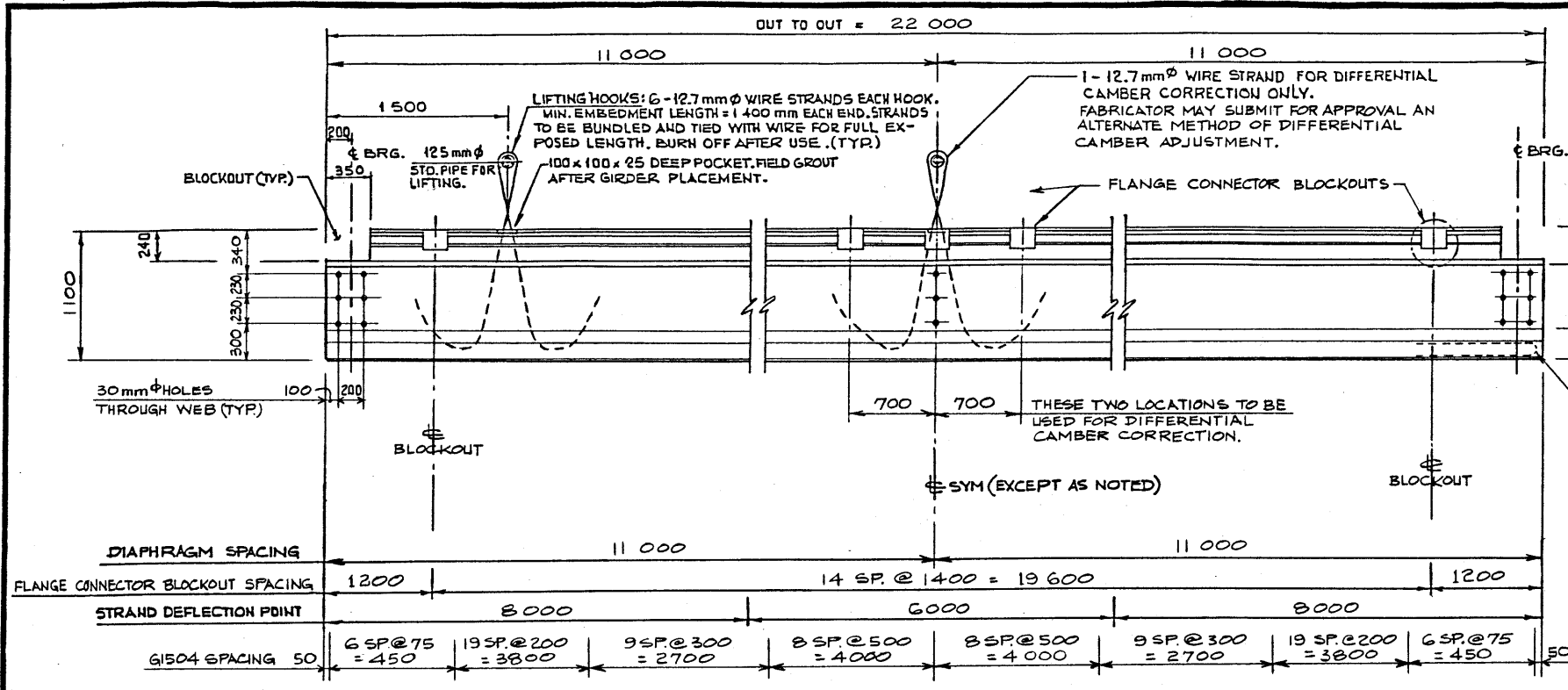
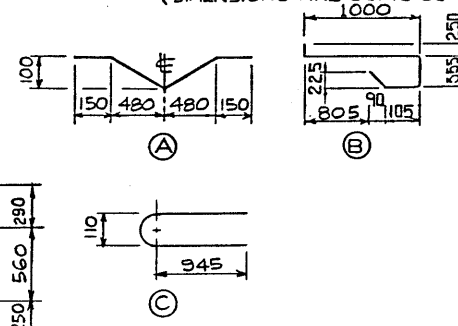


DESIGNED BY: J. A. S. P. SZÖTS  
 DRAWN BY: P. SZÖTS  
 DATE: 82-05-03  
 M.P.-262



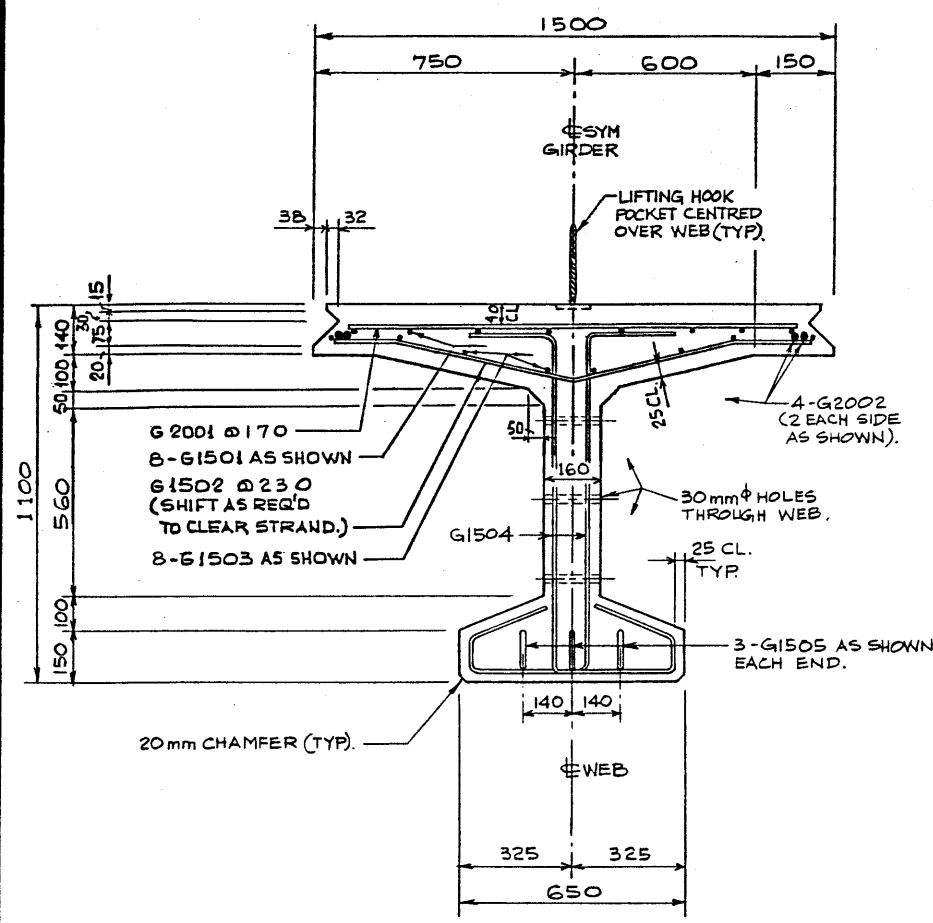
BAR TYPES:  
 (DIMENSIONS ARE OUT TO OUT)



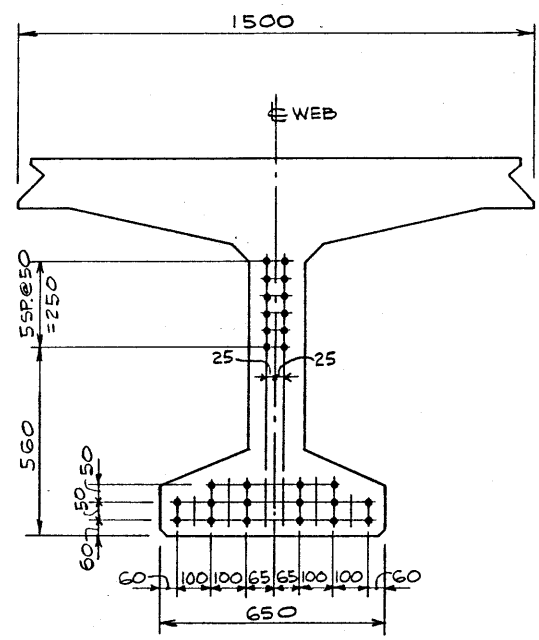
BAR LIST: ONE SQUARE GIRDER							
MARK	SIZE	NO.	TYPE	X	Y	LENGTH	MASS
G 1501	15	16	STR.			11420	287
G 1502	15	93	A			1280	187
G 1503	15	16	STR.			11420	287
G 1504	15	170	B			1955	522
G 1505	15	6	C			2065	19
G 2001	20	126	STR.			1260	374
G 2002	20	8	STR.			11730	221
TOTAL kg:							1897



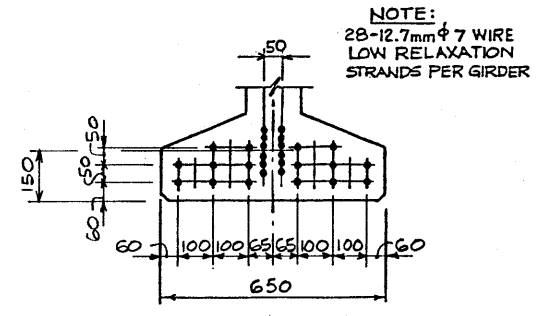
ELEVATION  
 N.T.S.



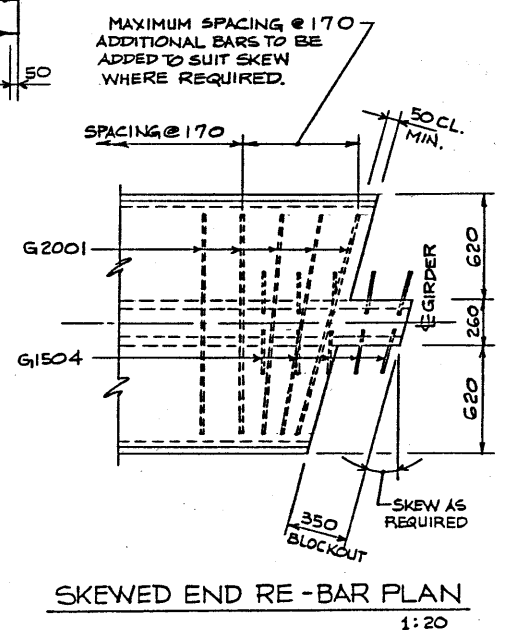
TYPICAL SECTION 1:10



END 1:10



MIDSPAN PRESTRESSING PATTERN 1:10



SKewed END RE-BAR PLAN 1:20

GENERAL NOTES

- DESIGN:
- C.S.A. CAN 3-S6-M78.
  - NO TENSION IN TOP FLANGE OF GIRDER.
- LOADING:
- DEAD LOAD - GIRDER = 12.37 kN/M
  - WEARING SURFACE, SHEAR KEYS = 2.04 kN/M
  - LIVE LOAD - C.S.A. CAN 3-S6-M78 - MS300 PLUS IMPACT
  - 0.89 WHEEL LINES/GIRDER
- PRESTRESSING STEEL:
- PRESTRESSING STEEL SHALL BE 12.7 mm  $\phi$  - 7 WIRE LOW RELAXATION STRAND (F<sub>pu</sub> = 1860 MPa)
  - INITIAL TENSIONING LOAD: 128.6 kN/STRAND
  - DESIGN LOAD AFTER LOSSES: 97.7 kN/STRAND
- MATERIALS:
- STANDARD WEIGHT CONCRETE WITH NOT LESS THAN 5% AIR ENTRAINMENT (WHEN MEASURED IN PLASTIC STATE) SHALL BE USED THROUGHOUT.
  - 28 DAY STRENGTH: 35 MPa
  - RELEASE STRENGTH: 28 MPa
  - REINFORCING STEEL SHALL BE A MINIMUM OF G30-12M GRADE 300.
- FABRICATION:
- GIRDERS SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT ALBERTA BRIDGE BRANCH "SPECIFICATION FOR THE MANUFACTURE OF PRESTRESSED AND PRECAST CONCRETE BRIDGE UNITS B-190M".
  - ALL EXPOSED CONCRETE CORNERS TO HAVE 20 mm CHAMFER OR FILLET UNLESS OTHERWISE NOTED.
  - GIRDER FORMS MUST BE ADJUSTABLE SUCH THAT THE TOP AND BOTTOM FLANGES OF THE GIRDER WILL FOLLOW THE SAME PARABOLIC CURVE WITH A MIDPOINT SAG AS SPECIFIED AT THE TIME OF CASTING.
  - EXPECTED GIRDER CAMBER DUE TO PRESTRESS IS 34 mm.
- ERECTION:
- LIFTING FORCE AT EACH HOOK MUST BE VERTICAL AT ALL TIMES.
  - GIRDER SURFACE MUST BE LEVEL AT ALL TIMES.
  - THEORETICAL MASS OF ONE GIRDER IS 29.4 TONNES.
  - CAMBER DIFFERENTIAL TO BE ELIMINATED BEFORE WELDING FLANGE CONNECTORS, USING JACKING BEAM & LIFTING HOOKS AT MID SPAN.

NOTE: GIRDERS SHALL BE INSTALLED WITH ADEQUATE TEMPORARY LATERAL SUPPORT IMMEDIATELY AFTER STRIPPING AND UNTIL GIRDERS ARE ERECTED.

**SUPERSEDED**

DESIGNED		DRAWN BY		DATE		CHECKED BY		DATE		APPROVED		ALBERTA TRANSPORTATION BRIDGE AND STRUCTURAL ENGINEERING BRANCH		METRIC			
REVISIONS										CHIEF BRIDGE ENGINEER		PRESTRESSED CONCRETE 22m TYPE D.B.T. 1100 x 1500 INTERIOR GIRDER					
NO.	DATE	DESCRIPTION								DATE	STREAM	LOCATION	WPT NO.	SCALE	FILE NO.	SHEET	DWG NO.
		K.S.T. V.G.B. 82-07-14												SHOWN			S-1521