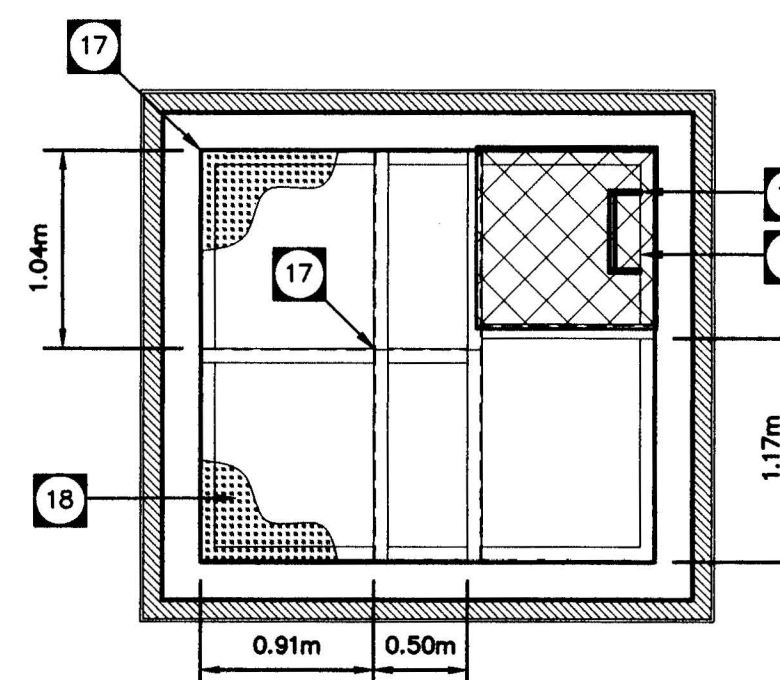


E VAULT #1 COVER DETAIL
SW1 1:40



F VAULT #2 COVER DETAIL
SW1 1:40

DRAWING NOTES:

- BREAK INTO EXISTING 200mm HDPE FORCEMAIN. INSTALL A 45° 200mm HDPE WYE FITTING c/w 50mm PRE-INSULATION.
- INSTALL 45° HDPE BEND C/W 50mm PRE-INSULATION.
- INSTALL 200mm BALLCENTRIC VALVE MOUNTED VERTICALLY WITH VALVE STEM EXTENSION. (TYP)
- CONCRETE VAULTS C/W STEEL PLATE COVER. 200mm CONCRETE WALL. (TYP)
- EXISTING ABOVE GROUND 300mm INSULATED GRAVITY OUTFALL
- INSTALL 200mm HDPE BYPASS LINE C/W 50mm PRE-INSULATION.
- ACCESS HATCH TO BE BILCO TYPE K-4 & RECESSED PADLOCK (OR APPROVED EQUAL). SIZE 914mm x 914mm.
- INSTALL 300mm x 300mm x 200mm DR17 HDPE WYE C/W 50mm PRE-INSULATION.
- EXISTING 200mm PRE-INSULATED STEEL PIPE TRANSITION.
- 200mm X 75mm STAINLESS STEEL SADDLE C/W 75mm BALL VALVE, SCREW ON CAP & INSULATION KIT.
- 200mm X 50mm STAINLESS STEEL SADDLE. 50mm BALL VALVE, SCREW ON CAP & INSULATION KIT.
- 2 LAYERS OF 50mm RIGID BOARD INSULATION. (TYP)
- 200mm SAND BEDDING. (TYP)
- GRINNEL PIPE SUPPORT. (TYP)
- 15M REBAR BOTH WAYS @ 300mm O.C. WITH 50mm CONCRETE COVER MINIMUM.
- 19mm ALUMINUM LADDER RUNGS 400mm WIDE @ 300 O.C. FIX TO CONCRETE VAULT
- 75mm X 75mm X 6mm GALVANIZED ANGLE IRON FRAME.
- 6mm THK. GALVANIZED STEEL PLATE VAULT COVER WELDED TO ANGLE IRON FRAME.
- 200mm LINK-SEAL FOR A 200mm THK. CONCRETE WALL. C/W STEEL SLEEVE TO SUIT. (TYP)
- 300mm LINK-SEAL FOR A 200mm THK. CONCRETE WALL. C/W STEEL SLEEVE TO SUIT. (TYP)
- 6mm OF PRESSURE TREATED PLYWOOD SHEATHING. (TYP)

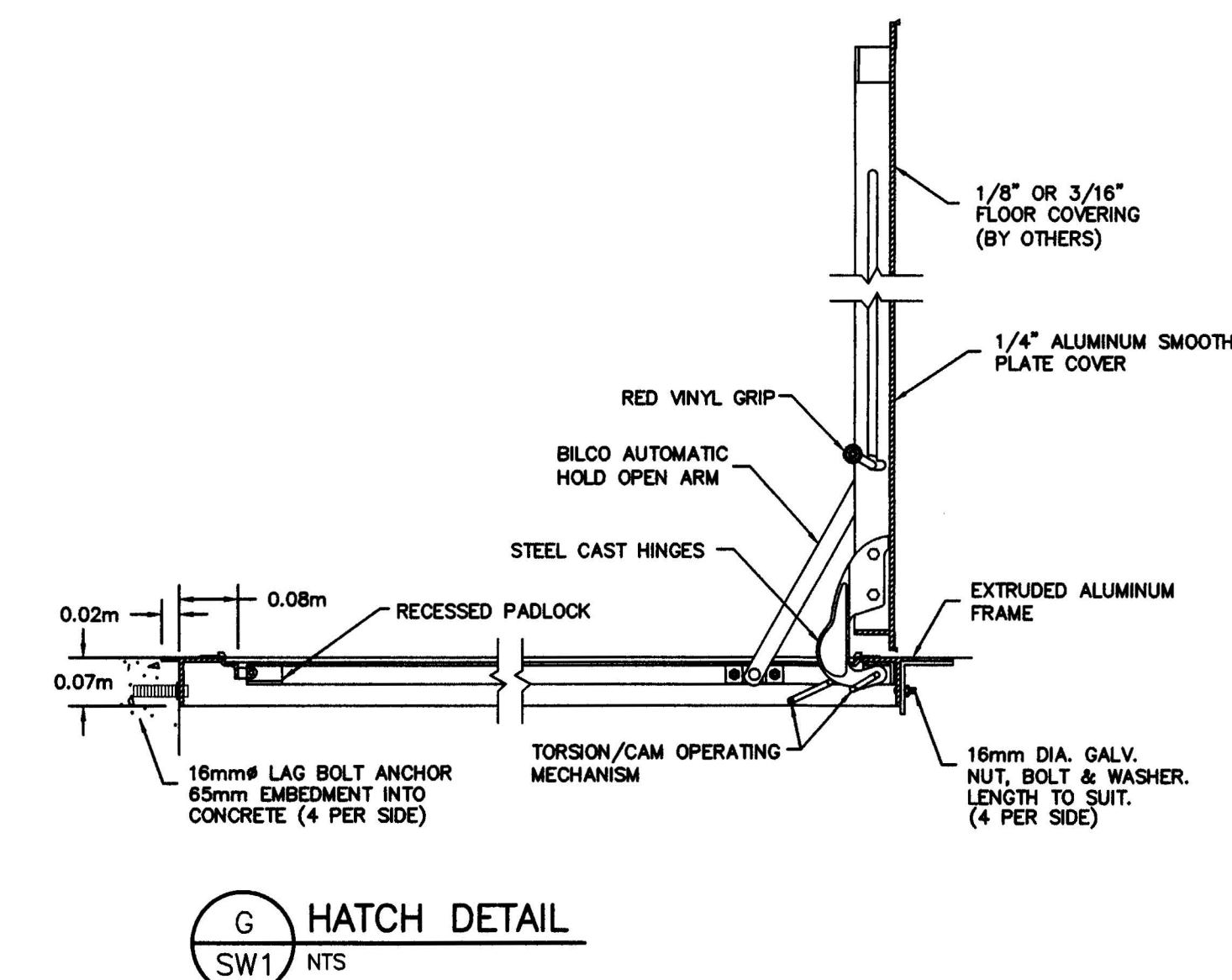
REINFORCING STEEL:

- REINFORCING STEEL TO BE NEW DEFORMED BILLET STEEL BAR CONFORMING TO CSA G30.18 (LATEST). GRADES TO BE 400 MPa FOR 15M BARS AND LARGER; 300 MPa FOR 10M BARS.
- SUBMIT SHOP DRAWINGS WHICH CLEARLY INDICATE BAR SIZES, SPACING, LOCATIONS & QUANTITIES OF REINFORCING STEEL, BENDING & CUTTING SCHEDULES, SUPPORTING & SPACING DEVICES, ETC. FOR REVIEW PRIOR TO FABRICATION. DETAIL, FABRICATE AND PLACE REINFORCING IN ACCORDANCE CSA A23.1 (LATEST), CSA A23.3 (LATEST) AND ACI SP-88 (LATEST) EXCEPT AS NOTED. LAP STEEL 36 BAR DIAMETERS (MINIMUM) UNLESS NOTED OTHERWISE.
- REINFORCING STEEL SHALL BE CLEAN, FREE OF RUST, DIRT, LOOSE SCALE, OIL, GREASE OR ANY OTHER MATERIAL WHICH WOULD REDUCE BOND WITH THE CONCRETE.
- TIE, SUPPORT AND SPACE ALL REINFORCING STEEL WITH PROPER APPROVED DEVICES DESIGNED FOR USE IN REINFORCED CONCRETE, TO PREVENT DISPLACEMENT OF REINFORCING AND ENSURE SPECIFIED CONCRETE COVER.

CONCRETE:

- CONCRETE MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH CSA A23.1/A23.2 (LATEST). SEE BELOW FOR MIX REQUIREMENTS.
- ADMIXTURES SHALL NOT BE USED UNLESS SPECIFIED HEREIN OR APPROVED BY THE DESIGN ENGINEER. CALCIUM CHLORIDE SHALL NOT BE USED.
- DESIGN, FABRICATE AND ERECT FORMWORK/SHORING IN ACCORDANCE WITH CAN/CSA-S289.3 (LATEST). ALLOW SUFFICIENT CONCRETE CURING TIME PRIOR TO REMOVAL.
- CONCRETE FINISHING SHALL MEET THE REQUIREMENTS OF CSA A23.1 (LATEST).
- FORM RELEASE AGENT SHALL BE BIODEGRADABLE, NON-STAINING AND NON-VOLATILE.
- PROVIDE ADEQUATE COLD/HOT WEATHER PROTECTION AS REQUIRED DURING CURING PERIOD.
- CAST-IN-PLACE ANCHOR BOLTS SHALL MEET REQUIREMENTS OF ASTM A307 (LATEST).
- CONCRETE MIX DESIGN SHALL BE PROPORTIONED TO MEET THE FOLLOWING PERFORMANCE REQUIREMENTS:

SLABS	EXPOSURE CLASS	F-1
	28 DAY COMP. STRENGTH	30 MPa
	CEMENT	TYPE GU
	W/C RATIO	0.50
	AGGREGATE SIZE (MAX.)	20mm
	ENTRAINED AIR	5%-8%



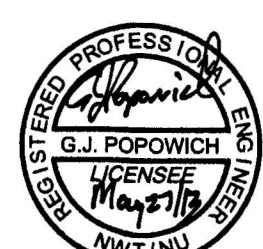
G HATCH DETAIL
SW1 NTS

BENCH MARK: DATUM ELEV. 0.00
SEWAGE TREATMENT PLANT
TOP OF FLOOR

- This drawing is the exclusive property of Nuna Burnside and the reproduction of any part without prior written consent of this office is strictly prohibited.
- The contractor shall verify all dimensions, levels, and datums on site and report any discrepancies or omissions to this office prior to construction.
- This drawing is to be read and understood in conjunction with all other plans and documents applicable to this project.
- Do not scale the drawings.

Issue / Revision	Date
1 ISSUED FOR CLIENT REVIEW & CONTRACTOR PRICE QUOTE	NOVEMBER 4, 2011
2 ISSUED FOR 66% SUBMISSION	NOVEMBER 2012
3 ISSUED FOR 99% SUBMISSION	JANUARY 2013
4 ISSUED FOR TENDER	FEBRUARY 2013
5 REVISED AS PER ADDENDUM 1 TO 4 AND ISSUED FOR CONSTRUCTION	APRIL 2013

PERMIT TO PRACTICE
Nuna Burnside Engineering and Environmental Ltd.
Signature: *G. Popowich*
Date: *May 27/13*
PERMIT NUMBER: P 535
The Association of Professional Engineers,
Geologists and Geophysicists of NWITNU



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Client
**GOVERNMENT OF NUNAVUT
COMMUNITY & GOVERNMENT
SERVICES**
**RANKIN INLET
SEWAGE TREATMENT PLANT**

Drawing Title
**NUVUK LIFT STATION EXTERIOR
BYPASS**

Drawn By J. JUACALLA	Checked By G. POPOWICH	Drawing No. SW-1
Scale AS NOTED	Project No. 300031281	