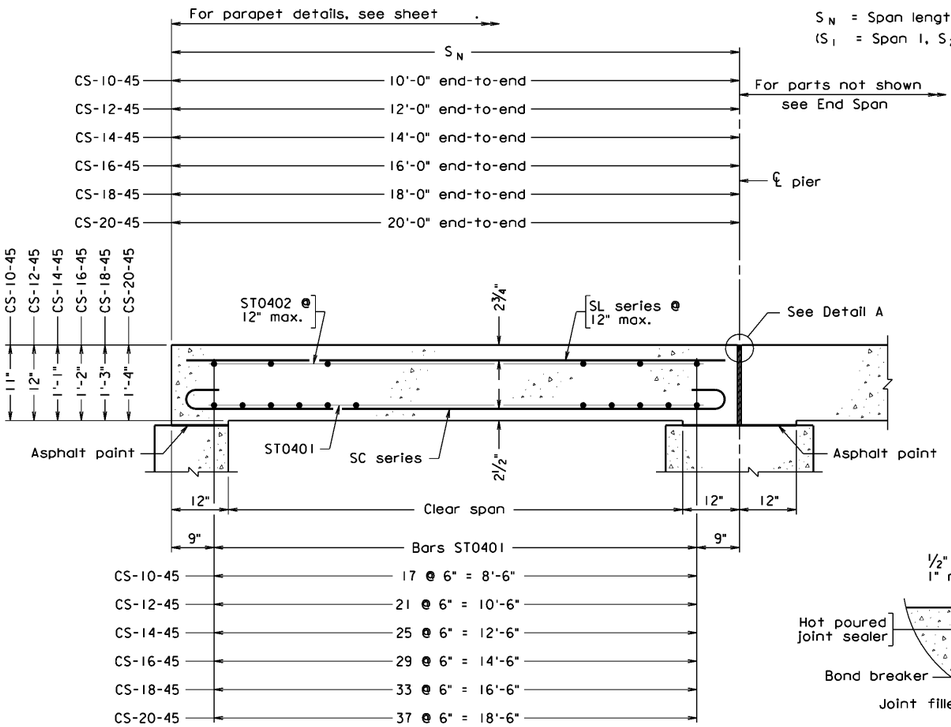
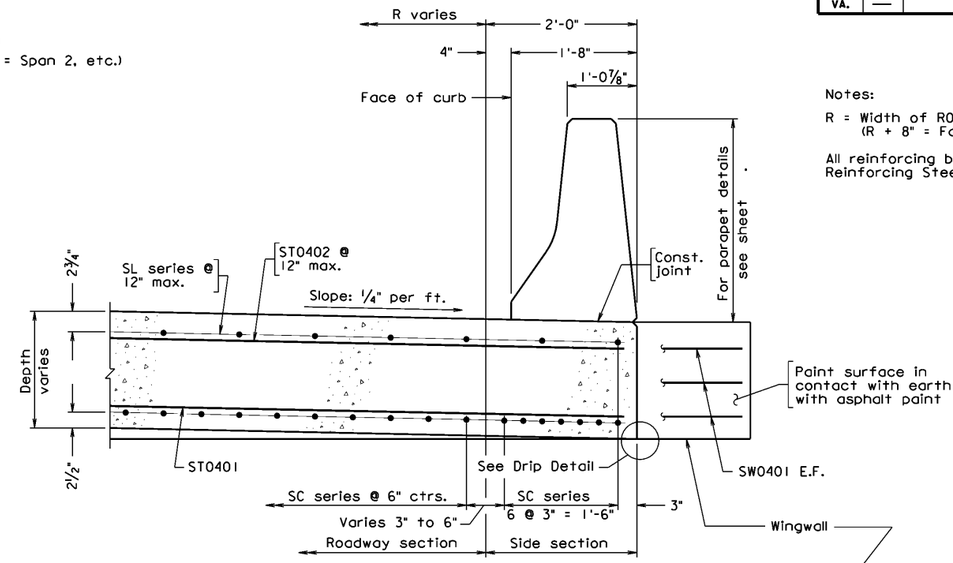
| STATE | FEDERAL AID ROUTE | FEDERAL AID PROJECT | STATE ROUTE | STATE PROJECT | SHEET NO. |
|---|---|---|---|---|---|
| VA. | — | | | | |




LONGITUDINAL SECTION

$S_N$ = Span length
($S_1$ = Span 1, $S_2$ = Span 2, etc.)

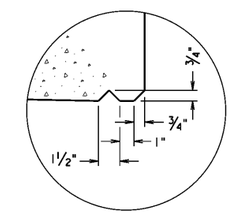



PART TRANSVERSE SECTION

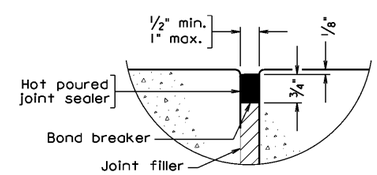
Notes:

R = Width of ROADWAY SECTION.
(R + 8" = Face-to-face of curb dimension)

All reinforcing bars in superstructure shall be Corrosion Resistant Reinforcing Steel, Class __.

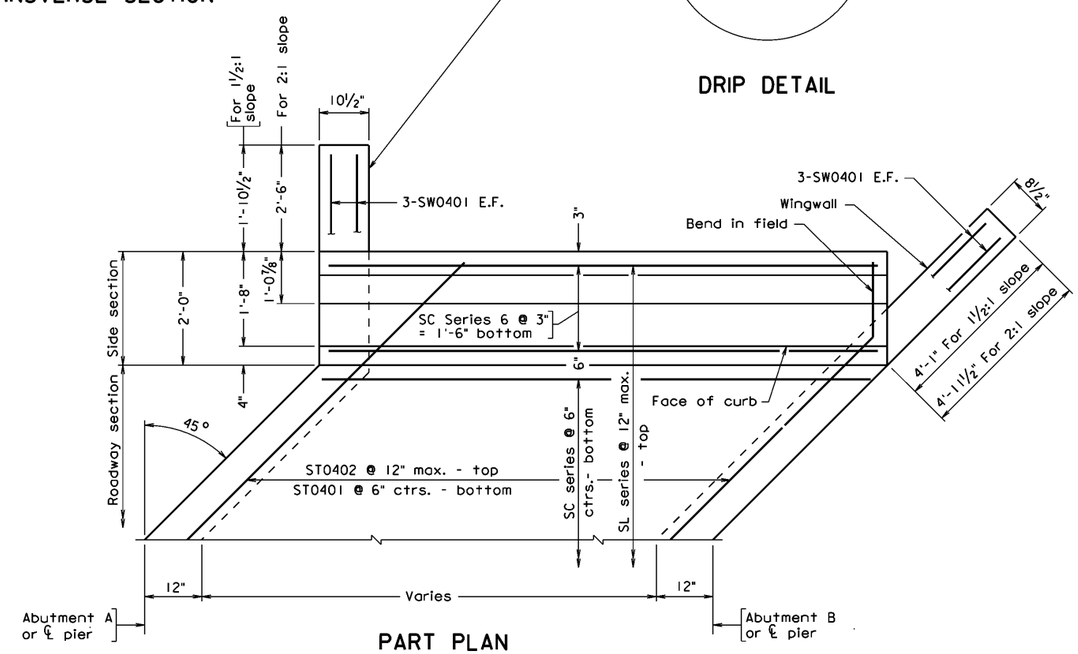



DRIP DETAIL




DETAIL A

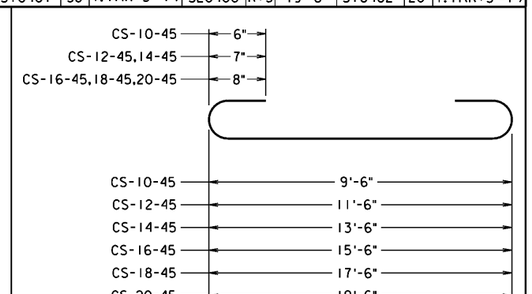
Note: Joint sealer to extend full width of slab. For sealer in parapet, see Section C-C on sheet .




PART PLAN

## REINFORCING STEEL SCHEDULE

| Span | 4 WINGWALLS Mark | No. | Length 1½:1 | Length 2:1 | 2 SIDE SECTIONS** Mark | No. | Length | Pin ø | ROADWAY SECTION Mark | No.* | Length | Pin ø | Mark | No. | Length | Mark | No.* | Length | Mark | No. | Length |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CS-10-45 | SW0401 | 24 | 5'-0" | 5'-10" | SC0601 | 14 | 10'-11" | 4½" | SC0601 | 2R | 10'-11" | 4½" | ST0401 | 18 | 1.41(R+3'-7") | SL0401 | R+5 | 9'-6" | ST0402 | 10 | 1.41(R+3'-7") |
| CS-12-45 | SW0401 | 24 | 5'-0" | 5'-10" | SC0702 | 14 | 13'-1" | 5¼" | SC0702 | 2R | 13'-1" | 5¼" | ST0401 | 22 | 1.41(R+3'-7") | SL0402 | R+5 | 11'-6" | ST0402 | 12 | 1.41(R+3'-7") |
| CS-14-45 | SW0401 | 24 | 5'-0" | 5'-10" | SC0703 | 14 | 15'-1" | 5¼" | SC0703 | 2R | 15'-1" | 5¼" | ST0401 | 26 | 1.41(R+3'-7") | SL0403 | R+5 | 13'-6" | ST0402 | 14 | 1.41(R+3'-7") |
| CS-16-45 | SW0401 | 24 | 5'-0" | 5'-10" | SC0804 | 14 | 17'-4" | 6" | SC0804 | 2R | 17'-4" | 6" | ST0401 | 30 | 1.41(R+3'-7") | SL0404 | R+5 | 15'-6" | ST0402 | 16 | 1.41(R+3'-7") |
| CS-18-45 | SW0401 | 24 | 5'-0" | 5'-10" | SC0805 | 14 | 19'-4" | 6" | SC0805 | 2R | 19'-4" | 6" | ST0401 | 34 | 1.41(R+3'-7") | SL0405 | R+5 | 17'-6" | ST0402 | 18 | 1.41(R+3'-7") |
| CS-20-45 | SW0401 | 24 | 5'-0" | 5'-10" | SC0806 | 14 | 21'-4" | 6" | SC0806 | 2R | 21'-4" | 6" | ST0401 | 38 | 1.41(R+3'-7") | SL0406 | R+5 | 19'-6" | ST0402 | 20 | 1.41(R+3'-7") |




Notes:

Dimensions shown in bending diagram are out-to-out of bars.
*Round number of bars to next highest whole number.
**This does not include SL and ST Series shown in SIDE SECTION. These bars are tabulated in the ROADWAY SECTION.

| DIMENSION DATA |
|---|
| R = |
| $S_1$ = |
| $S_2$ = |

Not to scale

©2013, Commonwealth of Virginia

| No. | Description | Date |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Revisions

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

STRUCTURE AND BRIDGE DIVISION

# CONCRETE SLAB DETAILS

Designed: .....
Drawn: .....
Checked: .....

| Date | Plan No. | Sheet No. |
|---|---|---|
| | CS-10-20-45 | |

Sealed and Signed by:
Julius F.J. Volgyi Jr.
Lic. No. 010487
On the date of
January 25, 2013

A copy of the original sealed and signed standard drawing is on file in the Central Office.

VDOT S&B DIVISION
RICHMOND, VA
STRUCTURAL ENGINEER

CS-10-20-45 01-25-2013

cs102045.dgn

**CAST-IN-PLACE CONCRETE SLAB SPANS**

**CONCRETE SLAB DETAILS**
**10'-20' SPANS – 45° SKEW**

**NOTES TO DESIGNER:**

Standard to be used for the construction of standard cast-in-place concrete slab spans.

Standard is for: 45° skew
10', 12', 14', 16', 18' and 20' span length (end-to-end)

| ESTIMATED QUANTITIES | | | | |
|---|---|---|---|---|
| Span | **4 Wingwalls 1 ½ : 1** | | **4 Wingwalls 2:1** | |
| | Cl. A4 Conc. | Reinf. Steel | Cl. A4 Conc. | Reinf. Steel |
| | CY | LB | CY | LB |
| CS-10-45 | 0.3 | 80 | 0.4 | 90 |
| CS-12-45 | 0.3 | 80 | 0.4 | 90 |
| CS-14-45 | 0.3 | 80 | 0.4 | 90 |
| CS-16-45 | 0.4 | 80 | 0.5 | 90 |
| CS-18-45 | 0.4 | 80 | 0.5 | 90 |
| CS-20-45 | 0.4 | 80 | 0.5 | 90 |
| Span | **2 Side Sections** | | **Roadway Section** | |
| | Cl. A4 Conc. | Reinf. Steel | Cl. A4 Conc. | Reinf. Steel |
| | CY | LB | CY | LB |
| CS-10-45 | 1.3 | 230 | 0.33R | 67(R+1) |
| CS-12-45 | 1.7 | 370 | 0.44R | 95(R+1) |
| CS-14-45 | 2.2 | 430 | 0.56R | 111(R+1) |
| CS-16-45 | 2.7 | 650 | 0.69R | 148(R+1) |
| CS-18-45 | 3.3 | 720 | 0.83R | 166(R+1) |
| CS-20-45 | 3.9 | 800 | 0.99R | 184(R+1) |

**ADD THE FOLLOWING NOTES, DIMENSIONS, DETAILS, ETC. TO STANDARD:**

PROJECT/TITLE BLOCKS:

Project block and title block shall be completed in accordance with Manual of the Structure and Bridge Division, Volume V – Part 2, Chapter 4.

DIMENSION DATA:

Enter R, $S_1$, $S_2$, etc. in the DIMENSION DATA table.

SLAB SPAN DETAILS:

Indicate appropriate slab depth based on span length for required slab span details.

**CAST-IN-PLACE CONCRETE SLAB SPANS**

**CONCRETE SLAB DETAILS**
**10'-20' SPANS – 45° SKEW**

**ADD THE FOLLOWING NOTES, DIMENSIONS, DETAILS, ETC. TO STANDARD cont'd:**

NOTES:

Complete second note by adding the Class I, II or III of corrosion resistant reinforcing steel required. For additional information on corrosion resistant reinforcing steels (CRR), see Structure and Bridge Division Memorandum (current IIM-S&B-81).