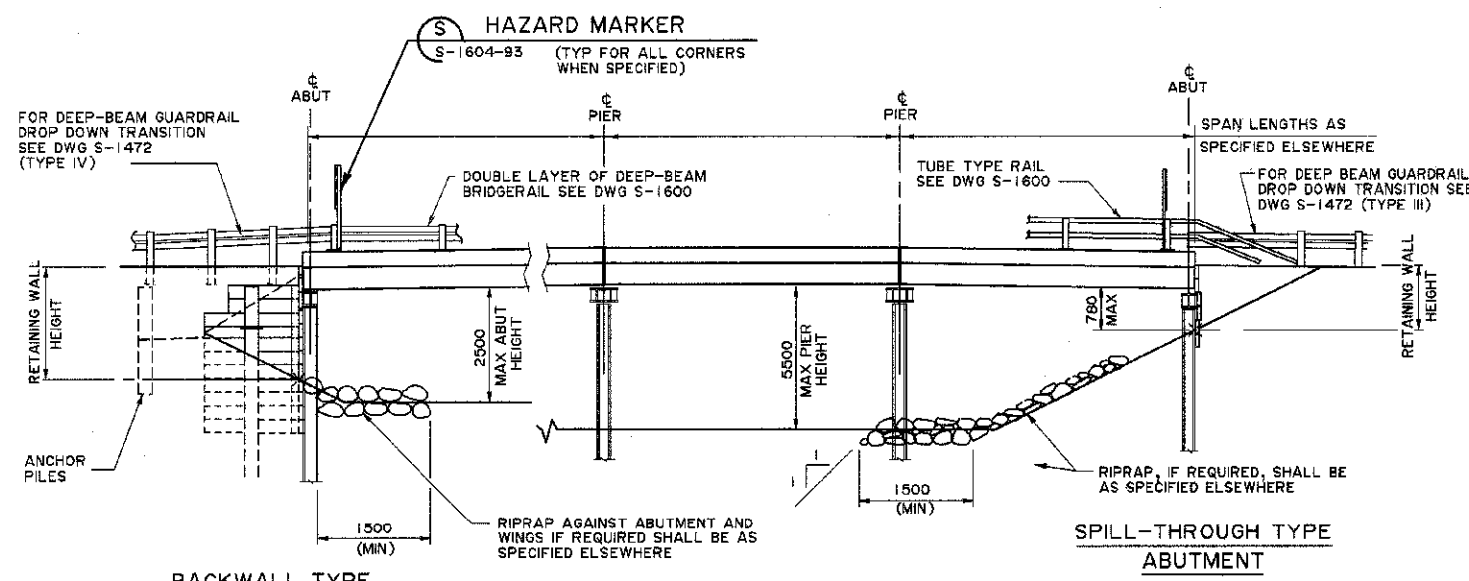
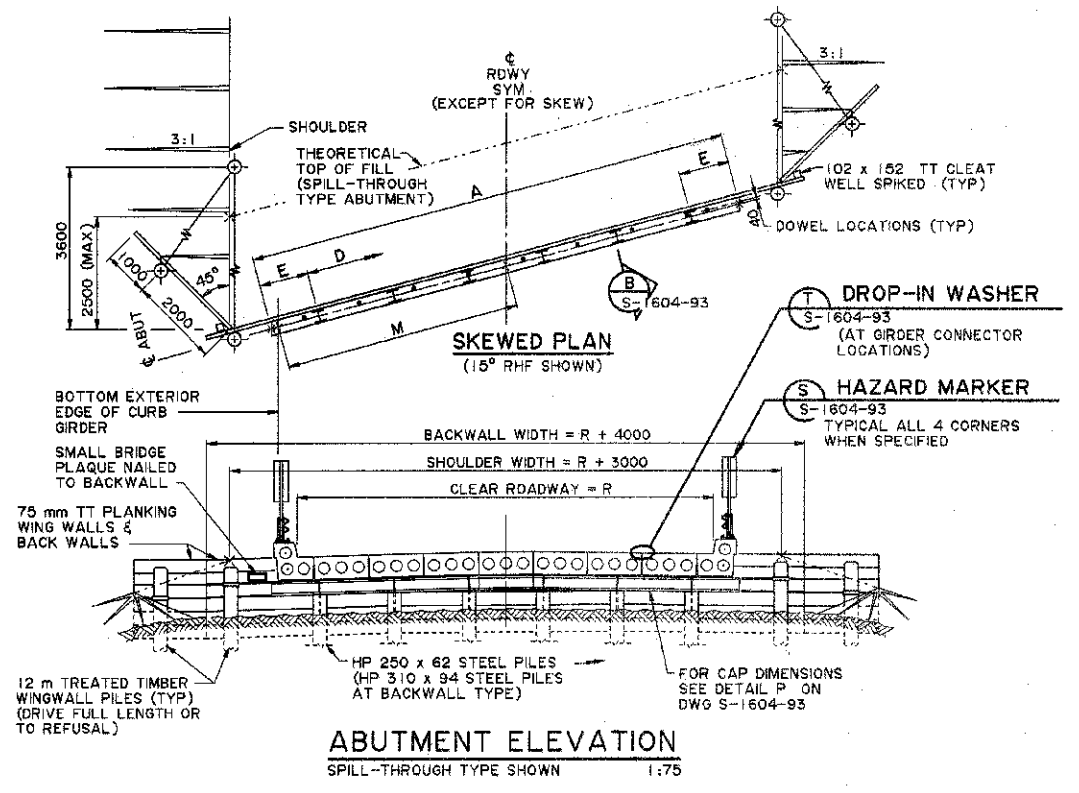


**BRIDGE PLAN**  
1:75



**BRIDGE ELEVATION**  
1:75

NOTE:  
BACKWALL TYPE ABUTMENTS ARE TO BE USED ONLY AT SINGLE SPAN, 0° SKEW BRIDGE SITES



**ABUTMENT ELEVATION**  
SPILL-THROUGH TYPE SHOWN 1:75

**GENERAL NOTES**

- ALL DRAWING REFERENCES REFER TO CURRENT DRAWINGS.
- ALL DIMENSIONS ARE GIVEN IN mm UNLESS NOTED OTHERWISE.
- ROADWAY ELEVATIONS SPECIFIED ELSEWHERE ARE GIVEN TO TOP OF THEORETICAL CROWN ON CENTRELINE ROADWAY.
- DESIGN SPECIFICATION: CAN/CSA-S6-88
- DESIGN LIVE LOAD: CS750
- ASSUMED SOIL PARAMETERS
  - UNIT WEIGHT OF SOIL = 20 Kn/m<sup>3</sup>
  - FACTORED ka = 0.65
  - FACTORED kp = 1.80
- THE FOLLOWING LIMITS SHALL NOT BE EXCEEDED IN USING THIS PLAN:
  - ICE LOADING - USUAL VALUE FOR SMALL STREAMS - (0.3 m THICK ICE, SITUATION a)
  - HEIGHT OF DECK ABOVE STREAMBED = 6 m
  - SKEW = 45° MAX FOR SPILL-THROUGH TYPE ABUTMENTS
  - MAXIMUM ABUTMENT HEIGHT
    - BACKWALL TYPE = 2.5 m
    - SPILL THROUGH TYPE = 0.78 m
- TREATED TIMBER (TT) SHALL BE HANDLED TO AVOID BRUISING, BREAKING OR PENETRATION OF OUTER FIBRES. LIFTING TOOLS SHALL BE APPLIED ONLY ON ENDS OF TT PIECES. ALL CUTS AND BRUISES SHALL BE CAREFULLY TRIMMED AND SHALL RECEIVE 2 APPLICATIONS OF CREOSOTE FOLLOWED BY A THOROUGH COVERING WITH HOT ROOFING PITCH.
- WHEN PILE TIP ELEVATIONS AND BEARING VALUES ARE SPECIFIED, PILES SHALL BE DRIVEN TO THESE ELEVATIONS EXCEPT THAT WHEN REQUIRED BY THE ENGINEER, PILES SHALL BE DRIVEN TO THE SPECIFIED BEARING VALUES BASED ON A BEARING VALUE FORMULA. WHEN PILE TIP ELEVATIONS OR BEARING VALUES ARE NOT SPECIFIED ELSEWHERE, PILES SHALL BE DRIVEN TO THE FOLLOWING BEARING VALUES BASED ON A BEARING VALUE FORMULA:

ABUT PILES (kN)	PIER PILES (kN)				
	SPANS	12m	10m	8m	6m
210	6m	370	340	310	260
240	8m	410	380	340	
280	10m	450	410		
320	12m	480			

NOTWITHSTANDING THE ABOVE, PIER PILES SHALL PENETRATE AT LEAST 5 m BELOW STREAMBED IN IRRIGATION CANALS OR OTHER LOCATIONS WHERE FROST HEAVING CAN OCCUR, AND 3 m BELOW STREAMBED IN STREAMS. BACKWALL TYPE ABUTMENT PILES SHALL PENETRATE AT LEAST 5 m BELOW STREAMBED.

**GIRDER & ERECTION DETAILS**

- TYPE SC-510 GIRDER DWGS:
  - 6 m S-1535 TO S-1537
  - 8 m S-1538 TO S-1540
  - 10 m S-1541 TO S-1543
  - 12 m S-1544 TO S-1546
  - S-1547
- GIRDERS SHALL BE CONNECTED TOGETHER WITH 20 mm A325 BOLTS, C/W DROP-IN WASHERS TO FILL GAP BETWEEN GIRDERS, TORQUED TO 400 N-m. GIRDERS SHALL NOT TOUCH EXCEPT THROUGH DROP-IN WASHERS.
- CONNECTOR AND LIFTING HOOK POCKETS SHALL BE FILLED WITH A SAND-CEMENT GROUT, OR WITH HOT-POURED C190 ASPHALT IN FREEZING WEATHER.

**SUPERSEDED** BY S-1603-94 rev. A 94-08-15

WORK DWGS S-1603-93 AND S-1604-93 TOGETHER WITH A SITE SPECIFICATION, GENERAL LAYOUT OR A BRIDGE AUTHORIZATION.

APPROVED		Albata TRANSPORTATION AND UTILITIES BRIDGE ENGINEERING BRANCH	
EXECUTIVE DIRECTOR BRIDGE ENGINEERING		SC-PRECAST GIRDER BRIDGES WITH STEEL SUBSTRUCTURES SHEET 1	
93-08-01	REDRAWN FROM S-1603 & S-1604	LEA	
REV	DATE	DESCRIPTION	BY
REVISIONS			
DESIGNED	DRAWN	DATE	CHECKED
KST LEA	MIK	93-08-01	
STREAM	LOCATION	HIGHWAY	FILE
SHEET	DRAWING		
1 of 2	S-1603-93		