



PERMIT OF PRACTICE  
EXP. SERVICES INC.  
Signature Stephen S. Blevins  
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PERMIT NUMBER: P483  
NT/NU Association of Professional  
Engineers and Geoscientists

RELEASED FOR CONSTRUCTION



Const. North	
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• BUILDINGS • EARTH & ENVIRONMENT • ENERGY •  
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Project Title

WASTE WATER  
TREATMENT PLANT  
UPGRADE  
PANGNIRTUNG, NU

Dwg. Title
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## MEMBRANE TANK AND RAS PUMP SECTIONS

Project No. OTT-00204430-A0

Dwg. No.	<b>P402-6</b>	Rev. No.	0
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Scale

AS SHOWN

This drawing is not to be scaled

## P402-3) MEMBRANE TANK PIPING

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- |    |  |    |   |
|----|--|----|---|
| 1  | OWNER SUPPLIED EQUIPMENT. INSTALL PER MANUFACTURER'S GUIDELINES.   | 27 | CONCRETE HOUSEKEEPING PAD, SIZED TO SUIT.   |
| 2  | ORIENT PNEUMATIC VALVE ACTUATOR TO AVOID INTERFERENCES AND MAINTAIN ACCESS ROUTES. SUPPORT ACTUATOR AS REQUIRED.                                 | 28 | SECURE CLEVIS HANGER ROD TO BUILDING PURLIN WITH GALVANIZED CLAMP.  |
| 3  | USE 100mm Ø SCH. 40 GALVANIZED STEEL EXTENSION PIPE.   | 29 | 150mm FLANGE x 150mm FNPT C/W 150mm Ø NPT THREADED NIPPLE FOR CONNECTION TO TANK NOZZLE   |
| 4  | 300mm x 200mm REDUCING BUSHING   | 30 | FORM NOTCH IN HOUSEKEEPING PAD TO ACCOMODATE FLANGE AND PIPING.   |
| 5  | 200mm Ø SCH 80 PVC 90° ELBOW.  | 31 | CONCRETE HOUSEKEEPING PAD, HEIGHT TO ALIGN PUMP SUCTION WITH PIPING AS SHOWN.   |
| 6  | VICTAULIC FLANGE ADAPTOR FITTING.  | 32 | CONTRACTOR TO VERIFY LOCATION AND ALIGNMENT OF EXISTING PROCESS PIPING AND SERVICE LINES NOT BEING DEMOLISHED. CONSTRUCT PIPE RACK TO SUIT NEW AND EXISTING PROCESS PIPING AND SERVICE LINES. REALIGN EXISTING SERVICE LINES AS REQUIRED. |
| 7  | 250mm x 200mm SCH 80 PVC REDUCING FLANGE.  |    |   |
| 8  | FABRICATED 250mm x 75mm SS REDUCING FLANGE PIPE SPOOL.   |    |   |
| 9  | 75mm x 38mm SCH 80 PVC REDUCING PIPE SADDLE.   |    |   |
| 10 | 75mm x 19mm SCH 80 PVC REDUCING PIPE SADDLE.   |    |   |
| 11 | 75mm x 50mm ECCENTRIC REDUCING EXPANSION JOINT WITH FLAT SIDE UP.  |    |   |
| 12 | 50mm FLANGE x 50mm FNPT C/W 50mm Ø NPT THREADED NIPPLE FOR CONNECTION TO PUMP.   |    |   |
| 13 | ORIENT DRAIN VALVE FOR ACCESS AND TO AVOID INTERFERENCE WITH OTHER PIPING AND EQUIPMENT.   |    |   |
| 14 | 75mm x 50mm CONCENTRIC REDUCING EXPANSION JOINT C/W CONTROL RODS.  |    |   |
| 15 | 75mm x 50mm SCH 80 PVC CONCENTRIC REDUCER.   |    |   |
| 16 | 100mm x 75mm SCH 80 PVC CONCENTRIC REDUCER [NOT REQUIRED FOR 65-RP-01]   |    |   |
| 17 | 100mm Ø SCH 80 PVC TEE [75mm Ø SCH. 80 PVC 90° ELBOW FOR 65-RP-01]   |    |   |
| 18 | FIELD CUT PANEL WITH MINIMAL CLEARANCE TO ACCEPT PIPE. INSULATE BETWEEN PANEL AND PIPE. SEAL AND FLASH PANEL TO PIPE.                            |    |   |
| 19 | 150 Ø SCH 80 PVC PIPE C/W HYDRONIC HEAT TRACING, 50mm THICK URETHANE INSULATION AND METAL JACKET. SLOPE DOWN TO EXPANSION JOINT AT 2% OR BETTER. |    |   |
| 20 | SEAL INSULATION JACKET TO BUILDING WALL PANEL WEATHERTIGHT.  |    |   |
| 21 | SEAL INSULATION JACKET TO PIPE END WEATHERTIGHT.   |    |   |
| 22 | EXPANSION JOINT.   |    |   |
| 23 | SOLVENT WELDED FLANGE ASSEMBLY.  |    |   |
| 24 | PVC OR SS BATTEN RING; OD, ID AND BOLT HOLE PATTERN TO MATCH ADJACENT FLANGE ASSEMBLY.   |    |   |
| 25 | 4 x 4 MESH SS BIRD SCREEN SANDWICHED BETWEEN FACES OF FLANGE AND BATTEN RING.  |    |   |
| 26 | 14 x 14 MESH SS BUG SCREEN SANDWICHED BETWEEN PVC AND EXPANSION JOINT FLANGES.   |    |   |

P402-3 MEMBRANE TANK #2 AND RAS PUMP (65-RP-02) [SIMILAR FOR MEMBRANE TANK #1 AND 65-RP-01]

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