

I:\ENGINEERING\AIL\PROJECTS\2019\00284E - SC - VARIOUS RAIL STREAM CROSSING, QC\ORDER DRAFTING\R.2\2019-00284E - R.2

BRIAN HEANEY

Wednesday, March 31, 2021 4:32:02 PM

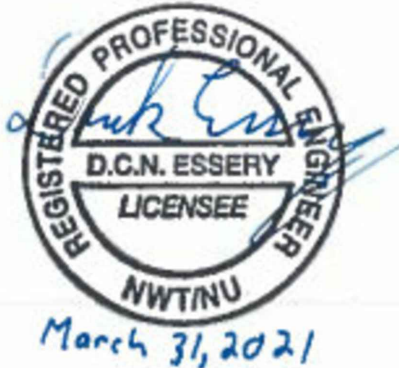
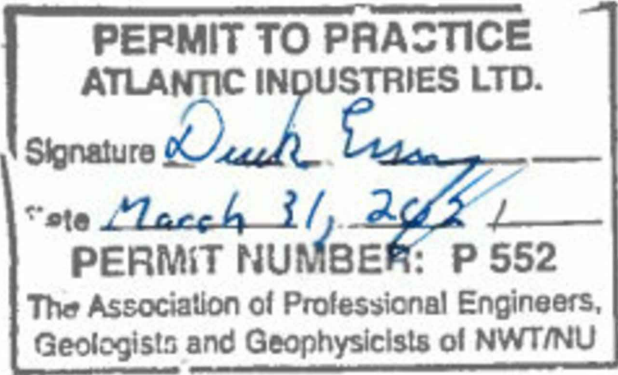
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BAFFINLAND IRON MINES CORPORATION  
RAIL STREAM CROSSINGS, NUNAVUT  
- CROSSING CV-29-2



AIL® SUPER-COR® ARCH STRUCTURE c/w  
AIL TRACK STRIP WIRE WALL HEADWALLS

DRAWING INDEX			
DRAWING No.	DRAWING TITLE	REV.	ISSUE DATE
2019-00284E-E00	COVER SHEET	2	31 MAR 21
AIL® SUPER-COR® ARCH STRUCTURE c/w AIL TRACK STRIP WIRE WALL HEADWALLS DRAWINGS			
2019-00284E-E01	PLAN VIEW	2	31 MAR 21
2019-00284E-E02	LONGITUDINAL PROFILE	2	31 MAR 21
2019-00284E-E03	STRUCTURE GEOMETRY, DETAILS & NOTES	2	31 MAR 21
2019-00284E-E04	STRUCTURE LAYOUT	1	31 MAR 21
2019-00284E-E05	STRUCTURE BILL OF MATERIALS, DETAILS & SECTIONS	1	31 MAR 21
2019-00284E-E06	STRUCTURAL BACKFILL ENVELOPE	1	31 MAR 21
2019-00284E-E07	PRECAST FOOTING DETAILS	2	31 MAR 21
2019-00284E-E08	MSE WALL ELEVATIONS	2	31 MAR 21
2019-00284E-E09	MSE WALL MATERIAL SCHEDULES	2	31 MAR 21
2019-00284E-E10	MSE WALL TYPICAL SECTIONS	2	31 MAR 21



2	31 MAR 21	BH	ISSUED FOR CONSTRUCTION
1	02 MAR 21	BH	RE-ISSUED FOR APPROVAL
0	29 JAN 21	BH	ISSUED FOR APPROVAL
REV NO.	DATE	BY	DESCRIPTION



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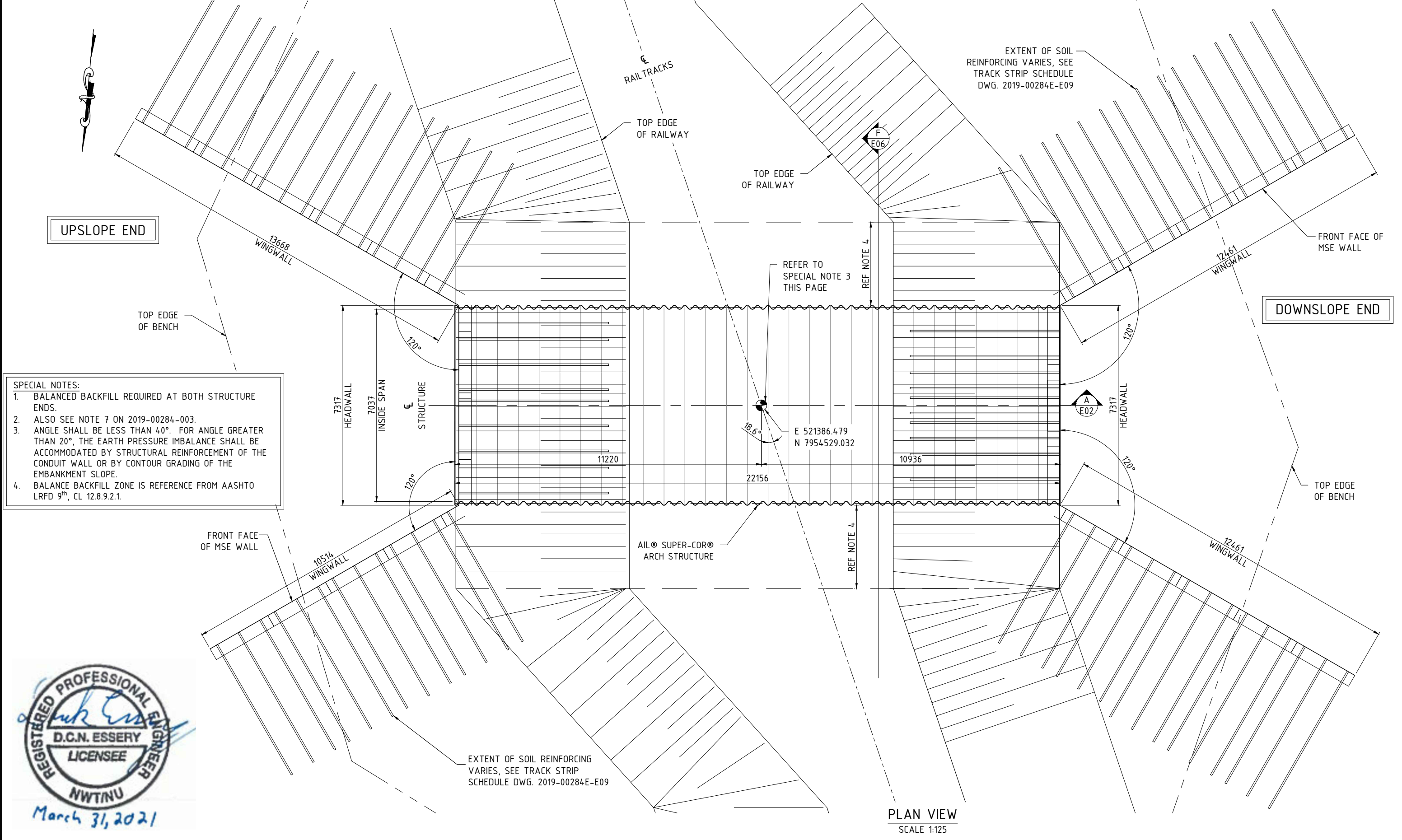
BAFFINLAND IRON MINES CORPORATION  
RAIL STREAM CROSSINGS, NUNAVUT - CROSSING CV-29-2  
COVER SHEET

DESIGNED	JZ	28 JAN 21	BRANCH P.O.	-	CUSTOMER REF.	CV-29-2	TOTAL DWGS	11
DES. CHK	MME	29 JAN 21						
DRAWN BY	BH	11 JAN 21	PROJECT NUMBER	2019-00284E	DWG NO.	E00	REV.	2
DWG. CHK	LM	25 JAN 21						

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Wednesday, March 31, 2021 4:32:03 PM

BRIAN HEANEY



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REV NO.	DATE	BY	DESCRIPTION



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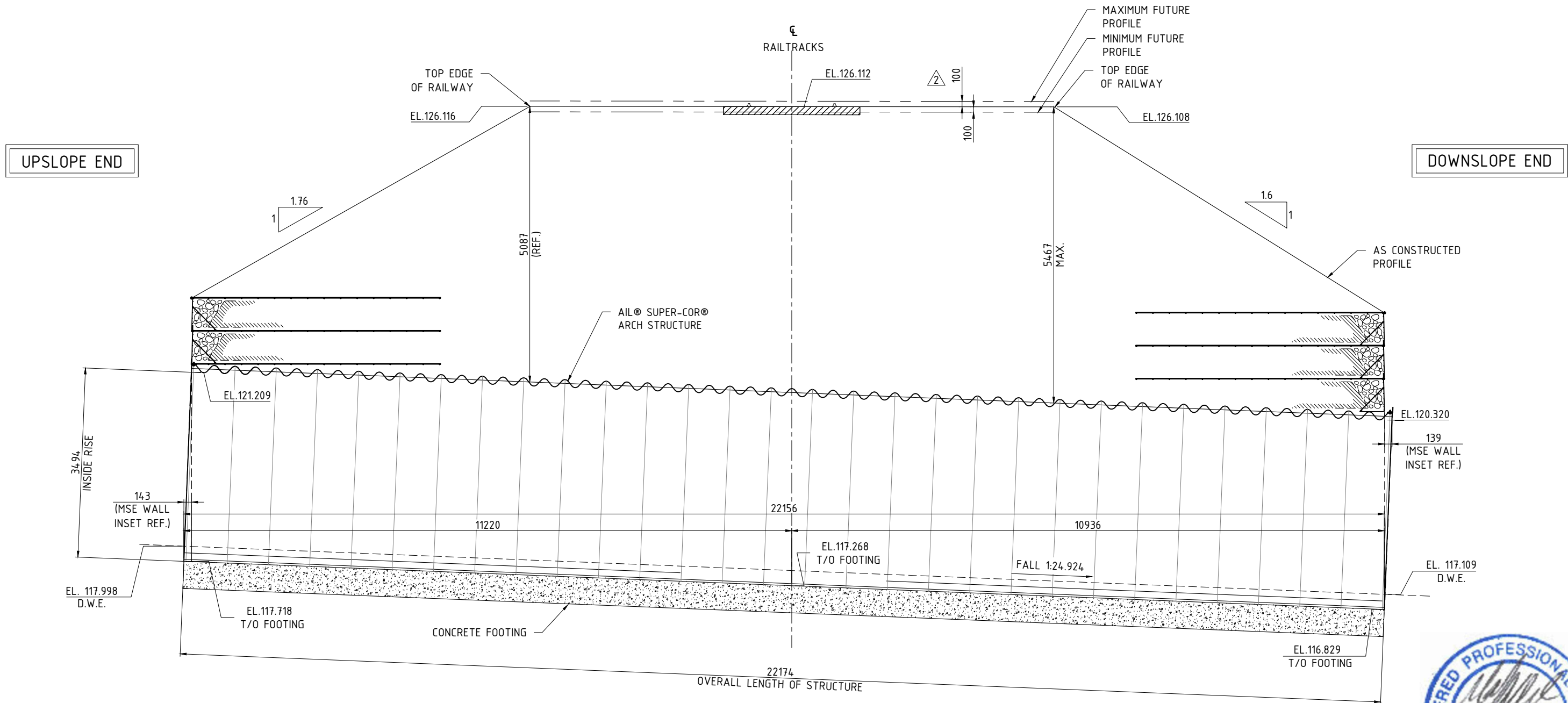
BAFFINLAND IRON MINES CORPORATION  
RAIL STREAM CROSSINGS, NUNAVUT - CROSSING CV-29-2  
PLAN VIEW

DESIGNED	JZ	28 JAN 21	BRANCH P.O.	-	CUSTOMER REF.	CV-29-2
DES. CHK	MME	29 JAN 21				
DRAWN BY	BH	11 JAN 21	PROJECT NUMBER	2019-00284E	DWG NO.	E01
DWG. CHK	LM	25 JAN 21				REV. 2

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Wednesday, March 31, 2021 4:32:04 PM      BRIAN HEANEY



**A** SECTION - LONGITUDINAL PROFILE THRU  $\epsilon$  OF STRUCTURE  
E01 SCALE: 1:75



2	31 MAR 21	BH	ISSUED FOR CONSTRUCTION
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RAIL STREAM CROSSINGS, NUNAVUT - CROSSING CV-29-2  
LONGITUDINAL PROFILE

DESIGNED	JZ	28 JAN 21	BRANCH P.O.	-	CUSTOMER REF.	CV-29-2
DES. CHK	MME	29 JAN 21				
DRAWN BY	BH	11 JAN 21	PROJECT NUMBER	2019-00284E	DWG NO.	E02
DWG. CHK	LM	25 JAN 21				REV. 2

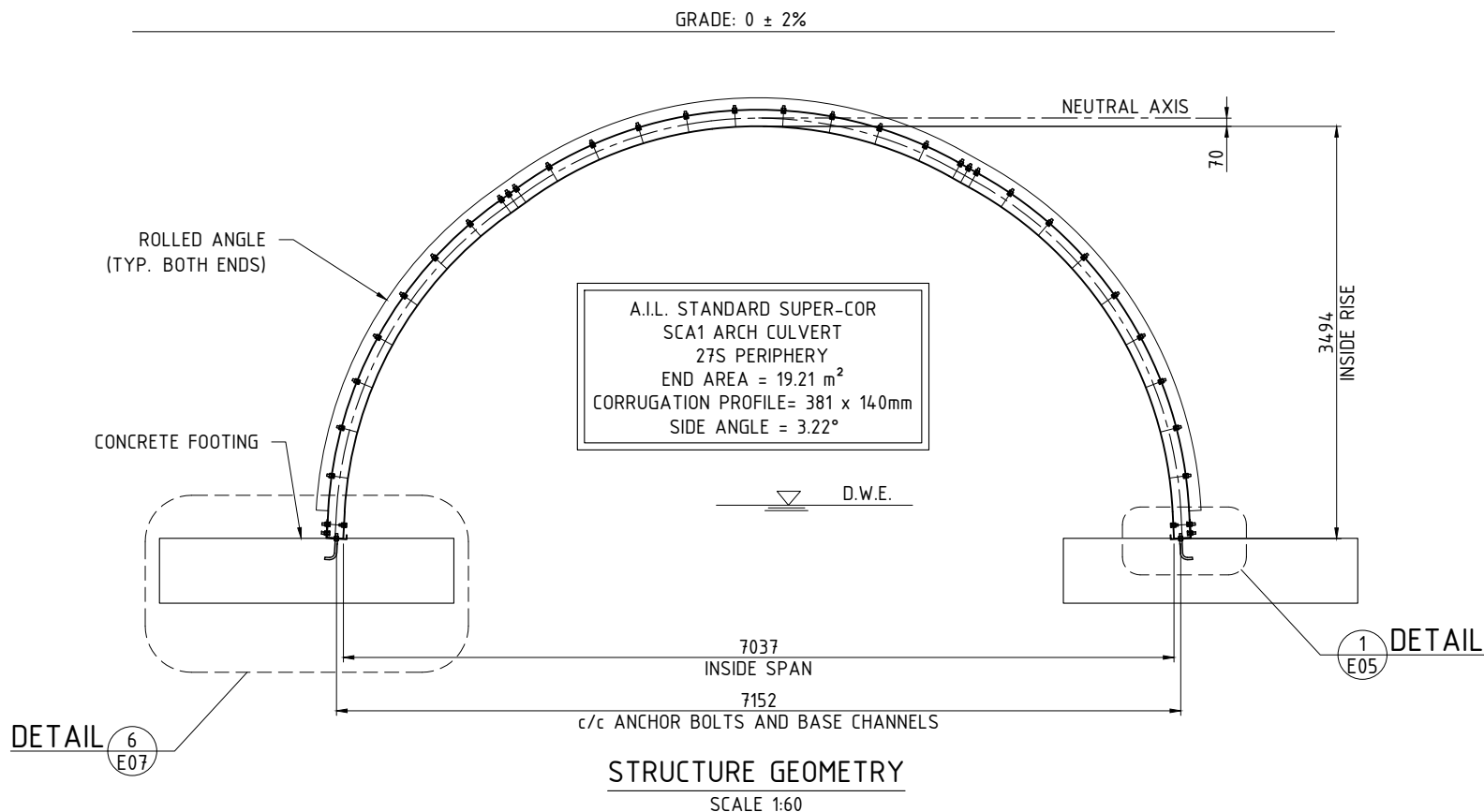
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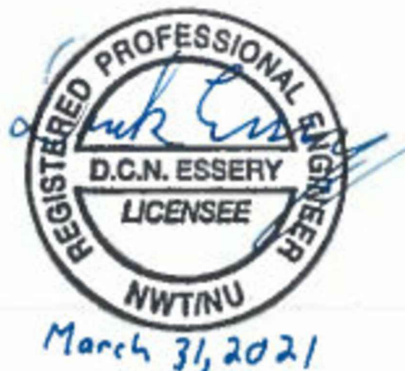


SITE SPECIFIC MSE WALL DESIGN PARAMETERS:

- FOR TYPICAL MSE WALL NOTES AND DETAILS REFER TO AIL DRAWINGS 2019-00284-002 & 005-009.
- REFERENCE DRAWINGS BY HATCH, BAFFINLAND IRON MINES LP MARY RIVER PROJECT, RAIL SITE CULVERT CV-29-2 GENERAL LAYOUT, REV A, ISSUED FOR INTERNAL REVIEW, 2019/03/26.
- THE DESIGN LIFE FOR THE MSE WALL IS 25 YEARS.
- BELOW GROUND STEEL CORROSION RATES FOR NON-AGGRESIVE FILL ARE AS FOLLOWS:  
GALVANIZATION LOSS: 15 µm/YEAR FOR FIRST TWO YEARS  
4 µm/YEAR FOR SUBSEQUENT YEARS  
CARBON STEEL LOSS: 12 µm/YEAR AFTER ZINC DEPLETION.  
THE CORROSION RATES ARE BASED ON BACKFILL MATERIAL WHICH MEETS THE ELECTROCHEMICAL SPECIFICATIONS IN THE BACKFILL NOTES.
- SOIL REINFORCING MINIMUM YIELD STRENGTH OF 450 MPa MANUFACTURED ACCORDING TO ASTM A1064, WITH 0.086mm ZINC GALVANIZING AS PER ASTM A123.  
SOIL REINFORCING LENGTHS ARE SHOWN ON THE SCHEDULE.
- SOIL DESIGN PARAMETERS:  
SELECT BACKFILL: UNIT WEIGHT: 18 kN/m³  
INTERNAL FRICTION ANGLE: 38°  
COHESION: 0  
RETAINED BACKFILL: UNIT WEIGHT: 18 kN/m³  
INTERNAL FRICTION ANGLE: 38°  
COHESION: 0  
FOUNDATION SOIL: FRICTION FOR SLIDING: 38°
- SEISMIC PARAMETERS:  
SITE CLASS = B  
PGA = 0.089  
SEISMIC PARAMETERS: PER AASHTO LRFD 2019, 11.5.4.2, NO SEISMIC ANALYSIS IS REQUIRED.  
THIS APPROACH IS VALID PROVIDED SEISMIC ACCELERATION 'AS' IS LESS THAN 0.4G, THERE IS NO POTENTIAL FOR LIQUEFACTION, AND THE WALL IS NOT SUPPORTING ANOTHER STRUCTURE WHICH IS DESIGNED FOR SEISMIC LOADING. IT IS THE RESPONSIBILITY OF THE PROJECT GEOTECHNICAL ENGINEER TO ADVISE IF THESE CONDITIONS ARE NOT MET.
- UF LIVE LOAD SURCHARGE = E-90  
- 12kPa MAINTENANCE VEHICLE CONSIDER OUTSIDE OF RAIL LOADING (TO BE CONFIRMED).
- DESIGN WATER LEVEL - WALL DESIGN CONSIDERED 1:200 YEAR STORM OF 0.28m ABOVE STREAM BED.
- EMBEDMENT = 600mm MIN.
- GLOBAL STABILITY REQUIREMENTS CONSIDERED IN DESIGN = 0.7H, CODE MINIMUM. GLOBAL AND COMPOUND STABILITY ANALYSIS BY OTHERS.
- FOR STRUCTURE SPECIFIC DESIGN PARAMETERS REFER TO THE DRAWING SITE AS NOTED ON AIL DRAWING NO. 2019-00284-000.

MSE WALL SETTLEMENT AND ALIGNMENT NOTES:

- CALCULATION AND ANALYSIS OF TOTAL AND DIFFERENTIAL SETTLEMENT WERE NOT COMPLETED BY AIL. THE ANTICIPATED SETTLEMENTS ARE ASSUMED TO BE WITHIN THE FOLLOWING LIMITS (THESE LIMITS ARE APPLICABLE TO THE MSE WALL AND DO NOT ADDRESS SETTLEMENT LIMITS FOR STRUCTURES SUPPORTED BY THE WALL):  
a. MAXIMUM DIFFERENTIAL SETTLEMENT: 1% ON LENGTH  
b. MAXIMUM TOTAL SETTLEMENT: 50mm
- THE FOLLOWING ALIGNMENT TOLERANCES MUST BE MET:  
c. VERTICAL ALIGNMENT TOLERANCE SHALL NOT EXCEED 50mm PER 3m OF WALL HEIGHT  
d. HORIZONTAL ALIGNMENT TOLERANCE SHALL NOT EXCEED 50mm PER 3m OF WALL LENGTH ADDITIONAL TOLERANCES SHALL BE AS PER THE CONTRACT DOCUMENTS



GENERAL STRUCTURE NOTES

ALL DIMENSIONS ARE IN MILLIMETRES, UNLESS NOTED OTHERWISE.  
ALL ELEVATIONS ARE IN METRES.  
1S = 406.4 mm  
ALL DIMENSIONS ARE TO THE INSIDE CREST OF STEEL UNLESS NOTED OTHERWISE.  
REQUIRED TORQUE ON BOLTS : MINIMUM 203 N.m (150 ft.lbs)  
AVERAGE 270 N.m (200 ft.lbs)  
MAXIMUM 338 N.m (250 ft.lbs)

- DESIGN STANDARDS, SPECIFICATIONS AND GUIDELINES  
1.1. AREMA MANUAL FOR RAILWAY ENGINEERING 2020.  
1.2. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 9<sup>TH</sup> EDITION 2020.  
1.3. CANADIAN STANDARD ASSOCIATION (CSA).  
1.4. ASTM STANDARDS.  
1.5. ATLANTIC INDUSTRIES LIMITED INTERNAL METHODS  
1.6. CSPI HANDBOOK OF STEEL DRAINAGE AND HIGHWAY CONSTRUCTION - PERFORMANCE GUIDELINE (TECH BULLETIN 13).
- DESIGN PARAMETERS  
2.1. LIVE LOAD: E-90, DLA = 0.50, LOAD FACTOR = 1.75.  
2.2. DESIGN UNIT WEIGHT OF SOIL = 18 kN/m³  
2.3. DESIGN HEIGHT OF COVER = 5470mm FROM NEUTRAL AXIS OF BARREL CROWN. MAINTENANCE AND OPERATIONAL VARIANCES, ± 100mm FROM THE AS CONSTRUCTED PROFILE ON DWG 2019-00284E-E02.  
2.4. DESIGN SERVICE LIFE = 25 YEARS, CSPI PERFORMANCE GUIDELINE.  
THE OWNER IS TO ADVISE ATLANTIC INDUSTRIES LIMITED IF ACTUAL DURABILITY EXPOSURES DIFFER FROM THE FOLLOWING:  
2.4.1. OUTSIDE OF STRUCTURE  
\* SOIL EXPOSURE: AASHTO CORROSION MODEL (SEE TABLE 1-1 ON DWG 2019-00284-001)  
2.4.2. INSIDE OF STRUCTURE  
\* ATMOSPHERE EXPOSURE: ISOCORRAG CLASSIFICATION C1 TO C2. NO LOSS CONSIDERED.  
\* SOIL EXPOSURE: AASHTO CORROSION MODEL (SEE TABLE 1-1 ON DWG 2019-00284-001).  
\* WATER EXPOSURE: WATER CONTACT WITH THE STRUCTURE WAS CONSIDERED PERIODIC AND GALVANIZING PROTECTION WAS CONSIDERED SUFFICIENT PROTECTION ON THE INSIDE.  
2.4.3. BOLTS  
AASHTO: REFER TO TABLE 1-1 ON DWG. 2019-00284-001.
- STEEL CULVERT  
3.1. CORRUGATED STEEL/COMPONENTS TO CONFORM TO AASHTO M167M.  
3.2. STRUCTURAL PLATE/CHANNEL/ANGLE COATING, AASHTO M167M: GALVANIZED Z915 (TOTAL ON BOTH SURFACES).  
3.3. BOLTS - 19Ø, (ASTM A449, TYPE 1).  
NUTS - 19Ø, (ASTM A563, GRADE C).  
ANCHOR BOLTS - 19Ø CSA-G401-14, (ASTM F1554, GRADE 36).  
3.4. FASTENER COATING:  
ASTM A153/A153M AND ASTM F2329 OR CAN/CSA-G164, CLASS 5.  
ANCHOR BOLTS - ASTM A153/A153M AND ASTM F2329 OR CAN/CSA-G164, CLASS 5.
- FOOTINGS  
4.1. FOOTINGS DESIGN BY ATLANTIC INDUSTRIES LIMITED.  
4.2. ANCHOR BOLTS FOR CONCRETE FOOTINGS SUPPLIED BY ATLANTIC INDUSTRIES LIMITED.  
4.3. FOOTING DESIGN BASED ON SOIL WITH A MINIMUM ALLOWABLE BEARING CAPACITY OF 400 kPa SLS, 500 kPa ULS AND FOUNDATION INTERFACE COEFFICIENT OF FRICTION FOR SLIDING RESISTANCE = 0.36. EFFECTIVE FRICTION ANGLE FOR LATERAL EARTH PRESSURE ON FOOTING = 30° (MIN.). GEOTECHNICAL ENGINEER TO EVALUATE THE LOAD INCLINATION IMPACT ON BEARING CAPACITY. DESIGN PARAMETERS TO BE CONFIRMED BY OWNER'S GEOTECHNICAL ENGINEER IN THE FIELD.  
4.4. THE OWNER'S GEOTECHNICAL ENGINEER IS RESPONSIBLE FOR ENSURING THE AS-CONSTRUCTED FOUNDATION RESULTS IN MAXIMUM FOOTING SETTLEMENTS LESS THAN THE FOLLOWING:  
4.4.1. LONGITUDINAL DIFFERENTIAL SETTLEMENT (ALONG THE LENGTH) = SMALLER OF 1% OF LENGTH OR 50mm.  
4.4.2. TOTAL SETTLEMENT = 50mm.  
4.4.3. MAXIMUM DIFFERENTIAL SETTLEMENT BETWEEN THE STRUCTURE AND THE ENGINEERING BACKFILL = 25 mm.  
4.4.4. TRANSVERSE DIFFERENTIAL SETTLEMENT (ACROSS THE SPAN) = SMALLER OF 1% OF LENGTH OR 25 mm.  
4.5. FOR CONCRETE FOOTINGS NOTES SEE DRAWING 2019-00284E-E07.
- HYDRAULICS/SCOUR  
5.1. REFERENCE 2019-00284-001.
- EXCAVATING AND BACKFILLING  
6.1. REFERENCE 2019-00284-001, 2019-00284-003 AND 2019-00284E-E06.



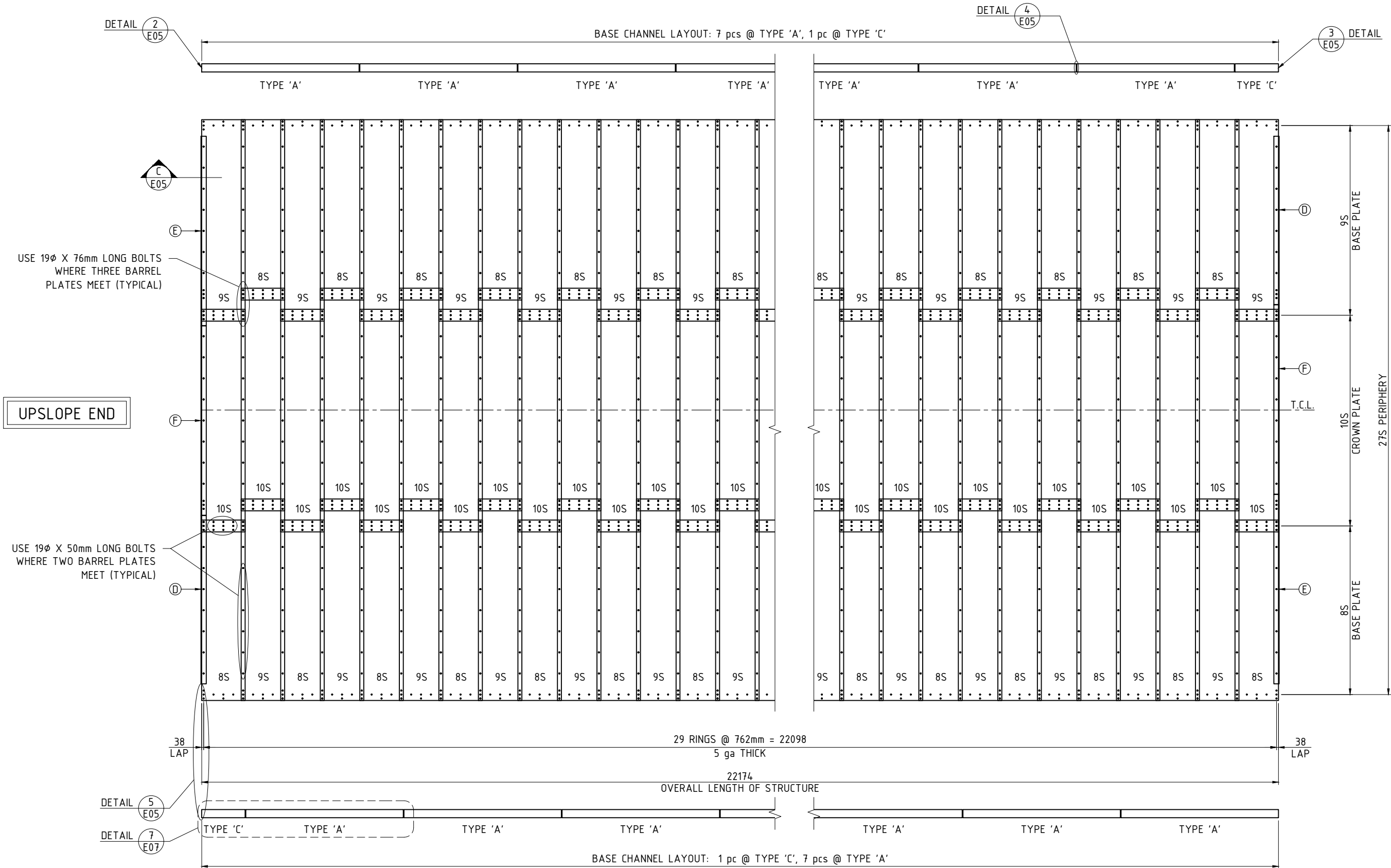
2	31 MAR 21	BH	ISSUED FOR CONSTRUCTION	 <b>Atlantic Industries Limited</b> CALL TOLL FREE IN NORTH AMERICA 1-877-AIL-PIPE www.ail.ca	BAFFINLAND IRON MINES CORPORATION RAIL STREAM CROSSINGS, NUNAVUT - CROSSING CV-29-2 STRUCTURE GEOMETRY, DETAILS & NOTES	DESIGNED	JZ	28 JAN 21	BRANCH P.O. -	CUSTOMER REF. CV-29-2		PROJECT NUMBER	2019-00284E	DWG NO. E03	REV. 2			
1	02 MAR 21	BH	RE-ISSUED FOR APPROVAL			DES. CHK	MME	29 JAN 21										
0	29 JAN 21	BH	ISSUED FOR APPROVAL			DRAWN BY	BH	11 JAN 21	PROJECT									
REV NO.	DATE	BY	DESCRIPTION					DWG. CHK	LM	25 JAN 21	NUMBER							

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STRUCTURE LAYOUT - OUTSIDE FLAT VIEW  
SCALE : 1:75

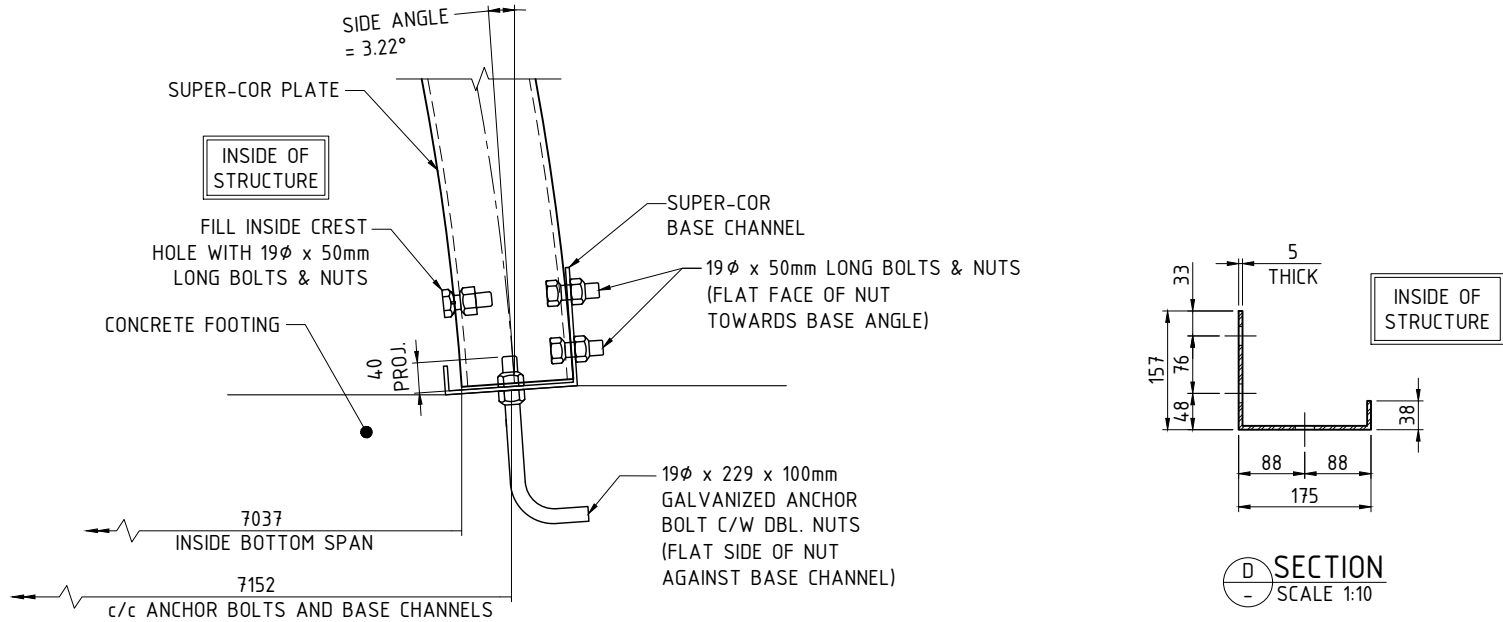


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REV NO.	DATE	BY	DESCRIPTION													
						DRAWN BY	BH	11 JAN 21	PROJECT	2019-00284E			DWG NO.	E04	REV.	1
						DWG. CHK	LM	25 JAN 21	NUMBER							

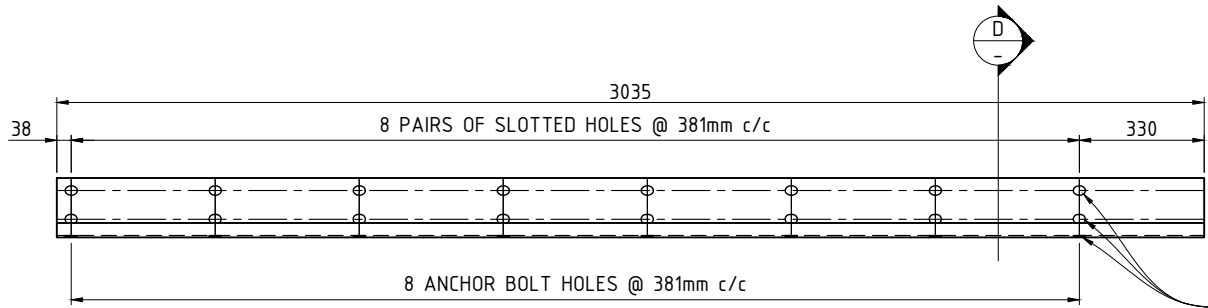
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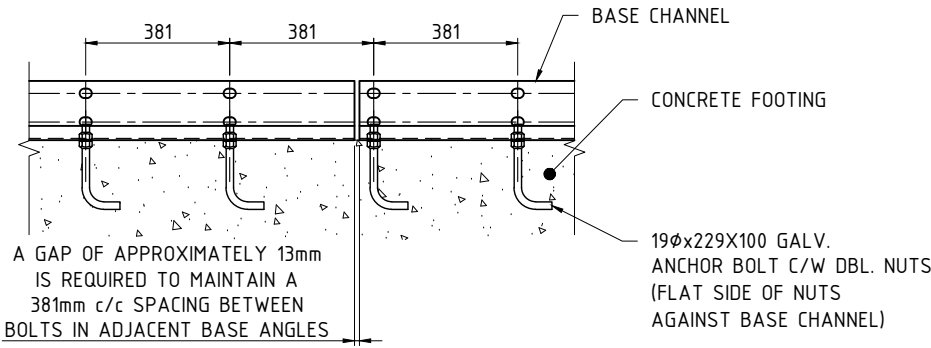


1  
E03  
DETAIL - BASE CONNECTION  
SCALE 1:10

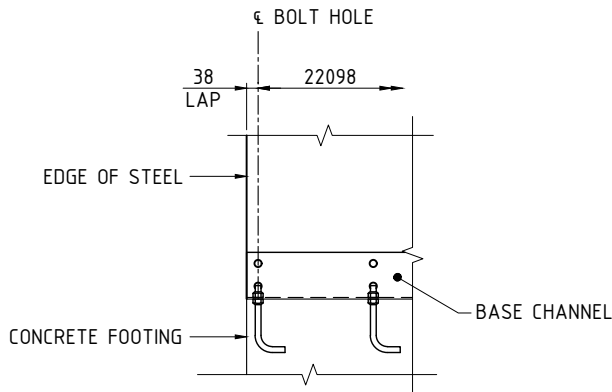


2  
E04  
DETAIL - TYPE 'A' CHANNEL (VIEWED FROM INSIDE STRUCTURE)  
14 pcs REQUIRED  
SCALE 1:20

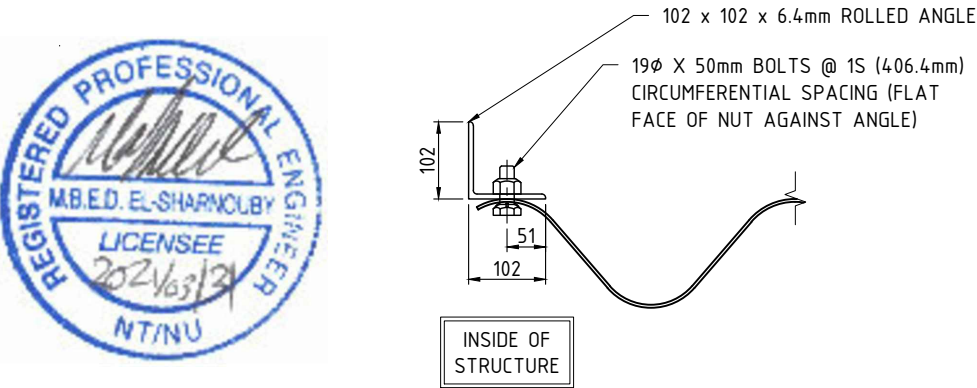
ALL HOLES ARE  
25mm x 32mm  
LONGITUDINALLY  
SLOTTED



4  
E04  
DETAIL - BASE CHANNEL SPACING  
SCALE 1:20



5  
E04  
DETAIL - BASE CHANNEL & FOOTING END  
(TYP. BOTH ENDS) N.T.S.



C  
E04  
SECTION - ROLLED ANGLE CONNECTION (TYP. BOTH ENDS)  
SCALE 1:10

BILL OF MATERIALS						
QTY	PART ID	ITEM DESCRIPTION	NET LENGTH (mm)	GROSS WIDTH (mm)	DESIGN THICKNESS (mm)	MARK/ COLOUR CODE
29	SCF538S	8S BASE PLATE	762	3479.2	5.45 (5 ga)	
29	SCF539S	9S BASE PLATE	762	3885.6	5.45 (5 ga)	
29	SCF5310S	10S CROWN PLATE	762	4292	5.45 (5 ga)	
1650	UP.75X2	HEAVY HEX CULVERT BOLT	50		19 ϕ	
375	UP.75X3	HEAVY HEX CULVERT BOLT	76		19 ϕ	
118	UP.75X9X4	GALV. ANCHOR BOLT	229 x 100		19 ϕ	
2261	UP.75NUT	HEAVY HEX NUT			19 ϕ	
14	UPBASECHANYPEA	TYPE 'A' CHANNEL	3035			
2	UPBASECHANCUSTOM -SC	TYPE 'C' CHANNEL	838			
2	UPROLLEDANGLE6.4X102X102HDG	102X102X6.4 GALV. BASE ROLLED ANGLE	3312.3		6.4	D
2	UPROLLEDANGLE6.4X102X102HDG	102X102X6.4 GALV. BASE ROLLED ANGLE	3727.1		6.4	E
2	UPROLLEDANGLE6.4X102X102HDG	102X102X6.4 GALV. CROWN ROLLED ANGLE	3727.1		6.4	F
2	UPPRYBAR42	PRY BAR				
1	UPDRIFTPIN	DRIFT PIN				

PLATE/ANGLE AND BASE CHANNEL FINISH = GALVANIZED Z915



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BAFFINLAND IRON MINES CORPORATION  
RAIL STREAM CROSSINGS, NUNAVUT - CROSSING CV-29-2  
STRUCTURE BILL OF MATERIALS, DETAILS & SECTIONS

DESIGNED	JZ	28 JAN 21	BRANCH P.O.	-	CUSTOMER REF.	CV-29-2
DES. CHK	MME	29 JAN 21				
DRAWN BY	BH	11 JAN 21	PROJECT NUMBER	2019-00284E	DWG NO.	E05
DWG. CHK	LM	25 JAN 21			REV.	1

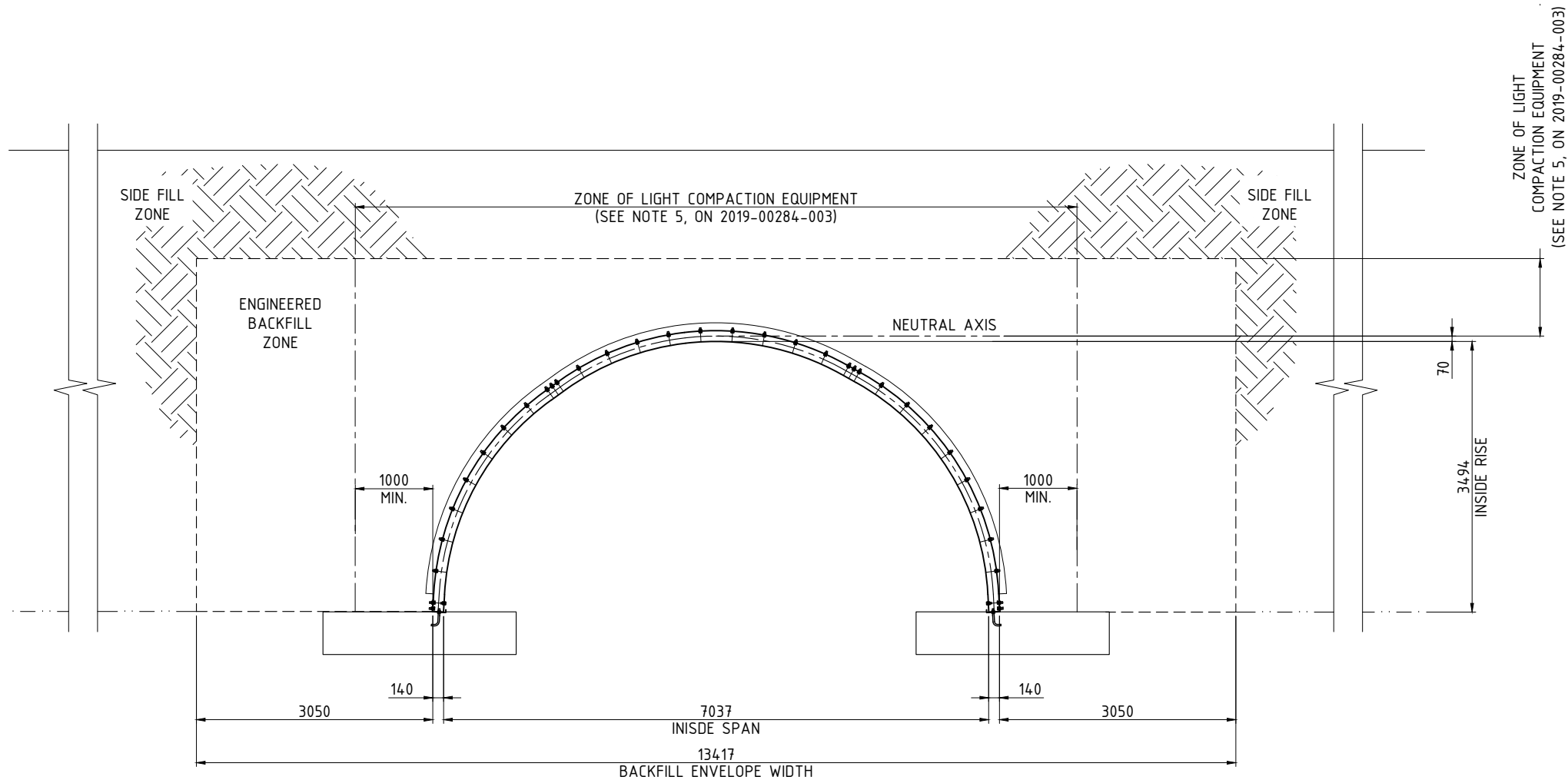
I:\ENGINEERING\RAIL\PROJECTS\2019\00284E - SC - VARIOUS RAIL STREAM CROSSING, QC\ORDER\DRAWING\R2\2019-00284E - R2

BRIAN HEANEY

Wednesday, March 31, 2021 4:32:10 PM

REFER TO STRUCTURE BACKFILL  
PROCEDURE'S ON DRAWING  
2019-00284-003 (REV 2, 31 MAR 21)  
IN ADDITION TO THIS DRAWING

1



F BACKFILL ENVELOPE  
E01 SCALE: 1:75



1	31 MAR 21	BH	ISSUED FOR CONSTRUCTION
0	01 MAR 21	BH	ISSUED FOR APPROVAL
REV NO.	DATE	BY	DESCRIPTION



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BAFFINLAND IRON MINES CORPORATION  
RAIL STREAM CROSSINGS, NUNAVUT - CROSSING CV-29-2  
STRUCTURAL BACKFILL ENVELOPE

DESIGNED	JZ	28 JAN 21	BRANCH P.O.	-	CUSTOMER REF.	CV-29-2
DES. CHK	MME	29 JAN 21				
DRAWN BY	BH	11 JAN 21	PROJECT NUMBER	2019-00284E	DWG NO.	E06
DWG. CHK	LM	25 JAN 21			REV.	1

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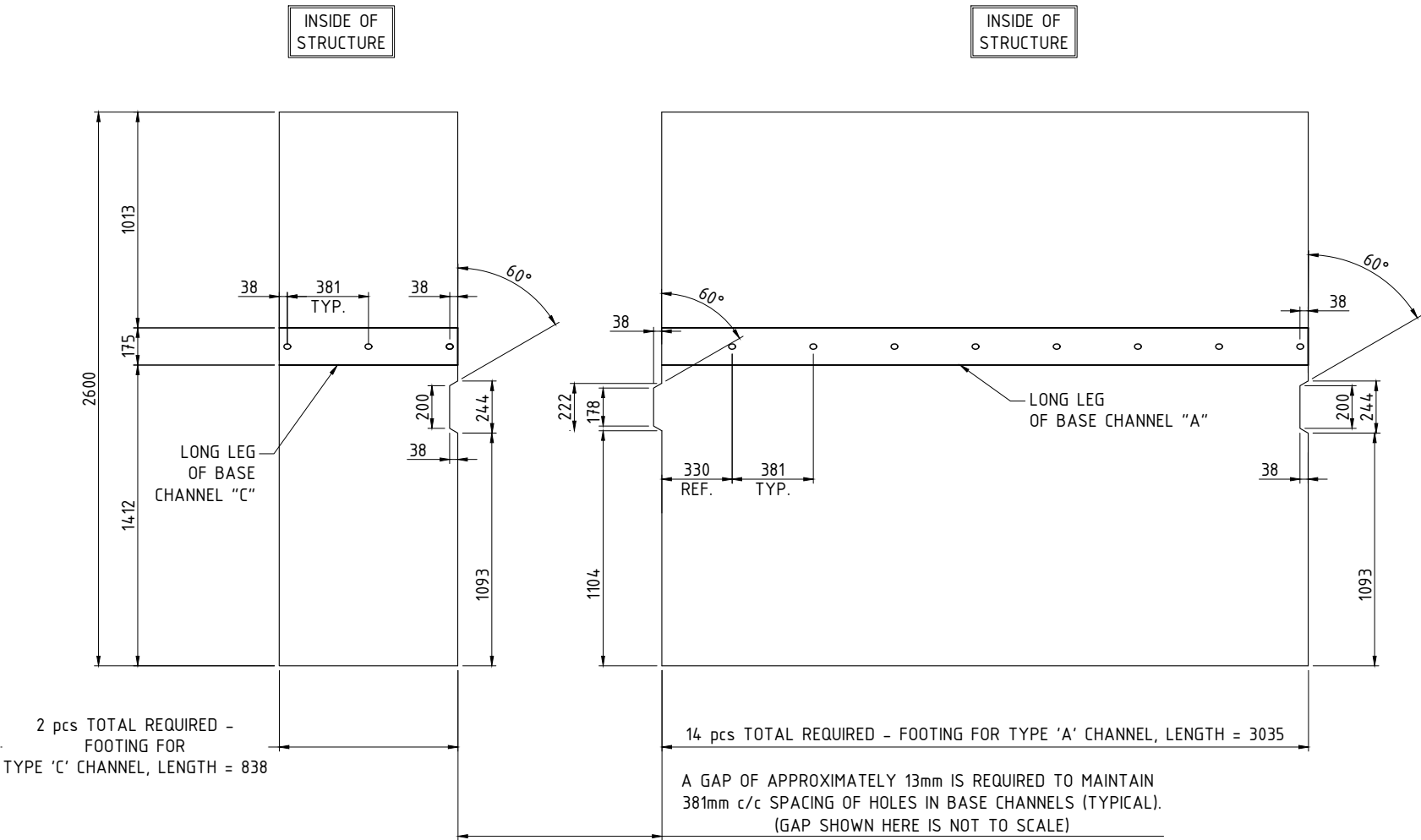
I:\ENGINEERING\AIL\PROJECTS\2019\00284E - SC -VARIOUS RAIL STREAM CROSSING, QC\ORDERDRAFTING\2019-00284E - R2

BRIAN HEANEY

Wednesday, March 31, 2021 4:32:11 PM

PRECAST CONCRETE FOOTINGS:

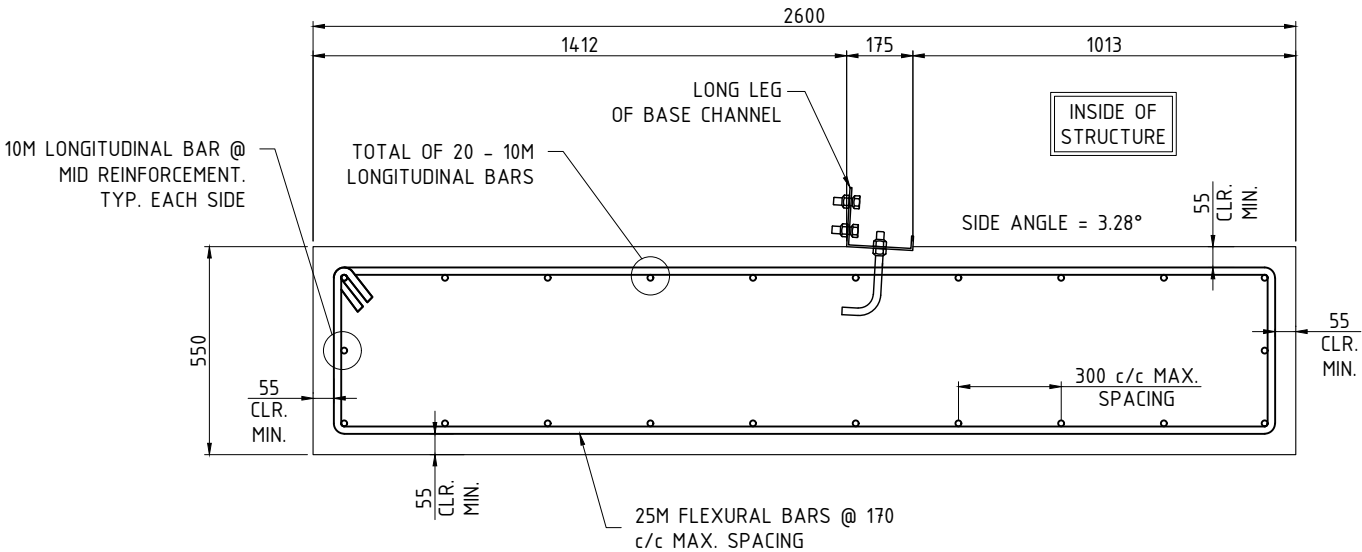
- 1.1. CONCRETE MATERIALS, METHODS OF CONSTRUCTION AND TEST METHODS FOR PRECAST CONCRETE TO CONFORM TO AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS 2017.
- 1.2. CONCRETE DESIGN AS PER AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 9<sup>TH</sup> EDITION 2020.
- 1.3. TYPE HS OR Hsb CEMENT.
- 1.4. ALL CONCRETE SHALL BE STANDARD WEIGHT WITH 5% TO 8% MINIMUM AIR ENTRAINMENT.
- 1.5. WATER CEMENT RATIO = 0.4 TO 0.45.
- 1.6. MINIMUM 28 DAY COMPRESSIVE STRENGTH OF CONCRETE = 35 MPa.
- 1.7. MAXIMUM AGGREGATE SIZE 19 mm.
- 1.8. ALL REINFORCING STEEL SHALL CONFORM TO CSA C30.18M, GRADE 400 (GRADE 400W IF CAGES TO BE TACK WELDED).
- 1.9. ALL REINFORCING STEEL SHALL BE GALVANIZED AS PER ASTM A767/A767M-19.
- 1.10. ALL REINFORCING STEEL SHALL HAVE 55mm MIN. CLEAR COVER UNLESS NOTED OTHERWISE.
- 1.11. PRE-CAST FOOTING FABRICATION DETAILS TO BE PROVIDED BY PRE-CAST SUPPLIER.
- 1.12. LIFTING DETAILS DESIGN AND SUPPLIED BY PRECASTER.
- 1.12. EXPOSURE SEVERE TO MODERATE EXPOSURE (AASHTO LRFD TABLE 5.10.1-1), EARTH OR FRESH WATER (ACI 318).
- 1.13. IF THERE ARE ANY DISCREPANCIES BETWEEN THESE AIL DRAWINGS AND REFERENCE DOCUMENTS, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN. AIL SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.



7  
E04

DETAIL - PRE-CAST CONCRETE FOOTING (PLAN VIEW)

SCALE 1:30



6  
E03

DETAIL - PRE-CAST CONCRETE FOOTING (SECTION VIEW)

SCALE 1:20



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0	29 JAN 21	BH	ISSUED FOR APPROVAL
REV NO.	DATE	BY	DESCRIPTION



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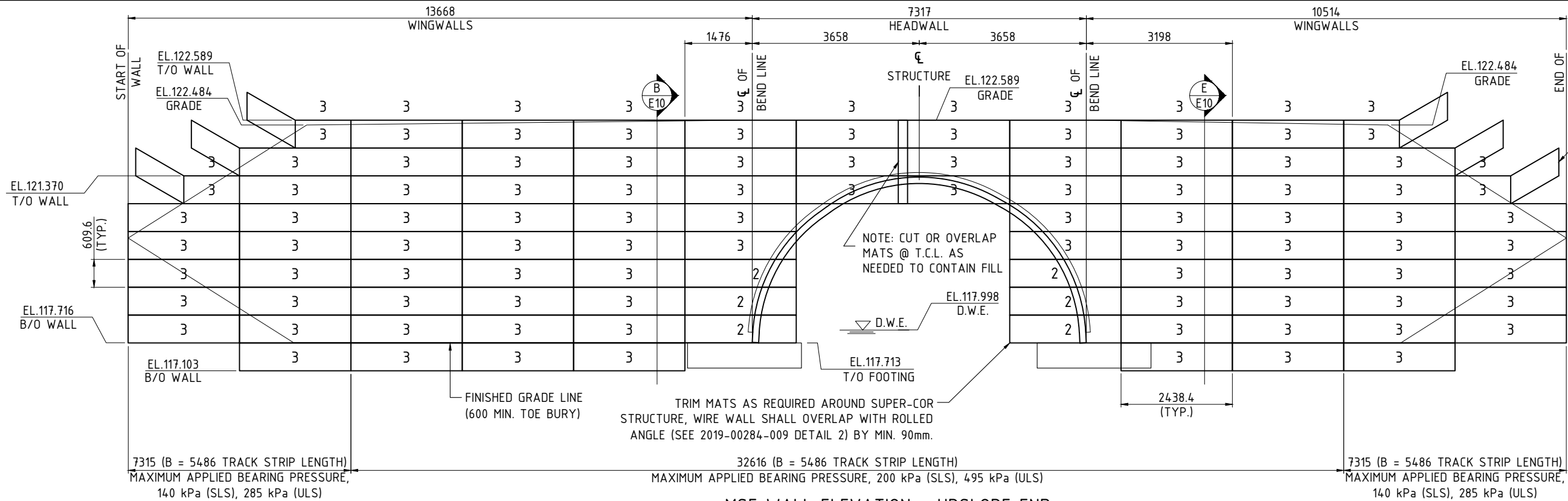
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BAFFINLAND IRON MINES CORPORATION  
RAIL STREAM CROSSINGS, NUNAVUT - CROSSING CV-29-2  
PRECAST FOOTING DETAILS

DESIGNED	JZ	28 JAN 21	BRANCH P.O.	-	CUSTOMER REF.	CV-29-2
DES. CHK	MME	29 JAN 21				
DRAWN BY	BH	11 JAN 21	PROJECT NUMBER	2019-00284E	DWG NO.	E07
DWG. CHK	LM	25 JAN 21				REV. 2

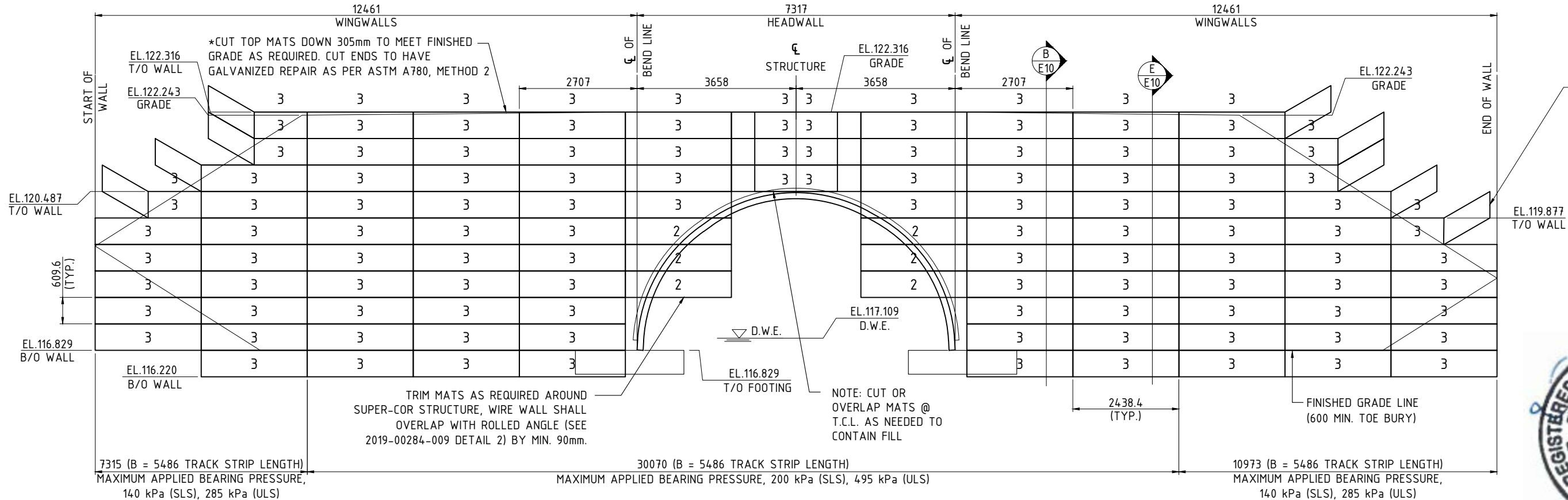
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MSE WALL ELEVATION - UPSLOPE END

SCALE 1:100

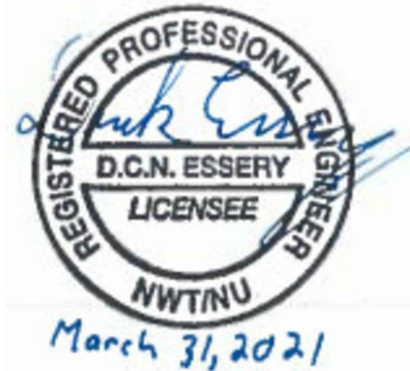


MSE WALL ELEVATION - DOWNSLOPE END

SCALE 1:100

WHERE SHOWN, BEND FACING MATS AT MID POINT AT 90° TO MAKE A 1219.2 RETURN MAT. REF TO DETAIL ON DWG 2019-00284-009

WHERE SHOWN, BEND FACING MATS AT MID POINT AT 90° TO MAKE A 1219.2 RETURN MAT. REF TO DETAIL ON DWG 2019-00284-009



2	31 MAR 21	BH	ISSUED FOR CONSTRUCTION
1	02 MAR 21	BH	RE-ISSUED FOR APPROVAL
0	29 JAN 21	BH	ISSUED FOR APPROVAL
REV NO.	DATE	BY	DESCRIPTION



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BAFFINLAND IRON MINES CORPORATION  
RAIL STREAM CROSSINGS, NUNAVUT - CROSSING CV-29-2  
MSE WALL ELEVATIONS

DESIGNED	TE	29 JAN 21
DES. CHK	DE	29 JAN 21
DRAWN BY	BH	25 JAN 21
DWG. CHK	MS	28 JAN 21

BRANCH P.O.

-

CUSTOMER REF.

CV-29-2

PROJECT  
NUMBER

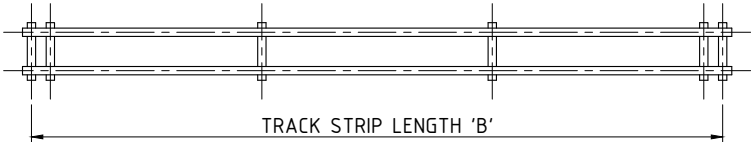
2019-00284E

DWG  
NO.

E08

REV.  
2

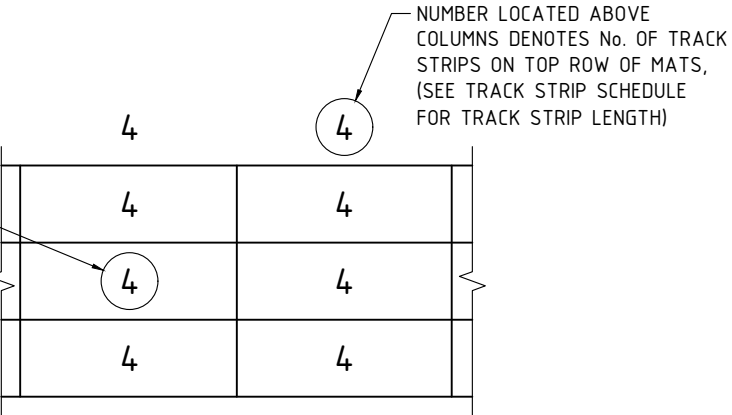
TRACK STRIP SOIL REINFORCING SCHEDULE				
MAT #	PART ID	TRACK LENGTH 'B'	QTY	COMMENTS
GS 11	WLFTS11W18GALV1FT	18'-0" (5486)	685	SEE DRAWING WLFTS11WXXGALV1FT REV. 0 FOR DETAILS
TOTAL			685	
SM (EXTRA)	WLFTS11W18GALV1FT	18'-0" (5486)	6	SEE DRAWING WLFTS11WXXGALV1FT REV. 0 FOR DETAILS



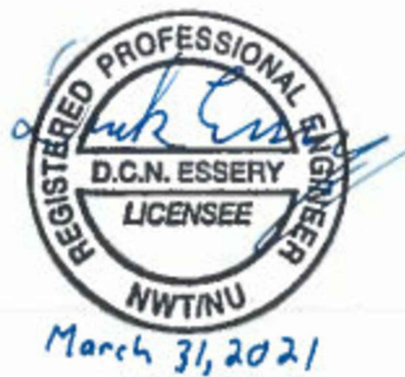
TRACK STRIP SCHEDULE KEY

MISCELLANEOUS SCHEDULE						
#	PART ID	ITEM DESCRIPTION	QTY	EXTRA QTY	TOTAL QTY	COMMENTS
1	WLPTSF2.438X0.61WWFORMGAL	WELDED WIRE FORM (GALVANIZED)	211	3	214	SEE DRAWING WLPTSF2.438X0.61WWFORM REV. 0 FOR DETAILS
2	WLPNWGE06W712N	FILTER FABRIC	505 (LINEAR METERS)	25 (LINEAR METERS)	530 (LINEAR METERS)	1830 MIN (72") (SEE DRAWING WLPNWGE06W712N REV. 0 FOR DETAILS)
3	WLPPLIERS	PLIERS	2	0	2	
4	WLPHOGRINGS	HOG RINGS	725	200	925	SEE DRAWING WLPHOGRINGS REV. 0 FOR DETAILS
5	WLPFS4.5X24.45STRUT	TRACK STRIP WIRE WALL STRUT	663	10	673	SEE DRAWING WLPFS4.5X24.45STRUT REV. 0 FOR DETAILS

NUMBER ON WALL ELEVATION DENOTES No. OF TRACK STRIPS REQUIRED FOR THAT ROW, (SEE TRACK STRIP SCHEDULE FOR TRACK STRIP LENGTH)



TRACK STRIP SCHEDULE ANNOTATION



2	31 MAR 21	BH	ISSUED FOR CONSTRUCTION
1	02 MAR 21	BH	RE-ISSUED FOR APPROVAL
0	29 JAN 21	BH	ISSUED FOR APPROVAL
REV NO.	DATE	BY	DESCRIPTION



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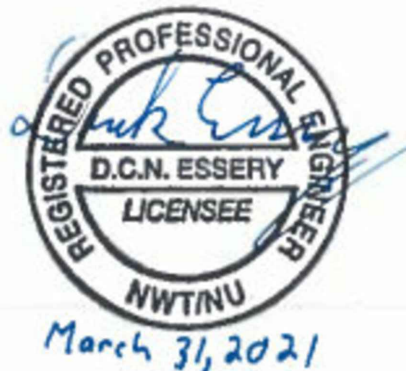




BAFFINLAND IRON MINES CORPORATION  
RAIL STREAM CROSSINGS, NUNAVUT - CROSSING CV-29-2  
MSE WALL MATERIAL SCHEDULES

DESIGNED	TE	29 JAN 21	BRANCH P.O. -	CUSTOMER REF. CV-29-2	
DES. CHK	DE	29 JAN 21			
DRAWN BY	BH	25 JAN 21	PROJECT NUMBER	2019-00284E	DWG NO. E09
DWG. CHK	MS	28 JAN 21			
					REV. 2



IF FROST SUSCEPTIBLE OR FROZEN SOILS ARE PRESENT, THE SOIL WITHIN THE DEPTH AND LATERAL EXTENT OF FROST PENETRATION BELOW THE WALL SHALL BE REMOVED AND REPLACED WITH NON FROST SUSCEPTIBLE CLEAN GRANULAR SOIL.



2	31 MAR 21	BH	ISSUED FOR CONSTRUCTION	 <b>Atlantic Industries Limited</b> CALL TOLL FREE IN NORTH AMERICA 1-877-AIL-PIPE www.ail.ca	 <b>MSE</b> Retaining Wall Systems	BAFFINLAND IRON MINES CORPORATION RAIL STREAM CROSSINGS, NUNAVUT - CROSSING CV-29-2 MSE WALL TYPICAL SECTIONS	DESIGNED	TE	29 JAN 21	BRANCH P.O. -	CUSTOMER REF. CV-29-2					
1	02 MAR 21	BH	RE-ISSUED FOR APPROVAL				DES. CHK	DE	29 JAN 21							
0	29 JAN 21	BH	ISSUED FOR APPROVAL				DRAWN BY	BH	25 JAN 21	PROJECT	2019-00284E			DWG NO.	E10	REV. 2
REV NO.	DATE	BY	DESCRIPTION				DWG. CHK	MS	28 JAN 21	NUMBER						