Part 1 ADDENDUM NO.1

1.1 General

- .1 This Addendum is issued prior to tender closing and shall become an integral part of the Tender, Specifications, Drawings and Contract Documents for this project.
- .2 In the event of conflicts between the various Contract Documents, the order of precedence shall be as stipulated in the General Conditions of the Contract, except that this Addendum shall take overall precedence.

Part 2 Preventative Maintenance

2.1 Provide preventative (PM) maintenance as per the attached standards.

- .1 Furnace
- .2 Hot Water Tank Oil Fired
- .3 Hot Water Tank Hydronic
- .4 Hydronic Boiler
- .5 HRV
- 2.2 Supply completed PM for to consultant for review upon completion of work.
- 2.3 Upon review of PM reports consultant will issue CCN for any potential repairs to houses and detachments.
- 2.4 Supply Photo of each piece of equipment with PM sheet.

2.5 Location List:

- .1 Arctic Bay
 - .1 V102 Detachment
 - .1 Furnace Olsen HTL-100C Burner: Becket AF65XN
 - .2 V009 Residence
 - .1 Furnace DMO Industries Model WTL-100H Burner: Becket AF65XZT
 - .2 Hot water tank Bradford White Model CF-32-6 Burner: Aero A98866
 - .3 V100 Residence
 - .1 Furnace Olsen WML80 Burner Becket AF65XN
 - .2 Hot water tank John Wood JWF-307 Burner: Aero Model AFC-2X-5.5
- .2 Cape Dorset
 - .1 V148 Detachment

	.1 Hot Water Boiler HB Smith Model 8 series : Burner Carlin Mod 99FRD	lel
	.2 Hot Water Boiler HB Smith Model 8 series : Burner Carlin Mod 99FRD	lel
.2	V149 Residence	
	.1 Furnace – Olsen WML-80 Burner AF76BO	
	.2 Hot water Tank – John Wood Model JWF-307 Burner: Aero F-A 2X-5.5	AFC-
.3	V151 Storage	
	.1 Furnace – Olsen WTL-125 Burner: SUNTEC	
.4	V153 Garage Workshop	
	.1 Furnace – Olsen WML-80 Burner: Becket AF76BO	
.5	V156 Garage	
	.1 Furnace Olsen BCL-120S Burner: Becket AF76BO	
.6	V157 Residence	
	.1 Furnace Olsen BCL-120S Burner: Becket AF76BO	
	.2 Hot water tank – John Wood JWF-307 Burner: Becket AF65YH	
.7	V160 Residence	
	.1 Boiler Weil-McLain P-WTGO-4 Burner: Riello 40-F5	
Cly	e River	
.1	V095 Residence	
	.1 Boiler Weil-McLain P-WTGO-4 Burner: Riello 40-F5	
.2	V116 Garage	
	.1 Furnace: Olsen HTL-100B Burner Becket AF65XN	
.3	V118 Gym	
	.1 Furnace: Olsen Model SR55RH Burner: unknown	
.4	V119 Detachment	
	.1 Furnace – Olsen WML-80 Burner AF76BO	
	.2 Furnace – Olsen WML-80 Burner AF76BO	
	.3 Hot water tank – Johnwood F3068 Burner: Aero model unknown	n
	.4 Furnace – Olsen HML-80B Burner: Beckett AF76BO	
Hal	Beach	
.1	V058 Detachment	

- .1 Furnace UTC Canada Corp Model AMP120 Burner: Beckett AFG
- .2 Furnace UTC Canada Corp Model AMP120 Burner: Beckett AFG
- .3 Hot Water Tank Aero Model CF-32A Burner: Aero F-AFC-2X-5.5
- .2 V054 Garage

.3

.4

- .1 Furnace Olsen HTL-115A Burner unknown
- .3 V053 Residence
 - .1 Furnace Lennox Model 2505-140/154-1A Burner: Riello Model 40F5
- .4 V055 Residence

|--|

.2 Boiler Weil-McLain P-WTGO-4 Burner: Beckett AFG

.5 Pangnritung

- .1 V128 Residence
 - .1 Furnace Olsen WML-80C Burner: Beckett Model A,AF
- .2 V129 Gym/Storage
 - .1 Furnace Olsen HML-80C Burner: Beckett Model A,AF
- .3 V131 Residence
 - .1 Boiler Biasi Model B-6 Burner Riello 40F5
- .4 V132 Residence
 - .1 Furnace Olsen WMP-80C Burner: Beckett Model A,AF
- .5 V133 Garage
 - .1 Furnace Olsen DOS 111B Burner: EZPro EZ-1
- .6 V134 Detachment
 - .1 Furnace Olsen Model WML80C Burner Beckett Model A, AF
- .7 V461 Residence
 - .1 Boiler Weil-McLain Ultra Oil UO-4E Burner: Beckett
 - .2 Boiler Weil-McLain Ultra Oil UO-4E Burner: Beckett
- .6 Pond Inlet
 - .1 V135 Residence
 - .1 Boiler Wheil McLain Burner Beckett AF44WHPW
 - .2 V136 Garage
 - .1 Furnace Dettson Model (N)OUF10SA12C/(N)OHB53F105 Burner: Beckett AF72X2T
 - .3 V138 Detachment
 - .1 Furnace Olsen WTL-100A Burner: Beckett AF6SBO
 - .2 Furnace Heil CM-32/CM032/CM050 Burner: Beckett AF6SBO
 - .3 Furnace Olsen MPL120B Burner: AF76BNHS
 - .4 Furnace Olsen WML-80C Burner: AF76BNHS
 - .5 Furnace Olsen STL-100A Burner: Olsen SR65RD
 - .4 V135 Residence
 - .1 Furnace DMO Industries BCL-190 Burner DMO AF65XO
 - .2 Boiler Weil-McLain WTGO-3 Burner Beckett Model AFG50MBAS
 - .5 V140 Residence
 - .1 Furnace Olsen WTL-100H Burner: Beckett AF-65-BO
 - .2 Water Heater: Brock 1B32-0 Burner AF-65-BO
- .7 Kimmirut
 - .1 V289 Residence
 - .1 Boiler: Slant Fin TRDV-30 Burner Riello 40BF5
 - .2 Boiler: Slant Fin TRDV-30 Burner Riello 40BF5

- .2 V026 Garage
 - .1 Furnace Dettson AMP3 Burner: AFG
- .3 V293 Detachment
 - .1 Boiler: Burnham PV84WT-GBWF Burner: AFG
 - .2 Boiler: Burnham PV84WT-GBWF Burner: AFG

To the best of our knowledge the above list of equipment is correct. The contractor is to site verify all equipment noted above prior to ordering parts and filters.

Part 3 Clarifications and Modifications

- .1 Please note ALL piping from the tanks to the appliances (Furnace, HWT, Boiler and generator) are to be new. All existing piping is to be removed
- .2 The contractor is not responsible for the first fill of the fuel tank. Co-ordinate this with the local RCMP detachment commander.
- .3 All stainless steel clevis hangers are to be removed and replace with galvanized clevis hangers sizes as per drawings.
- .4 All tank stands and supports are to be galvanized.
- .5 It should be noted that the support details on sheet S4 may have to be site modified due to local conditions. Allow for the site adjustment of the tank of 2'-0" in any direction.
- .6 On drawing S3 Details A,B,C,D,E Galv. HSS 2 ¹/₂" x ¹/₄" Collar to be changed to Galv. 2 ¹/₂" x 2 ¹/₂" x 1/8" to allow for the 2"x2"x1/4" vertical member to slide in more easily. Verify the fit prior to welding.
- .7 Structural steel supplier to ensure that all steel sections dry fit together prior to welding the frame or pipe supports.
- .8 There are no architectural drawings with the tender package. Contractor is to co-ordinate with mechanical drawings.
- .9 All Piping Running along a wall is to have a steel protection angle above see example Photo 1.

.10 ALL PIPING IS TO BE PREPAINTED PRIOR TO SHIPPING TO SITE.

- .11 All bollards are to be Painted yellow and have 3 2" wide reflective strips on each bollard.
- .12 Drip leg nipple to be minimum of 14" long beyond valve not 3" as shown.
- .13 All piping to tank T-2 is to enter from the top of the tank. (With the exception of the drain line)

Part 4 Specifications

4.1 Section 23 11 13 Fuel Oil Piping

- .1 Delete section 2.4.5 " Conforms to ULC/ORD-C482"
- .2 Insert section 2.4.5 "Conforms to ULS/ORD-C842"

4.2 Section 23 11 13 Fuel Oil Piping

- .1 Delete: 2.13.1 "Manufacturer: K TECH LEVELOMETER Model Midget Model 277 Pneumatic Indicator"
- .2 Insert 2.13.1 : "Manufacturer : King Tank Gauges"
- .3 Delete 2.13.1.1 "King Tank Gauges."
- .4 Delete2.13.1.2 "Rocket Wireless Gauge."

Part 5 Drawings

5.1 Add Structural Drawings S1 to S18 attached.

5.2 Cape Dorset

- .1 M3.0 Revision 00 Delete
- .2 M3.0 Revision 01 Insert

5.3 Clyde River

- .1 M3.0 Revision 00 Delete
- .2 M3.0 Revision 01 ADD

5.4 GENERATOR DAY TANK CONTROL

- .1 The solenoid valve is controlled by a overfill protection system with a level switch so that when the fuel level reaches 90% the solenoid valve shall close. The solenoid shall fail closed. If the tank reaches 95% an alarm will sound in the mechanical room or generator room.
- .2 Provide a control panel for the overfill protection system with alarms and indicators in the mechanical room or generator room. (Example of acceptable system attached)
- .3 Standard of acceptance Ktech Industrial Model FS701

RCMP "V" Division FUEL TANK REPAIR AND REPLCEMENT PROJECT NUNAVUT – PHASE 1 Can-Tec Project No: 16-028-01-30

Part 6 Photos:



Photo 1: Example of Wall Support

END OF SECTION







NEW PIPING EXISTING PIPING NEW VALVE

EXISTING VALVE NEW REDUCER CHECK VALVE

> RAWING NUMBER: M3.0 **AS NOTED** DATE (YY MM DD): 17 02 22 REVISION NUMBER:

DATE (YY MM DD) REV. BY

01



	SCALE: AS NOTED DATE (YY MM DD):	drawing number: M3.0
DATE (YY MM DD) REV. BY	17 06 09	REVISION NUMBER: 01



RCMP

ANNUAL BOILER AND CHIMNEY INSPECTION/SERVICE (1.75Gph – 60B)			
Location:	Building:		
Serviced By:	Date:		
Equipment: Boiler	Manufacturer:		
Model No.:	Serial Number:		
Date of Manufacture:	-		
Equipment: Burner	Manufacturer:		
Model No.:	Serial Number:		
Date of Manufacture:	-		

- 1. Work to be performed by a qualified oil burner mechanic, carried out in fall prior to start of winter heating season.
- 2. Contact Detachment Commander for scheduling.
- 3. Start Boilers, verify all associated controllers, ensure they are in proper operation/settings.
- 4. Contact Detachment Commander for instruction on whether boilers should be left on or off or standby before you leave the building

Task No.	Description	Completed
1	Check boiler, piping for leaks.	
2	Service circ pumps, check coupling. Replace As Required	
3	Check expansion tank.	
4	Check air eliminators on boiler and system	
5	Check for proper supply of Combustion air	
6	Check Power supply to Boiler	
7	Check all controls, setting. Check safety relay, record run time. Check/label limit switch.	
8	Check safety valve verify operation	
9	Lubricate motors, Clean Burner Fan	
10	Check/clean - Combustion Chamber	
11	Remove access covers. Clean and inspect boiler both internally and externally.	
12	Check/Clean – smoke pipe, chimney, rain cap and chimney supports. Check chimney flashing and weather seal to roof.	
13	Check makeup water regulator, clean strainer.	



14	Open Burner doors on boiler to inspect the fire box's lining. Check	
	if there is any damage, repair/replace if necessary.	
15	Water systems, drain, refill, and bleed air. Glycol system: Test	
	glycol for freeze protection level using a refractometer and the pH	
	level with a pH meter.	
	PH Level:	
	Glycol Concentration:	
16	Check and service zone valves and balancing valves.	
17	Conduct a combustion efficiency test.	
18	Check Barometric Damper, Replace if Necessary.	
19	Perform combustion analysis on boiler, submit report to RCMP	
	asset Manager.	
20	Use brush and vacuum cleaner to clean soot on the fire side and	
	passages on boiler, use brush to clean interior of stacks/chimneys	
	form boiler to chimney caps.	
21	Service burners, change nozzles, clean change/oil filter cartridges,	
	clean squirrel cages. Check fuel pump pressure.	

General Comments:

Repairs Recommended:



RCMP

Annual Furnace and Chimney Inspection

Location:	Building:
Serviced By:	Date:
Equipment: Furnace	Manufacturer:
Model No.:	Serial Number:
Date of Manufacture:	
Equipment: Burner	Manufacturer:
Model No.:	Serial Number:

Date of Manufacture:_____

Task No.	Description	Completed
1	Contact Detachment Commander for scheduling.	
2	Check/inspect: Stacks, Chimneys, Caps, for any sign of cracks	
	or deterioration; repair if necessary. Report to RCMP Asset	
	Manager if major work or replacement is required.	
3	Check barometric dampers, replace if required.	
4	Remove burners from furnaces, inspect fire boxes, lining, check	
	for any cracks or deterioration, report to RCMP Asset Manager	
	if fire box is cracked or damaged so unit replacement can be	
	processed.	
5	Use brush and vacuum cleaner to clean soot in the fire box,	
	clean sight glasses, use brush to clean interior of	
	stack/chimney from fire box to chimney cap.	
6	Check/inspect fan blower on furnaces for alignment, change V	
	belt, lubricate motor, clean squirrel cage (fans).	
7	Service burner: Change nozzles; clean/change oil filter	
	cartridges, clean/adjust electrodes.	
8	Check fuel pump/motor couplings, check fuel pump pressure.	
9	Start furnaces; perform combustion analysis; check all	
	associated controllers on furnace for proper operation/settings,	
	submit combustion report to RCMP Asset Manager.	
10	Check/Clean – smoke pipe, chimney, rain cap and chimney	
	supports. Check chimney flashing and weather seal to roof.	
11	Change furnace filter	

General Comments:

Repairs Recommended:



RCMP

Annual HRV Inspection

Location:	Building:
Serviced By:	Date:
Equipment: HRV	Manufacturer:
Model No.:	Serial Number:

Date of Manufacture:_____

Task No.	Description	Completed
1	Contact Detachment Commander for scheduling.	
2	Remove and vacuum filters	
3	Wash Filters in Water and Dry and re-install	
4	Vacuum interior of HRV	
5	Check all fan motors for operation and clean and lubricate	
6	Remove and clean HRV Core in warm water let the unit dry and re-install in HRV	
7	Check hydronic Pre-heat and post heating coils to ensure operation and all control valves.	
8	Vacuum and clean pre-heat Coil	
9	Test HRV with hand held flow meter and note flow rate. HRV Flow: CFM	

General Comments:

Recommended Repairs:



RCMP

Annual Hydronic HWT Inspection

Building.
Date:
Manufacturer:
Serial Number:

Date of Manufacture:_____

Task No.	Description	Completed
1	Contact Detachment Commander for scheduling.	
2	Check/inspect and test: Temperature Relief Valve	
3	Check and inspect circulation pumps from boiler to HWT (if present in system)	
4	Drain Hot Water tank and wash out sediment and check interior for Corrosion.	
5	Check controls and water temperature adjust as required.	

General Comments:

Recommended Repairs:



RCMP

Annual HWT Inspection

Location:	Building:		
Serviced By:	Date:		
Equipment: Hot Water Tank	Manufacturer:		
Model No.:	Serial Number:		
Date of Manufacture:			
Equipment: Burner	Manufacturer:		
Model No.:	Serial Number:		

Date of Manufacture:_____

Task No.	Description	Completed
1	Contact Detachment Commander for scheduling.	
2	Check/inspect: Stacks, Chimneys, Caps, for any sign of cracks or deterioration; repair if necessary. Report back to RCMP Asset Manager if major work or replacement is required.	
3	Check barometric dampers, replace if required.	
4	Remove burners from HWT, inspect fire boxes, lining, check for any cracks or deterioration, report back to RCMP Asset Manager if fire box is cracked or damaged so unit replacement can be processed.	
5	Use brush and vacuum cleaner to clean soot in the fire box, clean sight glasses, use brush to clean interior of stack/chimney from fire box to chimney cap.	
6	Check/inspect fan blower on furnaces for alignment, change V belt, lubricate motor, clean squirrel cage (fans).	
7	Service burner: Change nozzles; clean/change oil filter cartridges, clean/adjust electrodes.	
8	Check fuel pump/motor couplings, check fuel pump pressure.	
9	Start HWT; perform combustion analysis; check all associated controllers on furnace for proper operation/settings, submit combustion report to RCMP Asset Manager.	
10	Test Temperature and Pressure relief valve	
11	Drain tank and flush all sediment from bottom of tank and inspect for corrosion.	
12	Check Controls and water temperature adjust as required.	

General Comments:

Recommended Repairs:

GENERAL NOTES:

DO NOT SCALE DRAWINGS

- COORDINATE AND VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO COMMENCING CONSTRUCTION. 2
- SEE ARCHITECTURAL DRAWINGS FOR ELEVATIONS, SLOPES, ROUGH OPENING DIMENSIONS FOR WINDOWS, DOORS, ETC. 3
- SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR OPENINGS IN FLOORS, ROOF, WALLS, ETC.
- DO NOT CUT OR DRILL OPENINGS IN ANY STRUCTURAL MEMBERS WITHOUT WRITTEN APPROVAL FROM BEACH ROCKE ENGINEERING LTD. 5
- BEACH ROCKE ENGINEERING LTD. SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF REQUIRED SITE INSPECTIONS. (TEL: 1-204-255-7251, 6 FAX: 1-204-257-7239)
- STRUCTURAL DRAWINGS SHOW THE COMPLETED STRUCTURE. THEY DO NOT SHOW COMPONENTS WHICH MAY BE NECESSARY FOR SAFETY DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION SITE SAFETY AND TO ENSURE THAT ALL SUBTRADES CONFORM TO THE LATEST REGULATIONS OF THE PROVINCIAL "BUILDING PROTECTION ACT", TO PROVIDE ALL NECESSARY SAFETY EQUIPMENT AS REQUIRED THEREIN AND TO NOTIFY LOCAL AUTHORITIES AS REQUIRED BY LAW.
- 8 THE CONTRACTOR SHALL CONFORM TO THE COLD WEATHER REQUIREMENTS OF THE CSA STANDARD A23.1/A23.2 AND THE NATIONAL BUILDING CODF
- IT IS THE GENERAL CONTRACTORS RESPONSIBILITY TO LOCATE ALL SITE SERVICES PRIOR TO CONSTRUCTION. q
- THE GENERAL CONTRACTOR SHALL DESIGN ALL SHORING. FORM WORK, AND BRACING TO ENSURE PROPER CONSTRUCTION AND ERECTION.
- THE CONTRACTOR SHALL VISIT THE SITE, AND NOTE ALL CHARACTERISTICS AND IRREGULARITIES AFFECTING THE WORK OF THIS SECTION. 11.
- 12. SHOP DRAWINGS NOT STAMPED, SIGNED, AND DATED BY THE CONTRACTOR WILL BE RETURNED AND SHALL BE CONSIDERED REJECTED. SHOP DRAWINGS FOR WORK DESIGNED BY THE CONTRACTOR SHALL BEAR THE SEAL AND SIGNATURE OF A QUALIFIED PROFESSIONAL ENGINEER IN THE PROJECTS PROVINCE
- THE CONTRACTOR SHALL SUBMIT AT LEAST 3 COPIES OF STAMPED SHOP DRAWINGS FOR ALL PRE-FABRICATED STRUCTURAL ASSEMBLIES. INCLUDING REINFORCING STEEL TO BEACH ROCKE ENGINEERING LTD. FOR REVIEW AND APPROVAL PRIOR TO FABRICATION, ALL SHOP DRAWINGS, EXCEPT REINFORCING STEEL, SHALL BEAR THE SEAL OF AN ENGINEER REGISTERED IN THE PROJECTS PROVINCE.

SLAB-ON-GRADE NOTES:

ALL SLAB-ON-GRADE WILL EXPERIENCE MOVEMENT AND CRACKING DUE TO HEAVING AND SOIL EXPANSION RESULTING FROM THE NATURE OF THE CLAY SOIL, PREVIOUS AND PRESENT LEVEL OF VEGETATION AT THE SITE, SOIL MOISTURE LEVEL AND CONSTRUCTION PRACTICES. BEACH ROCKE ENGINEERING LTD. ACCEPTS NO LIABILITY FOR THIS CRACKING AND /OR MOVEMENT.

CONCRETE NOTES:

- CONCRETE SHALL BE MANUFACTURED AND PLACED IN ACCORDANCE WITH THE CSA STANDARDS A23.1-09/A23.2-09.
- THE CONTRACTOR SHALL PROVIDE ONE SET OF STANDARD CONCRETE CYLINDER TEST RESULTS CONDUCTED BY AN INDEPENDENT TESTING FIRM FOR EACH DAYS POUR AND AN ADDITIONAL SET OF CYLINDERS FOR EVERY 50 CUBIC METERS POURED AT NO EXTRA COST TO THE OWNER. TEST RESULTS ARE TO BE FORWARDED TO BEACH ROCKE ENGINEERING LTD. IMMEDIATELY UPON RECEIPT FROM THE TESTING FIRM.
- PROVIDE A MINIMUM 150mm (6") VOID UNDER ALL BEAMS, WALLS AND STRUCTURAL SLABS. VOID TO BE SHEARMAT OR APPROVED CARDBOARD VOIDFORM
- VIBRATE ALL CONCRETE TO ENSURE COMPLETE CONSOLIDATION.
- THE LOCATIONS OF CONSTRUCTION JOINTS IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE APPROVED BY BEACH ROCKE ENGINEERING LTD
- WHEN THE OUTSIDE TEMPERATURE FALLS BELOW 5 DEGREES CENTIGRADE, THE CONTRACTOR SHALL CONFORM TO CSA STANDARD A23.1-09/A23.2-09 AND THE NATIONAL BUILDING CODE FOR COLD WEATHER CONCRETING PROCEDURES, AND SHALL RECIEVE WRITTEN APPROVAL FROM BEACH ROCKE ENGINEERING LTD. PRIOR TO COMMENCING CONCRETE CONSTRUCTION
- PROVIDE 18" x 1" SAW CUTS AT 20' O.C. BOTH WAYS IN FLOOR SLABS UNLESS OTHERWISE NOTED ON DRAWINGS
- CONCRETE SHALL CONFORM TO THE FOLLOWING: 8 NAME CONC. TYPE STRENGTH MAX. AGG. SLUMP(MAX) AIR EXPOSURE CLASS TYPE 10 32MPA @ 28 DAYS 120mm 5-8% C-2

SLABS 20mm **REINFORCING STEEL NOTES:**

- REINFORCING STEEL SHALL BE NEW BILLET DEFORMED BARS MANUFACTURED AND DETAILED IN ACCORDANCE WITH CAN/CSA-G30.18-M92 WITH MINIMUM YEILD STRENGTH AS FOLLOWS: 10M BARS-300MPA, 15M BARS & LARGER - 400MPA.
- 2 REINFORCING STEEL SHALL BE FREE FROM LOOSE RUST. MUD. OIL OR OTHER COATINGS WHICH MAY REDUCE THE BOND OR HARM THE CONCRETE
- REINFORCING STEEL SHALL BE HELD IN PLACE AND TIED WITH PROPER ACCESSORIES SUCH AS HI-CHAIRS, SPACERS, TIES, ETC. SUPPLIED BY THE REINFORCING STEEL PROVIDER. APPROPRIATE SUPPORT SHALL BE PROVIDED UNDER ALL SUPPORT ACCESSORIES TO ENSURE THAT THE REINFORCING STEEL IS ACCURATELY POSITIONED.

75mm (3")

50mm (2")

40mm (1 ¹/₂")

- LAP TOP BARS AT MID-SPAN AND BOTTOM BARS OVER SUPPORTS.
- BEND ALL HORIZONTAL STEEL 18" AROUND CORNERS. OR USE EXTRA 36"x36" CORNER BARS TO MATCH HORIZONTALS.
- PROVIDE 2-15M AROUND ALL SLAB, WALL, & BEAM OPENINGS, UNLESS OTHERWISE NOTED ON STRUCTURAL DRAWINGS. 6
- CONCRETE COVER TO REINFORCING STEEL SHALL BE AS FOLLOWS:
- CONCRETE CAST IN DIRECT CONTACT WITH SOIL 71
- 7.2. FORMED CONCRETE IN CONTACT WITH SOIL 15M OR SMALLER
- 7.3. FORMED CONCRETE IN CONTACT WITH SOIL 20M OR LARGER
- 7.4. FORMED CONCRETE NOT IN CONTACT WITH SOIL (BEAMS AND COLUMNS)
- $40 \text{mm} \left(1 \frac{1}{2}\right)$ FORMED CONCRETE NOT IN CONTACT WITH SOIL (SLABS AND WALLS) 7.5
- 20mm (³/₄") MISCELLANEOUS CONCRETE HOUSEKEEPING PADS AND CURBS SHALL BE REINFORCED WITH A MINIMUM 10M AT 18" O.C. EACH WAY UNLESS
- NOTED. SEE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS.



PRO JECT TIT RCMP "V" DIVISION OIL TANK REPLACEMENT

PROJECT NOTES ROJECT NUMBER

17-122-CG-39



Beach Rocke e: (204) 255 7251 Fax: (204) 257 723

ISSUED FOR CONSTRUCTION 03 02 01 REV. # REVISION

STRUCTURAL STEEL NOTES:

- STRUCTURAL STEEL SHALL BE DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE CAN/CSA-S16-09 BY FULLY CERTIFIED MEMBERS OF THE CANADIAN INSTITUTE OF STEEL CONSTRUCTION.
- ALL STRUCTURAL STEEL SHALL CONFORM TO THE CAN/CSA G40.21-350W CLASS C TO SIZES AND SHAPES INDICATED ON THE DRAWINGS. NO 2. SUBSTITUTIONS IN GRADES OR SIZES ARE PERMITTED WITHOUT WRITTEN APPROVAL OF BEACH ROCKE ENGINEERING LTD. ALL ANGLES AND PLATES TO BE G40 21-300W
- ALL FABRICATION SHALL BE CARRIED OUT IN PLANT FACILITIES CERTIFIED BY THE CANADIAN WELDING BUREAU TO CSA S16-09 AND S136. SITE FABRICATION IS NOT PERMITTED WITHOUT WRITTEN APPROVAL FROM BEACH ROCKE ENGINEERING LTD.
- 4 ALL WELDING SHALL BE PERFORMED IN ACCORDANCE WITH THE CSA W59 BY WELDERS FULLY CERTIFIED FOR STRUCTURAL WELDING BY THE CANADIAN BUREAU TO CSA W47.1, ALL BASE AND CAP PLATES SHALL BE FULLY WELDED TO COLUMNS.
- 5 STRUCTURAL FASTENERS SHALL BE A325 BOLTS. ANCHOR BOLTS SHALL BE 18" LG. C/W 3"HOOK (A307) UNLESS NOTED OTHERWISE ON STRUCTURAL DRAWINGS. BASE AND CAP PLATES TO BE 3/4" THICK. CAP PLATES TO HAVE MIN. 4 BOLT (A325) CONNECTION UNLESS NOTED OTHERWISE ON STRUCTURAL DRAWINGS
- 6 PROVIDE TEMPORARY GUYING AND BRACING AS NECESSARY TO PROVIDE STABILITY FOR THE WHOLE STRUCTURE UNTIL DECKING AND PERMANENT BRACING ARE SECURED IN PLACE.
- 7. PROVIDE 3/8" STIFFENER PLATES IN ALL BEAMS CONTINUOUS OVER SUPPORTS. HOLES ARE NOT PERMITTED IN THE TOP FLANGES UNLESS NOTED OTHERWISE ON THE DRAWINGS
- CLEAN ALL FIELD WELDS AND TOUCH UP WITH PRIMER TO MATCH SHOP COAT ZINC PAINT
- 9 DESIGN AND FABRICATE CONNECTIONS FOR THE FULL STRENGTH OF THE MEMBER. SPLICING OF MEMBERS IS NOT PERMITTED UNLESS WRITTEN APPROVAL FROM THE DESIGN ENGINEER HAS BEEN PROVIDED.
- 10 ALL STEEL SHALL BE GALVANIZED.
- STRUCTURAL STEEL SUPPLIER SHALL PROVIDE STAMPED SHOP DRAWINGS TO THE DESIGN ENGINEER FOR REVIEW AND APPROVAL PRIOR TO 11. FABRICATION.

STRUCTURAL DRAWING LIST:

- S1 - STRUCTURAL PROJECT NOTES
- S2 - TYP TANK SLAB, BOLLARD AND BASE PLATE DETAILS & ISOMETRIC VIEW OF METAL STAND
- S3 - CONNECTION #1 DETAILS
- S4 - CONNECTION #2 DETAILS
- TANK #1 PLAN VIEW OF TANK ON SLAB S5
- S6 - TANK #1 - ELEVATIONS OF TANK ON SLAB
- S7 - TANK #2 - PLAN VIEW OF TANK ON LOW METAL STAND
- S8 - TANK #2 - ELEVATIONS OF LOW METAL STAND
- TANK #2 -ELEVATIONS OF LOW METAL STAND S9
- TANK #3 PLAN VIEW OF TANK ON HIGH METAL STAND S10
- S11 - TANK #3 - ELEVATIONS OF HIGH METAL STAND
- S12 TANK #3 ELEVATIONS OF HIGH METAL STAND
- S13 TANK #4 PLAN VIEW OF TANK ON LOW DOUBLE METAL STAND
- S14 TANK #4 ELEVATIONS OF LOW DOUBLE METAL STAND
- S15 TANK #4 ELEVATIONS OF LOW DOUBLE METAL STAND
- S16 TANK #5 PLAN VIEW OF TANK ON HIGH DOUBLE METAL STAND
- S17 TANK #5 ELEVATIONS OF HIGH DOUBLE METAL STAND
- S18 TANK #5 ELEVATIONS OF HIGH DOUBLE METAL STAND

ISSUED FOR TENDER RH 17 06 12 **ISSUED FOR 99% REVIEW** 17 05 30 RH ISSUED FOR REVIEW 17 03 31 RH DATE (YY MM DD) REV. BY

18 07 23

RH

REV. # REVISION





















NOTES:











	ISSUED FOR CONSTRUCTION	18 07 23	RH		
	ISSUED FOR TENDER	17 06 12	RH		
	ISSUED FOR 99% REVIEW	17 05 30	RH		
	ISSUED FOR REVIEW	17 03 31	RH		
/. #	REVISION	DATE (YY MM DD)	REV. BY	REV. #	REVISION









NOTES:

- ALL STEEL TO BE GALVANIZED (GALV) OR STAINLESS STEEL (SS)
- ALL ANGLES SHOWN ARE L2"x2"x3/16" (U/N/O)
- ALL BOLTS SHOWN ARE 1/2"Øx2" LONG (U/N/O)
 CONFIRM ALL DIMENSIONS SHOWN WITH MECH. DRAWINGS









