

- 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 (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 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

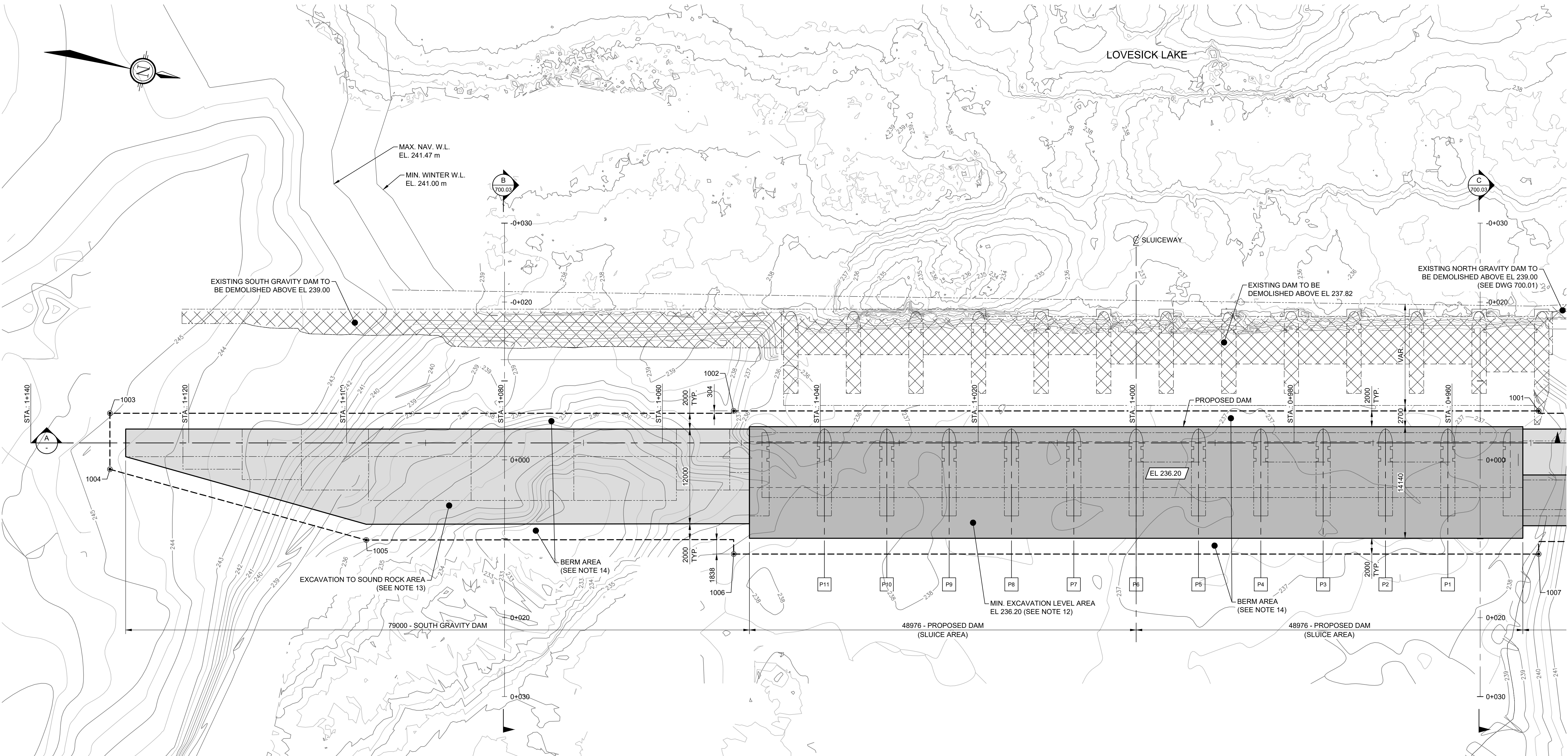
Professional Stamp

Project title / Titre du projet

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

CIVIL  
EXCAVATION  
PLANS, ELEVATIONS  
AND SECTIONS

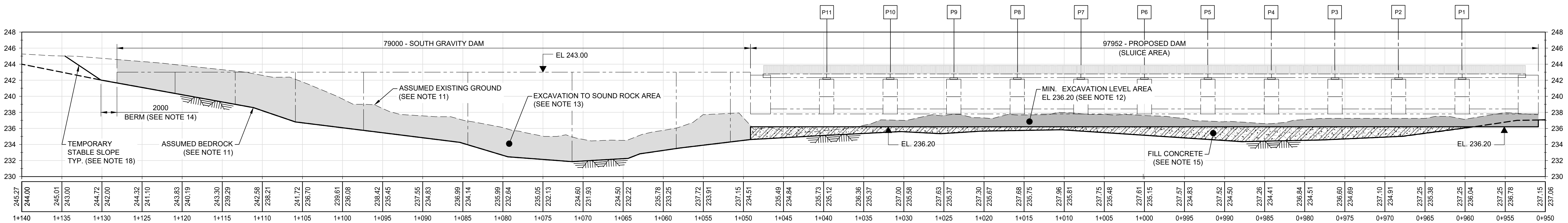
Drawn by / Dessiné par K. NONEN	Designed by / Conçu par M-A. BEAUPRÉ	P.Eng.
Verified by / Vérifié par A. RANCOURT	Approved by / Approuvé par S. VITTECOQ	P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number / Numéro du Dessin 700	
Project Number / Numéro du projet R.076951.705	Sheet Feuille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

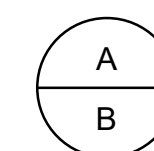
## NOTES:

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

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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

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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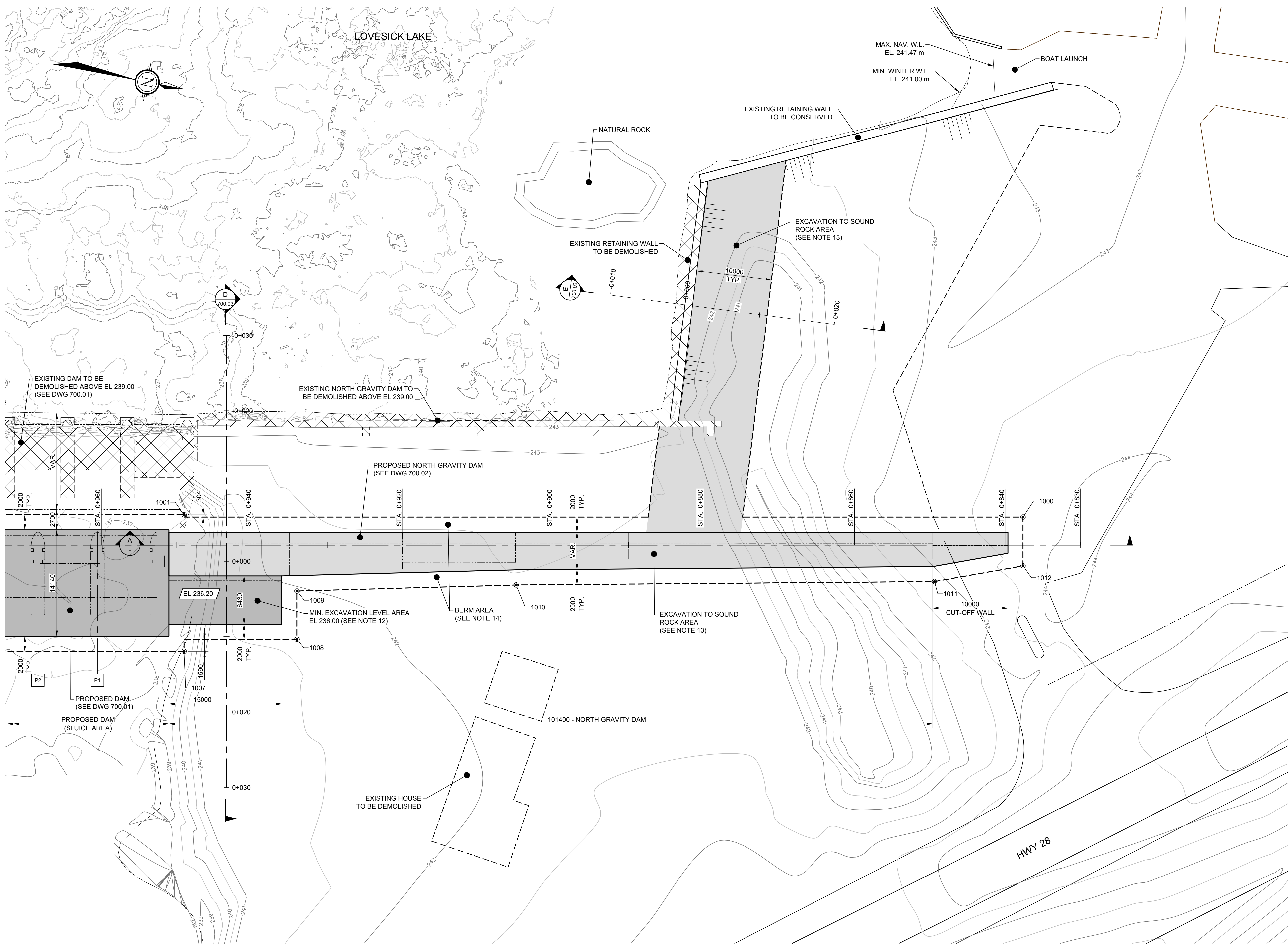
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A. RANCOURT	P.Eng.	S. VITTECOQ	P.Eng.
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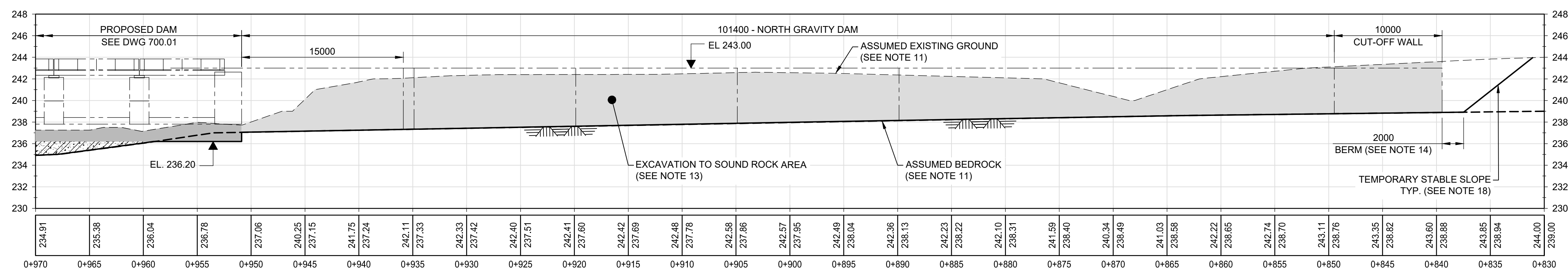
Drawing Date / Date du dessin	Drawing Number / Numéro du Dessin
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05/13/2020	700
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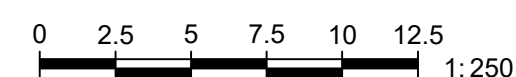
Project Number / Numéro du projet	700
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PLAN  
1:250



ELEVATION  
1:250

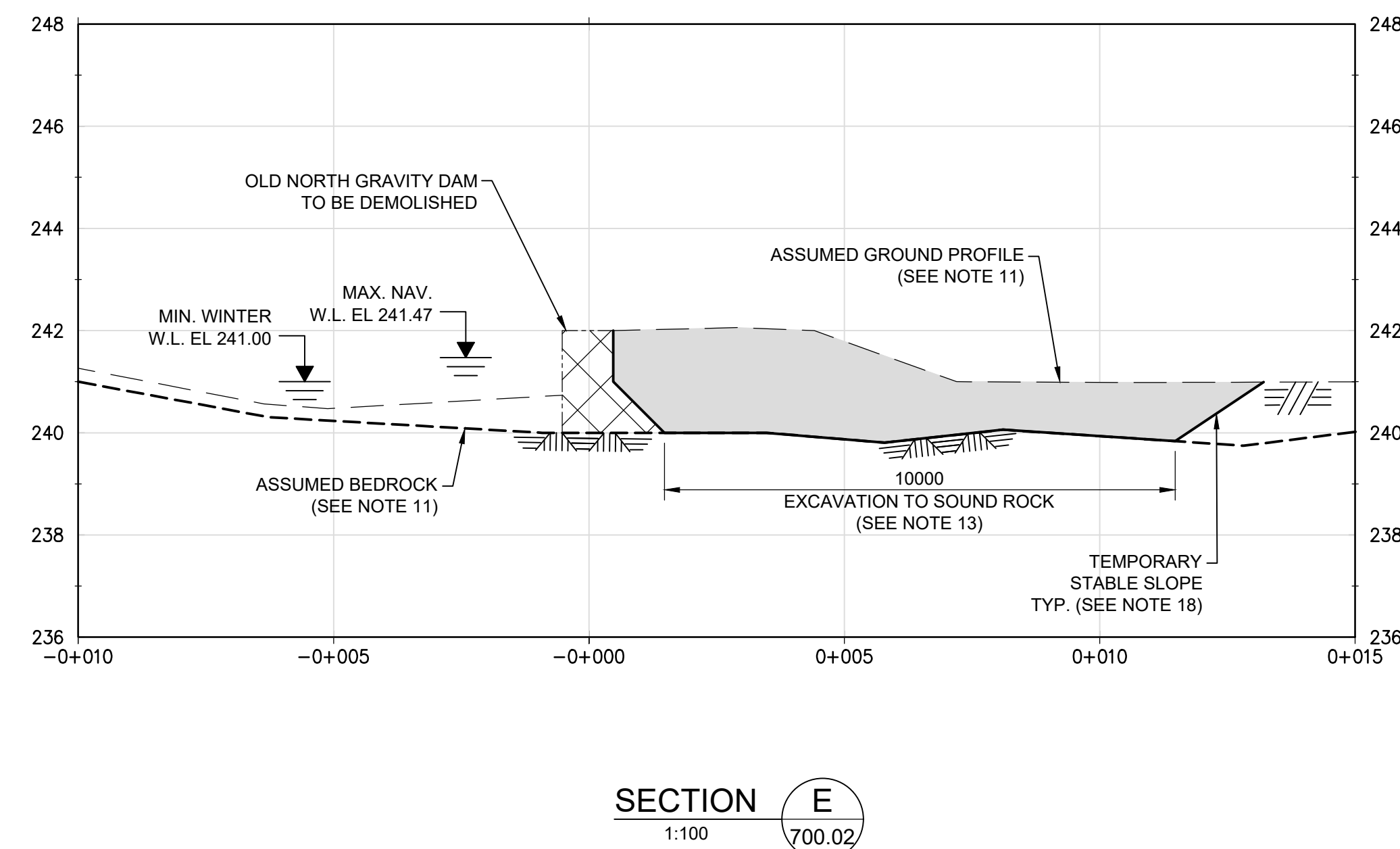
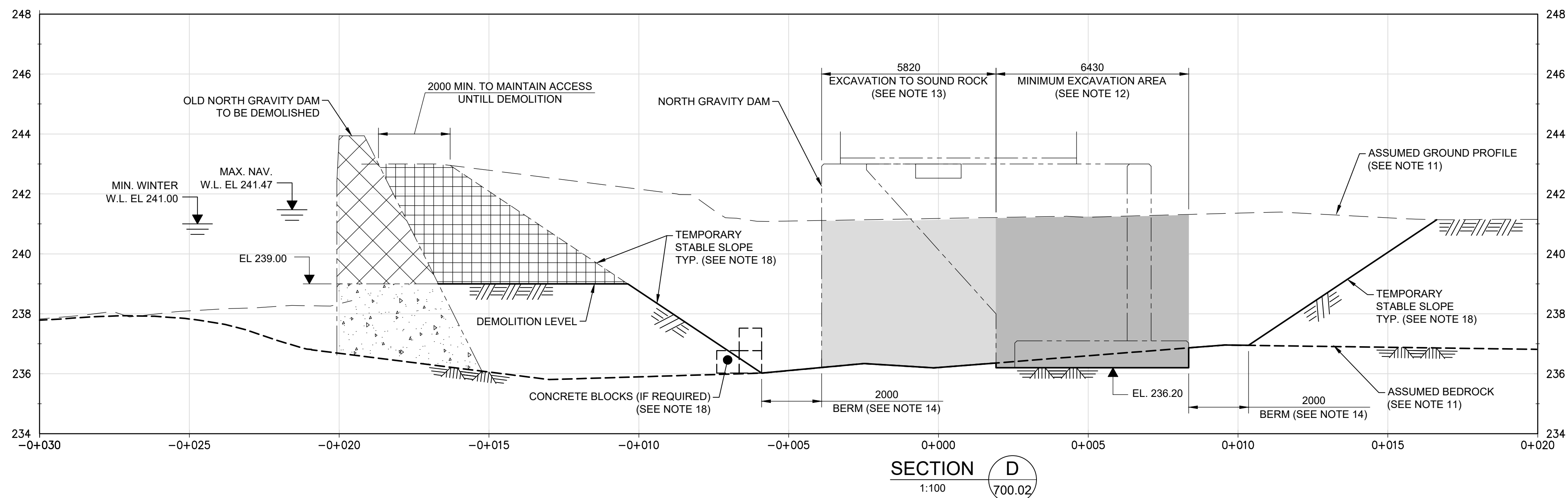
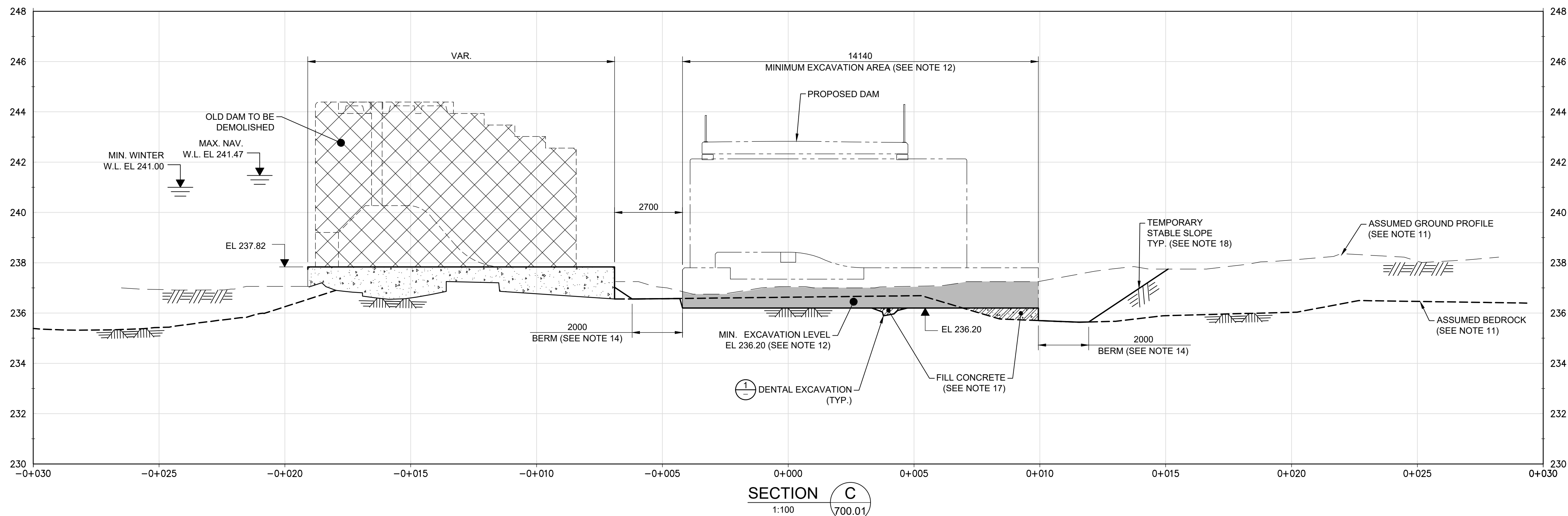
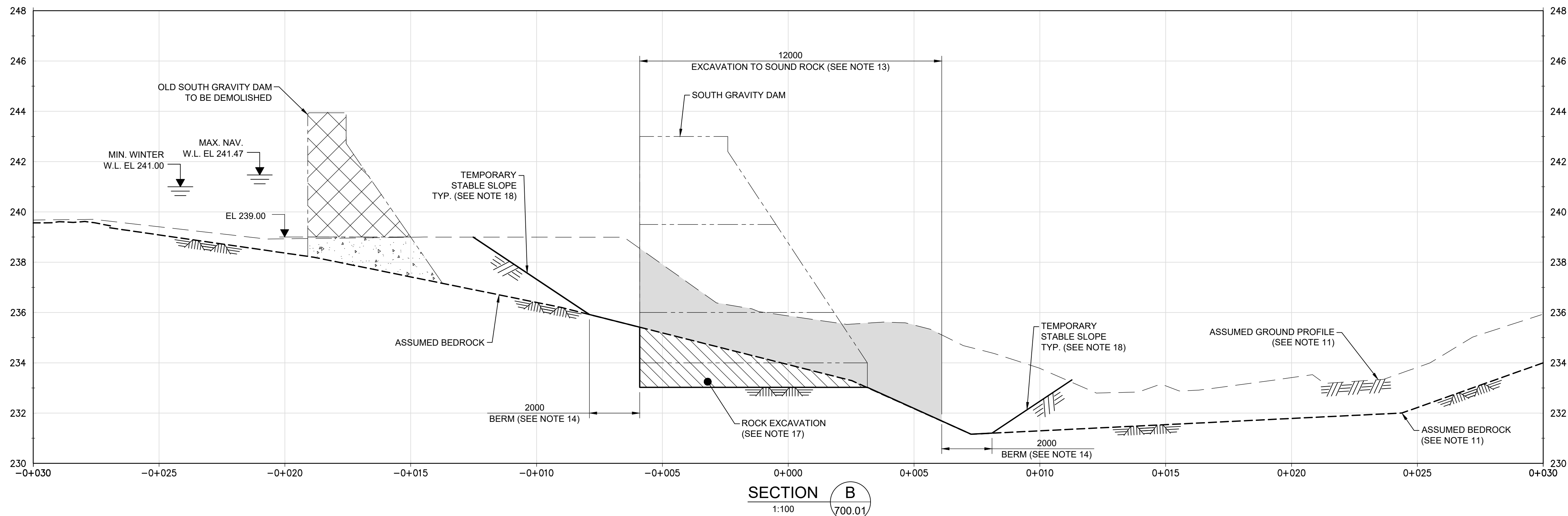
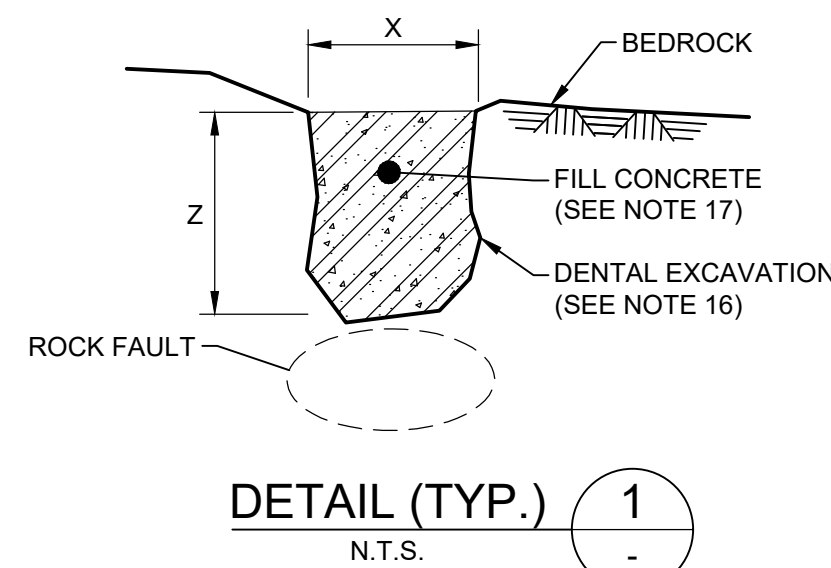
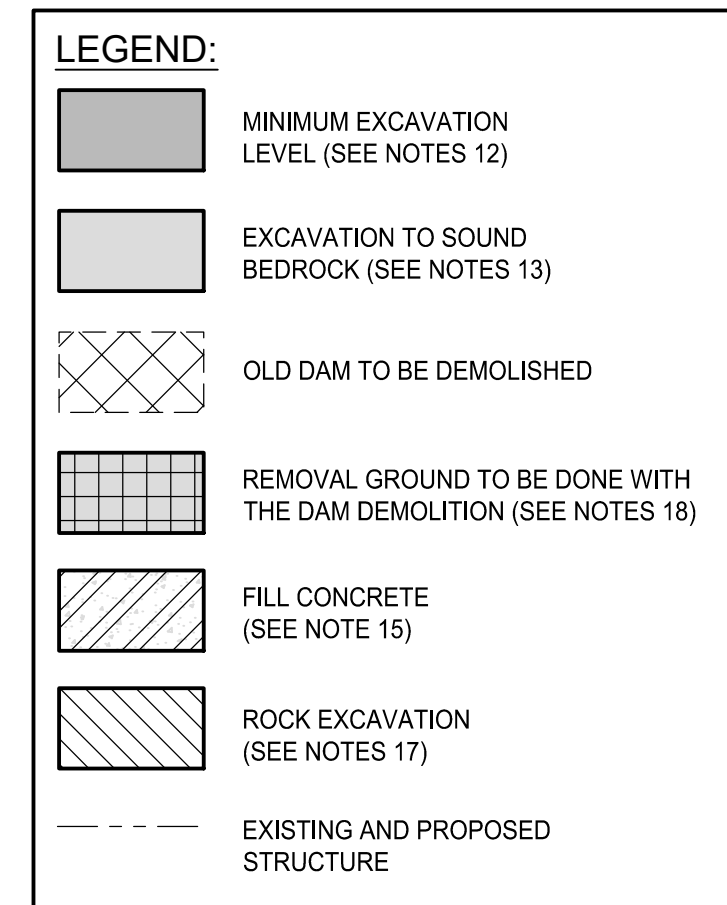




Contract No.	Drawing Code	Serial	Rev.
HSS00243	210	41DD	0700   C

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

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

Professional Stamp

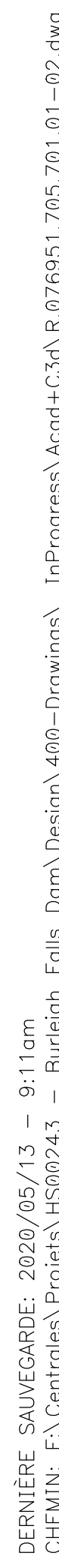
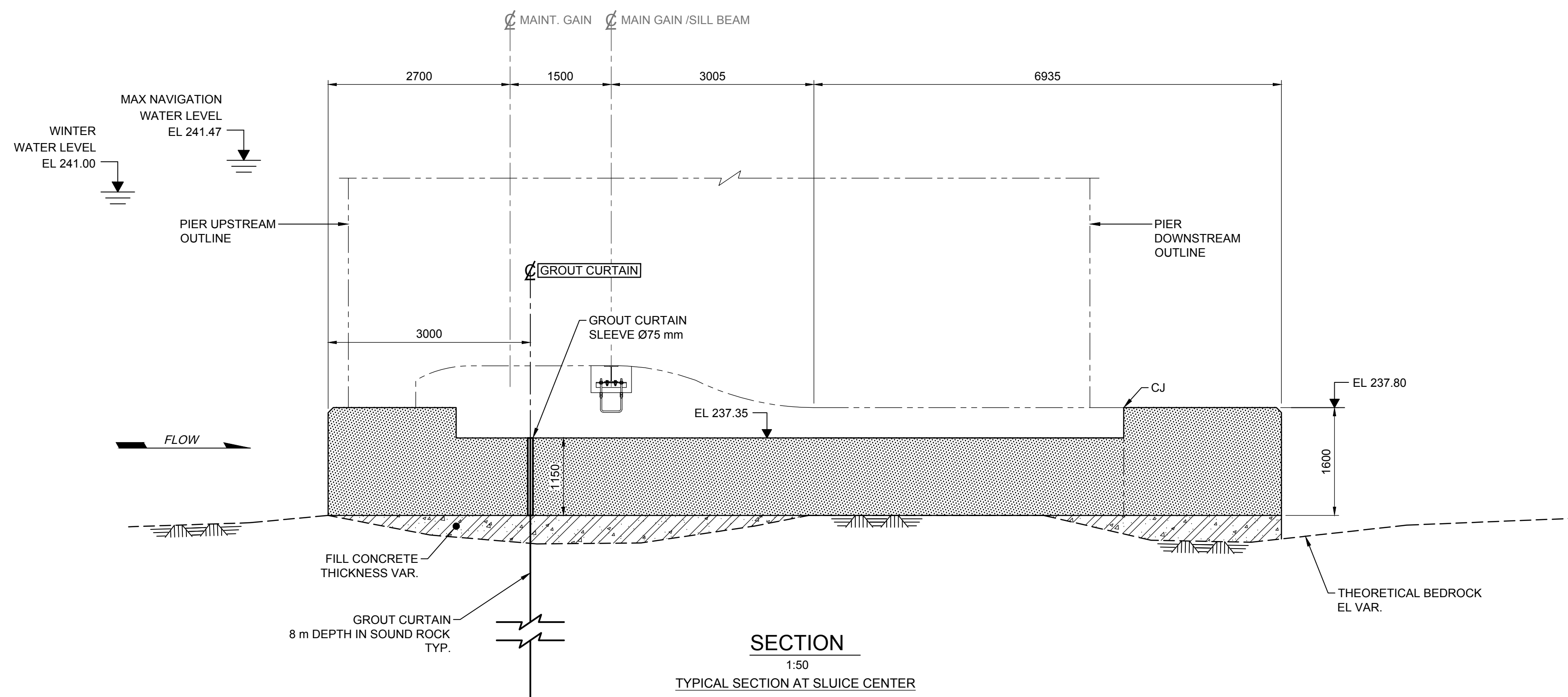
Project title / Titre du projet

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

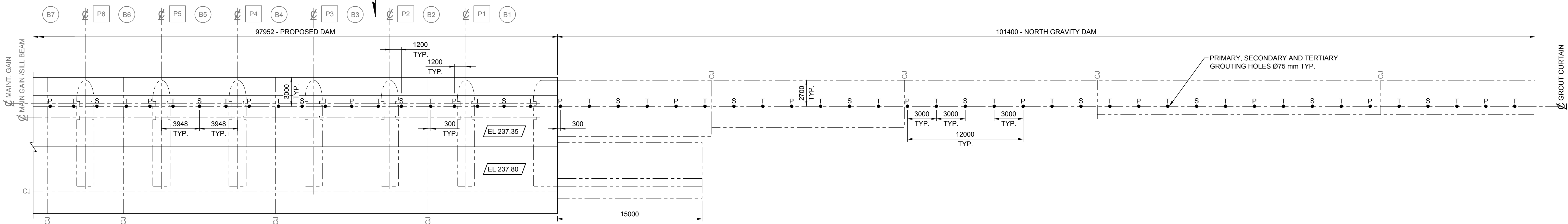
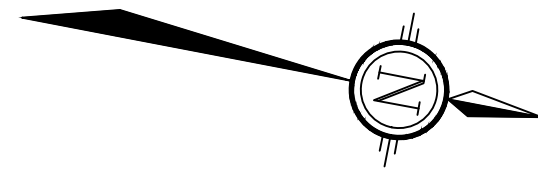
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CIVIL  
EXCAVATION  
PLANS, ELEVATIONS  
AND SECTIONS

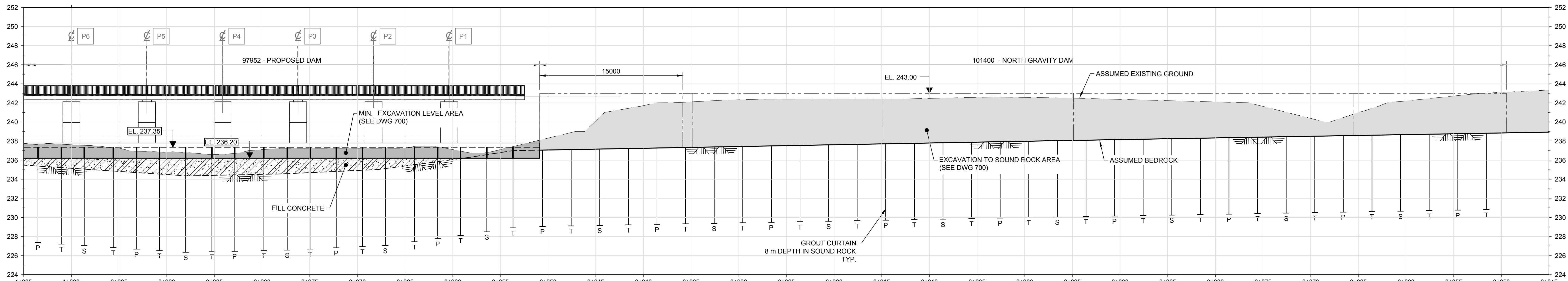
Drawn by / Dessiné par K. NONEN	Designed by / Conçu par M-A. BEAUPRÉ P.Eng.
Verified by / Vérifié par A. RANCOURT P.Eng.	Approved by / Approuvé par S. VITTECOQ P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number / Numéro du Dessin 700
Project Number / Numéro du projet R.076951.705	Sheet 3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



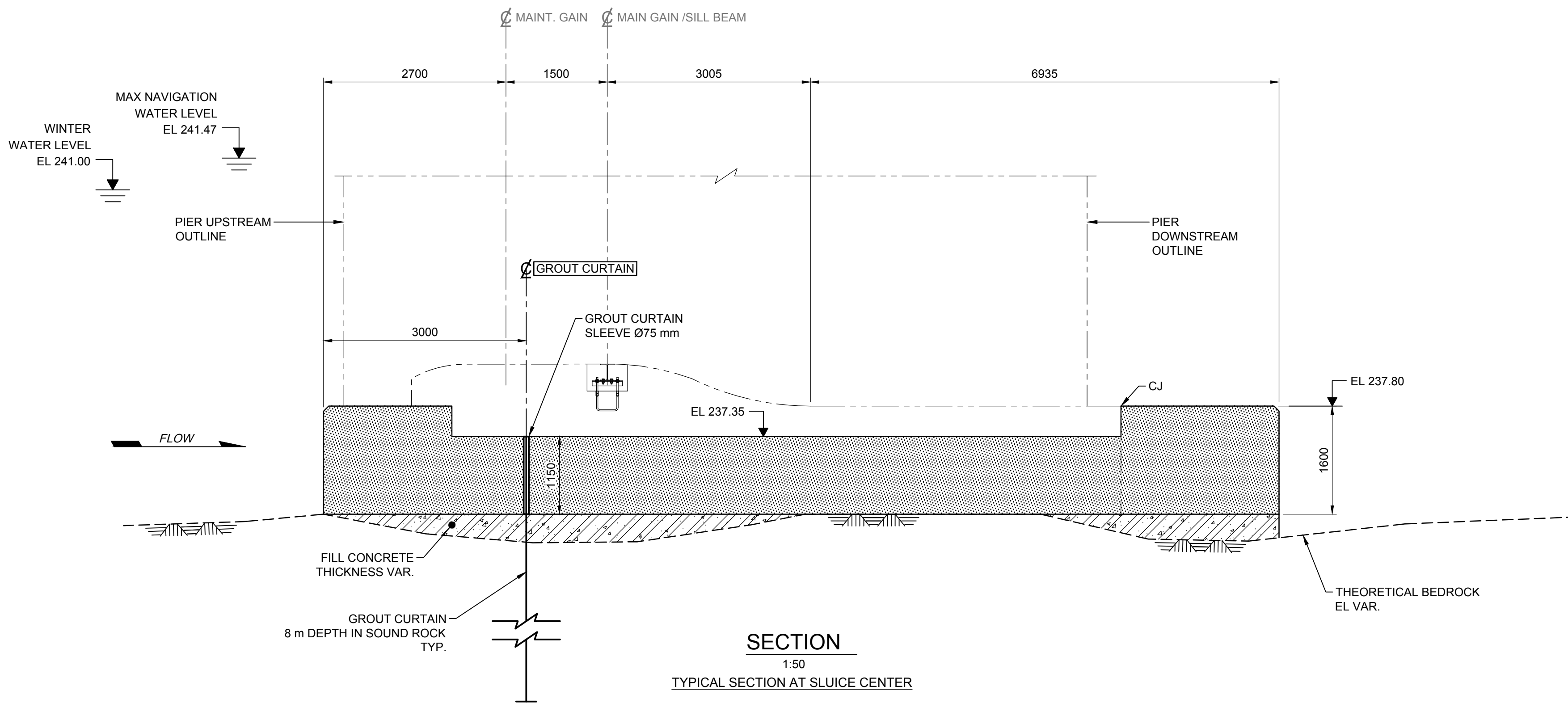
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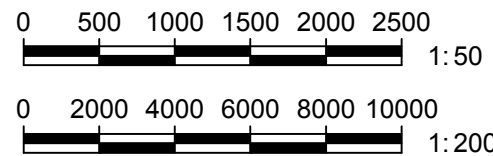
PLAN AT EL 237.80  
1:200



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  
Parcs Canada

Canada

CIMA+

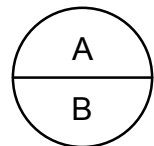
Contract No.	Drawing Code	Serial	Rev.
HSS00243	210 41DD	2701	0

NOTES:  
1. SEE SHEET 1 FOR NOTES.

0	FOR TENDER	M.A.B.	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

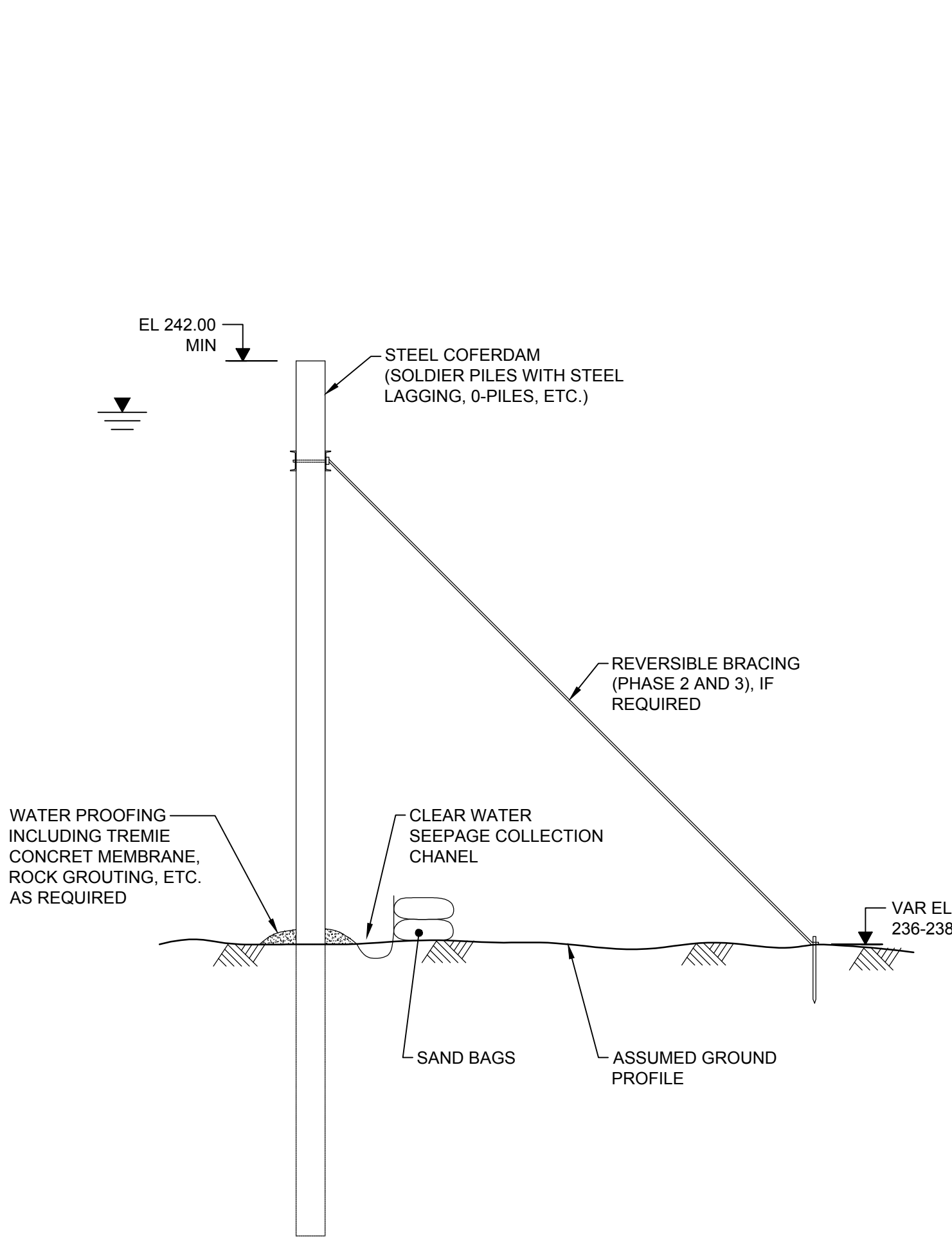
Project title / Titre du projet

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

Drawing title / Titre du dessin

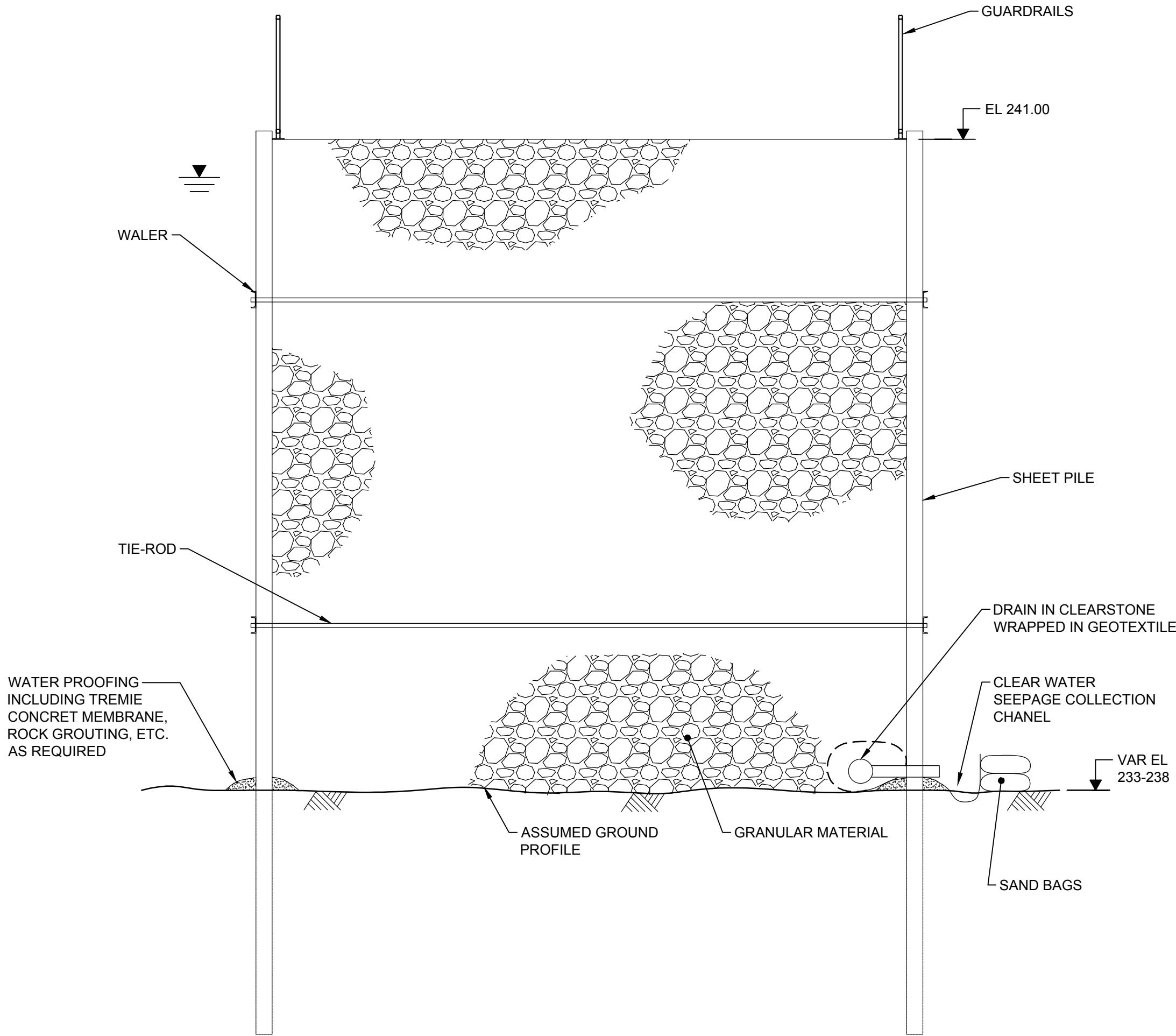
CIVIL  
GROUTING LAYOUT  
PLANS, ELEVATIONS  
AND SECTIONS

Drawn by / Dessiné par A. GUÉRIN-H.	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 701
Project Number / Numéro du projet R.076951.705	Sheet Feuille 2 of 2



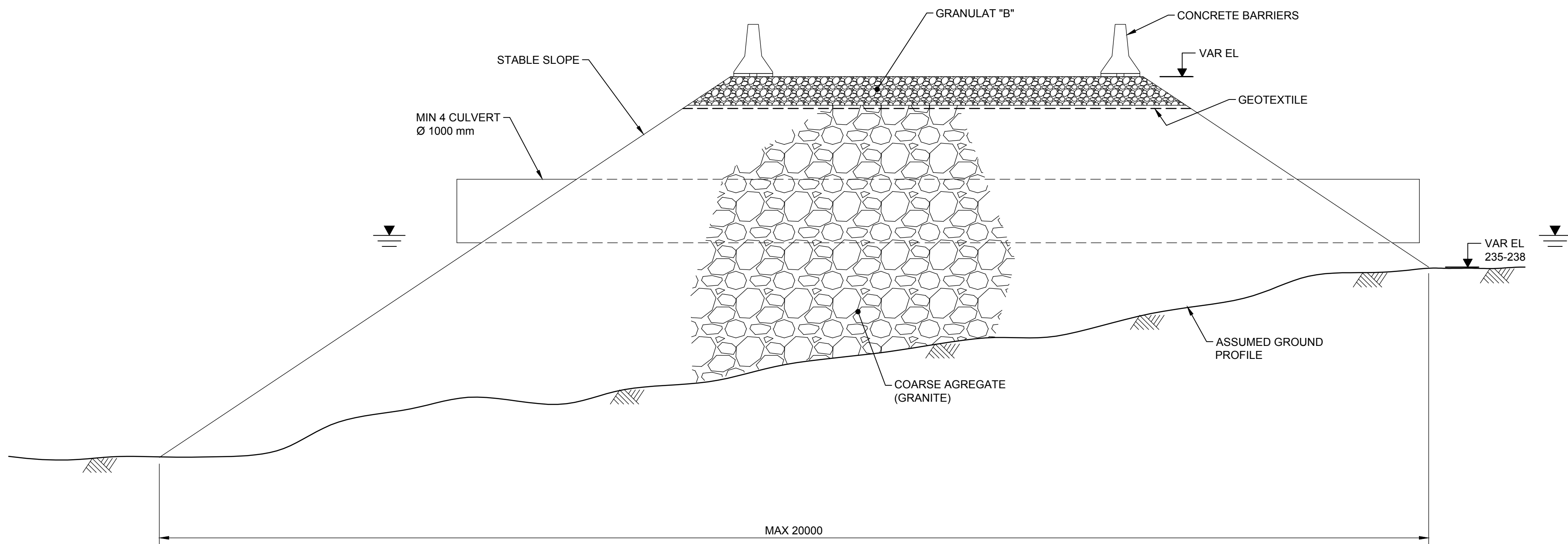
CONCEPTUAL STEEL COFFERDAM  
(PARALLEL TO FLOW)

1:50



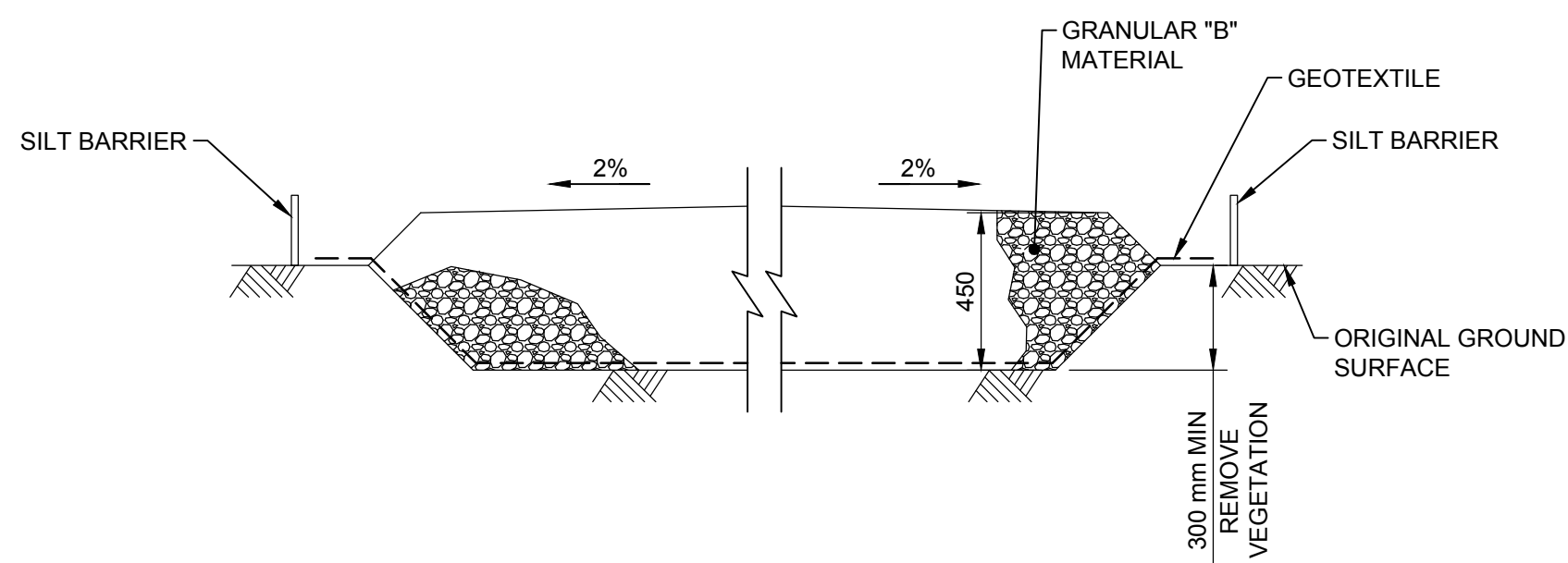
CONCEPTUAL CAISSON COFFERDAM  
(PERPENDICULAR TO FLOW)

1:50



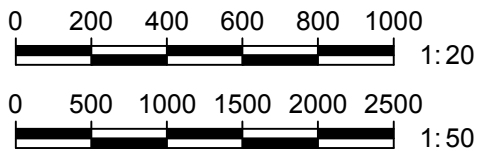
CONCEPTUAL IN-WATER  
TEMPORARY ACCES ROAD

1:50



TEMPORARY STAGING / LAYDOWN AREA  
AND ACCES ROADS CROSS SECTION

1:20



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

- 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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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

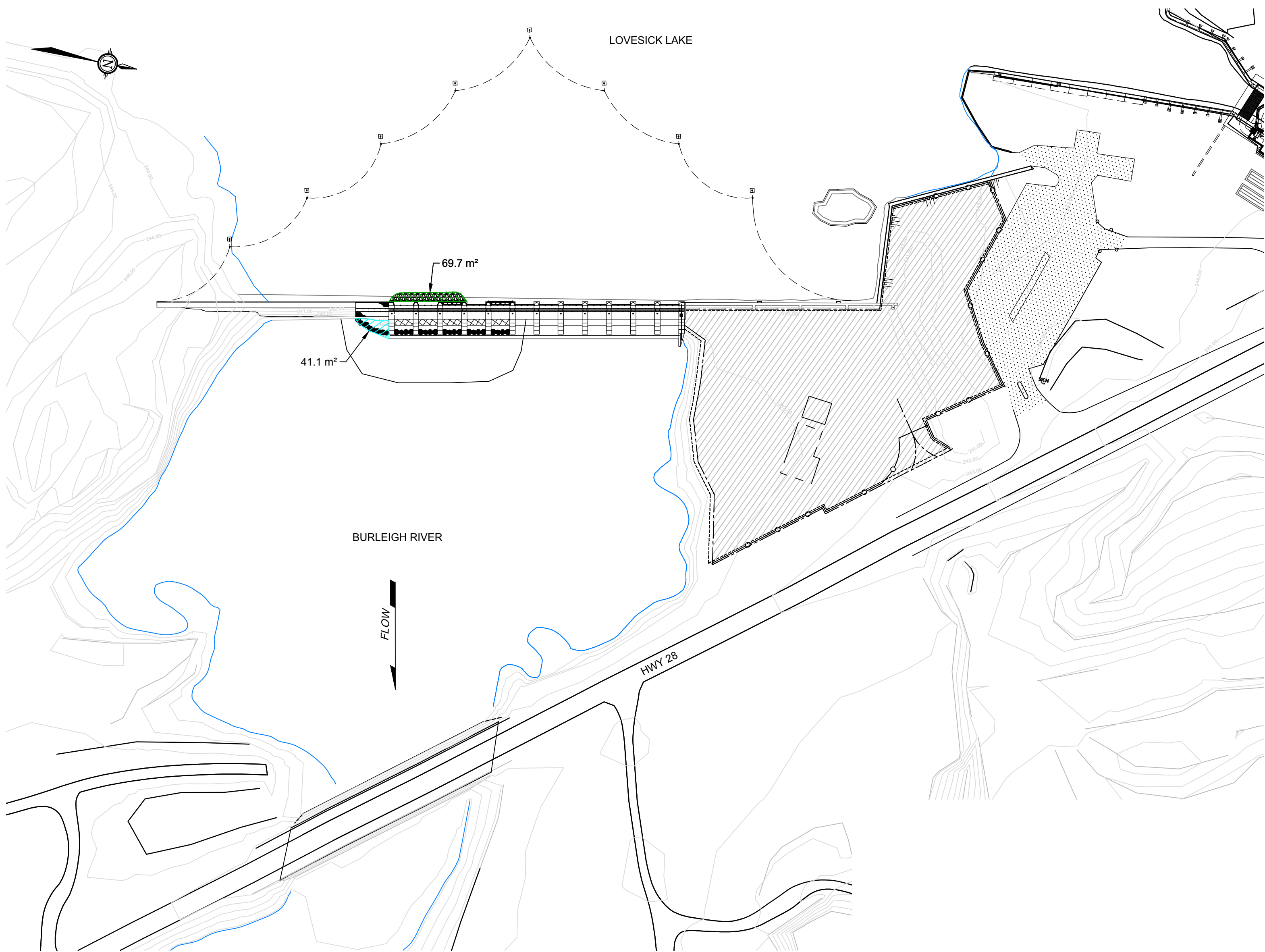
TRENT-SEVERN WATERWAY  
CONCRETE  
RECONSTRUCTION

Drawing title / Titre du dessin

CIVIL  
TEMPORARY ACCESSES  
AND LAYDOWN AREAS  
SECTIONS

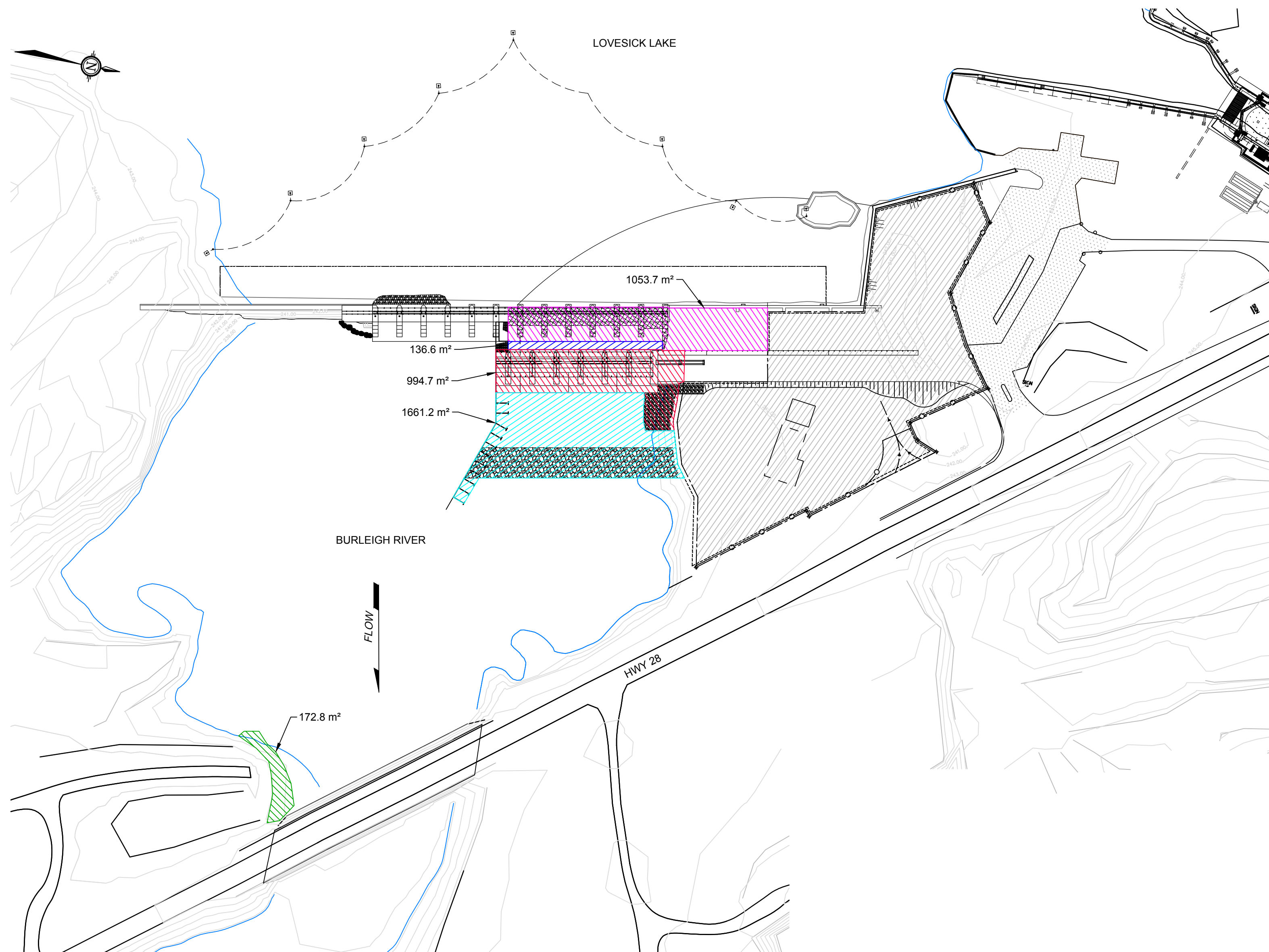
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Verified by / Vérifié par R. MIGUEL P.Eng.	Approved by / Approuvé par S. VITTECOQ P.Eng.
Drawing Date / Date du dessin 05/13/2020	Drawing Number/ Numéro du Dessin 702
Project Number / Numéro du projet R.076951.705	Sheet Feuille 1 of 1





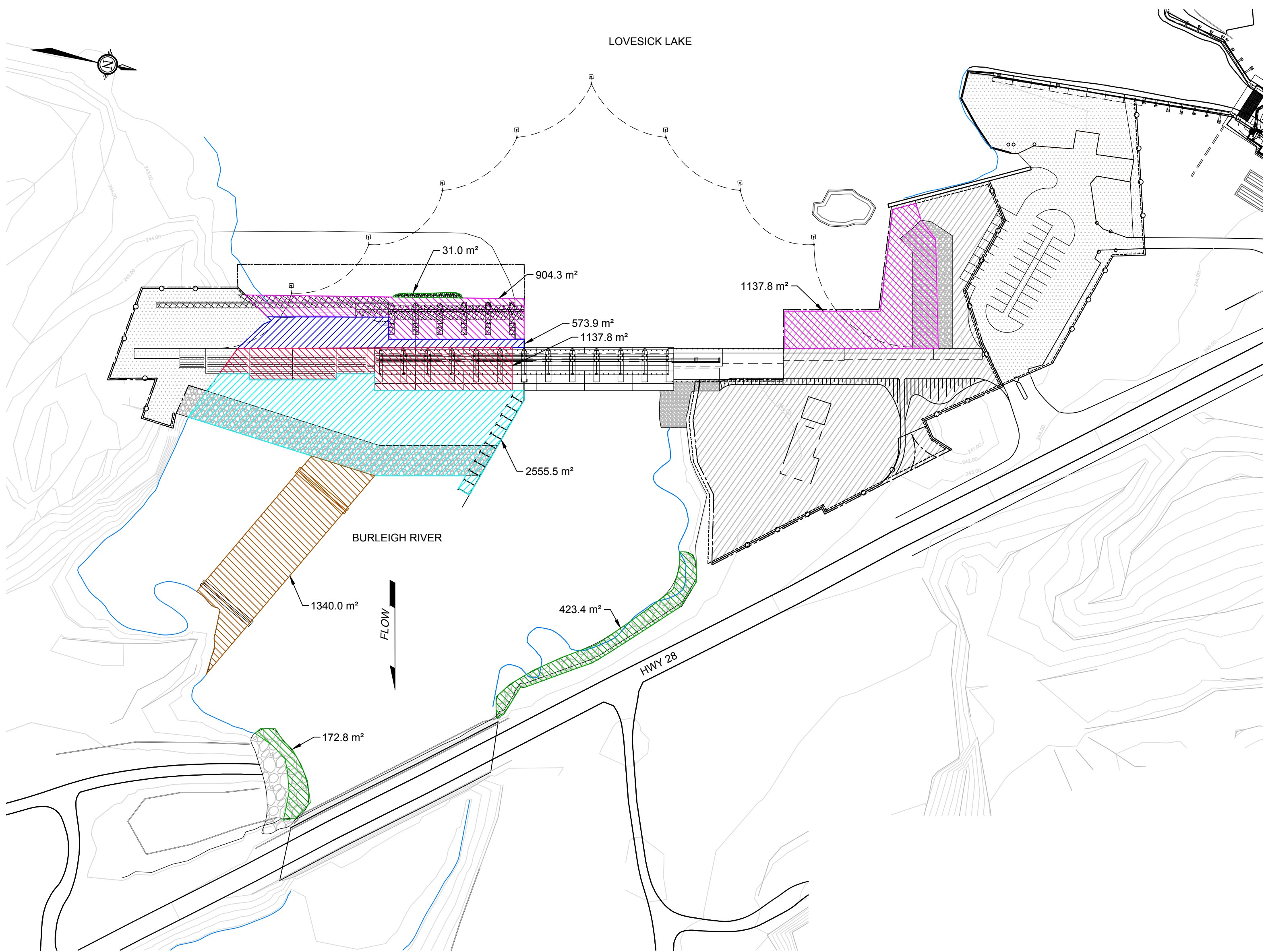
PHASE 1 - GENERAL ARRANGEMENT

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
---------------------

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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  
BURLEIGH DAM AT LOCK 28  
RECONSTRUCTION

Drawing title / Titre du dessin

CIVIL  
PERMANENT AND TEMPORARY  
IN WATER FOOTPRINTS  
GENERAL ARRANGEMENT

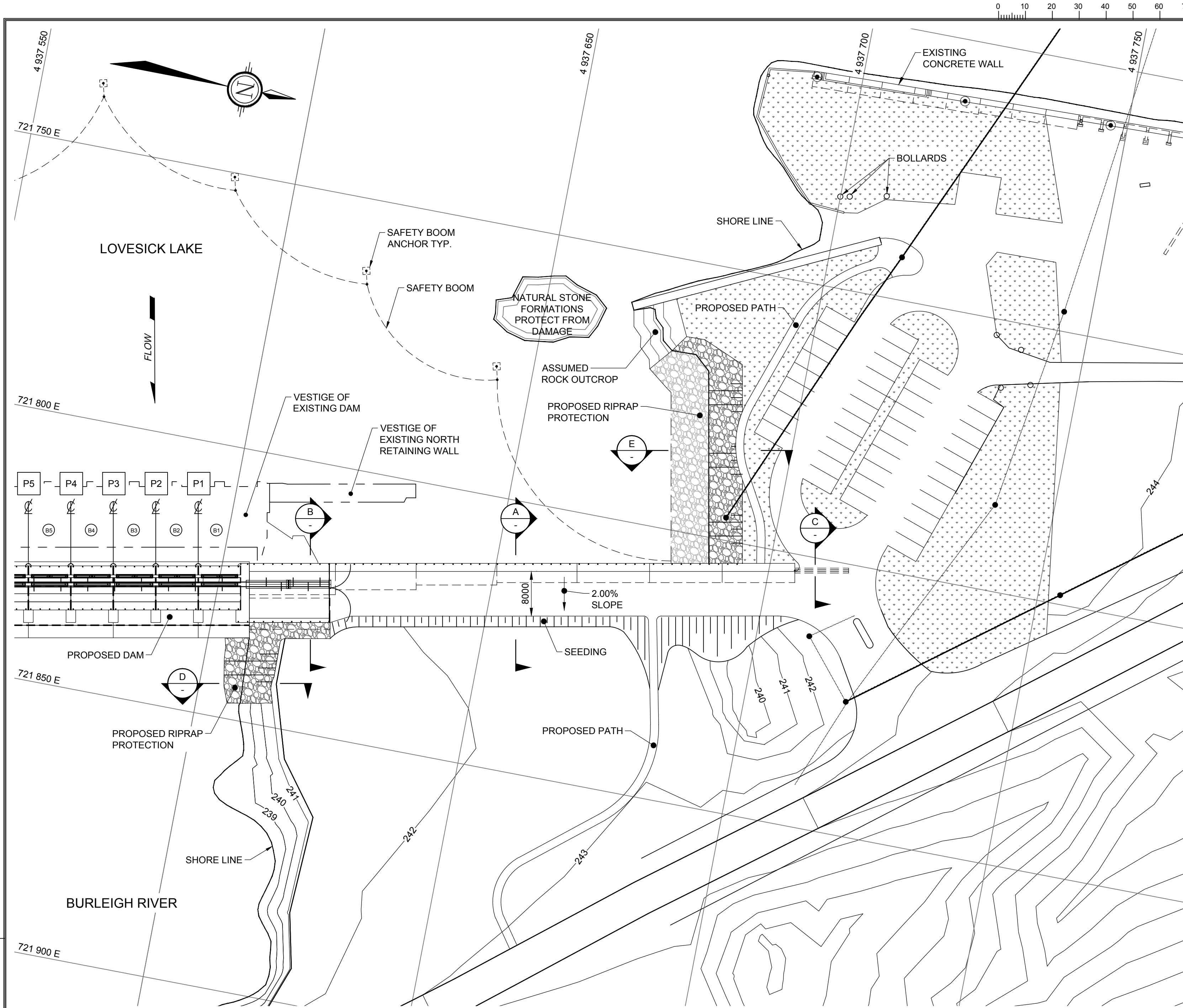
Drawn by / Dessiné par K. NONEN	Designed by / Conçu par Y. BERTON	P.Eng.
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Verified by / Vérifié par Y. BERTON	Approved by / Approuvé par S. VITTECOQ	P.Eng.
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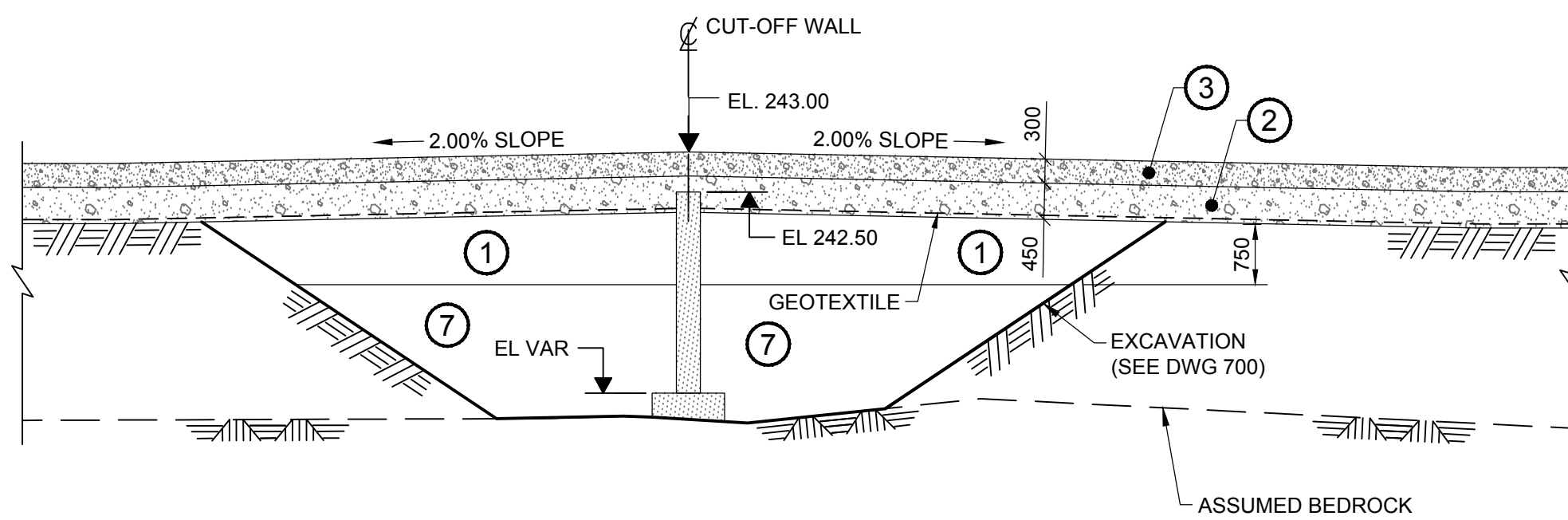
Drawing Date / Date du dessin 05/13/2020	Drawing Number/ Numéro du Dessin 703
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Project Number / Numéro du projet R.076951.705	Sheet Feuille 1 of 1 de 1
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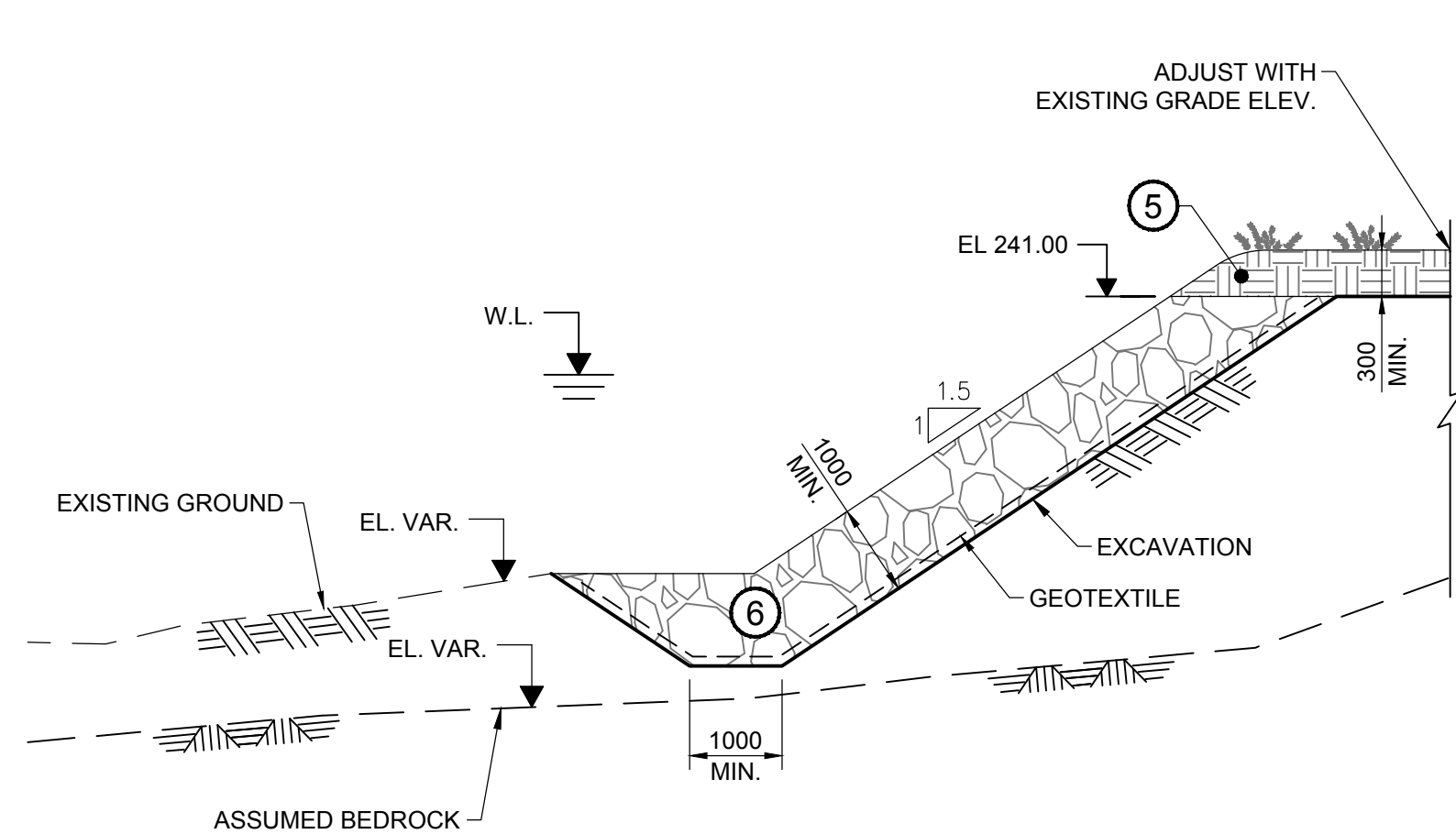




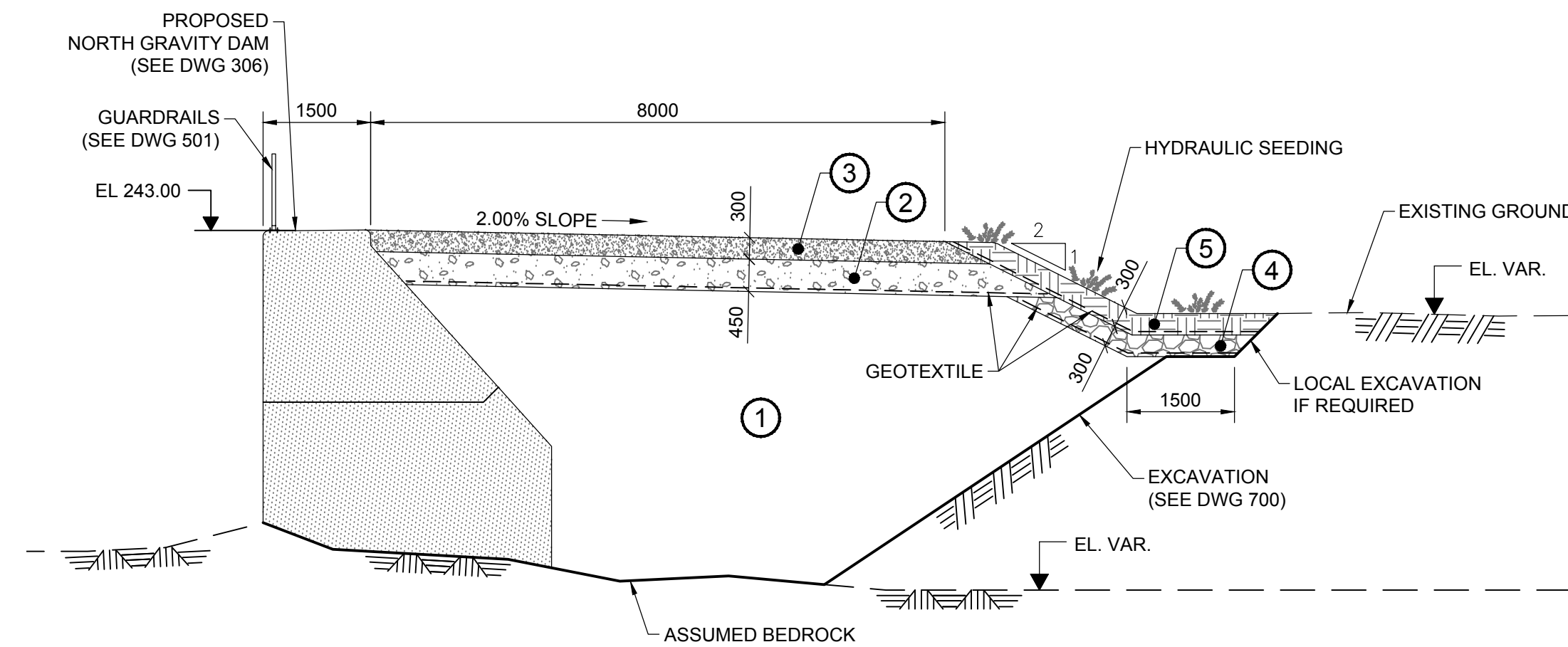
BACKFILLING PLAN VIEW  
1:500



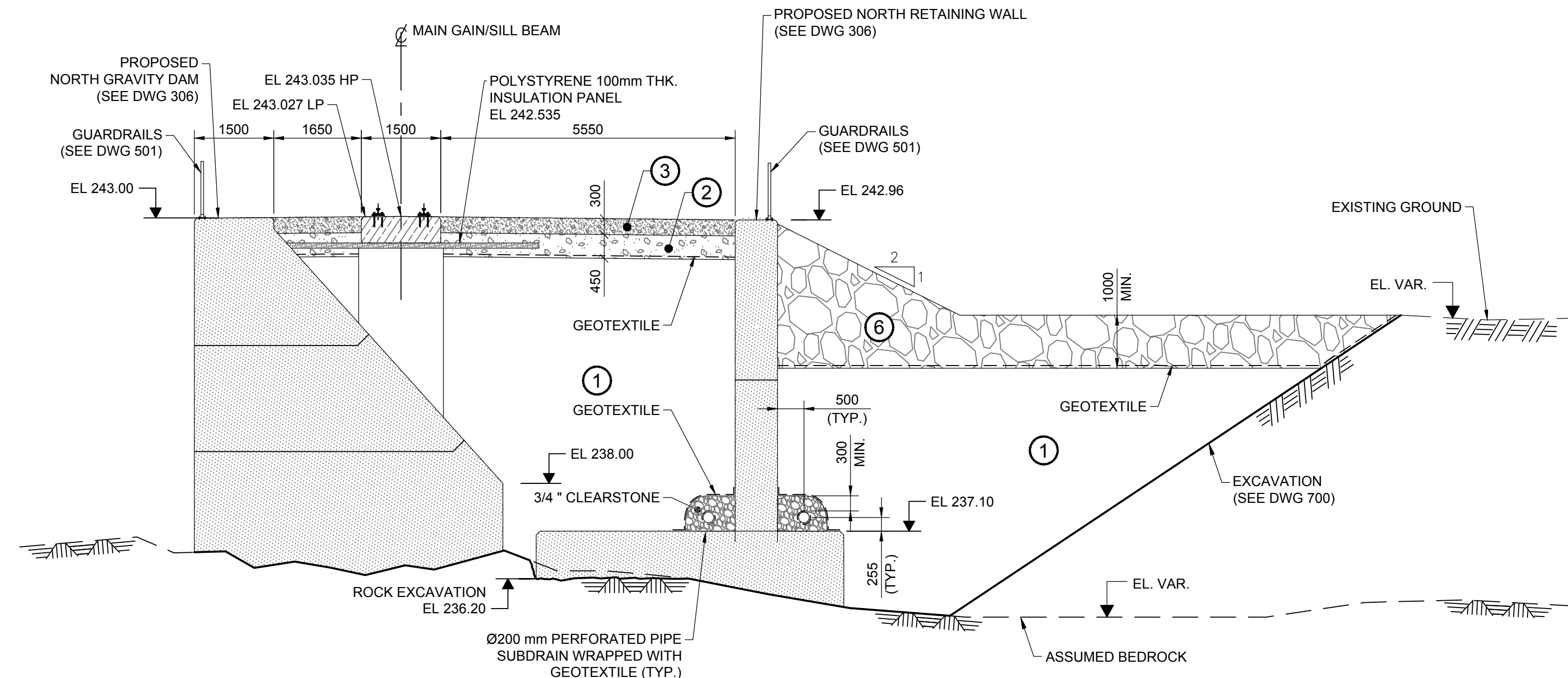
SECTION C  
1:75



SECTION D  
1:75



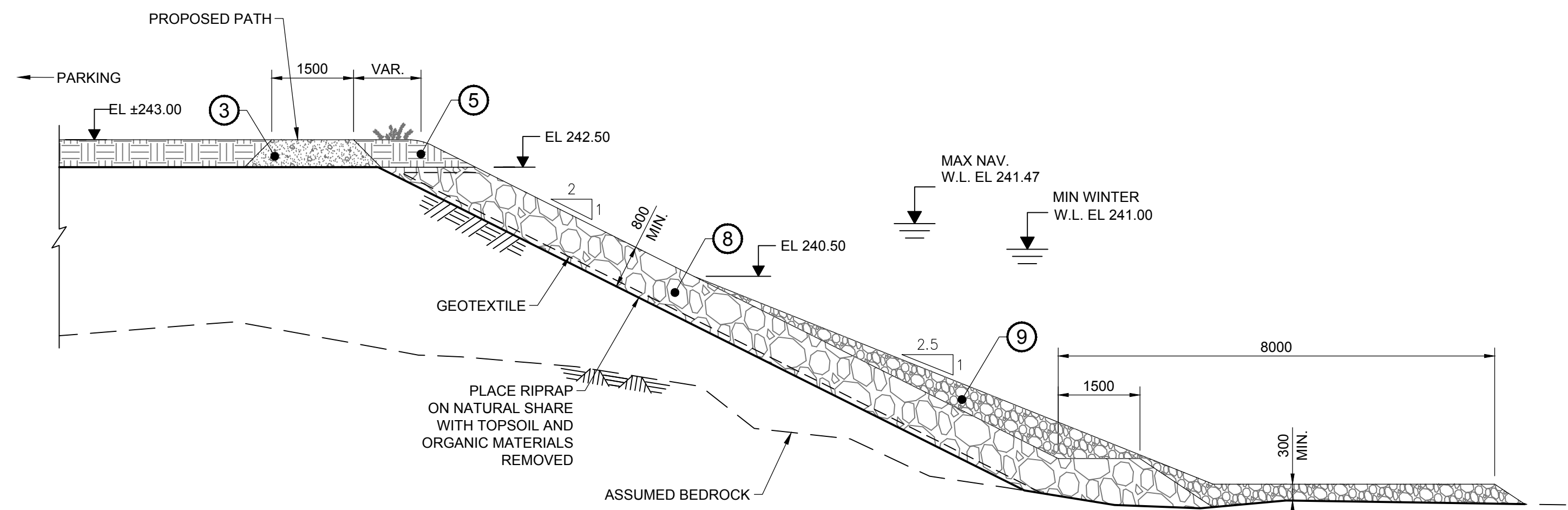
SECTION A  
1:75



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

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  
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		