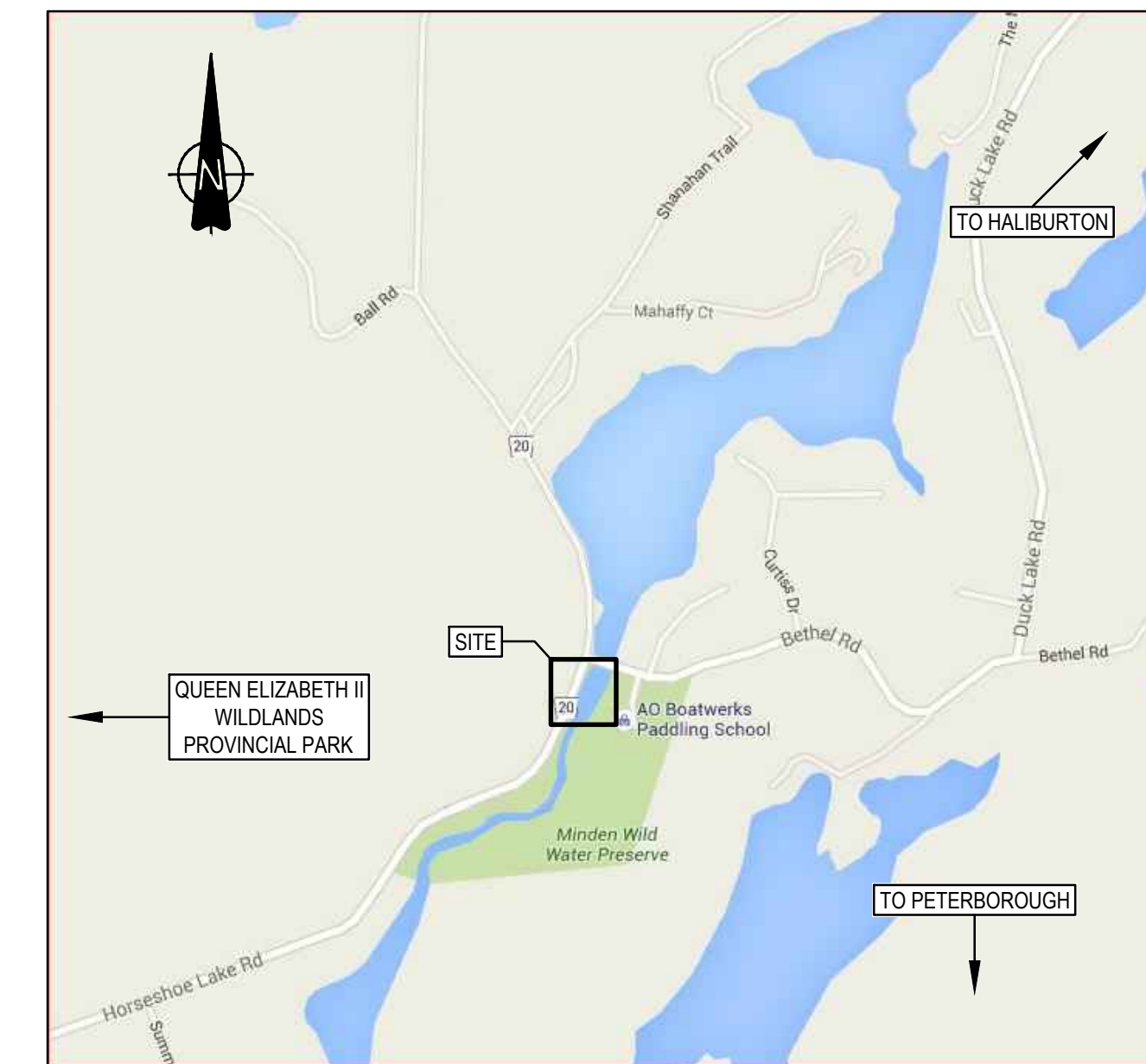


Canada

HORSESHOE LAKE DAM REPLACEMENT

MINDEN HILLS, ONTARIO

DWG No.	DESCRIPTION
100	COVER SHEET AND DRAWING LIST
101	EXISTING CONDITIONS - PLAN VIEW
102	EXISTING CONDITIONS - ELEVATION AND SECTION
103	PROPOSED CONSTRUCTION STAGING - PLAN STAGE 1 TO 4
104	PROPOSED CONSTRUCTION STAGING - PLAN STAGE 5 TO 7
105	REMOVALS
106	CONSTRUCTION - FINAL GENERAL ARRANGEMENT
107	CONSTRUCTION - ELEVATION AND SECTIONS
108	REINFORCING - DECK
109	REINFORCING - PIER SECTIONS AND SILL SLAB
110	CONSTRUCTION - EAST ABUTMENT
111	JACKING BRACKET DETAILS
112	LOG PINNING SYSTEM - GENERAL ASSEMBLY AND DETAILS
113	GAIN COVER DETAILS
114	MISCELLANEOUS METAL
115	MISCELLANEOUS DETAILS
116	PUBLIC SAFETY PLAN
117	STANDARD DETAILS 1
118	STANDARD DETAILS 2
119	STANDARD DETAILS 3
120	STANDARD DETAILS 4



No.	Description	Drawn By / Dessiné Par	Date
D	REVISED FOR TENDER	M.G.	JUL-24-2018
C	ISSUED FOR TENDER	M.G.	MAY-07-2018
B	ISSUED FOR REVIEW	M.G.	MAR-28-2018
A	ISSUED FOR REVIEW	M.G.	FEB-02-2018

Revision / Révision

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	A Detail number Numéro du détail
B	B Location dwg. number Numéro sur dessin

wsp
600 COCHRANE DRIVE, 5TH FLOOR
MARKHAM ONTARIO CANADA L3R 5K3
TEL: 1-905-475-7270 | FAX: 1-905-475-5994 | WWW.WSPGROUP.COM

Project title / Titre du projet
HORSESHOE LAKE DAM REPLACEMENT

Drawing title / Titre du dessin
COVER SHEET AND DRAWING LIST

Drawn by / Dessiné par MAITE GARCIA	Designed by / Conçu par KARINA SETO
Approved by / Approuvé par JAVIER VILORIA	Drawing Date / Date du dessin FEBRUARY 2018
Project manager / Administrateur de projet NICHOLAS READ	
HCEW Number / Numéro de CHTI 30025849	Drawing Number / Numéro du Dessin 100
Project Number / Numéro du projet 121-15275-52	Sheet / Feuille 1 of 1

NOTES:

- REFER TO PCA DRAWINGS C-1, S-1, S-2, S-3, S-4, S-5 FOR PLAN, ELEVATIONS, AND DETAILS OF EXISTING GATES, RAILING AND SIGNAGE.
- DIMENSIONS MAY NOT BE ACCURATE AND CONTRACTOR MAY ENCOUNTER SITE CONDITIONS SLIGHTLY DIFFERENT THAN SHOWN.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING SITE CONDITIONS AND EX-DIMENSIONS AS REQUIRED.
- CONTRACTOR SHALL NOT RELY ON ANY EXISTING SAFETY SYSTEMS.
- BUILDING CONTROL LINES, REFERENCE LINES, GRID LINES AND TEMPORARY BENCH MARKS TO BE CLEARLY IDENTIFIED AND MAINTAINED DURING THE ENTIRE CONSTRUCTION PERIOD.
- CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION OF ALL EXISTING UNDERGROUND AND OVERHEAD UTILITIES. THE OWNER AND THE DEPARTMENTAL REPRESENTATIVE ASSUME NO RESPONSIBILITY FOR THE ACCURACY OF UTILITIES INDICATED ON THE DRAWINGS.
- CONTRACTOR TO SURVEY EXISTING CONDITIONS AND VERIFY BENCHMARK IN ORDER TO ENSURE ACCURACY OF NEW CONSTRUCTION.
- LARGE TREES SHOULD NOT BE REMOVED WITHOUT APPROVAL BY DEPARTMENTAL REPRESENTATIVE. WHERE PRACTICAL, THE BRANCHES OF LARGE TREES SHOULD BE TRIMMED BACK RATHER THAN CUTTING THE ENTIRE TREE.

FOR TENDER

LEGEND:

- DIRECTION OF WATER FLOW
- TREES
- BRUSH (PLAN VIEW)
- PARKING AREA
- ARMOUR STONE
- WATER

C	ISSUED FOR TENDER	M.G.	MAY-07-2018
B	ISSUED FOR REVIEW	M.G.	MAR-28-2018
A	ISSUED FOR REVIEW	M.G.	FEB-02-2018
No.	Description	Drawn By	Date

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	A Detail number	Numéro du détail
B	B Location dwg. number	Numéro sur dessin



Project title / Titre du projet

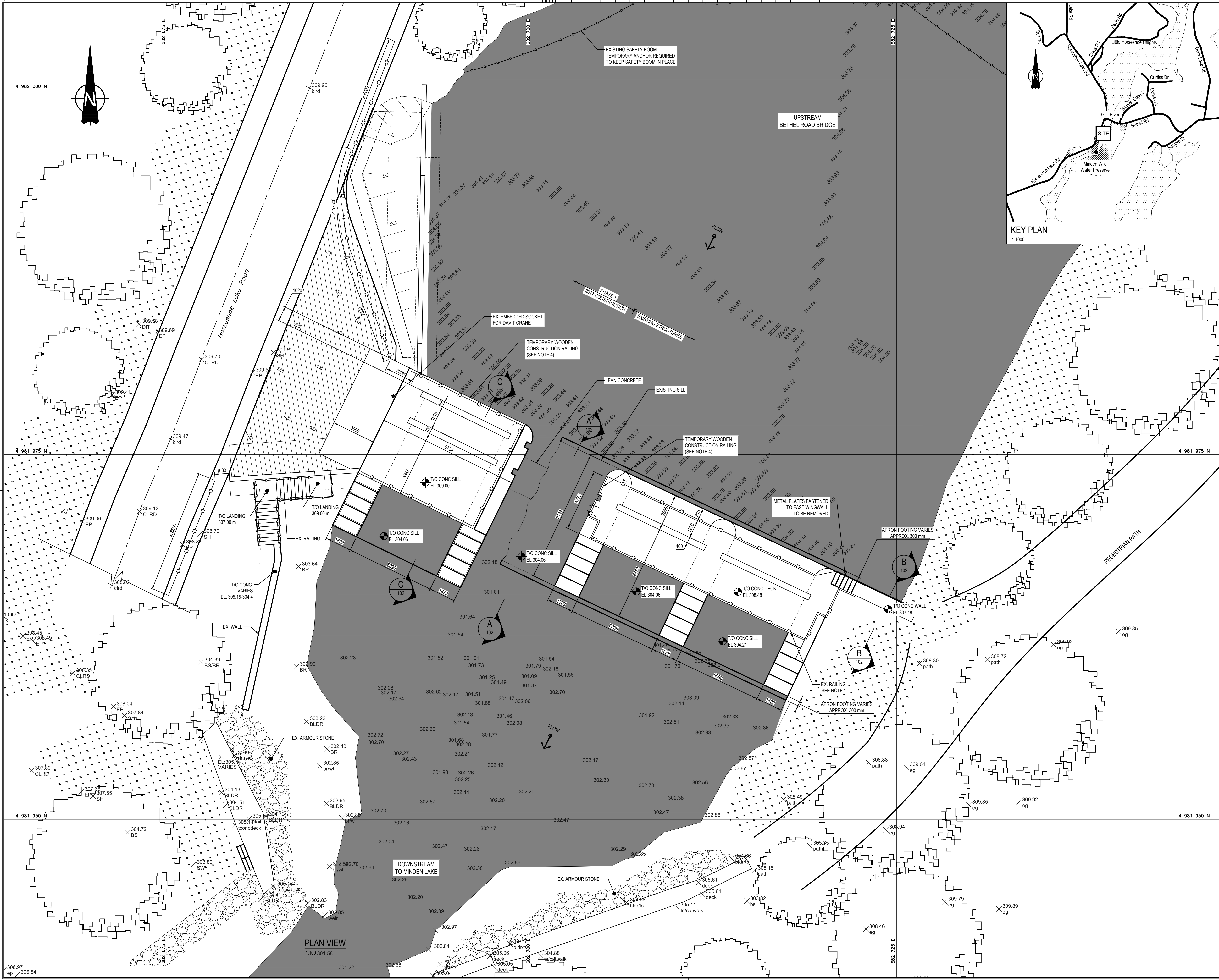
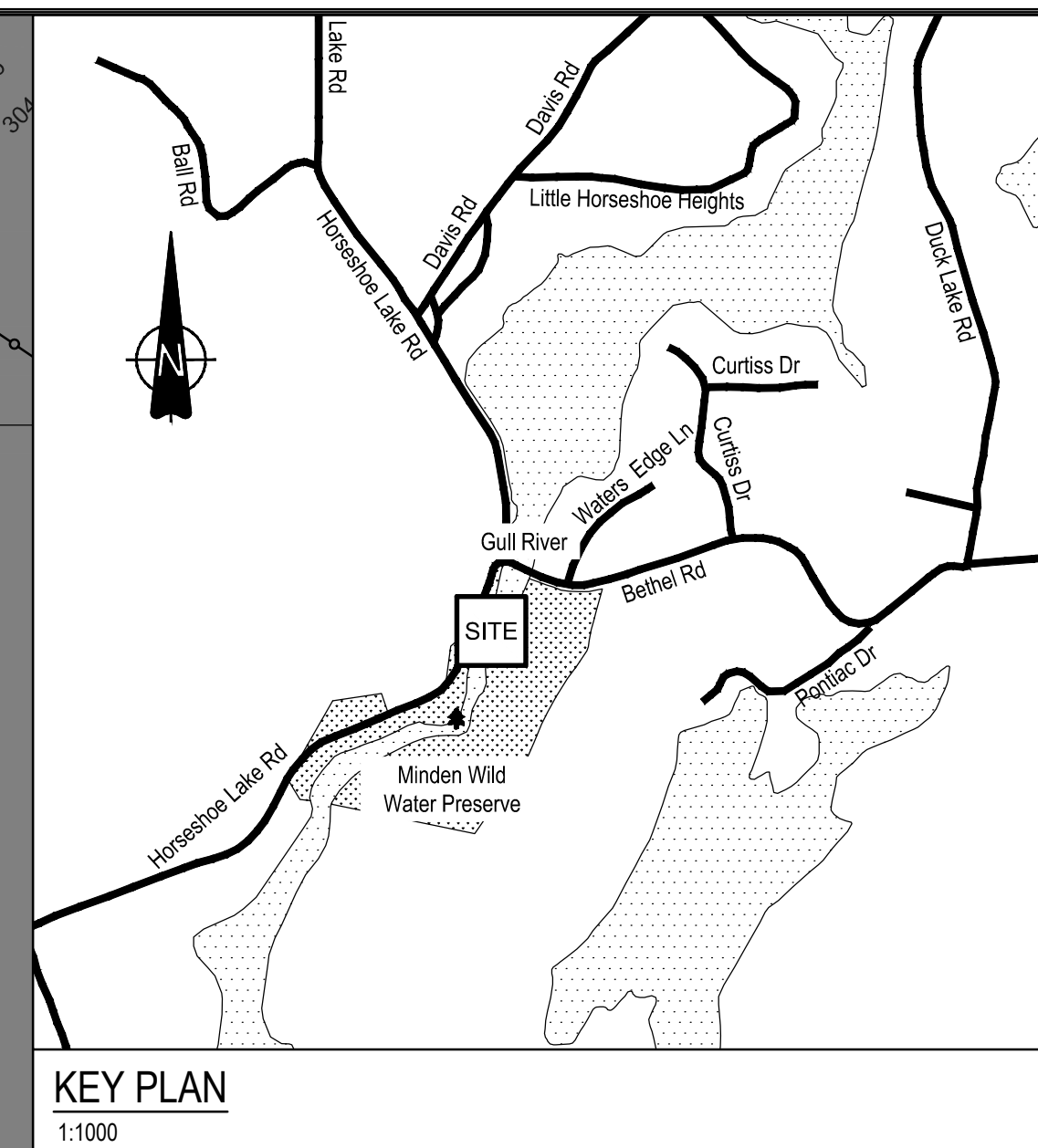
HORSESHOE LAKE DAM REPLACEMENT

EXISTING CONDITIONS PLAN VIEW

Drawn by / Dessiné par	MAITE GARCIA	Designed by / Conçu par	KARINA SETO
Approved by / Approuvé par	JAVIER VILORIA	Drawing Date / Date du dessin	FEBRUARY 2018

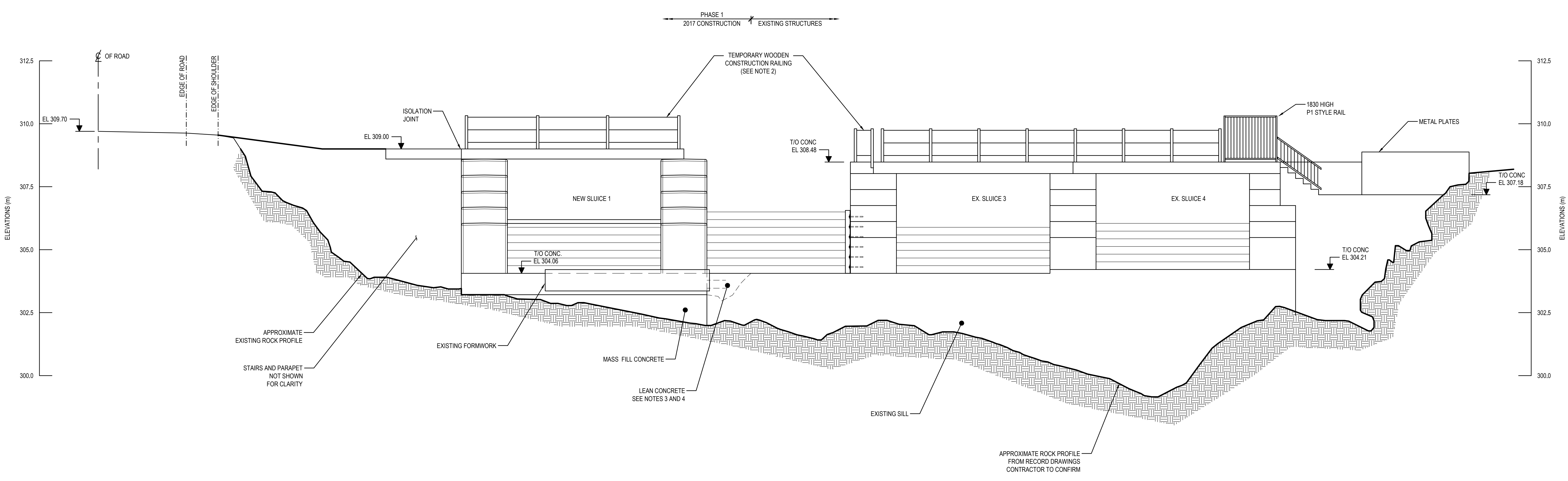
Project manager / Administrateur de projet
NICHOLAS READ

HCEW Number / Numéro de CHTI	30025849	Drawing Number / Numéro du Dessin	101
Project Number / Numéro du projet	121-15275-52	Sheet	1 of 1

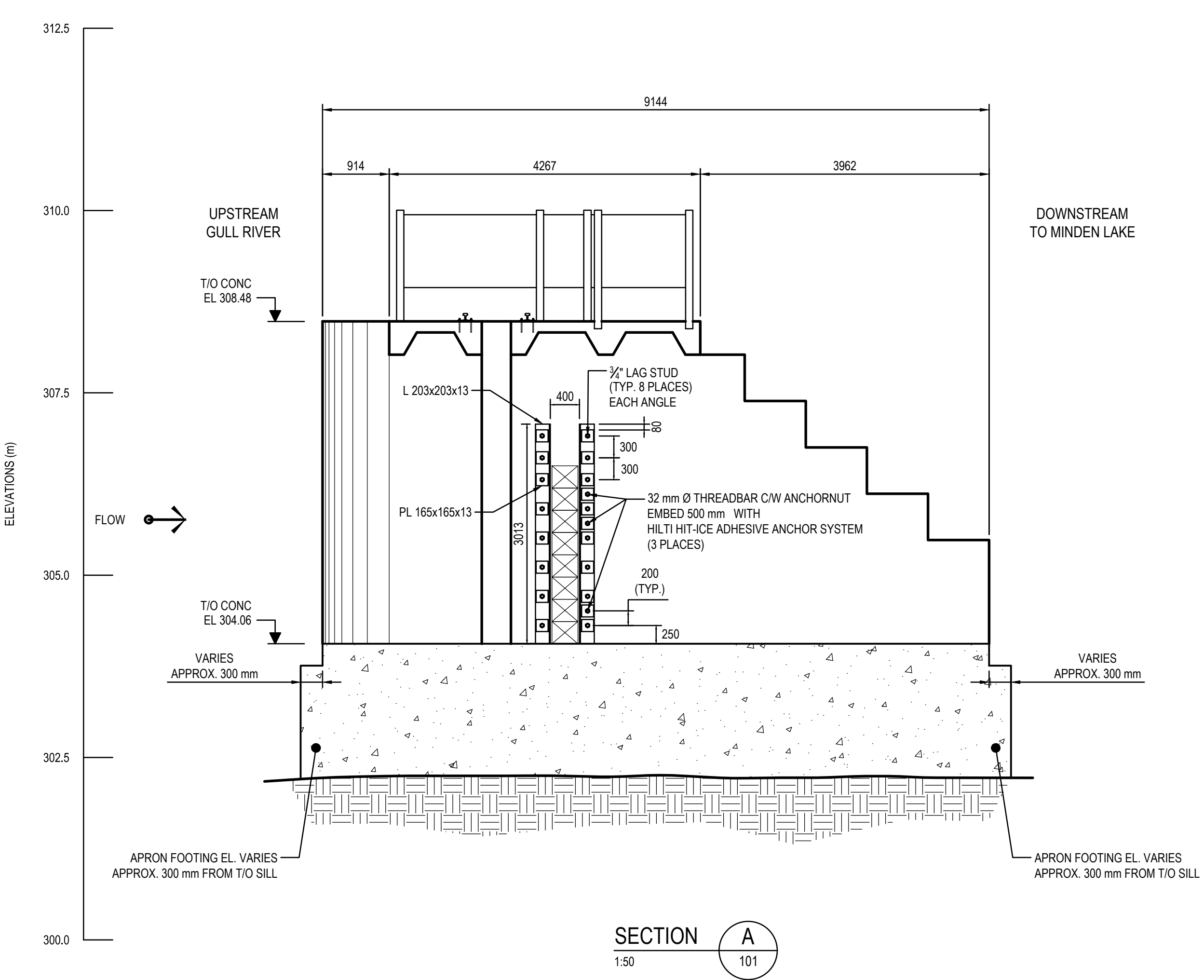


- NOTES:
- REFER TO PCA DRAWINGS C-1, S-1, S-2, S-3, S-4, S-5 FOR PLAN, ELEVATIONS, AND DETAILS OF EXISTING GATES, RAILING AND SIGNAGE.
 - CONTRACTOR SHALL NOT RELY ON ANY EXISTING SAFETY SYSTEMS.
 - CONTRACTOR TO CAREFULLY REMOVE LEAN CONCRETE TO EXPOSE REBAR.
 - IF SPECIFIED LAP LENGTH W/ EX. REINFORCEMENT CANNOT BE ACHIEVED, USE MECHANICAL COUPLERS.

FOR TENDER

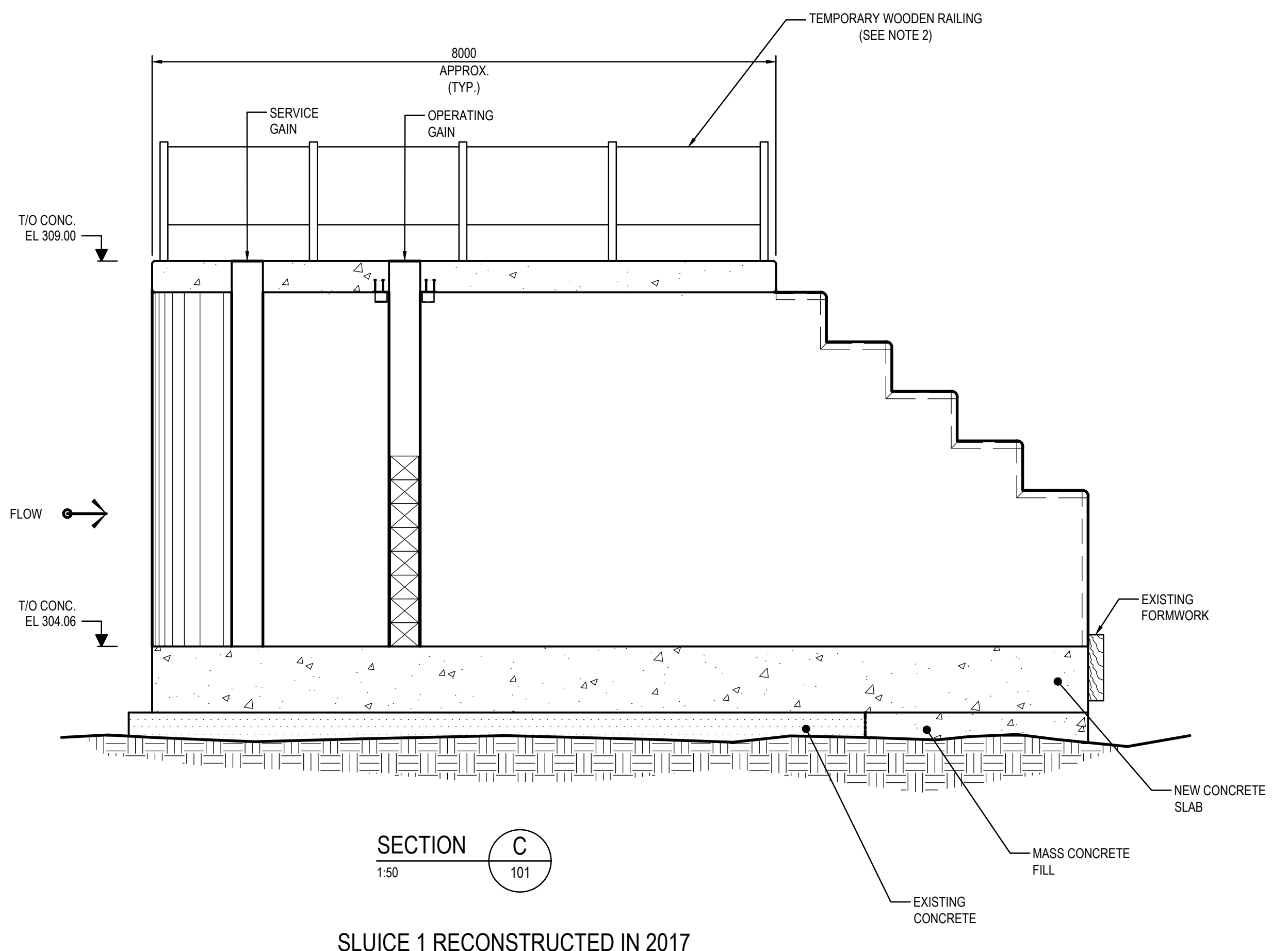


DOWNSTREAM ELEVATION
1:75



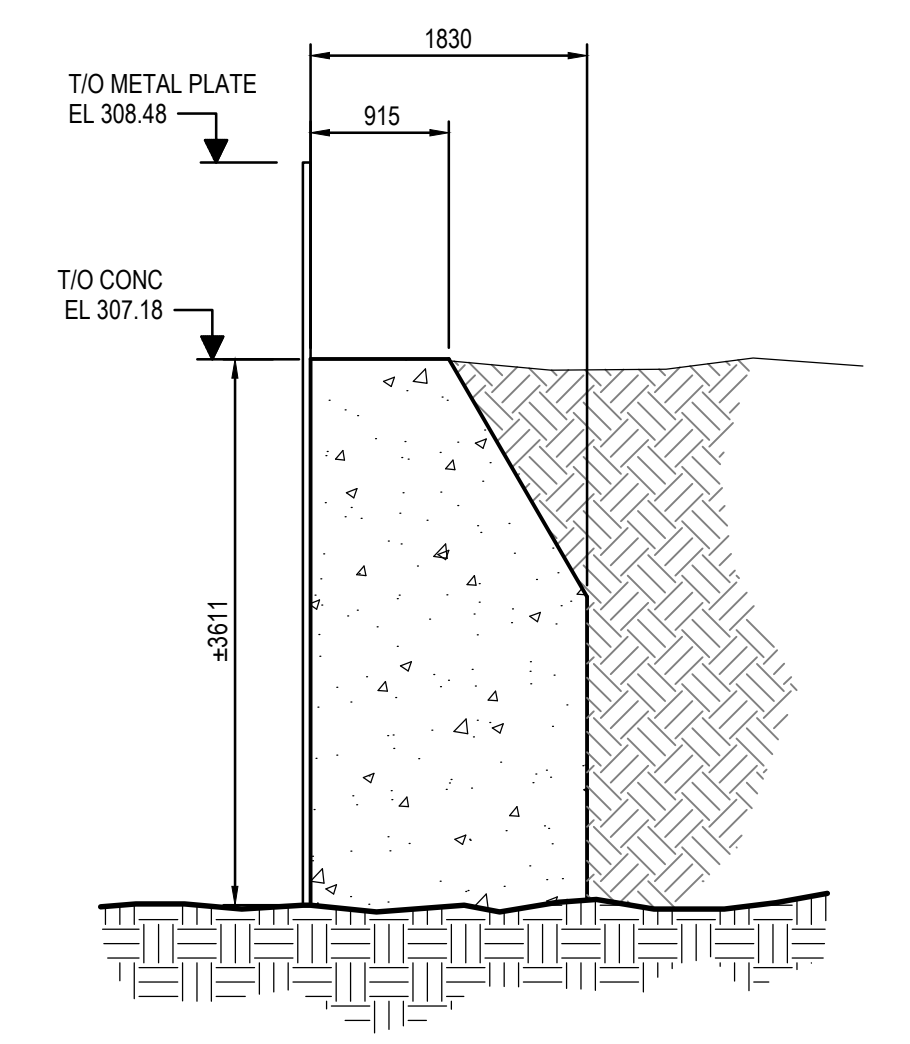
SECTION A
1:50

TEMPORARY SLUICE TO BE DEMOLISHED AND RECONSTRUCTED



SECTION C
1:50

SLUICE 1 RECONSTRUCTED IN 2017



SECTION B
1:50

EX. CUT OFF WALL TO BE DEMOLISHED

No.	Description	Drawn By (Des. Par)	Date
C	ISSUED FOR TENDER	M.G.	MAY-07-2018
B	ISSUED FOR REVIEW	M.G.	MAR-28-2018
A	ISSUED FOR REVIEW	M.G.	FEB-02-2018

Revision / Révision

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A Detail number
Numéro du détail
B Location dwg. number
Numéro sur dessin



Project title / Titre du projet

HORSESHOE LAKE DAM REPLACEMENT

Drawing title / Titre du dessin
EXISTING CONDITIONS ELEVATION AND SECTION

Drawn by / Dessiné par MAITE GARCIA	Designed by / Conçu par KARINA SETO
Approved by / Approuvé par JAVIER VILORIA	Drawing Date / Date du dessin FEBRUARY 2018

Project manager / Administrateur de projet NICHOLAS READ	
HCEW Number / Numéro de CHTI 30025849	Drawing Number / Numéro du Dessin 102
Project Number / Numéro du projet 121-15275-52	Sheet Feuille 1 of 1

NOTES:

1. THE PROPOSED STAGING AND COFFERDAM CONFIGURATION IS FOR PLANNING AND PERMITTING PURPOSES ONLY. CONTRACTOR TO PROVIDE FINAL STAGING AND COFFERDAM DESIGN TO DEPARTMENTAL REPRESENTATIVE FOR APPROVAL AT LEAST 14 DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
2. FOR SEASONAL WATER LEVELS SEE www.pc.gc.ca/apps/waterlevel/ ANY ADDITIONAL INFORMATION REQUIRED FOR COFFERDAM DESIGN, MUST BE REQUESTED BY THE CONTRACTOR.
3. CONTRACTOR MUST PROVIDE FOR THE ABILITY TO PASS AN ADDITIONAL 90 cms THROUGH, OVER OR AROUND WORKS AREA UNTIL SLUICE 2 IS OPERATIONAL.
4. PROVIDE DETAIL FOR SEAL AT COFFERDAM AND PER INTERFACE.
5. CONSTRUCTION STAGING OF COFFERDAM TO FOLLOW IN-WATER WORKS RESTRICTION.
6. 1.20 YR WATER LEVELS ARE ESTIMATED WITH ONE GATE IN OPERATION ONLY.

FOR TENDER

LEGEND:

- DIRECTION OF WATER FLOW
- TREES
- BRUSH (PLAN VIEW)
- ▨ PARKING AREA
- ⊗ ARMOUR STONE
- WATER
- ▤ REMOVALS

No.	Description	Drawn By	Date
C	ISSUED FOR TENDER	M.G.	MAY-07-2018
B	ISSUED FOR REVIEW	M.G.	MAR-28-2018
A	ISSUED FOR REVIEW	M.G.	FEB-02-2018

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

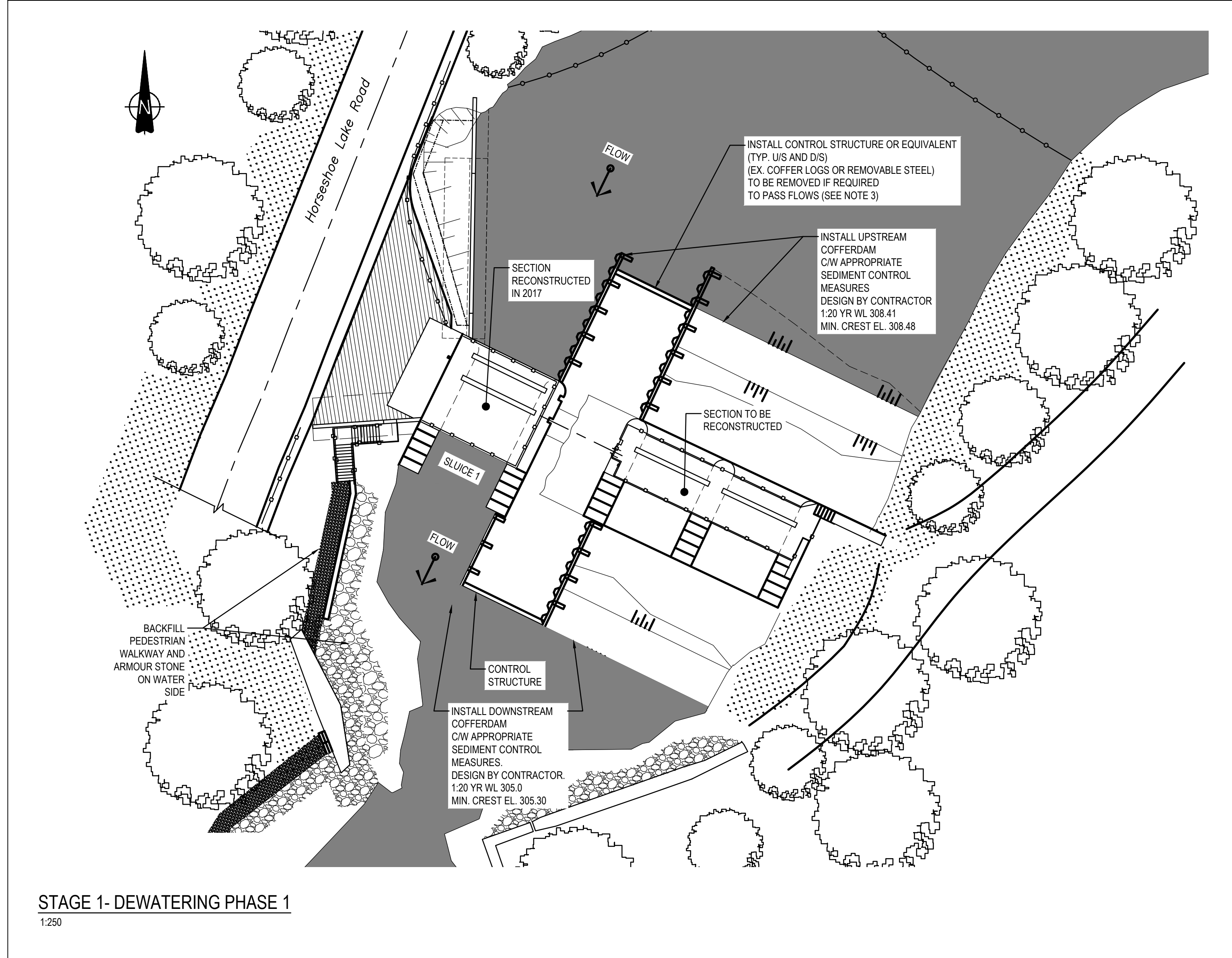
Revision / Révision	Description
A	Detail number / Numéro du détail
B	Location dwg. number / Numéro sur dessin



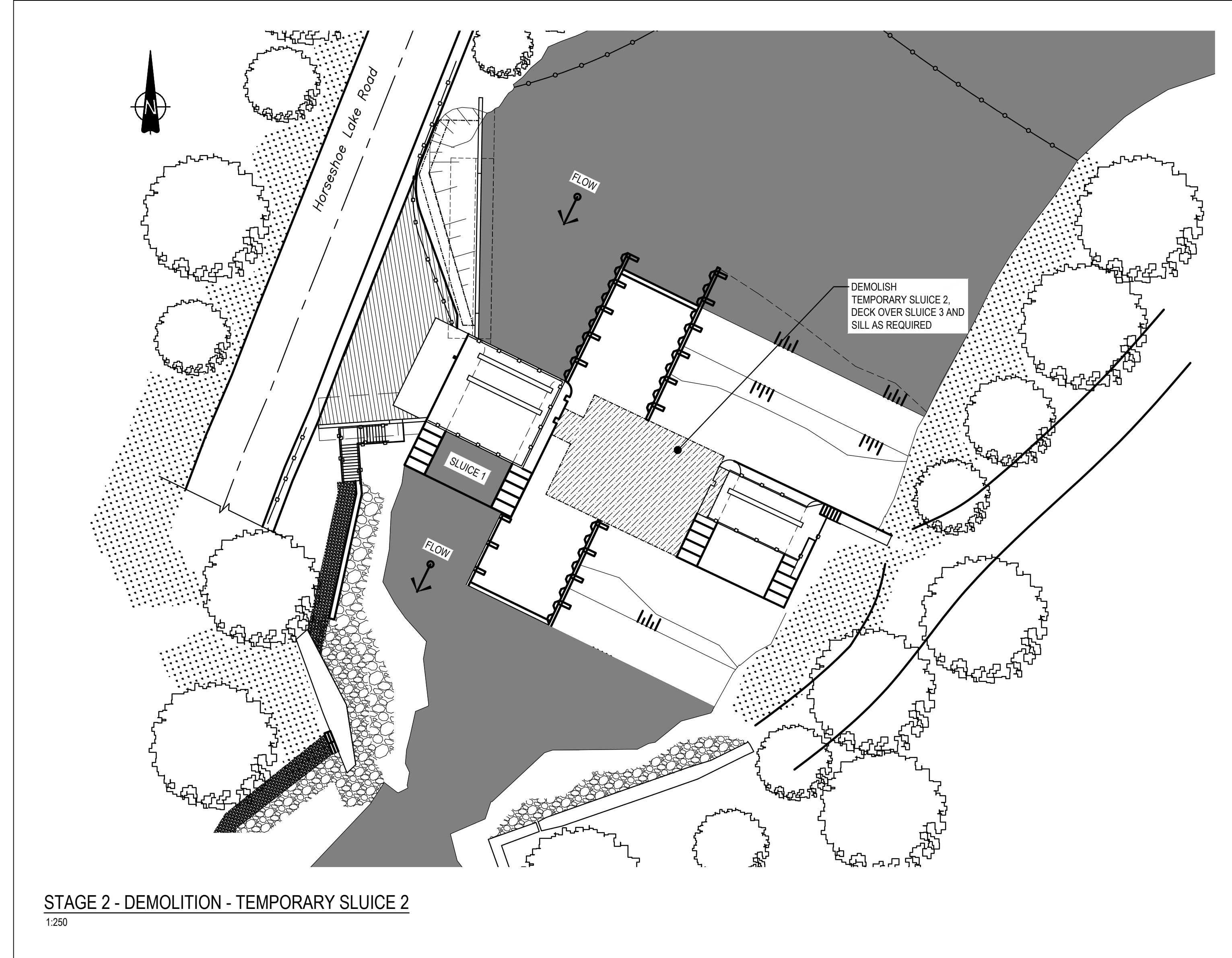
HORSESHOE LAKE DAM REPLACEMENT OPTION 2

PROPOSED CONSTRUCTION STAGING PLAN STAGE 1 TO 4

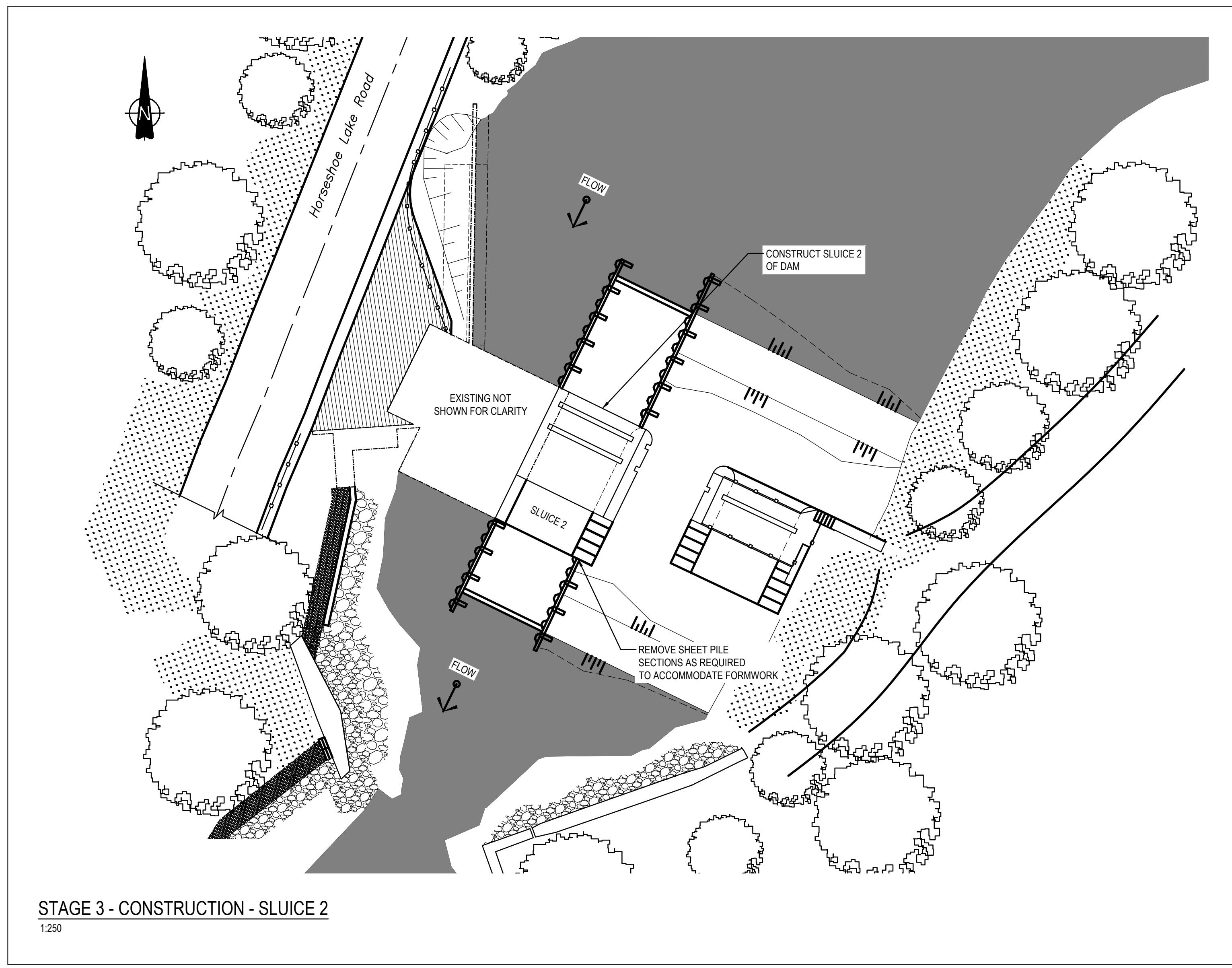
Drawn by / Dessiné par MAITE GARCIA	Designed by / Conçu par KARINA SETO
Approved by / Approuvé par JAVIER VILORIA	Drawing Date / Date du dessin FEBRUARY 2018
Project manager / Administrateur de projet NICHOLAS READ	
HCEW Number / Numéro de CHTI 30025849	Drawing Number / Numéro du Dessin 103
Project Number / Numéro du projet 121-15275-52	Sheet / Feuille 1 of 2



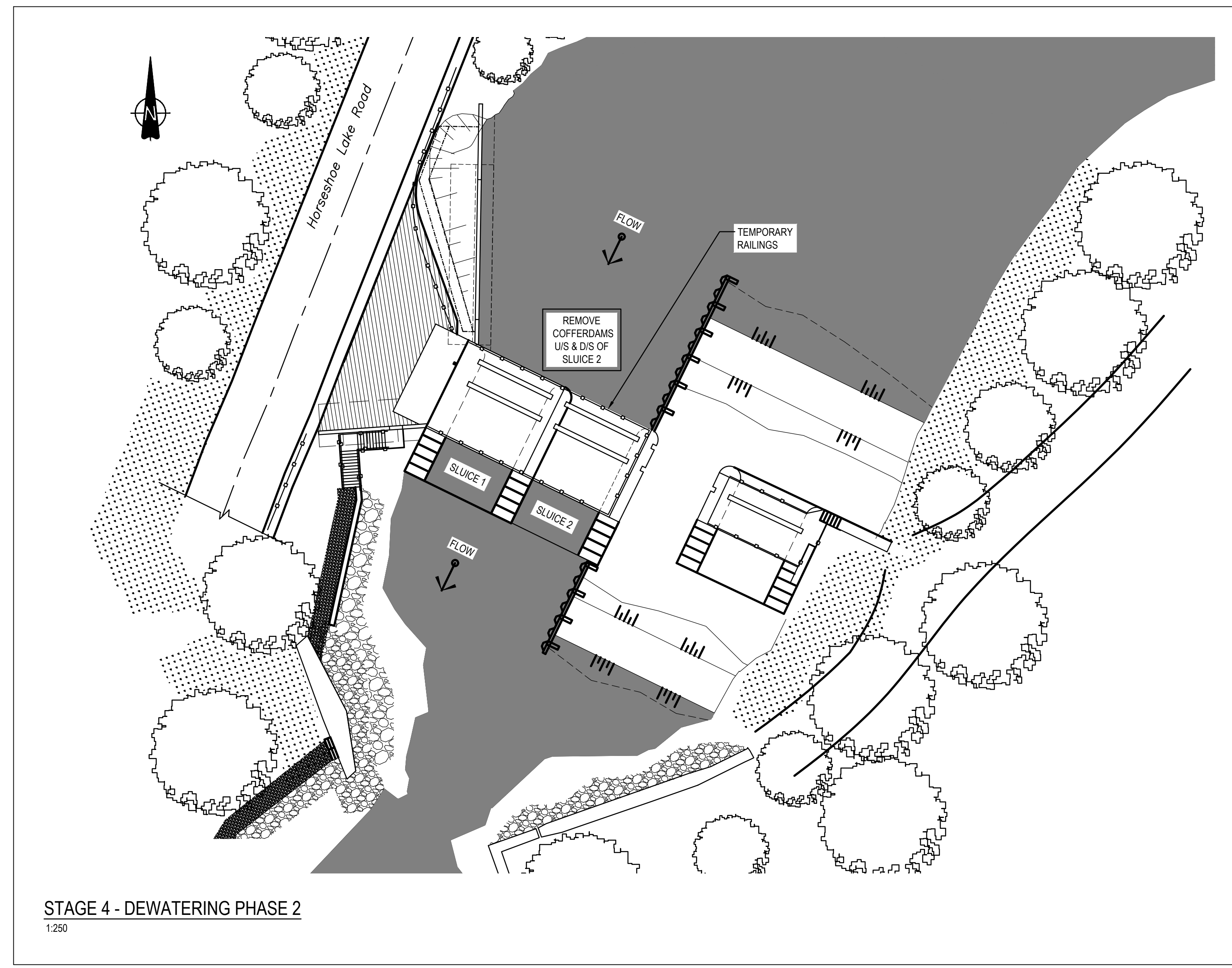
STAGE 1 - DEWATERING PHASE 1
1:250



STAGE 2 - DEMOLITION - TEMPORARY SLUICE 2
1:250



STAGE 3 - CONSTRUCTION - SLUICE 2
1:250



STAGE 4 - DEWATERING PHASE 2
1:250

NOTES:

1. THE PROPOSED STAGING AND COFFERDAM CONFIGURATION IS FOR PLANNING AND PERMITTING PURPOSES ONLY. CONTRACTOR TO PROVIDE FINAL STAGING AND COFFERDAM DESIGN TO DEPARTMENTAL REPRESENTATIVE FOR APPROVAL AT LEAST 14 DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
2. FOR SEASONAL WATER LEVELS SEE www.pc.gc.ca/apps/waterlevel/ ANY ADDITIONAL INFORMATION REQUIRED FOR COFFERDAM DESIGN, MUST BE REQUESTED BY THE CONTRACTOR.
3. CONTRACTOR MUST PROVIDE FOR THE ABILITY TO PASS AN ADDITIONAL 90 cms THROUGH, OVER OR AROUND WORKS AREA UNTIL SLUICE 2 IS OPERATIONAL.
4. PROVIDE DETAIL FOR SEAL AT COFFERDAM AND PER INTERFACE.
5. CONSTRUCTION STAGING OF COFFERDAM TO FOLLOW IN-WATER WORKS RESTRICTION.
6. 1.20 YR WATER LEVELS ARE ESTIMATED WITH ONE GATE IN OPERATION ONLY.

FOR TENDER

LEGEND:

- DIRECTION OF WATER FLOW
- TREES
- BRUSH (PLAN VIEW)
- PARKING AREA
- ARMOUR STONE
- WATER
- REMOVALS

No.	Description	Drawn By / Dessiné par	Date
C	ISSUED FOR TENDER	M.G.	MAY-07-2018
B	ISSUED FOR REVIEW	M.G.	MAR-28-2018
A	ISSUED FOR REVIEW	M.G.	FEB-02-2018

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	A Detail number / Numéro du détail
B	B Location dwg. number / Numéro sur dessin



Project title / Titre du projet

HORSESHOE LAKE DAM REPLACEMENT OPTION 2

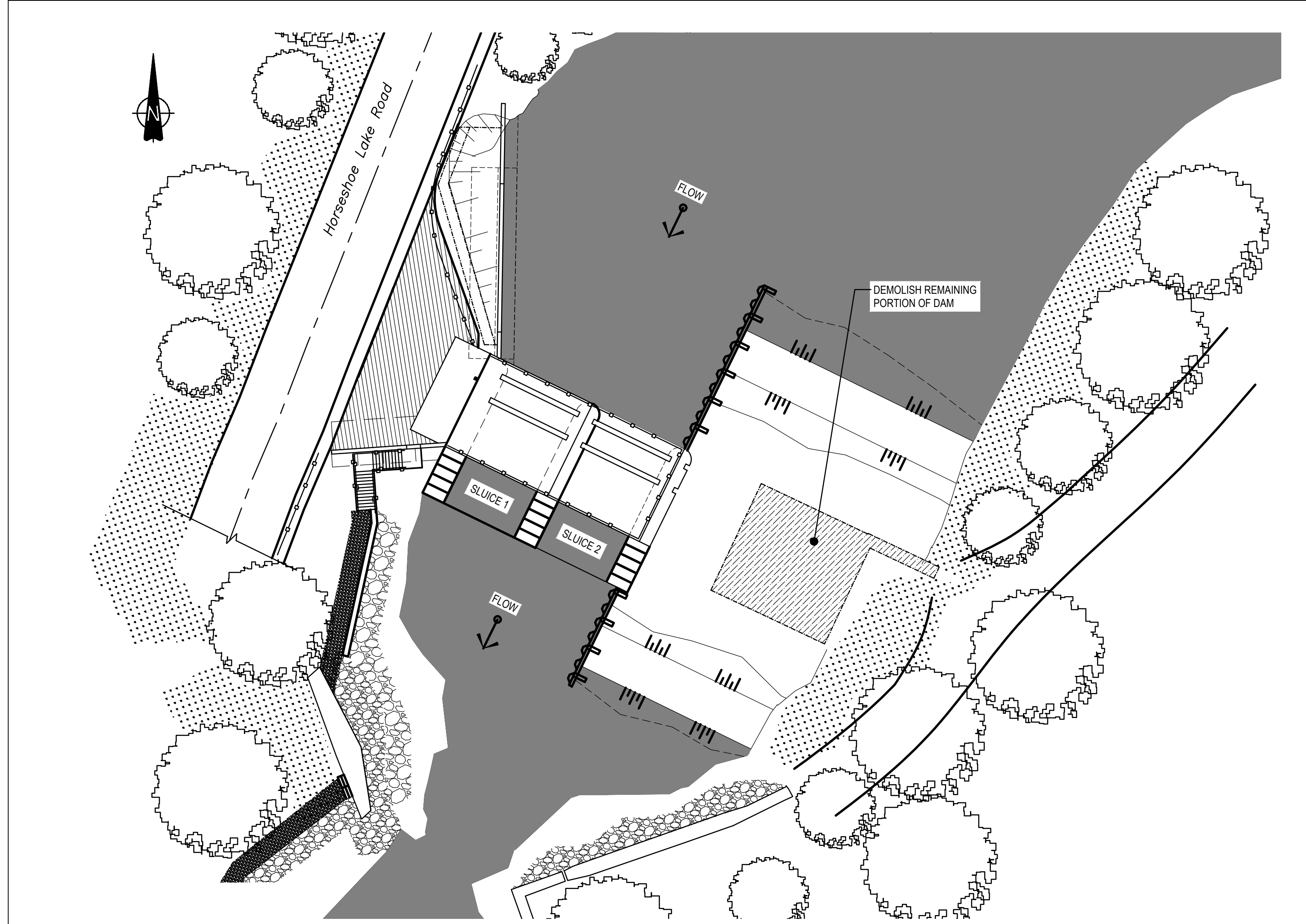
Drawing title / Titre du dessin

PROPOSED CONSTRUCTION STAGING PLAN STAGE 5 TO 7

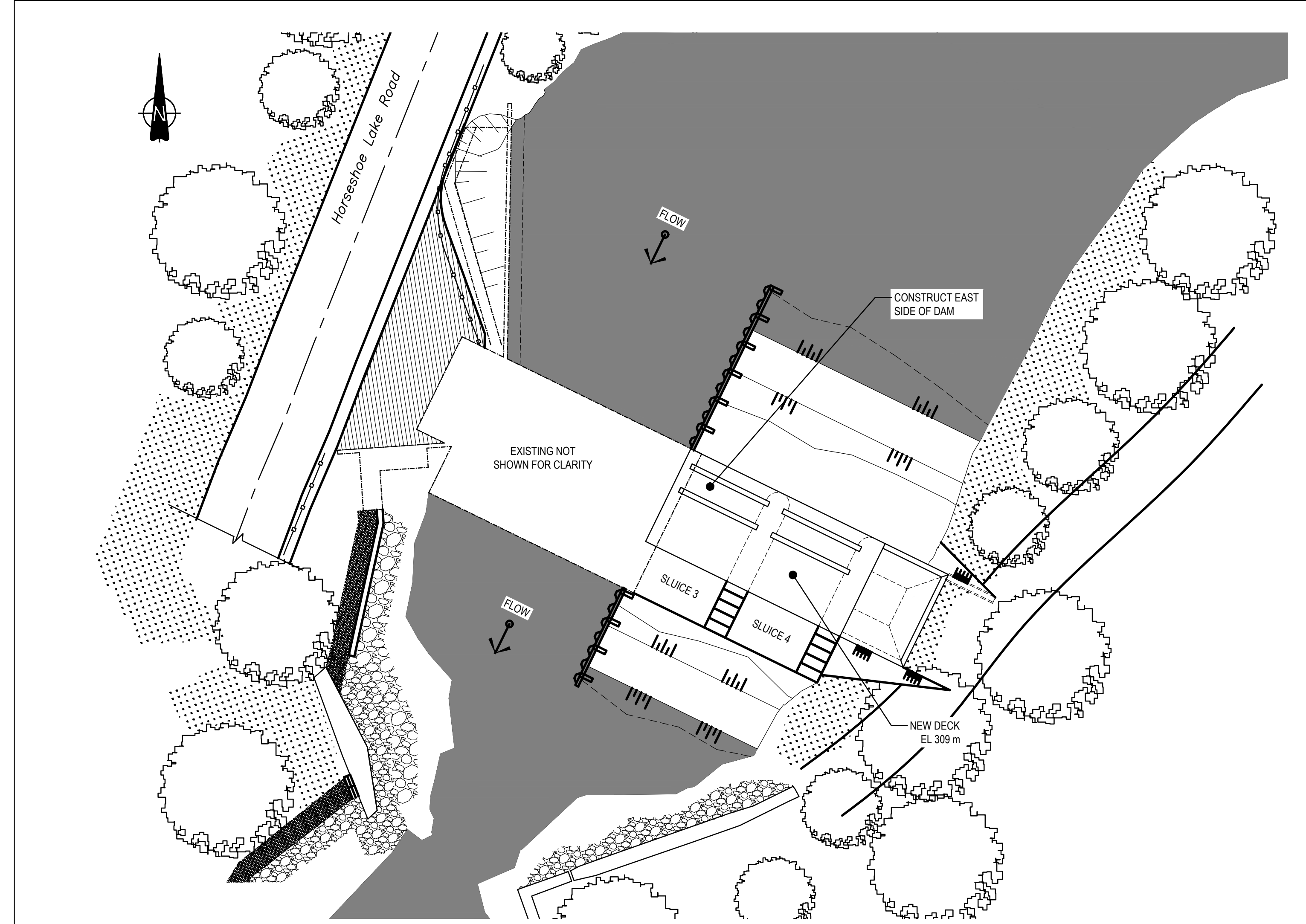
Drawn by / Dessiné par MAITE GARCIA	Designed by / Conçu par KARINA SETO
Approved by / Approuvé par JAVIER VILORIA	Drawing Date / Date du dessin FEBRUARY 2018

Project manager / Administrateur de projet
NICHOLAS READ

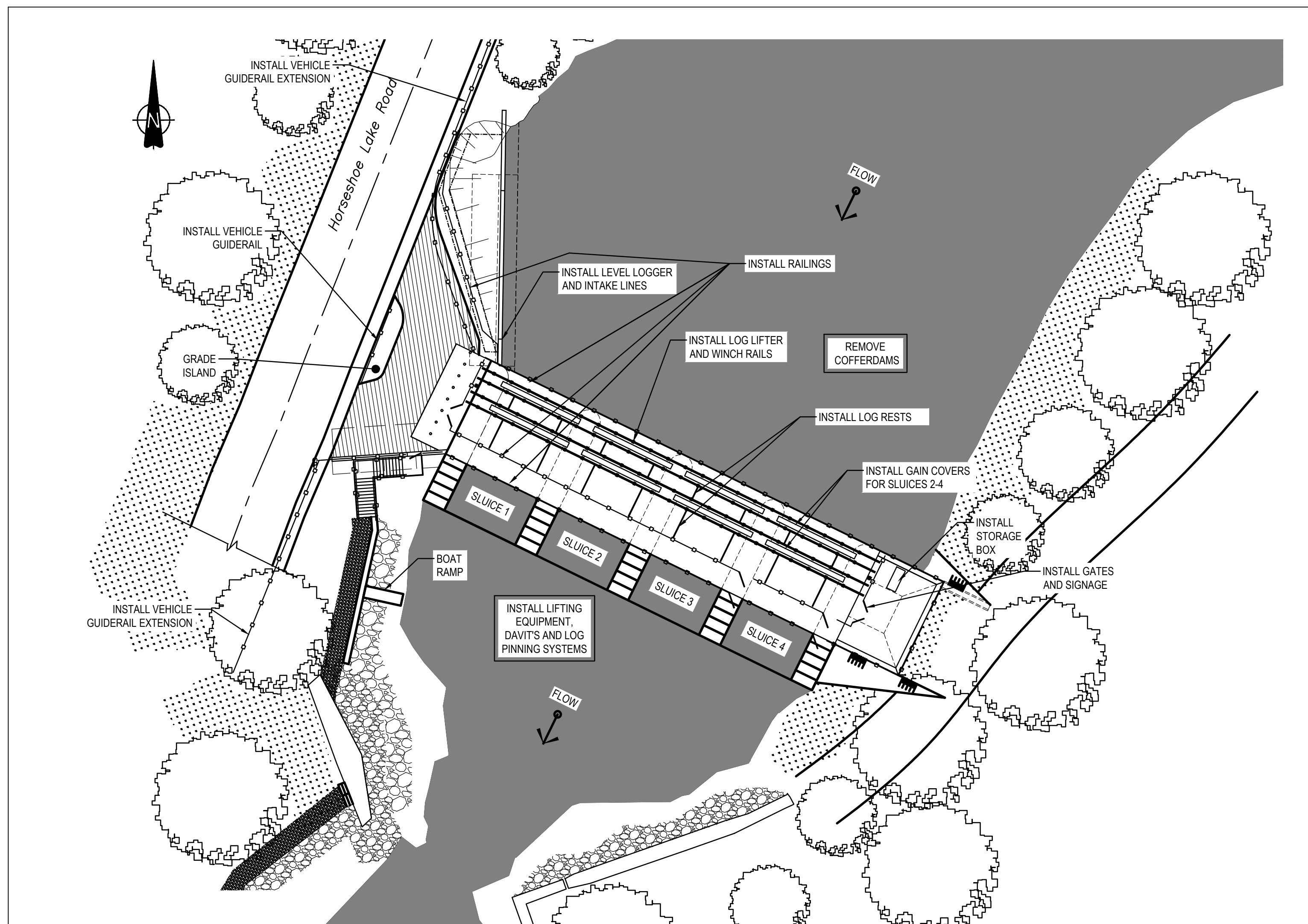
HCEW Number / Numéro de CHTI 30025849	Drawing Number / Numéro du Dessin 104
Project Number / Numéro du projet 121-15275-52	Sheet / Feuille 2 of 2



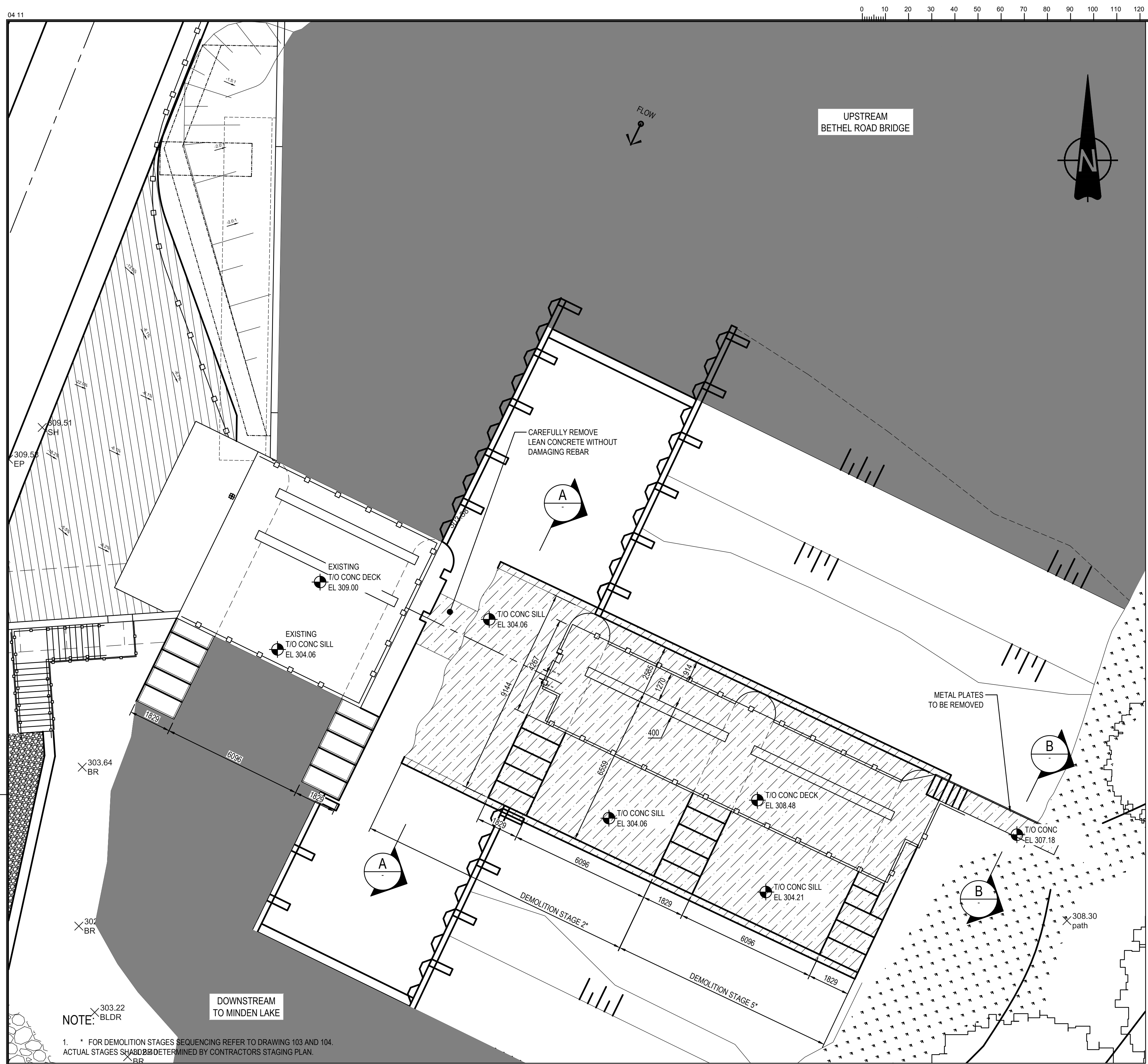
STAGE 5 - DEMOLITION - EAST SIDE OF DAM
1:250



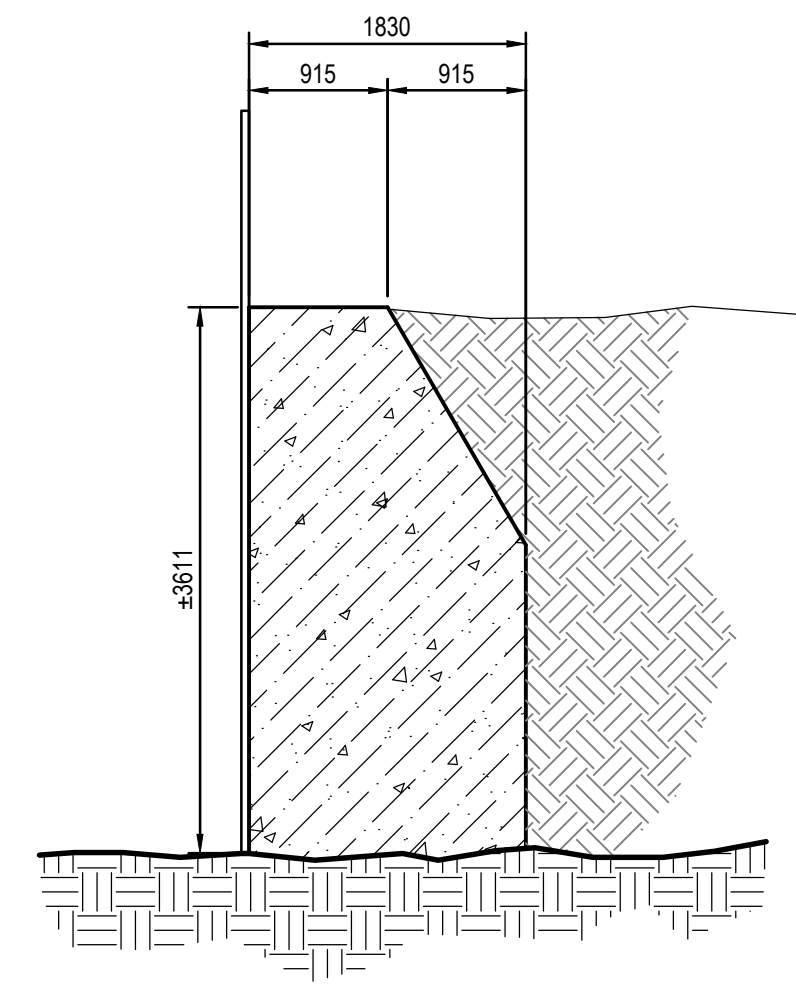
STAGE 6 - CONSTRUCTION - EAST SIDE OF DAM
1:250



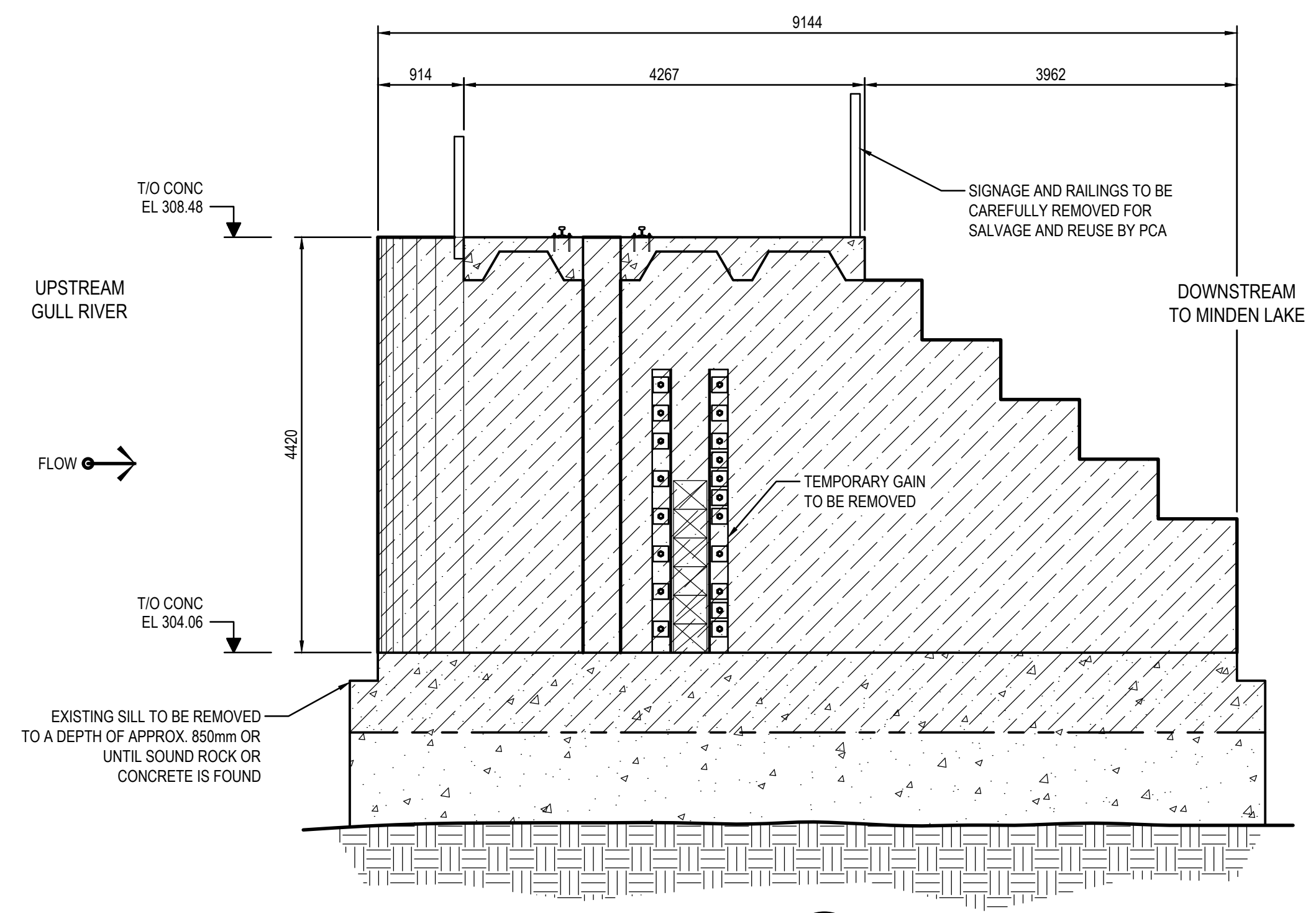
STAGE 7 - FINAL STAGE
1:250



PLAN VIEW
1:100



SECTION B
1:50



SECTION A
1:50



- NOTES:
- WINCHES TO BE REMOVED AND REINSTALLED AS DESCRIBED IN THE SPECIFICATION SECTION 011100 IN ORDER TO MAINTAIN STAGED OPERATIONS OF THE DAM. DAM OPERATORS MUST BE PROVIDED ACCESS TO THE OPERATING EQUIPMENT AT ALL TIMES.
 - ALL EXISTING CONDUIT TO BE DISPOSED OF. NEW CONDUIT TO SUIT NEW GAUGE LAYOUT ON DRAWING 107 TO BE SUPPLIED BY CONTRACTOR.
 - DIMENSIONS ON DRAWINGS ARE APPROXIMATE AND TAKEN FROM RECORD DRAWINGS. ACTUAL DIMENSION MAY VARY.
 - TEMPORARY ANCHOR IS REQUIRED TO KEEP EXISTING SAFETY BOOM IN PLACE.
 - PRIOR TO DEMOLITION OF EXISTING STRUCTURE, CONTRACTOR TO ESTABLISH REFERENCE POINTS (MIN. 4) TO ALLOW TRANSFER OF COORDINATES AND ELEVATIONS TO THE NEW BENCHMARKS ON THE NEW STRUCTURE.

FOR TENDER

- LEGEND:
- DIRECTION OF WATER FLOW
 - TREES
 - BRUSH (PLAN VIEW)
 - PARKING AREA
 - ARMOUR STONE
 - WATER
 - REMOVALS

No.	Description	Drawn By	Date
C	ISSUED FOR TENDER	M.G.	MAY-02-2018
B	ISSUED FOR REVIEW	M.G.	MAR-28-2018
A	ISSUED FOR REVIEW	M.G.	FEB-02-2018

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

- A Detail number / Numéro du détail
- B Location dwg. number / Numéro sur dessin



Project title / Titre du projet

HORSESHOE LAKE DAM REPLACEMENT

REMOVALS

Drawn by / Dessiné par: MAITE GARCIA
Designed by / Conçu par: KARINA SETO
Approved by / Approuvé par: JAVIER VILORIA
Drawing Date / Date du dessin: FEBRUARY 2018

Project manager / Administrateur de projet: NICHOLAS READ
HCEW Number / Numéro de CHTI: 30025849
Drawing Number / Numéro du Dessin: 105
Project Number / Numéro du projet: 121-15275-52
Sheet / Feuille: 1 of 1

- NOTES:**
- REFER TO DRAWING 116 FOR PUBLIC SAFETY PLAN
 - REFER TO DRAWING 115 FOR LOG REST DETAILS
 - END STOP TO BE INSTALLED AT BOTH ENDS OF EACH RAIL
 - SINGLE RAIL VEHICLE GUIDERAIL REFER TO OPSD 912.130, 912.235, 912.101, 912.102, 912.103
 - CONTRACTOR TO ESTABLISH TWO PERMANENT BENCHMARKS ON THE NEW STRUCTURE REFERENCED TO ESTABLISHED BENCHMARKS.
 - RAILINGS SHOWN AS VISUAL REPRESENTATION ONLY. FOR DETAILS TO BE USED FOR QUANTITY ESTIMATION REFER TO PCA STANDARD DETAILS.
 - CONTRACTOR IS RESPONSIBLE FOR THE RESTORATION OF ALL DISTURBED AREAS BACK TO NATURAL CONDITIONS OR BETTER AFTER THE COMPLETION OF WORKS.
 - UNDERTAKE RESTORATION TO LINES AND GRADES IDENTIFIED INCLUDING EXCAVATION AND/OR PLACEMENT OF APPROVED MATERIALS TO ACHIEVE SUBGRADE AND TRACK PACKING FILL MATERIALS TO THE SATISFACTION OF THE INSPECTOR. TEMPORARY SITE WORKS SHALL BE RETURNED TO THE ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE DEPARTMENTAL REPRESENTATIVE.
 - CONTRACTOR TO PROVIDE AND INSTALL NEW PREFABRICATED REMOVABLE BOLLARDS IN A SIMILAR STYLE TO THE PROVIDED FIXED BOLLARDS.

- LEGEND:**
- DIRECTION OF WATER FLOW
 - TREES
 - BRUSH (PLAN VIEW)
 - PARKING AREA
 - ARMOUR STONE
 - WATER
 - EXISTING SPOT ELEVATIONS

No.	Description	Drawn By	Date
C	ISSUED FOR TENDER	M.G.	MAY-07-2018
B	ISSUED FOR REVIEW	M.G.	MAR-28-2018
A	ISSUED FOR REVIEW	M.G.	FEB-02-2018

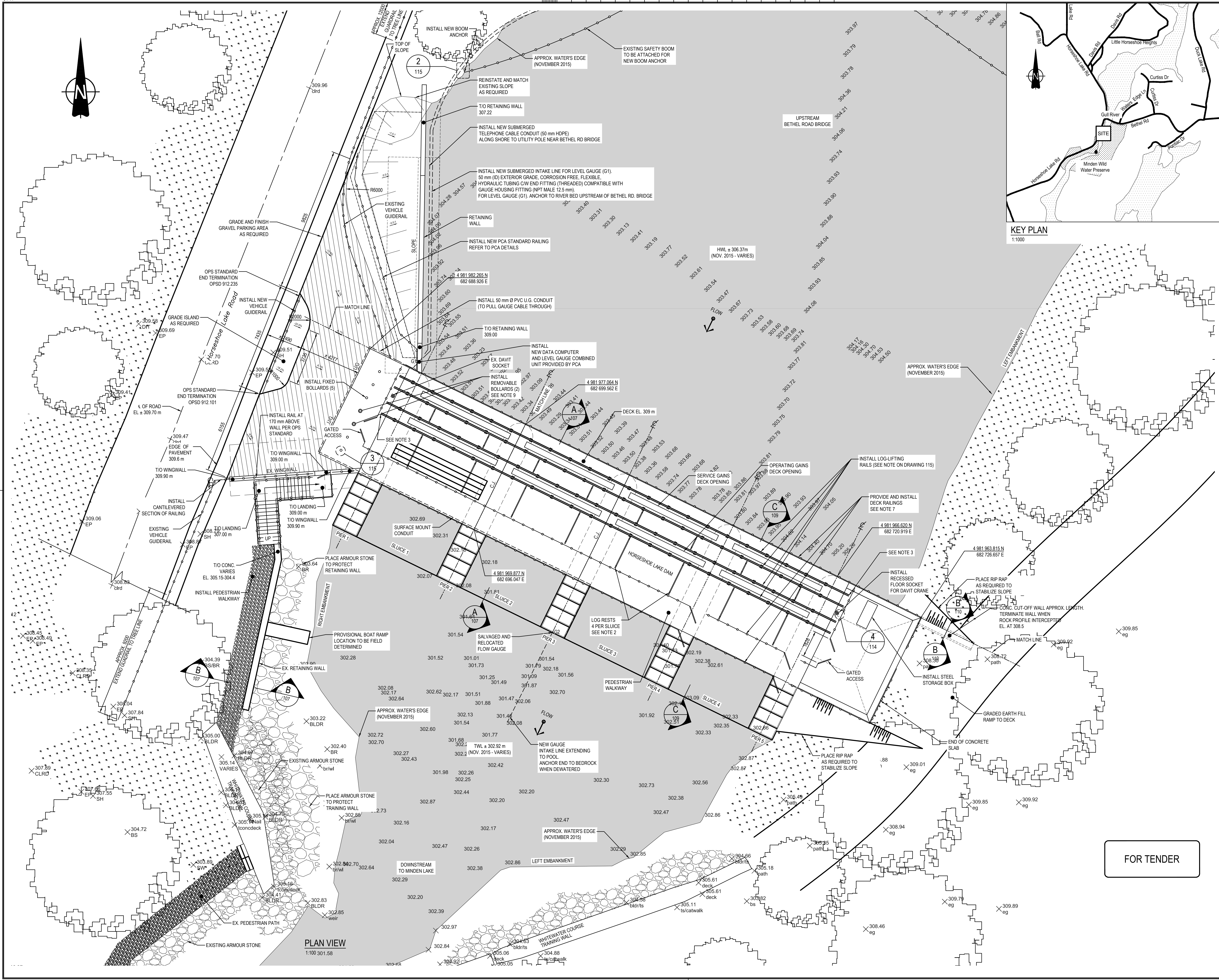
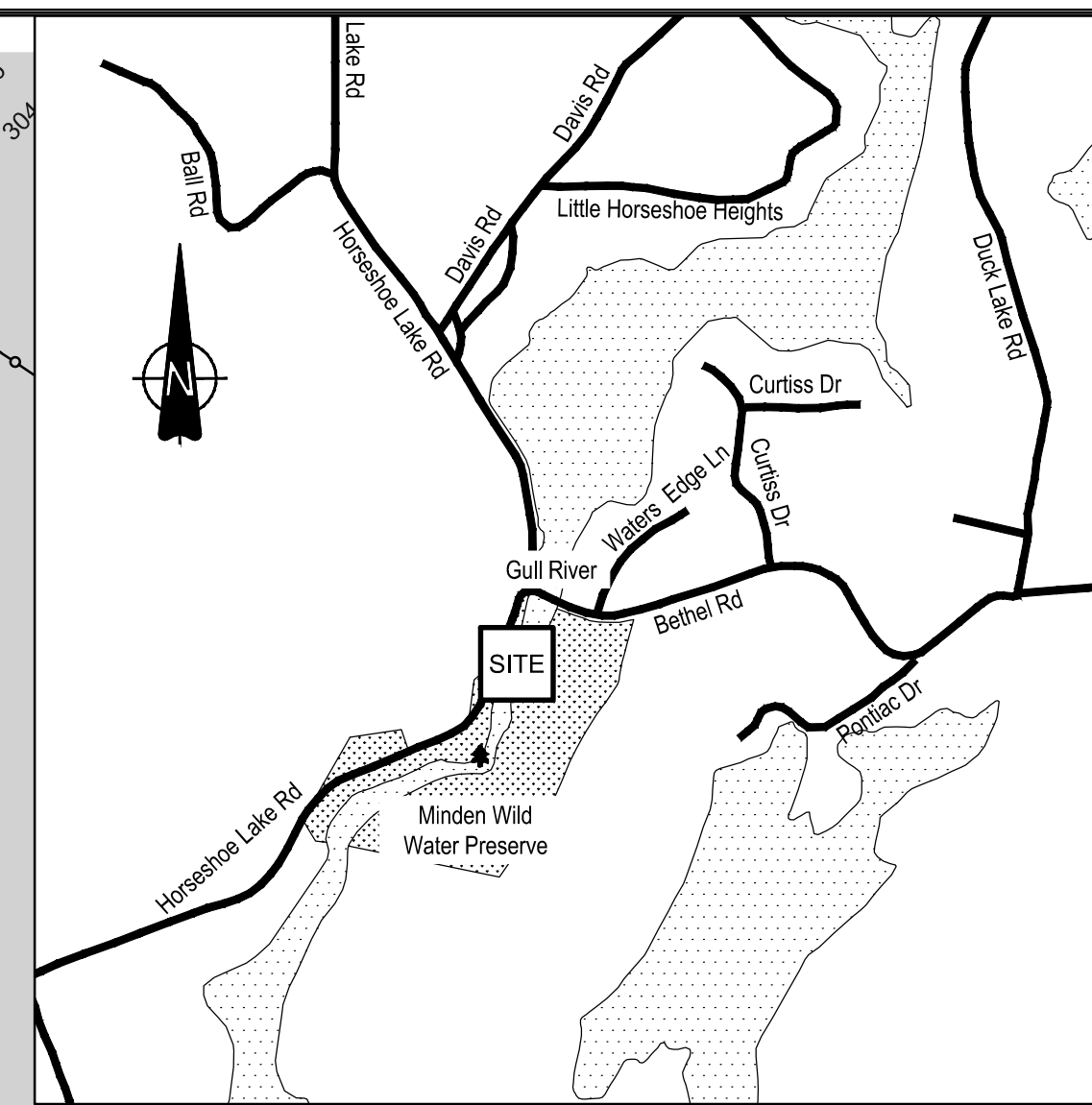
- Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.
- A Detail number
 - B Location dwg. number



HORSESHOE LAKE DAM REPLACEMENT

CONSTRUCTION FINAL GENERAL ARRANGEMENT

Drawn by / Dessiné par MAITE GARCIA	Designed by / Conçu par KARINA SETO
Approved by / Approuvé par JAVIER VILORIA	Drawing Date / Date du dessin FEBRUARY 2018
Project manager / Administrateur de projet NICHOLAS READ	
HCEW Number / Numéro de CHTI 30025849	Drawing Number / Numéro du dessin 106
Project Number / Numéro du projet 121-15275-52	Sheet / Feuille 1 of 1



FOR TENDER

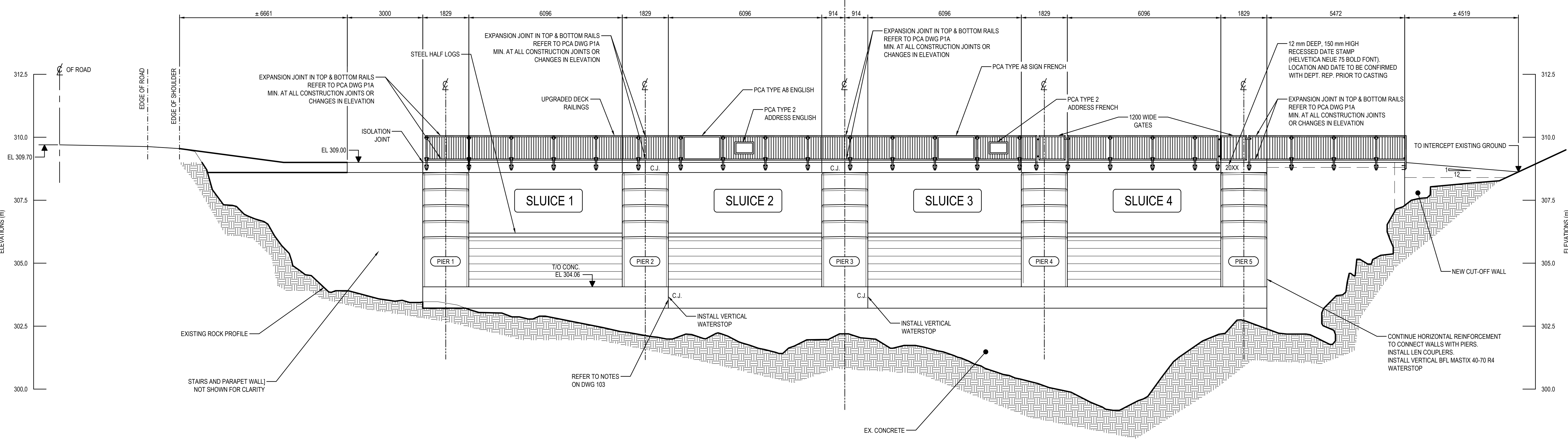
NOTE:

- REFER TO DRAWING 116 FOR PUBLIC SAFETY PLAN.
- RAILINGS SHOWN AS VISUAL REPRESENTATION ONLY. FOR DETAILS TO BE USED FOR QUANTITY ESTIMATION REFER TO PCA STANDARD DETAILS.
- IF SPECIFIED LAP LENGTH CANNOT BE ACHIEVED USE MECHANICAL COUPLERS.
- PROVIDE ALL REQUIRED TEMPORARY BRACING AND SUPPORTS FOR ALL SLABS, BEAMS, WALLS AND FRAMES. TEMPORARY BRACING AND SUPPORTS MUST BE CAPABLE OF TRANSFERRING ALL IMPOSED CONSTRUCTION AND DEAD LOADS TO THE STRUCTURE WITHOUT EXCEEDING SPECIFIED DESIGN LOADS.
- REFER TO SPECIFICATIONS SECTION 03 30 00 FOR REPAIR OF DEFICIENT CONCRETE.
- DAM DECK AND RAILS ARE DESIGNED FOR A LOG LIFTER DEAD LOAD OF 27500 lbs AND LOG LIFTER LIVE LOAD OF 32000 lbs.
- WHERE INDICATED ON DESIGN DRAWINGS, GRANULAR "A" AND GRANULAR "B" ARE AS PER OPS.PROV 1010, NOVEMBER 2013.

LEGEND:

- DIRECTION OF WATER FLOW
- TREES
- BRUSH (PLAN VIEW)
- ROCK (SECTION)

FOR TENDER



DOWNSTREAM ELEVATION VIEW
1:75

CONCRETE:

- REFER TO SPECIFICATIONS DIVISION 3 FOR CONCRETE TYPES AND REQUIREMENTS.
- CARE SHOULD BE TAKEN TO ENSURE ADEQUATE COVER OF REINFORCEMENT WHEN POURING ON PREPARED ROCK SURFACE. ALL CONCRETE MUST BE PLACED AGAINST ROCK SURFACE. VOIDS IN THE ROCK, SOIL OR CONCRETE INTERFACE ARE NOT ALLOWED.
- THE CONTRACTOR SHALL COMPLY WITH MAXIMUM POUR HEIGHTS, AND POUR RATES OF THE EMBEDDED PARTS MANUFACTURERS RECOMMENDATIONS. THE SPECIFICATIONS AND FRAMEWORK LIMITATIONS. WHERE ANY DISCREPANCIES OCCUR, THE MOST STRINGENT REQUIREMENTS SHALL APPLY.
- CONCRETE FINISH ON THE DECK AND APPROACH SLABS TO BE A LIGHT BROOM FINISH.
- CONCRETE EDGES IN DAM PIERS AND WALLS TO HAVE A 3" RADIUS FILLET, UNLESS NOTED OTHERWISE.
- USE 25 mm CHAMFER STRIP ON EXTERNAL CORNERS & EDGES OF DECK UNLESS NOTED OTHERWISE.

No.	Description	Drawn By	Date
E	REVISED FOR TENDER	H.Z.	OCT-17-2018
D	REVISED FOR TENDER	M.G.	JUL-24-2018
C	ISSUED FOR TENDER	M.G.	MAY-07-2018
B	ISSUED FOR REVIEW	M.G.	MAR-28-2018
A	ISSUED FOR REVIEW	M.G.	FEB-02-2018

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A Detail number
Numéro du détail
B Location dwg. number
Numéro sur dessin

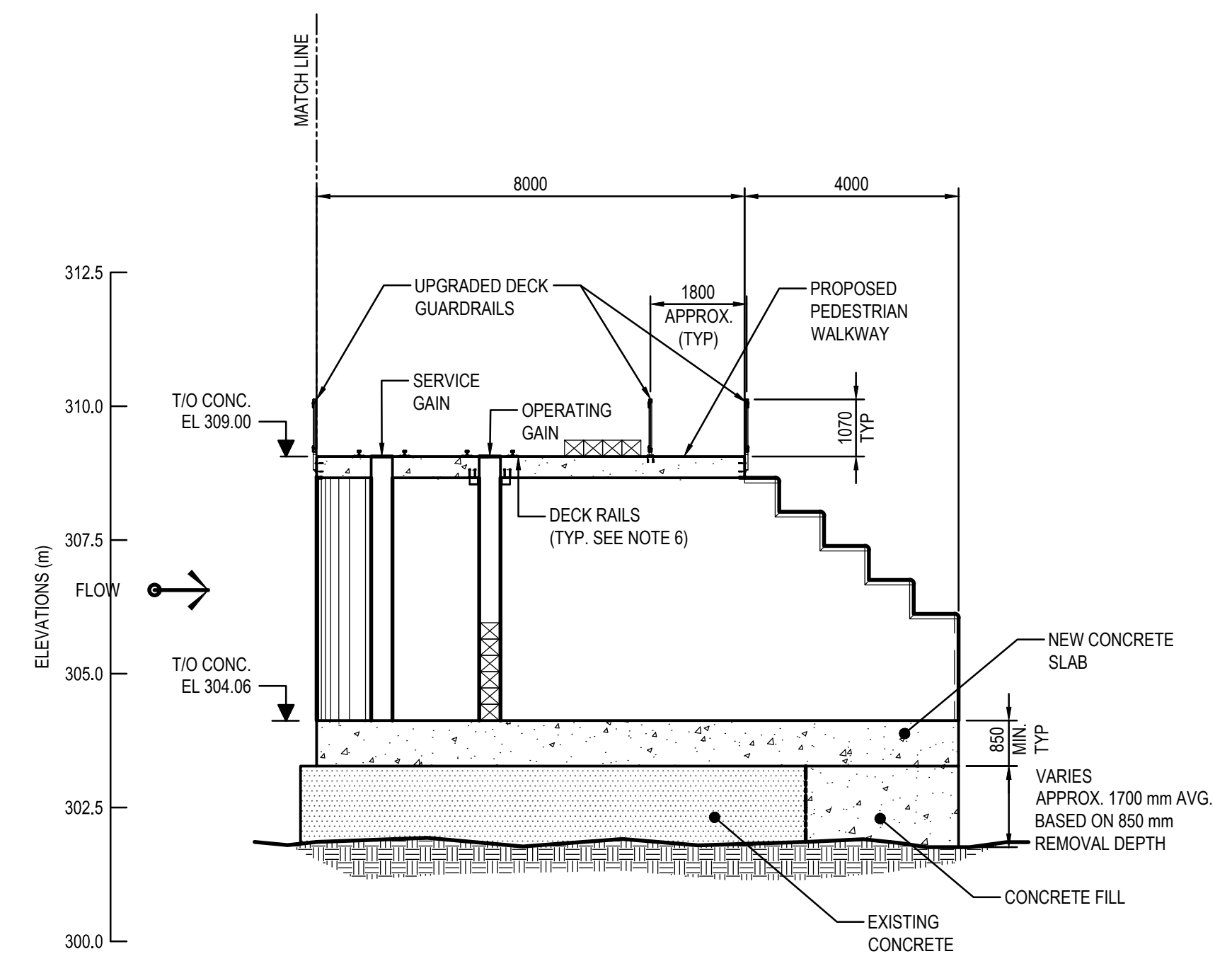


Project title / Titre du projet
HORSESHOE LAKE DAM REPLACEMENT

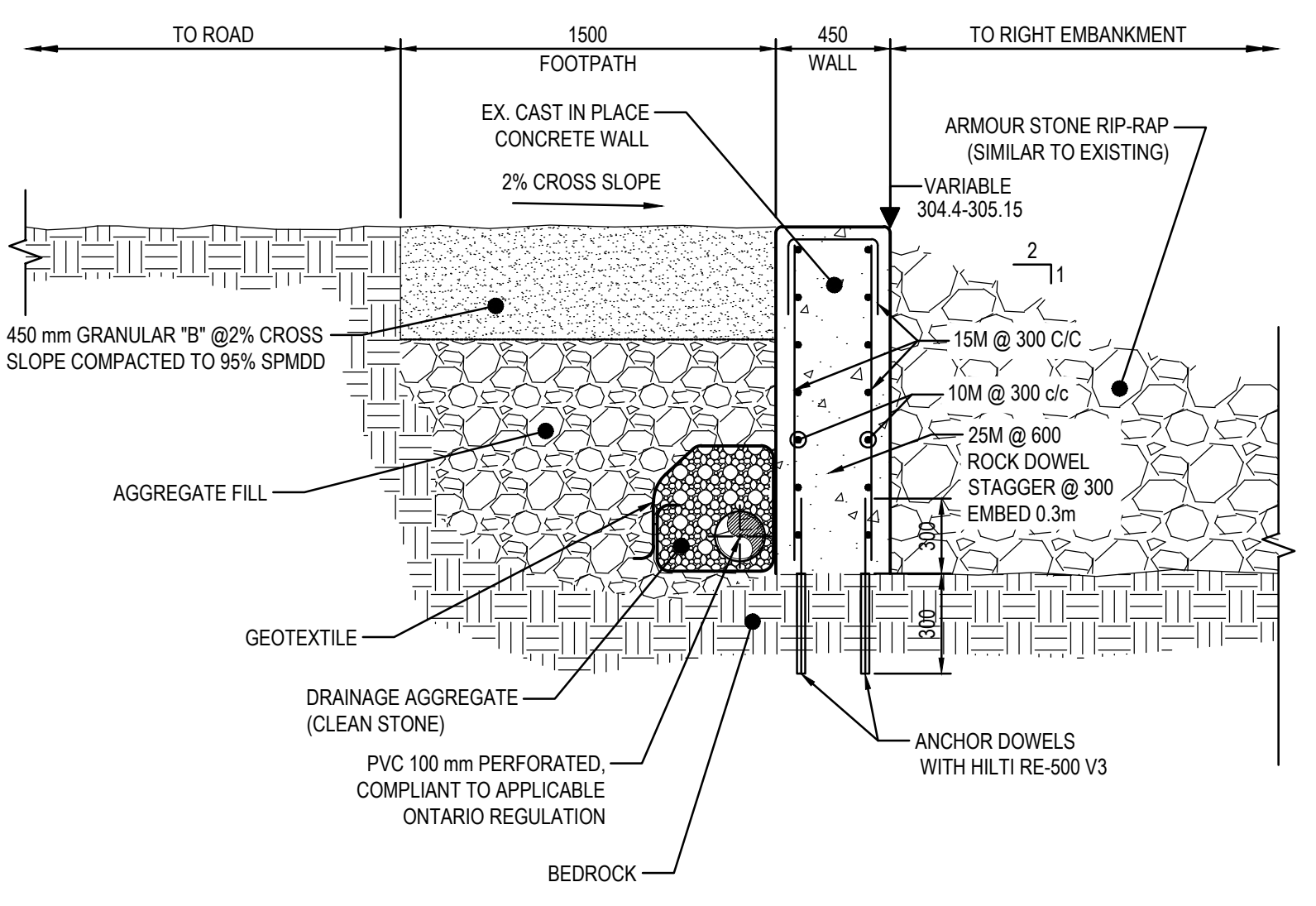
Drawing title / Titre du dessin
CONSTRUCTION ELEVATION AND SECTIONS

Drawn by / Dessiné par: MAITE GARCIA
Designed by / Conçu par: KARINA SETO
Approved by / Approuvé par: JAVIER VILORIA
Drawing Date / Date du dessin: FEBRUARY 2018

Project manager / Administrateur de projet: NICHOLAS READ
HCEW Number / Numéro de CHTI: 30025849
Drawing Number / Numéro du Dessin: 107
Project Number / Numéro du projet: 121-15275-52
Sheet / Feuille: 1 of 1



SECTION A
1:100

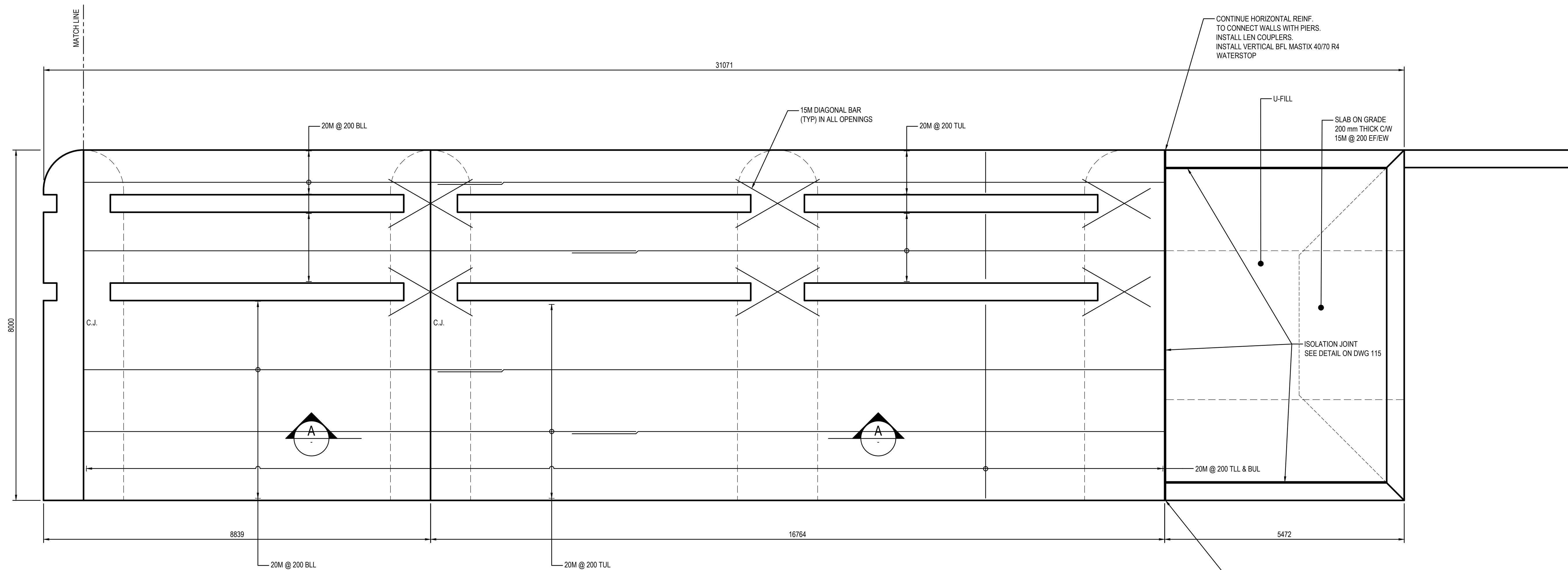


PEDESTRIAN WALKWAY SECTION B
1:25

REINFORCEMENT:

1. REINFORCEMENT TO CSA G30 18M GRADE 400 U.L.O.
2. FOR CONCRETE COVER REQUIREMENTS REFER TO TABLE 17 CSA A 23.3 OR TABLE 17 CSA A 23.1
3. PROVIDE CLASS B LAP LENGTHS IN ACCORDANCE WITH RSIC REINFORCING STEEL MANUAL OF STANDARD PRACTICE.
4. REINFORCEMENT REQUIREMENTS ARE SHOWN ON DETAIL DRAWINGS. WHERE DETAILS OF BAR SIZING AND SPACING ARE NOT SHOWN, ALLOW FOR MINIMUM REINFORCEMENT IN ACCORDANCE WITH CANCSA A23.3 ALL REINFORCEMENT SHOWN SHALL BE CONTINUOUS UNLESS AS DETAILED OTHERWISE BUT SHALL NOT BE LESS THAN THAT SHOWN FOR SIMILAR ITEM. ALL CONCRETE ITEMS ARE REINFORCED CONCRETE UNLESS SPECIFICALLY NOTED OTHERWISE. WHERE BAR SIZE NOT SHOWN, USE MAXIMUM SIZE OF BARS WHICH ARE LAPPED.
5. CONTRACTOR TO REFER TO ALL SECTIONS OF DIV 03 FOR CONCRETE REINFORCING REQUIREMENTS.
6. PROVIDE LEN COUPLERS AS REQUIRED AND SHOWN ON DRAWINGS.
7. PROVIDE ADDITIONAL REINFORCEMENTS AROUND OPENINGS. ENSURE DETAIL IS SHOWN ON REINFORCING SHOP DRAWINGS WHEN ADDITIONAL REINFORCEMENTS AROUND OPENINGS ARE NOT SPECIFICALLY SHOWN ON DRAWINGS.
8. SUBMIT PROPOSALS FOR CONSTRUCTION JOINT LOCATIONS OTHER THAN THOSE SHOWN ON DRAWINGS TO DEPARTMENTAL REPRESENTATIVE FOR REVIEW.

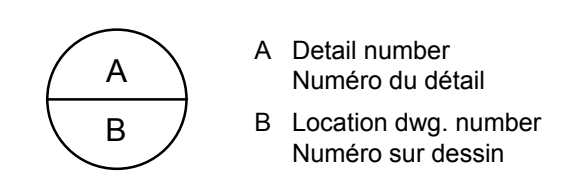
FOR TENDER



DECK PLAN VIEW
1:75

No.	Description	Drawn By (Des.Pw)	Date
C	ISSUED FOR TENDER	M.G.	MAY-07-2018
B	ISSUED FOR REVIEW	M.G.	MAR-28-2018
A	ISSUED FOR REVIEW	M.G.	FEB-02-2018

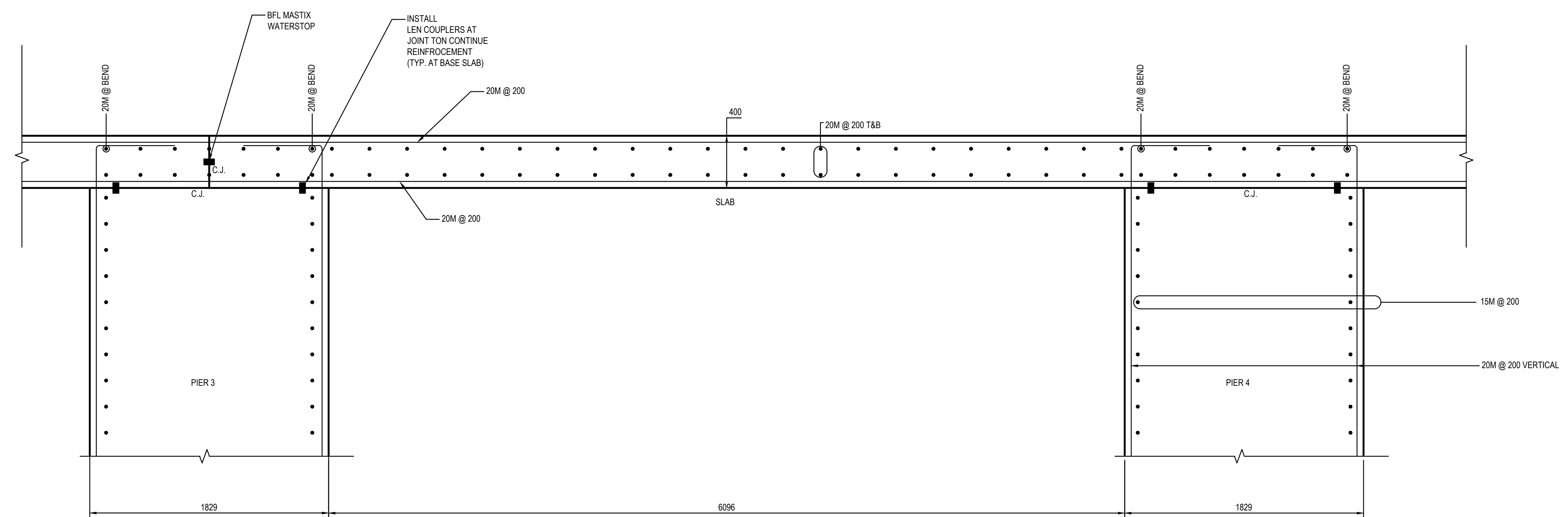
Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.



Project title / Titre du projet
HORSESHOE LAKE DAM REPLACEMENT

Drawing title / Titre du dessin
REINFORCING DECK

Drawn by / Dessiné par MAITE GARCIA	Designed by / Conçu par KARINA SETO
Approved by / Approuvé par JAVIER VILORIA	Drawing Date / Date du dessin FEBRUARY 2018
Project manager / Administrateur de projet NICHOLAS READ	
HCEW Number / Numéro de CHTI 30025849	Drawing Number / Numéro du Dessin 108
Project Number / Numéro du projet 121-15275-52	Sheet / Feuille 1 of 1



SECTION A
1:20

- NOTES:**
- BEFORE CASTING CONCRETE, ENSURE THAT ALL EMBEDDED ITEMS, SUCH AS ANCHOR BOLTS, SLEEVES AND WATER STOPS ARE IN POSITION AND SECURELY FASTENED IN PLACE TO THE SATISFACTION OF THE DEPARTMENTAL REPRESENTATIVE.
 - INTERNAL WATERSTOPS ARE REQUIRED IN ALL JOINTS OF WATER RETAINING STRUCTURES AND AS SHOWN. TERMINATE INTERNAL WATERSTOPS AT GRADE IN NON-WATER RETAINING EXTERIOR WALLS.
 - INSTALL ROCK DOWELS AS PER MANUFACTURERS RECOMMENDATIONS.
 - THE EXISTING CONCRETE SURFACES/INTERFACES SHALL BE INTENTIONALLY ROUGHENED TO A FULL AMPLITUDE OF AT LEAST 5MM U.N.O. TO RECEIVE NEW CONCRETE ELEMENTS ARE TO BE CONSTRUCTED ON EXISTING CONCRETE STRUCTURES WHETHER SHOWN ON DRAWINGS OR NOT.

FOR TENDER

No.	Description	Drawn By	Date
D	REVISED FOR TENDER	H.Z.	OCT-17-2018
C	ISSUED FOR TENDER	M.G.	MAY-07-2018
B	ISSUED FOR REVIEW	M.G.	MAR-28-2018
A	ISSUED FOR REVIEW	M.G.	FEB-02-2018

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

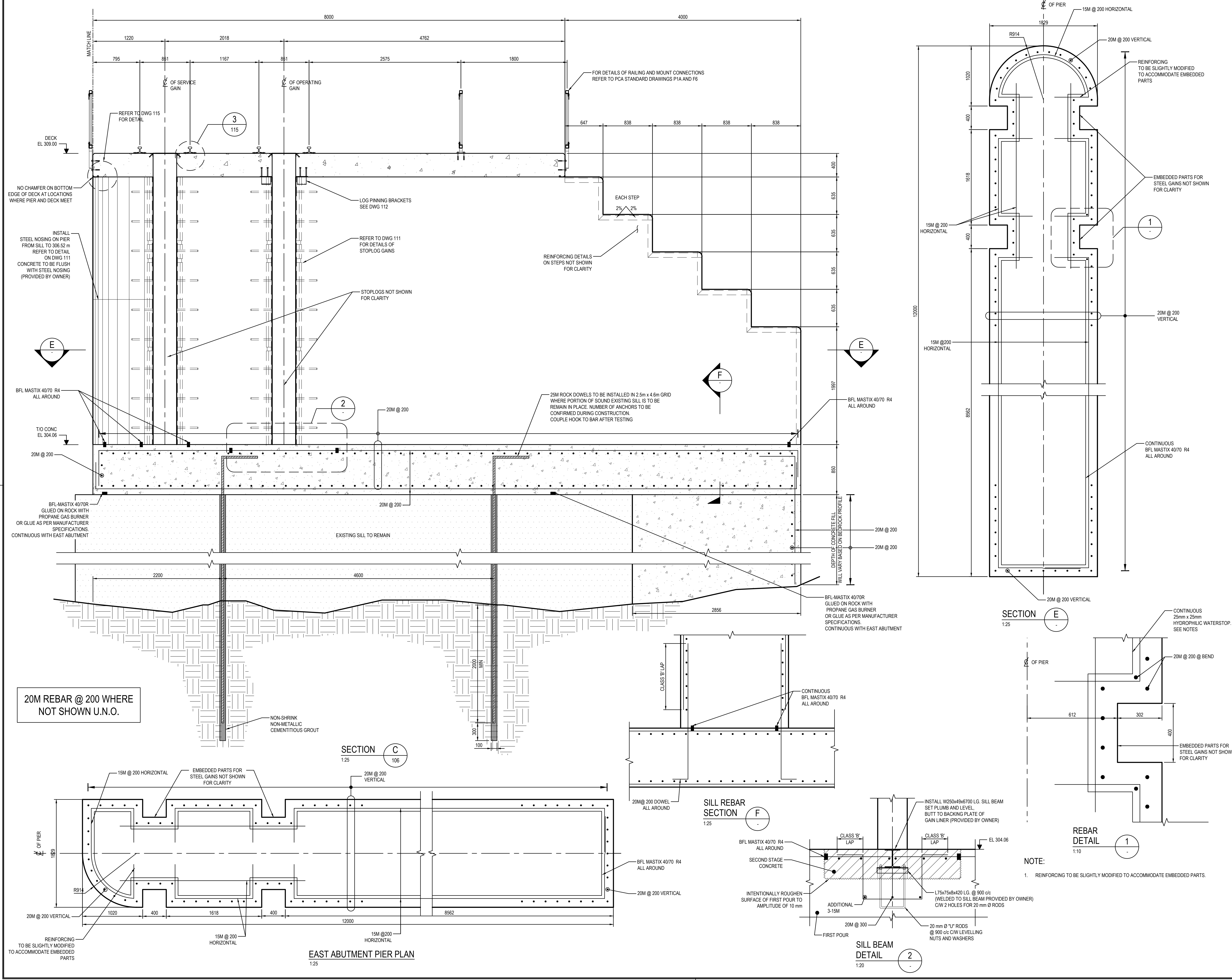
A	Detail number
B	Location dwg. number
	Numéro sur dessin



Project title / Titre du projet
HORSESHOE LAKE DAM REPLACEMENT

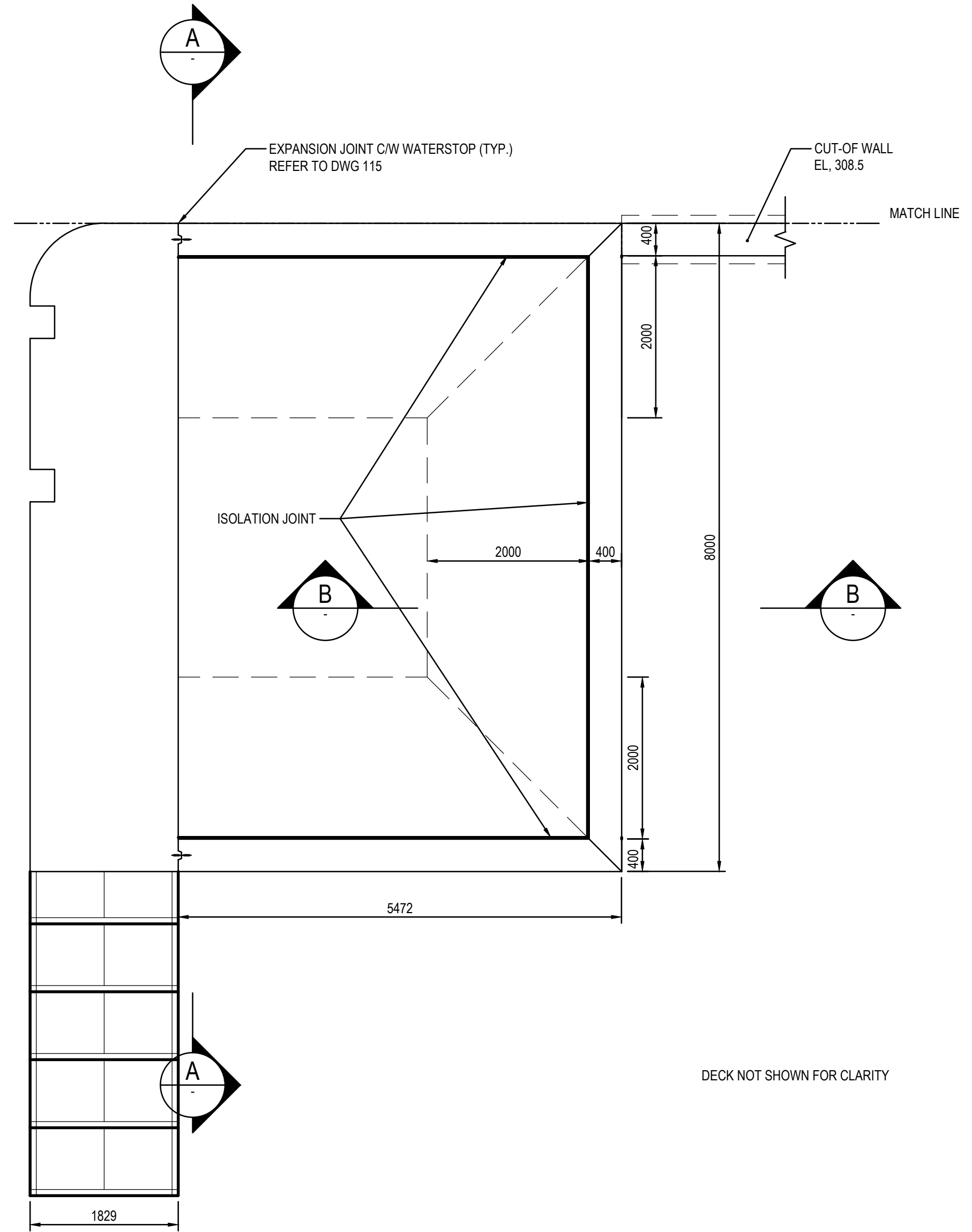
REINFORCING PIER SECTIONS AND SILL SLAB

Drawn by / Dessiné par MAITE GARCIA	Designed by / Conçu par KARINA SETO
Approved by / Approuvé par JAVIER VILORIA	Drawing Date / Date du dessin FEBRUARY 2018
Project manager / Administrateur de projet NICHOLAS READ	
HCEW Number / Numéro de CHTI 30025849	Drawing Number / Numéro du Dessin 109
Project Number / Numéro du projet 121-15275-52	Sheet / Feuille 1 of 1

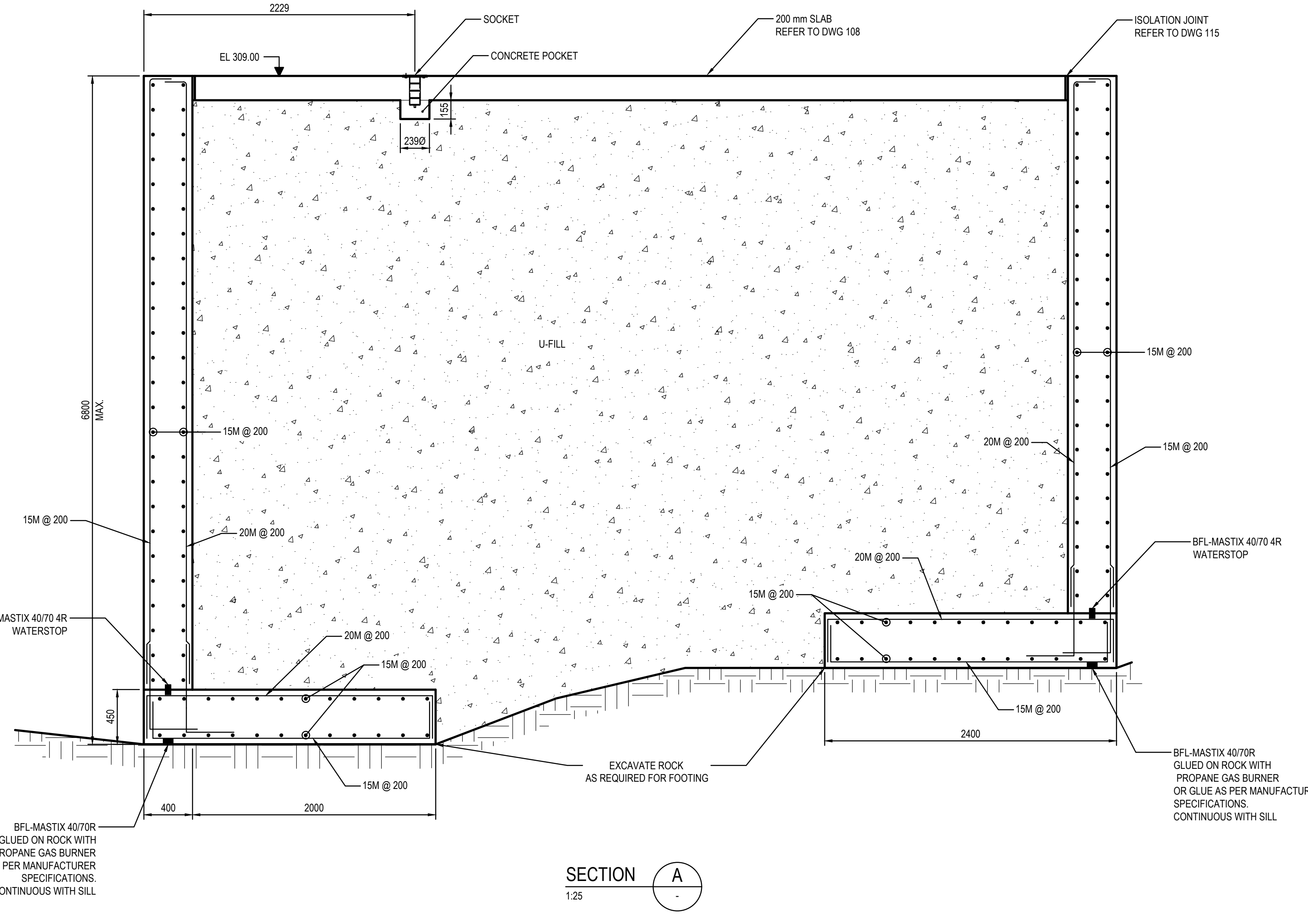


NOTES:
 1. PLACE U-FILL IN 1.5 m LIFTS MAX. POUR SUBSEQUENT LIFTS ONLY ONCE PREVIOUS LIFT HAS SET.
 2. PROVIDE CLASS "F" LAP LENGTHS IN ACCORDANCE WITH RSIC REINFORCING STEEL MANUAL OF STANDARD PRACTICE.

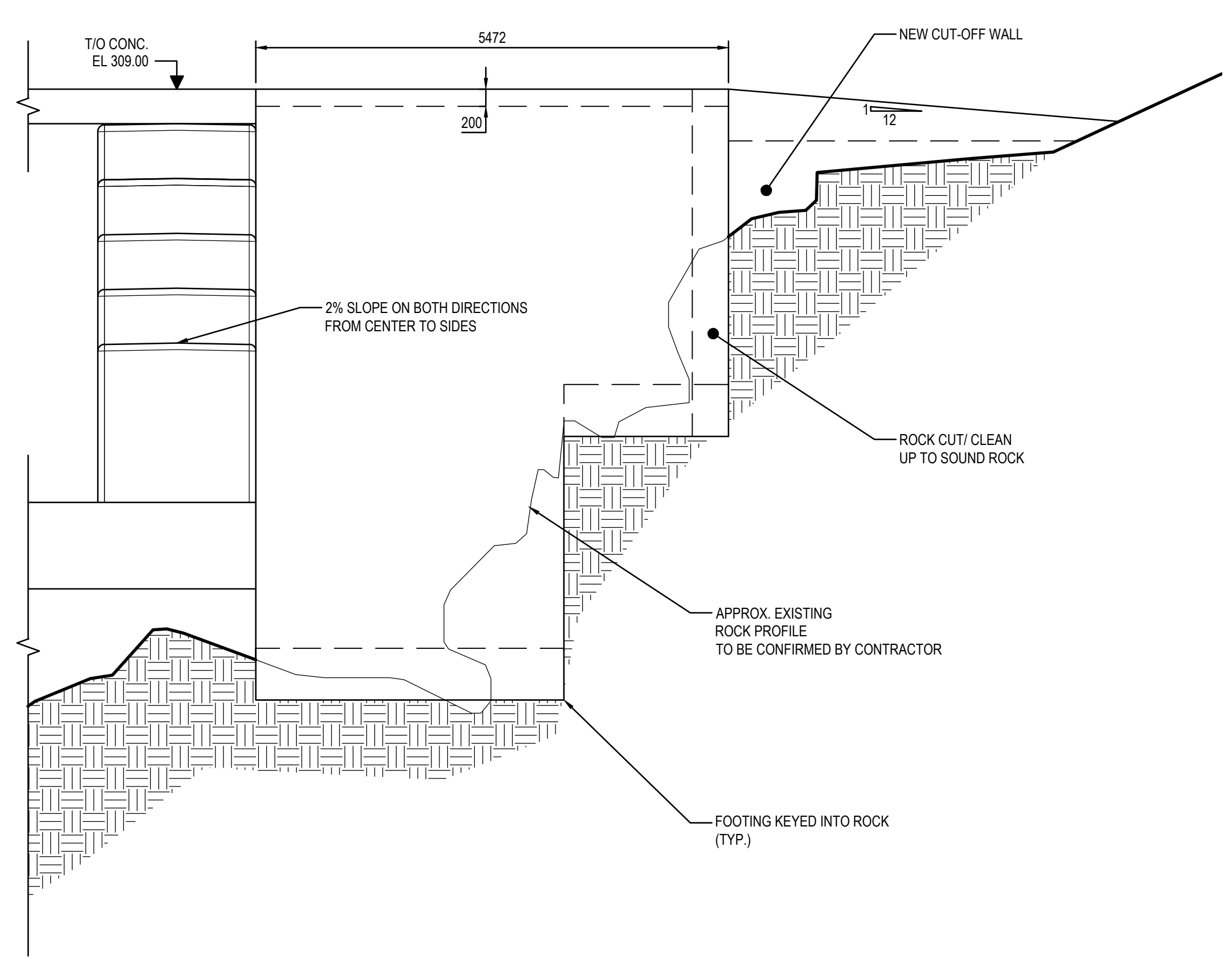
FOR TENDER



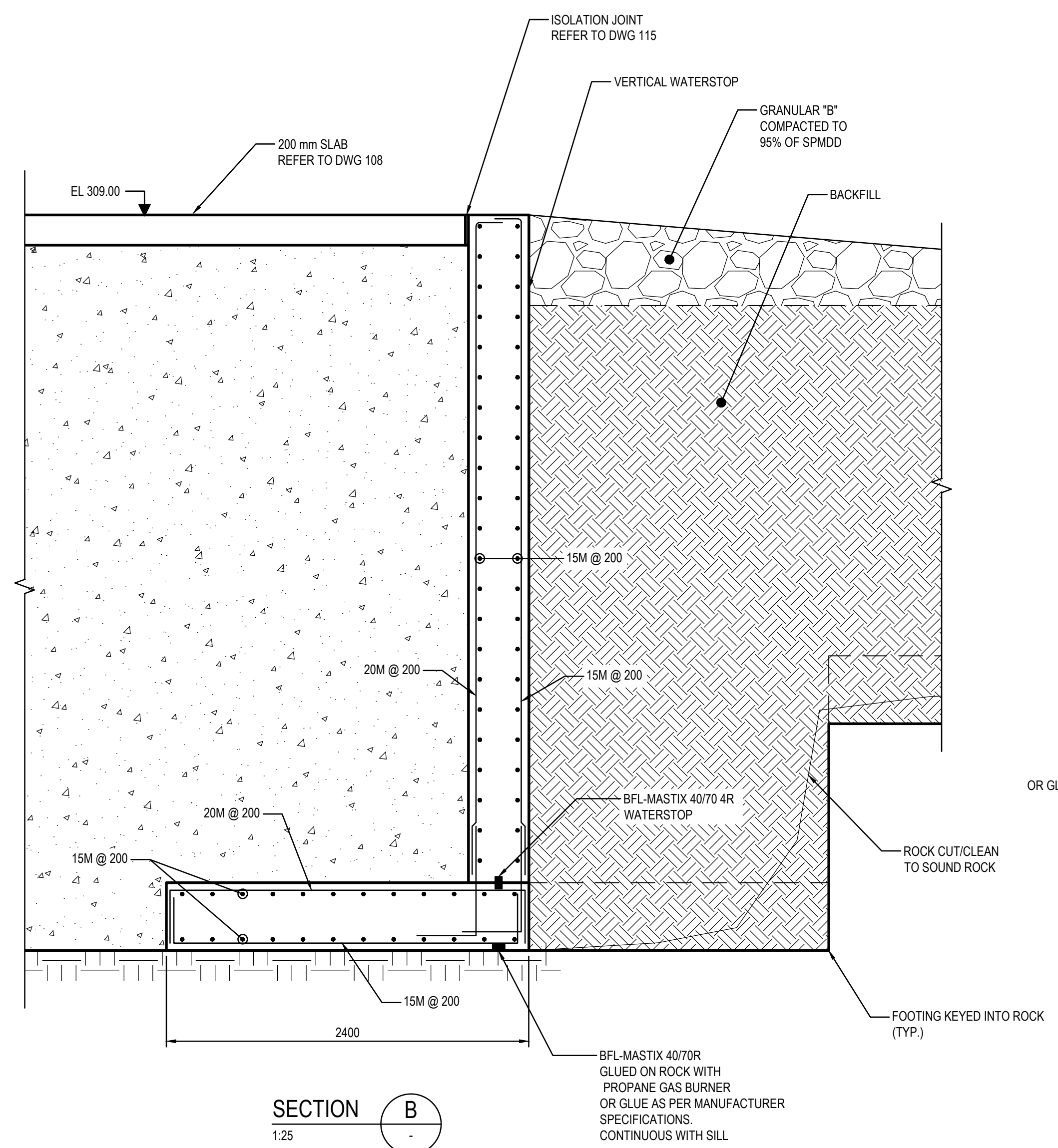
EAST ABUTMENT PLAN VIEW
1:50



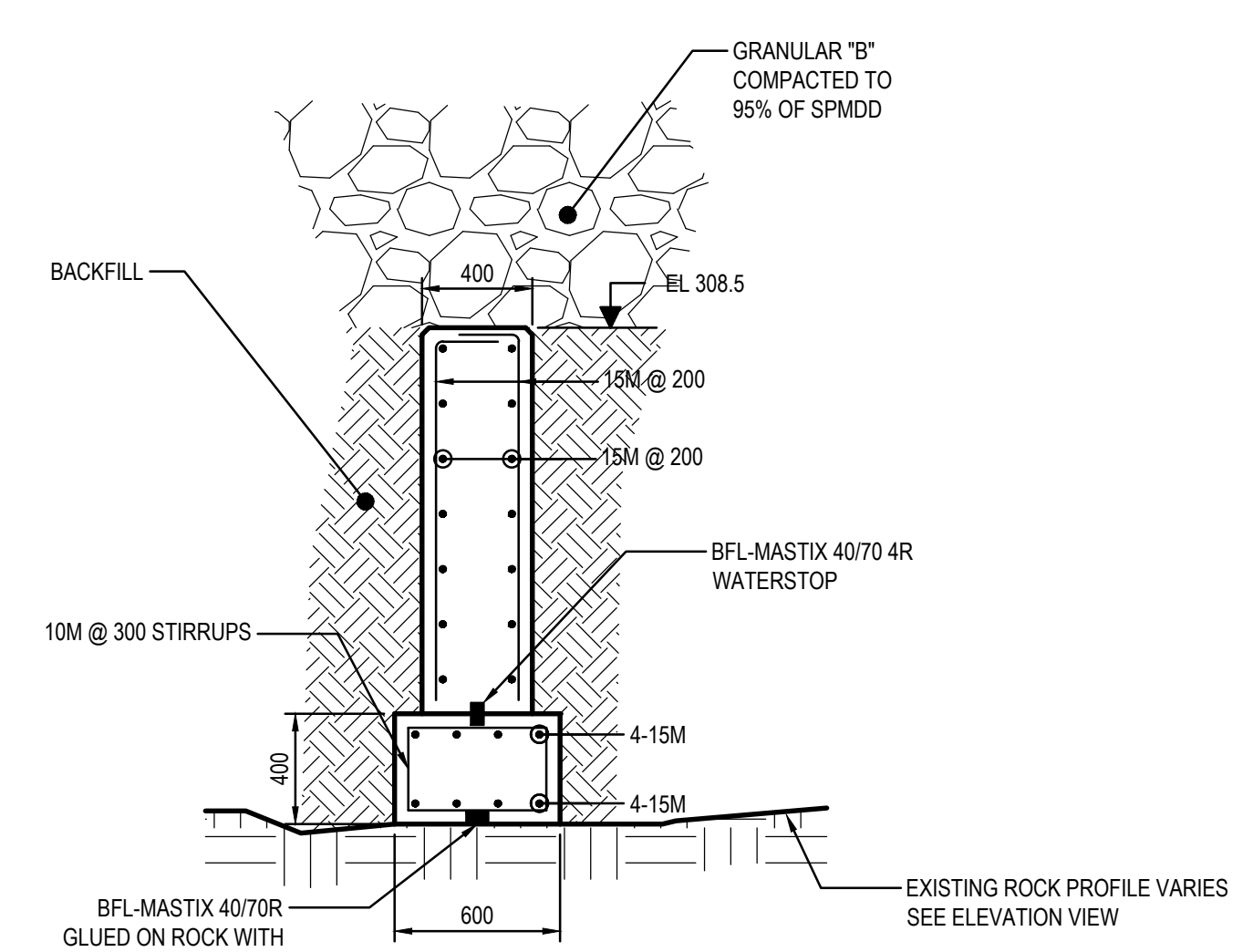
SECTION A
1:25



DOWNSTREAM ELEVATION
1:50



SECTION B
1:25



CONCRETE CORE WALL (TYP.)
SECTION B
1:25

NOTE:
1. PLACE FILL EVENLY AND SIMULTANEOUSLY ON UPSTREAM AND DOWNSTREAM SIDES.

No.	Description	Drawn By	Date
C	ISSUED FOR TENDER	M.G.	MAY-07-2018
B	ISSUED FOR REVIEW	M.G.	MAR-28-2018
A	ISSUED FOR REVIEW	M.G.	FEB-02-2018

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A Detail number
Numéro du détail
B Location dwg. number
Numéro sur dessin



Project title / Titre du projet
HORSESHOE LAKE DAM REPLACEMENT

Drawing title / Titre du dessin
CONSTRUCTION EAST ABUTMENT

Drawn by / Dessiné par MAITE GARCIA	Designed by / Conçu par KARINA SETO
Approved by / Approuvé par JAVIER VILORIA	Drawing Date / Date du dessin FEBRUARY 2018
Project manager / Administrateur de projet NICHOLAS READ	
HCEW Number / Numéro de CHTI 30025849	Drawing Number / Numéro du Dessin 110
Project Number / Numéro du projet 121-15275-52	Sheet / Feuille 1 of 1

NOTE:
 1. DRAWING FOR INSTALLATION MATERIALS PROVIDED BY OWNER AS INDICATED.
 2. TEMPORARY SUPPORTS INSIDE OF GAIN LINERS (TO BE PROVIDED) MUST BE REMOVED IN THE FIELD AND GROUND FLUSH.

FOR TENDER

No.	Description	Drawn By (Des. Par)	Date
C	ISSUED FOR TENDER	M.G.	MAY-07-2018
B	ISSUED FOR REVIEW	M.G.	MAR-28-2018
A	ISSUED FOR REVIEW	M.G.	FEB-02-2018

Revision / Révision
 Do not scale drawings.
 Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	A Detail number Numéro du détail
B	B Location dwg. number Numéro sur dessin

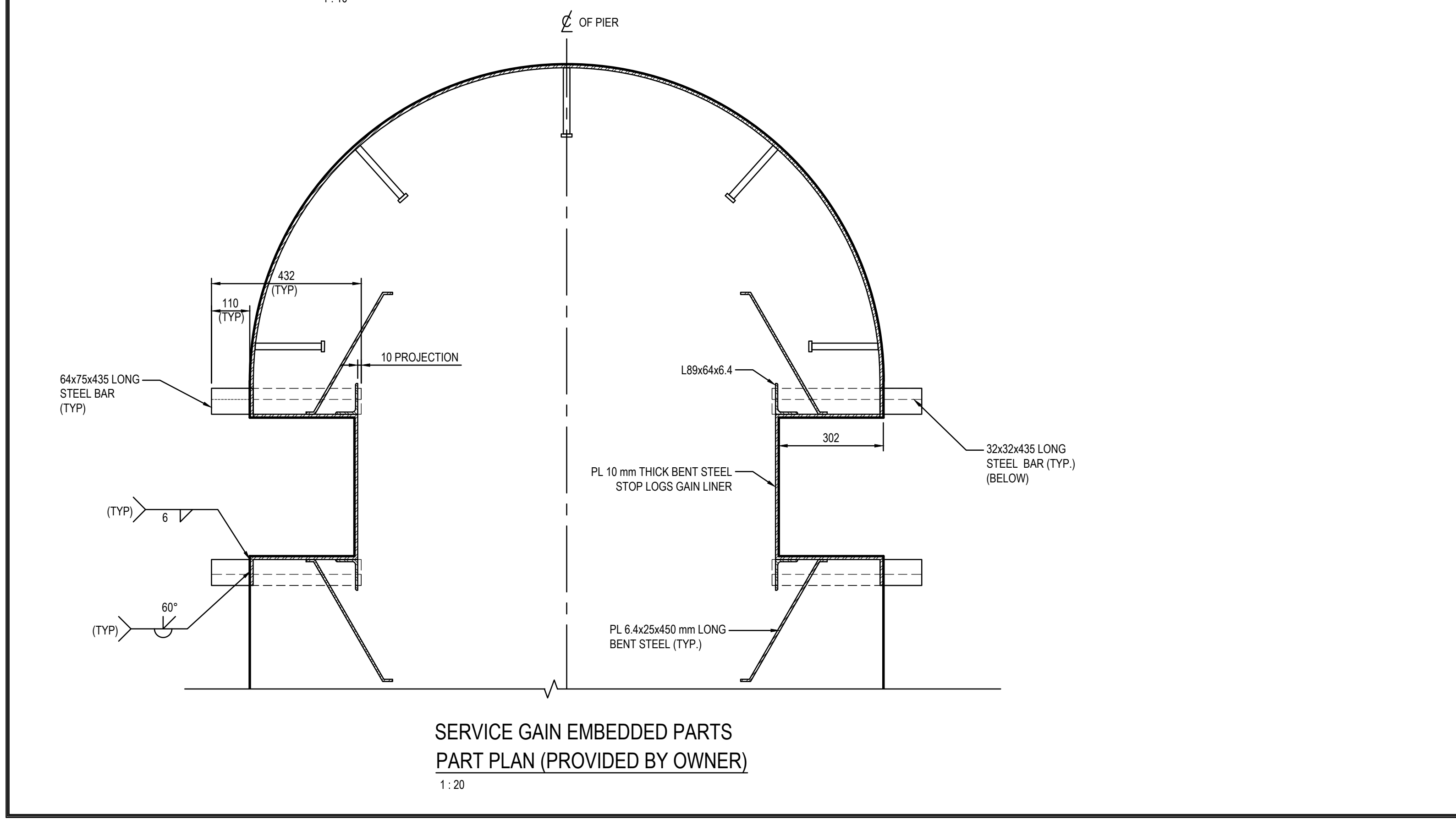
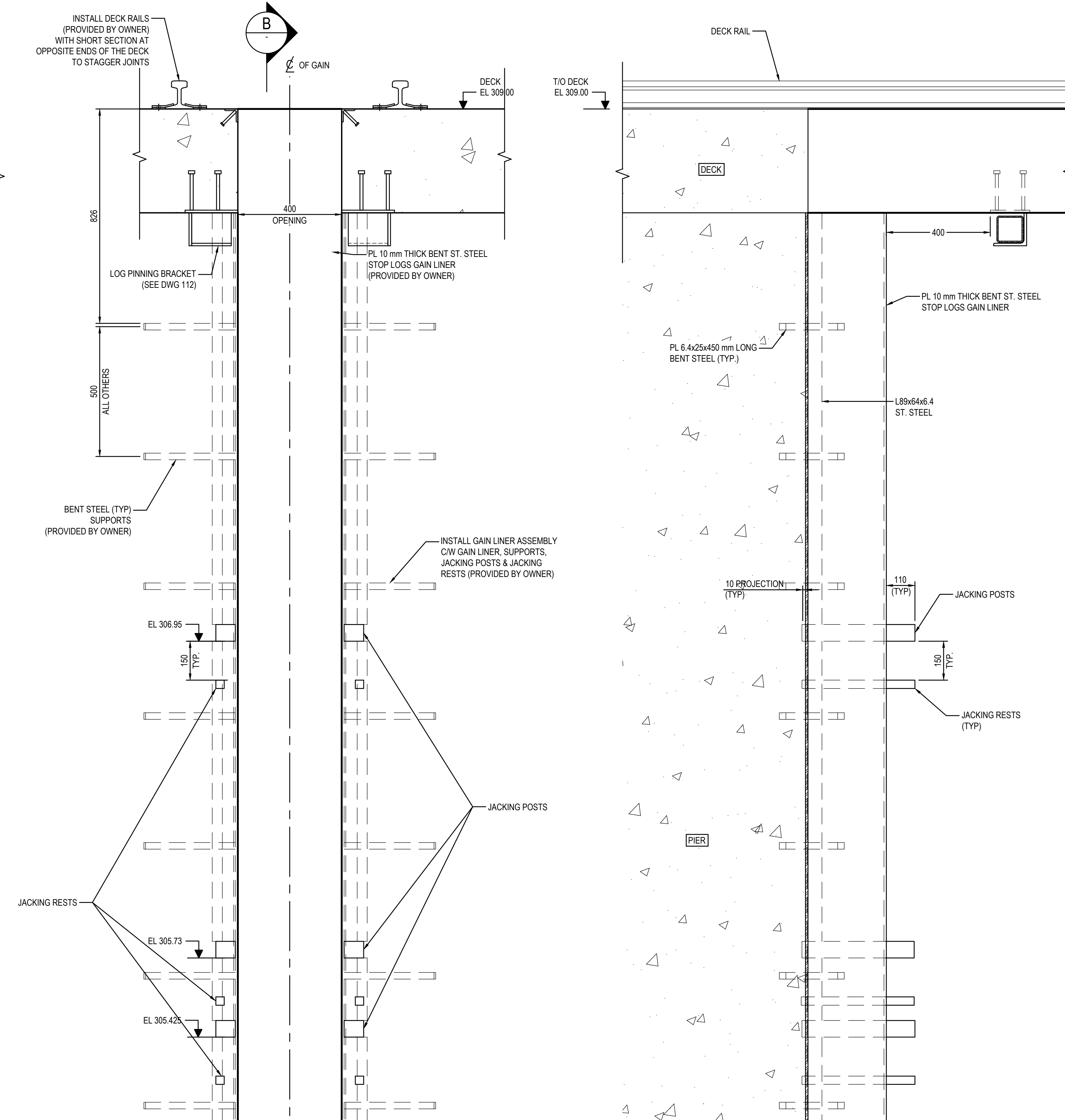
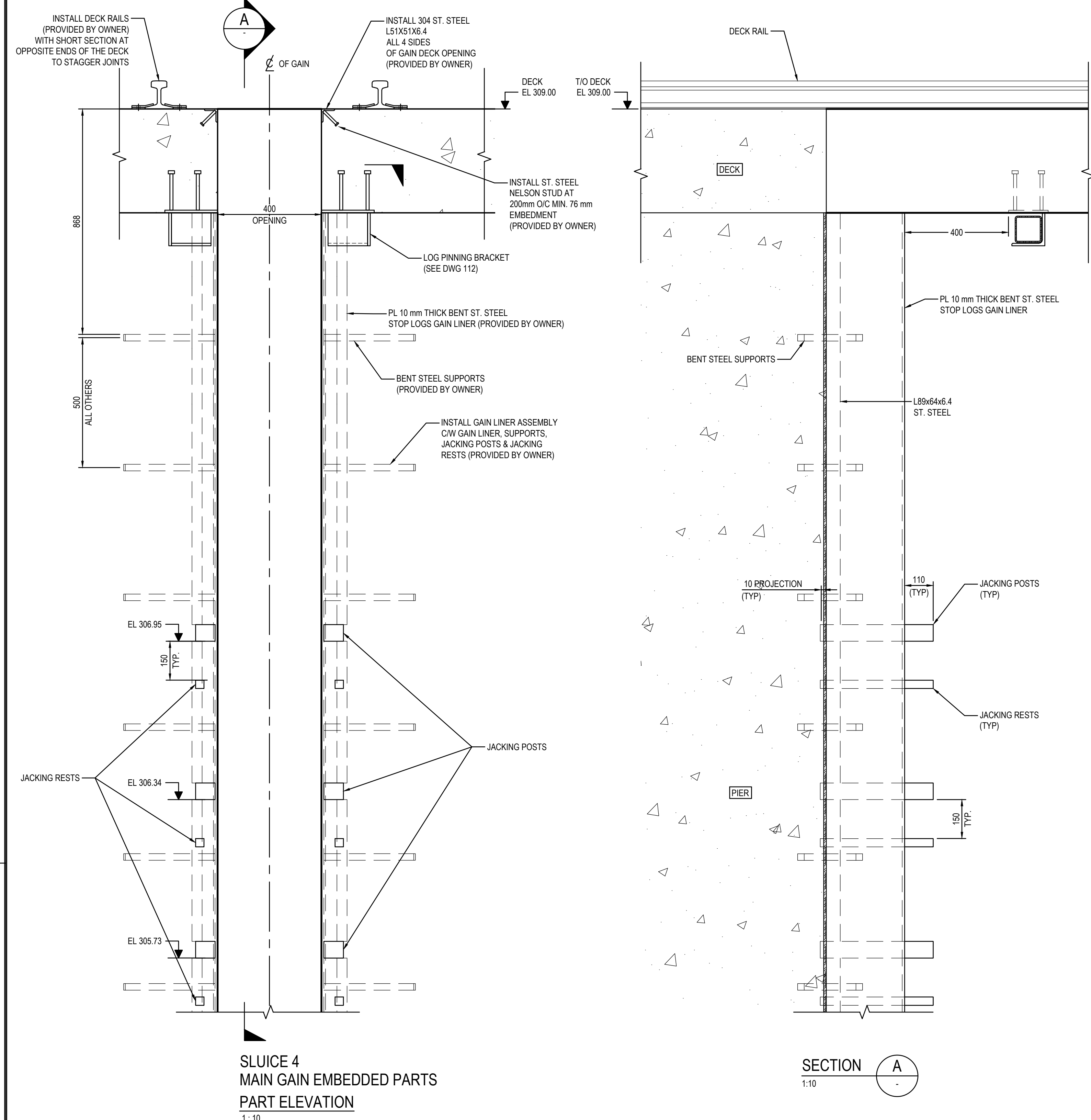
wsp
 600 COCHRANE DRIVE, 5TH FLOOR
 MARKHAM ONTARIO CANADA L3R 5K3
 TEL: 1-905-475-7270 | FAX: 1-905-475-5994 | WWW.WSPGROUP.COM

Project title / Titre du projet
HORSESHOE LAKE DAM REPLACEMENT

Drawing title / Titre du dessin
JACKING BRACKET DETAILS

Drawn by / Dessiné par
MAITE GARCIA
 Approved by / Approuvé par
JAVIER VILORIA
 Project manager / Administrateur de projet
NICHOLAS READ

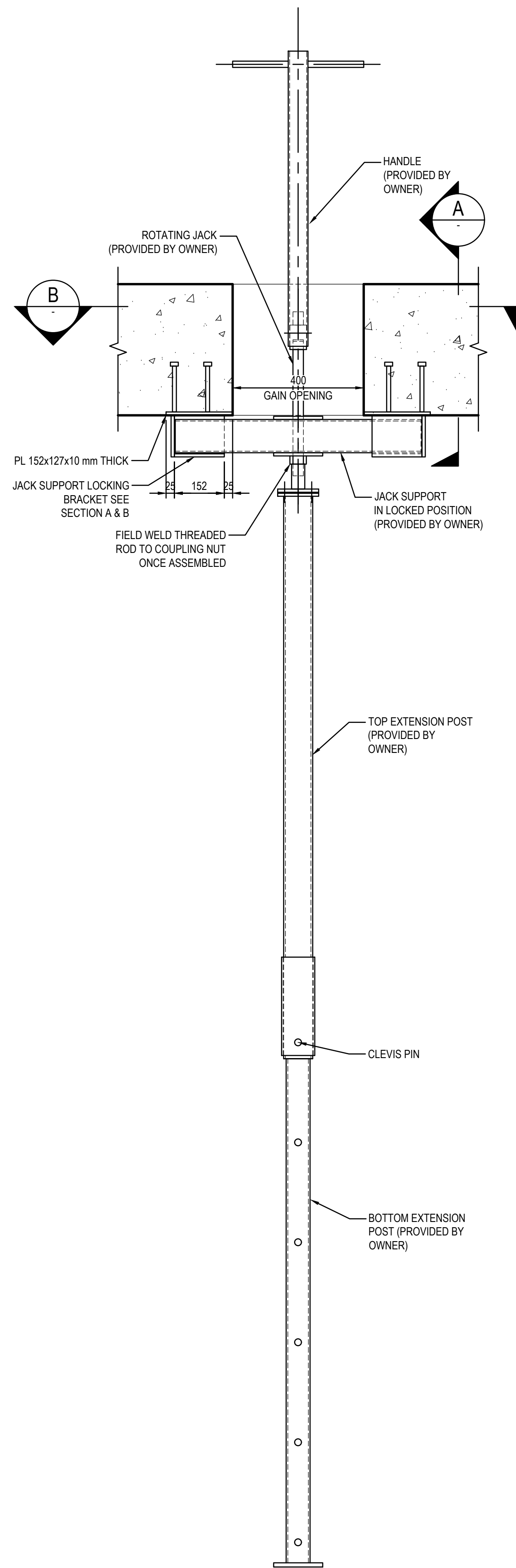
Designed by / Conçu par
KARINA SETO
 Drawing Date / Date du dessin
FEBRUARY 2018
 Drawing Number / Numéro de CHTI
30025849
 Project Number / Numéro du projet
121-15275-52
 Drawing Number / Numéro du Dessin
111
 Sheet / Feuille
1 of **1**



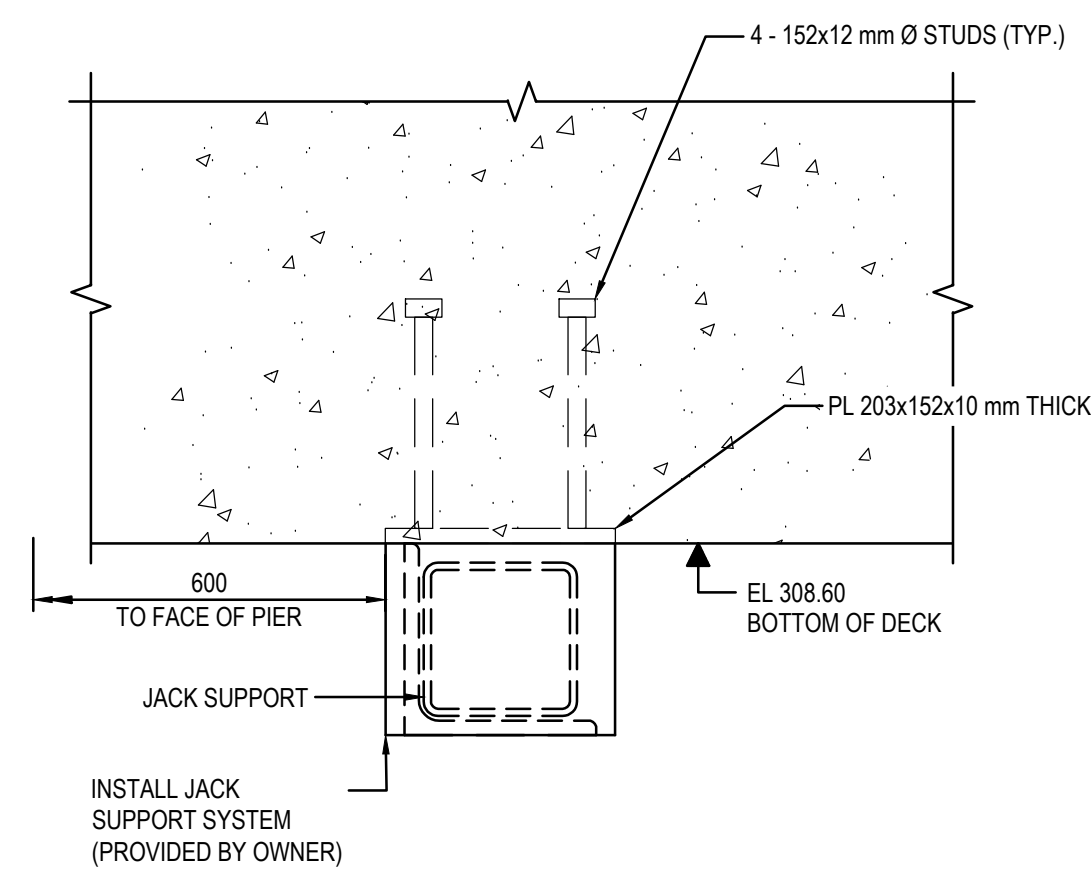
NOTES:

1. ALL WELDING ACCORDING TO CSA W59 / W59.2
2. USE MARINE GRADE GREASE ON THREADS WHEN INSERTING ROTATING JACK.
3. DRAWING FOR INSTALLATION METALS PROVIDED BY OWNER.

FOR TENDER

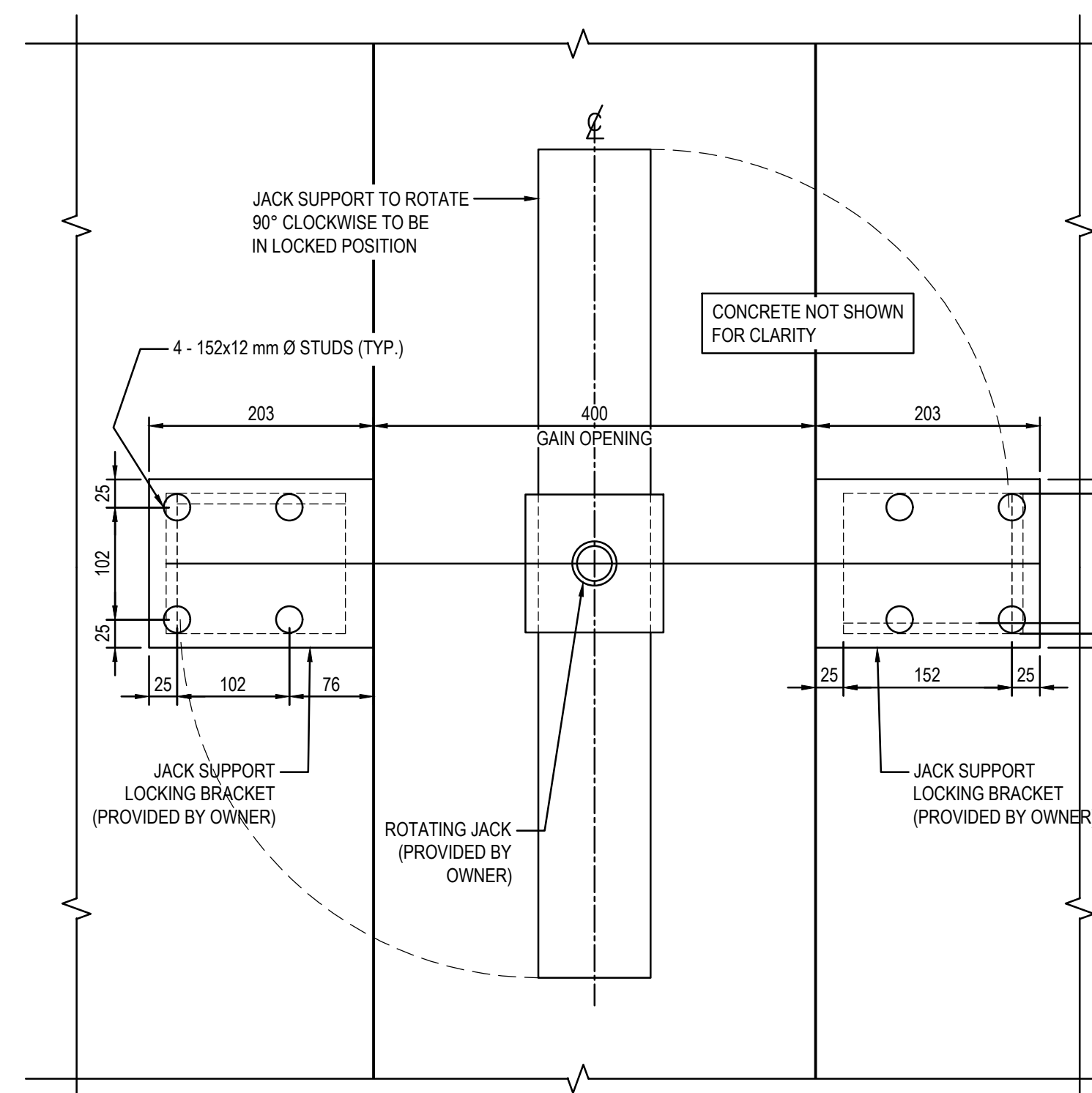


LOG PINNING SYSTEM-GENERAL ASSEMBLY
1:10



JACK SUPPORT LOCKING BRACKET

SECTION A
1:5



JACK SUPPORT LOCKING SYSTEM

SECTION B
1:5

No.	Description	Des.Par	Date
C	ISSUED FOR TENDER	M.G.	MAY-07-2018
B	ISSUED FOR REVIEW	M.G.	MAR-28-2018
A	ISSUED FOR REVIEW	M.G.	FEB-02-2018

Revision / Révision	

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	A Detail number Numéro du détail
B	B Location dwg. number Numéro sur dessin



600 COCHRANE DRIVE, 5th FLOOR
MARKHAM, ONTARIO CANADA L3R 5K3
TEL: 1-905-475-1270 | FAX: 1-905-475-5994 | WWW.WSPGROUP.COM

Project title / Titre du projet
HORSESHOE LAKE DAM REPLACEMENT

Drawing title / Titre du dessin
LOG PINNING SYSTEM GENERAL ASSEMBLY AND DETAILS

Drawn by / Dessiné par MAITE GARCIA	Designed by / Conçu par KARINA SETO
Approved by / Approuvé par JAVIER VILORIA	Drawing Date / Date du dessin FEBRUARY 2018

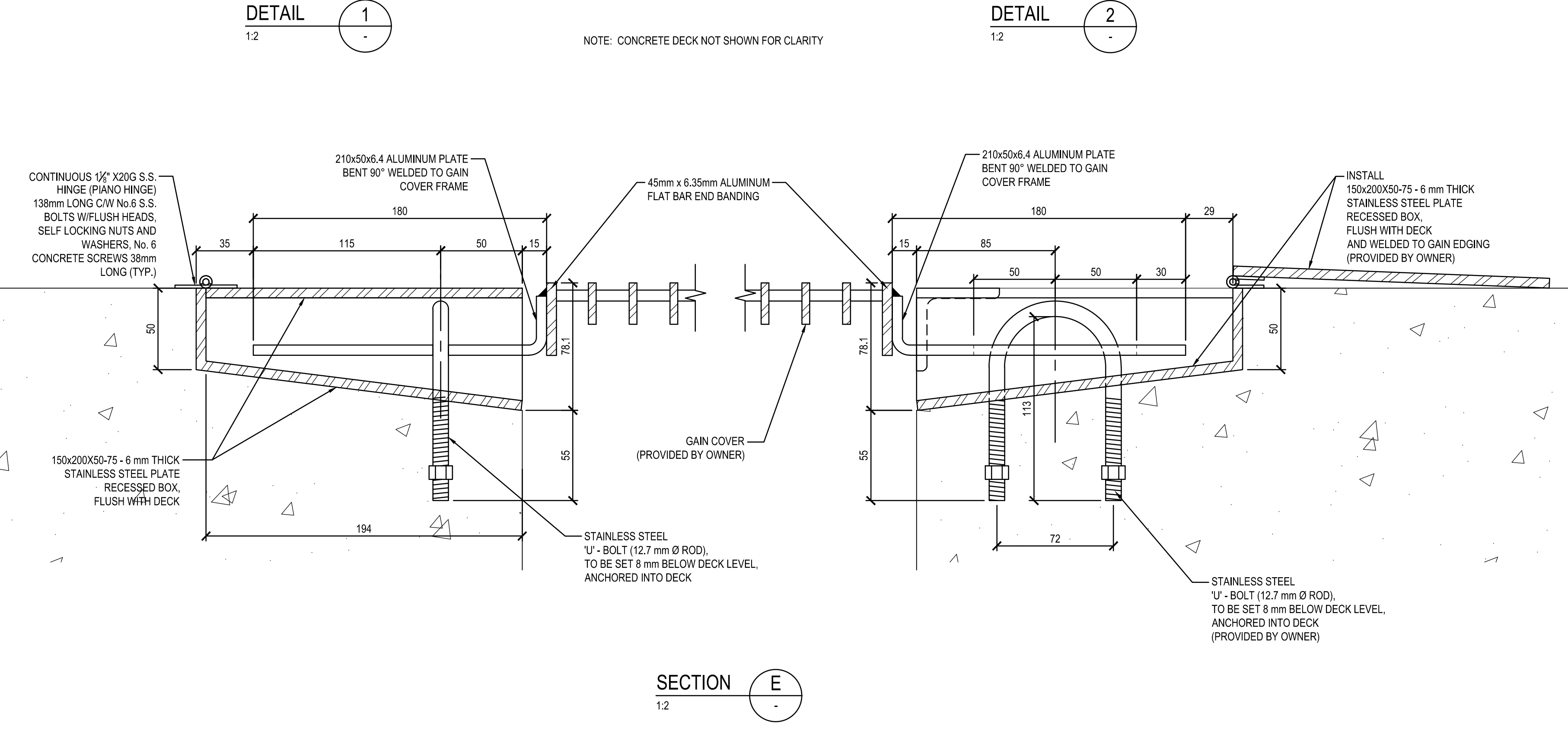
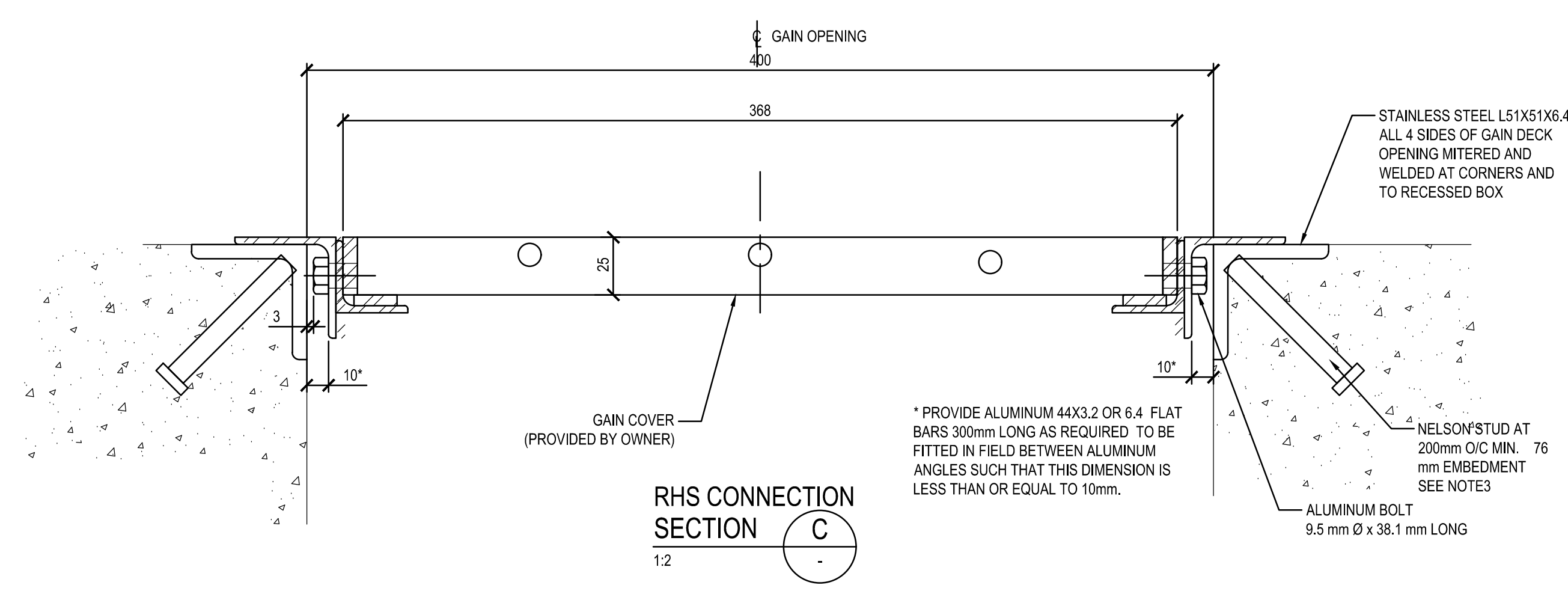
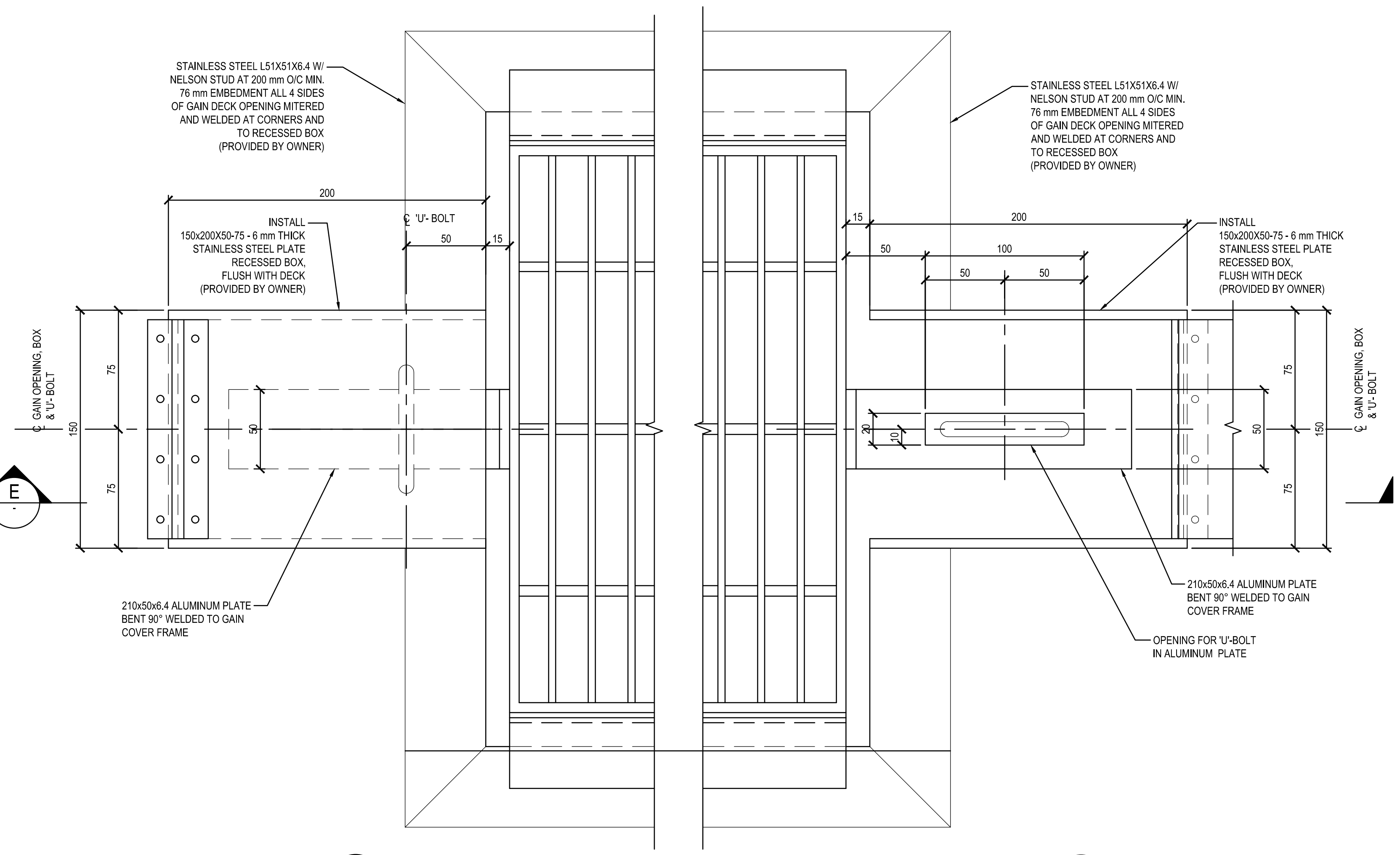
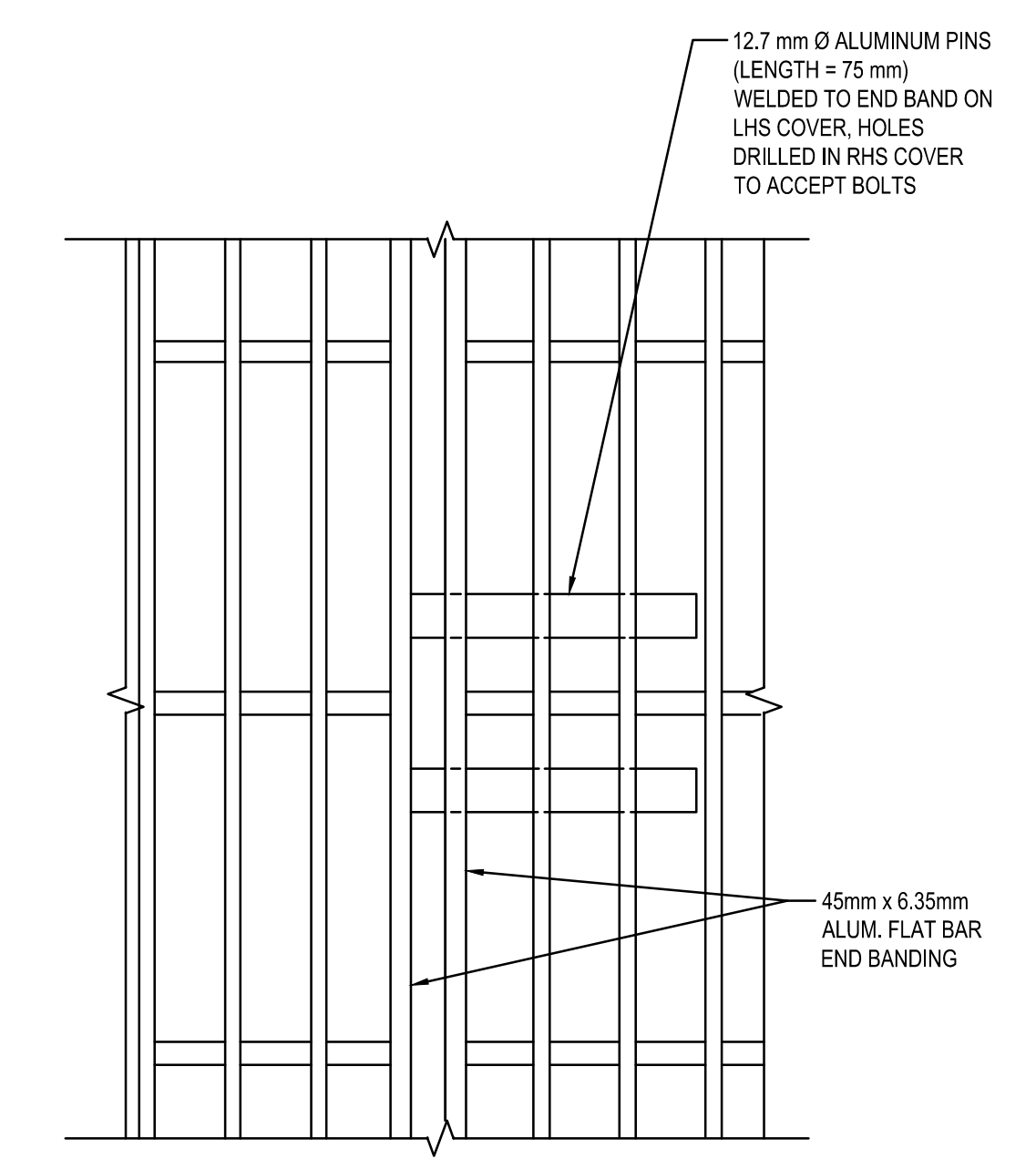
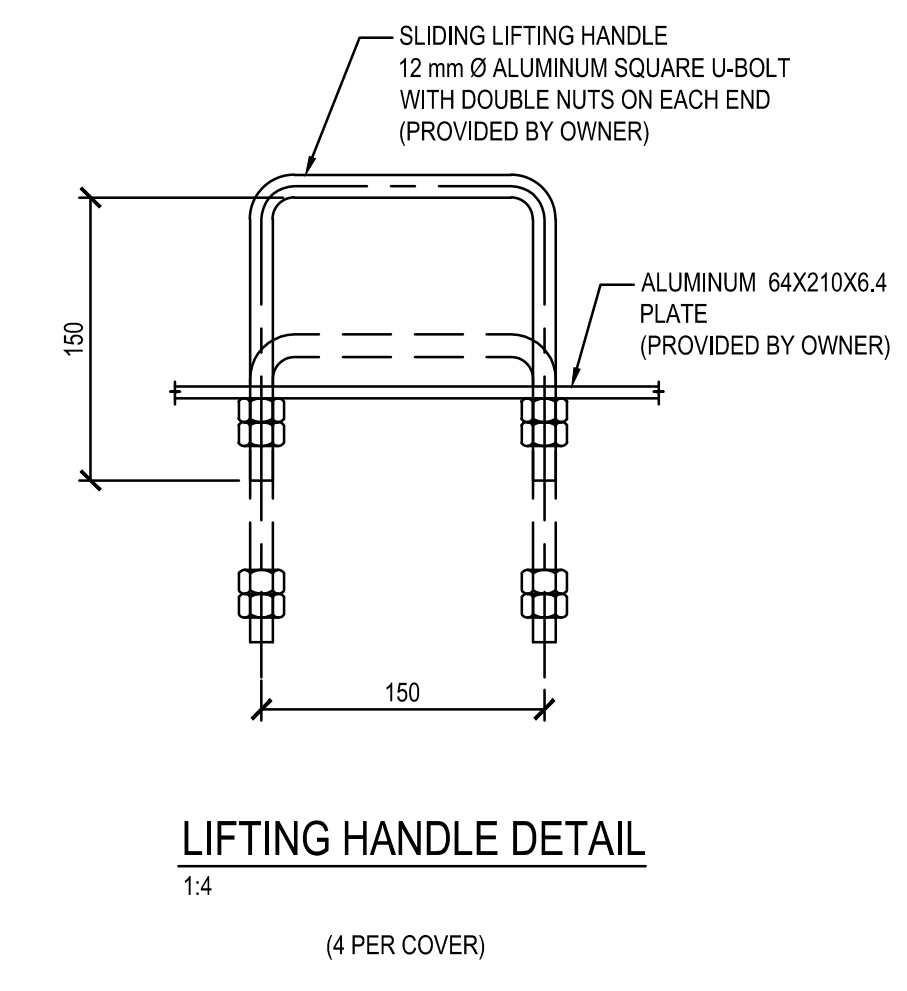
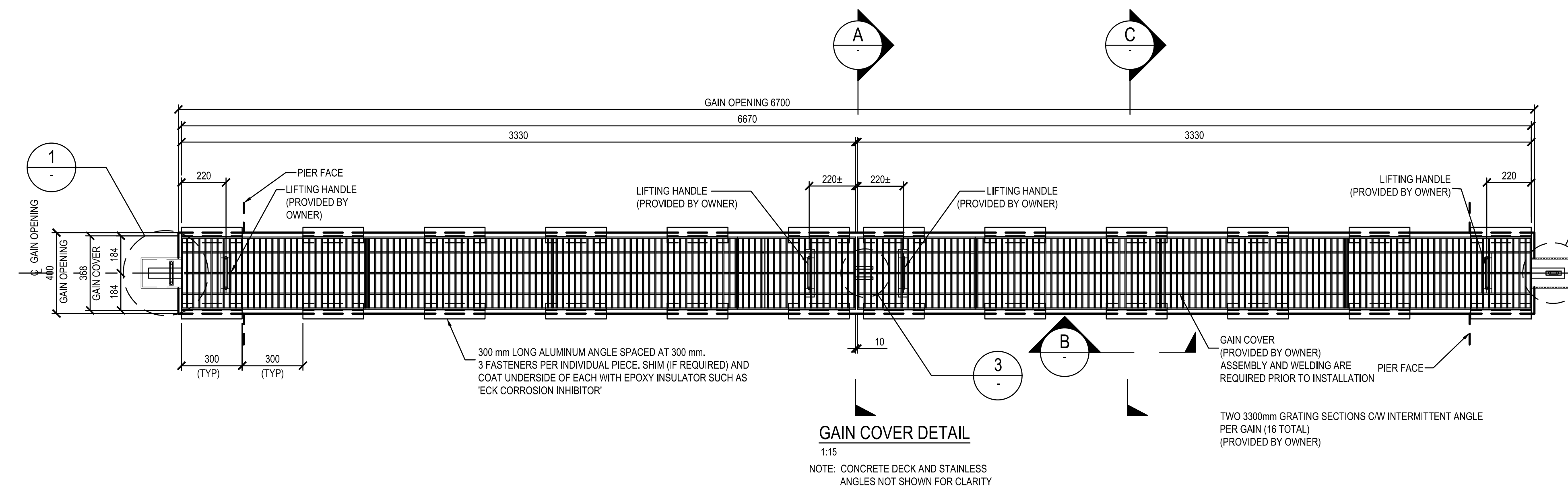
Project manager / Administrateur de projet
NICHOLAS READ

HCEW Number / Numéro de CHTI 30025849	Drawing Number / Numéro du Dessin 112
Project Number / Numéro du projet 121-15275-52	Sheet Feuille 1 of 1

NOTE:
 1. DRAWING FOR INSTALLATION. MATERIALS PROVIDED BY OWNER AS INDICATED.

STEEL:
 1. CONTRACTOR TO REFER TO ALL SECTIONS OF DIV 05 FOR ANCHORS, METAL, FABRICATION, ETC. REQUIREMENTS.
 2. STEEL IN CONTACT WITH CONCRETE OR MASONRY TO RECEIVE TWO COATS OF ALKALI RESISTANT BITUMINOUS PAINT. UPON INSTALLATION AND PRIOR TO CASTING CONCRETE THE STEEL IN CONTACT WITH CONCRETE OR MASONRY SHALL RECEIVE ONE COAT OF ALKALI RESISTANT BITUMINOUS PAINT WHERE THE ORIGINAL COATING HAS BEEN DAMAGED.

FOR TENDER



No.	Description	Rev. By	Date
D	REVISED FOR TENDER	H.Z.	OCT-17-2018
C	ISSUED FOR TENDER	M.G.	MAY-07-2018
B	ISSUED FOR REVIEW	M.G.	MAR-28-2018
A	ISSUED FOR REVIEW	M.G.	FEB-02-2018

Revision / Révision	
A	A Detail number / Numéro du détail
B	B Location dwg. number / Numéro sur dessin

600 COCHRANE DRIVE, 5TH FLOOR
 MARKHAM, ONTARIO, CANADA L3R 5K3
 TEL: 1-905-475-7270 | FAX: 1-905-475-5994 | WWW.WSPGROUP.COM

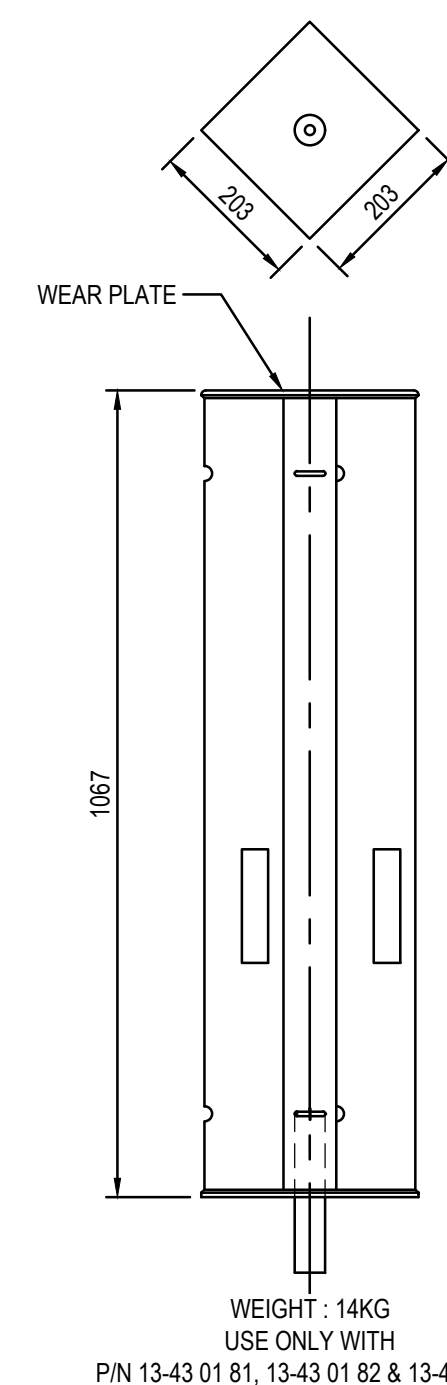
Project title / Titre du projet
HORSESHOE LAKE DAM REPLACEMENT

Drawing title / Titre du dessin
GAIN COVER DETAILS

Drawn by / Dessiné par MAITE GARCIA	Designed by / Conçu par KARINA SETO
Approved by / Approuvé par NICHOLAS READ	Drawing Date / Date du dessin FEBRUARY 2018
Project manager / Administrateur de projet NICHOLAS READ	
HCEW Number / Numéro de CHTI 30025849	Drawing Number / Numéro du Dessin 113
Project Number / Numéro du projet 121-15275-52	

NOTE:
 1. RAILINGS MARKED 'EXISTING' ARE NOT INCLUDED IN THE SCOPE OF WORK. ALL OTHER RAILINGS AND GATES ARE TO BE PROVIDED AND INSTALLED.
 2. DAVIT POST AND DAVIT SOCKET ARE TO BE PROVIDED BY CONTRACTOR.

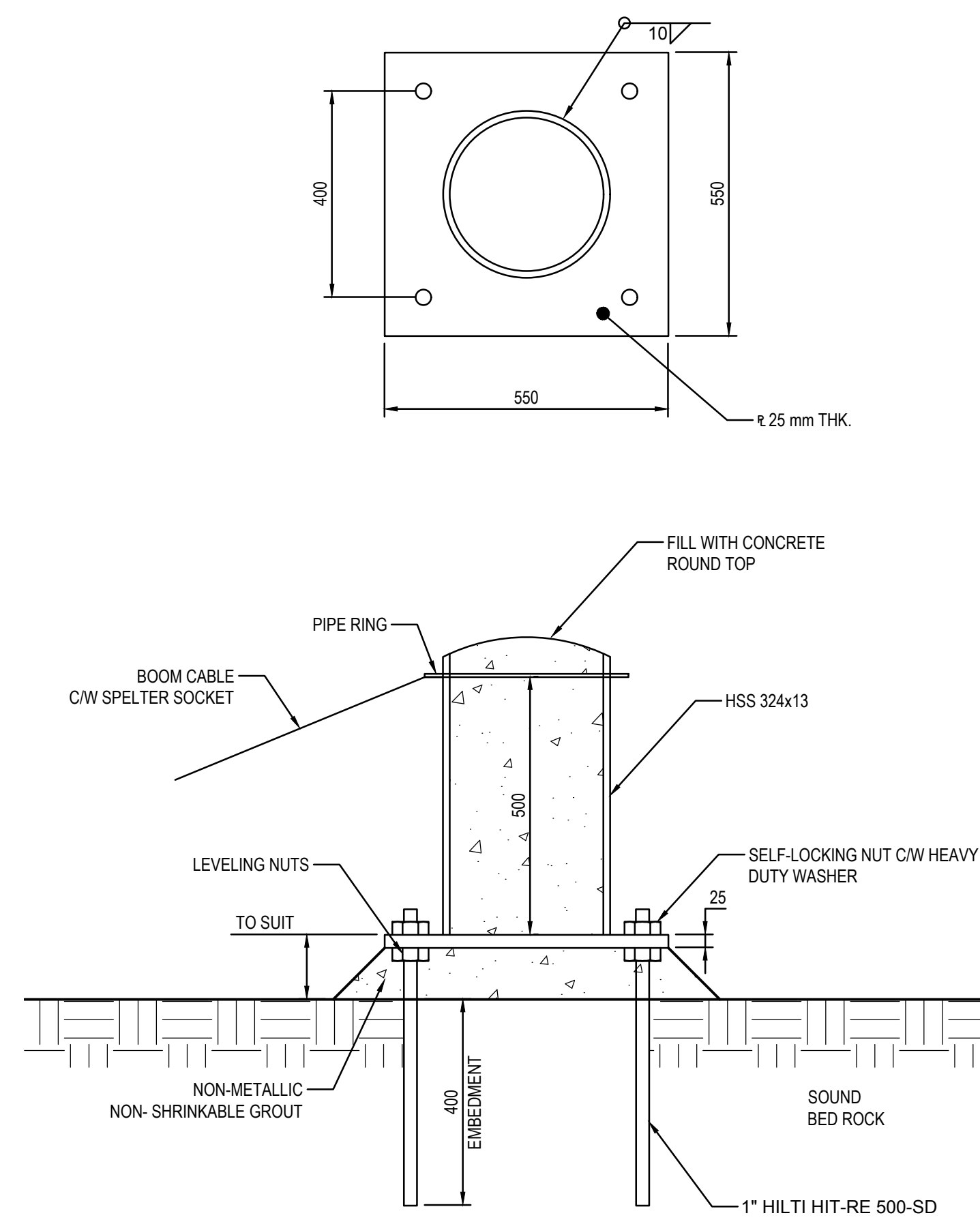
FOR TENDER



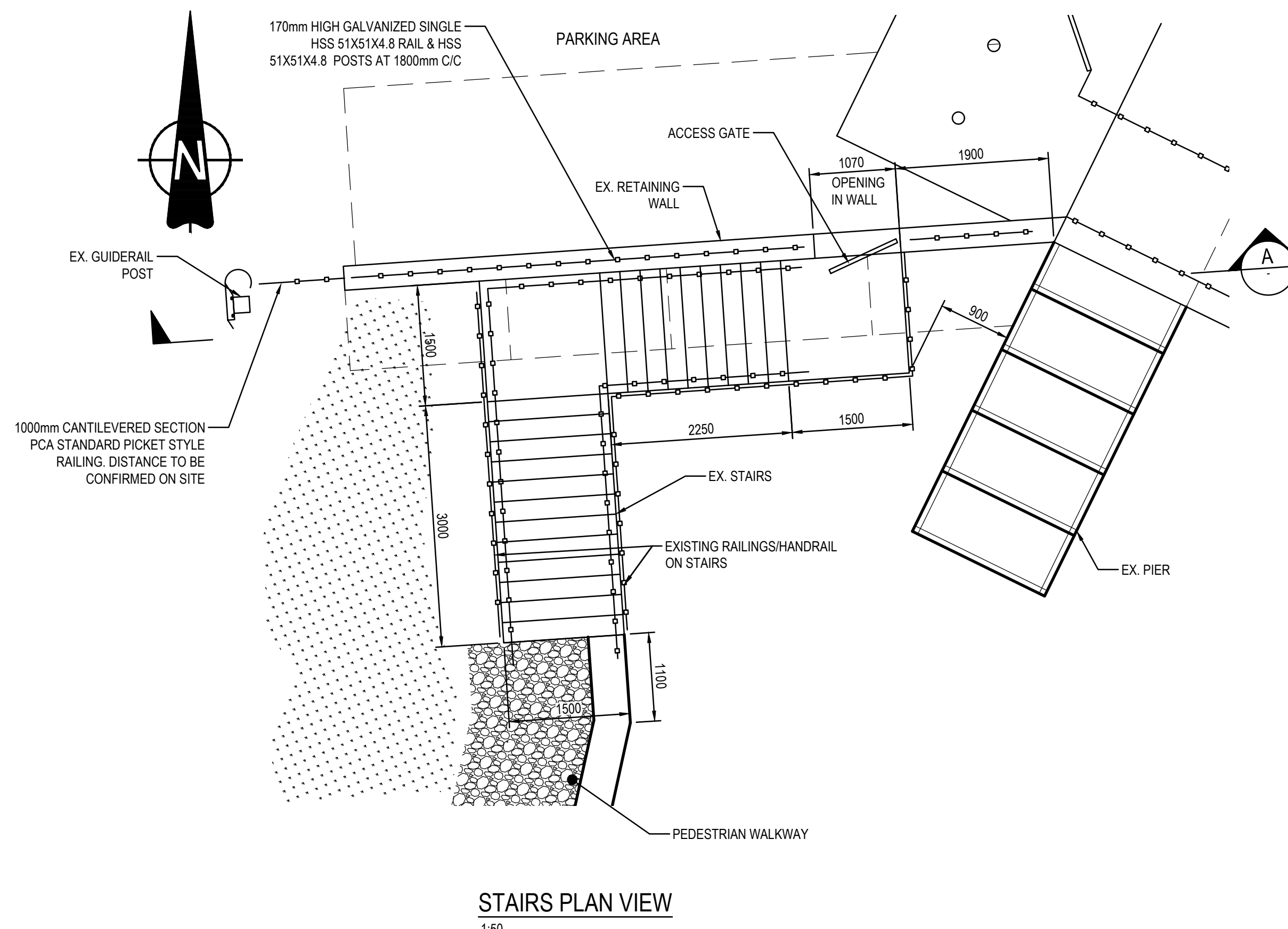
WEIGHT : 14KG
 USE ONLY WITH
 P/N 13-43 01 81, 13-43 01 82 & 13-43 01 84

- NOTES:**
- EMBEDDED PARTS ARE BASED ON A XYLEM LIFTING DAVIT RATED FOR 500 kg WITH CABLE WINCH OPTION P/N 13-43 01 72.
 - FINISH: SAFETY YELLOW POWDER PAINT.
 - MATERIAL: STEEL.

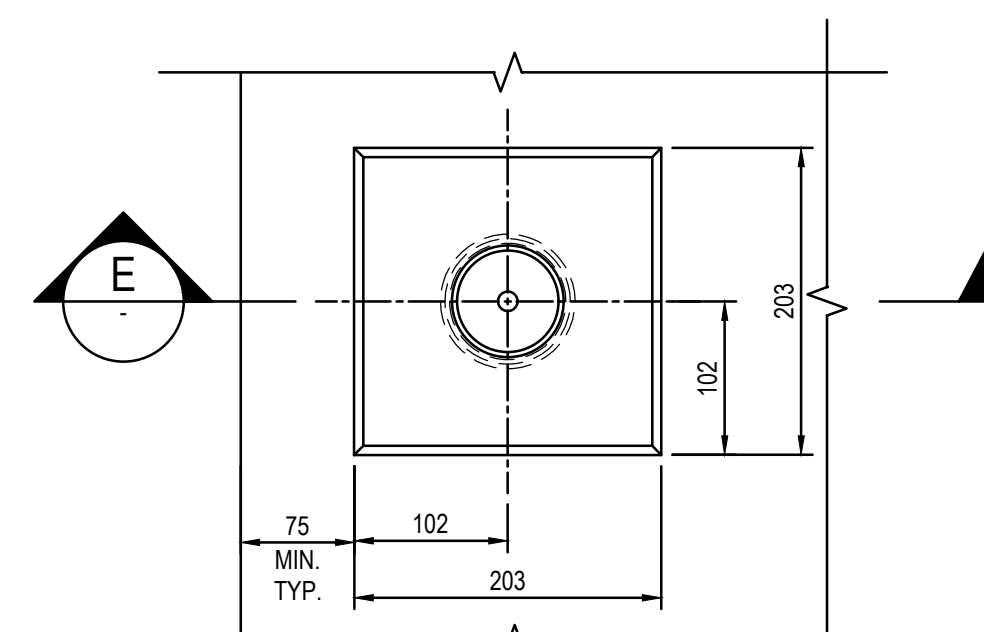
P/N 13-43 01 86 EXTENDER
 1:10



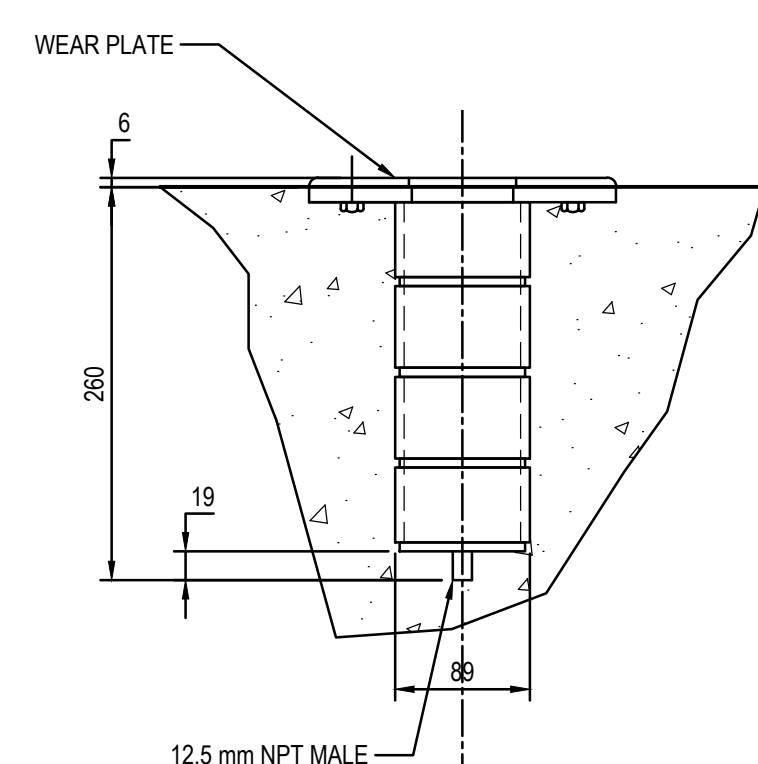
TYP. SHORELINE ANCHOR DETAIL 2
 1:10



STAIRS PLAN VIEW
 1:50

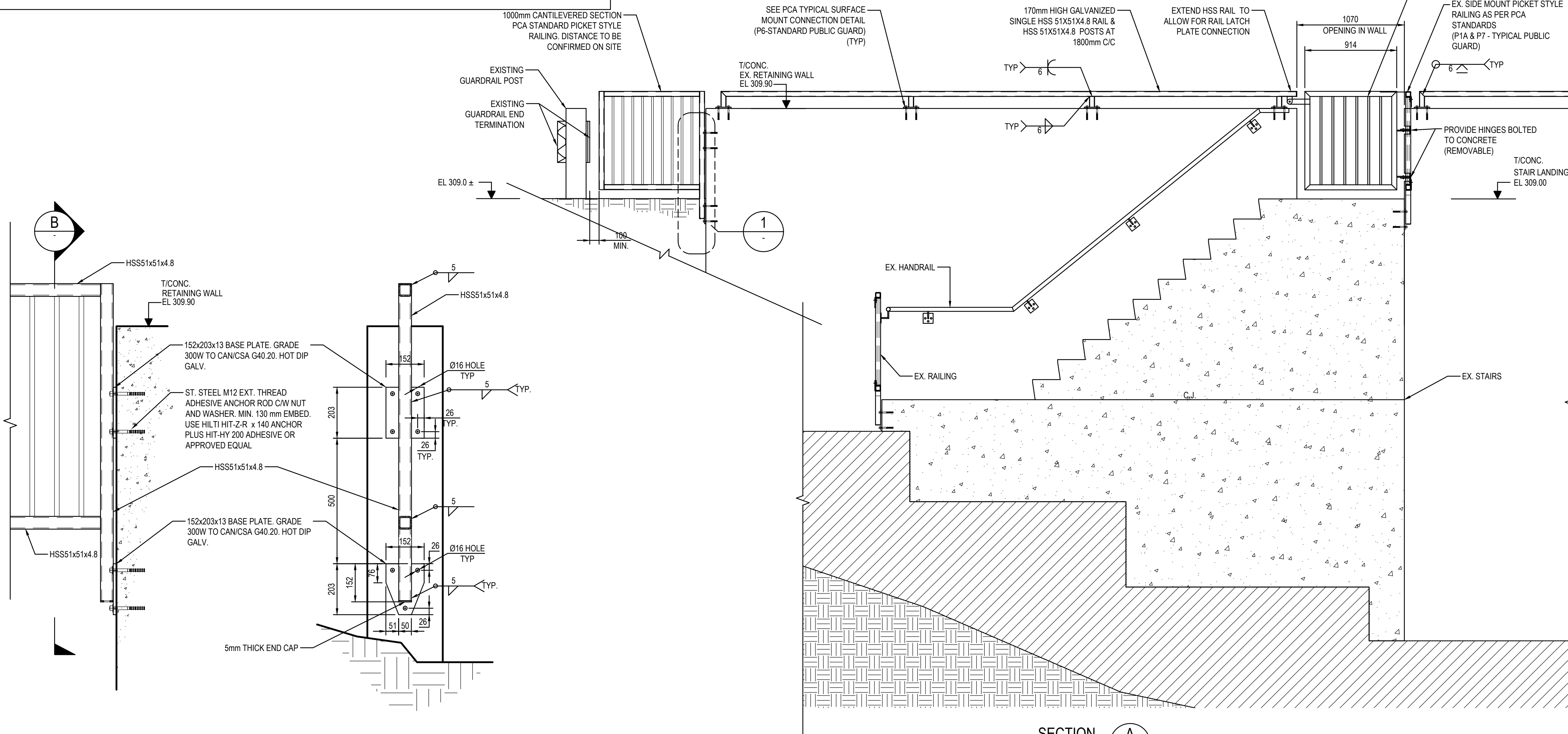


P/N 13-43 01 81 RECESSED FLOOR SOCKET DETAIL 4
 1:5



SECTION E
 1:5

- NOTES:**
- PROVIDE WITH A DUST COVER (NOT SHOWN).
 - RECESSED FLOOR SOCKET MUST BE USED WITH SOCKET EXTENDER P/N 13-43 01 86 TO BE POURED IN CONCRETE.



SECTION A
 1:25

DETAIL 1
 1:10

SECTION B
 1:10

No.	Description	Drawn By (Des.P)	Date
C	ISSUED FOR TENDER	M.G.	MAY-07-2018
B	ISSUED FOR REVIEW	M.G.	MAR-28-2018
A	ISSUED FOR REVIEW	M.G.	FEB-02-2018

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	A Detail number Numéro du détail
B	B Location dwg. number Numéro sur dessin

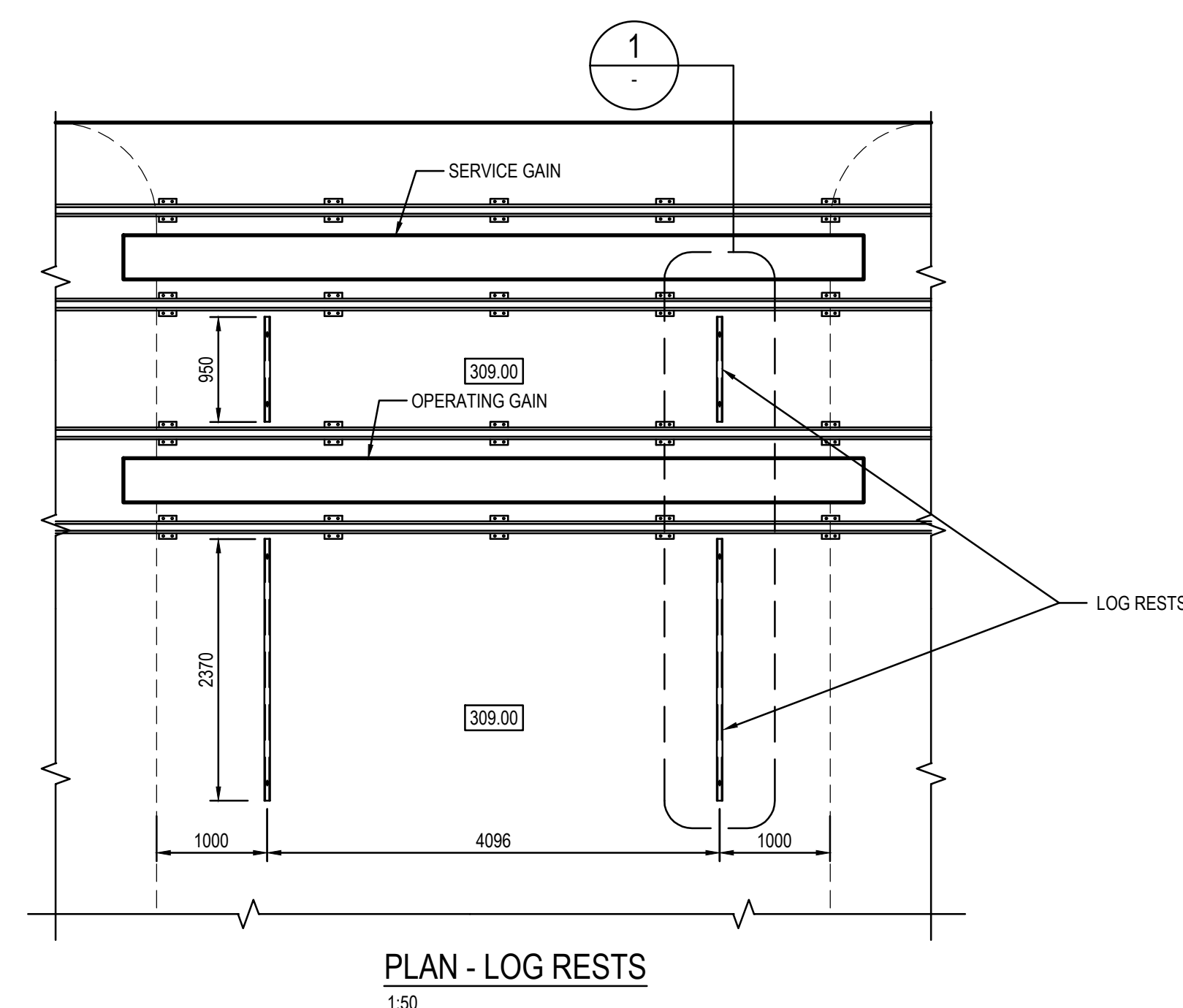
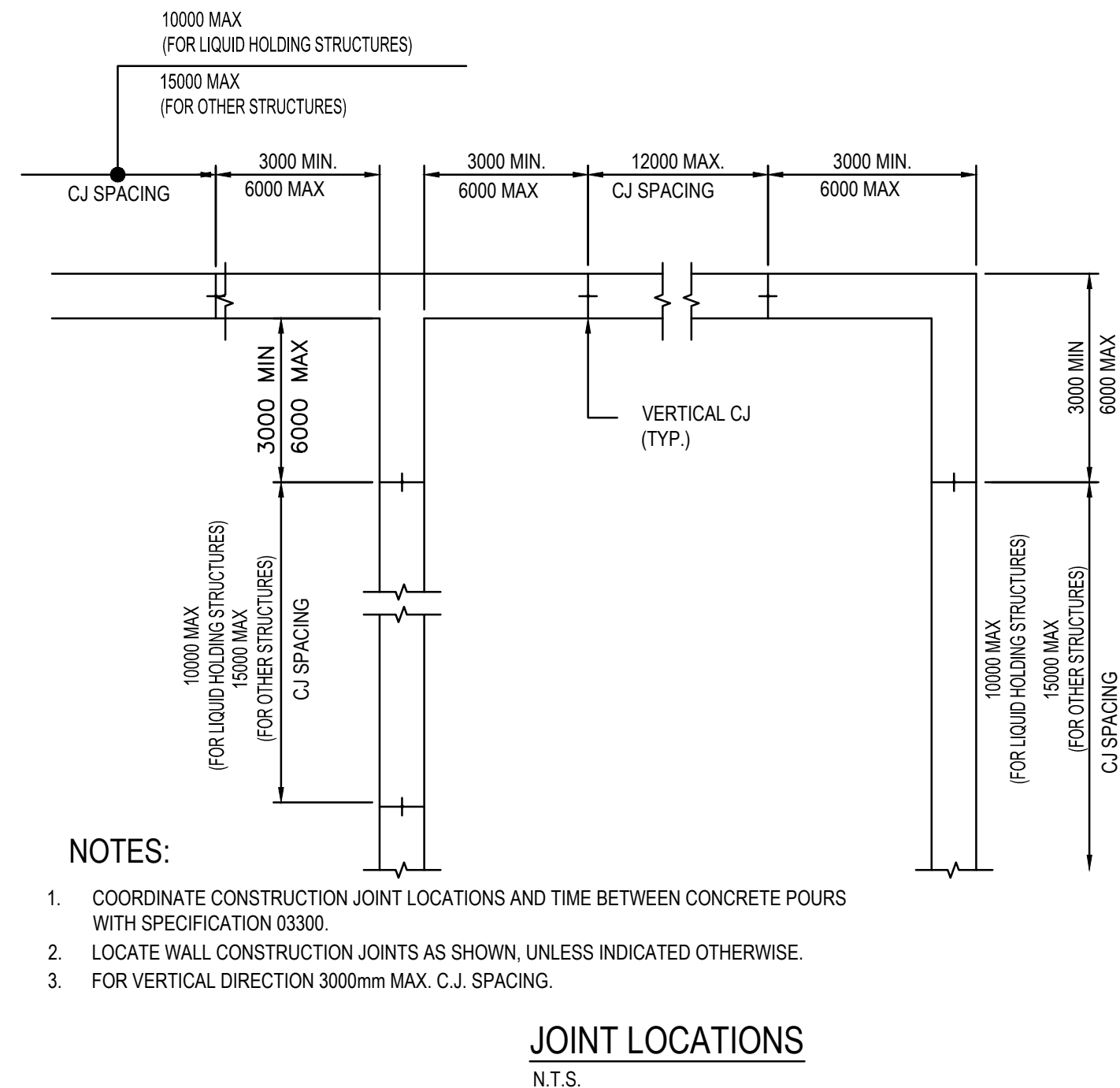
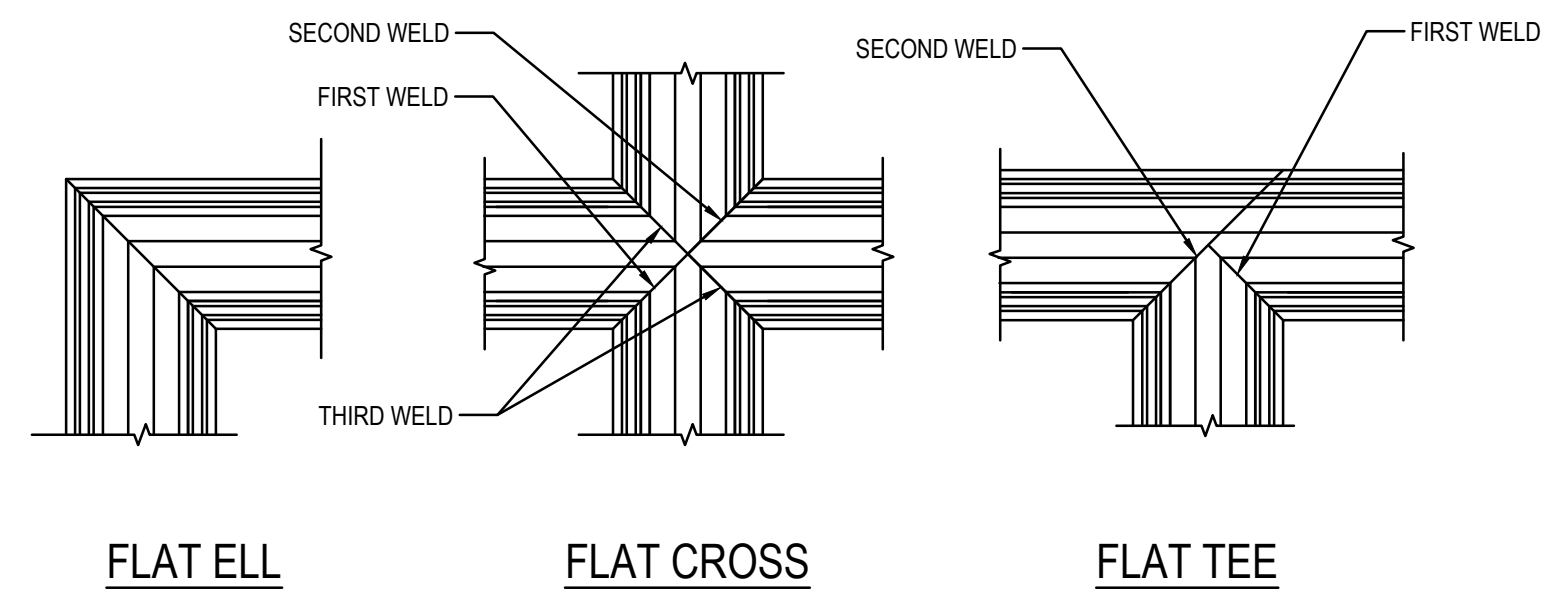
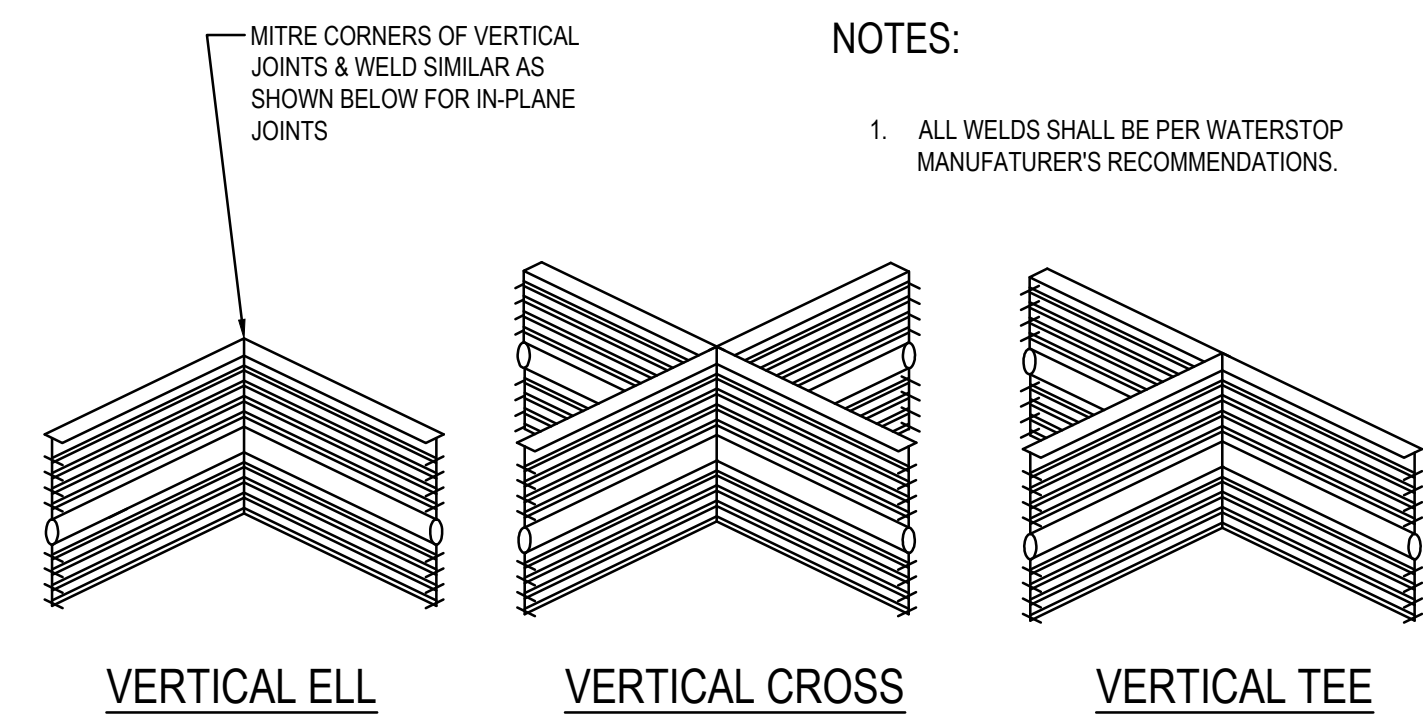


600 COCHRANE DRIVE, 5TH FLOOR
 MARKHAM ONTARIO CANADA L3R 5K3
 TEL: 1-905-475-7270 | FAX: 1-905-475-5994 | www.wspgroup.com

Project title / Titre du projet
HORSESHOE LAKE DAM REPLACEMENT

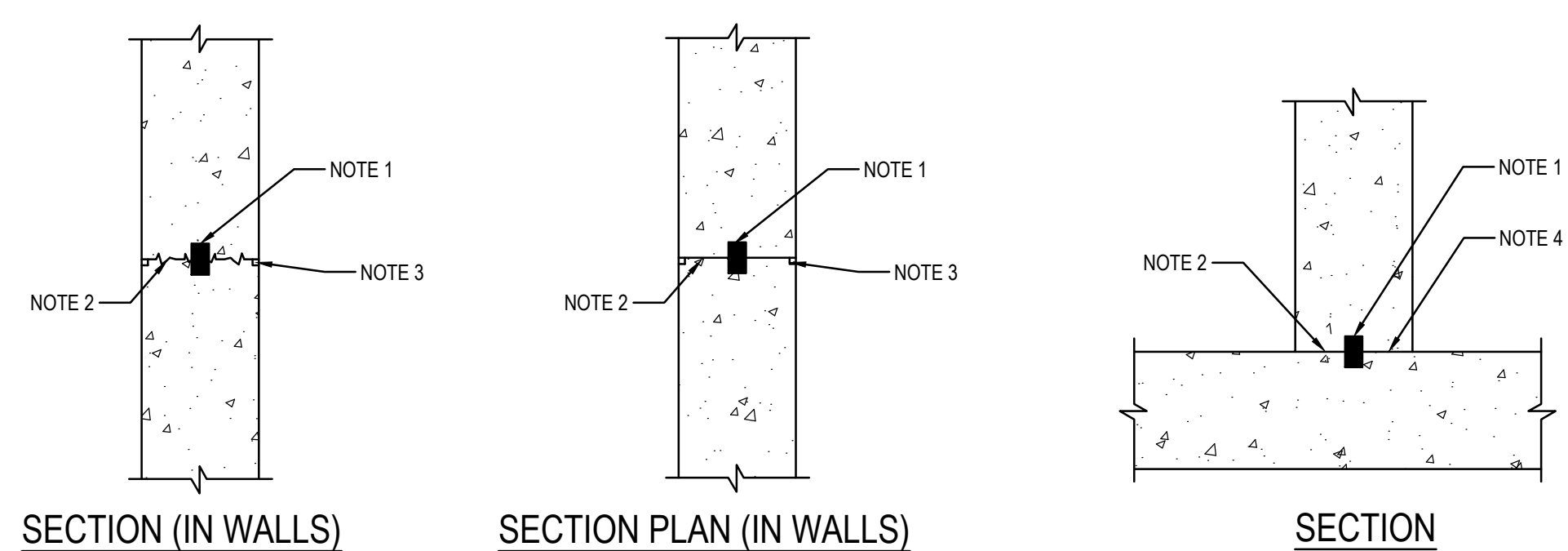
Drawing title / Titre du dessin
MISCELLANEOUS METALS

Drawn by / Dessiné par MAITE GARCIA	Designed by / Conçu par KARINA SETO
Approved by / Approuvé par JAVIER VILORIA	Drawing Date / Date du dessin FEBRUARY 2018
Project manager / Administrateur de projet NICHOLAS READ	
HCEW Number / Numéro de CHTI 30025849	Drawing Number / Numéro du Dessin 114
Project Number / Numéro du projet 121-15275-52	Sheet Feuille 1 of 1

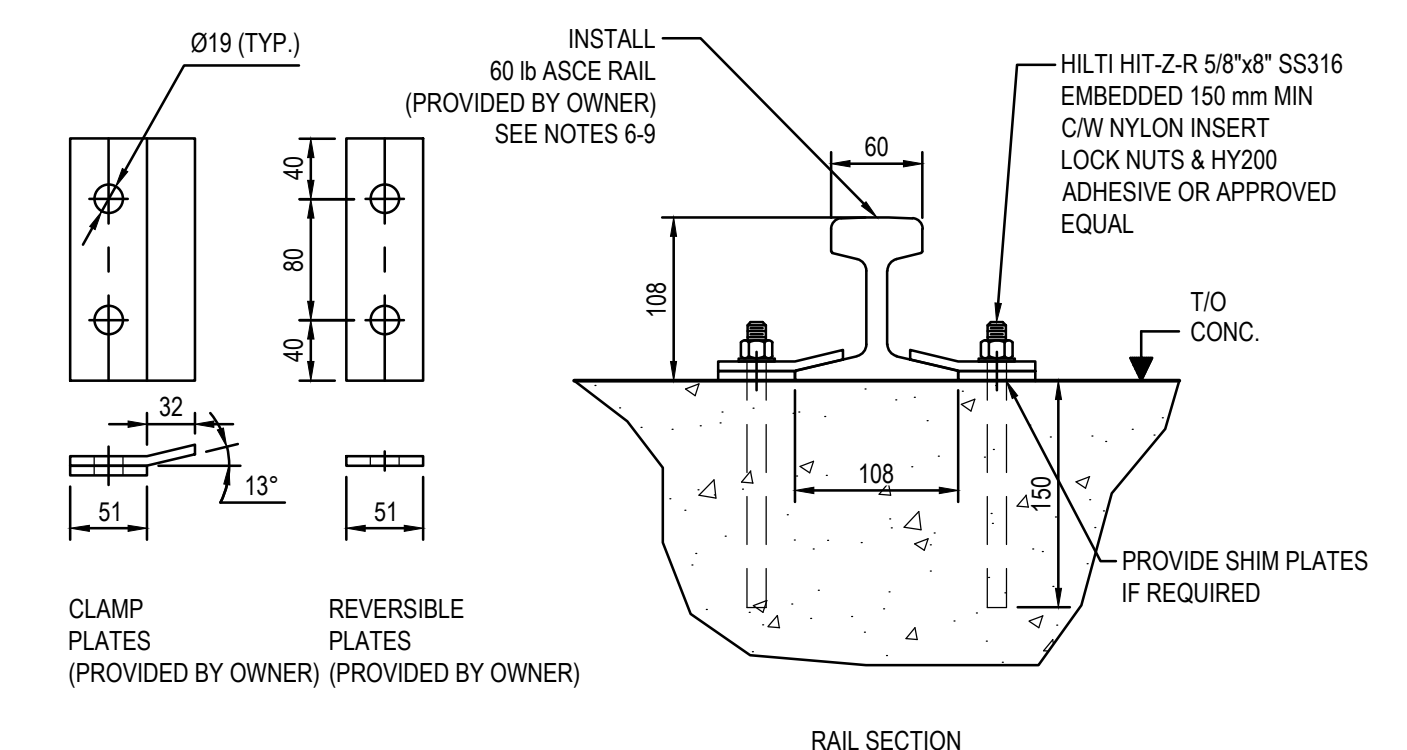
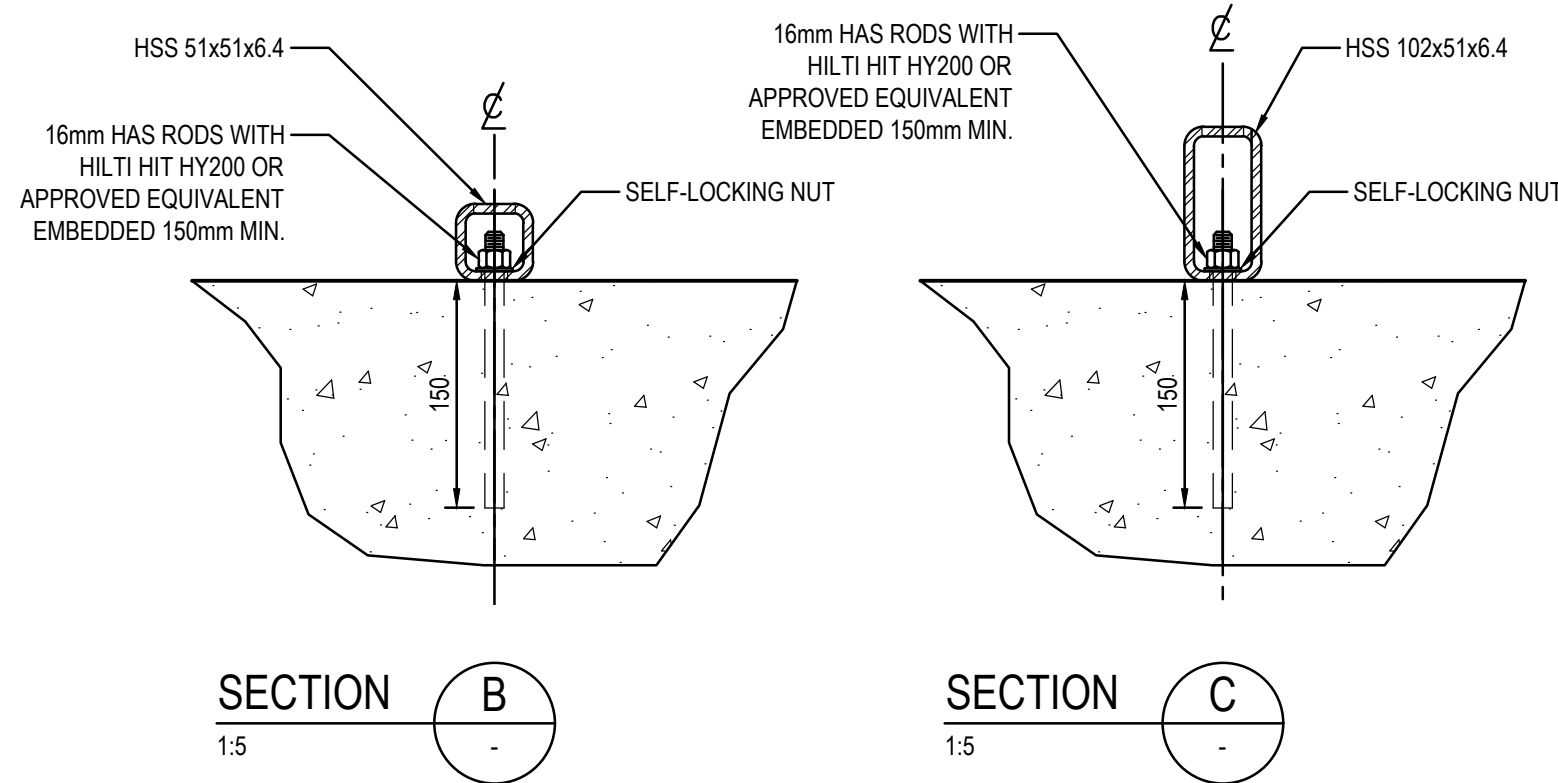
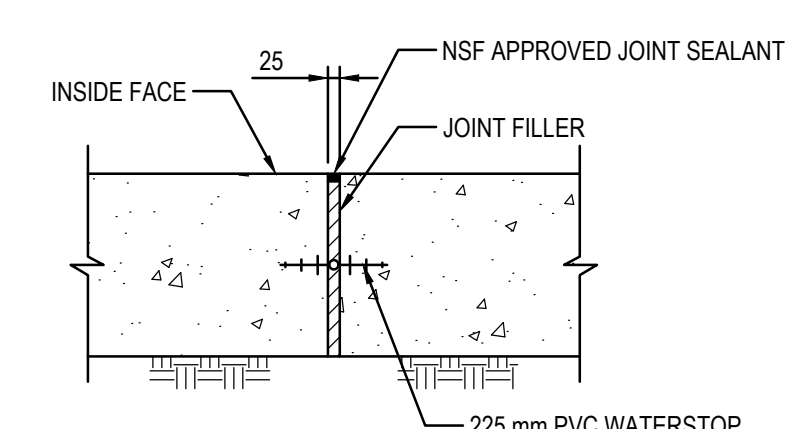
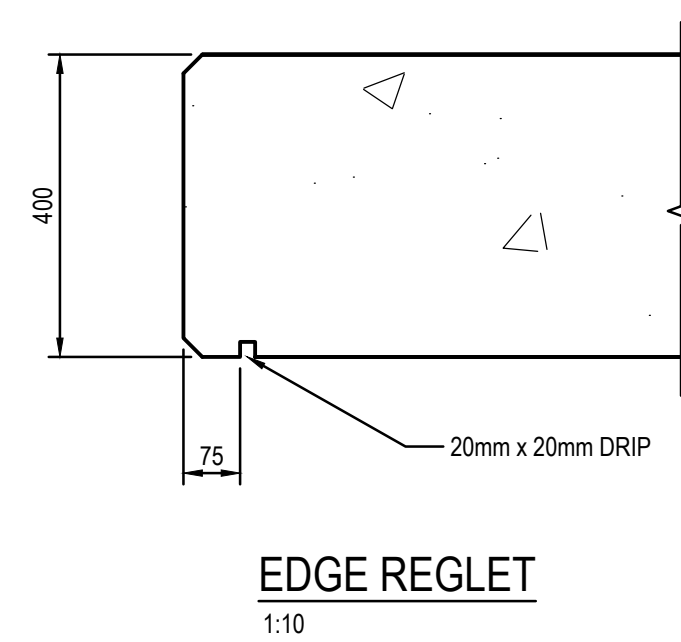
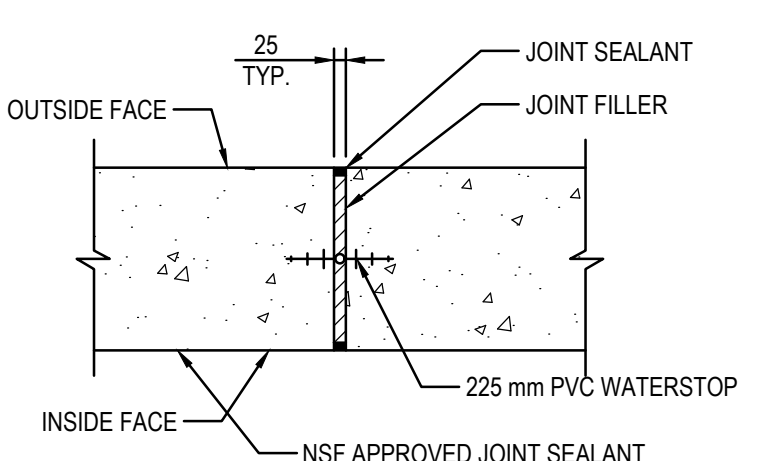
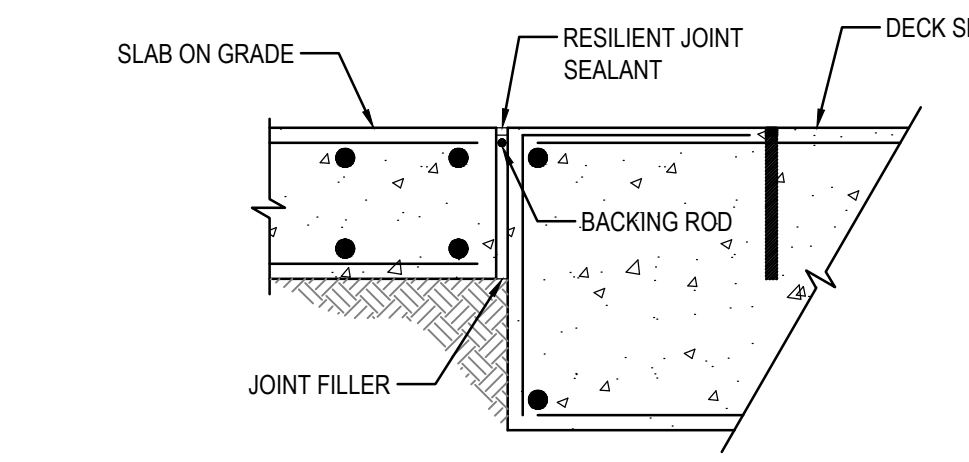
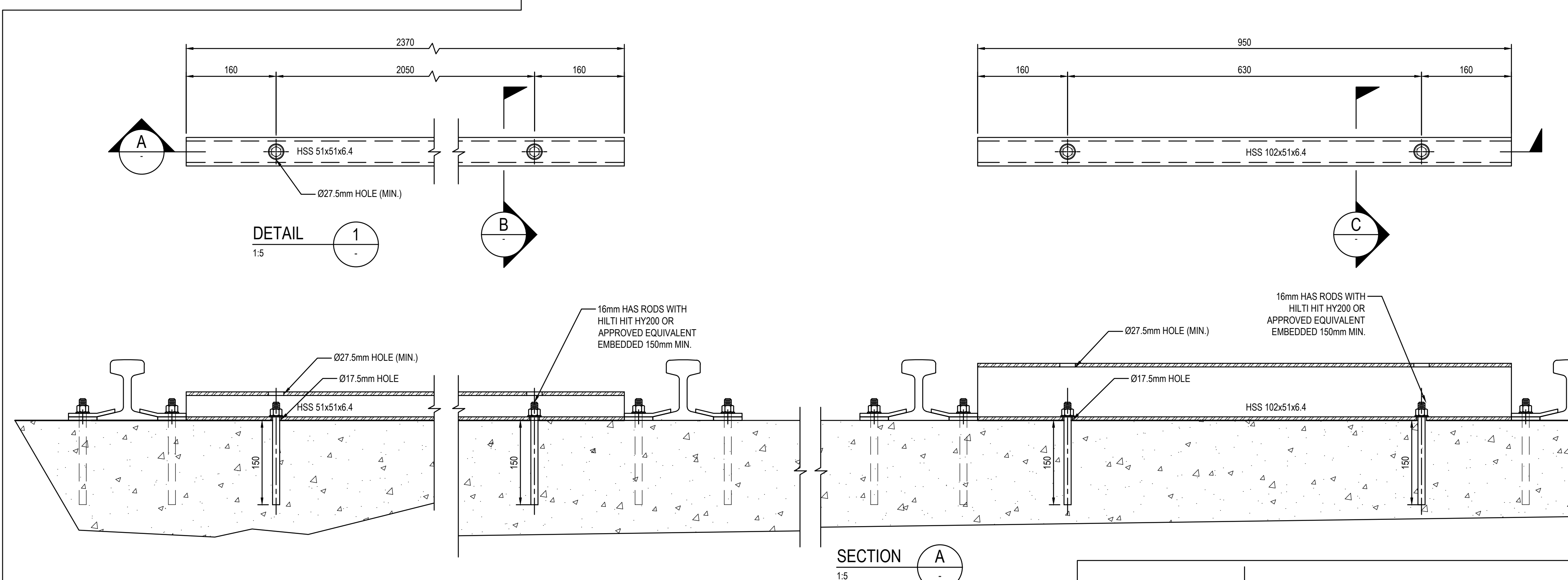


- NOTES:**
1. WATERSTOPS ARE TO BE MASTIX 40/70 R4 WATERSTOPS OR APPROVED EQUIVALENT.
 2. CLEAN FIRST POUR SURFACE THOROUGHLY OF ALL CONTAMINANTS LAITANCE OR INFERIOR CONCRETE BEFORE SECOND POUR AND ROUGHEN TO FULL 5 mm AMPLITUDE.
 3. 13 mm DEEP 20 mm WIDE REGLET FOR EXTERIOR FACE. APPLY CEMENTITIOUS MORTAR.
 4. LEAVE SURFACE ROUGH BETWEEN POUR AT HORIZONTAL JOINTS.
 5. LOCATE WALL CONSTRUCTION JOINTS AS SHOWN, UNLESS INDICATED OTHERWISE.
 6. USE EXPANSION SHIMS BETWEEN RAIL SECTIONS WITH RAIL TEMPERATURE MEASUREMENTS DURING INSTALLATION TO ACHIEVE ADEQUATE SPACING (TYP).
 7. CLAMPS TO HAVE END SPACING OF 457 mm AND NORMAL SPACING OF 914 mm.
 8. STAGGER JOINTS ON UPSTREAM AND DOWNSTREAM RAILS OF EACH GAIN.
 9. INSTALL STAINLESS STEEL CRANE STOPPER AT EACH END.

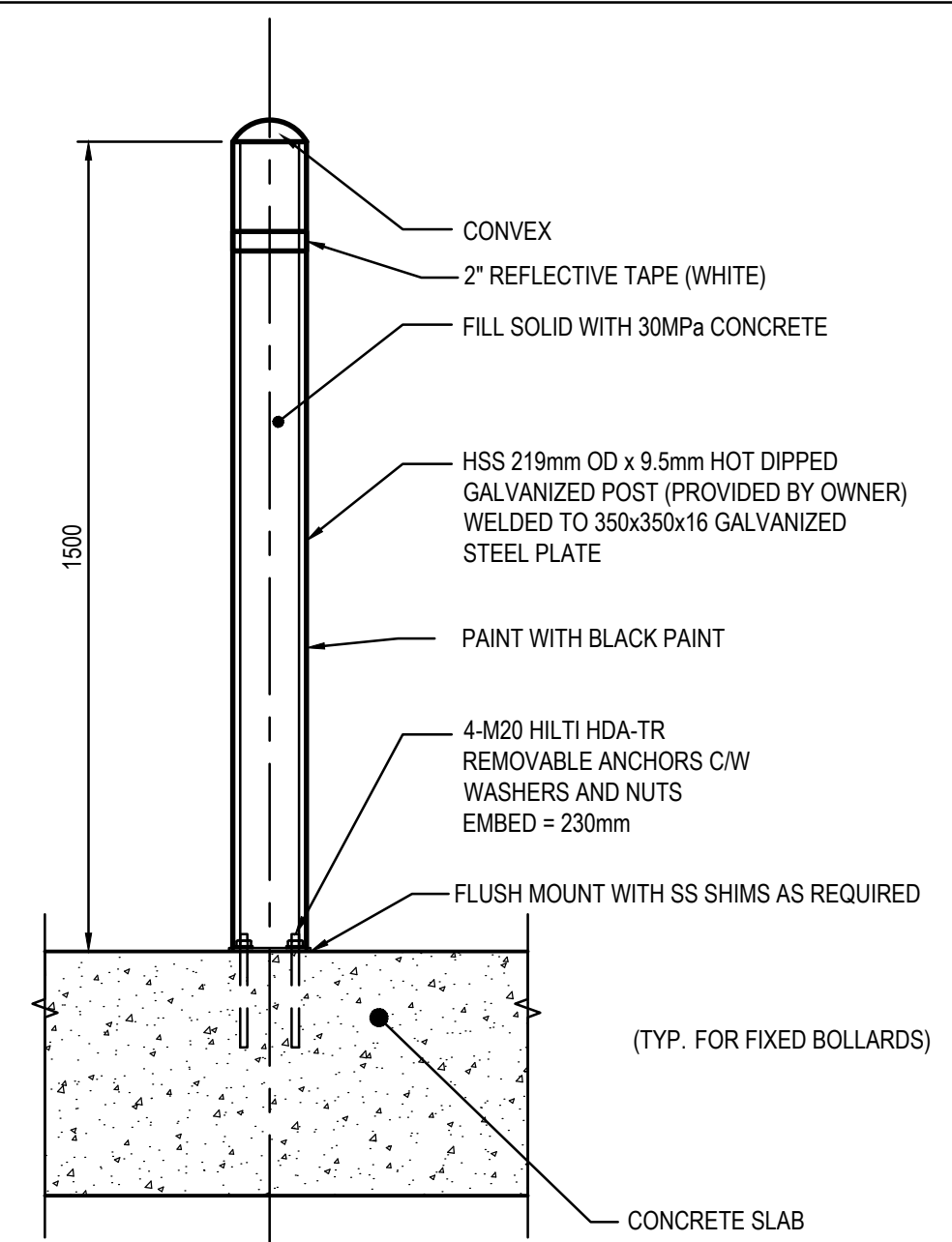
WATERSTOP JOINTS
N.T.S.



TYPICAL CONSTRUCTION JOINT
N.T.S.



TEE RAIL (60 LB) DETAIL
1:5



TYP. BOLLARD ON CONCRETE SLAB DETAIL
N.T.S.

- NOTES:**
1. REMOVABLE BOLLARDS TO HAVE SAME DIMENSIONS AND FINISHES SHOWN ON THE DETAILS ABOVE BUT MUST BE REMOVABLE TO ALLOW ACCESS TO THE DECK FOR OPERATIONS.

FOR TENDER

No.	Description	Drawn By	Date
D	REVISED FOR TENDER	H.Z.	OCT-17-2018
C	ISSUED FOR TENDER	M.G.	MAY-07-2018
B	ISSUED FOR REVIEW	M.G.	MAR-28-2018
A	ISSUED FOR REVIEW	M.G.	FEB-02-2018

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	A Detail number Numéro du détail
B	B Location dwg. number Numéro sur dessin

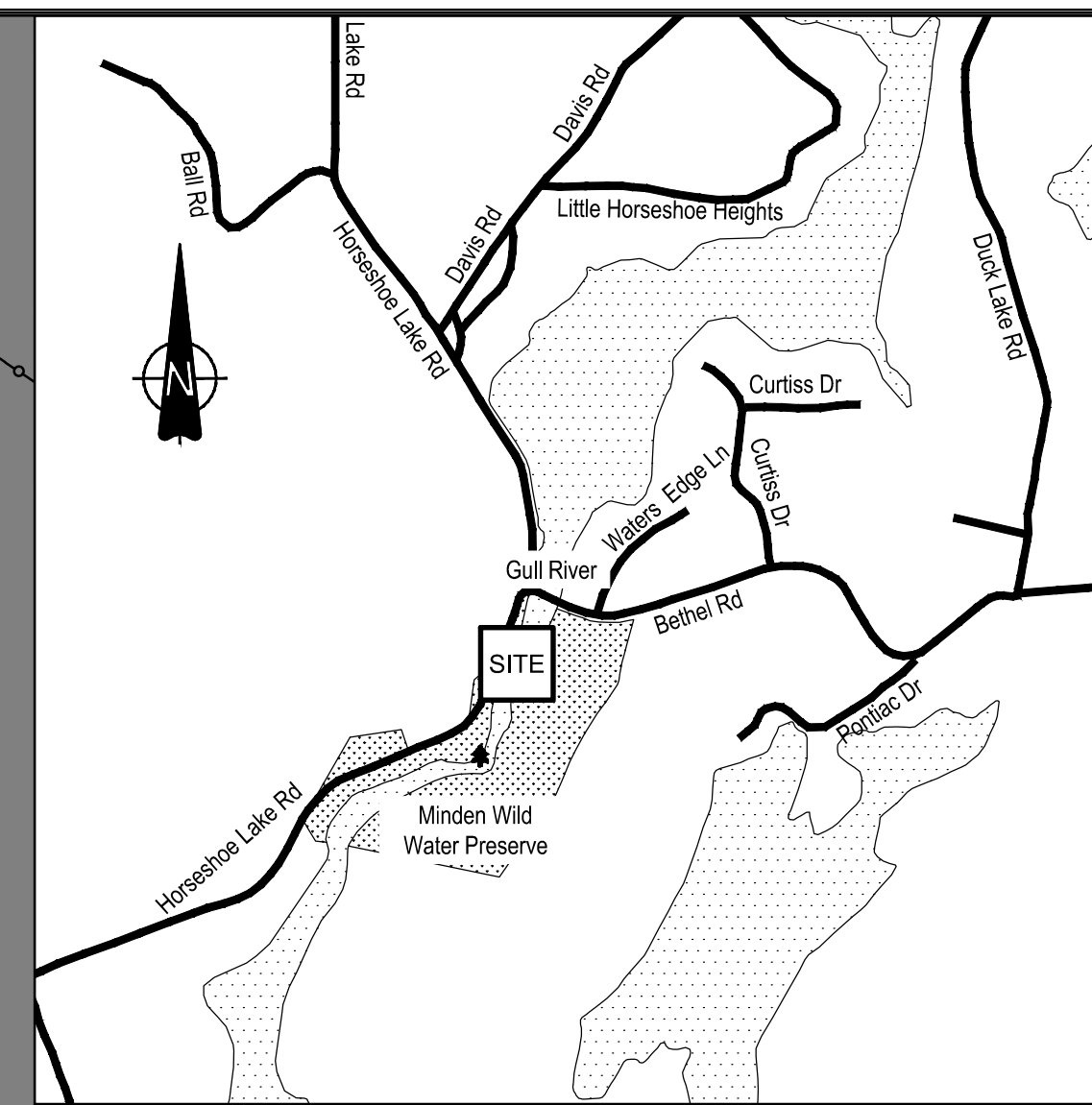
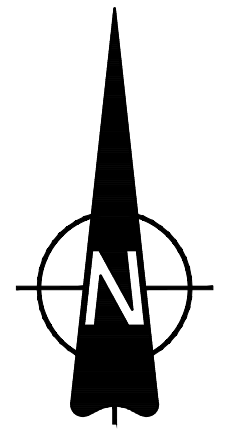


HORSESHOE LAKE DAM REPLACEMENT

MISCELLANEOUS DETAILS

Drawn by / Dessiné par MAITE GARCIA	Designed by / Conçu par KARINA SETO
Approved by / Approuvé par JAVIER VILORIA	Drawing Date / Date du dessin FEBRUARY 2018

Project manager / Administrateur de projet NICHOLAS READ	Drawing Number / Numéro de CHTI 30025849	Sheet / Feuille 115
Project Number / Numéro du projet 121-15275-52		1 of 1



- NOTES:**
- SIGNS A1 AND A8 ARE TO BE MOUNTED USING EXISTING MOUNT FRAMES. DOWNSTREAM FRAMES NEED MODIFICATION TO HEIGHT. ALL OTHER SIGNS MOUNTING TO BE PROPOSED BY CONTRACTOR. ALLOW FOR MIN. 2 STAINLESS STEEL FASTENERS PER SIGN. ALL HOLES MUST BE DRILLED. TRANSPARENT POLYCARBONATE (EXXAM) INSULATOR. GRIMMETS ARE REQUIRED IN ALL HOLES. SUBMIT SHOP DRAWINGS FOR MOUNTING IN ADDITION TO PROOFS FOR SIGNS GRAPHICS.
 - CONTRACTOR TO SUPPLY AND INSTALL NEW SIGNS.
 - REFER TO PCA STANDARD DRAWINGS FOR DETAILS OF SIGNS, RAILINGS, AND LIFE RINGS.
 - GATES ARE TO FACILITATE MAINTENANCE OF THE LOG LIFTER. PRIOR TO OPENING THE GATES TO BEGIN MAINTENANCE ACTIVITIES, TEMPORARY BARRIERS MUST BE INSTALLED AT BOTH ENDS OF THE PEDESTRIAN WALKWAY TO PREVENT PEDESTRIAN ACCESS.

FOR TENDER

- LEGEND:**
- DIRECTION OF WATER FLOW
 - TREES
 - BRUSH (PLAN VIEW)
 - EARTH (SECTION)
 - ROCK (SECTION)
 - WATER

No.	Description	Drawn By (Des.P)	Date
D	REVISED FOR TENDER	H.Z.	OCT-18-2018
C	ISSUED FOR TENDER	M.G.	MAY-07-2018
B	ISSUED FOR REVIEW	M.G.	MAR-28-2018
A	ISSUED FOR REVIEW	M.G.	FEB-02-2018

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

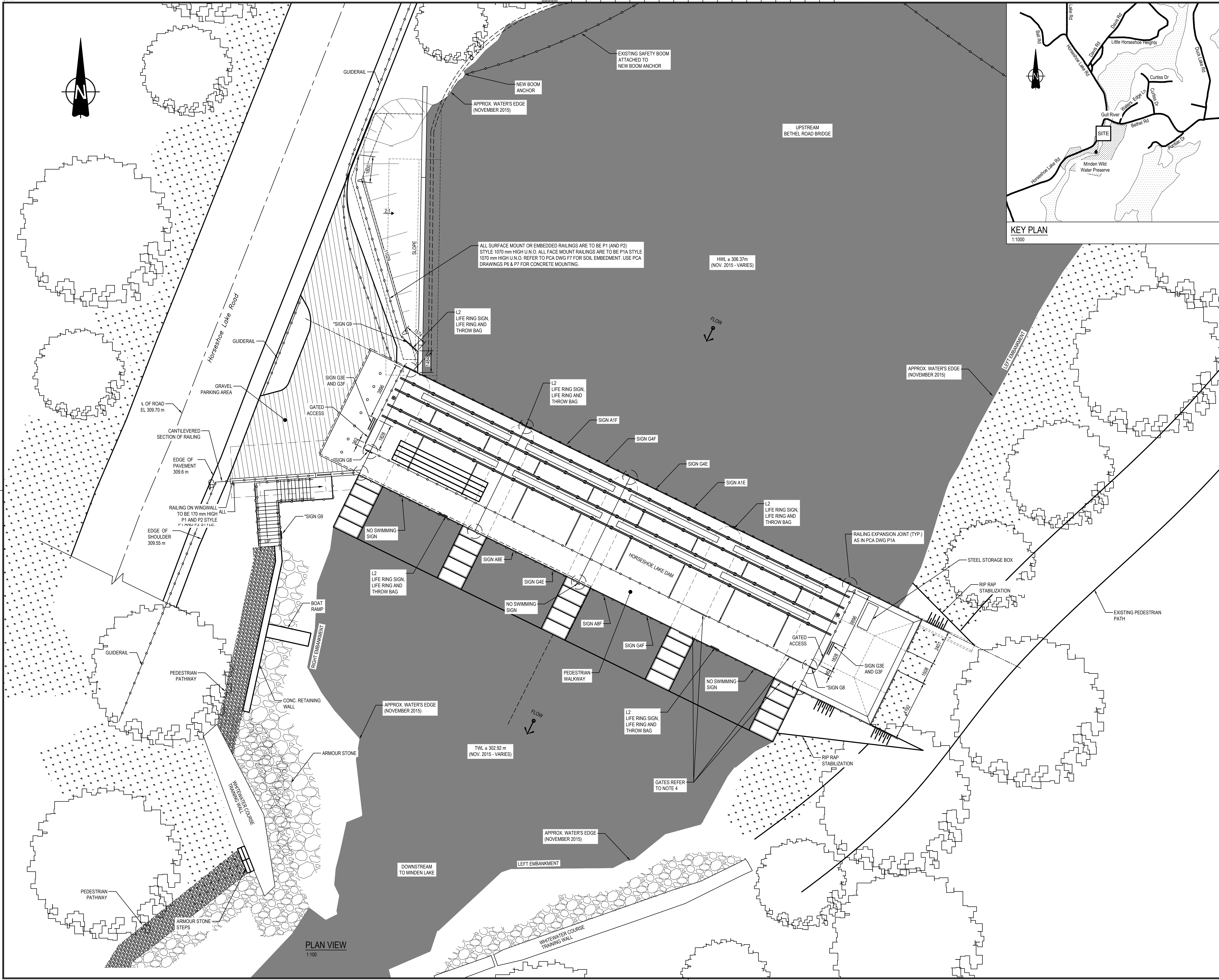
	A Detail number Numéro du détail
	B Location dwg. number Numéro sur dessin



Project title / Titre du projet
HORSESHOE LAKE DAM REPLACEMENT

Drawing title / Titre du dessin
PUBLIC SAFETY PLAN

Drawn by / Dessiné par MAITE GARCIA	Designed by / Conçu par KARINA SETO
Approved by / Approuvé par JAVIER VILORIA	Drawing Date / Date du dessin FEBRUARY 2018
Project manager / Administrateur de projet NICHOLAS READ	
HCEW Number / Numéro de CHTI 30025849	Drawing Number / Numéro du Dessin 116
Project Number / Numéro du projet 121-15275-52	Sheet / Feuille 1 of 1



PLAN VIEW
1:100

FOR TENDER

Project title / Titre du projet
HORSESHOE LAKE DAM REPLACEMENT

Drawing title / Titre du dessin
STANDARD DETAILS 1

Drawn by / Dessiné par MAITE GARCIA	Designed by / Conçu par KARINA SETO
Approved by / Approuvé par JAVIER VILORIA	Drawing Date / Date du dessin FEBRUARY 2018
Project manager / Administrateur de projet NICHOLAS READ	
HCEW Number / Numéro de CHTI 30025849	Drawing Number / Numéro du dessin 117
Project Number / Numéro du projet 121-15275-52	Sheet Feuille 1 of 1

DANGER Dam Ahead Keep Out

Name of Dam
In An Emergency, Call 9-1-1

SIGN COLOURS

- Background: White
- Text: Red
- Graphic: Red

SIGN FONTS AND TEXT HEIGHTS

SIGN HEIGHT: 2000mm
SIGN WIDTH: 1200mm

SIGNS MATERIALS AND FABRICATION SPECIFICATIONS

- ALL MATERIALS MUST BE OF NEW STOCK AND FREE FROM DEFECTS.
- STRUCTURAL PANELS TO BE TESTED IN ACCORDANCE WITH ASTM E78 AND DESIGNED TO WITHSTAND A WINDHOLE WIND FORCE OF 110 KILOMETRES PER HOUR.

2.1 FABRICATION TOLERANCES

1.1 THE MAXIMUM ALLOWABLE DEVIATION FROM FLATNESS MUST NOT EXCEED 0.1 MM PER 100 (0.010 INCH PER 100 INCH) WIDTH OF THE SIGN PANEL.

TYPICAL 4X6 (1220x1830) SIGN DIMENSIONS AND MATERIALS AND FABRICATION SPECIFICATIONS	Released: November 3, 2014 Checked: November 3, 2014 Approved: November 3, 2014	Drawn by: S. Gauthier Checked by: S. Gauthier Approved by: S. Gauthier	G1 REV. 0
--	---	--	---------------------

SCALE = 1:4

SIGN COLOURS

- Background: White
- Text: Red
- Graphic: Red

SIGN FONTS AND TEXT HEIGHTS

SIGN HEIGHT: 500mm
SIGN WIDTH: 700mm

SIGNS MATERIALS AND FABRICATION SPECIFICATIONS

- ALL MATERIALS MUST BE OF NEW STOCK AND FREE FROM DEFECTS.
- STRUCTURAL PANELS TO BE TESTED IN ACCORDANCE WITH ASTM E78 AND DESIGNED TO WITHSTAND A WINDHOLE WIND FORCE OF 110 KILOMETRES PER HOUR.

2.1 FABRICATION TOLERANCES

1.1 THE MAXIMUM ALLOWABLE DEVIATION FROM FLATNESS MUST NOT EXCEED 0.1 MM PER 100 (0.010 INCH PER 100 INCH) WIDTH OF THE SIGN PANEL.

TYPICAL LIFE PRESERVER RING SIGN DIMENSIONS AND MATERIALS AND FABRICATION SPECIFICATIONS	Released: August 26, 2014 Checked: August 26, 2014 Approved: August 26, 2014	Drawn by: S. Gauthier Checked by: M. McLay Approved by: M. McLay	G5 REV. 0
--	--	--	---------------------

SCALE = 1:8

SIGN COLOURS

- Background: White
- Text: Red
- Graphic: Red

SIGN FONTS AND TEXT HEIGHTS

SIGN HEIGHT: 100mm
SIGN WIDTH: 150mm

SIGNS MATERIALS AND FABRICATION SPECIFICATIONS

- ALL MATERIALS MUST BE OF NEW STOCK AND FREE FROM DEFECTS.
- STRUCTURAL PANELS TO BE TESTED IN ACCORDANCE WITH ASTM E78 AND DESIGNED TO WITHSTAND A WINDHOLE WIND FORCE OF 110 KILOMETRES PER HOUR.

2.1 FABRICATION TOLERANCES

1.1 THE MAXIMUM ALLOWABLE DEVIATION FROM FLATNESS MUST NOT EXCEED 0.1 MM PER 100 (0.010 INCH PER 100 INCH) WIDTH OF THE SIGN PANEL.

TYPICAL 36" (914mm) DAM ADDRESS SIGN DIMS MATERIALS AND FABRICATION SPECIFICATIONS	Released: August 26, 2014 Checked: August 26, 2014 Approved: August 26, 2014	Drawn by: S. Gauthier Checked by: M. McLay Approved by: M. McLay	G3 REV. 0
--	--	--	---------------------

SCALE = 1:8

SIGN COLOURS

- Background: White
- Text: Red
- Graphic: Red

SIGN FONTS AND TEXT HEIGHTS

SIGN HEIGHT: 150mm
SIGN WIDTH: 150mm

SIGNS MATERIALS AND FABRICATION SPECIFICATIONS

- ALL MATERIALS MUST BE OF NEW STOCK AND FREE FROM DEFECTS.
- STRUCTURAL PANELS TO BE TESTED IN ACCORDANCE WITH ASTM E78 AND DESIGNED TO WITHSTAND A WINDHOLE WIND FORCE OF 110 KILOMETRES PER HOUR.

2.1 FABRICATION TOLERANCES

1.1 THE MAXIMUM ALLOWABLE DEVIATION FROM FLATNESS MUST NOT EXCEED 0.1 MM PER 100 (0.010 INCH PER 100 INCH) WIDTH OF THE SIGN PANEL.

STD 'NO FISHING' & 'NO SWIMMING' SIGNS DIMS MATERIALS AND FABRICATION SPECIFICATIONS	Released: October 31, 2014 Checked: October 31, 2014 Approved: October 31, 2014	Drawn by: S. Gauthier Checked by: M. McLay Approved by: M. McLay	G6 REV. 0
--	---	--	---------------------

SCALE = 1:8

SIGN COLOURS

- Background: White
- Text: Red
- Graphic: Red

SIGN FONTS AND TEXT HEIGHTS

SIGN HEIGHT: 100mm
SIGN WIDTH: 150mm

SIGNS MATERIALS AND FABRICATION SPECIFICATIONS

- ALL MATERIALS MUST BE OF NEW STOCK AND FREE FROM DEFECTS.
- STRUCTURAL PANELS TO BE TESTED IN ACCORDANCE WITH ASTM E78 AND DESIGNED TO WITHSTAND A WINDHOLE WIND FORCE OF 110 KILOMETRES PER HOUR.

2.1 FABRICATION TOLERANCES

1.1 THE MAXIMUM ALLOWABLE DEVIATION FROM FLATNESS MUST NOT EXCEED 0.1 MM PER 100 (0.010 INCH PER 100 INCH) WIDTH OF THE SIGN PANEL.

TYPICAL 24"x26" (610x660) DAM ADDRESS SIGN MATERIALS AND FABRICATION SPECIFICATIONS	Released: August 26, 2014 Checked: August 26, 2014 Approved: August 26, 2014	Drawn by: S. Gauthier Checked by: M. McLay Approved by: M. McLay	G4 REV. 0
---	--	--	---------------------

SCALE = 1:8

SIGN COLOURS

- Background: White
- Text: Red
- Graphic: Red

SIGN FONTS AND TEXT HEIGHTS

SIGN HEIGHT: 150mm
SIGN WIDTH: 150mm

SIGNS MATERIALS AND FABRICATION SPECIFICATIONS

- ALL MATERIALS MUST BE OF NEW STOCK AND FREE FROM DEFECTS.
- STRUCTURAL PANELS TO BE TESTED IN ACCORDANCE WITH ASTM E78 AND DESIGNED TO WITHSTAND A WINDHOLE WIND FORCE OF 110 KILOMETRES PER HOUR.

2.1 FABRICATION TOLERANCES

1.1 THE MAXIMUM ALLOWABLE DEVIATION FROM FLATNESS MUST NOT EXCEED 0.1 MM PER 100 (0.010 INCH PER 100 INCH) WIDTH OF THE SIGN PANEL.

STANDARD 'STRONG CURRENTS' SIGNS DIMS MATERIALS AND FABRICATION SPECIFICATIONS	Released: July 21, 2018 Checked: July 21, 2018 Approved: July 21, 2018	Drawn by: S. Gauthier Checked by: B. Kowalik Approved by: B. Kowalik	G9 REV. 0
--	--	--	---------------------

FOR TENDER

No.	Description	M.G.	JUL-24-2018
A	ISSUED FOR TENDER		

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	Detail number	
B	Location dwg. number	



Project title / Titre du projet: HORSESHOE LAKE DAM REPLACEMENT

Drawing title / Titre du dessin: STANDAD DETAILS 2

Drawn by / Dessiné par: MAITE GARCIA	Designed by / Conçu par: KARINA SETO
Approved by / Approuvé par: JAVIER VILORIA	Drawing Date / Date du dessin: FEBRUARY 2018
Project manager / Administrateur de projet: NICHOLAS READ	
HCEW Number / Numéro de CHTI: 30025849	Drawing Number / Numéro du Dessin: 118
Project Number / Numéro du projet: 121-15275-52	Sheet / Feuille: 1 of 1

DANGER
Dam Outflow
Keep Out

Name of Dam
In An Emergency Call (XXX) XXX-XXXX

SCALE: 1:1.5
TYPE A1 HEADPOND DANGER SIGN - ENGLISH
SIZE 4x6 (1220x1830) - REFER TO G1 FOR SPECS

DANGER
Dam Outflow
Keep Out

Name of Dam
In An Emergency Call (XXX) XXX-XXXX

SCALE: 1:1.5
TYPE A8 TAILRACE DANGER SIGN - ENGLISH
SIZE 4x6 (1220x1830) - REFER TO G1 FOR SPECS

DANGER
Barrage Ahead
Keep Out

Name of Dam
In An Emergency, Call 9-1-1

SCALE: 1:1.5
TYPE A1 HEADPOND DANGER SIGN - FRENCH
SIZE 4x6 (1220x1830) - REFER TO G1 FOR SPECS

DANGER
Zone de décharge
du barrage
Accès interdit

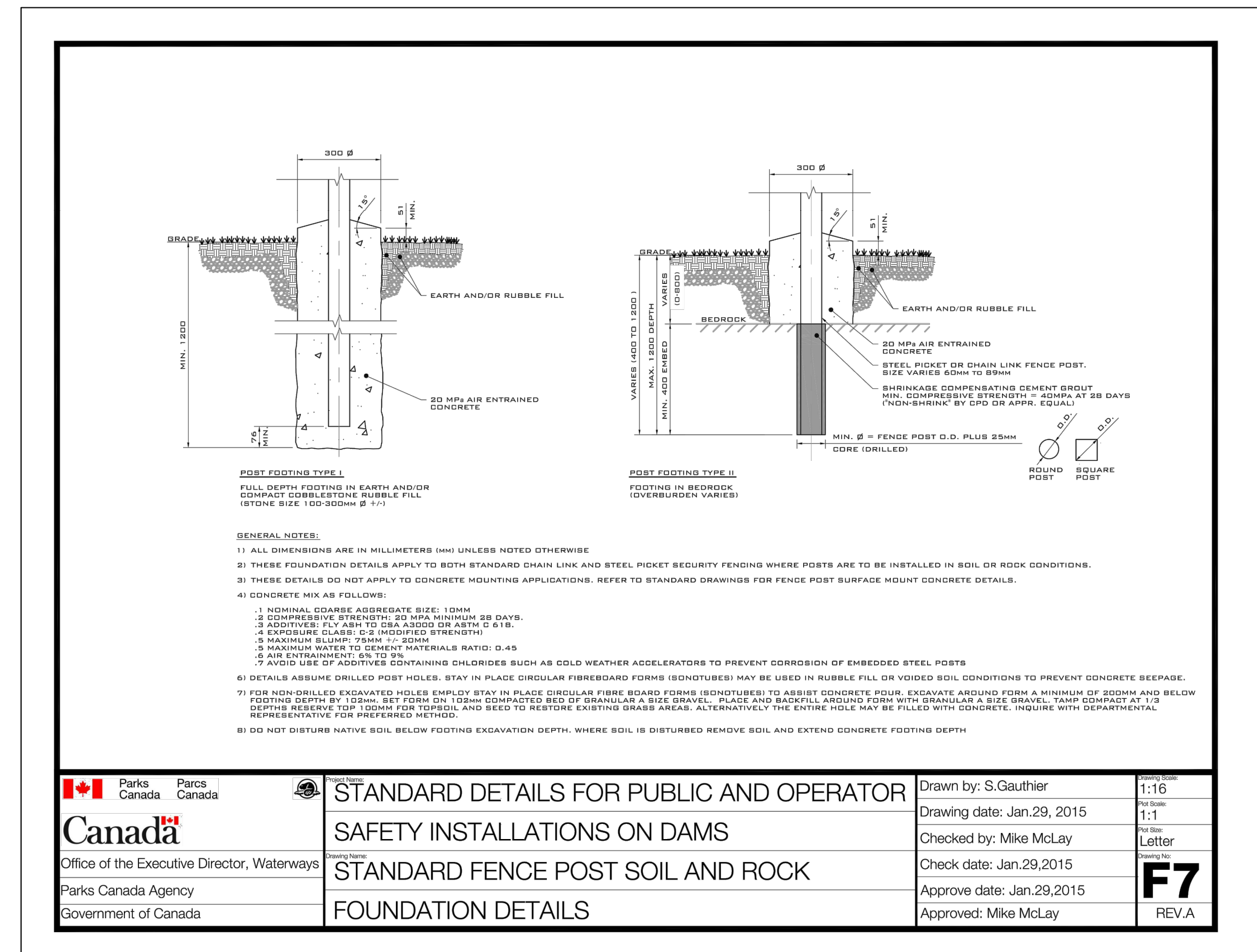
Nom du barrage
En cas d'urgence, composez le (XXX) XXX-XXXX

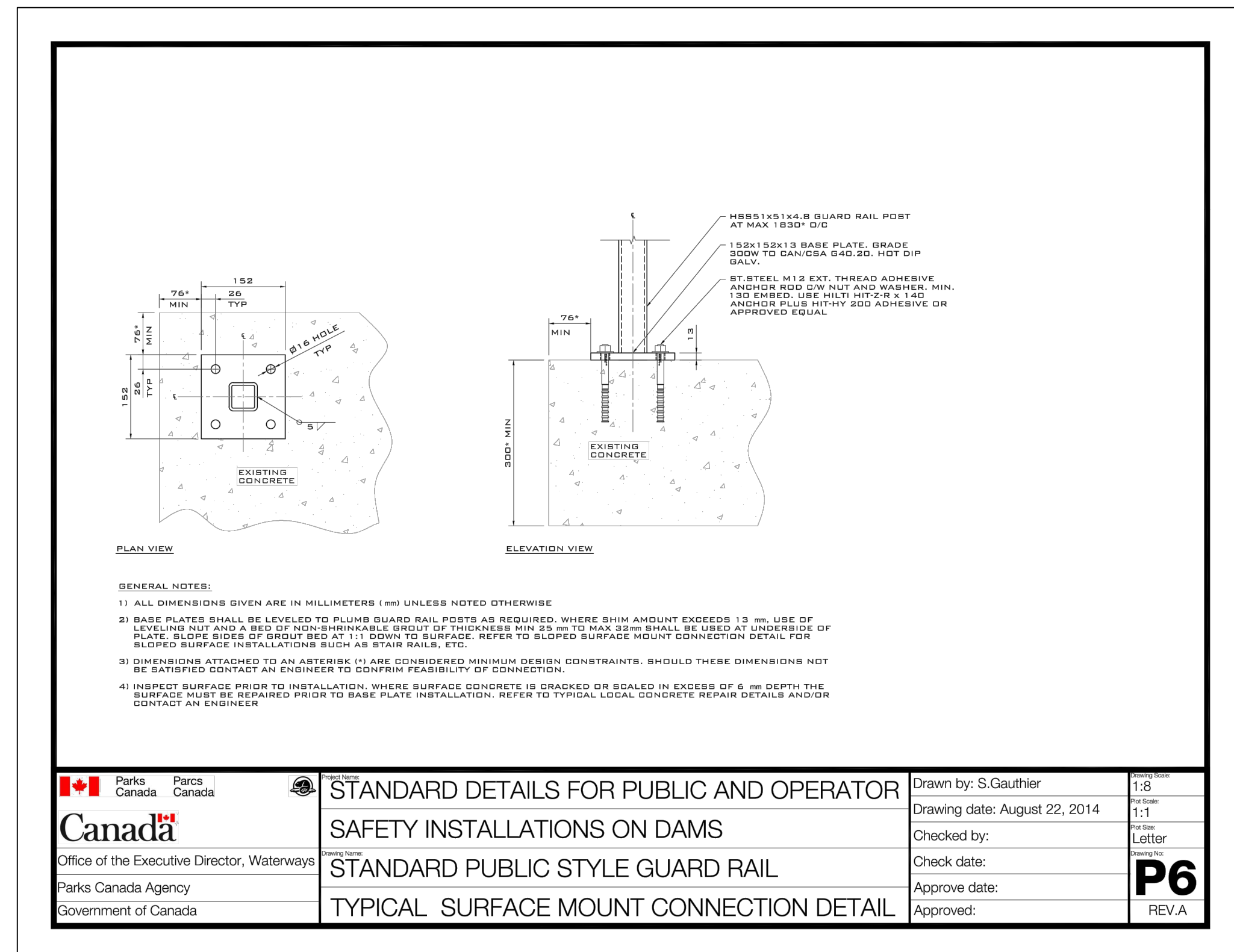
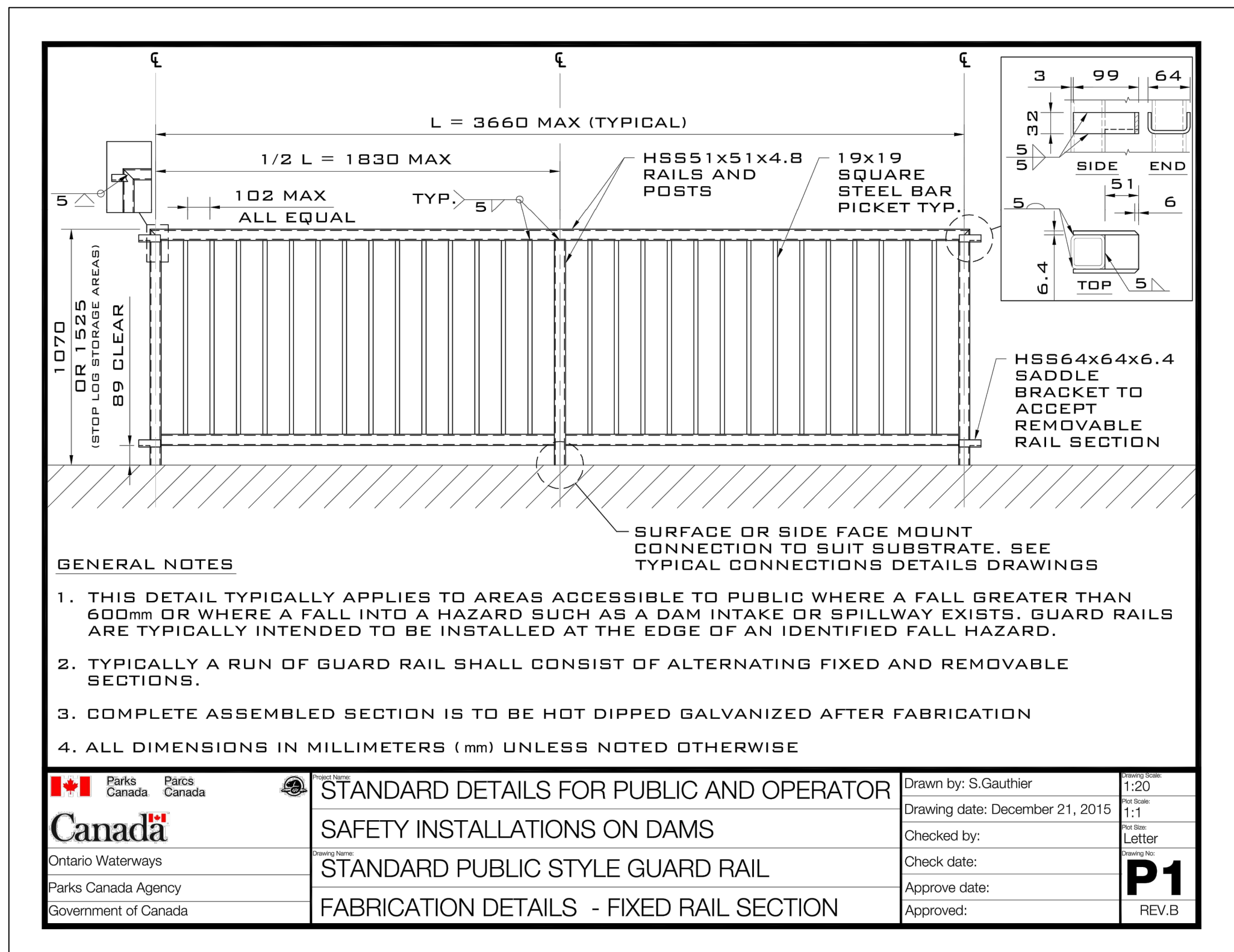
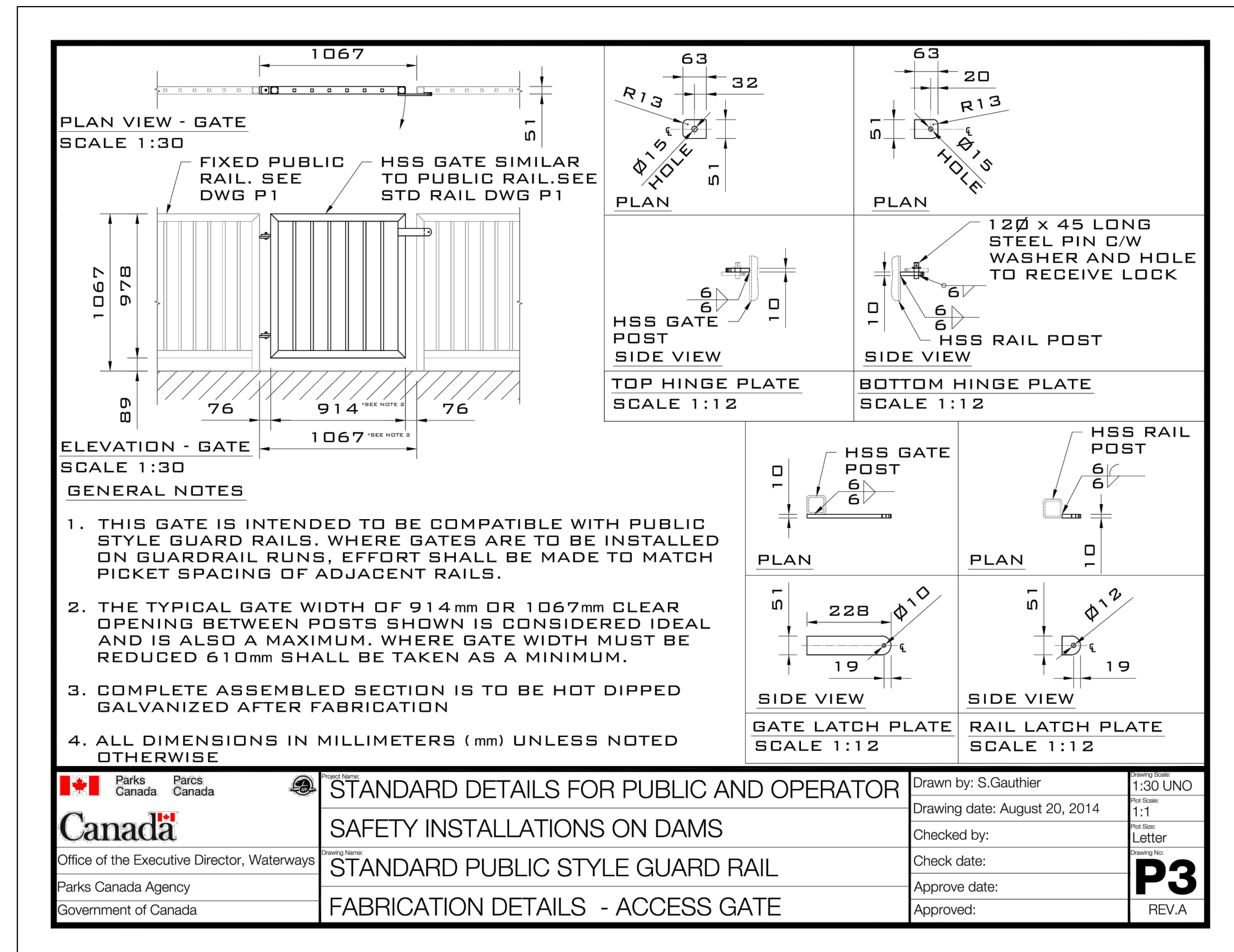
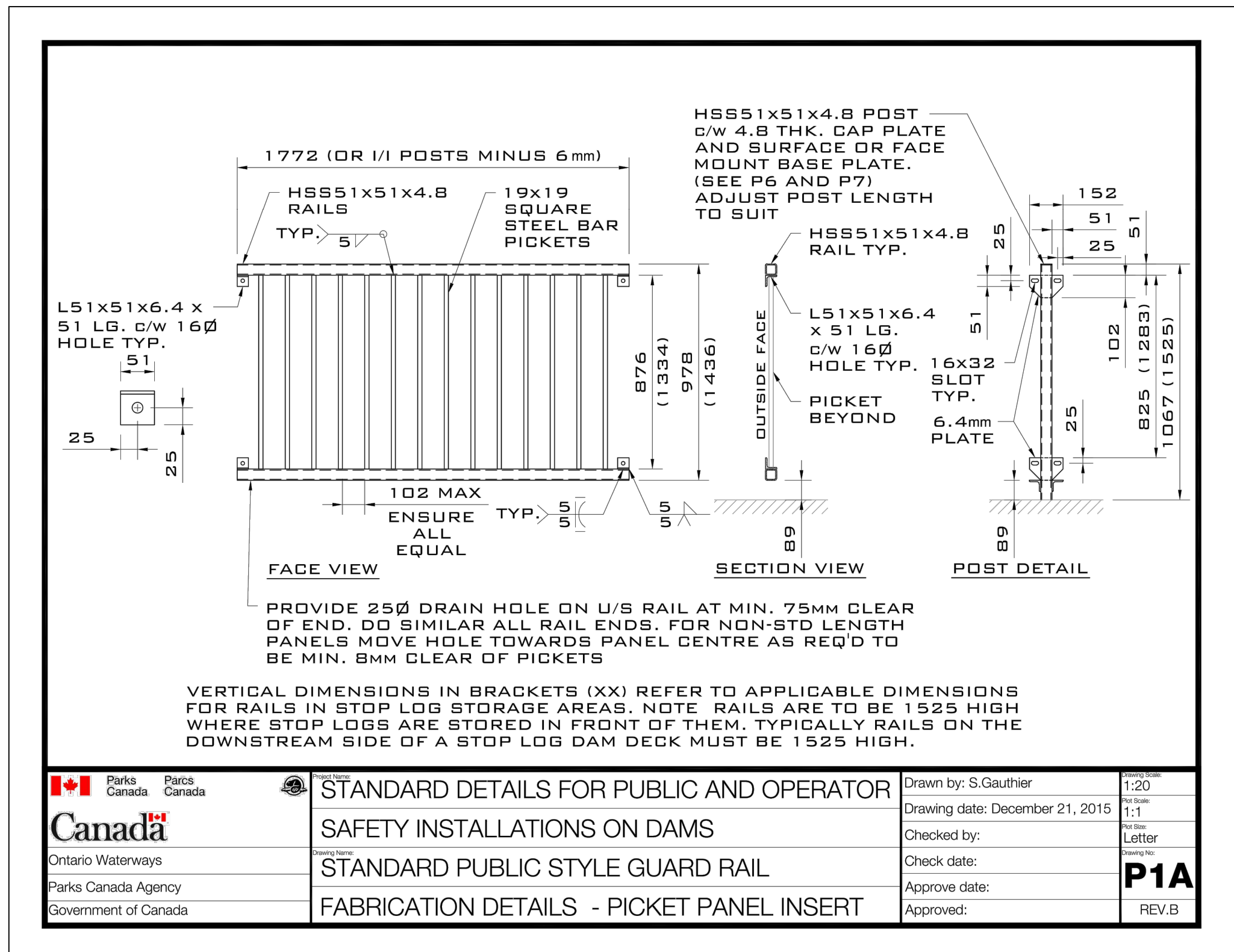
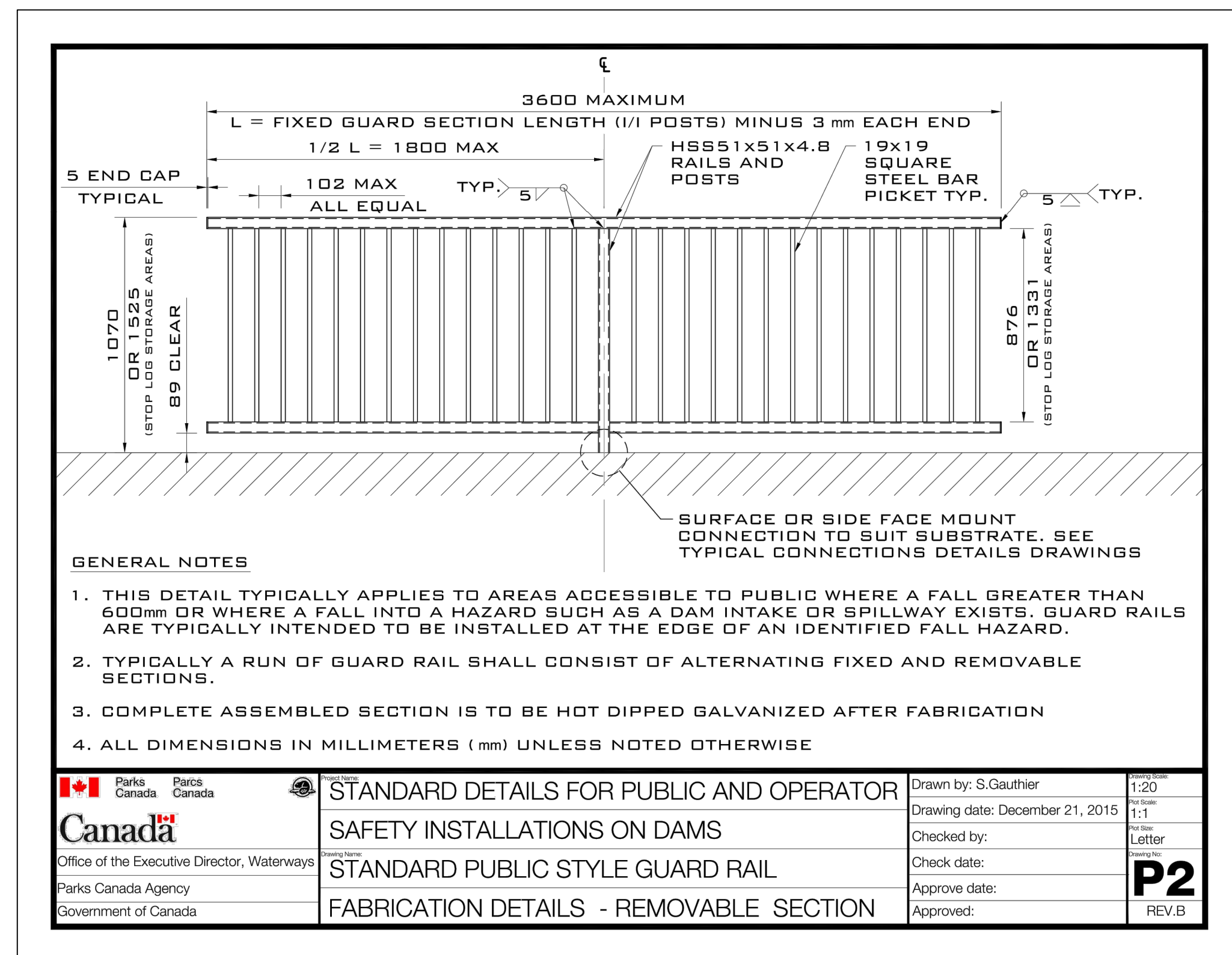
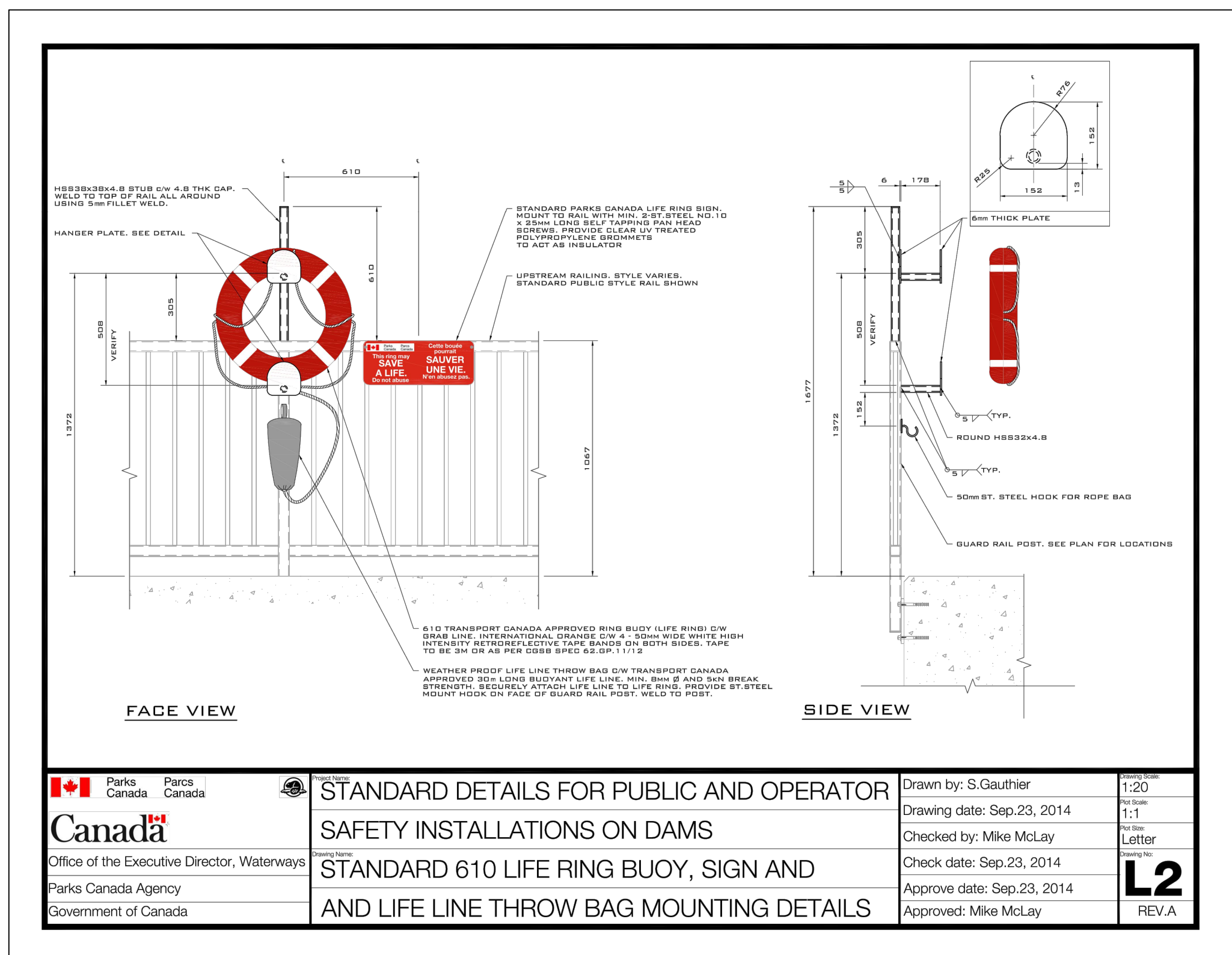
SCALE: 1:1.5
TYPE A8 TAILRACE DANGER SIGN - FRENCH
SIZE 4x6 (1220x1830) - REFER TO G1 FOR SPECS

DANGER
Barrage devant
Accès interdit

Nom du barrage
En cas d'urgence, composez le 9-1-1

SCALE: 1:1.5
TYPE A1 HEADPOND DANGER SIGN - FRENCH
SIZE 4x6 (1220x1830) - REFER TO G1 FOR SPECS





FOR TENDER

No.	Description	M.G.	JUL-24-2018
-----	-------------	------	-------------

Revision / Révision			
---------------------	--	--	--

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	Detail number	
B	Location drawing number	

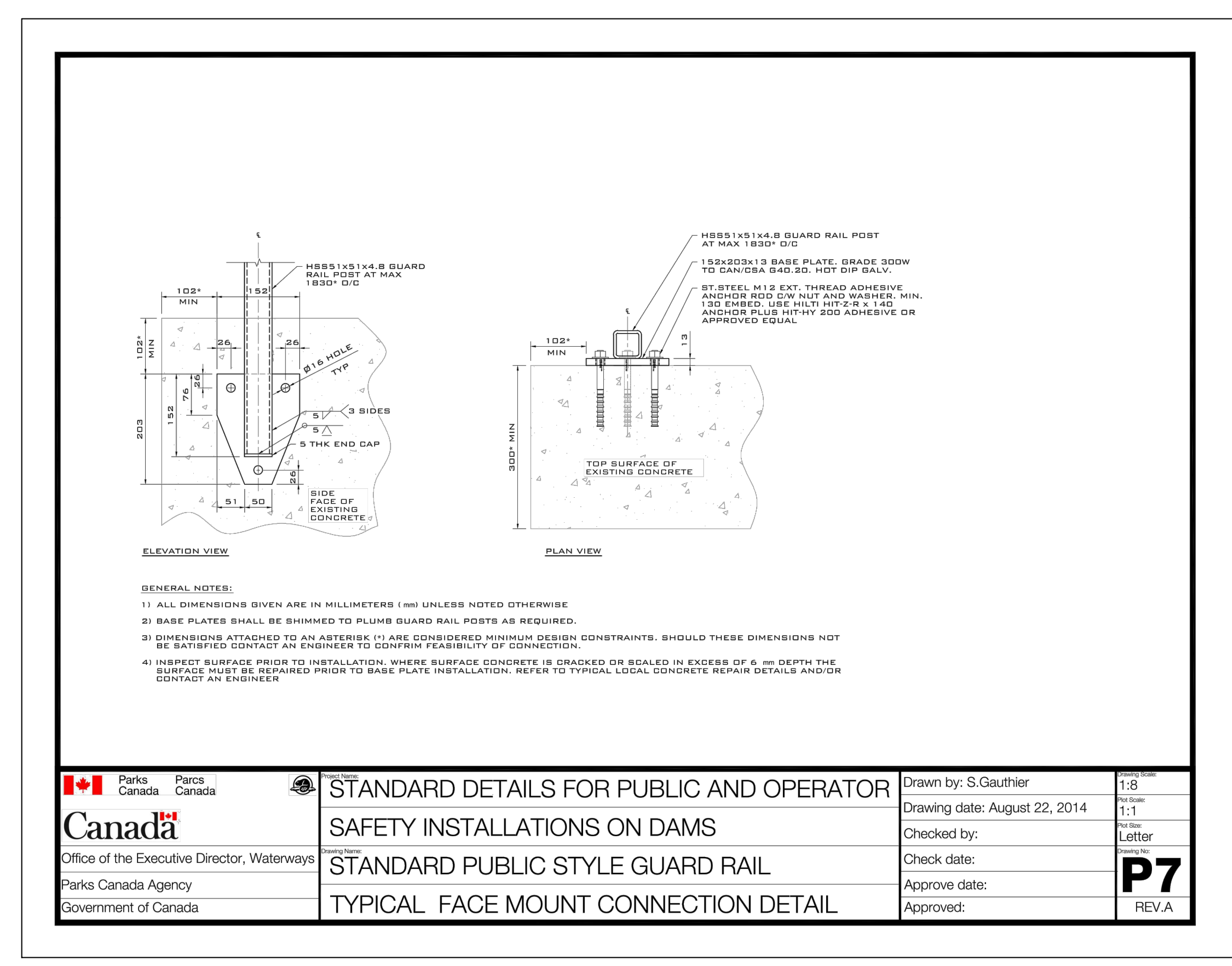


Project title / Titre du projet
HORSESHOE LAKE DAM REPLACEMENT

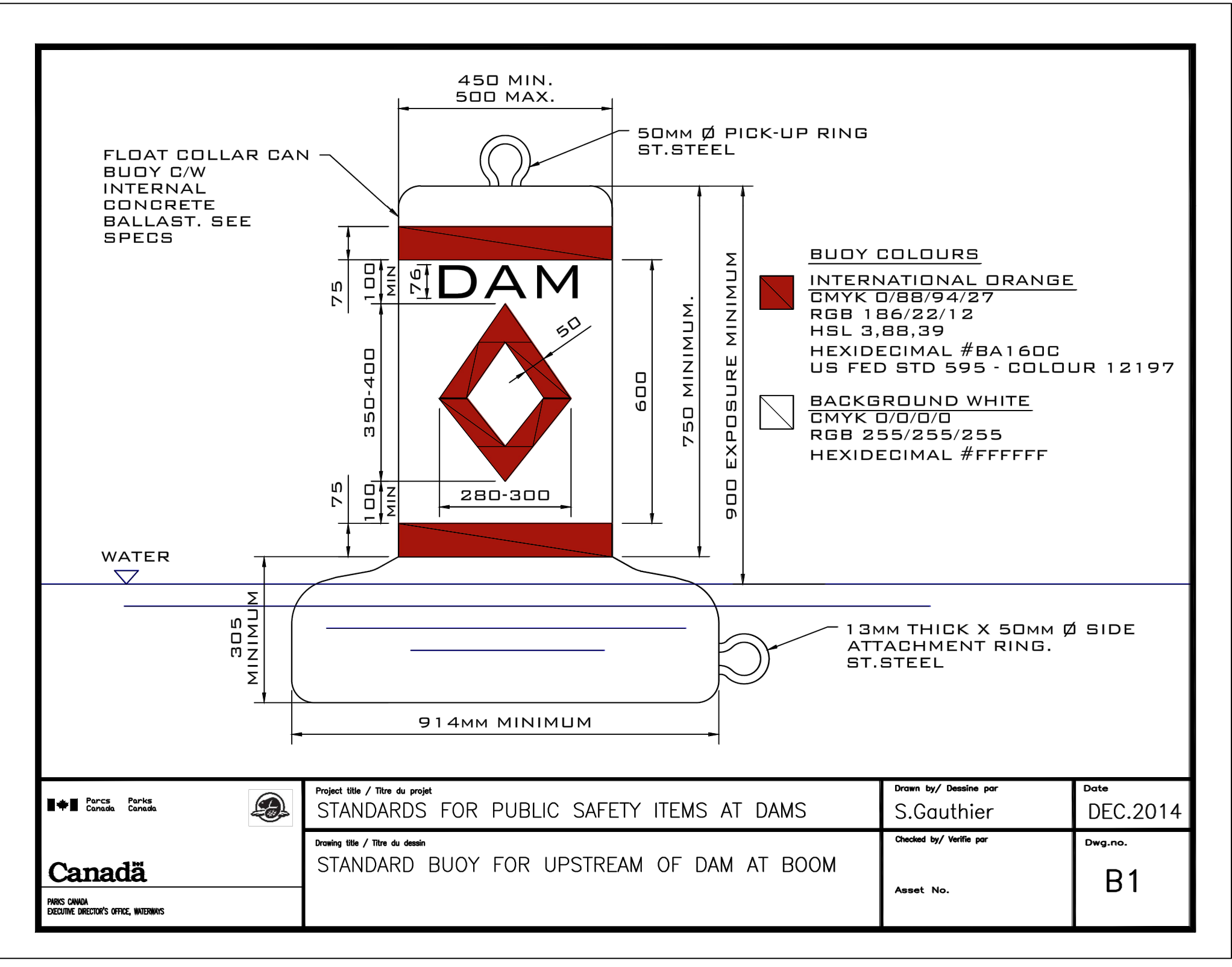
Drawing title / Titre du dessin
STANDARD DETAILS 3

Drawn by / Dessiné par MAITE GARCIA	Designed by / Conçu par KARINA SETO
Approved by / Approuvé par JAVIER VILORIA	Drawing Date / Date du dessin FEBRUARY 2018

Project manager / Administrateur de projet NICHOLAS READ	Drawing Number / Numéro de CHTI 30025849	Drawing Number / Numéro du Dessin 119
Project Number / Numéro du projet 121-15275-52	Sheet / Feuille 1 of 1	



 Office of the Executive Director, Waterways	STANDARD DETAILS FOR PUBLIC AND OPERATOR SAFETY INSTALLATIONS ON DAMS STANDARD PUBLIC STYLE GUARD RAIL TYPICAL FACE MOUNT CONNECTION DETAIL	Drawn by: S.Gauthier Drawing date: August 22, 2014 Checked by: Check date: Approved date: Approved:	1:8 1:1 Letter P7 REVA
---	--	--	---



 Project title / Titre de projet: STANDARDS FOR PUBLIC SAFETY ITEMS AT DAMS Drawn by / Dessiné par: S.Gauthier Date: DEC.2014 Drawn by / Dessiné par: S.Gauthier Date: DEC.2014 Drawn by / Dessiné par: S.Gauthier Date: DEC.2014 Drawn by / Dessiné par: S.Gauthier Date: DEC.2014	Project title / Titre de projet: STANDARDS FOR PUBLIC SAFETY ITEMS AT DAMS Drawn by / Dessiné par: S.Gauthier Date: DEC.2014	BUDY COLOURS INTERNATIONAL ORANGE CMYK 0/88/94/27 RGB 186/22/12 HSL 3,88,39 HEXDECIMAL #BA160C US FED STD 595 - COLOUR 12197 BACKGROUND WHITE CMYK 0/0/0/0 RGB 255/255/255 HEXDECIMAL #FFFFFF
--	--	--

FOR TENDER

No.	Description	Date
B	ISSUED FOR TENDER	M.G. SEP-24-2018
A	ISSUED FOR TENDER	M.G. JUL-24-2018

Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the Departmental Representative of all discrepancies.

A	Detail number	Número do detalh
B	Location drawing number	Número sur dessin



Project title / Titre du projet

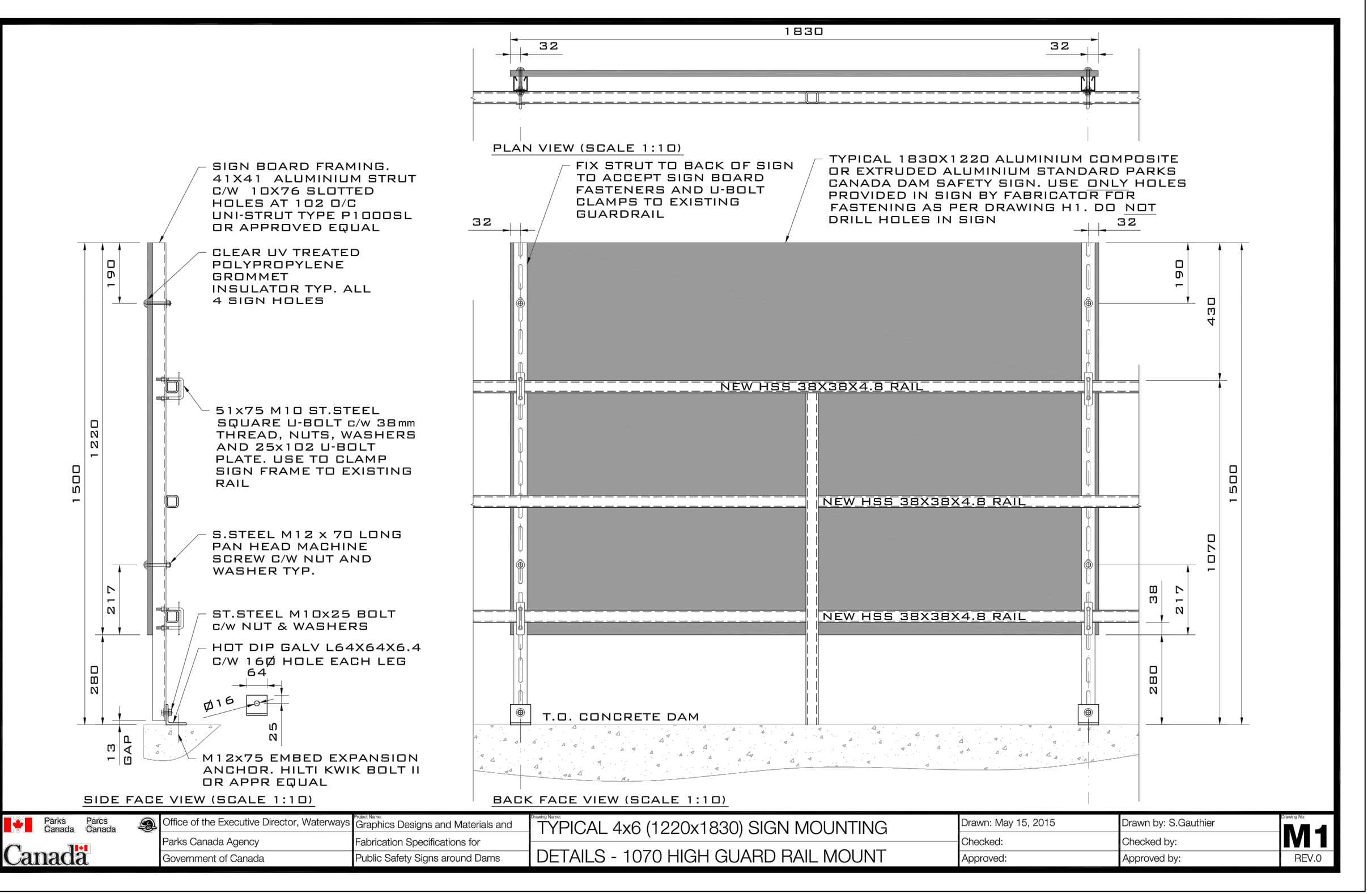
HORSESHOE LAKE DAM REPLACEMENT

Drawing title / Titre du dessin

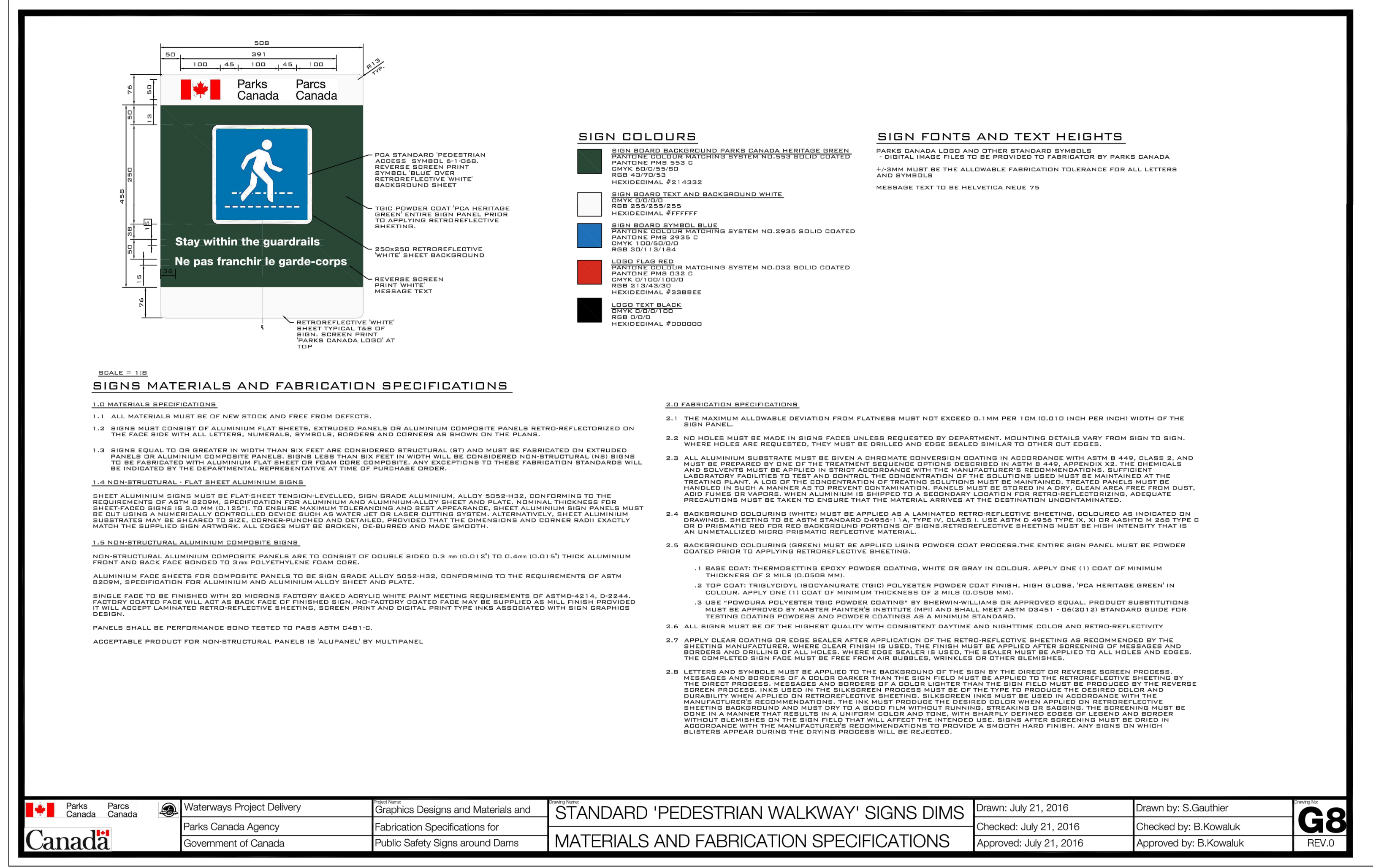
STANDARD DETAILS 4

Drawn by / Dessiné par: MAITE GARCIA Approved by / Approuvé par: JAVIER VILORIA Project manager / Administrateur de projet: NICHOLAS READ	Designed by / Conçu par: KARINA SETO Drawing Date / Date du dessin: FEBRUARY 2018
--	--

HCEW Number / Numéro de chti: 30025849	Drawing Number / Numéro du Dessin: 120
Project Number / Numéro du projet: 121-15275-52	Sheet / Feuille: 1 of 1



 Office of the Executive Director, Waterways	TYPICAL 4x6 (1220x1830) SIGN MOUNTING DETAILS - 1070 HIGH GUARD RAIL MOUNT	Drawn: May 15, 2015 Checked: Approved:	Drawn by: S.Gauthier Checked by: Approved by:	M1 REVA
---	---	--	---	-------------------



 Waterways Project Delivery	Graphics Designs and Materials and Fabrication Specifications for Public Safety Signs around Dams	STANDARD 'PEDESTRIAN WALKWAY' SIGNS DIMS MATERIALS AND FABRICATION SPECIFICATIONS	Drawn: July 21, 2016 Checked: July 21, 2016 Approved: July 21, 2016	Drawn by: S.Gauthier Checked by: B.Kowalik Approved by: B.Kowalik	G8 REV.0
--------------------------------	---	--	---	---	--------------------