

BILL OF HARDWARE

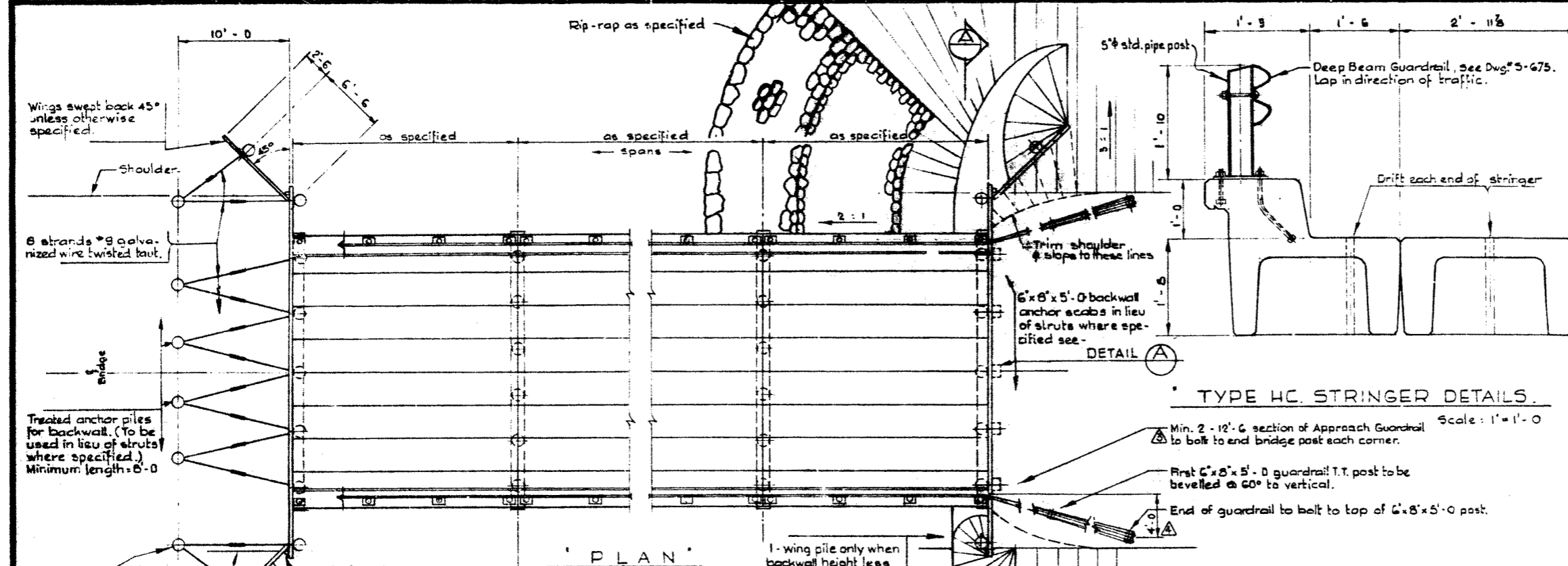
Mark	Size	Type	Washers	Quantity & No. Required
1	1/2" x 22	Drifts		Caps & caps to piles
2	1/2" x 24	Headless Drifts		Stringer & caps to caps Cap stringer & cap
3	1/2" x 26	Machine Bolts	2 - 5 O.G.	Cap splice - 4 pile splice
4	1/2" x 22			Double nut & lock to cap
5	1/2" x 22			Single nut & lock to cap
6	1/2" x 7	Flexbeam Bolts	1 - 5 Lock	Guardrail to Post
7	1/2" x 4			Guardrail splice - 5 per splice

GENERAL NOTES

- Pile splices to be driven a min. of 5'-0" below ground level.
- Piles to be driven to a min. of 20 tons bearing capacity.
- Hardened washers are to be placed between the stringer connectors to fill up any space. The 3/4" high tensile bolts are to be tightened to 300 Ft. lbs. torque.
- Connector holes, lifting hook pockets and dowel holes are to be filled with hot-poured Class asphalt.
- For bridge fills see Dwg. # S-828.
- For precast stringer units:
 - 20' HC: S-760 + S-781
 - 25' HC: S-781 + S-792
 - 33' HC: S-785 + S-786
 - 33' HC: S-786 + S-787
- For bridges with crown and for spans of 33' and 36' see Dwg. # S-862.

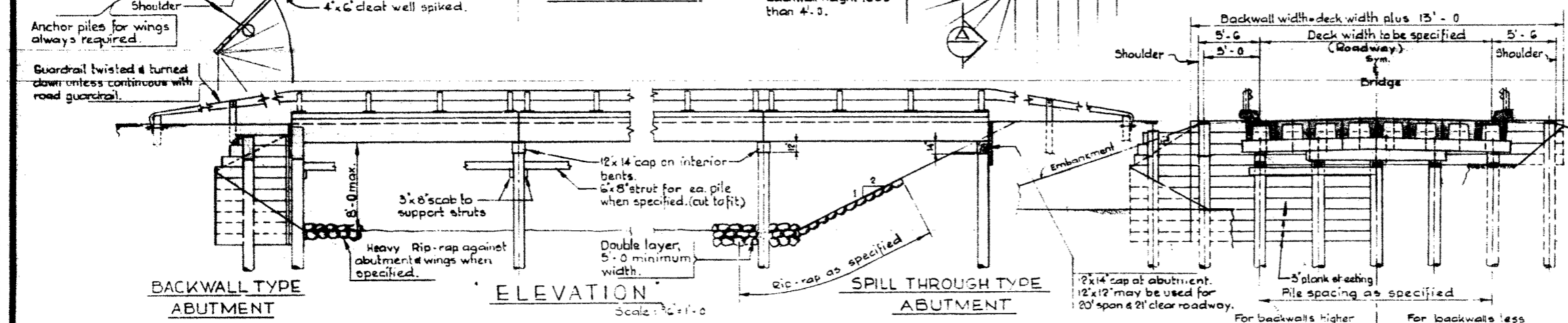
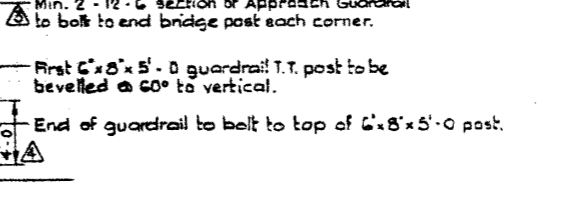
TREATMENT OF TIMBER - IMPORTANT

- Pile tops under caps shall be coated with 2 coats of creosote oil and thoroughly covered with roofing pitch.
- Exposed pile tops shall be treated with creosote oil in addition shall be covered with 20 ga. galvanized sheet iron of a size 4" greater than diameter of the pile. Neatly trim iron cover to fit and secure to pile with galvanized roofing nails.
- Treated timber shall be carefully handled to avoid breaking of outer fibers and to prevent penetrating the surface. Tools to be used shall be kept sharp.
- All cuts and abrasions in treated timber shall be carefully trimmed and coated with 2 coats of creosote oil and then be thoroughly covered with roofing pitch.
- Treated piles must not be dapped for away from the field.
- Bolt holes bored after treatment shall be carefully treated with creosote. Any unfilled holes shall be sealed with creosoted plugs.



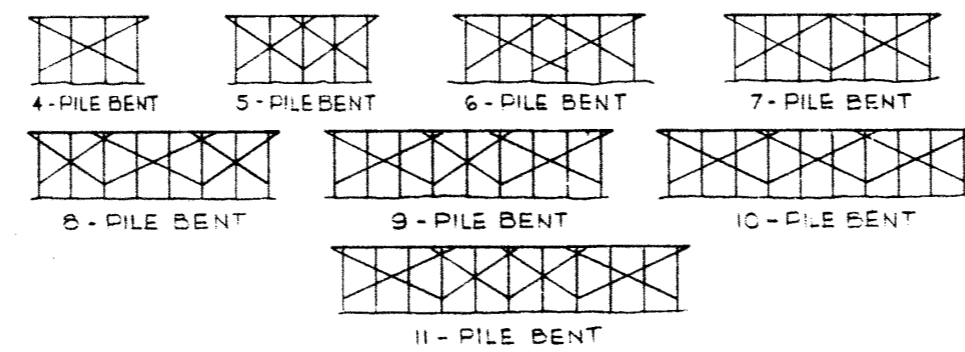
TYPE HC STRINGER DETAILS

Scale: 1" = 1'-0"



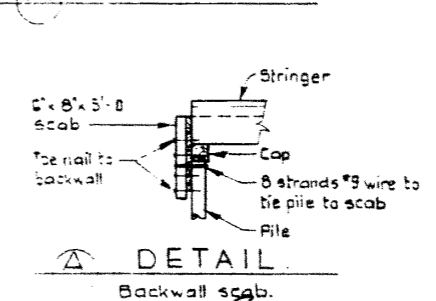
BACKWALL TYPE ABUTMENT
PILE SPACING
(Spacing to be centre to centre)

Clear Roadway	Skew	Cap length	20' Span Abutment		25' Span Abutment		20'-20' Span Pier		20'-25' Span Pier		25'-25' Span Pier	
			No. of Piles	Pile Sp.	No. of Piles	Pile Sp.	No. of Piles	Pile Sp.	No. of Piles	Pile Sp.	No. of Piles	Pile Sp.
21'	0°	24'	5	5'-3"	5	5'-3"	6	4'-2 1/2"	6	4'-2 1/2"	7	3'-6"
		15°	5	5'-5 1/2"	5	5'-5 1/2"	6	4'-4"	6	4'-4"	7	3'-7 1/2"
		30°	5	5'-8"	5	5'-8"	6	4'-6"	6	4'-6"	7	3'-9"
27'	0°	27'	5	6'-0"	5	6'-0"	6	4'-9"	6	4'-9"	7	4'-0"
		15°	5	6'-2 1/2"	5	6'-2 1/2"	6	4'-11"	6	4'-11"	7	4'-1 1/2"
		30°	5	6'-5"	5	6'-5"	6	5'-1 1/2"	6	5'-1 1/2"	7	4'-3 1/2"
30'	0°	30'	6	6'-3"	6	6'-3"	7	4'-6"	7	4'-6"	8	4'-9"
		15°	6	6'-5 1/2"	6	6'-5 1/2"	7	4'-8"	7	4'-8"	8	4'-10 1/2"
		30°	6	6'-8"	6	6'-8"	7	5'-0"	7	5'-0"	8	4'-12"



SWAY BRACING LAYOUT
Single storey bracing. Double storey bracing to be used when height is over 14'-0"
All sway bracing 3" x 10" or 3" x 12" planks spiked and bolted to piles and cap

SECTION



DETAIL

Backwall scab.

REVISIONS

No.	Date	Description
1	Feb 17/77	Replace sand-concrete and utility cap
2	Sept 8, 1970	Appr. nail dimension added
3	Nov 10, 1970	Cap changed from 12" x 12"
4	May 6, 1970	Cap changed from 12" x 12"

SUPERSEDED
BY S-860
SUPERSEDED

STANDARD PRECAST BRIDGES WITH TREATED TIMBER SUBSTRUCTURE

GOVERNMENT OF THE PROVINCE OF ALBERTA
DEPARTMENT OF HIGHWAYS
BRIDGE BRANCH, EDMONTON

FILE NO. _____ REV. NO. _____
LOCATION _____ SHEET NO. _____ OF _____
DATE _____

DESIGNED BY _____ DATE _____
CHECKED BY _____ DATE _____
DRAWN BY _____ DATE _____