

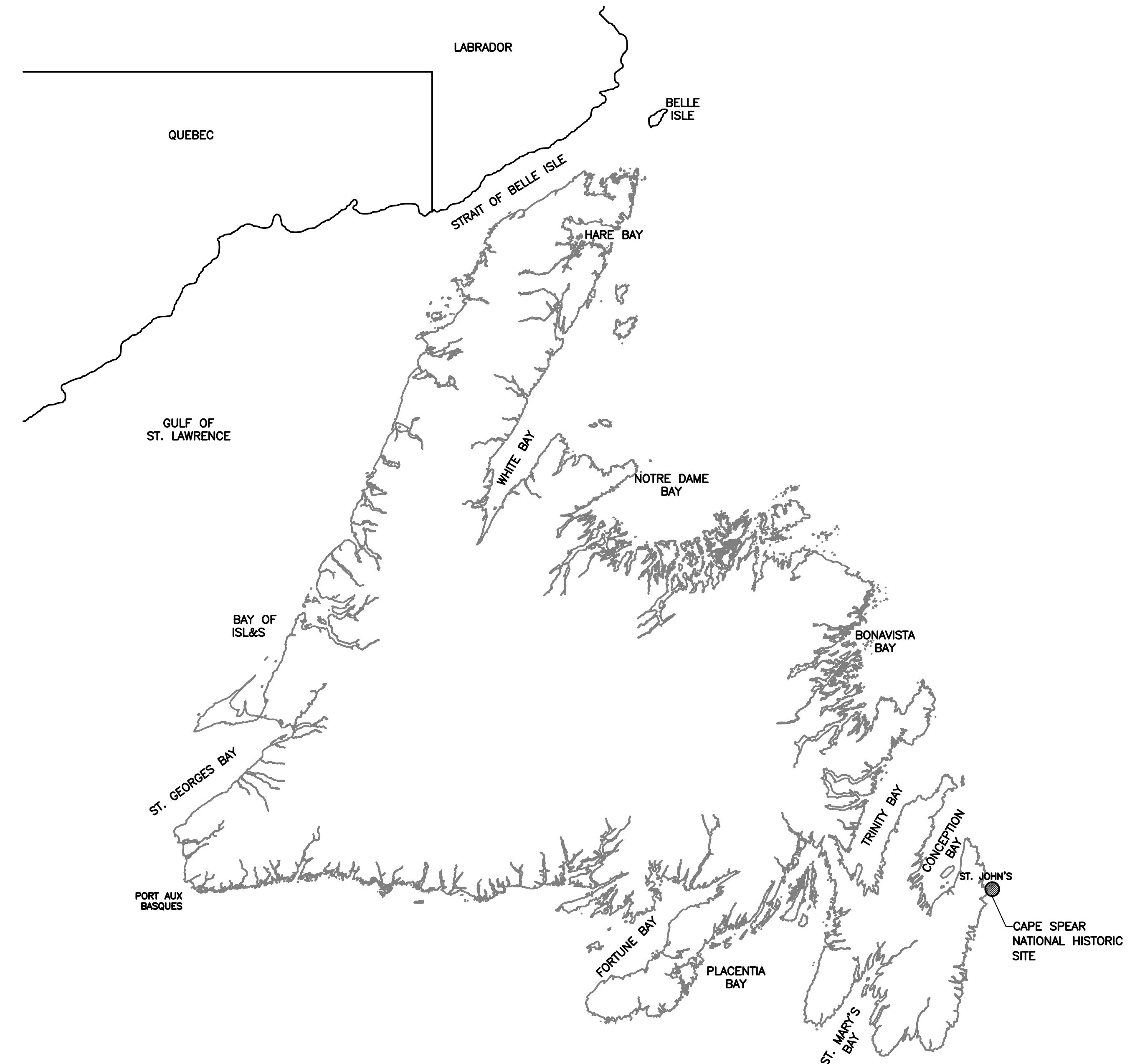
Parks Parcs  
Canada Canada

# CAPE SPEAR SEPTIC SYSTEM UPGRADES

## CAPE SPEAR NATIONAL HISTORIC SITE ST. JOHN'S, NL

### DRAWING LIST

- CS01 SANITARY SEWER OVERALL SITE PLAN, LEGEND & GENERAL NOTES
- CS02 SITE REMOVALS PLAN
- CS03 DISPOSAL FIELD SITE PLAN & PROFILE
- CS04 MISCELLANEOUS SECTIONS AND DETAILS (1 OF 2)
- CS05 MISCELLANEOUS SECTIONS AND DETAILS (2 OF 2)



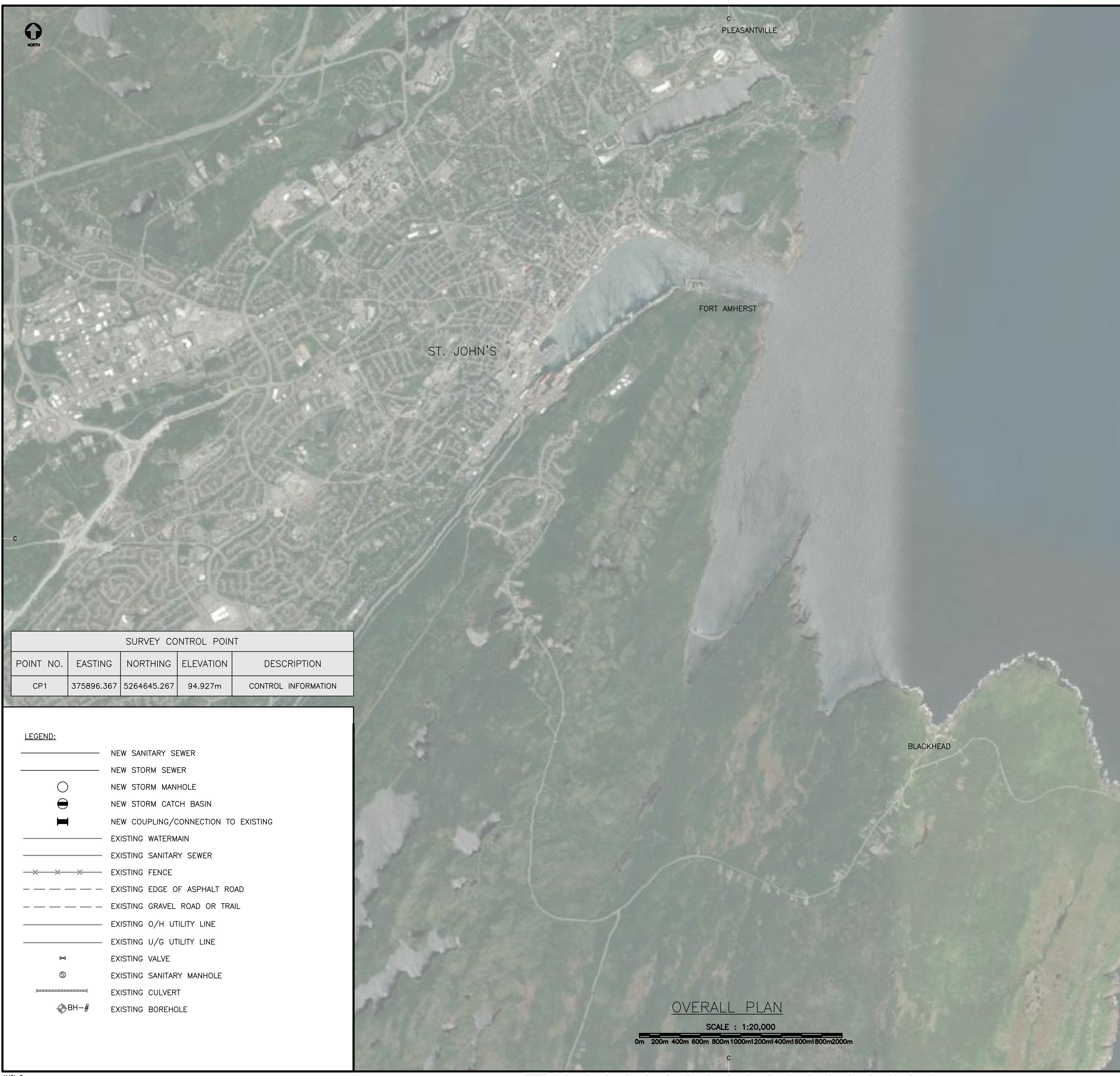
MONCTON 1077 boul. St. George Blvd. Suite 400 Moncton, N.B. Canada E1E 4C9 Tel: (506) 857-2777 Fax: (506) 857-2753	SAINT JOHN 133 Prince William Street Suite 703 Saint John, N.B. Canada E2L 2B5 Tel: (506) 693-5893 Fax: (506) 693-3250	FREDERICTON 564 Prospect Street Suite 101 Fredericton, N.B. Canada E3B 9M3 Tel: (506) 451-4400 Fax: (506) 693-3250
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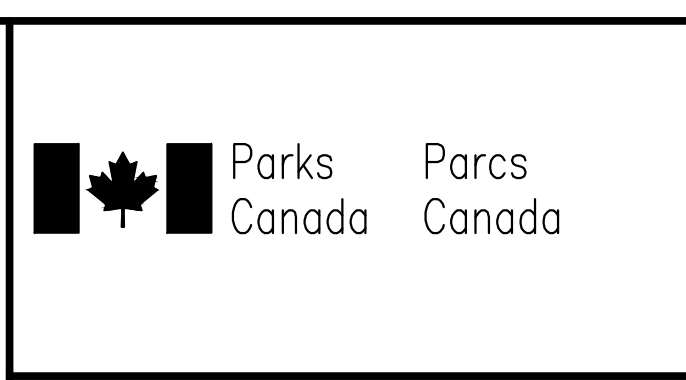
PCA PROJECT NO. 1900387.03







- GENERAL NOTES:**
- EXISTING WATERMAIN, ELECTRICAL, SANITARY SEWER TAKEN FROM INFORMATION ON CAPE SPEAR LIGHTHOUSE WASTE WATER SYSTEM DATED 2018 IN COMBINATION WITH INFRASTRUCTURE FOUND DURING CRANDALL SURVEY. ACTUAL LOCATIONS TO BE CONFIRMED IN THE FIELD BY THE CONTRACTOR.
  - CONTRACTOR TO LOCATE ALL EXISTING UTILITIES PRIOR TO BEGINNING WORK.
  - CONTRACTOR TO CONFIRM EXACT LOCATION, MATERIAL AND SIZE OF EXISTING PIPING, UNDERGROUND POWER LINES AND ALL CONNECTION POINTS IN THE FIELD, PRIOR TO ANY SEWER INSTALLATION.
  - ANY UTILITIES THAT MAY BECOME DAMAGED DURING CONSTRUCTION MUST BE REPORTED TO THE DEPARTMENTAL REPRESENTATIVE IMMEDIATELY AND REPAIRED AT NO COST TO PCA.
  - THE CONTRACTOR IS RESPONSIBLE FOR THE TEMPORARY SUPPORT OF UTILITY POLES AND UNDERGROUND UTILITY DUCTS DURING THE INSTALLATION OF THE NEW SEWER MAIN AS REQUIRED, INCIDENTAL TO THE WORK.
  - THE CONTRACTOR MUST HAVE A COPY OF ALL APPROVED ENVIRONMENTAL PERMITS ON-SITE AT ALL TIMES AS WELL AS PARKS CANADA BASIC IMPACT ANALYSIS (B.I.A.).
  - DRAWINGS BASED ON COORDINATE SYSTEM UTM83-22 (UTM WITH NAD83 DATUM, ZONE 22, METER; CENTRAL MERIDIAN 51D W).
  - SAFETY SIGNS TO BE INSTALLED PRIOR TO START OF CONSTRUCTION AND IN ACCORDANCE WITH WORK AREA TRAFFIC CONTROL MANUAL.
  - ALL DISTURBED AREAS SHALL BE REINSTATED TO PREVIOUS CONDITIONS OR BETTER; IN ACCORDANCE WITH THE SPECIFICATIONS.
  - EXISTING ASPHALT AND CRUSHED ROCK DRIVEWAYS AFFECTED BY THE WORK SHALL BE RESTORED IN ACCORDANCE WITH THE SPECIFICATIONS.
  - ALL GRASSED AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED IN ACCORDANCE WITH THE SPECIFICATIONS.
  - EROSION CONTROL STRUCTURES AND SILT FENCING TO BE INSTALLED PRIOR TO START OF THE WORK, INCIDENTAL TO THE WORK. CONTRACTOR TO PROVIDE EROSION CONTROL PLANS TO DEPARTMENTAL REPRESENTATIVE FOR APPROVAL PRIOR TO START OF WORK.
  - REFER TO SPECIFICATIONS FOR GEOTECHNICAL REPORT.
  - EXISTING ASPHALT TO BE CUT SQUARE USING A SAW BEFORE THE START OF THE WORK, REFER TO SPECIFICATIONS.
  - CONTRACTOR SHALL ENSURE THAT THE WORK IS COMPLETED WITHOUT SURCHARGING OF RAW SEWAGE. PROVIDE TEMPORARY PUMPING OR VACUUM EQUIPMENT AS REQUIRED. THIS SHALL BE INCIDENTAL TO THE WORK.
  - TACK COAT SHALL BE PLACED ON ALL EXISTING ASPHALT SURFACES PRIOR TO ASPHALT PLACEMENT.
  - 50mm THICK CLOSED CELL INSULATION TO BE PLACED ON MAINS AND SERVICES WHERE COVER IS LESS THAN 1.8m. INSULATION TO BE MIN. 1.2m WIDE.
  - ALL DITCHES DISTURBED DURING THE COURSE OF THE WORK WILL BE CLEANED OUT AND RESHAPED BY THE CONTRACTOR AT HIS OWN EXPENSE AT THE END OF EACH WORK DAY, ALL TO THE SATISFACTION OF THE DEPARTMENTAL REPRESENTATIVE.



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KEY PLAN

PROVINCE OF NEWFOUNDLAND AND LABRADOR  
**PEGL** PERMIT HOLDER  
 This Permit Allows  
 CRANDALL ENGINEERING LTD.  
 To practice Professional Engineering in Newfoundland and Labrador  
 Permit No. as issued by PEGL: **A02425**  
 which is valid for the year **2020**

08260  
 Julien Babin  
 SIGNATURE  
 2020-06-25  
 DATE  
 PROVINCE OF NEWFOUNDLAND AND LABRADOR

SURVEY CONTROL POINT				
POINT NO.	EASTING	NORTHING	ELEVATION	DESCRIPTION
CP1	375896.367	5264645.267	94.927m	CONTROL INFORMATION

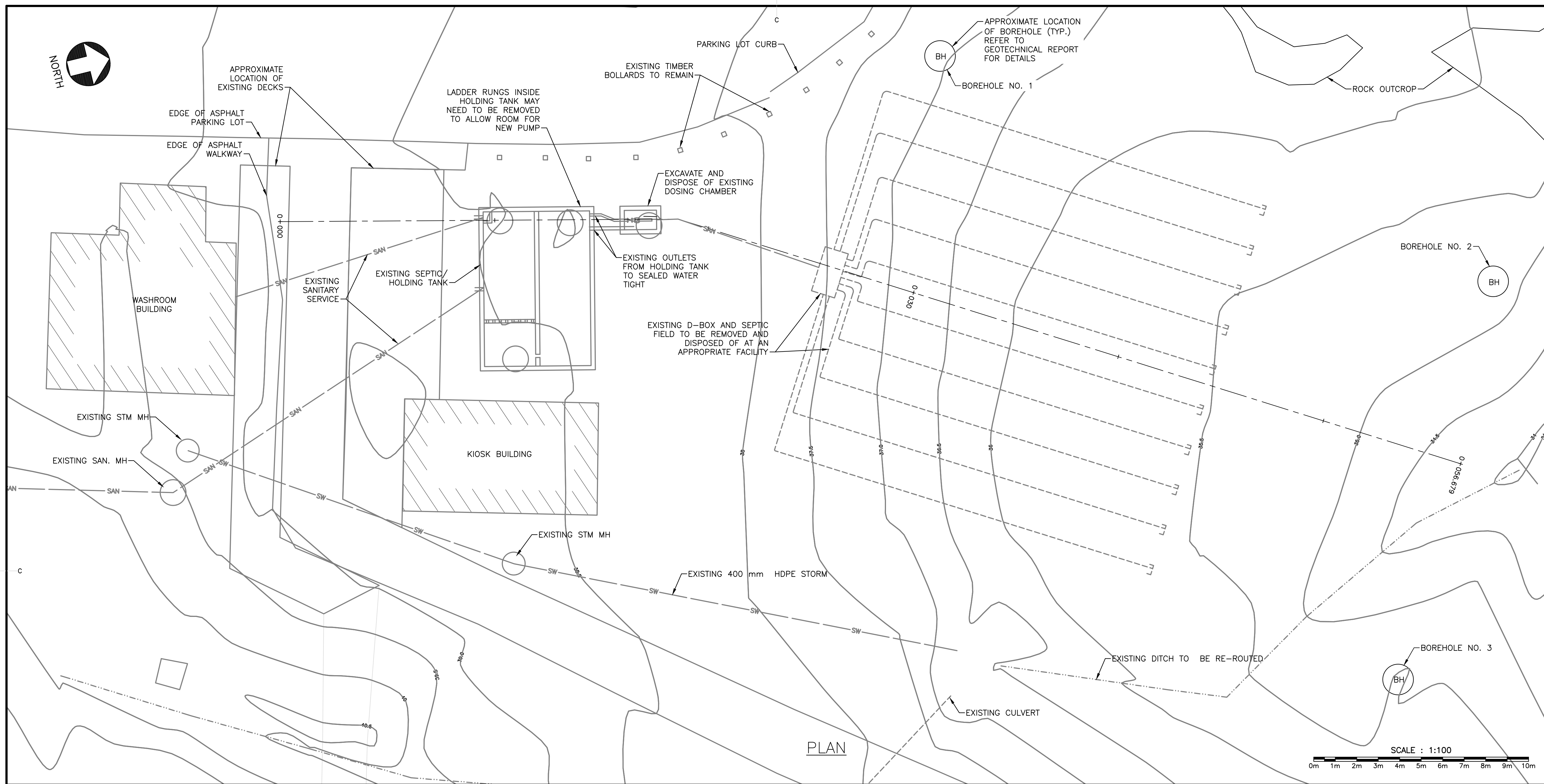
**LEGEND:**

	NEW SANITARY SEWER
	NEW STORM SEWER
	NEW STORM MANHOLE
	NEW STORM CATCH BASIN
	NEW COUPLING/CONNECTION TO EXISTING
	EXISTING WATERMAIN
	EXISTING SANITARY SEWER
	EXISTING FENCE
	EXISTING EDGE OF ASPHALT ROAD
	EXISTING GRAVEL ROAD OR TRAIL
	EXISTING O/H UTILITY LINE
	EXISTING U/G UTILITY LINE
	EXISTING VALVE
	EXISTING SANITARY MANHOLE
	EXISTING CULVERT
	EXISTING BOREHOLE

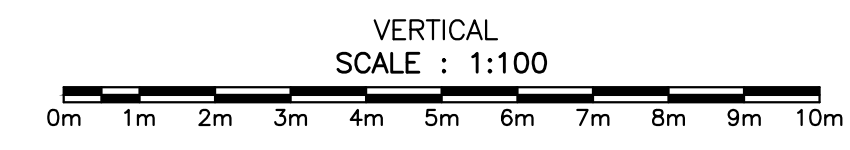
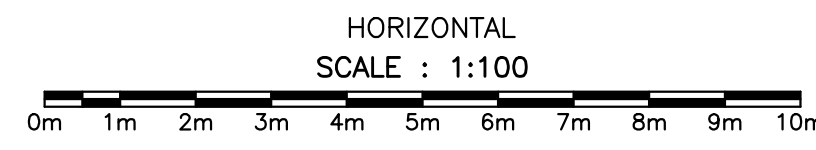
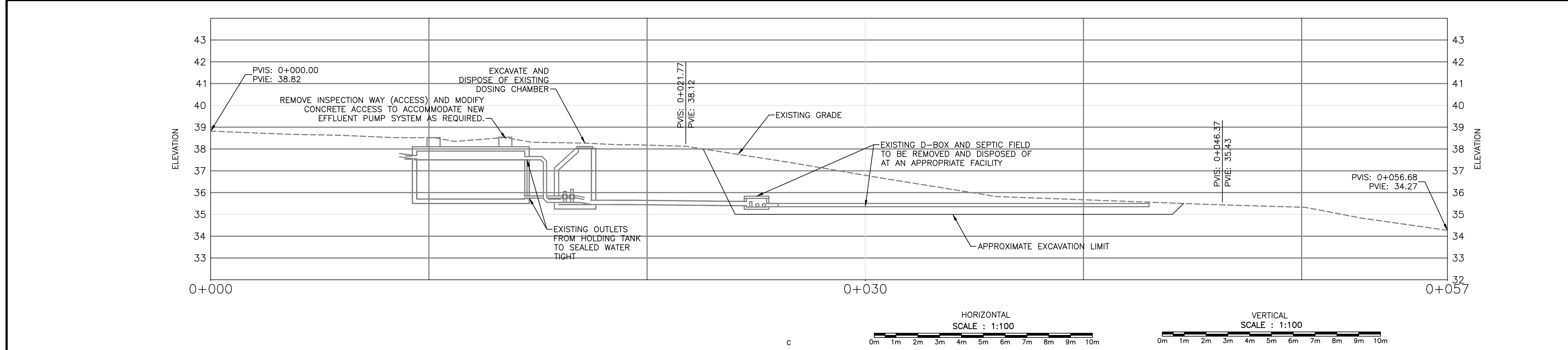
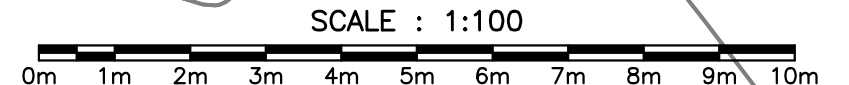
OVERALL PLAN  
 SCALE : 1:20,000  
 0m 200m 400m 600m 800m 1000m 1200m 1400m 1600m 1800m 2000m

0.0	ISSUED FOR TENDER	06/02/2020
revisions		date
project	CAPE SPEAR SEPTIC SYSTEM UPGRADES CAPE SPEAR NATIONAL HISTORIC SITE	
drawing	ST. JOHN'S NL	
designed	KKM	conçu
date	2020-05-08	
drawn	TJ	dessiné
date	2020-05-08	
approved	JFB	approuvé
date	2020-05-08	
Tender	Soumission	
PCA Project Manager	Administrateur de projets APC	
project number	no. du projet	
1900387.03		
drawing no.	no. du dessin	
C01		





PLAN



ANSI D



Parks Canada  
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 FREDERICTON: 544 Prospect Street, Suite 101, Fredericton, N.B. Canada E3B 9E1, Tel: (506) 451-4400, Fax: (506) 463-3200

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revisions		date

project CAPE SPEAR SEPTIC SYSTEM UPGRADES  
 CAPE SPEAR NATIONAL HISTORIC SITE  
 CAPE SPEAR NL  
 drawing dessin  
**SITE REMOVALS PLAN**

designed	KKM	conçu
date	2020-05-08	
drawn	TJ	dessiné
date	2020-05-08	
approved	JFB	approuvé
date	2019-03-24	
Tender		Soumission
PCA Project Manager	Administrateur de projets APC	
project number	no. du projet	
<b>1900387.03</b>		
drawing no.	no. du dessin	
<b>C02</b>		





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08260  
 Julien Babin  
 2020-06-25  
 JULIEN BABIN

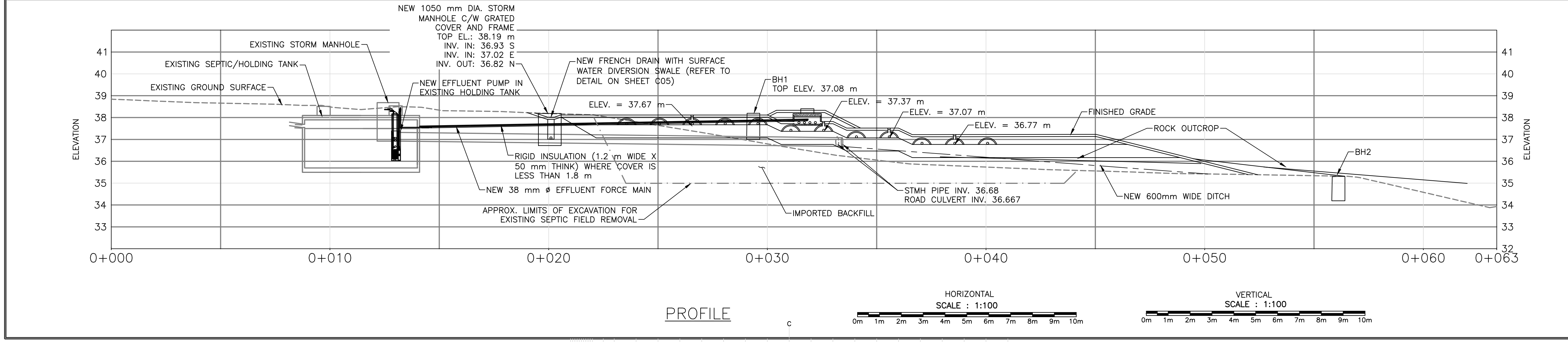
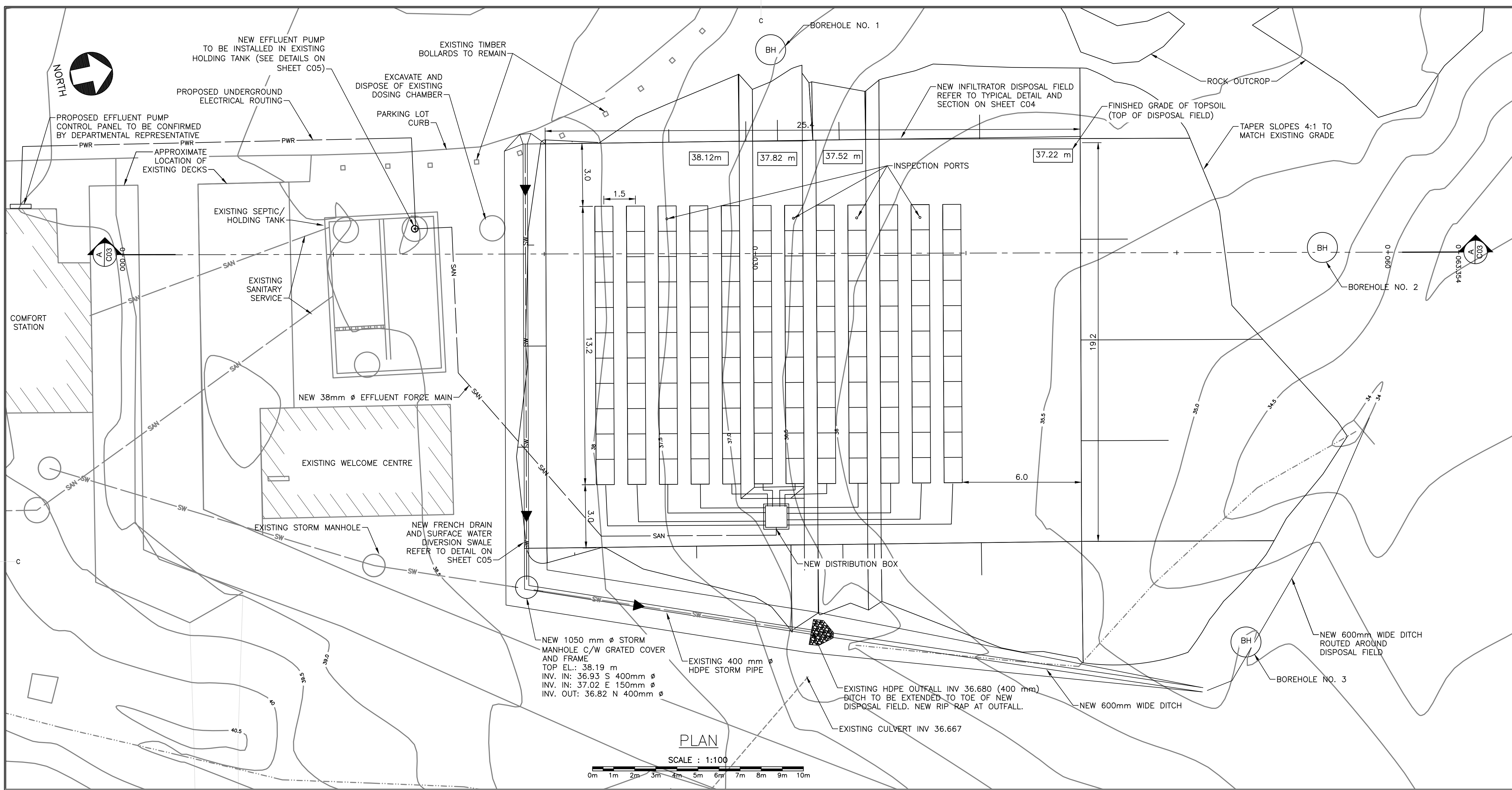
0.0	ISSUED FOR TENDER	06/02/2020
revisions		date

project CAPE SPEAR SEPTIC SYSTEM UPGRADES  
 CAPE SPEAR NATIONAL HISTORIC SITE

ST. JOHN'S NL  
 drawing dessin

DISPOSAL FIELD SITE PLAN & PROFILE

designed KKM	conçu
date 2020-05-08	
drawn TJ	dessiné
date 2020-05-08	
approved JFB	approuvé
date 2020-05-08	
Tender	Soumission
PCA Project Manager	Administrateur de projets APC
project number	no. du projet
<b>1900387.03</b>	
drawing no.	no. du dessin
<b>C03</b>	





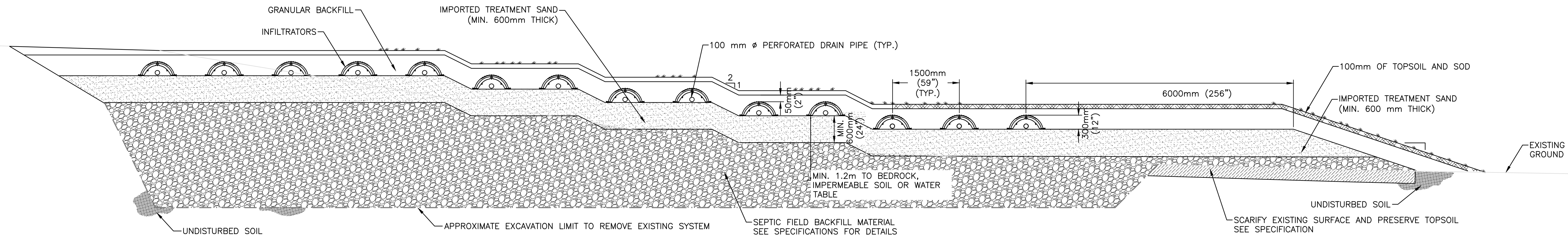


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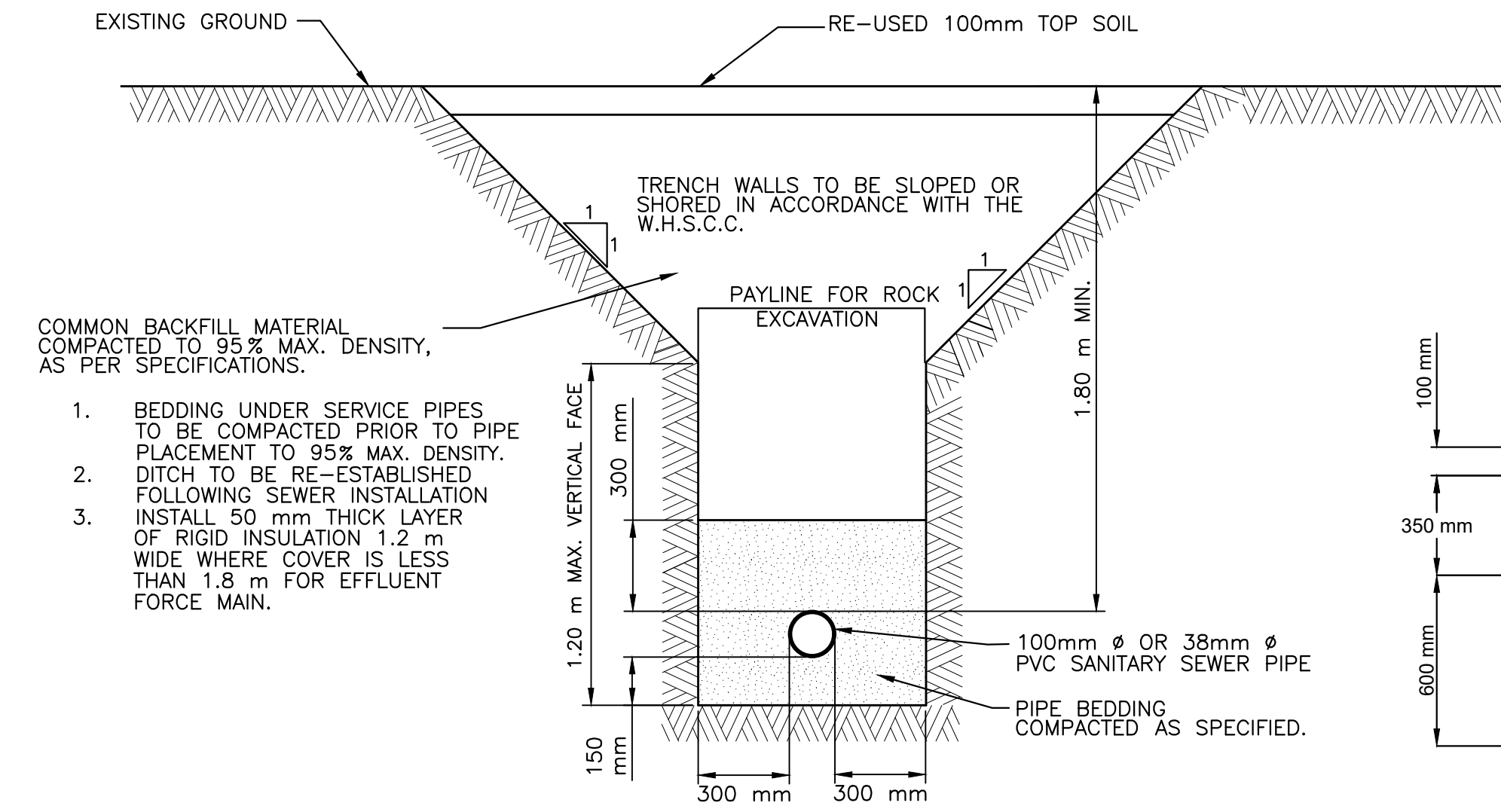
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FREDERICTON 544 Prospect Street Suite 101 Fredericton, N.B. Canada E3B 9E1 Tel: (506) 451-4400 Fax: (506) 463-3250

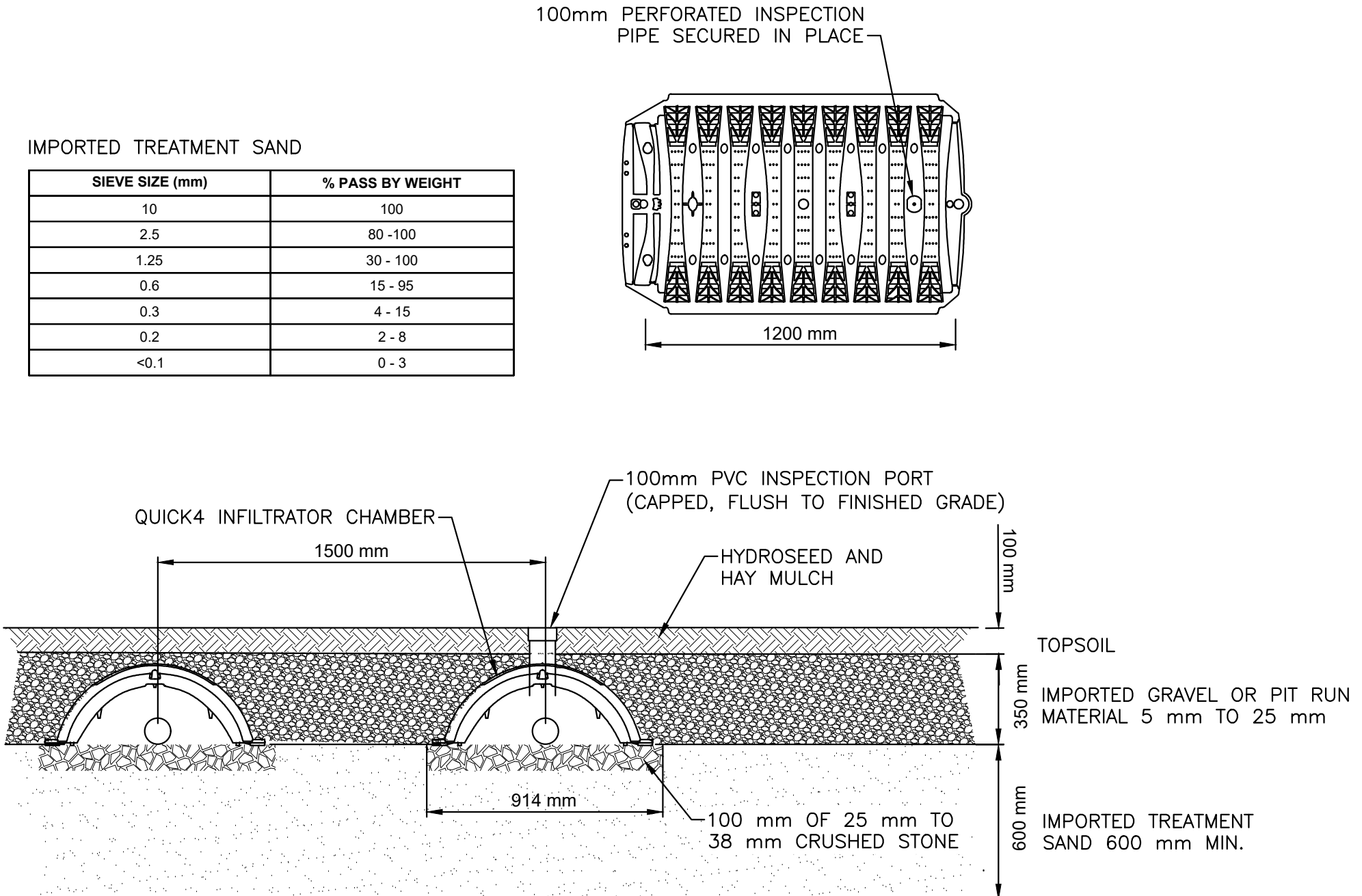
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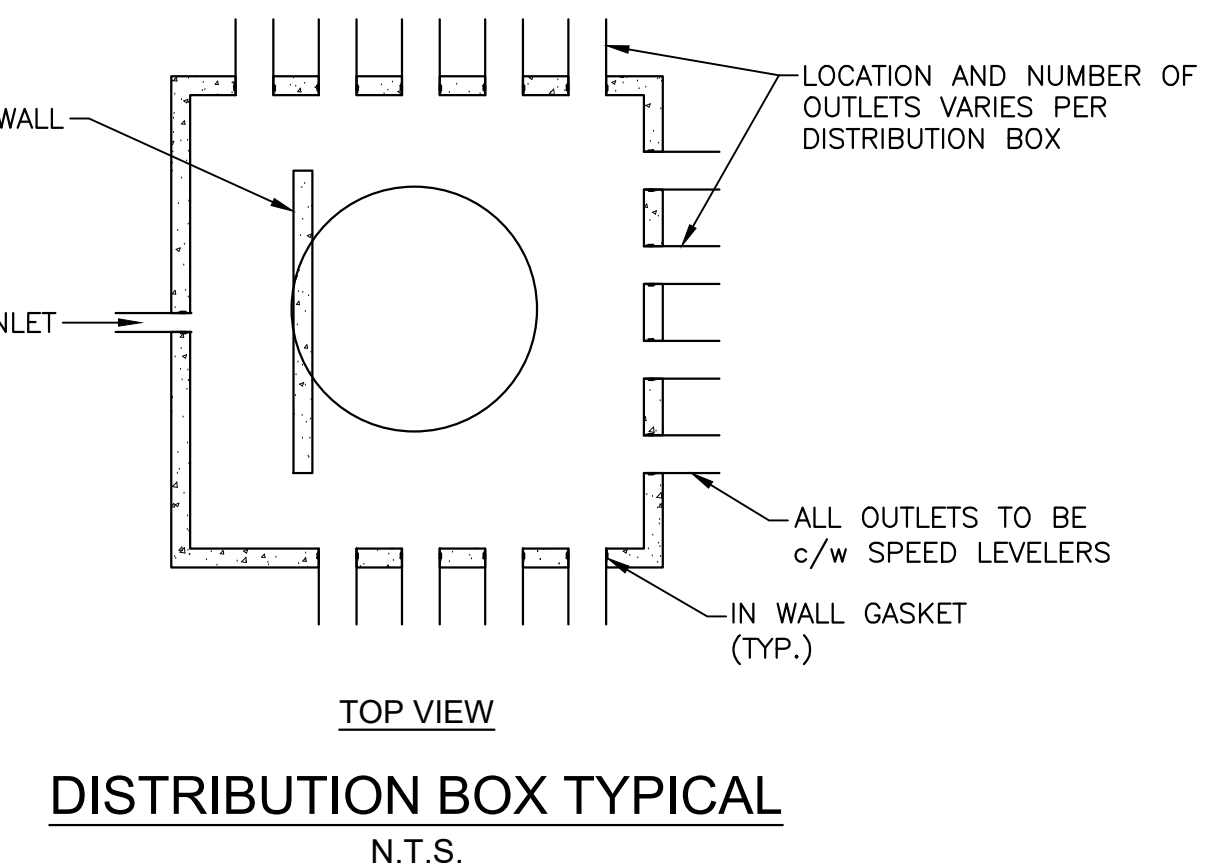
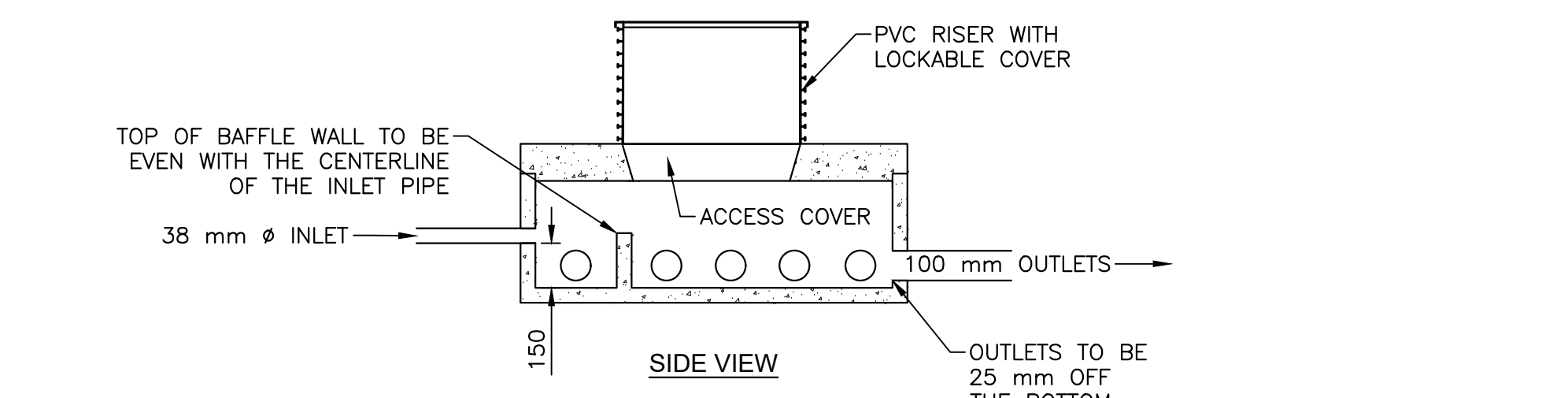
**STANDARD INFILTRATOR CHAMBER TYPICAL MOUND DETAIL SECTION VIEW**  
N.T.S.



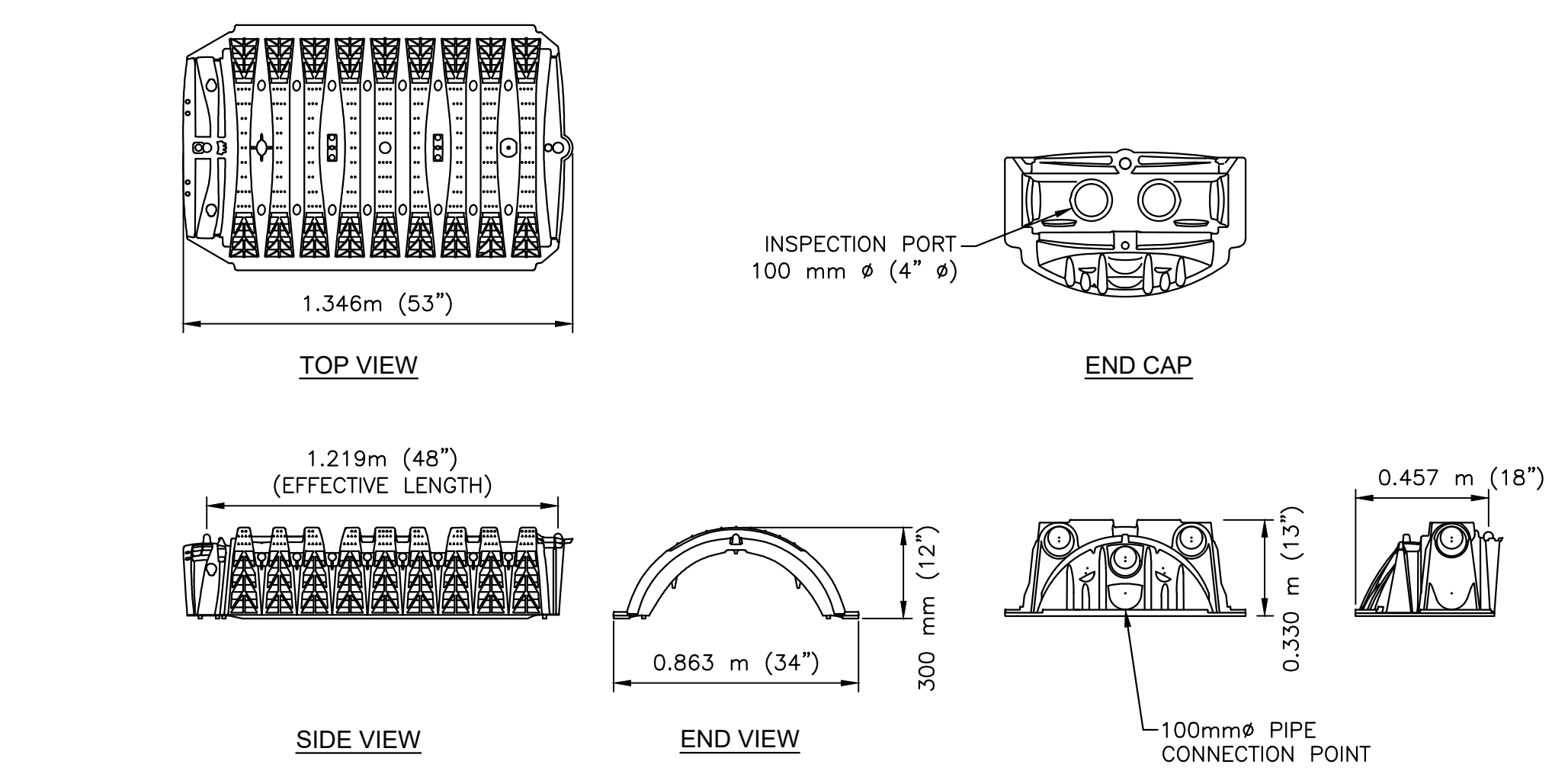
**DETAIL - SINGLE PIPE TRENCH**  
N.T.S.



**STANDARD INFILTRATOR CHAMBER TYPICAL SECTION**  
N.T.S.



**DISTRIBUTION BOX TYPICAL**  
N.T.S.



**STANDARD INFILTRATOR CHAMBER TYPICALS**  
N.T.S.

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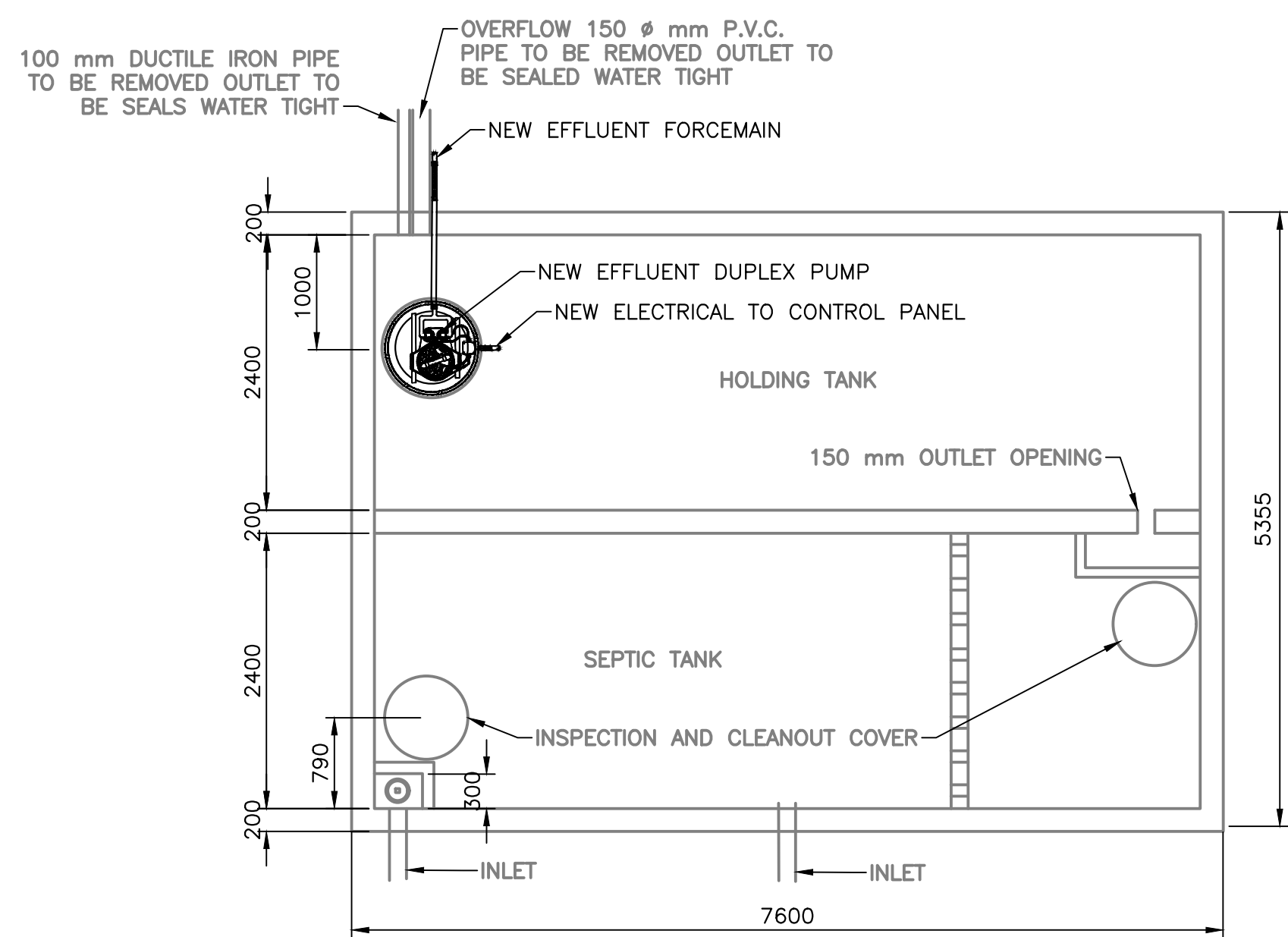
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revisions		date

project  
**CAPE SPEAR SEPTIC SYSTEM UPGRADES**  
**CAPE SPEAR NATIONAL HISTORIC SITE**  
ST. JOHN'S NL  
drawing dessin

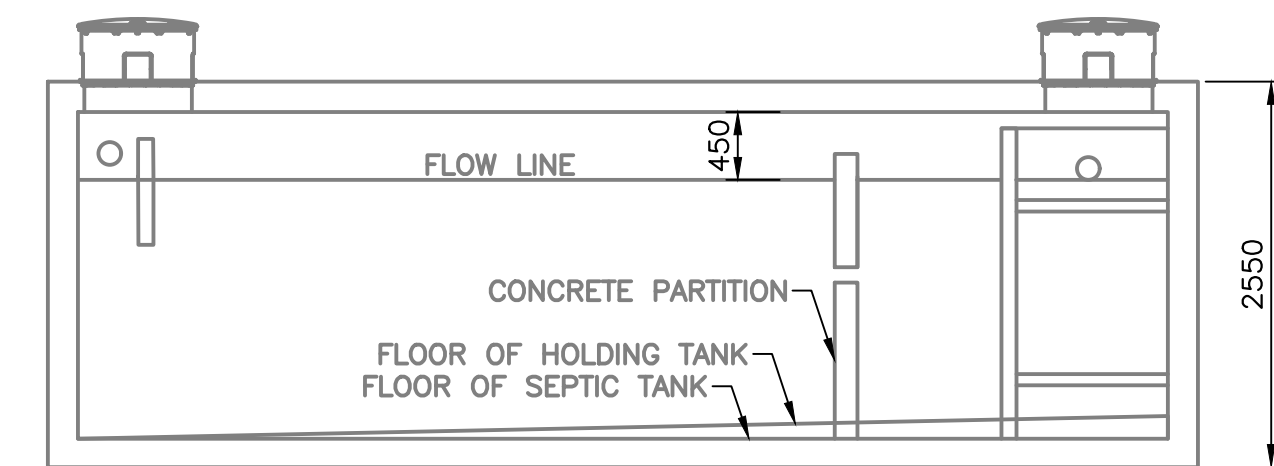
**MISCELLANEOUS SECTIONS AND DETAILS (1 OF 2)**  
designed KKM conçu  
date 2020-05-08  
drawn TJ dessiné  
date 2020-05-08  
approved JFB approuvé  
date 2020-05-08  
Tender Soumission  
PCA Project Manager Administrateur de projets APC  
project number no. du projet  
**1900387.03**  
drawing no. no. du dessin  
**C04**



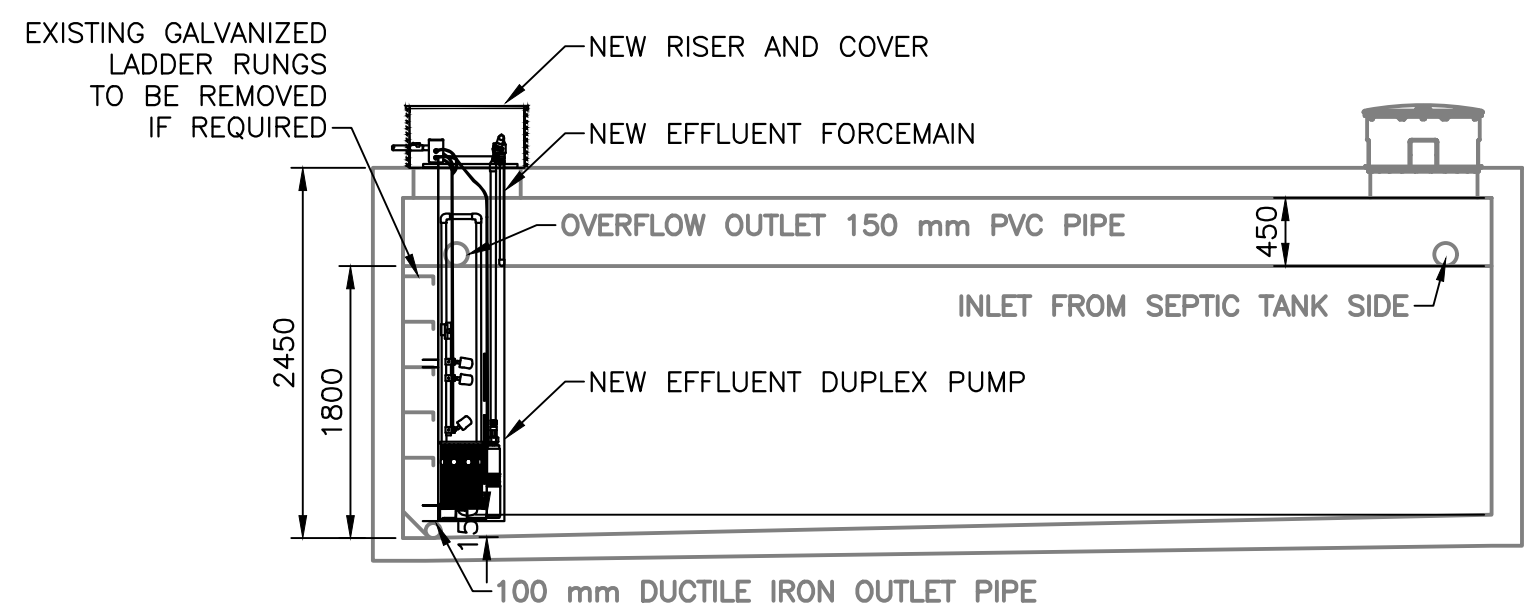
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PLAN VIEW - EXISTING SEPTIC & HOLDING TANK

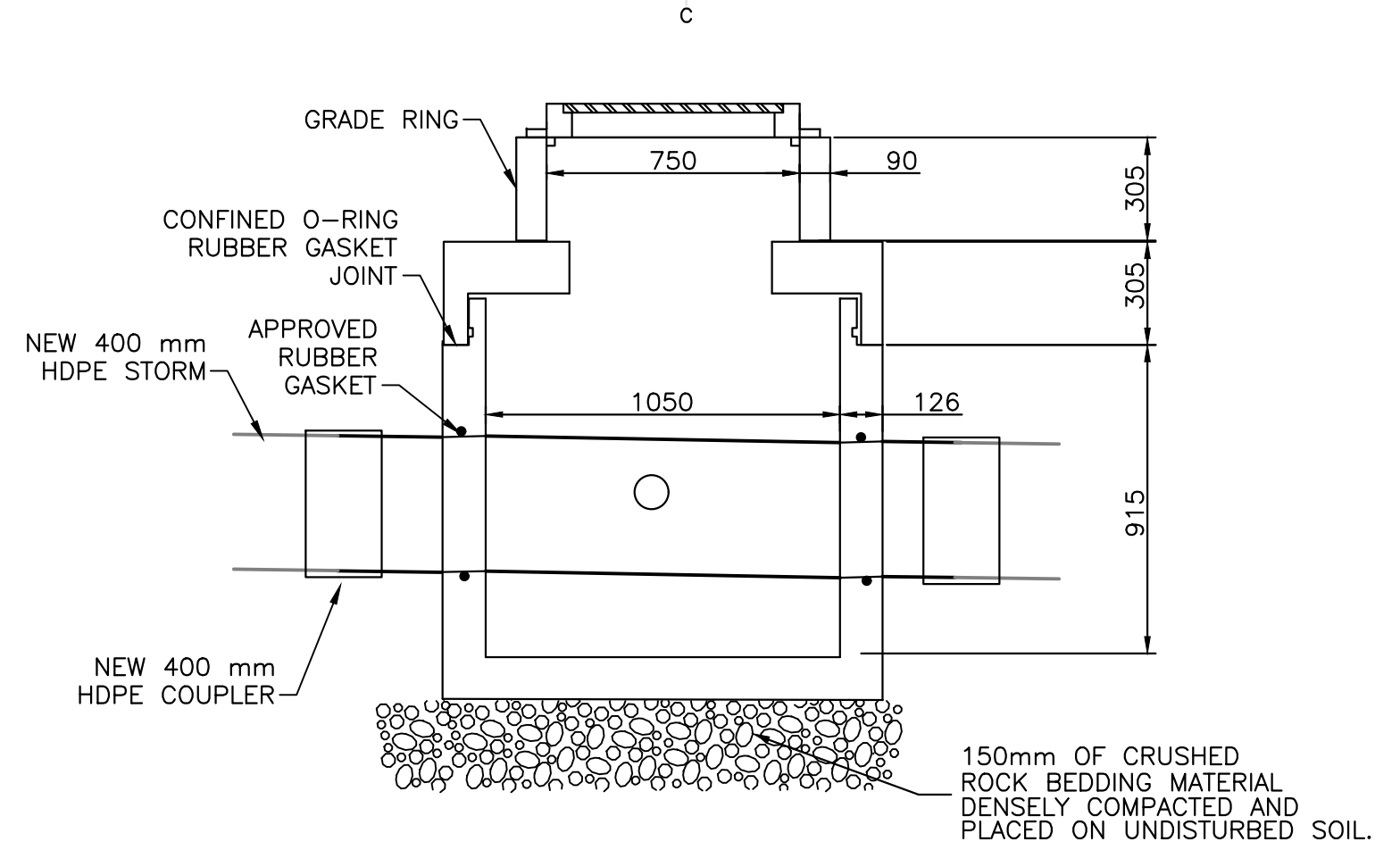


SECTION VIEW - EXISTING SEPTIC TANK



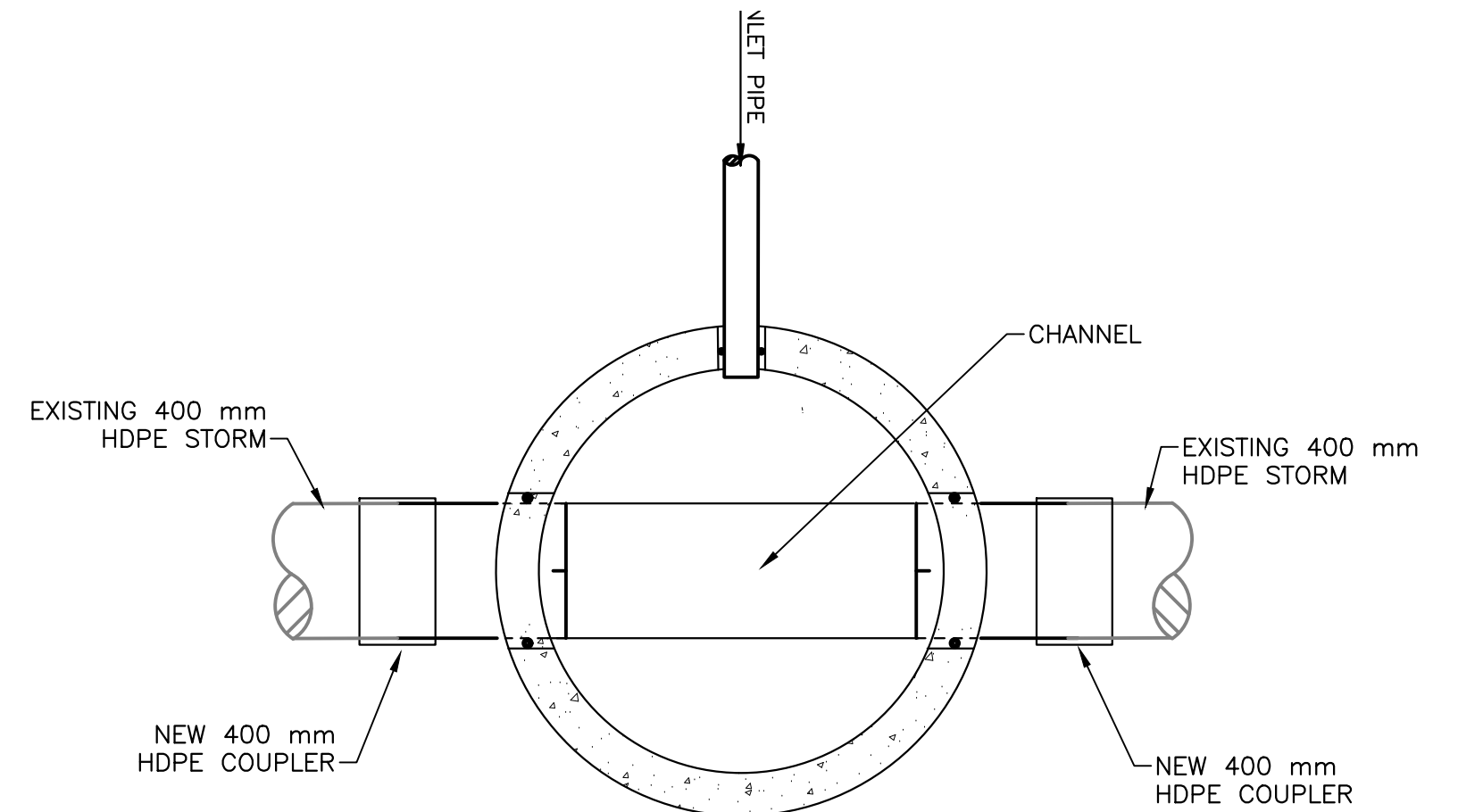
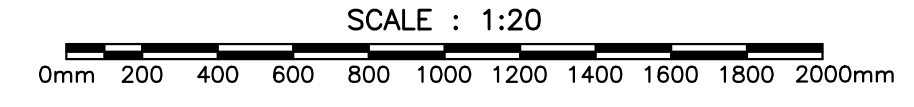
SECTION VIEW - EXISTING HOLDING TANK

DETAIL - MODIFICATIONS TO EXISTING SEPTIC /HOLDING TANK  
N.T.S.

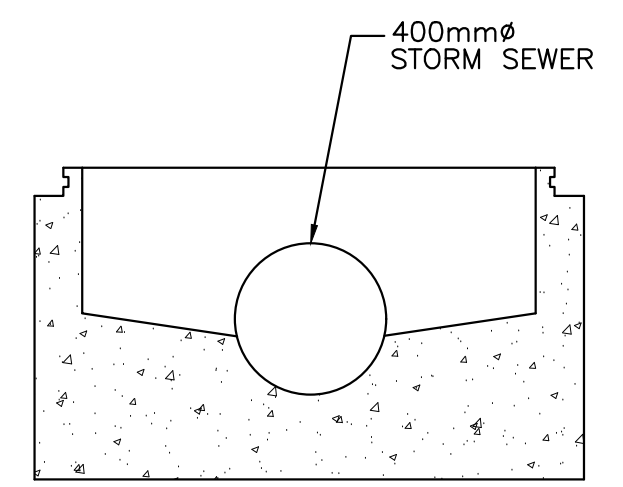


**NOTES:**  
 1050mmØ AND 1200mmØ SHAFTING TO BE COMPLETE WITH BLIND LIFT HOLES (NOT TO PENETRATE WALLS).  
 APPROVED RUBBER GASKETED PIPE CONNECTION TO SUIT DIAMETER AND TYPE OF PIPE.  
 750mm Ø SHAFTING TO BE COMPLETE WITH LIFT HOLES.  
 BENCHING HEIGHT TO BE 75% (3/4) OF PIPE DIAMETER BEFORE SLOPING.  
 BASE SECTION TO BE PRECAST CONCRETE AND PRE-BENCHED.  
 PRECAST CONCRETE UNITS TO A.S.T.M. C78.  
 CONCRETE TO BE AIR ENTRAINED IN ACCORDANCE TO C.S.A. A23.1.  
 CONCRETE TO BE 30MPa.

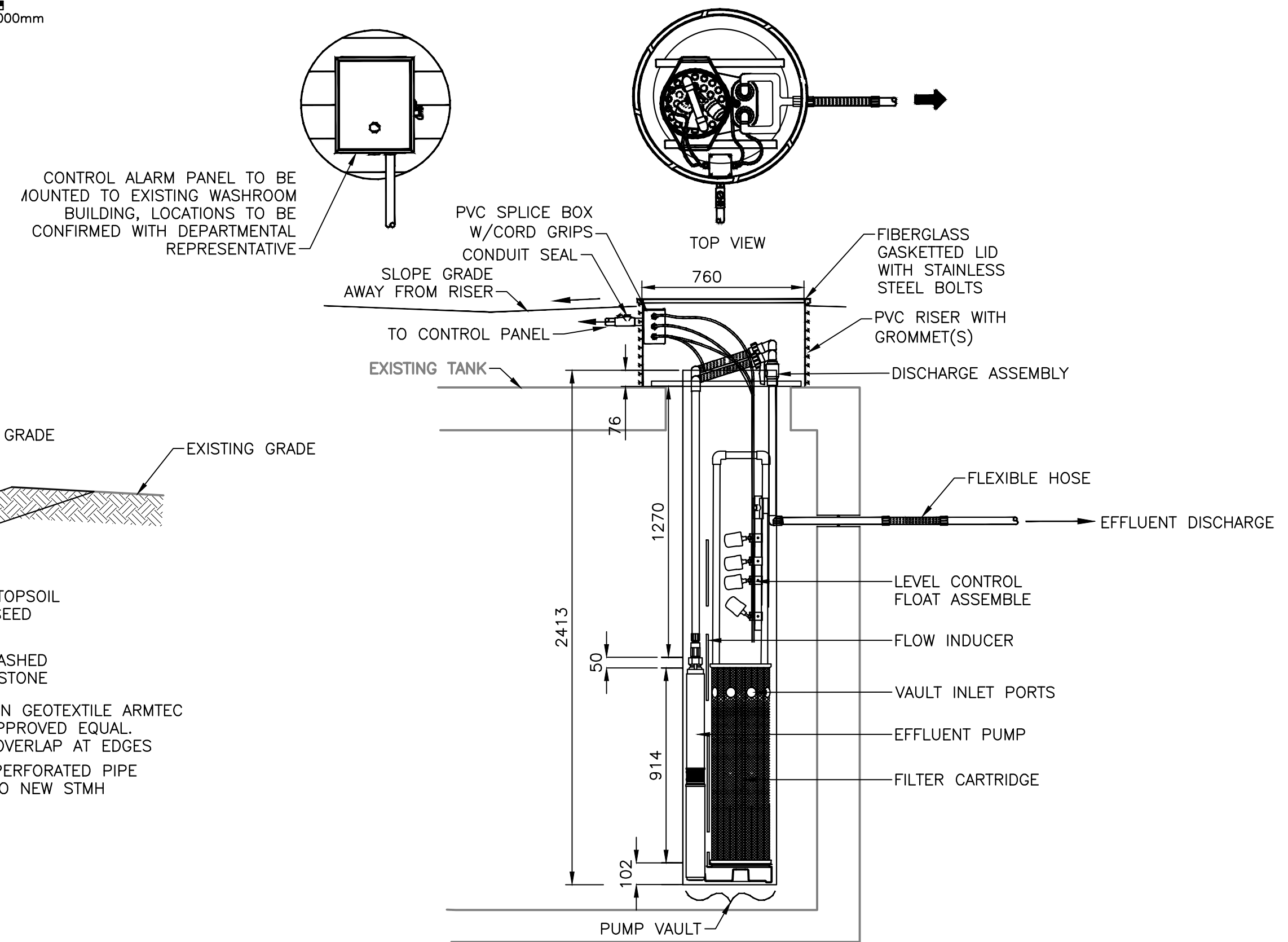
DETAIL - 1050mm Ø STORM MANHOLE INSTALLATION  
SCALE : 1:20



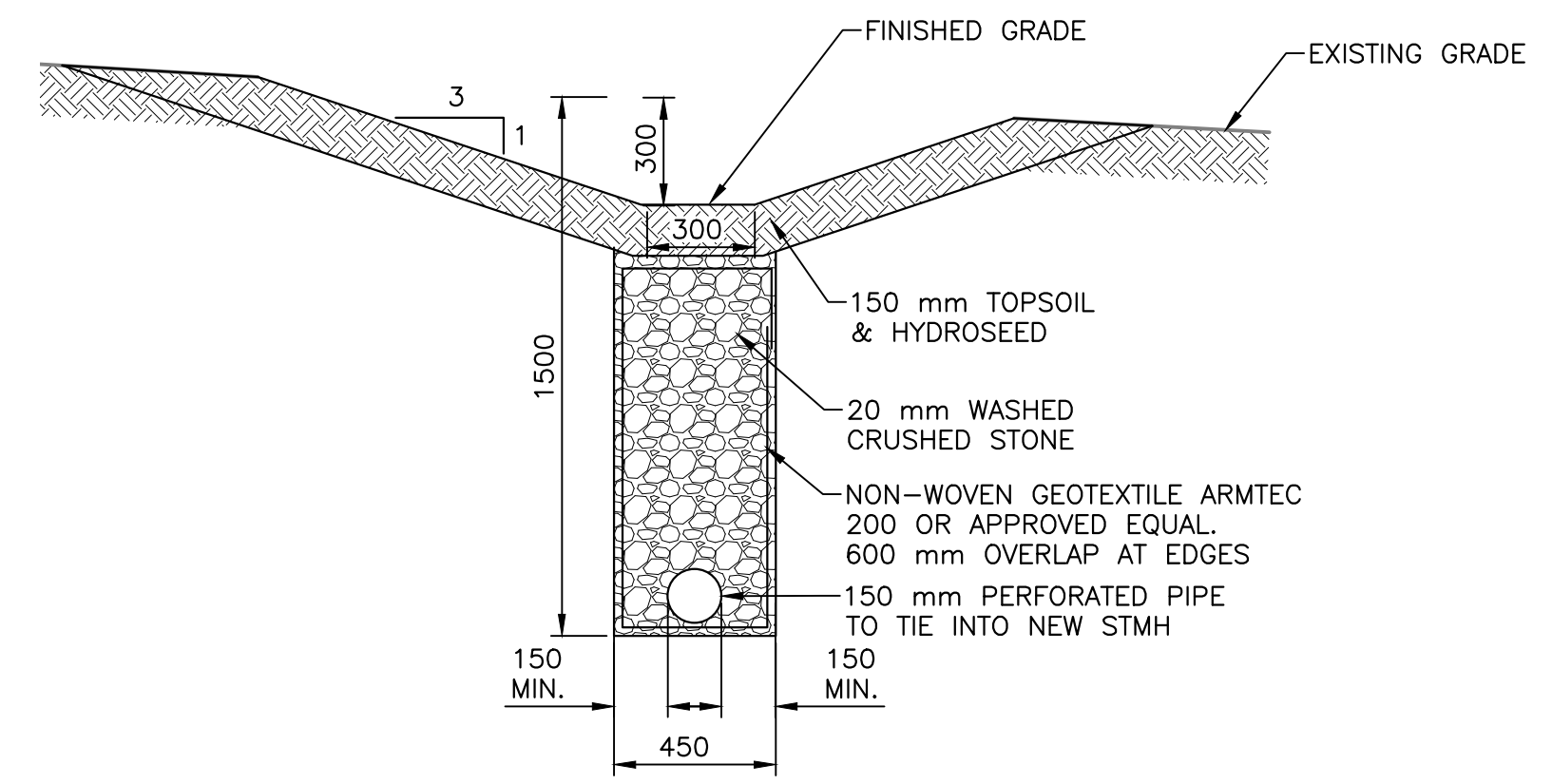
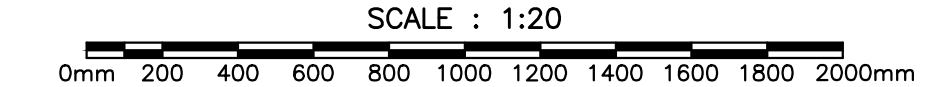
PLAN VIEW  
N.T.S.



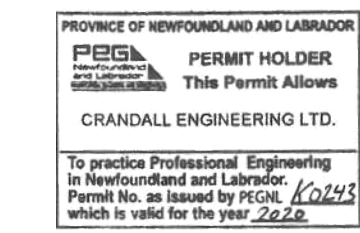
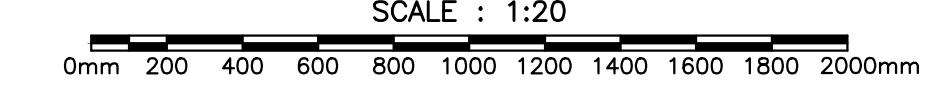
SIDE VIEW  
N.T.S.



DETAIL - DUPLEX EFFLUENT PUMP IN UNIVERSAL PUMP VAULT  
SCALE : 1:20



DETAIL - FRENCH DRAIN WITH SURFACE WATER DIVERSION SWALE  
SCALE : 1:20



0.0	ISSUED FOR TENDER	06/02 2020
revisions		date
project		project

**CAPE SPEAR SEPTIC SYSTEM UPGRADE**  
**CAPE SPEAR NATIONAL HISTORIC SITE**

ST. JOHN'S NL  
 drawing dessin

**MISCELLANEOUS SECTIONS AND DETAILS (2 OF 2)**

designed KKM	conçu
date 2020-05-08	
drawn TJ	dessiné
date 2020-05-08	
approved JFB	approuvé
date 2020-05-08	
Tender	Submission

PCA Project Manager Administrateur de projets APC  
 project number no. du projet

**1900387.03**  
 drawing no. no. du dessin

C05

