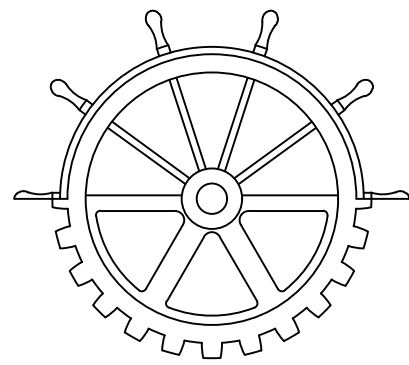




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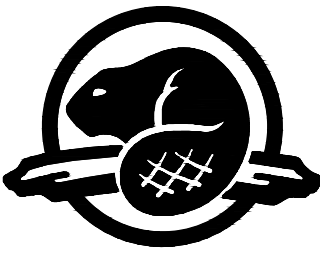


Ontario Region  
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Région de l'Ontario  
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AERIAL PHOTO

# TRENT-SEVERN WATERWAY DAM AT LOCK 28 - BURLEIGH FALLS RECONSTRUCTION

GENERAL DRAWINGS

DRAWING No: DRAWING TITLE

000	LIST OF DRAWINGS
001	LIST OF REFERENCE DRAWINGS
002	GENERAL NOTES, LEGEND, TABLES & ABBREVIATIONS
003	CONSTRUCTION PHASING - PHASE 1 - GENERAL ARRANGEMENT
004	CONSTRUCTION PHASING - PHASE 2 - GENERAL ARRANGEMENT
005	CONSTRUCTION PHASING - PHASE 3 - GENERAL ARRANGEMENT

DEMOLITION DRAWINGS

DRAWING No: DRAWING TITLE

100	DEMOLITION - PHASE 1 - EXISTING MAIN DAM - GAINS AND SILLS - PLAN AND SECTIONS
101	DEMOLITION - PHASE 2 - NORTH RETAINING WALL - PLAN ,SECTIONS AND DETAIL
102	DEMOLITION - PHASE 2 - EXISTING MAIN DAM - PLAN AND SECTIONS
103	DEMOLITION - PHASE 3 - SOUTH GRAVITY DAM - PLAN AND SECTIONS
104	DEMOLITION - PHASE 3 - EXISTING MAIN DAM - PLAN AND SECTIONS

TEMPORARY WORKS DRAWINGS

DRAWING No: DRAWING TITLE

200	TEMPORARY WORKS - PHASE 1 - ANCHORING LAYOUT - PLAN, SECTIONS AND DETAILS
201	TEMPORARY WORKS - PHASE 1 - VOID TREATMENT - PLAN AND SECTIONS
202	TEMPORARY WORKS - PHASE 1 - STOPLOG GAINS AND SILLS - PLAN, SECTIONS AND DETAIL
203 (SH1 OF 2)	TEMPORARY WORKS - PHASE 1 - SOUTH DECK EXTENTION - PLAN, SECTIONS AND DETAILS
203 (SH2 OF 2)	TEMPORARY WORKS - PHASE 1 - SOUTH DECK EXTENTION - PLAN, SECTIONS AND DETAILS
204	TEMPORARY WORKS - PHASE 1 - PROPOSED BULKHEAD TYPICAL ARRANGEMENT
205	TEMPORARY WORKS - STEEL STOP LOGS - PLAN, ELEVATION, SECTIONS AND DETAILS
206	TEMPORARY WORKS - GANTRY - PLAN, ELEVATION AND SECTION
207	TEMPORARY WORKS - LOGLIFTER RAILS - EXTENSION BRACING - PLANS, SECTIONS AND DETAILS

CONCRETE DRAWINGS

DRAWING No: DRAWING TITLE

300	CONCRETE - GENERAL LAYOUT - PLAN AND ELEVATION
301 (SH1 OF 3)	CONCRETE - SPILLWAY - APRON AND SILLS - PLAN, ELEVATIONS, SECTIONS AND DETAILS
301 (SH2 OF 3)	CONCRETE - SPILLWAY - APRON AND SILLS - PLAN , ELEVATIONS, SECTIONS AND DETAILS
301 (SH3 OF 3)	CONCRETE - SPILLWAY - APRON AND SILLS - PLAN , ELEVATIONS, SECTIONS AND DETAILS
302	CONCRETE - INTERMEDIATE PIERS - PLAN, ELEVATION, SECTIONS AND DETAILS
303	CONCRETE - SOUTH ABUTMENT - PLAN, ELEVATION, SECTIONS AND DETAIL
304	CONCRETE - NORTH ABUTMENT - PLAN, ELEVATION, SECTIONS AND DETAIL
305	CONCRETE - SOUTH GRAVITY DAM - PLAN, SECTIONS AND DETAIL
306	CONCRETE - NORTH GRAVITY DAM - PLAN, SECTIONS AND DETAILS
307 (SH1 OF 3)	CONCRETE - SPILLWAY AND DECK - PLAN, SECTIONS AND DETAILS
307 (SH2 OF 3)	CONCRETE - SPILLWAY AND DECK - PLAN, SECTIONS AND DETAILS
307 (SH3 OF 3)	CONCRETE - SPILLWAY AND DECK - PLAN, SECTIONS AND DETAILS

REINFORCEMENT DRAWINGS

DRAWING No: DRAWING TITLE

400 (SH1 OF 3)	REINFORCEMENT - SPILLWAY - PLAN , ELEVATIONS AND SECTIONS
400 (SH2 OF 3)	REINFORCEMENT - SPILLWAY - PLAN , ELEVATIONS AND SECTIONS
400 (SH3 OF 3)	REINFORCEMENT - SPILLWAY - PLAN , ELEVATIONS AND SECTIONS
401	REINFORCMENT - INTERMEDIATE PIERS - PLAN, ELEVATION, SECTIONS AND DETAIL
402	REINFORCEMENT - NORTH ABUTMENT - PLAN, ELEVATION, SECTIONS AND DETAIL
403	REINFORCEMENT - SOUTH ABUTMENT - PLAN, ELEVATION, SECTIONS AND DETAIL
404	REINFORCEMENT - SOUTH GRAVITY DAM - PLAN, ELEVATIONS AND SECTIONS
405	REINFORCEMENT - NORTH GRAVITY DAM - PLAN, ELEVATIONS AND SECTIONS

MISCELLANEOUS METAL PARTS DRAWINGS

DRAWING No: DRAWING TITLE

500	MISCELLANEOUS METALS PARTS - GENERAL LAYOUT - PLAN
501	MISCELLANEOUS METALS PARTS - GUARDRAILS AND LADDERS - SECTIONS AND DETAILS
502	MISCELLANEOUS METALS PARTS - GAIN AND PIER NOSING - PLAN, ELEVATION & DETAILS
503	MISCELLANEOUS METALS PARTS - GRATING, COVERS & - PLANS, SECTIONS & DETAILS
504	MISCELLANEOUS METALS PARTS - ACCESS GATES - ELEVATIONS, SECTIONS AND DETAILS
505	MISCELLANEOUS METALS PARTS - SIGN MOUNTING DETAILS
506	MISCELLANEOUS METALS PARTS - PUBLIC SAFETY MEASURES

MECHANICAL DRAWINGS

DRAWING No: DRAWING TITLE

600	MECHANICAL - STOP LOG LIFTER - PLAN, SECTION AND DETAIL
601	MECHANICAL - GAIN EMBEDDED PARTS AND JACK SUPPORT LOCKING SYSTEM DETAILS
602	MECHANICAL - TYPICAL SECTOR STOPLOG AND LIFTING BOLT DETAILS

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CIVIL DRAWINGS

DRAWING No: DRAWING TITLE

700 (SH1 OF 3)	CIVIL - EXCAVATION - PLANS, ELEVATIONS AND SECTIONS
700 (SH2 OF 3)	CIVIL - EXCAVATION - PLANS, ELEVATIONS AND SECTIONS
700 (SH3 OF 3)	CIVIL - EXCAVATION - PLANS, ELEVATIONS AND SECTIONS
701 (SH1 OF 2)	CIVIL - GROUTING LAYOUT - PLANS, ELEVATIONS AND SECTIONS
701 (SH2 OF 2)	CIVIL - GROUTING LAYOUT - PLANS, ELEVATIONS AND SECTIONS
702	CIVIL - TEMPORARY ACCESSES AND LAYDOWN AREAS - SECTIONS
703	CIVIL - PERMANENT AND TEMPORARY IN WATER FOOTPRINTS - GENERAL ARRANGEMENT
704	CIVIL - BACKFILLING - PLAN AND SECTIONS

LIST OF ARCHITECTURAL DRAWINGS

DRAWING No DRAWING TITLE

800	GENERAL LAYOUT - LANDSCAPE - REHABILITATION PLAN
801	LANDSCAPE DETAILS

Canada

PSPC PROJECT NUMBER  
R.076951.705



LIST OF REFERENCE DRAWINGS

<u>DRAWING No:</u>	<u>DRAWING FILE NAME</u>	<u>DRAWING TITLE</u>
900 .....	T11-142.pdf .....	PLAN OF DAM AT LOCK No 28 - AS CONSTRUCTED (1931).
901 .....	T11-18002.tif .....	STEEL REINFORCING IN STOPLOG PLATFROM AS BUILT LOCK 28
902 .....	R.063182.001-100 SH.1 OF 4 .....	BURLEIGH FALLS DAMS AND LOCK 28 - DAM SAFETY REVIEW - SITE PLAN
R.076951700.500 .....	TRENT SEVERN WATERWAY -DAM AT LOCK 28 - BURLEIGH FALLS - REHABILITATION - INVESTIGATIONS PLAN	
R.076951700.501 .....	TRENT SEVERN WATERWAY -DAM AT LOCK 28 - BURLEIGH FALLS - REHABILITATION - SUBSURFACE PROFILES	
R.076951700.101 .....	TRENT SEVERN WATERWAY -DAM AT LOCK 28 - BURLEIGH FALLS - REHABILITATION - GENERAL LAYOUT - EXISTING CONDITIONS - PLAN AND SECTION	

05/13/2020  
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GENERAL NOTES:

- DRAWINGS MUST BE READ IN CONJUNCTION WITH TECHNICAL SPECIFICATIONS.
- ALL WORK SHALL CONFORM TO THE LATEST EDITIONS OF THE "NATIONAL BUILDING CODE OF CANADA", NATIONAL STANDARDS, CODES OF PRACTICE AND LOCAL BY-LAWS AND REGULATIONS OF ALL AUTHORITIES HAVING JURISDICTION, INCLUDING FEDERAL, PROVINCIAL AND LOCAL HEALTH AND SAFETY LEGISLATION, REGULATIONS AND STANDARDS.
- IF NOT SPECIFICALLY INDICATED, ALL REFERENCES TO BUILDING CODES, MATERIAL AND PERFORMANCE SPECIFICATIONS, ARE TO LATEST EDITIONS OF THE PUBLICATIONS.
- IN CASE OF A DISCREPANCY BETWEEN CODES, STANDARDS AND REGULATIONS, THE MORE STRINGENT AND DEMANDING REFERENCE SHALL GOVERN, UNLESS ACCEPTED OTHERWISE BY DEPARTMENTAL REPRESENTATIVE IN WRITING.
- COORDINATE SYSTEM: UTM ZONE 17, HORIZONTAL DATUM NAD83-CSRS, VERTICAL DATUM CGVD28:1978.
- UNLESS OTHERWISE NOTED, DIMENSIONS ARE IN MILLIMETERS AND ELEVATIONS ARE IN METERS.
- CHAINAGES ARE EXPRESSED IN METERS (1+234.567).
- DIMENSIONS ARE NOT TO BE SCALED FROM DRAWINGS
- EXISTING GROUND CONTOUR LINES AND PROFILES ARE APPROXIMATE AND SHOWN FOR INFORMATION ONLY.
- EXISTING GROUND BELOW WATER LEVEL IS NOT ACCURATE AND SHOWN FOR INFORMATION ONLY.
- ASSUMED BEDROCK IS NOT ACCURATE AND SHOWN FOR INFORMATION ONLY.
- THE ISOCONTOURS AND CROSS-SECTIONS PROFILES OF THE PRESUMED BEDROCK LEVEL DO NOT REPRESENT THE IRREGULARITIES NORMALLY ASSOCIATED WITH TOP OF BEDROCK. THE ACTUAL ISOCONTOURS AND CROSS-SECTIONS PROFILES OF THE BEDROCK ARE MORE IRREGULAR THAN THOSE PRESUMED.
- VERIFY ALL EXISTING SITE CONDITIONS, DIMENSIONS AND ELEVATIONS PRIOR TO COMMENCING WORK, INCLUDING DESIGN, SHOP DRAWING PREPARATION AND FABRICATION. IMMEDIATELY NOTIFY THE DEPARTMENTAL REPRESENTATIVE IN WRITING OF ALL DISCREPANCIES AND/OR OMISSIONS, IF ANY.
- THE DIMENSIONS AND ELEVATIONS OF EXISTING STRUCTURES ARE INDICATIVE AND ORIGINATE FROM THE EXISTING DRAWINGS. VERIFY AND CONFIRM ALL CRITICAL LOCATIONS AND ELEVATIONS ON THE FIELD AT THE START OF WORK, AND BE RESPONSIBLE FOR ALL DIMENSIONS. REPORT ANY DISCREPANCIES TO THE DEPARTMENTAL REPRESENTATIVE BEFORE PROCEEDING WITH ANY WORK.
- DURING EXCAVATION WORKS, ANY EXISTING UNDERGROUND UTILITIES OR SUBSTRUCTURE SHALL BE RELOCATED OR DISMANTLED OR DEMOLISHED AS DIRECTED BY THE DEPARTMENTAL REPRESENTATIVE.
- WATERSTOPS AND CONSTRUCTION JOINTS ARE INDICATED FOR REFERENCE AND MUST BE COORDINATED ON SITE WITH THE DEPARTMENTAL REPRESENTATIVE.
- ALL CONSTRUCTION JOINT SHALL BE ROUGHENED TO EXPOSE THE AGGREGATES TO FULL AMPLITUDE OF AT LEAST 5 mm (UNO).
- ALL EXPOSED VERTICAL, UPPER HORIZONTAL AND UPPER INCLINED INCLUDING, EDGES, IN-WATER CONCRETE EDGES, SHALL HAVE 6 mm INSET AND 75 mm (3") RADIUS EDGING, UNLESS NOTED OTHERWISE. ALL OTHER EDGES, SHALL HAVE 25x25 mm CHAMFER/FILLET.
- WHEN THE SURFACES OF THE WALLS ARE VISIBLE, TIE ROD HOLES SHALL BE ALIGNED VERTICALLY AND HORIZONTALLY AND BE FILLED WITH AN APPROVED MORTAR. MORTAR COLOR SHALL MATCH THE POURED CONCRETE COLOR. MOCK-UPS SHALL BE CARRIED OUT FOR THE DEPARTMENTAL REPRESENTATIVE REVIEW.
- CONCRETE COVER SHALL BE AS DEFINED IN TABLE 2.
- LAP SPLICES MUST CONFORM TO CAN/CSA A23.3-14 FOR CLASS B TENSION LAP SPLICES, SEE TABLES 1-1, 1-2 AND 1-3.
- CONCRETE FINISHES FOR THE FORMED AND UN-FORMED SURFACES, AS INDICATED ON THE CONCRETE DRAWINGS, SHALL BE AS PER TECHNICAL SPECIFICATIONS AND TABLE 3. ALL TOP OF PIERS AND WALL FINISHES SHALL MATCH THE TOP OF DECK FINISH AS CLOSE AS POSSIBLE. MOCK-UPS FOR FINISHES SHALL BE CARRIED OUT FOR REVIEW BY THE DEPARTMENTAL REPRESENTATIVE.
- EXPOSED FACES OF EMBEDDED PARTS FOR STOPLOGS (GAINS AND SILLS) TO BE SHOP PAINTED. PIER NOSING PROTECTIVE PLATES TO BE STAINLESS STEEL.
- GALVANIZE ALL OTHER EXPOSED METAL PARTS, INCLUDING GRATING GAIN COVERS AND ASSOCIATED HARDWARE, HANDRAILS, PLATES, EMBEDDED PIPES, EYEBOLTS, ALL EXPOSED ANGLES AND THEIR EMBEDDED ANCHORS AND FRAMES. ADHESIVE ANCHORS TO BE STAINLESS STEEL.
- ALL FOUNDATIONS MUST BE APPROVED BY THE DEPARTMENTAL REPRESENTATIVE BEFORE ANY POURING OF CONCRETE.
- FOR LOAD BEARING CAPACITY OF DECK, SEE DRAWING 307.03.
- CLARIFY WITH THE DEPARTMENTAL REPRESENTATIVE ANY QUERIES REGARDING INTERPRETATION OF THE DRAWINGS BEFORE PROCEEDING WITH ANY WORK.
- THE NORMAL UPSTREAM WATER LEVEL WILL RANGE FROM 241.4 TO 241.5 DURING NAVIGATION SEASON (MID MAY - MID OCTOBER).
- THE MAXIMUM UPSTREAM WATER LEVELS CORRESPONDING TO 1:20 YEAR AND 1:40 YEAR FLOODS ARE 241.5 AND 241.8, RESPECTIVELY.
- THE NORMAL DOWNSTREAM WATER LEVELS WILL RANGE FROM 237.8 TO 238.9.
- THE MAXIMUM DOWNSTREAM WATER LEVEL CORRESPONDING TO 1:20 YEAR AND 1:40 FLOODS ARE 240 AND 240.5, RESPECTIVELY, EXCLUDING COFFERDAM EFFECTS.

LEGEND:

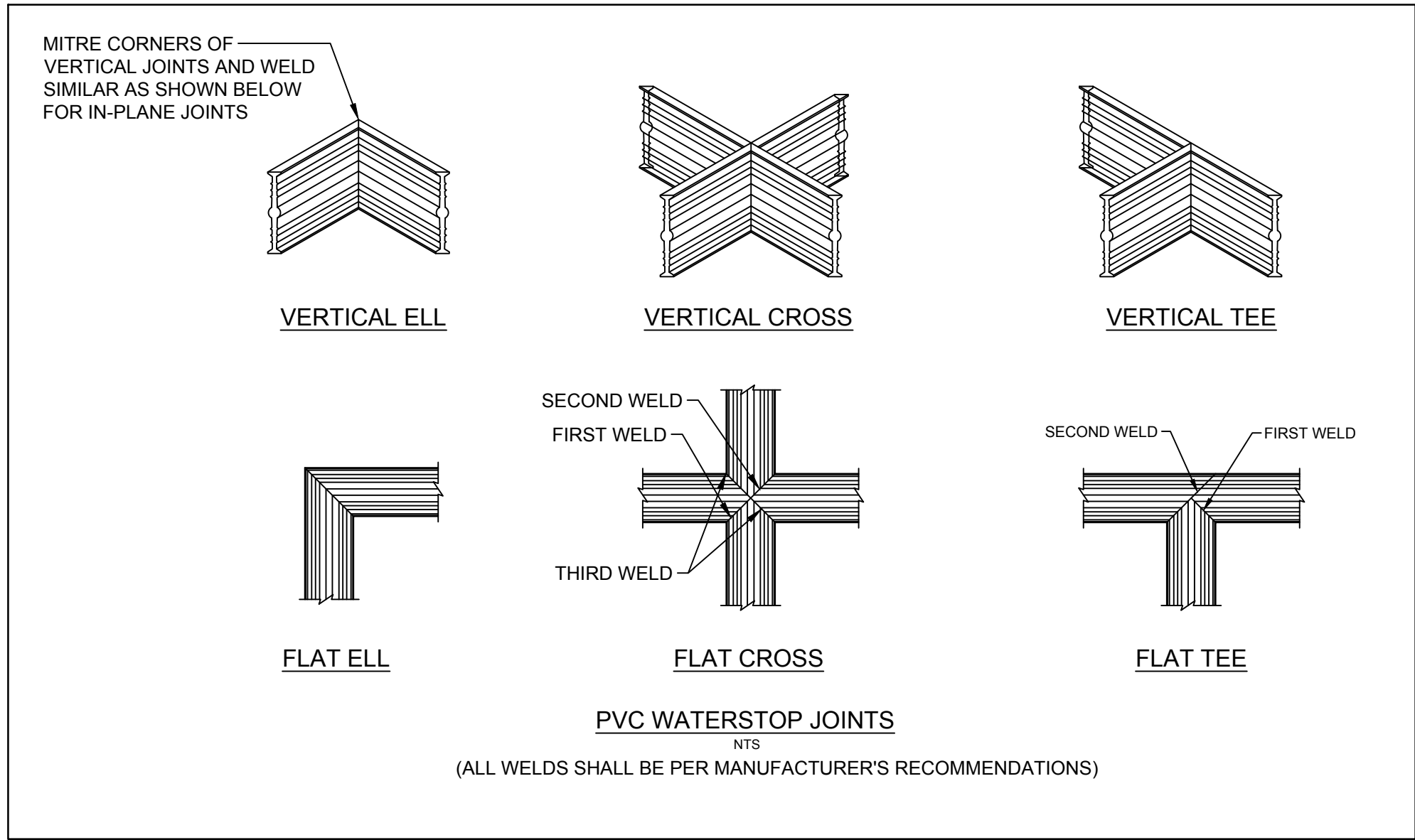
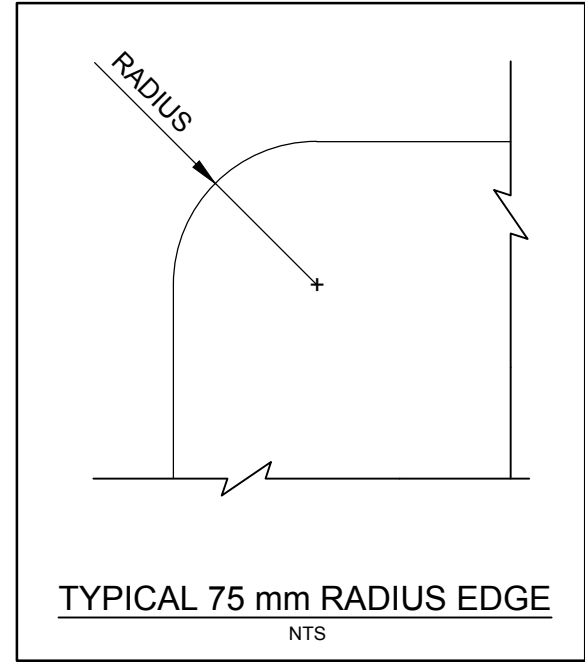
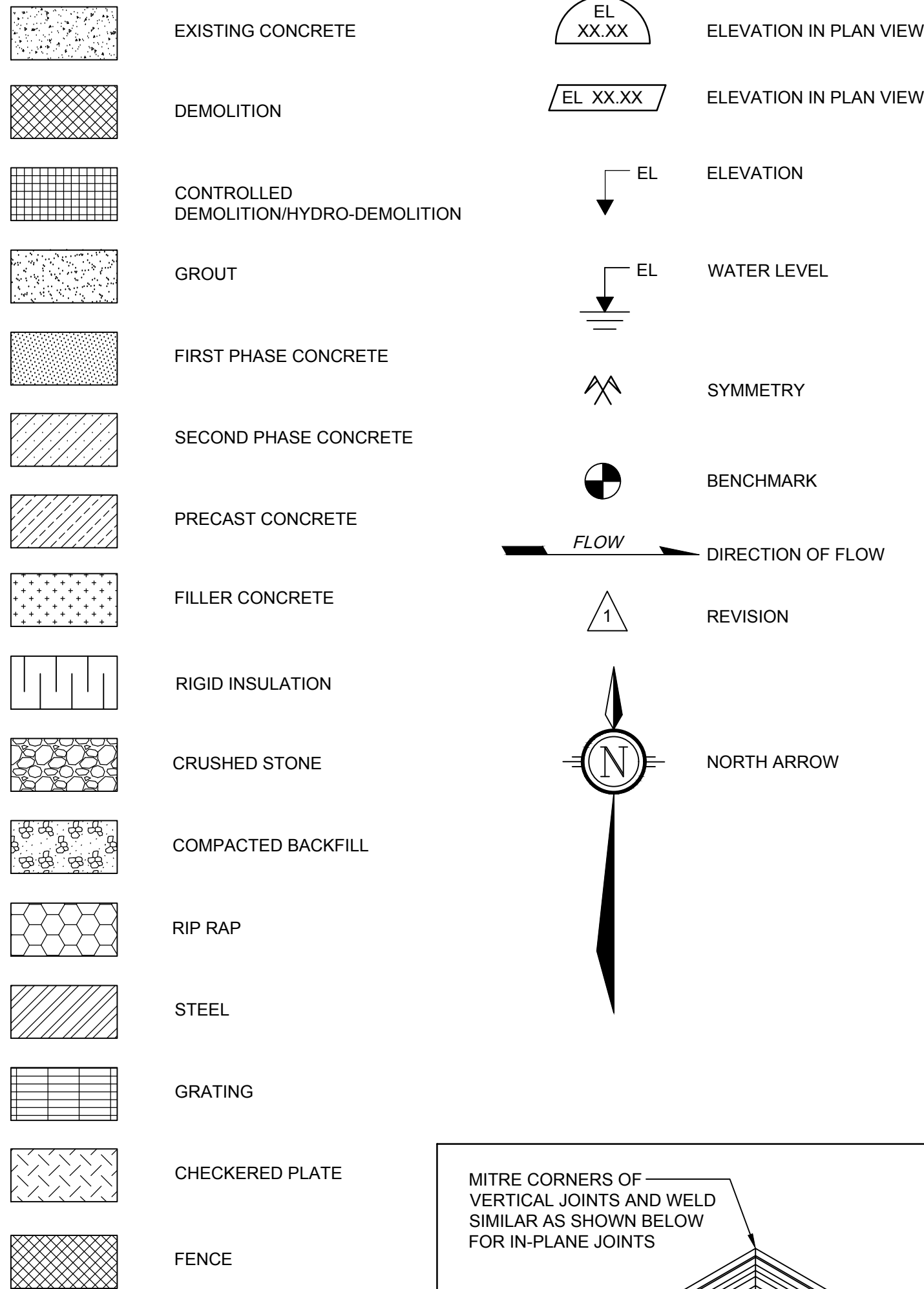


TABLE 1-1: REINFORCING STEEL fy=400 MPa fc'=25 MPa				
BAR SIZE	TOP BARS		OTHER BARS	
	DEVELOPMENT LENGTH (mm)	LAP SPlice LENGTH (CLASS B) (mm)	DEVELOPMENT LENGTH (mm)	LAP SPlice LENGTH (CLASS B) (mm)
10M	380	490	300	380
15M	570	740	440	570
20M	750	980	580	750
25M	1170	1530	900	1170
30M	1410	1830	1080	1410
35M	1640	2130	1260	1640

TABLE 1-2: REINFORCING STEEL fy=400 MPa fc'=30 MPa				
BAR SIZE	TOP BARS		OTHER BARS	
	DEVELOPMENT LENGTH (mm)	LAP SPlice LENGTH (CLASS B) (mm)	DEVELOPMENT LENGTH (mm)	LAP SPlice LENGTH (CLASS B) (mm)
10M	350	450	300	350
15M	520	670	400	520
20M	690	890	530	690
25M	1070	1390	830	1070
30M	1290	1670	990	1290
35M	1500	1950	1160	1500

TABLE 1-3: REINFORCING STEEL fy=400 MPa fc'=35 MPa				
BAR SIZE	TOP BARS		OTHER BARS	
	DEVELOPMENT LENGTH (mm)	LAP SPlice LENGTH (CLASS B) (mm)	DEVELOPMENT LENGTH (mm)	LAP SPlice LENGTH (CLASS B) (mm)
10M	320	420	300	390
15M	480	630	370	490
20M	640	840	490	640
25M	990	1290	770	1010
30M	1190	1550	920	1200
35M	1390	1810	1070	1400

TABLE 2: CONCRETE COVER

CONCRETE COVER IS MEASURED FROM THE CONCRETE SURFACE TO THE NEAREST SURFACE OF REINFORCEMENT. (INCLUDING TRANSVERSE REINFORCEMENT HOOKED AROUND LONGITUDINAL BARS).	
ELEMENT	COVER
CONCRETE PLACED AGAINST ROCK	75 mm
EXPOSED FACES OF WALLS AND PIERS	75 mm
DECK SLABS	50 mm
FACES COVERED BY BACKFILL, ROCK FILL	75 mm
FACES IN CONTACT WITH WATER	100 mm

TABLE 3: SURFACE FINISHES

FORMED CONCRETE SURFACE TOLERANCES		
SURFACE FINISH	FLATNESS TOLERANCE	JOINT TOLERANCE
F1	30 mm	30 mm
F2	12 mm	8 mm
F3	5 mm	3 mm
F4	5 mm (MEASURED PERPENDICULAR TO FLOW) 3 mm (MEASURED PARALLEL TO FLOW)	5 mm (MEASURED PERPENDICULAR TO FLOW) 3 mm (MEASURED PARALLEL TO FLOW)
UNFORMED CONCRETE SURFACE TOLERANCES		
SURFACE FINISH	FLATNESS TOLERANCE	JOINT TOLERANCE
U1	20 mm	5 mm
U2	5 mm	0 mm
U3	5 mm	0 mm

ABBREVIATIONS:

- @ - AT (SPACING)  
AB - ANCHOR BOLT  
ADD - ADDITIONAL  
ALT - ALTERNATE  
APP - APPROVED  
B OR BOT - BOTTOM  
BB - BENT BARS  
BS - BOTH SIDES  
C/C - CENTRELINE  
CHKD PL - CHECKERED PLATE  
CJ - CONSTRUCTION JOINT  
CJ+WS - CONSTRUCTION JOINT + WATERSTOP  
CONC - CONCRETE  
CONC BLK - CONCRETE BLOCK  
CONTD - CONTINUED  
CONT - CONTINUOUS  
CONTRJ - CONTRACTION JOINT  
COV - COVER  
CP - CONTROL POINT  
DEG or ° - DEGREE  
DET - DETAIL  
DEP - DEPTH  
DIA OR Ø - DIAMETER  
DWG - DRAWING  
DWLS - DOWELS  
ED - EACH DIRECTION  
EF - EACH FACE  
EL - ELEVATION  
EJ - EXPANSION JOINT  
EP - EMBEDDED PART  
EQ or = - EQUAL  
EQ SP - EQUAL SPACE  
ES - EACH SIDE  
EMB - EMBEDMENT  
EQUIV - EQUIVALENT  
EW - EACH WAY  
EXIST - EXISTING  
f'c - SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE  
FF - FAR FACE  
FGR - FIXED GUARDRAIL  
GR - GUARDRAIL  
H OR HORIZ - HORIZONTAL  
HB - HORIZONTAL BRACING  
HP - HIGH POINT  
HR - HANDRAIL  
HSS - HOLLOW STRUCTURAL STEEL  
ID - INSIDE DIAMETER  
IDF - INFLOW DESIGN FLOOD  
IF - INSIDE FACE, INNER FACE  
INT - INTERIOR  
LG - LENGTH / LONG  
LP - LOW POINT  
LSL - LOW SUPPLY LEVEL  
MAX - MAXIMUM
- MAX WL - MAXIMUM WATER LEVEL  
MECH - MECHANICAL  
MISC - MISCELLANEOUS  
MIN WL - MINIMUM WATER LEVEL  
MIN - MINIMUM  
MOL - MINIMUM OPERATING LEVEL  
NA - NOT APPLICABLE  
NF - NEAR FACE  
NOM - NOMINAL  
NTS - NOT TO SCALE  
NS - NEAR SIDE  
OD - OUTSIDE DIAMETER  
OF - OUTSIDE FACE  
OPP - OPPOSITE  
OPNG - OPENING  
/ OR & - AND  
PL - PLATE  
PP - PARTIAL PENETRATION  
PVC - POLYVINYLCHLORIDE  
R - RADIUS  
REF - REFERENCE  
REINF - REINFORCEMENT  
RG - REMOVABLE GUARDRAIL  
RH - REMOVABLE HANDRAIL  
REQ'D - REQUIRED  
REV - REVISION  
RGR - REMOVABLE GUARDRAIL  
SCH - SCHEDULE  
SH - SHEET  
SIM - SIMILAR  
SPCS - SPACES  
SS - STAINLESS STEEL  
STD - STANDARD  
STIFF - STIFFENER  
STR - STRUCTURAL  
T - TOP  
T&B - TOP AND BOTTOM  
TEMP - TEMPORARY  
THK - THICK, THICKNESS  
T/O - TOP OF  
TOG - TOP OF GRATING  
TOC - TOP OF CONCRETE/CURB  
TOR - TOP OF RAIL  
TOS - TOP OF STEEL  
TP - TANGENT POINT  
TWL - TAIL WATER LEVEL  
TYP - TYPICAL  
UNO - UNLESS NOTED OTHERWISE  
U/S - UNDERSIDE  
VAR - VARIABLE, VARIES  
VB - VERTICAL BRACING  
V OR VERT - VERTICAL  
WL - WATER LEVEL  
WP - WORKING POINT,  
WS - WATERSTOP  
W/C - WATER CEMENT RATIO  
WSH - HYDROPHILIC WATERSTOP  
XS - EXTRA STRONG

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Contract No.	Drawing Code	Serial	Rev.
HS00243	210	41DD	0002   0

No.	Description	By Par	Date
0	FOR TENDER	R.M	05/13/2020

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

Professional Stamp

Project title / Titre du projet

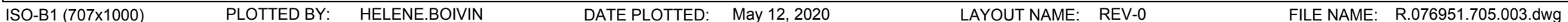
TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

Drawing title / Titre du dessin

GENERAL NOTES  
LEGEND, TABLES & ABBREVIATIONS

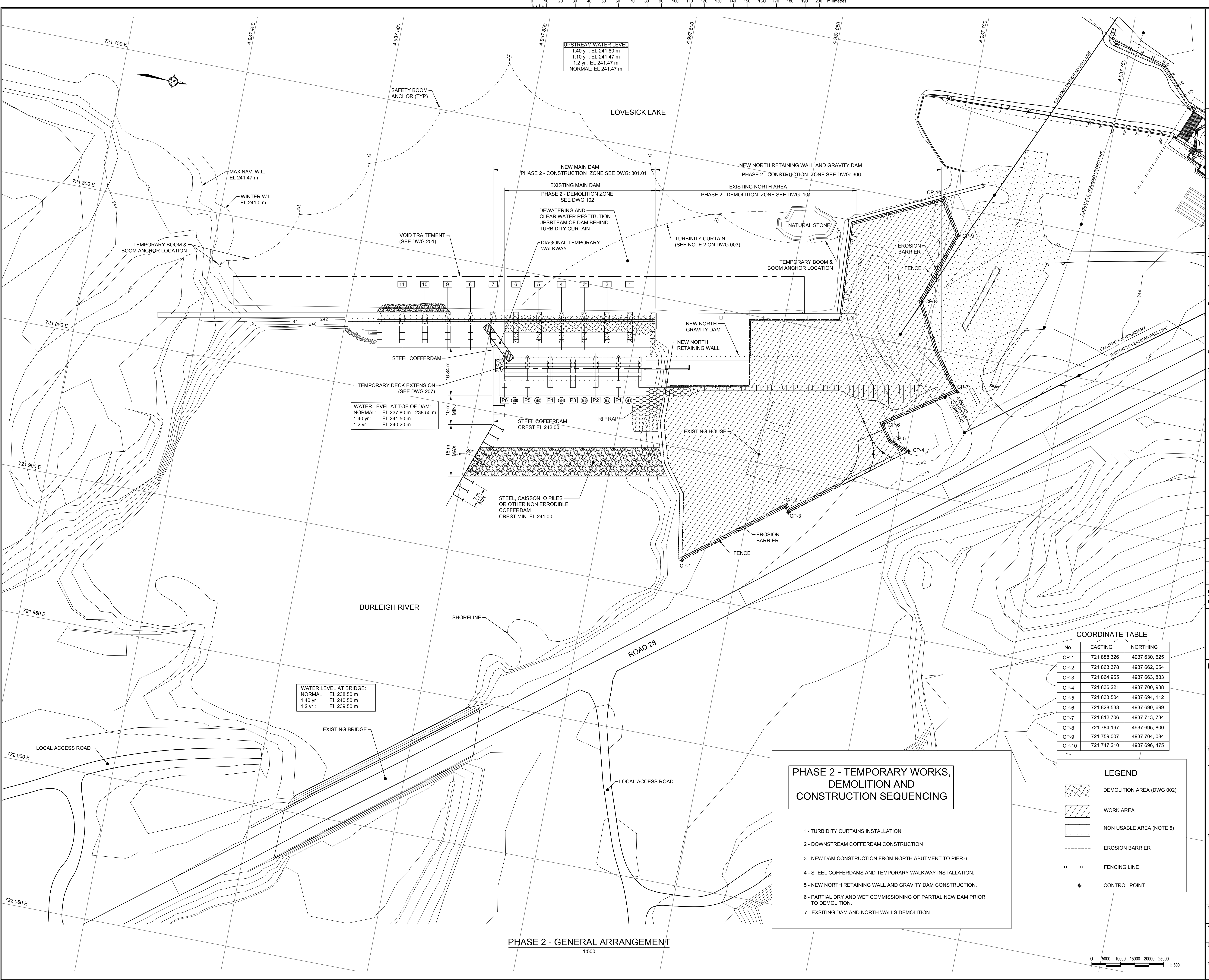
Drawn by / Dessiné par H. BOIVIN	Designed by / Conçu par Y. BERTON P.Eng.
Verified by / Vérifié par R. MIGUEL P.Eng.	Approved by / Approuvé par S. VITTECOQ P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number/ Numéro du Dessin 002
Project Number / Numéro du projet R.076951.705	Sheet Feuille 1 of 1





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- NOTES:
1. FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS SEE DRAWING 100.

2. NEW DAM UPSTREAM LINE TO BE LOCATED AT 2.7 METERS FROM EXISTING DAM DOWNSTREAM LINE.

3. MAXIMUM FOOTPRINT OF DEWATERED AREA INCLUDING COFFERDAM AND ANY OTHER DEWATERING STRUCTURES: 28 METRES FROM DOWNSTREAM EDGE OF NEW DAM APRON.

4. ALL IN WATER WORKS TO BE DONE BEHIND TURBIDITY CURTAINS.

5. PARKING AREA TO REMAIN OPEN TO THE PUBLIC AT ALL TIMES. CLOSURE REQUIRED FOR WORKS (CUTOFF WALL, END OF NORTH GRAVITY DAM, REINSTATEMENT) TO BE CONDUCTED OUTSIDE OF NAVIGATION SEASON AND WITH WRITTEN APPROVAL OF THE DPT. REPRESENTATIVE PRIOR TO CLOSURE. EMPLOYEE PARKING NOT ALLOWED.

6. COFFERDAM TO WITH STAND OVERTOPPING. SEE SPECIFICATION SECTION 35 20 22.

7. ACCESS FROM BANK TO BANK TO BE MAINTAINED THROUGH OUT WORK. INSTALL TEMPORARY WALKWAY BETWEEN EXISTING DAM DECK AND NEW DAM DECK PRIOR TO PHASE II - DEMOLITION OF EXISTING DAM.

0	FOR TENDER	R.M	05/13/2020
No.	Description	By Par	Date
Revision / Révision			

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

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

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Project title / Titre du projet

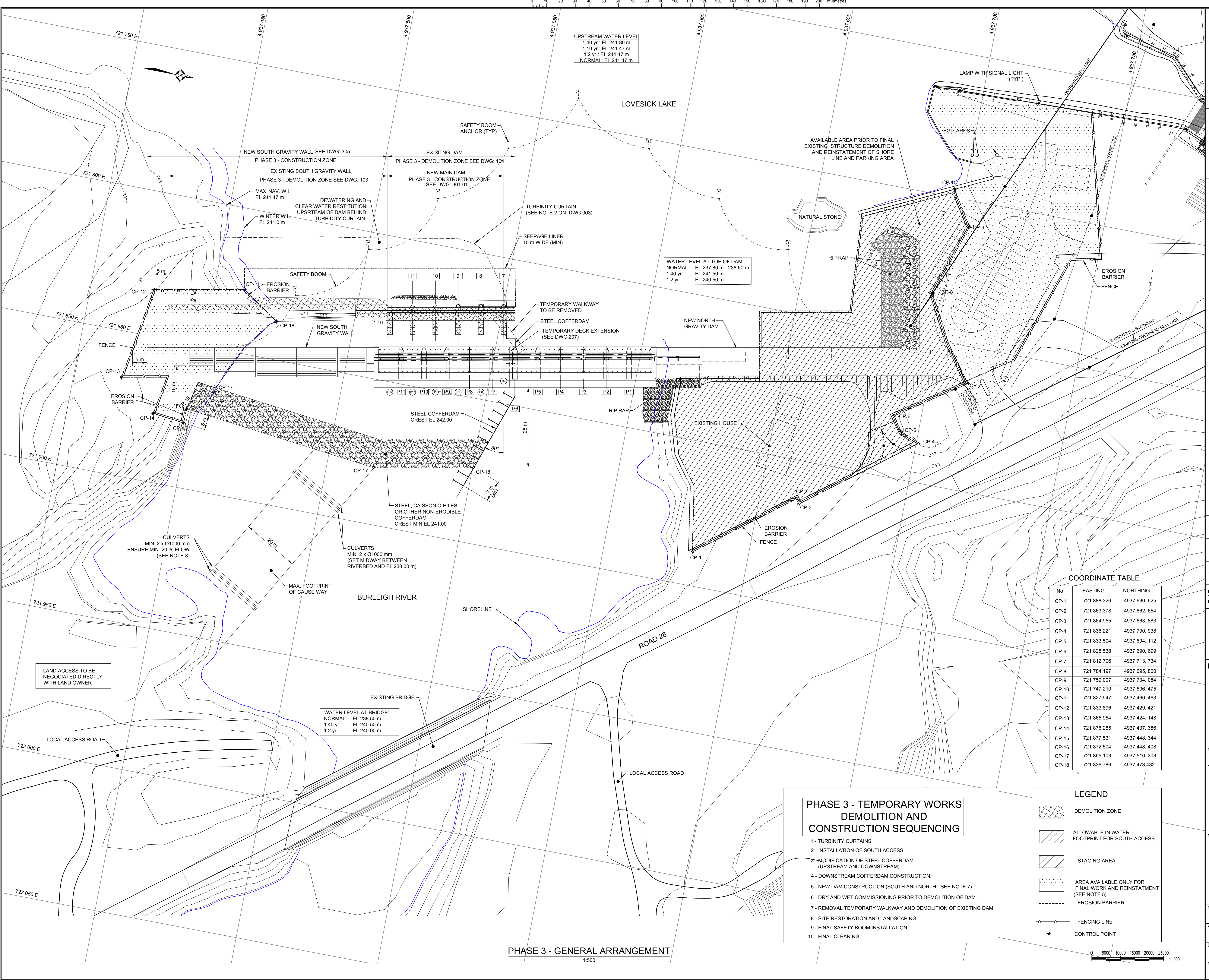
TRENT-SEVERN WATERWAY  
BURLEIGH DAM AT LOCK 28  
RECONSTRUCTION

Drawing title / Titre du dessin

CONSTRUCTION PHASING  
PHASE 2  
GENERAL ARRANGEMENT

Drawn by / Dessiné par	Designed by / Conçu par
H. BOIVIN	Y. BERTON P.Eng.
Verified by / Vérifié par	Approved by / Approuvé par
R. MIGUEL P.Eng.	S. VITTECOQ P.Eng.
Drawing Date / Date du dessin	Drawing Number/ Numéro du Dessin
05/13/2020	004
Project Number / Numéro du projet	Sheet 1 of 1 Feuille de
R.076951.705	





UPSTREAM WATER LEVEL  
1:40 yr.: EL 241.80 m  
1:10 yr.: EL 241.47 m  
1:2 yr.: EL 241.47 m  
NORMAL: EL 241.47 m

WATER LEVEL AT TOE OF DAM:  
NORMAL: EL 237.80 m - 238.50 m  
1:40 yr.: EL 241.50 m  
1:2 yr.: EL 240.50 m

WATER LEVEL AT BRIDGE:  
NORMAL: EL 238.50 m  
1:40 yr.: EL 240.50 m  
1:2 yr.: EL 240.00 m

PHASE 3 - TEMPORARY WORKS  
DEMOLITION AND  
CONSTRUCTION SEQUENCING

- 1 - TURBIDITY CURTAINS.
- 2 - INSTALLATION OF SOUTH ACCESS.
- 3 - MODIFICATION OF STEEL COFFERDAM (UPSTREAM AND DOWNSTREAM).
- 4 - DOWNSTREAM COFFERDAM CONSTRUCTION.
- 5 - NEW DAM CONSTRUCTION (SOUTH AND NORTH - SEE NOTE 7).
- 6 - DRY AND WET COMMISSIONING PRIOR TO DEMOLITION OF DAM.
- 7 - REMOVAL TEMPORARY WALKWAY AND DEMOLITION OF EXISTING DAM.
- 8 - SITE RESTORATION AND LANDSCAPING.
- 9 - FINAL SAFETY BOOM INSTALLATION.
- 10 - FINAL CLEANING.

LEGEND

- DEMOLITION ZONE
- ALLOWABLE IN WATER FOOTPRINT FOR SOUTH ACCESS
- STAGING AREA
- AREA AVAILABLE ONLY FOR FINAL WORK AND REINSTATEMENT (SEE NOTE 5)
- EROSION BARRIER
- FENCING LINE
- CONTROL POINT

COORDINATE TABLE

No	EASTING	NORTHING
CP-1	721 888,326	4937 630, 625
CP-2	721 863,378	4937 662, 654
CP-3	721 864,955	4937 663, 883
CP-4	721 836,221	4937 700, 938
CP-5	721 833,504	4937 694, 112
CP-6	721 828,538	4937 690, 699
CP-7	721 812,706	4937 713, 734
CP-8	721 784,197	4937 695, 800
CP-9	721 759,007	4937 704, 084
CP-10	721 747,210	4937 696, 475
CP-11	721 827,947	4937 460, 463
CP-12	721 833,896	4937 429, 421
CP-13	721 865,954	4937 424, 148
CP-14	721 876,255	4937 437, 386
CP-15	721 877,531	4937 448, 344
CP-16	721 872,504	4937 448, 408
CP-17	721 865,103	4937 516, 303
CP-18	721 836,786	4937 473,432

Contract No.	Drawing Code	Serial	Rev.
HS00243	210	41DD	0005   0

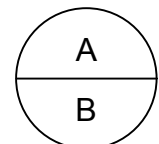
NOTES:

1. FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS SEE DRAWING 100.
2. NEW DAM UPSTREAM LINE TO BE LOCATED AT 2.7 METERS FROM EXISTING DAM DOWNSTREAM LINE.
3. MAXIMUM FOOTPRINT OF DEWATERED AREA INCLUDING COFFERDAM AND ANY OTHER DEWATERING STRUCTURES: 28 METRES FROM DOWNSTREAM EDGE OF NEW DAM APRON.
4. ALL IN WATER WORKS TO BE DONE BEHIND TURBIDITY CURTAINS.
5. PARKING AREA TO REMAIN OPEN TO THE PUBLIC AT ALL TIMES. CLOSURE REQUIRED FOR WORKS (CUTOFF WALL, END OF NORTH GRAVITY DAM, REINSTATEMENT) TO BE CONDUCTED OUTSIDE OF NAVIGATION SEASON AND WITH WRITTEN APPROVAL OF THE DPT. REPRESENTATIVE PRIOR TO CLOSURE. EMPLOYEE PARKING NOT ALLOWED.
6. COFFERDAM TO WITH STAND OVERTOPPING. SEE SPECIFICATION SECTION 35 20 22.
7. INSTALLATION OF PRECAST DECK OVER SLUICE (67) REQUIRES REMOVAL OF TEMPORARY OPERATING PLATFORM. DURING THIS WORK SLUICE (68) WILL NOT BE OPERABLE. DOWNTIME OF SLUICE (68) MUST BE MINIMIZED AND COORDINATED WITH DEPARTMENTAL REPRESENTATIVE.
8. ENSURE A MINIMUM 20 IS FLOW INTO AREA CUT-OFF BY ACCESS ROAD (PUMPING OR SIPHON FROM UPSTREAM)

No.	Description	R.M.	05/13/2020
0	FOR TENDER		

No.	Description	By	Date
	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

Professional Stamp

Project title / Titre du projet

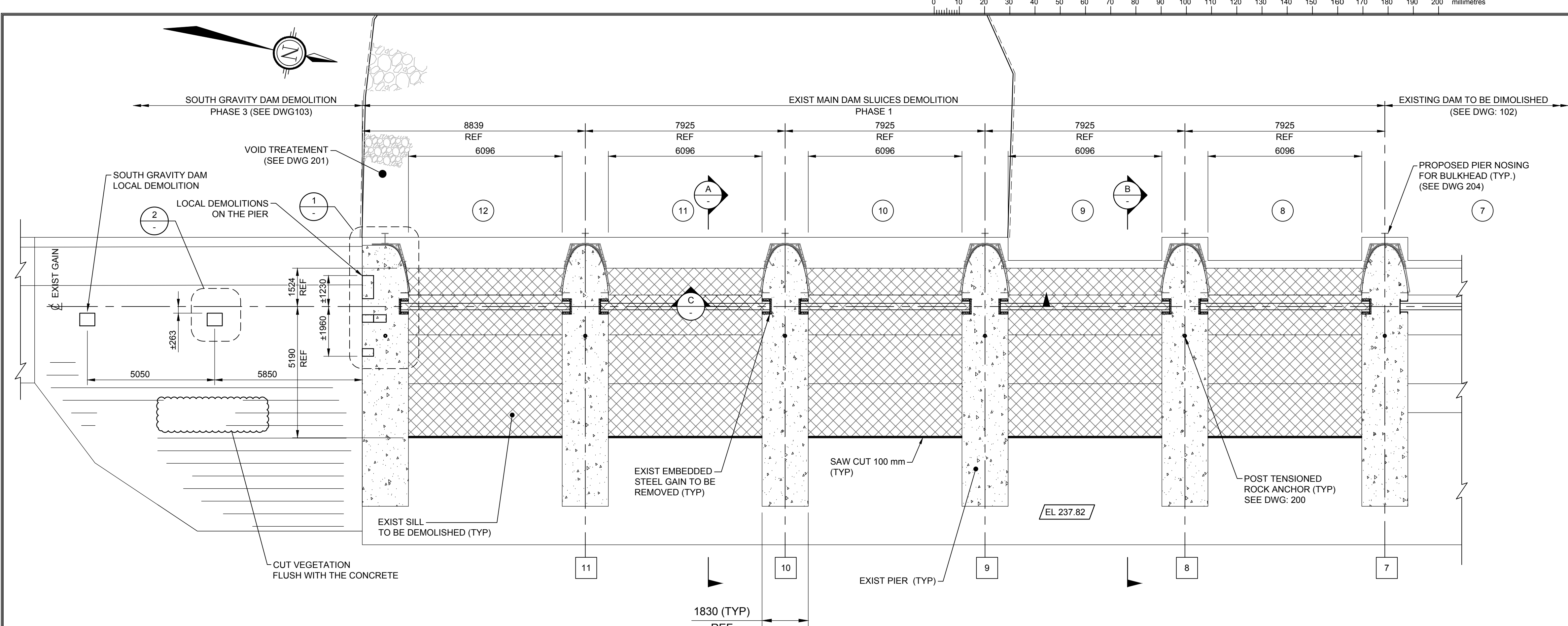
TRENT-SEVERN WATERWAY  
BURLEIGH DAM AT LOCK 28  
RECONSTRUCTION

CONSTRUCTION PHASING  
PHASE 3  
GENERAL ARRANGEMENT

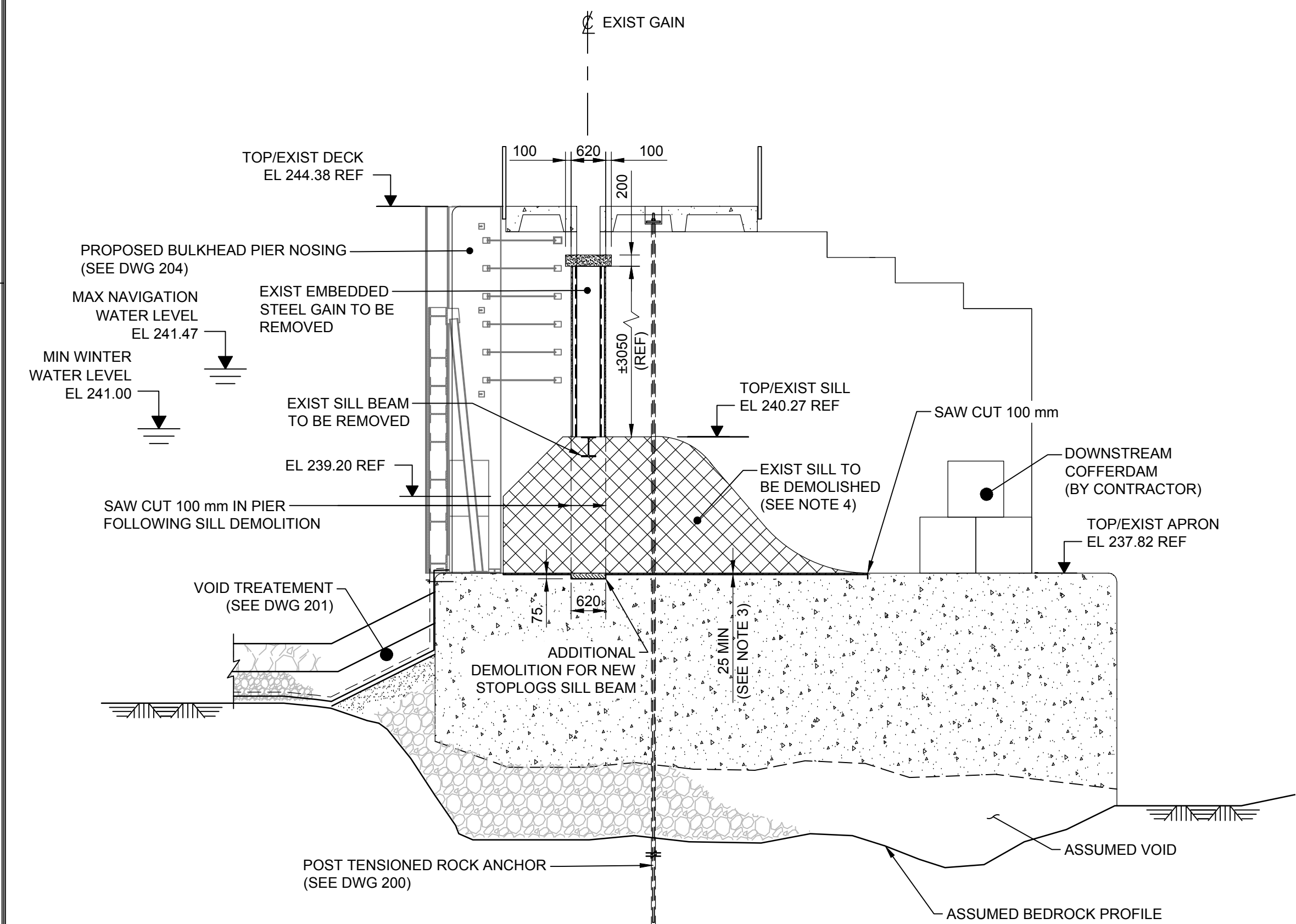
Drawn by / Dessiné par H. BOIVIN	Designed by / Conçu par Y. BERTON P.Eng.
Verified by / Vérifié par R. MIGUEL	Approved by / Approuvé par S. VITTECOQ P.Eng.

Drawing Date / Date du dessin 05/13/2020	Drawing Number/ Numéro du Dessin 005
Project Number / Numéro du projet R.076951.705	Sheet Feuille 1 of 1

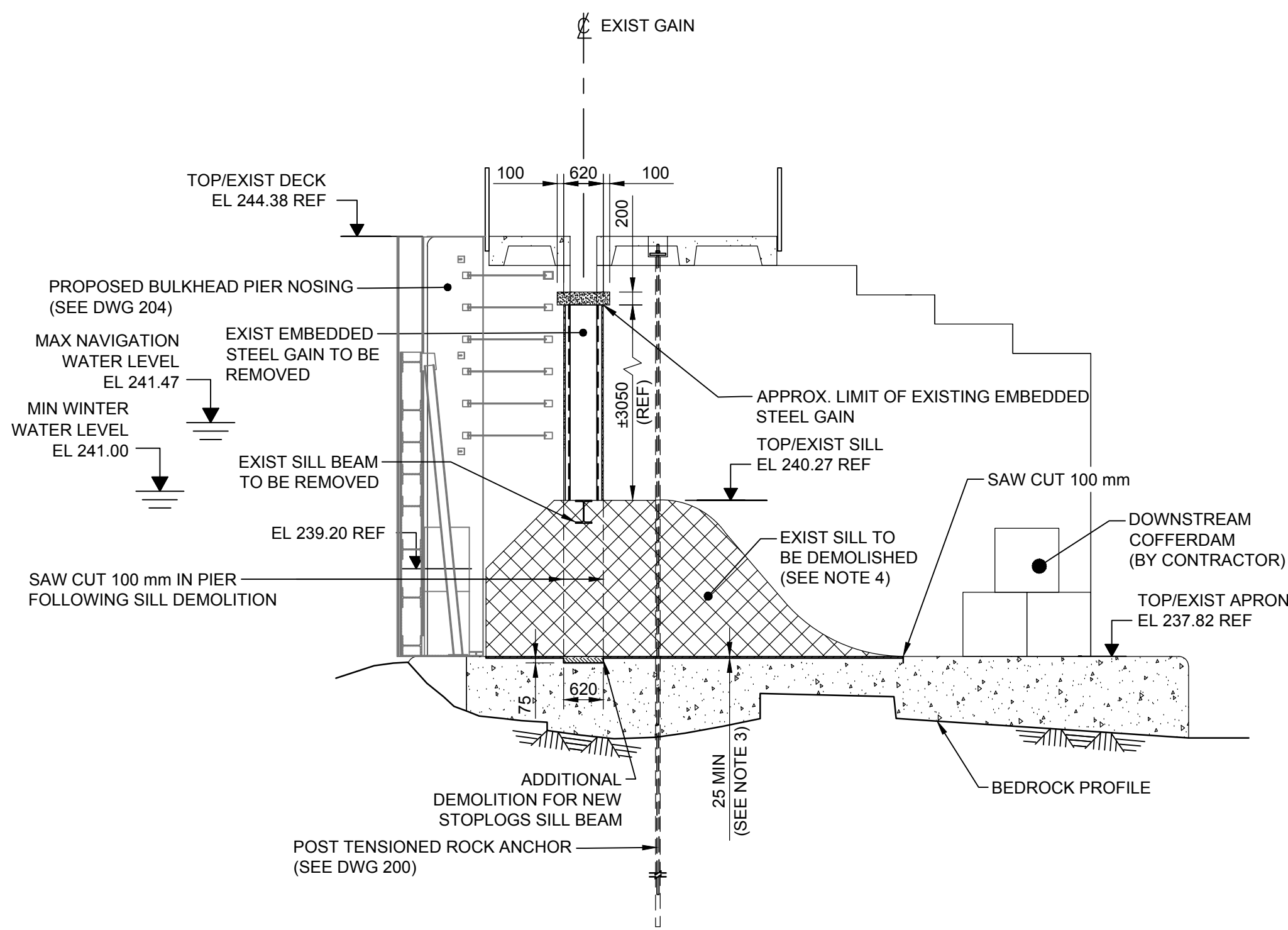




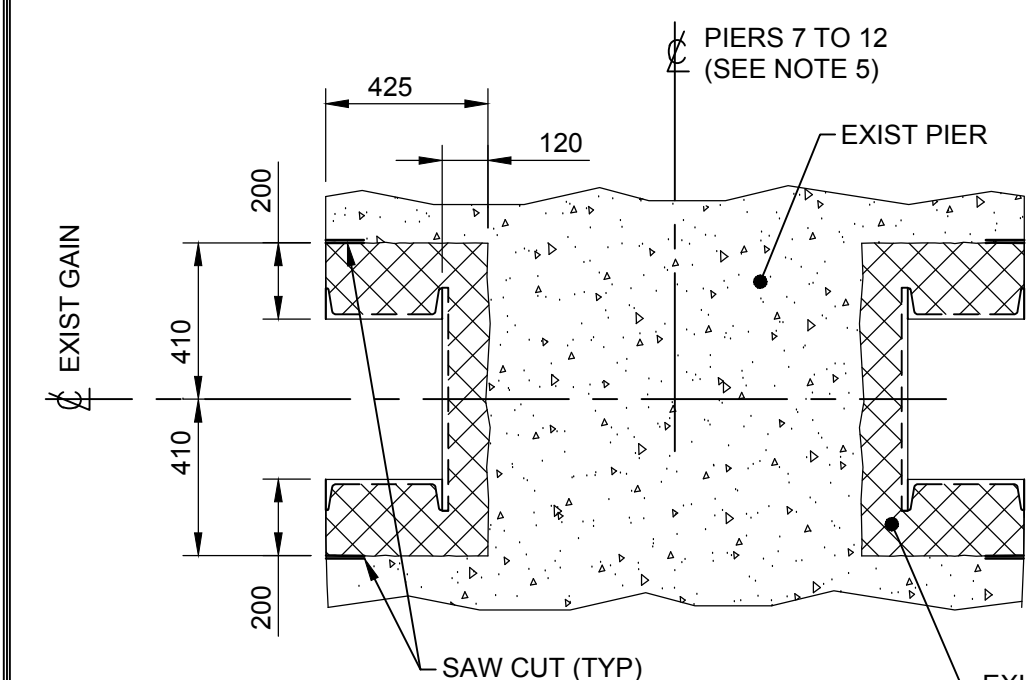
PLAN NIV. 240,27  
1:100  
(TOP OF EXISTING SILL)



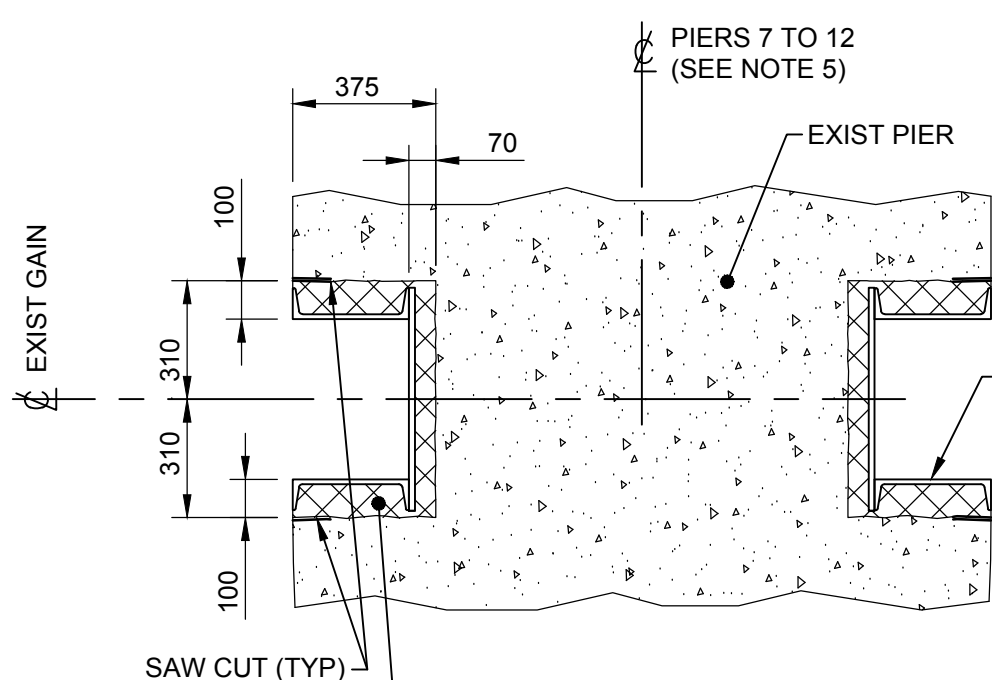
SECTION A  
1:75



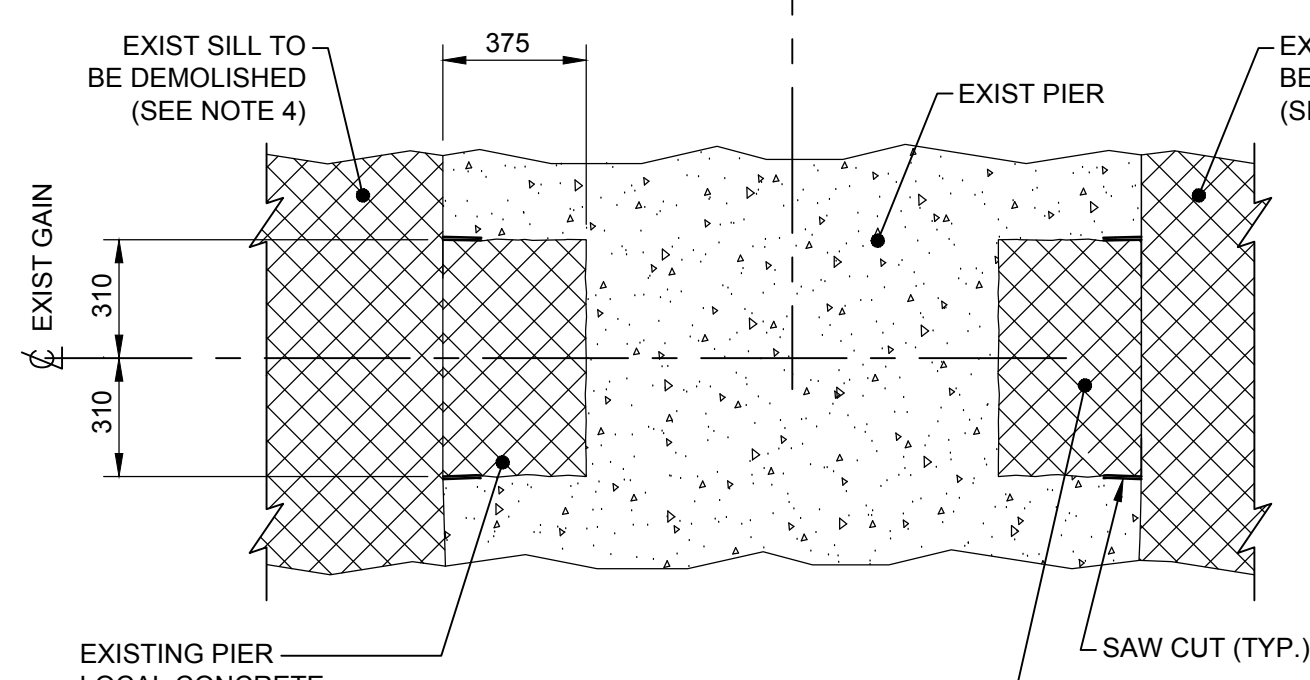
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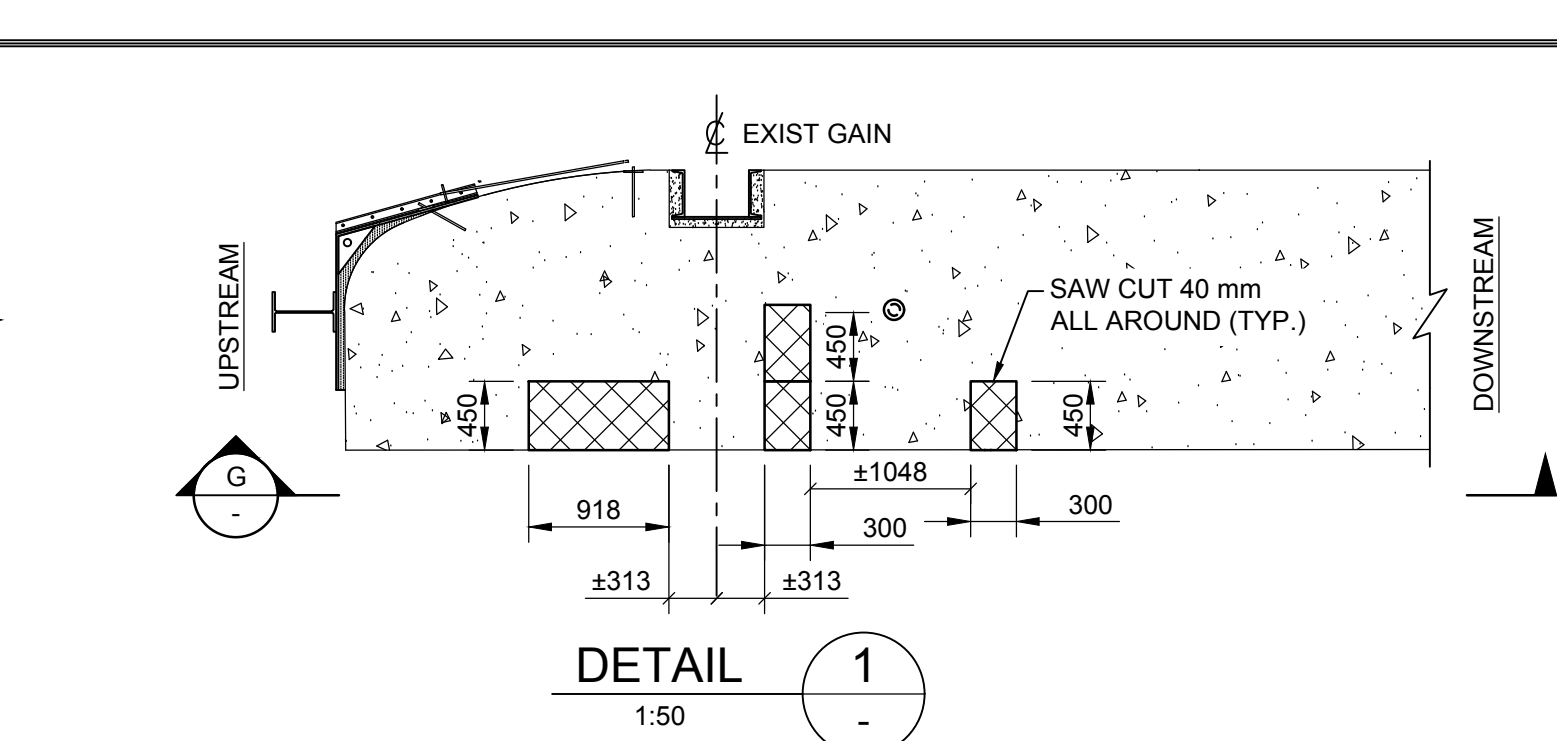
SECTION D  
1:20



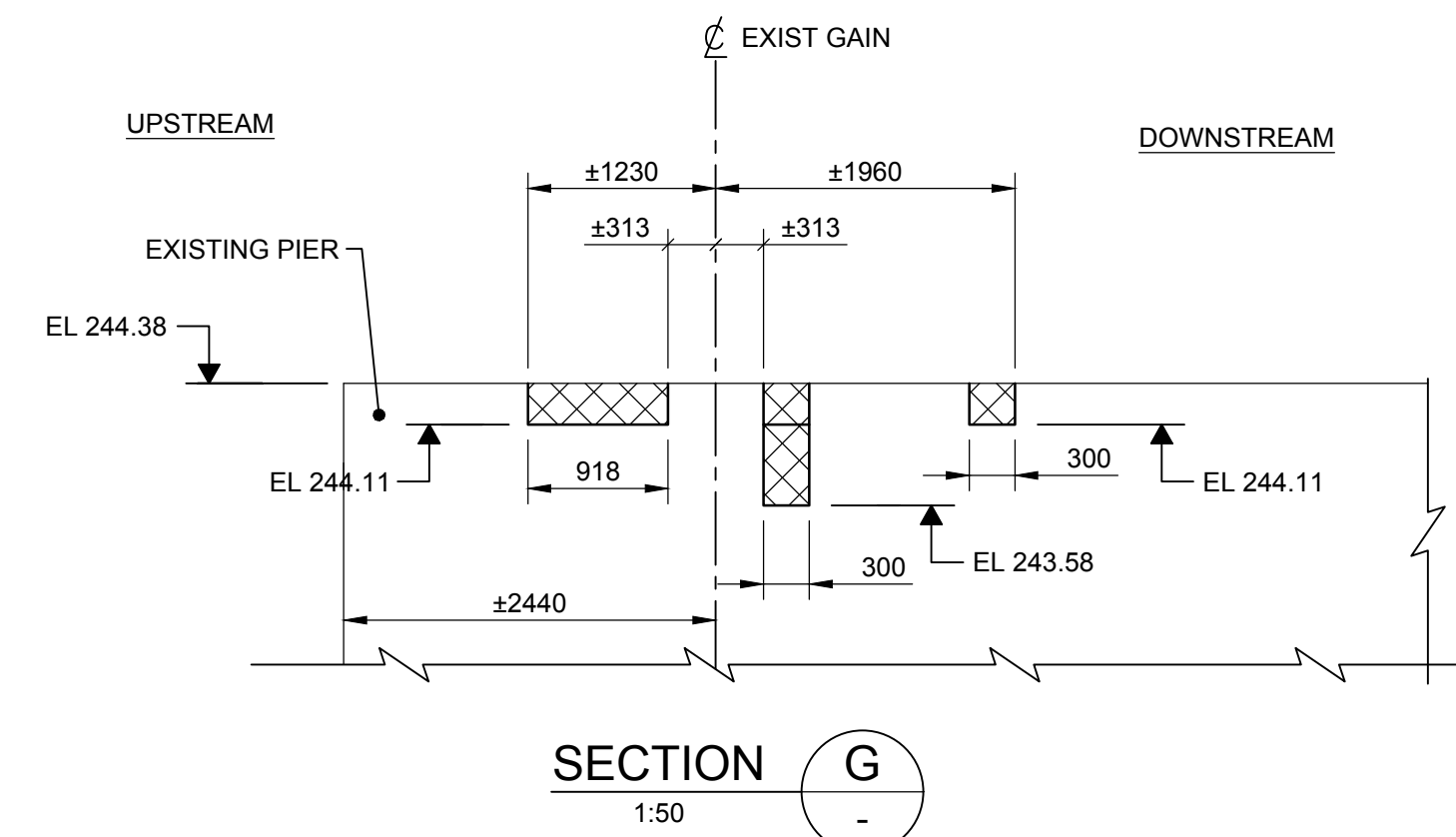
SECTION E  
1:20



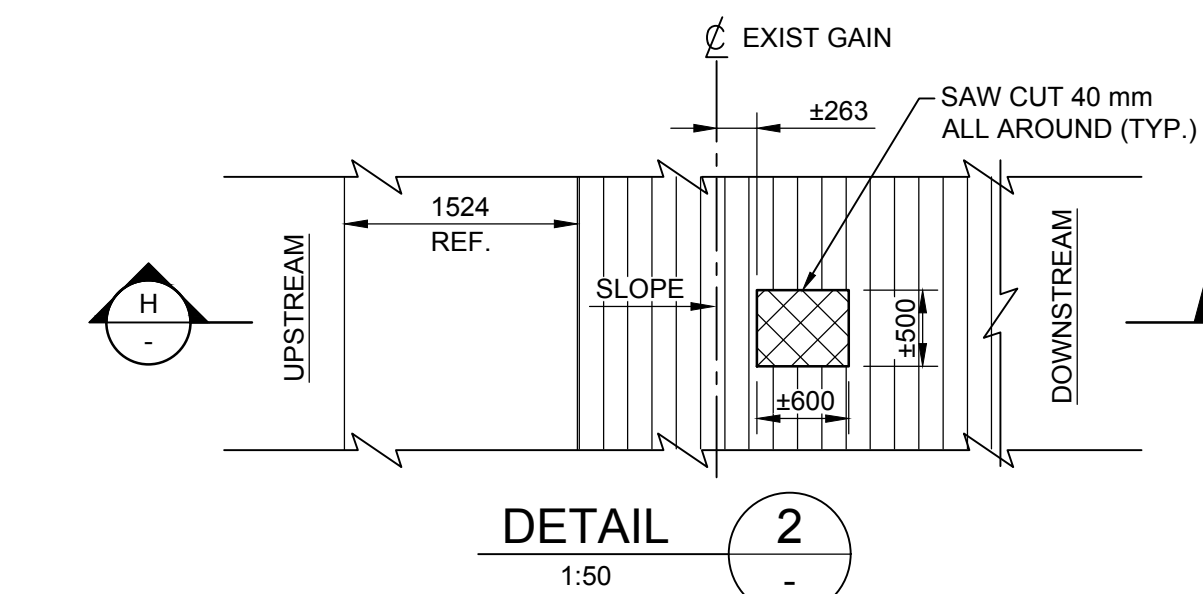
SECTION F  
1:20



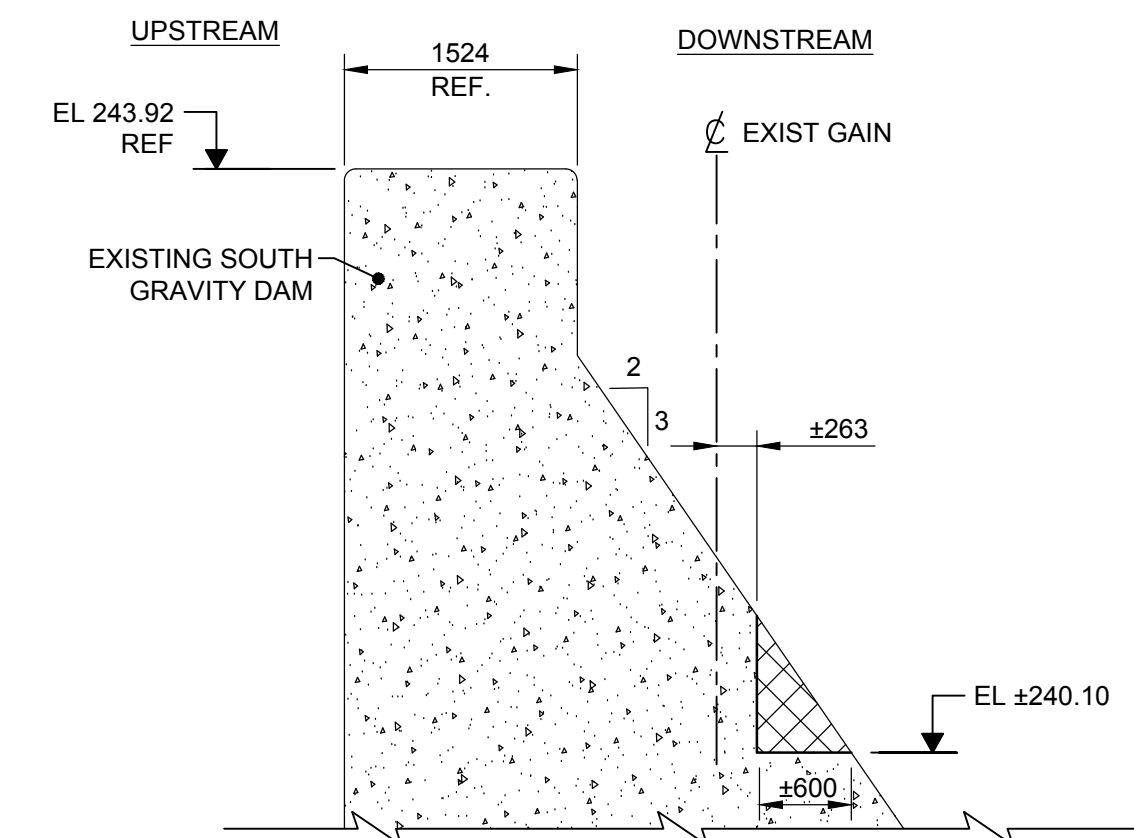
DETAIL 1  
1:50



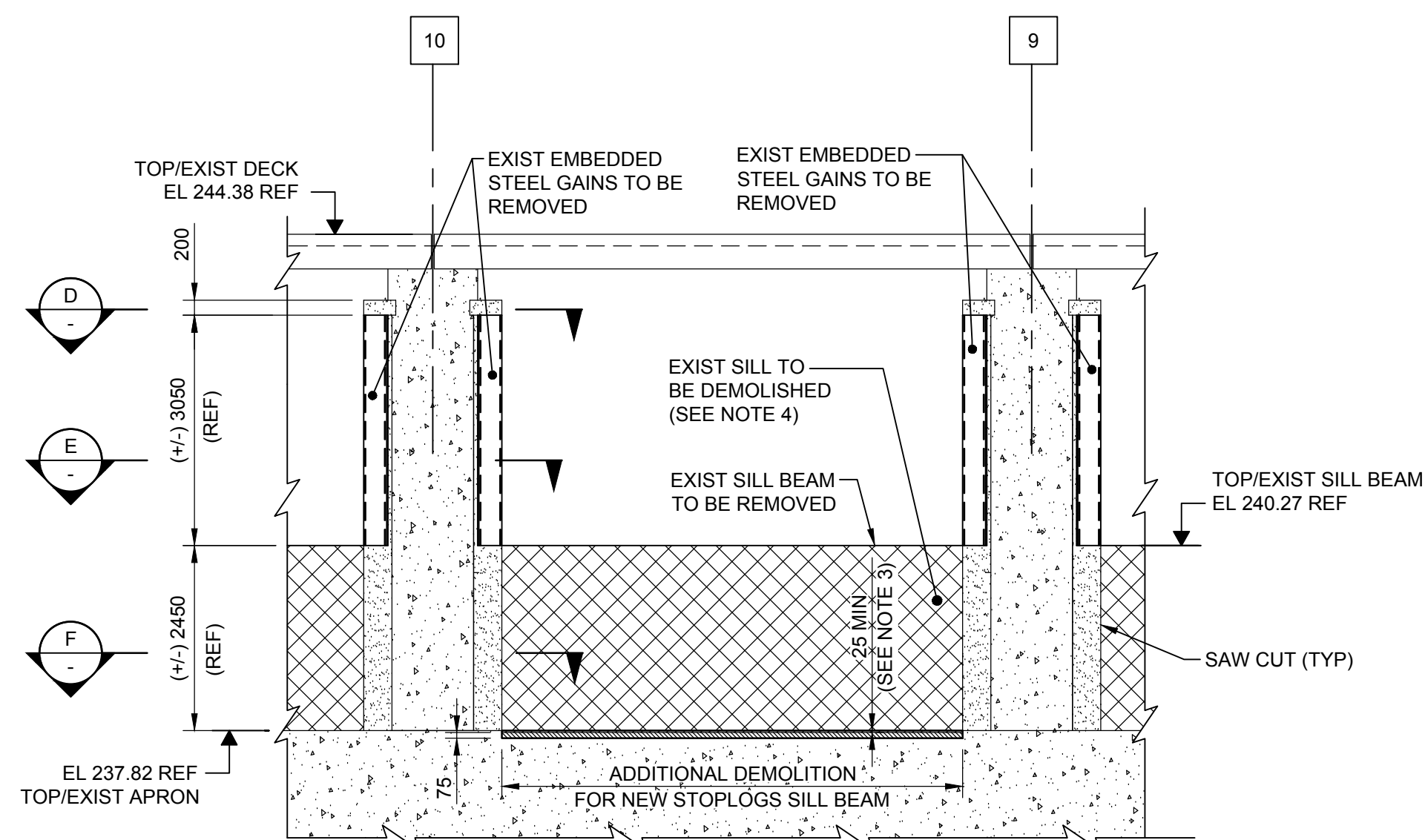
SECTION G  
1:50



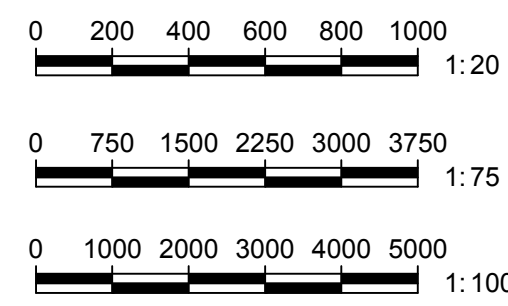
DETAIL 2  
1:50



SECTION H  
1:50



SECTION C  
1:75



Contract No.	Drawing Code	Serial	Rev.
HS00243	210	41DD	0100

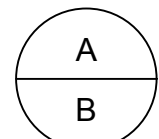
NOTES:

- FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS SEE DRAWING 002.
- REFER TO DWG 003 TO 005 FOR GENERAL DEMOLITION SEQUENCING.
- PERFORM DEMOLITION MINIMUM 25 mm BELOW TOP OF EXISTING APRON ELEVATION. (EXCEPT WHERE ADDITIONAL DEMOLITION IS REQUIRED FOR NEW STOPLOG SILL BEAM) ONCE DEMOLITION IS COMPLETE, PARGE THE DEMOLISHED SURFACE USING CEMENT REPAIR MORTAR TO MAKE FLUSH WITH TOP OF EXISTING APRON ELEVATION. FINAL SURFACE TO BE TIED IN AND SMOOTH WITH EXISTING APRON.
- DEMOLITION OF EXISTING SILL TO BE PERFORMED FLUSH WITH THE FACE OF THE EXISTING PIERS. (EXCEPT WHERE ADDITIONAL DEMOLITION IS REQUIRED FOR THE STOPLOG GAINS) MAXIMUM ALLOWABLE ROUGHNESS OF THE FINISHED SURFACE OF THE PIER IS 25 mm AMPLITUDE.
- GAIN DEMOLITION TO BE PERFORMED ON LEFT SIDE ONLY FOR PIER 12 AND RIGHT SIDE ONLY FOR PIER 7 (REFER TO PLAN VIEW).
- EXISTING GAIN DEMOLITION TO BE LIMITED TO ONE GAIN PER PIER AT A TIME.

No.	Description	By	Date
0	FOR TENDER	C.GP	05/13/2020

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

Professional Stamp

Project title / Titre du projet

TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

Drawing title / Titre du dessin

DEMOLITION - PHASE - 1  
EXISTING MAIN DAM  
GAINS AND SILLS  
PLAN AND SECTIONS

Drawn by / Dessiné par H. BOVIN	Designed by / Conçu par F. GOMES MESTRINER
Verified by / Vérifié par C. GAZARIAN PAGÉ	Approved by / Approuvé par S. VITTECOQ
Drawing Date / Date du dessin 05/13/2020	Drawing Number / Numéro du Dessin 100
Project Number / Numéro du projet R.076951.705	Sheet Feuille 1 of 1



Contract No.	Drawing Code	Serial	Rev.
HS00243	210	41DD	0101
			0

NOTES:

1. FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS  
SEE DRAWING 002.

2. REFER TO DWG 004 FOR DEMOLITION SEQUENCING.

3. MAXIMUM ELEVATION AFTER DEMOLITION

POSITION	MAXIMUM DEMOLITION ELEVATION
MIN 3 m FROM EXISTING MAIN DAM	237.82
BEYOND 3 m FROM EXISTING MAIN DAM	239.00

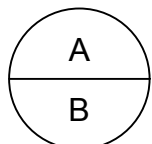
4. DEMOLISH NORTH CLOSURE WALL FLUSH WITH FACE  
OF EXISTING WALL TO BE PRESERVED. ANY  
ENCOUNTERED REINFORCEMENT TO BE REMOVED AS  
PER DETAIL 1.


0	FOR TENDER	C.GP	05/13/2020
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No.	Description	By Par	Date
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Revision / Révision

Do not scale drawings.  
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Departmental Representative of all discrepancies.



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

Professional Stamp

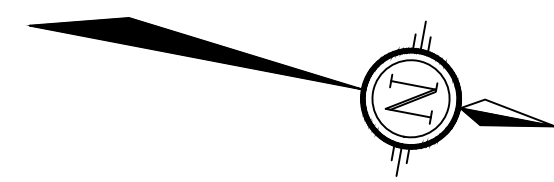
Project title / Titre du projet

TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

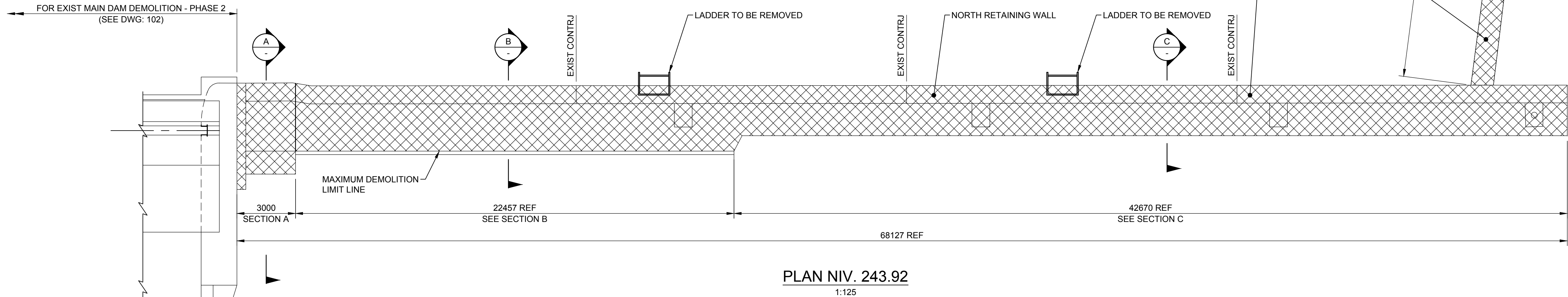
Drawing title / Titre du dessin

DEMOLITION  
PHASE - 2  
NORTH RETAINING WALL  
PLAN, SECTIONS & DETAIL

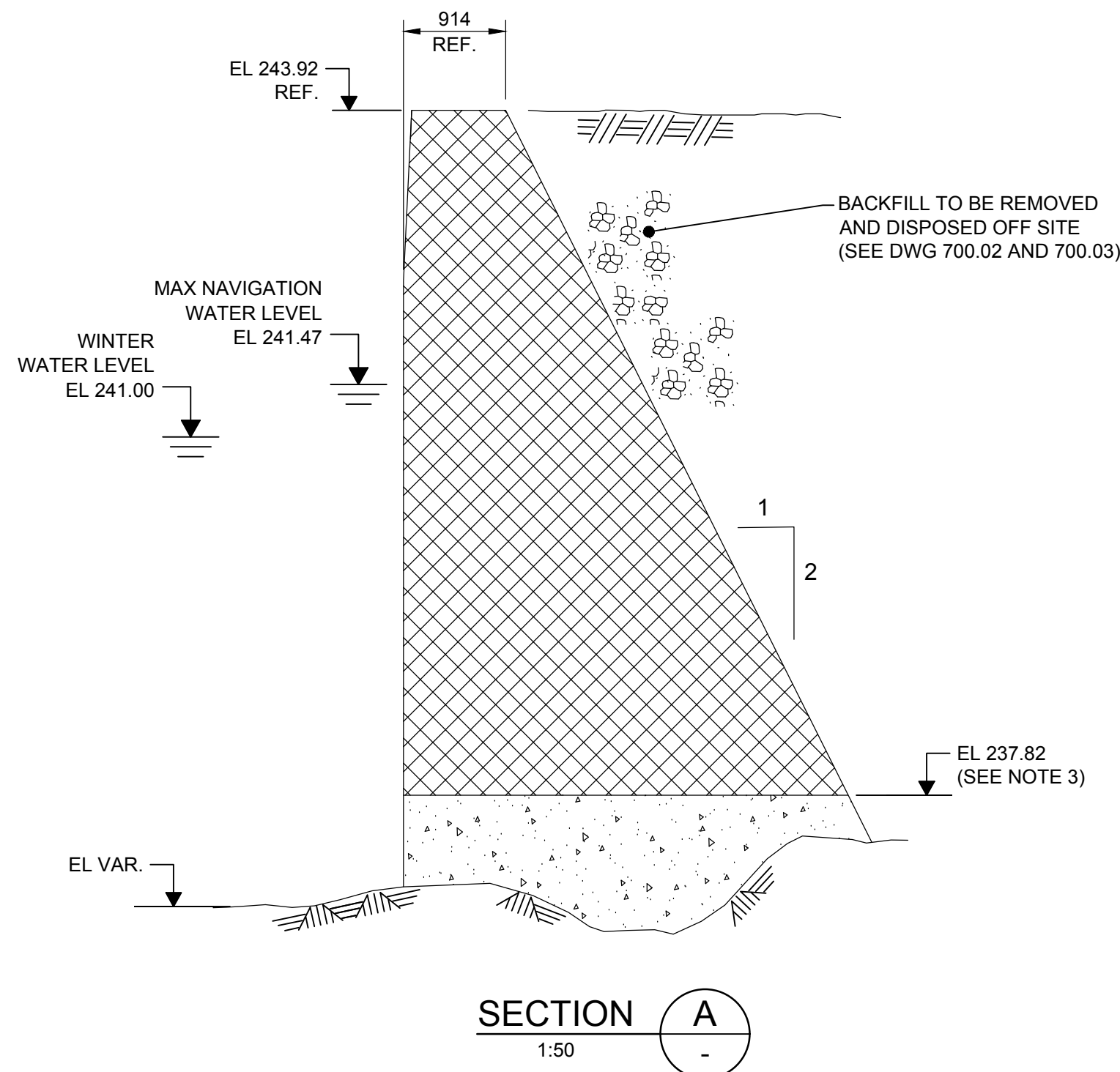
Drawn by / Dessiné par H. BOIVIN	Designed by / Conçu par F. GOMES MESTRINER EIT
Verified by / Vérifié par C. GAZARIAN PAGÉ P.Eng.	Approved by / Approuvé par S. VITTECOQ P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number/ Numéro du Dessin 101
Project Number / Numéro du projet R.076951.705	Sheet Feuille 1 of 1



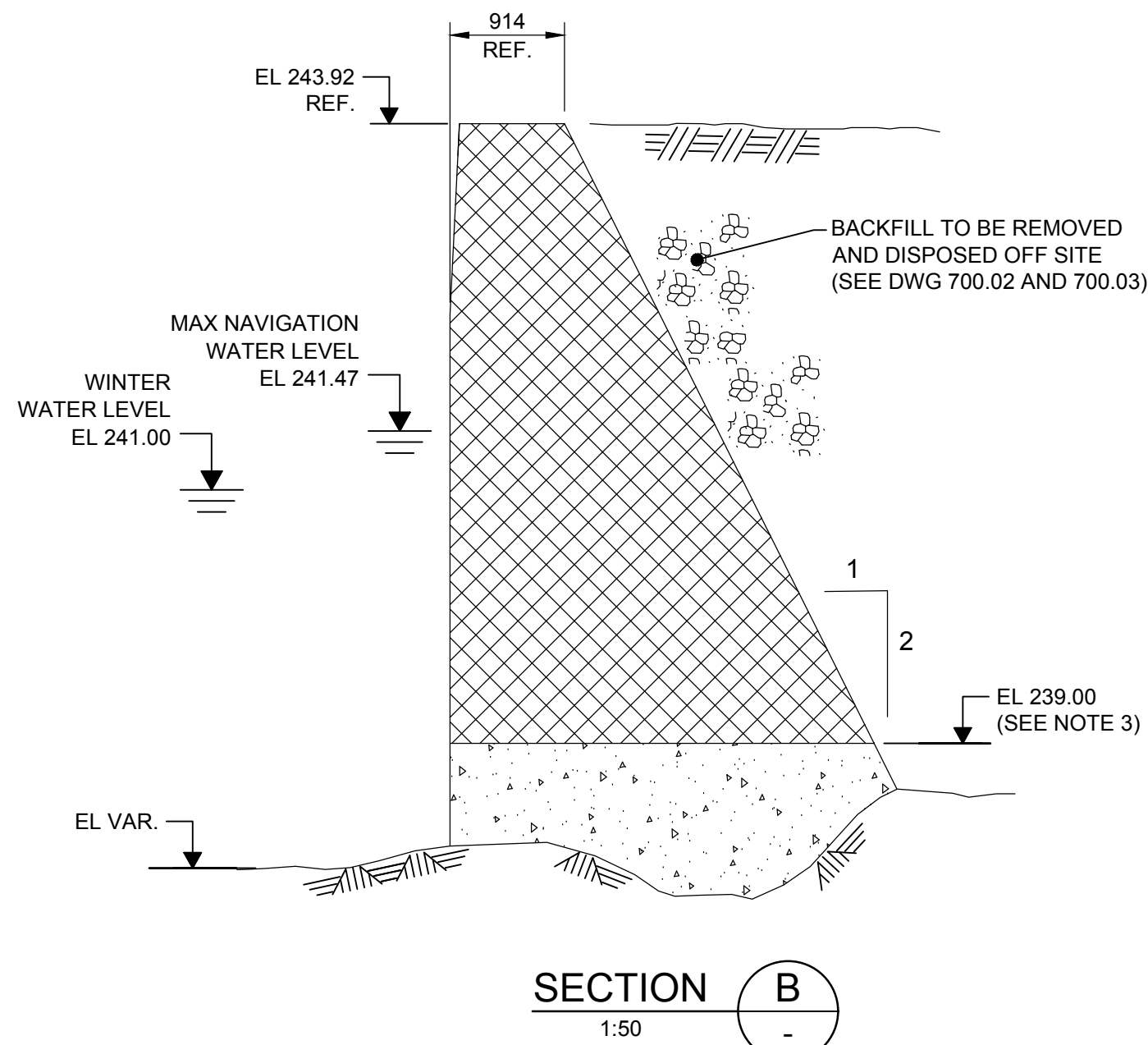
FLOW  
UPSTREAM



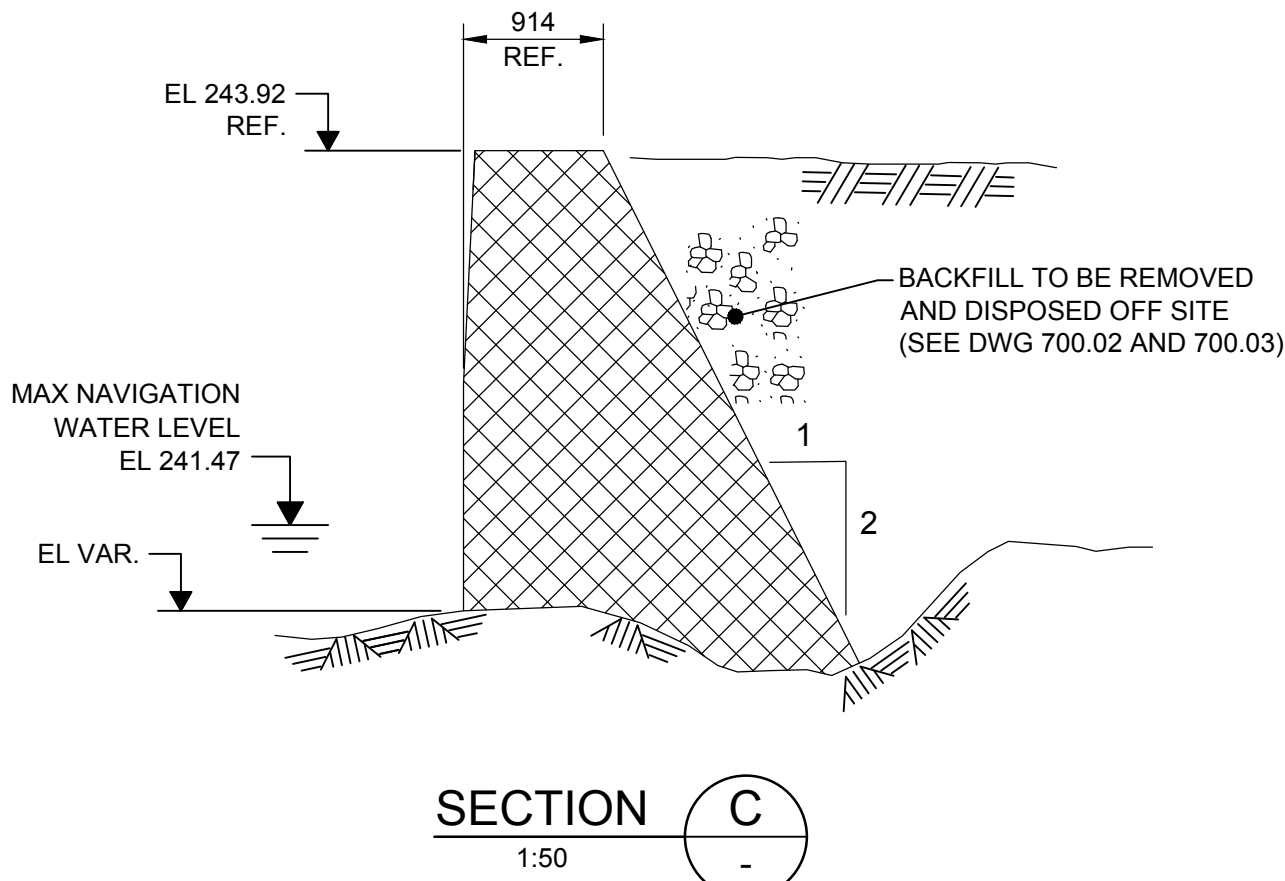
PLAN NIV. 243.92  
1:125



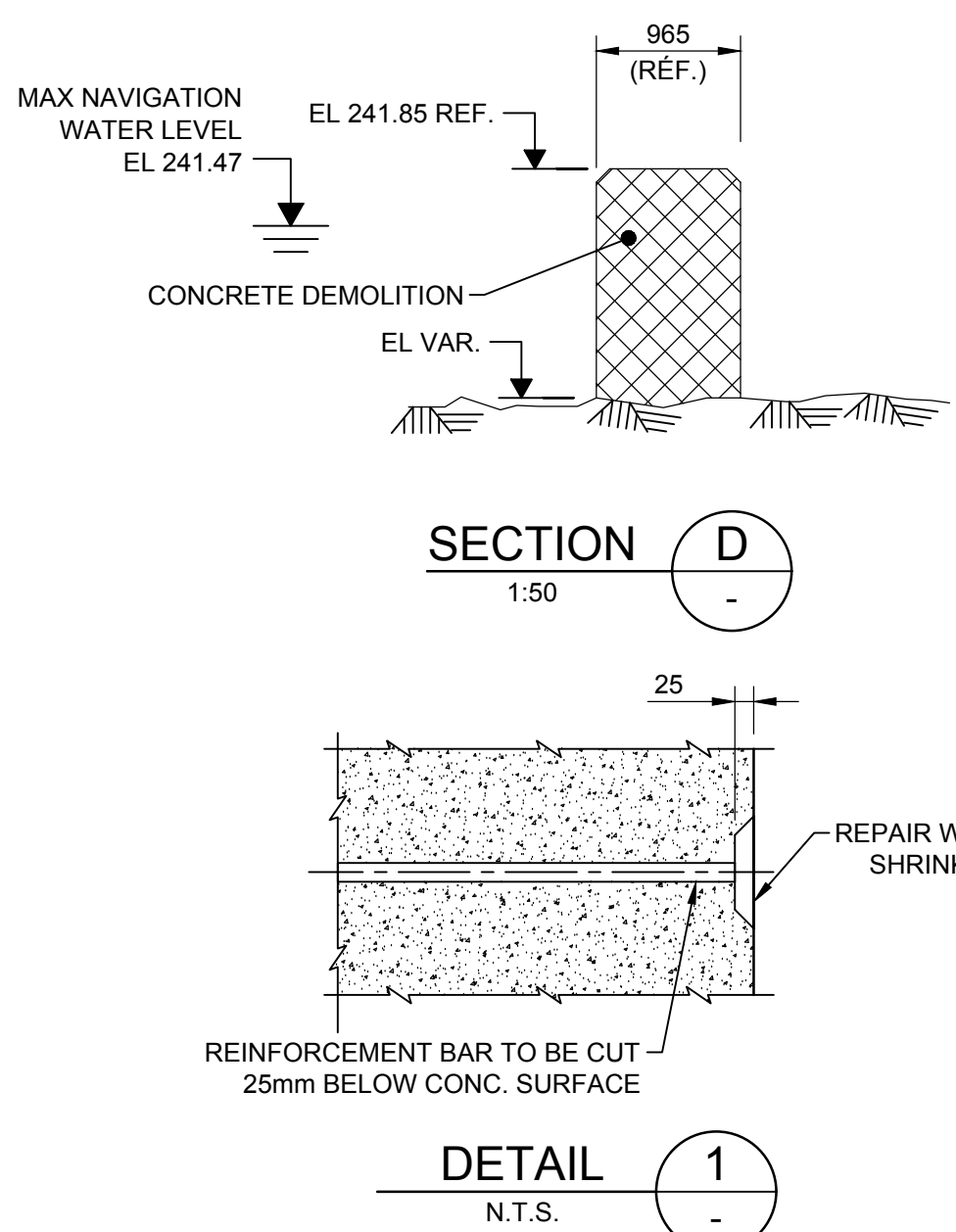
SECTION A  
1:50



SECTION B  
1:50

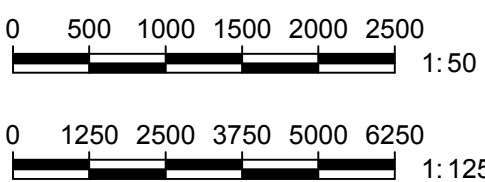


SECTION C  
1:50



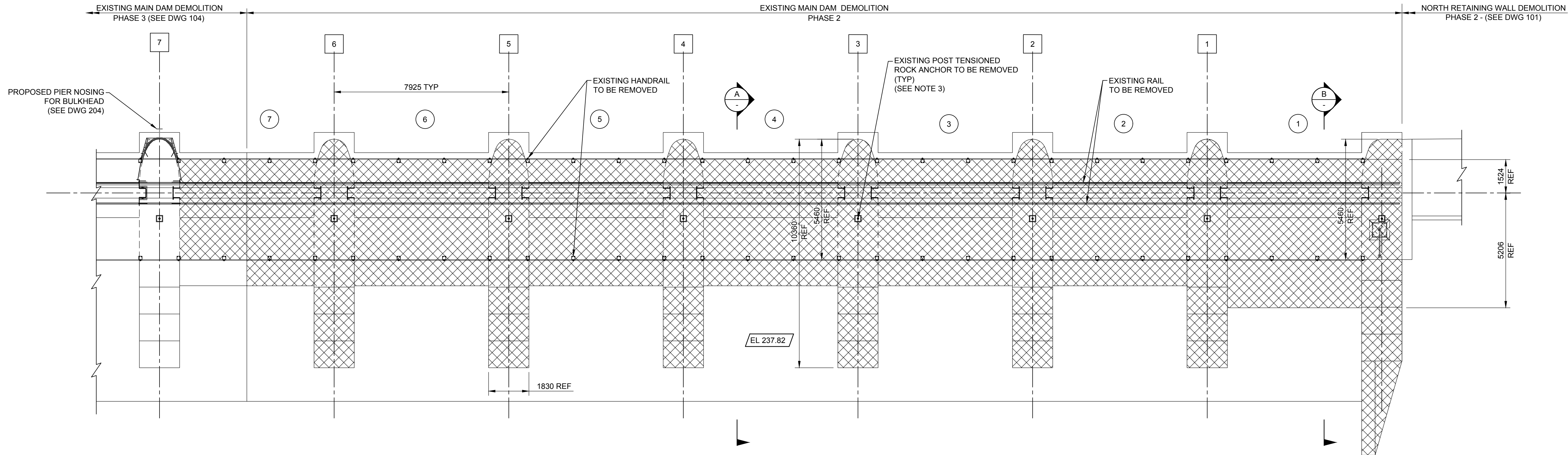
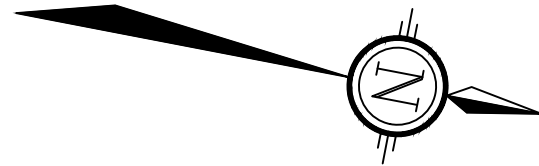
SECTION D  
1:50

DETAIL 1  
N.T.S.

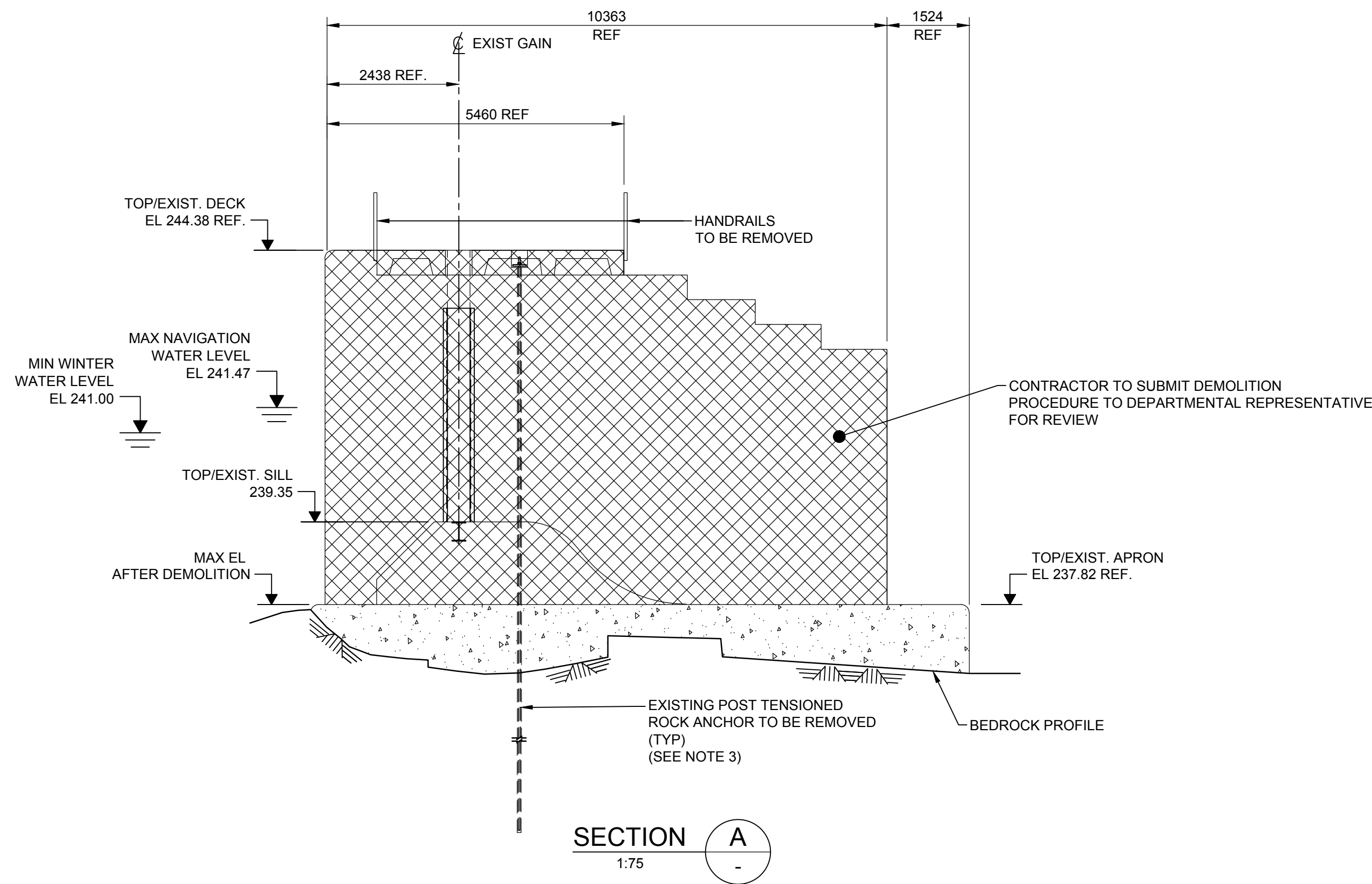




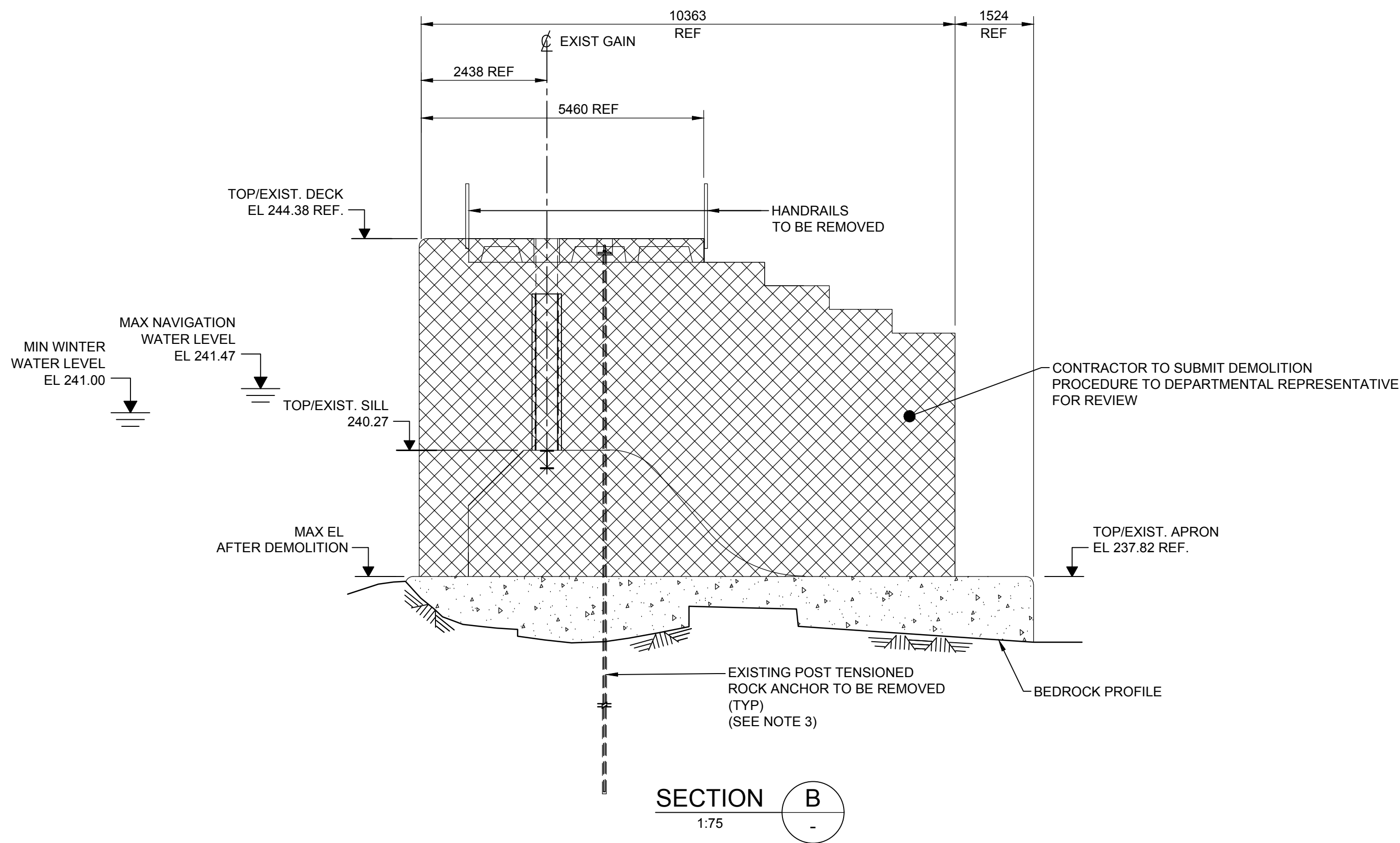
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 millimetres



PLAN NIV. 244,38  
1:100  
(TOP OF EXISTING DECK)



SECTION A  
1:75



SECTION B  
1:75

Contract No.	Drawing Code	Serial	Rev.
HS00243	210	41DD	0102

NOTES:

- FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS SEE DRAWING 002.
- REFER TO DWG 004 FOR DEMOLITION SEQUENCING.
- EXISTING POST TENSIONED ROCK ANCHOR TO BE REMOVED. CONTRACTOR TO SUBMIT POST TENSIONED REMOVAL PROCEDURE TO DEPARTMENTAL REPRESENTATIVE FOR REVIEW.

No.	Description	By	Date
0	FOR TENDER	C.GP	05/13/2020

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

Professional Stamp

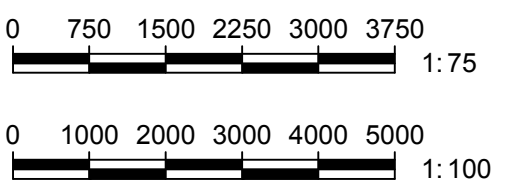
Project title / Titre du projet

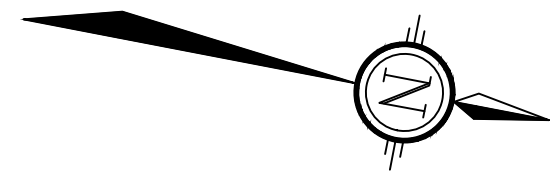
TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

Drawing title / Titre du dessin

DEMOLITION  
PHASE 2  
EXISTING MAIN DAM  
PLAN AND SECTIONS

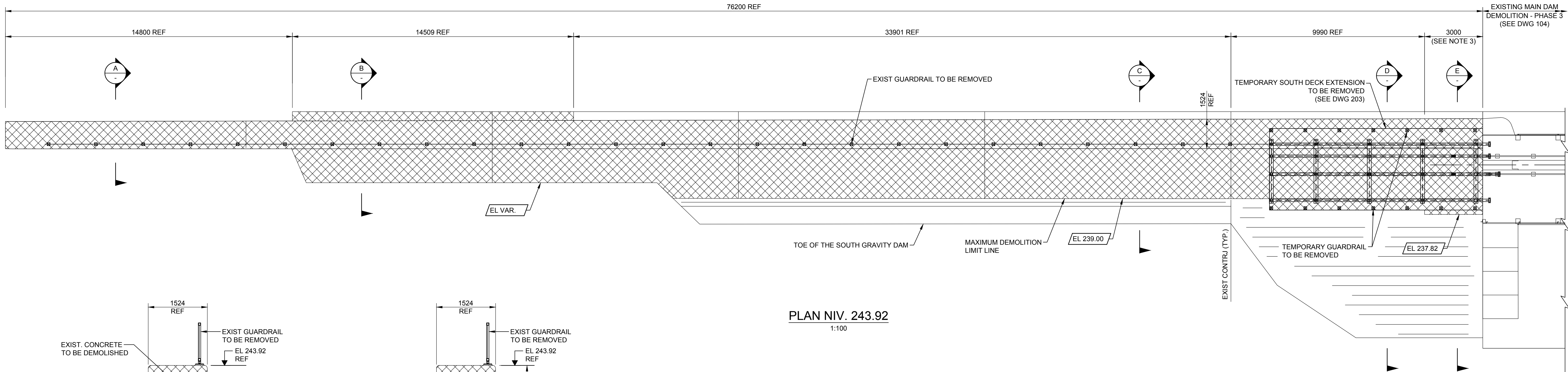
Drawn by / Dessiné par H. BOIVIN	Designed by / Conçu par F. GOMES MESTRINER EIT
Verified by / Vérifié par C. GAZARIAN PAGÉ P.Eng.	Approved by / Approuvé par S. VITTECOQ P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number/ Numéro du Dessin 102
Project Number / Numéro du projet R.076951.705	Sheet Feuille 1 of 1



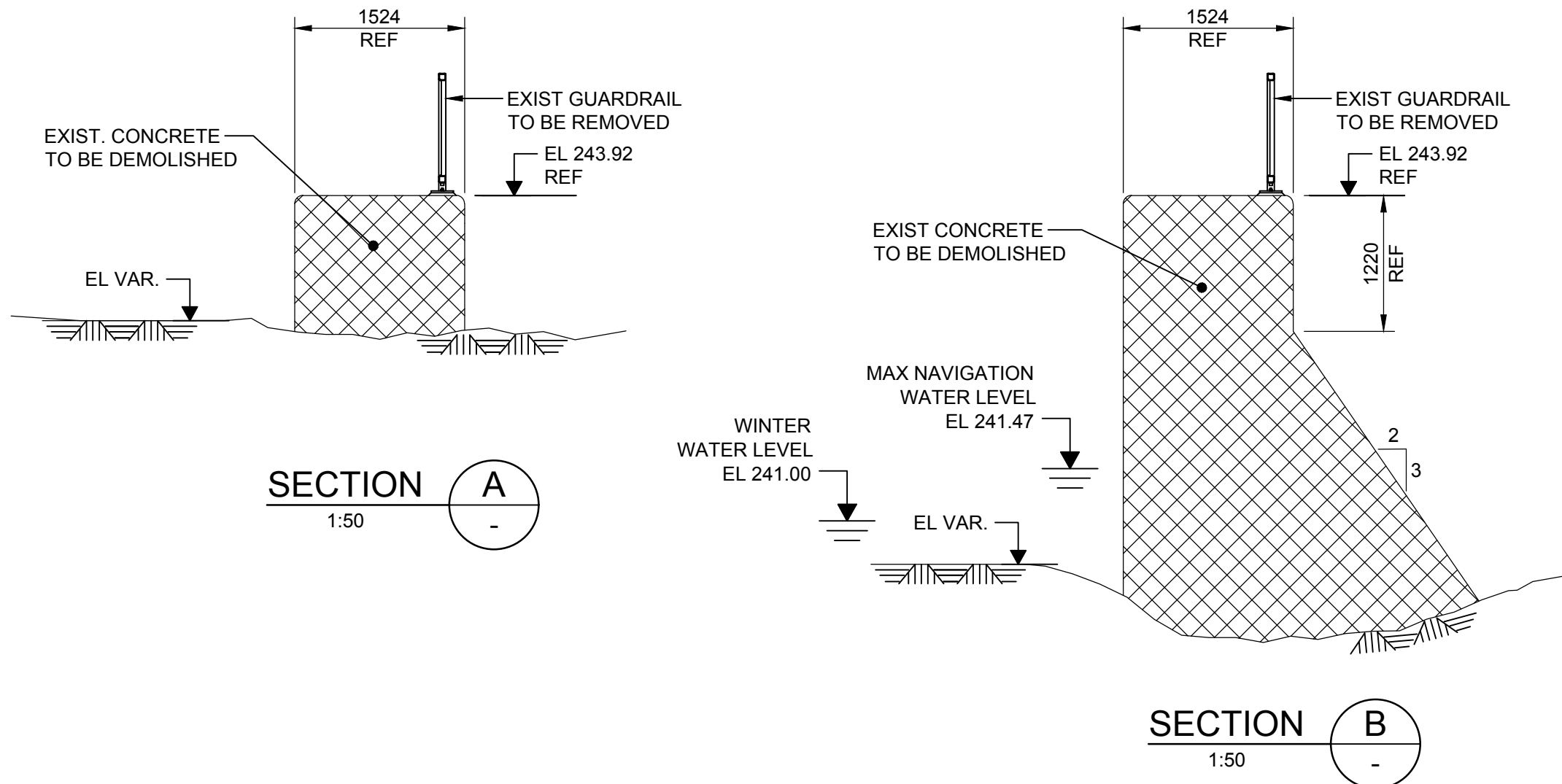


LOVESICK LAKE

UPSTREAM  
FLOW

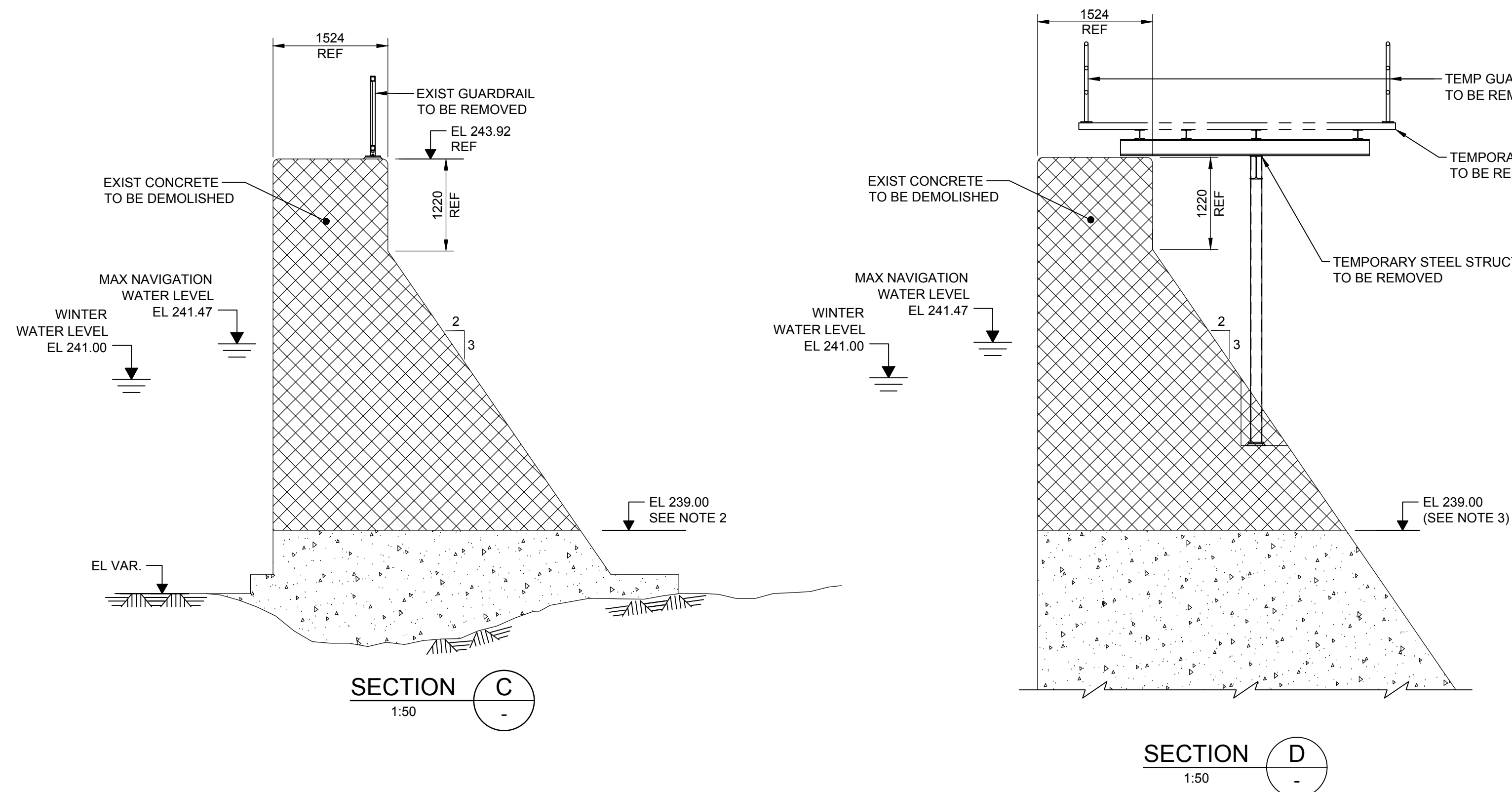


PLAN NIV. 243.92  
1:100



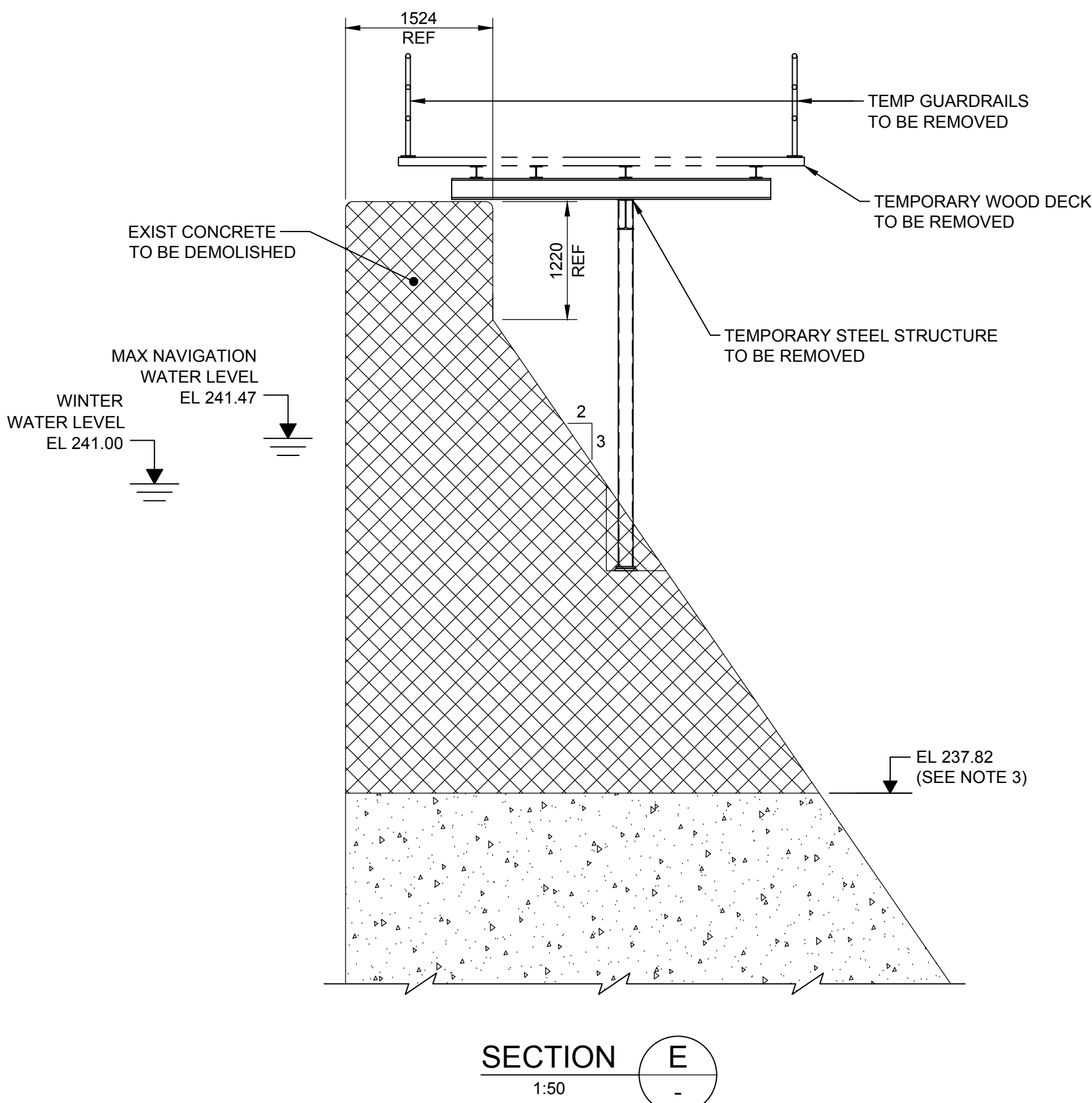
SECTION A  
1:50

SECTION B  
1:50



SECTION C  
1:50

SECTION D  
1:50



SECTION E  
1:50



Canada

CIMA+

Contract No.	Drawing Code	Serial	Rev.
HS243	210	41DD	0104 0

NOTES:

- FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS SEE DRAWING 002.
- REFER TO DWG. 005 FOR SEQUENCING.
- MAXIMUM ELEVATION AFTER DEMOLITION

POSITION	MAXIMUM DEMOLITION ELEVATION
MIN 3 m FROM EXISTING MAIN DAM	237.82
BEYOND 3 m FROM EXISTING MAIN DAM	239.00

No.	Description	By	Date
0	FOR TENDER	C.GP	05/13/2020

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

Professional Stamp

Project title / Titre du projet

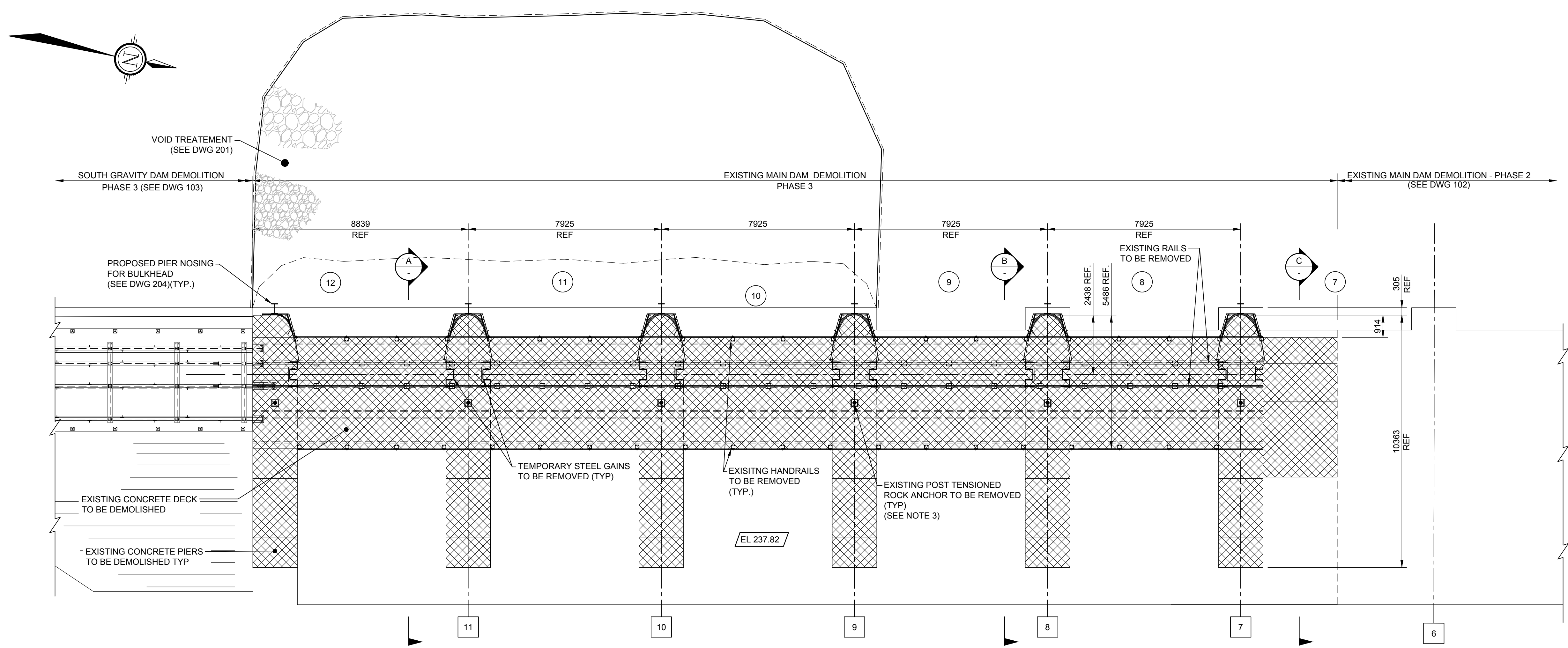
TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

Drawing title / Titre du dessin

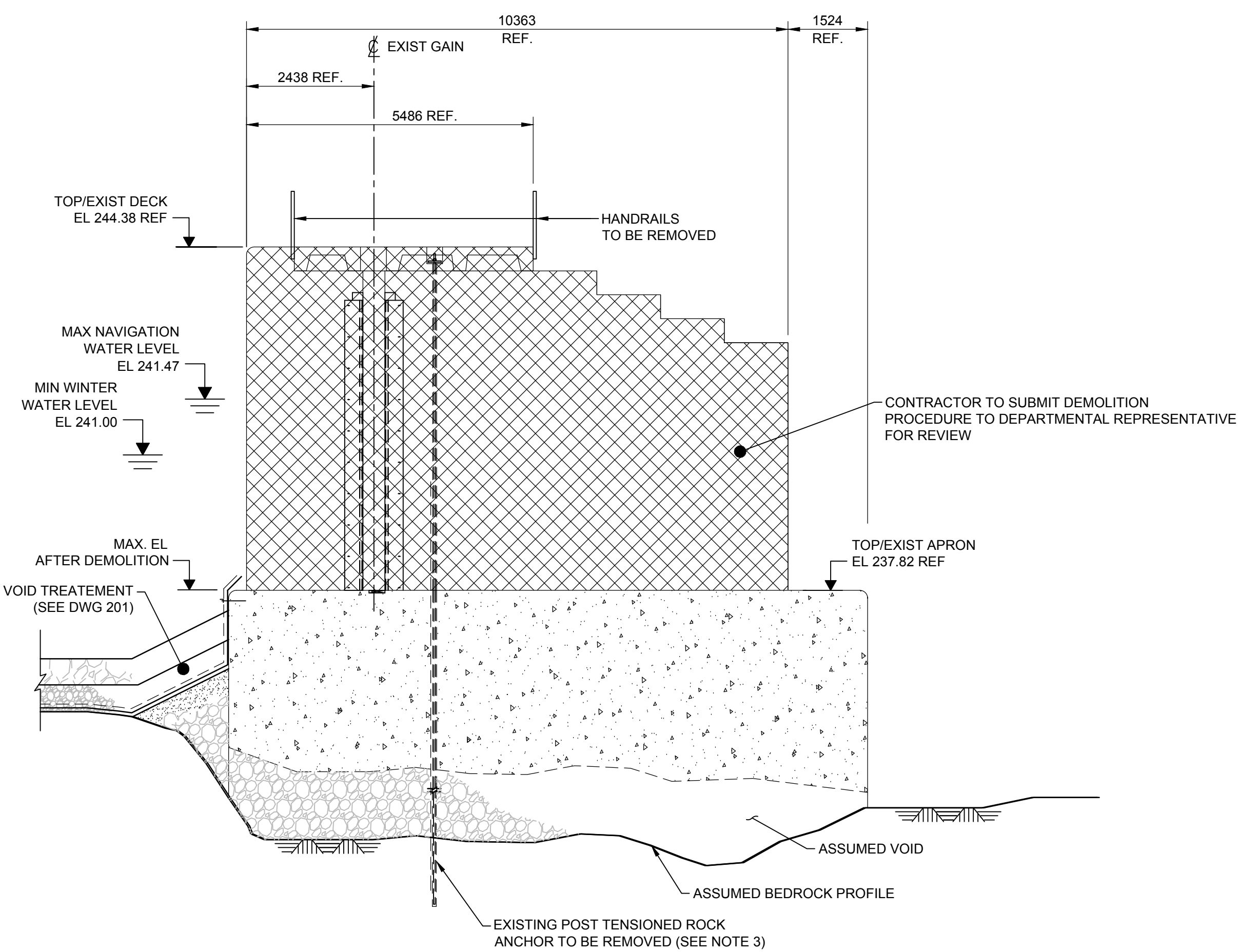
DEMOLITION  
PHASE - 3  
SOUTH GRAVITY DAM  
PLAN AND SECTIONS

Drawn by / Dessiné par H. BOIVIN	Designed by / Conçu par F. GOMES MESTRINER EIT
Verified by / Vérifié par C. GAZARIAN PAGÉ P.Eng.	Approved by / Approuvé par S. VITTECOQ P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number / Numéro du Dessin 103
Project Number / Numéro du projet R.076951.705	Sheet / Feuille 1 of 1

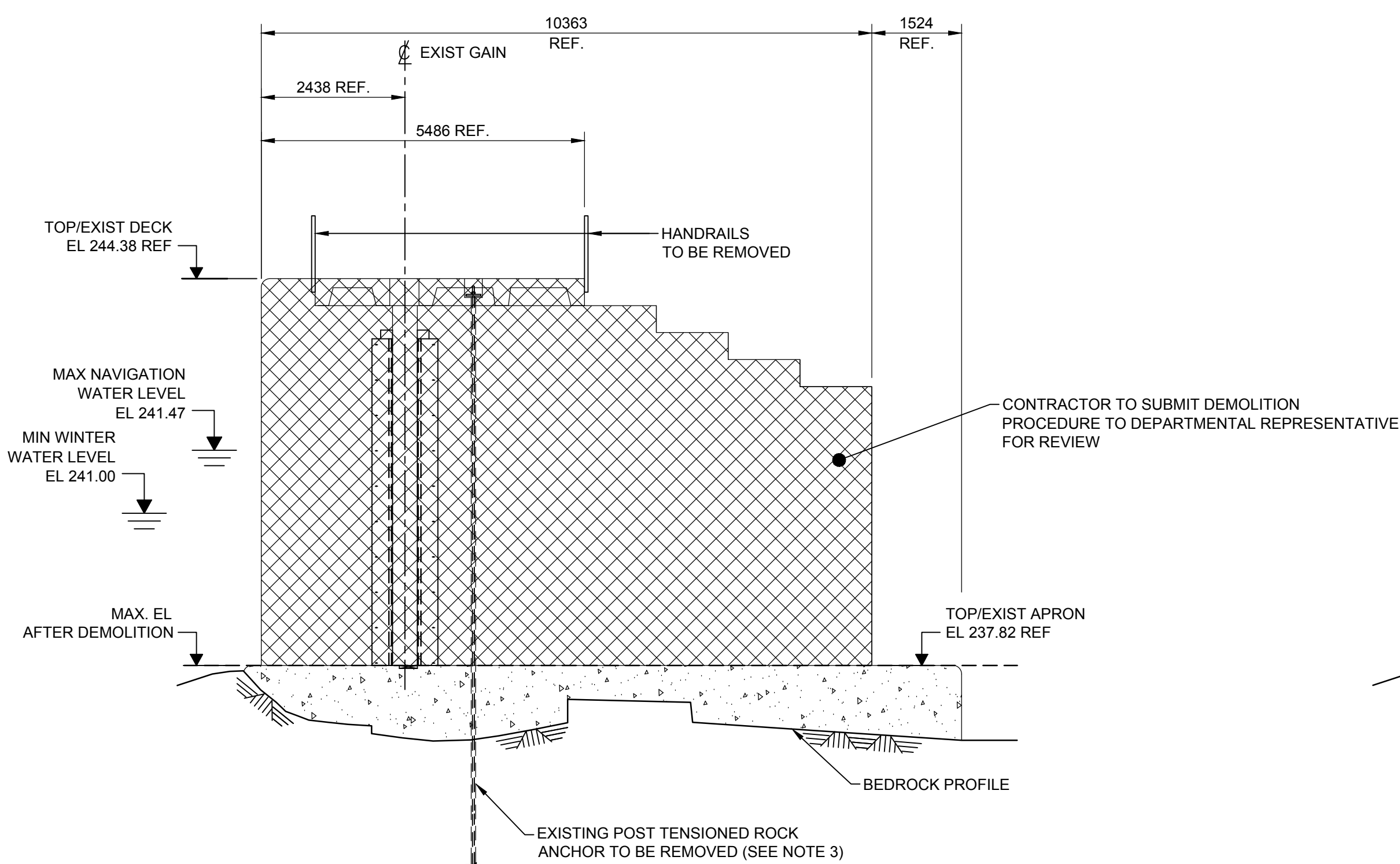




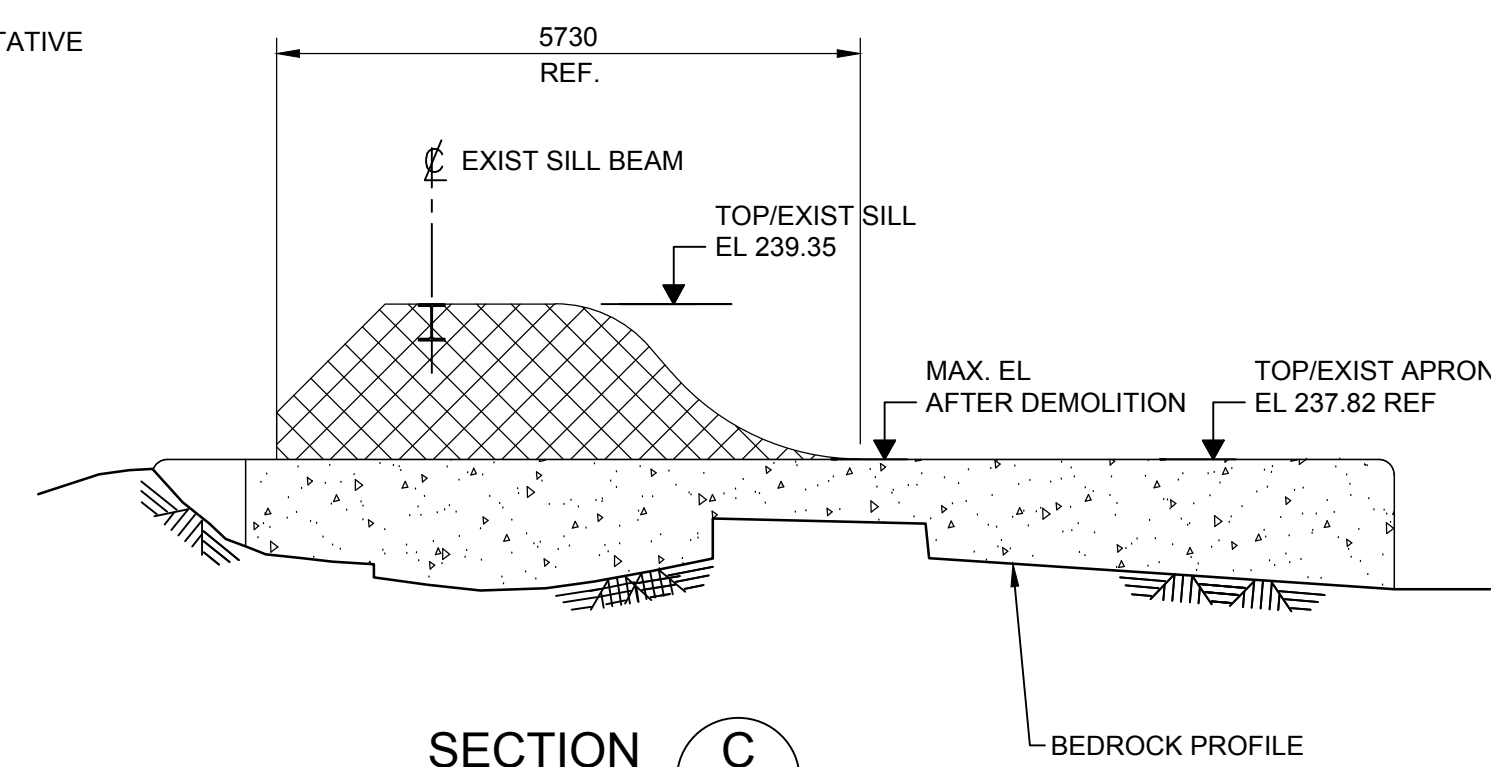
PLAN NIV. 244,38  
1:100  
(TOP OF EXISTING DECK)



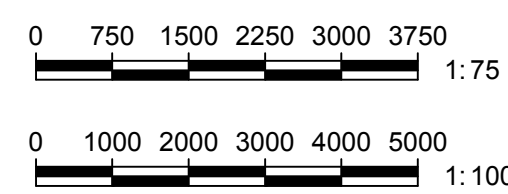
SECTION A  
1:75



SECTION B  
1:75



SECTION C  
1:75



Contract No.	Drawing Code	Serial	Rev.
HS00243	210	41DD	0104

NOTES:

- FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS SEE DRAWING 002.
- REFER TO DWG. 005 FOR SEQUENCING.
- EXISTING POST TENSIONED ROCK ANCHOR TO BE REMOVED. CONTRACTOR TO SUBMIT POST TENSIONED REMOVAL PROCEDURE TO DEPARTMENTAL REPRESENTATIVE FOR REVIEW.

No.	Description	By	Date
0	FOR TENDER	C.GP	05/13/2020

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

Professional Stamp

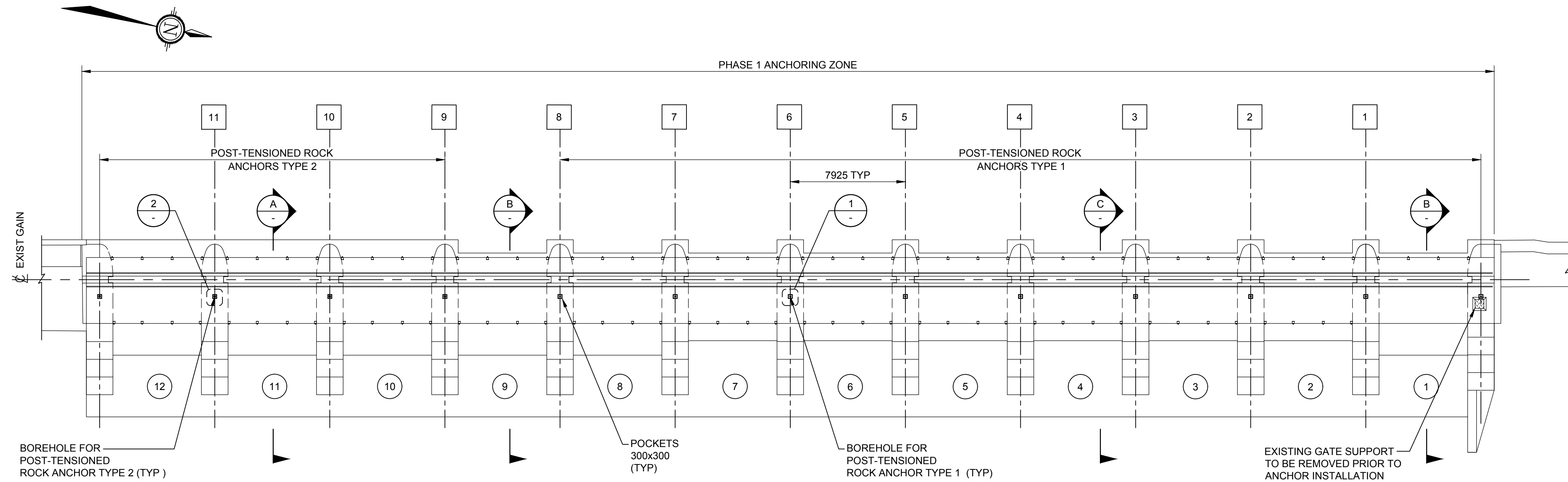
Project title / Titre du projet

TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

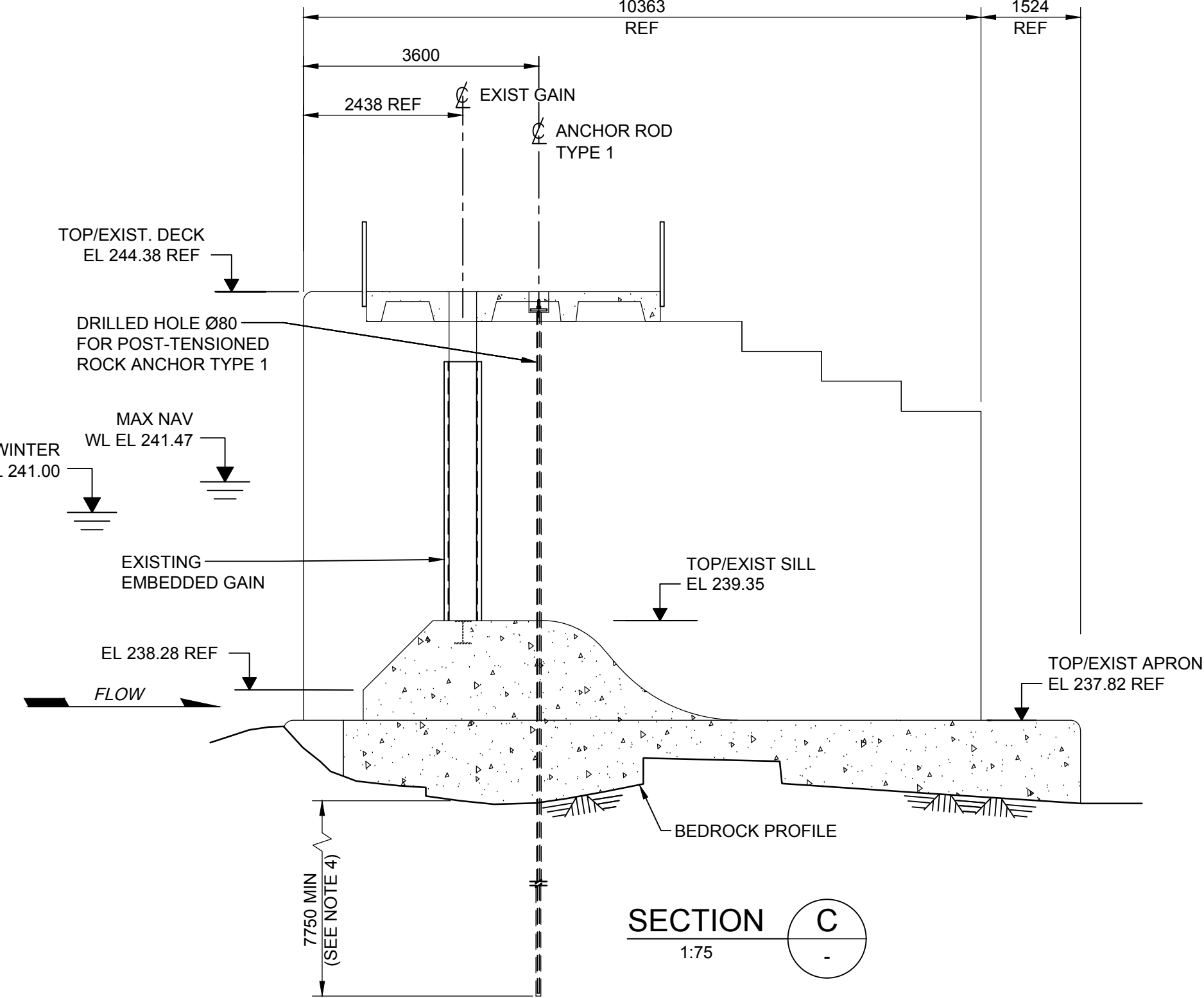
Drawing title / Titre du dessin

DEMOLITION  
PHASE 3  
EXISTING MAIN DAM  
PLAN AND SECTIONS

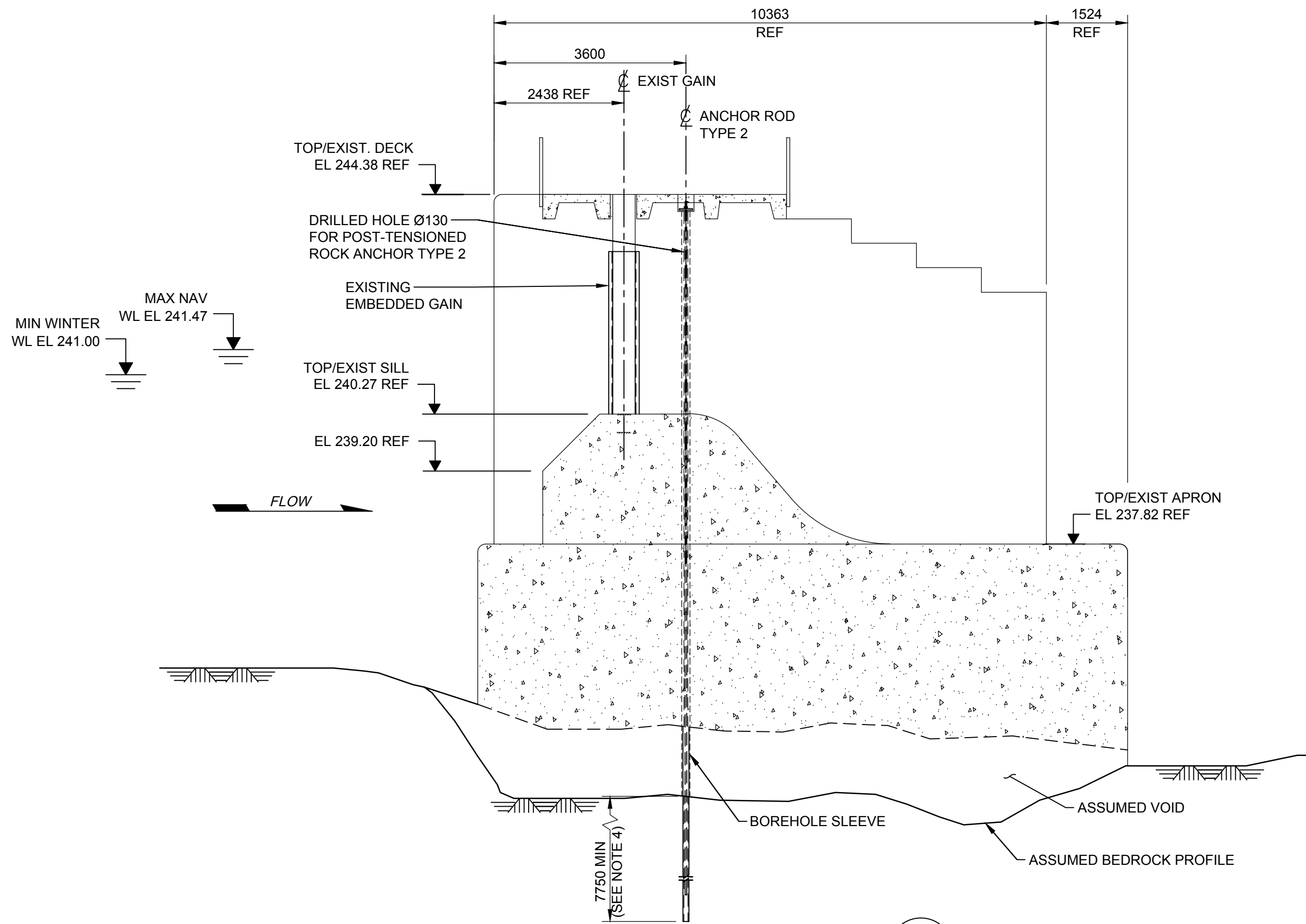
Drawn by / Dessiné par H. BOVIN	Designed by / Conçu par F. GOMES MESTRINER EIT
Verified by / Vérifié par C. GAZARIAN PAGÉ P.Eng.	Approved by / Approuvé par S. VITTECOQ P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number/ Numéro du Dessin 104
Project Number / Numéro du projet R.076951.705	Sheet Feuille 1 of 1



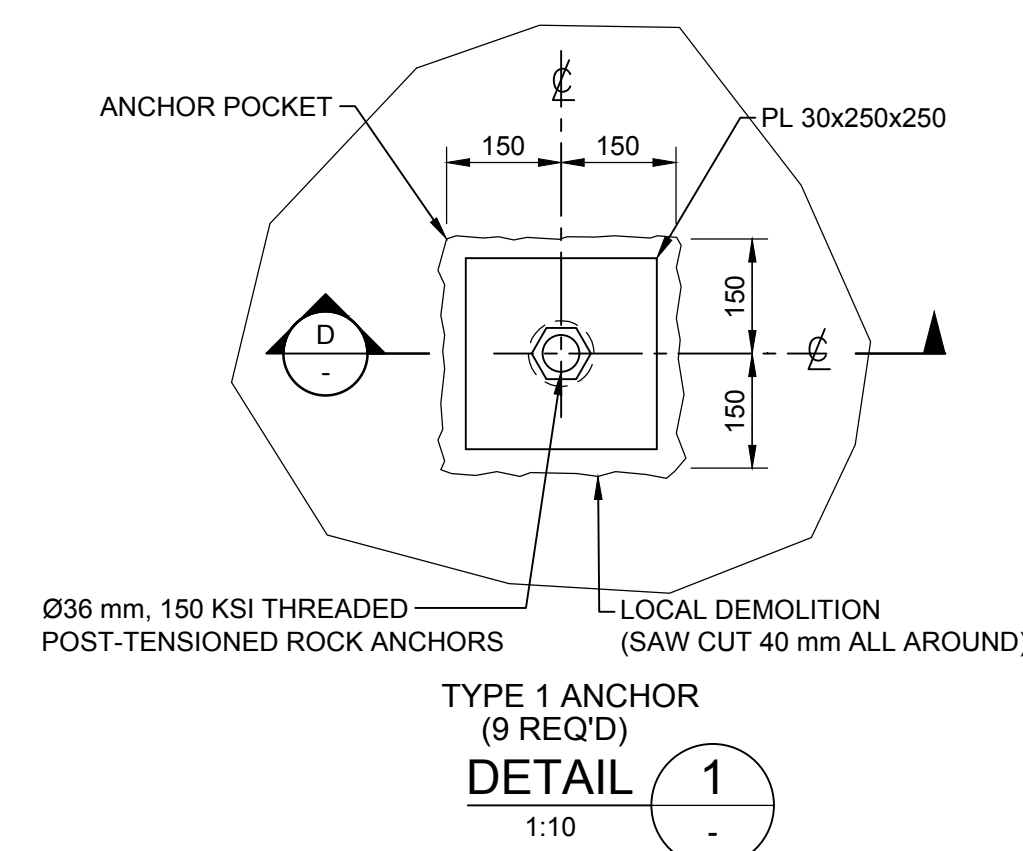
ANCHOR LAYOUT  
1:200



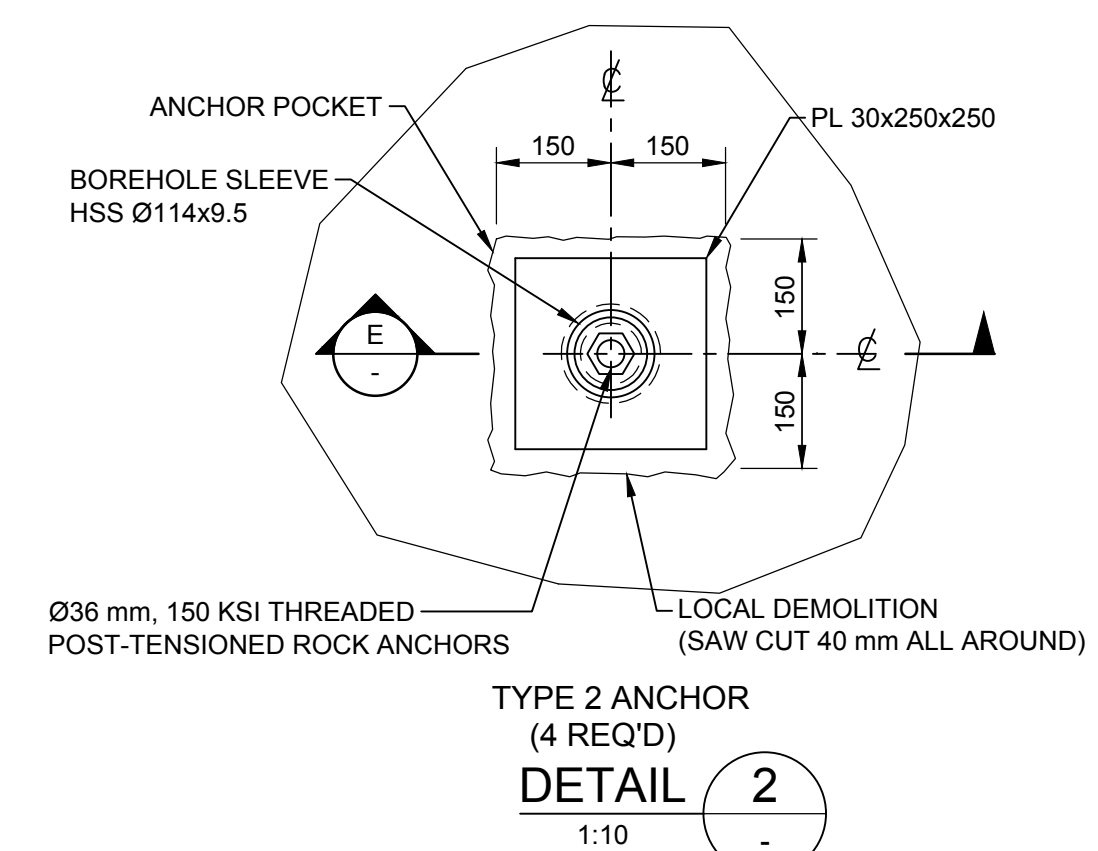
SECTION C  
1:75



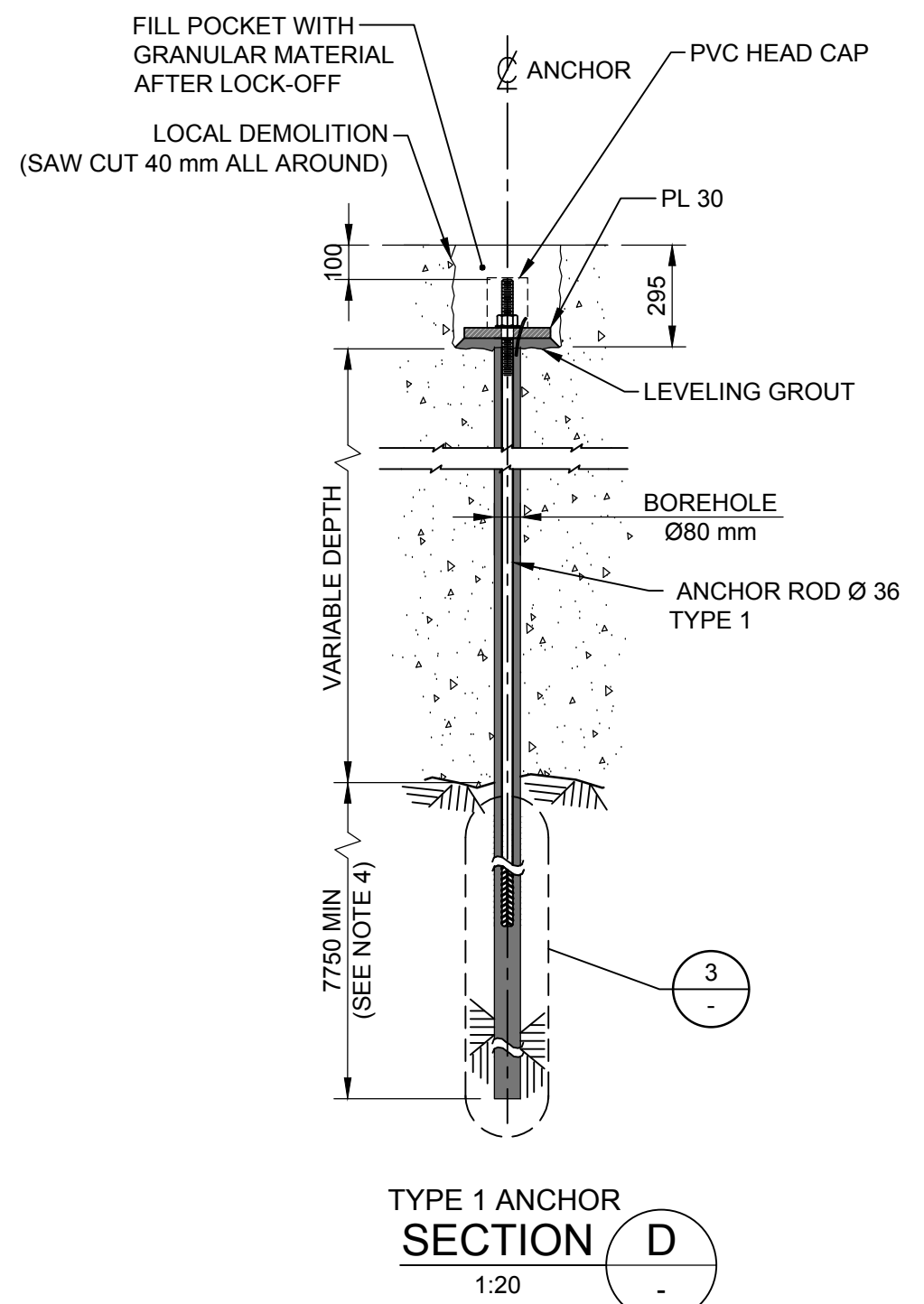
SECTION A  
1:75



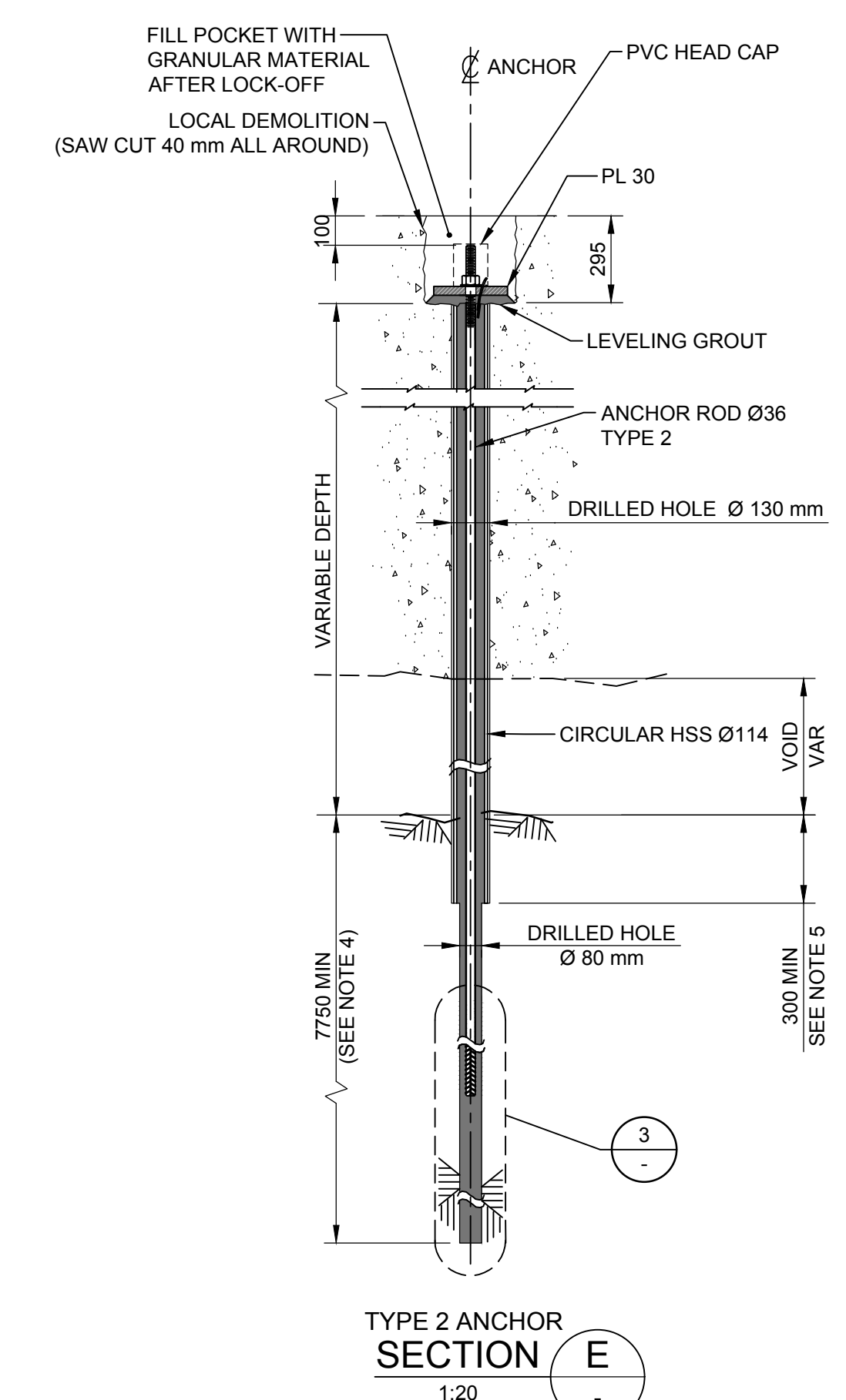
TYPE 1 ANCHOR  
(9 REQ'D)  
DETAIL 1  
1:10



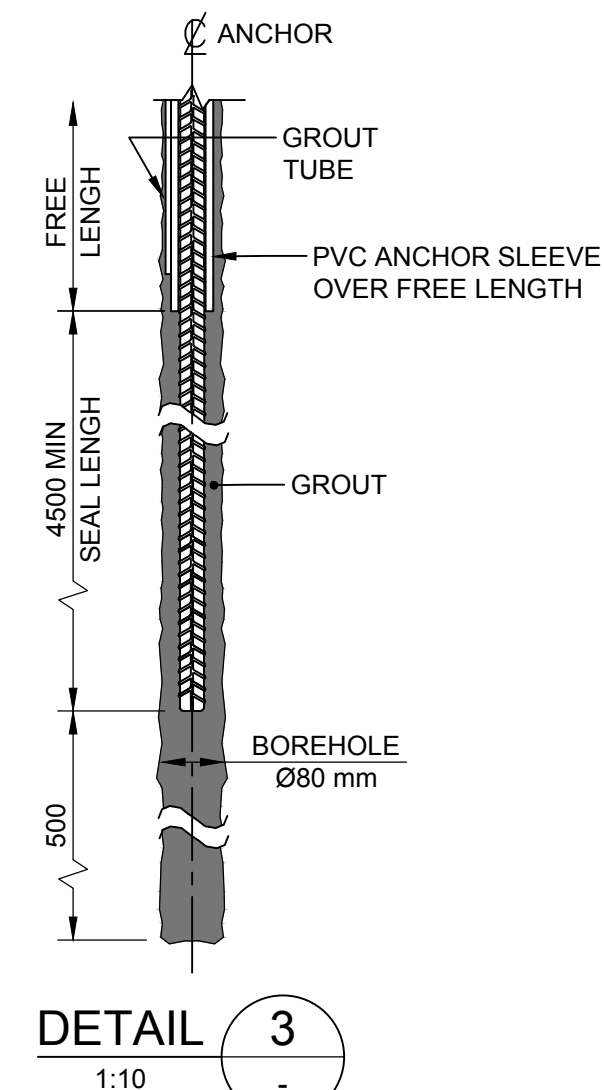
TYPE 2 ANCHOR  
(4 REQ'D)  
DETAIL 2  
1:10



TYPE 1 ANCHOR  
SECTION D  
1:20

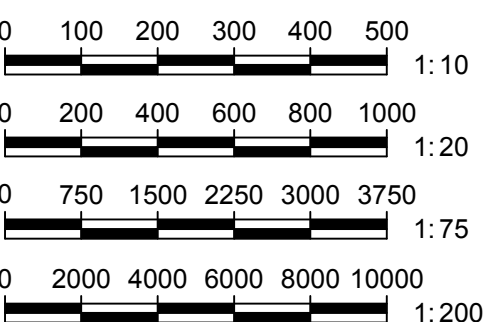


TYPE 2 ANCHOR  
SECTION E  
1:20



DETAIL 3  
1:10

ANCHOR SCHEDULE (POST TENSIONED)									
ANCHOR TYPE	ANCHOR DIA	TOTAL ANCHOR LENGTH	DESIGN LOAD (kN)	LOCK OFF LOAD (kN)	TEST LOAD (kN)	ULTIMATE TENSILE STRENGTH (kN)	BOREHOLE SLEEVE	BOREHOLE DIA.	QTY. REQ.
1	Ø36	VAR	633	738	843	1054	NONE	80	9
2	Ø36	VAR	633	738	843	1054	HSS Ø114	130	4



Contract No.	Drawing Code	Serial	Rev.
HS00243	210	41DD	0200   0

- NOTES:
- FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS SEE DRAWING 002.
  - ROCK ANCHORS TO BE POST TENSIONED.
  - HOLES MAY NEED TO BE GROUTED AND RE-DRILLED DEPENDING ON WATER INFILTRATION. REFER TO SPECIFICATION SECTION 05 05 20 REGARDING WATER TIGHTNESS TESTING REQUIREMENTS FOR BOREHOLES.
  - MIN. ROCK ANCHOR EMBEDMENT IN SOUND ROCK.
  - MIN BOREHOLE SLEEVE EMBEDMENT IN COMPETENT BEDROCK.

No.	Description	By	Date
0	FOR TENDER	C.GP	05/13/2020

Revision / Révision

Do not scale drawings.  
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A	A Detail number Numéro du détail
B	B Location dwg. number Numéro sur dessin

Professional Stamp

Project title / Titre du projet

TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

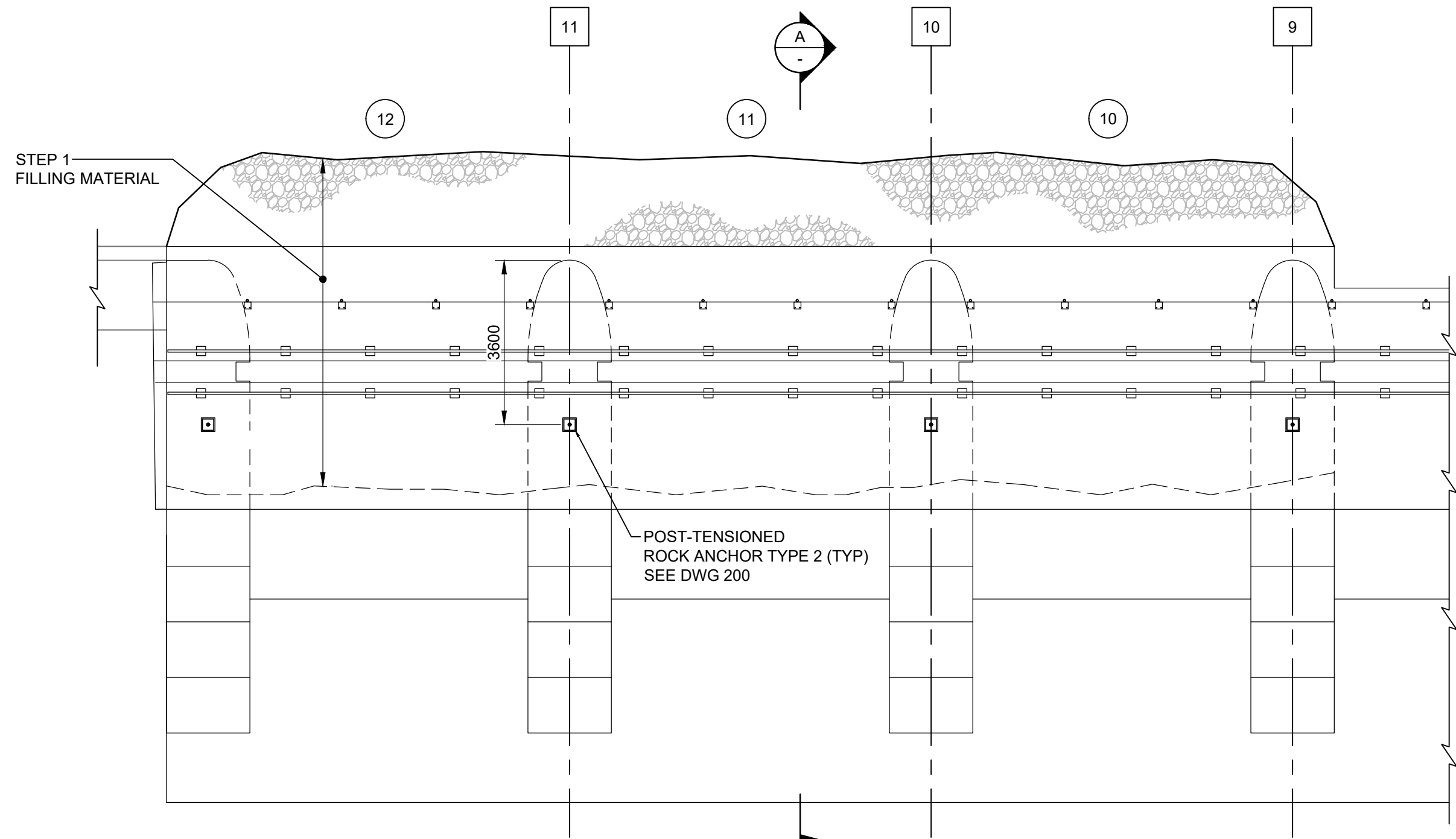
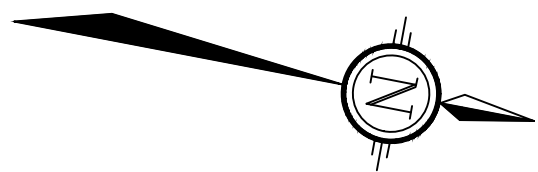
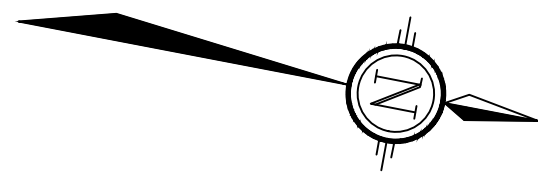
Drawing title / Titre du dessin

TEMPORARY WORKS  
PHASE 1  
ANCHORING LAYOUT  
PLAN, SECTIONS AND DETAILS

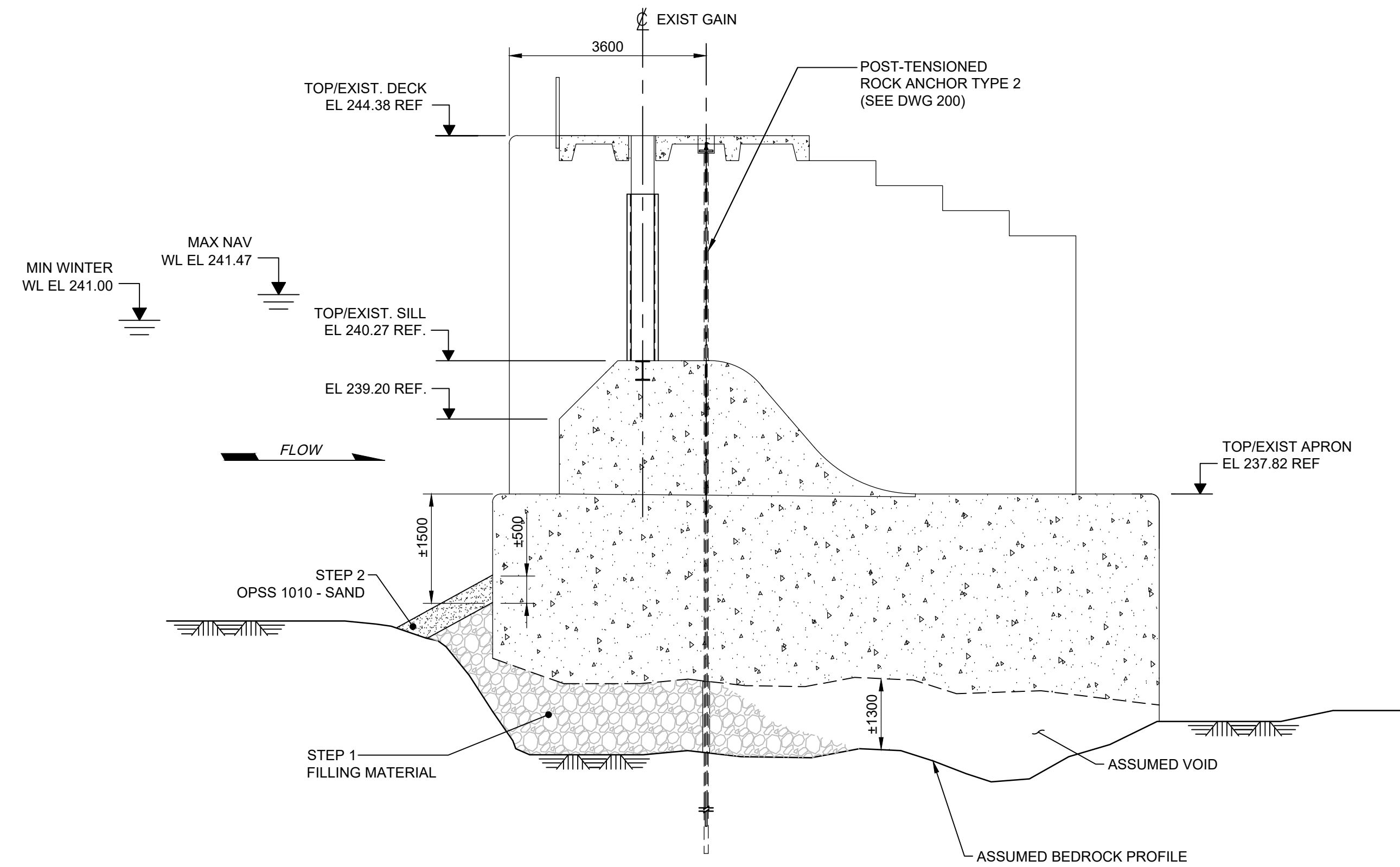
Drawn by / Dessiné par I. ZIECIK	Designed by / Conçu par F. GOMES MESTRINER EIT
Verified by / Vérifié par C. GAZARIAN PAGÉ P.Eng.	Approved by / Approuvé par S. VITTECOQ P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number / Numéro du Dessin 200
Project Number / Numéro du projet R.076951.705	Sheet Feuille 1 of 1



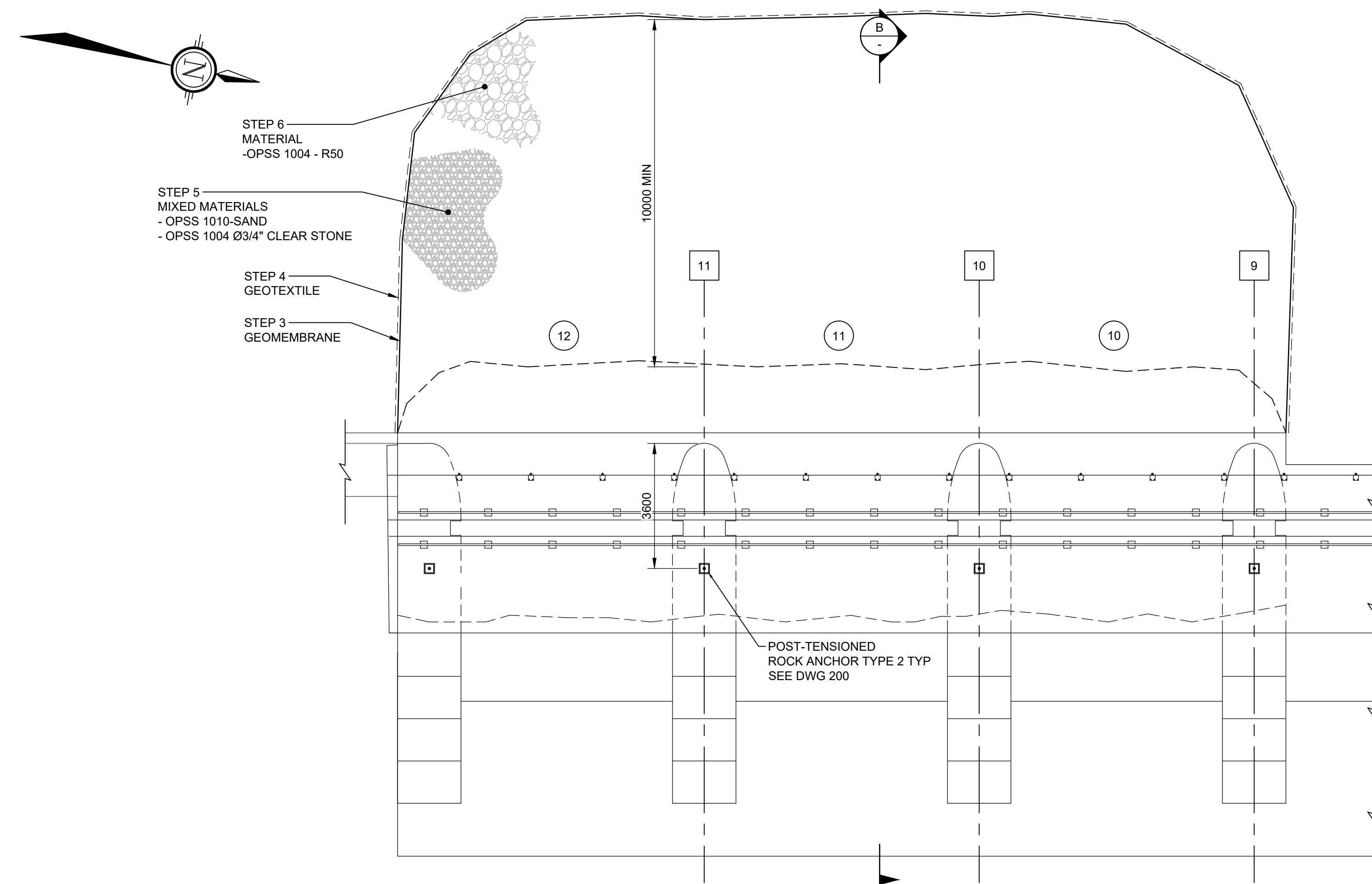
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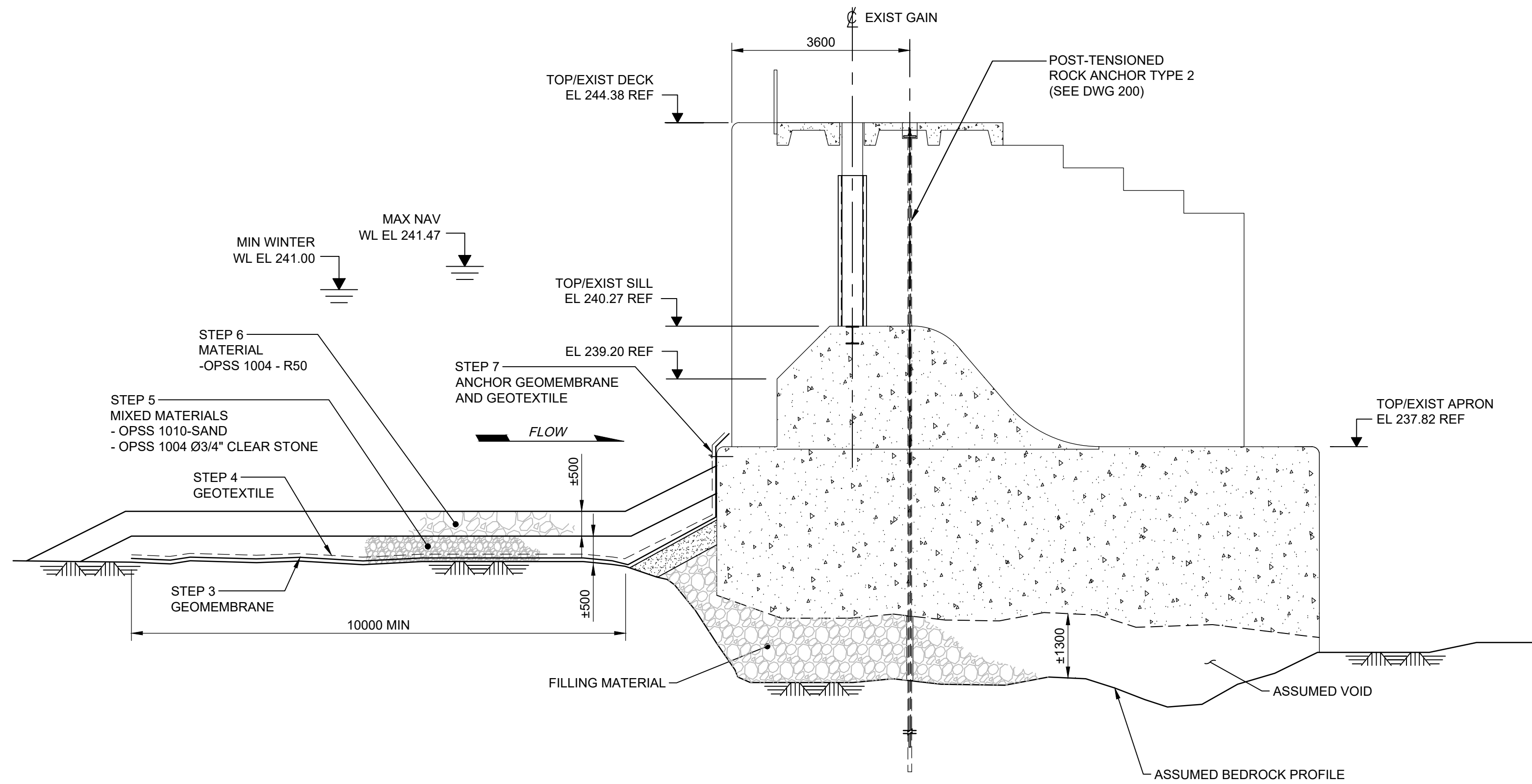
PLAN NIV. 244.38  
1:100



SECTION A  
1:75



PLAN NIV. 244.38  
1:100



SECTION B  
1:75

### VOID TREATMENT CONSTRUCTION SEQUENCING

#### STEP 1

FILL THE VOID UNTIL THE FILLING MATERIAL BEDDING IS STABLE OVER A MINIMUM 24 H PERIOD AND THE FLOW UNDER THE DAM IS SUFFICIENTLY CONTROLLED TO ENSURE THE SAFETY OF DIVERS. FILLING MATERIAL SHALL BE INSTALLED UP TO 1.5 m APPROXIMATELY BENEATH TOP OF APRON IN CONSECUTIVE LAYERS OF THE FOLLOWING MATERIALS IN SEQUENCE:

- OPSS 1004-R50
  - OPSS 1004-G-3
  - OPSS 1004 -Ø 3/4" CLEAR STONE
  - OPSS 1010 - SAND
- AFTER INITIAL SEQUENCE, ADD MATERIAL TYPES AND QUANTITY AS NEEDED TO FILL THE VOID AND MEET THE ABOVE CRITERIA.

#### STEP 2

DEPOSIT A LAYER OF APPROXIMATELY 500 mm OF THE FOLLOWING MATERIAL ON TOP OF STEP 1 FILLING MATERIAL

- OPSS 1010 - SAND

#### STEP 3

DEPOSIT A PVC SMOOTH GEOMEMBRANE LINER WITH A MINIMUM THICKNESS, IN ACCORDANCE TO ASTM D-5199, OF 0.75 mm, ENSURE AS MUCH AS CONTACT AS POSSIBLE BETWEEN GEOMEMBRANE AND UNDERLYING FILL MATERIAL TO AVOID TEARS DURING SUBSEQUENT STEPS.

#### STEP 4

DEPOSIT A NON WOVEN GEOTEXTILE AS PER TECHNICAL SPECIFICATION SECTION 31 32 19.2 ON TOP OF GEOMEMBRANE LINER.

#### STEP 5

DEPOSIT ON TOP OF THE GEOTEXTILE AND GEOMEMBRANE LINER A LAYER OF APPROXIMATELY 500 mm OF A MIX OF THE FOLLOWING MATERIAL. (APPROX. PROPORTION 50/50)

- OPSS 1010-SAND
- OPSS 1004 Ø3/4" CLEAR STONE

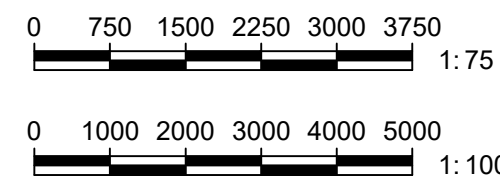
#### STEP 6

DEPOSIT A LAYER OF APPROXIMATELY 500 mm OF THE FOLLOWING MATERIAL

- OPSS 1004-R50

#### STEP 7

ANCHOR THE GEOTEXTILE AND GEOMEMBRANE TO THE UPSTREAM FACE OF THE APRON (SEE NOE 5)



Public Services and Procurement Canada  
Services publics et Approvisionnement Canada

Ontario Region  
Heritage Canals and Engineering Works  
Région de l'Ontario  
Canaux historiques et travaux d'ingénierie

Parks  
Canada

Canada

CIMA+

Contract No. Drawing Code Serial Rev.  
HS00243 210 41DD 0201 0

#### NOTES:

- FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS SEE DRAWING 002.
- NO DIVERS ALLOWED UNTIL STEP 6 HAS BEEN COMPLETED.
- CONSIDERATION SHOULD BE GIVEN TO USING DIVING CAGES TO ENSURE DIVER SAFETY.
- CONTRACTOR MUST CONSULT VIDEO SURVEYS, GEOTECHNICAL REPORTS AND INVESTIGATION REPORTS PERTAINING TO THE VOIDS BEFORE UNDERTAKING THE WORKS. DIMENSIONS AND LOCALIZATION SHOWN IN REPORTS AND DRAWINGS ARE APPROXIMATE. CONTRACTOR MUST ADAPT WORK METHODS BASED ON THEIR UNDERSTANDING OF THE VOIDS AND ON CONDITIONS ENCOUNTERED ON SITE AS THE WORK IS CARRIED OUT.
- AT ALL TIMES DURING THE WORK, THE CONTRACTOR SHALL BE FULLY AND SOLELY RESPONSIBLE FOR THE SAFETY OF THE DIVERS.

0 FOR TENDER C.GP 05/13/2020

No. Description By Date

Revision / Révision

Do not scale drawings.  
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A Detail number  
Numéro du détail  
B Location dwg. number  
Numéro sur dessin

Professional Stamp

Project title / Titre du projet

TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

TEMPORARY WORKS  
PHASE 1  
VOID TREATMENT  
PLAN AND SECTIONS

Drawn by / Dessiné par

H. BOIVIN C. GAZARIAN PAGÉ P.Eng.

Verified by / Vérifié par

Y. BERTON P.Eng. S. VITTECOQ P.Eng.

Drawing Date / Date du dessin

05/13/2020

Project Number / Numéro du projet

R.076951.705

Drawing Number/  
Numéro du Dessin  
201

Sheet  
Feuille 1 of 1

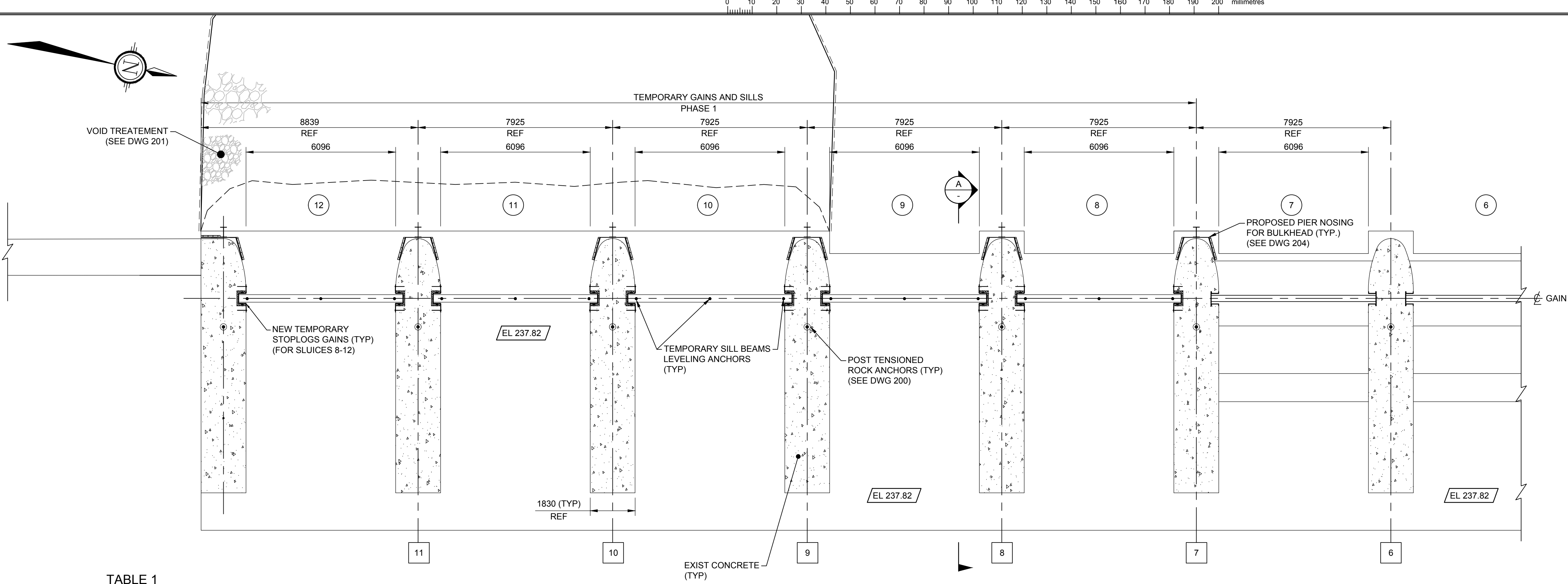


TABLE 1

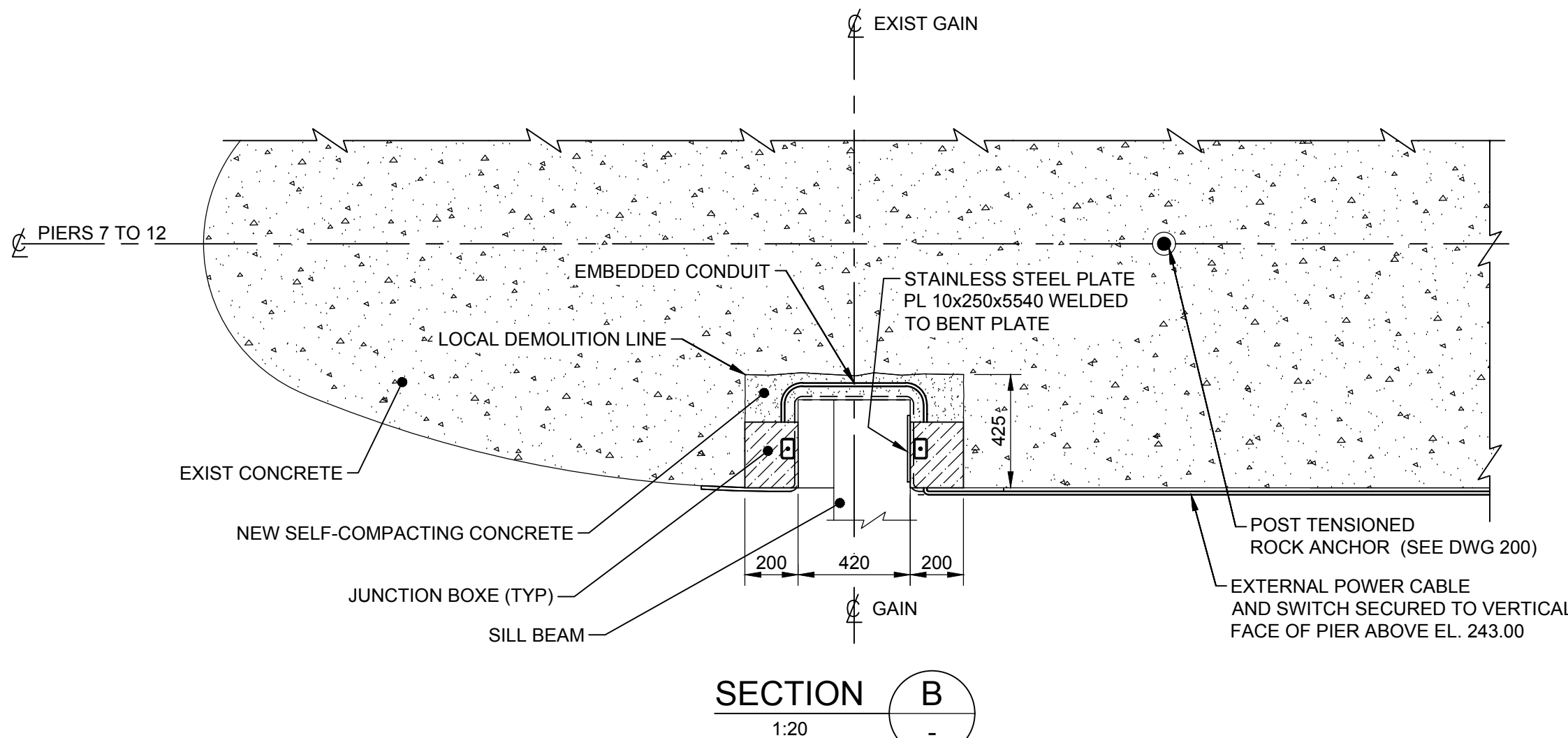
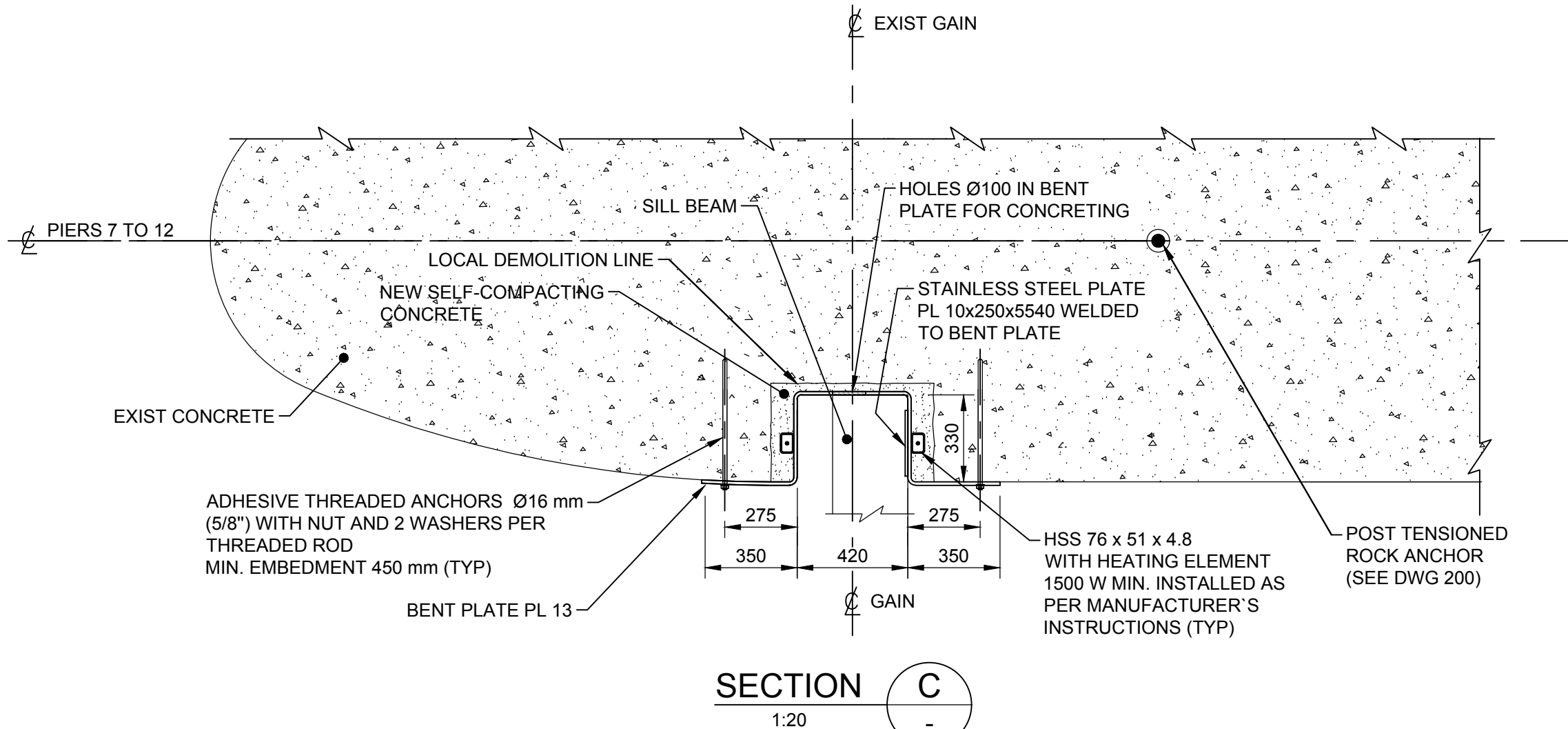
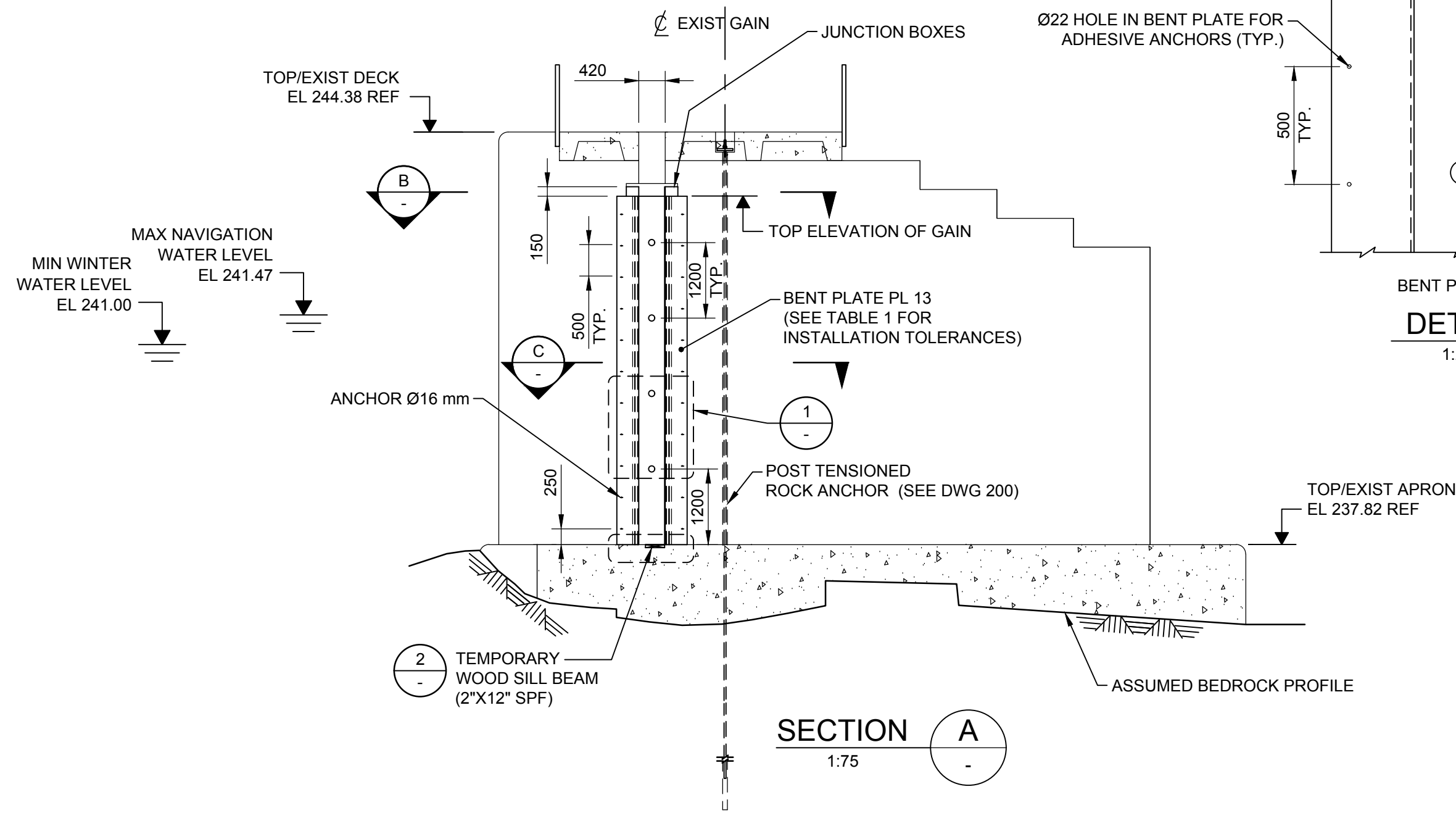
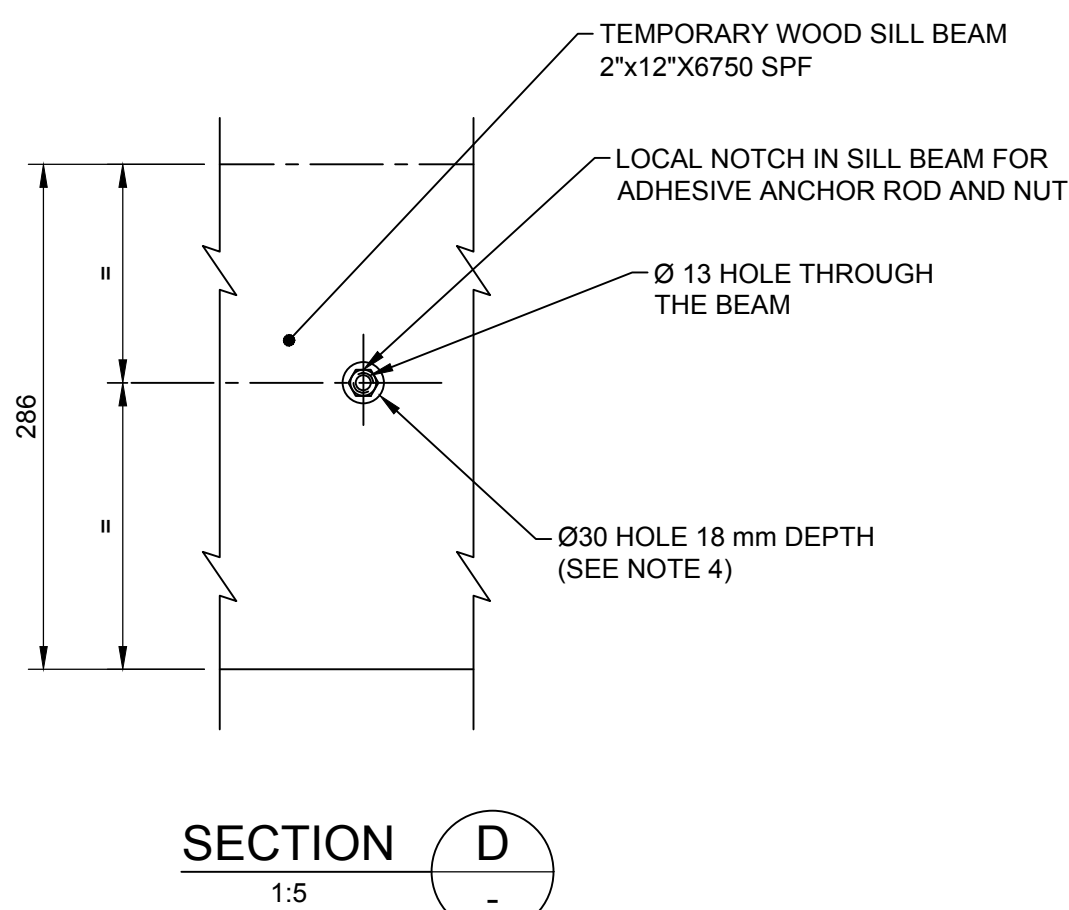
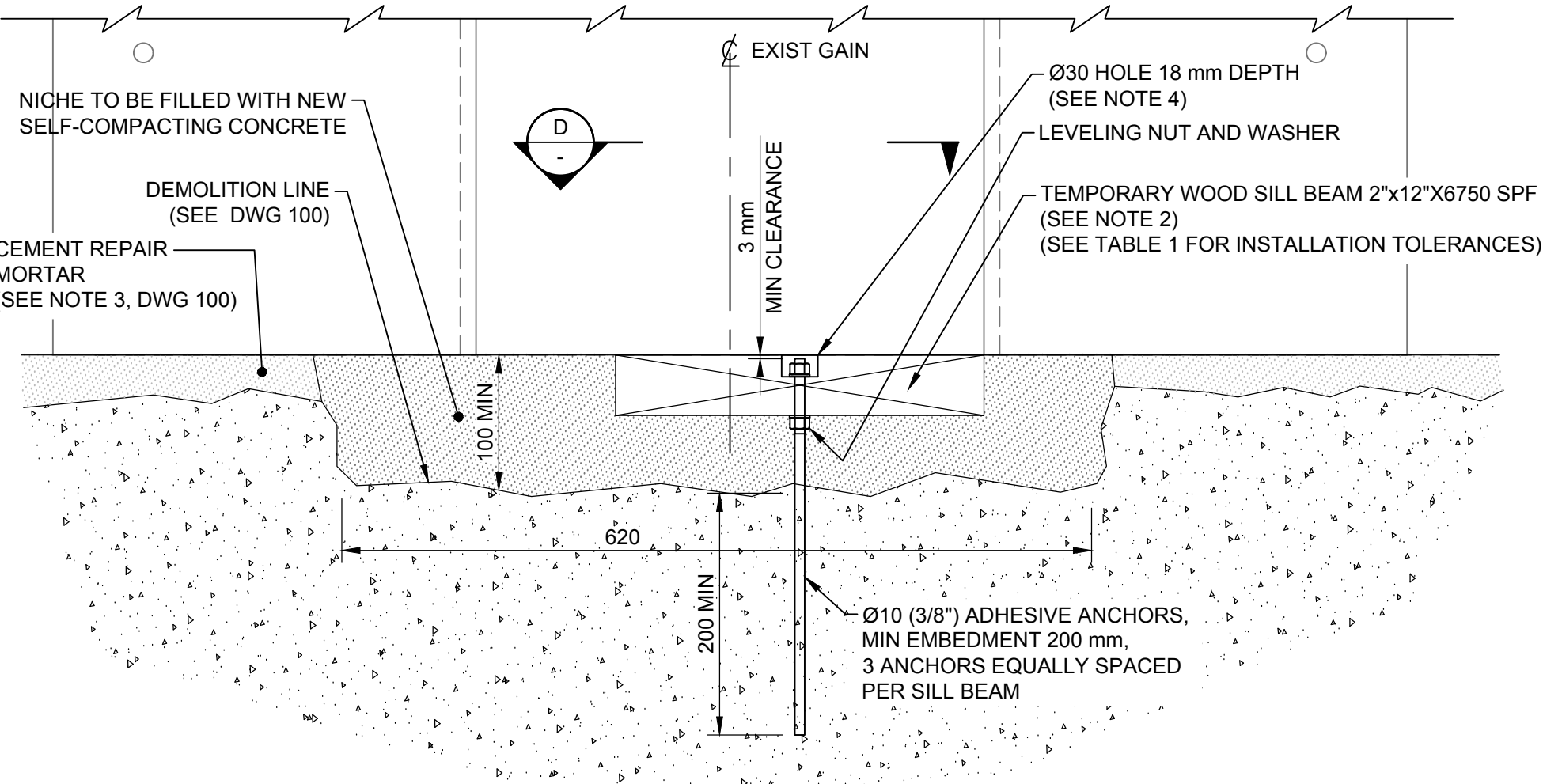
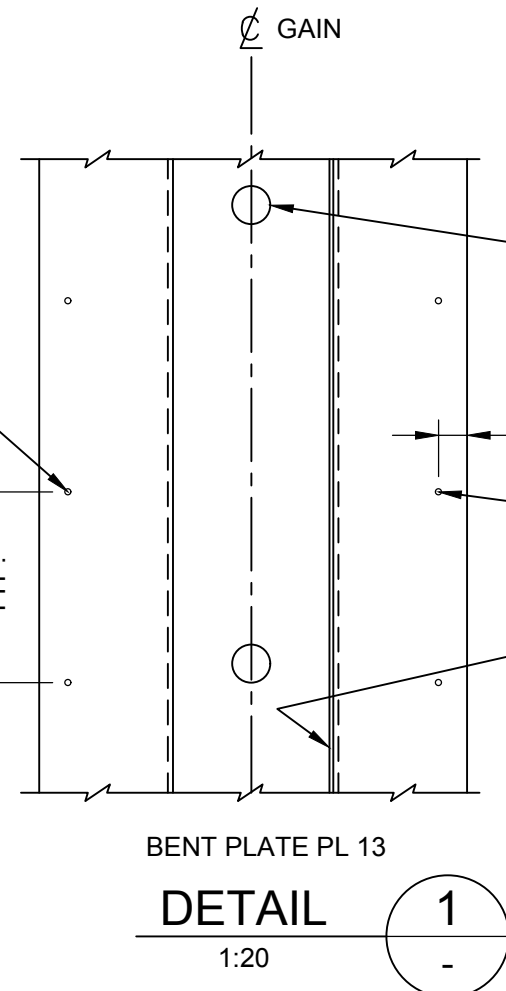
FINAL TOLERANCES AFTER INSTALLATION OF THE TEMPORARY STOPLOG EMBEDDED PARTS				
EMBEDDED PARTS	POSITION OR DIMENSION (mm)	VERTICALITY - T (mm/HEIGHT)	HORIZONTALITY - T (mm/LENGTH)	STRENGTHNESS - T (mm/m)
SILL BEAMS SEALING SURFACES	±2.0 (*)	-	2.0 (**)	1.0 / 2.0
LATERAL GUIDES SEALING SURFACE	±2.0 (*)	2.0	-	1.0 / 2.0

(\*) THE POSITION TOLERANCES ARE ESTABLISHED WITH RESPECT TO THE AXES OF THE OPENING AND SHALL BE RESPECTED THROUGHOUT THE ENTIRE LENGTH OF THE EMBEDDED PARTS.

(\*\*) THIS TOLERANCE APPLIES TO THE LONGITUDINAL AND TRANSVERSAL DIRECTIONS.

PLAN AT EL 238.00

1:100



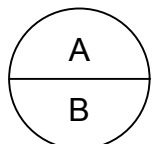
Contract No.	Drawing Code	Serial	Rev.
HS00243	210	41DD	0202 0

NOTES:

- FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS SEE DRAWING 002.
- TOP OF TEMPORARY WOOD SILL BEAM TO BE FLUSH WITH EXISTING SILL.
- CONTRACTOR TO DESIGN AND INSTALL TEMPORARY GAIN HEATERS ON SLUICES 8 TO 12 FOR USE DURING PHASE 2 OF WORKS.
- ELEMENTS ON BOTH SIDES OF STOP LOG GAINS FOR A TOTAL OF 20 ELEMENTS.
- 1.5 KW MINIMUM PER ELEMENT.
- SYSTEM MUST HAVE THE CAPACITY TO SWITCH ON AND OFF EACH SLUICE INDIVIDUALLY.
- SWITCHES/PANELS TO BE LOCATED ON THE DECK OR AT NORTH ENTRANCE OF THE DECK. PANEL NOT TO INTERFERE WITH LOG OPERATIONS AND STORAGE.
- POWER CABLES TO BE INSTALLED UNDER THE DECK AT DOWNSTREAM OR UPSTREAM SIDE. CABLES SHALL BE INSTALLED IN PVC CONDUIT OR USE JACKETED & ARMoured (e.g. TECK/ACWU) CABLES.
- SYSTEM TO INCLUDE GROUND FAULT DETECTION.
- SYSTEM MUST NOT INTERFERE WITH OPERATION LOGS.
- CONTRACTOR TO ASSUME POWER COST.
- INSTALL TO CODE FOR TEMPORARY INSTALLATIONS.
- OBTAIN ESA APPROVAL PRIOR TO ENERGIZING.
- PROVIDE PCA WITH SHORT TRAINING ON OPERATION AND SHORT OPERATING MANUAL WITH PICTURES OF ACTUAL CONTROL PANEL (OPERATION OF HEATER UPON RESPONSABILITY).
- SYSTEM SHOWN ON DRAWING IS FOR INFORMATION PURPOSE ONLY FOR CONTRACTOR TO DESIGN A TEMPORARY HEATING SYSTEM.
- FOLLOWING SILL BEAM INSTALLATION, FILL HOLE WITH SILICONE BASED MATERIAL.

No.	Description	By	Date
0	FOR TENDER	C.GP	05/13/2020
Revision / Révision			

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

Professional Stamp

Project title / Titre du projet

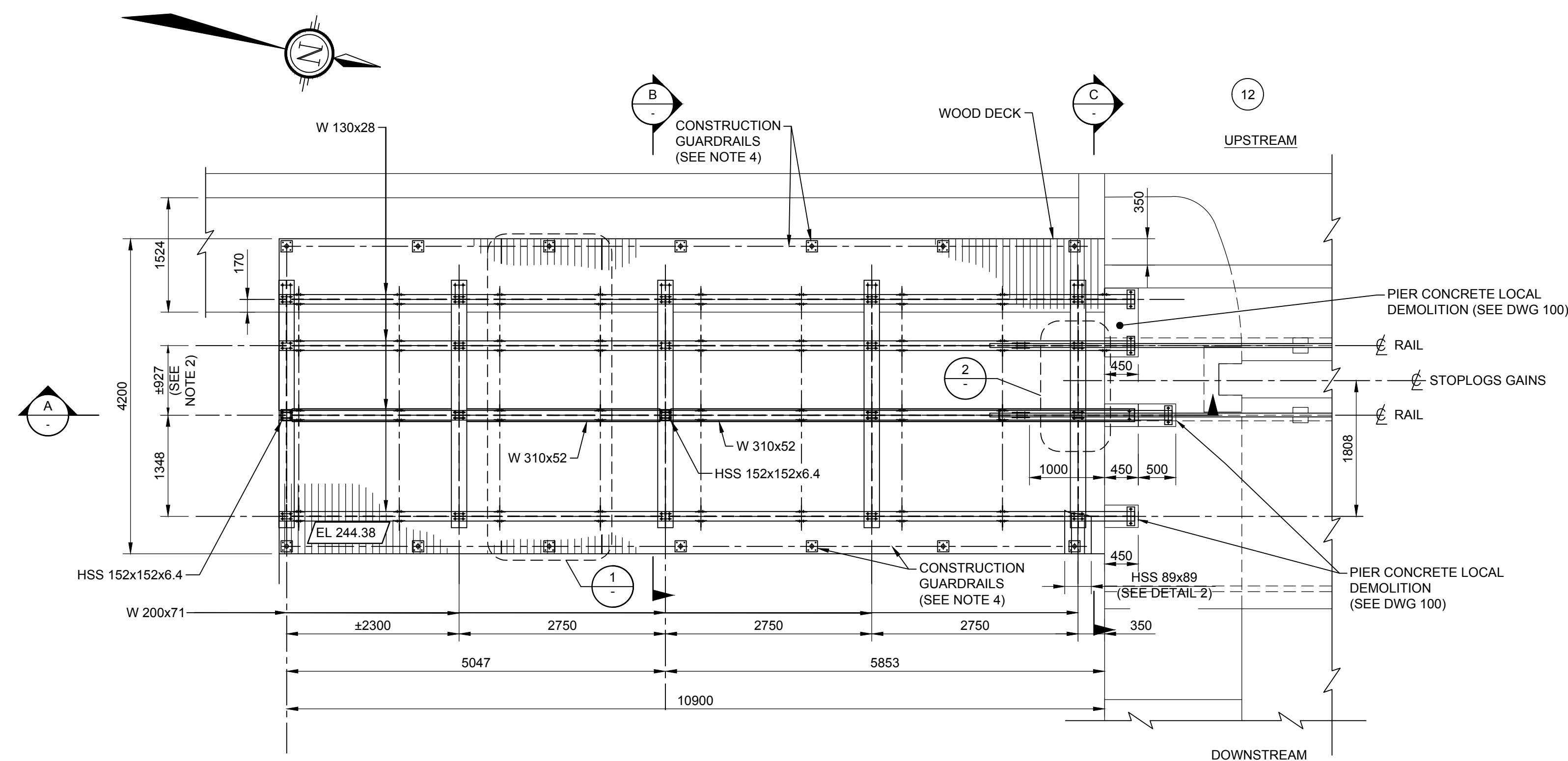
TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

Drawing title / Titre du dessin

TEMPORARY WORKS  
PHASE 1  
STOPLOG GAIN AND SILLS  
PLAN, SECTIONS AND DETAIL

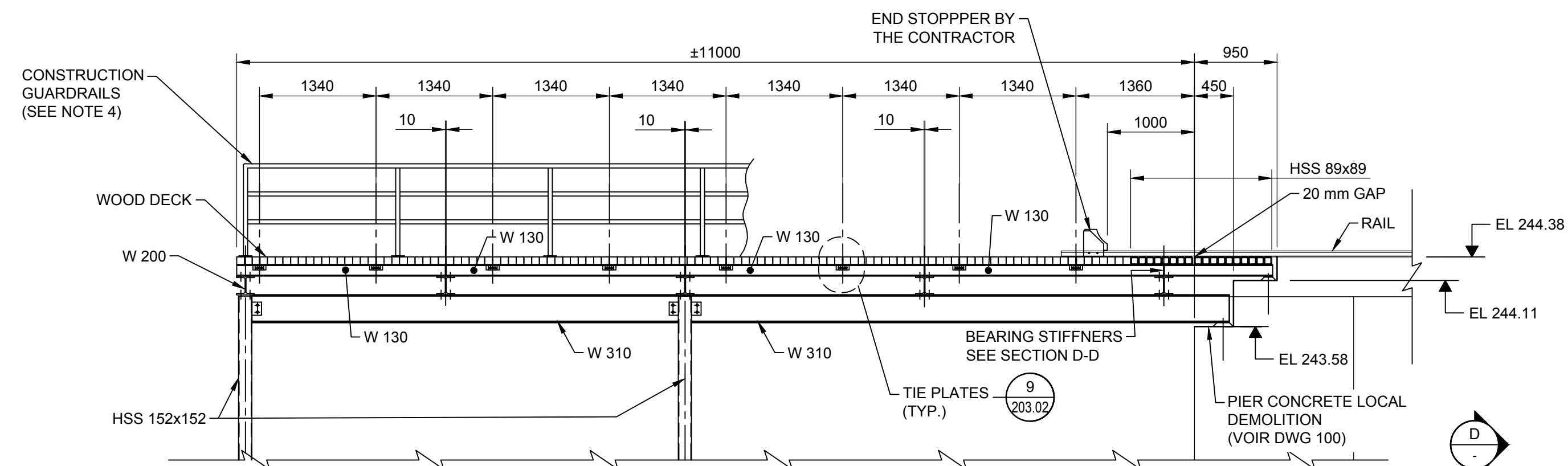
Drawn by / Dessiné par H. BOIVIN	Designed by / Conçu par F. GOMES MESTRINER EIT
Verified by / Vérifié par C. GAZARIAN PAGÉ P.Eng.	Approved by / Approuvé par S. VITTECOQ P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number/ Numéro du Dessin 202
Project Number / Numéro du projet R.076951.705	Sheet Feuille 1 of 1





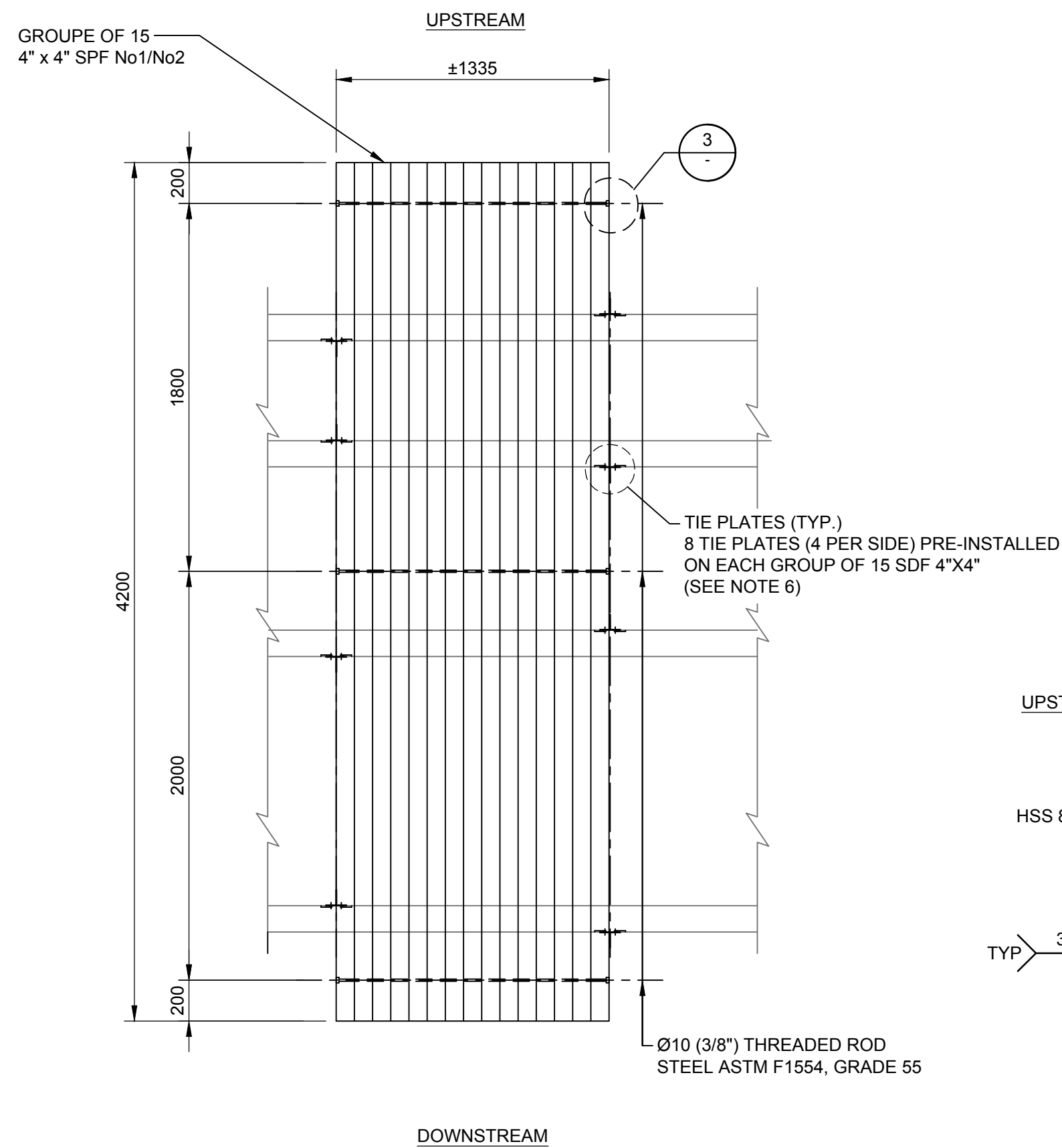
PLAN NIV. 244.38

1:50



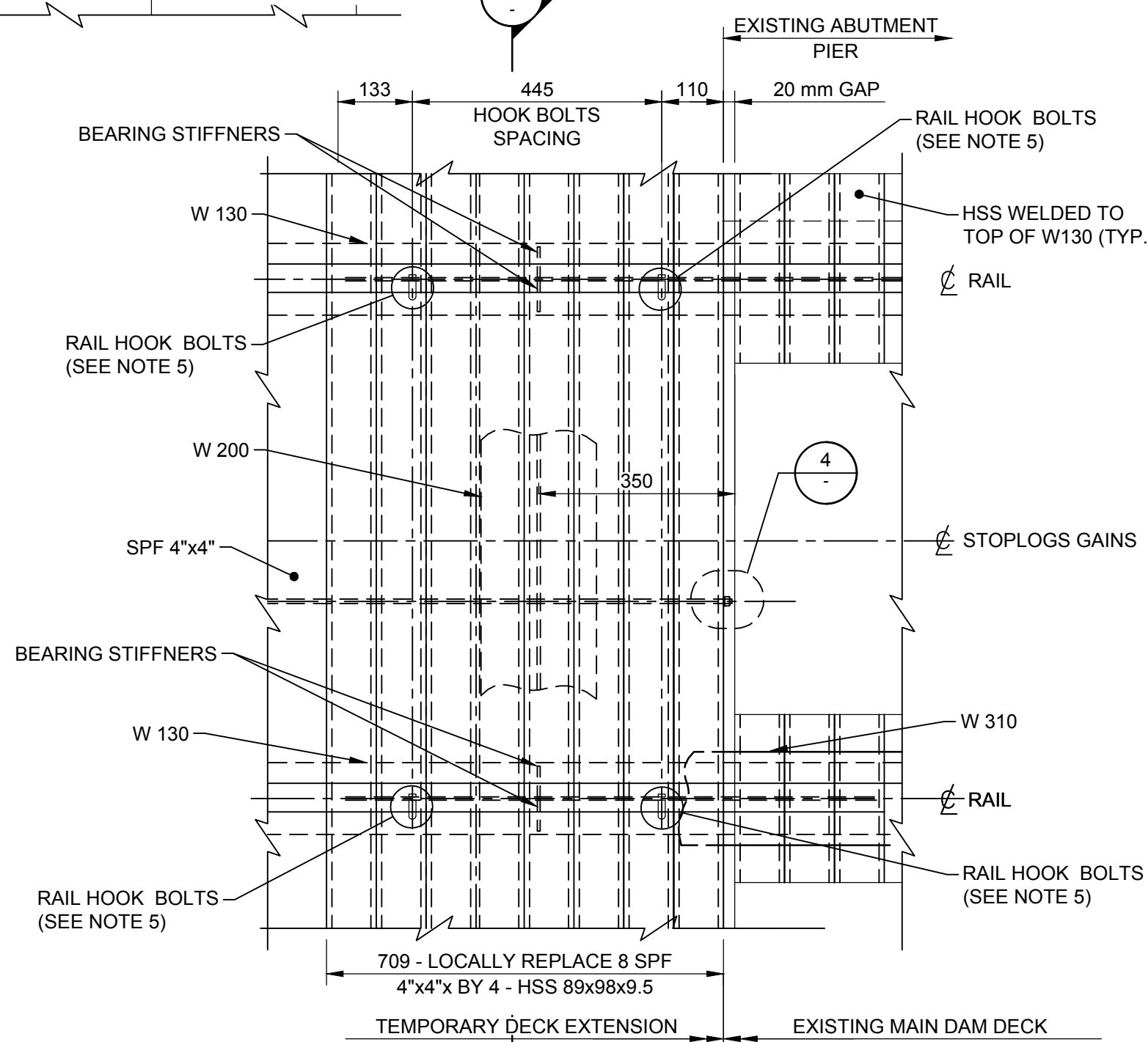
SECTION A

1:50



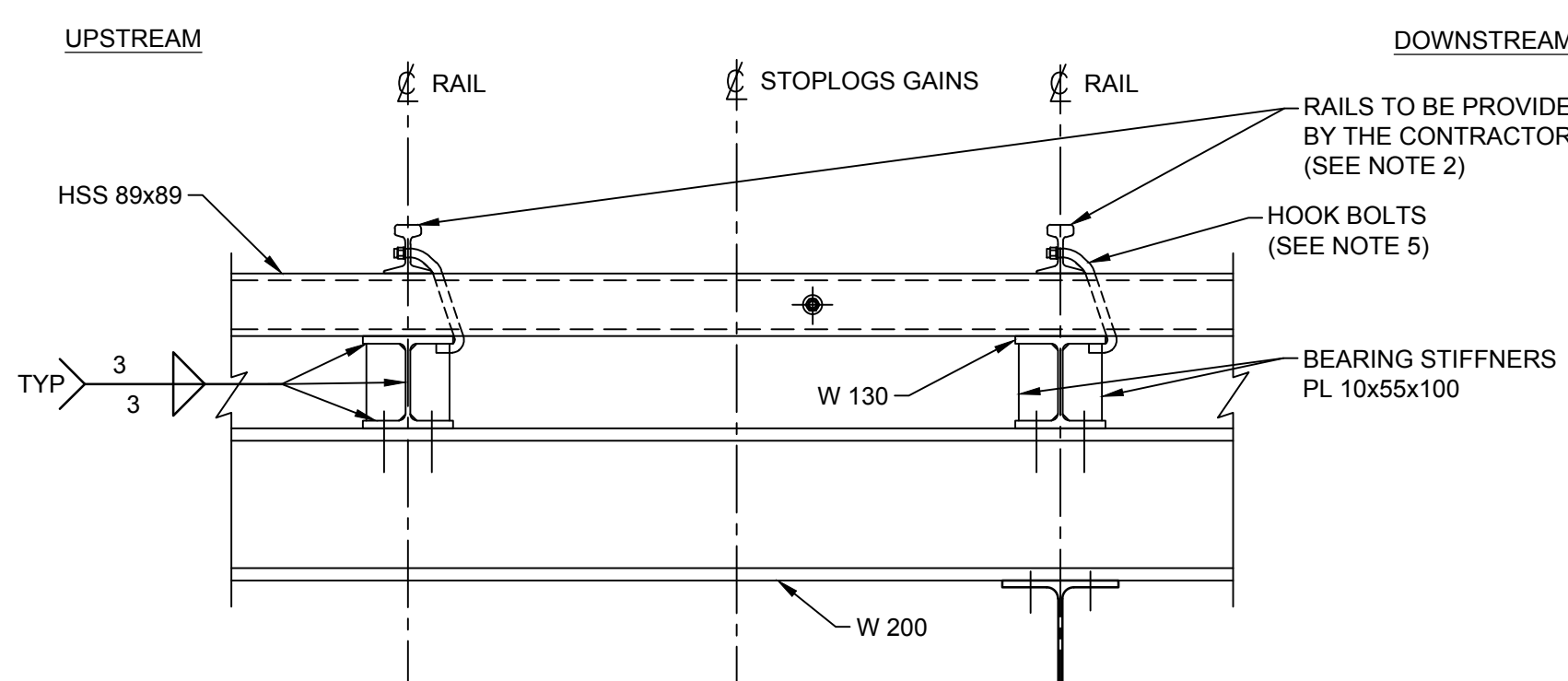
DETAIL 1

1:25



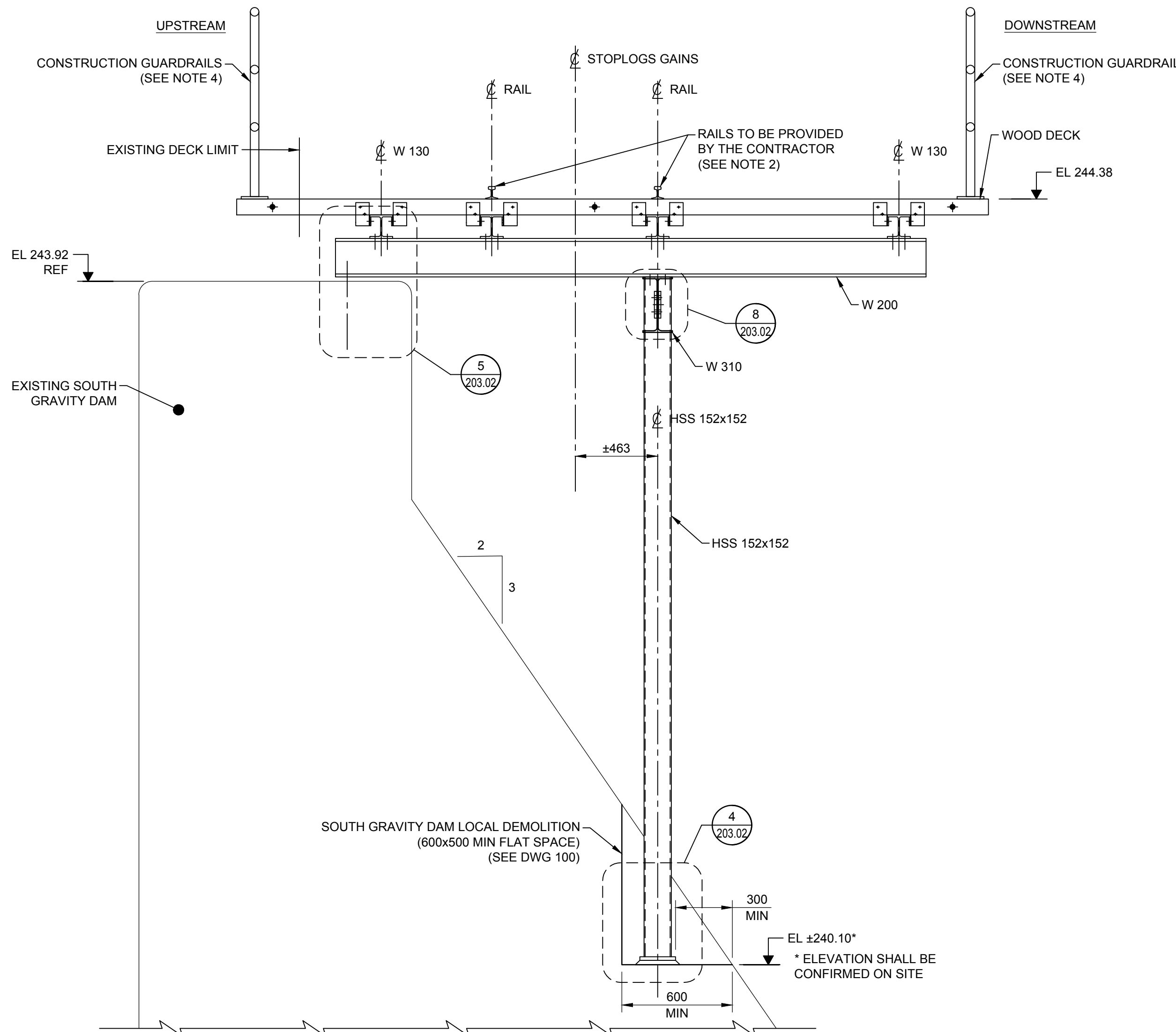
DETAIL 2

1:10



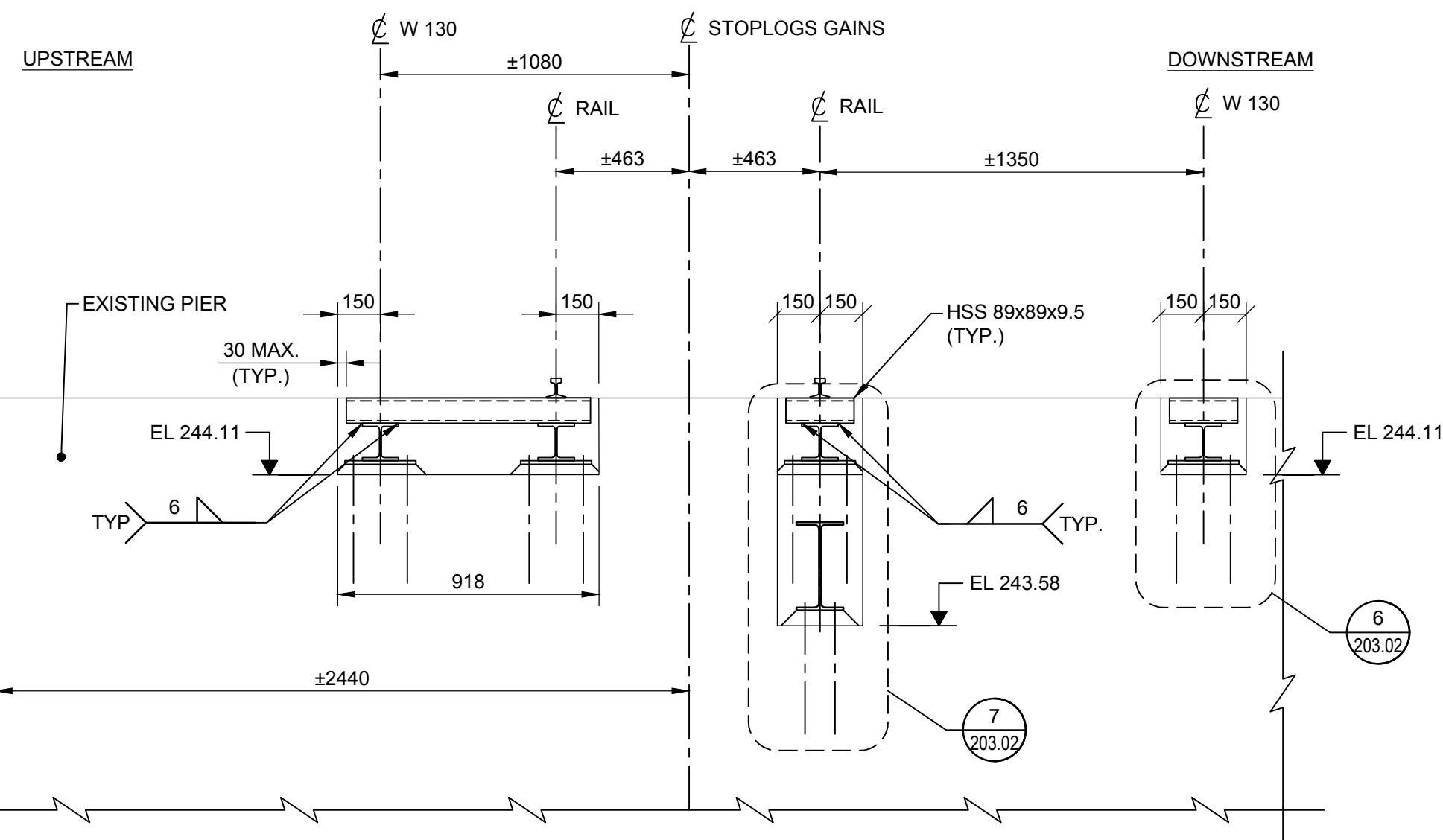
SECTION D

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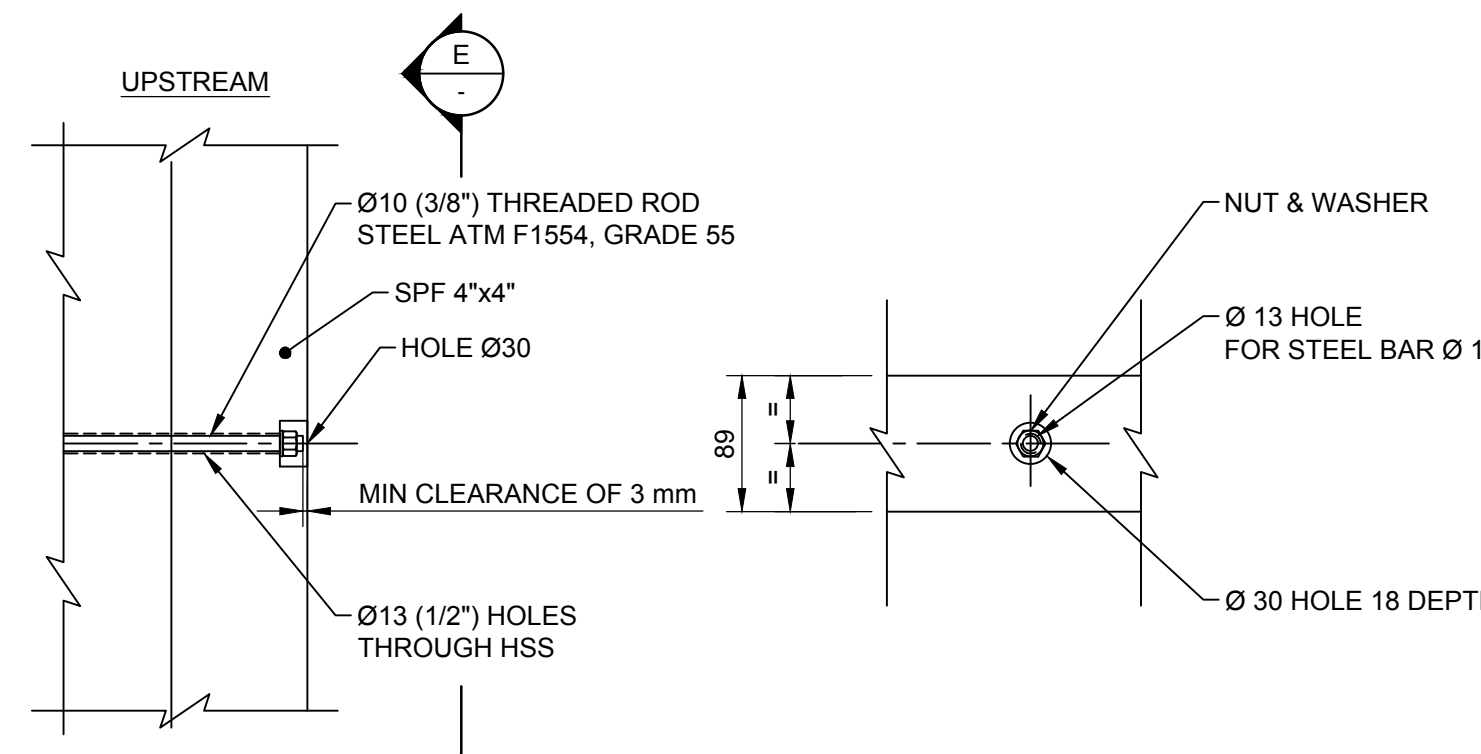
SECTION B

1:20



SECTION C

1:20

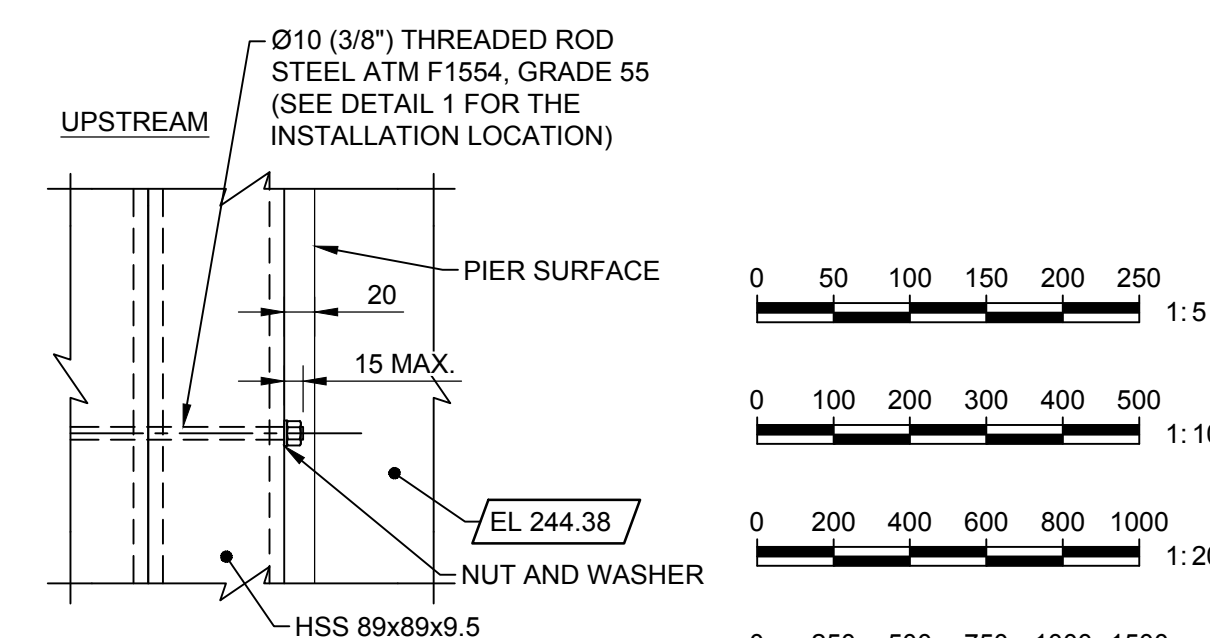


DETAIL 3

1:5

SECTION E

1:5



DETAIL 4

1:5

Contract No.	Drawing Code	Serial	Rev.
HS00243	210	41DD	1203

NOTES:

- FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS SEE DRAWING 002.
- TOP ELEVATION AND ALIGNMENT OF PROVIDED RAILS TO MATCH THE EXISTING RAILS ON MAIN DAM TO ENSURE A CONTINUOUS RAILWAY FOR THE LOG-LIFTER. REFER TO SPECIFICATIONS SECTION 34.11.13 FOR RAIL INSTALLATION TOLERANCES.
- THE STRUCTURAL DESIGNING OF THE DECK IS BASED ON THE LOG-LIFTER LOADS SHOWN IN DWG 307.03 AND A UNIFORM LIVE LOAD OF 4.8 KPa.
- CONSTRUCTION GUARDRAILS TO OSHA INDUSTRIAL STANDARD TO BE PROVIDED BY THE CONTRACTOR.
- RAIL HOOK BOLTS TO BE PROVIDED BY THE CONTRACTOR TO BE CONNECTED TO THE W130 FLANGE AT THE INDICATED LOCATION.
- EACH GROUP OF 15 SPF 4"x4" TO BE CONNECTED TO EACH OF THE W130 ON BOTH SIDES - 8 CONNECTIONS TOTAL PER GROUP OF 15 SPF 4"x4".


0	FOR TENDER	C.GP	05/13/2020
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No.	Description	By	Date

Revision / Révision

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Professional Stamp

Project title / Titre du projet

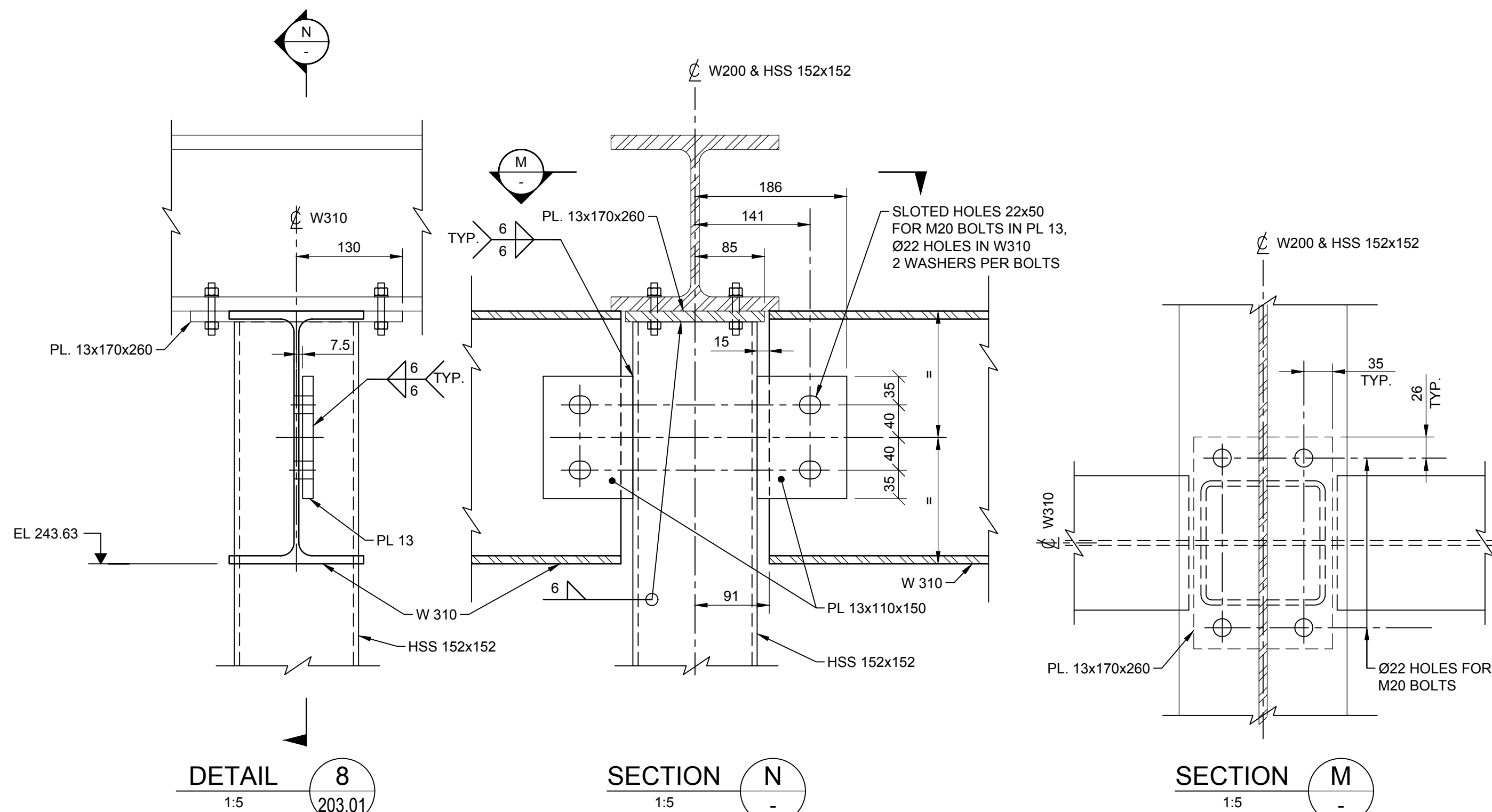
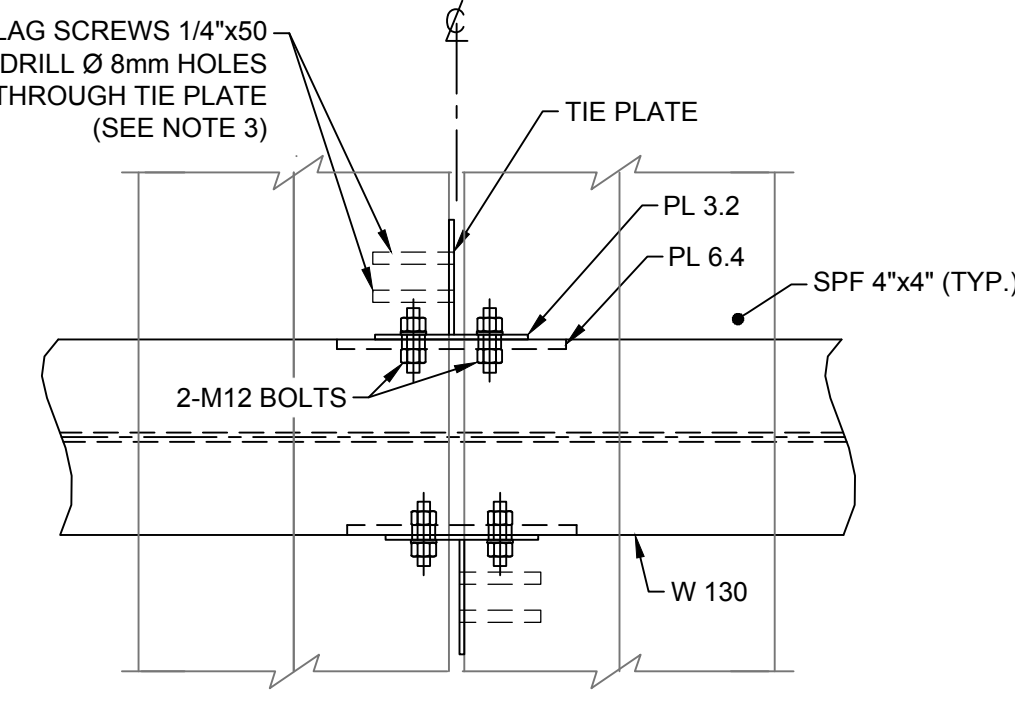
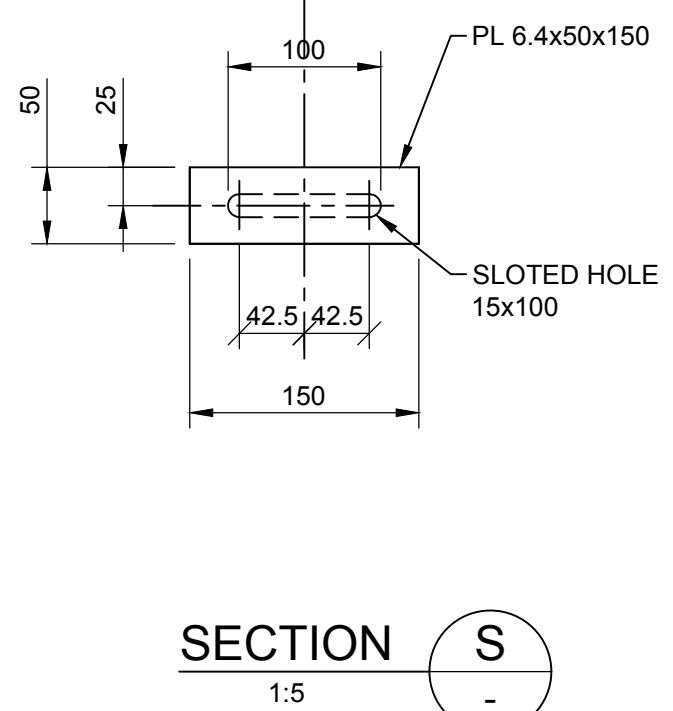
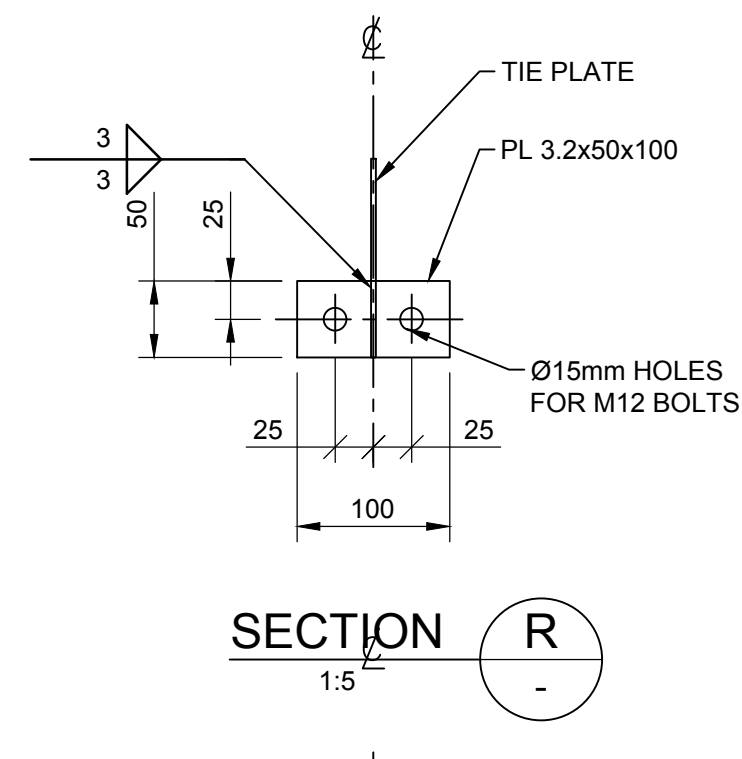
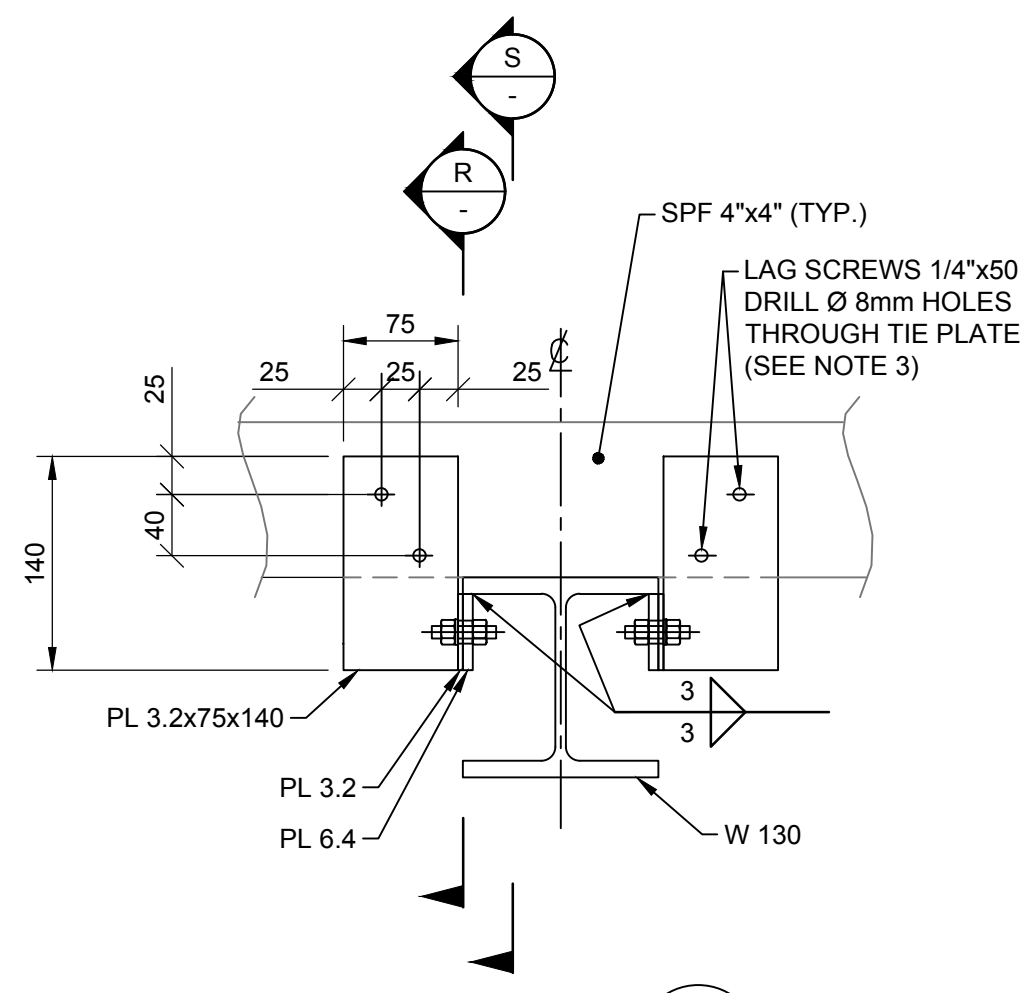
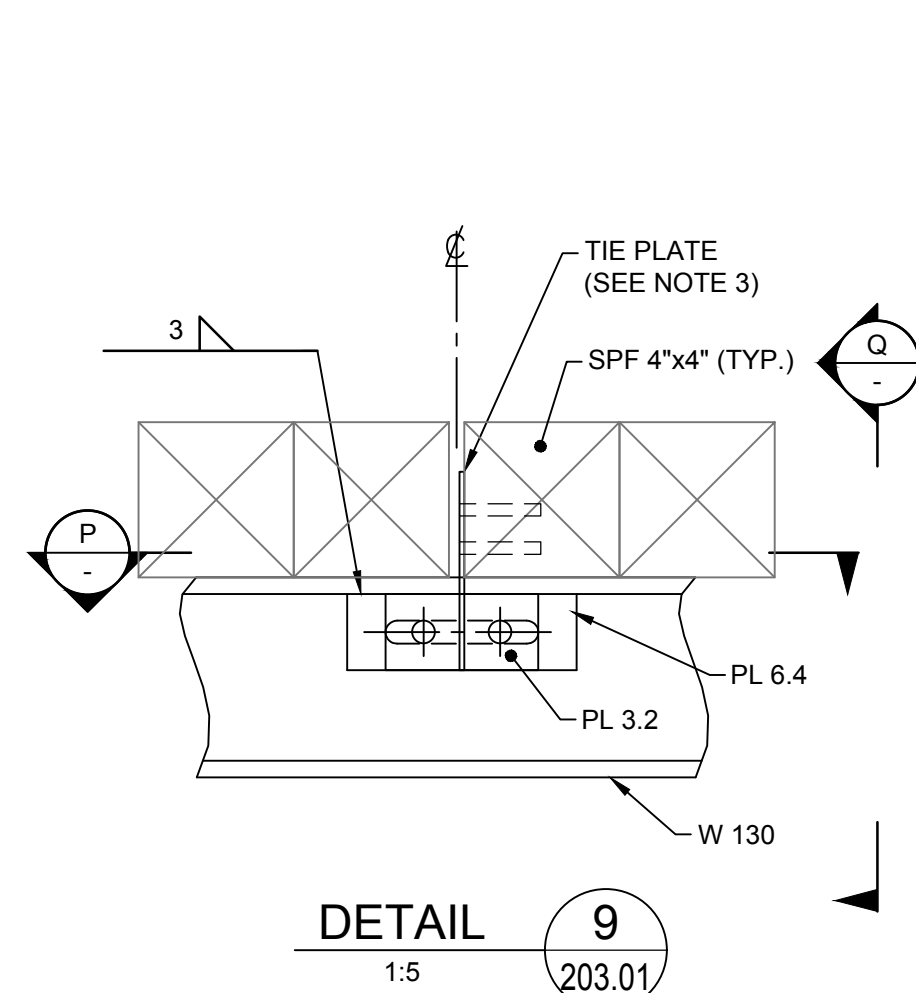
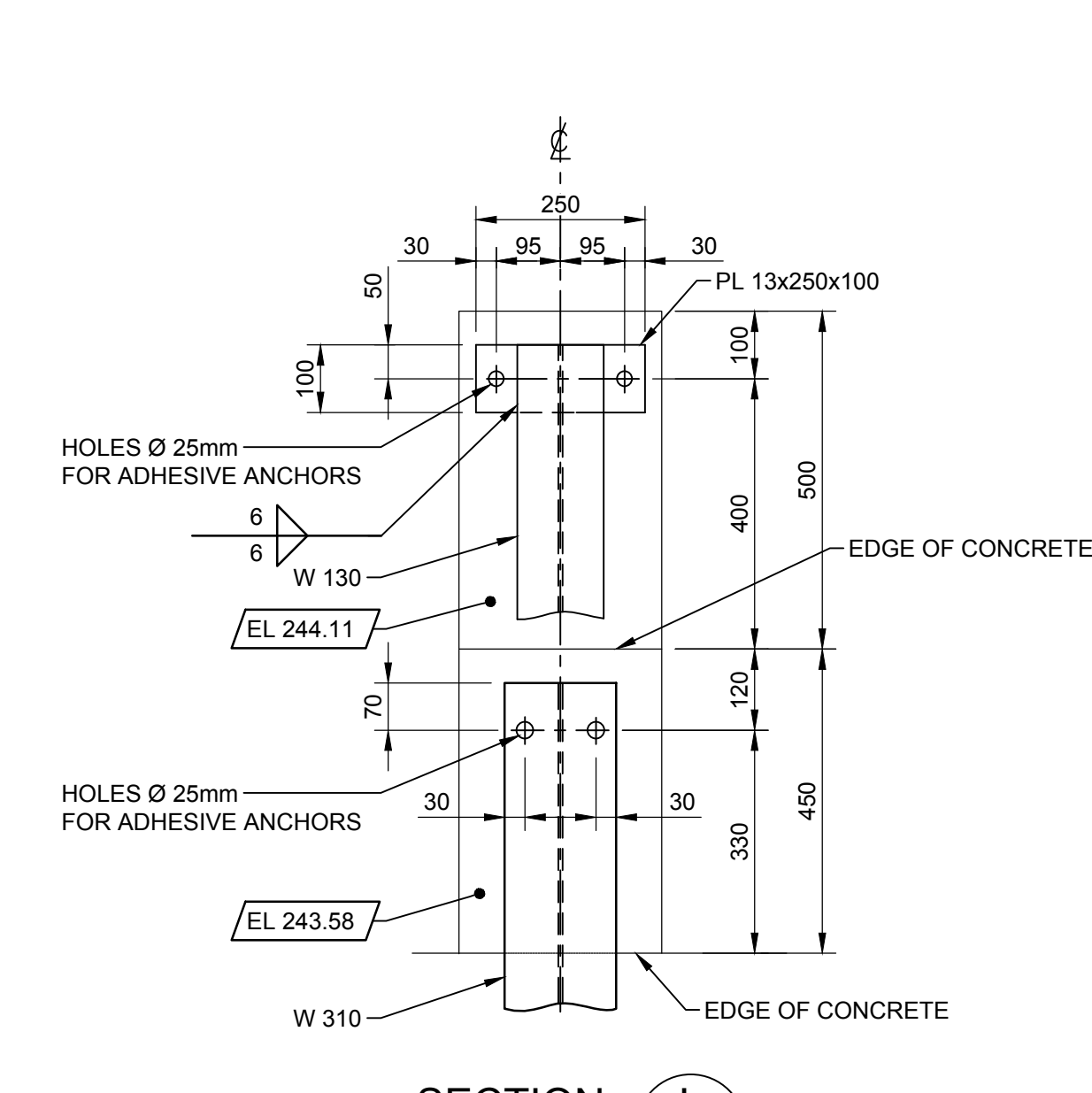
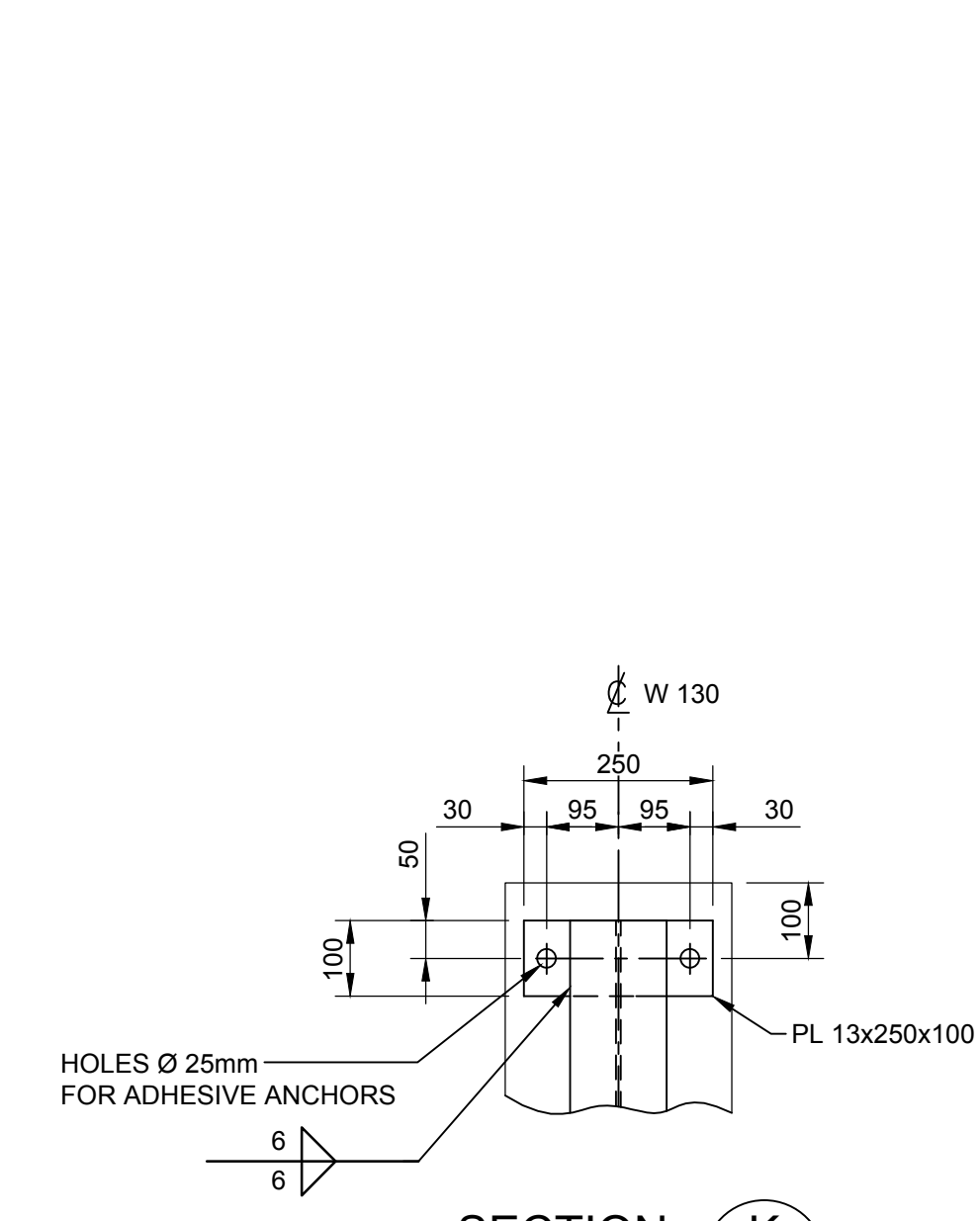
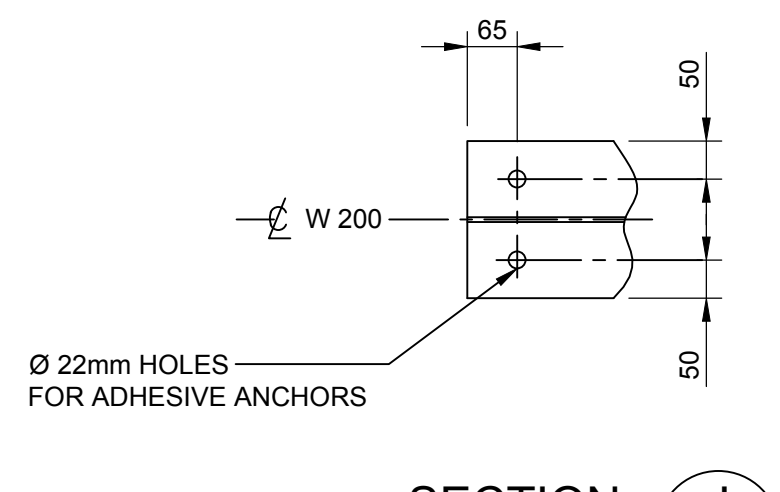
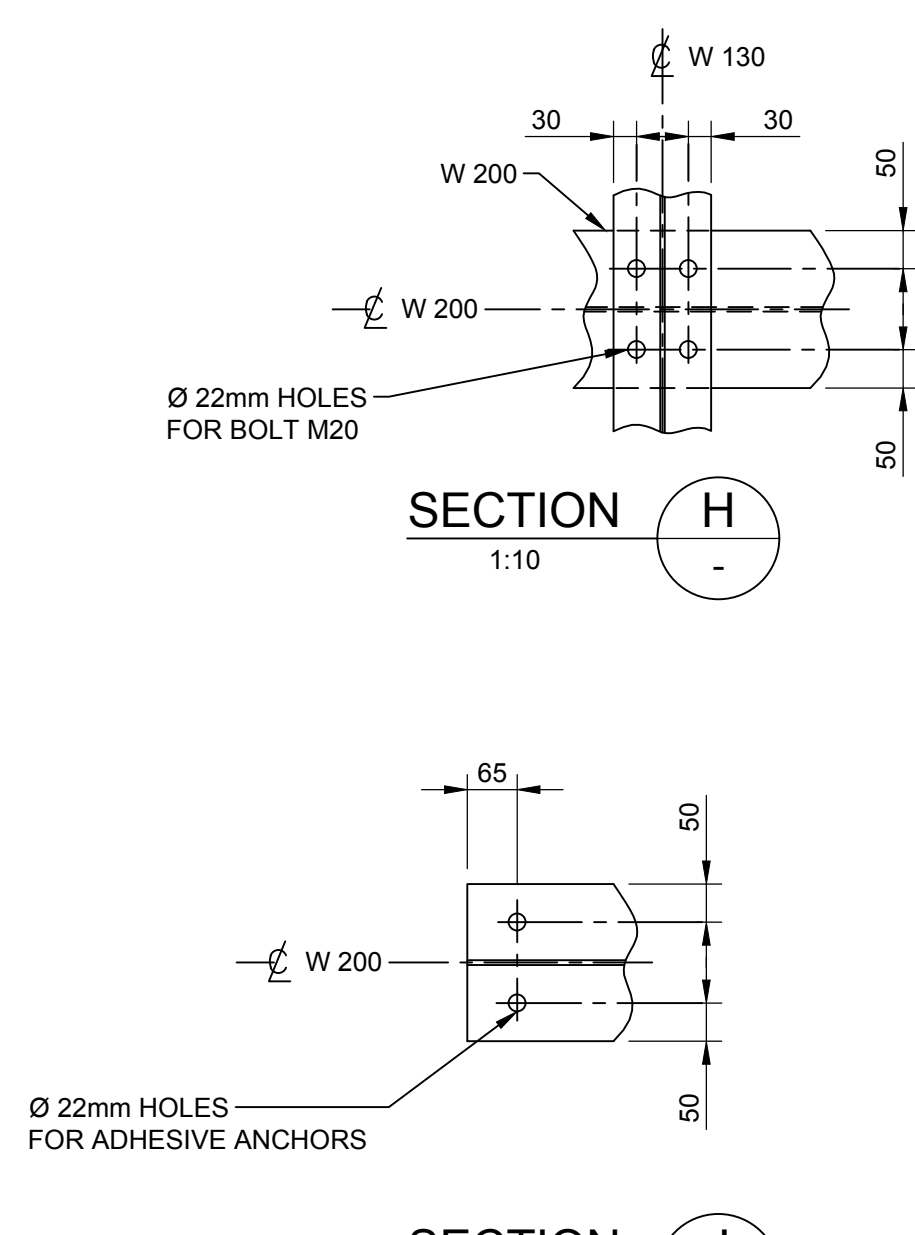
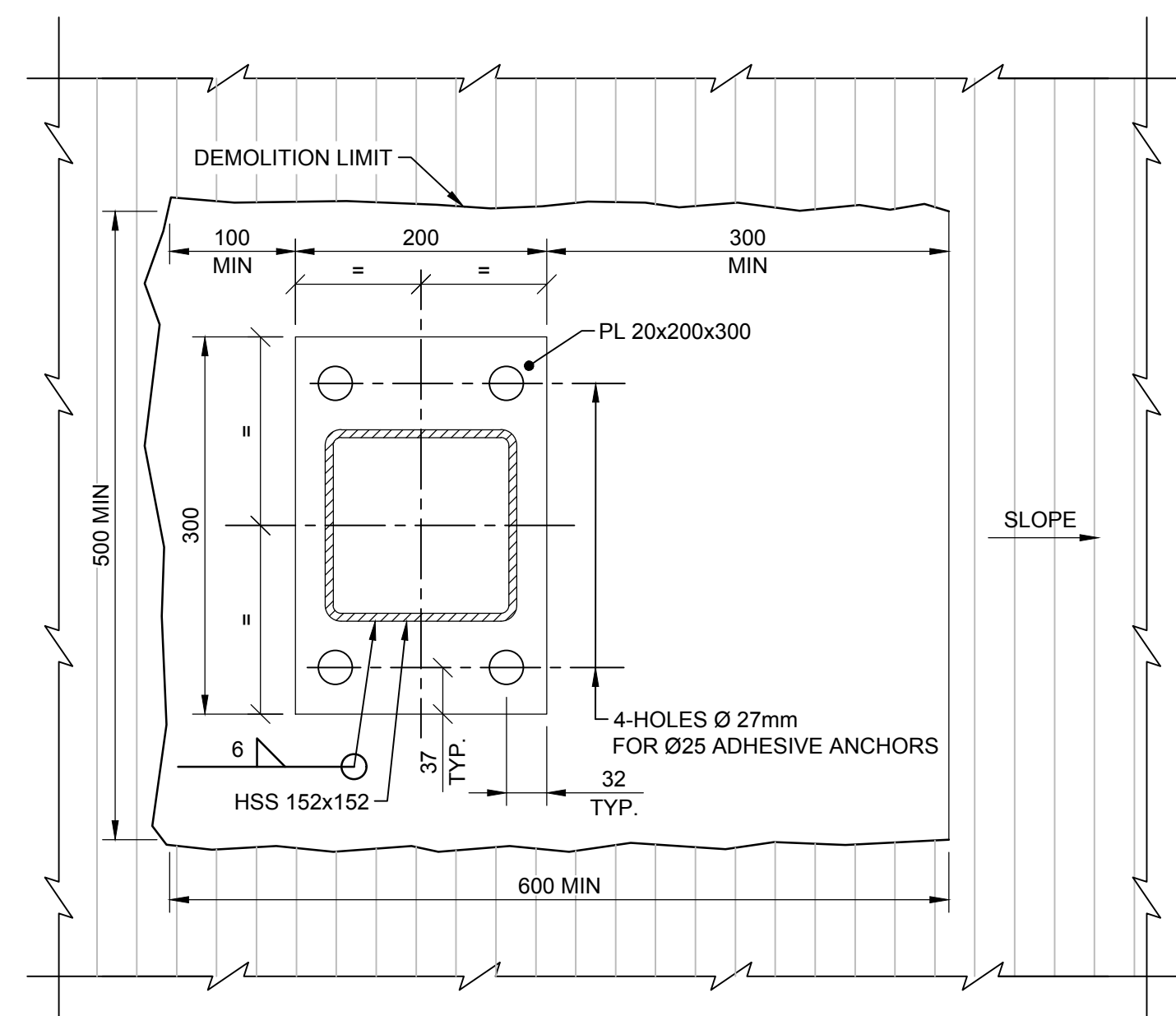
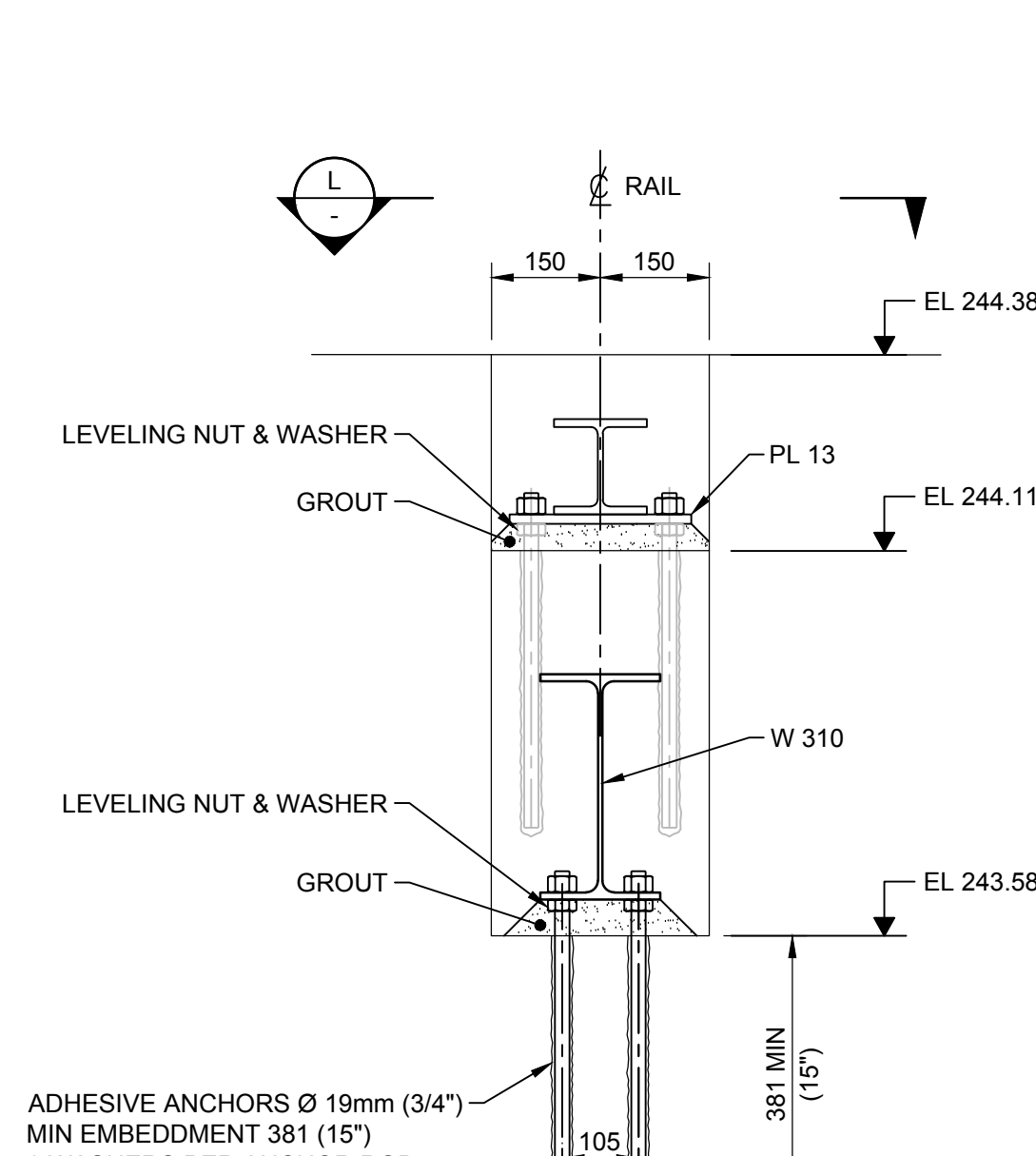
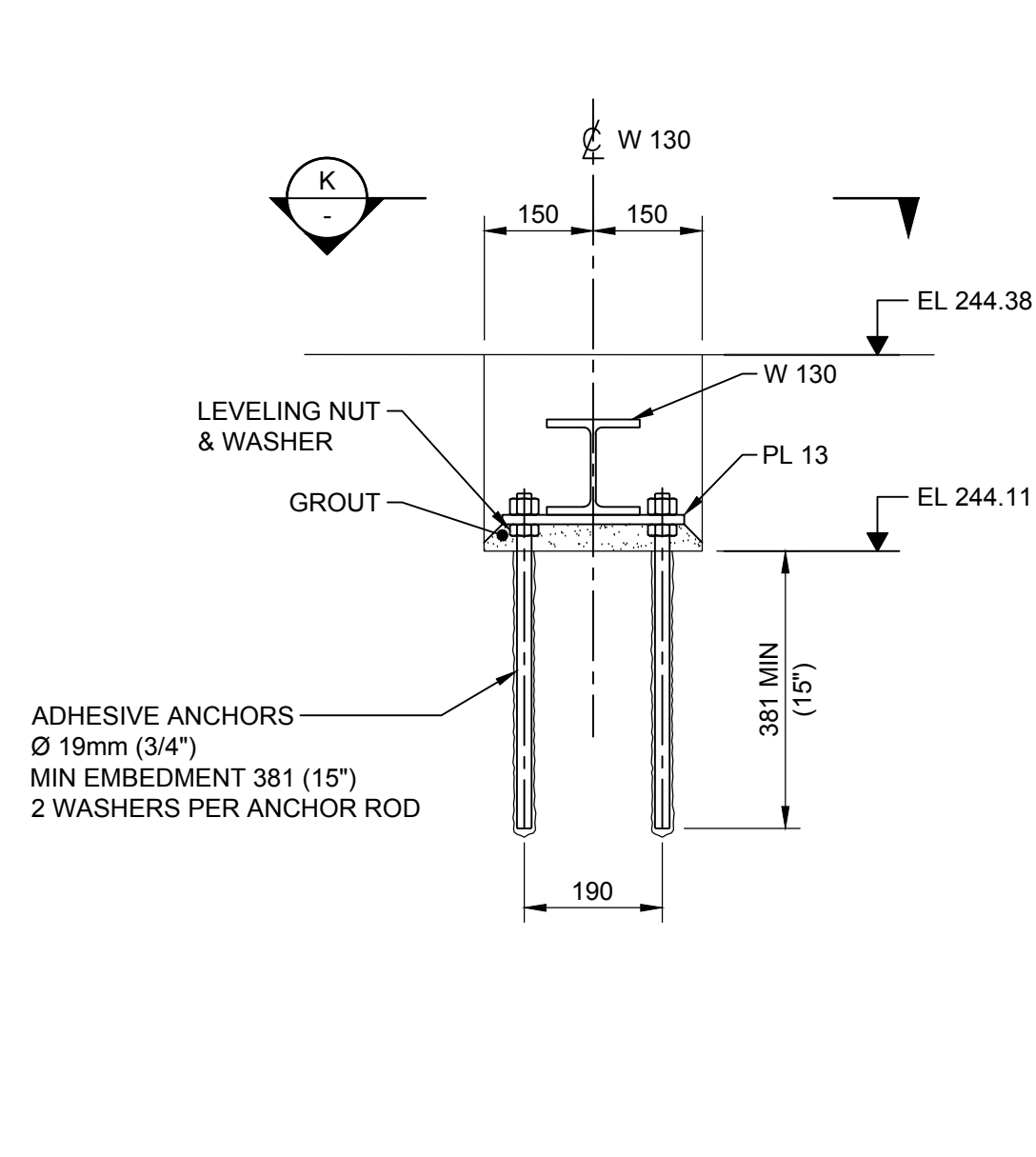
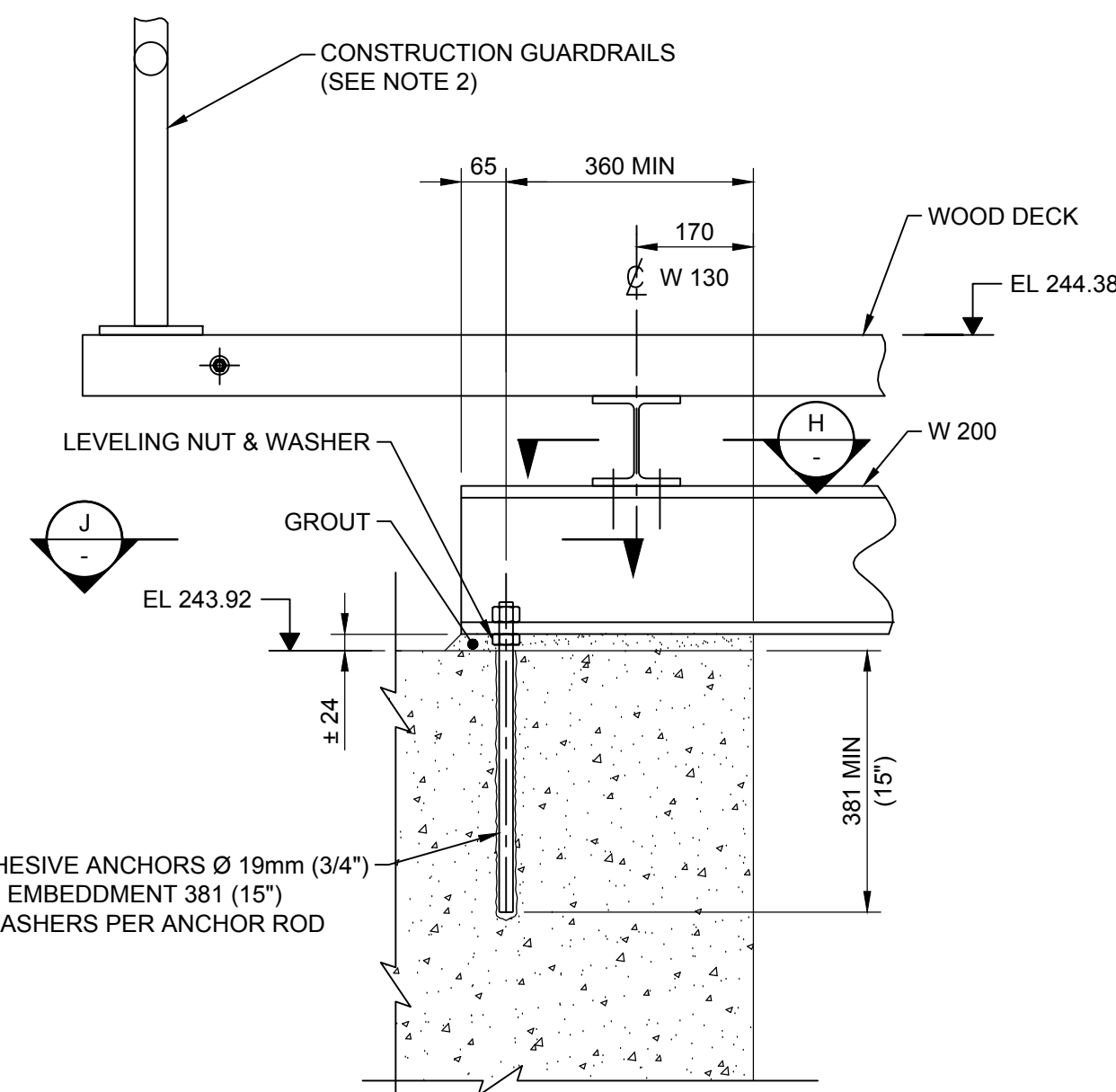
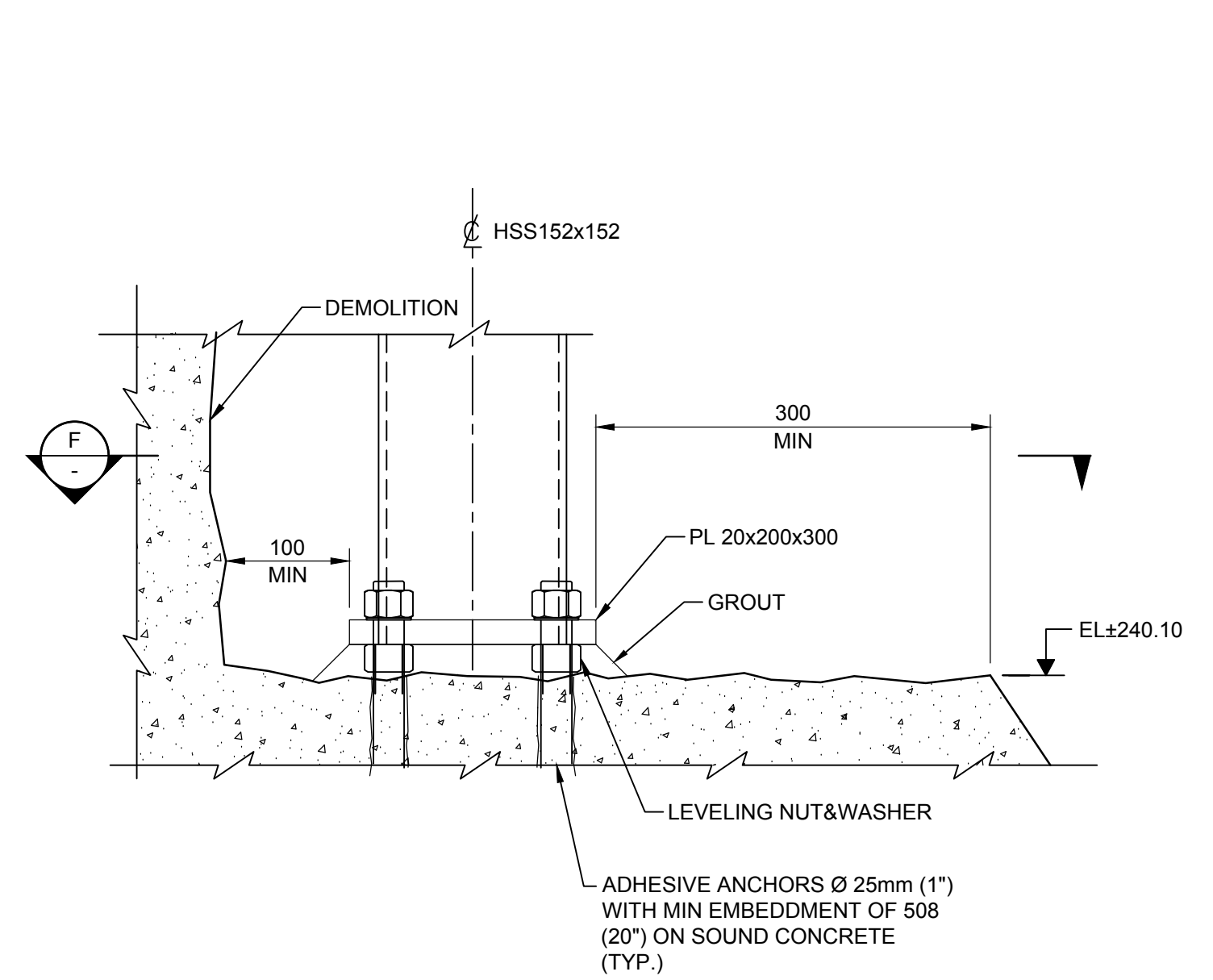
TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

Drawing title / Titre du dessin

TEMPORARY WORKS  
PHASE - 1  
DECK EXTENSION  
PLAN, SECTIONS AND DETAILS

Drawn by / Dessiné par	Designed by / Conçu par
H. BOIVIN	F. GOMES MESTRINER
Verified by / Vérifié par	Approved by / Approuvé par
C. GAZARIAN PAGÉ	S. VITTECOQ
Drawing Date / Date du dessin	Drawing Number / Numéro du dessin
05/13/2020	203
Project Number / Numéro du projet	Sheet / Feuille
R.076951.705	1 of 2





Contract No.	Drawing Code	Serial	Rev.
HS00243	210	41DD	2203 0

NOTES:

- FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS SEE DRAWING 002.
- CONSTRUCTION GUARDRAILS TO OSHA INDUSTRIAL STANDARD TO BE PROVIDED BY THE CONTRACTOR.
- EACH GROUP OF 15 SPF 4"x4" TO BE CONNECTED TO EACH OF THE W130 ON BOTH SIDES - 8 CONNECTIONS TOTAL PER GROUP OF 15 SPF 4"x4".

No.	Description	By	Date
0	FOR TENDER	C.GP	05/13/2020

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

Professional Stamp

Project title / Titre du projet

TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

Drawing title / Titre du dessin

TEMPORARY WORKS  
PHASE - 1  
DECK EXTENSION  
PLAN, SECTIONS AND DETAILS

Drawn by / Dessiné par H. BOIVIN	Designed by / Conçu par F. GOMES MESTRINER EIT
Verified by / Vérifié par C. GAZARIAN PAGÉ P.Eng.	Approved by / Approuvé par S. VITTECOQ P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number / Numéro du Dessin 203
Project Number / Numéro du projet R.076951.705	Sheet 2 of 2



Contract No.	Drawing Code	Serial	Rev.
HS00243	210	41DD	0204   0

**BULKHEAD DESING REQUIREMENTS:**

- WATER LEVELS:  
AVERAGE NAVIGATION LEVEL: 241.47 m  
FLOOD 1 IN 40 YEARS: 241.81 m  
USUAL WINTER: 241.00 m

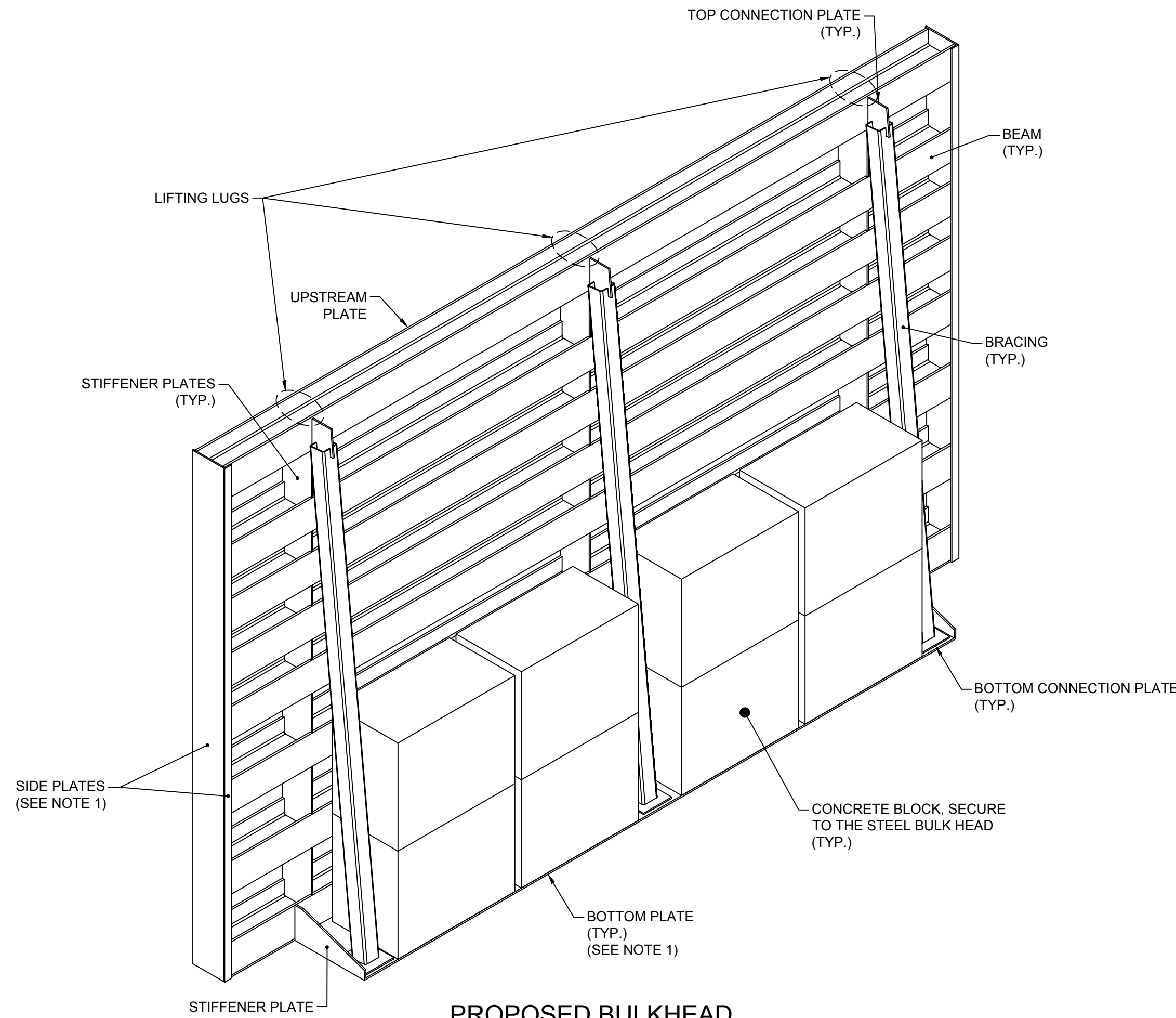
- USUAL ICE LOAD: 75 kN/m (UNFACTORED)

- USUAL ICE THICKNESS: 600 mm

- FOR DIMENSIONS, REFER TO DRAWINGS:  
R.076951.705.100  
R.076951.705.102  
R.076951.705.104

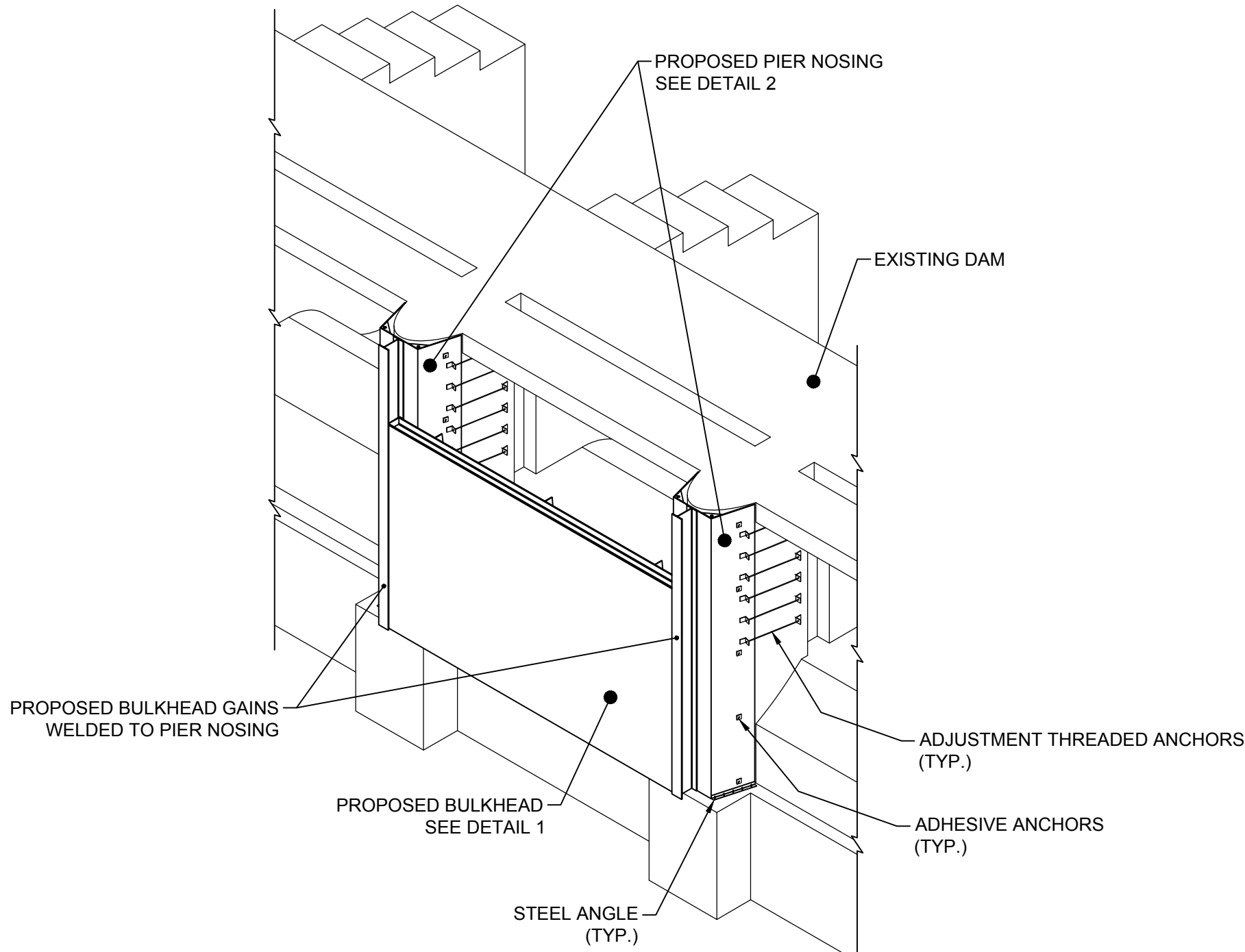
- WATER TIGHTNESS CRITERIA: ALL WATER INFILTRATIONS THROUGH THE BULKHEAD SHALL BE ABLE TO BE EVACUATED FROM THE WORK ZONE USING A SINGLE 6 IN. PUMP, MAINTAINING THE WORK AREA DRY, TO THE SATISFACTION OF THE DEPARTMENTAL REPRESENTATIVE. IF WATER INFILTRATIONS EXCEED THIS CRITERIA, THE CONTRACTOR SHALL TAKE ADDITIONAL MEANS TO IMPROVE WATER TIGHTNESS OF THE BULKHEAD TO REACH THE REQUIRED CRITERIA.

1. PROVIDE SEALING PLATES FOR THE SIDE AND BOTTOM PLATES.
2. REFER TO SPECIFICATION SECTION 35 20 22 FOR FURTHER INFORMATION.

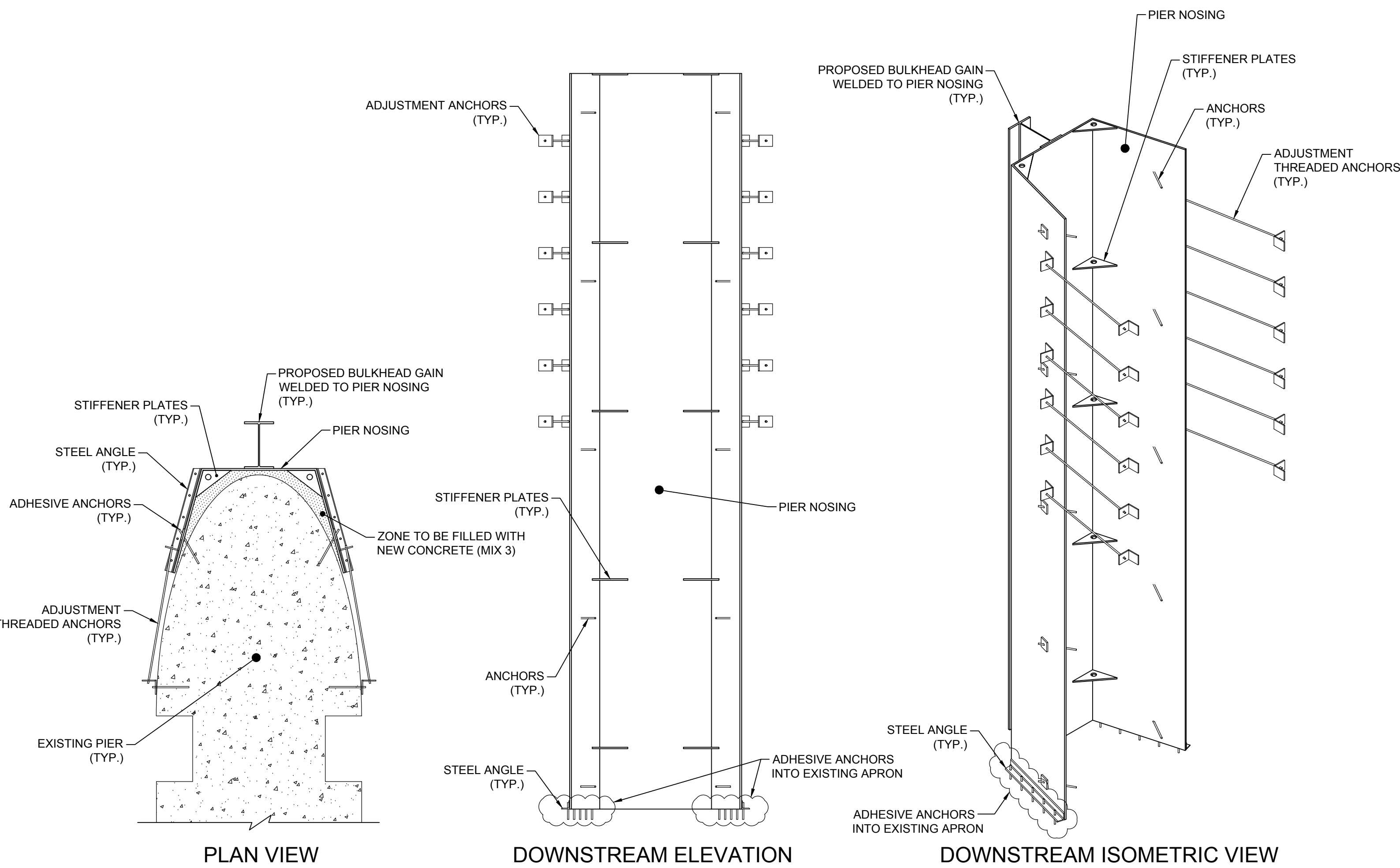


PROPOSED BULKHEAD  
DOWNSTREAM ISOMETRIC VIEW

DETAIL 1  
1:30

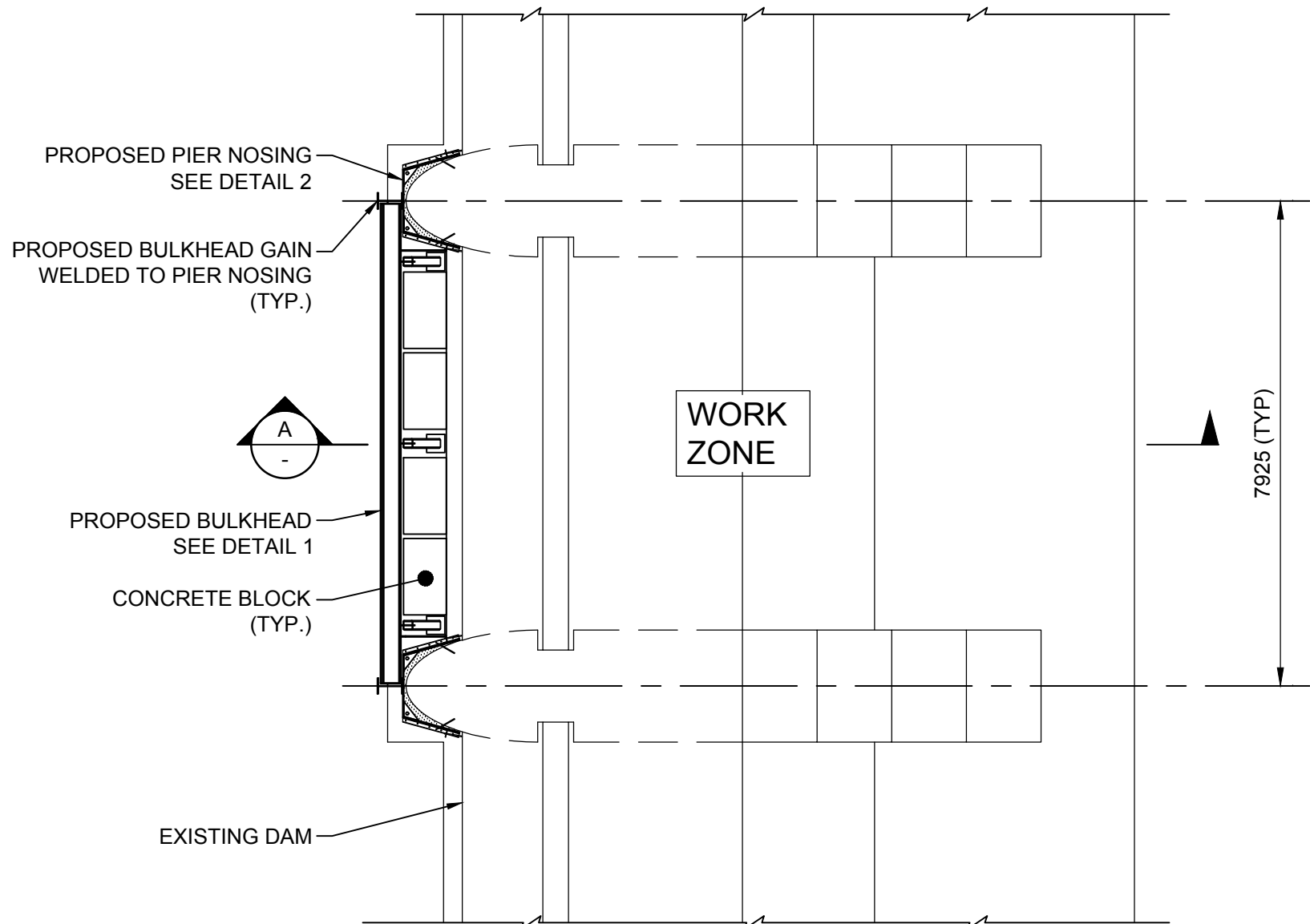


PROPOSED BULKHEAD INSTALLATION  
UPSTREAM ISOMETRIC VIEW

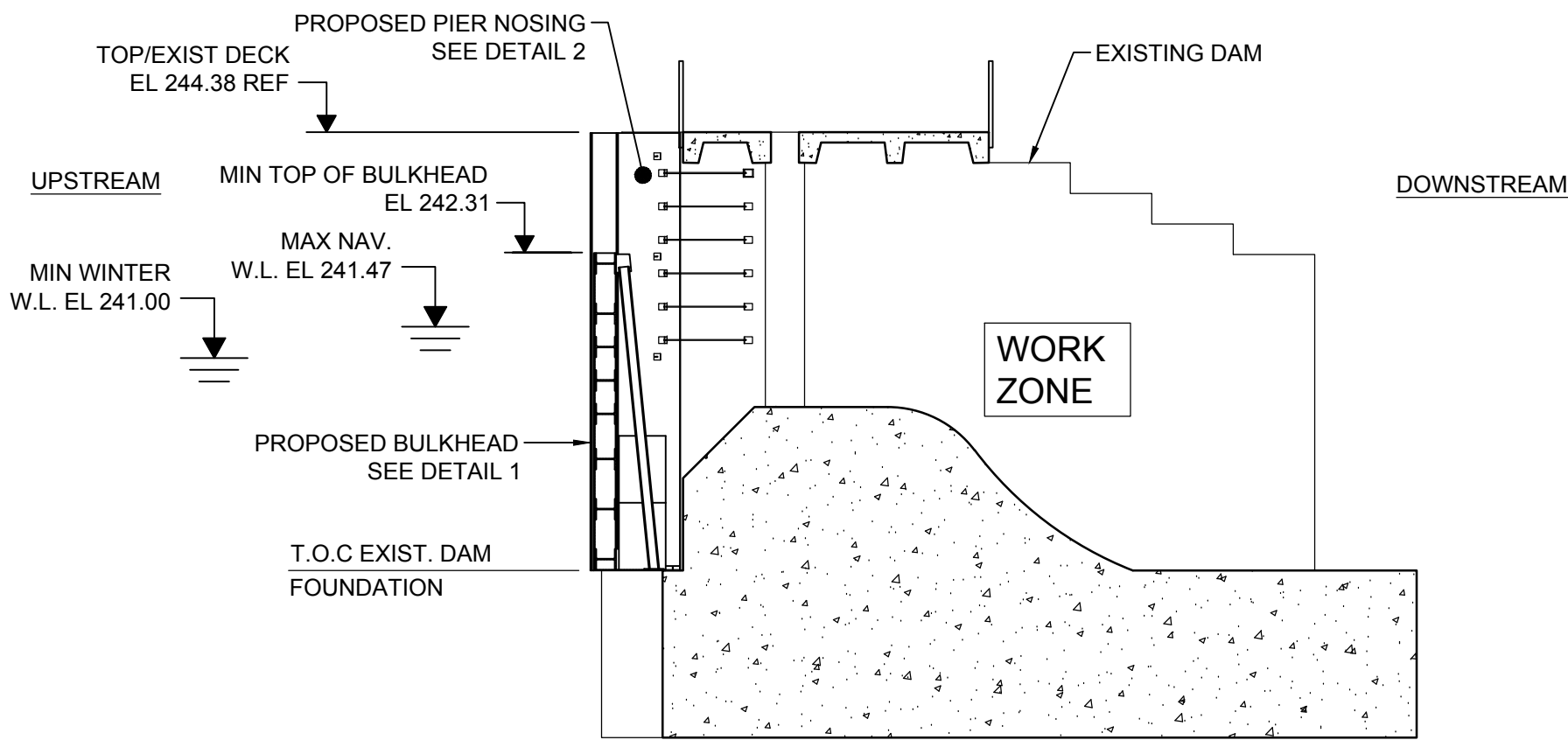


PROPOSED PIER NOSING

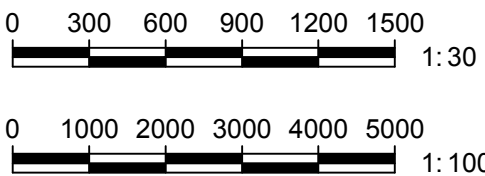
DETAIL 2  
1:30



PROPOSED BULKHEAD INSTALLATION  
PLAN VIEW



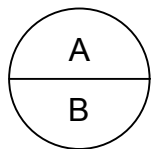
SECTION A  
1:100




No.	Description	By	Date
0	FOR TENDER	C.GP	05/13/2020

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

**Professional Stamp**

Project title / Titre du projet

**TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION**

Drawing title / Titre du dessin

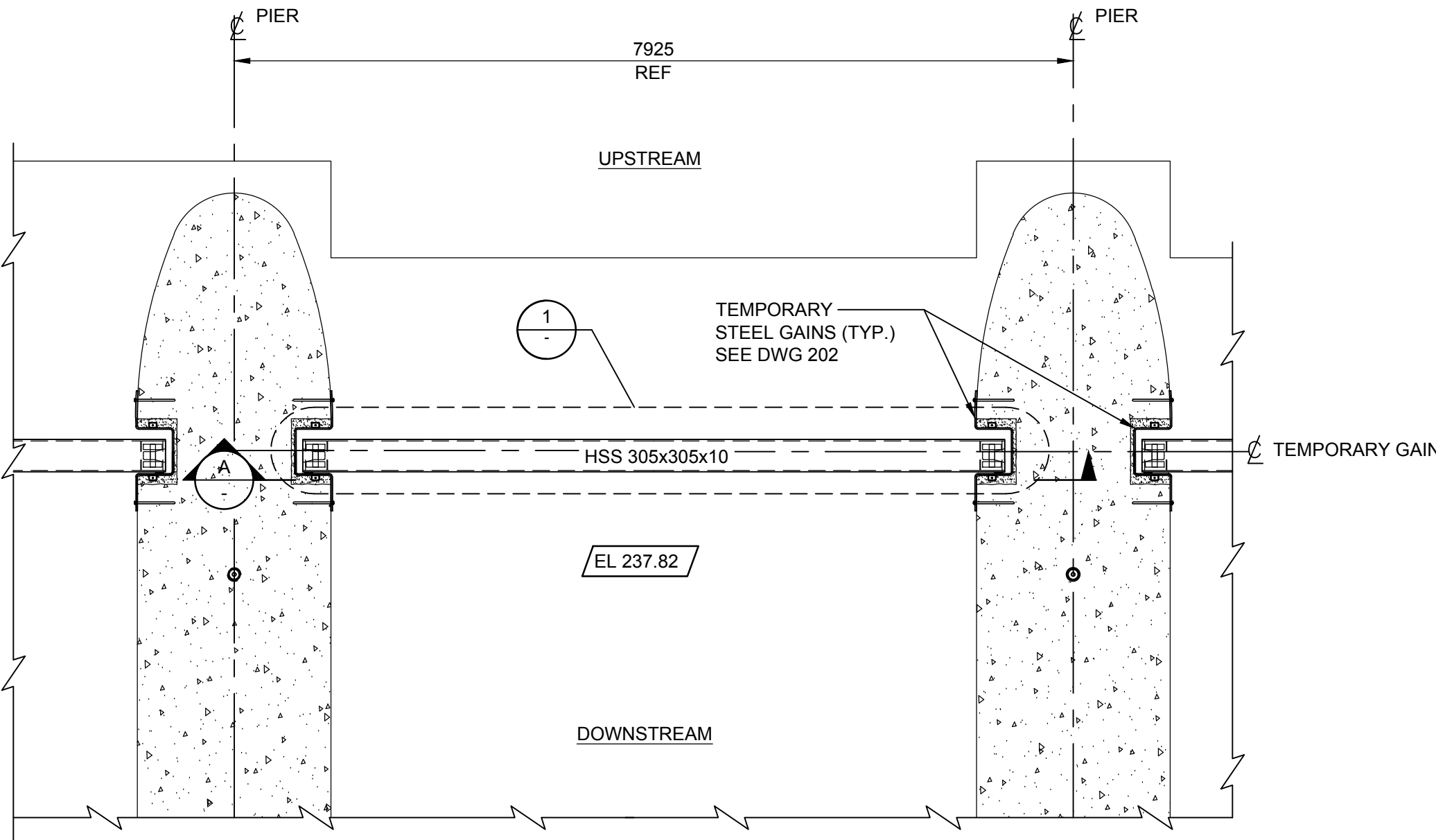
**TEMPORARY WORK  
PHASE 1  
PROPOSED BULKHEAD  
TYPICAL ARRANGEMENT**

Drawn by / Dessiné par H. BOIVIN	Designed by / Conçu par F. GOMES MESTRINER EIT
Verified by / Vérifié par C. GAZARIAN PAGÉ P.Eng.	Approved by / Approuvé par S. VITTECOQ P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number/ Numéro du Dessin 204
Project Number / Numéro du projet R.076951.705	Sheet Feuille 1 of 1



NOTES:

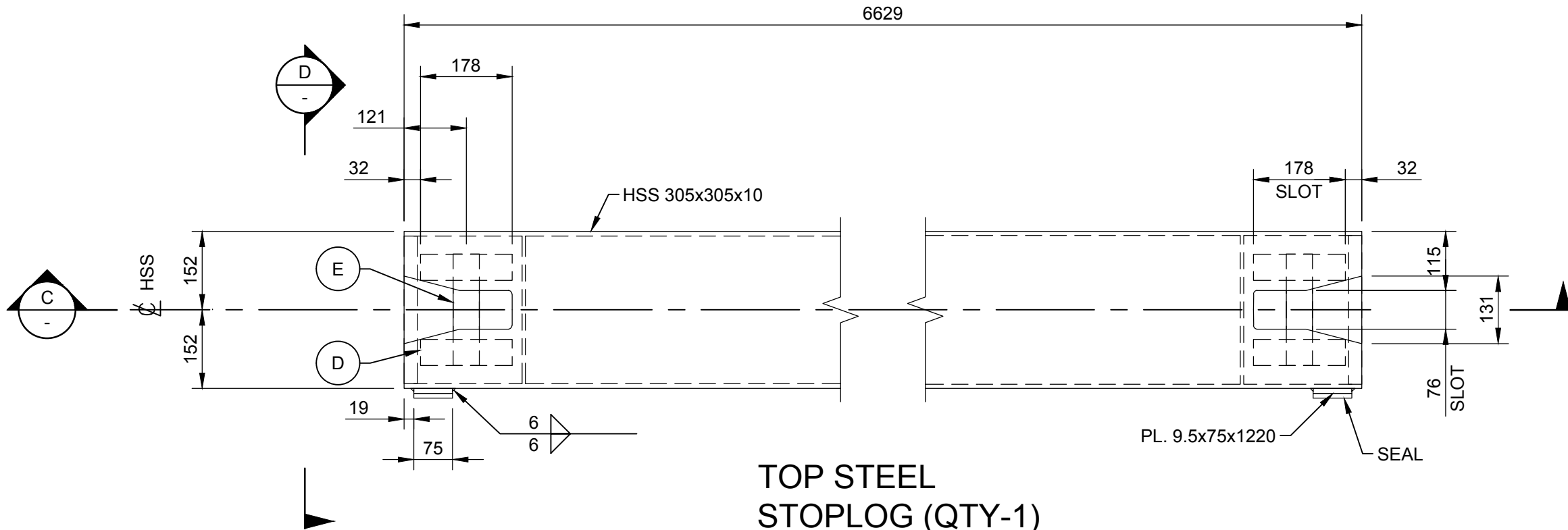
1. FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS SEE DRAWING 002.



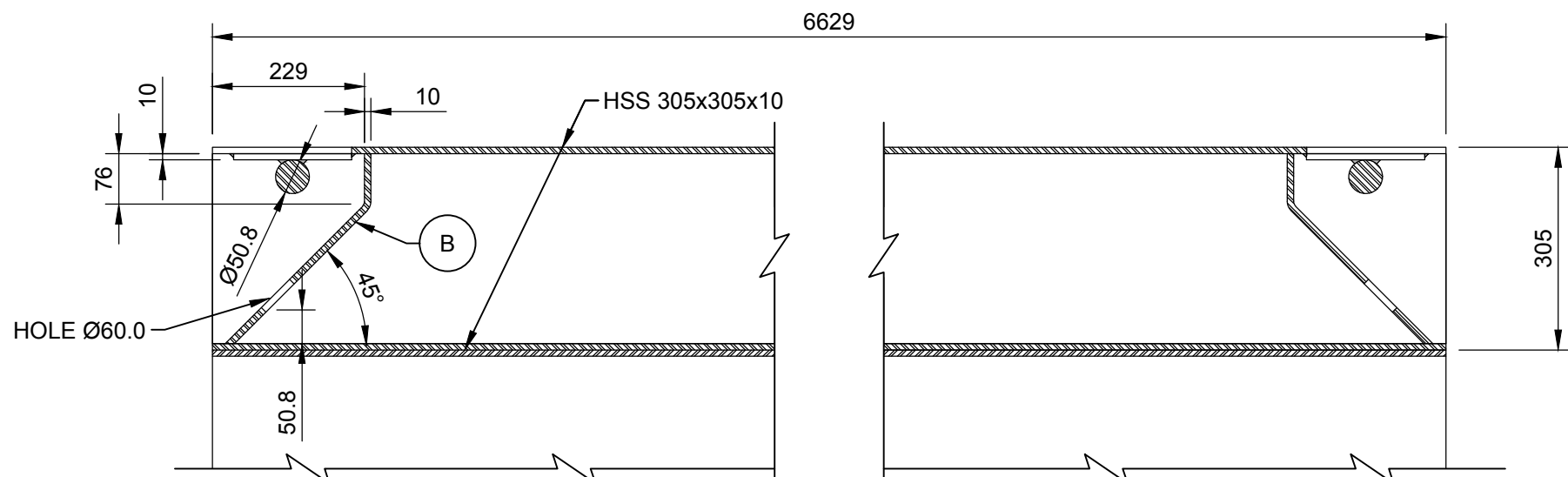
PLAN EL 239.35  
1:50

ITEM	QTY	DESCRIPTION	MATERIAL GRADE
A	4	HSS 305x305x10x6629 LG.	STEEL 350 W
B	2	8x292 PL x 381 LG.	STEEL 350 W
D	4	12.7x50.8x178 LG. F/BAR	STEEL 350 W
E	2	25.4 DIA R/BAR	STEEL 350 W
F	6	12.7x295x295 PL	STEEL 350 W
G	1	9.5x205x6600 LG.	STEEL 350 W
H	2	9.5x75x1220	STEEL 350 W
I	2	9.5x75x1230 SEAL PLATE	UHMWPE-TIVAR 88
J	2	9.5x75x25	STEEL 350 W

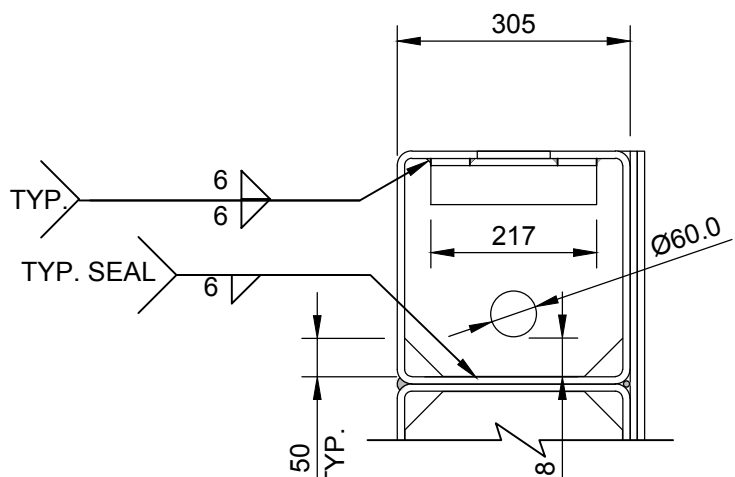
STEEL STOPLOG ASSEMBLY= 1 UNITS



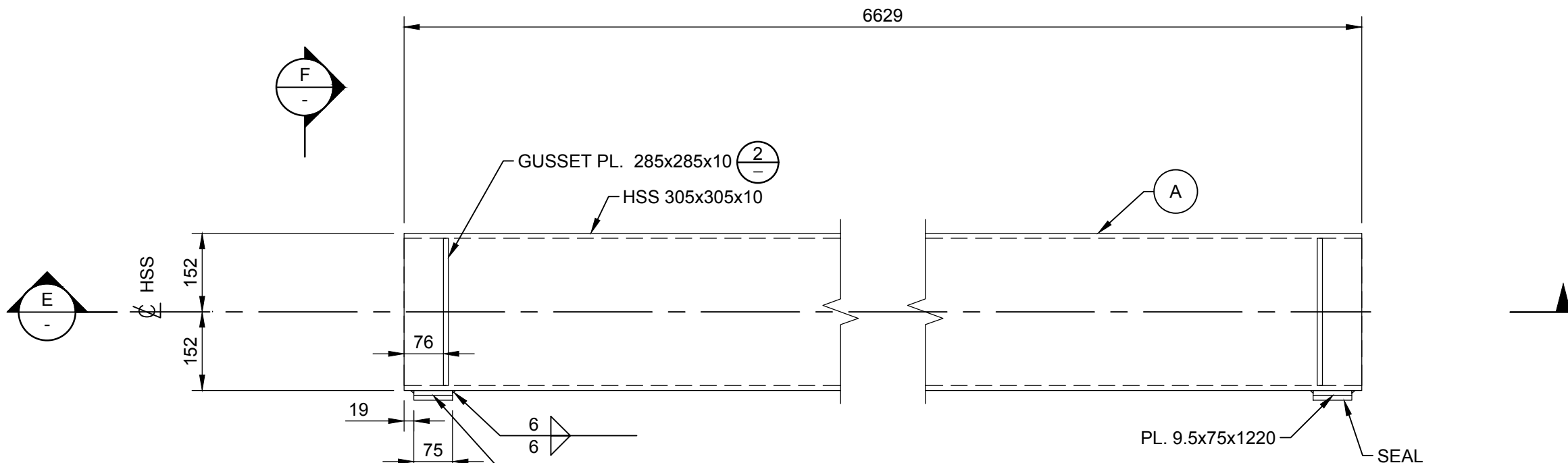
TOP STEEL  
STOPLOG (QTY-1)  
DETAIL  
1:10



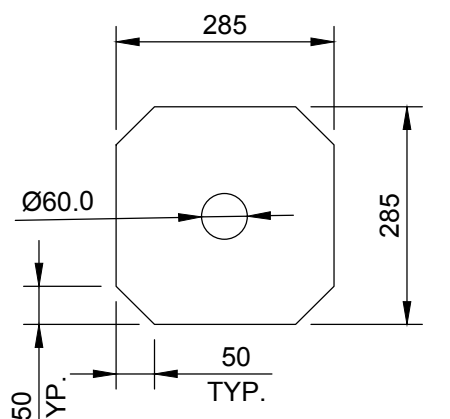
ELEVATION  
1:10



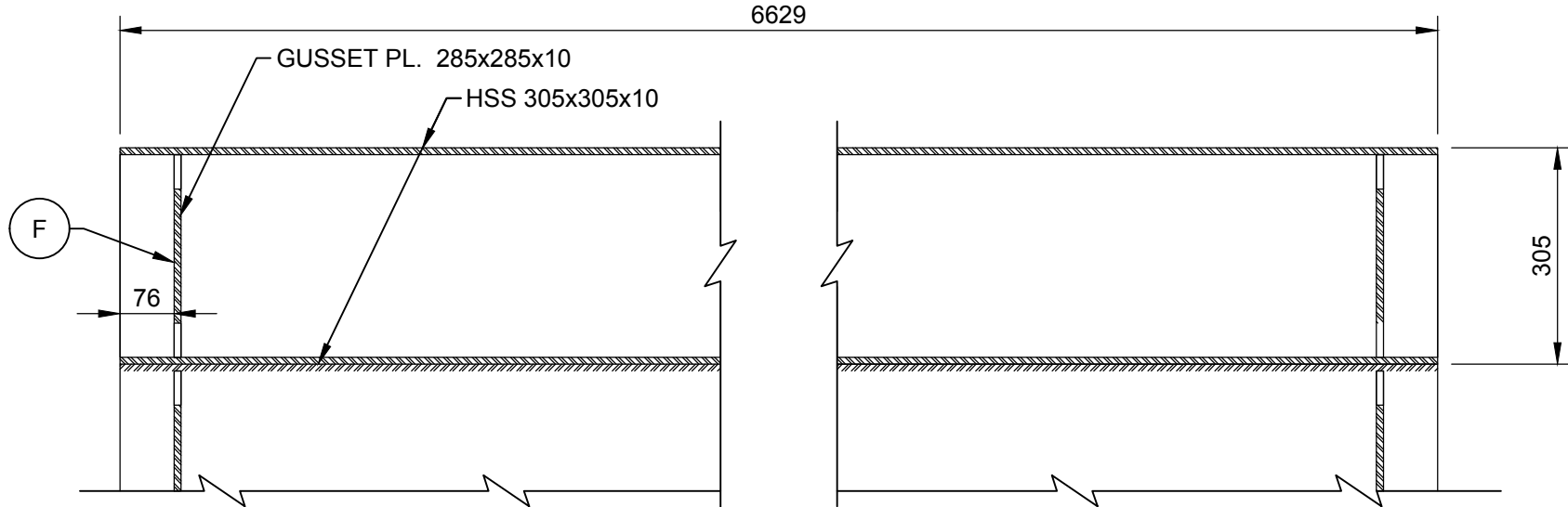
SECTION D  
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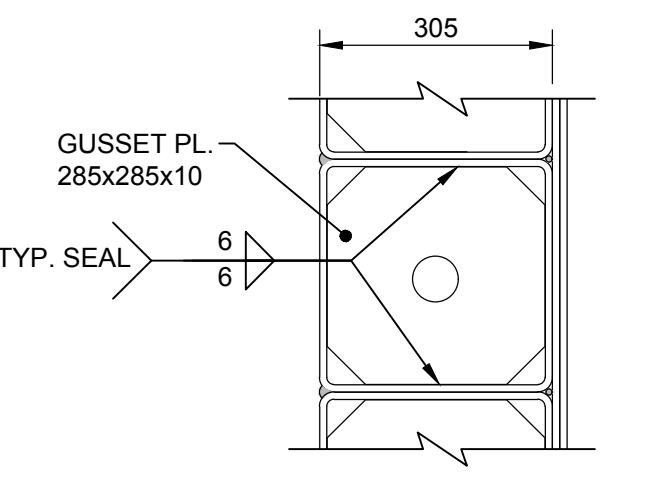
STOPLOGS (QTY-3)  
DETAIL  
1:10



GUSSET PL.  
DETAIL  
1:10

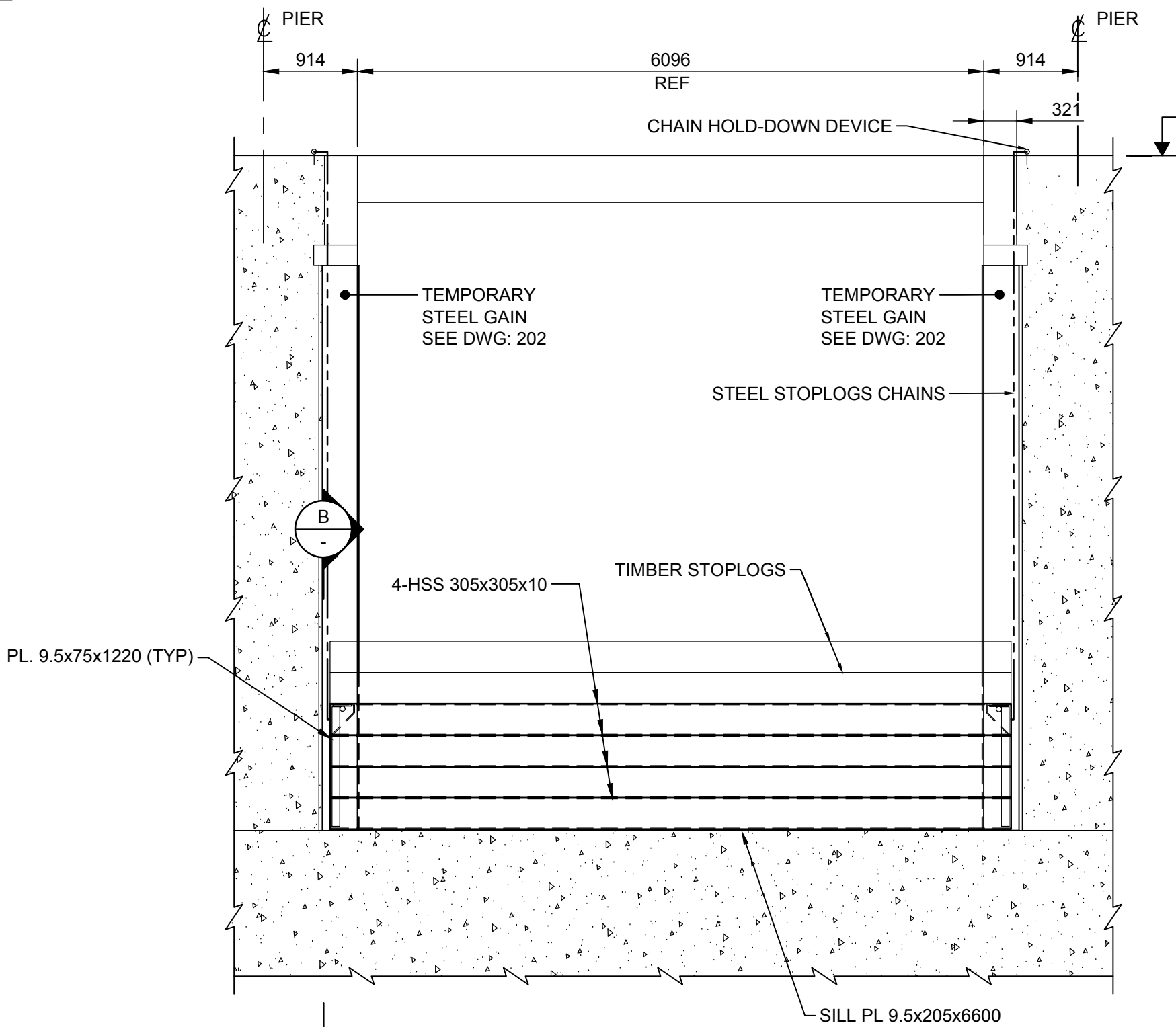


ELEVATION  
1:10

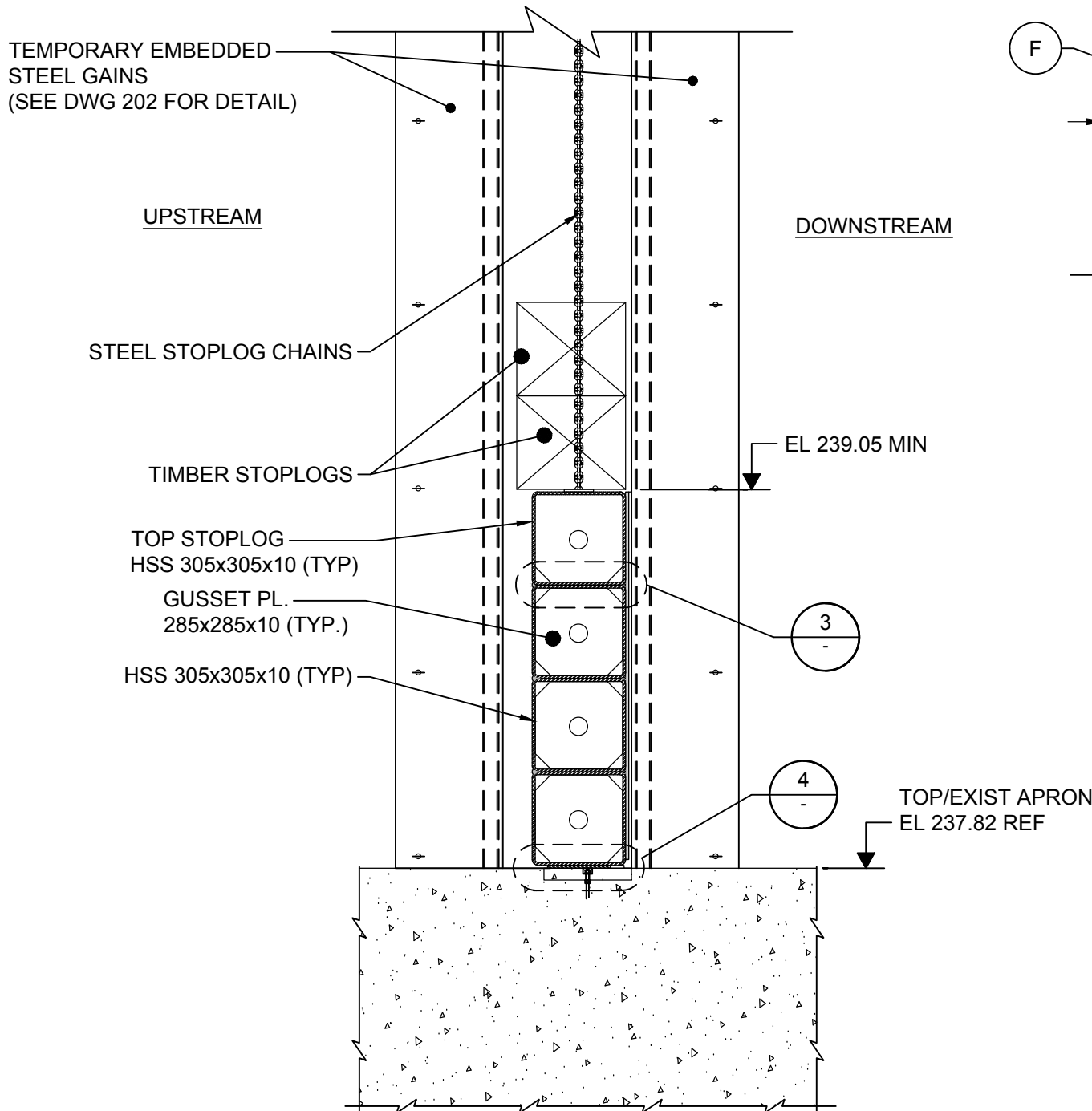


SECTION F  
1:10

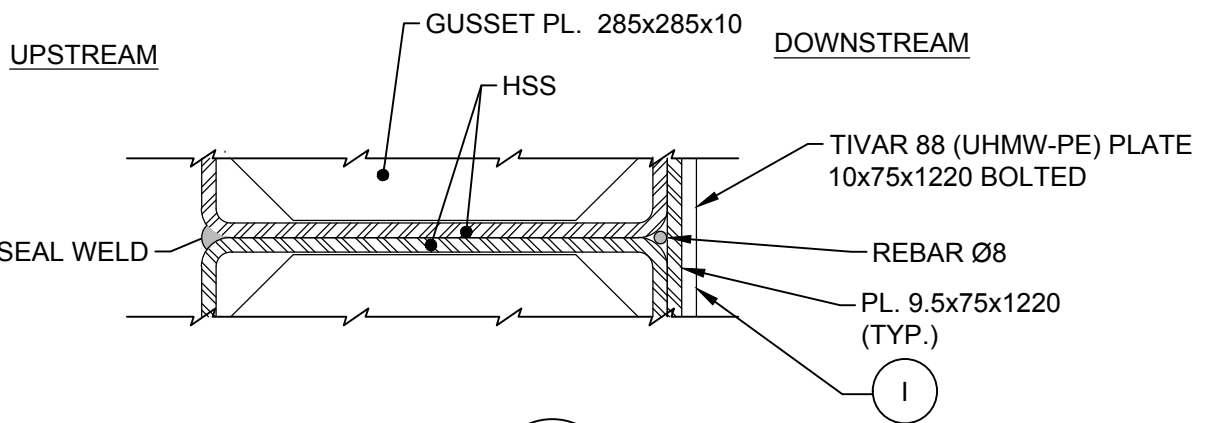
VITS



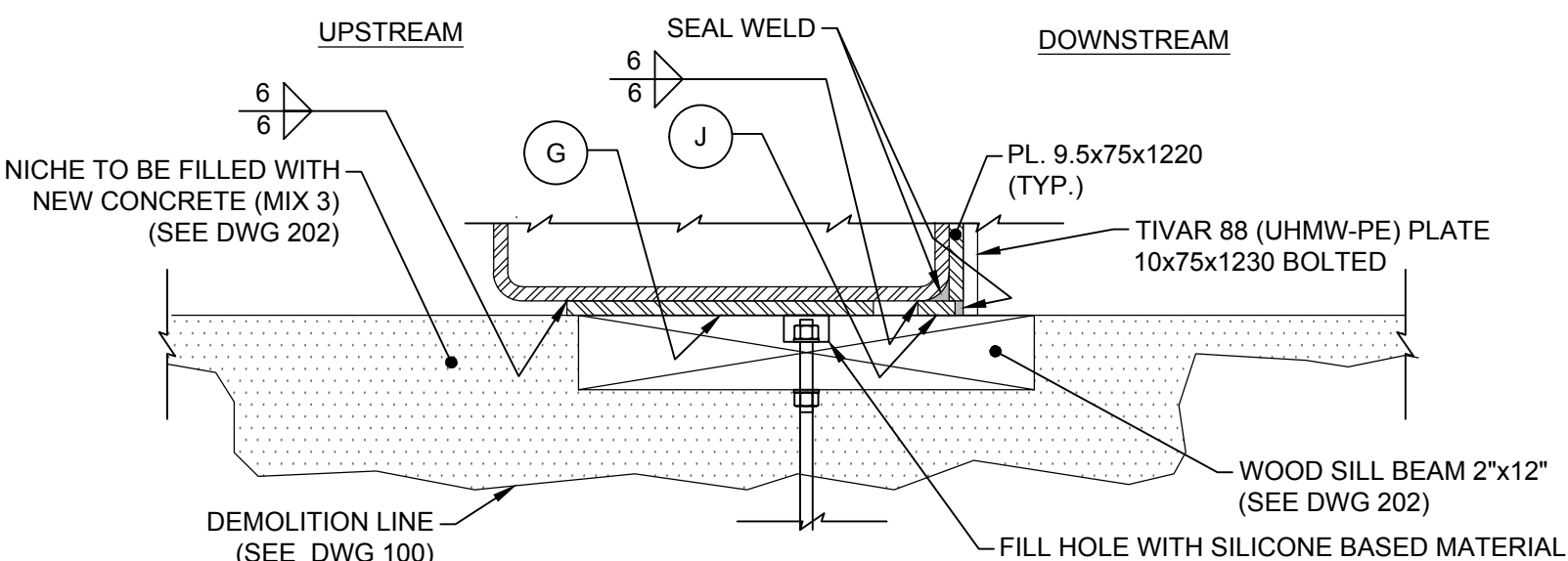
ELEVATION A  
1:50



SECTION B  
1:20



DETAIL 3  
1:5



DETAIL 4  
1:5


0	FOR TENDER	D.L.	05/13/2020
No.	Description	By	Date

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

Professional Stamp

Project title / Titre du projet

TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

Drawing title / Titre du dessin

TEMPORARY WORKS  
STEEL STOP LOGS  
PLAN, ELEVATION  
SECTIONS AND DETAILS

Drawn by / Dessiné par K. NONEN	Designed by / Conçu par F. GOMES MESTRINER EIT
Verified by / Vérifié par D. LEBLANC P.Eng.	Approved by / Approuvé par S. VITTECOQ P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number/ Numéro du Dessin 205
Project Number / Numéro du projet R.076951.705	Sheet 1 of 1 Feuille 1 de 1

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 millimetres

Contract No.	Drawing Code	Serial	Rev.
HS00243	210	41DD	0206
			0

NOTES:

- FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS SEE DRAWING 002.
- GANTRY STRUCTURE SYSTEM CAPACITY IS 15 TONS.
- MANUAL CHAIN HOIST MINIMUM CAPACITY IS 7.0 TONS.
- WHEN NOT IN USE, GANTRY STRUCTURE SYSTEM TO BE PARKED OVER SOUTH DECK EXTENSION. REFER TO DWG 203.
- GANTRY NOT TO BE LOADED WHILE RESTING ON DECK, ENSURE LEGS ARE ON PIERS BEFORE LOADING.
- GANTRY CRANE DIMENSIONS AS PER CONTRACTOR'S DESIGN.
- ENSURE SUFFICIENT VERTICAL CLEARANCE TO ALLOW GANTRY TO PASS OVER RAIL END STOPPERS. REFER TO DWG 203.
- CONNECTIONS BETWEEN CHAIN HOLD - DOWN DEVICE, MANUAL CHAIN AND STEEL STOPLOG CHAIN SHALL BE DESIGNED, SO THAT THE OPERATORS ARE NOT HOLDING THE WEIGHT OF THE CHAIN DURING THE OPERATION OF THE STEEL STOPLOGS.


No.	Description	By	Date
0	FOR TENDER	D.L.	05/13/2020

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

Professional Stamp

Project title / Titre du projet

TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

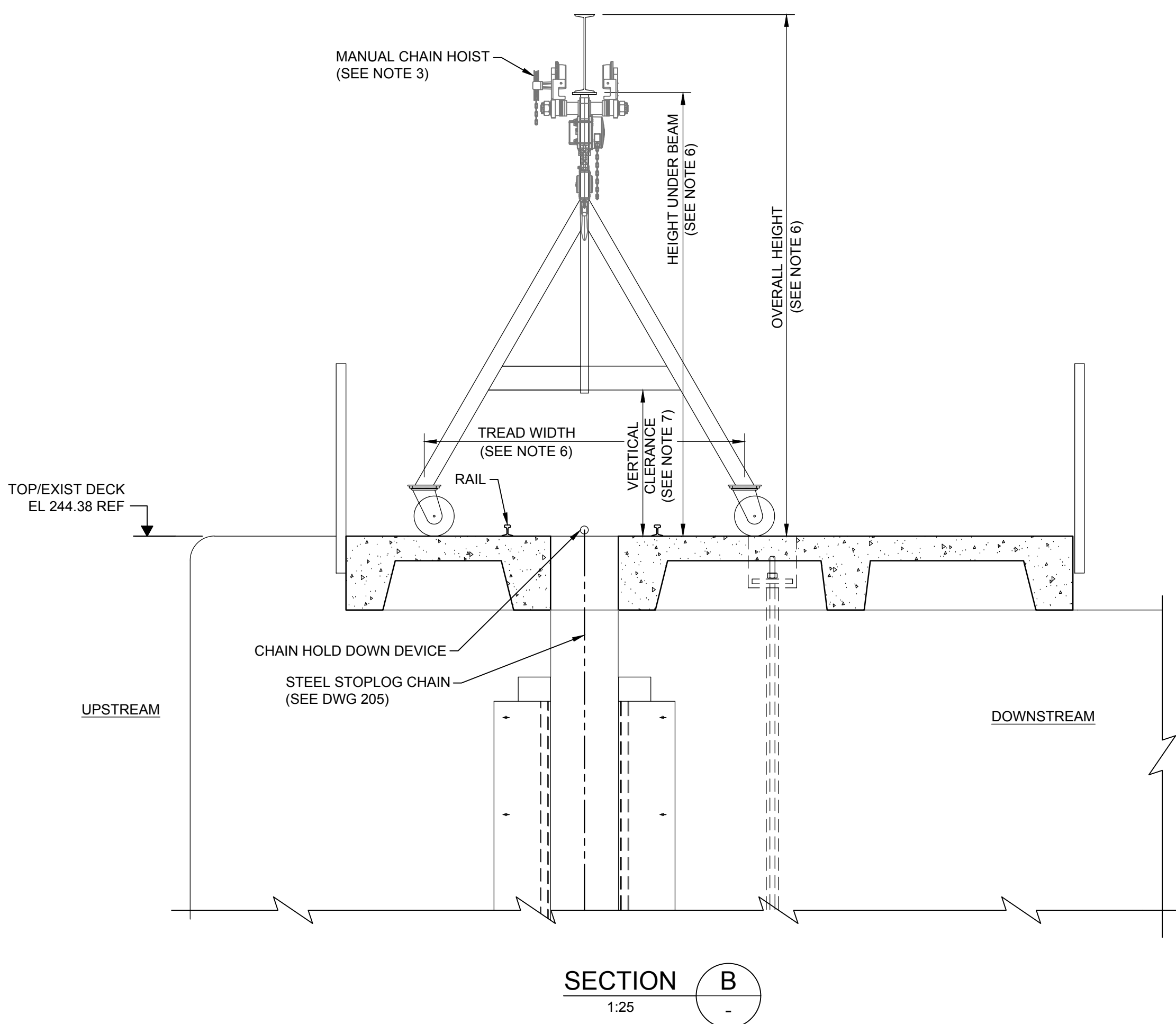
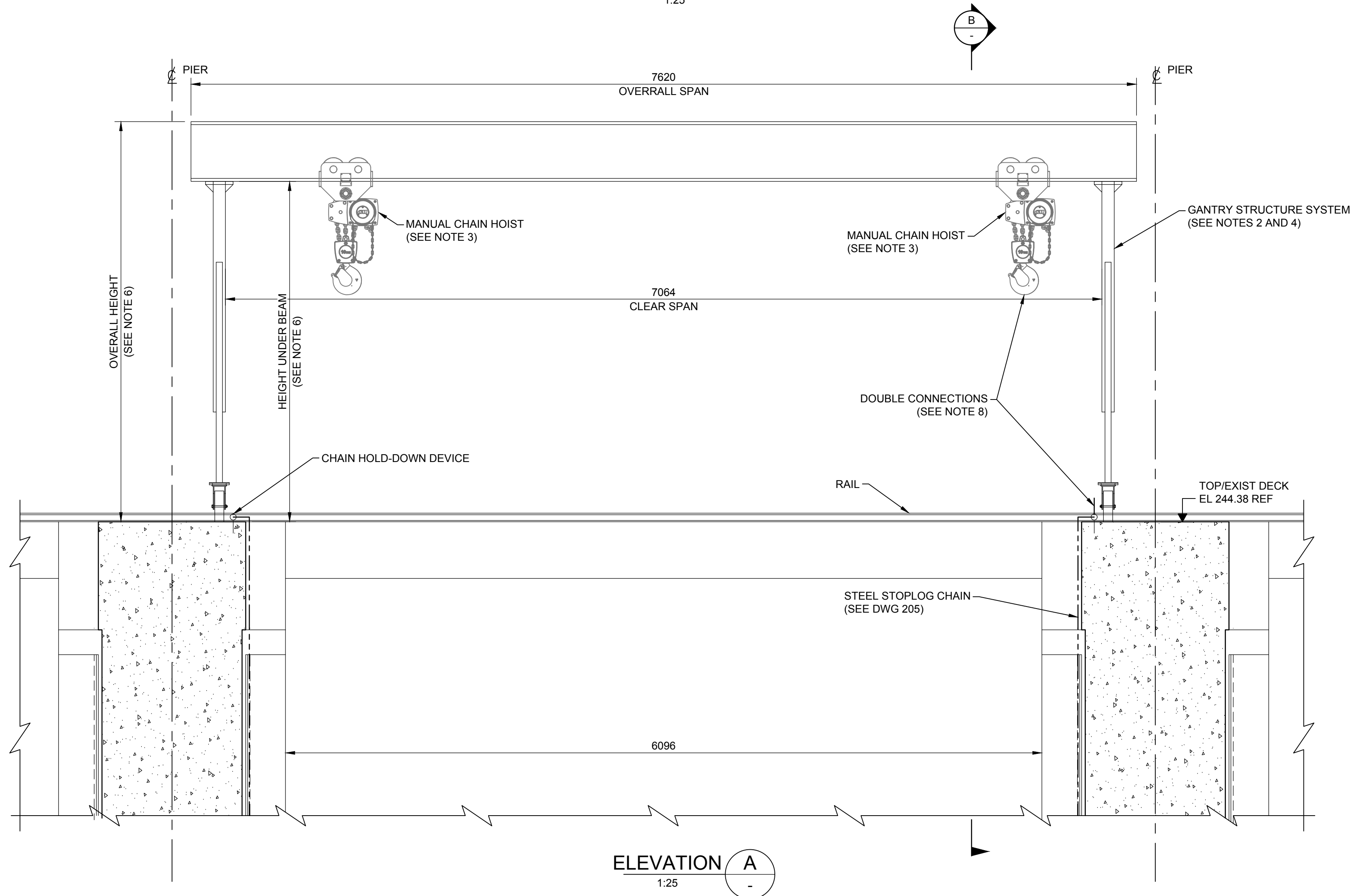
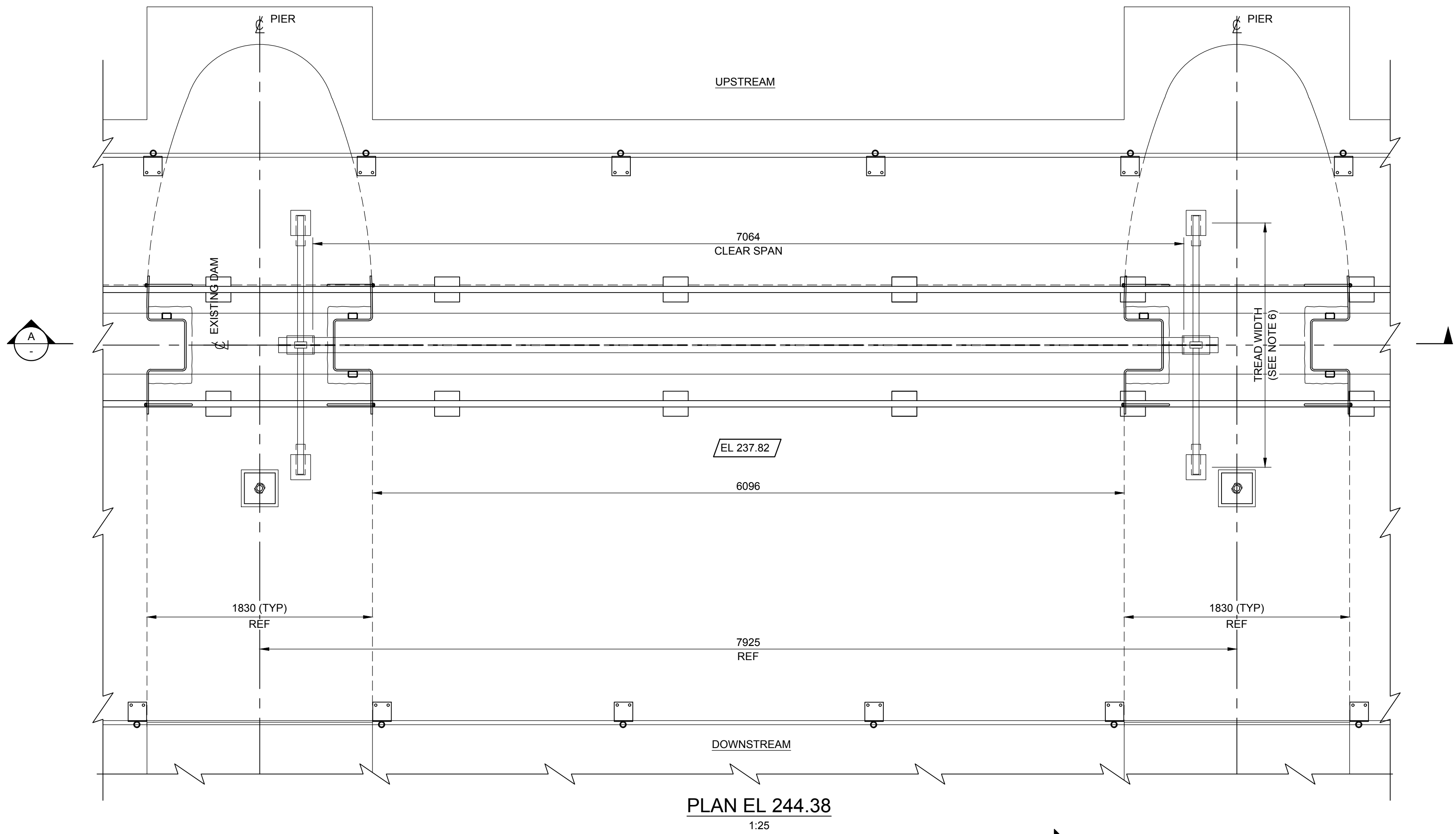
Drawing title / Titre du dessin

TEMPORARY WORKS  
GANTRY  
PLAN, ELEVATION  
AND SECTION

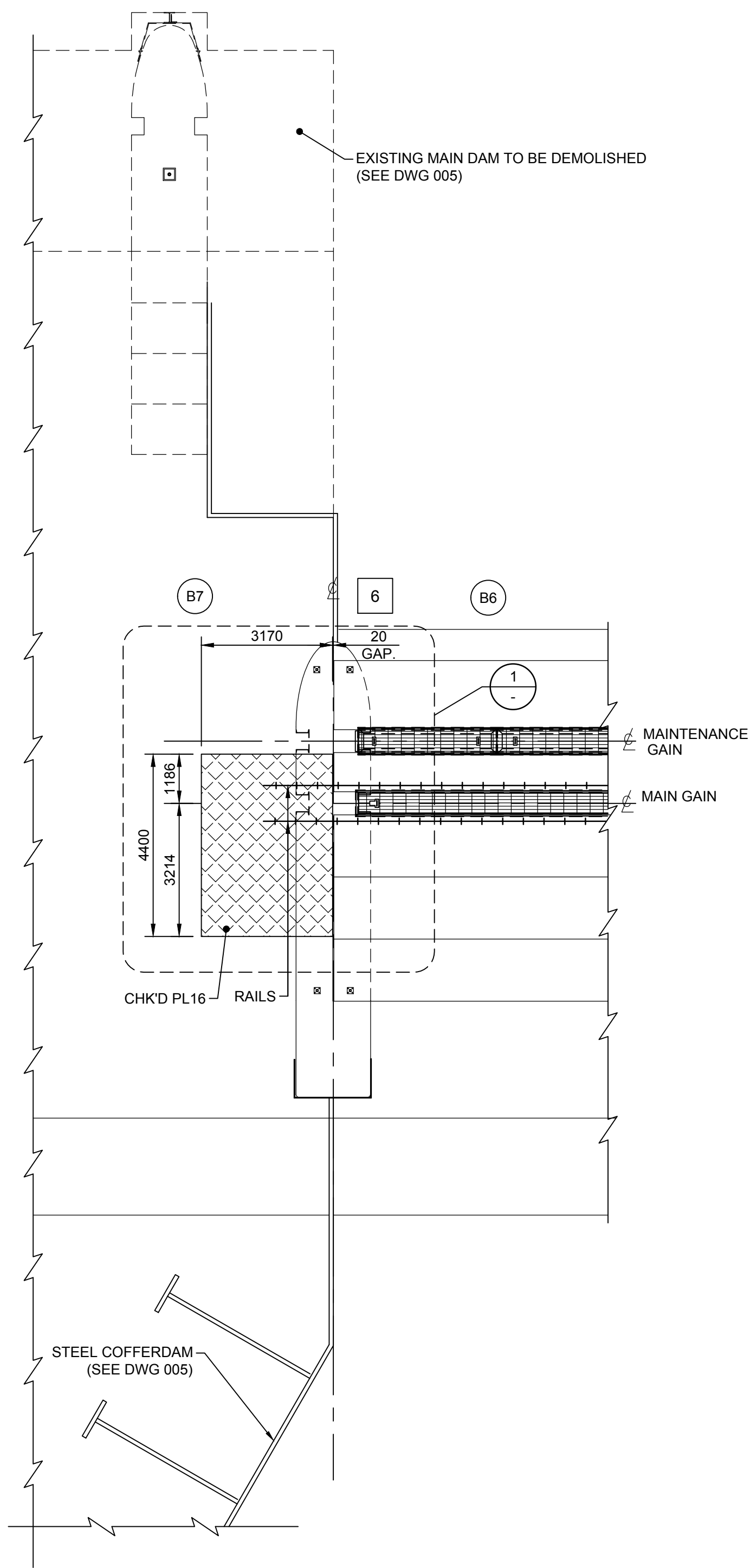
Drawn by / Dessiné par	Designed by / Conçu par
K. NONEN	F. GOMES MESTRIMER EIT
Verified by / Vérifié par	Approved by / Approuvé par
D. LEBLANC P.Eng.	S. VITTECOQ P.Eng.

Drawing Date / Date du dessin	Drawing Number/ Numéro du Dessin
05/13/2020	206
Project Number / Numéro du projet	Sheet 1 of 1 Feuille 1 de 1
R.076951.705	

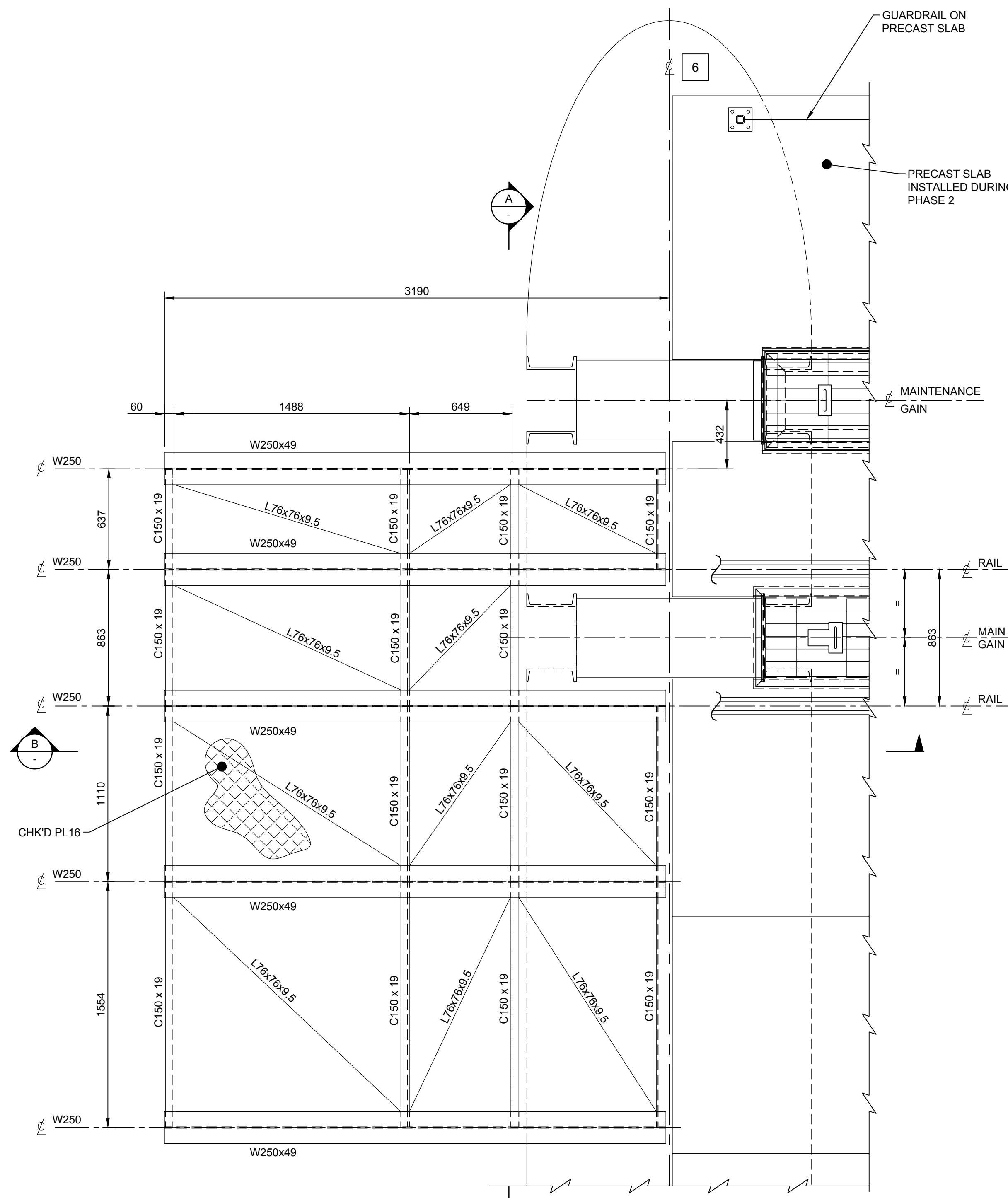
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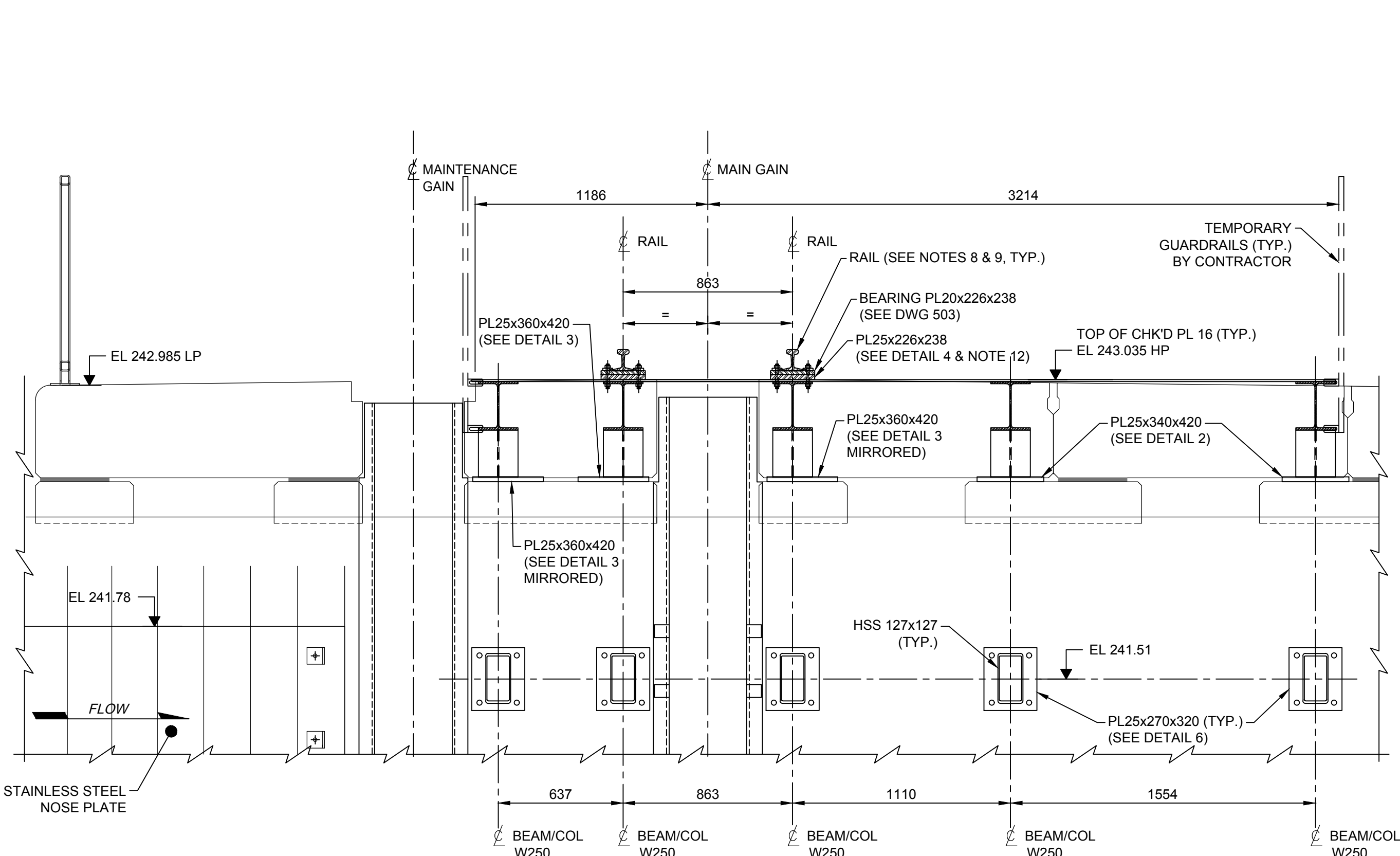




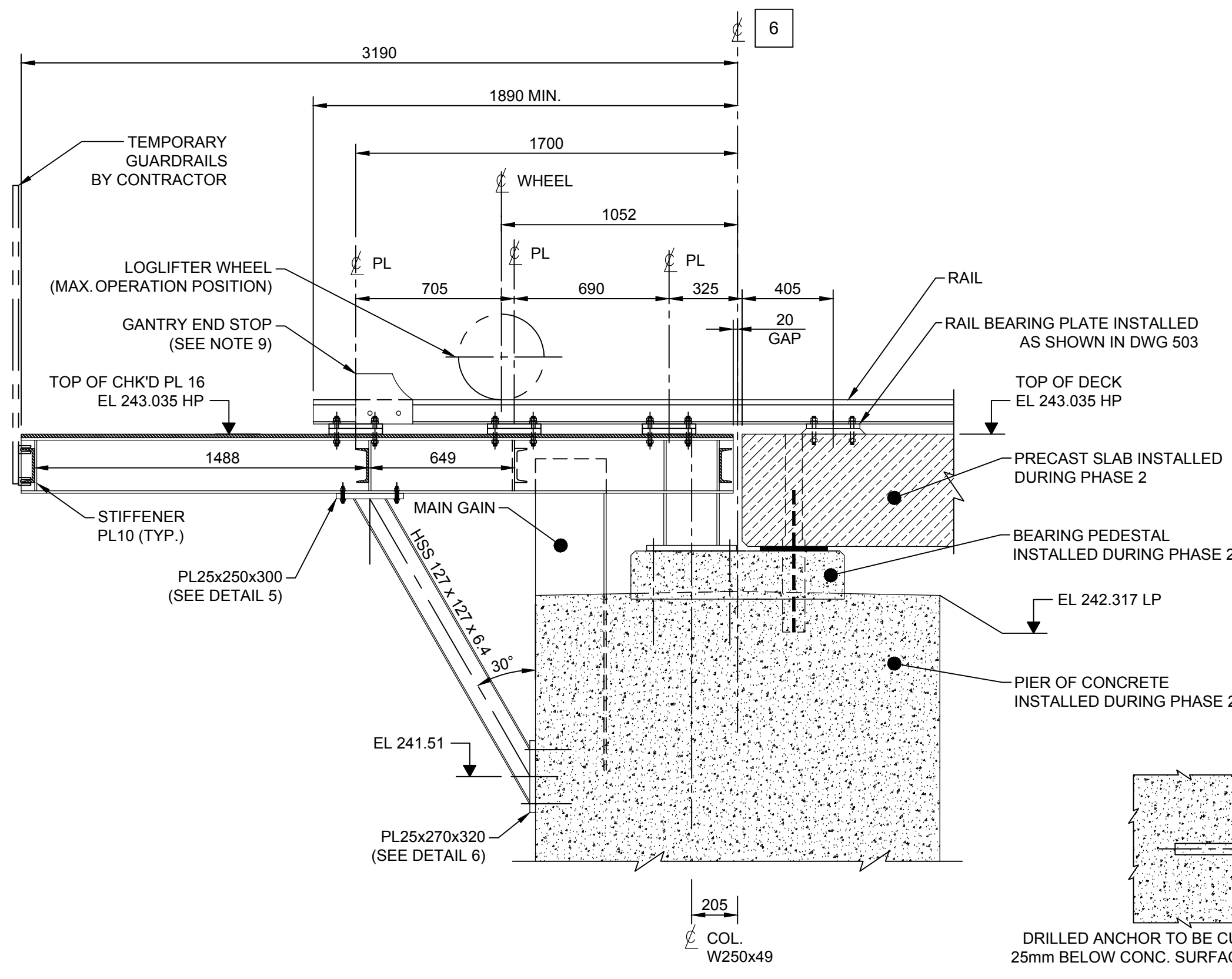
PLAN VIEW  
1:100



PLAN VIEW  
1:20

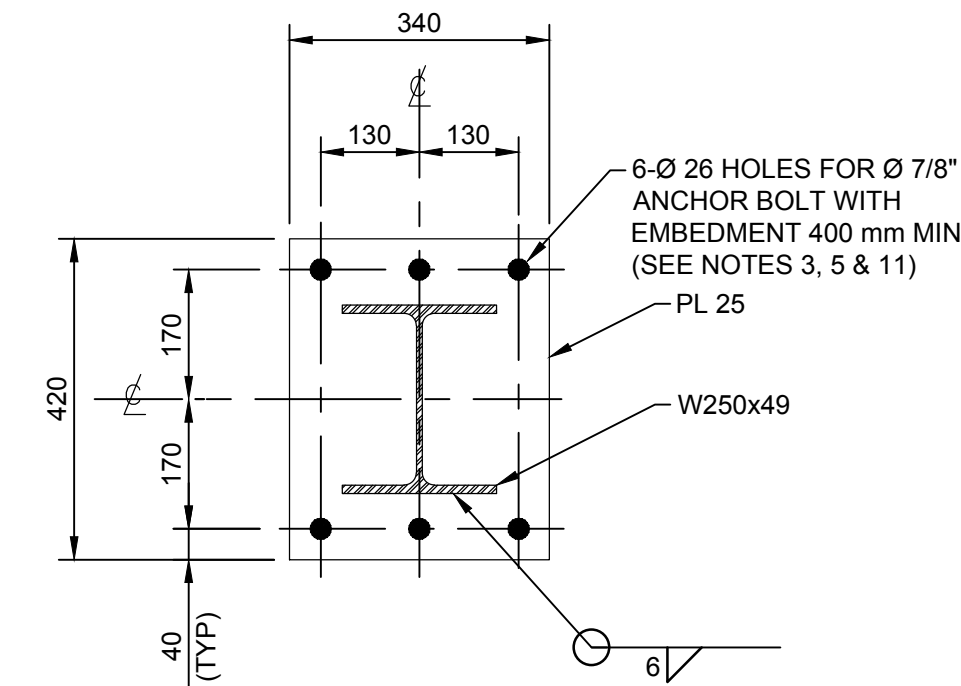


SECTION A  
1:20

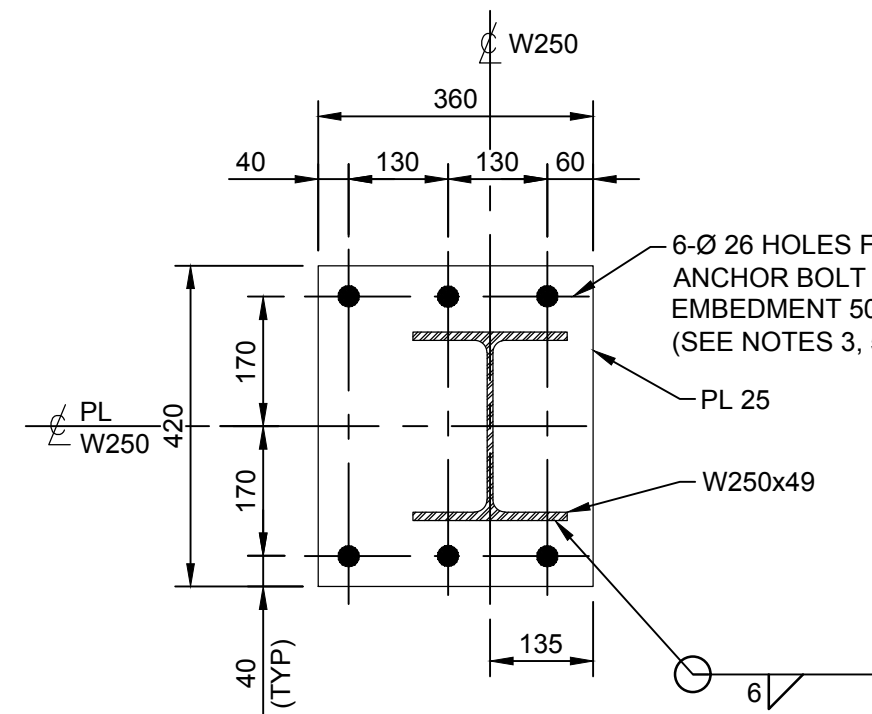


SECTION B  
1:20

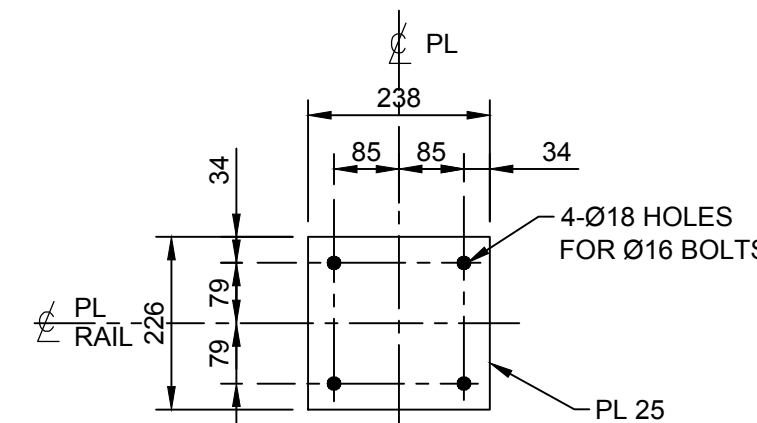
REPAIR DETAIL AFTER  
PLATFORM REMOVAL  
N.T.S.



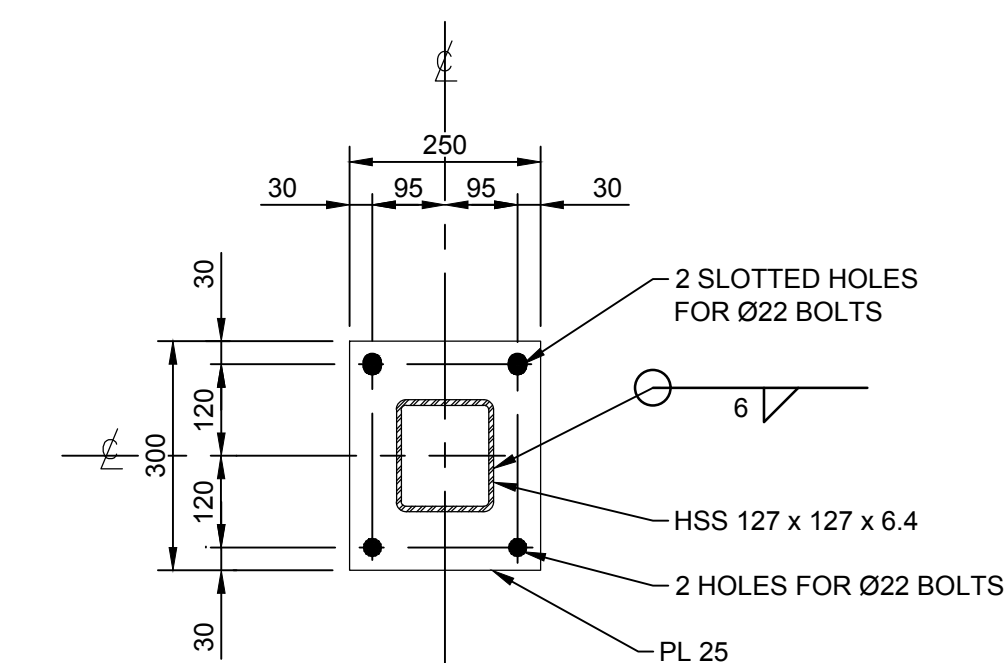
DETAIL - PL25x340x420  
1:10



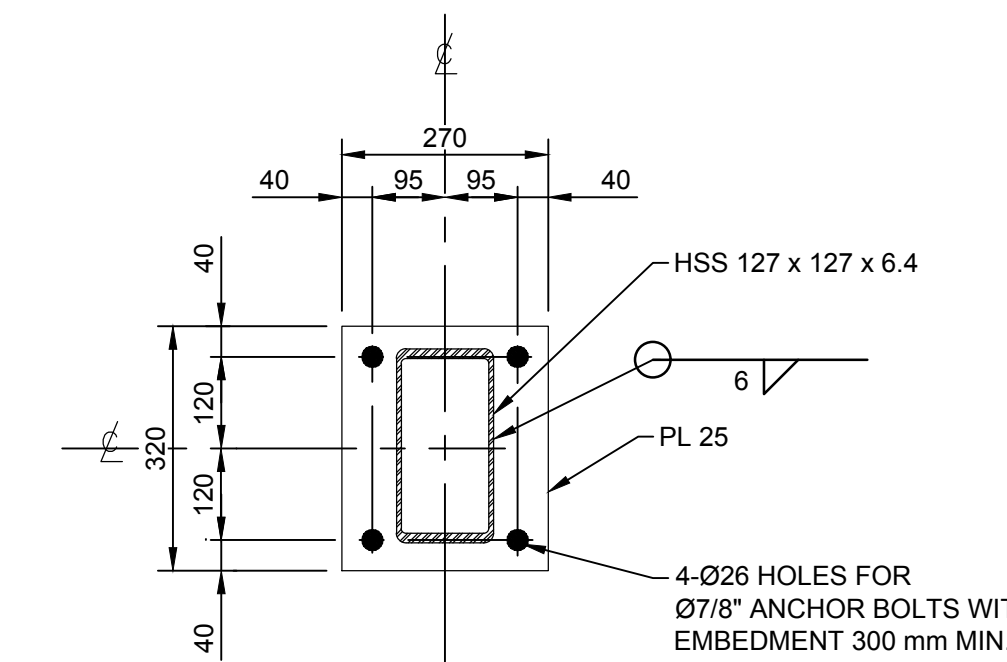
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1:10



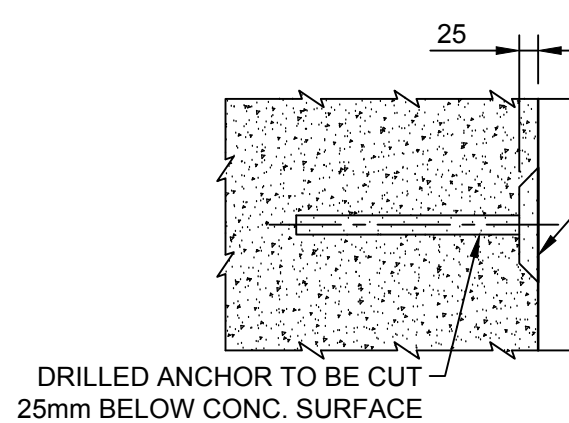
DETAIL - PL25x226x238  
1:10



DETAIL - PL25x250x300  
1:10



DETAIL - PL25x270x320  
1:10



STIFFENER  
1:10

Contract No.	Drawing Code	Serial	Rev.
HS00243	210	41DD	0207 0

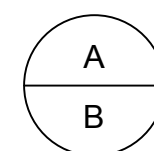
NOTES:

- FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS SEE DRAWING 002.
- ALL STEEL ARE NOT GALVANIZED:
  - CHECKER PLATE SHALL CONFORM WITH CSA G40.21, 260W.
  - W STEEL BEAM TO CONFORM WITH CSA G40.21, 350W.
- ANCHOR BOLTS SHALL CONFORM TO ASTM A193 GRADE B7 WITH MINIMUM TENSILE STRENGTH OF 125 KSI (862 MPa) AND MINIMUM YIELD STRENGTH OF 105 KSI (724 MPa).
- ALL LENGTHS SHOWN ARE IN HORIZONTAL PLAN MEASURED AT 20°C.
- ALL STEEL CONNECTION BOLTS SHALL CONFORM WITH ASTM F3125.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE FABRICATION.
- THE STRUCTURAL DESIGN OF W250 BEAMS IS BASED ON THE LOGLIFTER LOADS SHOWN IN DRAWING 307.03. CHECKERED PLATE IS DESIGNED FOR 2.4kPa CONSTRUCTION UNIFORM LOAD.
- FOR ALL RAILS, CLIPS, AND SPLICES DETAILS, REFER TO DWG 503.
- CONTRACTOR TO PROVIDE END STOPPERS, RAIL CLIPS & THEIR ACCESSORIES AS PER MANUFACTURER'S INSTRUCTIONS.
- NO WOODEN STOPLOGS ARE TO BE STACKED ON THE TEMPORARY RAIL PLATFORM EXTENSION.
- DURING DRILLING, THE CONTRACTOR CAN CUT REINFORCEMENT WITHIN THE PIER AND PEDESTAL TO FACILITATE THE INSTALLATION OF THE ANCHOR BOLTS.
- CHECKERED PLATE TO BE LOCALLY GRINDED AT RAIL BASE PLATE LOCATIONS.
- ALL STEEL CONNECTIONS ARE TO BE DESIGNED AND DETAILED BY THE CONTRACTOR'S ENGINEER.
- CHECKERED PLATE IS TO BE CONNECTED TO THE STEEL BEAMS WITH Ø12 BOLT AND COUNTERSUNK HOLE AT EVERY 300 mm c/c MAX.

No.	Description	By	Date
0	FOR TENDER	C.GP	05/13/2020

No.	Description	By	Date
0	FOR TENDER	C.GP	05/13/2020

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

Project title / Titre du projet

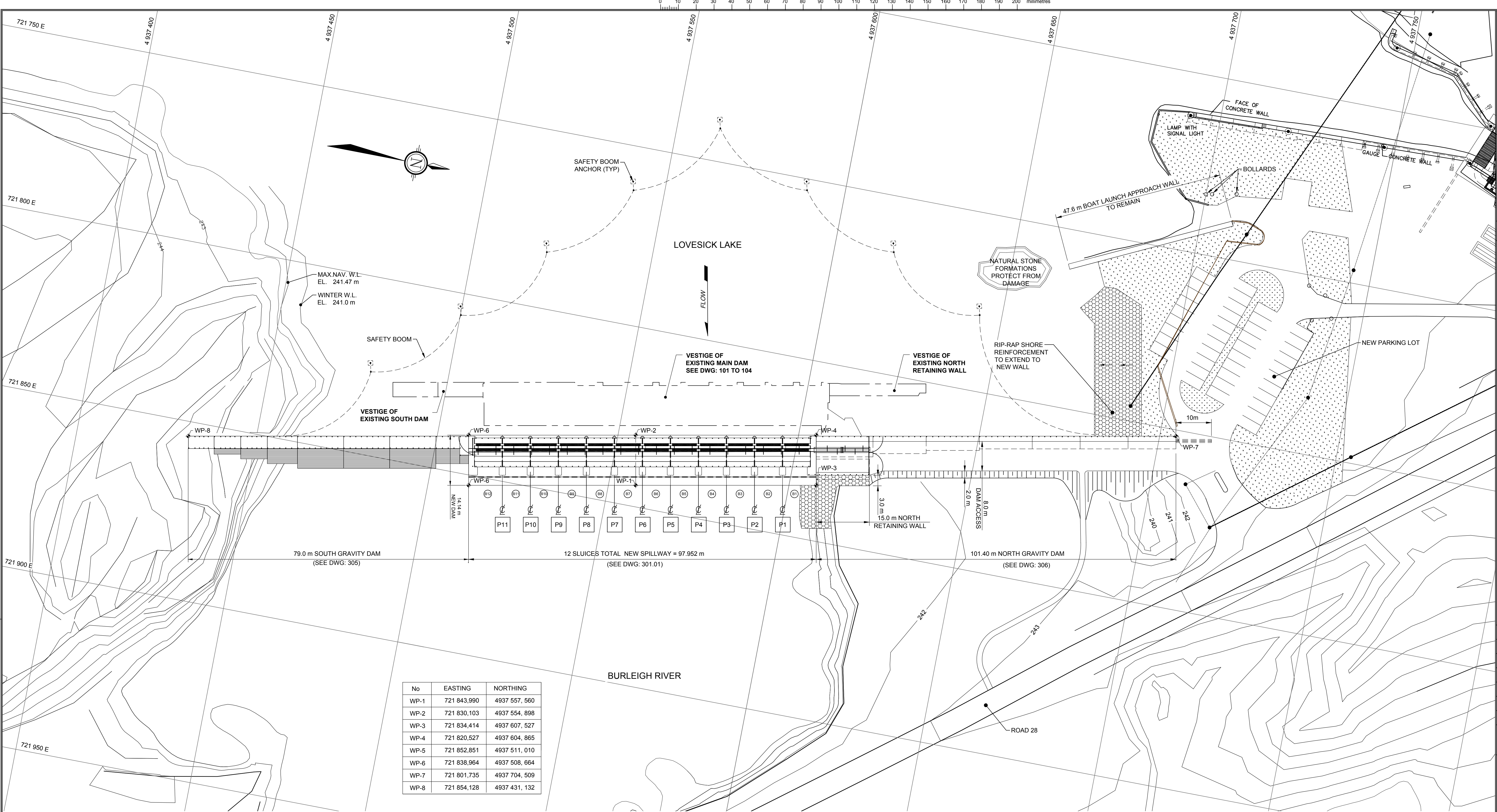
TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

Drawing title / Titre du dessin

TEMPORARY WORKS  
LOGLIFTER RAILS  
EXTENSION BRACING  
PLANS, SECTIONS AND DETAILS

Drawn by / Dessiné par H. BOVIN	Designed by / Conçu par F. GOMES MESTRINER
Verified by / Vérifié par C. GAZARIAN PAGÉ	Approved by / Approuvé par S. VITTECOQ
Drawing Date / Date du dessin 05/13/2020	Drawing Number / Numéro du Dessin 207
Project Number / Numéro du projet R.076951.705	Sheet Feuille 1 of 1

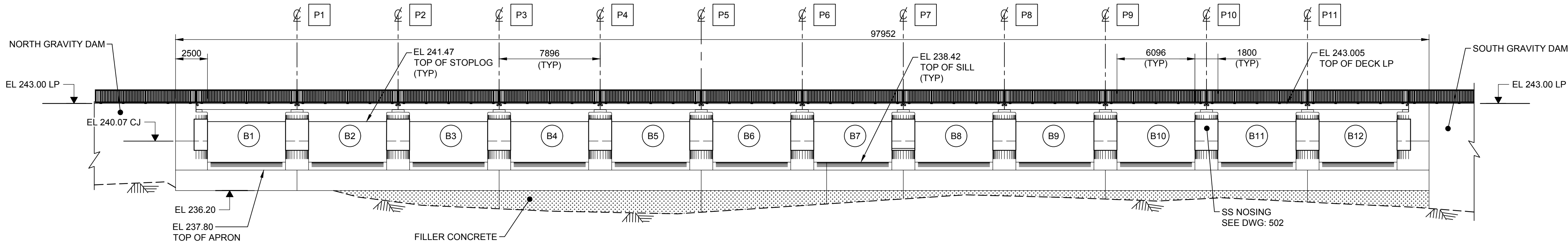




No	EASTING	NORTHING
WP-1	721 843,990	4937 557, 560
WP-2	721 830,103	4937 554, 898
WP-3	721 834,414	4937 607, 527
WP-4	721 820,527	4937 604, 865
WP-5	721 852,851	4937 511, 010
WP-6	721 838,964	4937 508, 864
WP-7	721 801,735	4937 704, 509
WP-8	721 854,128	4937 431, 132

GENERAL CONCRETE LAYOUT PLAN VIEW

1:500



UPSTREAM ELEVATION (LOOKING DOWNSTREAM)

1:200

Canada

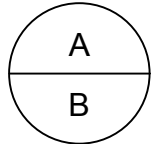
CIMA+

Contract No.	Drawing Code	Serial	Rev.
HS00243	210	41DD	0300   0

- NOTES:
- FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS SEE DRAWING 002.
  - DESIGN SUPPLY AND INSTALL A NEW SAFETY BOOM COMPLETE WITH ON-SHORE AND IN-WATER ANCHORS. SEE SPECIFICATION SECTION 35 42 15.

0	FOR TENDER	R.M	05/13/2020
No.	Description	By Par	Date
Revision / Révision			

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

Professional Stamp

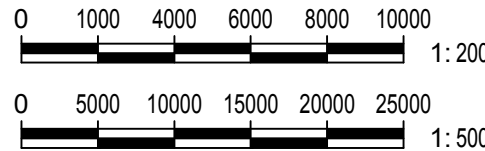
Project title / Titre du projet

TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

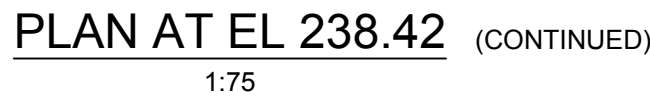
Drawing title / Titre du dessin

CONCRETE  
GENERAL LAYOUT  
PLAN AND ELEVATION

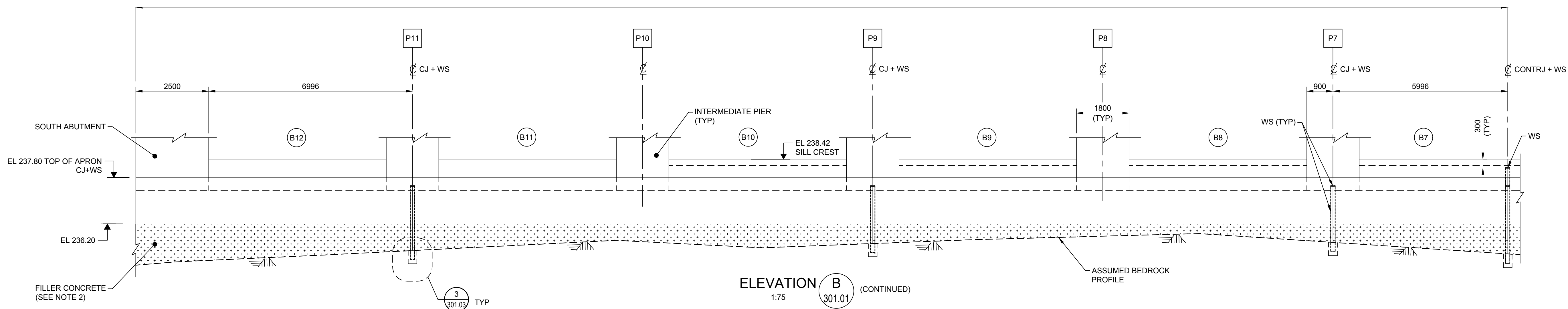
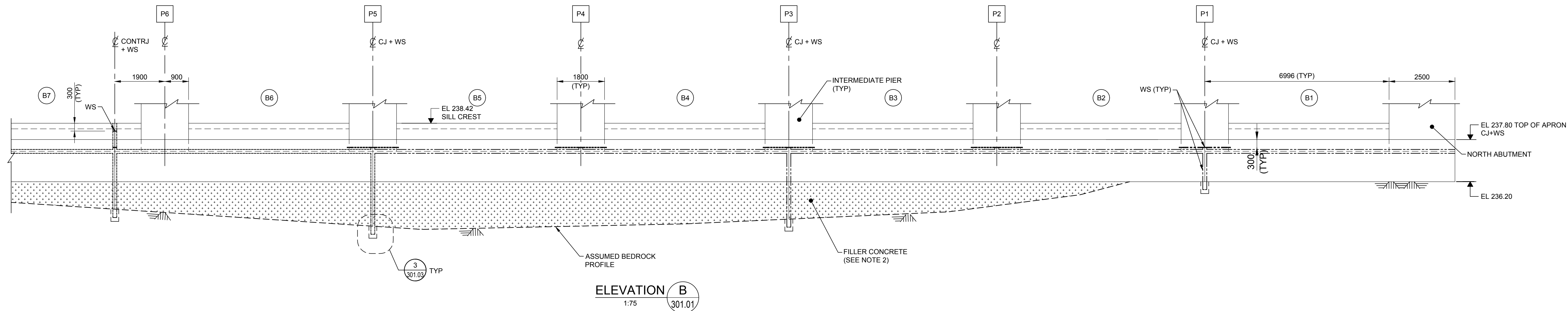
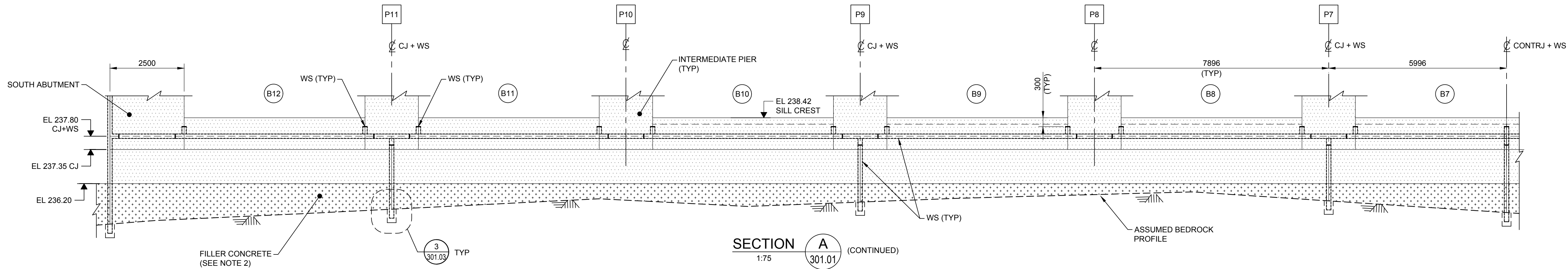
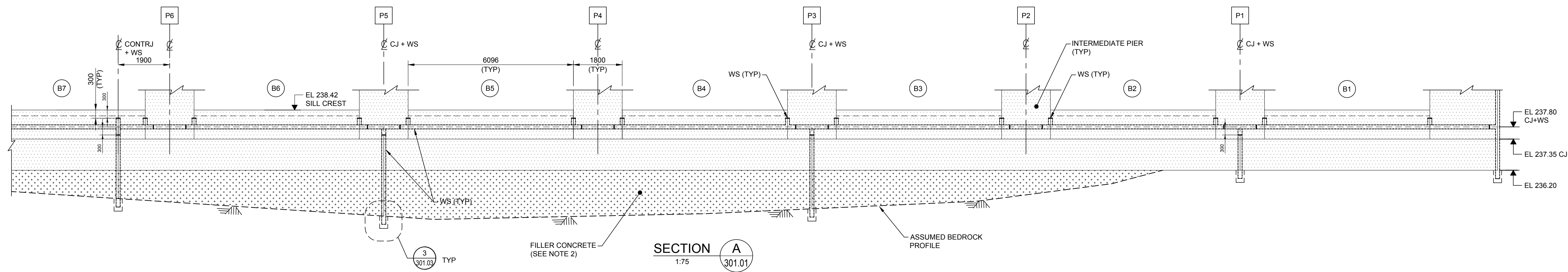
Drawn by / Dessiné par	Designed by / Conçu par
H. BOVIN	Y. BERTON P.Eng.
Verified by / Vérifié par	Approved by / Approuvé par
R. MIGUEL P.Eng.	S. VITTECOQ P.Eng.
Drawing Date / Date du dessin	Drawing Number/ Numéro du Dessin
05/13/2020	300
Project Number / Numéro du projet	Sheet 1 of 1 Feuille 1 de 1
R.076951.705	







0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 millimetres



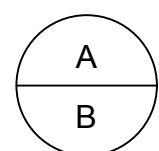
Contract No.	Drawing Code	Serial	Rev.
HS00243	210	41DD	2301
			0

NOTES:

- FOR GENERAL NOTES, LEGEND & ABBREVIATIONS SEE DRAWING 002.
- FILLER CONCRETE IS SHOWN FOR INDICATIVE PURPOSES. SEE NOTE 11 ON DWG. 002.

No.	Description	R.M.	By	Date
0	FOR TENDER			05/13/2020

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



Professional Stamp

Project title / Titre du projet

TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

Drawing title / Titre du dessin

CONCRETE  
SPILLWAY - APRON & SILLS  
PLAN, ELEVATIONS  
SECTIONS AND DETAILS

Drawn by / Dessiné par I. ZIECIK	Designed by / Conçu par M. SAIDOU	P.Eng.
Verified by / Vérifié par R. MIGUEL	Approved by / Approuvé par S. VITTECOQ	P.Eng.

Drawing Date / Date du dessin 05/13/2020	Drawing Number / Numéro du Dessin 301
Project Number / Numéro du projet R.076951.705	Sheet 2 of 3 Feuille 2 de 3

0 750 1500 2250 3750  
1:75



Contract No.	Drawing	Code	Serial	Rev.
HS00243	210	41DD	3301	0


NOTES:

1. FOR GENERAL NOTES, LEGEND & ABBREVIATIONS  
SEE DRAWING 002.
2. FOR DETAILS OF MECHANICAL EMBEDDED PARTS  
IN FIRST AND SECOND PHASE CONCRETE, SEE  
DRAWING 601 AND 602.
3. FILLER CONCRETE IS SHOWN FOR INDICATIVE  
PURPOSES. SEE NOTE 11 ON DWG. 002.


0	FOR TENDER	R.M	05/13/2020
No.	Description	By Par	Date

## 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

## Professional Stamp

Project title / Titre du projet

# TRENT-SEVERN WATERWAY DAM AT LOCK 28 - BURLEIGH FALLS RECONSTRUCTION

Drawing title / Titre du dessin

# CONCRETE SPILLWAY - APRON & SILLS PLAN, ELEVATIONS SECTIONS AND DETAILS

Drawn by / Dessiné par	Designed by / Conçu par
I. ZIECIK	M. SAIDOU P.Eng.

Verified by / Vérifié par	Approved by / Approuvé par
R. MIGUEL P.Eng.	S. VITTECOQ P.Eng.

Drawing Date / Date du dessin	Drawing Number / Numéro du Dessin
05/13/2020	

Project Number / Numéro du projet	301
R.076951.705	Sheet 3 of 3 Feuille 3 de 3

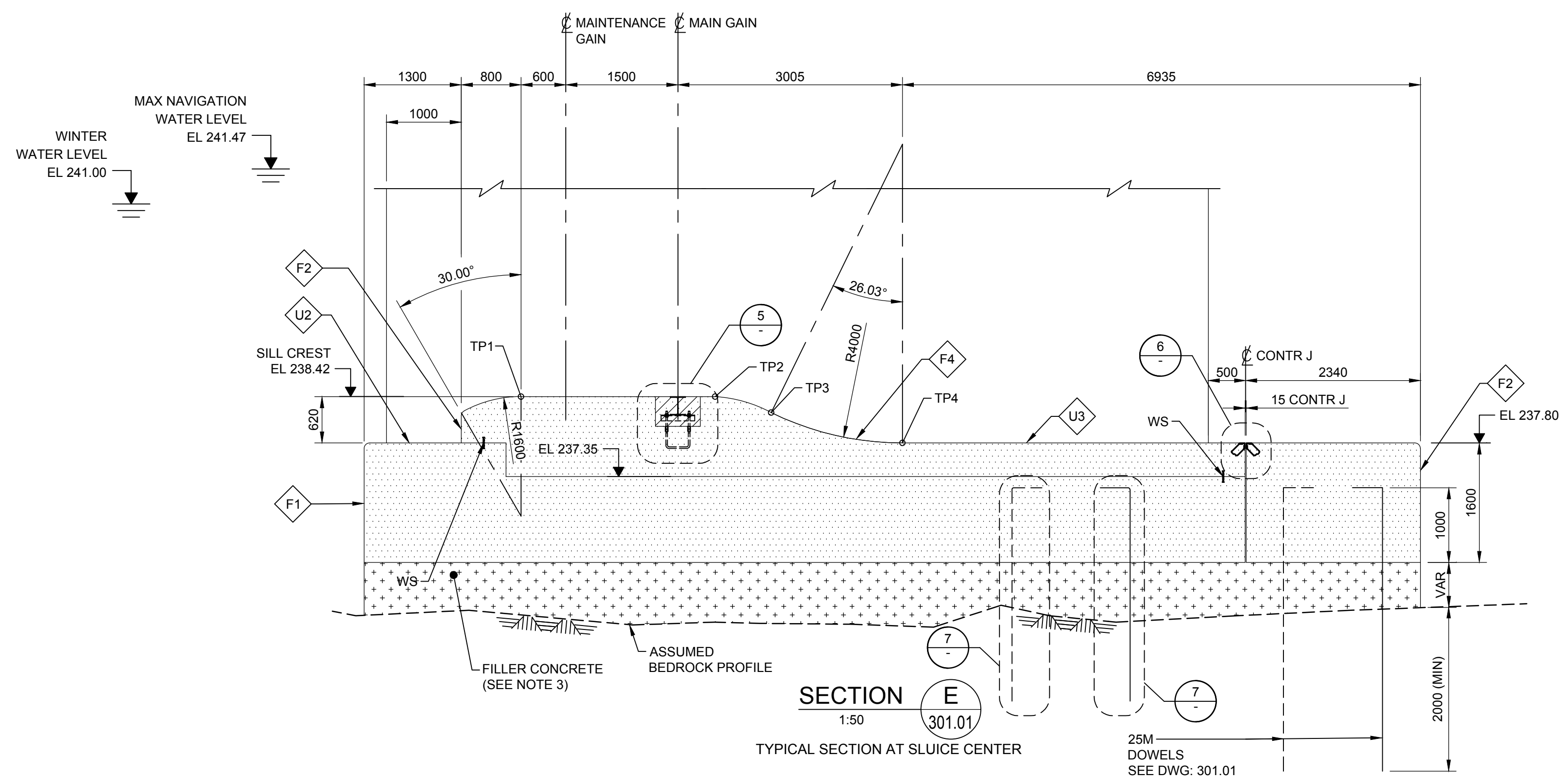
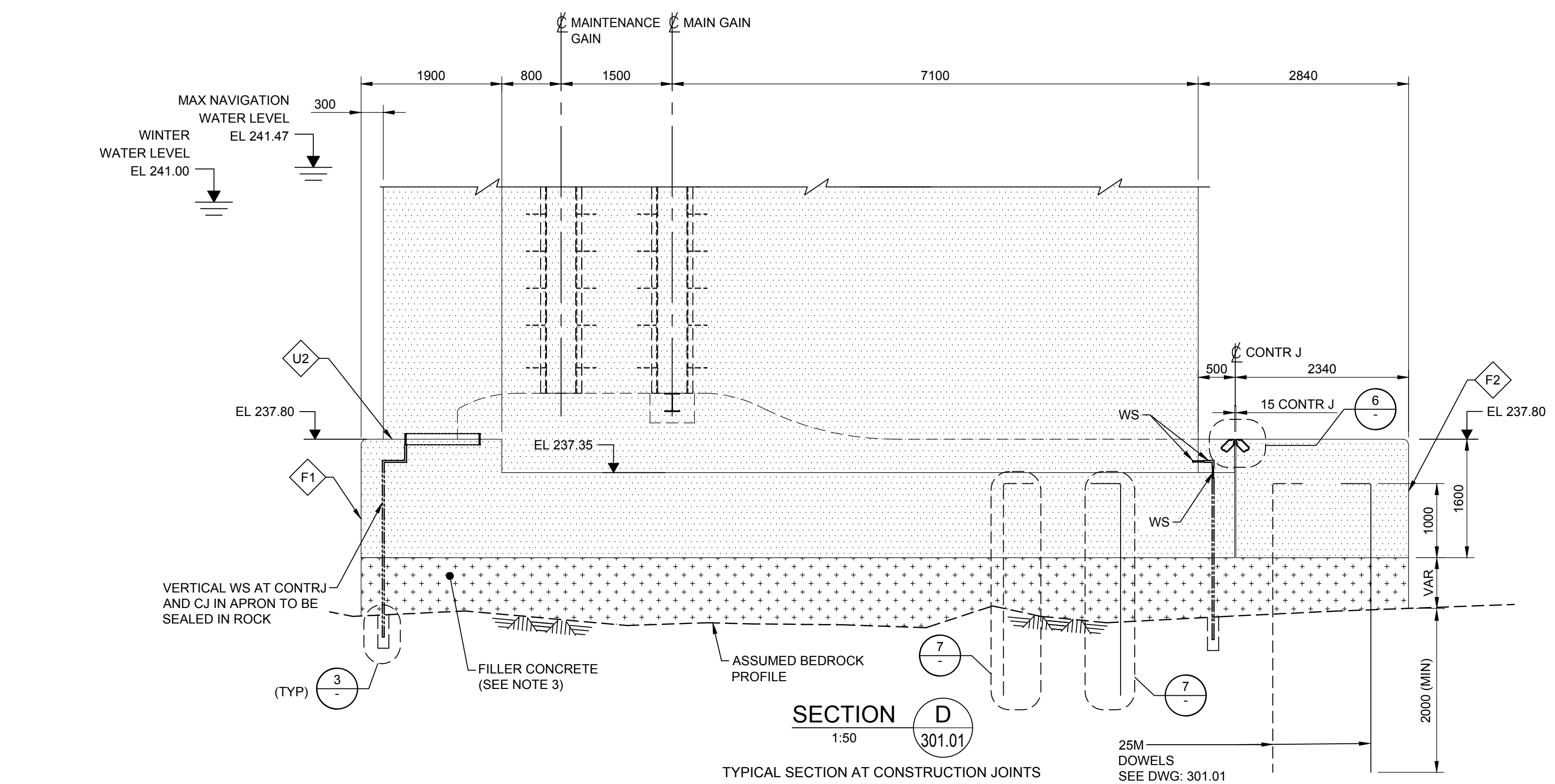
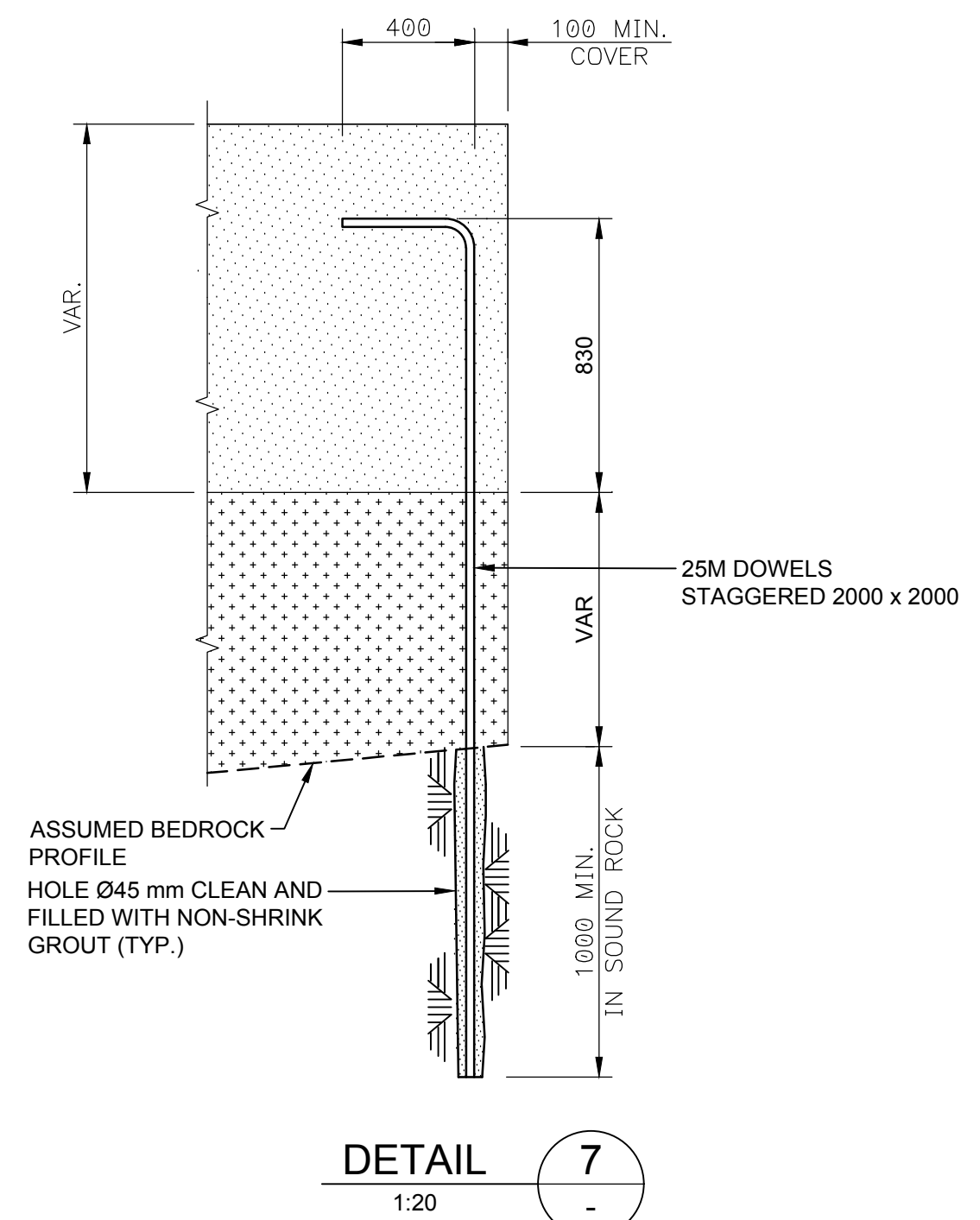
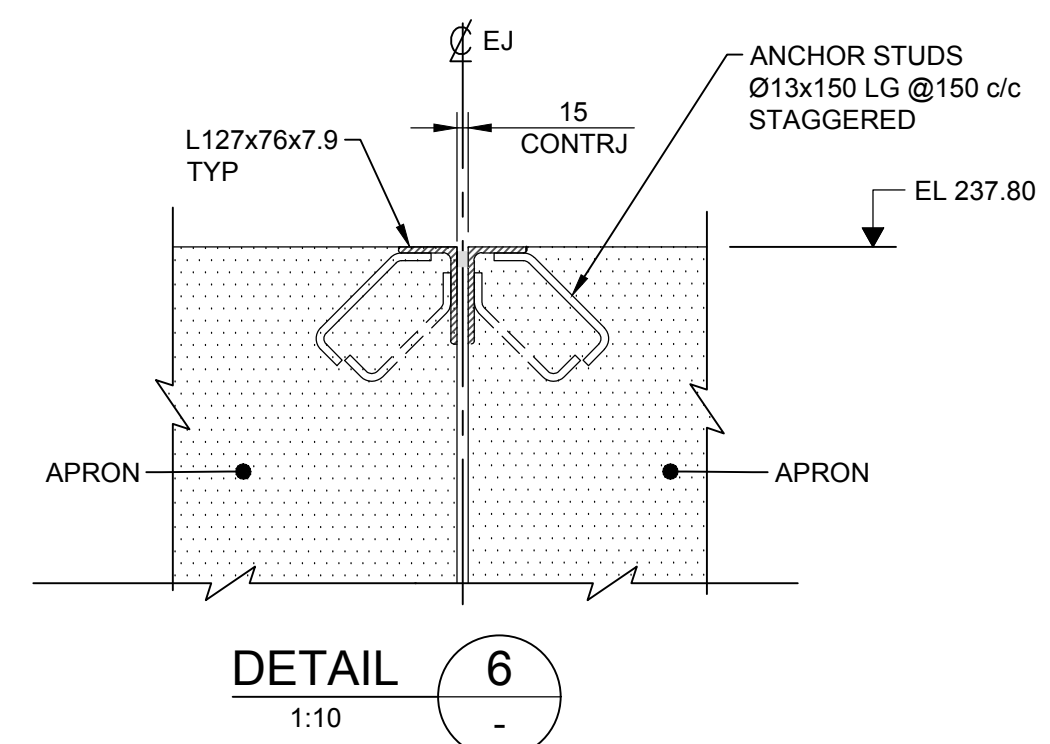
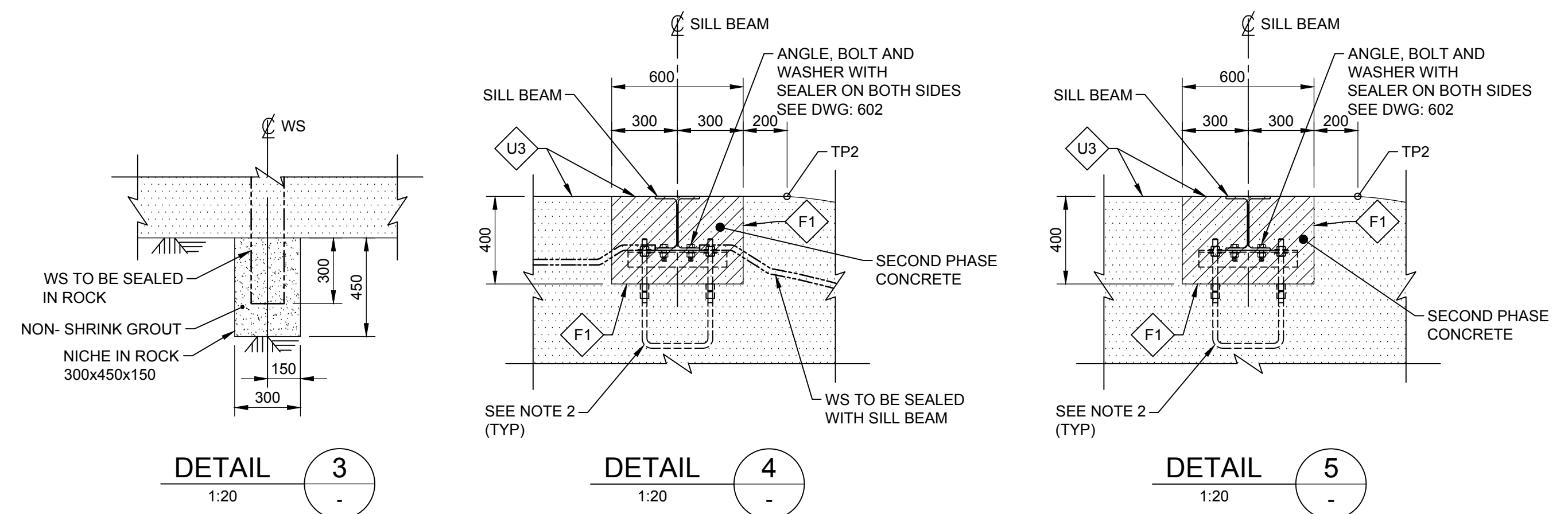
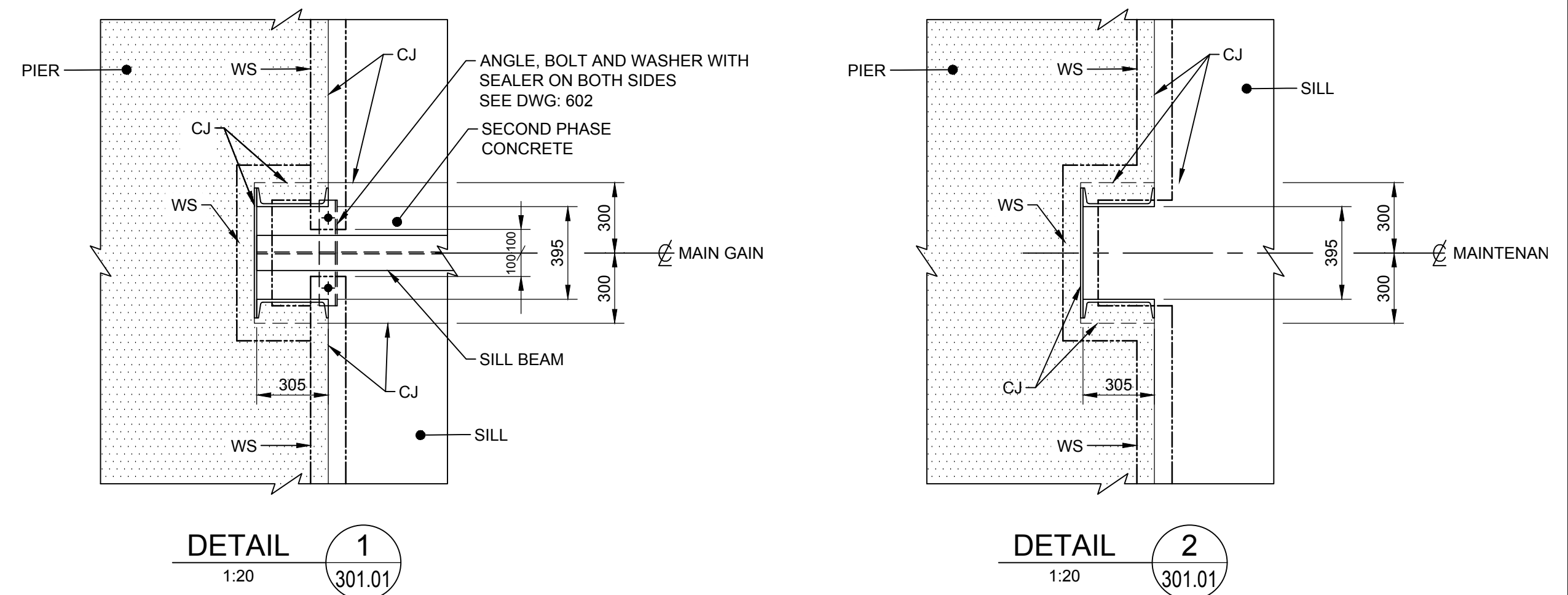
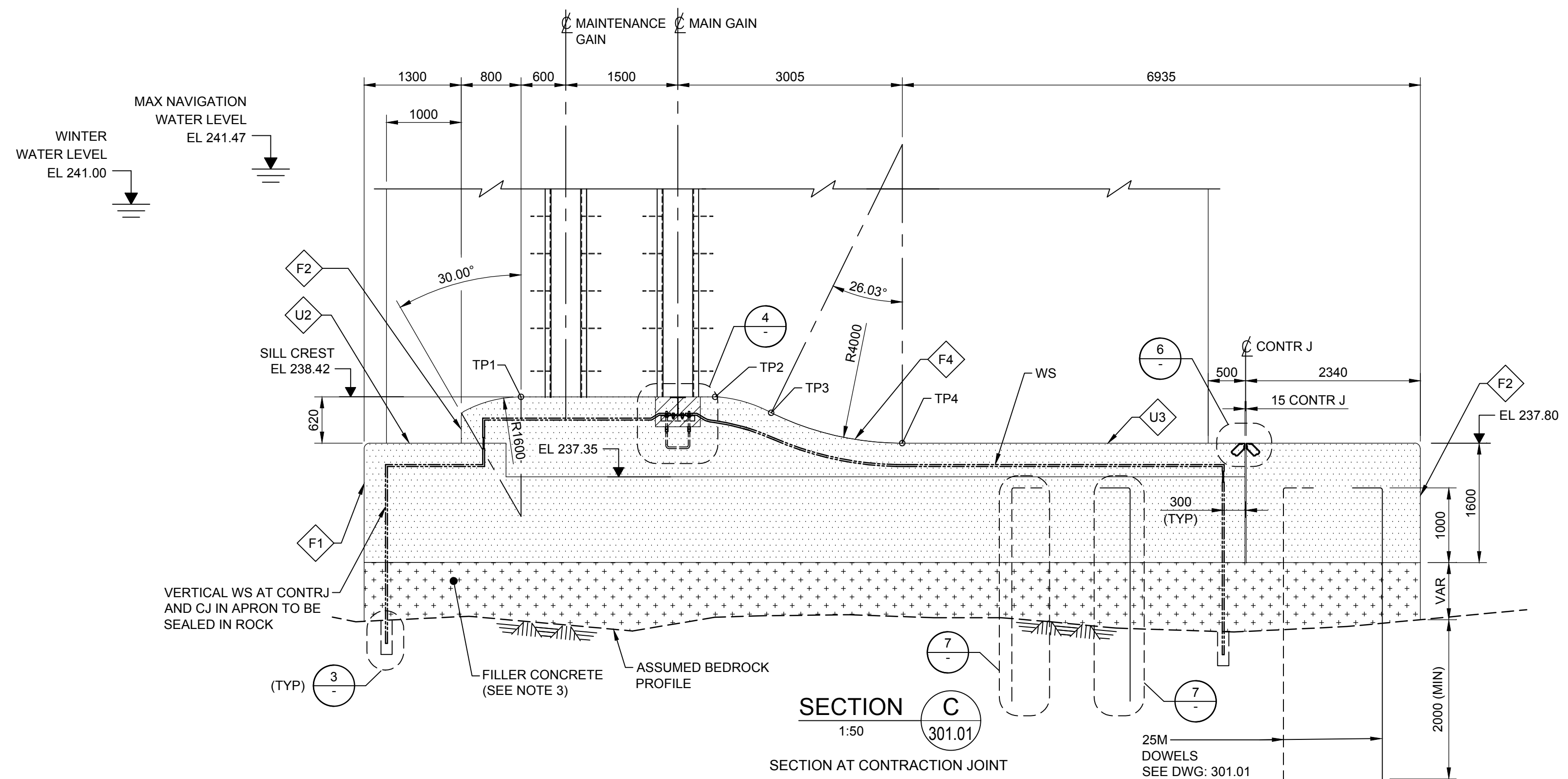
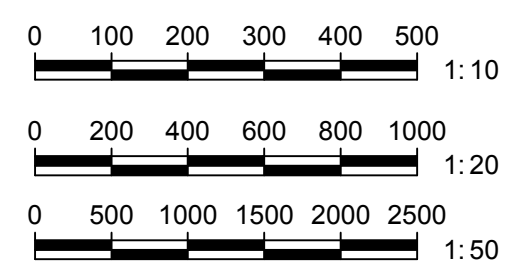


TABLE-1  
SPILLWAY SILL PROFILE

x (mm)	EL (m)	POINT	REMARKS
-2900	238.162		CIRCULAR ARC OF RADIUS 1600
-2700	238.303		
-2500	238.369		
-2300	238.407		
-2100	238.420	TP1	
-1500	238.420	2 MAINTENANCE GAIN	CIRCULAR ARC OF RADIUS 4000
0	238.420	2 MAIN GAIN & SILL BEAM	
500	238.420	TP2	
750	238.387		
1000	238.317		
1250	238.206	TP3	
1500	238.094		
1750	238.003		
2000	237.929		
2250	237.872		
2500	237.832		
2750	237.809		
3005	237.800	TP4	

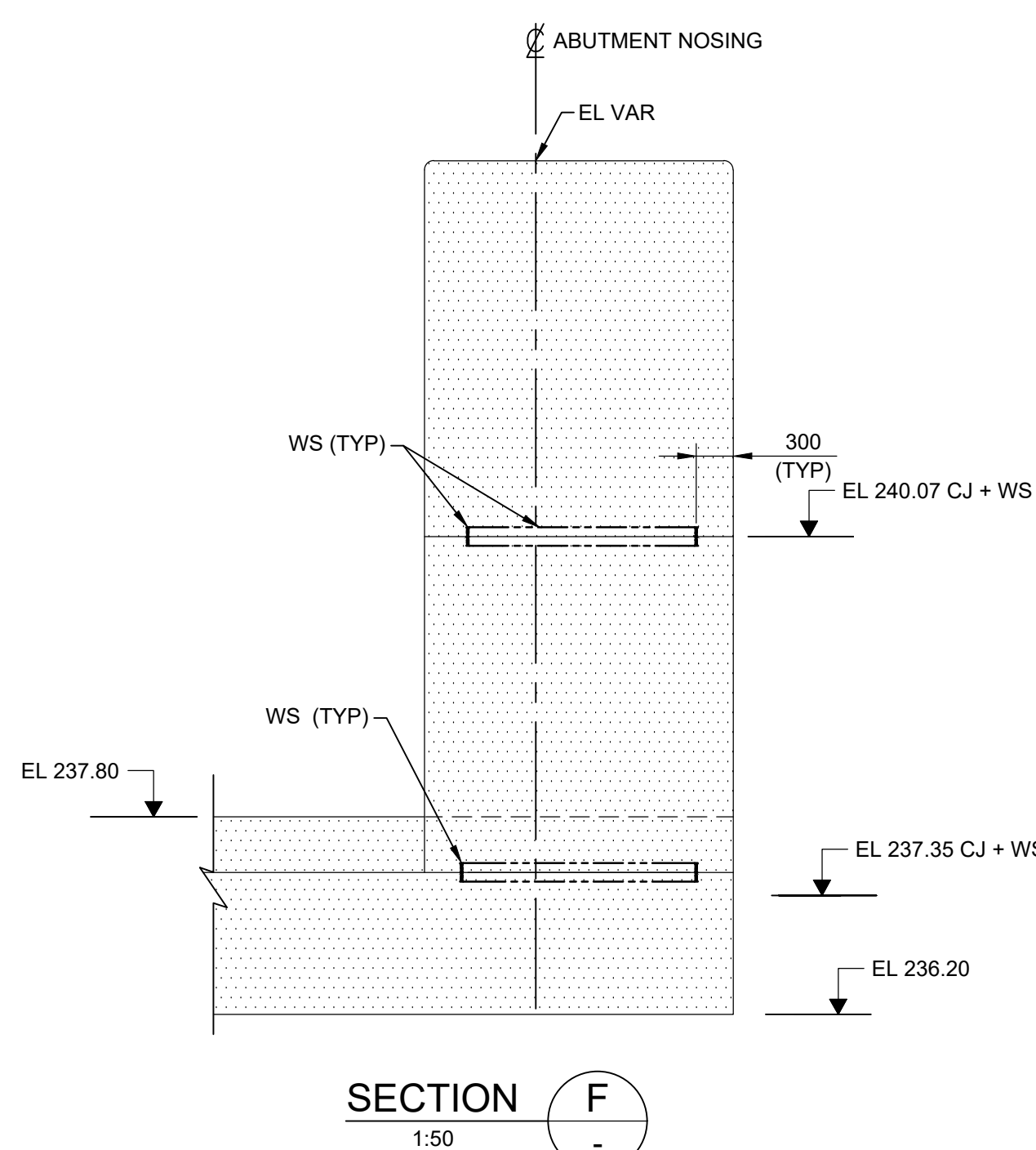
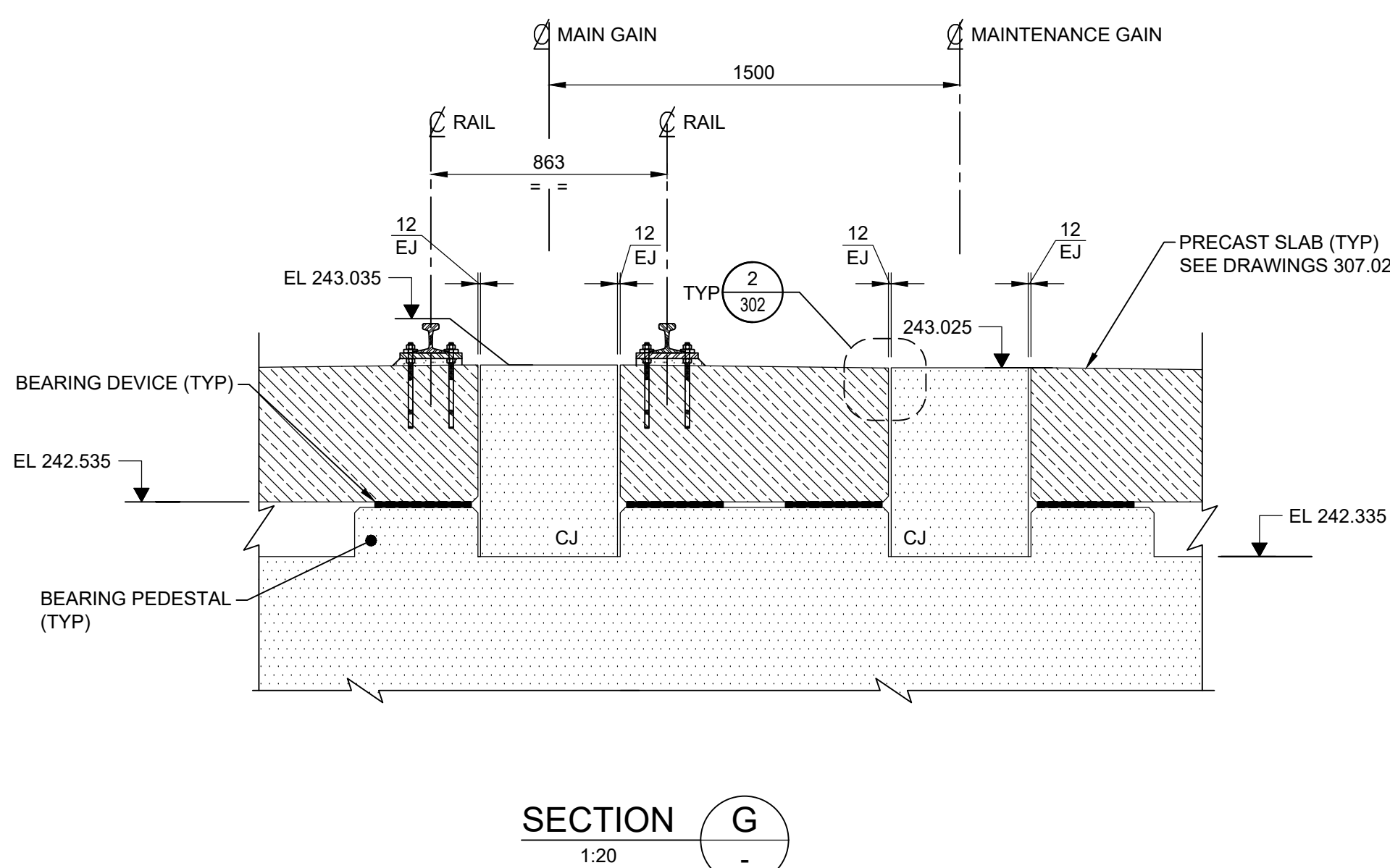
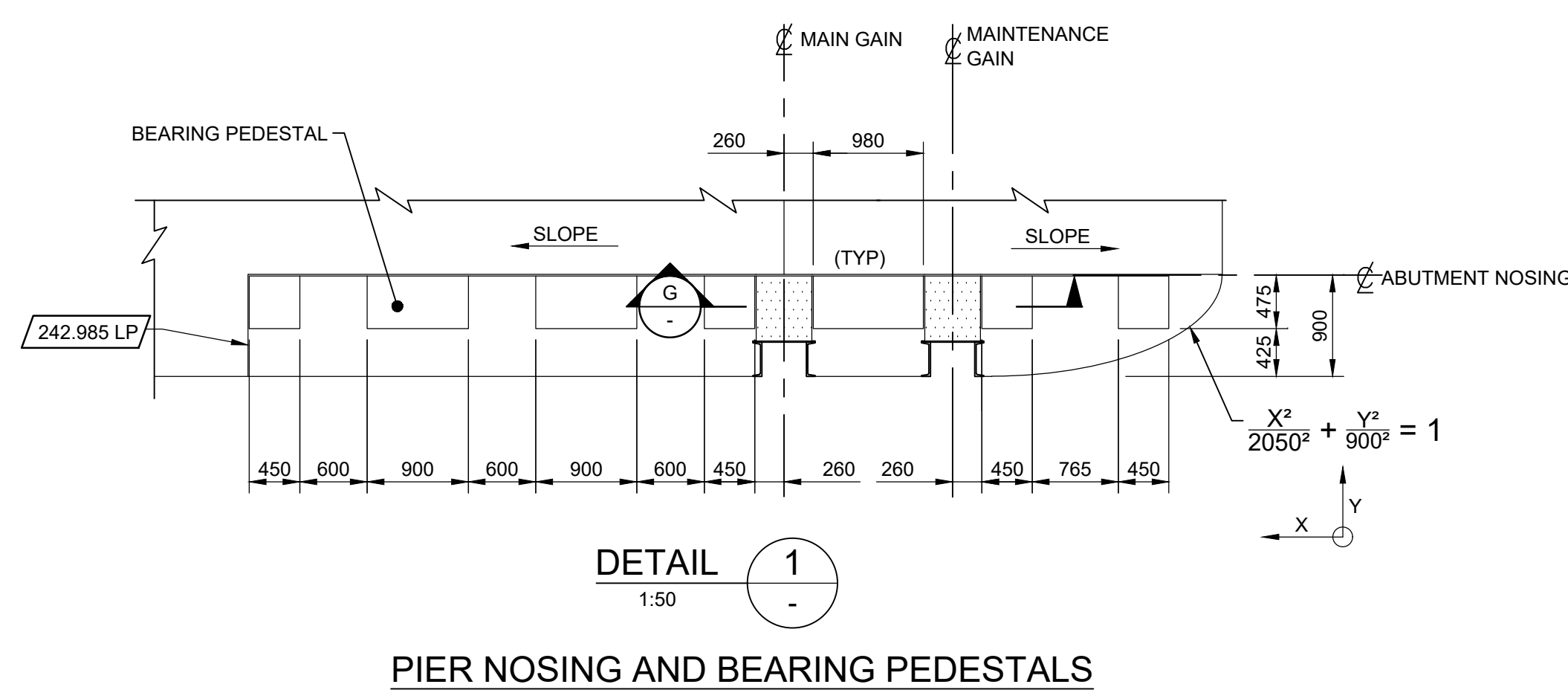
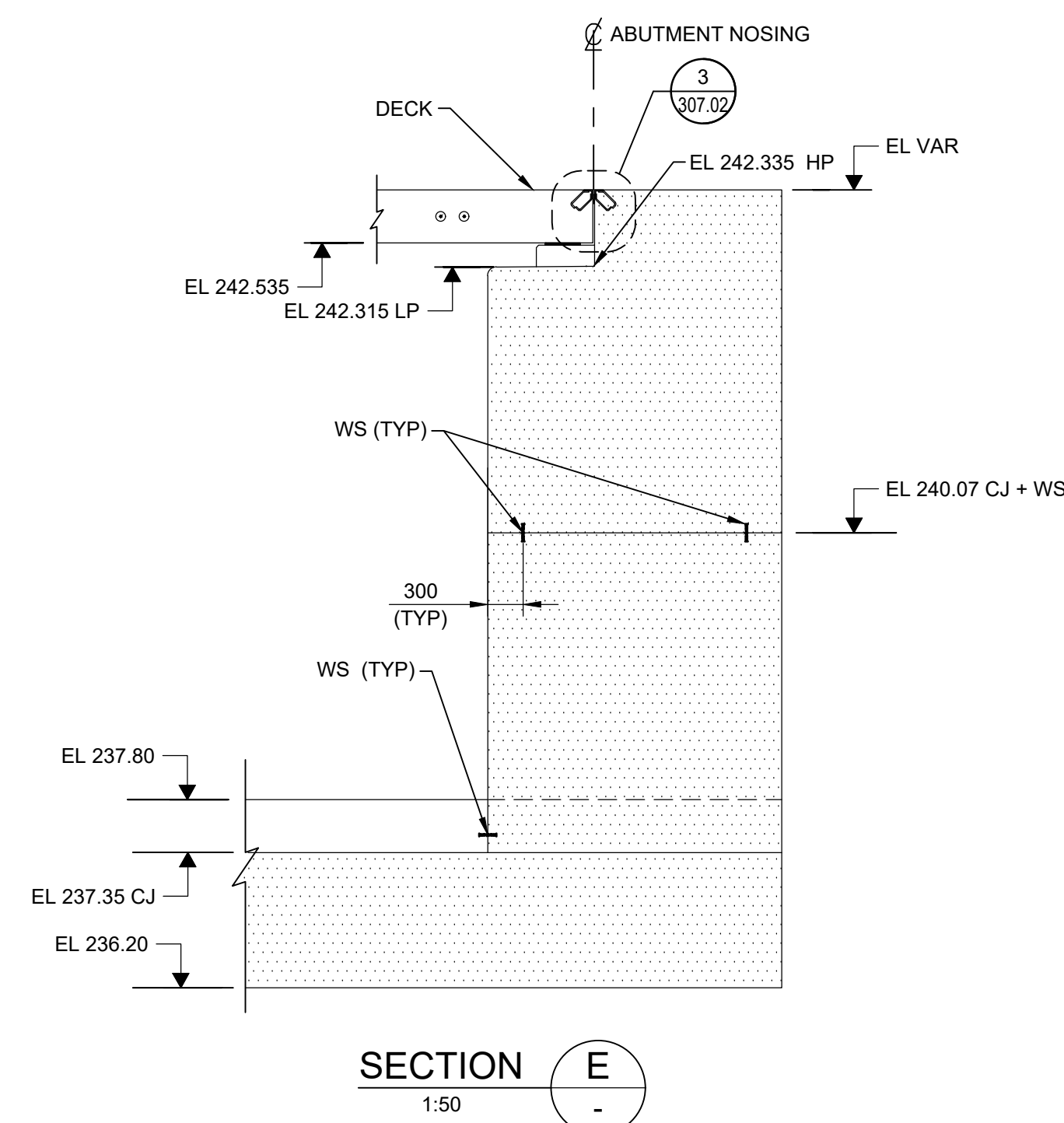
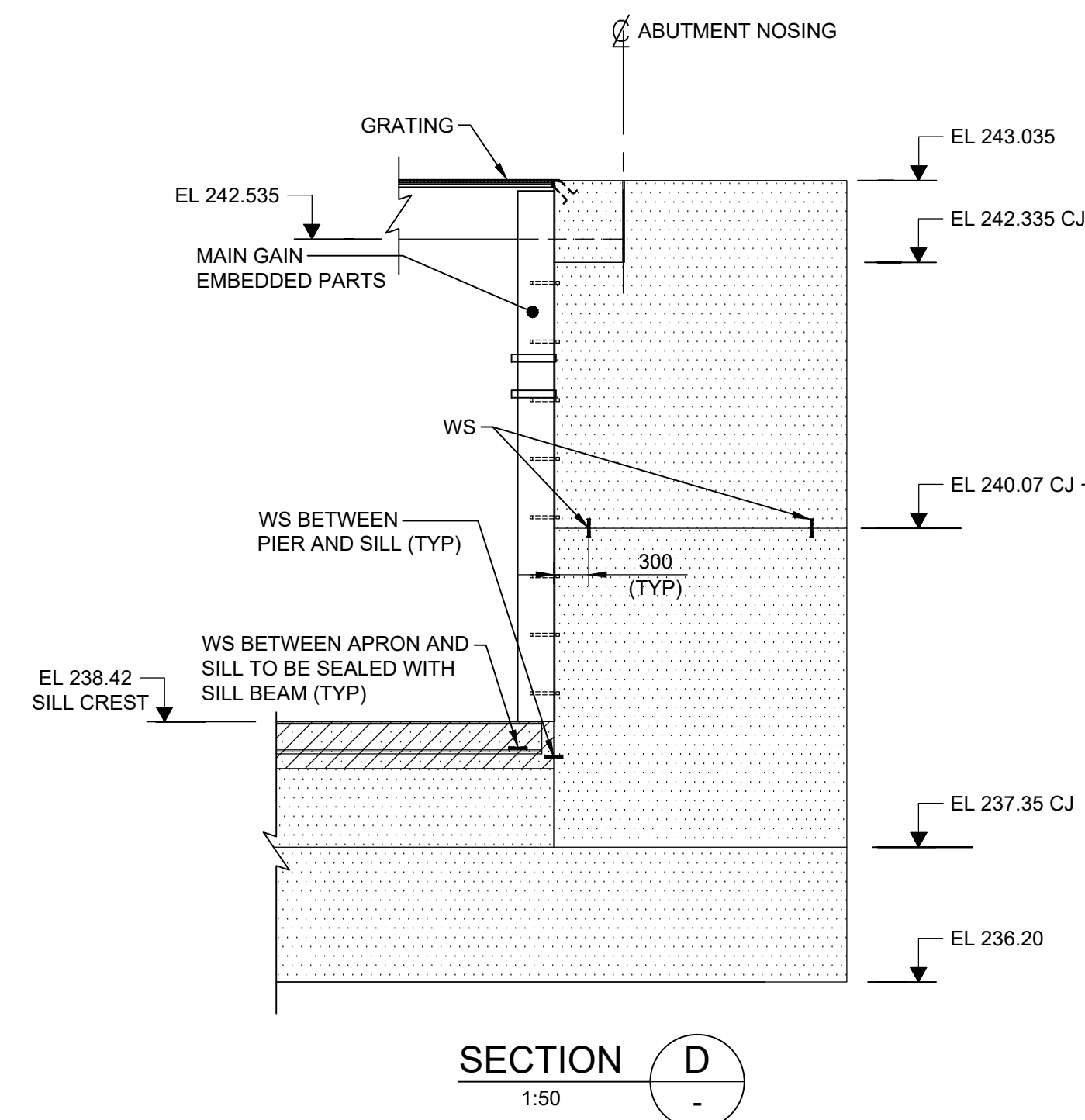
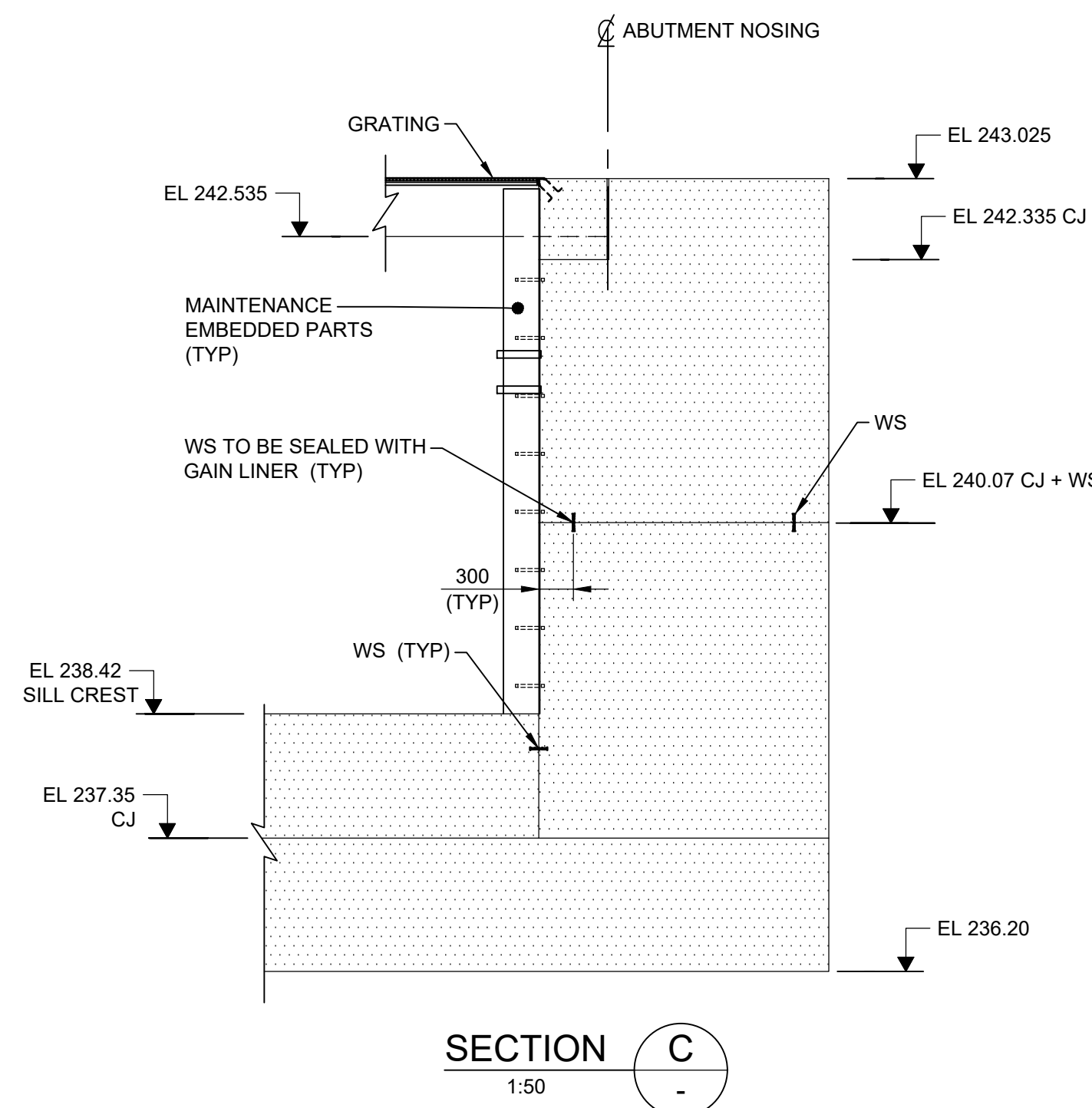
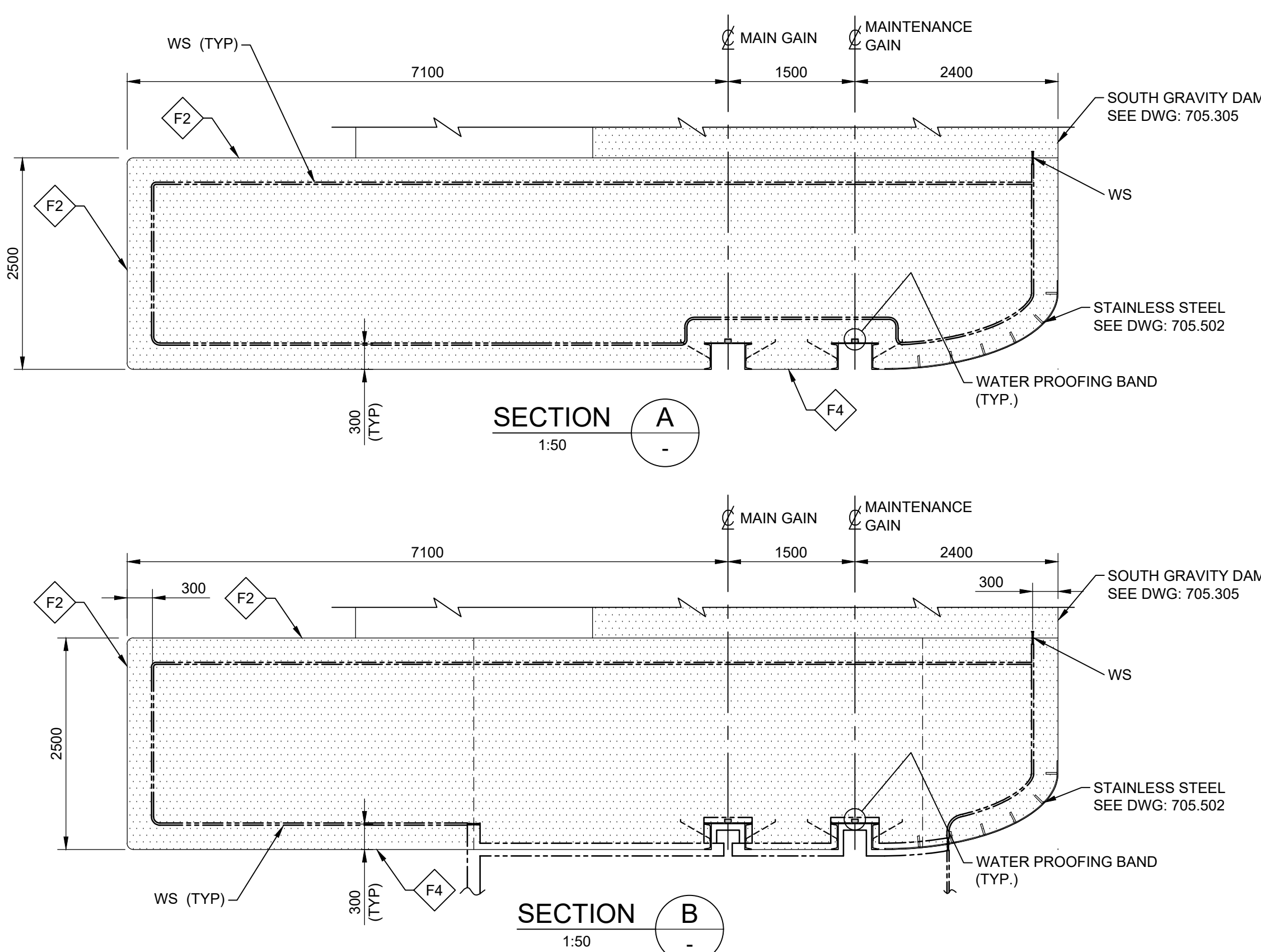
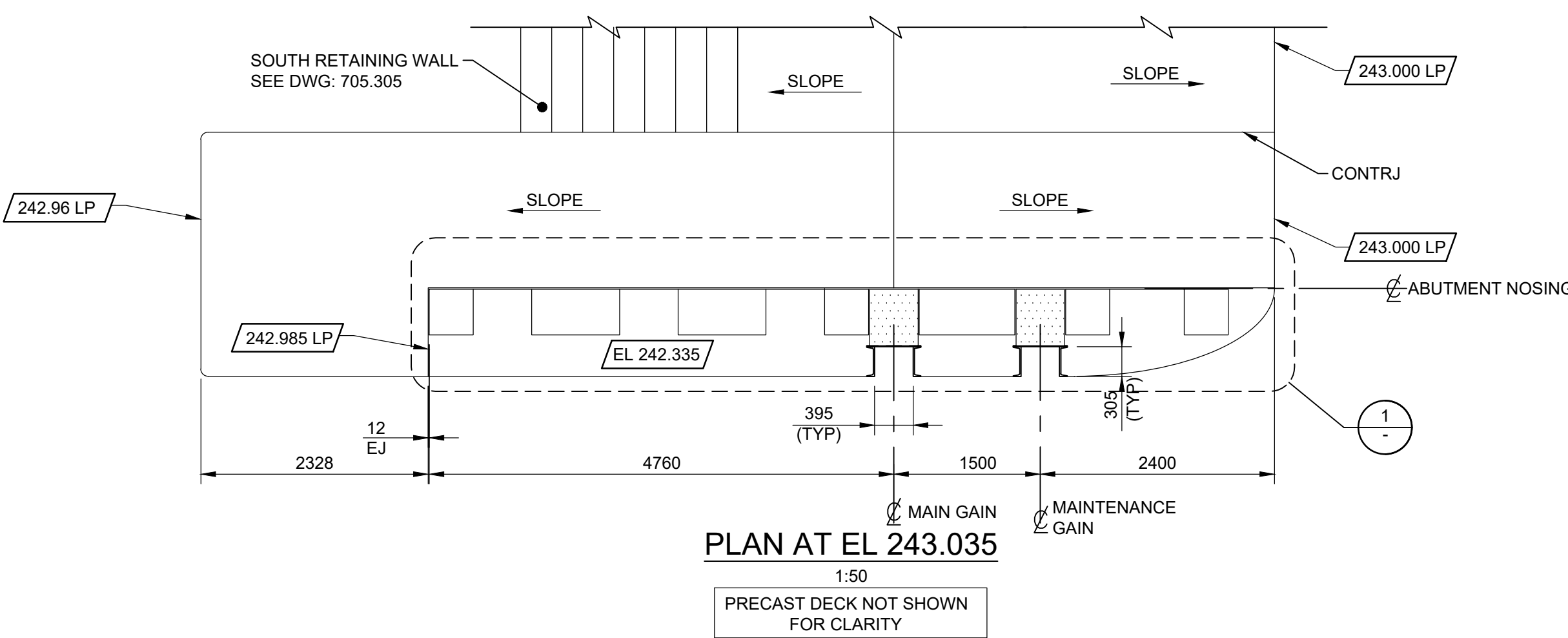
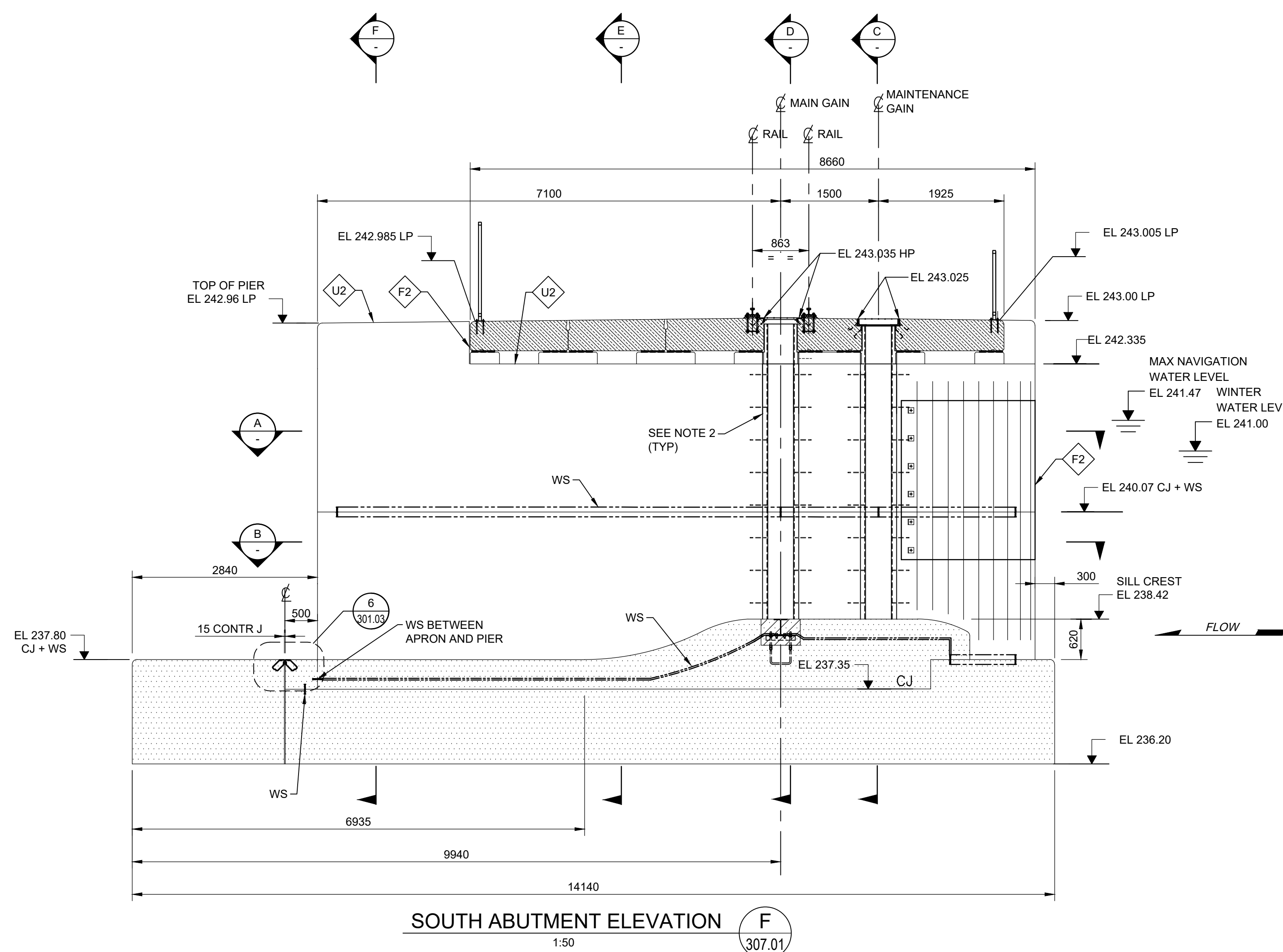
TABLE-2 ELEVATIONS AT SLUICES CENTER	
---	--

SLUICES	BATHYMETRY	
	UPSTREAM	DOWNSTREAM
B1	236.756	237.288
B2	237.500	236.585
B3	237.250	236.465
B4	237.091	236.300
B5	236.910	236.500
B6	237.317	236.750
B7	237.800	237.800
B8	237.750	237.750
B9	237.250	237.750
B10	237.171	237.800
B11	236.072	237.750
B12	235.412	237.441









- NOTES:
- FOR GENERAL NOTES, LEGEND & ABBREVIATIONS SEE DRAWING 002.
  - FOR DETAILS OF MECHANICAL EMBEDDED PARTS IN FIRST AND SECOND PHASE CONCRETE, SEE DRAWINGS 600 TO 602.

No.	Description	By	Date
0	FOR TENDER	R.M	05/13/2020

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

Professional Stamp

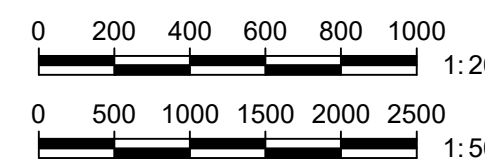
Project title / Titre du projet

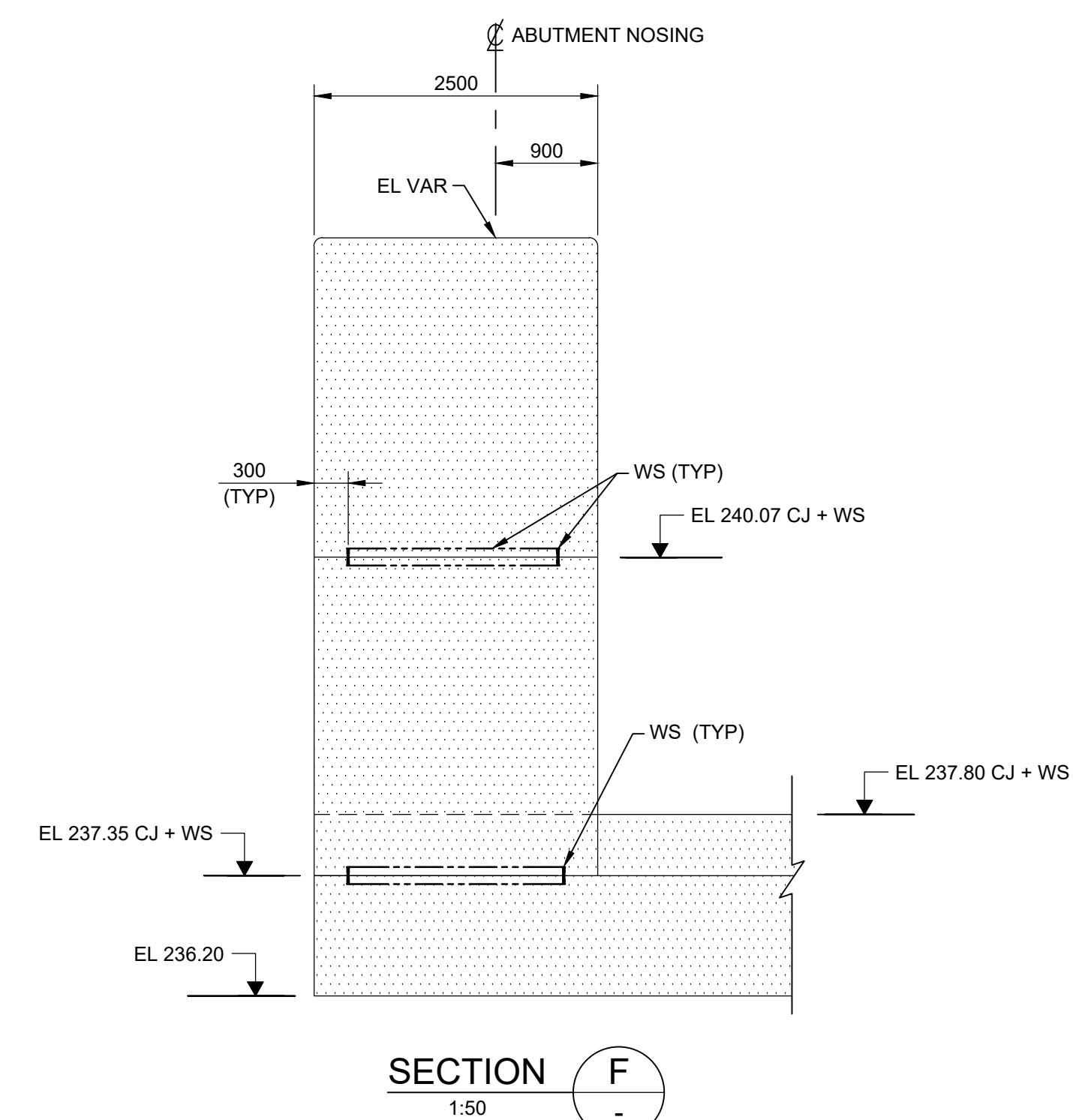
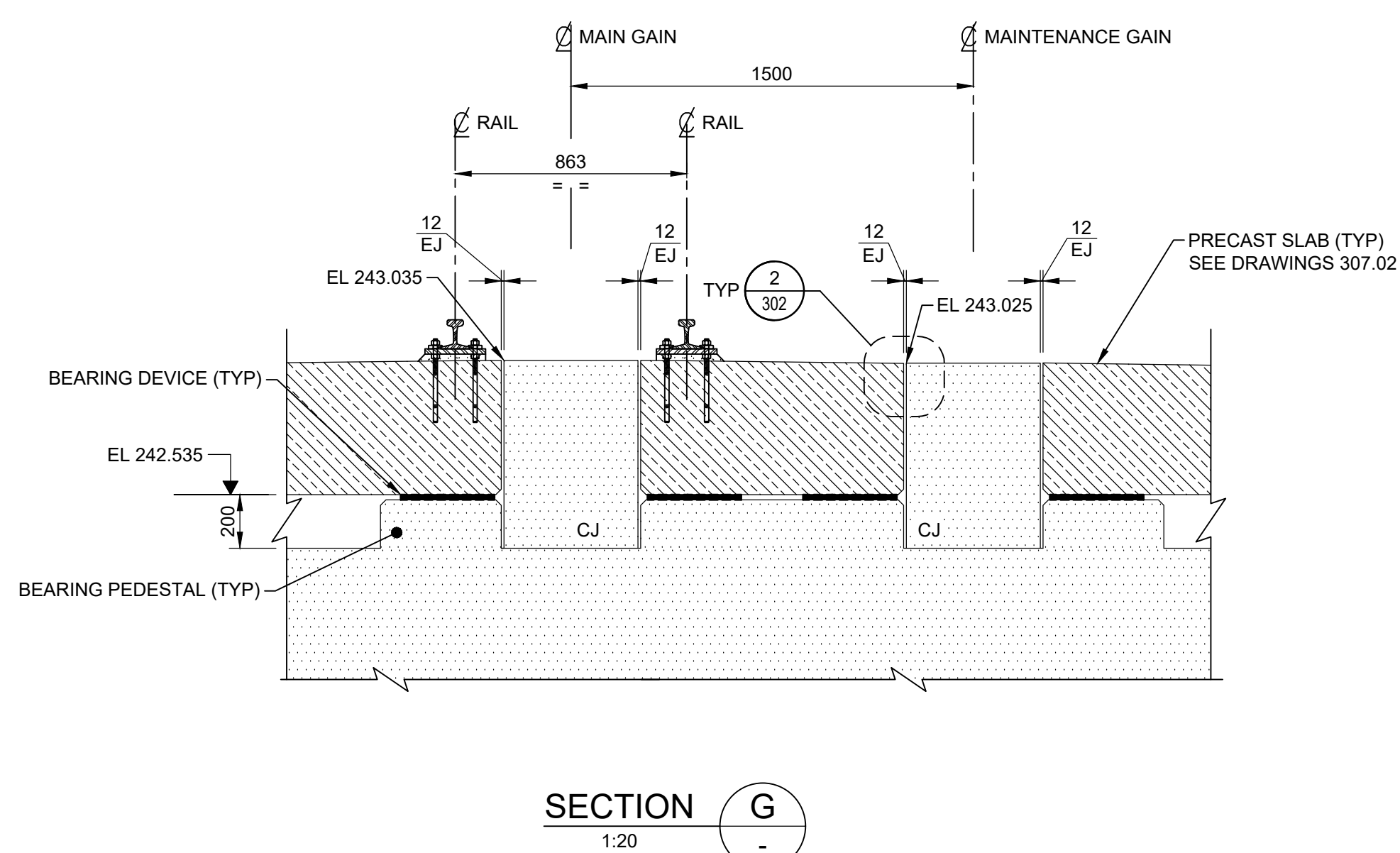
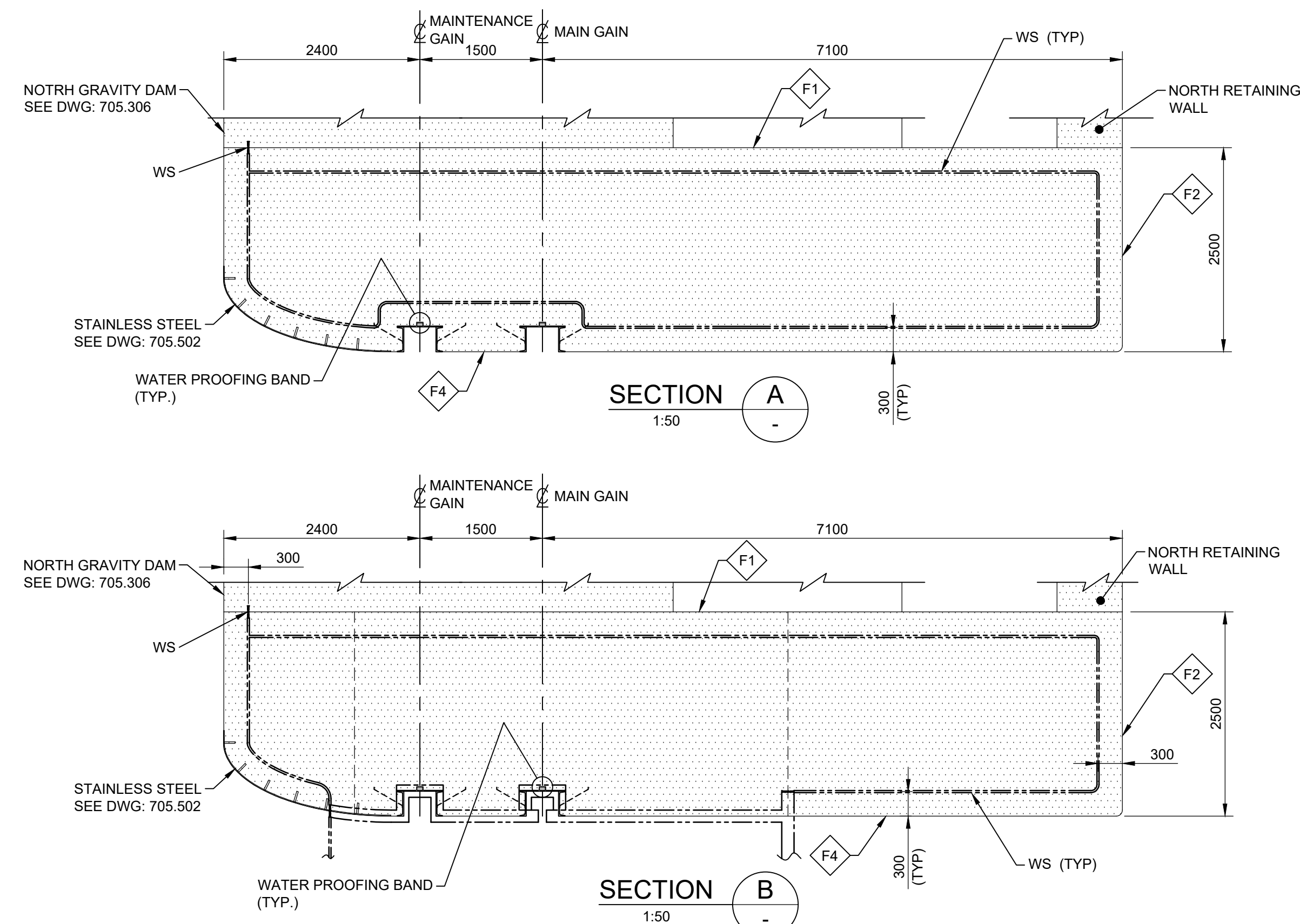
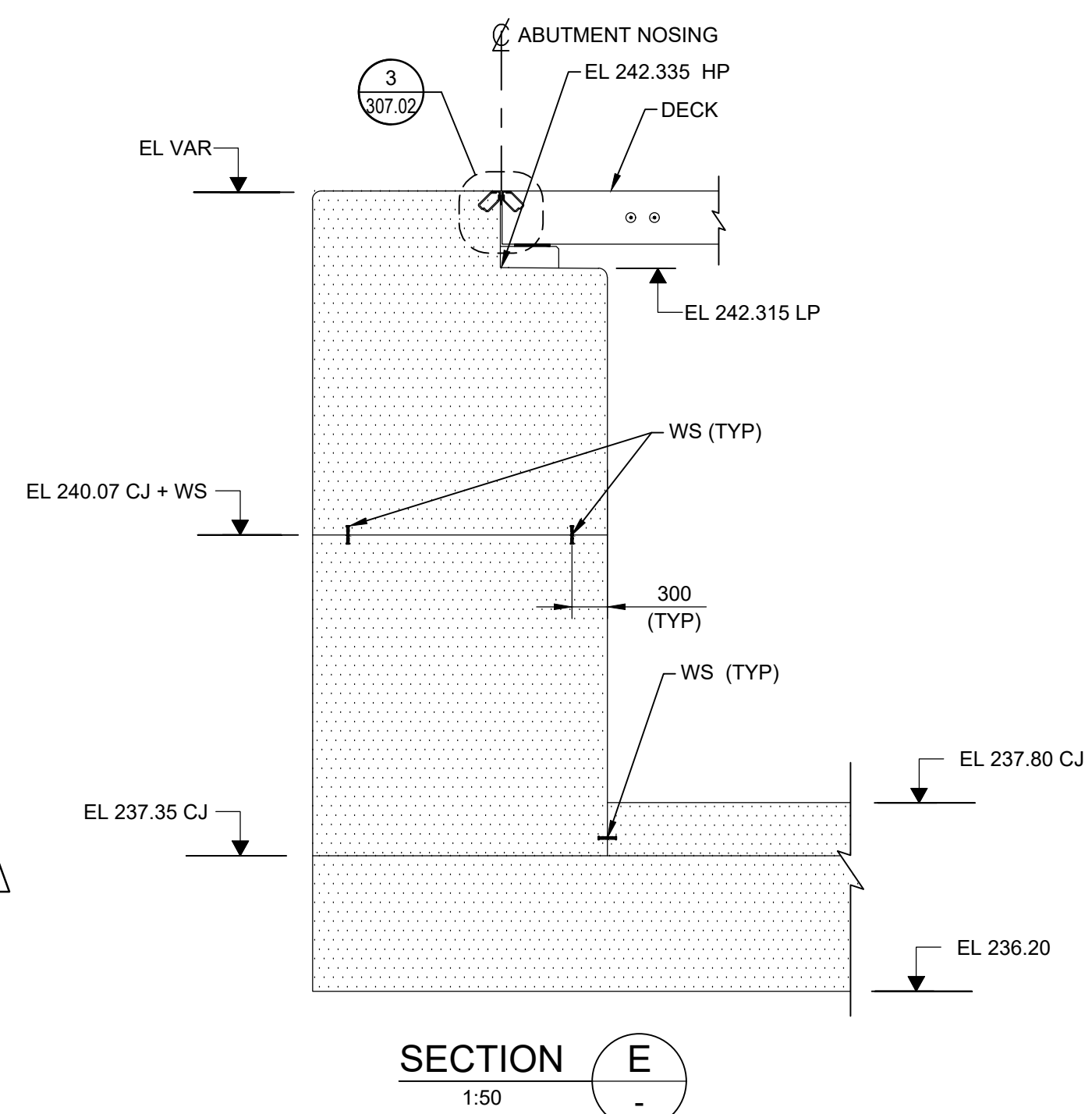
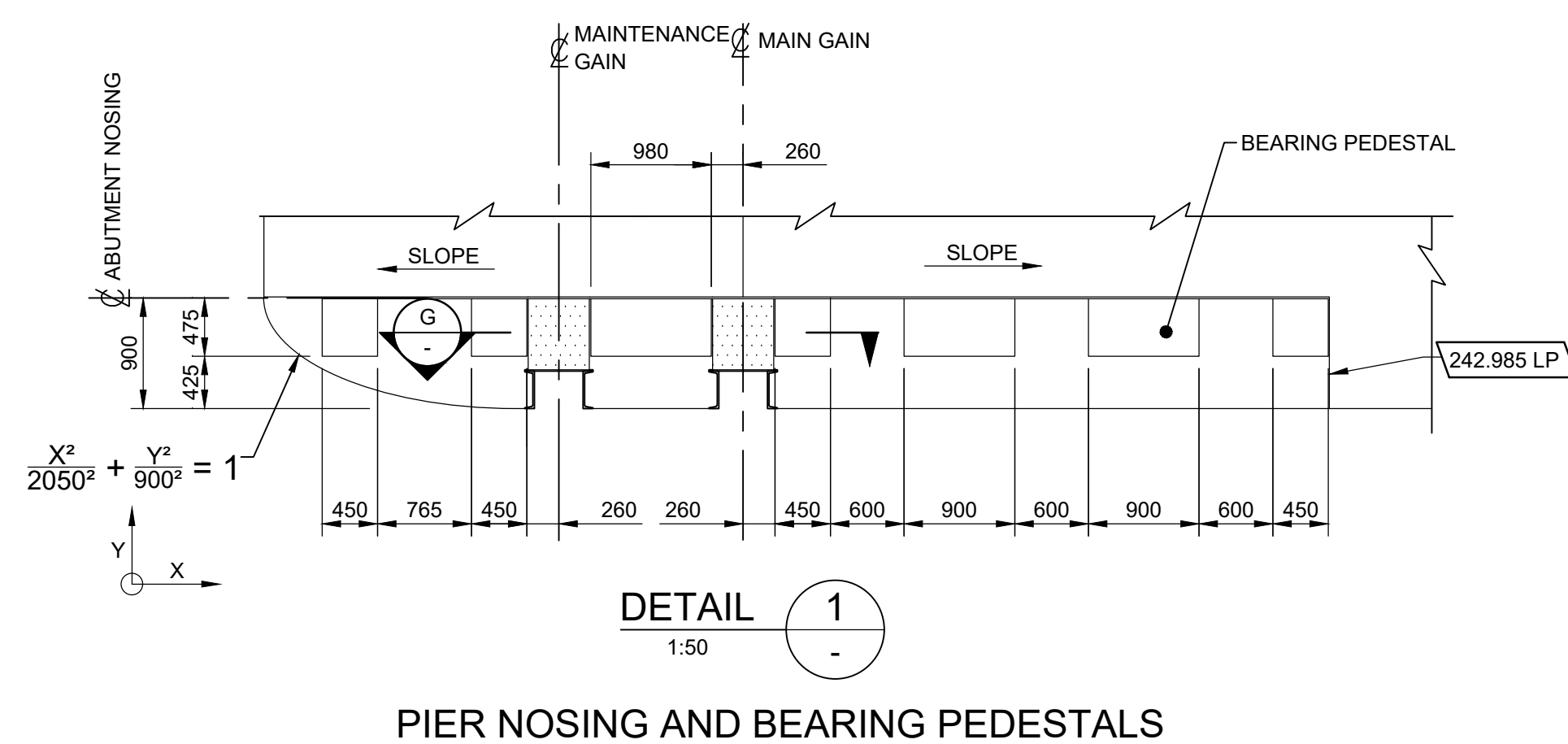
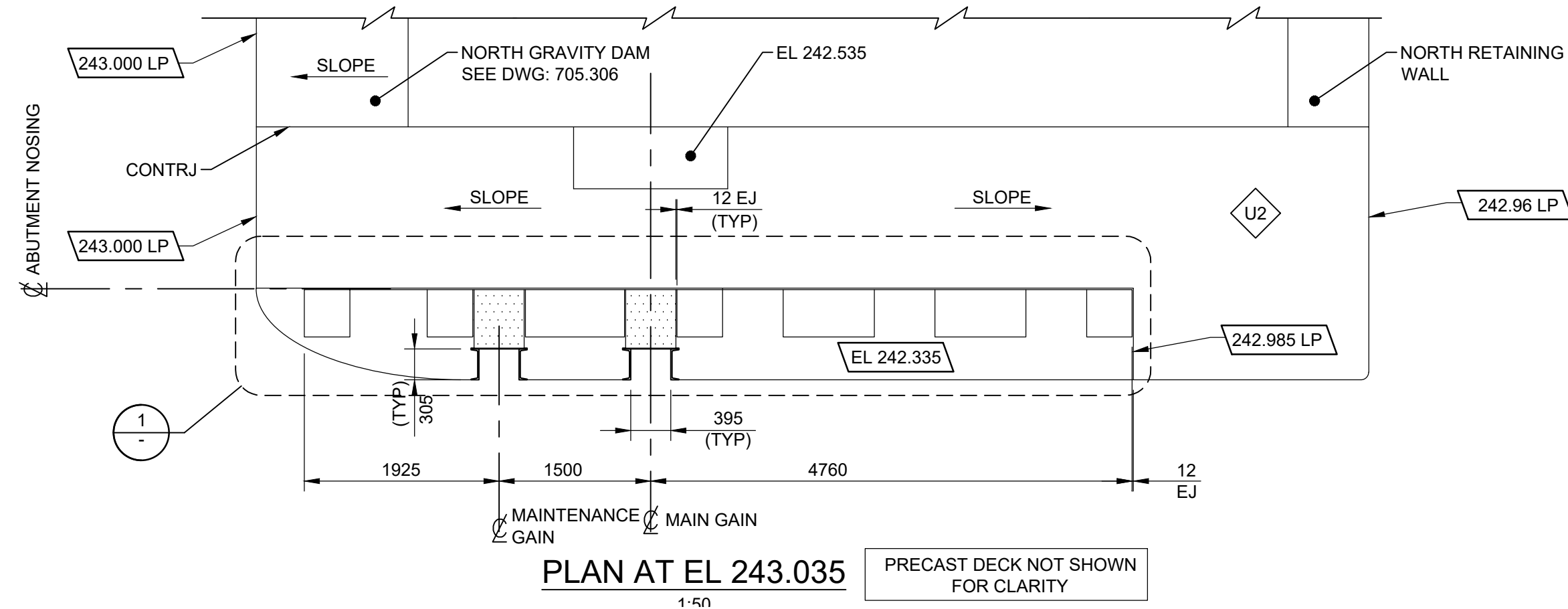
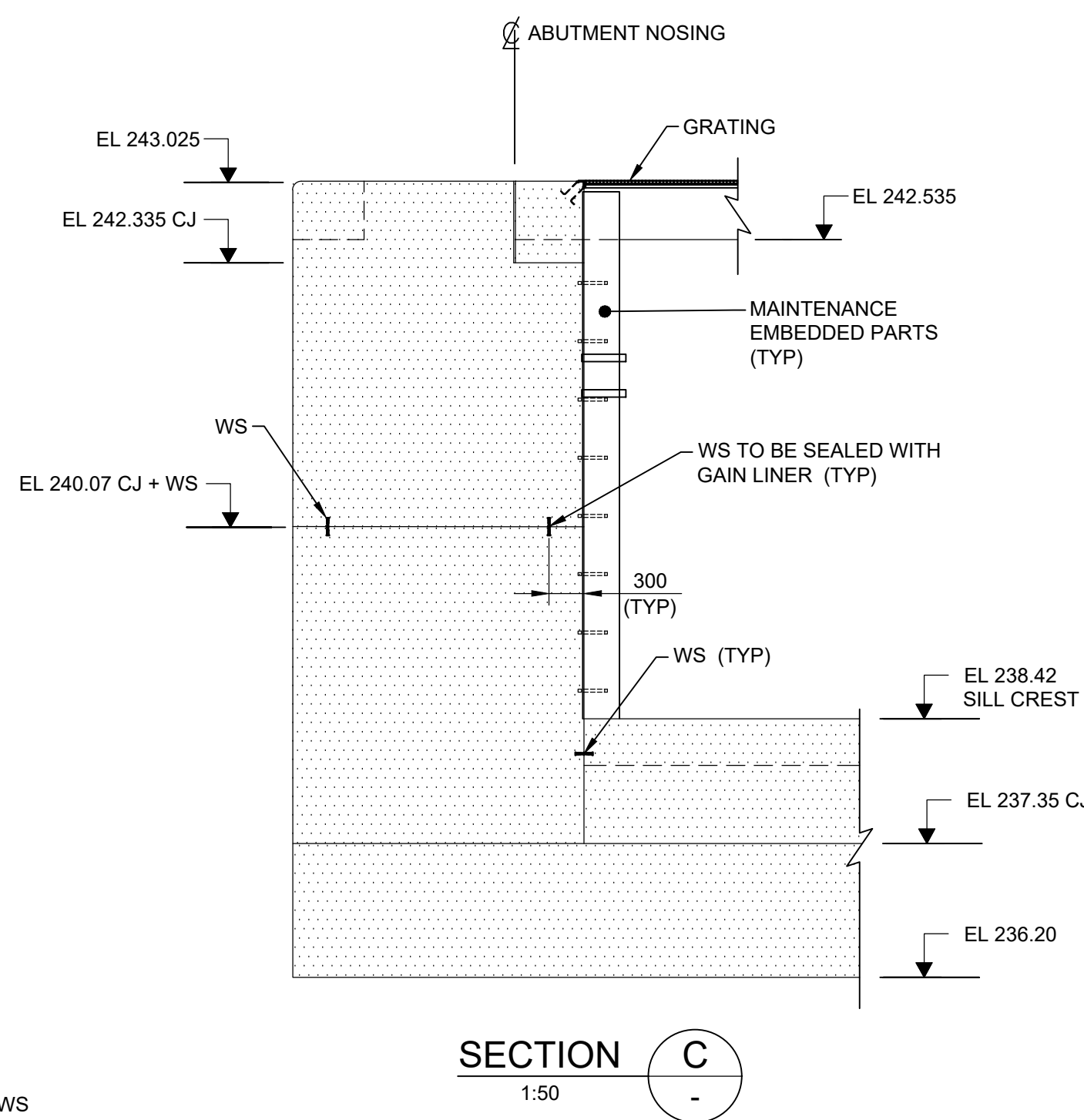
TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

Drawing title / Titre du dessin

CONCRETE  
SOUTH ABUTMENT  
PLAN, ELEVATION,  
SECTIONS AND DETAIL

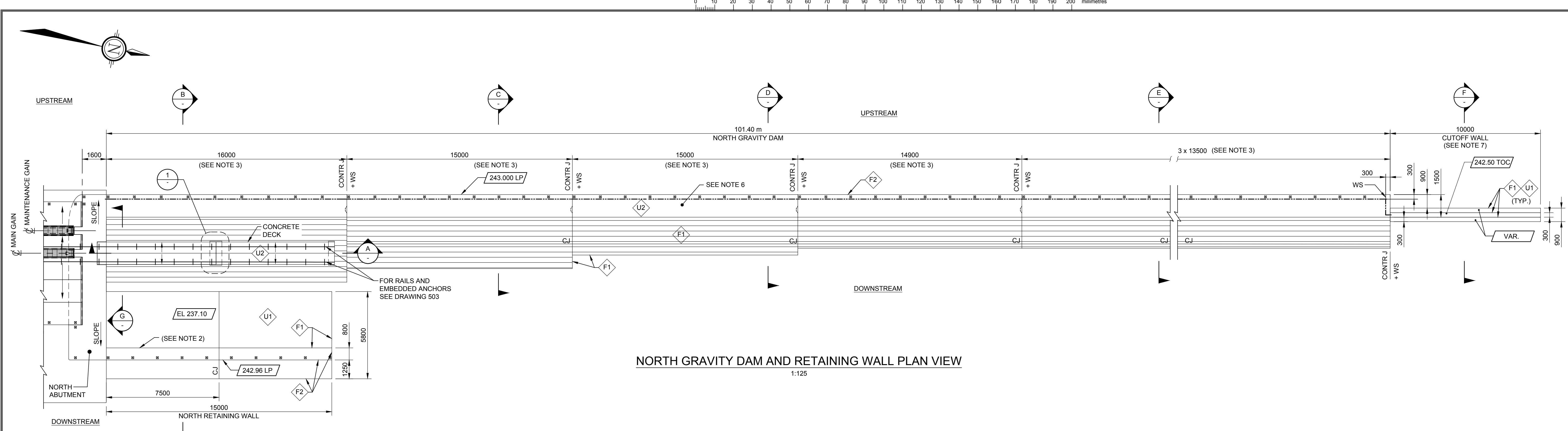
Drawn by / Dessiné par I. ZIECK	Designed by / Conçu par M. SAIDOU P.Eng.
Verified by / Vérifié par R. MIGUEL P.Eng.	Approved by / Approuvé par S. VITTECOQ P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number / Numéro du Dessin 303
Project Number / Numéro du projet R.076951.705	Sheet Feuille 1 of 1 de 1





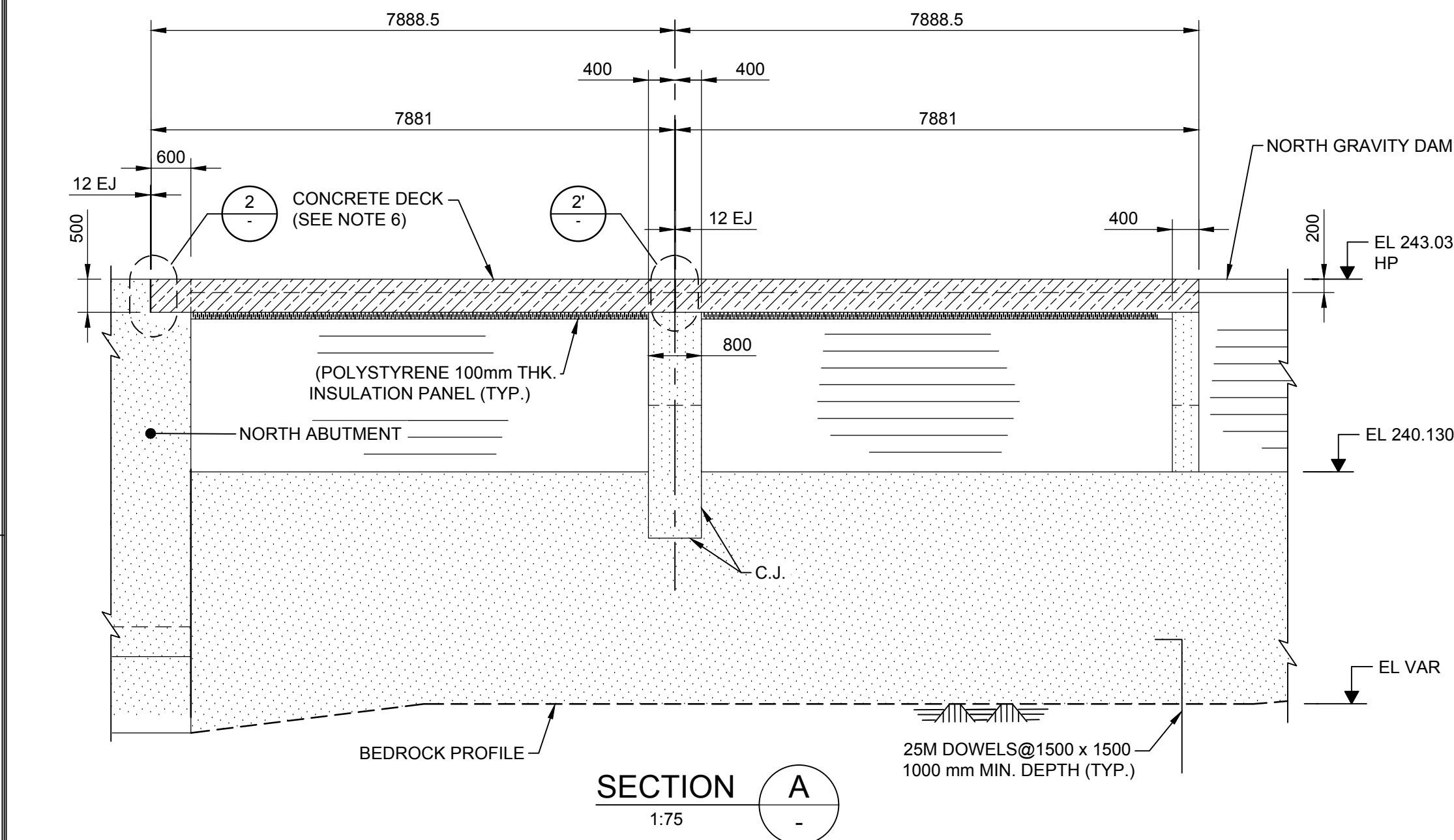






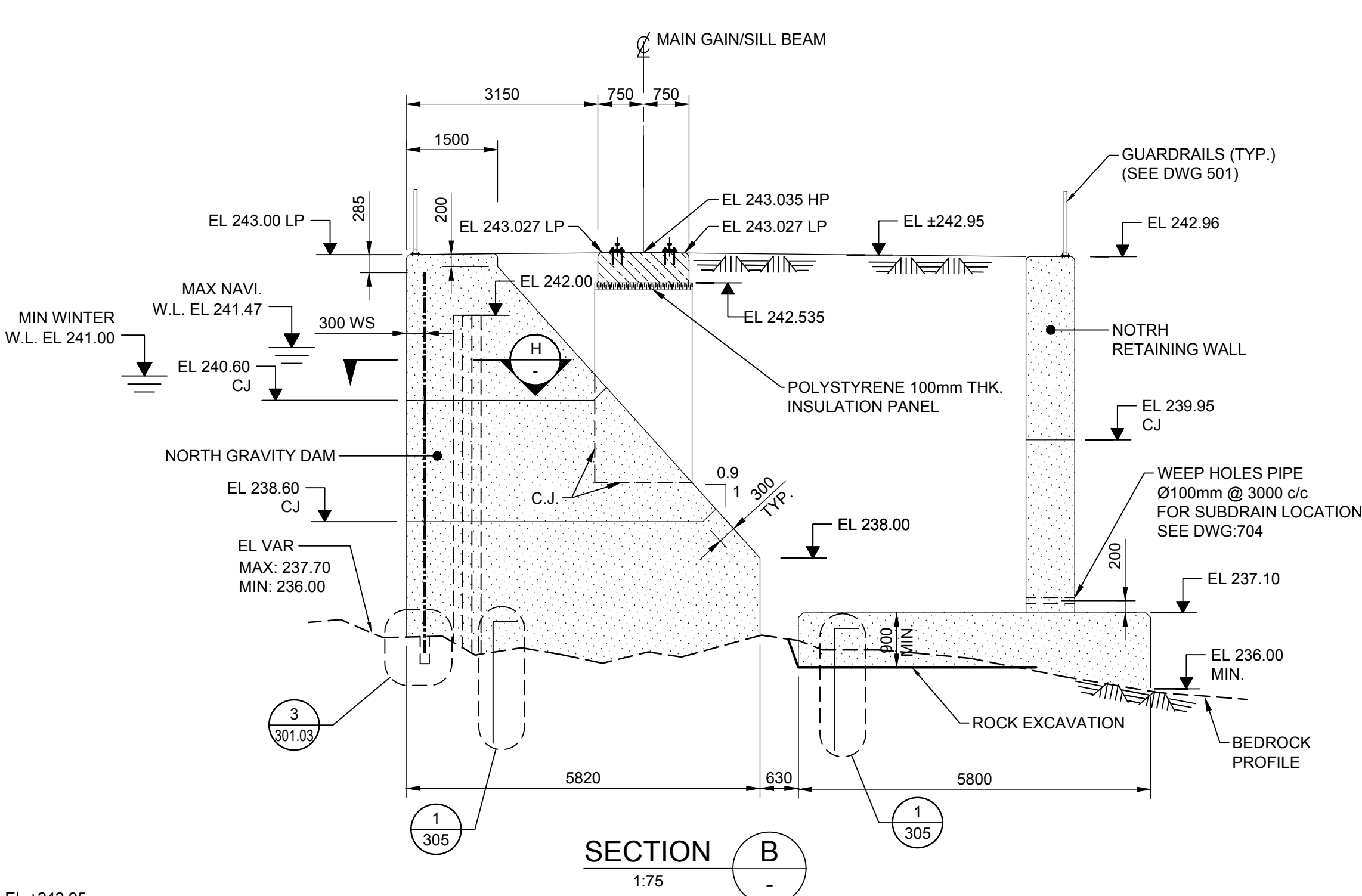
NORTH GRAVITY DAM AND RETAINING WALL PLAN VIEW

1:125



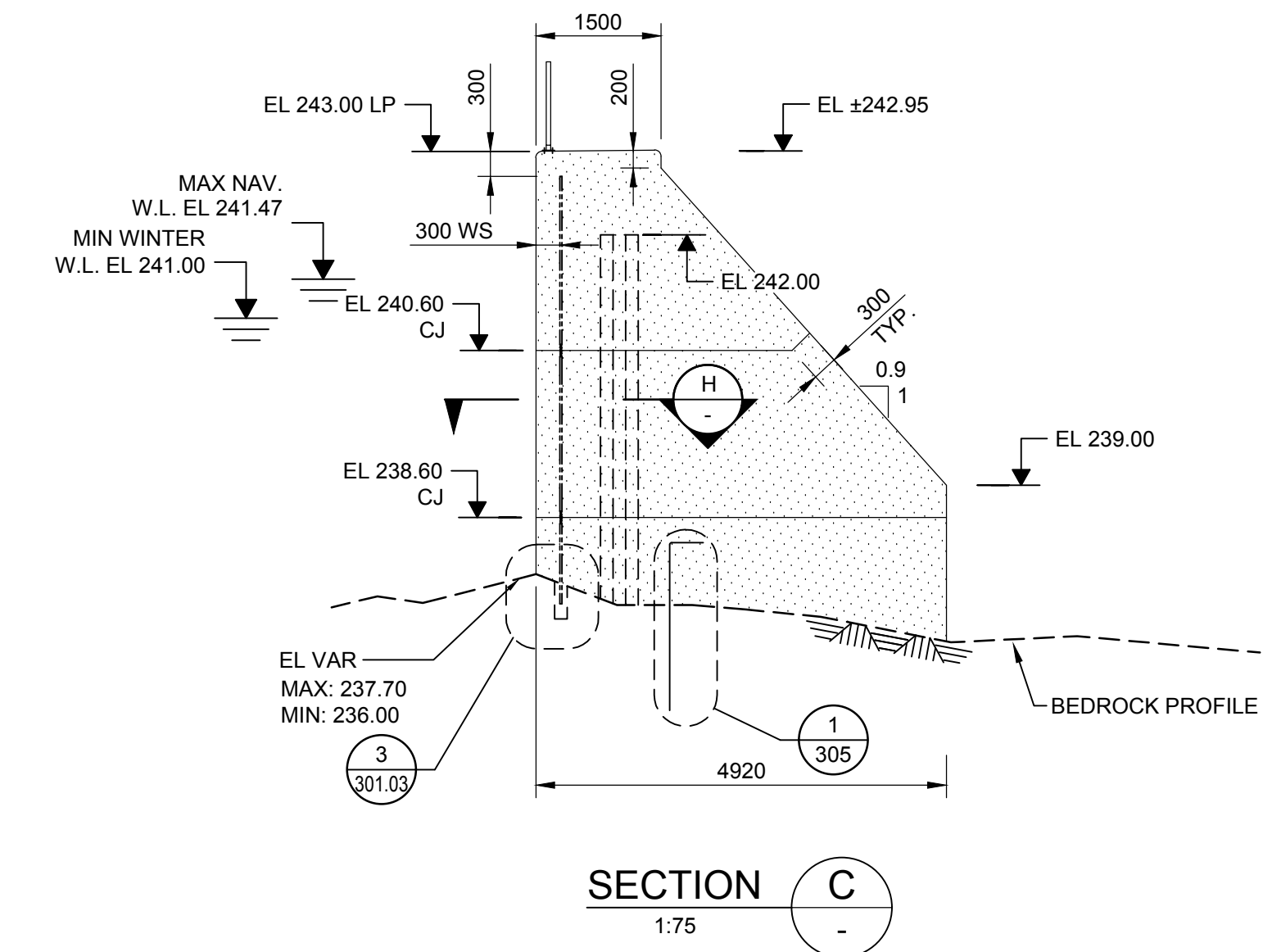
SECTION A

1:75



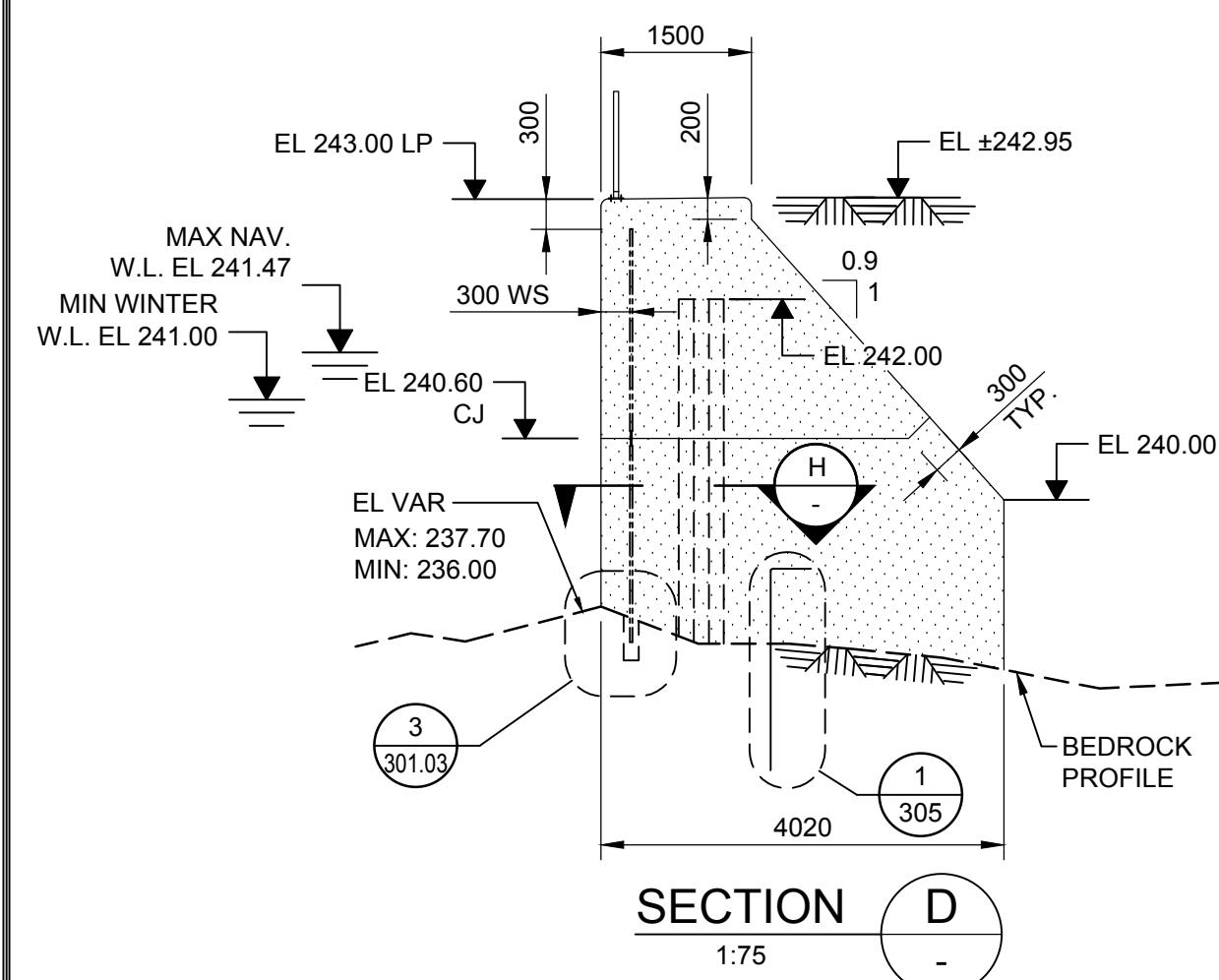
SECTION B

1:75



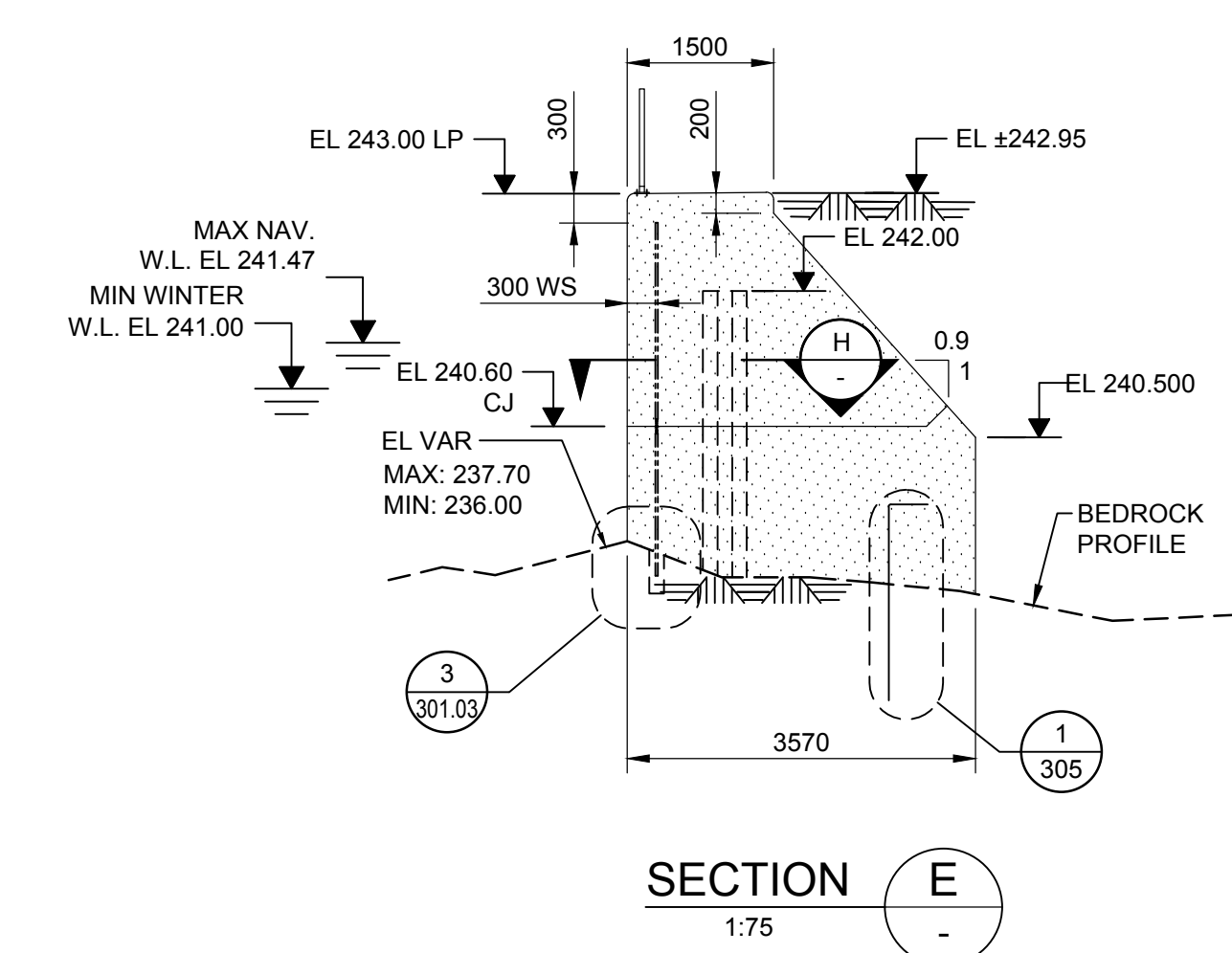
SECTION C

1:75



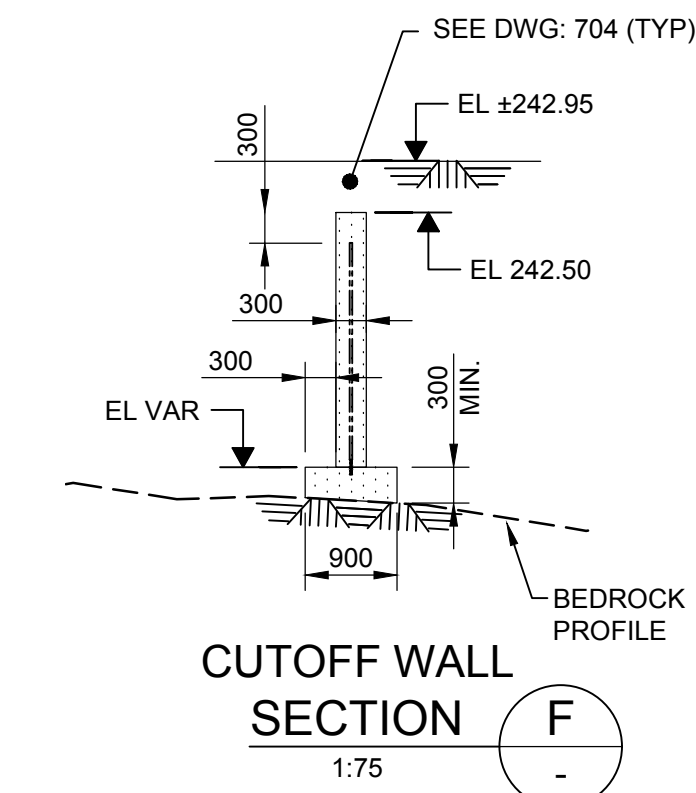
SECTION D

1:75



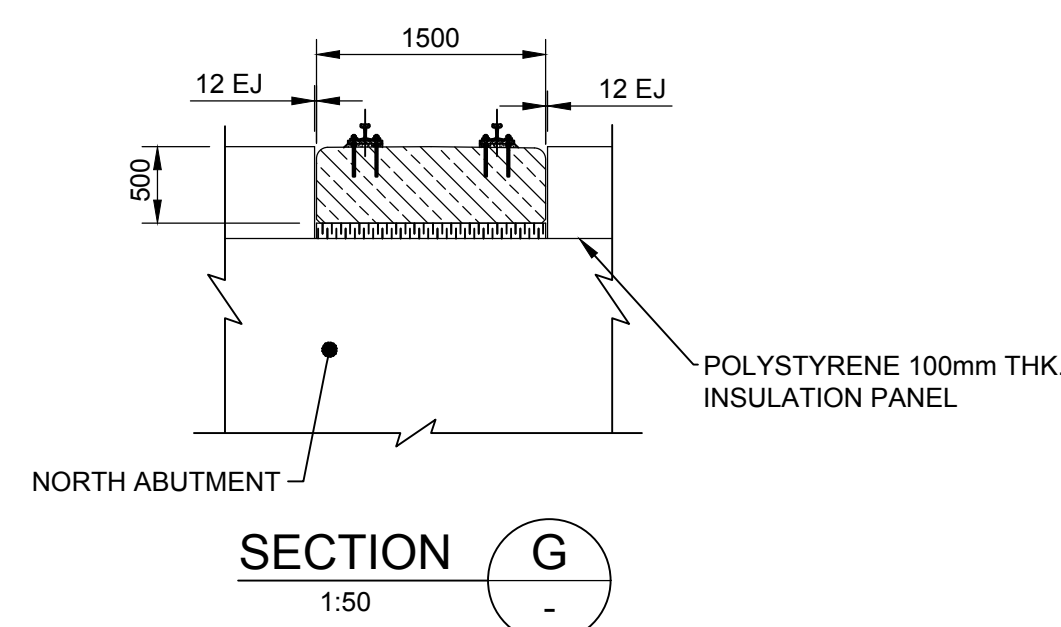
SECTION E

1:75



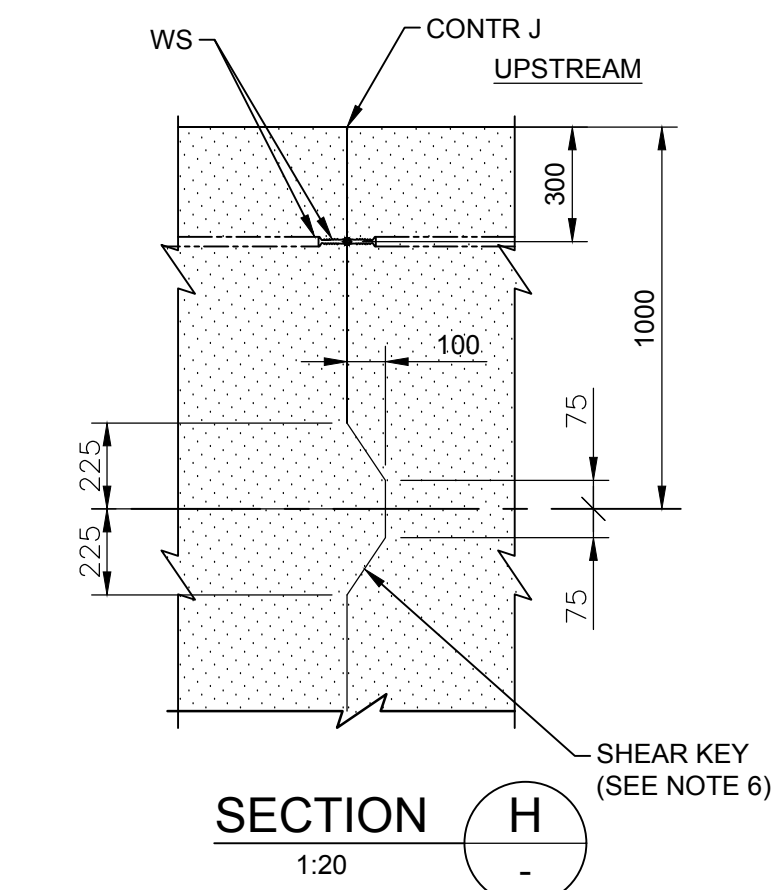
SECTION F

1:75



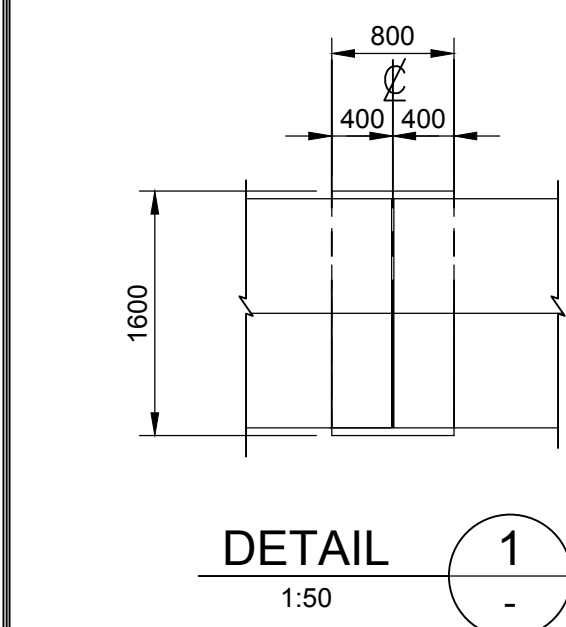
SECTION G

1:50



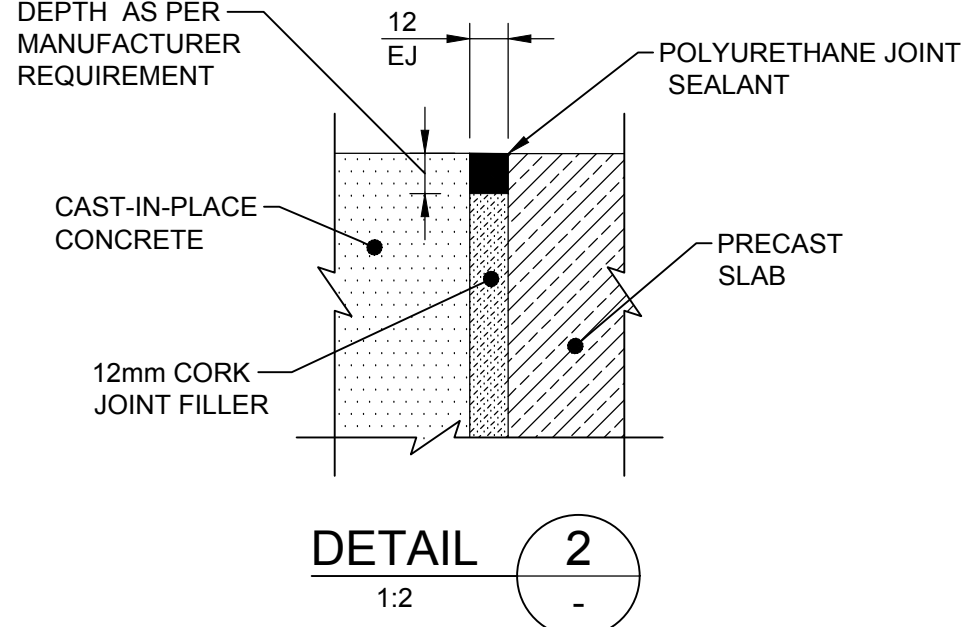
SECTION H

1:20



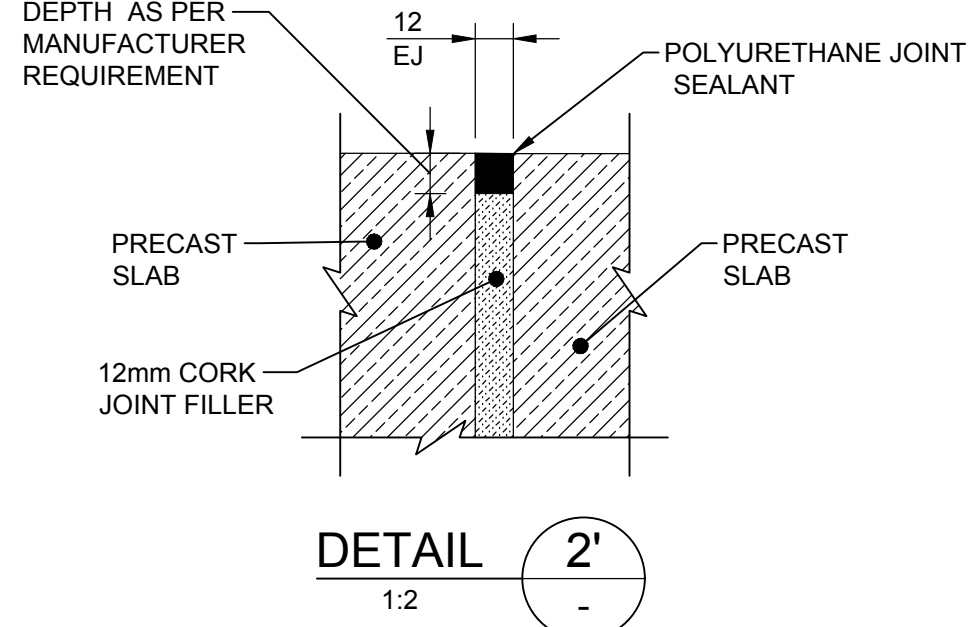
DETAIL 1

1:50



DETAIL 2

1:2

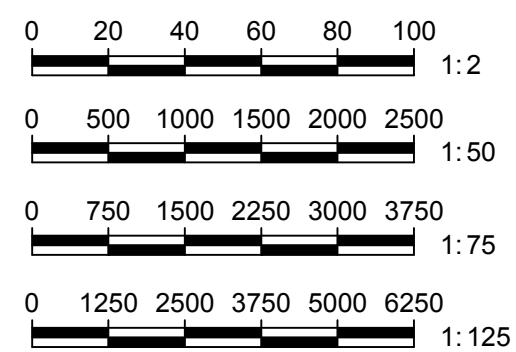


DETAIL 2'

1:2

(12mm EXPANSION JOINT BETWEEN PRECAST SLAB AND CAST-IN-PLACE CONCRETE)

(12mm EXPANSION JOINT BETWEEN PRECAST SLABS)



Public Services and Procurement Canada  
Services publics et Approvisionnement Canada

Ontario Region  
Heritage Canals and Engineering Works  
Région de l'Ontario  
Canaux historiques et travaux d'ingénierie

Parks Canada  
Parcs Canada

Canada

CIMA+

Contract No. HS00243 Drawing Code 210 Serial 41DD Rev. 0306 0

NOTES:

- FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS SEE DRAWING 002.
- TOP OF DAM TO BE SUITABLY SLOPED TO MATCH SPILLWAY DECK.
- LOCATION OF CONTROL JOINTS AND DAM GEOMETRY TO BE COORDINATED WITH THE D.R. ACCORDING TO BEDROCK FOUNDATION ELEVATIONS.
- ALL CONTROL AND CONSTRUCTION JOINTS TO HAVE CONTINUOUS WATER STOP.
- CONCRETE FINISH OF SURFACES SUPPORTING PRECAST DECK TO ALLOW FOR ADEQUATE LEVELING OF DECK SLABS.
- CONCRETE FINISH OF DECK AND CREST SURFACES AS PER SPECIFICATION 03 35 00.
- BACKFILL BOTH SIDES OF CUTOFF WALL SIMULTANEOUSLY, MAINTAINING A MAXIMUM HEIGHT DIFFERENTIAL OF 300mm.

0	FOR TENDER	R.M	05/13/2020
No.	Description	By	Date
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

Professional Stamp

Project title / Titre du projet

TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

Drawing title / Titre du dessin  
CONCRETE  
NORTH GRAVITY DAM  
PLAN, SECTIONS AND DETAILS

Drawn by / Dessiné par H. BOIVIN	Designed by / Conçu par M. SAIDOU	P.Eng.
Verified by / Vérifié par R. MIGUEL	Approved by / Approuvé par S. VITTECOQ	P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number / Numéro du Dessin 306	
Project Number / Numéro du projet R.076951.705	Sheet Feuille	1 of 1

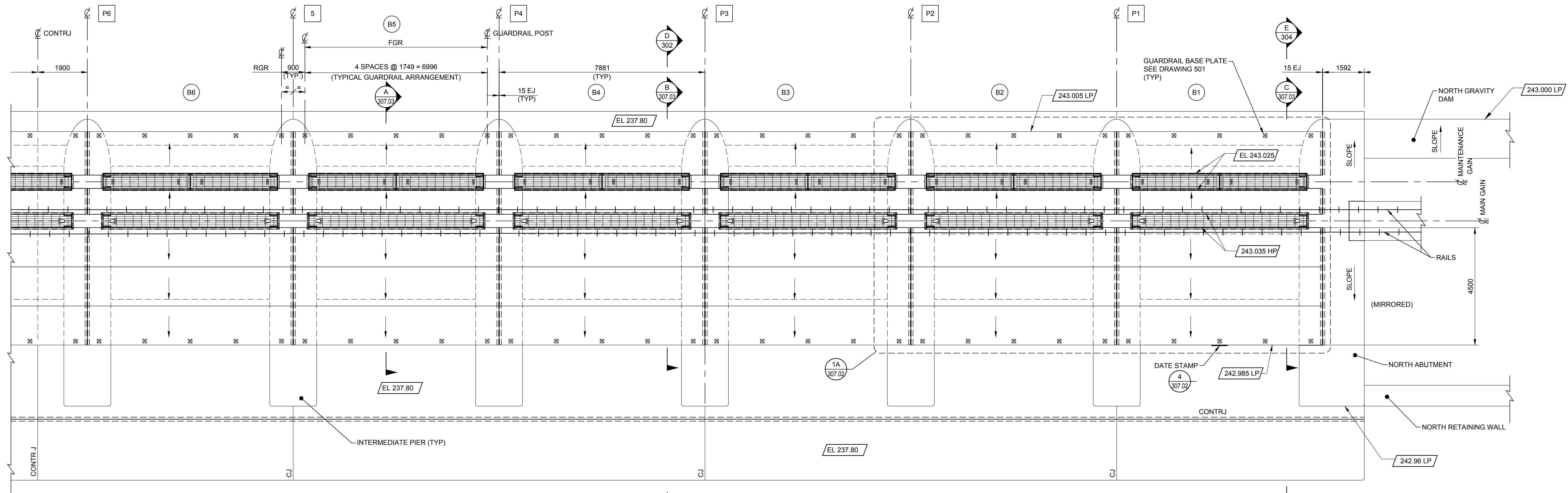


Canada

CIMA+

Contract No.	Drawing Code	Serial	Rev.
HS00243	210	41DD	1307
			0

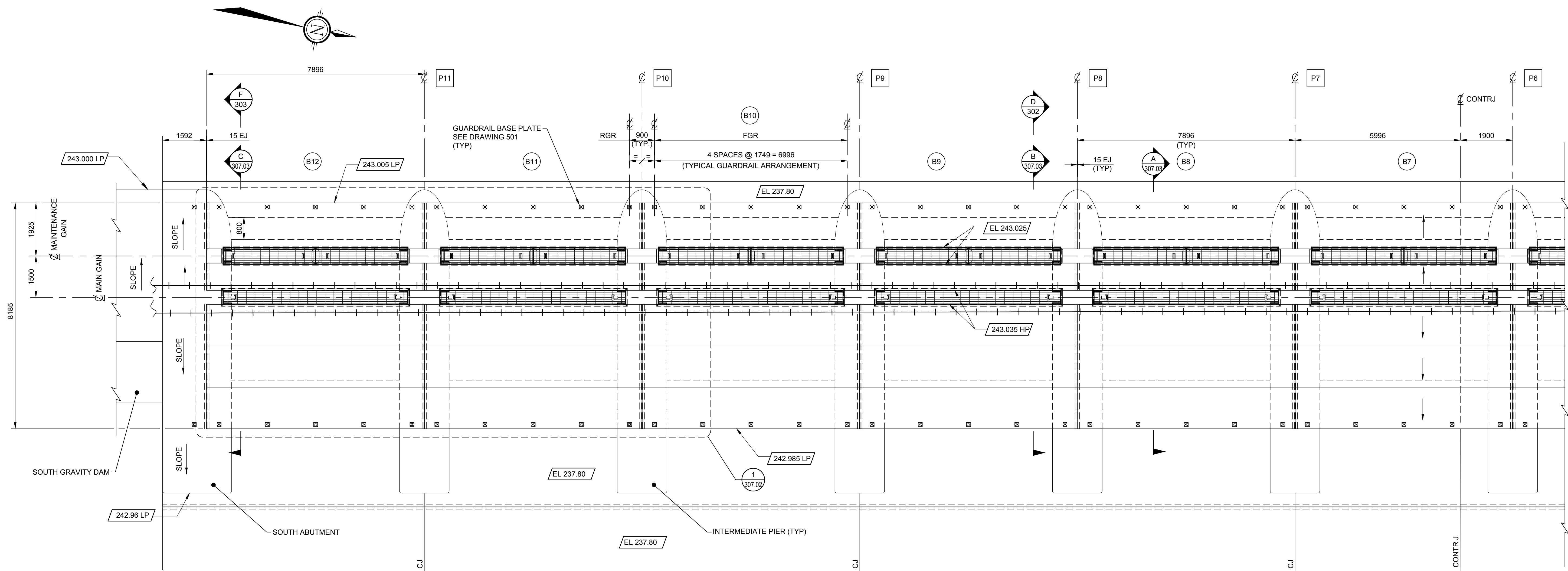
- NOTES:
- FOR GENERAL NOTES, LEGEND & ABBREVIATIONS SEE DRAWING 002.
  - CONTRACTOR SHALL DESIGN THE DECK AS PER SPECIFICATION SECTION 03 30 00.
  - CONTRACTOR TO IDENTIFY DIMENSIONS OF PRECAST SLAB PANELS AS WELL AS LOCATION OF ALL REQUIRED EMBEDMENTS.
  - CONTRACTOR TO PLAN PRECAST SLAB TO SUIT EMBEDMENT LOCATIONS.
  - CONCRETE FINISH OF DECK SURFACE AS PER SPECIFICATION SECTION 03 35 00.
  - DECK IS NOT DESIGNED TO ACCOMMODATE PUBLIC TRAFFIC. VEHICLE TRAFFIC ON DECK TO BE RESTRICTED TO SERVICE VEHICLES ONLY.



DECK PLAN  
1:75  
(SEE DRAWING 307.02 FOR PRECAST SLAB DETAILS)

## LEGEND

RGR: REMOVABLE GUARDRAIL  
FGR: FIXED GUARDRAIL



DECK PLAN (CONTINUED)  
1:75  
(SEE DRAWING 307.02 FOR PRECAST SLAB DETAILS)

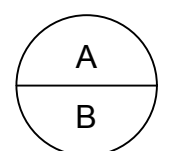
## LEGEND

RGR: REMOVABLE GUARDRAIL  
FGR: FIXED GUARDRAIL

No.	Description	By	Date
0	FOR TENDER	R.M	05/13/2020

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

Professional Stamp

Project title / Titre du projet

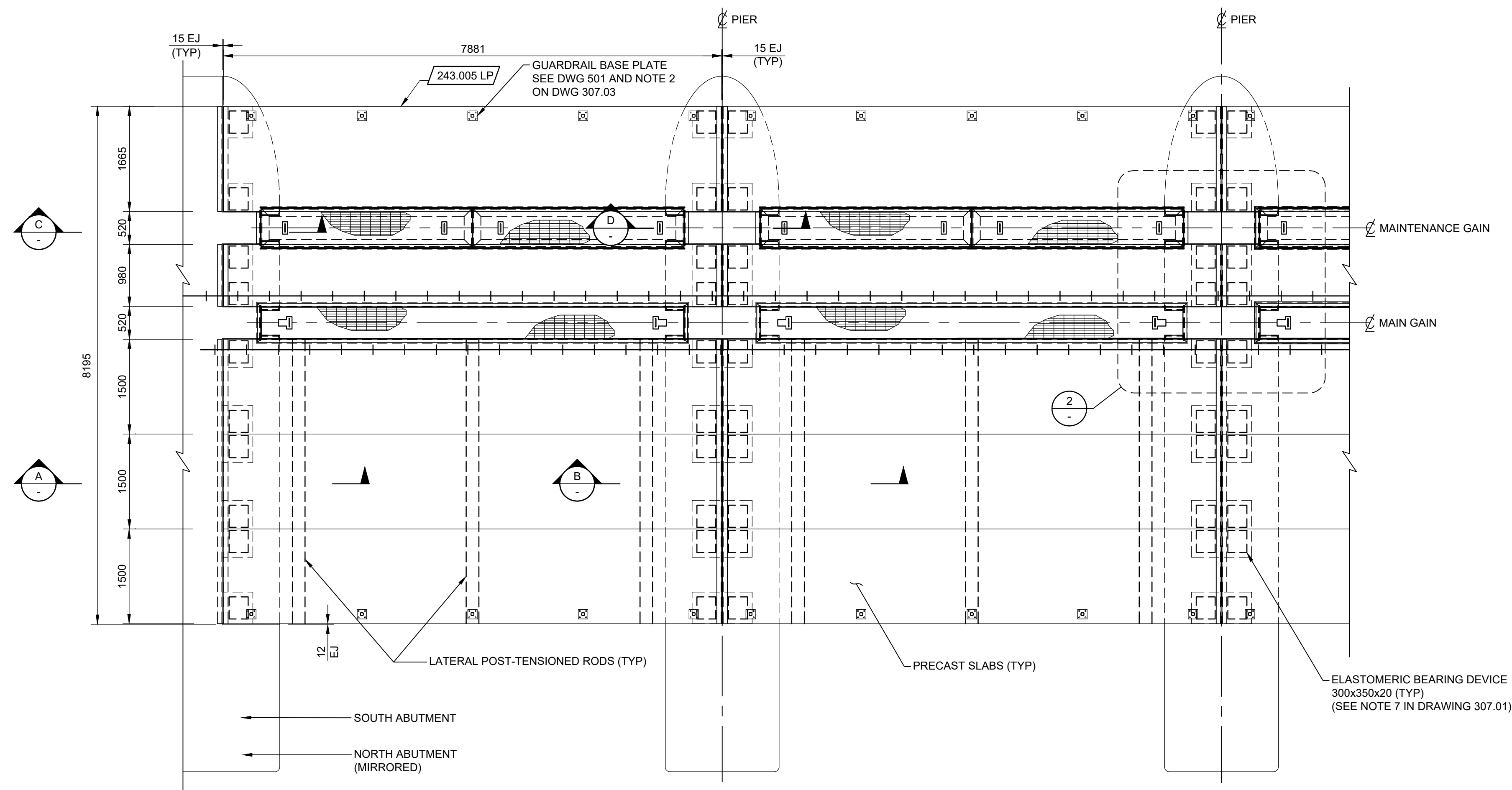
TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

Drawing title / Titre du dessin

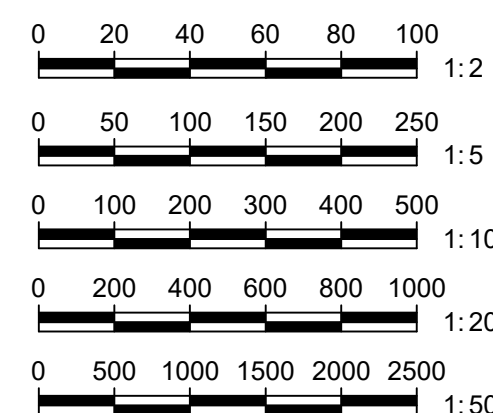
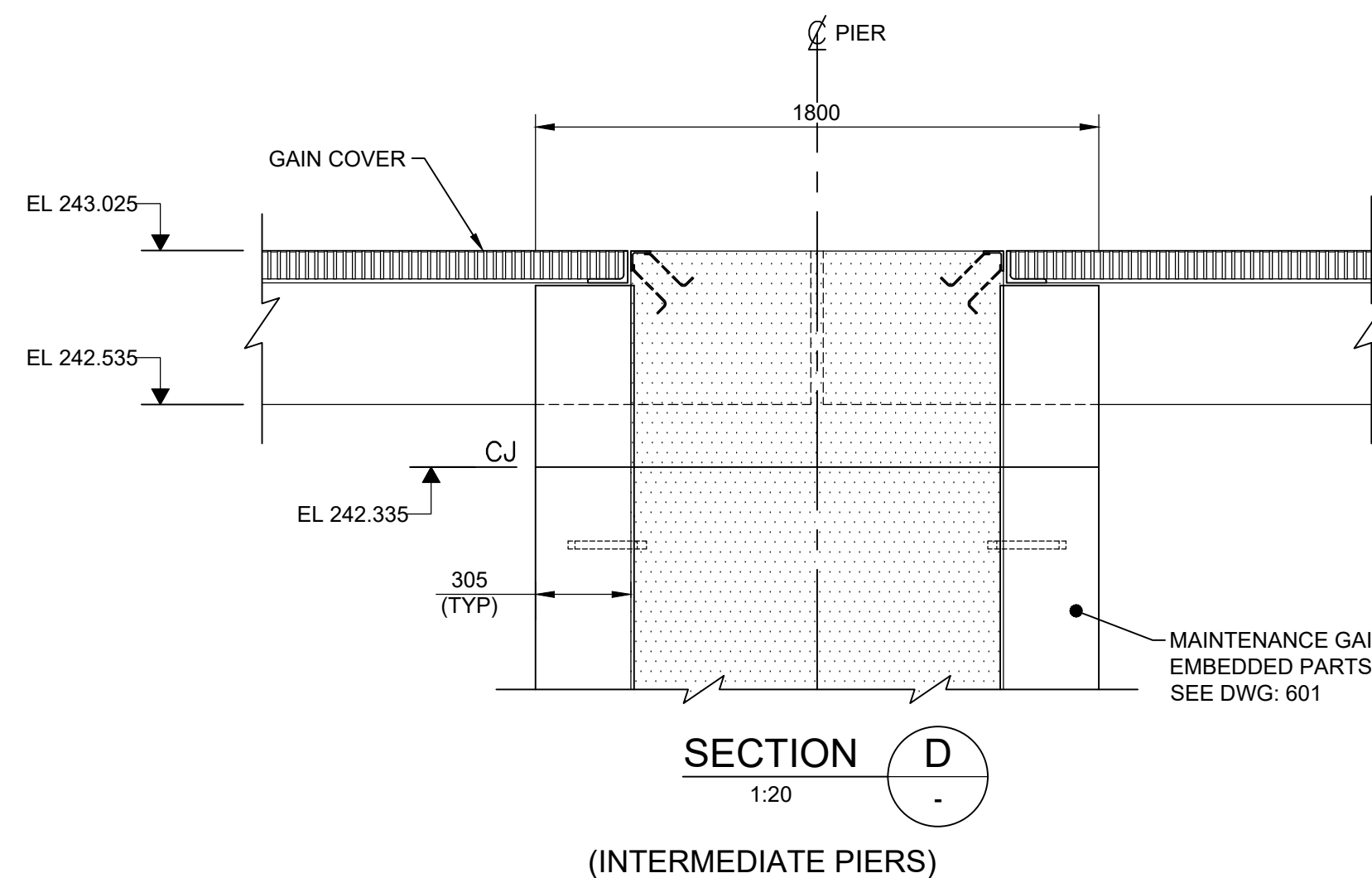
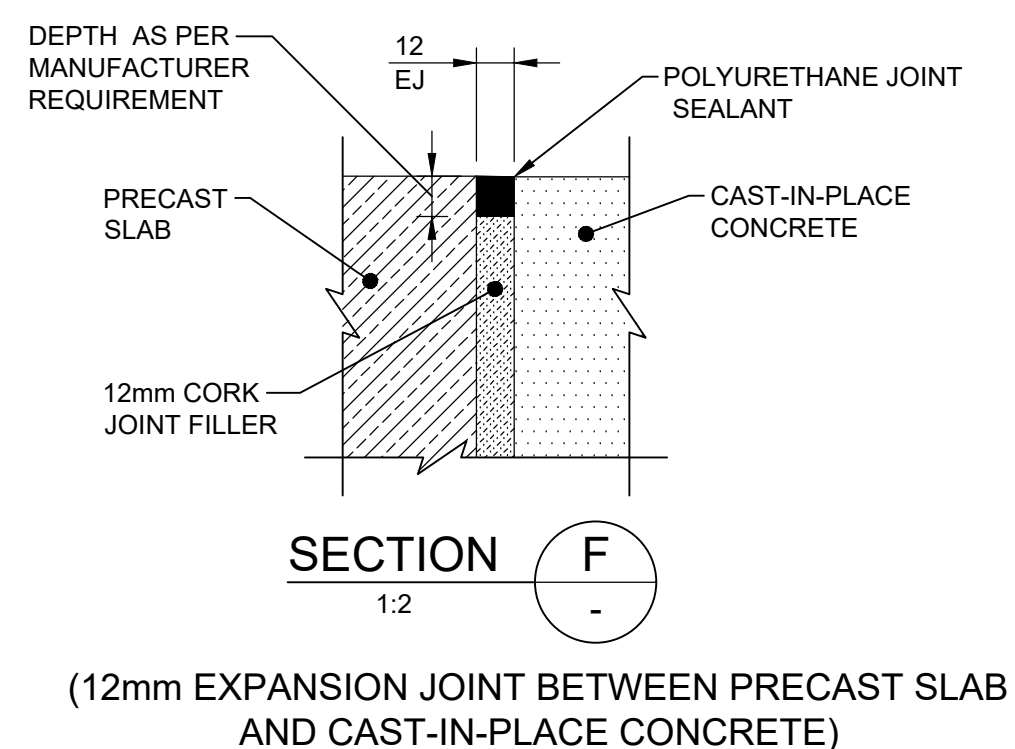
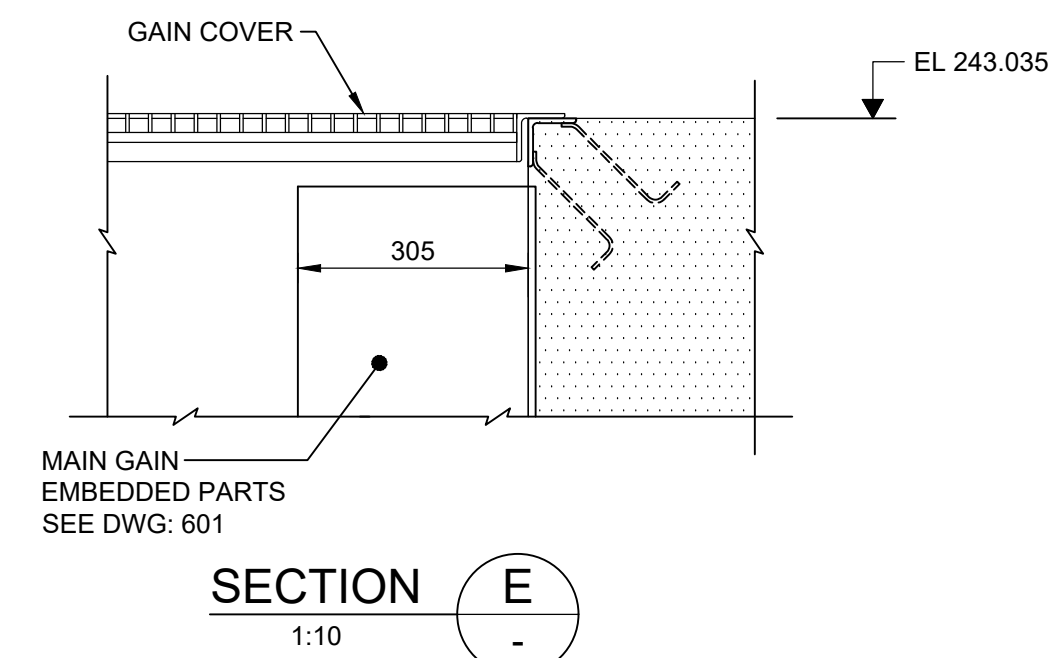
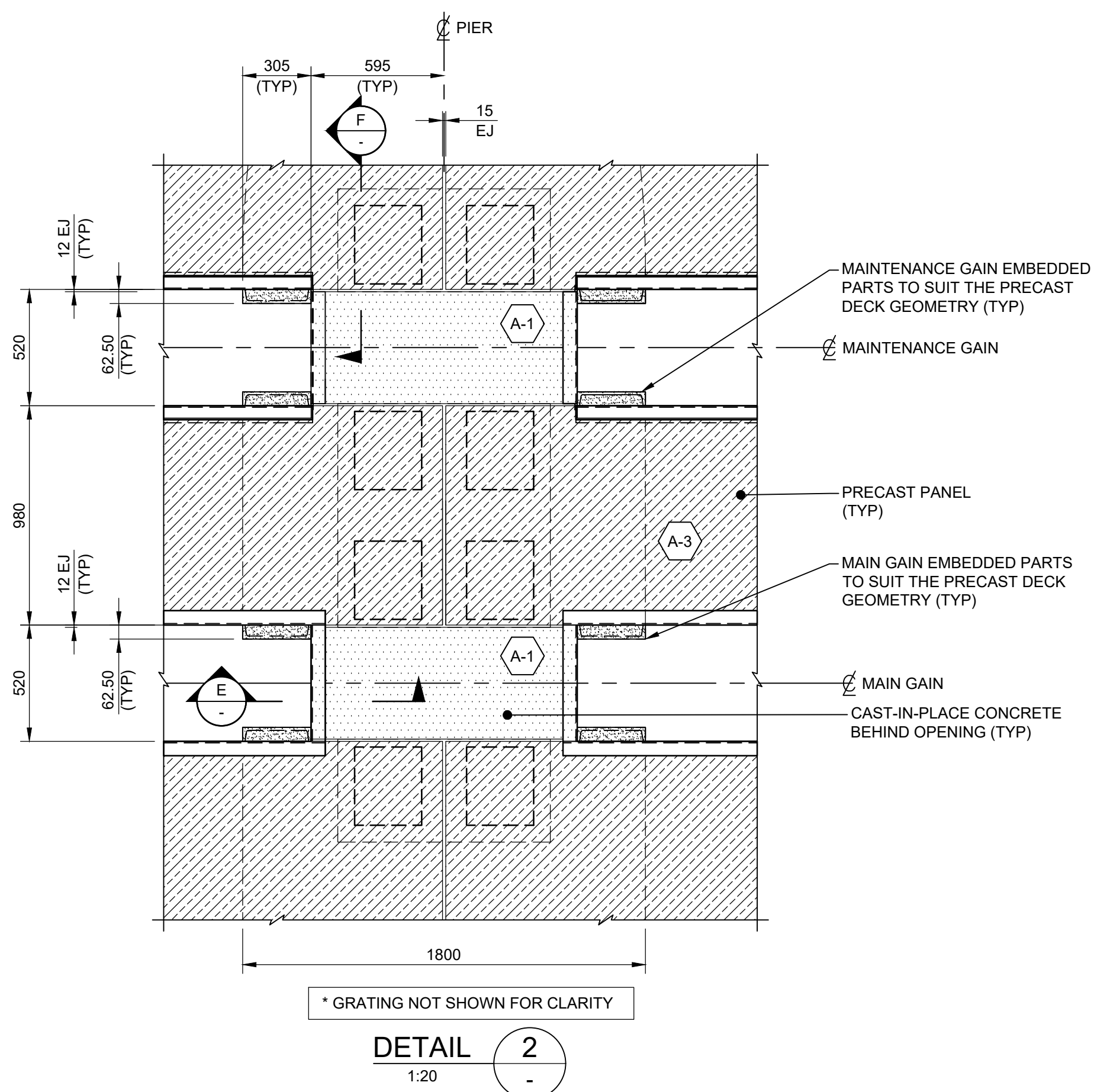
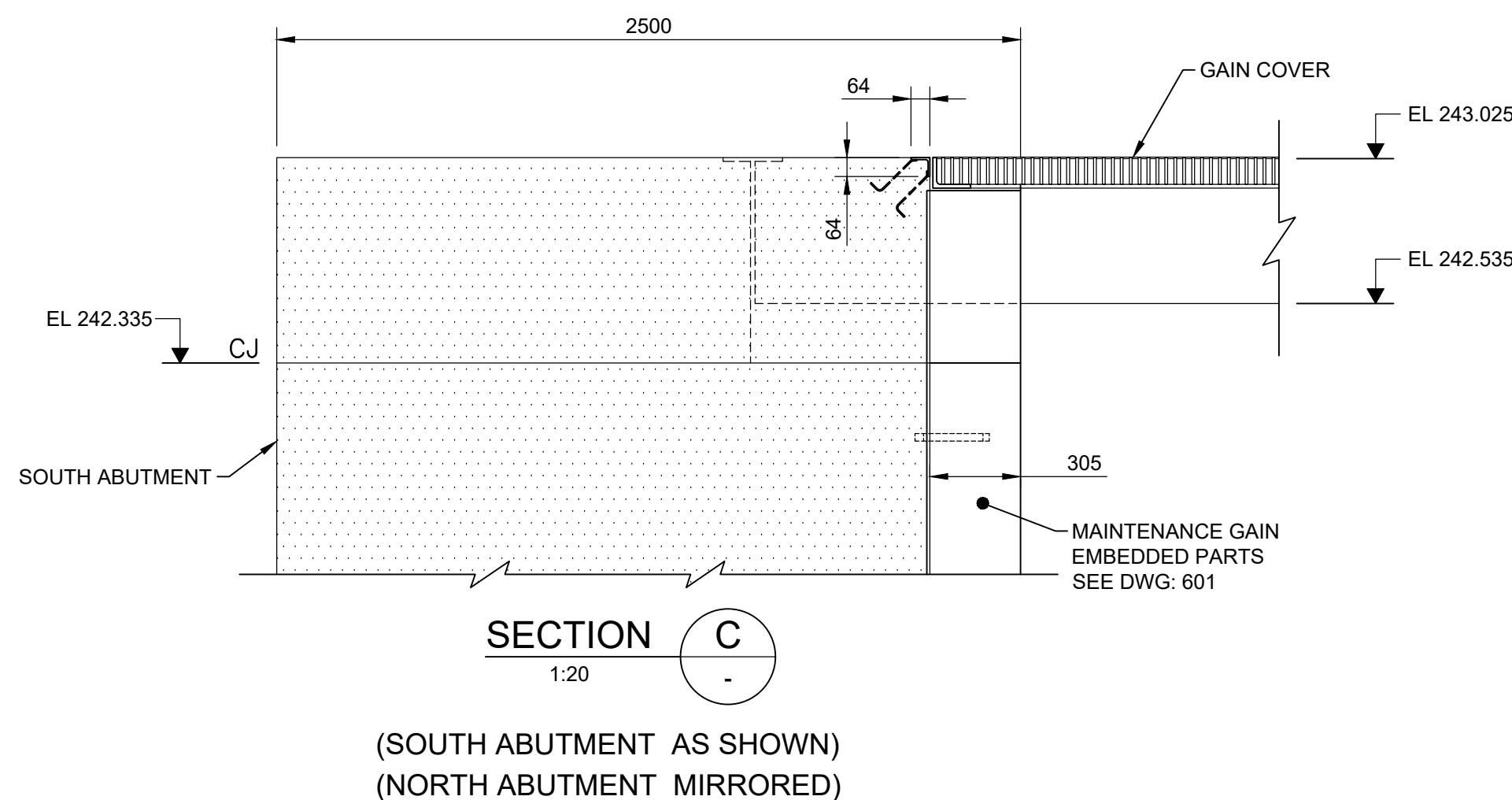
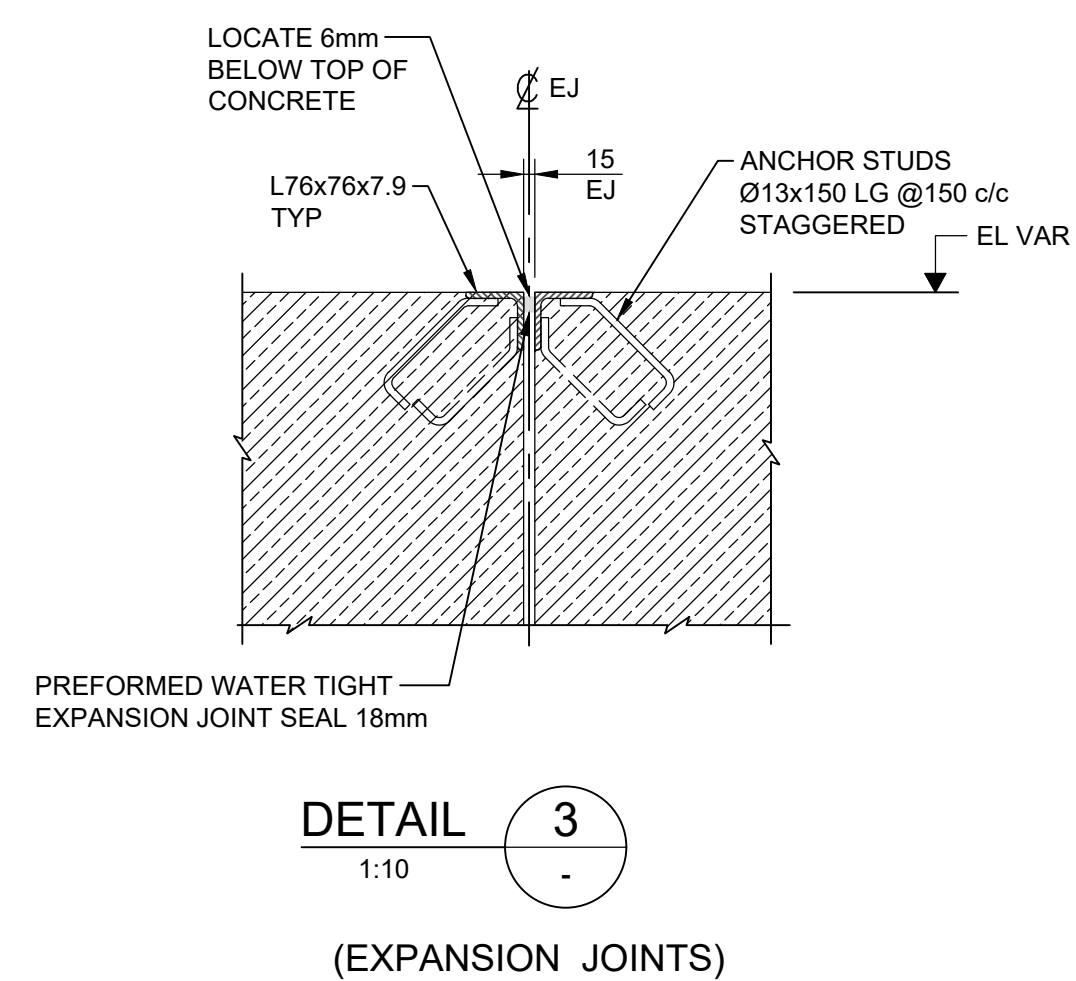
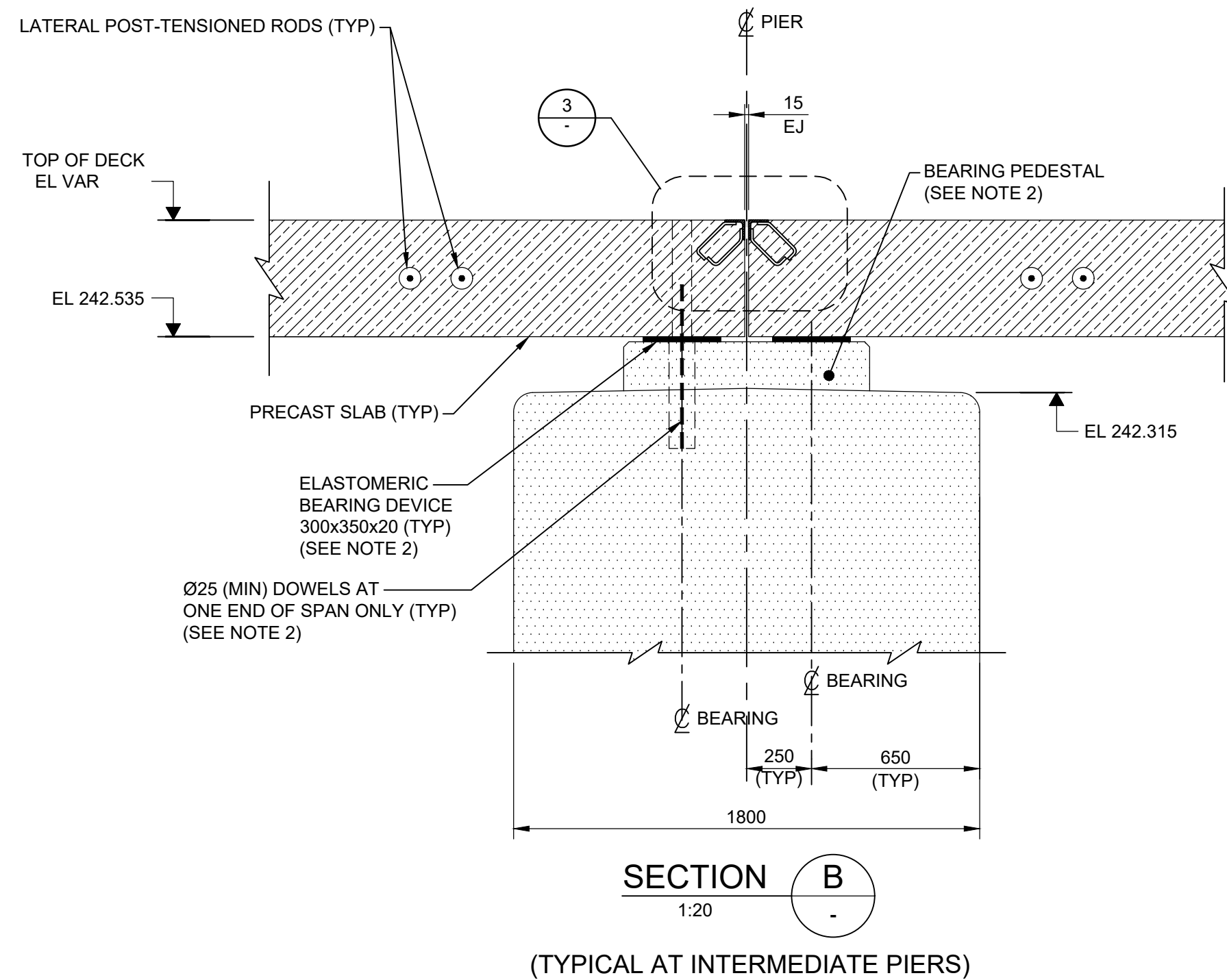
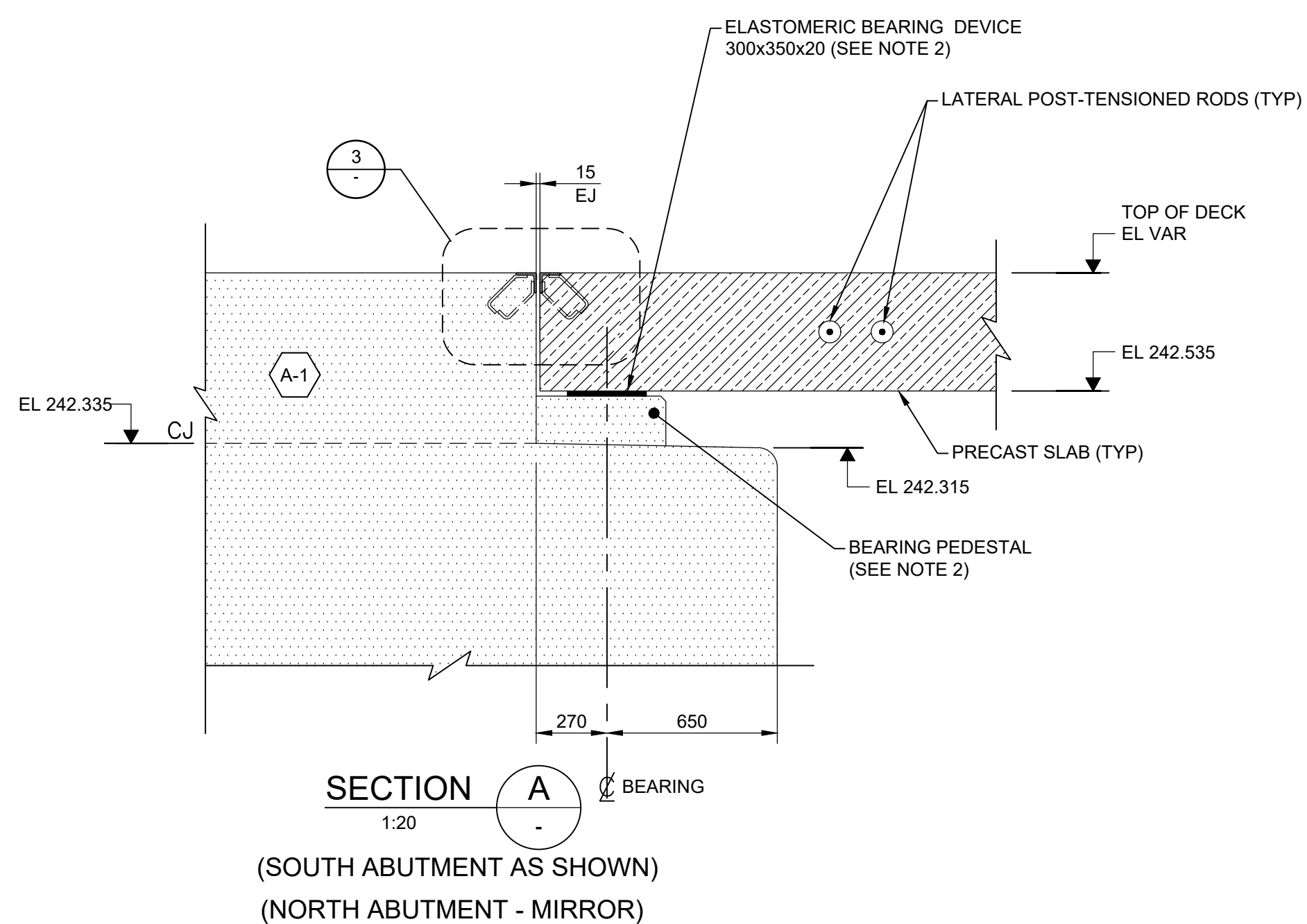
CONCRETE  
SPILLWAY AND DECK  
PLAN, SECTIONS AND DETAILS

Drawn by / Dessiné par H. BOVIN	Designed by / Conçu par M. SAIDOU P.Eng.
Verified by / Vérifié par R. MIGUEL P.Eng.	Approved by / Approuvé par S. VITTECOQ P.Eng.

Drawing Date / Date du dessin 05/13/2020	Drawing Number / Numéro du Dessin 307
Project Number / Numéro du projet R.076951.705	Sheet Feuille 1 of 3



DETAIL 1 307.01 1A (MIRRORED)  
1:50  
PRECAST SLABS - TYPICAL ARRANGEMENT



Contract No.	Drawing Code	Serial	Rev.
HS00243	210	41DD	2307 0

- NOTES:
- FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS SEE DRAWING 002.
  - THE ELASTOMERIC BEARING DEVICE INCLUDING CONCRETE PEDESTAL AND DOWEL SIZES SHOWN ARE INDICATIVE. DESIGN BEARINGS AS PER SPECIFICATION SECTION 03 30 00.
  - BEARING DEVICE CENTRELINE LOCATIONS ARE INDICATIVE AND COULD BE MODIFIED TO SUIT DESIGN REQUIREMENTS.
  - DATE STAMP AS PER SPECIFICATION SECTION 03 30 00.

No.	Description	By Par	Date
0	FOR TENDER	R.M	05/13/2020

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

Professional Stamp

Project title / Titre du projet

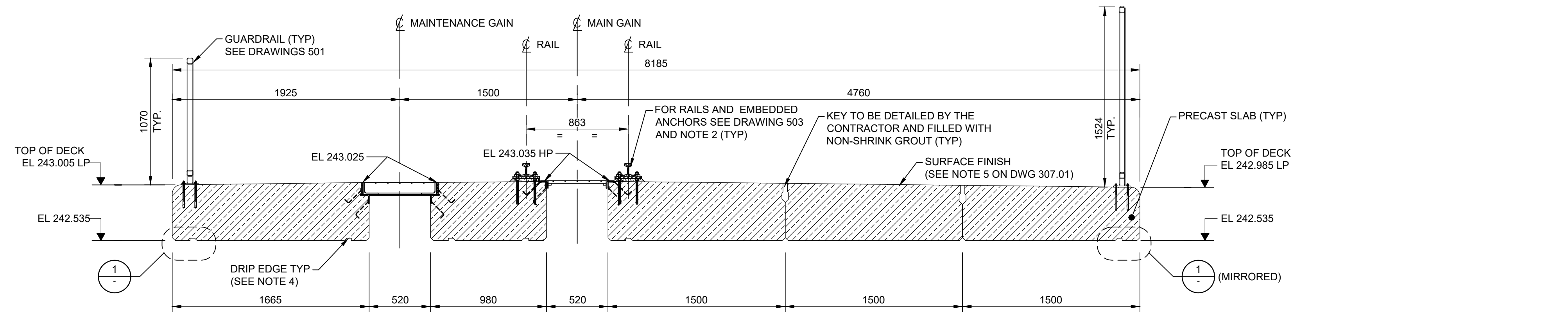
TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

Drawing title / Titre du dessin

CONCRETE  
SPILLWAY AND DECK  
PLAN, SECTIONS AND DETAILS

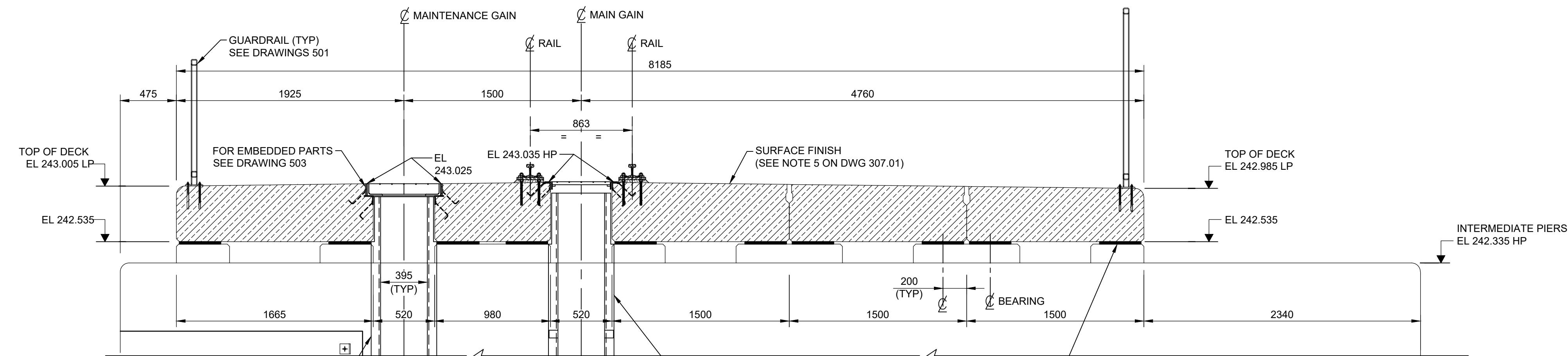
Drawn by / Dessiné par H. BOIVIN	Designed by / Conçu par M. SAIDOU	P.Eng.
Verified by / Vérifié par R. MIGUEL	Approved by / Approuvé par S. VITTECOQ	P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number / Numéro du Dessin 307	Sheet Feuille 2 of 3
Project Number / Numéro du projet R.076951.705		





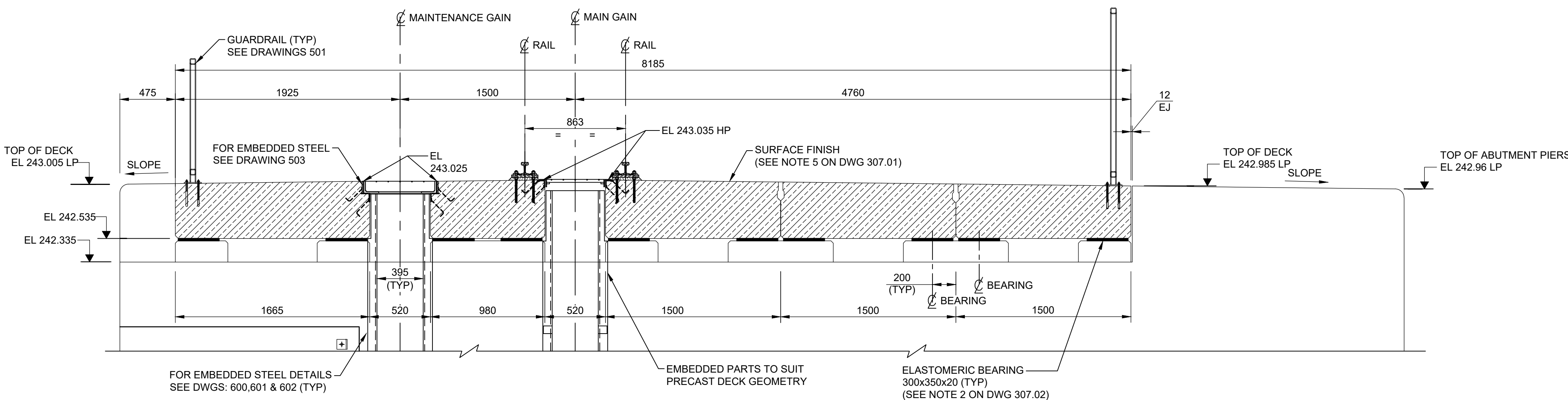
SECTION A  
1:25 307.01

(TYP FOR SPILLWAY BAYS)



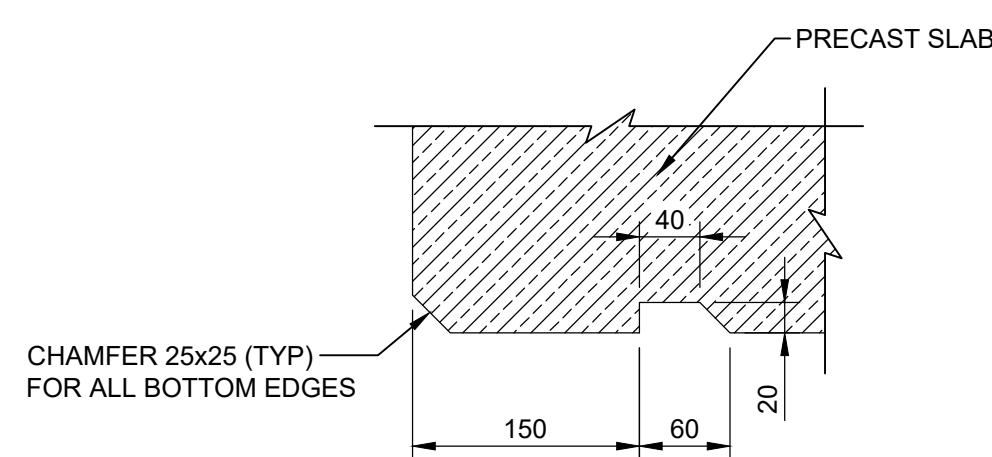
SECTION B  
1:25 307.01

(TYP AT INTERMEDIATE PIERS)



SECTION C  
1:25 307.01

(NORTH ABUTMENT AS SHOWN)  
(SOUTH ABUTMENT MIRRORED)

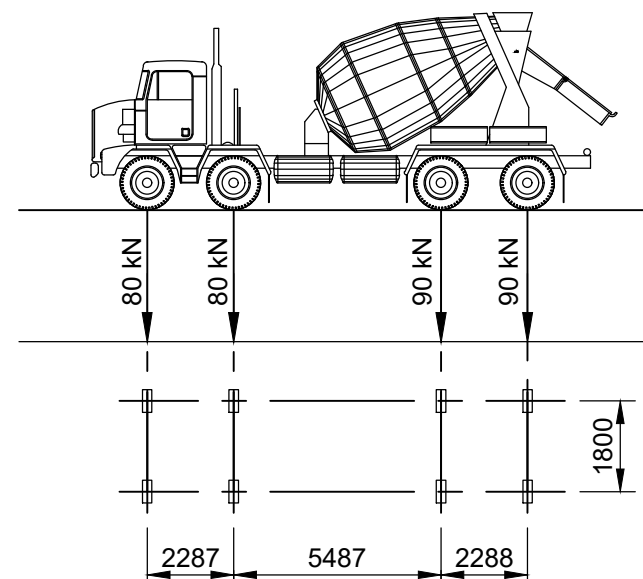


DETAIL 1  
1:5

(DRIP EDGE DETAIL)

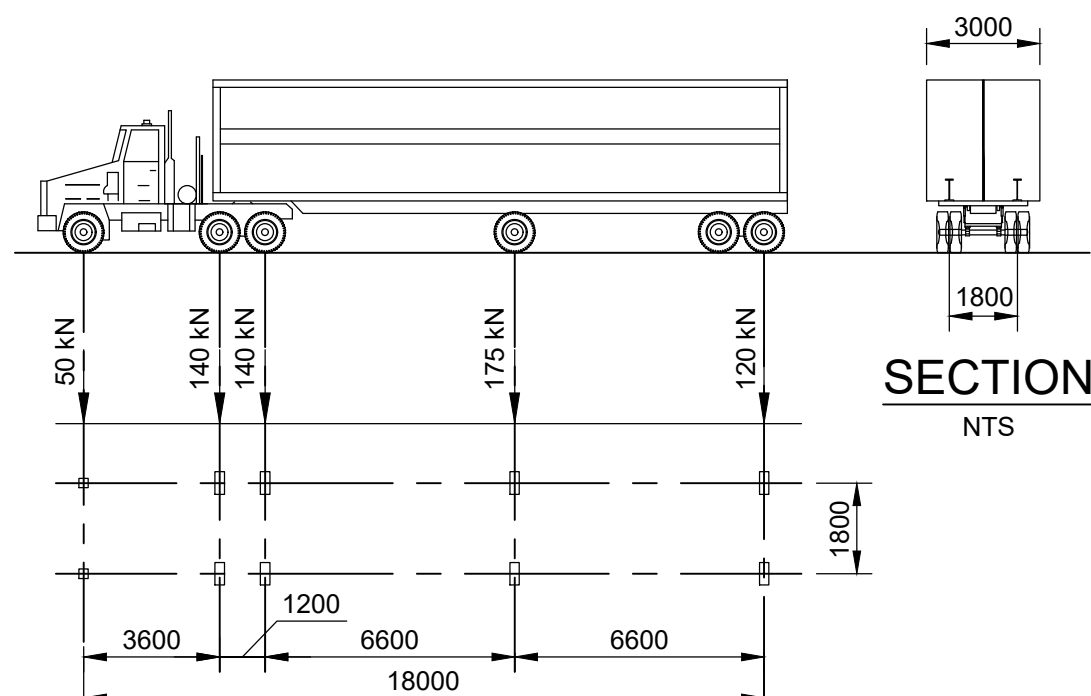
#### DESIGN LOADING (UNFACTORED)

- UNIFORM LIVE LOAD : 15 kPa
- VEHICLES



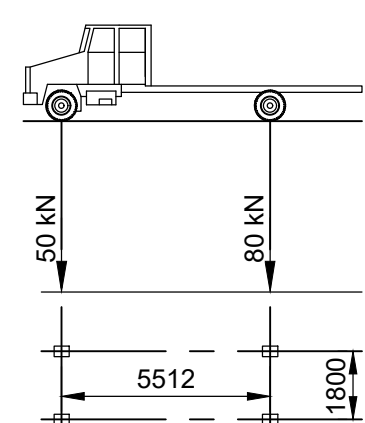
#### CONCRETE MIXER AXLE LOAD

NTS



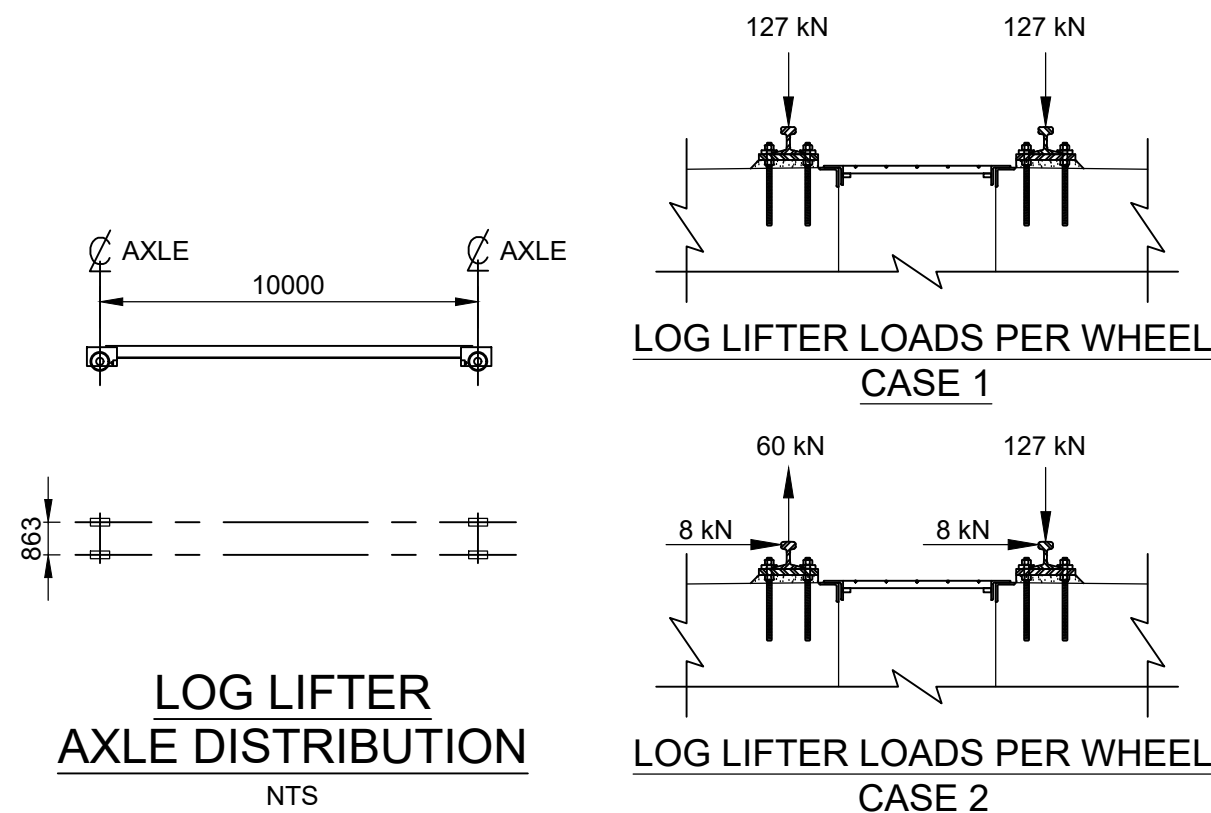
#### TRUCK CL-625-ONT AXLE LOAD

NTS



#### MAINTENANCE TRUCK AXLE LOAD

NTS



#### LOG LIFTER LOADS PER WHEEL CASE 1

#### LOG LIFTER LOADS PER WHEEL CASE 2

Canada

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Contract No.	Drawing Code	Serial	Rev.
HS00243	210	41DD	3307
			0

- NOTES:
- FOR GENERAL NOTES, LEGEND & ABBREVIATIONS SEE DRAWING 002.
  - PRECAST DECK DESIGN TO ALLOW DRILLING OF POST-INSTALLED ANCHORS ALONG 100 mm STRIPS ON EITHER SIDE OF RAILS AXES. AND ALONG STRIPS LOCATED BETWEEN 90 mm AND 210 mm FROM UPSTREAM AND DOWNSTREAM EDGES OF DECK.
  - DECK AND GUARDRAILS ARE NOT DESIGNED TO ACCOMMODATE PUBLIC TRAFFIC. VEHICLE TRAFFIC ON DECK TO BE RESTRICTED TO SERVICE VEHICLES ONLY.
  - LOCATE DRIP EDGES ON EITHER SIDE OF GAINS, AS WELL AS AT UPSTREAM AND DOWNSTREAM ENDS OF THE DECK. DRIP EDGES TO BE 6096mm LONG AND CENTERED ON SLUICES.

No.	Description	By	Date
0	FOR TENDER	R.M	05/13/2020

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

Professional Stamp

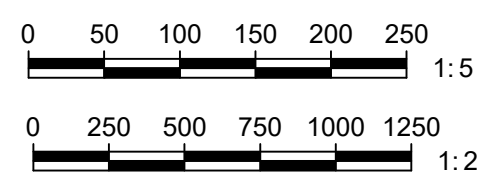
Project title / Titre du projet

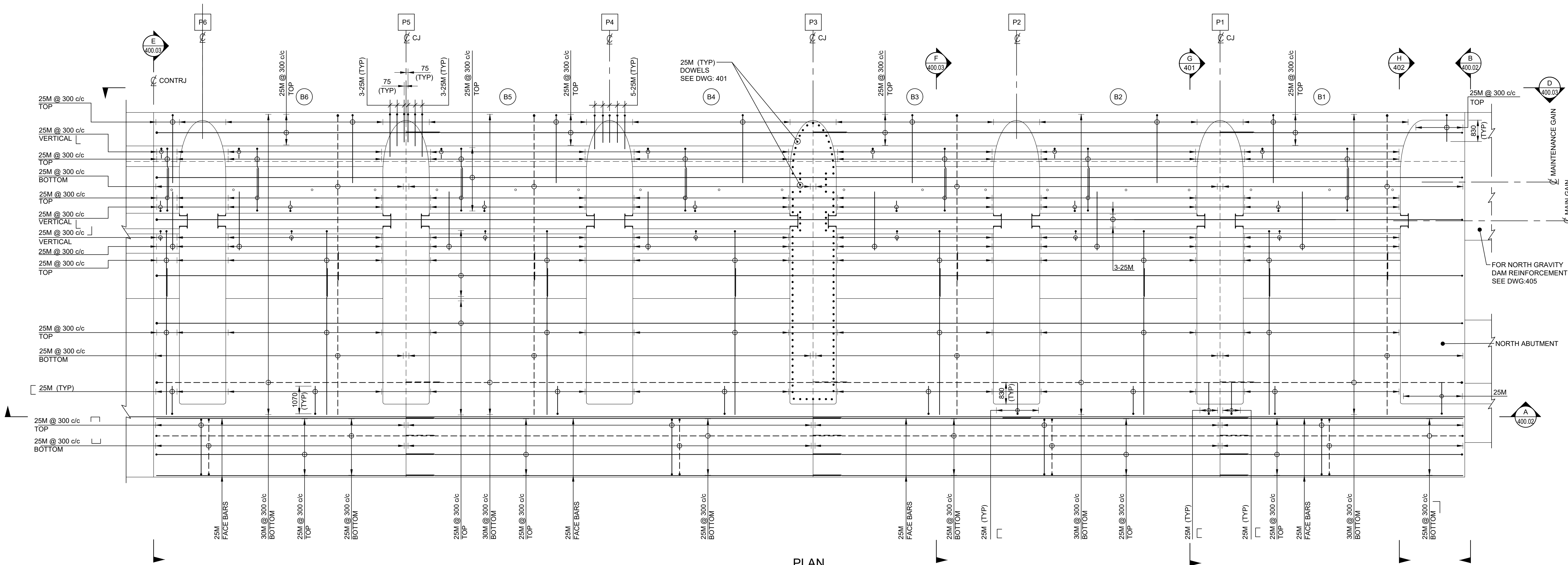
TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

Drawing title / Titre du dessin

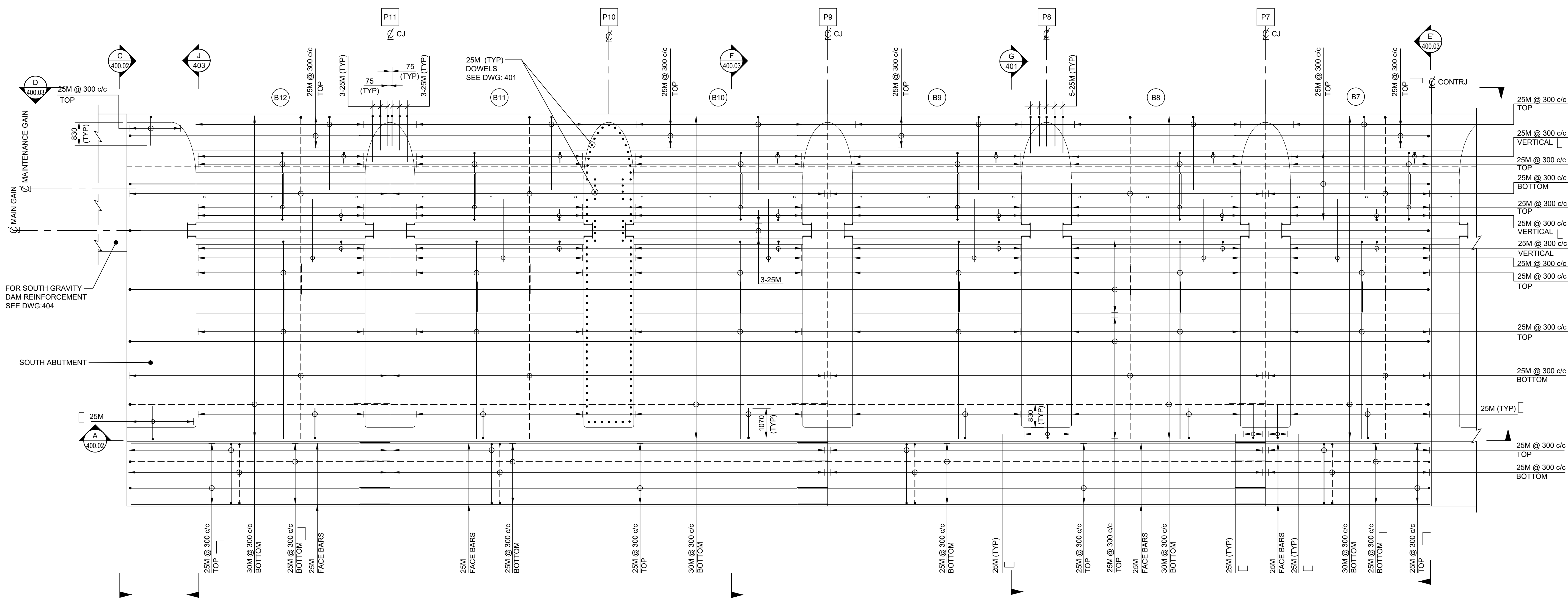
CONCRETE  
SPILLWAY AND DECK  
PLAN, SECTIONS AND DETAILS

Drawn by / Dessiné par I. ZIECK	Designed by / Conçu par M. SAIDOU P.Eng.
Verified by / Vérifié par R. MIGUEL P.Eng.	Approved by / Approuvé par S. VITTECOQ P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number / Numéro du Dessin 307
Project Number / Numéro du projet R.076951.705	Sheet Feuille 3 of 3





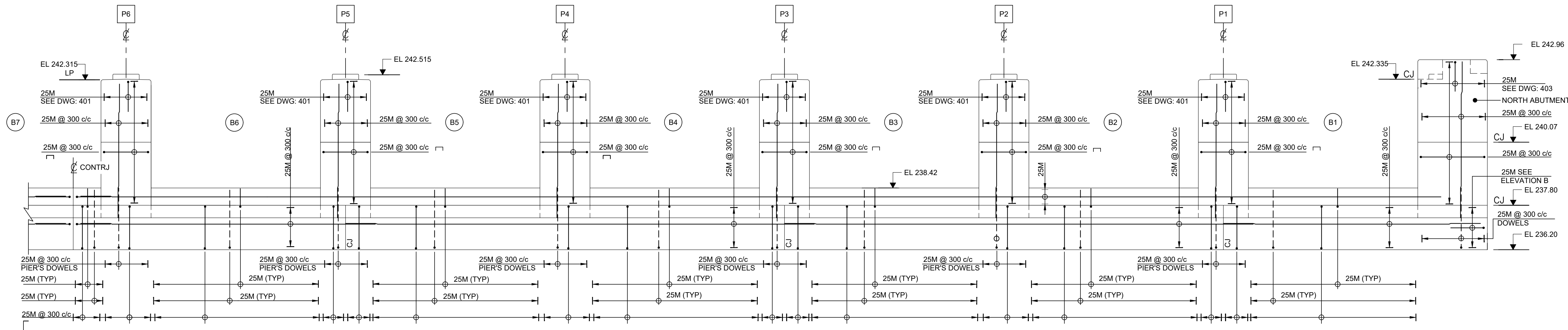
PLAN  
APRON & SILLS REINFORCING  
1:75



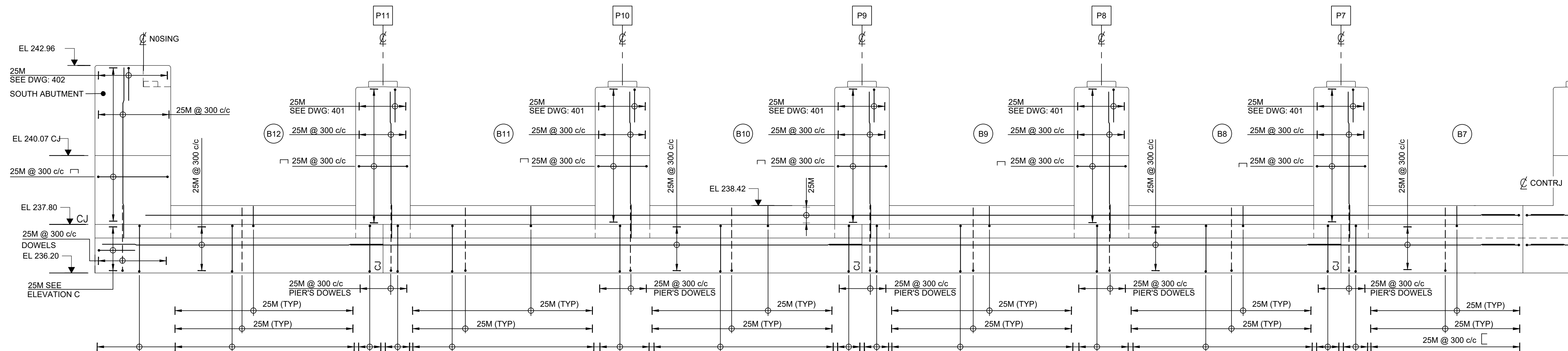
PLAN  
APRON & SILLS REINFORCING (FOLLOWING)  
1:75



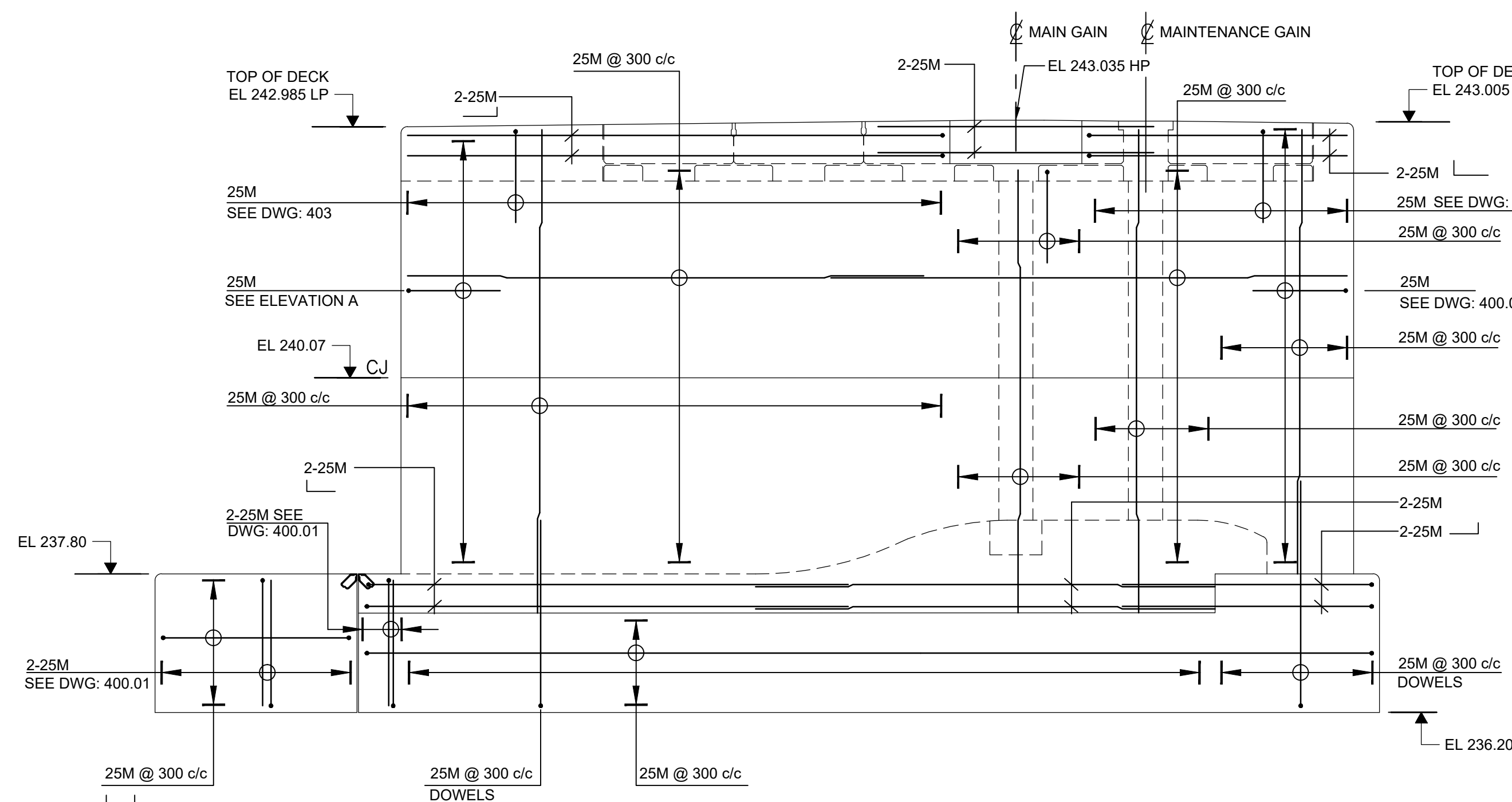




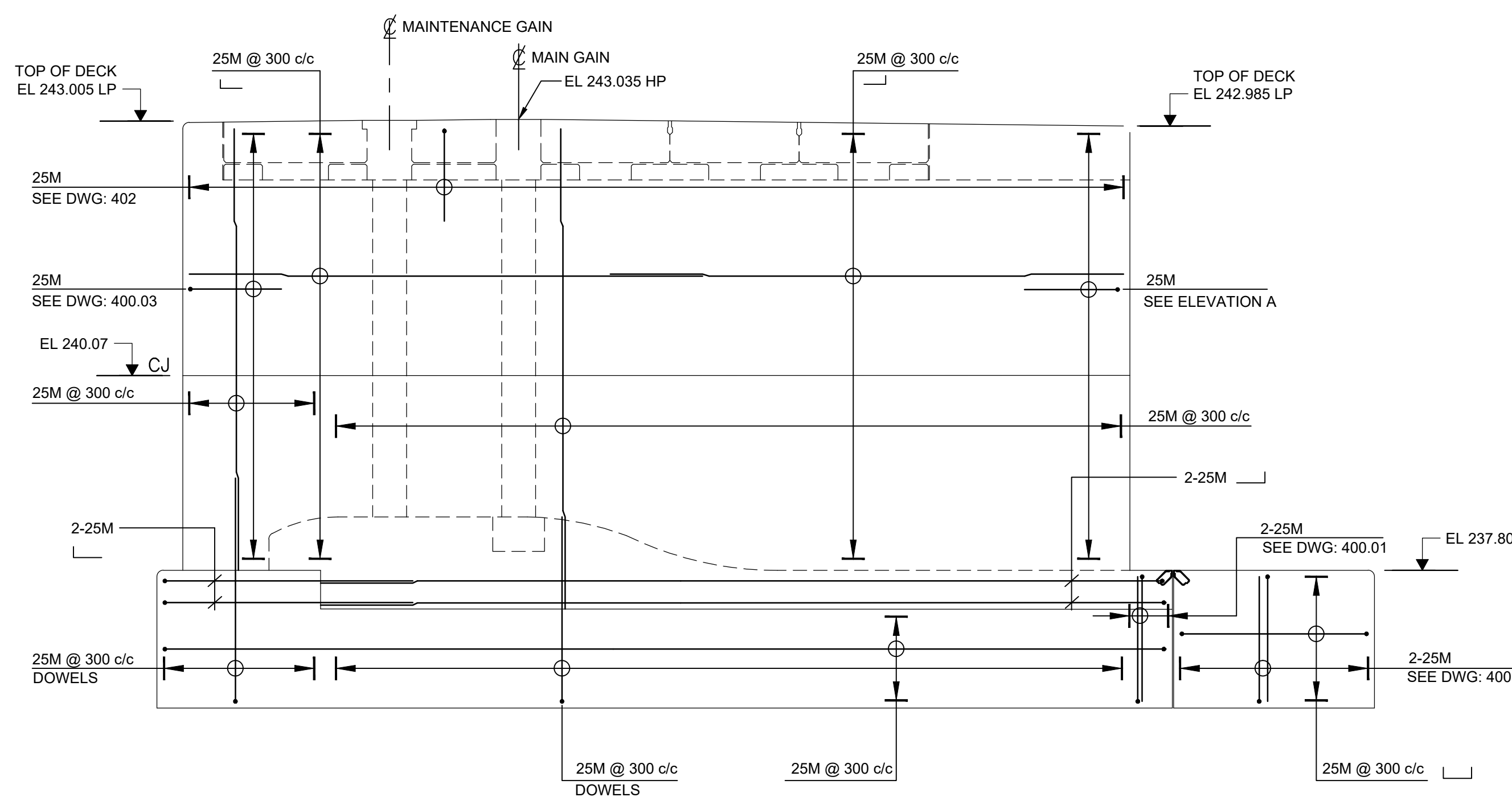
ELEVATION A  
1:75  
400.01



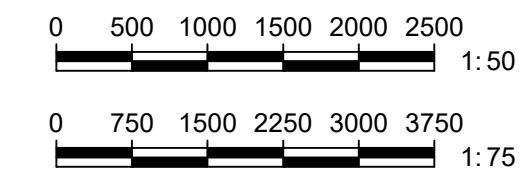
ELEVATION A (CONTINUED)  
1:75  
400.01



ELEVATION B  
1:50  
400.01  
NORTH ABUTMENT



ELEVATION C  
1:50  
400.01  
SOUTH ABUTMENT



Contract No.	Drawing Code	Serial	Rev.
HS00243	210	41DD	2400 0

NOTES:  
1. FOR GENERAL NOTES, LEGEND & ABBREVIATIONS SEE DRAWING 002.

No.	Description	By Per	Date
0	FOR TENDER	R.M	05/13/2020

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

Professional Stamp



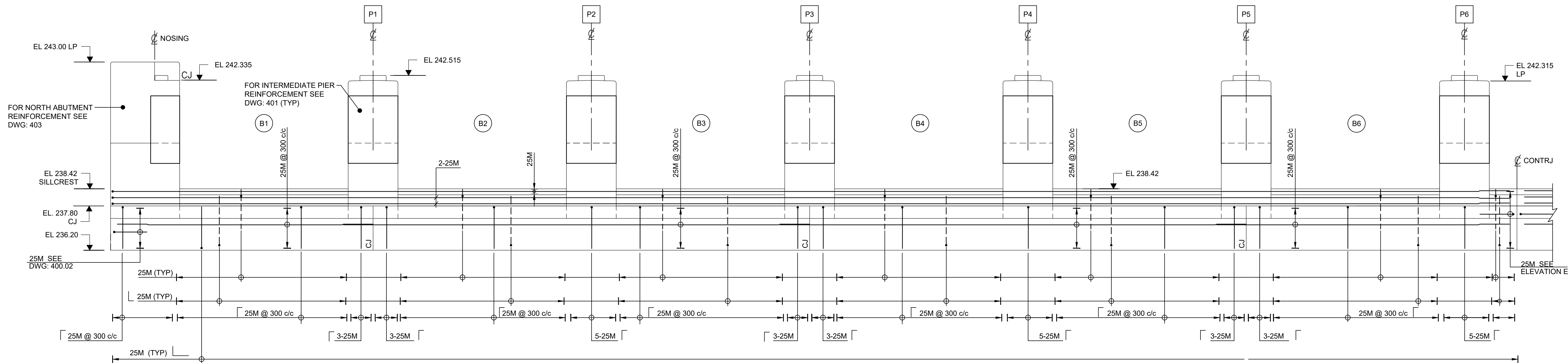
Project title / Titre du projet

TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

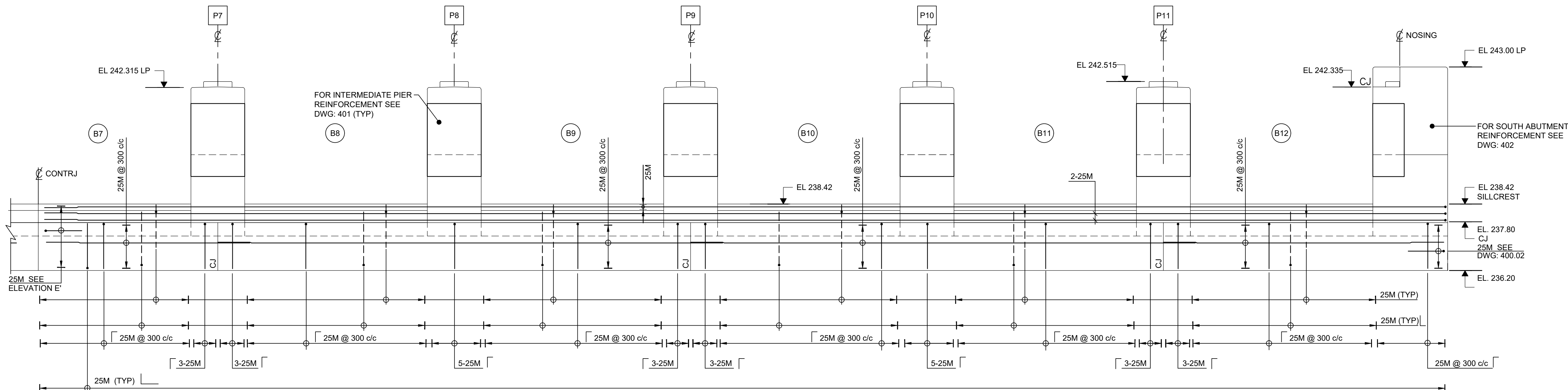
Drawing title / Titre du dessin

REINFORCEMENT  
SPILLWAYS  
PLAN, ELEVATIONS  
AND SECTIONS

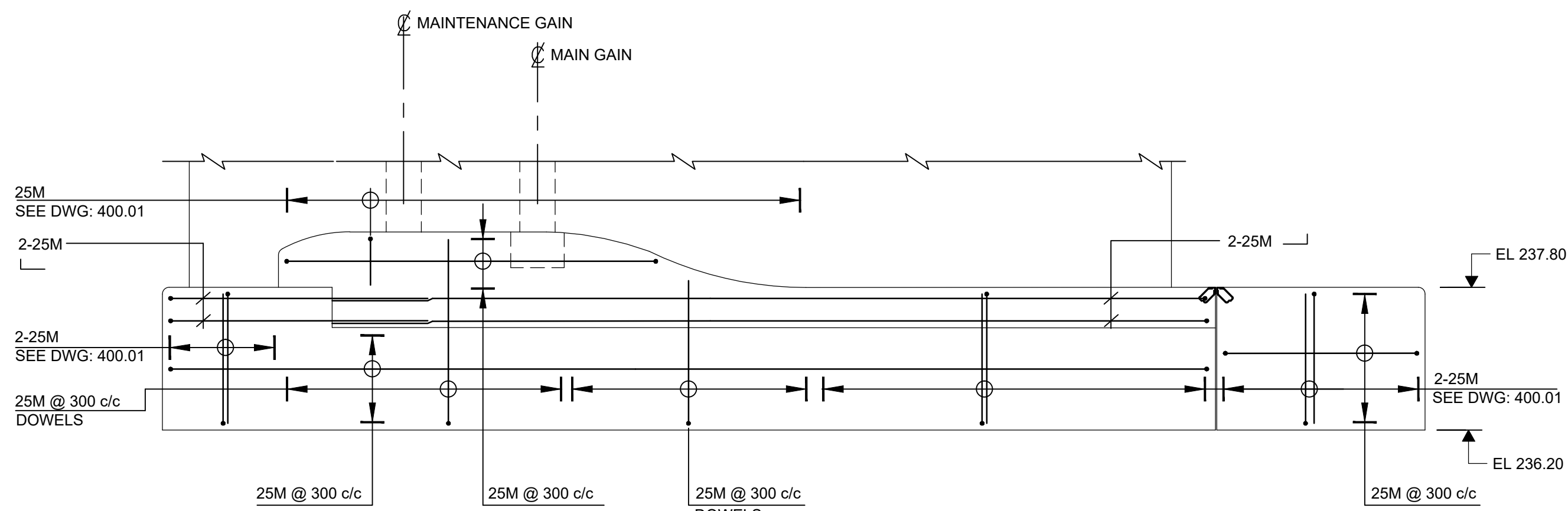
Drawn by / Dessiné par H. BOIVIN	Designed by / Conçu par M. SAIDOU P.Eng.
Verified by / Vérifié par R. MIGUEL P.Eng.	Approved by / Approuvé par S. VITTECOQ P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number / Numéro du Dessin 400
Project Number / Numéro du projet R.076951.705	Sheet Feuille 2 of 3



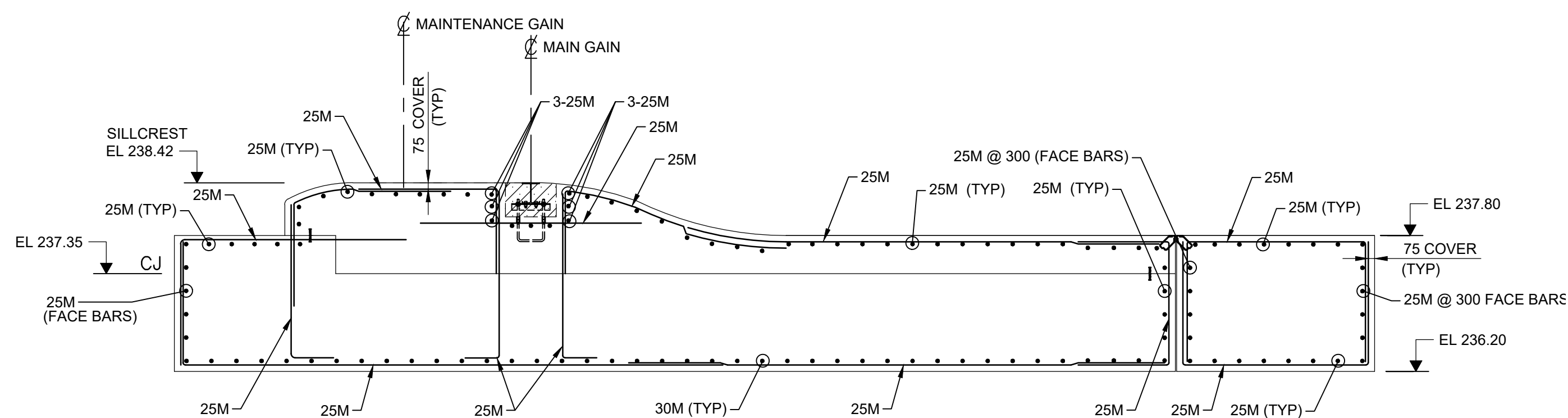
ELEVATION D  
1:75 400.01



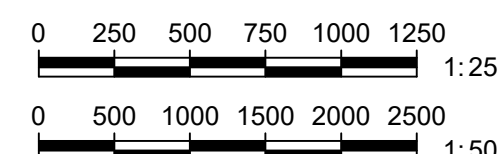
ELEVATION D  
1:75 400.01 (CONTINUED)



ELEVATION E  
1:50 400.01 (MIRRORED)



SECTION F  
1:50



Contract No.	Drawing Code	Serial	Rev.
HS00243	210 41DD	3400	0

- NOTES:
- FOR GENERAL NOTES, LEGEND & ABBREVIATIONS SEE DRAWING 002.
  - FOR DETAILS OF MECHANICAL EMBEDDED PARTS IN FIRST AND SECOND PHASE CONCRETE, SEE DRAWINGS 600 TO 602.

No.	Description	By Par	Date
0	FOR TENDER	R.M	05/13/2020

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

Professional Stamp



Project title / Titre du projet

TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

Drawing title / Titre du dessin

REINFORCEMENT  
SPILLWAYS  
PLAN, ELEVATIONS  
AND SECTIONS

Drawn by / Dessiné par H. BOIVIN	Designed by / Conçu par M. SAIDOU P.Eng.
Verified by / Vérifié par R. MIGUEL P.Eng.	Approved by / Approuvé par S. VITTECOQ P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number / Numéro du Dessin 400
Project Number / Numéro du projet R.076951.705	Sheet Feuille 3 of 3 de 3



Contract No.	Drawing Code	Serial	Rev.
HS00243	210 41DD	0401	0

- NOTES:
- FOR GENERAL NOTES, LEGEND & ABBREVIATIONS SEE DRAWING 002.
  - FOR DETAILS OF MECHANICAL EMBEDDED PARTS IN FIRST AND SECOND PHASE CONCRETE, SEE DRAWINGS 600 TO 602.

No.	Description	By	Date
0	FOR TENDER	R.M	05/13/2020

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

Professional Stamp



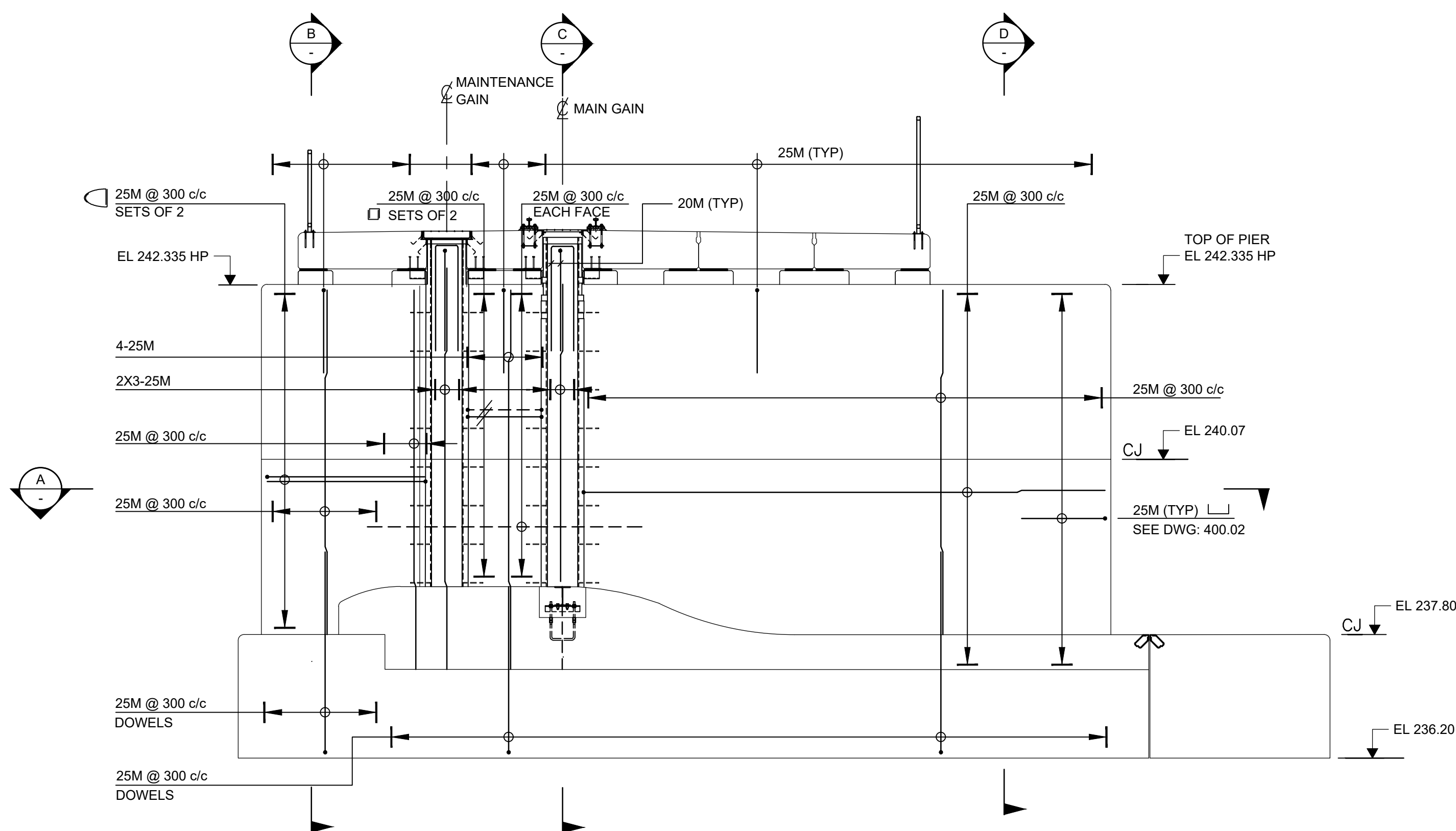
Project title / Titre du projet

TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

Drawing title / Titre du dessin

REINFORCEMENT  
INTERMEDIATE PIERS  
PLAN, ELEVATION  
SECTIONS AND DETAILS

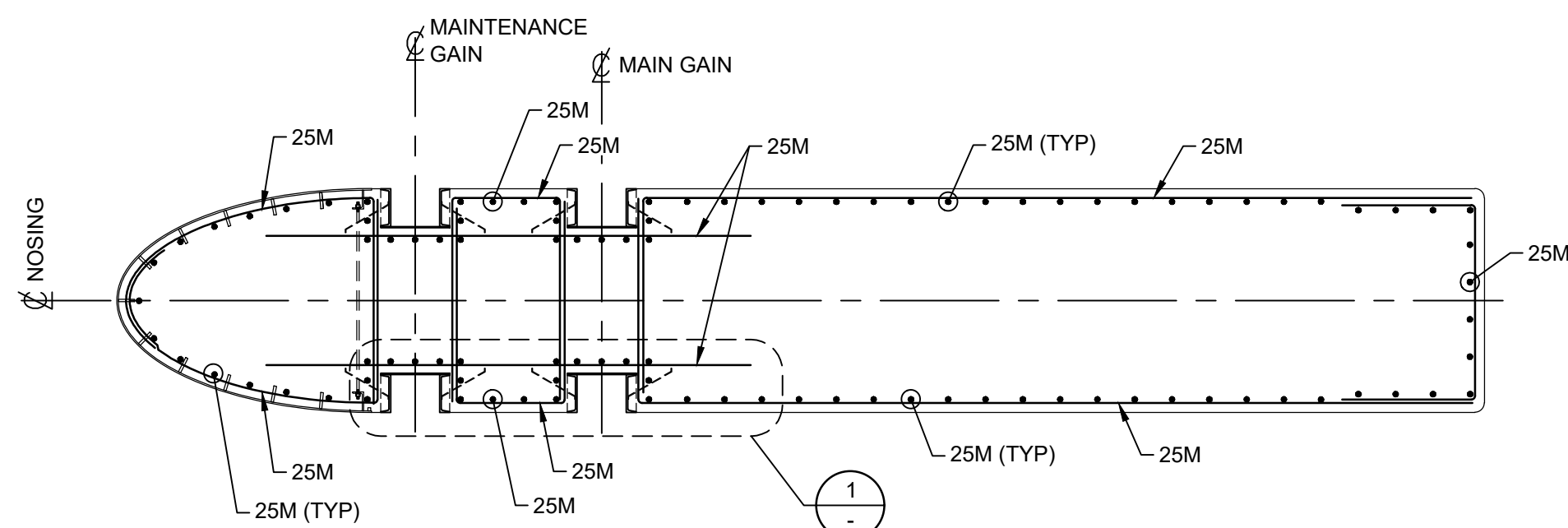
Drawn by / Dessiné par H. BOIVIN	Designed by / Conçu par M. SAIDOU P.Eng.
Verified by / Vérifié par R. MIGUEL P.Eng.	Approved by / Approuvé par S. VITTECOQ P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number/ Numéro du Dessin 401
Project Number / Numéro du projet R.076951.705	Sheet Feuille de 06



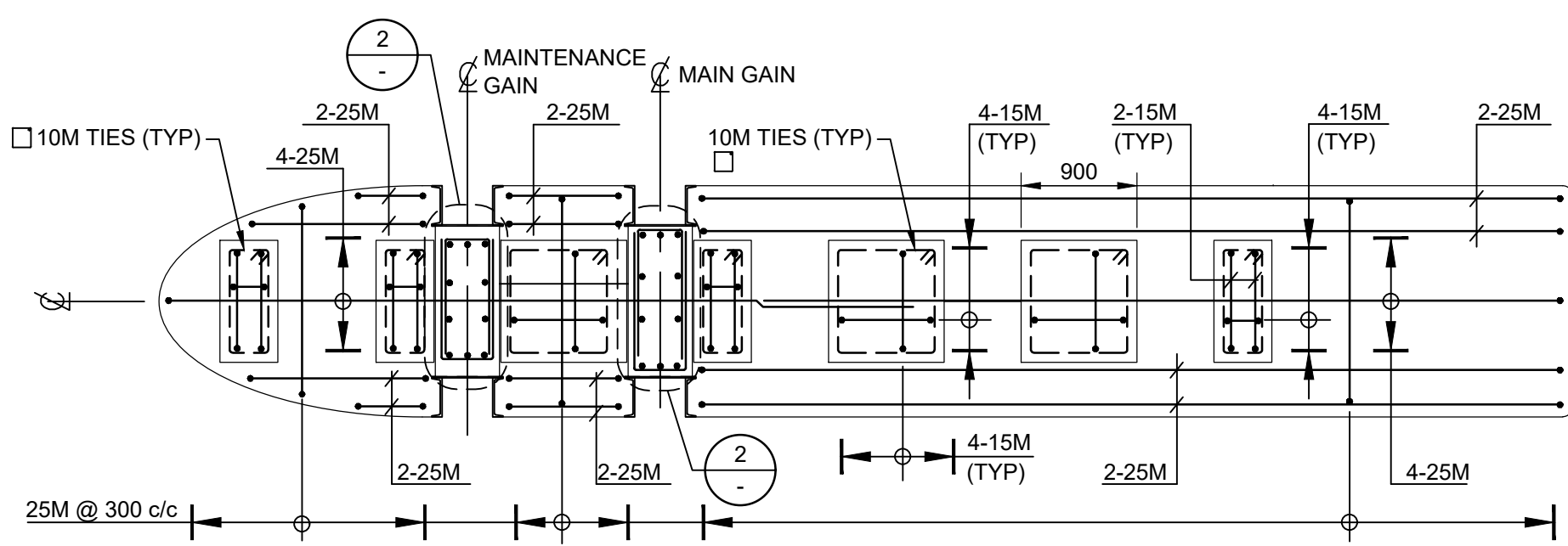
ELEVATION G  
1:50  
400.01

INTERMEDIATE PIERS

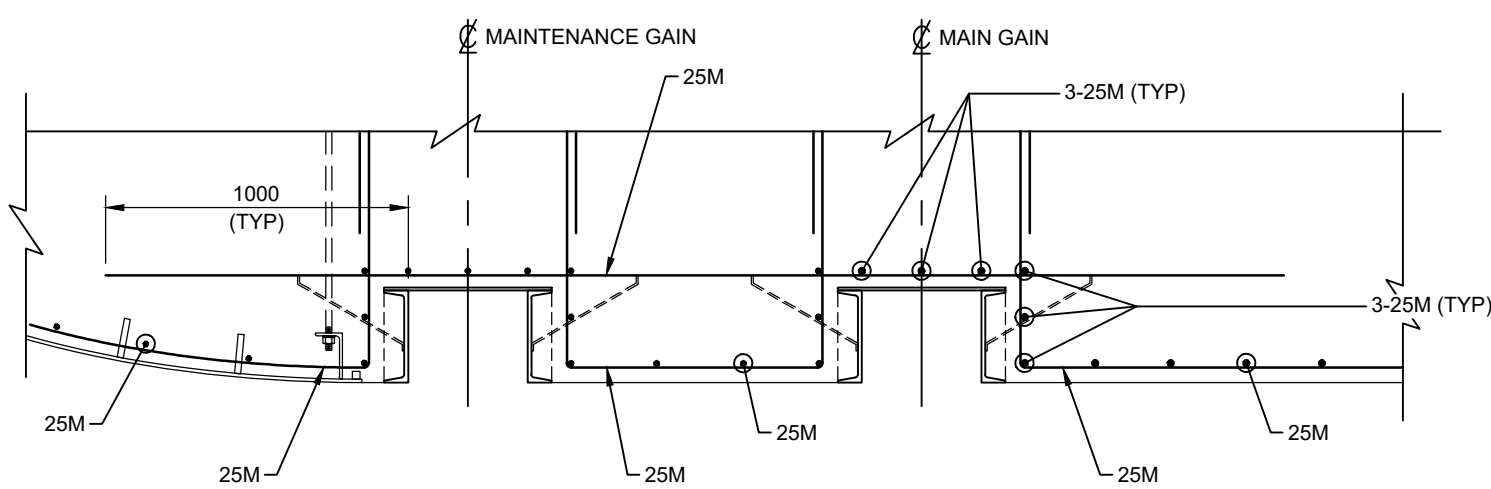
1:50  
(TYP FOR BOTH FACES)



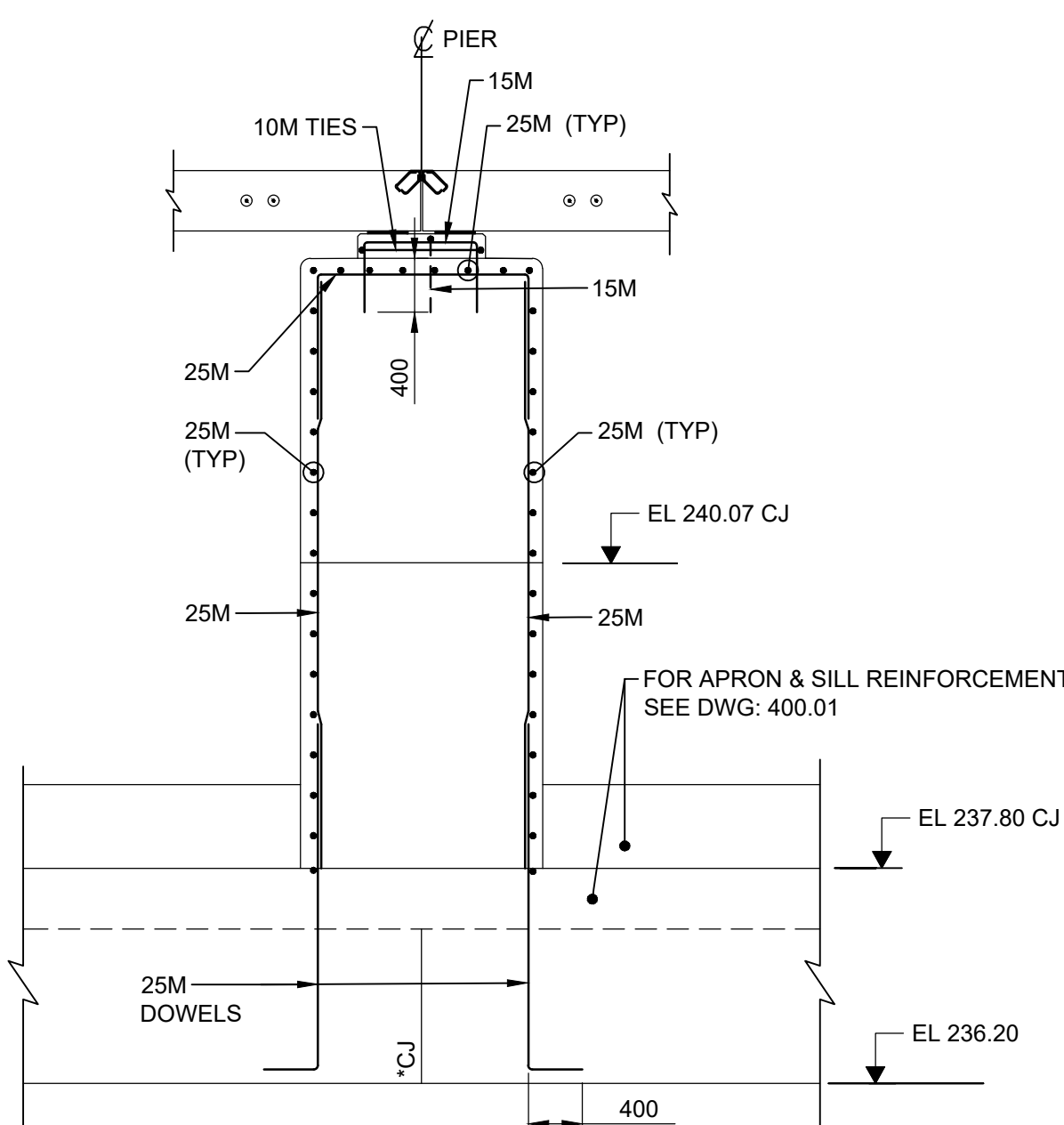
SECTION A  
1:50  
-



PLAN AT EL 242.535  
1:50

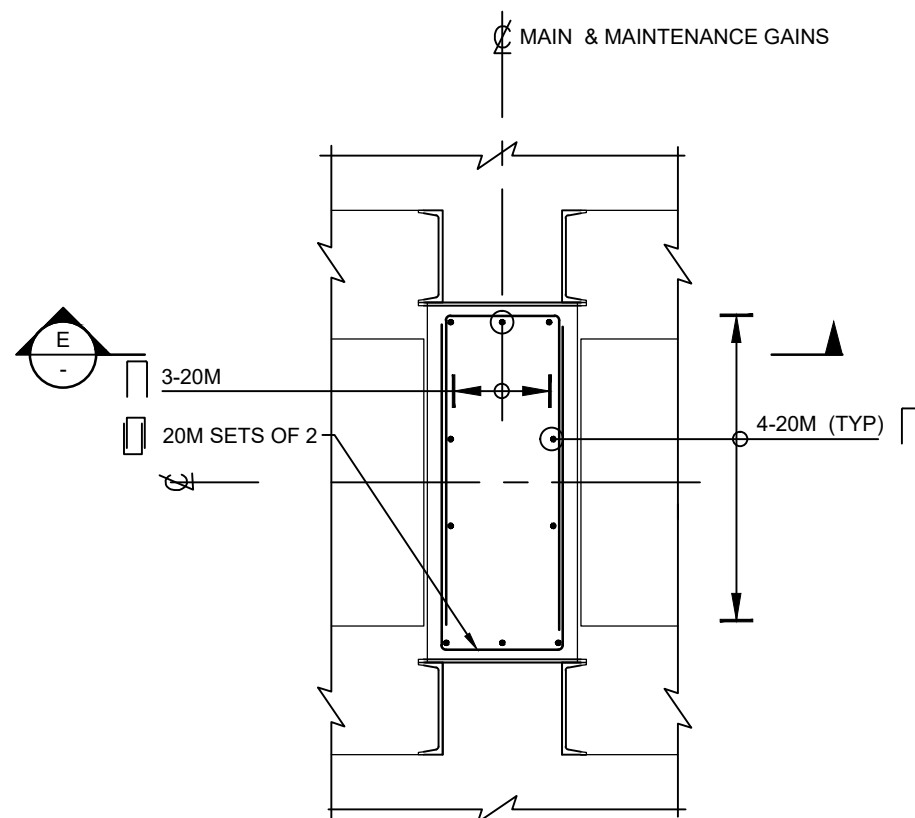


DETAIL 1  
1:20  
-

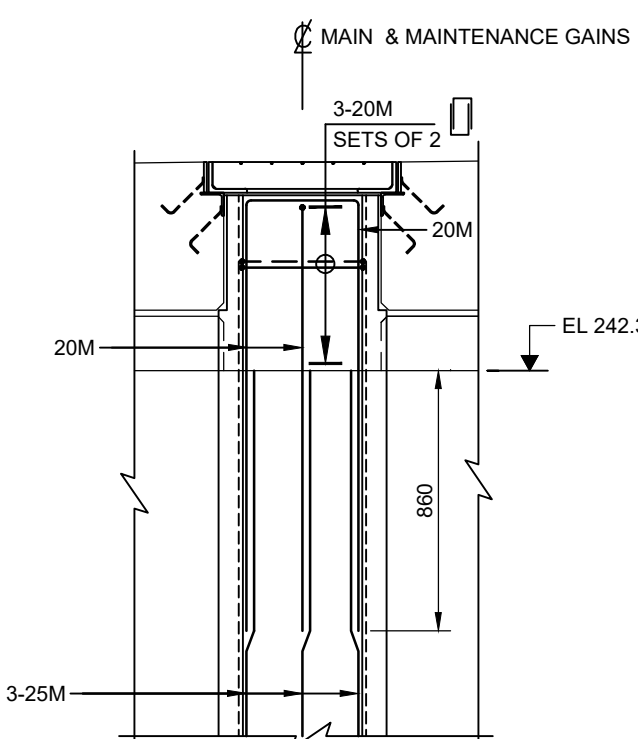


SECTION B  
1:50  
-

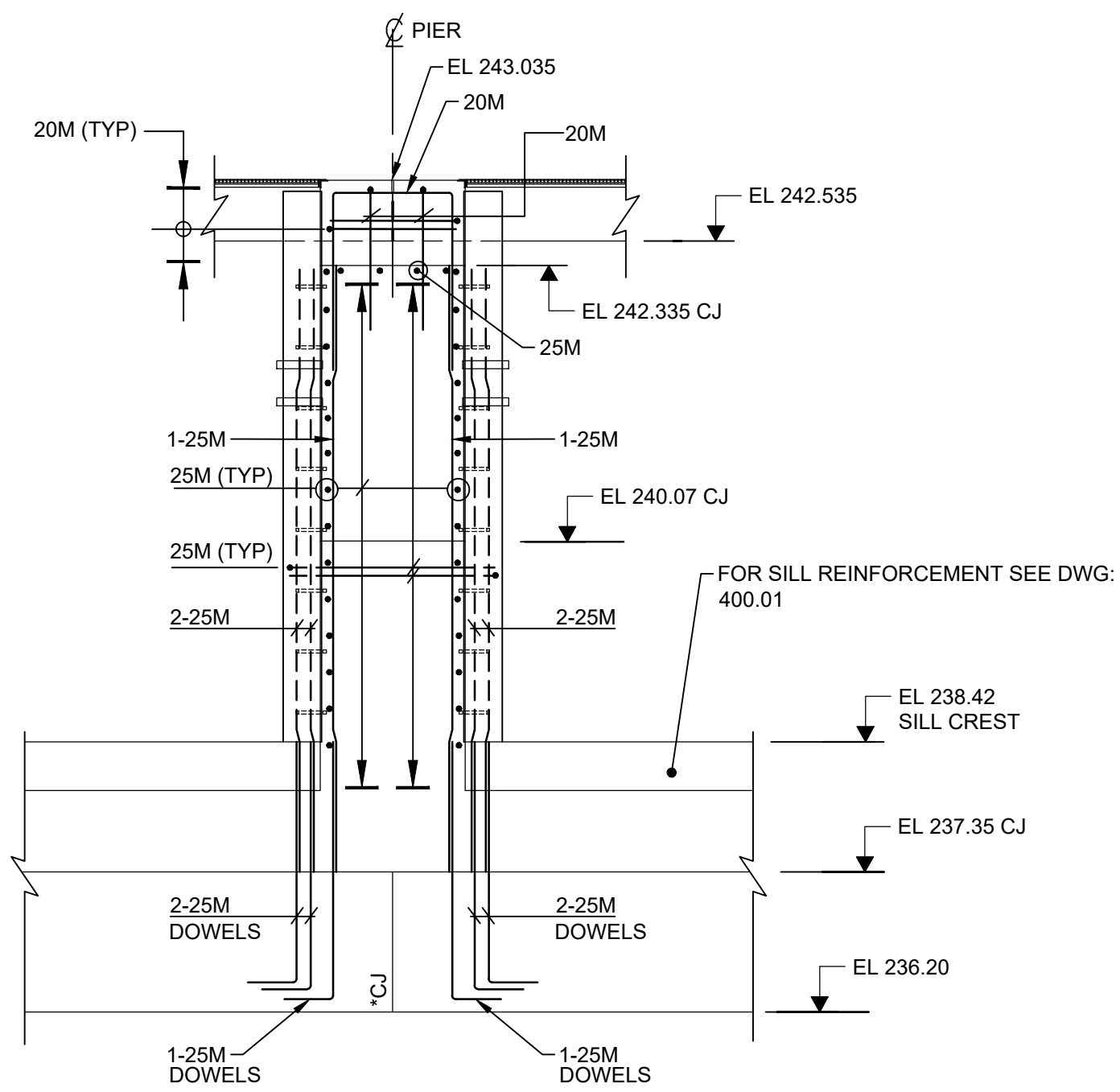
\* CONSTRUCTION JOINT AT PIERS: P1,P3,P5,P7,P9 & P11 ONLY.



DETAIL 2  
1:20  
-

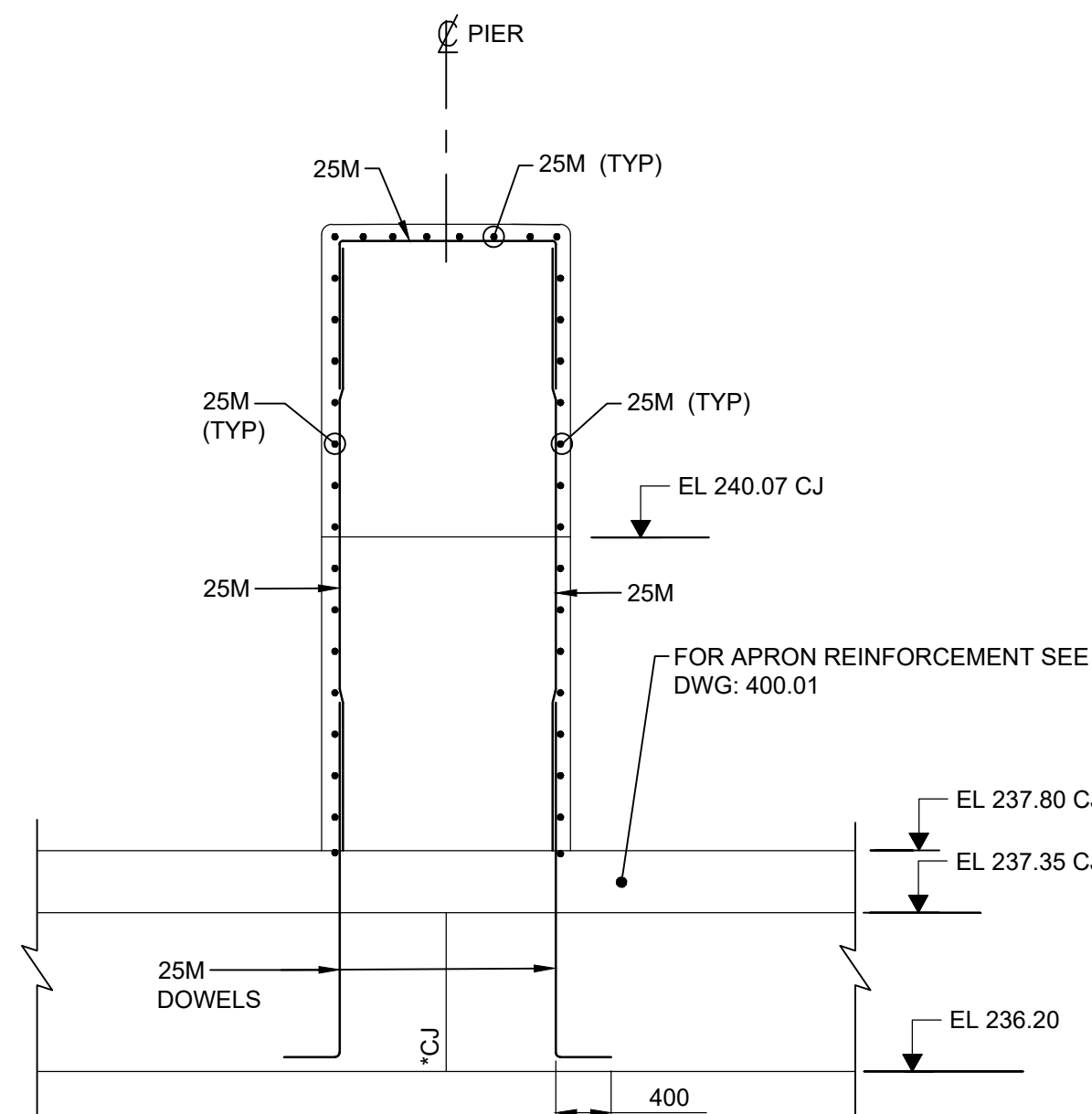


SECTION E  
1:20  
-



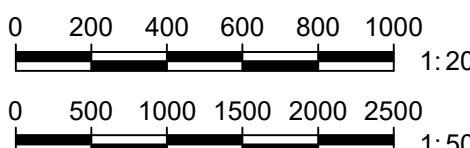
SECTION C  
1:50  
-

\* CONSTRUCTION JOINT AT PIERS: P1,P3,P5,P7,P9 & P11 ONLY.



SECTION D  
1:50  
-

\* CONSTRUCTION JOINT AT PIERS: P1,P3,P5,P7,P9 & P11 ONLY.



- NOTES:
- FOR GENERAL NOTES, LEGEND & ABBREVIATIONS SEE DRAWING 002.
  - FOR DETAILS OF MECHANICAL EMBEDDED PARTS IN FIRST AND SECOND PHASE CONCRETE, SEE DRAWINGS 600 TO 602.

No.	Description	By	Date
0	FOR TENDER	R.M	05/13/2020

Revision / Révision

Do not scale drawings.  
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A Detail number  
Numéro du détail  
B Location dwg. number  
Numéro sur dessin

Professional Stamp



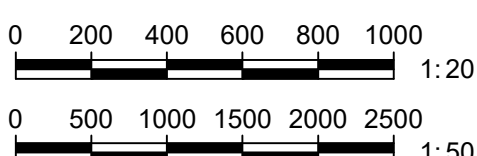
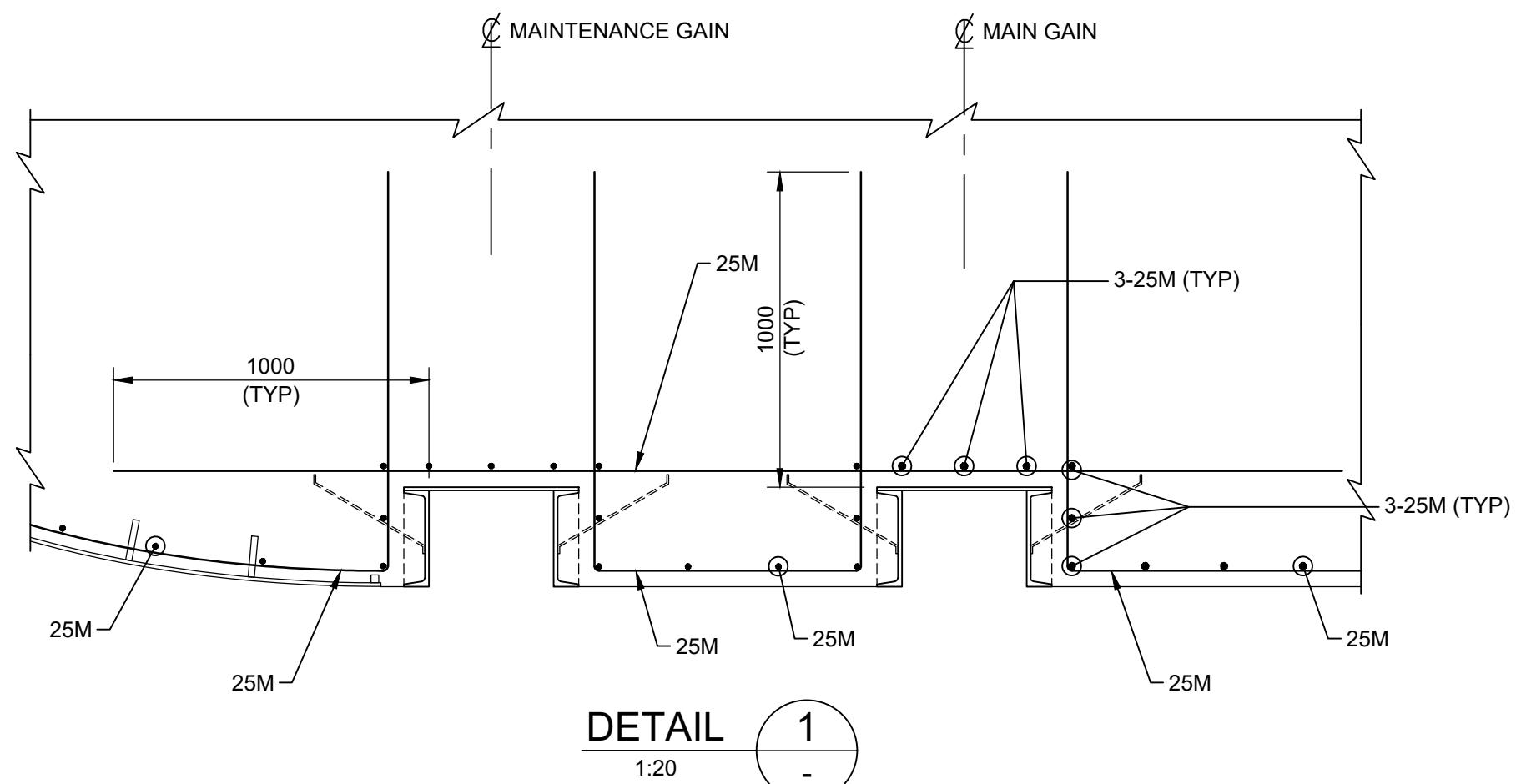
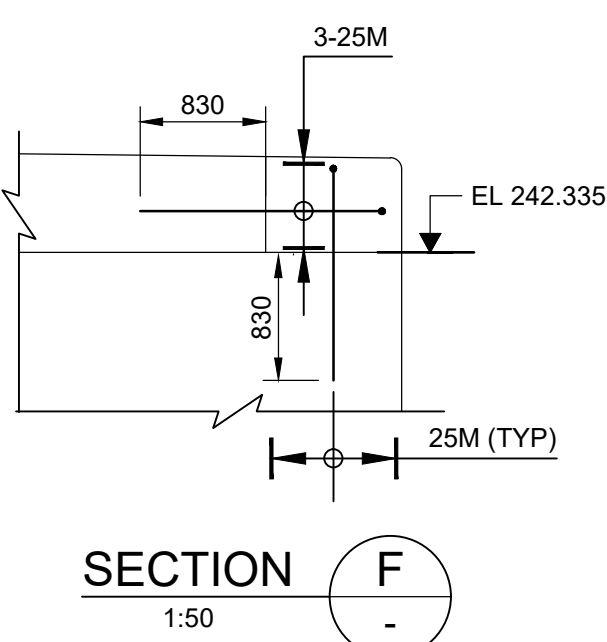
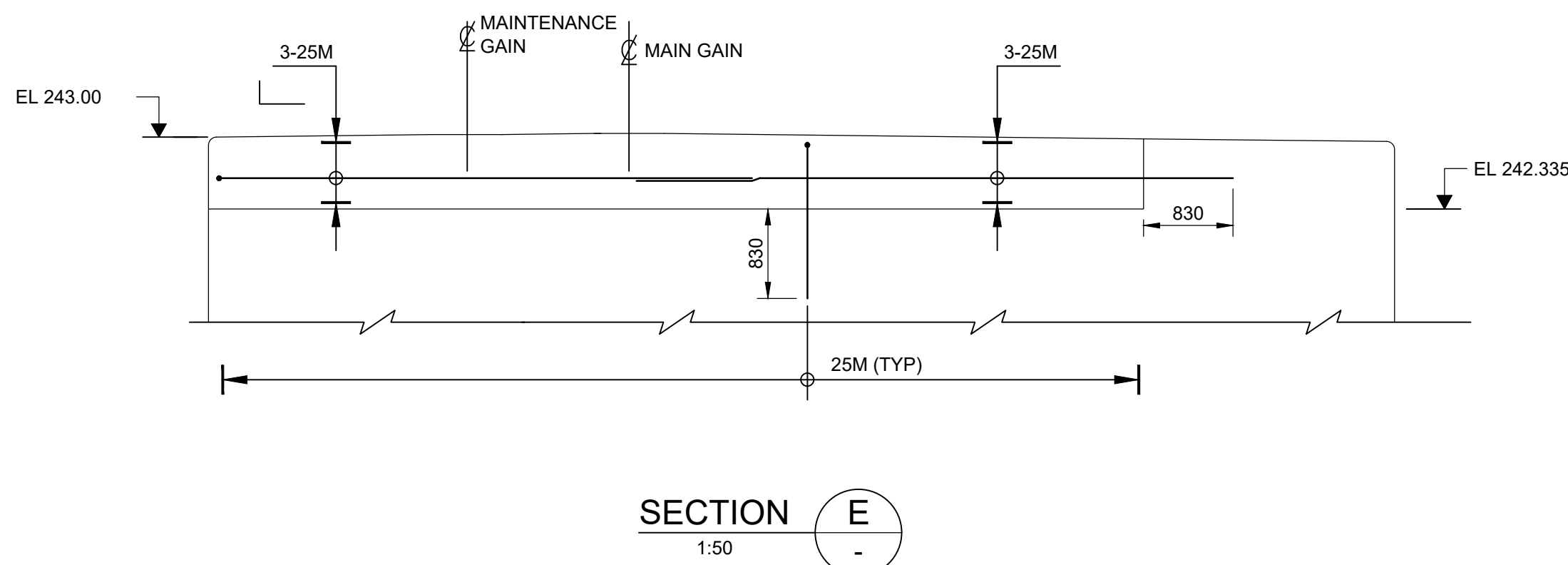
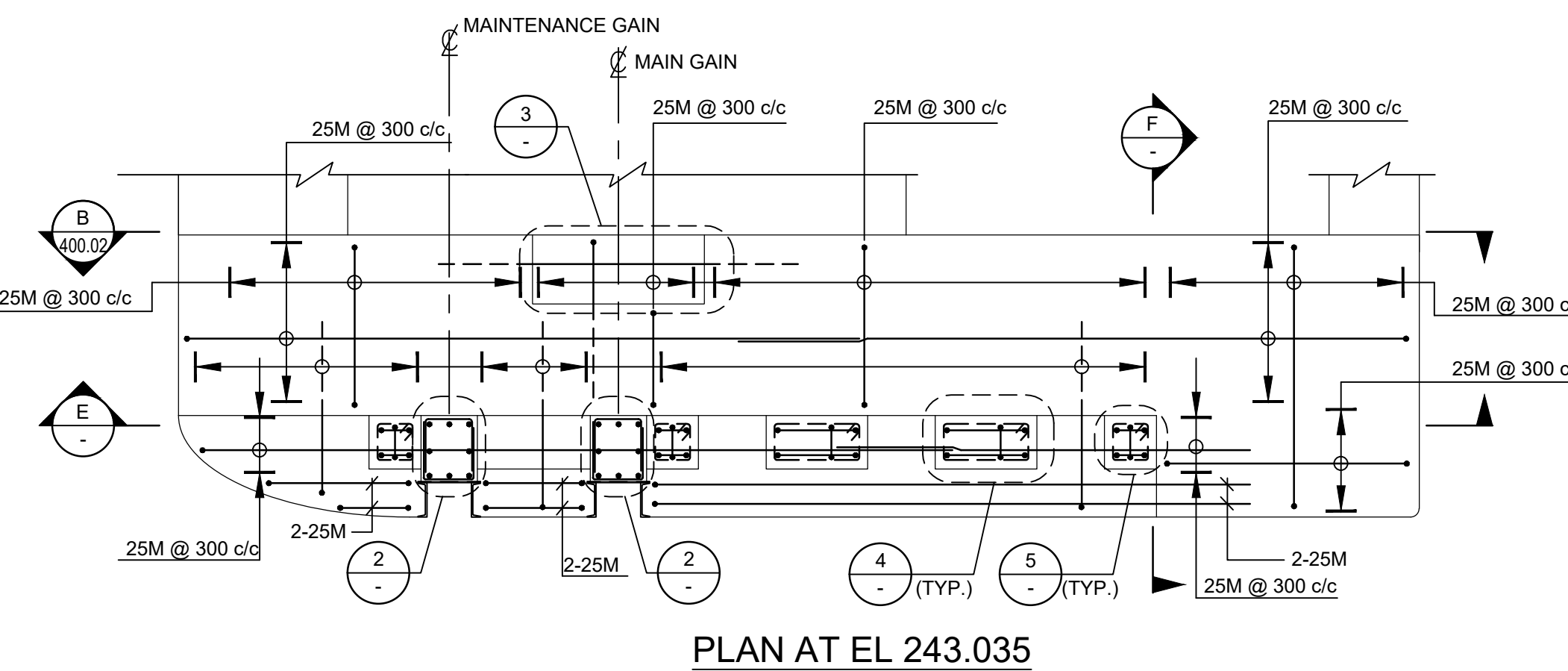
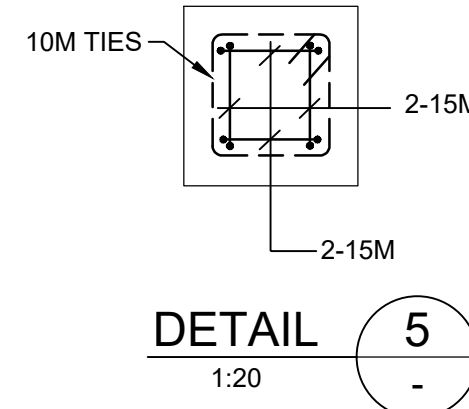
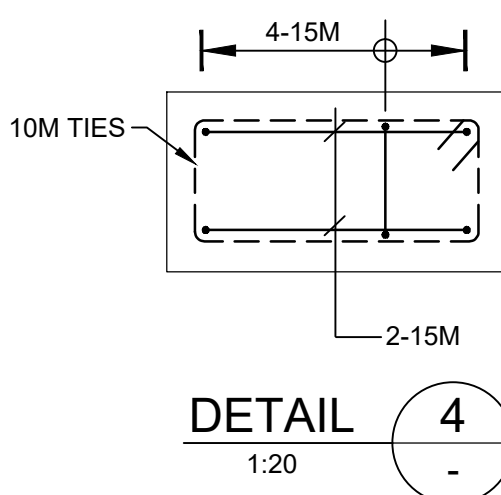
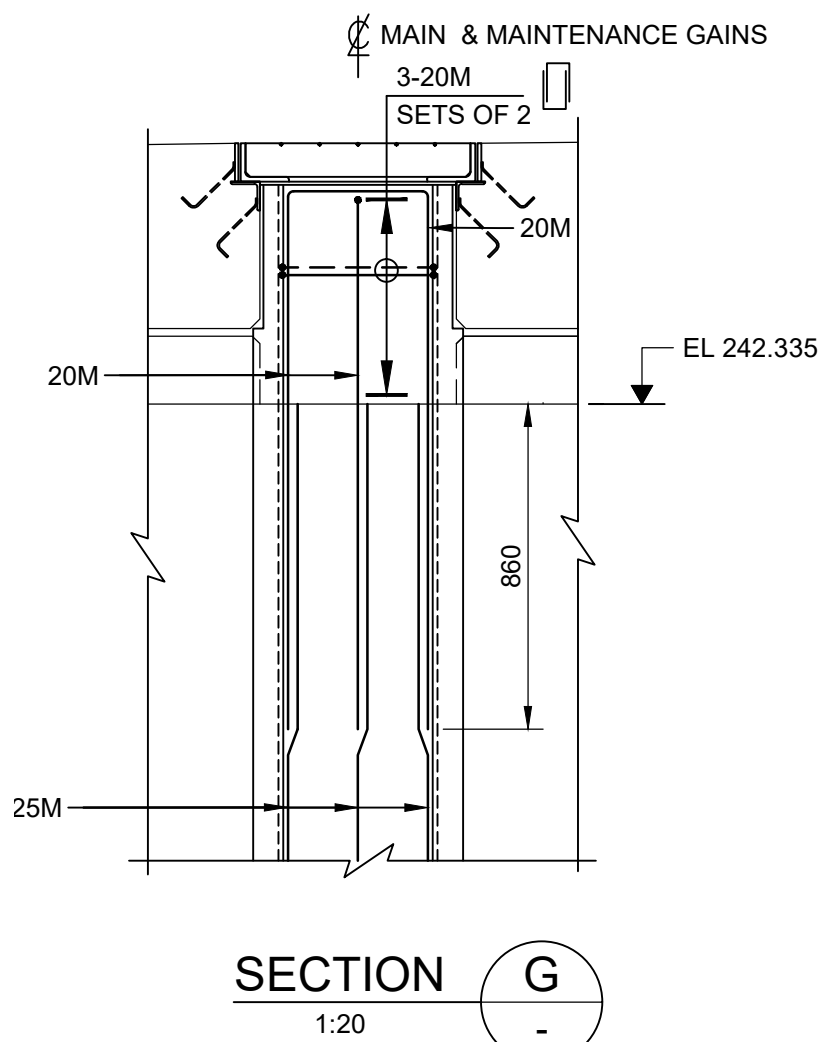
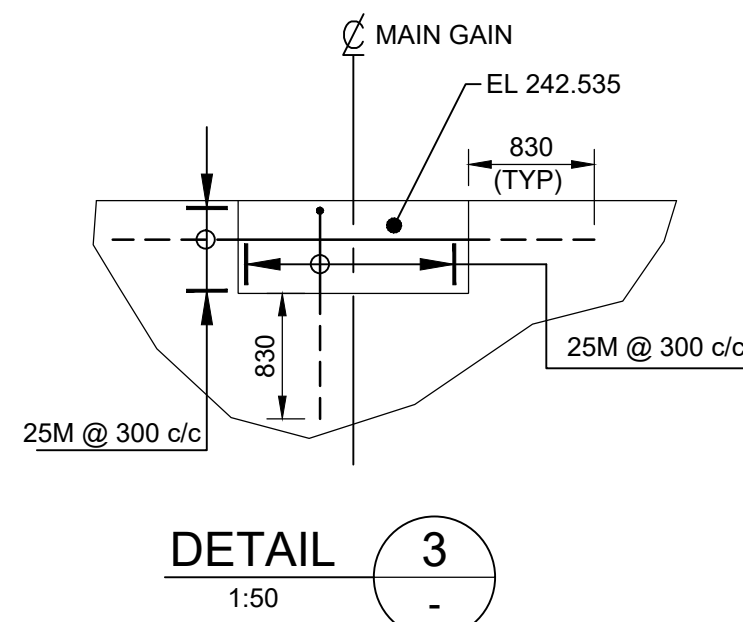
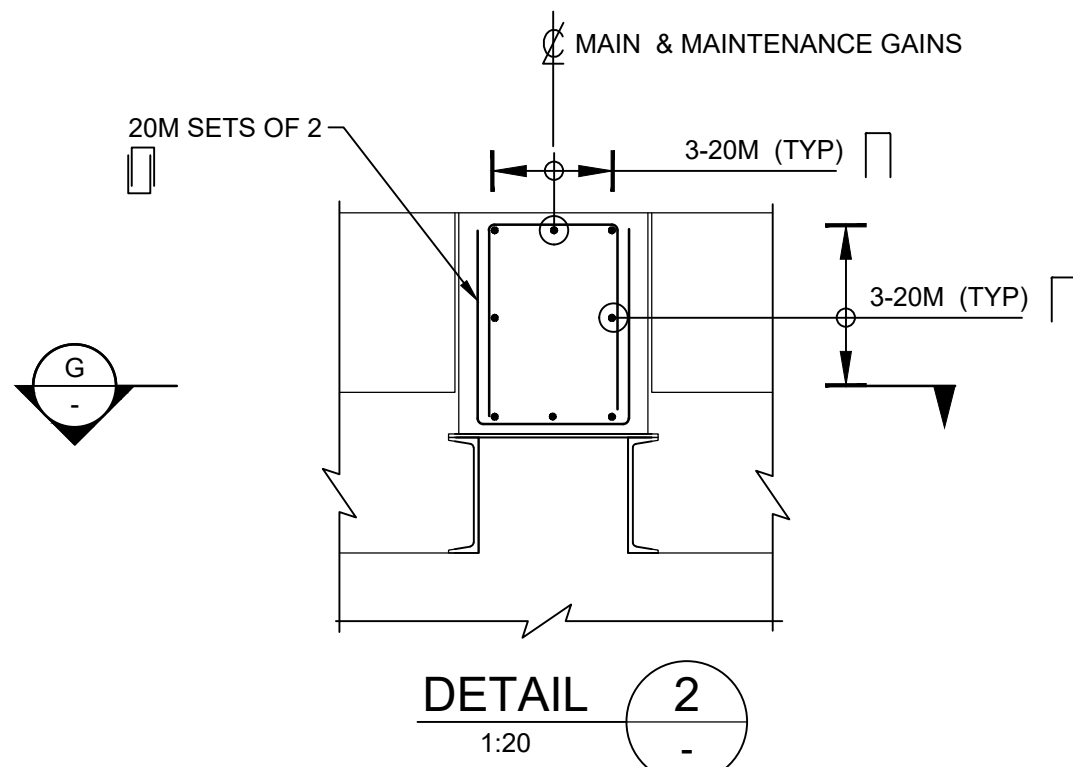
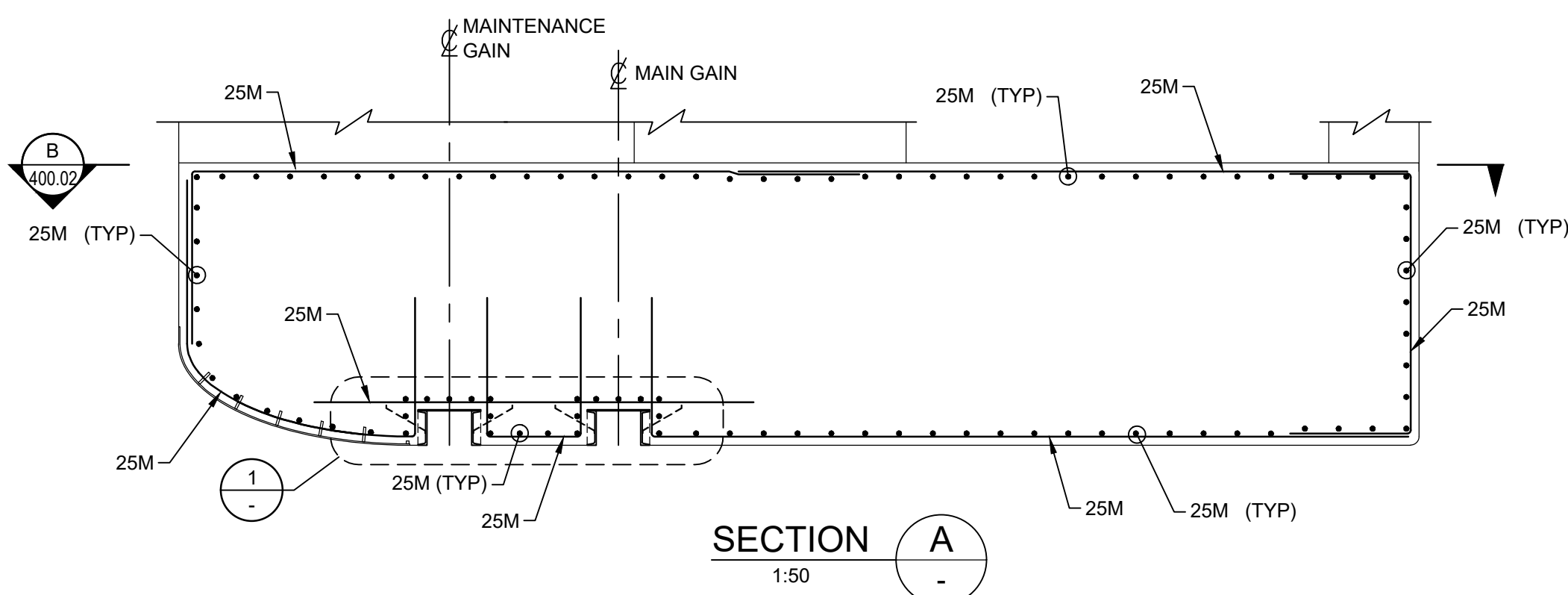
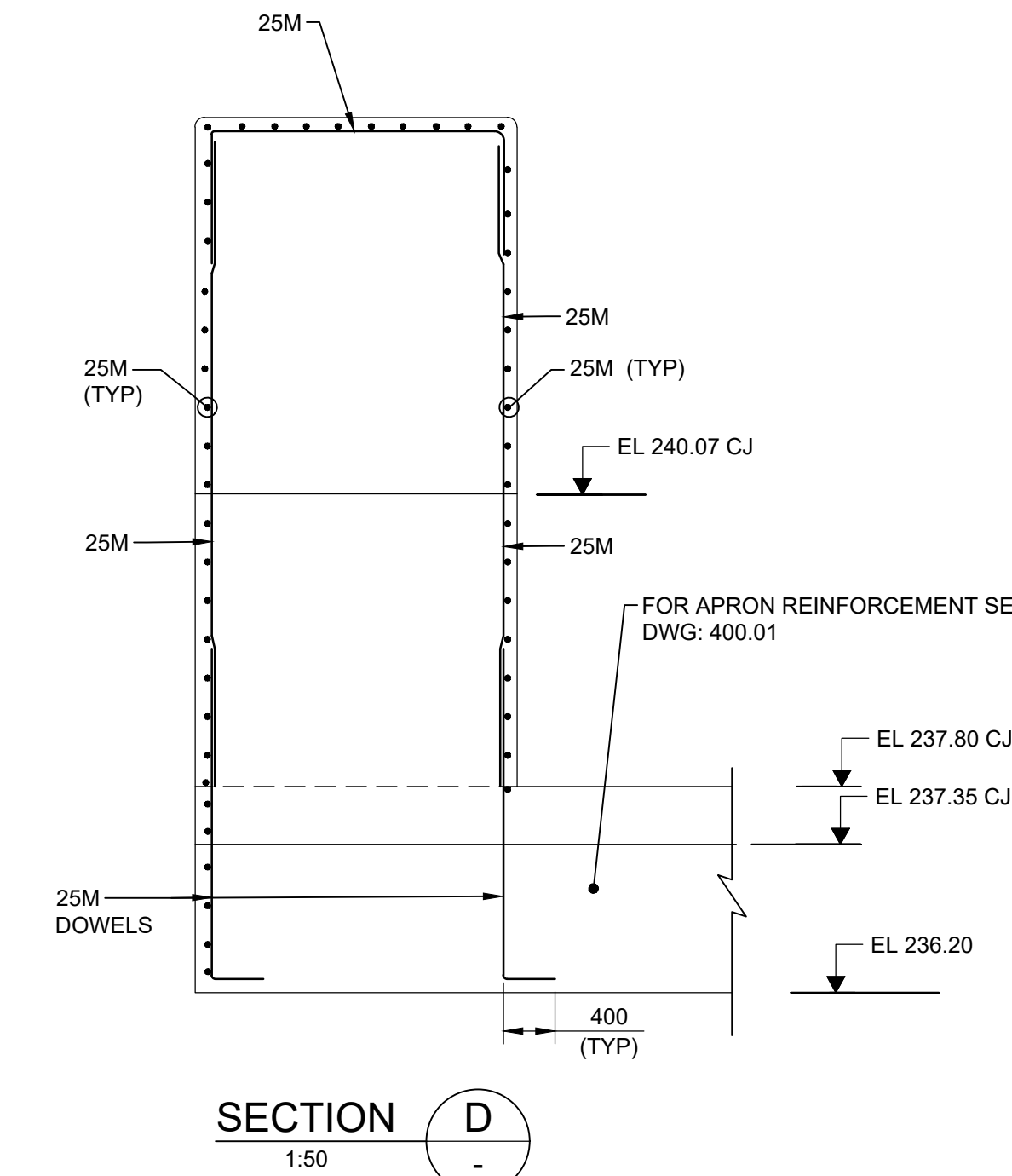
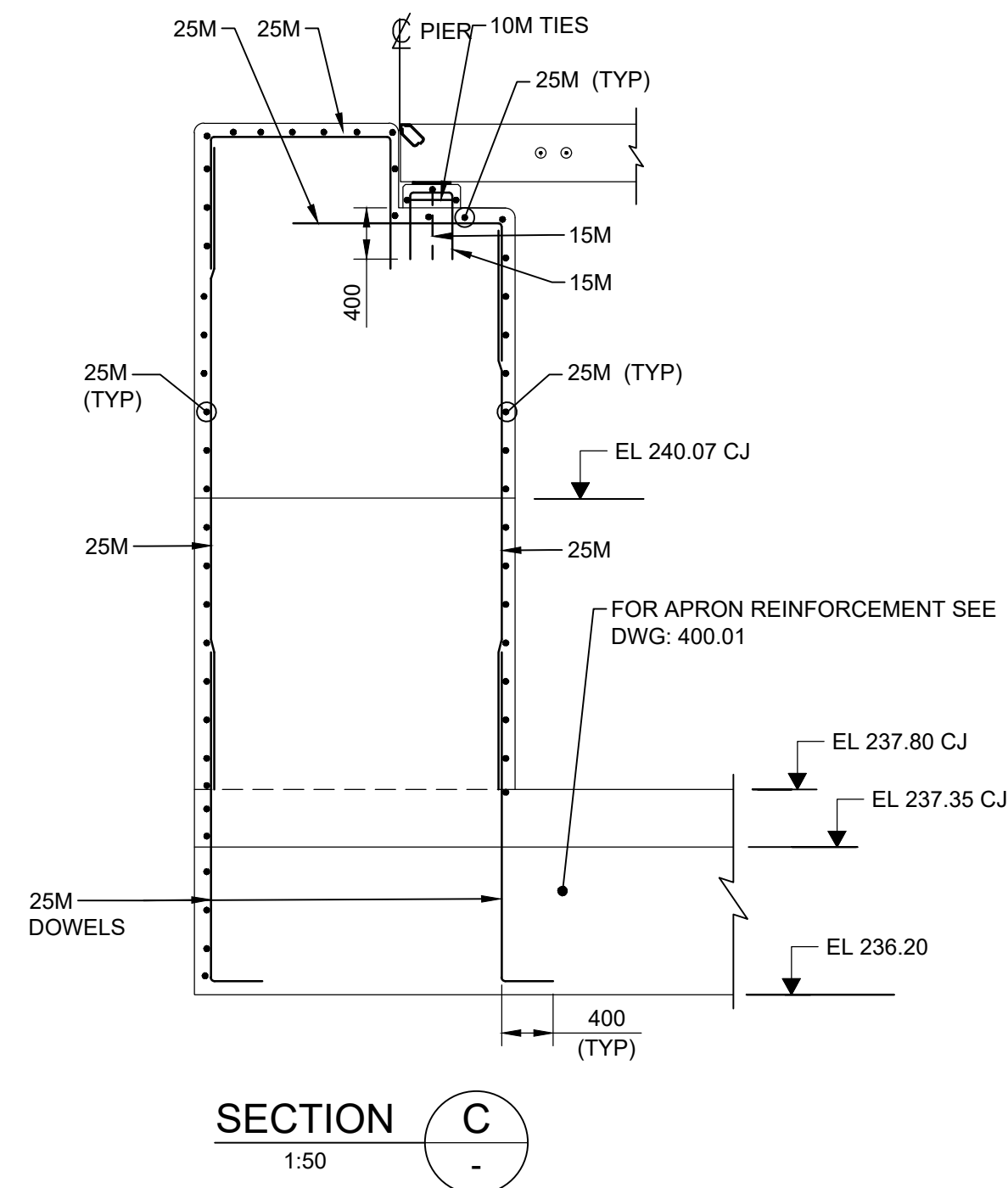
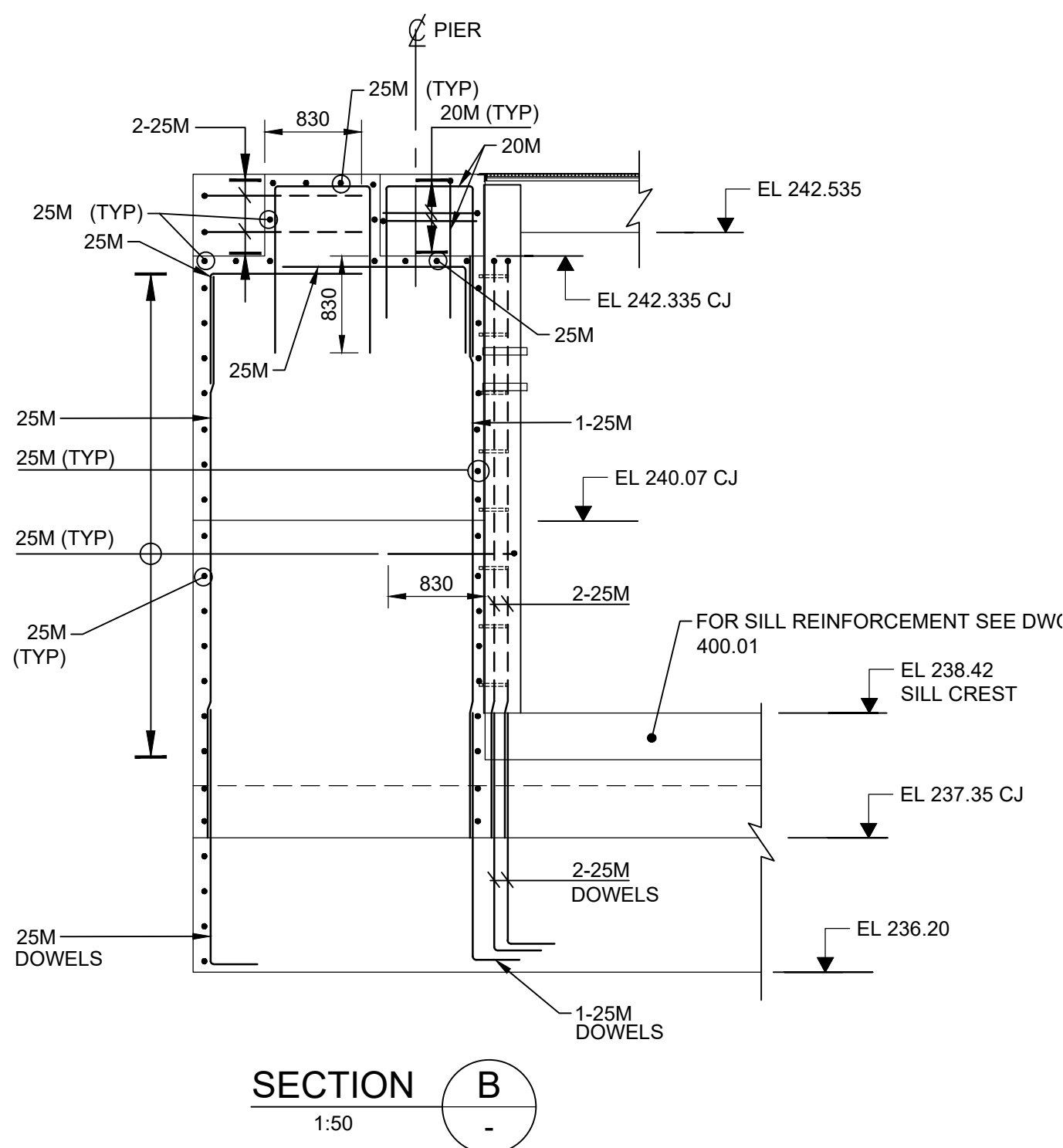
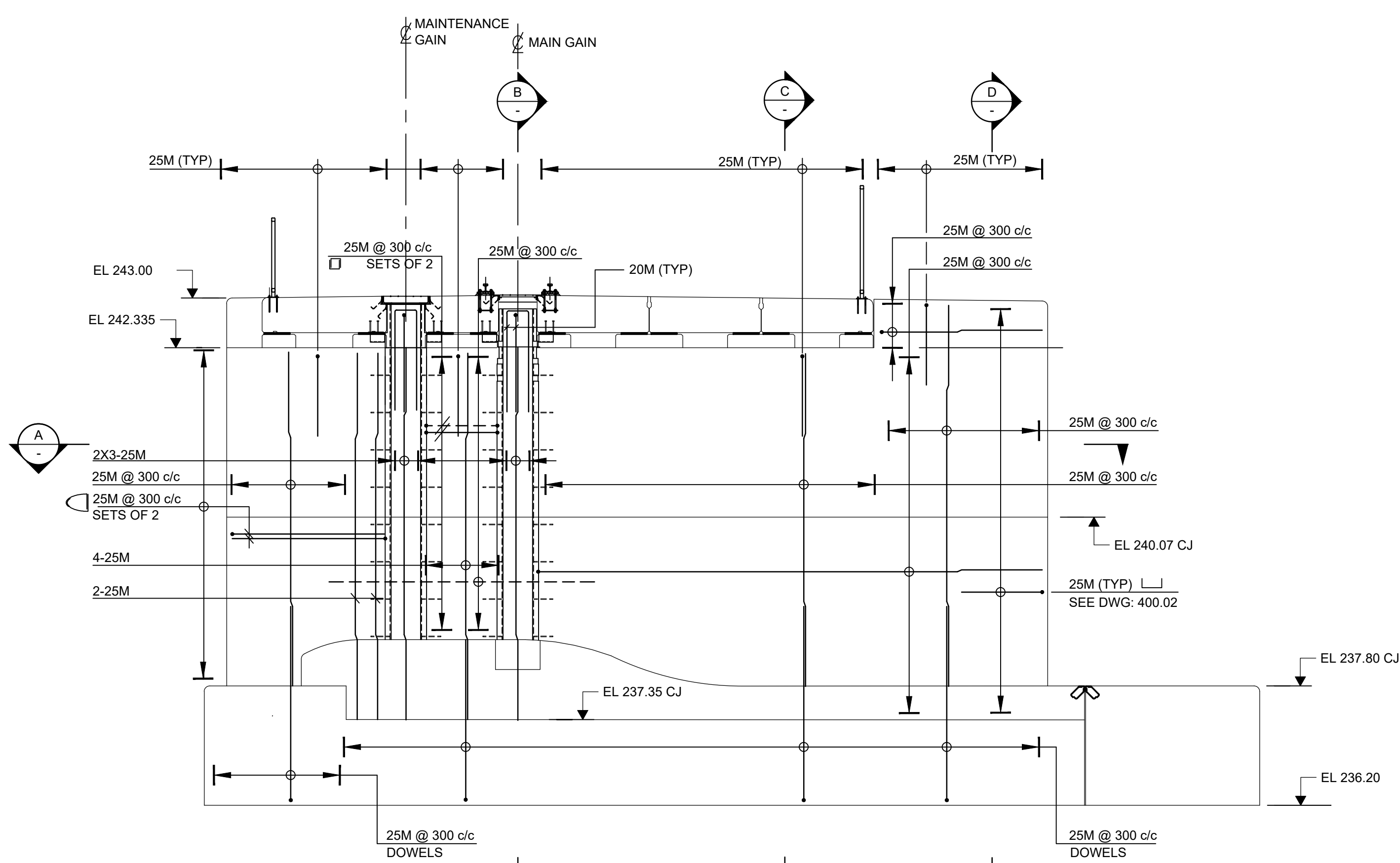
Project title / Titre du projet

TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

Drawing title / Titre du dessin

REINFORCEMENT  
NORTH ABUTMENT  
PLAN, ELEVATION,  
SECTIONS AND DETAILS

Drawn by / Dessiné par H. BOIVIN	Designed by / Conçu par M. SAIDOU	P.Eng.
Verified by / Vérifié par R. MIGUEL	Approved by / Approuvé par S. VITTECOQ	P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number / Numéro du Dessin 402	Sheet Feuille de
Project Number / Numéro du projet R.076951.705		






NOTES:

1. FOR GENERAL NOTES, LEGEND & ABBREVIATIONS  
SEE DRAWING 002.
2. FOR DETAILS OF MECHANICAL EMBEDDED PARTS  
IN FIRST AND SECOND PHASE CONCRETE, SEE  
DRAWINGS 600 TO 602.

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

Professional Stamp



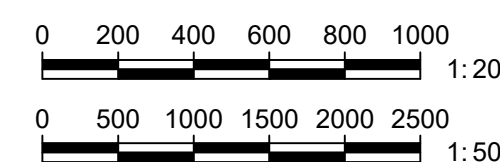
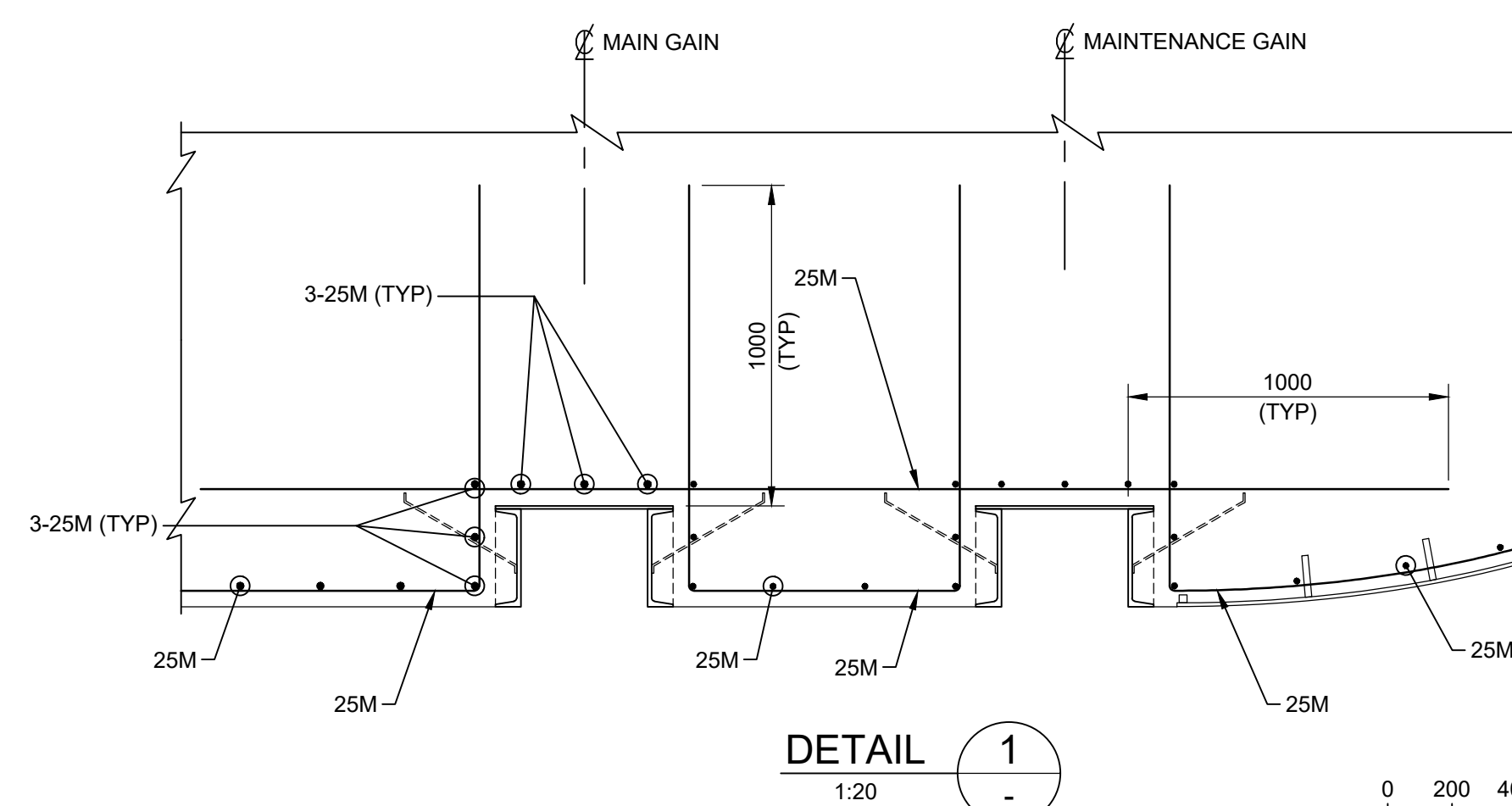
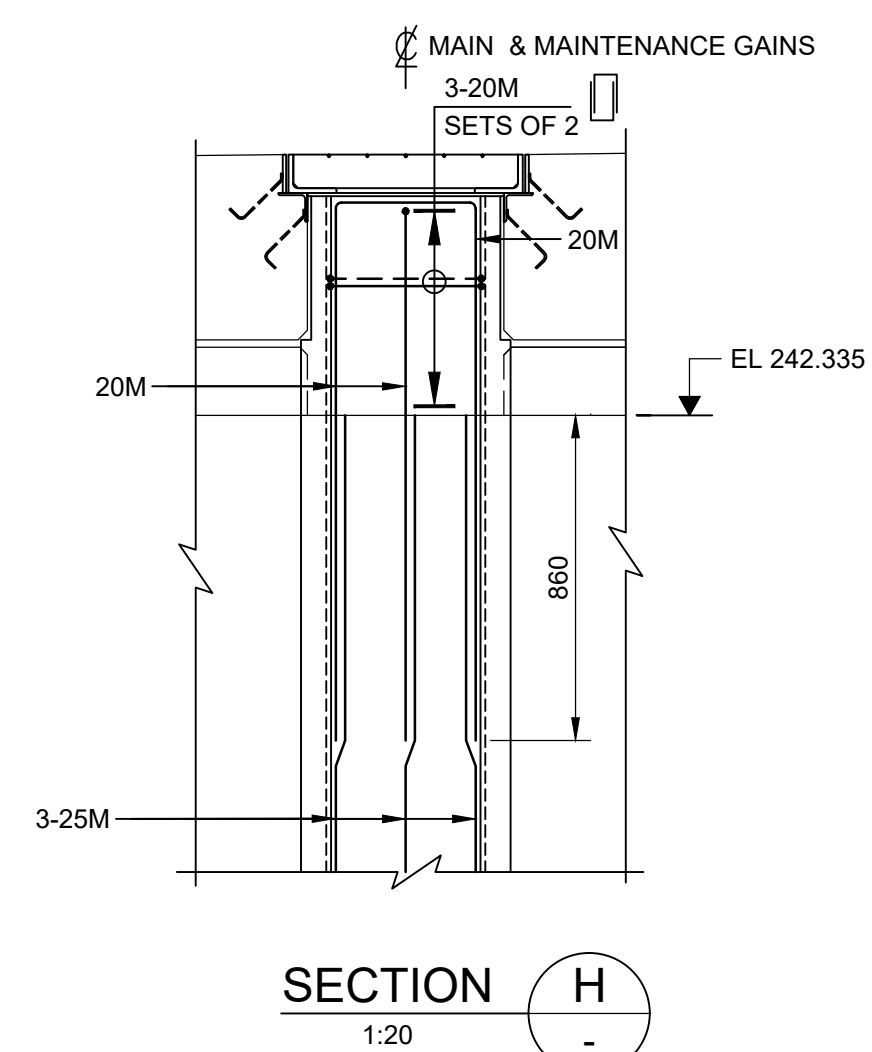
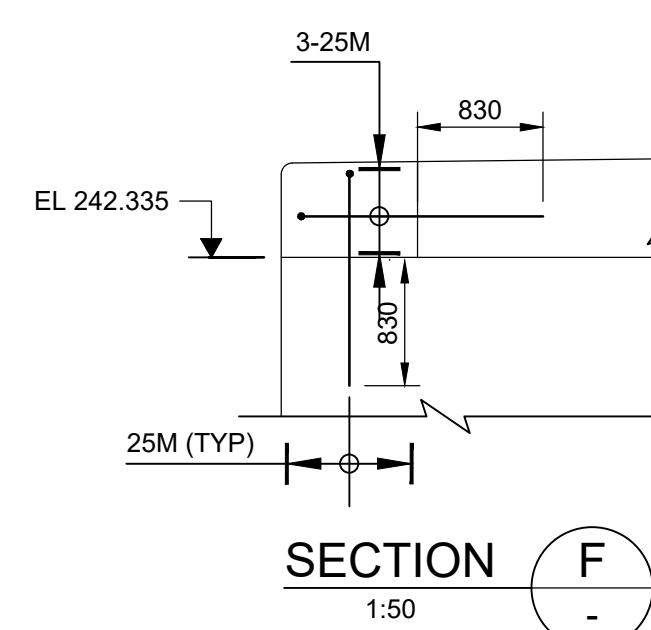
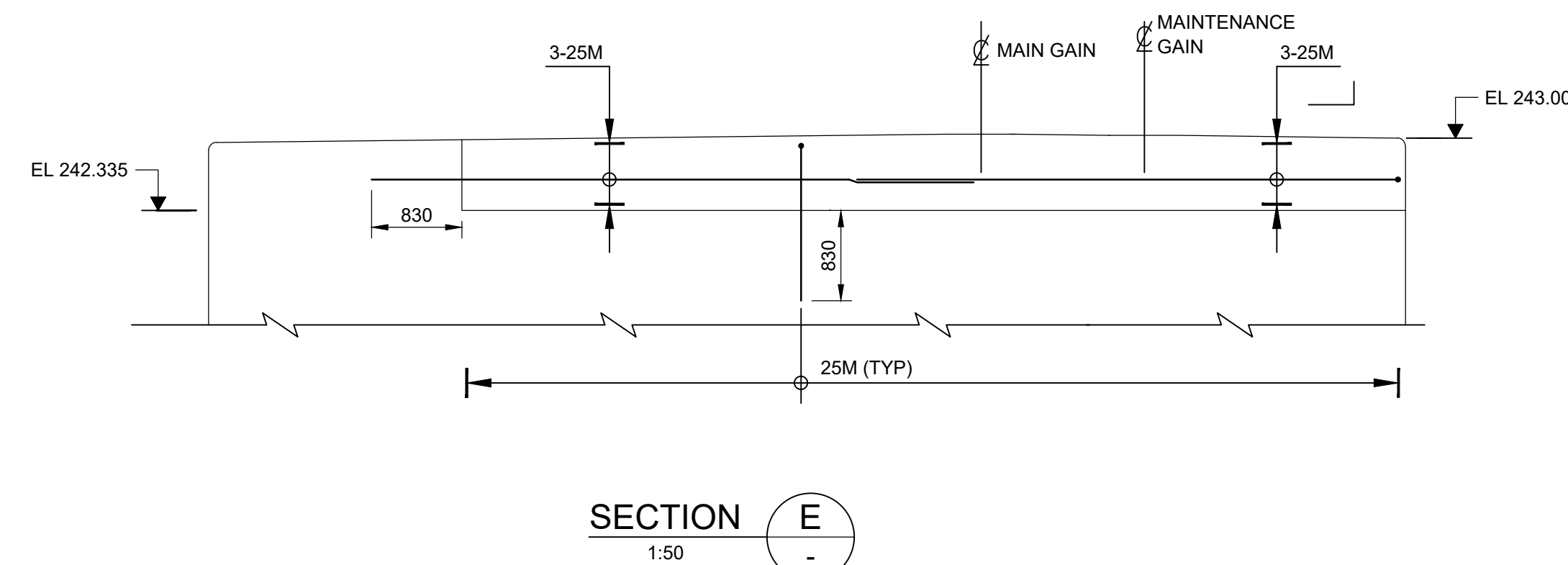
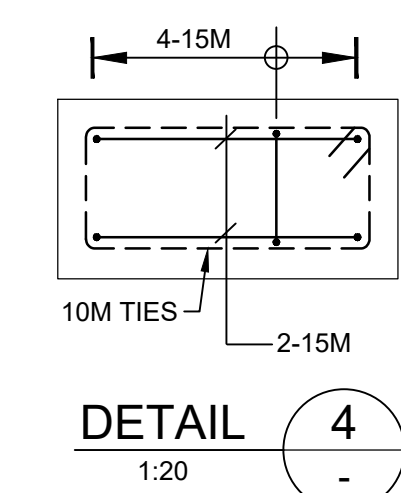
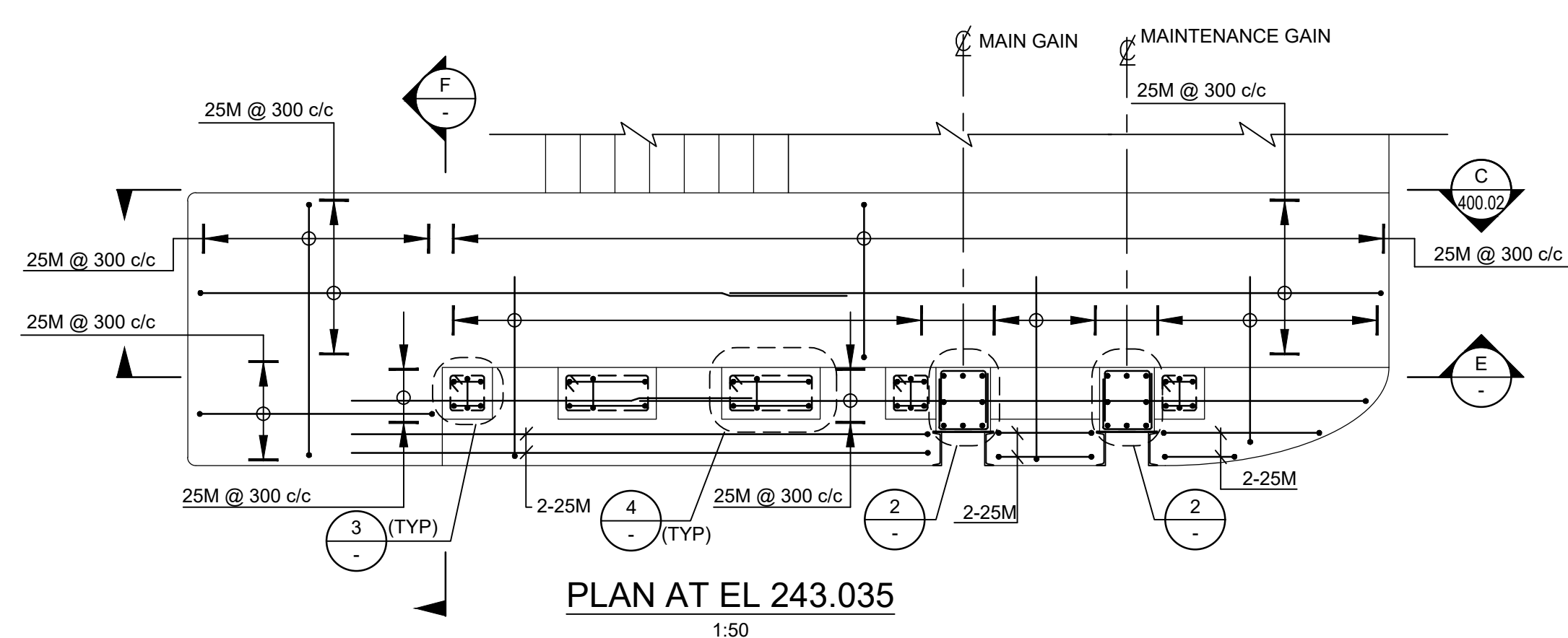
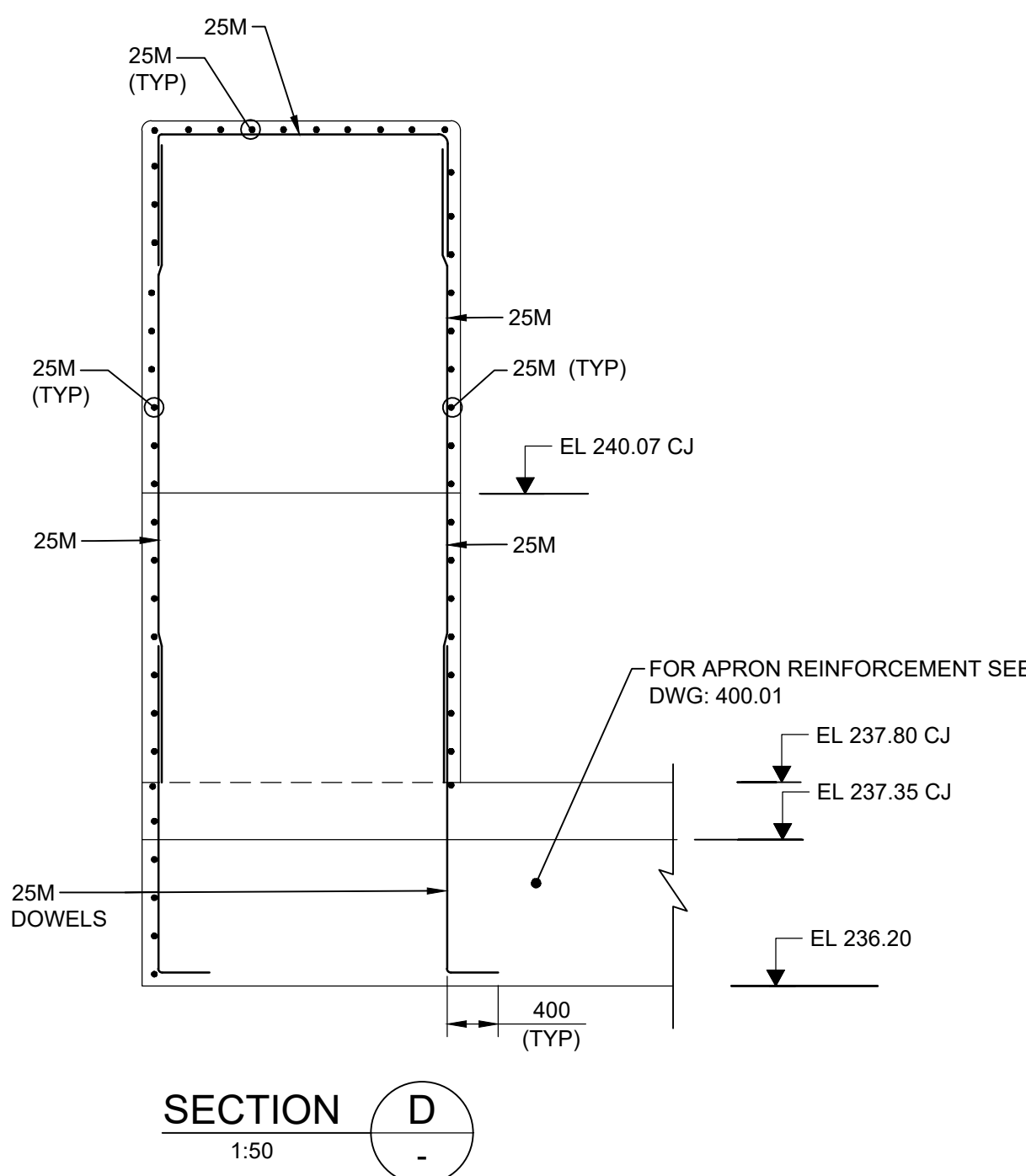
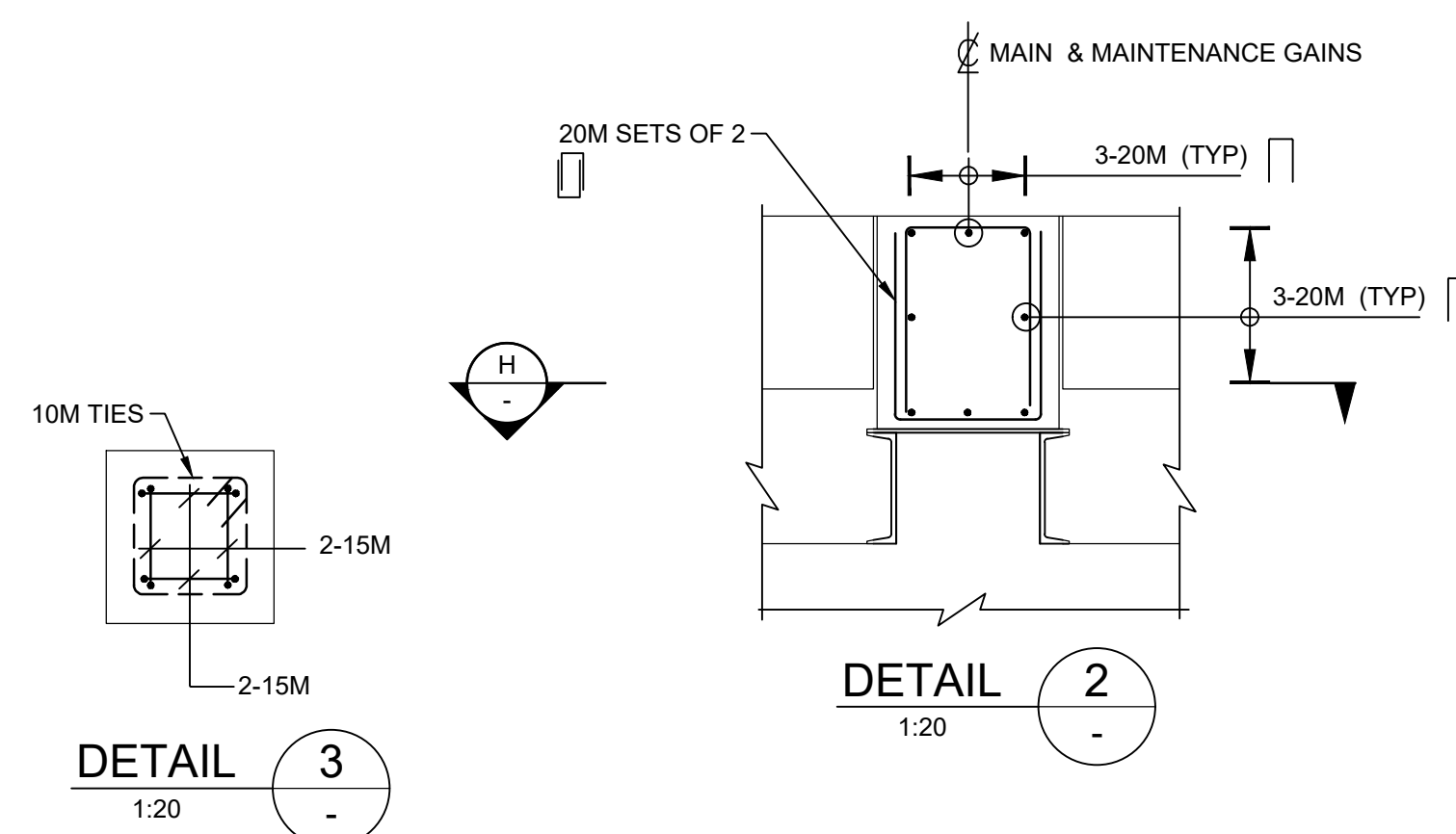
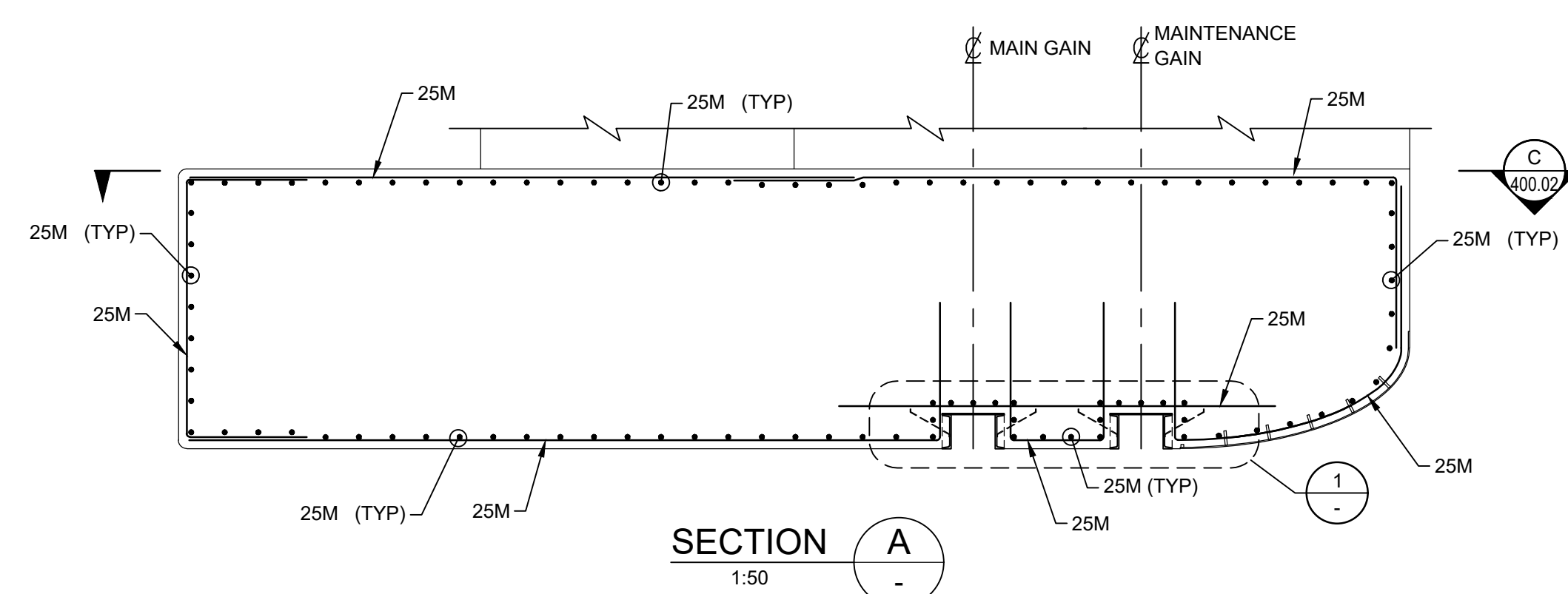
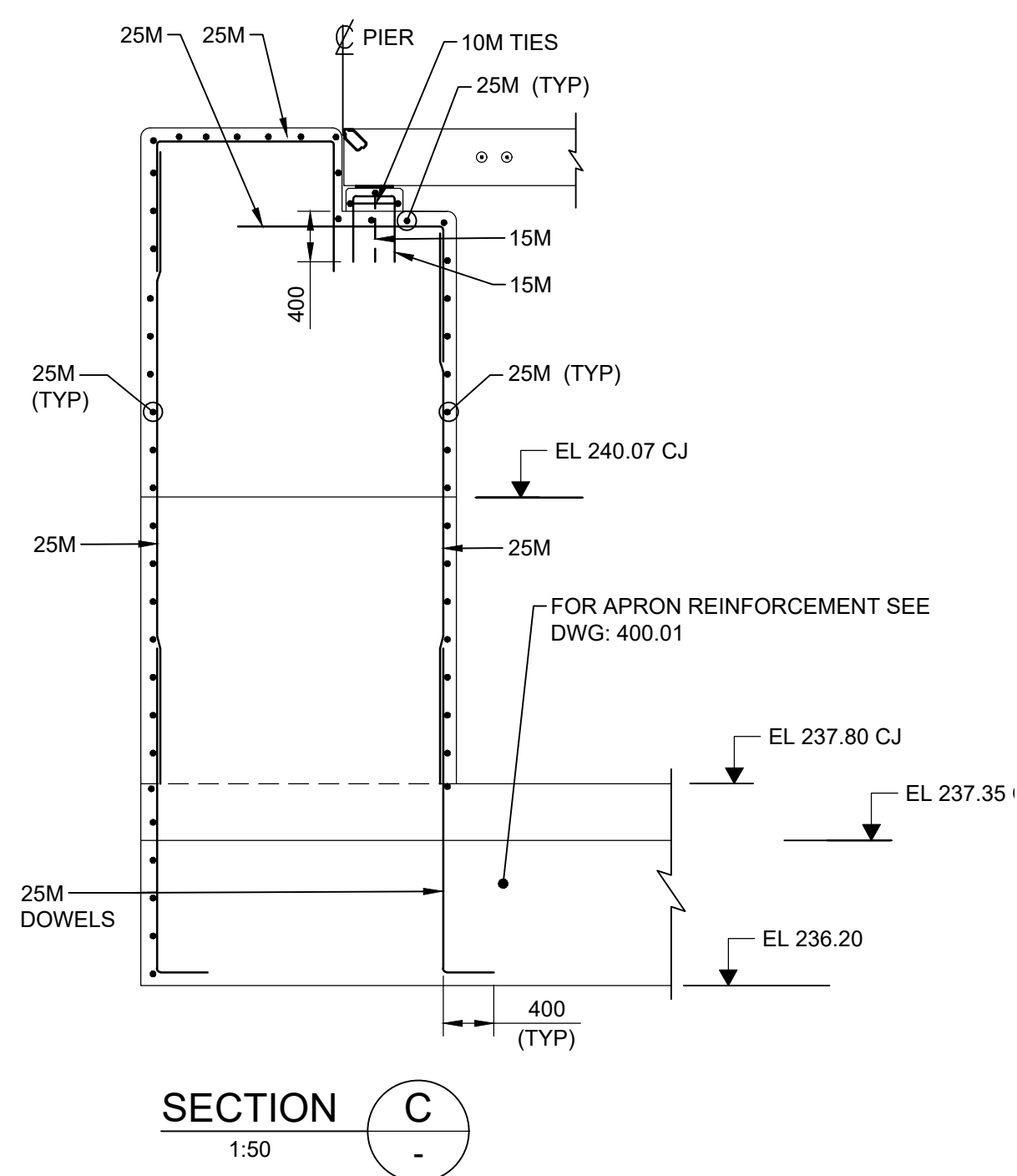
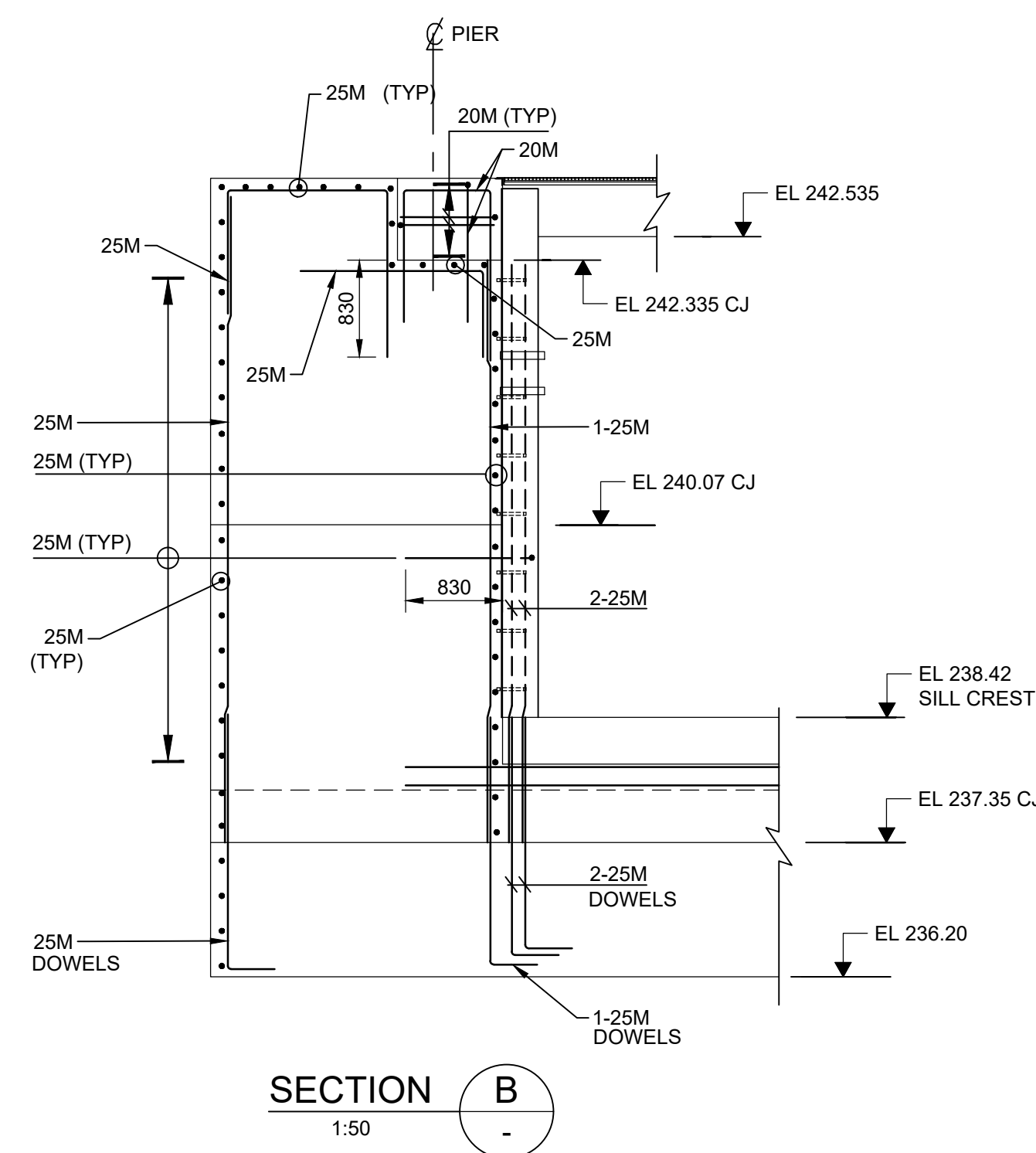
Project title / Titre du projet

# TRENT-SEVERN WATERWAY DAM AT LOCK 28 - BURLEIGH FALLS RECONSTRUCTION

Drawing title / Titre du dessin

REINFORCEMENT  
SOUTH ABUTMENT  
PLAN, ELEVATION,  
SECTIONS AND DETAILS

Drawn by / Dessiné par		Designed by / Conçu par	
H. BOIVIN		M. SAIDOU P. Eng.	
Verified by / Vérifié par		Approved by / Approuvé par	
R. MIGUEL P. Eng.		S. VITTECOQ P. Eng.	
Drawing Date / Date du dessin		Drawing Number / Numéro du Dessin	
05/13/2020		403	
Project Number / Numéro du projet		Sheet _____ of _____	
R.076951.705			



NOTES:

1. FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS SEE DRAWING 002.

0	FOR TENDER	R.M	05/13/2020
No.	Description	By Par	Date

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

Professional Stamp



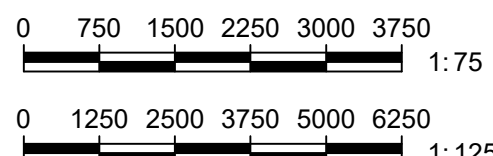
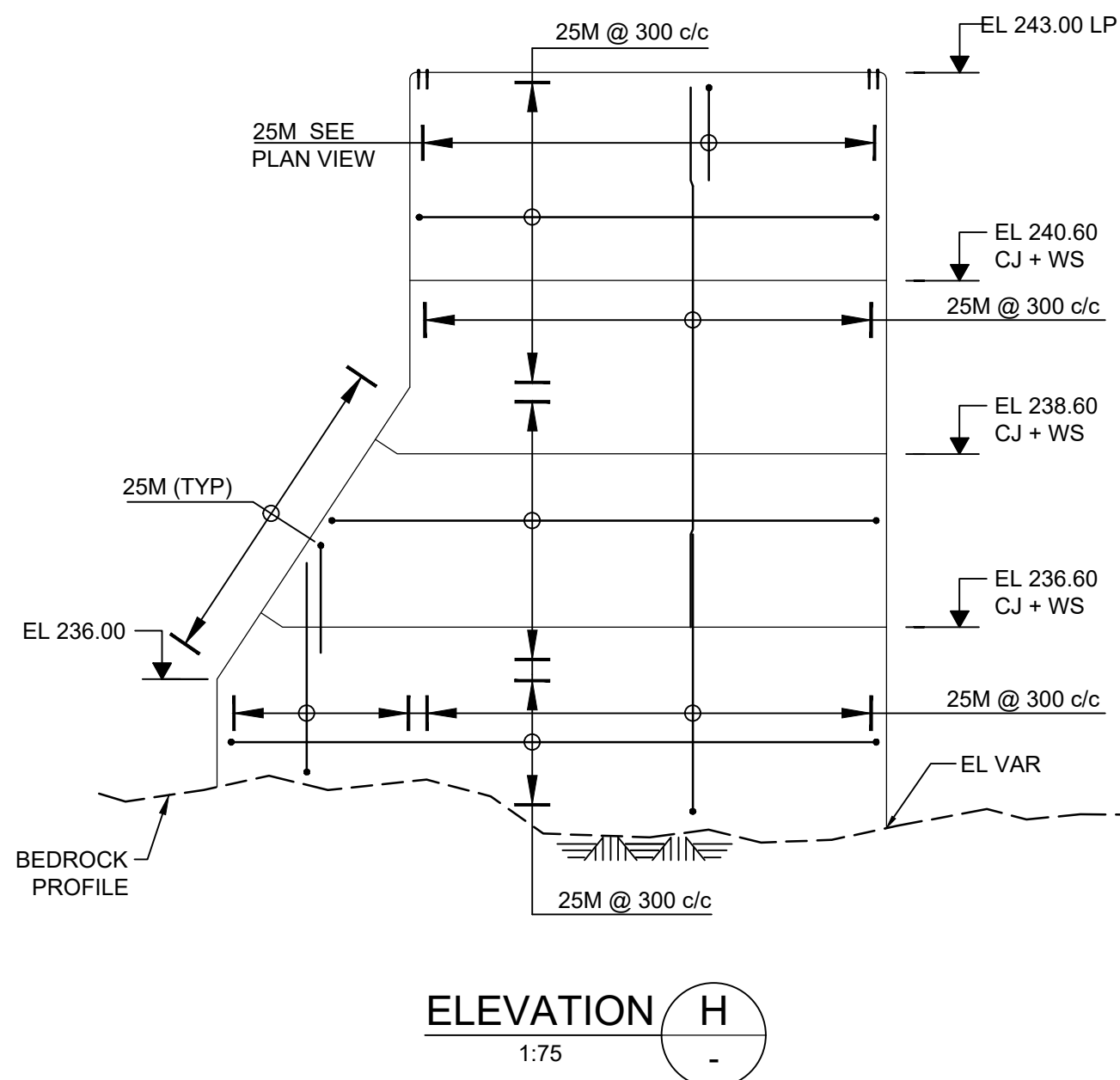
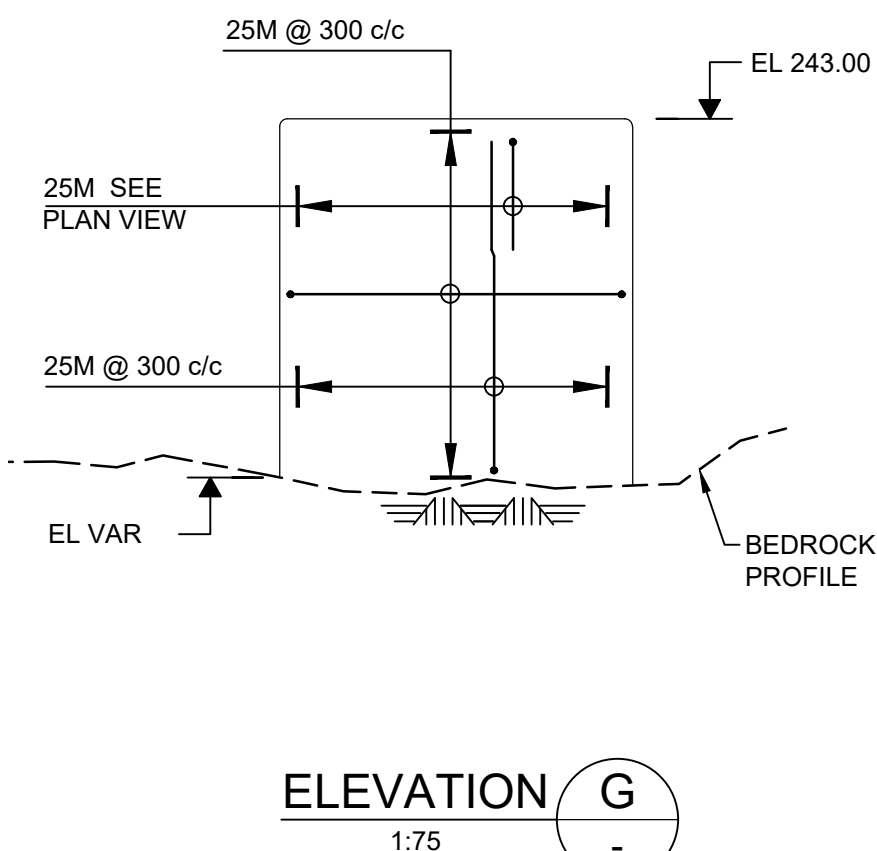
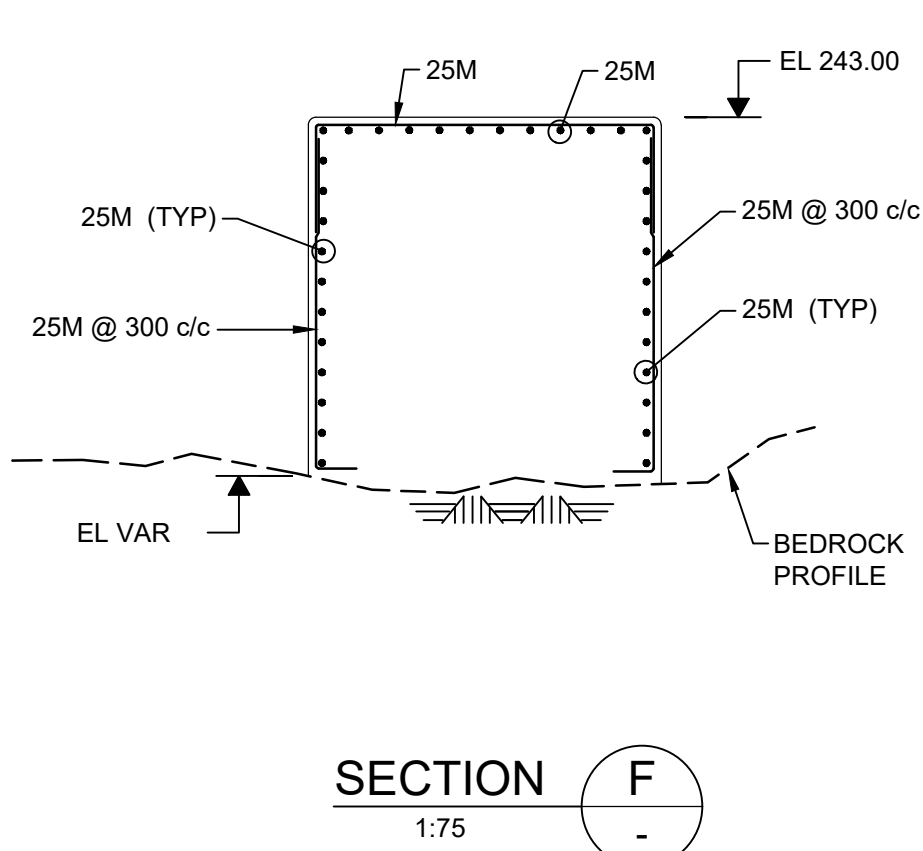
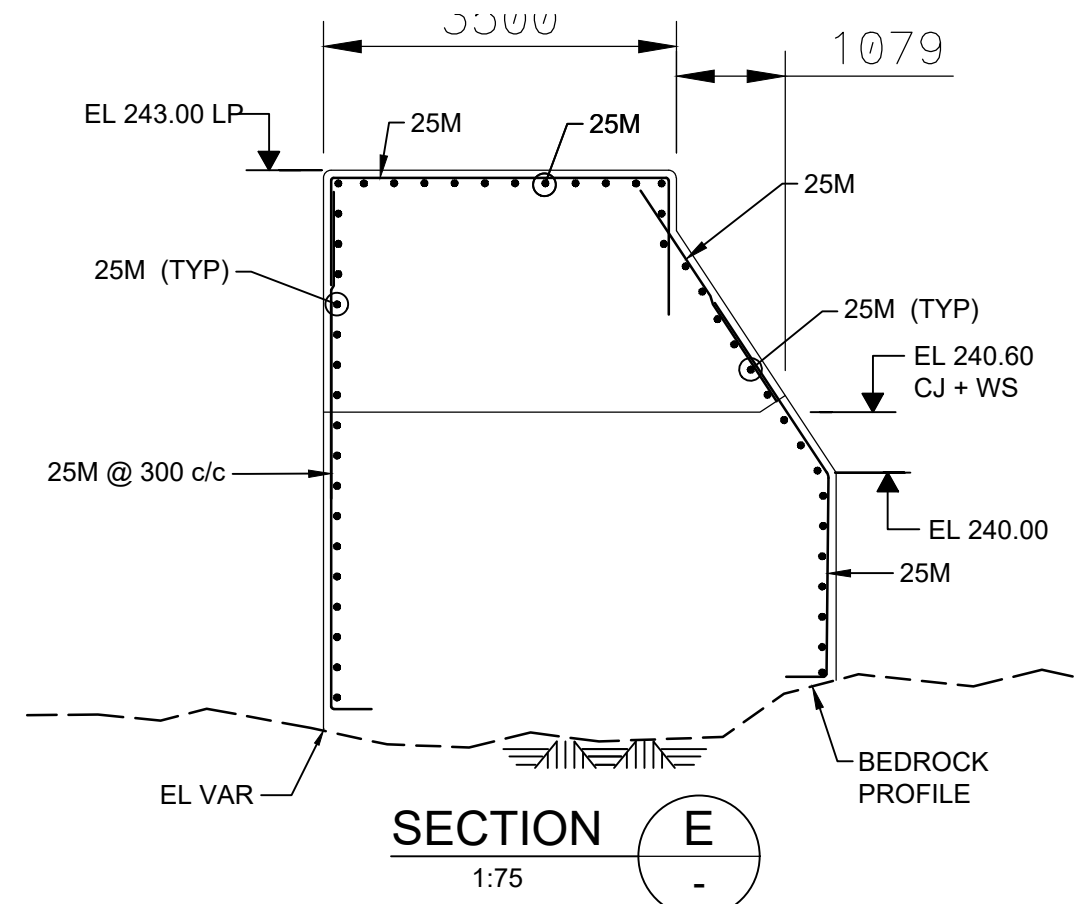
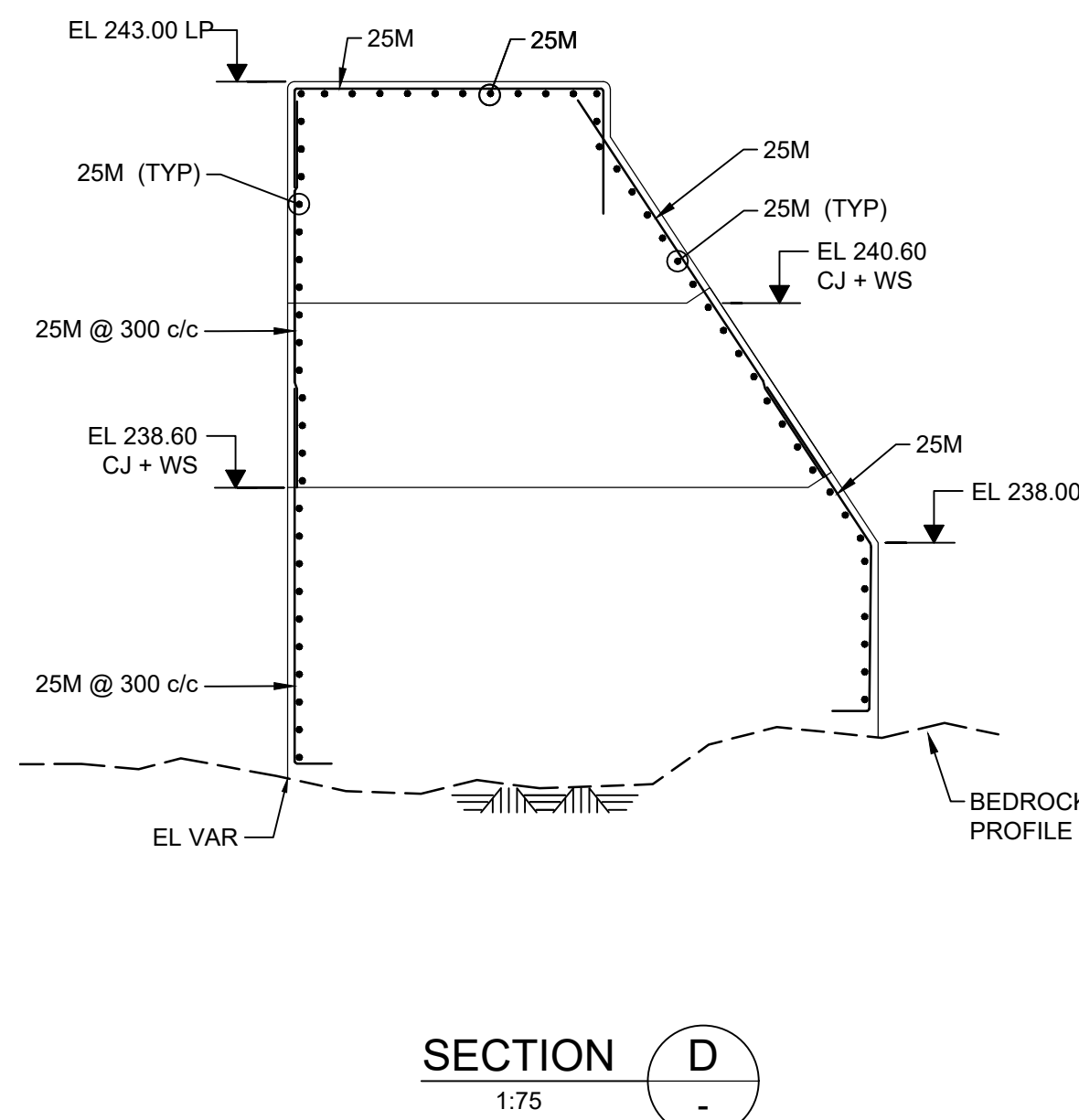
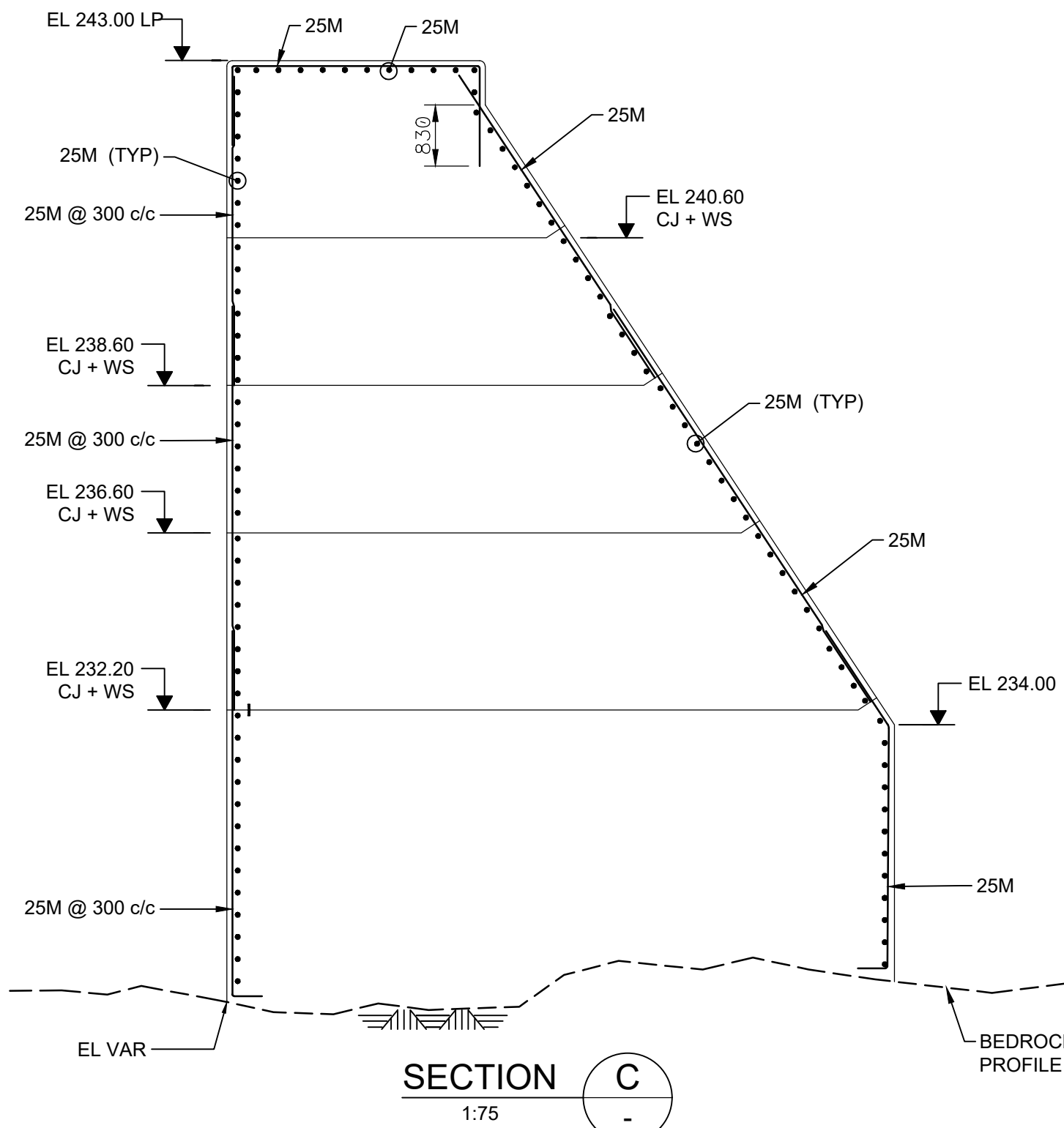
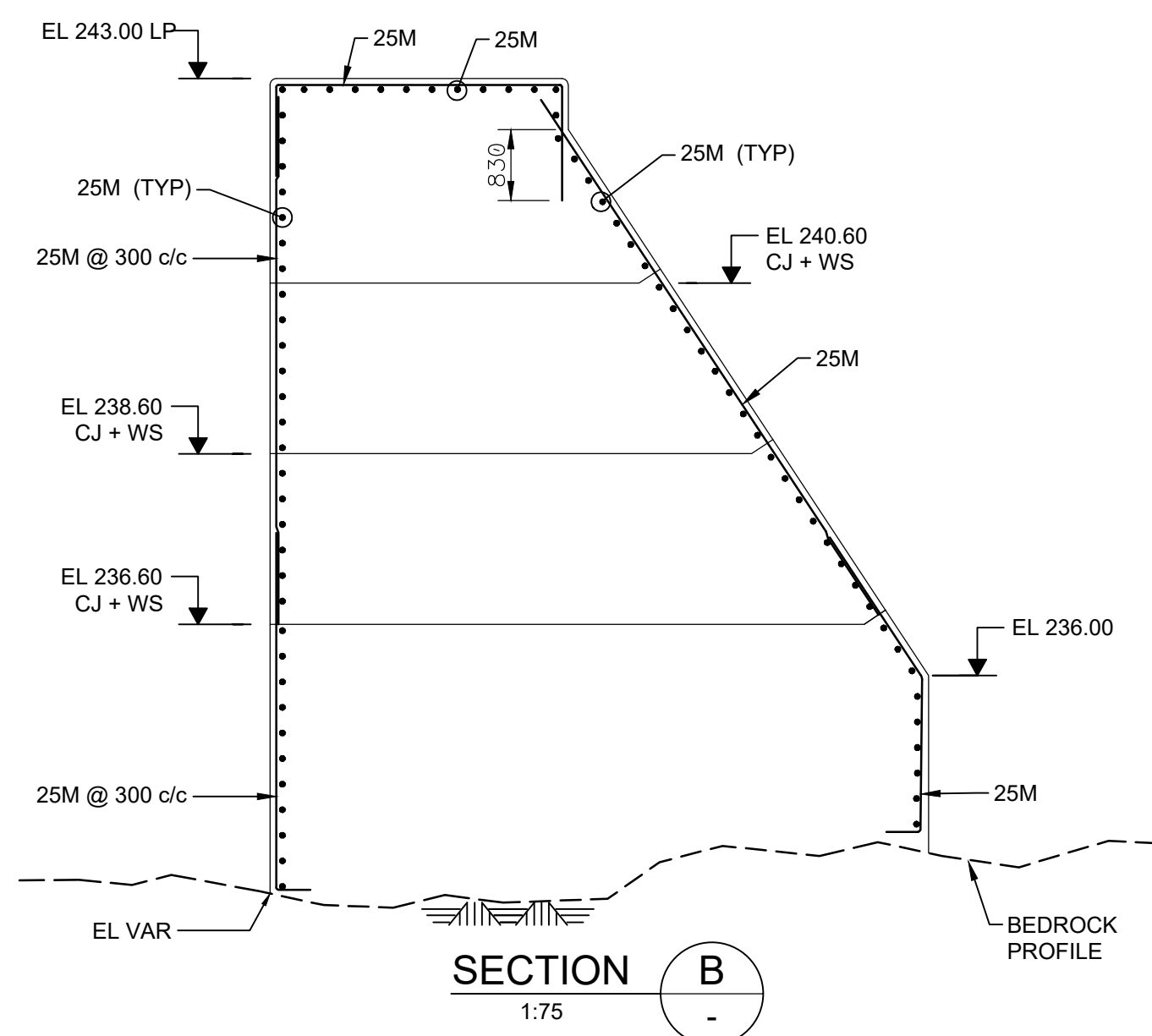
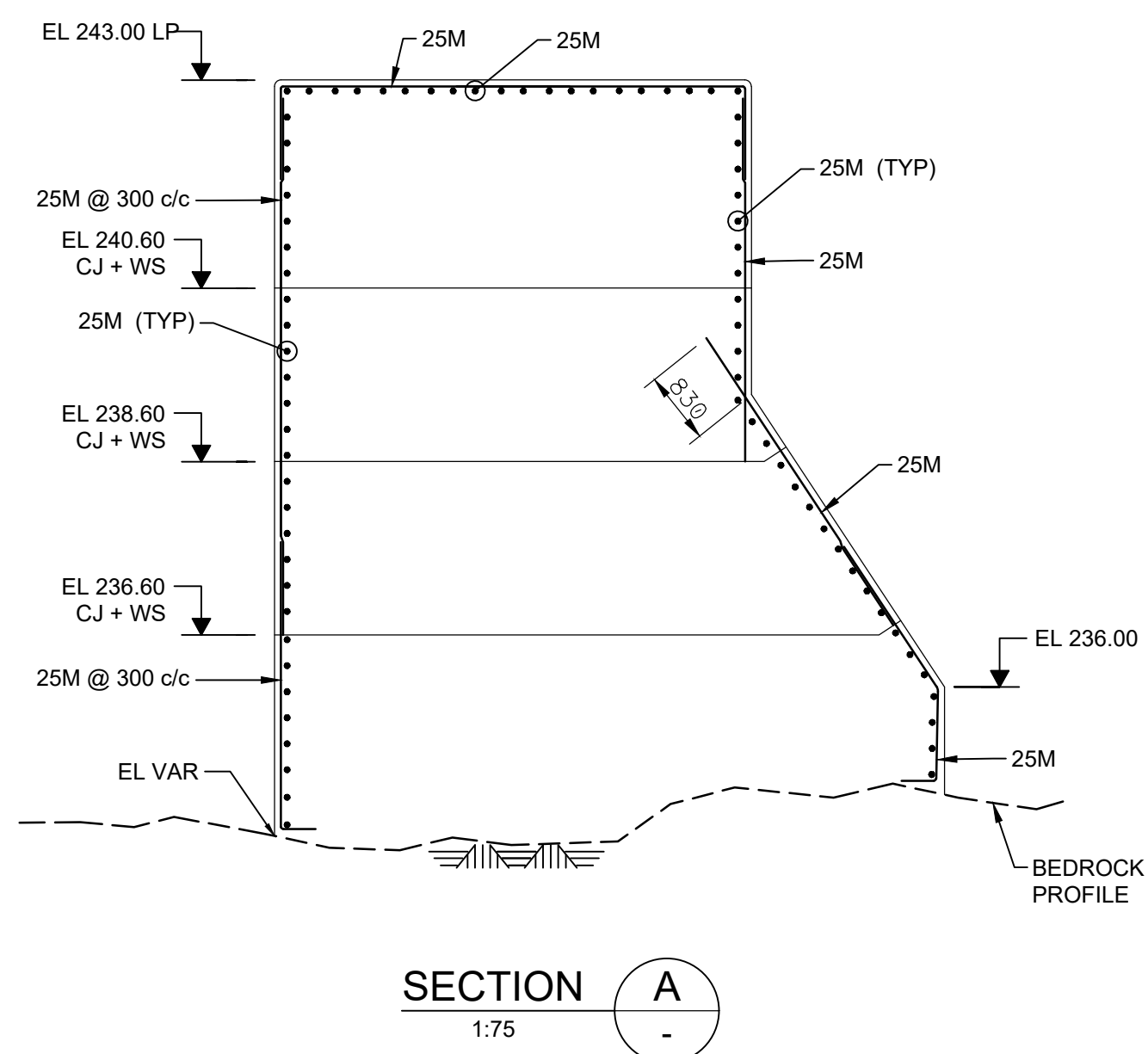
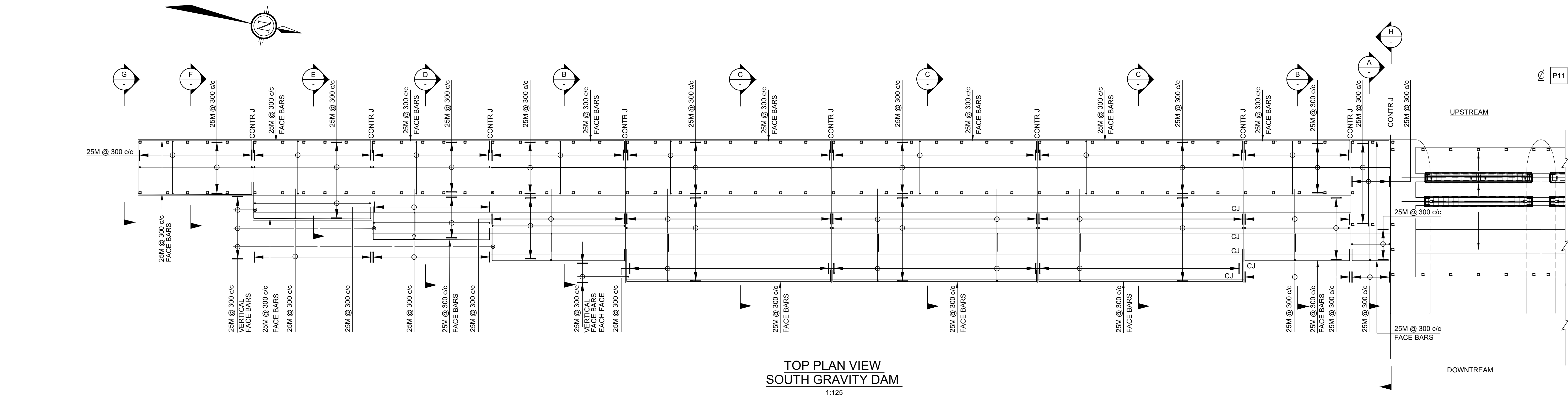
Project title / Titre du projet

TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

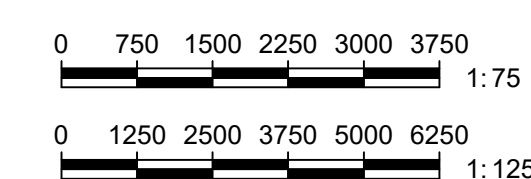
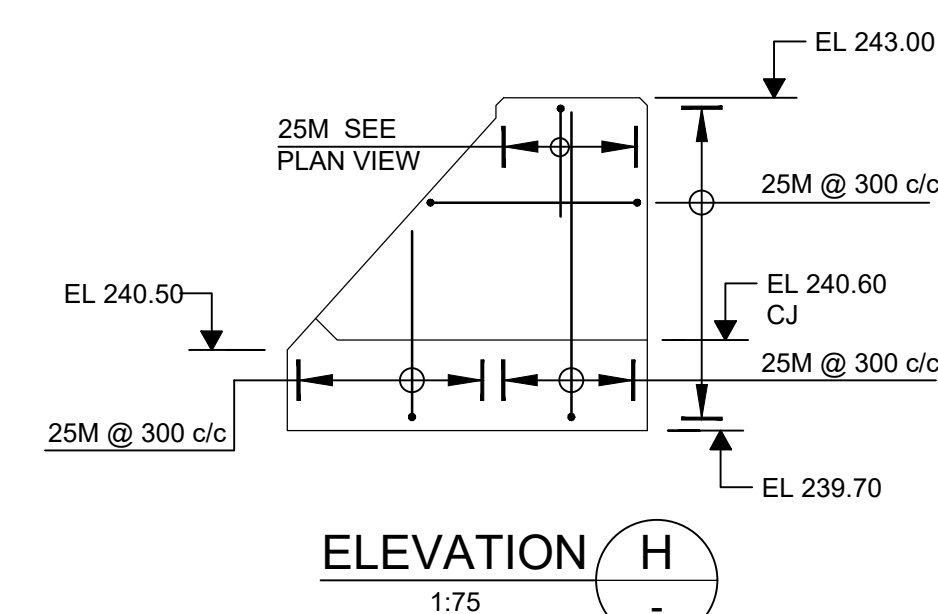
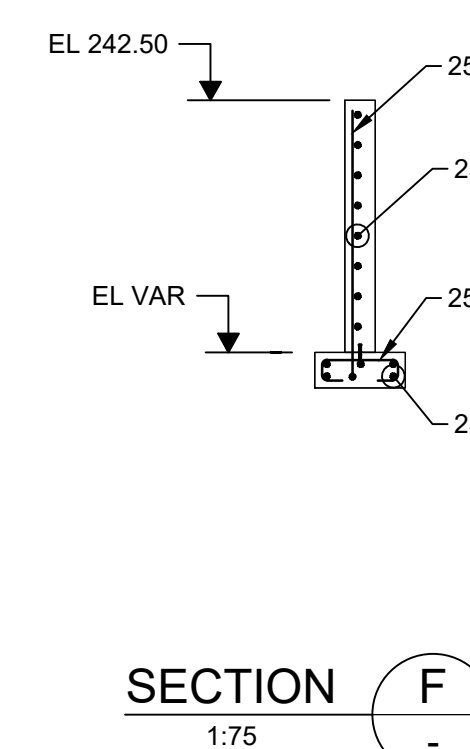
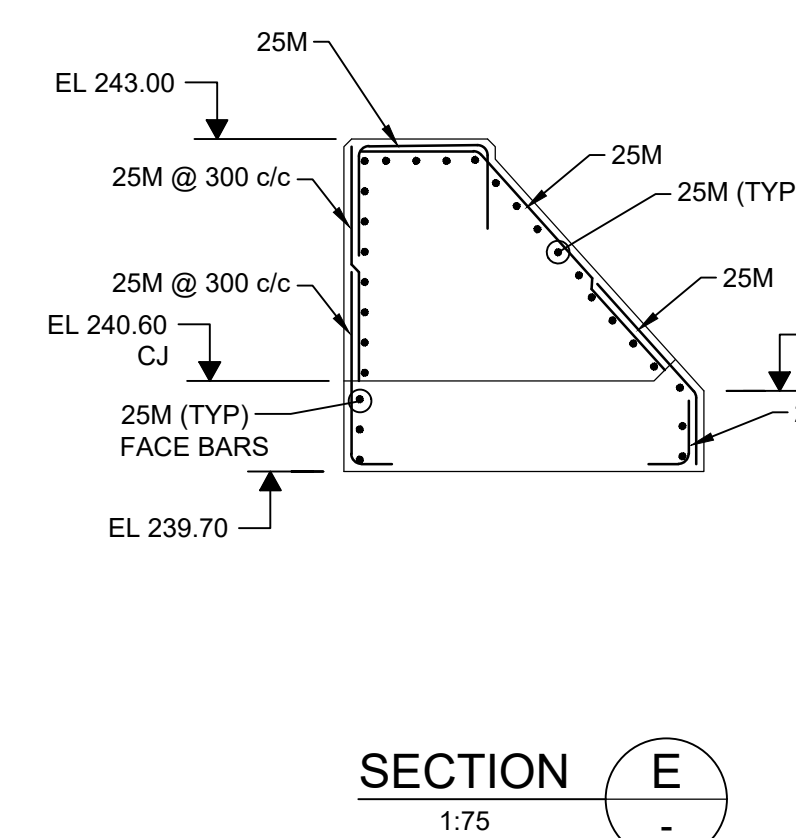
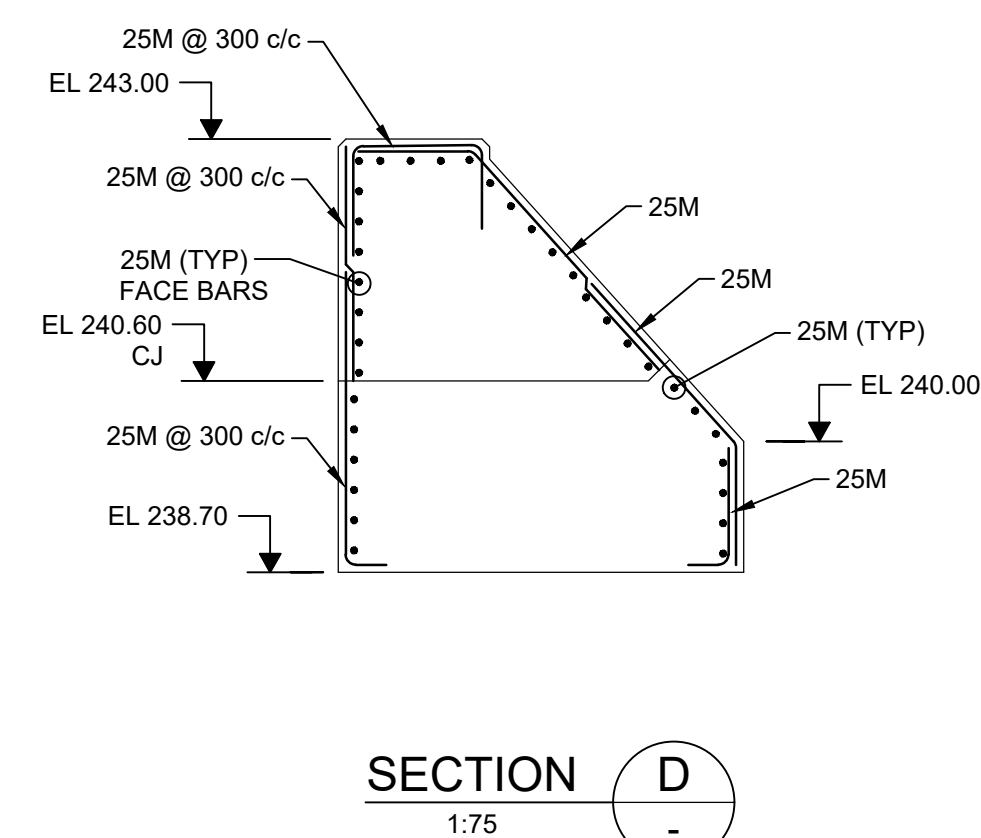
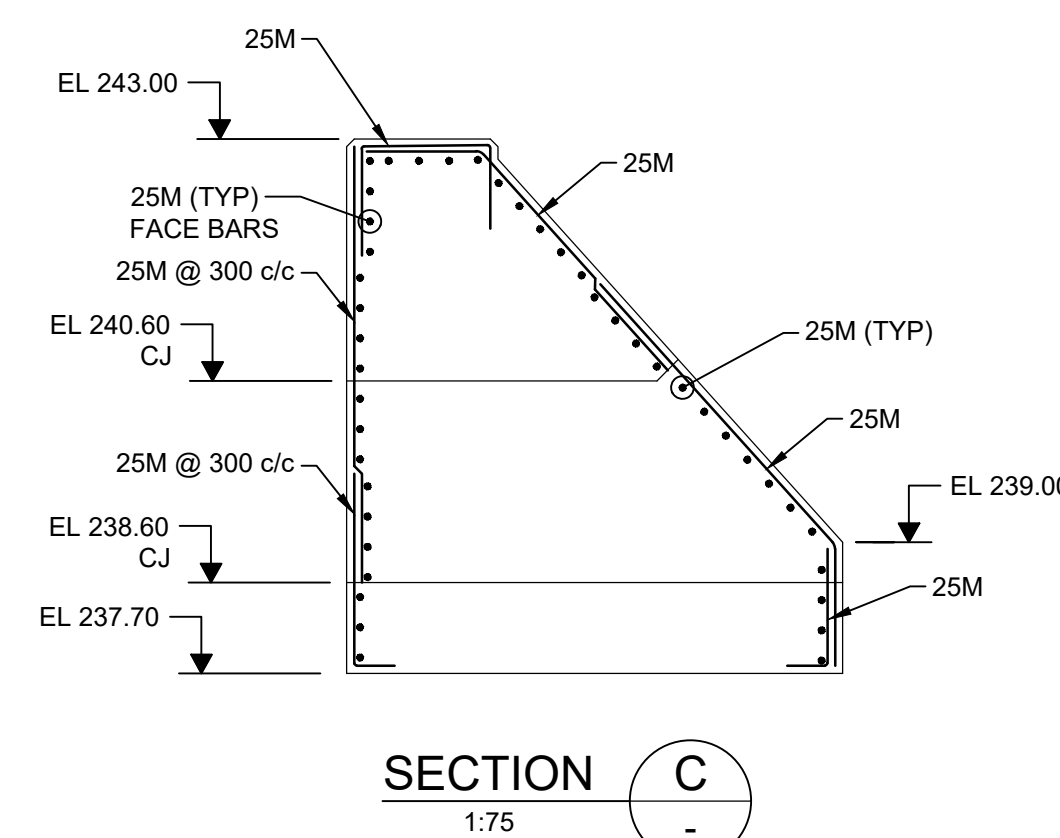
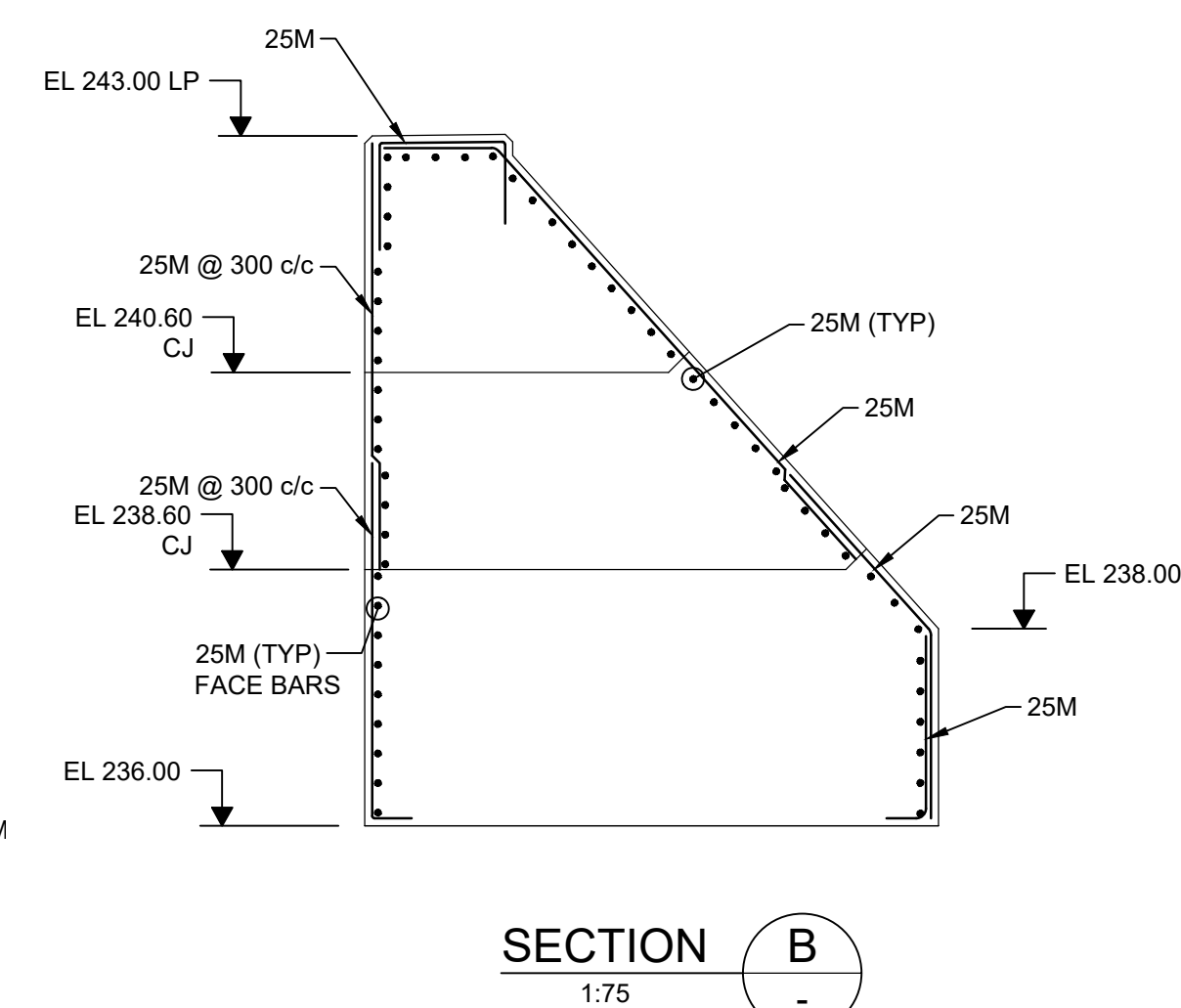
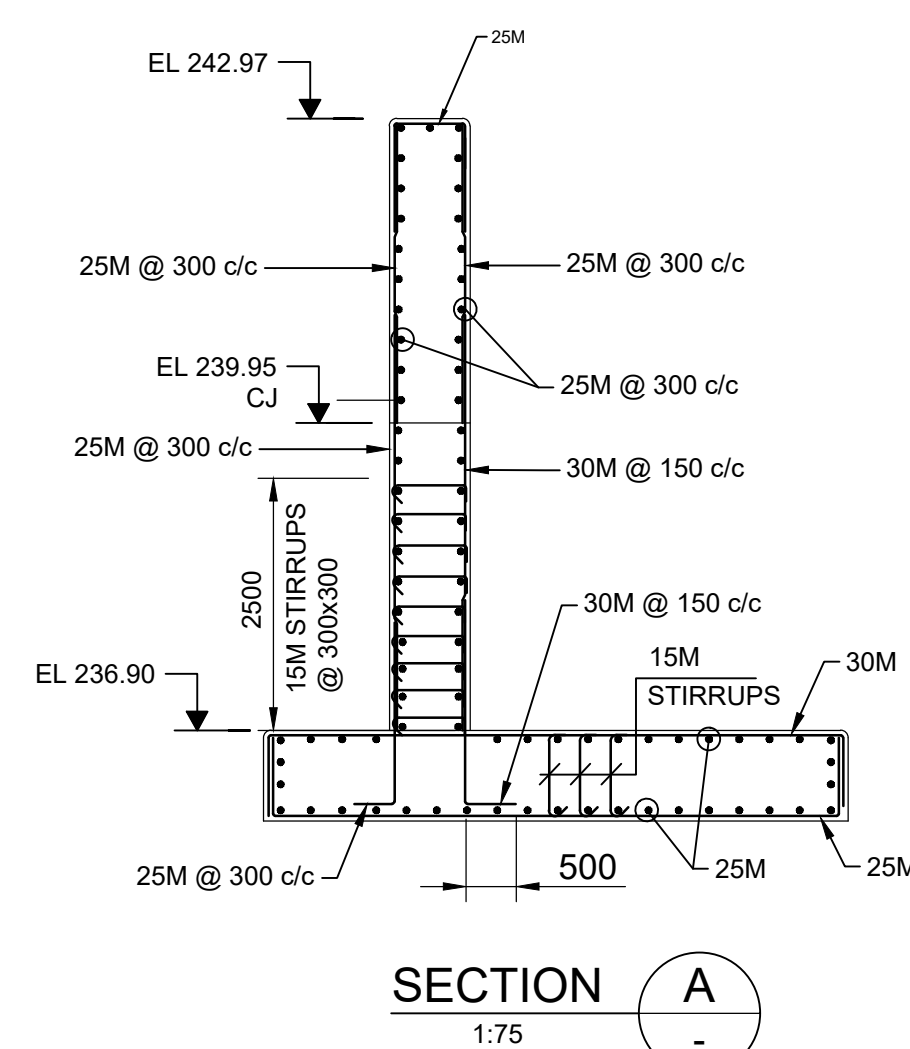
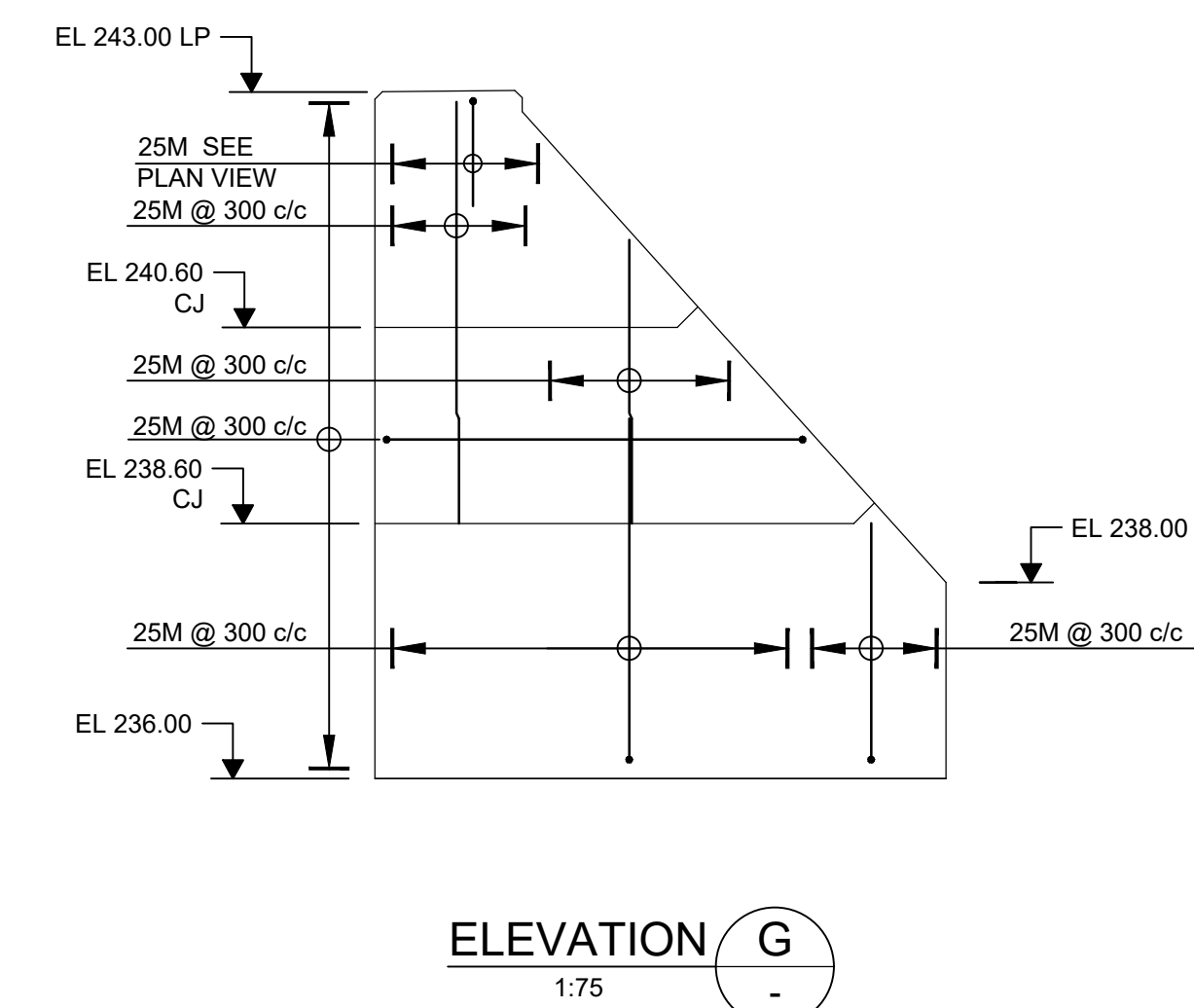
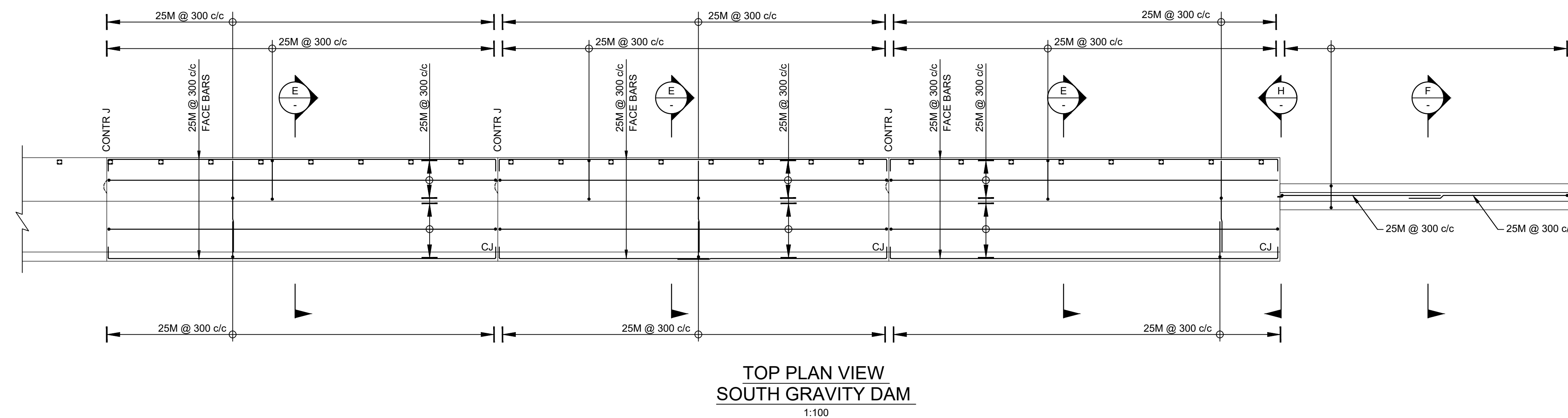
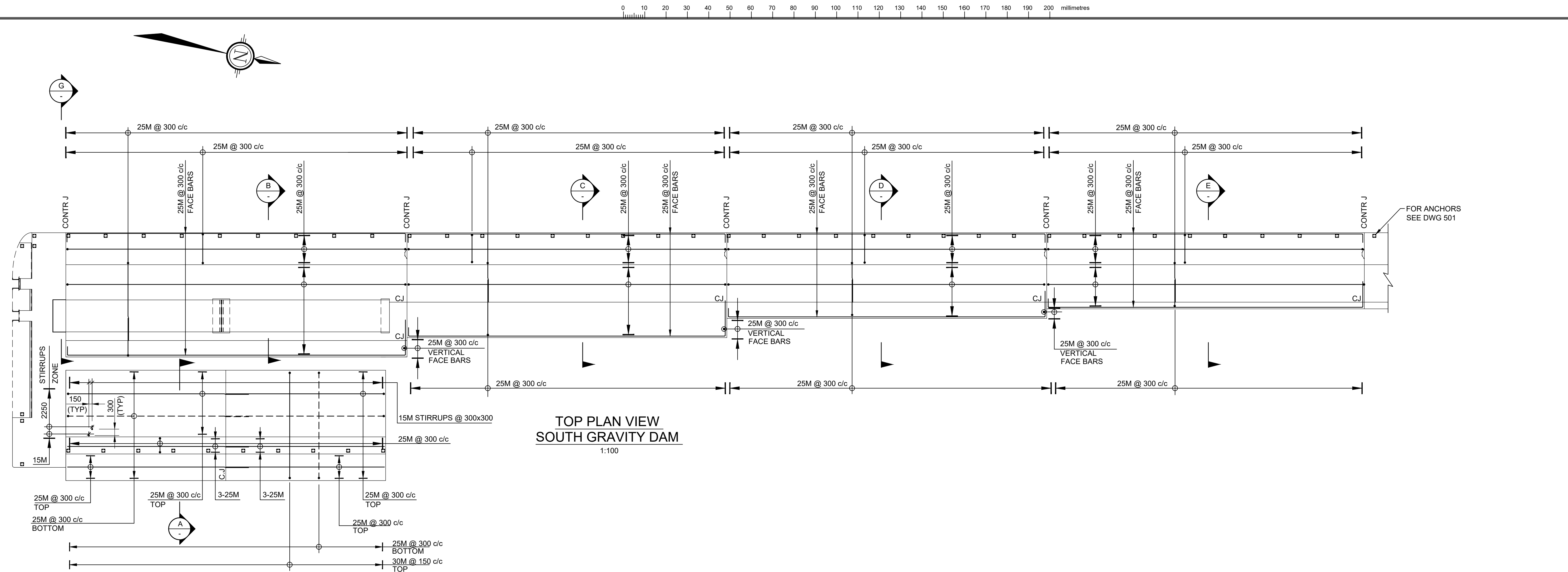
Drawing title / Titre du dessin

REINFORCEMENT  
SOUTH GRAVITY DAM  
PLAN, ELEVATIONS  
AND SECTIONS

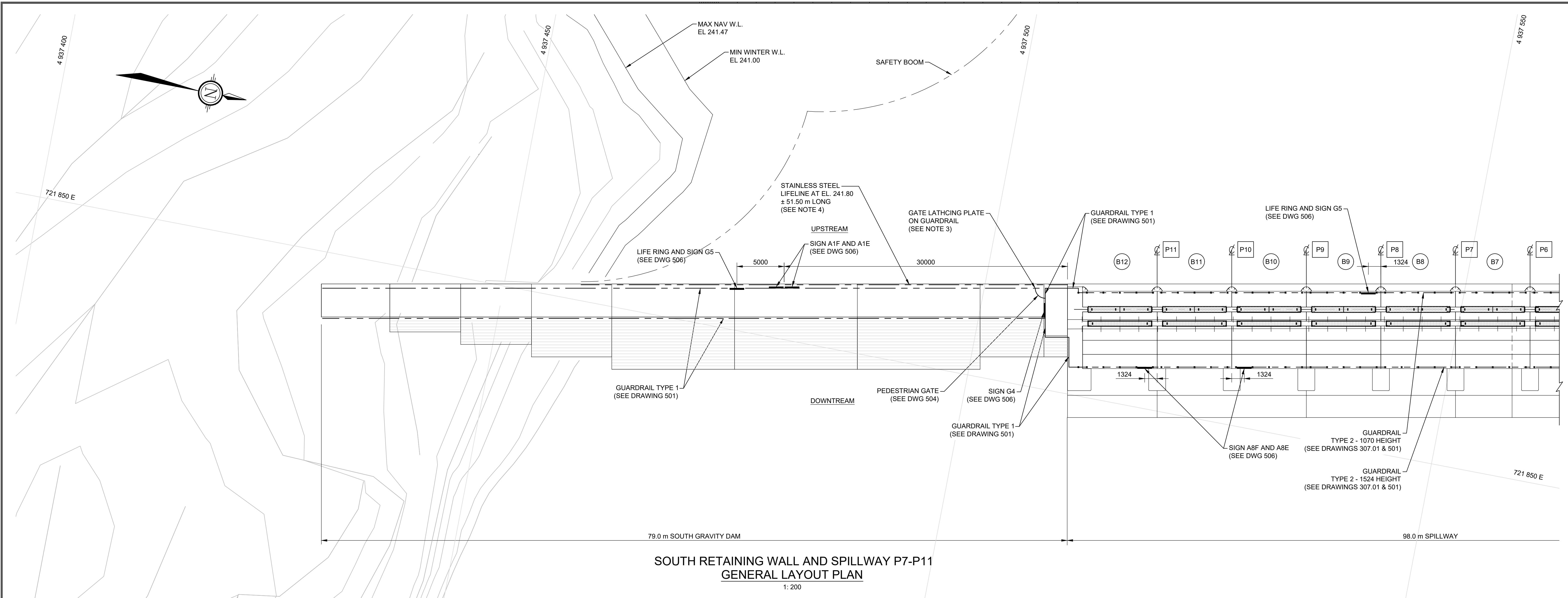
Drawn by / Dessiné par H. BOIVIN	Designed by / Conçu par M. SAIDOU	P.Eng.
Verified by / Vérifié par R. MIGUEL	Approved by / Approuvé par S. VITTECOQ	P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number / Numéro du Dessin 404	Project Number / Numéro du projet R.076951.705
	Sheet Feuille	1 of 1 de





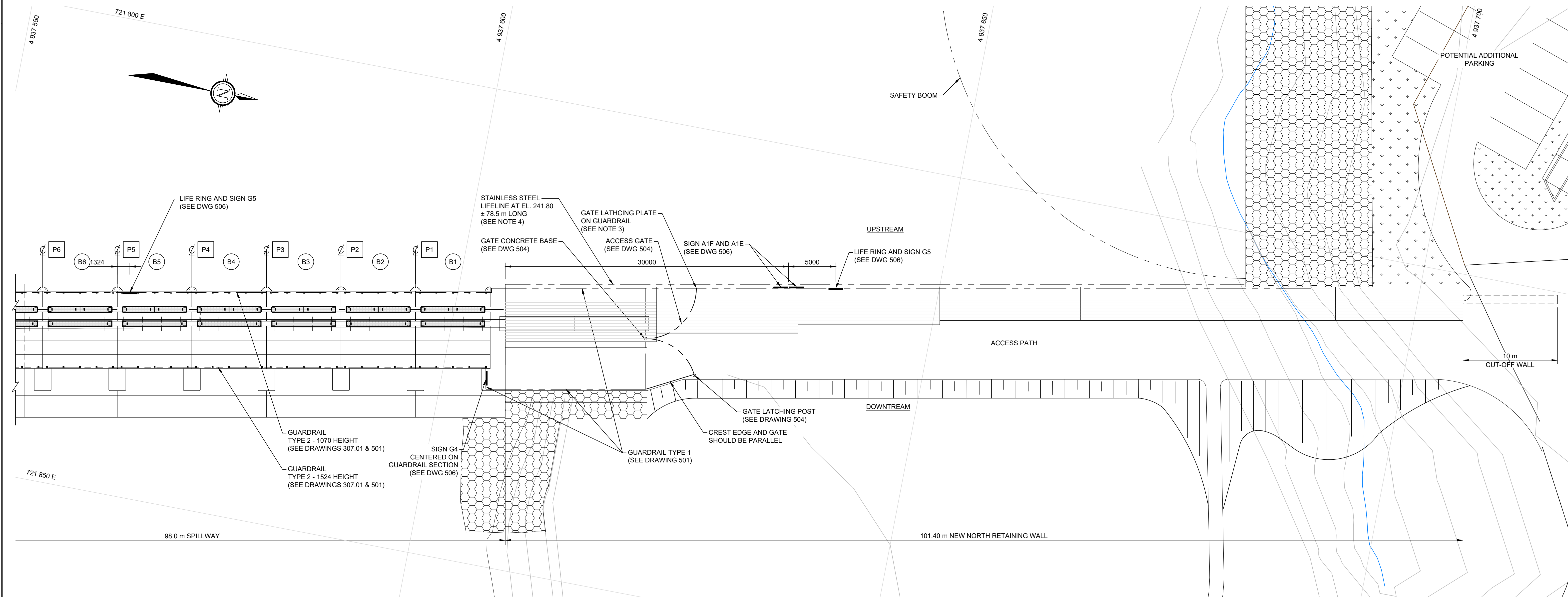






SOUTH RETAINING WALL AND SPILLWAY P7-P11  
GENERAL LAYOUT PLAN

1: 200



NORTH RETAINING WALL AND SPILLWAY P1-P6  
GENERAL LAYOUT PLAN

1: 200



Contract No.	Drawing Code	Serial	Rev.
HS00243	210 41DD	0500	0

- NOTES:
- FOR GENERAL NOTES, LEGEND & ABBREVIATIONS SEE DRAWING 002.
  - CONTRACTOR TO DESIGN LAYOUT AND PROVIDE SHOP DRAWINGS FOR GUARDRAILS RESPECTING PCA STANDARDS. SEE DRAWING 501.
  - CONTRACTOR TO PROVIDE AND INSTALL LATCHING PLATE ON GUARDRAIL SO THAT IT IS ALIGNED WITH GATE LATCHING PLATE IN OPEN POSITION.
  - CONTRACTOR TO PROVIDE AND INSTALL SAFETY LIFELINE CONFORM TO LATEST EDITION OF CSA Z259.16. INSTALLATION SHALL CONFORM TO MANUFACTURER'S RECOMMENDATIONS.

No.	Description	By	Date
0	FOR TENDER	Y.B	05/13/2020

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

Professional Stamp

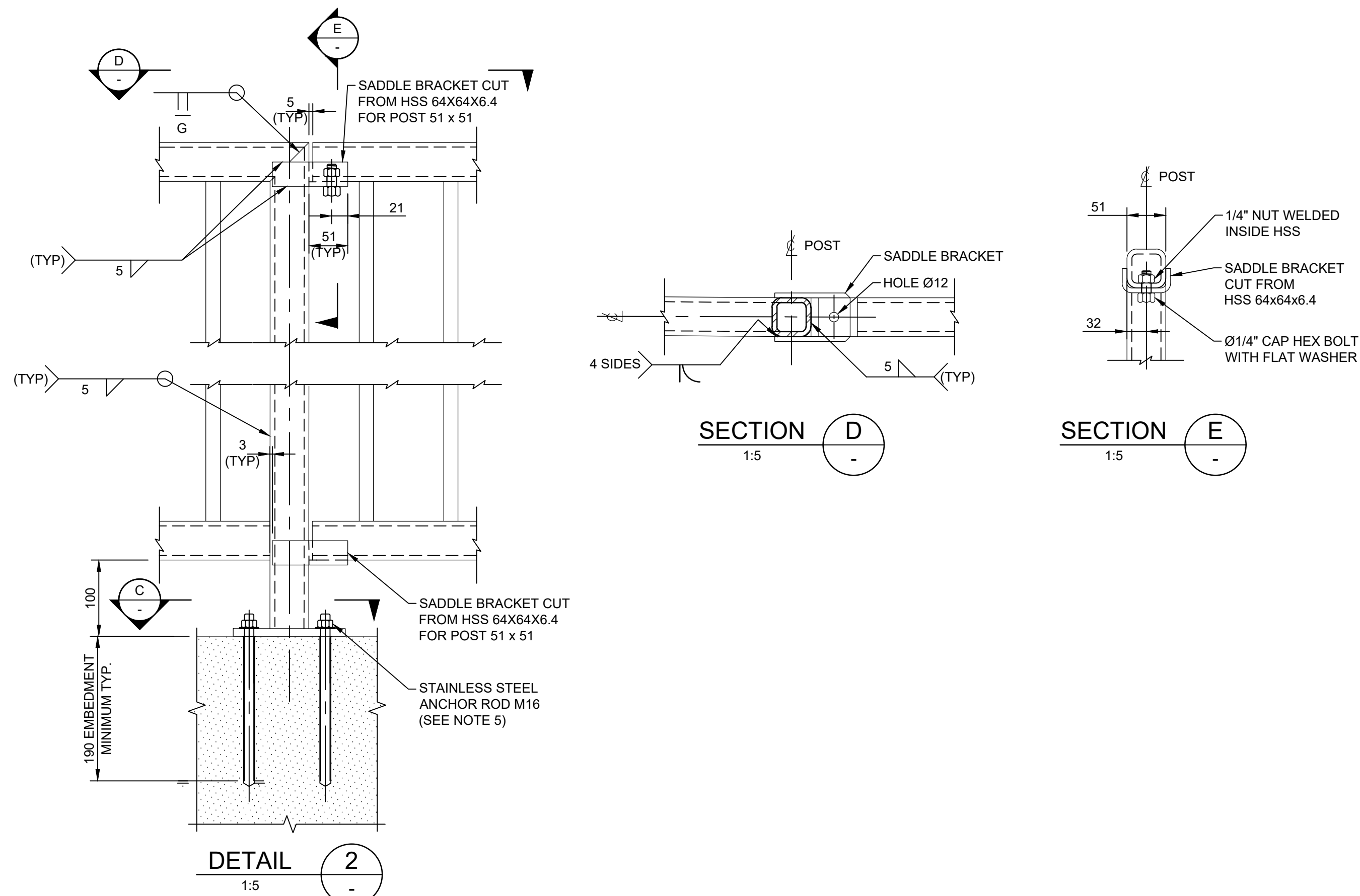
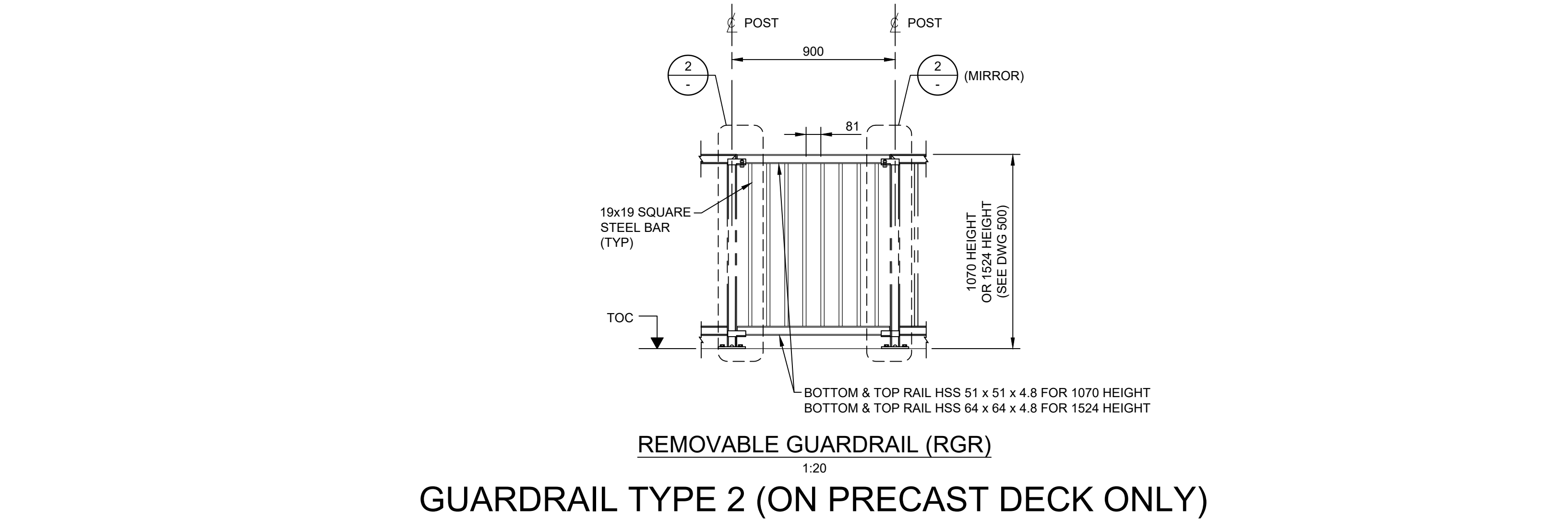
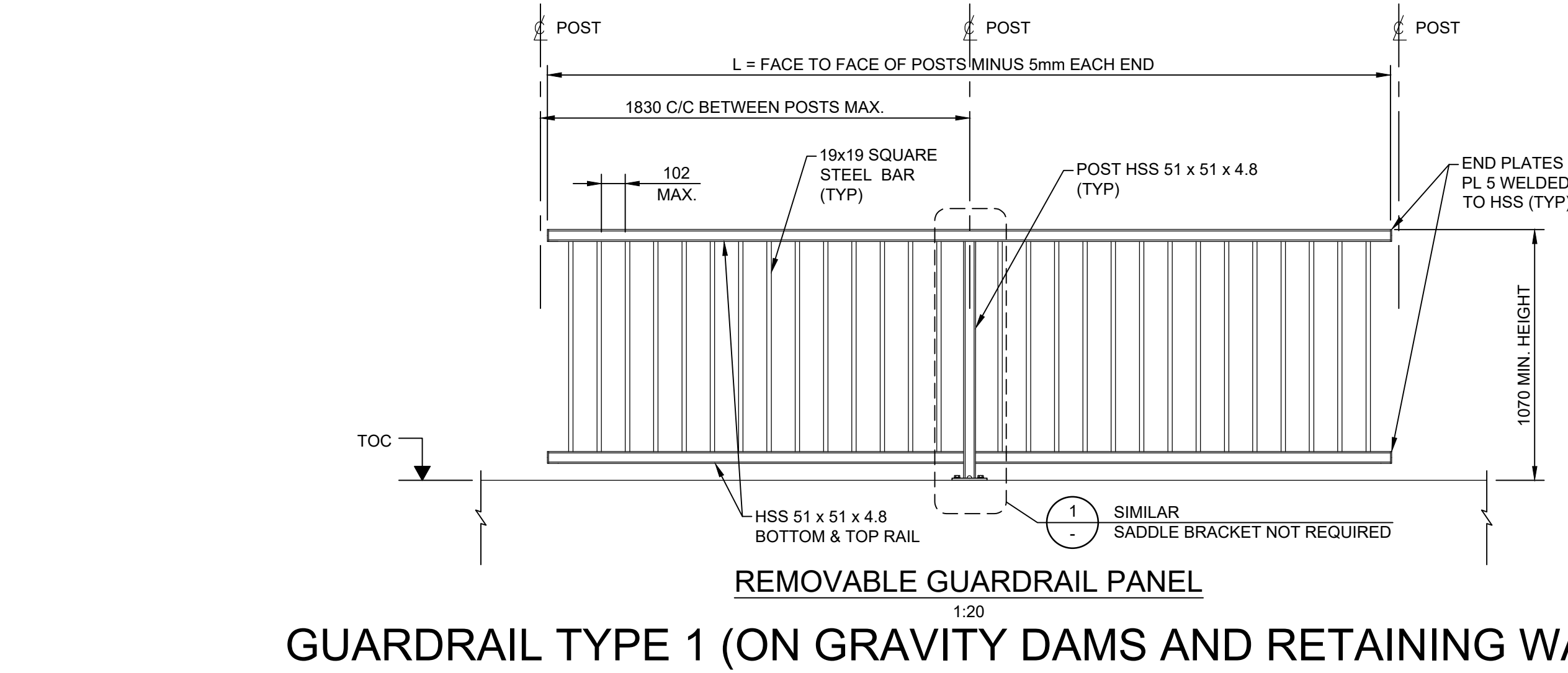
Project title / Titre du projet

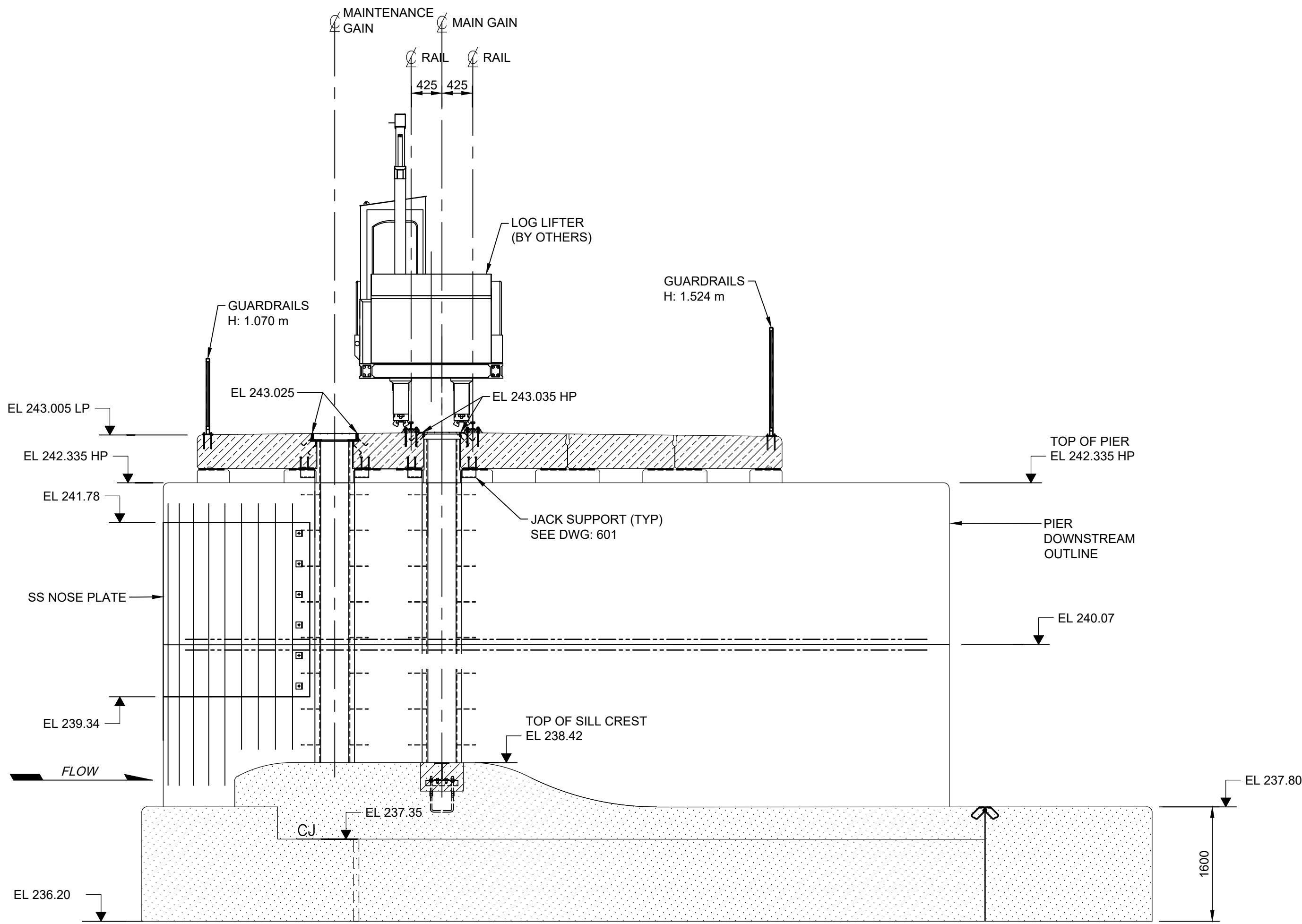
TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

MISCELLANEOUS METALS  
PARTS  
GENERAL LAYOUT  
PLAN

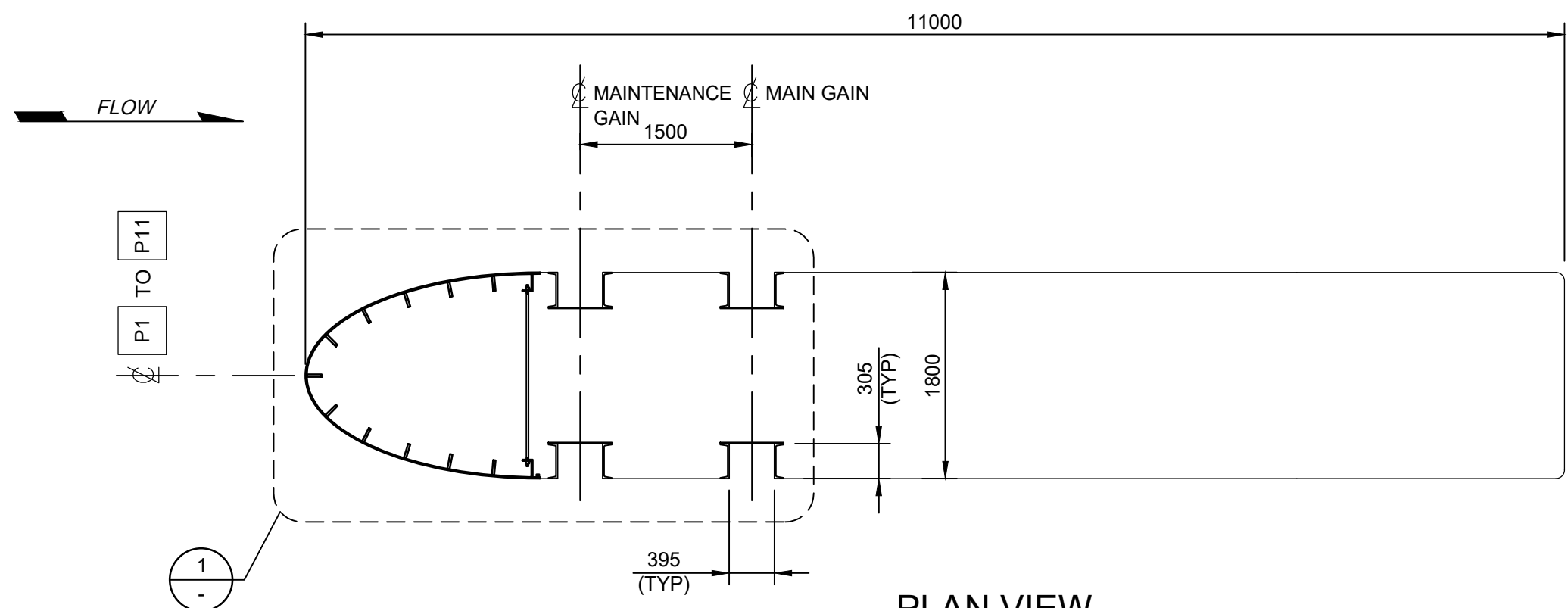
Drawn by / Dessiné par H. BOIVIN	Designed by / Conçu par M. SAIDOU	P.Eng.
Verified by / Vérifié par Y. BERTON	Approved by / Approuvé par S. VITTECOQ	P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number / Numéro du Dessin 500	
Project Number / Numéro du projet R.076951.705	Sheet Feuille 1 of 1	



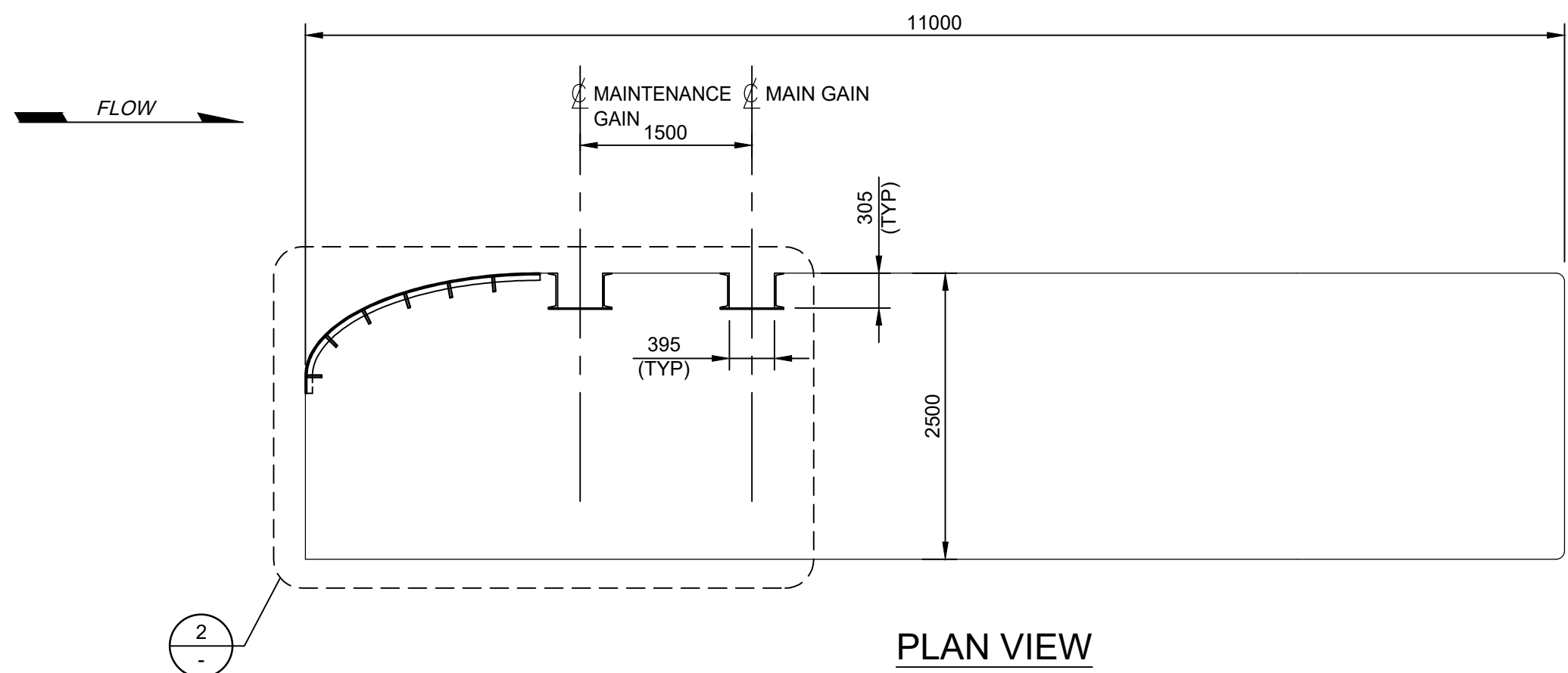




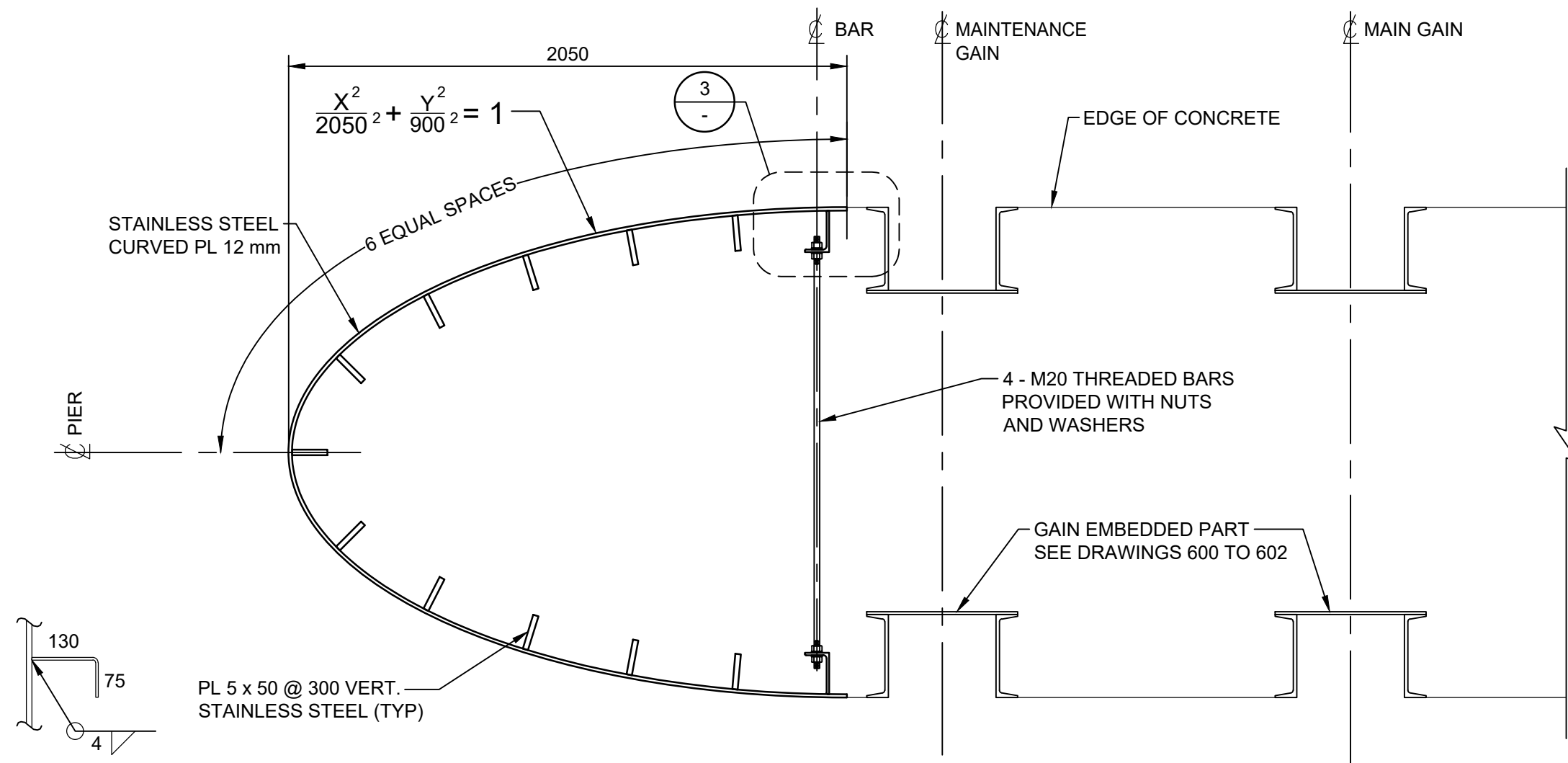
ELEVATION  
INTERMEDIATE PIERS  
1:50



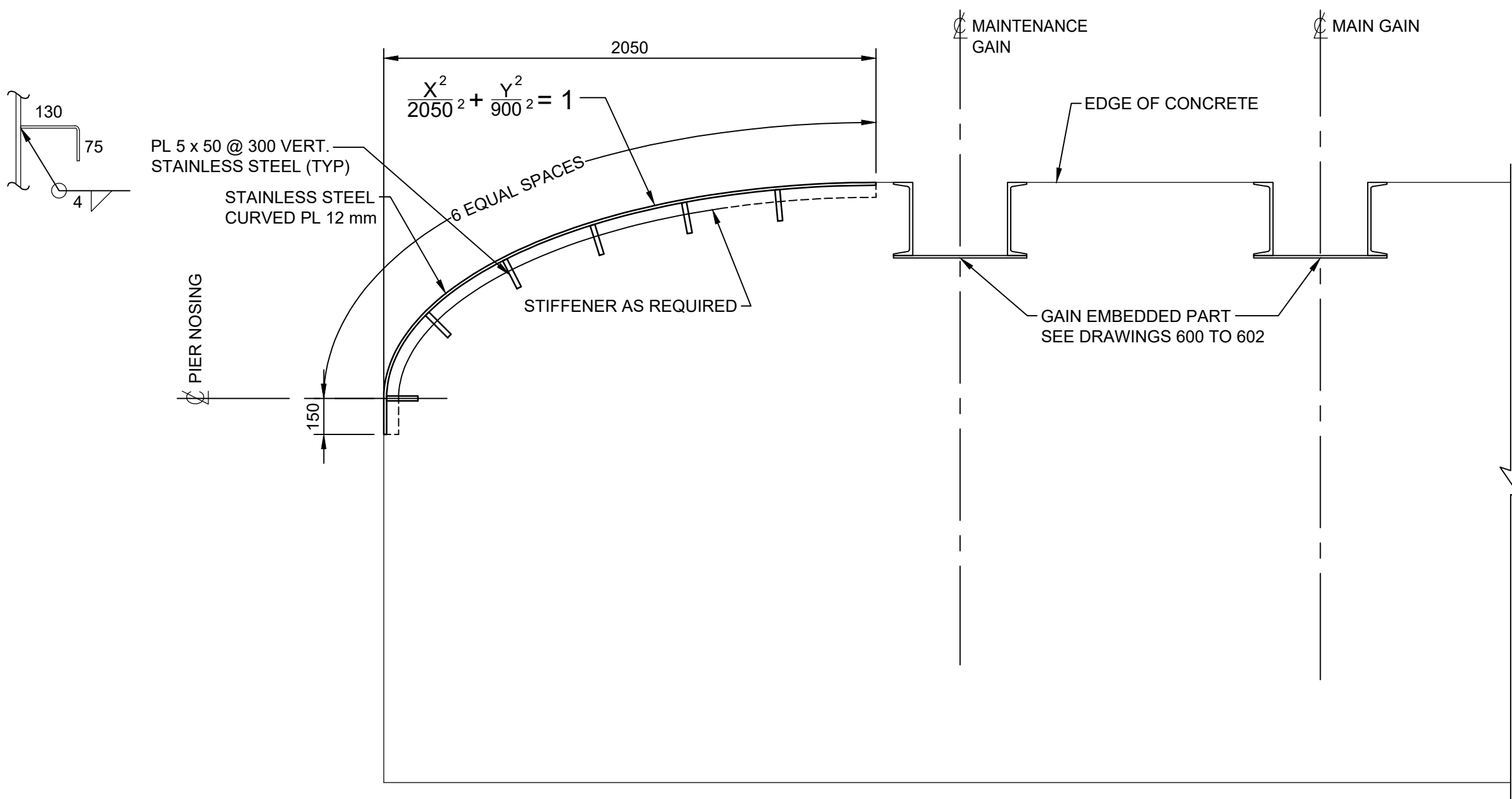
PLAN VIEW  
INTERMEDIATE PIERS P1 TO P11  
1:50



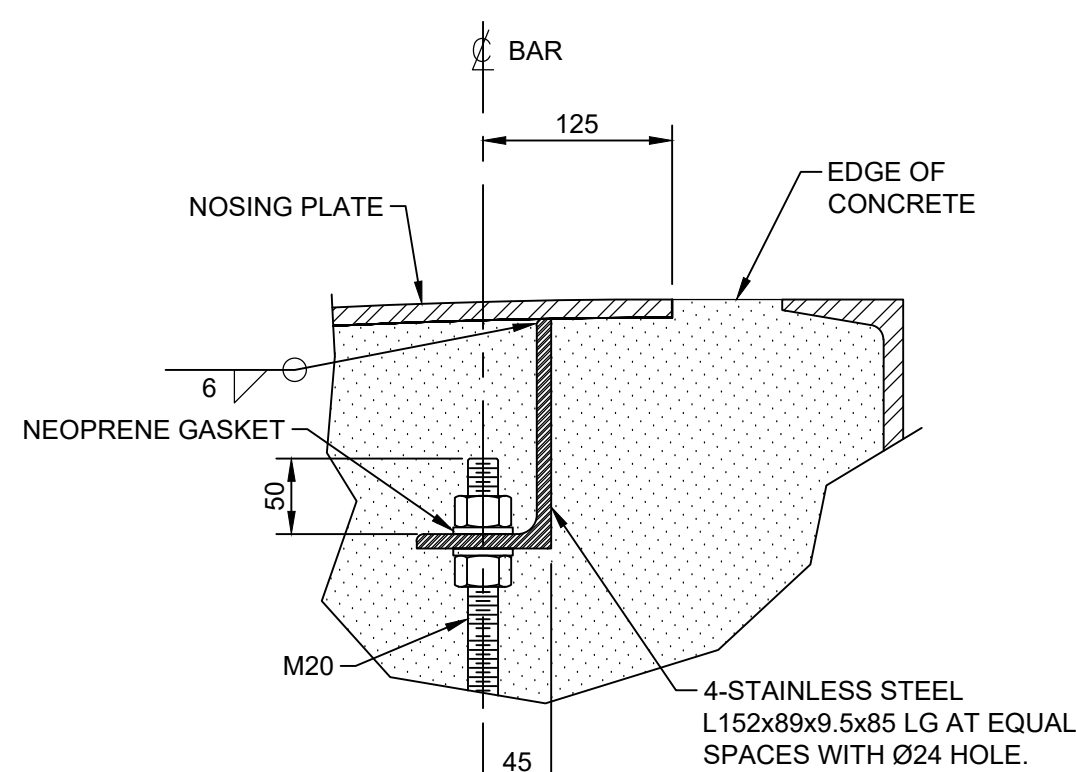
PLAN VIEW  
SOUTH ABUTMENT AS SHOWN (NORTH ABUTMENT - MIRROR)  
1:50



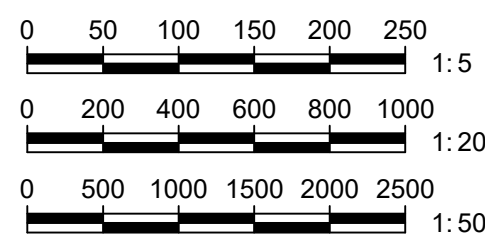
DETAIL 1  
1:20



DETAIL 2  
1:20



DETAIL 3  
1:5



Contract No.	Drawing Code	Serial	Rev.
HS00243	210 41DD	502	0

- NOTES:
- FOR GENERAL NOTES, LEGENDS AND ABBREVIATIONS SEE DRAWING 002.
  - STAINLESS STEEL MATERIAL AND WELDING AS PER SPECIFICATION SECTION 05 50 00.
  - PIER NOSING STAINLESS STEEL SHALL HAVE A ROUGH AND DULL FINISH #1 AS PER ASTM A480.

No.	Description	By	Date
0	FOR TENDER	Y.B	05/13/2020

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

Professional Stamp

Project title / Titre du projet

TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

Drawing title / Titre du dessin

MISCELLANEOUS METALS  
PARTS  
GAIN AND PIER NOSING  
PLAN, ELEVATION & DETAILS

Drawn by / Dessiné par H. BOIVIN	Designed by / Conçu par M. SAIDOU P.Eng.
Verified by / Vérifié par Y. BERTON P.Eng.	Approved by / Approuvé par S. VITTECOQ P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number / Numéro du Dessin 502
Project Number / Numéro du projet R.076951.705	Sheet Feuille 1 of 1



NOTES:

- FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS SEE DRAWING 002.
- FOR STRUCTURAL STEEL SEE SPECIFICATION SECTION 05 50 00.
- WEIGHT OF EACH MAINTENANCE GAIN COVER PANEL: 570 kg.
- BENT STEEL ROD SHALL CONFORM TO CSA G40.21 GRADE 400W.
- ALL GRATING AND STEEL SHALL BE HOT DIP GALVANIZED WITH THE EXCEPTION OF RAILS AFTER ASSEMBLY AND FABRICATION.
- SUPPLY OF RAIL CLIPS & THEIR ACCESSORIES BY THE CONTRACTOR. ASSEMBLY SHALL FOLLOW MANUFACTURER'S INSTRUCTIONS. THE LOWER PART OF THE RAIL CLIP SHALL BE WELDED AS PER REQUIREMENTS OF THE MANUFACTURER.
- LIFTING SLINGS USED AT LIFTING POINT SHALL BE BETWEEN 45° AND 90° FROM HORIZONTAL.
- FISH PLATE REPRESENTED FOR INDICATIVE PURPOSES. INSTALL AS PER MANUFACTURER RECOMMENDATION.

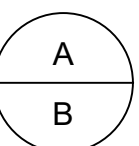
DESIGN LOADS

- COVERS ARE DESIGNED FOR THE FOLLOWING LOADS (UNFACTORED):
- MAIN GAIN COVERS:  
UNIFORMLY DISTRIBUTED LIVE LOAD OF 10 kPa.
  - MAINTENANCE COVERS:  
FULL HIGHWAY LOAD AS PER CSA-S6 (CL-625 TRUCKS)

No.	Description	By	Date
0	FOR TENDER	Y.B	05/13/2020

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

Professional Stamp

Project title / Titre du projet

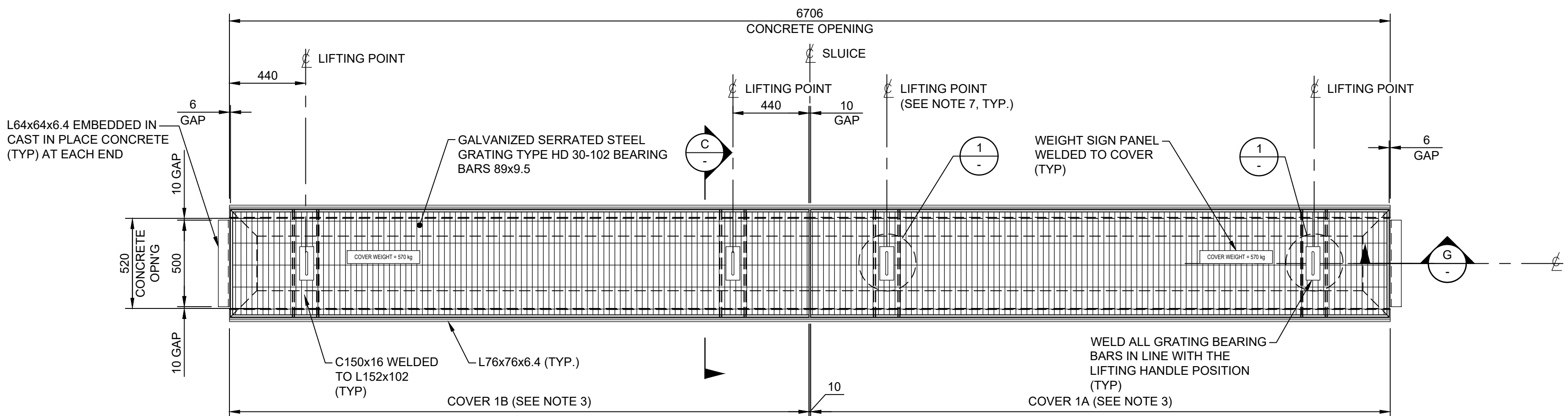
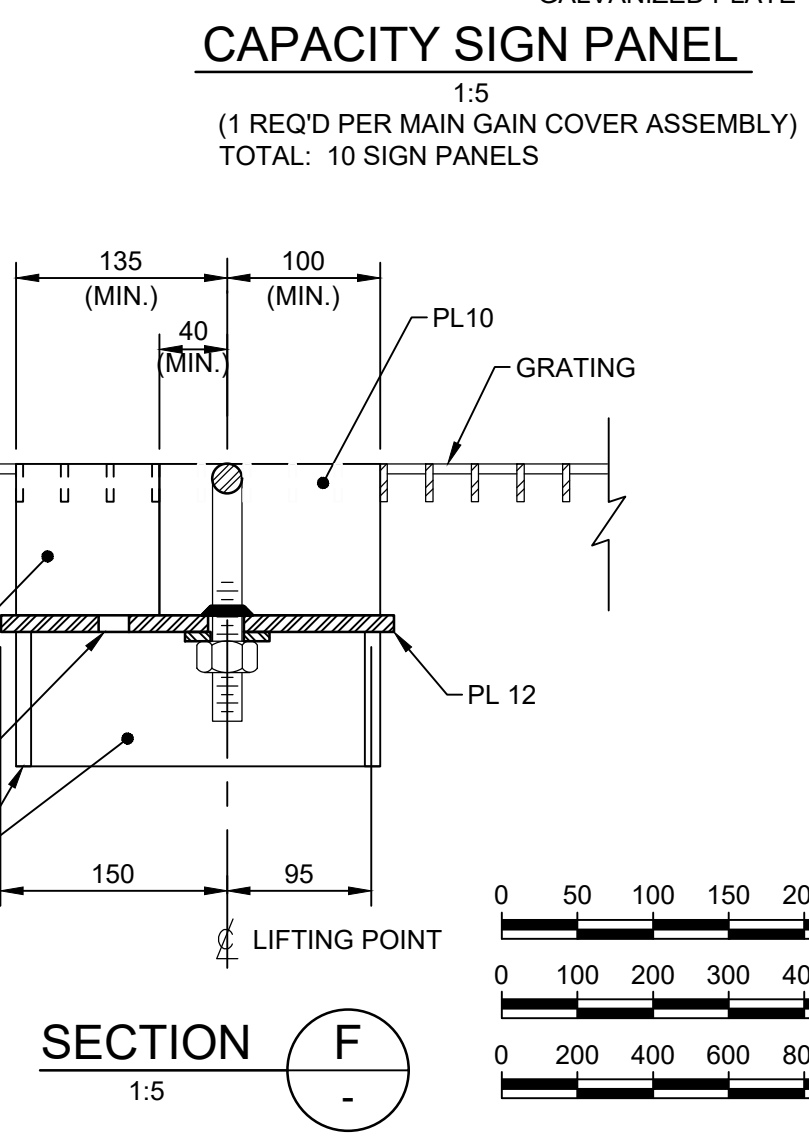
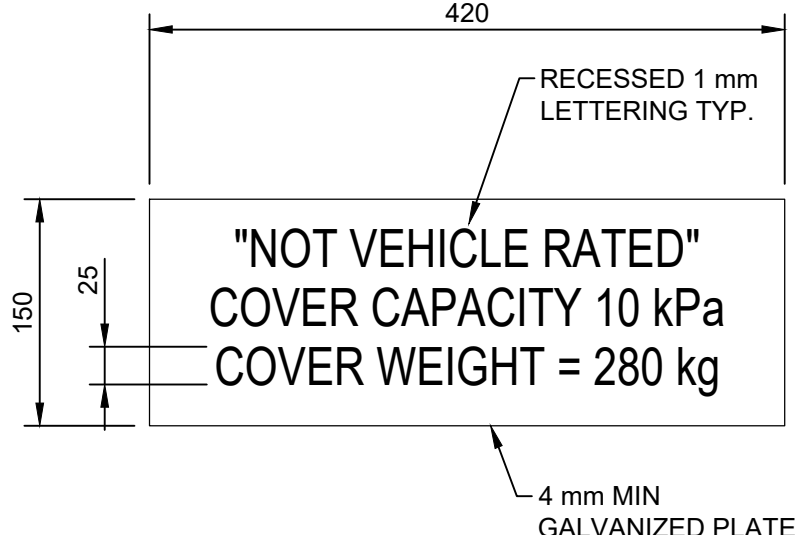
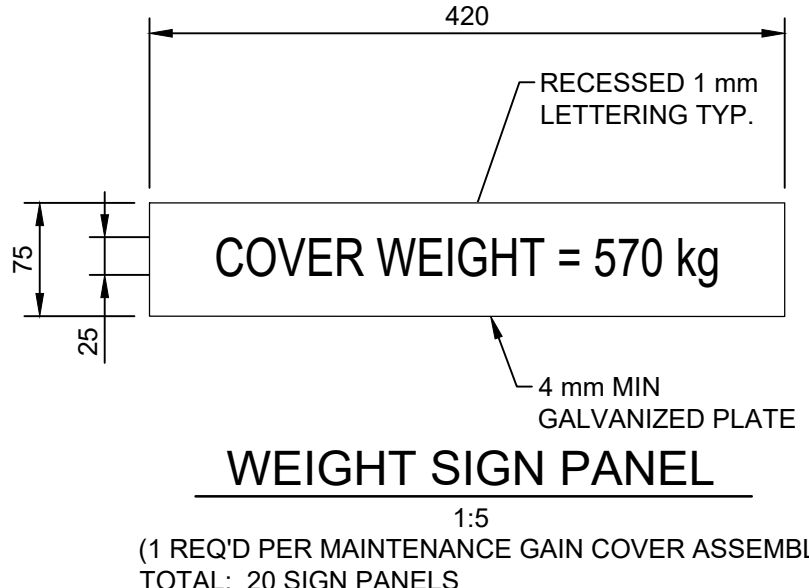
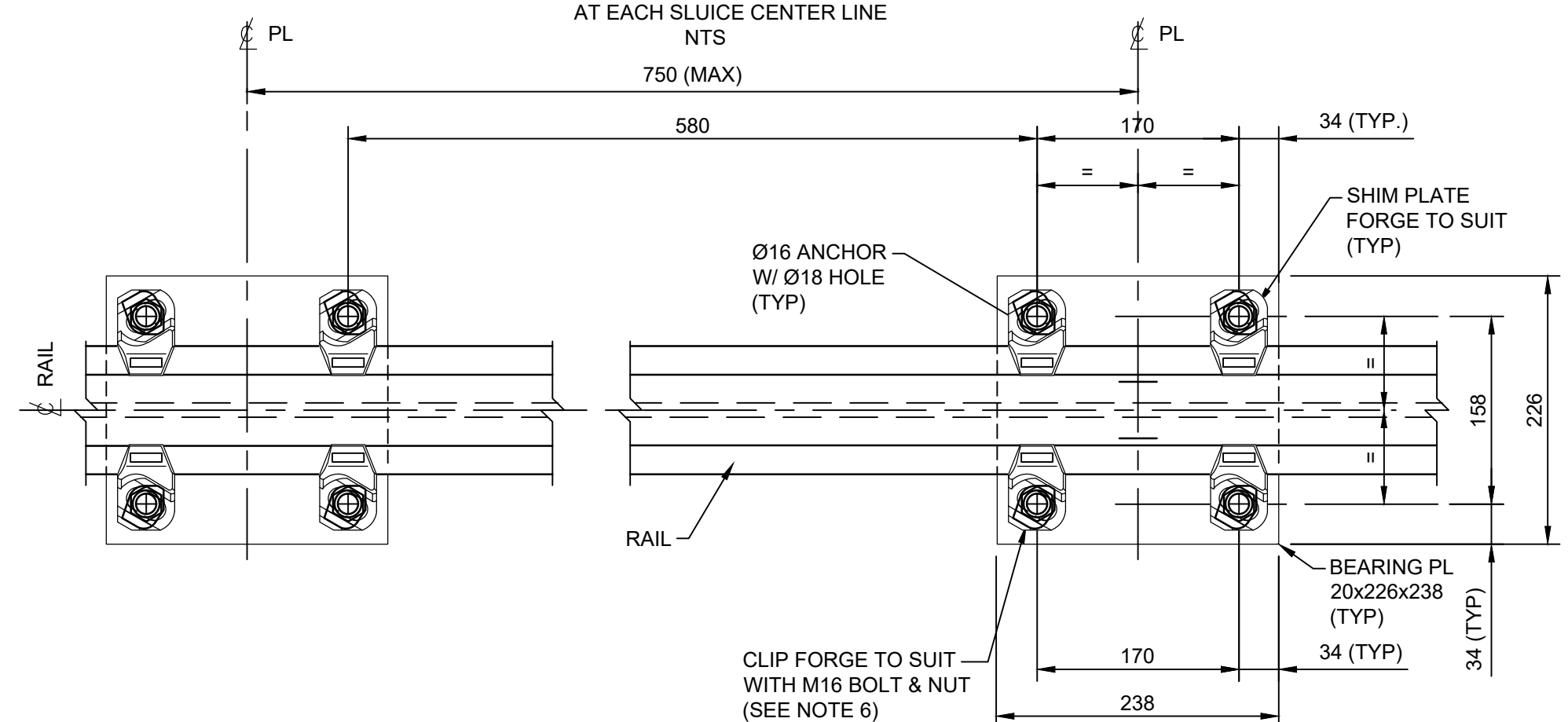
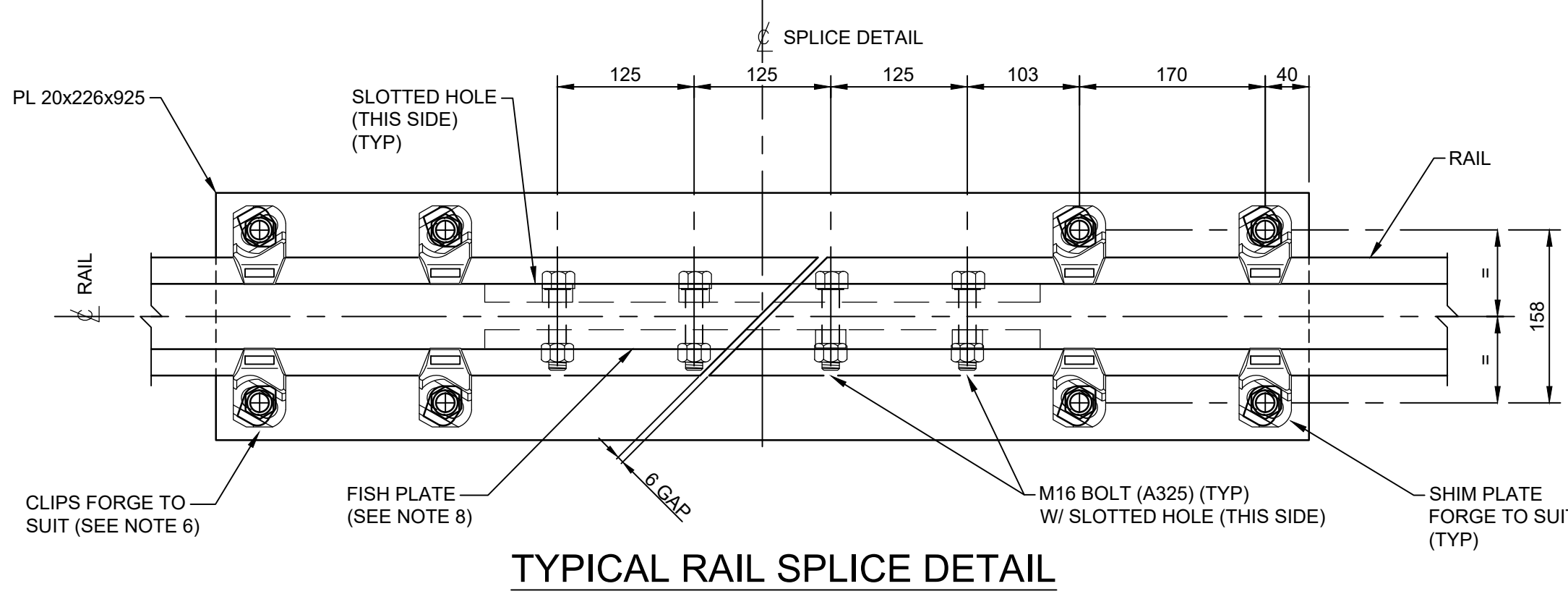
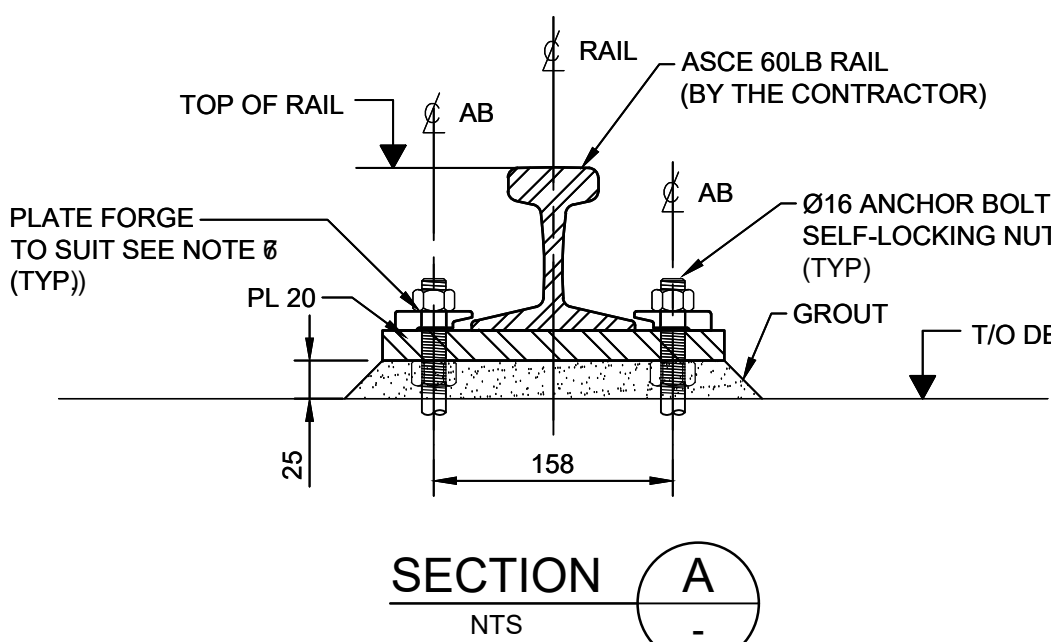
TRENT-SEVERN WATERWAY  
DAM AT LOCK 25 - SAWERS CREEK  
RECONSTRUCTION

Drawing title / Titre du dessin

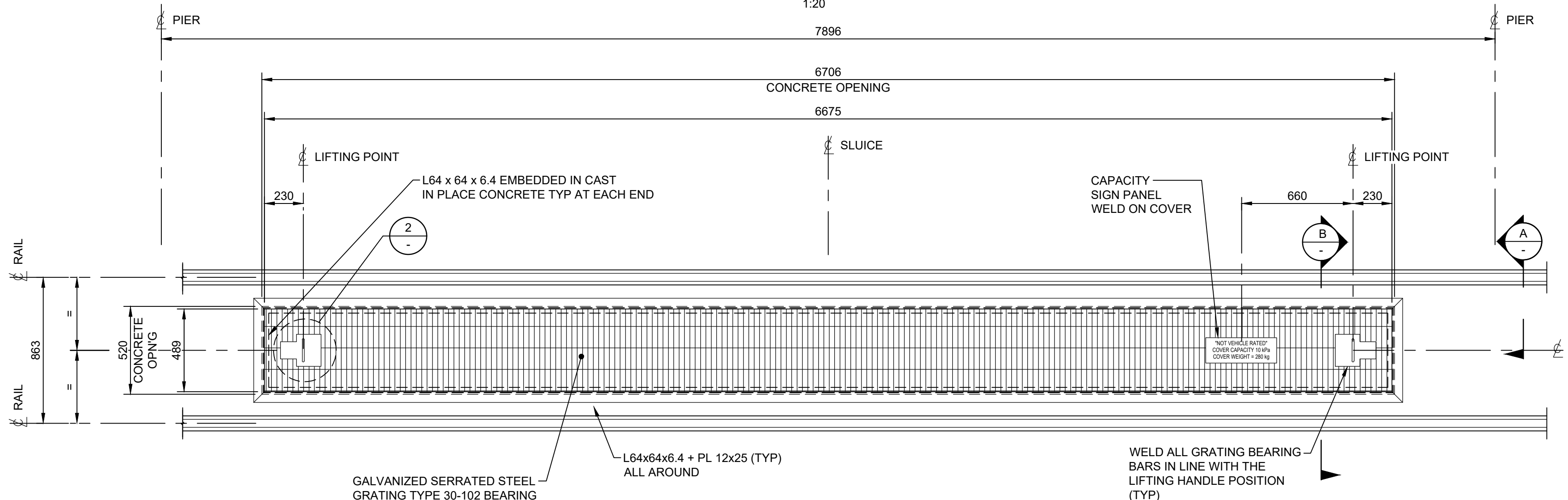
MISCELLANEOUS METALS  
PARTS  
GRATING, COVERS & RAILS  
PLANS, SECTIONS & DETAILS

Drawn by / Dessiné par H. BOIVIN	Designed by / Conçu par M. SAIDOU	P.Eng.
Verified by / Vérifié par Y. BERTON	Approved by / Approuvé par S. VITTECOQ	P.Eng.
Drawing Date / Date du dessin 05/13/2020	Project Number / Numéro du projet R.076951.705	Drawing Number / Numéro du Dessin 503
		Sheet Feuille 1 of 1

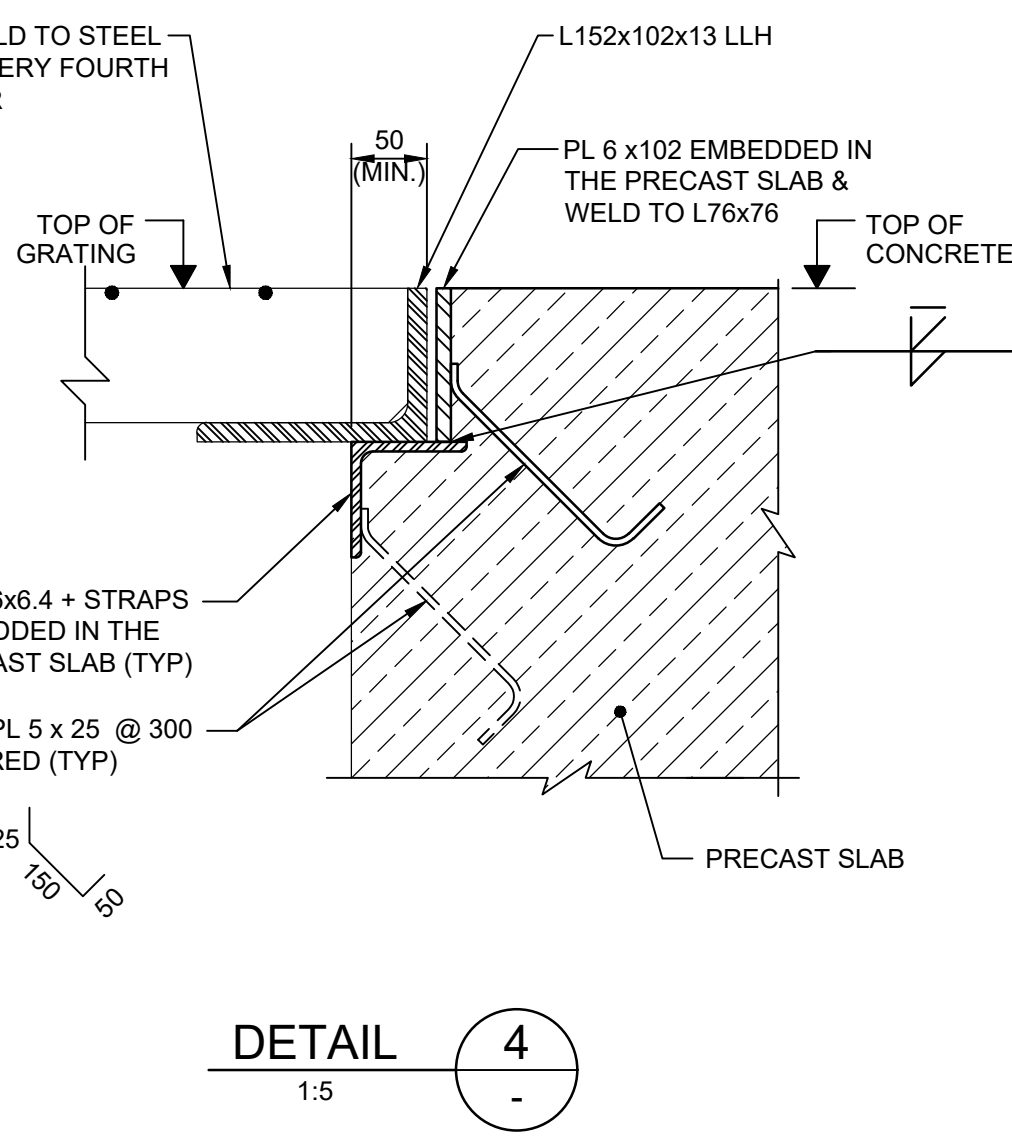
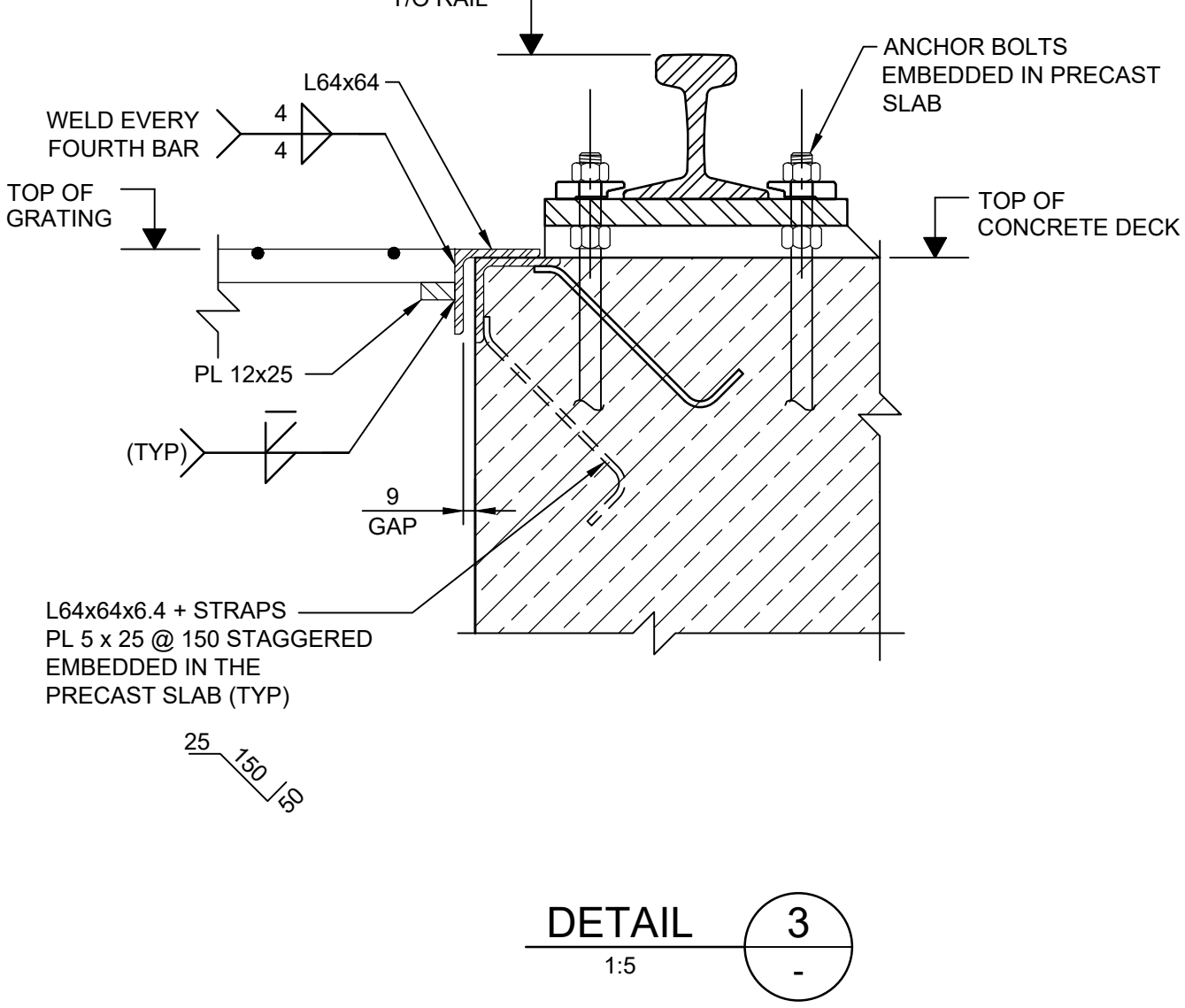
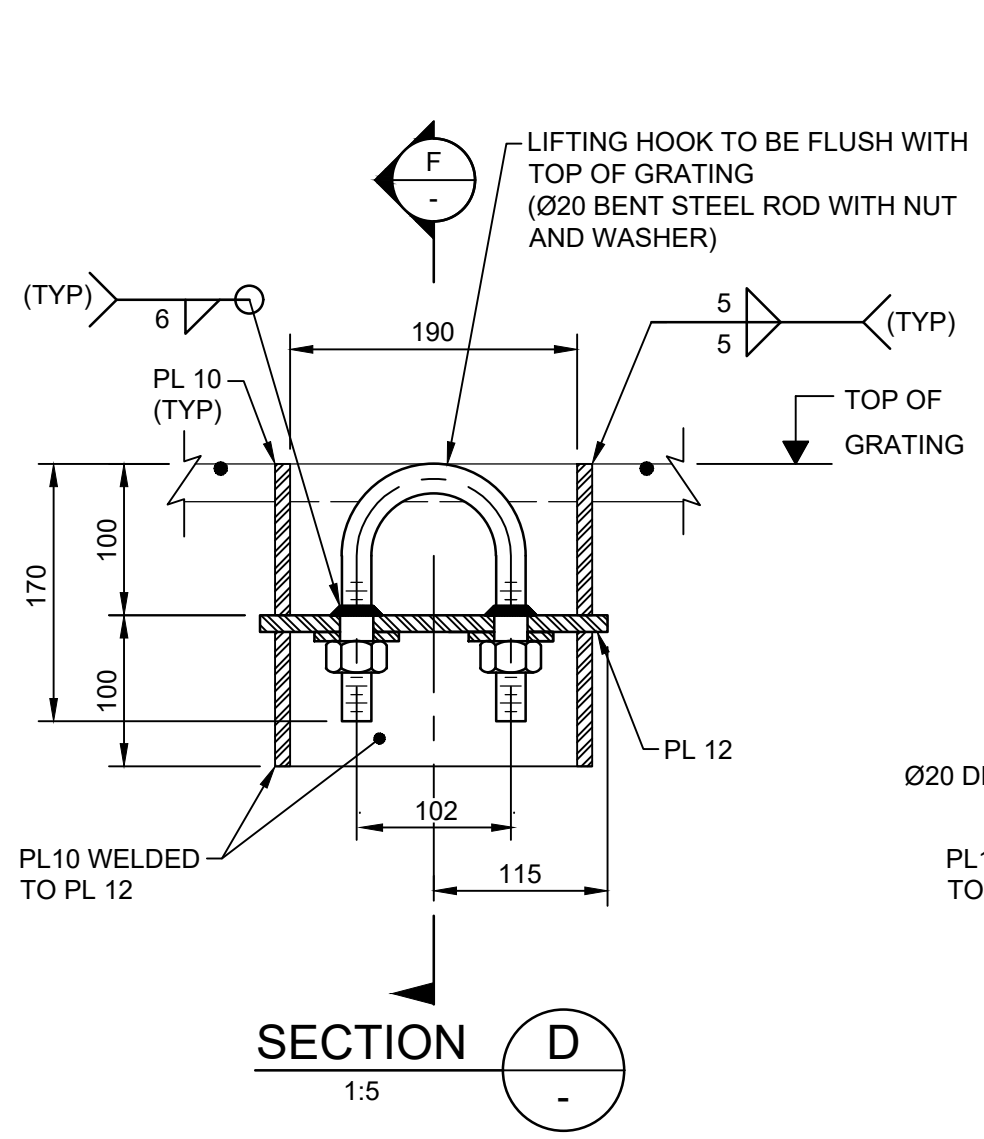
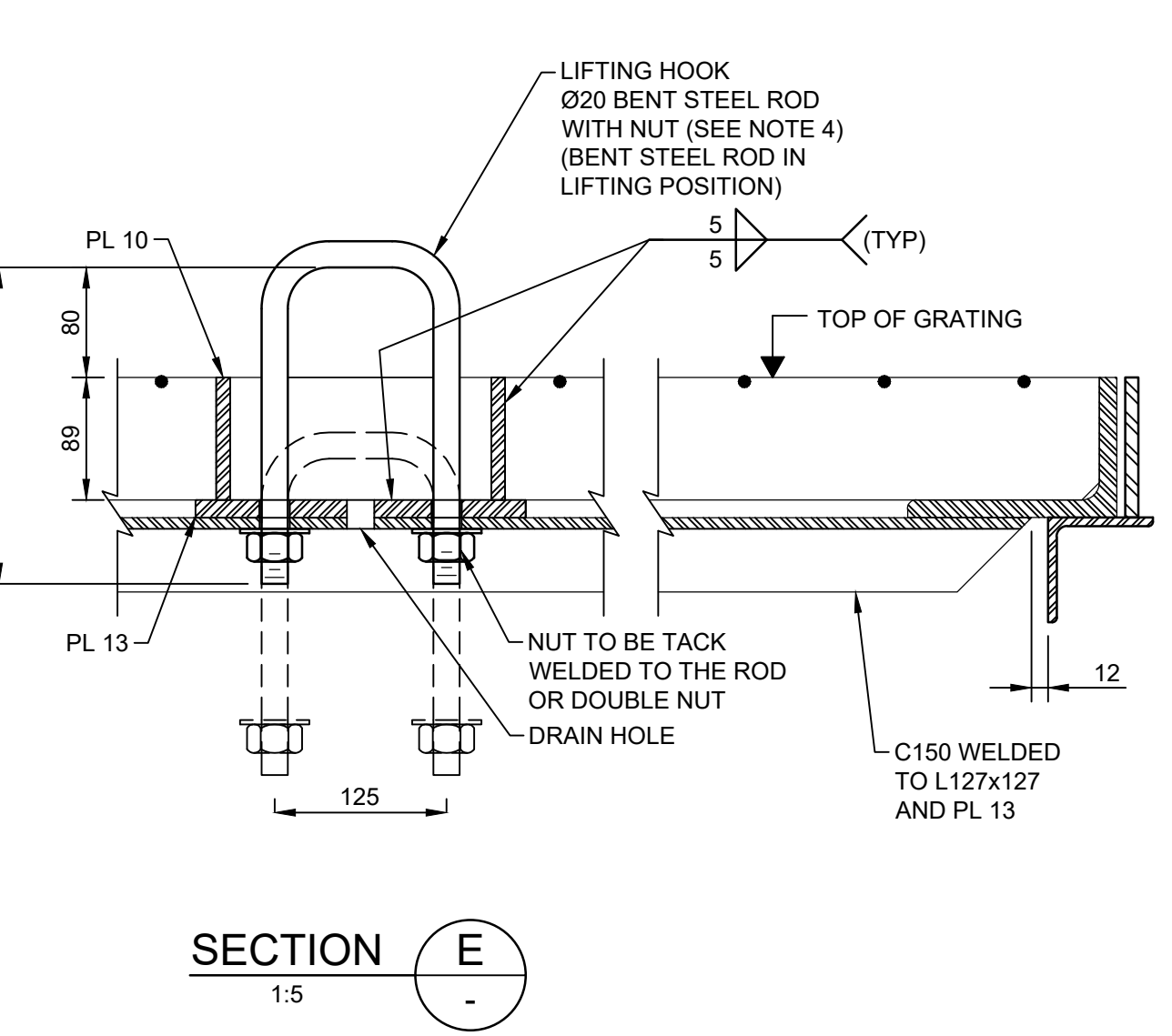
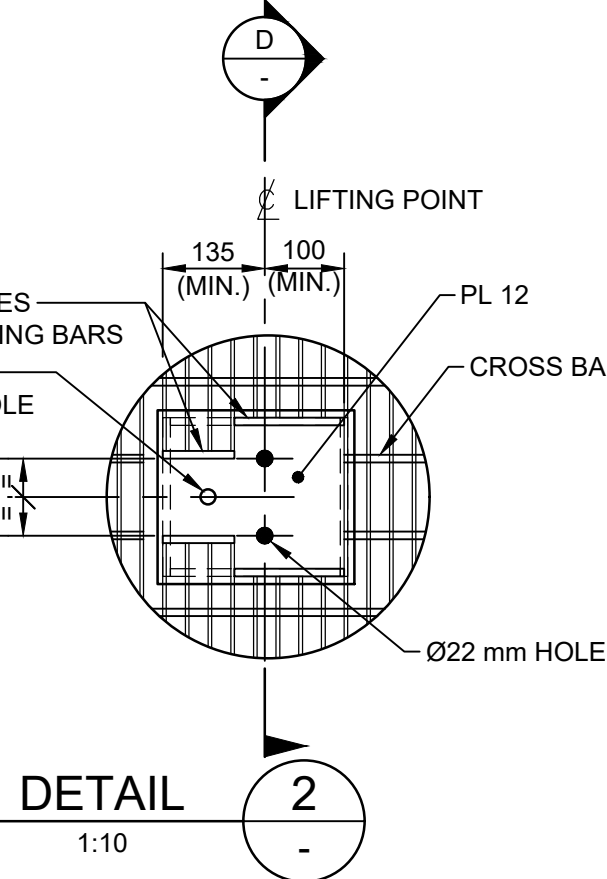
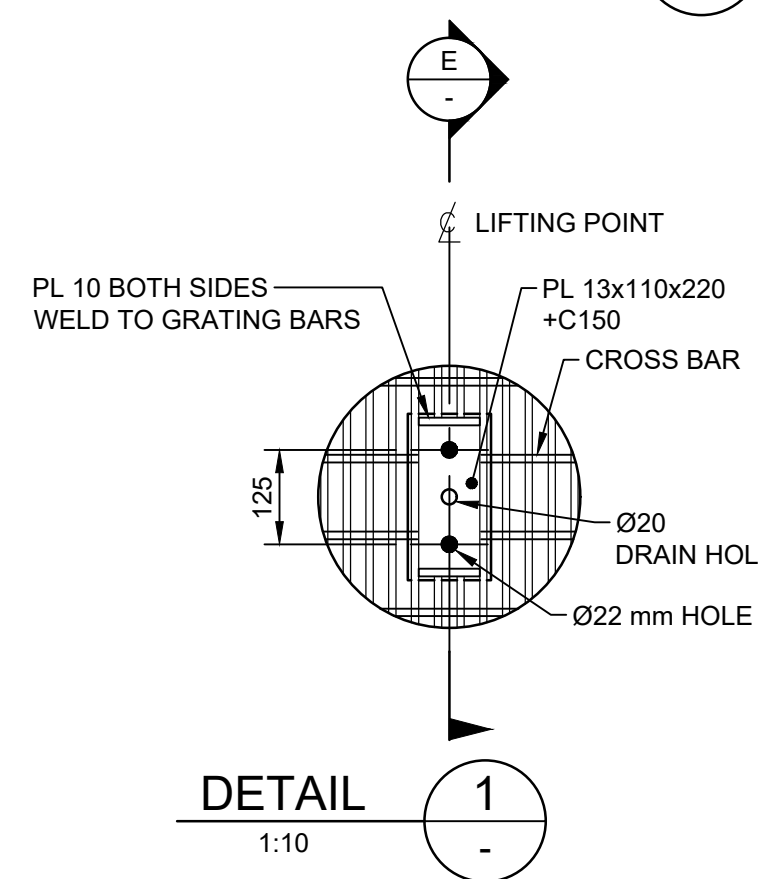
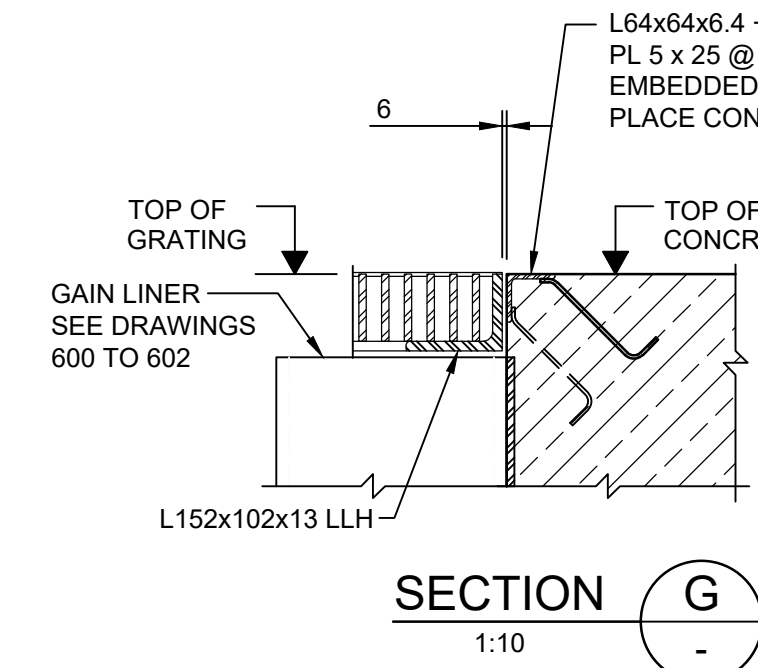
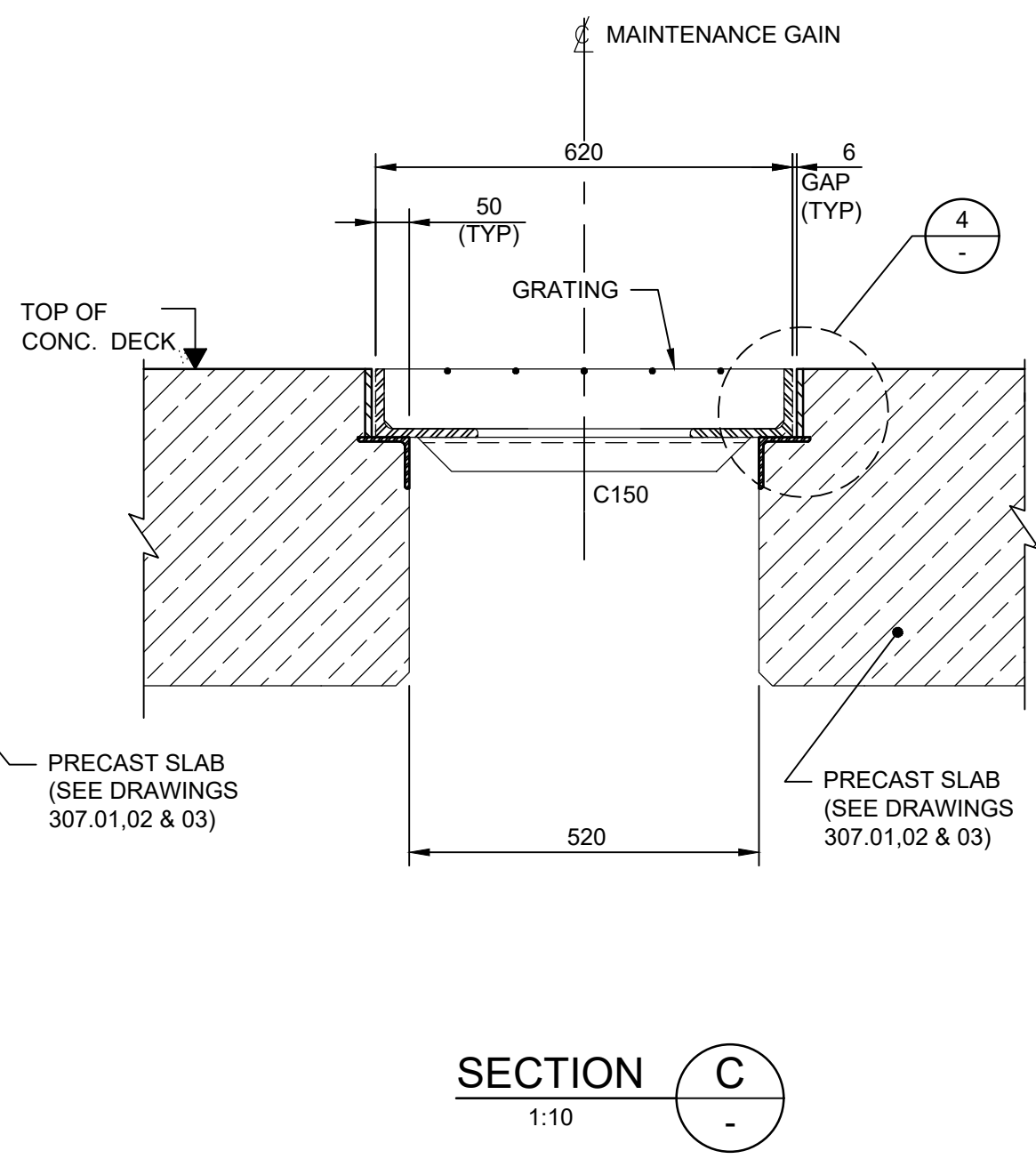
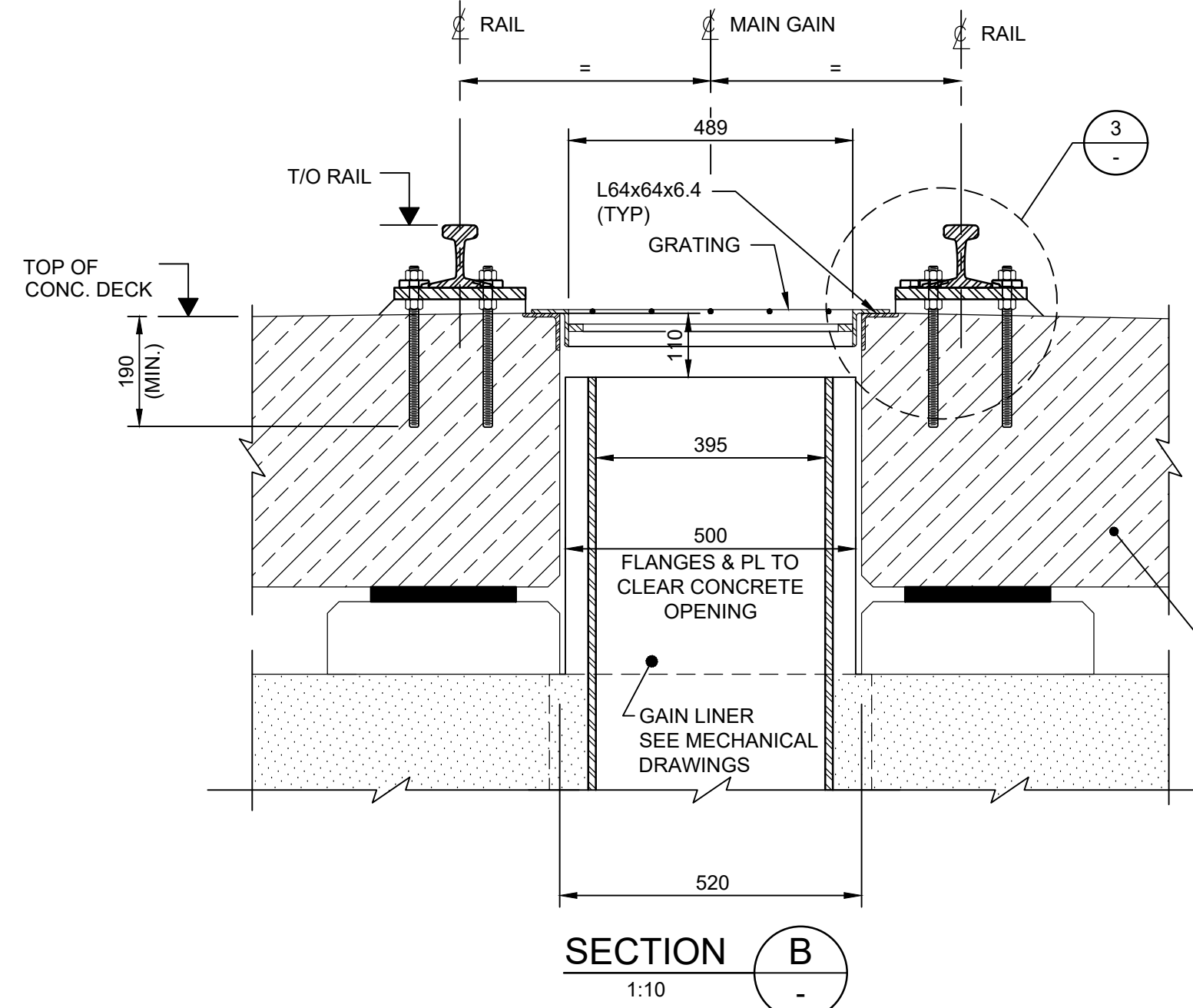
LOG LIFTER RAIL TOLERANCES			
ITEM	FIGURE	OVER ALL TOLERANCE	MAXIMUM RATE OF CHANGE
CRANE SPAN (L)		$L \leq 15.24 \text{ m}$ $A = 5 \text{ mm}$	6 mm IN 6.10 m
STRAIGHTNESS (B)		$B = 10 \text{ mm}$	6 mm IN 6.10 m
ELEVATION (C)		$C = 10 \text{ mm}$	6 mm IN 6.10 m
RAIL TO RAIL ELEVATION (D)		$L \leq 15.24 \text{ m}$ $D = \pm 5 \text{ mm}$	6mm IN 6.10 m



COVER TYPE 1 - MAINTENANCE GAIN - PLAN  
(FOR ALL SLUICES QUANTITY 12 REQUIRED)



COVER TYPE 2 - MAIN GAIN - PLAN  
(FOR ALL SLUICES QUANTITY 12 REQUIRED)



Contract No.	Drawing Code	Serial	Rev.
HS000243	003D	41DD	0504 0

## NOTES:

- FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS SEE DRAWING 002.
- COMPLETE ASSEMBLED SECTION IS TO BE HOT DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH SPECIFICATION SECTION 09 97 01.
- STAINLESS STEEL ANCHORS SHALL CONFORM TO ASTM F593 AISI TYPE 316, FIXED WITH PRE-PACKAGED TWO COMPONENTS ADHESIVE CONSISTING OF VINYL METACRYLATE RESIN. SUBMIT ANCHORS AND ADHESIVE DATA TO DEPARTMENTAL REPRESENTATIVE FOR REVIEW.
- BASE PLATES SHALL BE LEVELED TO PLUMB GUARDRAIL POSTS AS REQUIRED. WHERE SHIM AMOUNT EXCEEDS 13 mm, USE OF LEVELING NUT AND A BED OF NON-SHRINKABLE GROUT OF THICKNESS MIN 25 mm TO MAX 32 mm SHALL BE USED AT UNDERSIDE OF PLATE. SLOPE SIDES OF GROUT BED AT 1:1 DOWN TO SURFACE.
- ACCESS GATE STEEL BARS SHALL BE POSITIONED TO ENSURE THAT WHEN THE GATE IS FULLY OPENED, THEY ALIGN WITH VERTICAL STEEL BARS OF THE GUARDRAIL. FABRICATION SHOP MOCK-UPS ARE TO BE PERFORMED FOR DEPARTMENTAL REPRESENTATIVE REVIEW.
- PROVIDE A SYSTEM TO HAVE THE GATE LOCKING MECHANISM IN THE UPRIGHT POSITION WHILE THE GATE IS BEING OPENED.
- GATE CLOSING PINS MUST BE ACCESSIBLE FROM INSIDE OF ENCLOSED AREA WHEN GATE IS CLOSED.
- CONTRACTOR TO POSITION LATCHING PLATE SO THAT IT IS ALIGNED WITH GATE LATCHING PLATE IN OPEN POSITION.

No.	Description	By	Date
0	FOR TENDER	Y.B	05/13/2020

## 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

## Professional Stamp

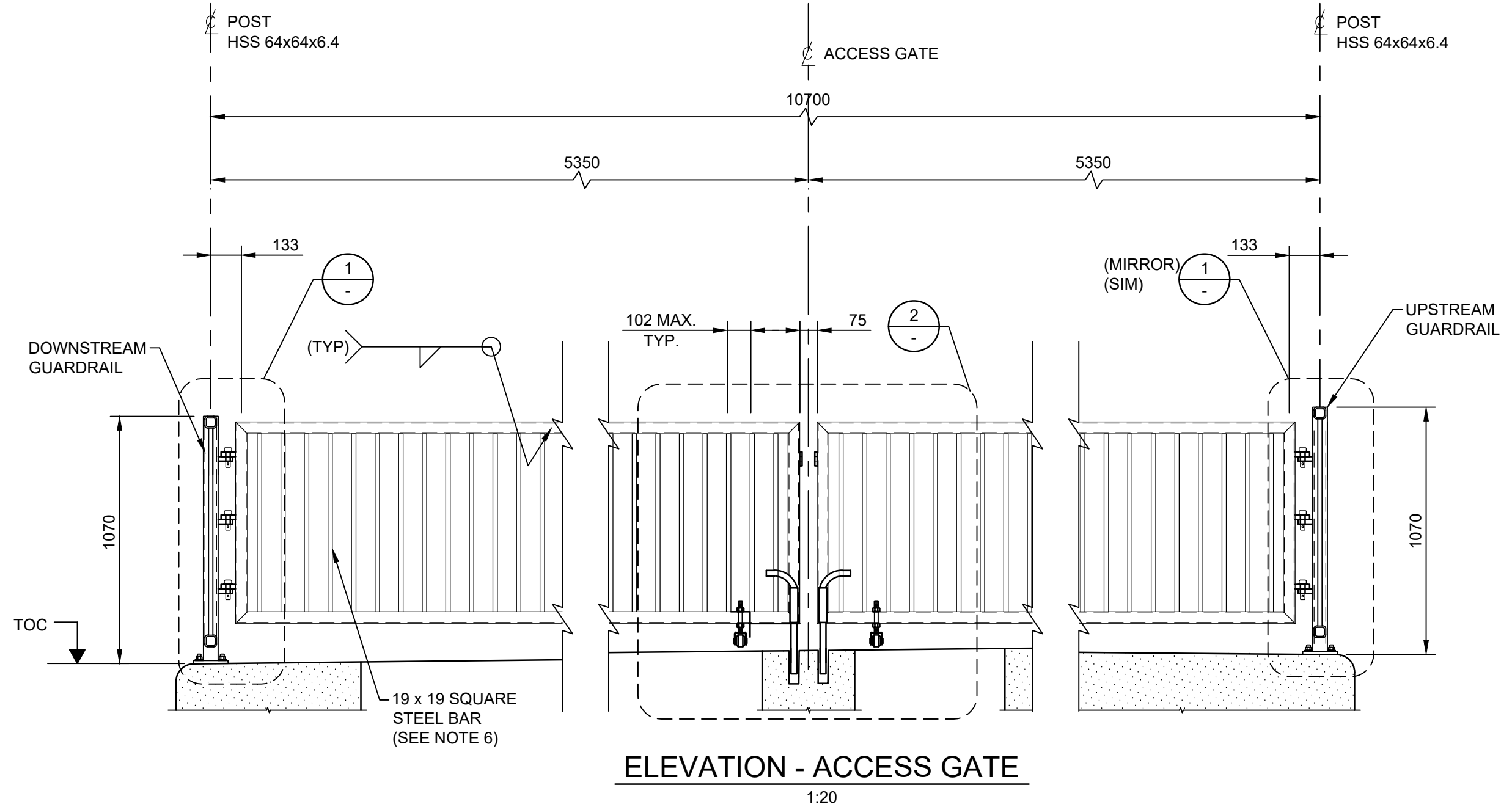
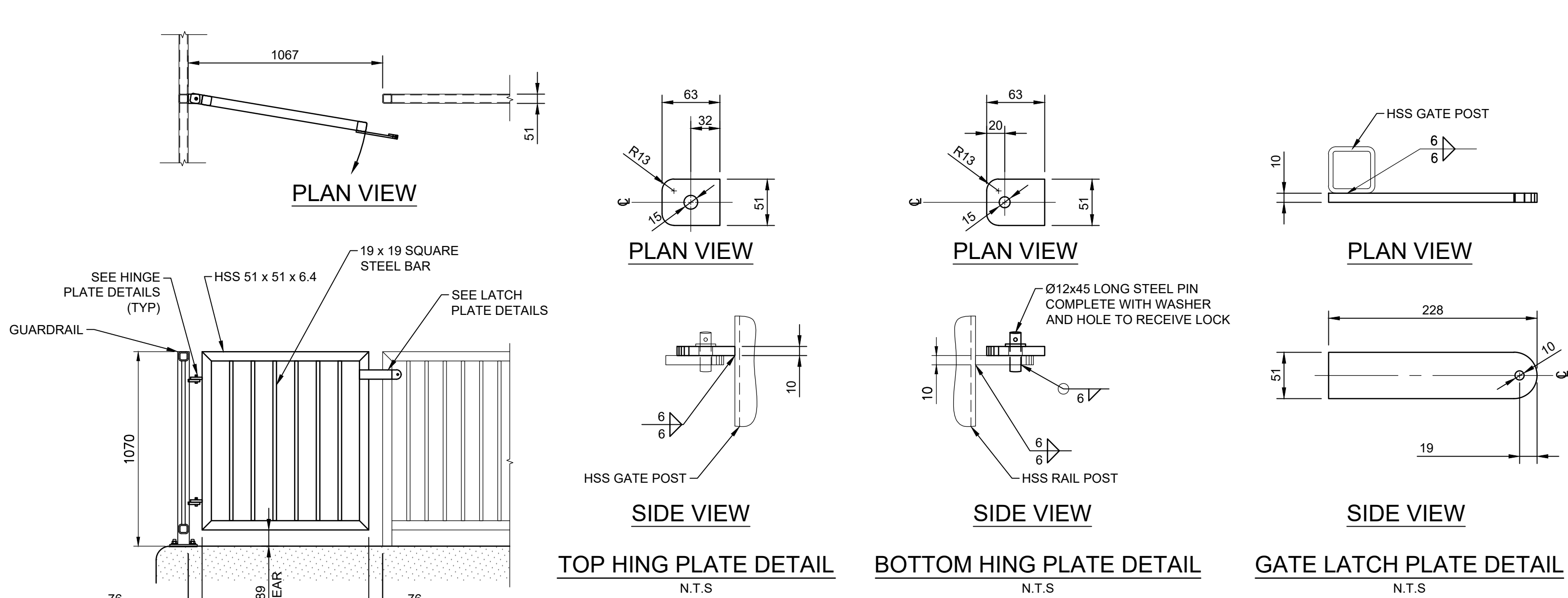
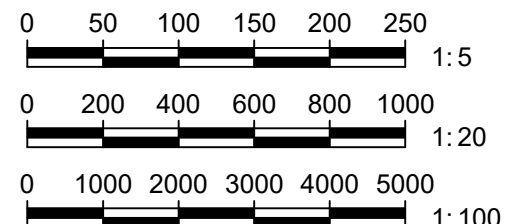
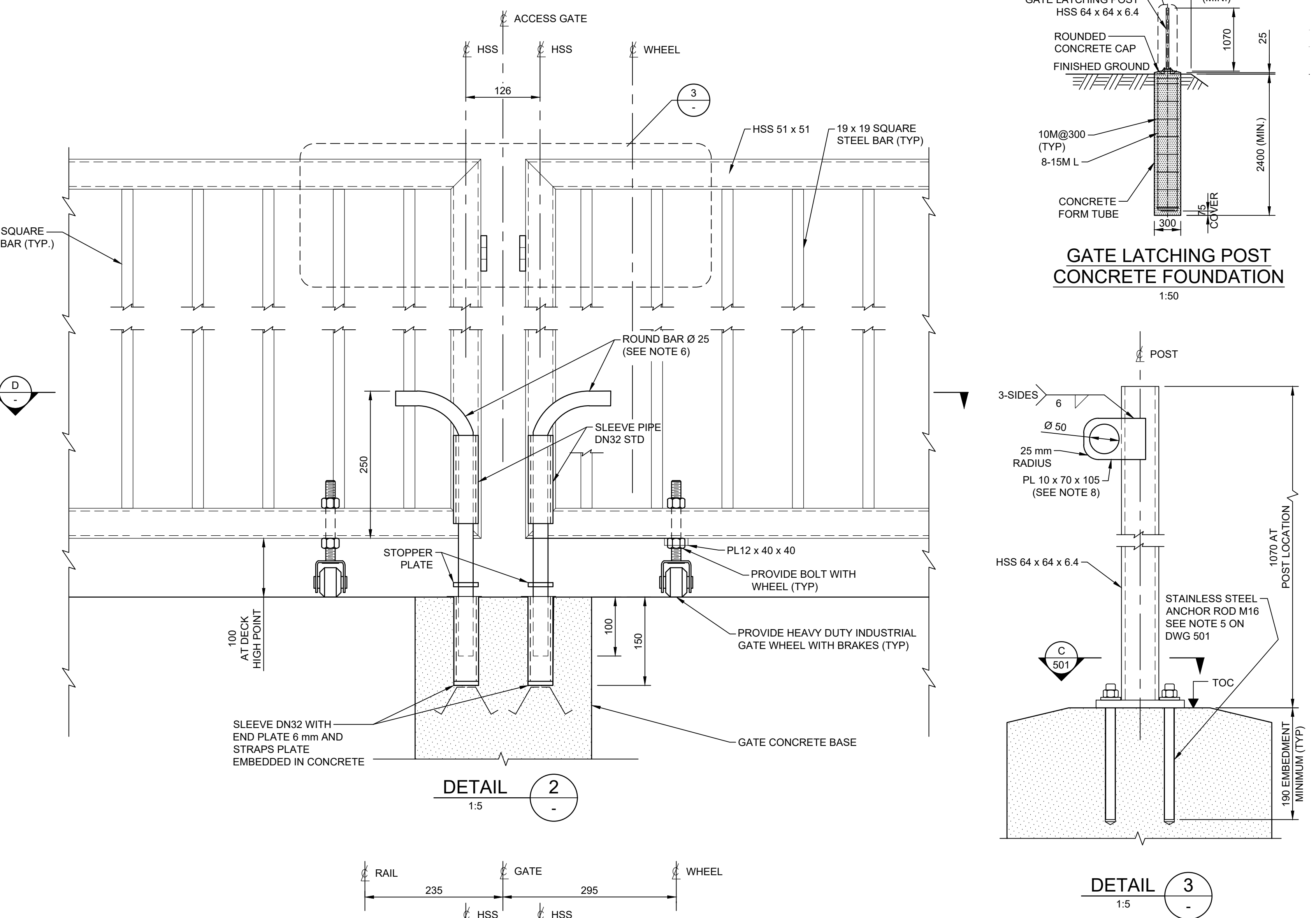
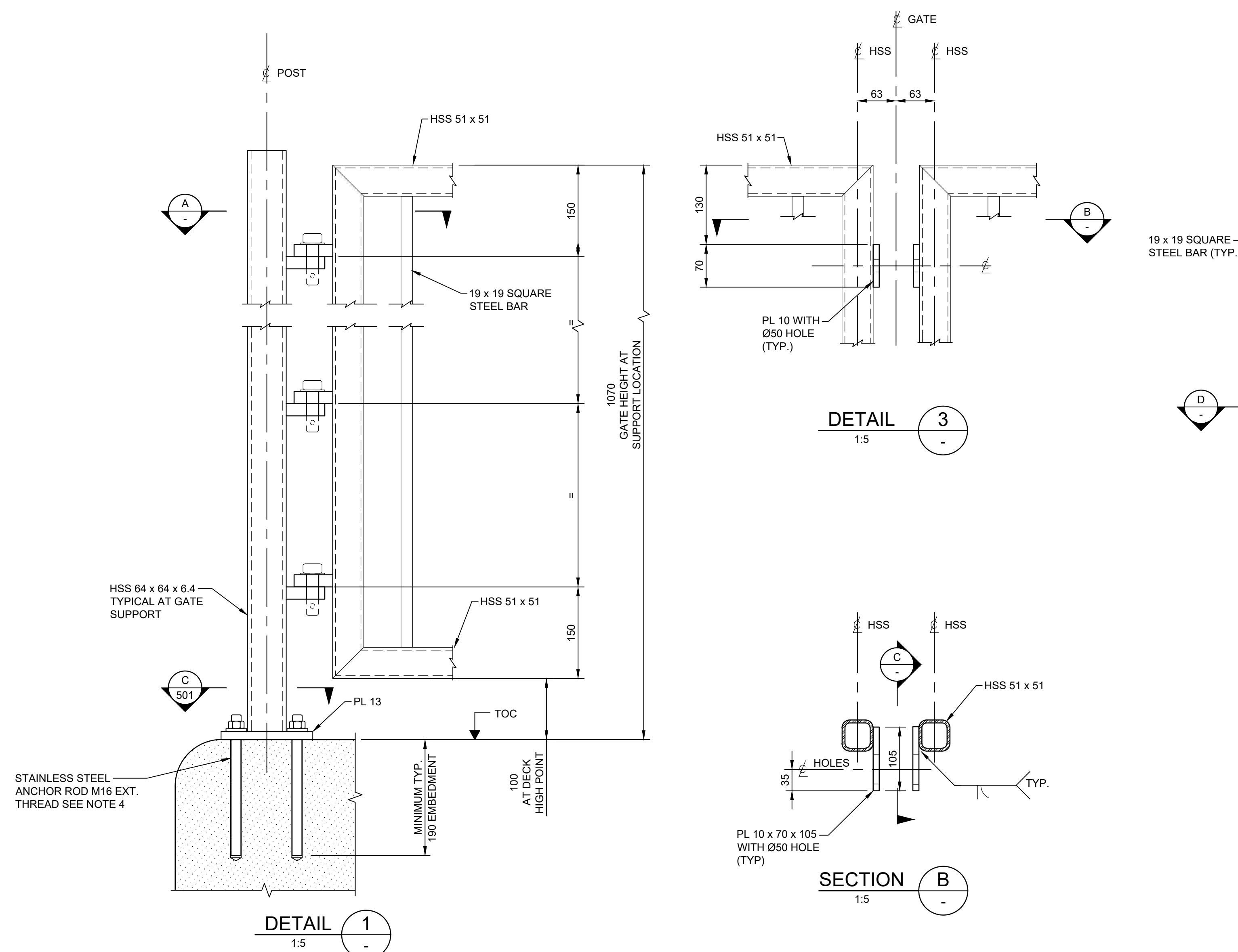
Project title / Titre du projet

TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 BURLEIGH FALLS  
RECONSTRUCTION

Drawing title / Titre du dessin

MISCELLANEOUS METAL  
ACCESS GATE  
ELEVATIONS, SECTIONS  
AND DETAILS

Drawn by / Dessiné par H. BOIVIN	Designed by / Conçu par M. SAIDOU	P.Eng.
Verified by / Vérifié par Y. BERTON	Approved by / Approuvé par S. VITTECOQ	P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number / Numéro du Dessin 504	
Project Number / Numéro du projet R.076951.705	Sheet Feuille	1 of 1

PEDESTRIAN ACCESS GATE  
1:20



Contract No.	Drawing Code	Serial	Rev.
HS00243	210	41DD	0505 0

- NOTES:
- FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS SEE DRAWING 002.
  - FOR GUARDRAIL DETAILS SEE DRAWING 502.

No.	Description	By	Date
0	FOR TENDER	Y.B	05/13/2020

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

Professional Stamp

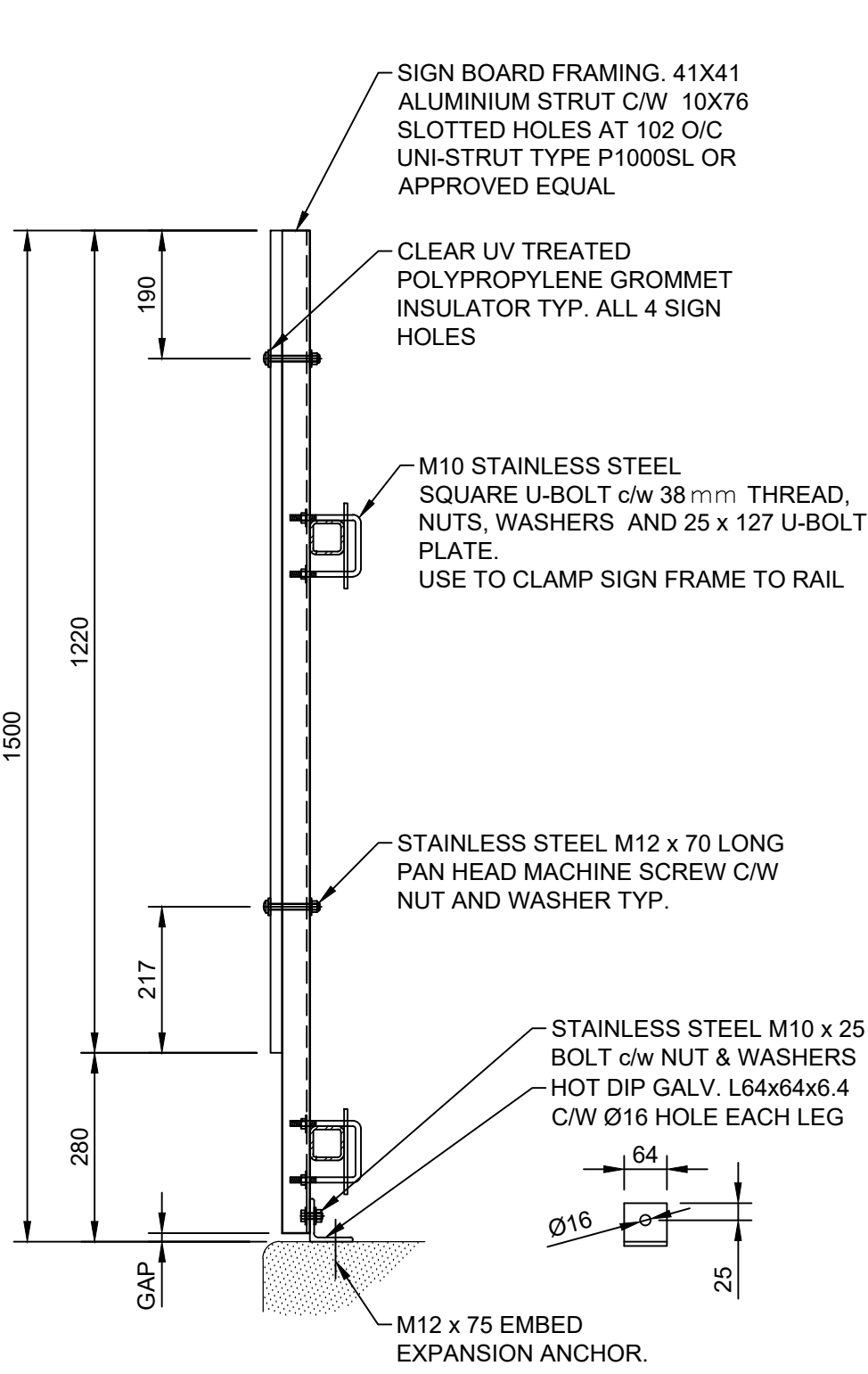
Project title / Titre du projet

TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

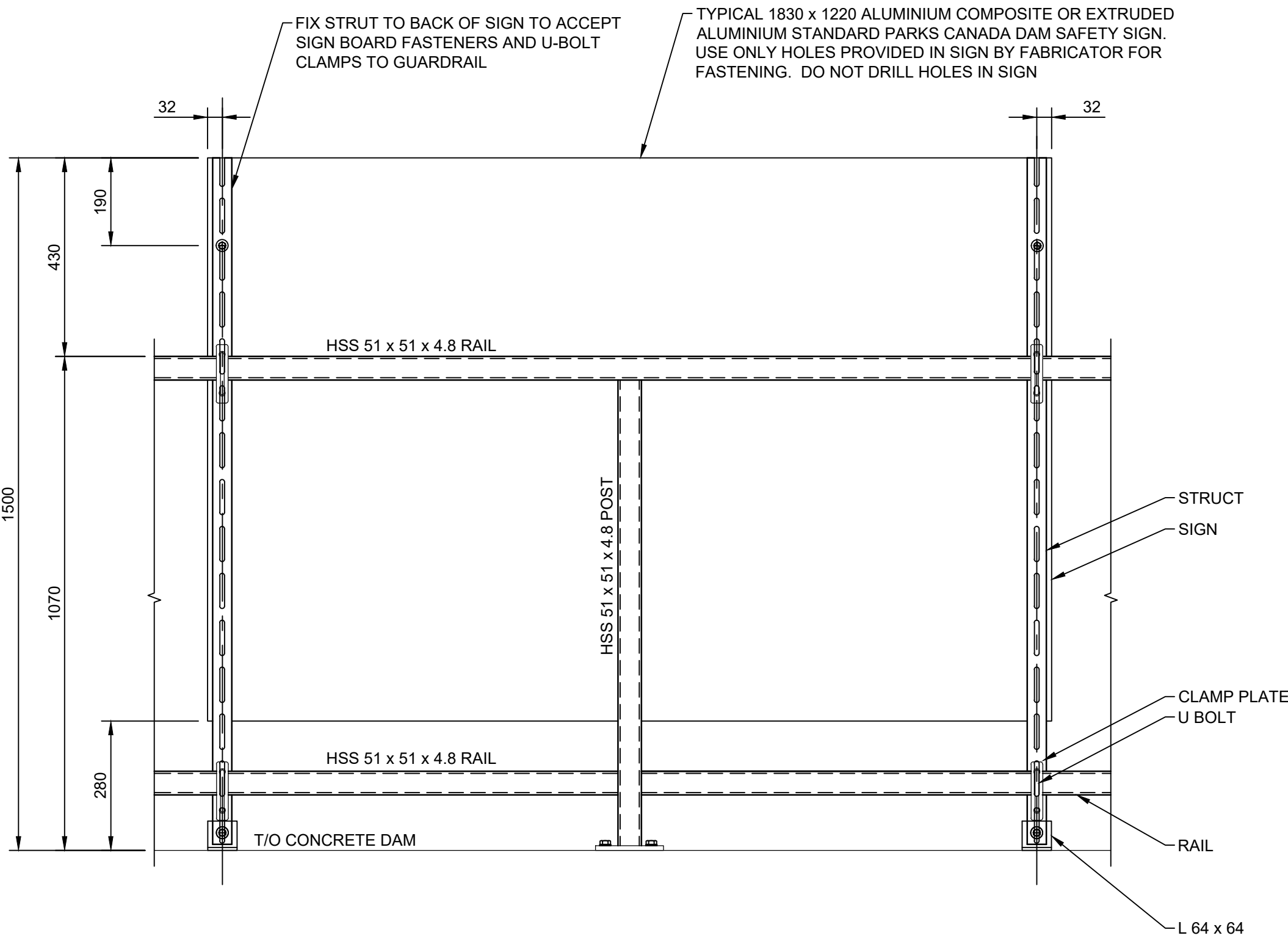
Drawing title / Titre du dessin

MISCELLANEOUS METALS  
PARTS  
SIGN MOUNTING  
DETAILS

Drawn by / Dessiné par H. BOIVIN	Designed by / Conçu par M. SAIDOU	P.Eng.
Verified by / Vérifié par Y. BERTON	Approved by / Approuvé par S. VITTECOQ	P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number / Numéro du Dessin 505	
Project Number / Numéro du projet R.076951.705	Sheet Feuille 1 of 1	

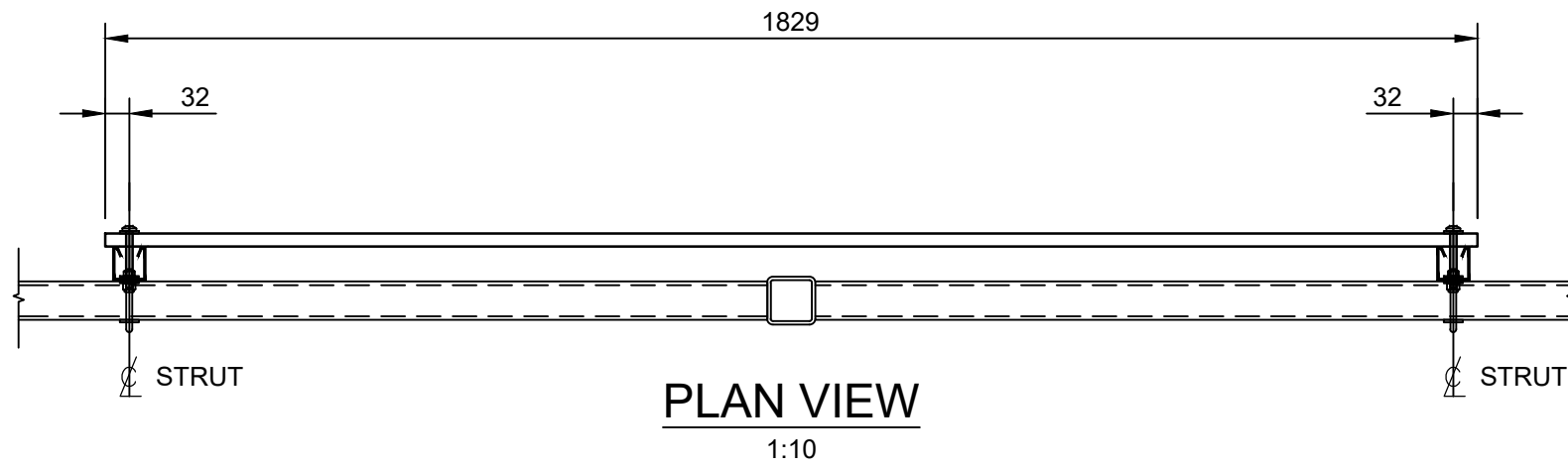


SIDE FACE VIEW  
1:10

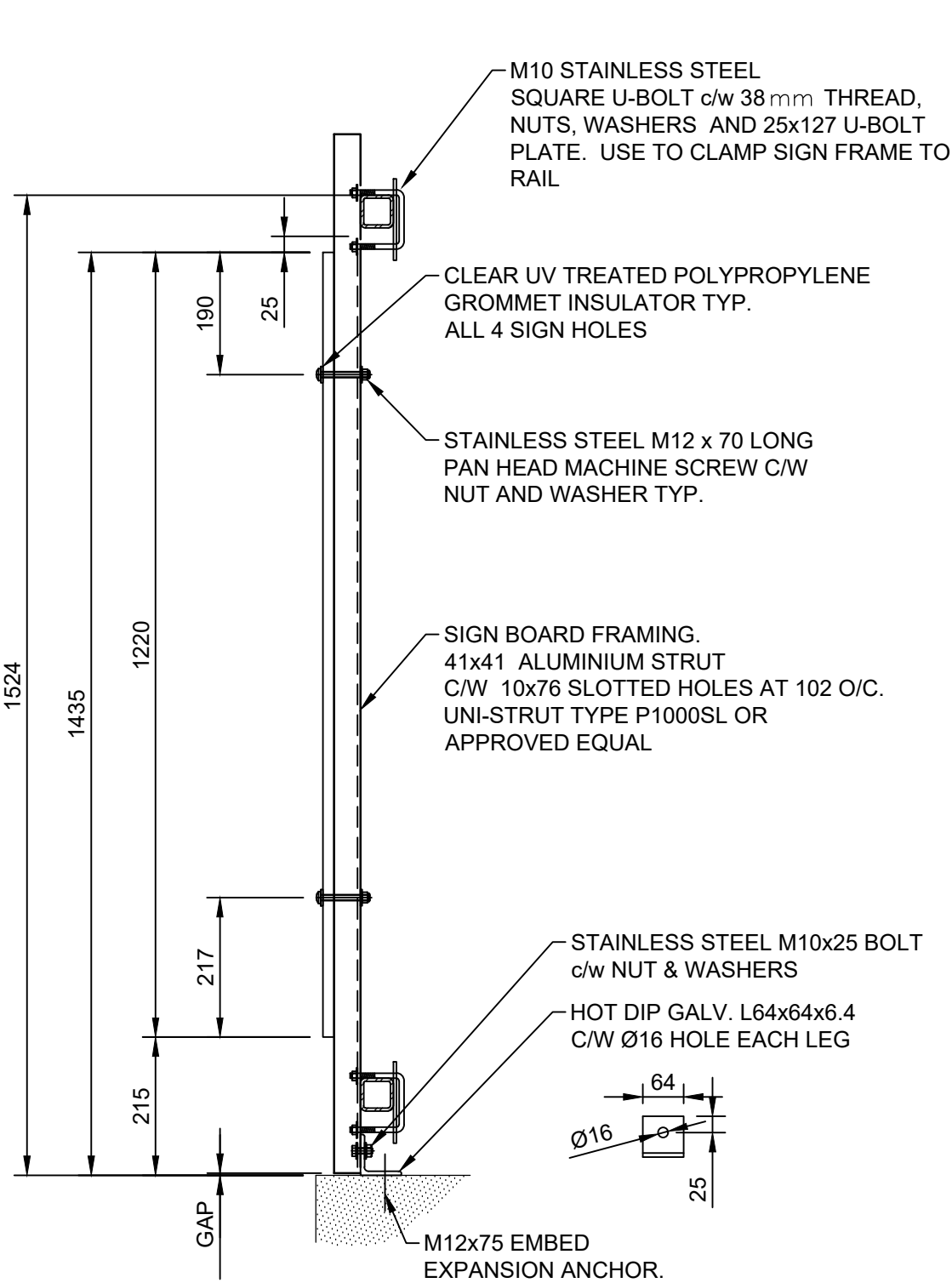


BACK FACE VIEW  
1:10

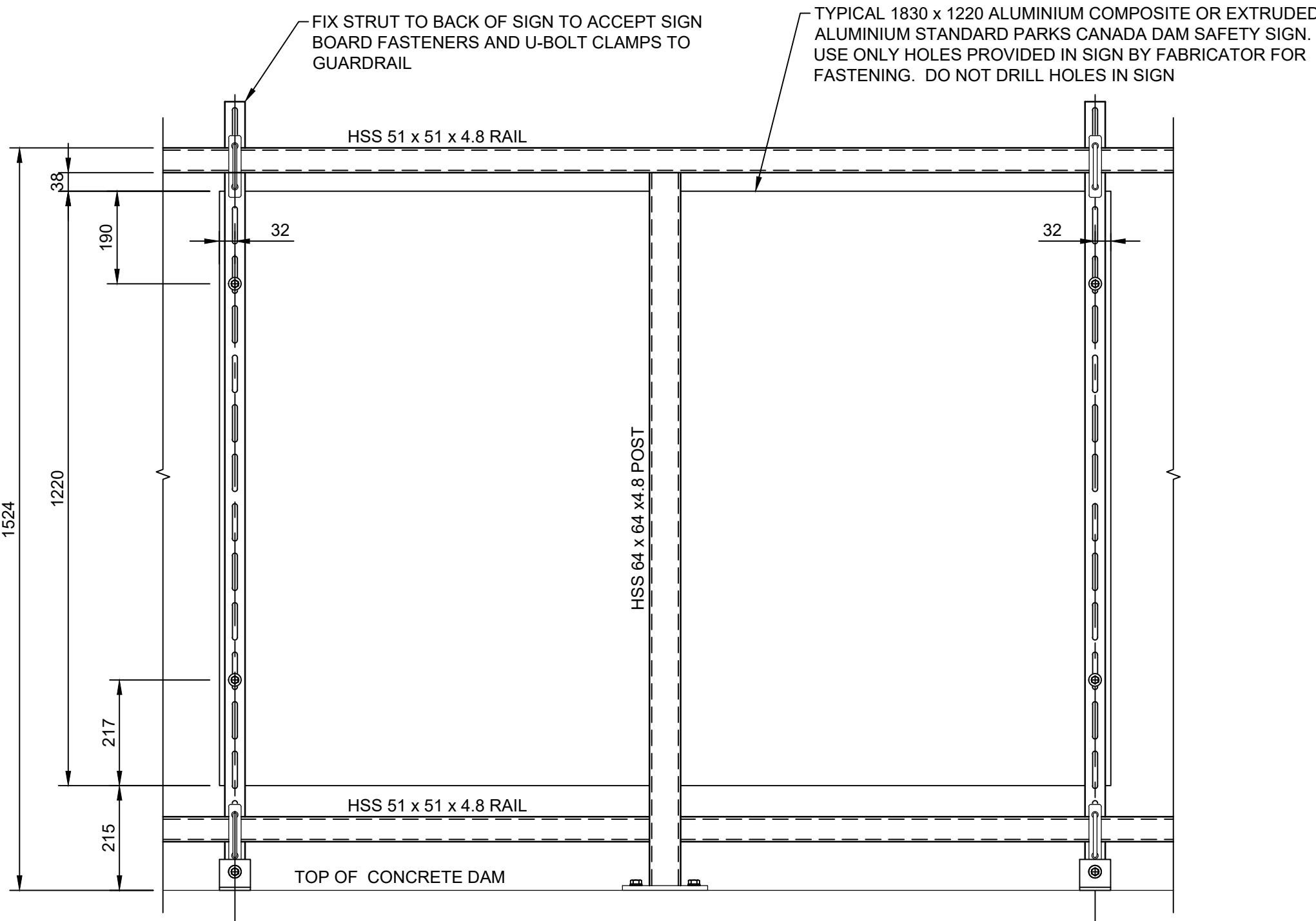
DETAILS - 1070 HIGH GUARDRAIL DETAILS  
TYPICAL 4' x 6' (1220 x 1830) SIGN MOUNTING



PLAN VIEW  
1:10



SIDE FACE VIEW  
1:10



BACK FACE VIEW  
1:10

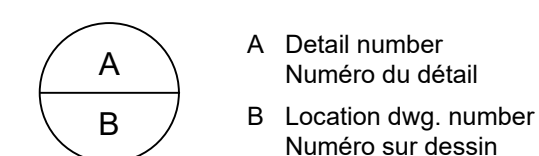
DETAILS - 1524 HIGH GUARDRAIL DETAILS  
TYPICAL 4' x 6' (1220 x 1830) SIGN MOUNTING

Contract No.	Drawing Code		Serial	Rev.
HS00243	210	41DD	0506	0

1. FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS SEE DRAWING 002.
2. SAFETY SIGNAGE LOCATED OFF OF DAM TO BE INSTALLED ON GALVANISED STEEL SUPPORTS ANCHORED TO BEDROCK. SEE SPECIFICATION SECTION 05 50.00.
3. SIGN DESIGN IN ACCORDANCE WITH PCA SAFETY SIGN STANDARD FOR LETTERING AND COLORS.
4. ISOLATING WASHER TO BE PROVIDED BETWEEN ALUMINIUM AND GALVANIZED STEEL.


0	FOR TENDER	Y.B	05/13/2020
No.	Description	By Par	Date

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

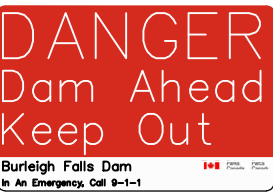


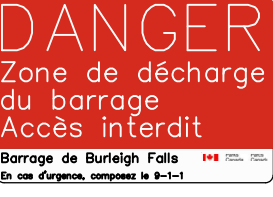




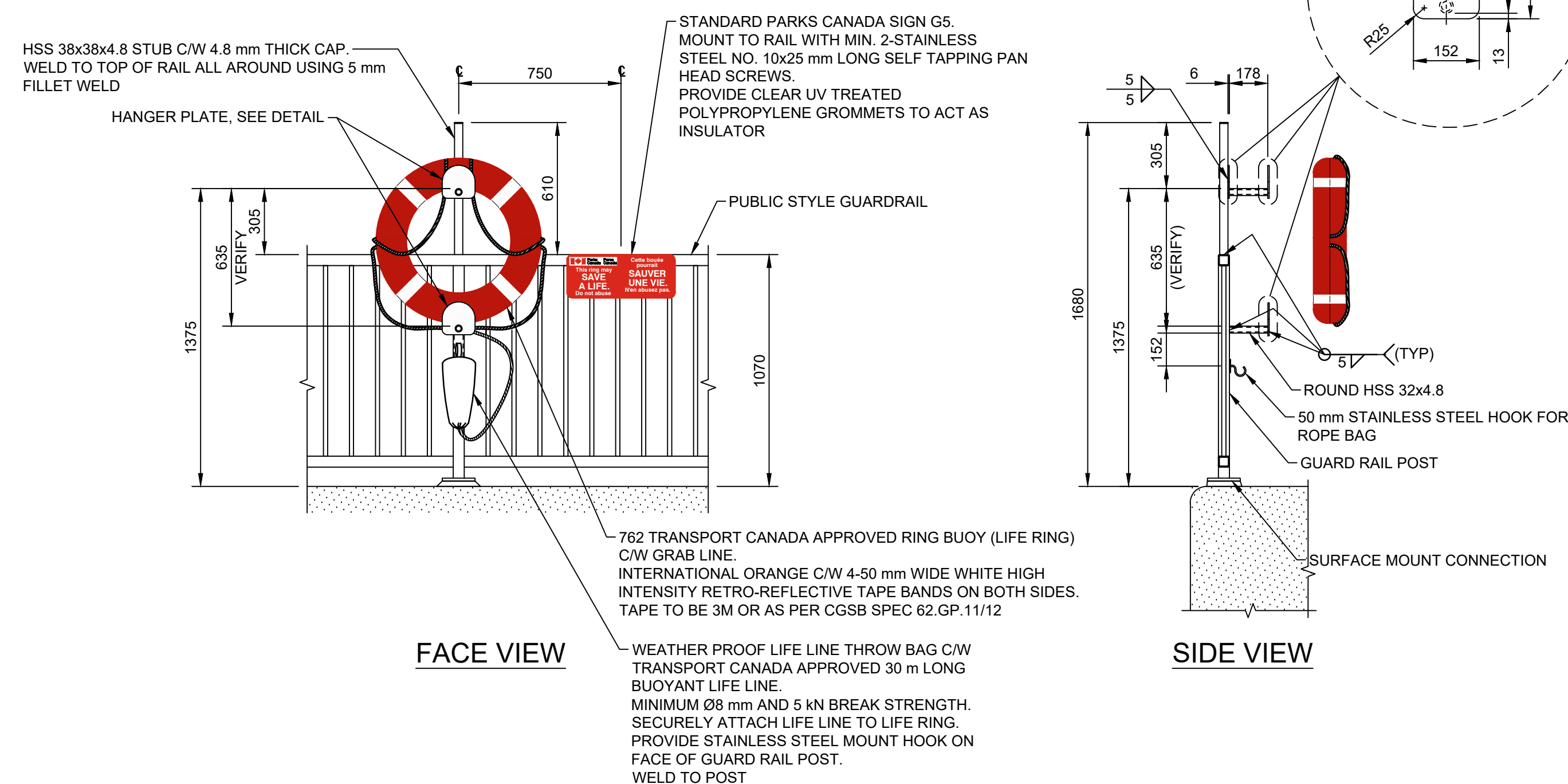
## Project title / Titre du projet

# TRENT-SEVERN WATERWAY DAM AT LOCK 28 - BURLEIGH FALLS RECONSTRUCTION

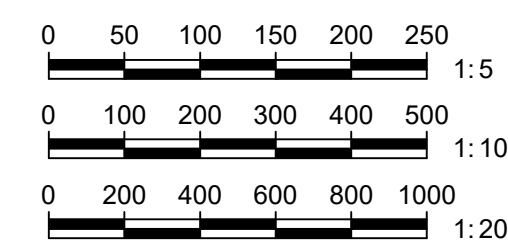
MISCELLANEOUS METALS  
PARTS  
PUBLIC SAFETY  
MEASURES

Drawn by / Dessiné par		Designed by / Conçu par	
H. BOIVIN		M. SAÏDOU P. Eng.	
Verified by / Vérifié par		Approved by / Approuvé par	
Y. BERTON	P. Eng.	S. VITTECOQ	P. Eng.
Drawing Date / Date du dessin		Drawing Number / Numéro du Dessin	
05/13/2020		506	
Project Number / Numéro du projet		Sheet	
R.076951.705		Escale 1 of 1	

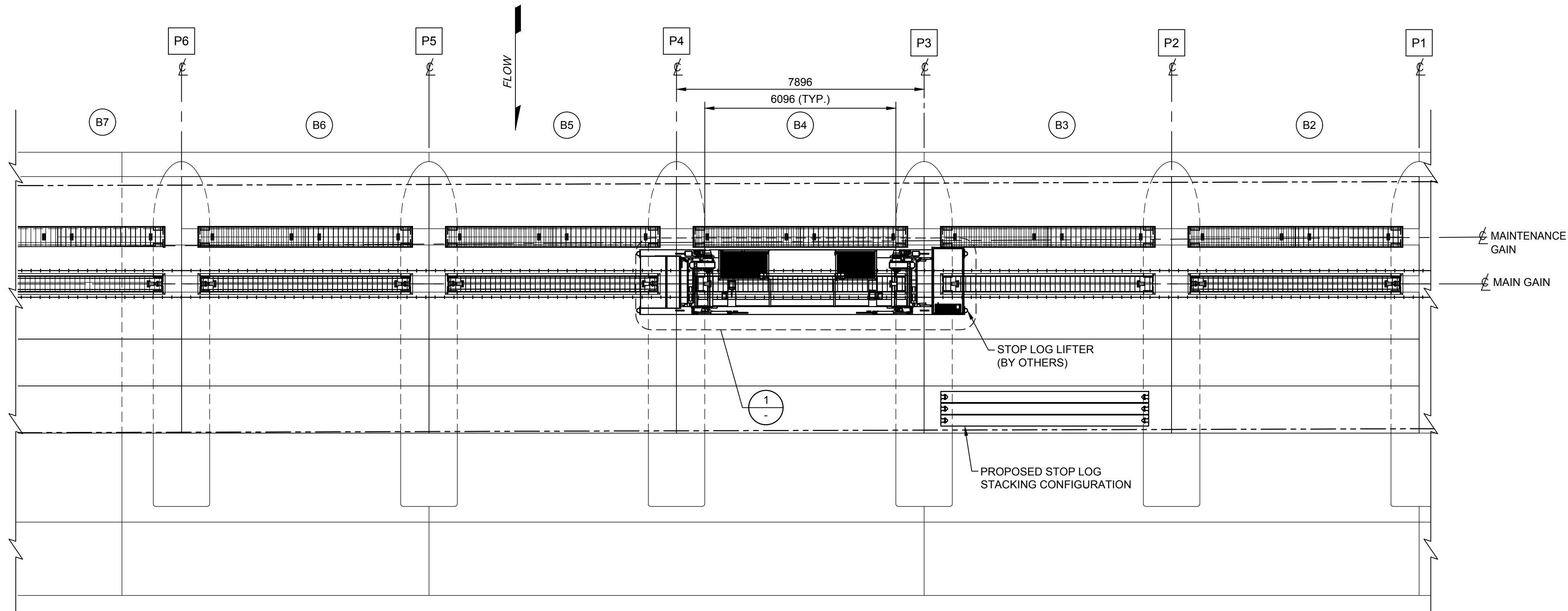
Sign Schedule (SIGNS PROVIDED BY PARKS CANADA, CONTRACTOR TO INSTALL)							
SIGN IMAGE	SIGN DESIGNATION	SIZE (mm)	MATERIAL	QUANTITY	LOCATION	MESSAGE	
	A1 E SEE PARKS CANADA SIGN STANDARD DRAWING G1 FOR COLORS, FONT, MATERIALS AND MANUFACTURING SPECIFICATIONS. TEXT ACCORDING TO THIS TABLE.	1220 x 1830	ALUMINUM COMPOSITE	2	AT END OF SAFETY BOOM, UPSTREAM OF DAM, BOTH ENDS REFER TO DRAWING 500	DANGER Dam Ahead Keep Out Burleigh Falls Dam In An Emergency, Call 9-1-1	
	A1 F SEE PARKS CANADA SIGN STANDARD DRAWING G1 FOR COLORS, FONT, MATERIALS AND MANUFACTURING SPECIFICATIONS. TEXT ACCORDING TO THIS TABLE.	1220 x 1830	ALUMINUM COMPOSITE	2	AT END OF SAFETY BOOM, UPSTREAM OF DAM, BOTH ENDS REFER TO DRAWING 500	DANGER Barrage devant Accès interdit Barrage de Burleigh Falls En cas d'urgence, composez le 9-1-1	
	A8 E SEE PARKS CANADA SIGN STANDARD DRAWING G1 FOR COLORS, FONT, MATERIALS AND MANUFACTURING SPECIFICATIONS. TEXT ACCORDING TO THIS TABLE.	1220 x 1830	ALUMINUM COMPOSITE	1	DOWNSTREAM OF DECK AT PIER 11 REFER TO DRAWING 500	DANGER Dam Outflow Keep Out Burleigh Falls Dam In An Emergency, Call 9-1-1	
	A8 F SEE PARKS CANADA SIGN STANDARD DRAWING G1 FOR COLORS, FONT, MATERIALS AND MANUFACTURING SPECIFICATIONS. TEXT ACCORDING TO THIS TABLE.	1220 x 1830	ALUMINUM COMPOSITE	1	DOWNSTREAM OF DECK AT PIER 10 REFER TO DRAWING 500	DANGER Zone de décharge du barrage Accès interdit Barrage de Burleigh Falls En cas d'urgence, composez le 9-1-1	
	G4 SEE PARKS CANADA SIGN STANDARD DRAWING G4 FOR COLORS, FONT, MATERIALS AND MANUFACTURING SPECIFICATIONS. TEXT ACCORDING TO THIS TABLE.	660 x 610	ALUMINUM COMPOSITE	2	AT BOTH ENDS OF DECK REFER TO DRAWING 500	Burleigh Falls Dam  HWY 28, Trent Lakes, On	
	G5 SEE PARKS CANADA SIGN STANDARD DRAWING G5 FOR COLORS, FONT, MATERIALS AND MANUFACTURING SPECIFICATIONS. TEXT ACCORDING TO THIS TABLE.	200 x 500	ALUMINUM COMPOSITE	4	ON GUARDRAILS AT BOTH LADDERS 2 ON UPSTREAM FACE OF DECK AT PIER 4 AND 8 REFER TO DRAWING 500	This ring may SAVE A LIFE. Do not abuse	Cette bouée pourrait SAUVER UNE VIE. N'en abusez pas.



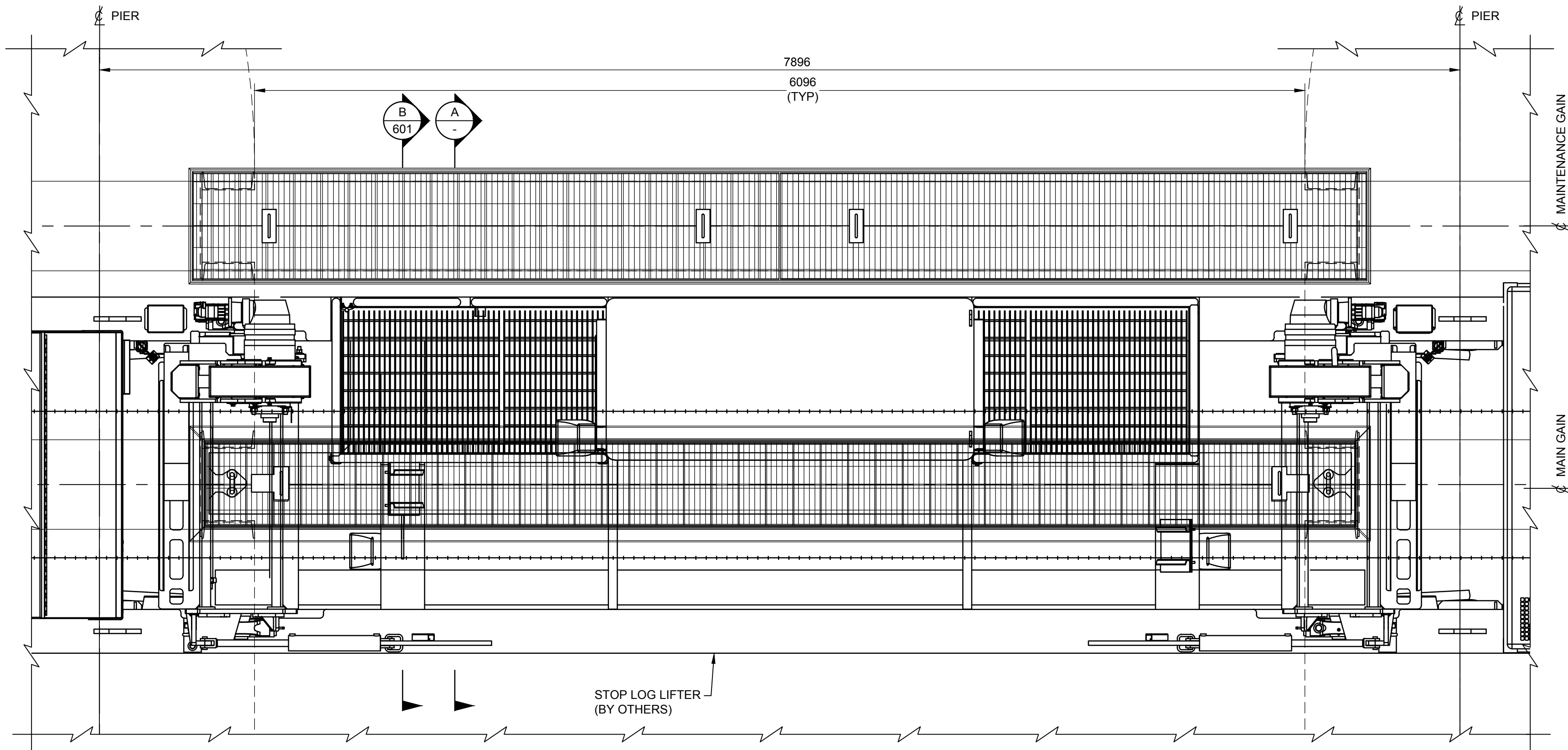
STANDARD 762 LIFE RING, SIGN AND  
LINE THROW BAG MOUNTING TYPICAL DETAILS



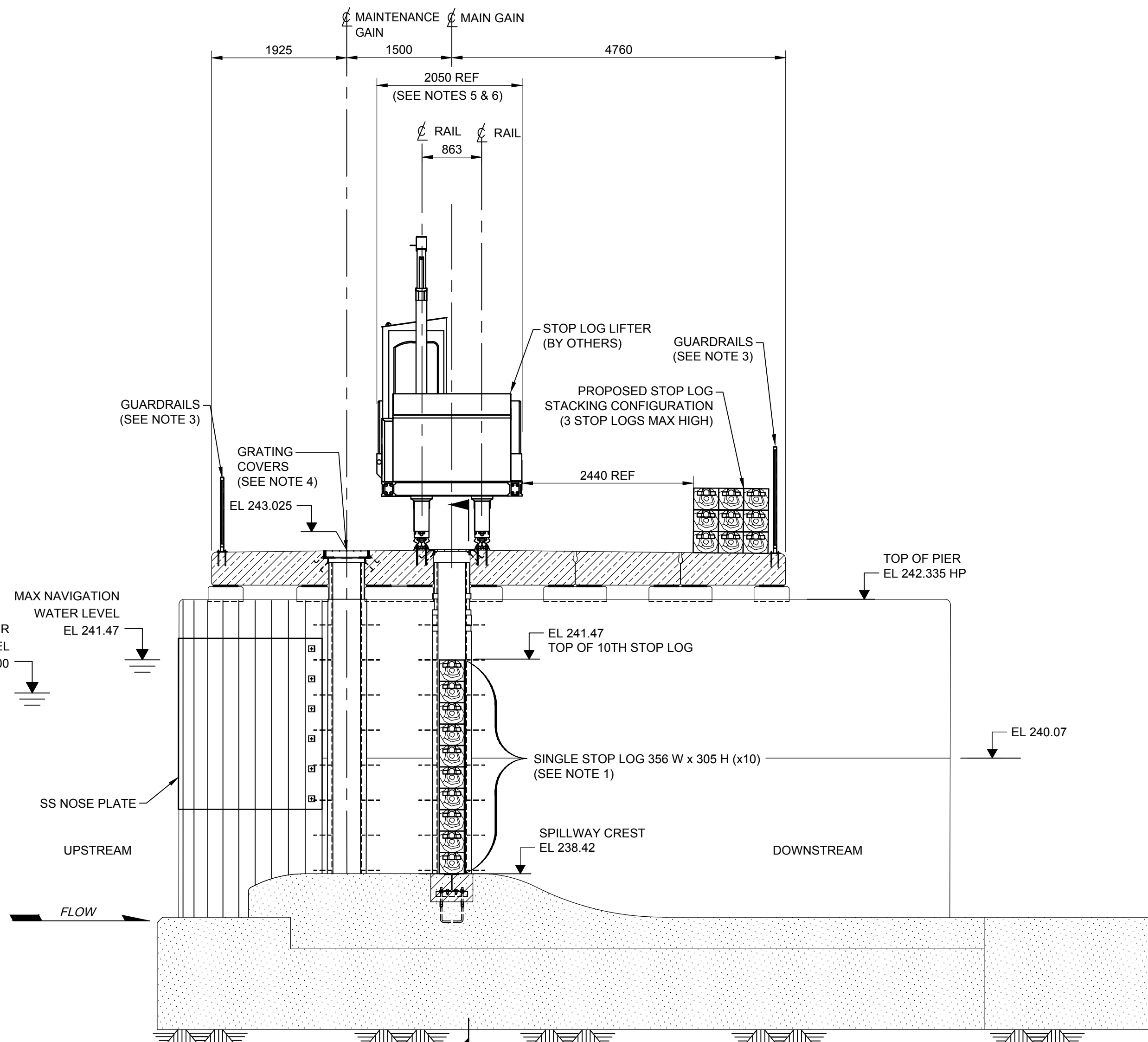




PLAN VIEW  
1:100



DETAIL  
1:20



SECTION  
1:50

Contract No.	Drawing Code	Serial	Rev.
HS00243	210 41DD	0600	0

NOTES:

- FOR STOP LOG DIMENSIONS AND LIFTING BOLT DETAILS SEE STOP LOG SPECIFICATION AND MECHANICAL DRAWING 602.
- FOR MORE DETAILS REGARDING GAINS DIMENSIONS SEE CIVIL AND METALS DRAWINGS.
- FOR DETAILS REGARDING GUARDRAILS SEE METALS DRAWINGS.
- FOR DETAILS REGARDING GRATING, COVERS AND RAILS, SEE METALS DRAWINGS.
- STOP LOG LIFTER WIDTH FOR REFERENCE ONLY.
- BEFORE FINAL DETAILED DESIGN, REFERENCED DIMENSIONS SHALL BE VERIFIED BY THE CONTRACTOR.

No.	Description	By	Date
0	FOR TENDER	Y.B	05/13/2020

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

Professional Stamp

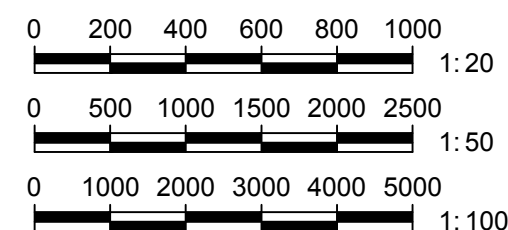
Project title / Titre du projet

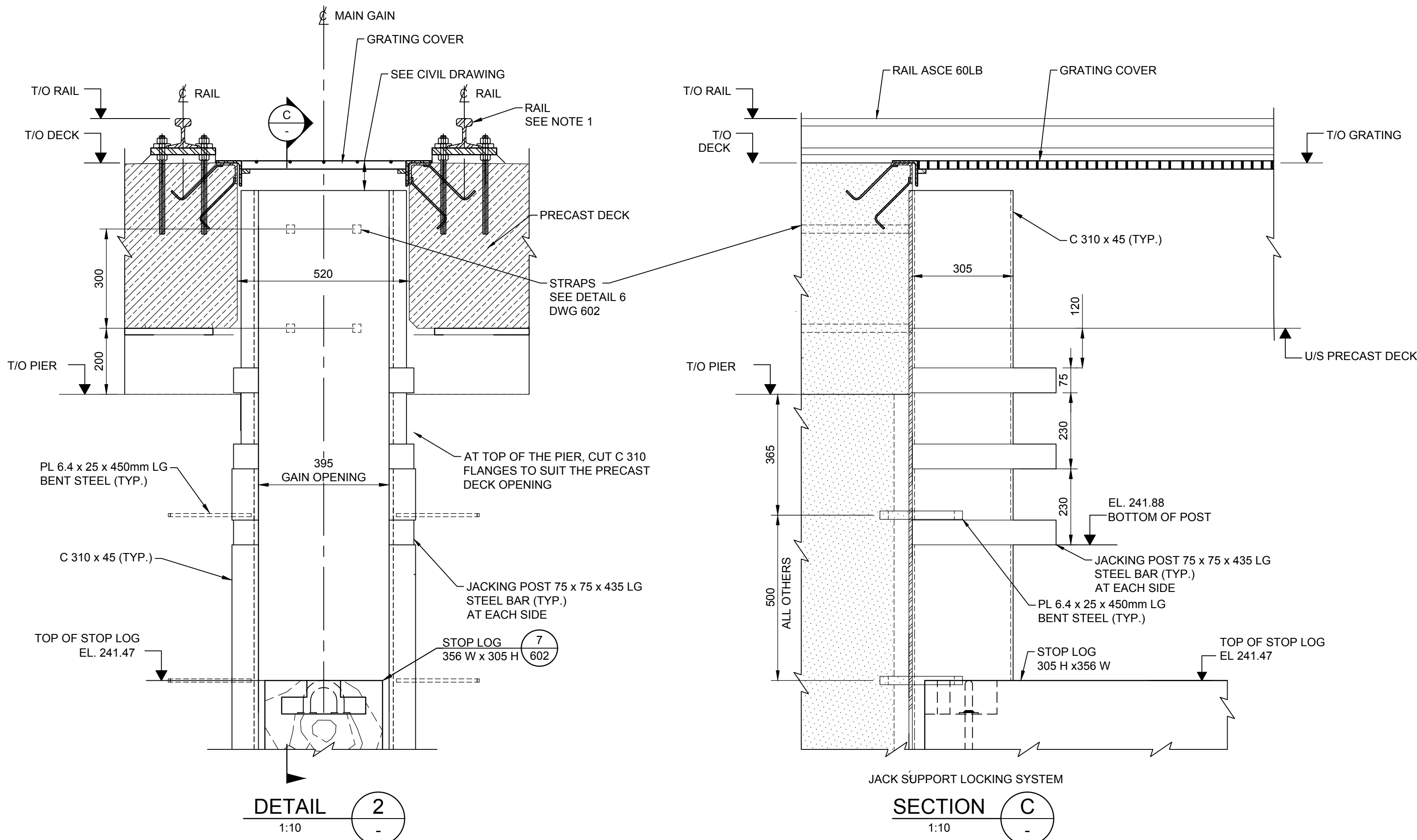
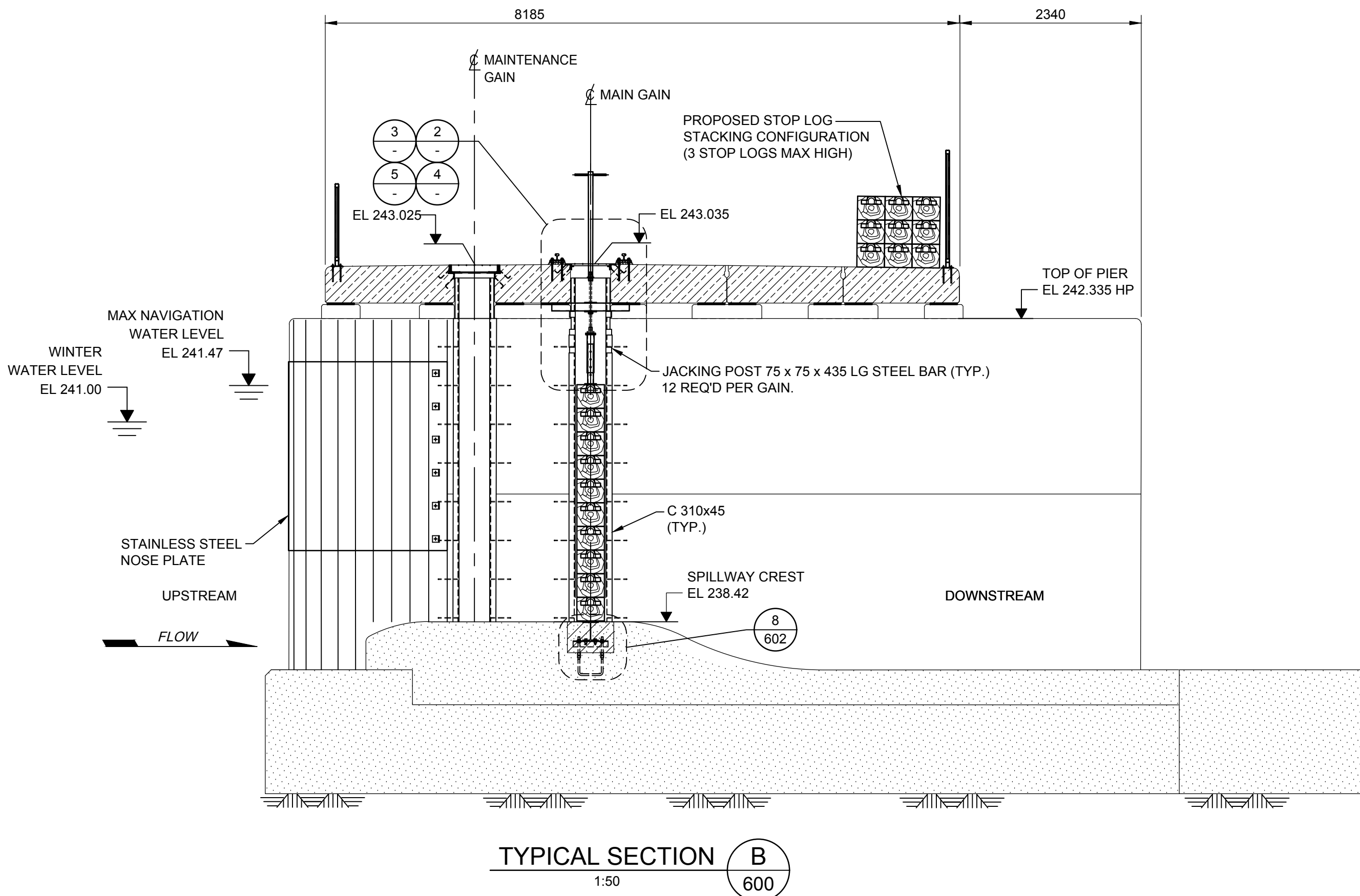
TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

Drawing title / Titre du dessin

MECHANICAL  
STOP LOG LIFTER  
PLAN, SECTION AND DETAIL

Drawn by / Dessiné par I. ZIECK	Designed by / Conçu par M. SAIDOU P.Eng.
Verified by / Vérifié par Y. BERTON P.Eng.	Approved by / Approuvé par S. VITTECOQ P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number / Numéro du Dessin 600
Project Number / Numéro du projet R.076951.705	Sheet Feuille of de





STOP LOG GAINS EMBEDDED PARTS INSTALLATION TOLERANCES:

- E. CENTRELINE POSITION OF TOP GUIDE TO BE WITHIN  $\pm 3\text{mm}$  OF SPECIFIED POSITION ON DRAWINGS.
- F. MAXIMUM DEVIATION FROM TRUE VERTICALITY FOR THE OVERALL HEIGHT : 5mm IN EACH DIRECTION PERPENDICULAR TO FLOW, 3mm IN DIRECTION PARALLEL TO FLOW, FOR EACH FACE, ANYWHERE ALONG THE HEIGHT.
- G. SILL BEAM:
- LEVEL : MAXIMUM VERTICAL DEVIATION OF  $\pm 3\text{mm}$  OVER FULL LENGTH.
  - STRAIGHTNESS :  $\pm 1\text{mm}$  ON 1800mm STRAIGHT EDGE.
- H. DISTANCE BETWEEN LATERAL FACES OF GUIDES ACROSS ONE PASSAGE : NOMINAL DISTANCE  $\pm 10\text{mm}$ , ANYWHERE ALONG THE HEIGHT.
- I. BRACING DURING CONCRETE POUR BY CONTRACTOR.

Contract No.	Drawing Code	Serial	Rev.
HS00243	210 41DD	0601	0

NOTES:

- FOR RAIL DETAILS SEE CIVIL AND METALS DRAWINGS.
- FOR GRATING AND COVERS DETAILS AND ALL CONCRETE ELEVATIONS, SEE CIVIL AND METALS DRAWINGS.
- FOR STAINLESS STEEL NOSING AND GAINS SEE CIVIL DRAWINGS.
- BEFORE FINAL DETAILED DESIGN, REFERENCED DIMENSIONS SHALL BE VERIFIED BY THE CONTRACTOR.
- QUANTITY = 2 STOP LOG PINNING MECHANISM PER SLUICE (ONE AT EACH SIDE ON THE DOWNSTREAM LOCATION).
- ALL EMBEDDED PARTS TO BE HOT-DIP GALVANIZED.

No.	Description	By Par	Date
0	FOR TENDER	Y.B	05/13/2020

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

Professional Stamp

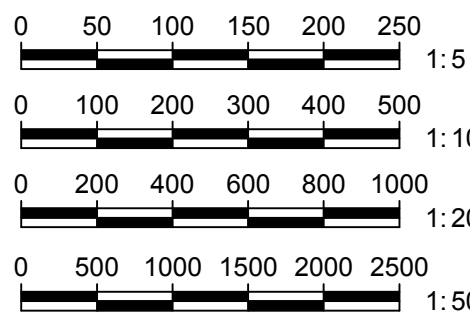
Project title / Titre du projet

TRENT-SEVERN WATERWAY  
DAM AT LOCK 25 - SAWERS CREEK  
RECONSTRUCTION

Drawing title / Titre du dessin

MECHANICAL  
GAIN EMBEDDED PARTS  
AND JACK SUPPORT  
LOCKING SYSTEM DETAILS

Drawn by / Dessiné par I. ZIECIK	Designed by / Conçu par M. SAIDOU	P.Eng.
Verified by / Vérifié par Y. BERTON	Approved by / Approuvé par S. VITTECOQ	P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number / Numéro du Dessin 601	
Project Number / Numéro du projet R.076951.705	Sheet Feuille	of de







- NOTES:
- ALL DIMENSIONS AND ELEVATIONS ARE IN METRES, UNLESS NOTED OTHERWISE.
  - ALL ELEVATIONS ARE BASED ON CANADIAN GEODETIC VERTICAL DATUM CGVD1928-1978.
  - ALL COORDINATES ARE BASED ON UTM ZONE 17, NAD83 (GRS).
  - GEOTECHNICAL INFORMATION ARE OBTAINED FROM GEOTECHNICAL SITE INVESTIGATION REPORTS BY SNCL (2018).
  - BATHYMETRIC CONTOUR LINE PROVIDED BY LVM (2016).
  - BATHYMETRIC CONTOUR LINE PROVIDED BY GPR (2017).
  - BATHYMETRIC CONTOUR LINE ESTIMATED FROM GEOPHYSICS SEISMIC SURVEY RESULTS.
  - TOPOGRAPHIC CONTOUR LINE PROVIDED BY IBI GROUP (2007).
  - TOPOGRAPHIC CONTOUR LINE PROVIDED BY GPR (2017).
  - UTILITY LOCATION PROVIDED BY PWGSC (2013).
  - THE ASSUMED GROUND PROFILE AND ASSUMED BEDROCK PROFILE ARE SHOWN FOR INFORMATION ONLY. REAL SURFACES WILL BE AT DIFFERENT ELEVATION THAN SHOWN AND WILL BE MORE ROUGH THAN SHOWN.
  - IF SOUND BEDROCK IS HIGHER THAN THE MINIMUM EXCAVATION LEVEL, EXCAVATION SHOULD CONTINUE IN SOUND ROCK UNTIL EL 236.20 (AS SHOWN) IS REACHED.
  - EXCAVATION TO SOUND BEDROCK AS DEFINED IN SECTION 31 23 16.26 - ROCK REMOVAL.
  - EXCAVATE SOIL AND LOOSE MATERIAL SHOULD BE CLEARED A 2.0 m BERM AROUND THE EXCAVATION LIMIT WITH A 50 cm WIDE OR LESS LIP CLEANING BUCKET.
  - IN THE AREA IDENTIFIED WITH A MINIMUM EXCAVATION LEVEL, IF SOUND ROCK IS FOUND UNDER THE MINIMUM EXCAVATION LEVEL, THE GAP BETWEEN THE SOUND BEDROCK AND THE MINIMUM EXCAVATION LEVEL SHOULD BE FILLED WITH CONCRETE. SEE SECTION 03 30 00 - CASTING PLACE CONCRETE.
  - EXCAVATE ROCK FAULT OR OTHER DEFAULTS AND FILL WITH DENTAL CONCRETE WERE REQUIRED AND REQUESTED.


0	FOR TENDER	M.A.B.	05/13/2020
No.	Description	By	Date

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

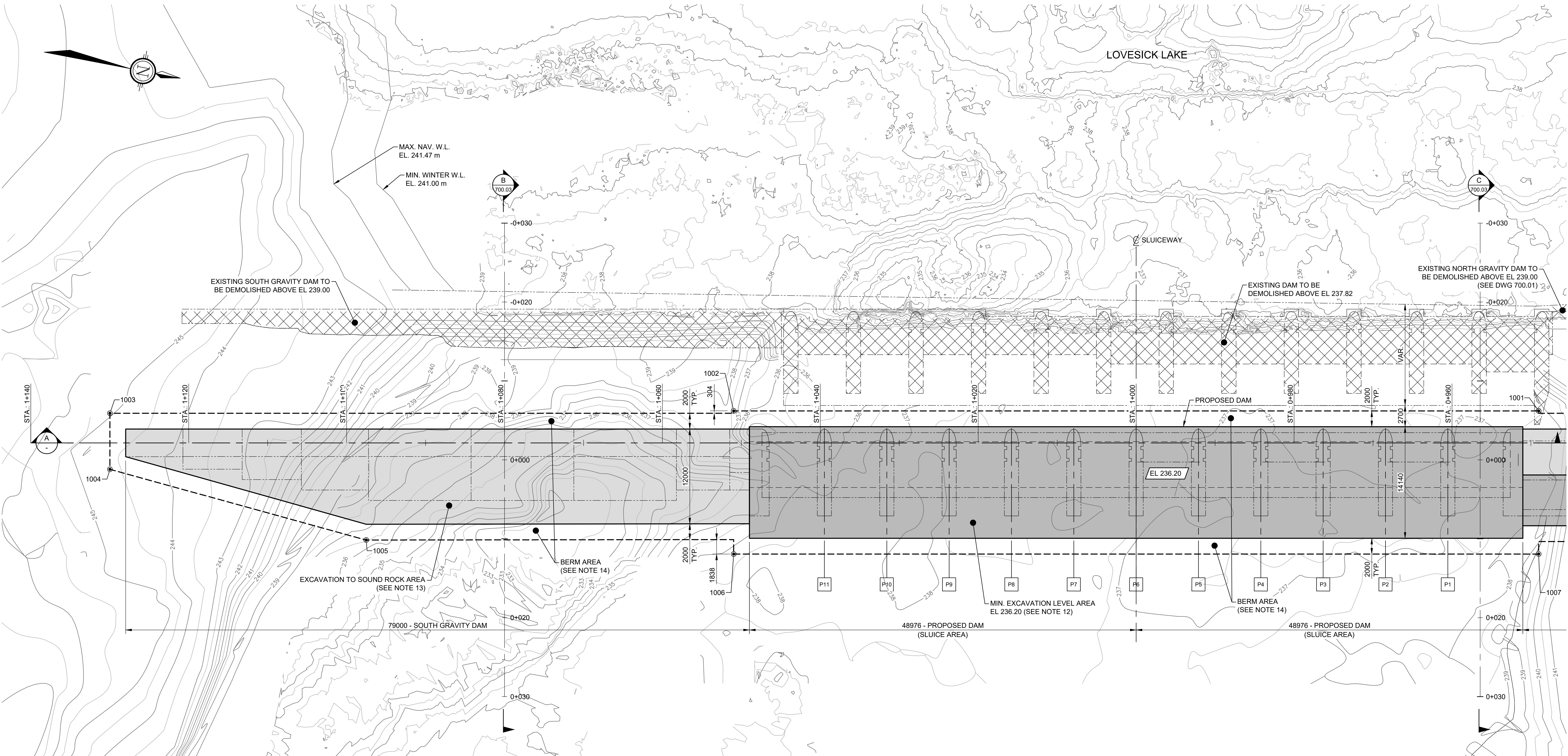
Professional Stamp

Project title / Titre du projet

TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

CIVIL  
EXCAVATION  
PLANS, ELEVATIONS  
AND SECTIONS

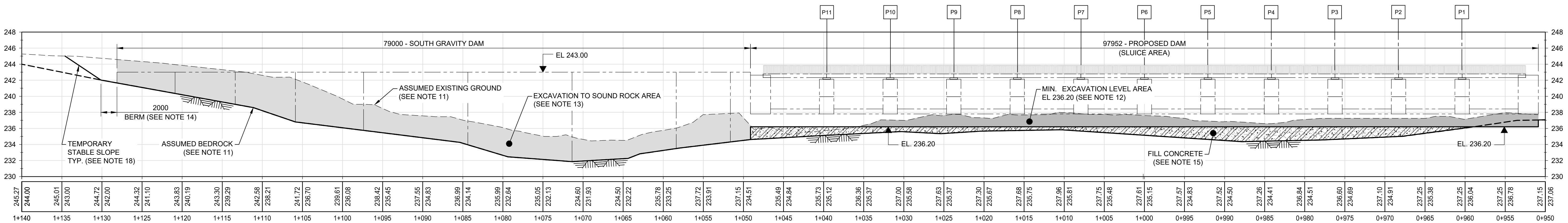
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Verified by / Vérifié par A. RANCOURT	Approved by / Approuvé par S. VITTECOQ	P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number / Numéro du Dessin 700	
Project Number / Numéro du projet R.076951.705	Sheet Feuille	1 of 3



PLAN  
1:250

Point #	Northing	Easting
1001	4 937 606.45	721 818.19
1002	4 937 506.32	721 837.38
1003	4 937 428.79	721 852.54
1004	4 937 430.13	721 859.52
1005	4 937 463.69	721 862.21
1006	4 937 509.74	721 855.19
1007	4 937 609.87	721 836.00

- LEGEND:
- MINIMUM EXCAVATION LEVEL (SEE NOTES 12)
  - EXCAVATION TO SOUND BEDROCK (SEE NOTES 13)
  - OLD DAM TO BE DEMOLISHED
  - FILL CONCRETE (SEE NOTE 15)
  - EXISTING AND PROPOSED STRUCTURE



ELEVATION A  
1:250

0 2.5 5 7.5 10 12.5  
1:250



Contract No.	Drawing Code		Serial	Rev.
HSS00243	210	41DD	0700	C

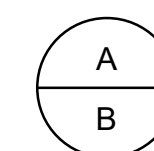
## NOTES:

1. SEE DWG 700.01 FOR NOTE 1 TO NOTE 10.
11. THE ASSUMED GROUND PROFILE AND ASSUMED BEDROCK PROFILE ARE SHOWN FOR INFORMATION ONLY. REAL SURFACES WILL BE AT DIFFERENT ELEVATION THAN SHOWN AND WILL BE MORE ROUGH THAN SHOWN.
12. IF SOUND BEDROCK IS HIGHER THAN THE MINIMUM EXCAVATION LEVEL, SOUND BEDROCK SHOULD CONTINUE IN SOUND ROCK UNTIL EL 236.20 (AS SHOWN) IS REACH.
13. EXCAVATION TO SOUND BEDROCK AS DEFINED IN SECTION 31 23 16-26 - ROCK REMOVAL.
14. EXCAVATE-SOIL AND LOOSE MATERIAL SHOULD BE CLEANED A 2.0 m BERM AROUND THE EXCAVATION LIMIT WITH A 50 CM WIDE OR LESS LP CLEANING BUCKET.
15. IN THE AREA IDENTIFIED WITH A MINIMUM EXCAVATION LEVEL, IF SOUND ROCK IS FOUND UNDER THE MINIMUM EXCAVATION LEVEL, THE GAP BETWEEN THE SOUND BEDROCK AND THE MINIMUM EXCAVATION LEVEL SHOULD BE FILLED WITH CONCRETE. SEE SECTION (03 30 00 - CASTING PLACE CONCRETE)
16. EXCAVATE ROCK FAULT OR OTHER DEFAULTS AND FILL WITH DENTAL CONCRETE WERE REQUIRED AND REQUESTED.
17. SOUTH GRAVITY DAM FOUNDATION SHOULD BE HORIZONTAL ALONG THE UPSTREAM - DOWNSTREAM AXIS. EXCAVATE ROCK BETWEEN SOUND ROCK SURFACE AND HORIZONTAL SURFACE IN THE SOUTH GRAVITY DAM FOUNDATION.
18. TEMPORARY STABLE (IF REQUIRED) TO BE DESIGNED, INSTALL AND MAINTAIN BY CONTRACTOR.

0	FOR TENDER	M.A.B.	05/13/2020
No.	Description	By Pgr	Date

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

Professional Stamp

Project title / Titre du projet

TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

Drawing title / Titre du dessin

CIVIL  
EXCAVATION  
PLANS, ELEVATIONS  
AND SECTIONS

Drawn by / Dessiné par	Designed by / Conçu par
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K. NONEN	M-A. BEAUPRÉ	P.En
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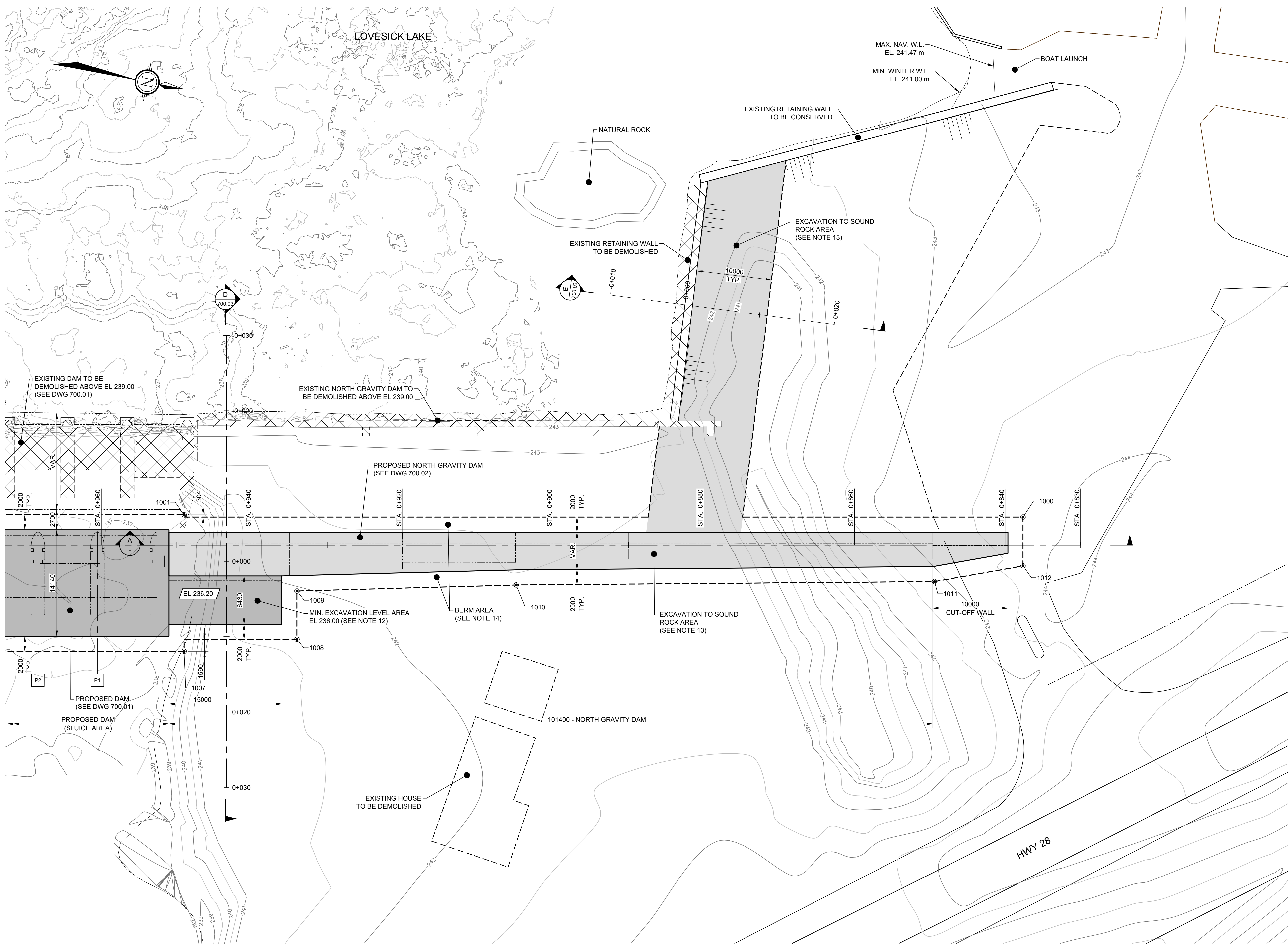
Verified by / Vérifié par	Approved by / Approuvé par
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A. RANCOURT	P.Eng.	S. VITTECOQ	P.Eng.
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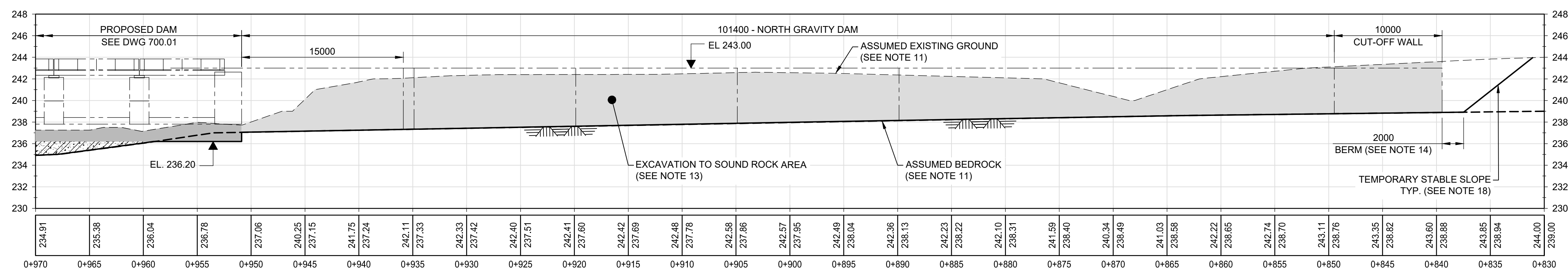
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05/13/2020	700
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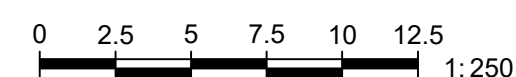
Project Number / Numéro du projet	700
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PLAN  
1:250



ELEVATION  
1:250

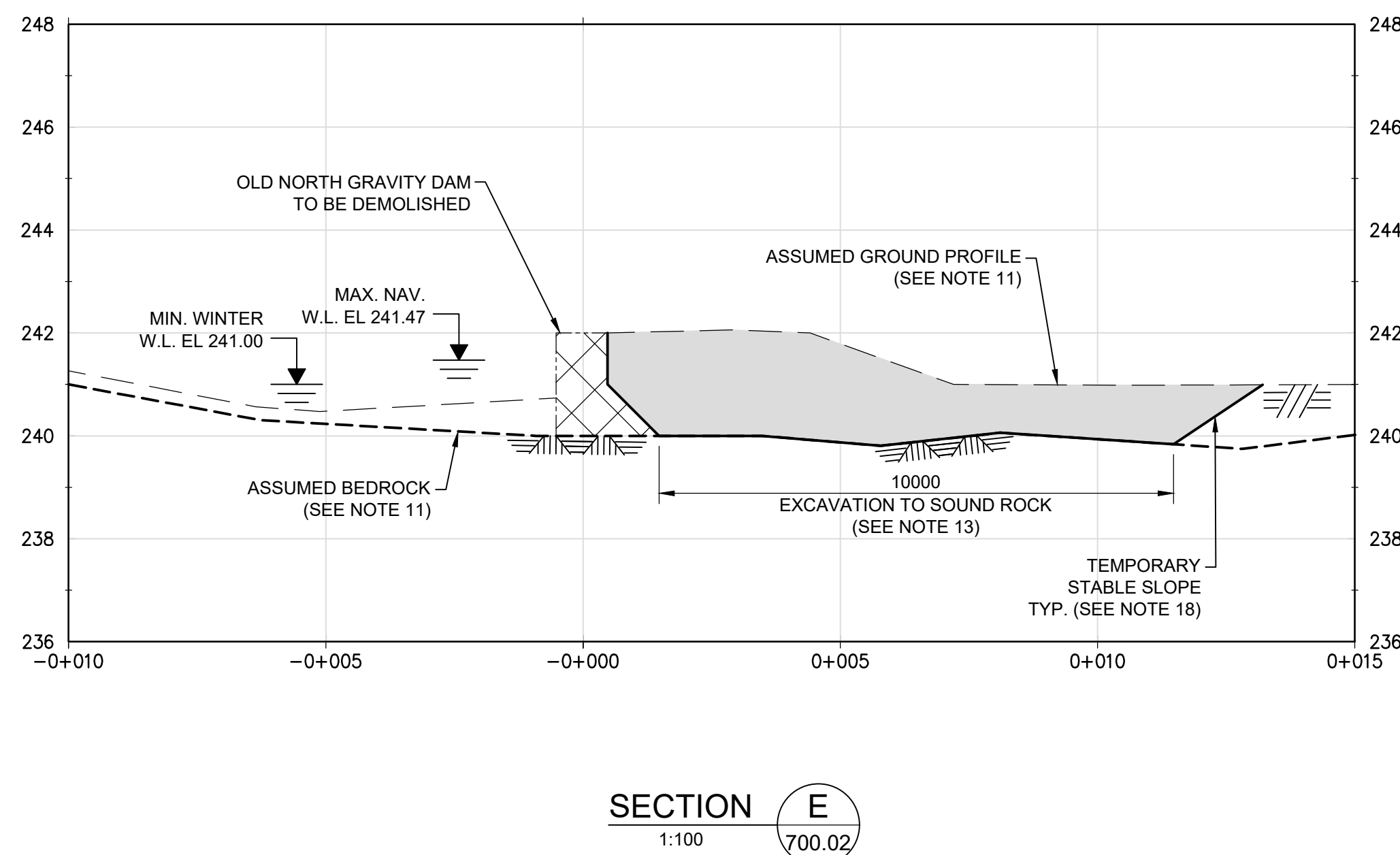
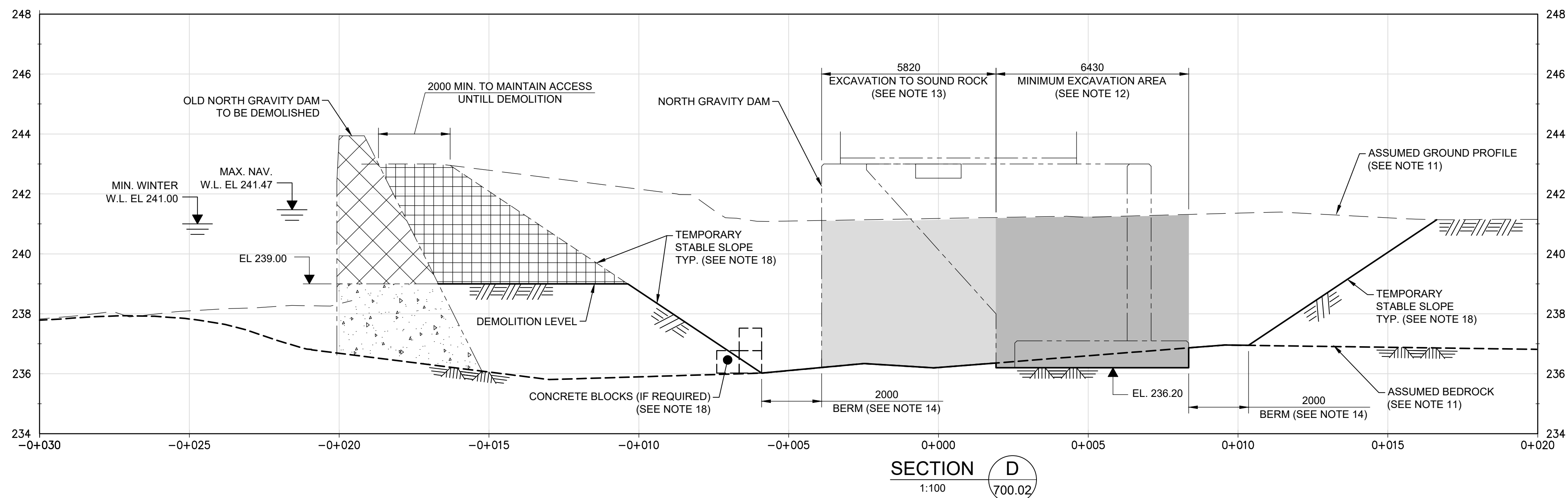
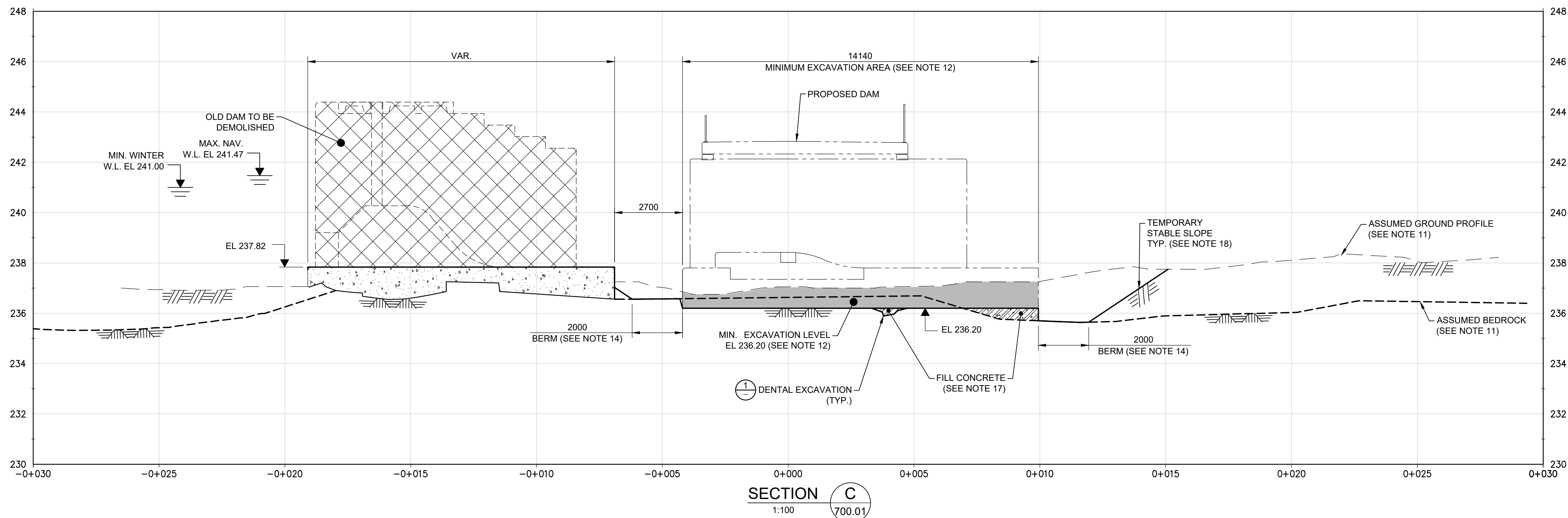
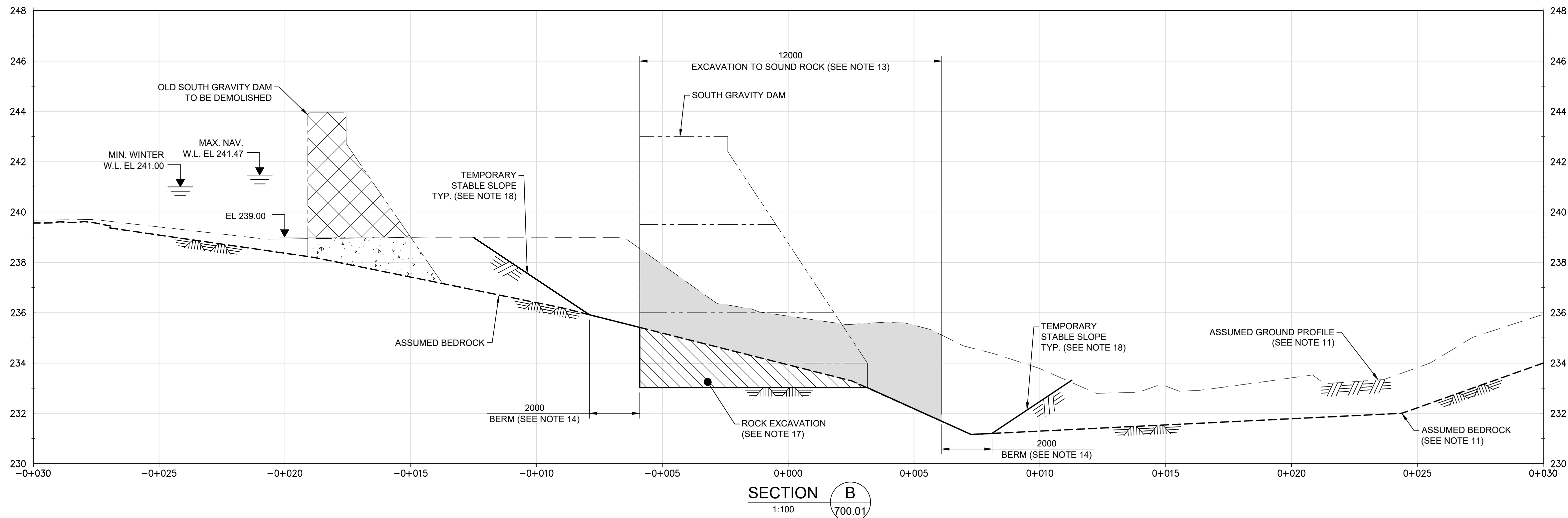
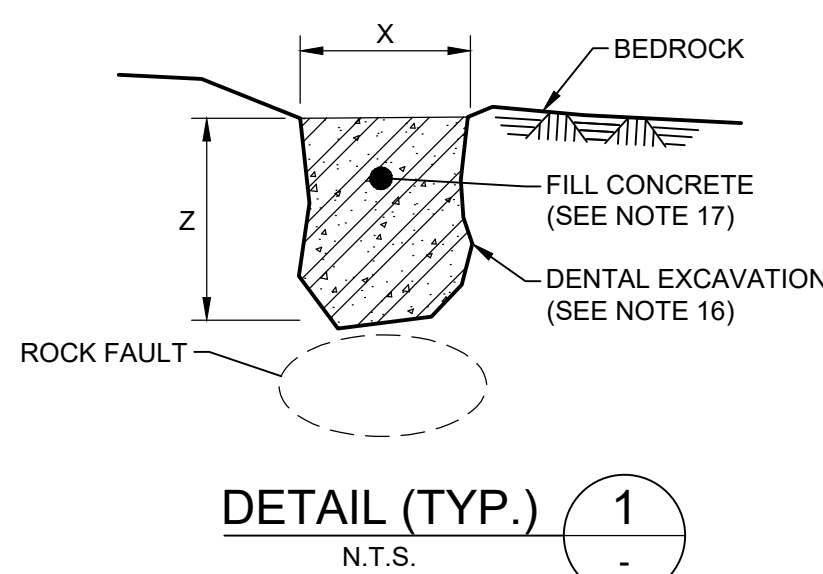
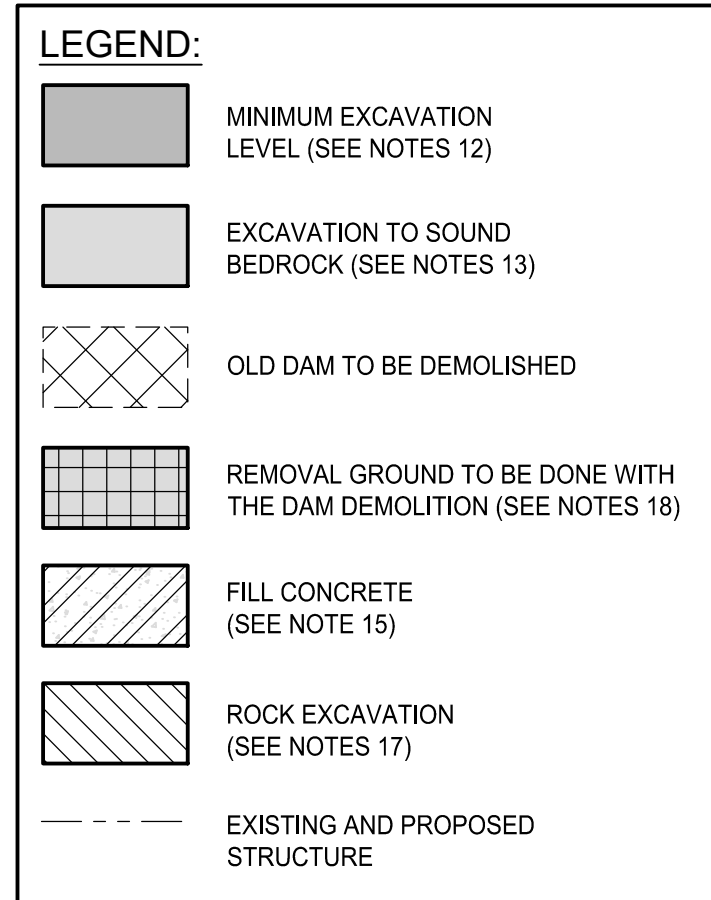




Contract No.	Drawing Code	Serial	Rev.
HSS00243	210	41DD	0700   C

NOTES:

- SEE DWG 700.01 FOR NOTE 1 TO NOTE 10.
- THE ASSUMED GROUND PROFILE AND ASSUMED BEDROCK PROFILE ARE SHOWN FOR INFORMATION ONLY. REAL SURFACES WILL BE AT DIFFERENT ELEVATION THAN SHOWN AND WILL BE MORE ROUGH THAN SHOWN.
- IF SOUND BEDROCK IS HIGHER THAN THE MINIMUM EXCAVATION LEVEL, EXCAVATION SHOULD CONTINUE IN SOUND ROCK UNTIL EL. 236.20 (AS SHOWN) IS REACH.
- EXCAVATION TO SOUND BEDROCK AS DEFINED IN SECTION 31 23 16.26 - ROCK REMOVAL.
- EXCAVATE-SOIL AND LOOSE MATERIAL SHOULD BE CLEANED A 2.0 m BERM AROUND THE EXCAVATION LIMIT WITH A 50 cm WIDE OR LESS LIP CLEANING BUCKET.
- IN THE AREA IDENTIFIED WITH A MINIMUM EXCAVATION LEVEL, IF SOUND ROCK IS FOUND UNDER THE MINIMUM EXCAVATION LEVEL, THE GAP BETWEEN THE SOUND BEDROCK AND THE MINIMUM EXCAVATION LEVEL SHOULD BE FILLED WITH CONCRETE, SEE SECTION (03 30 00 - CASTING PLACE CONCRETE)
- EXCAVATE ROCK FAULT OR OTHER DEFAULTS AND FILL WITH DENTAL CONCRETE WERE REQUIRED AND REQUESTED. DEPTH "Z" SHOULD BE EQUAL OR BIGGER THAN "X".
- SOUTH GRAVITY DAM FOUNDATION SHOULD BE HORIZONTAL ALONG THE UPSTREAM - DOWNSTREAM AXIS. EXCAVATE ROCK BETWEEN SOUND ROCK SURFACE AND HORIZONTAL SURFACE IN THE SOUTH GRAVITY DAM FOUNDATION.
- TEMPORARY STABLE EXCAVATION SLOPE AND TEMPORARY SHORING (IF REQUIRED) TO BE DESIGNED, INSTALL AND MAINTAIN BY CONTRACTOR.



No.	Description	By	Date
0	FOR TENDER	M.A.B.	05/13/2020

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

Professional Stamp

Project title / Titre du projet

TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

Drawing title / Titre du dessin

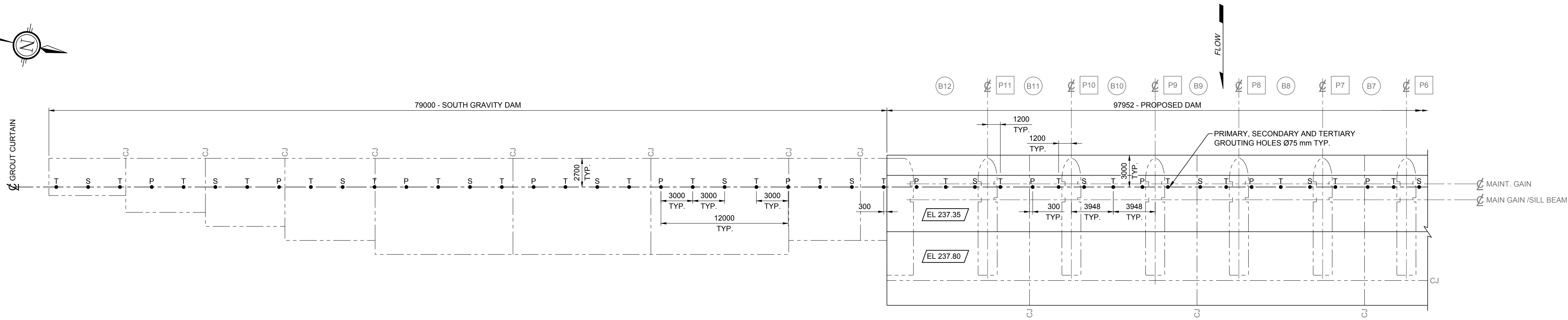
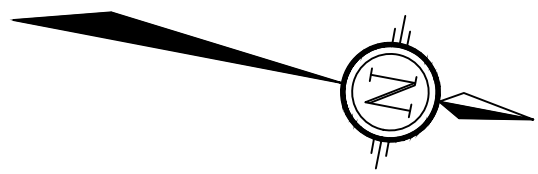
CIVIL  
EXCAVATION  
PLANS, ELEVATIONS  
AND SECTIONS

Drawn by / Dessiné par K. NONEN	Designed by / Conçu par M-A. BEAUPRÉ P.Eng.
Verified by / Vérifié par A. RANCOURT P.Eng.	Approved by / Approuvé par S. VITTECOQ P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number / Numéro du Dessin 700
Project Number / Numéro du projet R.076951.705	Sheet Feuille 3 of 3

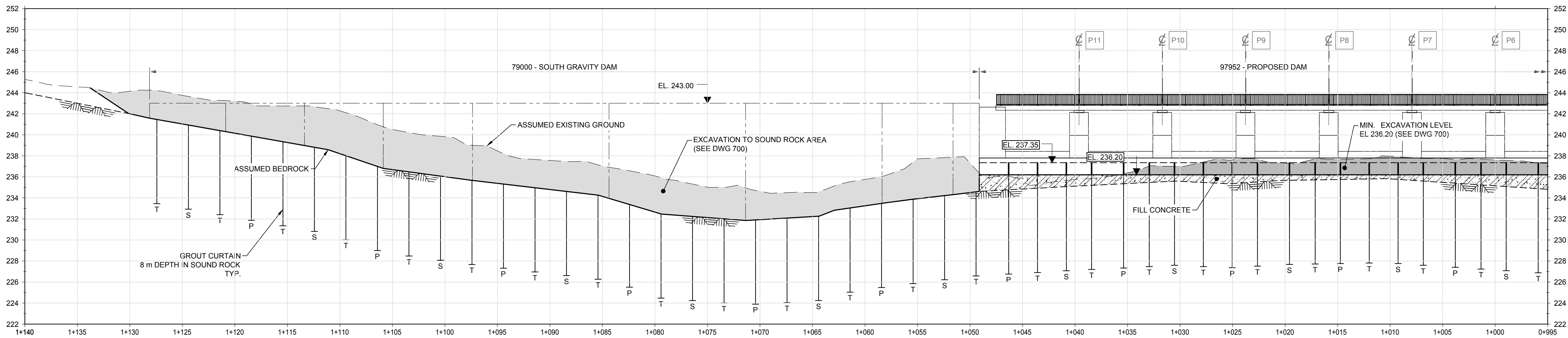


DERNIÈRE SAUVEGARDE: 2020/05/13 - 9:11am  
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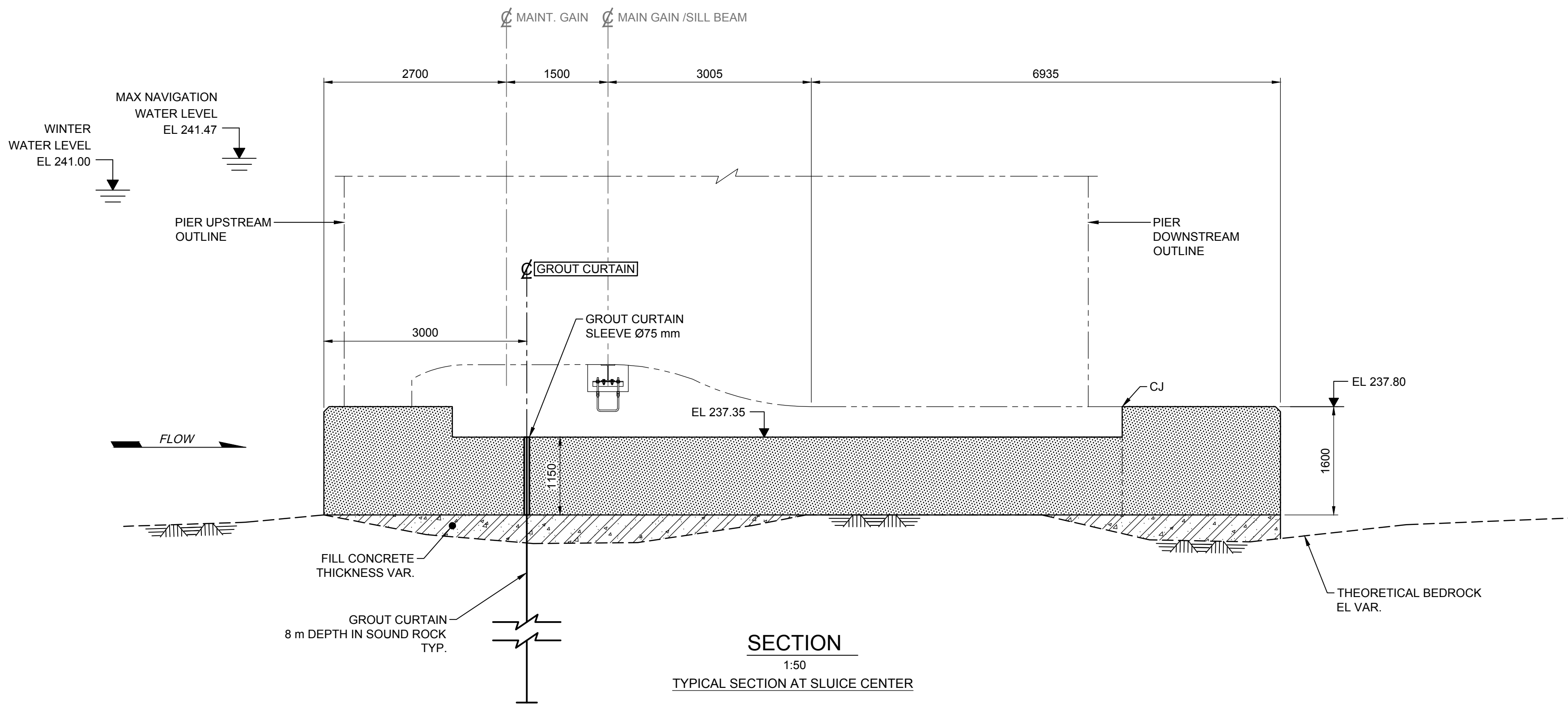
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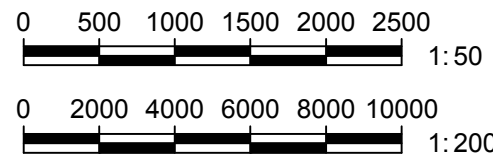
PLAN AT EL 237.80  
1:200



ELEVATION  
1:200



SECTION  
1:50  
TYPICAL SECTION AT SLUICE CENTER



Public Services and Procurement Canada  
Services publics et Approvisionnement Canada

Ontario Region  
Heritage Canals and Engineering Works  
Région de l'Ontario  
Canaux historiques et travaux d'ingénierie

Parks  
Canada

Canada

CIMA+

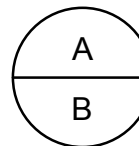
Contract No.	Drawing Code	Serial	Rev.
HSS00243	210	41DD	1701 0

- NOTES:
- ALL DIMENSIONS AND ELEVATIONS ARE IN METRES, UNLESS NOTED OTHERWISE.
  - ALL ELEVATIONS ARE BASED ON CANADIAN GEODETIC VERTICAL DATUM CGVD1928-1978.
  - ALL COORDINATES ARE BASED ON UTM NAD83 (CSRS).
  - GEOTECHNICAL INFORMATION ARE OBTAINED FROM GEOTECHNICAL SITE INVESTIGATION REPORTS BY SNCL (2018).
  - BATHYMETRIC CONTOUR LINE PROVIDED BY LVM (2016).
  - BATHYMETRIC CONTOUR LINE PROVIDED BY GPR (2017).
  - BATHYMETRIC CONTOUR LINE ESTIMATED FROM GEOPHYSICS SEISMIC SURVEY RESULTS.
  - TOPOGRAPHIC CONTOUR LINE PROVIDED BY IBI GROUP (2007).
  - TOPOGRAPHIC CONTOUR LINE PROVIDED BY GPR (2017).
  - UTILITY LOCATION PROVIDED BY PWGSC (2013).
  - THE ASSUMED GROUND PROFILE AND ASSUMED BEDROCK PROFILE ARE SHOWN FOR INFORMATION ONLY. REAL SURFACES WILL BE AT DIFFERENT ELEVATION THAN SHOW AND WILL BE MORE ROUGH THAN SHOW.
  - GROUTING SHOULD BE DONE TROUGH GROUTING SLEEVE IN THE SLUICE AREA WHEN CONCRETE REACH 20 MPa OR MORE.

No.	Description	M.A.B.	05/13/2020
0	FOR TENDER	By	Date

Revision / Révision

Do not scale drawings.  
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Departmental Representative of all discrepancies.



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

Professional Stamp

Project title / Titre du projet

TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

Drawing title / Titre du dessin

CIVIL  
GROUTING LAYOUT  
PLANS, ELEVATIONS  
AND SECTIONS

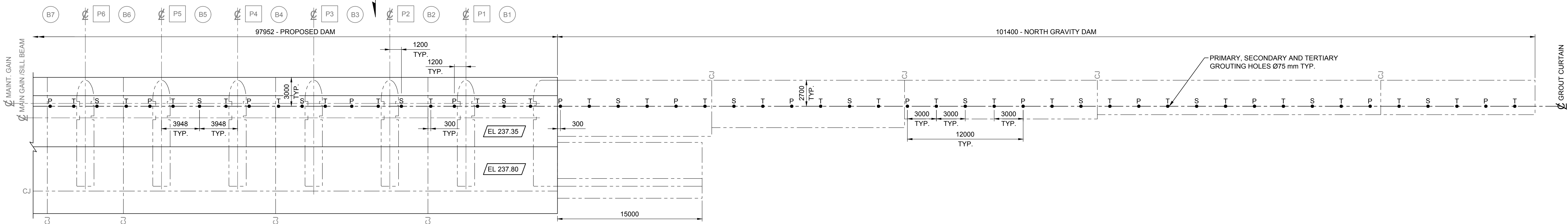
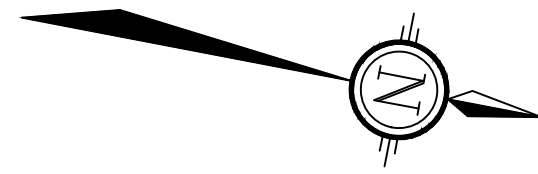
Drawn by / Dessiné par	Designed by / Conçu par
A. GUÉRIN-H.	M-A. BEAUPRÉ P.Eng.

Verified by / Vérifié par	Approved by / Approuvé par
A. RANCOURT P.Eng.	S. VITTECOQ P.Eng.

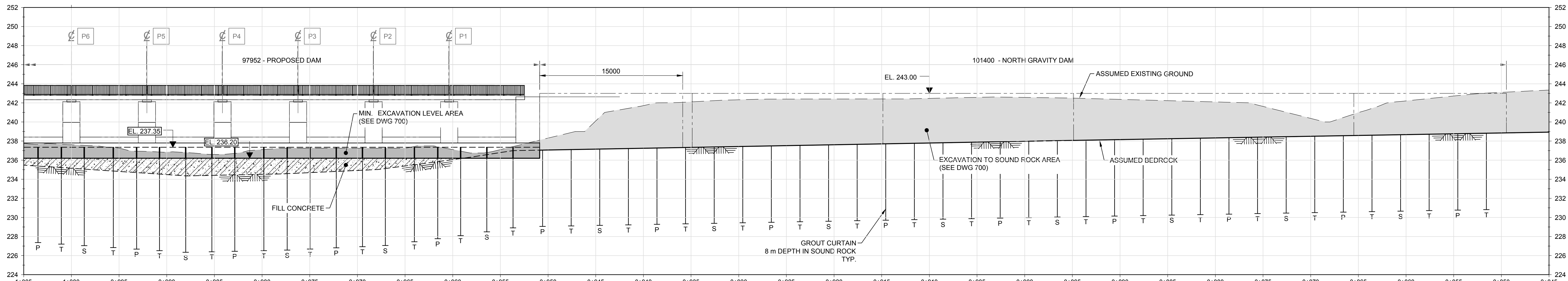
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05/13/2020	701

Project Number / Numéro du projet	Sheet / Feuille
R.076951.705	1 of 2

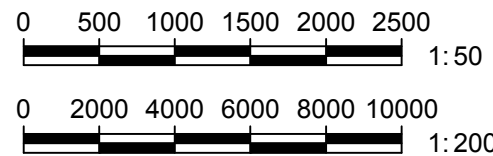
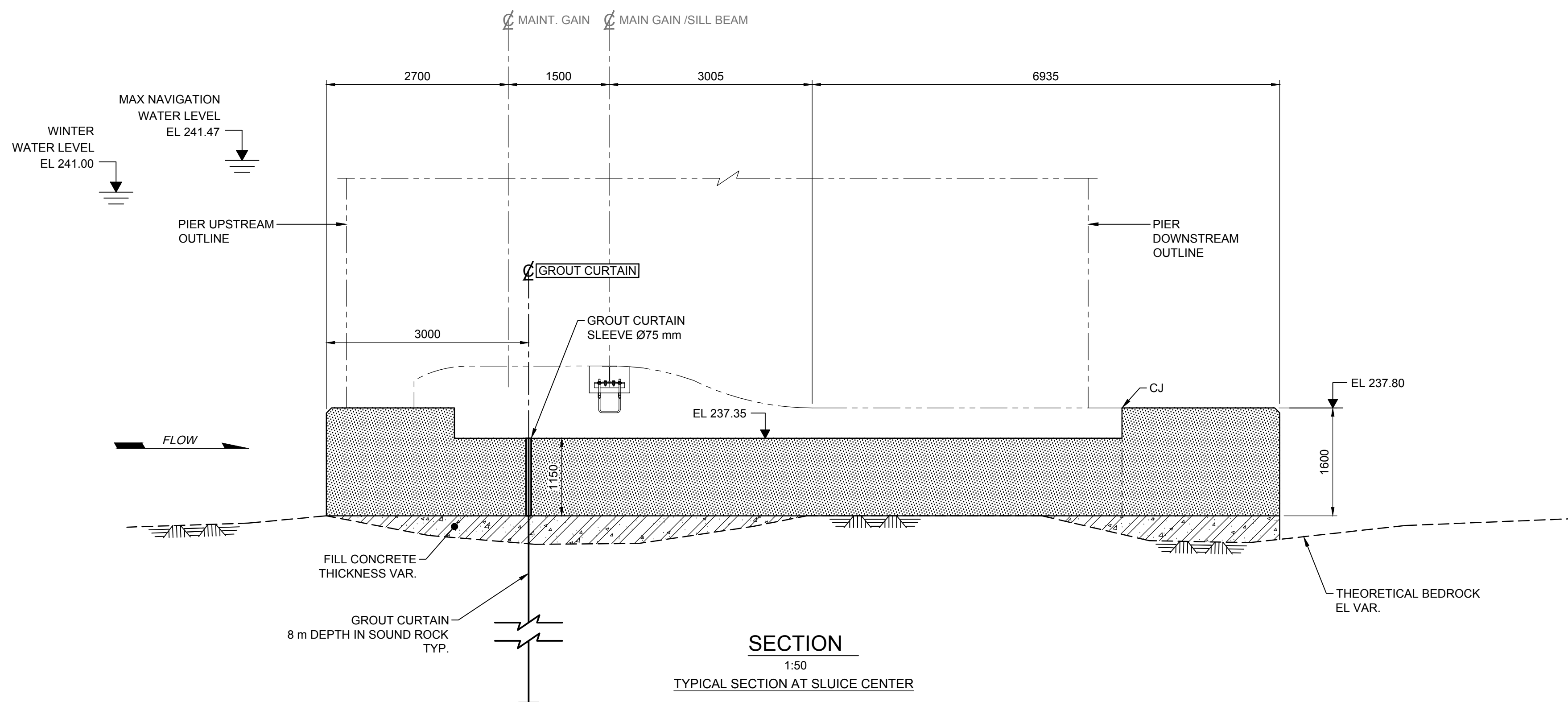
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PLAN AT EL 237.80  
1:200



ELEVATION  
1:200



Contract No.	Drawing Code	Serial	Rev.
HSS00243	210 41DD	2701	0

NOTES:  
1. SEE SHEET 1 FOR NOTES.

No.	Description	M.A.B.	05/13/2020
0	FOR TENDER	By	Date

Revision / Révision  
Do not scale drawings.  
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A	A Detail number Numéro du détail
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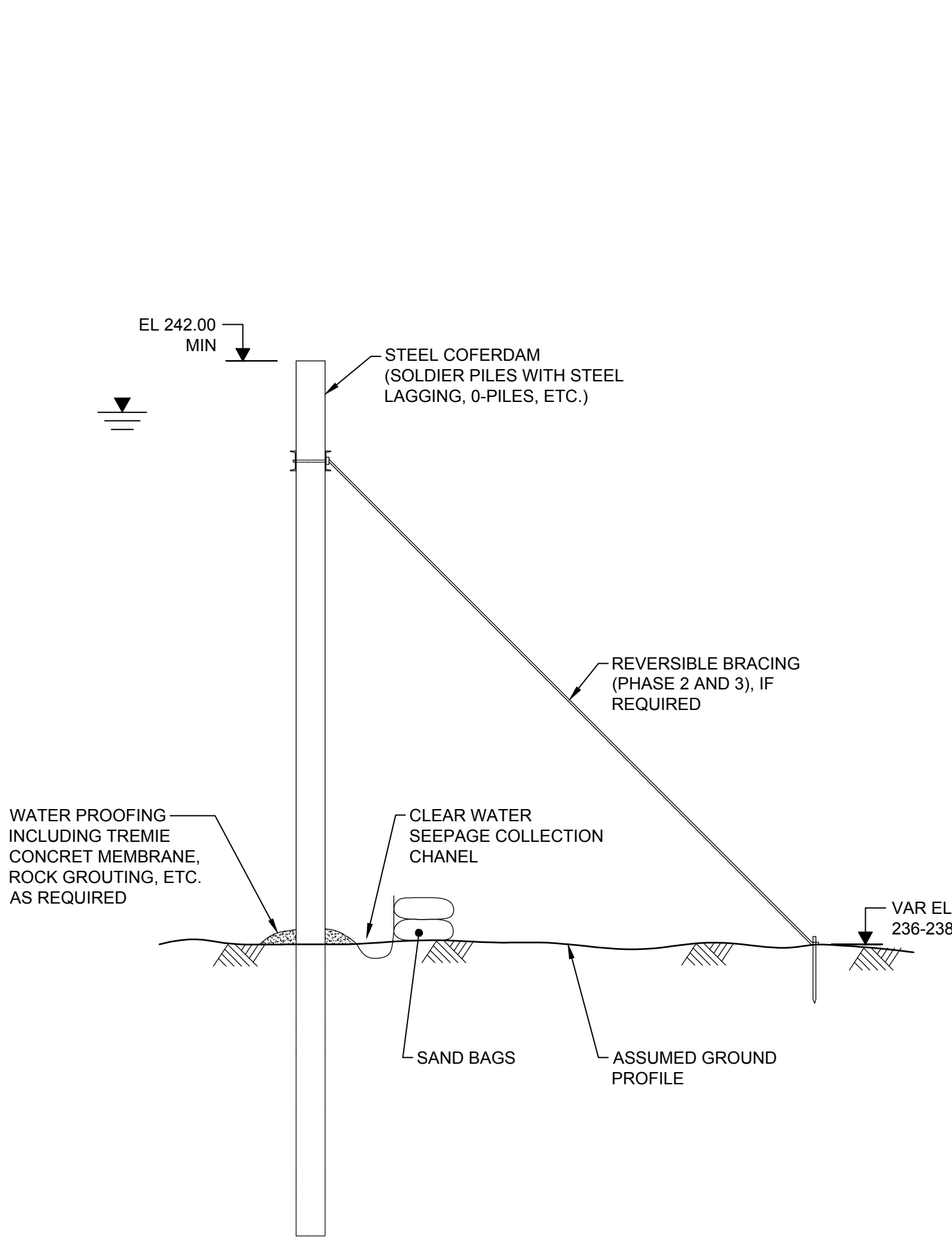
TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

Drawing title / Titre du dessin

CIVIL  
GROUTING LAYOUT  
PLANS, ELEVATIONS  
AND SECTIONS

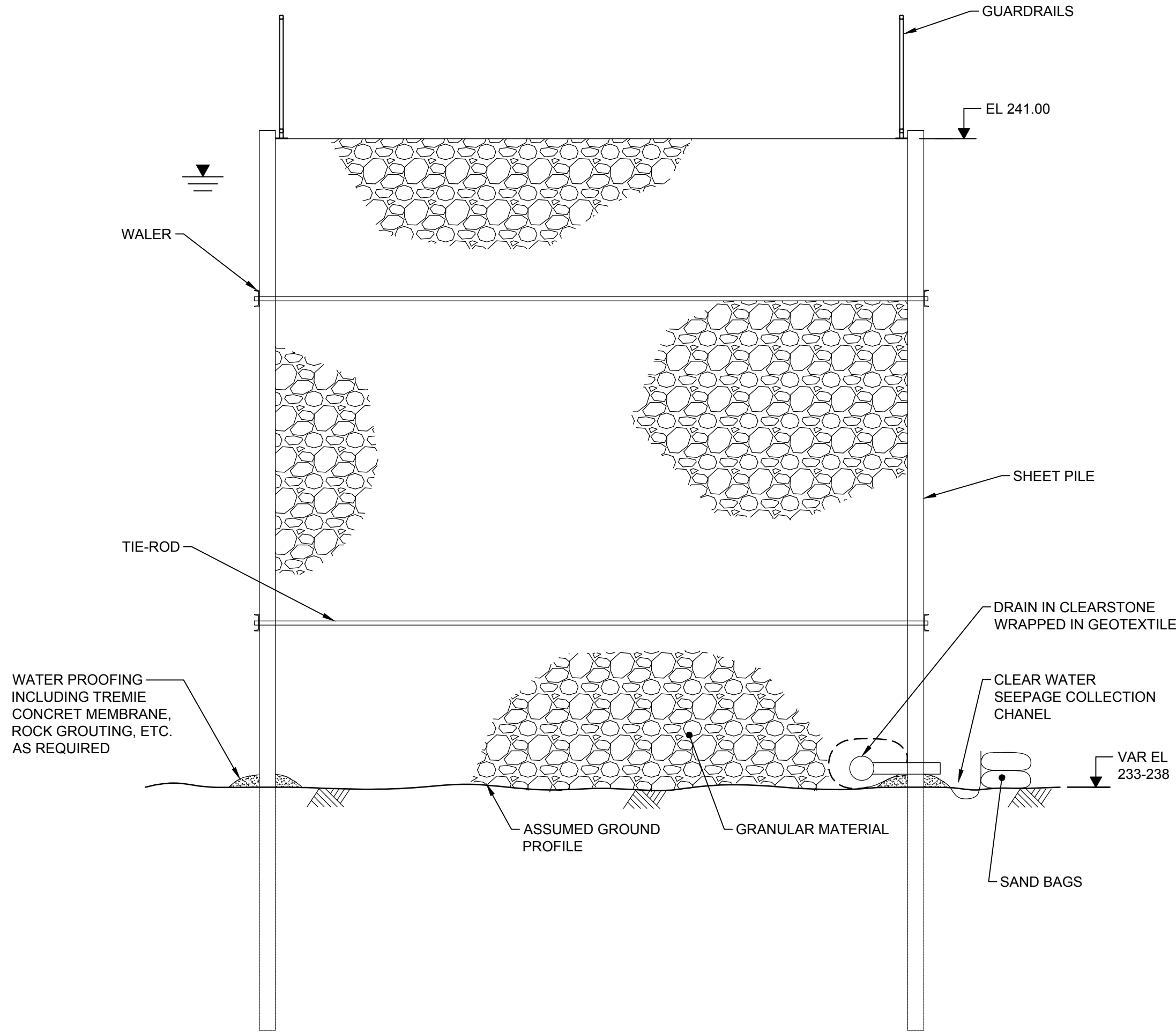
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Verified by / Vérifié par A. RANCOURT P.Eng.	Approved by / Approuvé par S. VITTECOQ P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number / Numéro du Dessin 701
Project Number / Numéro du projet R.076951.705	Sheet Feuille 2 of 2





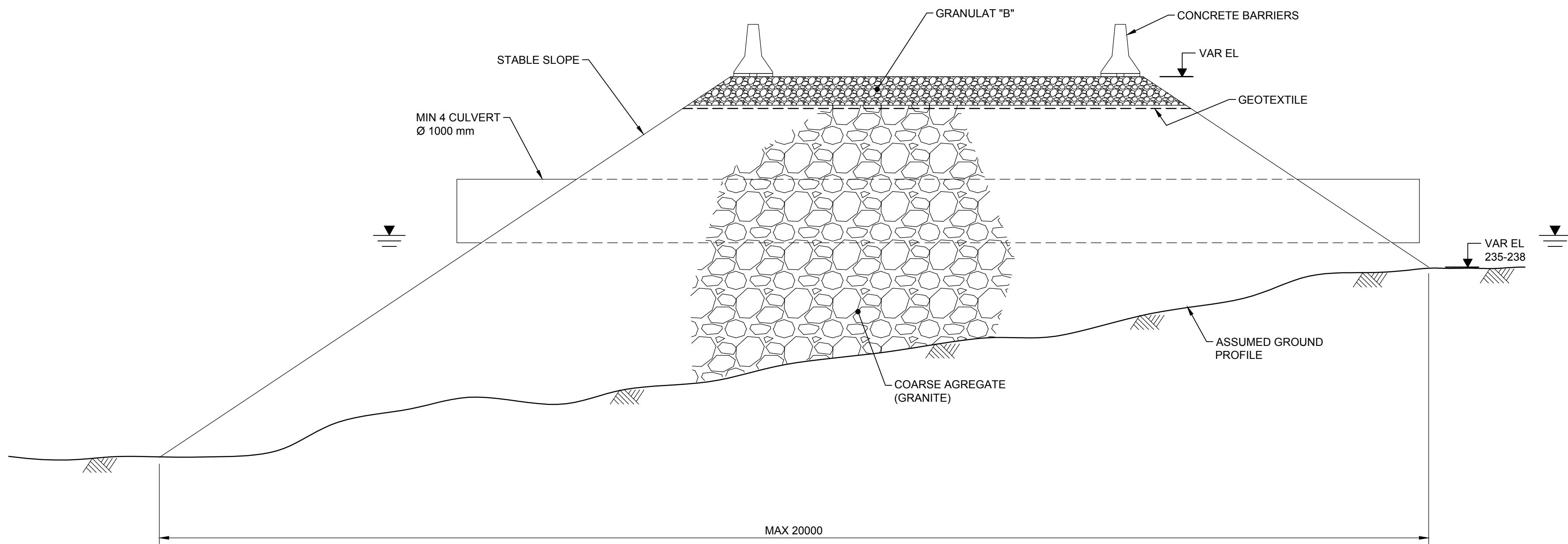
CONCEPTUAL STEEL COFFERDAM  
(PARALLEL TO FLOW)

1:50



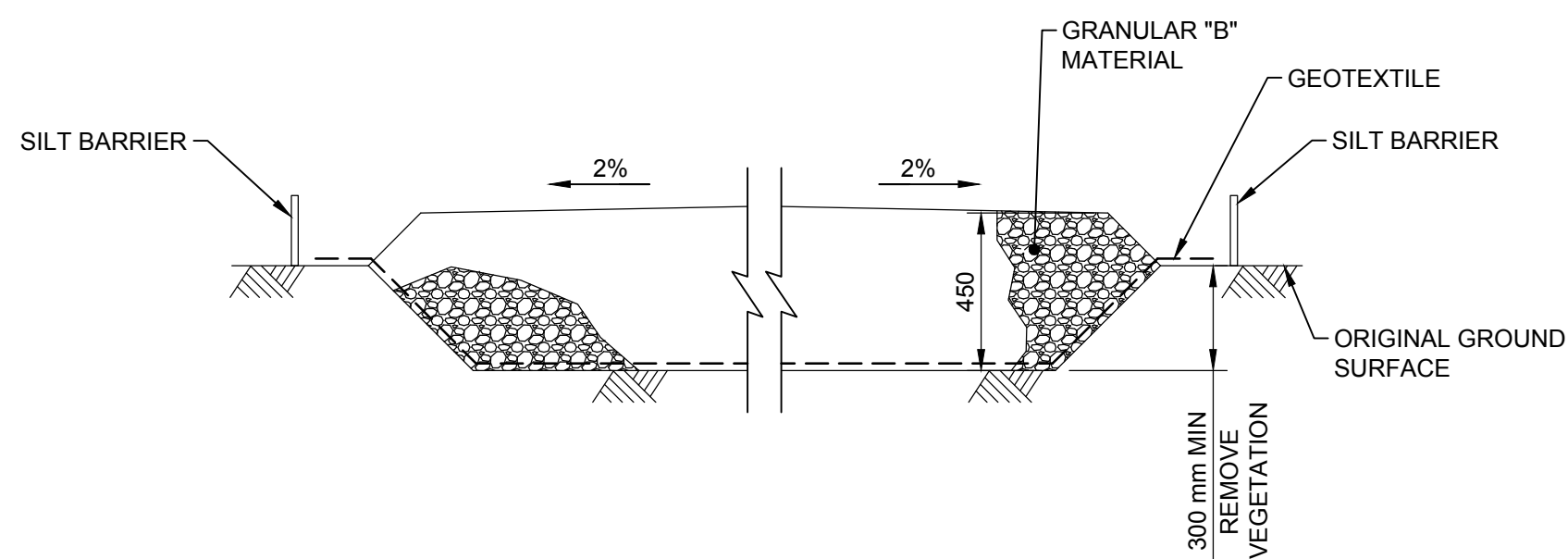
CONCEPTUAL CAISSON COFFERDAM  
(PERPENDICULAR TO FLOW)

1:50



CONCEPTUAL IN-WATER  
TEMPORARY ACCES ROAD

1:50



TEMPORARY STAGING / LAYDOWN AREA  
AND ACCES ROADS CROSS SECTION

1:20



Contract No.	Drawing Code	Serial	Rev.
HS00243	210	41DD	0207   0

- NOTES:
- RECHARGE TEMPORARY LAYDOWN/STAGING AREAS AND TEMPORARY ACCESSES AS NEEDED TO AVOID RUTS AND POOLING.
  - CLEAR VEGETATION, GRUB AND EXCAVATE A MINIMUM OF 300MM OF SOIL PRIOR TO INSTALLING LAYDOWN/STAGING AREAS OR TEMPORARY ACCESSES.
  - IF BACKFILLING IS REQUIRED FOR STAGING/LAYDOWN AREAS OR TEMPORARY ACCESSES, CLEAR VEGETATION, GRUB AND EXCAVATE A MINIMUM OF 300MM OF SOIL PRIOR TO BACKFILLING WITH MATERIAL EXEMPT OF ORGANIC MATERIAL AND CONTAMINANTS. TEMPORARY BACKFILLING CAN BE CONDUCTED WITH RE-USED MATERIAL FORM SITE IF ADEQUATE.
  - ENSURE EFFICIENT DRAINAGE AND EROSION CONTROL.
  - FINAL DESIGN OF TEMPORARY WORK IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AS DESCRIBED IN THE SPECIFICATIONS. TEMPORARY WORKS DRAWING PROVIDED FOR CONCEPTUAL PURPOSES ONLY.
  - MATERIALS PLACED IN-WATER SHOULD BE EXEMPT OF FINES AND ORGANIC MATERIALS AND CONTAMINANTS.
  - MATERIAL FROM ALL TEMPORARY WORK SHALL BE REMOVED AND DISPOSED OFF-SITE.
  - ENSURE COMPLETE RESTORATION TO A STATE AT LEAST EQUAL TO THE EXISTING STATE OF ALL DISTURBED AREAS.

No.	Description	By Par	Date
0	FOR TENDER	Y.B	05/13/2020

Revision / Révision

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A	A Detail number Numéro du détail
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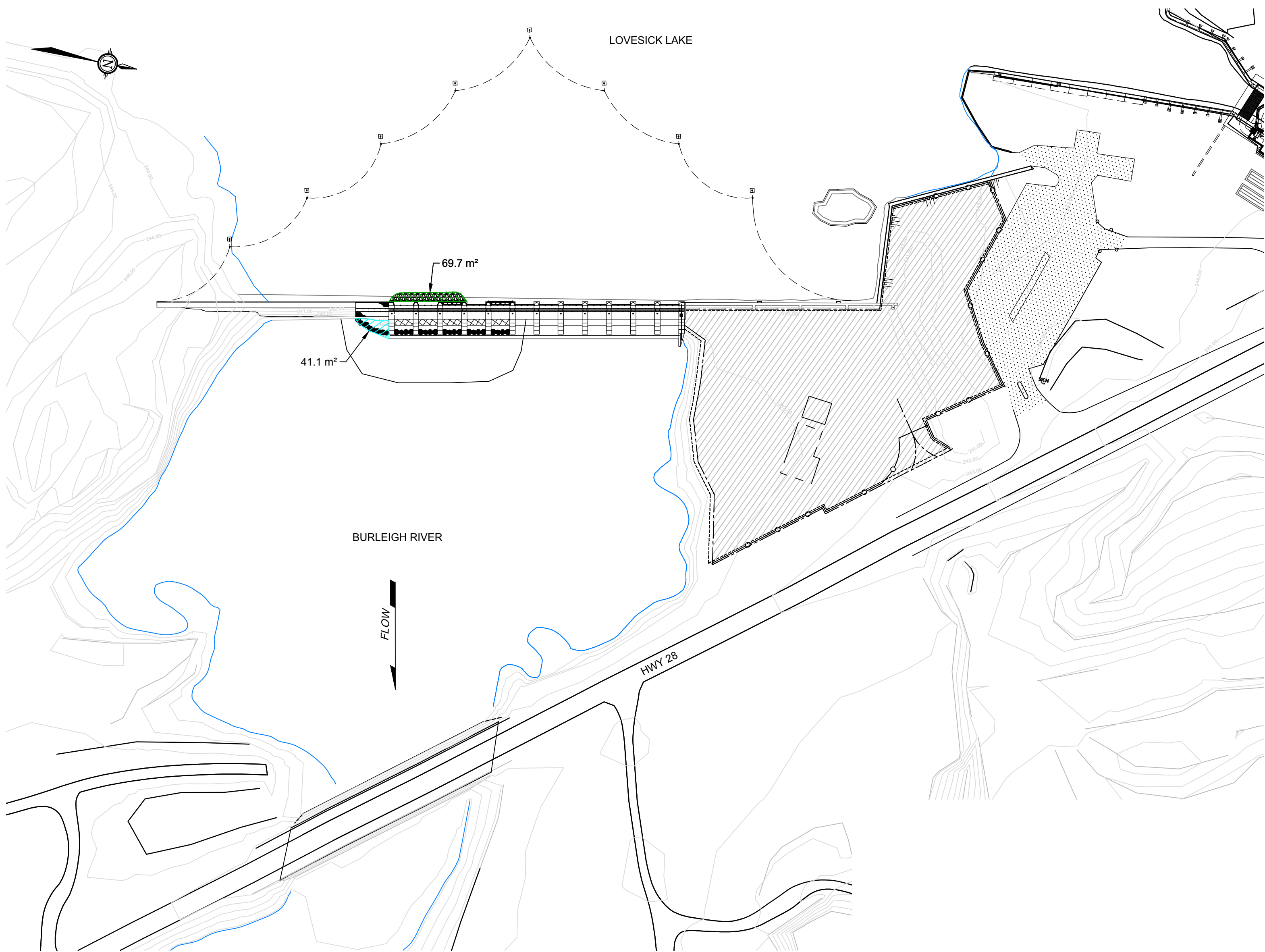
TRENT-SEVERN WATERWAY  
CONCRETE  
RECONSTRUCTION

Drawing title / Titre du dessin

CIVIL  
TEMPORARY ACCESSES  
AND LAYDOWN AREAS  
SECTIONS

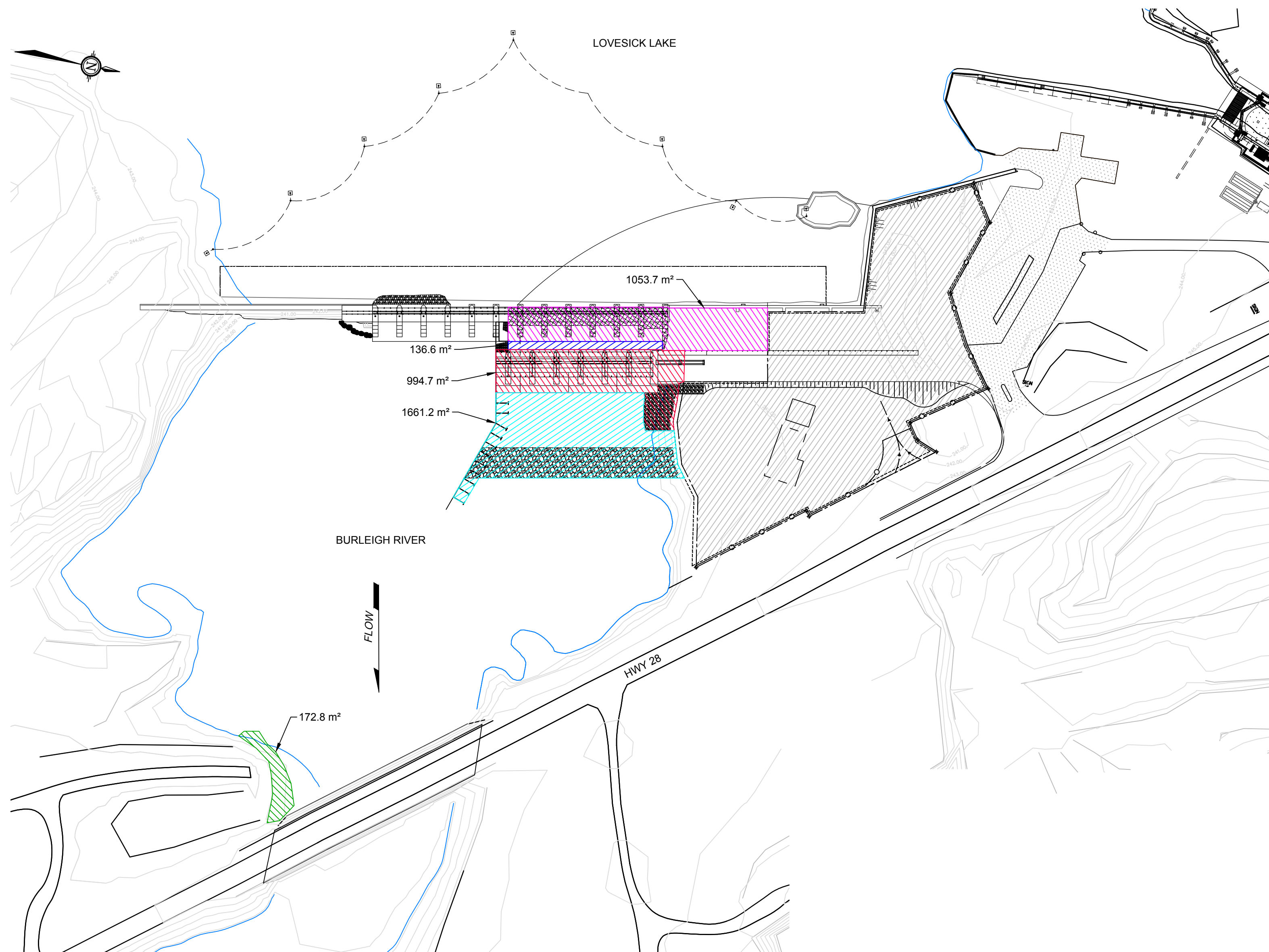
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Verified by / Vérifié par R. MIGUEL P.Eng.	Approved by / Approuvé par S. VITTECOQ P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number/ Numéro du Dessin 702
Project Number / Numéro du projet R.076951.705	Sheet Feuille 1 of 1





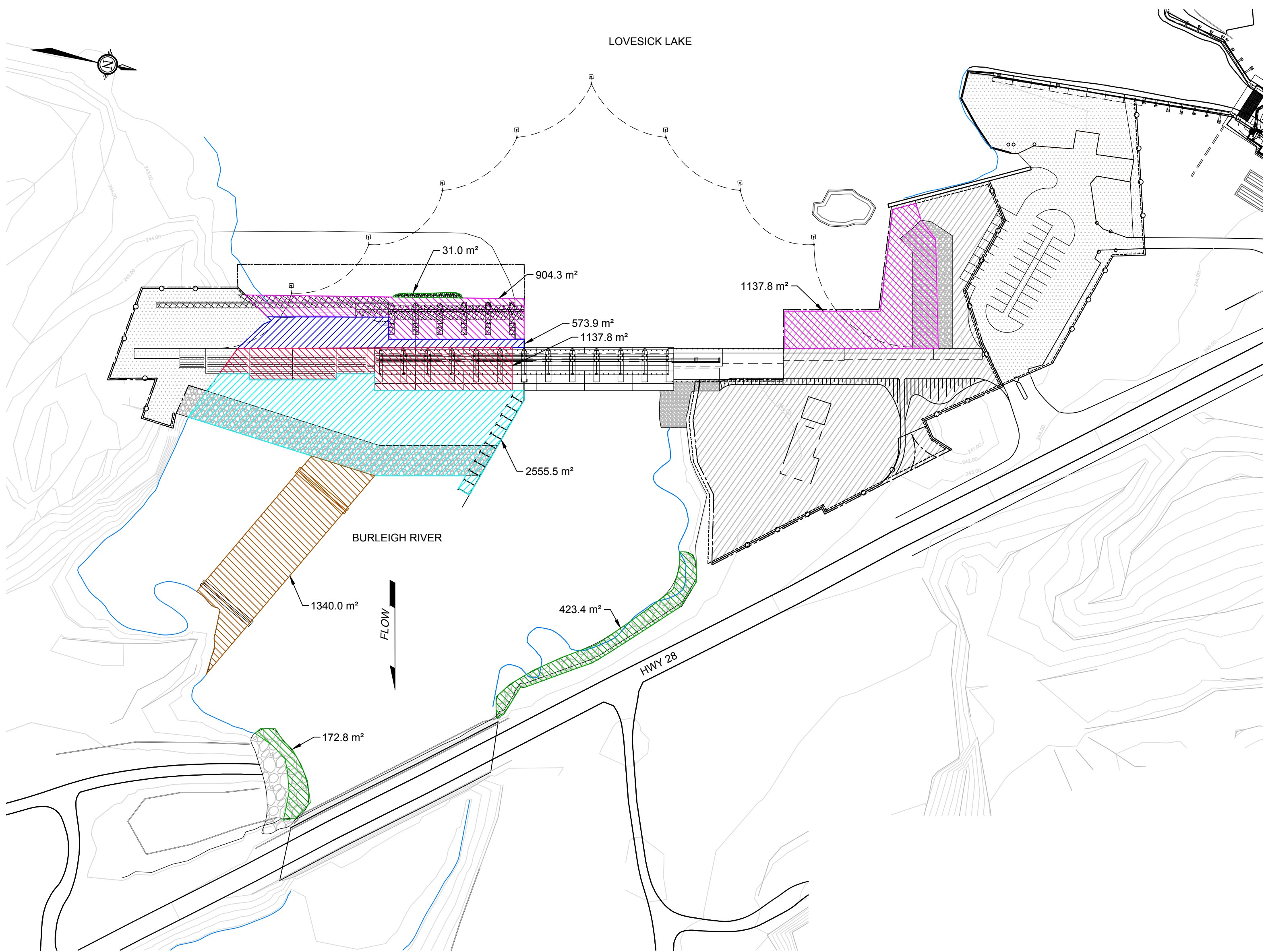
PHASE 1 - GENERAL ARRANGEMENT

1:1000



PHASE 2 - GENERAL ARRANGEMENT

1:1000



PHASE 3 - GENERAL ARRANGEMENT

1:1000

Hatch legend	Description	Area (m2)			At completion
		Phase 1	Phase 2	Phase 3	
	Date	Jul. 2020 to Dec.2020	Jan. 2021 to dec 2021	Jan 2022 to march 2023	summer 2023
	Upstream temporary in-water footprint ( riprap protection)	69.7 m²	172.8 m²	627.2 m²	-
	Upstream temporary in-water footprint (dewatering)	0	0	0	-
	Downstream temporary in-water footprint (dewatering)	41.1 m²	1661.2 m²	2555.5 m²	-
	Downstream max allowable access footprint	0	0	1340.0 m²	-
	Upstream permanent restitution (land/structure to water)	0	1053.7 m²	2042.1 m²	3095.8 m²
	Permanent in water footprint (water to structure)	0	994.7 m²	1137.8 m²	2132.5 m²
	Area changing from downstream watered area to upstream watered area	0	136.6 m²	573.9 m²	710.5 m²

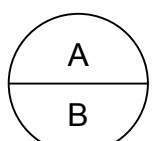
Contract No.	Drawing Code	Serial	Rev.
HS00243	210	41DD	0003

- NOTES:
- FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS SEE DRAWING 002.
  - TURBIDITY CURTAIN QUANTITY AND LOCATION SHOWN FOR INDICATIVE PURPOSE ONLY. CURTAINS MAY REQUIRED MOVING, DOUBLING, EXTENDING OR OTHER CURTAINS DEPENDING ON ACTUAL WORK, FLOW CONDITIONS, ENVIRONMENTAL IMPACTS, ETC...


No.	Description	By Par	Date
0	FOR TENDER	Y.B	05/13/2020

Revision / Révision

Do not scale drawings.  
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A Detail number  
Numéro du détail  
B Location dwg. number  
Numéro sur dessin

Professional Stamp

Project title / Titre du projet

TRENT-SEVERN WATERWAY  
BURLEIGH DAM AT LOCK 28  
RECONSTRUCTION

Drawing title / Titre du dessin

CIVIL  
PERMANENT AND TEMPORARY  
IN WATER FOOTPRINTS  
GENERAL ARRANGEMENT

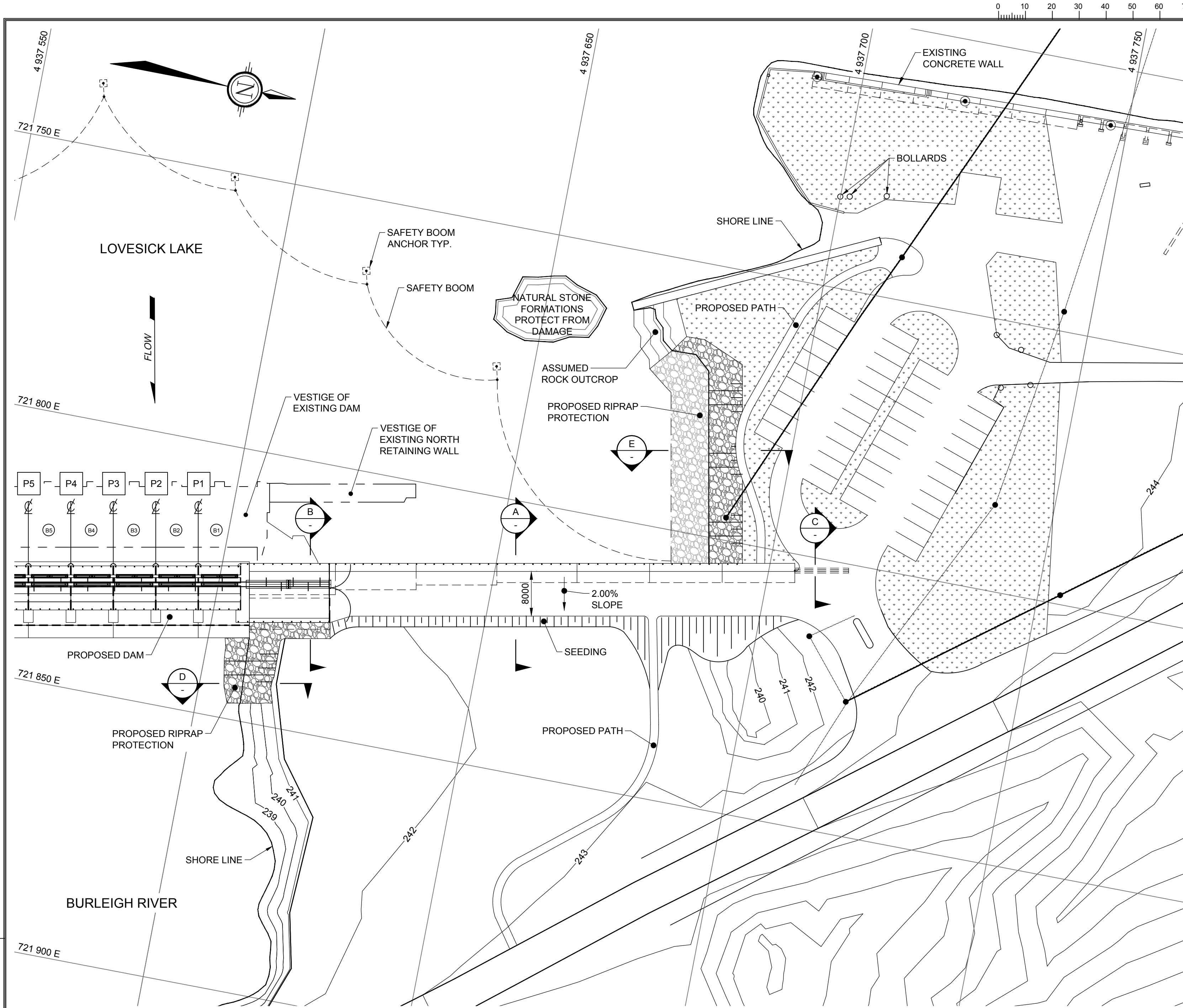
Drawn by / Dessiné par K. NONEN	Designed by / Conçu par Y. BERTON	P.Eng.
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Verified by / Vérifié par Y. BERTON	Approved by / Approuvé par S. VITTECOQ	P.Eng.
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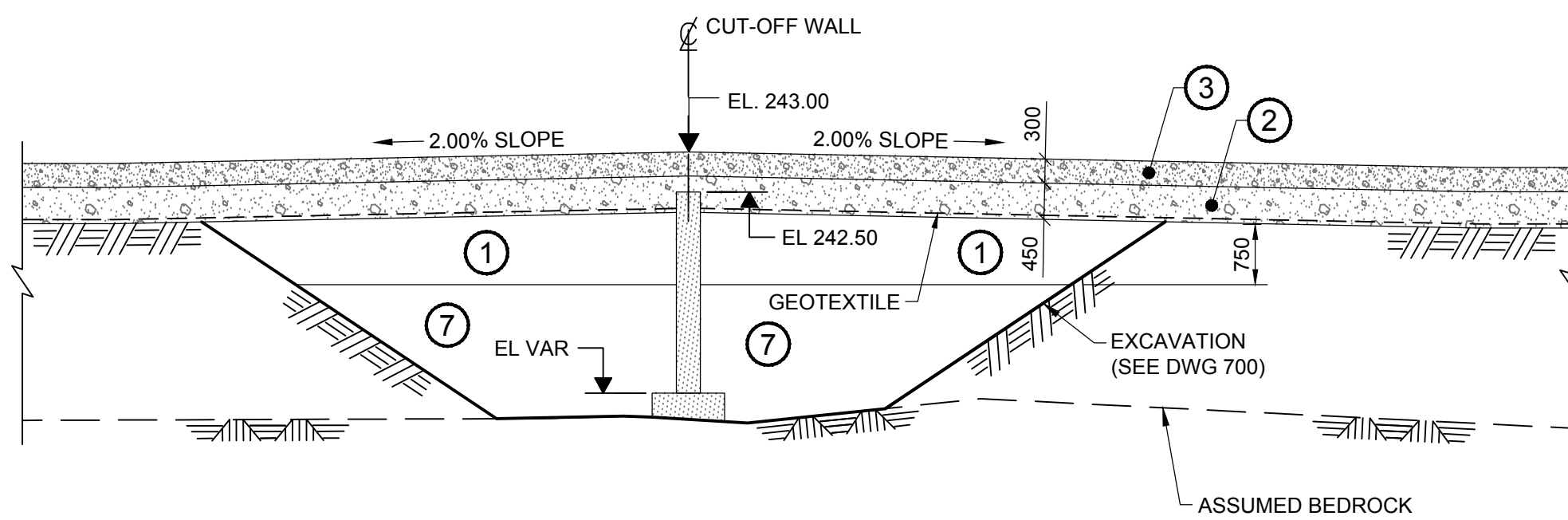
Drawing Date / Date du dessin 05/13/2020	Drawing Number/ Numéro du Dessin 703
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Project Number / Numéro du projet R.076951.705	Sheet Feuille 1 of 1
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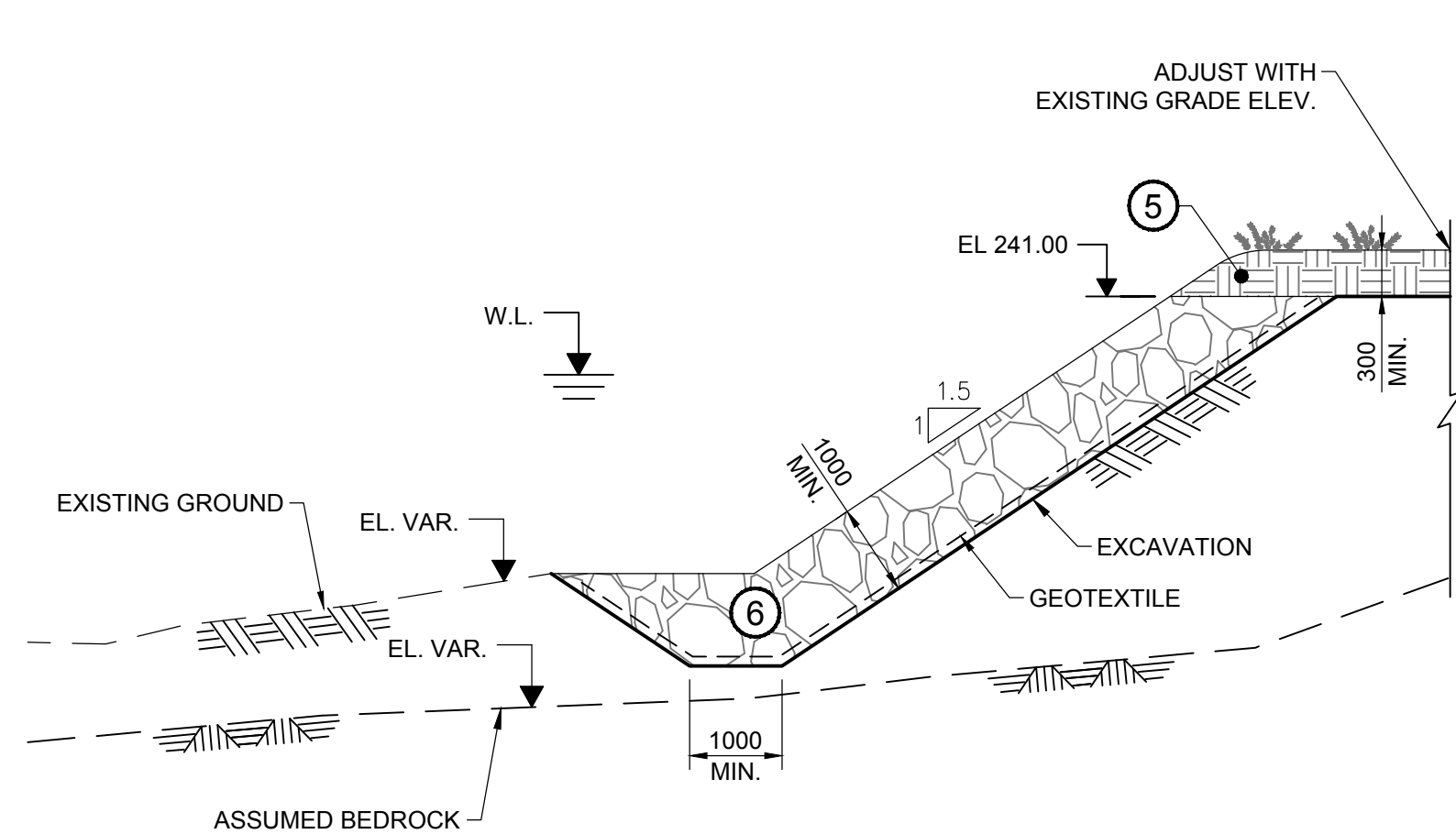




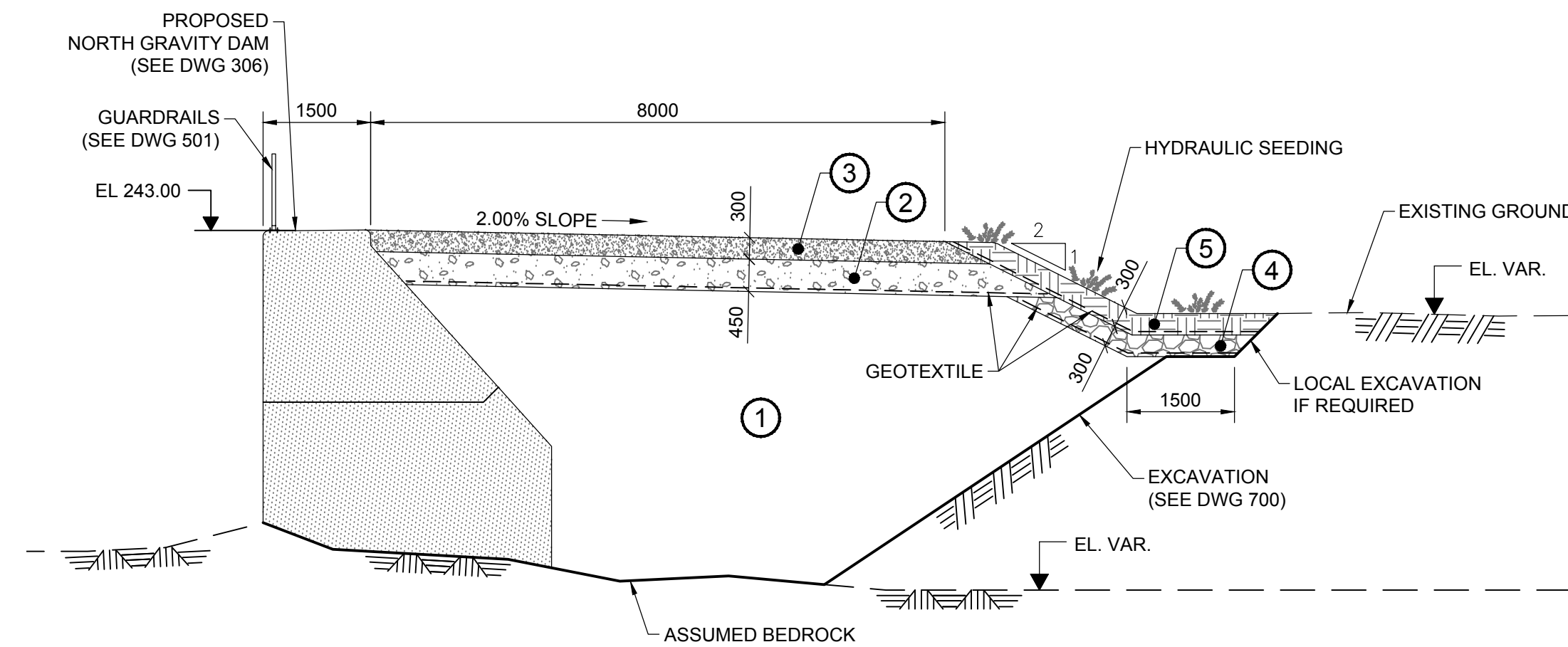
BACKFILLING PLAN VIEW  
1:500



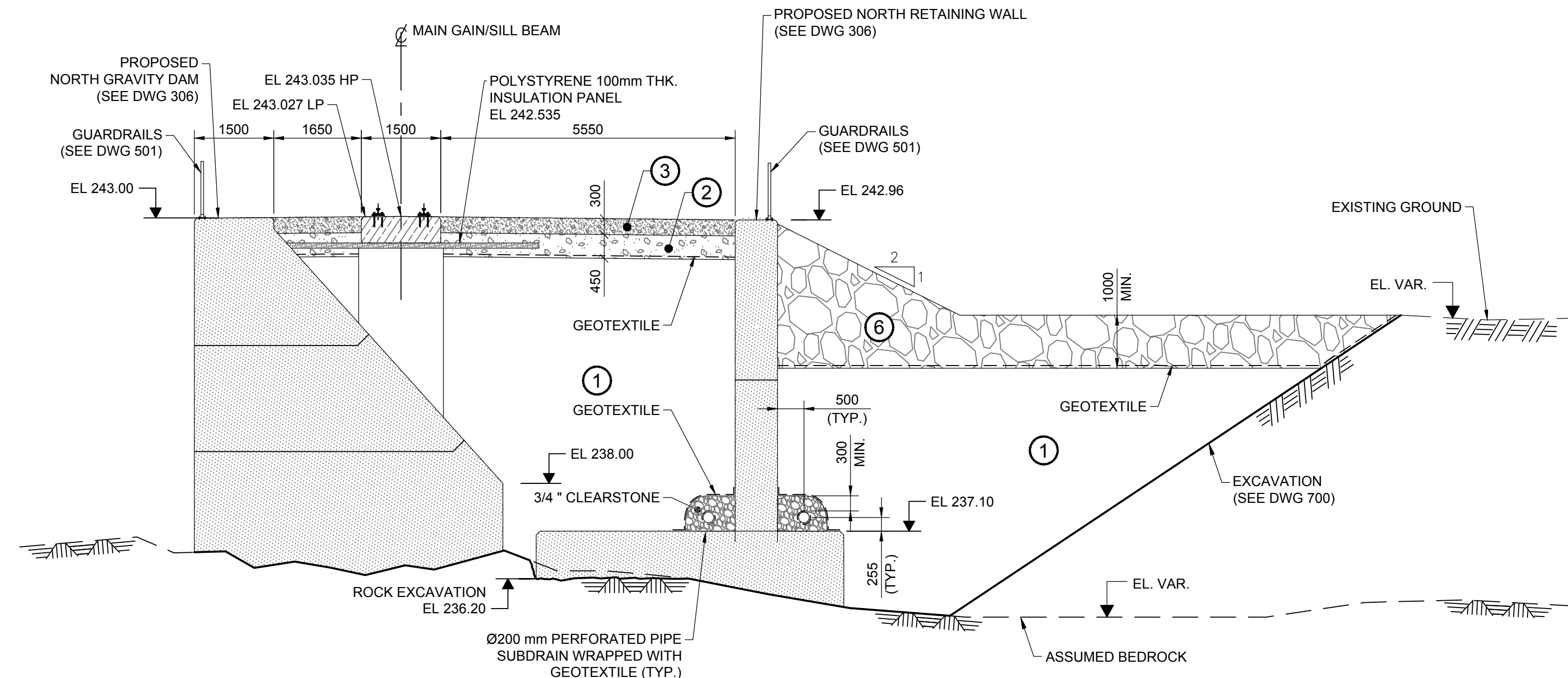
SECTION C  
1:75



SECTION D  
1:75



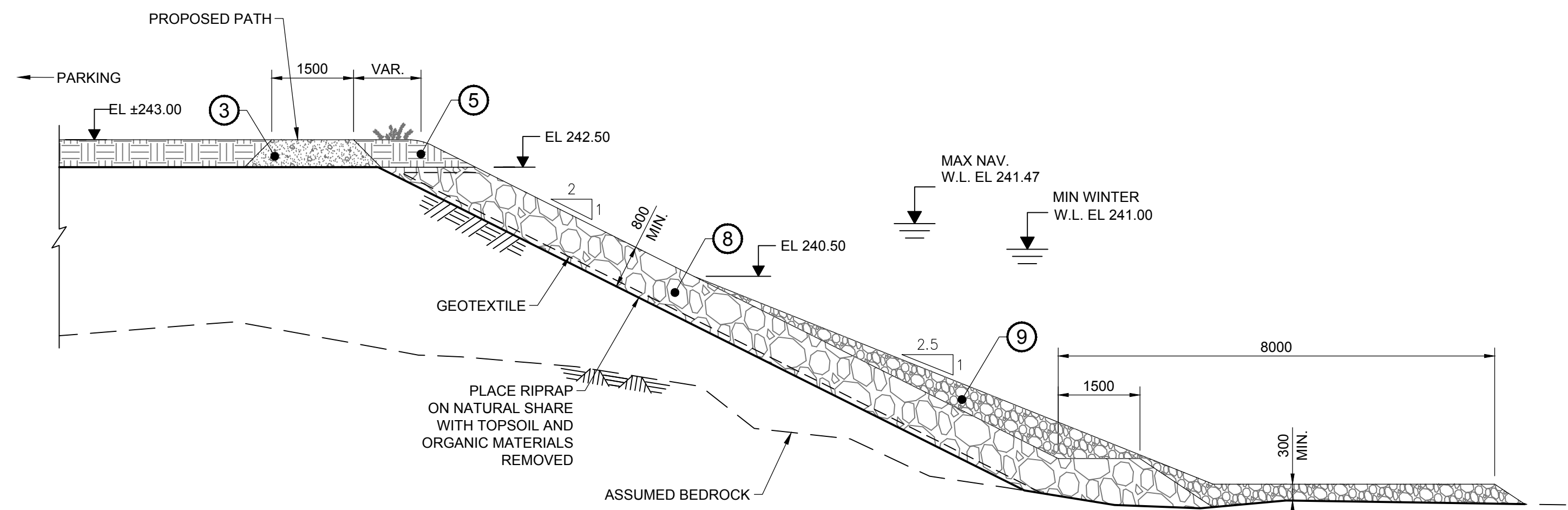
SECTION A  
1:75



SECTION B  
1:75

#### MATERIAL

- 1 UNGRADED, NON FROST SUCEPTIBLE BACKFILL Ø300 mm MAX., EXCLUDING ORGANIC MATERIAL, COMPACTED 92% OF SMPMD IN 300 mm LAYERS
- 2 GRANULAR B TYPE 2 (OPSS 1010), COMPACTED 95% OF SMPMD
- 3 GRANULAR A (OPSS 1010), COMPACTED 95% OF SMPMD
- 4 RIPRAP, Ø50-200 mm, PLACED
- 5 TOPSOIL, COMPACTED
- 6 RIPRAP Ø300-500 mm (ANGULAR GRANITE STONES), PLACED
- 7 IMPERVIOUS MATERIAL, COMPACTED
- 8 RIPRAP Ø100-300 mm (GRANITE STONES WITH NO SHARP EDGES), PLACED
- 9 COBLESTONES AND GRAVEL 25-200 m,  $D_{50} = 75$  mm



SECTION E  
1:75

Contract No.	Drawing Code	Serial	Rev.
HS00243	210	41DD	0704 0

#### NOTES:

1. FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS SEE DRAWING 002.
2. BACKFILL BOTH SIDES OF CUTOFF WALL SIMULTANEOUSLY, MAINTAINING A MAXIMUM HEIGHT DIFFERENTIAL OF 300mm.

No.	Description	By	Date
0	FOR TENDER	Y.B	05/13/2020

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A	A Detail number Numéro du détail
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#### Professional Stamp

Project title / Titre du projet

TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

Drawing title / Titre du dessin

CIVIL  
BACKFILLING  
PLAN AND SECTIONS

Drawn by / Dessiné par A. GUÉRIN-H.	Designed by / Conçu par Y. BERTON	P.Eng.
Verified by / Vérifié par J. FRANCOEUR	Approved by / Approuvé par S. VITTECOQ	P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number / Numéro du Dessin 704	Sheet Feuille 1 of 1
Project Number / Numéro du projet R.076951.705		



NOTES:

1. ALL DISTURBED EARTH DAM AREAS TO RECEIVE A MINIMUM OF 100mm IMPORTED TOPSOIL.
2. ALL DISTURBED AREAS TO BE TERRASEEDED WITH 'MEADOW MIXTURE'  
SEEDING RATE 21-23 LBS/ACRE, 22-25KG/HECTARE.
3. EXACT PLACEMENT OF PROPOSED VEGETATION ALONG DISTURBED EDGE FROM  
CONSTRUCTION TO BE DETERMINED ON SITE AND VERIFIED BY THE DEPARTMENT REPRESENTATIVE.

LOVESICK  
LAKE

FLOW

EXISTING TREE TO REMAIN  
(Typ.)

LOCK 28  
BURLEIGH FALLS

BOAT LAUNCH

CONCRETE WALL

NATURAL STONE FORMATIONS  
TO REMAIN

1.5m WIDE STONE DUST PATHWAY  
SEE DETAIL (04  
801)

GROUP OF GRANITE BOULDERS  
SEE DETAIL (05  
801)

MATCH TOP OF CURB

VESTIGE OF  
EXISTING MAIN DAM  
SEE DWG: 101 TO 104

VESTIGE OF  
EXISTING NORTH  
RETAINING WALL

VESTIGE OF  
EXISTING SOUTH DAM

EARTH DAM TO BE COVERED WITH 100mm TOPSOIL,  
ECO-BLANKET AND MEADOW SEED MIX  
AREA : 350m2 SEE SEED MIX TABLE ON DRAWING 801

REFORESTATION PLANTING WITH  
300mm TOPSOIL AND MEADOW SEED MIX  
AREA: 1700m2 SEE SEED MIX TABLE ON DRAWING 801

EXISTING VEGETATION TO  
REMAIN UNDISTURBED

REFORESTATION PLANTING WITH  
300mm TOPSOIL AND MEADOW SEED MIX  
AREA: 700m2 SEE SEED MIX TABLE ON DRAWING 801

EXISTING VEGETATION TO  
REMAIN UNDISTURBED

SEEDED TURF  
RESTORATION

HWY 28

TREE PRESERVATION FENCE (typ.)  
SEE DETAIL (02  
801)

PRESERVE EXISTING VEGETATION (typ.)

1.5m WIDE STONE DUST PATHWAY  
SEE DETAIL (04  
801)

REFORESTATION PLANTING WITH 300mm TOPSOIL AND  
MEADOW SEED MIX 315m2 SEE SEED MIX TABLE ON  
DRAWING 801

FUTURE POTENTIAL PEDESTRIAN  
CONNECTION TO TRADING POST &  
THE BURLEIGH FALLS INN

THE BURLEIGH FALLS INN

TRADING POST

Public Services and Procurement Canada  
Services publics et Approvisionnement Canada

Ontario Region  
Heritage Canals and Engineering Works  
Région de l'Ontario  
Canaux historiques et travaux d'ingénierie

Parks  
Canada  
Parcs  
Canada

Canada

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Contract No.	Drawing Code	Serial	Rev.
HS00243	210	41DD	0800
			0

LEGEND

- Existing Tree To Remain
- Existing Hydro Pole
- Proposed Deciduous Trees
- Proposed Coniferous Trees
- Proposed Shrubs
- Existing Tree and Shrub Canopy
- Reforestation Planting
- Proposed Eco-Blanket and Meadow Seed Mix
- Seeded Turf Restoration
- Stone Dust Pathway
- Rip-Rap (Refer to Civil Drawings)
- Granite Boulder
- Tree Preservation Fence

0	FOR TENDER	L.C	05/12/2020
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A	A Detail number Numéro du détail
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Drawing with revision 1 Signed and Seal by:  
Lisa J. Cullen, OALA



Project title / Titre du projet

TRENT-SEVERN WATERWAY  
DAM AT LOCK 28 - BURLEIGH FALLS  
RECONSTRUCTION

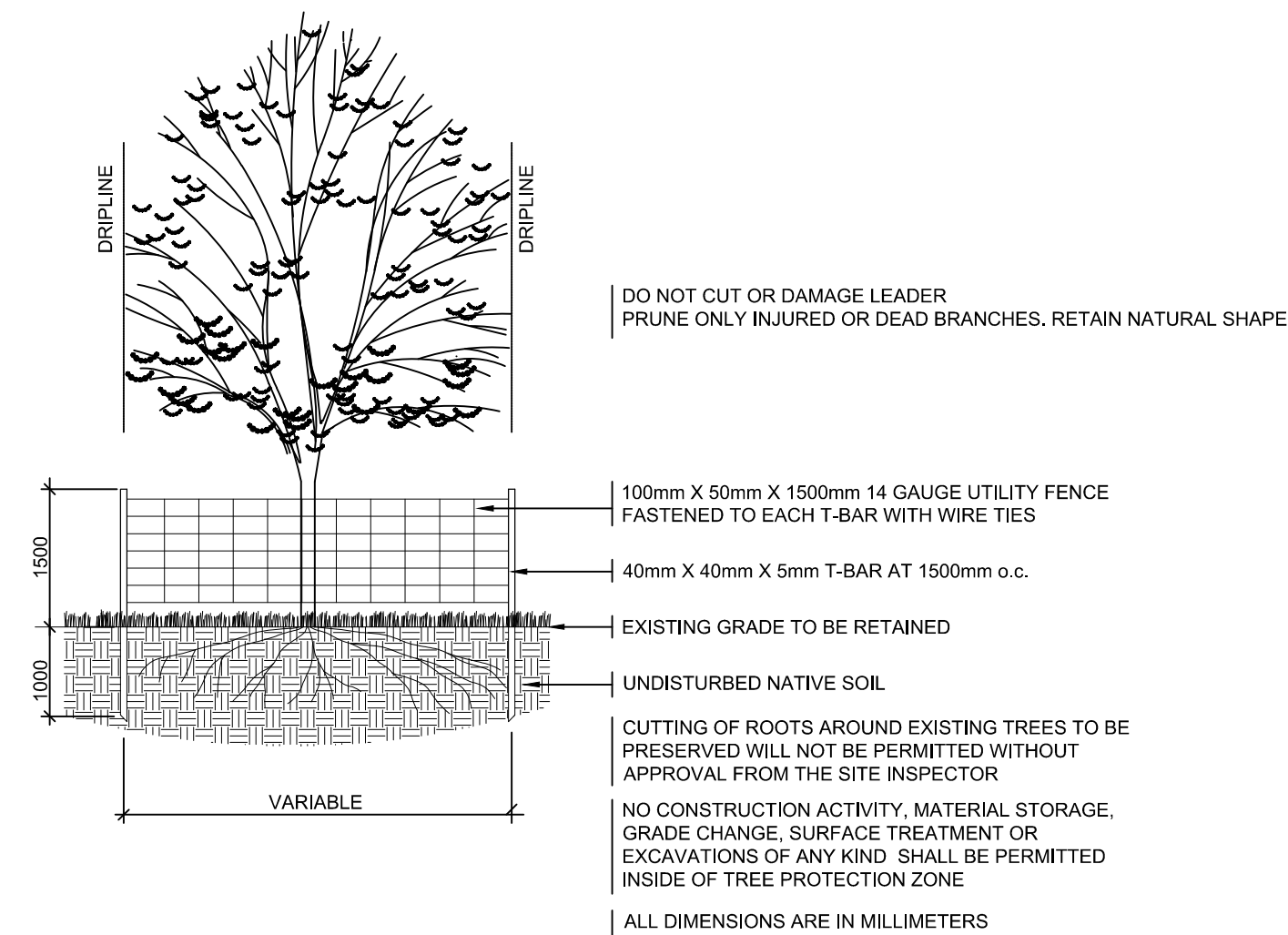
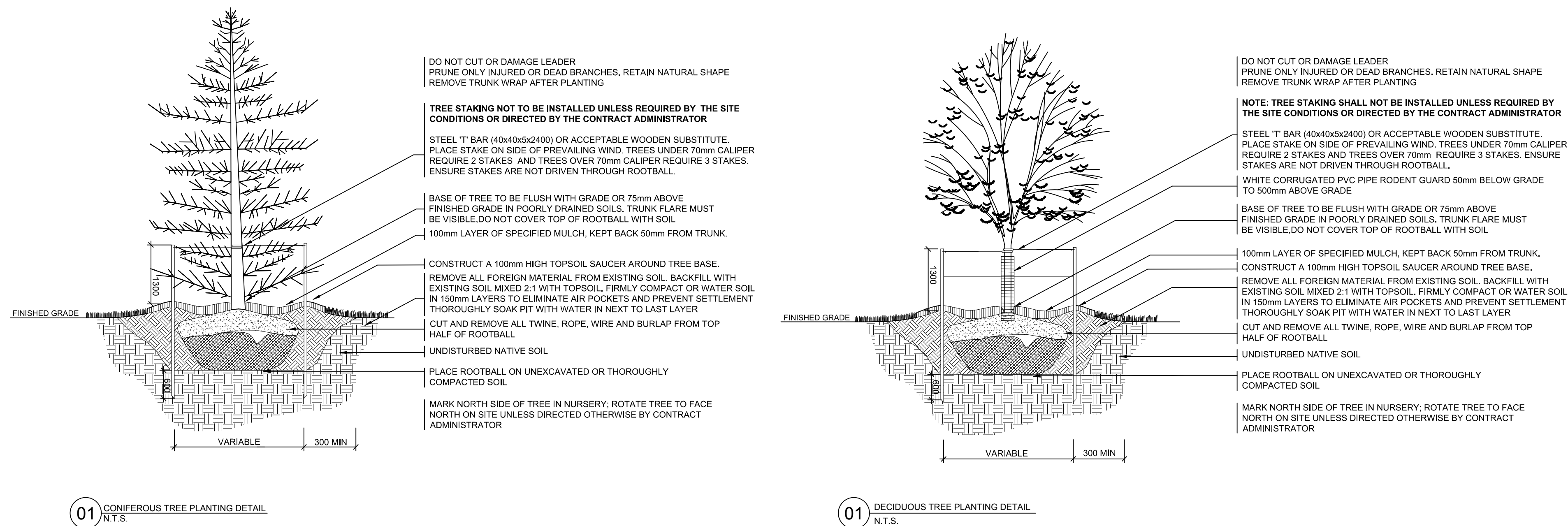
Drawing title / Titre du dessin

ARCHITECTURAL  
LANDSCAPE  
GENERAL LAYOUT  
REHABILITATION PLAN

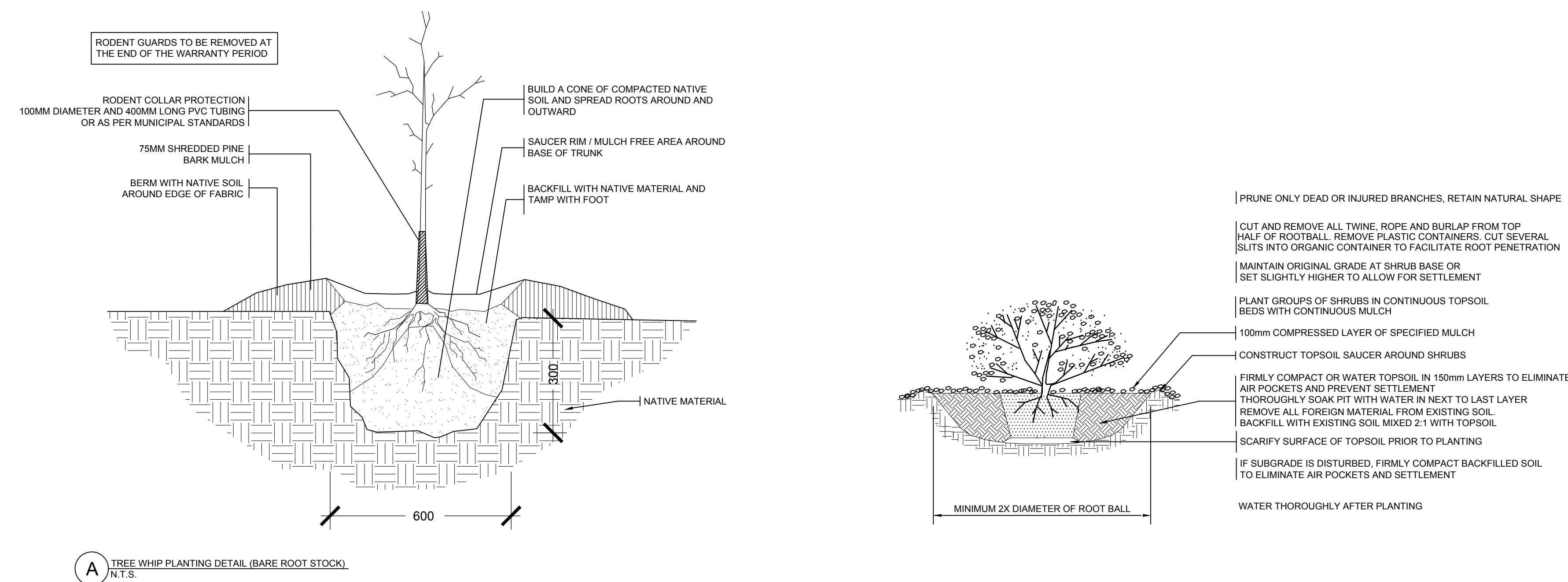
Drawn by / Dessiné par	Designed by / Conçu par
L. MAY	P. BROCKS
Verified by / Vérifié par	Approved by / Approuvé par
L. CULLEN OALA	Y. BERTON P.Eng.
Drawing Date / Date du dessin	Drawing Number / Numéro du Dessin
02/2020	800
Project Number / Numéro du projet	Sheet Feuille
R.076951.705	of de

SCALE  
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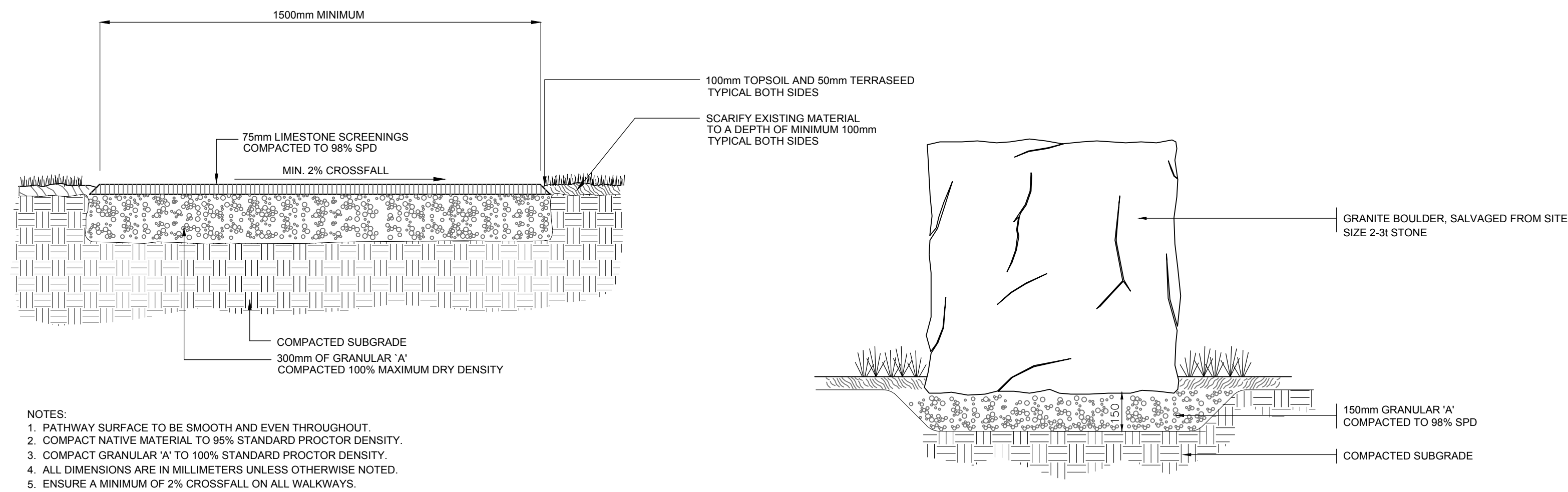




## 01 PLANTING DETAILS FOR ALL OTHER AREAS



### 03 PLANTING DETAILS FOR NATURALIZED AREAS



## 04 STONE DUST PATHWAY

## 05 BOULDER PLACEMENT DETAIL

## 02 TREE PROTECTION FENCE

Burleigh Falls Dam					
Plant List					
DECIDUOUS TREES					
Key	Qty	Botanical Name	Common Name	Size	Condition
Af	5	Acer x freemianii 'Jeffersred'	Autumn Blaze Maple	50mm	W.B.
Gb	4	Ginkgo biloba 'The President'	Presidential Gold Ginkgo	50mm	W.B.
Qr	1	Quercus rubra	Red Oak	50mm	W.B.
CONIFEROUS TREES					
Key	Qty	Botanical Name	Common Name	Size	Condition
Li	5	Larix laricina	Tamarack	250cm	W.B.

Reforestation Plant List					
DECIDUOUS TREES					
Qty	Botanical Name	Common Name	Size	Condition	Spacing
8	Acer rubrum	Red Maple	150cm	R / R / 3m	3m
8	Acer saccharum	Sugar Maple	150cm	B / R / 3m	3m
10	Acer saccharum	Sugar Maple	40mm	BB / 3m	8m
8	Alnus incana	Speckled Alder	100cm	B / R / 3m	3m
10	Amelanchier canadensis	Servceberry	200cm	B / R / 3m	3m
8	Juglans nigra	Black Walnut	100cm	B / R / 3m	3m
10	Juglans nigra	Black Walnut	40mm	BB / 3m	8m
8	Celtis virginiana	Ironwood	100cm	B / R / 3m	3m
6	Populus balsamifera	Balsam Poplar	100cm	B / R / 3m	3m
6	Populus tremuloides	Trembling Aspen	100cm	B / R / 3m	3m
10	Quercus rubra	Red Oak	200cm	B / R / 3m	3m
8	Quercus americana	Basswood	40mm	B / R / 3m	3m
10	Ulmus wilsonia 'Prospector'	Prospector Elm	100cm	B / R / 3m	3m
10	Viburnum lentago	Nannyberry	100cm	B / R / 3m	3m

CONIFEROUS TREES					
Qty	Botanical Name	Common Name	Size	Condition	Spacing
6	Abies balsamea	Balsam Fir	100cm	pot	5m
6	Larix laricina	Tamarack	100cm	pot	5m
6	Picea glauca	White Spruce	50cm	pot	5m
6	Pinus resinosa	Red Pine	100cm	pot	5m
6	Pinus strobus	White Pine	100cm	pot	5m
20	Thuja occidentalis	White Cedar	50cm	B.R./pot	2m
6	Thuja canadensis	Eastern Hemlock	100cm	pot	5m

SHRUBS					
Qty	Botanical Name	Common Name	Size	Condition	Spacing
7	<i>Amaranthus canadensis</i>	Smartweed	100cm	B.R./pot	4m
1	<i>Ceanothus occidentalis</i>	Blueberry	50cm	B.R./pot	1m
3	<i>Cornus racemosa</i>	Grey Dogwood	50cm	B.R./pot	1m
3	<i>Cornus sericea</i>	Red Osier Dogwood	50cm	B.R./pot	1m
7	<i>Corylus americana</i>	Hazelnut	100cm	B.R./pot	1m
1	<i>Cornus virginiana</i>	Witch Hazel	100cm	B.R./pot	1m
7	<i>Myrica pensylvanica</i>	Bayberry	50cm	B.R./pot	1m
7	<i>Physocarpus opulifolius</i>	Common Ninebark	50cm	B.R./pot	1m
16	<i>Rhus typhina</i>	Staghorn Sumac	100cm	B.R./pot	2m
7	<i>Rhus odoratus</i>	Flowering Raspberry	50cm	B.R./pot	1m
7	<i>Sambucus canadensis</i>	Elderberry	50cm	B.R./pot	2m

**Note:** Meadow seed mix to be seeded around trees and shrubs in reforestation area

Seed Mix - Meadow Areas		
Botanical Name	Common Name	%
<i>Silene aenea</i>	Catchfly	1%
<i>Asclepias syriaca</i>	New England Asclepi	3%
<i>Astragalus canadensis</i>	Canada Milk Vetch	3%
<i>Cercopis lanceolata</i>	Leaved Cereopsis	10%
<i>Liatris spicata</i>	Dense Blazingstar	5%
<i>Monarda fistulosa</i>	Bergamot	2%
<i>Rudbeckia hirta</i>	Black Eyed Susan	8%
<i>Solidago nemoralis</i>	Ridder's Goldenrod	2%
<i>Tradescantia virginiana</i>	Spide Wört	3%
<i>Verbena hastata</i>	Blue Vervin	1%
<i>Asclepias syriaca</i>	Common Milkweed	2%
<i>Andropogon gerardi</i>	Big Bluestem	12%
<i>Chrysanthemum leucanthemum</i>	White Bluestem	10%
<i>Elymus canadensis</i>	Canada Wild Rye	13%
<i>Sorghastrum nutans</i>	Indian Grass	10%

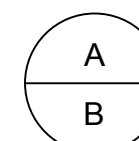
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Contract No.	Drawing Code		Serial	Rev.
HS00243	210	41DD	0801	0


No.	Description	By Par	Date
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Revision / Révision

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A Detail number  
Numéro du détail

B Location dwg. number  
Numéro sur dessin

Professional Stamp

Drawing with revision 1 Signed and Seal by:  
Lisa J. Cullen, OALA



Project title / Titre du projet

# TRENT-SEVERN WATERWAY DAM AT LOCK 28 - BURLEIGH FALLS RECONSTRUCTION

Drawing title / Titre du dessin

## ARCHITECTURAL LANDSCAPE DETAILS

Drawn by / Dessiné par		Designed by / Conçu par	
L. MAY		P. BROCKS	
Verified by / Vérifié par		Approved by / Approuvé par	
L. CULLEN OALA		Y. BERTON P.Eng.	
Drawing Date / Date du dessin		Drawing Number / Numéro du Dessin	
02/2020		801	
Project Number / Numéro du projet		Sheet of	
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