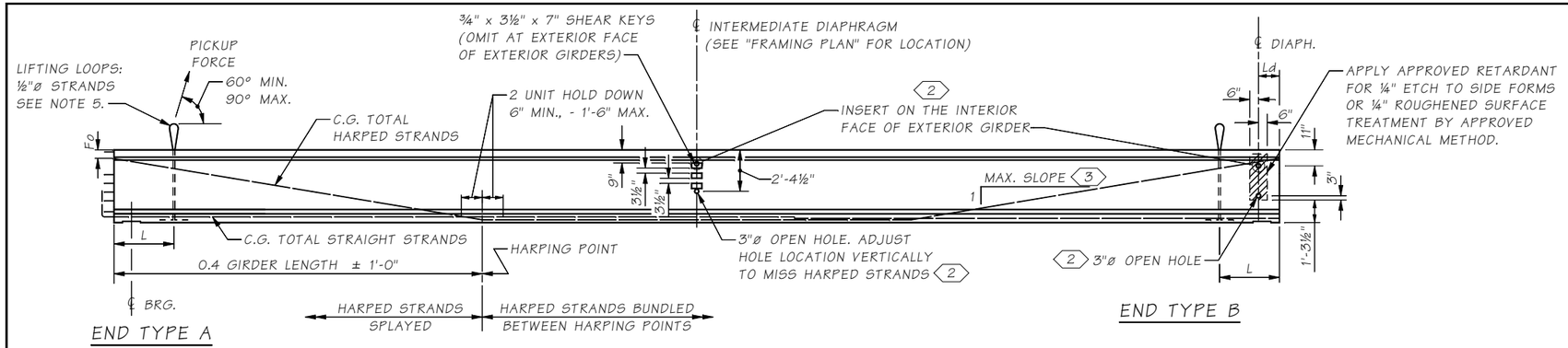
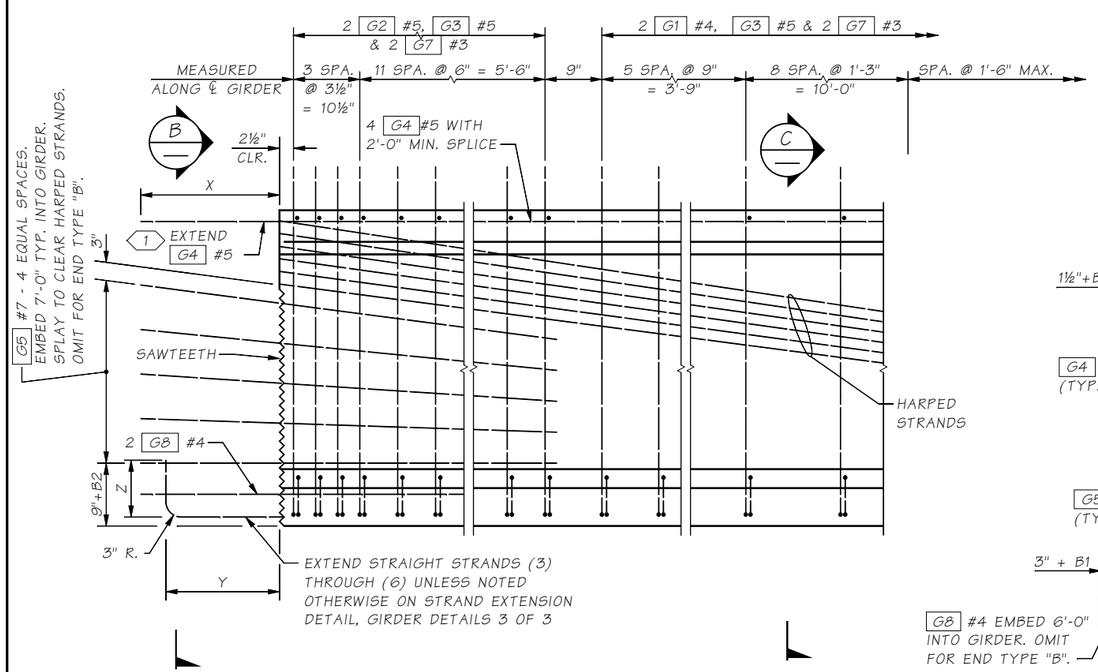
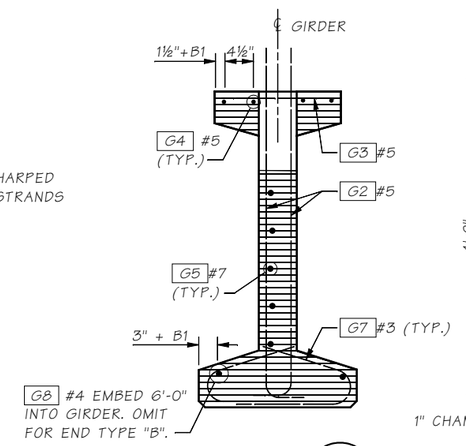


END TYPE A

END TYPE B

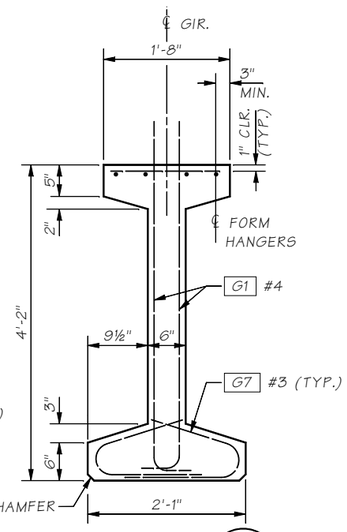
GIRDER ELEVATION





VIEW B

SAWTEETH SHOWN BY HATCHED AREA.



SECTION C

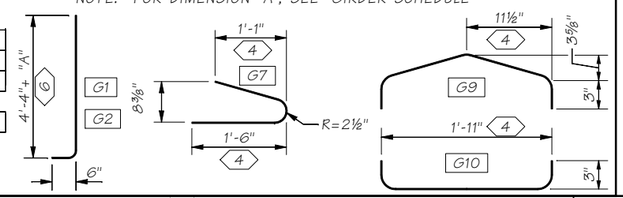
INTERMEDIATE DIAPHRAGM: 1/2 point of span for span lengths 40'-0" to 80'-0". No intermediate diaphragm for span lengths 40'-0" or less.

TYPICAL END ELEVATION

END OF TYPE C SHOWN, OTHER END TYPES SIMILAR

(stirrup spacing shall be determined by the designer)

MARK	NOTE	LOCATION	SIZE	BENDING DIAGRAM (ALL DIMENSIONS ARE OUT TO OUT) NOTE: FOR DIMENSION "A", SEE "GIRDER SCHEDULE"
G1		GIRDER STIRRUPS	4	
G2		GIRDER END STIRRUPS	5	
G3		GIRDER TOP FLANGE	5	STR.
G4		GIRDER LONGIT. FULL LENGTH	5	STR.
G5		GIRDER END LONGIT.	7	STR.
G7	5	GIRDER BOT. FLANGE TIES	3	
G8		GIRDER END LONGIT.	4	STR.
G9	5	GIRDER BOT. FLANGE TIES	3	
G10	5	GIRDER BOT. FLANGE TIES	3	



FOR END TYPE "C"

ENDS AHEAD ON STATION
G5 BARS LEFT OF ℄
B1 = 0" (G4 , G8)
B2 = 0" (G5)
ENDS BACK ON STATION
G5 BARS RIGHT OF ℄
B1 = 1½"(G4 , G8)
B2 = 3" (G5)

Diaphragm Type	END TYPE	BEARING RECESS	X	Y	Z	SAWTEETH
End Diaph. on Girder	A	YES	1'-10"	1'-6"	9"	YES
"L" Abutment	B	YES	0"	0"	0"	NO
Hinge Diaph. @ Intermediate Pier	C	NO	1'-10"	1'-6"	9"	YES
Fixed Diaph. @ Intermediate Pier	D	NO	1'-10"	ALT. 1 OR ALT. 2 STRAND EXTENSION		YES

GIRDER NOTES

1. PLAN LENGTH SHALL BE INCREASED AS NECESSARY TO COMPENSATE FOR SHORTENING DUE TO PRESTRESS AND SHRINKAGE.
2. ALL PRETENSIONED AND TEMPORARY STRANDS SHALL BE 0.6"ø LOW RELAXATION STRANDS (AASHTO M203 GRADE 270.)
3. FOR END TYPES A, C AND D CUT ALL STRANDS FLUSH WITH THE GIRDER ENDS AND PAINT WITH AN APPROVED EPOXY RESIN, EXCEPT FOR EXTENDED STRANDS AS SHOWN. FOR END TYPE B CUT ALL STRANDS 1" BELOW CONCRETE SURFACE AND GROUT WITH AN APPROVED EPOXY GROUT.
4. THE TOP SURFACE OF THE GIRDER FLANGE SHALL BE ROUGHENED IN ACCORDANCE WITH SECTION 6-02.3(25)H OF THE STANDARD SPECIFICATIONS.
5. LIFTING EMBEDMENTS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 6-02.3(25)L OF THE STANDARD SPECIFICATIONS.
6. CAUTION SHALL BE EXERCISED IN HANDLING AND PLACING GIRDERS. ALL GIRDERS SHALL BE CHECKED BY THE CONTRACTOR TO ENSURE THAT THEY ARE BRACED ADEQUATELY TO PREVENT TIPPING AND TO CONTROL LATERAL BENDING DURING SHIPPING. ONCE ERECTED, ALL GIRDERS SHALL BE BRACED LATERALLY TO PREVENT TIPPING UNTIL THE DIAPHRAGMS ARE CAST AND CURED.
7. FORMS FOR BEARING PAD RECESSES SHALL BE CONSTRUCTED AND FASTENED IN SUCH A MANNER AS TO NOT CAUSE DAMAGE TO THE GIRDER DURING THE STRAND RELEASE OPERATION.
8. TEMPORARY TOP STRANDS SHALL BE EITHER PRETENSIONED OR POST-TENSIONED IN ACCORDANCE WITH SECTION 6-02.3(25)L OF THE STANDARD SPECIFICATIONS AND THE GIRDER DETAILS SHEETS. THE LIFTING LOCATION "L" AND CONCRETE RELEASE STRENGTH "F'CI" SHOWN IN THE GIRDER SCHEDULE ASSUME THAT THE TEMPORARY TOP STRANDS ARE PRETENSIONED. ALTERNATIVELY, POST-TENSIONED TEMPORARY TOP STRANDS MAY BE USED IF THE LIFTING POINTS IN THE GIRDER SCHEDULE ARE MAINTAINED AND THE STRANDS ARE STRESSED PRIOR TO LIFTING THE GIRDER FROM THE FORM.
9. FOR DIAPHRAGMS, OMIT HOLES AND PLACE INSERTS ON THE INTERIOR FACE OF EXTERIOR GIRDERS. PLACE HOLES AND INSERTS PARALLEL TO SKEW. INSERTS SHALL BE 1"ø MEADOWBURKE MX-3 HI-TENSILE, 1"ø MEADOWBURKE FX-19 FERRULE INSERT, 1"ø x 5½" WILLIAMS F22 OPEN FERRULE INSERT, 1"ø x 4⅝" DAYTON-SUPERIOR F-62 FLARED THIN SLAB FERRULE INSERT OR APPROVED EQUAL.

NOTES:

1. FIELD BENDING REQUIRED TO OBTAIN 1½" CONCRETE COVER AT PAVEMENT SEAT.
2. OMIT HOLES AND PLACE INSERTS ON THE INTERIOR FACE OF EXTERIOR GIRDERS. PLACE HOLES AND INSERTS PARALLEL TO SKEW. INSERTS SHALL BE 1"ø BURKE HI-TENSILE, LANCASTER MALLEABLE, DAYTON-SUPERIOR F-62 FLARED THIN SLAB (1" x 4⅝") FERRULE OR APPROVED EQUAL. (TYP.)
3. MAXIMUM SLOPE FOR STRANDS:
   6 : 1 FOR EACH ½"ø STRAND OR
   8 : 1 FOR EACH 0.6"ø STRAND
4. VARIES FOR SKEWED ENDS.
5. PAIRS OF G7 BARS, OR G9 AND G10 BARS, MAY BE USED INTERCHANGEABLY AS BOTTOM FLANGE TIES.
6. SHALL BE CHECKED FOR EFFECT OF VERTICAL CURVE.

Bridge Design Engr.	M:\STANDARDS\Girders\W\W50G\W50G1.MAN				
Supervisor					
Designed By					
Checked By					
Detailed By					
Bridge Projects Engr.					
Prelim. Plan By					
Architect/Specialist	DATE	REVISION	BY	APP'D	

REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
10	WASH.			
JOB NUMBER				

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

STANDARD PRESTRESSED CONCRETE GIRDERS

W50G GIRDER DETAILS 1 OF 2

BRIDGE SHEET NO.

SHEET OF SHEETS

Last revised: 04/13/2020

SHEET JOB NO. SR 5.6-A3-3

Tue Jul 07 11:50:13 2020