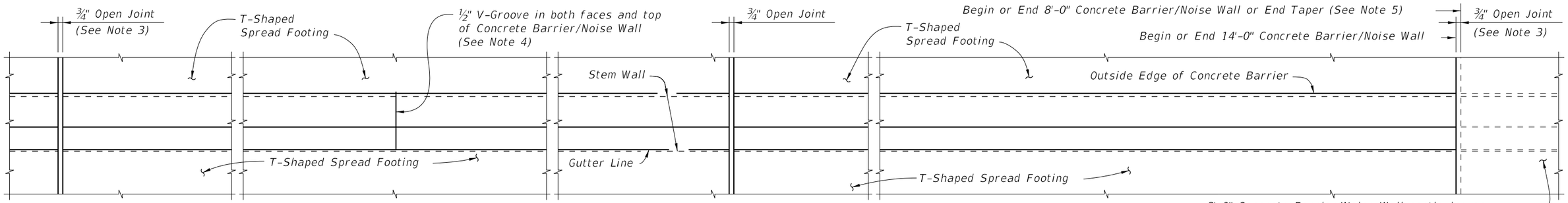
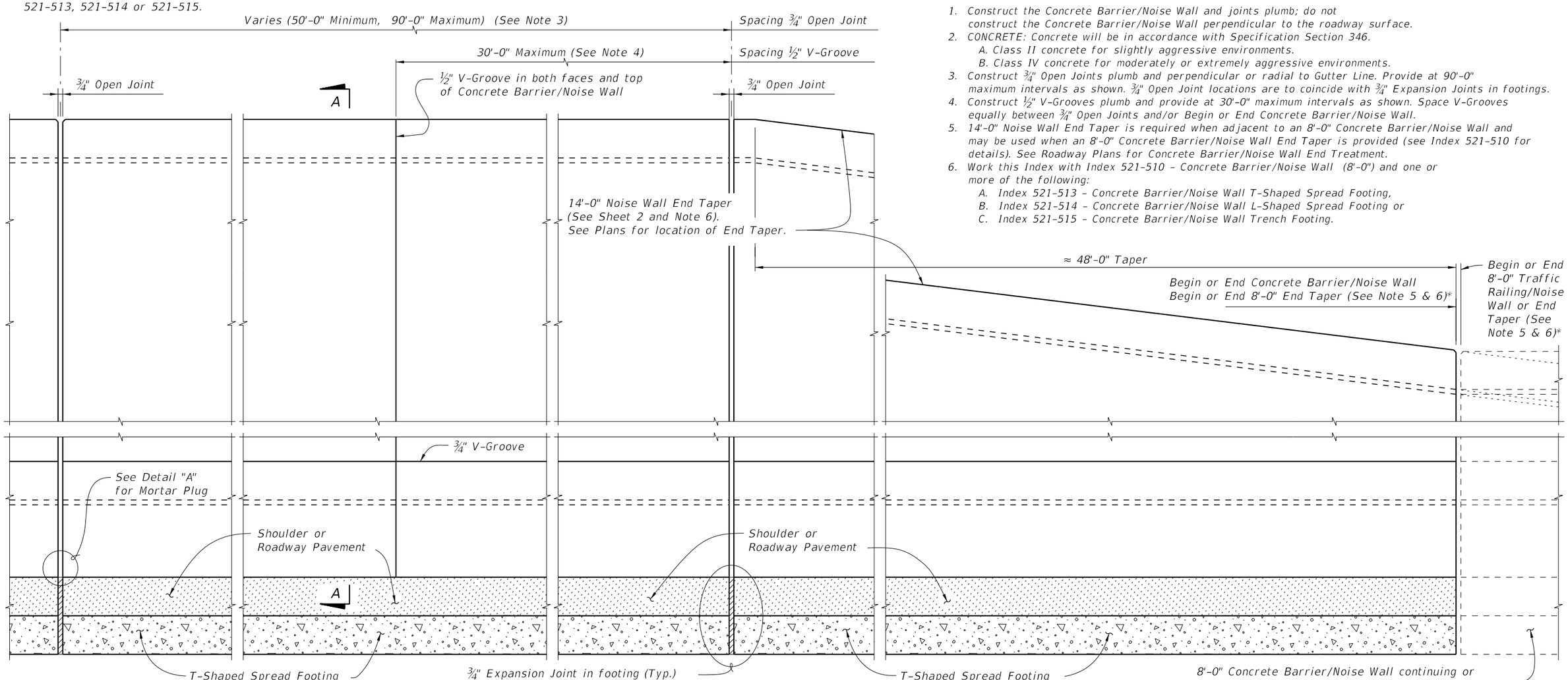



CROSS REFERENCE:
For Section A-A, Detail "A" and Estimated Quantities, see Sheet 3.
For Expansion Joint Detail in Footing, see Index 521-513, 521-514 or 521-515.

## PLAN (Reinforcing Steel not shown for clarity) (T-Shaped Spread Footing Shown, L-Shaped Spread Footing and Trench Footing Similar)




## ELEVATION OF INSIDE FACE OF CONCRETE BARRIER/NOISE WALL (Reinforcing Steel not shown for clarity) (T-Shaped Spread Footing Shown, L-Shaped Spread Footing and Trench Footing Similar)

* ¾" Open Joint may be omitted when 8'-0" Railing/Noise Wall End Taper is adjacent to a 14'-0" Concrete Barrier/Noise Wall End Taper.

### Concrete Barrier/NOISE WALL NOTES

1. Construct the Concrete Barrier/Noise Wall and joints plumb; do not construct the Concrete Barrier/Noise Wall perpendicular to the roadway surface.
2. CONCRETE: Concrete will be in accordance with Specification Section 346.
   A. Class II concrete for slightly aggressive environments.
   B. Class IV concrete for moderately or extremely aggressive environments.
3. Construct ¾" Open Joints plumb and perpendicular or radial to Gutter Line. Provide at 90'-0" maximum intervals as shown. ¾" Open Joint locations are to coincide with ¾" Expansion Joints in footings.
4. Construct ½" V-Grooves plumb and provide at 30'-0" maximum intervals as shown. Space V-Grooves equally between ¾" Open Joints and/or Begin or End Concrete Barrier/Noise Wall.
5. 14'-0" Noise Wall End Taper is required when adjacent to an 8'-0" Concrete Barrier/Noise Wall and may be used when an 8'-0" Concrete Barrier/Noise Wall End Taper is provided (see Index 521-510 for details). See Roadway Plans for Concrete Barrier/Noise Wall End Treatment.
6. Work this Index with Index 521-510 - Concrete Barrier/Noise Wall (8'-0") and one or more of the following:
   A. Index 521-513 - Concrete Barrier/Noise Wall T-Shaped Spread Footing,
   B. Index 521-514 - Concrete Barrier/Noise Wall L-Shaped Spread Footing or
   C. Index 521-515 - Concrete Barrier/Noise Wall Trench Footing.

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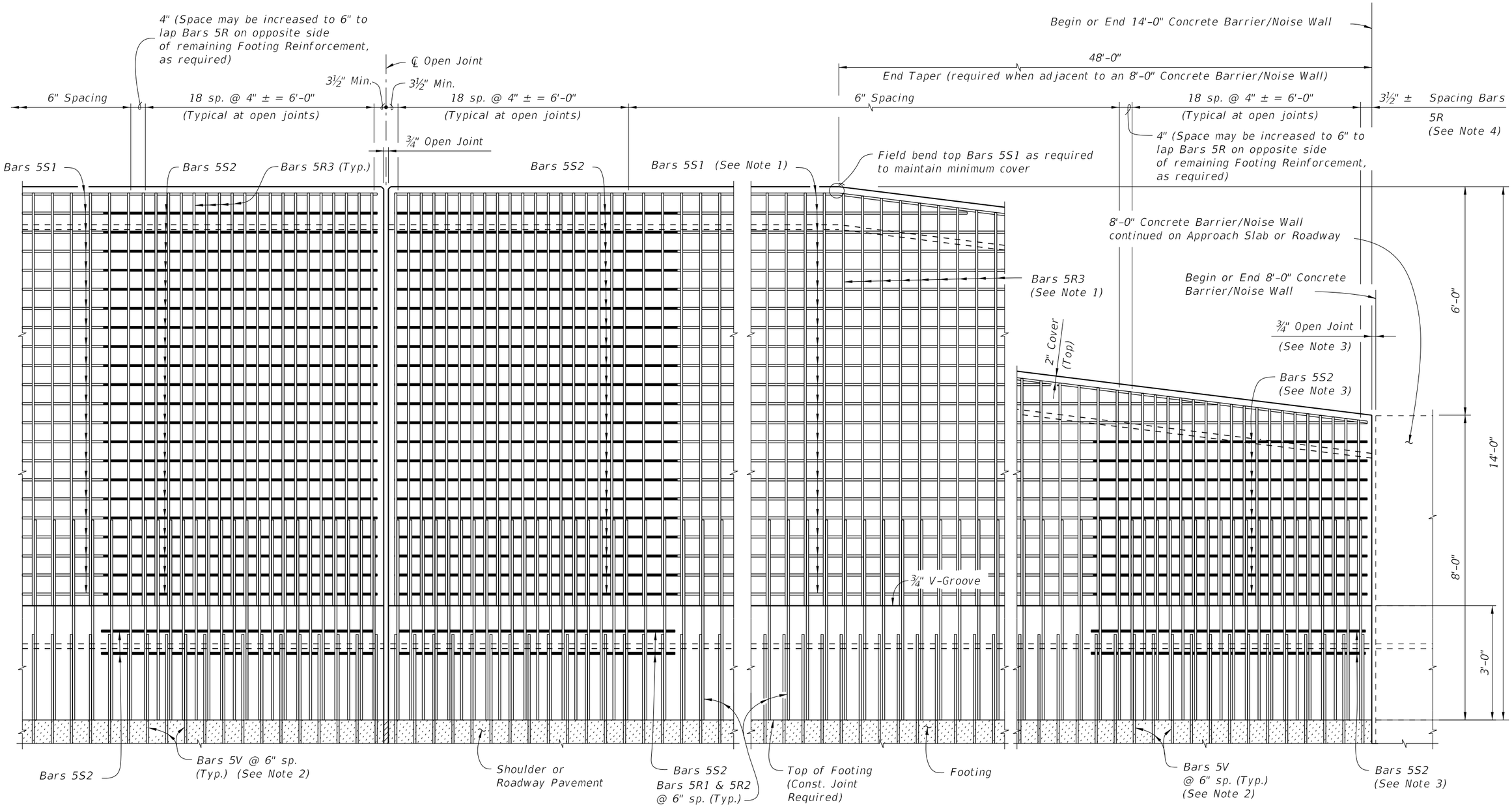
| LAST REVISION | REVISION | DESCRIPTION: | | | INDEX | SHEET |
|---|---|---|---|---|---|---|
| 11/01/23 | | | FY 2025-26 STANDARD PLANS | CONCRETE BARRIER/NOISE WALL (14'-0") | 521-511 | 1 of 3 |




ELEVATION OF CONCRETE BARRIER/NOISE WALL REINFORCING STEEL
(Bars 5S1 in Railing not shown for clarity)

ELEVATION OF CONCRETE BARRIER/NOISE WALL END TAPER
(Bars 5S1 in Railing not shown for clarity)

NOTES:
1. Field Cut Bars 5R & 5S1 in Noise Wall End Taper as required to maintain minimum cover.
2. See Index 521-513, 521-514 and 521-515 for footing reinforcement.
3. ¾" Open Joint may be omitted when 8'-0" Railing/Noise Wall End Taper is adjacent to a 14'-0" Concrete Barrier/Noise Wall End Taper as shown on Sheet 1. See Index 521-510 for reinforcement details and spacing. Bars 5S2 are not required when ¾" Open Joint is omitted.
4. Bar spacing shown is along the Gutter Line.

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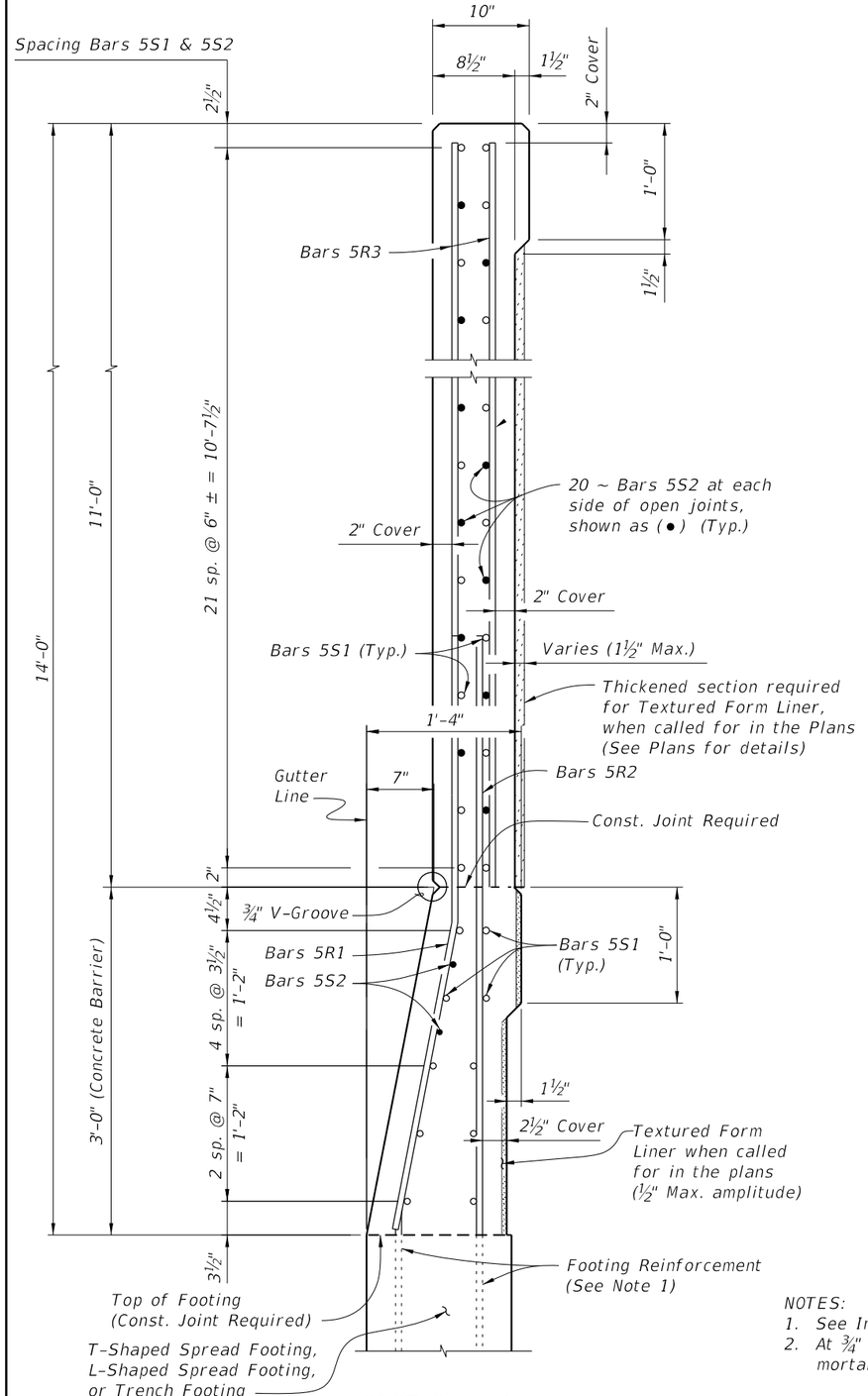
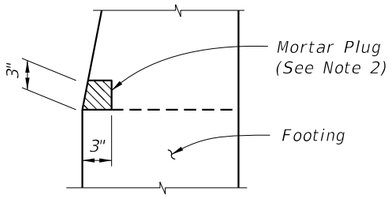
| LAST REVISION | REVISION | DESCRIPTION: | FY 2025-26 STANDARD PLANS | CONCRETE BARRIER/NOISE WALL (14'-0") | INDEX | SHEET |
|---|---|---|---|---|---|---|
| 11/01/18 | | | | | 521-511 | 2 of 3 |




SECTION A-A
TYPICAL SECTION THRU CONCRETE BARRIER/NOISE WALL

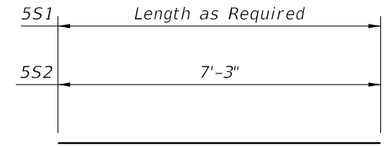



DETAIL "A" -
SECTION AT OPEN JOINT

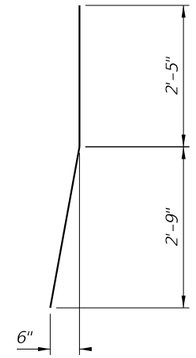
NOTES:
1. See Index 521-513, 521-514 or 521-515 for footing reinforcement.
2. At ¾" Open Joints, plug the lower 3" portion of the open joint by filling it with mortar in accordance with Specification Section 400.

## REINFORCING STEEL BENDING DIAGRAMS

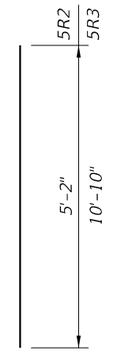
| BILL OF REINFORCING STEEL | | |
|---|---|---|
| MARK | SIZE | LENGTH |
| R1 | 5 | 5'-2" |
| R2 | 5 | 5'-2½" |
| R3 | 5 | 10'-10" |
| S1 | 5 | AS REQD. |
| S2 | 5 | 7'-3" |




BARS 5S1 & 5S2




BAR 5R1 (FF)




BAR 5R2 &
BAR 5R3

REINFORCING STEEL NOTES:

1. All bar dimensions in the bending diagrams are out to out.
2. All reinforcing steel at the open joints will have a 2" minimum cover.
3. Bars 5R may be continuous or spliced at construction joints. Lap splices for Bars 5R, and 5S1 will be a minimum of 2'-2".
4. The Contractor may use Welded Wire Reinforcement (WWR) when approved by the Engineer. WWR must consist of Deformed wire meeting the requirements of Specification Section 931.

| ESTIMATED CONCRETE BARRIER/NOISE WALL QUANTITIES | | |
|---|---|---|
| ITEM | UNIT | QUANTITY |
| Concrete (Concrete Barrier) | CY/FT | 0.107 |
| Concrete (Noise Wall, excluding any thickening) | CY/FT | 0.293 |
| Reinforcing Steel (Railing/Noise Wall) (Bars R1, R2, R3, S1 & V) | LB/FT | 120.88 |
| Additional Reinf. @ Open Joint (Railing/Noise Wall) | LB | 378.22 |

CROSS REFERENCE:
For locations of Section A-A and Detail "A", see Sheet 1.

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