

STRUCTURAL DRAWINGS AND DETAILS
Instructional Memorandum 700-GD
General Details
June 26, 2024

General

General details are available for bridges consisting of beam/girder superstructures, flat slabs, and adjacent prestressed concrete box beams and cored slabs. This standard drawing sheet includes details that are generally consistent from project to project.

Instructions to Designer

The Engineer must determine if the general details are adequate for project specific use and remove or update any details that are not suitable for the project. At a minimum, consider the following items:

- Remove all details that are not applicable to the project.
- Wherever “X” or “#” is used, replace with project specific values.
- For projects that require the pipe underdrain detail, include the Special Provision for Geotextile for Drainage Filtration in the contract proposal.
- For projects that require the adhesively bonded dowel detail, determine if field testing of the anchorage is necessary. If field testing is required, input the required test load. If field testing is not required, replace the last sentence of the second paragraph of the adhesively bonded dowel detail notes with “Field testing of the anchorages is not required.”
- Incorporate the appropriate details for two separate 2" diameter Schedule 80 PVC conduits in all concrete bridge barrier parapets and concrete railing walls. Include the applicable Expansion/Deflection Fitting detail and/or Expansion Fitting detail and the applicable notes. Expansion Fittings should be detailed for open joints at interior bents of bridges with tangent alignments where little or no transverse movement is expected. Expansion/Deflection Fittings should be detailed for open expansion joints of bridges with curved alignments and for open joints at end bents where transverse movement or rotation is expected. At openings where either type of fitting is acceptable, the Expansion Fitting should be detailed. If both Expansion Fittings and Expansion/Deflection Fittings are detailed, identify which type of fitting is required at each open joint in the concrete bridge barrier parapet or concrete railing wall. For any conduit lengths in excess of 300', include details for pull boxes and include the proper number of supplemental “J05” and “L05” bars in the Reinforcing Steel Schedule for the superstructure.
- For projects that require the drain details with grate, include the proper number of E0501 bars in the Reinforcing Steel Schedule for the superstructure. If the drainage grates are not located at the gutter line, ensure that additional anchorage is detailed for the frames.





South Carolina
Department of Transportation

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Applicable Drawings

| DGN File Name | Drawing Number | Sheet Title |
|-----------------|----------------------|---|
| 700-GEN_DETAILS | 700-07.GD01.BM | General Details, For Beam/Girder Superstructure |
| | 700-07.GD01.BM.SUP01 | General Details, For Beam/Girder Superstructure, Supplemental 1 |
| | 700-07.GD01.BM.SUP02 | General Details, For Beam/Girder Superstructure, Supplemental 2 |
| | 700-08.GD01.FS | General Details, For Flat Slab Superstructure |
| | 700-09.GD01.ABB | General Details, For Adjacent Prestressed Concrete, Box Beam Superstructure |
| | 700-10.GD01.ACS | General Details, For Adjacent Prestressed Concrete, Cored Slab Superstructure |
| | 700-10.GDALL.SUP | General Details, For All Superstructures - Supplemental |
| | 700-11.GD01.SS | General Details, Structural Steel Superstructure |

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