Chapter 02 - Substructure

SECTION 03

WING WALLS (SUB-WW)
Exposed face to have chamfer unless otherwise specified on the Plans.

1” Sponge type expansion joint filler material full height of key (top of footing to top of parapet). Fasten to one face with copper nails.

Reinforcing steel shall not pass through expansion joint.

Note:
1. For details not shown see sheet 2 of 3.
2. This joint is required when distance from joint to end of wall is 25’ or greater.
3. Material in end post area shall be cut to fit shape of end post.
4. Slanted lettering indicates notes “For Office Use Only”.
5. Wing wall expansion joint locations shall be located within a striated panel, or edge of architectural treatment where abutment has this requirement.
Transition stepped key (Section A-A) to straight face (Section B-B) at beam seat elevation. Carry straight joint up through end post.

Provide two layers of tar paper horizontal in transition area. Fasten to concrete with asphaltic cement.

Stop additional #6 bar at this level.

Two layers of tar paper full height of key. Fasten to concrete with asphaltic cement.

Normal vertical steel not shown.

As shown in Elevation.

#6 full height.
Exposure face to have chamfer unless otherwise specified on the Plans.

Reinforcing steel shall not pass through expansion joint.

1" Sponge type expansion joint filler material full height of sidewalk area.
Other expansion joint material as indicated on Sheet 1 of 3. Fasten to one face with copper nails.

See notes on Sheet 1 of 3.
Normal #6 dowels for end posts (epoxy coated).

Additional #6 dowels only in approach end of end posts (epoxy coated). These additional #6 dowels should extend in area 6'-2" from end of endpost, see endpost standards.

5-#5 bars @ 1'-0" c/c

3-#6's to follow slope of overhang

Normal wing wall reinforcement

Note:
For Section A-A see sheet nos. 2 & 3 of 3.

Notes to Designer:
1. For bridges without a median barrier, use the approach end detail on all 4 end posts.
2. Use cantilever section when utilizing an existing foundation (i.e. deck replacement or superstructure replacements only.)
For exact configuration of parapet and conduits, see the typical bridge section.

Normal #6 dowels 5'-0" long for end post include additional #6 dowels 5'-0" long in 6'-2" approach end of end posts (epoxy coated).

Finished roadway

2 - ply waterproofing membrane

3-#6 bars

2" x 4" construction key

#5 bars @ 1'-0" c/c

Normal wing wall reinforcement (typ.)

3-#5's @ 1'-0" max. c/c to follow slope of overhang

SECTION A-A - APPROACH END

Scale: 1/2" = 1'-0"

Note:
For endpost configuration, refer to wing wall and endpost plans.
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For endpost configuration, refer to wing wall and endpost plans.
**CHEEK WALL AT BRIDGE ABUTMENT WITH FIXED BEARINGS OR EXPANSION BEARINGS WITH LENGTH CONTRIBUTING TO EXPANSION ≤ 70 FT.**

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**SECTION A-A**
- Scale: \(\frac{3}{8}\)" = 1'-0"

- Top to be 1" below bottom of superstructure
- Epoxy coated #5 @ 12" c/c
- Roughened constr. joint
- 2-#5 bars epoxy coated
- Minimum 1'-6"

**SECTION B-B**
- Scale: \(\frac{3}{8}\)" = 1'-0"

- Top to be 1" below bottom of superstructure
- Epoxy coated #5 @ 12" c/c
- Roughened constr. joint
- 2-#5 bars epoxy coated
- Minimum 1'-6"

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**Note:**

- If formliners or other aesthetic treatment is used on the outside face of the cheekwall, the cheekwall shall be cast monolithically with the abutment stem.

- **For location and size of coping and size of cheekwall see Plans.**
CHEEK WALL AT BRIDGE ABUTMENT WITH EXPANSION BEARINGS WITH LENGTH CONTRIBUTING TO EXPANSION > 70 FT.

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**CHEEK WALL AT BRIDGE ABUTMENT WITH EXPANSION BEARINGS WITH LENGTH CONTRIBUTING TO EXPANSION > 70 FT.**
Expansion joint cross beam

Top of roadway

#5 bars @ 1'-0" c/c (epoxy coated)

Construction joint with 2"x6" key

2-#5's each face placed as shown (epoxy coated)

Wing wall

Support column

Note:
Notch out a portion of wing wall to clear the #8 hook bar

For exact configuration of parapet see "Typical Section of Bridge"

Reinforcing bars in wing wall and parapet are not shown for clarity.