Based on theoretical beam center, dead load deflections of two-course surface treatment and 2" ACP overlay, and a constant grade.

This standard does not provide for changes in roadway cross-slopes within the structure.

See Lateral Connector Details.

Deflections shown are due to two-course surface treatment and 2" ACP overlay only. Actual deflections shown are theoretical and actual dimension may be less.

Adjust beam placements as necessary to accommodate crest of sag roadway or bent face. Beams are designed to accept 2" ACP overlay. Beam #1 is intended to rest on bent face of rail or bent head. It is recommended to erect beams adjacent to crown point first. For structures with a concrete slab, it is recommended to start at high side of cross-slope first and progress to the low side.

Payment for the following is considered subsidiary to the other bid items: packaged non-metallic, non-shrink cementitious grout; corrosion inhibiting bonding agent; and curing compound.

Payment for fabric joint seal is considered subsidiary to other bid items. Fabric underseal; work performed; materials furnished; and curing compound.

Concrete Decked Slab Beams Rail Anchorage Details (DSBRA).

See applicable railing details and standard Prestressed Concrete Decked Slab Beam Spans (Type 7DS20 or 7DS23).

See Bridge Layout for actual skew direction.

This standard is drawn showing right forward skew. See Bridge Layout for actual skew direction.

This standard does not support the use of transition bents.

Concrete Decked Slab Beams Rail Anchorage Details (DSBRA)

See applicable railing details and standard Prestressed Concrete Decked Slab Beam Spans (Type 7DS20 or 7DS23).

Designed according to AASHTO LRFD Bridge Design Specifications.

GENERAL NOTES:

Provide Grade 36 or 50 Lateral Connector Rods (LCR).

MATERIAL NOTES:

Provide Grade 36 or 50 Lateral Connector Rods (LCR).

See applicable railing details and standard Prestressed Concrete Decked Slab Beams Rail Anchorage Details (DSBRA).

For rail anchorage, it is recommended to erect beams adjacent to crown point first. For structures with a concrete slab, it is recommended to start at high side of cross-slope first and progress to the low side.

Payment for the following is considered subsidiary to the other bid items: packaged non-metallic, non-shrink cementitious grout; corrosion inhibiting bonding agent; fabric underseal; work performed; materials furnished; and curing compound.

Payment for fabric joint seal is considered subsidiary to other bid items.

See applicable railing details and standard Prestressed Concrete Decked Slab Beam Spans (Type 7DS20 or 7DS23).

Designed according to AASHTO LRFD Bridge Design Specifications.

GENERAL NOTES:

Provide Grade 36 or 50 Lateral Connector Rods (LCR).

MATERIAL NOTES:

Provide Grade 36 or 50 Lateral Connector Rods (LCR).

See applicable railing details and standard Prestressed Concrete Decked Slab Beams Rail Anchorage Details (DSBRA).

For rail anchorage, it is recommended to erect beams adjacent to crown point first. For structures with a concrete slab, it is recommended to start at high side of cross-slope first and progress to the low side.

Payment for the following is considered subsidiary to the other bid items: packaged non-metallic, non-shrink cementitious grout; corrosion inhibiting bonding agent; fabric underseal; work performed; materials furnished; and curing compound.

Payment for fabric joint seal is considered subsidiary to other bid items.
1. Fabricator must adjust beam lengths for beam slopes as required.
2. Screw and center 1" diameter smooth lateral connector rod (LCR) in the bottom of the flange connector "pay off" prior to welding to minimize grout leakage. (See where necessary between connectors.)
3. Cast steel surfaces in contact with grout with a 3-component, water-based, epoxy-modified cement bonding agent including a corrosion inhibitor (BASF Emaco P2, Euclid Cor-R-Bond, Sikadur 110 Epoxy or approved equal). Submit material data sheet to Engineer For approval, prior to use. Apply in accordance with manufacturer’s specifications and let prior to 12 hours before grout placement.
4. Fill shear keys with grout that meets the requirements of OMS 4675 “Concrete Mixes and Casters for Miscellaneous Applications” and is capable of a compressive strength of 4,000 psi after 3 days of curing at atmospheric temperatures. Surface preparation, mixing and consistency of grout, placing, and curing grout must follow the manufacturer’s recommendations. Curing compounds are not allowed. Cure 3 days, minimum, prior to placing surface treatment and overlay. Approximate grout quantity for three beam joints = 0.33 CF of grout per foot of span length.
5. Use forming material between lateral connectors. Maintain a uniform joint depth along length of beams.
6. Lateral connector rods are subsidiary to other pertinent bid items.
7. After the specified cure times for the grout is reached, apply fabric underseal to the limits shown. Use fabric underseal meeting the requirements of Item 236, “Fabric Underseal”. Maintain a uniform joint depth along length of beams.
8. Provide joint for roadway width and/or between toe of rails on the superstructure.
9. Place backer rod in joint opening prior to placing binder. Backer rods must be suitable for contact with hot asphalt.
11. Tuck fabric 1" into joint opening. Mark location of centerline of joint on curb or barrier as approved.
12. After the asphaltic concrete pavement operations are complete, saw cut through the asphalt at centerline of joint. Make multiple saw cuts to create a 6" minimum joint opening. Depth of saw cut will be 1½ less than total ACP overlay over joint. Do not damage the undersurface.
13. Seal the joint opening with a Class I, "Hot Poured Rubber” in accordance with DMS-6310, “Joint Sealants and Fillers”. Seal flush with the top of the asphaltic concrete pavement.