Section 1—BRIDGE SUPERSTRUCTURE

PC/PRETENSIONED WIDE FLANGE GIRDER (MISC DETAILS)

XS Sheet Numbers:

xs1-122-3

Description of Component:

Precast Pretensioned Wide Flange Girder (Miscellaneous Details). This sheet shall be used in conjunction with xs1-122-1 or xs1-122-2.

Standard Drawing Features:

1. Optional End Block:
   - If the end blocks are required, specify a minimum of six feet for the length to give precast manufacturers some flexibility to adjust the standard section form.
   - If the end blocks are necessary, consider using only one for each girder.
   - A notched end block is required if inverted T-bent caps are used. The designer is responsible for customizing the details for the project.
   - Three holes for #8 dowels are shown (as a minimum). However, the designer could change the number of holes based on the girder height and dowel spacing.
2. Typical End Block Section:
   - If an end block is needed, a 2 feet-6 inches width is standard with ± 1.5 inches allowable tolerance due to the difference in precast manufacturers' form. Shop drawings must show the exact end block width.
   - The shear key design at the abutment requires special attention if the girder end block is used. If bearings need to be replaced in the future, thick polyethylene may be required at the top of the bottom flange of the girder so that the girder can be jacked to provide the space.
3. Detail B:

   Typically, it is for an exterior girder only at diaphragm locations.
4. Intermediate Diaphragm and Section B-B:
   - Standard intermediate diaphragm details are provided.
   - End diaphragm design is project-specific, and the details for the intermediate diaphragms may be used for end diaphragms.
5. Welded Wire Reinforcement (WWR) Alternative and Detail A:
   - Shear reinforcement could be replaced by WWR. The contractor needs to show it on the shop drawings.

- The requirements for using WWR are listed in AASHTO-CA LRFD BDS, BDM 5.3, and the Standard Specifications.
- WWR size could vary based on the design. Minimum requirements for size and locations are shown in Detail A.

Additional Drawings Needed to Complete PS&E:

This sheet must be accompanied by xs1-122-1 or xs1-122-2

Contract Specifications:

Standard Specifications 2024

Restrictions on Use of Standard Drawings:

The project engineer is responsible for designing and stamping this sheet.

Special Considerations:

The project engineer may modify this sheet based on project needs.