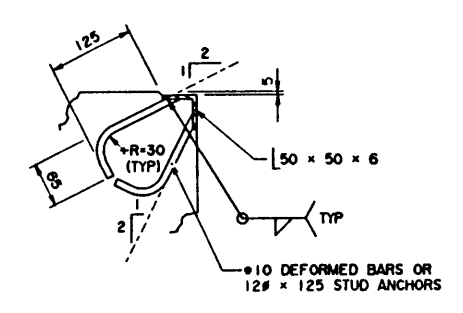
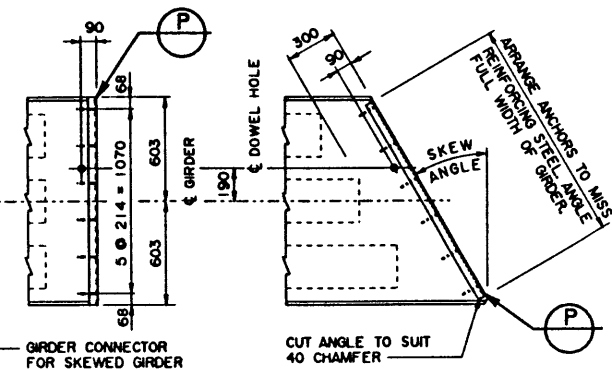
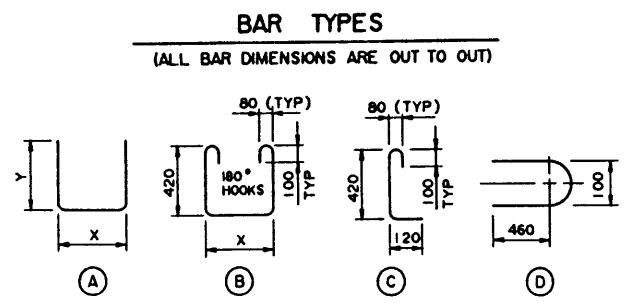
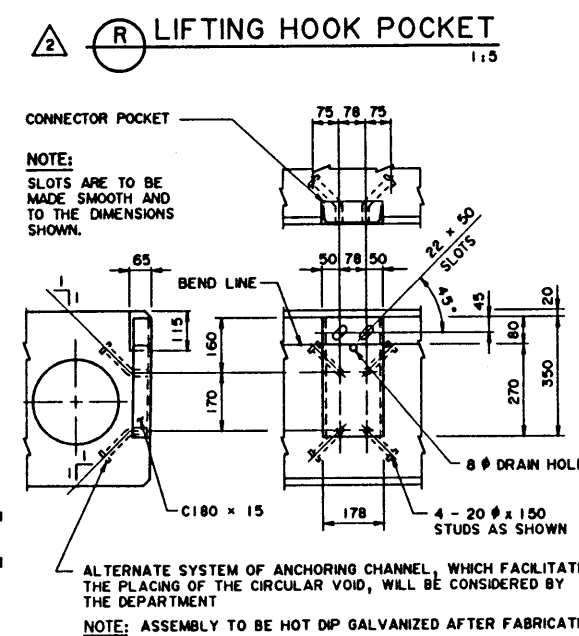
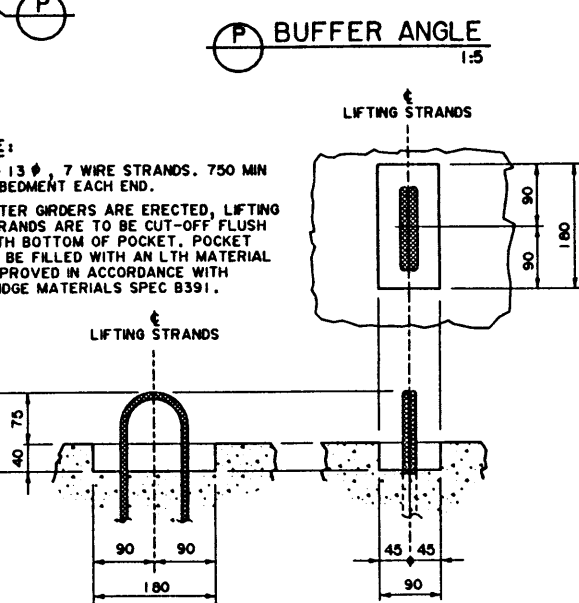
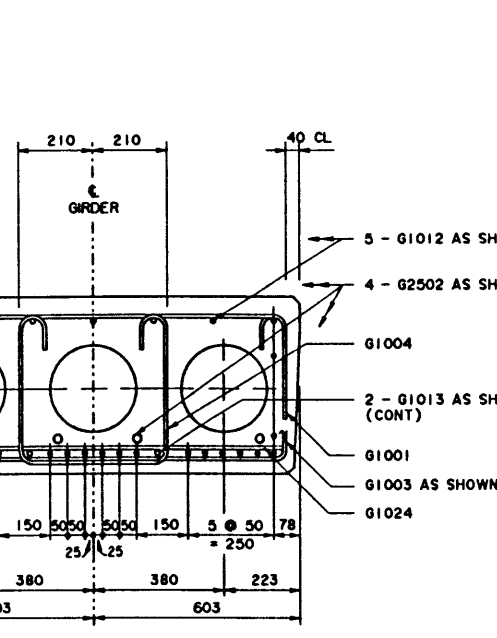
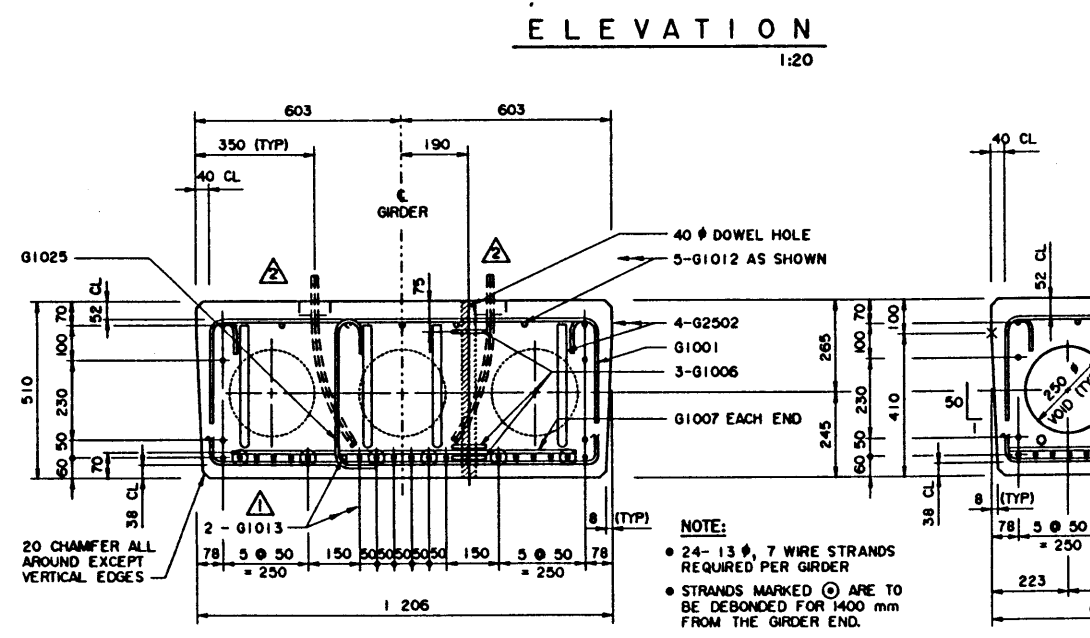
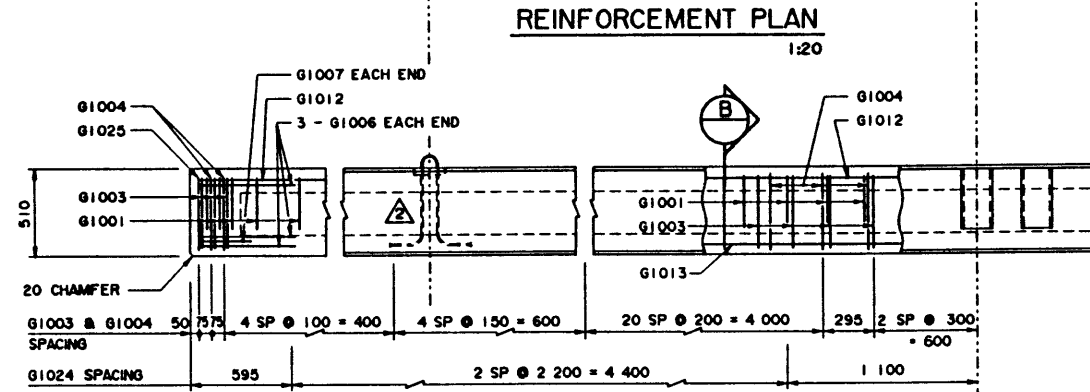
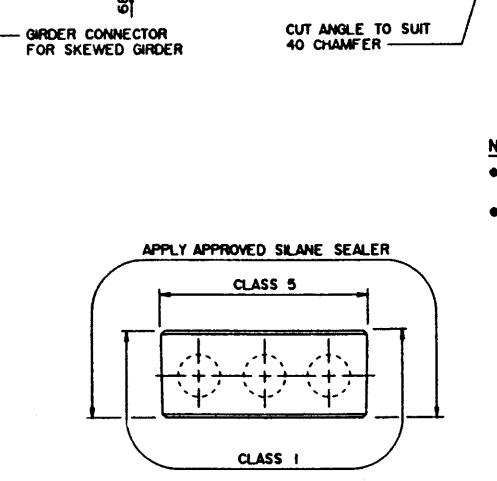
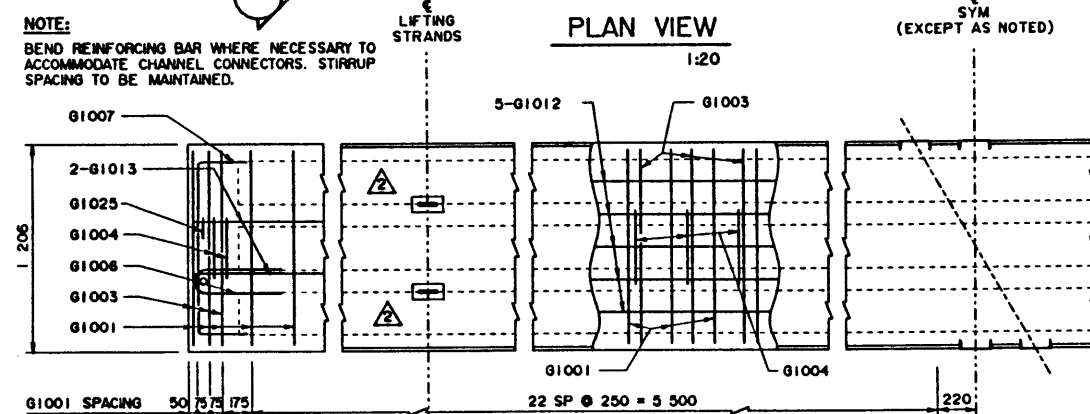


NOTE:  
FOR SKEWED END REINFORCING BAR DETAILS SEE DWG S-1579



BAR LIST: FOR SQUARE GIRDER							
MARK	SIZE	NO	TYPE	X	Y	LENGTH	MASS
G1001	10	53	A	1 125	300	1 725	72
G1003	10	67	B	1 125		2 220	117
G1004	10	65	B	420		1 520	78
G1006	10	6	D			1 080	5
G1007	10	2	A	1 000	300	1 600	3
G1012	10	5	STR			12 090	47
G1013	10	2	STR			11 990	19
G1024	10	6	STR			1 100	5
G1025	10	2	C			670	1
G2502	25	4	A	12 040	350	12 740	200

TOTAL kg : 547



GENERAL NOTES

- ALL DRAWING REFERENCES ARE TO CURRENT DRAWINGS.
- DESIGN
  - CAN/CSA-56-88 SPECIFICATIONS EXCEPT AS MODIFIED BELOW:
    - ALLOWABLE TENSION AT MIDSPAN IS 54% OF MODULUS OF RUPTURE WITH 50 mm WEARING SURFACE (66% WITH 90 mm WEARING SURFACE).
    - NO TENSION ALLOWED IN DECK SURFACE.
  - LOADING:
    - LIVE LOAD - CAN/CSA-56-88; CS-750 ONE WHEEL LINE PER GIRDER
    - DEAD LOAD - GIRDER = 0.93 t/m
    - WEARING SURFACE = 0.24 t/m
- MATERIALS
  - CONCRETE SHALL CONTAIN SILICA FUME AND BE MADE OF LIGHTWEIGHT COARSE AGGREGATE AND NATURAL SAND FINES. UNIT WEIGHT OF SEMI-LIGHTWEIGHT CONCRETE SHALL BE 1920 kg/m<sup>3</sup>.
  - 28 DAY CONCRETE STRENGTH - 40 MPa
  - RELEASE STRENGTH - 28 MPa
  - PRESTRESSING STEEL SHALL BE 13 #, 7 WIRE LOW RELAXATION STRAND (f<sub>pu</sub> = 1860 MPa).
  - REINFORCING STEEL SHALL BE GRADE 400W (YIELD STRENGTH OF GRADE 300 USED IN DESIGN TO ALLOW TACK WELDING OF SHEAR REINFORCEMENT).
- FABRICATION
  - GIRDERS SHALL CONFORM TO THE CURRENT REQUIREMENTS OF THE SPECIFICATIONS FOR BRIDGE CONSTRUCTION SECTION 7 - PRECAST CONCRETE UNITS.
  - FORCE IN PRESTRESSING STEEL:
    - INITIAL TENSIONING LOAD = 129 kN/STRAND
    - DESIGN LOAD AFTER LOSSES = 104 kN/STRAND
  - ALL GALVANIZING SHALL CONFORM TO ASTM SPEC A123.
  - BEND OR SHIFT REINFORCING WHERE REQUIRED TO CLEAR GIRDER CONNECTORS AND LIFTING HOOK ASSEMBLIES. STIRRUP SPACING IS TO BE MAINTAINED. FOR CONNECTOR AND LIFTING HOOK LOCATIONS SEE DWG S-1579.
- ERECTION
  - ANY FREE SPACE BETWEEN CONNECTORS SHALL BE FILLED WITH DROP-IN WASHERS.
  - CALCULATED MASS OF ONE GIRDER IS 11.52 t.

REV	DATE	REVISIONS	BY
95-07-10		SPECIFICATION NOTE	LEA
94-04-05		LIFTING HOOK POCKET	LEA
93-12-13		BAR LIST REVISED & BAR MARK CORRECTED	SBD

ORIGINAL DRAWING APPROVED BY  
J. RAMOTAR  
EXECUTIVE DIRECTOR  
BRIDGE ENGINEERING  
MAY 24, 1994

Alberta TRANSPORTATION AND UTILITIES  
BRIDGE ENGINEERING BRANCH

PRESTRESSED CONCRETE  
12.19 m TYPE SC-510  
INTERIOR GIRDER

DESIGNED	DRAWN	DATE	CHECKED	DATE	STREAM	LOCATION	HIGHWAY	FILE	SHEET	DRAWING
LEA	VMV	93-09-16	SBD	94-05-16					1 of 4	S-1577

FILE: BRIDGE/1577/REV. UPDATE: JUL 21, 1995  
TIME: 14:50 HR