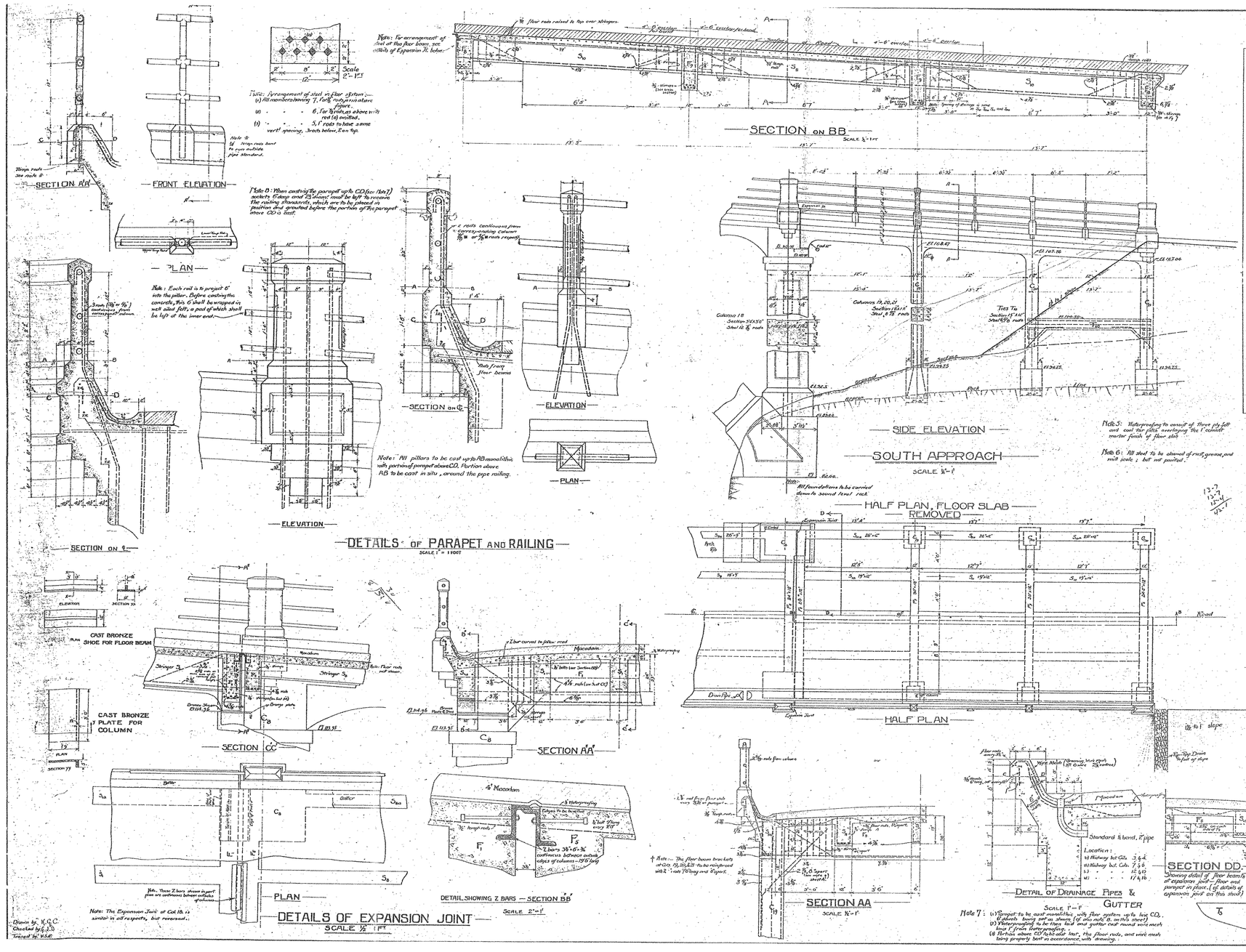

No. 2

SOUTH TRESTLE

Member	№	Concrete (dimensions)	Reinforcement: Tension №	Tension Size	Tension Length	Shear №	Shear Size	Shear Length
Floor (as shown)		4½" thick 2 coats	18	⅝" ▪ Round rods	84 @ 23' 6" = 1974'			
					16 - 9'6" (Varying) = 152'			
Stringer S_{20}	4	25"×12"	4	⅞ "	8 - 19'6" = 156'	8	⅞ "	32 @ 5'0" = 160'
- S_{10}	6	19"×12"	4	⅞ "	12 - 21'6" (Varying) = 258'	8	⅞ "	28 @ 4'0" = 112'
					12 - 19'6" = 234'			
- S_{30}	2	26×12"	4	⅞ "	4 common to S_{20}	8	⅞ "	18 @ 5'0" = 80'
					4 @ 22'3" = 89'			
- S_3	3	19"×12"	4	⅞ "	6 common to S_{20}	8	⅞ "	24 @ 4'0" = 96'
					6 @ 22'3" = 133'6"			
Floor Beam F_6	2	25"×12"	6	⅞ "	6 - 21'6" 129'			
					6 - 19'6" 117'	16	⅞ "	16 @ 4'6" 72'
			4	⅝ "	4 - 19'6" 78'			Note — Not shown in Plan
- F_7	2	30"×12"	7	⅞ "	8 - 22'6" 176'	16	⅞ "	32 @ 5'6" = 176'
					6 - 18'6" 111'			
Column C_{19}	2	10"×18"	8	⅝ "	12 - 16'0" 192'			
					4 - 21'6" 86'			
Footing C_{19}	2	30"×30"	8	⅝ "	16 - 5'6" 88'			
Column C_{20}	2	18"×18"	8	⅝ "	12 - 15'5" 185'			
					4 - 20'9" 83'			
Footing C_{20}	2	30"×30"	8	⅝ "	16 - 4'5" 68'			
Column C_{21}	2	18"×18"	8	⅝ "	12 - 14'6" 174'			
					4 - 20'0" 80'			
Footing C_{21}	2	30"×30"	8	⅝ "	16 - 4'5" 68'			
Brackets F_{10} & F_{11}	6	12"×12"	2	⅝ "	12 - 7'6" 90'			
Ties T_{10}	4	15"×12"	6	⅝ "	6 - 34'0" 204			
			6	⅞ "	6 - 32'0" 192'			
Brackets or T_{10}	8	12"×12"	2	⅝ "	16 - 5'9" 92'			
Expansion Jt.	2		4	2 bars 3½"×½"	19'6" long on curve			
			40	½" ▪ bolts & nuts	9" long			
Bronze Castings	24	as shown on drawing						
C.I. drain pipes	8	10" square pipe, 2 bends	Few	wedges				

All steel to be square cold-rolled rods or flats, free from knots, knit, softer than being of 55,000 lbs per sq. inch ult. tens.

Note 1: The 10" Tees rods, and the 2, ⅝" or 2 ⅞" bars which remain on S_{10} & S_{20} or S_{30} & S_{40} respectively, to be made with splices in case of one continuous rod extending from support to support.

Note 2: Sizes of beams and stringers given above, include all depth of floor slab and depth of beams or stringers.

Note 3: Unless otherwise indicated on plans, all steel to be bent with bends of from five times diameter of rod to ten times diameter of rod, except in floor slab, where diameter of bend may be reduced to twenty times diameter of rod, but not less than 15".

Note 4: The Road Metal or Macadam, on the floor slab, shall be 4" in thickness consisting of a mixture of broken stone and screenings where it shall be not less than 15".

It will be provided, laid, and rolled by the Contractor in 2 layers of 2" in thickness each, the top layer being rolled with a view to the protection of the waterproofing.

Note 5: Waterproofing to consist of three ply felt and coal tar pitch overlaying the 1" cement mortar finish of floor slab.

Note 6: All steel to be cleaned of rust, grease, and mill scale; but not painted.

Section	Total Length	Total Weight
3/8	3497 feet	1672 lbs
5/8	2233 "	2992 "
7/8	1398' 6"	3641 "
4 Z bars 3½×6×½"×19'6"		2280 "
40 ½" bolt w/nuts 9" long		25 "
4 bronze castings		
8 C.I. drains pipes		

Greening Wire Fabric — 1114 lb. work, 2½" centres
2'0" wide 2 lengths @ 130'0" — 81' 0"
2 " 106'6" — 106' 6"
Weight = 1437 lbs
⅜ rod for 6" dowels — 270 @ 1.32 lbs

Note 7: (1) Gutter to be cast monolithic with floor system up to line CD. 6 dowels being set as shown (of one rod 8 in this sheet)
(2) Waterproofing to be then laid and gutter coat round wire mesh long 1' from waterproofing.
(3) Portion above CD to be cast later, the floor rods, and wire mesh being properly bent in accordance with drawing.

Examined R. Clemens
Approved H. Lapointe

CENTRAL VERMONT RAILWAY
WINOOSKI VIADUCT
SOUTH TRESTLE
AND
DETAILS

Office of Chief Engineer G.T.R., Montreal

THIS SHEET HAS BEEN REPRODUCED FROM ORIGINAL PLANS DATED JUNE 1913, ALL DETAILS HAVE BEEN SCALED DOWN FROM THE ORIGINAL SHEET SIZE AND ARE NO LONGER TO SCALE. THESE PLANS DO NOT INCLUDE THE STEEL SHORING COMPONENTS THAT HAVE BEEN ADDED TO THE STRUCTURE SINCE THE ORGINAL CONSTRUCTION.

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: COLCHESTER-SOUTH BURLINGTON
PROJECT NO.: BRM 5600 (6) S C/2
TITLE: EXISTING BRIDGE PLANS
BRIDGE SHEET No. ZD139-EX7

VHB NO. 50735

plot date: 12/3/2003