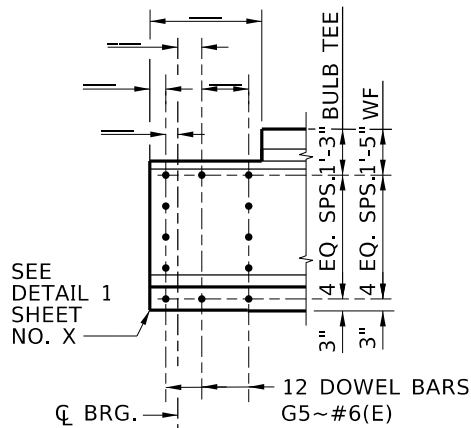
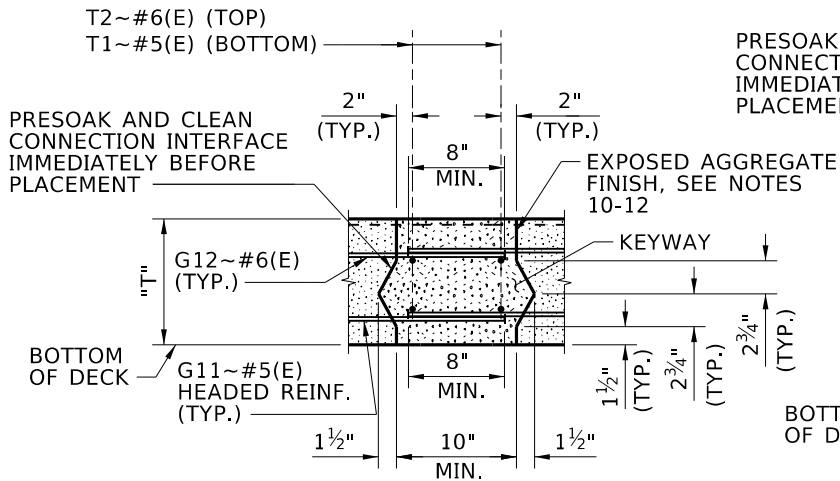


PLAN

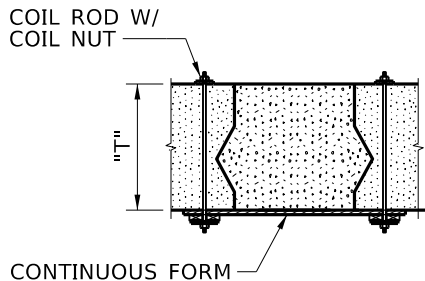


ELEVATION
TYPE B

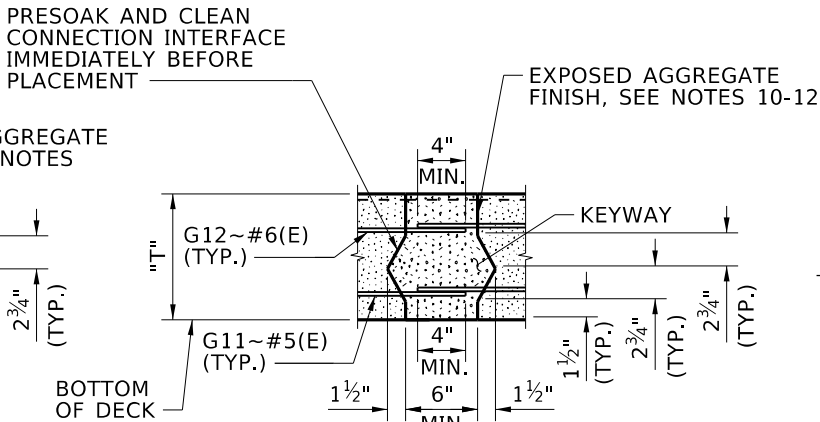
END DIAPHRAGM DOWEL DETAILS
1/4"=1'-0"



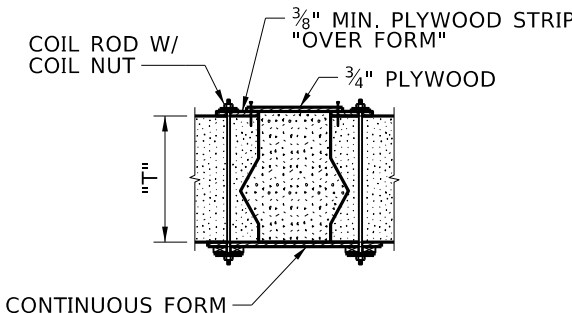
HESC CLOSURE POUR DETAIL
3/4"=1'-0"



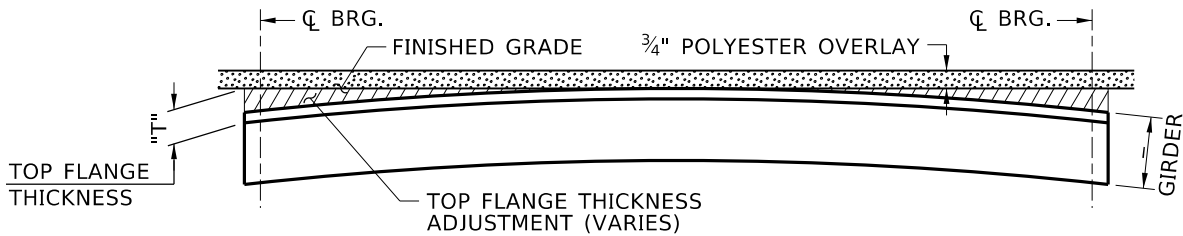
HESC CLOSURE POUR FORMING DETAIL
(HESC = HIGH EARLY STRENGTH CONCRETE)
3/4"=1'-0"



UHPC CLOSURE POUR DETAIL
3/4"=1'-0"



UHPC CLOSURE POUR FORMING DETAIL
(UHPC = ULTRA HIGH PERFORMANCE CONCRETE)
3/4"=1'-0"



TOP FLANGE THICKNESS ADJUSTMENT DIAGRAM
1 1/2"=1'-0"

DEFLECTION DATA ~ INCHES

LOCATION	ΔP PRESTRESS	ΔG GIRDER	ΣΔ * ΔP + ΔG	ΔC CURB	Δ1** 1.55 ΔP + 1.65(ΔG)	ΔD	Δ2 ΔD + ΔC

*ESTIMATED DEFLECTION OF PRESTRESSED GIRDER AT RELEASE
**ESTIMATED DEFLECTION OF PRESTRESSED GIRDER AT GIRDER ERECTION. GIRDER ERECTION ASSUMED TO OCCUR WITHIN 60 TO 90 DAYS AFTER GIRDER FABRICATION.

REVISIONS				DESIGNED
NO.	DATE	BY	DESCRIPTION	DESIGN CHECKED
▲				
▲				
▲				
▲				

DESIGNED
DESIGN CHECKED
DETAILED
DWG. CHECKED
CORRECTIONS

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME
Standards/Bridge Standard Drawings/ B05_4F.DGN
DRAWING DATE: DEC 2025

IDAHO
TRANSPORTATION
DEPARTMENT

YOUR Safety→YOUR Mobility→YOUR Economic Opportunity

APPROVED BY:
BRIDGE ENGINEER MICHAEL T. JOHNSON DATE:

ENGLISH
PROJECT NO.

PRESTRESSED DECK GIRDER DETAILS

STATE SYSTEM
BRIDGE DESIGN MANUAL, B5.4F

BRIDGE PLANS	
BRIDGE KEY NO.	
COUNTY	KEY NO.
BRIDGE DWG. NO.	SHEET OF

NOTES

DOWELS

- PROVIDE DOWELS BY ANY OF THE FOLLOWING METHODS:
 - COIL ROD INSERTS AND THREADED DOWELS, MAY BE PROVIDED, IF THE ULTIMATE STRENGTH OF THE INSERT IS IN ACCORDANCE WITH THE FOLLOWING:

BAR SIZE	MINIMUM ULTIMATE TENSION CAPACITY (LBS.)
#4	12,000
#5	18,600
#6	26,400
 - 1 1/2"Ø HOLES MAY BE PROVIDED DURING FABRICATION AND DOWELS GROUTED IN PLACE AFTER DELIVERY TO THE JOB SITE.
- PLACE DOWELS PARALLEL TO CL BEARING.

SHOP DRAWINGS

- PROVIDE SHOP DRAWING DETAILS THAT CONFORM TO CURRENT AASHTO SPECIFICATIONS. SHOW DETENSIONING SEQUENCE AND LIFT POINTS ON THE SHOP DRAWINGS.
- SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH 506.03 AND 105.02.
- LATERALLY RESTRAIN GIRDERS IN AN UPRIGHT POSITION DURING TRANSPORTATION AND ERECTION. SHOW METHOD OF LATERAL RESTRAINT ON THE SHOP DRAWINGS.

MISCELLANEOUS GIRDER DETAILS

- WELDED WIRE REINFORCEMENT STIRRUPS MAY BE PROVIDED IN ACCORDANCE WITH THE DETAILS SHOWN ON THE OPTIONAL PRESTRESSED GIRDER WWR DETAILS SHEET.
- PROVIDE GIRDERS WITH ENDS THAT ARE PLUMB WHEN SET TO GRADE.
- DIMENSION (A) IN THE PRESTRESSED GIRDER SCHEDULE TABLE IS A HORIZONTAL DIMENSION. CORRECT THE FINISHED GIRDER LENGTH FOR GRADE AND PROVIDE AN ALLOWANCE FOR BEAM SHORTENING.
- BLOCK OUT TOP FLANGE OF BULB TEE AND WF GIRDERS TO ALLOW PLACEMENT OF CONCRETE FOR THE END DIAPHRAGMS.
- IF THE TOP FLANGE OVERHANG IS USED TO SUPPORT CURB FORMS, SUBMIT THE METHOD OF SUPPORT FOR APPROVAL BEFORE CASTING THE GIRDERS. SHOW THE METHOD OF CURB FORM SUPPORT ON THE SHOP DRAWINGS..
- INTENTIONALLY ROUGHEN INTERFACES OF SHEAR KEYS AND KEYWAYS THROUGH THE USE OF A CHEMICAL RETARDER APPLIED TO THE PRECAST COMPONENT FORMWORK TO PRODUCE AN EXPOSED AGGREGATE SURFACE. SUBMIT THE MATERIAL SPECIFICATIONS OF THE CHEMICAL RETARDER FOR REVIEW AND APPROVAL.
- PROVIDE AN AMPLITUDE OF ETCH OF AT LEAST 0.25" AND NO LARGER THAN 1/2 THE NORMAL COARSE AGGREGATE SIZE OF THE PRECAST COMPONENT CONCRETE.
- DO NOT SANDBLAST, ABRASE, OR USE A FORM LINER TO CREATE AN EXPOSED AGGREGATE SURFACE.
- FABRICATE IN ACCORDANCE WITH 506.

CONCRETE

- PROVIDE CONCRETE THAT CONFORM TO 502 EXCEPT ENTRAINED AIR WILL BE 5% ± 1%.

STRAND

- DESIGN BASED UPON 0.6" DIA. AASHTO M203 LOW RELAXATION STRAND.

DEFLECTION DATA

- ΔG INCLUDES GIRDER AND TOP FLANGE THICKNESS ADJUSTMENT FOR CAMBER.
- ΔC INCLUDES GROUT KEY AND INTERMEDIATE DIAPHRAGM.
- ΔD INCLUDES POLYESTER OVERLAY, RAIL, UTILITIES, AND FUTURE WEARING SURFACE.

GIRDER SHIPPING

- DO NOT SHIP PRESTRESSED CONCRETE MEMBERS UNTIL TESTS ON CONCRETE CYLINDERS MANUFACTURED FROM THE SAME CONCRETE AND CURED UNDER THE SAME CONDITIONS AS THE GIRDERS INDICATE THAT THE CONCRETE OF THE PARTICULAR MEMBER HAS ATTAINED A COMPRESSIVE STRENGTH EQUAL TO THE SPECIFIED DESIGN 28 DAY COMPRESSIVE STRENGTH.

BASIS OF PAYMENT

- PRESTRESSING CONCRETE MEMBERS IS INCIDENTAL TO THE PRECAST AND PRESTRESSED PAY ITEMS IN 502.