GIRDER SCHEDULE

SPAN	GIRDER	GIRDER SERIES	TOP FLANGE ℄ GIRDER TO ℄ JOINT B	PLAN LENGTH (ALONG GIRDER GRADE) (SEE GIRDER NOTE 1)	GIRDER END DETAILS						MIN. CONC. COMP. STRENGTH		NUMBER OF STRANDS (SEE GIRDER NOTE 2)		LOCATION OF C.G. STRANDS			STRAIGHT STRANDS TO EXTEND		MIDSPAN VERTICAL DEFLECTION D		REINFORCEMENT DETAILS						SHIPPING AND HANDLING DETAILS				
					END 1 TYPE	END 2 TYPE	θ_1	θ_2	P_1	P_2	@ 28-DAYS F'C (KSI)	@ RELEASE F'CI (KSI)	STRAIGHT	HARPED	E	F℄	Fo	END 1	END 2	LOWER BOUND @ 40 DAYS	UPPER BOUND @ 120 DAYS	V1	V2	V3	V4	V5	V6	L	L_L	L_T	K_θ MINIMUM SHIPPING SUPPORT ROTATIONAL SPRING CONSTANT	W_{CC} MINIMUM SHIPPING SUPPORT CNTR.-TO-CNTR. WHEEL SPACING
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	? TO ?	? TO ?	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

GIRDER NOTES

1. PLAN LENGTH SHALL BE INCREASED AS NECESSARY TO COMPENSATE FOR SHORTENING DUE TO PRESTRESS AND SHRINKAGE.
2. ALL PRETENSIONED STRANDS SHALL BE 0.6"ø AASHTO M203 GRADE 270 LOW RELAXATION STRANDS, JACKED TO 202.5 KSI.
3. CUT ALL STRANDS FLUSH WITH THE GIRDER ENDS AND PAINT WITH AN APPROVED EPOXY RESIN, EXCEPT FOR EXTENDED STRANDS AS SHOWN.
4. THE TOP SURFACE OF THE GIRDER FLANGE SHALL BE FINISHED 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. AFTER ERECTION, CUT OFF LIFTING EMBEDMENTS 1 INCH BELOW THE TOP OF THE FLANGE AND FILL WITH AN APPROVED GROUT.
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. STRUCTURAL STEEL SHAPES AND ASSEMBLIES SHALL BE ASTM A36. THEY SHALL BE PAINTED WITH A PRIMER COAT IN ACCORDANCE WITH STD. SPEC. 6-07.3(9). WELD TIES SHALL BE PAINTED WITH A FIELD PRIMER COAT OF AN ORGANIC ZINC PAINT AFTER FIELD WELDING.
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.
10. DEFORMED WELDED WIRE REINFORCEMENT CONFORMING TO SECTION 9-07.7 WITH DEFORMED WIRE CONFORMING TO SECTION 9-07.8 MAY BE SUBSTITUTED FOR MILD STEEL REINFORCEMENT IF AASHTO LRFD BRIDGE DESIGN SPECIFICATION REQUIREMENTS (INCLUDING DEVELOPMENT AND ANCHORAGE) ARE MET. WELDED WIRE REINFORCEMENT SHALL HAVE THE SAME AREA AND SPACING AS THE MILD STEEL REINFORCEMENT THAT IT REPLACES AND THE YIELD STRENGTH SHALL BE GREATER THAN OR EQUAL TO 60 KSI. SHEAR STIRRUP LONGITUDINAL WIRES AND TACK WELDS SHALL BE EXCLUDED FROM GIRDER WEBS. LONGITUDINAL WIRES FOR ANCHORAGE OF WELDED WIRE REINFORCEMENT SHALL HAVE AN AREA OF 40% OR MORE OF THE AREA OF THE WIRE BEING ANCHORED BUT SHALL NOT BE LESS THAN D4.

NOTES TO DESIGNER:

1. DG GIRDER DETAIL SHEETS 1 TO 2 ARE INTENDED TO BE USED AS IS WITHOUT NEED FOR MODIFICATION FOR MOST PROJECTS. PROJECT SPECIFIC GIRDER DETAILS ARE THEN LIMITED TO THE GIRDER SCHEDULE.
2. V1 SPA. @ V2 IS INTENDED TO BE THE SPLITTING RESISTANCE ZONE DEFINED BY BDM 5.6.2.F.
3. V3 SPA. @ V4 IS INTENDED TO BE THE CONFINEMENT REINFORCEMENT ZONE DEFINED BY BDM 5.6.2.G.
4. GIRDER END SKEW IS LIMITED TO 30°.
5. DIMENSIONS IN THE GIRDER SCHEDULE SHALL BE SHOWN TO THE NEAREST ⅛TH INCH.
6. THE NUMBER OF HARPED STRANDS SHOULD NOT EXCEED HALF THE NUMBER OF STRAIGHT STRANDS UNLESS THE STRAIGHT STRAND PATTERN IS FULL.
7. IT IS ASSUMED THAT THE FINAL PROFILE GRADE IS PROVIDED BY VARYING THE OVERLAY THICKNESS. INSTEAD, THE DESIGNER COULD ADD A "GIRDER FLANGE THICKENING" DETAIL TO ACCOUNT FOR PROFILE GRADE AND PRESTRESSING CAMBER EFFECTS.
8. THIS STANDARD IS BASED ON THE USE OF AN HMA OVERLAY. USE OF A 5" CIP CONCRETE DECK REQUIRES MODIFICATIONS.

Last revised on : 4/07/2016

SR ____ FILE NO. ____ SHEET ____

5.6-A7-1

Bridge Design Engr.	M:\STANDARDS\Girders\Deck Bulb Tee\DBT SCHEDULE AND NOTES.MAN								
Supervisor					REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Designed By					10	WASH.			
Checked By					JOB NUMBER				
Detailed By									
Bridge Projects Engr.									
Prelim. Plan By									
Architect/Specialist	DATE	REVISION	BY	APP'D					

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

STANDARD PRESTRESSED CONCRETE GIRDERS

DECK BULB TEE GIRDER SCHEDULE

BRIDGE SHEET NO.

SHEET OF SHEETS

Fri Jun 10 10:47:02 2016