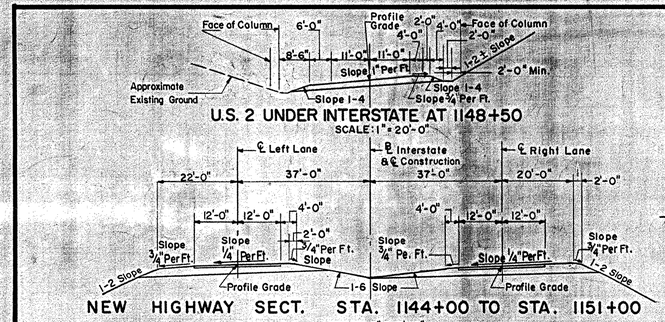
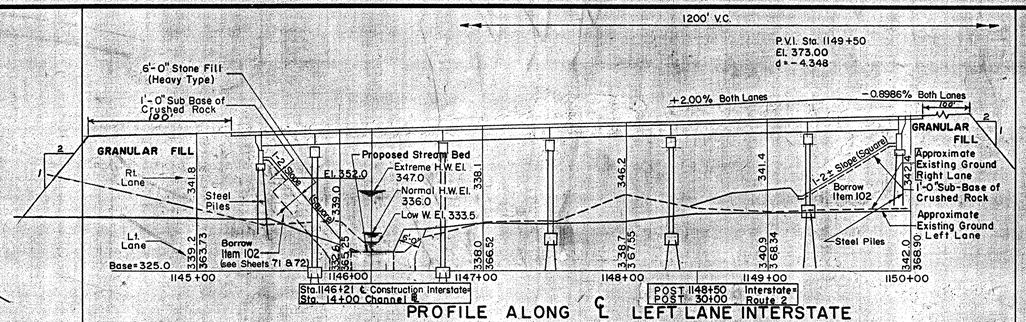


U.S. 2 UNDER INTERSTATE AT 1148+50

SCALE: 1"=20'-0"

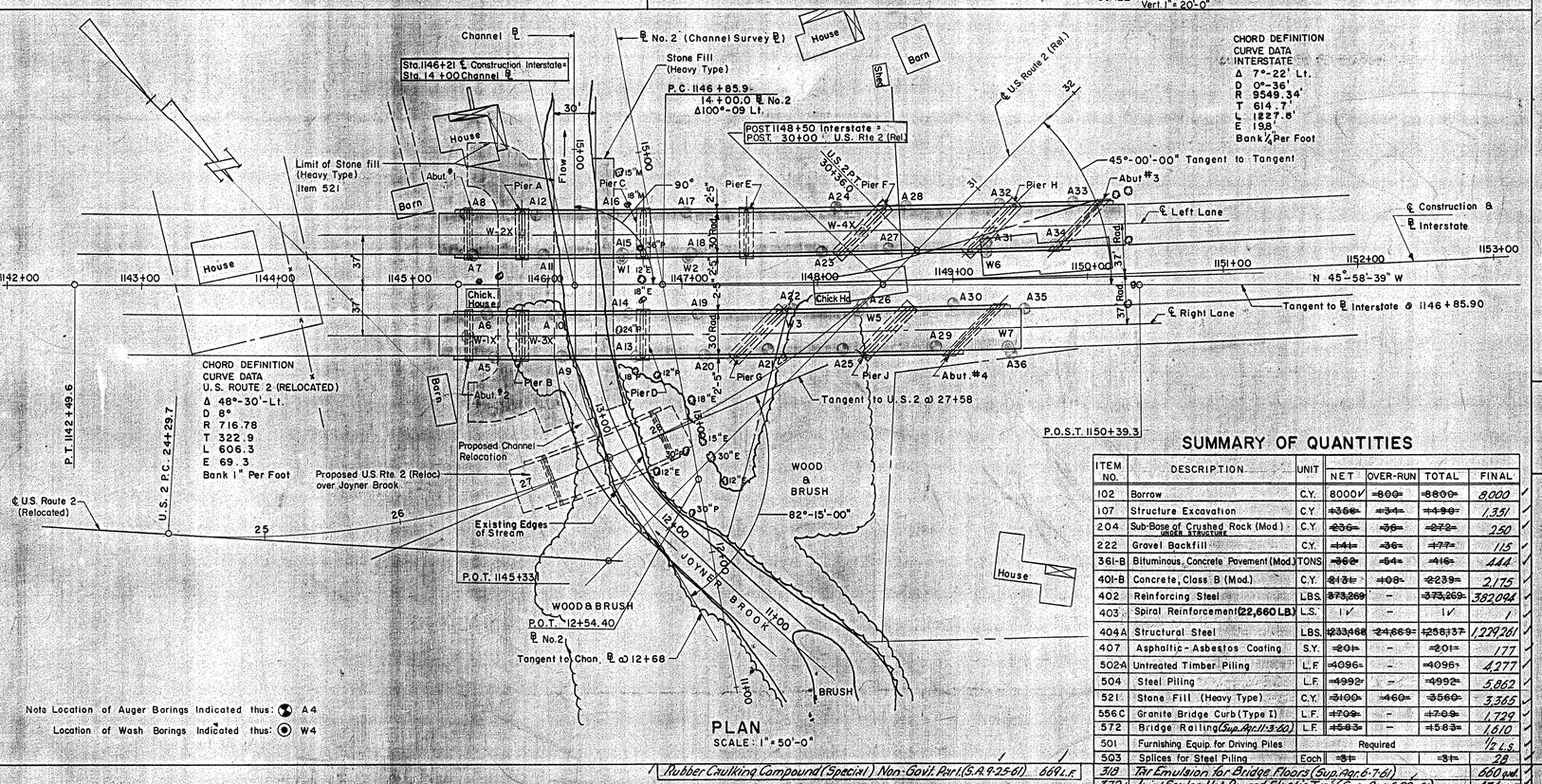
NEW HIGHWAY SECT. STA. 1144+00 TO STA. 1151+00

SCALE: 1"=20'-0"



PROFILE ALONG ℄ LEFT LANE INTERSTATE

SCALE: Hor. 1"=50'-0" Vert 1"=20'-0"



PLAN

SCALE: 1"=50'-0"

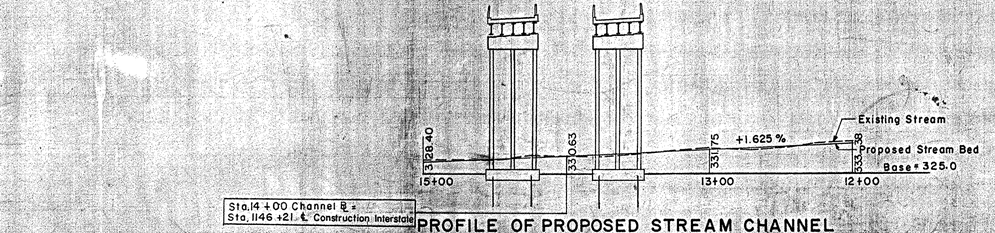
Note Location of Auger Borings Indicated thus: A4

Location of Wash Borings Indicated thus: W4

SUMMARY OF QUANTITIES

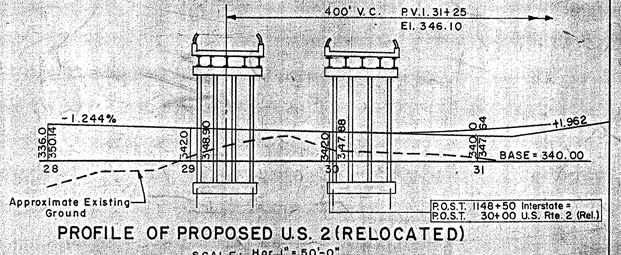
ITEM NO.	DESCRIPTION	UNIT	NET	OVER-RUN	TOTAL	FINAL
102	Borrow	C.Y.	8000	~~800~~	~~8800~~	8,000
107	Structure Excavation	C.Y.	~~1356~~	~~34~~	~~1390~~	1,351
204	Sub-Base of Crushed Rock (Mod.)	C.Y.	~~236~~	~~36~~	~~272~~	250
222	Gravel Backfill	C.Y.	~~141~~	~~26~~	~~177~~	115
361-B	Bituminous Concrete Pavement (Mod.)	TONS	~~360~~	~~54~~	~~416~~	444
401-B	Concrete, Class B (Mod.)	C.Y.	~~2131~~	~~108~~	~~2239~~	2,175
402	Reinforcing Steel	LBS.	~~373,269~~	–	~~373,269~~	382094
403	Spiral Reinforcement (22,660 LB)	L.S.	1 V	–	1 V	1
404A	Structural Steel	LBS.	~~233468~~	~~24,669~~	~~258,137~~	1,279,261
407	Asphaltic-Asbestos Coating	S.Y.	~~201~~	–	~~201~~	177
502-A	Untreated Timber Piling	L.F.	~~4096~~	–	~~4096~~	4,277
504	Steel Piling	L.F.	~~4992~~	–	~~4992~~	5,862
521	Stone Fill (Heavy Type)	C.Y.	~~3100~~	~~460~~	~~3560~~	3,365
556C	Granite Bridge Curb (Type I)	L.F.	~~1709~~	–	~~1709~~	1,729
572	Bridge Railing (Sup. Agr. 11-3-60)	L.F.	~~1583~~	–	~~1583~~	1,610
501	Furnishing Equip. for Driving Piles		Required			½ L.S.
503	Splices for Steel Piling	Each	~~31~~		~~31~~	28
318	Tar Emulsion for Bridge Floors (Sup. Agr. 6-7-61)					660 gal.
372	Joint Sealer, Hot Poured Elastic Type (Sup. Agr. 6-22-61)					474 L.F.
106-A	Channel Excav. of Earth	C.Y.	0	0	0	1,790

Rubber Caulking Compound (Special) Non-Govt. Agr. (S.A. 9-25-61) 669 L.F.



PROFILE OF PROPOSED STREAM CHANNEL

SCALE: Hor. 1"=50'-0" Vert. 1"=20'-0"



PROFILE OF PROPOSED U.S. 2 (RELOCATED)

SCALE: Hor. 1"=50'-0" Vert. 1"=20'-0"

HIGHWAY NO. I 89	NAME OF HIGHWAY Interstate	B.P.R. DIV. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
STRUCTURE NO. 20	COUNTY CHITTENDEN TOWN Bolton	1	VT.	I-89-2(7)	68	137

PROJECT NO. I-89-2(7) LOCATION Sta 1148+50

EXISTING STRUCTURE

1. RATED LOADING OF EXISTING STRUCTURE None
2. TYPE OF EXISTING STRUCTURE None
3. UNDERCLEARANCE ELEVATION OF EXISTING STRUCTURE None
4. WHAT DISPOSITION SHOULD BE MADE OF EXISTING STRUCTURE COST OF REMOVAL None
5. SHOULD EXISTING STRUCTURE BE USED TO MAINTAIN TRAFFIC DURING CONSTRUCTION OF NEW STRUCTURE No
6. SHOULD NEW TEMPORARY STRUCTURE BE BUILT
7. ORDINARY HIGH WATER SURFACE ELEV. AT EXISTING STRUCTURE WATERWAY TO ORDINARY H.W.
8. EXTREME HIGH WATER AT EXISTING STRUCTURE
9. SPAN OF EXISTING BRIDGE UPSTREAM WATERWAY TO EXTREME H.W.
   SPAN OF EXISTING BRIDGE DOWNSTREAM 35' WATERWAY TO EXTREME H.W.
10. TYPE OF FOUNDATION UNDER EXISTING ABUTMENTS
11. DOES ALL WATER AT FLOOD ELEVATION PASS THROUGH EXISTING STRUCTURE
12. IF NOT AT WHAT ELEVATION IS RELIEF AFFORDED
13. ADDITIONAL WATERWAY AREA PROVIDED

NEW STRUCTURE

1. RECOMMENDED TYPE OF STRUCTURE 5 and 6 Span Composite Steel Stringer Bridge
2. RECOMMENDED CLEAR SPAN OR SPANS Left lane 37-87-85.5 96-95-51 / 97-96-51 Right lane 37-87-66 / 67
   MEASURED PARALLEL TO ℄ NEW HIGHWAY
   MEASURED AT RIGHT ANGLES TO ℄ STREAM
3. ARE THERE OBJECTIONS TO A PIER IN THE STREAM ANSWER YES OR NO YES
4. ORDINARY HIGH WATER ELEVATION AT NEW STRUCTURE 336.0
5. EXTREME HIGH WATER ELEVATION AT NEW STRUCTURE 347.0 SOURCE OF INFORMATION U.S. Corps of Engineers Profile 1927 Flood from
6. IS ALL WATER INTENDED TO PASS THROUGH NEW STRUCTURE Yes
7. DOES STREAM REACH ITS MAXIMUM HIGHWATER ELEVATION RAPIDLY Yes IS ORDINARY RISE RAPID
8. LOW WATER ELEVATION AT NEW STRUCTURE 333.5
9. DRAINAGE AREA IN ACRES ABOVE STRUCTURE 6100 CHARACTER OF TERRAIN Mountainous
10. IS STREAM EVER DRY No
11. VELOCITY OF STREAM AT HIGH WATER STAGE 13 Ft. Per Second ESTIMATED DISCHARGE 1900 C.F.S
12. AREA FULL OPENING AREA BELOW ORDINARY H.W. 88 S.F.
13. CHARACTER OF SCOUR DRIFT ICE
14. ESTIMATED DRAINAGE AREA ABOVE NATURAL OR ARTIFICIAL STORAGE None
15. VERTICAL CLEARANCE ABOVE FLOOD ELEVATION
16. ARE SIDEWALKS REQUIRED, IF SO ON WHAT SIDE NO BOTH SIDES
17. RECOMMENDED TYPE OF PAVEMENT 2" Bituminous Concrete Pavement
18. TRAFFIC TO BE MAINTAINED UNDER ITEM NO. NONE ONE OR TWO WAYS PROBABLE COST
19. PROBABLE COST OF CLEARING AND GRUBBING STREAM CHANNEL AT STRUCTURE SITE
20. SHOULD PROVISIONS BE MADE FOR PUBLIC UTILITIES
21. ESTIMATED ALLOWABLE LOAD ON FOUNDATIONS SHOULD PILES BE USED YES EST. LGTH

FOUNDATION INFORMATION

OBTAINED FOR DESIGN PURPOSES ONLY, THE STATE ASSUMES NO RESPONSIBILITY WHATSOEVER FOR THE SUFFICIENCY OR ACCURACY OF THE INFORMATION SHOWN. BOULDERS MAY BE ENCOUNTERED AT ANY PIER OR ABUTMENT LOCATION. FOR BORING LOGS, SEE SHEETS 68 & 69 OF 137

GENERAL NOTES

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

LIVE LOAD:
H20-S16-44 and Military Loading

DESIGN STRESSES:
Structural steel fs = 18,000 psi
Reinforcing steel fs = 20,000 psi
Concrete fc = 1,200 psi f'c = 3,000 psi.

CLEARANCES:
Horizontal: as shown on drawings.
Vertical: 14'-3" Clear U.S. Route 2 (Relocated)

SUPERSTRUCTURES:
Separate Structure for Each Lane
30' Roadway, 1'-6" Safety Walks, as per SCB-30-56
6 Spans (Simple) Left Lane, 5 Spans (Simple) Right Lane, rolled beams, composite design, as per SB-30-56
Aluminum bridge railing, or galvanized bridge railing, and granite bridge curb as per SB-56-57 (1 & 2).
Bearing and diaphragm connections as per SB-20-56
Approach Slabs as per SB-AS-45° Skew 57
SB-AS-Square 57
SUBSTRUCTURE
Open piers, round columns spaced 12'-0" o.c.± continuous footing.
Stub abutments.

FOUNDATION:
Stub Abutments, Steel Piles, 35 Ton Design Load.
Piers, A, B, C, & D, Untreated Timber Piles 20 Ton Capacity
Piers, E, F, G, H & J, Steel Piles 35 Ton Design Load.

LIST OF SHEETS

SHEET NO.	DESCRIPTION
68	GENERAL PLAN
69	BORING LOGS
70	BORING LOGS
71	PLAN AND ELEVATION
72	PLAN AND ELEVATION
73	ABUTMENTS #1 AND #2
74	ABUTMENT #3
75	ABUTMENT #4
76	APPROACH SLABS
77	PIERS A, B, C, D AND E
78	PIERS F, G, H AND J
79	STRUCTURAL STEEL PLAN
80	STRUCTURAL STEEL PLAN
81	STRUCTURAL DETAILS
82	REINFORCING SCHEDULE
83	REINFORCING SCHEDULE
84	REINFORCING SCHEDULE
85	REINFORCING SCHEDULE
16-18	HIGHWAYS PLAN AND PROFILES
50-51	SCB-30-56 (1 & 2)
54-55	SB-56-57 (1 & 2)
59	SB-20-56
60	SB-22-58
56	SB-AS-Square-57
58	SB-AS-45° Skew-57

BOLTON IM 089-2(29)
BRIDGES 51 N&S
THIS SHEET FOR REFERENCE ONLY.

CONTRACT NO. 3

GENERAL PLAN

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

INTERSTATE PROJECT in the towns of
WATERBURY - BOLTON
INTERSTATE STA. 1148+50
OVER
U.S. ROUTE 2 (REL.) STA. 30+00

APPROVED BY Wm. A. Henderson DATE 12-16-58

THE CLARKESON ENGINEERING CO. INC.
CONSULTING ENGINEERS
BOSTON MASSACHUSETTS

SURVEYED BY	CHECKED BY OS & H.M.	SCALE AS NOTED
DRAWN BY R.J.F.	IN CHARGE J.V.B.	DATE 7-7-58

PROJECT NO. I-89-2(7) SHEET 260 OF 307