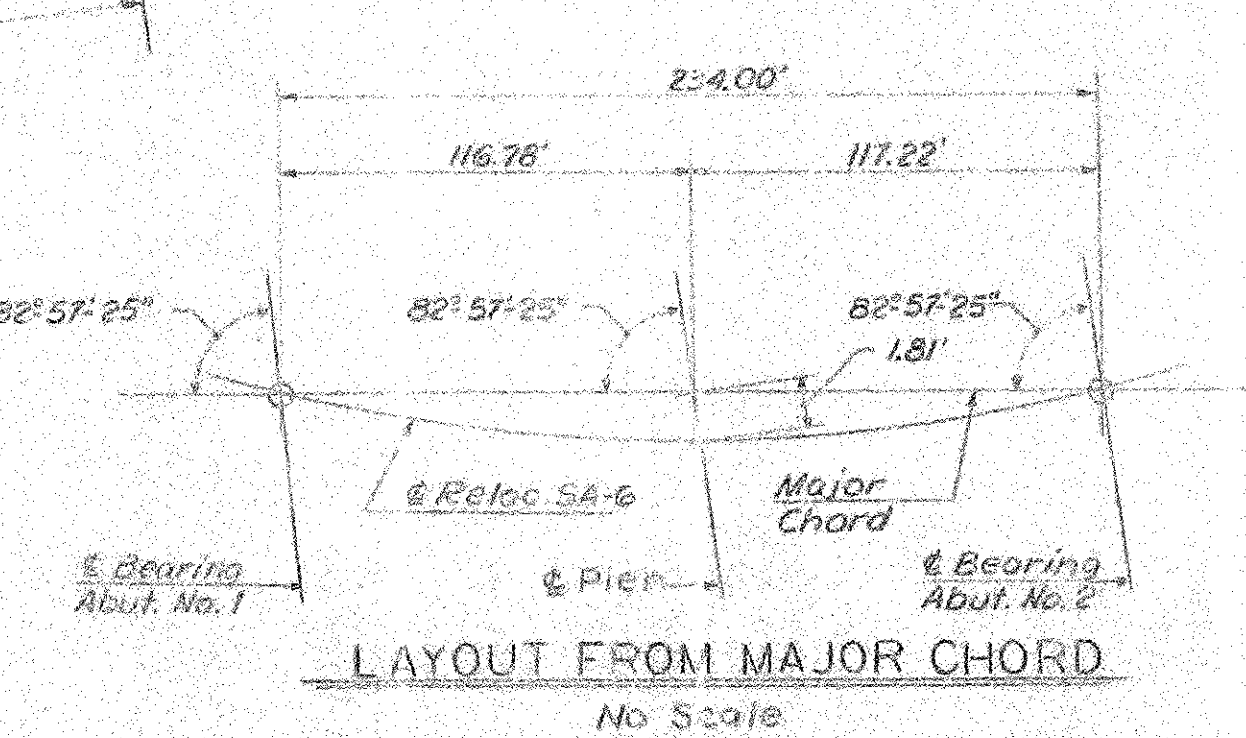


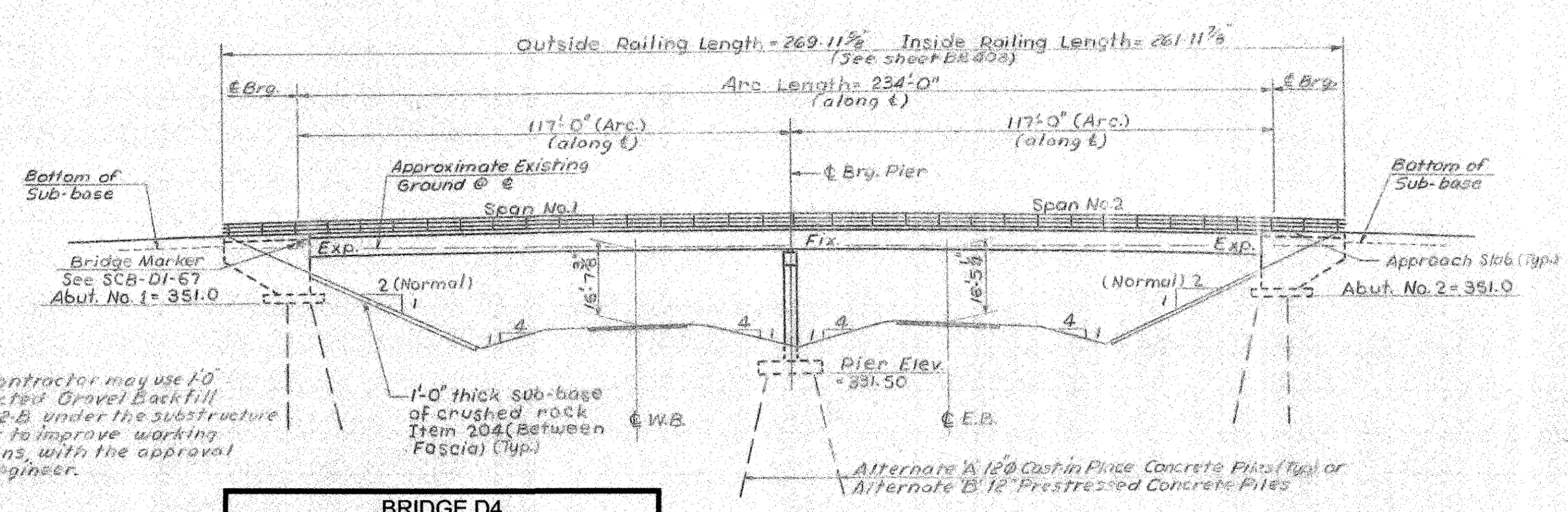
**CURVE DATA**  
 SA-6  
 $\Delta = 10^\circ 12' 20''$  lt.  
 $D = 1^\circ 30'$   
 $R = 3313.72$   
 $T = 341.09$   
 $L = 680.37$   
 $E = 15.2$   
 $\text{Bank} = \frac{3}{16}$  ft.

6 Cast Iron Water Pipe or 4 Cast Iron Sewer Pipe to be furnished, installed, tested, and maintained by the Town of Fair Haven at future date.

**PLAN**  
 Scale: 1" = 20'



**LAYOUT FROM MAJOR CHORD**  
 No Scale



**NOTE:**  
 The Contractor may use 1'-0" of compacted Gravel Backfill Item 222-B under the substructure footings to improve working conditions, with the approval of the Engineer.

**BRIDGE D4**  
**FOR REFERENCE ONLY**  
**SHEET 12 OF 14**

**ELEVATION**  
 Scale: 1" = 20'

Revisions:  
 Revised to 2'-0" Brush Curb 6-13-68 R.P.G. J.R.F.S.  
 Included Slabs for Water and Sewer Pipe 7-25-68 R.P.G.

**GENERAL NOTES:**  
**SPECIFICATIONS:**  
 All materials and construction shall conform to the State of Vermont, Department of Highways, Standard Specifications for Highways and Bridge Construction, dated 1964 and AASHTO Standard Specifications dated 1965, as modified by Current Interim Specifications.  
**LIVE LOAD:**  
 Structure designed for HS20-44 Loading modified for National System of Interstate Highways in accordance with the provisions of the AASHTO Standard Specifications Article 1.2.8.  
**CONCRETE:**  
 All exposed edges of concrete shall be chamfered 1"x1" unless otherwise noted. All construction joints to be made as shown on SCB-D6-67, Details B & C unless otherwise noted.  
**REINFORCEMENT:**  
 All reinforcement to have a clear cover of 2", unless otherwise noted.  
**DIMENSIONS:**  
 All dimensions given are measured horizontally or vertically unless otherwise noted. Dimensions given are for 68°F, unless otherwise noted. Elevation datum sea level based on nearest U.S. Government vertical control.  
**STRUCTURAL STEEL:**  
 Item 404-A shall include all structural steel, copper, wrought iron, and any other materials indicated or required in the completed structure which are not otherwise classified. All structural steel shall be structural carbon steel conforming to the requirements of the specifications for steel bridges and buildings A.S.T.M. Designation A-36-62T, except as otherwise noted. The contractor shall submit complete details of the structural steel to the State of Vermont, Department of Highways, and receive their written approval prior to the start of fabrication. The steel details shall include provisions for cambering of beams for dead load deflection as well as erection diagrams and falsework details. The final coat of field paint shall be green.  
**WATER REPELLENT:**  
 The top surface of safety walks, fascia, and back to the fascia beam under the slab, on the sides and ends of all pier caps, and on exposed areas of piers and abutments not otherwise treated shall be covered with Water Repellent (Item 440).  
**FIELD BOLTING:**  
 Field bolted connections shall be made with 7/8" A325 High Strength Bolts. A490 bolts are not allowed.  
**ABUTMENTS & PIERS:**  
 The top surfaces of all abutments and piers shall be sloped 1/4"/ft. from the front edge of abutment, curtainwalls or center lines of piers, except for bearing pads, which shall be level. Elevation of bridge seats given are for center line of bearings. The entire exposed top surface of abutments and piers shall be coated with Asphaltic-Asbestos Coating 1/2" thick as per Item 407 of the specifications. The application of this item shall be after all painting and incidental items are completed.  
**PILE LOADING TESTS:**  
 Pile loading tests, Item 505, shall be used and paid for only when directed by the Engineer.  
**PILES:** Cast-in-Place Concrete Piling or Prestressed Concrete Piling. Type will be chosen by alternate bids. Vertical design load 40 Tons / Pile. Horizontal Design load - 2 Tons / Pile.  
**GENERAL:**  
 Cross slopes of approach slabs to conform to the cross slopes of the bridge. All expansion material shall be premoistened cork containing no bitumen or asphalt.  
**BITUMINOUS CONCRETE PAVEMENT:**  
 Bituminous Concrete Pavement Item 361 Modified, Type IV shall be applied in two courses.

**INDEX OF DRAWINGS**

BR 401	PLAN & ELEVATION
BR 402	QUANTITY SHEET
BR 403	PRELIMINARY INFORMATION SHEET
BR 404	BORING LOG
BR 405	BORING LOG
BR 406	SUPERSTRUCTURE DETAILS
BR 407	SUPERSTRUCTURE DETAILS
BR 408	SUPERSTRUCTURE DETAILS
BR 409	JOINT DETAILS
BR 410	ABUTMENT NO. 1 DETAILS
BR 411	ABUTMENT NO. 2 DETAILS
BR 412	FOOTING DETAILS AND TYPICAL SECTIONS
BR 413	PIER DETAILS
BR 414	APPROACH SLAB NO. 1
BR 415	APPROACH SLAB NO. 2
BR 416	REINFORCING STEEL DETAILS
BR 417	REINFORCING STEEL DETAILS
BR 418	SCB-20-67T

**STANDARD DRAWINGS**

SCB-DI-67	BENCH MARK DETAILS & GENERAL NOTES
SCB-D5-67	DECK REINFORCEMENT LAYOUT AT PIERS
SCB-D6-67	CONSTRUCTION JOINT DETAILS
SB-R2-65	STEEL RAILING DETAILS
SB-R1-64	(SHEETS 1 & 2) ALUMINUM RAILING DETAILS
SCB-D2-67	HAUNCH DETAILS
SB-A5-65	CURB JOINT DETAILS AT PIERS
PRESTRESSED CONCRETE PILES - JOINT COMMITTEE AASHTO COMMITTEE ON BRIDGES & STRUCTURES AND PRESTRESSED CONCRETE INSTITUTE.	
SB-P1-66	CAST-IN-PLACE CONCRETE PILING

**DESIGN STRESSES**

Concrete  $f_c = 3,000$  p.s.f.  
 $f_c = 1,200$  p.s.f.  
 Structural Steel = 20,000 p.s.f.  
 (A36, other steels as per AASHTO specs.)  
 Reinforcing Steel (Intermediate)  
 $f_s = 20,000$  p.s.f. (tension)  
 $f_s = 16,000$  p.s.f. (compression)

VERMONT  
 STATE HIGHWAY DEPARTMENT  
 TOWN OF FAIR HAVEN  
 U.S. ROUTE 4

SA-6 RELOCATED OVER  
 U.S. ROUTE 4 RELOCATED

**PLAN AND ELEVATION**

McFARLAND-JOHNSON  
 CONSULTING ENGINEERS  
 BINGHAMTON, NEW YORK

DESIGNED BY: [Signature] CHECKED BY: [Signature] DATE: 10-20-67  
 DRAWN BY: [Signature] IN CHARGE: [Signature] SCALE: As Shown

PROJECT NO. F020-1(4) SH 12 OF 14  
 CONTRACT NO. 1 BR 401