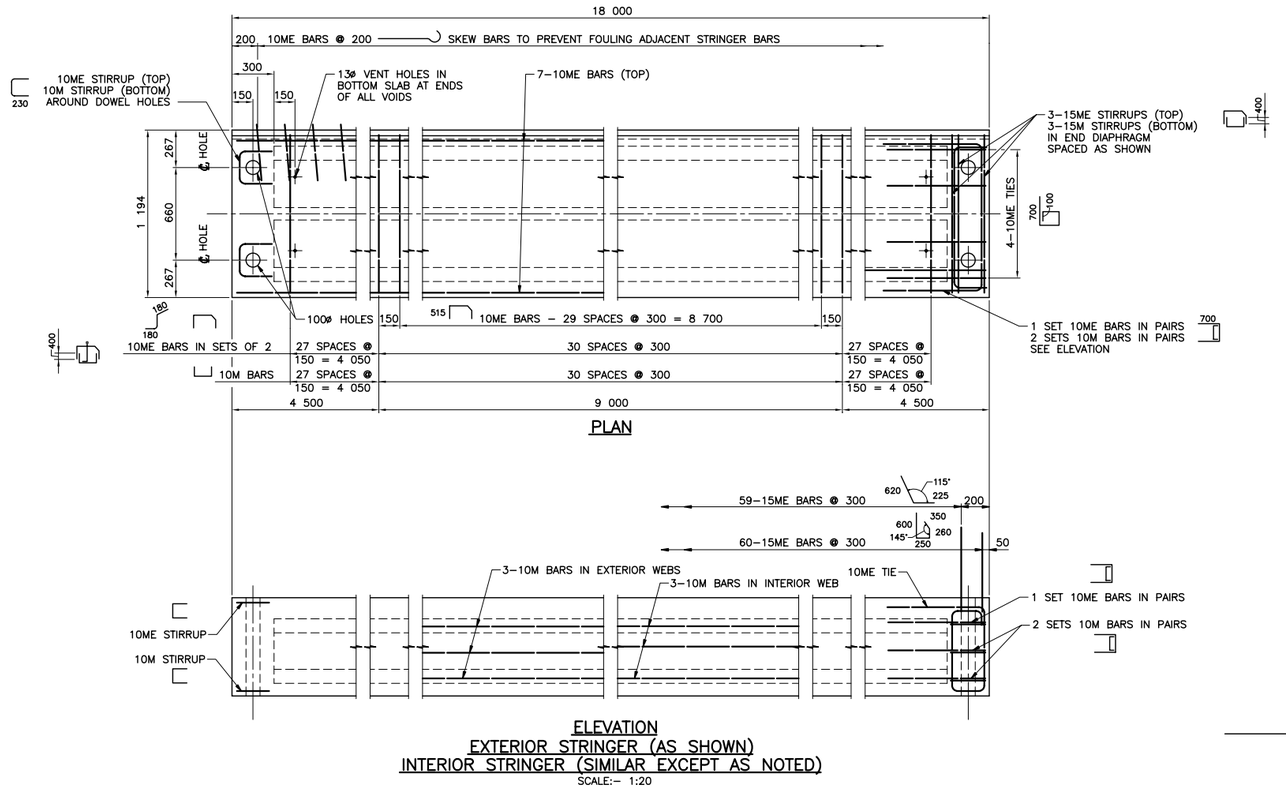
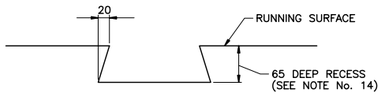


ELEVATION
EXTERIOR STRINGER (AS SHOWN)
INTERIOR STRINGER (SIMILAR EXCEPT AS NOTED)
SCALE:– 1:20

ESTIMATED MASS	
STRINGER MK. 700/18/E	21 950 kg
STRINGER MK. 700/18/I	21 050 kg

STRINGER IDENTIFICATION

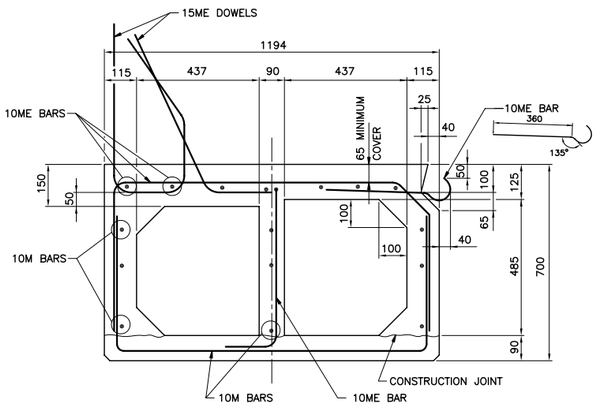
DEPTH OF STRINGER IN mm
MK. 700 / 18 / E OR I
LENGTH OF STRINGER IN METERS
EXTERIOR OR INTERIOR STRINGER



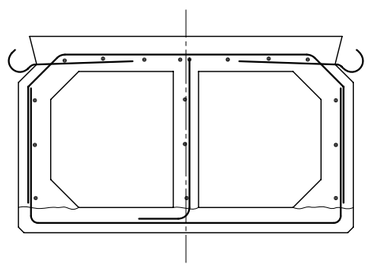
⚠ LIFTING DEVICE RECESS DETAIL
SCALE:– 1:5

NOTES

1. DESIGN SPECIFICATIONS:
   CAN/CSA–S6–88.
   OHBDC – PRESTRESS LOSSES.
2. DESIGN LOAD:
   LIVE LOAD: CS–600
   DEAD LOAD: DESIGNED FOR 100mm CONCRETE OVERLAY.
3. STRINGERS SHALL BE MANUFACTURED IN ACCORDANCE WITH THE M.O.T.H. SPECIFICATION: MANUFACTURE OF PRESTRESSED CONCRETE BOX STRINGER.
4. PRESTRESSING STRANDS SHALL BE 13ø (7 WIRE) UNCOATED LOW RELAXATION STRANDS, C.S.A. G279M–1982, 1862 MPa GRADE OR EQUIVALENT. MINIMUM ULTIMATE TENSILE STRENGTH = 184 kN/STRAND. STRAND TENSION IMMEDIATELY BEFORE RELEASE = 138 kN/STRAND.
5. CONCRETE: MINIMUM COMPRESSIVE STRENGTH OF CONCRETE AT TIME OF RELEASE OF STRANDS = 33MPa AT 28 DAYS = 42MPa.
6. REINFORCING STEEL SHALL CONFORM TO C.S.A. G30.12M GRADE 400.
7. REINFORCING STEEL SHALL HAVE 35mm MINIMUM COVER UNLESS OTHERWISE NOTED.
8. ALL REINFORCING MARKED "ME" IS EPOXY COATED.
9. LAP OF BARS FOR SPLICES TO BE AS FOLLOWS UNLESS NOTED OTHERWISE:
   10M BARS – 450
   10ME BARS – 600
   SPLICES TO BE STAGGERED.
10. BOTTOM EDGES OF STRINGERS SHALL BE CHAMFERED 20mm.
11. LIFTING DEVICES SATISFACTORY TO THE ENGINEER SHALL BE PROVIDED OVER THE BEARINGS. ONLY VERTICAL LIFTS WILL BE PERMITTED. CARE SHALL BE TAKEN TO PREVENT SUDDEN IMPACT LOADS ON THE STRINGERS.
12. ENDS OF PRESTRESSING STRANDS SHALL BE PAINTED WITH AN APPROVED GALVANIZING AGENT.
13. TOP OF BOXES SHALL HAVE A SAND BLASTED FINISH. FOR CONCRETE OVERLAY AND FLOAT FINISH FOR NO OVERLAY OR MEMBRANE AND ASPHALT OVERLAY.
14. ⚠ THE CONCRETE IMMEDIATELY SURROUNDING ALL LIFTING DEVICES SHALL HAVE A FORMED RECESS 65mm DEEP. THE RECESS SHALL BE THOROUGHLY SANDBLASTED IN THE SHOP. AFTER ERECTION, THE LIFTING DEVICE SHALL BE BURNT OFF AT THE BOTTOM OF THE RECESS AND THE RECESS SHALL BE PATCHED WITH AN APPROVED NON–SHRINK GROUT.

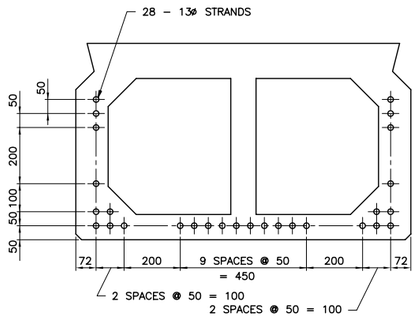


TYPICAL SECTION THROUGH
EXTERIOR STRINGER
SCALE:– 1:10



NOTE:– ALL NOT SHOWN SIMILAR TO EXTERIOR STRINGER

TYPICAL SECTION THROUGH
INTERIOR STRINGER
SCALE:– 1:10



PRESTRESSING STRAND LAYOUT
SCALE:– 1:10

REVISIONS			
Rev	Date	Description	Init
A	92–11–12	LIFTING DEVICE RECESS–NOTES	K.L.
B	93–02–04	GENERAL	J.S.

SCALE AS NOTED
DESIGNED V.H./K.B. DATE 92–07–14
CHECKED J.E.S. DATE 92–11–12
DRAWN J.A. DATE 92–03–20

Province of British Columbia
MINISTRY OF TRANSPORTATION
BRIDGE ENGINEERING BRANCH

STANDARD TWIN CELL CONCRETE BOX STRINGERS MK. 700/18/E & MK. 700/18/I

PREPARED BY	RECOMMENDED	ACCEPTED FOR CONSTRUCTION
ORIGINAL SIGNED BY B. BARNEWALL	ORIGINAL SIGNED BY K.W. HO	ORIGINAL SIGNED BY E.A. LUND
BRIDGE REHAB/MAINT ENGINEER	CHIEF BRIDGE ENGINEER	CHIEF HIGHWAY ENGINEER
DATE 93/02/12	DATE 93/02/12	DATE 93/02/12

FILE No. | NEGATIVE No. | REG. | DRAWING No. 2978–21 B

CANCEL PRINTS BEARING PREVIOUS LETTER

H–308Gm06–003