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RECORD PLANS-MATERIAL SUPPLIERS

CONTRACTOR-AMERICAN BRIDGE RAILING CORP., LYNN, MASS. CONTRACT DATED-3 OCTOBER 1979

CONSTRUCTION BEGAN-2 JANUARY 1979 COMPLETED-9 AUGUST 1979 ACCEPTED-23 AUGUST 1979

RESIDENT ENGINEER-FREDERICK W. ROSS III RECORD PLANS-PAUL E. SINGLETON

1 1/4" GALVANIZE PIPE-AMERICAN BRIDGE RAILING CORP., LYNN, MASS.

JOINT SEALER POLYURETANE-SONNEBORN BUILDING PRODUCTS, MINNEAPOLIS, MINN.

PREFORMED FABRIC MATERIAL-B.F. GOODRICH ENGINEERING PRODUCTS CO., AKRON, OHIO

DRAIN TROUGH SUPPORTS-CONCORD STEEL CORP., EVERETT, MASS.

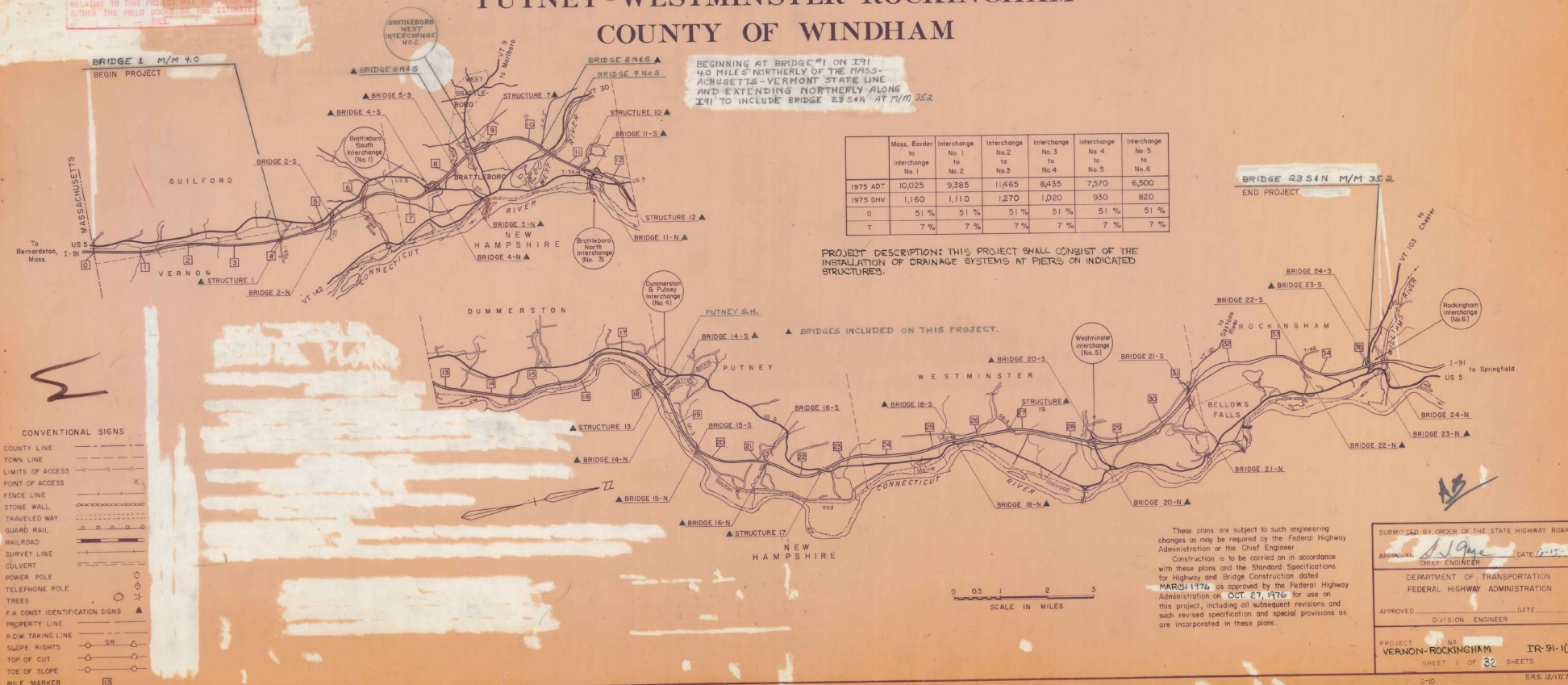
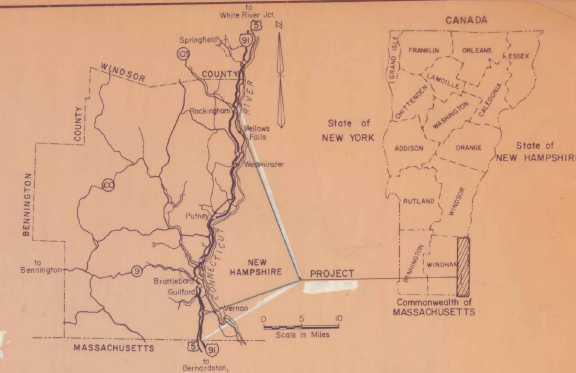
PAINT-CADILAC PAINT AND VARNISH CO. INC., ALLSTON, MASS.

NOTE: ANY FURTHER INFORMATION CONCERNING
 FINAL QUANTITIES, AMOUNTS OR OTHER DETAILS
 RELATIVE TO THIS PROJECT MAY BE FOUND IN
 EITHER THE FIELD BOOK OR THE ESTIMATE
 FILE

STATE OF VERMONT DEPARTMENT OF HIGHWAYS



PROPOSED IMPROVEMENT TOWNS OF VERNON-BRATTLEBORO- PUTNEY-WESTMINSTER-ROCKINGHAM COUNTY OF WINDHAM



BEGINNING AT BRIDGE #1 ON I-91
 4.0 MILES NORTHERLY OF THE MASS-
 CHUSETTS-VERMONT STATE LINE
 AND EXTENDING NORTHERLY ALONG
 I-91 TO INCLUDE BRIDGE 23 54N AT M/M 35.2

	Mass. Border to Interchange No. 1	Interchange No. 1 to No. 2	Interchange No. 2 to No. 3	Interchange No. 3 to No. 4	Interchange No. 4 to No. 5	Interchange No. 5 to No. 6
1975 ADT	10,025	9,385	11,465	8,435	7,570	6,500
1975 DHV	1,160	1,110	1,270	1,020	930	820
D	51 %	51 %	51 %	51 %	51 %	51 %
T	7 %	7 %	7 %	7 %	7 %	7 %

PROJECT DESCRIPTION: THIS PROJECT SHALL CONSIST OF THE
 INSTALLATION OF DRAINAGE SYSTEMS AT PIERS ON INDICATED
 STRUCTURES.

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
- F.A. CONST. IDENTIFICATION SIGNS
- PROPERTY LINE
- R.O.W. TAKING LINE
- SLOPE RIGHTS
- TOP OF CUT
- TOE OF SLOPE
- MILE MARKER

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 Highway and Bridge Construction dated
 MARCH 1976 as approved by the Federal Highway
 Administration on OCT. 27, 1976 for use on
 this project, including all subsequent revisions and
 such revised specification and special provisions as
 are incorporated in these plans.

SUBMITTED BY ORDER OF THE STATE HIGHWAY BOARD

APPROVED: *[Signature]* DATE: *1-15-80*
 CHIEF ENGINEER

DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION

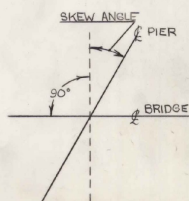
APPROVED: _____ DATE: _____
 DIVISION ENGINEER

PROJECT: VERNON-ROCKINGHAM TR-91-1(5)
 SHEET 1 OF 82 SHEETS

BRIDGE NO.	TOWN	DESCRIPTION	MILEAGE SEE NOTE NO. 4 BELOW	SKEW / SEE DETAIL BELOW	DECK WIDTH CURB TO CURB	CURB WIDTH	REFERENCE STANDARD Dwg. FOR EXISTING EXPANSION JOINT	BEAM SPACING	EST. LENGTH DRAIN TROUGH	NO. OF NEW DRAIN TROUGH	EST. TOTAL LENGTH OF NEW TROUGH PER BRIDGE	EST. WIDTH OF NEW FABRIC FOR TROUGH	DIRECTION OF FLOW IN TROUGH	EXTERIOR BEAM END PLATES TO BE REMOVED (SEE SHEET NO. 4)	TYPE OF PIER DIAPHRAM	REMARKS
1	VERNON	S.A. #1 OVER I-91	4.0	28°	30'	2'-2"-5"	SB-20-56	6'-0	40'	3	120'	16"	LT.	6	CONCRETE	CHEEK WALLS ON PIERS.
4N	BRATTLEBORO	I-91 OVER US 5	7.5	41°	30'	↑	SCB-30-56	7'-6	47'	1	40'	↑	LT.	2	↑	
4S	"	" " " "	7.5	41°	44'		" " "	7'-6	65'	1	65'		LT.	2		
5N	"	I-91 OVER MAPLE ST.	8.2	17°	42'		SCB-42-56	7'-0	49'	2	98'		LT.	4		
5S	"	" " " "	8.2	20°	42'		" " "	7'-0	50'	2	100'		LT.	4		
6N	"	I-91 OVER WILLIAMS ST.	8.4	10°	30'		SCB-30-56	7'-6	36'	4	144'	↓	RT.	8		
6S	"	" " " "	8.4	5°	30'	2'-2"-5"	" " "	7'-6	36'	4	144'	16"	RT.	8		
7	"	VT 9 OVER I-91	8.7	0°	64'	2'-2"-5" VAR. MED.	SCB-42-56	7'-3	78'	1	78'	16" TO 36"	RT. & LT.	2		1-PIPE IN 3RD & 7TH BAY.
8N	"	I-91 OVER SA 5	10.3	20°	42'	2'-2"-5"	" " "	7'-0	50'	2	100'	16"	RT.	4		
8S	"	" " " "	10.3	20°	42'	↑	" " "	7'-0	50'	2	100'	16"	RT.	4		
10	"	TR 36 OVER I-91	11.2	4°	30'		SCB-30-56	7'-6	43'	3	129'	16" TO 36"	RT. & LT.	6		2-PIPES IN 1ST BAY
11N	"	I-91 OVER BRATTLEBORO SR.	11.6	1°	42'		SCB-42-56	7'-0	47'	2	94'	16" TO 36"	RT. & LT.	NONE		
11S	"	" " " "	11.6	1°	42'		" " "	7'-4	47'	2	94'	16" TO 36"	RT. & LT.	↑		
12	BRATTLEBORO	US 5 OVER I-91	12.2	33°	30'		SB-22-58	7'-6	42'	3	126'	16"	LT.			CONDUIT IN 4TH BAY
13	PUTNEY	PUTNEY S.H. OVER I-91	18.2	17°	30'			7'-6	37'	3	111'	↑	RT.			1 PIPE OUTSIDE RT. FACIA BEAM
14N	"	I-91 OVER SACKETTS BRK.	18.5	20°	30'			7'-6	38'	2	76'		LT.			
14S	"	" " " "	18.5	20°	30'			7'-6	38'	2	76'		LT.			
15N	"	I-91 OVER SA 3	19.7	45°	30'			7'-6	50'	4	200'		LT.			
15S	"	" " " "	19.7	45°	30'			7'-6	50'	2	100'		LT.			
16N	"	I-91 OVER TH 50 + PUT. BRK.	21.3	0°	30'			7'-6	35'	3	105'		LT.			
16S	"	" " " "	21.3	0°	30'			7'-6	35'	3	105'	↓	LT.			
17	PUTNEY	US 5 OVER I-91	22.6	55°	30'			7'-6	61'	3	183'	16"	RT.			
18N	WESTMINSTER	I-91 OVER TH 52	25.6	22°	42'			7'-0	51'	2	102'	16" TO 36"	RT. & LT.			
18S	"	" " " "	25.6	34°	42'			7'-0	57'	2	114'	16"	LT.			
19	"	SA 4 OVER I-91	26.8	39°	30'			7'-6	45'	3	135'	↑	RT.			
20N	"	I-91 OVER WESTMINSTER STATE HIGHWAY	28.6	28°	30'	↓		7'-6	40'	2	80'	↓	LT.			
20S	WESTMINSTER	" " " "	28.6	28°	30'	2'-2"-5"	SB-22-58	7'-6	40'	2	80'	16"	LT.		CONCRETE	
22N	ROCKINGHAM	I-91 OVER TH 46	33.7	15°	38'	2'-2"-8"	SB-22-60	7'-6	45'	2	90'	16" TO 36"	RT. & LT.		STEEL	SEE DETAILS SHEET NO. 5
23N	"	I-91 OVER VT 103	35.2	16°	30'	2'-2"-8"	SB-22-56	7'-6	37'	2	74'	16"	LT.		CONCRETE	
23S	ROCKINGHAM	" " " "	35.2	16°	42'	2'-2"-8"	SB-22-56	7'-0	50'	2	100'	16"	LT.	NONE	CONCRETE	
TOTAL									71	3165	3165	TOTAL				50
										3165	3165					
										3165	3165					

NOTES

1. STATIONING FOR I-91 IS ASSUMED TO RUN IN A NORTHERLY DIRECTION.
2. STATIONING FOR A STRUCTURE CROSSING OVER I-91 IS ASSUMED TO RUN FROM EAST TO WEST.
3. BEAMS OR BAYS BETWEEN BEAMS ARE NUMBERED LEFT TO RIGHT. THE LEFT FACIA BEAM IS ASSUMED TO BE THE "1" BEAM.
4. MILEAGE NOTED FOR STRUCTURE IS MEASURED FROM THE MASSACHUSETTS-VERMONT LINE IN A NORTHERLY DIRECTION ALONG I-91.
5. ESTIMATED LENGTH, WIDTH, AND DIRECTION OF FLOW FOR THE NEW FABRIC TROUGH IS ONLY APPROXIMATE AND MAY BE CHANGED BY THE ENGINEER SO AS TO MEET EXISTING FIELD CONDITIONS.



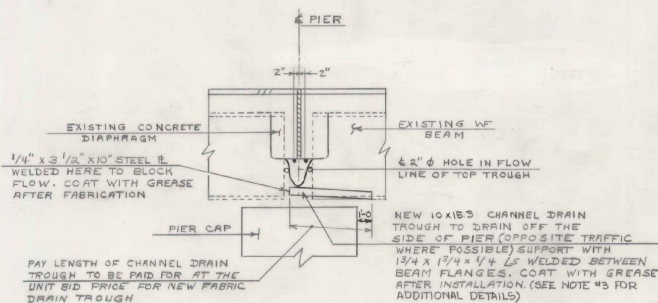
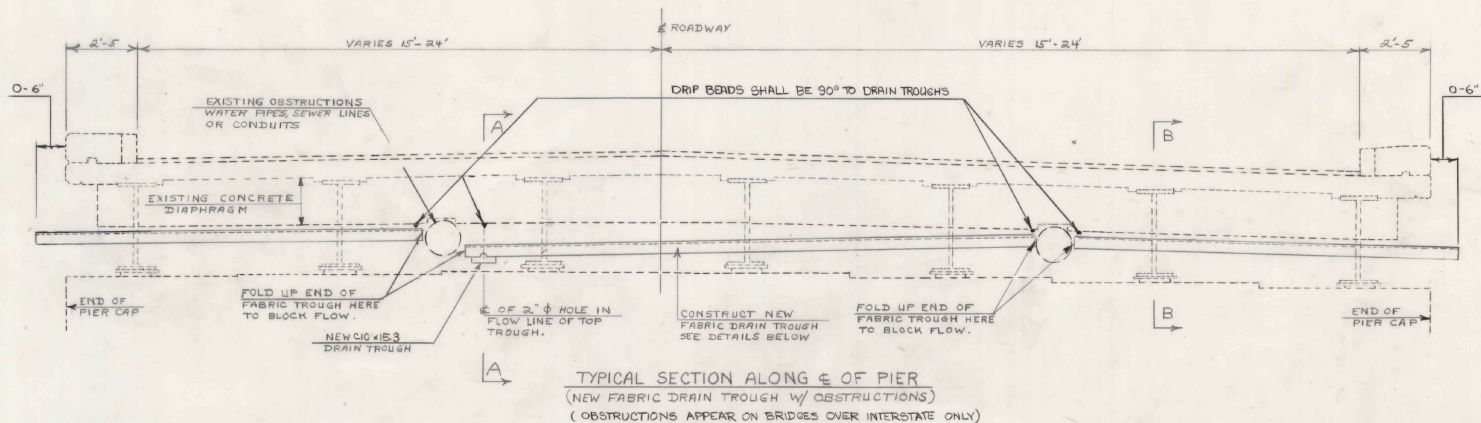
SKEW ANGLE DETAIL

QUANTITIES

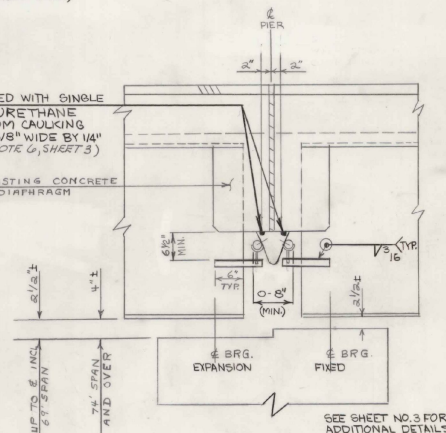
NO.	ITEM	UNIT	ORIGINAL	FINAL
506.80	DRAIN TROUGH	LF	3200	
637.10	MAINTENANCE OF TRAFFIC FOR BRIDGE PROJECTS	LS	1	

STATE OF VERMONT DEPARTMENT OF HIGHWAYS

TOWN OF	VERNON-ROCKINGHAM	Bridge No.	VARIOUS
Highway No.	I-91	Log Sta.	
SUMMARY CHART OF STRUCTURES			
RECEIVING NEW FABRIC DRAIN TROUGH			
Designed by	D. PERKINS	Drawn by	D. PERKINS & C. DUBRAY
Checked by	D.E. LATHROP	Bridge Design Supervisor	W. TRIPP
PROJECT	VERNON-ROCKINGHAM	PROJECT NO.	IR-91-1(3)
Bridge Sheet No.		Sheet	2 of 32

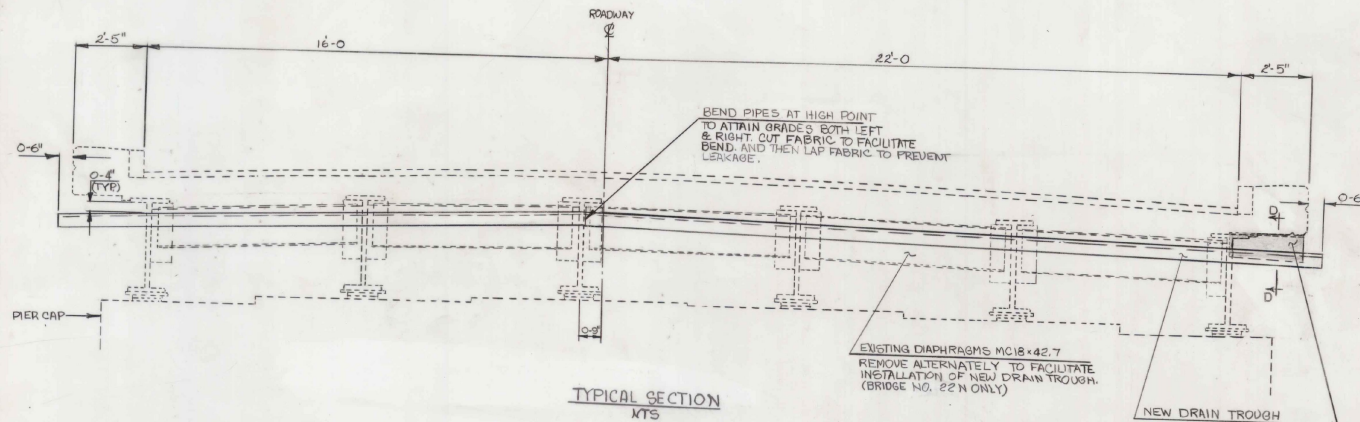


DRIP BEADS FORMED WITH SINGLE COMPONENT POLYURETHANE (TO BE APPLIED FROM CAULKING GUN CARTRIDGES) 3/8" WIDE BY 1/4" DEEP MIN. (SEE NOTE 6, SHEET 3)



NOTES

1. ALL NEW STEEL COMPONENTS USED IN CONSTRUCTING FABRIC DRAIN TROUGHS SHALL BE PAINTED AS SPECIFIED IN SECTION 513 OF STANDARD SPECIFICATIONS AND SPRAY COATED WITH ONE COAT OF GREASE. GREASE WILL BE AS SPECIFIED IN SPECIAL PROVISIONS.
2. IN LIEU OF WELDER CERTIFICATION, THE WELDER MAY BE APPROVED BY DEMONSTRATION TO THE ENGINEER OF HIS ABILITY TO PERFORM SATISFACTORY WELDING.
3. THE NEW 10 X 153 CHANNEL SHALL BE USED TO DRAIN WATER OFF THE SIDE OF THE PIERS WHEN AN OBSTRUCTION TO THE MAIN FABRIC TROUGH IS ENCOUNTERED. THE CHANNEL MAY BE SUPPORTED BY SHORT LEGS SETTING ON THE CONCRETE PIER CAP, HOWEVER, IT SHOULD ALSO BE ATTACHED TO W8 BEAM FLANGES IN SUCH A MANNER AS TO HOLD THE CHANNEL FIRMLY IN POSITION. PAYMENT FOR CHANNEL TROUGH (MATERIALS AND INSTALLATION) WILL BE AT THE SAME UNIT PRICE AS THE FABRIC DRAIN TROUGH.
4. BRIDGES 1, 7, 10, 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, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 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TYPICAL SECTION
NTS

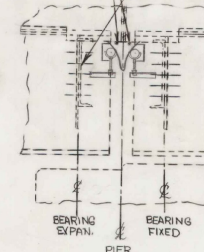
EXISTING DIAPHRAGMS MC18x42.7
REMOVE ALTERNATELY TO FACILITATE
INSTALLATION OF NEW DRAIN TROUGH.
(BRIDGE NO. 22 N ONLY)

NEW DRAIN TROUGH

APRONS ARE TO BE USED AT
LOW ENDS OF TROUGHS ON ALL
STRUCTURES WHERE SKEW ANGLE
IS GREATER THAN 30°

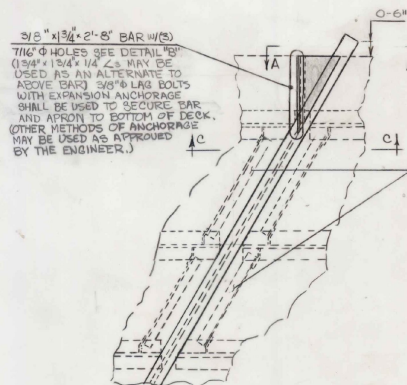
D RIP BENDS FORMED WITH
SINGLE COMPONENT
POLYURETHANE (TO BE
APPLIED FROM CAULKING
GUN CARTRIDGES) 3/8" WIDE
BY 1/4" DEEP MIN.

REMOVE EXISTING MC18x42.7, PERFORM
NECESSARY WORK TO INSTALL NEW DRAIN
TROUGH, REINSTALL DIAPHRAGM REUSING
EXISTING HARDWARE.

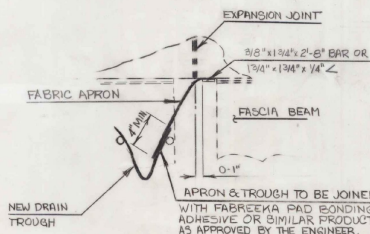


SEE SHEET 3 FOR ADDITIONAL DETAILS.

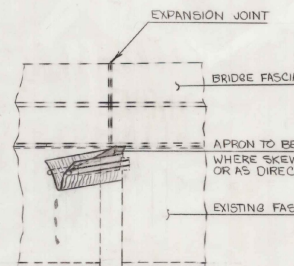
SECTION C-C
NTS



TYPICAL PARTIAL PLAN VIEW @ PIER
NTS

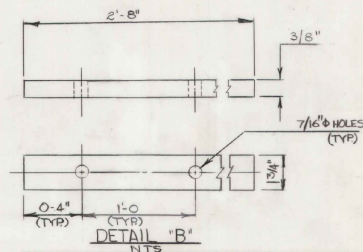


SECTION D-D
NTS



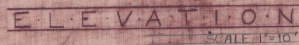
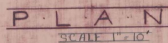
VIEW A-A
NTS

NOTES
1) FOR INSTALLATION & MATERIAL DETAILS
OF TROUGH SEE SHEET NO. 3

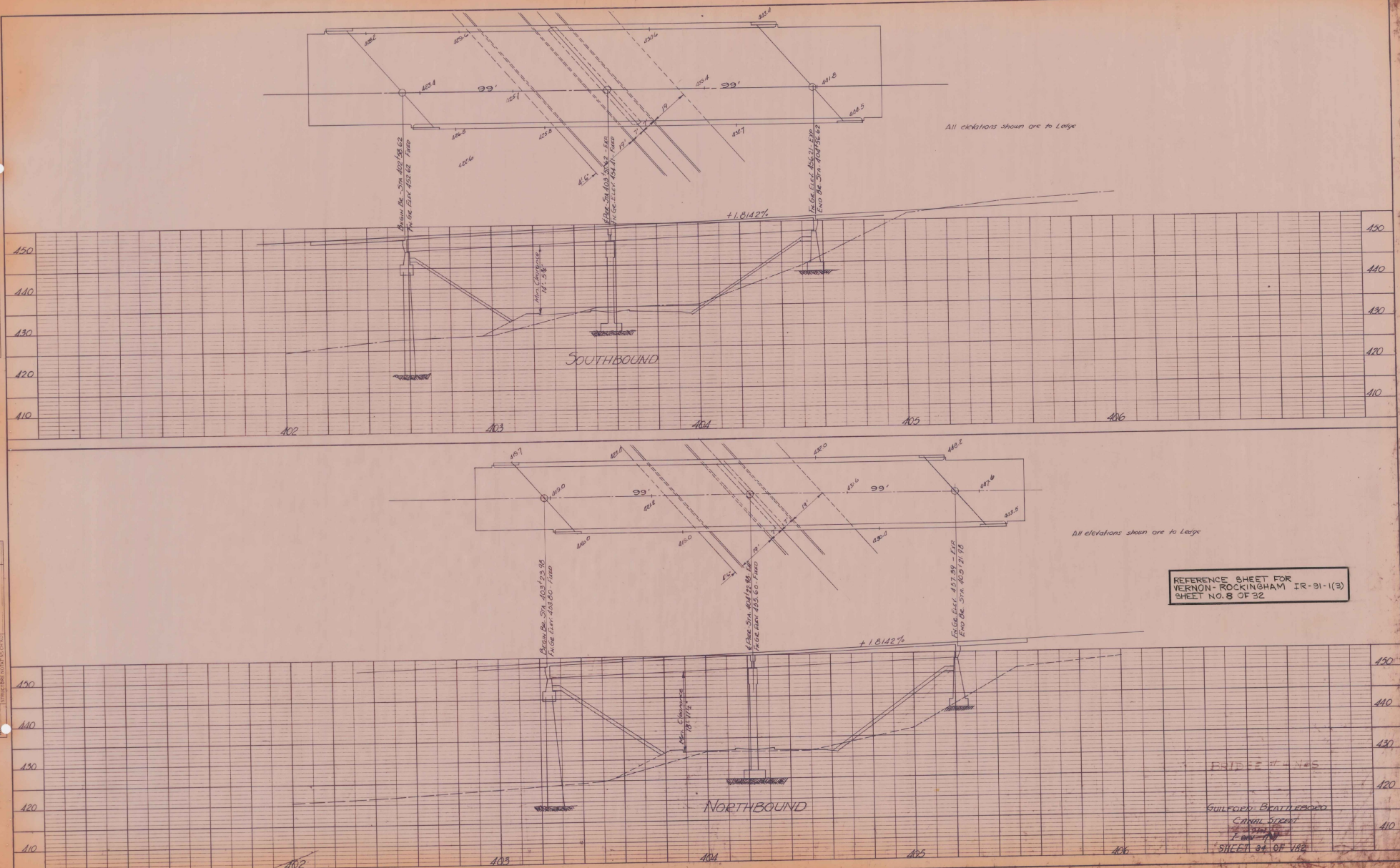
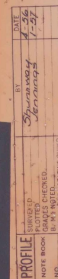


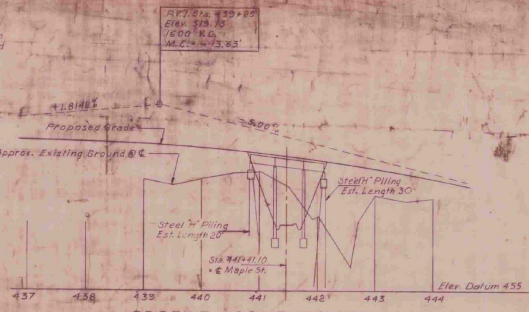
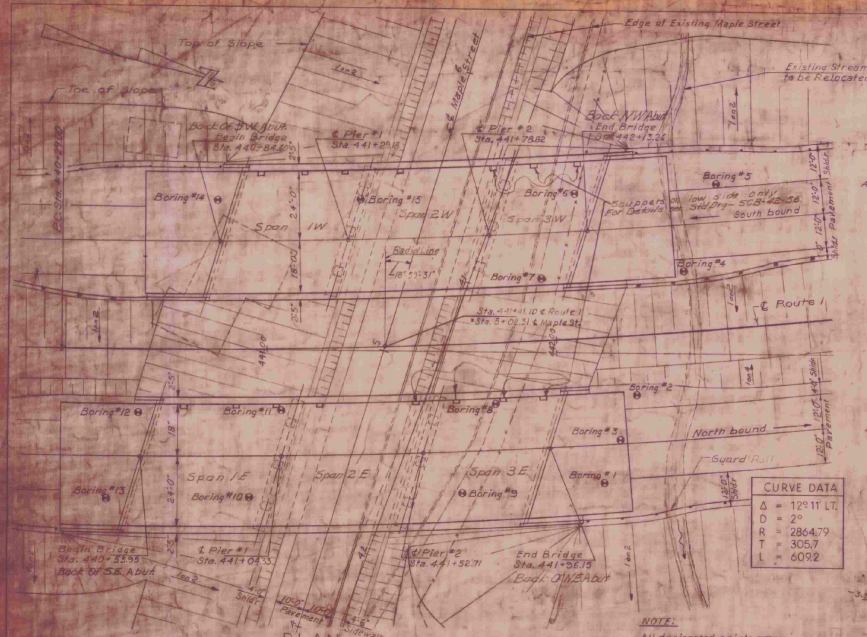
STATE OF VERMONT DEPARTMENT OF HIGHWAYS

TOWN OF	VERNON - ROCKINGHAM	Bridge No.	22 N
HIGHWAY NO.	I 91	Log Sta.	
		Surv. Sta.	1783+92.22
EXPANSION JOINT DRAIN TROUGH			
DETAILS			
Designed by	D. PERKINS	Drawn by	G. DUBRAY
Checked by	DE LATHROP	Bridge Design Supervisor	W. TRIPP
date	6/78	date	6/78
PROJECT	VERNON - ROCKINGHAM	PROJECT NO.	1R-91-1(3)
Bridge Sheet No.	Sheet	5	of 32

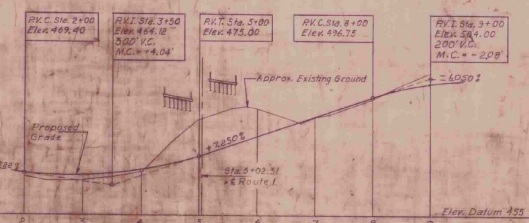


TOWN OF VERNON
ROUTE NO. INTERSTATE LOG STA. 10
UNDERPASS @ 222' 87.4
DEAN & ELEVATION 100
SCALE 1" = 10' 0"
SURVEYED BY Debor
DRAWN BY 11 CHECKED BY NM
Vernon 5-11-1988
PROJECT NO. 11000-1 (3)
SHEET 27 OF 150

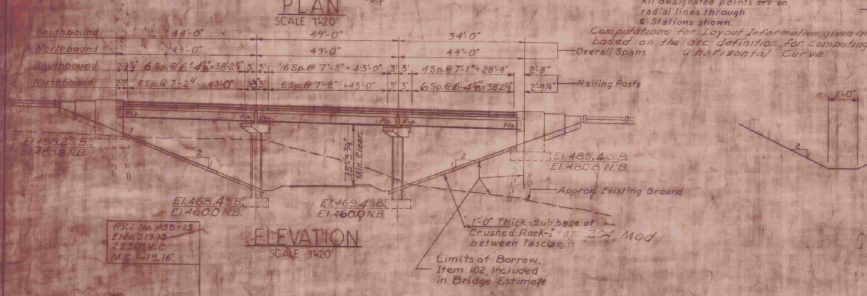




PROFILE SOUTHBOUND
INTERSTATE ROUTE 1
SCALES: HORIZ 1"=100'
VERT. 1"=20'



PROFILE MAPLE STREET AT
SCALES: HORIZ 1"=100'
VERT. 1"=20'



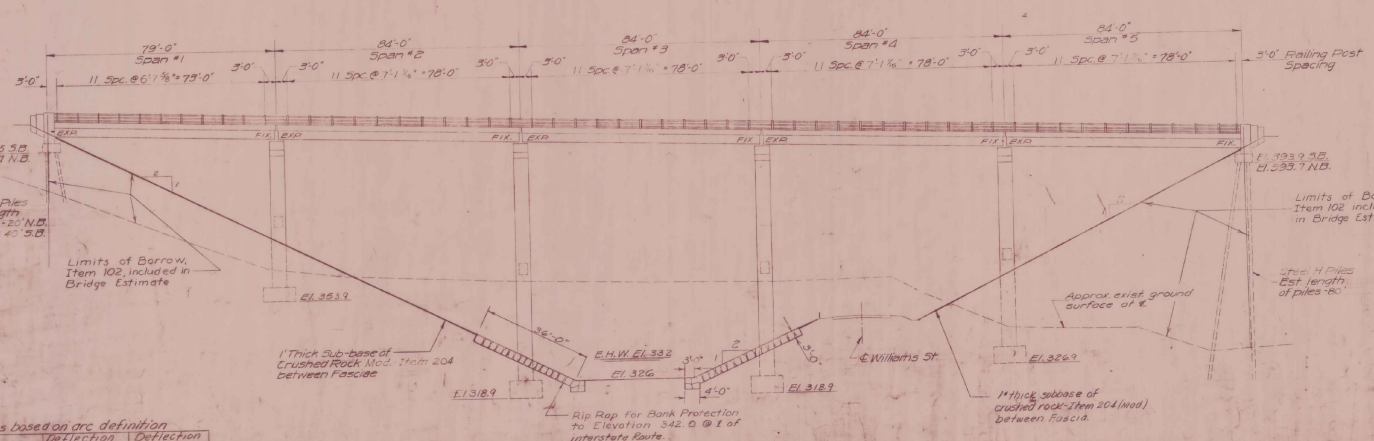
ELEVATION
SCALE 1"=20'





ROUTE 1 CURVE DATA
 $\Delta = 41^{\circ}22'$ R.
 $D = 5'$
 $R = 1925.66'$
 $T = 78.1'$
 $L = 1378.9'$
 $E = 13.6'$

PLAN
 Scale 1"=20'



Deflections based on arc definition

	Degree of Curve	Deflection Angle for a 100' Span	Deflection Angle for an 84' Span
Southbound Lane	2°-56'-36"	2°-14'-31"	1°-17'-06"
NB	5°-00'-00"	3°-00'-00"	
Northbound Lane	3°-02'-55"	1°-09'-45"	1°-14'-10"

ELEVATION
 Scale 1"=4'

ESTIMATE OF QUANTITIES FOR TWO BRIDGES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
102	Borrow	CY	47700
204	Sub-base of Crushed Rock Mod.	CY	850
36-B	Bituminous Concrete Pavement (Mod)	Ton	390
117	70# Concrete Reinforcing Steel (Mod)	CY	2714
401-2	Concrete Class 4 (Mod)	CY	2714
402	Reinforcing Steel	LB	243,910
403	Spiral Reinforcement	13810 lbs.	1
404A	Structural Steel	LB	1185,836
501	Turning Equipment for Erosion	L.S.	16
222	Grout Drilling	LB	0
504	Steel Piling	LF	2200
505-2	Granite Bridge Curb	LF	1642
506	Bridge Railing	CY	2268
507	Structure Excavation	CY	144
508	Asphaltic-Asbestos Coating	CY	2070
509	Riprap for Bank Protection	CY	2070
442	Removal of Present Superstructure	L.S.	1

For quantities for partial treatment of approaches and standard sheet RS-57-7.
 * R.R. of Sta 464+25

GENERAL NOTES

- Materials and Construction shall conform to State of Vermont Department of Highways Standard Specifications for Highway and Bridge Construction, dated 1956.
- All design in accordance with AASHTO Standard Specifications for Highway Bridges, dated 1953. Loading is H20-S16 truck as modified for National System of Interstate Highways.
- Concrete shall attain a minimum strength of 3000 psi prior to the addition of any super-imposed load.
- All concrete to be Class B throughout.
- All welding to conform with the American Welding Society Standard Specifications for Welded Highway and Railway Bridges.
- All piles to be 105#42 and driven to a minimum bearing capacity of 37 tons. All pile caps are to be driven to the following minimum elevations unless otherwise directed by the engineer:
 Abut #1 5B elev. 371
 Abut #2 5B elev. 369
 #2 NB elev. 317
- Use self-lubricating plates for expansion devices on piers (standard 30-20-64).
- The beam seat elevations have been lowered 1' to allow for camber.
- Computations for layout information given are based on the one deflection for computing a horizontal curve.

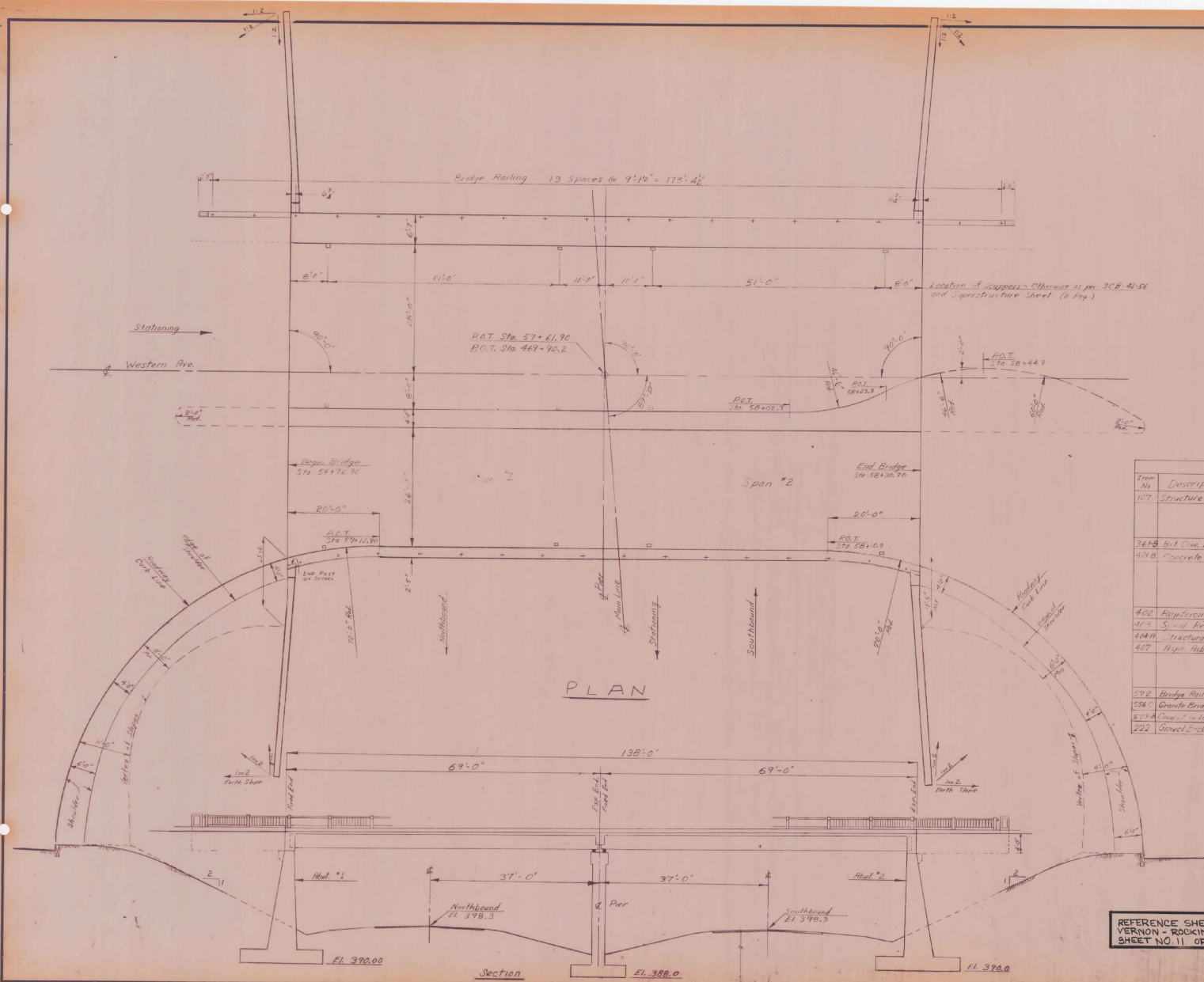
REFERENCE DRAWINGS

- BORING LOGS, PROFILES, & SECTIONS
 ABUTMENT DETAILS
 PIER DETAILS
 REINFORCING BAR SCHEDULE
 STANDARD DRAWINGS
- BRIDGE SHEET 2
 5B-2A-56
 5B-2B-56
 5B-2C-56
 5B-2D-56
 5B-2E-56
 5B-2F-56
 5B-2G-56
 5B-2H-56
 5B-2I-56
 5B-2J-56
 5B-2K-56
 5B-2L-56
 5B-2M-56
 5B-2N-56
 5B-2O-56
 5B-2P-56
 5B-2Q-56
 5B-2R-56
 5B-2S-56
 5B-2T-56
 5B-2U-56
 5B-2V-56
 5B-2W-56
 5B-2X-56
 5B-2Y-56
 5B-2Z-56

REFERENCE SHEET FOR
 VERNON-ROCKINGHAM IR-91-1(3)
 SHEET NO. 10 OF 32

BRIDGE 6N4S

VERMONT
 STATE HIGHWAY DEPARTMENT
 TOWN OF BRATTLEBORO
 INTERSTATE ROUTE 1
 WHETSTONE BROOK BRIDGE
 GENERAL PLAN AND ELEVATION
 W. H. MORGANLAND
 ENGINEER
 BINGHAMTON, N.Y.
 DESIGNED BY: T. H. MORGANLAND
 DRAWN BY: C. H. MORGANLAND
 PROJECT NO. 1-91(2) SHEET 10 OF 32



LIST OF WESTERN AVE BRIDGE SHEETS	
Estimated Quantities & Plan & Section (10 Scale)	
Plan (20 Scale)	
Profile & Bearings	
Abutment Details	
Abutment Details (Section)	
Pier	
Superstructure	
Railing Details	
Reinforcing Steel Sheet	
Standard SB-21-56	
Standard SB-20-56	
Standard SB-42-56	

ESTIMATED QUANTITIES		Quantities				
From No	Description	Location	Units	Net	Western	Eastern
107	Structure Excavation		CY			
	Abut. #1		CY	1220	122	1342
	Abut. #2		CY	1220	122	1342
	Pier		CY	199	20	219
3618	Bit. Conc. Ret. Bridge	Superstructure	Tons	106	16	122
4018	Concrete C.I. B.					
	Abut. #1		CY	739	37	776
	Abut. #2		CY	754	38	792
	Pier		CY	136	7	143
	Super		CY	328	16	344
402	Reinforcing Steel		Lbs			193,370
474	Struct. Reinforcement		L.S.	(est. Wt. 5,300 Lbs)		1
10418	Structural Steel		Lbs	277,680	6,000	305,680
407	Hydr. Metal Coating					67
	Abut. #1		S.Y.	18	—	18
	Abut. #2		S.Y.	18	—	18
	Pier		S.Y.	33	—	33
592	Bridge Railing Aluminum		L.F.	308	—	308
556	Granite Bridge Curb Type		L.F.	554	—	554
574	Concrete in Locking Section		L.S.	1	—	1
222	Gravel Endfill		CY			2

BRIDGE 7 WESTERN AVE. Rte. 9

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

TOWN OF BRATTLEBORO

ROUTE No. 91 LOG STA.

Estimated Quantities

Plan & Section

SCALE 1"=10'-0"

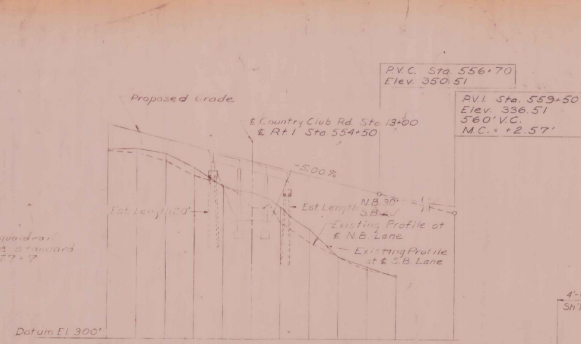
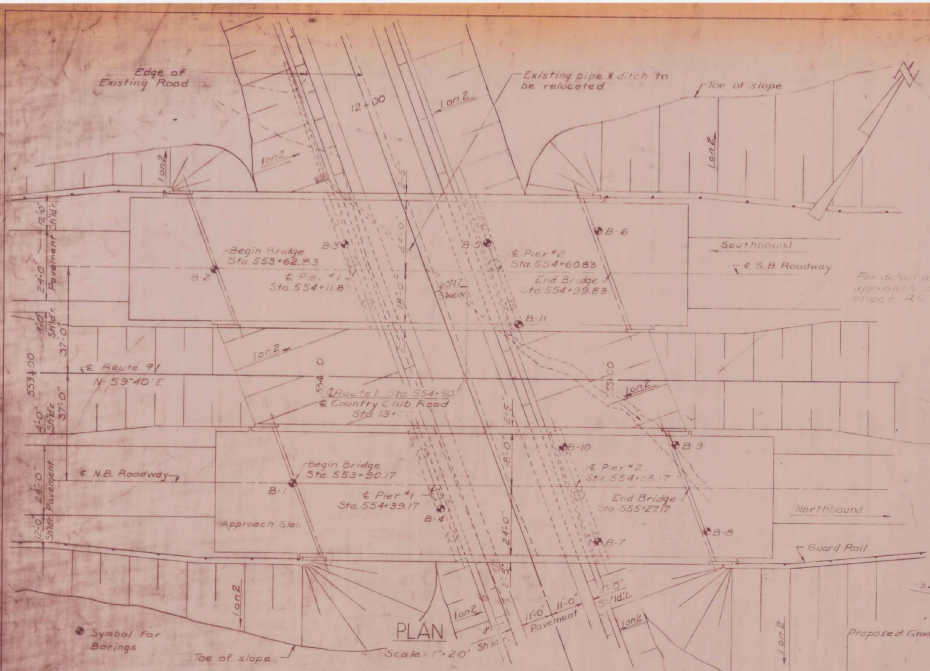
SURVEYED BY

DRAWN BY HANSELL CHECKED BY REEDMAN

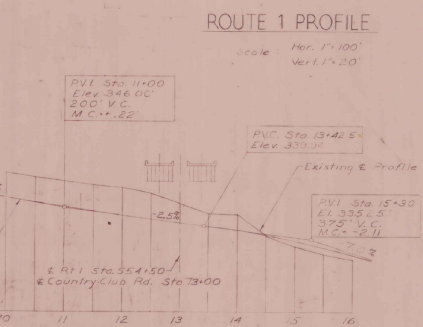
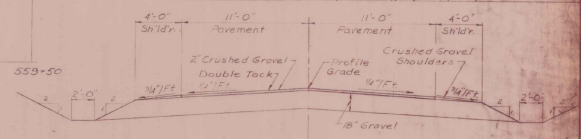
PROJECT No. 12911 (B)

SHEET 111 OF 496

REFERENCE SHEET FOR
VERNON - ROCKINGHAM IR-01-1(3)
SHEET NO 11 OF 32



ESTIMATE OF QUANTITIES FOR TWO BRIDGES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
102	Borrow	CY	2052
204	Sub-base of Crushed Rock Mod.	CY	369
361-B	Bituminous Concrete Pavement Mod.	Ton	235
222	Gravel Backfill	CY	0
401-B	Concrete - Class 8' Mod.	CY	1253
402	Reinforcing Steel	LB	18,510
403	Spiral Reinforcement 6230 lbs	LB	1
404-A	Structural Steel	LB	286,700
501	Furnishing Equipment for Drilling		
	Piles	LB	Reqd.
504	Steel Piling	LF	1260
526-C	Granite Bridge Curb	LF	608
578	Bridge Rolling	LF	530
107	Structure Excavation	CY	514
407	Asphaltic-Asbestos Coating	SY	112
318	Tar Emulsion for Bridge Floor (Supp. Type)	gal	0



TYPICAL SECTION COUNTRY CLUB ROAD

GENERAL NOTES

1. Materials and construction shall conform to State of Vermont Department of Highway Standard Specifications for Highway and Bridge Construction, dated 1956.
2. All design in accordance with A.S.H.T.O. Standard Specifications for Highway Bridges, dated 1959. Loading is H20S16-44 truck as modified for National System of Interstate Highways.
3. Concrete shall attain a minimum strength of 3000 psi prior to the addition of any super-imposed load.
4. All concrete to be Class 8' throughout.
5. All welding to conform with the American Welding Society Standard Specifications for Welded Highway and Railway Bridges.
6. All piles to be 135P42 and driven to a minimum bearing capacity of 30 tons.
7. Bridge seat also has been lowered 1'-0" to allow for camber in the beams.
8. Standard drawing SB-AS-15" skew 57' shall be modified to 1:1 a 20'-17' skew.

REFERENCE SHEET FOR VERNON-ROCKINGHAM TR-91(3) SHEET 12 OF 82

FOUNDATION INFORMATION

Obtain for design purposes only, and the State assumes no responsibility whatsoever for the accuracy or accuracy of the information shown. Builders may be encountered at any part of settlement (settlement).

Weight of Hammer = 150"
Drop of Hammer = 24"
Diameter of Casing = 24"
Thickness of Shell = 1/2"

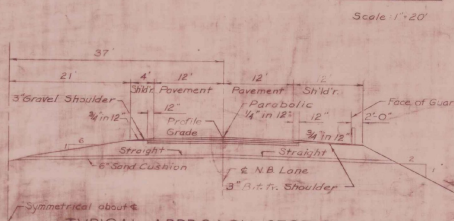
For location of Borings, See 11-20-10 Plan

VERMONT
STATE HIGHWAY DEPARTMENT
TOWN OF BRATTLEBORO
INTERSTATE ROUTE 1
COUNTRY CLUB ROAD OVERPASS
GENERAL PLAN, ELEVATION
PROFILES & SECTIONS
WILLIAM F. ARNOLD
ENGINEER
DESIGNED, DRAWN, CHECKED, AND DATE 1959
DRAWN STEWART W. HARRIS, CIVIL ENGINEER
PROJECT NO. E-117 SHEET 12 OF 40
BRIDGE SHEET 12 OF 40

REFERENCE DRAWINGS

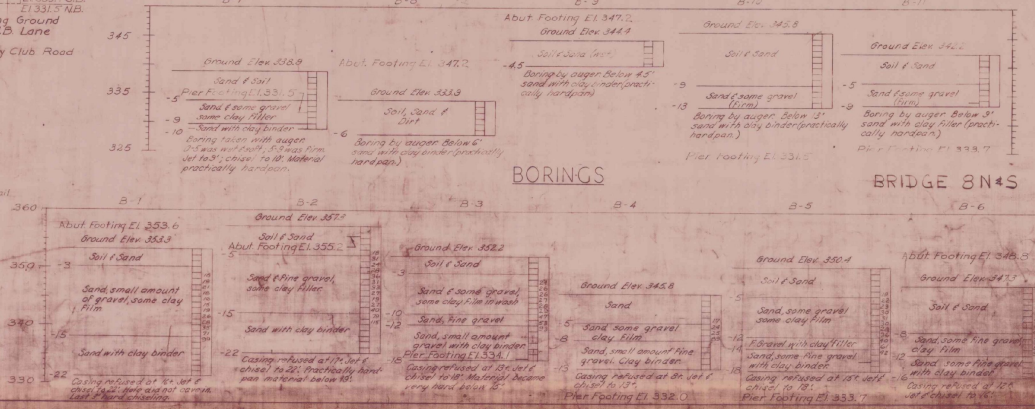
Abutment Details
Pier Details
Standard Drawings
Bridge Sheet E-3
SB-5A-56
SB-AS-15" skew-57' (Mod.)
SB-20-56
SCB-42-56 SK 1 of 2
SK 2 of 2

ELEVATION



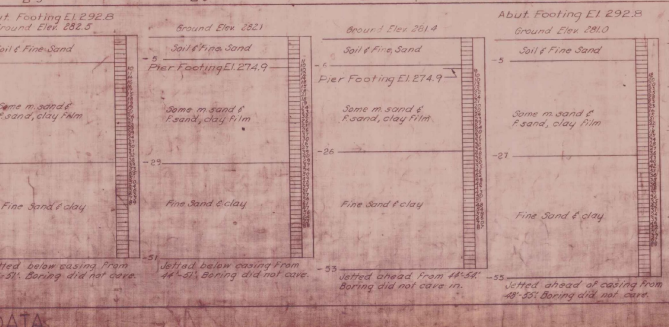
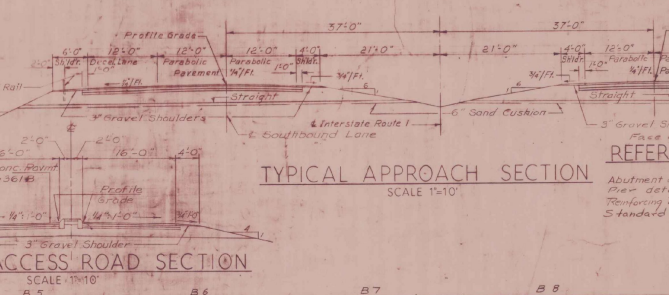
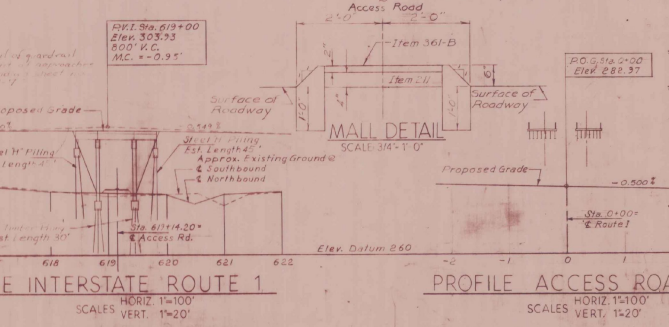
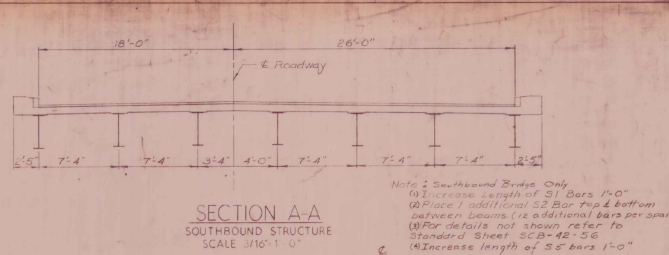
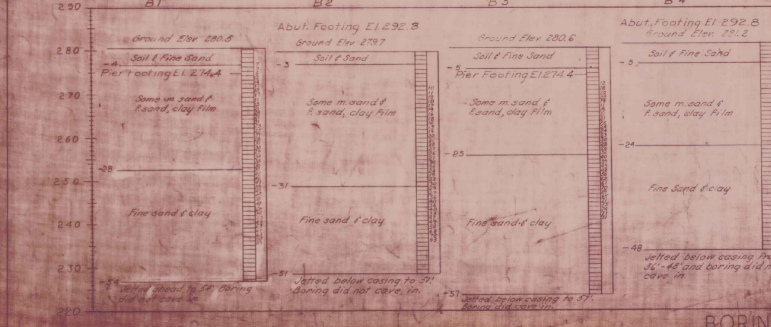
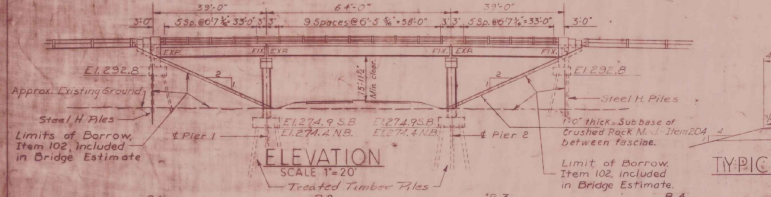
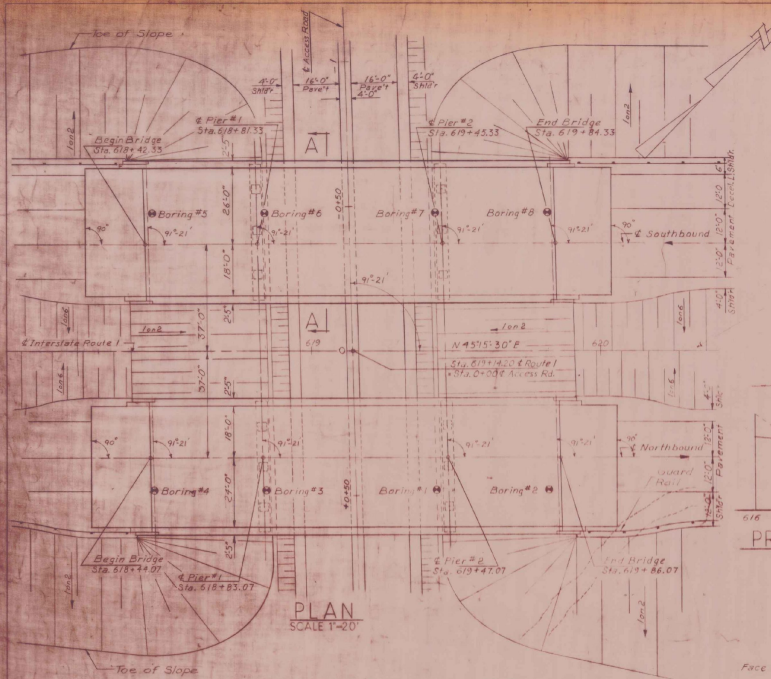
TYPICAL APPROACH SECTION ROUTE 1

Scale 1" = 10'



BORINGS

BRIDGE 8N4S



ITEM NO.	DESCRIPTION	UNIT	QUANTITY
272	Gravel Backfill	C.Y.	0
318	Tar Emulsion for Bridge Floors	Gal	0
102	Borrow	C.Y.	5334
204	Sub-base of Crushed Rock Mod.	C.Y.	339
361-B	Bituminous Concrete Pavement	Ton	223
502-B	Treated Timber Piling	L.F.	4520
401-B	Concrete Chalk Bl.	C.Y.	1210
402	Reinforcing Steel	Lb.	174,188
403	Spiral Reinforcement	Lb.	6670
404-A	Structural Steel	Lb.	296,500
512	Bridge Railing (Alum.) (Supp. Agree.)	L.F.	0
501	Furnishing Equipment for Driving Piles	L.F.	382
504	Steel Piling	L.F.	2520
356-C	Granite Bridge Curb	L.F.	624
372	Bridge Railing	L.F.	550
107	Structure Excavation	C.Y.	404
407	Asphaltic-Asbestos Coating	S.Y.	108
442	Removal of Present Superstructure	L.S.	1
442	Removal of Present Superstructure	L.S.	1

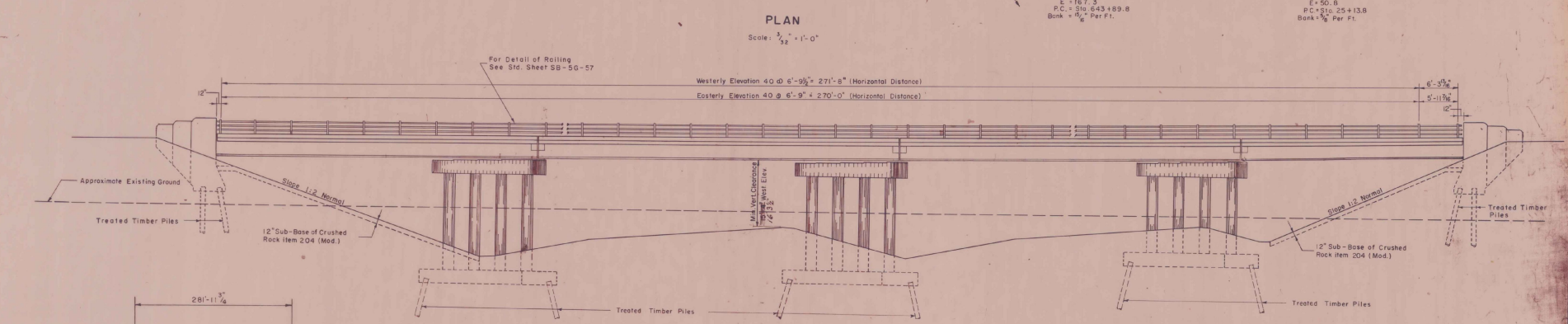
* R.R. of Sta. 618+70
* L.R. of Sta. 621+75

GENERAL NOTES

1. Material and Construction shall conform to State of Vermont Department of Highways Standard Specifications for Highway Bridges and Bridge Construction, dated 1936.
2. All design in accordance with AASHTO Standard Specifications for Highway Bridges dated 1930. Loading is H20-S16-44 truck as modified. For National System of Interstate Highways.
3. Concrete shall attain a minimum strength of 2000 psi prior to the addition of any superimposed load.
4. All concrete to be Class "B" throughout.
5. All welding to conform with the American Welding Society Standard Specification for Welded Highway and Railway Structures.
6. Steel H piles to be 100#2 and driven to a minimum bearing capacity of 37 tons. Treated Timber piles to be driven to a minimum bearing capacity of 20 tons.
7. Standard Drawing for approach 306-B-45 (April 1937) shall be modified to fit a 14'21" skew and at 44' roadway. Approach shall be 20' on the short side.
8. Standard Drawings 308-44-57 shall be modified to fit a 14' roadway for 20' skew.

REFERENCE DRAWINGS

1. Abutment details, Bridge sheet 2.
2. Pier details, Bridge sheet 3.
3. Reinforcing Bar Schedule, Standard Drawings.
4. Bridge sheet 2.
5. Bridge sheet 3.
6. Bridge sheet 4.
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Scale: $\frac{3}{32}'' = 1' - 0''$

Scale: $\frac{3}{32}'' = 1' - 0''$

Easterly Elevation 40 @ 6'-9" = 270'-0" (Horizontal Distance)

Easterly Elevation 40 @ 6'-9" = 270'-0" (Horizontal Distance)

For Detail of Rolling
See Std. Sheet SB-5G-57

Scale : $\frac{3}{32}'' = 1'-0''$

ailing posts to be set normal to grade
omit test screws at upgrade end of
ailing panels at expansion joint over
piers.

The Contractor's attention is called to the material which is located under the various pier foundations. Test piles will be required. After driving test piles the Engineer shall determine if piles are necessary and the length to be ordered. If piles are omitted, the footings as designed are to be used unless otherwise ordered by the Engineer.

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

TOWN OF BRATTLEBORO
ROUTE NO. INTERSTATE STA. 655+23.8
UNDER U.S. RTE. 5 (RELOCATED)

PLAN & ELEVATION

SCALE $\frac{3}{32}'' = 1' - 0''$
SURVEYED BY _____

DRAWN BY R. J. F. CHECKED

PROJECT NO. I-91-179
SHEET 113 OF 580

SHEET 75 OF 500

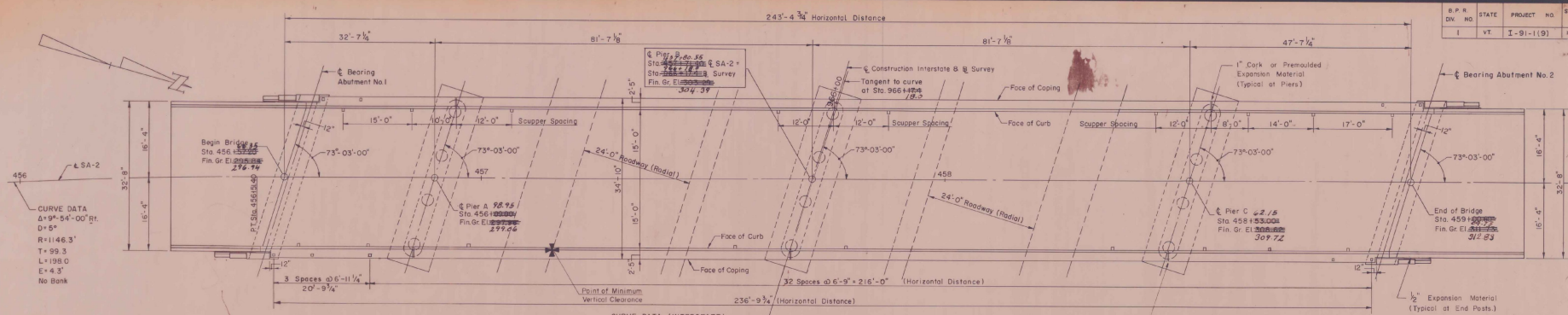
CONTRACT

ITEM N2	ITEM	UNIT	NET			
			OVER-RUN	TOTAL	FINAL	
566-C	Granite Bridge Curb (Type 1)	LF	603	-	603	606
572	Bridge Railing	LF	558	-	558	557
361-B	Bituminous Concrete Pavement	Ton	133	20	153	133

CONSULTING ENGINEERS
CLARKESON ENGINEERING CO. INC.
BOSTON MASSACHUSETTS

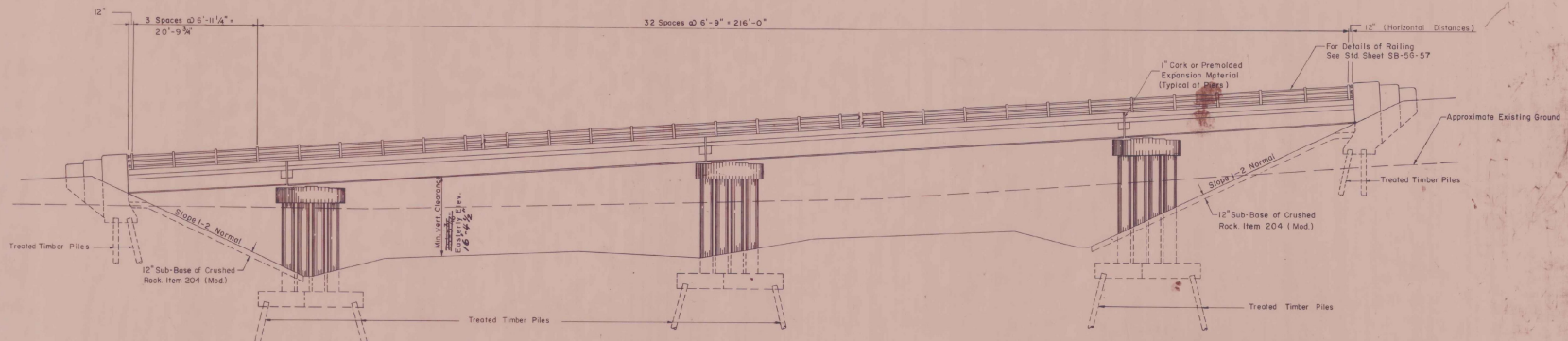
CHORD LAYOUT
NOT TO SCALE

S.P. #	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
I	VT	I-91-119	143	590



CURVE DATA (INTERSTATE)
 $\Delta = 65^{\circ}-11'-30''$ Rt.
 $D = 1'-30''$
 $R = 3819.83'$
 $T = 2442.5'$
 $L = 4346.1'$
 $E = 714.2'$
 $P.C. = 931+53.9$
 $Bank = \frac{1}{2}'$ per ft

PLAN
 Scale: $\frac{3}{32}'' = 1'-0''$



EASTERLY ELEVATION
WESTERY ELEVATION (SIMILAR)
 Scale: $\frac{3}{32}'' = 1'-0''$

Note: 1. Railing Posts to be set normal to grade.
 2. Omit set screws of upgrade end of railing panels at expansion joints over piers.
 3. The contractor's attention is called to the material which is located under the various pier foundations. Test piles will be required. After driving test piles the engineer shall determine if piles are necessary and the length to be ordered. If piles are omitted, the footings as designed are to be used unless otherwise ordered by the Engineer.

REFERENCE SHEET FOR
VERNON - ROCKHAM IR-91-1(3)
SHEET 16 OF 32

ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	NET	OVERRUN	TOTAL	FINAL
556-C	Granite Bridge Curb (Type 1)	LF	-687'	-	-687'	530
572	Bridge Railing	LF	-477'	-	-477'	478

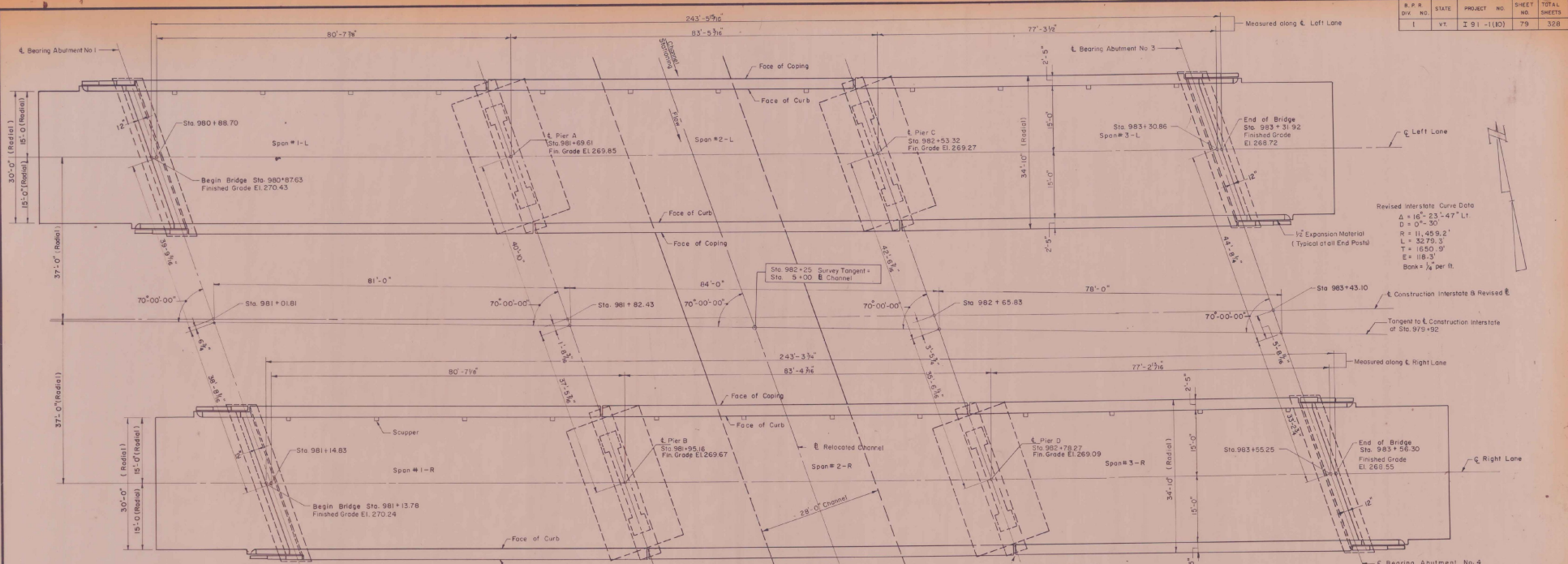
CONSULTING ENGINEERS
 CLARKSON ENGINEERING CO. INC.
 BOSTON MASSACHUSETTS

BRIDGE 13

STATE OF VERMONT
 DEPARTMENT OF HIGHWAYS

TOWN OF DUMMERSTON
 ROUTE NO. INTERSTATE STA. 966+174
 UNDER SA-2 (RELOCATED)
PLAN & ELEVATION
 SCALE $\frac{3}{32}'' = 1'-0''$
 SURVEYED BY
 DRAWN BY H.B.C. CHECKED BY D.S.B.C.
 PROJECT NO. I-91-119
 SHEET 143 OF 590

S.P.R.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
VT.	VT.	I 91 - (10)	79	328



PLAN

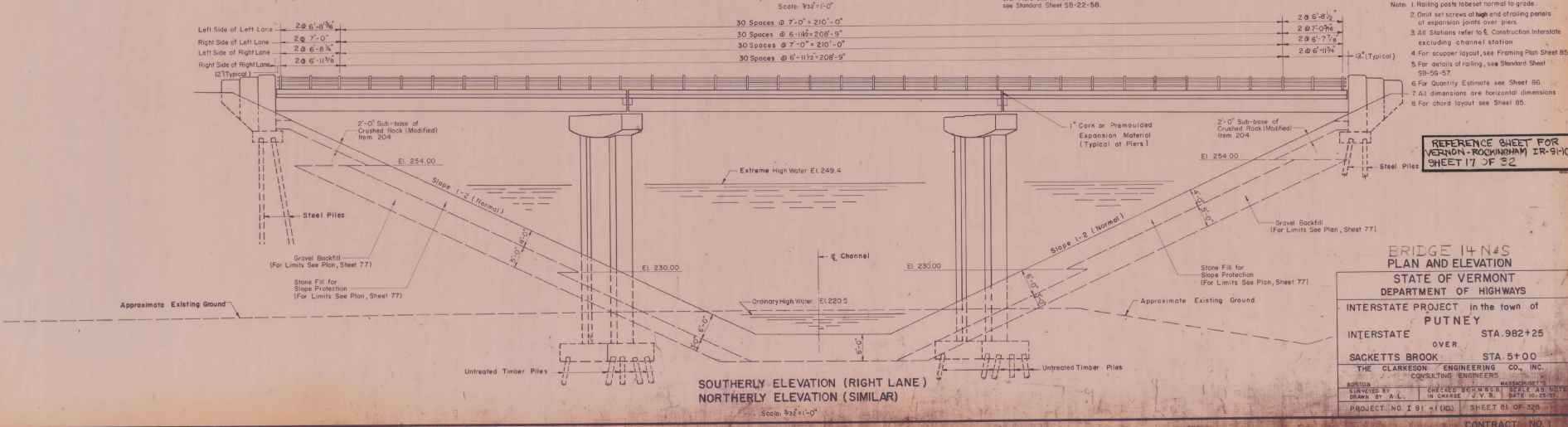
Scale: 1/2" = 1'-0"

30 Spaces @ 7'-0" = 210'-0"

30 Spaces @ 6'-10" = 208'-0"

30 Spaces @ 7'-0" = 210'-0"

30 Spaces @ 6'-11 1/2" = 208'-9"



SOUTHERLY ELEVATION (RIGHT LANE)
NORTHERLY ELEVATION (SIMILAR)

Scale: 1/2" = 1'-0"

BRIDGE 14N4S
PLAN AND ELEVATION

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

INTERSTATE PROJECT in the town of
PUTNEY

INTERSTATE OVER STA. 982+25

SACKETTS BROOK STA. 5+00

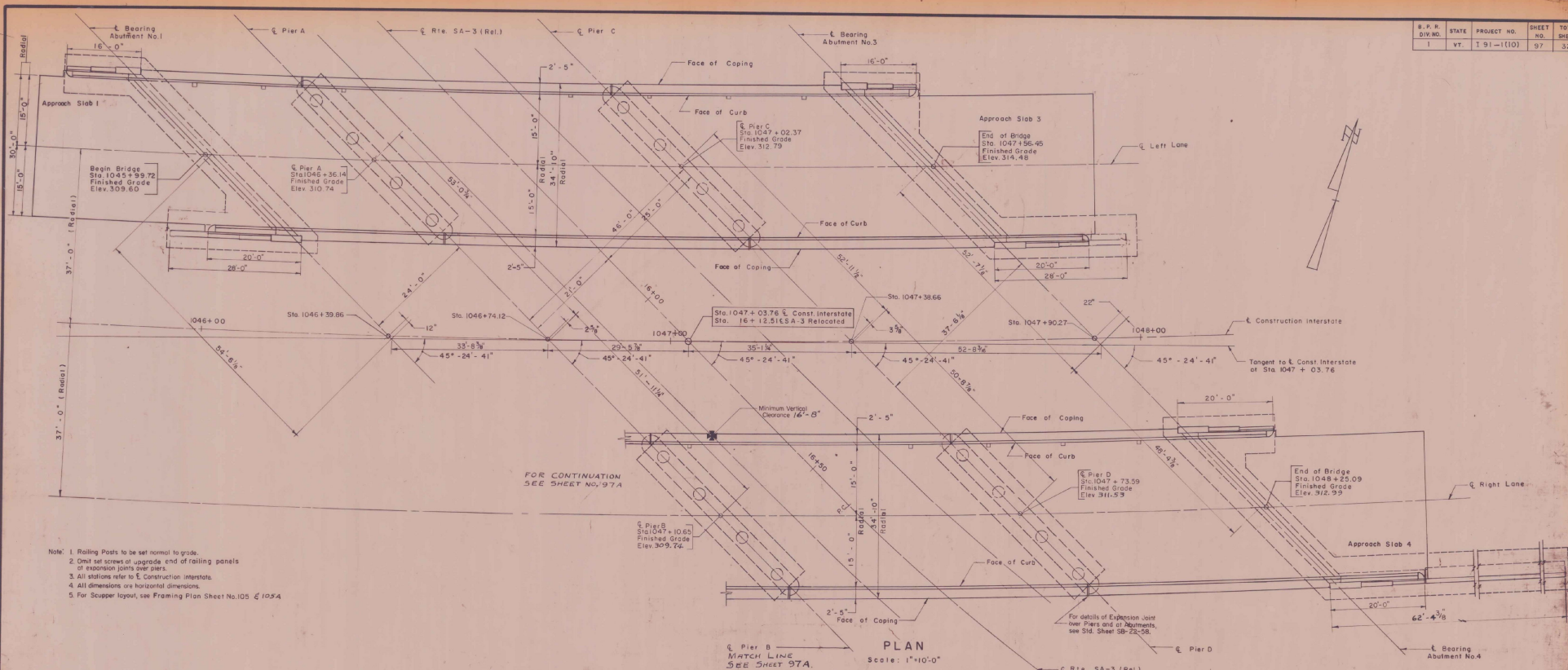
THE CLARKSON ENGINEERING CO., INC.
CONSULTING ENGINEERS

DESIGNED BY: [Signature] CHECKED BY: [Signature] SCALE AS NOTED
DRAWN BY: [Signature] IN CHARGE: J. V. M. DATE: 10-15-57

PROJECT NO. I 91 - (10) SHEET 79 OF 328

CONTRACT NO. 1

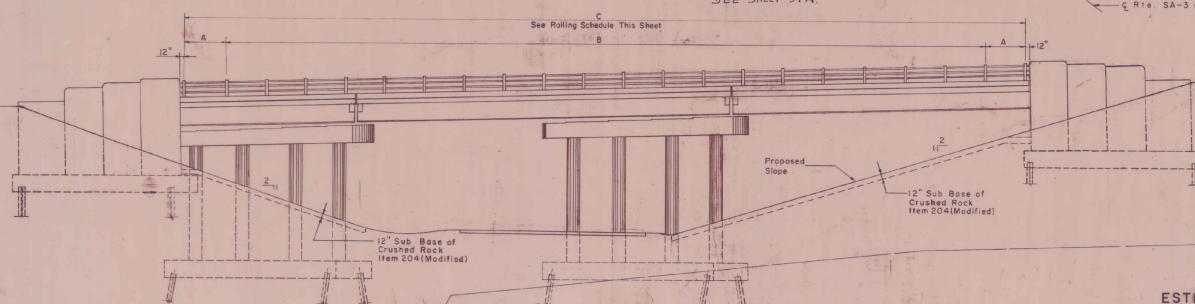
S. R. R. DIV. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	VT	191-1(10)	97	328



- Note: 1. Railing Posts to be set normal to grade.
2. Omit set screws of upgrade end of railing panels at expansion joints over piers.
3. All stations refer to Construction Interstate.
4. All dimensions are horizontal dimensions.
5. For Scupper layout, see Framing Plan Sheet No. 105 of 103A.

FOR CONTINUATION
SEE SHEET NO. 97A

PLAN
Scale: 1"=10'-0"



RAILING SCHEDULE

		A	B	C
LEFT LANE	NORTH	7'-1"	19 0 7'-0" = 133'-0"	147'-2"
	SOUTH	6'-11 3/4"	19 0 6'-11" = 131'-5"	145'-4"
RIGHT LANE	NORTH	7'-0 1/2"	40 0 7'-0" = 281'-6"	295'-0"
	SOUTH	6'-11 1/2"	40 0 6'-11" = 278'-9"	292'-11"

SOUTHERLY ELEVATION, LEFT LANE
NORTHERLY ELEVATION (SIMILAR)
Scale: 1"=10'-0"

ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	NET	OVERLAP	TOTAL	FINAL
556-C	Granite Bridge Curb (Type I)	L.F.	1044.0	0.0	1044.0	2049
572	Bridge Railing	L.F.	087.0	0.0	087.0	897
503	Splices for Steel Piling	NO.	20	0.0	20	24

REFERENCE SHEET FOR
VERNON-ROCKHAMM JR-HIS
SHEET 18 OF 32

CHORD LAYOUT
NOT TO SCALE

BRIDGE 15N4S
PLAN AND ELEVATION

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

INTERSTATE PROJECT in the town of

PUTNEY

INTERSTATE OVER STA. 1047+03.76

SA-3 (REL) OVER STA. 16+12.51

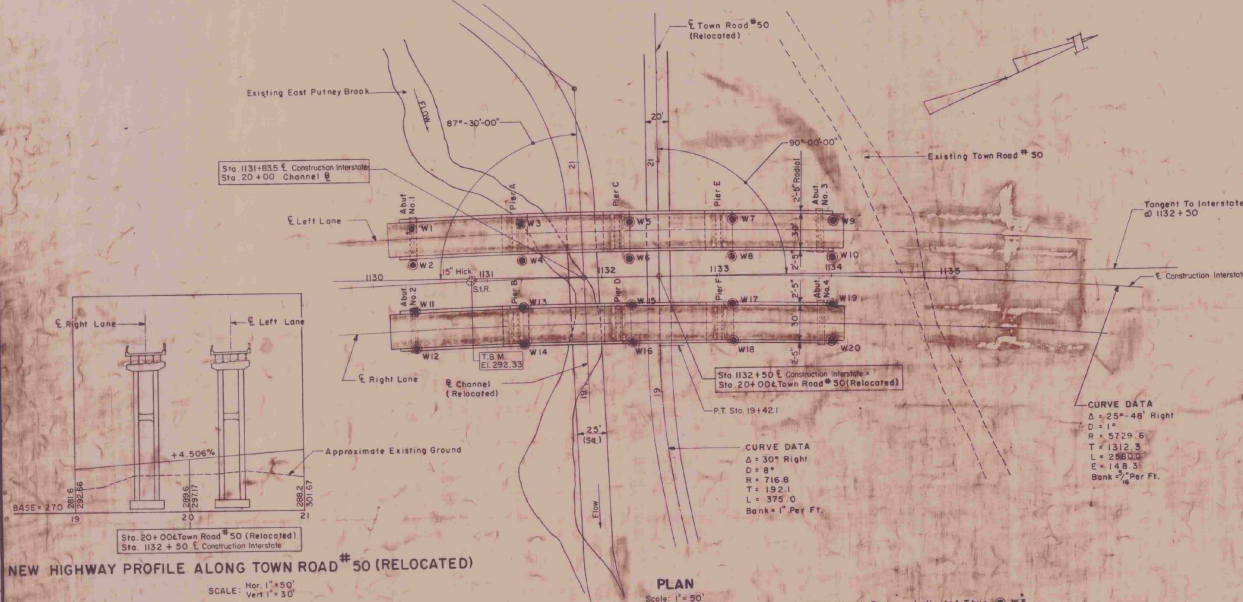
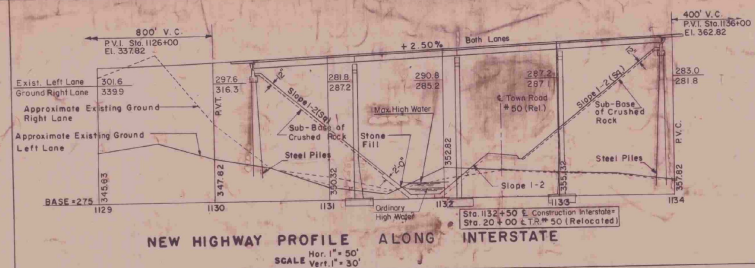
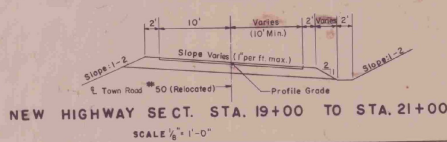
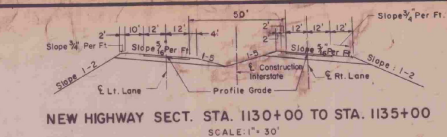
THE CLARKSON ENGINEERING CO., INC.

CONSULTING ENGINEERS

SURVEYED BY J.E.R. & J.S. W. CARRIE - V.T. SCALE AS NOTED

PROJECT NO. 191-1(10) SHEET 97 OF 328

CONTRACT NO. 1



HIGHWAY NO	191 Sec. 1	NAME OF HIGHWAY	Interstate	S.S. ON NO	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
STRUCTURE NO		COUNTY	Windham TOWN	Putney	1	Vt.	191-110	110 328
PROJECT NO	191-110	LOCATION	Sta. 1132+50					

EXISTING STRUCTURE

1. RATED LOADING OF EXISTING STRUCTURE: None
2. TYPE OF EXISTING STRUCTURE: 4
3. UNDERCUTS: 4
4. WHAT DISPOSITION SHOULD BE MADE OF EXISTING STRUCTURE: COST OF REMOVAL
5. SHOULD EXISTING STRUCTURE BE USED TO MAINTAIN TRAFFIC DURING CONSTRUCTION OF NEW STRUCTURE: No
6. SHOULD NEW TEMPORARY STRUCTURE BE BUILT: No
7. ORDINARY HIGH WATER SURFACE ELEV. AT EXISTING STRUCTURE: WATERWAY TO ORDINARY H.W.
8. EXTREME HIGH WATER AT EXISTING STRUCTURE: WATERWAY TO EXTREME H.W.
9. SPAN OF EXISTING BRIDGE DOWNSTREAM: WATERWAY TO EXTREME H.W.
10. TYPE OF FOUNDATION UNDER EXISTING ABUTMENTS: No
11. DOES ALL WATER AT FLOOD ELEVATION PASS THROUGH EXISTING STRUCTURE: No
12. IF NOT AT WHAT ELEVATION IS RELIEF AFFORDED: No
13. ADDITIONAL WATERWAY AREA PROVIDED: No

NEW STRUCTURE

1. RECOMMENDED TYPE OF STRUCTURE: 4 Span Composite Steel Stringer Bridge
2. RECOMMENDED CLEAR SPAN OR SPANS: 80'-80'-80'
3. MEASURED PARALLEL TO & NEW HIGHWAY: No
4. MEASURED AT RIGHT ANGLES TO & STREAM: No
5. ARE THERE OBJECTIONS TO A PIER IN THE STREAM, ANSWER YES OR NO: YES
6. ORDINARY HIGH WATER ELEVATION AT NEW STRUCTURE: 4' Above Bottom
7. EXTREME HIGH WATER ELEVATION AT NEW STRUCTURE: 6' Above Bottom
8. IS ALL WATER INTENDED TO PASS THROUGH NEW STRUCTURE?: No
9. DOES STREAM REACH ITS MAXIMUM HIGH WATER ELEVATION RAPIDLY? No. IS ORDINARY RISE RAPID? No.
10. LOW WATER ELEVATION AT NEW STRUCTURE: 0.5' Above Bottom
11. DRAINAGE AREA IN ACRES ABOVE STRUCTURE: 3.99 CHARACTER OF TERRAINE: No
12. IS STREAM EVER DRY?: No
13. VELOCITY OF STREAM AT HIGH WATER STAGE: 10.3 F.P.S. ESTIMATED DISCHARGE: 234
14. AREA FULL OPENING: AREA BELOW ORDINARY H.W.: 234
15. CHARACTER OF SCOUR: DRIFT Light ICE Light
16. ESTIMATED DRAINAGE AREA ABOVE NATURAL OR ARTIFICIAL STORAGE: No
17. VERTICAL CLEARANCE ABOVE FLOOD ELEVATION: No BOTH SIDES
18. ARE SIDEWALKS REQUIRED, IF SO ON WHAT SIDE: No
19. RECOMMENDED TYPE OF PAVEMENT: 2 Bituminous Conc. Pavement For Bridge Piers
20. TRAFFIC TO BE MAINTAINED UNDER ITEM NO.: No ONE OR TWO WAYS PROBABLE COST
21. PROBABLE COST OF CLEARING AND GRUBBING STREAM CHANNEL AT STRUCTURE SITE: No
22. SHOULD PROVISIONS BE MADE FOR PUBLIC UTILITIES? No
23. ESTIMATED ALLOWABLE LOAD ON FOUNDATIONS: No SHOULD PILES BE USED? No EST. LATH

FOUNDATION INFORMATION

OBTAINED FOR DESIGN PURPOSES ONLY, AND THE STATE ASSUMES NO RESPONSIBILITY WHATSOEVER FOR THE SUFFICIENCY OR ACCURACY OF THE INFORMATION SHOWN. BOULDER MAY BE ENCOUNTERED AT ANY PIER OR ABUTMENT LOCATION. For Boring Logs, see sheet 111.

GENERAL NOTES

DESIGN SPECIFICATIONS: AASHTO 1957 Edition and as modified by Vermont Dept. of Highways.

LIVE LOAD: HS-20-516-44 and Military Loading

DESIGN STRESSES: Structural steel: 16,000 psi; Reinforcing steel: 20,000 psi; Concrete: 1,200 psi.

CLEARANCES: Horizontal as shown on drawings; Vertical: 60'-8" Clear Over Town Road #50.

REFERENCE SHEET FOR VERNON - ROCKINGHAM IR-91-1(3) SHEET 19 OF 32.

SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	NET	OVER-RUN	TOTAL	FINAL
107	Structural Excavation	C.Y.	639.8	639.8	1,279.6	1,279.6
204	Sub-Base of Crushed Rock (Mod.)	C.Y.	40.8	40.8	81.6	81.6
222	Gravel Backfill	C.Y.	40.8	40.8	81.6	81.6
360B	Bit. Coat Pavement	Sq. Yds.	40.8	40.8	81.6	81.6
404B	Concrete Class B (Mod.)	C.Y.	40.8	40.8	81.6	81.6
405	Reinforcing Steel	Lbs.	370,138	370,138	740,276	740,276
406	Asphaltic-Althos Gearing	S.Y.	40.8	40.8	81.6	81.6
407	Asphaltic-Althos Gearing	S.Y.	40.8	40.8	81.6	81.6
504	Steel Piling	L.F.	40.8	40.8	81.6	81.6
520	Gravel Fills for Slope Protection	C.Y.	40.8	40.8	81.6	81.6
580	Concrete Bridge Curb (Type I)	L.F.	40.8	40.8	81.6	81.6
572	Bridge Railings	L.F.	40.8	40.8	81.6	81.6
501	Flashings, Etc., for Boring Piles	Required	40.8	40.8	81.6	81.6
503	Splices for Steel Piling	Lbs.	40.8	40.8	81.6	81.6

LIST OF SHEETS

SHEET NO.	DESCRIPTION
110	GENERAL PLAN
111	BORINGS
112	PLAN & ELEVATION
113	ABUTMENTS
114	WINGWALLS & APPROACH SLABS
115	PIERS A & B
116	PIERS C & D
117	PIERS E & F
118	STRUCTURAL STEEL PLAN
119	STRUCTURAL STEEL DETAILS
120	REINFORCING SCHEDULE
120A	REINFORCING SCHEDULE
120B	REINFORCING SCHEDULE
120C	REINFORCING SCHEDULE
120D	REINFORCING SCHEDULE
120E	REINFORCING SCHEDULE
120F	REINFORCING SCHEDULE
120G	REINFORCING SCHEDULE
120H	REINFORCING SCHEDULE
120I	REINFORCING SCHEDULE
120J	REINFORCING SCHEDULE
120K	REINFORCING SCHEDULE
120L	REINFORCING SCHEDULE
120M	REINFORCING SCHEDULE
120N	REINFORCING SCHEDULE
120O	REINFORCING SCHEDULE
120P	REINFORCING SCHEDULE
120Q	REINFORCING SCHEDULE
120R	REINFORCING SCHEDULE
120S	REINFORCING SCHEDULE
120T	REINFORCING SCHEDULE
120U	REINFORCING SCHEDULE
120V	REINFORCING SCHEDULE
120W	REINFORCING SCHEDULE
120X	REINFORCING SCHEDULE
120Y	REINFORCING SCHEDULE
120Z	REINFORCING SCHEDULE

BRIDGE 16N4S GENERAL PLAN

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

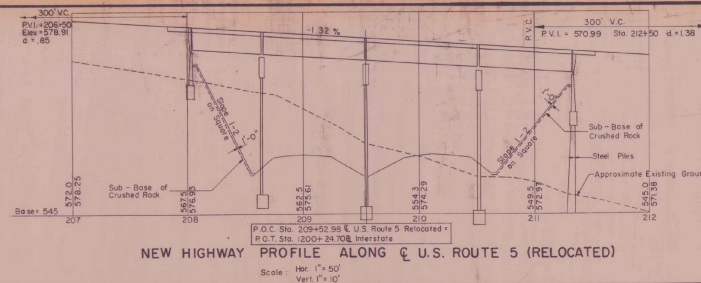
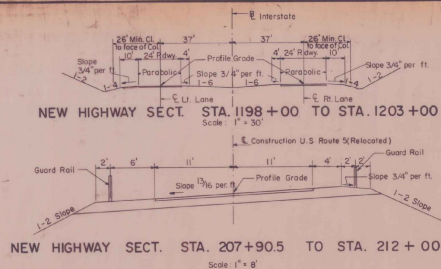
INTERSTATE PROJECT in the town of
PUTNEY
OVER STA. 1132+50
TOWN ROAD #50 (REL.) STA. 20+00

DESIGNED BY: J. H. CLARKSON
ENGINEERED BY: J. H. CLARKSON
CONSULTING ENGINEERS

DATE: 11-1-58

SCALE: AS SHOWN

CONTRACT NO. 2



HIGHWAY NO.	R11 Sec. 1	NAME OF HIGHWAY	Interstate	S.P. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
STRUCTURE NO.		COUNTY	Windham	1	VT.	I 91-1(10)	121	328
PROJECT NO.	191-1(10)	LOCATION	Sta. 1200+24.70					

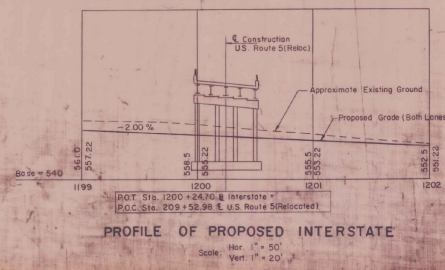
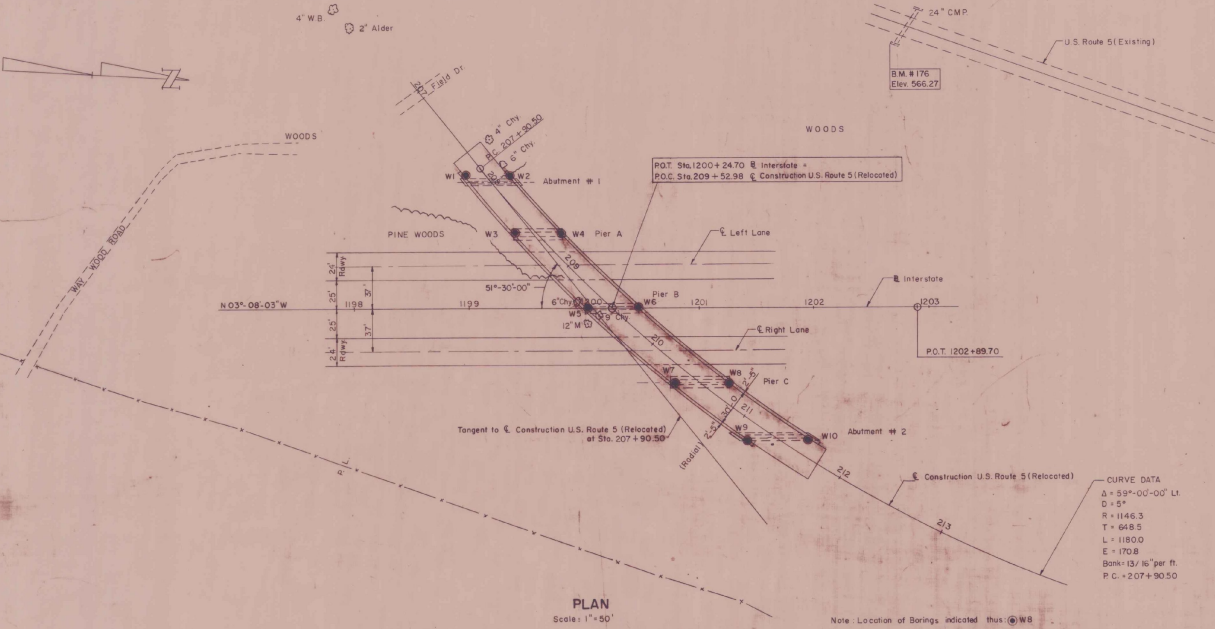
REFERENCE SHEET FOR
VERNON-ROCKINGHAM IR-91-1(3)
SHEET 20 OF 32

FOUNDATION INFORMATION

OBTAINED FOR DESIGN PURPOSES ONLY, AND THE STATE ASSUMES NO RESPONSIBILITY WHATSOEVER FOR THE SUFFICIENCY OR ACCURACY OF THE INFORMATION SHOWN. BOLDERS MAY BE ENCOUNTERED AT ANY PIER OR ABUTMENT LOCATION. FOR BORING LOGS, SEE SHEET NO. 121.

GENERAL NOTES

- DESIGN SPECIFICATIONS:**
AASHTO 1957 Edition and as modified by Vermont Dept. of Highways.
- LIVE LOAD:**
H20-S16-44 and Military Loading.
- DESIGN STRESSES:**
Structural Steel: $f_s = 18,000$ p.s.i.
Reinforcing Steel: $f_s = 20,000$ p.s.i.
Concrete: $f_c = 1,200$ p.s.i. for $f_c = 3,000$ p.s.i.
- CLEARANCE:**
Horizontal: as shown on drawings.
Vertical: $-10' \pm$ (Lt. Lane Interstate).
- SUPERSTRUCTURE:**
30' Roadway, 1'-6" Safety Widths, as per SCB-30-50.
4 simple spans, rolled beams, composite design, similar to SCB-30-56, 16'-09"-09"-09" (as modified).
Aluminum bridge railing, or galvanized bridge railing, and concrete bridge curb as per SB-50-07(1821).
Bearing and diaphragm connections as per SB-20-56.
Approach Slopes as per SB-AS-45-Slew-57. As Modified.
- SUBSTRUCTURE:**
Open piers, round columns, continuous footings.
Shrub abutments.
- FOUNDATIONS:**
Piers: Spread Footings.
North Abutment: Steel Piers, 35 Ton Design Load.
South Abutment: Spread Footing.



SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	NET	OVERRUN	TOTAL	FINAL
107	Structure Excavation	C.Y.	488	48	536	437
204	Sub-base of Crushed Rock (Mod.)	C.Y.	498	48	546	213
222	Gravel Backfill	C.Y.	498	48	546	194
361B	Bit. Conc. Pavement (5'-4" x 2'-0")	Sq. Yd.	155	48	203	155
401B	Concrete Class B (Mod.)	C.Y.	498	48	546	213
402	Reinforcing Steel	Lbs.	134,636	1	134,637	134,350
403	Spiral Reinforcement (5'-4" x 2'-0")	Lbs.	1	1	2	1
404A	Structural Steel	Lbs.	130,880	0	130,880	122,245
407	Asphaltic-Asbestos Coating	S.Y.	88	1	89	69
504	Steel Piling	L.F.	440	1	441	535
556C	Granite Bridge Curb (Type 1)	L.F.	208	1	209	212
572	Reinforcing Steel for Drilling Piles	L.F.	648	1	649	648
573	Reinforcing Steel for Drilling Piles	L.F.	648	1	649	648
574	Reinforcing Steel for Drilling Piles	L.F.	648	1	649	648
575	Reinforcing Steel for Drilling Piles	L.F.	648	1	649	648
576	Reinforcing Steel for Drilling Piles	L.F.	648	1	649	648
577	Reinforcing Steel for Drilling Piles	L.F.	648	1	649	648

LIST OF SHEETS

SHEET NO.	DESCRIPTION
121	GENERAL PLAN
122	BORINGS
123	PLAN & ELEVATION
124	ABUTMENTS NO. 1 & 2
125	PIERS A, B & C
126	APPROACH SLABS
127	STRUCTURAL STEEL PLAN
128	STRUCTURAL DETAILS
129	REINFORCING SCHEDULE
130	REINFORCING SCHEDULE
131	HIGHWAYS: PLAN & PROFILES
132	SCB-30-56 (1821)
133	SB-20-56
134	SB-21-56
135	SB-22-56
136	SB-23-56
137	SB-24-56
138	SB-25-56
139	SB-26-56
140	SB-27-56
141	SB-28-56
142	SB-29-56
143	SB-30-56
144	SB-31-56
145	SB-32-56
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206	SB-93-56
207	SB-94-56
208	SB-95-56
209	SB-96-56
210	SB-97-56
211	SB-98-56
212	SB-99-56
213	SB-100-56

BRIDGE 17
GENERAL PLAN

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

INTERSTATE PROJECT in the town of
PUTNEY

INTERSTATE UNDER
U.S. ROUTE 5 (REL.) Sta. 1200+24.70

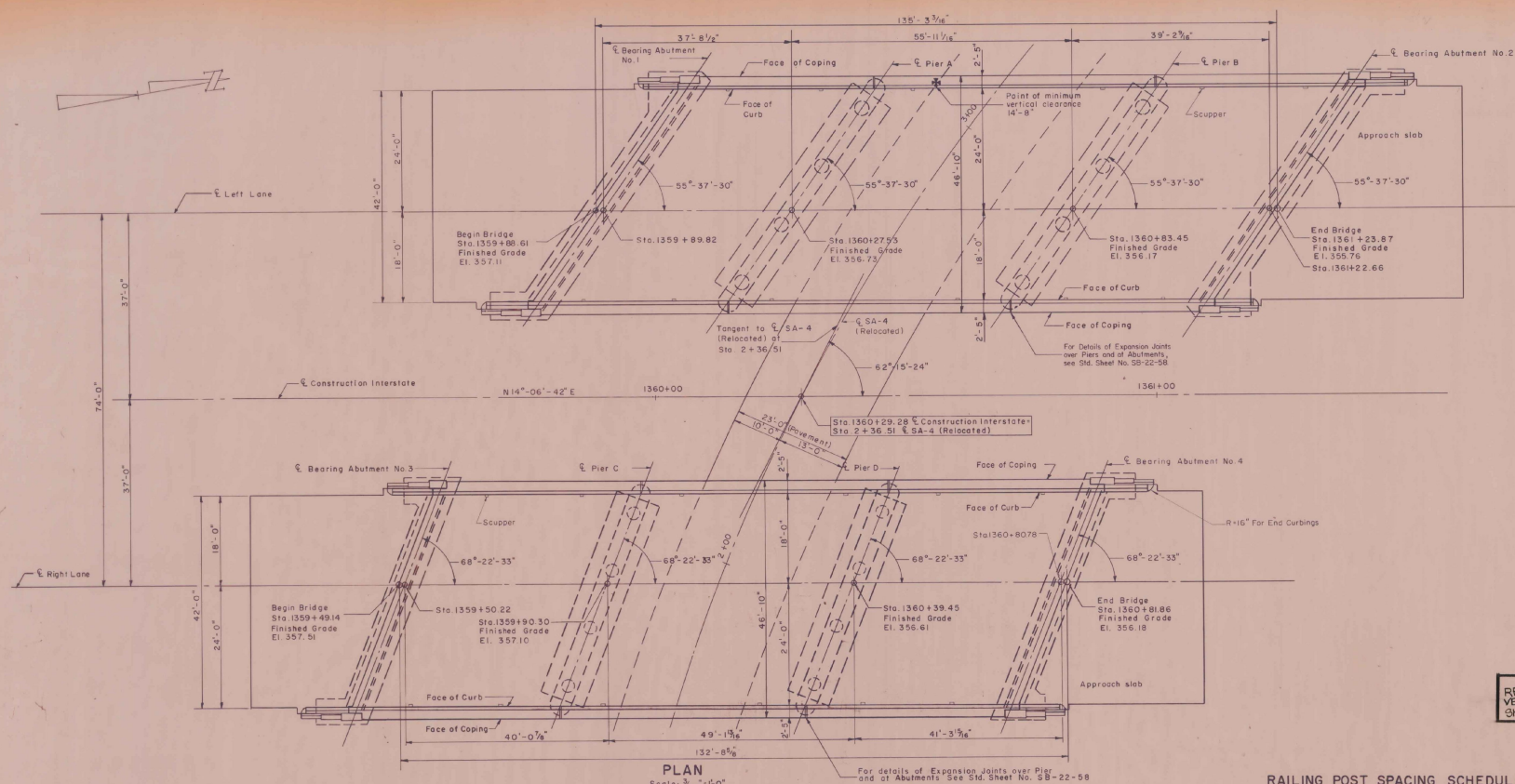
APPROVED BY: *[Signature]* DATE: 1/1/61

THE CLARKSON ENGINEERING CO. INC.
CONSULTING ENGINEERS
BOSTON

DESIGNED BY: *[Signature]* CHECKED BY: *[Signature]* DRAWN BY: *[Signature]*

PROJECT NO. 191-1(10) SHEET 121 OF 328

S.P.R.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
VT.	VT.	I 91-1(11)	192	555



REFERENCE SHEET FOR
VERNON-ROCKINGHAM IR-81-1(3)
SHEET 21 OF 32

PLAN
Scale: 3/32" = 1'-0"

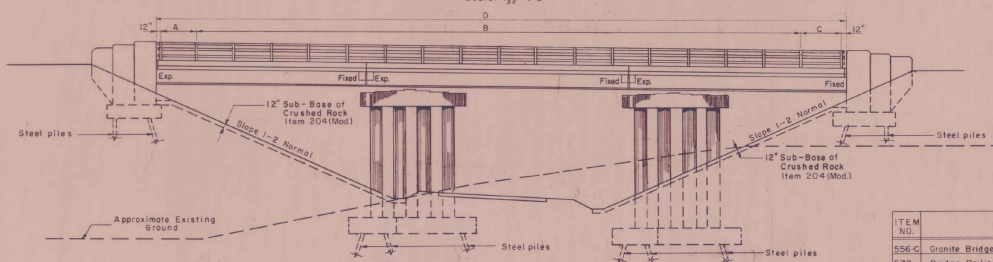
RAILING POST SPACING SCHEDULE

	A	B	C	D
LEFT LANE	7'-2 1/8"	16 @ 7'-1" = 113'-4"	7'-2 1/8"	127'-8 1/8"
RIGHT LANE	6'-8 1/8"	16 @ 7'-0" = 112'-0"	6'-11 7/8"	125'-11 1/8"

- Notes: 1. Railing posts to be set normal to grade. Omit set screw at high end of railing panel at expansion joints over pier.
2. All stationing refers to Construction Interstate excluding stationing along SA-4 (Relocated).
3. For scupper layout see Framing Plan Sheet No. 198.
4. For railing details see standard Sheet SB-56-57 (1B.2).
5. All dimensions are horizontal dimensions.
6. For Bridge Marker See Drawing SB-20-56 (Detail A).

ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	NET	OVER-RUN	TOTAL	FINAL
556-C	Granite Bridge Curb-Type I - Left Lane	L.F.	309'	309'	309'	309'
572	Bridge Railing - Left Lane	L.F.	255'	255'	255'	255'
556-C	Granite Bridge Curb-Type I - Right Lane	L.F.	306'	306'	306'	306'
572	Bridge Railing - Right Lane	L.F.	256'	256'	256'	256'



EASTERLY ELEVATION
WESTERLY ELEVATION (SIMILAR)
Scale: 3/32" = 1'-0"

BRIDGE 18N4S

PLAN AND ELEVATION
STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

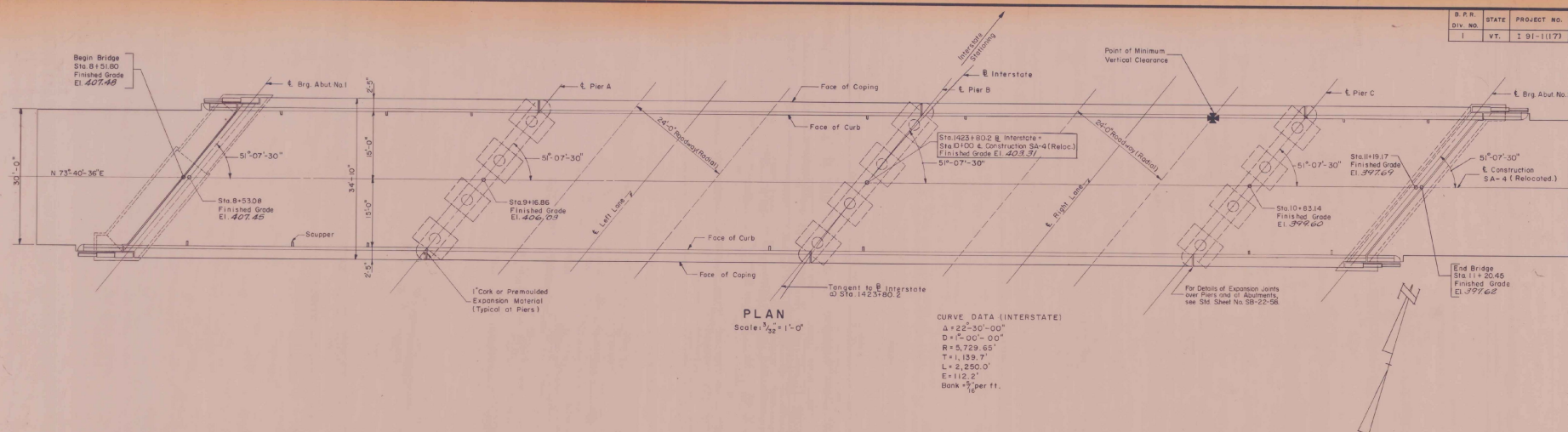
INTERSTATE PROJECT in the town of
WESTMINSTER

INTERSTATE OVER STA. 1360+29.28
SA-4(RELOCATED) STA. 2+36.51

THE CLARKSON ENGINEERING CO., INC.
CONSULTING ENGINEERS
BOSTON MASSACHUSETTS

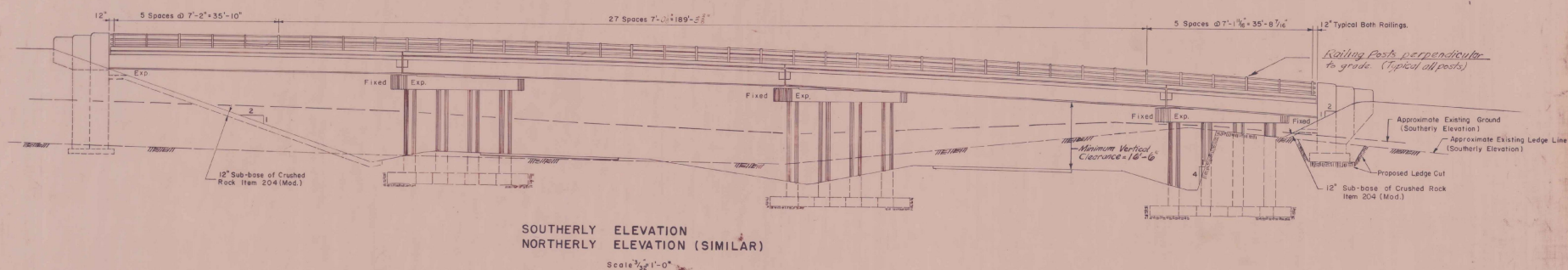
SUBMITTED BY R.J.F. CHECKED BY J.M.B. IN CHARGE J.V.B. SCALE AS NOTED
PROJECT NO. I 91-1(11) SHEET 192 OF 555

S. P. R.	STATE	PROJECT NO.	SHEET	TOTAL
Div. NO.	VT.	1 91-1(17)	211	555



PLAN
Scale: $\frac{1}{4}$ " = 1'-0"

CURVE DATA (INTERSTATE)
 $\Delta = 22^\circ 30' 00''$
 $D = 1^\circ 00' 00''$
 $R = 5,729.65'$
 $T = 1,159.7'$
 $L = 2,250.0'$
 $E = 112.2'$
 Bank $\frac{1}{2}$ per ft.



SOUTHERLY ELEVATION
 NORTHERLY ELEVATION (SIMILAR)
 Scale: $\frac{1}{4}$ " = 1'-0"

ESTIMATED QUANTITIES

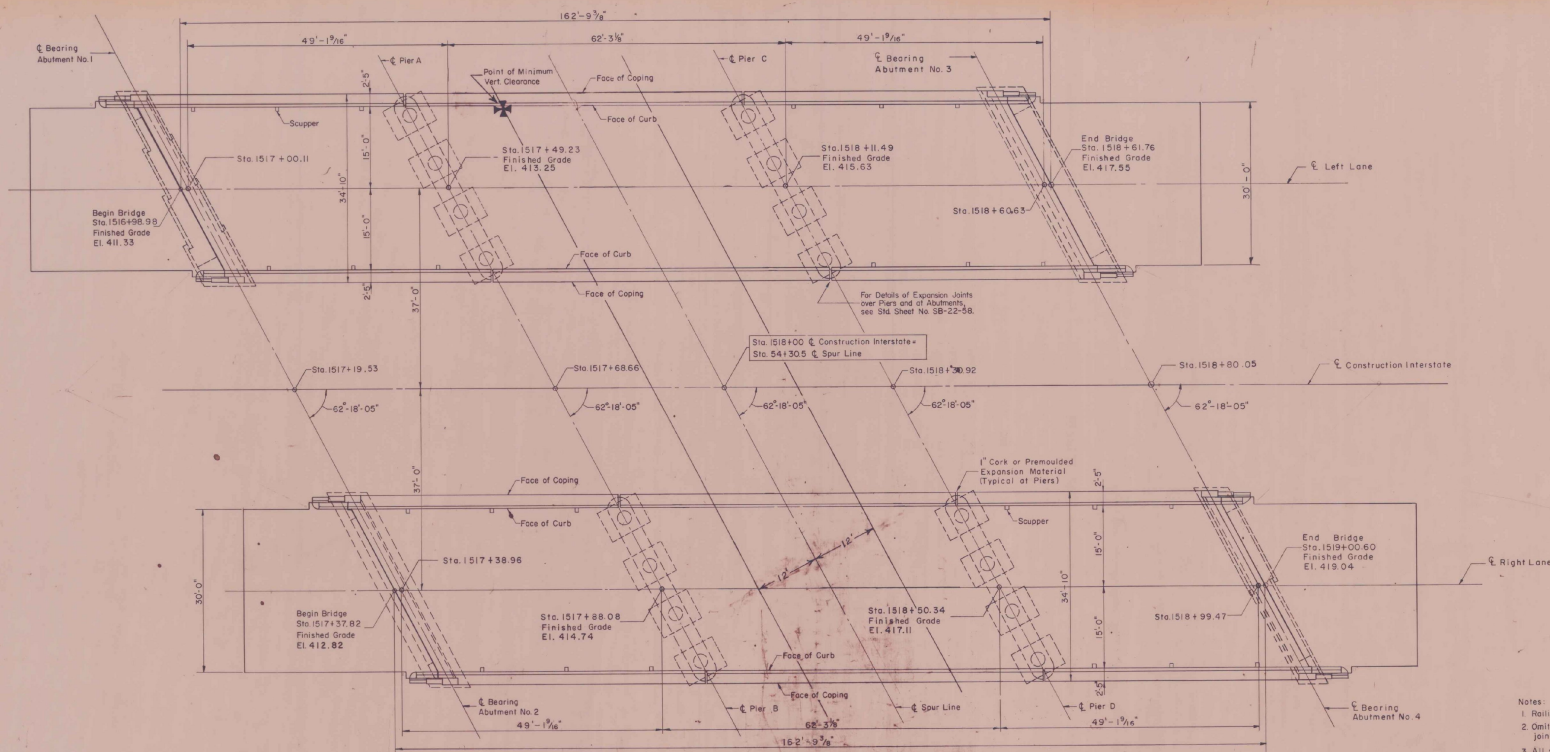
ITEM NO.	DESCRIPTION	UNIT	NET	OVER-RUN	TOTAL	FINAL
556-C	Granite Bridge Curb (Mod.)	L.F.	470	-	470	577
572	Bridge Railing	L.F.	525	-	525	525

- Notes: 1. Railing posts to be set normal to grade.
 2. Omit set screws of one end of railing panel at expansion joints over piers.
 3. All dimensions are horizontal dimensions.
 4. For scupper spacing see Sheet 215.
 5. For Bridge Marker see Drawing SB-20-56 (Detail A).
 6. For Details of Railing see standard Sheet SB-59-60 (1 & 2).

REFERENCE SHEET FOR
 VERNON-ROCKINGHAM TR-91-1(3)
 SHEET 22 OF 32

BRIDGE 17
 STAGE I CONSTRUCTION
 PLAN AND ELEVATION
 STATE OF VERMONT
 DEPARTMENT OF HIGHWAYS
 INTERSTATE PROJECT up the town of
 WESTMINSTER
 INTERSTATE UNDER STA 1423+80.2
 SA-4 (RELOCATED) STA 10+00
 THE CLARKSON ENGINEERING CO. INC.
 CONSULTING ENGINEERS WASHINGTON
 BOSTON
 SURVEYED BY: [Name] CHECKED BY: D. B. B. SCALE AS NOTED
 DRAWN BY: A. B. C. IN CHARGE: A. B. C. DATE: 1-2-62
 PROJECT NO. 1 91-1(17) SHEET 37 OF 149

S.P.R. SHEET NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	VT.	191-101(23)		



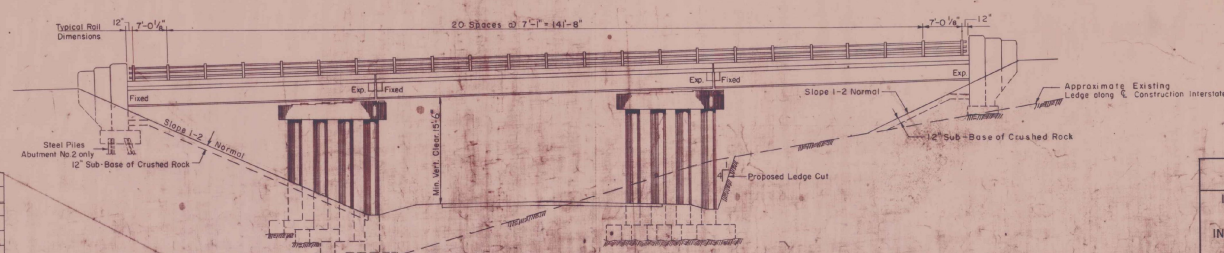
PLAN
Scale: 1/32" = 1'-0"

- Notes:
1. Rolling Posts to be set normal to grade.
 2. Omit set screws at one end of rolling panels at expansion joints over piers.
 3. All stations refer to ∇ Construction Interchange.
 4. All dimensions are horizontal dimensions.
 5. For Scupper layout see Framing Plan Sheet No. 243.
 6. For Details of Rolling see, Standard Sheet SB-50-60(182).

REFERENCE SHEET FOR
VERNON - ROCKINGHAM IR-91-(3)
SHEET 23 OF 32

ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	NET	OVER-RUN	TOTAL	FINAL
556-C	Granite Bridge Curb (NIGD)	L.F.	629		629	711
572	Bridge Railing	L.F.	629		629	629



EASTERLY ELEVATION RIGHT LANE
WESTERLY ELEVATION (SIMILAR EXCEPT AS NOTED)
Scale: 1/32" = 1'-0"

BRIDGE 30 N 4 S
STAGE 1 CONSTRUCTION

PLAN AND ELEVATION

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

INTERSTATE PROJECT IN THE TOWN OF
WESTMINSTER

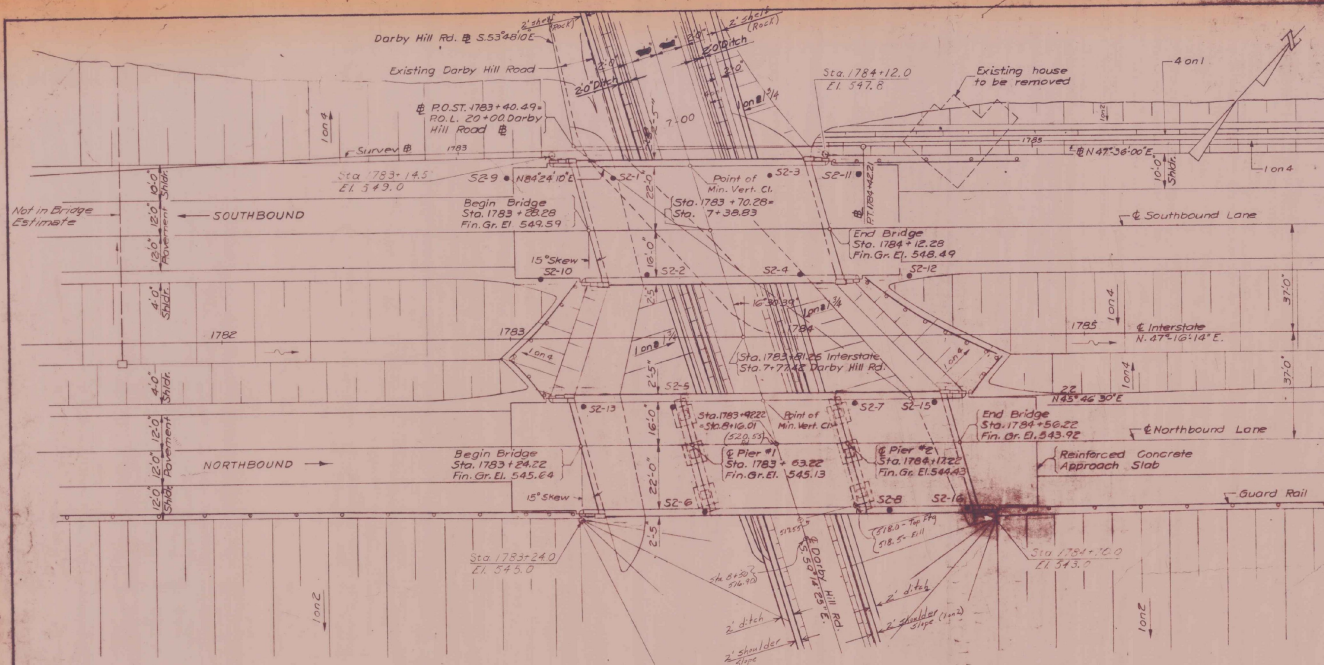
INTERSTATE OVER STA 1518+00
SPUR LINE STA 54+30.5

THE CLARKSON ENGINEERING CO., INC.
CONSULTING ENGINEERS

DESIGNED BY: J.E.C. CHECKED BY: G.B.S. SCALE: AS SHOWN
DRAWN BY: J.E.C. IN CHARGE: J.V.B. DATE: 10-19-78
PROJECT NO. 191-101(23) SHEET 24 OF 192

CONTRACT NO. 2

SHEET 46 OF 189 SHEETS



NOTE:-

Where granular material is indicated around bridge abutments rock fill, if available, shall be substituted except in the area where piles are to be driven. Wherever materials from excavation are used in embankments regarding granular material they shall be paid for as indicated under Item 101, Excavation.

PLAN
Scale: 1"=20'

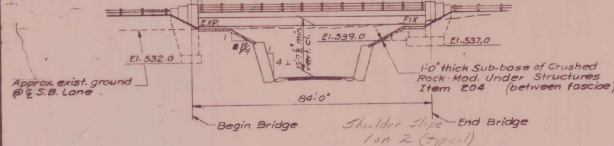
Note: Piers & Abutments are parallel.
• Boring Symbol.

The embankment for a distance of 100 ft from approach slabs shall be of granular material conforming to the specification for granular borrow - Item 102-A.

West Fascia : 3'-4 1/2"
East Fascia : 2'-10 1/2"

11 Railing Post Spacing @ 1'-0 1/2" = 77'-10 1/2"

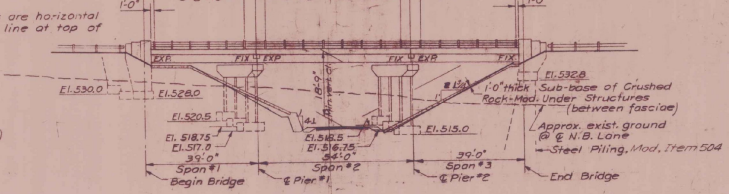
NOTE:
Railing dimensions are horizontal given along fascia line at top of sidewalk.



ELEVATION-S.B. BRIDGE
Scale: 1"=20'

West Fascia : 3'-4 1/2"
East Fascia : 2'-10 1/2"

NOTE:
Railing dimensions are horizontal given along fascia line at top of sidewalk.



ELEVATION-N.B. BRIDGE
Scale: 1"=20'

SUMMARY OF QUANTITIES

ITEM NO.	ITEM	UNIT	QUANTITIES
			S.B. BRIDGE N.B. BRIDGE
107	Structure Excavation	C.Y.	269 317
204	Sub-base of Crushed Rock (Mod. under Structures)	C.Y.	74 161
222	Gravel Backfill	C.Y.	90 100
318	Tar Emulsion for Bridge Floors	gal.	227 306
321-B	Bituminous Concrete Pavement	Sq. Yd.	72 98
401-B	Concrete Class B, Mod.	CY	529 535
402	Reinforcing Steel	LB	43,492 70,542
403	Spinal Reinforcement (S.B. & N.B. same)	LB	Nec.
404-A	Structural Steel	LB	149,540 131,680
407	Asphaltic-Asbestos Coating	Sq. Yd.	10 46
501	Furnishing Equipment for Driving Piles	LS	- Nec.
503	Splices for Steel Piling	EQ	- 3
504	Steel Piling	LF	- 240
556-C	Granite Bridge Curb, Mod.	LF	199 295
575	Bridge Railing	LF	159 258
572	Joint Sealant (Hot-poured elastic type)	LA	78 158

* These items to be included in the roadway estimate.

For Final Quantities
See Original Tracing
SH 38 OF 131
BRIDGE SHEET 1 OF 10

GENERAL NOTES:

- Materials and Construction shall conform to State of Vermont Department of Highways Standard Specifications for Highway and Bridge Construction dated 1986.
- All design in accordance with A.A.S.H.O. Standard Specifications for Highway Bridges, dated 1957. Loading is H20-S16-44 truck as modified for National System of Interstate Highways.
- Concrete shall attain a minimum strength of 2000 p.s.i. prior to the addition of any superimposed load.
- All concrete to be Class "B".
- All welding to conform with the American Welding Society Standard Specifications for Welded Highway and Railway Bridges.
- The haunch over each beam to vary in order to compensate for camber remaining after dead load deflection. Beam seat elevations have been lowered to account for difference between actual camber and required camber.
- Minimum cover for reinforcing bars shall be 2" unless noted.
- All piles to be 12" D x 55 and driven to ledge rock or refusal as directed by Engineer. Minimum bearing capacity = 46 tons.
- Chamfer all exposed edges of concrete 1" unless otherwise shown.
- Care must be exercised in removing the ledge rock in the area of piers & abutments founded on ledge rock.
- All expansion material shall be premoolded cork containing no bituminous or asphalt.

REFERENCE SHEET FOR
VERNON-ROCKINGHAM IR-91-1 (3)
SHEET 24 OF 32

INDEX OF DRAWINGS

- General Plan & Elevations
- Boring Logs, Profiles, Sections & Framing Plans.
- South Abutment-Southbound
- North Abutment-Southbound
- South Abutment-Northbound
- North Abutment-Northbound
- Piers-Northbound
- Approach Slabs
- Reinforcement Sheet 2 of 2
- Reinforcement Sheet 2 of 2

Standard Drawings

- SCB-D-60
- SCB-36-60
- SB-59-60-sheet 1 of 2
- SB-20-60
- SB-20-60

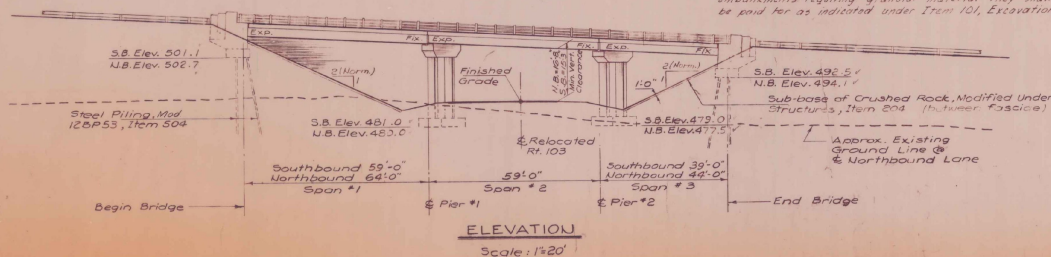
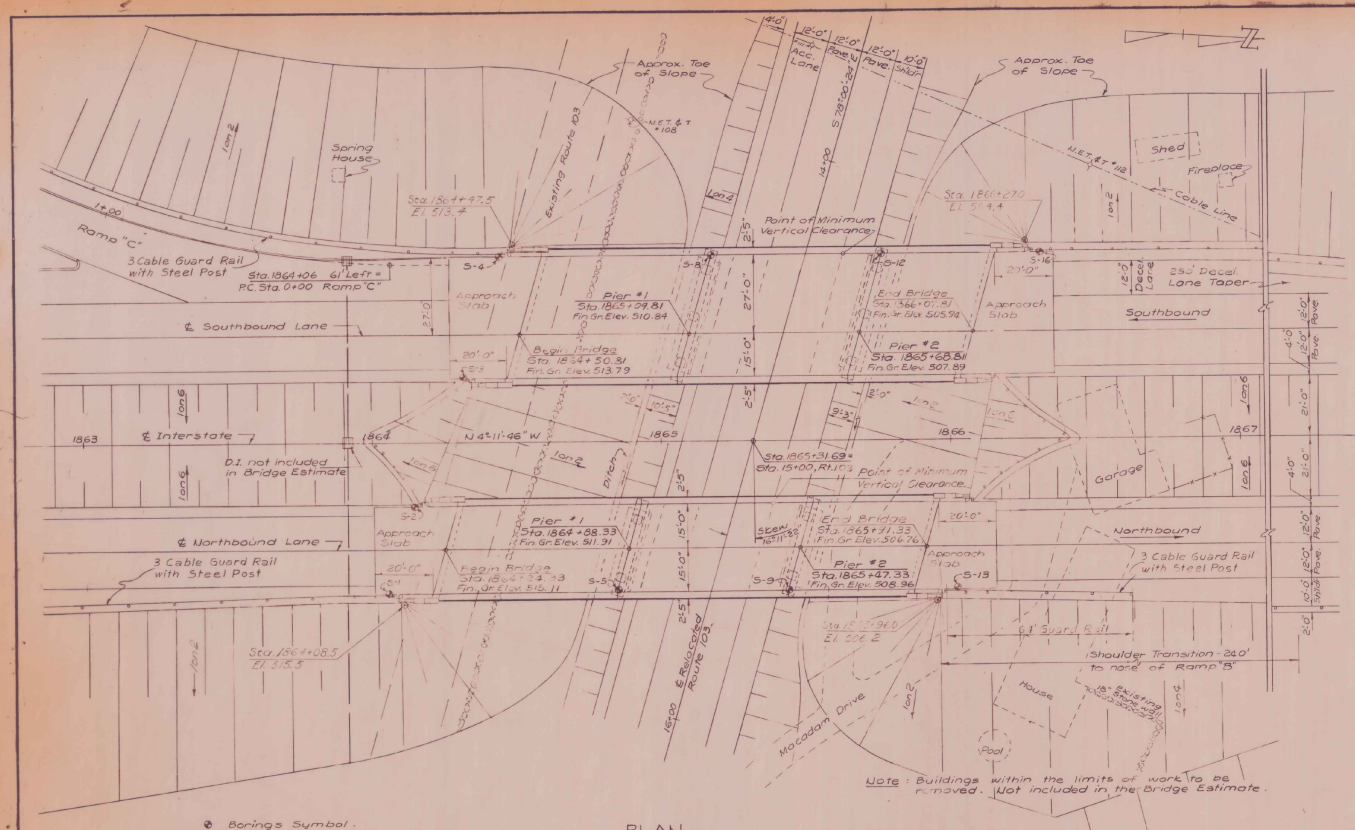
PRELIMINARY INFORMATION
SHEET FOR BRIDGES

BRIDGE 22N4S
VERMONT
STATE HIGHWAY DEPARTMENT
TOWNS OF WESTMINSTER ROCKINGHAM
INTERSTATE ROUTE 91

DARBY HILL ROAD BRIDGE
GENERAL PLAN
AND ELEVATIONS

WMH McFARLAND
ENGINEER
BURLINGTON, VT

DESIGNED L.H.S. CHECKED L.H.S. DATE 12-30-60
DRAWN J.H.T. IN CHARGE H.C. SCALE 1"=20'
PROJECT 191-1151 CONT'G SH 38 OF 137
BRIDGE SHEET 1 OF 10



SUMMARY OF QUANTITIES		QUANTITIES			
ITEM NO.	ITEM		S.B. BRIDGE	N.B. BRIDGE	
107	Structure Excavation,	C.Y.	175	146	134
204	Sub-base of Crushed Rock, Mod., Under Structure	C.Y.	131	120	120
222	Gravel Backfill	C.Y.	88	66	66
315	Tar Emulsion for Bridge Floors	gal.		391	288
361-B	Bituminous Concrete Pavement, Mod.	ton		158	115
401-B	Concrete Class B, Mod.	C.Y.	637	649	493
402	Reinforcing Steel #10, 540000-80, 790	Lb.	107,750	107,750	78,450
403	Spiral Reinforcement #10, 540000-80, 790	Lb.			
404A	Structural Steel #10, 540000-80, 790	Lb.			
407	Asphaltic Asbestos Coating	S.Y.	48	48	36
501	Furnishing Equipment for Driving Piles	L.S.	Nec.	Nec.	Nec.
503	Splices for Steel Piling	ea.	0	0	0
504	Steel Piling	L.F.	1,257	1,011	1,011
556C	Granite Bridge Curb, Mod.	L.F.	366	383	383
572	Bridge Railing	L.F.	327	343	343
372	Joint Sealer, hot poured elastic type	L.F.			
	FINAL		FINAL	FINAL	FINAL

* These items to be included in the roadway estimate.

GENERAL NOTES

- Materials and Construction shall conform to State of Vermont Department of Highways Standard Specifications for Highway and Bridge Construction dated 1956.
- All design in accordance with A.A.S.H.O. Standard Specifications for Highway Bridges, dated 1957. Loading is H20-S16-44 truck, as modified for National System of Interstate Highways.
- Concrete shall attain a minimum strength of 2,000 p.s.i. prior to the addition of any superimposed load.
- All concrete to be Class "B".
- All welding to conform with the American Welding Society Standard Specifications for Welded Highway and Railway Bridges.
- The haunch over each beam to vary in order to compensate for camber remaining after dead load deflection. Beam seat elevations have been lowered to account for difference between actual camber and required camber.
- Minimum cover for reinforcing bars shall be 2" unless otherwise noted.
- All piles to be 12 BP 53 and driven to minimum bearing capacity of 25 tons.
- Chamfer all exposed edges of concrete 1" unless otherwise shown.
- All expansion material shall be premoiled cork containing no bituminous or asphalt.
- Refer to SCB-D-60 for cambering of beams & joint material details.

INDEX OF DRAWINGS

- General Plan and Elevation.
- Boring Logs, Profiles, Sections & Framing Plans
- South Abutment - Southbound
- North Abutment - Southbound
- South Abutment - Northbound
- North Abutment - Northbound
- Piers Southbound
- Piers Northbound
- Approach Slab and Railing Plan.
- Reinforcement Sheet 1 of 2
- Reinforcement Sheet 2 of 2

STANDARD DRAWINGS:

- SCB-30-58 Sheet 1 of 2
SCB-42-58 " 2 " 2
" " " 2 " 2
" " " 2 " 2
SB-50-60 2 Sheets
SB-AS-15 " 57
SB-20-56
SB-22-56
SCB-D-60

PRELIMINARY INFORMATION
SHEET FOR BRIDGES

REFERENCE SHEET FOR
VERNON-ROCKINGHAM IR-91-103
SHEET 25 OF 32

BRIDGE 23N4S
VERMONT
STATE HIGHWAY DEPARTMENT
TOWNS OF WESTMINSTER-ROCKINGHAM
INTERSTATE ROUTE 91

ROUTE 103 INTERCHANGE
GENERAL PLAN
AND ELEVATION

WM. H. McFARLAND
ENGINEER
BINGHAMTON, N.Y.

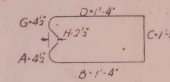
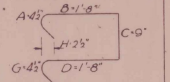
DESIGNED: L.H.S. CHECKED: L.H.S. DATE: 10-30-60
DRAWN: R.C.M. IN CHARGE: M.C. SCALE: As Shown
PROJ. 191-115(1) CONT. 5 SH. 37 OF 141

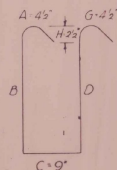
BRIDGE SHEET 1 OF 11

TABLE OF QUANTITIES FOR SINGLE SPAN (Square)

Span, Outside Out	93'-0"	94'-0"	89'-0"	84'-0"	79'-0"	74'-0"	69'-0"	64'-0"	59'-0"	54'-0"	49'-0"	44'-0"	39'-0"	34'-0"
Span & Tot. Brngs.	91'-0"	92'-0"	87'-0"	82'-0"	77'-0"	72'-0"	67'-0"	62'-0"	57'-0"	52'-0"	47'-0"	42'-0"	37'-0"	32'-0"
Length of Brng.	98'-0"	93'-0"	88'-0"	83'-0"	78'-0"	73'-0"	68'-0"	63'-0"	58'-0"	53'-0"	48'-0"	43'-0"	38'-0"	33'-0"
Size of Beam	36" x 30"	36" x 30"	36" x 30"	36" x 24"	36" x 19"	36" x 17"	36" x 16"	36" x 15"	33" x 13"	33" x 13"	33" x 12"	33" x 10"	30" x 10"	27" x 9"
Length of Side Bar, Center to Center	10'-0"	9'-0"	8'-0"	7'-0"	6'-0"	5'-0"	4'-0"	3'-0"	2'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"
Top	18"	18"	18"	18"	18"	18"	18"	18"	18"	18"	18"	18"	18"	18"
Dead Load Deflection	3"	2 1/2"	2 1/2"	2 1/2"	1 1/2"	1 1/2"	1 1/2"	1"	1"	1"	1"	1"	1"	1"
Dia. of Spiral Bars	5"	5"	5"	5"	5"	5"	5"	5"	5"	5"	5"	5"	5"	5"
Mean Dia. of Spiral	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
Spiral Pitch 0'-10' from Brng.	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"
10'-20' or 5 Span	4 1/2"	5"	5"	5"	5"	5"	5"	5"	5"	5"	5"	5"	5"	5"
20'-30' or 6 Span	6"	6 1/2"	7"	7"	7"	7"	7"	7"	7"	7"	7"	7"	7"	7"
30'-40' or 7 Span	9"	9 1/2"	10"	10"	10"	10"	10"	10"	10"	10"	10"	10"	10"	10"
40'-5 Span	14"	15"	15"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"	16"
Length of 1/2" Studs	(2 Studs required per pitch. 6" long unless otherwise specified on the plans)													
Tot. Struct. Steel (1 Span)	198,860	169,891	156,403	123,400	99,048	82,980	69,499	59,081	48,883	42,556	39,399	33,392	23,554	18,399
Reinforcing Bars - #1	366	346	328	310	292	274	254	236	218	200	180	162	144	126
- #2	192	192	192	192	192	192	192	188	188	188	188	188	188	188
- #3	30	30	30	30	30	30	30	30	30	30	30	30	30	30
- #4	128	128	114	108	100	94	88	80	74	68	60	54	48	40
- #5	16	16	16	16	16	16	16	16	16	16	16	16	16	16
- #6A	52	52	52	52	52	52	52	52	52	52	52	52	52	52
- #7	44	44	44	44	44	44	44	44	44	44	44	44	44	44
Tot. Weight - Rein. Bars	20,450	19,416	18,480	17,513	16,551	15,610	14,571	13,478	12,508	11,555	10,525	9,572	8,602	7,502
Approx. Wt. Spiral Reinf.	1,710	1,585	1,510	1,380	1,275	1,210	1,080	1,060	920	790	725	655	580	500
Tot. Cu. Yds. Conc. Class B	116	110	105	100	95	89	84	79	73	68	62	57	51	45
Tot. Wt. Brkm. Conc. Pavement	42	40	38	36	34	32	29	27	25	23	21	19	17	15

REINFORCING STEEL SCHEDULE

51 - #5 - 34'-4" - Straight				55 - #5 - 32'-2" - Straight			
52 - #4				56A - #4			
Straight				Straight			
Span	Length	Span	Length	Span	Length	Span	Length
34'-0"	33'-6"	34'-0"	33'-6"	34'-0"	2'-0"	5'-6"	
39'-0"	20'-3"	30'-0"	20'-6"	30'-0"	2'-3"	6'-0"	
44'-0"	22'-0"	44'-0"	23'-0"	44'-0"	2'-6"	6'-6"	
49'-0"	25'-3"	49'-0"	25'-6"	49'-0"	2'-6"	6'-6"	
54'-0"	27'-0"	54'-0"	28'-0"	54'-0"	2'-6"	6'-6"	
59'-0"	30'-3"	59'-0"	30'-6"	59'-0"	2'-6"	6'-6"	
64'-0"	32'-9"	64'-0"	33'-0"	64'-0"	2'-9"	7'-0"	
69'-0"	24'-3"	69'-0"	24'-6"	69'-0"	2'-9"	7'-0"	
74'-0"	26'-0"	74'-0"	26'-3"	74'-0"	2'-9"	7'-0"	
79'-0"	27'-6"	79'-0"	28'-0"	79'-0"	2'-10"	7'-2"	
84'-0"	29'-3"	84'-0"	29'-6"	84'-0"	2'-10"	7'-2"	
89'-0"	31'-0"	89'-0"	31'-3"	89'-0"	2'-10"	7'-2"	
94'-0"	32'-6"	94'-0"	33'-0"	94'-0"	2'-10"	7'-2"	
99'-0"	34'-3"	99'-0"	34'-6"	99'-0"	2'-10"	7'-2"	
54 - #4 - T.L. 4'-10"				56B - #4 - T.L. 4'-10"			
57 - #6 - T.L. 3'-0"							
							



REFERENCE STANDARD FOR
VERNON - ROCKINGHAM IR-91-1(3)
SHEET 27 OF 32

Revisions & Corrections
Structural Steel Rev. for 84' span 2/26/57

Drawn By H.N.S. Nov. 1956
Traced By H.N.S.

Checked By D.T.B.

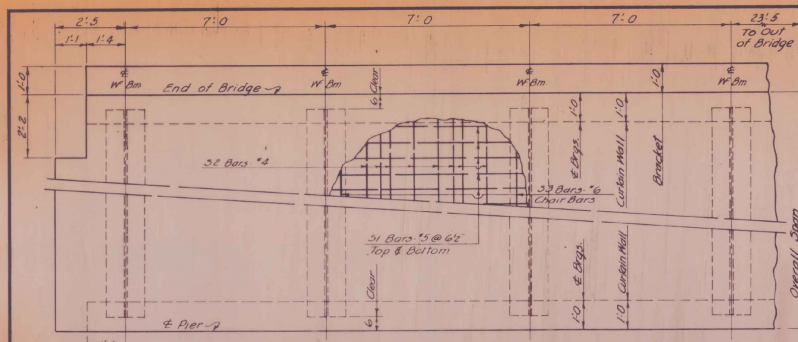
Correct 12/11/56
A.B. Smith
Bridge Engineer

Approved 12/13/56
H. H. Smith
Chief Engineer

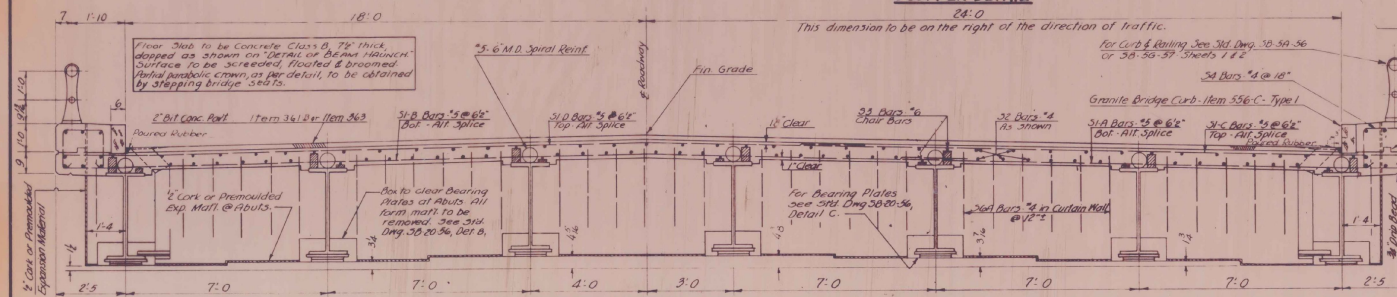
TABLES TO BE USED IN CONNECTION WITH
SCB-30-56

DEPARTMENT OF HIGHWAYS
STANDARD STRUCTURES

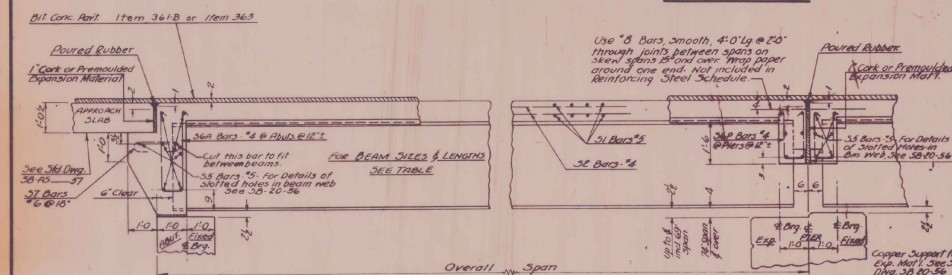
SCB-30-56



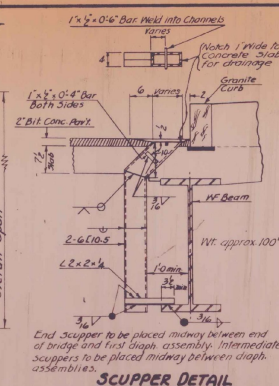
PARTIAL PLAN



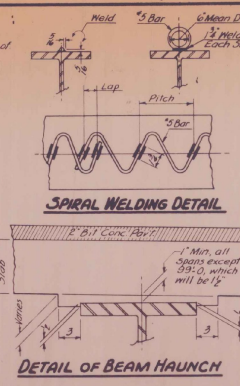
TYPICAL SECTION



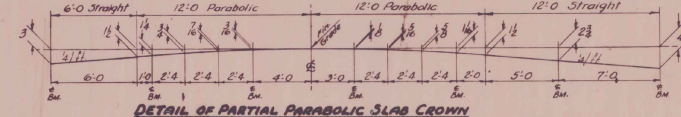
ELEVATION



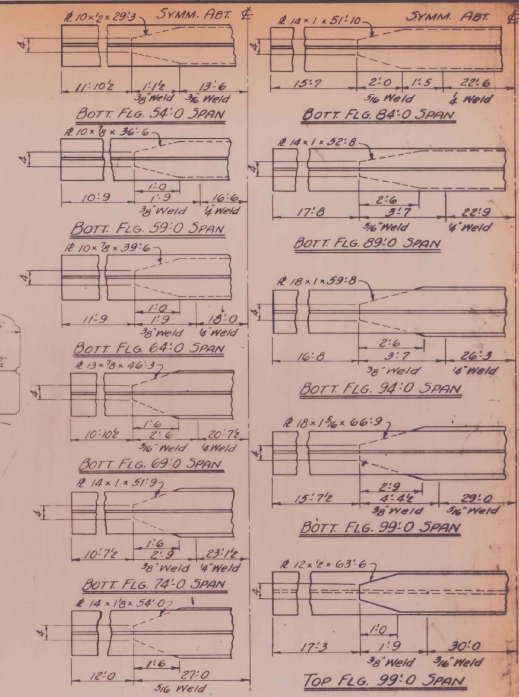
SCUPPER DETAIL



DETAIL OF BEAM HAUNCH



DETAIL OF PARTIAL PARABOLIC SLAB CROWN



THIS IS SHEET 1 OF 2 SHEETS

REFERENCE STANDARD FOR
VERNON - ROCKINGHAM IR-91-1(3)
SHEET 28 OF 32

REVISIONS & CORRECTIONS
COVER PLATE REVISED - 84' SPAN
NOTCH ADDED TO BACK OF SCUPPER
Note on Scupper Location added
Added reference to 301.30.50-57 301.182
Added Approx Scupper weight (800)
Changed ref to 301.30.50-57 to 301.182-57
Added Const Joint & chamfer notes

DRAWN BY: R.T.B. 11/13/56
TRACED BY: R.T.B. 11/13/56
CHECKED BY: H.V.S. Dec 56
CORRECT 12/12/56
G.O.T. Chief
BRIDGE ENGINEER
APPROVED 12/13/56
H. H. H. Chief
CHIEF ENGINEER

DETAILS OF 42 FT. ROADWAY-COMPOSITE BEAM BRIDGES

DEPARTMENT OF HIGHWAYS
STANDARD STRUCTURES
SCB-42-56

TABLE OF QUANTITIES FOR A SINGLE SPAN (SQUARE)

SPAN - OUT TO OUT	99-0	94-0	89-0	84-0	79-0	74-0	69-0	64-0	59-0	54-0	49-0	44-0	39-0	34-0
SPAN & TO & BEARINGS	97-0	92-0	87-0	82-0	77-0	72-0	67-0	62-0	57-0	52-0	47-0	42-0	37-0	32-0
LENGTH OF BEAMS	98-0	93-4	88-0	83-0	78-0	73-0	68-0	63-0	58-0	53-0	48-0	43-0	38-0	33-0
SIZE OF BEAM	36W300	36W300	36W300	36W245	36W245	36W200	36W160	36W150	33W130	33W130	33W121	33W130	30W108	27W94
LGTH. & SIZE BOT. COVER @	66" 2.10	59" 2.10	52" 2.10	45" 2.10	38" 2.10	31" 2.10	24" 2.10	17" 2.10	10" 2.10	3" 2.10	NONE	NONE	NONE	NONE
LGTH. & SIZE TOP COVER @	66" 1.5	59" 1.5	52" 1.5	45" 1.5	38" 1.5	31" 1.5	24" 1.5	17" 1.5	10" 1.5	3" 1.5	NONE	NONE	NONE	NONE
DEAD LOAD DEFLECTION	3"	2 1/2"	2 1/2"	2 1/2"	1 1/2"	1 1/2"	1 1/2"	1"	1"	1"	1"	1"	1"	1"
DIA. OF SPIRAL BARS	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"
MEAN DIA. OF SPIRAL	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"
SPIRAL PITCH 0'-10' FROM BCG.	4"	5"	5"	5"	5"	5"	5"	6"	6"	6"	7"	8"	8"	8"
" " 10'-20' OR 6' SPAN	4"	5"	5"	5"	5"	5"	5"	6"	6"	6"	7"	8"	8"	8"
" " 20'-30' " " "	6"	6"	7"	7"	7"	8"	8"	9"	10"	11"	12"	13"	14"	15"
" " 30'-40' " " "	9"	9"	10"	10"	11"	12"	13"	14"	15"	16"	17"	18"	19"	20"
" " 40'-6' SPAN	14"	15"	15"	16"	16"	17"	18"	19"	20"	21"	22"	23"	24"	25"
LENGTH OF 1/2" STUDS	6' LONG UNLESS OTHERWISE SPECIFIED ON THE PLANS.	2 STUBS REQUIRED PER PITCH.	2 STUBS REQUIRED PER PITCH.	2 STUBS REQUIRED PER PITCH.	2 STUBS REQUIRED PER PITCH.	2 STUBS REQUIRED PER PITCH.	2 STUBS REQUIRED PER PITCH.	2 STUBS REQUIRED PER PITCH.	2 STUBS REQUIRED PER PITCH.	2 STUBS REQUIRED PER PITCH.	2 STUBS REQUIRED PER PITCH.	2 STUBS REQUIRED PER PITCH.	2 STUBS REQUIRED PER PITCH.	2 STUBS REQUIRED PER PITCH.
TOT. STRUT. STEEL (1 SPAN)	269,750	237,600	218,700	176,600	138,400	103,925	97,125	82,550	68,275	59,425	53,000	46,575	32,850	25,700
REINFORCING BARS - 31-A	183	174	164	155	146	137	127	118	109	100	91	81	72	63
" " 31-B	183	174	164	155	146	137	127	118	109	100	91	81	72	63
" " 31-C	183	174	164	155	146	137	127	118	109	100	91	81	72	63
" " 31-D	183	174	164	155	146	137	127	118	109	100	91	81	72	63
" " 32	252	252	252	252	252	252	252	252	252	252	252	252	252	252
" " 33	42	42	42	42	42	42	42	42	42	42	42	42	42	42
" " 34	128	122	114	108	102	94	88	82	74	68	62	54	48	42
" " 35	32	32	32	32	32	32	32	32	32	32	32	32	32	32
" " 36A	76	76	76	76	76	76	76	76	76	76	76	76	76	76
" " 37	62	62	62	62	62	62	62	62	62	62	62	62	62	62
TOT. WEIGHT REINF. BARS	28,290	26,970	25,570	24,235	22,920	21,610	20,175	18,680	17,330	16,015	14,700	13,275	11,935	10,430
APPROX. WT. SPIRAL REINF.	2395	2215	2110	1930	1935	1780	1690	1505	1475	1285	1100	1010	915	810
TOTAL C.Y. CONC. CLASS B	1510	1440	1373	130.6	123.7	116.8	110.1	103.3	95.4	88.6	82.0	75.2	67.0	59.0
TOT. WT. BOT. CONC. PAINT (TONS)	60	57	54	51	48	45	42	39	36	33	30	27	24	21

REINFORCING STEEL SCHEDULE

31-A #5 17'3" STRAIGHT	31-B #5 31'3" STRAIGHT
31-C #5 20'9" STRAIGHT	31-D #5 27'9" STRAIGHT
32 #4 STRAIGHT	36A #4 STRAIGHT
SPAN LGTH. SPAN LGTH. SPAN LGTH. SPAN LGTH.	SPAN LGTH. SPAN LGTH. SPAN LGTH. SPAN LGTH.
34-0 33-6 34-0 33-6	34-0 2-0 5-6
39-0 20-3 39-0 20-6	39-0 2-3 6-0
44-0 22-9 44-0 23-0	44-0 2-6 6-6
49-0 25-3 49-0 25-6	49-0 2-6 6-6
54-0 27-9 54-0 28-0	54-0 2-6 6-6
59-0 30-3 59-0 30-6	59-0 2-6 6-6
64-0 32-9 64-0 33-0	64-0 2-9 7-0
69-0 34-3 69-0 34-6	69-0 2-9 7-0
74-0 36-0 74-0 36-3	74-0 2-9 7-0
79-0 37-6 79-0 38-0	79-0 2-10 7-2
84-0 39-3 84-0 39-6	84-0 2-10 7-2
89-0 41-0 89-0 41-3	89-0 2-10 7-2
94-0 42-6 94-0 43-0	94-0 2-10 7-2
99-0 44-3 99-0 44-6	99-0 2-10 7-2
34 #4 FL 4'-10"	36A #4 FL 4'-10"
34-0 33-6 34-0 33-6	34-0 2-0 5-6
39-0 20-3 39-0 20-6	39-0 2-3 6-0
44-0 22-9 44-0 23-0	44-0 2-6 6-6
49-0 25-3 49-0 25-6	49-0 2-6 6-6
54-0 27-9 54-0 28-0	54-0 2-6 6-6
59-0 30-3 59-0 30-6	59-0 2-6 6-6
64-0 32-9 64-0 33-0	64-0 2-9 7-0
69-0 34-3 69-0 34-6	69-0 2-9 7-0
74-0 36-0 74-0 36-3	74-0 2-9 7-0
79-0 37-6 79-0 38-0	79-0 2-10 7-2
84-0 39-3 84-0 39-6	84-0 2-10 7-2
89-0 41-0 89-0 41-3	89-0 2-10 7-2
94-0 42-6 94-0 43-0	94-0 2-10 7-2
99-0 44-3 99-0 44-6	99-0 2-10 7-2
34 #4 FL 4'-10"	36A #4 FL 4'-10"
34-0 33-6 34-0 33-6	34-0 2-0 5-6
39-0 20-3 39-0 20-6	39-0 2-3 6-0
44-0 22-9 44-0 23-0	44-0 2-6 6-6
49-0 25-3 49-0 25-6	49-0 2-6 6-6
54-0 27-9 54-0 28-0	54-0 2-6 6-6
59-0 30-3 59-0 30-6	59-0 2-6 6-6
64-0 32-9 64-0 33-0	64-0 2-9 7-0
69-0 34-3 69-0 34-6	69-0 2-9 7-0
74-0 36-0 74-0 36-3	74-0 2-9 7-0
79-0 37-6 79-0 38-0	79-0 2-10 7-2
84-0 39-3 84-0 39-6	84-0 2-10 7-2
89-0 41-0 89-0 41-3	89-0 2-10 7-2
94-0 42-6 94-0 43-0	94-0 2-10 7-2
99-0 44-3 99-0 44-6	99-0 2-10 7-2

REFERENCE STANDARD FOR
VERNON - ROCKINGHAM IR-91(2)
SHEET 29 OF 32REVISIONS & CORRECTIONS
STRUCTURAL STEEL REV. FOR 84' SPAN

2/26/56

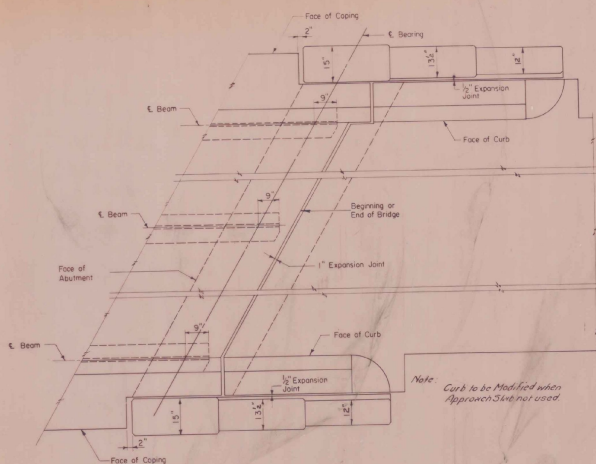
DRAWN BY: R.T.B. DEC 1956
TRACED BY: R.T.B. MAY 1956

CHECKED BY: H.V.S. DEC 1956

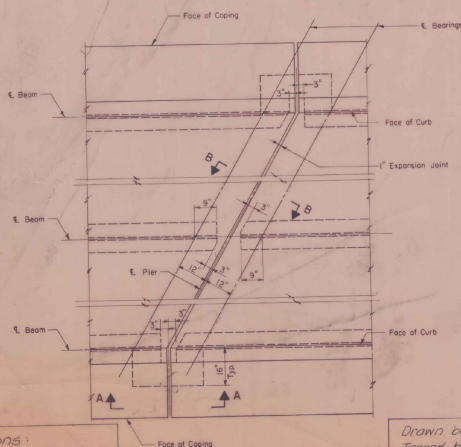
CORRECT - 2/17/56

APPROVED - 2/17/56
BRIDGE ENGINEERAPPROVED - 2/17/56
CHIEF ENGINEERTABLES TO BE USED IN CONNECTION
WITH SCB-42-56DEPARTMENT OF HIGHWAYS
STANDARD STRUCTURES

SCB-42-56



PLAN AT ABUTMENT
Scale: $\frac{1}{2}'' = 1'-0''$

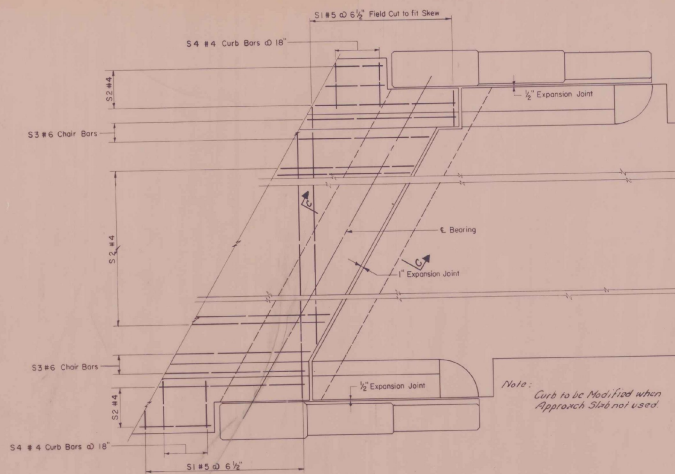


PLAN AT PIER
Scale: $\frac{1}{2}'' = 1'-0''$

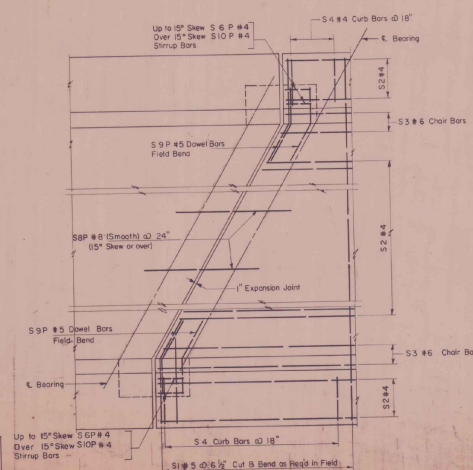
Revisions & Corrections:
Changed Dashed Rubber to Asphalt Joint Filler 9/19/58

Drawn by
Traced by
Checked by
Clarkson Engineering Co.

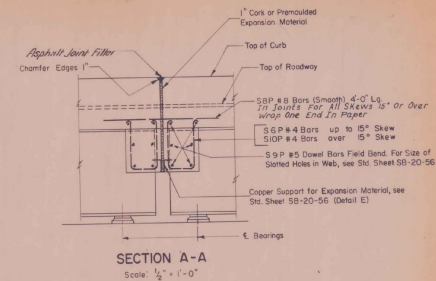
Correct
9/23/58
Bridge Engineer
Approved
5/23/58
Bridge Engineer



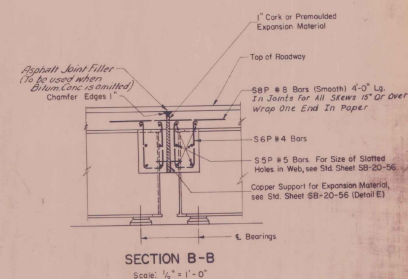
REINFORCEMENT LAYOUT AT ABUTMENT
Scale: $\frac{1}{2}'' = 1'-0''$



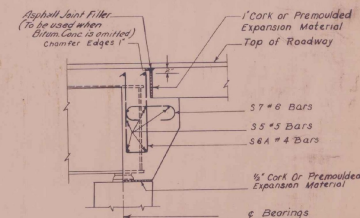
REINFORCEMENT LAYOUT AT PIER
Scale: $\frac{1}{2}'' = 1'-0''$



SECTION A-A
Scale: $\frac{1}{2}'' = 1'-0''$



SECTION B-B
Scale: $\frac{1}{2}'' = 1'-0''$



SECTION C-C
Scale: $\frac{1}{2}'' = 1'-0''$

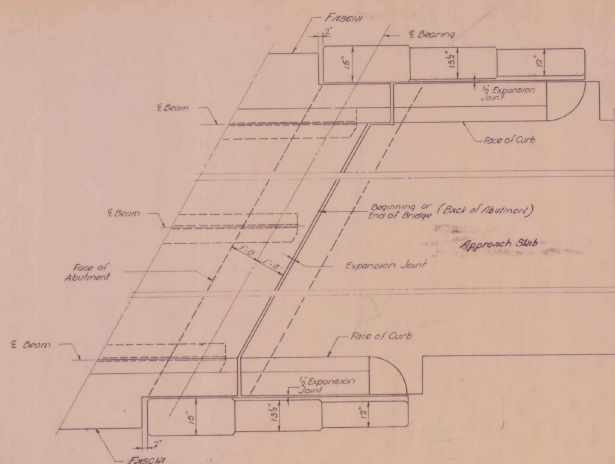
REFERENCE STANDARD FOR
VERNON-ROCKINGHAM JR-91-1(3)
SHEET 31 OF 32

DETAIL OF EXPANSION JOINT OVER PIERS AND AT ABUTMENTS

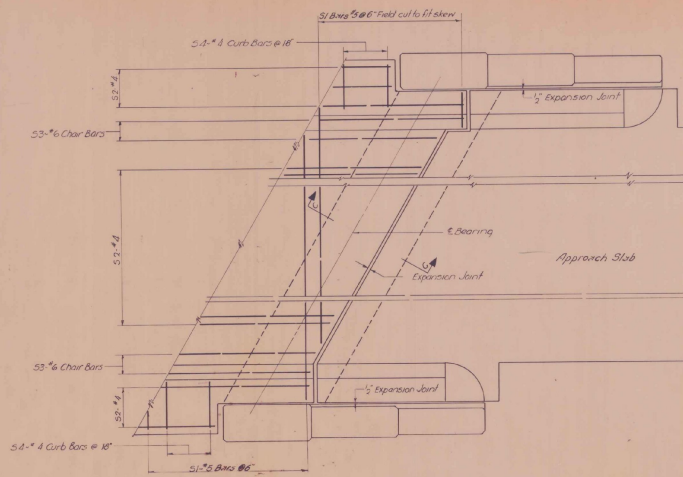
DEPARTMENT OF HIGHWAYS
STANDARD STRUCTURES

SB-22-58

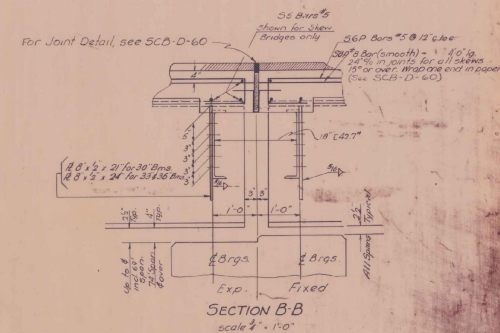
GENERAL NOTES



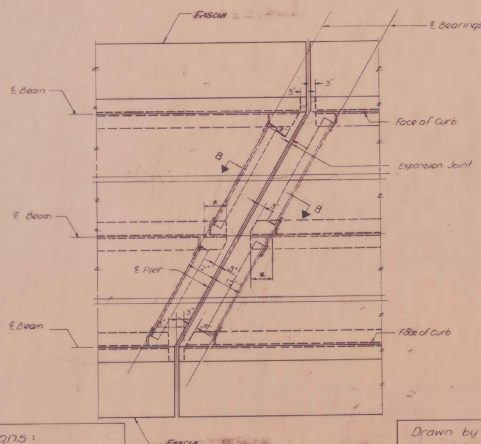
PLAN AT ABUTMENT
Scale 1/2" = 1'-0"



REINFORCEMENT LAYOUT AT ABUTMENT
Scale 1/2" = 1'-0"

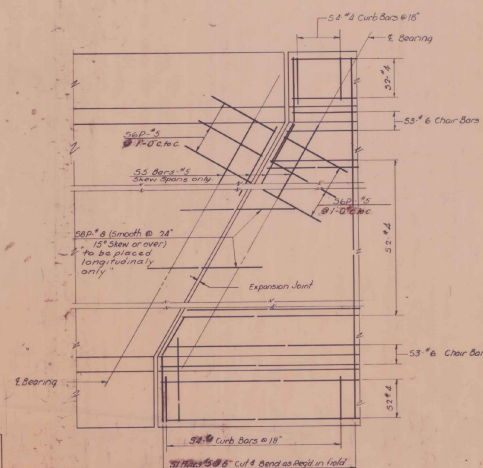


SECTION B-B
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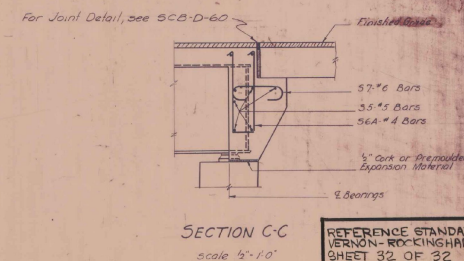


PLAN AT PIER
Scale 1/2" = 1'-0"

* This dimension varies according to the skew. See Standards SCB-D-60



REINFORCEMENT LAYOUT AT PIER
Scale 1/2" = 1'-0"



SECTION C-C
Scale 1/2" = 1'-0"

REFERENCE STANDARD FOR
VERNON-ROCKINGHAM IR-91-1(3)
SHEET 32 OF 32

Revisions & Corrections:
Remove #4 Bar Sec BB
Added General Note
Corrected Joint Detail
Added note to 5/8 bars

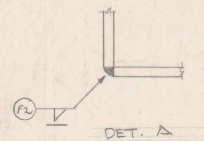
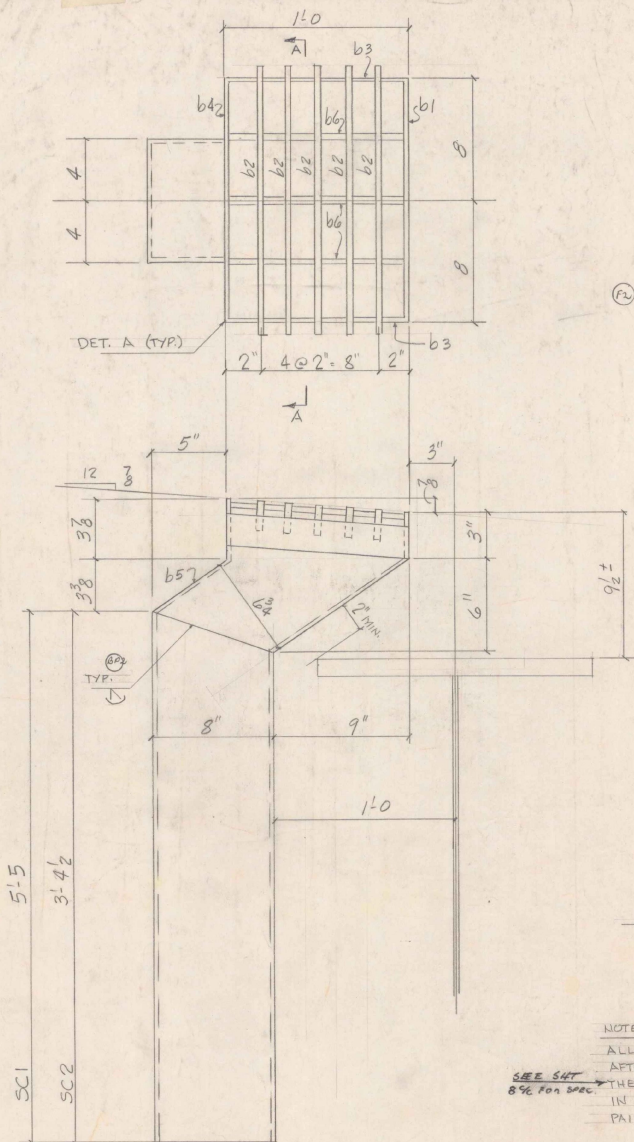
1/12/60
4/16/60
12-2-60
3-2-61

Drawn by: H.W.S. June 1960
Traced by: H.W.S. June 1960
Checked by: R.S.H. & R.T.B. June 1960
Corrected: 13 July 1960
Approved: 13 July 1960
Chief Engineer

DETAIL OF EXPANSION JOINT OVER PIERS AND AT ABUTMENTS

DEPARTMENT OF HIGHWAYS
STANDARD STRUCTURES

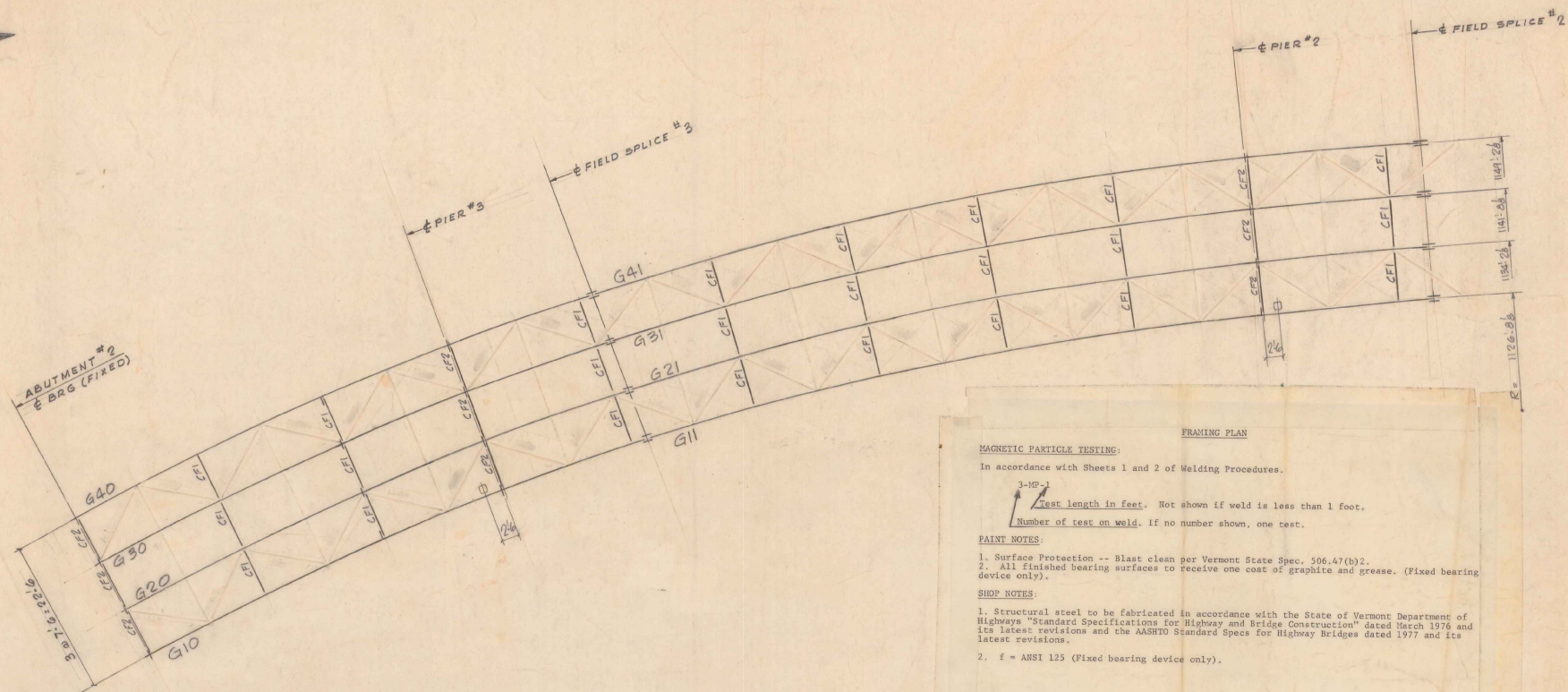
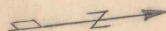
SB-22-60



3~SC-5 $L2 \times 2 \times \frac{5}{16} \times 1'-7"$

ONE SC-1
2 ~ SC2

BILL OF MATERIAL									
NO. PIECES		MARK	DESCRIPTION	LENGTH		WEIGHT			
				FT.	IN.				



FRAMING PLAN

MAGNETIC PARTICLE TESTING:

In accordance with Sheets 1 and 2 of Welding Procedures.

Test length in feet. Not shown if weld is less than 1 foot.
Number of test on weld. If no number shown, one test.

PAINT NOTES:

1. Surface Protection -- Blast clean per Vermont State Spec. 306.47(b)2.
2. All finished bearing surfaces to receive one coat of graphite and grease. (Fixed bearing device only).

SHOP NOTES:

1. Structural steel to be fabricated in accordance with the State of Vermont Department of Highways "Standard Specifications for Highway and Bridge Construction" dated March 1976 and its latest revisions and the AASHTO Standard Specs for Highway Bridges dated 1977 and its latest revisions.

2. F = ANSI 125 (Fixed bearing device only).

SEE E4 FOR SCUPPER AND DRAIN DETAIL.

FIELD CONNECTIONS 3" A829F (TYPE 3) BOLTS, ONE WASHER

ABUTMENT AND PIER CROSSFRAMES ~ 720 x 2 1/2

INTERMEDIATE CROSSFRAMES ~ 2306 x 2 1/4

SPLICE WEB ~ 1192 x 3

SPLICE #1 FLANGE ~ 416 x 4 1/4

SPLICE #2 FLANGE ~ 416 x 4

SPLICE #3 FLANGE ~ 416 x 3 1/2

DESK. SEQ. - PCS. MARK END OF BEAM AT TRAILER END.							
DESK. SEQ.	PCS. MARK	DESK. SEQ.	PCS. MARK	DESK. SEQ.	PCS. MARK	DESK. SEQ.	PCS. MARK
1	G10	5	G41	9	G42	13	G43
2	G20	6	G31	10	G32	14	G33
3	G30	7	G21	11	G22	15	G23
4	G40	8	G11	12	G12	16	G13

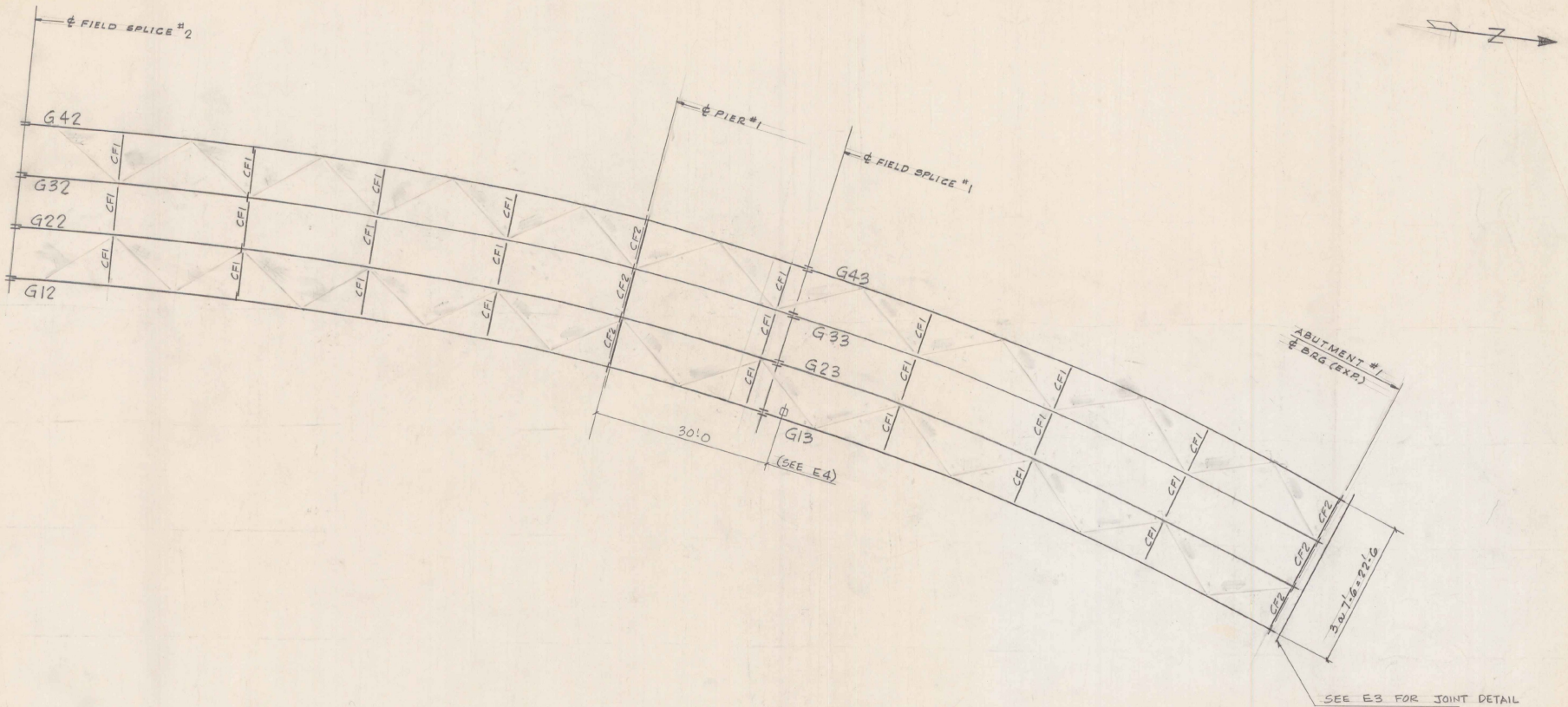
SHOULD BE
G23
SHOULD BE
G13

FRAMING PLAN

A MCB 8-4-81 REV DESW SEM AS PER A.BECIC

VERMONT STRUCTURAL STEEL CORPORATION		BURLINGTON, VT		FAP 193-1(3) 5/8	
A Remove Horiz. Barring 6-3-81		PROJECT RAMP WIDS OVER I-91 N.B. & S.B.		PRINT RECORD	
DRAWN BY VTU	DATE 3/81	LOCATION WATERFORD, VT.	CUSTOMER BECK & BELLUCCI	NO.	FOR DATE
CHKD BY CG				5	APP 5-16
				3	APP 5-17
				3	APP 6-1
				5	APP 6-13
				4	APP 6-14
ARCHITECT S.O.V. A.O.T.		JOB NO. 80-3591		SHEET NO. E1	
BOOTS		PAINT			

N.C. 2 STATE 7/18/81 4 FIELD 8-9-81



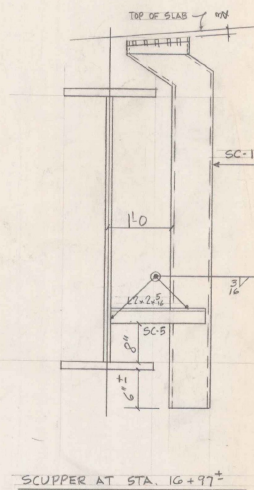
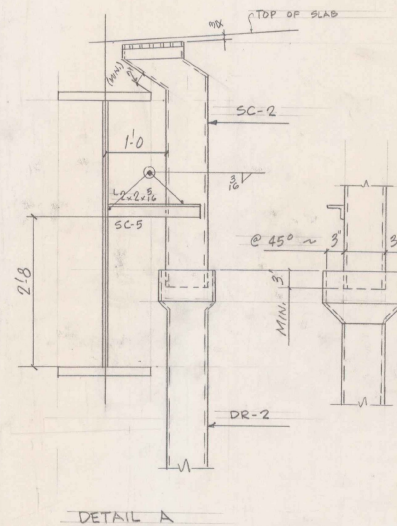
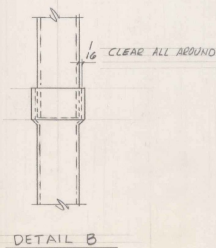
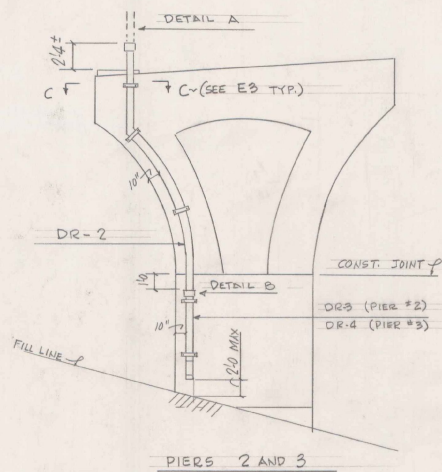
FOR SHOP NOTES
SEE DWG. E1

FRAMING PLAN

VERMONT STRUCTURAL STEEL CORPORATION BURLINGTON, VT.		FAP 193-1(3) 5/3	
PROJECT REMOVE HORIZ BRACING <u>RAMP WTS OVER 191 N.B. & S.B.</u>		PRINT RECORD	
DRAWN BY VTU	DATE	NO.	FOR DATE
CHKD BY OS		5	APP 5-6
LOCATION WATERFORD, VT.		3	INT 5-7
CUSTOMER BECK & BELLUCCI		3	5/10 6-1
ARCHITECT S.O.V. A.O.T.		5	APP 6-23
JOB NO. 80-3591	SHEET NO. E2	4	SHOP 6-24
PAINT			

N/C 2 5016 9/8/81



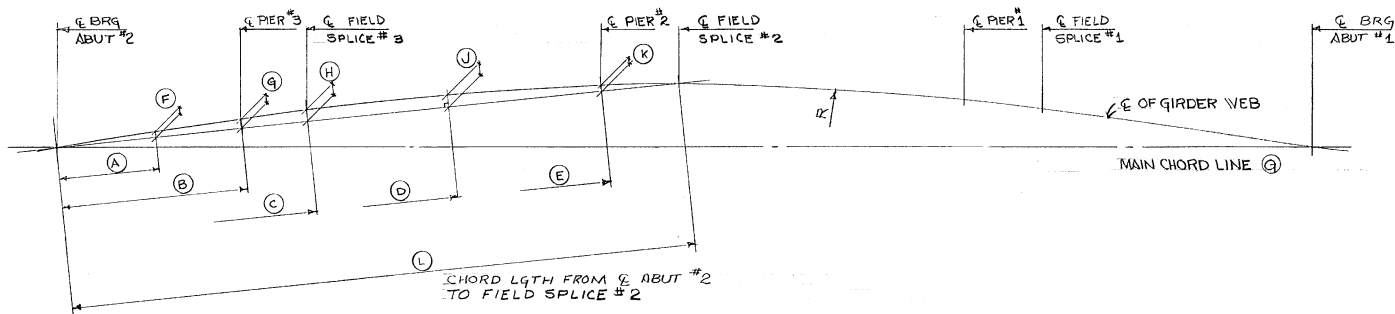


FOR SHOP NOTES
SEE DWG. E1

FAP I 93-1(3) C/3

VERMONT STRUCTURAL STEEL CORPORATION BURLINGTON, VT.				PRINT RECORD		
DRAWN BY	DATE	PROJECT	LOCATION	NO.	FOR	DATE
CB	3/8	RAMP W/TS OVER I 91	WATERFORD, VT.	5	APPD	5-6
CHKD BY	SB	CUSTOMER	BESK & BELLUCCI	5	APPD	6-13
		ARCHITECT	S.D.V.A.O.T.	4	APPD	6-13
		JOB NO.	80-3591	2	STRUT	7/1/01
		SHEET NO.	E4			

NC.

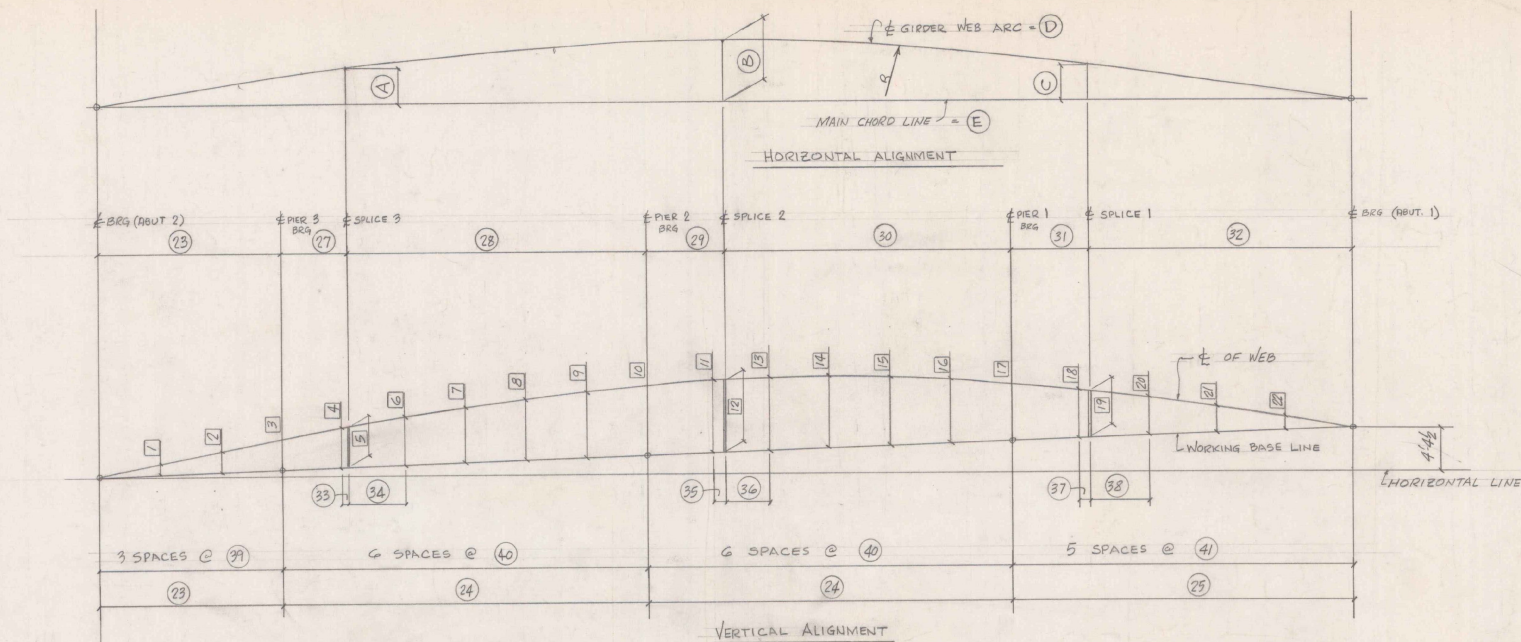


~ ABUT #2 To FIELD SPLICE #2 ~

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(J)	(K)	(L)	(Q)	(R)
LINE 1	29-4 ¹⁵ / ₁₆	38-10 ⁷ / ₁₆	80-8 ⁵ / ₁₆	128-10 ⁵ / ₁₆	175-9 ⁷ / ₁₆	2-3 ¹ / ₁₆	3-8 ¹³ / ₁₆	4-4 ¹ / ₁₆	4-2	1-11 ³ / ₁₆	201-6 ¹ / ₁₆	402-10 ¹³ / ₁₆	1126-8 ¹ / ₁₆
LINE 2	27-1 ¹ / ₄	59-3 ³ / ₈	81-3	129-7 ⁹ / ₁₆	177-11 ⁷ / ₁₆	2-3 ¹ / ₄	3-9 ⁸ / ₁₆	4-4 ³ / ₈	4-2 ⁵ / ₁₆	1-11 ⁹ / ₁₆	202-10 ⁵ / ₁₆	405-7	1134-2 ¹ / ₈
LINE 3	29-9 ⁷ / ₁₆	57-8 ⁷ / ₁₆	81-8 ⁵ / ₁₆	130-5 ⁵ / ₁₆	179-2 ⁵ / ₁₆	2-3 ³ / ₈	3-9 ³ / ₈	4-4 ⁵ / ₈	4-2 ⁹ / ₁₆	1-11 ¹ / ₂	204-0 ³ / ₁₆	408-3 ¹ / ₁₆	1141-8 ¹ / ₁₆
LINE 4	30-0	60-0 ¹ / ₄	82-0 ¹ / ₈	131-2 ¹ / ₈	180-3 ¹ / ₁₆	2-3 ¹ / ₂	3-9 ⁵ / ₈	4-4 ⁷ / ₈	4-2 ³ / ₄	1-11 ⁷ / ₁₆	205-2 ¹ / ₁₆	410-11 ¹ / ₁₆	1149-2 ¹ / ₈

SEE SH C/A FOR ADD'L INFO.

VERMONT STRUCTURAL STEEL CORPORATION BURLINGTON, VT.			
PROJECT RAMP WTS OVER I-91		PRINT RECORD	
LOCATION WATERFORD VT		NO.	FOR
CUSTOMER BECK & BELLUCCI		3	SHOP
ARCHITECT S.O.V. A.O.T.			
JOB NO. 80-3591		SHEET NO. C1B	
HOLDS			
BOLTS			
PAINT			



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
2 1/2"	4 7/8"	6 3/8"	8 3/4"	9"	11"	1' 0 1/2"	1' 1"	1' 0 1/8"	1' 0 5/8"	1' 0 13/16"	1' 0 1/2"	1' 1"	1' 0 1/8"	1' 1 1/8"	10 3/4"	9 1/2"	8 3/4"	8 5/8"	8"	6 3/8"	3 3/4"

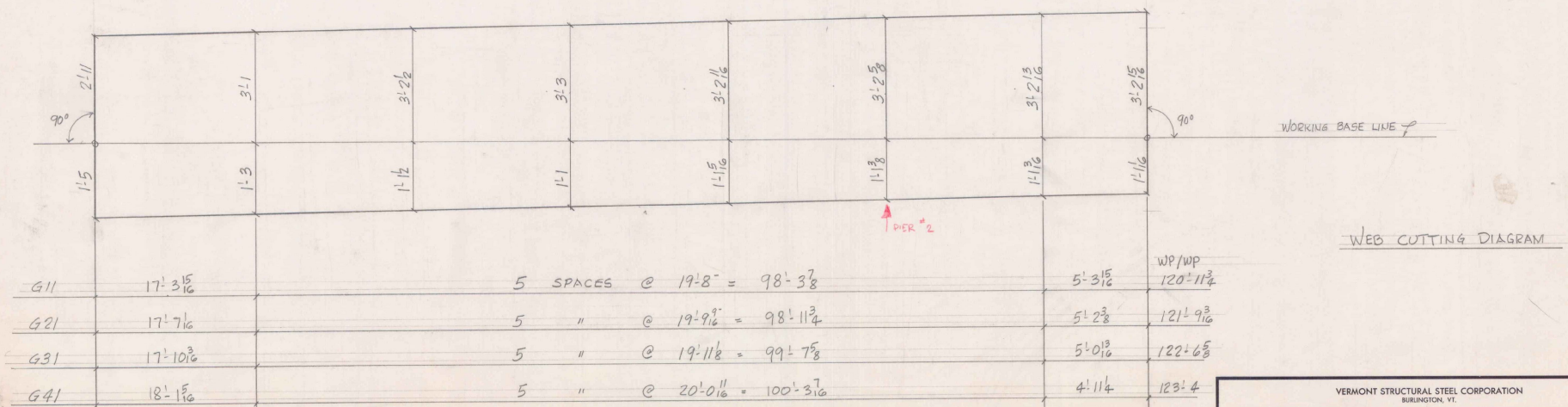
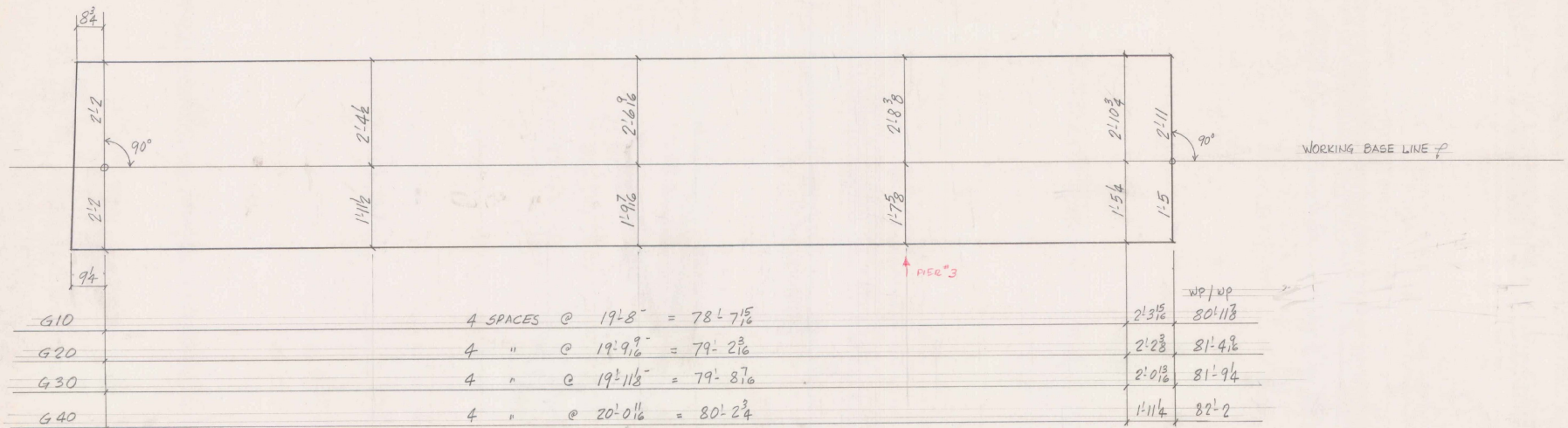
FOR SHOP NOTES
SEE DWG. E 1

	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	R
LINE 1	58'-11 1/2"	117'-11 1/2"	110'-11 1/2"		22'-0"	98'-11 1/2"	25'-0"	92'-11 1/2"	24'-6"	85'-7 1/2"	2'-4"	17'-4"	5'-4"	14'-4"	2'-5 1/2"	19'-6 5/8"	19'-8"	19'-8"	22'-6 5/8"	1126'-5 1/2"
LINE 2	59'-4 5/8"	118'-9 1/4"	110'-10 3/4"		22'-0"	96'-9 1/4"	25'-0"	93'-9 1/4"	24'-6"	86'-4 1/2"	2'-2 7/8"	17'-7 1/8"	5'-2 7/8"	14'-7 1/8"	2'-3 1/2"	19'-10 3/8"	19'-9 7/8"	19'-9 7/8"	22'-2 1/2"	1134'-2 1/2"
LINE 3	59'-9 1/8"	119'-6 1/8"	111'-7"		22'-0"	97'-6 1/8"	25'-0"	94'-6 1/8"	24'-6"	87'-1"	2'-0 7/8"	17'-10 1/4"	5'-0 7/8"	14'-10 1/4"	2'-2 1/2"	20'-1 1/2"	19'-11 1/8"	19'-11 1/8"	22'-5 1/2"	1141'-8 1/2"
LINE 4	60'-1 1/16"	120'-4 1/16"	112'-5 3/16"		22'-0"	98'-4 1/16"	25'-0"	95'-4 1/16"	24'-6"	87'-9 13/16"	1'-11 1/16"	18'-1 3/8"	4'-11 1/8"	15'-1 3/8"	2'-0 7/8"	20'-5 1/8"	20'-10 1/8"	20'-10 1/8"	22'-5 1/2"	1149'-2 1/2"

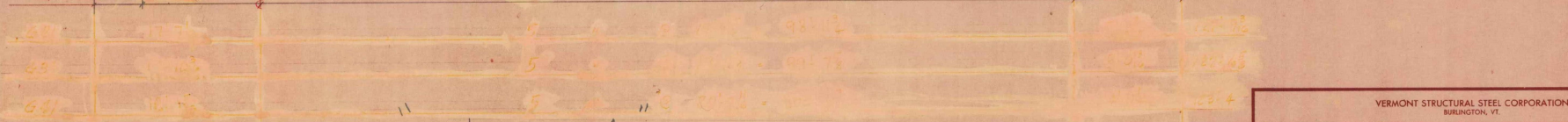
	A	B	C	D	E	
LINE 1	11'-7 1/4"	18'-1 1/8"	12'-1 1/8"	405'-0 1/2"	402'-10 1/2"	20'-57'97"
LINE 2	11'-7 1/8"	18'-3 1/8"	12'-2 1/8"	407'-9 1/8"	405'-7"	20'-57'98"
LINE 3	11'-8 1/16"	18'-4 1/4"	12'-3 1/4"	410'-5 1/4"	408'-5 1/4"	20'-57'99"
LINE 4	11'-9 1/16"	18'-6 1/4"	12'-4 1/4"	413'-2"	410'-11 1/2"	20'-58'97"

VERMONT STRUCTURAL STEEL CORPORATION BURLINGTON, VT.				FAC I 93-1 (3) C/3			
PROJECT	RAMP W.T.S. OVER I-91	DATE		NO.	FOR	DATE	
LOCATION	WATERFORD, VT.	DRAWN BY	C.B.	5	800	6-6	
CUSTOMER	BECK & BELLUCCI	CHECK BY	S.O.	6	800	6-13	
ARCHITECT	S.O.V. A.O.T.						
JOB NO.	80-3591	SHEET NO.	C1				

N.C.

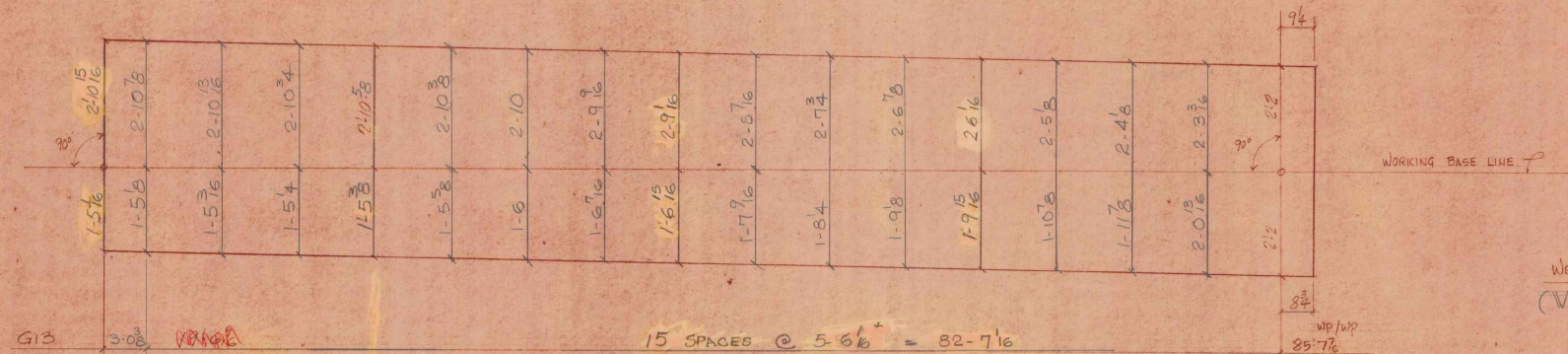
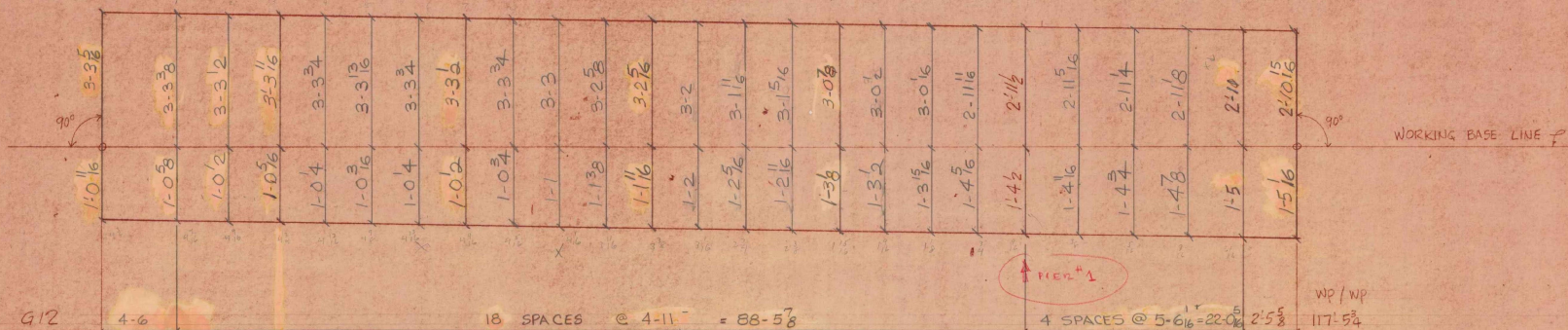


VERMONT STRUCTURAL STEEL CORPORATION BURLINGTON, VT.			
PROJECT	RAMP WTS OVER I-91	NO.	FOR
LOCATION	WATERFORD, VT.	DATE	
CUSTOMER	BECK & BELLUCCI	NO.	FOR
ARCHITECT	S.O.V.A.D.T.	DATE	
JOB NO.	80-3591	SHEET NO.	C2



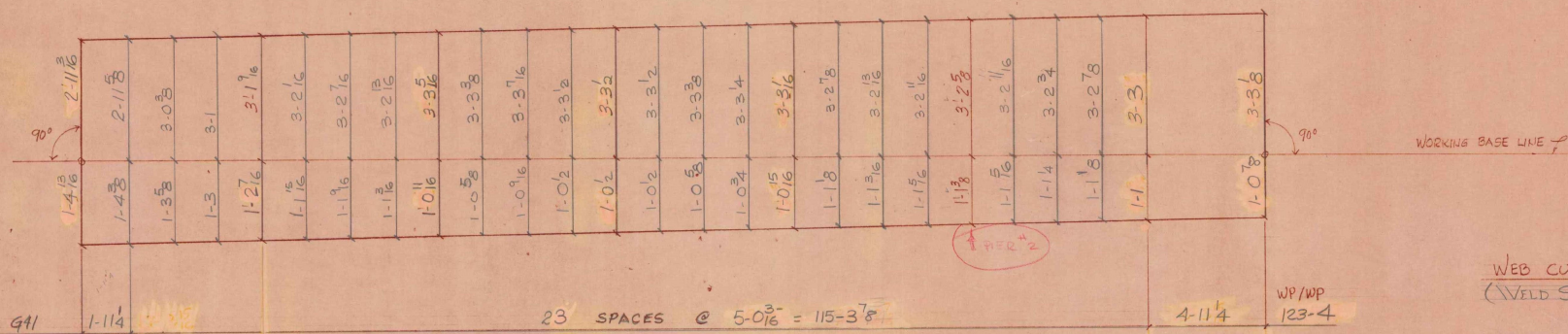
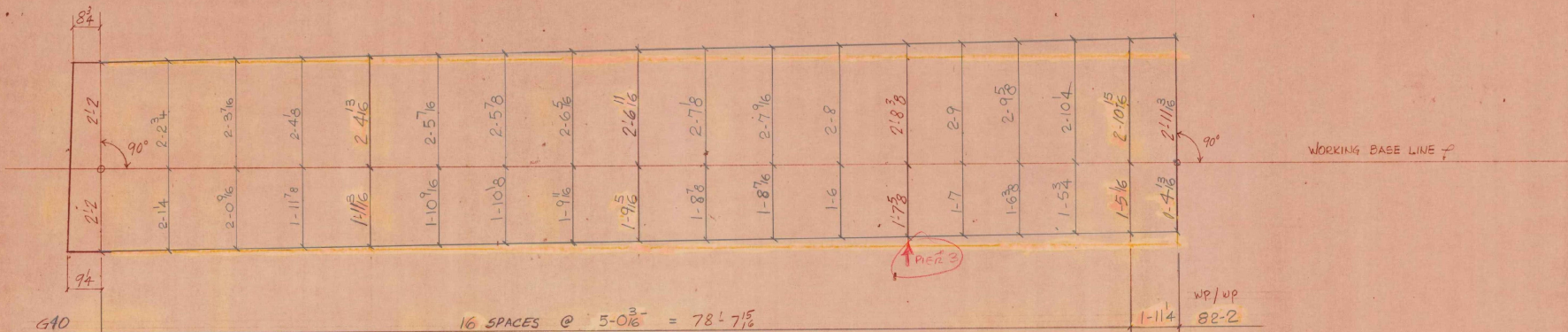
LINE 1

VERMONT STRUCTURAL STEEL CORPORATION BURLINGTON, VT.				PRINT RECORD	
DATE	PROJECT	LOCATION	CUSTOMER	NO.	FOR DATE
DRAWN BY: <u>W.C.D.</u>	RAMP W T O S OVER I91	WATERFORD, VT.	BECK & BELLUCCI	3	6/10/68 7/16
CED BY:					
HOLES	ARCHITECT	S.O.V.A. D.T.			
ROTS	JOB NO.	80-3591		SHEET NO.	C4
PAINT					



WEB CUTTING DIAGRAM
(WELD SHRINKAGE INCLUDED)

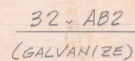
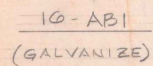
VERMONT STRUCTURAL STEEL CORPORATION BURLINGTON, VT.									
DRAWN BY	DATE	PROJECT	RAMP W/TPS OVER I-91						
CHECK BY		LOCATION	WATERFORD, VT.						
		CUSTOMER	BECK & BELLUCCI						
DESIGNED BY		ARCHITECT	S.O.V.A.O.T.						
ERECTED BY		JOB NO.	80-3511						
PAINT		SHEET NO.	C5						
			PRINTED BY						
			NO.		REV.		DATE		
			3		ENGR 7-15				



WEB CUTTING DIAGRAM
(WELD SHRINKAGE INCLUDED)

LINE 4

VERMONT STRUCTURAL STEEL CORPORATION BURLINGTON, VT.			
DRAWN BY C.B.	DATE	PROJECT RAMP W TO S OVER I-91	PRINT RECORD
CHECK BY		LOCATION WATERFORD, VT.	NO. FOR DATE
		CUSTOMER BECK & BELLUCCI	3-5-80 7-16
HOLES		ARCHITECT S.O.V.A.O.T.	C6
NOTES		JOB NO. 80-3591	SHEET NO. 25
PAINT			



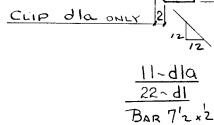
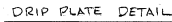
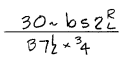
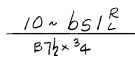
14 SHAD
3-25-81
DELY 5-11-81

JOB NO. _____ SHEET NO. _____

REVISION RECORD

[illegible]

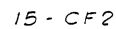
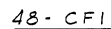
VERMONT STRUCTURAL STEEL CORPORATION			
BURLINGTON, VERMONT			
PROJECT		RAMP W. to S. OVER I91	
LOCATION		WATERFORD, VT.	
CUSTOMER		BECK & BELLUCCI	
DATE		PRINT RECORD	
ISSUED BY	CD	NO.	FOR DATE
CHECKED BY	WR	5	11/20 3-2
		6	12/10 3-2
		7	1/10 3-2
		8	2/10 3-2
		9	3/10 3-2
		10	4/10 3-2
		11	5/10 3-2
		12	6/10 3-2
		13	7/10 3-2
		14	8/10 3-2
		15	9/10 3-2
		16	10/10 3-2
		17	11/10 3-2
		18	12/10 3-2
		19	1/11 3-2
		20	2/11 3-2
		21	3/11 3-2
		22	4/11 3-2
		23	5/11 3-2
		24	6/11 3-2
		25	7/11 3-2
		26	8/11 3-2
		27	9/11 3-2
		28	10/11 3-2
		29	11/11 3-2
		30	12/11 3-2
		31	1/12 3-2
		32	2/12 3-2
		33	3/12 3-2
		34	4/12 3-2
		35	5/12 3-2
		36	6/12 3-2
		37	7/12 3-2
		38	8/12 3-2
		39	9/12 3-2
		40	10/12 3-2
		41	11/12 3-2
		42	12/12 3-2
		43	1/13 3-2
		44	2/13 3-2
		45	3/13 3-2
		46	4/13 3-2
		47	5/13 3-2
		48	6/13 3-2
		49	7/13 3-2
		50	8/13 3-2
		51	9/13 3-2
		52	10/13 3-2
		53	11/13 3-2
		54	12/13 3-2
		55	1/14 3-2
		56	2/14 3-2
		57	3/14 3-2
		58	4/14 3-2
		59	5/14 3-2
		60	6/14 3-2
		61	7/14 3-2
		62	8/14 3-2
		63	9/14 3-2
		64	10/14 3-2
		65	11/14 3-2
		66	12/14 3-2
		67	1/15 3-2
		68	2/15 3-2
		69	3/15 3-2
		70	4/15 3-2
		71	5/15 3-2
		72	6/15 3-2
		73	7/15 3-2
		74	8/15 3-2
		75	9/15 3-2
		76	10/15 3-2
		77	11/15 3-2
		78	12/15 3-2
		79	1/16 3-2
		80	2/16 3-2
		81	3/16 3-2
		82	4/16 3-2
		83	5/16 3-2
		84	6/16 3-2
		85	7/16 3-2
		86	8/16 3-2
		87	9/16 3-2
		88	10/16 3-2
		89	11/16 3-2
		90	12/16 3-2
		91	1/17 3-2
		92	2/17 3-2
		93	3/17 3-2
		94	4/17 3-2
		95	5/17 3-2
		96	6/17 3-2
		97	7/17 3-2
		98	8/17 3-2
		99	9/17 3-2
		100	10/17 3-2
		101	11/17 3-2
		102	12/17 3-2
		10	



FOR SHOP NOTES
SEE DWG. E1

ASTM - A588			BILL OF MATERIAL				
NO	PIECES	MARK	DESCRIPTION	LENGTH		WEIGHT	
				FE	IN		
						AL A588	
						ord. USSC 60V28	
10	b5E	B 7/8 x 34	SC2E	4	4	2-21'-8 1/2" x 1/2" x 3/8" (cont'd of 5890)	
30	b5E	D0	SC2E	4	4	(321)	
22	d1	B 7/8 x 2		4	1	cont'd of 317	
11	d1a	D0		4	1	6-10-1/2" x 1/2" x 5/8" (for 72")	
15	d2	D0		4	1	" " " " " 1/2" x 5/8" (for 58")	
						" " " " " 1/2" x 3/4" (for 44")	
33	d3	D0		4	1	" " " " " 1/2" x 5/8" x 4" (for 6")	
						" " " " " 1/2" x 5/8" x 5-0" (for 72")	
15	d4	D0		4	1	ord. USSC 60V28 1/2" x 5/8" x 8-0" (for 72")	
						1/2" x 7/8" x 2'-23" (for 72") (cont'd of 3590)	
						(5018)	
4	dP1	B 3/4 x 4		1	0 1/2	ASR	
2	dP2	B 3/8 x 4		1	0 1/2	SH- PL	
2	dP3	B 3/8 x 4		1	0 1/2		
						(10)	
						(6)	
						(351)	

DATE			REV. #			BY			REVISION		
VERMONT STRUCTURAL STEEL CORPORATION											
BURLINGTON, VERMONT											
FAP I93-1(3) C/3											
DATE			PROJECT						PRINT RECORD		
12/16			RAMP W. 105. OVER I91								
DRAWN BY			LOCATION						NO.		
CB			WATERFORD, VT.						FOR		
CHECKED BY			CUSTOMER						DATE		
309			BEGG & BELLUCCI						5 1990 5-6		
HIDES			ARCHITECT						309 1990 6-3		
18/16			S.O.V. A.O.T.						509 6-2		
NOTES			JOB NO.						2 1990 7/8		
PAINT			30						7/8		
NONE			SHEET NO.						1		



FOR SHOP NOTES
SEE DWG. E 1

[illegible]

JOB NO. _____ SHEET NO. _____

ASTM - A578		BILL OF MATERIAL				
NO. PEGS		NAME	DESCRIPTION	LENGTH		WEIGHT
				FT	IN.	
			48 - CF1			
	96	Q1	L $G \times G \times \frac{1}{8}$	6		and 3/16SC 6042R for 12-6x6x1/8 x 4' 0"
	96	Q2	L $G \times G \times \frac{1}{8}$	6		for 12-6x6x1/8 x 4' 0"
						(14.23)
						(870)
	96	PIX	R $\frac{1}{2} \times \frac{1}{2} \times 18$	3 2/3		2-1/2" x 1/2" x 1/2" x 18"
	48	P2	R $\frac{1}{2} \times \frac{1}{2} \times 11$	1		2-1/2" x 1/2" x 1/2" x 11"
						8280
						(130.4)
						707
			15 - CF2			
	15	C1	C 15 x 33.9	6		and 1 R 7/16 60430 15-6-11 w/ft. nut
						(30.51)
	15	Q1				and 3/16SC 6042R 2-1/2" x 1/2" x 1/2" x 18"
	30	Q3	L $G \times G \times \frac{3}{8}$	2	11	and 3/16SC 6042R 2-1/2" x 1/2" x 1/2" x 11"
						(22.08)
						(130.4)
	60	P1	R $\frac{1}{2} \times \frac{1}{2} \times 18$	1	6	6-1/2" x 1/2" x 1/2" x 18"
	15	P3	R $\frac{1}{2} \times \frac{1}{2} \times 11$ Δ	1	6	6-1/2" x 1/2" x 1/2" x 11"
						8412
						536
						(9.51)

REVISION RECORD			4143
DATE	REV #	BY	REVISION
9-25	1	WJ	WRIGHTS
9-1-81	2	HP	GET TO YELLOS REMOVE ALL BOUNDS 54-00
8-27-81	3	HP	ARY. TO PLATE P2 AND VICK
8/19/81	4		REVISED PER CONVERSATION W/ DICK HAUP

VERMONT STRUCTURAL STEEL CORPORATION				BRISTOL, VERMONT		FAP 193-13343	
PROJECT	RAMP WTS OVER I91 N.B. & S.B.					PRINT RECORD	
DRAWN BY	VTU	DATE	3/81	LOCATION	WATERFORD, VT		
CHECKED BY	S.W.			CUSTOMER	BECK & BELLUCCI		
HOES	15 1/4 #			ARCHITECT	S.O.V.A.O.T.		
BOIS				JOB NO.	80-3591		
PART	NONE			SHEET NO.	4		
				N.C.		2 STATE 9/81/81 20 STATE 9/20/81	

Hand-drawn technical drawing of a mechanical part, showing two views: a front view (top) and a side view (bottom).

Front View (Top):

- Overall height: 1.9
- Overall width: 1.9
- Top edge features a horizontal line labeled $ED2A$ and a vertical line labeled $ED1P$.
- A dimension of $15/16$ is indicated for a small feature on the left side.
- A central feature is shown with a curved profile.
- A dimension of 22.8 is indicated for the overall width of the base.

Side View (Bottom):

- Overall height: 1.9
- Overall width: 12
- The side view shows a profile with a curved top edge and a vertical line labeled $ED1P$.
- A dimension of 22.8 is indicated for the overall width of the base.

SHOP ASSEMBLE CURB PLATES TO JOINT

± JOINT

± JOINT

11.9 11.9

3/4" ϕ A325 x (BAL T.W. NUT TO ANCHOR)

7 7 @ 45° F

SECT. D-D

Hand-drawn technical drawing of a mechanical part, likely a bracket or support. The drawing includes the following dimensions and labels:

- Top Section:**
 - Overall height: 1.9
 - Top flange thickness: 0.15
 - Top flange width: 1.9
 - Label: ED 3A
- Bottom Section:**
 - Overall height: 1.9
 - Label: ED 3
- Horizontal Dimensions:**
 - Distance from the left face to the center of the bottom flange: 22.8
 - Distance from the left face to the center of the top flange: 12.8
 - Distance from the left face to the center of the bottom flange: 12.8
- Other Dimensions:**
 - Distance from the left face to the center of the bottom flange: 0.10
 - Distance from the left face to the center of the bottom flange: 0.10
- Labels and Notes:**
 - FACE OF CUB
 - WORK WITH

WORK WITH DWGS 6 & 8

[illegible]

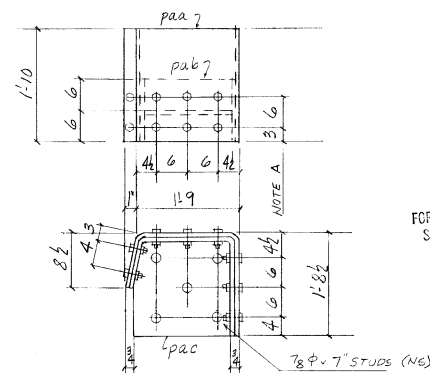
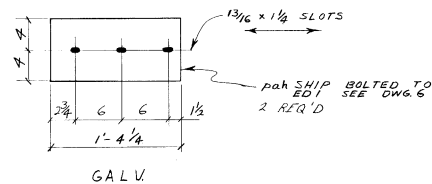
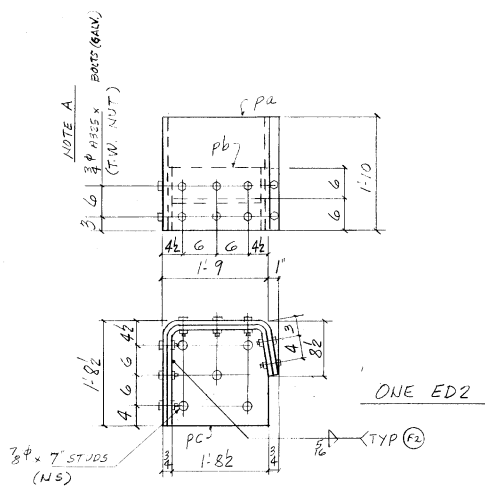
JOB NO. <u>01500</u>				SHEET NO. <u>10</u>			
ASTM - A 588 *				BILL OF MATERIAL			
	QTY. PIECES	MARK	DESCRIPTION	DIMENSIONS		WEIGHT	
				FT.	IN.		
*	1	ED4	16 1/2 x 10	24	0	ord. Bldg. 60729 0071 1-1/2 x 1/2 x 26-6 170 lbs w/ 173 6 D.S. ME-5-D-1 5 x 6 G 1491 △	(408) R 3.5
	48		3/4" STUDS		6		(92)
							(450)

REVISION RECORD			
DATE	REV. #	BY	REVISION
7-15	1A	HP	REV. MAT
7-23-81	2A	LLB	REV. CURBS ED2A, ED3A

VERMONT STRUCTURAL STEEL CORPORATION					
BURLINGTON, VERMONT FAX 193-1(3)C/3					
DRAWN BY	DATE	PROJECT	PRINT RECORD		
CB	3/81	RAMP W T O S OVER I91	NO.	FOR	DATE
CHECKED BY	SCH	LOCATION			
		WATERFORD, VT.	50	5	5-7
		CUSTOMER			
		BECK & BELVUEI	5	5	6-1
HIDES		ARCHITECT			
		S.O.V.A.O.T.	5	5	6-2
NOTES		JOB NO.			
		80-3591 - 03	50	5	6-4
PURCH		SHEET NO.			
		7	50	5	6-5

N.C.

1 SHOP 7-23-



FOR SHOP NOTES
SEE DWG. E 1

HOT DIP GALVANIZE AFTER FABRICATION
PER ASTM-A123.
SEE SHT B 6 → PAINT GRAY (FED. COLOR 26413)
FOR APP. SHOP ASSEMBLE TO JOINT ED1, SHT. 7

WORK WITH DWGS 687

[illegible]

ASTM - A36			BILL OF MATERIAL			
	QTY PIECES	MARK	DESCRIPTION	SIZE/IN.		WEIGHT
				"A"	"B"	
	1	EDZ				
	1	PA	$\frac{3}{8}$ x 22	4	3	(119)
	1	PB	$\frac{3}{8}$ x 12	4	12	(53)
	1	PC	$\frac{3}{8}$ x 19 $\frac{3}{4}$	1	82	(43)
	5		$\frac{3}{4}$ " STUDS	7		(2)
	16		$\frac{3}{4}$ " S25 (GALV)	14	HEX NUT	(9)
						(241)

[illegible]

105. 708.09, PAINTING OF HOT DIP GALVANIZED STEEL, is hereby made a new subsection of the Specifications as follows:

708.09. PAINING OF HOT DIP GALVANIZED STEEL. Whenever painting of hot dip galvanized steel is called for on the plans, it shall be done in accordance with this section.

708.09. PAINTING OF HOT DIP GALVANIZED STEEL. Whenever painting of hot dip galvanized steel is called for on the plans, it shall be done in accordance with this section.

All steel requiring coating after it has been hot dip galvanized shall be coated by the galvanizer in his own plant. All coating shall be completed within six hours after galvanizing.

All steel requiring coating after it has been hot dip galvanized shall be coated by the galvanizer in his own plant. All coating shall be completed within six hours after galvanizing.

Surface Preparation. All surfaces to be coated shall be completely free of oil, grease, dirt and other contaminants. Solvent wipe surfaces, if necessary.

Surface Preparation. All surfaces to be coated shall be completely free of oil, grease, dirt and other contaminants. Solvent wipe surfaces, if necessary.

Coating Material Shall be a Vinyl-epoxy, specifically formulated for use over untreated galvanized steel. It shall meet the requirements of A.S.T.M. specifications D-1475, D-1200, D-1310 and D-609. It shall have demonstrated 100% adhesion and freedom from failure when subjected to a minimum of 1,250 hours of 3% salt spray as per A.S.T.M. B-117. The manufacturer shall be capable of furnishing documentation that the coating has a proven track record and complete freedom from corrosion for a period greater than five years when used on untreated hot dip galvanized steel in the field.

The coating material shall also meet the following requirements:

- (1) Compatibility with acrylic, latex and epoxy coatings.
- (2) 98% hiding power over galvanized steel, at 1 mil thickness.
- (3) Air dry in ten minutes at 45° F.
- (4) Recoatable within sixty minutes at 45° F.
- (5) Solvent flashpoint not less than 100° F.
- (6) Hardness of 2H-3H.

Application - Shall be by hot, airless spray only.

Film Thickness. A minimum dry film thickness of six mils shall be applied in two 3 mil coats (2nd coat to be applied not more than 3 hours after the initial coat).

Color. The color of the coating material shall match that specified for the paint system to be used except that for A-588 Steel the color shall be gray, to be an acceptable match to Federal Color Standard 26493

Certification. The coating material furnished under this specification shall be covered by a Type A Certification in accordance with Subsection 700.02.

[illegible]

JOB NO. _____ SHEET NO. _____

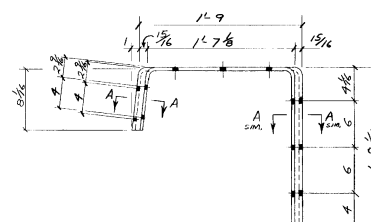
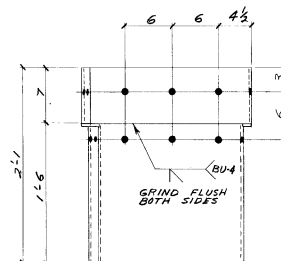
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FOR PAINT SPEC ONLY

DATE	REV. #	BY	REVISION

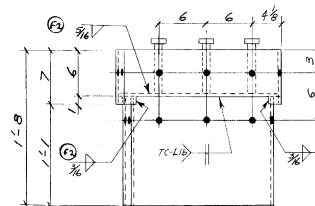
VERMONT STRUCTURAL STEEL CORPORATION
BURLINGTON, VERMONT

DATE	PROJECT <u>RAMP VTD 8 OVER I91</u>		PRINT RECORD	
DRAWN BY <u>142-281</u>	LOCATION <u>VARSANAD, VT</u>		NO.	DATE
CYD BY	CUSTOMER <u>BECK & BENNETT</u>		5	4/20/81
HOES	ARCHITECT <u>S.O.Y.A.O.T.</u>		3	5/20/81
POIS.	JOB NO. <u>80-3591-C3</u>		5	8/22/81
PAINT	JOB SHEET NO. <u>86</u>		3	3/24/82
			3	5/24/82

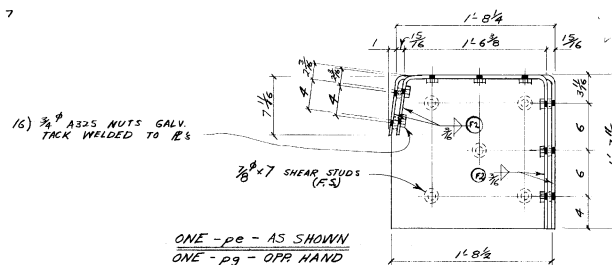


ONE - pd - AS SHOWN
ONE - pf - (OPP. HAND)

ONE - CURB ASSEMBLY - ED3A
p7 & p9



NOTE:
WORK WITH DWGS 6 & 7

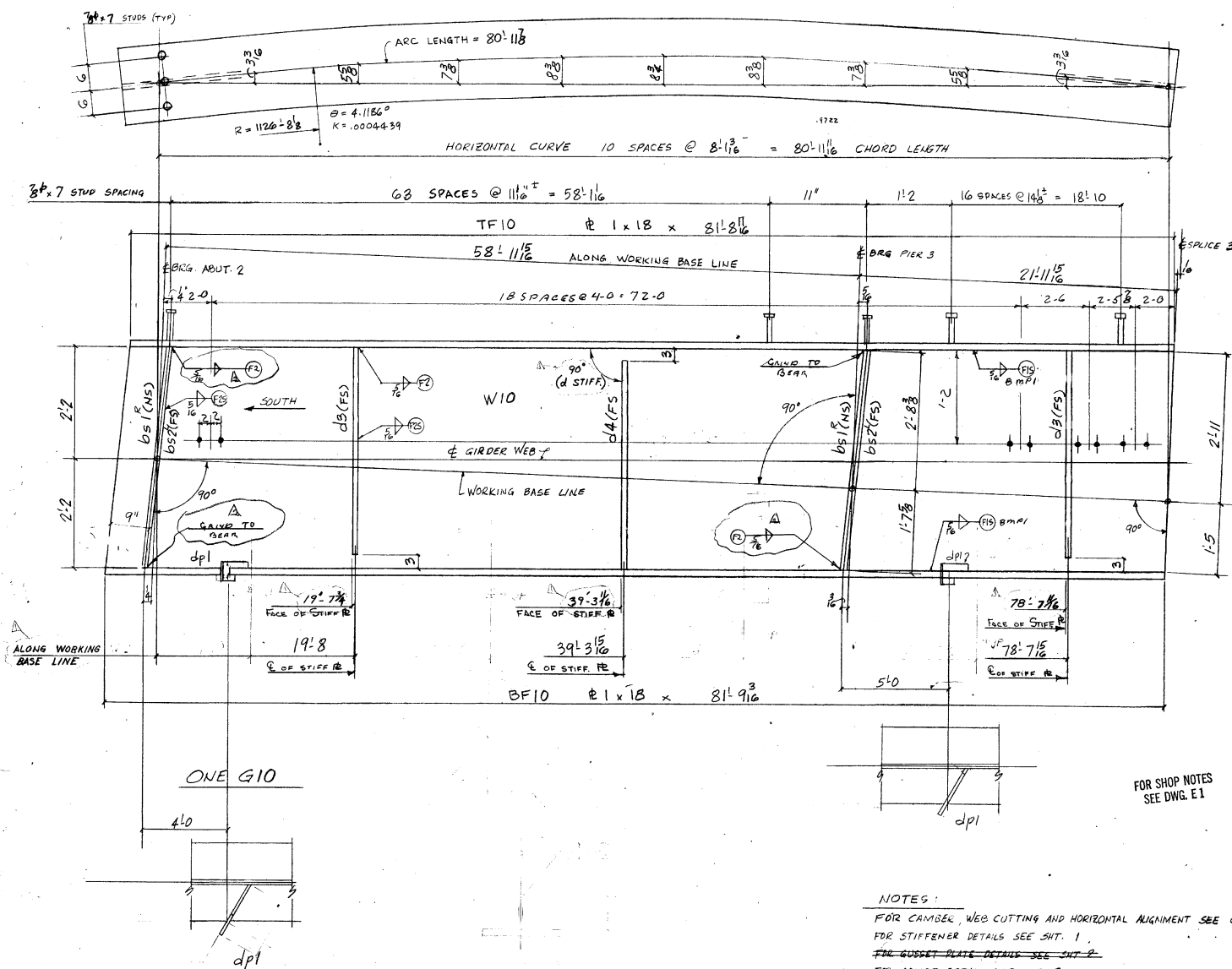


BILL OF MATERIAL					
NO. PIECES	MARK	DESCRIPTION	LENGTH		WEIGHT
			FT	IN.	
		<u>ONE ED3A</u>			
ONE	pf				
ONE		12 $\frac{3}{8}$ x 7	4	1 $\frac{1}{4}$	37
ONE		12 $\frac{3}{8}$ x 18	3	11 $\frac{3}{8}$	91
ONE		BAR $\frac{5}{16}$ x $\frac{7}{8}$	1	8 $\frac{1}{4}$	
ONE		BAR $\frac{1}{2}$ x $\frac{3}{8}$	0	8 $\frac{1}{4}$	3
ONE	cg				
ONE		12 $\frac{3}{8}$ 7	3	11 $\frac{3}{8}$	36
ONE		12 $\frac{3}{8}$ 14	3	9 $\frac{3}{8}$	67
ONE		12 $\frac{3}{8}$ 20 $\frac{1}{2}$	1	7 $\frac{3}{8}$	42
5		$\frac{3}{8}$ P SHEAR STUD	0	7	7
16		$\frac{3}{4}$ P A325 BOLT w/ NUT (GALV.)			9
					292

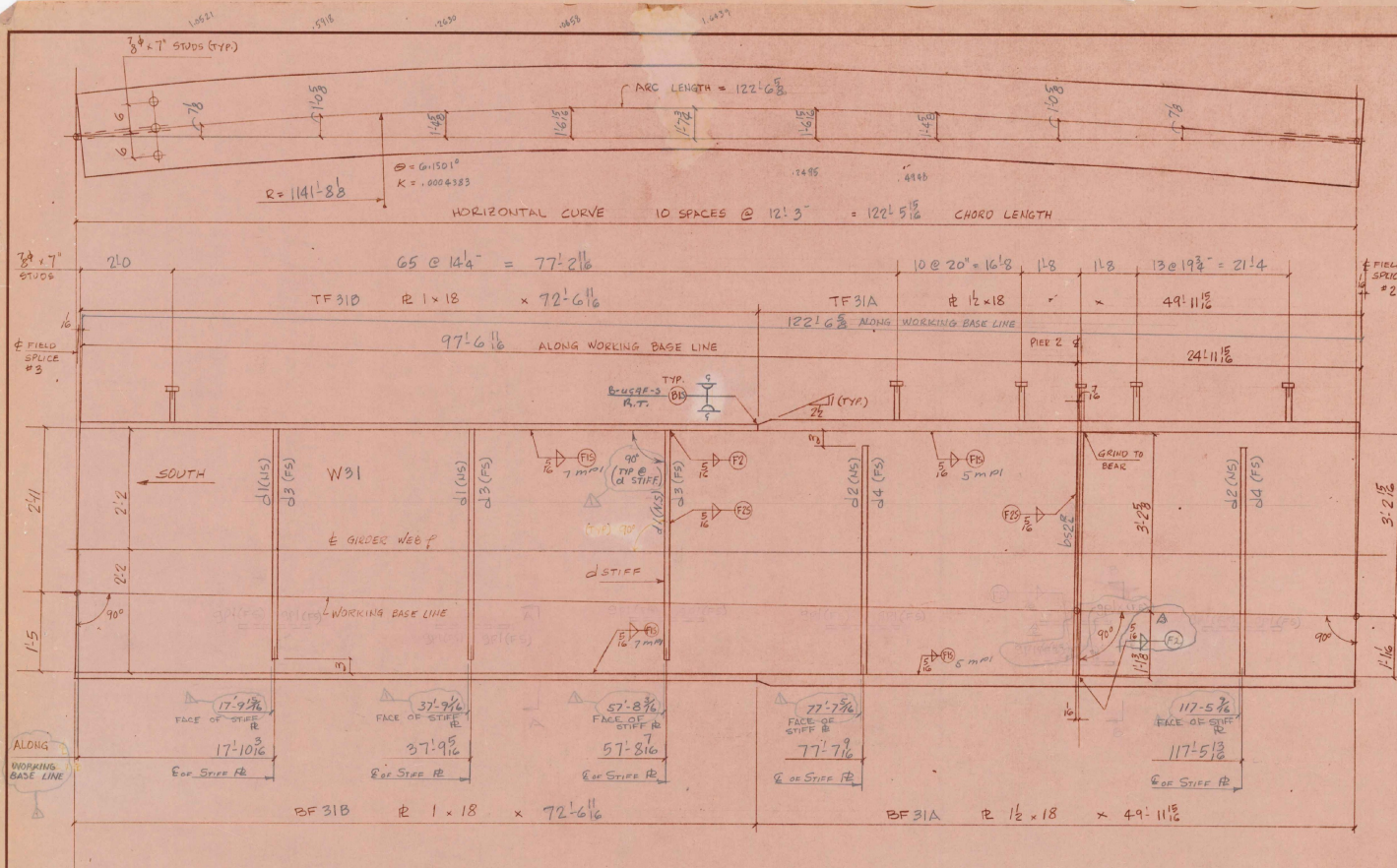
BILL OF MATERIAL					
NO. PIECES	NAME	DESCRIPTION	LENGTH		WEIGHT
			FT	IN	
		<u>ONE - ED2A</u>			
ONE	pd				
ONE		1R 3/8 x 7	4	1 1/4	(37)
ONE		1R 3/8 x 18	3	1 3/4	(71)
ONE		BAR 1/4 x 3/8	1	8 1/4	
ONE		BAR 1/4 x 3/8	0	8 1/4	(3)
ONE	pe				
ONE		1R 3/8 x 7	3	1 1/4	(36)
ONE		1R 3/8 x 18	3	7/8	(68)
ONE		1R 3/8 x 20 1/2	1	7 3/4	(82)
5		7/8" 50NFAR STD	0	7	(9)
16		3/4" A325 BOLT w/ NUT			(9)
		(GALV.)			
					273

[illegible]

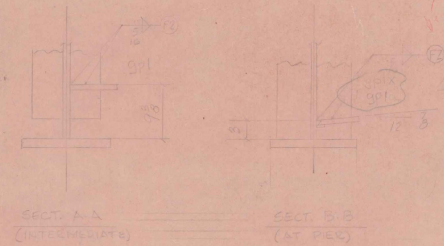
VERMONT STRUCTURAL STEEL CORPORATION				BRISTOLINGTON VERMONT		FAP I 98-1(s) S4		
DATE	PROJECT	RAMP W. to S. OVER I 91		PRINT RECORD				
DRAWN BY	LOCATION	WATERFORD VT		NO.	FOR	DATE		
CHECK BY	OWNER	BECK & BELLUCCI		30	5000	6-2		
HOLES	ARCHITECT	S.O.V. A.O.T.		3	Shop	7-2		
NOTES	SEE NOTE 507.02 FOR			SHEET NO. 8 1/2				
S.O.V.			PHONE NO. 80-3591-63					

[illegible]

REVISION RECORD			
DATE	REV #	BY	REVISION
6-7-81	1A	LLB	Dim's to FACE of R's & ANGLES of R's
6-23	2A	HD	1/2 CD REV.
VERMONT STRUCTURAL STEEL CORPORATION			
BURLINGTON, VERMONT			
FAD I93-1(3)/5			
PROJECT			PRINT RECORD
RAMP W.T.S. OVER I91			
LOCATION	CUSTOMER	NO.	FOR
WATERFORD, VT.	BECK & LUCCI	5	ADD 5-C
		1	REELING 6-P
		5	ADD 6-P
		70	3RD 9-P
		2	START 4-P
HOURLY	ARCHITECT	JOB NO.	DRAWING NO.
	S.O.V. A.D.T.	80-3691	10
DATE	BY	REVISION	
None		80-3691-61	SPUR



ONE G31



NOTES:
 FOR CAMBER, WEB CUTTING AND HORIZONTAL ALIGNMENT SEE C1.
 FOR STIFFENER DETAILS SEE SHT. 1.
 FOR GUSSET PLATE DETAILS SEE SHT. 2.
 FOR SPICE DETAIL SEE SHT. 3.

FOR SHOP NOTES
 SEE DWG. E 1

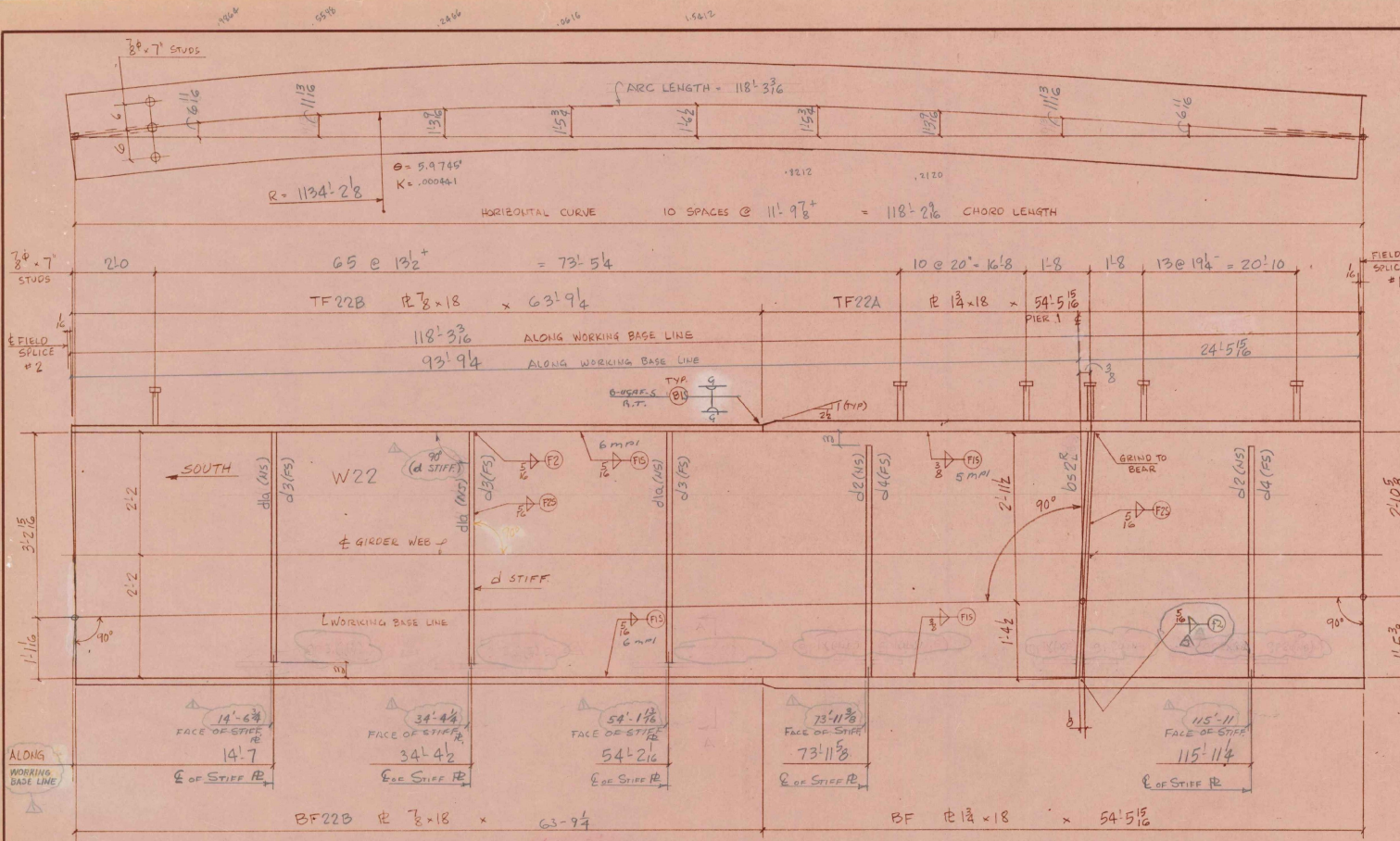
BILL OF MATERIAL					
NO.	QTY.	DESCRIPTION	LENGTH FT. IN.	WEIGHT LBS.	
1	W 31	R 1 x 18 x 72' 6 1/16"	72' 6 1/16"	1221.2	
1	TF 31A	R 1 1/2 x 18 x 49' 11 1/16"	49' 11 1/16"	490.0	
1	TF 31B	R 1 x 18 x 72' 6 1/16"	72' 6 1/16"	1221.2	
1	BF 31A	R 1 1/2 x 18 x 49' 11 1/16"	49' 11 1/16"	490.0	
1	BF 31B	R 1 x 18 x 72' 6 1/16"	72' 6 1/16"	1221.2	
2	G 31	R 7 x 3/4	4' 4"	166	
3	d 1	R 7/8 x 1/2	4' 1"	166	
2	d 2		4' 1"	166	
3	d 3		4' 1"	166	
2	d 4		4' 1"	166	
273	7/8" STUDS		7'	360	

BILL OF MATERIAL					
NO.	QTY.	DESCRIPTION	LENGTH FT. IN.	WEIGHT LBS.	
1	W 31	R 1 x 18 x 72' 6 1/16"	72' 6 1/16"	1221.2	
1	TF 31A	R 1 1/2 x 18 x 49' 11 1/16"	49' 11 1/16"	490.0	
1	TF 31B	R 1 x 18 x 72' 6 1/16"	72' 6 1/16"	1221.2	
1	BF 31A	R 1 1/2 x 18 x 49' 11 1/16"	49' 11 1/16"	490.0	
1	BF 31B	R 1 x 18 x 72' 6 1/16"	72' 6 1/16"	1221.2	
2	G 31	R 7 x 3/4	4' 4"	166	
3	d 1	R 7/8 x 1/2	4' 1"	166	
2	d 2		4' 1"	166	
3	d 3		4' 1"	166	
2	d 4		4' 1"	166	
273	7/8" STUDS		7'	360	

REVISION RECORD					
DATE	REV.	BY	DESCRIPTION	REVISION	
6-1-81	1	LLB	DM. TO FACE OF STIFF R.		
6-11-81	2	LLB	REV. QPS		
6-23-81	3	LLB	REV. RAY		

VERMONT STRUCTURAL STEEL CORPORATION					
BURLINGTON, VERMONT FAP I 93-1(3) 9/3					
DATE	REV.	BY	DESCRIPTION	REVISION	
6-1-81	1	LLB	DM. TO FACE OF STIFF R.		
6-11-81	2	LLB	REV. QPS		
6-23-81	3	LLB	REV. RAY		

PROJECT: RAMP W.T.O.S. OVER I 91					
LOCATION: WATERFORD, VT.					
CUSTOMER: BECK & BELLUCCI					
ARCHITECT: S.O.V. A.O.T.					
JOB NO: 80-3591					
SHEET NO: 31					
DATE	REV.	BY	DESCRIPTION	REVISION	
6-1-81	1	LLB	DM. TO FACE OF STIFF R.		
6-11-81	2	LLB	REV. QPS		
6-23-81	3	LLB	REV. RAY		



ONE G22

FOR SHOP NOTES
SEE DWG. E 1

NOTES

FOR CAMBER, WEB CUTTING AND HORIZONTAL ALIGNMENT SEE C1.
FOR STIFFENER DETAILS SEE SHT. 1,
FOR GUSSET PLATES SEE SHT. 2.
FOR SPLICE DETAIL SEE SHT. 3.

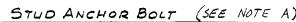
[illegible]

BILL OF MATERIAL					
NO PIECES	NAME	DESCRIPTION	LENGTH		WEIGHT
			FT	IN	
		ONE G22			
					ALLA 588 1 1/2" x 1/4" x 58 3/4" x 120-0 C.V. N. 117.88
1	W22	1/4" x 52	118	3/8	
1	TF22A	1 1/4" x 18	54	5/16	1 1/4" x 1/4" x 18 x 54-10 (587)
1	TF22B	1 3/8" x 18	63	3/4	1 1/4" x 1/4" x 18 x 63-5 3/8 (347B)
1	BF22A	1 1/4" x 18	54	5/16	1 1/4" x 1/4" x 18 x 54-10 (587)
1	BF22B	1 3/8" x 18	63	3/4	C.V. N. (347B) 51-11 1/2" x 118-5 3/8
2	bs 2 1/2"	B 7/8" x 34	4	4	SEE #1 (166)
1	ap 2 1/2"	A 7/8" x 10	0	1 1/4	(15)
3	d10a	B 7/8" x 1/2	4	1	SEE #1
2	d2		4	1	
3	d3		4	1	
2	d4		4	1	
1					(523)
					(31002)
273		80 STUDS (200-357-61)	7		(360)

REVISION RECORD			
DATE	REV. #	BY	REVISION
6-12-81	1	ECB	DIM TO FACE OF STIFF, R3
6-12-81	2	MCB	REV. 4123
6-12-81	3	HW	NEW BRT.

VERMONT STRUCTURAL STEEL CORPORATION			
BURLINGTON VERMONT		FAP 193-1(3) C/3	
PROJECT		RAMP N. TO S. OVER I91	
LOCATION		WATERFORD, VT.	
CUSTOMER		BECK & BELLUCCI	
ARCHITECT		v	
DESIGNER		S.O. VAOT	
NOTES		80-3591	
PART		NO. 12	
JOB NO.		SHEET NO.	

PRINT RECORD		
INC.	FOR	DATE
5	PERM	5-1
1	PERM	5-1
5	PERM	6-3
10	PERM	6-3
2	STATE	7-1



24~C3

ALL MATERIAL HOT DIPPED GALVANIZED (EXCEPT C3)
AFTER FABRICATION PER ASTM-A123.

HOPPER AND BRACKETS SHALL BE
PAINTED GRAY (FED. COLOR NO 26493)
IN ACCORDANCE WITH SPECIAL PROVISION 708.09
"PAINTING OF HOT DIPPED GALVANIZED STEEL."

1. BOLT ASSEMBLY SHALL BE CAPABLE OF AN ULTIMATE PULLOUT OF AT LEAST 16,000 LBS, AND AN ULTIMATE SHEAR STRENGTH OF 27,000 LBS.
2. TYPE OF ANCHOR SHALL BE APPROVED BY THE STRUCTURES ENGINEER.
3. MATERIAL FOR THE STUD BOLTS SHALL CONFORM WITH ASTM-A582 TYPE 309,
4. MATERIAL FOR THE WEDGE ANCHOR SHALL CONFORM WITH ASTM-A276 TYPE 304,
5. MATERIAL FOR NUTS AND WASHERS SHALL BE STAINLESS STEEL.

JOB NO. 80-3591

SHEET NO. 44^b₆

REVISION RECORD			
DATE	REV. #	BY	REVISION
9/25		WJ	WEIGHTS

VERMONT STRUCTURAL STEEL CORPORATION
BURLINGTON, VERMONT FAP I93-1(3)C/3

		NAME	PROJECT <u>RAMP WTOS OVER I91 N.B. & S.B.</u>		PRINT RECORD	
BRANNY	<u>LV</u>	LOCATION	<u>WATERFORD, VT.</u>		NO	FOR DATE
CRD BY	<u>506</u>	CUSTOMER	<u>BECK & BELLUCCI</u>		5	MAP 5-6
HOES		ARCHITECT	<u>S.O.V.A.O.T.</u>		1	JE 7-8
BOYS		JOB NO	<u>80-3591</u>		3	5-10-74
PAINT		SHEET NO	<u>442</u>		2	ST. 5-8 9-18
					20	STATE 9/65

FOR SHOP NOTES
SEE DWG. E 1

Vermont Agency of
Transportation
PHASE 1-INTERSTATE
#122302-01
INITIALS ☐
HANGER 374

BR1 BR5MS BR6, 7, 8, 17, 11, 12
13, 14, 15, 16, 17, 18, 19, 20, 22
23
Bridge
1979
Vernon ~ Rockingham
IR-91-1 (3)