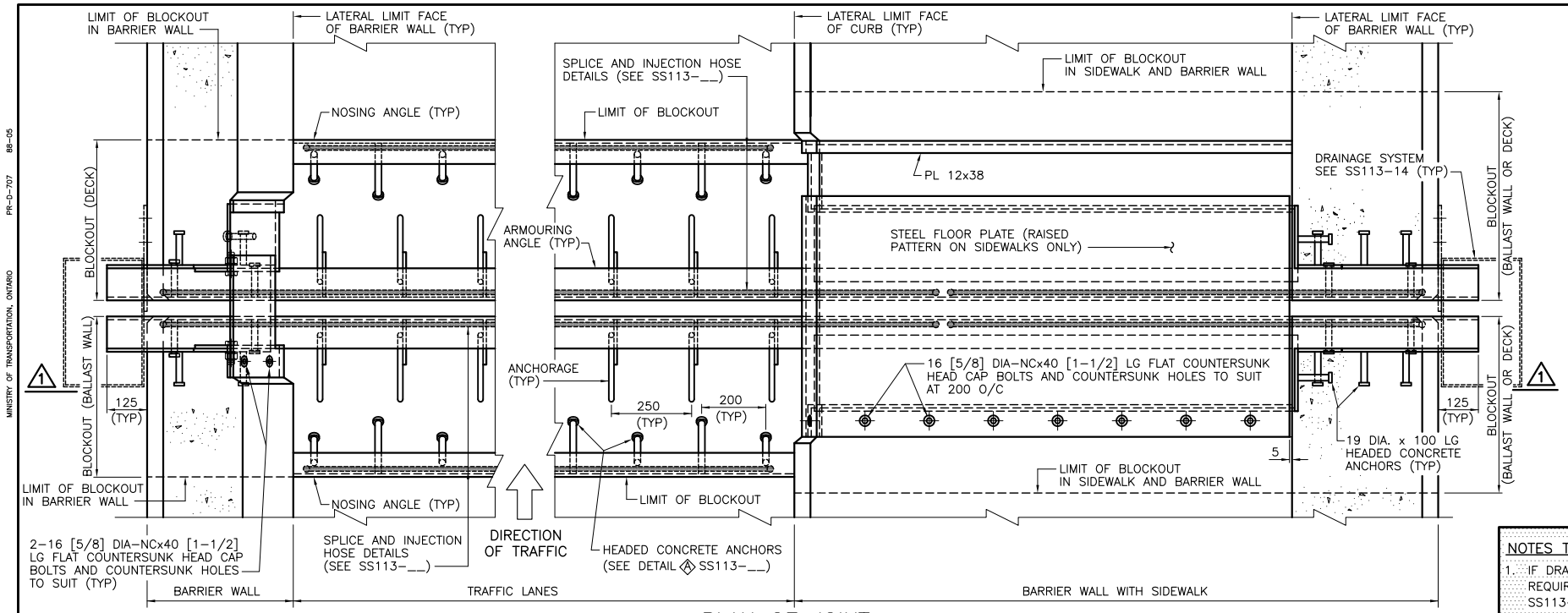
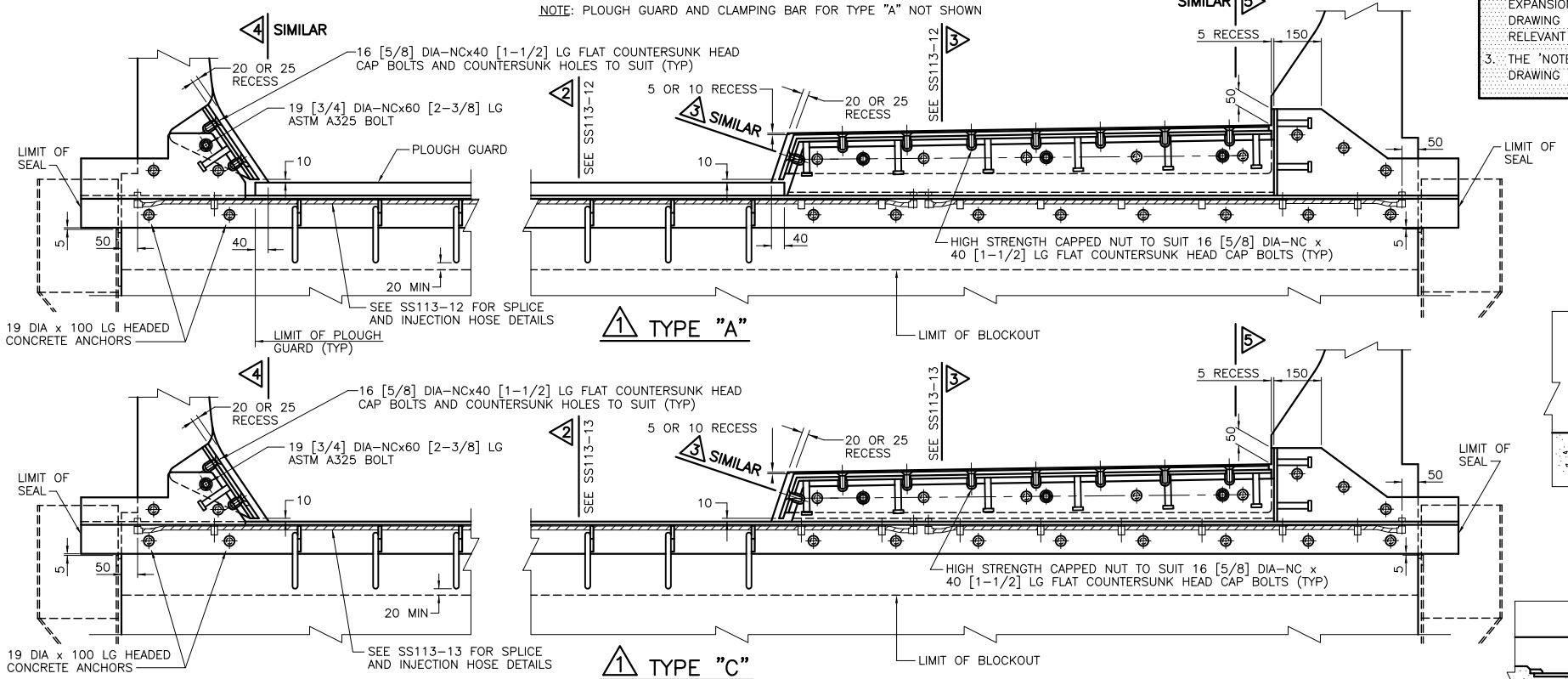
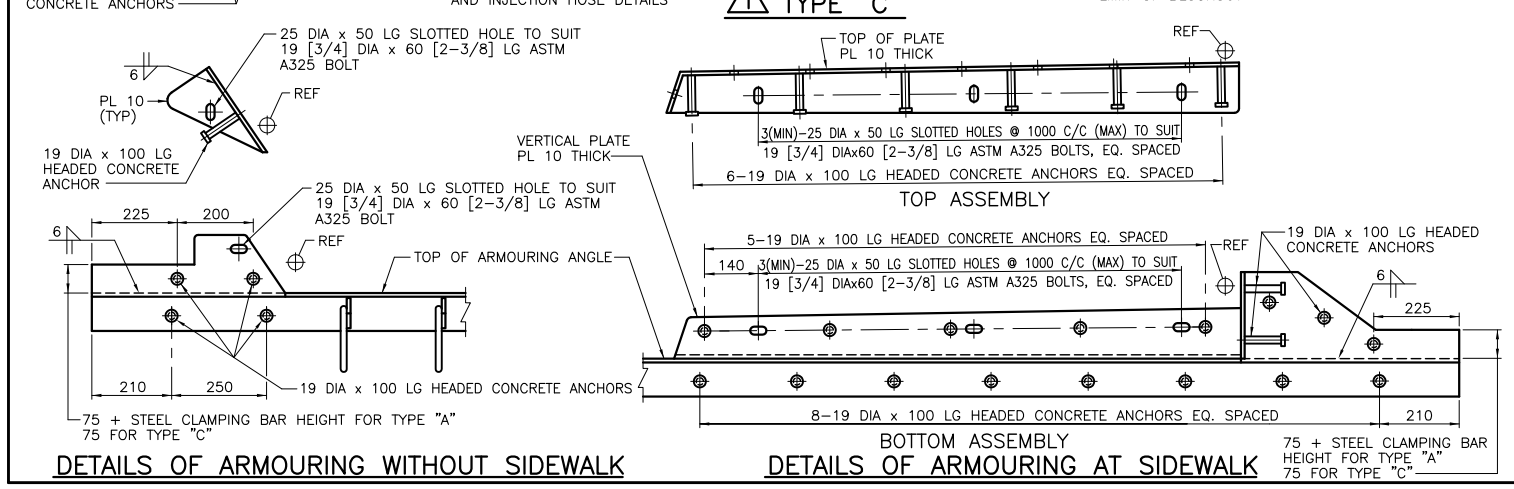


PLAN OF JOINT

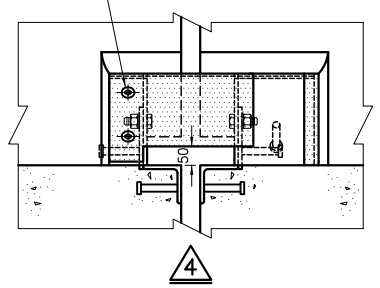
NOTE: PLOUGH GUARD AND CLAMPING BAR FOR TYPE "A" NOT SHOWN

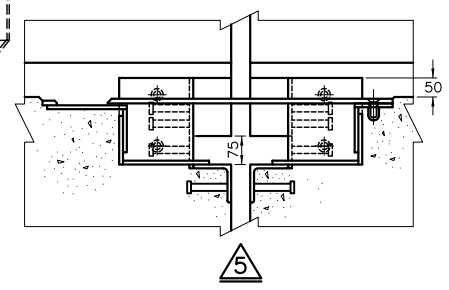




DETAILS OF ARMOURING WITHOUT SIDEWALK

DETAILS OF ARMOURING AT SIDEWALK





METRIC

DIMENSIONS ARE IN METRES AND/OR MILLIMETRES UNLESS OTHERWISE SHOWN

CONT No
WP No

SHEET

STRIP SEAL EXPANSION JOINT ASSEMBLY FOR BARRIER WALLS – WITH DRAINAGE SYSTEM

NOTES:

1. EXPANSION JOINT SHALL BE IN ACCORDANCE WITH THE DESIGNATED SOURCES FOR MATERIALS LIST DSM 9.40.___, TYPE "_". DETAILS SHOWN FOR OTHER TYPES ARE NOT APPLICABLE.
2. EXPANSION JOINT ASSEMBLY CONSTRUCTION AND MATERIAL SHALL BE ACCORDING TO OPSS 920 AND OPSS 1210, AND AS SPECIFIED IN THE CONTRACT DOCUMENTS.
3. STEEL PLATE 10mm THICK UNLESS OTHERWISE NOTED.
4. JOINT ASSEMBLIES SHALL BE COMPLETELY SHOP ASSEMBLED (EXCEPT FOR SEALS) AND PRESET TO DIMENSION 'J' FOR 15°C AND ADJUSTED IN THE FIELD TO SUIT INSTALLATION TEMPERATURE.
5. JOINT ASSEMBLY INSTALLATION TEMPERATURE SHALL BE TAKEN AS MEAN SHADE AIR TEMPERATURE AT STRUCTURE PRIOR TO JOINT INSTALLATION AS FOLLOWS:
   – FOR CONCRETE STRUCTURES – 48 HOURS
   – FOR STEEL STRUCTURES – 24 HOURS
6. FIELD SPLICES IN JOINT ASSEMBLY ARE ONLY PERMITTED AT STAGED CONSTRUCTION, AND/OR AS SHOWN ON THE CONTRACT DRAWINGS.
7. IF THE JOINT ARMOURING FOR A SKEWED STRUCTURE IS SPLICED AT A CROWN, THE SPLICE SHALL BE DETAILED PARALLEL TO THE CENTRELINE OF THE TRAFFIC LANE.
8. SETTING ANGLES SHALL BE FLAME CUT ACCORDING TO OPSS 920, BUT IN NO CASE PRIOR TO CONCRETE REACHING INITIAL SET.
9. AFTER CURING OF THE CONCRETE HAS BEEN COMPLETED, THE SETTING DEVICES MAY BE REMOVED. THE VOIDS UNDER THE ARMOURING ANGLE AND NOSING ANGLE SHALL THEN BE PRESSURE INJECTED.
10. PREFORMED SEALS SHALL HAVE MINIMUM THICKNESS OF 5mm OR AS PER DSM.
11. ALL STEEL RETAINER SURFACES COMING IN CONTACT WITH PREFORMED SEAL SHALL BE CLEANED PRIOR TO INSTALLATION OF THE SEAL.
12. PREFORMED SEALS SHALL BE INSTALLED AFTER JOINT ASSEMBLY HAS BEEN CAST IN PLACE, STYROFOAM OR FILLER BETWEEN DECK AND BALLAST WALL REMOVED, AND EXPANSION GAP CLEARED OF ANY DEBRIS.
13. FOR POST-TENSIONED CONCRETE BRIDGES, JOINT ASSEMBLY SHALL NOT BE INSTALLED UNTIL AT LEAST __ DAYS AFTER COMPLETION OF POST-TENSIONING OPERATIONS.
14. RAISED MEDIANS ON STRUCTURES SHALL BE PROVIDED WITH SLIDING PLATES. PLATE THICKNESS AND ANCHORAGES SHALL CONFORM TO SIDEWALK DETAILS, AND SHALL ACCOMMODATE INSTALLATION OF SEALS.
15. FOR SKEWED STRUCTURE, WORKING DRAWINGS SHALL BE DETAILED TO SUIT GEOMETRY OF STRUCTURE.
16. ALL JOINT ANCHORAGES SHALL BE DETAILED ON WORKING DRAWINGS PERPENDICULAR TO THE EXPANSION JOINT ON BOTH THE DECK SIDE AND THE ABUTMENT SIDE EXCEPT AS FOLLOWS. STRUCTURES SKEWED FROM OVER 15° AND UP TO 45° SHALL HAVE ANCHORAGES DETAILED 30° OFFSET FROM THE PERPENDICULAR TO THE EXPANSION JOINT ON THE DECK SIDE.
17. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING SS113-12 OR SS113-13 AND DRAWING SS113-14.
18. LEGEND: [ ] DENOTES FASTENER SIZE IN INCHES.

NOTES TO DESIGNER:

1. IF DRAINAGE SYSTEM FOR EXPANSION JOINTS IS NOT REQUIRED, THE DESIGNER SHALL USE STANDARD DRAWING SS113-10, INSTEAD OF THIS STANDARD DRAWING.
2. FOR SKEWED BRIDGES, A PLAN AND PROFILE OF THE EXPANSION JOINT(S) SHALL BE DETAILED ON THIS DRAWING SHOWING CROSSFALLS, BREAKPOINTS AND RELEVANT DIMENSIONS.
3. THE 'NOTES TO DESIGNER' SHALL BE DELETED FROM THIS DRAWING PRIOR TO ISSUING OF CONTRACT.

ADDITIONAL NOTES FOR BOLTS:

1. 19 [3/4] DIAMETER BOLTS SHALL BE IN ACCORDANCE WITH WITH ASTM A325. ALL BOLTS USED IN 25 DIA. x 50 LONG SLOTTED HOLES SHALL BE INSTALLED WITH OVERSIZE WASHERS.
2. 16 [5/8] DIAMETER FLAT COUNTERSUNK HEAD CAP BOLTS SHALL BE IN ACCORDANCE WITH ASTM F835.
3. CLAMPING BAR BOLTS FOR TYPE 'A' JOINTS SHALL BE 19 [3/4] DIAMETER HEX HEAD BOLTS IN ACCORDANCE WITH ASTM A325. CLAMPING BAR BOLTS SHALL BE TENSIONED TO 125kN.
4. ALL BOLTS SHALL BE INSTALLED USING MOLY50 LUBRICANT.
5. ALL BOLTS SHALL BE TENSIONED USING THE TURN-OF-NUT TIGHTENING METHOD IN ACCORDANCE WITH CAN/CSA S6-06.

REFER TO 1.1.8 IN THE STRUCTURAL MANUAL FOR PROFESSIONAL ENGINEER STAMPING REQUIREMENTS.

DRAWING NOT TO BE SCALED
100 mm ON ORIGINAL DRAWINGS

STANDARD DRAWING AUGUST 2015 — SS113-11

STRIP SEAL EXPANSION JOINT ASSEMBLY FOR BARRIER WALLS – WITH DRAINAGE SYSTEM

REVISIONS					
			DESCRIPTION		
DESIGN	CHK	CODE CHBDC-06	CL 625-ONT		DATE
DRAWN	CHK	SITE			DWG

MINISTRY OF TRANSPORTATION, ONTARIO
PR-S-707 88-05
DRAWING NAME: s113-11 Aug 2015.dwg
CREATED: 1998/03/11
MODIFIED: 2015/08/07 13:55:55