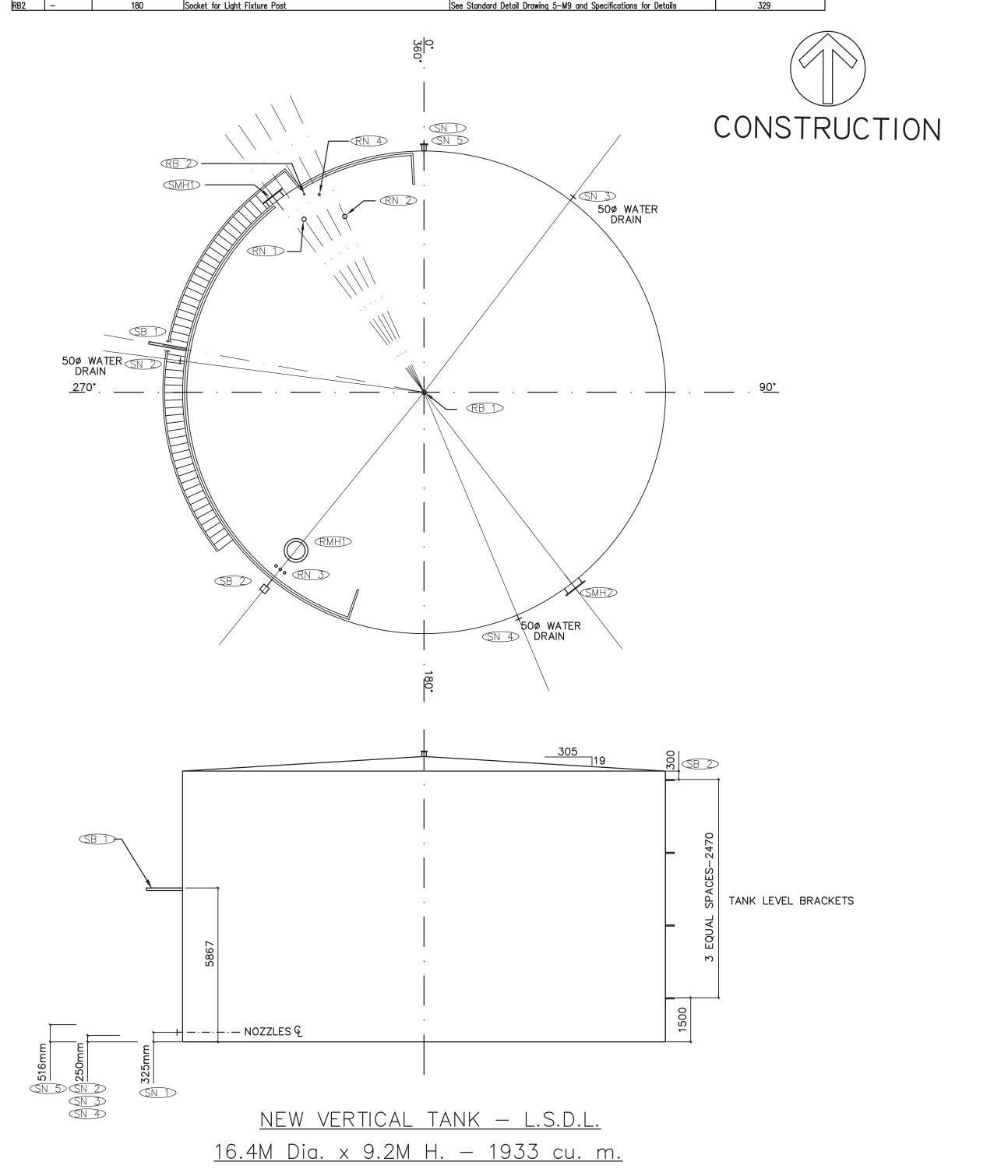
LIST OF	LIST OF REQUIRED APPURTENANCES FOR VERTICAL TANKS				
ITEM	SIZE	ELEV. ABOVE BASE RING	DESCRIPTION	Comments	ANGULAR LOCATION — CW DECIMAL DEGREES
SN1	150 ø	325	LCB cast steel gate valve, tank inlet/outlet	Nozzle. See Specification for Details	0
SMH1	610 ø	740	Manhole Access, c/w Cover 810 ø, Neck 610 ø, flange thickness 11 mm, Cover thickness 13 mm, 28 bolts, two handles 165 x 90 x 16 mm	See Specification for Details	322
SN2	50 ø	250	Water Drain Valve	See Standard Detail Drawing 3-M10 and Specifications for Details	277
SB2	_	_	Automatic tape type level gauge, metric units tape	See Standard Detail Drawing 1-M10 and Specifications for Details	219
_	_	_	Beginning of Tank Stairs (Clockwise Run)	See Standard Detail Drawing 2-M9 and Specifications for Details	232
SN3	50 ø	250	Water Drain Valve	See Standard Detail Drawing 3-M10 and Specifications for Details	37
SB1	_	5,867	Tank Stair Light Bracket	See Standard Detail Drawing 4-M9 and Specifications for Details	280
SMH2	610 ø	740	Manhole Access, c/w Cover 810 ø, Neck 610 ø, flange thickness 11 mm, Cover thickness 13 mm, 28 bolts, two handles 165 x 90 x 16 mm	See Specification for Details	142
_	_	_	Beginning of upper deck	See Standard Detail Drawing 2—M9 and Specifications for Details	321
_	_	_	End of upper deck	See Standard Detail Drawing 2-M9 and Specifications for Details	328
SN4	50 ø	250	Water Drain Valve	See Standard Detail Drawing 3-M10 and Specifications for Details	157
SN5	25 ø	516	Pressure Relief Valve	See Standard Detail Drawing 2-M10 and Specifications for Details	0

LICT OF	JST OF ROOF APPURTENANCES FOR VERTICAL TANKS					
ITEM		T	DESCRIPTION	Comments	ANGULAR LOCATION - CW DECIMAL DEGREES	
RN1	150 ø	900	150 ø Flanged gauge hatch	See Specification for Details	325	
RN2	150 ø	1,500	PV Vent	See Specification for Details	336	
RN3	varies	450	Connections for automatic level gauge	See Standard Detail Drawing 1—M10 and Specifications for Details	219	
RMH1	610 ø	1	Roof Manhole, Cover 810 ø m, Neck 610 ø, flange thickness 11 mm, Cover thickness 13 mm, 28 bolts,	See Specification for Details	219	
RB1	100 ø	Middle of tank	Cable support post		_	
RN4	75 ø	450	Coupling for future electronic level gauge	See Standard Detail Drawing 4-M10 and Specifications for Details	332	
000		400	0 1 1 ( 1:11 5:1	0 01 1 10 1 10 1 5 10 10 10 10 11 1 5 1 1	700	





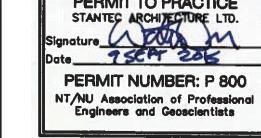
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RECORD DRAWINGS	2013/11/01
ISSUED FOR TENDER	2011/06/08
ISSUED FOR 95% REVIEW	2011/03/25
ISSUED FOR 50% REVIEW	2011/02
REVISION DESCRIPTION	DATE ISSUED

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ARCHITECTS & ENGINEERS
Unit C, 1088 Mivvik Street, Box 1779
Iqaluit, NU, X0A 0H0, Canada
T 867.979.0555 | F 867.979.5711

JECT TITLE

# FUEL STORAGE FACILITY UPGRADES

CHESTERFIELD INLET, NU

NEW LSDL VERTICAL
TANK

DRAWN BY	SCALE
AF	1:100
CHECKED BY	CLIENT PROJECT NO.
WO	10-3018
EGG DEG EGT 110	

2010-1160

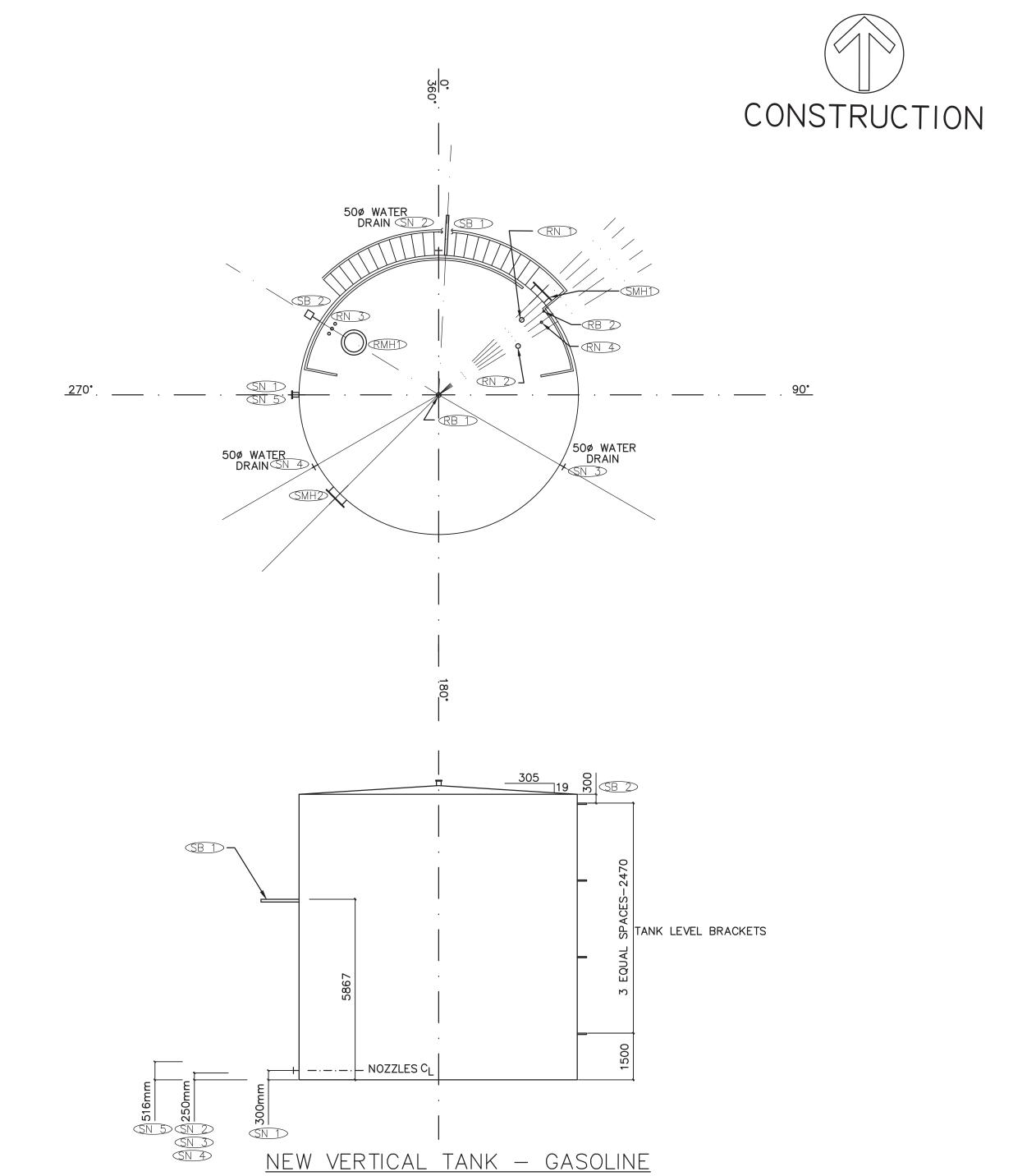
M1

OF 4

# <u>ORIENTATION PLAN - NEW GASOLINE VERTICAL TANK</u>

ITEM	SIZE	ELEV. ABOVE BASE RING	DESCRIPTION	Comments	ANGULAR LOCATION — CW DECIMAL DEGREES
SN1	100 ø	300	LCB cast steel gate valve, tank inlet/outlet	Nozzle. See Specification for Details	270
SMH1	610 ø	740	Manhole Access, c/w Cover 810 ø, Neck 610 ø, flange thickness 11 mm, Cover thickness 13 mm, 28 bolts, two handles 165 x 90 x 16 mm	See Specification for Details	45
SN2	50 ø	250	Water Drain Valve	See Standard Detail Drawing 3-M10 and Specifications for Details	0
SB2	<b>-</b>		Automatic tape type level gauge, metric units tape	See Standard Detail Drawing 1-M10 and Specifications for Details	302
			Beginning of Tank Stairs (Clockwise Run)	See Standard Detail Drawing 2-M9 and Specifications for Details	45
SN3	50 ø	250	Water Drain Valve	See Standard Detail Drawing 3-M10 and Specifications for Details	120
SB1		5,867	Tank Stair Light Bracket	See Standard Detail Drawing 4-M9 and Specifications for Details	3
SMH2	610 ø	740	Manhole Access, c/w Cover 810 ø, Neck 610 ø, flange thickness 11 mm, Cover thickness 13 mm, 28 bolts, two handles 165 x 90 x 16 mm		225
			Beginning of upper deck	See Standard Detail Drawing 2-M9 and Specifications for Details	38
			End of upper deck	See Standard Detail Drawing 2-M9 and Specifications for Details	50
N4	50 ø	250	Water Drain Valve	See Standard Detail Drawing 3-M10 and Specifications for Details	240
SN5	25 ø	516	Pressure Relief Valve	See Standard Detail Drawing 2-M10 and Specifications for Details	270

LIST OF	IST OF ROOF APPURTENANCES FOR VERTICAL TANKS				
ITEM	SIZE	HOR. LOCATION FROM EDGE OF SHELL (To CL)	DESCRIPTION	Comments	ANGULAR LOCATION — CW DECIMAL DEGREES
RN1	150 ø	900	150 ø Flanged gauge hatch	See Specification for Details	48
RN2	150 ø	1,500	PV Vent	See Specification for Details	58
RN3	varies	450	Connections for automatic level gauge	See Standard Detail Drawing 1-M10 and Specifications for Details	302
RMH1	610 ø	1,100	Roof Manhole, Cover 810 ø m, Neck 610 ø, flange thickness 11 mm, Cover thickness 13 mm, 28 bolts,	See Specification for Details	302
RB1	100 ø	Middle of tank	Cable support post		_
RN4	75 ø	450	Coupling for future electronic level gauge	See Standard Detail Drawing 4-M10 and Specifications for Details	54
RB2		180	Socket for Light Fixture Post	See Standard Detail Drawing 5-M9 and Specifications for Details	51



<u>9.0M Dia. x 9.2M H. – 582 cu. m.</u>

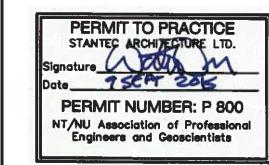


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)3	RECORD DRAWINGS	2013/11/01
)2	ISSUED FOR TENDER	2011/06/08
)1	ISSUED FOR 95% REVIEW	2011/03/25
00	ISSUED FOR 50% REVIEW	2011/02
Ο.	REVISION DESCRIPTION	DATE ISSUED







Unit C, 1088 Mivvik Street, Box 1779 Iqaluit, NU, XOA 0H0, Canada T 867.979.0555 | F 867.979.5711

# **FUEL STORAGE FACILITY UPGRADES**

CHESTERFIELD INLET, NU

NEW GASOLINE VERTICAL TANK

AF	1:100
CHECKED BY WO	CLIENT PROJECT NO. 10-3018
FSC PROJECT NO.	

2010-1160

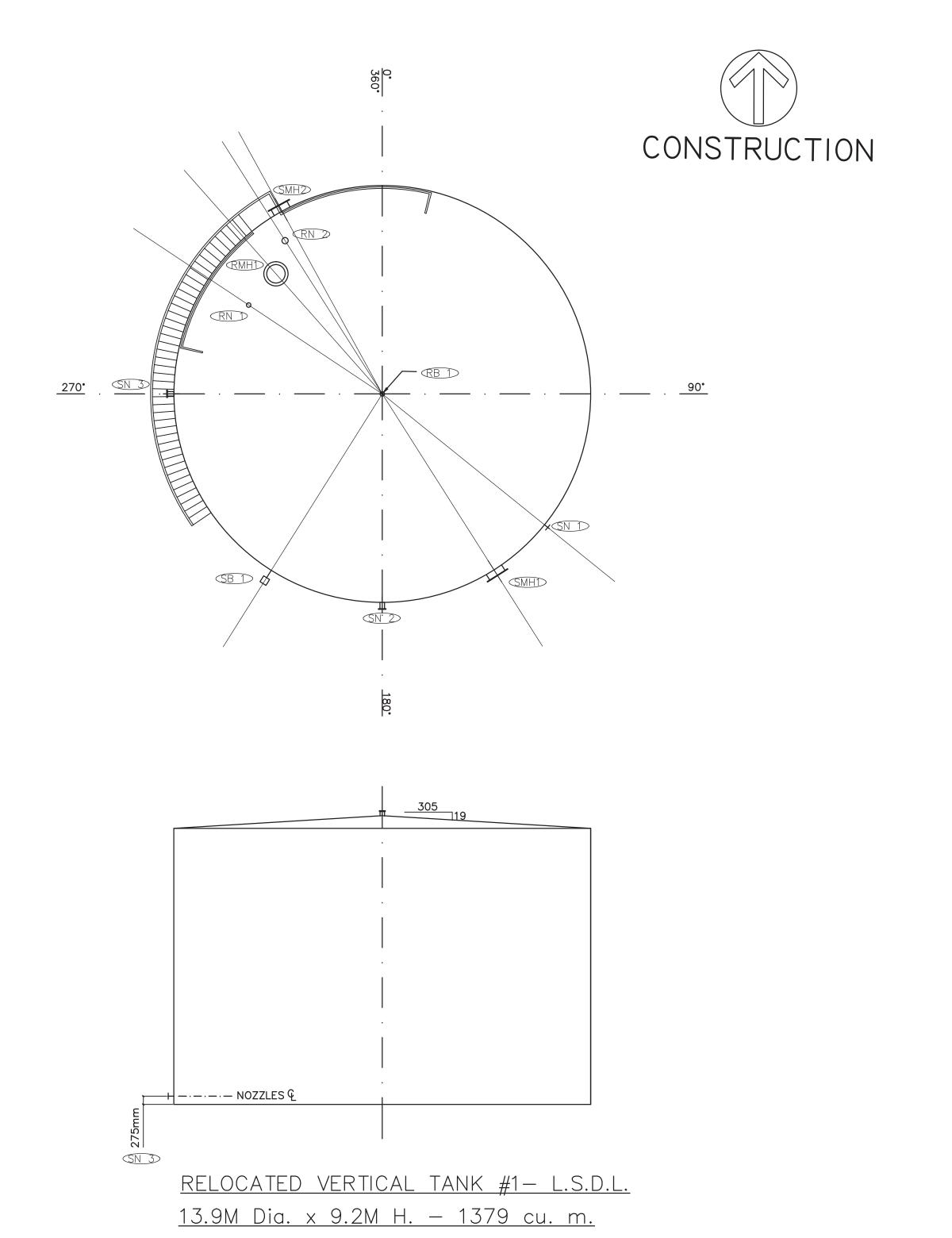
M2

Kraf X·\CIVII.\20101160 Chasterfield Inlat Fuel Facility Ungrades\DWG\10 Design\2011 06 IFT Submission\XRefs\ANSI-D 101160-TR dwg

# <u>ORIENTATION PLAN - RELOCATED VERTICAL TANK</u>

LIST OF	LIST OF SIDE APPURTENANCES FOR VERTICAL TANK				
ITEM	SIZE	ELEV. ABOVE BASE RING	DESCRIPTION		ANGULAR LOCATION — CW DECIMAL DEGREES
SN1	_	_	Water Drain Valve	Replace with New Valve — See Specification for Details	129
SMH1	800 ø	_	Manhole Access	Existing	148
SN2	150 ø	_	Existing Tank Inlet/Outlet	Existing Valve — Cap, See Specifications for Details	180
SB1	_	-	Automatic Tank Gauge	Replace with New — See Specification for Details	212
SN3	150 ø	275	New LCB Cast Steel Gate Valve, Tank Inlet/Outlet	New Valve — See Specification for Details	270
SMH1	800 ø	_	Manhole Access	Existing	331

ITEM	SIZE	HOR. LOCATION FROM EDGE OF SHELL (To CL)	DESCRIPTION		ANGULAR LOCATION — CW DECIMAL DEGREES
RN1	-	1060	PV Vent	Existing	304
RMH1	_	1060	Roof Manhole	Existing	318
	_	_	Beginning of Stair Landing	Existing	322
RN2	100 ø	900	Gauge Hatch	Existing	328
	-	_	End of Stair Landing	Existing	331





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03	RECORD DRAWINGS	2013/11/01
02	ISSUED FOR TENDER	2011/06/08
01	ISSUED FOR 95% REVIEW	2011/03/25
00	ISSUED FOR 50% REVIEW	2011/02
NO.	REVISION DESCRIPTION	DATE ISSUED

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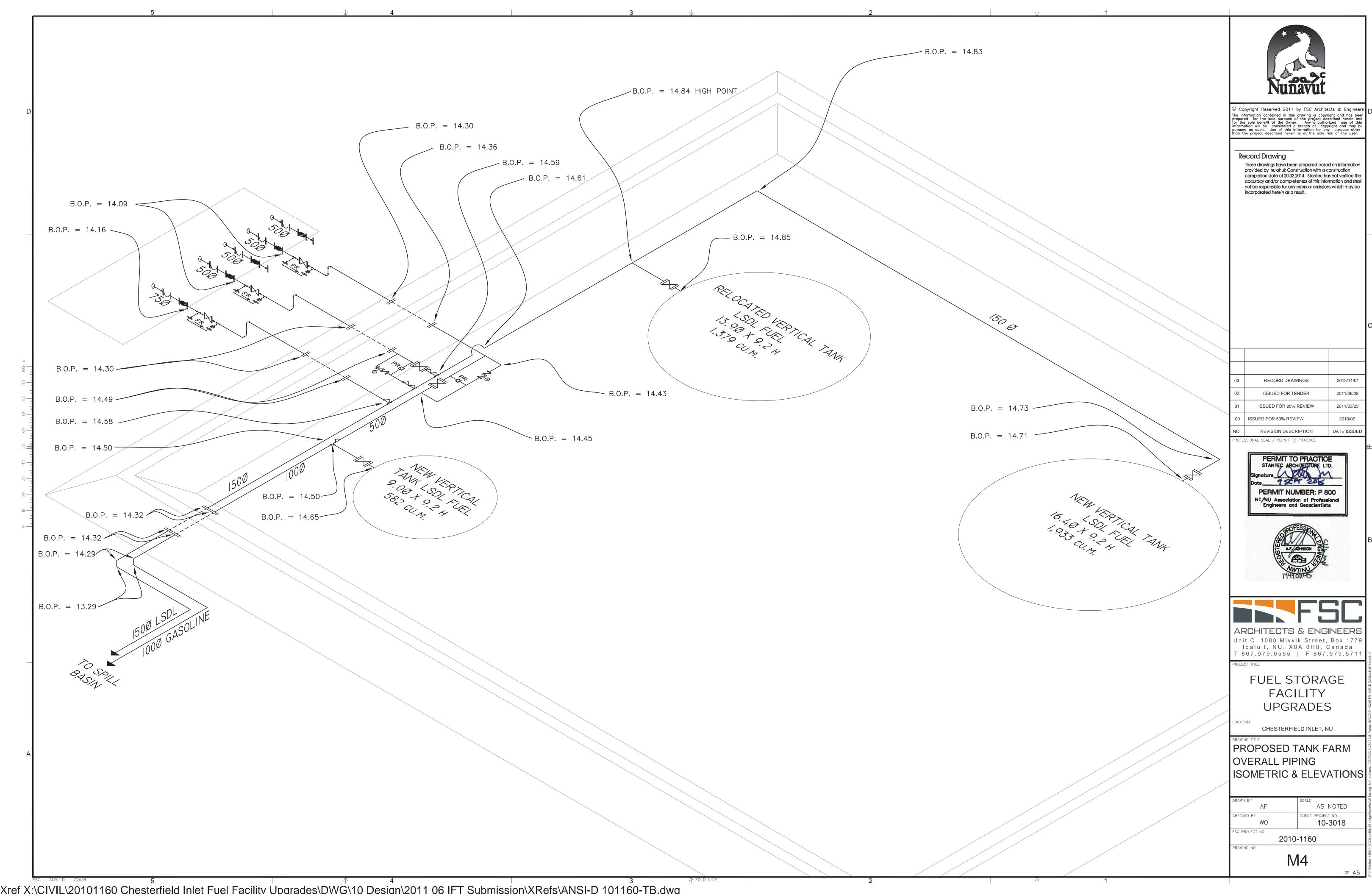
# FUEL STORAGE FACILITY UPGRADES

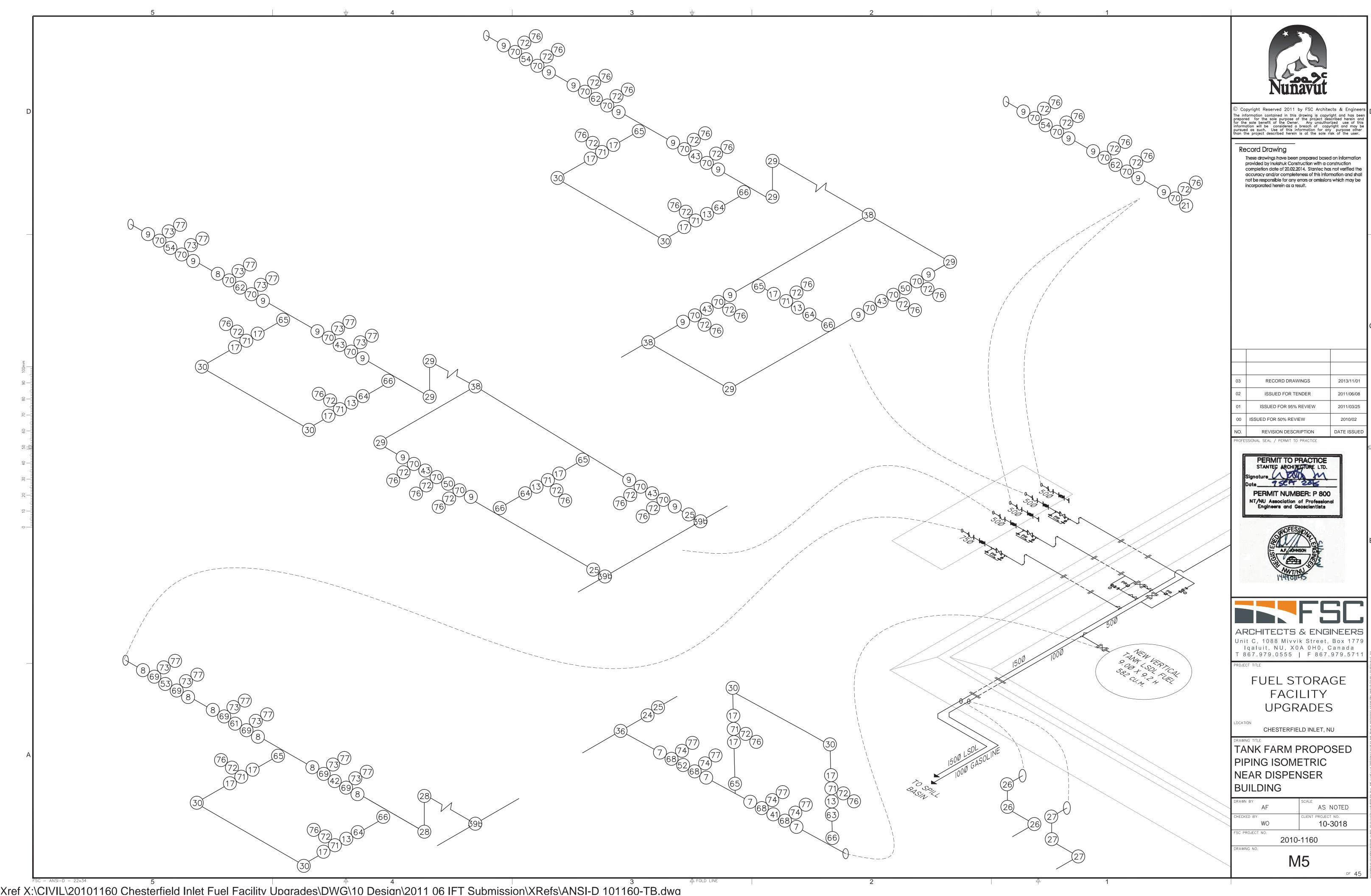
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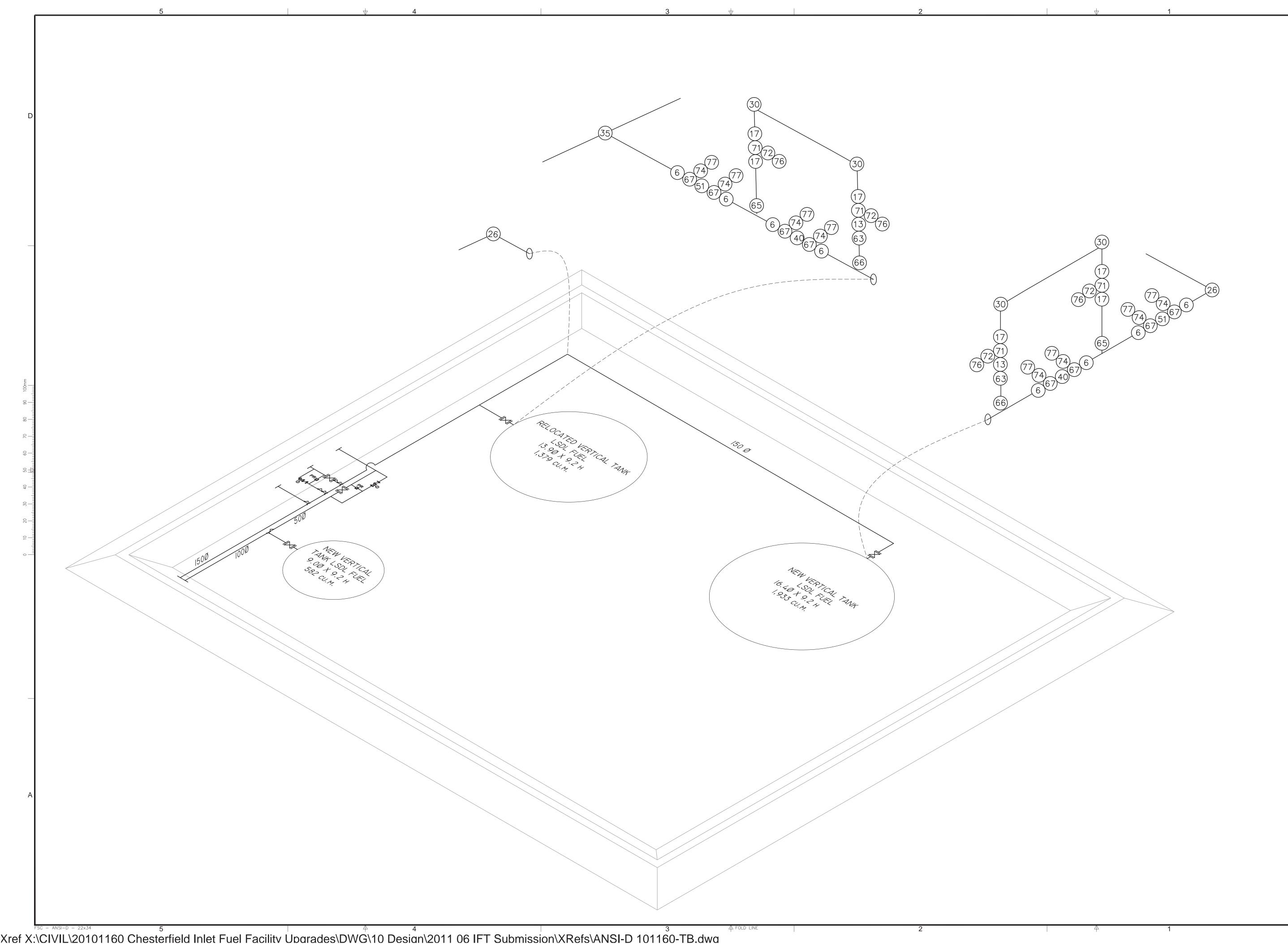
CHESTERFIELD INLET, NU

RELOCATED VERTICAL TANK

drawn by <b>A</b> F	1:100
CHECKED BY WO	CLIENT PROJECT NO. 10-3018
FSC PROJECT NO. 2010	-1160









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03	RECORD DRAWINGS	2013/11/01
02	ISSUED FOR TENDER	2011/06/08
01	ISSUED FOR 95% REVIEW	2011/03/25
00	ISSUED FOR 50% REVIEW	2010/02
NO.	REVISION DESCRIPTION	DATE ISSUED



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# FUEL STORAGE FACILITY UPGRADES

CHESTERFIELD INLET, NU

TANK FARM PROPOSED PIPING ISOMETRIC NEAR NEW LSDL TANK

DRAWN BY	SCALE
AF	AS NOTED
CHECKED BY	CLIENT PROJECT NO.
WO	10-3018
ECC DDO IECT NO	

2010-1160

Bill of Materials — Chesterfield Inlet Fuel Storage Piping

טווו טו	<u> </u>	Thesternera infectivel storage riping	
No.	Nom. Size	Description	Spec
1	150 Ø	Pipe, SMLS, C.S., SCH. 40	A 53 GR. B
2	100 Ø	Pipe, SMLS, C.S., SCH. 40	
3	75 Ø	Pipe, SMLS, C.S., SCH. 40	
4	50 Ø	Pipe, SMLS, C.S., SCH. 40	
5	25 Ø	Pipe, SMLS, C.S., SCH. 80	
6	150 Ø	W.N. FLANGE, F.R. 1034 kPa, FORGED STEEL, F. & D.	ASTM A350
7	100 Ø	W.N. FLANGE, F.R. 1034 kPa, FORGED STEEL, F. & D.	GR. LF2
8	75 Ø	W.N. FLANGE, F.R. 1034 kPa, FORGED STEEL, F. & D.	
9	50 Ø	W.N. FLANGE, F.R. 1034 kPa, FORGED STEEL, F. & D.	
11	75 Ø	THREADED FLANGE, 1034 kPa, FORGED STEEL, R.F., F.& D.	
12			
	50 Ø	THREADED FLANGE, 1034 kPa, FORGED STEEL, R.F., F.& D.	
13	25 Ø	THREADED FLANGE, 1034 kPa, FORGED STEEL, R.F., F.& D.	
17	25 Ø	SLIP ON FLANGE, 1034 kPa, FORGED STEEL, R.F., F.& D.	
18	150 Ø	BLIND FLANGE, 1034 kPa, FORGED STEEL, R.F., F.& D.	
19	100 Ø	BLIND FLANGE, 1034 kPa, FORGED STEEL, R.F., F.& D.	
20	75 Ø	BLIND FLANGE, 1034 kPa, FORGED STEEL, R.F., F.& D.	
21	50 Ø	BLIND FLANGE, 1034 kPa, FORGED STEEL, R.F., F.& D.	
22	25 Ø	BLIND FLANGE, 1034 kPa, FORGED STEEL, R.F., F.& D.	
23		ECCENTRIC REDUCER, SMLS, C.S., B.W., SCH. 40	A234 GR. B
24		ECCENTRIC REDUCER, SMLS, C.S., B.W., SCH. 40	
25		ECCENTRIC REDUCER, SMLS, C.S., B.W., SCH. 40	
26	150 Ø	ELBOW, 90 deg., L.R., SMLS, C.S., B.W., SCH. 40	
27	100 Ø	ELBOW, 90 deg., L.R., SMLS, C.S., B.W., SCH. 40	
28	75 Ø	ELBOW, 90 deg., L.R., SMLS, C.S., B.W., SCH. 40	
29	50 Ø	ELBOW, 90 deg., L.R., SMLS, C.S., B.W., SCH. 40	ACTM A 750
30	25 Ø	ELBOW, 90 deg., SOCKET WELD, FRG'D STEEL, 20680 kPa, SCH. 80	ASTM A350 GR. LF2
31	150 Ø	ELBOW, 45 deg., L.R., SMLS, C.S., B.W., SCH. 40	A234 GR. B
32	100 Ø	ELBOW, 45 deg., L.R., SMLS, C.S., B.W., SCH. 40	
33	75 Ø	ELBOW, 45 deg., L.R., SMLS, C.S., B.W., SCH. 40	
34	50 Ø	ELBOW, 45 deg., L.R., SMLS, C.S., B.W., SCH. 40	
35	150 Ø	STRAIGHT TEE, SMLS, C.S., B.W., SCH. 40	
36	100 Ø	STRAIGHT TEE, SMLS, C.S., B.W., SCH. 40	
37	75 Ø	STRAIGHT TEE, SMLS, C.S., B.W., SCH. 40	
38	50 Ø	STRAIGHT TEE, SMLS, C.S., B.W., SCH. 40	
39		REDUCING TEE, SMLS, C.S., B.W., SCH. 40	
<u>39a</u>		REDUCING TEE, SMLS, C.S., B.W., SCH. 40	
39b	<u> 150 Ø – 75 Ø</u>	REDUCING TEE, SMLS, C.S., B.W., SCH. 40	
40	150 Ø	GATE VALVE, 1034 kPa, FORGED STEEL, R.F., FLEX. DISC., OS & Y.  (SEE SPECS)	ASTM A350 GR. LCB
41	100 Ø	GATE VALVE, 1034 kPa, FORGED STEEL, R.F., FLEX. DISC., OS & Y. (SEE SPECS)	
42	75 Ø	GATE VALVE, 1034 kPa, FORGED STEEL, R.F., FLEX. DISC., OS & Y. (SEE SPECS)	
43	50 Ø	GATE VALVE, 1034 kPa, FORGED STEEL, R.F., FLEX. DISC., OS & Y. (SEE SPECS)	
45	150 Ø	CHECK VALVE, 1034 kPa, FORGED STEEL, R.F., (SEE SPECS)	
46	100 Ø	CHECK VALVE, 1034 kPa, FORGED STEEL, R.F., (SEE SPECS)	
47	75 Ø	CHECK VALVE, 1034 kPa, FORGED STEEL, R.F., (SEE SPECS)	
48	50 Ø	CHECK VALVE, 1034 kPa, FORGED STEEL, R.F., (SEE SPECS)	
49	25 Ø	CHECK VALVE, 1034 kPa, FORGED STEEL, R.F., (SEE SPECS)	

		2 WAY SOLENOID VALVE, FLANGED S.S. BODY, c/w S.S.	SNAP-TITE
50	50 Ø	INTERNALS SUITABLE FOR PETROLEUM PRODUCTŚ, NORMALLY CLOSED, EXPLOSION PROOF, GROUP D, 120 V 60 Hz, 12 NTP CONDUIT HOUSING	SEE SPECS
51	150 Ø	FLEXIBLE CONNECTOR, 309 LG, FLG'D, 1034 kPa, F.S., R.F., S.S. METAL HOSE, DOUBLE BRAIDED, TYPE RF-45	SEE SPECS
52	100 Ø	FLEXIBLE CONNECTOR, 309 LG, FLG'D, 1034 kPa, F.S., R.F., S.S. METAL HOSE, DOUBLE BRAIDED, TYPE RF-45	
53	75 Ø	FLEXIBLE CONNECTOR, 309 LG, FLG'D, 1034 kPa, F.S., R.F., S.S. METAL HOSE, DOUBLE BRAIDED, TYPE RF—81	
54	50 Ø	FLEXIBLE CONNECTOR, 309 LG, FLG'D, 1034 kPa, F.S., R.F., S.S. METAL HOSE, DOUBLE BRAIDED, TYPE RF—81	
55			
56			
57	100 Ø	KAMLOK ADAPTOR, OPW NO. 633-F, HOSE TO PIPE, MALE NPT, STAINLESS STEEL, C/W 634-BK CAP	
58			
59	75 Ø	KAMLOK ADAPTOR, OPW NO. 633-F, HOSE TO PIPE, MALE NPT, STAINLESS STEEL, C/W 634-BK CAP	
60	100 Ø	STRAINER FLG'D, R.F., 1034 kPa, FAB. STL. HOUSING, ALL IRON TRIM, DRAIN PLUG, A.O. SMITH MODEL #22—E3 EXPANDED STEEL OUTER BASKET, & 40 MESH S.S. INNER BASKET FOR GASOLINE OR JET A—1 SERVICE	
61	75 Ø	STRAINER FLG'D, R.F., 1034 kPa, FAB. STL. HOUSING, ALL IRON TRIM, DRAIN PLUG, A.O. SMITH MODEL #22-E3 EXPANDED STEEL OUTER BASKET, & 40 MESH S.S. INNER BASKET FOR GASOLINE OR JET A-1 SERVICE	
62	50 Ø	STRAINER FLG'D, R.F., 1034 kPa, FAB. STL. HOUSING, ALL IRON TRIM, DRAIN PLUG, A.O. SMITH MODEL #22—E3 EXPANDED STEEL OUTER BASKET, & 40 MESH S.S. INNER BASKET FOR GASOLINE OR JET A—1 SERVICE	
63	25 Ø	THERMAL PRESSURE RELIEF VALVE, EMCO—WHEATON MODEL E—0153, THREADED ENDS, PRESET AT 517 kPa (75 P.S.I.)	
64	25 Ø	THERMAL PRESSURE RELIEF VALVE, EMCO—WHEATON MODEL E—0153, THREADED ENDS, PRESET AT 172 kPa (25 P.S.I.)	
65	25 Ø	HALF COUPLING, FRG'D STEEL, 20680 kPa, SOCKET WELD, SCHED. 80	ASTM A350 GR. LF2
66	25 Ø	HALF COUPLING, FRG'D STEEL, 20680 kPa, SCREWED, SCHED. 80	
67	150 Ø	GASKET, 1034 kPa, 1.6 THICK FLAT RING TYPE	JOHN CRANE
68	100 Ø	GASKET, 1034 kPa, 1.6 THICK FLAT RING TYPE	STYLE 2160
69	75 Ø	GASKET, 1034 kPa, 1.6 THICK FLAT RING TYPE	SEE SPECS
70	50 Ø	GASKET, 1034 kPa, 1.6 THICK FLAT RING TYPE	$\dashv$
71	25 Ø	GASKET, 1034 kPa, 1.6 THICK FLAT RING TYPE	ACTM AZOO
72	12 Ø x 65 lg	STUD BOLTS, ALLOY STEEL	ASTM A320
73 74	16 Ø x 76 lg	STUD BOLTS, ALLOY STEEL	GR. L7
74 75	16 Ø x 89 lg 19 Ø x 94 lg	STUD BOLTS, ALLOY STEEL STUD BOLTS, ALLOY STEEL	$\dashv$
<u>75</u> 76	19 Ø X 94 Ig 12 Ø	NUTS, SEMI FINISHED, HEXAGONAL, ALLOY STEEL	ASTM A194
	16 Ø	NUTS, SEMI FINISHED, HEXAGONAL, ALLOY STEEL	GR. 4
	Ť Total	NUTS, SEMI FINISHED, HEXAGONAL, ALLOY STEEL	<b></b>
	19 W	-	•
78 79	19 Ø 38 Ø	BREAK AWAY AUTOMATIC SHUT OFF, OPW MODEL 10BF-5725 C/W OPW	SEE SPECS



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	RECORD DRAWINGS	2013/11/01
	ISSUED FOR TENDER	2011/06/08
	ISSUED FOR 95% REVIEW	2011/03/25
)	ISSUED FOR 50% REVIEW	2011/02
	REVISION DESCRIPTION	DATE ISSUED





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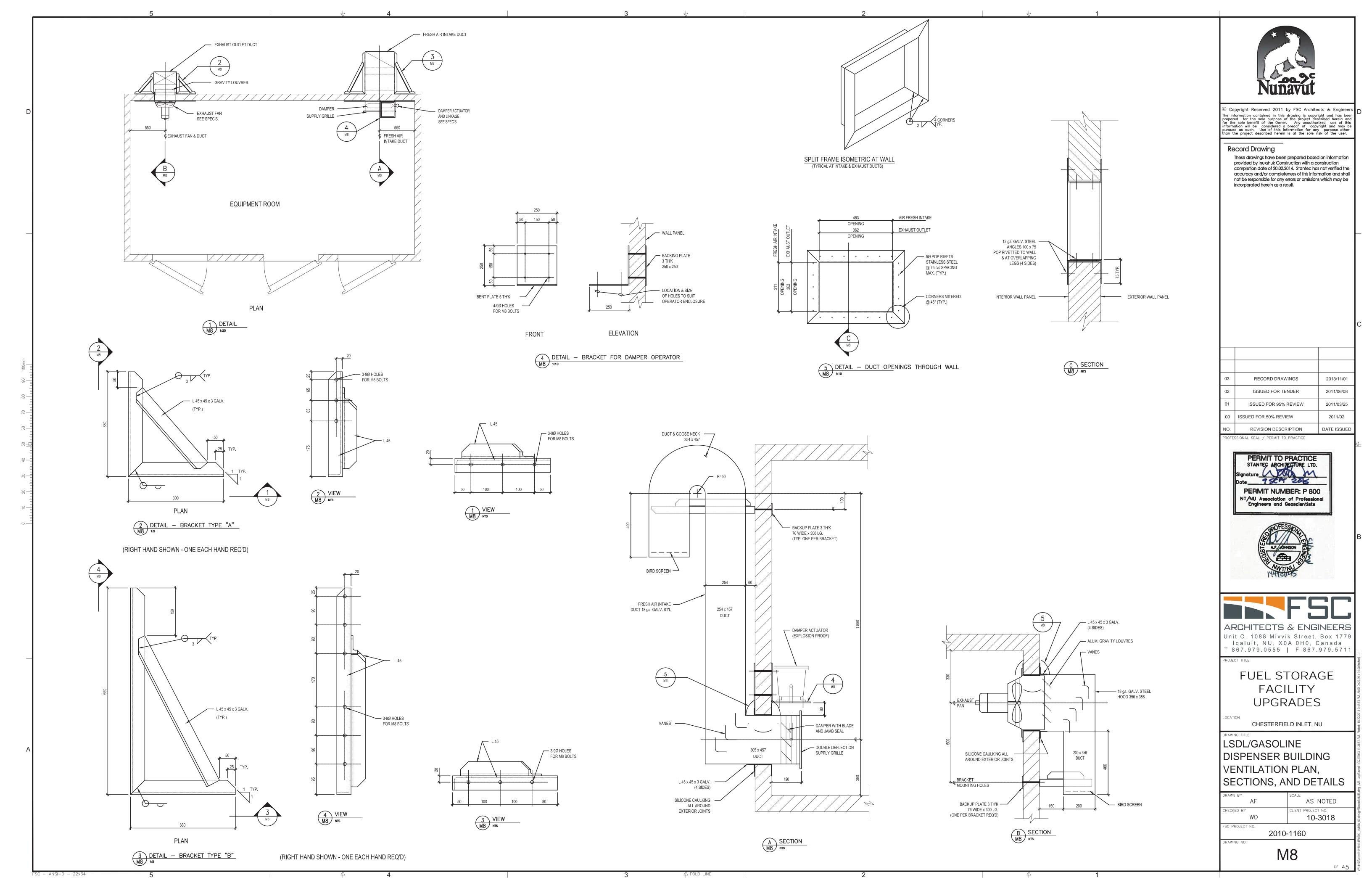
# **FUEL STORAGE** FACILITY **UPGRADES**

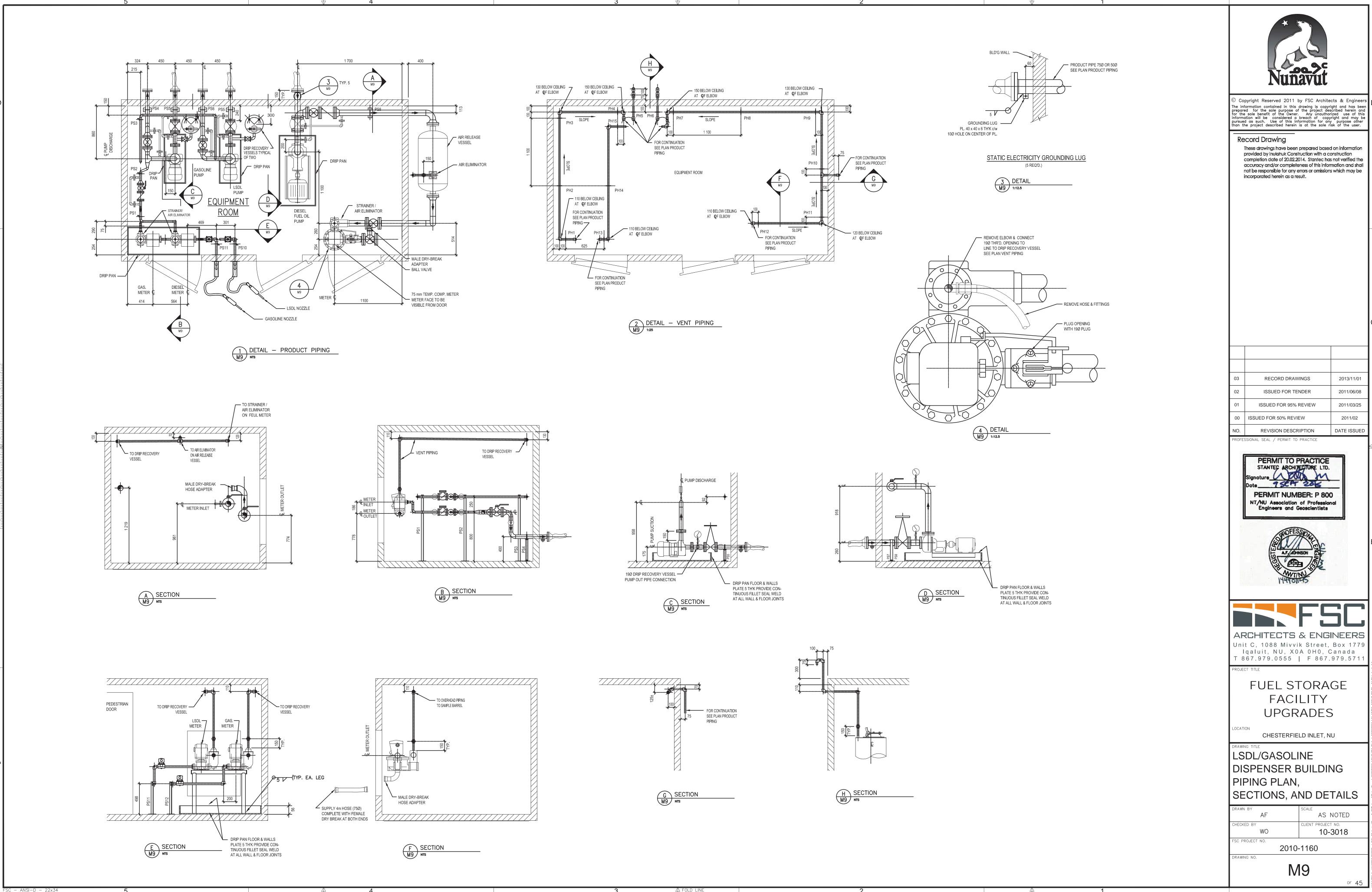
CHESTERFIELD INLET, NU

PIPING BILL OF MATERIALS

DRAWN BY	SCALE
AF	AS NOTED
CHECKED BY	CLIENT PROJECT NO.
WO	10-3018
ECO DDO IECT NO	•

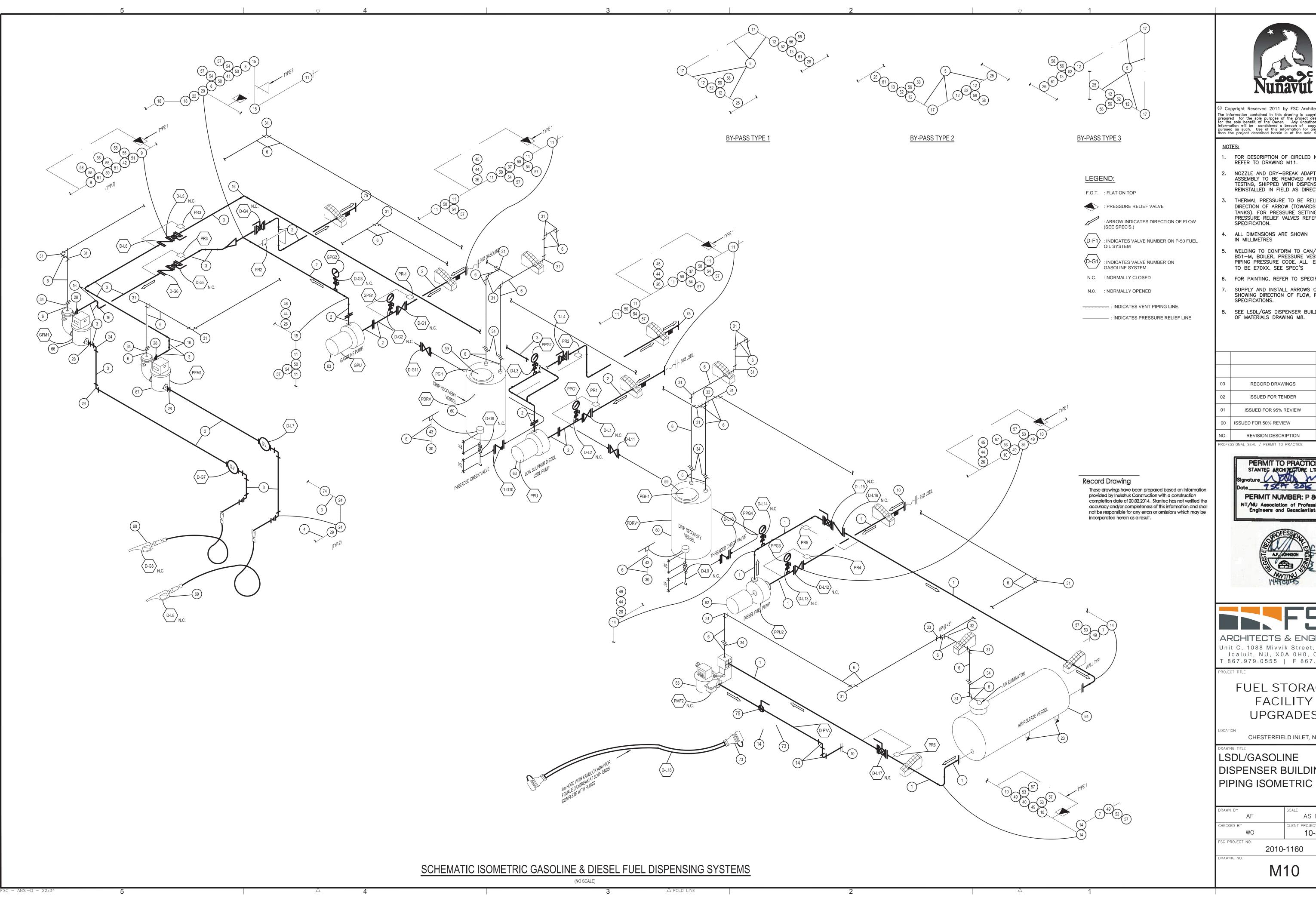
2010-1160





)3	RECORD DRAWINGS	2013/11/01
)2	ISSUED FOR TENDER	2011/06/08
)1	ISSUED FOR 95% REVIEW	2011/03/25
00	ISSUED FOR 50% REVIEW	2011/02
Ο.	REVISION DESCRIPTION	DATE ISSUED

AF	AS NOTED
CHECKED BY	CLIENT PROJECT NO.
WO	10-3018
FSC PROJECT NO.	





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- FOR DESCRIPTION OF CIRCLED NUMBERS REFER TO DRAWING M11.
- NOZZLE AND DRY-BREAK ADAPTER ASSEMBLY TO BE REMOVED AFTER SHOP TESTING, SHIPPED WITH DISPENSER AND REINSTALLED IN FIELD AS DIRECTED.
- THERMAL PRESSURE TO BE RELIVED IN DIRECTION OF ARROW (TOWARDS STORAGE TANKS). FOR PRESSURE SETTING OF PRESSURE RELIEF VALVES REFER TO
- ALL DIMENSIONS ARE SHOWN IN MILLIMETRES
- 5. WELDING TO CONFORM TO CAN/CSA-B51-M, BOILER, PRESSURE VESSEL AND PIPING PRESSURE CODE. ALL ELECTRODES TO BE E70XX. SEE SPEC'S
- 6. FOR PAINTING, REFER TO SPECIFICATIONS
- SUPPLY AND INSTALL ARROWS ON PIPES SHOWING DIRECTION OF FLOW, REFER TO SPECIFICATIONS.
- 8. SEE LSDL/GAS DISPENSER BUILDING BILL OF MATERIALS DRAWING M8.

03	RECORD DRAWINGS	2013/11/01
02	ISSUED FOR TENDER	2011/06/08
01	ISSUED FOR 95% REVIEW	2011/03/25
00	ISSUED FOR 50% REVIEW	2011/02
NO.	REVISION DESCRIPTION	DATE ISSUED

NT/NU Association of Professional Engineers and Geoscientists





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# FUEL STORAGE FACILITY **UPGRADES**

CHESTERFIELD INLET, NU

LSDL/GASOLINE DISPENSER BUILDING

DRAWN BY	SCALE
AF	AS NOTED
CHECKED BY	CLIENT PROJECT NO.
WO	10-3018

2010-1160

# BILL OF MATERIALS FOR GASOLINE / DIESEL FUEL DISPENSER BUILDING (NO SCALE)

EQUIPMENT TAG	SIZE (mm)	DESCRIPTION
1)	75 Ø	PIPE
2	50 Ø	PIPE
3	25 Ø	PIPE
4	19 Ø	PIPE
5	12 Ø	PIPE
6	19 Ø	PIPE GALVANIZED
7	75 Ø	WELDING NECK FLANGE
8	50 Ø	WELDING NECK FLANGE
9	25 Ø	WELDING NECK FLANGE
10	75 Ø	SLIP-ON FLANGE
11)	50 Ø	SLIP-ON FLANGE
12)	12 Ø	SLIP-ON FLANGE
13)	12 Ø	FLANGE THREADED
14)	75 Ø	ELBOW 90° L.R.
(15)	50 Ø	ELBOW 90° L.R.
16)	25 Ø	ELBOW 90° L.R.
17)	12 Ø	ELBOW 90° SOCKET WELD
18)	25 Ø	ELBOW 45° L.R.
19	75 Ø	STRAIGHT TEE
20	50 Ø	STRAIGHT TEE
<b>(21)</b>	75 Ø x 50 Ø	CONCENTRIC REDUCER
22)	50 Ø x 25 Ø	CONCENTRIC REDUCER
23	25 Ø	PLUG THREADED SQUARE HEAD
24)	25 Ø	ELBOW 90° THREADED
<b>2</b> 5	12 Ø	HALF COUPLING SOCKET WELD
26	12 Ø	HALF COUPLING THREADED
27)	75 Ø x 65 Ø	REDUCING BUSHING MALE AND FEMALE THREADED HEXAGONAL HEAD
28)	38 Ø x 25 Ø	REDUCING BUSHING MALE AND FEMALE THREADED HEXAGONAL HEAD
29	25 Ø x 19 Ø	REDUCING BUSHING MALE AND FEMALE THREADED HEXAGONAL HEAD
30	19 Ø	PIPE CAP MALLEABLE IRON GALVANIZED
<u>(31)</u>	19 Ø	ELBOW 90° MALLEABLE IRON GALVANIZED
32)	19 Ø	ELBOW 45° MALLEABLE IRON GALVANIZED
33	19 Ø	STRAIGHT TEE MALLEABLE IRON GALVANIZED
34)	19 Ø	UNION MALLEABLE IRON CLASS 300 GROUND JOINT COPPER ALLOY TO IRON GALVANIZED
35)	65 Ø x 50 Ø	REDUCER MALLEABLE IRON GALVANIZED
36)	75 Ø	GATE VALCE CAST STEEL FLANGED
37)	50 Ø	GATE VALVE CAST STEEL FLANGED
38)	75 Ø	CHECK VALVE CAST STEEL FLANGED
39	25 Ø	CHECK VALVE CAST STEEL FLANGED
40)	75 Ø	BALL VALVE CAST STEEL FLANGED
<b>(41)</b>	50 Ø	BALL VALVED CAST STEEL FLANGED.
42)	25 Ø	BALL VALVE CAST STEEL FLANGED
43)	19 Ø	BALL VALVE CARBON STEEL THREADED ENDS
(44)		GAUGE VALVE SEE SECTION 13230
45)		COMPOUND PRESSURE/ VACUUM GAUGE SEE SECTION 13230

EQUIPMENT TAG	SIZE (mm)	DESCRIPTION
46)		PRESSURE GAUGE SEE SECTION 13230
(47)	75 Ø x 457 Lg.	FLEXIBLE CONNECTOR FLANGED
48)	50 Ø x 65 Lg.	PIPE NIPPLE CARBON STEEL GALVANIZED
49	75 Ø	GASKET
50)	50 Ø	GASKET
(51)	25 Ø	GASKET
(52)	12 Ø	GASKET
(53)	16 Ø x 89 Lg.	STUD BOLTS
(54)	16 Ø x 76 Lg.	STUD BOLTS
(55)	12 Ø x 65 Lg.	STUD BOLTS
(56)	12 Ø x 57 Lg.	STUD BOLTS
<b>(57)</b>	16 Ø	NUTS
(58)	12 Ø	NUTS
(59)	100 Ø	GAUGE HATCH SEE SECTION 13230
60		DRIP RECOVERY VESSEL SEE DRAWING NO. S-GP-03, AND SECTION 13230
<b>6</b> 1)	12 Ø	PRESSURE RELIEF VALVE SEE SECTION 13230
62)		DIESEL FUEL PUMP SEE SECTION 13230
63)		GASOLINE PUMP SEE SECTION 13230
64)		AIR RELEASE VESSEL C/W AIR ELIMINATOR SEE SECTION 13230
65)		DIESEL FUEL METERING ASSEMBLY SEE SECTION 13230
66		GASOLINE METERING ASSEMBLY SEE SECTION 13230
67)		MOTIVE DIESEL FUEL METERING ASSEMBLY SEE SECTION 13230
68)		HOSE ASSEMBLY FOR GASOLINE DISPENSING SEE SECTION 13230
69		HOSE ASSEMBLY FOR MOTIVE DIESEL FUEL DISPENSING SEE SECTION 13230
70)		HOSE AND REEL ASSEMBLY FOR DIESEL FUEL DISPENSING SEE SECTION 13230
71)		NOZZLE FOR TOP LOADING OF DIESEL FUEL TRUCK SEE DESCRIPTION SECTION 13230
72)		DRY-BREAK COUPLER SEE DESCRIPTION SECTION 13230
73)		DRY-BREAK ADAPTER SEE DESCRIPTION SECTION 13230
74)	25 Ø	TWO-WAY SOLENOID VALVE: FORGED STAINLESS STEEL BODY, S.S. INTERNAL PARTS SUITABLE FOR PETROLEUM PRODUCTS, NORMALLY CLOSED, EXPLOSION PROOF ZONE 1, GROUP IIA, 120V, 60HZ, 12 Ø NPT CONDUIT HOUSING, POWER CONSUMPTION: 10W MAXIMUM. SKINNER 'L' SERIES CAT. NO. XL2DB6150 OR EQUIVALENT
75)	50 Ø	BLIND FLANGE, 1034 kPa, FORGED STEEL, R.F., F. & D.

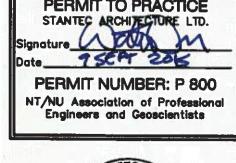


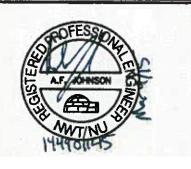
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### Record Drawing

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03	RECORD DRAWINGS	2013/11/01
02	ISSUED FOR TENDER	2011/06/08
01	ISSUED FOR 95% REVIEW	2011/03/25
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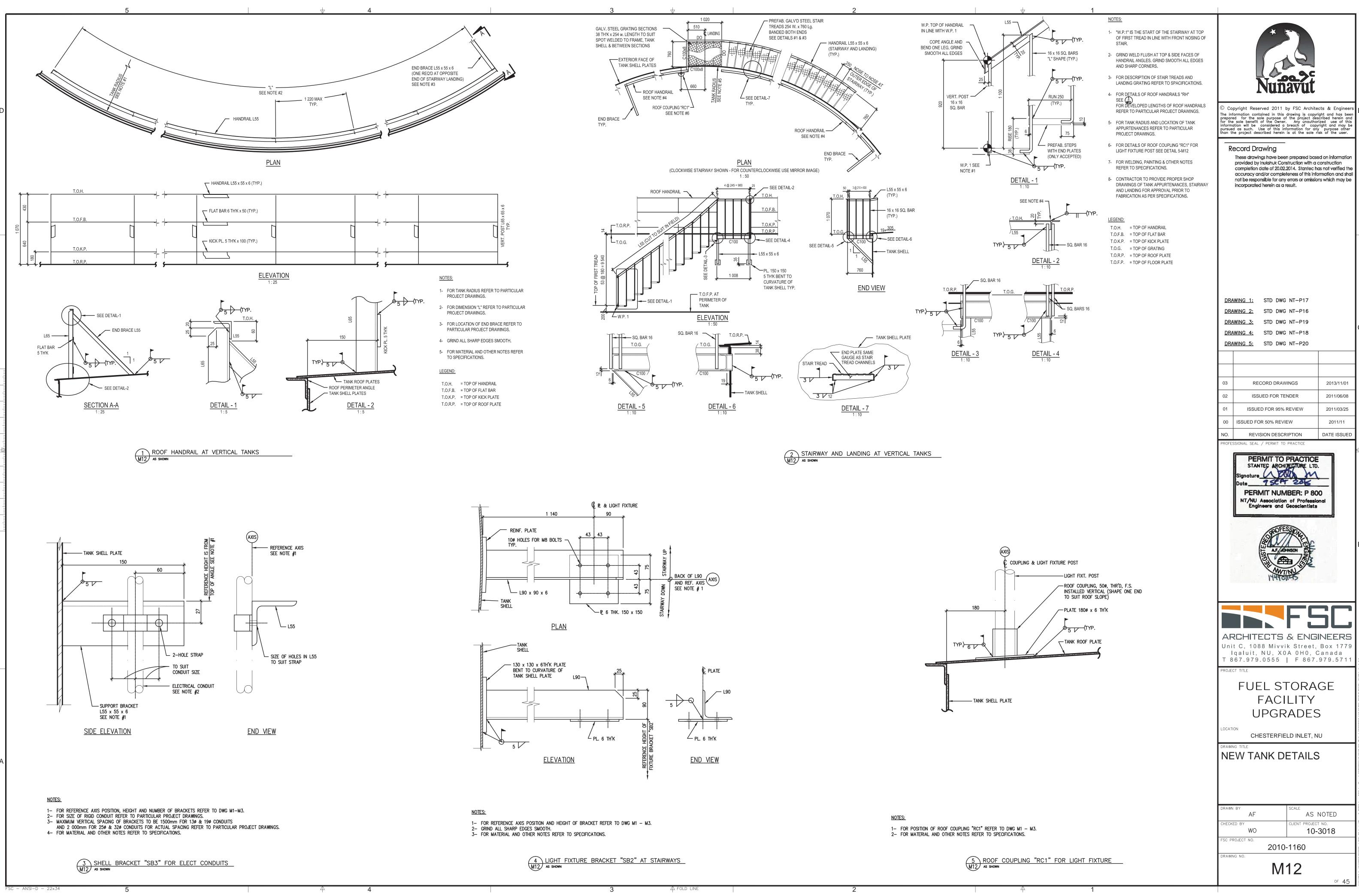
# FUEL STORAGE FACILITY **UPGRADES**

CHESTERFIELD INLET, NU

LSDL/GASOLINE DISPENSER BUILDING BILL OF MATERIALS

DRAWN BY	SCALE
AF	AS NOTED
CHECKED BY	CLIENT PROJECT NO.
WO	10-3018

2010-1160



DRAWING 1: STD DWG NT-P17 DRAWING 2: STD DWG NT-P16 DRAWING 3: STD DWG NT-P19

DRAWING 4: STD DWG NT-P18 DRAWING 5: STD DWG NT-P20

RECORD DRAWINGS 2013/11/01 2011/06/08 ISSUED FOR TENDER ISSUED FOR 95% REVIEW 2011/03/25 ISSUED FOR 50% REVIEW 2011/11

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**PERMIT NUMBER: P 800** 

NT/NU Association of Professional Engineers and Geoscientists





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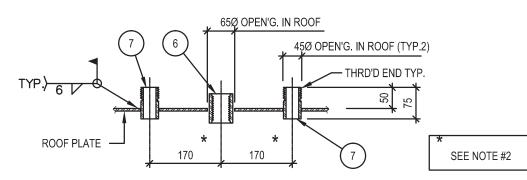
# **FUEL STORAGE FACILITY UPGRADES**

CHESTERFIELD INLET, NU

NEW TANK DETAILS

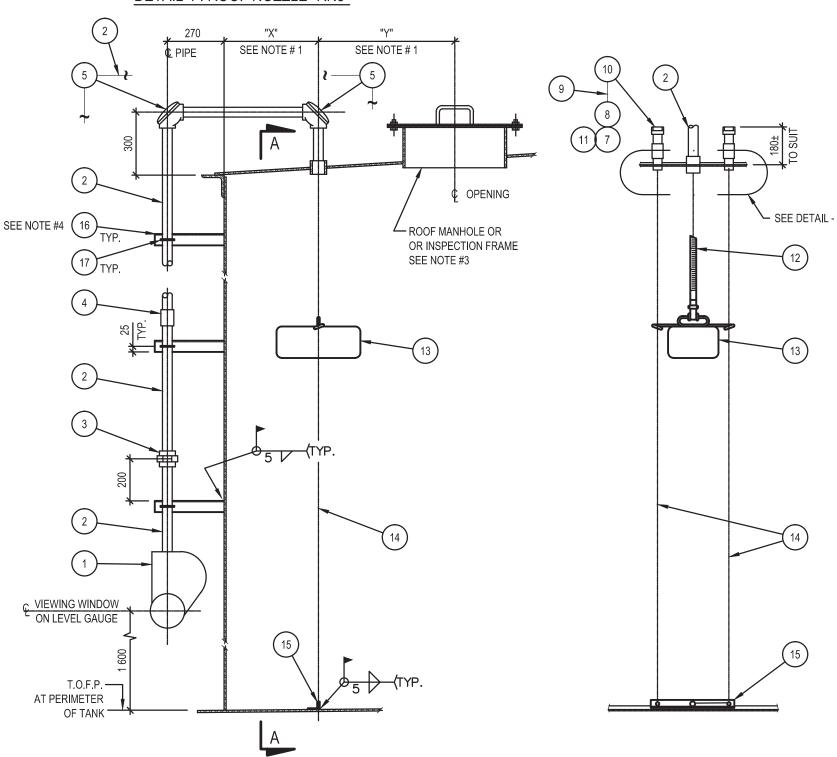
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AF	AS NOTED	
CHECKED BY	CLIENT PROJECT NO.	
WO	10-3018	

2010-1160

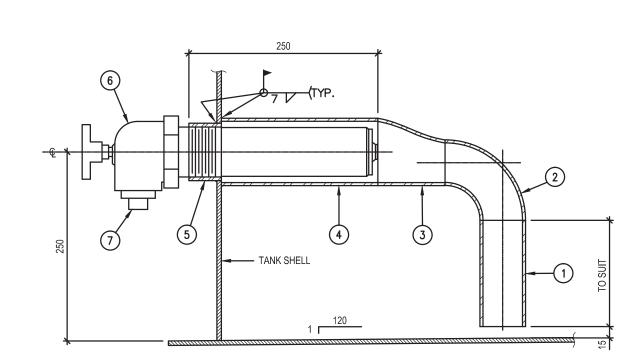


DETAIL-1 : ROOF NOZZLE "RN3"

**ELEVATION** 



1 INSTALLATION OF AUTOMATIC TANK LEVEL GAUGE M13 NTS



NOTES:

1- FOR LOCATION OF "SN3" SEE DWG. M1 - M3.2- FOR MATERIAL SEE SPECIFICATIONS.

	LIST OF MATERIAL			
ITEM	SIZE (S.I.)	DESCRIPTION		
1	50Ø	PIPE		
2	50Ø	ELBOW 90°, L.R.		
3	75Ø x 50Ø	ECCENTRIC REDUCER, FLAT ON BOTTOM		
4	75Ø	PIPE		
5	50Ø	HALF COUPLING, THREADED		
6	50Ø	WATER DRAIN VALVE (LOCKABLE) S&J 96181		
7	38Ø	PLUG, THREADED, SQUARE HEAD		

WATER DRAIN VALVE CONNECTION
M13 NTS

	LIST OF MATERI	A L
No.	DESCRIPTION	SIZE OR REMARKS
1	AUTOMATIC LEVEL GAUGE HEAD	SEE NOTE #2
2	PIPE, GALVANIZED	38Ø
3	UNION, MALLEABLE IRON, 300#, GALVANIZED	7
4	COUPLING, MALLEABLE IRON, 150#, GALVANIZED	38Ø
5	90° PULLEY ASSEMBLY	SEE NOTE #2
6	COUPLING, THREADED	38Ø
7	PIPE NIPPLE, THREADED ONE END	32Ø
8	COUPLING, THREADED	7
9	PIPE	7
10	CAP, MALLEABLE IRON, THREADED, 150#	7
(1)	GUIDE WIRE SPRING ASSEMBLY	SEE NOTE #2
12	READING TAPE	7
13)	FLOAT	7
14)	GUIDE WIRES	7
15	ANCHOR BAR	7
16)	PIPE BRACKET "SB1"	SEE NOTE #4
17	STANDARD "U" BOLT, GALVANIZED STEEL, 10Ø ROD	38Ø
		-

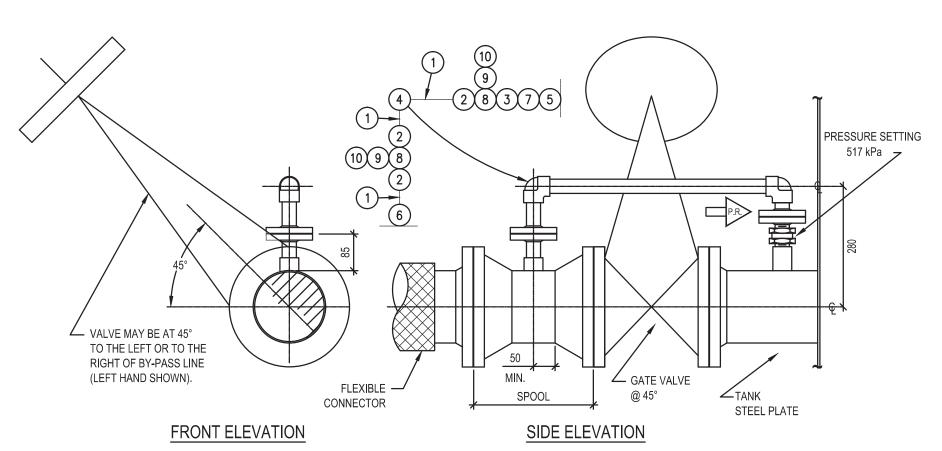
### NOTES:

- 1- FOR DIMENSIONS "X" AND "Y" REFER TO DWG. M1 M3.
- 2- DIMENSIONS SHOWN REFER TO SHAND & JURS
  TYPE AUTOMATIC LEVEL GAUGE. DIMENSIONS
  MAY VARY FOR OTHER MAKES OF LEVEL GAUGE.
  REFER TO SPECIFICATIONS AND MANUFACTURER'S
  DATA FOR ACTUAL DIMENSIONS.
- 3- REFER TO PARTICULAR PROJECT DRAWINGS FOR ACTUAL ROOF OPENING REQUIRED.
- 4- FOR NUMBER AND LOCATION OF SHELL
- BRACKETS "SB1" REFER TO DWG. M1 & M2.
- 5- FOR MATERIALS REFER TO SPECIFICATIONS.

### LEGEND:

SECTION A-A

T.O.F.P. = TOP OF FLOOR PLATE

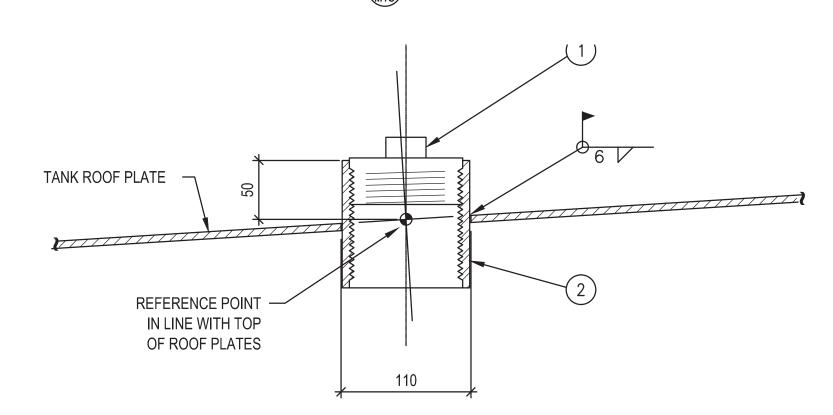


	LIST OF MATERIAL			
ITEM	SIZE (S.I.)	DESCRIPTION		
1	25Ø	PIPE		
2		SLIP-ON FLANGE		
3		THREADED FLANGE		
4		ELBOW 90°, SOCKET WELD		
(5)		HALF COUPLING, SCREWED		
6		HALF COUPLING, SOCKET WELD		
7		THERMAL PRESSURE RELIEF VALVE (SEE NOTES #1, 2, & 3)		
8		GASKET		
9	12Ø x 65 LG.	STUD BOLT		
10	12Ø	NUT		

## NOTES:

- 1- IN-LINE TYPE PRESSURE RELIEF VALVE WITH ENGRAVED ARROW ON ONE SIDE OF VALVE (TO
- INDICATE DIRECTION IN WHICH PRESSURE IS TO BE RELIEVED)
- 2- ENSURE THAT NAMEPLATE IS NOT DAMAGED OR PAINTED OVER.
- 3- BASIC ARRANGEMENT SHOWN IS APPLICABLE TO PRODUCT PIPES 100 mm AND 150 mm DIAMETER.
- 4- HOLES AT FLANGES TO BE STRADDLED ABOUT HORIZONTAL & VERTICAL AXIS OF PIPE.
   5- FOR MORE DESCRIPTION OF ITEMS REFER TO SPECIFICATIONS.





# SECTION THROUGH "RN5"

	LIST OF MATERIAL			
ITEM	SIZE (S.I.)	DESCRIPTION		
1	75Ø	PLUG, THREADED, SQUARE HEAD		
2		COUPLING, THREADED		

### NOTEO.

- 1- FOR LOCATION OF "RN5" ON TANK ROOF REFER TO DWG. M1 M3 AND PARTICULAR PROJECT DRAWINGS.
- 2- FOR MATERIAL AND NOTES REFER TO SPECIFICATIONS.

ROOF NOZZLE FOR FUTURE LEVEL GAUGE
M13 NTS



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DRAWING 1: STD DWG NT-P13

DRAWING 2: STD DWG NT-P12

DRAWING 3: STD DWG NT-P08

DRAWING 5: STD DWG NT-P15

03 RECORD DRAWINGS

 03
 RECORD DRAWINGS
 2013/11/01

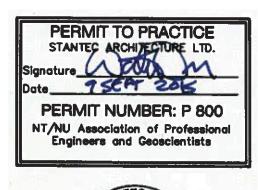
 02
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POJECT TITLE

# FUEL STORAGE FACILITY UPGRADES

CHESTERFIELD INLET, NU

MISCELLANEOUS DETAILS

DRAWN BY		SCALE
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	WO	10-3018

2010-1160 DRAWING NO.

M13

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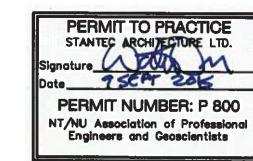


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# FUEL STORAGE FACILITY **UPGRADES**

CHESTERFIELD INLET, NU

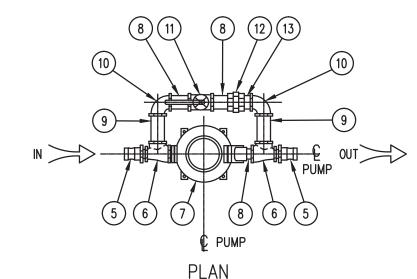
# DRAIN DYKE DETAILS

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2010-1160

M14

— 19 TH'K. CARRYING BOARD PLYWOOD EXTERIOR GRADE — SLOT 35 x 150 (35¢ HEADS) ∠4 HOLES, SPACED TO SUIT PUMP LEGS (PUMP TO BE BOLTED TO CARRYING BOARD WITH 4-80 CARRIAGE BOLTS & NUTS & WASHERS) <u>DETAIL - 2 PUMP CARRYING BOARD</u>



LIST OF MATERIAL FOR DIKE DRAIN PUMP ASSEMBLY \*

SUCTION STUB STRAINER.

(2) 500 x 100 LG. | WELDED STEEL PIPE NIPPLE, THREADED ENDS, GALV'D.

ELBOW 90°, M. I. GALV'D. THR'D.

OPW KAMLOK #633-F ADAPTER.

(8) 500 x 100 Lg. WELDED STEEL PIPE NIPPLE, THREADED ENDS, GALV'D.

(9) | 500 x 200 LG. | WELDED STEEL PIPE NIPPLE, THREADED ENDS, GALV'D.

ELBOW 90°, M. I. THR'D. GALV'D.

PROTEK DIAPHRAGM PUMP.

500 x TO SUIT PIPE, ERW, GALV'D. THR'D.

(6) | 50% x 50% x 50% | THREADED TEE, WITH ONE END OF RUN REDUCED, M. I. GALV'D.

BALL VALVE, BRONZE, TH'D ENDS, FEMALE NPT

DISCHARGE HOSE ASSEMBLY (SEE NOTE #2 ) & SPEC'S.

1. UNLESS OTHERWISE INDICATED ONE DIKE DRAIN PUMP

UNION, M. I., CLASS 300 THR'D. GALV'D.

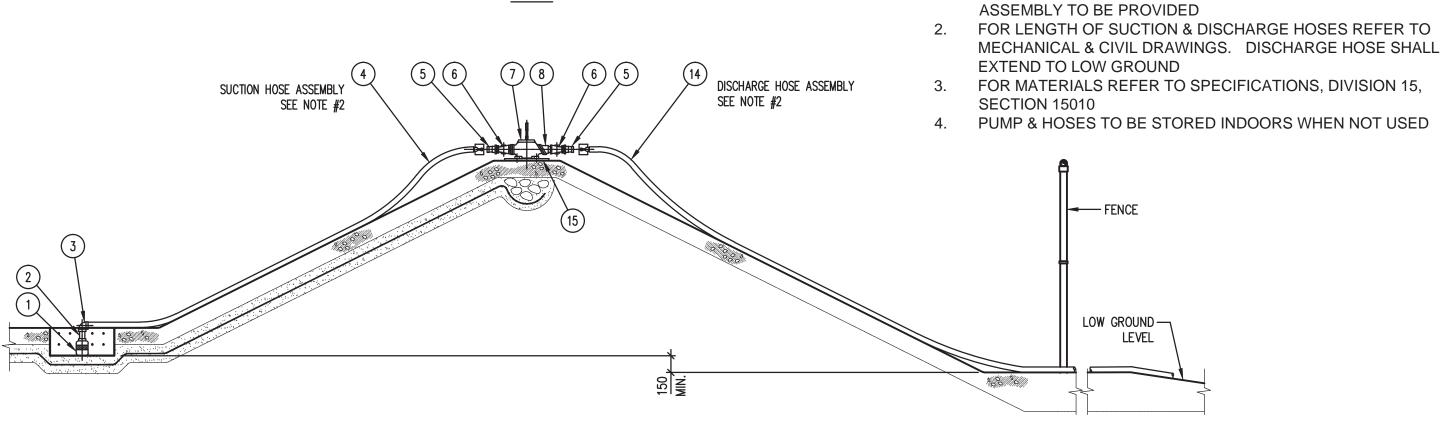
PUMP CARRYING BOARD, SEE DETAIL-2

\* FOR DESCRIPTION OF ITEMS SEE SPEC'S.

DESCRIPTION

SUCTION HOSE ASSEMBLY (SEE NOTE #2 ) & SPEC'S.

ITEM | SIZE (S.I.)



<u>DETAIL - 1 DIKE DRAIN PUMP ASSEMBLY INSTALLATION</u>