

## Appendix A

### ***Minister's Request for Additional Information Letter (February 2022)***



**Environment and Climate Change  
Office of the Minister**

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PO Box 442, Halifax, Nova Scotia, Canada B3J 2P8 • Telephone 902-424-3736 • novascotia.ca

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File number: 10700-40-57920  
40100-30-312

February 18, 2022

Ken MacLean and Harold Johnson  
Vice Presidents  
Envirosoil Limited, Municipal Group of Companies  
927 Rocky Lake Drive  
Bedford, NS B4A 3Z2

Dear Ken MacLean and Harold Johnson:

**RE: Environmental Assessment – Envirosoil Limited – Waste Oil Recycling and Water Treatment Facility - Dartmouth, Nova Scotia**

The environmental assessment of the Additional Information Addendum for the Waste Oil Recycling and Water Treatment Facility has been completed.

The Additional Information Addendum presents a substantial change to the project, such that treated water will now be discharged to the Halifax Harbour, not the Halifax Regional Municipal sanitary sewer system. This change has not been thoroughly assessed, particularly the potential impacts of the project to the marine environment and proposed measures and monitoring programs to mitigate these effects.

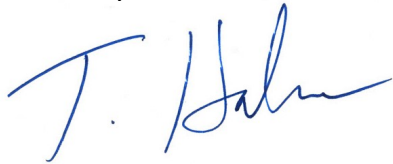
While the decision on the Environmental Assessment Registration Document made on May 28, 2021, required additional information on waste acceptance, sources and contaminants, treatment capabilities, discharge volumes, frequencies, sampling and analysis programs, and applicable criteria to be met prior to discharge, this information was not clearly or adequately provided. There remain concerns that without a coherent program to identify, monitor and/or treat all potential contaminants in the incoming waste materials, the result may be adverse impacts to the marine environment.

.../2

This letter is to advise that, pursuant to Section 13 (1)(a) of the Environmental Assessment Regulations, I have determined that a review of the information provided is insufficient to allow a decision, and that I require additional information to evaluate the potential environmental effects that may be caused by the undertaking. Additional information must be provided regarding the nature and scope of confirmatory waste and effluent sampling, treatment system capabilities for all applicable contaminants and compounds, and effluent management during project commissioning and operation (e.g., pressure testing and maintenance/cleaning). An assessment of the potential effects of the revised project on the marine environment must also be provided and should consider environmental baseline information, identification of impacts, mitigation measures, and monitoring programs.

If you have any questions regarding this decision, please contact Helen MacPhail, Supervisor, Environmental Assessment Branch, at (902) 483-2696 or [Helen.MacPhail@novascotia.ca](mailto:Helen.MacPhail@novascotia.ca).

Sincerely,

A handwritten signature in blue ink, appearing to read 'T. Halman', is written over a light blue horizontal line.

Honourable Tim Halman, MLA  
Minister of Environment and Climate Change

Encl.

c: Helen MacPhail, Environment and Climate Change

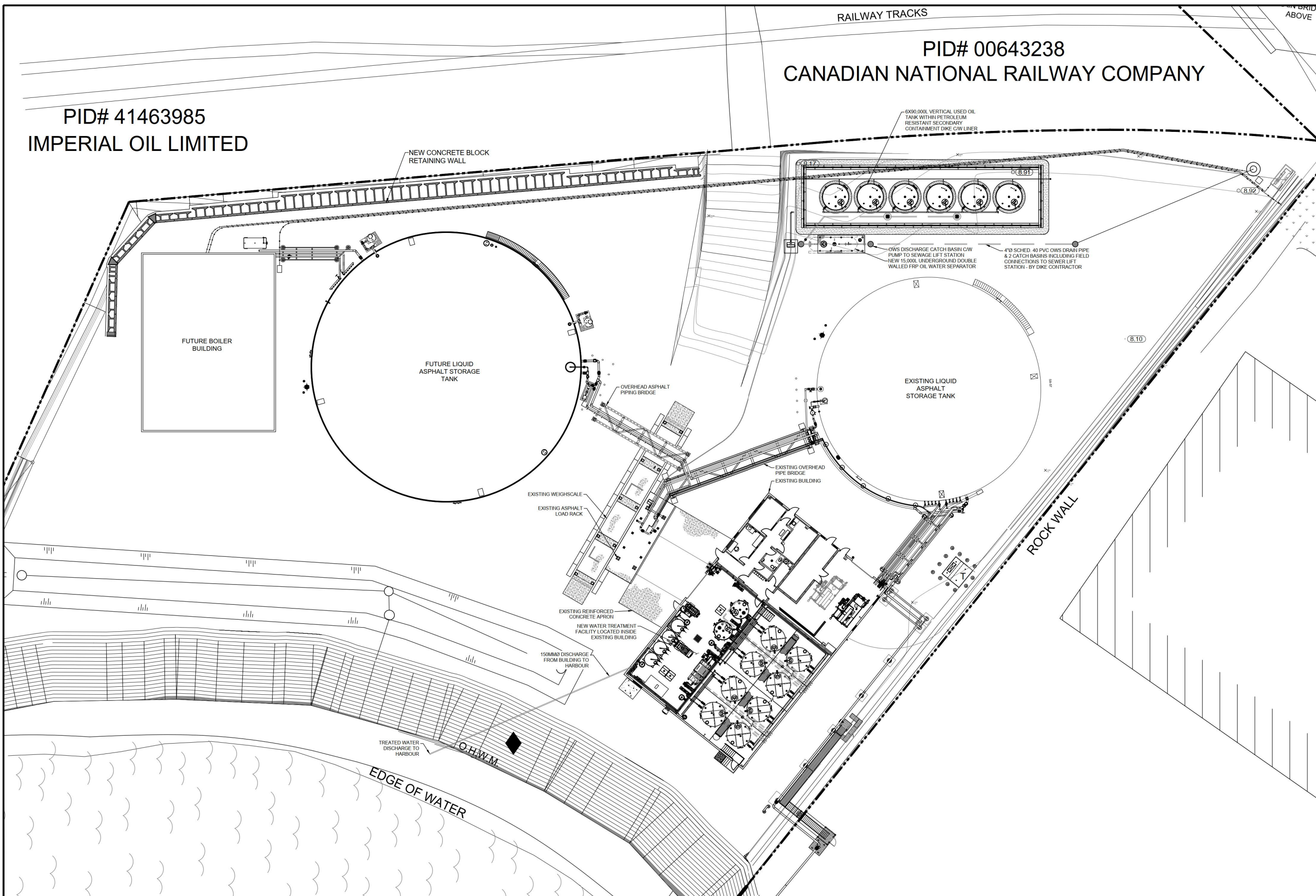
# Appendix B

## *Project Drawings and Plans (Updated)*

PID# 41463985  
 IMPERIAL OIL LIMITED

RAILWAY TRACKS  
 ABOVE

PID# 00643238  
 CANADIAN NATIONAL RAILWAY COMPANY



ISSUE		
FOR	BY	DATE
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<input type="checkbox"/> - FOR APPROVAL		
<input type="checkbox"/> - FOR TENDER		
<input type="checkbox"/> - FOR CONSTRUCTION		
<input type="checkbox"/> - FOR AS BUILT		

NOTES:

- INSTALLER TO VERIFY LOCATION OF BUILDING AND PROPERTY LINES BEFORE BEGINNING WORK
- INSTALLER TO CHECK SITE FOR EXISTING SITE SERVICES SUCH AS: WATER AND SEWER LINES, ELECTRICAL LINES, ETC.. PRIOR TO ANY EXCAVATION.
- ALL EQUIPMENT TO BE INSTALLED AND TESTED AS PER MANUFACTURERS RECOMMENDATIONS
- INSTALLATION WORK TO BE COMPLETED IN ACCORDANCE WITH ALL APPLICABLE CODES.
- THIS PETROLEUM STORAGE SYSTEM CONFORMS TO ALL APPLICABLE ULC REQUIREMENTS AND STANDARDS INCLUDING ULC-8601, "SHOP FABRICATED STEEL ABOVEGROUND VERTICAL TANKS FOR PETROLEUM PRODUCTS," AND API 650 "WELDED STEEL TANKS FOR OIL STORAGE", LATEST EDITION.
- THIS DESIGN HAS ADDRESSED THE ISSUE OF POSSIBLE COLLECTION OF FLAMMABLE VAPOUR AND/OR LIQUID IN UNDERGROUND SUMPS.
- ALL WORK TO BE COMPLETED BY A PETROLEUM INSTALLER LICENSED BY THE PROVINCE OF NOVA SCOTIA.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO COMMENCING WORK.
- ALL TANKS TO BE INSTALLED LEVEL.

CONCRETE SPEC:

- 32MPa
- 5%-8% AIR
- 400MPa REBAR YIELD STRENGTH
- 80mm SLUMP

No.	DESCRIPTION	BY	DATE
REVISIONS			





Client:  
**ENVIROSOIL**

Address:  
 PLEASANT STREET  
 DARTMOUTH, NS

Project:  
 NEW WASTE OIL RECYCLING & WASTE  
 WATER TREATMENT FACILITY

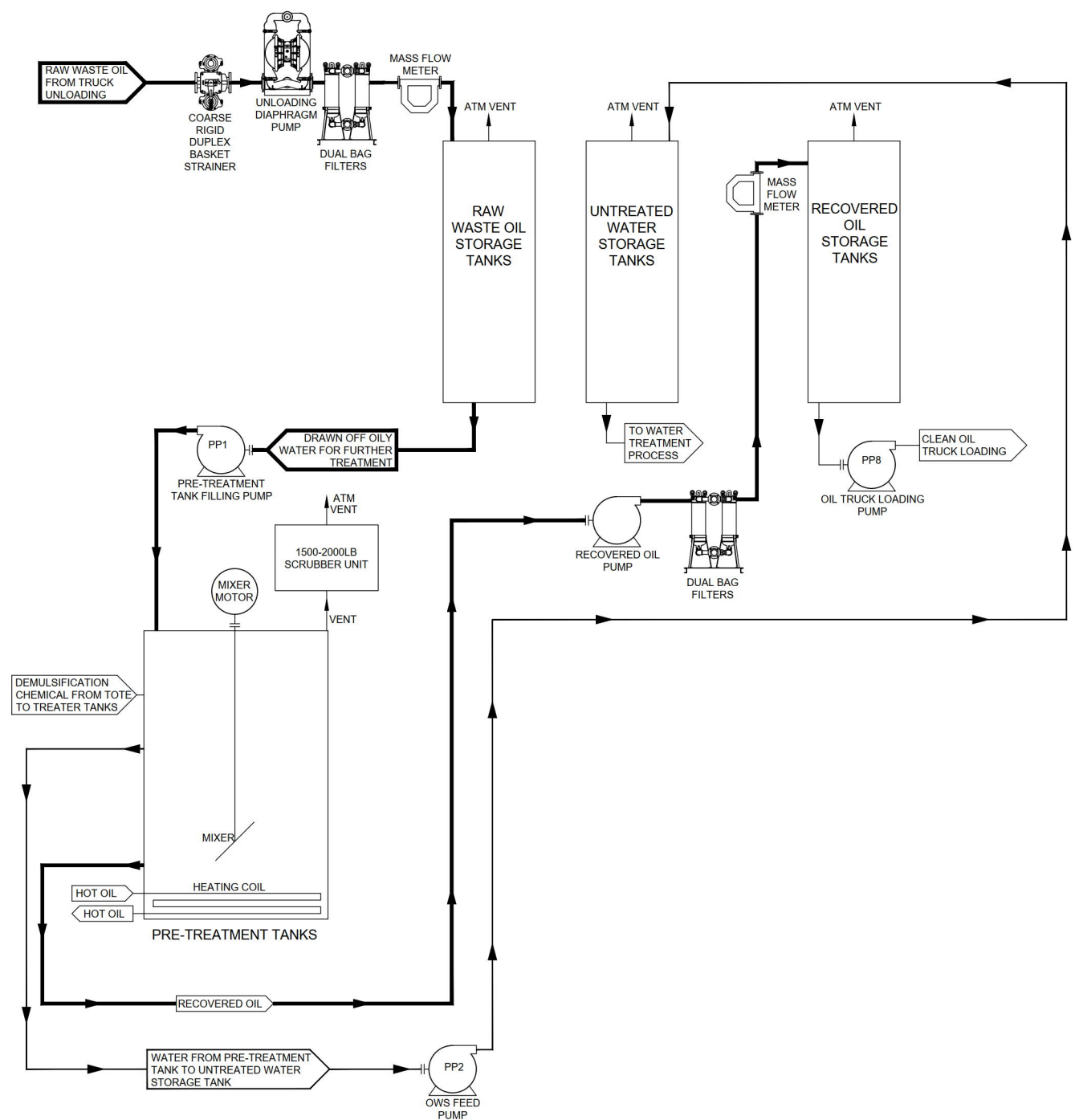
Title:  
 SITE PLAN

 22 DOUGLAS DRIVE  
 QUISPANSIS, NB  
 E2G 1Y3  
 PHONE: 506 849 4116  
 FAX: 506 847 1070

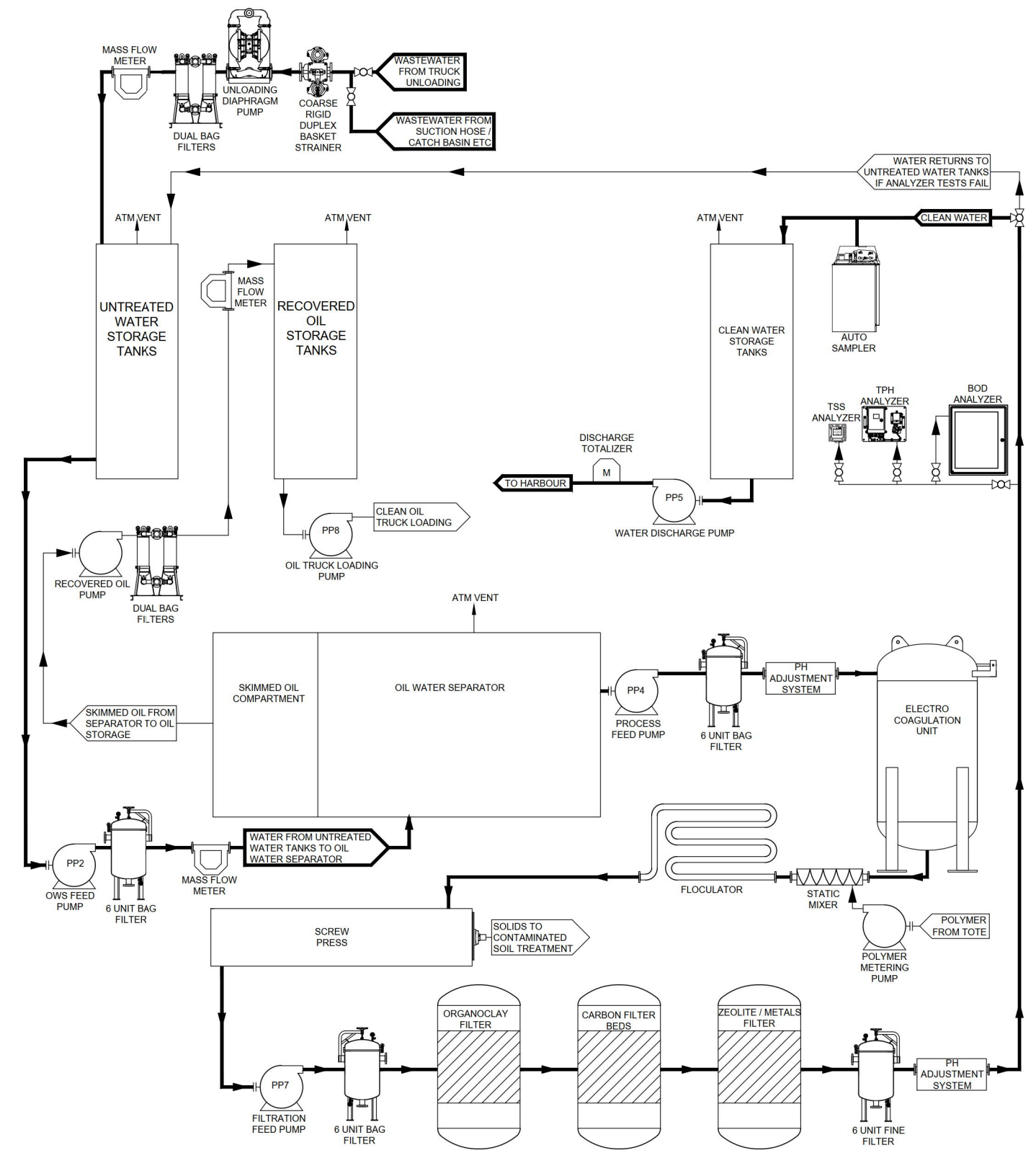
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	CHECKED:
	DATE: OCT 2022
	SCALE: 1" = 20'-0"
	REV: 

PROJECT NUMBER: GTS-1645 SHEET No. 1





**WASTE OIL TREATMENT  
PROCESS FLOW DIAGRAM**



**WASTE WATER TREATMENT  
PROCESS FLOW DIAGRAM**

**ISSUE**

FOR	BY	DATE
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<input type="checkbox"/> - FOR TENDER		
<input type="checkbox"/> - FOR CONSTRUCTION		
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**NOTES:**

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32MPa  
5%-8% AIR  
400MPa REBAR YIELD STRENGTH  
80mm SLUMP

No.	DESCRIPTION	BY	DATE
REVISIONS			

Logo: **envirosoil**  
150 years • 150 years

Client: **ENVIROSOIL**

Address: **PLEASANT STREET  
DARTMOUTH, NS**

Project: **NEW WASTE OIL RECYCLING & WASTE  
WATER TREATMENT FACILITY**

Title: **SIMPLIFIED PROCESS  
FLOW DIAGRAM**

GALLAGHER TECHNICAL SERVICES LIMITED  
22 DOUGLAS DRIVE  
QUISPAKIS, NB  
E2G 1Y3  
PHONE: 506 849 4116  
FAX: 506 847 1070

Stamp:	DESIGN:
	DRAWN:
	CHECKED:
	DATE: OCT 2022
	SCALE: 1/2" = 1'-0"
	REV:

PROJECT NUMBER: **GTS-1645** SHEET No. **2**



BOILER ROOM HEATING OIL PUMP EQUIPMENT SCHEDULE										
#	ELECTRIC MOTOR DRIVEN PUMP DESCRIPTION	MAX FLOW	IN/OUT Ø	MFR	MODEL #	HP	VOLTAGE	PHASE	VFD OR FIXED	TYPE OF PUMP
OHP1	OIL HEATER 1 PUMP	-	-	-	-	7.5	575VAC	3Ø	-	INCLUDED WITH OIL HEATER PACKAGE
OHP2	OIL HEATER 1 HOT OIL SUPPLY	-	1-1/2" Ø	-	-	-	-	-	-	BY HEATEC
OHP3	OIL HEATER 1 WARM OIL SUPPLY	-	3" Ø	-	-	-	-	-	-	BY HEATEC
OHP4	OIL HEATER 2 PUMP	-	-	-	-	7.5	575VAC	3Ø	-	INCLUDED WITH OIL HEATER PACKAGE
OHP5	OIL HEATER 2 HOT OIL SUPPLY	-	1-1/2" Ø	-	-	-	-	-	-	BY HEATEC
OHP6	OIL HEATER 2 WARM OIL SUPPLY	-	3" Ø	-	-	-	-	-	-	BY HEATEC

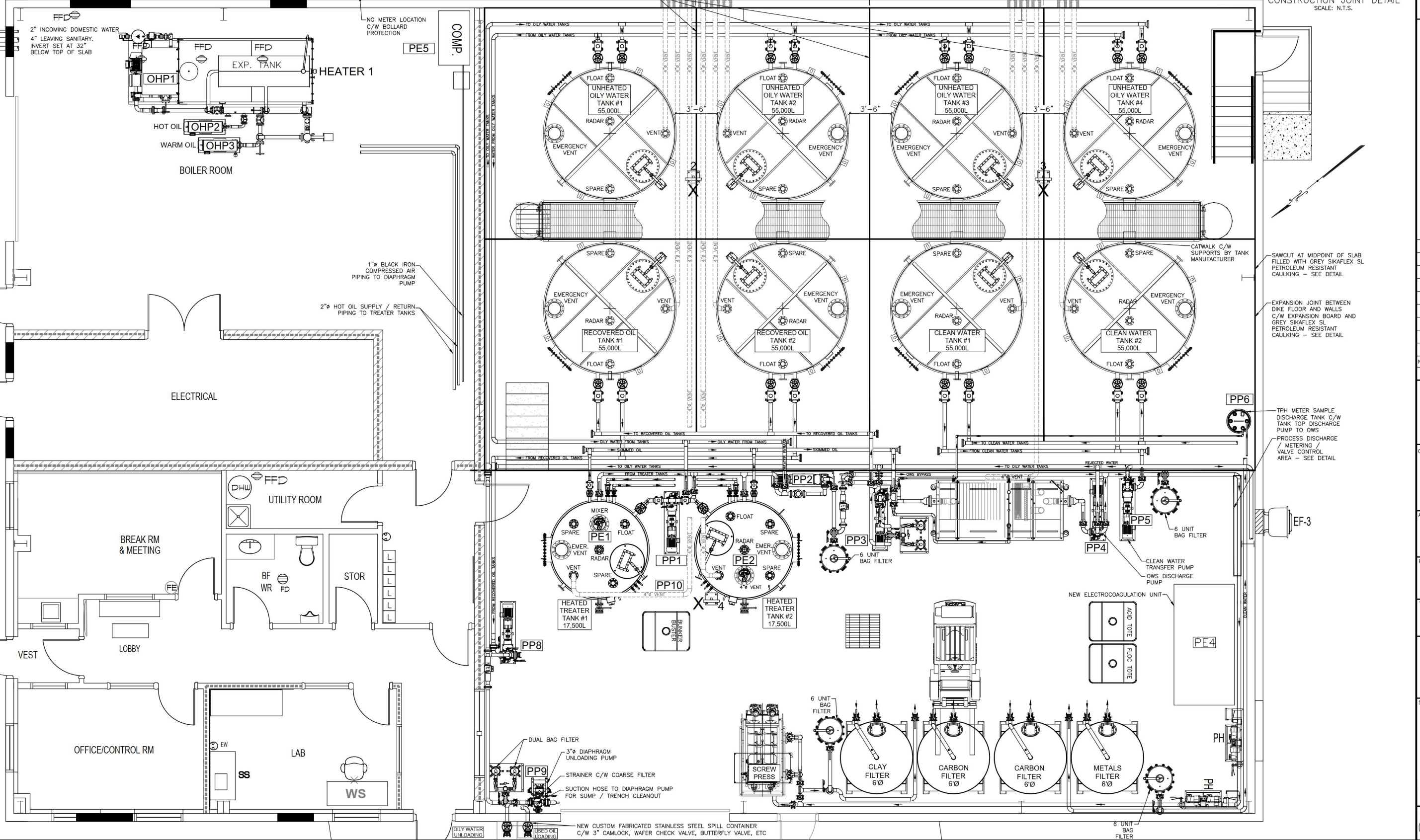
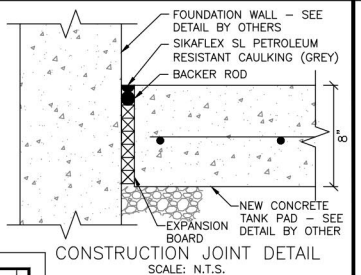
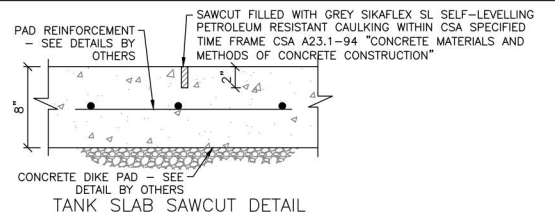
  

PROCESS EQUIPMENT ELECTRICAL EQUIPMENT / MOTOR SCHEDULE									
#	DESCRIPTION	POWER	VOLTAGE	PHASE	VFD OR FIXED				
PE1	TREATER TANK #1 MIXER	15HP	575VAC	3Ø	VARIABLE				
PE2	TREATER TANK #2 MIXER	15HP	575VAC	3Ø	VARIABLE				
PE3	SCREW PRESS	50HP	575VAC	3Ø	VARIABLE				
PE4	ELECTROCOAGULATION UNIT	125A	575VAC	3Ø	-				
PE5	AIR COMPRESSOR	50HP	575VAC	3Ø	-				

AIR DRIVEN PUMP DESCRIPTION									
#	DESCRIPTION	FLOW	IN/OUT Ø	MFR	MODEL #				
PP9	TRUCK UNLOADING DIAPHRAGM PUMP	-	-	-	-				
PP10	BUNKER BUSTER INJECTION PUMP	-	-	HUSKY	1050				

PROCESS PUMP EQUIPMENT SCHEDULE										
#	ELECTRIC MOTOR DRIVEN PUMP DESCRIPTION	MAX FLOW	IN/OUT Ø	MFR	MODEL #	HP	VOLTAGE	PHASE	VFD OR FIXED	TYPE OF PUMP
PP1	TREATER TANK FILLING FROM OILY WATER TANKS	150GPM	3" Ø	-	-	15	575VAC	3Ø	VARIABLE	HEAVY DUTY GEAR PUMP WITH INTERNAL PRESSURE RELIEF
PP2	WATER TREATMENT PROCESS FEED FROM OILY WATER OR TREATER TANKS	150GPM	3" Ø	-	-	15	575VAC	3Ø	VARIABLE	HEAVY DUTY GEAR PUMP WITH INTERNAL PRESSURE RELIEF
PP3	RECLAIMED OIL TO RECLAIMED OIL TANKS	150GPM	3" Ø	-	-	15	575VAC	3Ø	VARIABLE	HEAVY DUTY GEAR PUMP WITH INTERNAL PRESSURE RELIEF
PP4	OWS DISCHARGE PUMP TO PROCESS	150GPM	3" Ø	-	-	15	575VAC	3Ø	VARIABLE	HEAVY DUTY GEAR PUMP WITH INTERNAL PRESSURE RELIEF
PP5	CLEAN WATER TRANSFER	150GPM	3" Ø	-	-	15	575VAC	3Ø	VARIABLE	HEAVY DUTY GEAR PUMP WITH INTERNAL PRESSURE RELIEF
PP6	TPH DAY TANK WATER TRANSFER	10GPM	1" Ø	-	-	0.5	120VAC	1Ø	FIXED	'OFF THE SHELF' TANK TOP MOUNTED DAY TANK DISCHARGE PUMP
PP7	SCREW PRESS DAY TANK WATER TRANSFER	50GPM	2" Ø	-	-	5	120VAC	3Ø	FIXED	TANK TOP MOUNTED DAY TANK DISCHARGE PUMP
PP8	USED OIL TRUCK LOADING	150GPM	3" Ø	-	-	15	575VAC	3Ø	VARIABLE	HEAVY DUTY GEAR PUMP WITH INTERNAL PRESSURE RELIEF



ISSUE		
FOR	BY	DATE
■ - FOR REVIEW ONLY	TJG	OCT 2022
□ - FOR APPROVAL		
□ - FOR TENDER		
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□ - FOR AS BUILT		

- NOTES:
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REVISIONS			

Logo: **envirosoil**  
150 years • 150 years

Client: **ENVIROSOIL**

Address: **PLEASANT STREET DARTMOUTH, NS**

Project: **NEW WASTE OIL RECYCLING & WASTE WATER TREATMENT FACILITY**

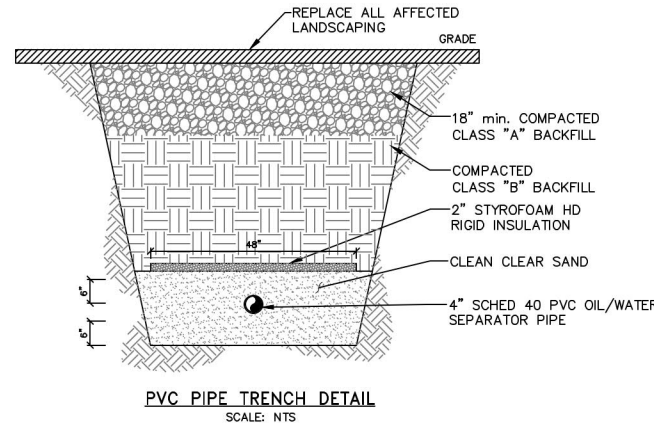
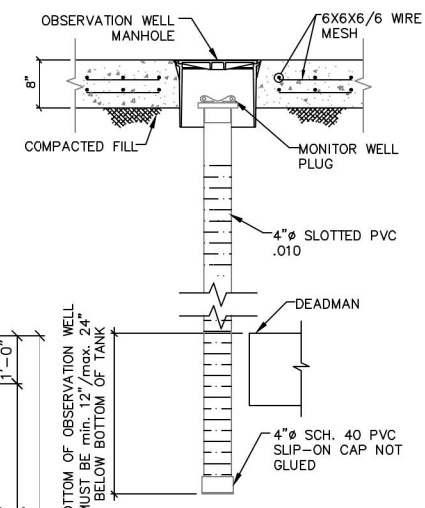
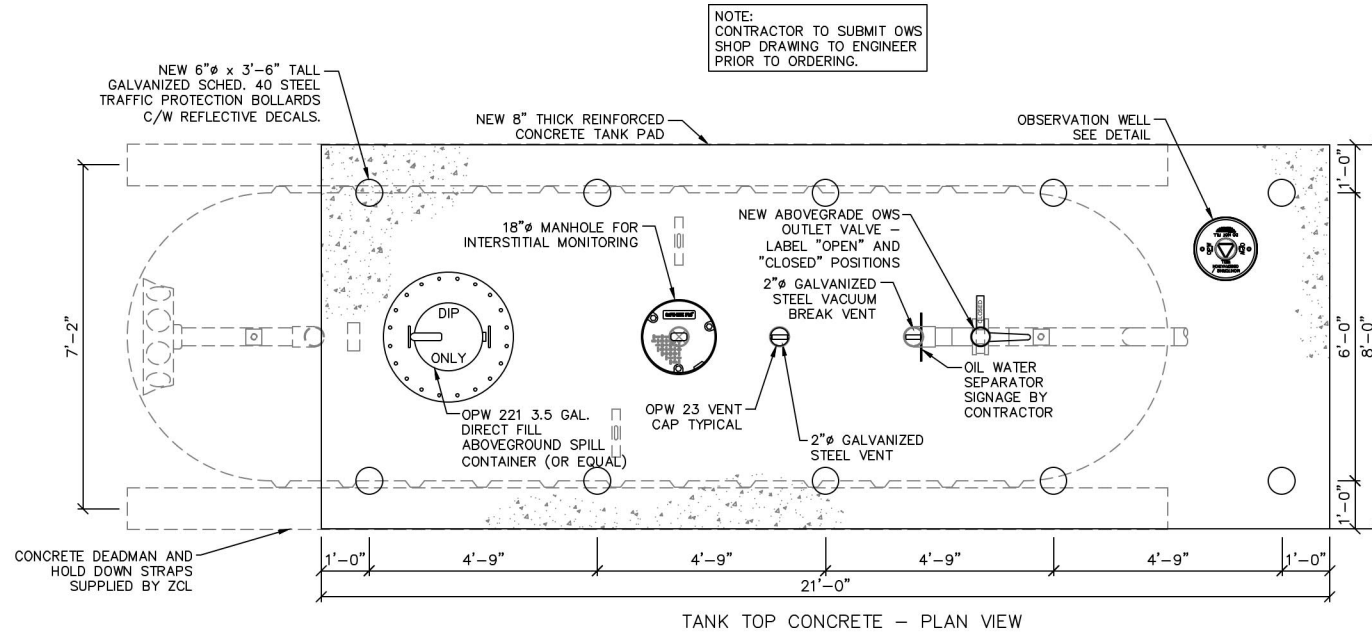
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Stamp: **GALLAGHER TECHNICAL SERVICES LIMITED**  
22 DOUGLAS DRIVE  
QUISPAMIS, NB  
E2G 1Y3  
PHONE: 506 849 4116  
FAX: 506 847 1070

DESIGN: \_\_\_\_\_  
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DATE: **OCT 2022**  
SCALE: **1/4" = 1'-0"**  
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PROJECT NUMBER: **GTS-1645** SHEET No. **3**





**CLASS "A" GRAVEL**

SIEVE SIZE	PERCENT PASSING
1 1/2"	100
1 1/4"	95-100
3/4"	70-88
1/2"	55-78
3/8"	45-72
No. 4	30-57
No. 8	20-46
No.16	14-35
No.30	9-27
No.50	5-19
No.100	2-12
No.200	0-5

**CLASS "B" GRAVEL**

SIEVE SIZE	PERCENT PASSING
5"	100
4"	95-100
3"	82-100
2"	62-100
1"	38-100
3/4"	30-84
3/8"	22-80
No. 4	16-66
No. 8	12-55
No.16	9-44
No.50	4-25
No.200	0-5

**OBSERVATION WELL NOTES**

- (1) 4" DIA. PVC SLOTTED WELL SCREENS (MAX. SLOT .010") WILL BE INSTALLED AS REQUIRED BY LOCAL CODE. SLOTS WILL EXTEND TO WITHIN 24" BELOW GRADE.
- EXTEND TANK NEST OBSERVATION WELL A MINIMUM OF 12" BELOW BOTTOM OF TANKS.
- DO NOT PAINT INSIDE MANHOLE.
- DO NOT GLUE REDUCERS, CAPS, OR COLLARS WITH PVC SOLVENT ADHESIVE.

**NOTE:** EXCAVATION MUST BE SLOPED OR BENCHED TO WITHIN 4 FT OF THE BOTTOM OF THE EXCAVATION OR TRENCH WITH THE SLOPE OR BENCH NOT EXCEEDING 1 FT OF VERTICAL RISE TO EACH 1 FT OF HORIZONTAL RUN.

**NOTE:** GEOTEXTILE TO FULLY LINE EXCAVATION, INCLUDING THE TOP OF THE TANKS ONCE 2 FT OF APPROVED BACKFILL HAS BEEN PLACED OVER TANK TOPS.

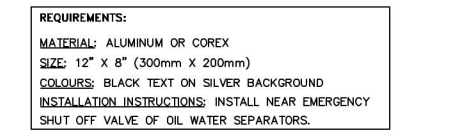
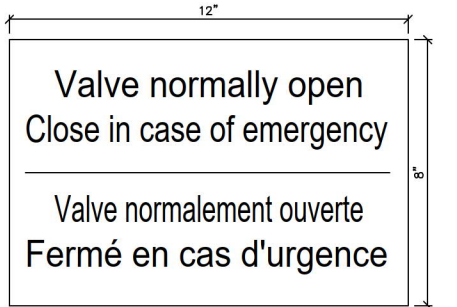
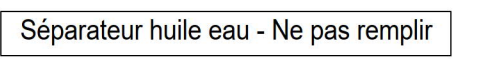
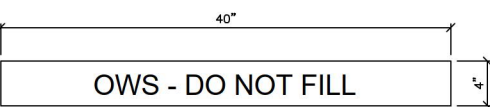
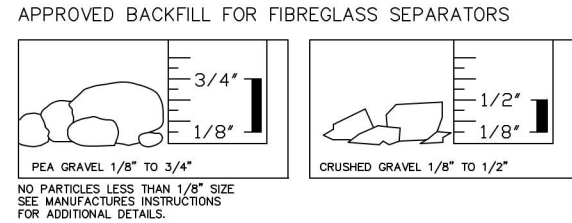
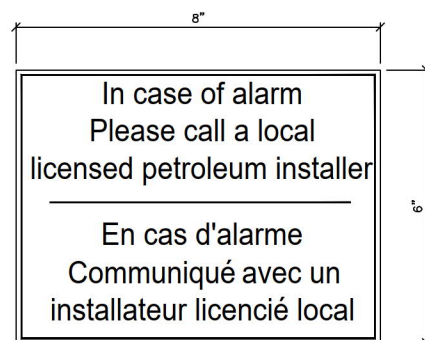
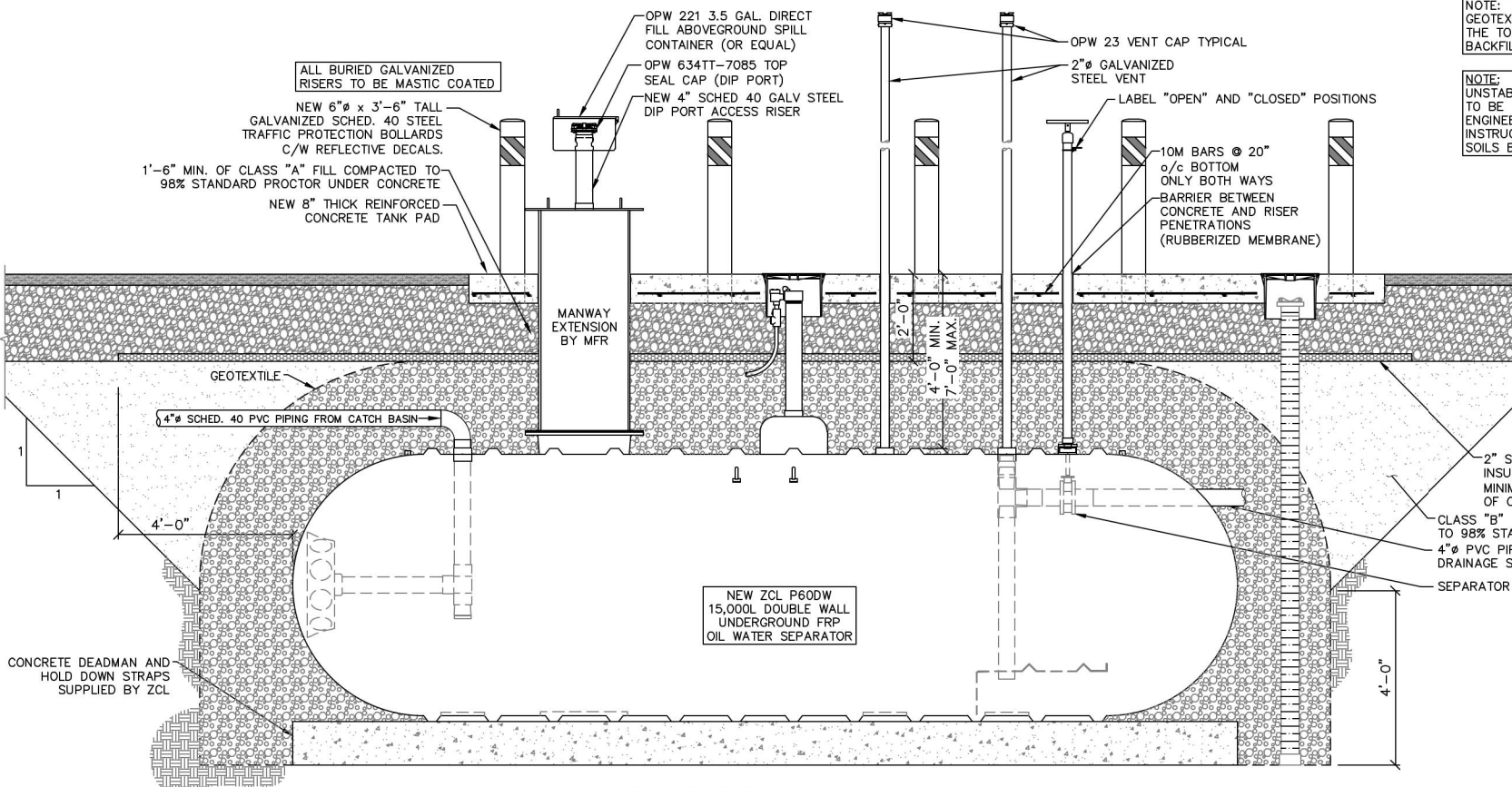
**NOTE:** UNSTABLE SOILS AT BOTTOM OF EXCAVATION TO BE INSPECTED BY A GEOTECHNICAL ENGINEER FOR SUPERVISION AND INSTRUCTIONS TO ENSURE THE REQUIRED SOILS BEARING PRESSURE IS ACHIEVED.

**NOTE: CLASS "A" GRAVEL**

CLASS "A" GRAVEL SHALL BE CRUSHED GRAVEL OR CRUSHED QUARRIED STONE OF HARD DURABLE PARTICLES FREE FROM SILT, CLAY, SLATE, FRIABLE PARTICLES, CEMENTATION, FROZEN MATERIAL, ORGANIC MATTER AND OTHER DELETERIOUS SUBSTANCES.

**NOTE: CLASS "B" GRAVEL**

FILL MATERIALS SHALL BE HARD, DURABLE PIT GRAVEL OR QUARRIED ROCK, FREE FROM SILT, CLAY, SLATE, FRIABLE PARTICLES, CEMENTATION, FROZEN MATERIAL, ORGANIC MATTER AND OTHER DELETERIOUS SUBSTANCES.



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**CONCRETE SPEC:**

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80mm SLUMP

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REVISIONS			

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50 years - 150 years

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Project: **NEW WASTE OIL RECYCLING & WASTE WATER TREATMENT FACILITY**

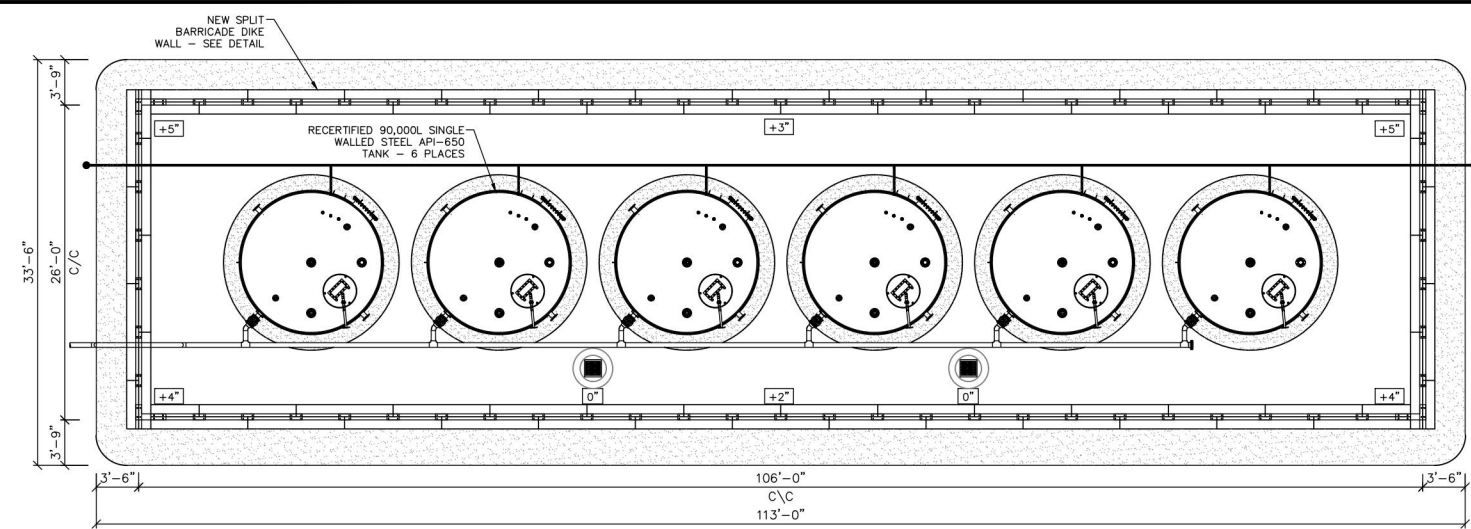
Title: **UNDERGROUND OIL WATER SEPARATOR DETAILS**

Stamp: **GALLAGHER TECHNICAL SERVICES LIMITED**  
22 DOUGLAS DRIVE  
QUIPSAMIS, NB  
E2G 1Y3  
PHONE: 506 849 4116  
FAX: 506 847 1070

Stamp: **OCT 2022**  
SCALE: 1/2" = 1'  
REV:

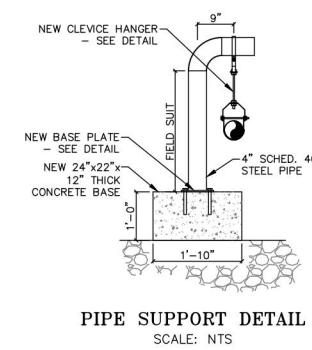
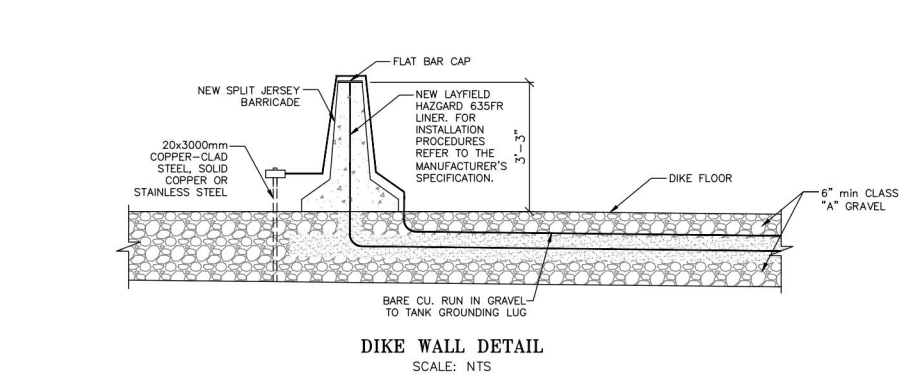
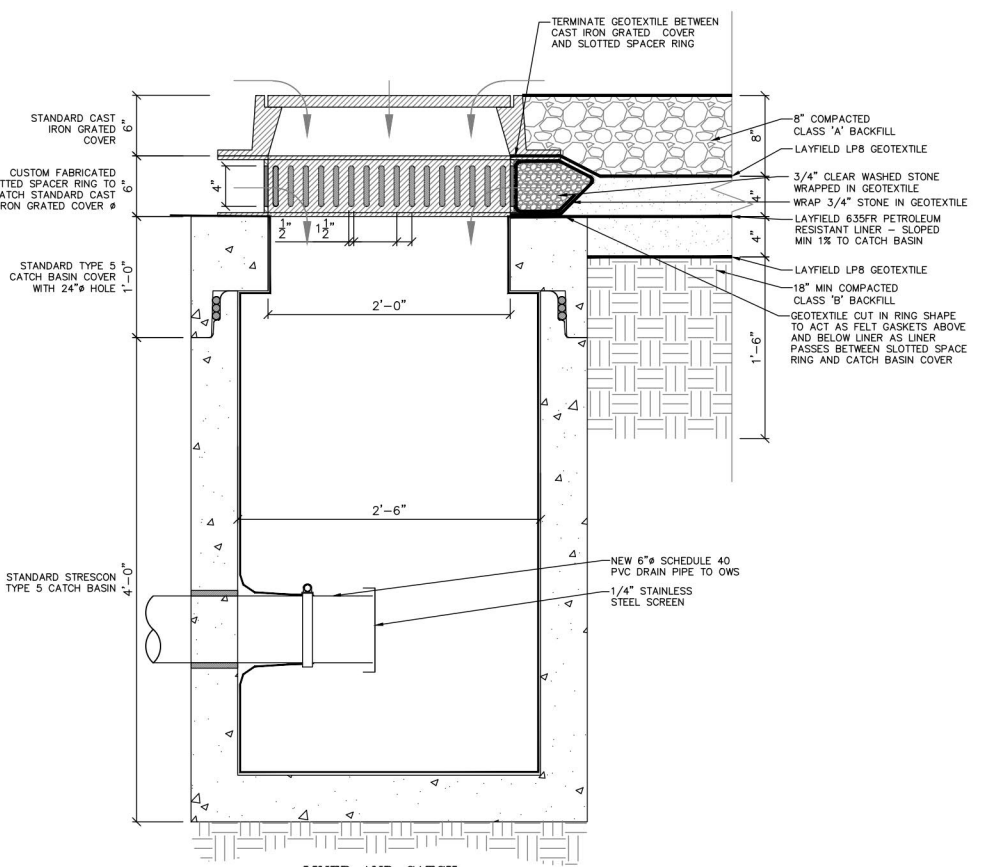
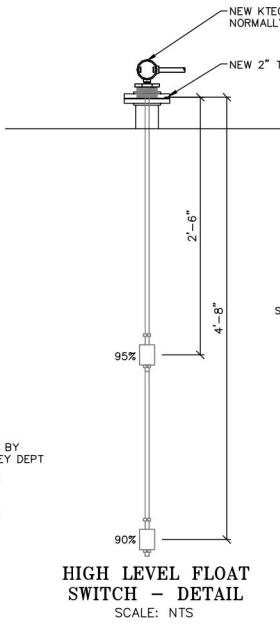
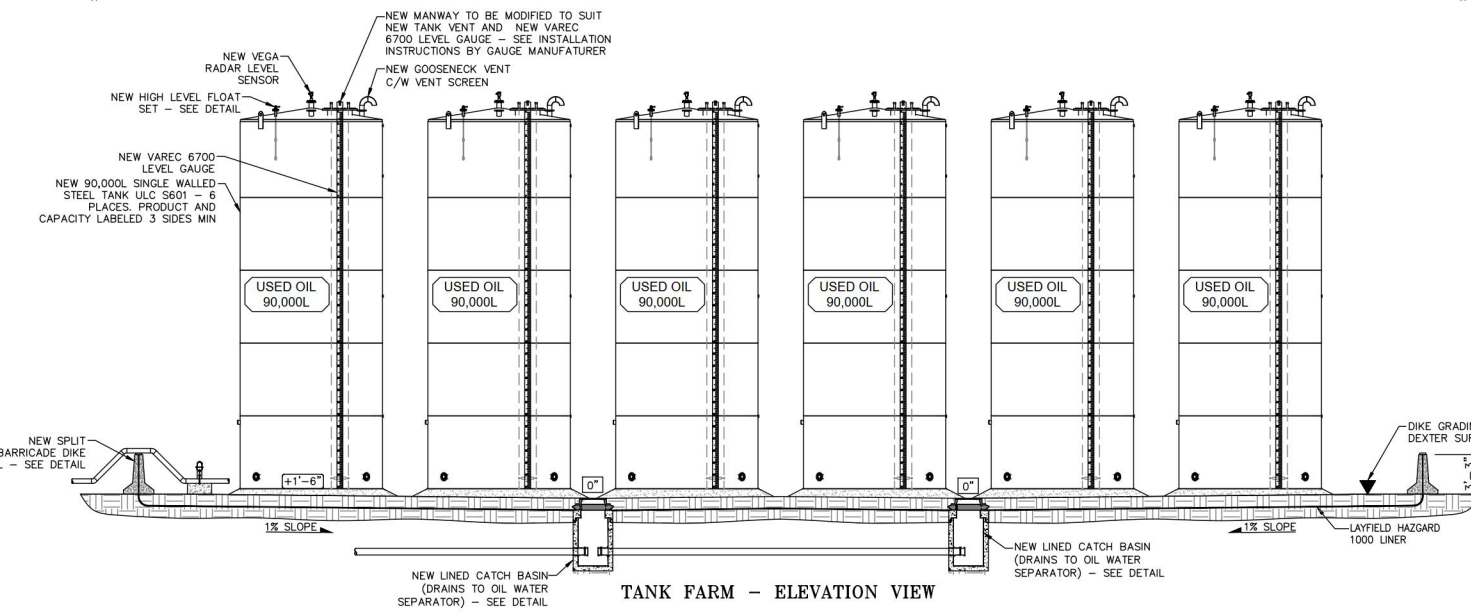
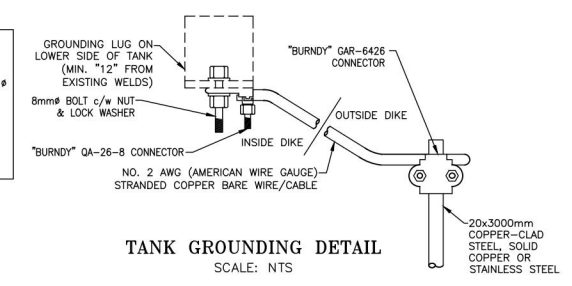
PROJECT NUMBER: **GTS-1645** SHEET No. **4**





- GENERAL NOTES:**
- GROUND RESISTANCE SHALL BE LESS THAN 10 OHMS MEASURED IN DRY CONDITIONS.
  - IF THIS VALUE CANNOT BE OBTAINED, ADD ANOTHER GROUNDING ROD 6.2m AWAY.
  - IF WEEER OR SEWER PIPES ARE NEARBY, IT WILL BE NECESSARY TO GROUND THEM TO THE SYSTEM.
  - ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LOCAL AND CANADIAN ELECTRICAL CODES.
  - BURY GROUND CONDUCTORS 300mm BELOW GRADE, TYPICAL OR AS NOTED. (ABOVE LINER INSIDE OF DYKE)
  - GROUND CONDUCTORS SHALL BE RUN CONTINUOUS THROUGH CONNECTIONS TO EQUIPMENT. DO NOT CUT AT CONNECTIONS. SPICES WHERE ABSOLUTELY REQUIRED SHALL BE BURNDY SERVIS KS-23
  - COMPRESSION SPICE BURNDY YS-1
  - USE MANUFACTURERS RECOMMENDED COMPRESSION DIES WITH EACH CONNECTOR. ALL SURFACES OF CONNECTORS AND FITTINGS TO BE COATED WITH PENTROX COMPOUND.
  - ALL GROUNDING AND BONDING COPPER WIRES SHALL BE BURIED TO A MINIMUM OF 300mm. PROTECTION OF THE WIRES SHALL BE PROVIDED FROM THE BOTTOM OF TRENCHES TO ABOVE BALLAST AT TRACK SIDES AND WITHIN 150mm WHERE THEY RISE ABOVE GRADE LEVEL. FLEXIBLE SLEEVES SHALL BE PROVIDED TO THIS EFFECT TO AVOID ANY DAMAGE TO THE COPPER WIRES.
  - COPPER WIRE ELECTRICAL RESISTANCE:  
No.4 AWG, 0.8153 ohm/km  
No.6 AWG, 1.2966 ohm/km
  - \*BURNDY\* CATALOGUE NO. SHOWN FOR IDENTIFICATION ONLY. THERMOWELD, GALWELD OR EQUAL CONNECTIONS MAY BE SUBSTITUTED ON NEW INSTALLATIONS.

- NOTES**
- EXCAVATION AND FILL REQUIREMENTS**
- EXCAVATE TO THE REQUIRED LINES, LEVELS AND GRADES. DO NOT EXCAVATE OR DISTURB BEYOND THE REQUIRED LINES, LEVELS OR GRADES UNLESS REQUIRED BY THE ENGINEER.
  - WHERE THE REQUIRED LINES, LEVELS AND GRADES ARE NOT DEFINED, EXCAVATE AS NECESSARY FOR THE ITEMS WHICH ARE TO BE PLACED IN THE EXCAVATION.
  - DO NOT PLACE FILL UNTIL SUBGRADE HAS BEEN COMPACTED TO 95% OF MAX. DRY DENSITY BY MOD. PROCTOR.
  - DO NOT COVER ANY SUBGRADE OR WORK UNTIL AUTHORIZED BY THE ENGINEER, BUT OTHERWISE PLACE THE FILL AS SOON AS POSSIBLE.
  - REMOVE ALL DISTURBED MATERIAL AND ALL MATERIAL WHICH HAS BECOME UNSTABLE DUE TO INADEQUATE PROTECTION, DEWATERING AND/OR ANY OTHER REASON. REPLACE SUCH MATERIAL WITH GRANULAR "B" OR SUITABLE MATERIAL AS APPROVED BY THE ENGINEER IN 250mm LIFTS AND COMPACTED TO 95% OF MAX. DRY DENSITY BY MODIFIED PROCTOR.
- LINER DETAILS**
- WHERE PIPES GO THROUGH THE DYKE, THE PERFORATION OF THE LINER MUST BE MADE BY USE OF THE SLEEVE SUPPLIED AS PART OF THE LINER.
  - THE LINER SHALL BE SEALED TO THE SUMP BASIN LOCATED AT THE LOW POINT OF THE TANK FARM FLOOR
  - GRANULAR "A" TO BE COMPACTED TO 100% BY MOD. PROCTOR.
  - EARTH DYKE AND SUB-BASE TO BE COMPACTED IN 150mm LIFTS, USING MECHANICAL EQUIPMENT, TO 100% STANDARD PROCTOR DRY DENSITY.
  - SLOPE LINER FROM CORNERS OF DYKE WALL TO SUMP.

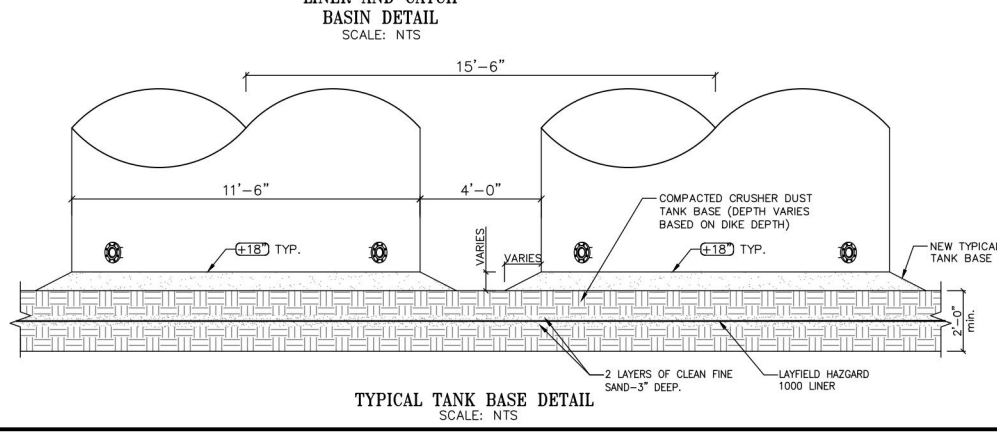


CLASS "A" GRAVEL	
SIEVE SIZE	PERCENT PASSING
1 1/2"	100
1 1/4"	95-100
3/4"	70-88
1/2"	55-78
3/8"	45-72
No. 4	30-57
No. 8	20-46
No.16	14-35
No.30	9-27
No.50	5-19
No.100	2-12
No.200	0-5

NOTE: CLASS "A" GRAVEL  
CLASS "A" GRAVEL SHALL BE CRUSHED GRAVEL OR CRUSHED QUARRIED STONE OF HARD DURABLE PARTICLES FREE FROM SILT, CLAY, SLATE, FRIABLE PARTICLES, CEMENTATION, FROZEN MATERIAL, ORGANIC MATTER AND OTHER DELETERIOUS SUBSTANCES.

CLASS "B" GRAVEL	
SIEVE SIZE	PERCENT PASSING
5"	100
4"	95-100
3"	82-100
2"	62-100
1"	39-100
3/4"	30-94
3/8"	22-80
No. 4	16-66
No. 8	12-54
No.16	9-44
No.50	4-25
No.200	0-5

NOTE: CLASS "B" GRAVEL  
FILL MATERIALS SHALL BE HARD, DURABLE PIT GRAVEL OR QUARRIED ROCK, FREE FROM SILT, CLAY, SLATE, FRIABLE PARTICLES, CEMENTATION, FROZEN MATERIAL, ORGANIC MATTER AND OTHER DELETERIOUS SUBSTANCES.



NOTE: ELEVATIONS SHOWN ARE RELATIVE TO EACH OTHER ONLY AND ARE NOT INTENDED TO RELATE TO ANY OTHER ELEVATIONS THROUGH THE DRAWING SET

NOTE: THE THICKNESS OF CRUSHER DUST BACKFILL UNDER THE TANKS INCREASES AS GROUND SLOPES DOWN TOWARDS CATCH BASIN (TO KEEP TANK BOTTOM ELEVATIONS EQUAL).

NOTE: BONDING CONNECTIONS SHALL BE ELECTRICALLY AND MECHANICALLY FIRM. JACKS, PLUGS, CLAMPS AND CONNECTING POINTS SHALL BE CLEAN UNPAINTED METAL TO PROVIDE POSITIVE ELECTRICAL CONNECTION.

**DIKE CAPACITY CALCULATION:**

-NFC REQUIRES A DIKE BE ABLE TO HOLD 100% OF THE LARGEST TANK + 10% OF EACH ADDITIONAL TANK.

VOLUME REQUIRED = 100% OF LARGEST TANK + 10% OF EACH ADDITIONAL TANK  
 = 90,000L + 7(9,000L)  
 = 90,000L + 63,000L  
 = 153,000L (5,404 ft<sup>3</sup>)

-CONSERVATIVELY, REMOVE FOOTPRINT OF ALL TANKS FROM TOTAL DIKE AREA, LEAVING THE FOLLOWING AVAILABLE CONTAINMENT AREA:

AVAILABLE AREA = 1960ft<sup>2</sup>

-WALL HEIGHT REQUIRED:  
 5,404 ft<sup>3</sup> = 1960ft<sup>2</sup> X H  
 H = 2.76 ft

ADD 6" FREEBOARD = WALL HEIGHT TO BE 39"

**GEOTECHNICAL INSTRUCTIONS:**

EXCAVATE TO 600mm (2') BELOW THE UNDERSIDE OF THE TANK FARM ELEVATIONS. THE EXPOSED SUBGRADE SURFACE SHALL THEN BE PROOF ROLLED WITH A LARGE STEEL DRUM ROLLER AND INSPECTED AND APPROVED BY THE ENGINEER. ANY SOFT AREAS SHALL BE SUBEXCAVATED AND REPLACED WITH GRANULAR "B" MATERIAL (SEE BELOW).

THE SUBBASE SHALL CONSIST OF 450mm (1.5') GRANULAR "B" PLACED IN TWO LIFTS.

THE BASE SHALL CONSIST OF 150mm (6") OF GRANULAR "A" MATERIAL AND ELEVATED CRUSHER DUST TANK PADS.

ALL GRANULAR MATERIALS TO BE COMPACTED TO 100% OF THE STANDARD PROCTOR  
 MAXIMUM DRY DENSITY USING SUITABLE VIBRATORY COMPACTION EQUIPMENT. COMPACTION TESTING WILL BE PROVIDED BY THE ENGINEER (PROVIDE 3 DAYS NOTICE).

**ISSUE**

FOR	BY	DATE
FOR REVIEW ONLY	TJG	OCT 2022
FOR APPROVAL		
FOR TENDER		
FOR CONSTRUCTION		
FOR AS BUILT		

**NOTES:**

- INSTALLER TO VERIFY LOCATION OF BUILDING AND PROPERTY LINES BEFORE BEGINNING WORK
- INSTALLER TO CHECK SITE FOR EXISTING SITE SERVICES SUCH AS: WATER AND SEWER LINES, ELECTRICAL LINES, ETC... PRIOR TO ANY EXCAVATION.
- ALL EQUIPMENT TO BE INSTALLED AND TESTED AS PER MANUFACTURERS RECOMMENDATIONS
- INSTALLATION WORK TO BE COMPLETED IN ACCORDANCE WITH ALL APPLICABLE CODES.
- THIS PETROLEUM STORAGE SYSTEM CONFORMS TO ALL APPLICABLE ULC REQUIREMENTS AND STANDARDS INCLUDING ULC-S601, "SHOP FABRICATED STEEL ABOVEGROUND VERTICAL TANKS FOR PETROLEUM PRODUCTS," AND API 650 "WELDED STEEL TANKS FOR OIL STORAGE," LATEST EDITION.
- THIS DESIGN HAS ADDRESSED THE ISSUE OF POSSIBLE COLLECTION OF FLAMMABLE VAPOUR AND/OR LIQUID IN UNDERGROUND SUMPS.
- ALL WORK TO BE COMPLETED BY A PETROLEUM INSTALLER LICENSED BY THE PROVINCE OF NOVA SCOTIA.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO COMMENCING WORK.
- ALL TANKS TO BE INSTALLED LEVEL

**CONCRETE SPEC:**

32MPa  
 5%-8% AIR  
 420MPa REBAR YIELD STRENGTH  
 80mm SLUMP

No.	DESCRIPTION	BY	DATE
REVISIONS			



Client: **ENVIROSOIL**

Address: **PLEASANT STREET DARTMOUTH, NS**

Project: **NEW WASTE OIL RECYCLING & WASTE WATER TREATMENT FACILITY**

Title: **EXTERIOR USED OIL STORAGE DIKE**

GALLAGHER TECHNICAL SERVICES LIMITED  
 22 DOUGLAS DRIVE  
 QUIPSAMIS, NB  
 E2G 1Y3  
 PHONE: 506 849 4116  
 FAX: 506 847 1070

Stamp:

DESIGN: \_\_\_\_\_  
 DRAWN: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 DATE: **OCT 2022**  
 SCALE: **1/8" = 1'-0"**  
 REV:

PROJECT NUMBER: **GTS-1645** SHEET No. **5**