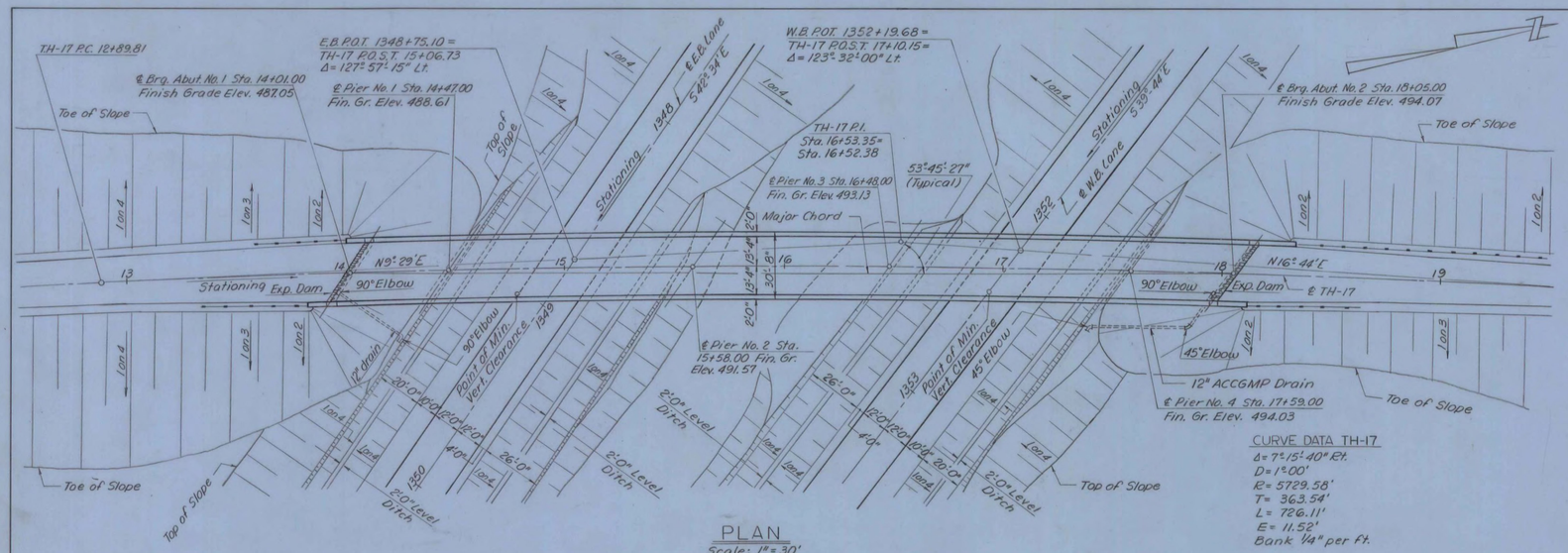
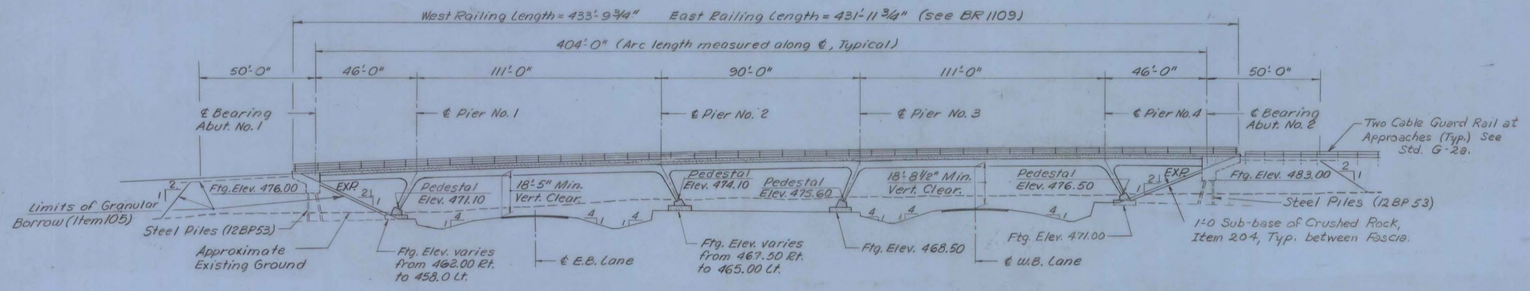


PLAN
Scale: 1" = 30'



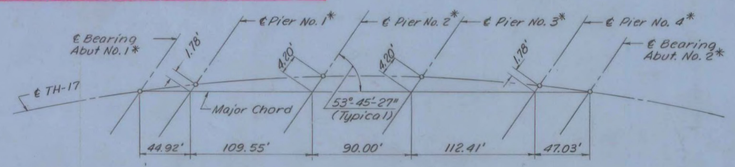
ELEVATION
Scale: 1" = 30'

INDEX OF DRAWINGS

CONTRACTOR E.T. O'NEIL & SON	CONTRACT: DATED	AUG. 19, 1970
RESIDENT ENGINEER N.W. BITTNER	STARTED	AUG. 20, 1970
INSPECTORS	COMPLETED	AUG. 31, 1971
RECORD PLANS R.L. WEICHERT	ACCEPTED	SEPT. 15, 1971

MATERIALS

CONCRETE (AA & B) J. CARRARA
REINFORCING STEEL: BETHLEHEM STEEL
STRUCTURAL STEEL: VT. STRUCT. STEEL
BRIDGE RAILING: S.T. GRISWOLD



SUPERSTRUCTURE LAYOUT FROM MAJOR CHORD
No Scale

* WORKING POINTS ARE LOCATED AT TOP OF STEEL FRAME AS SHOWN ON BR. 1106. FOR SUBSTRUCTURE LAYOUT SEE BR. 1113

GENERAL NOTES

SPECIFICATIONS:
All materials and construction shall conform to the State of Vermont, Department of Highways, Standard Specifications for Highway and Bridge Construction, dated April, 1964 and the AASHO Standard Specifications dated 1969, as modified by current Interim Specifications.

LIVE LOAD:
Structure designed for HS-20-44 loading modified for National System of Interstate Highways applied in accordance with the provisions of the AASHO Standard Specifications Article 1.2.8.

CONCRETE:
All exposed edges of concrete shall be chamfered 1" x 1" unless otherwise noted. All construction joints to be made as shown on SCB-D6-67 details B and C unless otherwise noted.

REINFORECEMENT:
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.

STRUCTUEAL 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.
Structural steel shall be structural carbon steel conforming to the requirements of the specifications for steel bridges and buildings A.S.T.M. Designations as noted on the project plans.
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 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 surfaces of safety walks, fascia, bottom of deck slab back to the exterior frame and the exposed areas of the 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" ϕ A325 High Strength bolts. A490 bolts are not allowed.

ABUTMENTS AND PIERS:
The top surfaces of all abutments shall be sloped 1/4"/ft. from the front edge of abutment and curtainwalls 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 shall be coated with Asphaltic-Asbestos coating 1/8" thick as per Item 407 of the specifications. The application of this item shall be after all painting and incidental items are completed.

STEEL PILES:
Steel bearing piles shall be driven to ledge rock unless otherwise approved by the engineer. When piles are driven in fill the material shall be such as to have no stones large enough to interfere with the driving of the piles. All pile points shall be reinforced with steel plates as specified in Article 503.03, Subarticle C, Part 1 of the Special Provisions for Item 503-C, Steel Piling.

GENERAL:
All expansion material shall be premolded cork containing no bitumen or asphalt. Payments for waterstop sealing strips and all labor necessary to install same shall be included in the unit price bid for Concrete Class B, Item 401-B.

BITUMINOUS CONCRETE PAVEMENT
Bituminous Concrete Pavement, Item 361 (Modified) Type IV mix shall be applied in two courses.

CURVE DATA TH-17
Δ = 7° 15' 40" Rt.
D = 1° 00'
R = 5729.58'
T = 363.54'
L = 726.11'
E = 11.52'
Bank 1/4" per ft.

STANDARD DRAWINGS
SCB-D1-67 BENCH MARK DETAILS & GENEREAL NOTES APRIL 28, 1970 R
SCB-D6-67 CURB DETAILS, PILE SPLICE DETAILS, & CONSTRUCTION JOINT DETAILS APRIL 28, 1970 R
SB-R2-65 STEEL RAILING DETAILS Nov. 8, 1966 R
SB-R1-64 (SHEETS 1 & 2) ALUMINUM RAILING DETAILS APRIL 28, 1970 R
SCB-D2-67 BEAM HAUNCH Jan. 24, 1968
SCB-D7-67 DIAPHRAGM DETAILS Jan. 24, 1968

DESIGN STRESSES
CONCRETE: f'c = 3,000 p.s.i.
fc = 1,200 p.s.i.
STRUCTURAL STEEL: fs = 20,000 p.s.i. (A36, other steels as per AASHO Specifications)
REINFORCING STEEL: fs = 20,000 p.s.i. (tension)
fs = 16,000 p.s.i. (compression)
(intermediate grade)

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.

VERMONT
STATE HIGHWAY DEPARTMENT
TOWN OF CASTLETON
U.S. ROUTE 4

TH-17 RELOC. OVER U.S. RTE 4 RELOC.

PLAN AND ELEVATION

McFARLAND-JOHNSON
CONSULTING ENGINEERS
BINGHAMTON, NEW YORK

DESIGNED BRK	CHECKED REC	DATE 7-12-68	
DRAWN RMG	IN CHARGE HGC	SCALE AS SHOWN	

PROJECT NO. F020-1(7) SH 43 OF 206
CONTRACT NO. BR. 1101