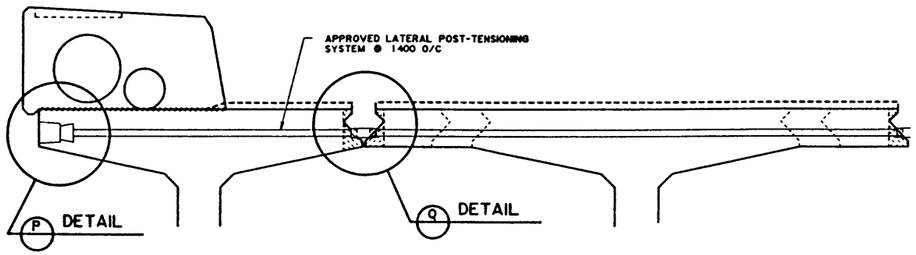
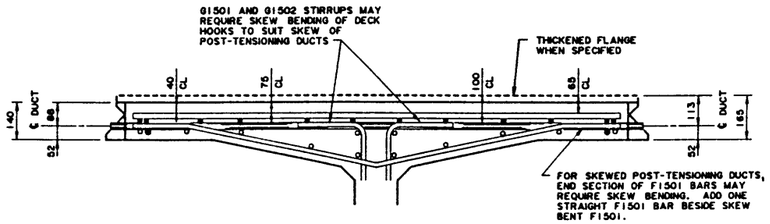


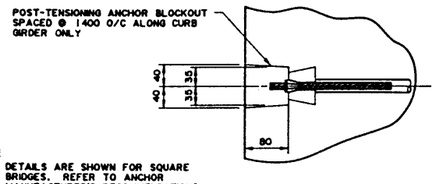
LATERAL POST-TENSIONING

1:10



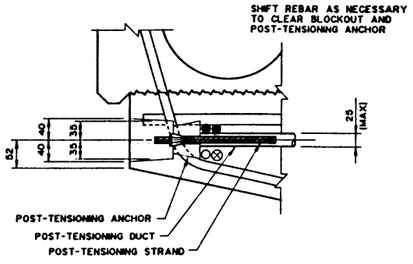
TYPICAL FLANGE DETAIL

2000 FLANGE SHOWN 1:10



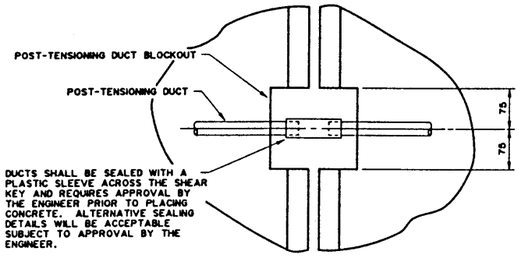
NOTE:

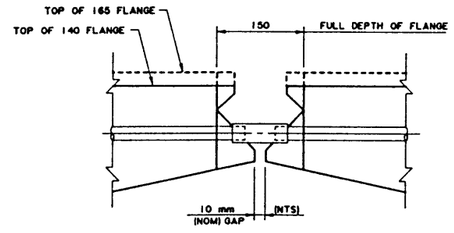
DETAILS ARE SHOWN FOR SQUARE BRIDGES. REFER TO ANCHOR MANUFACTURER'S RECOMMENDATIONS WHEN CASTING BLOCKOUTS ON A SKEW.



P DETAIL

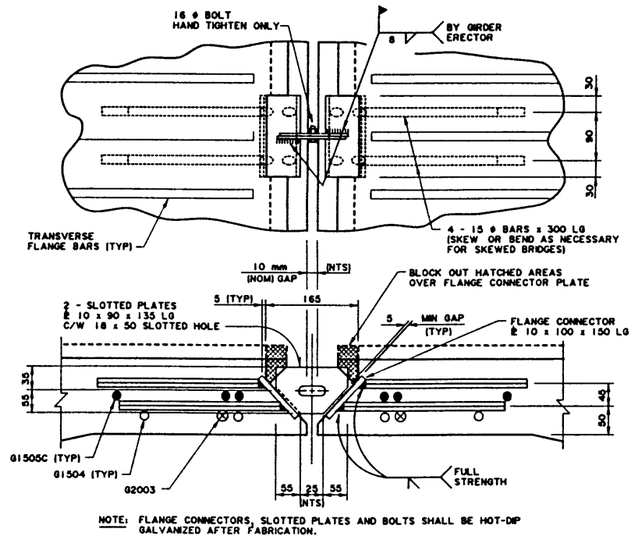
1:5





Q DETAIL

1:5



NOTE: FLANGE CONNECTORS, SLOTTED PLATES AND BOLTS SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.

TYPICAL CAMBER CORRECTION DETAIL

1:5

GENERAL NOTES

DECK LATERAL POST-TENSIONING

- DESIGNERS SHALL PLACE LATERAL POST-TENSIONING ON SKEW FOR SKEWS UP TO 30°. PLACE SQUARE IF SKEW IS OVER 30° UNLESS NOTED OTHERWISE.
- LATERAL STRESSING SHALL BE BY GIRDER ERECTOR UNLESS NOTED OTHERWISE.
- ANCHORAGE DETAILS REQUIRE APPROVAL BY THE ENGINEER.
- STRAND SHALL BE 12.7 ø - 7 WIRE, LOW RELAXATION STRAND (f_{pu} = 1860). STRAND FORCE SHALL BE 137 kN IMMEDIATELY AFTER SEATING.
- DUCTS SHALL HAVE A MAXIMUM VERTICAL DIMENSION OF 25 mm AND A MAXIMUM HORIZONTAL DIMENSION OF 75 mm. OVAL OR RECTANGULAR DUCTS WILL BE ACCEPTABLE SUBJECT TO APPROVAL BY THE ENGINEER.
- DUCT PROPERTIES SHALL NOT EXCEED THE FOLLOWING MAXIMUM DESIGN VALUES: K = 0.0033/m, μ = 0.2

SEQUENCE OF FIELD OPERATIONS

1. OBTAIN APPROVAL FOR FIELD STRESSING PROCEDURES PRIOR TO STRESSING.
2. ALIGN GIRDERS VERTICALLY AT MIDSPAN TO ELIMINATE DIFFERENTIAL CAMBER BETWEEN ADJACENT GIRDERS.
3. CAST DIAPHRAGMS.
4. INSTALL TIGHT FITTING SLEEVES FOR CONTINUITY OF SEALED DUCTS AT SHEAR KEYS.
5. PLACE CONCRETE IN LONGITUDINAL KEYS; IT SHALL OBTAIN A MINIMUM COMPRESSIVE STRENGTH OF 28 MPa PRIOR TO STRESSING.
6. TENSION ALL STRANDS FROM ONE SIDE OF THE DECK. STRESSING IN EACH SPAN SHALL START AT ONE END, SEQUENTIALLY DOING ALTERNATE STRANDS 1, 3, 5, 7 ...ETC. SUBSEQUENT STRESSING MAY START FROM EITHER END.
7. PRESSURE GROUT ALL DUCTS WITH AN APPROVED GROUT WITHIN 24 HOURS AFTER TENSIONING. MINIMUM GROUT STRENGTH SHALL BE 30 MPa AT 28 DAYS.
8. PATCH ANCHOR BLOCKOUTS IN CURB GIRDERS WITH AN APPROVED NON-SHRINK, NON-STAINING GROUT.
9. APPLY CLASS 3 FINISH TO OUTSIDE FACE OF ALL CURB GIRDERS INCLUDING FINISHED ANCHOR BLOCKOUTS.

REV	DATE	DESCRIPTION	BY
6			
5			
4			
3			
2			
1	90-11-28	REDRAWN FROM DWG S-1558	TL

REVISIONS

APPROVED

EXECUTIVE DIRECTOR BRIDGE ENGINEERING

DATE 91-03-07

Alberta TRANSPORTATION AND UTILITIES

BRIDGE ENGINEERING BRANCH

STANDARD DBC SERIES LATERAL POST-TENSIONING DETAILS

DESIGNED	DRAWN	DATE	CHECKED	DATE	STREAM	LOCATION	HIGHWAY	FILE	SHEET	DRAWING
TL	MIK	90-11-28							OF	S-1591

MAR 05, 1991 8BNEW-S-1591-M90.DWG