

LOCATION	ABUTMENTS	PIERS
TYPE		
SIZE (MM)		
NUMBER REQUIRED		
DEAD LOAD (kN)		
LIVE LOAD (kN)		
WIND LOAD (kN)		
ROTATION (degrees)		
MAX. SHEAR RATE (kN/mm)		
DEAD LOAD (kN)		
ULTIMATE LIMIT STATES		
TOTAL LOAD (kN)		

**BEARING DATA**

**DETAIL STRUCTURAL WELD (WELDED CASES ONLY)**

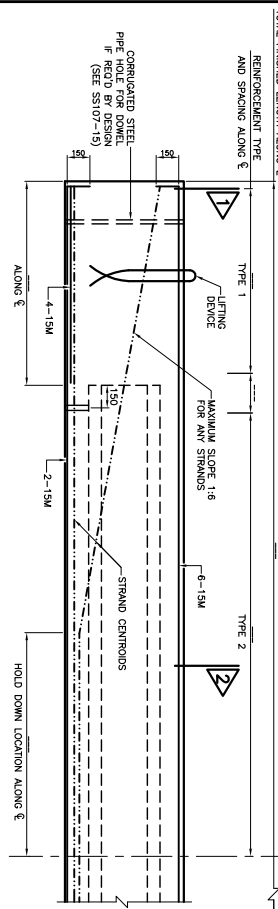
**DETAIL SKEW END (25° < θ ≤ 45°)**

**DETAIL SKEW END (45° < θ ≤ 65°)**

**DETAIL SKEW END (65° < θ ≤ 90°)**

**NOTES:**

- PRESSURE STEEL SHALL BE LOW-RELAXATION STEEL WIRE STRANDS. SIZE DESIGNATION —, GRADE 1860.
- MINIMUM BREAKING STRENGTH OF STRAND — kN.
- JACKING FORCE PER STRAND — kN.
- FORCE PER STRAND AFTER ALL LOSSES — kN.
- THE ELAPSED TIME INTERVAL BETWEEN JACKING OF STRANDS AND TRANSFER SHALL NOT BE LESS THAN 15 HOURS.
- THE VERTICAL SPACING OF PRESSURE STEEL STRANDS IN THE WEB SHALL BE AS SHOWN. THE MINIMUM CLEARANCE BETWEEN STRANDS SHALL BE 25 mm. THE MINIMUM CLEARANCE BETWEEN STRANDS AND HARDWARE CARABINES TO A MAXIMUM OF 50 mm. IF THE CLEARANCE BETWEEN STRANDS AND HARDWARE CARABINES IS LESS THAN 25 mm, THE DESIGNER SHALL BE RESPONSIBLE FOR ADJUSTING THE NUMBER OF STRANDS TO ENSURE THAT THE SAME FORCE EFFECT IS PRODUCED AS CLASS OF CONCRETE DESIGN.
- PRECAST GIRDER — WPA. (CONCRETE CONTAINING SILICA FUME)
- PRECAST GIRDER — WPA.
- CONCRETE STRENGTH AT TRANSFER — WPA.
- STAINLESS STEEL BARS SHALL BE GRADE 400W.
- REINFORCING STEEL SHALL BE TYPE 316 L4 OR DUPLEX 2205 WITH A MINIMUM YIELD STRENGTH OF 500 MPa.
- ALL STRIPPER, DOWELS INTO DECK AND BUSTLING/SPLITTING SHALL BE TYPE 316 L4 OR DUPLEX 2205 WITH A MINIMUM YIELD STRENGTH OF 500 MPa.
- SOFFIT OF BOTTOM SLAB (EXCEPT UNDERCUT) 30 + 15mm/-5mm CLEAR COVER TO REINFORCING STEEL.
- UNDERCUT AND ELSEWHERE 48 + 15mm/-5mm CLEAR COVER TO REINFORCING STEEL.
- ALL STRIPPER, DOWELS INTO DECK AND BUSTLING/SPLITTING SHALL BE TYPE 316 L4 OR DUPLEX 2205 WITH A MINIMUM YIELD STRENGTH OF 500 MPa.
- FOR BRIDGES ON GRADES EXCEEDING 3%, THE ENDS OF GIRDERS SHALL BE CAST SO THAT THEY ARE VERTICAL, WHEN ERECTED.
- THE TOP OF PRECAST BEAM SHALL BE GIVEN ROUGH FINISH OF ABSOLUTE FINISH ACROSS THE WIDTH.
- DRAWING TO BE READ IN CONJUNCTION WITH SS107-15.
- APPROVED BY THE OWNER.



**HALF ELEVATION**

**SQUARE END**

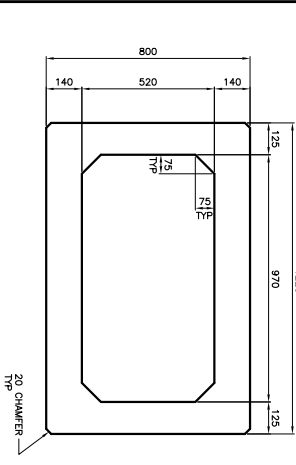
**SKEW END (θ < 25°)**

**SKEW END (25° < θ ≤ 45°)**

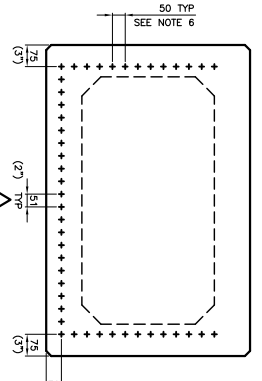
**SKEW END (45° < θ ≤ 65°)**

**SKEW END (65° < θ ≤ 90°)**

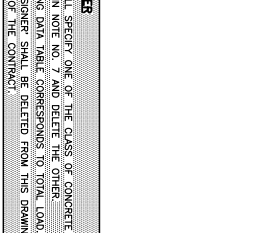
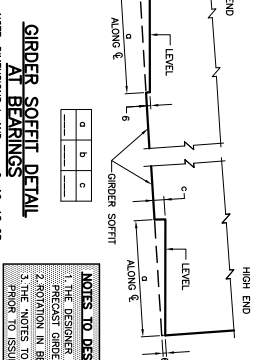
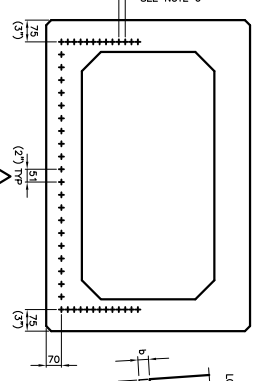
**TYPICAL END REINFORCING**



**TYPICAL SECTION**



**STRAND ARRANGEMENT**

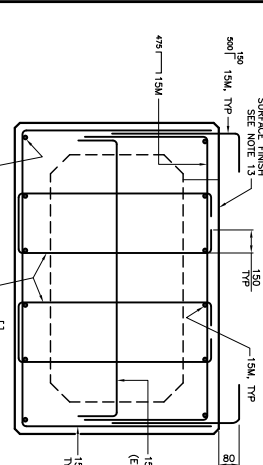


**NOTES TO DESIGNER:**

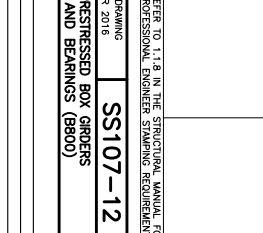
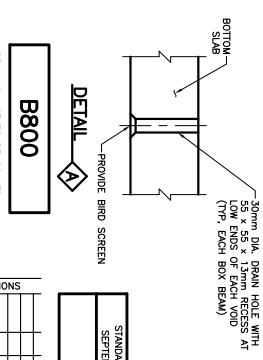
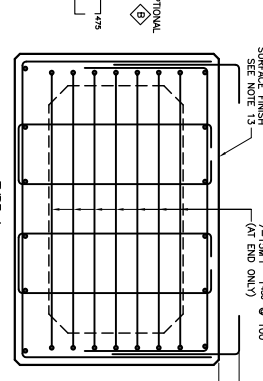
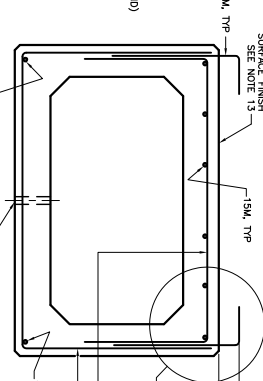
- THE DESIGNER SHALL SPECIFY ONE OF THE CLASS OF CONCRETE FOR THE GIRDER AND BOTTOM SLAB.
- ROTATION IN BEARING DATA TABLE CORRESPONDS TO TOTAL LOAD.
- THE NOTES TO DESIGNER SHALL BE OBTAINED FROM THE DRAWING PRIOR TO ISSUING OF THE CONTRACT.

**GIRDER SOFFIT DETAIL AT BEARINGS**

NOTE: DIMENSIONS b AND c ARE 9, 12, 15 OR 18mm, AS REQUIRED BY THE DESIGN



**REINFORCING DETAILS**



**METRIC DIMENSIONS ARE IN METRES AND/OR MILLIMETRES UNLESS OTHERWISE SHOWN**

CONT No	WP No	SHEET
PRESTRESSED BOX GIRDERS AND BEARINGS (B800)		

STANDARD DRAWING	SEPTEMBER 2016
PRESTRESSED BOX GIRDERS AND BEARINGS (B800)	SS107-12

REVISIONS	DESCRIPTION	DATE
DESIGN	CHK	DATE
CHK	DATE	
DATE		