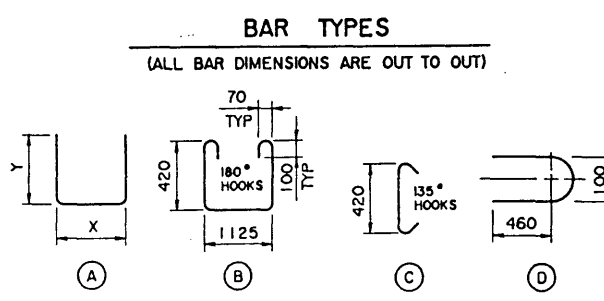


BAR LIST: FOR SQUARE GIRDER								
MARK	SIZE	NO	TYPE	X	Y	LENGTH	MASS	
G1001	10	48	A	1 125	300	1 725	65	
G1003	10	47	B			2 220	82	
G1004	10	92	C			620	45	
G1006	10	6	D			1 020	5	
G1007	10	2	A	1 000	300	1 600	3	
G1012	10	5	STR			10 900	43	
G1013	10	2	STR			10 800	17	
TOTAL							kg	260



- GENERAL NOTES**
- ALL DRAWING REFERENCES ARE TO CURRENT DRAWINGS.
  - DESIGN**
  - AASHTO 1973 SPECIFICATIONS PLUS INTERIMS TO 1976 EXCEPT AS MODIFIED BELOW:
    - ALLOWABLE TENSION AT MIDSPAN IS 80% OF MODULUS OF RUPTURE.
    - NO TENSION ALLOWED IN DECK SURFACE.
    - WEB REINFORCEMENT - ACCORDING TO ACI 318-71, BUT NOT LESS THAN AASHTO MINIMUM.
    - CAPACITY REDUCTION FACTORS ACCORDING TO CSA S6-1974.
  - LOADING:**
    - LIVE LOAD - CSA CAN3-S6-M78; MS225-77
    - ONE WHEEL LINE PER GIRDER
    - DEAD LOAD - GIRDER = 0.78 1/m
    - WEARING SURFACE = 0.15 1/m
  - MATERIALS**
  - CONCRETE IN GIRDER SHALL BE MADE OF LIGHTWEIGHT COARSE AGGREGATE AND SAND FINES.
  - 28 DAY CONCRETE STRENGTH - 35 MPa
  - RELEASE STRENGTH - 28 MPa
  - UNIT WEIGHT OF SEMI-LIGHT WEIGHT CONCRETE 1920 kg/m<sup>3</sup>.
  - PRESTRESSING STEEL SHALL BE 12.7 mm # 7 WIRE LOW RELAXATION STRAND (f<sub>s</sub> = 1860 MPa).
  - REINFORCING STEEL SHALL BE GRADE 400 (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 BRIDGE MATERIALS SPECIFICATION FOR THE MANUFACTURE OF PRESTRESSED CONCRETE BRIDGE UNITS (SPEC B190).
  - FORCE IN PRESTRESSING STEEL:
    - INITIAL TENSIONING LOAD = 129 kN/STRAND
    - DESIGN LOAD AFTER LOSSES = 107 kN/STRAND
  - ALL GALVANIZING SHALL CONFORM TO ASTM SPEC A153.
  - BEND OR SHIFT REINFORCING WHERE REQUIRED TO CLEAR GIRDER CONNECTORS AND LIFTING HOOK ASSEMBLIES. STIRRUP SPACING SHALL BE MAINTAINED.

- ERECTION**
- ANY FREE SPACE BETWEEN CONNECTORS SHALL BE FILLED WITH WASHERS.
  - CALCULATED MASS OF ONE GIRDER IS 8.67 t.
- WORK THESE DRAWINGS TOGETHER: S-1310, S-1311 AND S-1312.

DESIGNED R W L		DRAWN V G B W S		DATE 88-06-21	CHECKED	DATE	STREAM	LOCATION	HIGHWAY	FILE	SHEET 1 of 3	DRAWING S-1310-88
APPROVED  EXECUTIVE DIRECTOR BRIDGE ENGINEERING DATE: June 29, 1988												
Alberta TRANSPORTATION AND UTILITIES BRIDGE ENGINEERING BRANCH PRESTRESSED CONCRETE 11 m TYPE SM-510 INTERIOR GIRDER												