

EXISTING STRUCTURE

- RATED LOADING OF EXISTING STRUCTURE _____
- TYPE OF EXISTING STRUCTURE 8' x 5.4' Box Culvert
- UNDERCLEARANCE ELEVATION OF EXISTING STRUCTURE _____
- WHAT DISPOSITION SHOULD BE MADE OF EXISTING STRUCTURE Remove COST OF REMOVAL _____
- SHOULD EXISTING STRUCTURE BE USED TO MAINTAIN TRAFFIC DURING CONSTRUCTION OF NEW STRUCTURE _____
- SHOULD NEW TEMPORARY STRUCTURE BE BUILT _____
- ORDINARY HIGH WATER SURFACE ELEV. AT EXISTING STRUCTURE _____ WATERWAY TO ORDINARY H.W. _____
- EXTREME HIGH WATER AT EXISTING STRUCTURE 429.0
- SPAN OF EXISTING BRIDGE UPSTREAM _____ WATERWAY TO EXTREME H.W. _____
- SPAN OF EXISTING BRIDGE DOWNSTREAM _____ WATERWAY TO EXTREME H.W. _____
- TYPE OF FOUNDATION UNDER EXISTING ABUTMENTS _____
- DOES ALL WATER AT FLOOD ELEVATION PASS THROUGH EXISTING STRUCTURE _____
- IF NOT AT WHAT ELEVATION IS RELIEF AFFORDED _____
- ADDITIONAL WATERWAY AREA PROVIDED _____

NEW STRUCTURE

- RECOMMENDED TYPE OF STRUCTURE 3 Span Composite Steel Stringer Bridge and 96" C.M.P.
- RECOMMENDED CLEAR SPAN OR SPANS 63±-87±-61± Left Lane 64±-94±-68± Right Lane
- MEASURED PARALLEL TO ϵ NEW HIGHWAY _____
- MEASURED AT RIGHT ANGLES TO ϵ STREAM _____
- ARE THERE OBJECTIONS TO A PIER IN THE STREAM ANSWER YES OR NO _____ NO
- ORDINARY HIGH WATER ELEVATION AT NEW STRUCTURE 406.2
- EXTREME HIGH WATER ELEVATION AT NEW STRUCTURE 429.0 SOURCE OF INFORMATION _____
- IS ALL WATER INTENDED TO PASS THROUGH NEW STRUCTURE _____ Yes
- DOES STREAM REACH ITS MAXIMUM HIGH WATER ELEVATION RAPIDLY _____ Yes IS ORDINARY RISE RAPID _____ Yes
- LOW WATER ELEVATION AT NEW STRUCTURE 401.7
- DRAINAGE AREA IN ACRES ABOVE STRUCTURE 202.0 CHARACTER OF TERRAIN Mountainous
- IS STREAM EVER DRY _____ NO
- VELOCITY OF STREAM AT HIGH WATER STAGE 538 ESTIMATED DISCHARGE 232 cfs
- AREA FULL OPENING 43.2 AREA BELOW ORDINARY H.W. 24
- CHARACTER OF SCOUR _____ DRIFT _____ ICE _____
- ESTIMATED DRAINAGE AREA ABOVE NATURAL OR ARTIFICIAL STORAGE _____
- VERTICAL CLEARANCE ABOVE FLOOD ELEVATION _____
- ARE SIDEWALKS REQUIRED, IF SO ON WHAT SIDE _____ BOTH SIDES
- RECOMMENDED TYPE OF PAVEMENT 2" Bituminous Concrete Pavement
- TRAFFIC TO BE MAINTAINED UNDER ITEM NO. _____ ONE OR TWO WAYS _____ PROBABLE COST _____
- PROBABLE COST OF CLEARING AND GRUBBING STREAM CHANNEL AT STRUCTURE SITE _____
- SHOULD PROVISIONS BE MADE FOR PUBLIC UTILITIES _____
- ESTIMATED ALLOWABLE LOAD ON FOUNDATIONS _____ SHOULD PILES BE USED _____ 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 SHEET NO.2

GENERAL NOTES

DESIGN SPECIFICATION: 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. $f_c = 3,000$ p.s.i.

CLEARANCE: Horizontal: as shown on drawings; Vertical: 15'-11 1/2"

SUPERSTRUCTURE: Separate structure for each lane. 30' Roadway, 1'-6" Safety Walk, as per SCB-30-56. 3 Simple span, rolled beams, composite design, as per SCB-30-56. 63±-87±-61± Left Lane 64±-94±-68± Right Lane. Aluminum bridge railing or galvanized bridge railing, and granite bridge curb as per SB-56-57 (1 & 2).

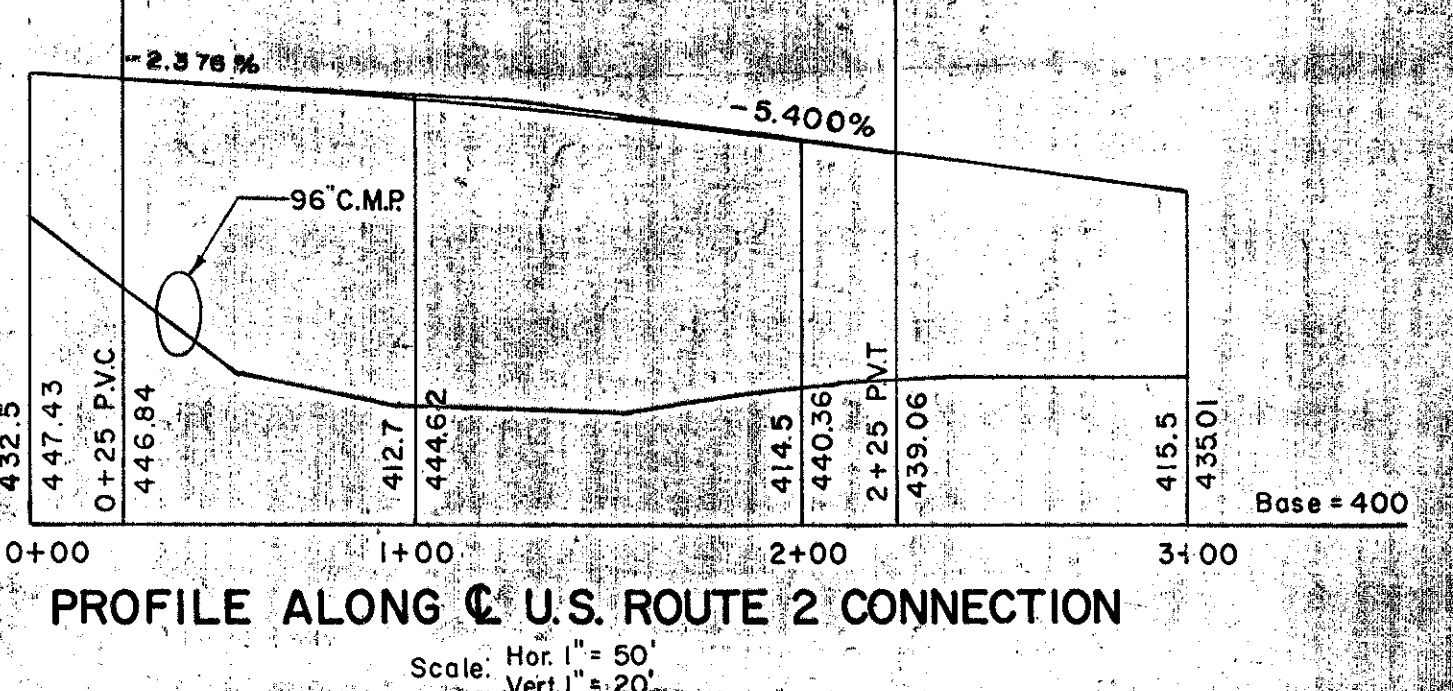
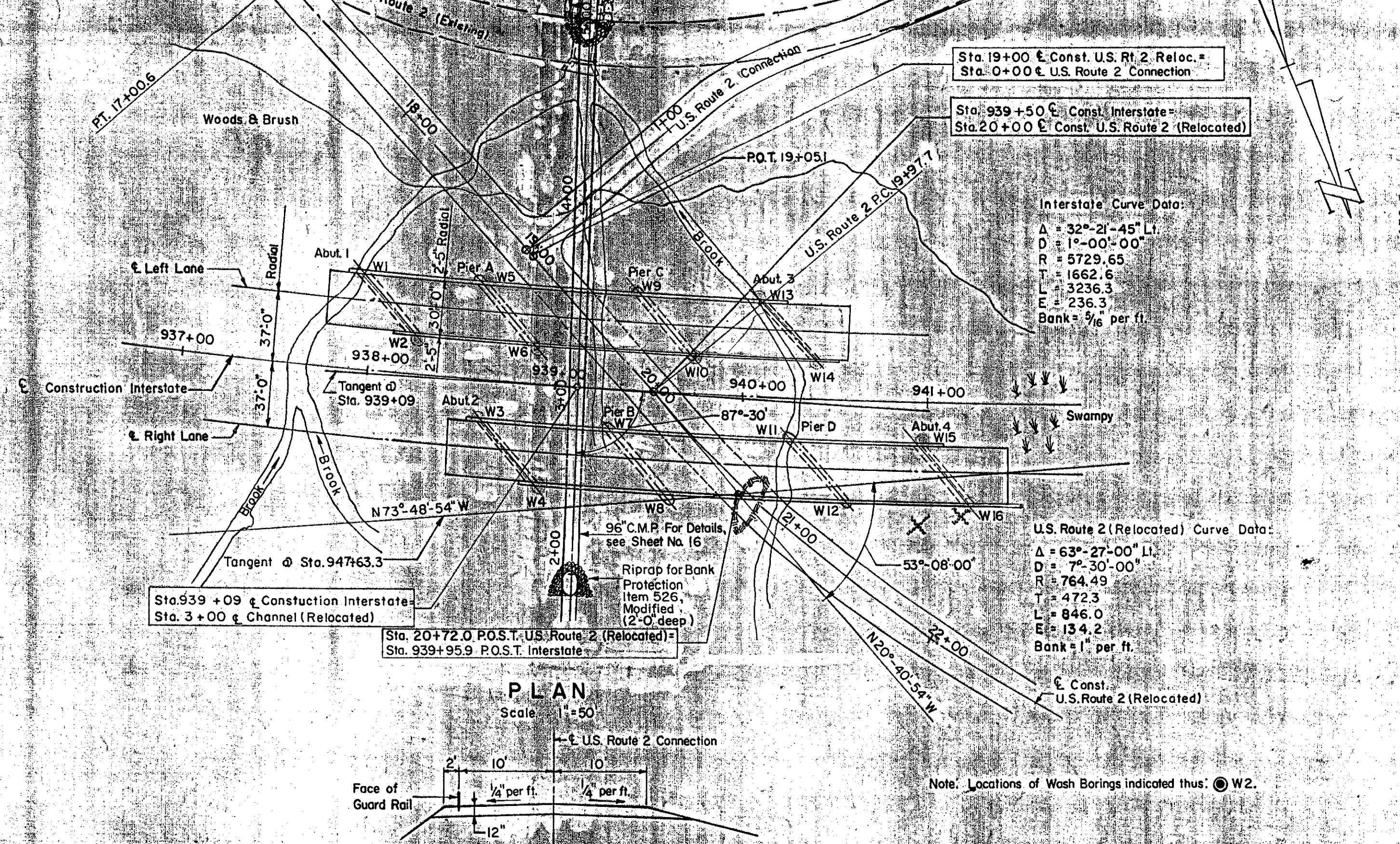
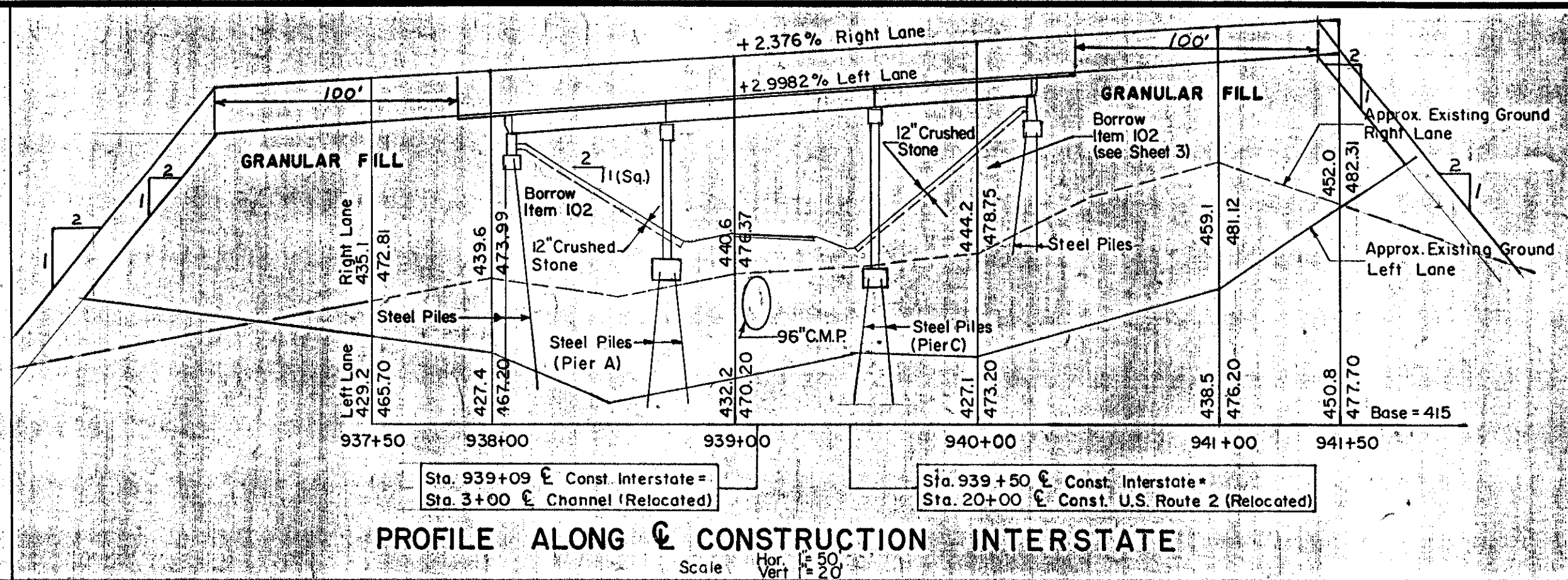
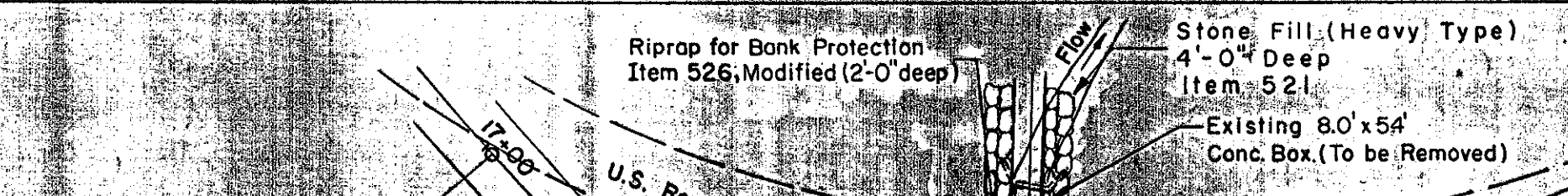
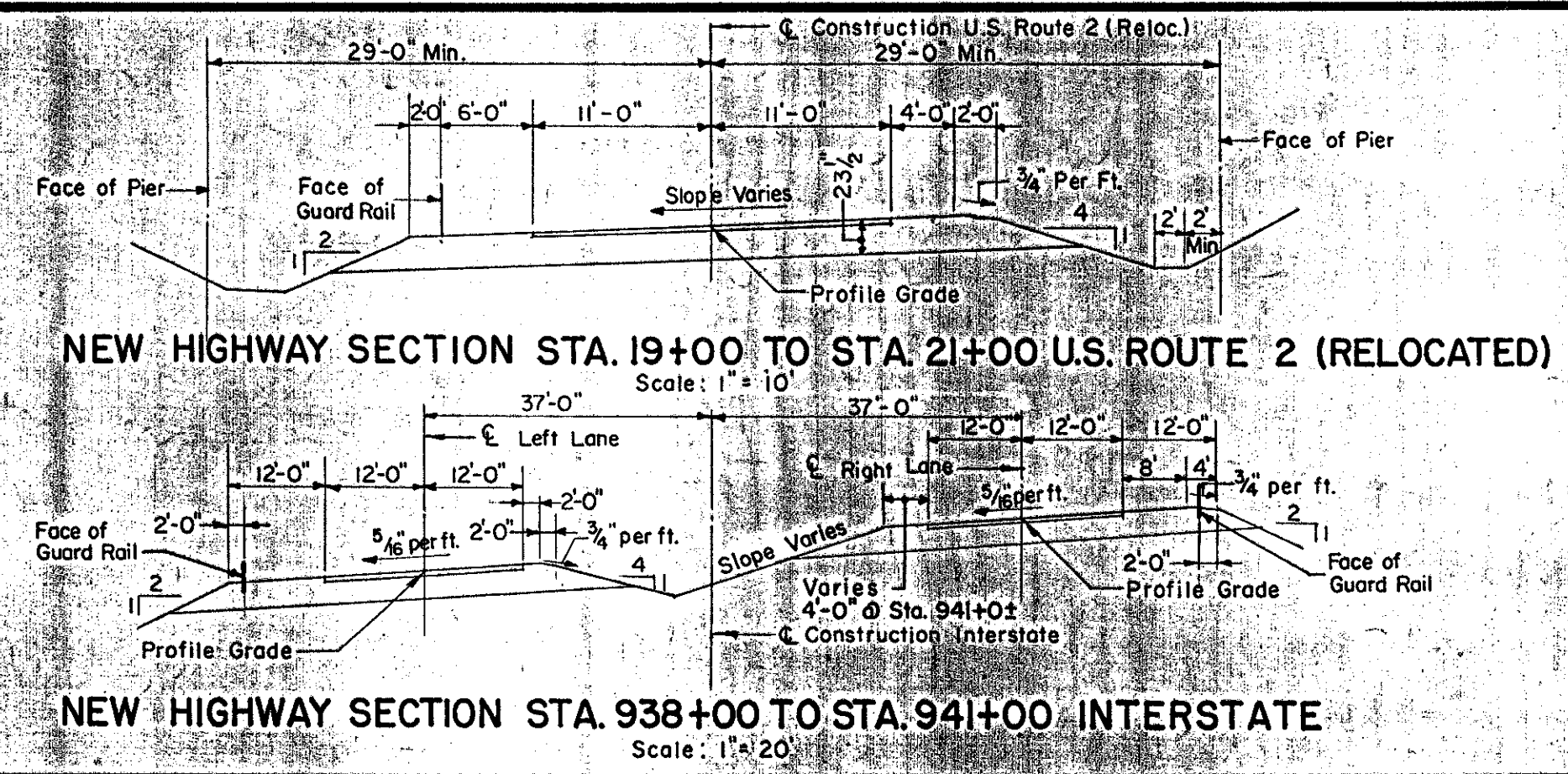
SUBSTRUCTURE: Open piers, round columns spaced 12'-6" o.c. Stub Abutments

FOUNDATION: Stub abutment: Steel piles. Piers: Piers A & C, steel piles. Piers B & D, individual footings to ledge

LIST OF SHEETS IM 089-2(26)

SHEET NO.	DESCRIPTION
109	GENERAL PLAN
110	BORINGS
111	PLAN AND ELEVATION
112	ABUTMENTS NO. 1 AND 2
113	ABUTMENTS NO. 3 AND 4
114	ABUTMENT FOOTING
115	REINFORCING PLANS
116	WINGWALLS
117	PIERS A AND C
118	PIERS B AND D
119	APPROACH SLABS
120	STRUCTURAL STEEL PLAN
121	STRUCTURAL DETAILS
122	REINFORCING SCHEDULE
123	96" PIPE PLAN, ELEV. & SEC.
124	HIGHWAY'S PLANS & PROFILES
125	INTERSTATE CROSS SECTION
285-286	U.S. RTE. 2 (REL.) CROSS SECTION
101-102	SCB-30-58 (1 & 2)
103-104	SB-56-57 (1 & 2)
105	SB-20-56
106	SB-22-58
107	SB-AS-45° Skew-57

APPROVED BY Wm. A. Henderson DATE 12-16-58
THE CLARKE ENGINEERING CO., INC. CONSULTING ENGINEERS
 BOSTON MASSACHUSETTS
 SURVEYED BY J.V.B. CHECKED BY D.S. & J.B. SCALE AS NOTED
 DRAWN BY F.P.D. IN CHARGE J.V.B. DATE 6-19-58
 PROJECT NO. I-89-2(7) SHEET 245 OF 307

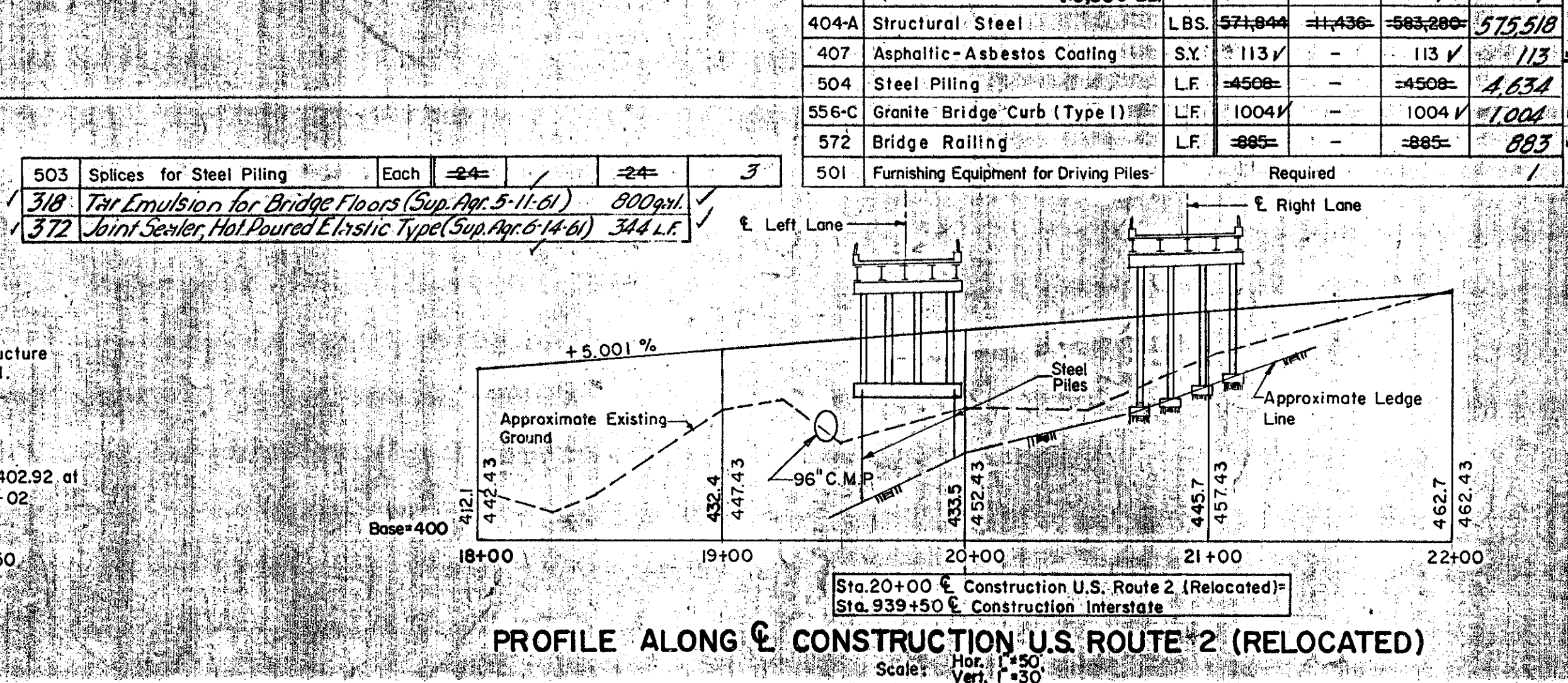
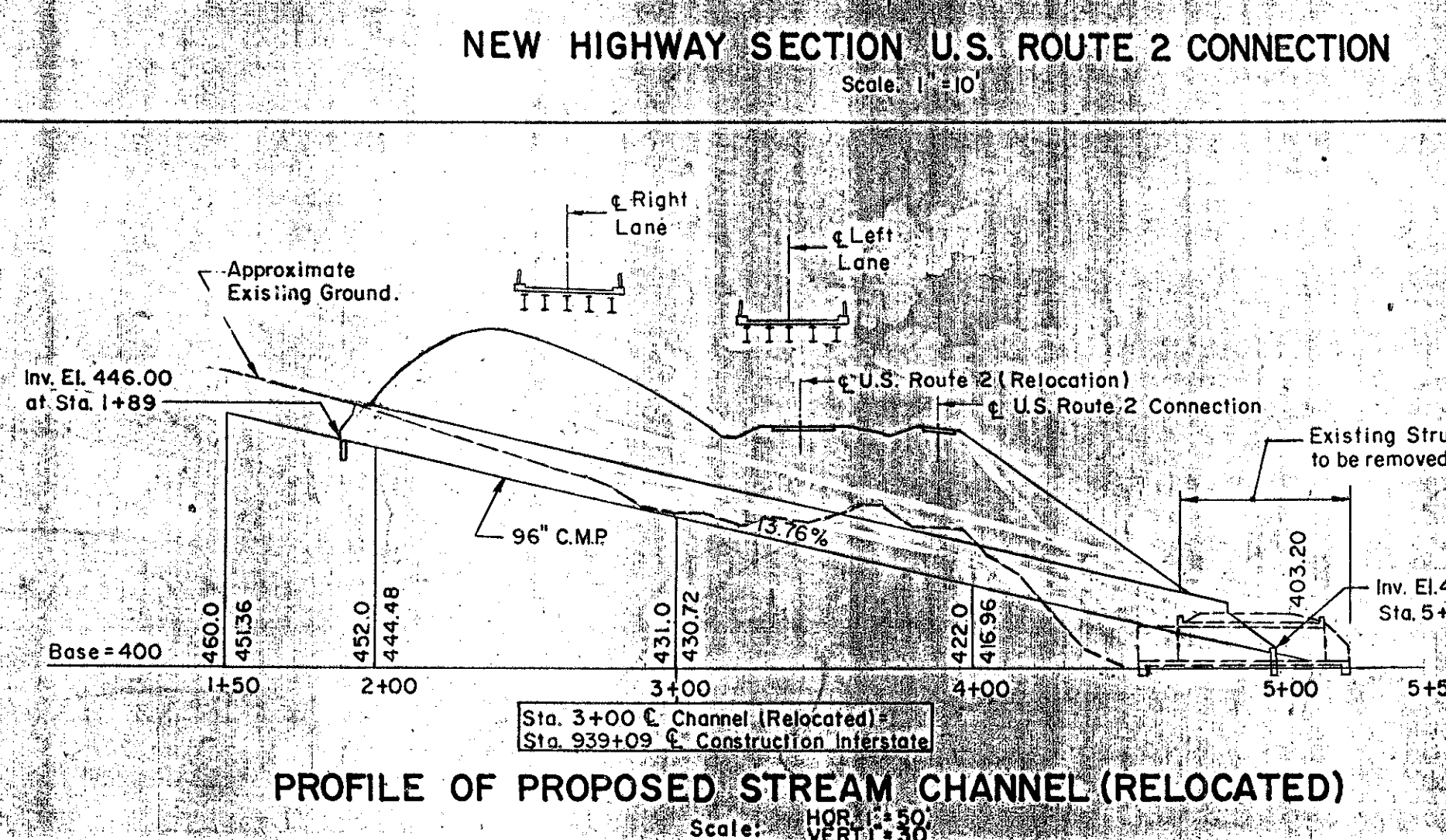


SUMMARY OF QUANTITIES FOR PIPE

ITEM NO.	DESCRIPTION	UNIT	NET	OVER-RUN	TOTAL	FINAL
107	Structure Excavation	C.Y.	787	79	866	
222	Gravel Backfill	C.Y.	1950	507	2457	
401-B	Concrete Class B (Mod.)	C.Y.	6	-	6	
402	Reinforcing Steel	LBS.	512	-	512	
429-A	Corrugated Galv. Metal Plate Pipe	L.S.	1	-	1	
526	Riprap for Bank Protection (Mod.)	C.Y.	94	14	108	
521	Stone Fill (Heavy Type)	C.Y.	610	90	700	

SUMMARY OF QUANTITIES FOR BRIDGE

ITEM NO.	DESCRIPTION	UNIT	NET	OVER-RUN	TOTAL	FINAL
102	Borrow	C.Y.	21000	2100	23100	21435
107	Structure Excavation	C.Y.	327	35	362	600
204	Sub-Base of Crushed Rock (Mod.)	C.Y.	390	60	450	472
222	Gravel Backfill	C.Y.	123	34	157	123
361-B	Bit. Conc. Pavement (Mod.)	TONS	229	33	262	229
401-B	Concrete Class B (Mod.)	C.Y.	34	68	102	136
402	Reinforcing Steel	LBS.	225,108	-	225,108	234,817
403-d	Spiral Reinforcement (13,300 LB)	L.S.	1	-	1	1
404-A	Structural Steel	LBS.	571,844	44,366	616,210	575,518
407	Asphaltic-Asbestos Coating	S.Y.	113	-	113	113
504	Steel Piling	L.F.	4508	-	4508	4,634
556-C	Granite Bridge Curb (Type I)	L.F.	1004	-	1004	1,004
572	Bridge Railing	L.F.	885	-	885	883
501	Furnishing Equipment for Driving Piles	Required				



503	Splices for Steel Piling	Each	24	24	3
318	Tar Emulsion for Bridge Floors (Sup. Apr. 5-11-61)	800 gal.			
372	Joint Sealer, Hot Poured Elastic Type (Sup. Apr. 6-14-61)	344 L.F.			

GENERAL PLAN

STATE OF VERMONT
 DEPARTMENT OF HIGHWAYS

INTERSTATE PROJECT in the town of
WATERBURY

INTERSTATE OVER STA. 939+50
 U.S. ROUTE 2 (RELOC.) STA. 20+00

APPROVED BY Wm. A. Henderson DATE 12-16-58
THE CLARKE ENGINEERING CO., INC. CONSULTING ENGINEERS
 BOSTON MASSACHUSETTS
 SURVEYED BY J.V.B. CHECKED BY D.S. & J.B. SCALE AS NOTED
 DRAWN BY F.P.D. IN CHARGE J.V.B. DATE 6-19-58
 PROJECT NO. I-89-2(7) SHEET 245 OF 307