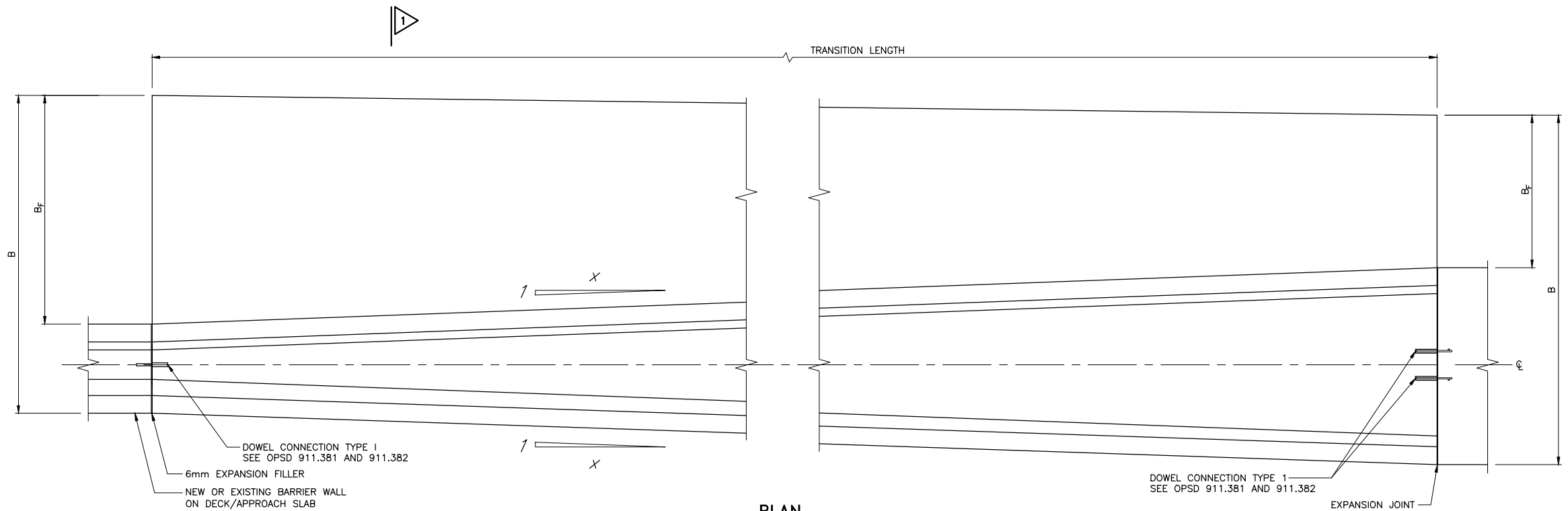
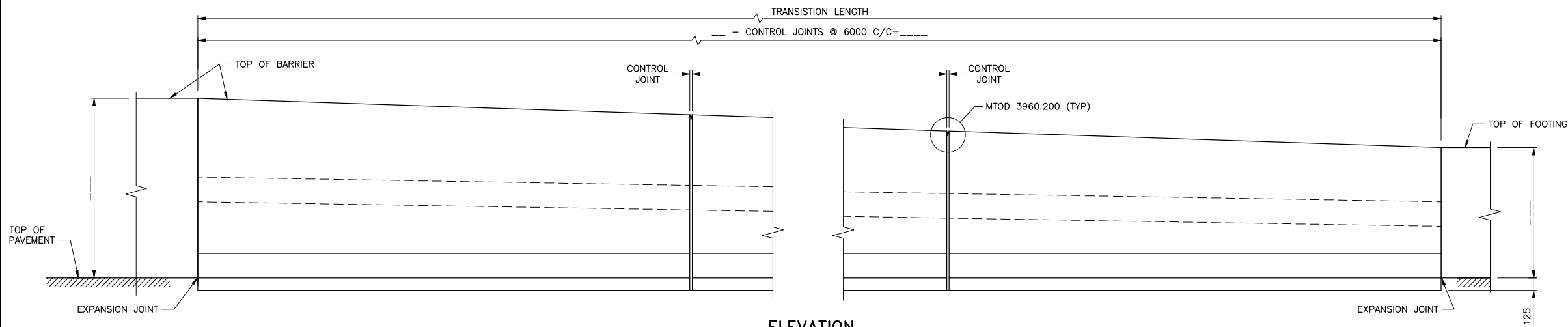


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MODIFIED: 2026-06-24 14:03

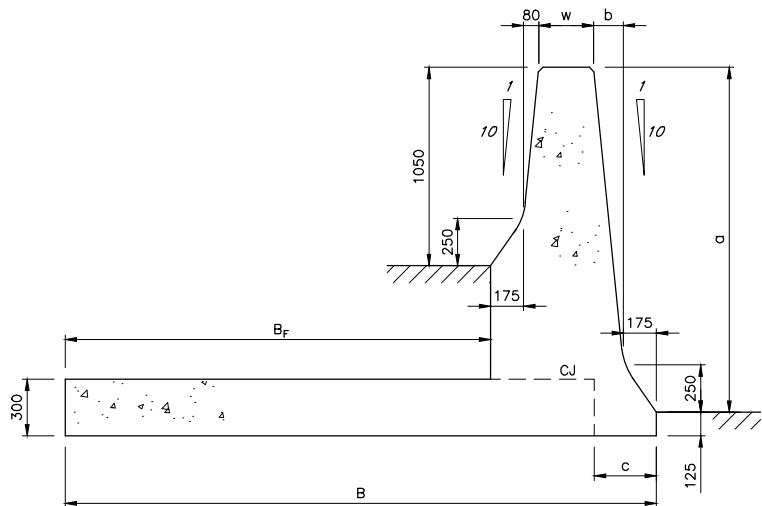


PLAN

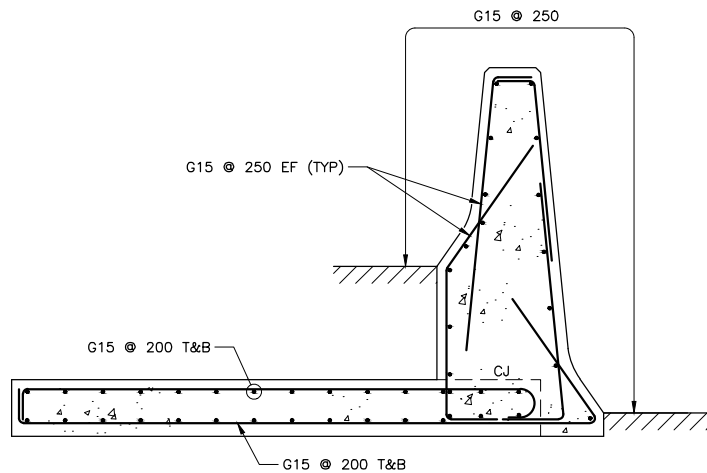


ELEVATION

(ALONG HIGH SIDE OF BARRIER)



1 ASYMMETRIC BARRIER WITH MOMENT SLAB
(TYPICAL DIMENSIONS)



1 ASYMMETRIC BARRIER WITH MOMENT SLAB
(TYPICAL REINFORCING)

NOTES TO DESIGNER:

- DESIGN IS APPLICABLE FOR MINIMUM BARRIER/TRANSITION LENGTH OF 10m AND STANDARD IS APPLICABLE FOR BARRIER FROM HEIGHT 1425 TO 1900mm.
- UPDATE PLAN AND ELEVATION FOR THE DESIGN.
- FOOTING WIDTH TO BE DRAWN TO SCALE IN SECTION 1 AND PLAN TO THE FOOTING WIDTHS SPECIFIED IN TABLE 1.

TABLE 1 - MOMENT SLAB WIDTH, B_F

BARRIER HEIGHT a^* (mm)	BARRIER TOP WIDTH, w^* (mm)				
	290	580	870	1160	1400
1425 MIN	3100	2700	2300	1900	1500
1900	2300	1800	1400	1050	750

*USE LINEAR INTERPOLATION FOR OTHER VALUES

- THIS DRAWING IS NOT SUITABLE FOR ANTICIPATED SETTLEMENT OF UNDERLYING SOIL LARGER THAN 25mm. FOR SUCH CASES, FOLLOW MTO RSS DESIGN GUIDELINES.
- FORMULAS FOR DIMENSIONING:

$$b = \frac{a - 250}{10} \quad c = b + 175 \quad B = B_F + w + b + 430$$

- FOR ASYMMETRIC BARRIER OF HEIGHT (a) LESS THEN 1425, REFER TO OPSD 911.130.
- SEE APPLICABLE 110 SERIES STANDARD DRAWINGS AND MTO 3960.200 FOR MORE INFORMATION.
- THE 'NOTES TO DESIGNERS' SHALL BE DELETED FROM THIS DRAWING PRIOR TO ISSUING.

NOTES:

- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL APPLICABLE STANDARD DRAWINGS REFERENCED/LISTED ON THIS DRAWING.
- SYSTEM CONFIGURATION IS EQUIVALENT TO MASH TL-5.
- CONCRETE COVER TO REINFORCING BAR SHALL BE 60 ± 20 mm, EXCEPT AS NOTED.
- SPECIFIED CONCRETE 28-DAY COMPRESSIVE STRENGTH IS 30 MPa.
- REINFORCING SHALL BE GLASS FIBRE REINFORCED POLYMER (GFRP) GRADE III.
- BAR LAP SPLICE FOR HORIZONTAL REINFORCEMENT MUST NOT LAP THROUGH CONTROL JOINT.
- MINIMUM BAR LAP SPLICE TO BE 1000mm, UNLESS OTHERWISE SHOWN.
- LENGTH OF HORIZONTAL BAR TO SUIT CONTRACTOR'S OPERATIONS. BAR LENGTHS NEED NOT MATCH DISTANCE BETWEEN CONTROL JOINTS.
- CONTROL JOINT TO BE FORMED.
- SAWCUTS NOT PERMITTED.
- CONTROL JOINT FORM HARDWARE NOT TO BE LEFT IN PLACE.
- OPTIONAL CONSTRUCTION JOINTS TO BE LOCATED WITHIN LIMITS OF CONCRETE DAMS ON DECK OR BALLAST WALL.
- COUNTER WEIGHT SLAB SHALL HAVE CONSTRUCTION JOINTS AT MAXIMUM SPACING OF 12.0m.

LEGEND:

- EF - DENOTES EACH FACE
CJ - CONSTRUCTION JOINT
T&B - TOP AND BOTTOM
GFRP - GLASS FIBRE REINFORCED POLYMER

REFER TO THE STRUCTURAL MANUAL FOR
PROFESSIONAL ENGINEER STAMPING REQUIREMENTS.

APPLICABLE STANDARD DRAWINGS:

MTOD 3960.200 BARRIER AND PARAPET WALL, JOINTS AND CHASE.

STANDARD DRAWING
JUNE 24, 2026

SS110-5810

ASYMMETRIC BARRIER WITH MOMENT SLAB
(GFRP)

REVISIONS				
DATE	BY	DESCRIPTION		
DESIGN	CHK	CODE	CSA S6:25	LOAD
DRAWN	CHK	SITE		DWG

CONT WP **DRAFT**

PROJECT NAME
TALL BARRIER WALL WITHOUT RAILING, TL-6 (GFRP)

SHEET
—

METRIC
MILLIMETRES OR
METRES
(UNLESS NOTED)

NOTES:

- THIS DRAWING SHALL BE READ WITH ALL APPLICABLE STANDARD DRAWINGS REFERENCED/LISTED ON THIS DRAWING.
- SYSTEM CONFIGURATION IS EQUIVALENT TO MASH TL-6.
- CONCRETE COVER TO REINFORCING BAR SHALL BE 60±20mm, EXCEPT AS NOTED.
- REINFORCING SHALL BE GLASS FIBRE REINFORCED POLYMER (GFRP) GRADE III.
- HOOKED BAR MAY BE SUBSTITUTED WITH BAR WITH ANCHOR HEAD. ANCHOR HEAD OF GFRP REBAR SHALL HAVE A MINIMUM GUARANTEED PULL OUT STRENGTH (Fp) FOR G15 WITH HEAD OF 100 kN.
- BAR LAP SPLICE FOR HORIZONTAL REINFORCEMENT MUST NOT LAP THROUGH CONTROL JOINT.
- MINIMUM BAR LAP SPLICE TO BE 1000mm, UNLESS OTHERWISE SHOWN.
- LENGTH OF HORIZONTAL BAR TO SUIT CONTRACTOR'S OPERATIONS. BAR LENGTHS NEED NOT MATCH DISTANCE BETWEEN CONTROL JOINTS.
- CONTROL JOINT TO BE FORMED.
- SAWCUTS NOT PERMITTED.
- CONTROL JOINT FORM HARDWARE NOT TO BE LEFT IN PLACE.
- OPTIONAL CONSTRUCTION JOINTS TO BE LOCATED WITHIN LIMITS OF CONCRETE DAMS ON DECK OR BALLAST WALL.
- COUNTER WEIGHT SLAB SHALL HAVE CONSTRUCTION JOINTS AT MAXIMUM SPACING OF 12.0m.

LEGEND:

EF - DENOTES EACH FACE
OF - DENOTES OUTSIDE FACE
IF - DENOTES INSIDE FACE
CJ - CONSTRUCTION JOINT
GFRP - GLASS FIBRE REINFORCED POLYMER

APPLICABLE STANDARD DRAWINGS:

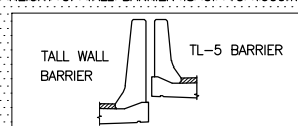
MTOD 3960.200 BARRIER AND PARAPET WALL, JOINTS AND CHASE.

NOTES TO DESIGNER:

1. FORMULAS FOR DIMENSIONING:

$$b = \frac{a - 250}{10} \quad c = 375 - b \quad a \leq 1900$$

2. THIS DRAWING IS INTENDED FOR TWIN BRIDGE CONFIGURATIONS WHERE DIFFERENCES IN DECK ELEVATION REQUIRE AN ASYMMETRIC BARRIER TYPE TRANSITION AT ENDS WHERE THE HEIGHT OF TALL BARRIER IS UP TO 1900mm.



3. REFER TO APPLICABLE 110 SERIES STANDARD DRAWINGS AND MTO 3960.200 FOR MORE INFORMATION.

4. THE 'NOTES TO DESIGNERS' SHALL BE DELETED FROM THIS DRAWING PRIOR TO ISSUING.

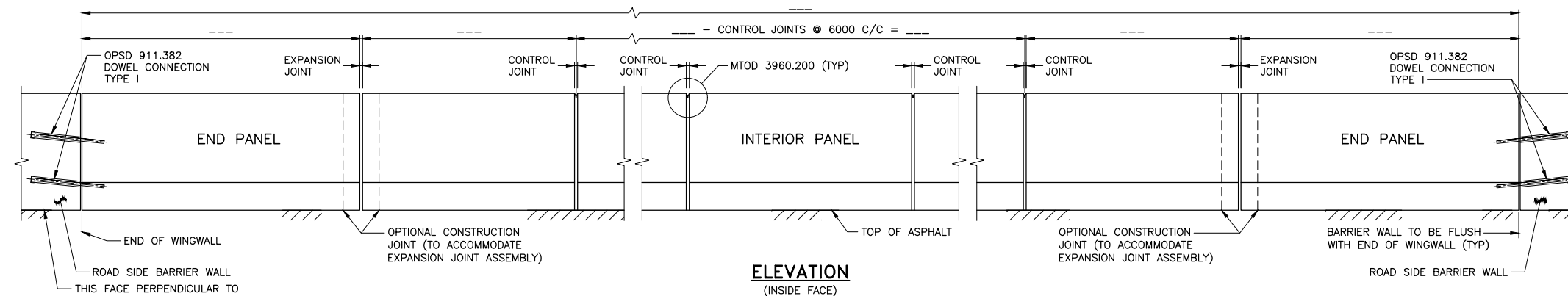
REFER TO THE STRUCTURAL MANUAL FOR PROFESSIONAL ENGINEER STAMPING REQUIREMENTS.

STANDARD DRAWING
JUNE 24, 2026

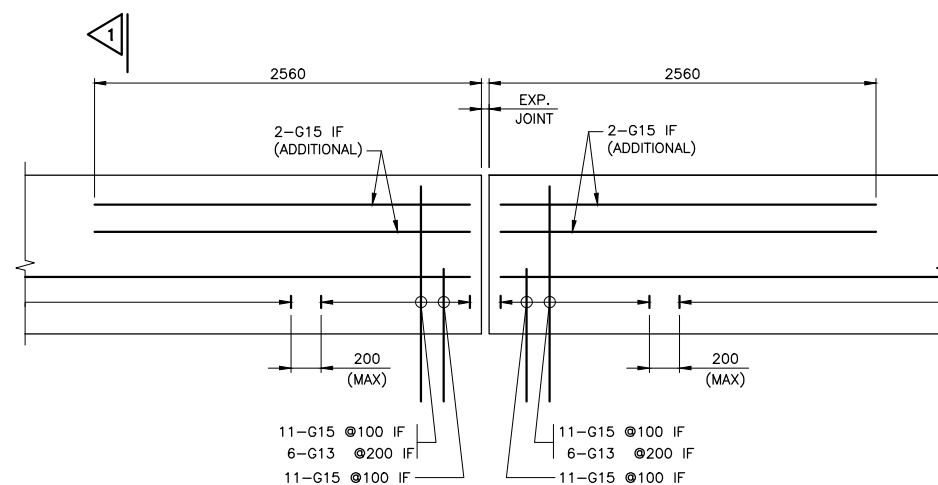
SS110-6210

TALL BARRIER WALL WITHOUT RAILING, TL-6 (GFRP)

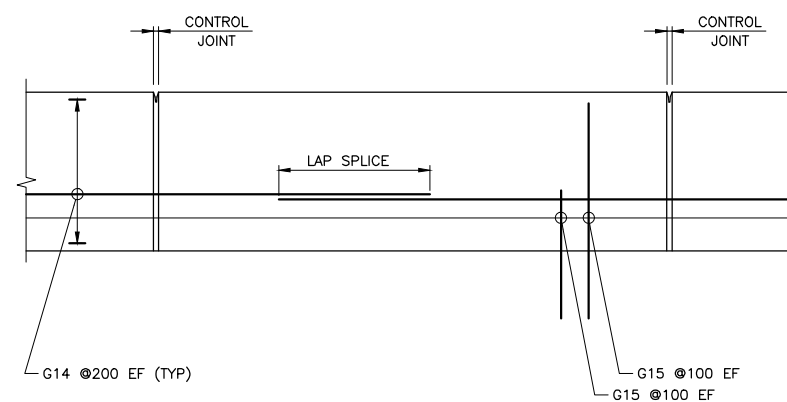
REVISIONS	DATE	BY	DESCRIPTION	DATE	
DESIGN	—	CHK	—	CODE	CSA S6:25/LOAD
DRAWN	—	CHK	—	SITE	—
				DATE	—
				DWG	—



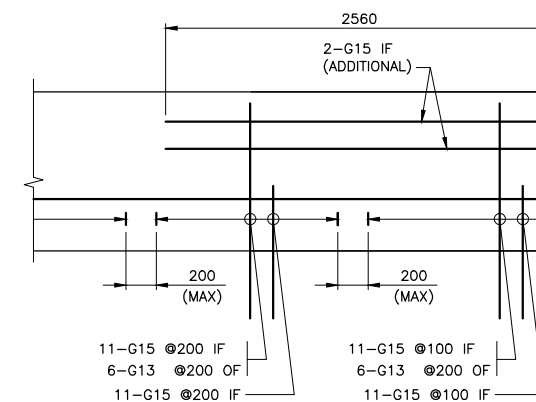
ELEVATION
(INSIDE FACE)



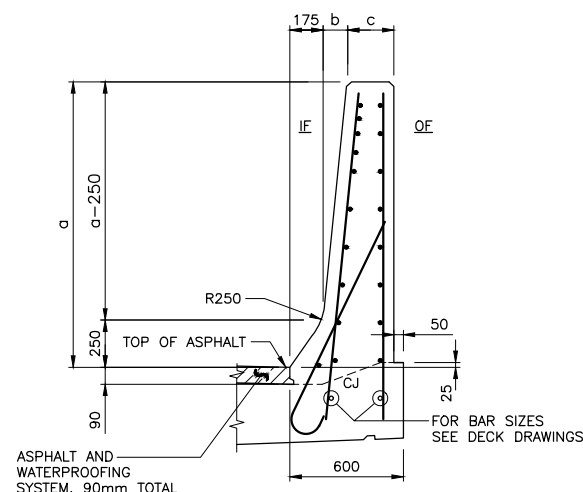
TYPICAL REINFORCING
AT EXPANSION JOINT IN BARRIER



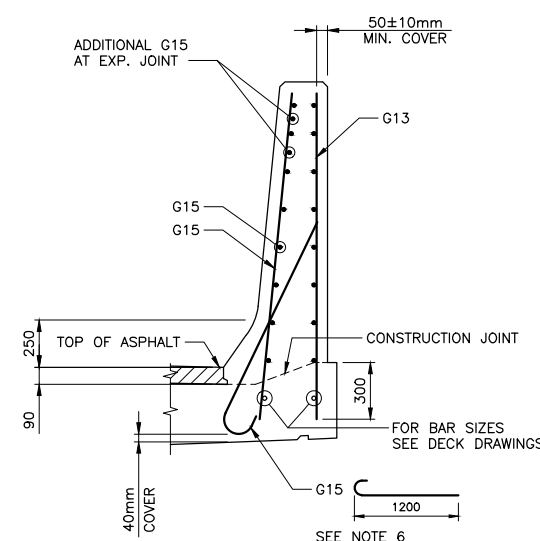
TYPICAL REINFORCING
AT INTERIOR PANEL IN BARRIER



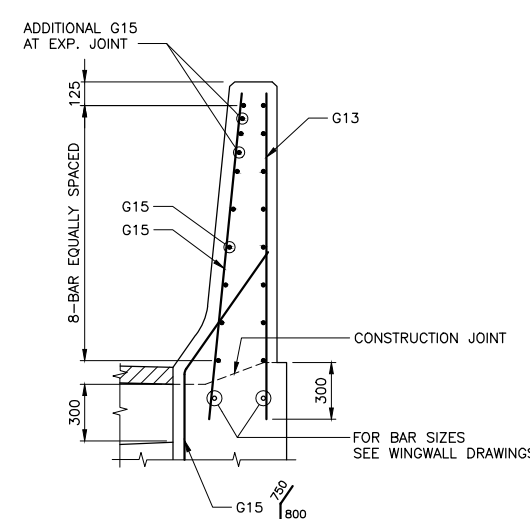
TYPICAL REINFORCING
AT END PANEL IN BARRIER



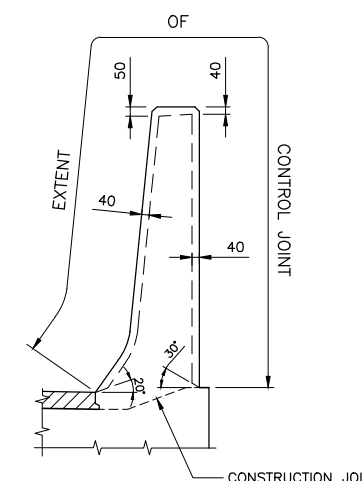
1 BARRIER WALL ON DECK
(TYPICAL DIMENSIONS)



1 BARRIER WALL ON DECK
(TYPICAL REINFORCING)



1 BARRIER WALL ON WINGWALL
(TYPICAL REINFORCING)



EXTENT OF CONTROL JOINT
IN BARRIER WALL