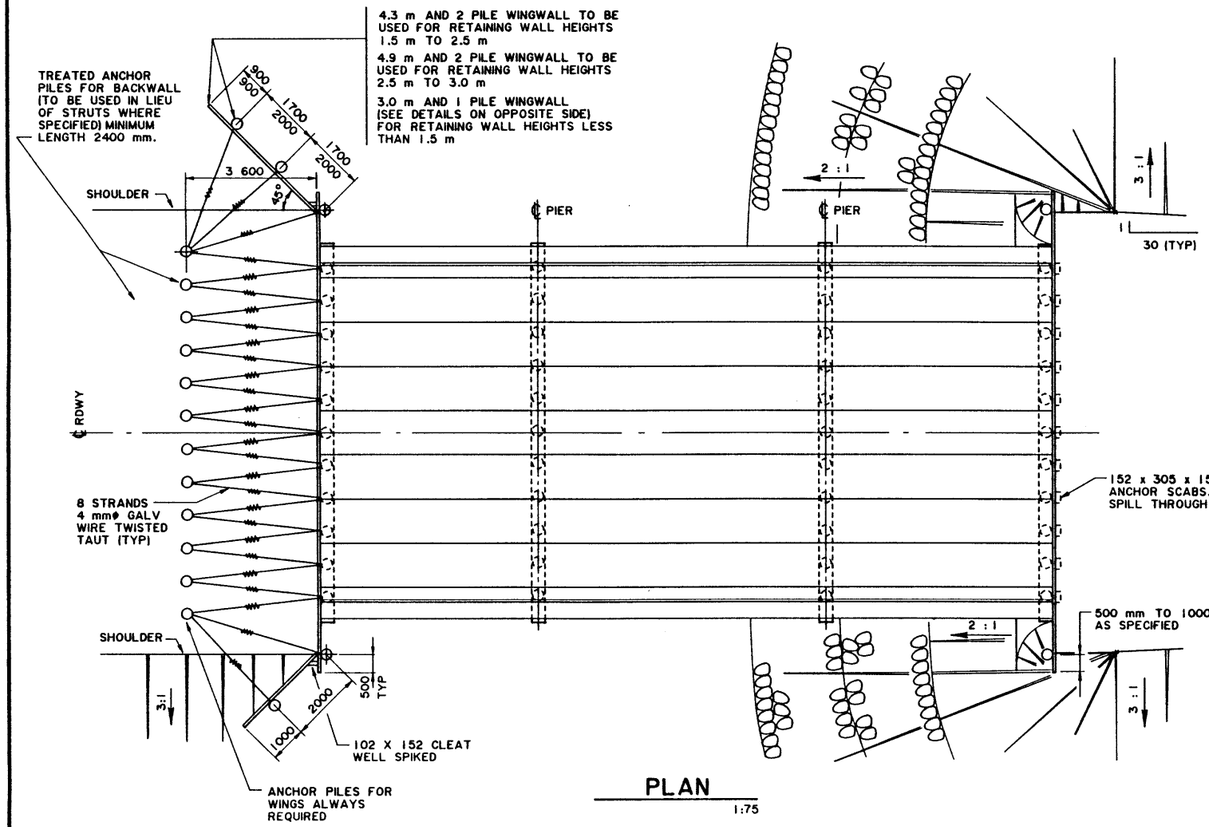
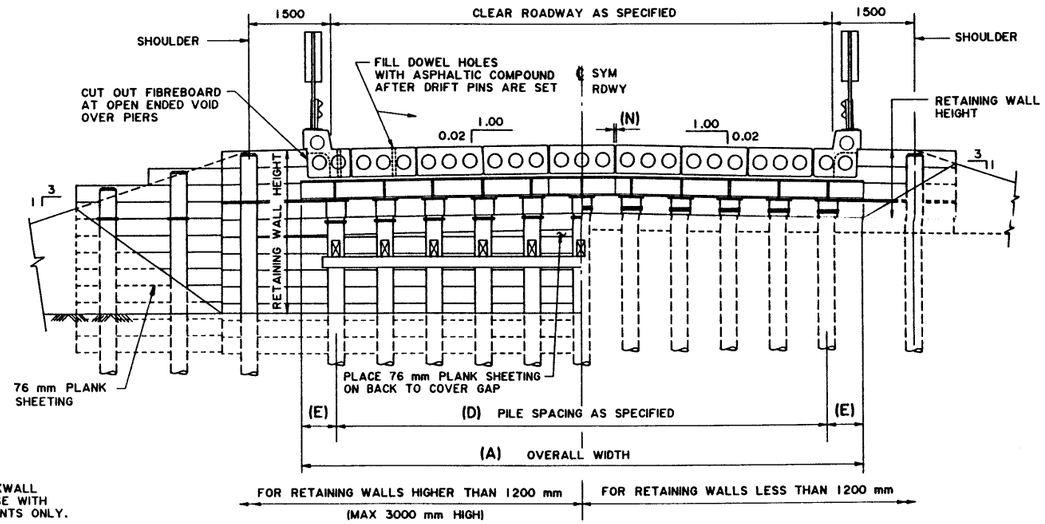
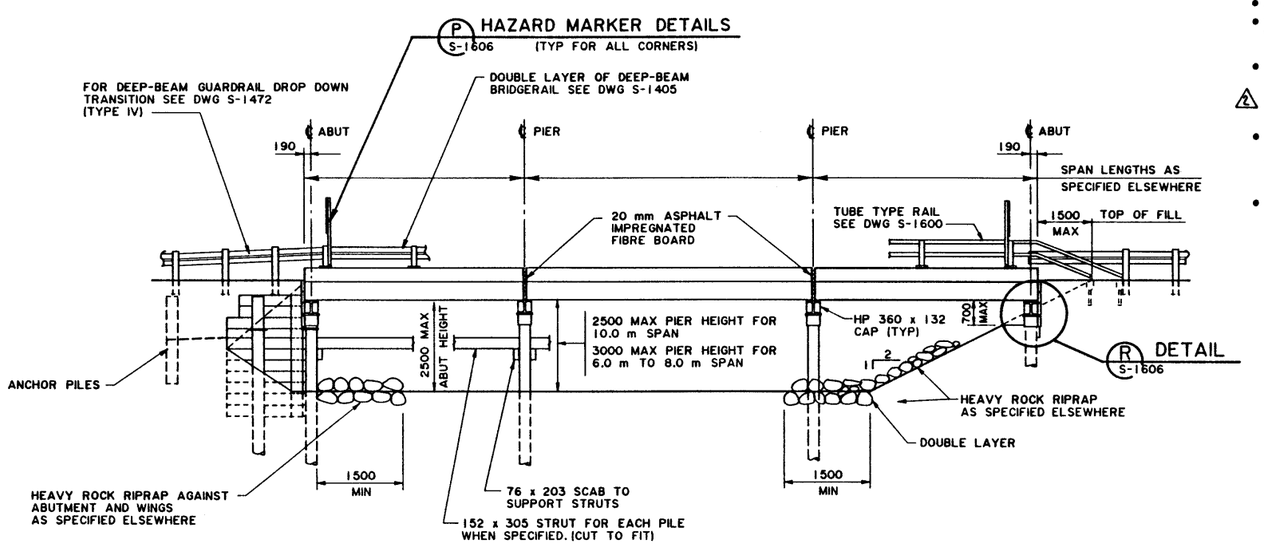


PLAN
1:75



RETAINING WALL ELEVATION
1:50



BACKWALL TYPE ABUTMENT

SPILL THROUGH TYPE ABUTMENT

ELEVATION
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

- DESIGN SPECIFICATION: CAN/CSA-S6-88
- DESIGN LIVE LOAD: CS750
- NO ICE FORCES ASSUMED IN PIER DESIGN.

CONSTRUCTION

- ALL REQUIREMENTS OF THE CURRENT SPECIFICATIONS FOR BRIDGE CONSTRUCTION SHALL BE MET. (1)
- STRUCTURAL STEEL SHALL CONFORM TO CSA G40.21M-300W. (2)
- ALL WELDING SHALL CONFORM TO CURRENT AWS SPECIFICATION D1.5.
- WHEN THE AIR TEMPERATURE IS BELOW 0° C, ALL MATERIAL TO BE WELDED SHALL BE PREHEATED TO 95° C AND SHALL BE SHELTERED FROM WIND BY A SUITABLE HOARDING APPROVED BY THE ENGINEER.
- THE STEEL CAPS AND CAPITALS SHALL BE BLAST CLEANED AND PAINTED WITH TWO PRIME COATS AND TWO FINISH COATS IN THE FIELD. CLEANING SHALL BE APPROVED BY THE ENGINEER PRIOR TO PAINTING. PAINTING SHALL CONFORM TO THE REQUIREMENTS OF THE ENGINEER. (2)
- 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, AS DETERMINED ON THE BASIS OF SOIL ANALYSIS, ARE SPECIFIED, PILES SHALL BE DRIVEN TO THOSE ELEVATIONS EXCEPT THAT, WITH THE APPROVAL OF THE ENGINEER, PILES MAY BE STOPPED AT HIGHER ELEVATIONS PROVIDED THAT SPECIFIED BEARING VALUES HAVE BEEN OBTAINED.
  - IF PILE TIP ELEVATIONS OR BEARING VALUES ARE NOT SPECIFIED ELSEWHERE, PILES SHALL BE DRIVEN TO AT LEAST THE FOLLOWING BEARING VALUES AS DETERMINED ON THE BASIS OF A PILE DRIVING FORMULA:

Abut Piles (kN)	Spans	Pier Piles (kN)		
		10 m	8 m	6 m
130	6 m	180	160	140
130	8 m	200	180	160
150	10 m	220	200	180
170	12 m	STEEL PILES REQUIRED		

  - 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.
  - PILE SPLICES ARE TO BE DRIVEN TO A MIN. OF 2500 mm BELOW GROUND.

GIRDER & ERECTION DETAILS

- TYPE SC-510 GIRDER DWGS:

6 m	S-1535 TO S-1537	10 m	S-1541 TO S-1543	S-1547	
8 m	S-1538 TO S-1540	12 m	S-1544 TO S-1546		

- GIRDERS SHALL BE CONNECTED TOGETHER WITH 20 mm ♦ A325 BOLT ASSEMBLIES, C/W DROP-IN WASHERS TO FILL GAP BETWEEN GIRDERS, TORQUED TO 400 Nm. GIRDERS SHALL NOT TOUCH EXCEPT THROUGH DROP-IN WASHERS.
- CONNECTOR AND LIFTING HOOK POCKETS SHALL BE FILLED WITH AN APPROVED LTH CONCRETE PATCHING MATERIAL. (1)
- WORK DRAWINGS S1605 AND S1606 TOGETHER WITH A SITE SPECIFIC GENERAL LAYOUT OR A BRIDGE AUTHORIZATION.

CONSTRUCTION PROCEDURE

1. DRAW PILES INTO ALIGNMENT;
2. CUT PILES OFF SQUARE AT REQUIRED ELEVATIONS;
3. PLACE SUITABLY SIZED CAPITALS (TRIM PILE TOPS IF NECESSARY); POSITION OPTIMALLY TO ALLOW FOR TILTING OF PINTLES RELATIVE TO PILES FOR CROWN AND GRADE;
4. PLACE CAP AND TILT TO SUIT GRADE;
5. WELD CAPITAL TO CAP;
6. ATTACH PIER SWAY BRACING;
7. GROUT CAPITALS TO PILE;
8. PLACE NEOPRENE BEARING STRIP;
9. ERECT GIRDERS AFTER GROUT SET; DRILL HOLES THROUGH NEOPRENE STRIP AND TOP FLANGE AND INSTALL DOWELS;
10. CLEAN AND FIELD PAINT WELD-DAMAGED PAINTED AREAS.

(2)(1)

REV	DATE	DESCRIPTION	BY
6			
5			
4			
3			
2	95-07-12	SPEC. REFERENCES & STEEL GRADE	LEA
1	94-04-27	GIRDER & ERECTION DETAILS NOTE	LEA

REVISIONS

APPROVED
EXECUTIVE DIRECTOR BRIDGE ENGINEERING
DATE Sept 18, 1992

Alberta TRANSPORTATION AND UTILITIES
BRIDGE ENGINEERING BRANCH

SC GIRDER BRIDGES WITH TREATED TIMBER SUBSTRUCTURES SHEET 1

DESIGNED	DRAWN	DATE	CHECKED	DATE	STREAM	LOCATION	HIGHWAY	FILE	SHEET	DRAWING
LEA	WS JFM	92-05-15							1 of 2	S-1605

PLOTTED JUNE 12, 1992 FILE BBWILF S1605X92.DGN