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D10 TOP FOR A DROP INLET WITH BITUMINOUS CONCRETE CURB
D11 DETAILS OF GRATES AND COVERS
C1 PRECAST REINFORCED CEMENT CONCRETE CURB

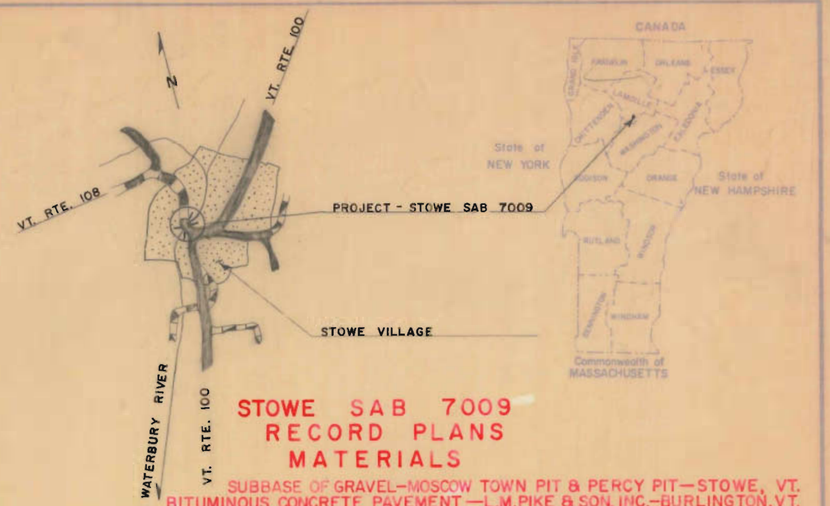
STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

PROPOSED IMPROVEMENT

TOWN OF STOWE
COUNTY OF LAMOILLE
VT. RTE. 108

BEGINNING AT A POINT 0.0057 MILES WESTERLY OF INTERSECTION OF VT RTE 100 & VT RTE 108 AND EXTENDING 0.093 MILES WESTERLY

PROJECT - STOWE SAB 7009 - SHALL CONSIST OF REMOVING THE CURB, SIDEWALK AND A PORTION OF THE DECK AND REPLACING SAME WITH NEW CONCRETE. A CONCRETE OVERLAY SHALL BE PLACED ON THE REMAINING PORTION OF THE EXISTING DECK AND A WEARING SURFACE OF BITUMINOUS CONCRETE SHALL BE PLACED OVER THE ENTIRE DECK.
A COVERED WALKWAY SHALL BE BUILT OVER THE SIDEWALK ON BRIDGE AND A NEW SIDEWALK SHALL BE BUILT TO THE INTERSECTION WITH VT. RTE. 100.

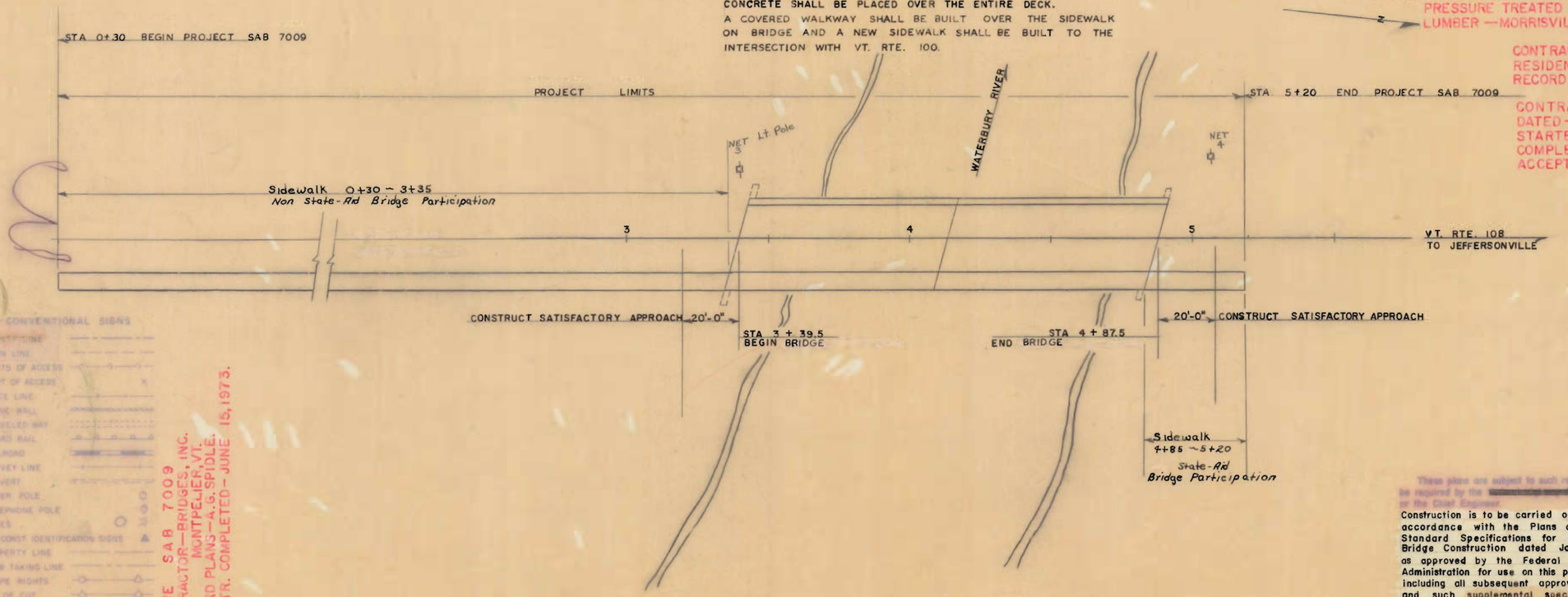


STOWE SAB 7009
RECORD PLANS
MATERIALS

SUBBASE OF GRAVEL—MOSCOW TOWN PIT & PERCY PIT—STOWE, VT.
BITUMINOUS CONCRETE PAVEMENT—L.M.PIKE & SON, INC.—BURLINGTON, VT.
CONCRETE CLASS A & SILICONE CONCRETE—A.G.ANDERSON, INC.—WATERBURY, VT.
REINFORCING STEEL—PIONEER VALLEY STEEL CO., INC.—GREENFIELD, MA.
STRUCTURAL STEEL—VERMONT STRUCTURAL STEEL CORP—BURLINGTON, VT.
BRIDGE RAILING—VERMONT STRUCTURAL STEEL CORP—BURLINGTON, VT.
BRIDGE PAINT—BURGESS FOBES PAINT CO.—PORTLAND, ME.
METAL CULVERT PIPE—NORTHEASTERN CULVERT CORP—WESTMINSTER, VT.
PRECAST REINFORCED CONCRETE PIPE DROP INLET & PLANK GUARD RAIL —
S.T. GRISWOLD & CO., INC.—WILLISTON, VT.
CORK FOR STRUCTURAL CONCRETE, WATER REPELLENT & EPOXY BONDING COMPOUND—KIBBY EQUIPMENT CO.—WHITE RIVER JCT., VT.
PRESSURE TREATED TIMBER FLOOR—KOPPERS—NASHUA, N.H.
LUMBER—MORRISVILLE LUMBER CO.—MORRISVILLE, VT.

CONTRACTOR—BRIDGES, INC.—MONTPELIER, VT.
RESIDENT ENGINEERS—DONALD BURBANK & GARY KITTELL.
RECORD PLANS—A.G.SPIDLE.

CONTRACT
DATED—JUNE 22, 1972.
STARTED—JUNE 22, 1972.
COMPLETED—JUNE 15, 1973.
ACCEPTED—JUNE 15, 1973.



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

CONVENTIONAL SIGNS

- CENTER 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

STOWE SAB 7009
CONTRACTOR—BRIDGES, INC.
MONTPELIER, VT.
RECORD PLANS—A.G.SPIDLE.
CONSTR. COMPLETED—JUNE 15, 1973.

RECOMMENDED FOR APPROVAL	R.B. Dibble, DISTRICT ENGINEER	5-1-72 DATE
RECOMMENDED FOR APPROVAL	Burbank, BRIDGE ENGINEER	5-2-72 DATE
RECOMMENDED FOR APPROVAL	R.C. Schaefer, CONSTRUCTION ENGINEER	5/2/72 DATE
RECOMMENDED FOR APPROVAL	E.H. Gilkey, ASSISTANT CHIEF ENGINEER	5/2/72 DATE

These plans are subject to such revisions as may be required by the [redacted] or the Chief Engineer.

Construction is to be carried out in accordance with the Plans and the Standard Specifications for Highway and Bridge Construction dated January 3, 1972, as approved by the Federal Highway Administration for use on this project, including all subsequent approved revisions and such supplemental specifications and Special Provisions as are incorporated in these plans.

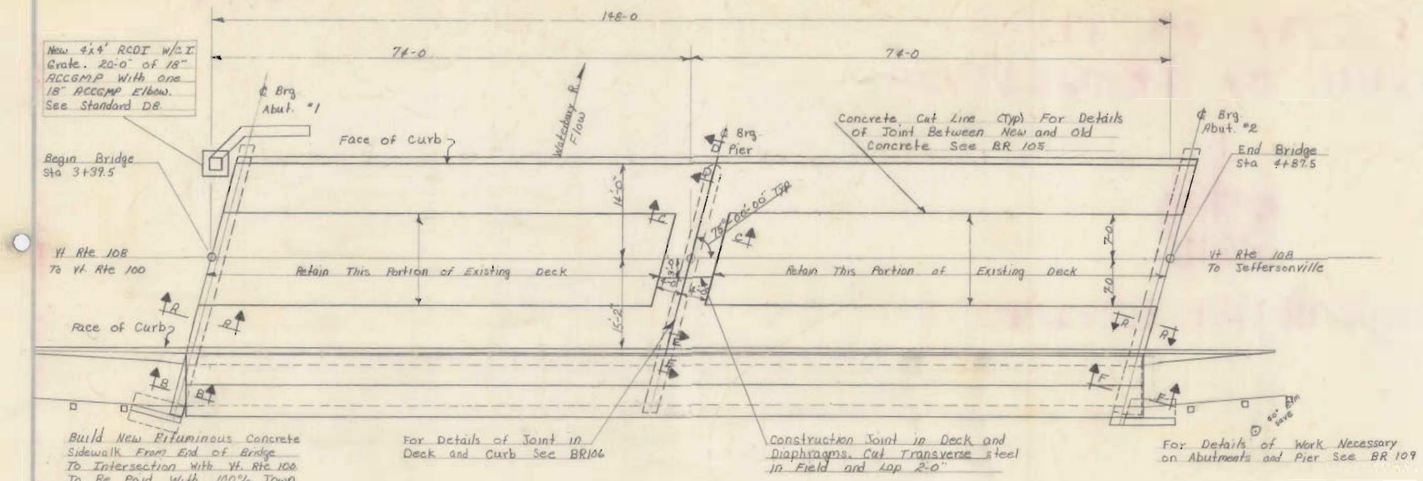
SUBMITTED BY ORDER OF THE STATE HIGHWAY BOARD
APPROVED R.H. ARNOLD 5/2/72
CHIEF ENGINEER DATE

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED DIVISION ENGINEER DATE

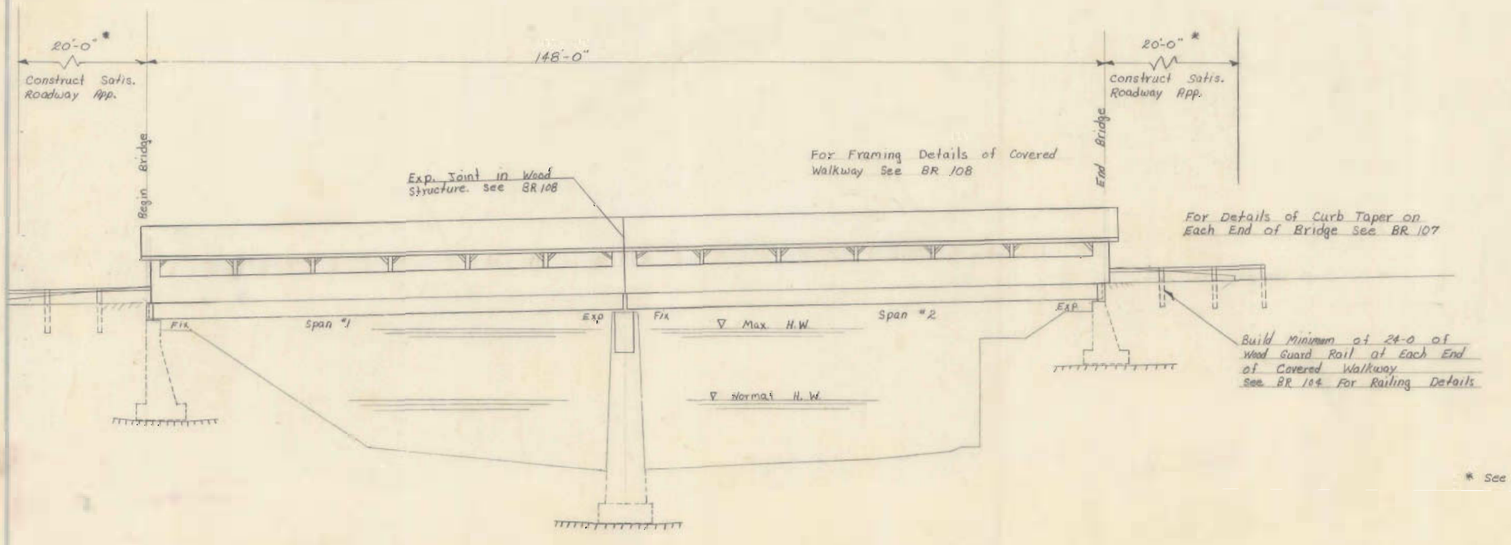
STOWE SAB 7009
PROJECT NO.

SHEET 1 OF 10 SHEETS

SAS. 8/71/70



Plan
3/32" = 1'-0"



Elevation Along Right Fascia
3/32" = 1'-0"

* See General Note # 13

GENERAL NOTES

1. For Additional Notes See SCB-D1-71, Notes 1, 3, 4, 5, 6, 7, 8, 11, 13, 14, 15 16, 18 and 19.
2. Design Load is Standard H 15-44.
3. Removal of All Existing Concrete or Masonry to the Lines Indicated on Plans or as Ordered by the Engineer Shall be Accomplished at the Unit Price Bid For Item 202.35 - Removal of Existing Concrete or Masonry. Removal of Existing Railing Shall be at the Unit Price Bid For Item 202.45 - Removal of Existing Railing.
4. All New Concrete in Deck and Curtain Walls Shall be Concrete Class A - Item 501.20. Concrete For Overlay Shall be Concrete Class A (Mod) as Per Special Provisions. All Concrete in Both Bridge Curb Sections Shall be Silicone Concrete, Item 518.41. Concrete in Abutments and Piers Shall be Concrete Class A, Item 501.20.
5. The New Concrete Overlay Shall be Placed Over the Entire Deck in Such a Manner that any Joints in the Concrete Overlay Shall Not Coincide With Joints Between Existing Concrete and the New Portion of the Deck. Place According to Item 501.12(b)
6. All New Structural Steel, Including Two New Exterior Beams With Necessary Bearings, Sidewalk Support Beams, Shim Plates, One New Diaphragm and All Other Incidentals Necessary For the Proper Placement of the New Steel Shall be Paid as Structural Steel, (Rolled Beam) Item 506.90.
7. All Existing Structural Steel Shall be Hand Cleaned, Spot Primed and Painted (Green) under Item 513.25.
8. Clean, Paint and Grease All Existing Expansion Bearings. All Exposed Surfaces of Expansion Bearings Shall be Cleaned as Specified in Subsection 513.03 (b) and any Exposed Sliding Surfaces Shall be Coated With Graphite and Grease. Deteriorated Bearings May be Replaced if Deemed Necessary by the Engineer. All Work on Bearings to be Included Under Item 506.90.
9. The Contractor Shall Maintain at Least One-Way Traffic Through the Project at All Times During the Construction Period. See Special Provisions For Details and Sequence of Operations.
10. Membrane Waterproofing, Type 1 - Item 519.21 Shall be Placed on the Concrete Overlay Before the Bituminous Concrete Surface is Placed. The Membrane Shall be Placed on 1/2 of the Bridge at a Time to Allow For One-Way Traffic. No Traffic Shall be Allowed Directly on the Waterproofing Membrane. Provision Shall be Made to Lap the Waterproofing Membrane Over a Cold Section by a Minimum of Two Feet.
11. Water Repellent, Item 514.10, Shall be Applied to All New Exposed Concrete Not Otherwise Treated. The New Curbs Shall be Treated Up the Face, Across the Top, Down the Fascia and Underneath to the Drip Notch. The Abutments and Piers Shall Also be Treated. The Top of the Pier Shall be Coated With Epoxy Bonding Compound, Item 615.30.
12. The Contractor Shall Exercise Extreme Care to Prevent the Spillage of Pollutants and Debris Into the Waters of the Waterbury River. Special Care Shall be Taken During Painting Operations to Prevent Paint and Associated Materials From Entering the Water.
*13. Regrading of Approaches to Meet New Grade on Bridge to be Accomplished With Item 406.25, Bituminous Concrete Pavement.
14. All New Structural Steel Shall be Cleaned Prior to Shop Painting Using Any Method Specified in Section 519.03, Surface Preparation. Field Painting of New Structural Steel Shall be Paid as Item 519.20.
15. The Concrete Overlay Shall be Finished With Machine Operated Vibrating Screeds.

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

TOWN OF Stowe	Bridge No. 2
HIGHWAY NO. Vt Rte 108	Log Sta. 4+20
	Surv. Sta. 4+20
Vt Rte 108 over Waterbury River	
Plan, Elevation & General Notes	
Designed by E. Leonard	Drawn by E Leonard
Checked by W. Jarvis date 3-24-72	Bridge Design Supervisor A. R. Buchanan date
PROJECT Stowe	PROJECT NO. SFB 7009
Bridge Sheet No. BR 102	Sheet 2 of 10

EARTHWORK

V.C.	% GRD	STATION	GRADES ELEVATION ON TAN.	GRADES ELEVATION ON V.C.	CORR. V.C.	DIST.	AREA	CU. YDS.	AREA	CU. YDS.	AREA	CU. YDS.	AREA	CU. YDS.

BRIDGE QUANTITY SHEET

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS
BRIDGE DIVISION

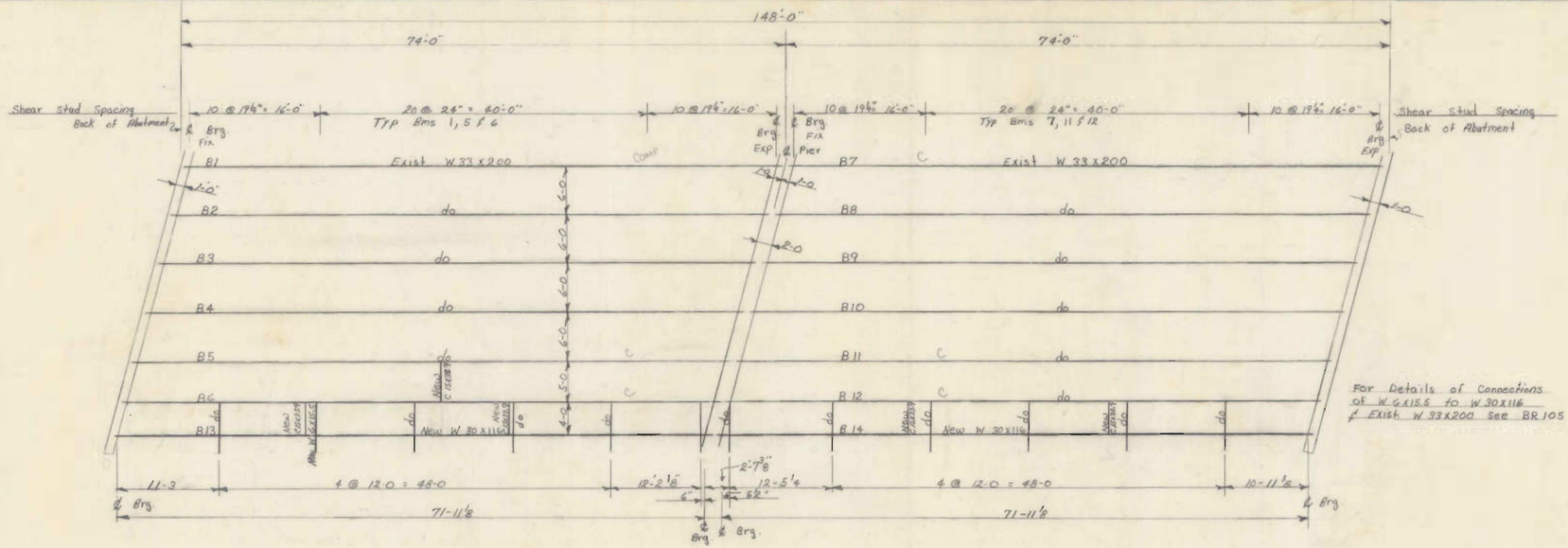
NO.	ITEM	UNIT	QUANTITY BREAKDOWN Abut #1	Pier #1	Abut #2	Bridge Superstr.	Covered Walkway	Approaches	Sidewalk					Rounding	Non State-Aid Bridge Participation	State-Aid Bridge Participation *	TOTAL	FINAL
202.16	Removal of Bridge Pavements	S.Y.				395										395	395	395
202.35	Removal of Exist. Concrete or Masonry	C.Y.	2.0	1.0	1.0	87.0										91	91	97.31
202.45	Removal of Exist Railing	L.F.				296										296	296	296
203.15	Common Excavation	C.Y.							54					6	60	5	65	47
204.20	Trench Excavation of Earth	C.Y.						13						2		15	15	37
202.25	Structure Excavation	C.Y.	19.0		16											35	35	48
204.30	Granular Backfill For Structures	C.Y.	6.0		6.0									3		15	15	27
301.15	Subbase of Gravel	C.Y.							40						40	5	45	38
306.10	Overhaul (5 Mi. Est.)	CY/mi	30		30				240						200	100	300	397
406.25	Bituminous Concrete Pavement	Ton				53		20								73	73	101
501.202	Concrete Class A (Mod For Overlay)	S.Y.				480										480	480	479.7
501.20	Concrete Class A	C.Y.	6	2	4	71										82	82	101.87
506.90	Structural Steel (Rolled Beam)	lb				361	12,153							486		19,000	19,000	20,303
507.15	Reinforcing Steel	lb	428	188	259	25,989		243						373		27,500	27,500	27,344
508.15	Shear Connectors (504 3/4" Studs)	L.S.				1										1	1	1
513.20	Painting, New Structure	L.S.				1										1	1	1
513.25	Painting, Hand Tool Cleaning (794,000#) (Existing Structural Steel)	L.S.				1										1	1	1
514.10	Water Repellant	Gal	0.2	0.1	0.2	3.4								0.1		4	4	10.
517.21	Membrane Waterproofing, Type I	S.Y.				480										480	480	0
518.20	Preparation of Concrete Surface	S.Y.				220										220	220	178
518.31	Silicone Concrete	C.Y.				35		5								40	40	41.47
601.109	Asph. Ctd. Corr. Galv. Met. Pipe (.064)	L.F.						20								20	20	20
601.559	Asph. Ctd. Corr. Galv. Met. Pipe Elbow (.064)	Ea.						1								1	1	1
604.25	Precast Rein Conc Pipe Drop Inlet W/C.I. Grate	Ea.						1								1	1	1
611.20	Untreated Lumber and Timber	MBf					92							0.3		9.5	9.5	9.14
611.25	Treated Lumber and Timber	MBf					57							0.3		6.0	6.0	5.33
614.10	Joint Sealer, Hot Poured	Gal				3										3	3	0
614.25	Joint Sealer, Polyurethane	Gal				1										10	10	0
615.30	Epoxy Bonding Compound	Gal		2		6										8	8	10.5
615.33	Epoxy Mortar Compound	Gal		1												1	1	
616.21	Precast Reinf. Conc. Curb Type 8	L.F.							310						310	20	330	189
617.25	Bridge Railing - 2 Rail Aluminum	L.F.				148										148	148	148
618.15	Bituminous Concrete Sidewalk	Ton							20						20	1	21	36.7
621.10	Guard Rail, Plank w/Wood Posts	L.F.							50						25	25	50	49
637.10	Maintenance of Traffic For Bridge Projects	L.S.				1										1	1	1
630.10	Uniformed Traffic Officers (CO.#1)	Hr															0	43
CO.#3	Welding & Extra Fabrication on Sidewalk	L.S.															0	1
CO.#4	P.R.C. #130 Joint Sealer	L.F.															0	137

* Per ROW, Finance and Maintenance Agreement The Town of Stowe shall Reimburse The State of Vermont $5,000.00 on the Total Cost of Items in This Column with the State-Aid Bridge Participation Based on the Net Total. (Total Cost Less $5,000.00)

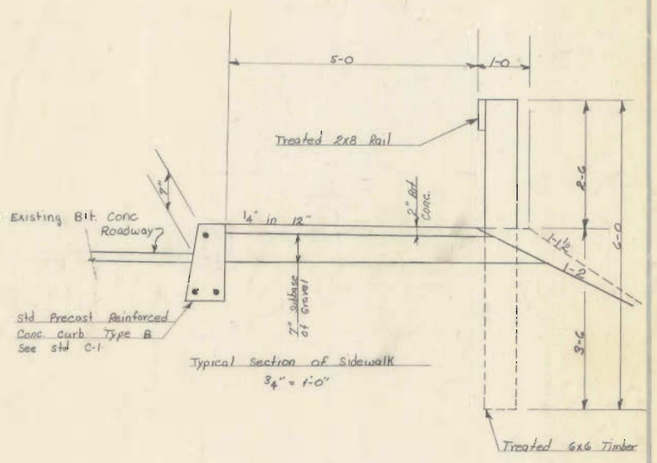
BRIDGE (S) AT STATION (S) 3+40
LOCATION (S) Vt. Rte 108 over Waterbury River STOWE

Prepared by E. Leonard Checked by J.R. DURANT
SUPERVISOR: R.P. Gendron

STOWE PROJECT NO. SRB 7009
BR 103 OF 110 SHEET NO. 3 OF 10

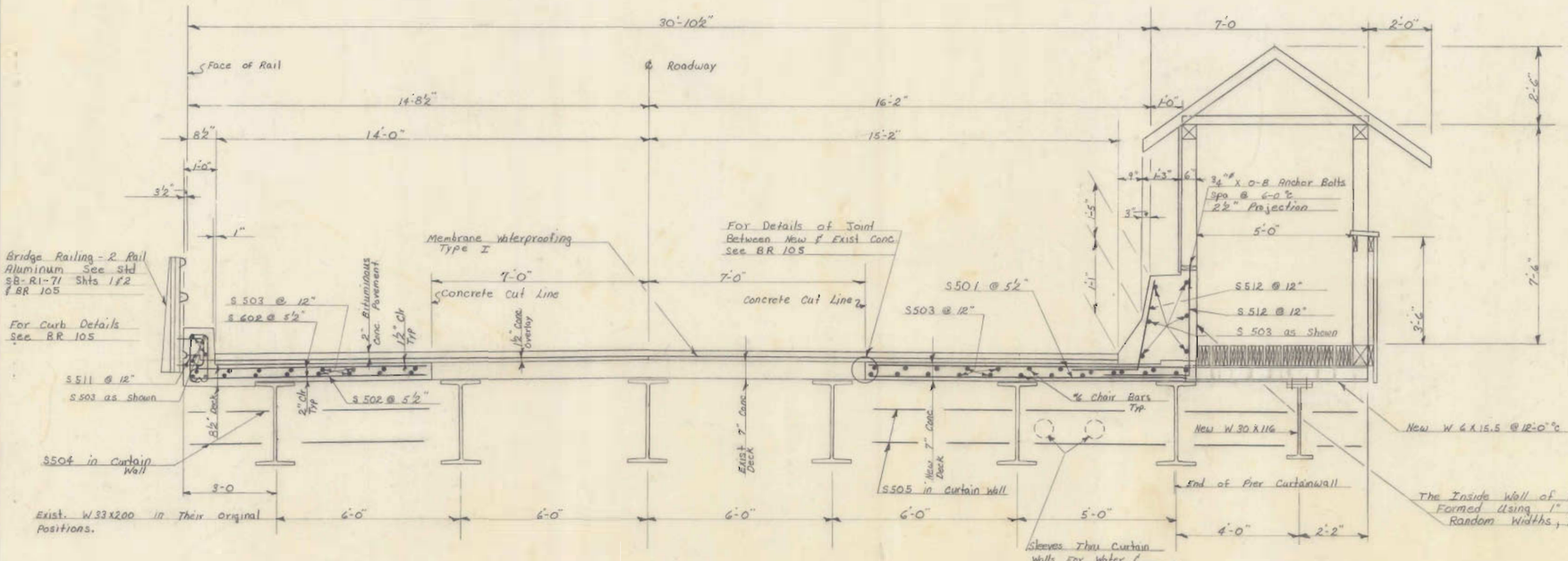


For Details of Connections of W 6 x 15.5 to W 30 x 116 & Exist W 33 x 200 See BR 105



Typical Section of Sidewalk
¾" = 1'-0"

Framing Plan
⅛" = 1'-0"



Exist. W 33 x 200 in Their original Positions.

Sleeves Thru Curtain Walls For Water & Sewer Lines as Requested by Town of Stowe.

The Inside Wall of Jersey Curb Shall be Formed Using 1" Rough Sawn Boards of Random Widths, Placed Vertically.

Typical Section
½" = 1'-0"

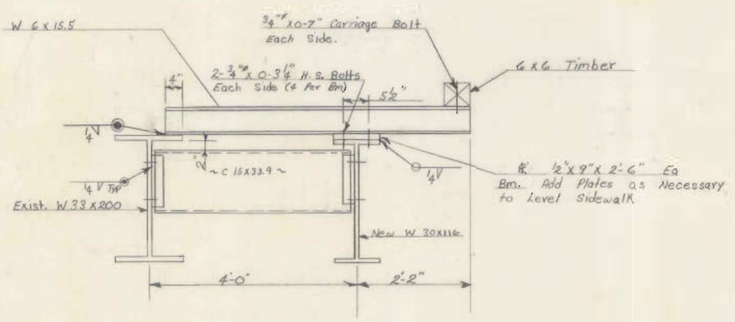
Revision - Relocated W 6 x 15.5 @ Pier 7/28/72 E.L.L.

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

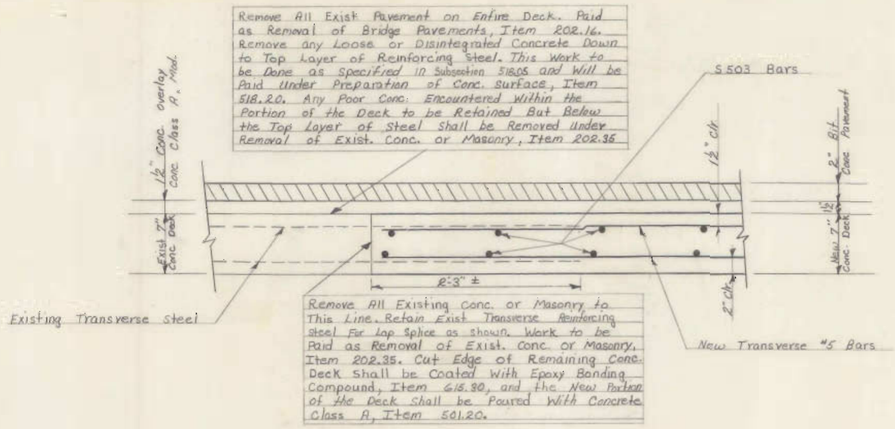
TOWN OF STOWE	Bridge No.
HIGHWAY NO. Vt. Rte 108	Log Sta.
	Surv. Sta.

Vt Rte 108 over Waterbury River.
Framing Plan and Typical Section

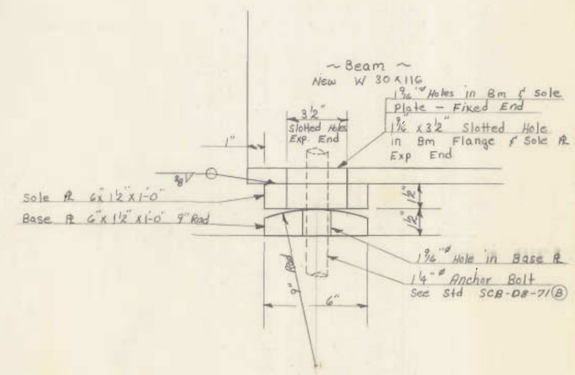
Designed by E. Leonard	Drawn by E. Leonard
Checked by W. Jarvis date 7/28/72	Bridge Design Supervisor R. R. Buchanan date 7/72
PROJECT STOWE	PROJECT NO. SAB 7009
Bridge Sheet No. BR 104	Sheet 4 of 10



Connection Details - W 6 x 15.5
3/4" = 1'-0"



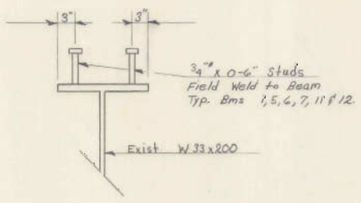
Typical Deck Joint Detail - Existing Conc. to New Conc.
1/2" = 1'-0"



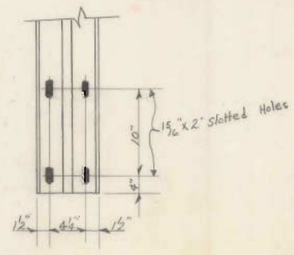
Detail of End Bearings on New Beams

One New Diaphragm to Replace Rusted Diaphragm in Span #1

New Diaphragm Detail
1" = 1'-0"

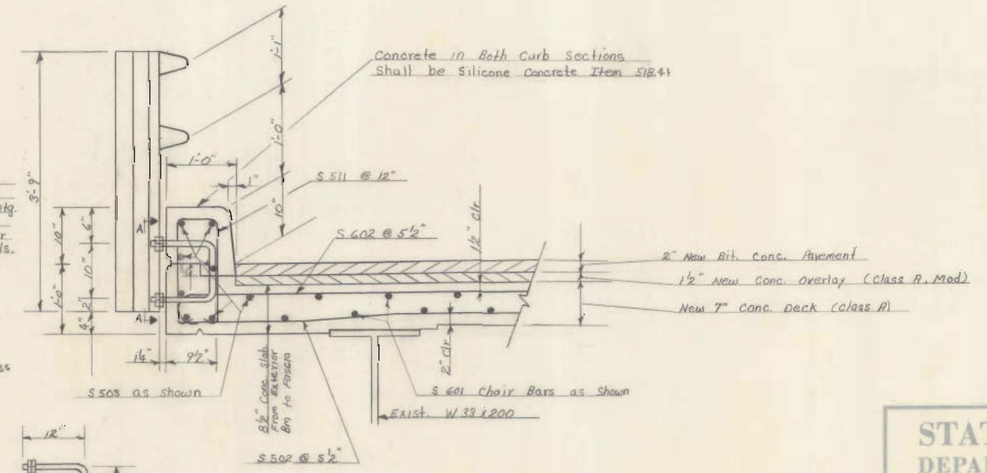


Shear Stud Detail
1" = 1'-0"

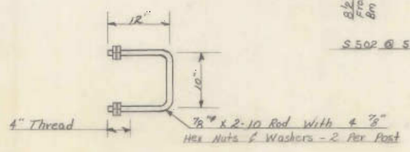


Section AA
1 1/2" = 1'-0"

Bridge Railing - 2 Rail Aluminum With Posts Modified For Fascia Mtg. See Standard SB-RI-71, Sheets 1 & 2 For Further Details of Posts & Rails.



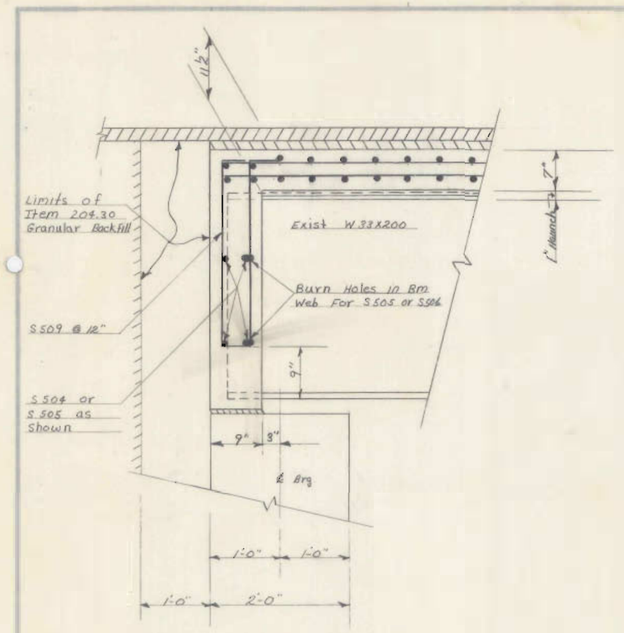
Curb and Railing Detail
1" = 1'-0"



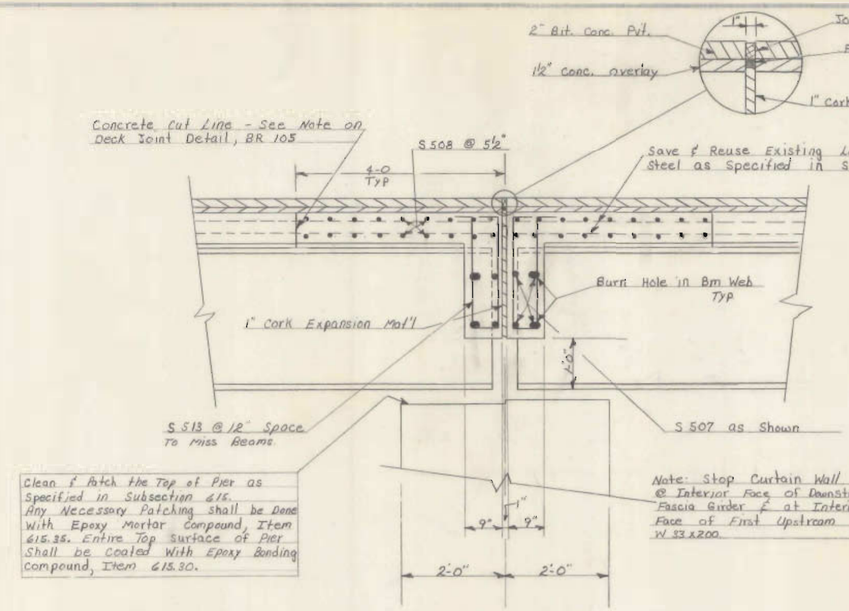
Post Anchor Bolt Detail
1" = 1'-0"

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

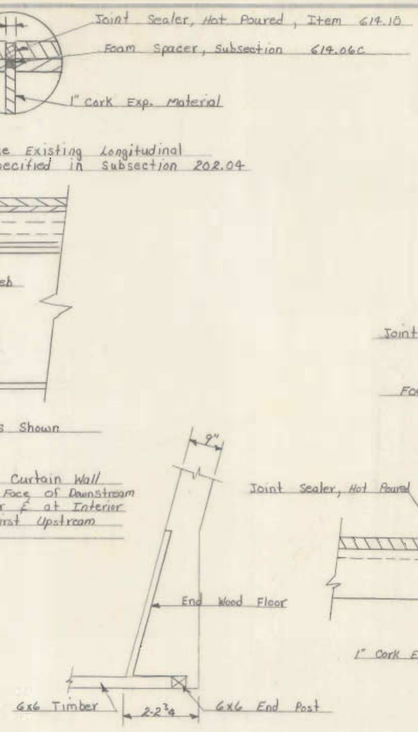
TOWN OF Stowe	Bridge No.
HIGHWAY NO. Vt. Rte. 108	Log Sta.
Vt. Rte. 108 over Waterbury River	Surv. Sta.
Steel & Concrete Details	
Designed by E. Leonard	Drawn by E. Leonard
Checked by W. Jarvis date 3-29-72	Bridge Design Supervisor R. R. Buchanan date 3/72
PROJECT Stowe	PROJECT NO. SAB 7009
Bridge Sheet No. BR 105	Sheet 5 of 10



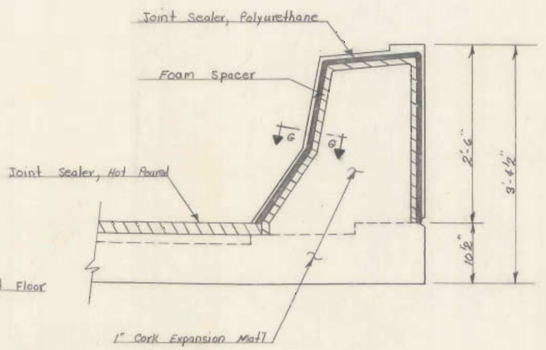
Section A-A
1" = 1'-0"



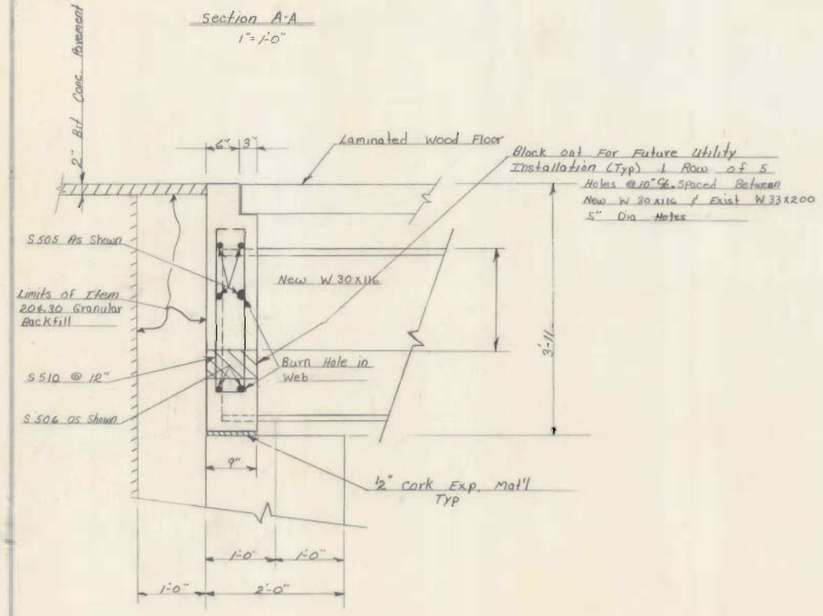
Section C-C
Diaphragms & Joint @ Pier
¾" = 1'-0"



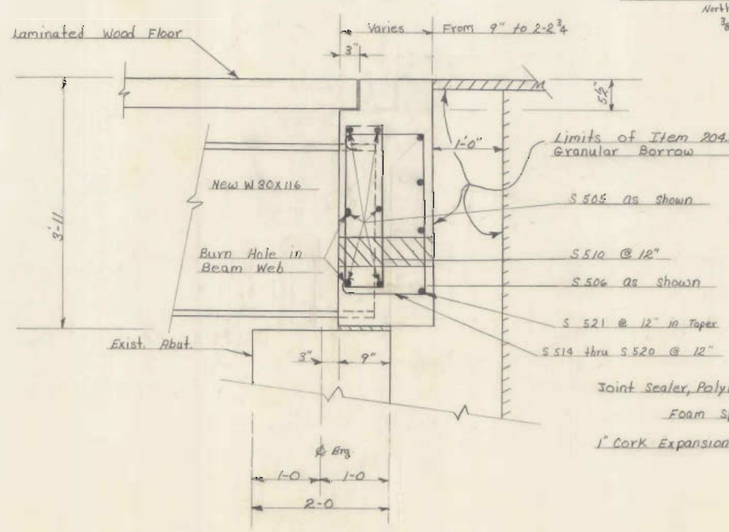
Plan View of Sidewalk Curtain Wall
North End
⅜" = 1-0



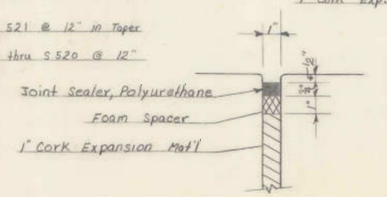
Section E-E
Jersey Curb Expansion Joint
1" = 1'-0"



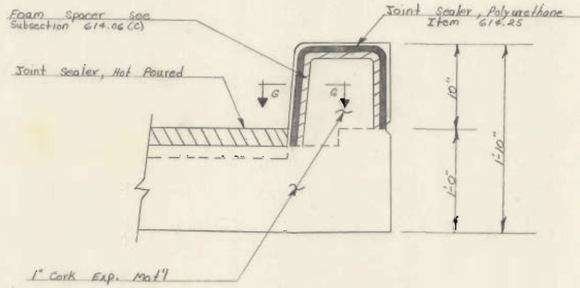
Section B-B
1" = 1'-0"



Section F-F
1" = 1'-0"



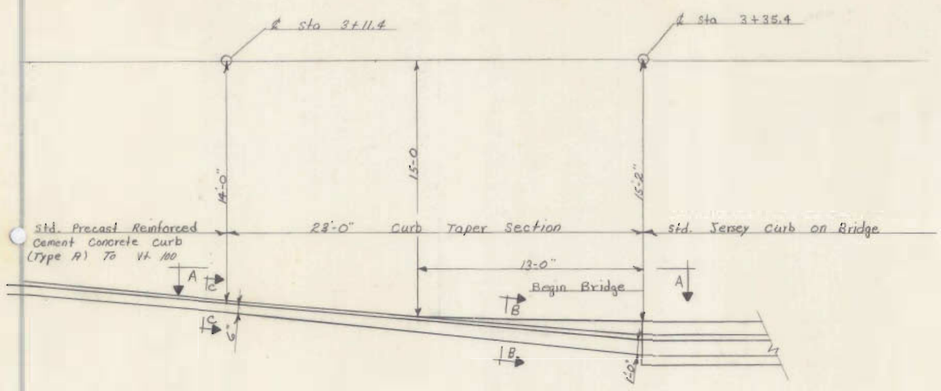
Section G-G
3" = 1'-0"



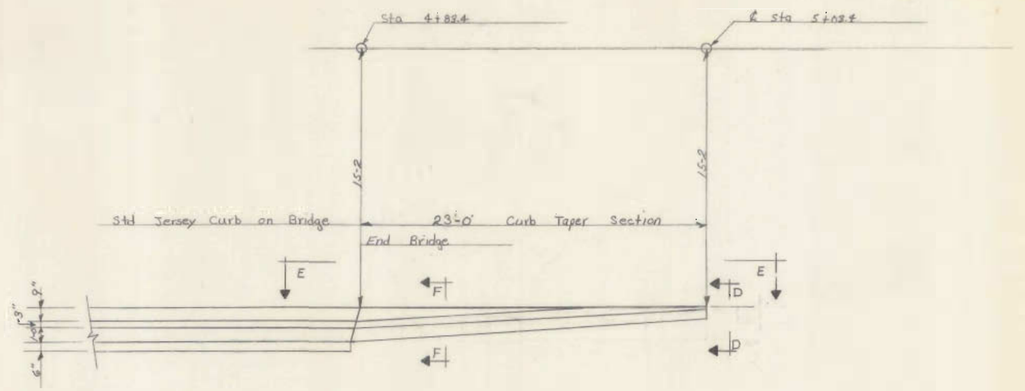
Section D-D
Curb Joint Detail
1½" = 1'-0"
For other Details See Std SCB-01-71 (8)

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

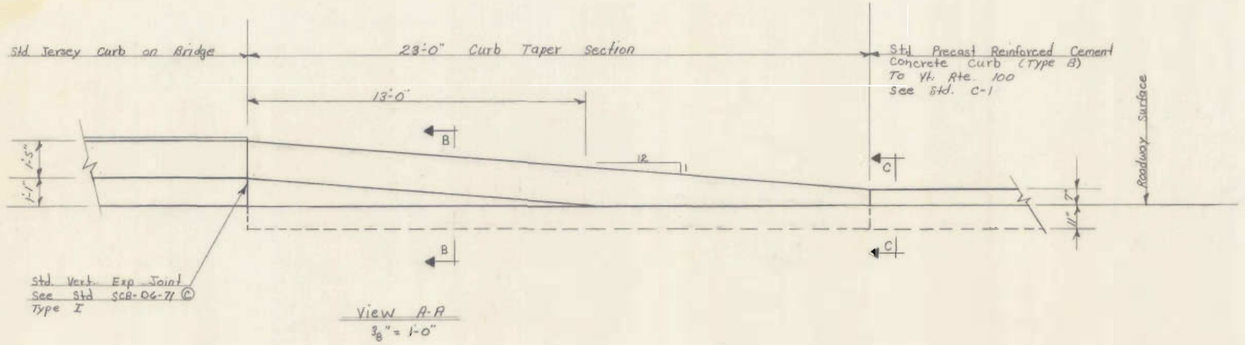
TOWN OF Stowe	Bridge No.
HIGHWAY NO. Vt. Rte. 108	Log Sta.
Vt. Rte. 108 over Waterbury River	Surv. Sta.
Curtain Walls & Joint Details	
Designed by E. Leonard	Drawn by E. Leonard
Checked by W. Jarvis date 3-24-72	Bridge Design Supervisor A. R. Buchanan date 9/72
PROJECT Stowe	PROJECT NO. SAB 7009
Bridge Sheet No. BR 106	Sheet 6 of 10



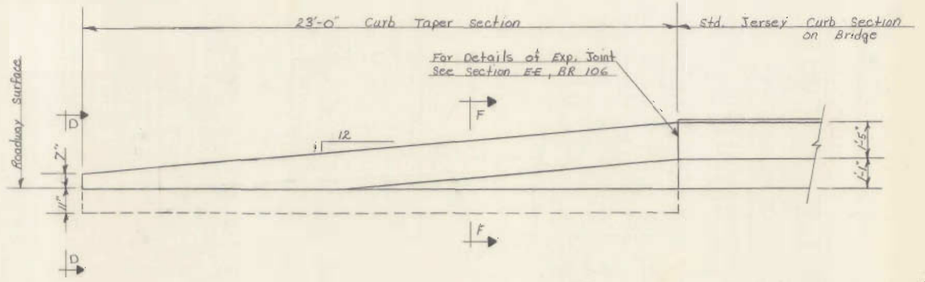
Plan View of Curb Taper @ South End of Bridge
1/4" = 1'-0"



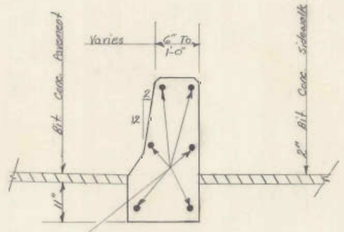
Plan View of Curb Taper @ North End of Bridge
1/4" = 1'-0"



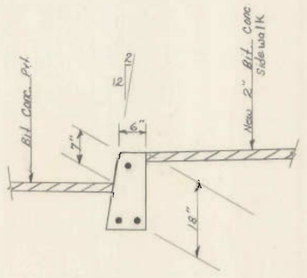
View A-A
3/8" = 1'-0"



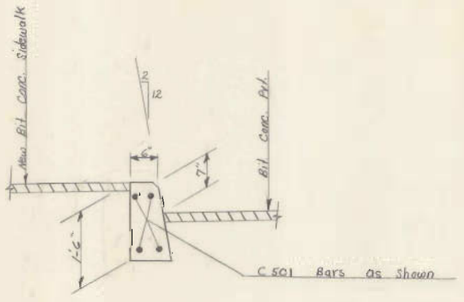
View E-E
3/8" = 1'-0"



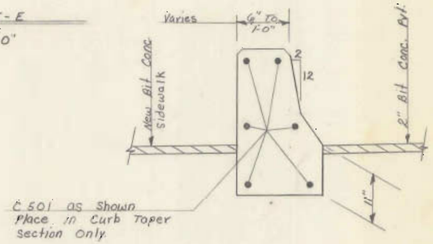
Section B-B
3/4" = 1'-0"



Section C-C
3/4" = 1'-0"
Std. Precast Reinforced Cement Concrete Curb (Type B) See Std C-1.



View D-D
3/4" = 1'-0"



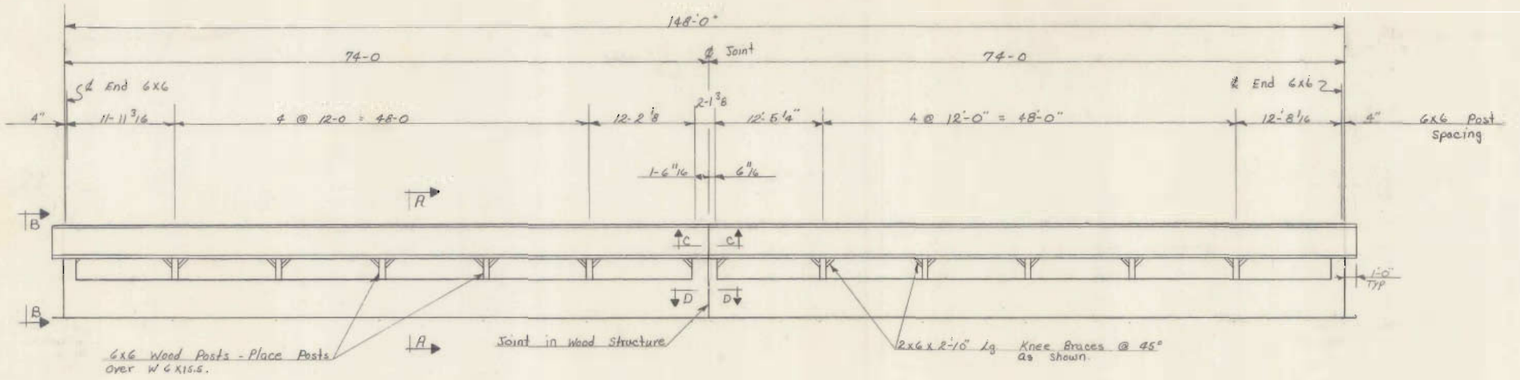
Section F-F
3/4" = 1'-0"

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

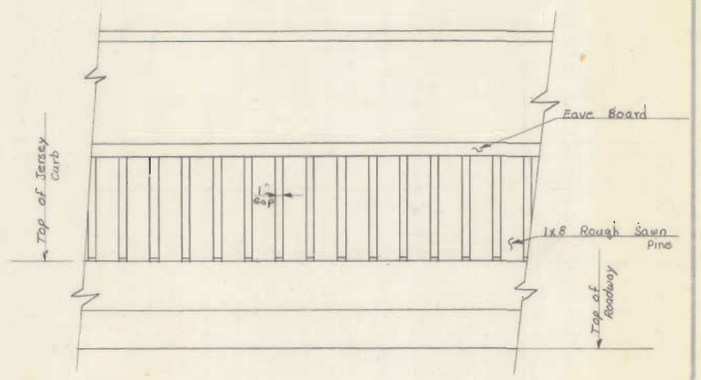
TOWN OF Stowe	Bridge No.
HIGHWAY NO. Vt. Rte 108	Log Sta.
	Surv. Sta.

Vt. Rte. 108 over Waterbury River
Details of Jersey Curb Taper

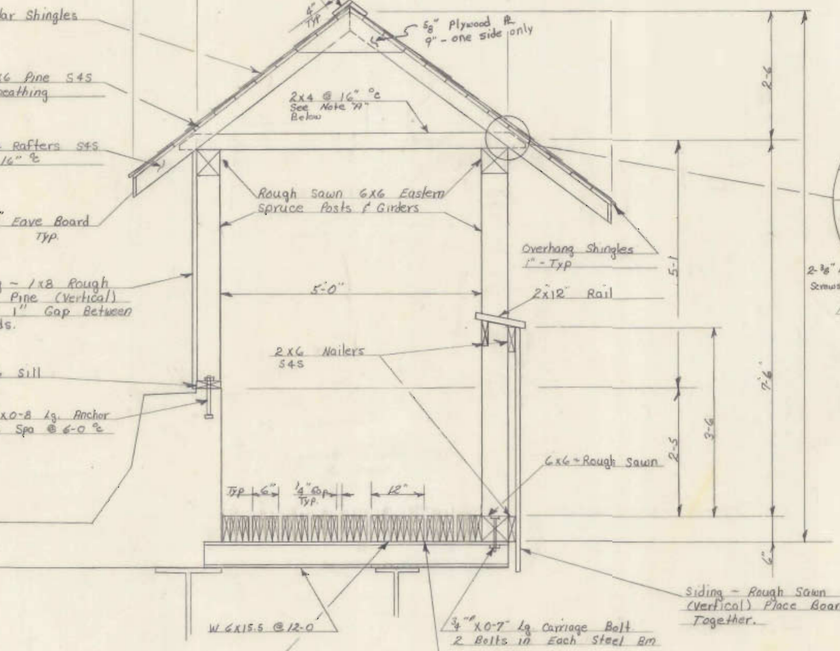
Designed by E. Leonard	Drawn by E. Leonard
Checked by W. Jarvis date 3-24-72	Bridge Design Supervisor A. R. Buchanan date 3/72
PROJECT Stowe	PROJECT NO. SAB 7009
Bridge Sheet No. BR 107	Sheet 7 of 10



Elevation Along Upstream side of Walkway
1/8" = 1'-0"



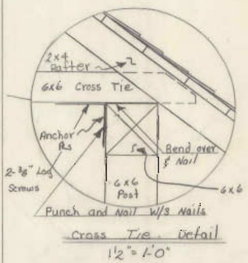
Elevation Along Roadway Side of Walkway
1/2" = 1'-0"



Laminated Floor shall be Built up with 2x6 Pressure Treated Creosote Eastern Spruce Spiked @ 18" ℄ With Spikes staggered. ¼" Spacer Blocks to be Placed over each W 6 X 15.5. Spacer Blocks to be of ¼" Exterior Plywood 0-3/2" x 0-7" Lg.

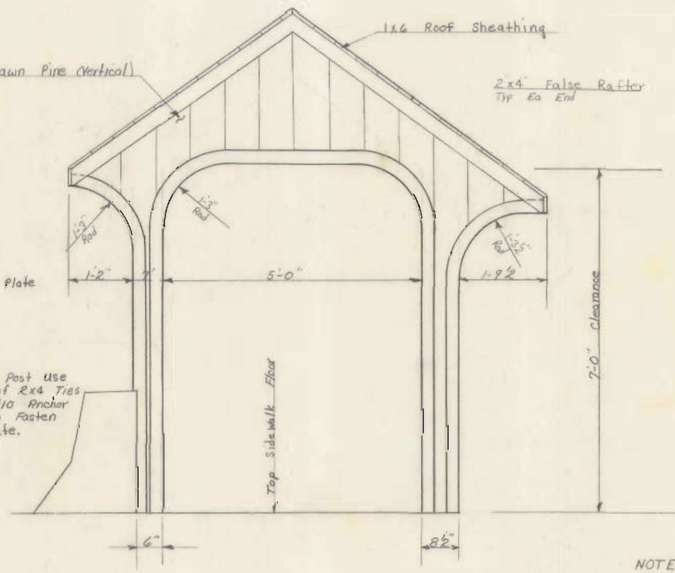
Fasten Each Group of Laminations to Each W 6x 15.5 With Two Stanley Anchor Plates # 9830-#8.

Section A-A
Typical Section
¾" = 1'-0"

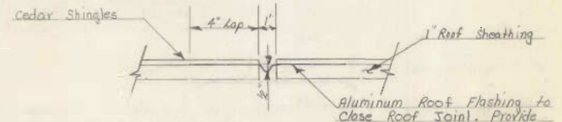


Cross Tie Detail
1½" = 1'-0"

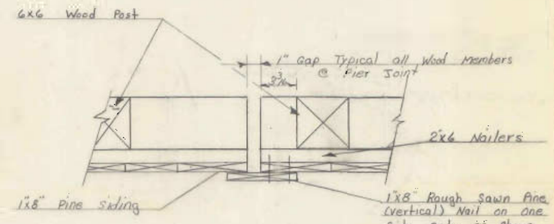
Note A: Over Each 6x6 Wood Post use a 6x6 Cross Tie in Place of 8x4 Ties shown. Use Stanley # 9830-#10 Anchor Plates or Approved Equal to Fasten 6x6 Cross Ties to 6x6 Plate.



View B-B
Typical End Treatment
¾" = 1'-0"



Section C-C
Roof Joint Detail
3" = 1'-0"



Section D-D
Wall Joint Detail
1½" = 1'-0"

NOTES

1. All Lumber in Wooden Walkway Shall be Rough Sawn (Full Dimension) Except as Noted.
2. Finish - The Cedar Shingles Shall be Left Natural. All other Exterior Surfaces Shall be Given Two Coats of Cabot's #241 Bleaching Oil in Accordance With the Manufacturers Instructions. The 2x6 For the Laminated Floor Shall be Pressure Treated With Creosote.

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

TOWN OF Stowe	Bridge No.
	Log Sta.
HIGHWAY NO. Vt. Rte 108	Surv. Sta.
Vt Rte 108 over Waterbury River	
Covered Walkway Framing Details & Joint detail	
Designed by E. Leonard	Drawn by E. Leonard
Checked by W. Jarvis date 3-24-72	Bridge Design Supervisor R. R. Buchanon date 3/72
PROJECT Stowe	PROJECT NO. SAB 7009
Bridge Sheet No. BR 108	Sheet 8 of 10

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