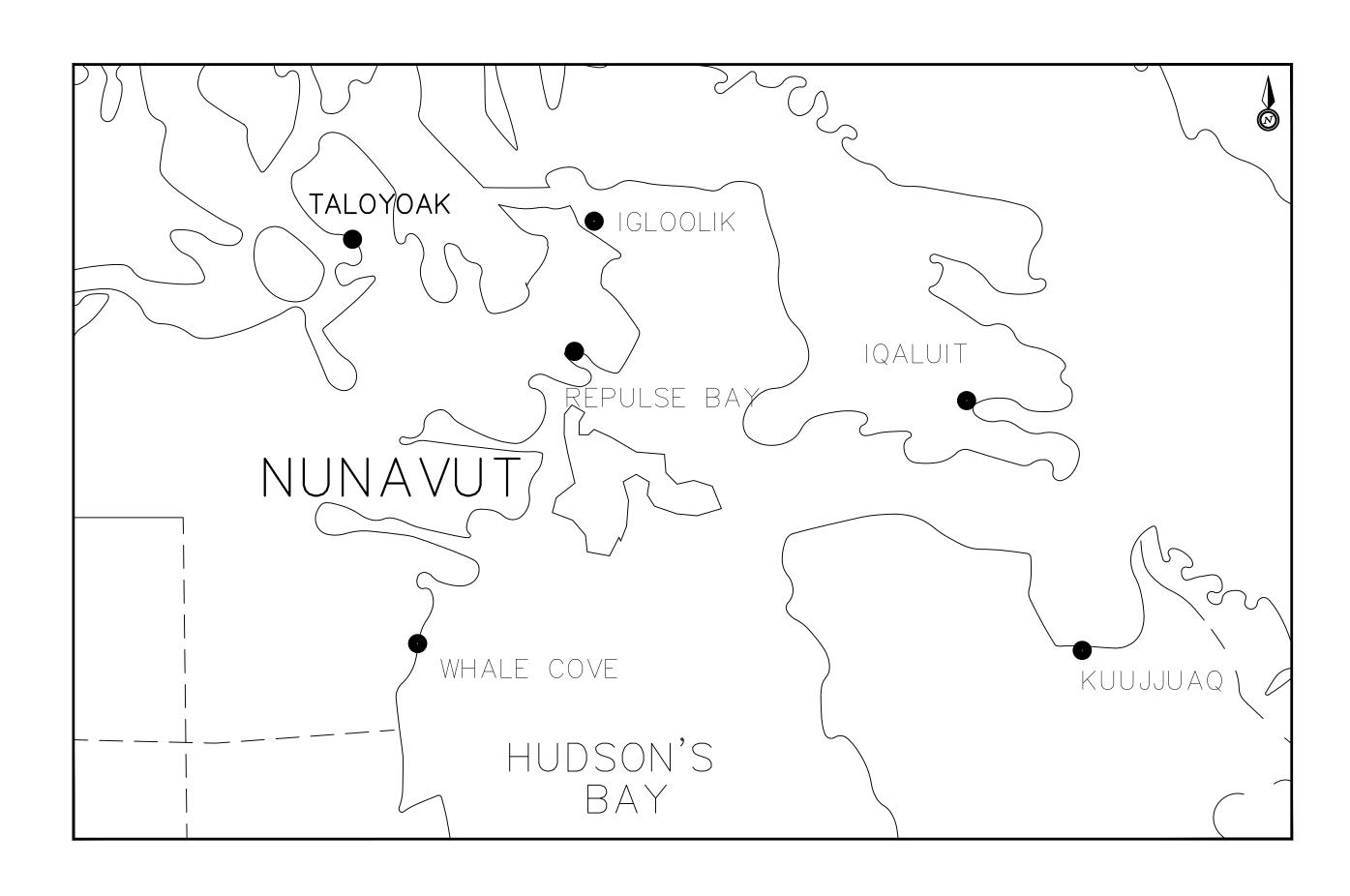
COMMUNITY OF TALOYOAK





INDI	EX OF INCLUDED DRAWINGS
SHEET NUMBER	SHEET TITLE
COV	COVER SHEET
OSP	OVERALL SITE PLAN
VOL	OVERALL CONTOURS AND ESTIMATED VOLUMES
DET-1	CROSS SECTIONS
DET-2	CROSS SECTIONS
DET-3	CROSS SECTIONS
DET-4	TRUCK DISCHARGE DETAILS
DET-5	PUMPING AND DEWATERING DETAILS
DET-6	LINER DETAILS, SPILLWAY DETAILS AND MISC. DETAILS
DET-7	AIR VENTILATION PIPE DETAILS
DET-8	EXISTING LAGOON DECOMMISSIONING WORK DETAILS
AR-PP	ACCESS ROAD PLAN & DETAILS
AR-XS	ACCESS ROAD CROSS SECTIONS
ВН	BOREHOLE DETAILS



exp Services Inc.

t: +1.613.688.1899 | f: +1.613.225.73 2650 Queensview Drive, Unit 100 Ottawa, ON K2B 8H6 Canada

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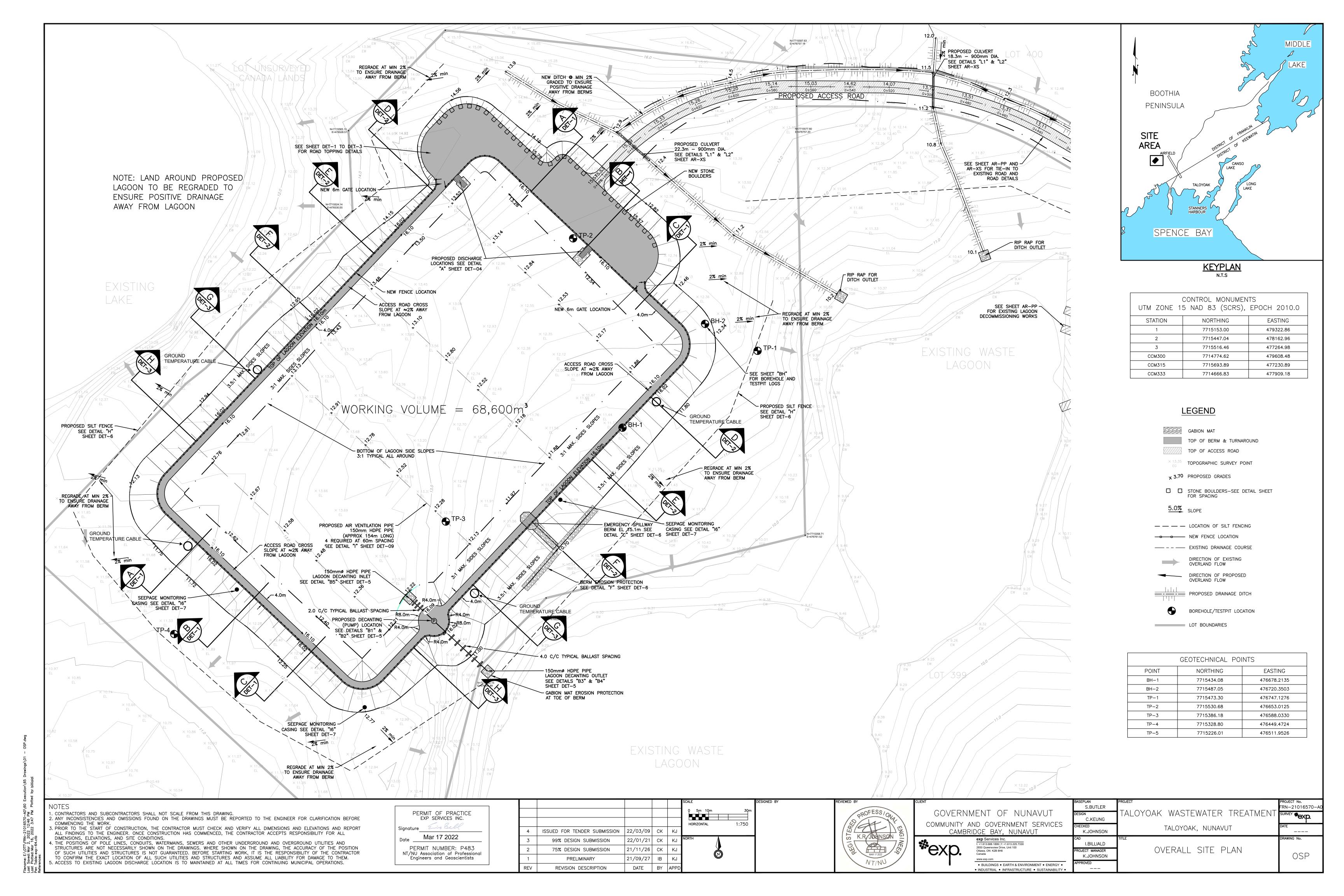
• INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY

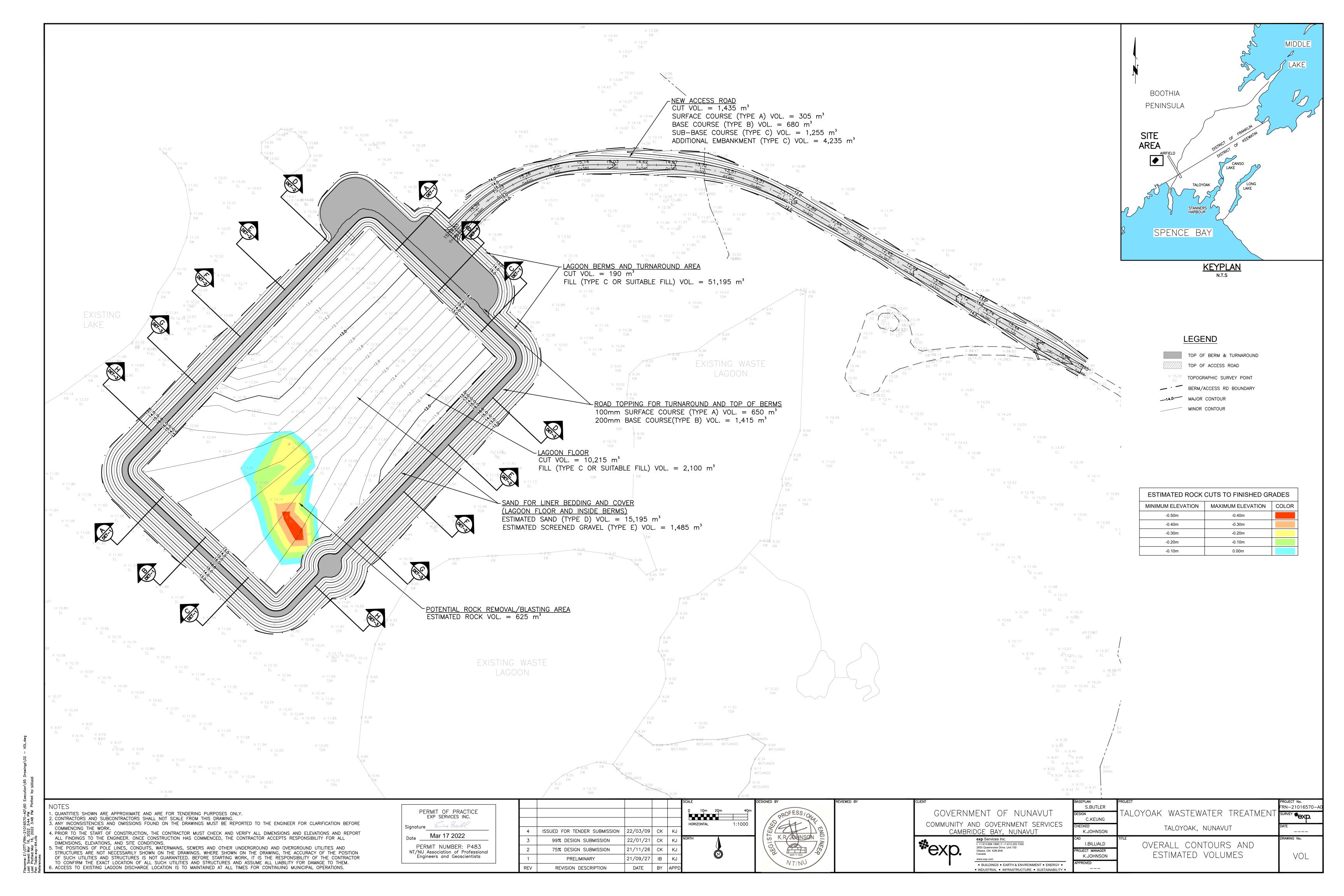
GOVERNMENT OF NUNAVUT TALOYOAK WASTEWATER TREATMENT

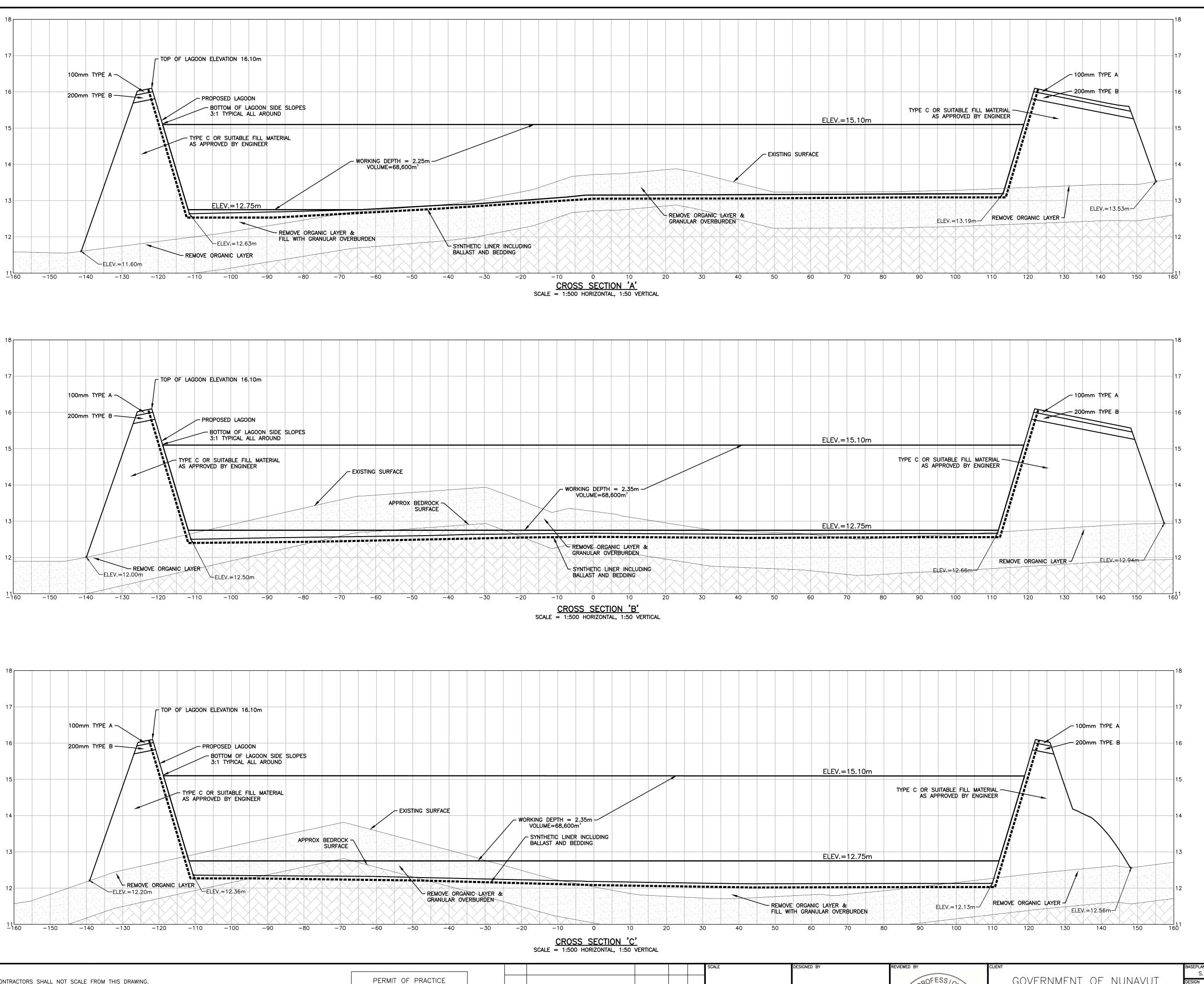
PROJECT FRN-21016570-A0

ISSUED FOR TENDER PURPOSES ONLY

DATE: MARCH 9, 2022







GENERAL NOTES

- 1. THE SUBBASE SHALL BE UNIFORM AND FREE OF SHARP ROCK FRAGMENTS OR STONES, LARGE STONES AND OTHER DELETERIOUS MATTER SUCH AS CONSTRUCTION DEBRIS AND METALLIC OBJECTS. THE SURFACE SHALL NOT HAVE ANY NATURAL OR FOREIGN OBJECT THAT PROTRUDES ABOVE THE SURFACE OF THE SUBBASE.
- 2. BEDROCK AND GEOLOGY DEPTHS ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR CONFIRMING DEPTHS AS REQUIRED.

SEWAGE LAGOON VOLUMES VOLUMES (m³) ELEVATION (m) 11.25 0.0 11.50 0.0 0.0 11.75 12.00 71.8 12.25 751.3 12.50 2742.8 12.75 6442.4 13.00 11722.0 13.25 17999.2 13.50 25045.3 13.75 32493.9 14.00 40078.0 14.25 47797.9 14.50 55654.3 14.75 63648.3 15.00 71780.7 15.10 75072.6 15.25 80052.4 15.50 88464.1 15.75 97016.8 16.00 105712.6 109365.5 16.10

RN-21016570-

DET-1

NOTES

- 1. CONTRACTORS AND SUBCONTRACTORS SHALL NOT SCALE FROM THIS DRAWING.
 2. ANY INCONSISTENCIES AND OMISSIONS FOUND ON THE DRAWINGS MUST BE REPORTED TO THE ENGINEER FOR CLARIFICATION BEFORE COMMENCING THE WORK.
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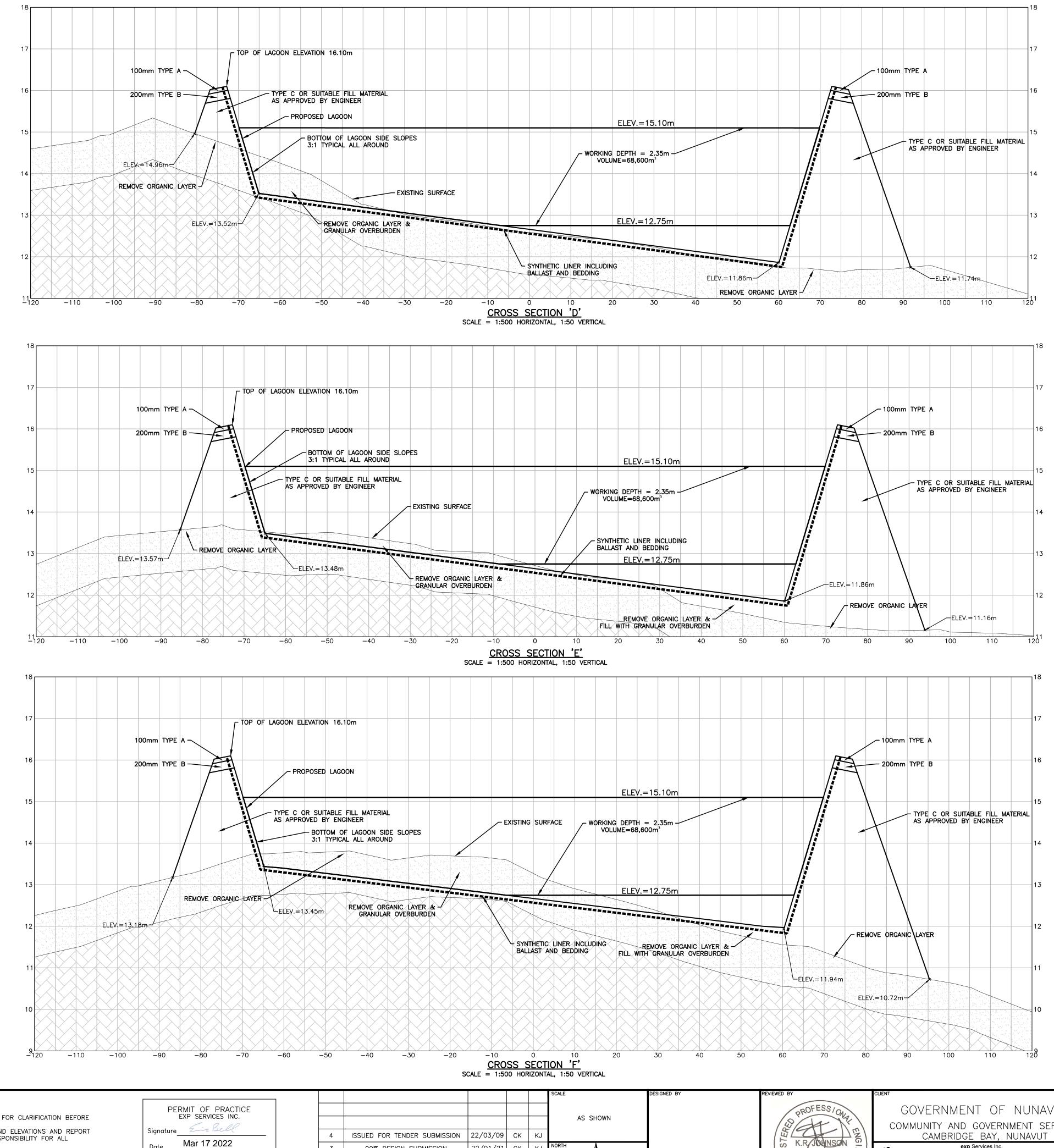
 5. ACCESS TO EXISTING LAGOON DISCHARGE LOCATION IS TO MAINTAINED AT ALL TIMES FOR CONTINUING MUNICIPAL OPERATIONS.

	PERMIT OF PRACTICE EXP SERVICES INC.
Signatu	ire Eir Bell
Date	Mar 17 2022
	ERMIT NUMBER: P483 IU Association of Professional ngineers and Geoscientists

					SCALE	DESI
					AS SHOWN	
4	ISSUED FOR TENDER SUBMISSION	22/03/09	СК	KJ		
3	99% DESIGN SUBMISSION	22/01/21	СК	KJ	NORTH	
2	75% DESIGN SUBMISSION	21/11/26	СК	KJ		
1	PRELIMINARY	21/09/27	IB	KJ		
REV	REVISION DESCRIPTION	DATE	BY	APPD		

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ENT		BASEPLAN S.BUTLER	PROJECT
	MENT OF NUNAVUT	DESIGN C.KEUNG	TALOYOAK WASTEWATER TREATMENT
	ND GOVERNMENT SERVICES IDGE BAY, NUNAVUT	CHECKED K.JOHNSON	TALOYOAK, NUNAVUT
* ехр.	exp Services Inc. t: +1.613.688.1899 f: +1.613.225.7330 2650 Queensview Drive, Unit 100 Ottawa, ON K2B 8H6 Canada www.exp.com	I.BILLIALD PROJECT MANAGER K.JOHNSON	CROSS SECTIONS
•	BUILDINGS EARTH & ENVIRONMENT ENERGY INDUSTRIAL INFRASTRUCTURE SUSTAINABILITY	APPROVED ———	



GENERAL NOTES

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ELEVATION (m)	VOLUMES (m³)
11.25	0.0
11.50	0.0
11.75	0.0
12.00	71.8
12.25	751.3
12.50	2742.8
12.75	6442.4
13.00	11722.0
13.25	17999.2
13.50	25045.3
13.75	32493.9
14.00	40078.0
14.25	47797.9
14.50	55654.3
14.75	63648.3
15.00	71780.7
15.10	75072.6
15.25	80052.4
15.50	88464.1
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16.00	105712.6
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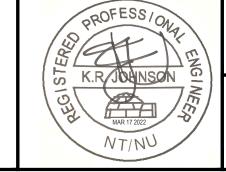
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PERMIT OF PRACTICE EXP SERVICES INC.			
Signature Ein Bell			
_{Date} Mar 17 2022			
PERMIT NUMBER: P483 NT/NU Association of Professional Engineers and Geoscientists			

					SCALE	DES
					AS SHOWN	
4	ISSUED FOR TENDER SUBMISSION	22/03/09	СК	KJ		
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1	PRELIMINARY	21/09/27	В	KJ		

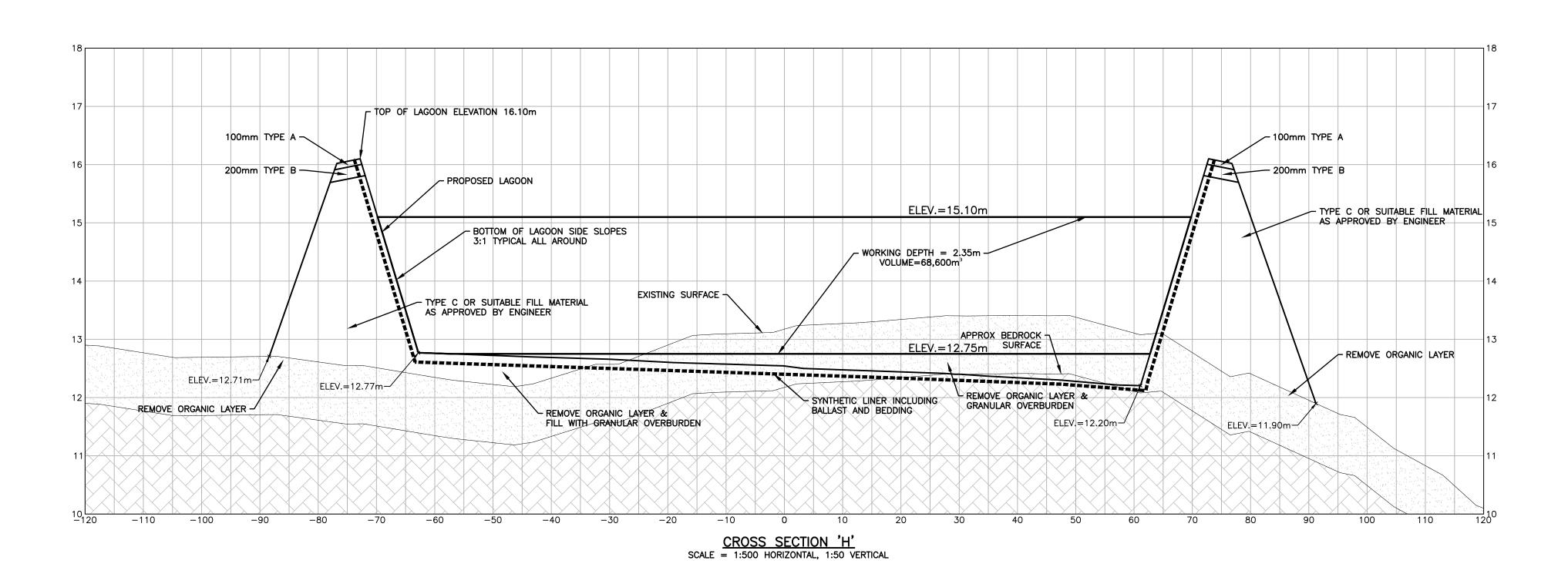
REVISION DESCRIPTION DATE BY APPD



t: +1.613.688.1899 f. +1.613.225.7330 2650 Queensview Drive, Unit 100	CAD I.E
COMMUNITY AND GOVERNMENT SERVICES CAMBRIDGE BAY, NUNAVUT	C. CHECKED K.J
GOVERNMENT OF NUNAVUT	S. DESIGN
CLIENT	RAZELLA

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N.45NIT. O.5. NILINIAN (LIT	BASEPLAN S.BUTLER		PROJECT No. FRN-210165
MENT OF NUNAVUT	DESIGN C.KEUNG	TALOYOAK WASTEWATER TREATMENT	SURVEY EX
AND GOVERNMENT SERVICES RIDGE BAY, NUNAVUT	CHECKED K.JOHNSON	TALOYOAK, NUNAVUT	DATE ———
exp Services Inc. t: +1.613.688.1899 f: +1.613.225.7330	CAD I.BILLIALD	TITLE	DRAWING No.
2650 Queensview Drive, Unit 100 Ottawa, ON K2B 8H6 Canada	PROJECT MANAGER K.JOHNSON	CROSS SECTIONS	DFT-
BUILDINGS • EARTH & ENVIRONMENT • ENERGY • INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •	APPROVED ———		

TOP OF LAGOON ELEVATION 16.10m ~ 100mm | TYPE | A 100mm TYPE A ~ 200mm TYPE B -- PROPOSED LAGOON ELEV.=15.10m - BOTTOM OF LAGOON SIDE SLOPES - TYPE C OR SUITABLE FILL MATERIAL 3:1 TYPICAL ALL AROUND AS APPROVED BY ENGINEER \sim WORKING DEPTH = 2.35m \sim VOLUME=68,600m³ - TYPE C OR SUITABLE FILL MATERIAL AS APPROVED BY ENGINEER - APPROX BEDROCK - EXISTING SURFACE ANIC I AVER & SURFACE - REMOVE ORGANIC LAYER REMOVE ORGANIC LAYER & -GRANULAR OVERBURDEN ELEV = 12.75m - REMOVE ORGANIC LAYER ELEV.=12.13m-SYNTHETIC LINER INCLUDING BALLAST AND BEDDING ELEV.=10.58m--70 -60 -50 -40 CROSS SECTION 'G'
SCALE = 1:500 HORIZONTAL, 1:50 VERTICAL



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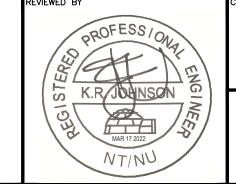
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PERMIT OF PRACTICE EXP SERVICES INC. Signature Zir Kell Mar 17 2022 PERMIT NUMBER: P483 NT/NU Association of Professional Engineers and Geoscientists

					AS SHOWN
4	ISSUED FOR TENDER SUBMISSION	22/03/09	СК	KJ	
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2	75% DESIGN SUBMISSION	21/11/26	СК	KJ	
1	PRELIMINARY	21/09/27	IB	KJ	
REV	REVISION DESCRIPTION	DATE	BY	APPD	



CLIENI		S.BUTLER
	ENT OF NUNAVUT	DESIGN C.KEUNG
	ID GOVERNMENT SERVICES DGE BAY, NUNAVUT	CHECKED K.JOHNSON
~\$.	exp Services Inc.	CAD
	t: +1.613.688.1899 f: +1.613.225.7330	I.BILLIALD
*exp.	t: +1.613.688.1899 f: +1.613.225.7330 2650 Queensview Drive, Unit 100 Ottawa, ON K2B 8H6 Canada www.exp.com	I.BILLIALD PROJECT MANAGER K.JOHNSON

	_		
	BASEPLAN S.BUTLER		PROJECT No. FRN-21016570
MENT OF NUNAVUT	DESIGN C.KEUNG	TALOYOAK WASTEWATER TREATMENT	SURVEY EXP.
AND GOVERNMENT SERVICES RIDGE BAY, NUNAVUT	CHECKED K.JOHNSON	TALOYOAK, NUNAVUT	DATE ———
exp Services Inc. t: +1.613.688.1899 f: +1.613.225.7330 2650 Queensview Drive. Unit 100	cad I.BILLIALD		DRAWING No.
Ottawa, ON K2B 8H6 Canada www.exp.com	PROJECT MANAGER K.JOHNSON	CROSS SECTIONS	DET-3
BUILDINGS • EARTH & ENVIRONMENT • ENERGY • INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •	APPROVED ———		

	I NOTES	
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	3. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND ELEVATIONS AND REPORT ALL FINDINGS TO THE ENGINEER. ONCE CONSTRUCTION HAS COMMENCED. THE CONTRACTOR ACCEPTS RESPONSIBILITY FOR ALL	Signature Sir Bell
	DIMENSIONS, ELEVATIONS, AND SITE CONDITIONS. 4. THE POSITIONS OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND	Date Mar 17 2022
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PERMIT OF PRACTICE EXP SERVICES INC.						AS SHOWN	
ignature Eir Bell	4	ISSUED FOR TENDER SUBMISSION	22/03/09	CK	KJ		
Date Mar 17 2022	3	99% DESIGN SUBMISSION	22/01/21	СК	KJ	NORTH	
PERMIT NUMBER: P483	2	75% DESIGN SUBMISSION	21/11/26	СК	KJ		
NT/NU Association of Professional Engineers and Geoscientists	1	PRELIMINARY	21/09/27	IB	KJ		
	REV	REVISION DESCRIPTION	DATE	BY	APPD		

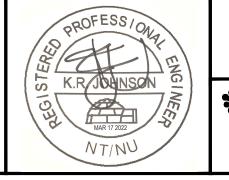
WELD 'L' STEEL _ TO STEEL PLATE

WELD 'L' STEEL _/ TO STEEL PLATE

<u>DETAIL "A1"</u> TRUCK DISCHARGE PLAN VIEW

'L' STEEL ,

STEEL PLATE





• INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •

C.KEUNG K.JOHNSON I.BILLIALD PROJECT MANAGER K.JOHNSON • BUILDINGS • EARTH & ENVIRONMENT • ENERGY •

TALOYOAK, NUNAVUT

S.BUTLER

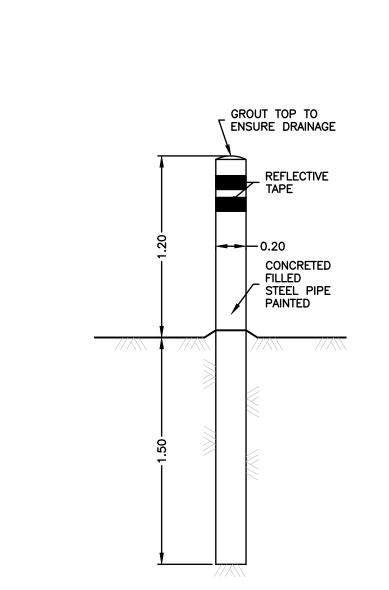
GOVERNMENT OF NUNAVUT COMMUNITY AND GOVERNMENT SERVICES CAMBRIDGE BAY, NUNAVUT

TALOYOAK WASTEWATER TREATMENT SURVEY PEXP TRUCK DISCHARGE DETAILS

FRN-21016570-

DET-4

REFLECTIVE TAPE 0.9m-1.4m NOMINAL SIZE STONE 0.9m-1.4m NOMINAL SIZE STONE CONCRETED FILLED STEEL PIPE PAINTED DETAIL "A5"
STONE BARRIER DETAIL SECTION VIEW
N.T.S. EDGE OF BERM DETAIL "A4"
BOLLARD DETAIL
1:25 <u>DETAIL "A6"</u> <u>STONE BARRIER DETAIL PLAN VIEW</u> N.T.S.



STONE BARRIER
SEE DETAIL 'A5'

75X75X12.5 STEEL_LATERAL

- CONNECTIONS
BETWEEN
BOLLARDS

STONE BARRIER
SEE DETAIL 'A5'

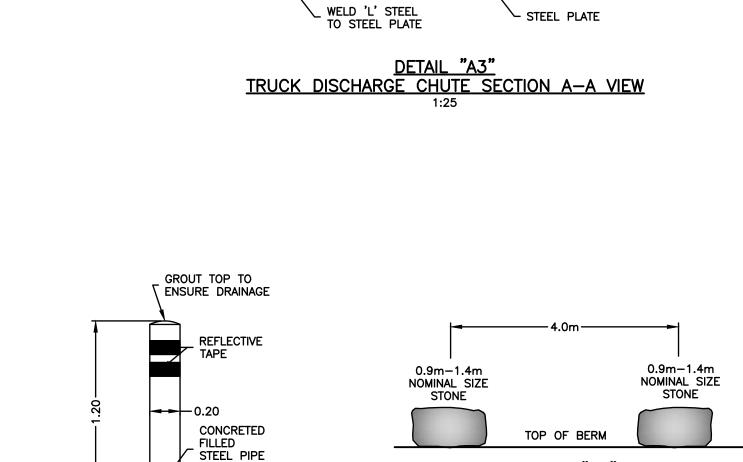
CABION MAT

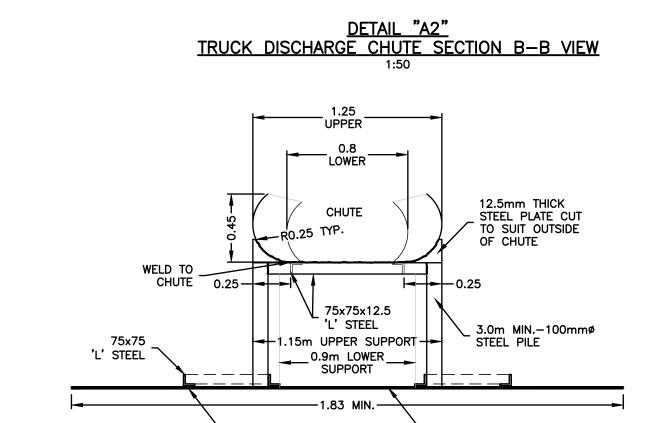
BOLLARD (TYPICAL)

'l' steel

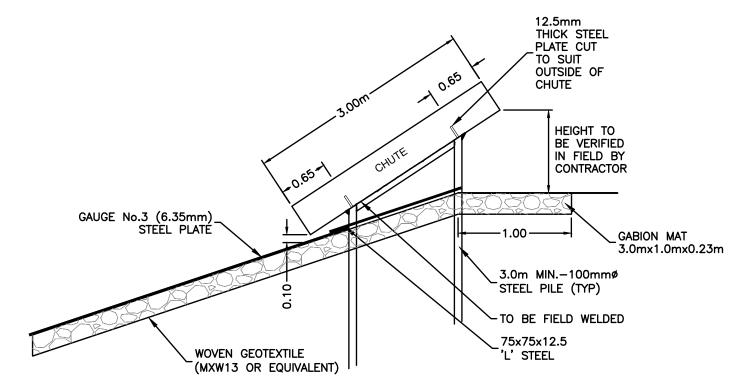
CHUTE 12 GA. STEEL

_ WELD STEEL PLATE TO STEEL PIPE





► STEEL PLATE



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TREATED WOOD CRIBBING

	PERMIT OF PRACTICE EXP SERVICES INC.
Signat	ure <u>Eir Bell</u>
Date	Mar 17 2022
	PERMIT NUMBER: P483 NU Association of Professional Engineers and Geoscientists

					AS SHOWN
4	ISSUED FOR TENDER SUBMISSION	22/03/09	СК	KJ	
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REV	REVISION DESCRIPTION	DATE	BY	APPD	



2650 Q	3.688.1899 f: +1.613.225.7330 Jeensview Drive, Unit 100 ON K2B 8H6
exp S	Services Inc.
	GOVERNMENT SERVICES BAY, NUNAVUT
GOVERNMEN	T OF NUNAVUT

• BUILDINGS • EARTH & ENVIRONMENT • ENERGY •

• INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •

// I T	S.BUTLER
/UT	DESIGN C.KEUNG
RVICES	CHECKED K.JOHNSON
	CAD I.BILLIALD
	PROJECT MANAGER

TALOYOAK, NUNAVUT DETAILS

RN-21016570-TALOYOAK WASTEWATER TREATMENT PUMPING AND DEWATERING DET-5 K.JOHNSON

CONCRETE BALLAST BLOCK ON

OUTLET PIPE 4.0m 0/C

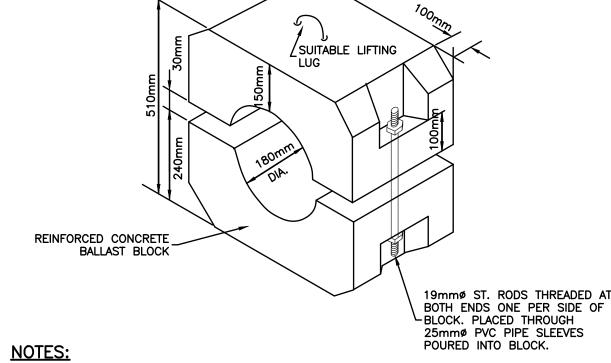
PROPOSED

150mmø HDPE_ OUTLET PIPE

DETAIL "B7" CONCRETE BALLAST BLOCK

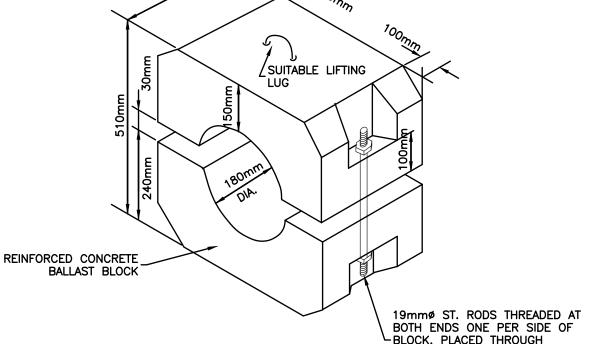
- 2. CONTRACTOR TO USE 6.25mm THICK NEOPRENE SPONGE PADDING BETWEEN PIPE AND BLOCKS TO PREVENT CONTACT. WIDTH TO BE 180mm.
- BALLAST BLOCKS C/W REINFORCING.

1. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR CONCRETE



TOE OF PROPOSED BERM

<u>DETAIL "B4"</u>
LAGOON DEWATERING OUTLET SECTION VIEW





IMPERVIOUS LINER TO

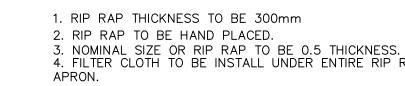
BE PLACED UNDER

BOULDERS 200mm

EXISTING GROUND

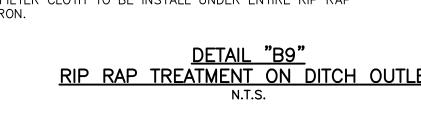
HAND PLACED

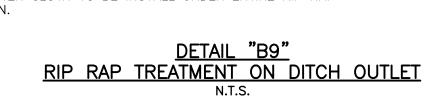
MIN NOMINAL



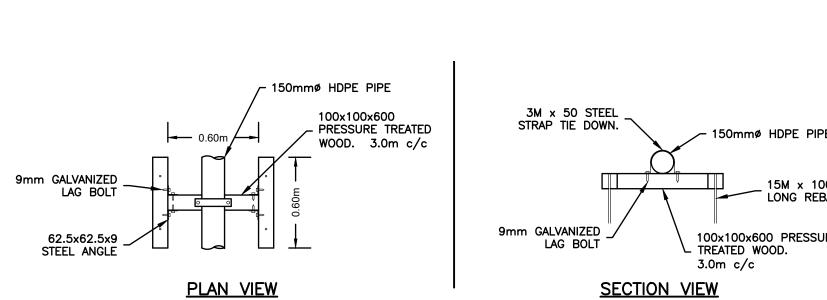
PROPOSED DITCH LINE

3. NOMINAL SIZE OR RIP RAP TO BE 0.5 THICKNESS.
4. FILTER CLOTH TO BE INSTALL UNDER ENTIRE RIP RAP





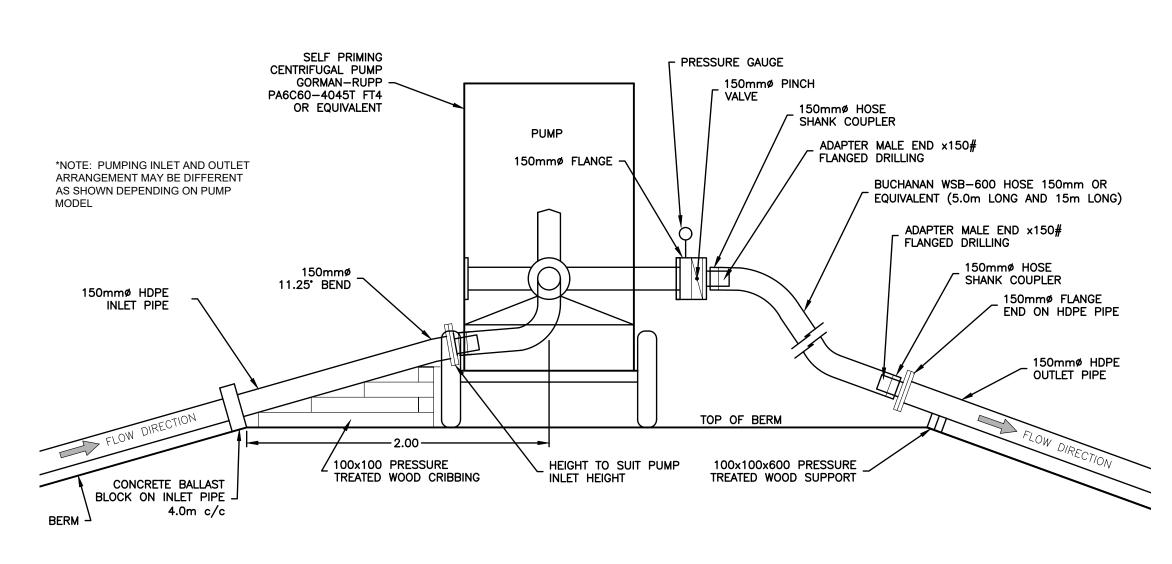
PLAN_

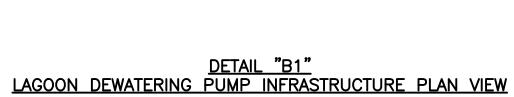


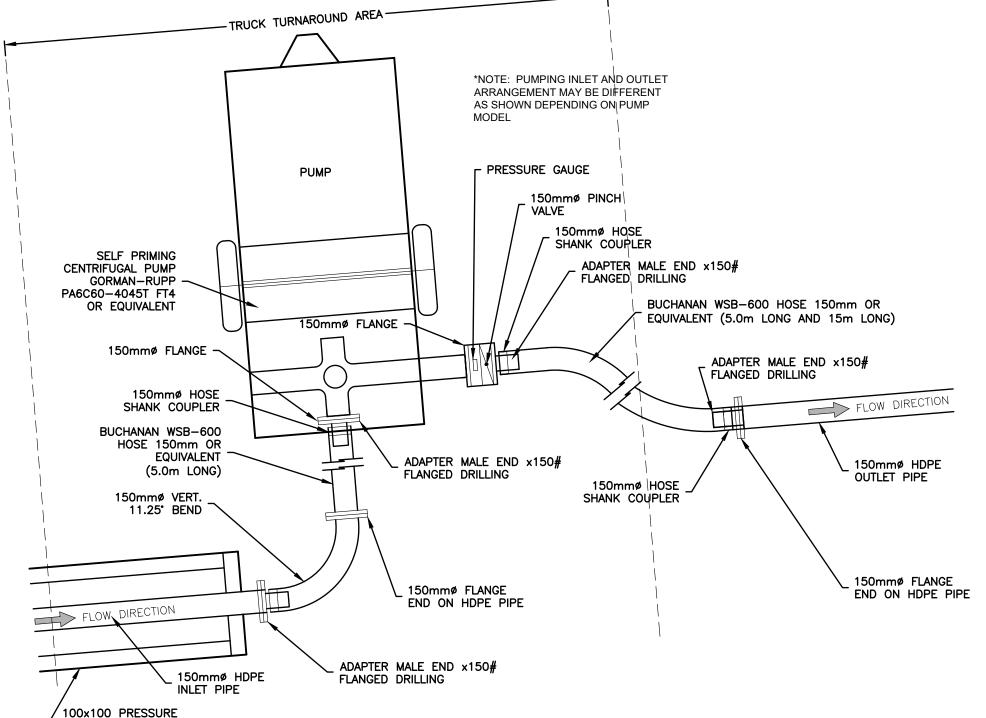
150mmø HDPE PIPE _ 15M x 1000 LONG REBAR 100x100x600 PRESSURE

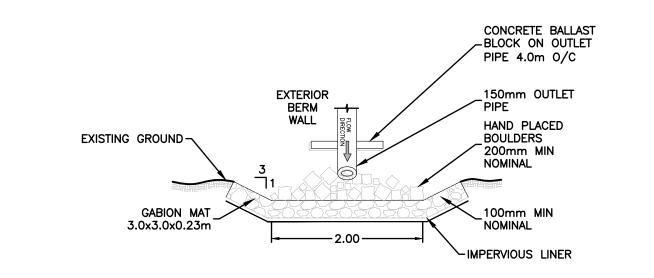
OUTLET PIPE SUPPORT

LAGOON DEWATERING PUMP INFRASTRUCTURE

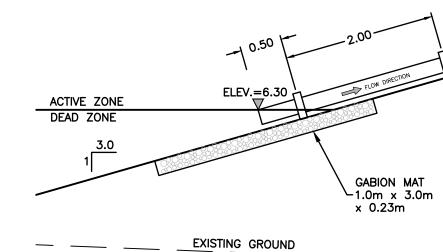








<u>DETAIL "B3"</u>
<u>LAGOON DEWATERING OUTLET ELEVATION VIEW</u>



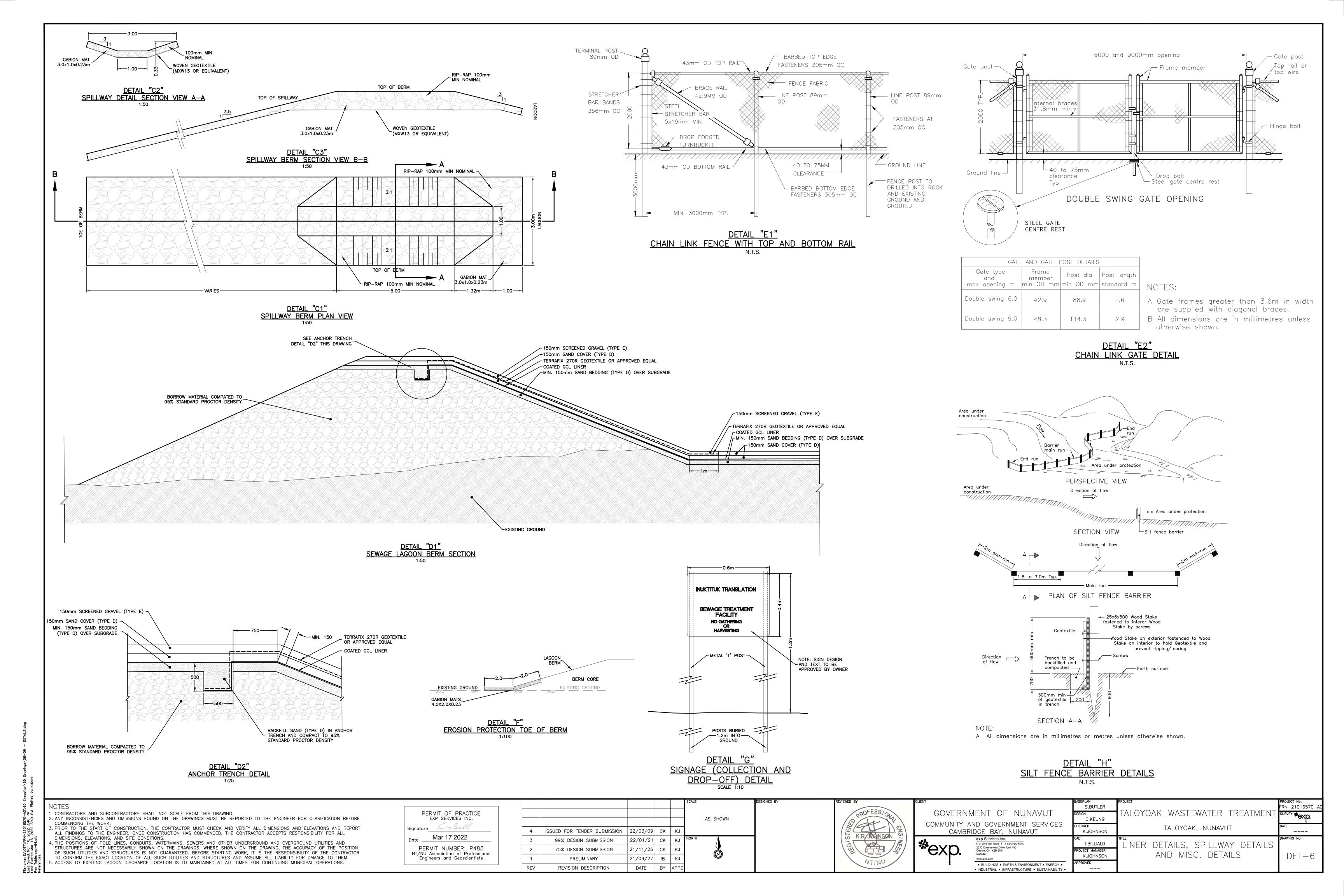
	GABION MAT 1.0m x 3.0m x 0.23m
EXISTING GROUND	
	IL "B5" /ATERING INLET

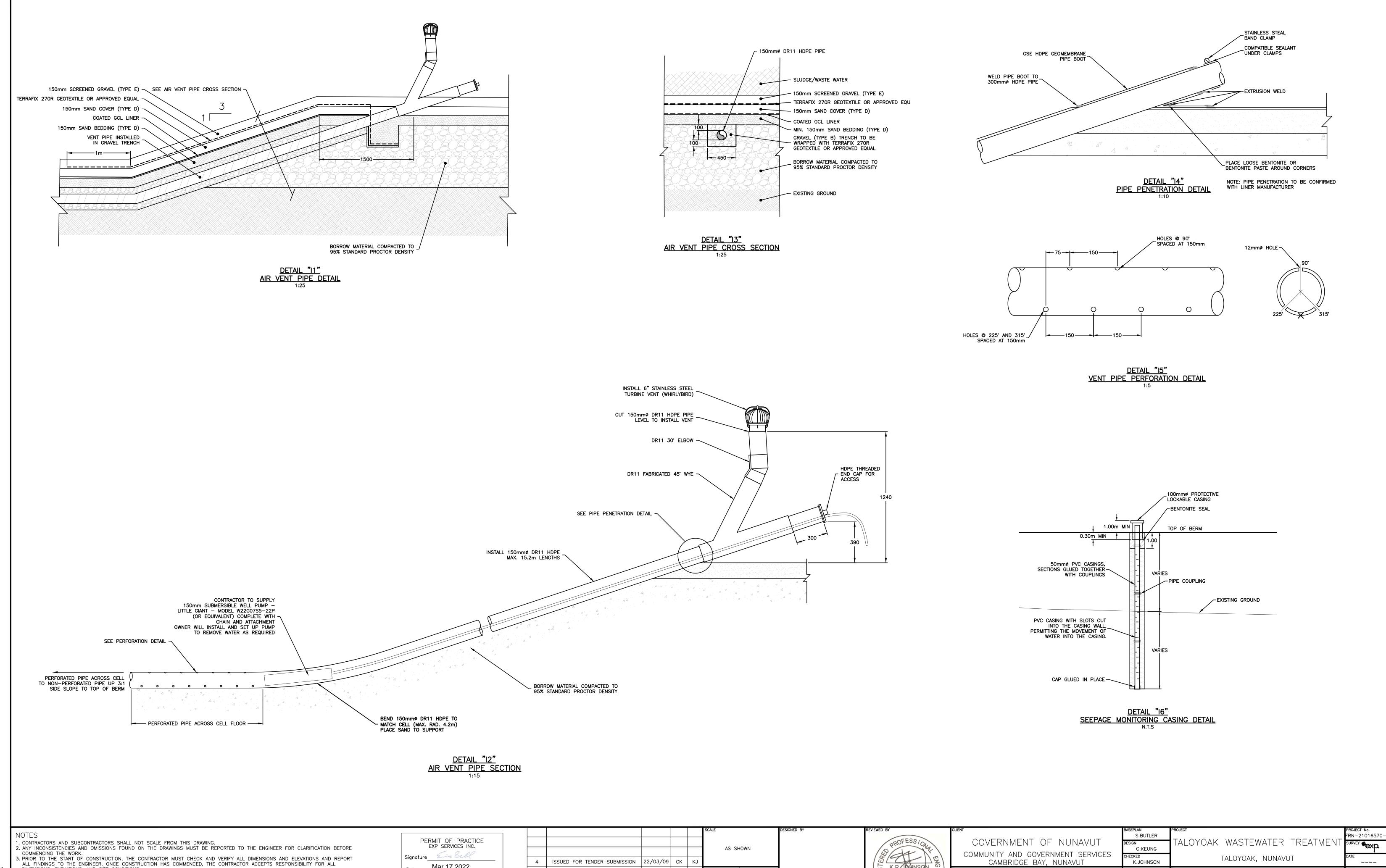
CONCRETE BALLAST BLOCK ON INLET PIPE 2.0m c/c

-DITCH WIDTH VARIES-

DETAIL "B6"

DITCH DETAIL





4 ISSUED FOR TENDER SUBMISSION 22/03/09 CK KJ

22/01/21 CK

21/09/27 IB

DATE

|21/11/26| CK | K

99% DESIGN SUBMISSION

75% DESIGN SUBMISSION

PRELIMINARY

REVISION DESCRIPTION

REV

TALOYOAK, NUNAVUT

AIR VENTILATION PIPE DETAILS

CAMBRIDGE BAY, NUNAVUT

t: +1.613.688.1899 | f: +1.613.225.7330

• BUILDINGS • EARTH & ENVIRONMENT • ENERGY •

• INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •

2650 Queensview Drive, Unit 100 Ottawa, ON K2B 8H6 Canada

K.JOHNSON

I.BILLIALD

K.JOHNSON

Signature

Mar 17 2022

PERMIT NUMBER: P483 NT/NU Association of Professional Engineers and Geoscientists

DIMENSIONS, ELEVATIONS, AND SITE CONDITIONS.

THE POSITIONS OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND

TO CONFIRM THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

5. ACCESS TO EXISTING LAGOON DISCHARGE LOCATION IS TO MAINTAINED AT ALL TIMES FOR CONTINUING MUNICIPAL OPERATIONS.

STRUCTURES ARE NOT NECESSARILY SHOWN ON THE DRAWINGS. WHERE SHOWN ON THE DRAWING, THE ACCURACY OF THE POSITION

OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, IT IS THE RESPONSIBILITY OF THE CONTRACTOR



DETAIL "J1"
REMOVAL OF EXISTING DISCHARGE CHUTES
N.T.S.

S.BUTLER TALOYOAK WASTEWATER TREATMENT SURVEY PEXP. GOVERNMENT OF NUNAVUT PERMIT OF PRACTICE EXP SERVICES INC. 1. CONTRACTORS AND SUBCONTRACTORS SHALL NOT SCALE FROM THIS DRAWING.
2. ANY INCONSISTENCIES AND OMISSIONS FOUND ON THE DRAWINGS MUST BE REPORTED TO THE ENGINEER FOR CLARIFICATION BEFORE AS SHOWN C.KEUNG COMMENCING THE WORK.

3. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND ELEVATIONS AND REPORT ALL FINDINGS TO THE ENGINEER. ONCE CONSTRUCTION HAS COMMENCED, THE CONTRACTOR ACCEPTS RESPONSIBILITY FOR ALL DIMENSIONS, ELEVATIONS, AND SITE CONDITIONS. COMMUNITY AND GOVERNMENT SERVICES TALOYOAK, NUNAVUT Signature CAMBRIDGE BAY, NUNAVUT 4 ISSUED FOR TENDER SUBMISSION 22/03/09 CK KJ K.JOHNSON Mar 17 2022 exp Services Inc. t: +1.613.688.1899 | f: +1.613.225.7330 2650 Queensview Drive, Unit 100 Ottawa, ON K2B 8H6 Canada DIMENSIONS, ELEVATIONS, AND SITE CONDITIONS.

4. THE POSITIONS OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE DRAWINGS. WHERE SHOWN ON THE DRAWING, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONFIRM THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

5. ACCESS TO EXISTING LAGOON DISCHARGE LOCATION IS TO MAINTAINED AT ALL TIMES FOR CONTINUING MUNICIPAL OPERATIONS. Date _ 99% DESIGN SUBMISSION | 22/01/21 | CK | KJ EXISTING LAGOON I.BILLIALD PERMIT NUMBER: P483 21/11/26 CK KJ 75% DESIGN SUBMISSION DECOMMISSIONING WORK DETAILS NT/NU Association of Professional Engineers and Geoscientists K.JOHNSON 21/09/27 IB KJ PRELIMINARY • BUILDINGS • EARTH & ENVIRONMENT • ENERGY • REV REVISION DESCRIPTION DATE BY APPE • INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •

FRN-21016570-A

DET-8

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• INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •

K.JOHNSON

ACCESS ROAD PLAN & DETAILS

AR-PP

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PERMIT NUMBER: P483

NT/NU Association of Professional Engineers and Geoscientists

75% DESIGN SUBMISSION

PRELIMINARY

REVISION DESCRIPTION

21/11/26 CK

21/09/27 IB

DATE BY APP

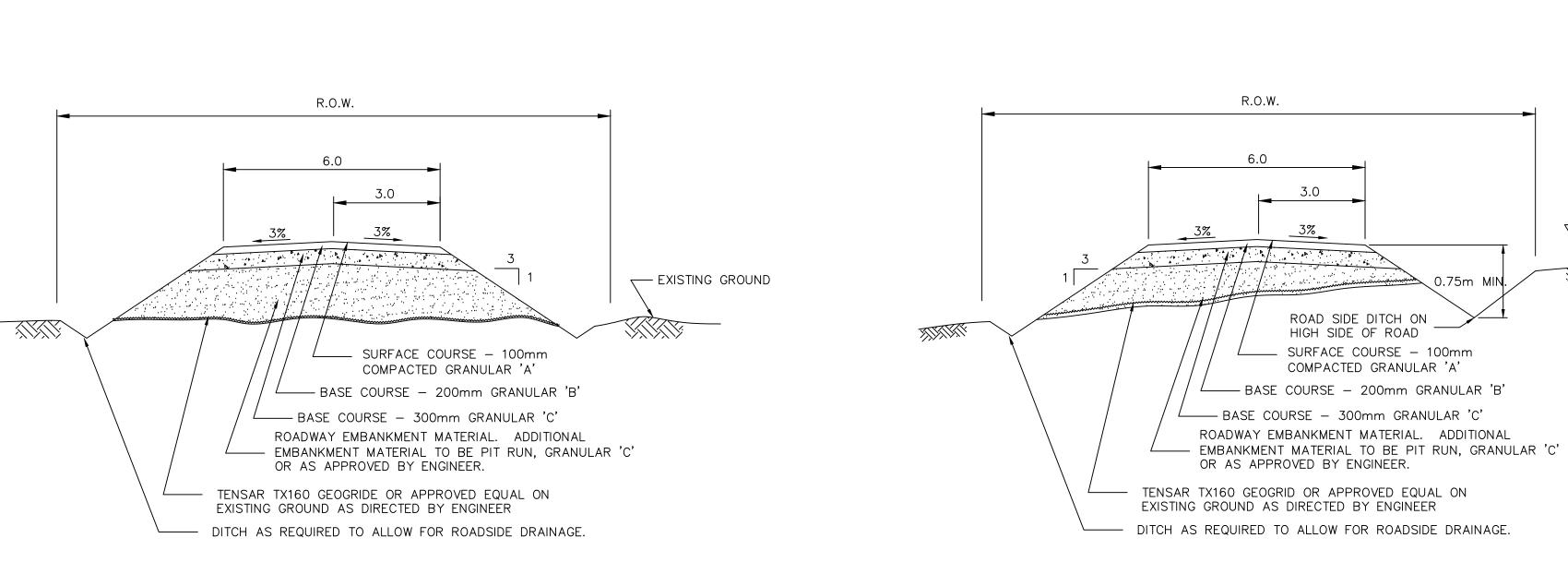


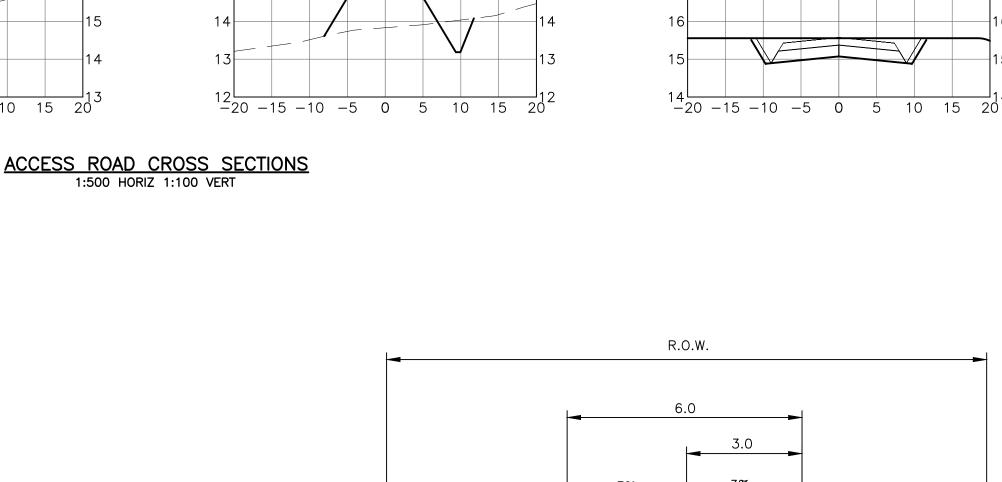
RN-21016570-S.BUTLER GOVERNMENT OF NUNAVUT TALOYOAK WASTEWATER TREATMENI PERMIT OF PRACTICE . CONTRACTORS AND SUBCONTRACTORS SHALL NOT SCALE FROM THIS DRAWING. 2. ANY INCONSISTENCIES AND OMISSIONS FOUND ON THE DRAWINGS MUST BE REPORTED TO THE ENGINEER FOR CLARIFICATION BEFORE EXP SERVICES INC. C.KEUNG COMMUNITY AND GOVERNMENT SERVICES HORIZONTAL 3. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND ELEVATIONS AND REPORT ALL FINDINGS TO THE CONTRACTOR ACCEPTS RESPONSIBILITY FOR ALL TALOYOAK, NUNAVUT Signature ISSUED FOR TENDER SUBMISSION 22/03/09 CK K CAMBRIDGE BAY, NUNAVUT K.JOHNSON ----Mar 17 2022 DIMENSIONS, ELEVATIONS, AND SITE CONDITIONS. **exp** Services Inc. t: +1.613.688.1899 | f: +1.613.225.7330 99% DESIGN SUBMISSION | 22/01/21 | CK | K THE POSITIONS OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND I.BILLIALD 2650 Queensview Drive, Unit 100 Ottawa, ON K2B 8H6 Canada STRUCTURES ARE NOT NECESSARILY SHOWN ON THE DRAWINGS. WHERE SHOWN ON THE DRAWING, THE ACCURACY OF THE POSITION PERMIT NUMBER: P483 ACCESS ROAD CROSS SECTIONS 75% DESIGN SUBMISSION 21/11/26 CK OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, IT IS THE RESPONSIBILITY OF THE CONTRACTOR NT/NU Association of Professional AR-XSK.JOHNSON TO CONFIRM THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

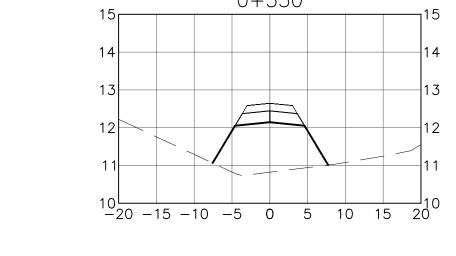
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EXISTING GROUND

R.O.W. R.O.W. 6.0 6.0 EXISTING GROUND ____ SURFACE COURSE — 100mm COMPACTED GRANULAR 'A' —— BASE COURSE – 200mm GRANULAR 'B' —— BASE COURSE – 300mm GRANULAR 'C' ROADWAY EMBANKMENT MATERIAL. ADDITIONAL — EMBANKMENT MATERIAL TO BE PIT RUN, GRANULAR 'C' OR AS APPROVED BY ENGINEER. -- TENSAR TX160 GEOGRIDE OR APPROVED EQUAL ON EXISTING GROUND AS DIRECTED BY ENGINEER — DITCH AS REQUIRED TO ALLOW FOR ROADSIDE DRAINAGE. ROAD EMBANKMENT - LEVEL GROUND ROAD EMBANKMENT - SLOPED GROUND



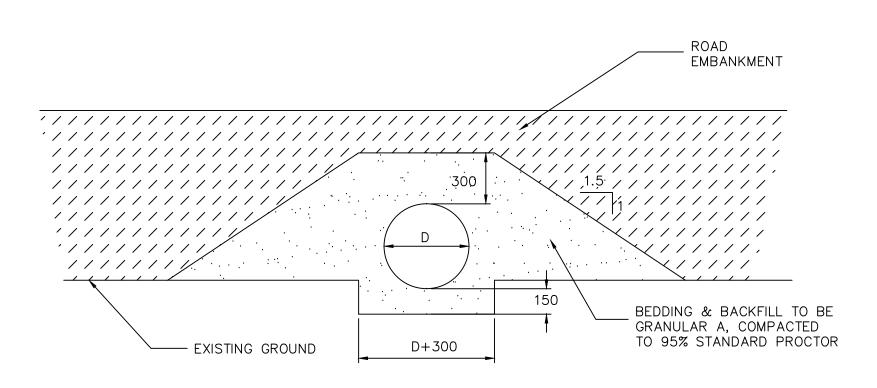




0+500

<u>-</u>20 -15 -10 -5 0 5 10 15 20

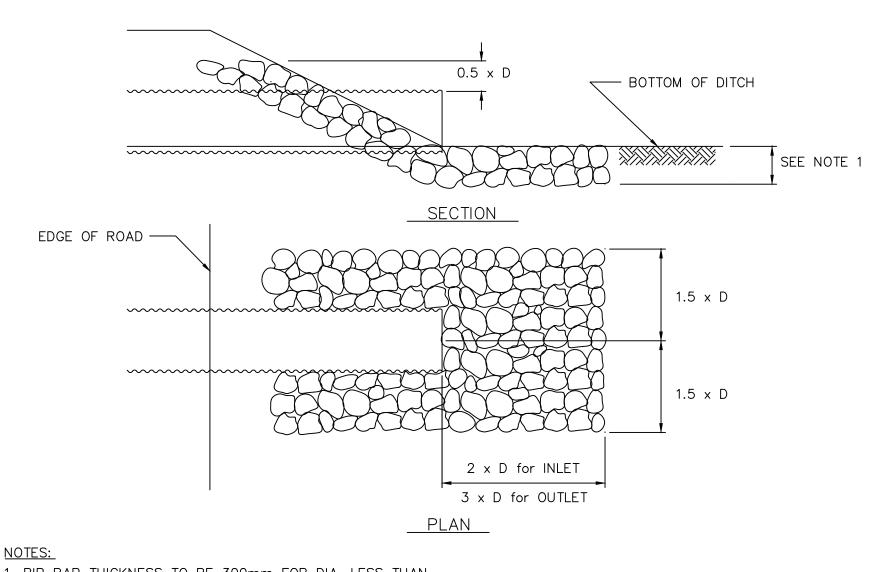
0+685



NOTES:

- 1. MINIMUM COVER TO BE 450mm IN ROADS AND 300mm
- IN DRIVEWAYS.
- 2. INVERT OF CULVERT TO BE EMBEDDED 150mm BELOW
- EXISTING GROUND.
- 3. SEE DETAIL 'L2' FOR CULVERT APRON DETAIL.

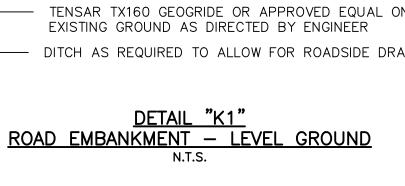
DETAIL "L1" PIPE CULVERT IN AN EMBANKMENT

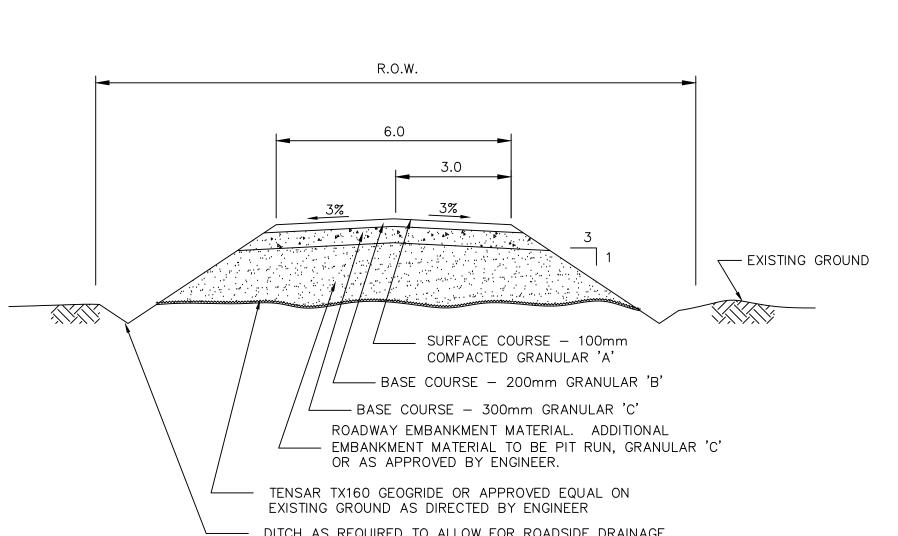


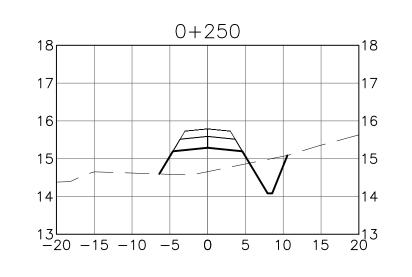
CULVERT APRON DETAIL

1. RIP RAP THICKNESS TO BE 300mm FOR DIA. LESS THAN 1400mm, AND 600mm FOR DIA. GREATER THAN 1400mm 2. RIP RAP TO BE HAND PLACED.

- 3. MINIMUM CULVERT DIA. TO BE 400mm.
- 4. NOMINAL SIZE OF RIP RAP TO BE 0.5 THICKNESS. 5. TERRAFIX 270R GEOTEXTILE OR APPROVED EQUAL TO BE
- INSTALLED UNDER ENTIRE RIPRAP APRON.
 - DETAIL "L2"







0 + 450

-20 -15 -10 -5 0 5 10 15 20

0+600

 $\frac{1}{2}$ 0 -15 -10 -5 0 5 10 15 20

0+206

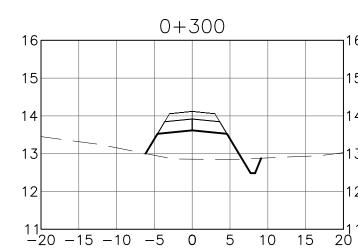
-20 -15 -10 -5 0 5 10 15 20

0 + 400

'–20 −15 −10 −5 0 5 10 15 20

0 + 550

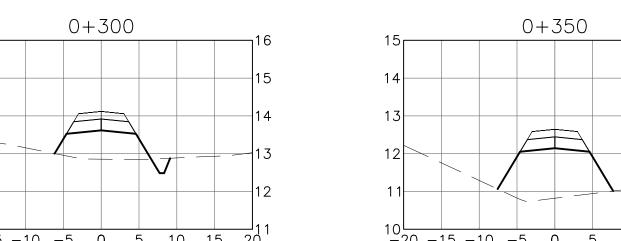
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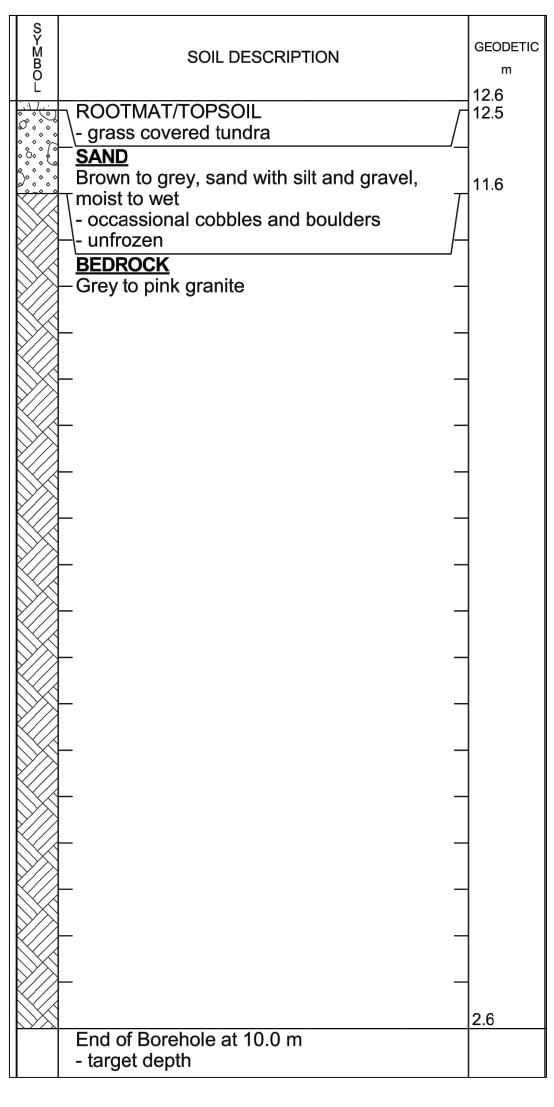


0 + 497

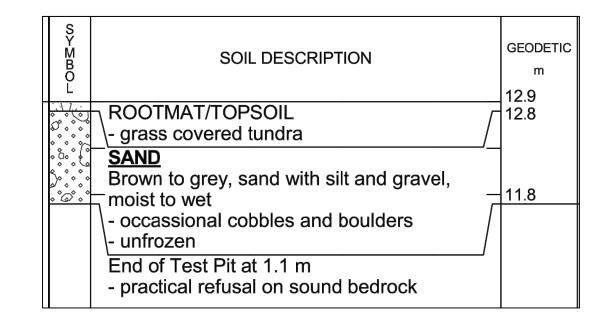
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0+650

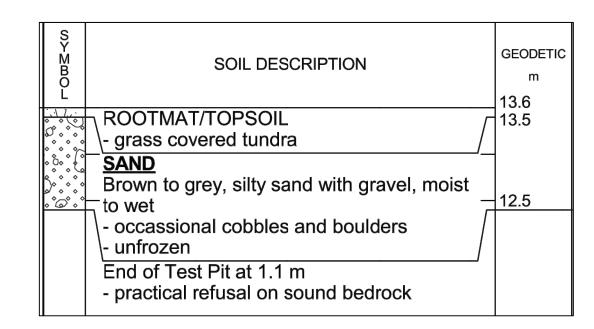




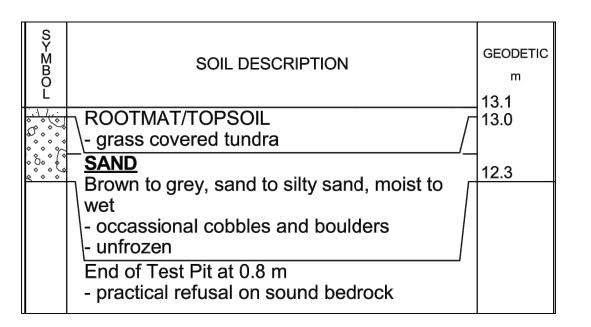
GEODETIC SOIL DESCRIPTION ¬ ROOTMAT/TOPSOIL \- grass covered tundra SAND
Brown to grey, sand with silt and gravel, moist to wet - occassional cobbles and boulders - unfrozen BEDROCK -Grey to pink granite End of Borehole at 10.0 m - target depth



<u>TP-1</u>



<u>TP-2</u>



TP-3

	⊓O¤⊠≺©	SOIL DESCRIPTION	GEODETION
		¬ ROOTMAT/TOPSOIL	11.3
8		\- grass covered tundra	
	\$0°.	SAND	1
٩	<u></u>	$_{\lnot}$ Brown to grey, silty sand with gravel, moist $_{\lnot}$	10.5
Ш		\ to wet	
Ш		\- occassional cobbles and boulders	
Ш		- unfrozen	
Ш		End of Test Pit at 0.9 m	
		 practical refusal on sound bedrock 	

<u>TP-4</u>

SY M B O L	SOIL DESCRIPTION	GEODETIC m
	¬ ROOTMAT/TOPSOIL √- grass covered tundra	10.8
	SAND Brown to grey, silty sand with gravel, moist to wet	9.8
	- occassional cobbles and boulders - unfrozen	
	End of Test Pit at 1.1 m - practical refusal on sound bedrock	

TP:	<u>-5</u>		

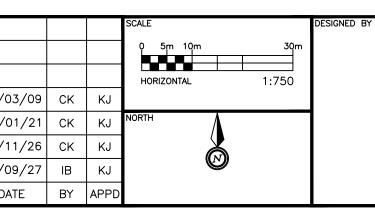
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PERMIT OF PRACTICE EXP SERVICES INC. Signature	
Date Mar 17 2022	
PERMIT NUMBER: P483 NT/NU Association of Professional Engineers and Geoscientists	

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		4	ISSUED FOR TENDER SUBMISSION	22/03
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	COMMUNITY AN	ND GOVERNMENT SERVICES		
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