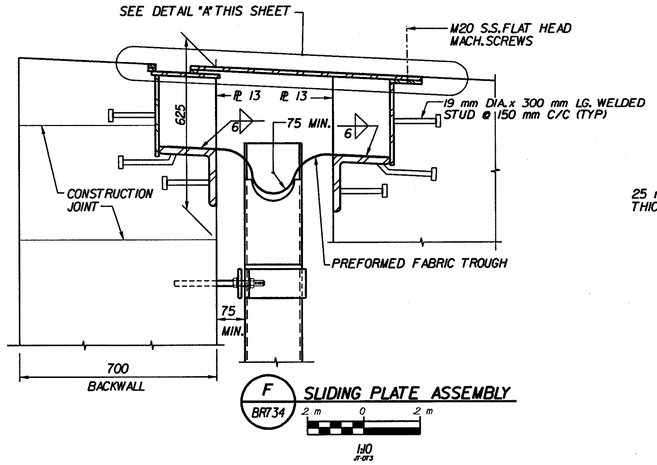
VAOT Metric



B BR733 **EXPANSION JOINT W/REMOVABLE SLIDING PLATE**

2 m 0 2 m

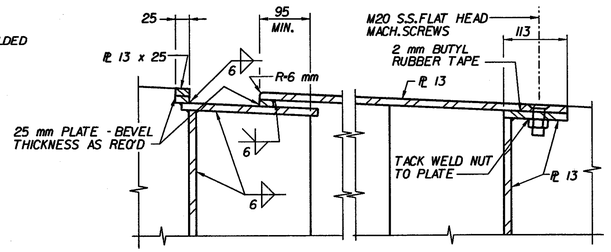
1:10 st-dr4



F BR734 **SLIDING PLATE ASSEMBLY**

2 m 0 2 m

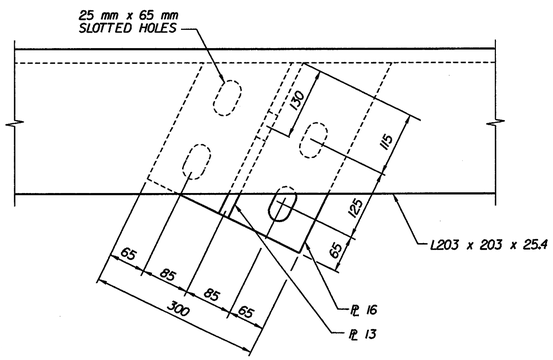
1:10 st-dr3



A BR735 **SLIDING PLATE DETAIL**

1 m 0 1 m

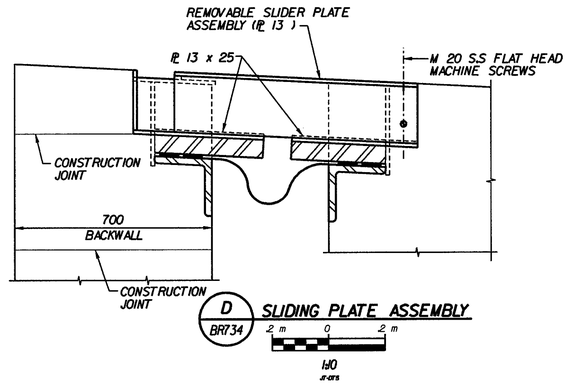
1:5 JT-DT6



SUPPORT BRACKET DETAIL

1 m 0 1 m

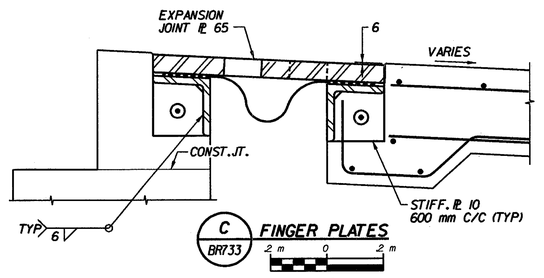
1:5 st-dr6



D BR734 **SLIDING PLATE ASSEMBLY**

2 m 0 2 m

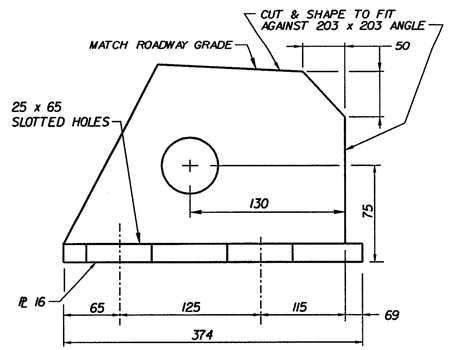
1:10 st-dr5



C BR733 **FINGER PLATES**

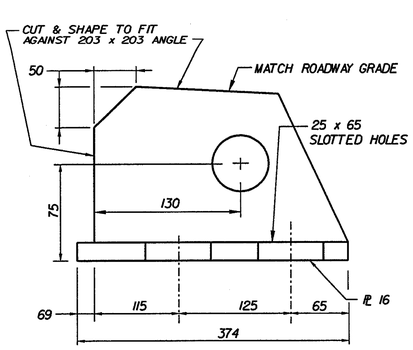
2 m 0 2 m

1:10



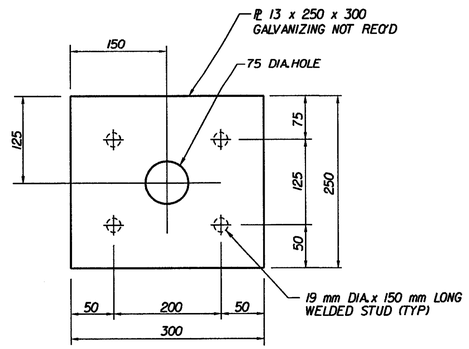
ELEVATION - BACKWALL BRACKET

N. T. S.



ELEVATION - SUPERSTRUCTURE BRACKET

N. T. S.



J BR733 **JOINT ASSEMBLY SEAT PLATE**

N. T. S.

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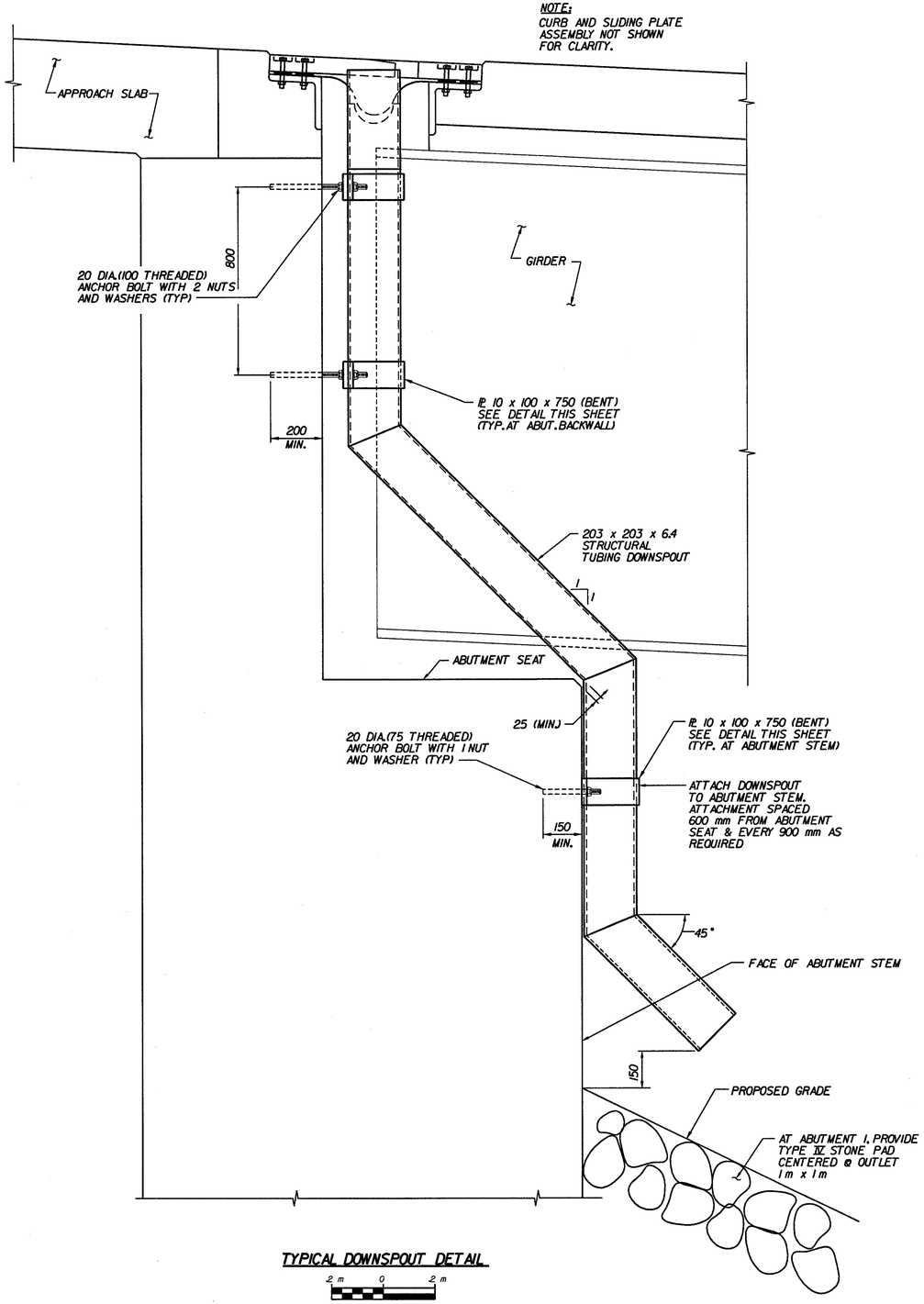
STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700 / Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
BRIDGE EXPANSION JOINT DETAILS - 4	
Designed By M. GOGUEN	Drawn by B. WEATHERBY
Checked By D. VIENI Date 11/99	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.J. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR735	Sheet 218 OF 385

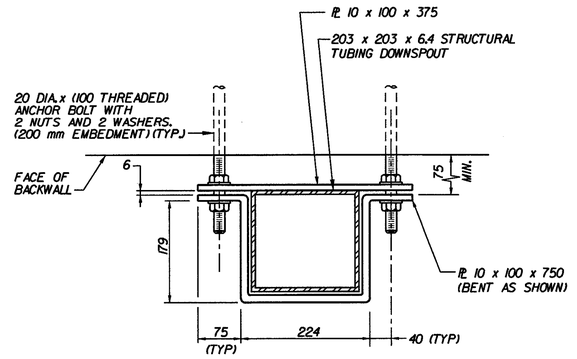
F:\351\15\BR700\JNTSHT-3\13000\BM 10mm

NOTE:
CURB AND SLIDING PLATE ASSEMBLY NOT SHOWN FOR CLARITY.

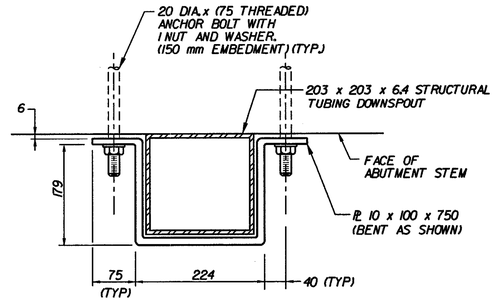


TYPICAL DOWNSPOUT DETAIL

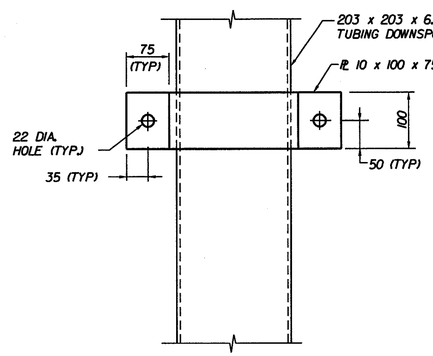
2 m 0 2 m
1:10
SPOUT01



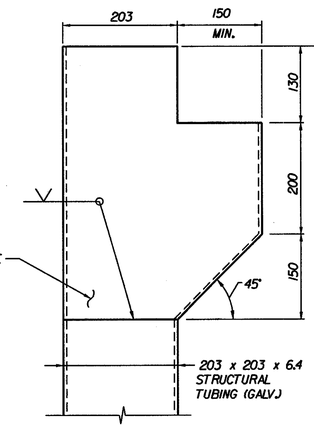
PLAN-DOWNSPOUT CONNECTION DETAIL AT BACKWALL



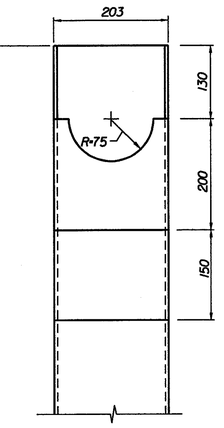
PLAN-DOWNSPOUT CONNECTION DETAIL AT ABUTMENT STEM



ELEVATION-DOWNSPOUT CONNECTION DETAIL



HOPPER ELEVATION-FRONT VIEW



HOPPER ELEVATION-SIDE VIEW

DOWNSPOUT AND HOPPER DETAILS

1 m 0 1 m
1:5
SPOUT02

DOWNSPOUT NOTES:

1. HOLLOW STRUCTURAL STEEL TUBING SHALL CONFORM TO ASTM A500 GRADE B OR ASTM A501.
2. ALL BARS AND PLATES SHALL CONFORM TO AASHTO M270 GRADE 250 AND SHALL BE GALVANIZED.
3. DOWNSPOUT SHALL BE GALVANIZED IN ACCORDANCE WITH SECTION 506.15 (A) AFTER FABRICATION.
4. ALL DOWNSPOUT BOLTS AND RELATED HARDWARE SHALL BE ASTM A-307 AND SHALL BE GALVANIZED IN ACCORDANCE WITH SECTION 506.15 (A).
5. WHERE THE GALVANIZING HAS BEEN REMOVED FROM THE DOWNSPOUT OR 100 mm BAR EITHER BY CUTTING, BURNING, WELDING, PLACING OR ANY OTHER MEANS, IT SHALL BE REPAIRED BY THOROUGHLY CLEANING THE DAMAGED AREAS WITH A WIRE BRUSH AND PAINTING THE DAMAGED AREAS WITH TWO COATS OF AN APPROVED SEALER.
6. DOWNSPOUT SHALL BE PAID FOR UNDER THE ITEM 506.75 "STRUCTURAL STEEL (SCUPPERS, DOWNSPOUTS)".

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STATE OF VERMONT
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Town Of BENNINGTON	Bridge No. BR700
Highway No. VT. RTE. 9	Log Sta.
	Surv. Sta. 16+800

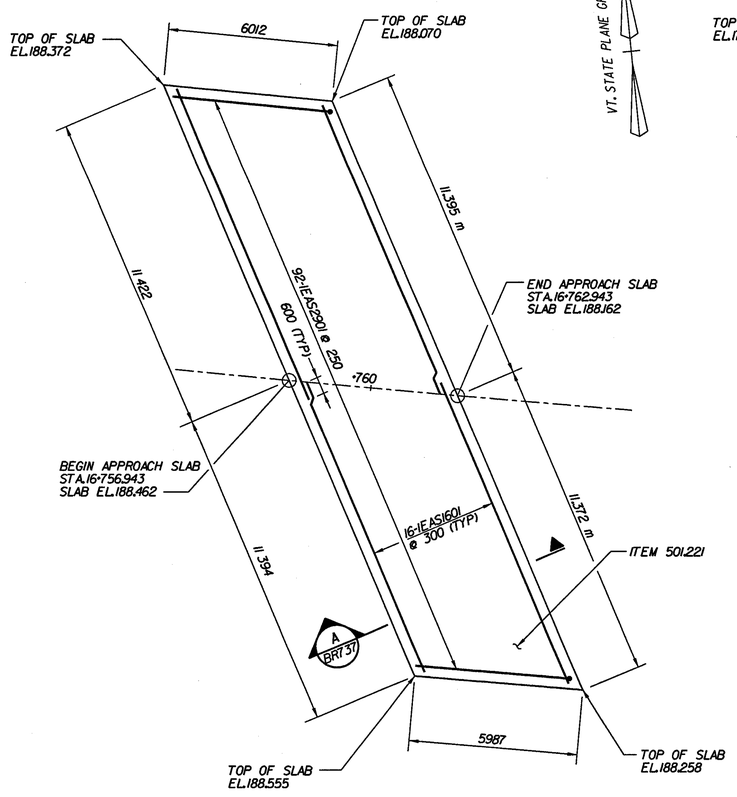
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER

BRIDGE EXPANSION JOINT DETAILS - 5

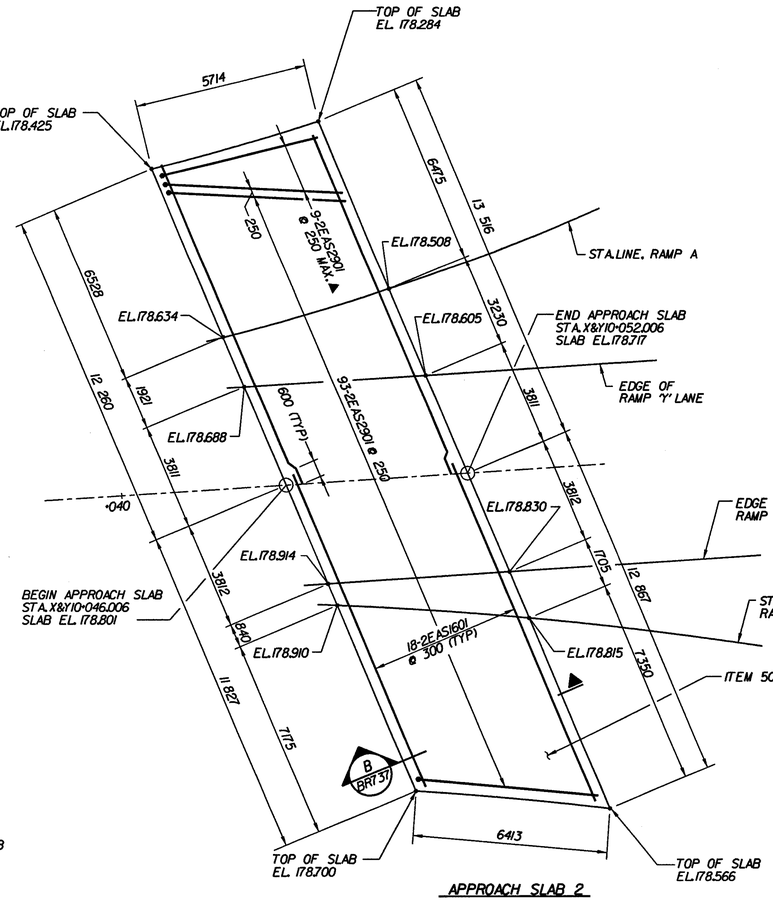
Designed By M. GOGUEN	Drawn by B. WEATHERBY
Checked By D. VIENI Date 11/99	Bridge Design Supervisor M. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(11) C/4
I.G.C. Info.	
Bridge Sheet No. BR736	Sheet 219 OF 385

F:\2571\IS\BR700\JNTSHT-5\5243000\BM 100mm

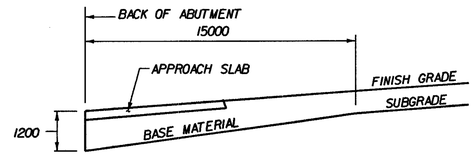
VAOT Metric



APPROACH SLAB 1

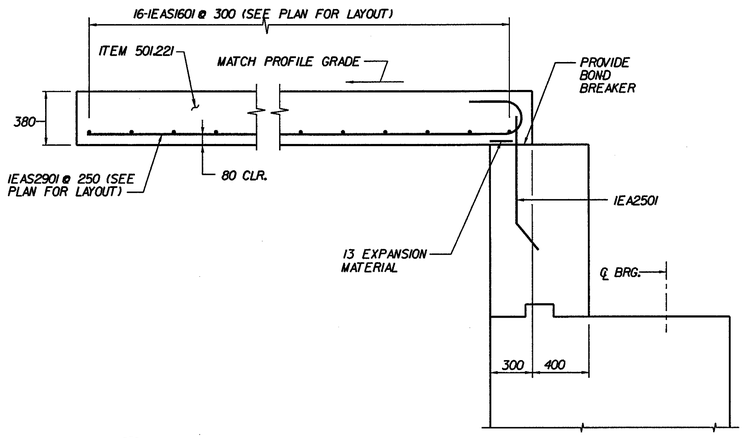


APPROACH SLAB 2

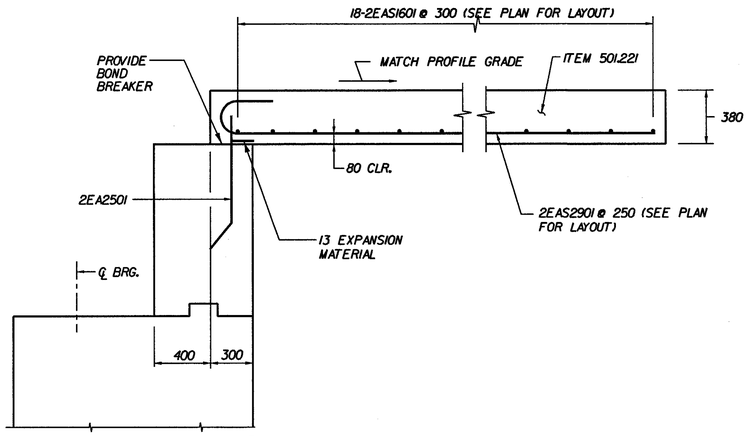


SUBBASE DETAIL AT ABUTMENTS
(ELEVATION IN CUT AND FILL)
N.T.S.

APPROACH SLAB PLANS
2 m 0 2 m
1:100
APPDET-2



A BR737 APPROACH SLAB 1 SECTION
.4 m 0 .4 m
1:20
APPDET-1



B BR737 APPROACH SLAB 2 SECTION
.4 m 0 .4 m
1:20
APPDET-1

APPROACH SLAB NOTE :

1. ALL APPROACH SLAB REINFORCING STEEL SHALL BE EPOXY COATED.
2. ▲ CUT IN FIELD TO FIT.

STATE OF VERMONT
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VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
APPROACH SLAB DETAILS	
Designed By M. GOGUEN	Drawn by J. HOTALING/B. WEATHERBY
Checked By D. VIENI Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.J. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR737	Sheet 220 OF 385

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11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

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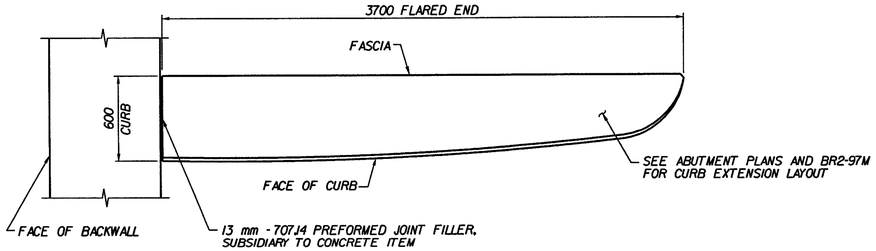


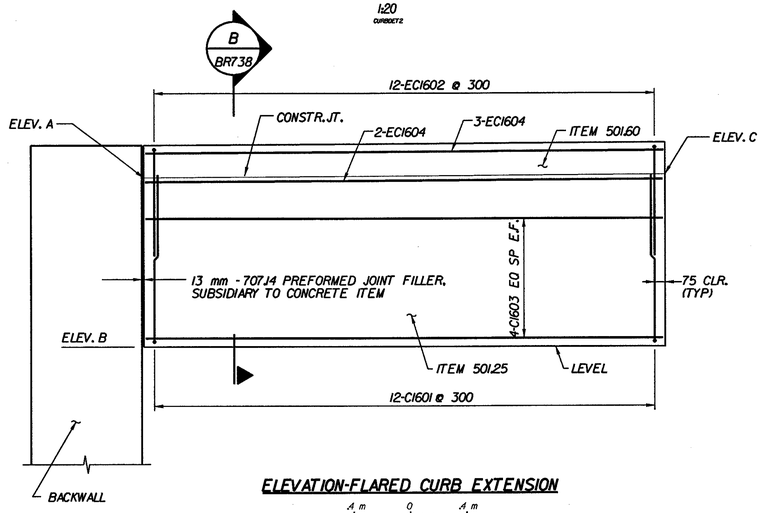
CURB EXTENSION PLAN-FLARED END FOR 600 mm CURB

4 m 0 4 m
1:20
CURBDET2

ELEVATIONS AT CURB EXTENSIONS			
LOCATION	ELEVATION A	ELEVATION B	ELEVATION C
WINGWALL 1	188.088	186.888	188.279
WINGWALL 2	188.276	187.076	188.460
WINGWALL 3	178.414	177.123	178.323
WINGWALL 4	178.698	177.426	178.626

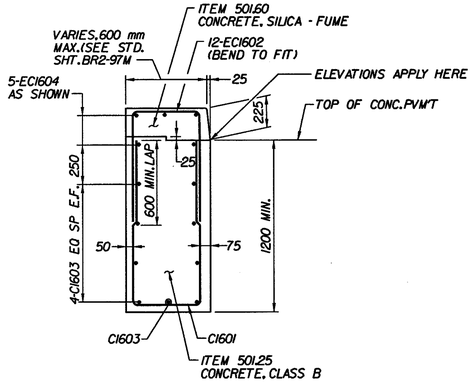
NOTES:

1. CONSTRUCTION JOINTS THROUGH CONCRETE CURBS SHALL BE PLACED A MAXIMUM 4.50 m CENTER TO CENTER AND SHALL BE 450 mm MINIMUM FROM THE CENTER OF THE NEAREST BRIDGE RAIL POST. CONCRETE SHALL BE PLACED IN ALTERNATING SECTIONS WITH A MINIMUM OF 48 HOURS DELAY BETWEEN ADJACENT POURS.
2. LONGITUDINAL REINFORCING BARS SHALL PASS THROUGH CURB CONSTRUCTION JOINTS.
3. CURB REINFORCING STIRRUP BARS SHALL BE TURNED AS REQUIRED TO FIT TAPERED ENDS.
4. SEE SHEET BR726 FOR GIRDER HAUNCH AND SHEAR CONNECTOR DETAIL.
5. A 15 mm RADIUS MAY BE USED IN LIEU OF THE 25 mm BY 25 mm CHAMFER ON THE TOP INSIDE CORNER OF CURBS.



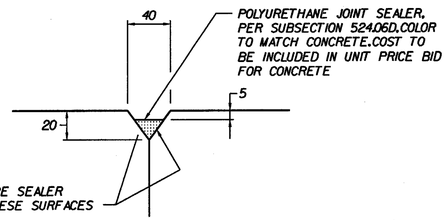
ELEVATION-FLARED CURB EXTENSION

4 m 0 4 m
1:20
CURBDET2



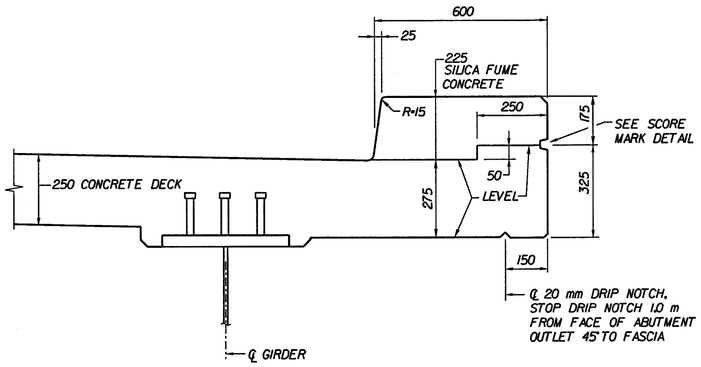
B BR738 FLARED CURB

4 m 0 4 m
1:20
CURBDET2



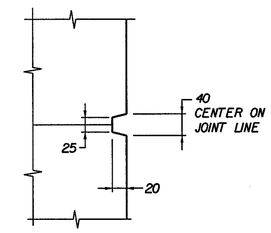
X BR738 CURB JOINT DETAIL

N.T.S.
CURBDET3



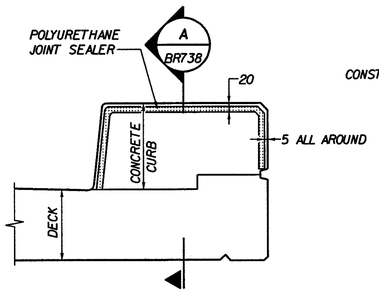
TYPICAL 600 mm CURB SECTION

2 m 0 2 m
1:10
CURBDET1



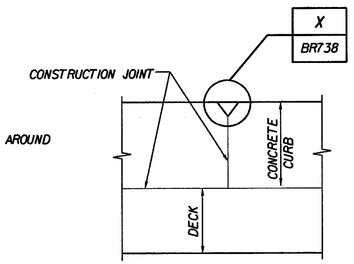
SCORE MARK DETAIL

N.T.S.
CURBDET1



TYPICAL SECTION THROUGH CONCRETE CURB CONSTRUCTION JOINT

2 m 0 2 m
1:10
CURBDET3



A BR738 CURB SECTION

2 m 0 2 m
1:10
CURBDET3

STATE OF VERMONT AGENCY OF TRANSPORTATION	
Town Of BENNINGTON	Bridge No. BR700 Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
CURB DETAILS	
Designed By M. GOGUEN	Drawn by B. WEATHERBY
Checked By D. VIENI Date 6/00	Bridge Design Supervisor M. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.J. 0146(1) C/4
L.G.C. Info.	
Bridge Sheet No. BR738	Sheet 221 OF 385

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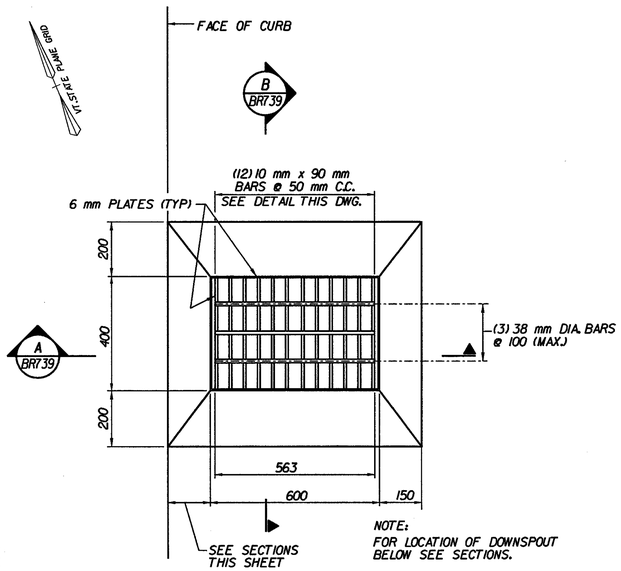
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

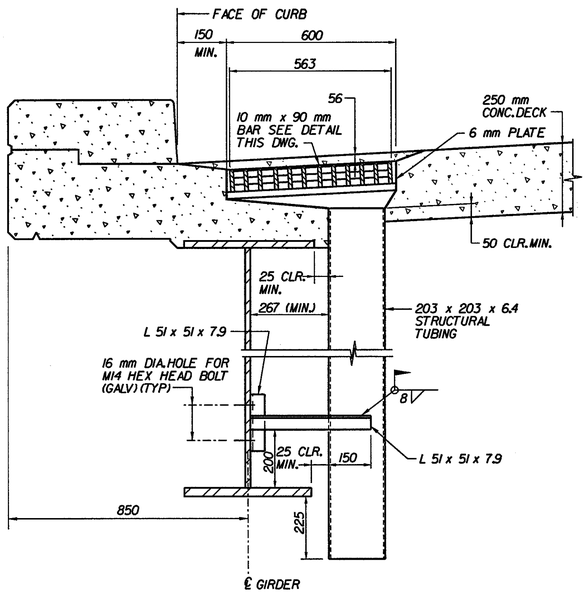
F:\357\15\CURBSHT\1X2000 BW 140mm



PLAN

2 m 0 2 m

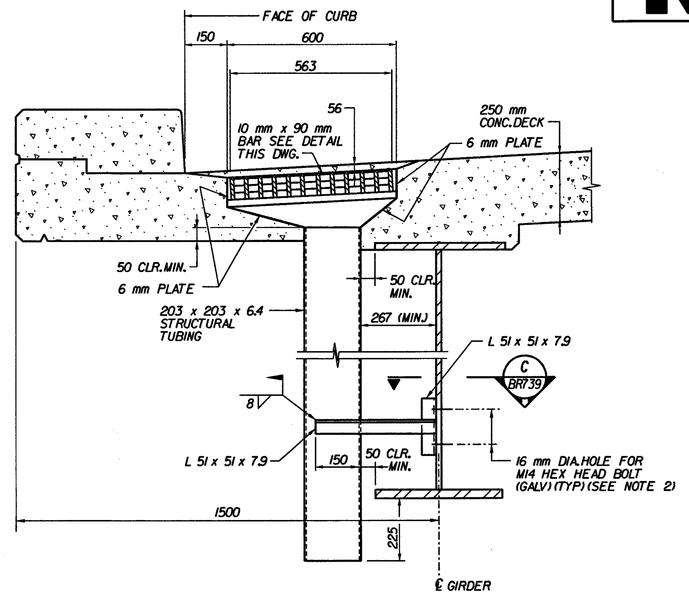
1:10



A BR739 **SCUPPERS 1, 2 & 3**

2 m 0 2 m

1:10



A BR739 **SCUPPER 4 (SCUPPER 5 SIMILAR)**

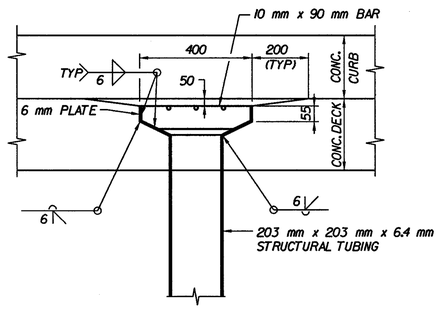
2 m 0 2 m

1:10

SCUPPER	℄ SCUPPER STA. LOCATION
1	VT. RTE. 9 STA. 16+829.700, 375 mm RT OF ℄ G1
2	VT. RTE. 9 STA. 16+888.700, 375 mm RT OF ℄ G1
3	VT. RTE. 9 STA. 16+949.700, 375 mm RT OF ℄ G1
4	X&Y STA. 10+040.300, 1000 mm LT OF ℄ G1
5	X&Y STA. 10+047.500, 1000 mm RT OF ℄ G8

THE FOLLOWING NOTES APPLY TO ALL SCUPPERS UNLESS OTHERWISE NOTED ON PROJECT PLANS.

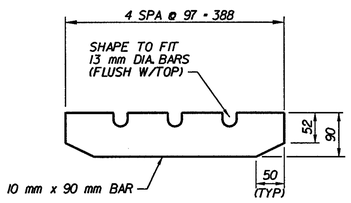
1. HOLLOW STRUCTURAL STEEL TUBING SHALL CONFORM TO ASTM A-500 GRADE B OR A-501.
2. ALL PLATES, BARS AND ANGLES SHALL CONFORM TO ASSHTO M270/M 270M GRADE 250. BOLTS SHALL CONFORM TO ASTM A307, PER SUBSECTION 714.04.
3. ALL SCUPPERS SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M111 AFTER FABRICATION.
4. THE TOP SURFACE OF SCUPPER SHALL BE SLOPED TO MATCH ROADWAY SLOPE AND GRADE.
5. THE BAR AND GRATE SECTION MAY BE PREFABRICATED PROVIDING THE GEOMETRY AND SECTION PROPERTIES ARE EQUIVALENT TO THE DETAILS SHOWN.
6. SEE FRAMING PLANS, SHEETS BR719 THRU BR723 AND TABLE THIS DWG. FOR SCUPPER LOCATIONS.
7. COST OF SCUPPERS AND APPURTENANCES INCLUDED IN ITEM 506.75, STRUCTURAL STEEL (SCUPPERS, DOWNSPOUTS).



B BR739 **SCUPPER**

2 m 0 2 m

1:10

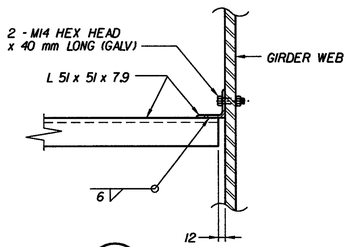


BAR DETAIL FOR GRATE

.1 m 0 .1 m

1:5

SCUPDET1



C BR739 **DOWNSPOUT CONNECTION**

.1 m 0 .1 m

1:5

SCUPDET2

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
SCUPPER DETAILS	
Designed By M. GOGUEN	Drawn by B. WEATHERBY
Checked By R. SIPZNER 6/00 Date	Bridge Design Supervisor M. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR739	Sheet 222 OF 385

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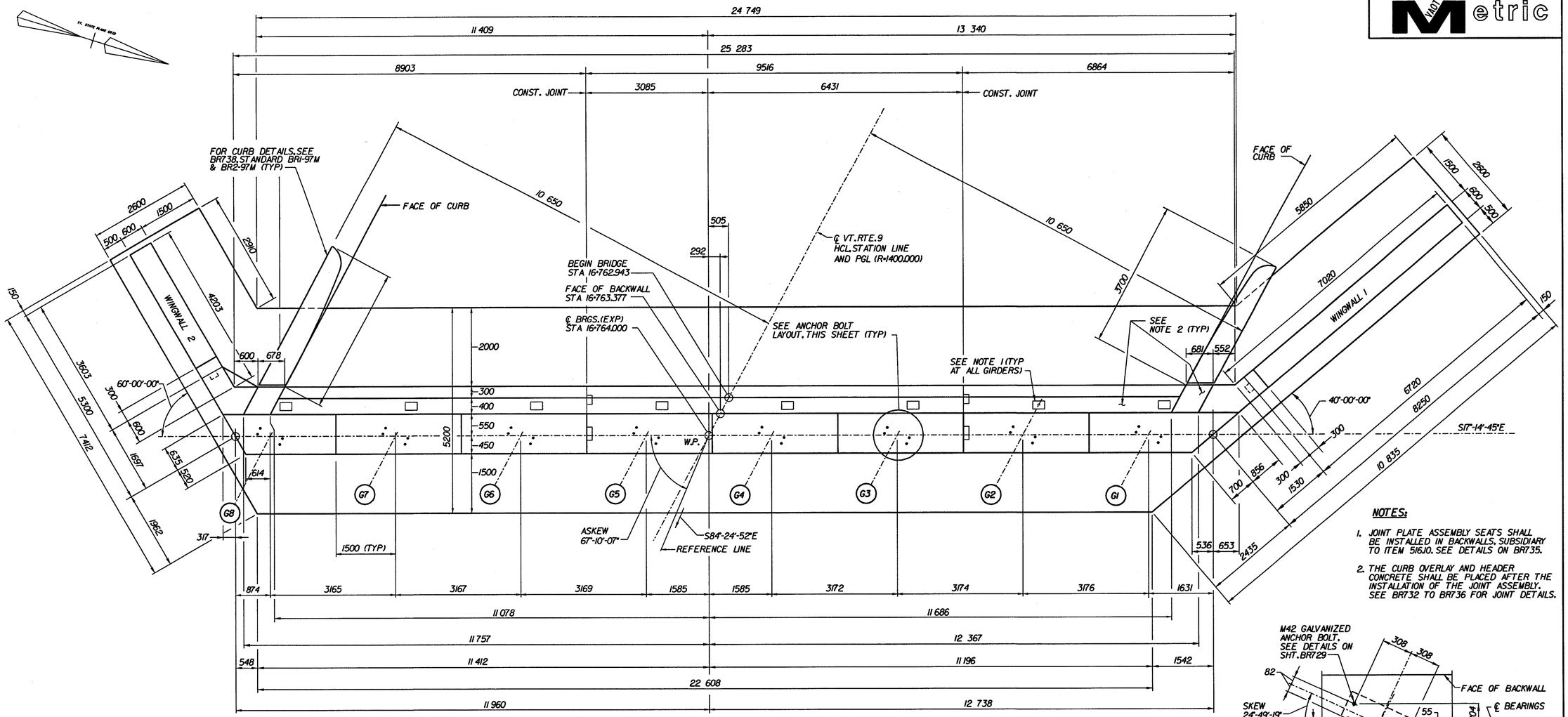
11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

Lr/3513/BR700/SCUP01S/BW/5.24.2000/ 140mm

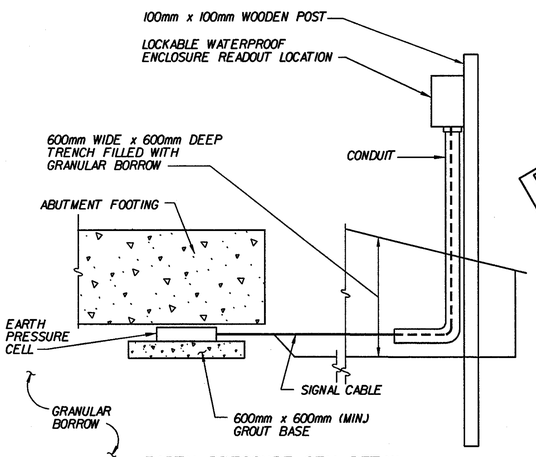
VAOT Metric



PLAN

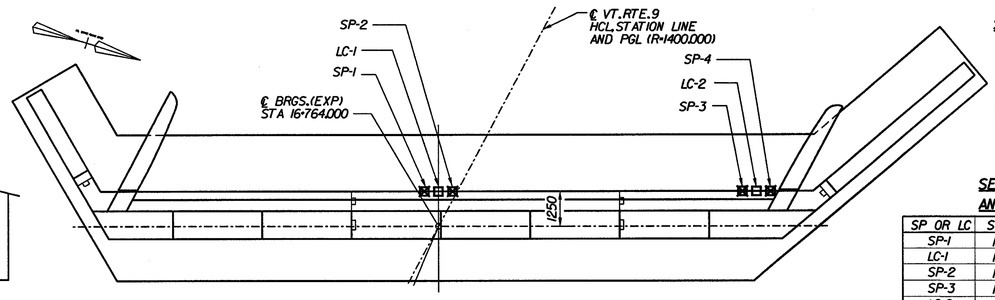
1 m 0 1 m

1:50



EARTH PRESSURE CELL DETAIL AT BASE OF ABUTMENT FOOTING

N.T.S.



PLAN-ABUTMENT INSTRUMENTATION

2 m 0 2 m

1:100

SETTLEMENT PLATFORM LEGEND:

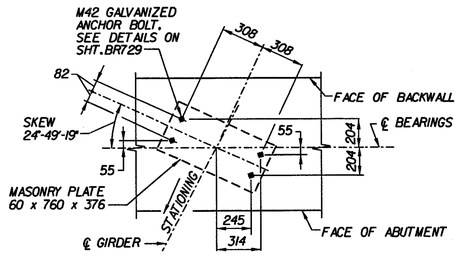
LC-1 — INDICATES LOCATION OF EARTH PRESSURE CELL, ITEM 623.60

SP-2 — INDICATES LOCATION OF VIBRATING WIRE SETTLEMENT PLATFORM, ITEM 623.23

SETTLEMENT PLATFORM (SP) AND LOAD CELL (LC) SCHEDULE

SP OR LC	STATION	OFFSET	DEPTH
SP-1	16+763	0.5m RT.	BASE OF FILL
LC-1	16+763	CL	TOP OF FILL
SP-2	16+763	0.5m LT.	TOP OF BEDROCK
SP-3	16+763	11m LT.	BASE OF FILL
LC-2	16+763	11.5m LT.	TOP OF FILL
SP-4	16+763	12m LT.	TOP OF BEDROCK
SP-5	16+744	11m LT.	BASE OF FILL

NOTE: SEE SHEET BR701 FOR LOCATION OF SP-5.



PLAN-ANCHOR BOLT LAYOUT-ABUTMENT 1

.4 m 0 .4 m

1:20

NOTES:

1. JOINT PLATE ASSEMBLY SEATS SHALL BE INSTALLED IN BACKWALLS, SUBSIDIARY TO ITEM 516.10. SEE DETAILS ON BR735.
2. THE CURB OVERLAY AND HEADER CONCRETE SHALL BE PLACED AFTER THE INSTALLATION OF THE JOINT ASSEMBLY. SEE BR732 TO BR736 FOR JOINT DETAILS.

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111 WINNERS CIRCLE ALBANY, NEW YORK, 12205

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
Highway No. VT. RTE. 9	Log Sta.
	Surv. Sta. 16+800

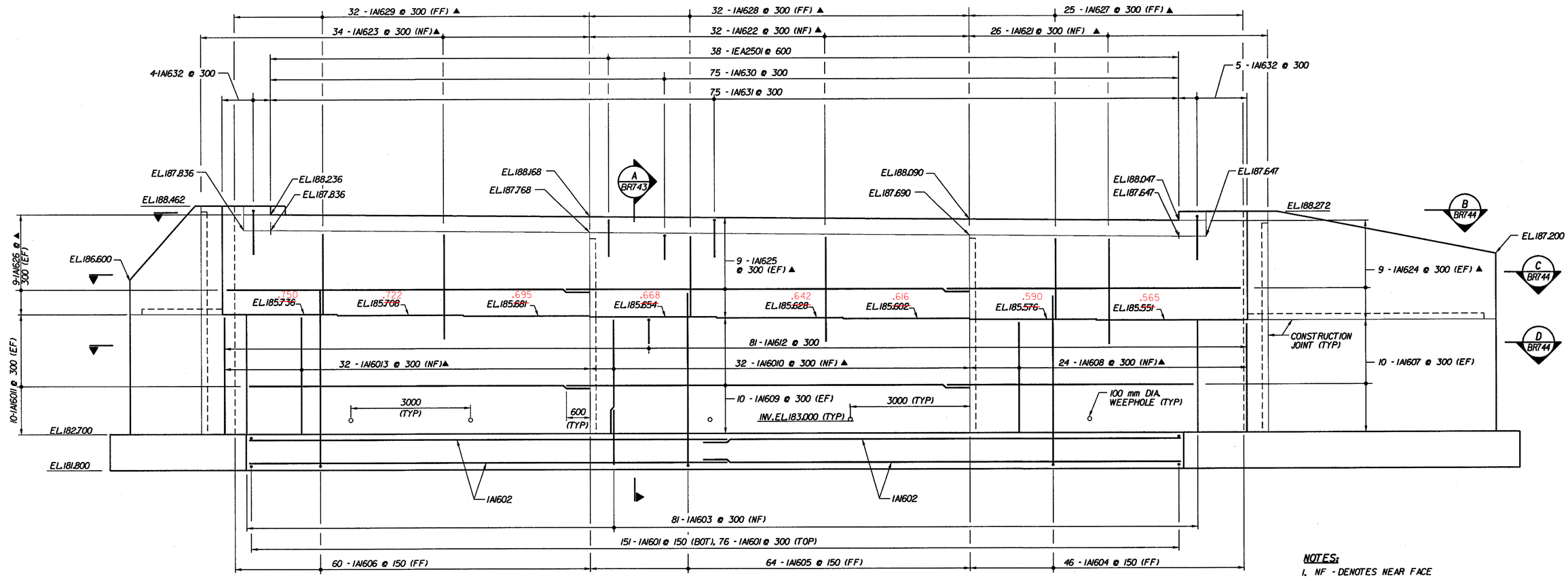
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER

ABUTMENT 1 PLAN

Designed By C. TUTUNJIAN	Drawn by B. WEATHERBY/J. HOTALING
Checked By L. AVERY Date 6/00	Bridge Design Supervisor M. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR740	Sheet 223 OF 385

U:\STR\BR700\APLAN /BW/3.23.2000/ 150mm

VAOT Metric



ELEVATION

1m 0 1m

1:50

NOTES:

1. NF - DENOTES NEAR FACE
2. FF - DENOTES FAR FACE
3. EF - DENOTES EACH FACE
4. FOR WEEPHOLE DETAILS, SEE BR743.
5. ▲ INDICATES BAR TO BE CUT IN FIELD.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
ABUTMENT 1 ELEVATION	
Designed By C. TUTUNJIAN	Drawn by B. WEATHERBY
Checked By L. AVERY Date 6/00	Bridge Design Supervisor M. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR741	Sheet 224 OF 385

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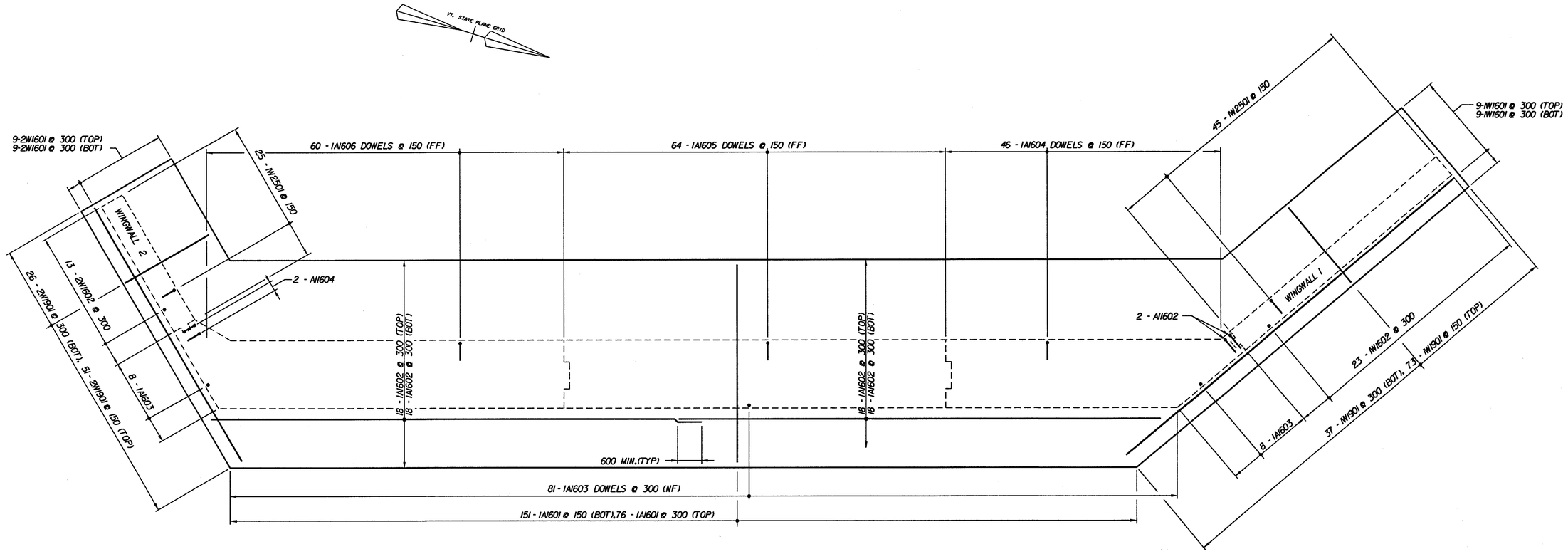
11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

OLSTAD\BR700\ABELEV\BM\3120000 1:50

VAOT Metric



FOOTING REINFORCEMENT PLAN

1m 0 1m

1:50

ABI-FPU

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800

VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER

ABUTMENT 1 REINFORCEMENT DETAILS - 1

Designed By C. TUTUNJIAN	Drawn by J. HOTALING/B. WEATHERBY
Checked By L. AVERY Date 6/00	Bridge Design Supervisor M. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR742	Sheet 225 OF 385

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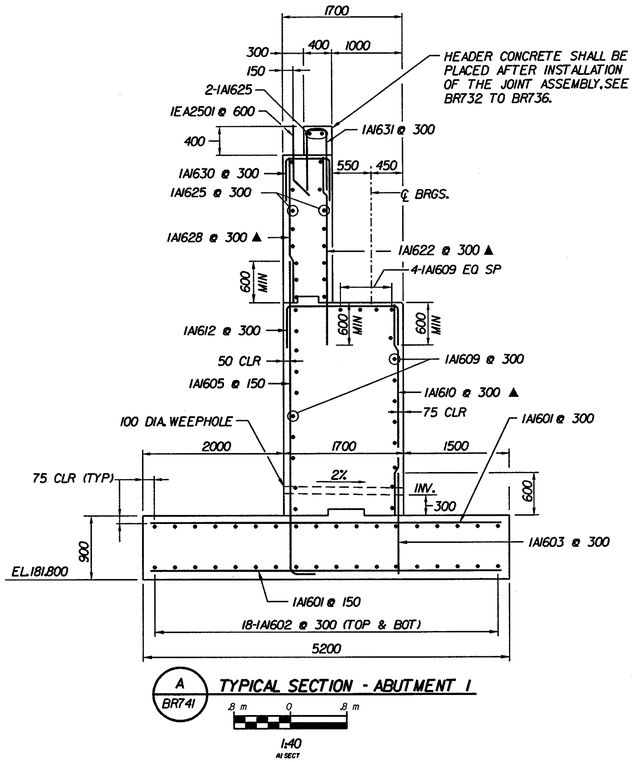
3 WINNERS CIRCLE ALBANY, NEW YORK, 12205

www.vaot.net/ext/com/cad/12.0/c/m

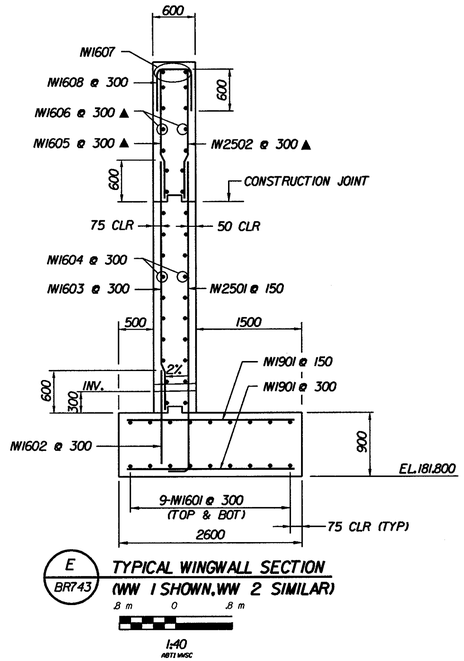


A BR741 **TYPICAL SECTION - ABUTMENT 1**

.8 m 0 .8 m

1:40

A1 SECT



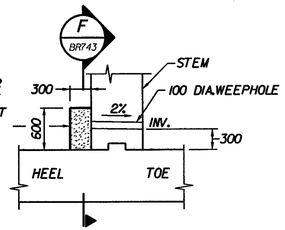
E BR743 **TYPICAL WINGWALL SECTION (WW 1 SHOWN, WW 2 SIMILAR)**

.8 m 0 .8 m

1:40

A811 WWSC

300 x 600 x 600 GRANULAR BACKFILL FOR STRUCTURES WRAPPED W/GEOTEXTILE AT EACH WEEPHOLE LOCATION

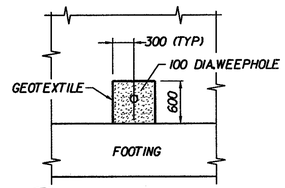


WEEPHOLE DETAIL

.8 m 0 .8 m

1:40

A1 - WEEP



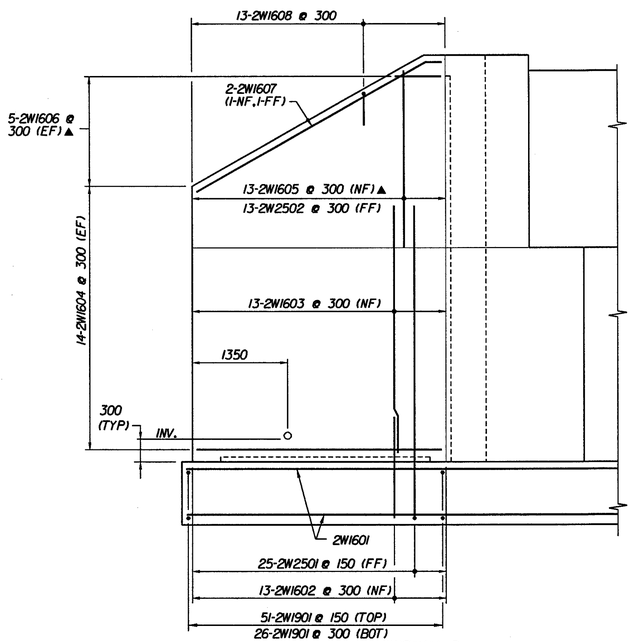
F BR743 **WEEPHOLE SECTION**

.8 m 0 .8 m

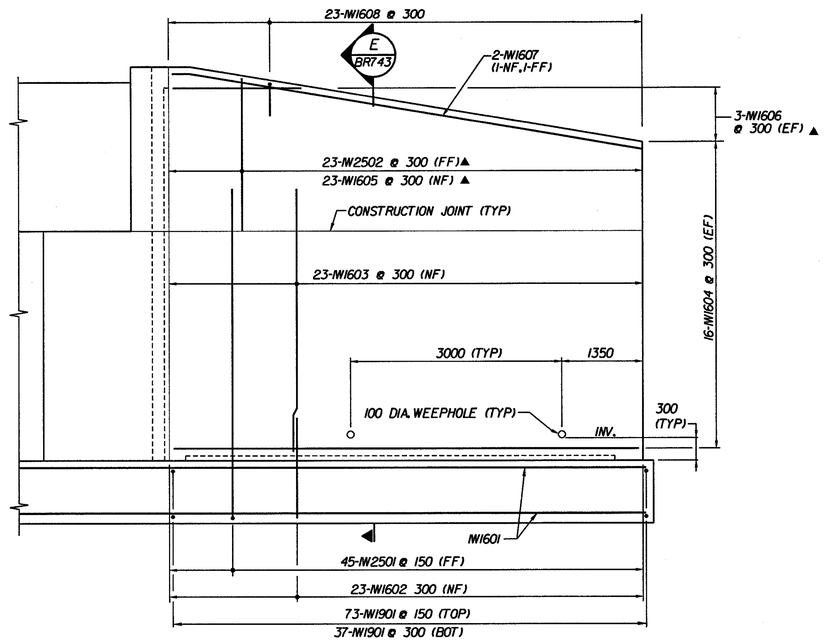
1:40

A1 - WEEP

NOTE:
THIS WILL BE PAID FOR UNDER THE "GRANULAR BACKFILL FOR STRUCTURES" ITEM 204.30.



WINGWALL 2



WINGWALL 1

ABUTMENT 1 WINGWALL REINFORCEMENT ELEVATIONS

.8 m 0 .8 m

1:40

A811 WW

NOTES:
1. NF - DENOTES NEAR FACE
2. FF - DENOTES FAR FACE
3. EF - DENOTES EACH FACE
4. ▲ INDICATES BAR TO BE CUT IN FIELD.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
Highway No. VT. RTE. 9	Log Sta.
	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
ABUTMENT 1 REINFORCEMENT DETAILS - 2	
Designed By C. TUTUNJIAN	Drawn by J. HOTALING/B. WEATHERBY
Checked By Date L. AVERY 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR743	Sheet 226 OF 385

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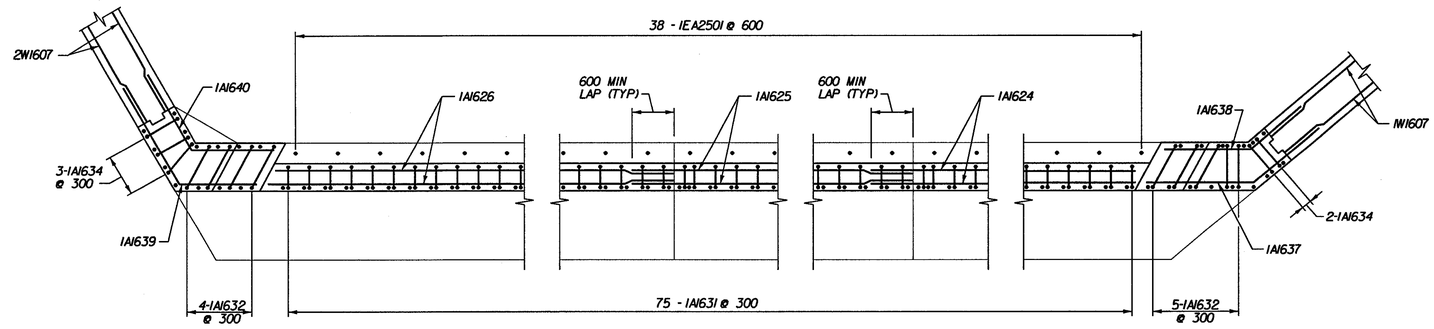
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

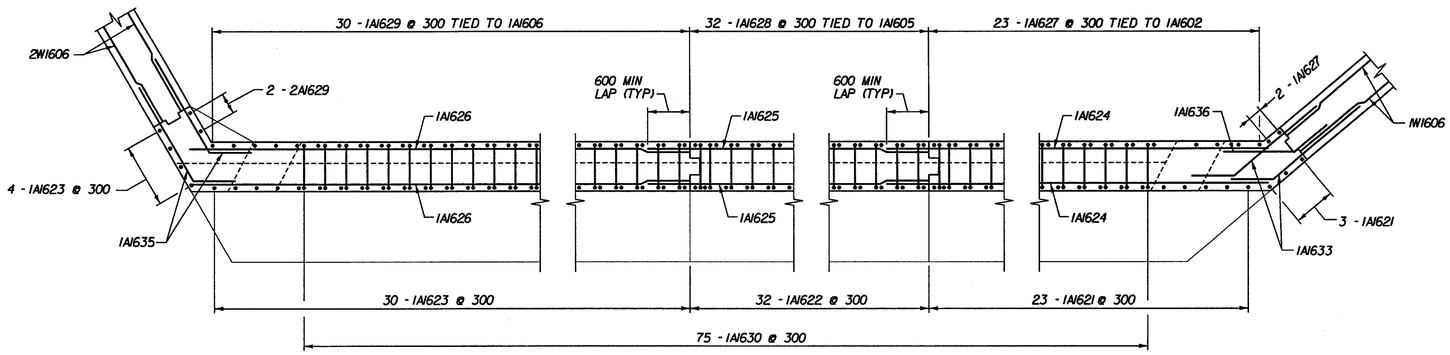
LW/3573/S/BR700/ABUTS#2/BW/JUL2000.DGN



B BR741 TOP OF BACKWALL REINFORCEMENT PLAN

.8 m 0 .8 m

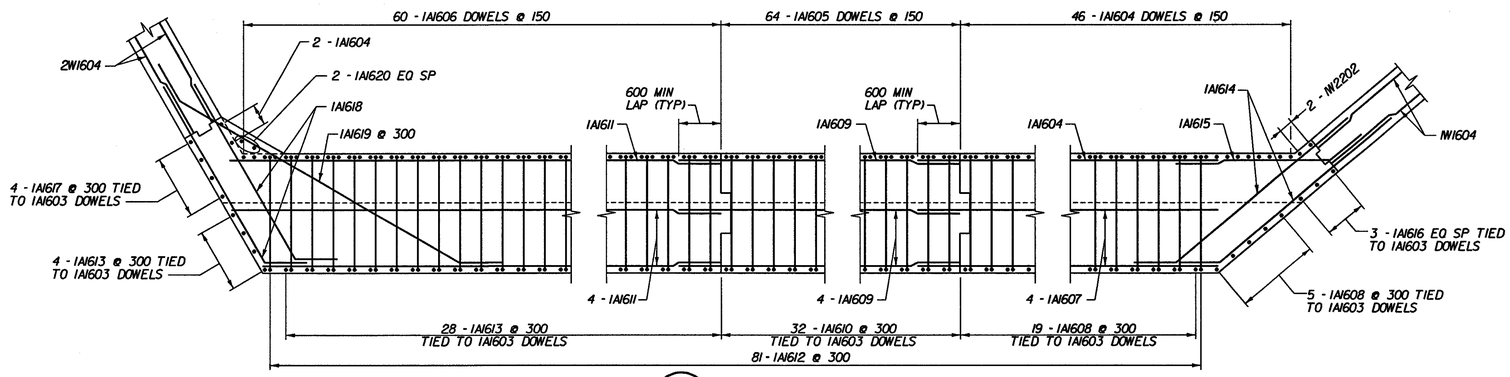
1:40 METRIC



C BR741 BACKWALL REINFORCEMENT PLAN

.8 m 0 .8 m

1:40 METRIC



D BR741 STEM REINFORCEMENT PLAN

.8 m 0 .8 m

1:40 METRIC

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
ABUTMENT 1 REINFORCEMENT DETAILS - 3	
Designed By C. TUTUNJIAN	Drawn by J. HOTALING/B. WEATHERBY
Checked By L. AVERY Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 01461(1) C/4
L.G.C. Info.	
Bridge Sheet No. BR744	Sheet 227 OF 385

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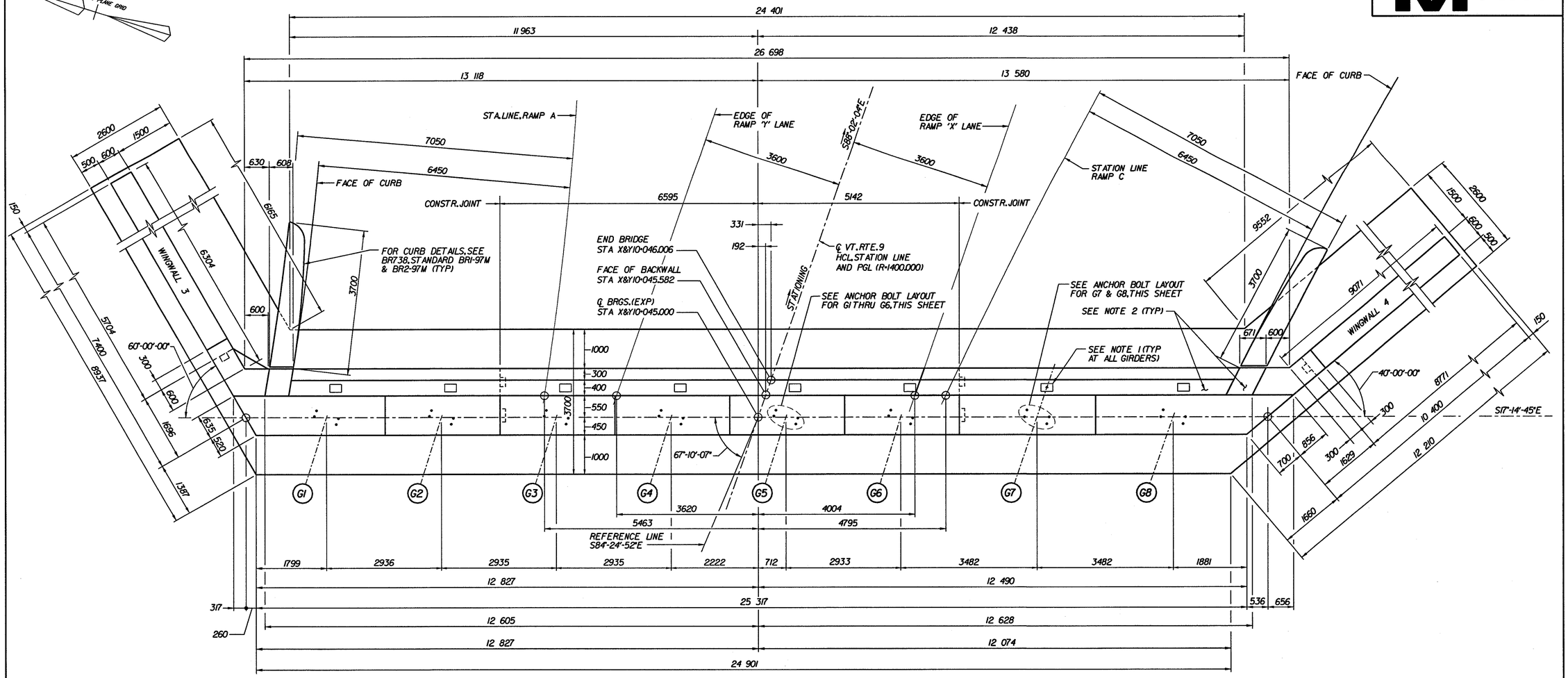
11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

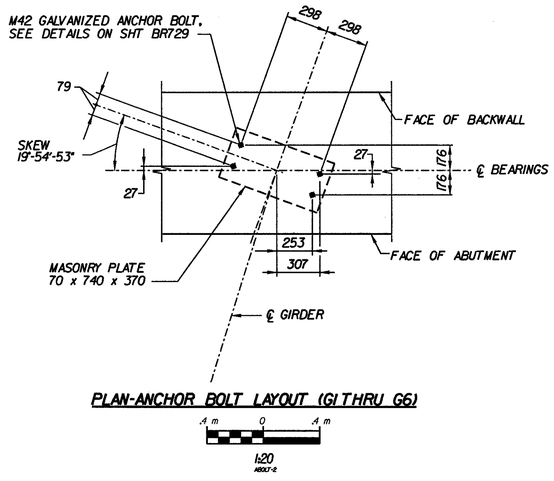
VAOT Metric

Fi/3513/15/BR700/ABDT3513/0A99/BW 1x0mm

VT. STATE PLANE GRID

VAOT Metric

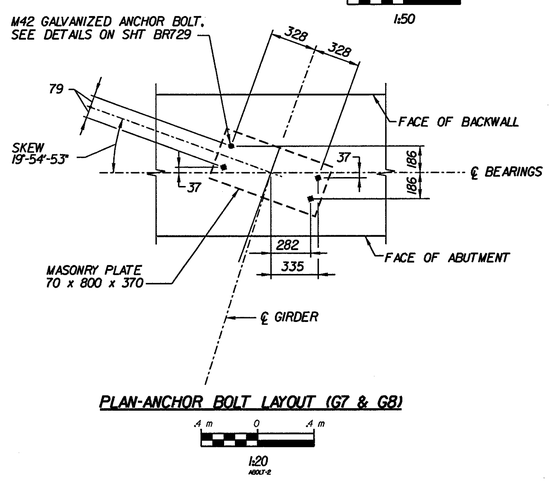




PLAN-ANCHOR BOLT LAYOUT (G1 THRU G6)

4 m 0 4 m

1:20



PLAN-ANCHOR BOLT LAYOUT (G7 & G8)

4 m 0 4 m

1:20

PLAN

1 m 0 1 m

1:50

NOTES:

1. JOINT PLATE ASSEMBLY SEATS SHALL BE INSTALLED IN BACKWALLS. SUBSIDIARY TO ITEM 516.10. SEE DETAILS ON BR735.
2. THE CURB OVERLAY AND HEADER CONCRETE SHALL BE PLACED AFTER THE INSTALLATION OF THE JOINT ASSEMBLY. SEE BR732 TO BR736 FOR JOINT DETAILS.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
ABUTMENT 2 PLAN	
Designed By T. TUTUNJIAN	Drawn by J. HOTALING/B. WEATHERBY
Checked By L. AVERY Date 6/00	Bridge Design Supervisor M. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR745	Sheet 228 OF 385

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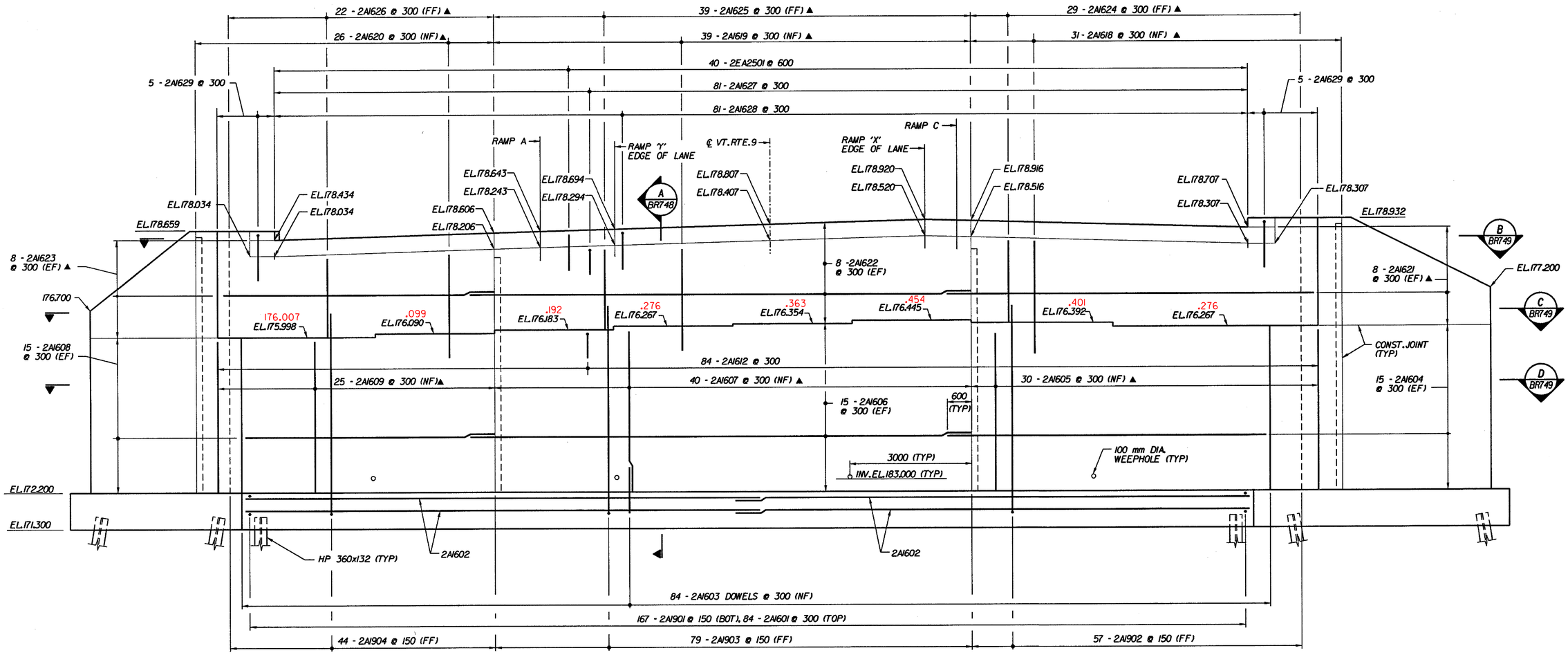
F:\353\15\BR700\ASPLAN\10739\BM_150mm

VAOT Metric



ELEVATION

1m 0 1m

1:50

NOTES:

1. NF - DENOTES NEAR FACE
2. FF - DENOTES FAR FACE
3. EF - DENOTES EACH FACE
4. FOR WEEPHOLE DETAILS, SEE BR748.
5. ▲ INDICATES BAR TO BE CUT IN FIELD.

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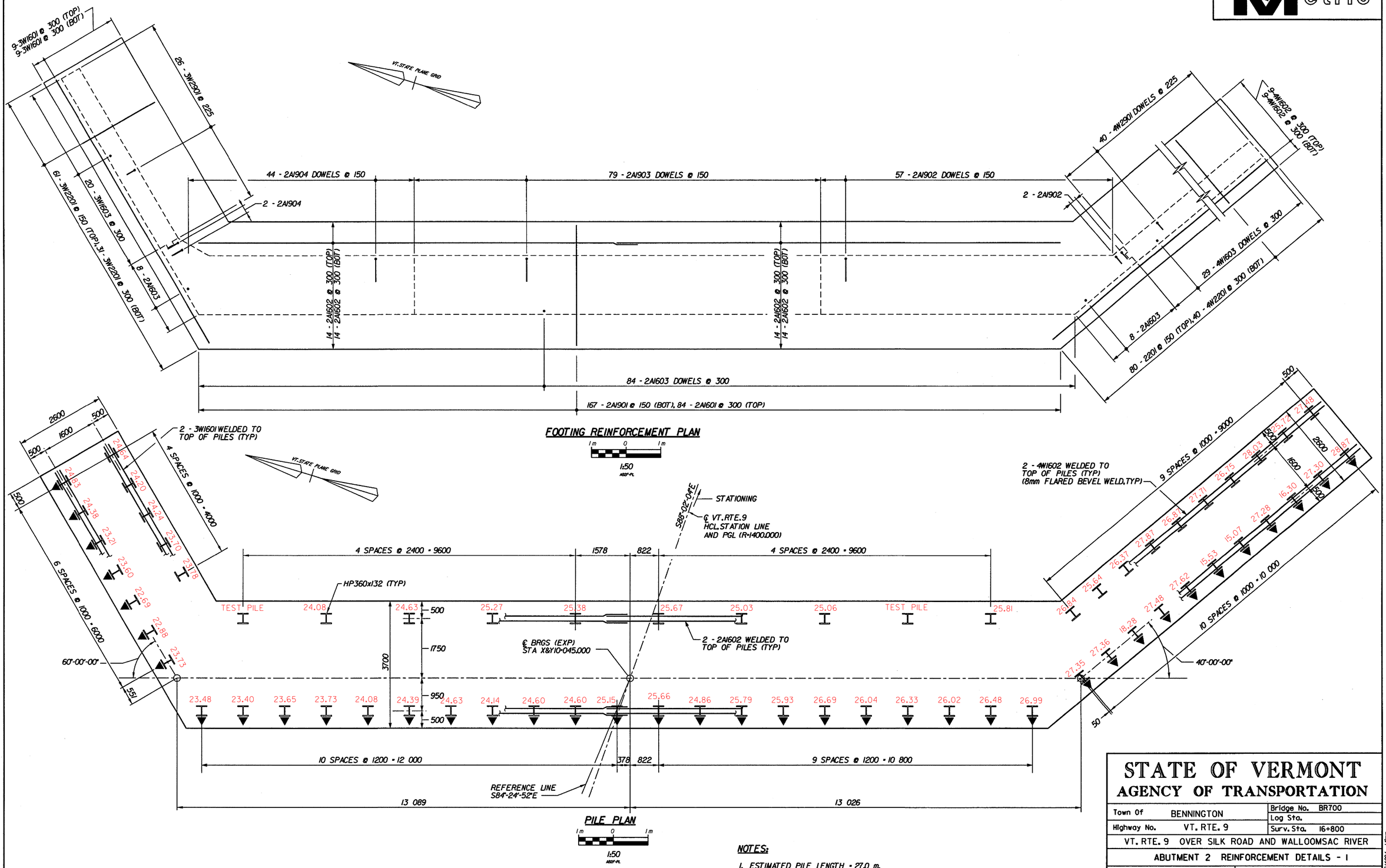
STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
ABUTMENT 2 ELEVATION	
Designed By T. TUTUNJIAN	Drawn by J. HOTALING/B. WEATHERBY
Checked By L. AVERY Date 6/00	Bridge Design Supervisor M. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR746	Sheet 229 OF 385

F:\353\15\BR700\ABELEV\700BR.DWG 150mm

VAOT Metric



NOTES:

1. ESTIMATED PILE LENGTH = 27.0 m.
2. ALL PILES ARE HP360x132.
3. ▼ - INDICATES DIRECTION OF 1 ON 4 BATTER
4. SEE PILE DRIVING AND LOAD TEST NOTES ON SHEET BR755.

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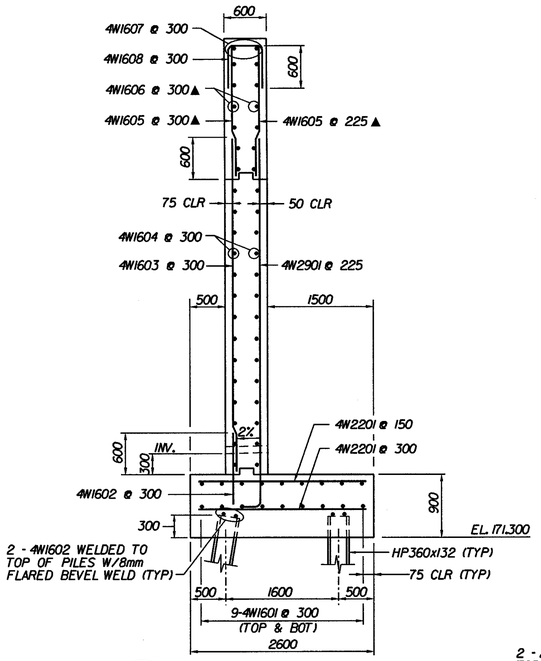
STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
ABUTMENT 2 REINFORCEMENT DETAILS - 1	
Designed By C. TUTUNJIAN	Drawn by J. HOTALING/B. WEATHERBY
Checked By L. AVERY Date 6/00	Bridge Design Supervisor M. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
L.G.C. Info.	
Bridge Sheet No. BR747	Sheet 230 OF 385

U:\SEA\15-BR700\ASBF\SHT\BR747.DGN 10mm

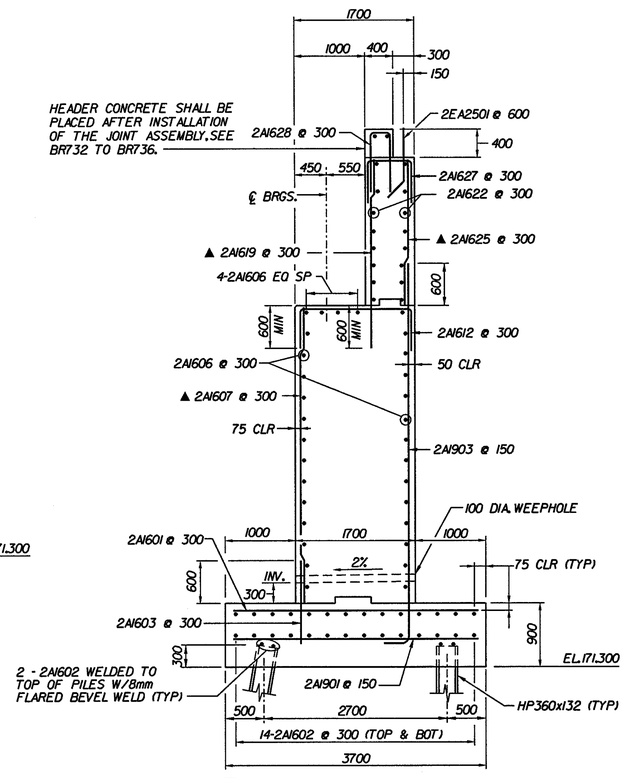


E BR748 **TYPICAL WINGWALL SECTION (WW 4 SHOWN, WW 3 SIMILAR)**

.8 m 0 .8 m

1:40

AB12WSC

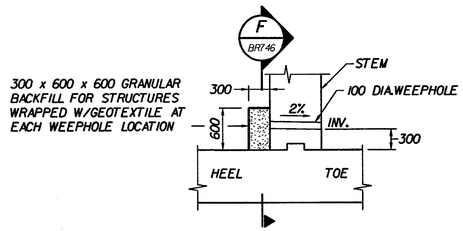


A BR746 **TYPICAL SECTION - ABUTMENT 2**

.8 m 0 .8 m

1:40

A2SECT

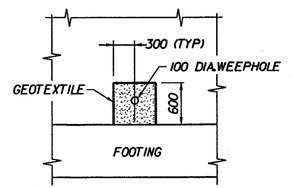


WEEPHOLE DETAIL

.8 m 0 .8 m

1:40

A1 - WEEP



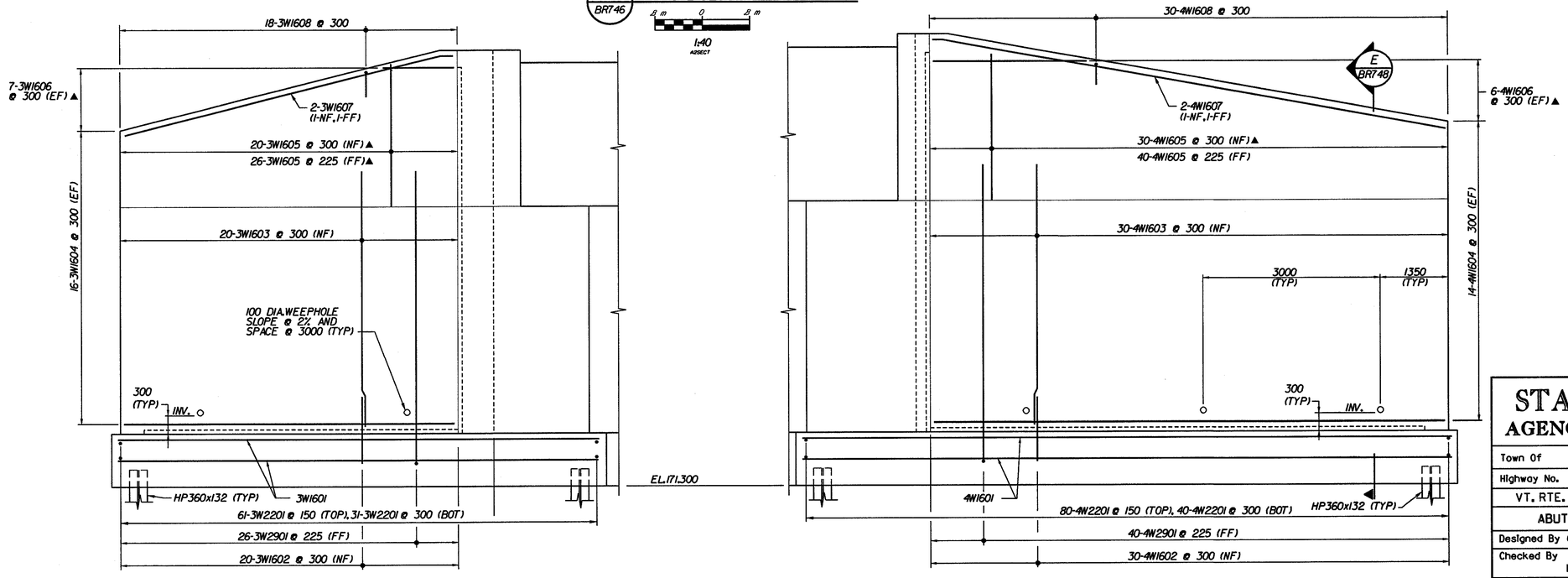
F BR746 **WEEPHOLE SECTION**

.8 m 0 .8 m

1:40

A2 - WEEP

NOTE:
THIS WILL BE PAID FOR UNDER THE "GRANULAR BACKFILL FOR STRUCTURES " ITEM 204.30.



WINGWALL 3

ABUTMENT 2 WINGWALL REINFORCEMENT ELEVATION

.8 m 0 .8 m

1:40

AB12WW

WINGWALL 4

NOTES:

1. NF - DENOTES NEAR FACE
2. FF - DENOTES FAR FACE
3. EF - DENOTES EACH FACE
4. ▲ INDICATES BAR TO BE CUT IN FIELD.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
Highway No. VT. RTE. 9	Log Sta.
	Surv. Sta. 16+800

VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER

ABUTMENT 2 REINFORCEMENT DETAILS - 2

Designed By C. TUTUNJIAN	Drawn by J. HOTALING/B. WEATHERBY
Checked By L. AVERY Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
L.C.C. Info.	
Bridge Sheet No. BR748	Sheet 231 OF 385

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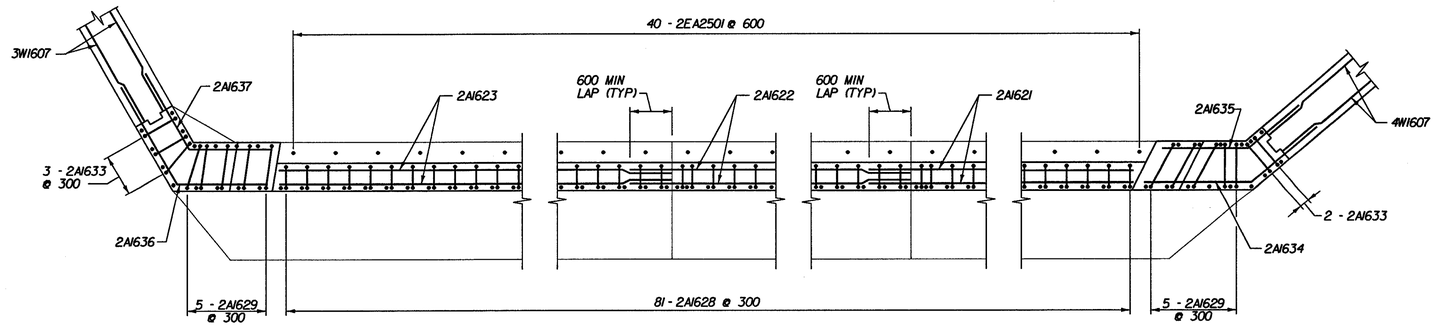
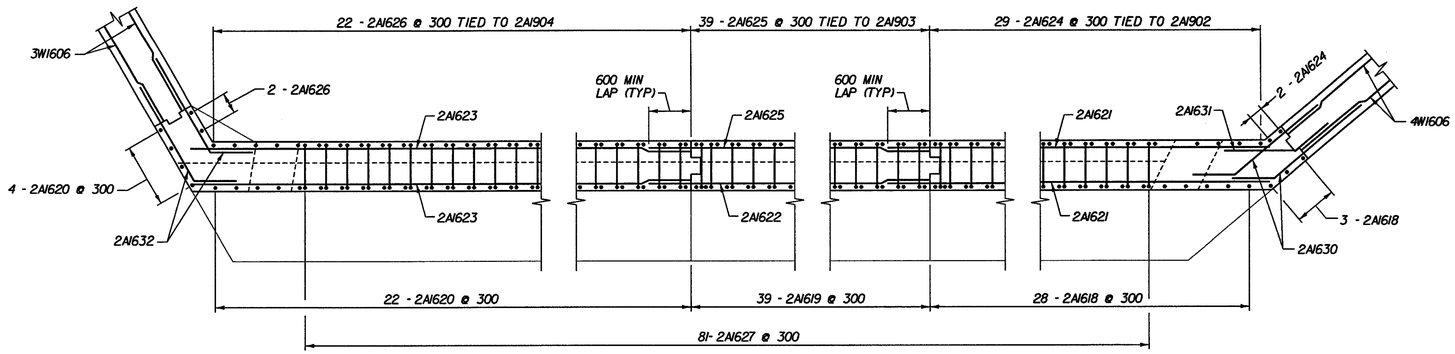
F:\2513\15\BR700\AB2DTSR2.DW\SLM.DGN 1x0mm



B BR746 TOP OF BACKWALL REINFORCEMENT PLAN

.8 m 0 .8 m

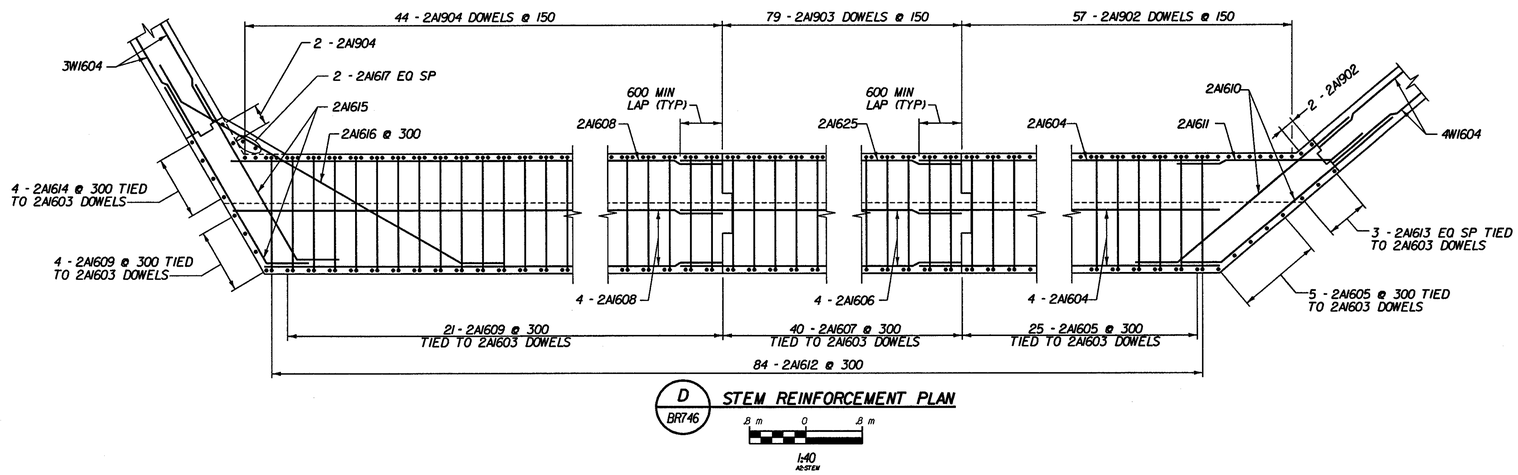
1:40 AS-STEN



C BR746 BACKWALL REINFORCEMENT PLAN

.8 m 0 .8 m

1:40 AS-STEN



D BR746 STEM REINFORCEMENT PLAN

.8 m 0 .8 m

1:40 AS-STEN

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
ABUTMENT 2 REINFORCEMENT DETAILS - 3	
Designed By C. TUTUNJIAN	Drawn by J. D. HOTALING Sr.
Checked By L. AVERY Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR749	Sheet 232 OF 385

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III WINNERS CIRCLE ALBANY, NEW YORK, 12205

Fv:3513/IS/BR700/AB2DTSH3/BWI6.1.99/ 140mm

VT. STATE PLANE GRID

SEE ANCHOR BOLT LAYOUT, THIS SHEET (TYP)

℄ BRGS PIER 1 (EXP) STA 16+804.000 FINISH GRADE EL.186.109

℄ VT. RTE. 9 HCL, PGL & STATION LINE R=1400.000 m

STATIONING

G1 G2 G3 G4 G5 G6 G7 G8

R=1390.200m R=1393.000m R=1395.800m R=1398.600m R=1401.400m R=1404.200m R=1407.000m R=1409.800m

S8°-24'-52"E

REFERENCE LINE

℄ PIER

R=750

825 825 1650

S17°-14'-45"E

SPAN 1 SPAN 2

1562 1562 EQ SP (TYP) EQ SP (TYP)

3272

650 3129 3127 3126 3124 3123 3121 3120 650 GIRDER SPACING

11 594 11 576

PIER 1 PLAN

1m 0 1m

1:50

M42 GALVANIZED ANCHOR BOLT. SEE DETAILS ON SHT. BR730

FACE OF PIER

129 378 378

SKEW 24°-00'-13"

272 272

36 36

MASONRY PLATE 82 x 470 x 900

STATIONING

292

398

℄ GIRDER

FACE OF PIER

PLAN-ANCHOR BOLT LAYOUT (PIER 1)

.4 m 0 .4 m

1:20

ABOUT-3

23 170

39 - IP1605 @ 600

MECHANICAL SPLICE (TYP)

EL.183.438 .464 EL.183.469 .495 EL.183.499 .525 EL.183.531 .557 EL.183.562 .588 EL.183.594 .620 EL.183.626 .652 EL.183.658 .684

IP3601 IP3602 IP3601

1200 MIN. (TYP) 800 (TYP)

IP1603 IP1604 IP1604 IP1603

600 LAP 1100 LAP

IP2504 IP2505

15 - SETS OF 4-IP1606 STIRRUPS @ 150

28 - SETS OF 4-IP1606 STIRRUPS @ 150

28 - SETS OF 4-IP1607 STIRRUPS @ 150

15 - SETS OF 4-IP1607 STIRRUPS @ 150

2000 (TYP)

150

13 - SETS OF 4-IP1606 STIRRUPS @ 75

13 - SETS OF 4-IP1606 STIRRUPS @ 75

13 - SETS OF 4-IP1606 STIRRUPS @ 75

13 - SETS OF 4-IP1607 STIRRUPS @ 75

13 - SETS OF 4-IP1607 STIRRUPS @ 75

13 - SETS OF 4-IP1607 STIRRUPS @ 75

3894 7700 7700 3876

SEE BRIDGE SHEET BR751 FOR COLUMN REINFORCEMENT (TYP)

5000 (TYP)

1750 (TYP) 1500 (TYP) 1750 (TYP)

EL.171.500

EL.170.400

ITEM 501.30, CLASS C CONCRETE. SEE SHEET BR752 FOR DETAILS

SEE BRIDGE SHEET BR751 FOR FOOTING REINFORCEMENT (TYP)

PIER 1 ELEVATION

1m 0 1m

1:50

1650

EL.181.438

5000

1750 1500 1750

END ELEVATION

1m 0 1m

1:50

NOTES:

1. ANCHOR BOLTS SHALL CLEAR ALL REINFORCING STEEL IN THE PIER CAP.
2. MECHANICAL SPLICES ARE SUBSIDIARY TO ITEM 507.15 AND SHALL CONFORM TO SECTION 713.02 OF THE STANDARD SPECIFICATIONS.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800

VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER

PIER 1 PLAN AND ELEVATION

Designed By C. TUTUNJIAN	Drawn by J. HOTALING/B. WEATHERBY
Checked By D. VIENI Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR750	Sheet 233 OF 385

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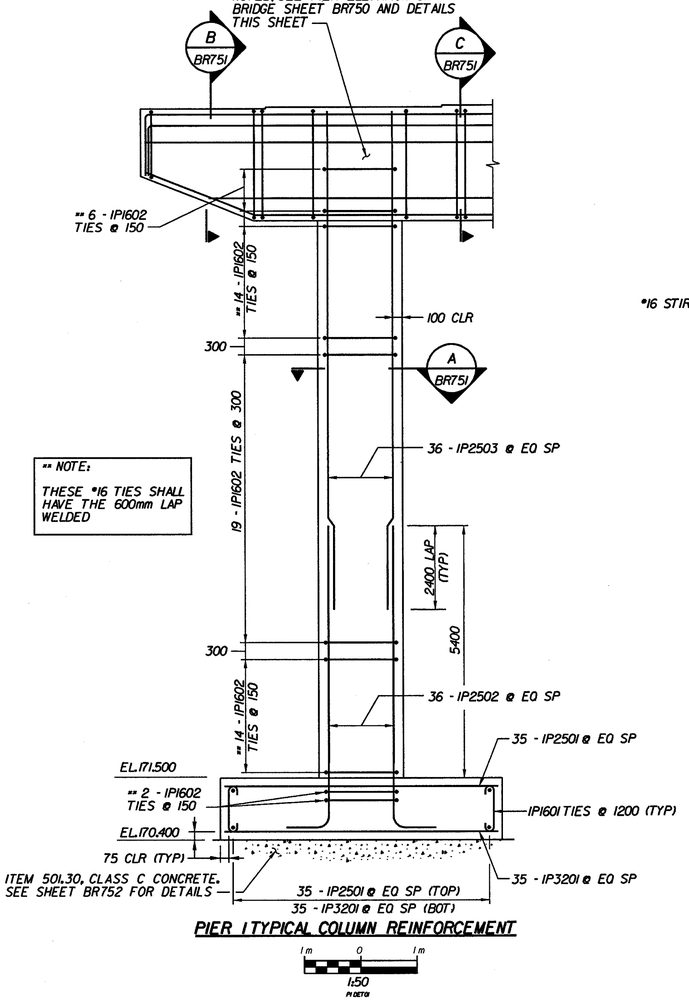
18 WINNERS CIRCLE ALBANY, NEW YORK, 12205

w:\2570\5-BRTOOP_BR700\PLS\BR700_PLAN_ELEV.dgn 6/5/00 8:36:46 AM

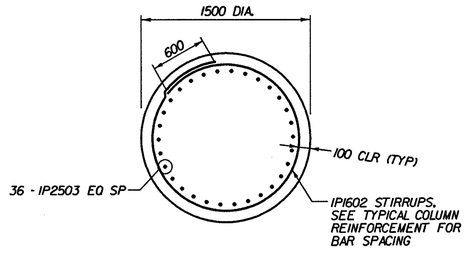
FOR PIER CAP REINFORCING NOT NOTED, SEE PIER ELEVATION ON BRIDGE SHEET BR750 AND DETAILS THIS SHEET



PIER I TYPICAL COLUMN REINFORCEMENT

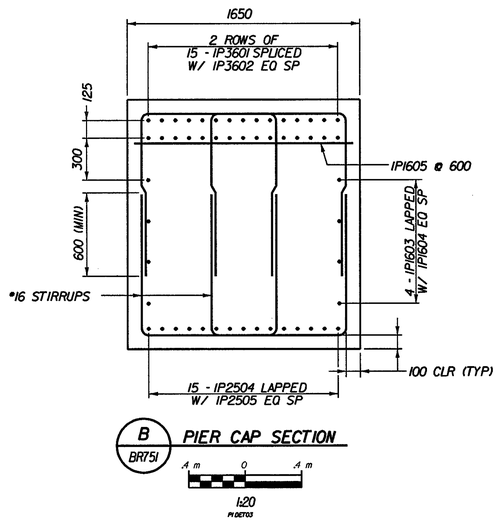
1m 0 1m
1:50
PI_DET01

** NOTE:
THESE #16 TIES SHALL HAVE THE 600mm LAP WELDED



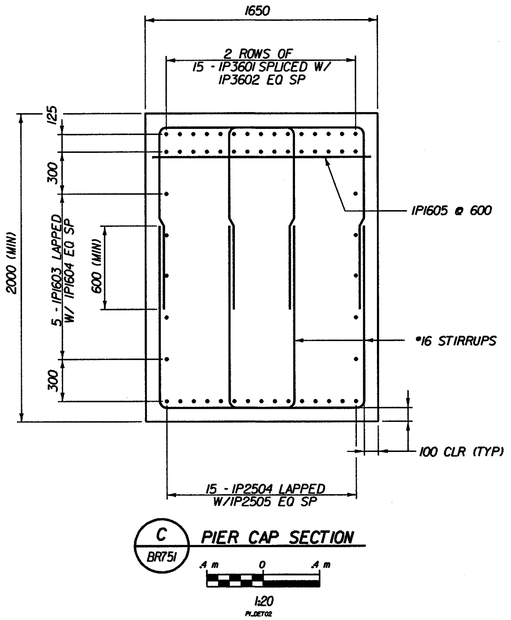
A BR754 **TYPICAL COLUMN SECTION**

.5 m 0 .5 m
1:25
PI_DET04



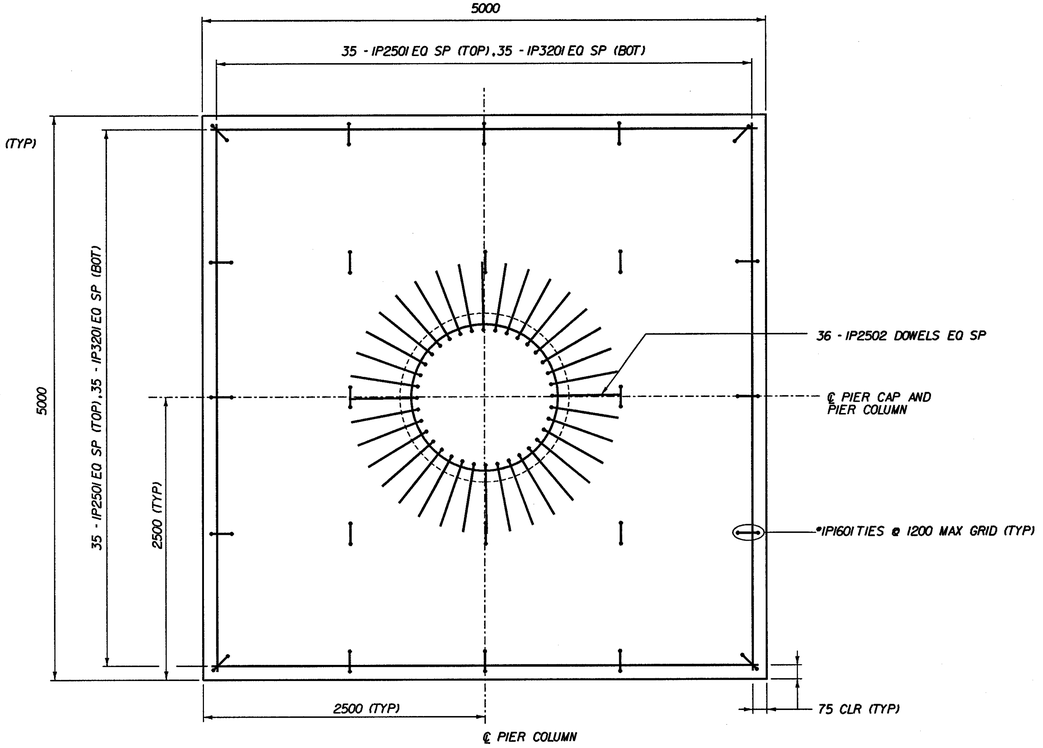
B BR751 **PIER CAP SECTION**

.4 m 0 .4 m
1:20
PI_DET03



C BR751 **PIER CAP SECTION**

.4 m 0 .4 m
1:20
PI_DET02



TYPICAL PIER FOOTING REINFORCEMENT PLAN

.5 m 0 .5 m
1:25
PI_DET05

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800

VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER

PIER I SECTIONS AND DETAILS

Designed By C. TUTUNJIAN	Drawn by J. HOTALING/B. WEATHERBY
Checked By D. VIENI Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR751	Sheet 234 OF 385

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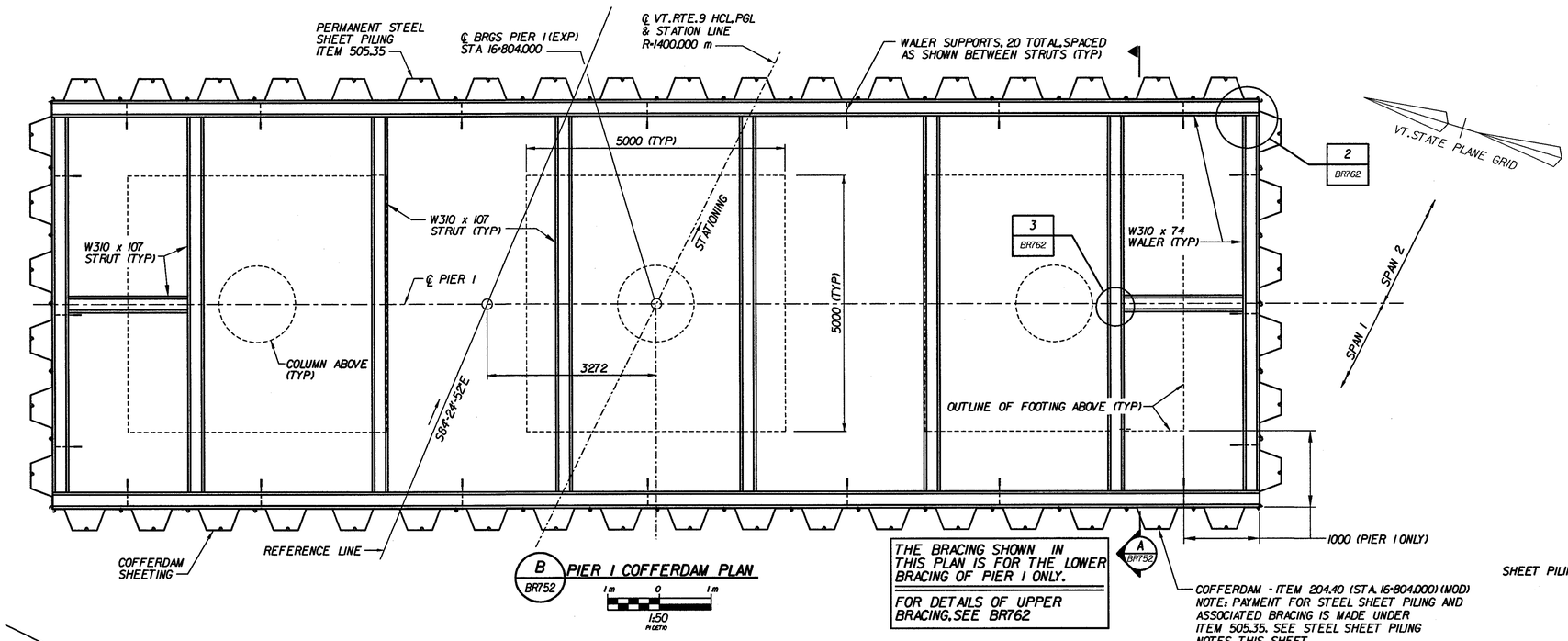
18 WINNERS CIRCLE ALBANY, NEW YORK, 12205

U:\SIVS\B\BR700\PLSHTS\25200\BW14

Metric (MDOT)



THE BRACING SHOWN IN THIS PLAN IS FOR THE LOWER BRACING OF PIER 1 ONLY.

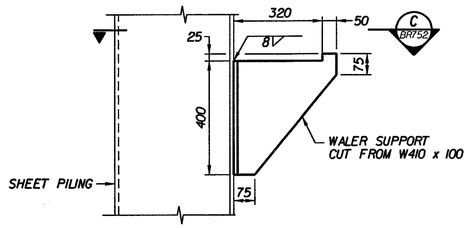
FOR DETAILS OF UPPER BRACING, SEE BR762

STEEL SHEET PILING NOTES:

1. ALL STRUCTURAL STEEL SHALL BE AASHTO M270M GRADE 345.
2. SECTION MODULUS REQUIRED FOR SHEET PILING IS 950 x 10^3 mm³ /METER.
3. THE COST FOR WALERS, STRUTS, TREMIE ANCHORAGES, AND WALER SUPPORTS SHALL BE SUBSIDARY TO ITEM 505.35 - PERMANENT STEEL SHEET PILING.
4. THE COST FOR INSTALLATION AND REMOVAL OF STRUTS, WALERS AND SUPPORTS SHALL BE SUBSIDIARY TO ITEM 505.35 - PERMANENT STEEL SHEET PILING.

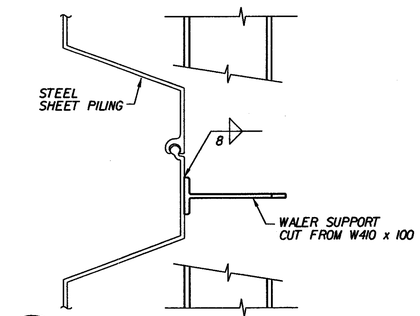
EXCAVATION NOTE:

NO EXCAVATION BELOW ELEVATION 168.000 SHALL BE PERFORMED UNTIL THE INSTALLATION OF BRACING AT ELEVATION 168.500 IS COMPLETED.



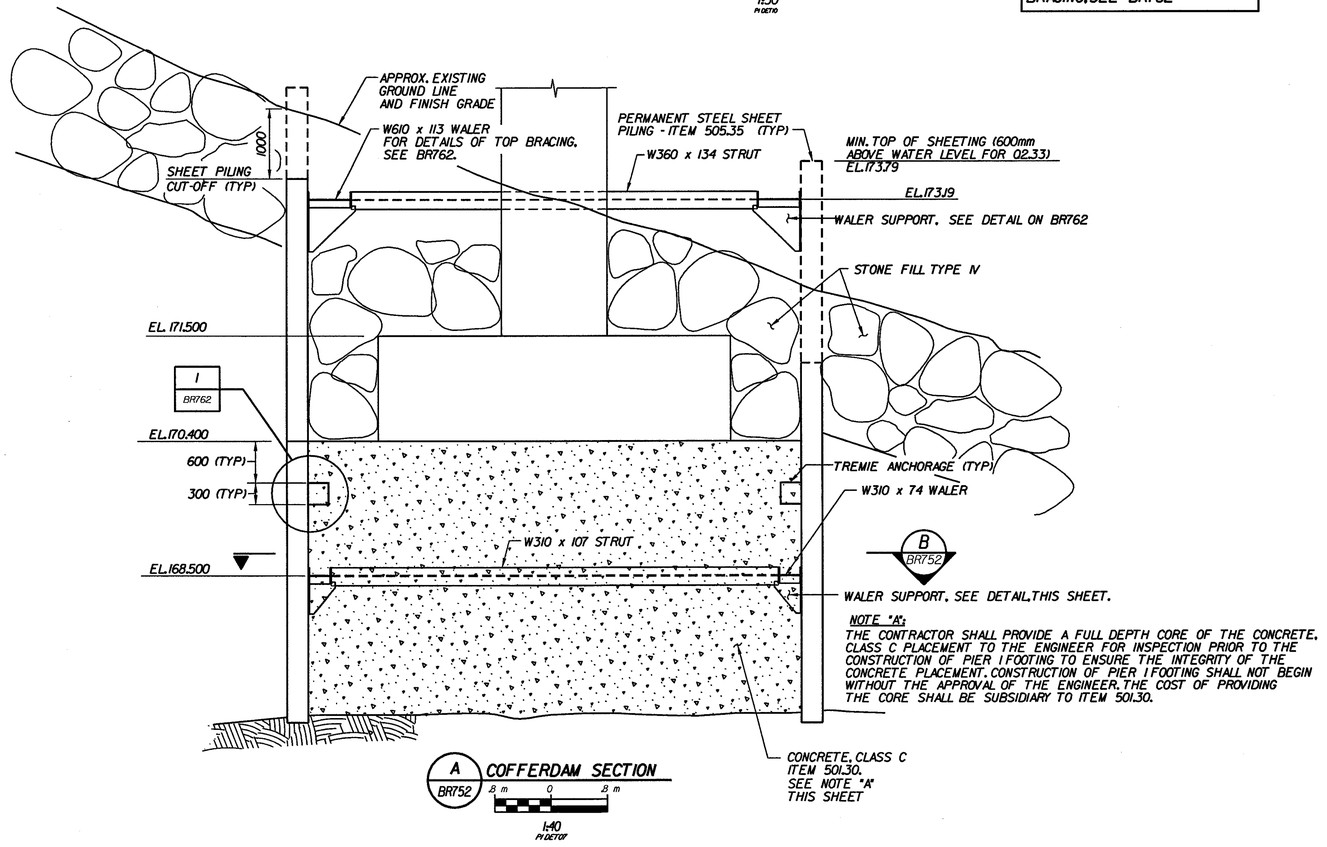
TYPICAL WALER SUPPORT DETAIL FOR W310 x 74 WALER

2 m 0 2 m
1:10 PL DETOG



C BR752 TOP SECTION VIEW (TYPICAL WALER) FOR W310 x 74 WALER

2 m 0 2 m
1:10 PL DETOG



STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
Highway No. VT. RTE. 9	Log Sta.
	Surv. Sta. 16+800

VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER

PIER 1 COFFERDAM DETAILS

Designed By C. TUTUNJIAN	Drawn by J. HOTALING/B. WEATHERBY
Checked By D. VIENI Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.J. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR752	Sheet 235 OF 385

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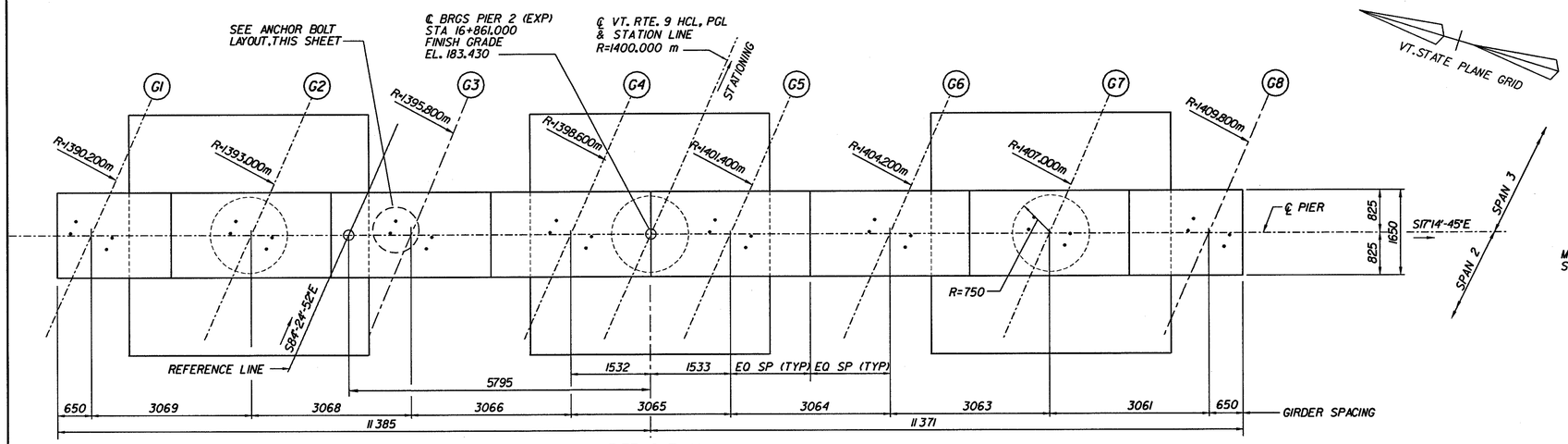
11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

FJ-3513/15/BR700/PLSH103/BW/6.2.00/NI

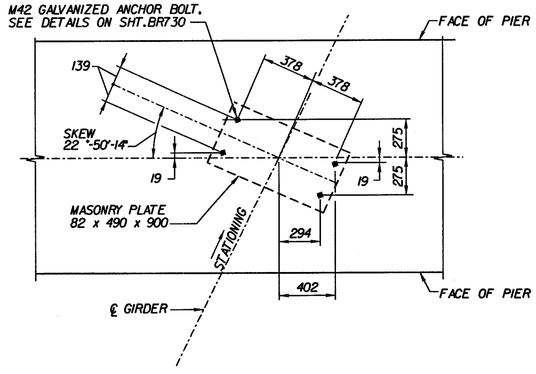
Metric M401



PIER 2 PLAN

1m 0 1m

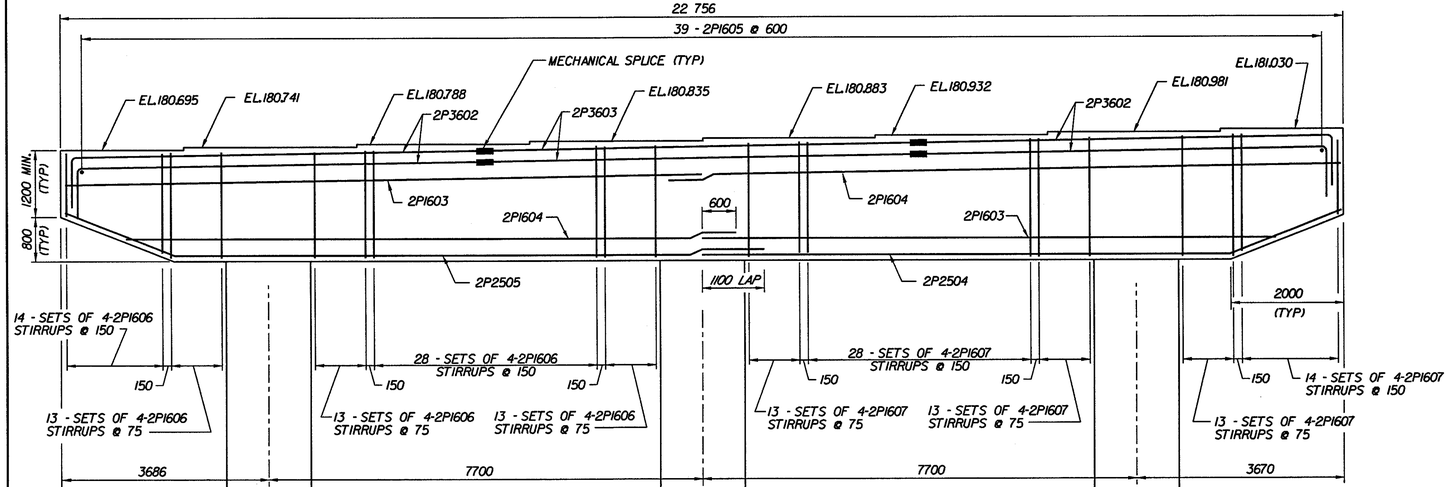
1:50



PLAN-ANCHOR BOLT LAYOUT (PIER 2)

.4m 0 .4m

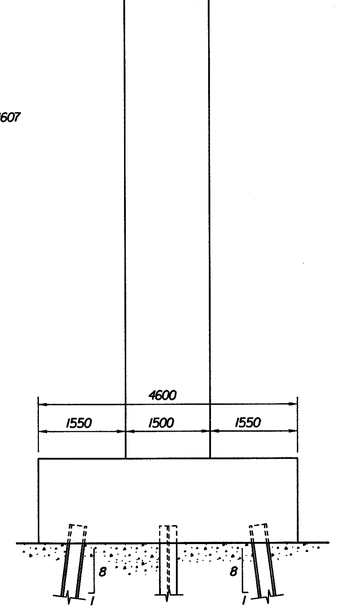
1:20



PIER 2 ELEVATION

1m 0 1m

1:50



END ELEVATION

1m 0 1m

1:50

NOTES:

1. ANCHOR BOLTS SHALL CLEAR ALL REINFORCING STEEL IN THE PIER CAP.
2. MECHANICAL SPLICES ARE SUBSIDIARY TO ITEM 507.15 AND SHALL CONFORM TO SECTION 713.02 OF THE STANDARD SPECIFICATIONS.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700 / Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
PIER 2 PLAN AND ELEVATION	
Designed By C. TUTUNJIAN	Drawn by J. D. HOTALING/B. WEATHERBY
Checked By D. VIENI Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(11) C/4
I.G.C. Info.	
Bridge Sheet No. BR753	Sheet 236 OF 385

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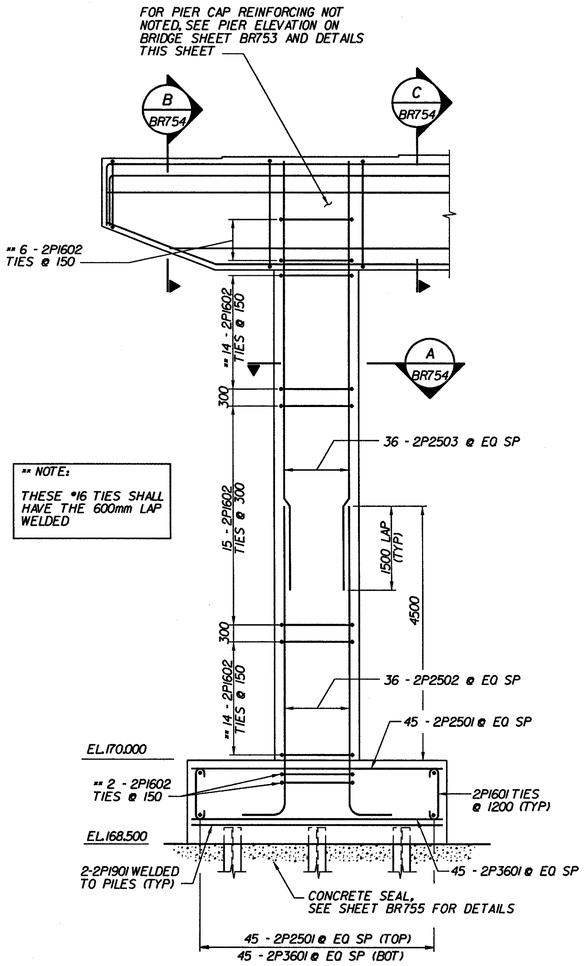
11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

LV 357.15/BR700/P2_SHT0163.DGN 8/1/00



** NOTE:

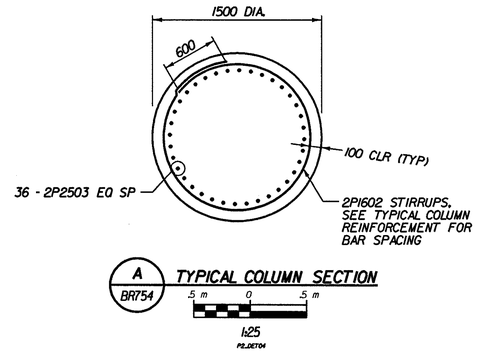
THESE #16 TIES SHALL HAVE THE 600mm LAP WELDED

PIER 2 TYPICAL COLUMN REINFORCEMENT

1m 0 1m

1:50

P2_DET01

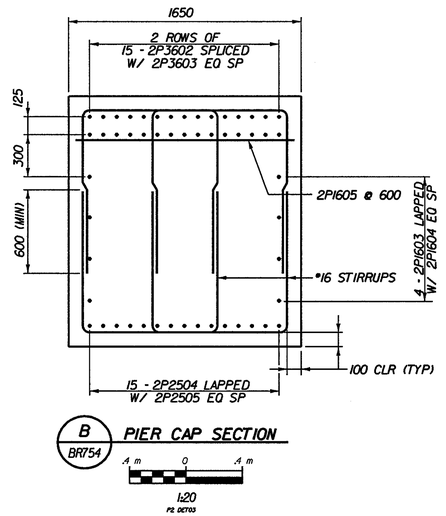


A BR754 **TYPICAL COLUMN SECTION**

.5 m 0 .5 m

1:25

P2_DET04

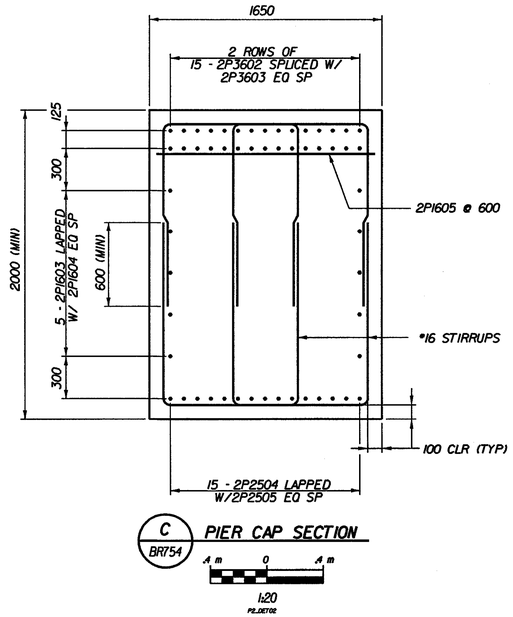


B BR754 **PIER CAP SECTION**

.4 m 0 .4 m

1:20

P2_DET03

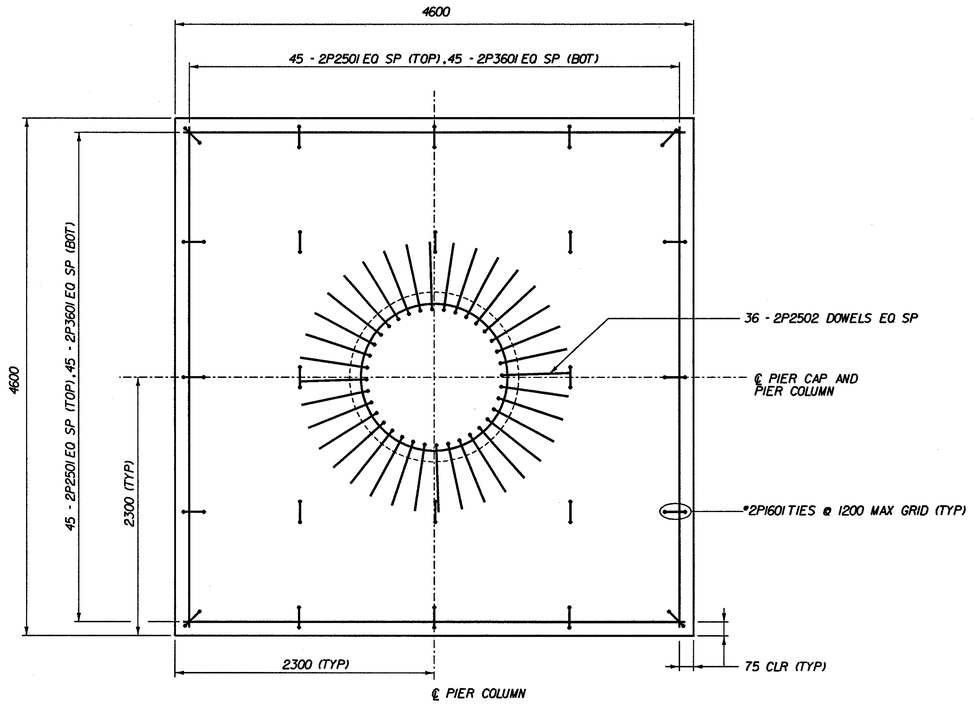


C BR754 **PIER CAP SECTION**

.4 m 0 .4 m

1:20

P2_DET02



TYPICAL PIER FOOTING REINFORCEMENT PLAN

.5 m 0 .5 m

1:25

P2_DET05

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
Highway No. VT. RTE. 9	Log Sta.
	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
PIER 2 SECTIONS AND DETAILS	
Designed By C. TUTUNJIAN	Drawn by J. D. HOTALING Sr.
Checked By D. VIENI Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR754	Sheet 237 OF 385

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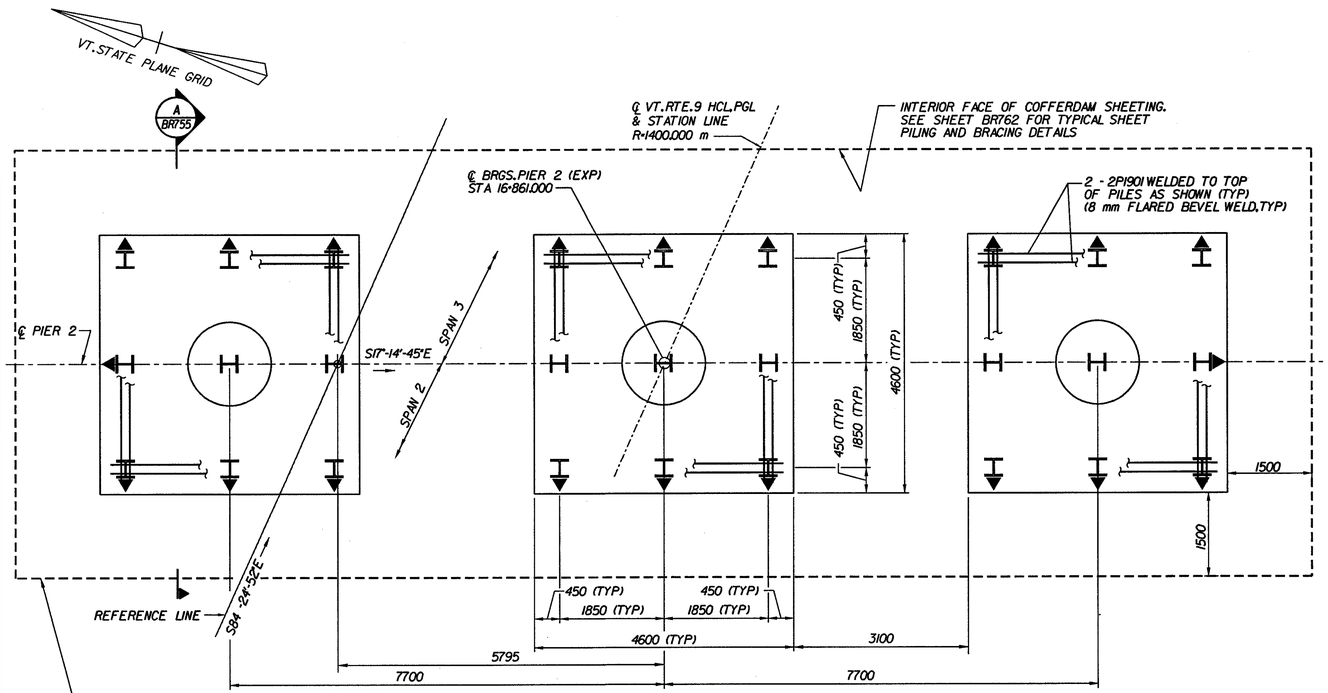
VAOT Metric

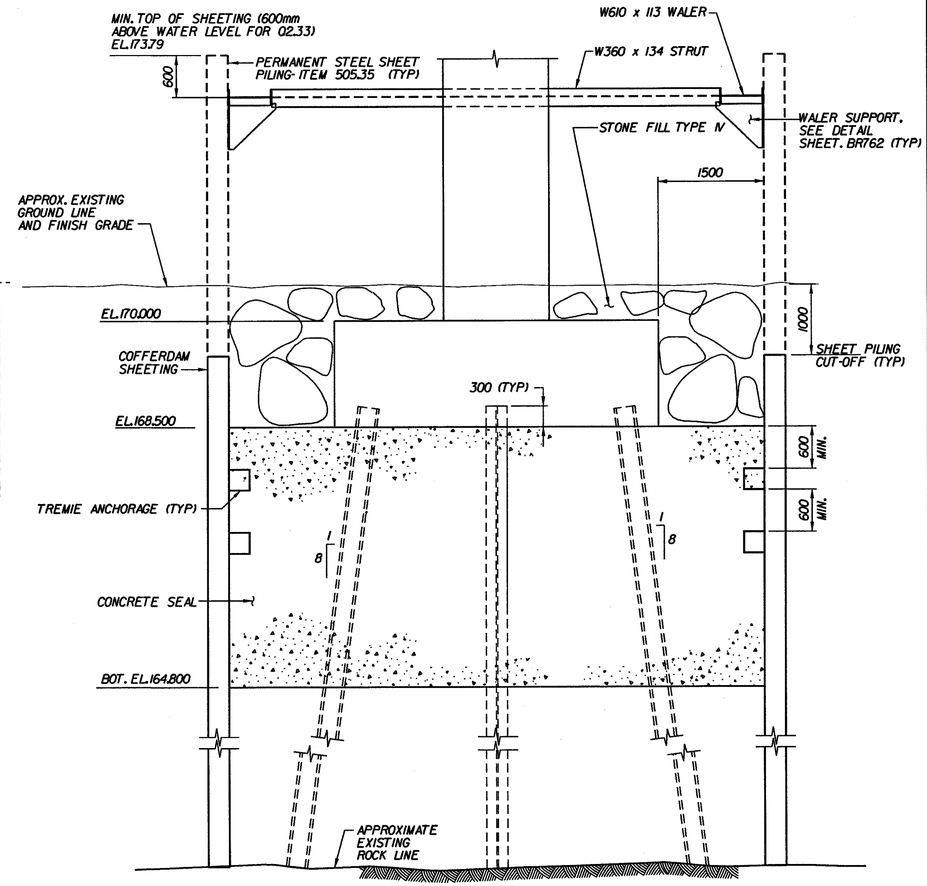


PIER 2 COFFERDAM & PILE PLAN

1m 0 1m

1:50

P2 DET05

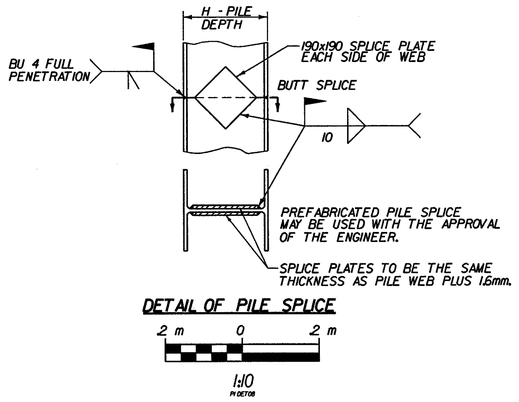


A BR755 **TYPICAL COFFERDAM SECTION**

.8 m 0 .8 m

1:40

P2 DET07



DETAIL OF PILE SPLICE

2 m 0 2 m

1:10

P1 DET08

NOTES:

1. ESTIMATED PILE LENGTH = 9.0 m. ALL PILES SHALL HAVE AN ULTIMATE CAPACITY OF 2.75 TIMES THE DESIGN LOAD OR 1300 kN. PILES SHALL BE DRIVEN TO REFUSAL.
2. ALL PILES ARE HP360x132.
3. ▼ INDICATES DIRECTION OF 1 ON 8 BATTER.

PILE DRIVING AND LOAD TEST NOTES:

1. PILES SHALL BE DRIVEN TO REFUSAL ON BEDROCK AND SHALL ACHIEVE AN ULTIMATE CAPACITY OF AT LEAST 2.75 TIMES THE ALLOWABLE DESIGN LOAD
2. REFUSAL SHALL INITIALLY BE DEFINED AS A DRIVING RESISTANCE OF 15 BLOWS PER 25 mm OF PENETRATION.
3. PRIOR TO DRIVING PILES, A WAVE EQUATION ANALYSIS SHALL BE PERFORMED FOR THE PROPOSED HAMMER AND CUSHIONS TO VERIFY THAT THE SPECIFIED ULTIMATE CAPACITY CAN BE ACHIEVED AND THAT THE PILE IS NOT OVERSTRESSED DURING FINAL DRIVING. A WAVE EQUATION ANALYSIS SHALL BE PERFORMED FOR EACH SUBSTRUCTURE.
4. DRIVING STRESSES AS DETERMINED BY THE WAVE EQUATION ANALYSIS SHALL NOT EXCEED 90 PERCENT OF THE YIELD STRESS OF THE PILE.
5. A MINIMUM OF TWO PILES AT EACH SUBSTRUCTURE SHALL BE DYNAMICALLY TESTED TO VERIFY THAT THE PILES ARE DRIVEN TO AN ULTIMATE CAPACITY EQUAL TO 2.75 TIMES THE ALLOWABLE DESIGN LOAD AND THAT THEY ARE NOT OVERSTRESSED DURING DRIVING.
6. THE RESULTS OF THE DYNAMIC TESTING SHALL BE USED TO VERIFY OR ADJUST THE INITIAL REFUSAL CRITERION. THE REVISED DRIVING CRITERION SHALL BE USED FOR ALL SUBSEQUENT PILES.
7. A CAPWAP ANALYSIS SHALL BE PERFORMED FOR EACH TEST PILE TO VERIFY FIELD RESULTS.
8. RESTRIKING IS REQUIRED OF ALL TEST PILES. THE MINIMUM TIME BETWEEN THE END OF INITIAL DRIVING AND RESTRIKING SHALL BE 48 HOURS.

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STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
PIER 2 PILE PLAN AND COFFERDAM DETAILS	
Designed By C. TUTUNJIAN	Drawn by J. HOTALING, B. WEATHERBY
Checked By D. VIENI Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR755	Sheet 238 OF 385

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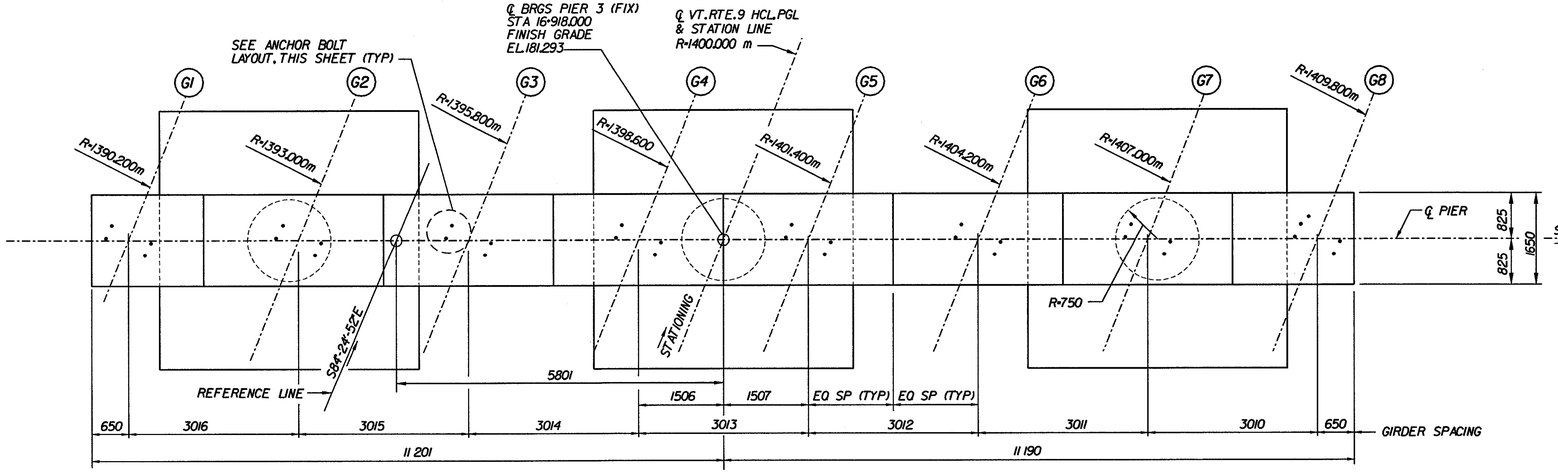
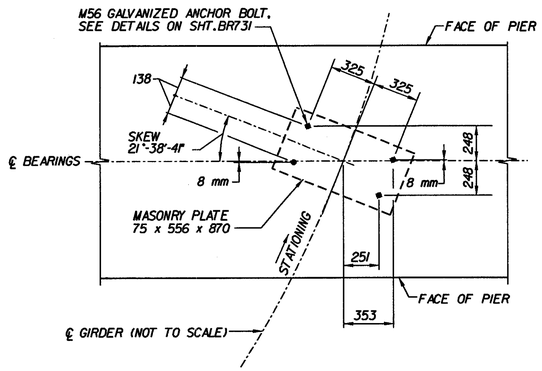


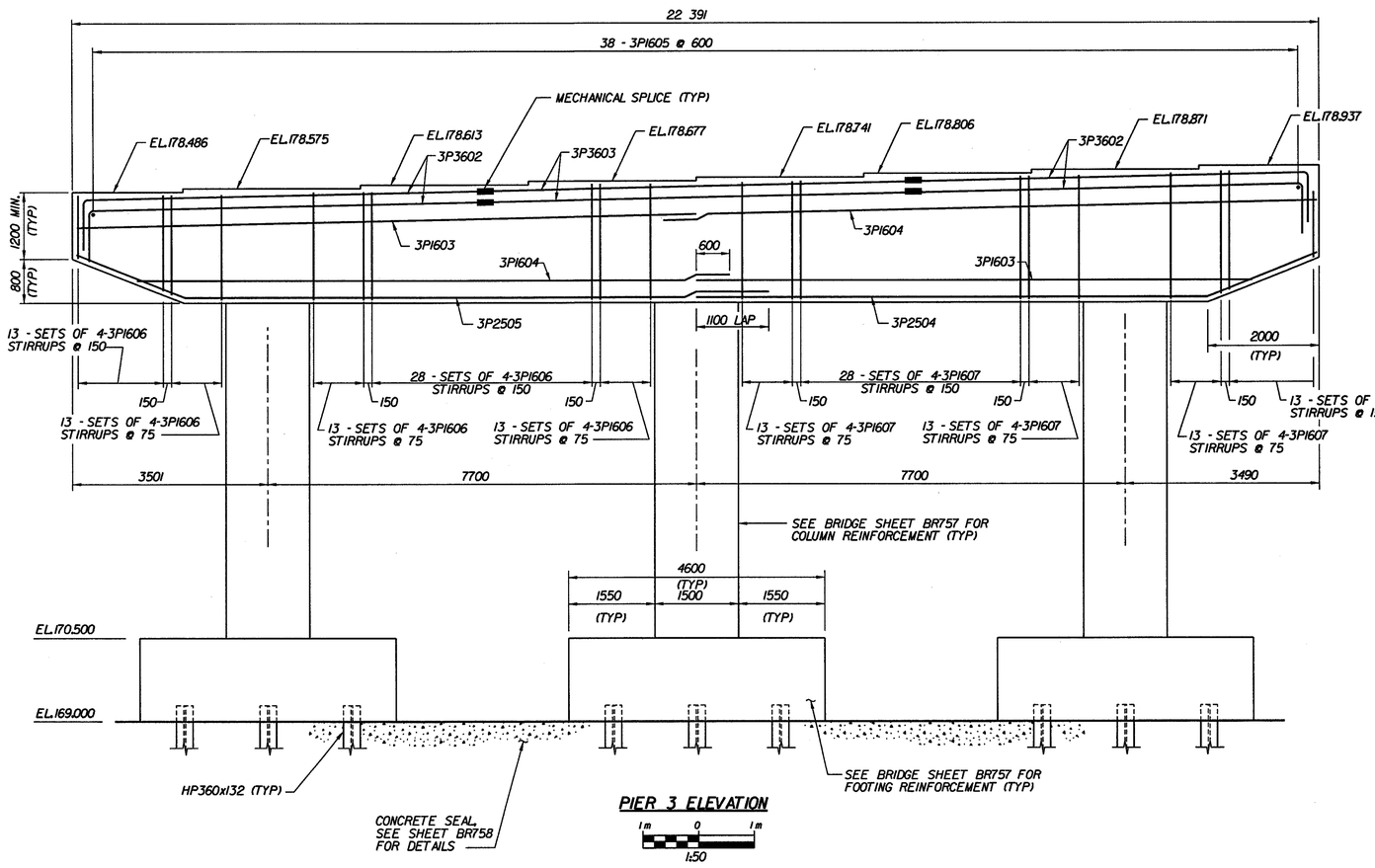
PIER 3 PLAN

1m 0 1m
1:50



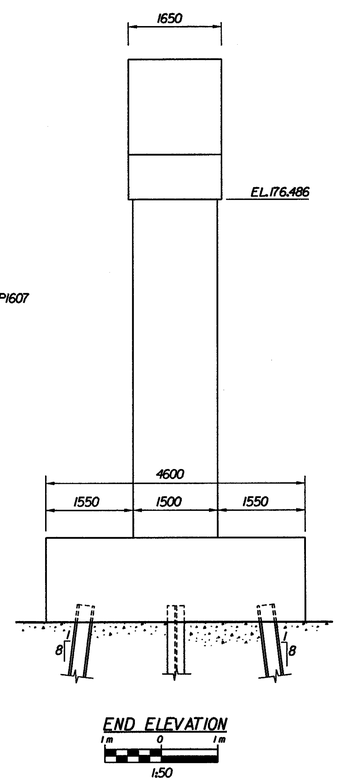
PLAN-ANCHOR BOLT LAYOUT (PIER 3)

1m 0 1m
1:20



PIER 3 ELEVATION

1m 0 1m
1:50



END ELEVATION

1m 0 1m
1:50

NOTES:

1. ANCHOR BOLTS SHALL CLEAR ALL REINFORCING STEEL IN THE PIER CAP.
2. MECHANICAL SPLICES ARE SUBSIDIARY TO ITEM 507.15 AND SHALL CONFORM TO SECTION 713.02 OF THE STANDARD SPECIFICATIONS.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800

VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER

PIER 3 PLAN AND ELEVATION

Designed By C. TUTUNJIAN	Drawn by J. HOTALING/B. WEATHERBY
Checked By D. VIENI Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.J. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR756	Sheet 239 OF 385

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11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

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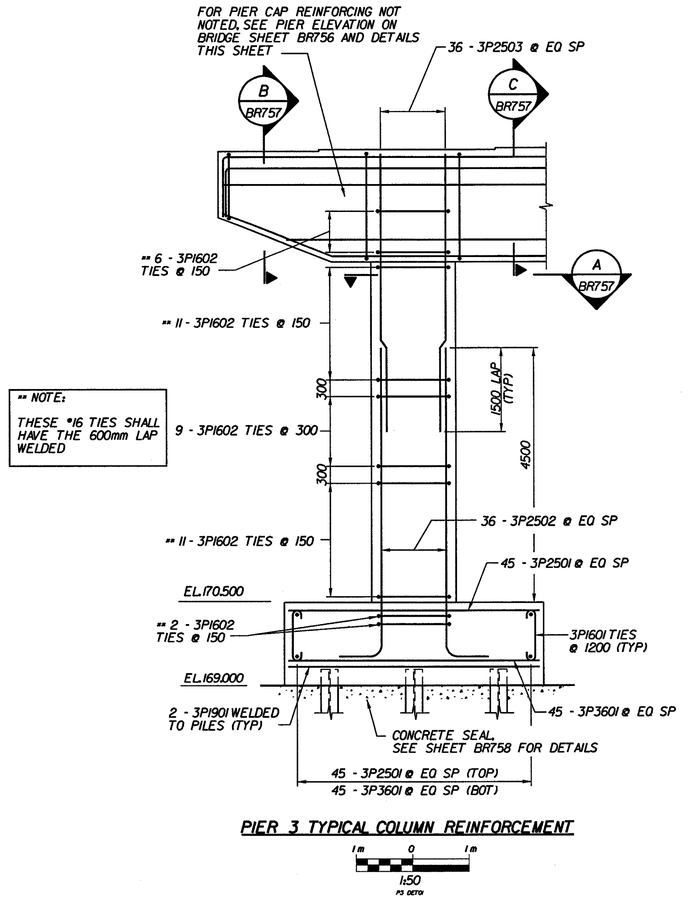
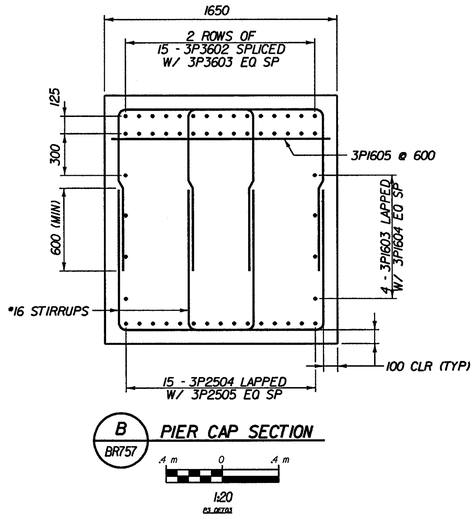


PIER 3 TYPICAL COLUMN REINFORCEMENT

1m 0 1m

1:50

P3_DET01

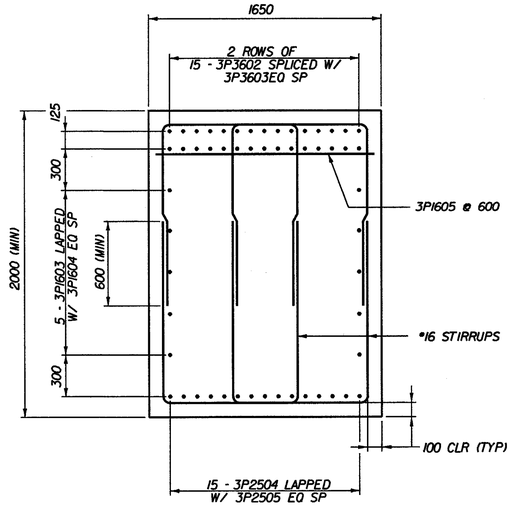


B BR757 PIER CAP SECTION

.4m 0 .4m

1:20

P3_DET01



C BR757 PIER CAP SECTION

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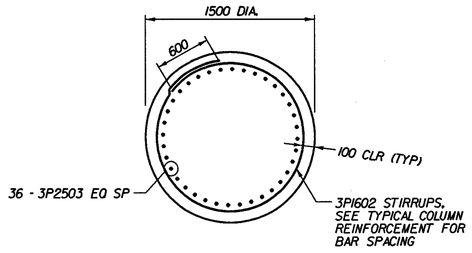
1:20

P3_DET02

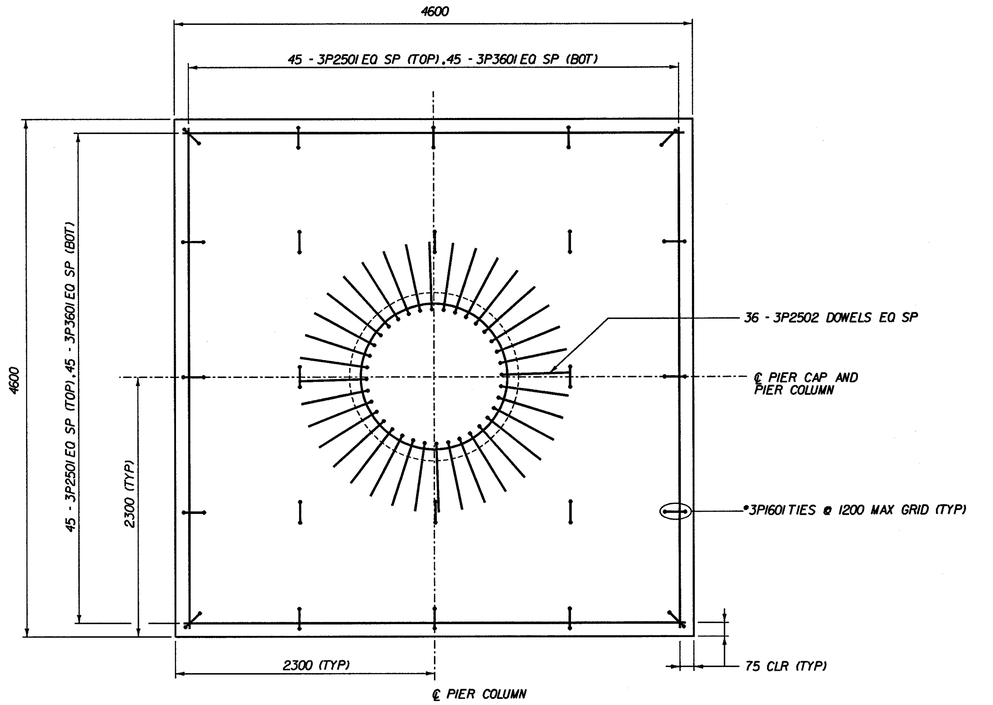


A BR757 TYPICAL COLUMN SECTION

.5m 0 .5m

1:25

P3_DET04



TYPICAL PIER FOOTING REINFORCEMENT PLAN

.5m 0 .5m

1:25

P3_DET05

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
PIER 3 SECTIONS AND DETAILS	
Designed By C. TUTUNJIAN	Drawn by J. HOTALING/B. WEATHERBY
Checked By D. VIENI Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR757	Sheet 240 OF 385

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3 WINNERS CIRCLE ALBANY, NEW YORK, 12205

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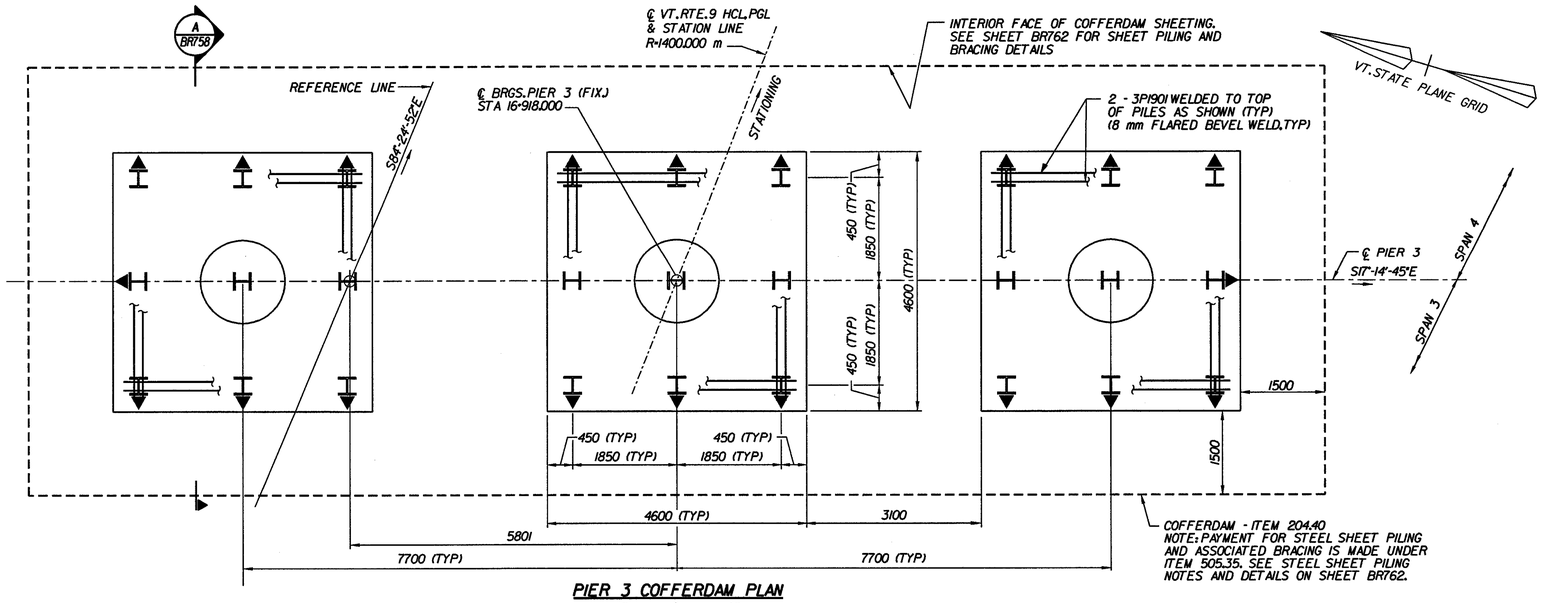
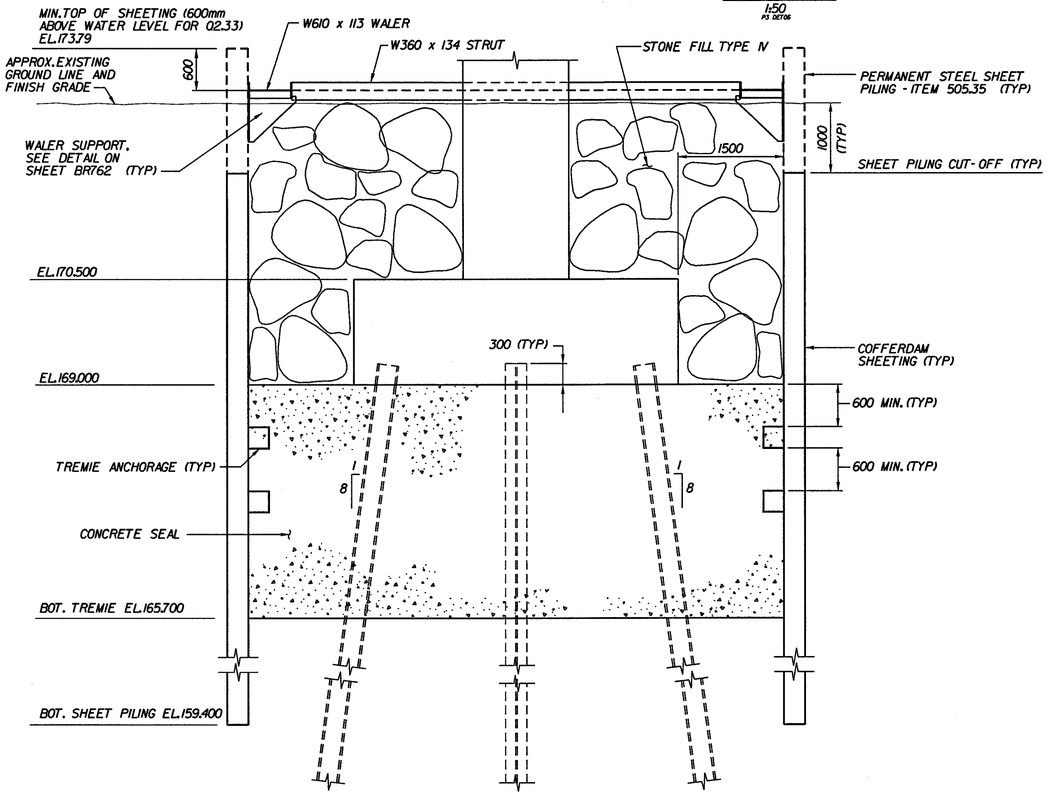


PIER 3 COFFERDAM PLAN

1m 0 1m

1:50
P3 DET06



A BR758 TYPICAL COFFERDAM SECTION

.8m 0 .8m

1:40
P3 DET07

NOTES:

1. ESTIMATED PILE LENGTH = 13.0 m. ALL PILES SHALL HAVE AN ULTIMATE CAPACITY OF 2.75 TIMES THE DESIGN LOAD OR 1300 kN. PILES SHALL BE DRIVEN TO REFUSAL.
2. ALL PILES ARE HP360x132.
3. FOR PILE SPLICE DETAIL, SEE BRIDGE SHEET BR755.
4. ↧ INDICATES DIRECTION OF 1 ON 8 BATTER.
5. SEE PILE DRIVING AND LOAD TEST NOTES ON SHEET BR755.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
PIER 3 PILE PLAN AND COFFERDAM DETAILS	
Designed By C. TUTUNJIAN	Drawn by J. HOTALING\B. WEATHERBY
Checked By D. VIENI Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.J. 0146(1)
I.G.C. Info.	
Bridge Sheet No. BR758	Sheet 241 OF 385

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11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

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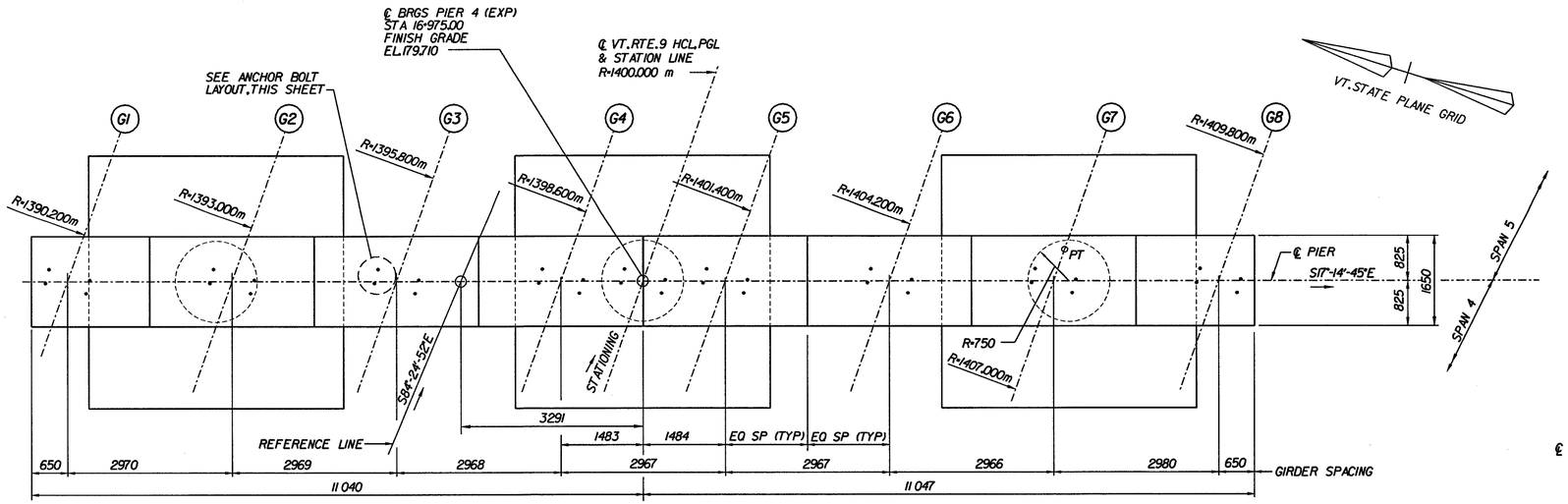
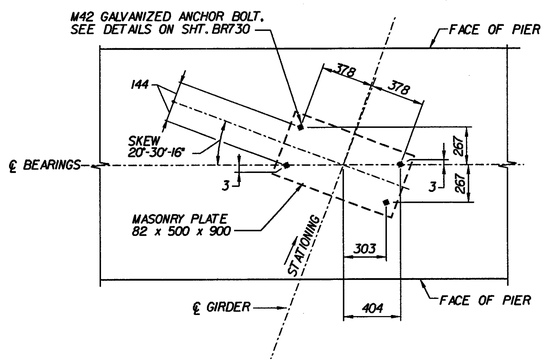


PIER 4 PLAN

1m 0 1m

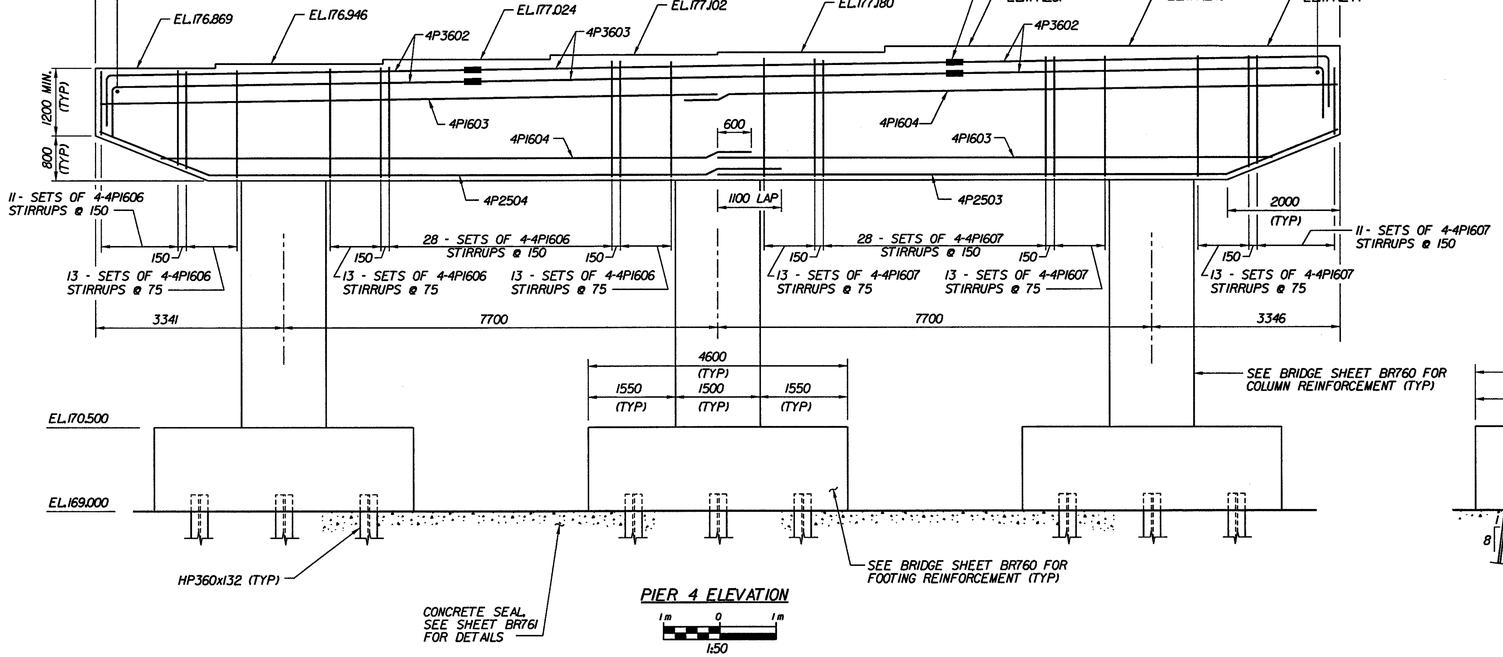
1:50



PLAN-ANCHOR BOLT LAYOUT (PIER 4)

.4m 0 .4m

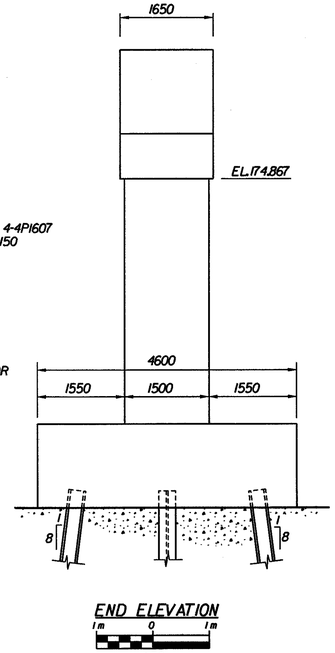
1:20



PIER 4 ELEVATION

1m 0 1m

1:50



END ELEVATION

1m 0 1m

1:50

NOTES:

1. ANCHOR BOLTS SHALL CLEAR ALL REINFORCING STEEL IN THE PIER CAP.
2. MECHANICAL SPLICES ARE SUBSIDIARY TO ITEM 507.15 AND SHALL CONFORM TO SECTION 713.02 OF THE STANDARD SPECIFICATIONS.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
Highway No. VT. RTE. 9	Log Sta.
	Surv. Sta. 16+800

VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER

PIER 4 PLAN AND ELEVATION

Designed By C. TUTUNJIAN	Drawn by J. HOTALING/B. WEATHERBY
Checked By D. VIENI Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.J. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR759	Sheet 242 OF 385

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11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

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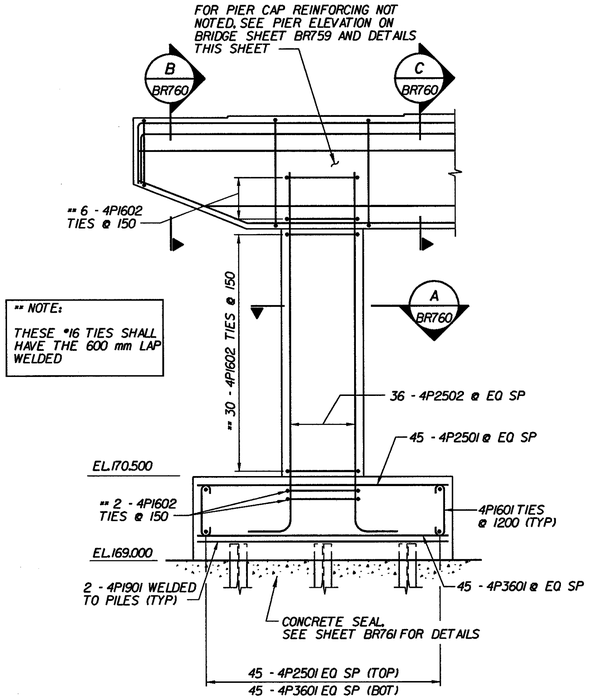
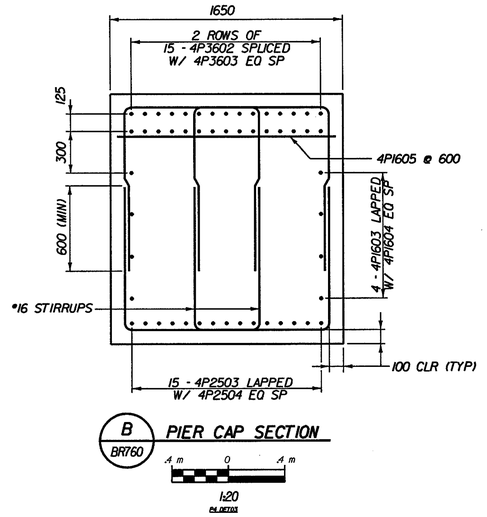


PIER 4 TYPICAL COLUMN REINFORCEMENT

1m 0 1m

1:50

P4_DET01

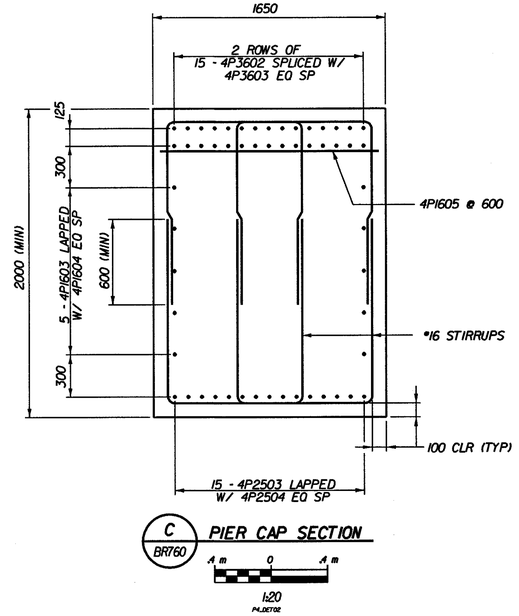


B BR760 PIER CAP SECTION

.4m 0 .4m

1:20

P4_DET03

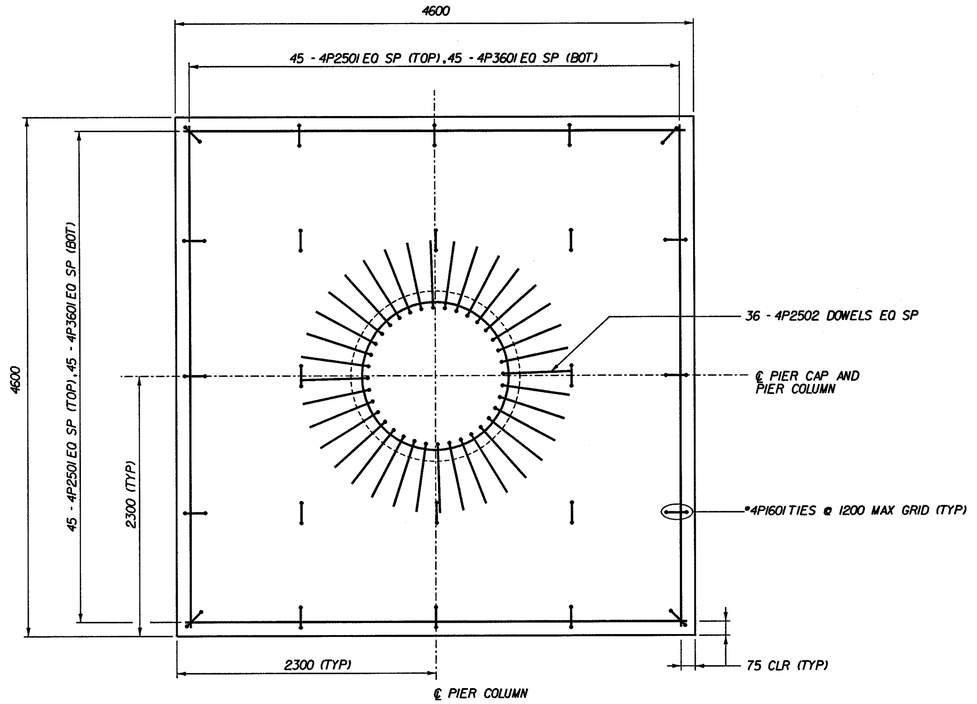


C BR760 PIER CAP SECTION

.4m 0 .4m

1:20

P4_DET02

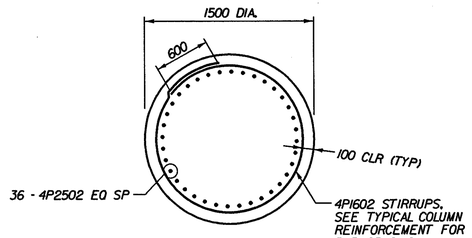


TYPICAL PIER FOOTING REINFORCEMENT PLAN

.5m 0 .5m

1:25

P4_DET05



A BR760 TYPICAL COLUMN SECTION

.5m 0 .5m

1:25

P4_DET04

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800

VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER

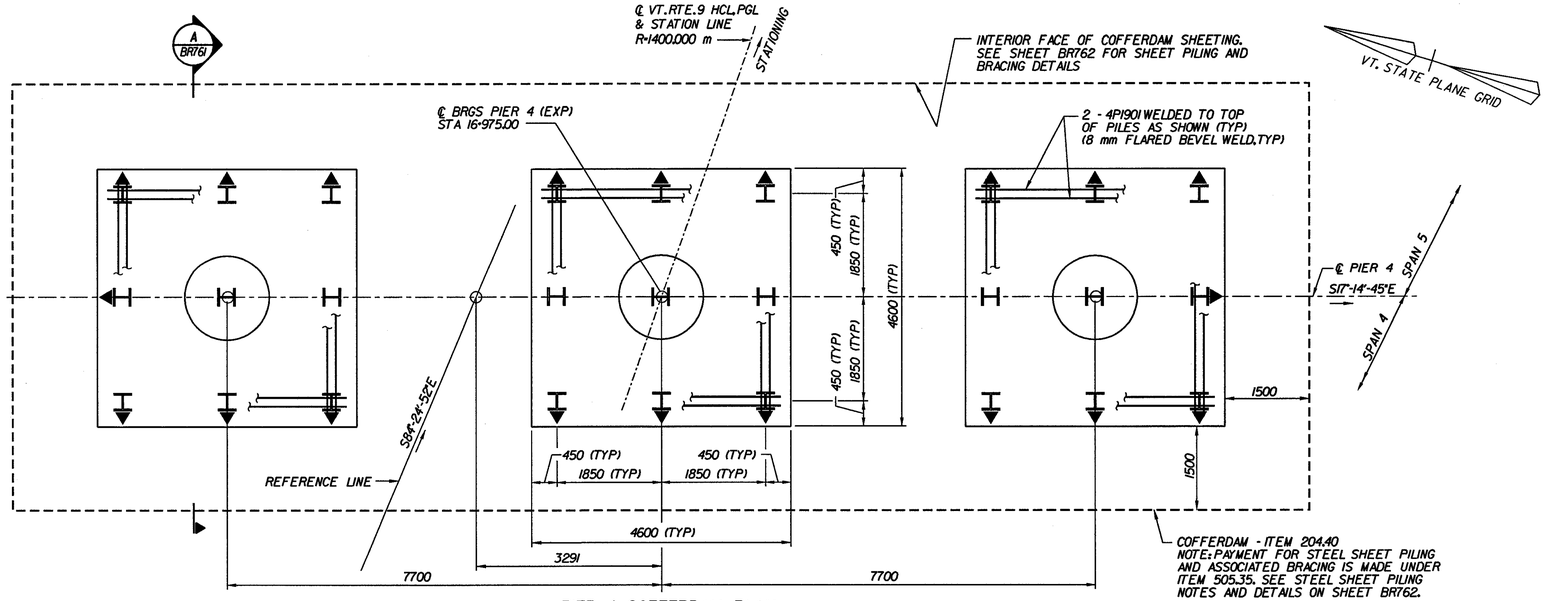
PIER 4 SECTIONS AND DETAILS

Designed By C. TUTUNJIAN	Drawn by J. HOTALING/B. WEATHERBY
Checked By D. VIENI Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR760	Sheet 243 OF 385

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
III WINNERS CIRCLE ALBANY, NEW YORK, 12205

U:\357\15\BR700\P4_SHT02\BM\252001.M

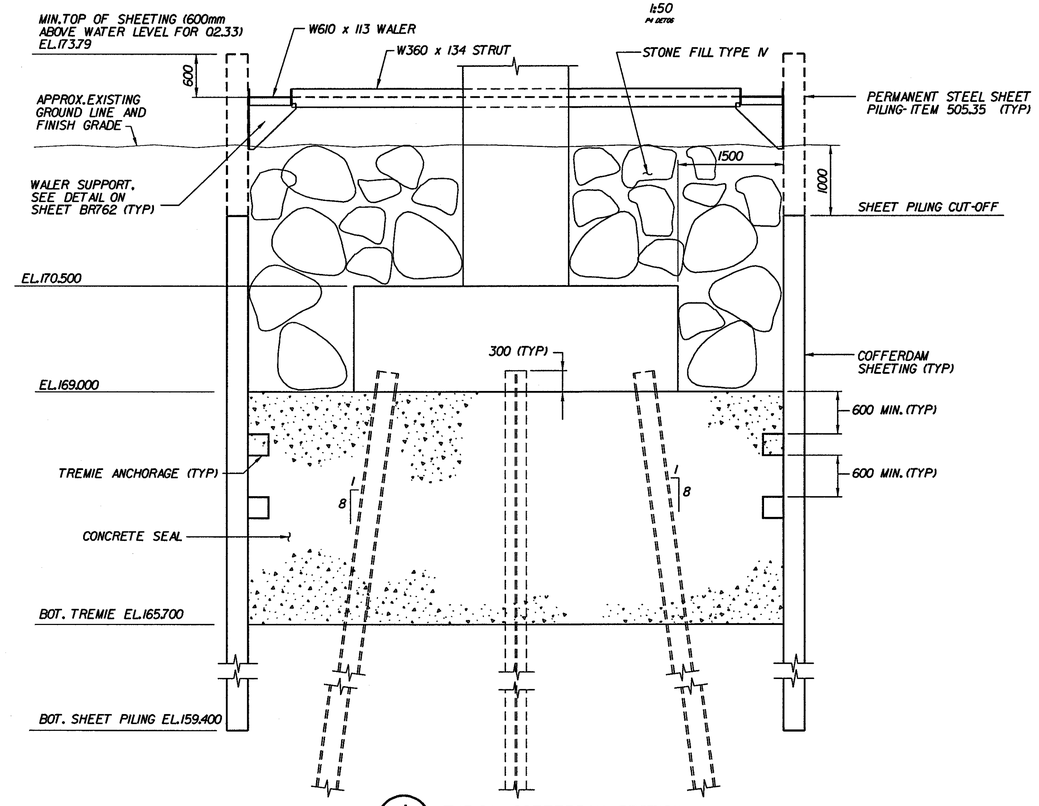
Metric



PIER 4 COFFERDAM PLAN

1m 0 1m

1:50
P4 DET08



A BR761 TYPICAL COFFERDAM SECTION

.5m 0 .5m

1:40
P4 DET07

NOTES:

1. ESTIMATED PILE LENGTH = 21 m. ALL PILES SHALL HAVE AN ULTIMATE CAPACITY OF 2.75 TIMES THE DESIGN LOAD OR 1300 kN. PILES SHALL BE DRIVEN TO REFUSAL.
2. ALL PILES ARE HP360x132.
3. FOR PILE SPLICE DETAIL SEE BRIDGE SHEET BR755.
4. ▼ INDICATES DIRECTION OF 1 ON 8 BATTER.
5. SEE PILE DRIVING AND LOAD TEST NOTES ON SHEET BR755.

CLOUGH, HARBOUR & ASSOCIATES LLP
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III WINNERS CIRCLE ALBANY, NEW YORK, 12205

STATE OF VERMONT
AGENCY OF TRANSPORTATION

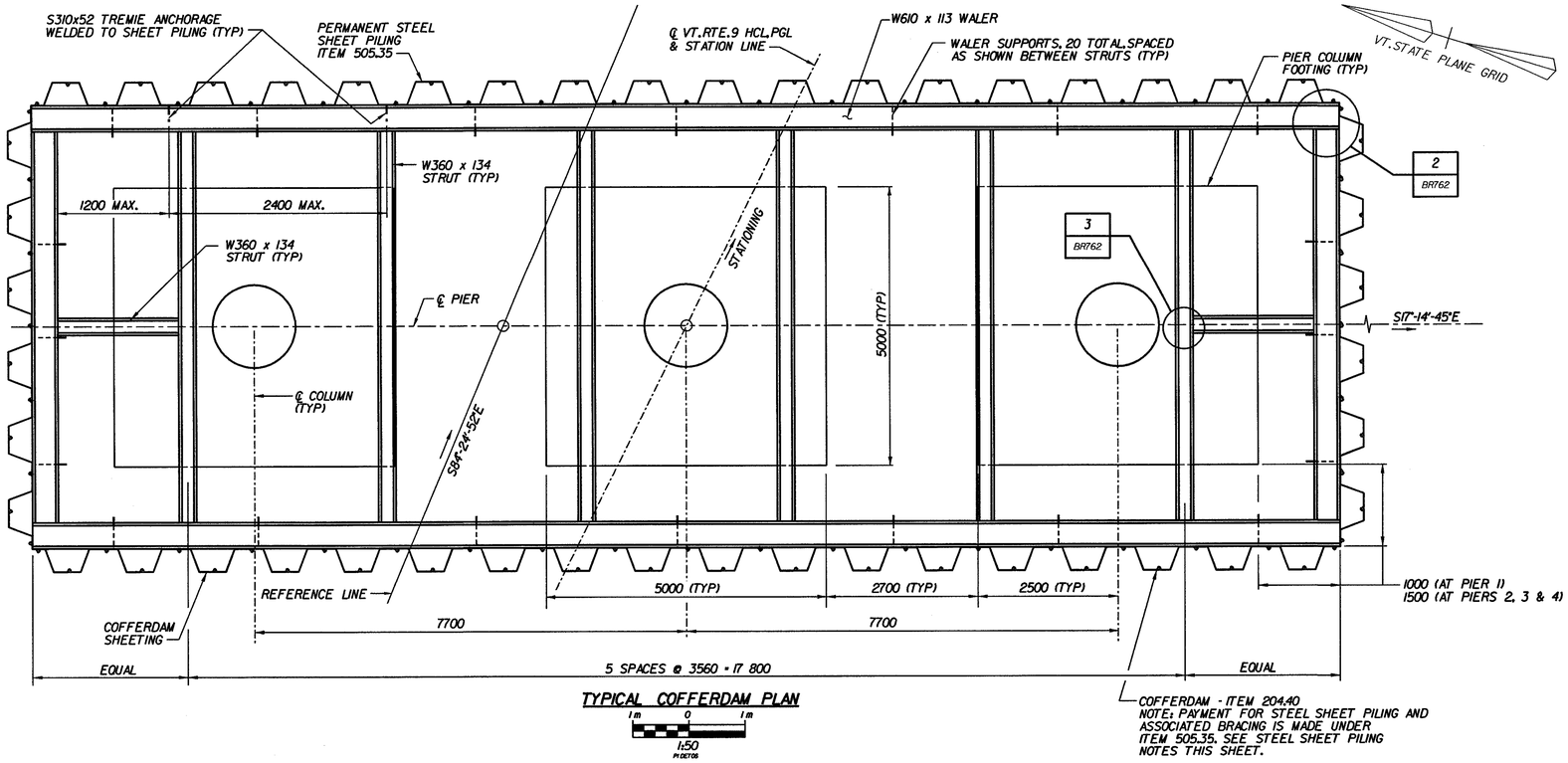
Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800

VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER

PIER 4 PILE PLAN AND COFFERDAM DETAILS

Designed By C. TUTUNJIAN	Drawn by J. HOTALING/B. WEATHERBY
Checked By D. VIENI Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.J. 0146(11) C/4
I.G.C. Info.	
Bridge Sheet No. BR761	Sheet 244 OF 385

W:\3573\15\P4_SHT03\3.5\03\BR761.dgn 14



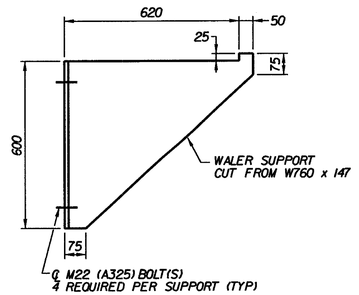
TYPICAL COFFERDAM PLAN

1m 0 1m

1:50

PI DET05

COFFERDAM - ITEM 204.40
NOTE: PAYMENT FOR STEEL SHEET PILING AND ASSOCIATED BRACING IS MADE UNDER ITEM 505.35. SEE STEEL SHEET PILING NOTES THIS SHEET.

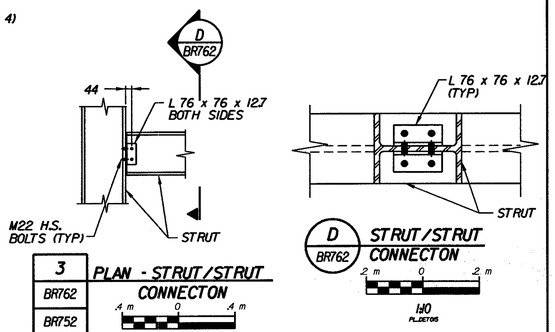


TYPICAL WALER SUPPORT DETAIL FOR W610 x 113 WALER

2 m 0 2 m

1:10

PL DET00



3 BR762 BR752 PLAN - STRUT/STRUT CONNECTON

4 m 0 4 m

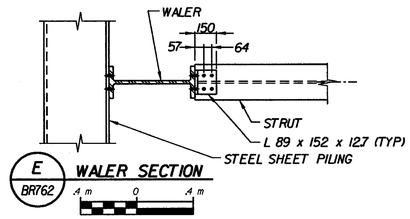
1:20

PI_DET03

2 m 0 2 m

1:10

PI_DET05

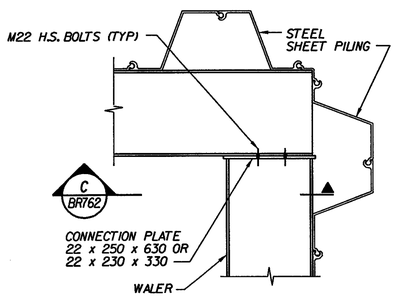


E BR762 WALER SECTION

4 m 0 4 m

1:20

PI DET09

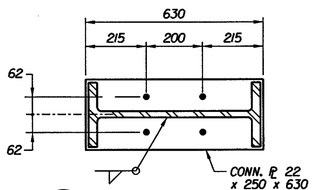


2 BR762 BR752 WALER CONNECTON

4 m 0 4 m

1:20

PI_DET02

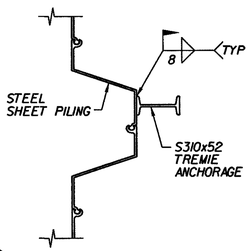


C BR762 WALER CONNECTION PLATE FOR W610 x 113 WALER

2 m 0 2 m

1:10

PI_DET07

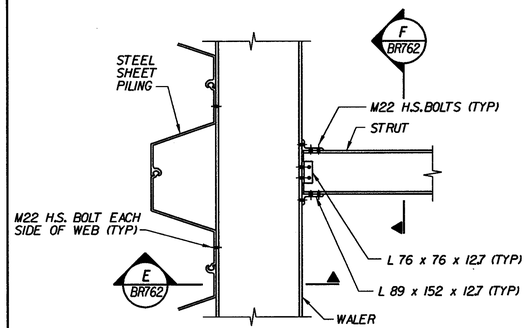


B BR762 TOP SECTION VIEW

4 m 0 4 m

1:20

PI DET01

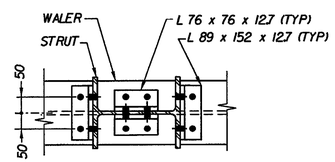


PARTIAL STEEL SHEET PILING/WALER PLAN

4 m 0 4 m

1:20

PI DET09

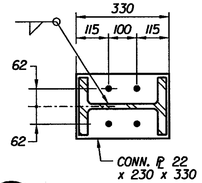


F BR762 WALER SECTION

2 m 0 2 m

1:10

PI DET14

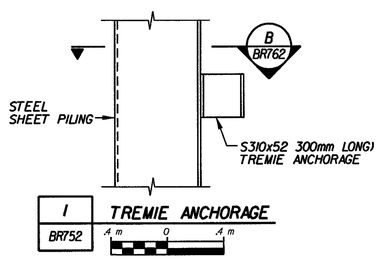


C BR752 WALER CONNECTION PLATE FOR W310 x 74 WALER

2 m 0 2 m

1:10

PL_DET08



1 BR752 TREMIE ANCHORAGE

4 m 0 4 m

1:20

PI DET01

STEEL SHEET PILING NOTES:

1. ALL STRUCTURAL STEEL SHALL BE AASHTO M270M GRADE 345.
2. SECTION MODULUS REQUIRED FOR SHEET PILING IS 950 x 10^3 mm^3 /METER.
3. THE COST FOR WALERS, STRUTS, TREMIE ANCHORAGES, AND WALER SUPPORTS SHALL BE SUBSIDIARY TO ITEM 505.35 - PERMANENT STEEL SHEET PILING.
4. THE COST FOR INSTALLATION AND REMOVAL OF STRUTS, WALERS AND SUPPORTS SHALL BE SUBSIDIARY TO ITEM 505.35 - PERMENANT STEEL SHEET PILING.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
Highway No. VT. RTE. 9	Log Sta.
	Surv. Sta. 16+800

VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER

COFFERDAM DETAILS

Designed By C. TUTUNJIAN	Drawn by J. HOTALING/B. WEATHERBY
Checked By D. VIENI Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.J. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR762	Sheet 245 OF 385

CHA CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

LV-2513/25/BR700/PLSHT04/BW/6.3.00/JW

ITEM	NO. PIECES	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
			ABUTMENT 1														
1																	
2	40	25	1300	1EA2501△	12		0	1000	300				210	0	210		1210
3																	
4																	
5																	
6	229	16	5050	1A1601 △	STR												
7	72	16	11605	1A1602	STR												
8	98	16	1425	1A1603	STR												
9	46	16	4540	1A1604	2	0	4290					250					
10	64	16	4630	1A1605	2	0	4380					250					
11	60	16	4700	1A1606	2	0	4450					250					
12	24	16	5780	1A1607	STR												
13	24	16	2800	1A1608▲	STR												
14	24	16	10100	1A1609	STR												
15	32	16	2845	1A1610 ▲	STR												
16	24	16	8540	1A1611	STR												
17	81	16	2775	1A1612	17		600	1575	600								
18	32	16	2975	1A1613 ▲	STR												
19	20	16	3845	1A1614	12		0	3245	600				385	0	460		3705
20	10	16	2290	1A1615	12		0	1690	600				385	0	460		2150
21	3	16	5520	1A1616	STR												
22	4	16	5685	1A1617	STR												
23	20	16	3345	1A1618	12		0	2745	600				300	0	520		3265
24	10	16	6090	1A1619	14	0	600	4890	600	0			300		520		5930
25	2	16	3750	1A1620	2	175	3575					0		130			
26	26	16	2675	1A1621 ▲	STR												
27	32	16	2675	1A1622▲	STR												
28	34	16	2650	1A1623▲	STR												
29	18	16	7460	1A1624▲	STR												
30	18	16	10140	1A1625▲	STR												
31	18	16	9115	1A1626 ▲	STR												
32	25	16	2075	1A1627▲	STR												
33	32	16	2075	1A1628▲	STR												
34	32	16	2050	1A1629▲	STR												
35	75	16	1775	1A1630	17		600	575	600								
36	75	16	2175	1A1631	17		950	275	950								
37	9	16	2575	1A1632	17		1000	575	1000								
38	16	16	2635	1A1633	12		0	2035	600				385	0	460		2495
39	8	16	2475	1A1634	17		1000	474	1000								
40	16	16	2265	1A1635	12		0	1665	600				300	0	520		2185
41	8	16	2030	1A1636	12		0	1430	600				385	0	460		1890
42	2	16	2830	1A1637	12		0	1555	1275				820	0	975		2530
43	2	16	1985	1A1638	12		0	1085	900				580	0	690		1775
44	2	16	2865	1A1639	12		0	1665	1200				600	0	1040		2705
45	2	16	2475	1A1640	12		0	1250	1225				615	0	1060		2310
46																	
47																	
48			**WINGWALL 1**														
49																	
50	47	25	4640	1W2501△	2	0	4265					375					
51	23	25	2655	1W2502▲	STR												
52	110	19	2450	1W1901	STR												
53	18	16	10685	1W1601	STR												
54	25	16	1425	1W1602△	STR												
55	23	16	3445	1W1603	STR												
56	23	16	2655	1A1605▲	STR												
57	32	16	6570	1A1604	STR												
58	6	16	6570	1A1606▲	STR												
59	2	16	6605	1W1607	12		0	6360	245				40	0	240		6600
60	23	16	1675	1W1608	17		600	475	600								
61																	
62																	
63																	
64			**WINGWALL 2**														
65																	
66	27	25	4825	2W2501△	2	0	4450					375					
67	13	25	2660	2W2502▲	STR												
68	18	16	7260	2W1601	STR												
69	15	16	1200	2W1602△	STR												
70	77	19	2450	2W1907	STR												
71	13	16	3625	2W1603	STR												
72	13	16	2660	2W1605▲	STR												
73	32	16	3453	2W1604	STR												
74	10	16	3453	2W1606▲	STR												
75	2	16	2905	2W1607	12		0	2660	245				40	0	240		2900
76	13	16	1675	2W1608	17		600	475	600								
77																	
78																	
79																	
80																	

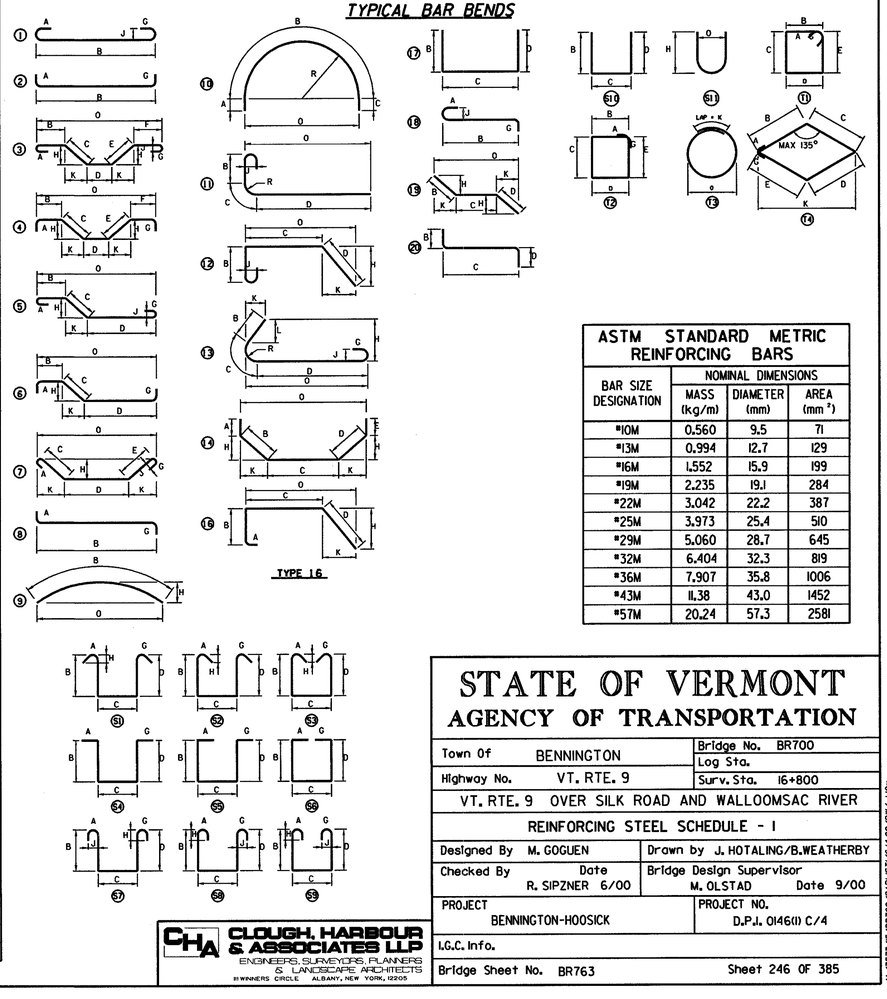
ITEM	NO. PIECES	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
81			**ABUTMENT 2**														
82	42	25	1300	2EA2502△	12		0	1000	300				210	0	210		1210
83																	
84	167	19	3550	2A1901 △	STR												
85																	
86	59	19	5090	2A1902	2	300	4790					0					
87	79	19	5745	2A1903	2	300	5445					0					
88	46	19	5390	2A1904	2	300	5090					0					
89																	
90	84	16	3550	2A1601	STR												
91	60	16	12500	2A1602	STR												
92	84	16	1500	2A1603	STR												
93	34	16	9050	2A1604▲	STR												
94	30	16	4140	2A1605▲	STR												
95	34	16	12340	2A1606	STR												
96	40	16	7950	2A1607▲	STR												
97	34	16	6525	2A1608▲	STR												
98	25	16	3985	2A1609▲	STR												
99	30	16	3845	2A1610	12		0	3245	600				385	0	460		3705
100	15	16	2290	2A1611	12		0	1690	600				385	0	460		2150
101	84	16	2775	2A1612	17		600	1575	600								
102	3	16	6680	2A1613	STR												
103	30	16	3345	2A1615	12		0	2745	600				300	0	520		3265
104	15	16	6090	2A1616	14	0	600	4890	600	0			300		520		5410
105	2	16	3750	2A1617	STR												
106	31	16	2870	2A1618 ▲	STR												
107	39	16	2825	2A1619 ▲	STR												
108	26	16	2670	2A1620▲	STR												
109	16	16	9140	2A1621 ▲	STR												
110	16	16	12335	2A1622	STR												
111	16	16	6810	2A1623▲	STR												
112	31	16	2270	2A1624▲	STR												
113	39	16	2225	2A1625▲	STR												
114	24	16	2070	2A1626▲	STR												
115	81	16	1775	2A1627	17		600	575	600								
116	81	16	2175	2A1628	17		950	275	950								
117	10	16	2575	2A1629	17		1000	575	1000								
118	16	16	2635	2A1630	12		0	2035	600				385	0	460		2495
119	8	16	2030	2A1631	12		0	1430	600				385	0	460		1890
120	16	16	2265	2A1632	12		0	1665	600				300	0	520		2185
121	5	16	2475	2A1633	17		1000	475	1000								
122	2	16	2495	2A1634	12		0	1220	1275				820	0	975		2195
123	2	16	2475	2A1635	12		0	1575	900				580	0	690		2265
124	2	16	2865	2A1636	12		0	1665	1200				600	0	1040		2705
125	2	16	2475	2A1637	12		0	1250	1225				615	0	1060		2310
126																	
127																	
128			**WINGWALL 3**														
129																	
130	28	29	5475	3W2901△	2	0	5000					475					
131	92	22	2450	3W2201△	STR												
132																	
133	22	16	8860	3W1601	STR												
134	22	16	1200	3W1602	STR												
135	20	16	3750	3W1603	STR												
136	32	16	5600	3W1604	STR												
137	46	16	2610	3W1605▲	STR												
138	14	16	5300	3W1606▲	STR												
139	2	16	5200	3W1607	12		0	4950	250				55	0	200		5150
140	20	16	1625	3W1608	17		600	425	600								
141																	
142																	
143			**WINGWALL 4**														
144																	
145	42	29	5675	4W2901△	2	0	5200					475					
146	113	22	2450	4W2201 △	STR												
147																	
148	18	16	11024	4W1601	STR												
149	30	16	1200	4W1602	STR												
150	30	16	3750	4W1603	STR												
151	28	16	8665	4W1604	STR												
152	70	16	4532	4W1605▲	STR												
153	12	16	4620	4W1606▲	STR												
154	2	16	4350	4W1607	12		0	4100	250				55	0	200		4300
155	30	16	1675	4W1608	17		600	475	600								
156																	
157																	
158																	
159																	
160																	

NOTES:

1. UNLESS OTHERWISE DESIGNATED, ALL BAR REINFORCEMENT FOR CONCRETE IN SIZES UP TO AND INCLUDING "57M SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT", AASHTO M31M (ASTM A615-91). ALL BARS SHALL BE GRADE 420, UNLESS OTHERWISE NOTED.
2. FOR TYPICAL BAR BENDING DETAILS, RECOMMENDED PIN DIAMETER "D" OF BENDS, HOOKS AND OTHER STANDARD PRACTICE SEE CURRENT CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE".
3. BARS WHICH REQUIRE MORE ACCURATE BENDING THAN STANDARD PRACTICES SHOULD HAVE LIMITS INDICATED.
4. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" AND "G" ON STANDARD 180° AND 135° HOOKS.
5. "J" DIMENSION ON 180° HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE OTHERWISE STANDARD HOOKS ARE TO BE USED.
6. "H" DIMENSION ON STIRRUPS TO BE SHOWN ONLY WHEN NECESSARY TO MAINTAIN CLEARANCES.
7. WHERE SLOPE DIFFERS FROM 45° DIMENSIONS "H" AND "K" MUST BE SHOWN.
8. BAR MARKS WITH AN "E" INDICATE EPOXY COATED REINFORCEMENT.

▲ - DENOTES BARS TO BE CUT IN FIELD.
x - DENOTES ONE EXTRA BAR ADDED FOR TESTING PURPOSES.
△ - DENOTES TWO EXTRA BARS ADDED FOR TESTING PURPOSES.

TYPICAL BAR BENDS



ASTM STANDARD METRIC REINFORCING BARS

BAR SIZE DESIGNATION	NOMINAL DIMENSIONS		
	MASS (kg/m)	DIAMETER (mm)	AREA (mm^2)
#10M	0.560	9.5	71
#13M	0.994	12.7	129
#16M	1.552	15.9	199
#19M	2.235	19.1	284
#22M	3.042	22.2	387
#25M	3.973	25.4	510
#29M	5.060	28.7	645
#32M	6.404	32.3	819
#36M	7.907	35.8	1006
#43M	11.38	43.0	1452
#57M	20.24	57.3	2581

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
	Log Sta.
Highway No. VT. RTE. 9	Surv. Sta. 16+800
VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER	
REINFORCING STEEL SCHEDULE - 1	
Designed By M. GOGUEN	Drawn by J. HOTALING/B. WEATHERBY
Checked By Date R. SIPZNER 6/00	Bridge Design Supervisor M. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.J. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR763	Sheet 246 OF 385

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

Metric

la/7STA/15/BR700/BARLIST/16.4.00/BW / 1:00pm

ITEM	NO. PIECES	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
			PIER 1														
2	72	16	1300	IP1601	1	175	950					175		130			
3	165	16	4527	IP1602	T3										600		1250
4	10	16	11485	IP1603	STR												
5	12	16	12085	IP1604△	STR												
6	39	16	1450	IP1605	STR												
7	328	16	3940	IP1606	S10		1245	1450	1245								
8	328	16	4070	IP1607	S10		1310	1450	1310								
9																	
10	212	25	4850	IP2501△	STR												
11	108	25	7225	IP2502	2	0	6800					425					
12	108	25	8940	IP2503	STR												
13	15	25	12805	IP2504	12		0	10650	2155				800	0	2000		12650
14	15	25	11735	IP2505	12		0	9580	2155				800	0	2000		11580
15																	
16	212	32	4850	IP3201△	STR												
17																	
18																	
19																	
20	60	36	8610	IP3601	17		0	7635	975								
21	32	36	7700	IP3602△	STR												
22																	
23																	
24																	
25			PIER 2														
26	72	16	1475	2P1601	1	175	1125					175		130			
27	153	16	4527	2P1602	T3										600		1250
28	10	16	11278	2P1603	STR												
29	10	16	11878	2P1604	STR												
30	39	16	1450	2P1605	STR												
31	328	16	3940	2P1606	S10		1245	1450	1245								
32	330	16	4070	2P1607△	S10		1310	1450	1310								
33																	
34	26	19	4450	2P1901△	STR												
35																	
36	272	25	4450	2P2501△	STR												
37	108	25	8425	2P2502	2	0	7825					600					
38	108	25	7690	2P2503	STR												
39	15	25	11533	2P2504	12		0	9378	2155				800	0	2000		11375
40	15	25	12833	2P2505	12		0	10678	2155				800	0	2000		12678
41																	
42	272	36	4450	2P3601△	STR												
43	60	36	8403	2P3602	17		0	7428	975								
44	30	36	7700	2P3603	STR												
45																	
46																	
47			PIER 3														
48																	
49	72	16	1475	3P1601	1	175	1125					175		130			
50	117	16	4527	3P1602	T3										600		1250
51	10	16	11096	3P1603	STR												
52	10	16	11696	3P1604	STR												
53	40	16	1450	3P1605△	STR												
54	320	16	4040	3P1606	S10		1295	1450	1295								
55	320	16	4300	3P1607	S10		1425	1450	1425								
56																	
57	26	19	4450	3P1901△	STR												
58																	
59	270	25	4450	3P2501	STR												
60	108	25	8425	3P2502	2	0	7825					600					
61	110	25	5011	3P2503△	STR												
62	15	25	11351	3P2504	12		0	9196	2155				800	0	2000		11196
63	15	25	12651	3P2505	12		0	10496	2155				800	0	2000		12496
64																	
65	272	36	4450	3P3601△	STR												
66	60	36	8220	3P3602	17		0	7245	975								
67	30	36	7700	3P3603	STR												
68																	
69																	
70			PIER 4														
71																	
72	72	16	1475	4P1601	1	175	1125					175		130			
73	114	16	4527	4P1602	T3										600		1250
74	10	16	10943	4P1603	STR												
75	10	16	11543	4P1604	STR												
76	40	16	1450	4P1605△	STR												
77	312	16	4130	4P1606	S10		1340	1450	1340								
78	312	16	4230	4P1607	S10		1390	1450	1390								
79																	
80	26	19	4450	4P1901△	STR												

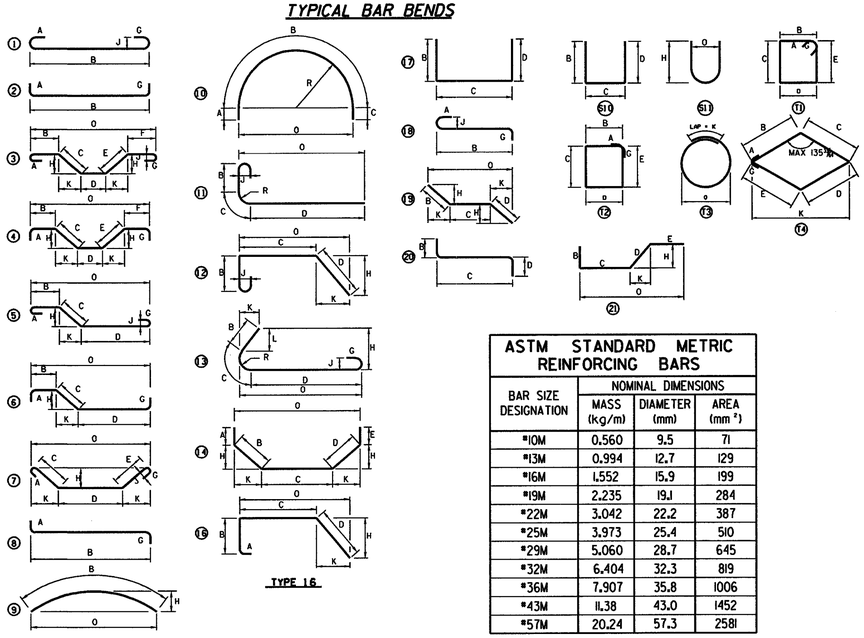
ITEM	NO. PIECES	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
81			PIER 4 (CONTINUED)														
82	272	25	4450	4P2501△	STR												
83	108	25	7775	4P2502	2	0	7350					425					
84	15	25	11190	4P2503	12		0	9034	2155				800	0	2000		11034
85	15	25	12498	4P2504	12		0	10343	2155				800	0	2000		12343
86																	
87	272	36	4450	4P3601△	STR												
88	60	36	8068	4P3602	17		0	7093	975								
89	30	36	7700	4P3603	STR												
90																	
91																	
92																	
93			DECK SLAB														
94																	
95																	
96	2859	16	18 200	ES1601	STR												
97	160	16	2100	ES1602	STR												
98	2320	16	1620	ES1603	S5	250	340	440	340			250					
99	140	16	1125	ES1604	21		250	375	250	250			175		175		800
100	30	16	2500	ES1605△	STR												
101																	
102	1088	19	12 385	ES1901	STR												
103	1088	19	9585	ES1902	STR												
104	1088	19	8185	ES1903	STR												
105	1088	19	10 985	ES1904	STR												
106	1056	19	10 000	ES1905	STR												
107	132	19	8540	ES1906	STR												
108	132	19	10 740	ES1907	STR												
109	132	19	9940	ES1908	STR												
110	132	19	10 440	ES1909	STR												
111	63	19	10 285	ES1910	STR												
112	63	19	14 055	ES1911	STR												
113	65	19	8885	ES1912△	STR												
114	63	19	15 455	ES1913	STR												
115	56	19	18 290	ES1914	STR												
116	74	19	16 750	ES1915	STR												
117	4	19	12 390	ES1916	STR												
118	4	19	12 840	ES1917	STR												
119																	
120																	
121			EXTENSION CURBS														
122																	
123	48	16	2625	C1601	17		1075	475	1075								
124																	
125	48	16	2025	EC1602	17		775	475	775								
126																	
127	38	16	3550	C1603△	STR												
128																	
129	22	16	3550	EC1604△	STR												
130																	
131																	
132			APPROACH SLAB 1														
133																	
134	32	16	11610	1EAS1601	STR												
135																	
136	92	29	6215	1EAS2901	1	375	5840					0		300			
137																	
138																	
139																	
140			APPROACH SLAB 2														
141																	
142	36	16	13410	2EAS1601	STR												
143																	
144	102	29	6785	2EAS2901	1	375	6410					0		300			
145																	
146																	
147																	
148																	
149																	
150																	
151																	
152																	
153																	
154																	
155																	
156																	
157																	
158																	
159																	
160																	

NOTES:

1. UNLESS OTHERWISE DESIGNATED, ALL BAR REINFORCEMENT FOR CONCRETE IN SIZES UP TO AND INCLUDING #57M SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT", AASHTO M31M (ASTM A615-S1). ALL BARS SHALL BE GRADE 420, UNLESS OTHERWISE NOTED.
2. FOR TYPICAL BAR BENDING DETAILS, RECOMMENDED PIN DIAMETER "D" OF BENDS, HOOKS AND OTHER STANDARD PRACTICE SEE CURRENT CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE".
3. BARS WHICH REQUIRE MORE ACCURATE BENDING THAN STANDARD PRACTICES SHOULD HAVE LIMITS INDICATED.
4. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" AND "G" ON STANDARD 180° AND 135° HOOKS.
5. "J" DIMENSION ON 180° HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE OTHERWISE STANDARD HOOKS ARE TO BE USED.
6. "H" DIMENSION ON STIRRUPS TO BE SHOWN ONLY WHEN NECESSARY TO MAINTAIN CLEARANCES.
7. WHERE SLOPE DIFFERS FROM 45° DIMENSIONS "H" AND "K" MUST BE SHOWN.
8. BAR MARKS WITH AN "E" INDICATE EPOXY COATED REINFORCEMENT.

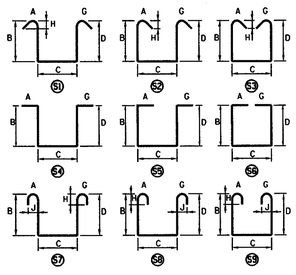
▲ - DENOTES BARS TO BE CUT IN FIELD.
x - DENOTES ONE EXTRA BAR ADDED FOR TESTING PURPOSES.
△ - DENOTES TWO EXTRA BARS ADDED FOR TESTING PURPOSES.

TYPICAL BAR BENDS



ASTM STANDARD METRIC REINFORCING BARS

BAR SIZE DESIGNATION	NOMINAL DIMENSIONS		
	MASS (kg/m)	DIAMETER (mm)	AREA (mm²)
#10M	0.560	9.5	71
#13M	0.994	12.7	129
#16M	1.552	15.9	199
#19M	2.235	19.1	284
#22M	3.042	22.2	387
#25M	3.973	25.4	510
#29M	5.060	28.7	645
#32M	6.404	32.3	819
#36M	7.907	35.8	1006
#43M	11.38	43.0	1452
#57M	20.24	57.3	2581



STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR700
Highway No. VT. RTE. 9	Log Sta.
	Surv. Sta. 16+800

VT. RTE. 9 OVER SILK ROAD AND WALLOOMSAC RIVER

REINFORCING STEEL SCHEDULE - 2

Designed By M. GOGUEN	Drawn by J. HOTALING/B. WEATHERBY
Checked By R. SIPZNER Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.J. 0146(1) C/4
I.G.C. Info.	
Bridge Sheet No. BR764	Sheet 247 OF 385

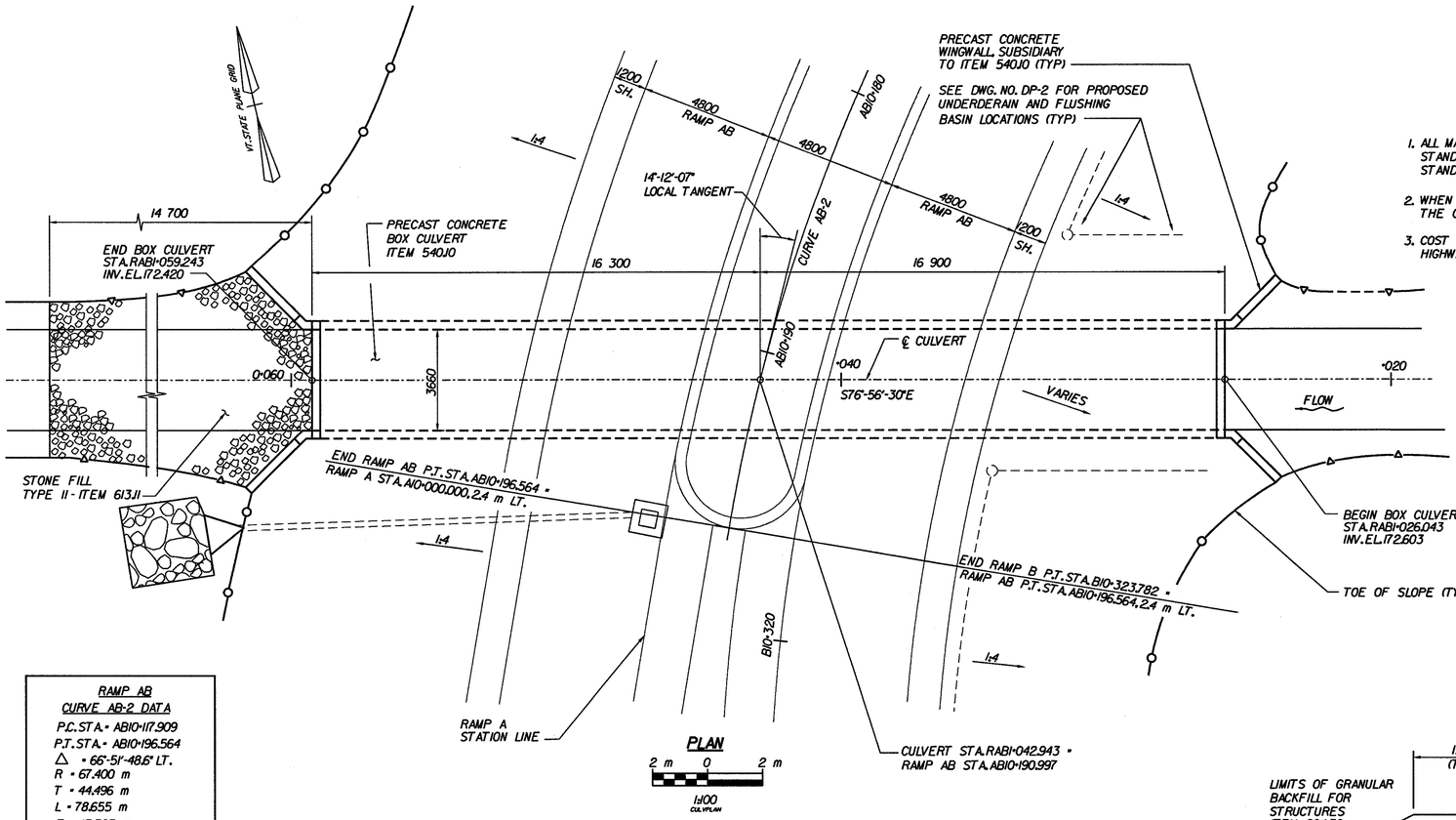
CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
III WINNERS CIRCLE ALBANY, NEW YORK, 12205

U:\353\15\BR700\BARLIST2\16200\BW\ 4:00pm

Metric

NOTE: UNLESS NOTED OTHERWISE, ALL STATIONS ARE IN KILOMETERS, ALL ELEVATIONS ARE IN METERS, AND ALL DIMENSIONS ARE IN MILLIMETERS.

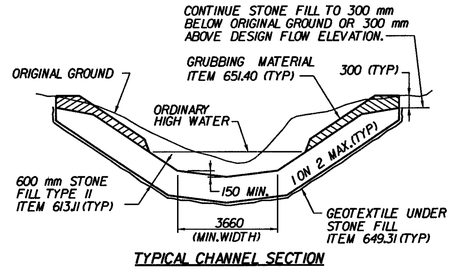
1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 1995 (METRIC) & THE LATEST A.A.S.H.T.O. STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES (16TH EDITION). DESIGN IS FOR MS-22.5 LIVE LOAD.
2. WHEN NORMAL CONSTRUCTION OR REGULAR ROADWAY TRAFFIC IS MAINTAINED OVER THE BOX CULVERT, THE CONTRACTOR SHALL MAINTAIN A MINIMUM COVER OF 500 mm OF COMPACTED MATERIAL.
3. COST FOR ALL SUBBASE AND PAVEMENT ITEMS ABOVE SUBGRADE SHALL BE INCLUDED IN THE HIGHWAY ESTIMATE.



PLAN

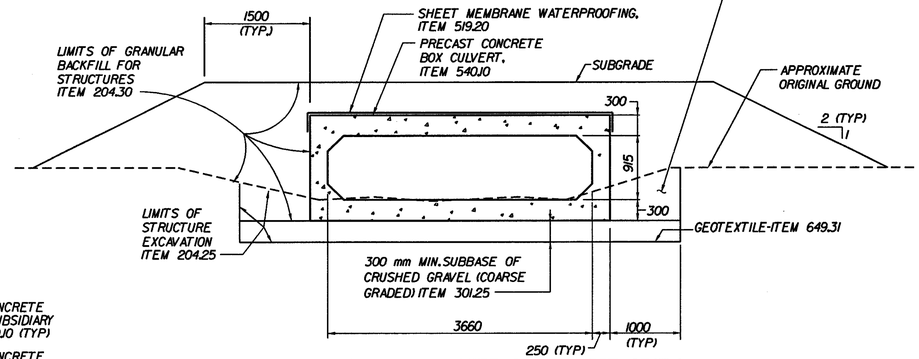
RAMP AB
CURVE AB-2 DATA

P.C. STA. = AB10+117.909
P.T. STA. = AB10+196.564
△ = 66°-51'-48.6" LT.
R = 67.400 m
T = 44.496 m
L = 78.655 m
E = 13.363 m
e_{max} = 0.077 DN. LT.



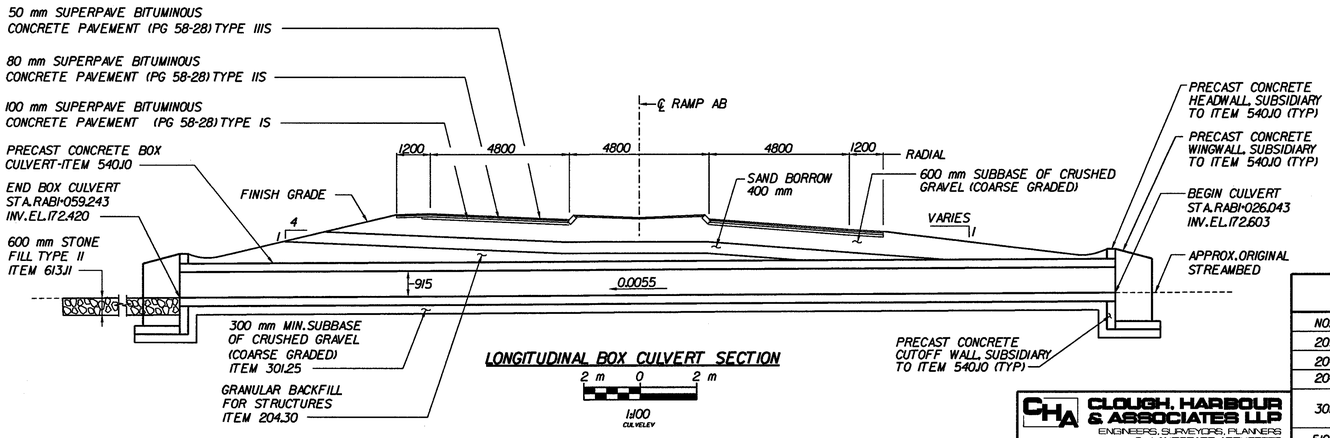
TYPICAL CHANNEL SECTION
N.T.S.

EXCAVATE UNSUITABLE MATERIAL TO DEPTH SHOWN OR AS DIRECTED BY THE ENGINEER. REPLACE AS SHOWN WITH COMPACTED COARSE AGGREGATE AND GRANULAR BACKFILL FOR STRUCTURES. IF LEDGE OR OTHER UNYIELDING MATERIAL IS ENCOUNTERED, IT SHALL BE REMOVED TO A DEPTH OF 300 mm BELOW BOTTOM OF BOX CULVERT AND REPLACED WITH COMPACTED COARSE AGGREGATE.



TYPICAL PRECAST CONCRETE BOX CULVERT SECTION
EXCAVATION AND BACKFILL DETAILS

.8 m 0 .8 m
1:40
CULVSECT



LONGITUDINAL BOX CULVERT SECTION

2 m 0 2 m
1:100
CULVELEV

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
III WINNERS CIRCLE ALBANY, NEW YORK, 12205

HYDRAULIC DATA

DRAINAGE AREA 24.9 ha DESIGN FLOW = Q50
DESIGN OUTLET VELOCITY @ Q50 = 1.6 m/sec.
DESIGN TAILWATER DEPTH @ Q50 = 0.94 m ELEVATION 173.36
ORDINARY HIGH WATER DEPTH @ Q50 = 200 mm

Q10	FLOW = 3.60 m^3/SEC.	HEADWATER ELEVATION = 173.47
Q25	FLOW = 4.42 m^3/SEC.	HEADWATER ELEVATION = 173.52
Q50	FLOW = 5.18 m^3/SEC.	HEADWATER ELEVATION = 173.58
Q100	FLOW = 5.95 m^3/SEC.	HEADWATER ELEVATION = 173.66

COMMENTS:

ESTIMATED QUANTITIES

NO.	ITEM	UNIT	TOTAL	FINAL
203.25	CHANNEL EXCAVATION OF EARTH	m^3	86	
204.25	STRUCTURE EXCAVATION	m^3	210	
204.30	GRANULAR BACKFILL FOR STRUCTURES	m^3	800	
301.25	SUBBASE OF CRUSHED GRAVEL (COARSE GRADED)	m^3	86	
519.20	SHEET MEMBRANE WATERPROOFING	m^2	155	
540.10	PRECAST CONCRETE BOX CULVERT	LS	1	
613.11	STONE FILL TYPE II	m^3	66	
649.31	GEOTEXTILE UNDER STONE FILL	m^2	305	
651.40	GRUBBING MATERIAL	m^2	40	

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR900
	Log Sta.
Highway No. RAMP AB	Surv. Sta. AB10+190

RAMP AB CULVERT

PRELIMINARY INFORMATION

Designed By C. TUTUNJIAN	Drawn By B. WEATHERBY
Checked By M. GOGUEN Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.J. 0146 (1) C/4
I.G.C. Info.	
Bridge Sheet No. BR900	Sheet 248 of 385

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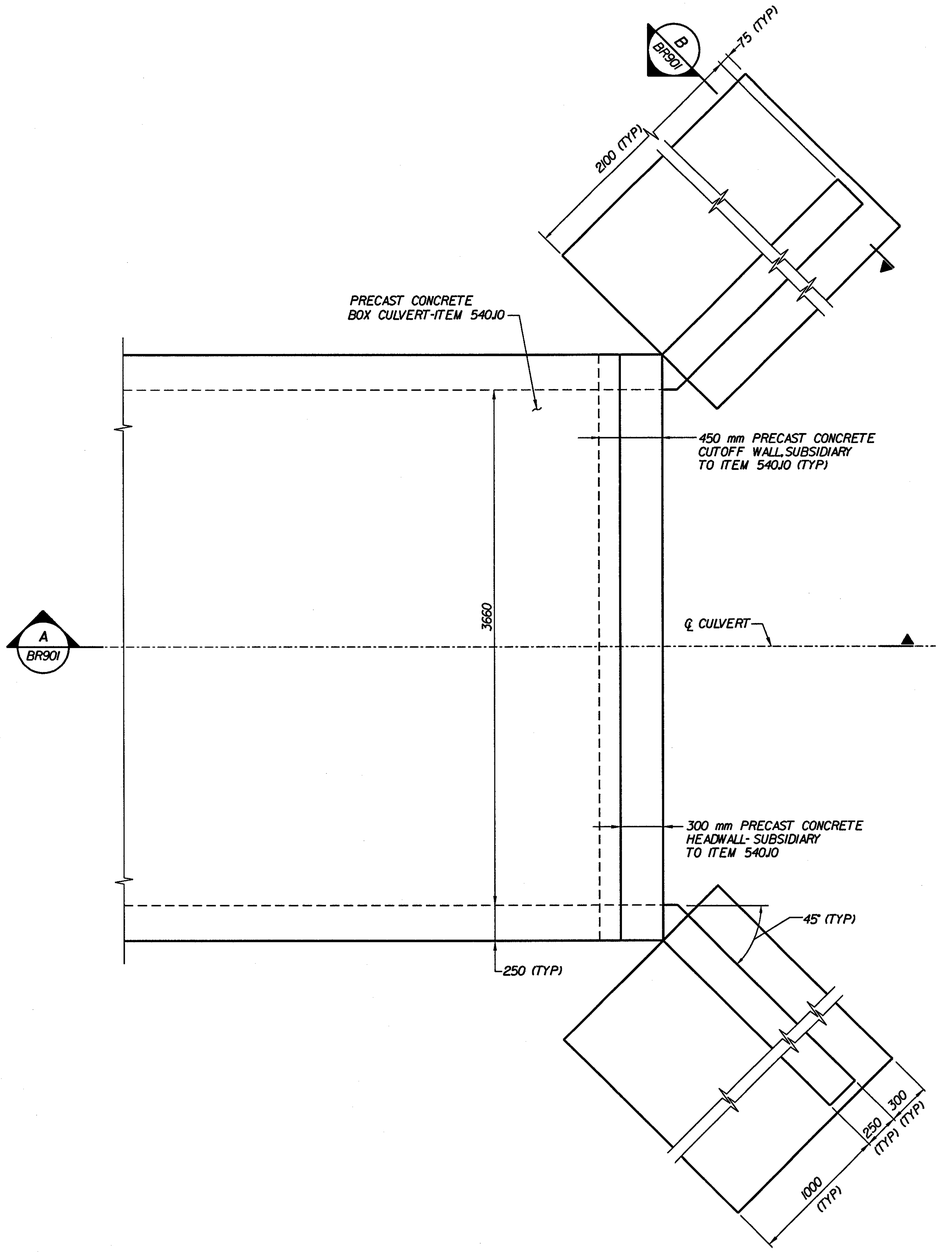
USER = 1459

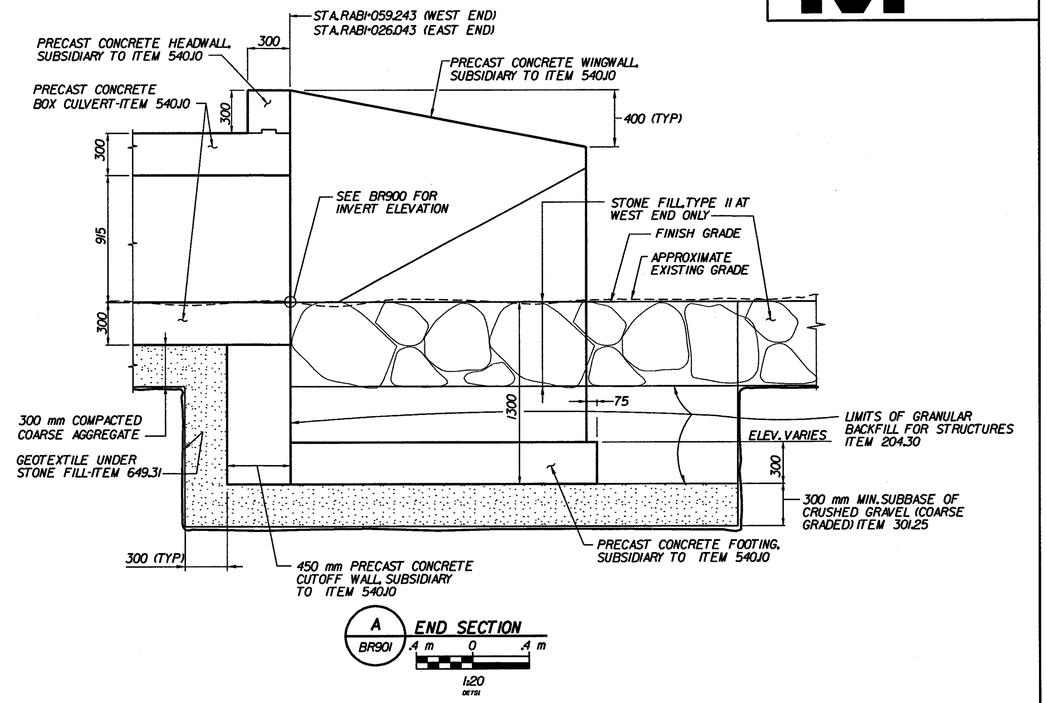
Metric



PART PLAN-CULVERT END SECTION

.4 m 0 .4 m

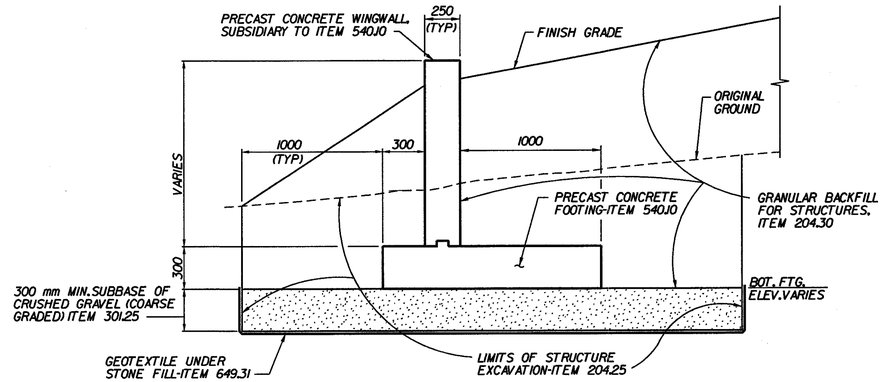
1:20 ORIGINAL



A BR901 END SECTION

.4 m 0 .4 m

1:20 ORIGINAL



B BR901 PRECAST WINGWALL

.4 m 0 .4 m

1:20 ORIGINAL

LEGEND:

- CRUSHED GRAVEL (COARSE GRADED) ITEM 301.25

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BR900
Highway No. RAMP AB	Log Sta.
	Surv. Sta. AB10+190
RAMP AB CULVERT	
CULVERT DETAILS	
Designed By C. TUTUNJIAN	Drawn By B. WEATHERBY
Checked By M. GOGUEN Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.J. 0146 (1) C/4
I.G.C. Info.	
Bridge Sheet No. BR901	Sheet 249 of 385

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
III WINNERS CIRCLE ALBANY, NEW YORK, 12205

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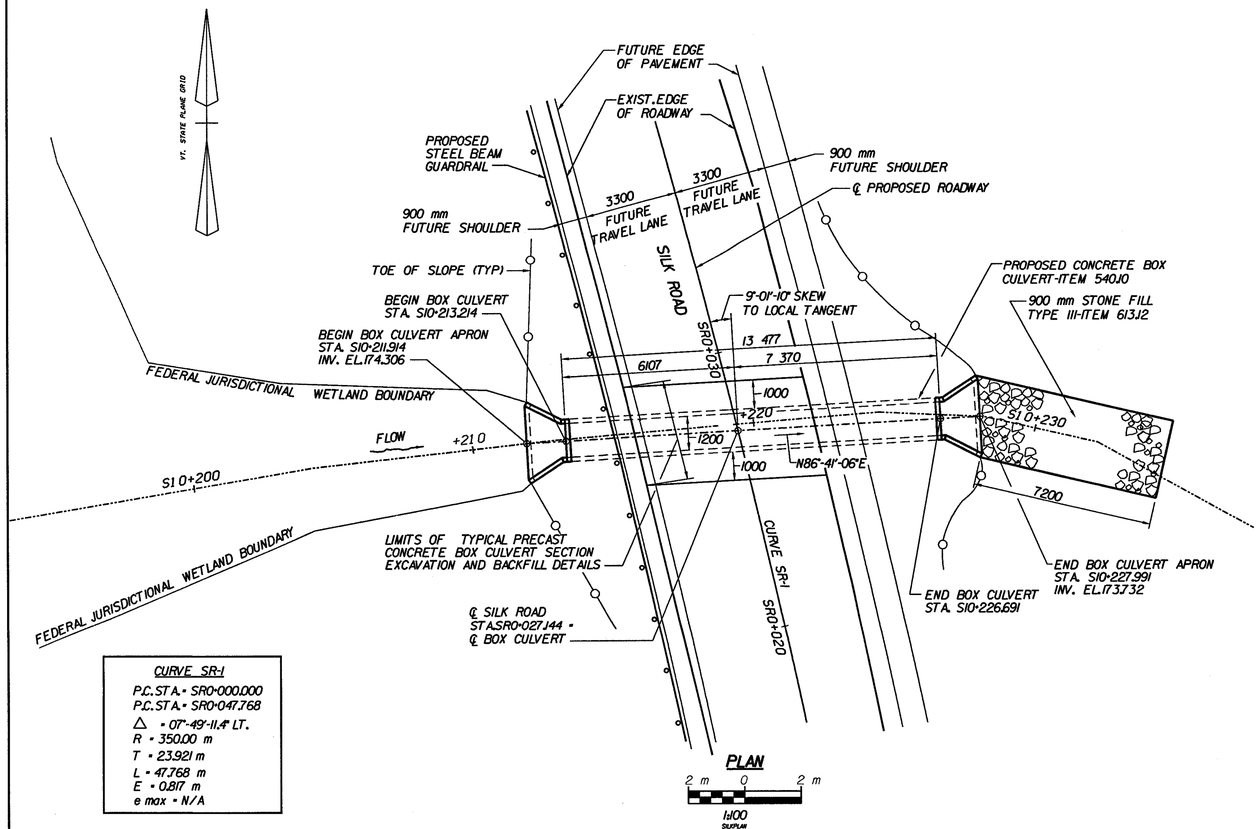
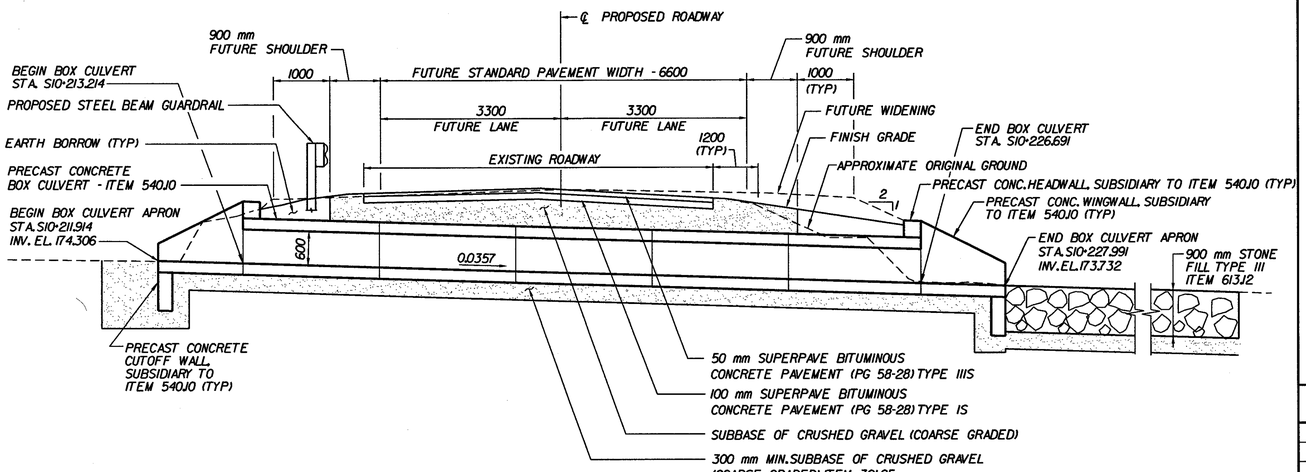
USER = 1459



CURVE SR-1
P.C. STA. = SR0+000.000
P.C. STA. = SR0+047.768
△ = 07°-49'-11.4" LT.
R = 350.00 m
T = 23.921 m
L = 47.768 m
E = 0.817 m
e max = N/A

PLAN
2 m 0 2 m
1:100 SHEET PLAN



LONGITUDINAL BOX CULVERT SECTION
1 m 0 1 m
1:50 CURVELEV

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
111 WINNERS CIRCLE ALBANY, NEW YORK, 12205

HYDRAULIC DATA

DRAINAGE AREA 34.2 ha DESIGN FLOW Q25
DESIGN OUTLET VELOCITY @ Q25 = 3.9 m/sec.
DESIGN TAILWATER DEPTH @ Q25 = 0.34 m ELEVATION 174.10
ORDINARY HIGH WATER DEPTH @ Q 25 = 380 mm

Q10	FLOW = 1.07 m^3/SEC.	HEADWATER ELEVATION = 174.99
Q25	FLOW = 1.32 m^3/SEC.	HEADWATER ELEVATION = 175.12
Q50	FLOW = 1.58 m^3/SEC.	HEADWATER ELEVATION = 175.28
Q100	FLOW = 1.81 m^3/SEC.	HEADWATER ELEVATION = 175.52

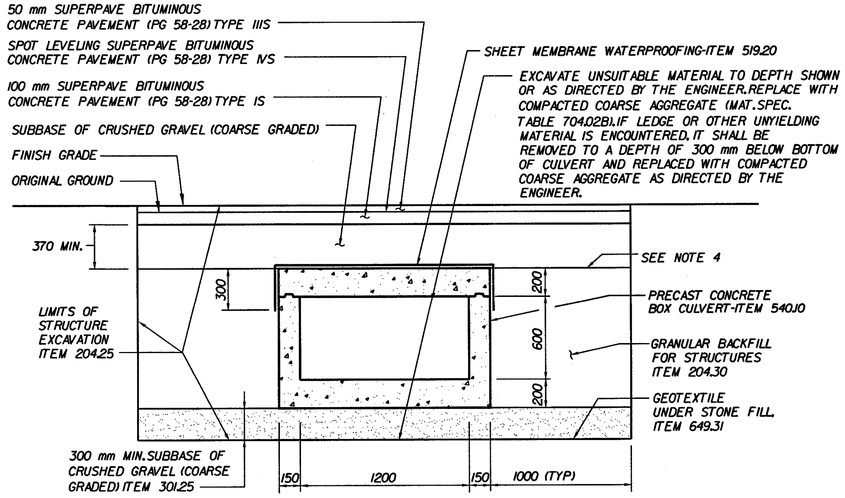
COMMENTS: TOWN OF BENNINGTON HIGHWAY CULVERT

NOTES:

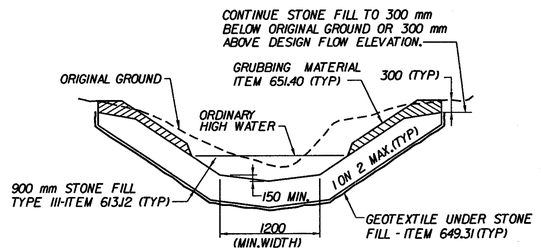
1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 1995 (METRIC) & THE LATEST A.A.S.H.T.O. STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES (16TH EDITION). DESIGN IS FOR MS-22.5 LIVE LOAD.
2. WHEN NORMAL CONSTRUCTION OR REGULAR ROADWAY TRAFFIC IS MAINTAINED OVER THE BOX CULVERT. THE CONTRACTOR SHALL MAINTAIN A MINIMUM COVER OF 500 mm OF COMPACTED MATERIAL.
3. ALL SILK ROAD PAVEMENTS SHALL BE CONSTRUCTED USING SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) UNLESS DIRECTED OTHERWISE BY THE RESIDENT ENGINEER.
4. COST FOR ALL SUBBASE AND PAVEMENT ITEMS ABOVE THE TOP SLAB OF THE CULVERT SHALL BE INCLUDED IN THE HIGHWAY ESTIMATE.
5. THR FUTURE STANDARD PAVEMENT AND FUTURE SHOULDERS WILL NOT BE CONSTRUCTED AS PART OF THIS PROJECT. SEE DRAWING NUMBER P-1 FOR THE WIDTH OF THE PROPOSED OVERLAY ON SILK ROAD.

Metric

NOTE: UNLESS NOTED OTHERWISE, ALL STATIONS ARE IN KILOMETERS, ALL ELEVATIONS ARE IN METERS, AND ALL DIMENSIONS ARE IN MILLIMETERS.



TYPICAL PRECAST CONCRETE BOX CULVERT SECTION
EXCAVATION AND BACKFILL DETAILS
.4 m 0 .4 m
1:20 EARTHSECT



TYPICAL CHANNEL SECTION
N.T.S.

ESTIMATED QUANTITIES

NO.	ITEM	UNIT	TOTAL	FINAL
203.25	CHANNEL EXCAVATION OF EARTH	m^3	40	
204.25	STRUCTURE EXCAVATION	m^3	100	
204.30	GRANULAR BACKFILL FOR STRUCTURES	m^3	40	
301.25	SUBBASE OF CRUSHED GRAVEL (COARSE GRADED)	m^3	20	
519.20	SHEET MEMBRANE WATERPROOFING	m^2	34	
540.10	PRECAST CONCRETE BOX CULVERT	LS	1	
613.12	STONE FILL TYPE III	m^3	40	
649.31	GEOTEXTILE UNDER STONE FILL	m^2	90	
651.40	GRUBBING MATERIAL	m^2	30	

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BRI000
	Log Sta.
Highway No. SILK ROAD	Surv. Sta. SR0+027

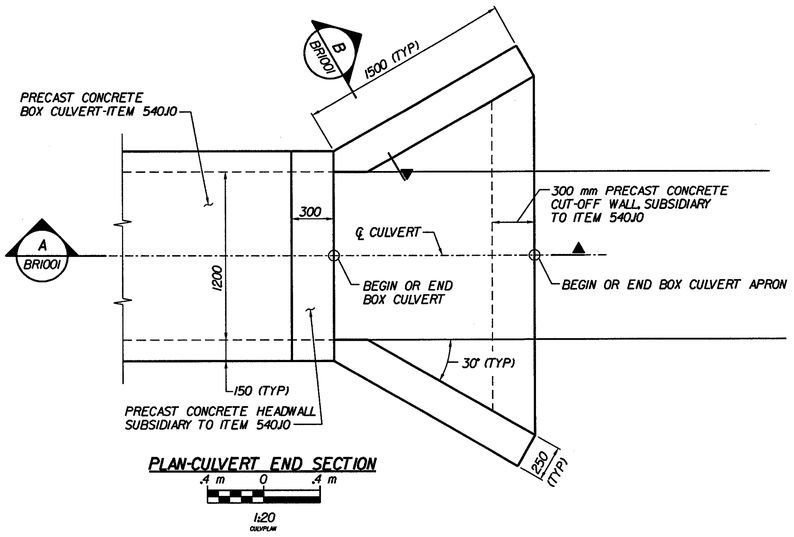
SILK ROAD CULVERT

PRELIMINARY INFORMATION

Designed By C. TUTUNJIAN	Drawn By B. WEATHERBY
Checked By M. GOGUEN Date 6/00	Bridge Design Supervisor M.W. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.J. 0146 (1) C/4
I.G.C. Info.	
Bridge Sheet No. BRI000	Sheet 250 of 385

FILE NAME = u:\357\V5\bri000\plelsht.dgn
DATE/TIME = 8 SEP 2000
USER = 1459

VAOT Metric

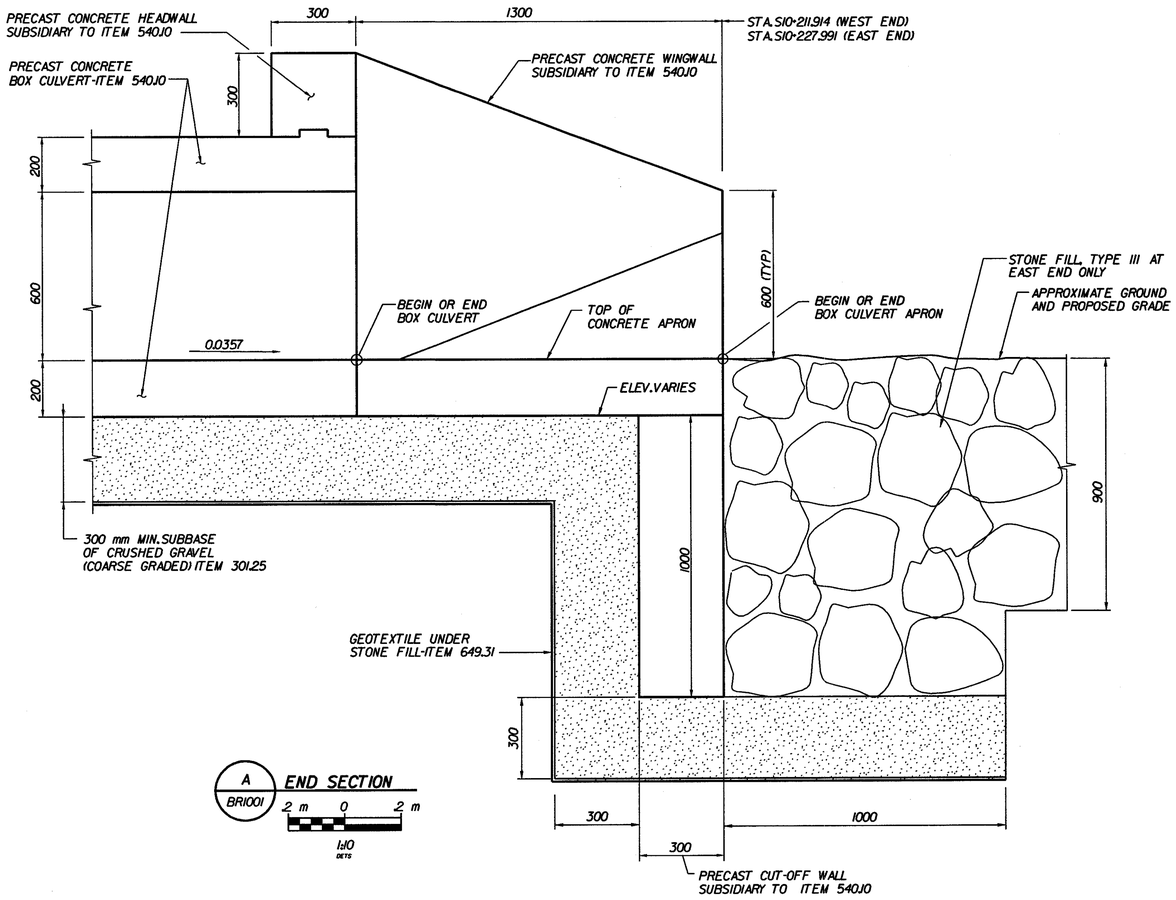


PLAN-CULVERT END SECTION

.4 m 0 .4 m

1:20

CLO/PLAN

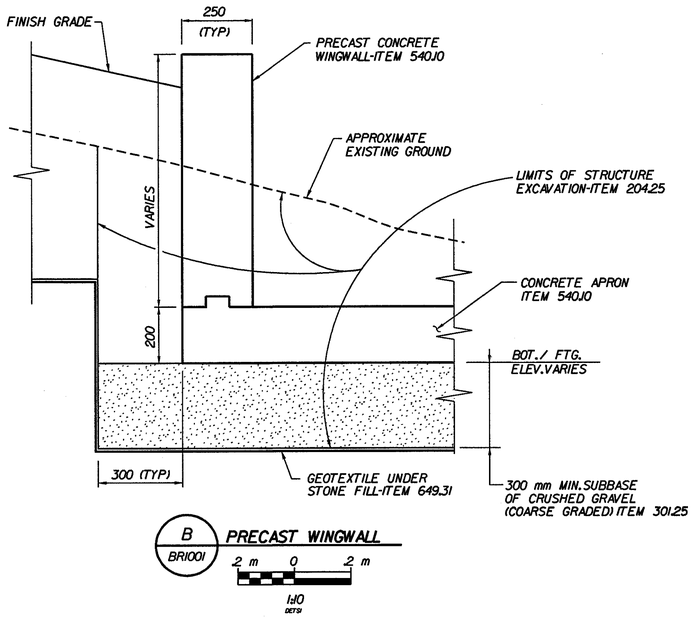


A BRI001 **END SECTION**

2 m 0 2 m

1:10

DETS



B BRI001 **PRECAST WINGWALL**

.2 m 0 .2 m

1:10

DETS

LEGEND:

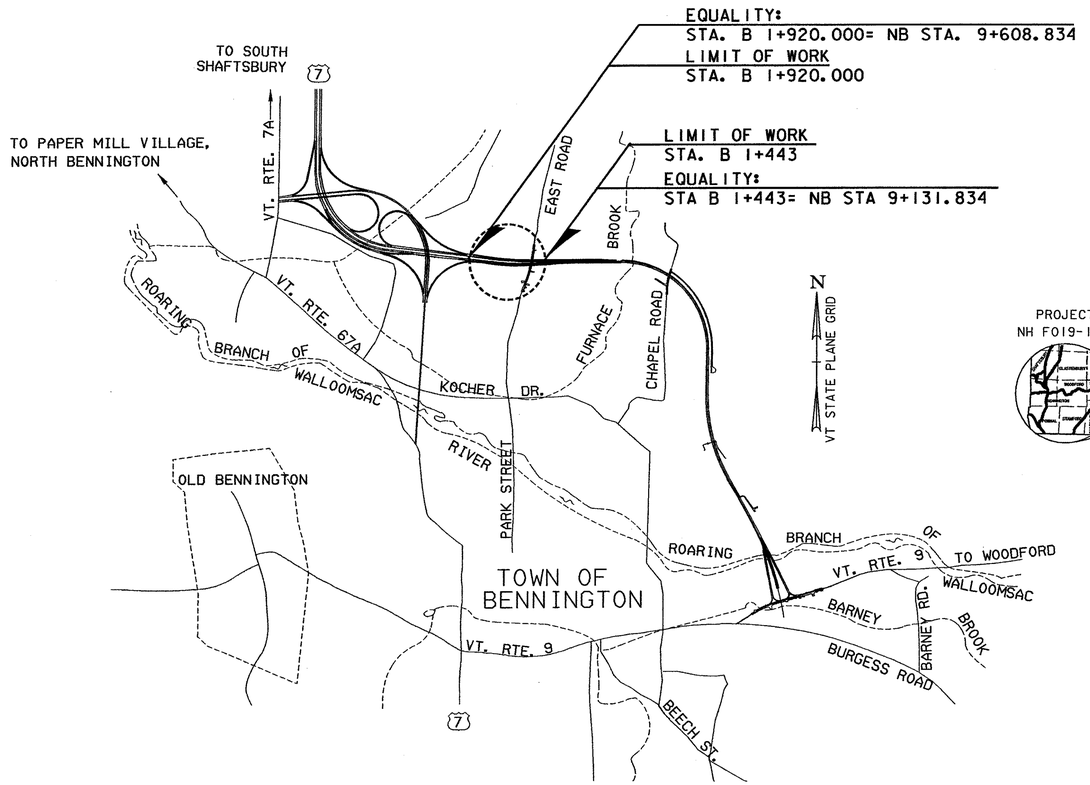
-SUBBASE OF CRUSHED GRAVEL (COARSE GRADED) ITEM 301.25

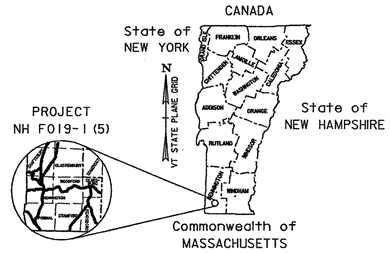
STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BRI000
	Log Sta.
Highway No. SILK ROAD	Surv. Sta. SRO+027
SILK ROAD CULVERT	
CULVERT DETAILS	
Designed By C. TUTUNJIAN	Drawn by B. WEATHERBY
Checked By M. GOGUEN Date 6/00	Bridge Design Supervisor M. OLSTAD Date 9/00
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.J. 0146(1) C/4
L.G.C. Info.	
Bridge Sheet No. BRI001	Sheet 251 OF 385

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

FILE NAME = u:\3573\15\bri000\detail.dgn
DATE/TIME = 9SEP 2000
USER = MSG





LOCUS PLAN

GRAPHIC SCALE

500 0 500 1000

METERS

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259	DRAINAGE DETAIL SHEET
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263,264	SITE PLAN
265,266	BORROW AREA PLAN
267	BORROW AREA PROFILE
268	HAUL ROAD PROFILE
269-273	BORROW AREA CROSS SECTIONS
274-283	HAUL ROAD CROSS SECTIONS

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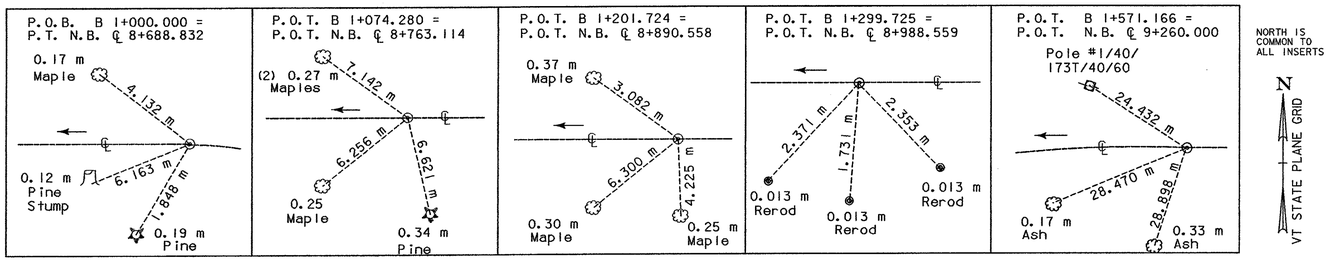
B-11M	METHODS OF SLOPE STABILIZATIN	6-13-97
D-3M	TREATED GUTTERS	6-13-97
D-6M	REINFORCED CONCRETE DROP INLET WITH GRATE	6-13-97
D-15M	CAST IRON GRATE WITH FRAME, TYPE D	6-13-97
D-20M	HIGHWAY CROSSING SLEEVES	6-13-97
E-100M	CONSTRUCTION APPROACH SIGNS	6-13-97
E-101M	CONSTRUCTION SIGN DETAILS	6-13-97
E-102M	CONSTRUCTION SIGN DETAILS	6-13-97
E-102AM	CONSTRUCTION SIGN DETAILS	6-13-97
E-106M	TRAFFIC CONTROL - MISCELLANEOUS DETAILS	6-13-97
T-1M	TEMPORARY EROSION CONTROL DETAILS	6-13-97
T-2M	TEMPORARY EROSION CONTROL DETAILS	6-13-97



MAINLINE TIE DATA

STATE OF VERMONT
GREGORY A. EDWARDS
No. 5812
REGISTERED PROFESSIONAL ENGINEER
2/29/00

ABOVE PROFESSIONAL ENGINEER STAMP
FOR SHEETS 255 THRU 283 ONLY

Dufresne-Henry

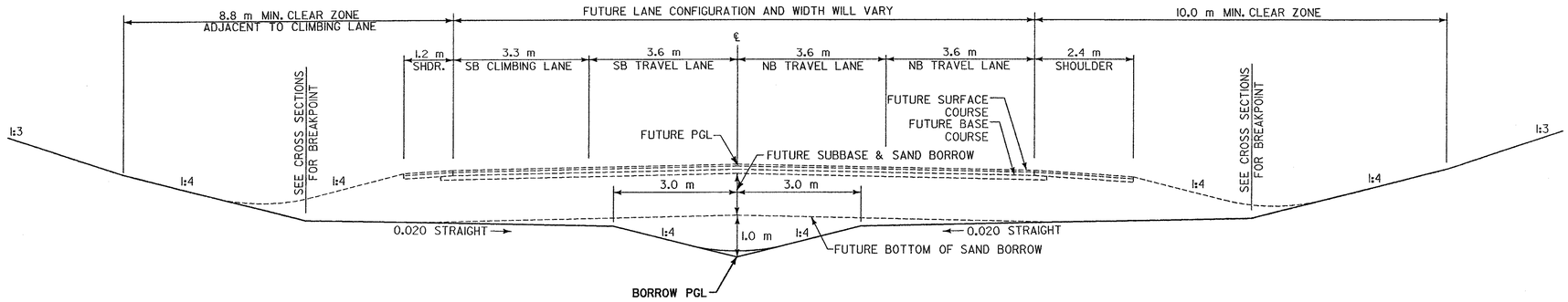
PROJECT NAME: BENNINGTION - HOOSICK
PROJECT NUMBER: DPI0146 (1) C/4

FILE NAME: locus-ties.dgn
PROJECT LEADER: GAE
DESIGNED BY: BJM
PLOT DATE: 08/29/2000
DRAWN BY: MAM
CHECKED BY: GAS

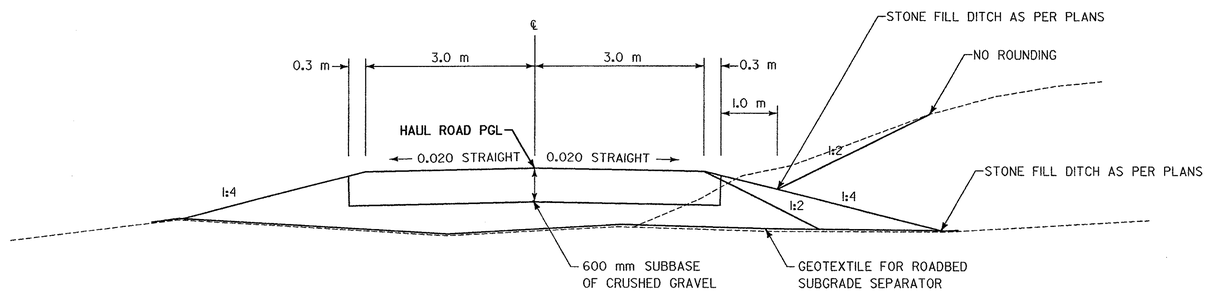
LOCATION, INDEX, TIES

SHEET 255 OF 385

TYPICAL SECTION
BORROW PIT AREA - CONTRACT #4



NORMAL SECTION WITH FUTURE NB & SB CLIMBING LANE
STA B 1+443 - STA B 1+582



HAUL ROAD
STA HR 1+005 - STA HR 1+340

SEEDING FORMULA ITEM 651.15
RURAL AREAS

MASS %	KG/HA	NAME	PUR %	GERM %
37.14	26.0	CREEPING RED FESCUE	98	85
37.14	26.0	TALL FESCUE	95	90
5.71	4.0	RED TOP	95	90
14.30	10.0	BIRDSFOOT TREFOIL	98	85
5.71	4.0	ANNUAL RYEGRASS	95	85
100.00	70.0			

GENERAL NOTES

THE SEED MIXTURE SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY MASS AND SHALL BE FREE OF ALL NOXIOUS WEED SEED.

SEED TO BE APPLIED PER SEEDING FORMULA OR AS DIRECTED BY THE ENGINEER.

FERTILIZER: FORMULA 10-20-10 TO BE USED WITH SEED, APPLIED AT RATE OF 560 KG/HA. (HYDRO SEEDERS MAY USE 19-19-19 FORMULA).

AGRICULTURAL LIMESTONE TO BE APPLIED AT THE RATE OF 4500 KG/HA OR AS DIRECTED BY THE ENGINEER.

HAY MULCH TO BE PLACED ON EARTH SLOPES AT THE RATE OF 4500 KG/HA OR AS DIRECTED BY THE ENGINEER.

MARKER POSTS TO BE PLACED AS DIRECTED BY THE ENGINEER.

SLOPE ROUNDING --ALL CUT SLOPES TO BE ROUNDED IN ACCORDANCE WITH STANDARD SHEET B-5 M

ALL EXCAVATED AND EXPOSED SLOPES SHALL BE SEEDED AND MULCHED AS DIRECTED BY THE ENGINEER

ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

Dufresne-Henry

PROJECT NAME: BENNINGTON - HOOSICK
PROJECT NUMBER: DPI 0146 (1) C/4

FILE NAME: borrow_typ.dgn
PROJECT LEADER: GAE
DESIGNED BY: BJM
PLOT DATE: 08/29/2000
DRAWN BY: MBL
CHECKED BY: GAS
TYPICAL SECTIONS
SHEET 256 OF 385

STATE OF VERMONT
AGENCY OF TRANSPORTATION

EARTHWORKS

Metric

STATION	DIST	TOTAL EXCAVATION EARTH AND ROCK AREA	TOTAL EXCAVATION EARTH AND ROCK VOLUME	ROCK EXCAVATION AREA	ROCK EXCAVATION VOLUME	EMBANKMENT AREA	EMBANKMENT VOLUME		
km + m	m	m^2	m^3	m^2	m^3	m^2	m^3	m^2	m^3
Borrow Area									
1+440		0.0				0			
	20		1981				0		
1+460		198.1				0			
	20		7832				0	CUT	54571
1+480		585.0				0		ROCK	0
	20		11139				0	R.FAC	.495
1+500		528.9				0		FILL	0
	20		10397				0	F.FAC	1.15
1+520		510.9				0		EX. C	54571
	20		10076				0		
1+540		496.7				0			
	20		8622				0		
1+560		365.5				0			
	20		4350				0		
1+580		69.5				0			
	5		174				0		
1+585		0.0				0			
Haul Road									
1+000		0.0				0			
	20						10		
1+020		0.0				1			
	20						30		
1+040		0.0				2			
	20						50		
1+060		0.0				3			
	20						80		
1+080		0.0				5		CUT	0
	20						100	ROCK	0
1+100		0.0				5		R.FAC	.495
	20						90	FILL	760
1+120		0.0				4		F.FAC	1.15
	20						70	EX. F	874
1+140		0.0				3			
	20						90		
1+160		0.0				6			
	20						120		
1+180		0.0				6			
	20						120		
1+200		0.0				6			
	20						160		
1+220		0.0				10			
	20						170		
1+240		0.0				7			
	20		20				310		
1+260		2.0				24			
	20		20				450	CUT	80
1+280		0.0				21		ROCK	0
	20						300	R.FAC	.495
1+300		0.0				9		FILL	1480
	20		20				90	F.FAC	1.15
1+320		2.0				0		EX. F	1622
	20		20						
1+340		0.0				0			
	17								
1+357		0.0				0			
Borrow Area Ditch									
1+475		3.8				0			
	5		20				0	CUT	170
1+480		3.8				0		ROCK	0
	20		80				0	R.FAC	.495
1+500		3.8				0		FILL	0
	20		80				0	F.FAC	1.15
1+520		4.0				0		EX. C	170
Haul Road Ditch #1									
1+020		0.5				0			
	20		10				0		
1+040		0.5				0			
	20		10				0	CUT	67
1+060		0.5				0		ROCK	0
	20		10				0	R.FAC	.495
1+080		0.5				0		FILL	0
	20		10				0	F.FAC	1.15
1+000		0.5				0		EX. C	67
	20		10				0		
1+120		0.5				0			
	20		10				0		
1+140		0.5				0			
	14		7				0		
1+156		0.5				0			

STATION	DIST	TOTAL EXCAVATION EARTH AND ROCK AREA	TOTAL EXCAVATION EARTH AND ROCK VOLUME	ROCK EXCAVATION AREA	ROCK EXCAVATION VOLUME	EMBANKMENT AREA	EMBANKMENT VOLUME		
km + m	m	m^2	m^3	m^2	m^3	m^2	m^3	m^2	m^3
Haul Road Ditch #2									
1+230			0.5				0		
	10				10		0	CUT	48
1+240			0.5				0	ROCK	0
	20				10		0	R.FAC	.495
1+260			0.5				0	FILL	0
	20				10		0	F.FAC	1.15
1+280			0.5				0	EX. C	0
	20				10		0		
1+300			0.5				0		
	15				8		0		
1+315			0.5				0		

STATION	DIST	TOTAL EXCAVATION EARTH AND ROCK AREA	TOTAL EXCAVATION EARTH AND ROCK VOLUME	ROCK EXCAVATION AREA	ROCK EXCAVATION VOLUME	EMBANKMENT AREA	EMBANKMENT VOLUME		
km + m	m	m^2	m^3	m^2	m^3	m^2	m^3	m^2	m^3

SUMMARY AND BALANCES

STATION TO STATION km + m		TOT EXC. EARTH & ROCK m^3	ROCK EXCAV m^3	EMBANK m^3	EXCESSES CUT	EXCESSES FILL	ACUMULATIVE EXCESSES CUT	ACUMULATIVE EXCESSES FILL
BORROW AREA								
1+440	1+585	54571	0	0	54571		54571	
HAUL ROAD								
1+000	1+180	0	0	760		874	53697	
1+200	1+357	80	0	1480		1622	52075	
BORROW AREA DITCH								
1+475	1+520	170	0	0	170		52245	
HAUL ROAD DITCH #1								
1+020	1+156	67	0	0	67		52312	
HAUL ROAD DITCH #2								
1+230	1+315	48	0	0	48		52360	
DRAINAGE *		301			301		52661	
		55237		2240				

* FROM DRAINAGE DETAIL SHEET

REMARKS

EARTH AND ROCK EXCAVATION	55237
SOLID ROCK EXCAVATION	0
EARTH EXCAVATION	55237
PLANIMETERED FILL	2240
LESS FACTORED SOLID ROCK	0
LESS DISPLACEMENT OF ANY LARGE STRUCTURES	0
NET PLANIMETERED FILL	2240
FACTOR	1.15
PLANIMETERED FILL INCLUDING FACTOR	2576
MATERIALS AVAILABLE FOR FILLS	0
EARTH EXCAVATION	55237
CHANNEL EXCAVATION	0
UNDERDRAIN EXCAVATION	0
STRUCTURE EXCAVATION	0
TOTAL MATERIAL AVAILABLE FOR FILL	55237
TOTAL FILL INCLUDING FACTOR	2576
TOTAL MATERIAL FOR FILL	55237
BORROW	0
EXCESS EXCAVATION	52661

PROJECT NAME: **BENNINGTON - HOOSICK**
PROJECT NUMBER: **DPI 0146 (1) C4**

FILE NAME: **C4borrow_earth.xls**
PROJECT LEADER: **GAE**
DESIGNED BY: **BJM**
EARTHWORK SHEET #1

PLOT DATE: **8/21/2000**
DRAWN BY: **DAH**
CHECKED BY: **GAS**
SHEET **257** OF **385**

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET

Metric

| SUMMARY OF ESTIMATED QUANTITIES | | |

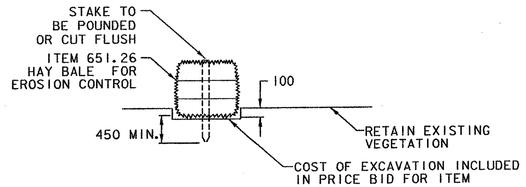
STATE OF VERMONT
AGENCY OF TRANSPORTATION

DRAINAGE DETAIL SHEET

Metric

STATION km + m	STATION km + m	POS.	ASKEW no. deg.	INLET/OUTLET TYPE INLET	INLET/OUTLET TYPE OUTLET	DITCH IN	DITCH OUT	PIPE ARCH SPAN mm	PIPE ARCH RISE mm	PIPE ARCH L m	PIPE D mm	PIPE L m	ALLOWABLE OPTIONS PCCSP mm	CAAP mm	RCP CL	CSP mm	CPEP SL mm	PCCSP PI mm	PIPE ELBOW no. deg.	ES ea	CB ea	PRCCDI	DEPTH DI mm	CONC CLASS B m³	REINF STEEL kg	DI GRATE type	CHAN ELEV ea	CRM m³	TRENCH EXCAVATION EARTH m³	TRENCH EXCAVATION ROCK m³	COMM EXC m³	UNC CHAN EXC m³	STRUCT EXCAV m³	GRAN BKFILL STRUCT m³	GRAN BORR m³	EROS MATT m²	STONE FILL m³	STONE FILL type	MARKER POSTS LT ea	MARKER POSTS RT ea	REMARKS
B 1+475	B 1+520	CL																													171						171	I			45 m TYPE I STONE DITCH
B 1+568	B 1+568	LT&RT									150	10																	11.5		19						19	I			USE UNDERDRAIN CARRIER PIPE
B 1+568	B 1+571	CL		SPEC'L	RCDI						150	3											2100	2.52	138	E			2.3											1	"TEE" SUBSIDERARY TO PIPE
B 1+571	B 1+623	LT		RCDI	ES						450	55					X			1									285								80	I		1	EXCAVATION INCLUDES PIPE AND DI
HR 1+020	HR 1+156	RT																													68						68	I			136 m TYPE I STONE DITCH
HR 1+230	HR 1+315	RT																													43						43	I			85 m TYPE I STONE DITCH; OUTLET TO EX. DI
HR 1+150		LT&RT	45								450	16			III					2									24								9	I			STONE FILL FOR INLET & OUTLET EXCAVATION INCLUDES PIPE AND STONE PAD
		TOTAL																		3				2.52	138	1			322.8		301						390			2	

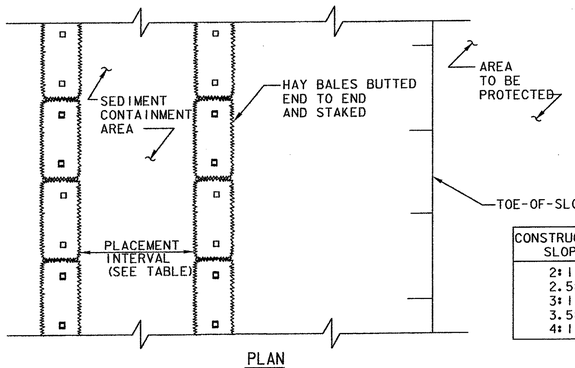
PROJECT NAME:	**BENNINGTON - HOOSICK**
PROJECT NUMBER:	**DPI 0146 (1) C/4**
FILE NAME:	**C4_drainage_sum.xls**
PROJECT LEADER:	**GAE**
DESIGNED BY:	**BJM**
DRAINAGE DETAIL SHEET #1	
PLOT DATE:	**8/21/2000**
DRAWN BY:	**DAH**
CHECKED BY:	**GAS**
SHEET	**259** OF **385**



SECTION

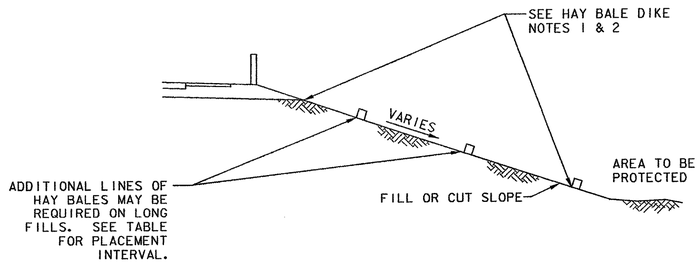
HAY BALE BEDDING DETAIL

NOT TO SCALE



CONSTRUCTION SLOPE	PLACEMENT INTERVAL
2:1	8 m
2.5:1	15 m
3:1	25 m
3.5:1	30 m
4:1	40 m

PLAN



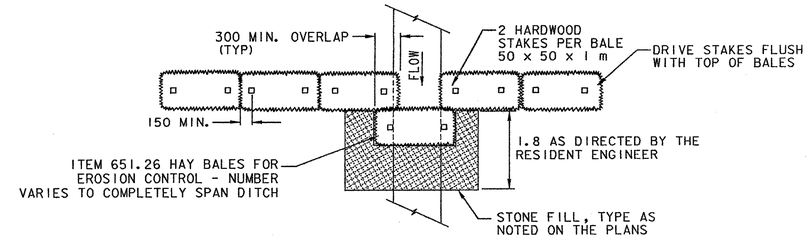
SECTION

HAY BALE DIKE

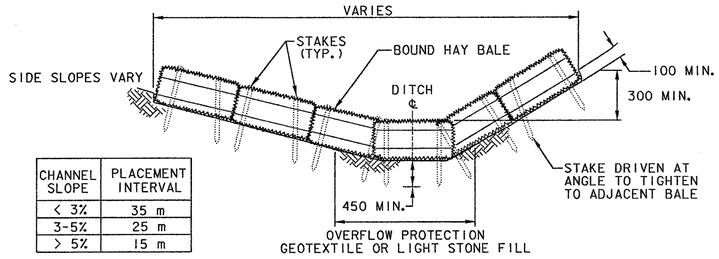
NOT TO SCALE

HAY BALE DIKE NOTES:

1. TEMPORARY EROSION CONTROL PROTECTION BY MULCHING MUST BE CARRIED OUT AS THE FILL IS PROGRESSED TO AVOID ALL POSSIBLE CONTAMINATION OF THE STREAM OR PROPERTY.
2. PERMANENT EROSION CONTROL BY SEEDING AND MULCHING SHALL BE DONE AS SOON AS THE FILL IS BROUGHT TO FINAL GRADE.

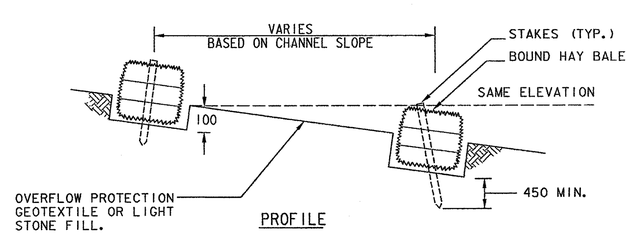


PLAN



CHANNEL SLOPE	PLACEMENT INTERVAL
< 3%	35 m
3-5%	25 m
> 5%	15 m

ELEVATION



PROFILE

HAY BALE CHECK DAM

NOT TO SCALE

GENRAL HAY BALE NOTES:

1. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 100 mm, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
2. HAY BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE AND INTO THE UNDISTURBED GROUND A MINIMUM OF 450 mm. STAKES IN EACH BALE SHALL BE DRIVEN TOWARDS THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE TOP OF THE BALE.

ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

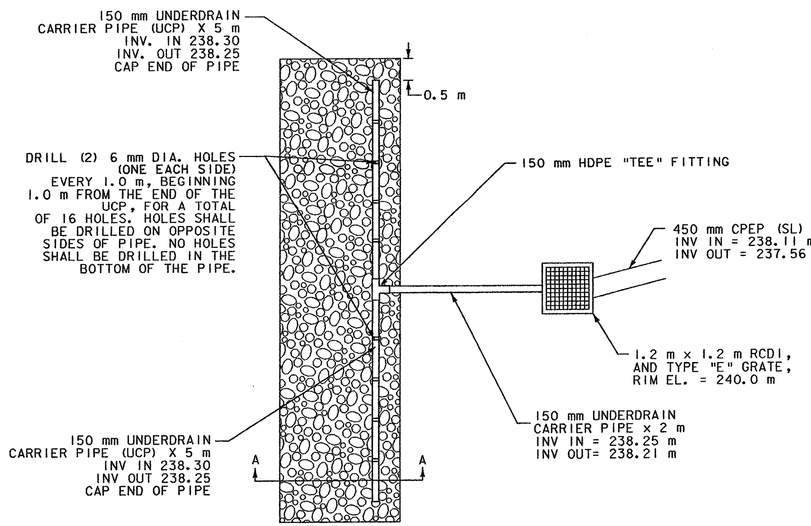
Dufresne-Henry

PROJECT NAME: BENNINGTON - HOOSICK
PROJECT NUMBER: DPI 0146 (1) C/4

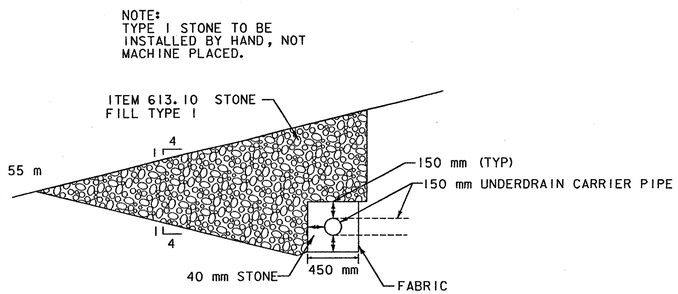
FILE NAME: borrow detail.dgn
PROJECT LEADER: GAE
DESIGNED BY: BJM
BORROW AREA DETAILS

PLOT DATE: 08/29/2000
DRAWN BY: MBL
CHECKED BY: GAS
SHEET 260 OF 385

Metric

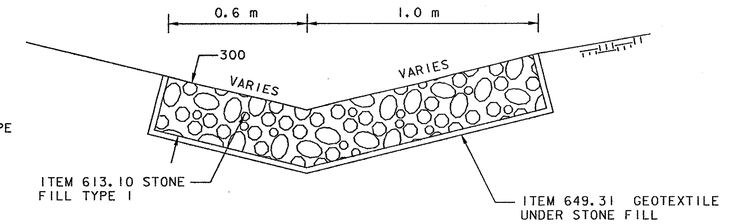


PLAN



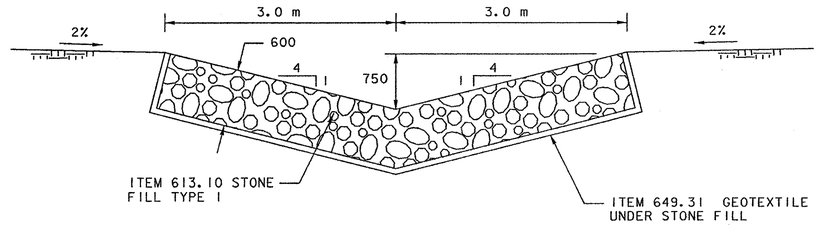
SECTION A-A

DETENTION POND OUTLET STRUCTURE



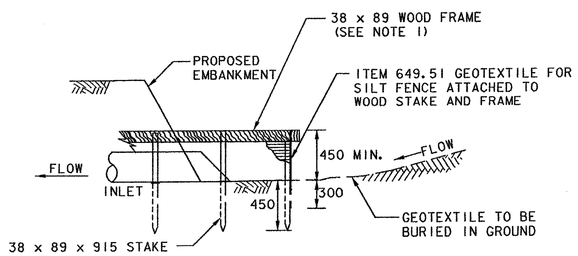
DITCH PROTECTION

STA. HR 1+020 TO HR 1+156
STA. HR 1+230 TO HR 1+315
NOT TO SCALE

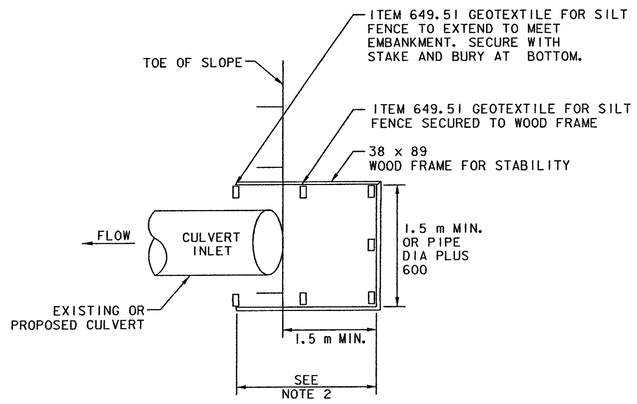


DITCH PROTECTION

STA. B 1+460 TO B 1+520
NOT TO SCALE



ELEVATION



PLAN

SILT FENCE FOR TEMPORARY EROSION CONTROL AT CULVERT INLETS

NOT TO SCALE

STANDARD SYMBOL:

BORING LOCATION TABLE				
BORING #	BORROW STA.	OFFSET	MAINLINE STA.	OFFSET
376	B 1+061.17	14.0 m LT	8+750.00	14.0 m LT
384	B 1+211.17	14.0 m LT	8+900.00	14.0 m LT
xxx	B 1+210.55	4.0 m RT	8+900.00	4.0 m RT
xxx	B 1+260.58	4.0 m RT	8+950.00	4.0 m RT
393	B 1+261.17	15.0 m RT	8+950.00	15.0 m RT
396	B 1+261.17	35.0 m RT	8+950.00	35.0 m RT
401	B 1+311.17	14.0 m LT	9+000.00	14.0 m LT
xxx	B 1+310.74	4.0 m RT	9+000.00	4.0 m RT
xxx	B 1+360.82	4.0 m RT	9+050.00	4.0 m RT
416	B 1+411.17	14.0 m LT	9+100.00	14.0 m LT
xxx	B 1+410.76	4.0 m RT	9+100.00	4.0 m RT
xxx	B 1+460.87	4.0 m RT	9+150.00	4.0 m RT
428	B 1+510.64	14.0 m LT	9+200.00	14.0 m LT
xxx	B 1+510.64	4.0 m RT	9+200.00	4.0 m RT
453	B 1+706.17	14.0 m LT	9+395.00	14.0 m LT
454	B 1+706.17	11.5 m LT	9+395.00	11.5 m LT

NOTES:

1. A 38 mm x 89 mm WOOD FRAME SHALL BE CONSTRUCTED AROUND THE TOP OF THE STAKES OVER THE ATTACHED FABRIC FOR OVERFLOW STABILITY.
2. SPACE STAKES EVENLY AROUND INLET TO A MAXIMUM OF 900 mm APART AND DRIVE A MINIMUM 450 mm DEEP. SPANS GREATER THAN 900 mm MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.

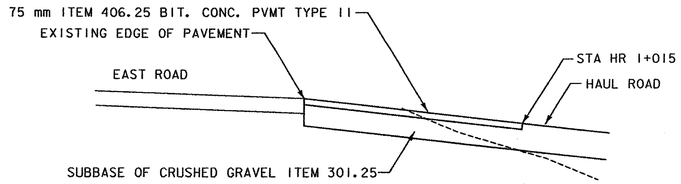
ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

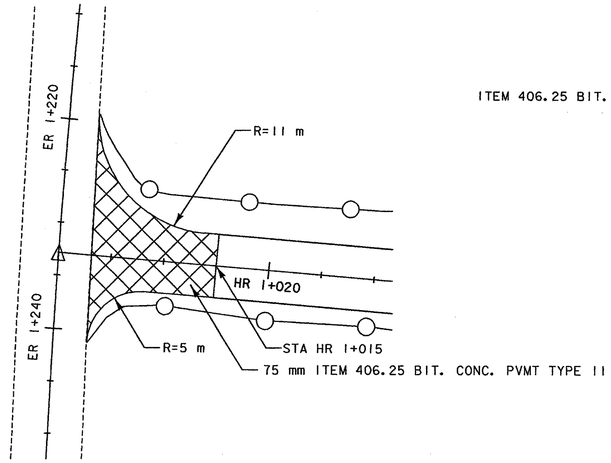
Dufresne-Henry

PROJECT NAME: BENNINGTON - HOOSICK
PROJECT NUMBER: DPI0146 (I) C/4

FILE NAME: borrow detail.dgn
PROJECT LEADER: GAE
DESIGNED BY: BJM
BORROW AREA DETAILS

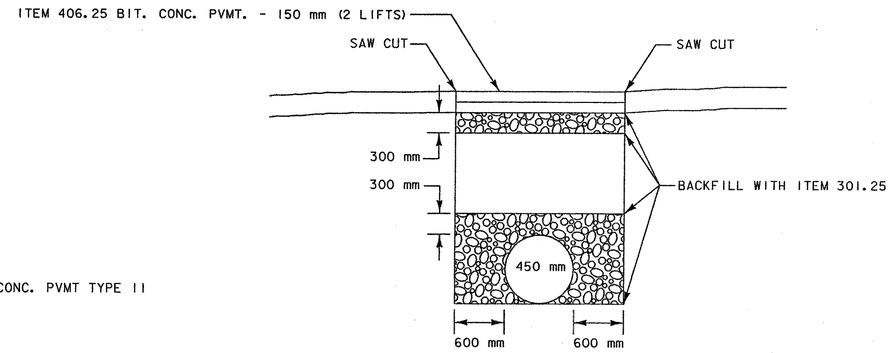
PLOT DATE: 08/29/2000
DRAWN BY: MBL
CHECKED BY: GAS
SHEET 261 OF 385





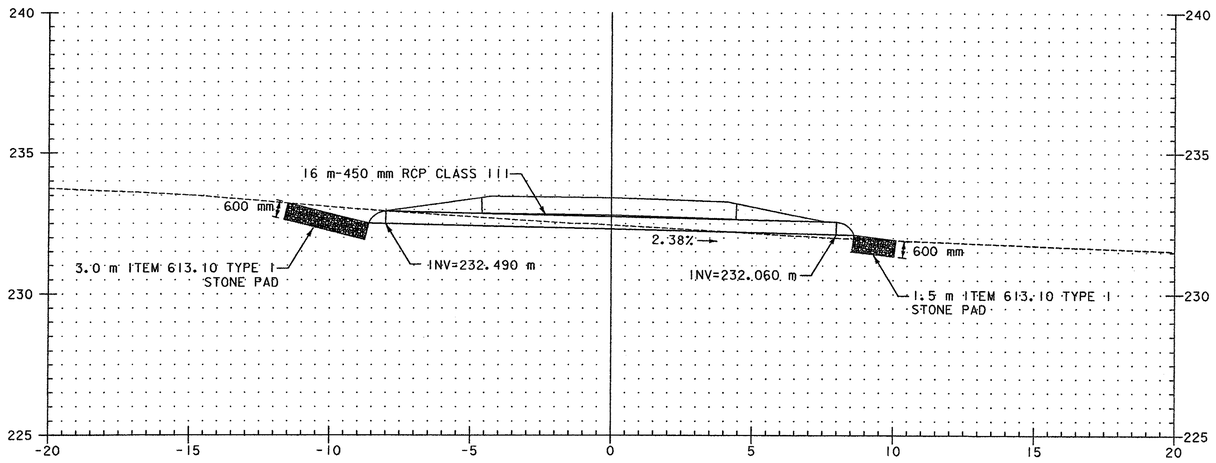
HAUL ROAD CONNECTION DETAIL

NOT TO SCALE



TRENCH DETAIL - EAST ROAD CROSSING

NOT TO SCALE



HR 1+150 - 45° SKEW LEFT

HAUL ROAD CULVERT SECTION THRU PIPE

NOT TO SCALE

ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

Dufresne-Henry

PROJECT NAME: BENNINGTON - HOOSICK
PROJECT NUMBER: DPI 0146 (1) C/4

FILE NAME: borrow detail.dgn
PROJECT LEADER: GAE
DESIGNED BY: BJM
BORROW AREA DETAILS

PLOT DATE: 09/05/2000
DRAWN BY: MBL
CHECKED BY: GAS
SHEET 262 OF 385

VAOT Metric

VT STATE PLANE GRID N

EQUALITY :
B 1+000.000 =
NB STA 8+688.832

BM # 145
SPIKE IN ROOT 0.40 m PINE
NAVD EL. 253.102

BM # 146
SPIKE IN ROOT 0.36 m CHERRY
NAVD EL. 260.857

BM # 147
SPIKE IN ROOT 0.19 m BIRCH
NAVD EL. 251.713

BM # 144
SPIKE IN ROOT 0.42 m PINE
NAVD EL. 244.619

PROPERTY LINE

BROOK

IP

POI

S 90° 00' 00.0" W

B 1+000 B 1+040 B 1+080 B 1+120 B 1+160 B 1+200 B 1+240 B 1+280 B 1+320 B 1+360 B 1+400 B 1+440 B 1+480 B 1+520 B 1+560 B 1+600

HR 1+000 HR 0+40

MATCH LINE STA 1+630 SP-2

ARCHAEOLOGICALLY SENSITIVE AREA
NO GROUND DISTURBANCE

STA B 1+278.000
LIMIT OF WORK - CONTRACT #3

STA B 1+438.000
LIMIT OF WORK - CONTRACT #4

STA B 1+582.000
LIMIT OF WORK - CONTRACT #3

(2A) BENNINGTON COUNTY INDUSTRIAL CORP. (CHRIS HUNSINGER)
CONSTRUCTION OF CULVERT AND CB UNDER CONTRACT #4

(3) ALAN HOOD

(4A) HENRY LYONS

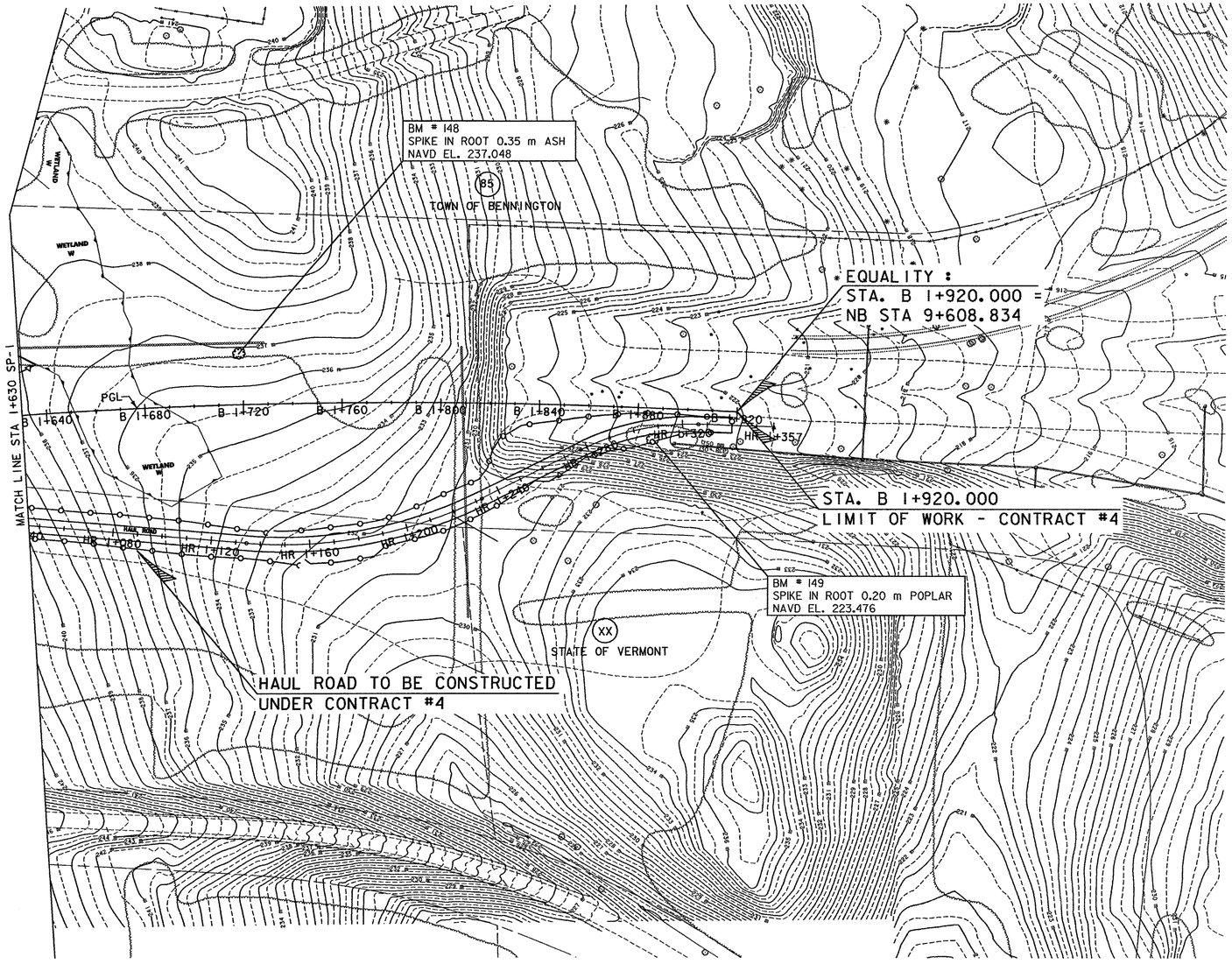
(1) MOUNT ANTHONY UNION HIGH SCHOOL, DIST. #14

20 0 20 METERS
1:1000 SCALE
@ FULL SIZE

Dufresne-Henry

PROJECT NAME:	BENNINGTON - HOOSICK		
PROJECT NUMBER:	DPI0146 (1) C/4		
FILE NAME:	borrow spl.ptf	PLOT DATE:	09/05/2000
PROJECT LEADER:	GAE	DRAWN BY:	MBL
DESIGNED BY:	BJM	CHECKED BY:	GAS
SITE PLAN SP-1		SHEET 263	OF 385

VAOT Metric



20 0 20 METERS
1:1000 SCALE
@ FULL SIZE

Dufresne-Henry

PROJECT NAME:	BENNINGTON - HOOSICK		
PROJECT NUMBER:	DPI 0146 (1) C/4		
FILE NAME:	borrow sp2.ptf	PLOT DATE:	08/29/2000
PROJECT LEADER:	GAE	DRAWN BY:	MBL
DESIGNED BY:	BJM	CHECKED BY:	GAS
SITE PLAN SP-2		SHEET	264 OF 385

SNOW FENCE FOR PROTECTION			
STATION	STATION	LOCATION	QUANTITY
MAINLINE			
B 1+438	B 1+592	LT.	190 m
B 1+438	B 1+579	RT.	181 m
ER 1+152	ER 1+232	RT.	80 m
ER 1+220	ER 1+240	LT.	20 m

HAYBALES FOR EROSION			
STATION	STATION	LOCATION	QUANTITY
MAINLINE			
B 1+458	B 1+469	LT. & RT.	76 EA
B 1+469	B 1+501	LT.	30 EA
B 1+469	B 1+507	RT.	36 EA
B 1+501	B 1+556	LT.	57 EA
B 1+505	B 1+567	LT.	62 EA

VAOT Metric

(58) BENNINGTON COUNTY INDUSTRIAL CORP.

CONSTRUCT OUTLET PROTECTION TYPE I STONE FILL STA. B 1+625 TO STA. B 1+635 LT.

WELL

FUTURE ROADWAY LIMITS

(59) ALAN HOOD

PERMANENT EASEMENT LINE

PROPOSED ROW LINE

PI STA ER 1+150.786

NEW 450 mm CPEP (SL) X 55 m W/ END SECTION @ OUTLET

1.2 m X 1.2 m R.C.D.I. AND TYPE "E" GRATE TG = 240.00 m

PROPOSED ROW LINE

FUTURE ROADWAY LIMITS

EXCAVATION LIMITS

EXISTING ROW LINE

CROSS OVER

SEE DETAILS FOR OUTLET STRUCTURE

INV.= 237.56 m CURVE NO. BI

NB ROUTE 7

INV.= 238.11 m

EQUALITY : STA ER 1+194.654 = STA B 1+590.595

MATCH LINE STA. 1+640 PL-2

PGL

BEGIN CONSTRUCTION STA B 1+443.000

R=11 m

HR 1+020

HR 1+040

R=5 m

EQUALITY STA HR 1+000.00= STA ER 1+232.86

PT STA ER 1+257.970

CONSTRUCT STONE FILL DITCH, TYPE I STA. B 1+475 TO STA. B 1+520

SNOW FENCE TO BE PLACED ALONG EAST ROAD AND END OF HAUL ROAD WHEN NOT IN USE

EASEMENT LINE

(57) HENRY LYONS

PROPOSED ROW LINE

(XX) MOUNT ANTHONY UNION HIGH SCHOOL, DIST. #14

CURVE NO. ERI
Δ=13°42'46.4" LT
R.= 900.000m
T.= 108.218m
L.= 215.402m
E.= 6.483m
BANK = N/A

CURVE NO. BI
Δ=7°15'00.5" RT
R.= 2380.000m
T.= 150.781m
L.= 301.160m
E.= 4.771m
BANK = N/A

EROSION LEGEND	
DESCRIPTION	SYMBOL
HAY/STRAWBALE CHECKDAM	
HAY/STRAWBALE (HAYBALE DIKE)	
SILT FENCE	
SILT FENCE FOR CULVERT INLET PROTECTION	
SNOW FENCE	

XXX SOIL BORING LOCATION

10 0 10 METERS

1:500 SCALE @ FULL SIZE

Dufresne-Henry

PROJECT NAME:	BENNINGTON - HOOSICK
PROJECT NUMBER:	DPI 0146 (I) C/4
FILE NAME: borrow2.ptf	PLOT DATE: 09/05/2000
PROJECT LEADER: GAE	DRAWN BY: PDC
DESIGNED BY: BJM	CHECKED BY: GAS
BORROW AREA PLAN 1	SHEET 265 OF 385

SNOW FENCE FOR PROTECTION			
STATION	STATION	LOCATION	QUANTITY
HAUL ROAD			
HR 1+005	HR 1+340	LT.	340 m
HR 1+005	HR 1+340	RT.	336 m

EROSION LEGEND	
DESCRIPTION	SYMBOL
HAY/STRAWBALE CHECKDAM	
HAY/STRAWBALE (HAYBALE DIKE)	
SILT FENCE	
SILT FENCE FOR CULVERT INLET PROTECTION	
SNOW FENCE	

VT STATE PLANE GRID N

(85)

TOWN OF BENNINGTON

EXISTING ROW LINE

WETLAND W

BM * 148
SPIKE IN ROOT 0.35 m ASH
NAVD EL. 237.048

EQUALITY :
STA. B 1+920.000 =
NB STA 9+608.834

SB ROUTE 7

PI STA B 1+722.938

PT STA B 1+873.317

POE STA B 1+920.000

POE STA HR 1+356.96

453
454

S 90° 00' 00.0"W

N82° 44' 59.5"W

CURVE NO. B1

PCL

B 1+640 PL-1

B 1+640

B 1+660

B 1+680

B 1+700

B 1+720

B 1+740

B 1+760

B 1+780

B 1+800

B 1+820

B 1+840

B 1+860

B 1+880

B 1+900

B 1+920

PI HR 2
STA HR 1+302.25

N82° 10' 07.4"W

HR 1+320

HR 1+340

HR 1+357

MATCH LINE STA. 1+640 PL-1

FUTURE ROADWAY LIMITS

WETLAND NOT TO BE DISTURBED

WETLAND W

PC STA HR 1+134.37

EXISTING ROW LINE

HAUL ROAD

HR 1+060

HR 1+080

HR 1+100

HR 1+120

HR 1+140

HR 1+160

HR 1+180

HR 1+200

HR 1+220

HR 1+240

HR 1+260

HR 1+280

HR 1+300

S68° 38' 07.4"W

750 mm (30") RCP

PC STA HR 1+321.50

PT STA HR 1+326.34

END CONSTRUCTION
STA HR 1+340.000
CONSTRUCT SATISFACTORY APPROACH

EQUALITY
STA. HR 1+340.000 =
STA B 1+918.080 , 5.635 m RT.

BM *149
SPIKE IN ROOT 0.20 m POPLAR
NAVD EL. 223.476

STATE OF VERMONT

N80° 07' 06.7"W 4.568

EASEMENT LINE

EASEMENT LINE

CONSTRUCT STONE FILL DITCH, TYPE I
STA. HR 1+230 TO STA. HR 1+1315

SEE DETAIL SHEETS FOR CULVERT LAYOUT

000.00=
232.86

CONSTRUCT STONE FILL DITCH, TYPE I
STA. HR 1+020 TO STA. HR 1+156

HENRY LYONS

PI HR 1
STA HR 1+184.70

CURVE NO. B1
Δ=7° 15' 00.5" RT
R. = 2380.000m
T. = 150.781m
L. = 301.160m
E. = 4.771m
BANK = N/A

CURVE NO. HR 1
Δ=31° 14' 45.6" LT
R. = 180.000m
T. = 50.335m
L. = 98.162m
E. = 6.905m
BANK = N/A

CURVE NO. HR 2
Δ=28° 11' 44.9" RT
R. = 100.000m
T. = 25.114m
L. = 49.211m
E. = 3.105m
BANK = N/A

10 0 10 METERS
1:500 SCALE
@ FULL SIZE

Dufresne-Henry

PROJECT NAME: BENNINGTON - HOOSICK
PROJECT NUMBER: DPI 0146 (1) C/4

FILE NAME: borrow3.ptf
PROJECT LEADER: GAE
DESIGNED BY: BJM
PLOT DATE: 09/05/2000
DRAWN BY: PDC
CHECKED BY: GAS

BORROW AREA PLAN 2

SHEET 266 OF 385

Metric

PVI B 1+270.000
ELEV 261.882

LIMIT OF WORK - CONTRACT #3
STA. B 1+278.000

6.9148%

PVI B 1+281.285
ELEV 262.662

-50.0000%

PVI B 1+320.000
ELEV 243.305

-2.2669%

PVI B 1+412.116
ELEV 241.217

-3.9832%

BORROW PGL
AT CONSTR. ℄

LIMIT OF WORK - CONTRACT #4
STA. B 1+443.000

-50.0000%

(1-2)

LIMIT OF WORK - CONTRACT #3
STA. B 1+475.000

-3.9832%

-25.0000%
(1-4)

PVI B 1+527.518
ELEV 236.620

PVI B 1+555.000
ELEV 236.000

PVI B 1+530.000
ELEV 236.000

0.0000%

300 mm - 2 m

25.0000%
(1-4)

PVI B 1+580.412
ELEV 242.353

PVI B 1+586.395
ELEV 241.925

EAST ROAD

7.1461%

450 mm CPEP (SL) - 55 m

INV=238.110
INV=238.210
INV=238.250
INV=237.560

B 1+260	B 1+280	B 1+300	B 1+320	B 1+340	B 1+360	B 1+380	B 1+400	B 1+420	B 1+440	B 1+460	B 1+480	B 1+500	B 1+520	B 1+540	B 1+560	B 1+580	B 1+600	B 1+620	B 1+640
261.41	262.57 262.573	262.89 263.305	261.88 263.305	260.65 262.852	258.98 262.398	257.67 261.945	255.78 261.491	253.73 260.903	251.71 260.106	249.83 259.310	248.05 258.513	246.56 257.716	245.84 256.920	244.86 256.000	243.57 255.250	242.37 254.250	240.50	238.91	237.60

4 METERS
2
0 10 20 METERS

H 1:500 SCALE
V 1:100 SCALE
@ FULL SIZE

Dufresne-Henry

PROJECT NAME: BENNINGTON - HOOSICK
PROJECT NUMBER: DPI 0146 (1) C/4

FILE NAME: borrow prof.dgn
PROJECT LEADER: GAE
DESIGNED BY: BJM
PLOT DATE: 08/29/2000
DRAWN BY: PDC
CHECKED BY: GAS

BORROW AREA PROFILE

SHEET 267 OF 385

Metric

ER 1+232.86 =
PVI HR 1+000.000
ELEV 243.500

PVI HR 1+006.716
ELEV 243.500

0.0000%

BEGIN CONSTRUCTION
HR 1+005.000

-7.4000%

PVC HR 1+125.000
ELEV 234.747

PVT HR 1+165.000
ELEV 233.083

PVI HR 1+145.000
ELEV 233.267
L = 40.000 m
M.O. = 0.324 m
K = 6

PVC HR 1+210.000
ELEV 232.669

-0.9200%

PVI HR 1+240.000
ELEV 232.393
L = 60.000 m
M.O. = -0.909 m
S.S.D. = 39 m
K = 5

PVT HR 1+270.000
ELEV 228.481

PVC HR 1+280.000
ELEV 227.177

-13.0400%

PVT HR 1+340.000
ELEV 222.146

-3.7300%

PVI HR 1+310.000
ELEV 223.265
L = 60.000 m
M.O. = 0.757 m
K = 6

END CONSTRUCTION
HR 1+340.000
CONSTRUCT SATISFACTORY APPROACH

HR 1+000	HR 1+020	HR 1+040	HR 1+060	HR 1+080	HR 1+100	HR 1+120	HR 1+140	HR 1+160	HR 1+180	HR 1+200	HR 1+220	HR 1+240	HR 1+260	HR 1+280	HR 1+300	HR 1+320	HR 1+340	HR 1+357
243.500	242.517	241.037	239.557	238.077	236.597	235.117	233.819	233.149	232.939	232.616	232.108	231.388	229.889	227.410	224.983	223.228	222.146	221.500

4 M
2
10 20 M
H 1:500 SCALE
V 1:100 SCALE
@ FULL SIZE

ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

Dufresne-Henry, Inc.

PROJECT NAME: BENNINGTON - HOOSICK
PROJECT NUMBER: DPI 0146 (1) C/4

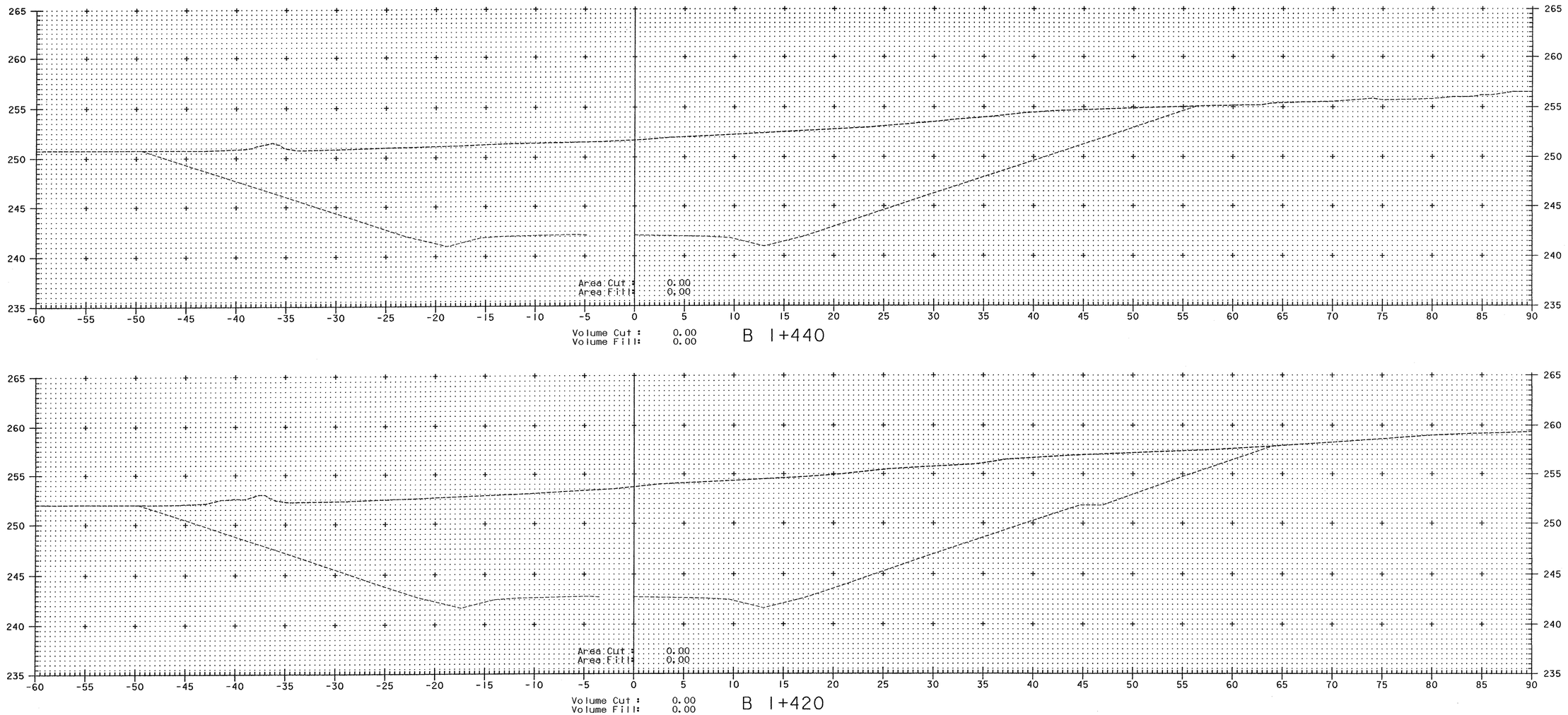
FILE NAME: HaulRoad prof.dgn
PROJECT LEADER: GAE
DESIGNED BY: BJM
PLOT DATE: 08/29/2000
DRAWN BY: MBL
CHECKED BY: GAS

HAUL ROAD PROFILE

SHEET 268 OF 385

Metric

BEGIN CONSTRUCTION
STA B 1+443.00



10 METERS

H 1:200 SCALE
V 1:200 SCALE
@ FULL SIZE

5 5 10 METERS

Dufresne-Henry

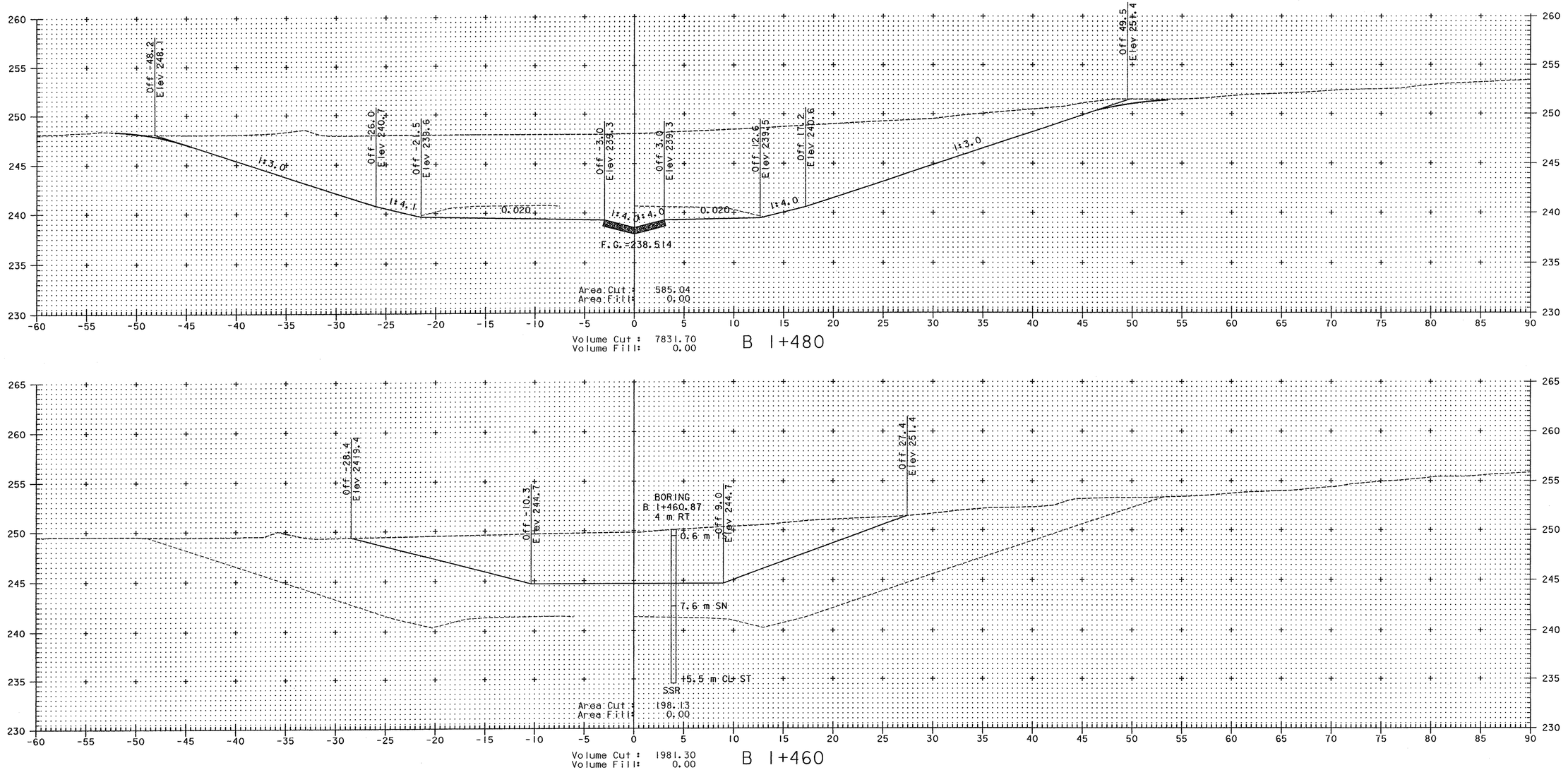
ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

PROJECT NAME: BENNINGTON - HOOSICK
PROJECT NUMBER: DPI 0146 (1) C/4

FILE NAME: c4 xs.dgn
PROJECT LEADER: GAE
DESIGNED BY: BJM
BORROW AREA CROSS SECTIONS

PLOT DATE: 08/29/2000
DRAWN BY: MBL
CHECKED BY: GAS
SHEET 269 OF 385

Metric



SOIL BORING CLASSIFICATION	
ABBREVIATION	DESCRIPTION
CL ST	CLAYEY SILT
FM	FOREST MAT
FSN ST	FINE SAND & SILT
GT	GLACIAL TILL
NLTD	NO LEDGE TO DEPTH
SN	SAND
SN ST	SANDY SILT
ST	SILT
TS	TOP SOIL
WGT	WEATHERED GLACIAL TILL
SSR	SPLIT SPOON REFUSAL

10 METERS

H 1:200 SCALE
V 1:200 SCALE
@ FULL SIZE

5 5 10 METERS

Dufresne-Henry

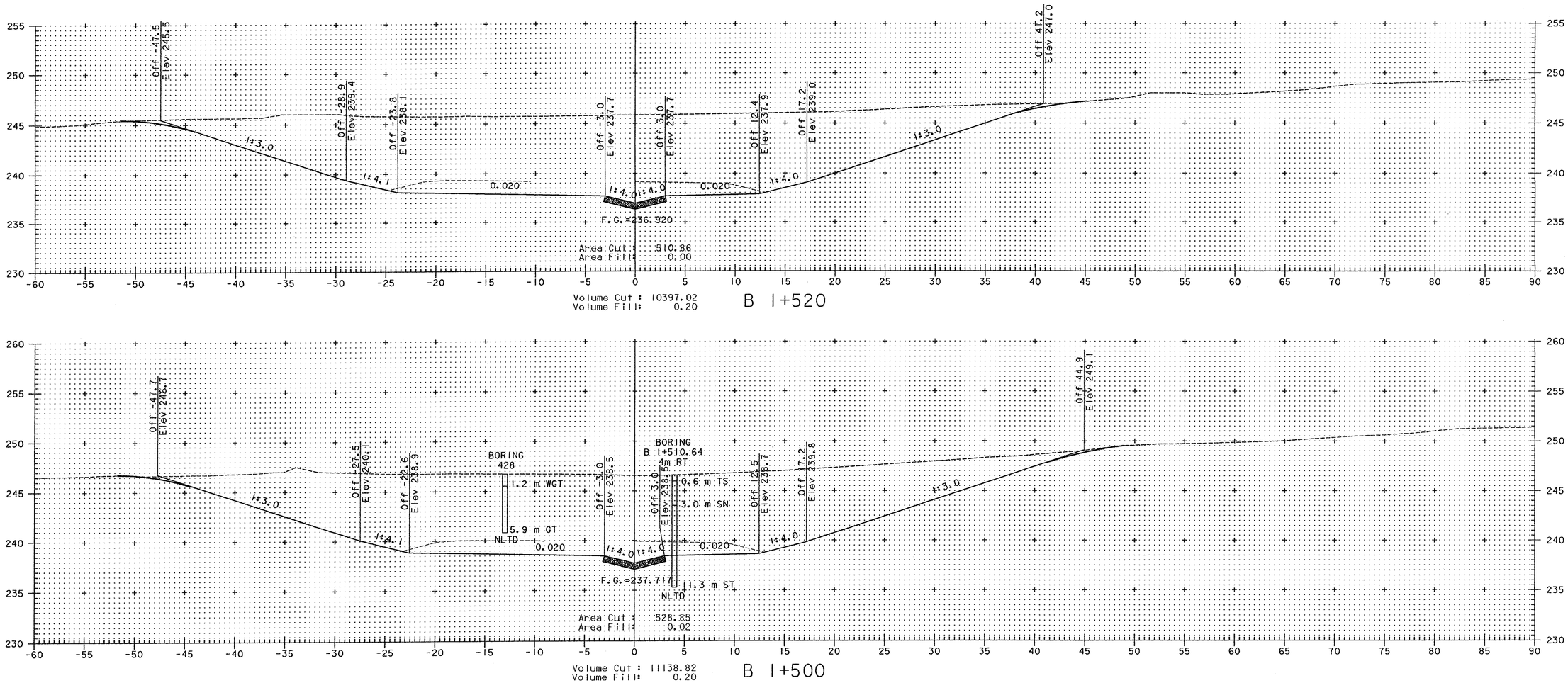
ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

PROJECT NAME: BENNINGTON - HOOSICK
PROJECT NUMBER: DPI0146 (1) C/4

FILE NAME: c4 xs.dgn
PROJECT LEADER: GAE
DESIGNED BY: BJM
PLOT DATE: 08/29/2000
DRAWN BY: MBL
CHECKED BY: GAS

BORROW AREA CROSS SECTIONS

SHEET 270 OF 385



SOIL BORING CLASSIFICATION	
ABBREVIATION	DESCRIPTION
CL ST	CLAYEY SILT
FM	FOREST MAT
FSN ST	FINE SAND & SILT
GT	GLACIAL TILL
NLTD	NO LEDGE TO DEPTH
SN	SAND
SN ST	SANDY SILT
ST	SILT
TS	TOP SOIL
WGT	WEATHERED GLACIAL TILL
SSR	SPLIT SPOON REFUSAL

10 METERS
5
5 10 METERS
H 1:200 SCALE
V 1:200 SCALE
@ FULL SIZE

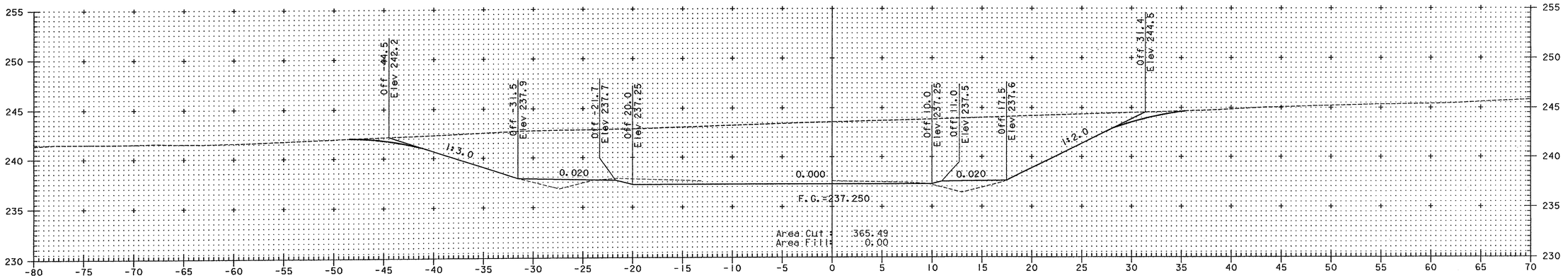
ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

Dufresne-Henry

PROJECT NAME: BENNINGTON - HOOSICK
PROJECT NUMBER: DP10146 (1) C/4

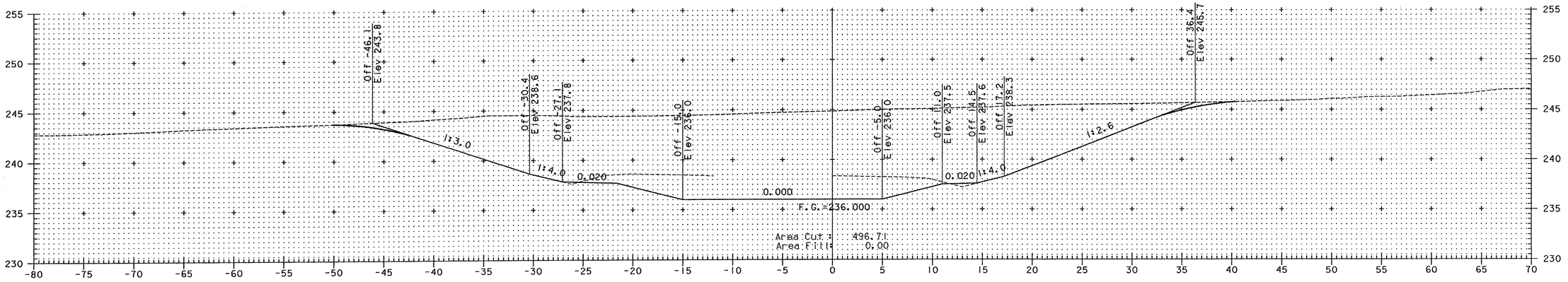
FILE NAME: c4 xs.dgn
PROJECT LEADER: GAE
DESIGNED BY: BJM
PLOT DATE: 08/29/2000
DRAWN BY: MBL
CHECKED BY: GAS
BORROW AREA CROSS SECTIONS
SHEET 271 OF 385

Metric



B 1+560

Volume Cut : 8125.49
Volume Fill: 0.00



B 1+540

Volume Cut : 9685.04
Volume Fill: 0.00

10 METERS

H 1:200 SCALE
V 1:200 SCALE
@ FULL SIZE

5 5 10 METERS

Dufresne-Henry

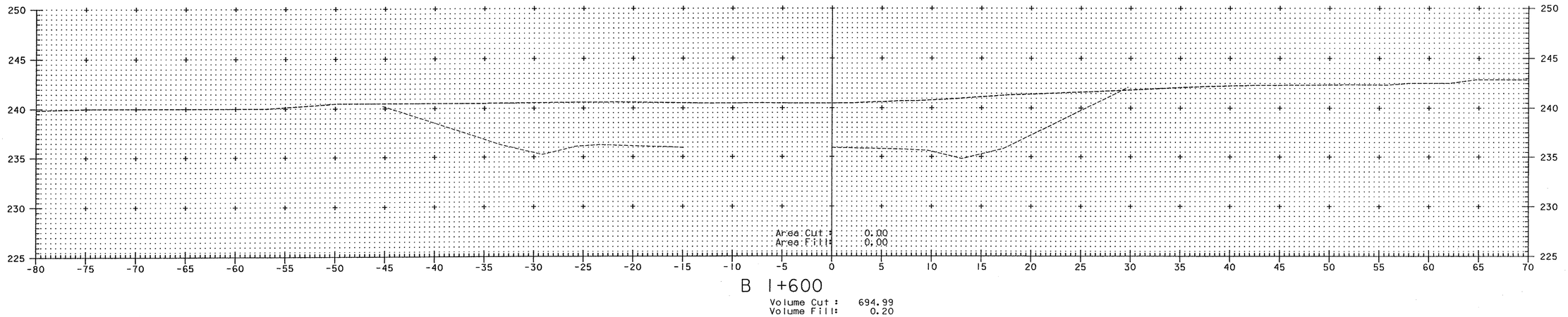
ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

PROJECT NAME: BENNINGTON - HOOSICK
PROJECT NUMBER: DPI 0146 (1) C/4

FILE NAME: c4 xs.dgn
PROJECT LEADER: GAE
DESIGNED BY: BJM
BORRROW AREA CROSS SECTIONS

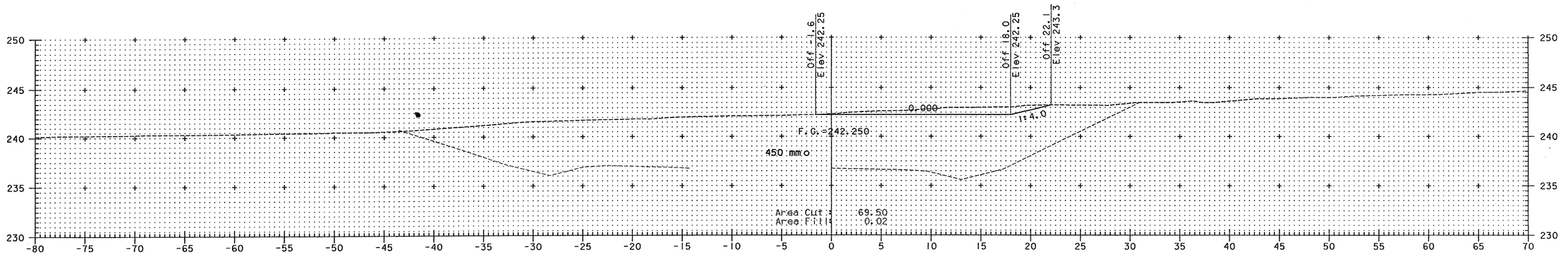
PLOT DATE: 08/29/2000
DRAWN BY: MBL
CHECKED BY: GAS
SHEET 272 OF 385

Metric



B 1+600

Volume Cut : 694.99
Volume Fill: 0.20



B 1+580

Volume Cut : 4287.53
Volume Fill: 0.20

10 METERS
5
H 1:200 SCALE
V 1:200 SCALE
@ FULL SIZE
5 10 METERS

ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

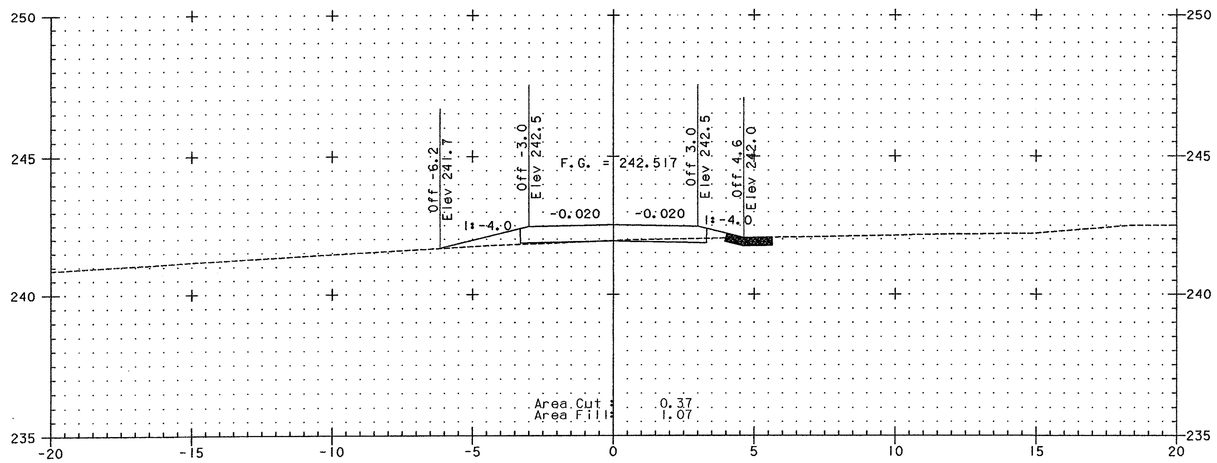
Dufresne-Henry

PROJECT NAME: BENNINGTON - HOOSICK
PROJECT NUMBER: DPI0146 (1) C/4

FILE NAME: c4 xs.dgn
PROJECT LEADER: GAE
DESIGNED BY: BJM
BORROW AREA CROSS SECTIONS

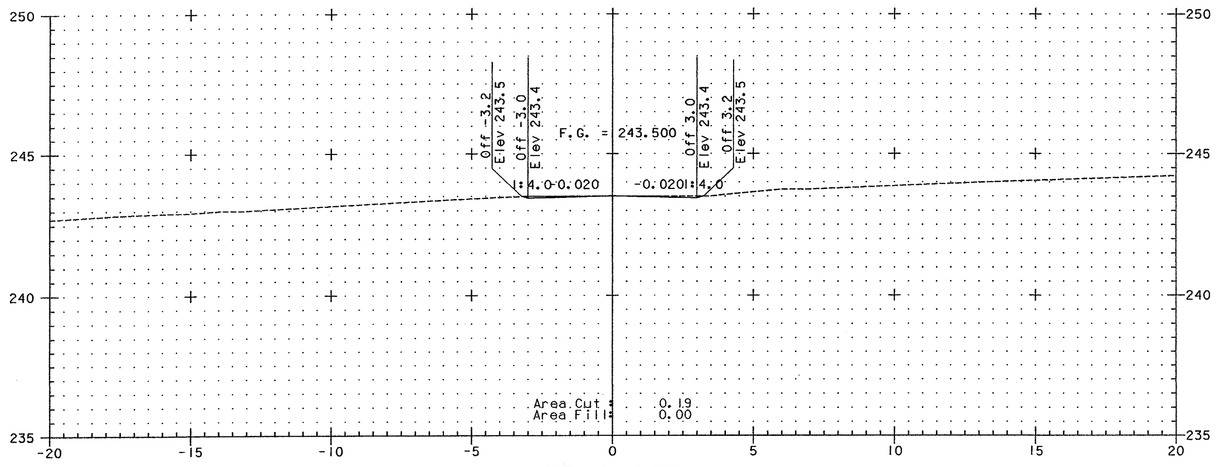
PLOT DATE: 08/29/2000
DRAWN BY: MBL
CHECKED BY: GAS
SHEET 273 OF 385

Metric



HR 1+020

Volume Cut : 5.66
Volume Fill: 10.65



HR 1+000

Volume Cut : 0.00
Volume Fill: 0.00

BEGIN CONSTRUCTION
STA HR 1+005

5 METERS
H 1:100 SCALE
V 1:100 SCALE
@ FULL SIZE
2.5
2.5 5 METERS

ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

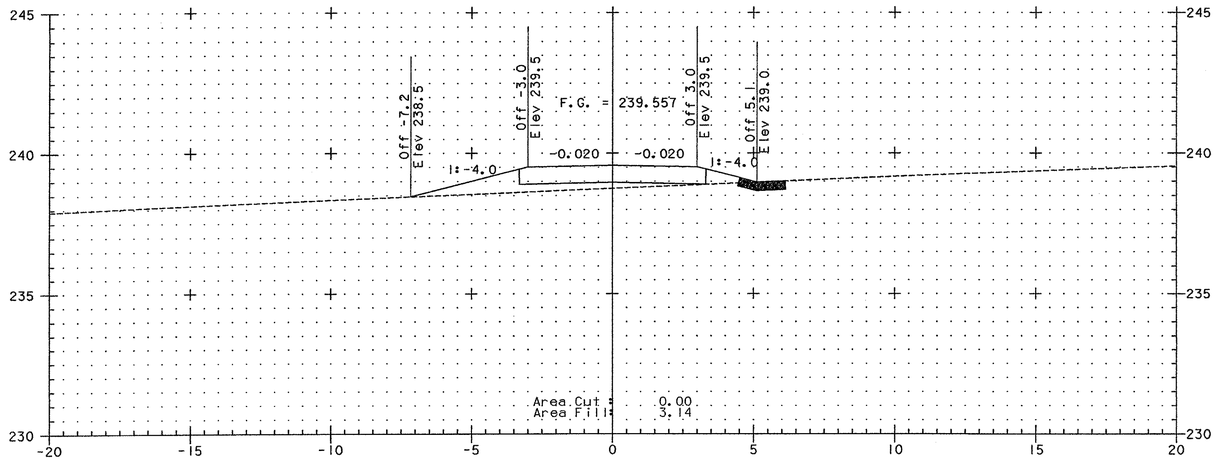
Dufresne-Henry

PROJECT NAME: BENNINGTON - HOOSICK
PROJECT NUMBER: DPI 0146 (1) C/4

FILE NAME: haulroad xs.dgn
PROJECT LEADER: GAE
DESIGNED BY: BJM
PLOT DATE: 08/29/2000
DRAWN BY: MBL
CHECKED BY: GAS

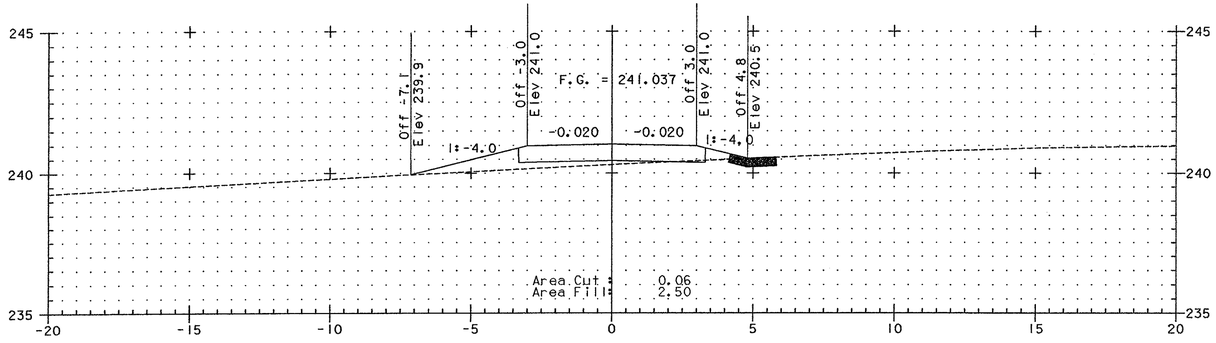
HAUL ROAD CROSS SECTIONS

SHEET 274 OF 385



HR 1+060

Volume Cut : 0.57
Volume Fill: 56.37



HR 1+040

Volume Cut : 4.28
Volume Fill: 35.63

5 METERS

H 1:100 SCALE
V 1:100 SCALE
@ FULL SIZE

2.5 2.5 5 METERS

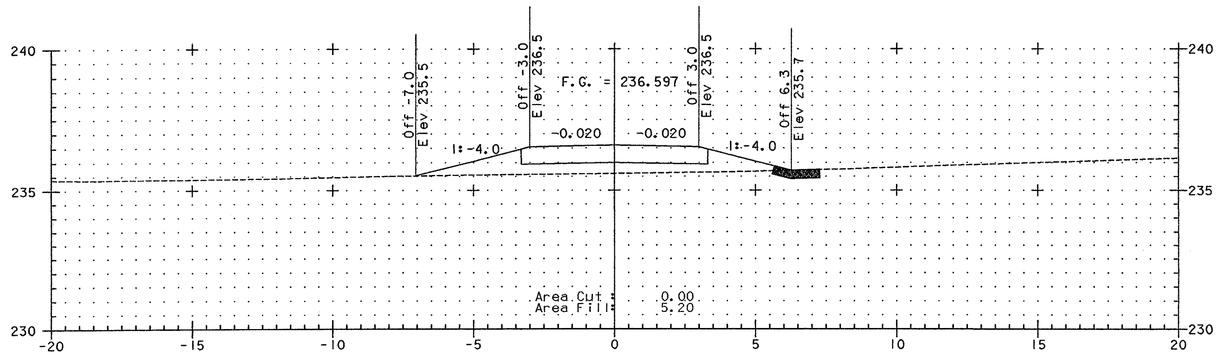
ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

Dufresne-Henry

PROJECT NAME: BENNINGTON - HOOSICK
PROJECT NUMBER: DPI 0146 (1) C/4

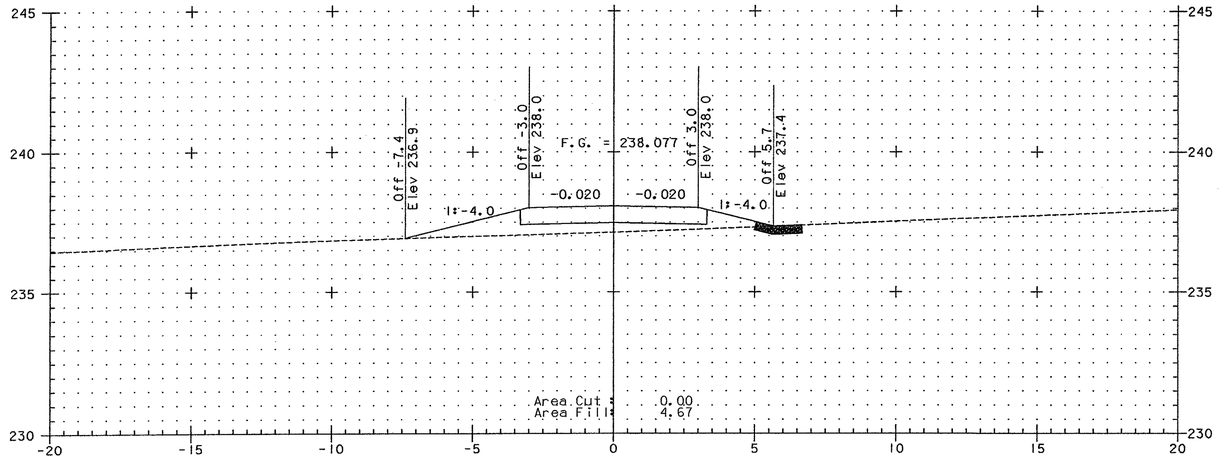
FILE NAME: haulroad xs.dgn
PROJECT LEADER: GAE
DESIGNED BY: BJM
HAUL ROAD CROSS SECTIONS

PLOT DATE: 08/29/2000
DRAWN BY: MBL
CHECKED BY: GAS
SHEET 275 OF 385



HR 1+100

Volume Cut : 0.00
Volume Fill: 98.72



HR 1+080

Volume Cut : 0.00
Volume Fill: 78.13

5 METERS
2.5
2.5 5 METERS

H 1:100 SCALE
V 1:100 SCALE
@ FULL SIZE

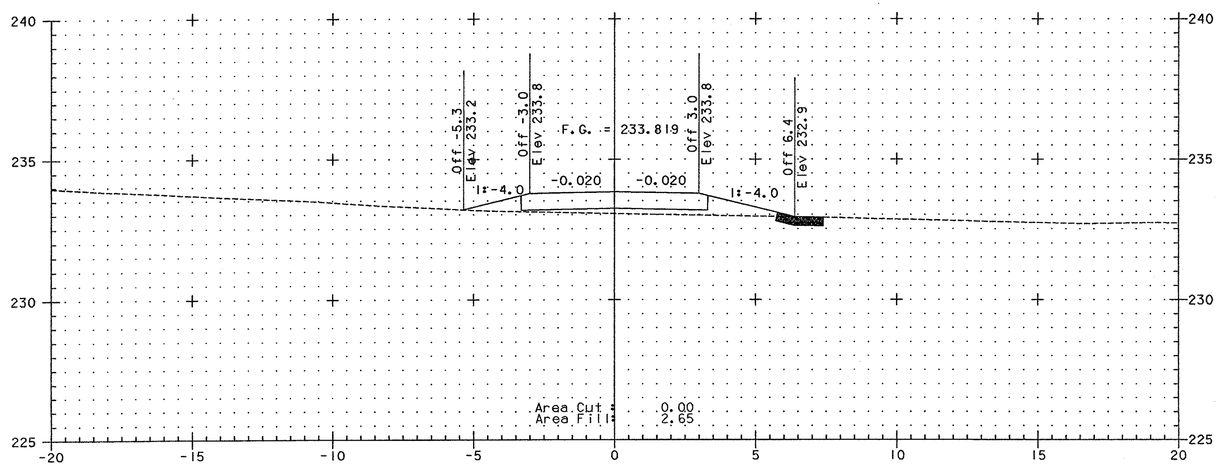
ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

Dufresne-Henry

PROJECT NAME: BENNINGTON - HOOSICK
PROJECT NUMBER: DPI 0146 (1) C/4

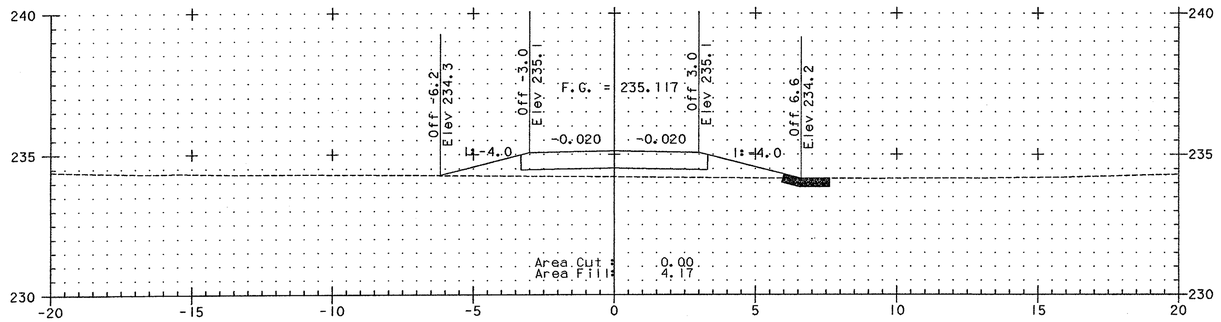
FILE NAME: haulroad xs.dgn
PROJECT LEADER: GAE
DESIGNED BY: BJM
HAUL ROAD CROSS SECTIONS

PLOT DATE: 08/29/2000
DRAWN BY: MBL
CHECKED BY: GAS
SHEET 276 OF 385



HR 1+140

Volume Cut : 0.00
Volume Fill: 68.17



HR 1+120

Volume Cut : 0.00
Volume Fill: 93.65

5 METERS

H 1:100 SCALE
V 1:100 SCALE
@ FULL SIZE

2.5 2.5 5 METERS

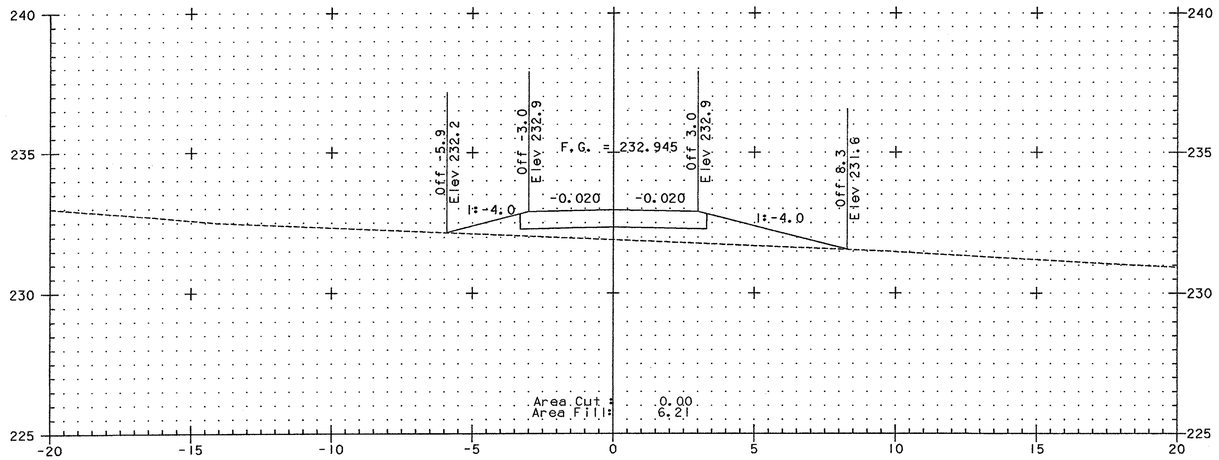
ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

Dufresne-Henry

PROJECT NAME: BENNINGTON - HOOSICK
PROJECT NUMBER: DPI0146 (1) C/4

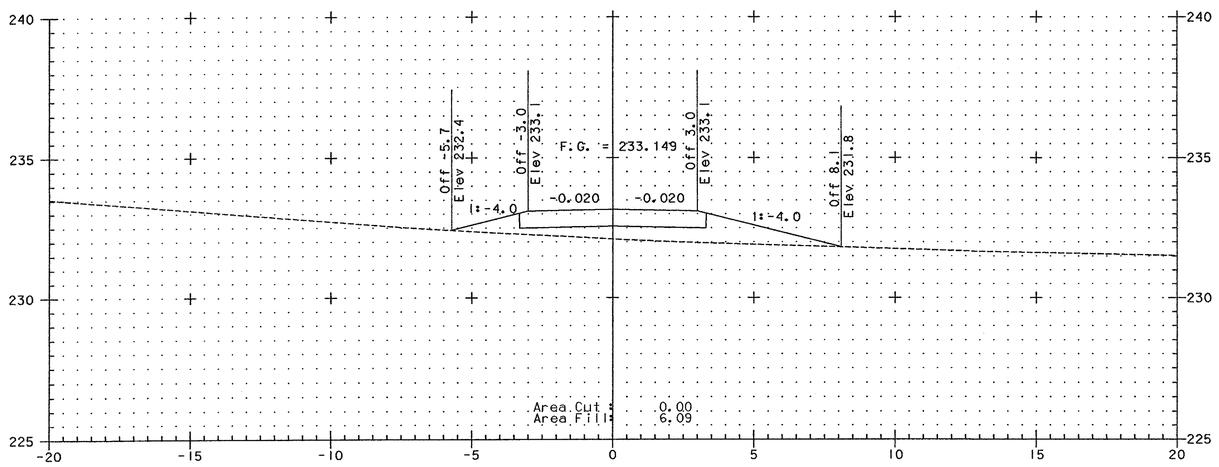
FILE NAME: haulroad xs.dgn
PROJECT LEADER: GAE
DESIGNED BY: BJM
HAUL ROAD CROSS SECTIONS

PLOT DATE: 08/29/2000
DRAWN BY: MBL
CHECKED BY: GAS
SHEET 277 OF 385



HR 1+180

Volume Cut : 0.00
Volume Fill: 122.98



HR 1+160

Volume Cut : 0.00
Volume Fill: 87.40

5 METERS

H 1:100 SCALE
V 1:100 SCALE
@ FULL SIZE

2.5 2.5 5 METERS

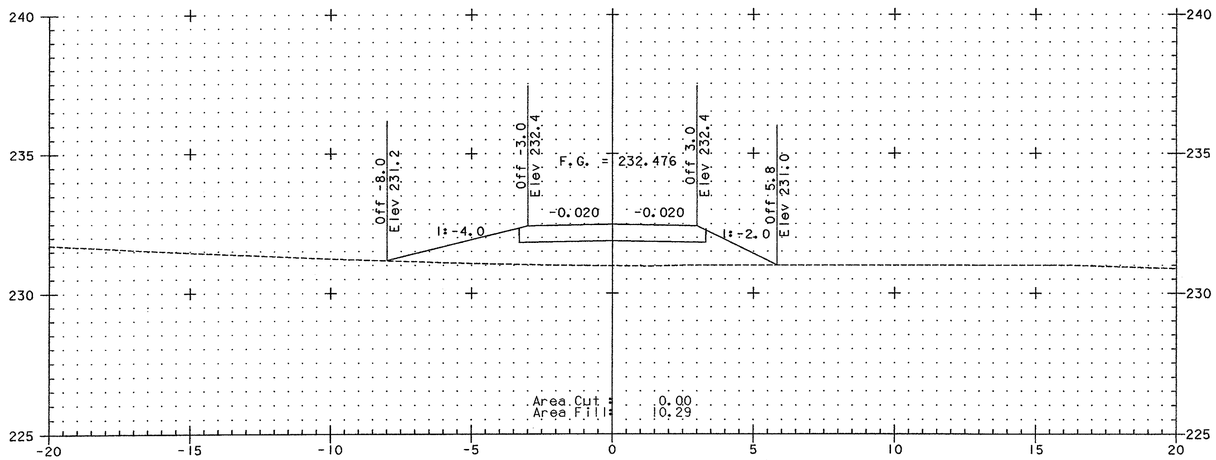
ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

Dufresne-Henry

PROJECT NAME: BENNINGTON - HOOSICK
PROJECT NUMBER: DPI 0146 (1) C/4

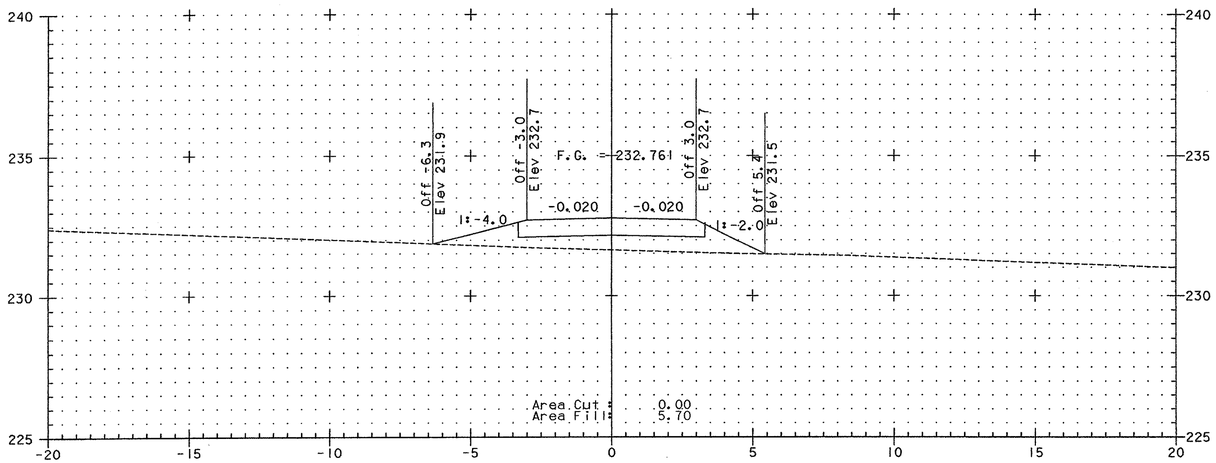
FILE NAME: haulroad xs.dgn
PROJECT LEADER: GAE
DESIGNED BY: BJM
HAUL ROAD CROSS SECTIONS

PLOT DATE: 08/29/2000
DRAWN BY: MBL
CHECKED BY: GAS
SHEET 278 OF 385



HR 1+220

Volume Cut : 0.00
Volume Fill: 159.88



HR 1+200

Volume Cut : 0.00
Volume Fill: 119.04

5 METERS
2.5
2.5 5 METERS

H 1:100 SCALE
V 1:100 SCALE
@ FULL SIZE

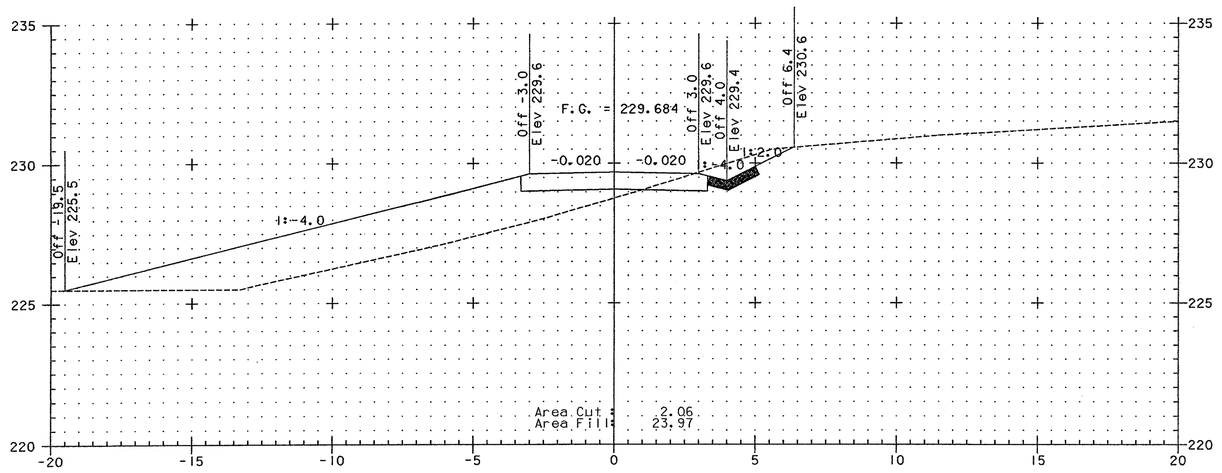
ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

Dufresne-Henry

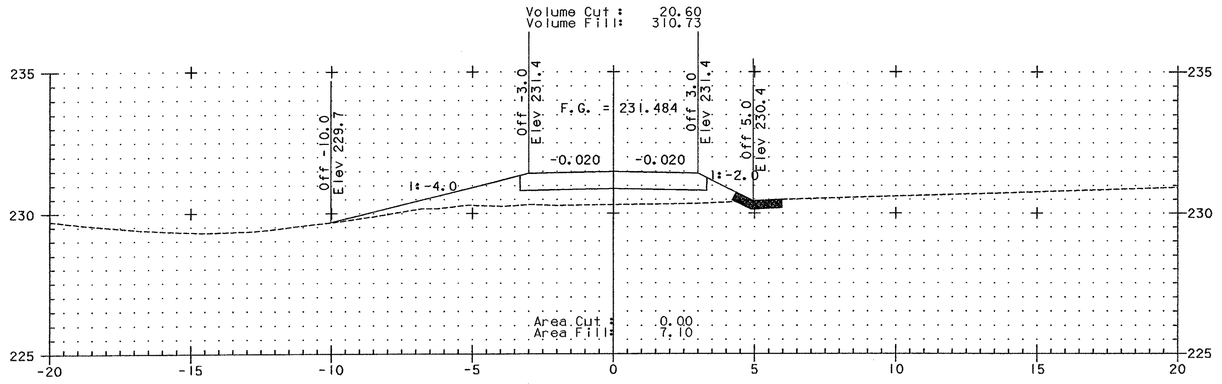
PROJECT NAME: BENNINGTON - HOOSICK
PROJECT NUMBER: DPI 0146 (1) C/4

FILE NAME: haulroad xs.dgn
PROJECT LEADER: GAE
DESIGNED BY: BJM
HAUL ROAD CROSS SECTIONS

PLOT DATE: 08/29/2000
DRAWN BY: MBL
CHECKED BY: GAS
SHEET 279 OF 385

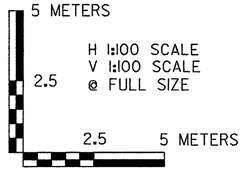


HR 1+260



HR 1+240

Volume Cut : 0.00
Volume Fill: 173.92



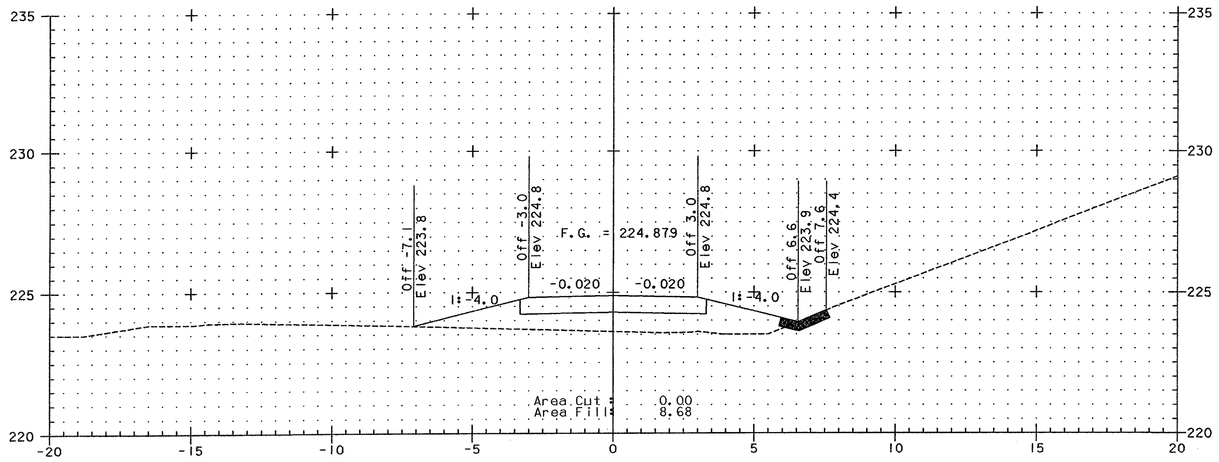
ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

Dufresne-Henry

PROJECT NAME: BENNINGTON - HOOSICK
PROJECT NUMBER: DPI 0146 (1) C/4

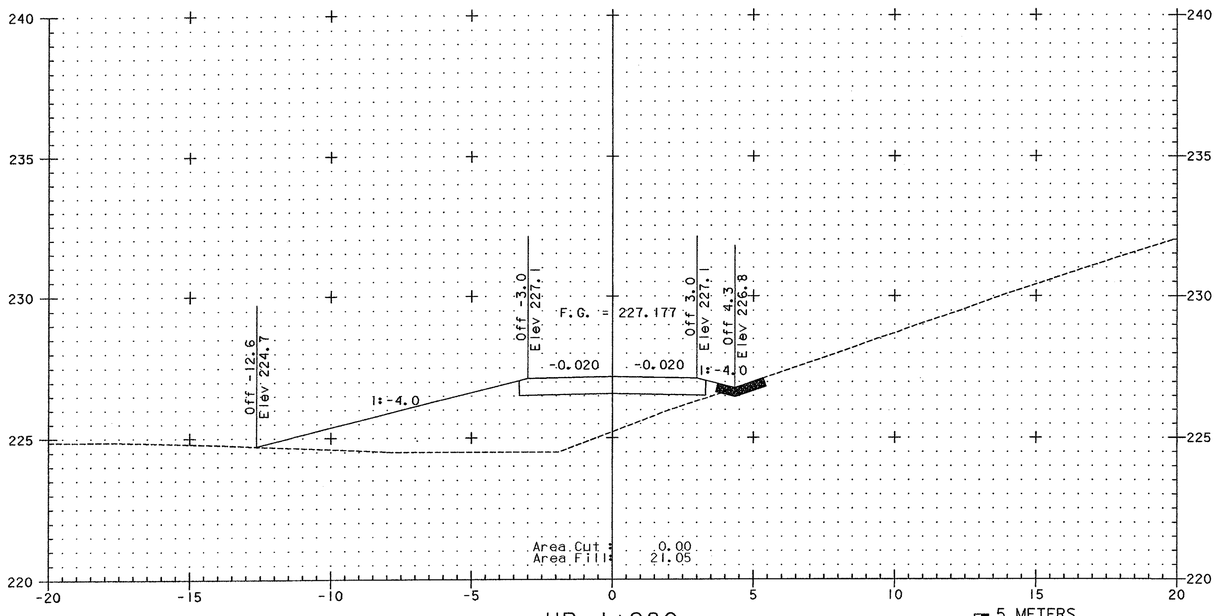
FILE NAME: haulroad xs.dgn
PROJECT LEADER: GAE
DESIGNED BY: BJM
HAUL ROAD CROSS SECTIONS

PLOT DATE: 08/29/2000
DRAWN BY: MBL
CHECKED BY: GAS
SHEET 280 OF 385



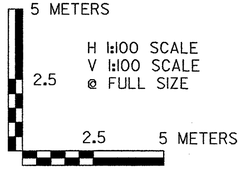
HR 1+300

Volume Cut : 0.00
Volume Fill: 297.27



HR 1+280

Volume Cut : 20.60
Volume Fill: 450.21



H 1:100 SCALE
V 1:100 SCALE
@ FULL SIZE

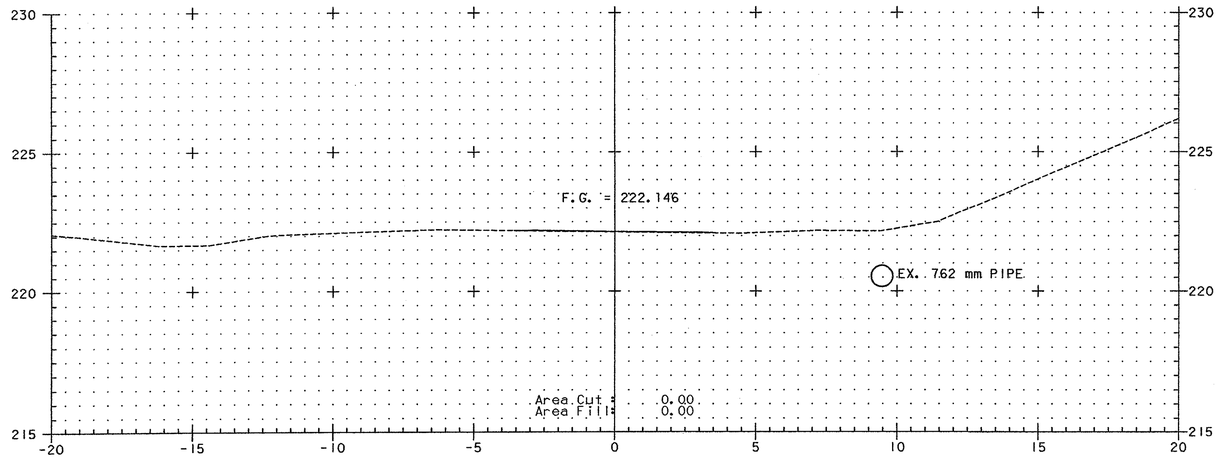
ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

Dufresne-Henry

PROJECT NAME: BENNINGTON - HOOSICK
PROJECT NUMBER: DPI 0146 (1) C/4

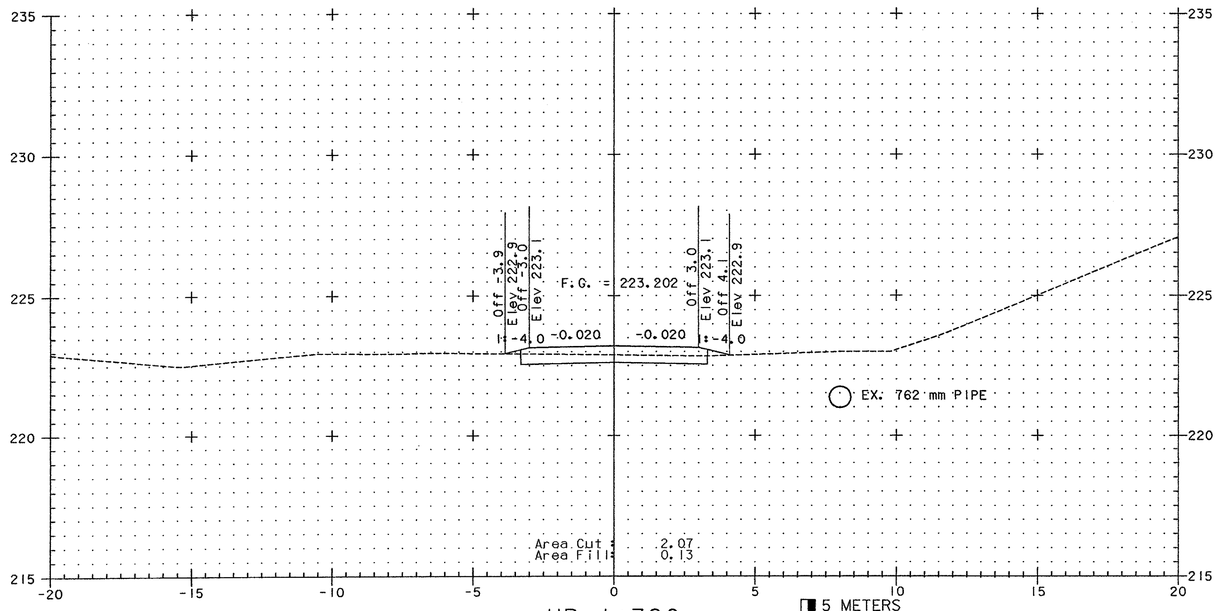
FILE NAME: haulroad xs.dgn
PROJECT LEADER: GAE
DESIGNED BY: BJM
HAUL ROAD CROSS SECTIONS

PLOT DATE: 08/29/2000
DRAWN BY: MBL
CHECKED BY: GAS
SHEET 281 OF 385



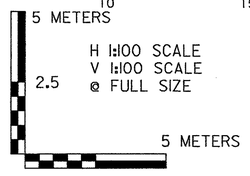
HR 1+340

Volume Cut : 20.69
Volume Fill: 1.28



HR 1+320

Volume Cut : 20.69
Volume Fill: 88.08



H 1:100 SCALE
V 1:100 SCALE
@ FULL SIZE

END CONSTRUCTION
STA HR 1+340

ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

Dufresne-Henry

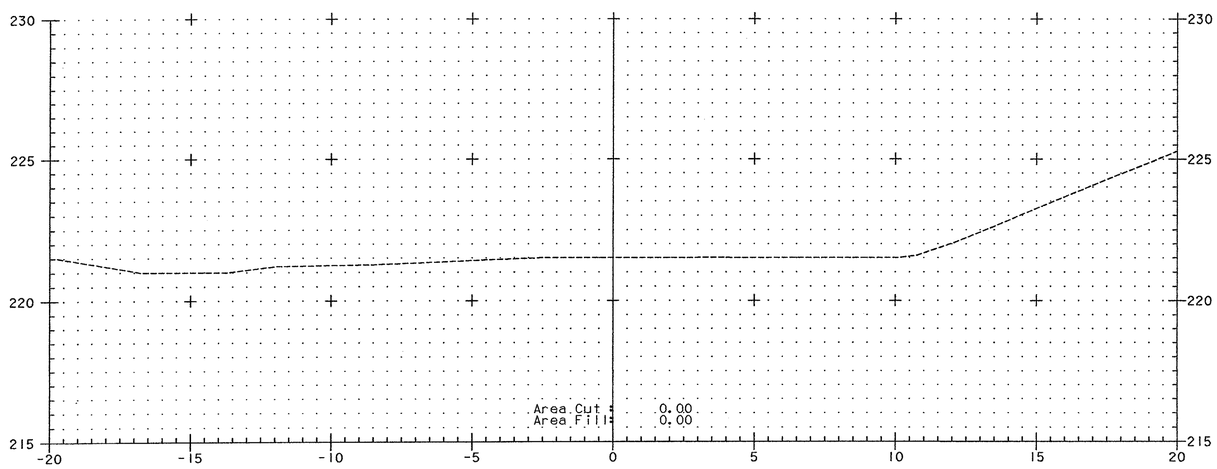
PROJECT NAME: BENNINGTON - HOOSICK
PROJECT NUMBER: DPI 0146 (I) C/4

FILE NAME: haulroad xs.dgn
PROJECT LEADER: GAE
DESIGNED BY: BJM
PLOT DATE: 08/29/2000
DRAWN BY: MBL
CHECKED BY: GAS

HAUL ROAD CROSS SECTIONS

SHEET 282 OF 385

Metric



HR 1+357

Volume Cut : 0.00
Volume Fill: 0.00

5 METERS

H 1:100 SCALE
V 1:100 SCALE
@ FULL SIZE

2.5 2.5 5 METERS

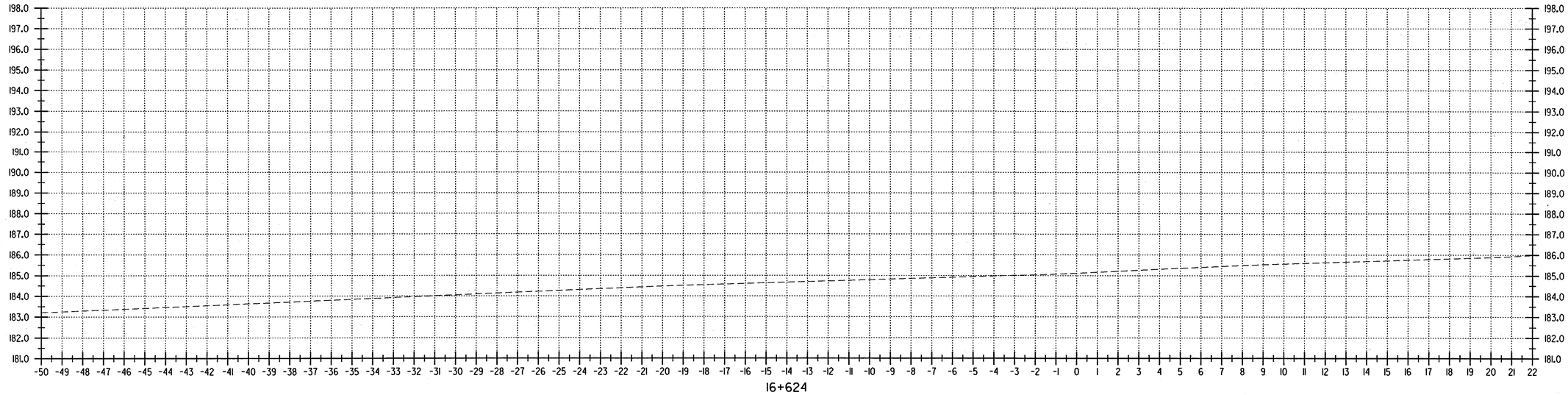
ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

Dufresne-Henry

PROJECT NAME: BENNINGTON - HOOSICK
PROJECT NUMBER: DPI 0146 (1) C/4

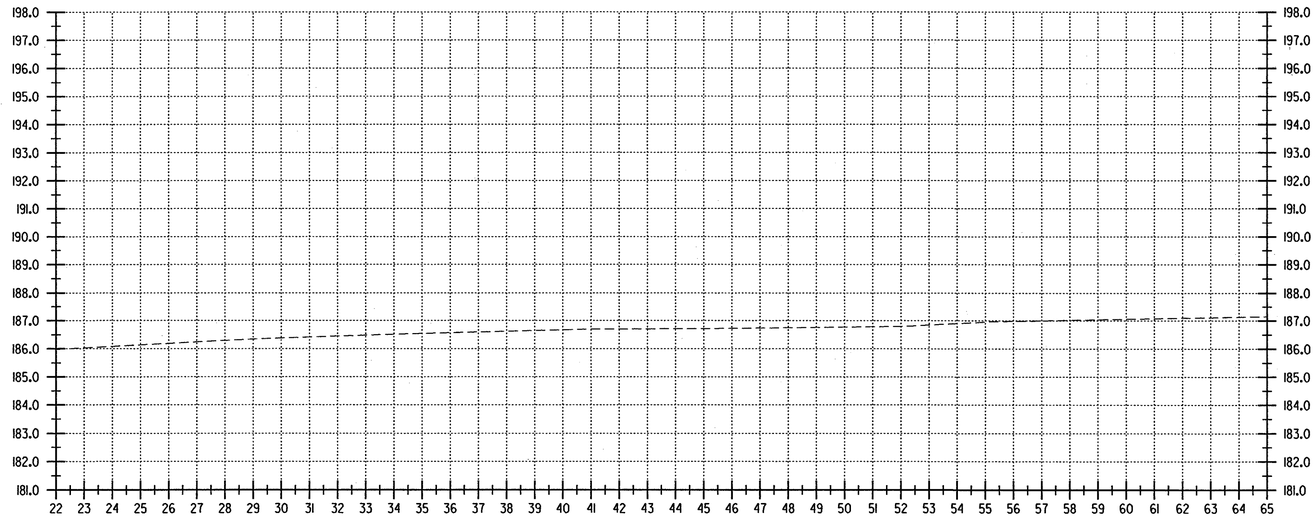
FILE NAME: haulroad xs.dgn
PROJECT LEADER: GAE
DESIGNED BY: BJM
HAUL ROAD CROSS SECTIONS

PLOT DATE: 08/29/2000
DRAWN BY: MBL
CHECKED BY: GAS
SHEET 283 OF 385



16+624

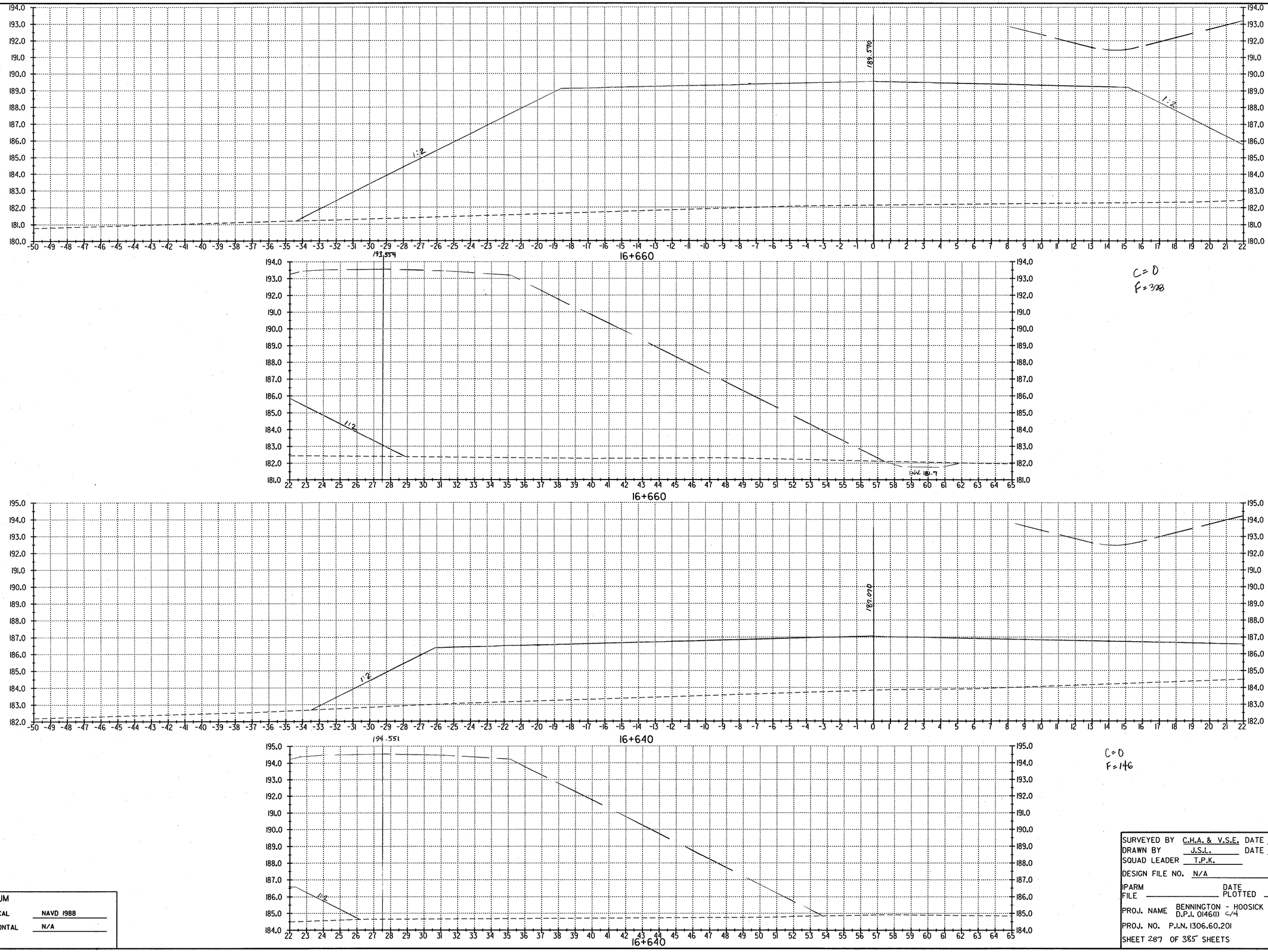
C = 0
F = 0



16+624

DATUM
VERTICAL NAVD 1988
HORIZONTAL N/A

SURVEYED BY C.H.A. & V.S.E. DATE
DRAWN BY J.S.L. DATE
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE
DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60.201
SHEET 286 OF 385 SHEETS



DATUM

VERTICAL NAVD 1988

HORIZONTAL N/A

SURVEYED BY C.H.A. & V.S.E. DATE

DRAWN BY J.S.L. DATE

SQUAD LEADER T.P.K.

DESIGN FILE NO. N/A

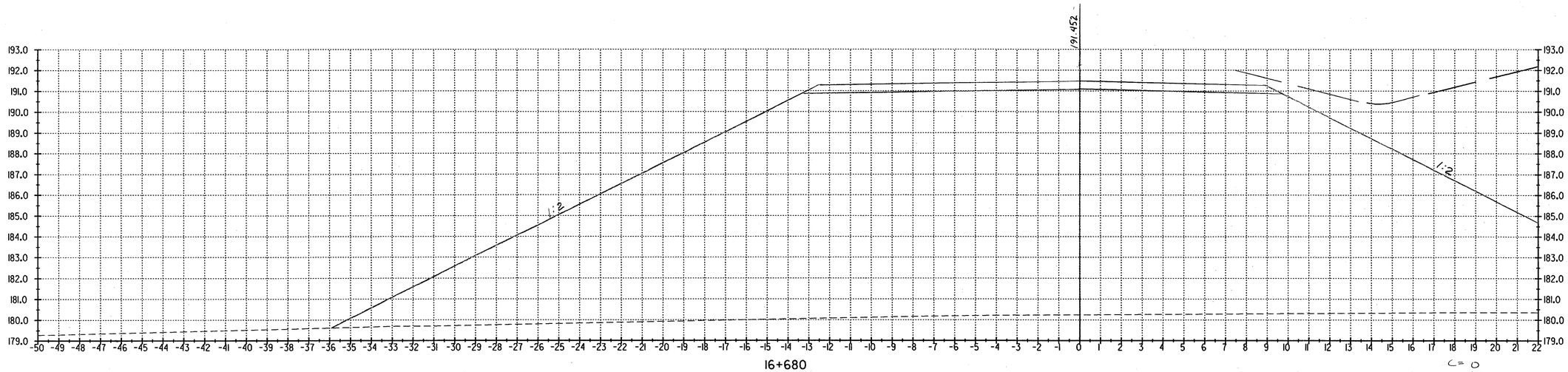
IPARM FILE

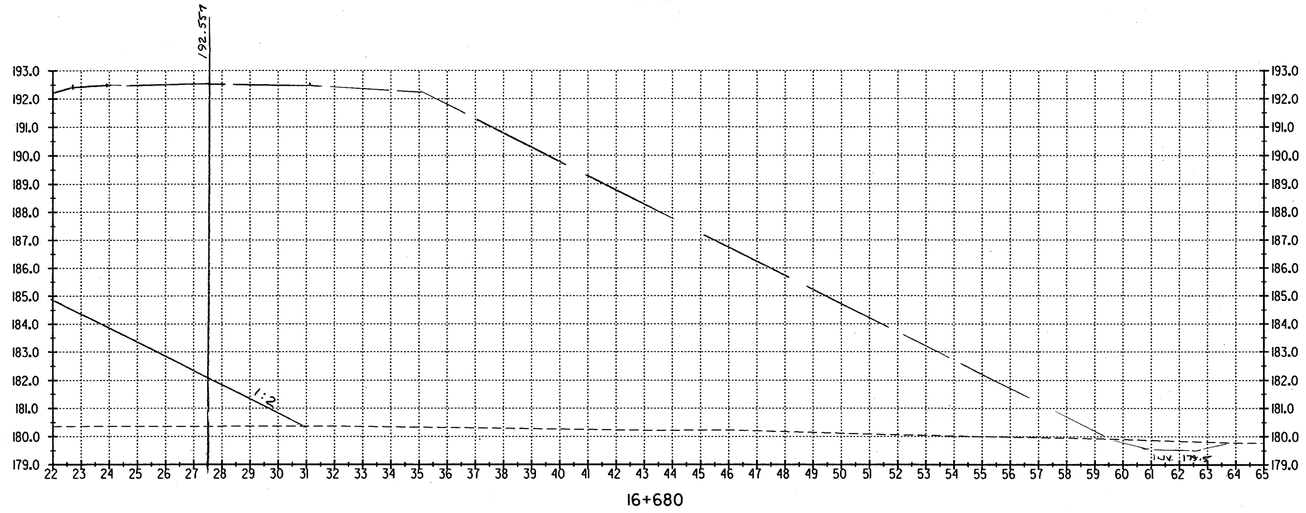
DATE PLOTTED

PROJ. NAME BENNINGTON - HOOSICK D.P.I. 014611 C/4

PROJ. NO. P.I.N. 1306.60.201

SHEET 287 OF 385 SHEETS





DATUM

VERTICAL NAVD 1988

HORIZONTAL N/A

SURVEYED BY C.H.A. & V.S.E. DATE

DRAWN BY J.S.L. DATE

SQUAD LEADER T.P.K.

DESIGN FILE NO. N/A

IPARM FILE

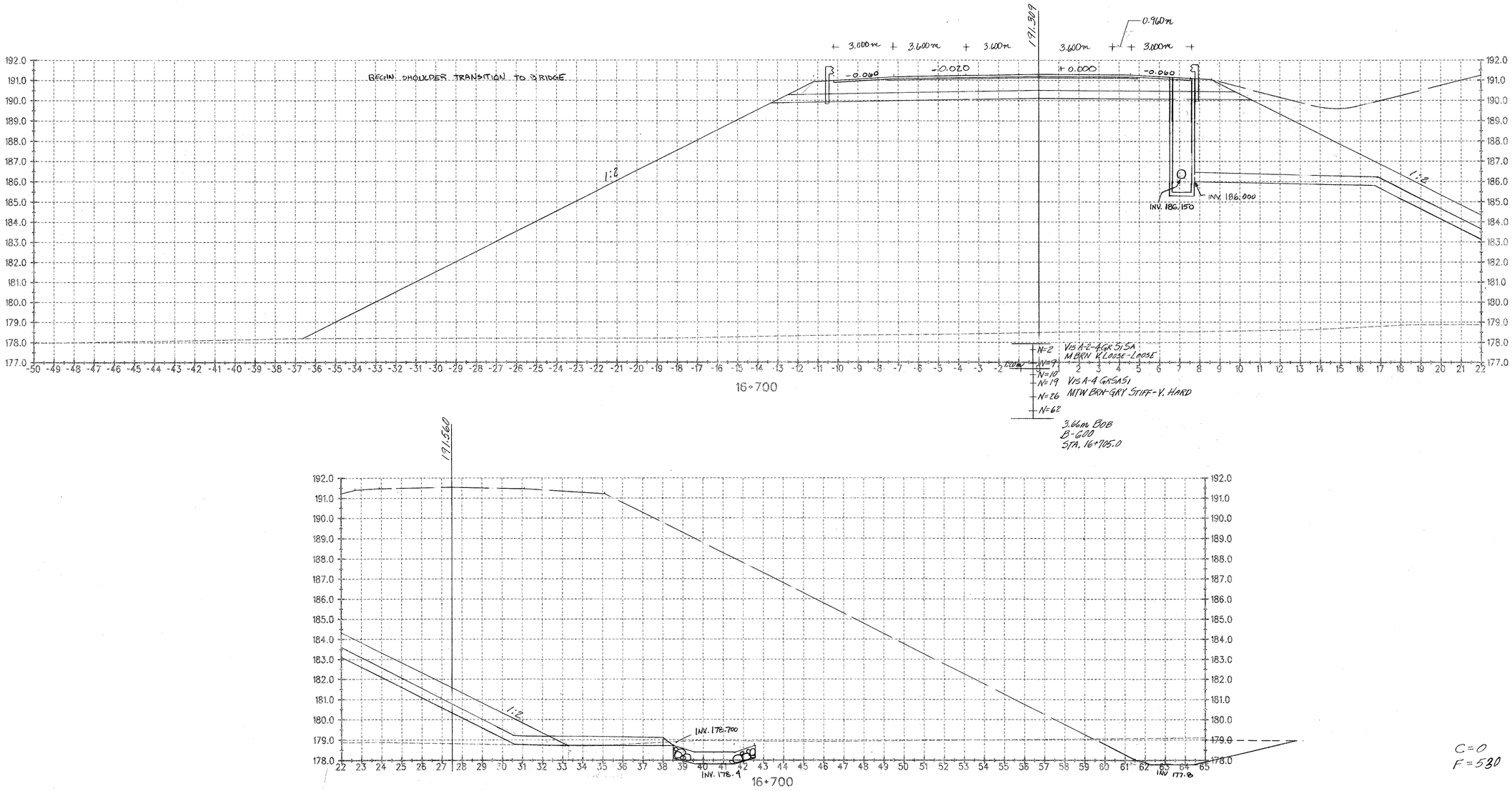
DATE PLOTTED

PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60.201

SHEET 288 OF 385 SHEETS

Metric



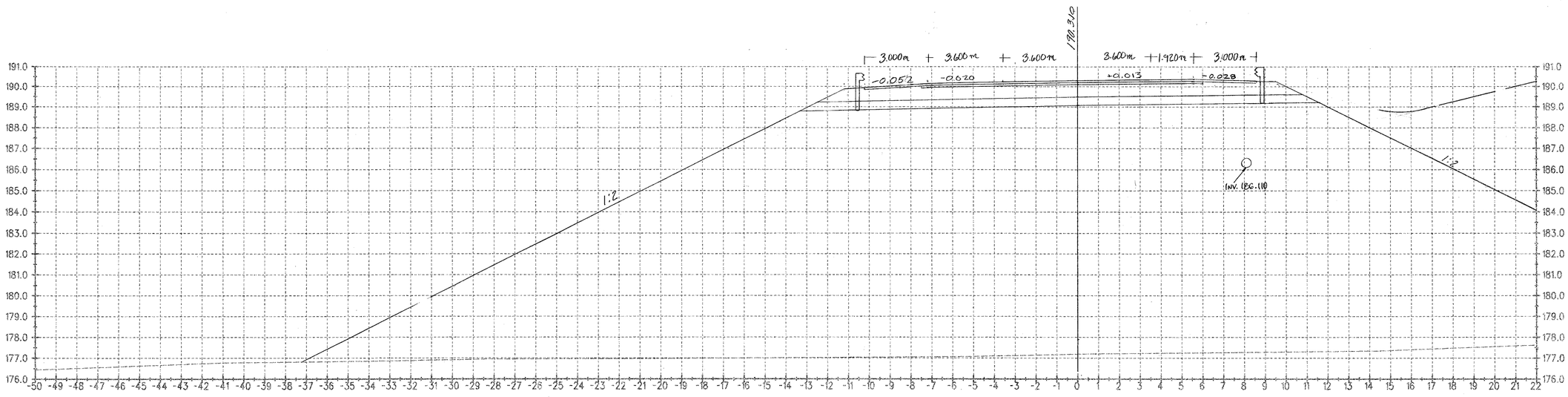
C=0
F=530

DATUM
VERTICAL NAVD 1988
HORIZONTAL N/A

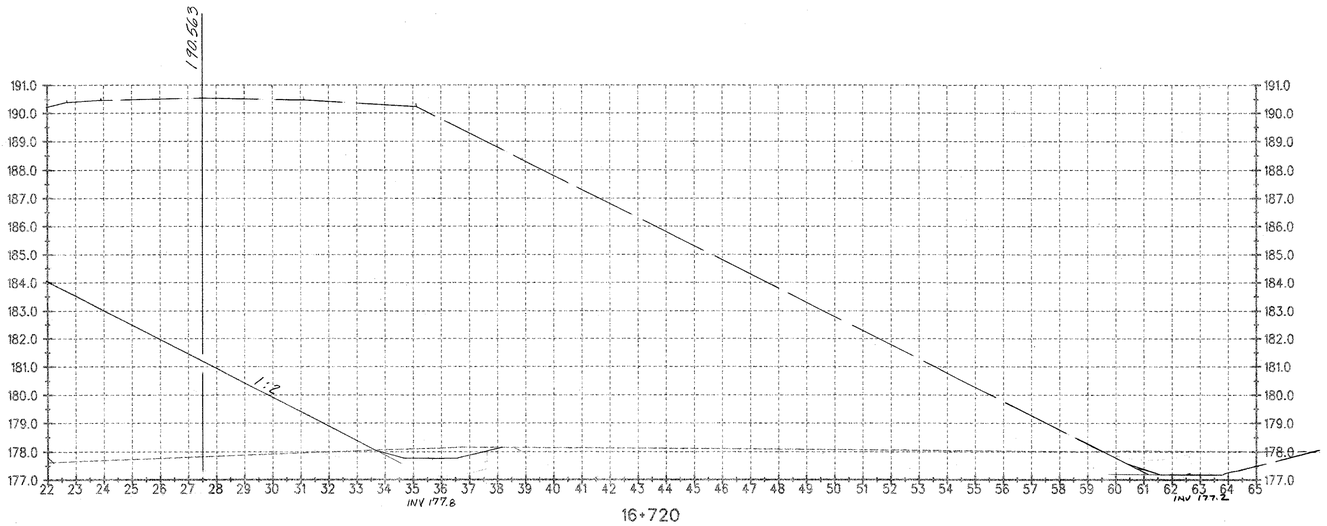
ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE
DRAWN BY J.S.L. DATE
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM DATE
FILE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) c/4
PROJ. NO. P.I.N. 1306.60.201
SHEET 289 OF 385 SHEETS

Metric



16+720



16+720

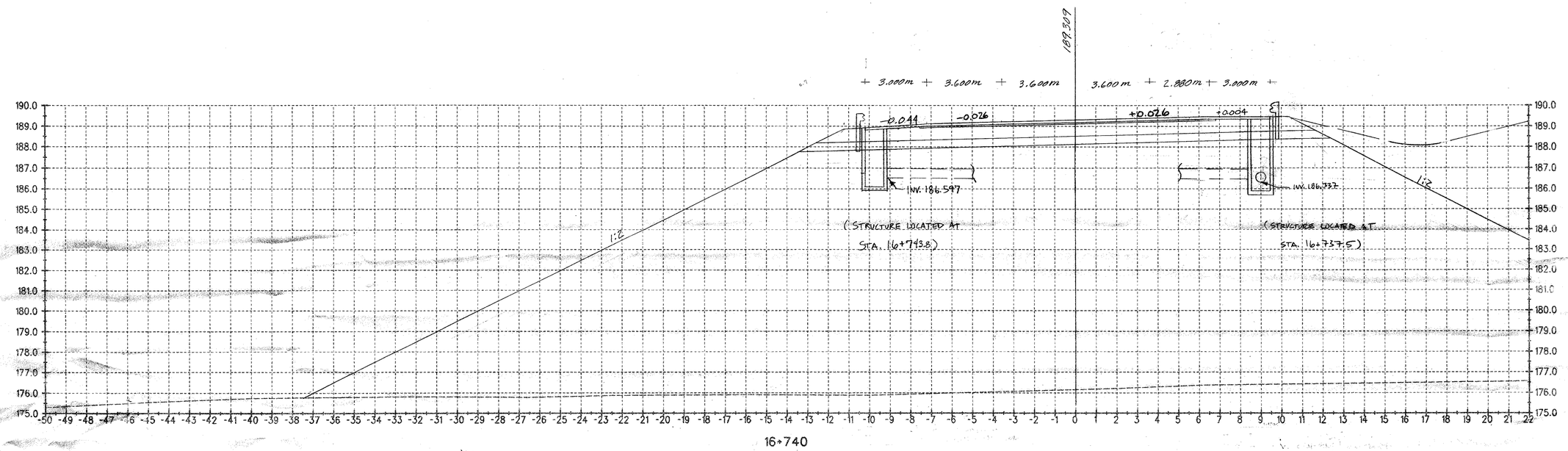
C=0
F=558

DATUM
VERTICAL NAVD 1988
HORIZONTAL N/A

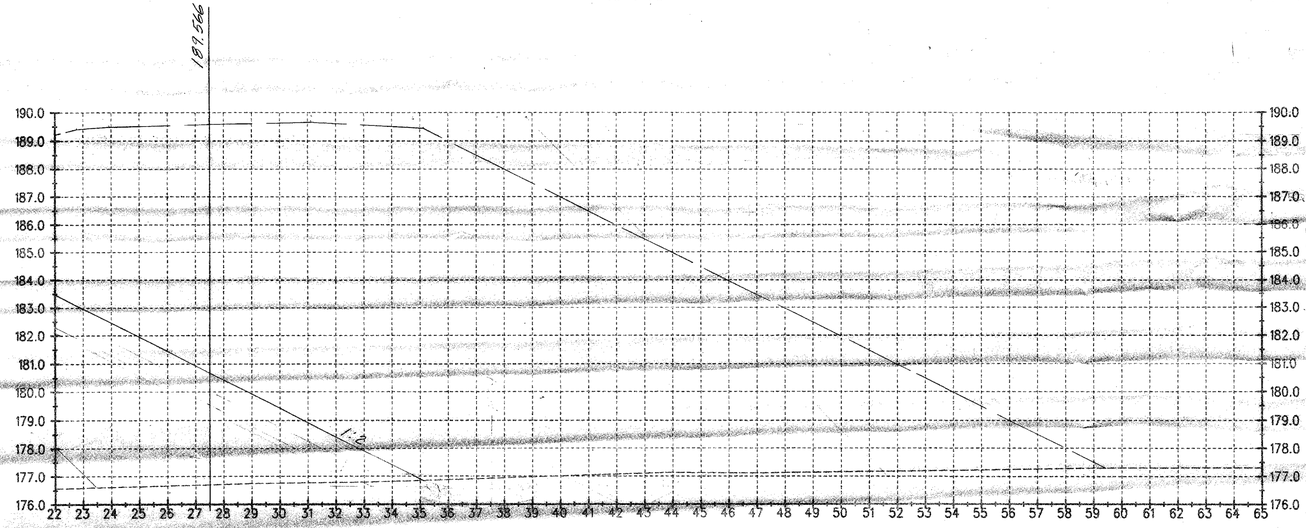
ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE
DRAWN BY J.S.L. DATE
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) c.14
PROJ. NO. P.I.N. 1306.60.201
SHEET 290 OF 385 SHEETS

Metric



16+740



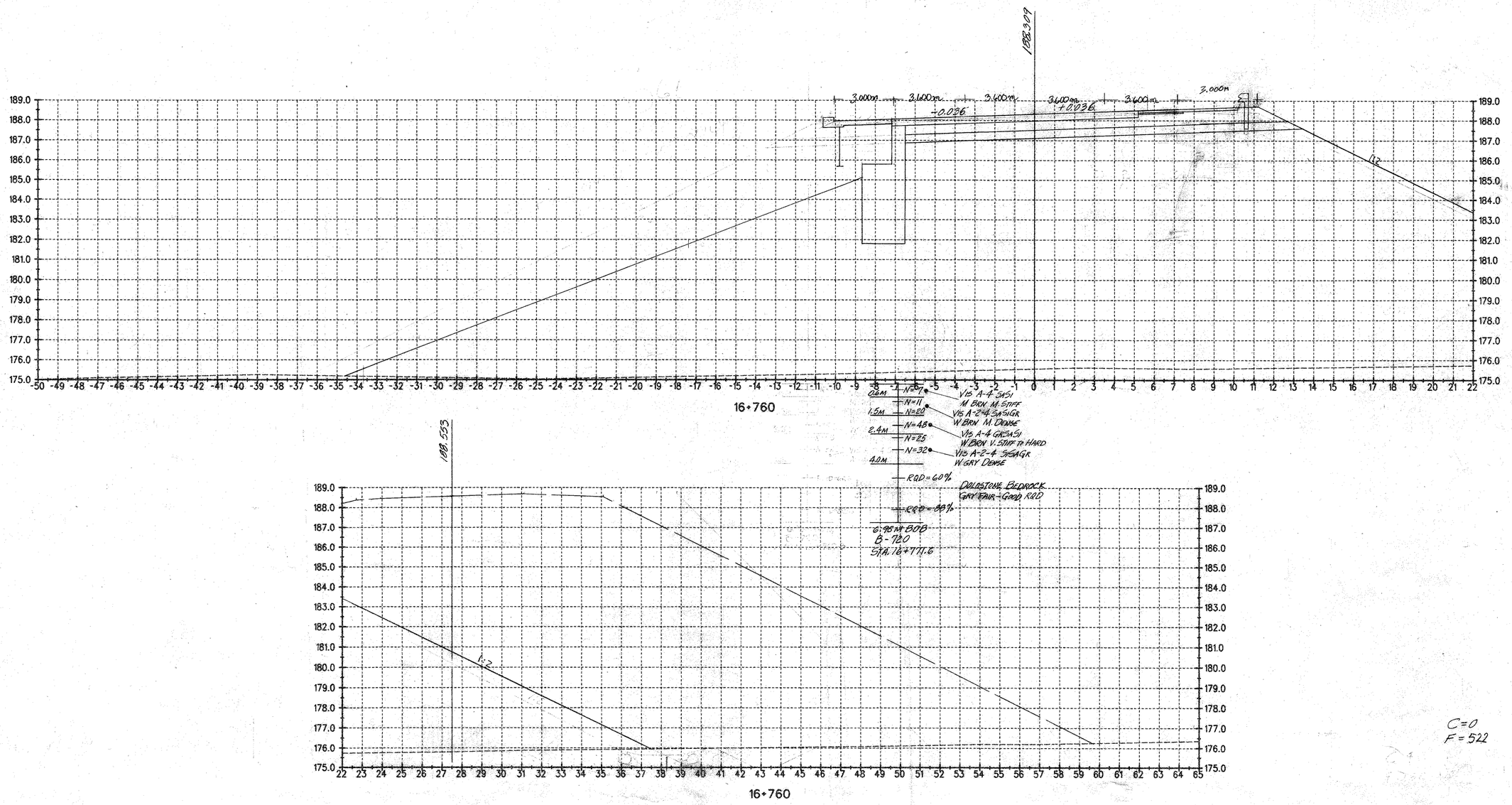
16+740

C=0
F=575

DATUM
VERTICAL NAVD 1988
HORIZONTAL N/A

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE
DRAWN BY J.S.L. DATE
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM DATE PLOTTED
FILE
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0148(1) C/4
PROJ. NO. P.I.N. 1306.60.201
SHEET 291 OF 385 SHEETS



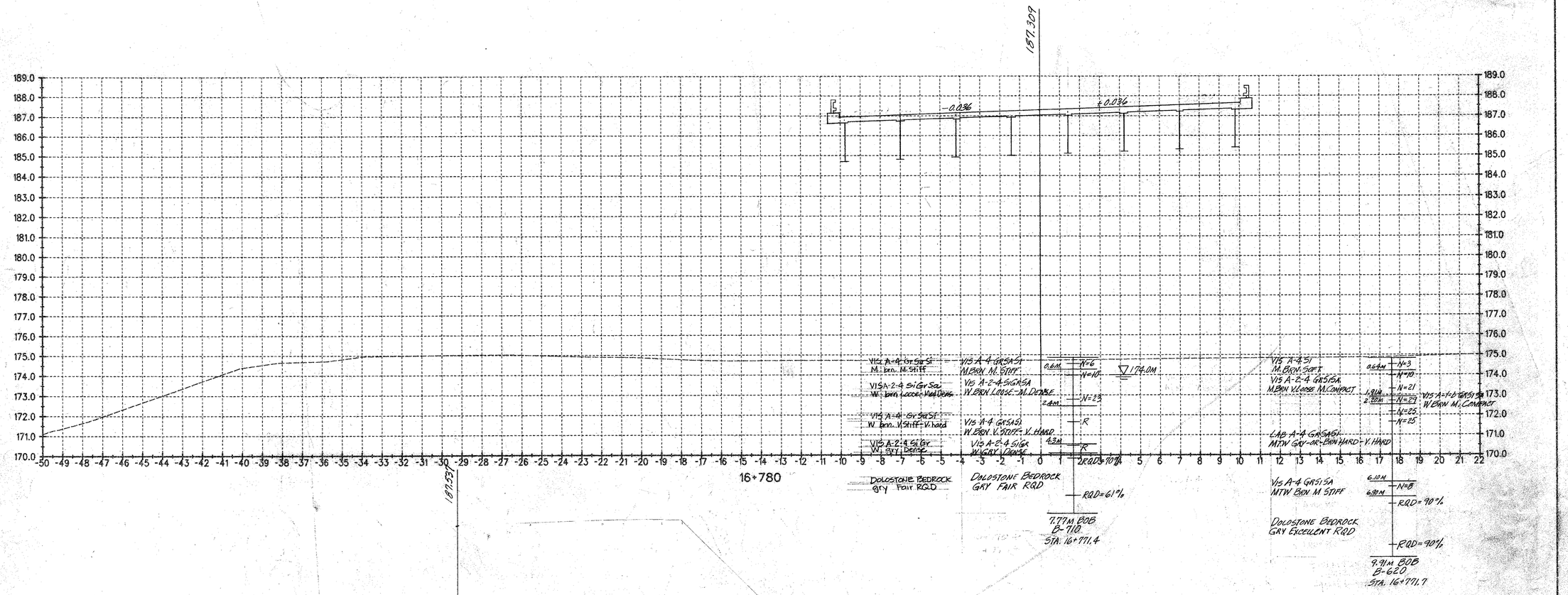
C=0
F=522

DATUM
VERTICAL NAVD 1988
HORIZONTAL N/A

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE
DRAWN BY J.S.L. DATE
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C14
PROJ. NO. P.I.N. 1306.60.201
SHEET 292 OF 385 SHEETS

Metric



DATUM

VERTICAL NAVD 1988

HORIZONTAL N/A

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

H 1:100

V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE _____

DRAWN BY J.S.L. DATE _____

SQUAD LEADER T.P.K.

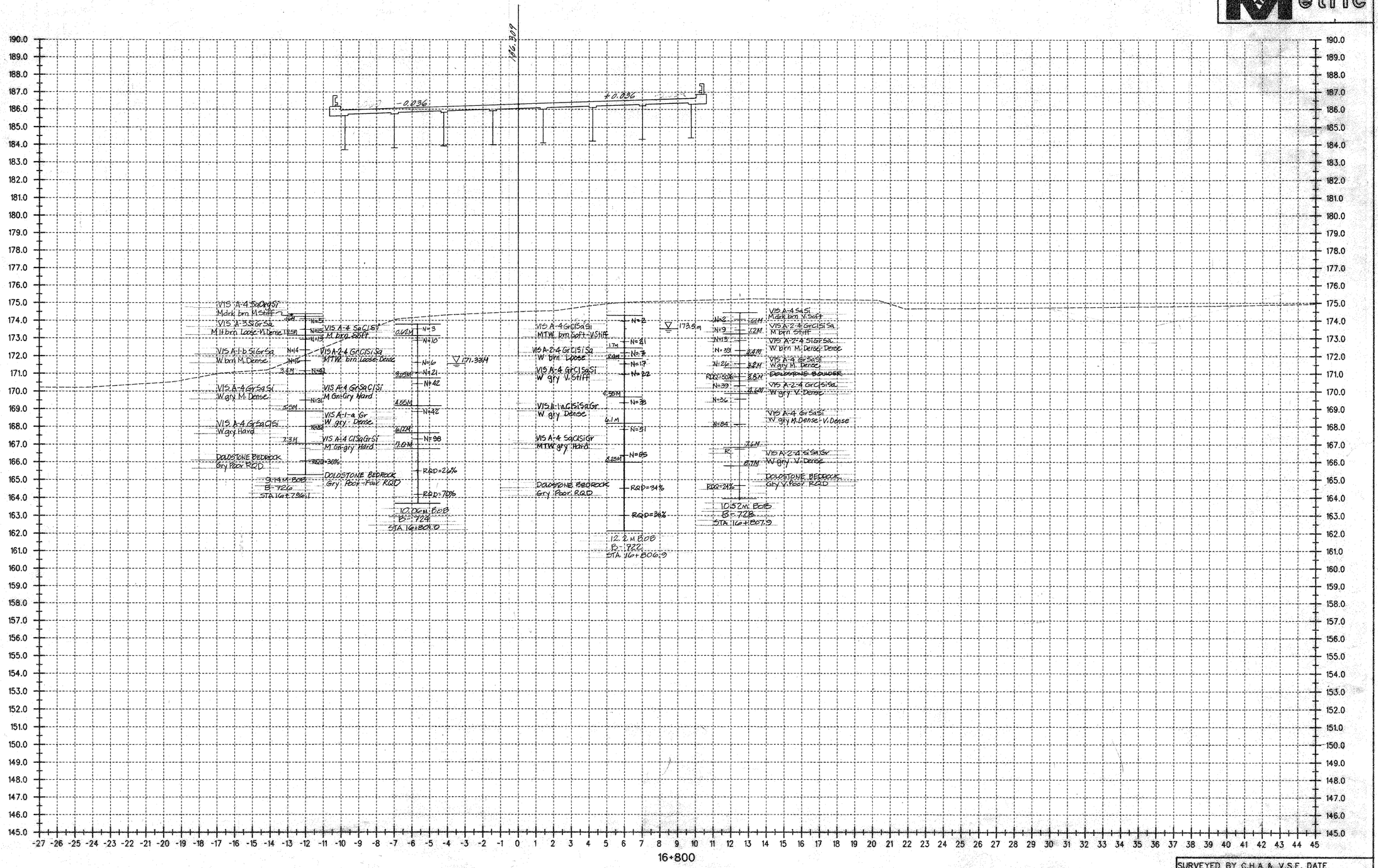
DESIGN FILE NO. N/A

IPARM FILE _____ DATE PLOTTED _____

PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60.201

SHEET 293 OF 385 SHEETS



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

H 1:100

V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE

DRAWN BY J.S.L. DATE

SQUAD LEADER T.P.K.

DESIGN FILE NO. N/A

IPARM FILE

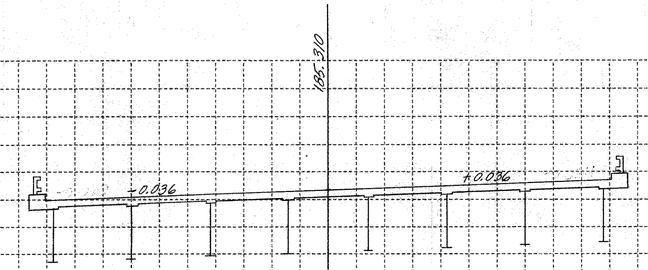
DATE PLOTTED

PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60.101

SHEET 294 OF 385 SHEETS

Metric



190.0 189.0 188.0 187.0 186.0 185.0 184.0 183.0 182.0 181.0 180.0 179.0 178.0 177.0 176.0 175.0 174.0 173.0 172.0 171.0 170.0 169.0 168.0 167.0 166.0 165.0 164.0 163.0 162.0 161.0 160.0 159.0 158.0 157.0 156.0 155.0 154.0 153.0 152.0 151.0 150.0 149.0 148.0 147.0 146.0 145.0

-27 -26 -25 -24 -23 -22 -21 -20 -19 -18 -17 -16 -15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45

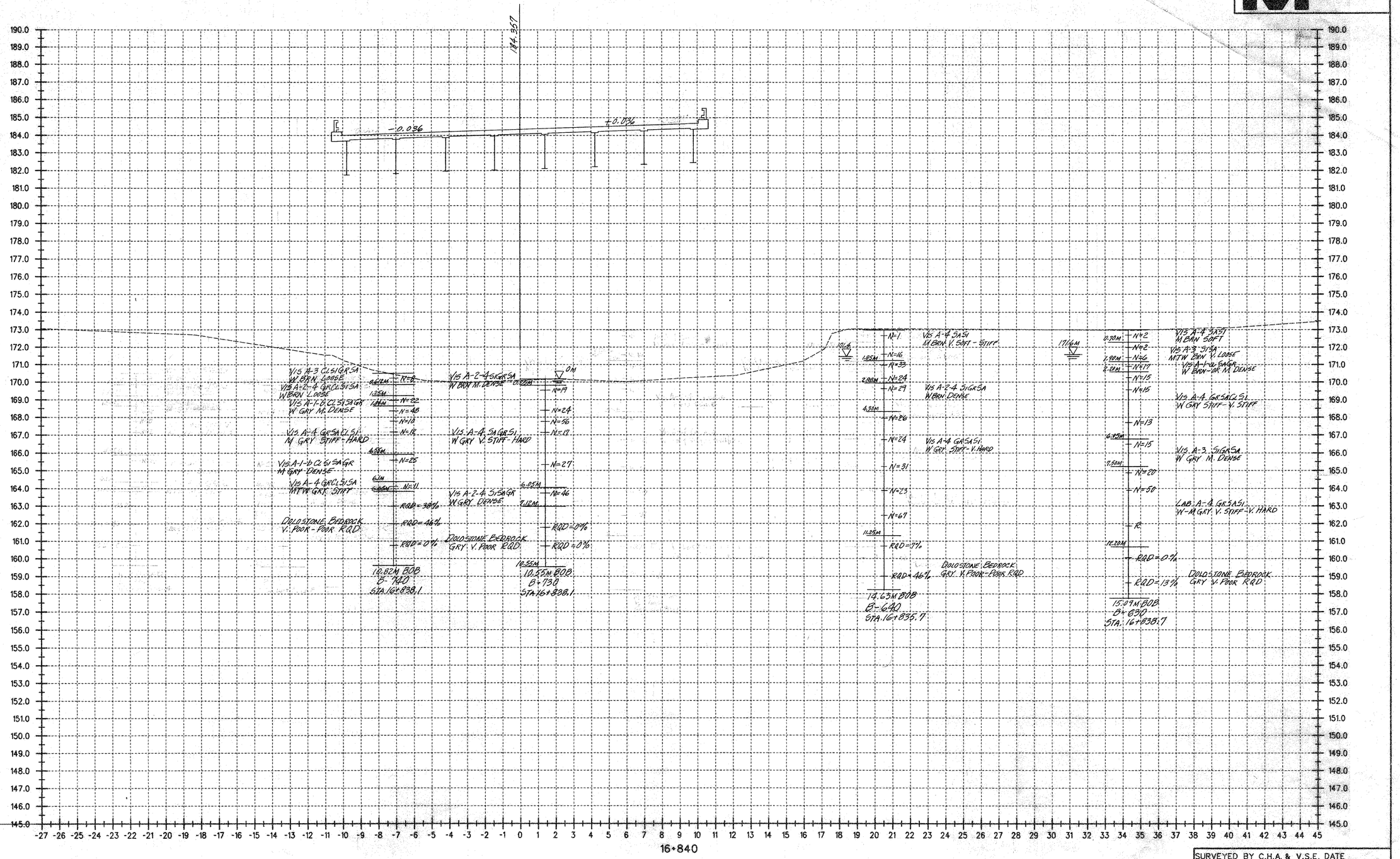
16+820

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE
DRAWN BY J.S.L. DATE
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) c/4
PROJ. NO. P.I.N. 1306.60.101
SHEET 295 OF 385 SHEETS

Metric



DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED

2 0 2 m

H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE
DRAWN BY J.S.L. DATE
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60.101
SHEET 296 OF 385 SHEETS

Metric

183.472

-0.036

+0.036

VIS A-1-a SI SA GR
W. brn. M. Dense
0.6M
N=20
N=6
VIS A-1-a SI GR SA
W brn M Dense
2.4M
N=22
N=22
VIS A-1-b SI GR SA
W gry M Dense
N=14
N=18
4.1M
N=12
VIS A-2-4 GR CL SI SA
W gry Stiff-Hard
N=35
7.2M
VIS A-1-b SI GR SA
W gry V. Dense
N=97
9.0M
DOLOSTONE BEDROCK
GRY Poor RQD
RQD=38%
10.82M BOB
B-754
STA 16+852.2

VIS A-2-4 SI SA
D BRN V. LOOSE
0.8M
VIS A-4 SI SA
M BRN. V. SOFT
1.9M
N=2
N=19
VIS A-2-4 GR SI SA
W BRN DENSE
2.5M
N=8
3.1M
N=32
VIS A-1-b SI GR SA
W BRN DENSE
4.5M
N=14
VIS A-4 GR CL SI SA
W GRY STIFF
N=15
7.6M
N=40
VIS A-2-4 CL SI GR SA
GRY DENSE
N=42
N=97
11.9M
DOLOSTONE BEDROCK
GRY. V. POOR-FAIR RQD
RQD=14%
RQD=54%
15.54M BOB
B-732
STA 16+864.0

190.64M

VIS A-3 SI GR SA
W BRN LOOSE

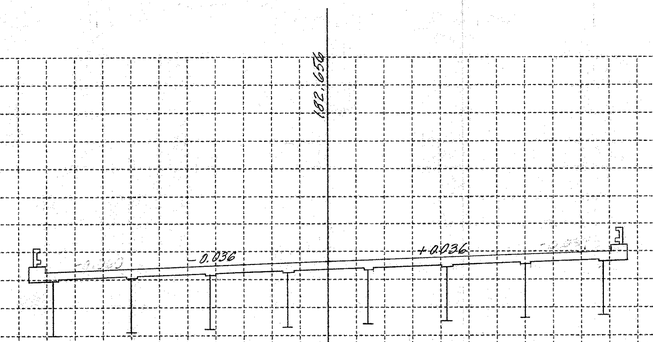
16+860

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE
DRAWN BY J.S.L. DATE
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60.101
SHEET 297 OF 385 SHEETS

Metric



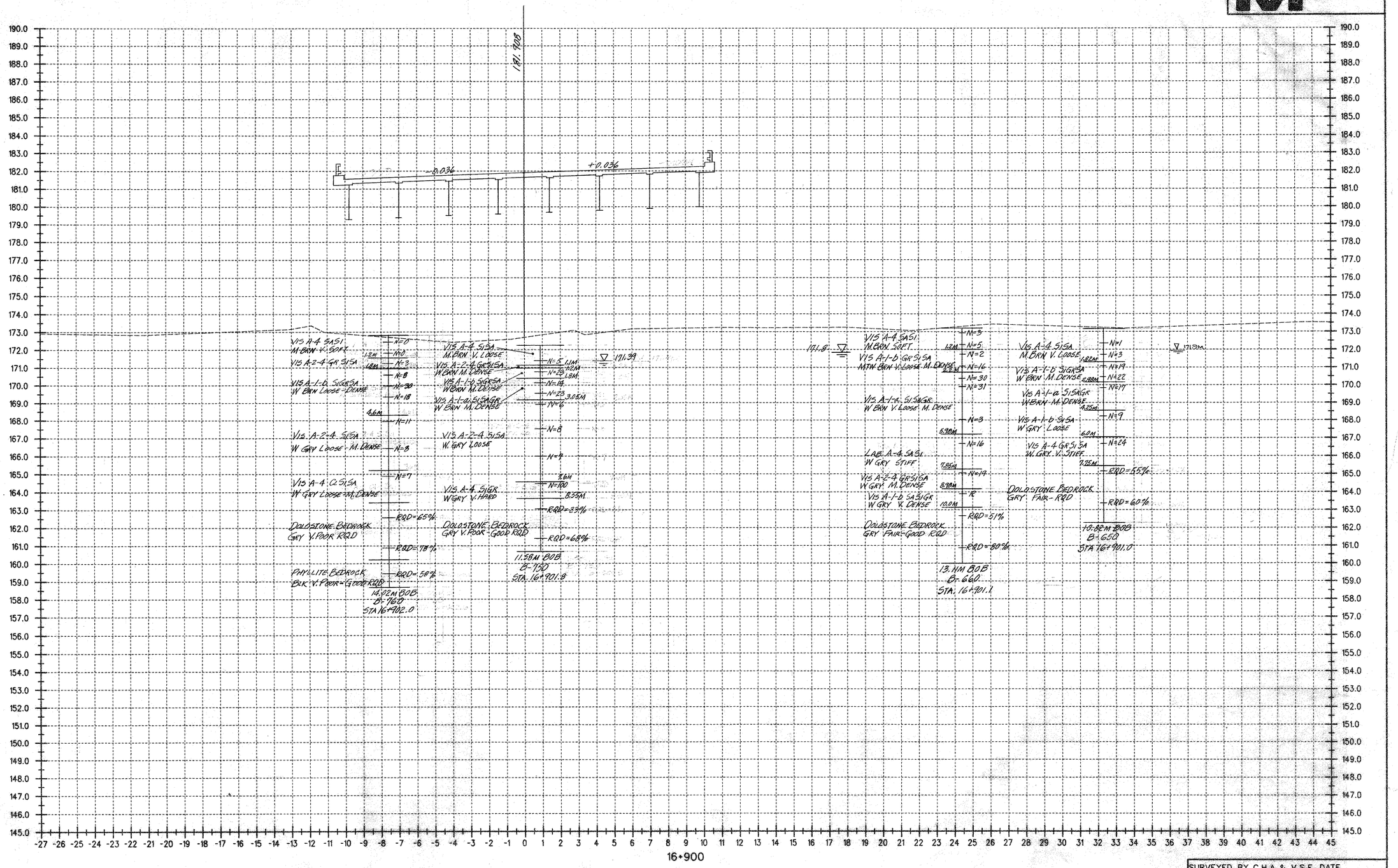
182.656

16+880

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE
DRAWN BY J.S.L. DATE
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60.101
SHEET 298 OF 385 SHEETS



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

H 1:100

V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE

DRAWN BY J.S.L. DATE

SQUAD LEADER T.P.K.

DESIGN FILE NO. N/A

IPARM DATE

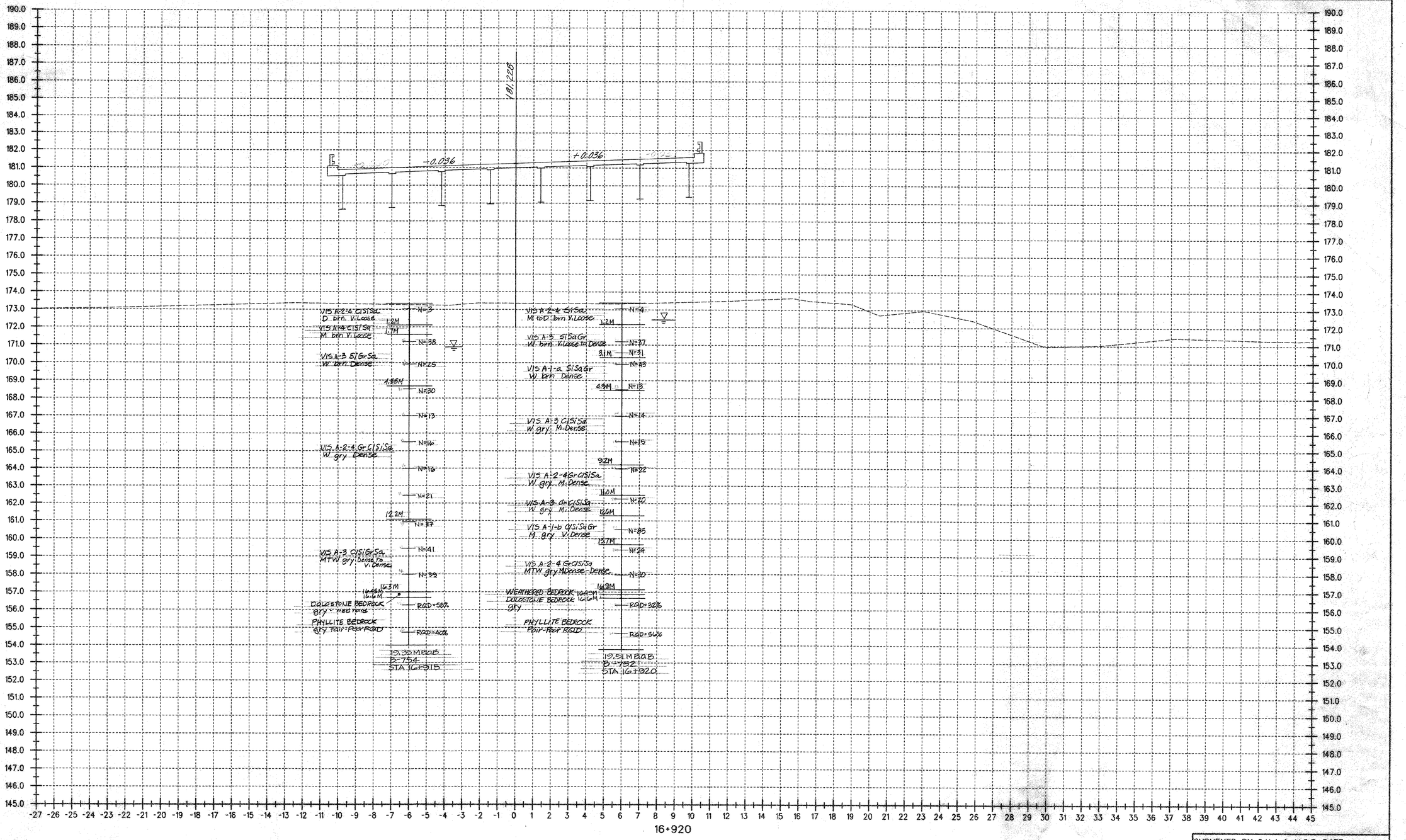
FILE PLOTTED

PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60.101

SHEET 299 OF 385 SHEETS

Metric



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

H 1:100

V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE

DRAWN BY J.S.L. DATE

SQUAD LEADER T.P.K.

DESIGN FILE NO. N/A

IPARM FILE

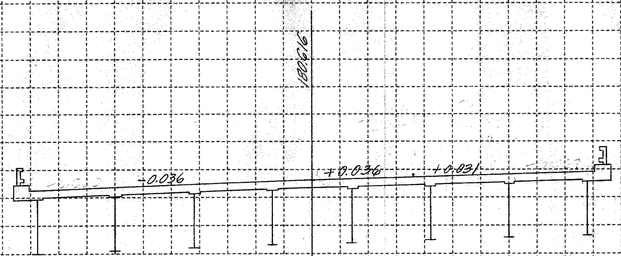
DATE PLOTTED

PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60.101

SHEET 309 OF 385 SHEETS

Metric



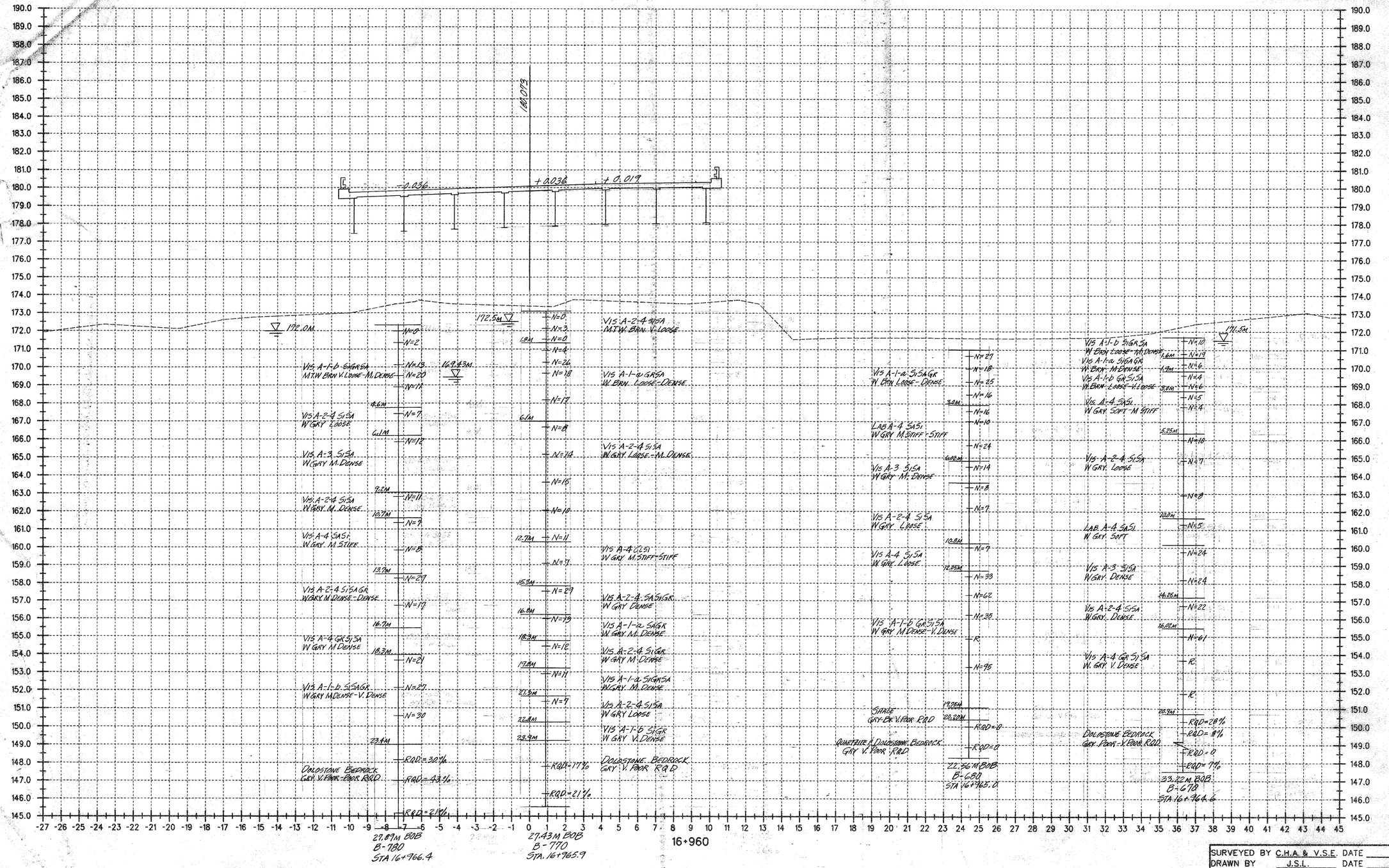
16+940

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE
DRAWN BY J.S.L. DATE
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60.101
SHEET 304 OF 385 SHEETS

Metric



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

H 1:100

V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE

DRAWN BY J.S.L. DATE

SQUAD LEADER T.P.K.

DESIGN FILE NO. N/A

IPARM FILE

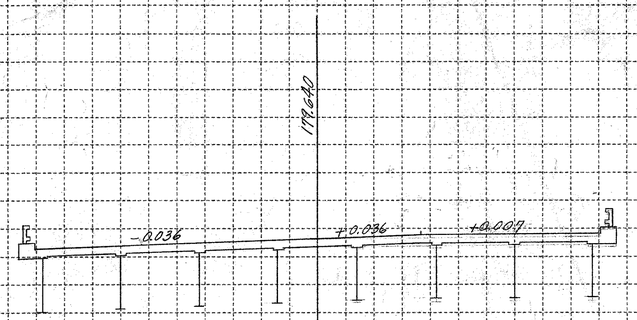
DATE PLOTTED

PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60.101

SHEET 302 OF 365 SHEETS

Metric



1+960.00

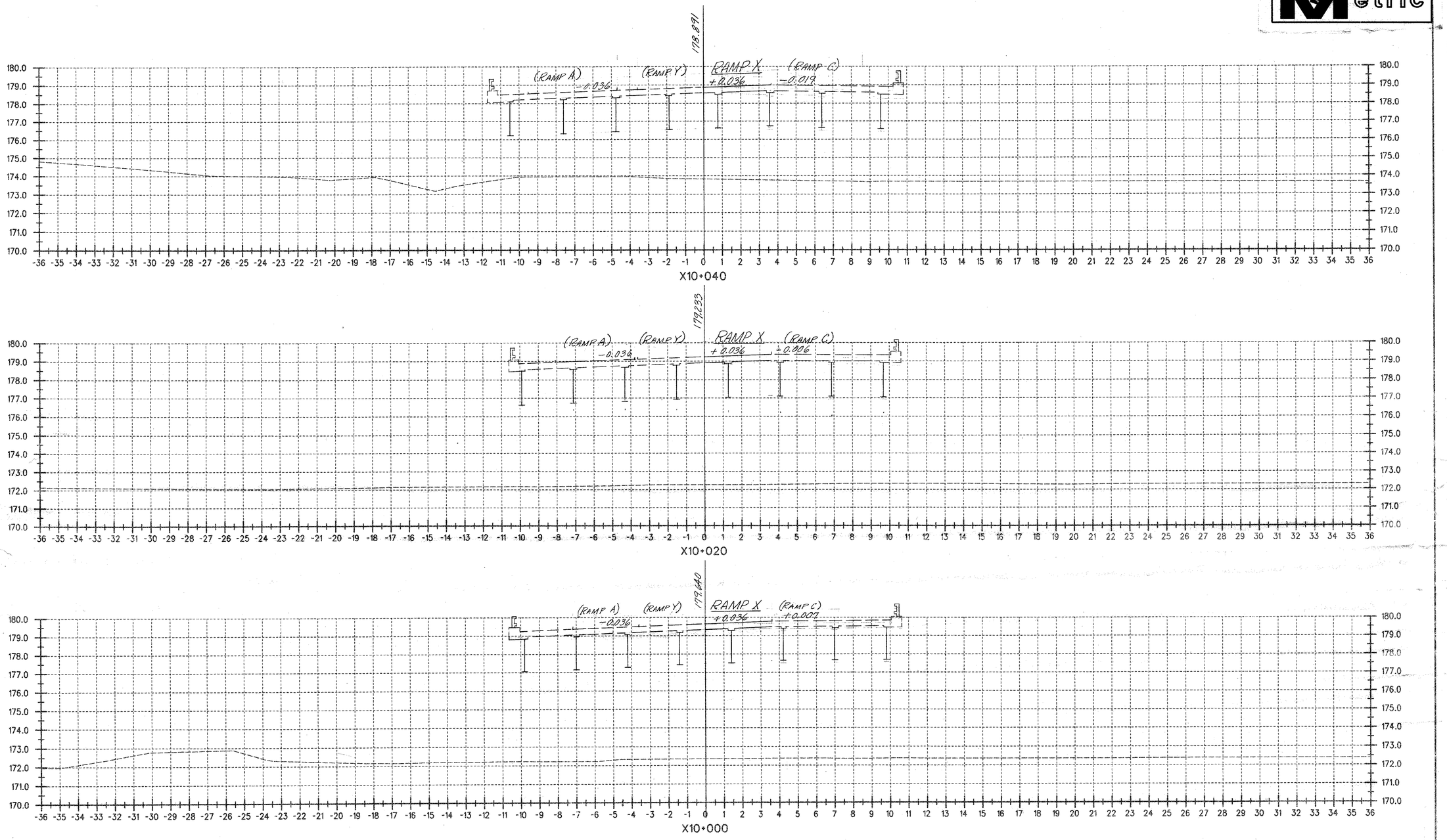
16+978.091

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE
DRAWN BY J.S.L. DATE
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60.101
SHEET 303 OF 385 SHEETS

Metric



DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

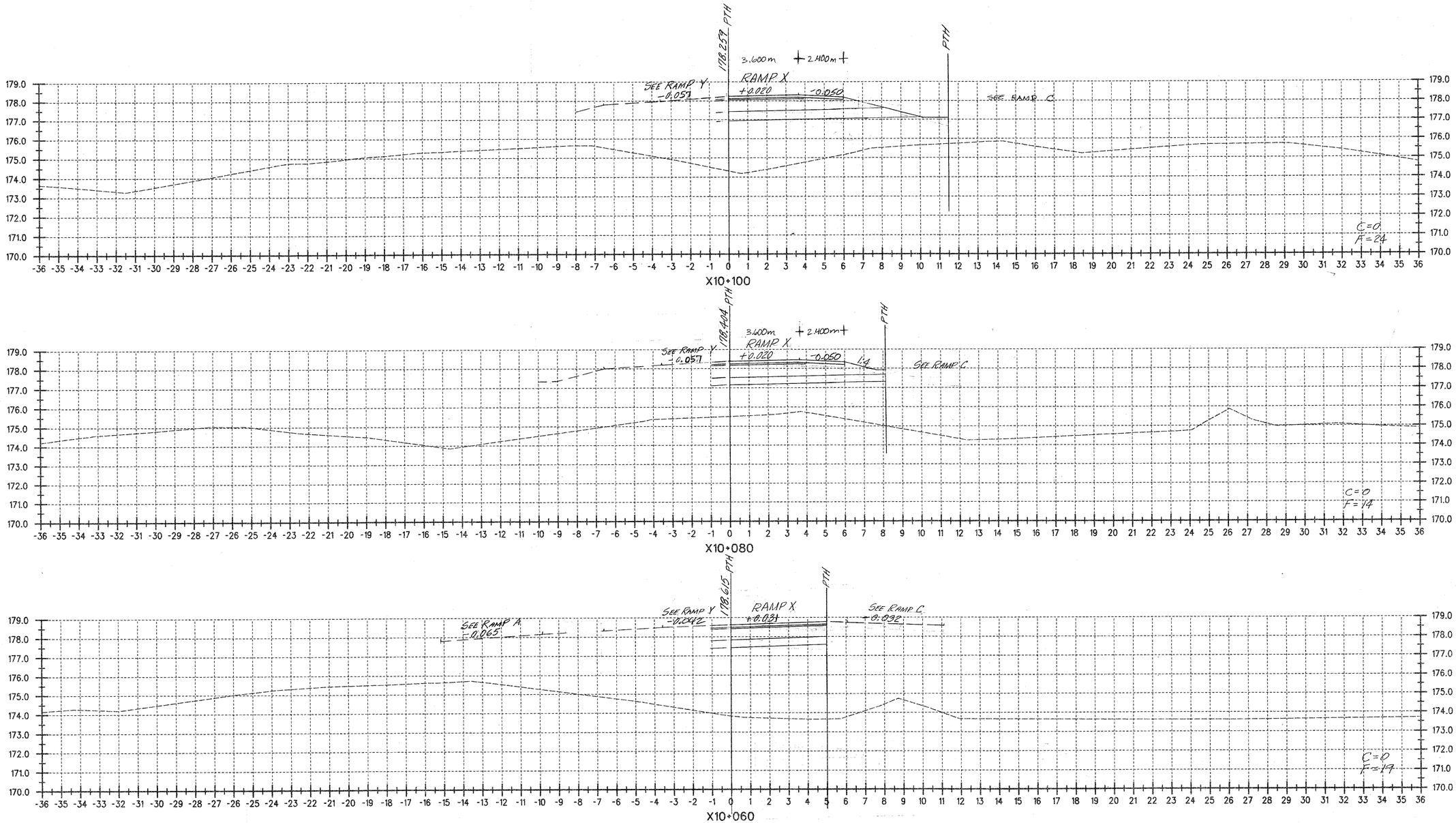
ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED

2 0 2 m

H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE _____
DRAWN BY J.S.L. DATE _____
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE _____ DATE PLOTTED _____
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C14
PROJ. NO. P.I.N. 1306.60.101
SHEET 304 OF 385 SHEETS

Metric



DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED

2 0 2 m

H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE

DRAWN BY J.S.L. DATE

SQUAD LEADER T.P.K.

DESIGN FILE NO. N/A

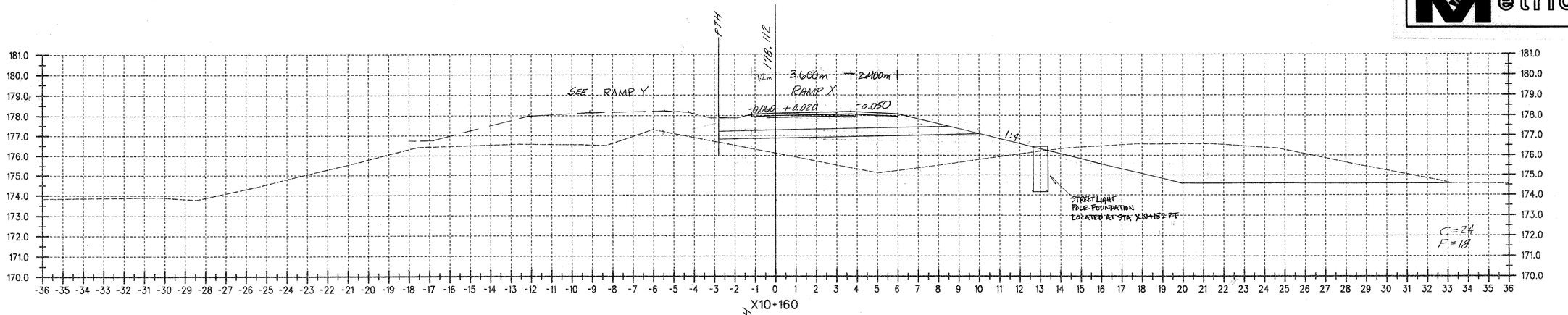
IPARM FILE DATE PLOTTED

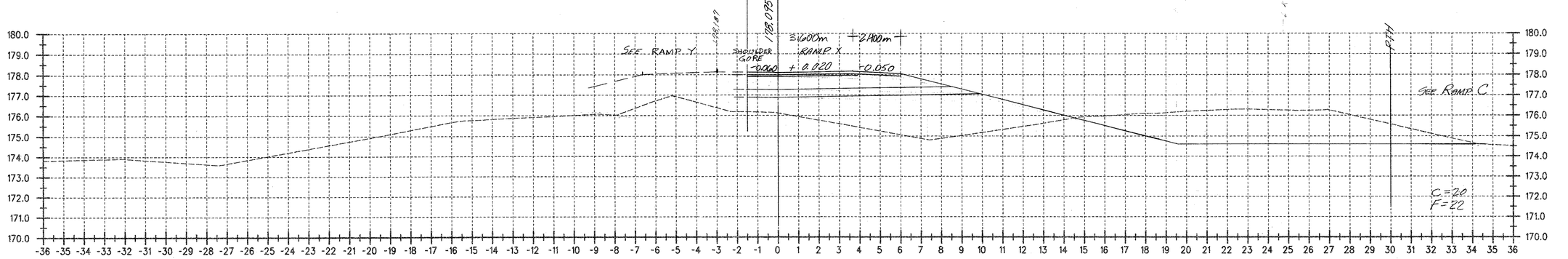
PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4

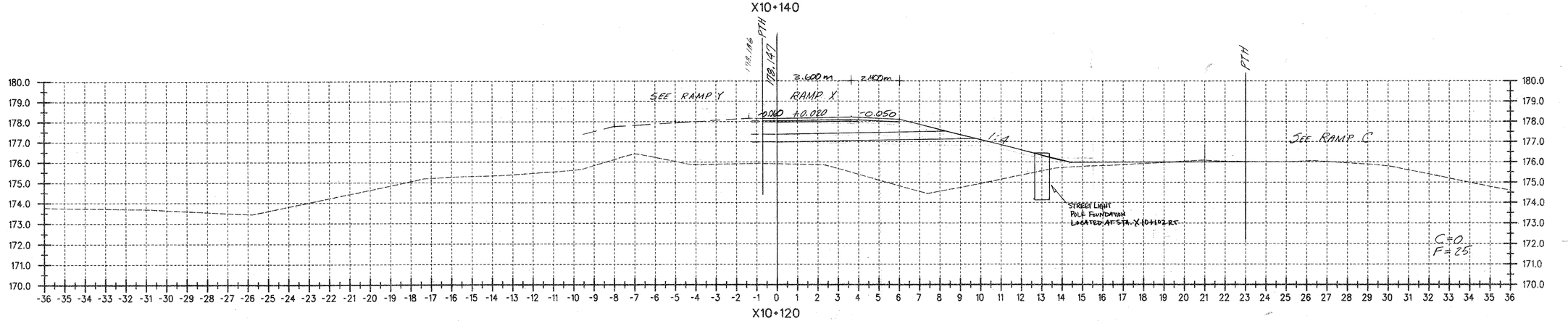
PROJ. NO. P.I.N. 1306.60.101

SHEET 305 OF 385 SHEETS

Metric







DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

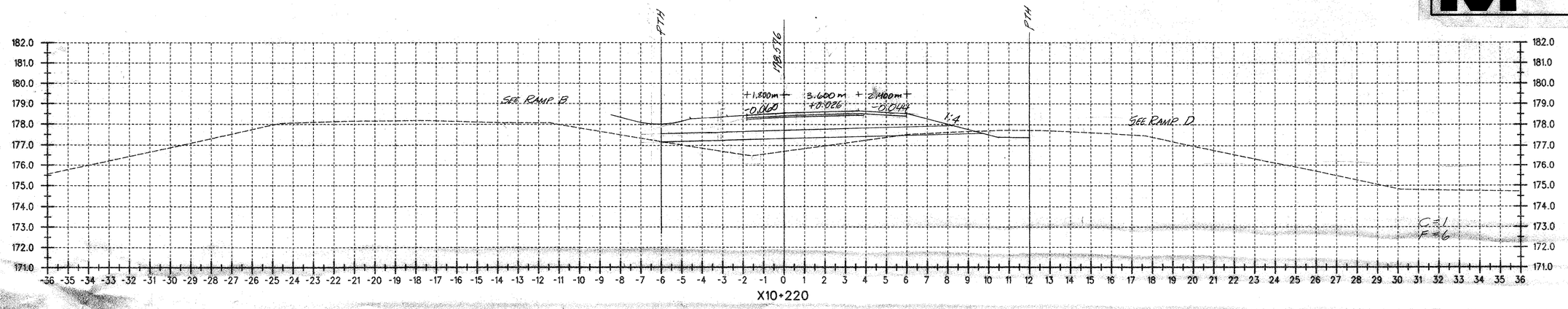
ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

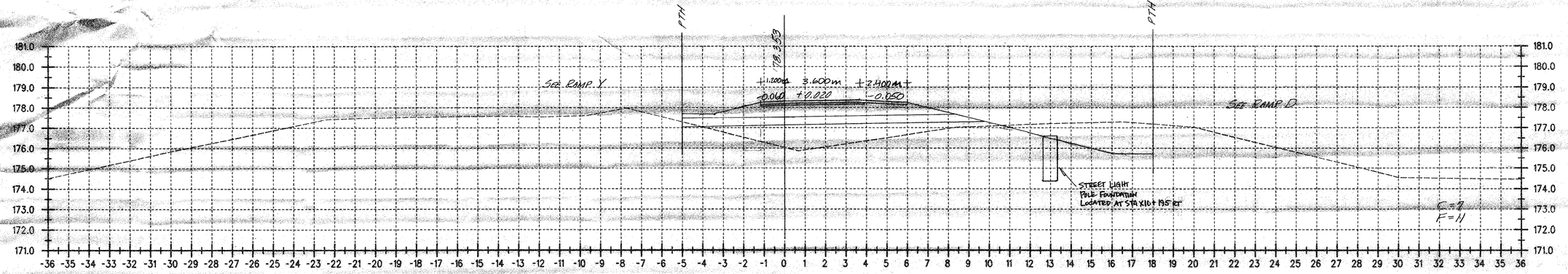
2 0 2 m

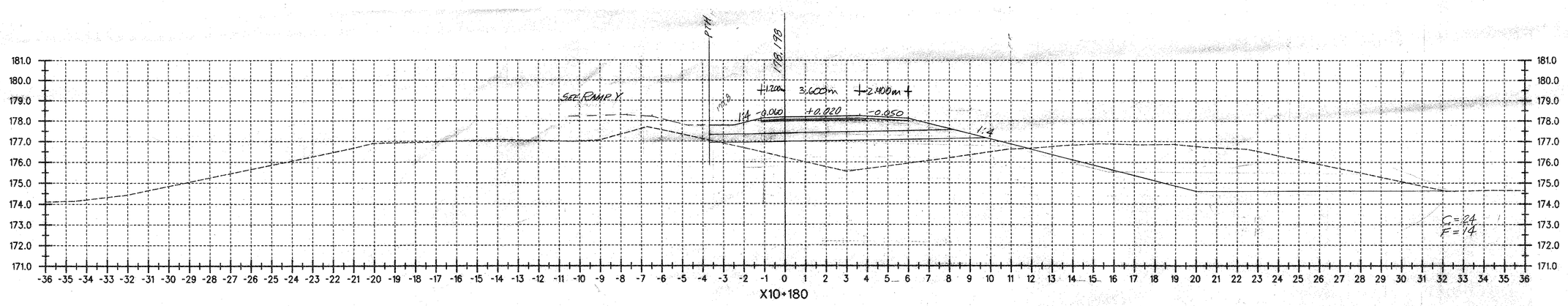
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE
DRAWN BY J.S.L. DATE
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE
DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60.101
SHEET 306 OF 385 SHEETS

Metric



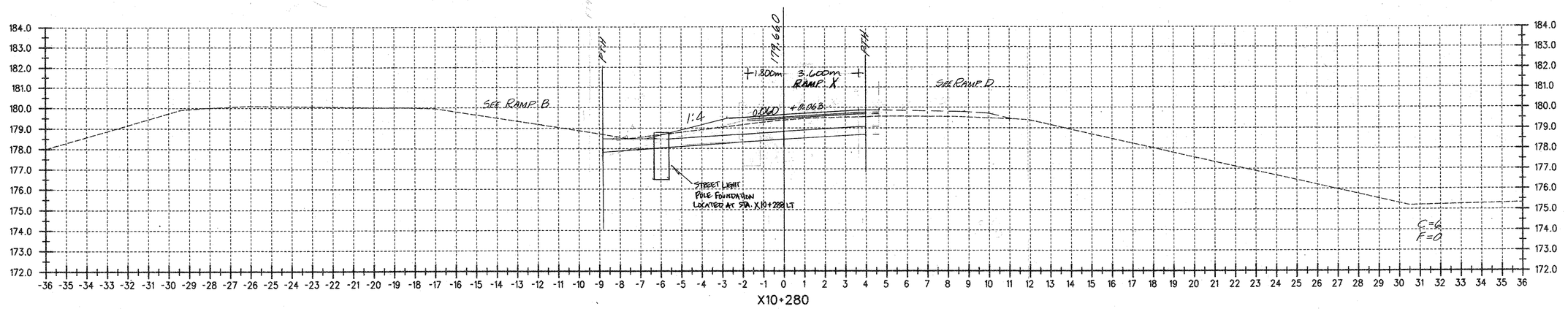


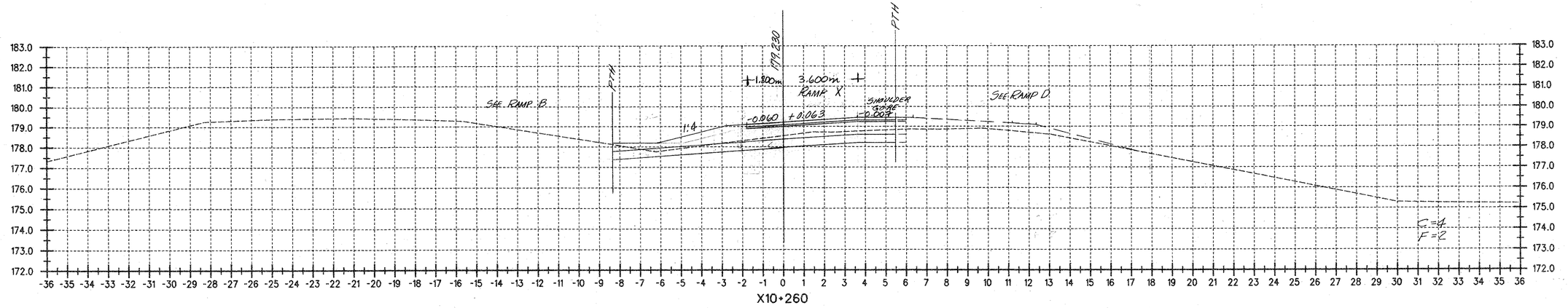


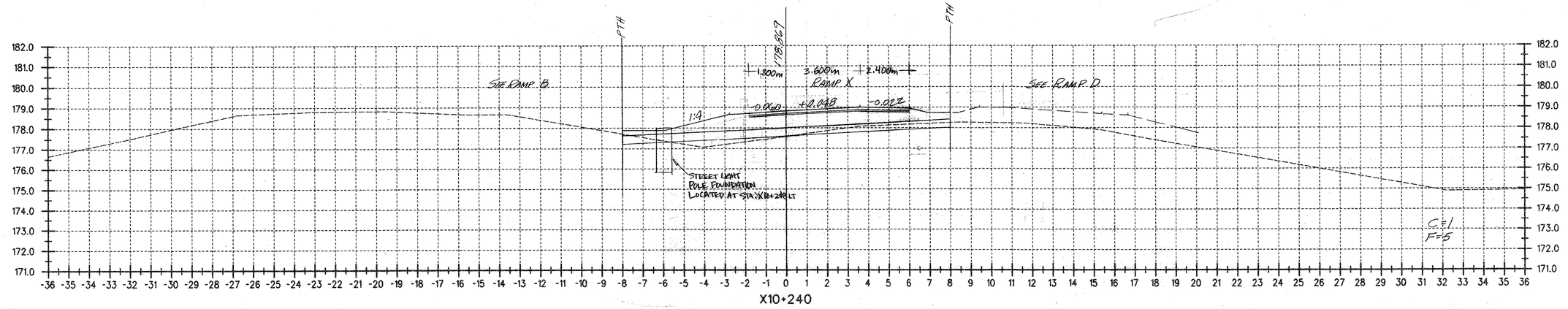
DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE
DRAWN BY J.S.L. DATE
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE
DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1506.60.101
SHEET 307 OF 385 SHEETS







Metric

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

H 1:100

V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE

DRAWN BY J.S.L. DATE

SQUAD LEADER T.P.K.

DESIGN FILE NO. N/A

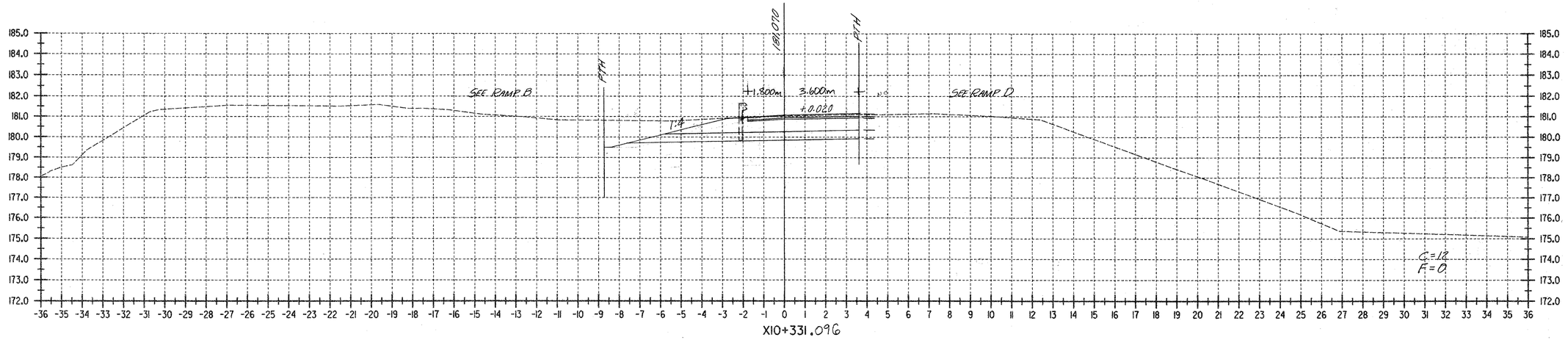
IPARM FILE

DATE PLOTTED

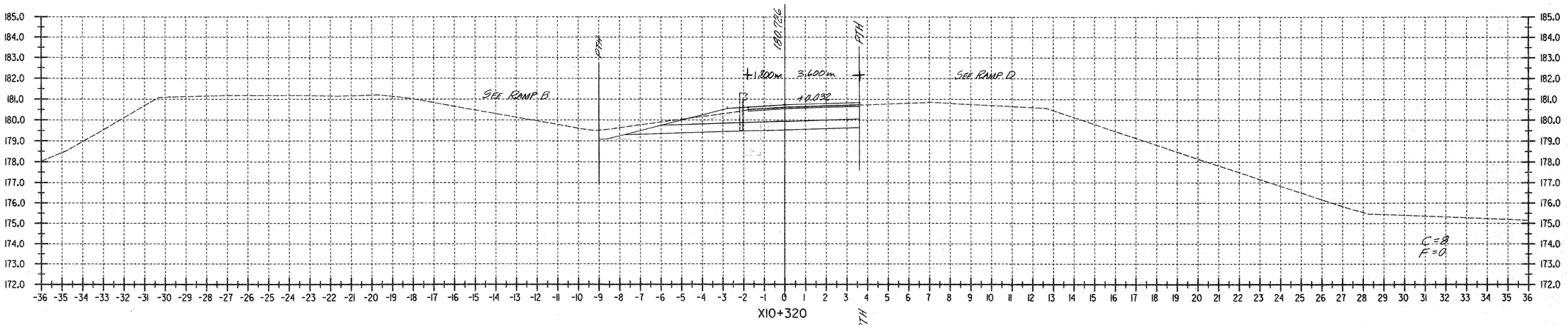
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60.101

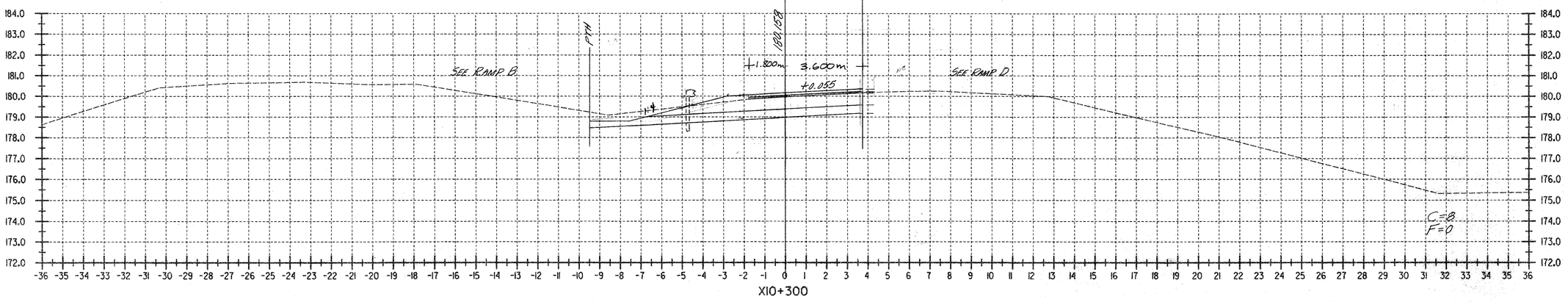
SHEET 308 OF 385 SHEETS



X10+331.096



X10+320



X10+300

Metric

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

H 1:100

V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE

DRAWN BY J.S.L. DATE

SQUAD LEADER T.P.K.

DESIGN FILE NO. N/A

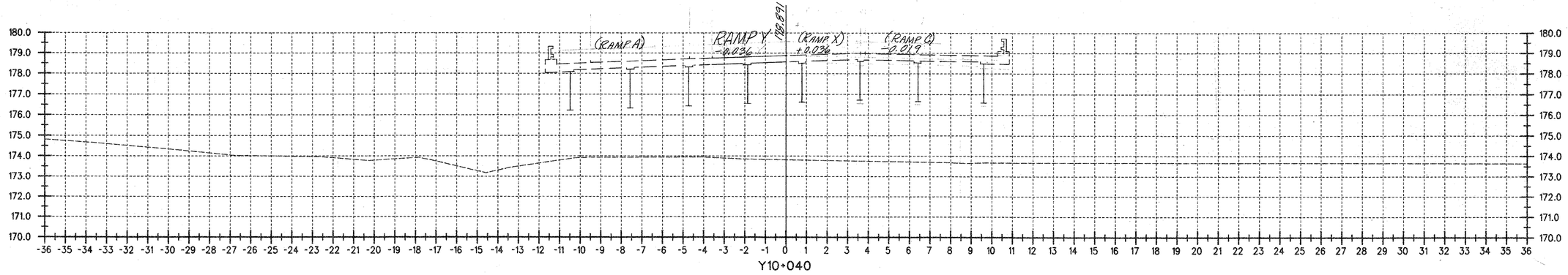
IPARM FILE

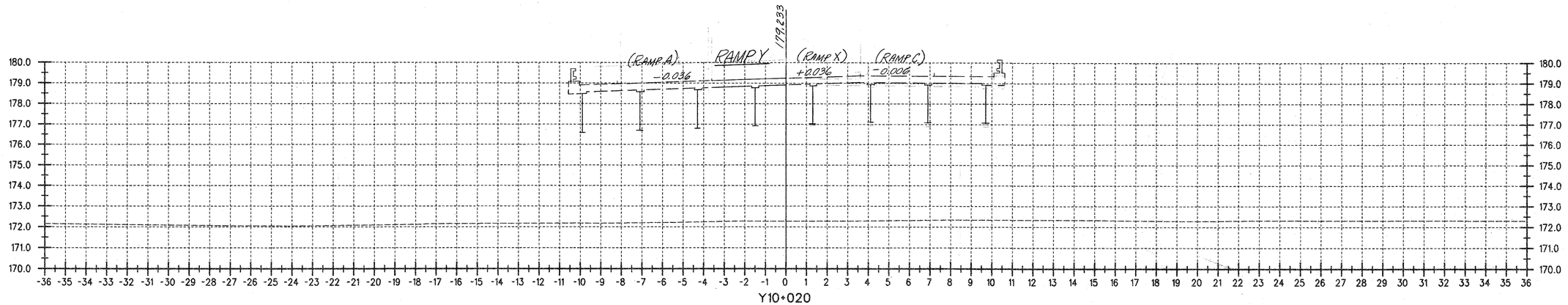
DATE PLOTTED

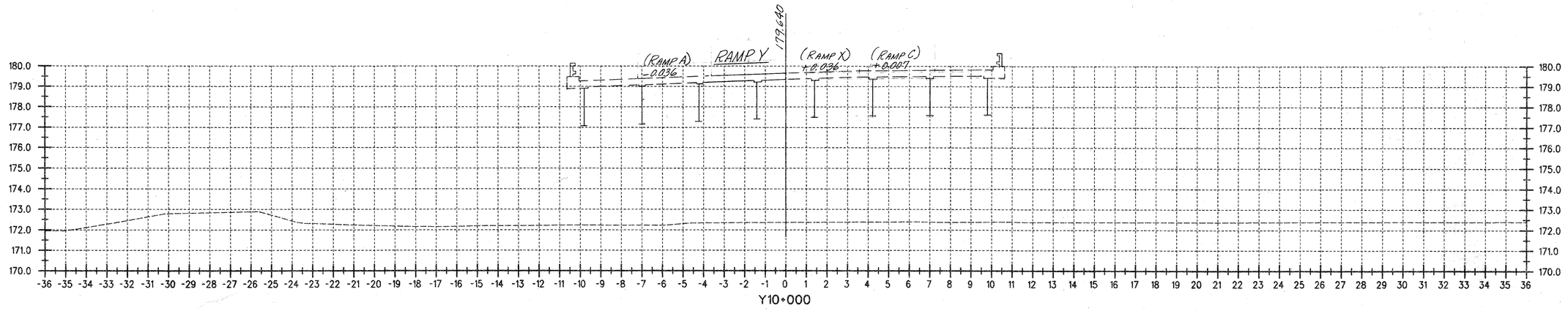
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60.101

SHEET 304 OF 385 SHEETS







DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

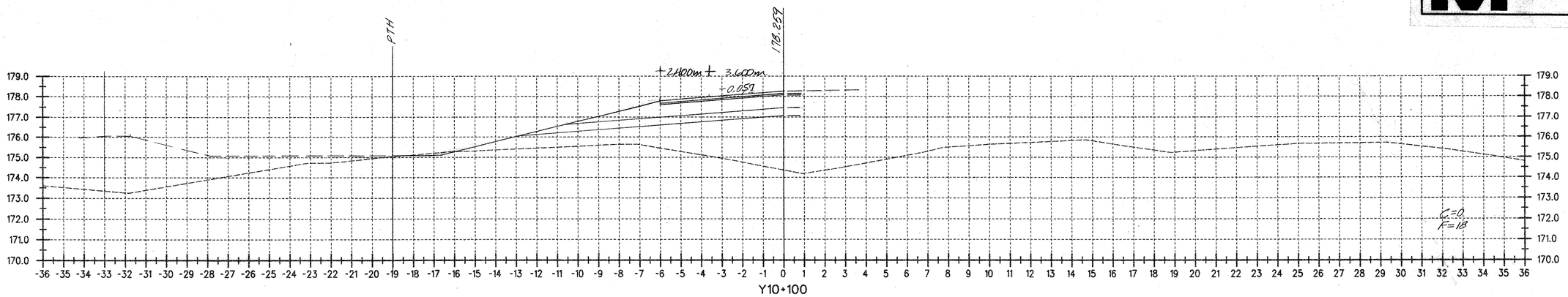
ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED

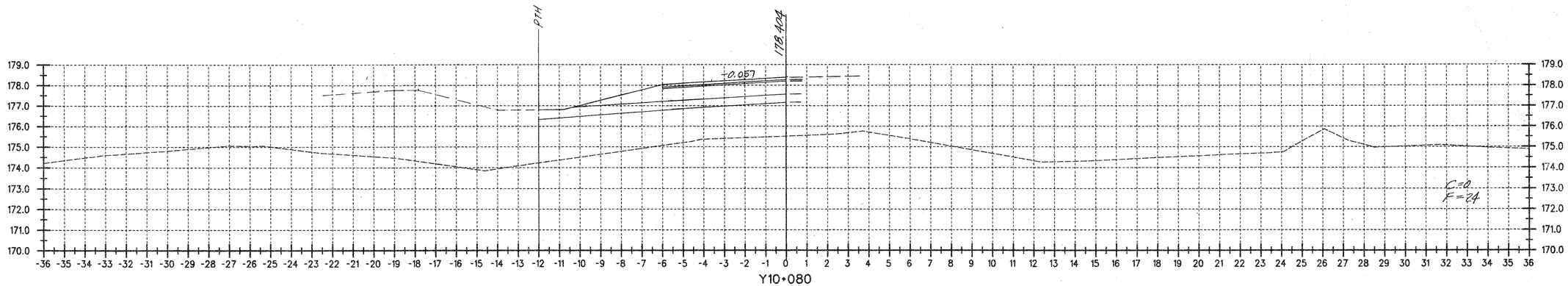
2 0 2 m

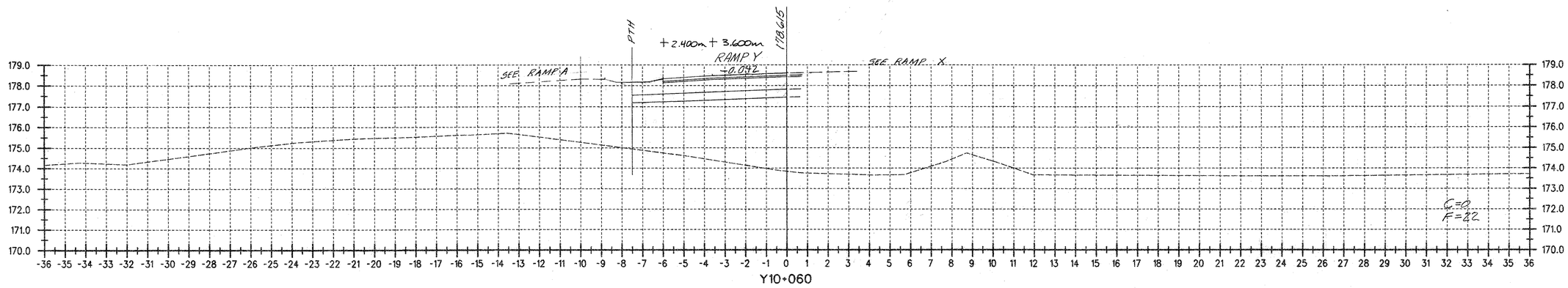
H 1:100
V 1:100

Metric

SURVEYED BY C.H.A. & V.S.E. DATE
DRAWN BY J.S.L. DATE
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE
DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60.101
SHEET 319 OF 385 SHEETS







DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

H 1:100

V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE _____

DRAWN BY J.S.L. DATE _____

SQUAD LEADER T.P.K.

DESIGN FILE NO. N/A

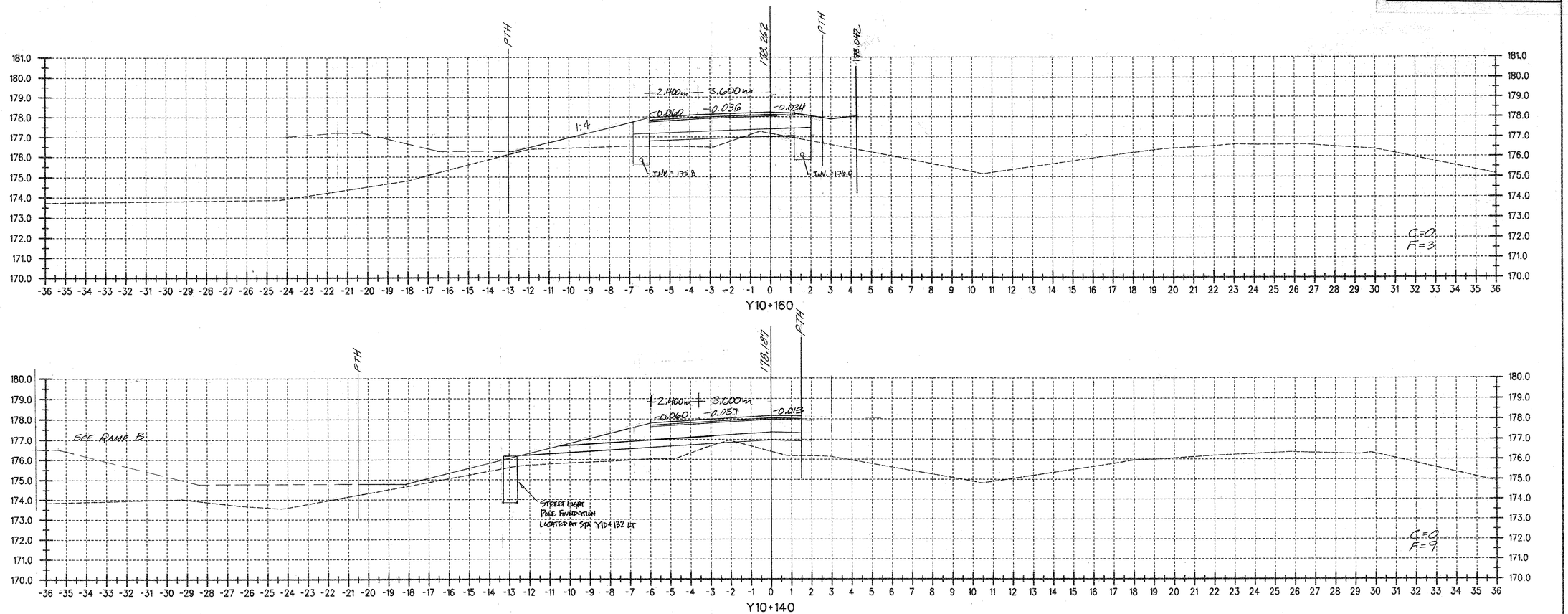
IPARM FILE _____ DATE PLOTTED _____

PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60.101

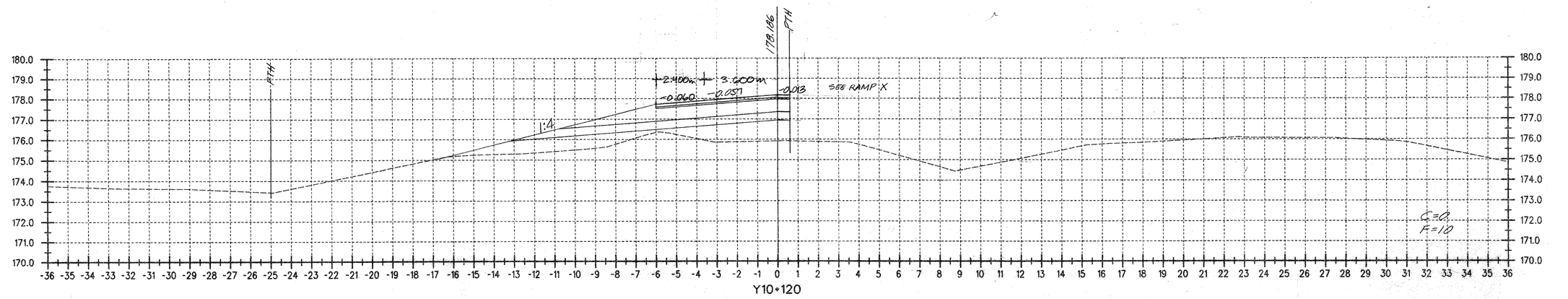
SHEET 31 OF 385 SHEETS

Metric



Y10+160

Y10+140



Y10+120

DATUM

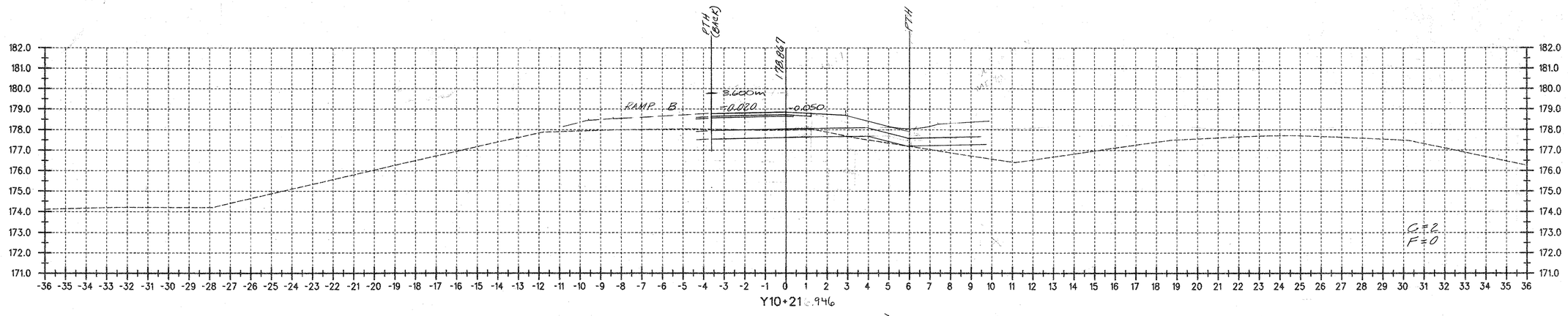
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

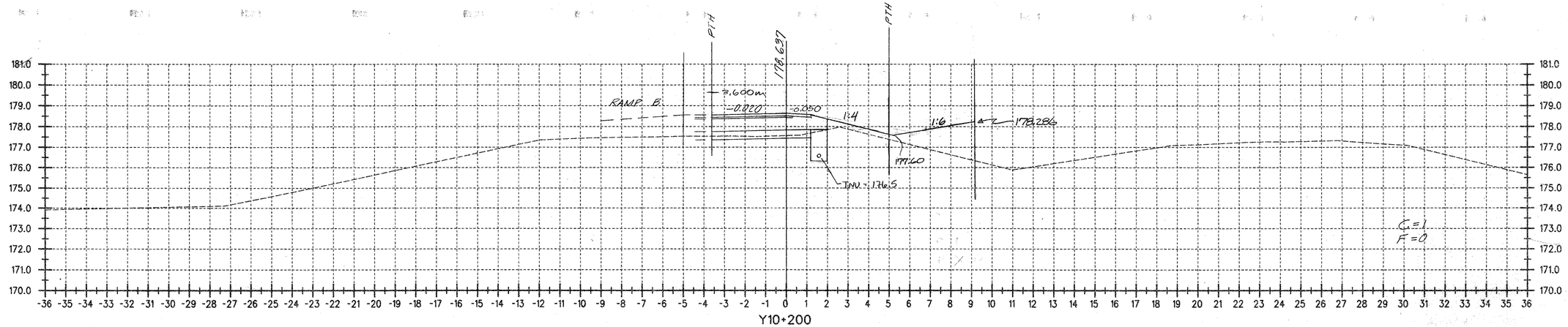
ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED

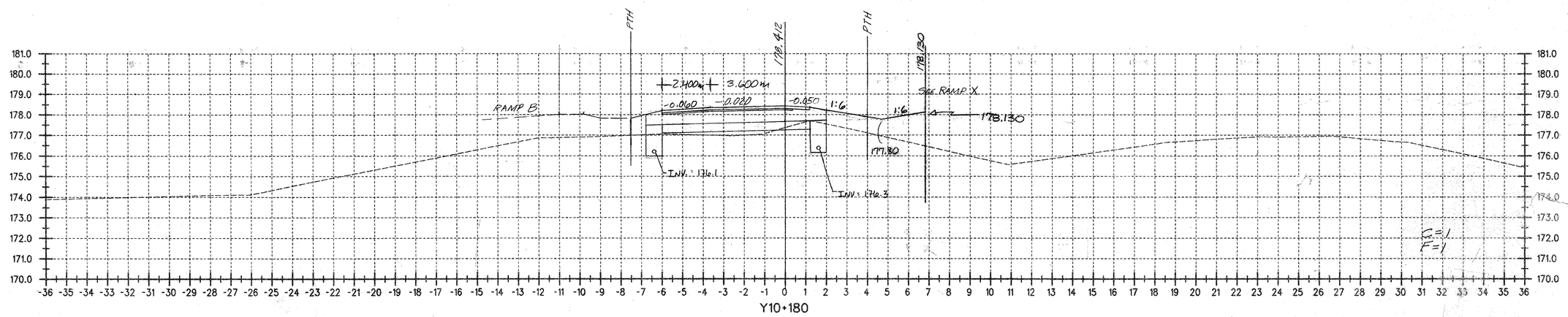
2 0 2 m

H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE
DRAWN BY J.S.L. DATE
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60.101
SHEET 312 OF 385 SHEETS







Metric

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

H 1:100

V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE

DRAWN BY J.S.L. DATE

SQUAD LEADER T.P.K.

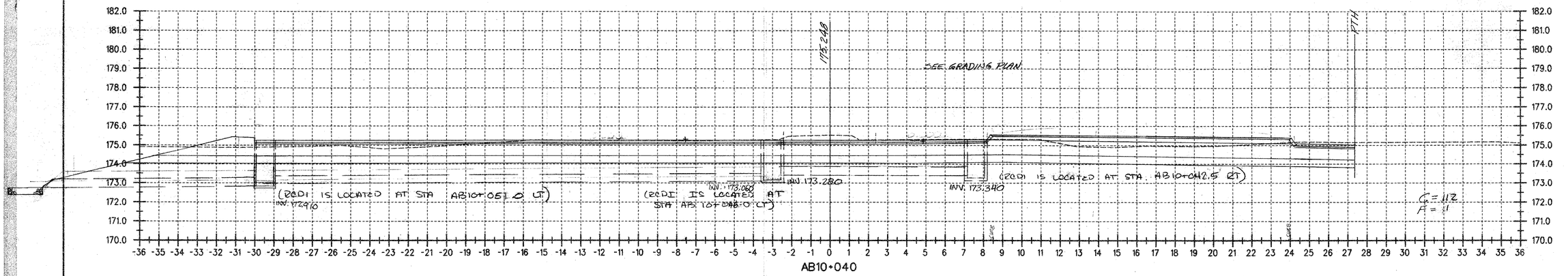
DESIGN FILE NO. N/A

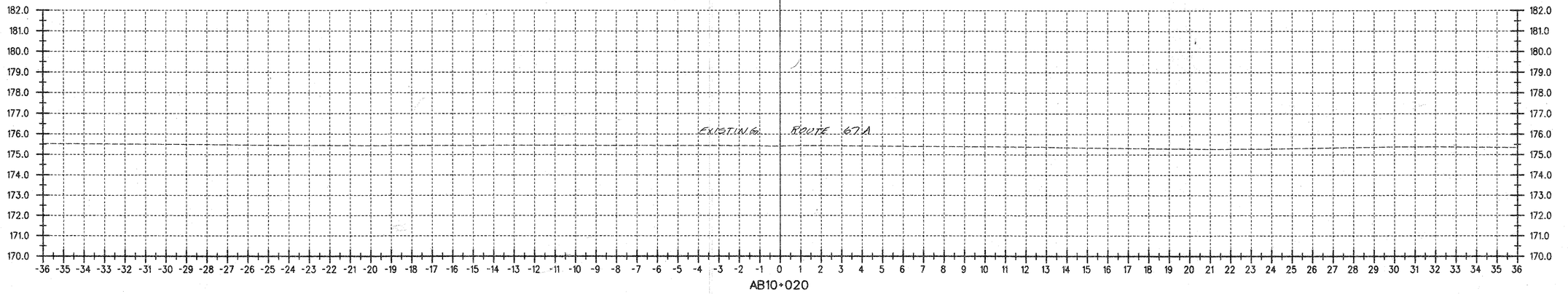
IPARM FILE DATE PLOTTED

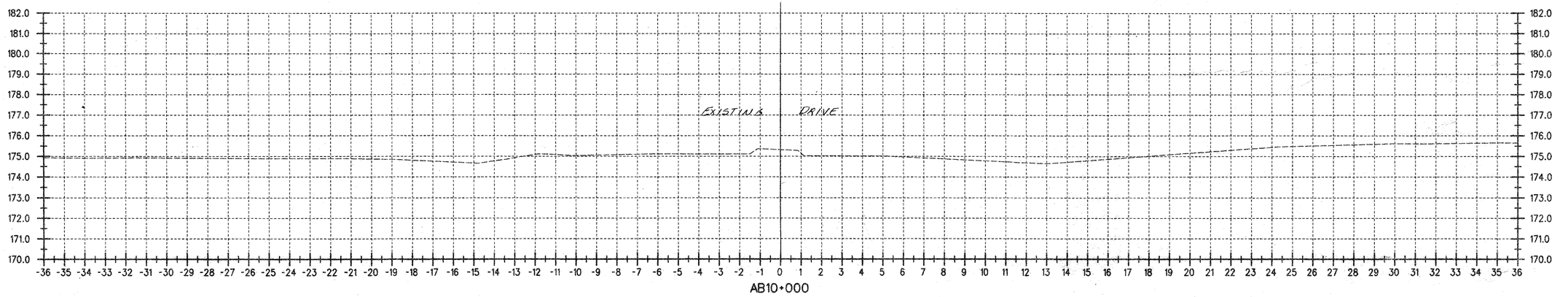
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60.101

SHEET 313 OF 385 SHEETS







Metric

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE

DRAWN BY J.S.L. DATE

SQUAD LEADER T.P.K.

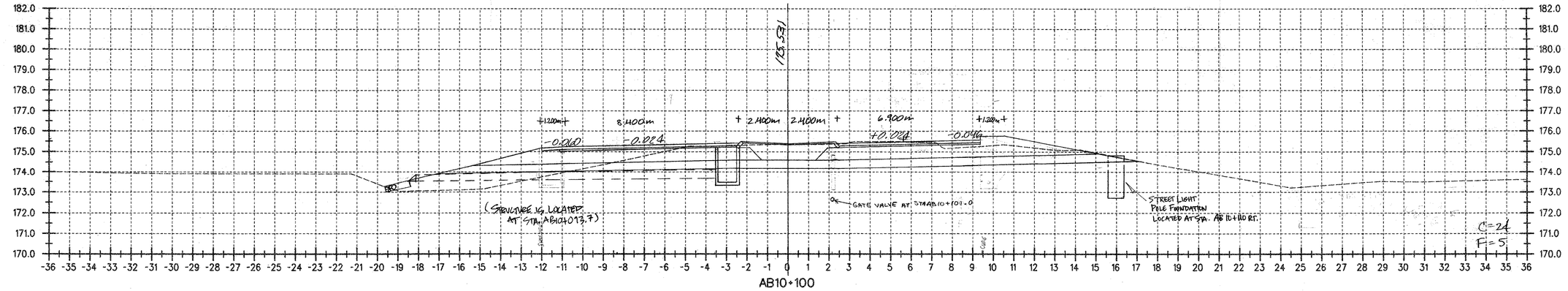
DESIGN FILE NO. N/A

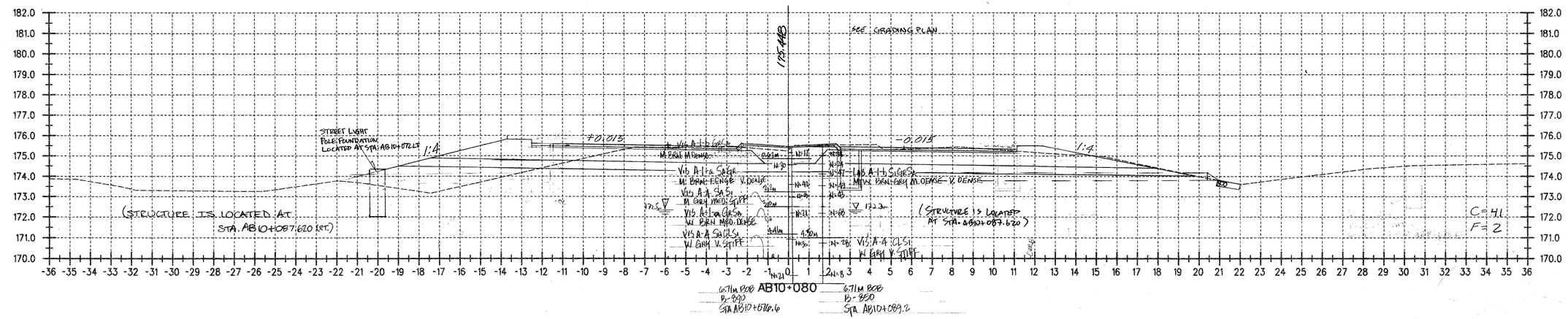
IPARM FILE DATE PLOTTED

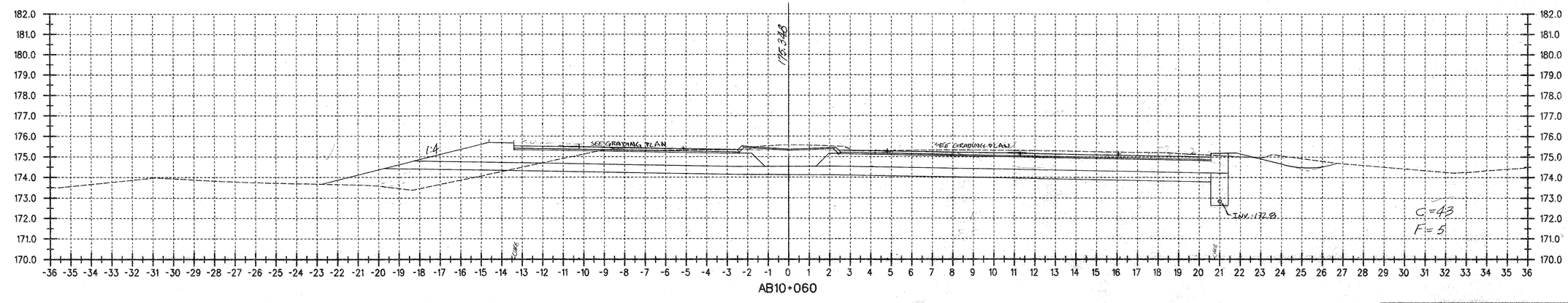
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C 4

PROJ. NO. P.I.N. 1306.60.101

SHEET 314 OF 385 SHEETS





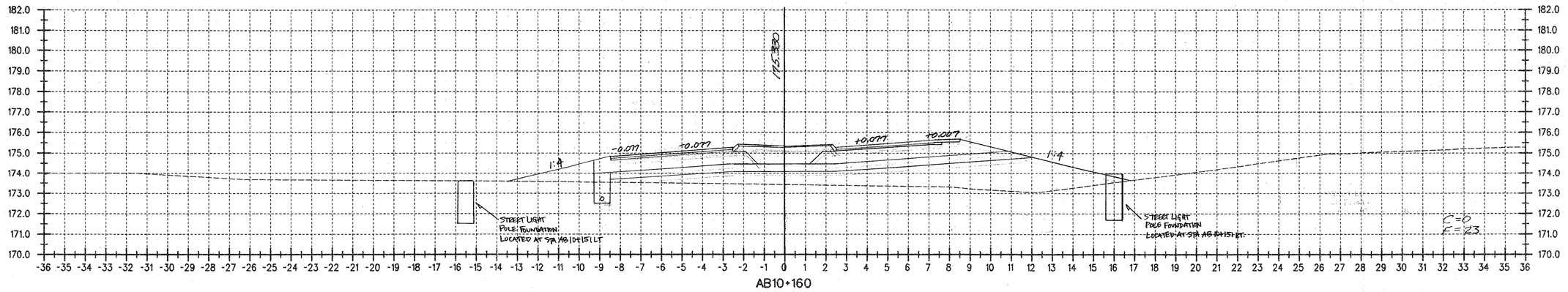


Metric

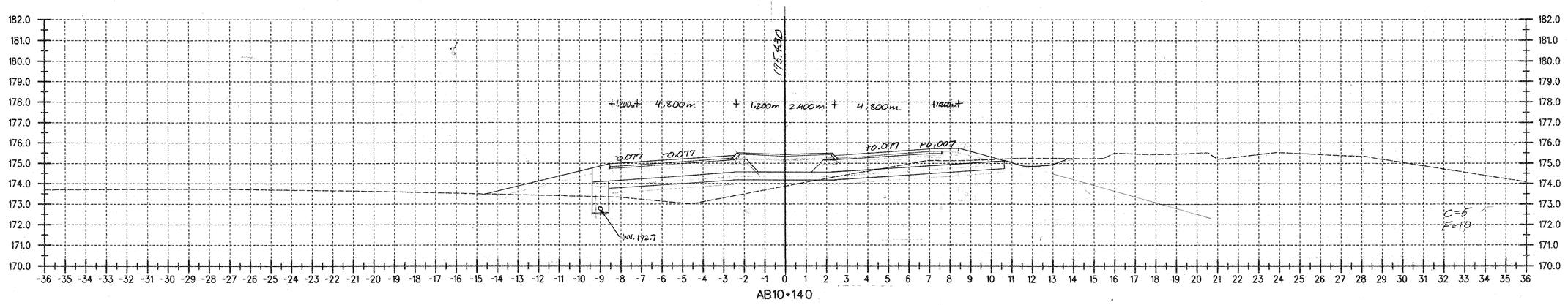
DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

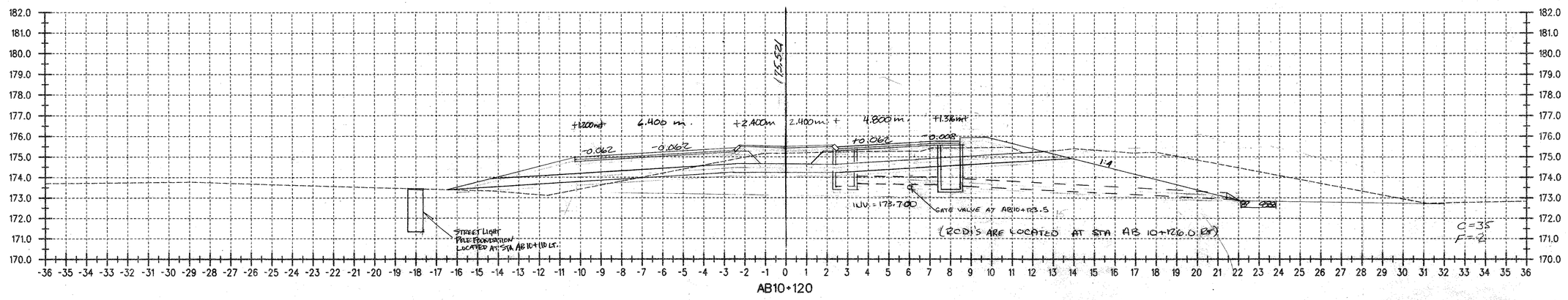
SURVEYED BY C.H.A. & V.S.E. DATE
DRAWN BY J.S.L. DATE
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE
DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60.101
SHEET 315 OF 385 SHEETS



AB10+160



AB10+140



AB10+120

Metric

DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

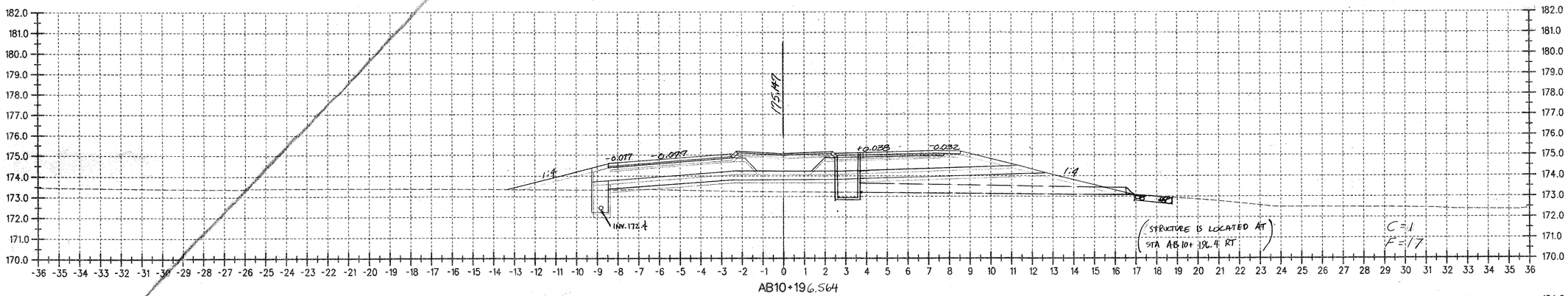
ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

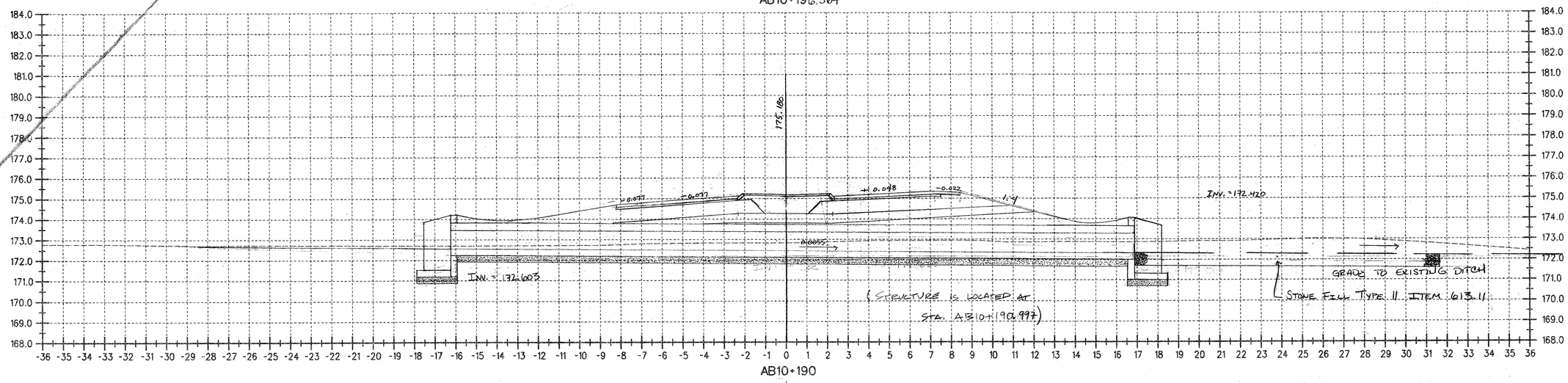
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE
DRAWN BY J.S.L. DATE
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE
DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60.101
SHEET 316 OF 385 SHEETS

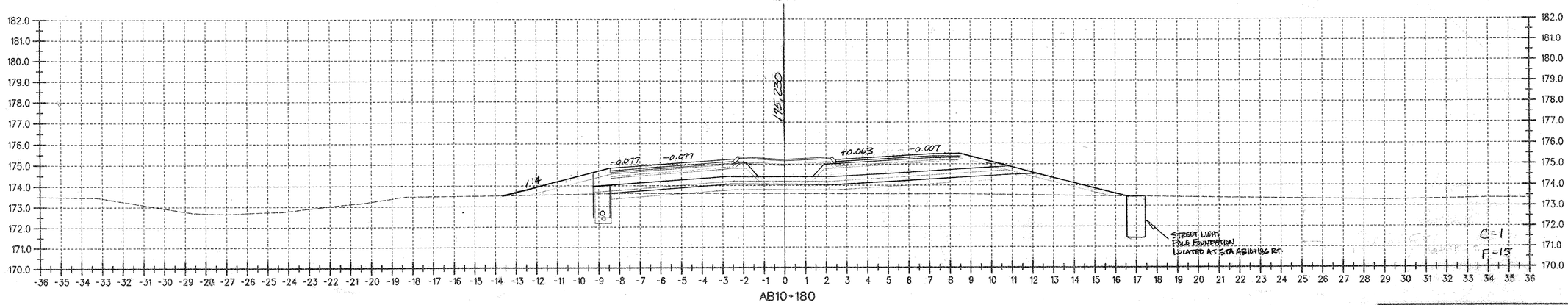
Metric



AB10+196.564



AB10+190



AB10+180

DATUM

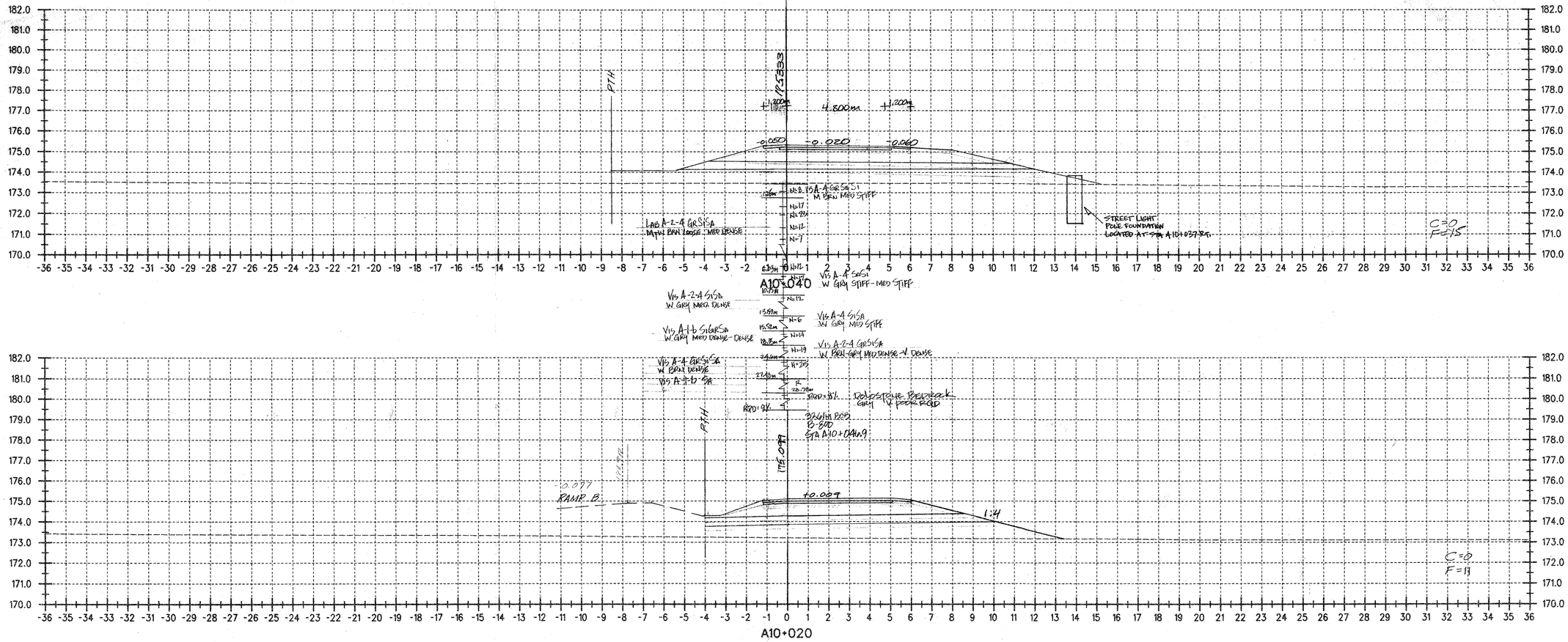
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE _____
DRAWN BY J.S.L. DATE _____
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE _____ DATE PLOTTED _____
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60.101
SHEET 317 OF 385 SHEETS



Metric

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

H 1:100

V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE _____

DRAWN BY J.S.L. DATE _____

SQUAD LEADER T.P.K.

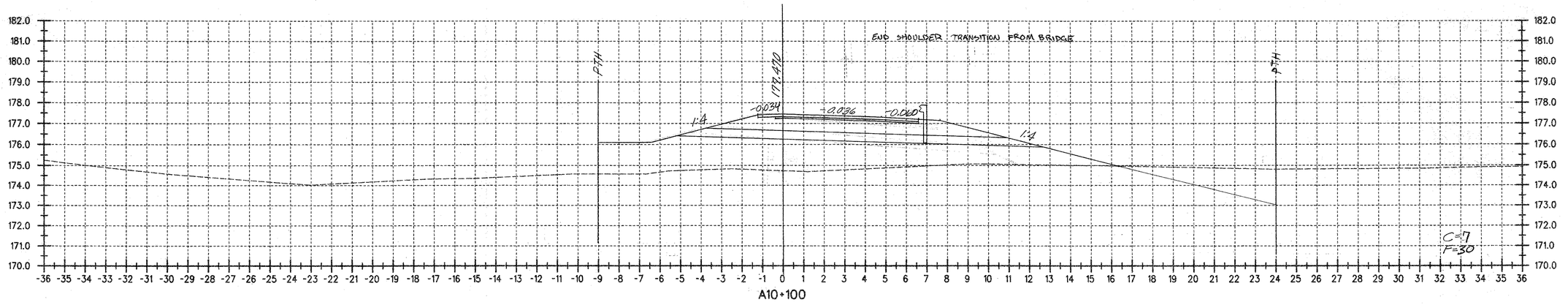
DESIGN FILE NO. N/A

IPARM FILE _____ DATE PLOTTED _____

PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60.101

SHEET 318 OF 385 SHEETS



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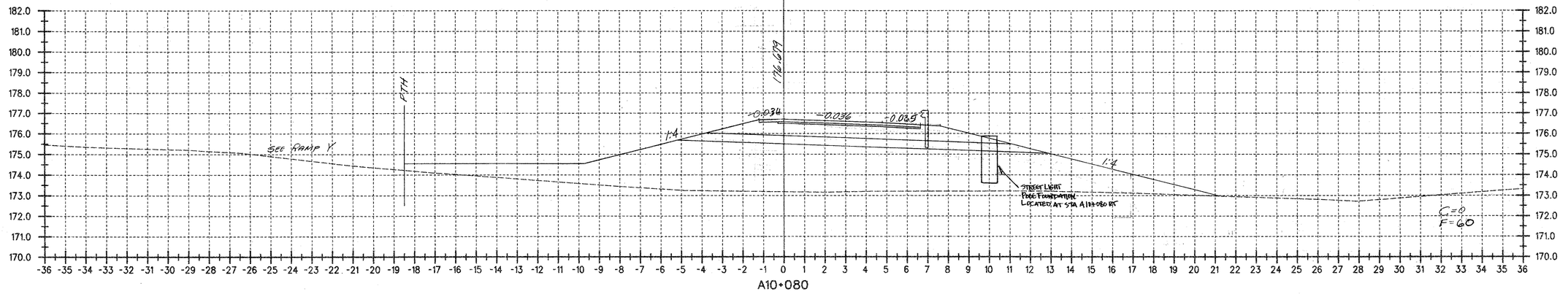
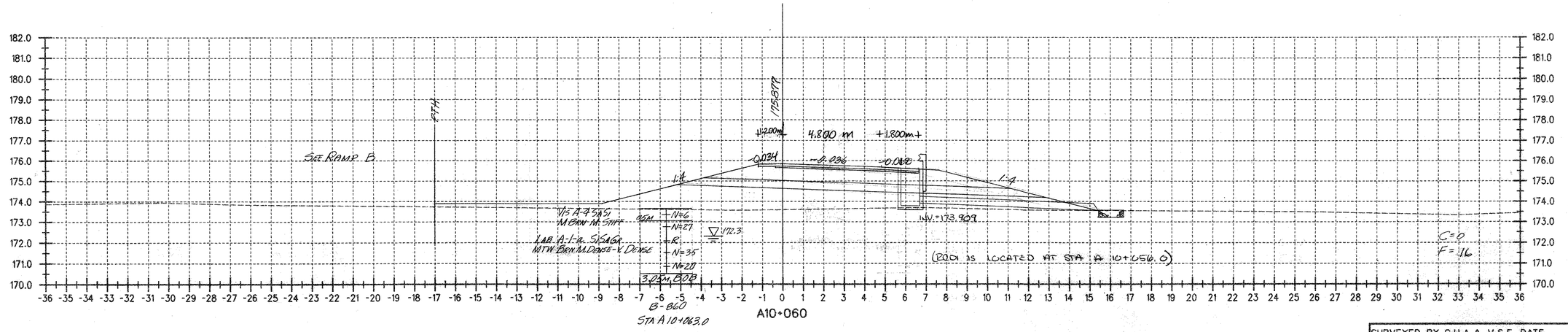


A10+080



A10+060

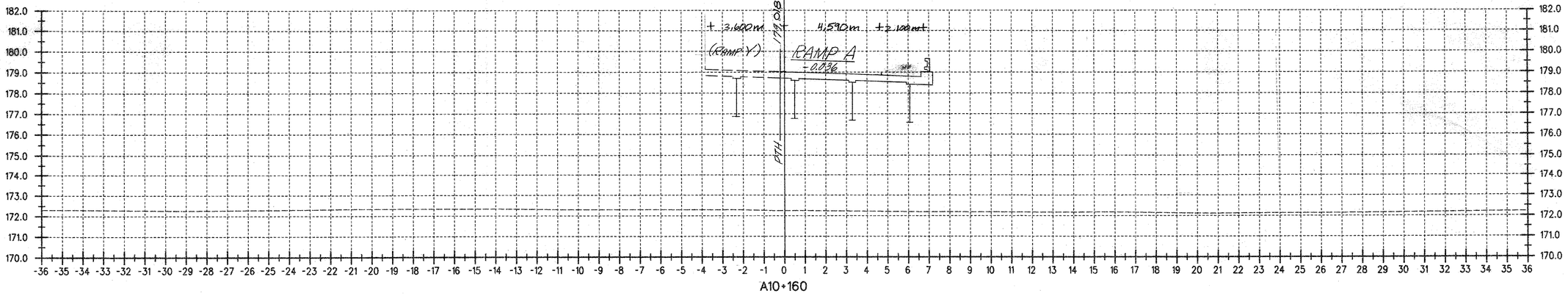
DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

H 1 :100
V 1 :100

SURVEYED BY C.H.A. & V.S.E. DATE
DRAWN BY J.S.L. DATE
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE
DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60.101
SHEET 319 OF 385 SHEETS



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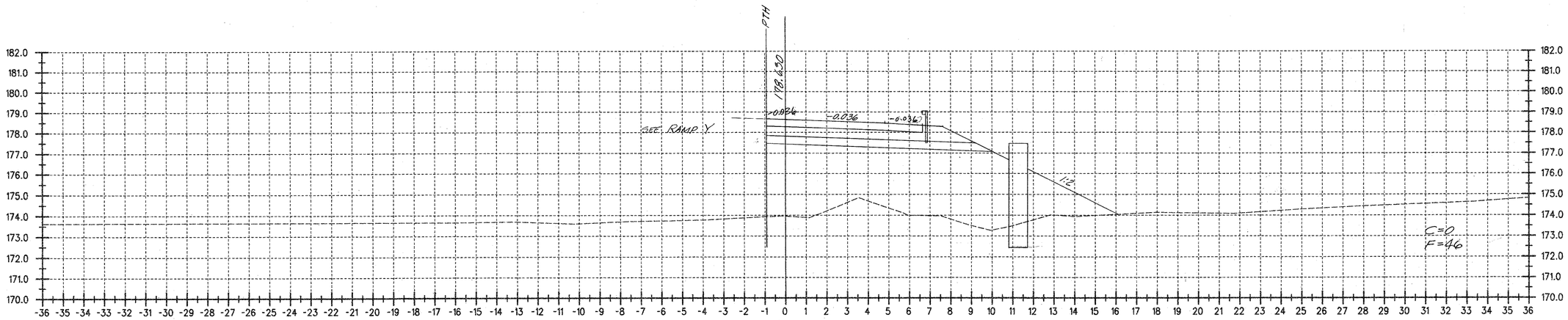
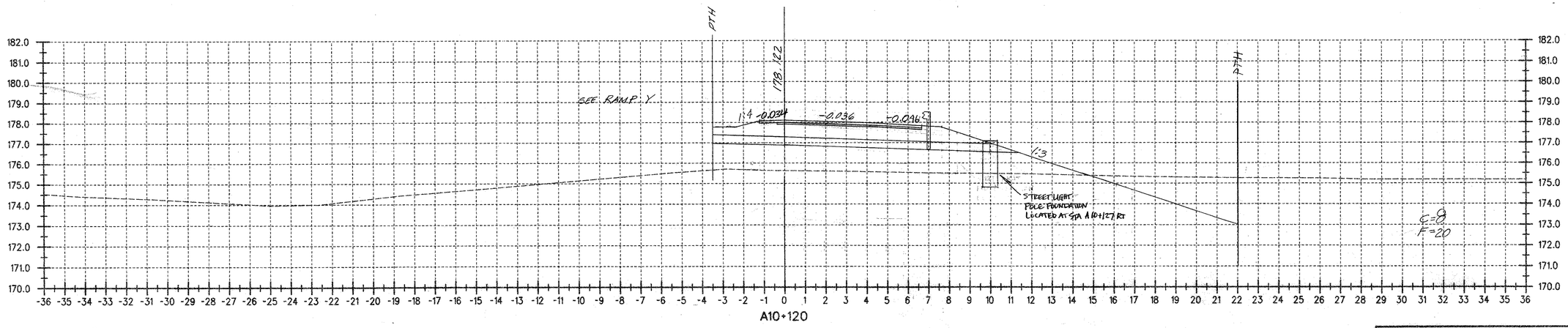


A10+140



A10+120

Metric

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED

2 0 2 m

H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE

DRAWN BY J.S.L. DATE

SQUAD LEADER T.P.K.

DESIGN FILE NO. N/A

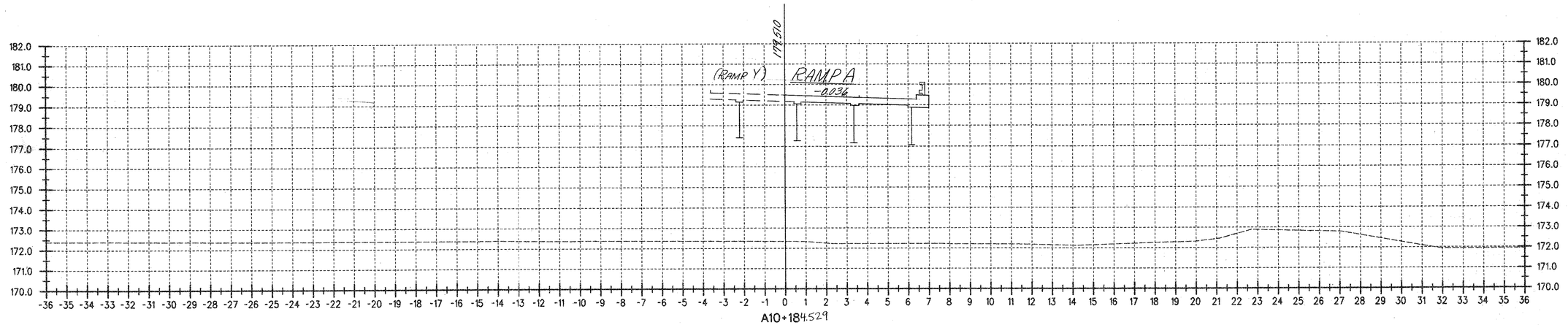
IPARM FILE

DATE PLOTTED

PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) c/4

PROJ. NO. P.I.N. 1306.60.101

SHEET 320 OF 385 SHEETS



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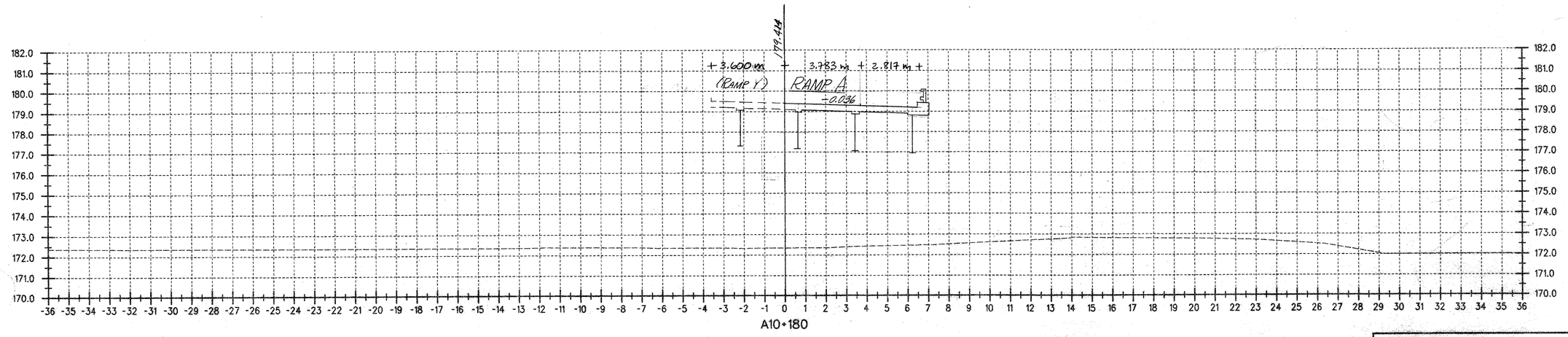


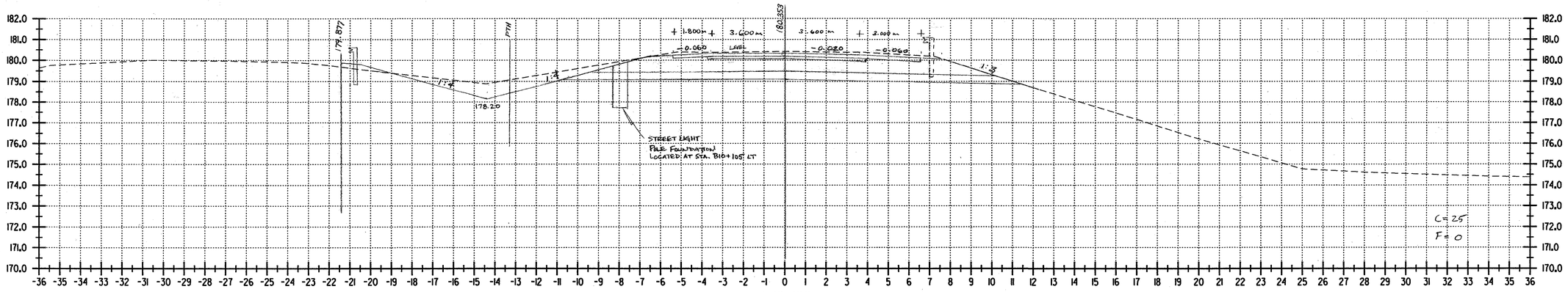
A10+180

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

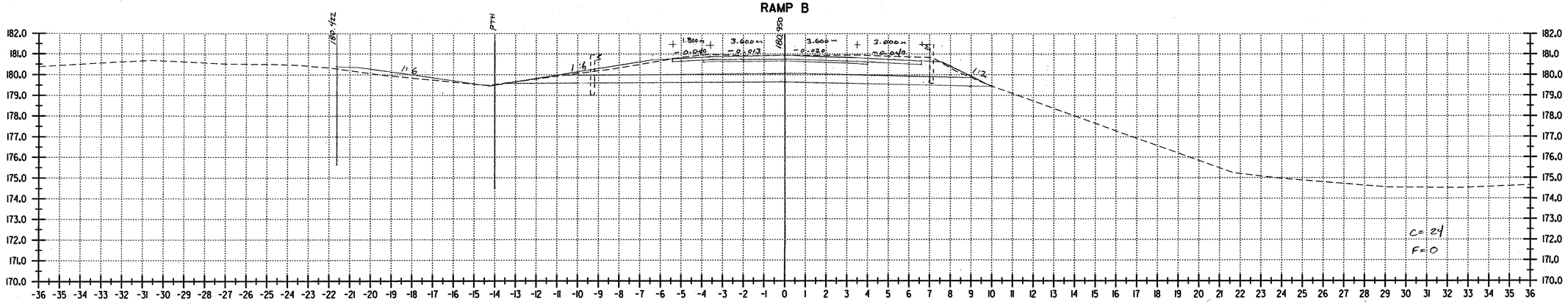
ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE
DRAWN BY J.S.L. DATE
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE
DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60.101
SHEET 321 OF 385 SHEETS

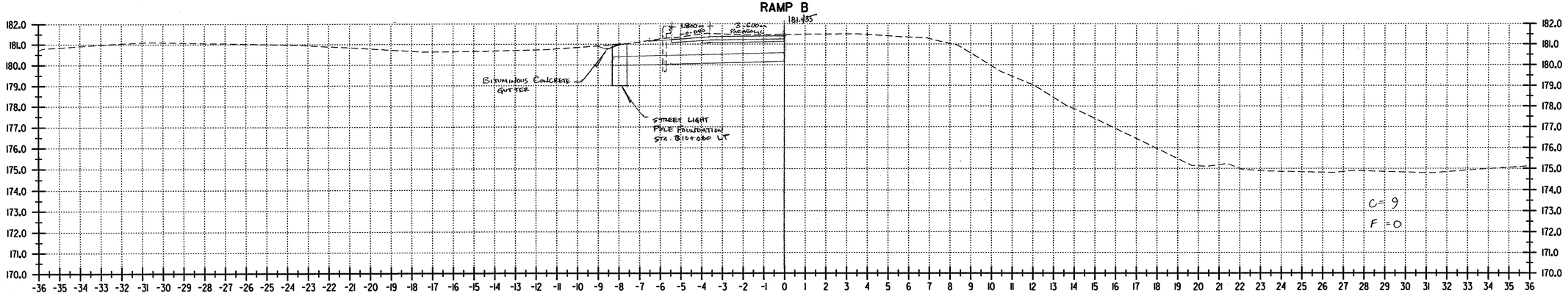
Metric



B 10+100
RAMP B



B 10+080
RAMP B

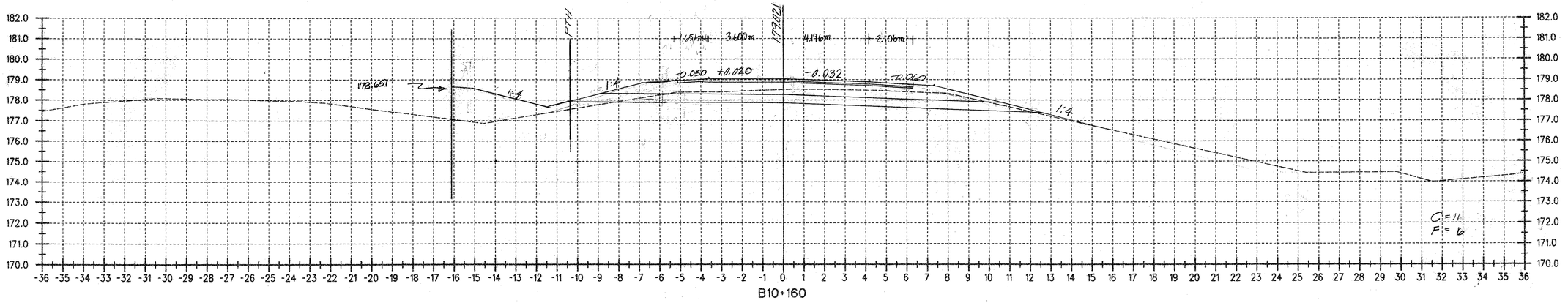


B 10+064.800
RAMP B

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DRAWN BY J.S.L. DATE 6/99
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VAOT/VTSECT3.D
IPARM FILE _____ DATE PLOTTED _____
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
SHEET 322 OF 385 SHEETS



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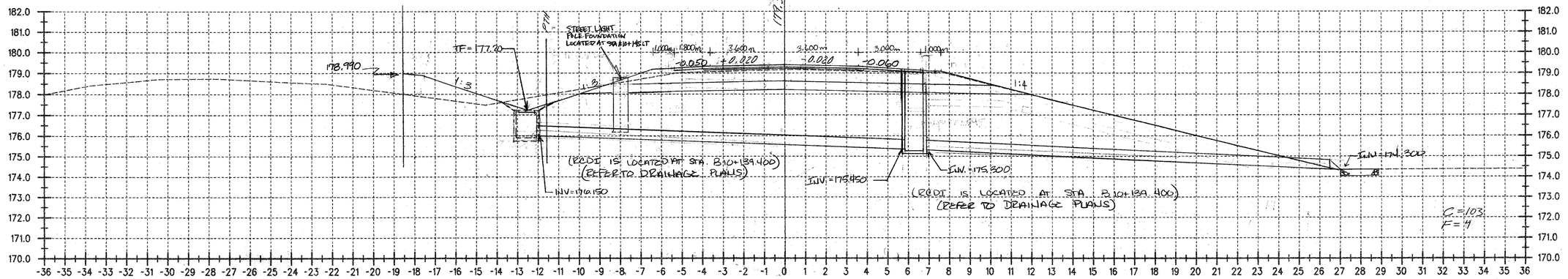
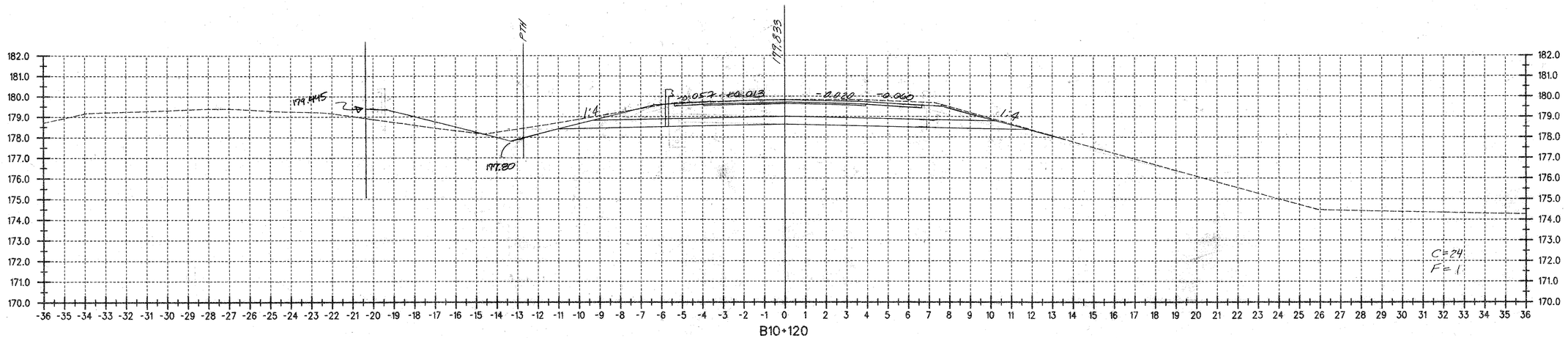


B10+140



B10+120

Metric

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

H 1:100

V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE

DRAWN BY J.S.L. DATE

SQUAD LEADER T.P.K.

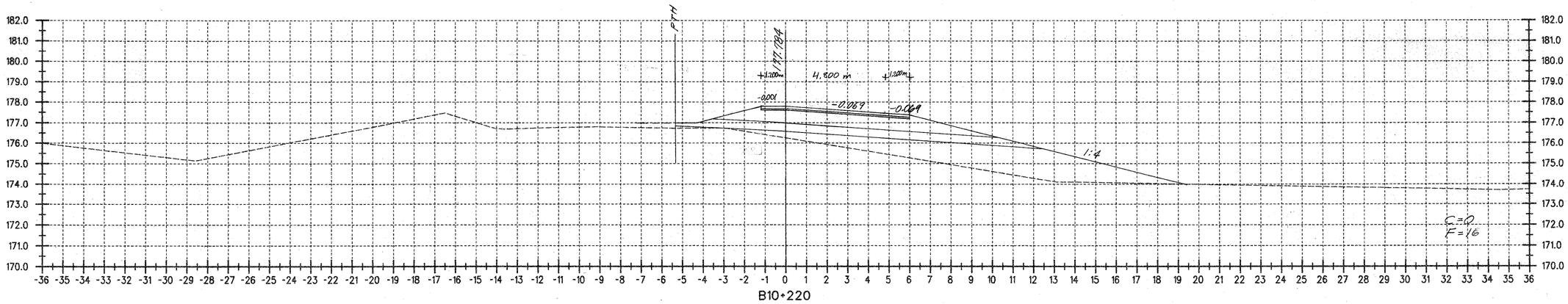
DESIGN FILE NO. N/A

IPARM FILE DATE PLOTTED

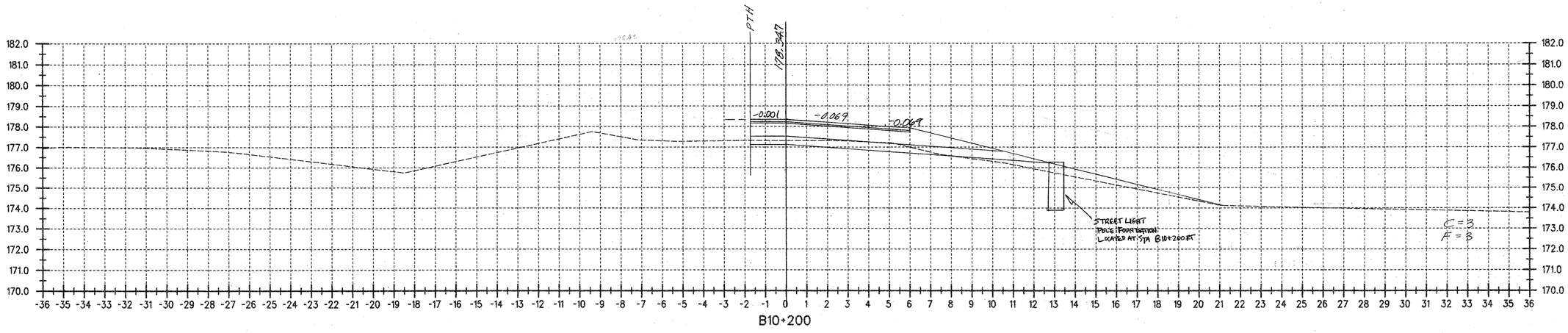
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60.101

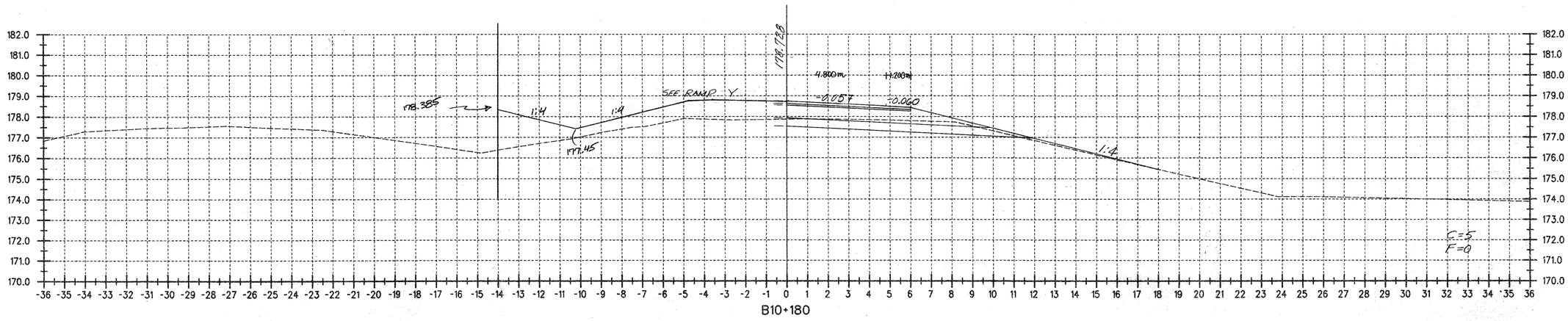
SHEET 323 OF 385 SHEETS



B10+220



B10+200



B10+180

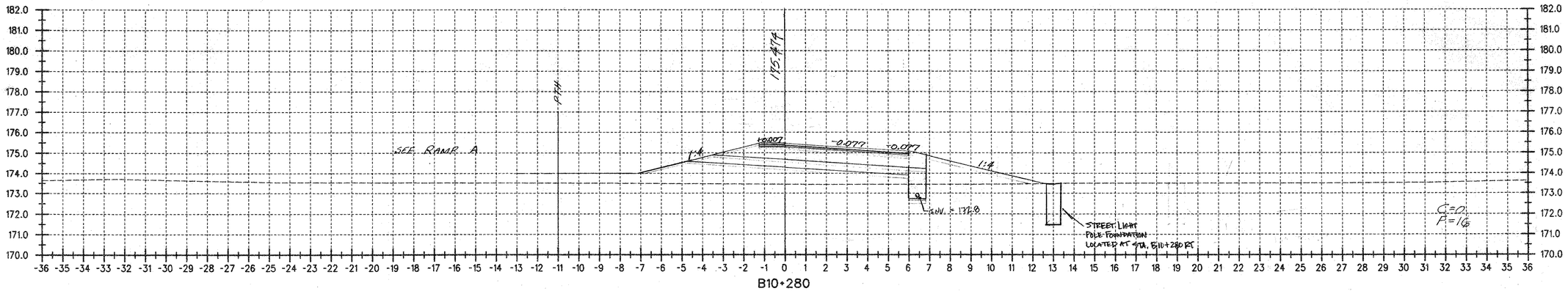
DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE
DRAWN BY J.S.L. DATE
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE
DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60.101
SHEET 324 OF 385 SHEETS



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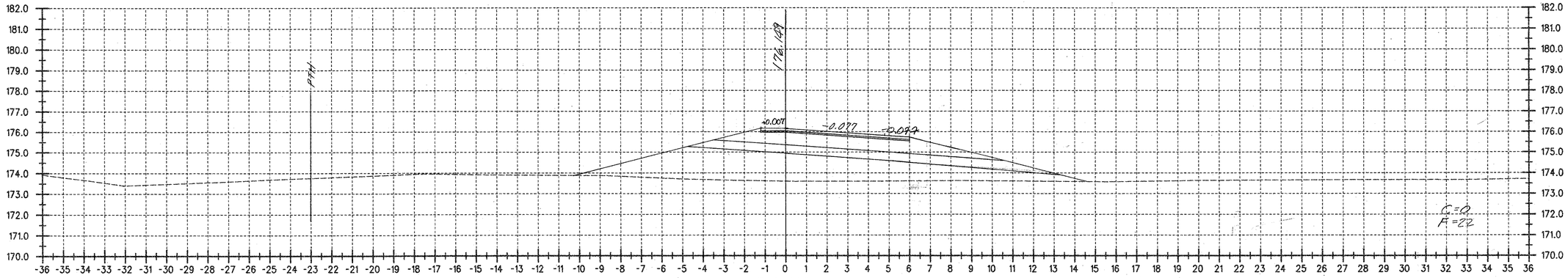

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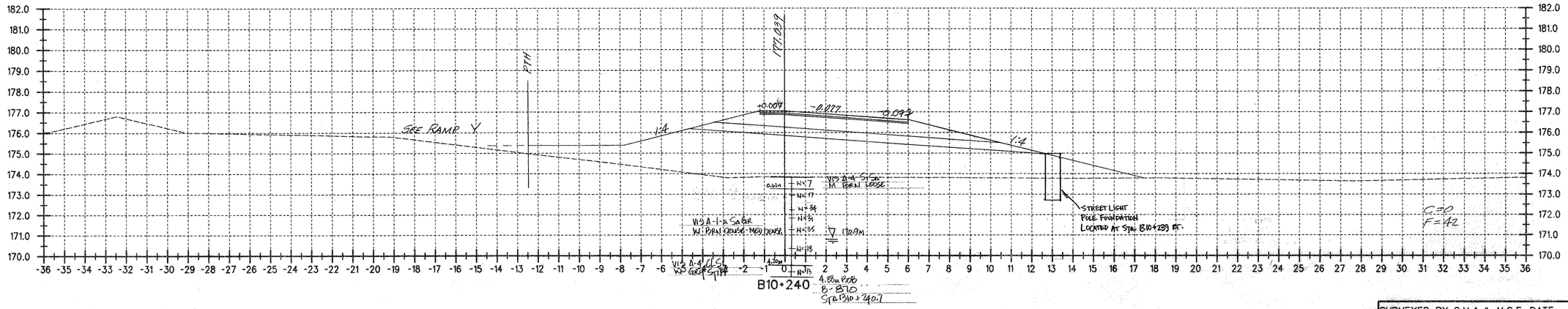


B10+240

4.8m BOB
B-850
STA B10+240.7

Metric

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

H 1:100

V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE

DRAWN BY J.S.L. DATE

SQUAD LEADER T.P.K.

DESIGN FILE NO. N/A

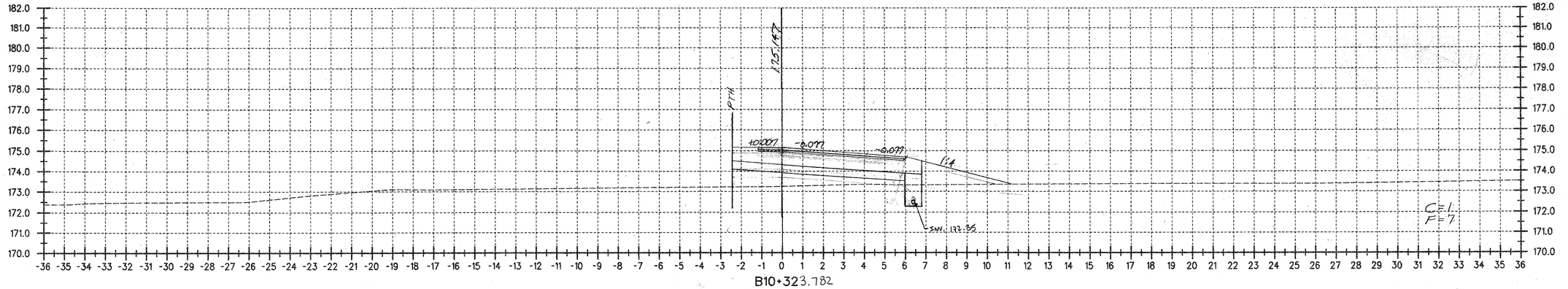
IPARM FILE

DATE PLOTTED

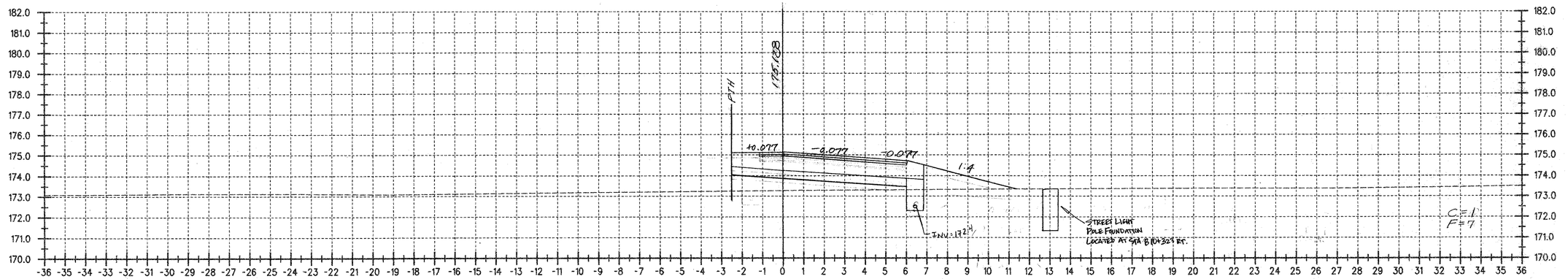
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60.101

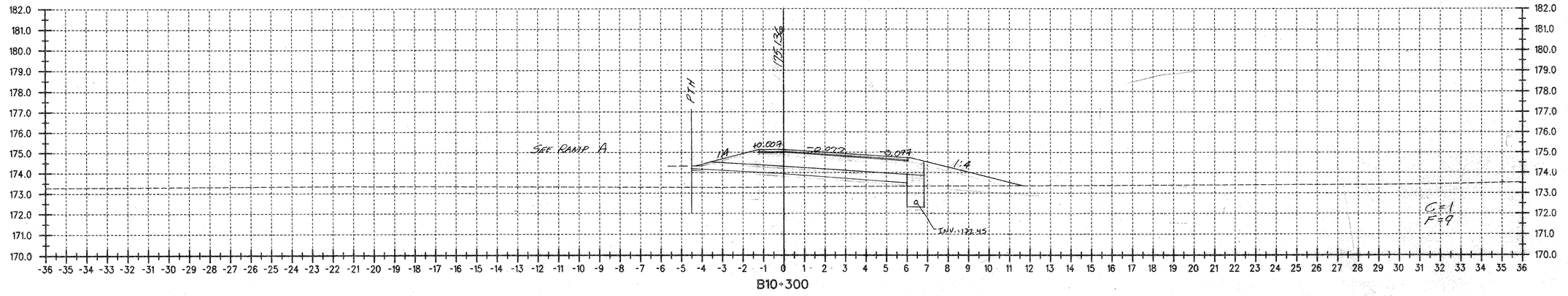
SHEET 325 OF 385 SHEETS



B10+323.782



B10+320



B10+300

Metric

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED

2 0 2 m

H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE

DRAWN BY J.S.L. DATE

SQUAD LEADER T.P.K.

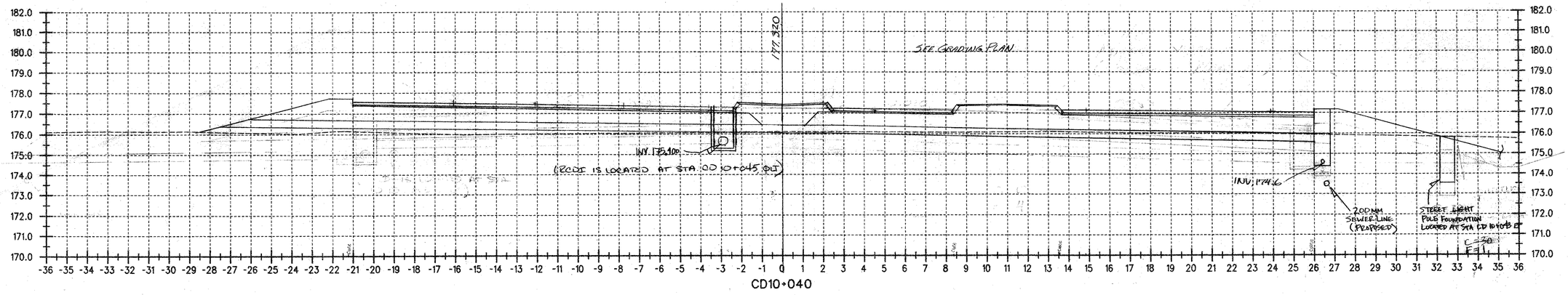
DESIGN FILE NO. N/A

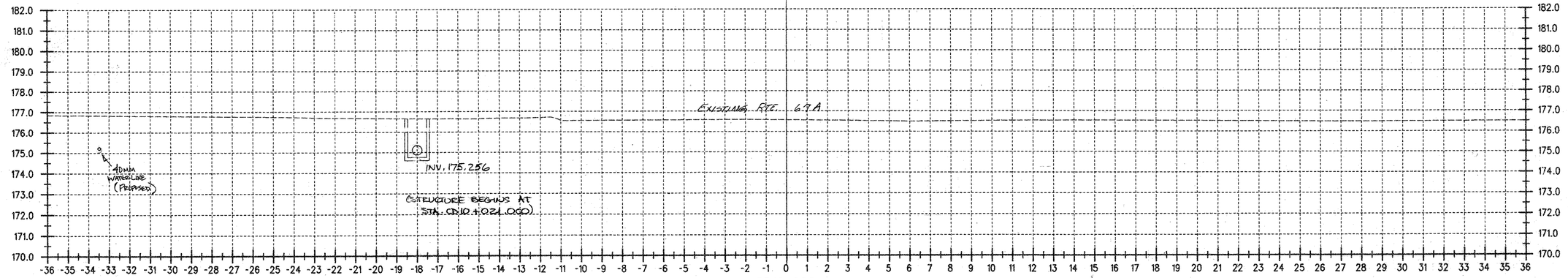
IPARM FILE DATE PLOTTED

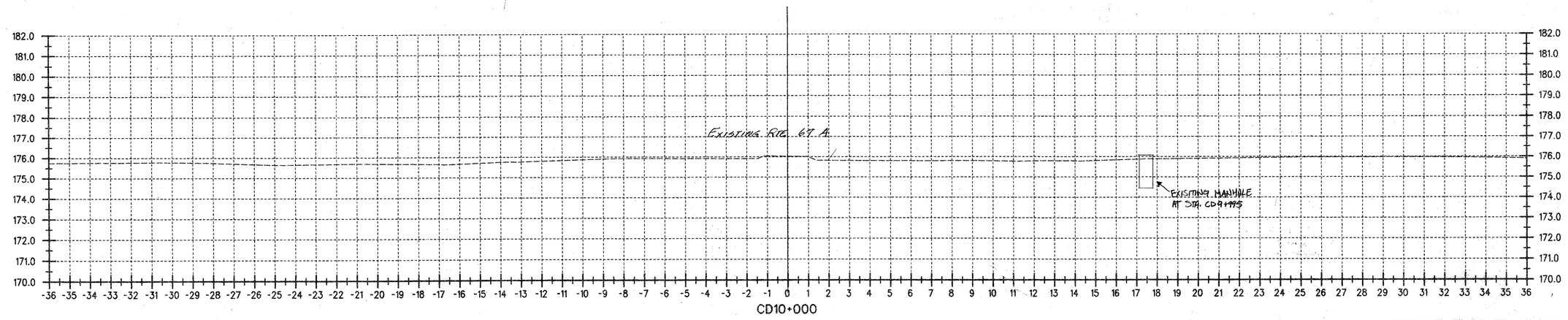
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60.101

SHEET 326 OF 385 SHEETS







Metric

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

H 1:100

V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE

DRAWN BY J.S.L. DATE

SQUAD LEADER T.P.K.

DESIGN FILE NO. N/A

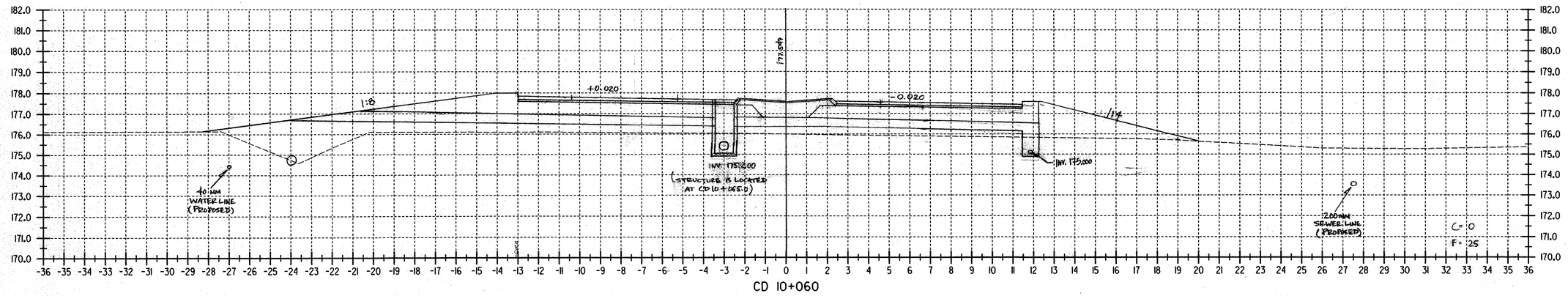
IPARM FILE DATE PLOTTED

PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60.101

SHEET 327 OF 385 SHEETS

Metric



DATUM

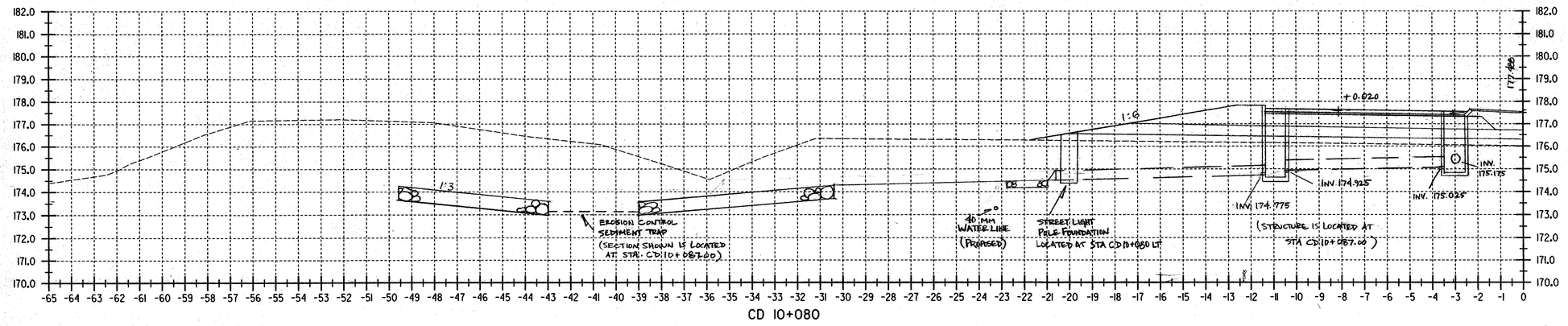
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

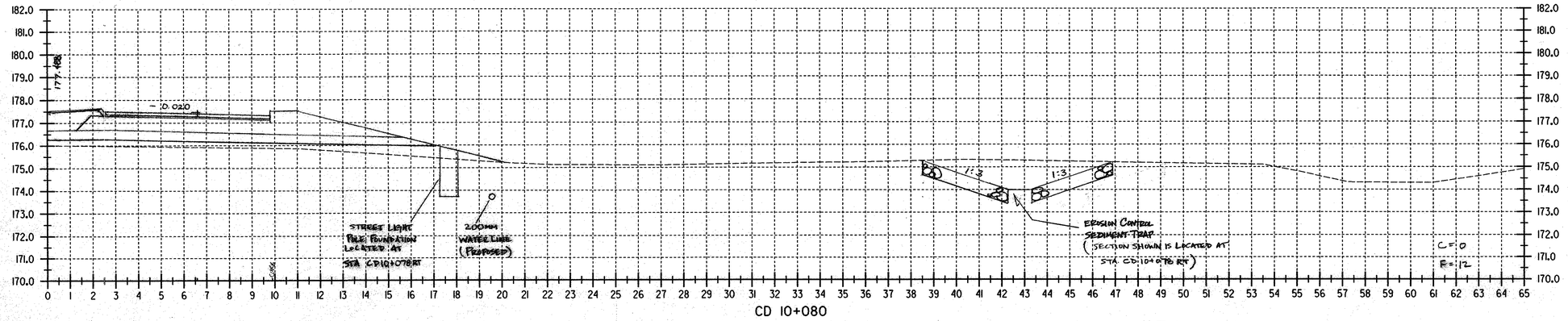
2 0 2 m

H 1:100
V 1:100

SURVEYED BY	C.H.A. & V.S.E. DATE 12/93
DRAWN BY	J.S.L. DATE 6/99
SQUAD LEADER	T.P.K.
DESIGN FILE NO.	/5116/VAOT/VTSECT3.D
IPARM FILE	DATE PLOTTED
PROJ. NAME	BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N.	1306.60
SHEET	32.8 OF 385 SHEETS



CD 10+080



CD 10+080

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

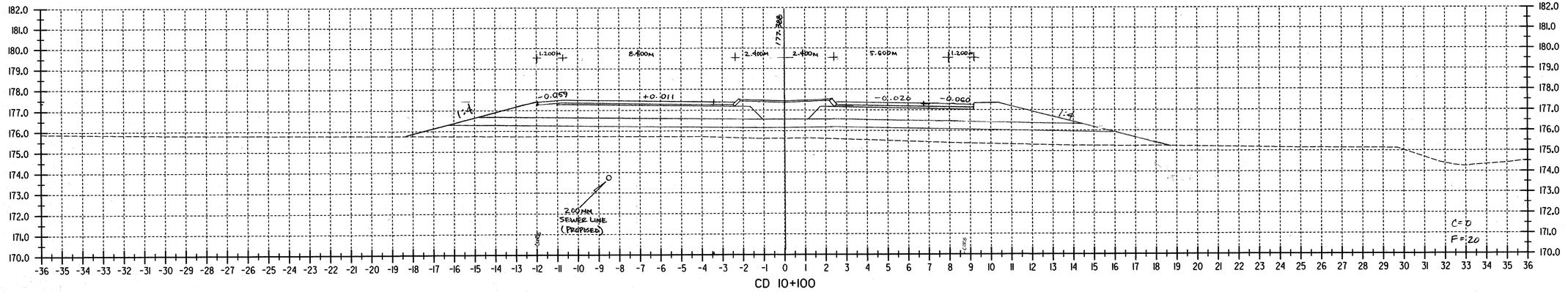
ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

H 1:100
V 1:100

SURVEYED BY	C.H.A. & V.S.E.	DATE	12/93
DRAWN BY	J.S.L.	DATE	6/99
SQUAD LEADER	T.P.K.		
DESIGN FILE NO.	'/5116/VAOT/VTSECT3.D		
IPARM FILE		DATE PLOTTED	
PROJ. NAME	BENNINGTON - HOOSICK D.P.I. 0146(1) C/4		
PROJ. NO. P.I.N. 1306.60			
SHEET 329 OF 385 SHEETS			

Metric



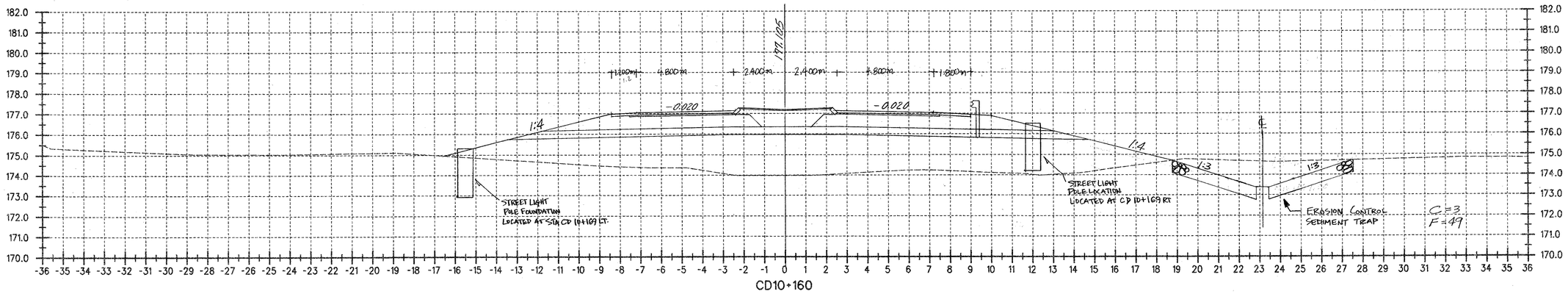
DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DRAWN BY J.S.L. DATE 6/99
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VAOT/VTSECT3.D
IPARM FILE
DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
SHEET 330 OF 385 SHEETS



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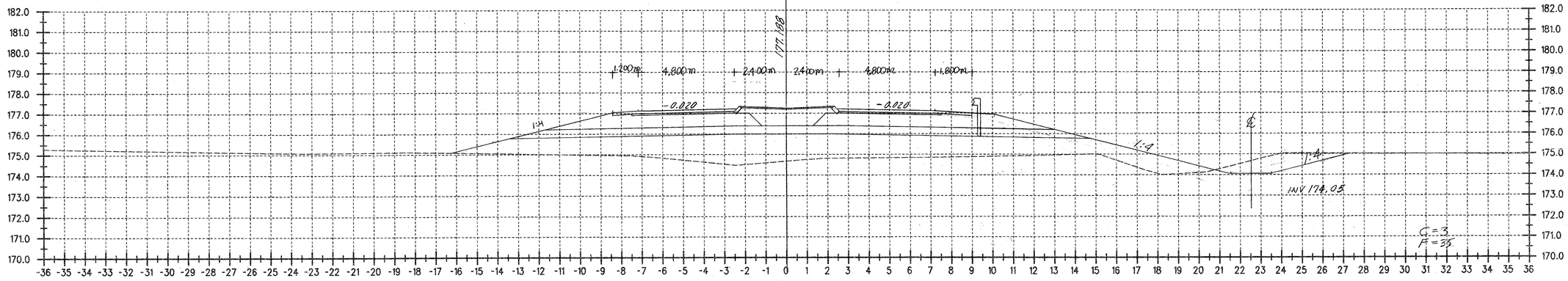
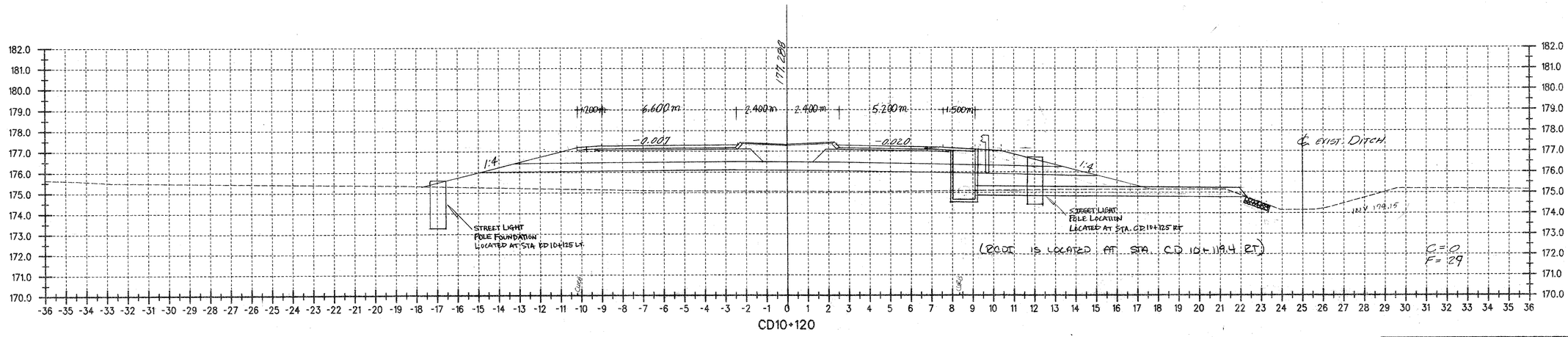


CD10+140



CD10+120

METRIC

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

H 1:100

V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE

DRAWN BY J.S.L. DATE

SQUAD LEADER T.P.K.

DESIGN FILE NO. N/A

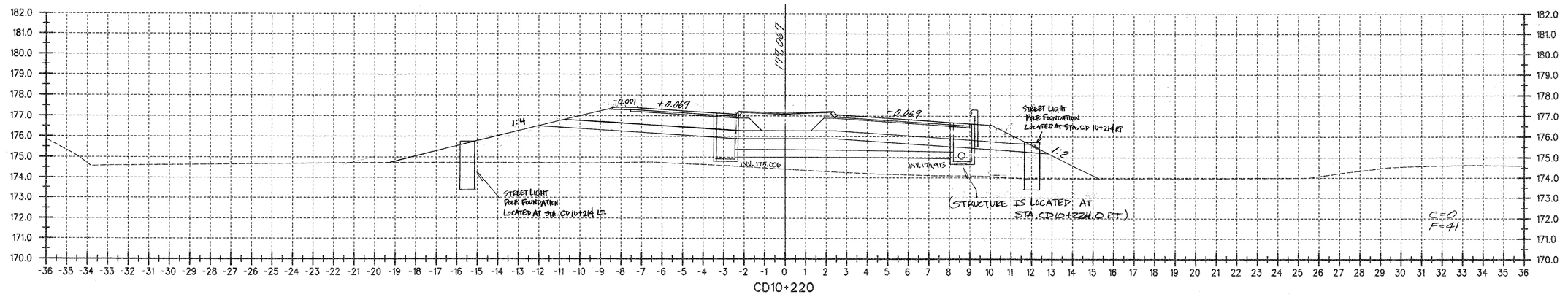
IPARM FILE

DATE PLOTTED

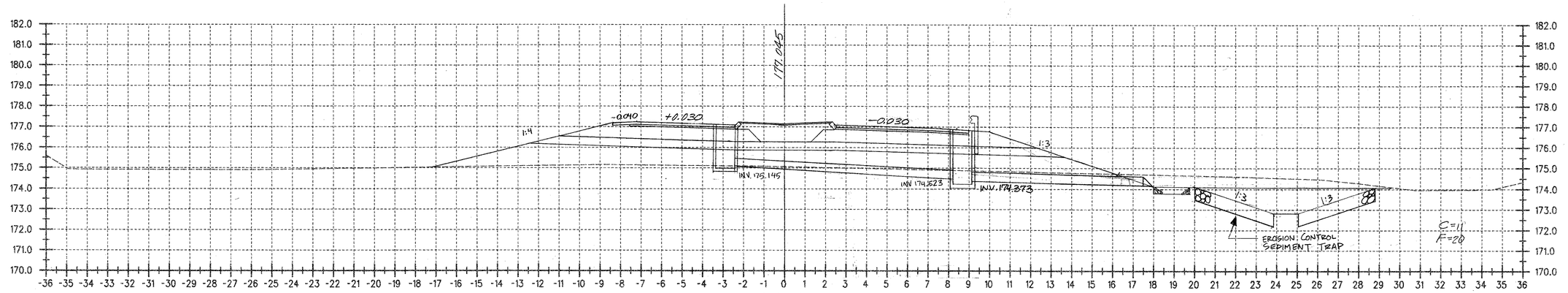
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60.101

SHEET 331 OF 385 SHEETS



CD10+220



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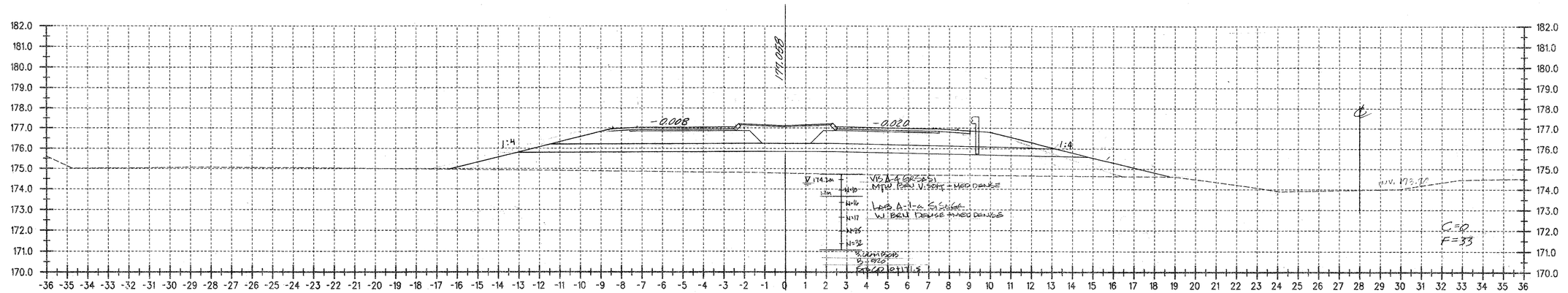


CD10+180

Metric

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

H 1:100

V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE

DRAWN BY J.S.L. DATE

SQUAD LEADER T.P.K.

DESIGN FILE NO. N/A

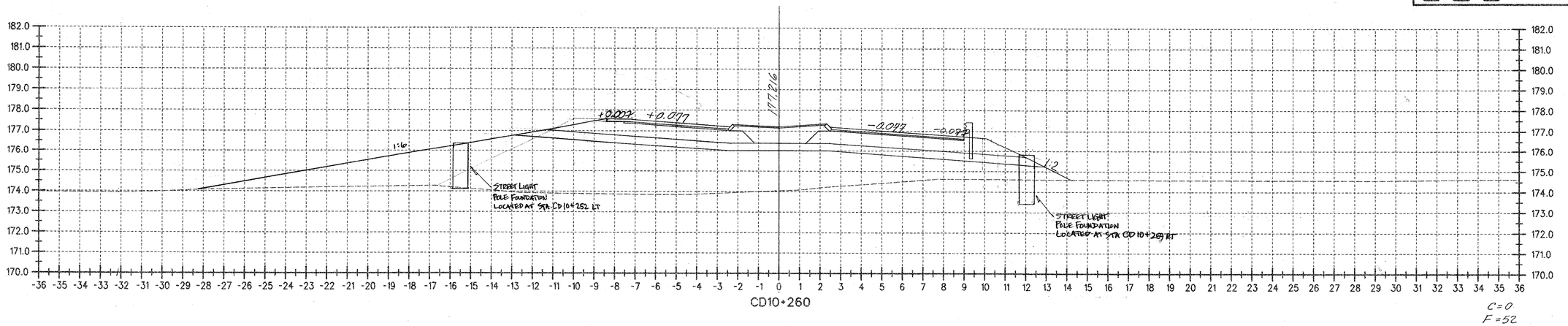
IPARM FILE DATE PLOTTED

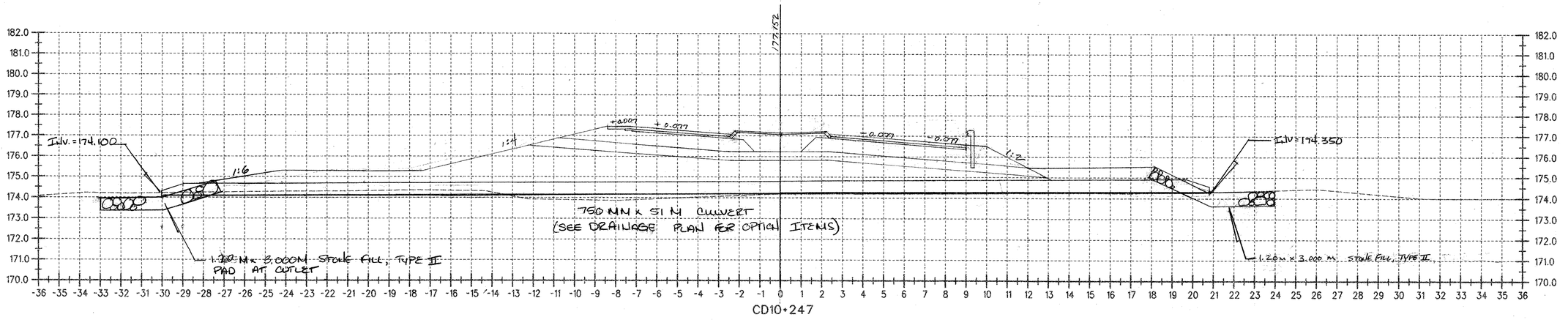
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) c/4

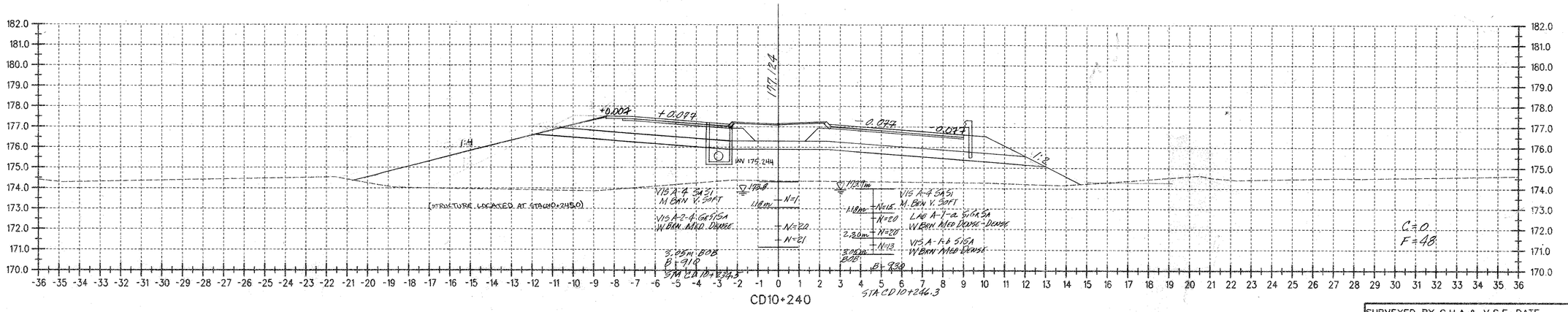
PROJ. NO. P.I.N. 1306.60.101

SHEET 332 OF 385 SHEETS

Metric







DATUM

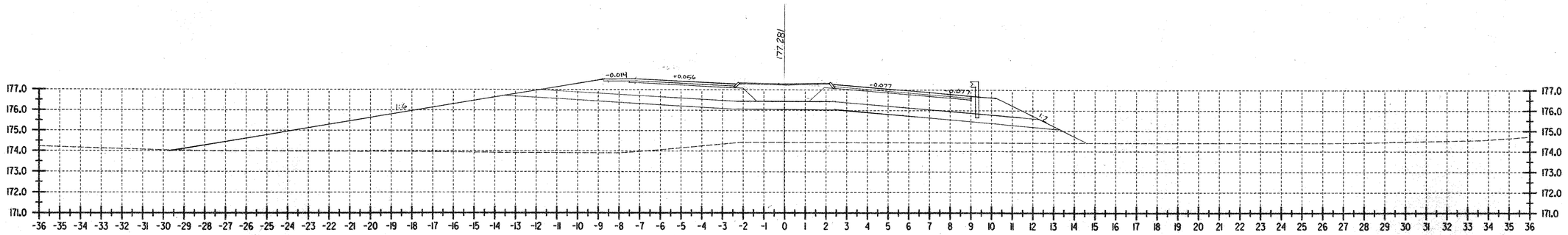
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE
DRAWN BY J.S.L. DATE
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60.101
SHEET 333 OF 385 SHEETS



CD 10+271.929

RAMP CD

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

H 1:100

V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE

DRAWN BY J.S.L. DATE

SQUAD LEADER T.P.K.

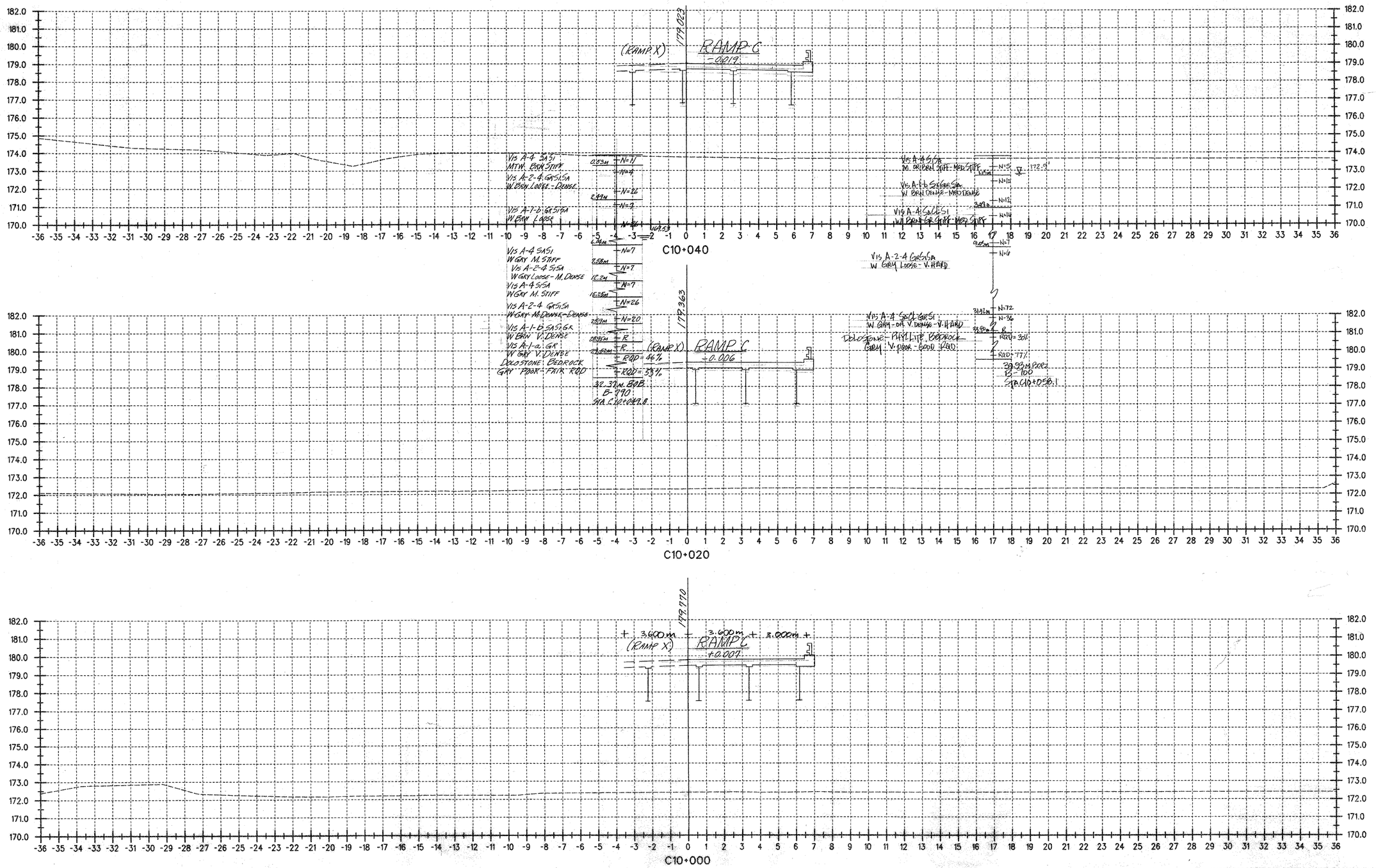
DESIGN FILE NO. N/A

IPARM FILE DATE PLOTTED

PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60

SHEET 334 OF 385 SHEETS



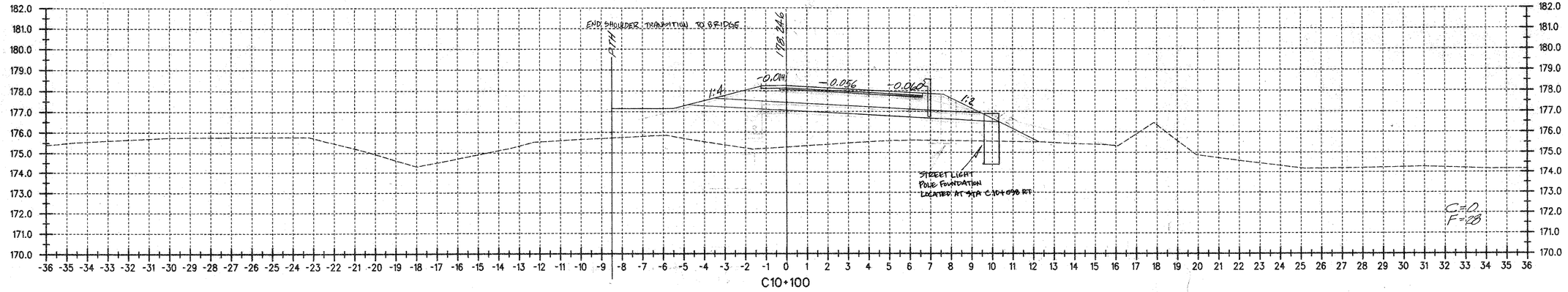
DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

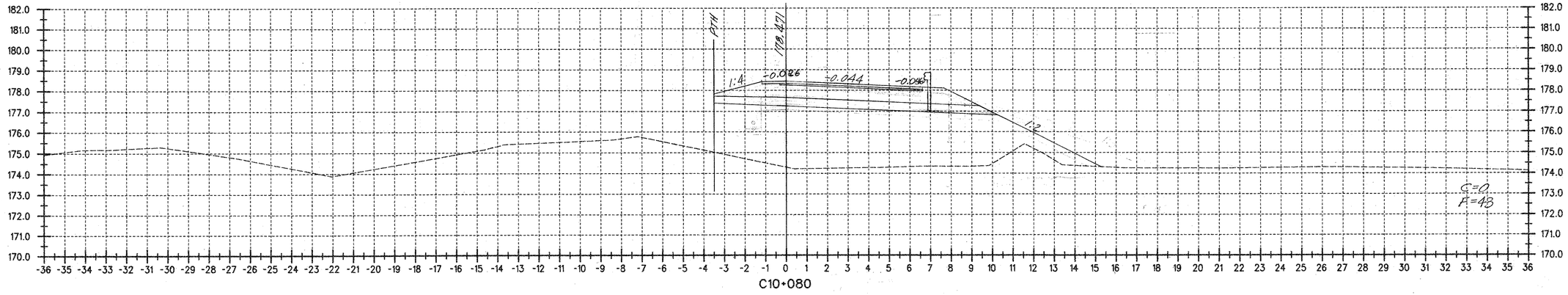
ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED

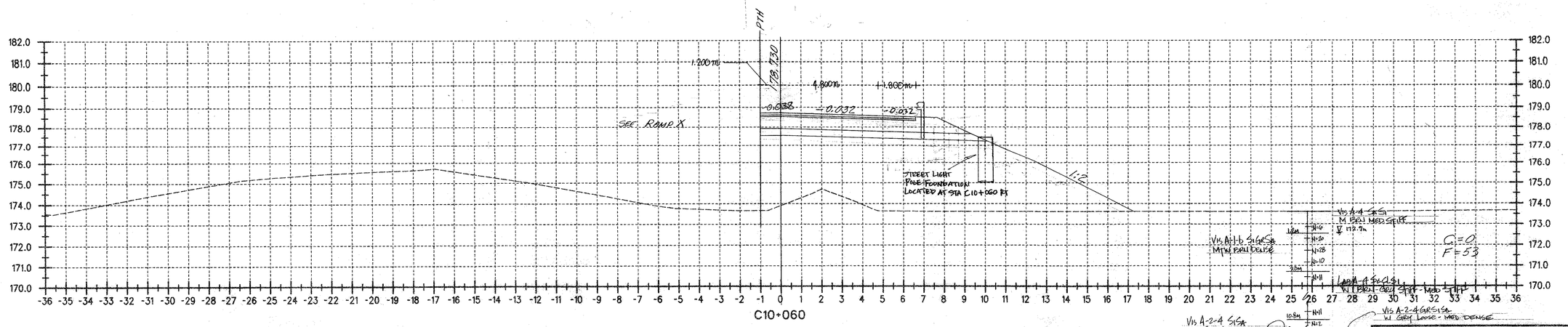
2 0 2 m

H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE
DRAWN BY J.S.L. DATE
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60.101
SHEET 335 OF 385 SHEETS





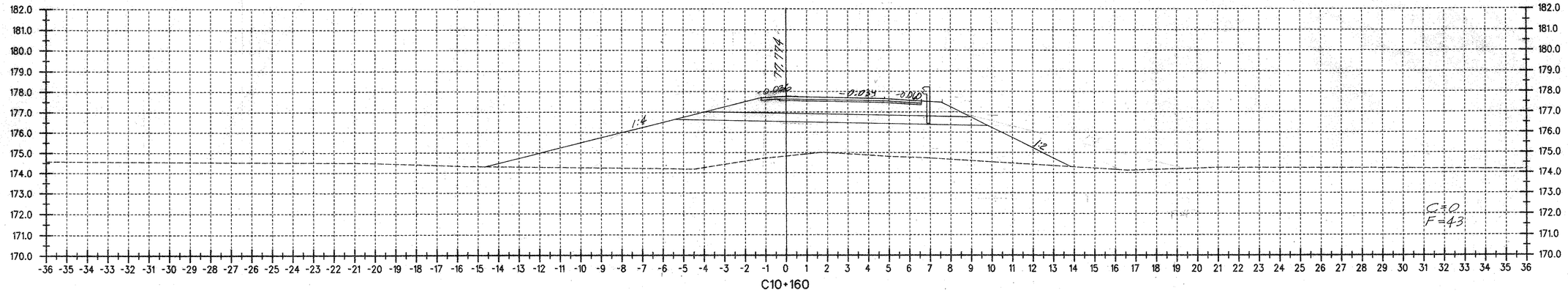


ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED
2 0 2
H 1:100
V 1:100

Metric

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

SURVEYED BY C.H.A. & V.S.E. DATE
DRAWN BY J.S.L. DATE
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM DATE
FILE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60.101
SHEET 336 OF 385 SHEETS



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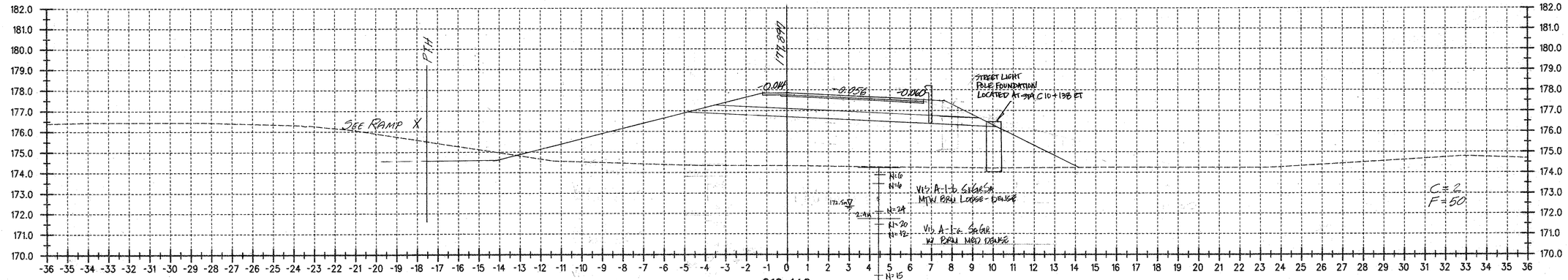

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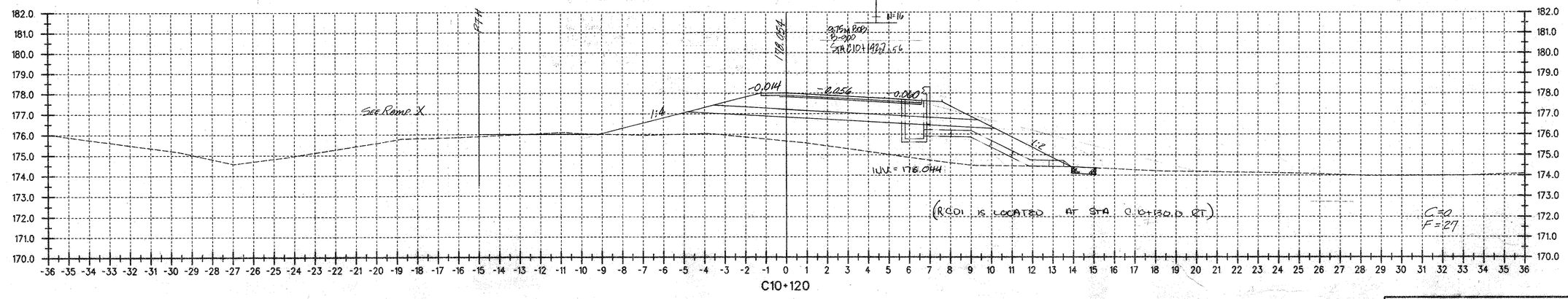


C10+120

Metric

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

H 1:100

V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE

DRAWN BY J.S.L. DATE

SQUAD LEADER T.P.K.

DESIGN FILE NO. N/A

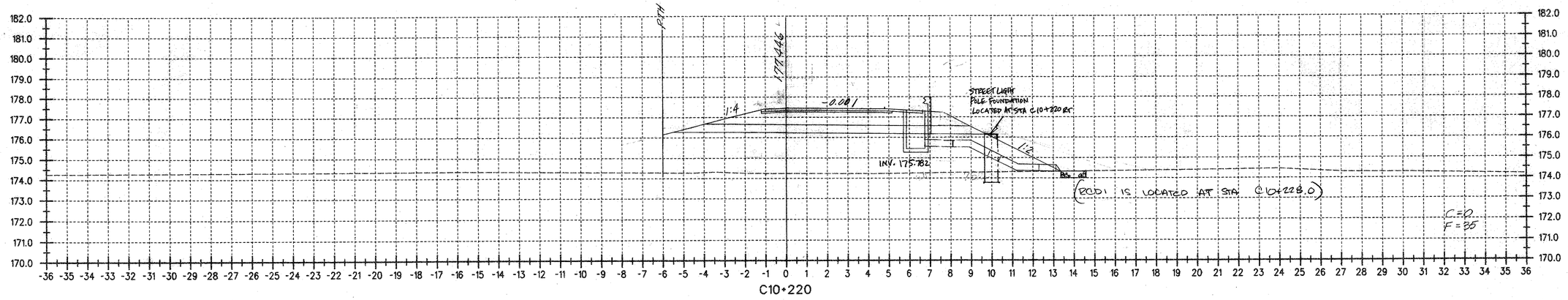
IPARM FILE

DATE PLOTTED

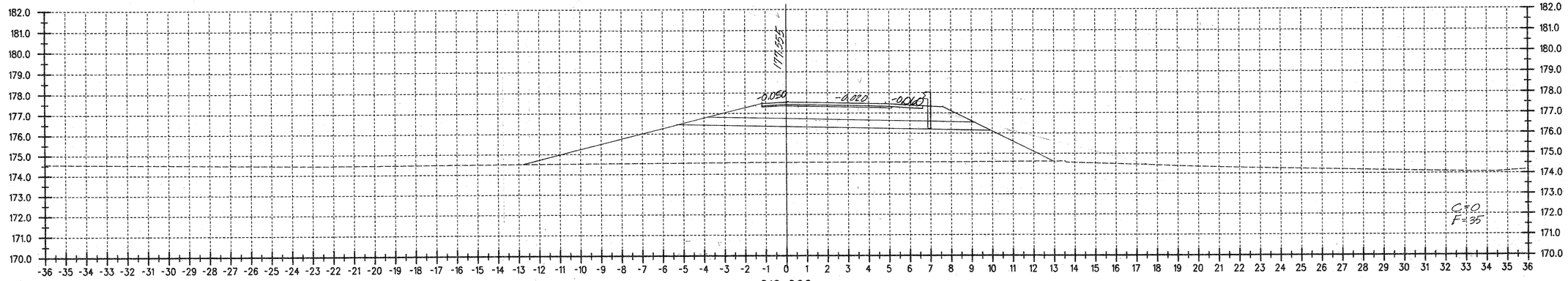
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60.101

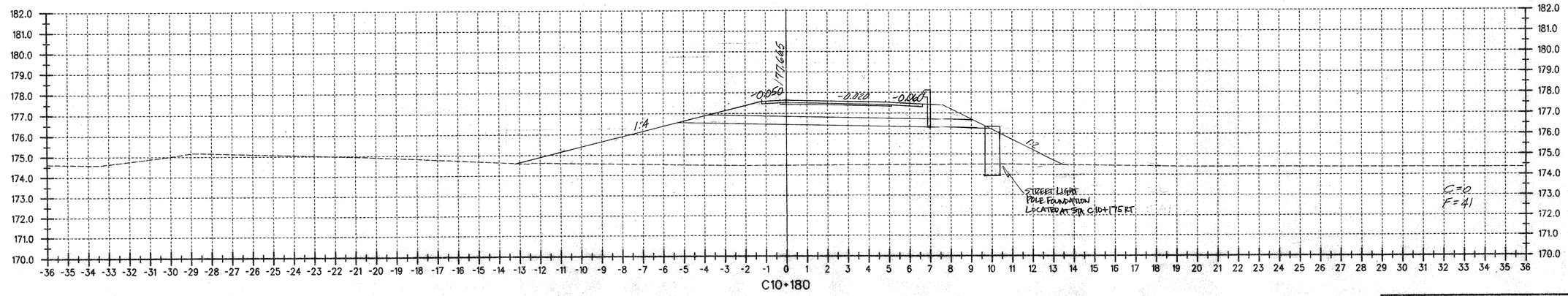
SHEET 337 OF 385 SHEETS



C10+220



C10+200



C10+180

Metric

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

H 1:100

V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE

DRAWN BY J.S.L. DATE

SQUAD LEADER T.P.K.

DESIGN FILE NO. N/A

IPARM FILE

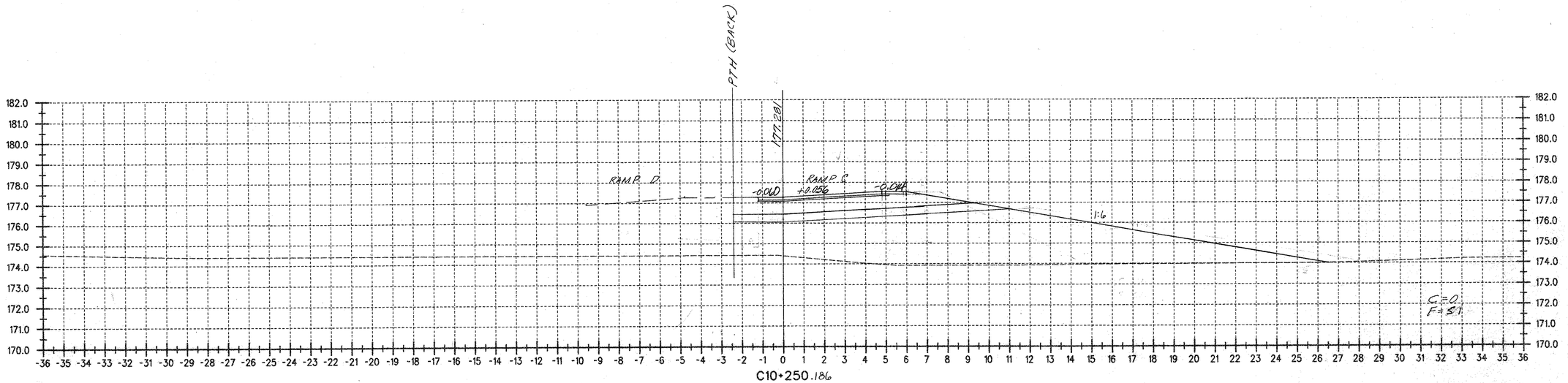
DATE PLOTTED

PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

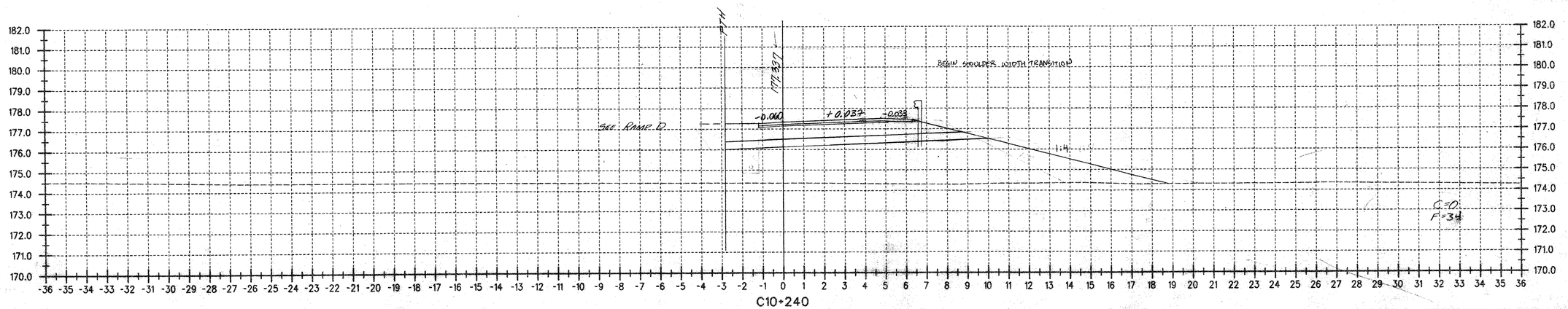
PROJ. NO. P.I.N. 1306.60.101

SHEET 338 OF 385 SHEETS

Metric



C10+250.186



C10+240

DATUM

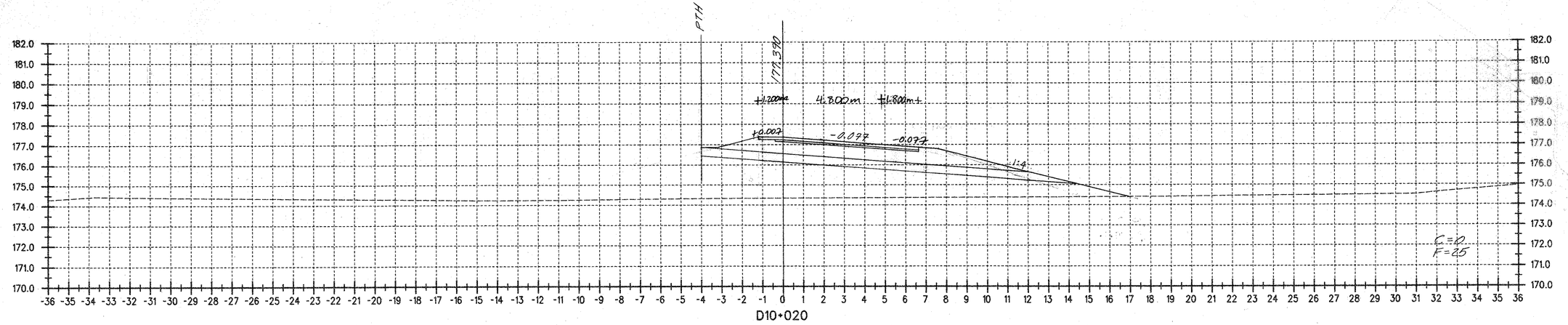
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

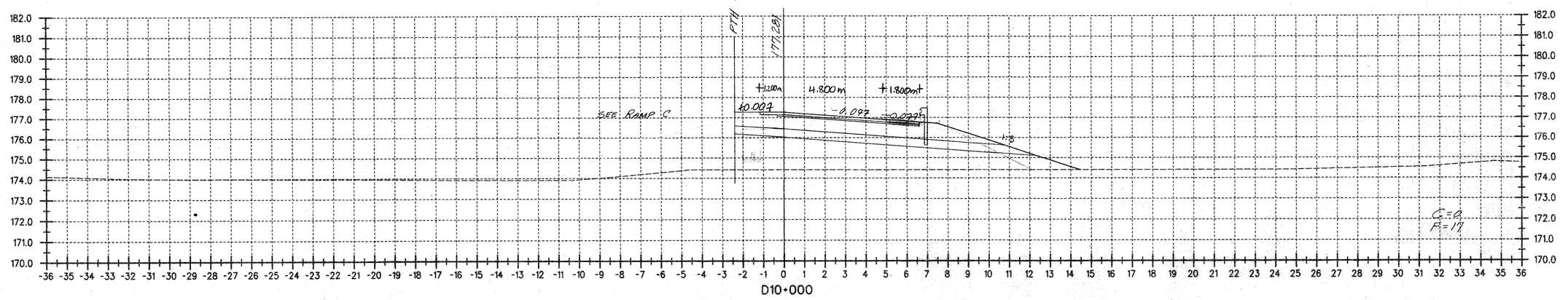
2 0 2 m

H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE ____
DRAWN BY J.S.L. DATE ____
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE ____ DATE PLOTTED ____
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60.101
SHEET 339 OF 385 SHEETS



D10+020

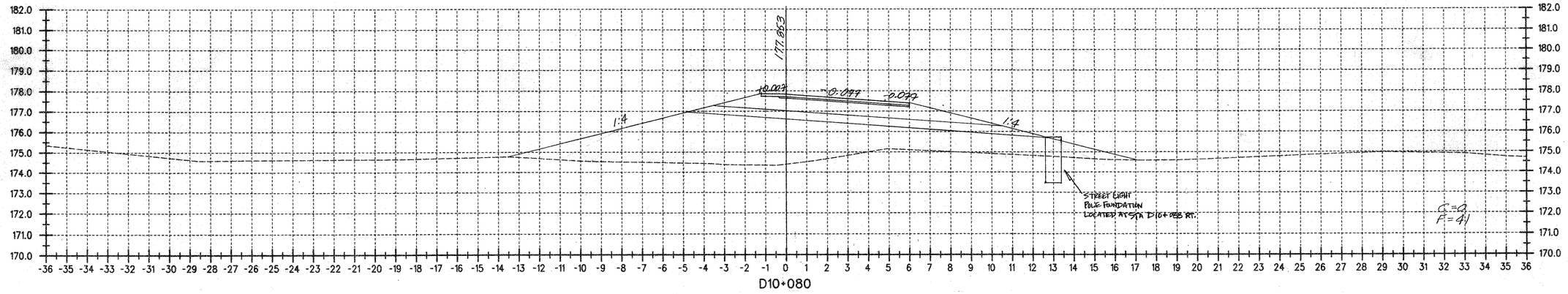


D10+000

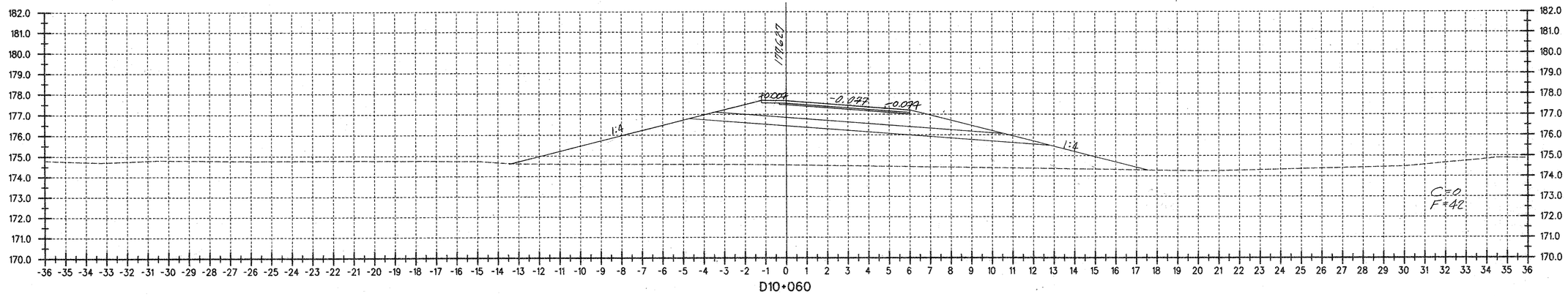
DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE
DRAWN BY J.S.L. DATE
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60.101
SHEET 340 OF 385 SHEETS



D10+080



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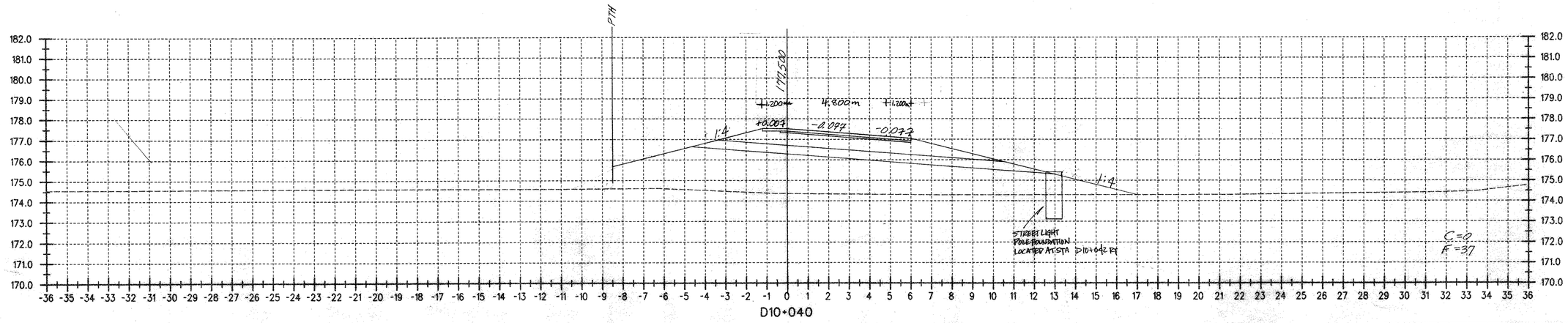


D10+040

Metric

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED

2 0 2 m

H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE

DRAWN BY J.S.L. DATE

SQUAD LEADER T.P.K.

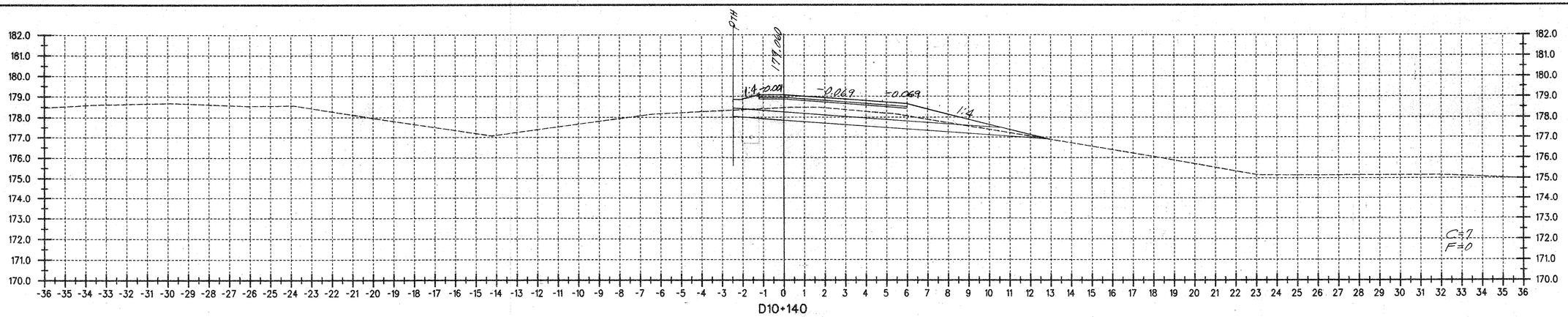
DESIGN FILE NO. N/A

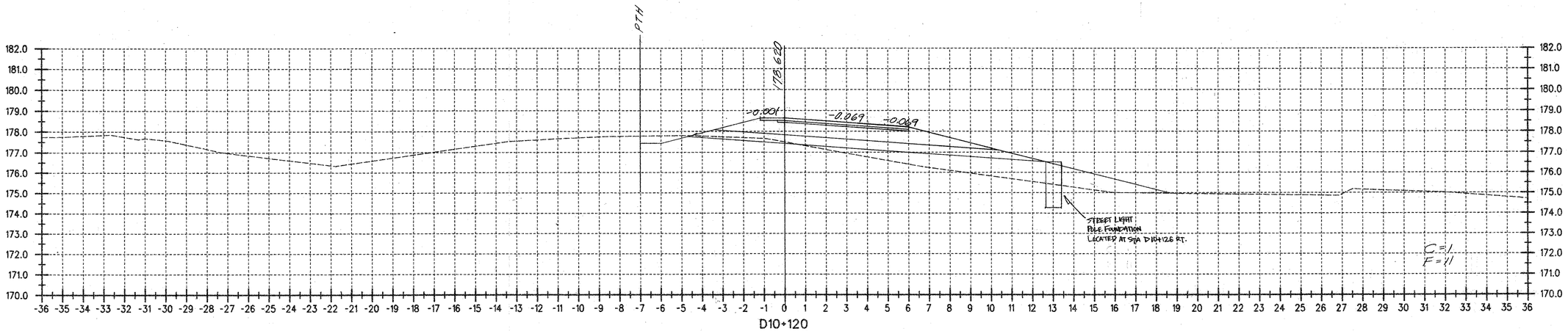
IPARM FILE DATE PLOTTED

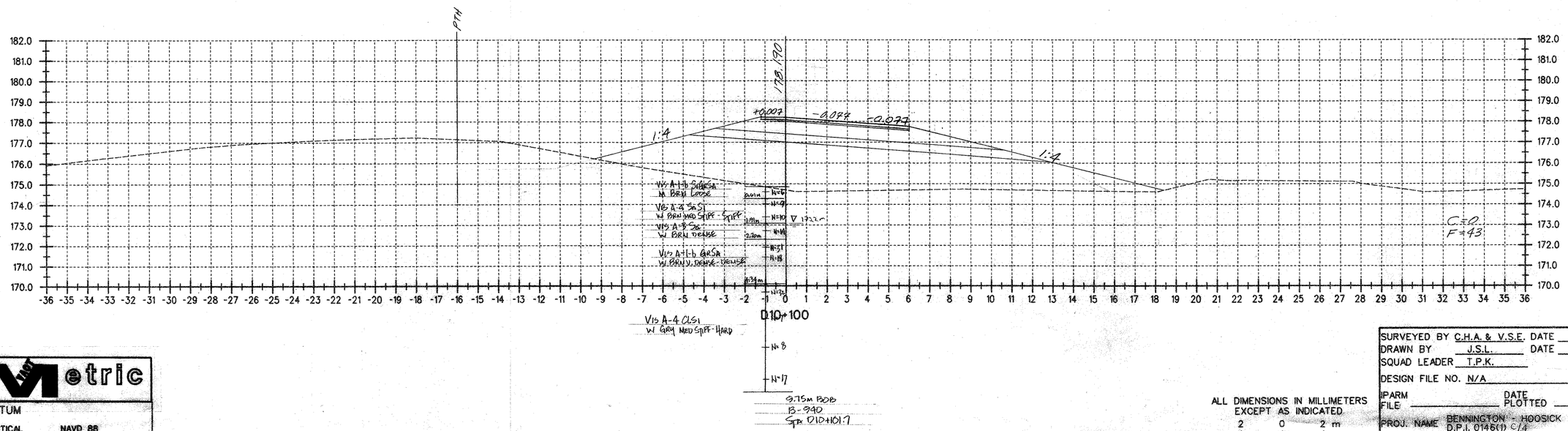
PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) c/4

PROJ. NO. P.I.N. 1308.60.101

SHEET 341 OF 385 SHEETS







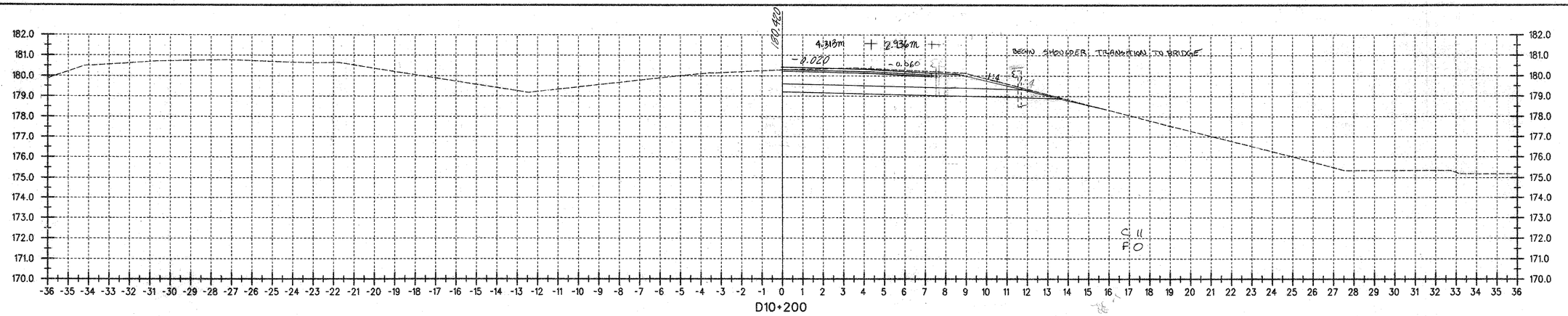
DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

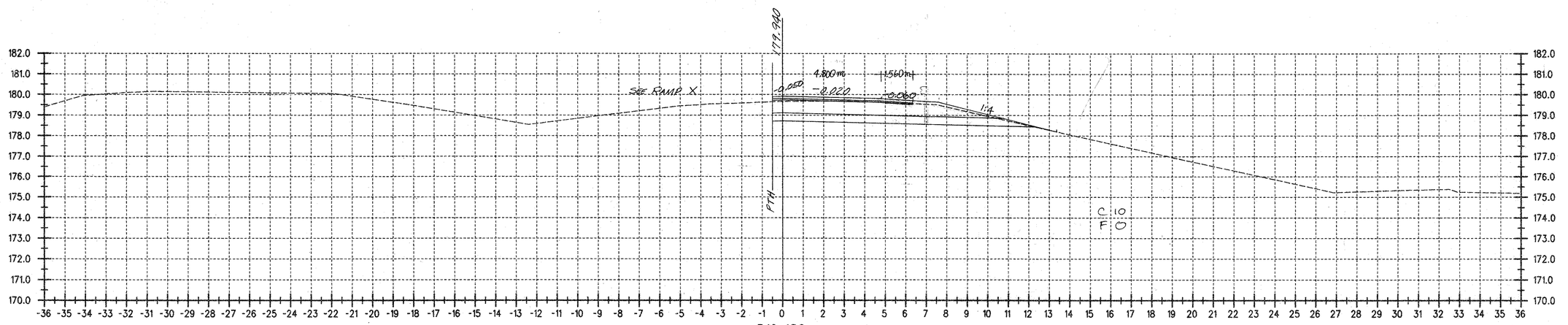
ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED

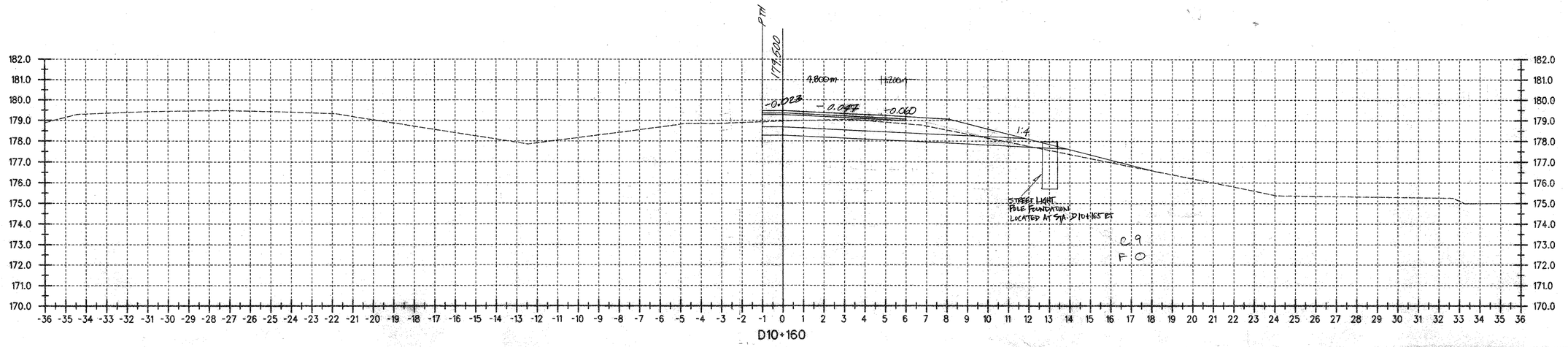
2 0 2 m

H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE
DRAWN BY J.S.L. DATE
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60.101
SHEET 342 OF 385 SHEETS







Metric

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

H 1:100

V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE

DRAWN BY J.S.L. DATE

SQUAD LEADER T.P.K.

DESIGN FILE NO. N/A

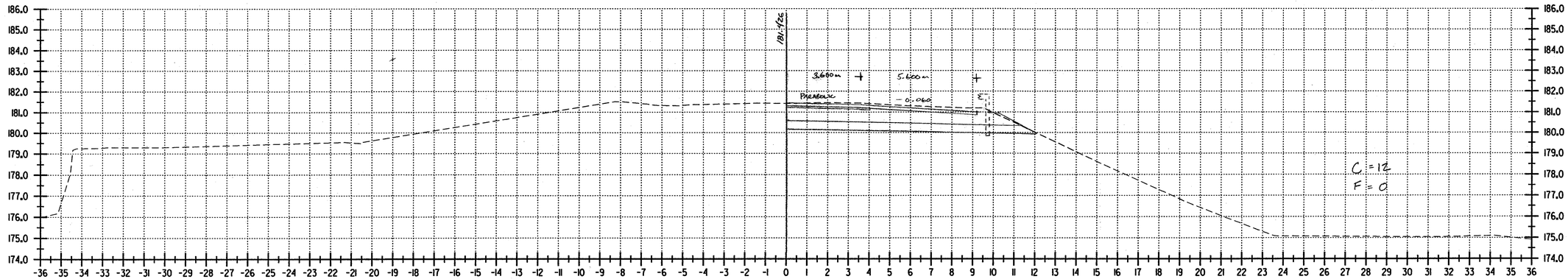
IPARM FILE DATE PLOTTED

PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

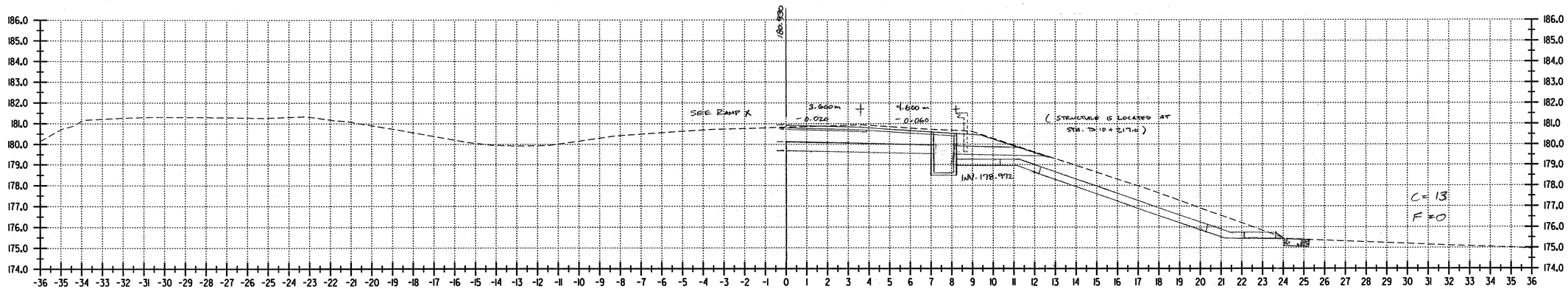
PROJ. NO. P.I.N. 1306.60.101

SHEET 343 OF 385 SHEETS

Metric



D 10+236.439
RAMP D



D 10+220
RAMP D

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

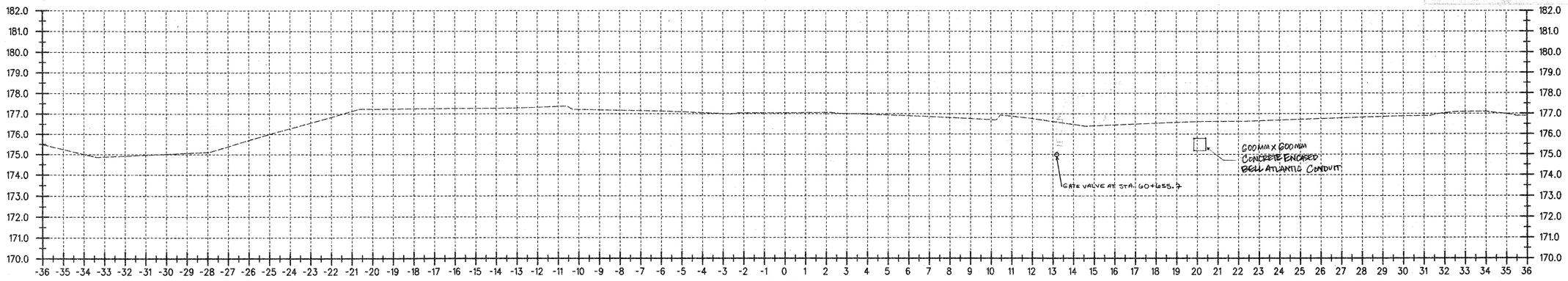
ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DRAWN BY J.S.L. DATE 6/99
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VAOT/VTSECT3.D
IPARM FILE _____ DATE PLOTTED _____
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
SHEET 344 OF 385 SHEETS

Metric



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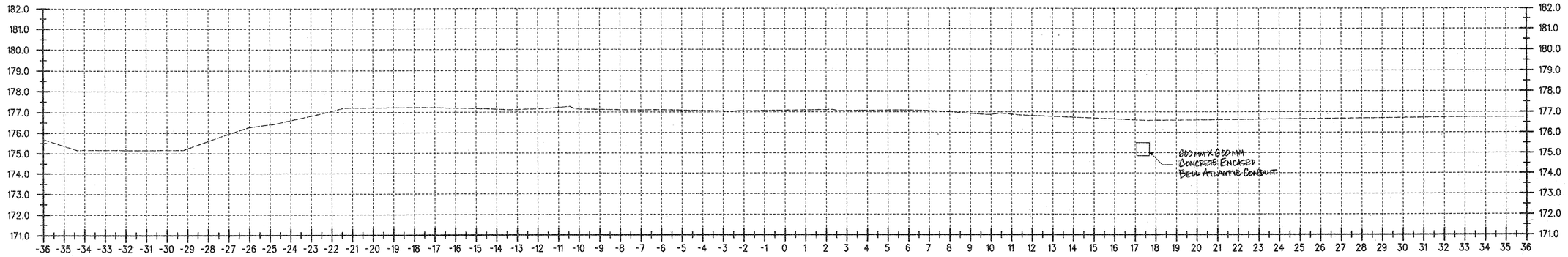

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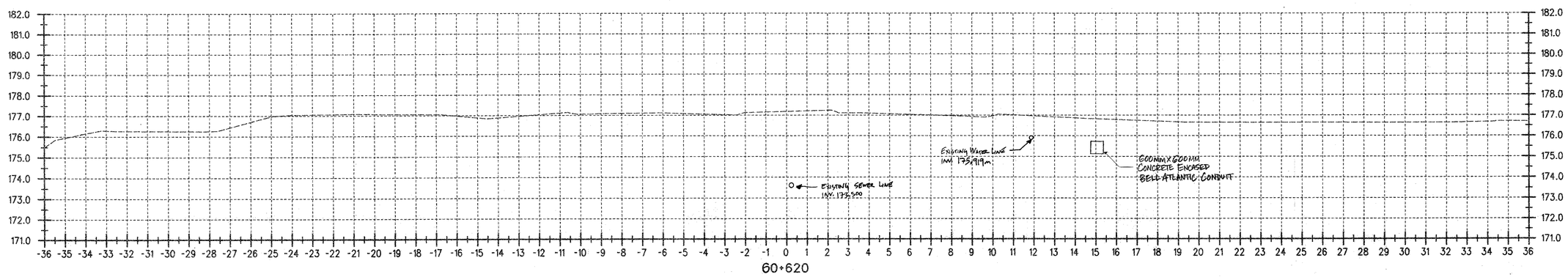


60+620

DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

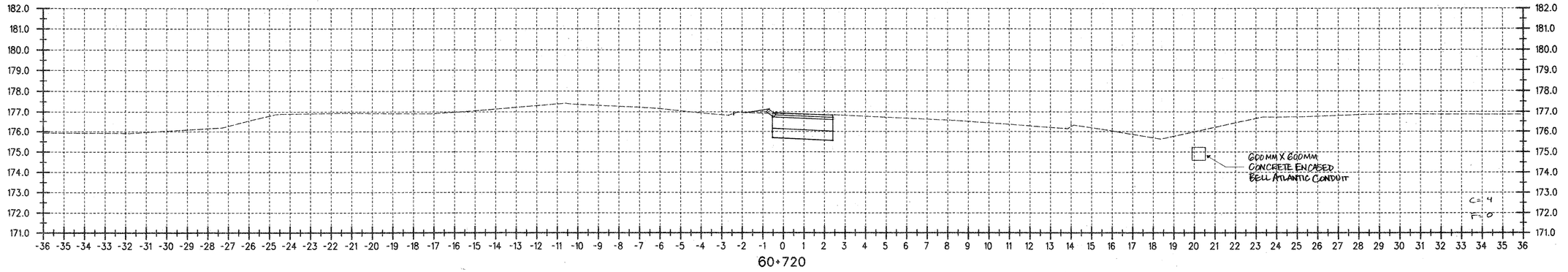
ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

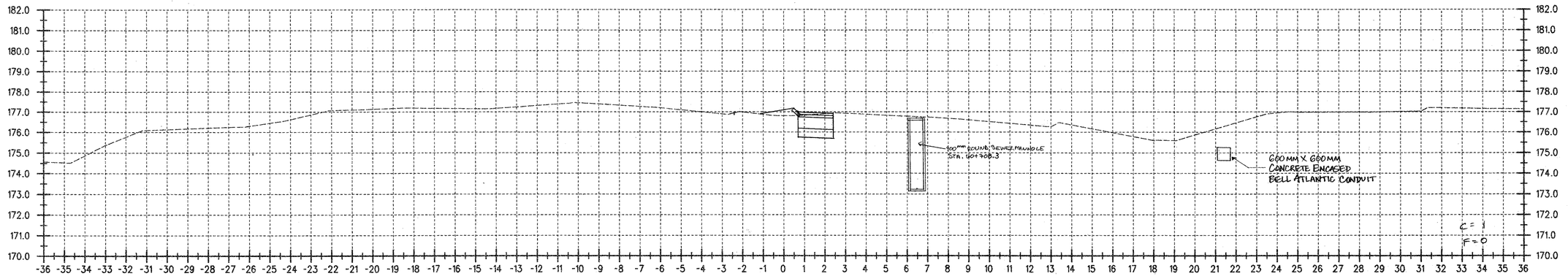
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE
DRAWN BY J.S.L. DATE
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE
DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60.101
SHEET 345 OF 385 SHEETS

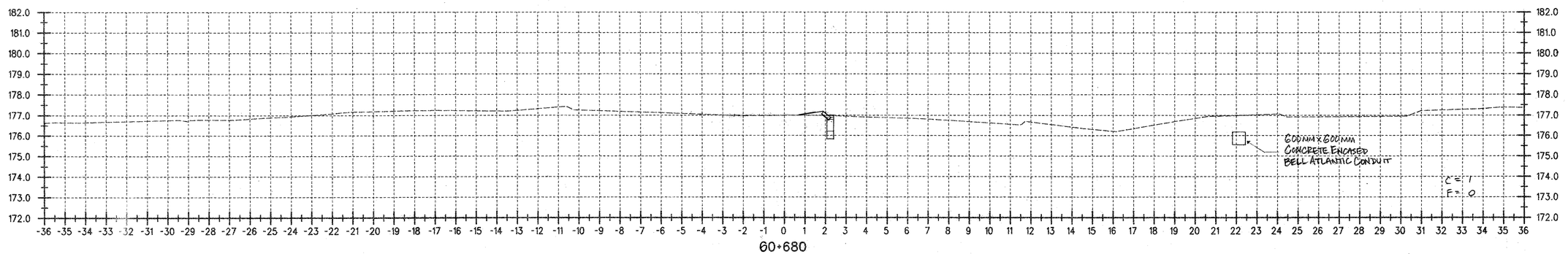
Metric



60+720



60+700



60+680

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED

2 0 2 m

H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE _____

DRAWN BY J.S.L. DATE _____

SQUAD LEADER T.P.K.

DESIGN FILE NO. N/A

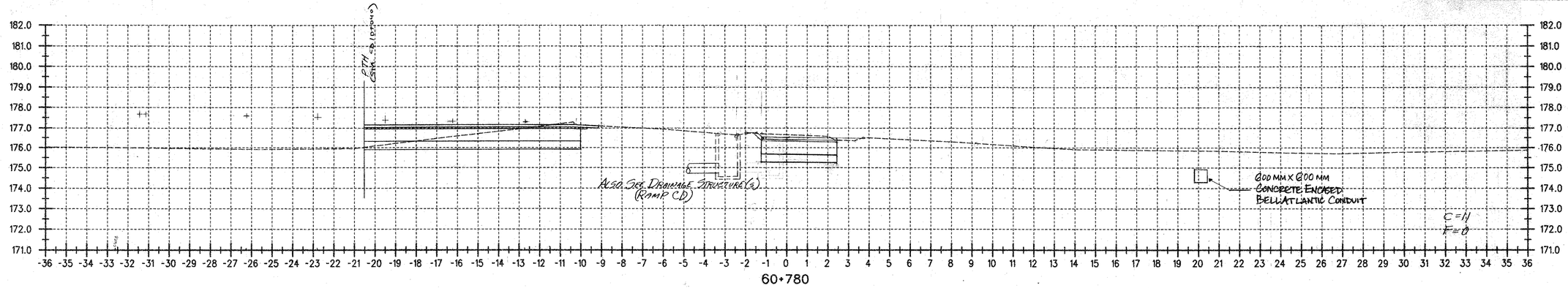
IIPARM FILE _____ DATE PLOTTED _____

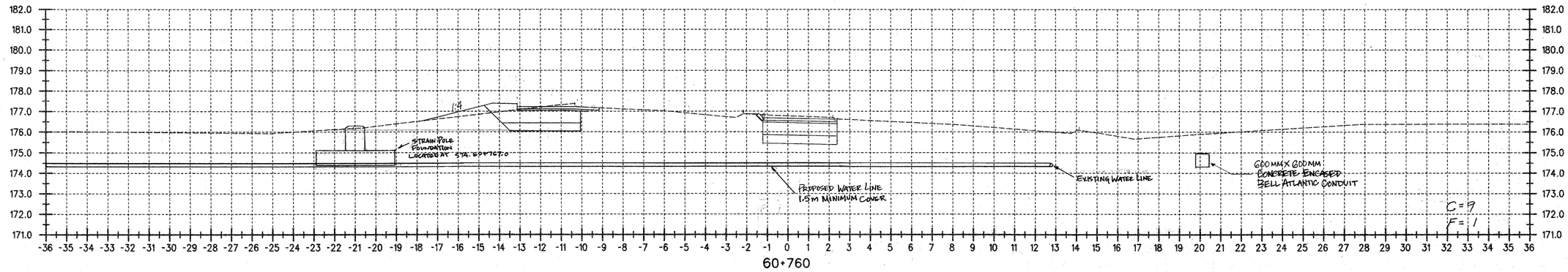
PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) c/4

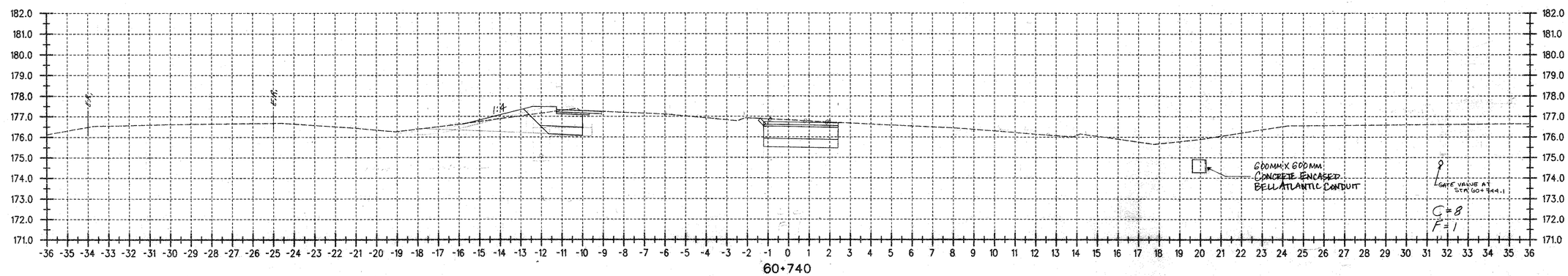
PROJ. NO. P.I.N. 1306.60.101

SHEET 346 OF 385 SHEETS

Metric







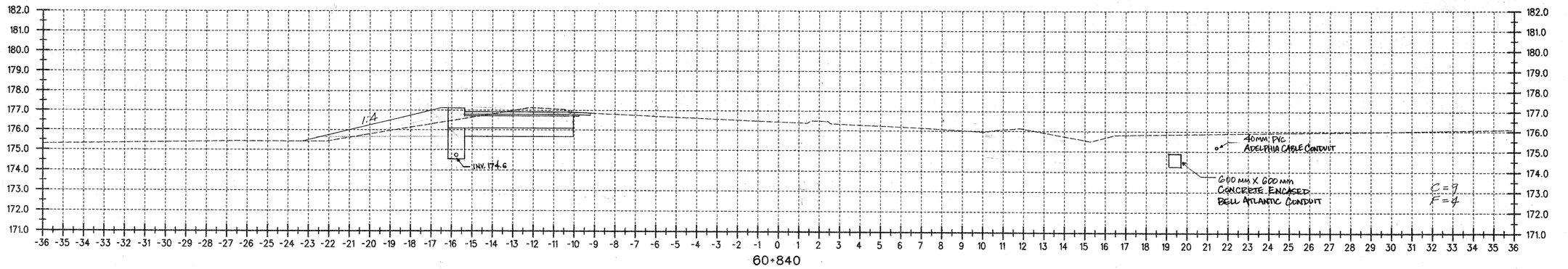
DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

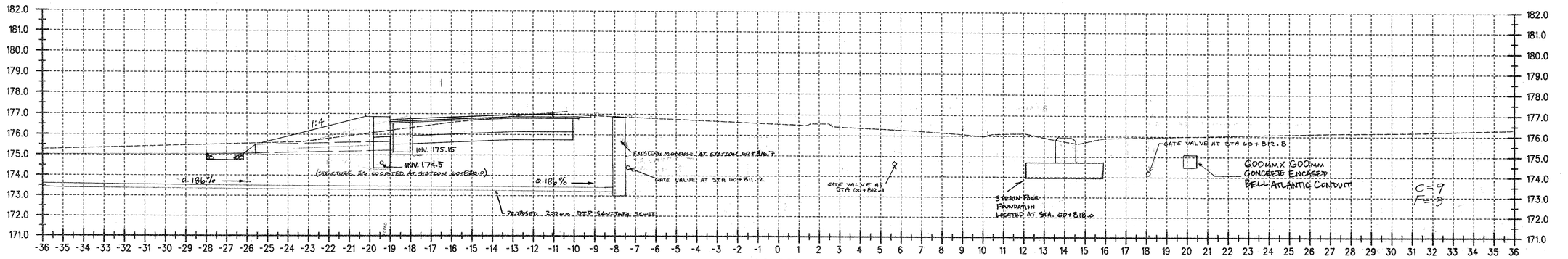
ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

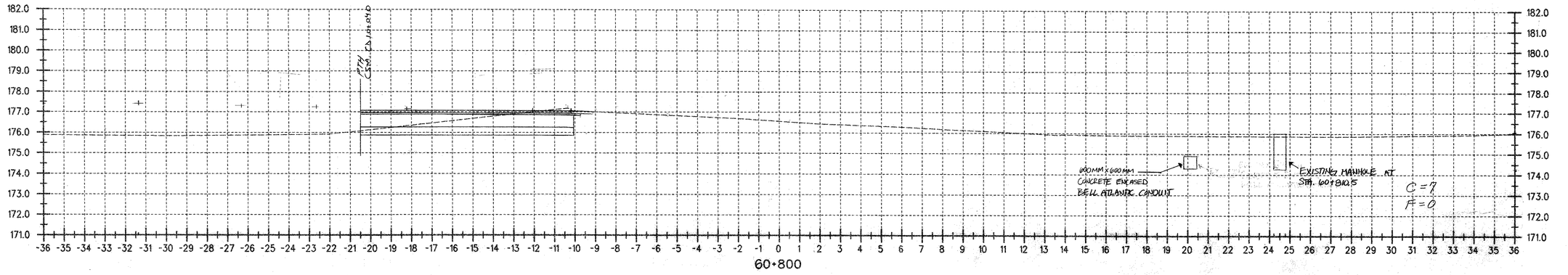
2 0 2 m

H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE
DRAWN BY J.S.L. DATE
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C14
PROJ. NO. P.I.N. 1306.60.101
SHEET 347 OF 385 SHEETS







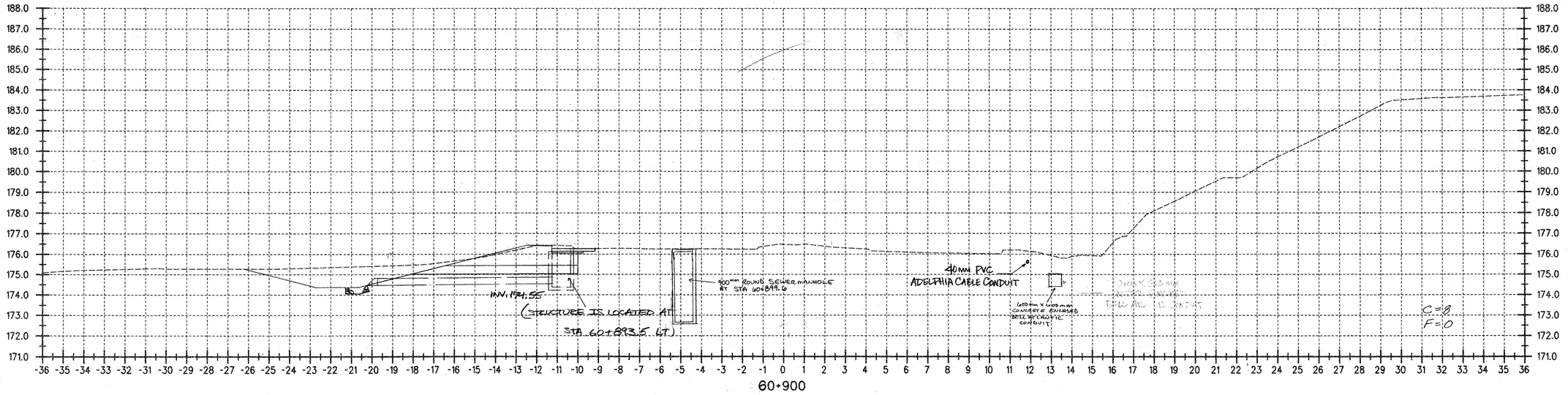
DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED

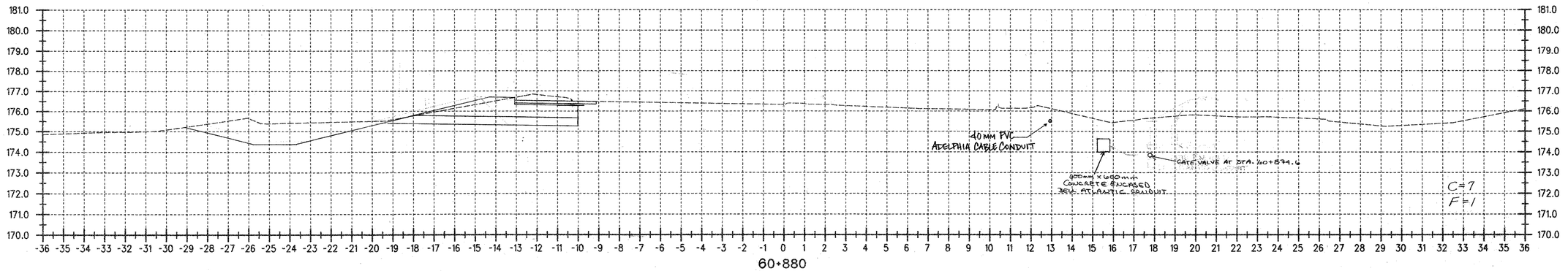
2 0 2 m

H 1:100
V 1:100

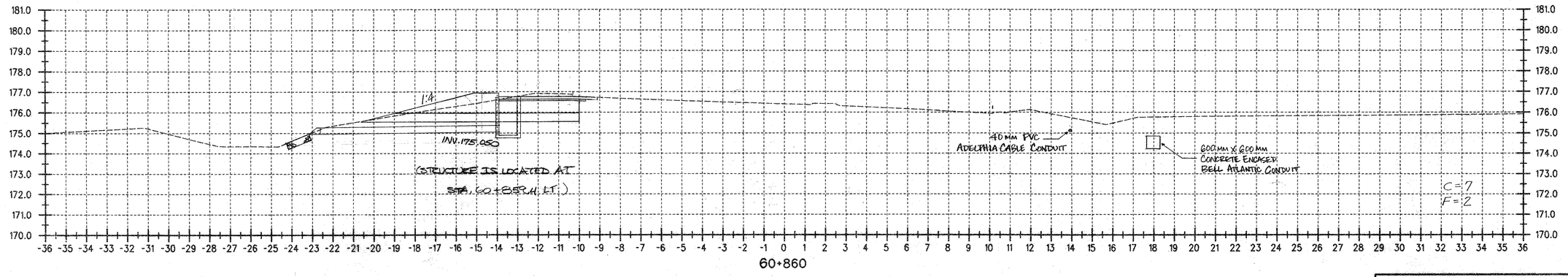
SURVEYED BY C.H.A. & V.S.E. DATE _____
DRAWN BY J.S.L. DATE _____
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE _____ DATE PLOTTED _____
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60.101
SHEET 348 OF 385 SHEETS



60+900



60+880



60+860

Metric

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

H 1:100

V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE

DRAWN BY J.S.L. DATE

SQUAD LEADER T.P.K.

DESIGN FILE NO. N/A

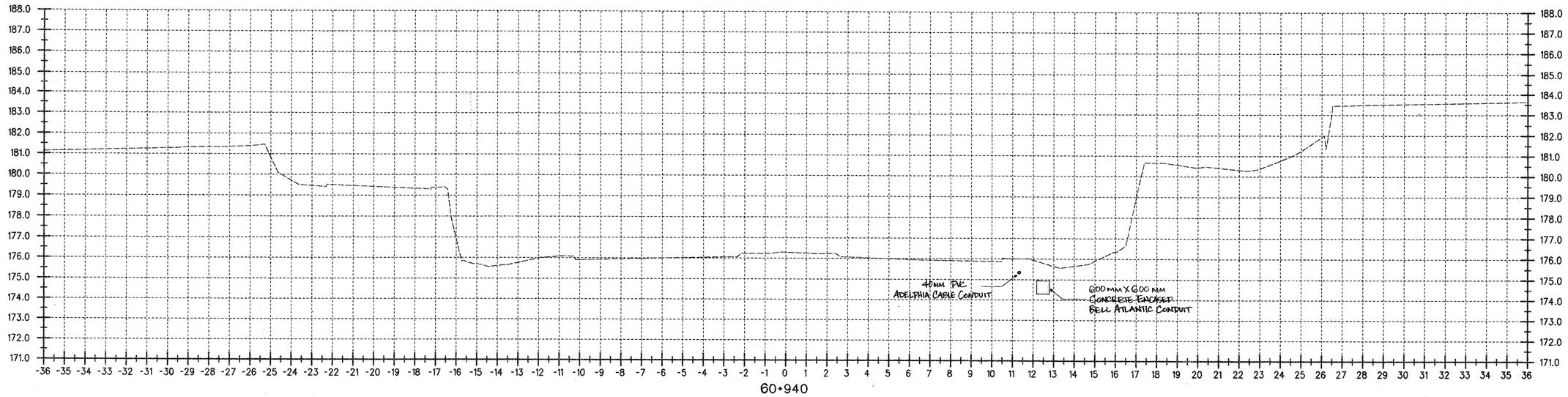
IPARM FILE

DATE PLOTTED

PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60.101

SHEET 349 OF 385 SHEETS



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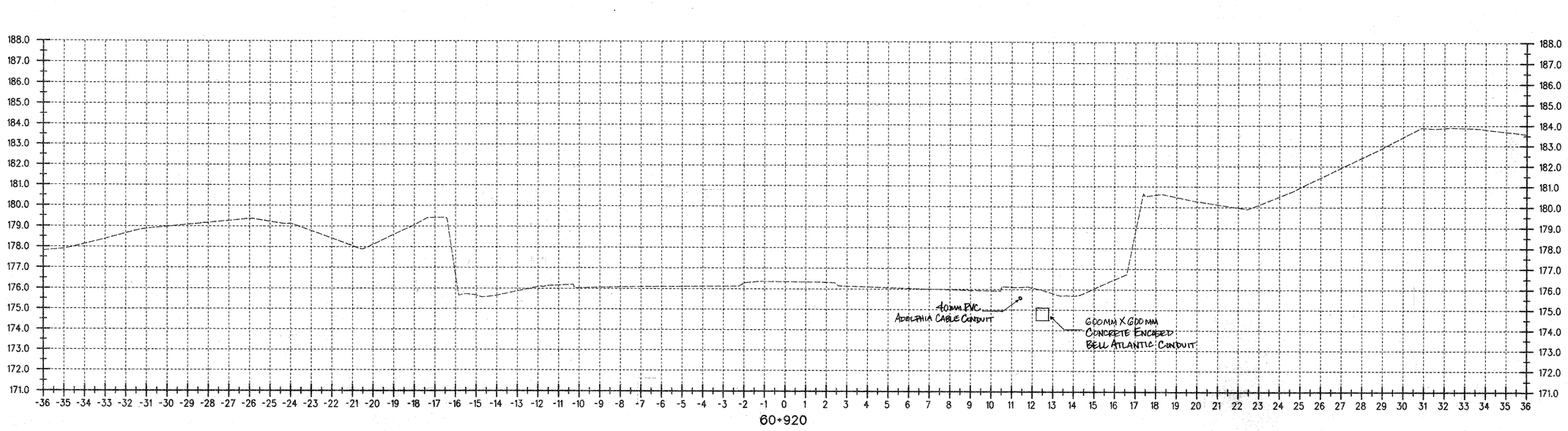
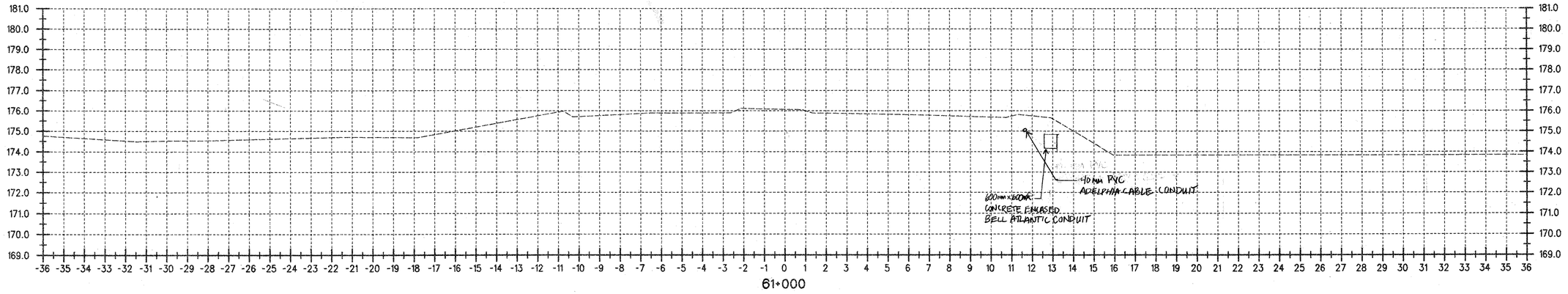


60+920

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE
DRAWN BY J.S.L. DATE
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
#PARM FILE DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60.101
SHEET 350 OF 385 SHEETS



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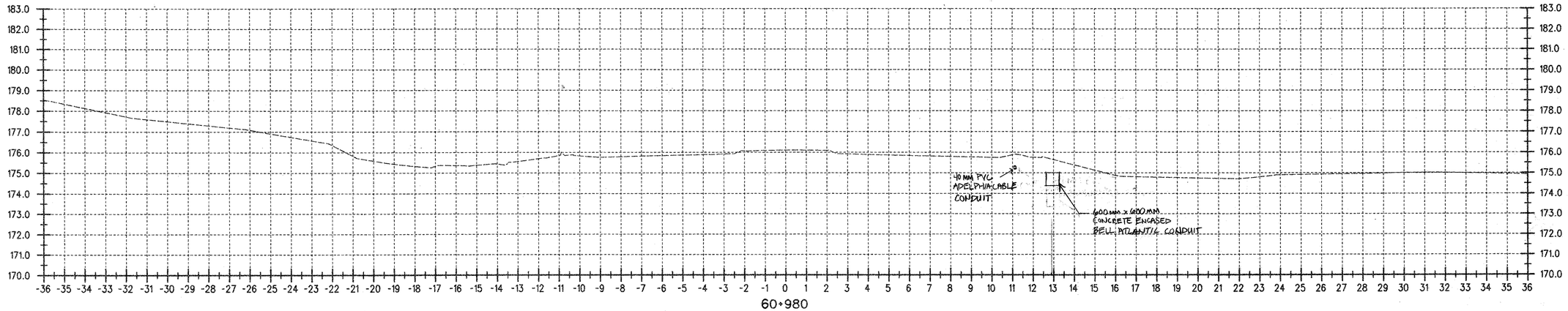
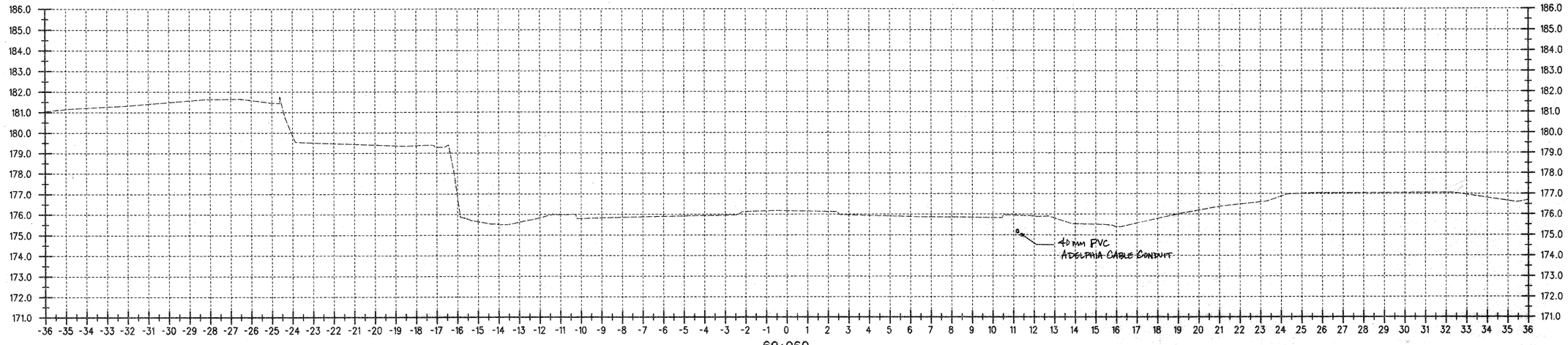


60+980



60+960

Metric

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED

2 0 2 m

H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE

DRAWN BY J.S.L. DATE

SQUAD LEADER T.P.K.

DESIGN FILE NO. N/A

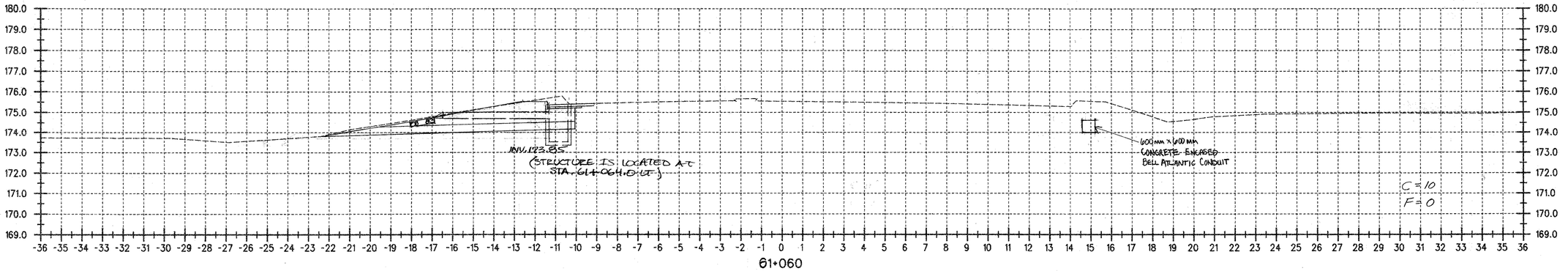
IPARM FILE DATE PLOTTED

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4

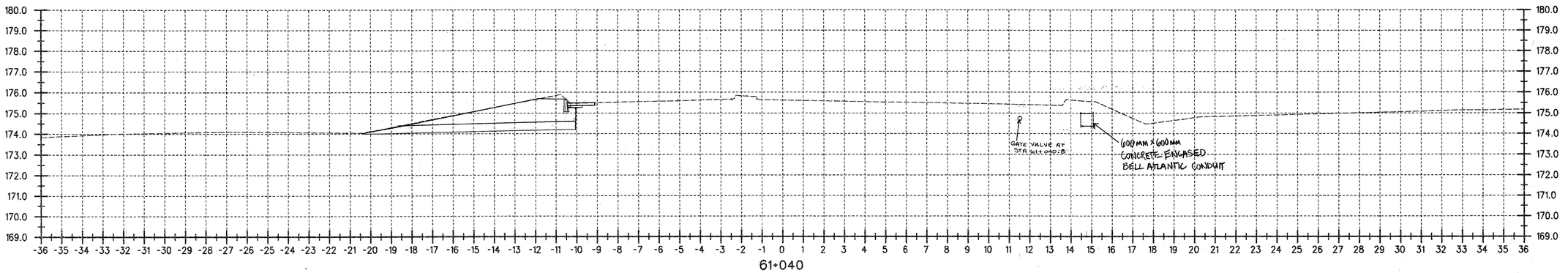
PROJ. NO. P.I.N. 1306.60.101

SHEET 351 OF 385 SHEETS

Metric



61+060



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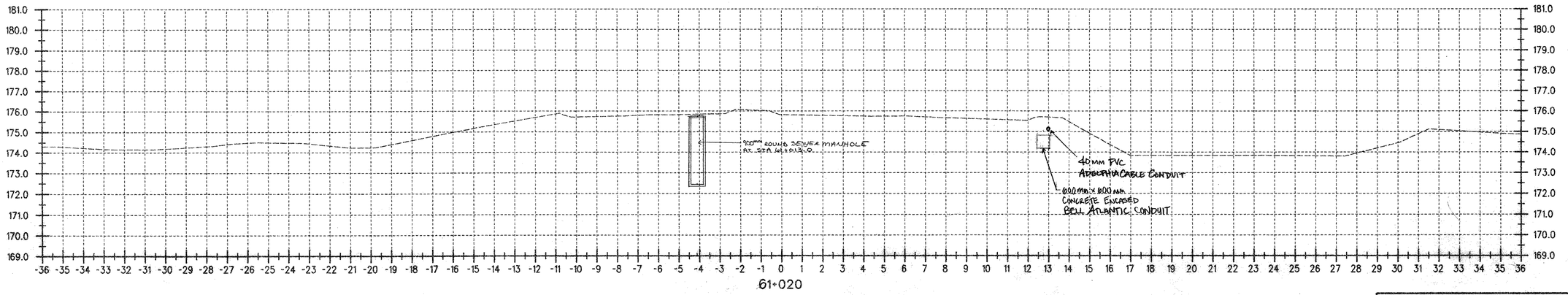


61+020

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

H 1:100

V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE _____

DRAWN BY J.S.L. DATE _____

SQUAD LEADER T.P.K.

DESIGN FILE NO. N/A

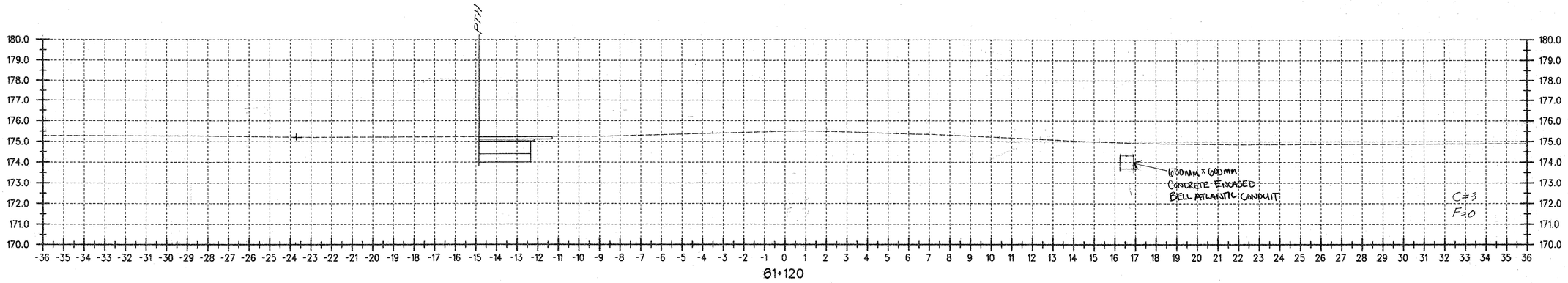
IPARM FILE _____ DATE PLOTTED _____

PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

PROJ. NO. P.I.N. 1306.60.101

SHEET 352 OF 385 SHEETS

Metric



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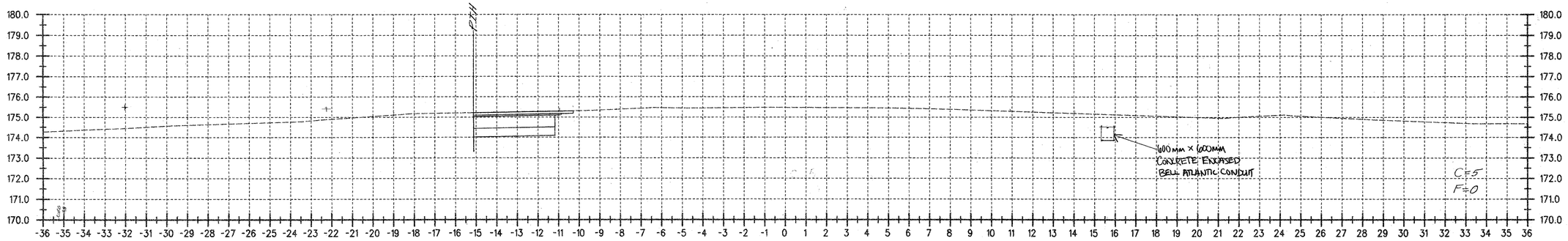
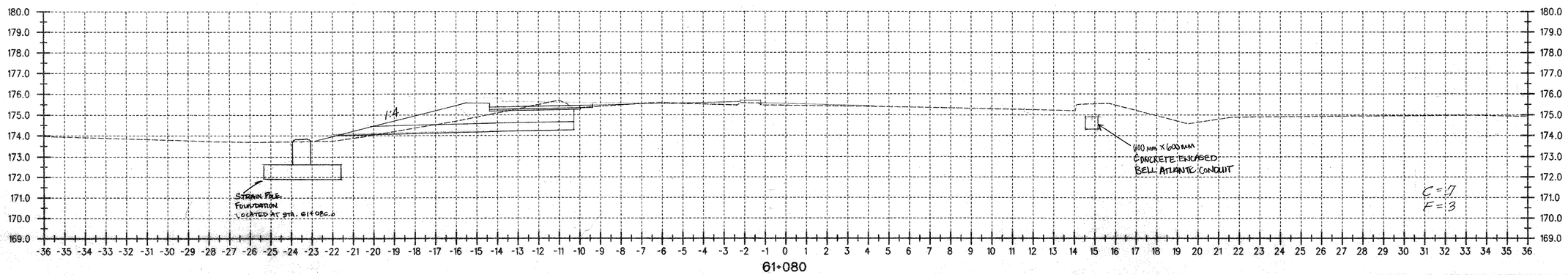


61+100



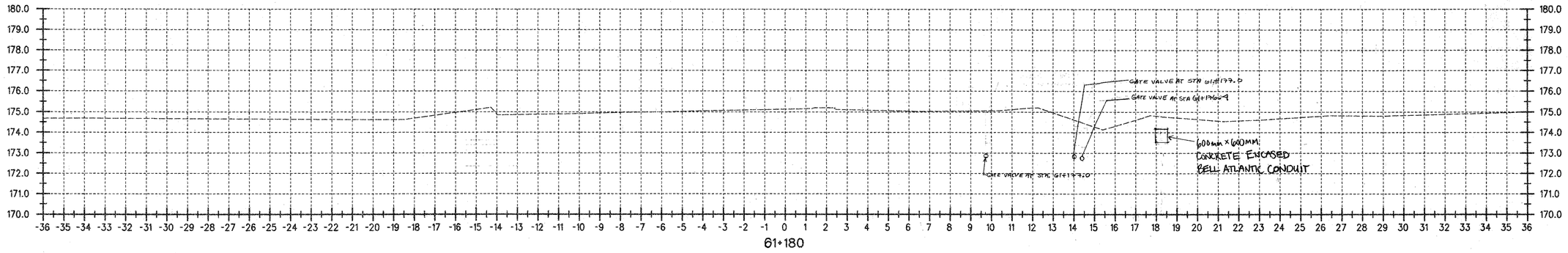
61+080

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

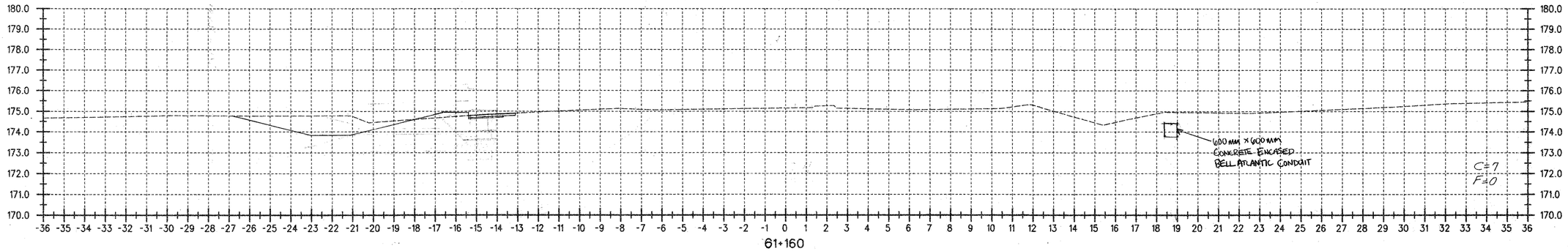
ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE
DRAWN BY J.S.L. DATE
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60.101
SHEET 353 OF 385 SHEETS

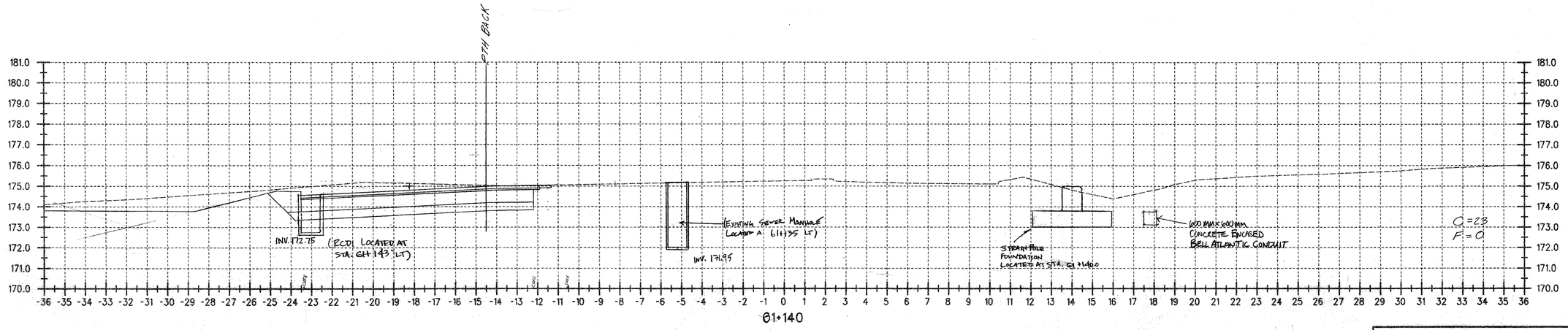
Metric



61+180



61+160



61+140

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS EXCEPT AS INDICATED

2 0 2 m

H 1:100

V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE

DRAWN BY J.S.L. DATE

SQUAD LEADER T.P.K.

DESIGN FILE NO. N/A

IPARM FILE

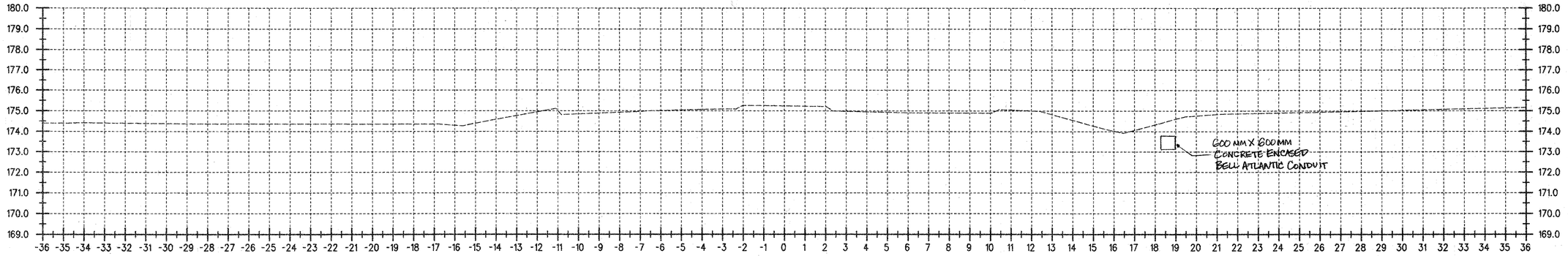
DATE PLOTTED

PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4

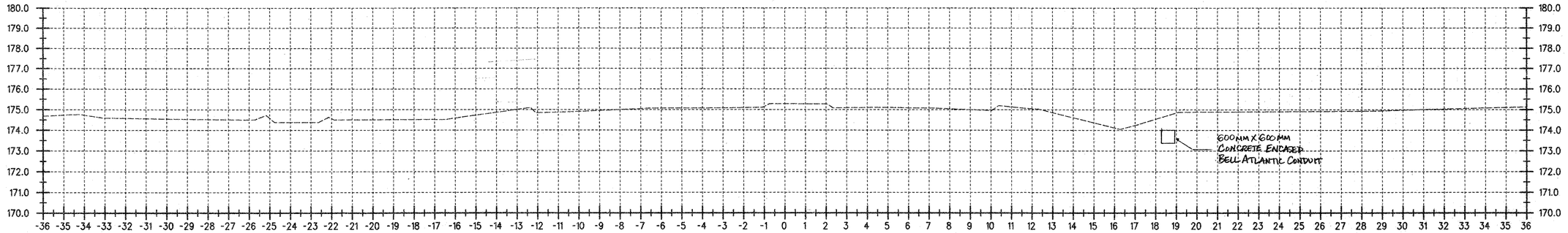
PROJ. NO. P.I.N. 1306.60.101

SHEET 354 OF 385 SHEETS

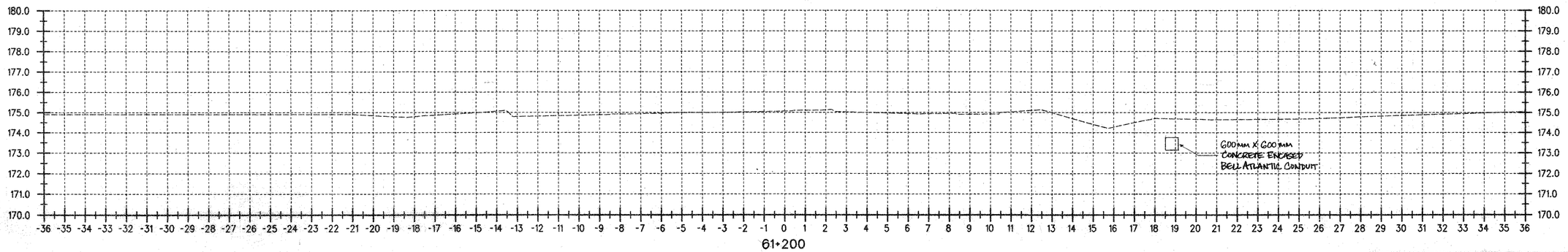
Metric



61+240



61+220



61+200

DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

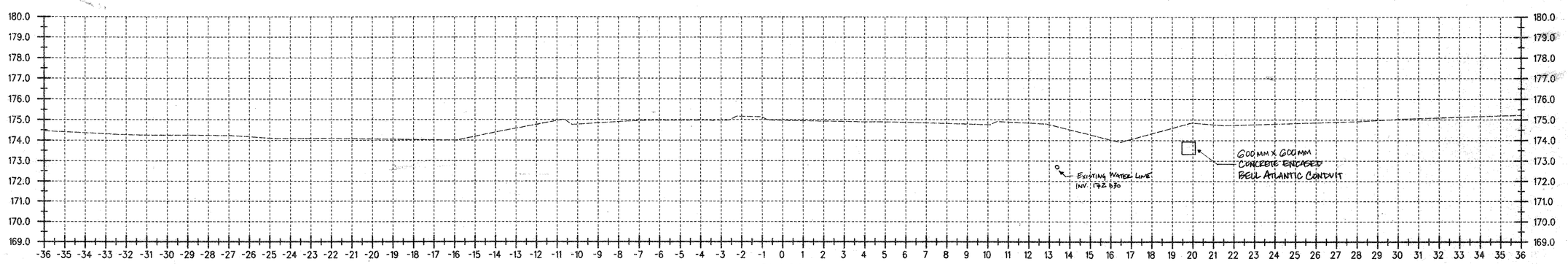
ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED

2 0 2 m

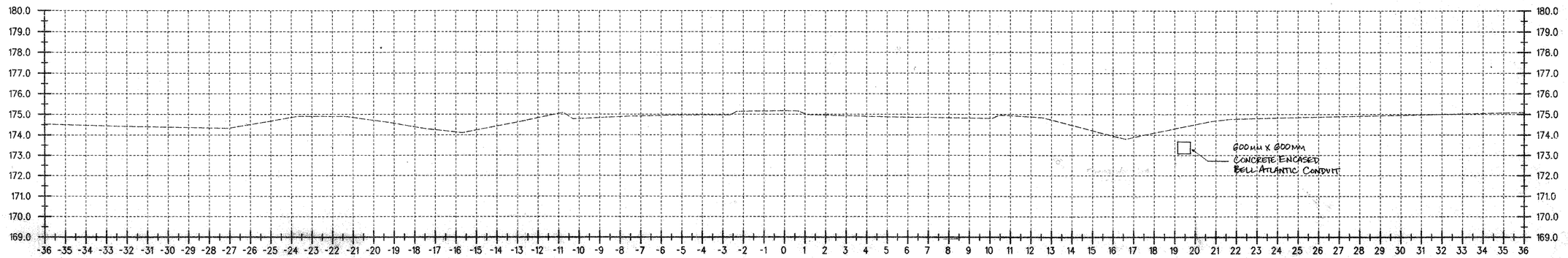
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE _____
DRAWN BY J.S.L. DATE _____
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE _____ DATE PLOTTED _____
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60.101
SHEET 355 OF 385 SHEETS

Metric



61+280



61+260

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

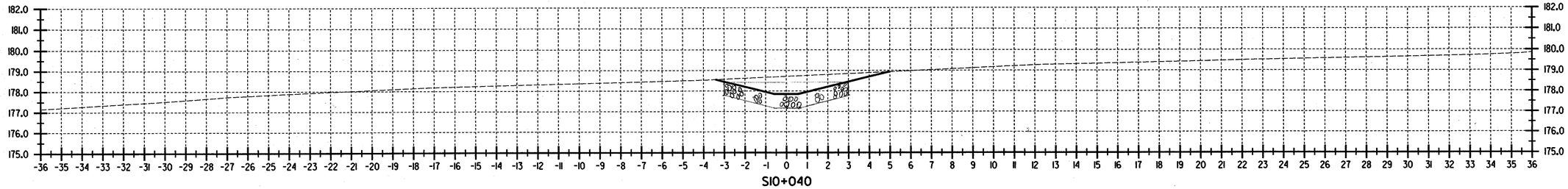
ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED

2 0 2 m

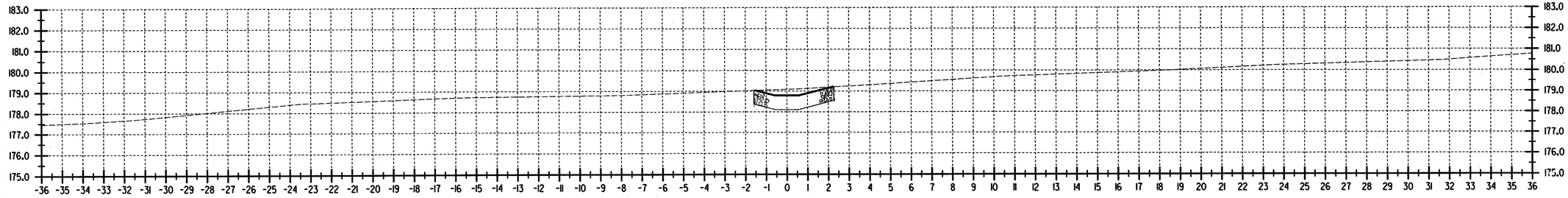
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE
DRAWN BY J.S.L. DATE
SQUAD LEADER T.P.K.
DESIGN FILE NO. N/A
IPARM FILE
DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60.101
SHEET 356 OF 385 SHEETS

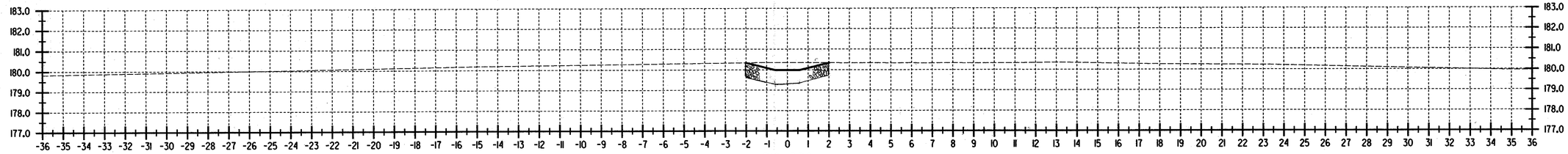
Metric



S10+040
SILK ROAD CHANNEL



S10+020
SILK ROAD CHANNEL



S10+006
SILK ROAD CHANNEL

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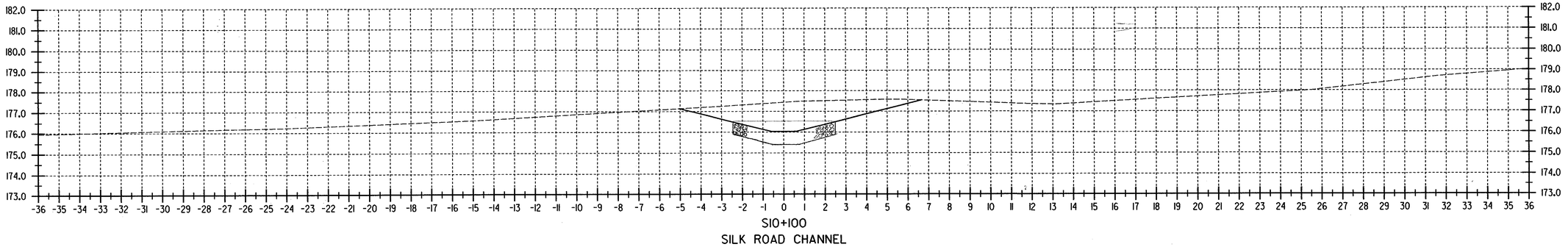
DATE/TIME = 10 JUN 1999
USER = 459

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

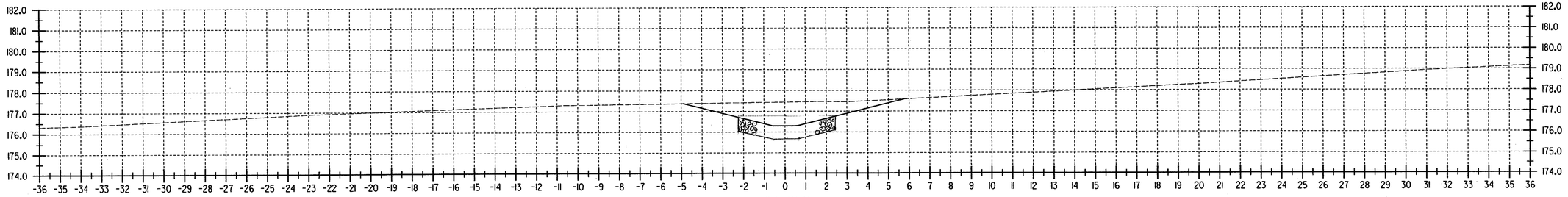
ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DRAWN BY J.S.L. DATE 1/99
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VAOT/REV1678ORT
IPARM FILE _____ DATE PLOTTED _____
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 01461(1) C/4
PROJ. NO. P.I.N. 1306.60
SHEET 357 OF 385 SHEETS

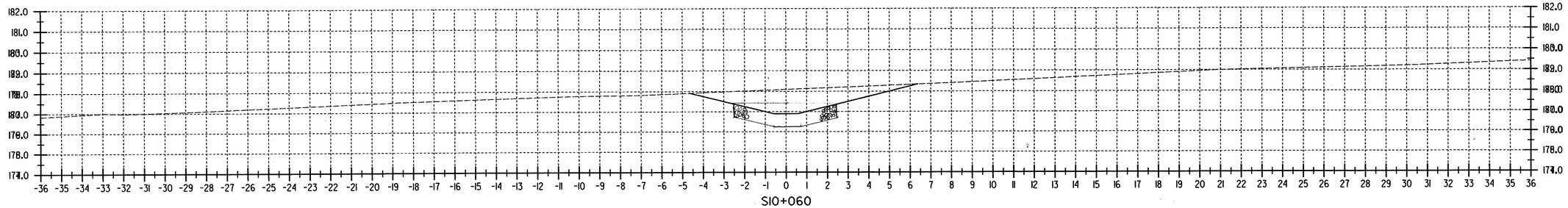
Metric



S10+100
SILK ROAD CHANNEL



S10+080
SILK ROAD CHANNEL



S10+060
SILK ROAD CHANNEL

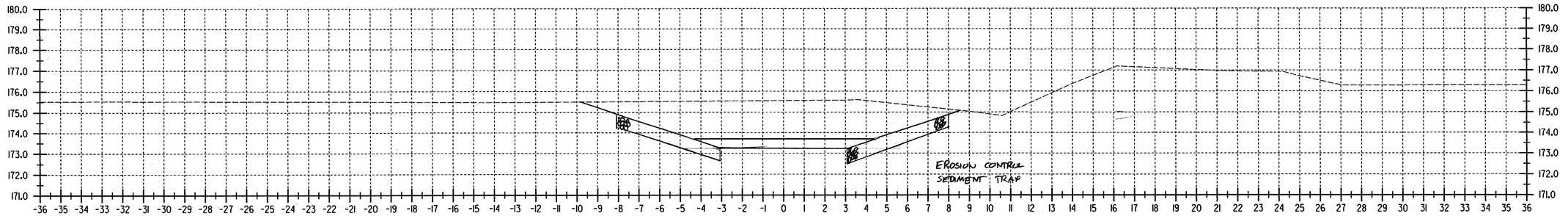
FILE NAME =$FILE$
DATE/TIME =$DATE$
USER =$NTUSER$

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

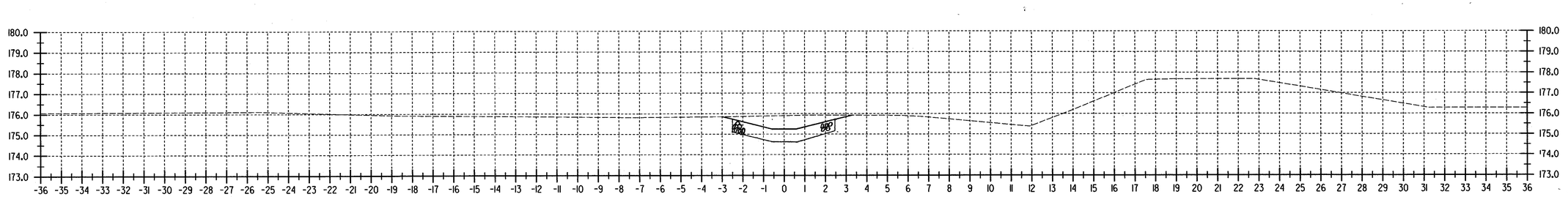
ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DRAWN BY J.S.L. DATE 1/99
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VA0T/REV1678ORT
IPARM FILE
DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
SHEET 358 OF 385 SHEETS

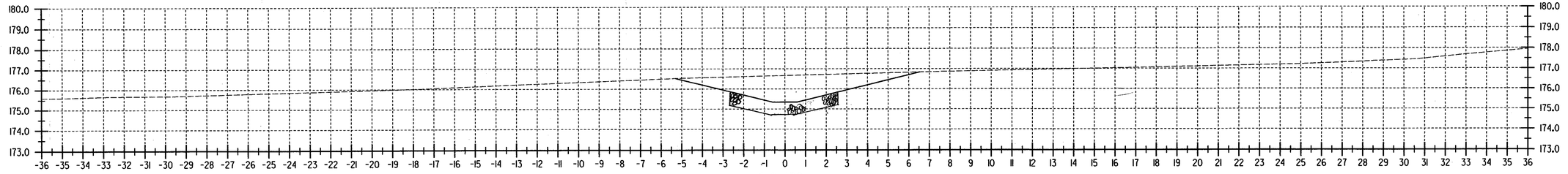
Metric



S10+160
SILK ROAD CHANNEL



S10+140
SILK ROAD CHANNEL



S10+120
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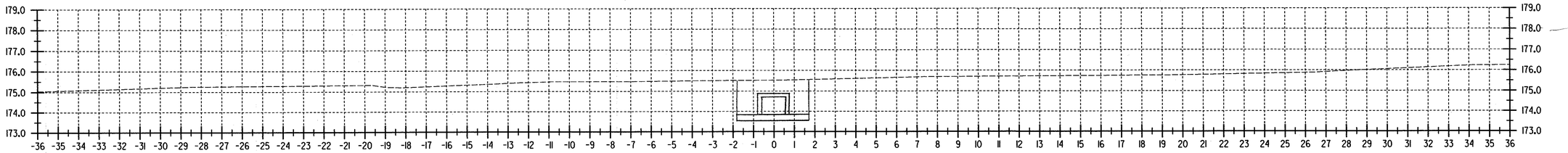
USER =$NTUSER$

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DRAWN BY J.S.L. DATE 6/99
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VAOT/REVI678ORT
IPARM FILE _____ DATE PLOTTED _____
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
SHEET 359 OF 385 SHEETS



S10+220
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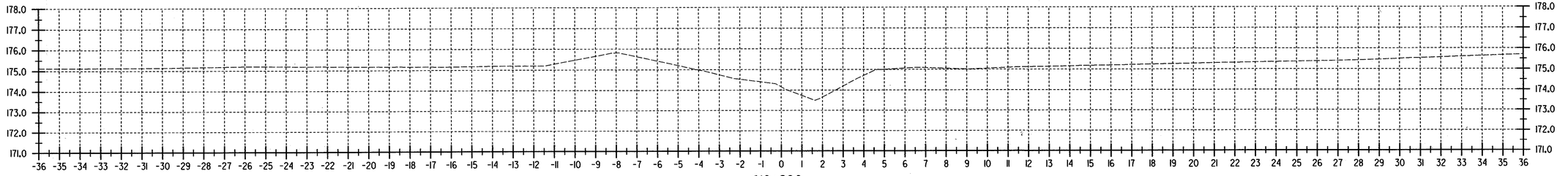
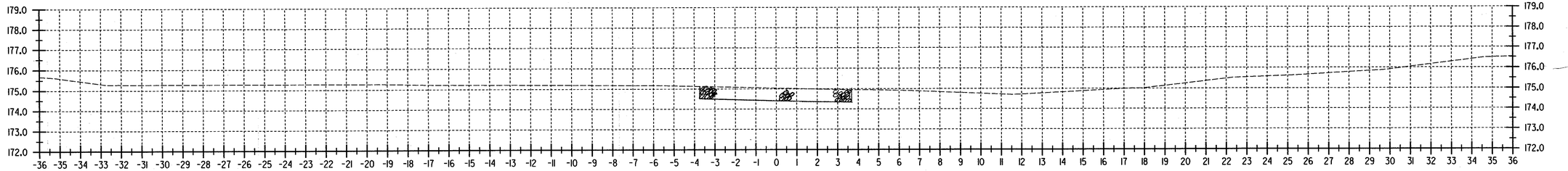


S10+200
SILK ROAD CHANNEL



S10+180
SILK ROAD CHANNEL

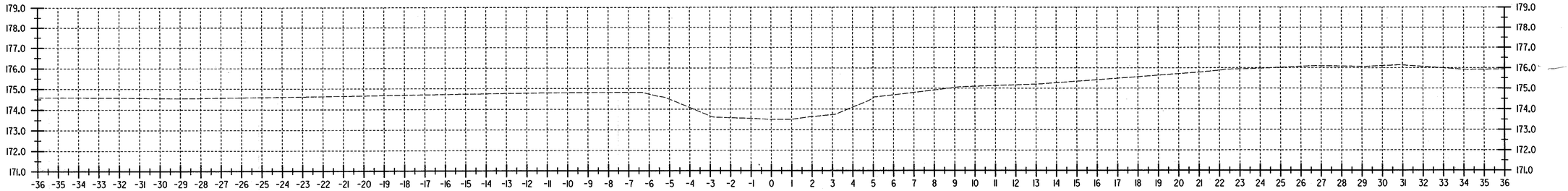
FILE NAME =$FILE$
DATE/TIME =$DATE$
USER =$NTUSER$

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DRAWN BY J.S.L. DATE 6/99
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VAOT/REV16780RT
IPARM FILE _____ DATE PLOTTED _____
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
SHEET 360 OF 385 SHEETS

Metric



S10+238.626
SILK ROAD CHANNEL

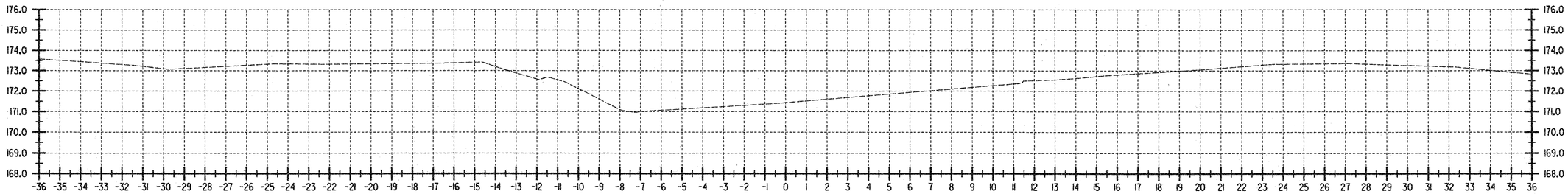
FILE NAME =$FILE$
DATE/TIME =$DATE$
USER =$NTUSER$

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

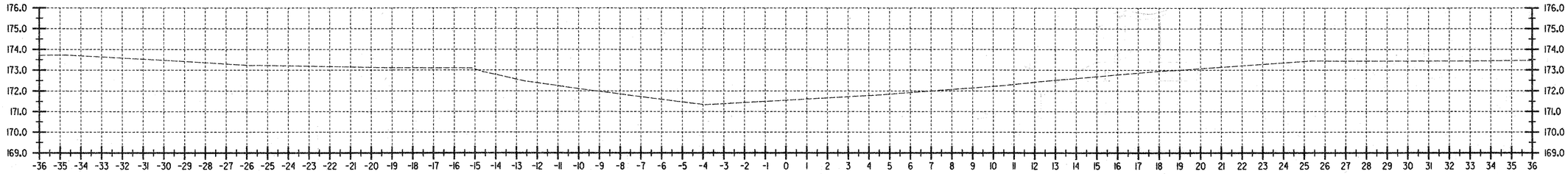
ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DRAWN BY J.S.L. DATE 6/99
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VAOT/REV16780RT
IPARM FILE ____ DATE PLOTTED ____
PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
SHEET 361 OF 385 SHEETS

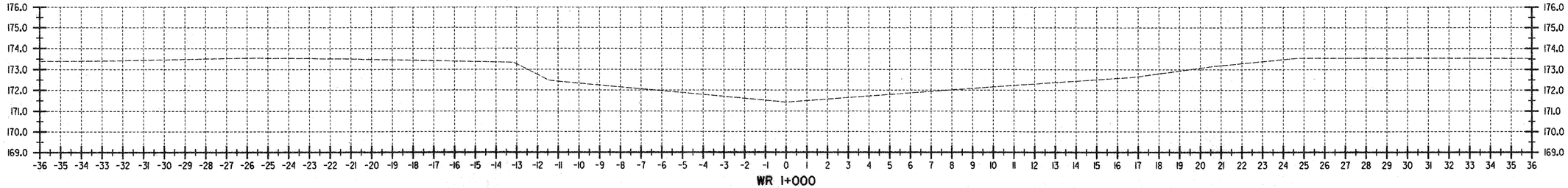
Metric



WR 1+020
WALLOOMSAC RIVER



WR 1+010
WALLOOMSAC RIVER

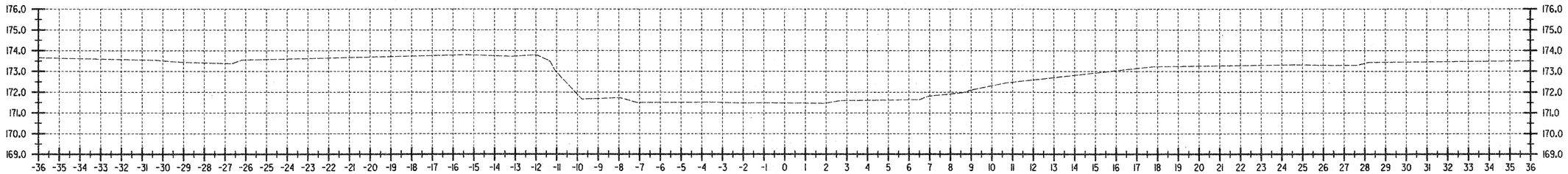


WR 1+000
WALLOOMSAC RIVER

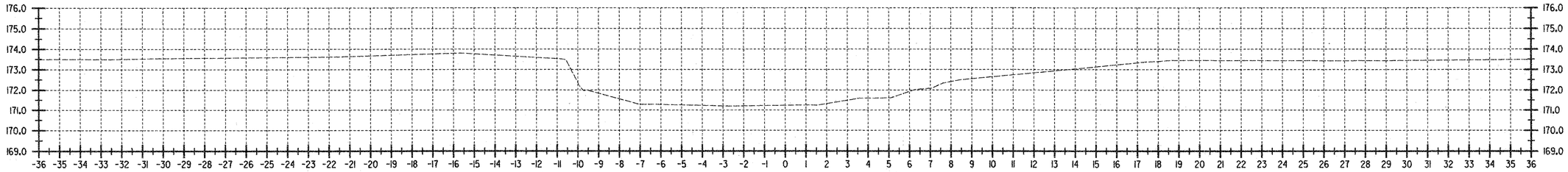
DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

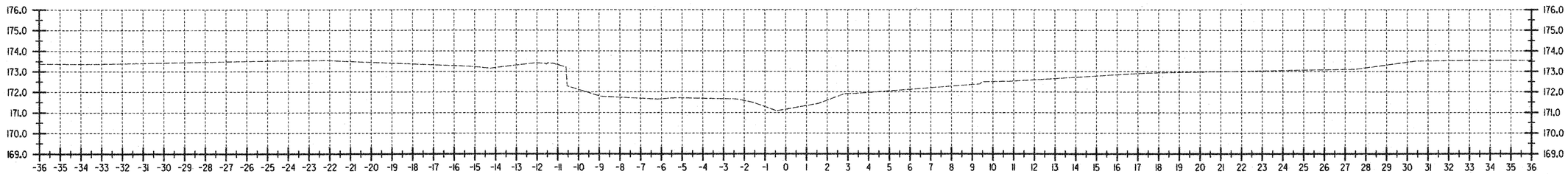
SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DRAWN BY J.S.L. DATE 6/98
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VAOT/VTSECT3.D
IPARM FILE ____ DATE PLOTTED ____
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 01461(1) c/4
PROJ. NO. P.I.N. 1306.60
SHEET 362 OF 385 SHEETS



WR 1+050
WALLOOMSAC RIVER



WR 1+040
WALLOOMSAC RIVER



WR 1+030
WALLOOMSAC RIVER

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

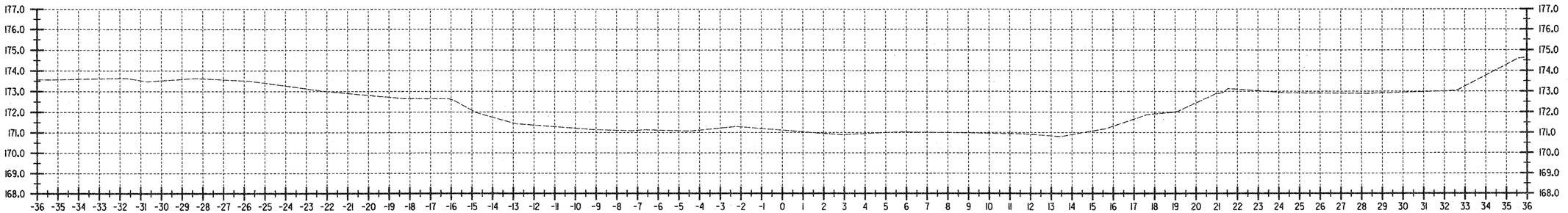
ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED

2 0 2 m

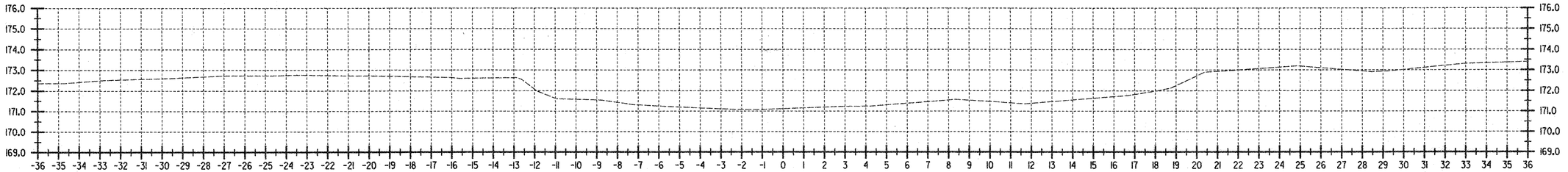
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DRAWN BY J.S.L. DATE 6/98
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VAOT/VTSECT3.D
IPARM FILE _____ DATE PLOTTED _____
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) c/4
PROJ. NO. P.I.N. 1306.60
SHEET 363 OF 385 SHEETS

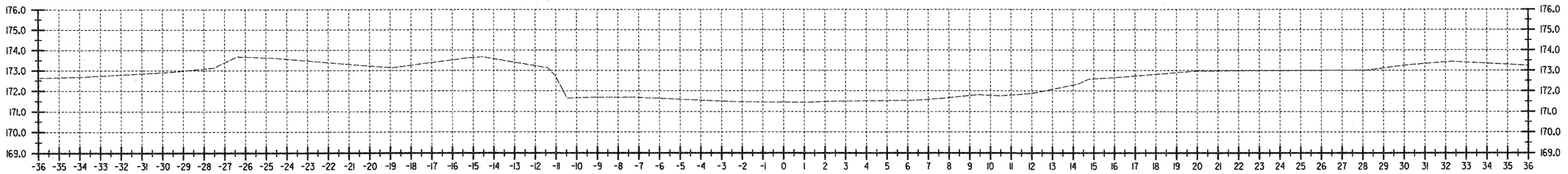
Metric



WR 1+080
WALLOOMSAC RIVER



WR 1+070
WALLOOMSAC RIVER

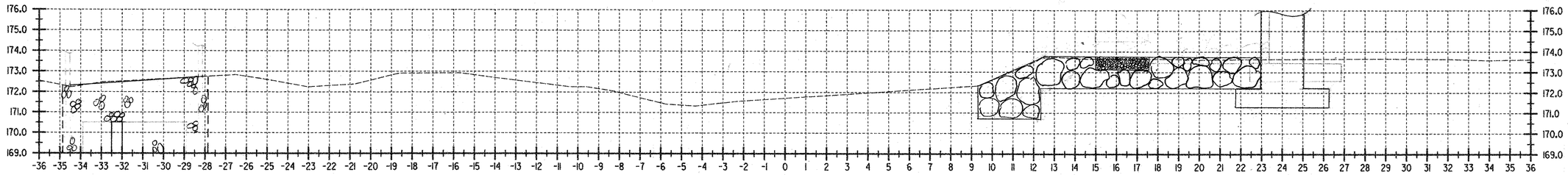


WR 1+060
WALLOOMSAC RIVER

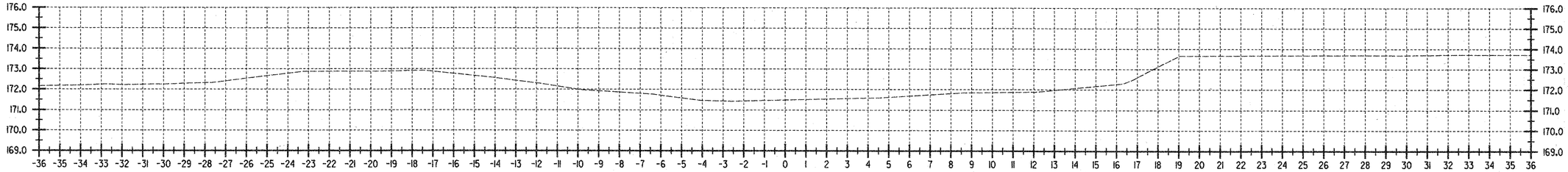
DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

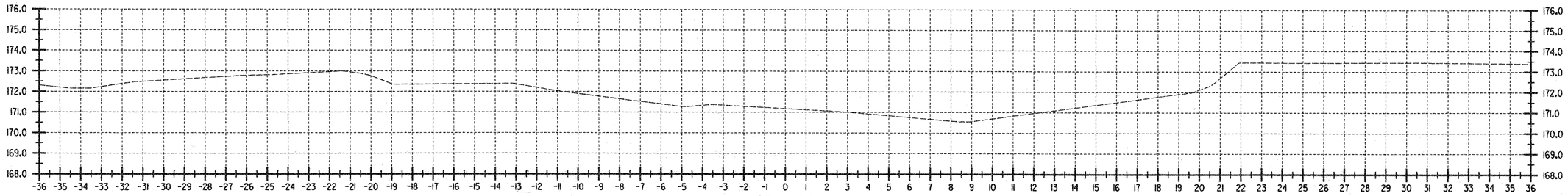
SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DRAWN BY J.S.L. DATE 6/98
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VAOT/VTSECT3.D
IPARM FILE ____ DATE PLOTTED ____
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) c/4
PROJ. NO. P.I.N. 1306.60
SHEET 364 OF 385 SHEETS



WR 1+110
WALLOOMSAC RIVER



WR 1+100
WALLOOMSAC RIVER

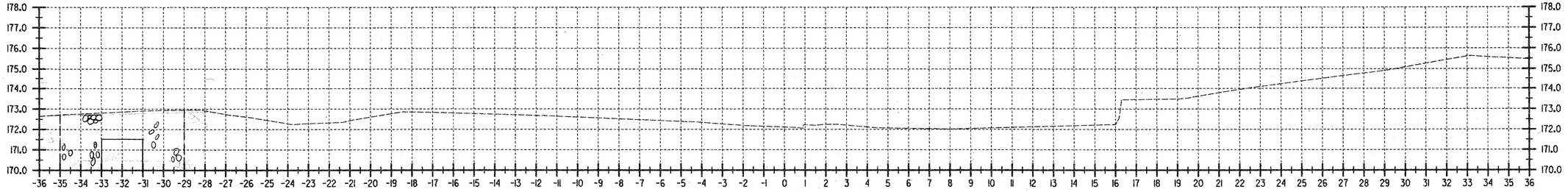


WR 1+090
WALLOOMSAC RIVER

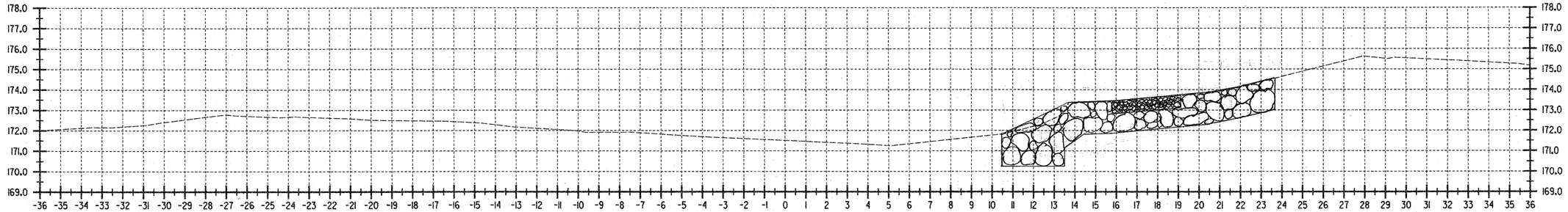
DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

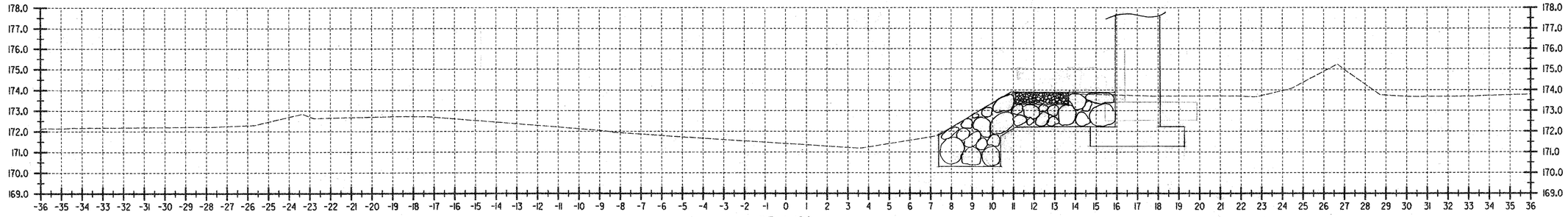
SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DRAWN BY J.S.L. DATE 6/98
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VAOT/VTSECT3.D
IPARM FILE DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/A
PROJ. NO. P.I.N. 1306.60
SHEET 365 OF 385 SHEETS



WR 1+140
WALLOOMSAC RIVER



WR 1+130
WALLOOMSAC RIVER



WR 1+120
WALLOOMSAC RIVER

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

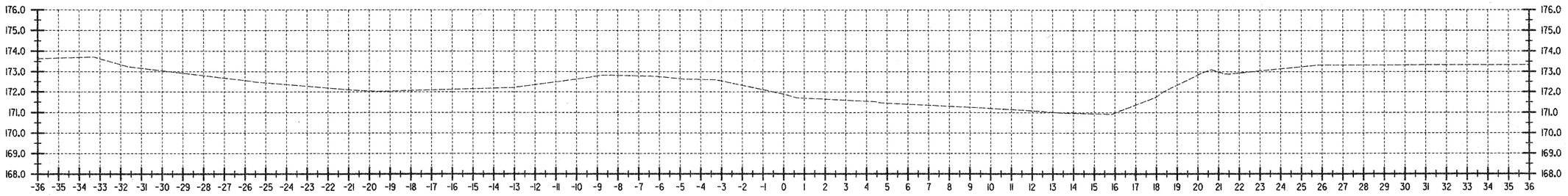
ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED

2 0 2 m

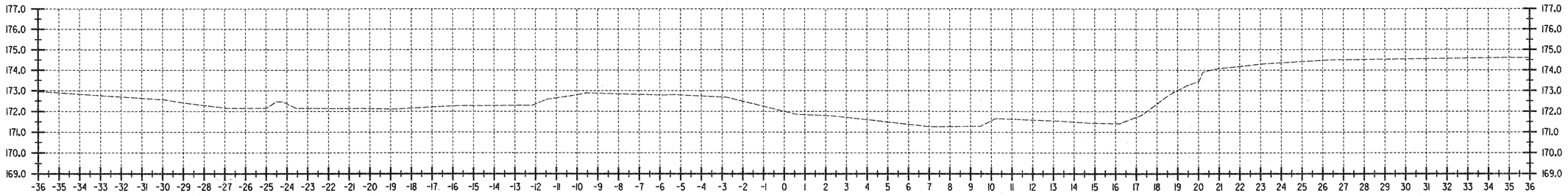
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DRAWN BY J.S.L. DATE 6/98
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VAOT/VTSECT3.D
IPARM FILE ____ DATE PLOTTED ____
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) c/1
PROJ. NO. P.I.N. 1306.60
SHEET 366 OF 385 SHEETS

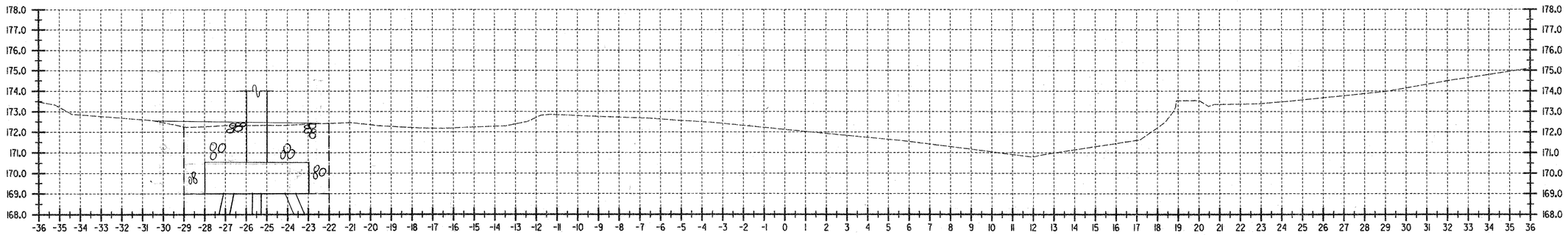
Metric



WR 1+170
WALLOOMSAC RIVER



WR 1+160
WALLOOMSAC RIVER



WR 1+150
WALLOOMSAC RIVER

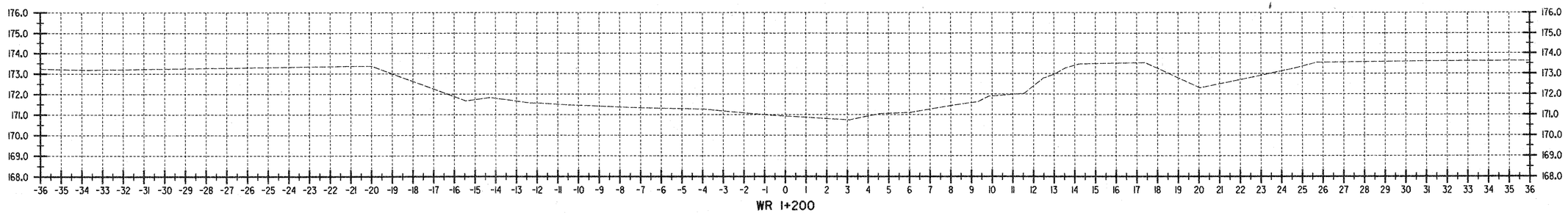
DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED

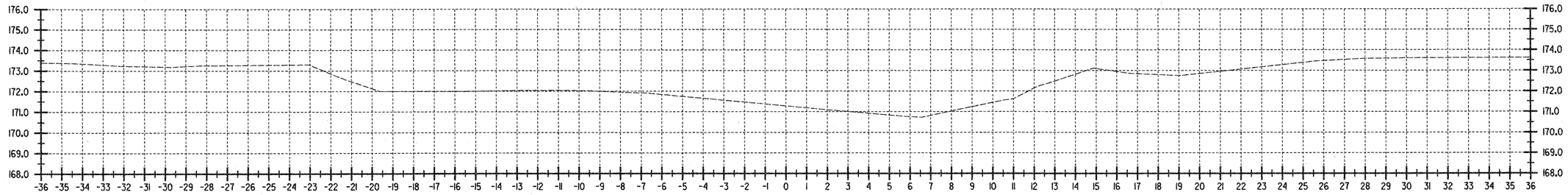
2 0 2 m

H 1:100
V 1:100

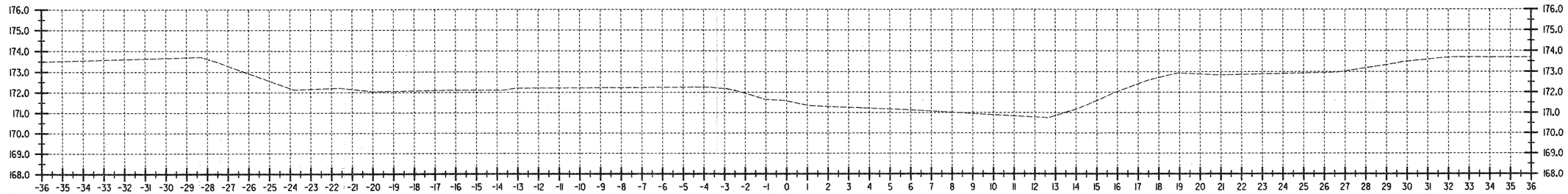
SURVEYED BY	C.H.A. & V.S.E. DATE 12/93
DRAWN BY	J.S.L. DATE 6/98
SQUAD LEADER	T.P.K.
DESIGN FILE NO.	/5116/VAOT/VTSECT3.D
PARM FILE	DATE PLOTTED
PROJ. NAME	BENNINGTON - HOOSICK D.P.I. 0146(1) c/t
PROJ. NO. P.I.N.	1306.60
SHEET	367 OF 385 SHEETS



WR 1+200
WALLOOMSAC RIVER



WR 1+190
WALLOOMSAC RIVER



WR 1+180
WALLOOMSAC RIVER

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

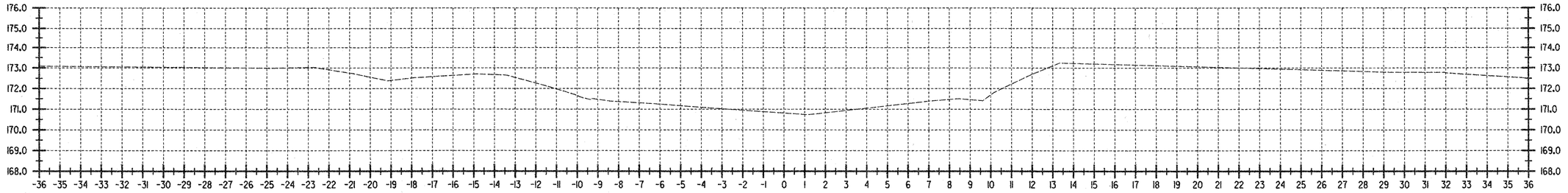
ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED

2 0 2 m

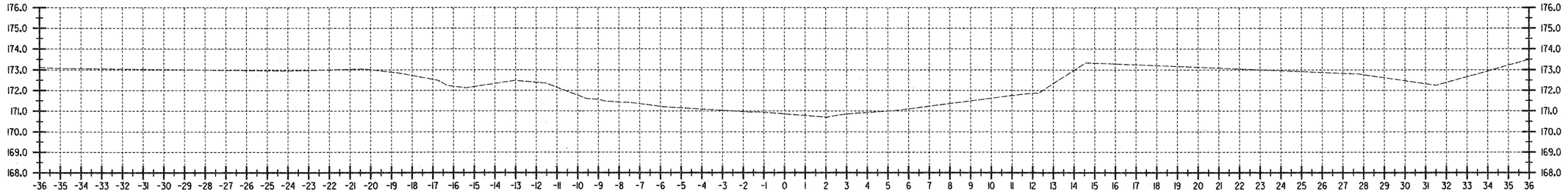
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DRAWN BY J.S.L. DATE 6/98
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VAOT/VTSECT3.D
IPARM FILE DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
SHEET 368 OF 385 SHEETS

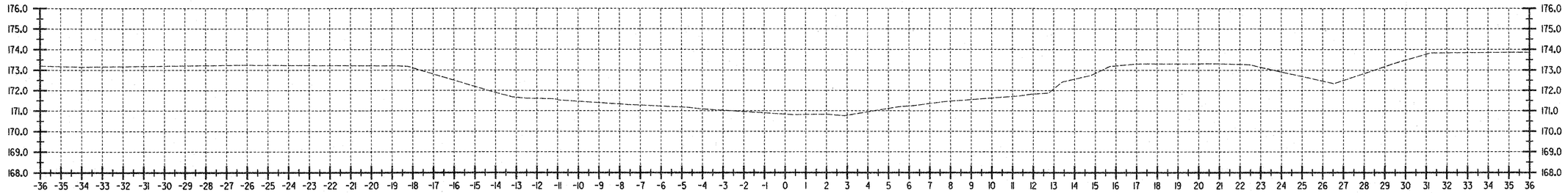
Metric



WR 1+230
WALLOOMSAC RIVER



WR 1+220
WALLOOMSAC RIVER



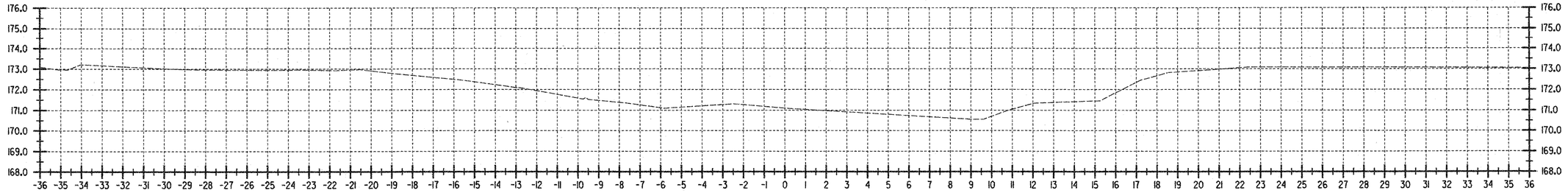
WR 1+210
WALLOOMSAC RIVER

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

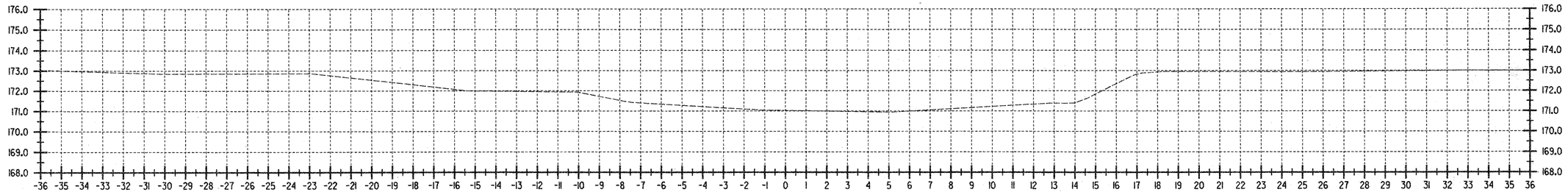
ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DRAWN BY J.S.L. DATE 6/98
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VAOT/VTSECT3.D
IPARM FILE _____ DATE PLOTTED _____
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) c/4
PROJ. NO. P.I.N. 1306.60
SHEET 309 OF 385 SHEETS

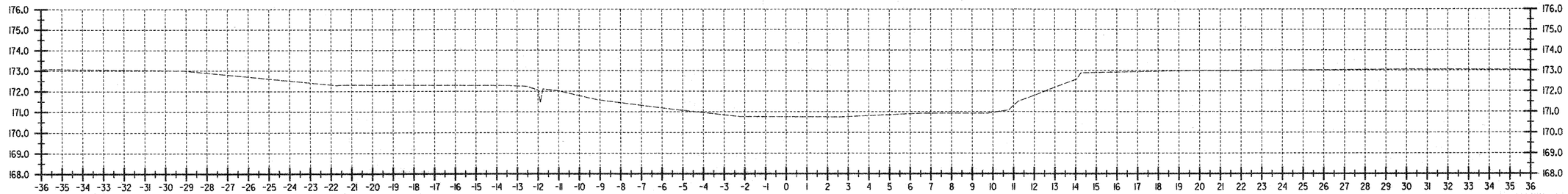
Metric



WR 1+290
WALLOOMSAC RIVER



WR 1+280
WALLOOMSAC RIVER

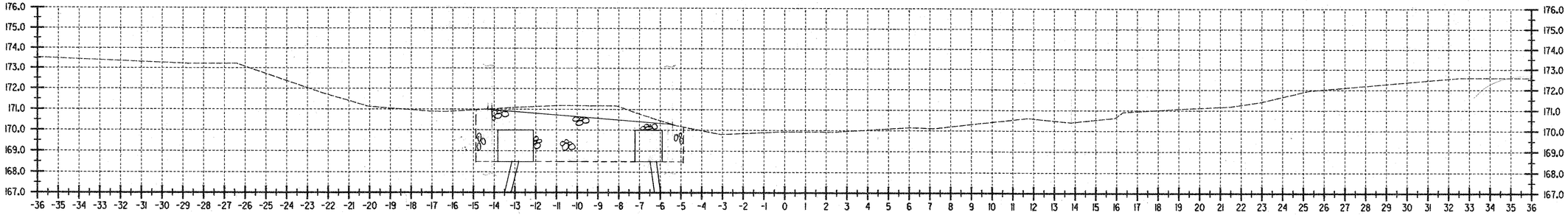


WR 1+270
WALLOOMSAC RIVER

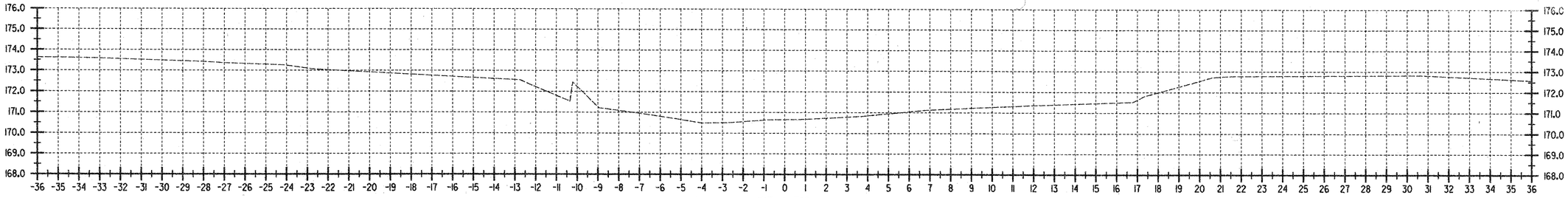
DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

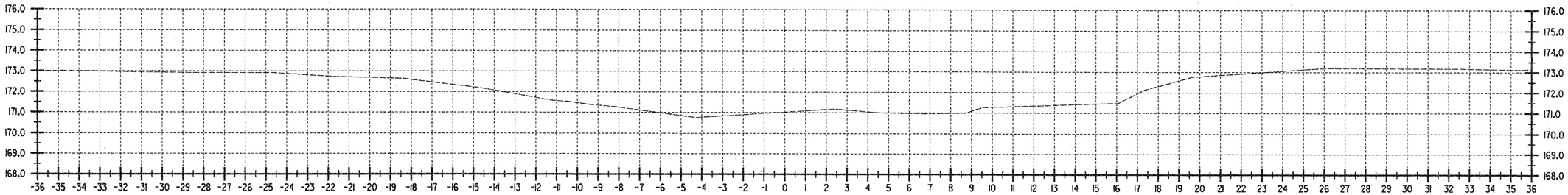
SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DRAWN BY J.S.L. DATE 6/98
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VAOT/VTSECT3.D
IPARM FILE ____ DATE PLOTTED ____
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
SHEET 371 OF 385 SHEETS



WR 1+320
WALLOOMSAC RIVER



WR 1+310
WALLOOMSAC RIVER



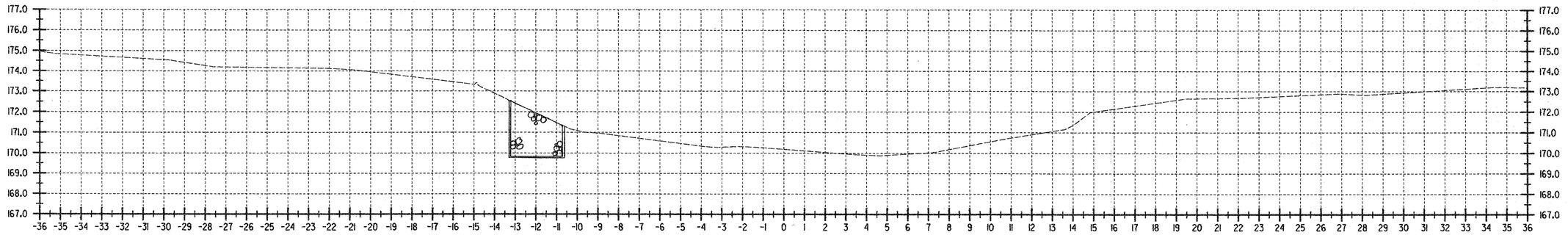
WR 1+300
WALLOOMSAC RIVER

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

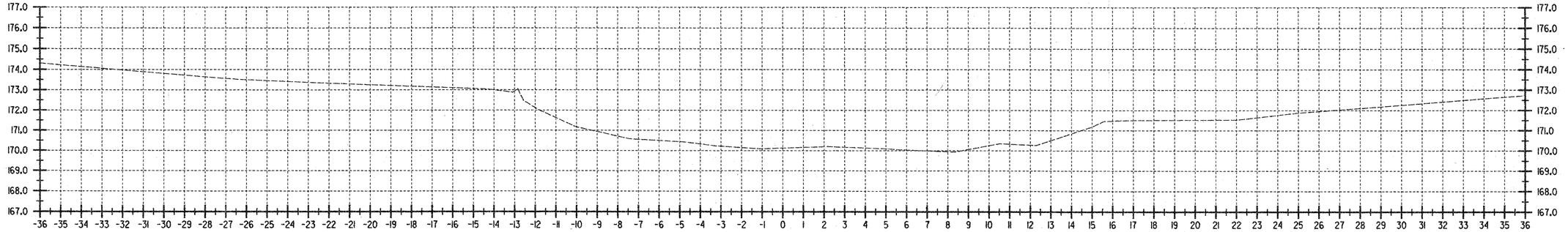
ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DRAWN BY J.S.L. DATE 6/98
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VAOT/VTSECT3.D
IPARM FILE ____ DATE PLOTTED ____
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/A
PROJ. NO. P.I.N. 1306.60
SHEET 372 OF 385 SHEETS

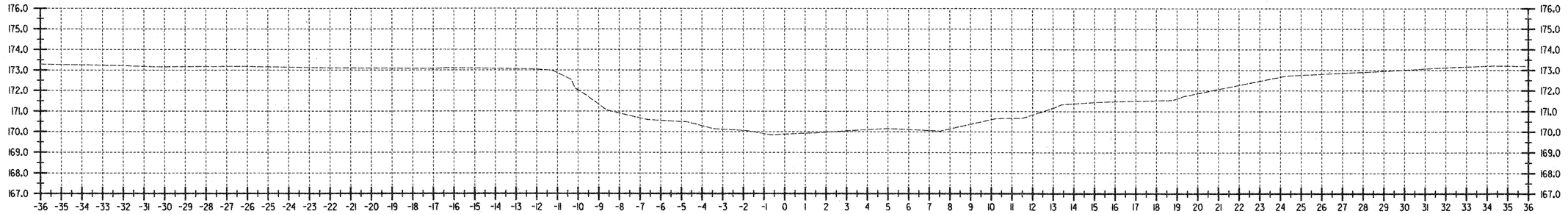
Metric



WR 1+350
WALLOOMSAC RIVER



WR 1+340
WALLOOMSAC RIVER



WR 1+330
WALLOOMSAC RIVER

DATUM

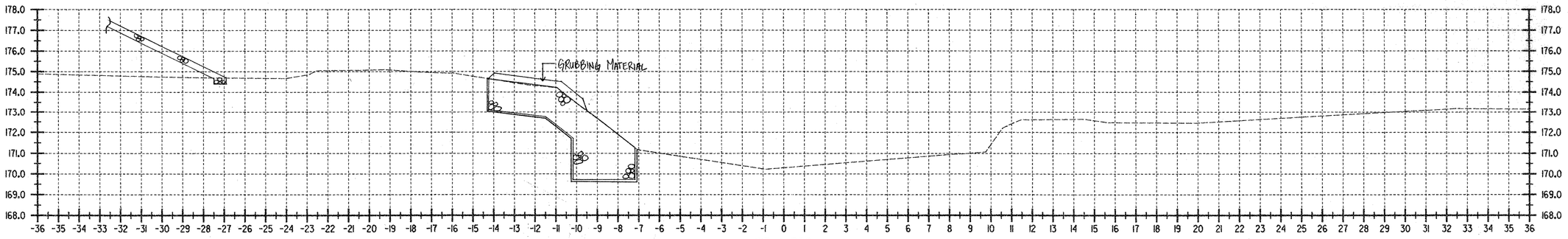
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED

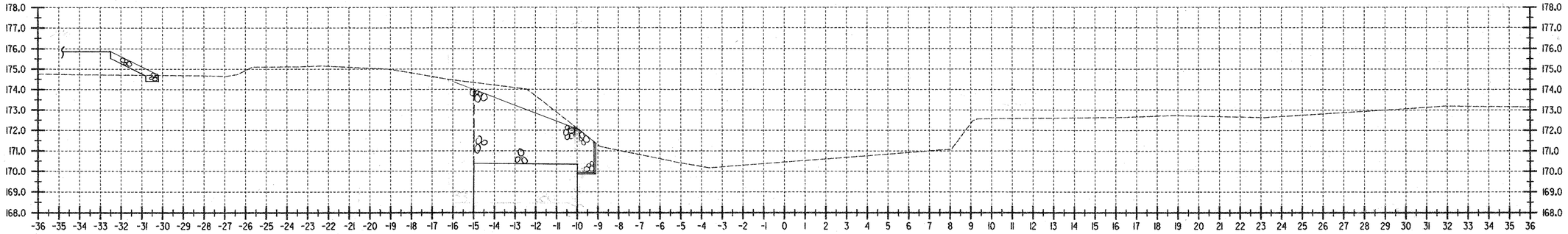
2 0 2 m

H 1:100
V 1:100

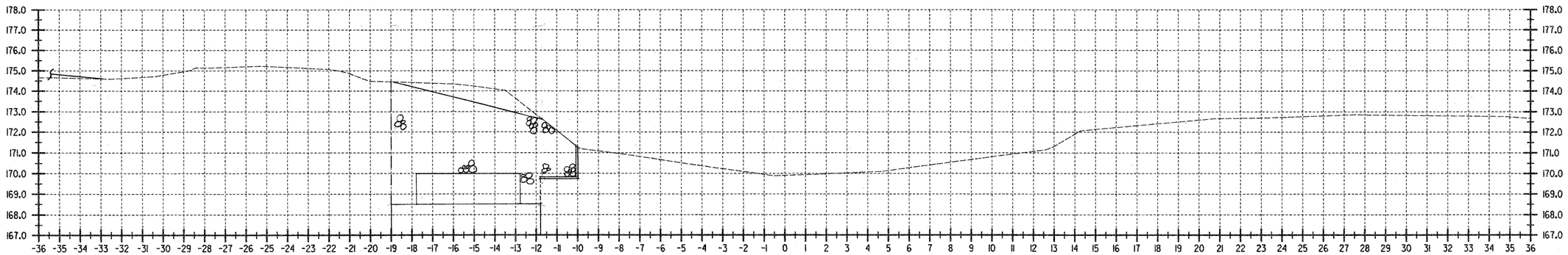
SURVEYED BY	C.H.A. & V.S.E. DATE 12/93
DRAWN BY	J.S.L. DATE 6/98
SQUAD LEADER	T.P.K.
DESIGN FILE NO.	/5116/VAOT/VTSECT3.D
IPARM FILE	DATE PLOTTED
PROJ. NAME	BENNINGTON - HOOSICK D.P.I. 0146(1) c/4
PROJ. NO. P.I.N.	1306.60
SHEET	373 OF 385 SHEETS



WR 1+380
WALLOOMSAC RIVER



WR 1+370
WALLOOMSAC RIVER



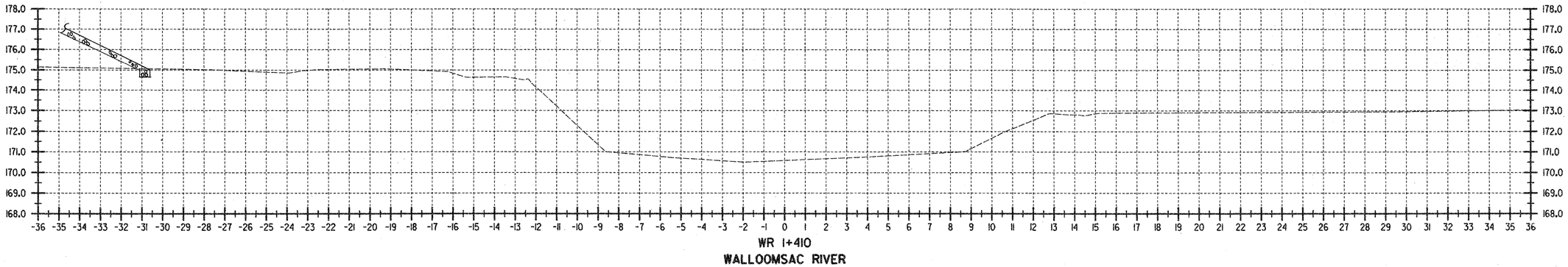
WR 1+360
WALLOOMSAC RIVER

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

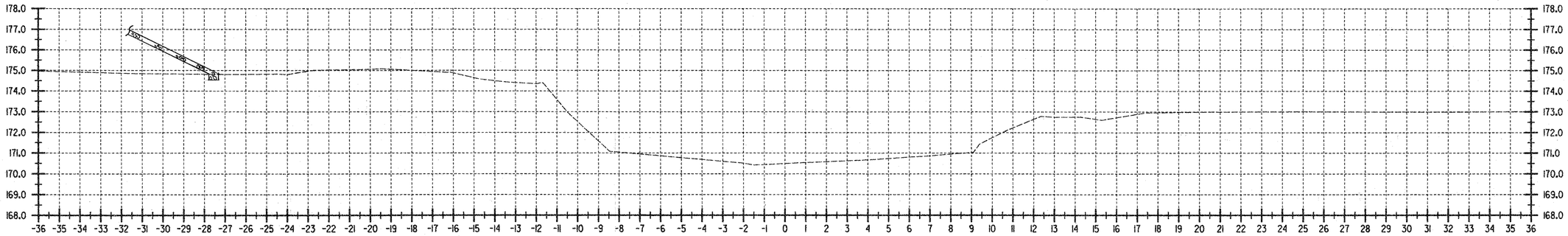
ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DRAWN BY J.S.L. DATE 6/98
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VAOT/VTSECT3.D
IPARM FILE
DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) c/4
PROJ. NO. P.I.N. 1306.60
SHEET 374 OF 385 SHEETS

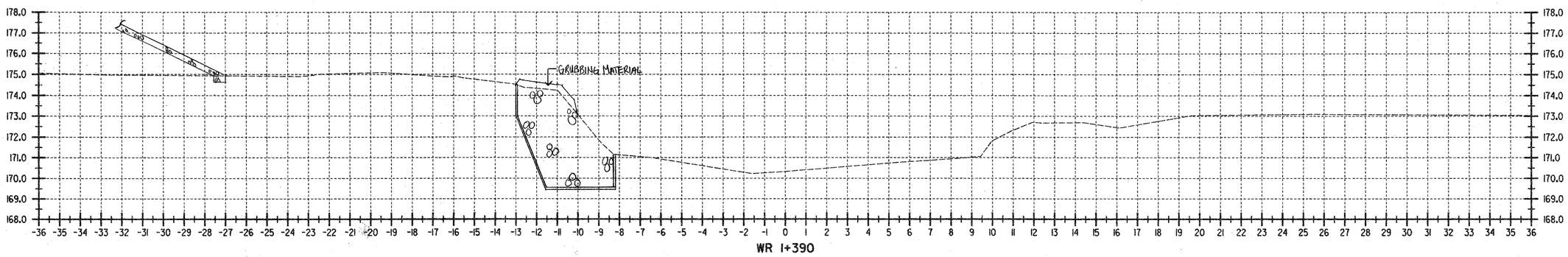
Metric



WR 1+410
WALLOOMSAC RIVER



WR 1+400
WALLOOMSAC RIVER



WR 1+390
WALLOOMSAC RIVER

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED

2 0 2 m

H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DRAWN BY J.S.L. DATE 6/98
SQUAD LEADER T.P.K.

DESIGN FILE NO. /5116/VAOT/VTSECT3.D

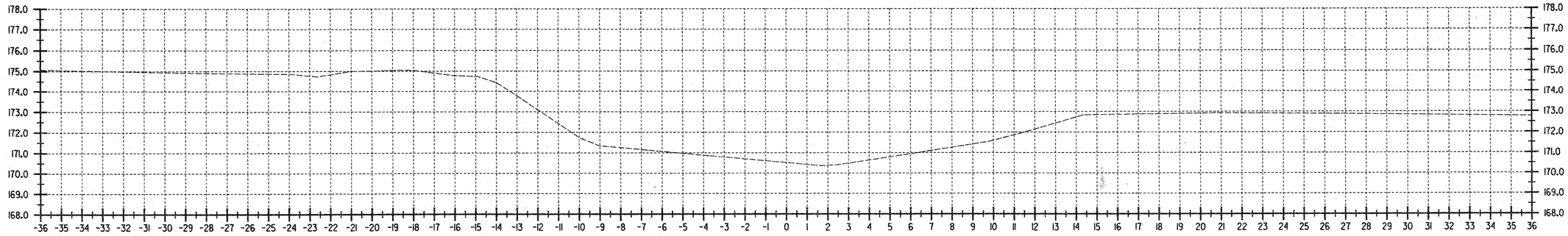
IPARM FILE _____ DATE PLOTTED _____

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/I

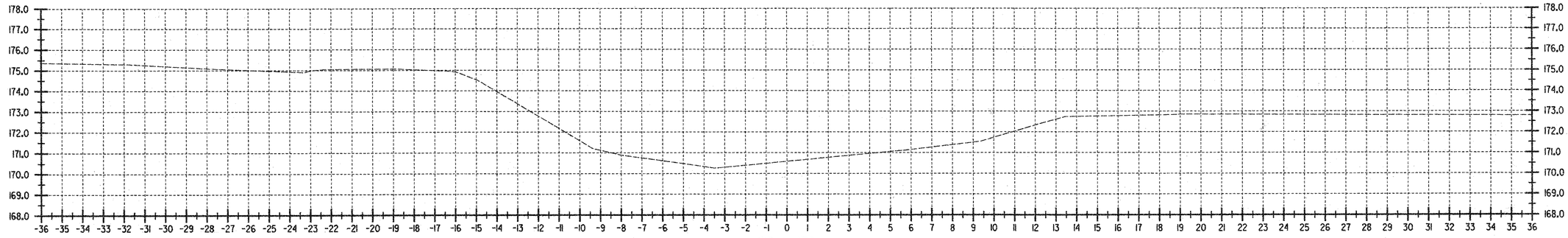
PROJ. NO. P.I.N. 1306.60

SHEET 375 OF 385 SHEETS

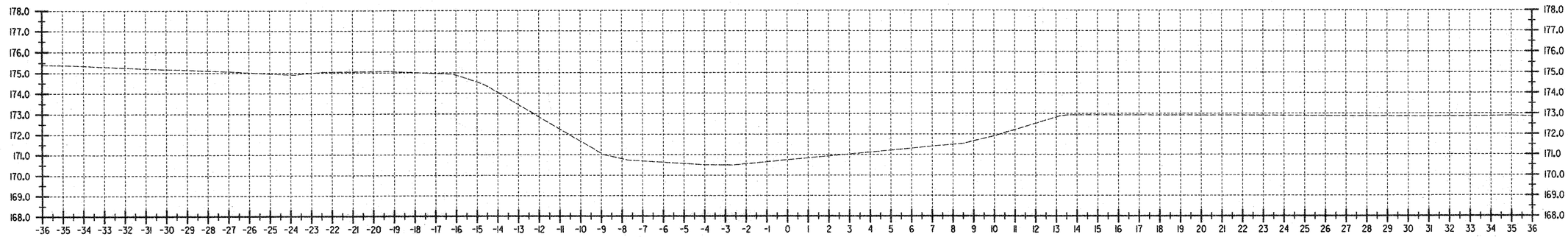
Metric



WR 1+440
WALLOOMSAC RIVER



WR 1+430
WALLOOMSAC RIVER



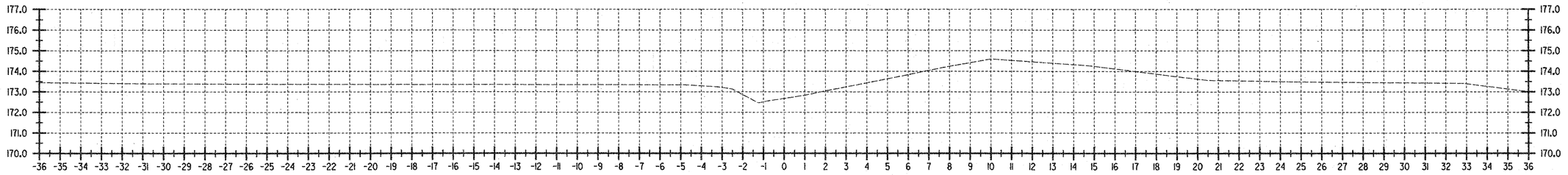
WR 1+420
WALLOOMSAC RIVER

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DRAWN BY J.S.L. DATE 6/98
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VAOT/VTSECT3.D
IPARM FILE
DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) c/4
PROJ. NO. P.I.N. 1306.60
SHEET 376 OF 385 SHEETS

Metric



RAB 1+020
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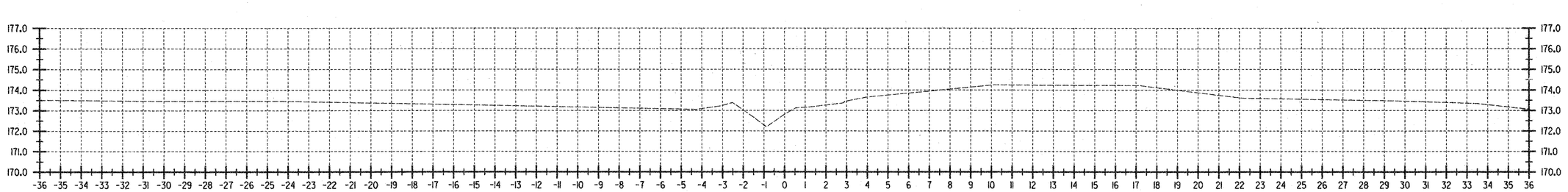

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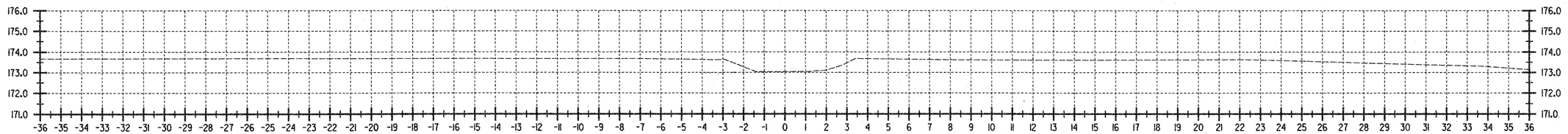
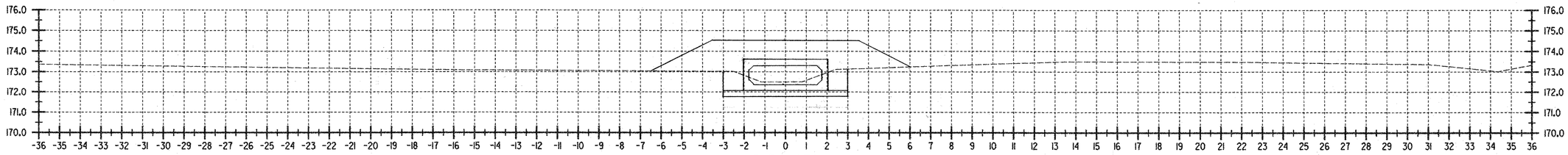


RAB 1+000
RAMP AB CHANNEL

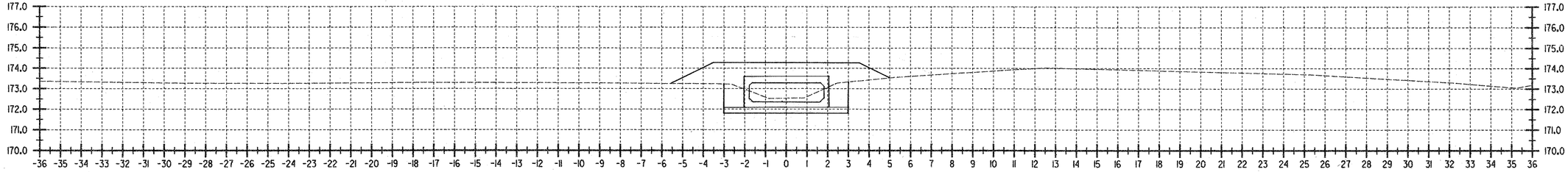
DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

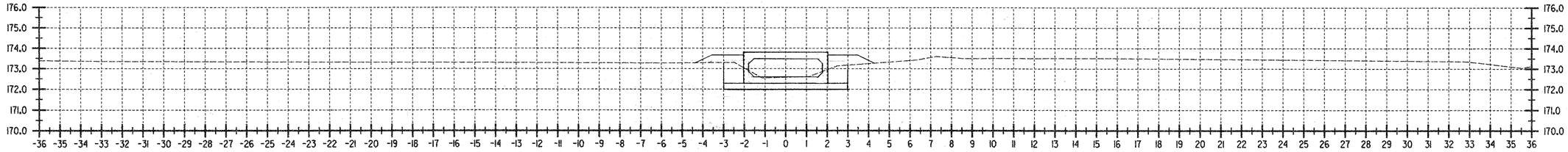
SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DRAWN BY J.S.L. DATE 6/98
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VAOT/VTSECT3.D
IPARM FILE _____ DATE PLOTTED _____
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) c/4
PROJ. NO. P.I.N. 1306.60
SHEET 377 OF 385 SHEETS



RAB 1+050
RAMP AB CHANNEL



RAB 1+040
RAMP AB CHANNEL



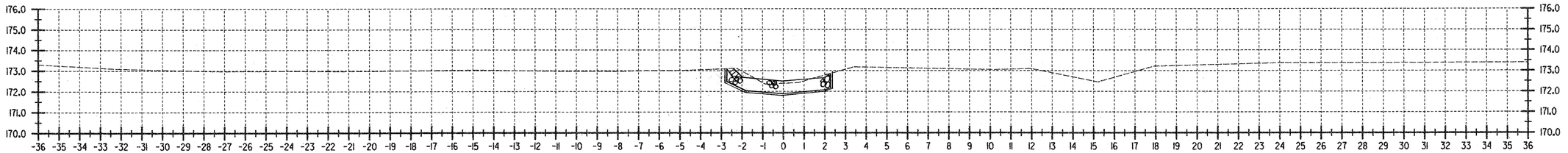
RAB 1+030
RAMP AB CHANNEL

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

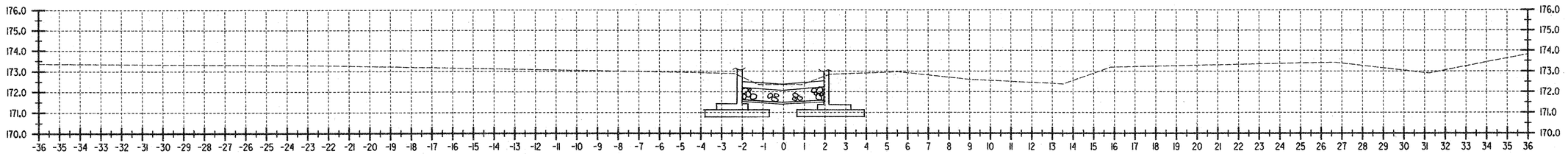
ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DRAWN BY J.S.L. DATE 6/98
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VAOT/VTSECT3.D
IPARM FILE _____ DATE PLOTTED _____
PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) C/1
PROJ. NO. P.I.N. 1306.60
SHEET 378 OF 385 SHEETS

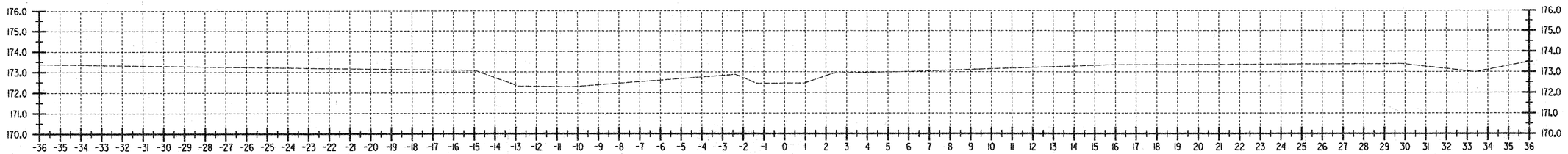
Metric



RAB 1+080
RAMP AB CHANNEL



RAB 1+070
RAMP AB CHANNEL



RAB 1+060
RAMP AB CHANNEL

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

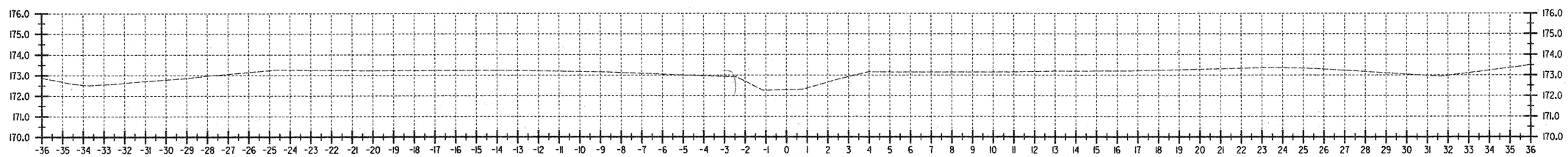
ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED

2 0 2 m

H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DRAWN BY J.S.L. DATE 6/98
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VAOT/VTSECT3.D
IPARM FILE _____ DATE PLOTTED _____
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) c/4
PROJ. NO. P.I.N. 1306.60
SHEET 379 OF 385 SHEETS

Metric



RAB 1+088.605
RAMP AB CHANNEL

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED

2 0 2 m

H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DRAWN BY J.S.L. DATE 6/98
SQUAD LEADER T.P.K.

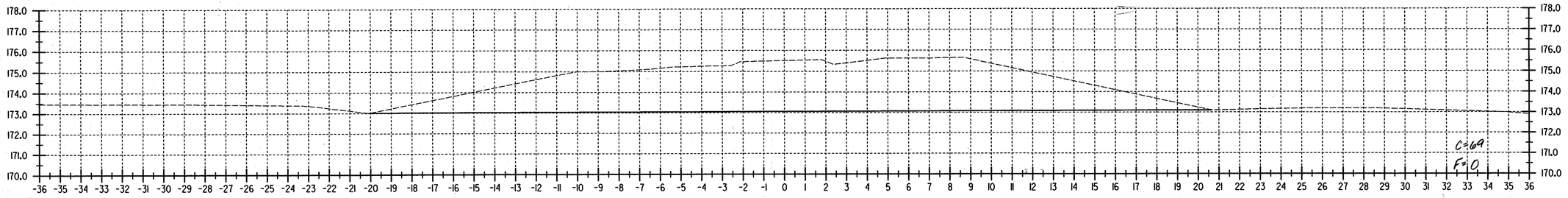
DESIGN FILE NO. /5116/VAOT/VTSECT3.D

IPARM FILE _____ DATE PLOTTED _____

PROJ. NAME BENNINGTON - HOOSICK
D.P.I. 0146(1) c/4

PROJ. NO. P.I.N. 1306.60

SHEET 380 OF 385 SHEETS



Z10+040
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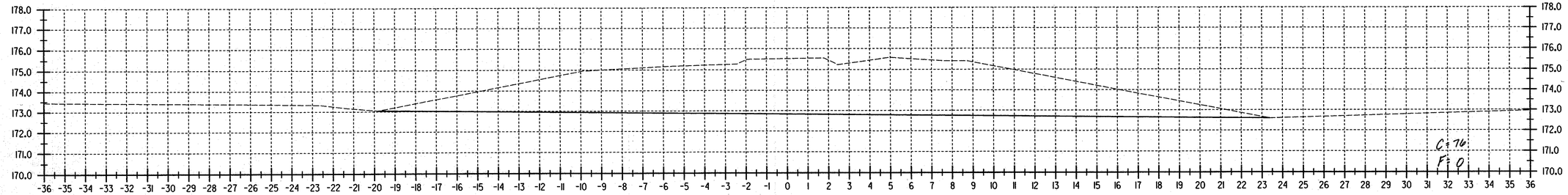

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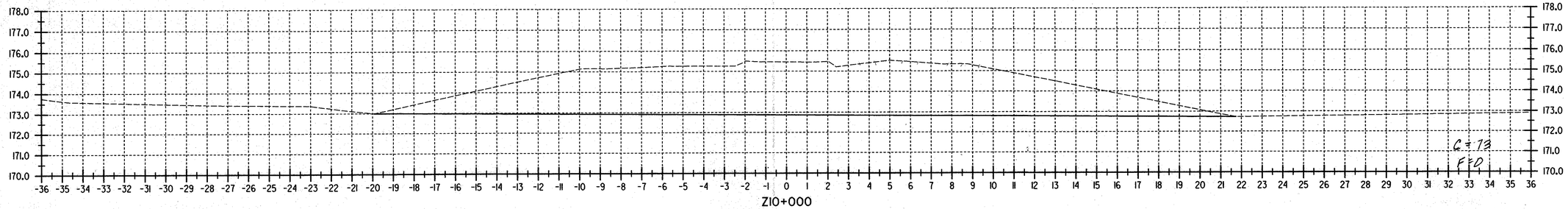

Z10+000
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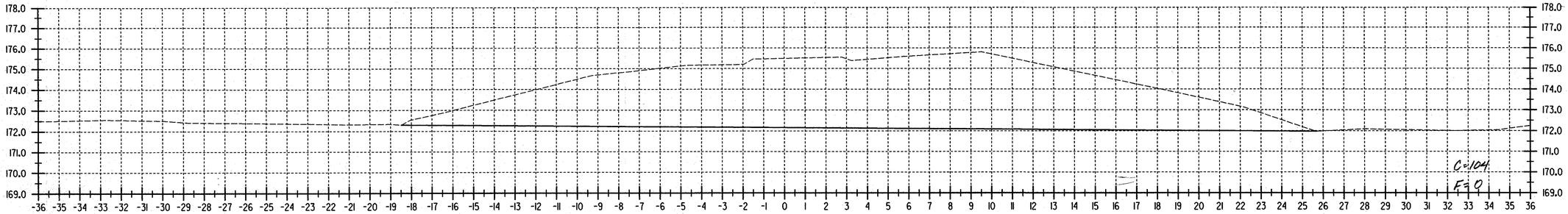
FILE NAME =$FILE$
DATE/TIME =$DATE$
USER =$NTUSER$

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DRAWN BY J.S.L. DATE 6/98
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VAOT/EXRAMPAB
IPARM FILE DATE PLOTTED
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
SHEET 381 OF 385 SHEETS

Metric VAOT



Z10+100
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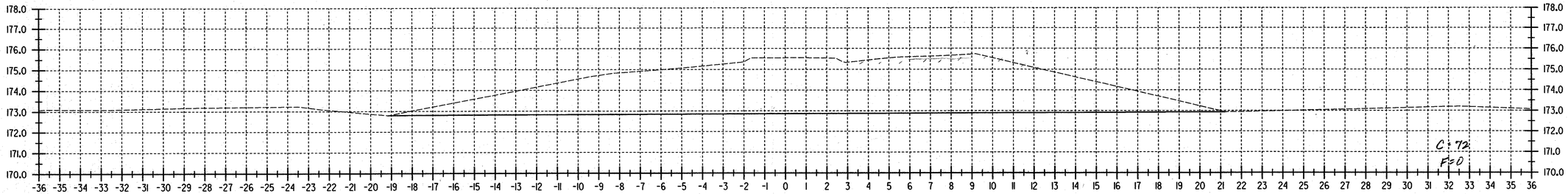

Z10+080
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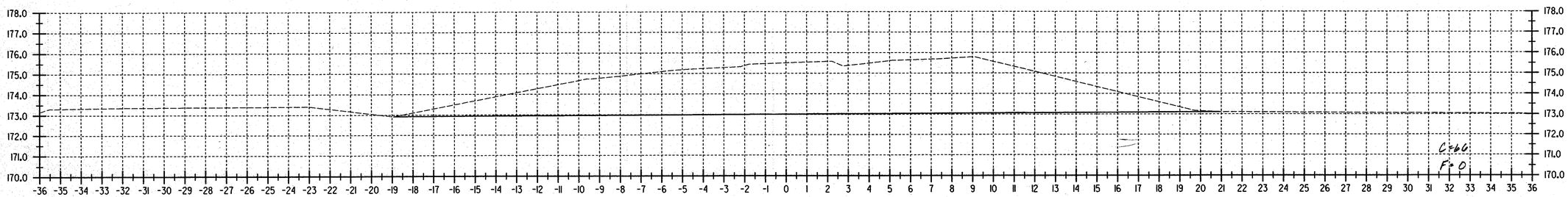

Z10+060
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USER =$NTUSER$

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DRAWN BY J.S.L. DATE 6/98
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VAOT/EXRAMPAB
IPARM FILE _____ DATE PLOTTED _____
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
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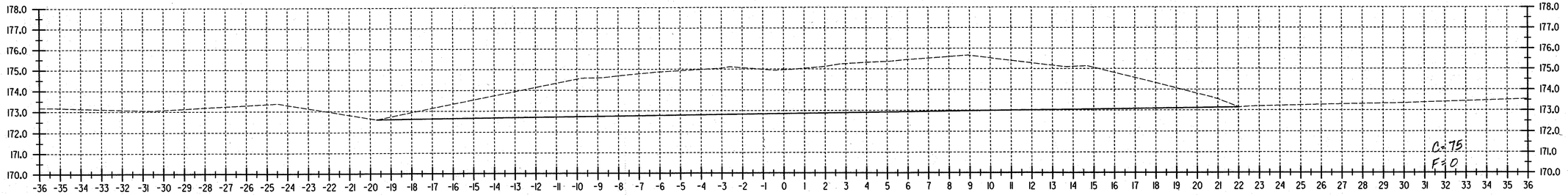
Metric



Z10+160
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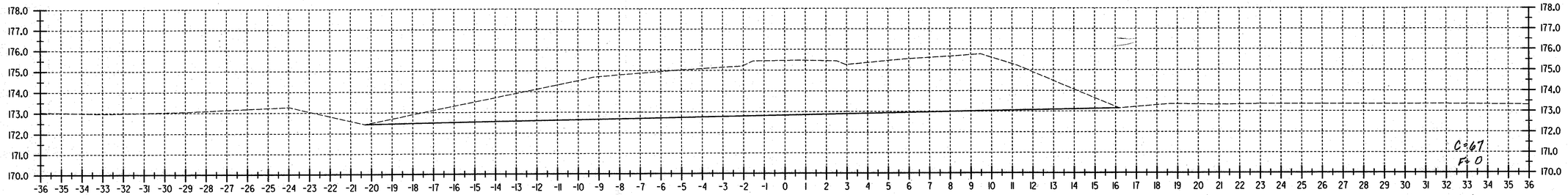
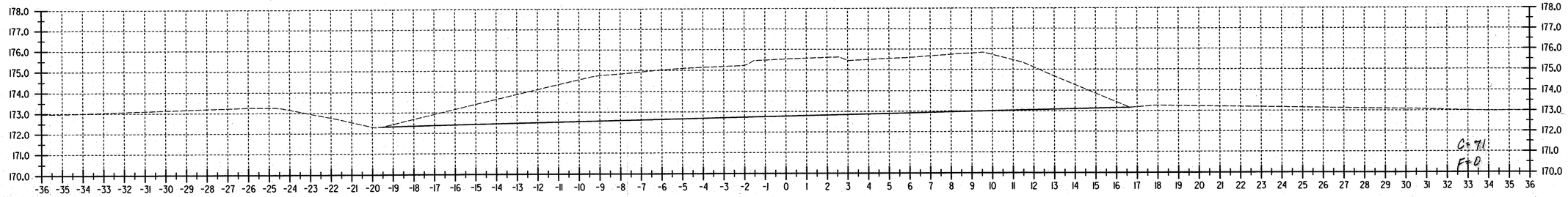


Z10+140
EXISTING RAMP AB



Z10+120
EXISTING RAMP AB

FILE NAME =$FILE$
DATE/TIME =$DATE$
USER =$NTUSER$

DATUM

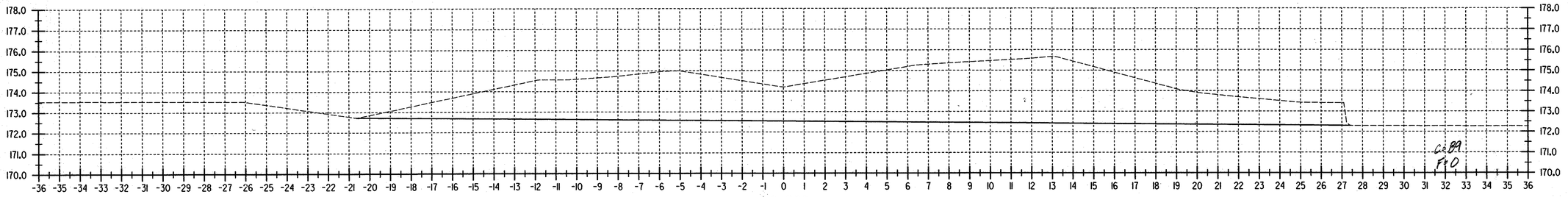
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED

2 0 2 m

H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DRAWN BY J.S.L. DATE 6/98
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VAOT/EXRAMPAB
IPARM FILE _____ DATE PLOTTED _____
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
SHEET 383 OF 385 SHEETS



Z10+220
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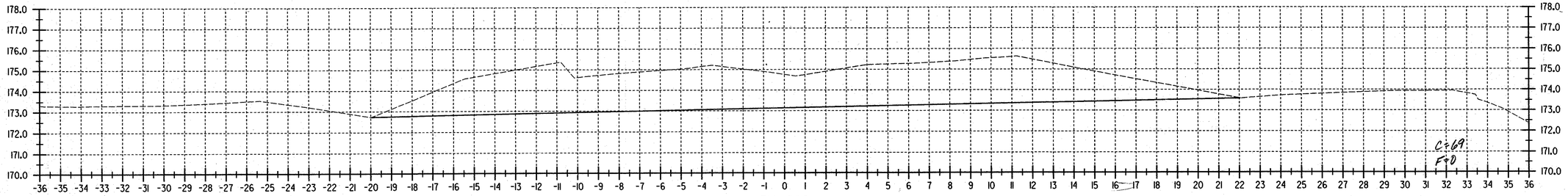
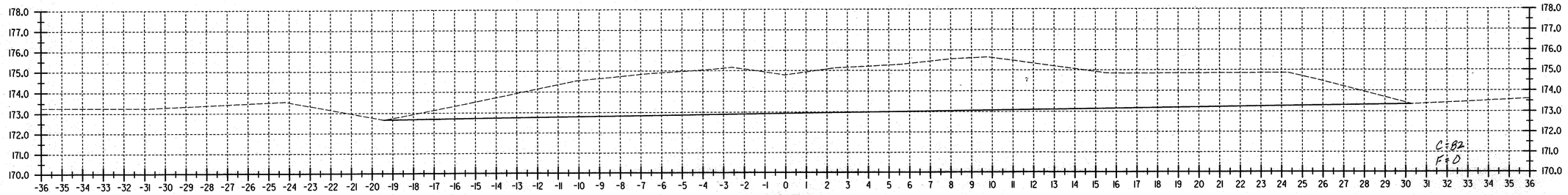


Z10+200
EXISTING RAMP AB



Z10+180
EXISTING RAMP AB

FILE NAME =$FILE$
DATE/TIME =$DATE$
USER =$NTUSER$

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DRAWN BY J.S.L. DATE 6/98
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VAOT/EXRAMPAB
IPARM FILE _____ DATE PLOTTED _____
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
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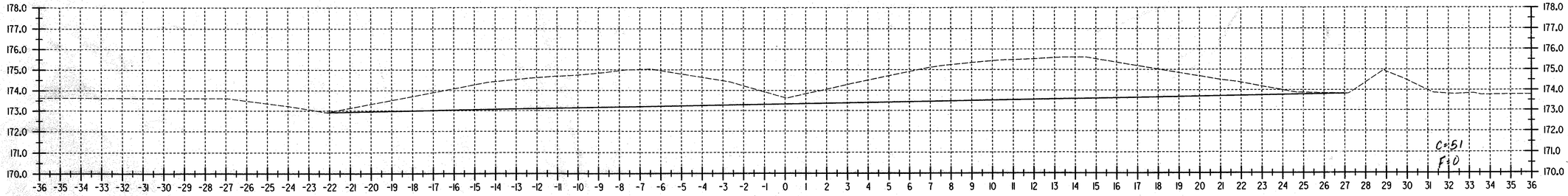
VAOT Metric



Z10+228
EXISTING RAMP AB

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DATE/TIME =$DATE$
USER =$NTUSER$

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

ALL DIMENSIONS IN MILLIMETERS
EXCEPT AS INDICATED
2 0 2 m
H 1:100
V 1:100

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DRAWN BY J.S.L. DATE 6/98
SQUAD LEADER T.P.K.
DESIGN FILE NO. /5116/VAOT/EXRAMPAB
IPARM FILE _____ DATE PLOTTED _____
PROJ. NAME BENNINGTON - HOOSICK D.P.I. 0146(1) C/4
PROJ. NO. P.I.N. 1306.60
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