

Ground Elev.	Color	Notes	Trials	Penetrate	Soil Description
499.3	Grey	3 trials To Penetrate boulders	5	20	Gravel + some Sand Trace of silt
-7	Grey		25	24	Gravel + some Sand Trace of silt
-19	Grey	Abutment #1 Bottom of Footing Elev. 486.30	30	23	Gravel + some Sand Trace of silt
-23	White		34	23	Sand Trace of silt
-27	White		37	25	Sand Trace of gravel + silt
-31	White		38	29	Sand Trace of silt
-35	White		39	31	Sand Some Gravel Trace of silt
-36.7	White	Refusal	40	33	Sand Some Gravel Trace of silt
488.3	IT Grey	4 trials To Penetrate boulders	2	0	Sand Some Gravel Trace of silt
-15	IT Grey		1	0	Sand Some Gravel Trace of silt
-19	IT Grey		1	0	Sand Some Gravel Trace of silt
-27	IT Grey		1	0	Sand Some Gravel Trace of silt
-29.5	IT Grey		1	0	Sand + Gravel Trace of silt
-30	IT Grey		1	0	Ledge of Boulder

Note: All material and construction shall conform to State of Vermont Standard Specifications for Highway and Bridge Construction dated 1956 and current modifications.

- List of Sheets**
- BR-1 Plan & Profile
  - "-2 Abutment No.1 Details
  - "-3 Reinforcing Schedule
  - "-4 Standard Structures SB-20-60
  - "-5 Roadway Sections
  - "-6 Channel Sections

Item#	Item	Unit	Total	Final
102	Borrow	C.Y.	100	
100-A	Channel Excavation of Earth	C.Y.	84	
107	Structure Excavation	C.Y.	203	
201-A	Sub-base of Gravel	C.Y.	28	
222	Gravel Backfill	C.Y.	77	
401-B	Concrete Class B, Mod	C.Y.	63	
402	Reinforcing Steel	Lb.	3800	
404-A	Structural Steel	Lb.	300	
441	Temporary Bridge	LS	1	
501	Furnishing Equipment for Driving Piles	LS	1	
503	Splices for Steel Piling	Ea.	3	
504	Steel Piling	L.F.	420	
521	Stone Fill (Heavy Type)	C.Y.	28	
549-A	Removing and Resetting Two Cable Guard Rail	L.F.	48	
548-A	Wood Guide Posts	Ea.	4	

- Work to be done**
1. Jack Abut. No.1 end of existing Superstructure.
  2. Remove old abutment.
  3. Construct new abutment.
  4. Lower superstructure to new abutment.
  5. Construct approach.

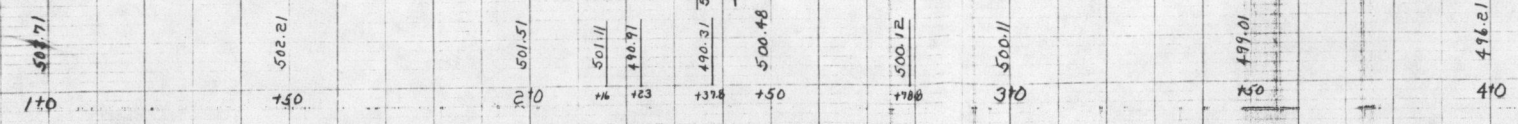
Approved: 10/26/62  
*R. F. Saylor*  
 District Engineer

Correct: 10/29/62  
*Lombardi*  
 Bridge Engineer

Approved: 10/29/62  
*A. O. Bishop*  
 Chief Engineer

Approved  
*R. H. Gould*  
 Asst. Chief Engineer

STOWE  
 NUMBER T.F. 34-1962  
 TYPE Repair of Substructure  
 CONTRACTOR  
 LOCATION T.P. 43 - Bridge #48



STOWE TF34-1962

Sheet BR-1

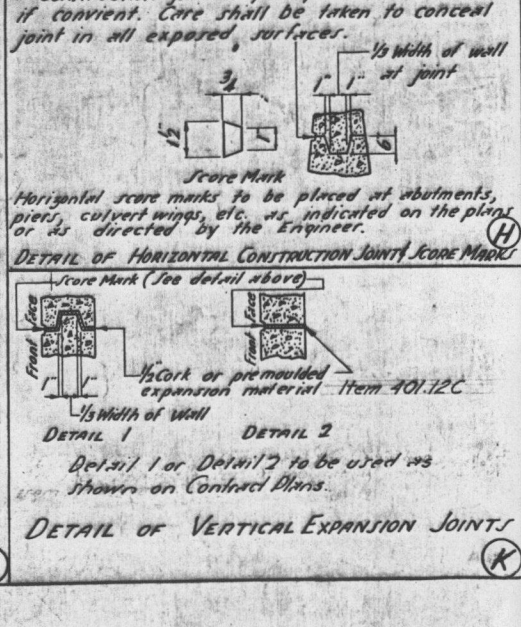
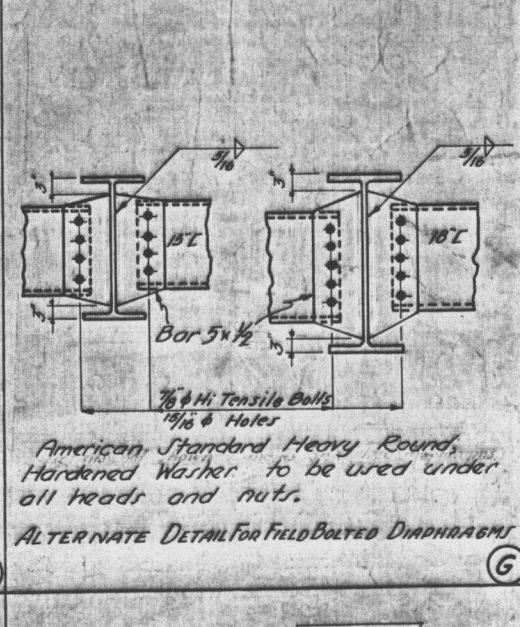
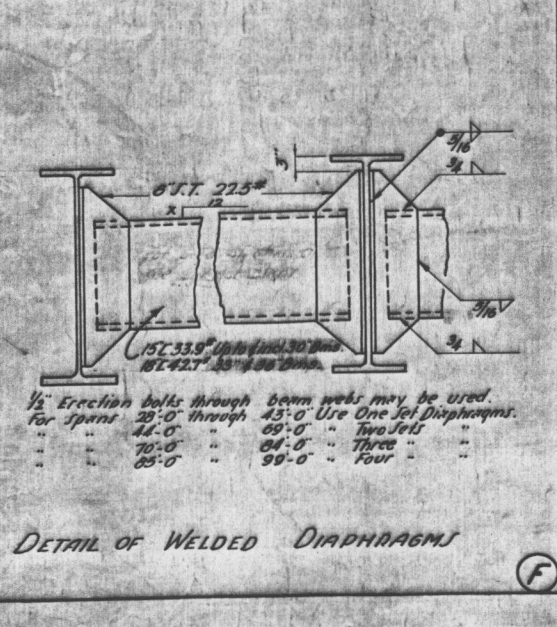
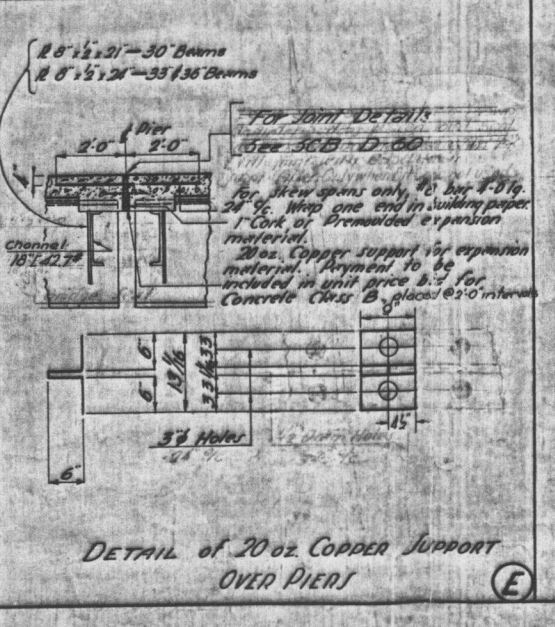
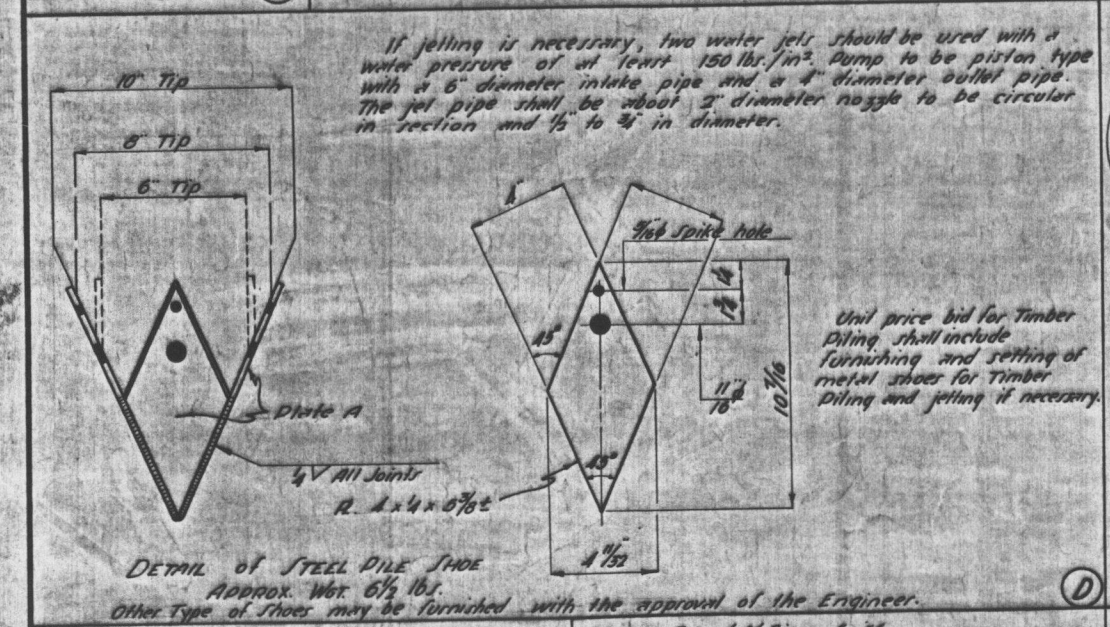
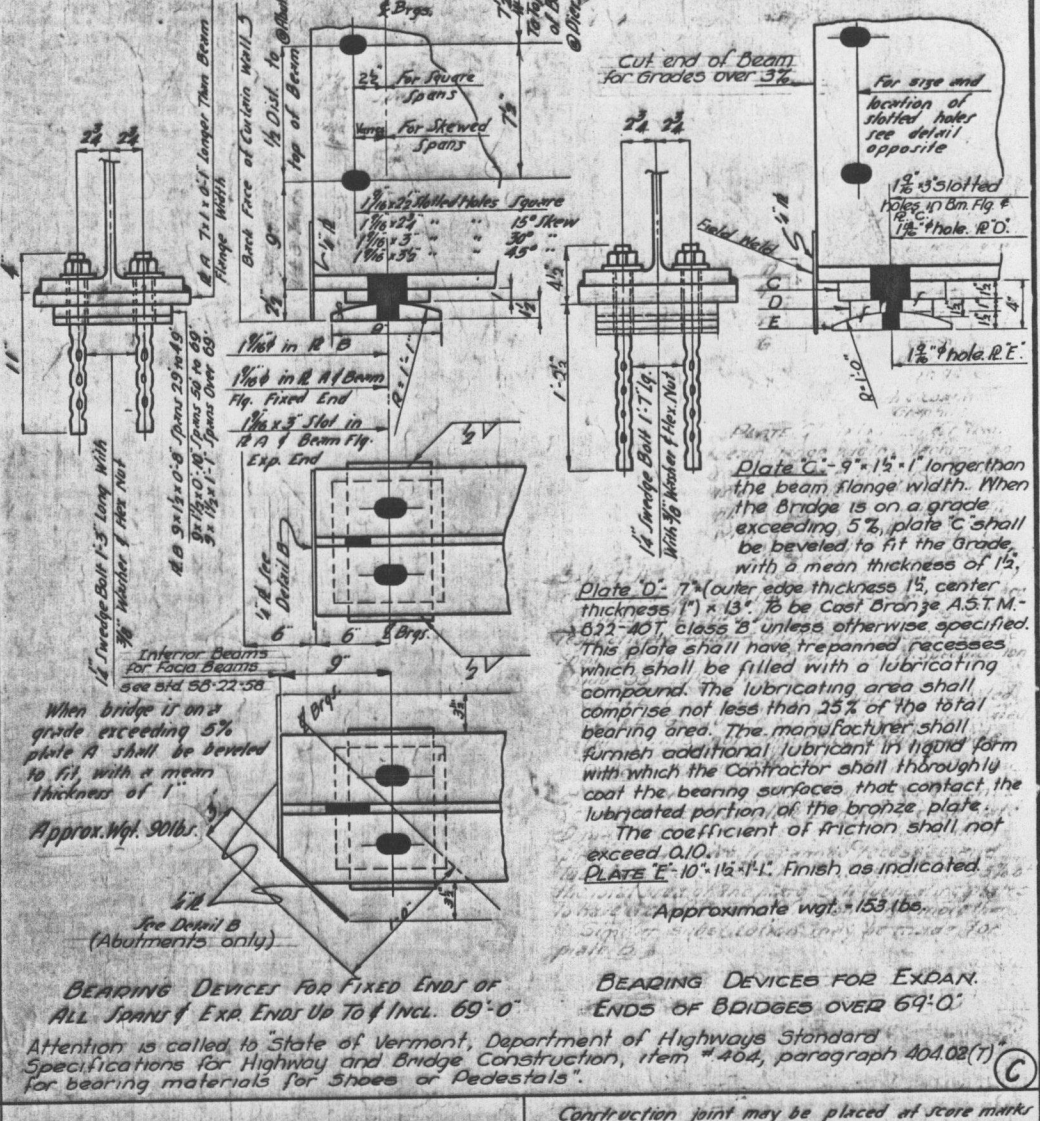
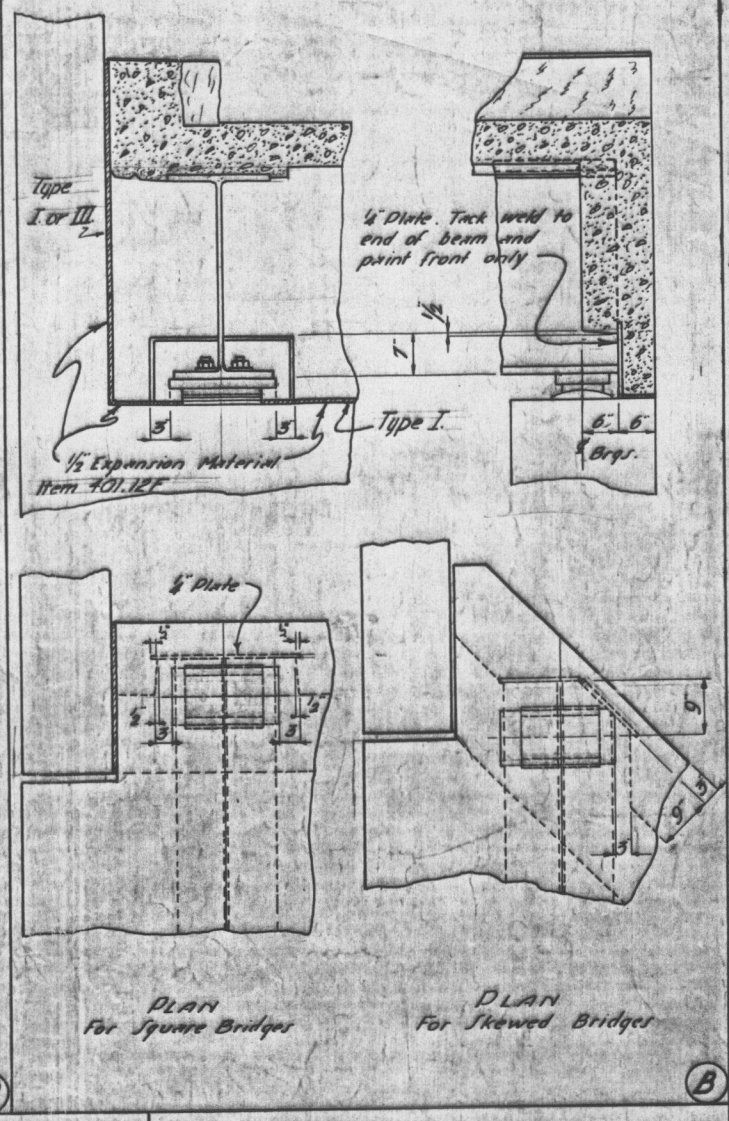
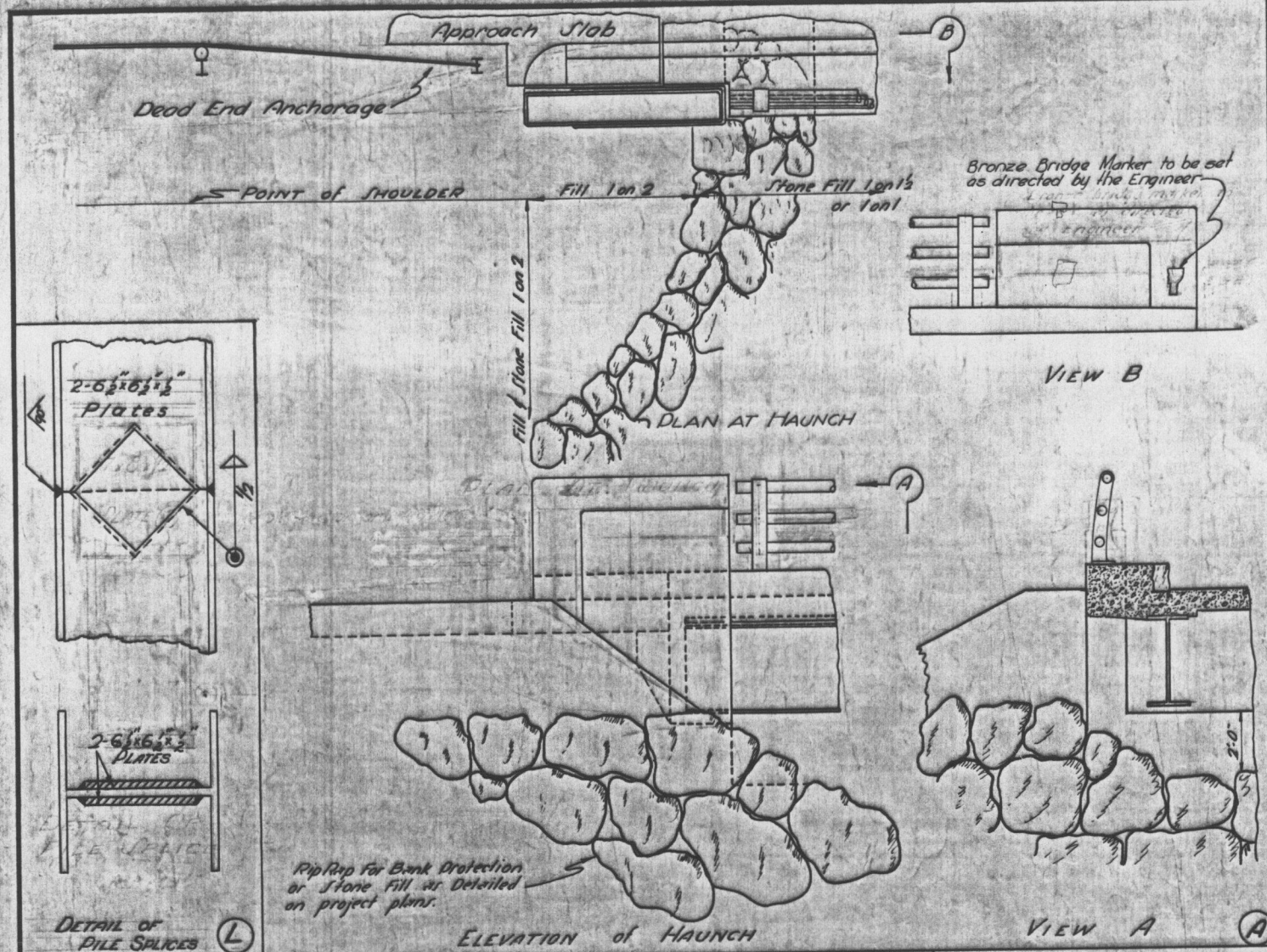












**REVISIONS & CORRECTIONS**  
 Revised July 1962  
 Correct 13 July 1960  
 L.M. Spurr  
 BRIDGE ENGINEER  
 Approved 13 July 1960  
 Chief Engineer

Drawn By L.M. Spurr 2-26-60  
 Traced By R.L. Hubbard 2-28-60  
 Checked By J.L. Hubbard 2-28-60  
 Correct 13 July 1960  
 L.M. Spurr  
 BRIDGE ENGINEER  
 Approved 13 July 1960  
 Chief Engineer

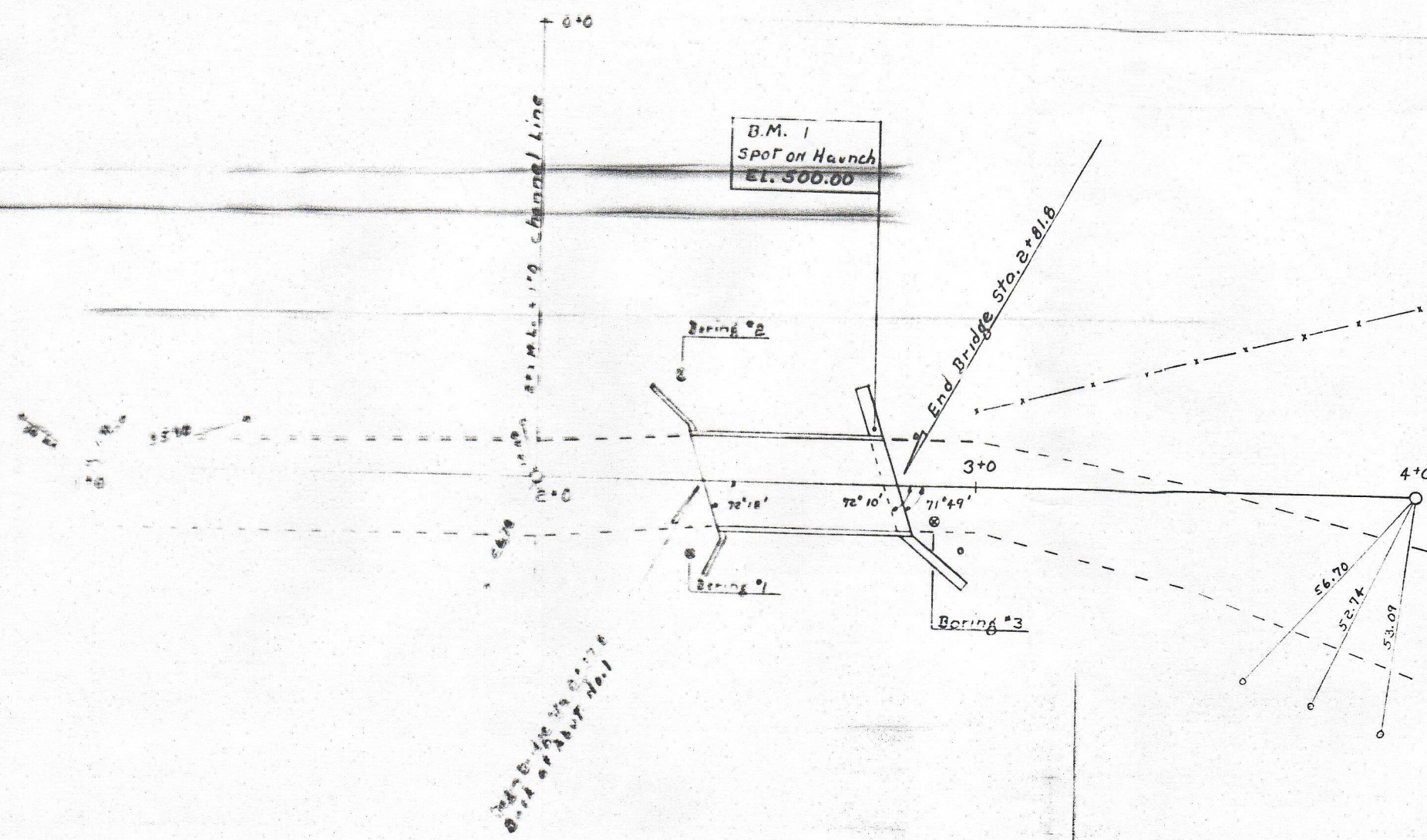
## CONSTRUCTION DETAILS FOR WF BEAM BRIDGES

DEPARTMENT OF HIGHWAYS  
STANDARD STRUCTURES

# SB-20-60

235  
CIV. ENGR. JULY 1962





Ground Elev.	Remarks	Depth (ft)	Ground Elev.	Remarks	Depth (ft)
499.3	3 Trials To Penetrate Boulders	5	488.3	4 Trials To Penetrate boulders	2
	Gravel & some Sand Trace of silt	20		Sand Some Gravel Trace of silt	0
		25			1
		24			8
		24			10
		31			19
		35			19
		38			14
		38			19
		37			18
		33			26
		36			26
		36			18
		33			23
		31			18
		25			16
		29			36
		33			44
		38			47
		31			77
		33			100
		48			68
		96			78
		72			100
		69			100
		81			100
		71			100
		59			100
		58			100
		100			100
		200			100

- List of Sheets
- BR-1 Plan & Profile
  - 2 Abutment No. 1 Details
  - 3 Reinforcing Schedule
  - 4 Standard Structures SB-20-60
  - 5 Roadway Sections
  - 6 Channel Sections

Note: All material and construction shall to State of Vermont Standard Specifications for Highway and Bridge Construction and current modifications.

Construct satisfactory Approach

Total Quantities

Item#	Item
102	Borrow
106-A	Channel Excavation of Earth
107	Structure Excavation
201-A	Sub-base of Gravel
222	Gravel Backfill
401-B	Concrete Class B, Max
402	Reinforcing Steel
404-A	Structural Steel
441	Temporary Bridge
501	Furnishing Equipment for Driving Piles
503	Splices for Steel Piling
504	Steel Piling
521	Stone Fill (Heavy Type)
549-A	Removing and Resetting Two Cable Guard Rail
548-A	Wood Guide Posts

- Work to be done
1. Jack Abut. No. 1 end of existing superstructure.
  2. Remove old abutment.
  3. Construct new abutment.
  4. Lower superstructure to new abutment.
  5. Construct approach.

Approved 10/26/62  
*[Signature]*  
 District Engineer

Approved 10/22/62  
*[Signature]*  
 Bridge Engineer

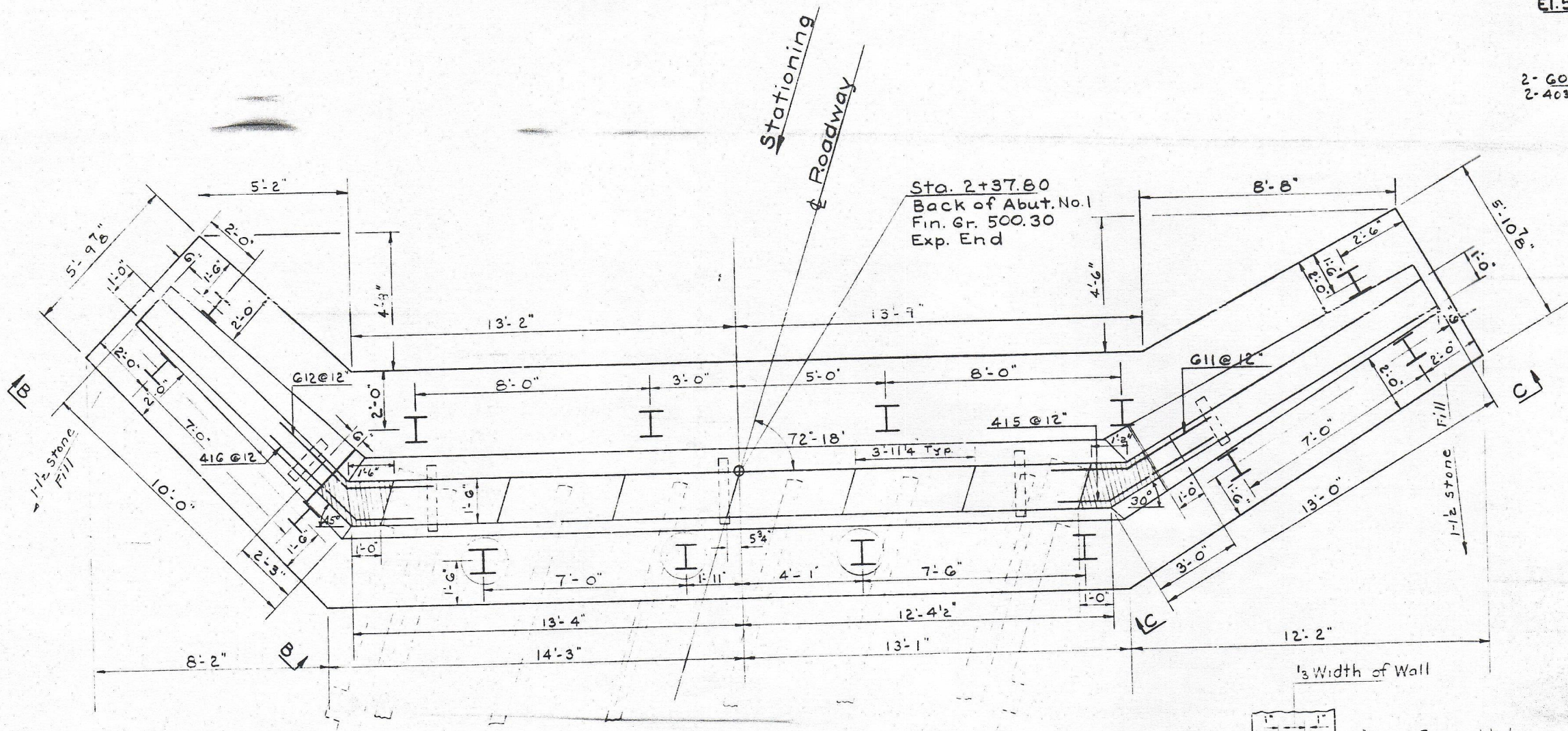
Approved 10/10/62  
*[Signature]*  
 Chief Engineer

Approved  
*[Signature]*  
 Asst. Chief Engineer

Stowe  
 72-51-102  
 Agency of Substructure  
 72-51-102-11

BRIDGE NO. 48  
 OVER MILLER BROOK  
 STOWE, VT  
 RTE TH. #43





Note: Three piles encircled in front row to be driven vertically through holes in bridge deck or battered the minimum to pass end of superstructure.

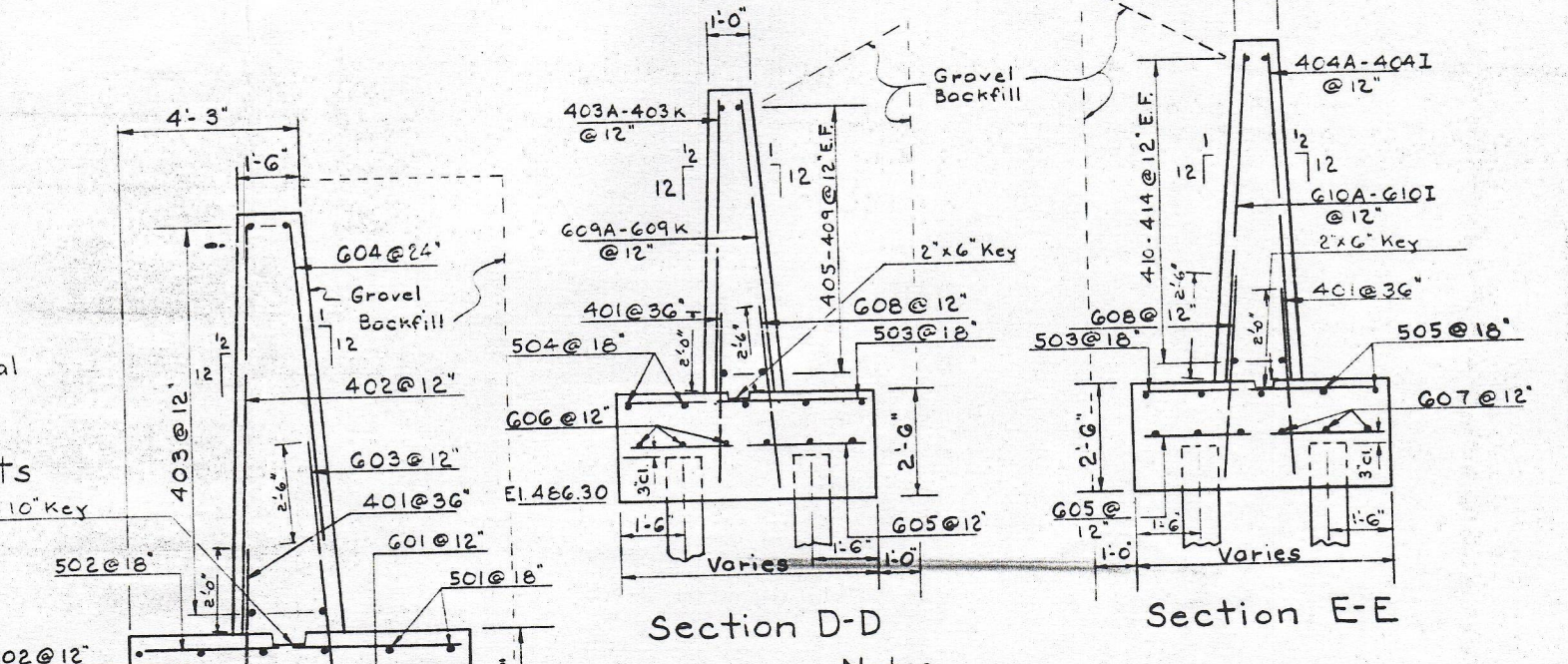
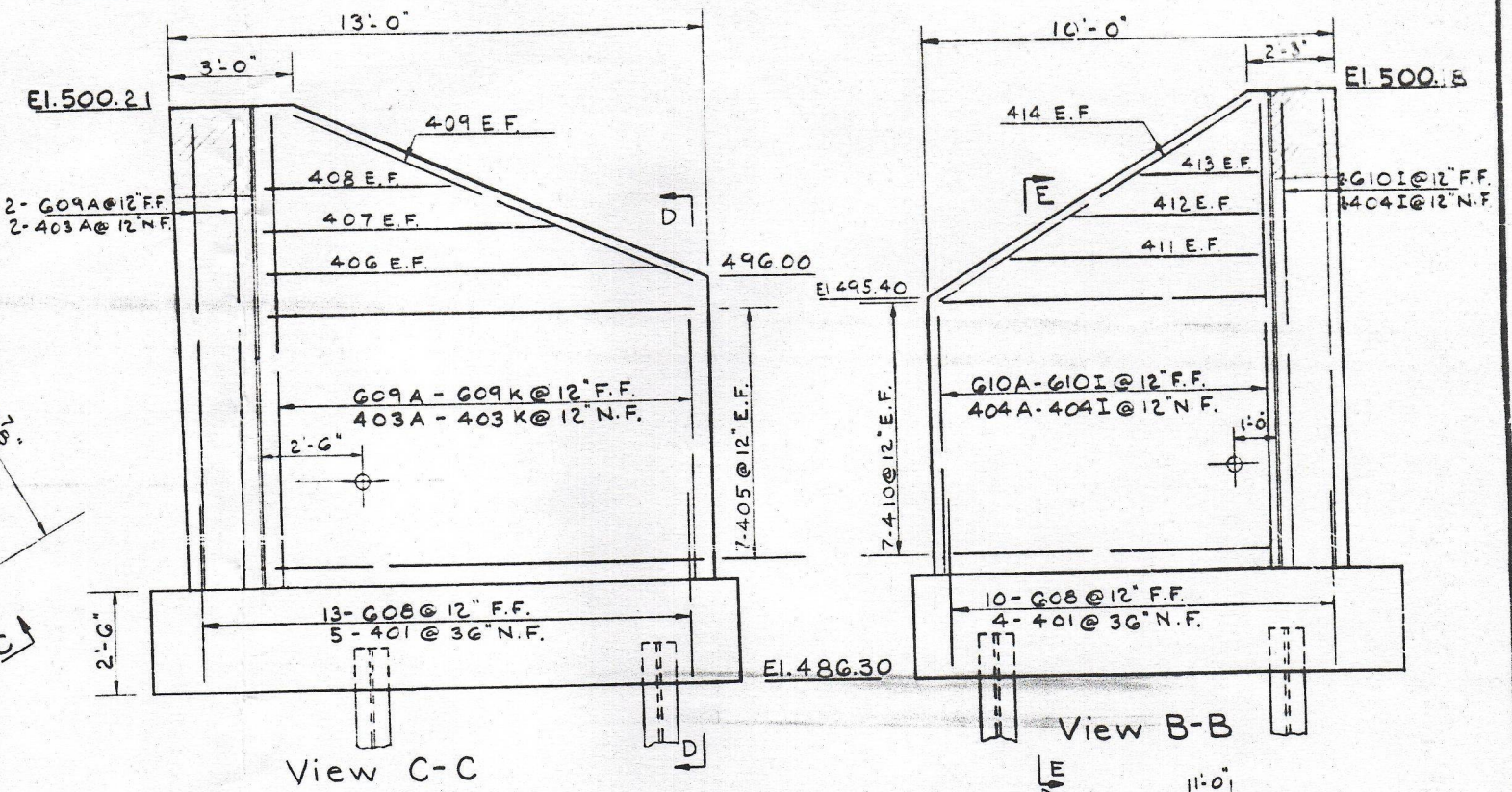
Note: For details of swedge bolts & brg. plates not shown see Std. Sh. SB-20-60, Detail C, Fixed End Brg. Plate B.

Haunch to be poured after superstructure is lowered in place.

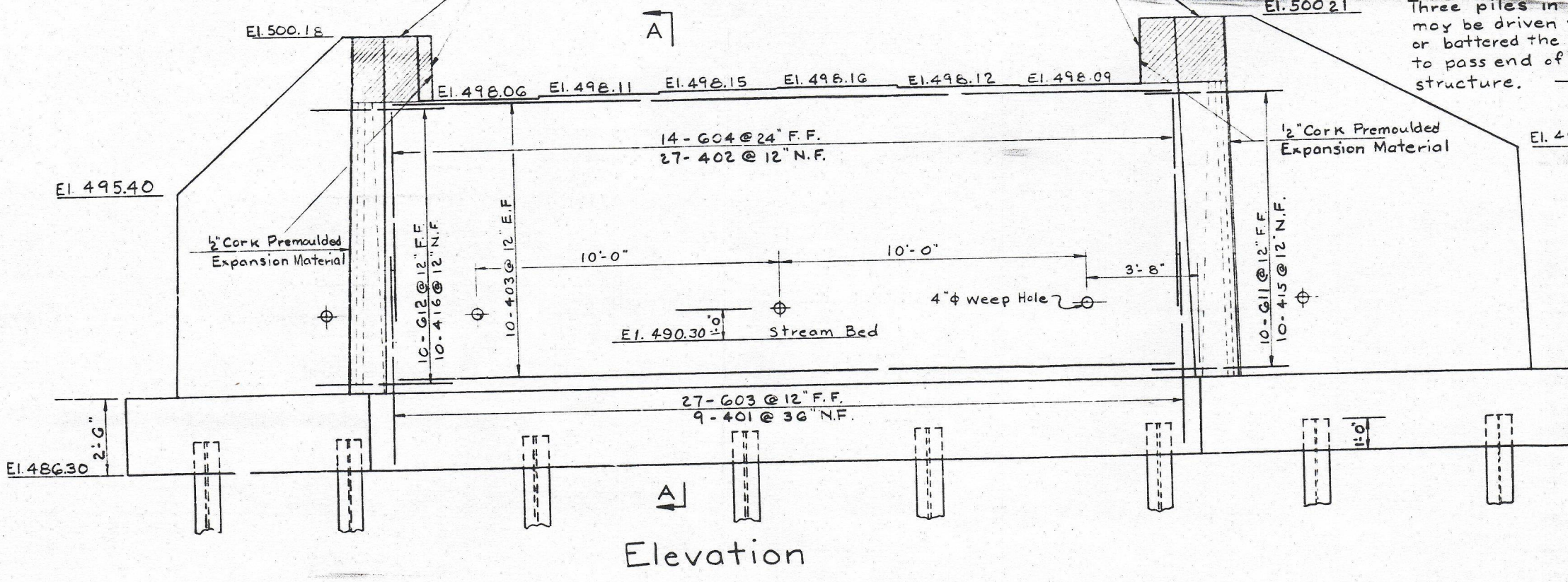
Detail of Bearing Plate (6 Plates Required 12 Bolts Required)

Haunch to be poured after superstructure is lowered in place.

Three piles in this row may be driven vertically or battered the minimum to pass end of superstructure.



- Notes
1. Three piles in the front of the main abut. footing may be driven vertically through the deck or battered to pass end of superstructure. All other piles to be vertical. All piles to be 10BP42, 35 Ton capacity, estimated length 30 ft.
  2. Reinforcing steel in footing to have 3" clear cover. All other reinforcing to have 2" clear cover.
  3. Bridge seat elevations given are at  $\phi$  of brg.



Abutment No. 1 Quantities

ITEM NO.	ITEM	UNIT	NET	OVERRUN	TOTAL	FINAL
106-A	CHAN. EXCAV. OF EARTH	C.Y.				
106-B	CHAN. EXCAV. OF ROCK	C.Y.				
106-C	UNCLASS. CHAN. EXCAV.	C.Y.				
107	STRUCT. EXCAV.	C.Y.	203		203	
401-B	CONC. CLASS B (MOD.)	C.Y.	63		63	
402	REINF. STEEL	LBS.	3800		3800	
407	ASPHALTIC-ASB. COATING	S.Y.				
502-B	TREATED TIMBER PILING	L.F.				
503	SPLICES FOR STEEL PILING	EA.	3		3	
504	STEEL PILING	L.F.	420		420	
502-A	UNTREATED TIMBER PILING	L.F.	77		77	
222	Gravel Backfill	C.Y.	77		77	
501	Furnishing Equipment for Driving Piles	L.S.	1		1	
521	Stone Fill (Heavy Type)	C.Y.	28		28	
404-A	Structural Steel	Lb.	300		300	

STATE OF VERMONT  
DEPARTMENT OF HIGHWAYS  
*OVER MILLER BROOK*

TOWN OF Stowe  
Town Bridge No. 46

ROUTE NO. 143 LOG STA.

Abutment Details  
Abut. No. 1  
SCALE 3/8" = 1'-0"

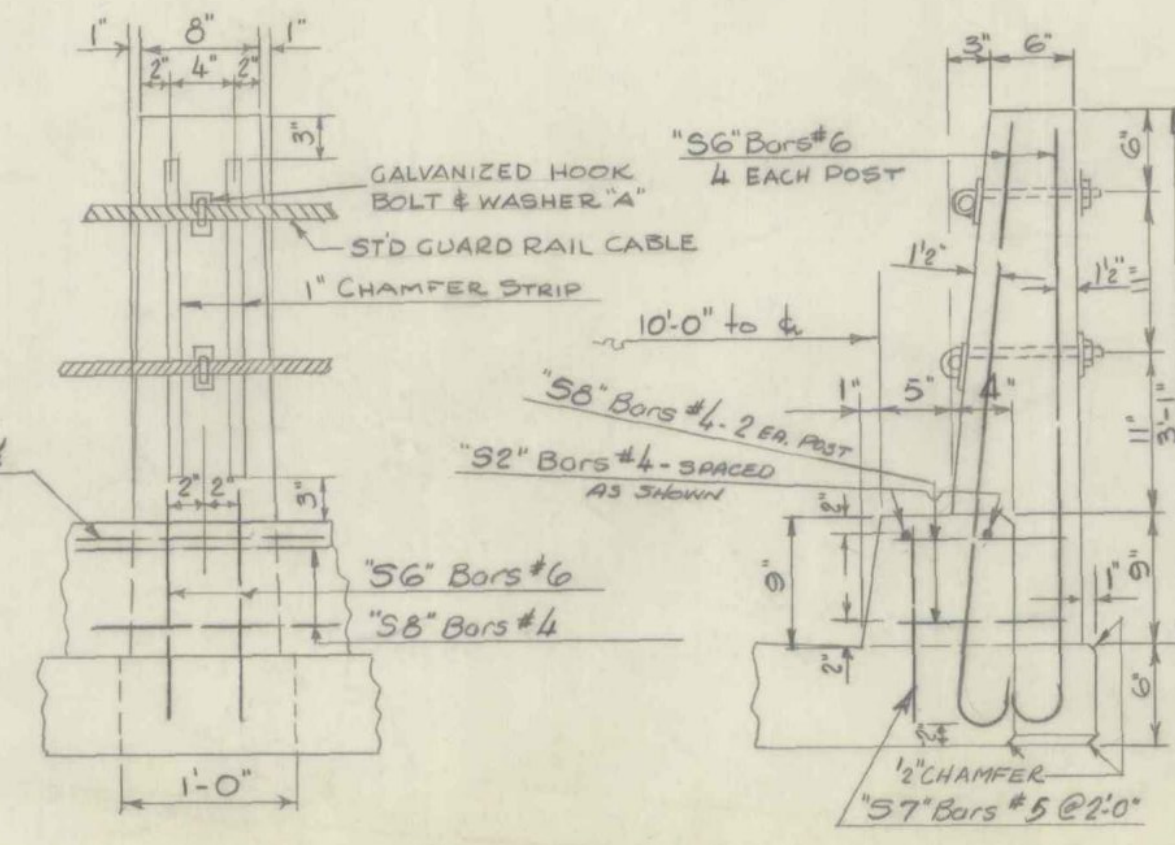
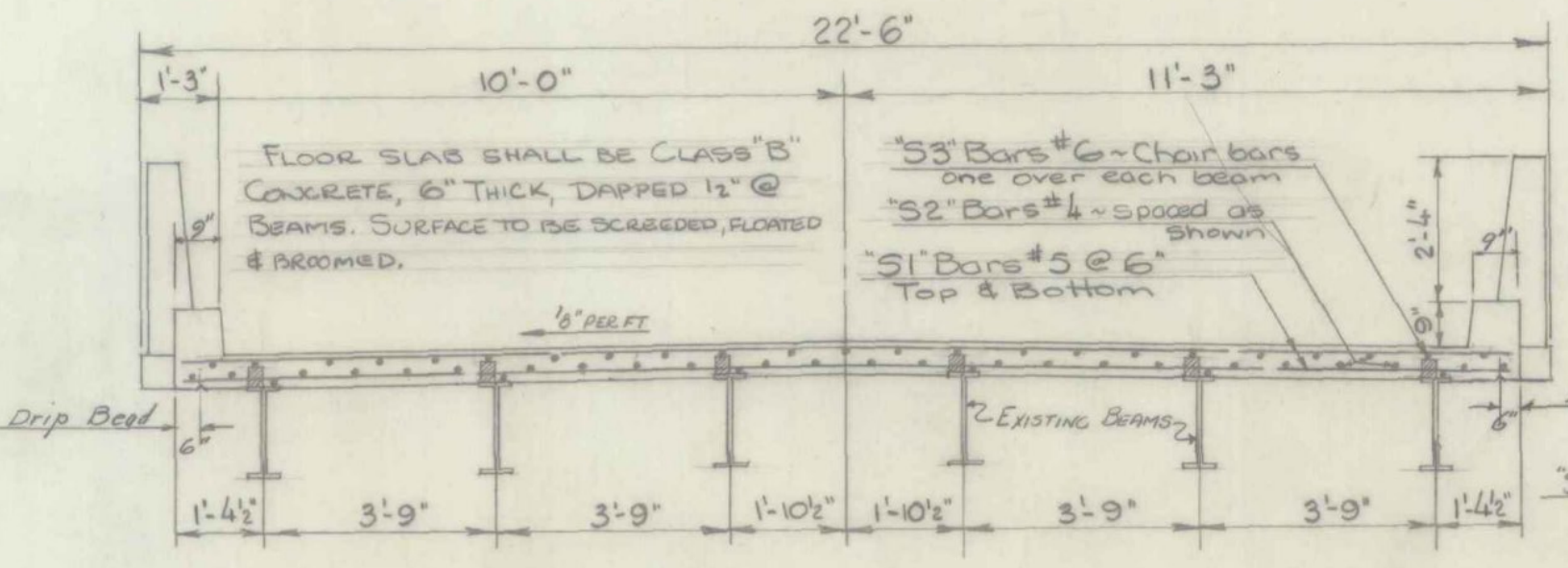
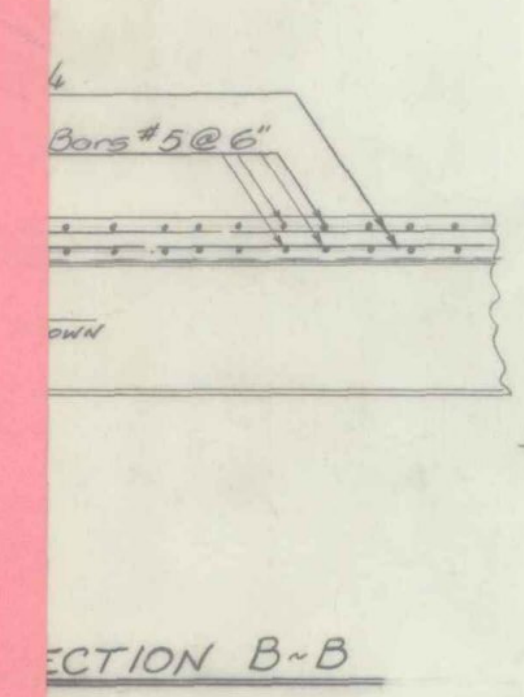
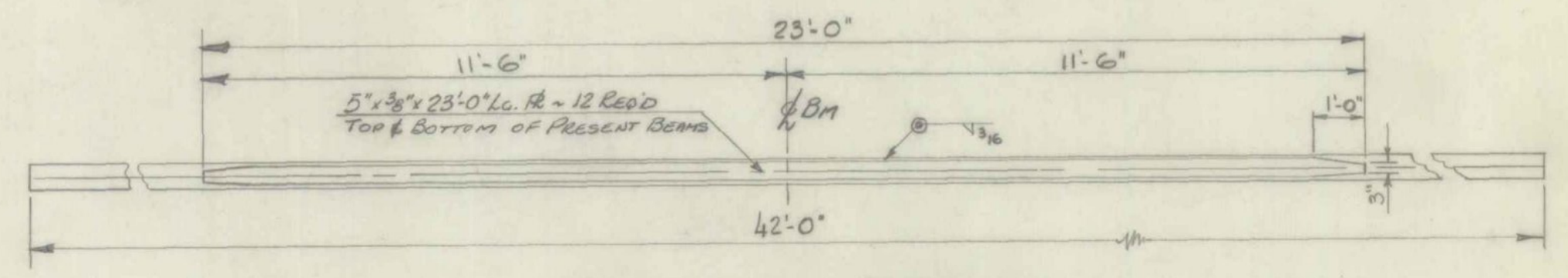
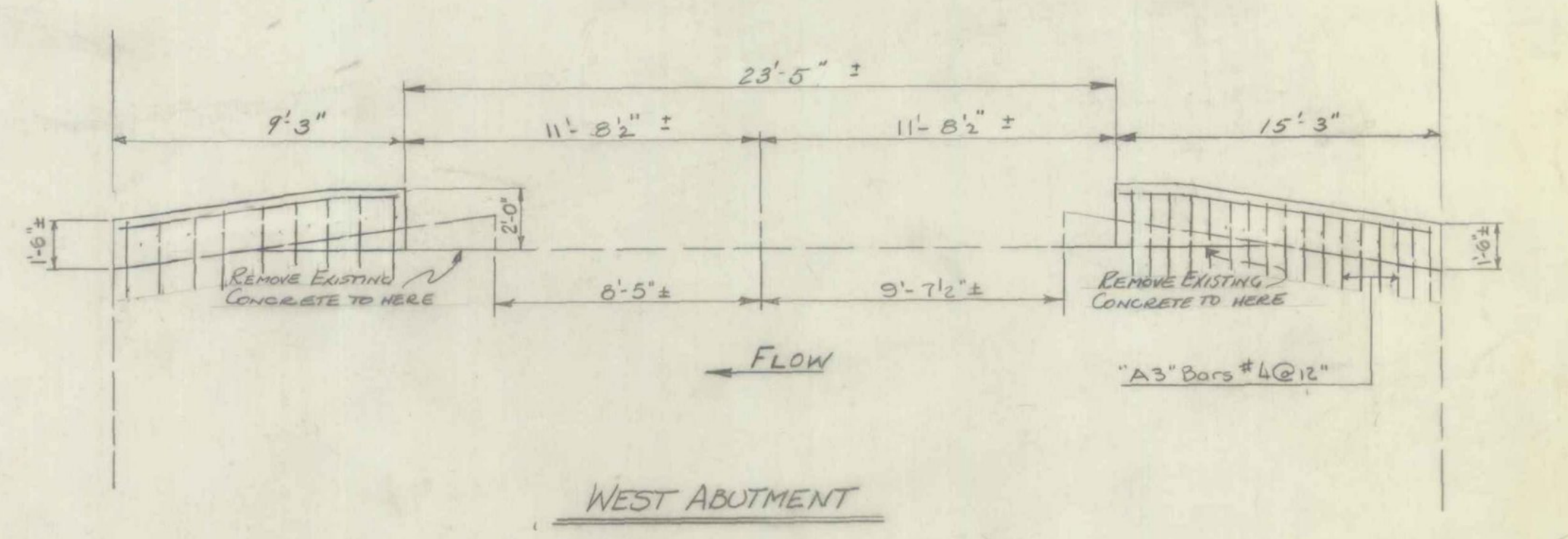
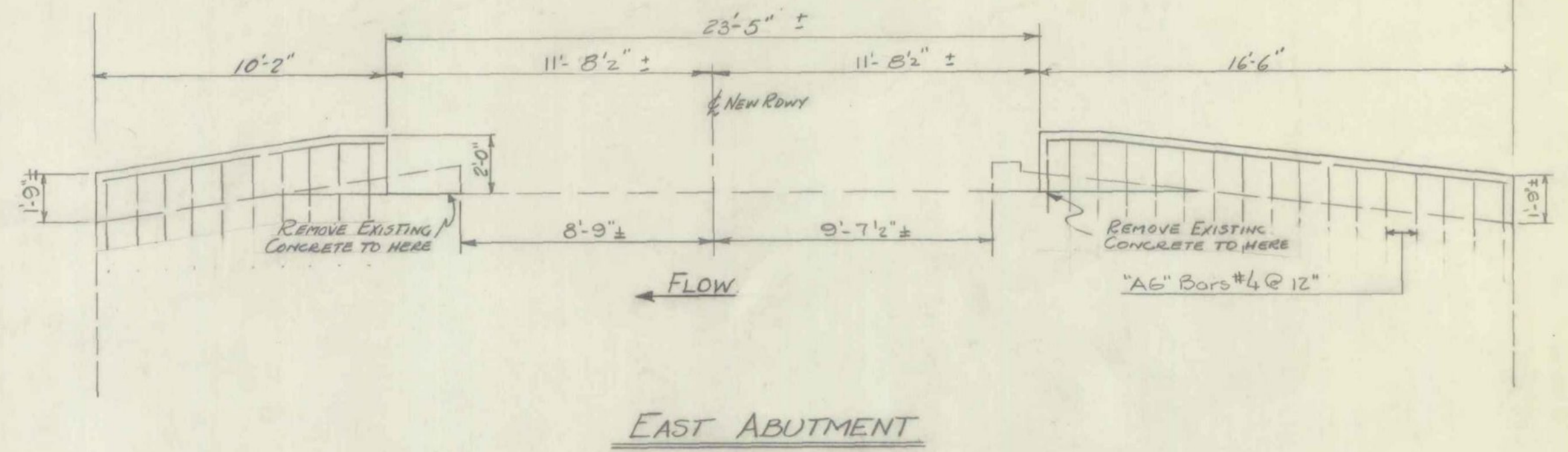
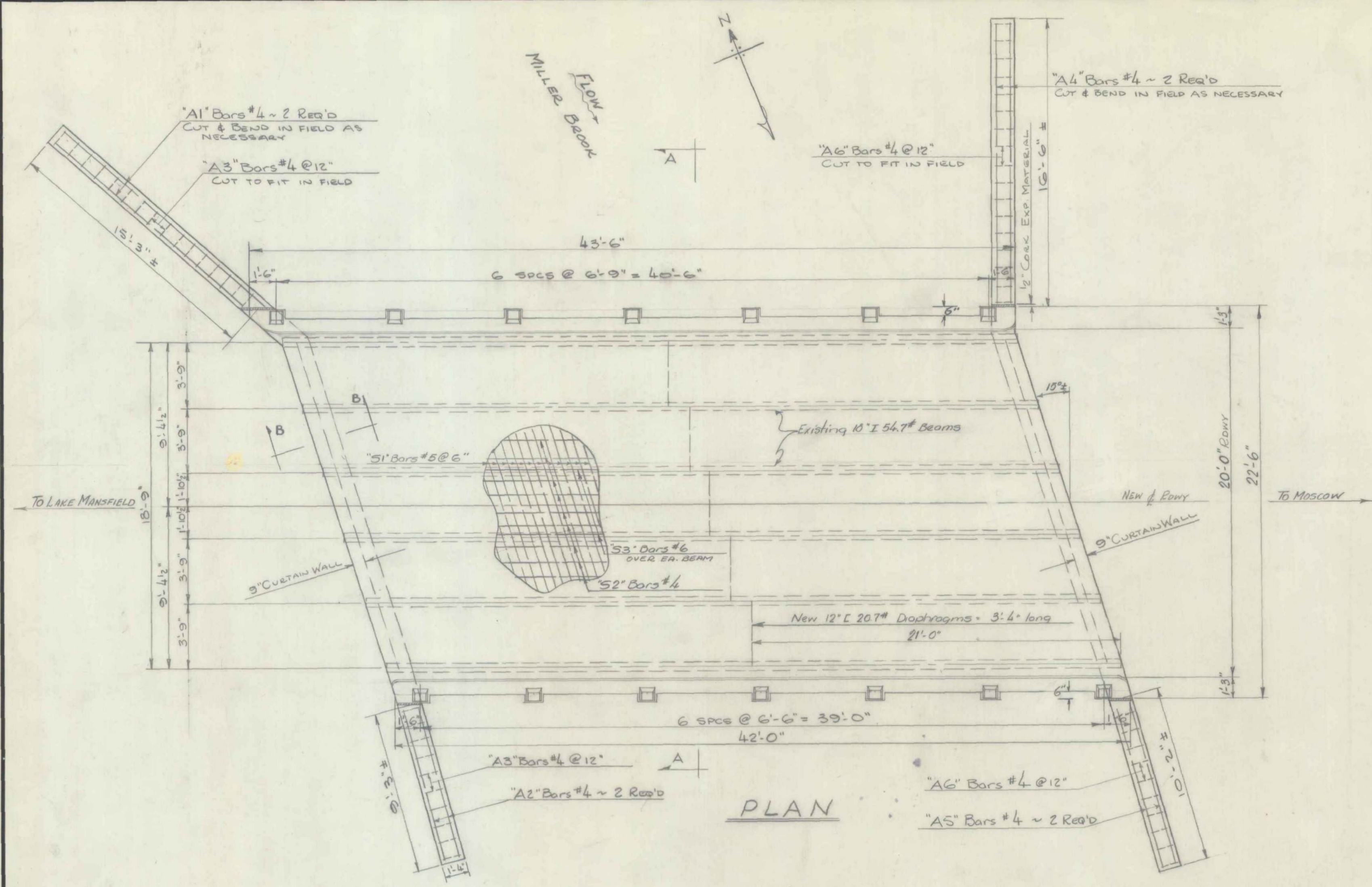
SURVEYED BY Spaulding  
DRAWN BY A.J.C. CHECKED BY W.M.S.

PROJECT NO. TF 34/1962  
SHEET BR-2 OF BR-6









**NOTES:-**

This sheet to be used in conjunction with Standard Drawing BT 205.

New Structural Steel shall consist of:

- 24 Sledge Bolts 1 1/4" x 1 1/2" long w/ 3/8" washers & Hexnuts
- 12 Plates 3" x 36" x 23'0" long
- 5 Channels 12" @ 20.7# - 3'7" long
- 20 Angles 4" x 3 1/2" x 9" long

The approximate weight of this Structural Steel is 1242 # (Order Blades for Casting 12's not included)

For Reinforcing Steel Details see Sheet 2 of 4 Sheets.

All new Structural Steel shall be painted in accordance with the Vt. Road & Bridge Specs.

All existing Structural Steel shall be thoroughly cleaned & painted with one coat of shop paint and two coats of field paint as per specifications.

Payment for removal of existing haunches, bar dowels, & parts of wings to be made under Item 101-B, Solid Rock Excavation.

Payment for drilling & grouting of dowels to be paid for under unit price bid for Concrete, Class "B".

Where new concrete is to be placed in contact with existing concrete the existing concrete shall be thoroughly cleaned & wetted before new concrete is poured.

101-B	SOLID ROCK EXCAVATION	2 CY
401-B	CONCRETE, CLASS "B" (MED)	26 CY
402	REINFORCING STEEL	6600 LBS
403A	STRUCTURAL STEEL	1242 LBS

STATE OF VERMONT  
DEPARTMENT OF HIGHWAYS

TOWN OF STOWE  
ROAD NO. TOWN #43 BRIDGE NO. 48  
SUPERSTRUCTURE  
AND ABUTMENT DETAILS  
SCALE 1 1/4" = 1'-0" EXCEPT AS NOTED  
SURVEYED BY Jennings  
DRAWN BY JJ CHECKED BY S.N.  
PROJECT NO. T 14-1954  
SHEET 1 OF 4

- LIST OF SHEETS**
- No 1. This Sheet
  - " 2. Reinf. Steel Schedule
  - " 3. Dwg. C-205
  - " 4. " S.B. 20

PROJECT Stowe  
NUMBER T-14-1954  
TYPE New Superstructure  
CONTRACTOR  
LOCATION Town Rd #43



