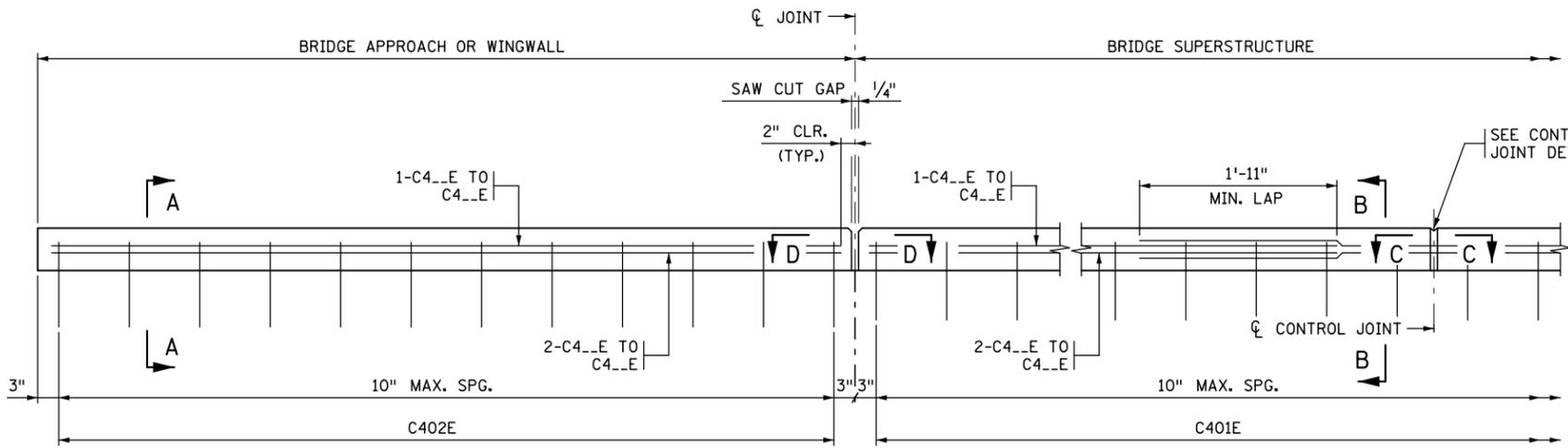
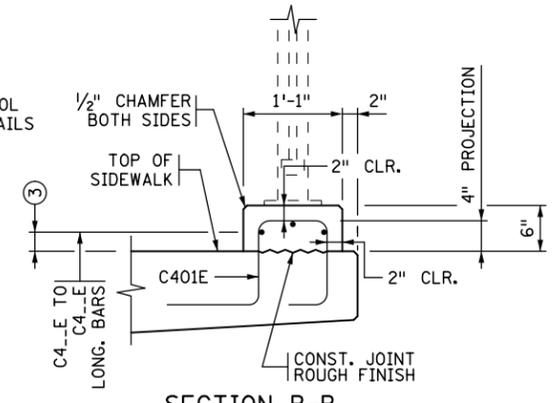


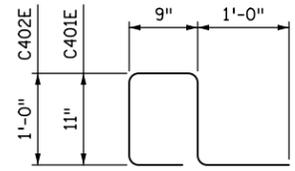
SECTION A-A



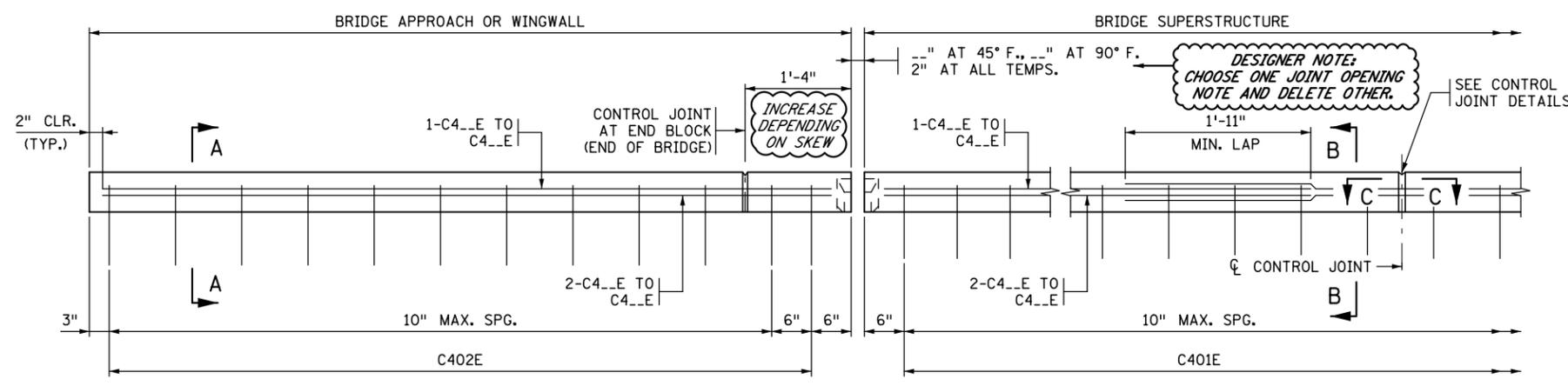
JOINT AT ABUTMENT  
INTEGRAL OR SEMI-INTEGRAL ABUTMENT  
(SEE ABUTMENT TYPE TABLE BELOW)  
INSIDE ELEVATION OF CONCRETE CURB



SECTION B-B

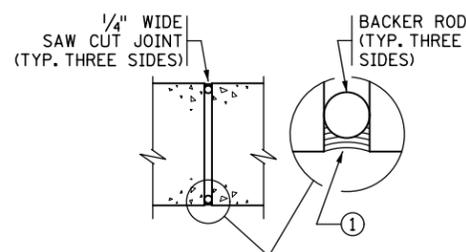


C401E, C402E



JOINT AT ABUTMENT  
PARAPET ABUTMENT (SEE ABUTMENT TYPE TABLE BELOW)  
(USE ONLY WITH STRIP SEAL EXPANSION DEVICE)  
(EXPANSION DEVICE NOT SHOWN)  
INSIDE ELEVATION OF CONCRETE CURB

BAR	NO.	LENGTH	SHAPE	LOCATION
C401E		4'-2"	U	CURB BASE VERTICAL
C402E		4'-4"	U	CURB BASE VERTICAL
C4_E			—	CURB BASE LONGIT.
C4_E			—	CURB BASE LONGIT.
C4_E			—	CURB BASE LONGIT.



SECTION D-D

CURB DOES NOT MEET CRASH TEST REQUIREMENTS OF NCHRP REPORT 350 OR MASH

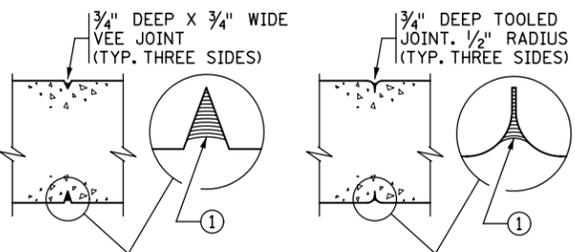
**DESIGNER NOTES**  
REMOVE PRIOR TO PLOTTING FINAL PLAN.  
T-3 AND T-4 ORNAMENTAL METAL RAILINGS MOUNTED ON A CURB MUST BE PROTECTED BY A TRAFFIC BARRIER.  
A SPECIAL CURB DESIGN IS REQUIRED IF SUPPORTING LIGHTING OR OTHER FIXTURES/ATTACHMENTS.  
IF THE CURB CONTAINS A CONDUIT, USE CAST-IN-PLACE ANCHORAGES FOR THE RAILING ATTACHMENT.  
BLOCK OUT AND CROSS HATCH ALL DETAILS NOT BEING USED.

ABUTMENT TYPE	
INTEGRAL OR SEMI-INTEGRAL ABUTMENT	<input type="checkbox"/>
PARAPET ABUTMENT	<input type="checkbox"/>

DESIGNER NOTE: PLACE AN "X" IN THE APPROPRIATE BOX TO INDICATE ABUTMENT TYPE

GENERAL NOTES

- CONTINUOUSLY GROUND ALL METAL RAILINGS; SEE THE SPECIAL PROVISIONS. REFER TO THE ELECTRICAL PLANS AND ELECTRICAL SPECIAL PROVISIONS FOR DETAILS REGARDING BONDING MULTIPLE ELECTRICAL GROUNDING SYSTEMS.
- MEASURE PAYMENT LENGTH BETWEEN THE OUTSIDE ENDS OF THE CONCRETE CURB.
- CONCRETE CURB = 81 LBS./FT. (0.020 CU. YDS./FT.)
- FINISH ALL EDGES OF CURB WITH 1/2" CHAMFER, EXCEPT WHERE OTHERWISE NOTED.
- MAXIMUM SPACING OF CONTROL JOINTS ON SUPERSTRUCTURE, APPROACH AND WINGWALL IS 10 FT. SEE SUPERSTRUCTURE SHEET FOR JOINT SPACING.
- CONCRETE CURB QUANTITIES ARE LISTED IN SUMMARY OF QUANTITIES FOR SUPERSTRUCTURE.
- ① JOINT SEALANT PER MNDOT APPROVED/QUALIFIED PRODUCTS LIST - CRACK AND JOINT MATERIALS - SILICONE JOINT SEALERS.
- ② REFER TO STANDARD FIGURE 5-397.632 FOR COVER PLATE DETAILS.
- ③ TO MAXIMIZE CLEARANCES FOR ANCHORAGES, PLACE TOP OF OUTSIDE LONGITUDINAL BARS 2" FROM DECK SURFACE (TYP.).



SECTION C-C  
CONTRACTOR OPTION 1  
SECTION C-C  
CONTRACTOR OPTION 2  
CONTROL JOINT DETAILS

WHEN USING SLIP FORM METHOD TO PLACE THE CONCRETE, CUT JOINT 3 INCHES DEEP USING MARGIN TROWEL OR SIMILAR MEANS IMMEDIATELY AFTER CONCRETE PLACEMENT (TYP. THREE SIDES)

REVISION: 08-24-2016  
APPROVED: NOVEMBER 6, 2013  
Nancy Subenberger  
STATE BRIDGE ENGINEER

CERTIFIED BY \_\_\_\_\_ DATE \_\_\_\_\_  
LICENSED PROFESSIONAL ENGINEER  
NAME: \_\_\_\_\_ LIC. NO. \_\_\_\_\_

TITLE: CONCRETE CURB FOR USE WITH ORNAMENTAL RAILING

DES: \_\_\_\_\_ DR: \_\_\_\_\_  
CHK: \_\_\_\_\_ CHK: \_\_\_\_\_  
APPROVED: \_\_\_\_\_  
SHEET NO. OF SHEETS  
BRIDGE NO. \_\_\_\_\_

FIG. 5-397.167