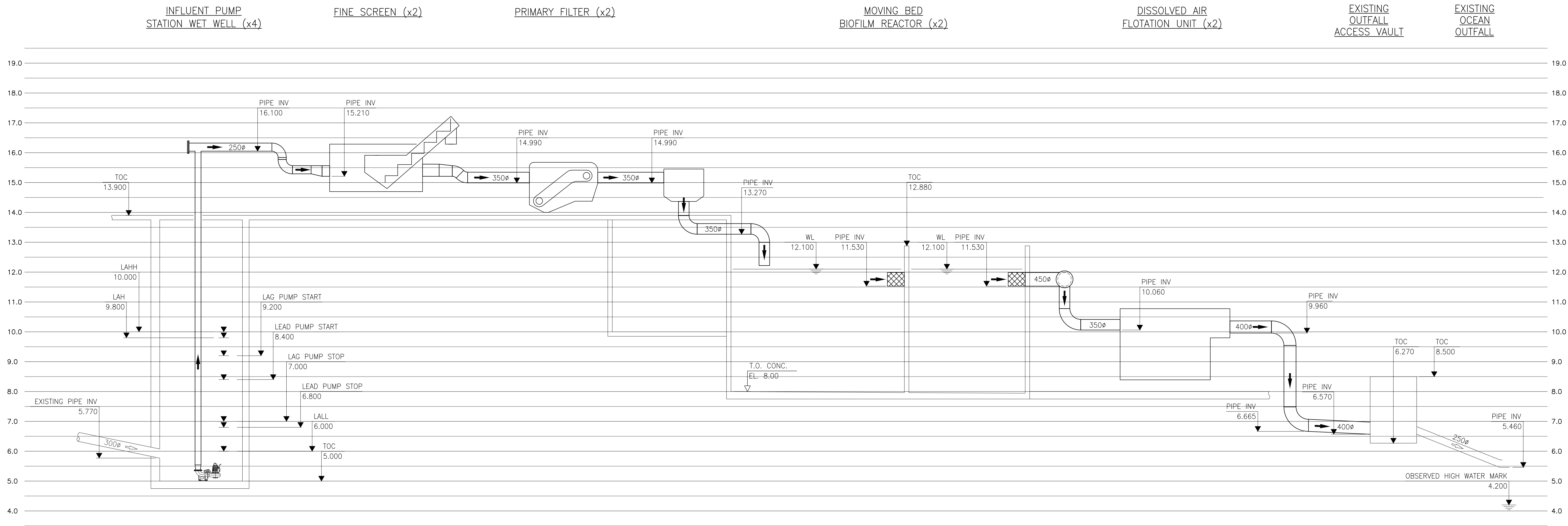


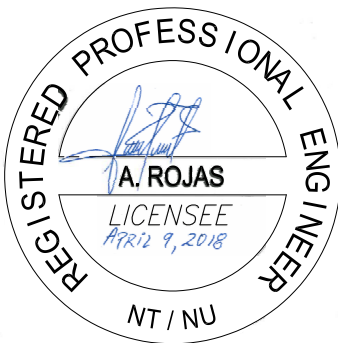
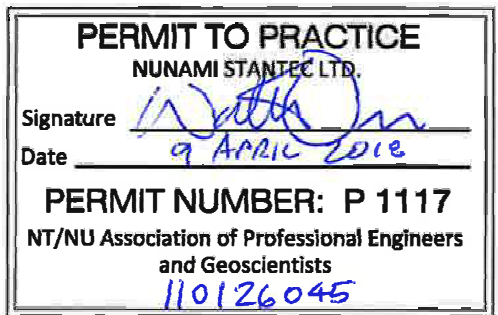


FLOW	CURRENT	YEAR 2041
ANNUAL AVERAGE FLOW L/s	38.5	50.3
MAXIMUM MONTH FLOW L/s	46.2	60.4
PEAK HOUR FLOW L/s	115.5	151.0

Revision	By	Appd.	YY.MM.DD
1 ISSUED FOR CONSTRUCTION	TR	AR	18.05.23
0 ISSUED FOR BID	TR	AR	18.04.09
Issued	By	Appd.	YY.MM.DD

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IQALUIT WASTEWATER TREATMENT PLANT
UPGRADE
City of Iqaluit, Nunavut

File Name: P001	TRchd Dwn.	Chkd.	Dign.	2017.10.03 YY.MM.DD
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Title

PROCESS
HYDRAULIC PROFILE

Project No.
110126045

Scale
NTS

Drawing No.

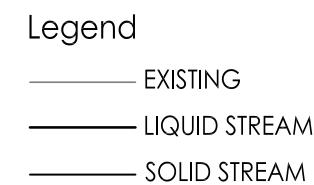
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Revision

P001

of

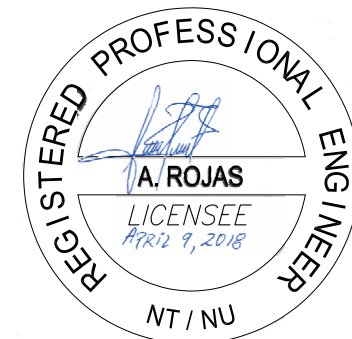
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Revision	By	Appd.	YY.MM.DD
1 ISSUED FOR CONSTRUCTION	TR	AR	18.05.23
0 ISSUED FOR BID	TR	AR	18.04.09
Issued	By	Appd.	YY.MM.DD

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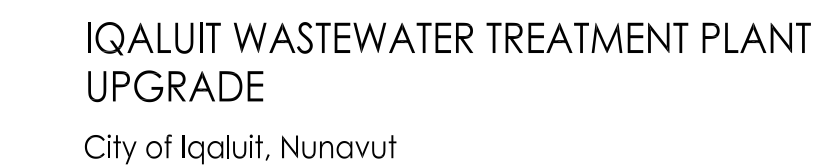


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TRohl	—	—	2017.10.03
Dwn.	Chkd.	Dsgn.	YY.MM.DD

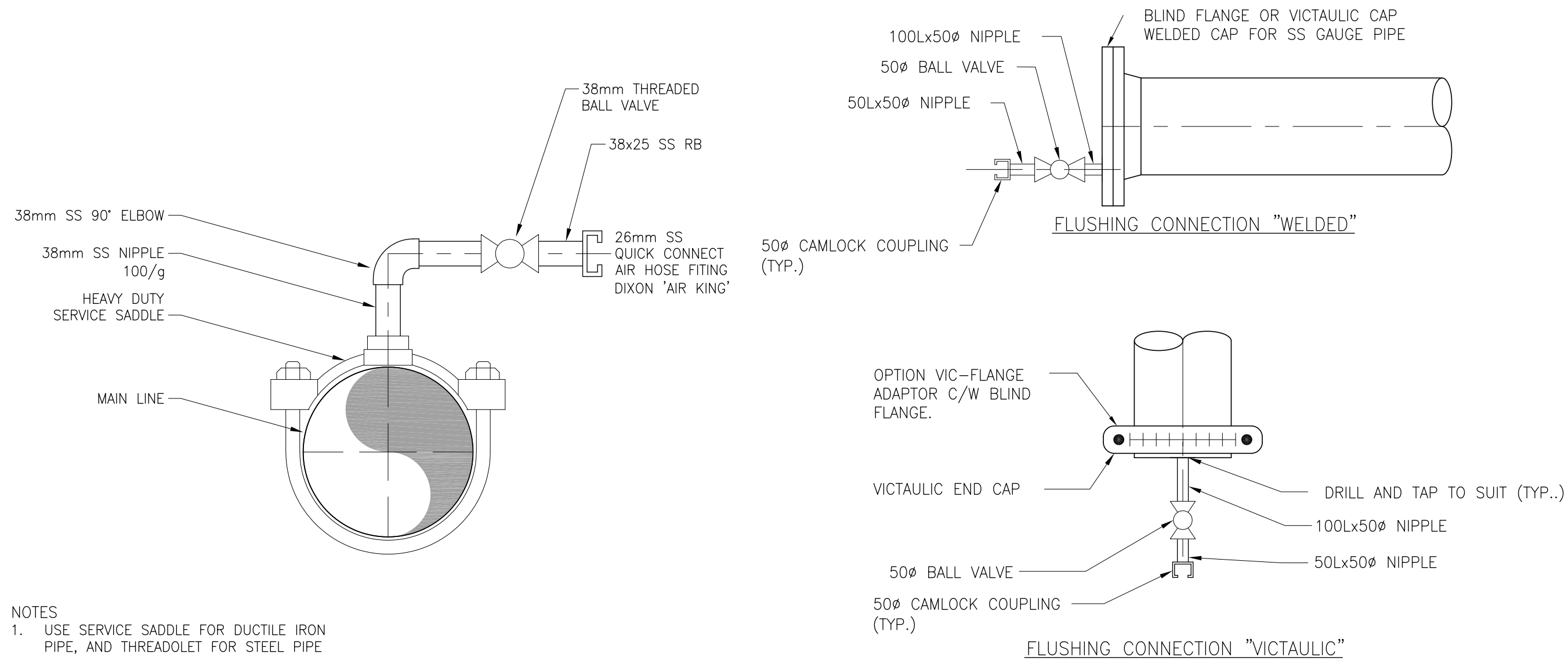
Title

PROCESS FLOW DIAGRAM

Project No. 110126045	Scale NTS	
Drawing No.	Sheet	Revision

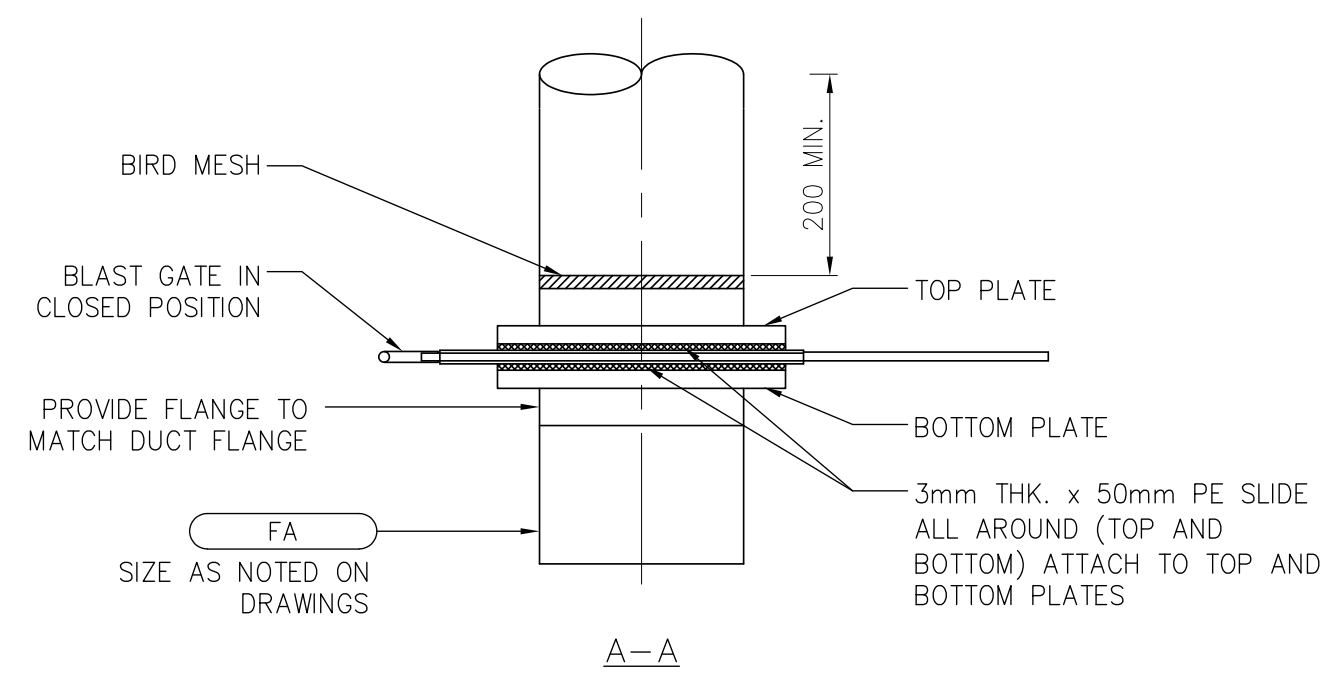
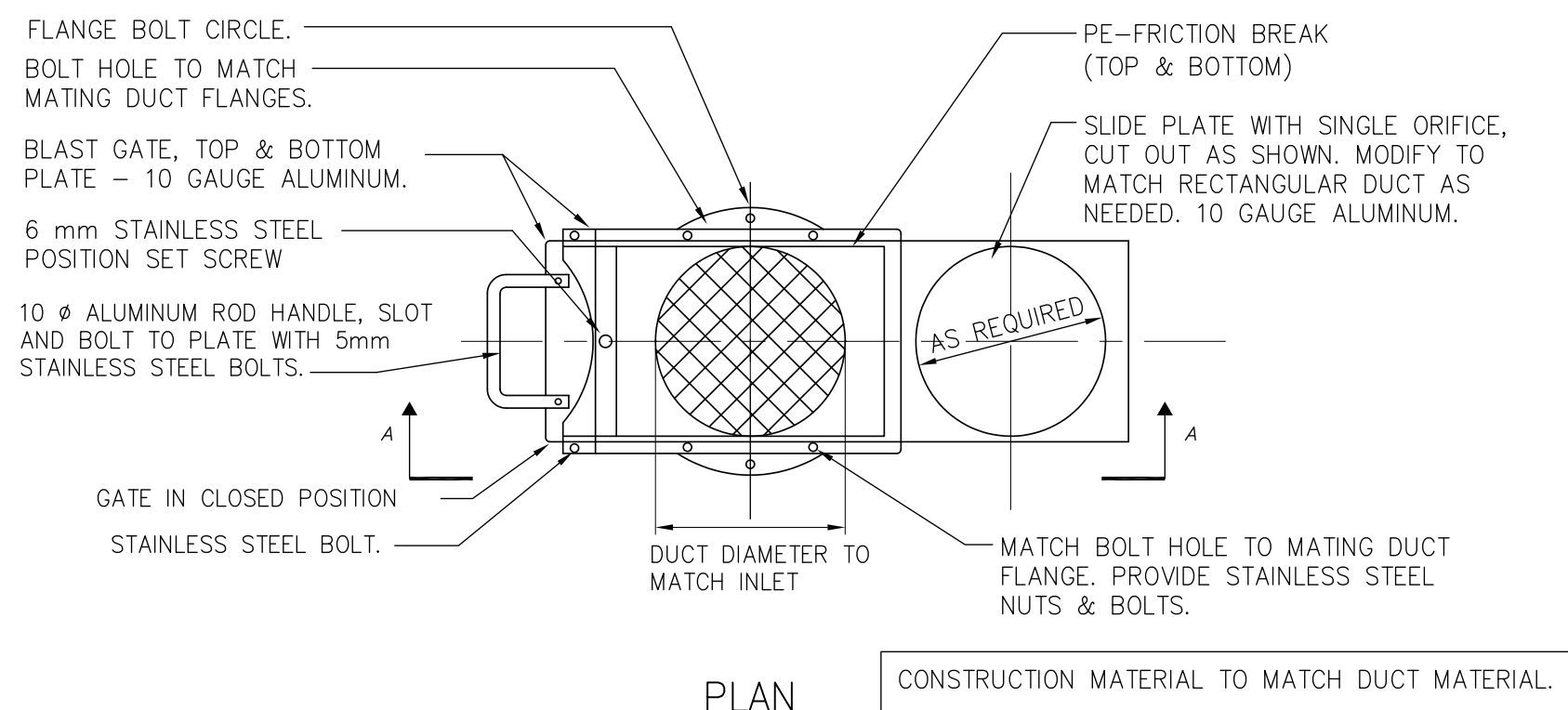
P002 of 0

0

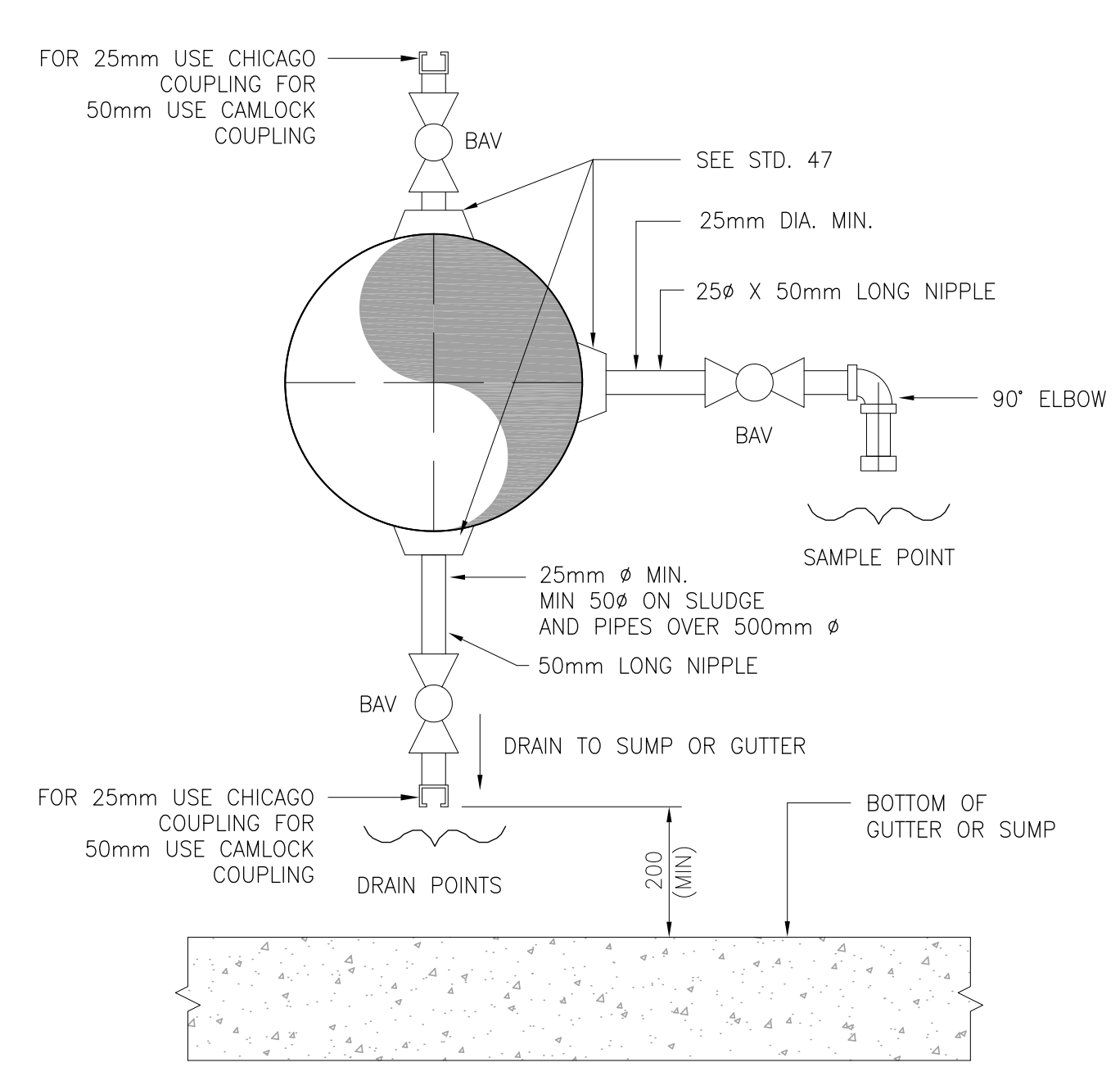


NOTES
1. USE SERVICE SADDLE FOR DUCTILE IRON PIPE, AND THREADOLET FOR STEEL PIPE

FLUSHING CONNECTION



BLAST GATE DETAIL



NOTES:
1. ALL DRAIN & SAMPLE POINT FITTINGS SHALL BE GALV'D STEEL EXCEPT ON SS PIPING, FITTINGS SHALL BE SS
2. LOCATE DRAINS AT LOW POINTS OF ALL LINES AND AS NOTED.
3. LOCATE VENTS AT ALL HIGH POINTS AND AS NOTED.
4. LOCATE EACH VALVE FOR EASE OF OPERATION.

SAMPLE / DRAIN / VENT - POINTS

Revision	By	Appd.	YY.MM.DD
1	ISSUED FOR CONSTRUCTION	TR	AR 18.05.23
2	ISSUED FOR ADDENDUM 01	TR	AR 18.04.09
3	Issued	By	Appd. YY.MM.DD

Consultants

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PERMIT TO PRACTICE
NUNAMI STANTEC LTD.
Signature: [Signature]
Date: 9 APRIL 2018
PERMIT NUMBER: P 1117
NT/NU Association of Professional Engineers and Geoscientists
110126045

REGISTERED PROFESSIONAL ENGINEER
A. ROJAS
LICENSEE
APRIL 9, 2018
NT / NU

NUNAMI
STANTEC LIMITED

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Iqaluit NU
www.stantec.com

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Client/Project

Iqaluit
ᐱᕐᕐᕐᕐᕐ
IQALUIT WASTEWATER TREATMENT PLANT
UPGRADE
City of Iqaluit, Nunavut

File Name: P004

TRchd
Dwn. Chkd. Dign. 2017.10.03
YY.MM.DD

Title

PROCESS
MISCELLANEOUS DETAILS

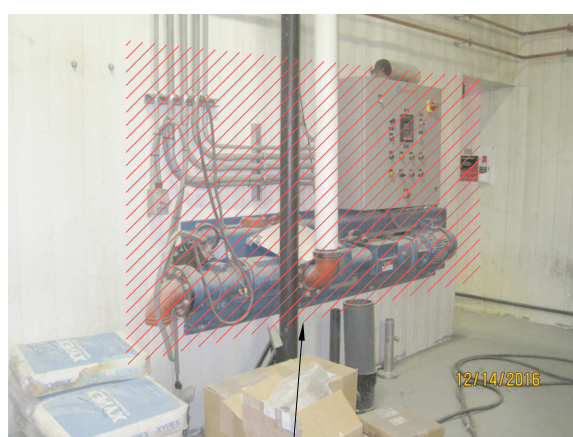
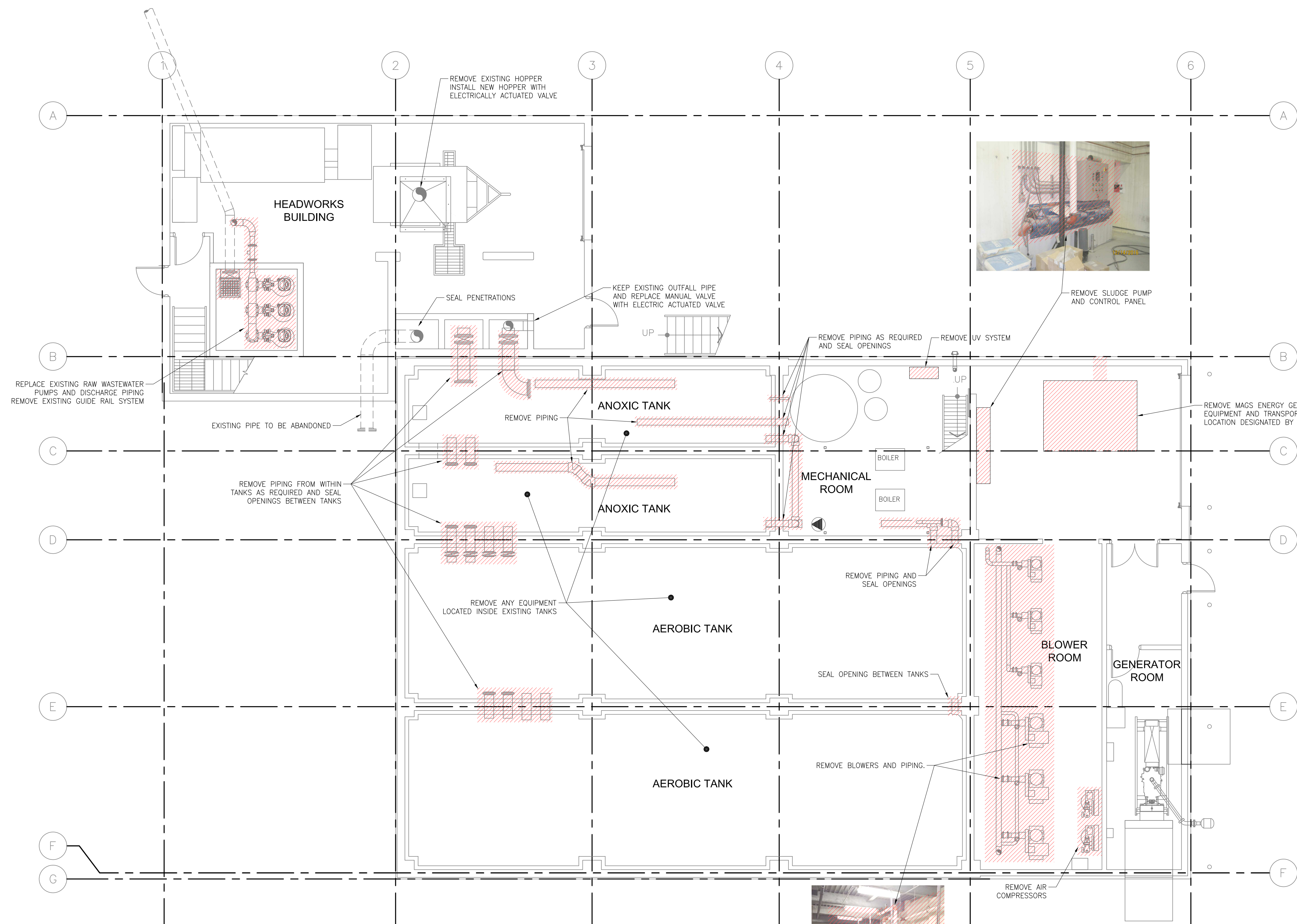
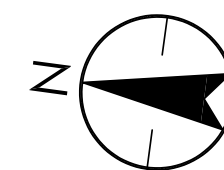
Project No. 110126045

Scale N.T.S.

Drawing No. P004

Sheet of

Revision 0



- NOTES**
- 1. REFER TO STRUCTURAL DRAWINGS FOR DETAILS ON TANK MODIFICATIONS AND SEALING PIPE PENETRATIONS.
 - 2. EQUIPMENT IS SHOWN FOR INFORMATION ONLY. CONTRACTOR IS TO REFER TO AS-BUILTS AND FIELD CONFIRM REMOVAL OF EQUIPMENT.
 - 3. REFER TO SECTION 024100 DEMOLITION FOR REQUIREMENTS FOR DEMOLITION OF EXISTING STRUCTURES, SALVAGE OF MATERIALS AND DISPOSAL OF DEBRIS.
 - 4. REFER TO DRAWING C201 CONSTRUCTION STAGING FOR DETAILS ON PROPOSED CONSTRUCTION STAGING.

VA1107\active\110126045\drawings\04-process\current\PT01.dwg
2018/05/22 8:35 AM By: Robt. Thomas

Revision	By	Appd.	YY.MM.DD
1	ISSUED FOR CONSTRUCTION	TR	AR 18.05.23
0	ISSUED FOR BID	TR	AR 18.04.09
Issued		By	Appd. YY.MM.DD

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PERMIT TO PRACTICE
NUNAMI STANTEC LTD.
Signature: *[Signature]*
Date: *9 April 2018*
PERMIT NUMBER: P 1117
NT/NU Association of Professional Engineers and Geoscientists
110126045

REGISTERED PROFESSIONAL ENGINEER
[Signature]
A. ROJAS
LICENSEE
Since 1-2-2018
NT / NU

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Client/Project

Iqaluit
ᐱᑭᓱᐱᐢ
IQUALUIT WASTEWATER TREATMENT PLANT UPGRADE
City of Iqaluit, Nunavut

File Name: P101

TRchd
Dwn.

Chkd.
Dign.

2017.10.03
YY.MM.DD

Title

**PROCESS
DEMOLITION - LOWER PLAN**

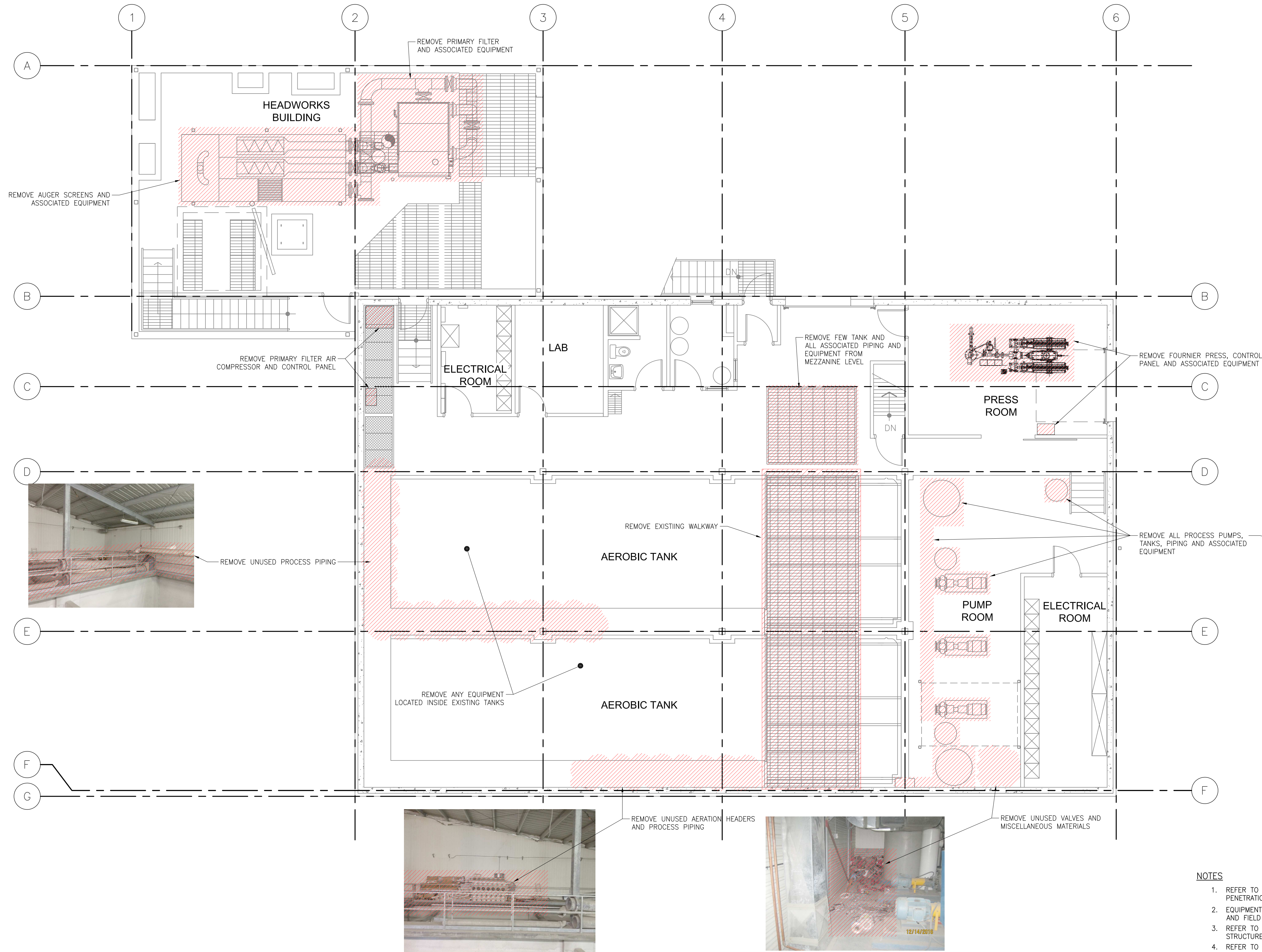
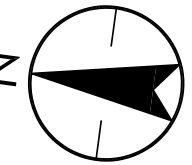
Project No.
110126045

Drawing No.
P101

Scale
1:75

Sheet
of

Revision
0

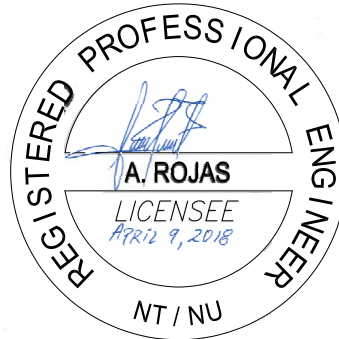
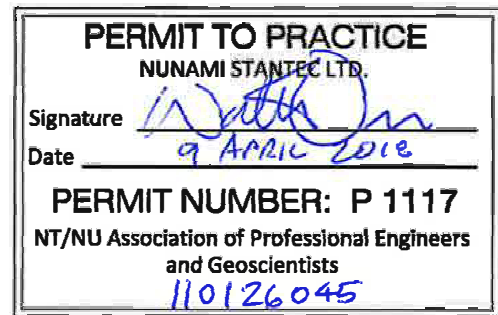


- NOTES**
1. REFER TO STRUCTURAL DRAWINGS FOR DETAILS ON TANK MODIFICATIONS AND SEALING PIPE PENETRATIONS.
 2. EQUIPMENT IS SHOWN FOR INFORMATION ONLY. CONTRACTOR IS TO REFER TO AS-BUILTS AND FIELD CONFIRM REMOVAL OF EQUIPMENT.
 3. REFER TO SECTION 024100 DEMOLITION FOR REQUIREMENTS FOR DEMOLITION OF EXISTING STRUCTURES, SALVAGE OF MATERIALS AND DISPOSAL OF DEBRIS.
 4. REFER TO DRAWING G201 CONSTRUCTION STAGING FOR DETAILS ON PROPOSED CONSTRUCTION STAGING.

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1 ISSUED FOR CONSTRUCTION	TR	AR	18.05.23
0 ISSUED FOR BID	TR	AR	18.04.09
Issued	By	Appd.	YY.MM.DD

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IQALUIT WASTEWATER TREATMENT PLANT
UPGRADE
City of Iqaluit, Nunavut

File Name: P102
T.Rohr Dwn. Chkd. Dign. 2017.10.03 YY.MM.DD

Title

PROCESS
DEMOLITION - UPPER PLAN

Project No.
110126045

Scale 0 750 2250 3750mm
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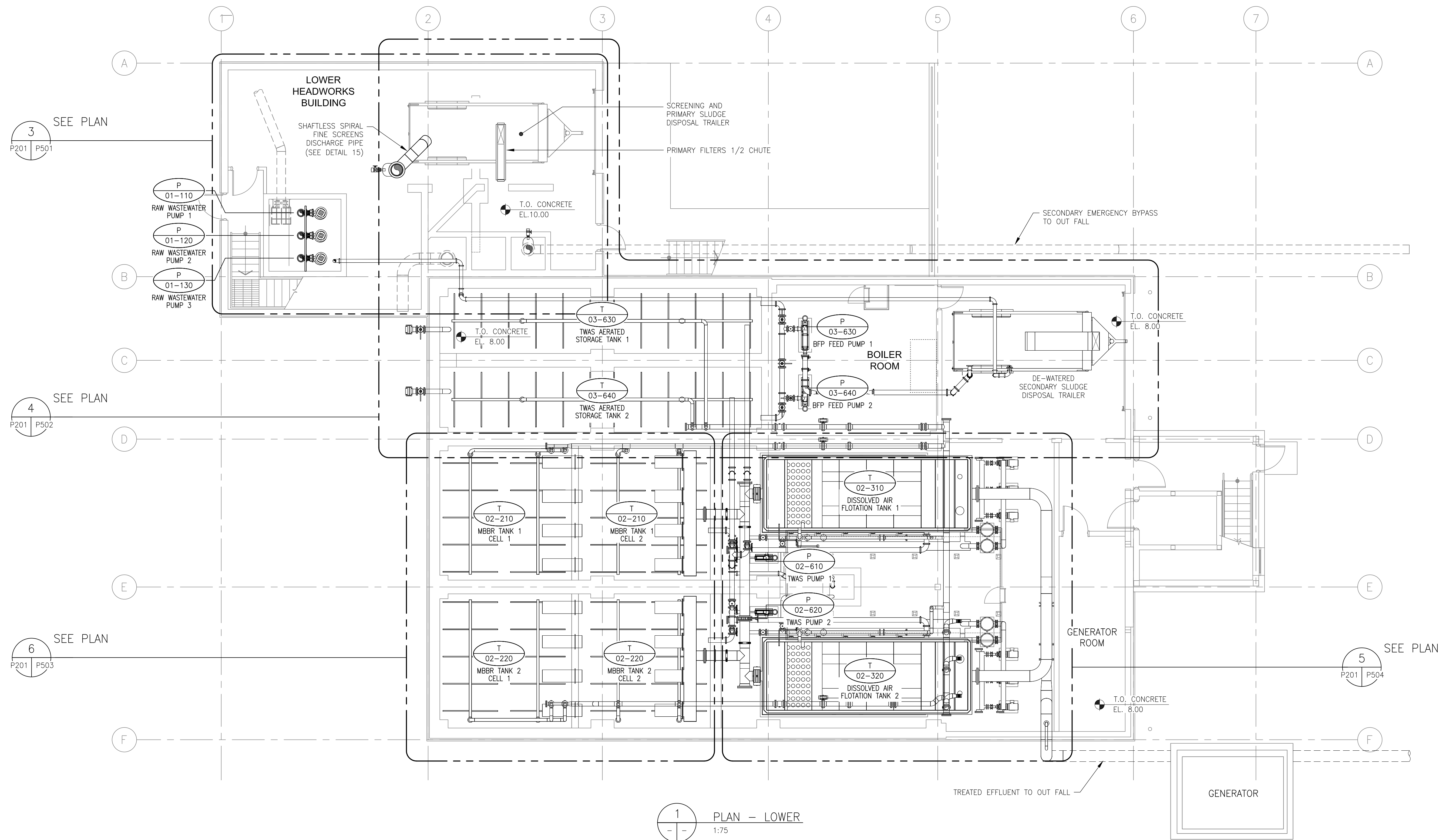
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Sheet of Revision

P102

of

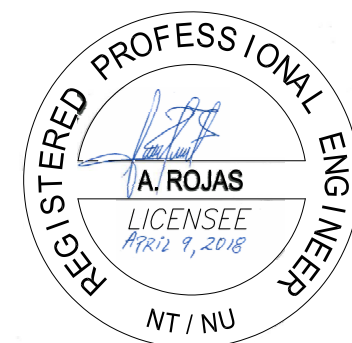
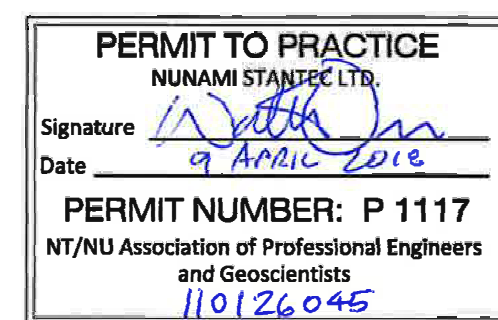
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PLAN - LOWER
1:75

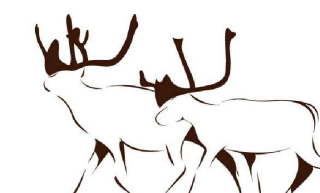
Revision	By	Appd.	YY.MM.DD
1 ISSUED FOR CONSTRUCTION	TR	AR	18.05.23
0 ISSUED FOR BID	TR	AR	18.04.09
Issued	By	Appd.	YY.MM.DD

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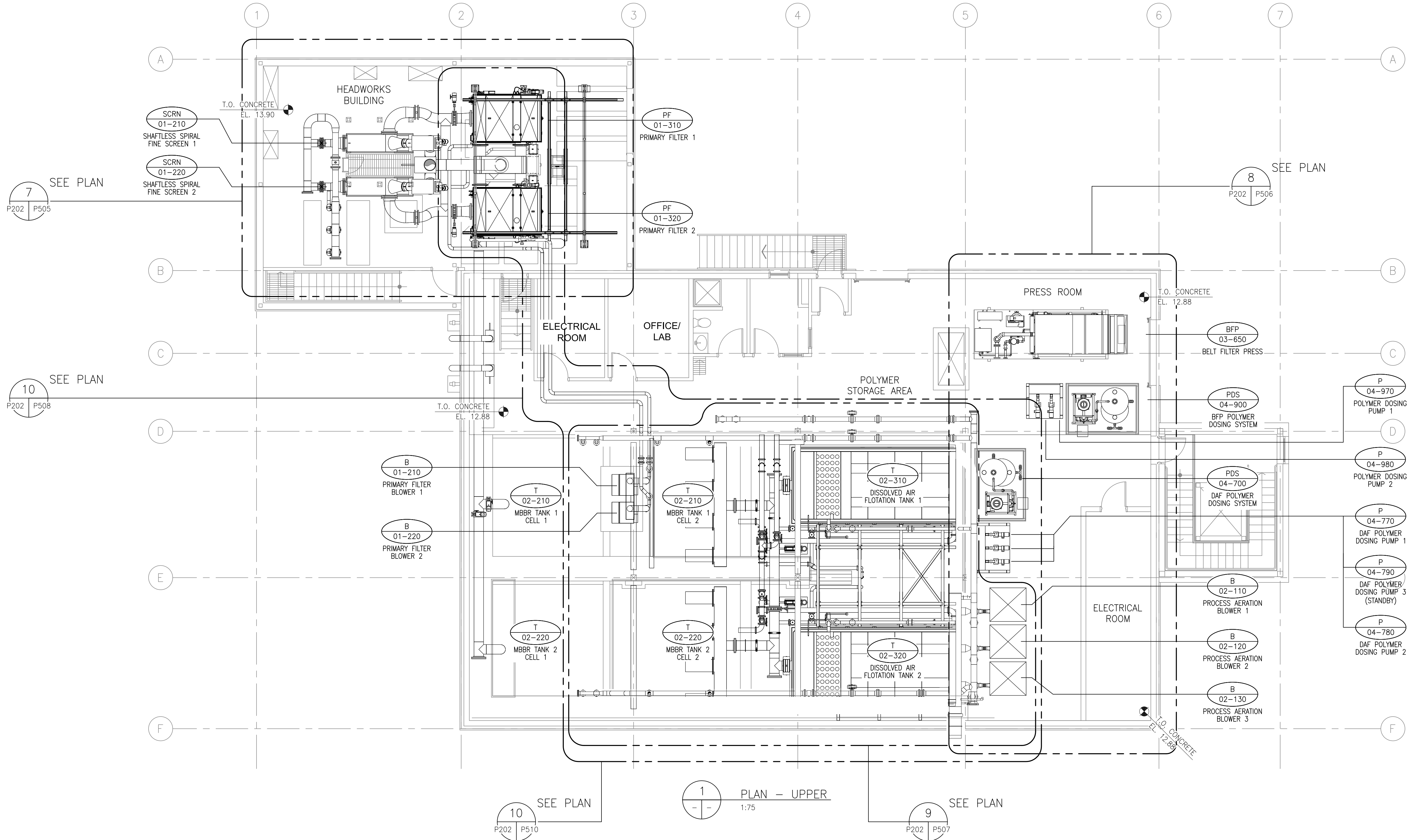
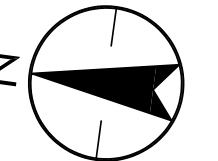
TRohl	—	—	2017.10.03
Dwn.	Chkd.	Dsgn.	YY.MM.DD

Drawing No.

P201

Sheet Revision

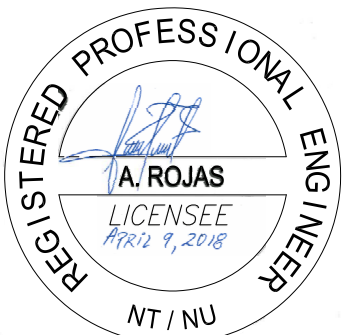
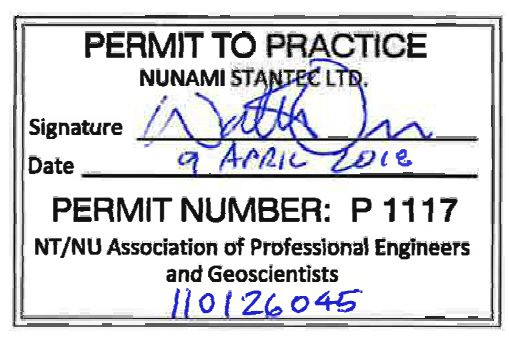
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Revision	By	Appd.	YY.MM.DD
1	ISSUED FOR CONSTRUCTION	TR	AR 18.05.23
0	ISSUED FOR BID	TR	AR 18.04.09
Issued		By	Appd. YY.MM.DD

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Iqaluit WASTEWATER TREATMENT PLANT
UPGRADE
City of Iqaluit, Nunavut

File Name: P202

TRcht
Dwn.

Chkd.

Dign.

2017.10.03
YY.MM.DD

Title

PROCESS
PLAN - UPPER

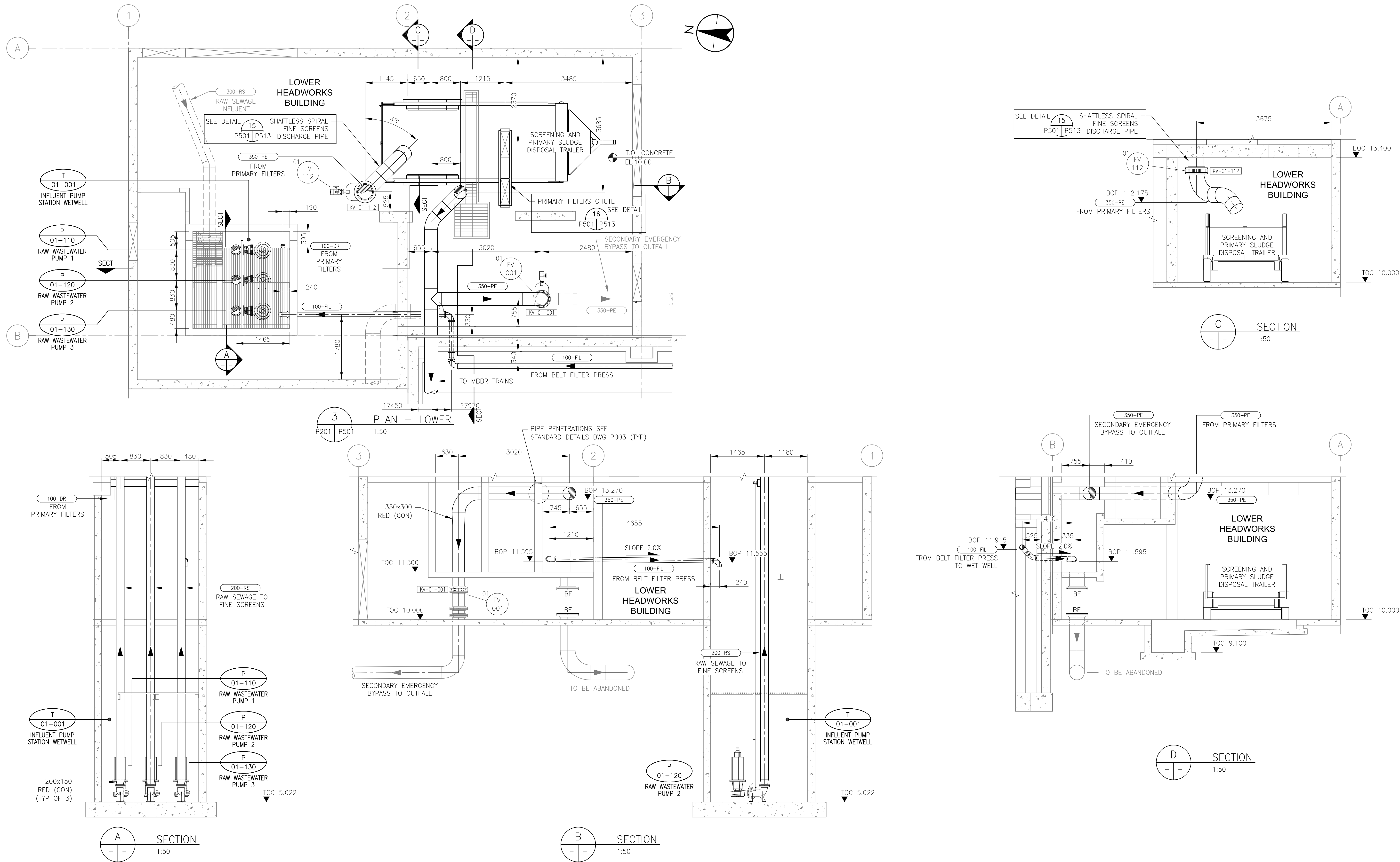
Project No.
110126045

Scale
1:75

Drawing No.
P202

Sheet
of

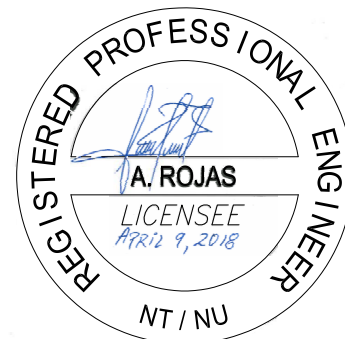
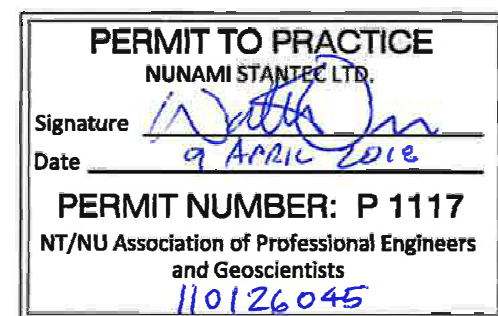
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Revision	By	Appd.	YY.MM.DD
1	ISSUED FOR CONSTRUCTION	TR	AR 18.05.23
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Issued		By	Appd. YY.MM.DD

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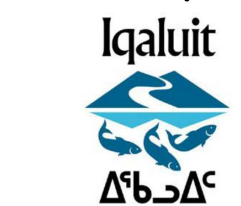


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IQALUIT WASTEWATER TREATMENT PLANT
UPGRADE
City of Iqaluit, Nunavut

File Name: P501

TRohd
Dwn. Chkd. Dign. 2017.10.03
YY.MM.DD

Title

PROCESS
LOWER - HEADWORKS BUILDING
DETAILS

Project No.
110126045

Drawing No.

P501

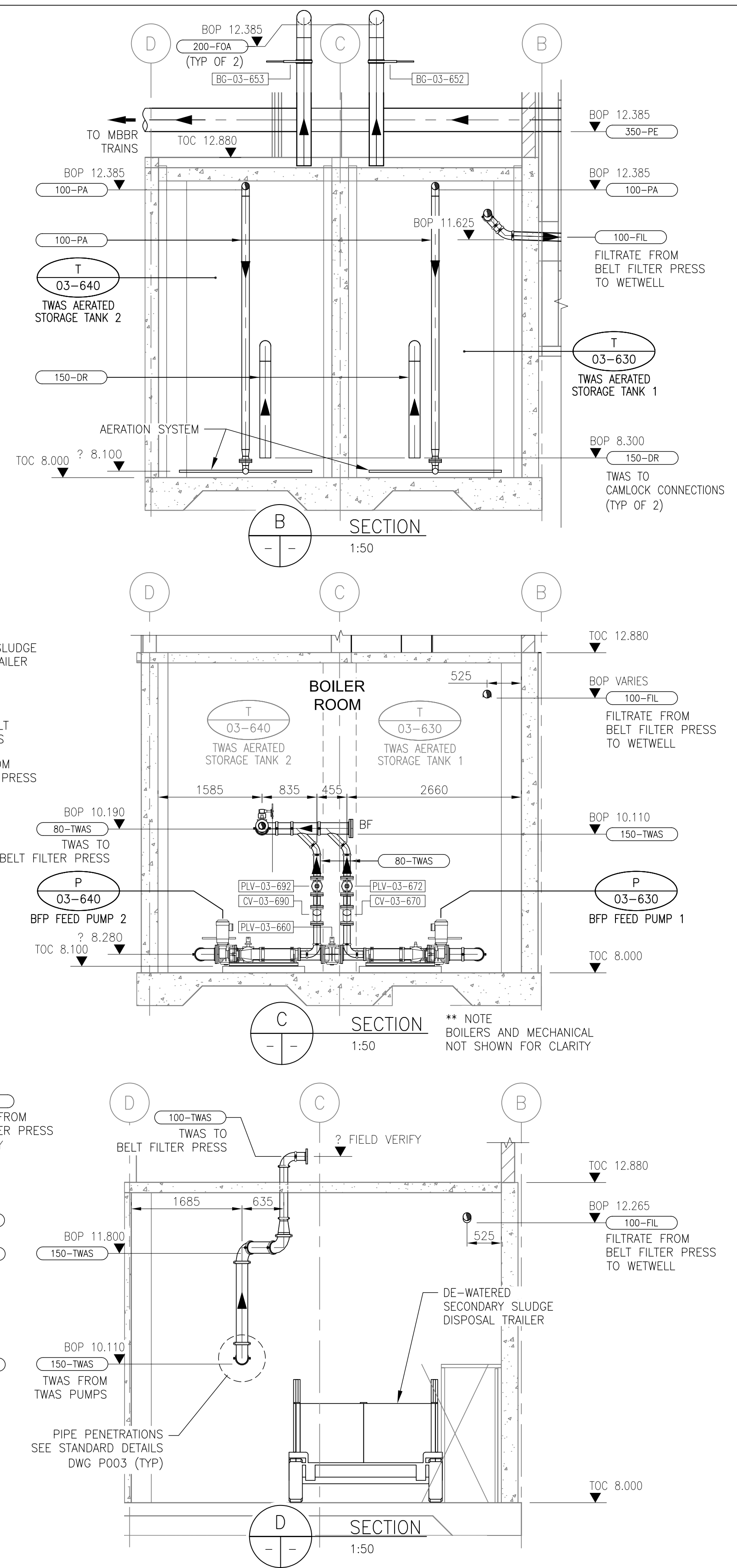
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of

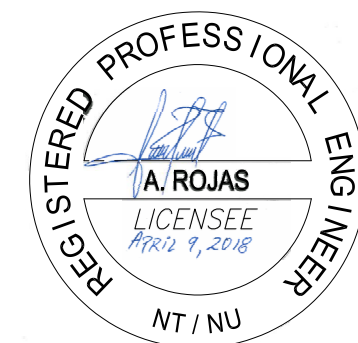
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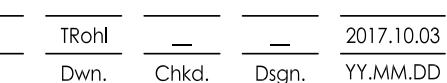


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1 ISSUED FOR CONSTRUCTION	TR	AR	18.05.23
0 ISSUED FOR BID	TR	AR	18.04.09
Issued	By	Appd.	YY.MM.DD

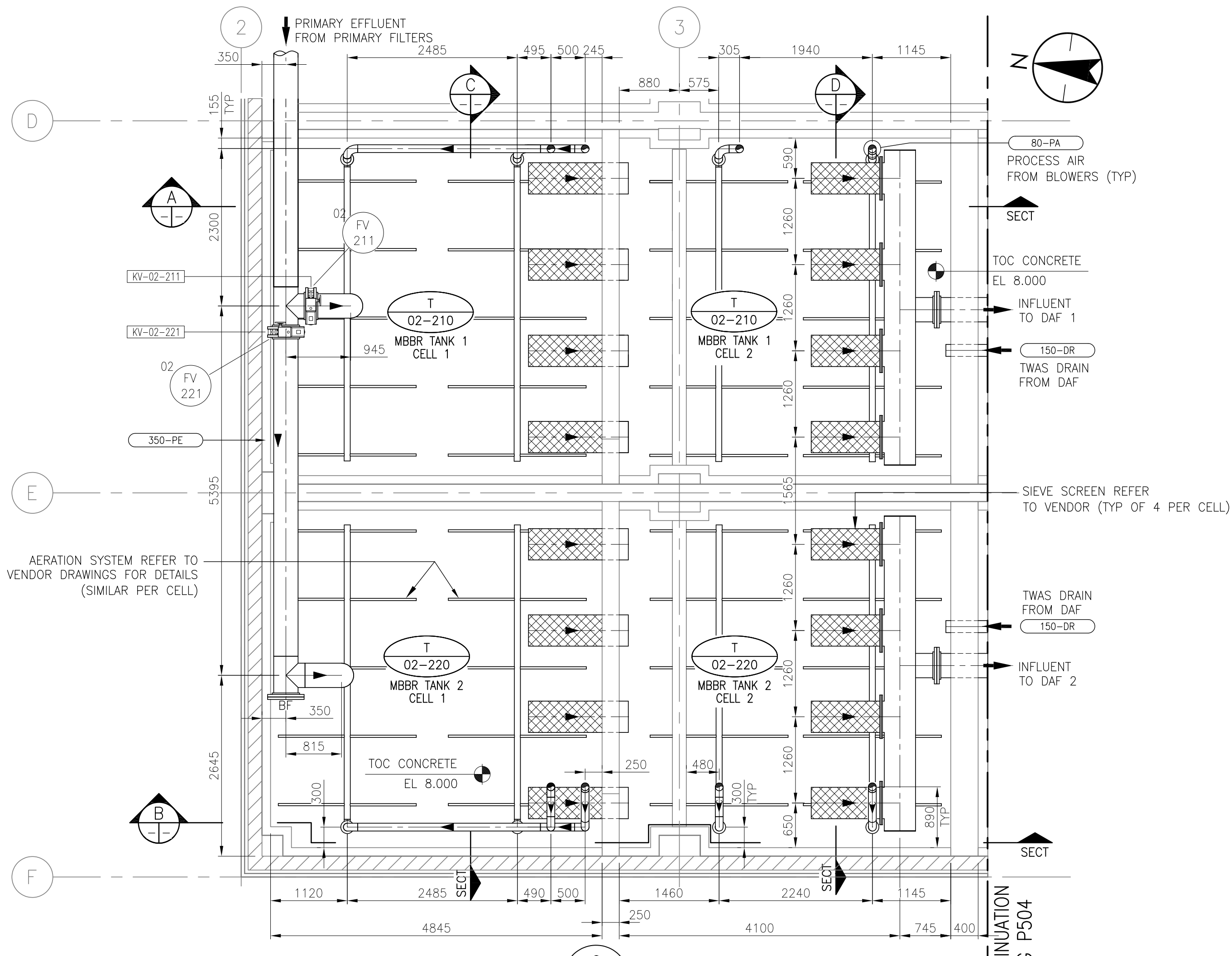
Permit-Seal



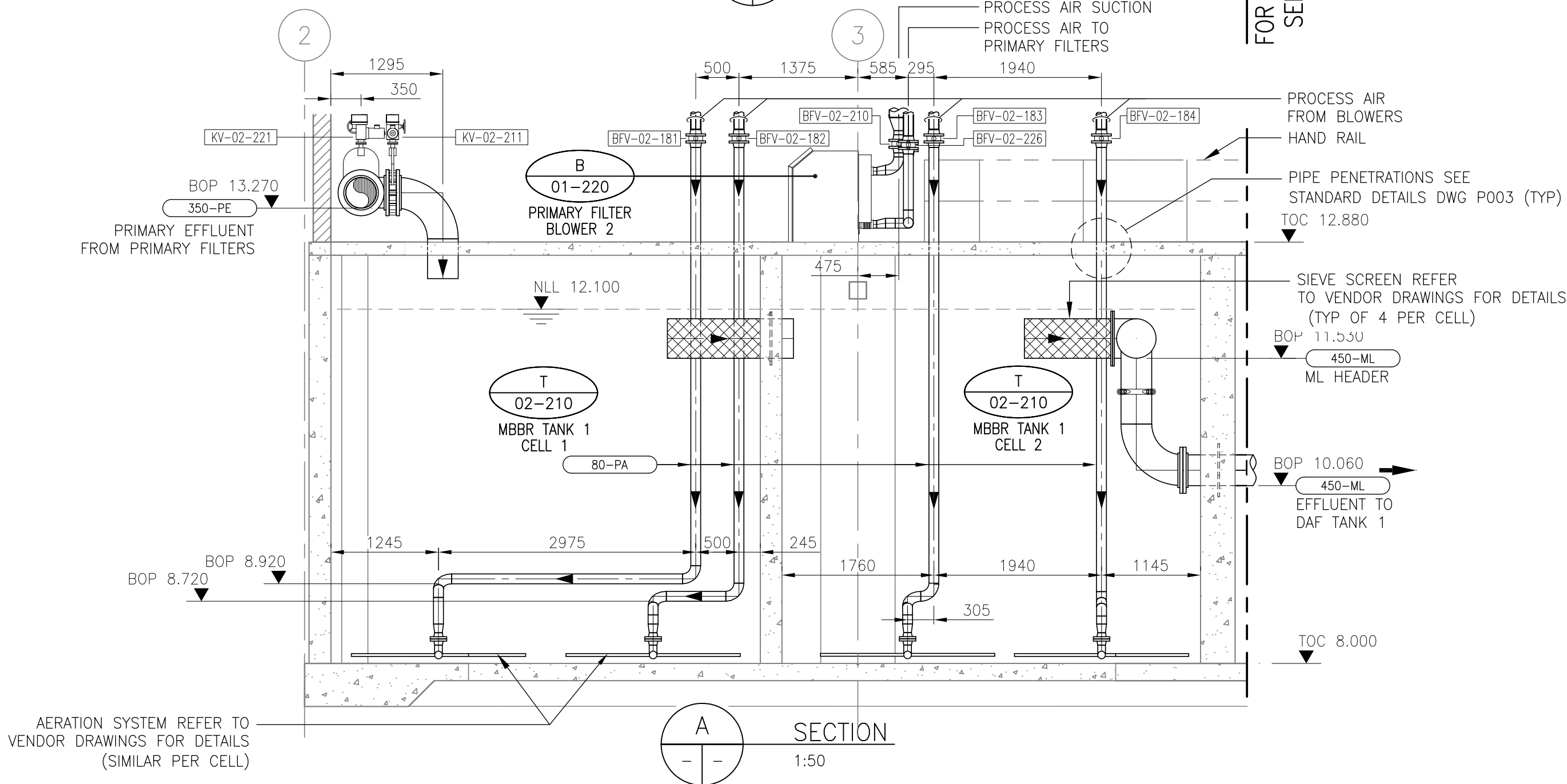
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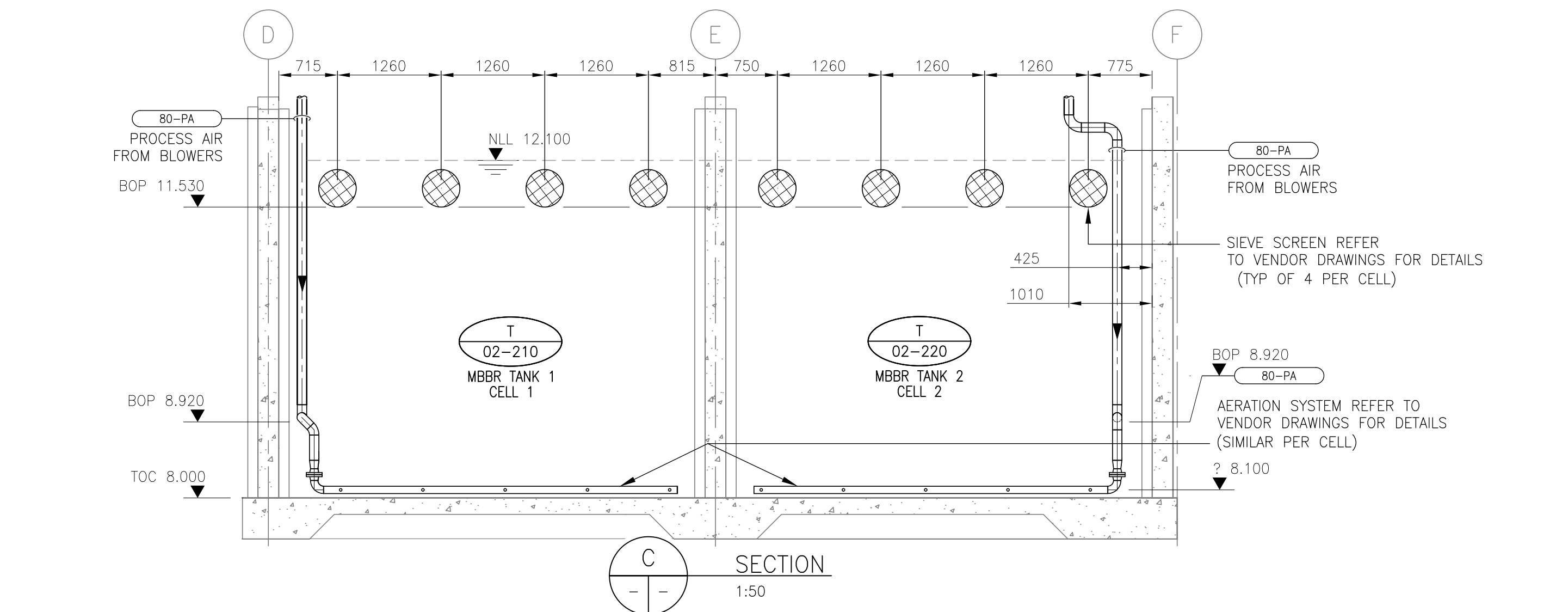
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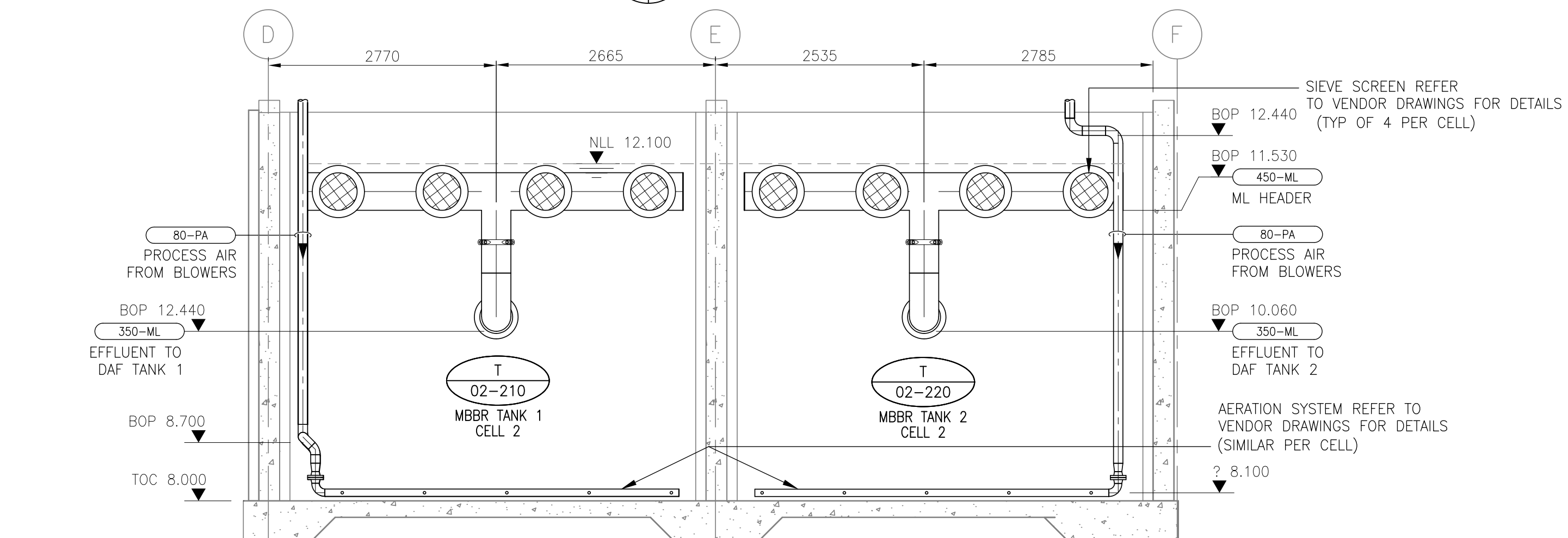
6 PLAN
P201 P503 1:50



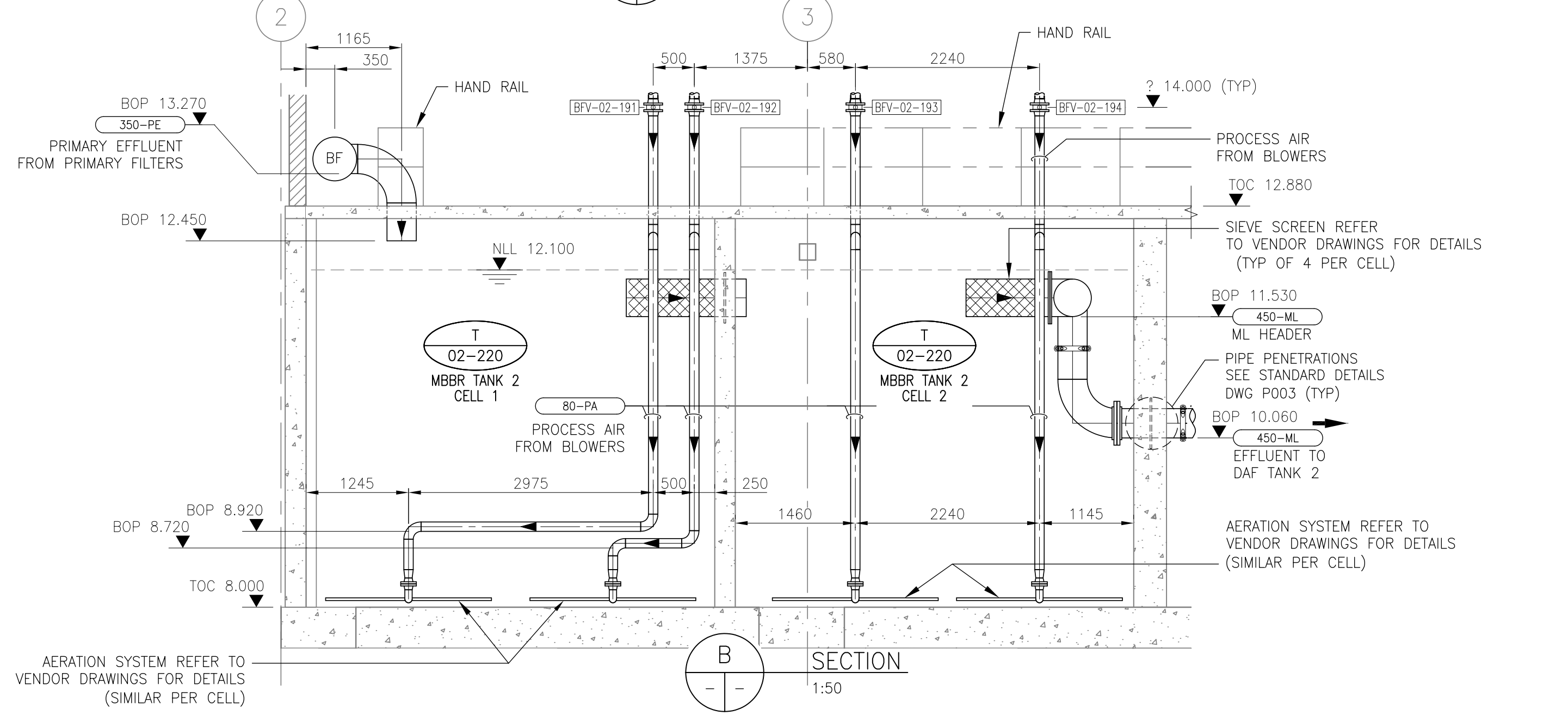
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C SECTION
1:50



D SECTION
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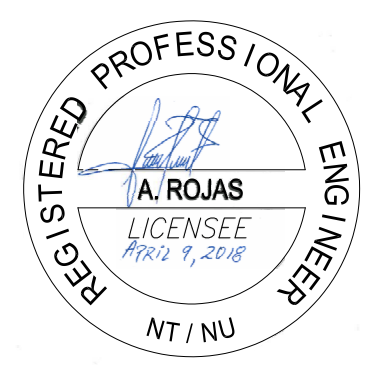
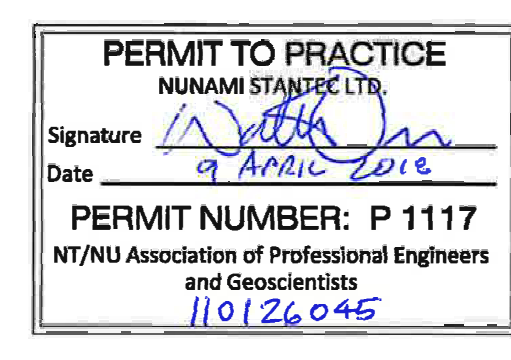


B SECTION
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Revision	By	Appd.	YY.MM.DD
1	ISSUED FOR CONSTRUCTION	TR	AR 18.05.23
0	ISSUED FOR BID	TR	AR 18.04.09
Issued		By	Appd. YY.MM.DD

Consultants

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Iqaluit NU
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Client/Project
Iqaluit
IQUALUIT WASTEWATER TREATMENT PLANT
UPGRADE
City of Iqaluit, Nunavut

File Name: P503
T:Roh
Dwn. Chkd. Dign. 2017.10.03
YY.MM.DD

Title
**PROCESS
LOWER - MBBR TANK 1 AND 2
DETAILS**

Project No.
110126045

Drawing No.
P503

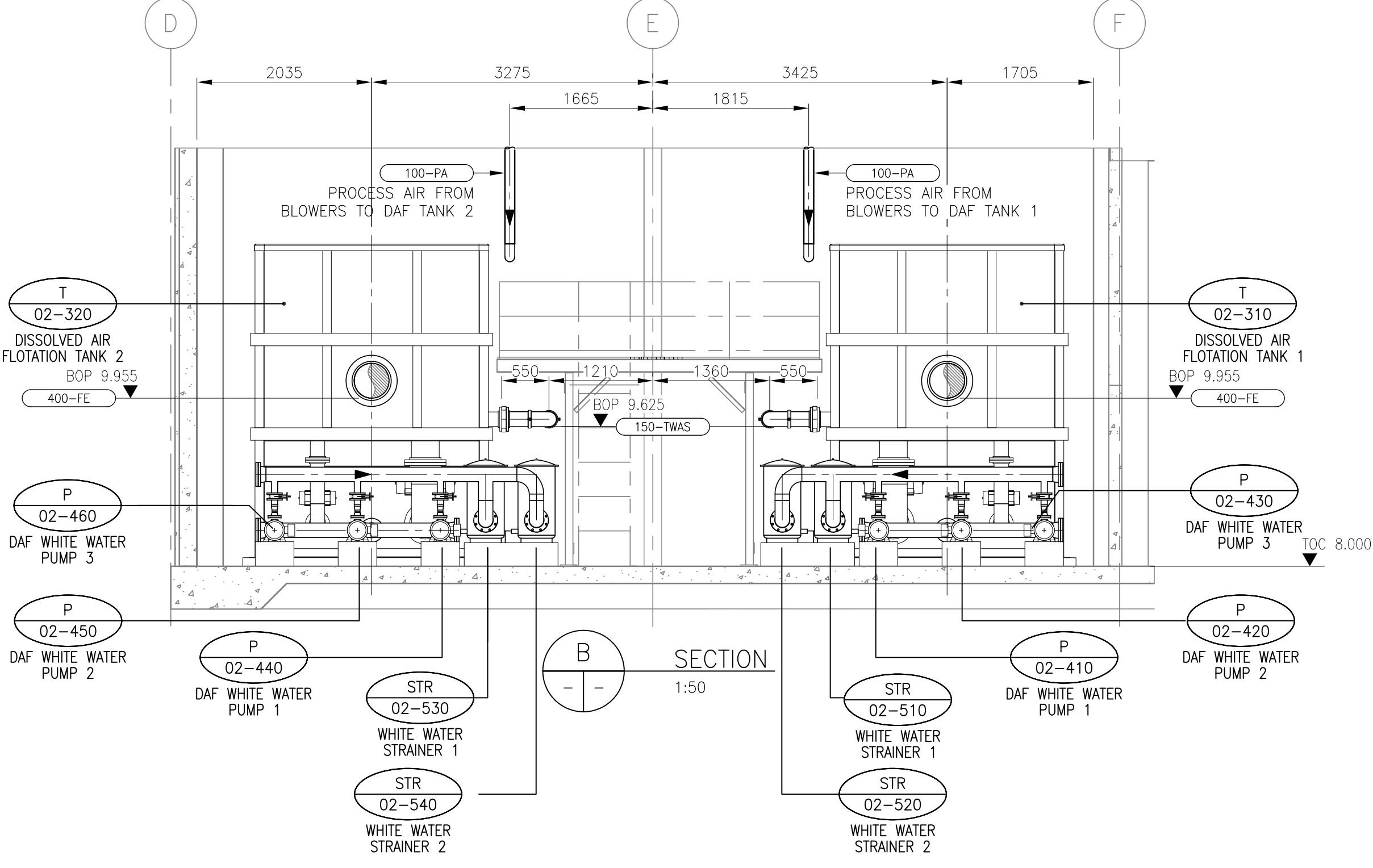
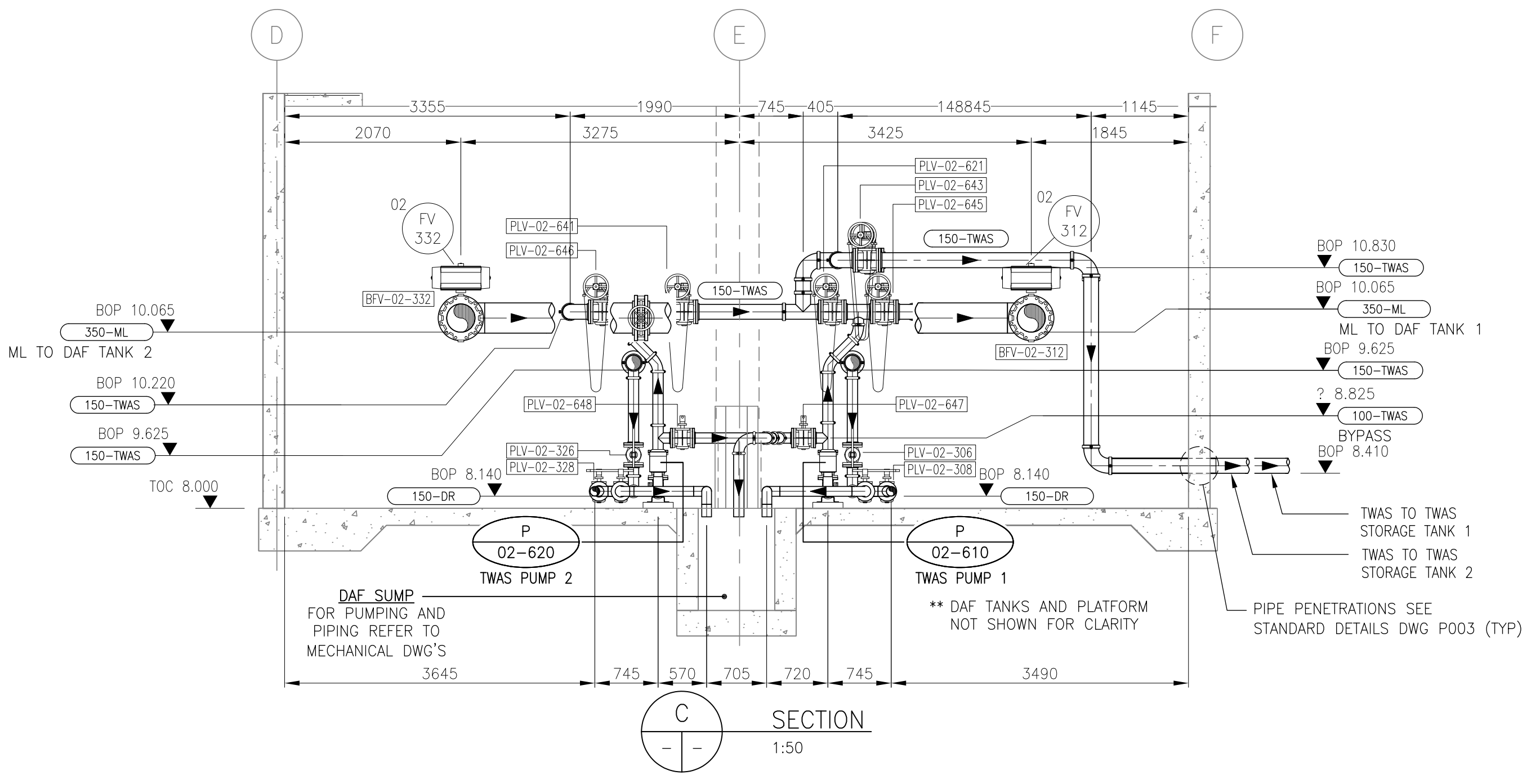
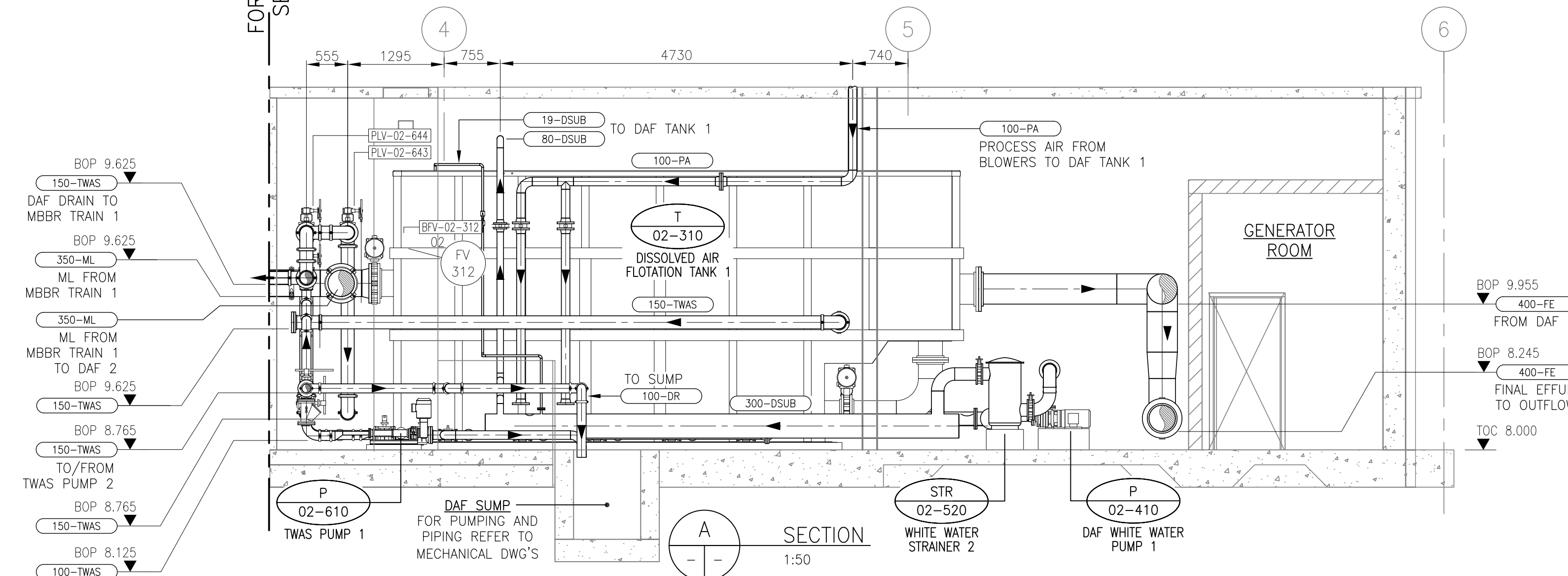
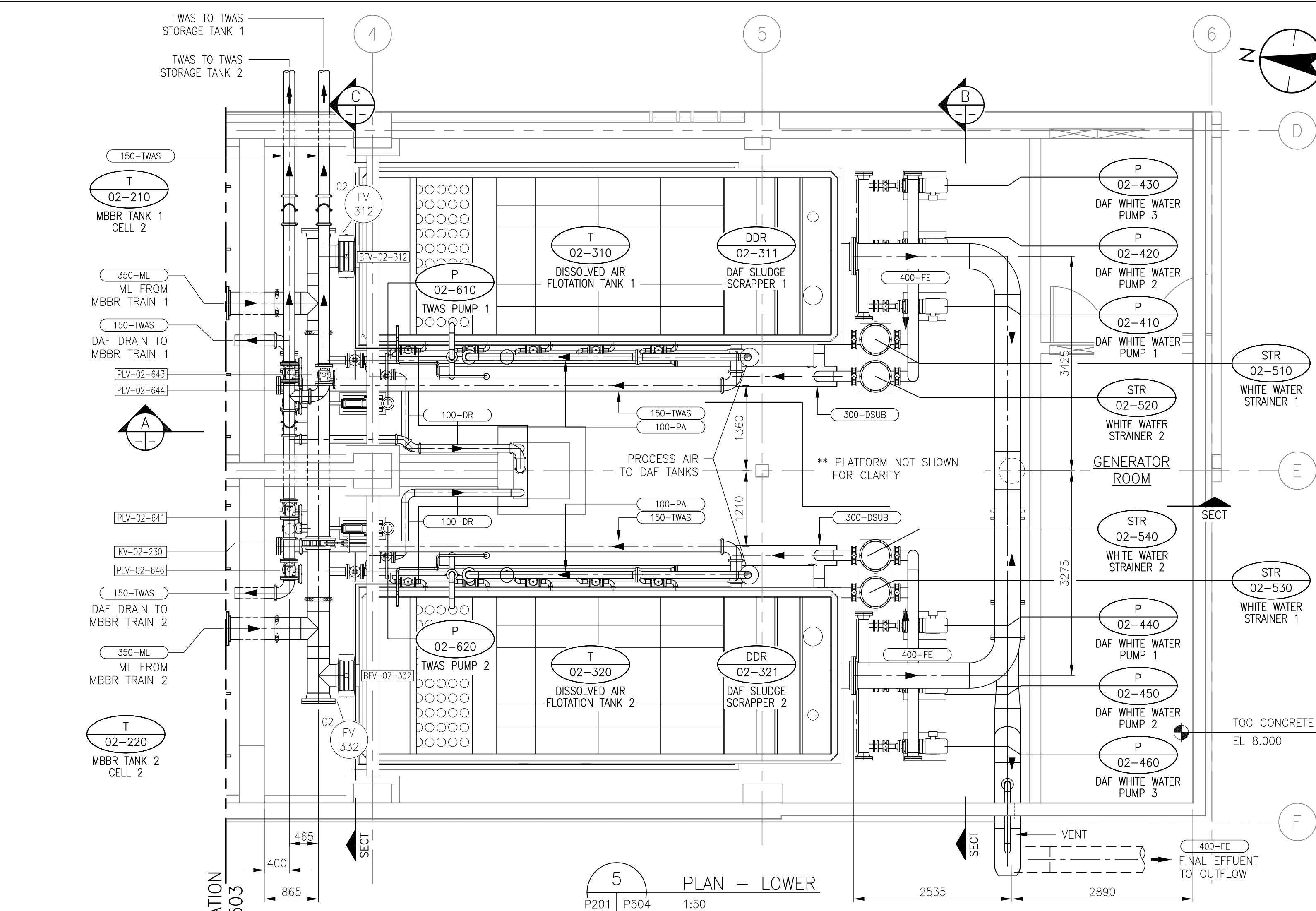
Scale
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1:75

Sheet
of

Revision
0

ORIGINAL SHEET - ISO A1

VA:1107\active\110126045\drawings\04-process\current\F504.dwg
2018/05/22 8:36 AM By: Robt. Thomas



NOTE
1. FOR CONCRETE PAD ELEVATIONS REFER TO DRAWING P509

Revision	By	Appd.	YY.MM.DD
1	ISSUED FOR CONSTRUCTION	TR	AR 18.05.23
0	ISSUED FOR BID	TR	AR 18.04.09
Issued		By	Appd. YY.MM.DD

Consultants

Permit-Seal

PERMIT TO PRACTICE
NUNAMI STANTEC LTD.
Signature: [Signature]
Date: 9 APRIL 2018
PERMIT NUMBER: P 1117
NT/NU Association of Professional Engineers and Geoscientists
110126045

REGISTERED PROFESSIONAL ENGINEER
A. ROJAS
LICENSEE
APRIL 1, 2018
NT/NU

NUNAMI
STANTEC LIMITED

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Iqaluit NU
www.stantec.com

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Client/Project

Iqaluit
Iqaluit Wastewater Treatment Plant
UPGRADE

City of Iqaluit, Nunavut

File Name: P504

TR: []
Dwn: []
Chkd: []
Dign: []
2017.10.03
YY.MM.DD

Title

PROCESS
LOWER - DAF UNITS 1 AND 2
DETAILS

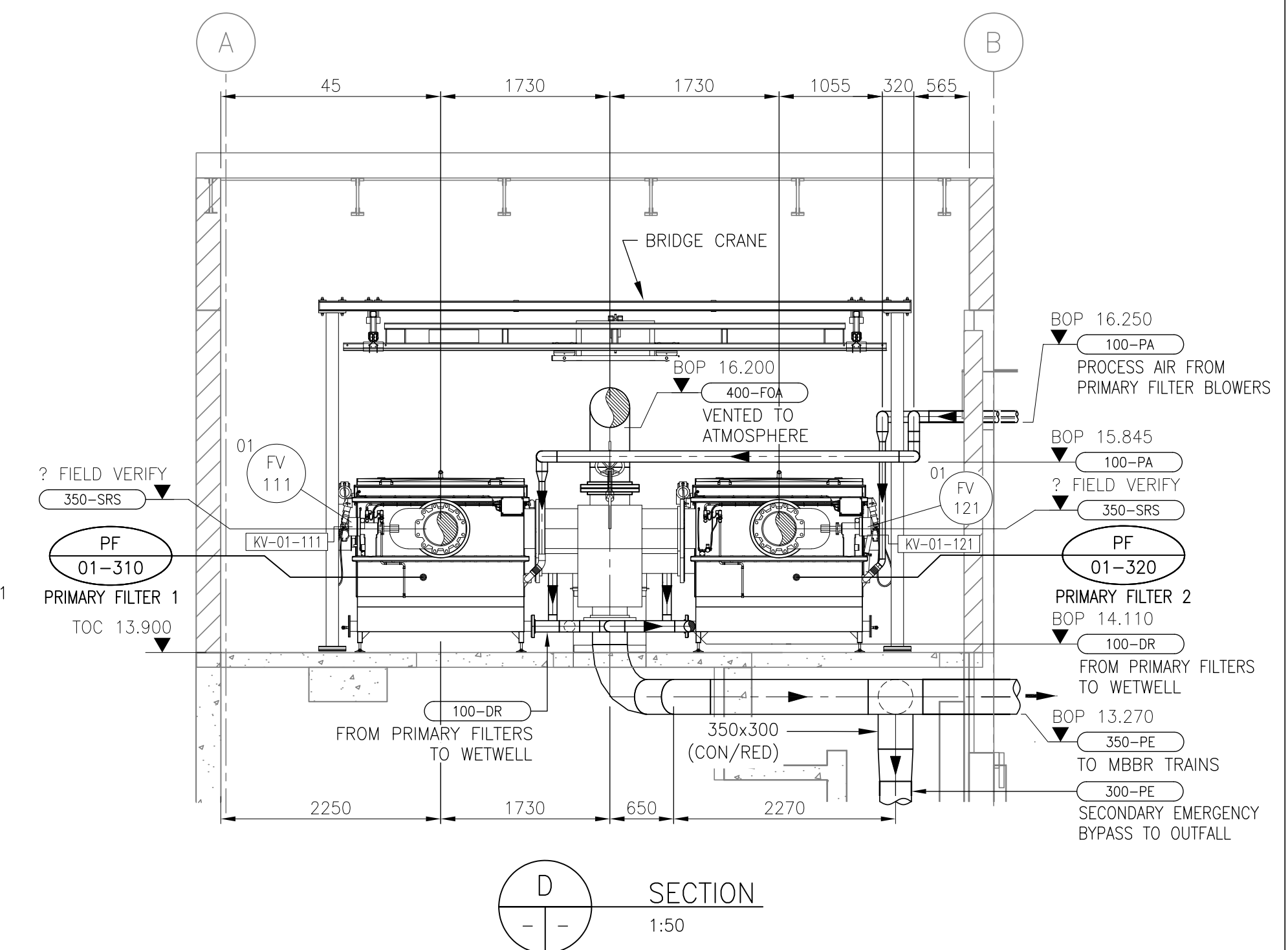
Project No.
110126045

Drawing No.
P504

Scale
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1:50

Sheet
of

Revision
0

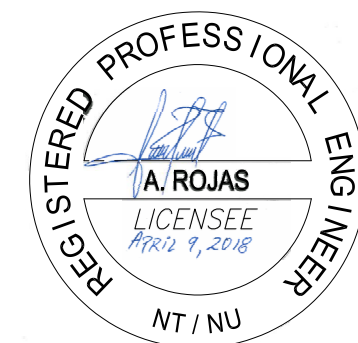


Revision	By	Appd.	YY.MM.DD
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0 ISSUED FOR BID	TR	AR	18.04.09
Issued	By	Appd.	YY.MM.DD

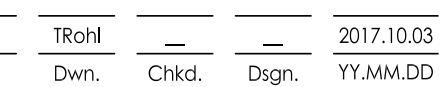
PERMIT TO PRACTICE
NUNAMI STANTEC LTD.

Signature: [Signature]
Date: 9 April 2012

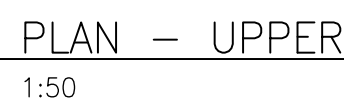
PERMIT NUMBER: P 1117
NT/NU Association of Professional Engineers
and Geoscientists
110126045



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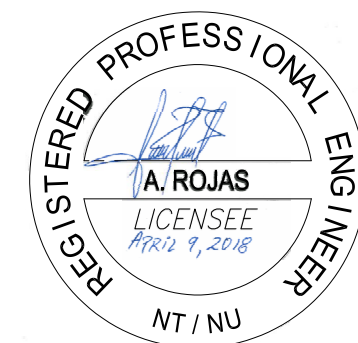


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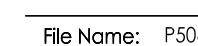


Consultants

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Client/Project

_____ Dwn. _____ Chkd. _____ Dsgn. _____ YY.MM.DD

Title

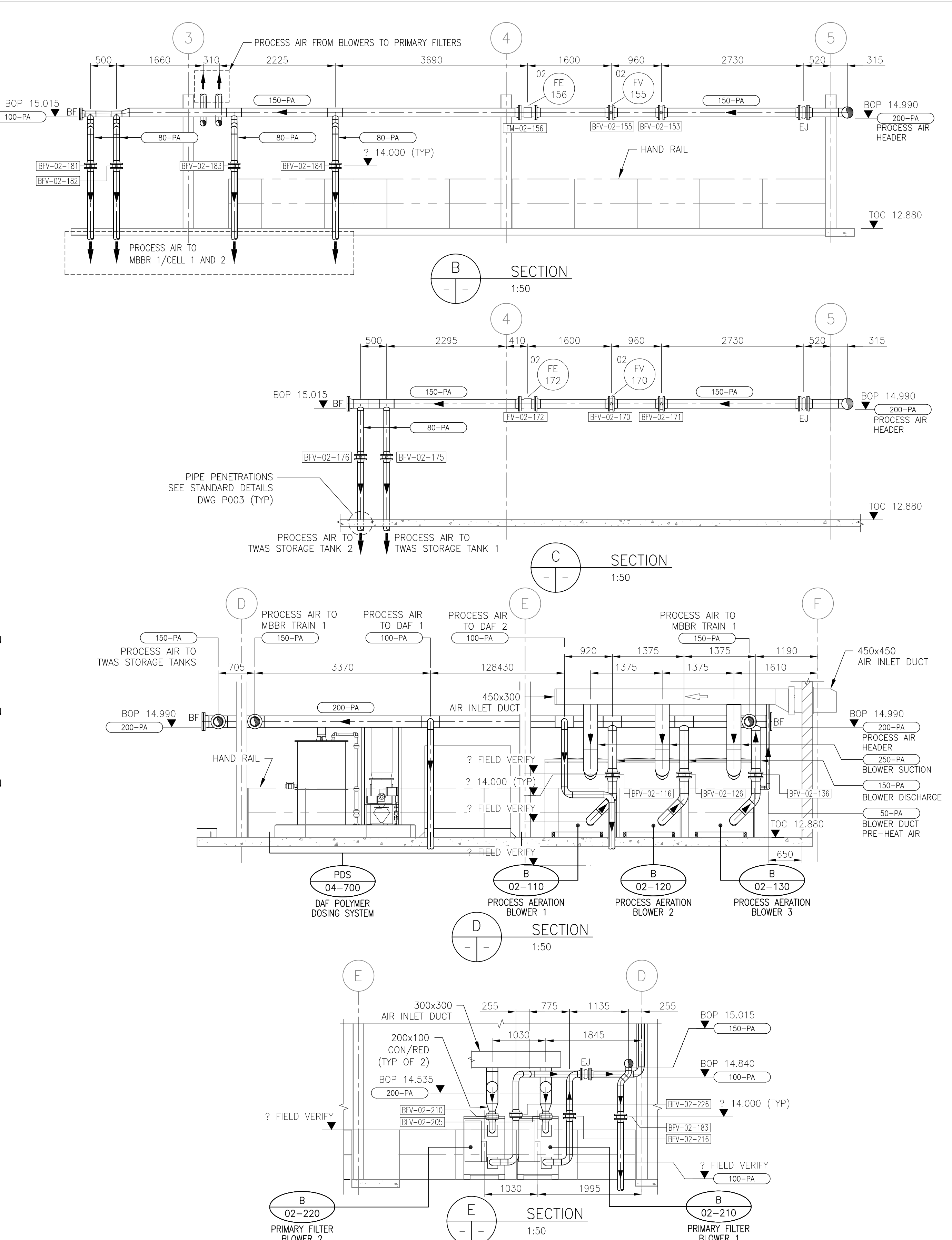
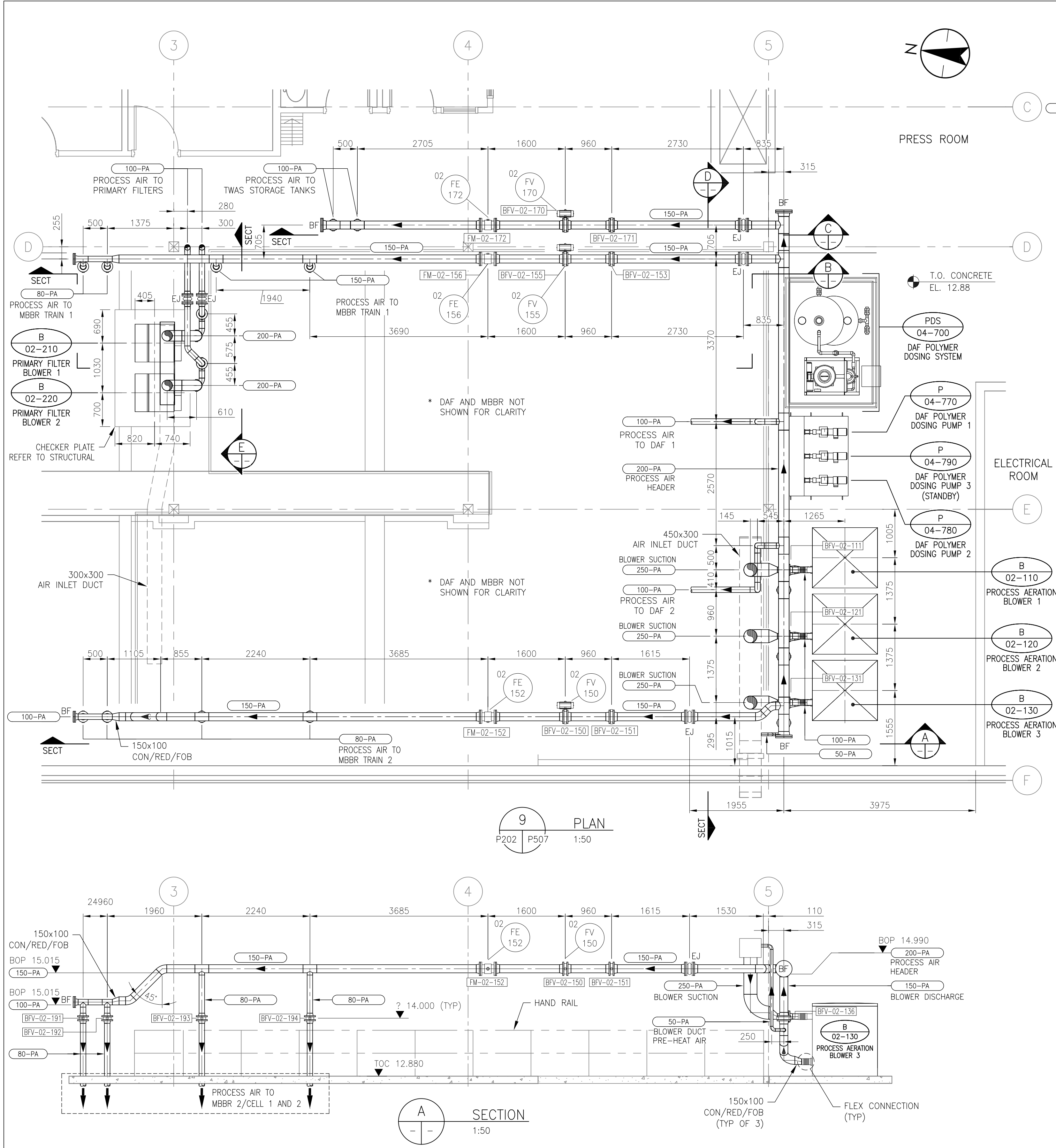
Sheet _____ Revision _____

of

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ORIGINAL SHEET - ISO A1

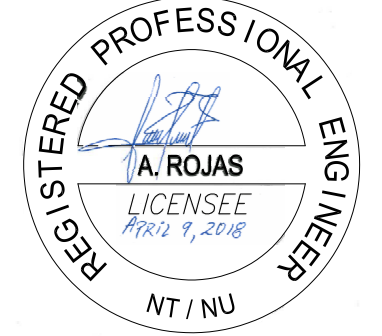
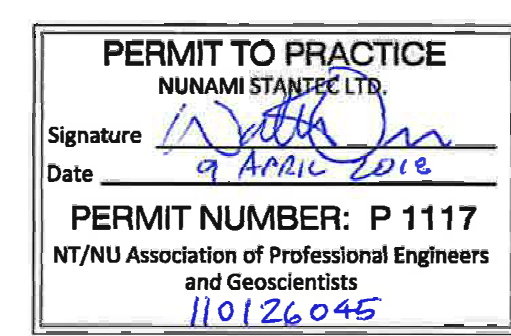
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2018/05/22 8:37 AM By: Robt. Thomas



Revision	By	Appd.	YY.MM.DD
1	ISSUED FOR CONSTRUCTION	TR	AR 18.05.23
0	ISSUED FOR BID	TR	AR 18.04.09
Issued		By	Appd. YY.MM.DD

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Client/Project
Iqaluit
Iqaluit Wastewater Treatment Plant
UPGRADE
City of Iqaluit, Nunavut

File Name: P507
T.Rohr
Dwn.
Chkd.
Dign.
2017.10.03
YY.MM.DD

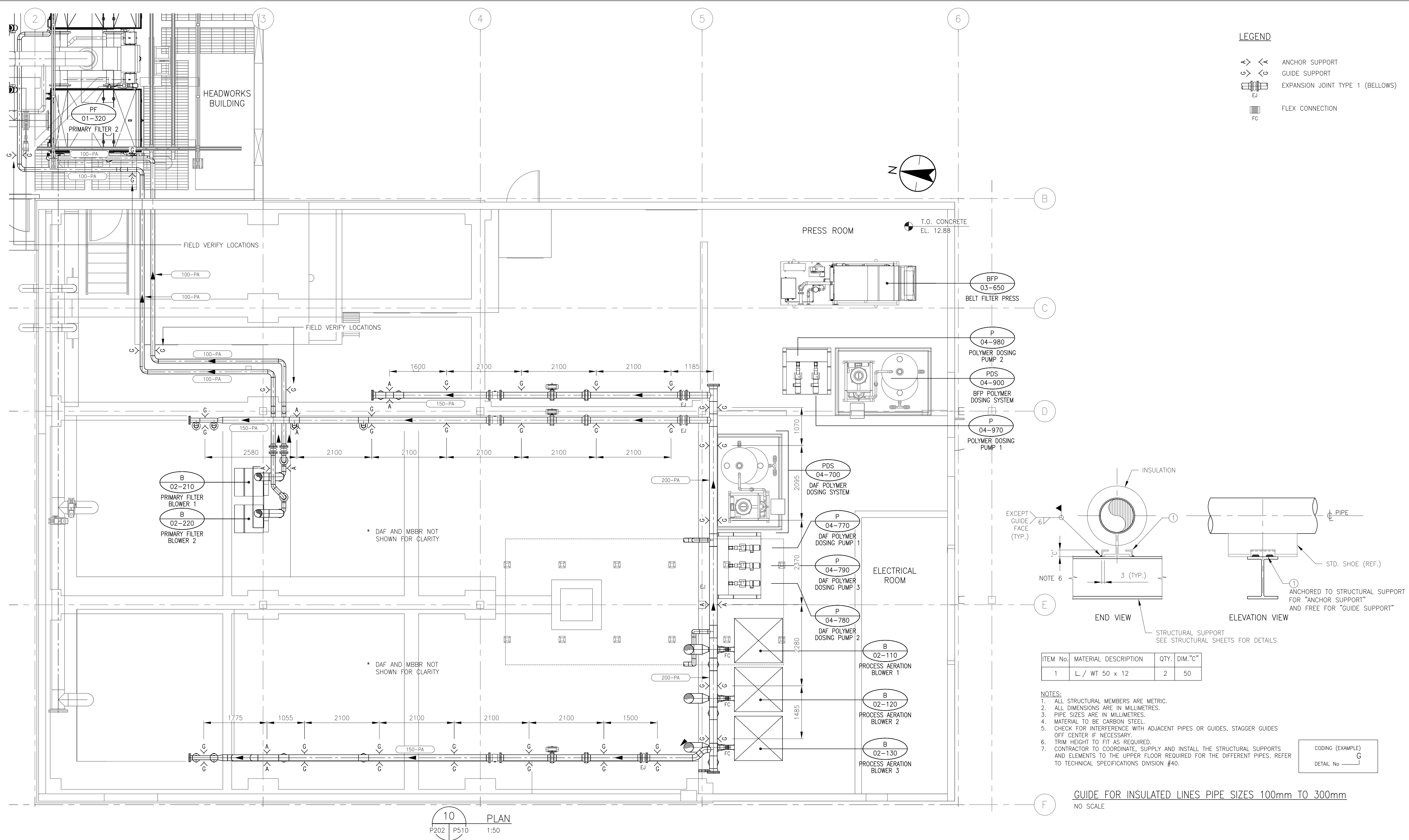
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**PROCESS
UPPER - PROCESS AIR (PA) PIPING
DETAIL**

Project No.
110126045

Drawing No.
P507

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1:75

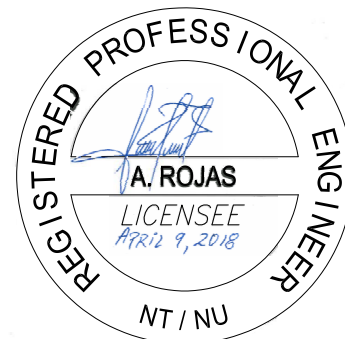
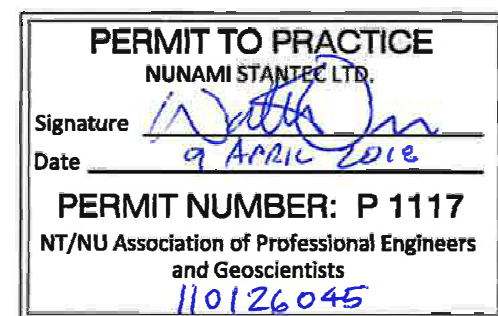
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of
Revision
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Revision	By	Appd.	YY.MM.DD
1	ISSUED FOR CONSTRUCTION	TR	AR 18.05.23
0	ISSUED FOR BID	TR	AR 18.04.09
Issued		By	Appd. YY.MM.DD

Consultants

Permit-Seal

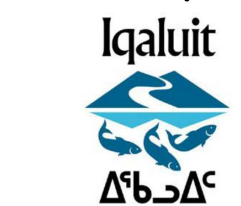


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Client/Project



IQUALUIT WASTEWATER TREATMENT PLANT
UPGRADE
City of Iqaluit, Nunavut

File Name: P508

TRchd
Dwn.
Chkd.
Dign.
2017.10.03
YY.MM.DD

Title

PROCESS
PROCESS AIR ANCHOR AND GUIDE LOCATIONS
UPPER LEVEL - PLAN

Project No.
110126045

Drawing No.

Scale
1:50
0 500 1500 2500mm

Sheet

Revision

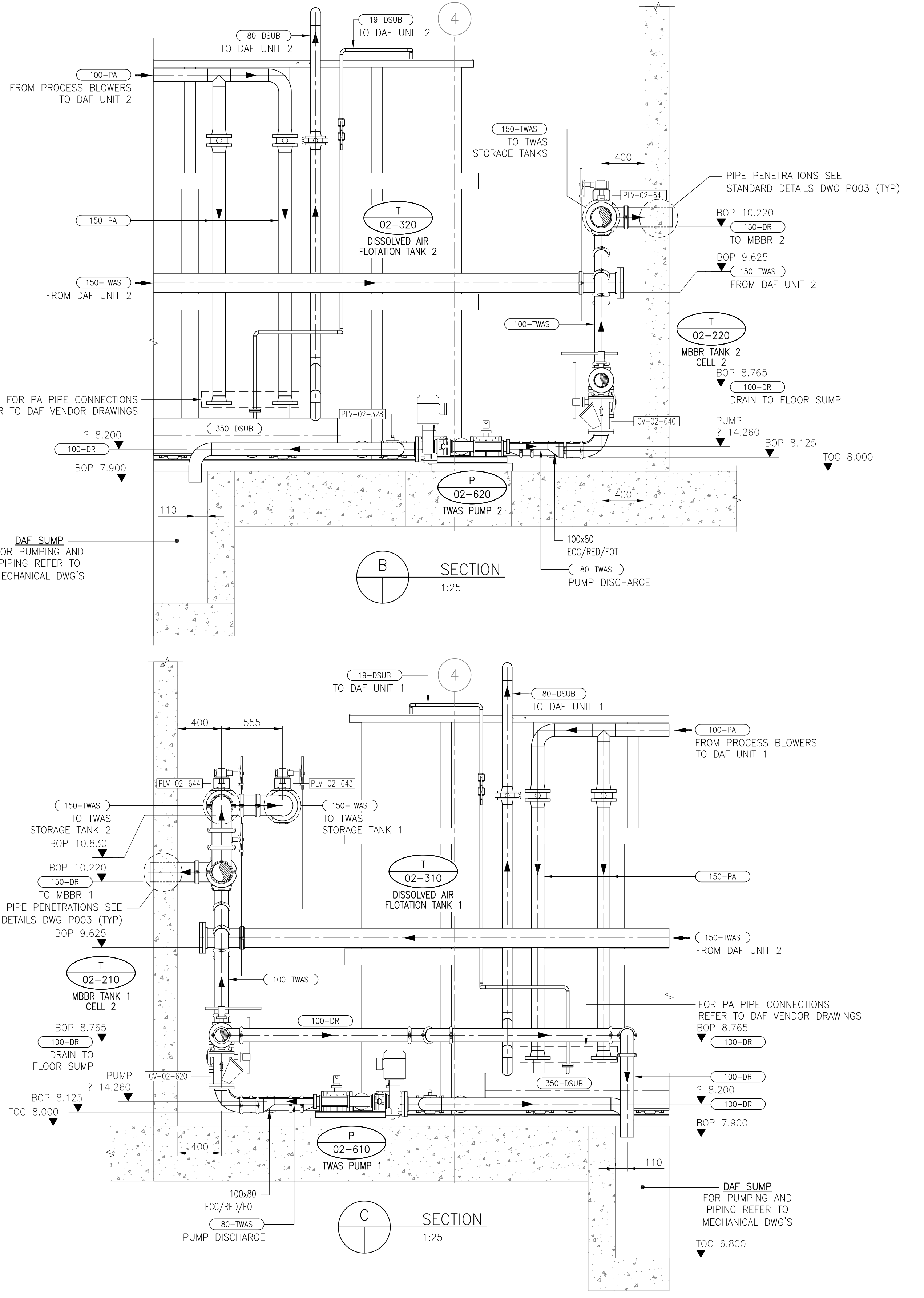
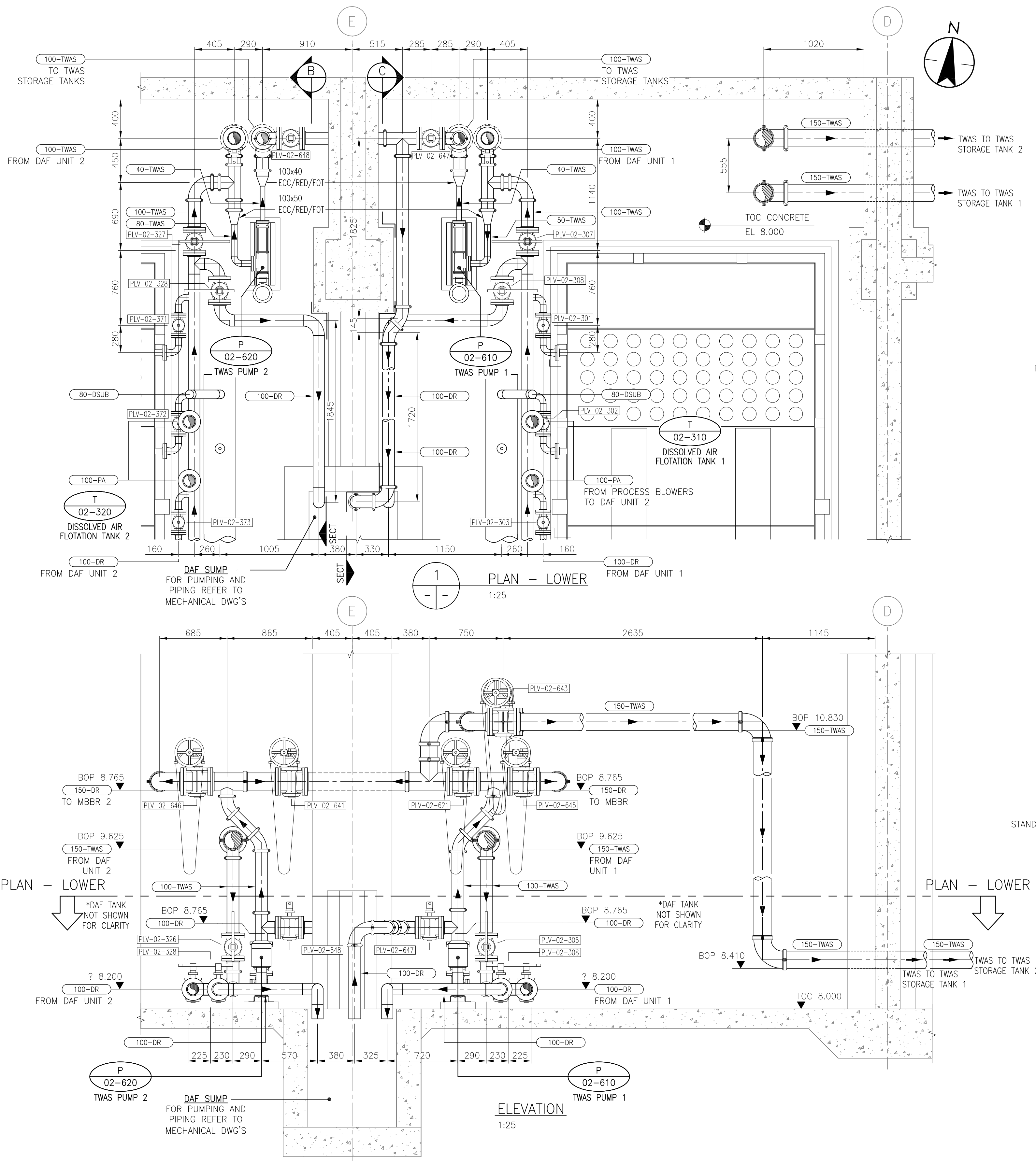
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ORIGINAL SHEET - ISO A1

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2018/05/22 9:51 AM By: Robt. Thomas



Revision	By	Appd.	YY.MM.DD
1	ISSUED FOR CONSTRUCTION	TR	AR 18.05.23
0	ISSUED FOR BID	TR	AR 18.04.09
Issued		By	Appd. YY.MM.DD

Consultants

Permit-Seal

PERMIT TO PRACTICE
NUNAMI STANTEC LTD.
Signature: [Signature]
Date: 9 April 2018
PERMIT NUMBER: P 1117
NT/NU Association of Professional Engineers and Geoscientists
110126045

REGISTERED PROFESSIONAL ENGINEER
A. ROJAS
LICENSEE
Since 1998
NT / NU

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Client/Project

Iqaluit
Iqaluit Wastewater Treatment Plant Upgrade
City of Iqaluit, Nunavut

File Name: P509

TRcht
Dwn.

Chkd.

Dign.

2017.10.03
YY.MM.DD

Title

PROCESS
TWAS PUMPS AND PIPING
DETAILS

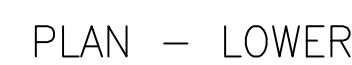
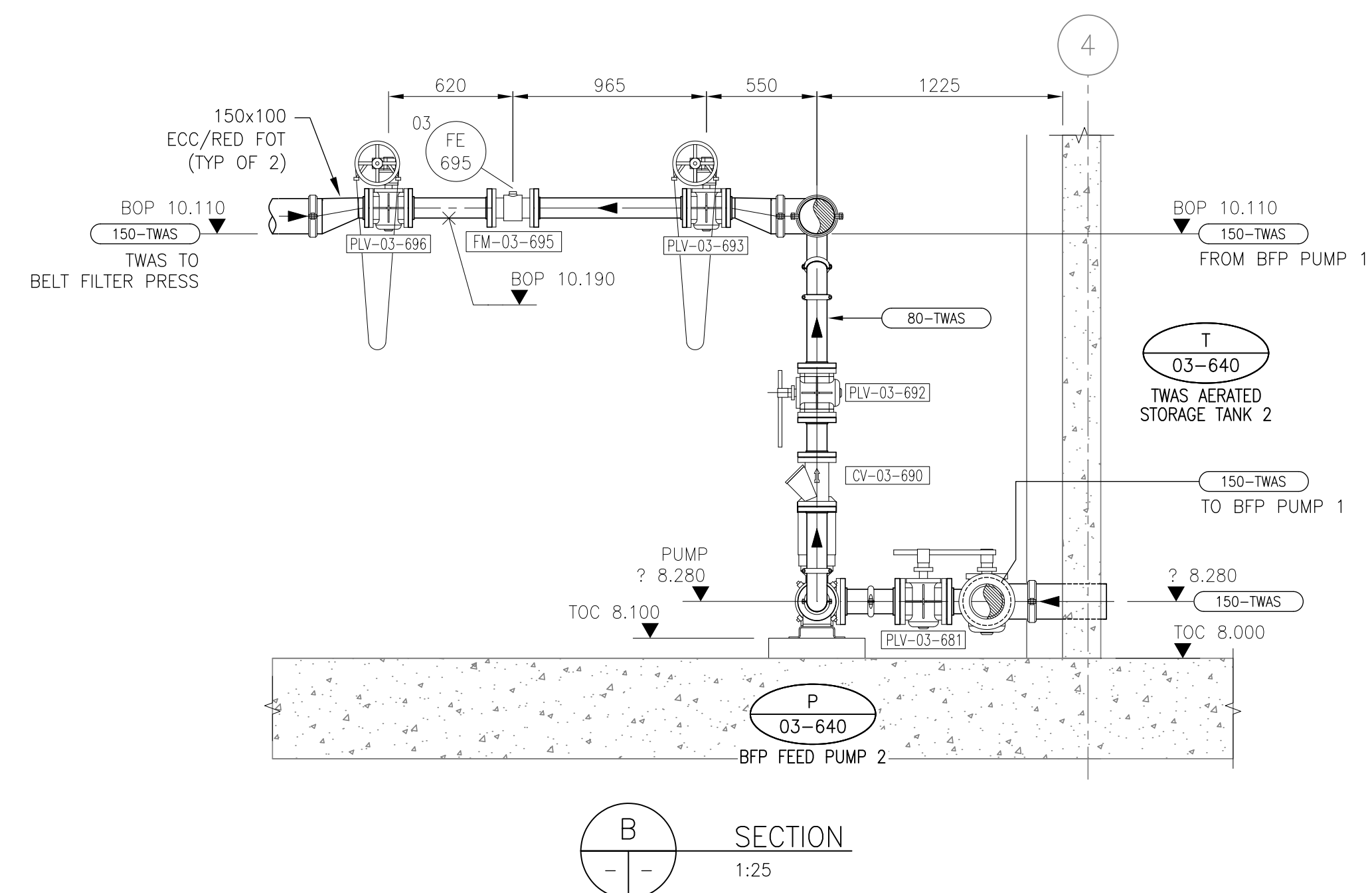
Project No.
110126045

Drawing No.
P509

Scale
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1:25

Sheet
of

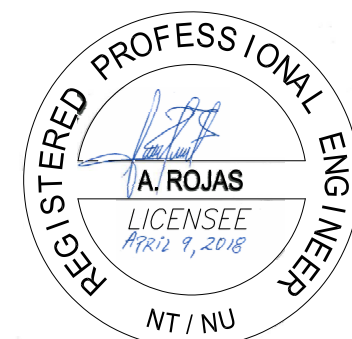
Revision
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PLAN – LOWER

[illegible]

Permit-Seal

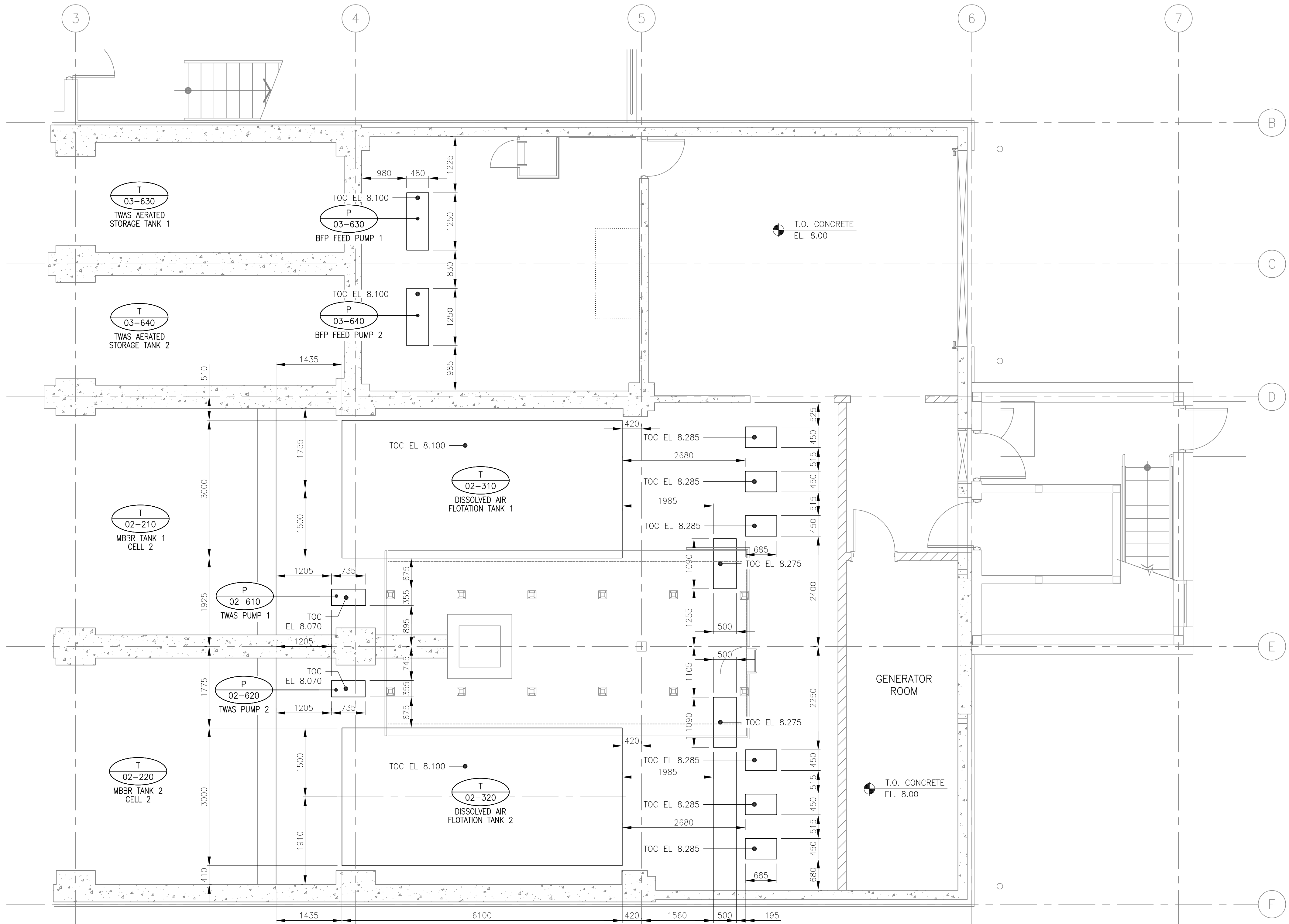
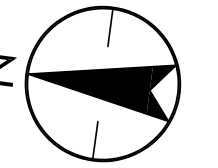


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Trchl	—	—	2017.10.03
Dwn,	Chkd,	Dsan,	YY.MM.DD

P510

of 0



13 PLAN - LOWER
1:50

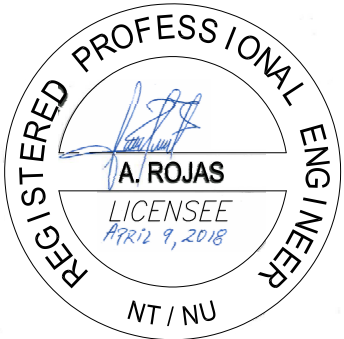
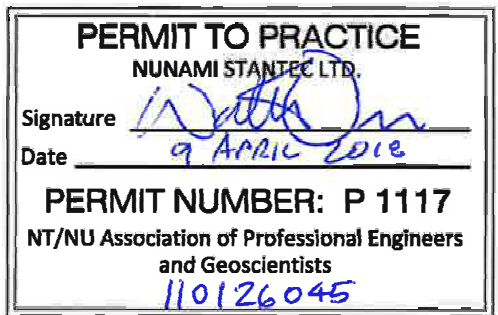
NOTE
1. FOR CONCRETE PAD DETAILS REFER TO STRUCTURE DRAWINGS

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2018/05/22 8:38 AM By: Robt. Thomas

Revision	By	Appd.	YY.MM.DD
1 ISSUED FOR CONSTRUCTION	TR	AR	18.05.23
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Client/Project

Iqaluit
WASTEWATER TREATMENT PLANT
UPGRADE
City of Iqaluit, Nunavut

File Name: P511

TRcht
Dwn.

Chkt.

Dign.

2017.10.03
YY.MM.DD

Title

PROCESS
LOWER - EQUIPMENT PAD LOCATIONS
DETAIL

Project No.
110126045

Drawing No.

Scale
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1:75

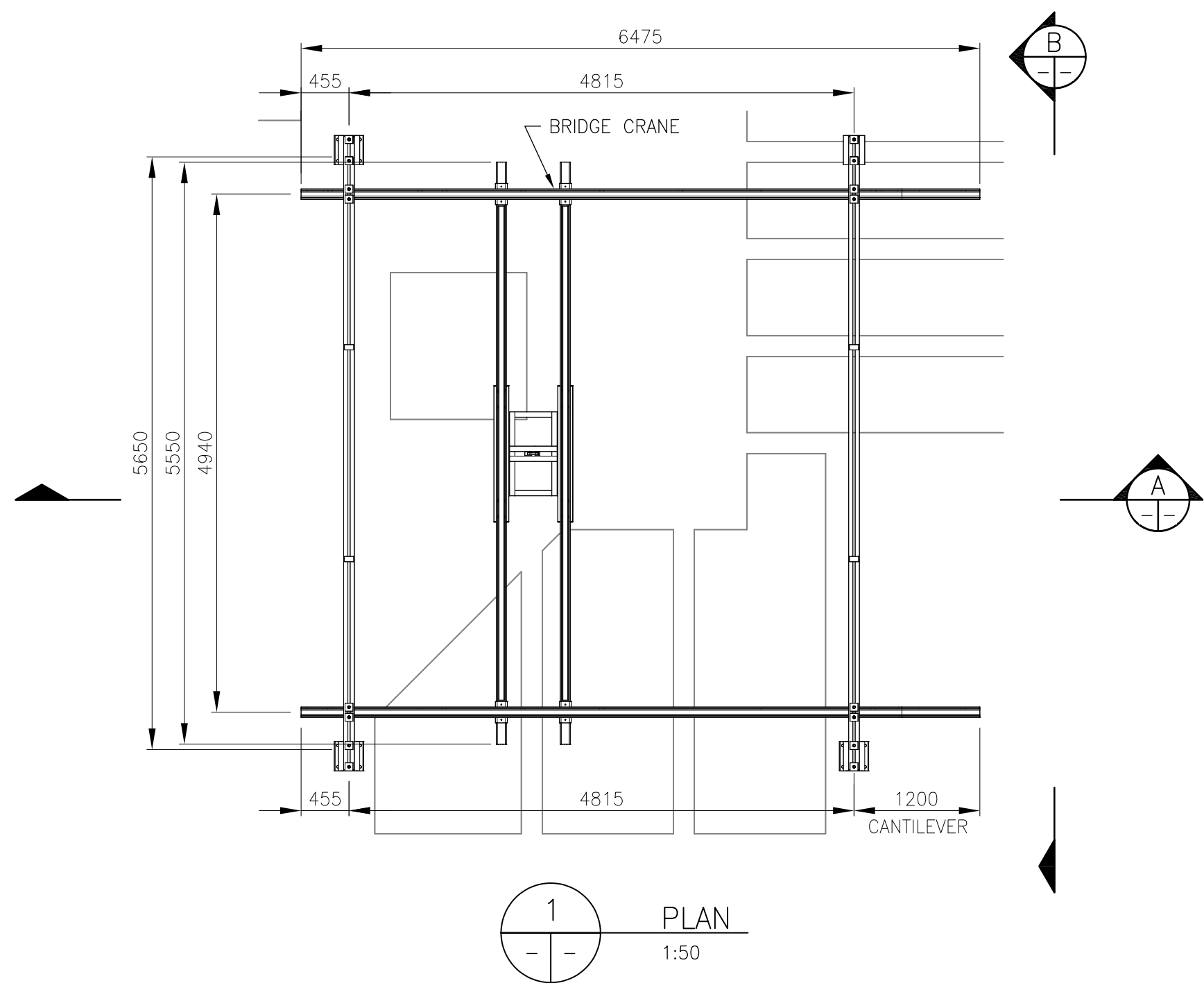
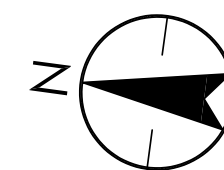
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Revision

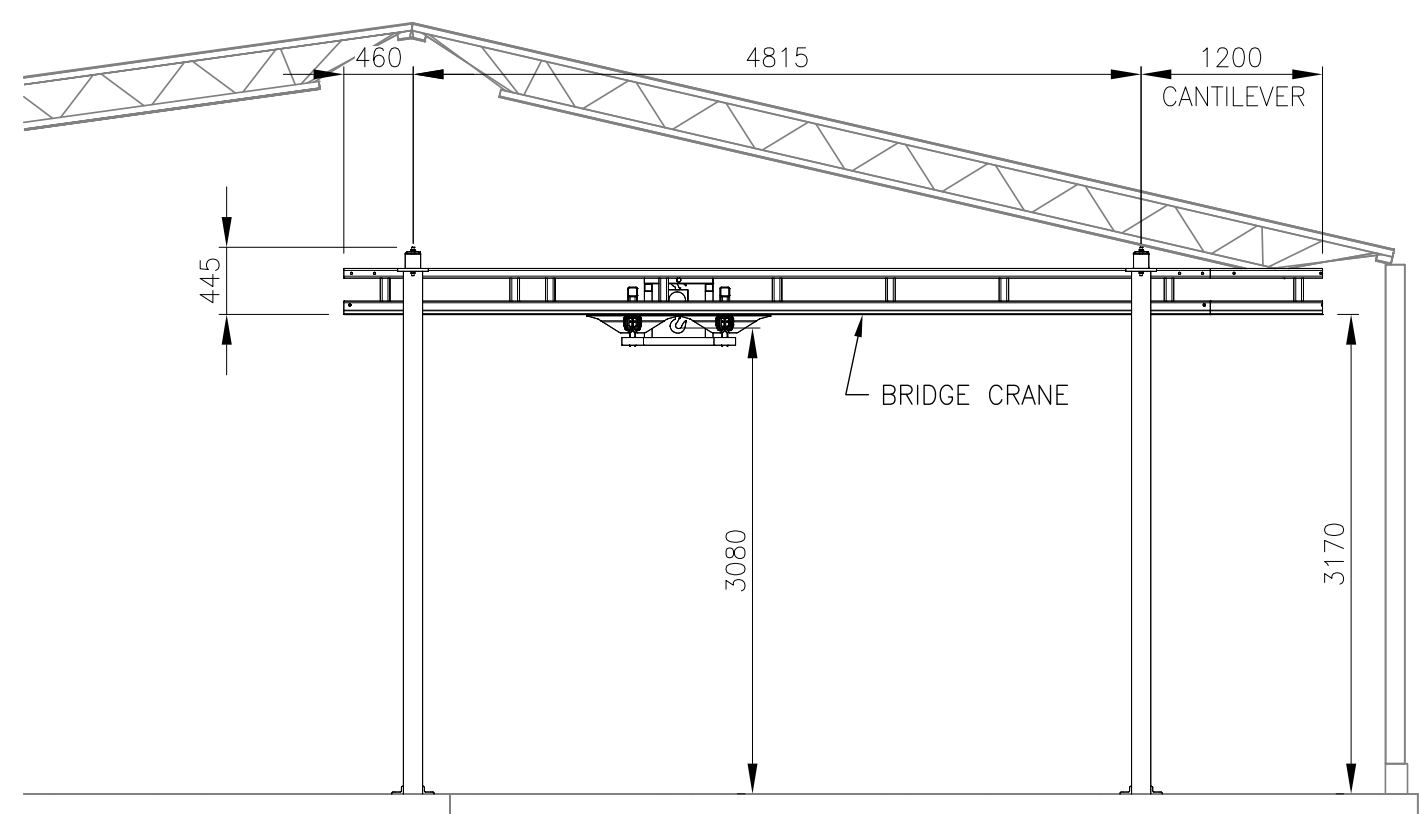
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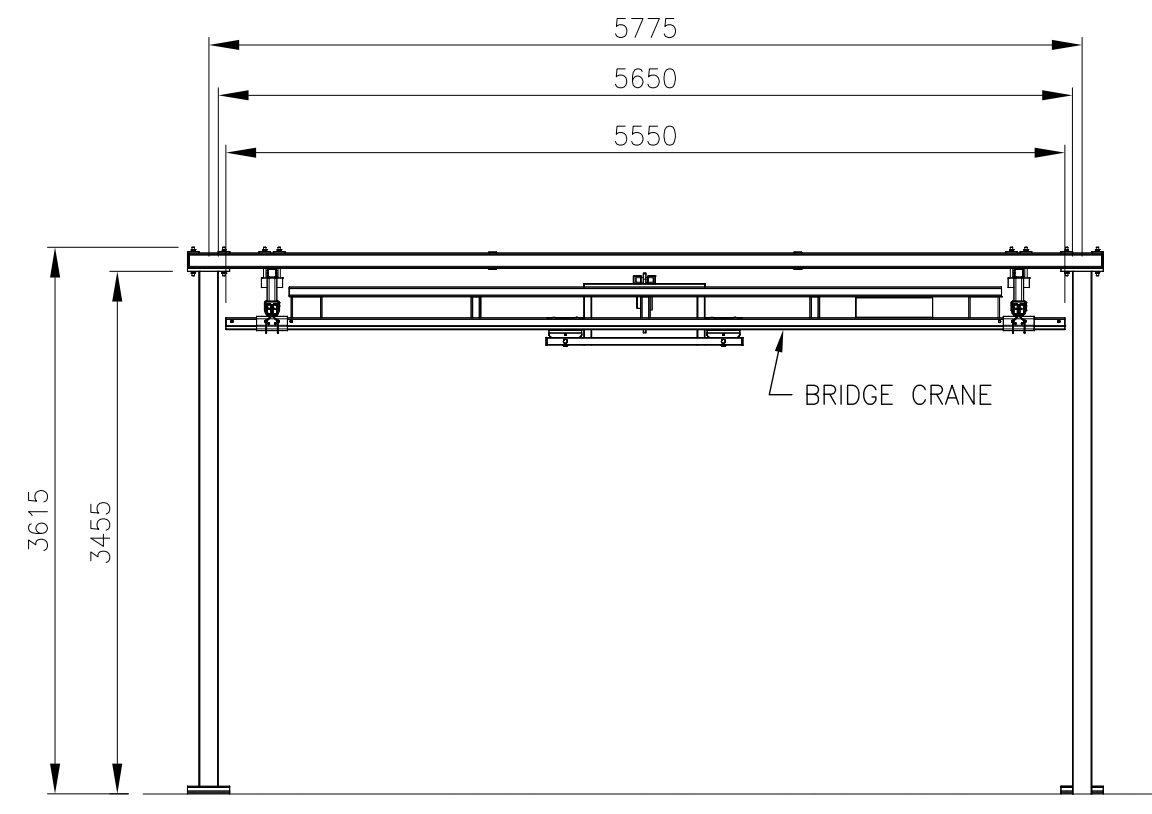
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1 PLAN
1:50



A ELEVATION
1:50



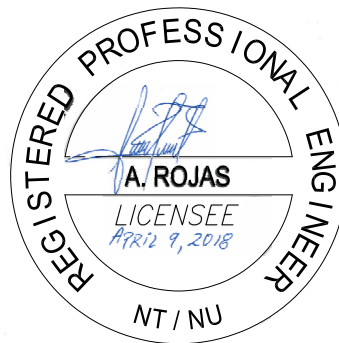
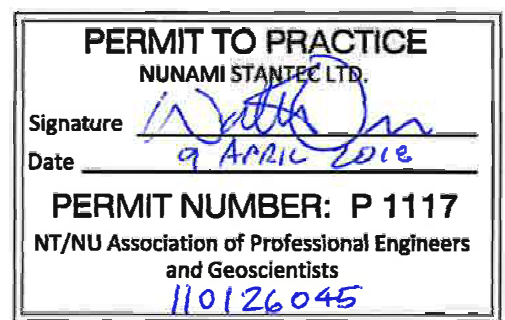
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BRIDGE CRANE AT HEADWORKS BUILDING

Revision	By	Appd.	YY.MM.DD
1 ISSUED FOR CONSTRUCTION	TR	AR	18.05.23
0 ISSUED FOR BID	TR	AR	18.04.09
Issued	By	Appd.	YY.MM.DD

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IQALUIT WASTEWATER TREATMENT PLANT
UPGRADE
City of Iqaluit, Nunavut

File Name: P512	TRcht Dwn.	Chkt. ---	Dign. ---	2017.10.03 YY.MM.DD
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Title

PROCESS
BRIDGE CRANE DIMENSIONS
DETAILS

Project No.
110126045

Drawing No.

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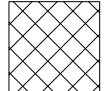
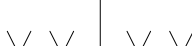
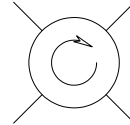
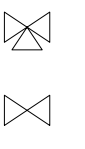
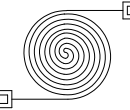
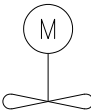
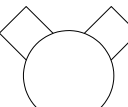
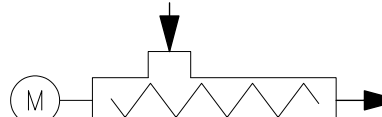
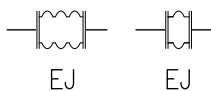
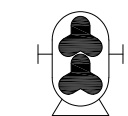
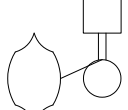
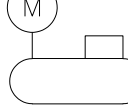
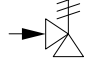
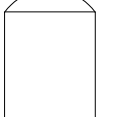
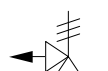
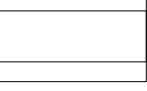
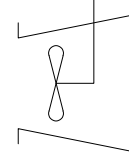
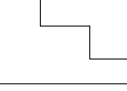
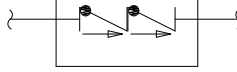
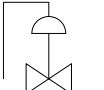
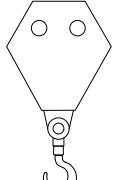
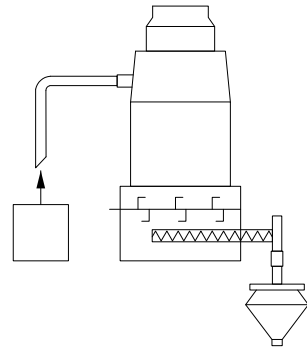
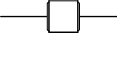
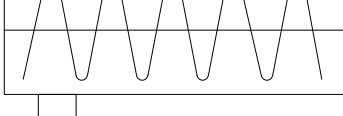
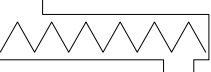
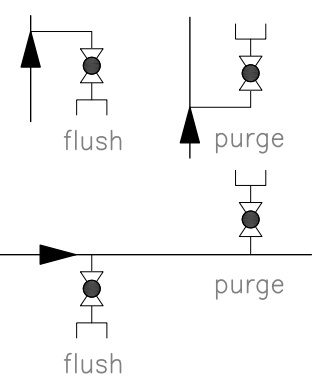
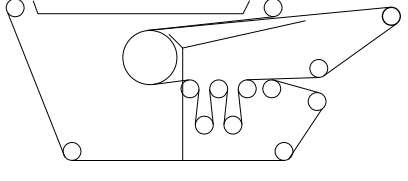
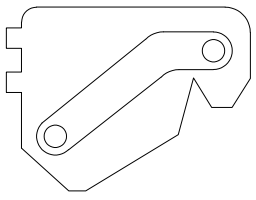
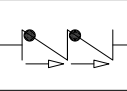
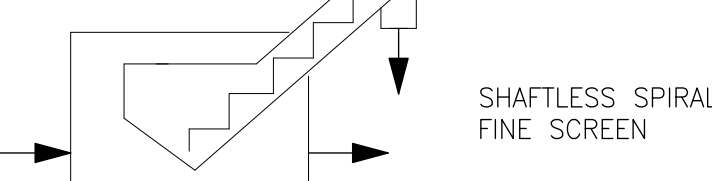
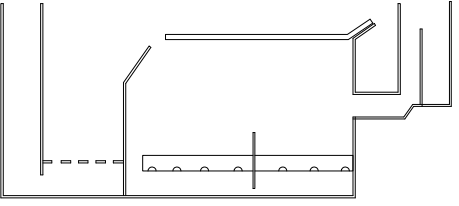
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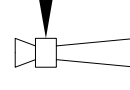
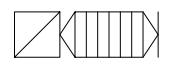
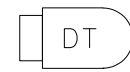
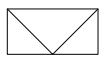
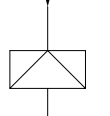
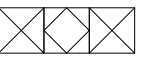
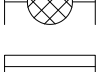
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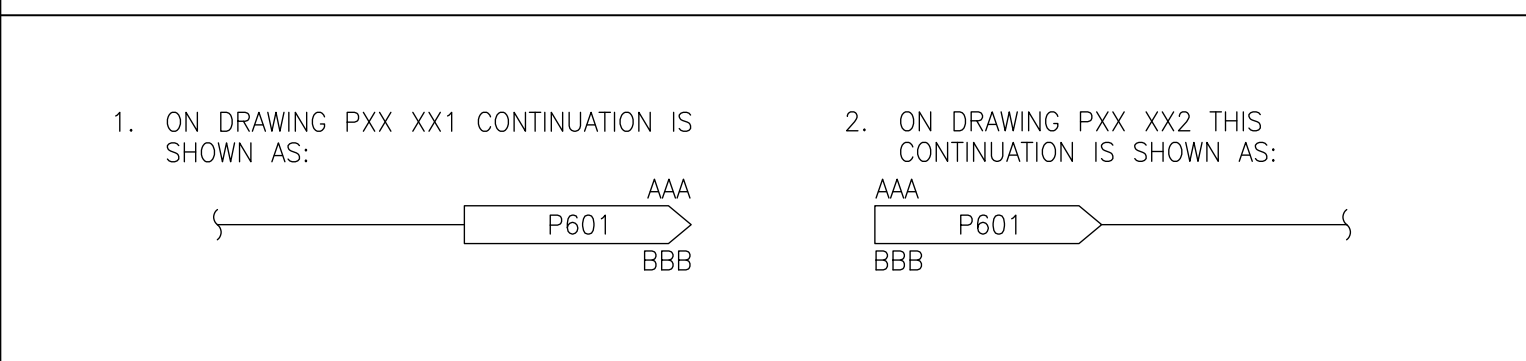
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EQUIPMENT				EQUIPMENT		VALVES		PROCESS LINES	
	FILTER OR FILTER-SILENCER INLET AIR		DIFFUSER HEADER		MIXER HORIZONTAL SURFACE		THREE WAY VALVE SOLENOID VALVE GATE VALVE (NORMALLY OPEN)		PUMP DISCHARGE VALVE (TRIPLE DUTY)
	HOSE REEL		CLEANING BRUSH		MIXER, INLINE STATIC		GATE VALVE (NORMALLY CLOSED)		KNIFE GATE VALVE
	VARIABLE FREQUENCY DRIVE		MIXER		MOTOR		PLUG VALVE (NORMALLY OPEN)		BALANCING COCK
	STOP LOG		WEIR		LEVEL CONTROL GATE		PLUG VALVE (NORMALLY CLOSED)		CIRCUIT BALANCING VALVE
	COMPRESSOR, PISTON		PROGRESSIVE CAVITY PUMP		EXPANSION JOINT (BELLOWS)		BALL VALVE (NORMALLY OPEN)		THERMOSTATICALLY CONTROLLED VALVE
	PUMP, CENTRIFUGAL		PUMP, ROTARY LOBE		RECEIVER OR PRESSURE VESSEL		BALL VALVE (NORMALLY CLOSED)		PRESSURE AND VACUUM RELIEF VALVE
	PUMP, DIAPHRAGM		PUMP, SUBMERSIBLE		TANK, DOUBLE WALLED		BUTTERFLY VALVE		VACUUM RELIEF VALVE
	PUMP, PLUNGER		PUMP, VERTICAL		TANK		CIRCULAR BALANCING DAMPER		PRESSURE SAFETY VALVE
	PUMP, GEAR		PUMP, LINE SHAFT		CONDENSATE TANK		GLOBE VALVE		IN-LINE, SPRING LOADED RELIEF VALVE
	PUMP, METERING		SUBMERSIBLE PROPELLER PUMP		LIFTING DAVIT SOCKET		DIAPHRAGM VALVE		MUD VALVE
	PUMP, METERING						ANGLE VALVE		SPRAY NOZZLE
	SLUICE GATE (NORMALLY CLOSED)		SLUICE GATE (NORMALLY OPEN)				Y-STRAINER		CAMLOCK
	WEIR GATE (NORMALLY CLOSED)		WEIR GATE (NORMALLY OPEN)				PRESSURE CONTROL VALVE (EXTERNAL SENSING)		DOUBLE CHECK VALVE BACKFLOW PREVENTER
	SLIDE GATE (NORMALLY CLOSED)		SLIDE GATE (NORMALLY OPEN)				PRESSURE CONTROL VALVE (INTERNAL SENSING)		VEE BALL VALVE
	GRINDER / MACERATOR						BACK PRESSURE CONTROL VALVE		BLAST GATE
	HOIST						DUCKBILL VALVE		DOUBLE LEAF CHECK VALVE
	SCREW PRESS		POLYMER DOSING SYSTEM				DRESSER COUPLING (FLEXIBLE CONNECTION)		CHECK VALVE
	ROTARY DRUM THICKENER		CONVEYOR				FLUSHING/PURGE CONNECTION		BALL CHECK VALVE
	BELT FILTER PRESS		PRIMARY FILTER				SPEC CHANGE		REDUCED PRESSURE BACKFLOW PREVENTER
	SHAFTLESS SPIRAL FINE SCREEN		DAF						

PIPE LINE DEVICES	
	INJECTOR
	FLAME ARRESTER
	FLAME ARRESTER WITH THERMAL SHUTOFF VALVE
	FLAME CHECK
	TRAP
	SEDIMENT TRAP
	PRESSURE REDUCING ASSEMBLY
	GAS DRIP TRAP
	LIQUID SEPARATOR
	BASKET STRAINER
	RUPTURE DISK (VACUUM RELIEF)
	RUPTURE DISK (PRESSURE RELIEF)
	AIR VENT
	STEAM VENT
	QUICK CONNECTOR
	PLUG
	CAP
	BLIND FLANGE
	REDUCER
	FLEXIBLE CONNECTION
	AIR FILTER
	HEATING COIL
	COOLING COIL
	HARD PIPE UTILITY CONNECTION
	WATER SOFTENER
	AIR RELEASE VALVE
	AIR VACUUM VALVE
	MANUAL AIR VENT
	STRAINER
	STATIC MIXER
	FOOT VALVE
	AIR SEPARATOR
	DRAIN
	SPECTACLE BLIND
	CALIBRATION CHAMBER
	PULSATION DAMPENER
	SIGHT GLASS
	THERMOWELL
	SUCTION GUIDE STRAINER
	FLOW STRAIGHTENING VANES
	MOTORIZED CONTROL DAMPER
	RECTANGULAR BALANCING DAMPER
	FIRE DAMPER
	BACKDRAFT DAMPER
	LOUVRE
	ORIFICE PLATE

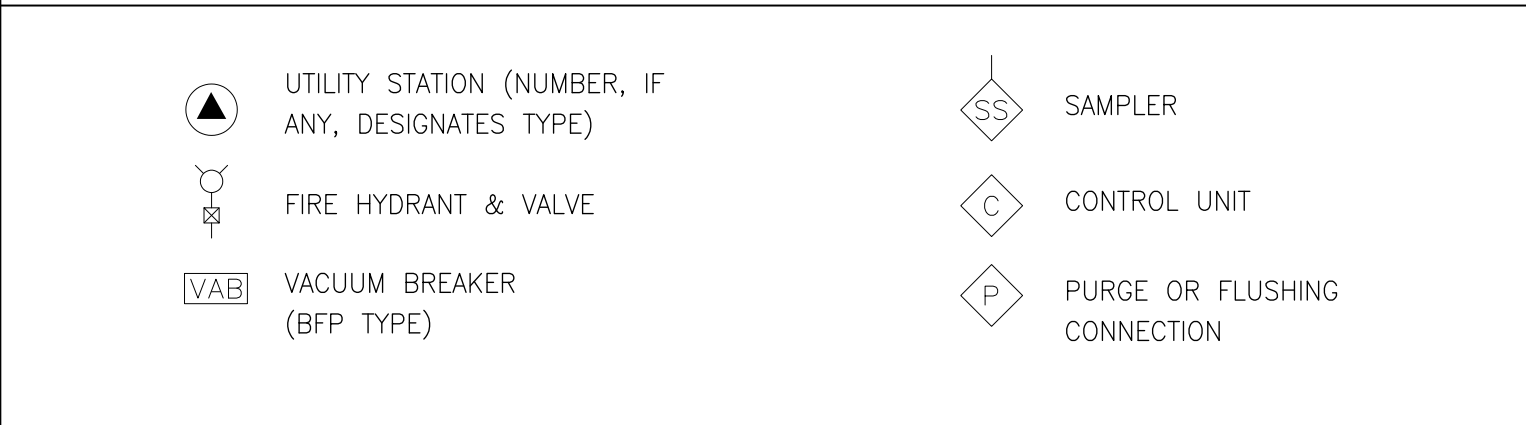
PROCESS AND SIGNAL CROSS REFERENCE SYSTEM

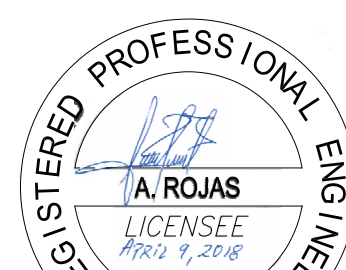


VALVE ACTUATORS



MISCELLANEOUS DEVICES



				Consultants				Permit-Seal								Client/Project  IQALUIT WASTEWATER TREATMENT PLANT UPGRADE City of Iqaluit, Nunavut				Title PROCESS PIPING AND INSTRUMENTATION DIAGRAM LEGEND SHEET											
								 				1088C Noble House Iqaluit NU www.stantec.com				File Name: P601				T:Roh Dwn.		2017.10.03 YY.MM.DD									
												The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.																			

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2018/05/22 12:50 PM By: Rohi, Thomas

FUNCTIONAL IDENTIFICATION						DESCRIPTION
	FIRST LETTER (4)		SUCCEEDING-LETTERS (3)			I/O TYPES
	MEASURED OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER	TYPICAL ASSOCIATED CDACS
A	ANALYSIS		ALARM			DI
B	BURNER, COMBUSTION			CLOSE-STOP DECREASE		DO
C	CONDUCTIVITY, pH (ACIDITY)		CLOSE	CONTROL OR CONTROLLER		DI/AO
D	DENSITY	DIFFERENTIAL		OPEN-START-INCREASE		DO
E	VOLTAGE		SENSOR (PRIMARY ELEMENT)			
F	FLOW RATE	RATIO (FRACTION)			FAIL	DI
G	GAS		GLASS VIEWING DEVICE			
H	HAND				H-HIGH-(ALARM) HH-HIGH-(SHUTDOWN)	DI
I	CURRENT (ELECTRICAL)		INDICATE			AI
J	POWER	SCAN				DO/AI
K	TIME, TIME SCHEDULE	TIME RATE OF CHANGE		CONTROL STATION		DO/AO
L	LEVEL		LIGHT		L-LOW-(ALARM) LL-LOW-(SHUTDOWN)	DI
M	MOTOR	MOMENTARY	ON OR OPERATE		MIDDLE, INTERMEDIATE	DI
N	MOISTURE			START		DO
O	UNCLASSIFIED		OPEN ORIFICE, RESTRICTION POINT (TEST) CONNECTION	STOP	OVERLOAD	DO
P	PRESSURE, VACUUM			PNEUMATIC		
Q	QUANTITY	INTEGRATE, TOTALIZED		INTEGRATE OR TOTALIZED		DI/AI
R	RADIATION	REGULATING	RECORD			AI
S	SPEED, FREQUENCY, SOLENOID	SAFETY		SWITCH, OR SAFETY		DI/DO
T	TEMPERATURE			TRANSMIT		AI
U	MULTIVARIABLE		MULTIFUNCTION	MULTIFUNCTION	MULTIFUNCTION	DI
V	VIBRATION, MECHANICAL ANALYSIS			VALVE, DAMPER, LOUVRE		
W	WEIGHT, FORCE		WELL			
X	ON/OFF	X AXIS	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	DI/DO
Y	EVENT, STATE, PRESENCE	Y AXIS		RELAY, COMPUTE, CONVERT		
Z	POSITION, DIMENSION	Z AXIS		DRIVER, ACTUATOR, UNCLASSIFIED - FINAL CONTROL ELEMENT		

TYPICAL INSTRUMENT IDENTIFICATION

SCHEMATIC IDENTIFICATION

FUNCTIONAL IDENTIFICATION - (UP TO 4 CHARACTER) * OPTIONAL

SEE FUNCTIONAL IDENTIFICATION MATRIX ABOVE

INSTRUMENT OPERATING FUNCTIONS

ANALYTICAL FUNCTIONS

Cl ₂	CHLORINE
NH ₃	AMMONIA
LEL	LOWER EXPLOSIVE LIMIT
COMB	COMBUSTIBLE GAS
H ₂ S	HYDROGEN SULFIDE
pH	pH
DO	DISSOLVED OXYGEN
O ₂	OXYGEN
VIB	VIBRATION
SS	SUSPENDED SOLIDS (DENSITY)
CO	CARBON MONOXIDE
NO	NITRIC OXIDE
TSS	TOTAL SUSPENDED SOLIDS
NO ₂	NITROGEN DIOXIDE
NO ₃	NITRATE
PO ₄	PHOSPHORUS

SWITCHING FUNCTIONS

HOA	HAND-OFF-AUTO SELECTION
S/S	START-STOP
OCA	OPEN-CLOSE-AUTO SELECTION
OSC	OPEN-STOP-CLOSE SELECTION
SEL	SELECTOR SWITCH
O/O	ON-OFF SELECTION
O/C	OPEN-CLOSE SELECTION
L/R	LOCAL-REMOTE SELECTION
P/R	PANEL-REMOTE SELECTION
ACK	ACKNOWLEDGE (ALARM)
FOR	FORWARD-OFF-REVERSE
LOR	LOCAL-OFF-REMOTE
ESD	EMERGENCY STOP DEVICE
OVR	INTERLOCK OVERRIDE SWITCH
FWD	FORWARD SELECTION
REV	REVERSE SELECTION

DIGITAL POINT NAMING CONVENTION

NOTE: ALL DEVICES INTERFACED WITH CDACS MUST FOLLOW THE DIGITAL POINT NAMING CONVENTION.

POINT NAMING CONVENTION

POINT IDENTIFICATION

INSTRUMENT SIGNAL SYMBOLS

	INSTRUMENT SUPPLY, PROCESS TAPS
	PNEUMATIC SIGNAL
	ELECTRIC SIGNAL
	CAPILLARY TUBE OR FILLED SYSTEM
	ELECTROMAGNETIC OR SONIC SIGNAL (GUIDED)
	ELECTROMAGNETIC OR SONIC SIGNAL (UNGUIDED)
	SOFTWARE OR DATA LINK
	MECHANICAL LINK
	ETHERNET LINK

PRIMARY ELEMENT SYMBOLS

	ORIFICE PLATE		CORIOLIS MASS FLOWMETER
	VENTURI OR FLOW TUBE		FLOAT LEVEL ELEMENT
	FLUME		DISPLACEMENT LEVEL ELEMENT
	WEIR		BUBBLER LEVEL TUBE
	VARIABLE AREA FLOW INDICATOR (ROTAMETER)		ULTRASONIC/MICROWAVE LEVEL ELEMENT
	DIAPHRAGM SEAL		RADIO FREQUENCY LEVEL ELEMENT
	IN-LINE PRESSURE SENSOR		VIBRATING TUNING FORK LEVEL SWITCH
	VORTEX FLOW SENSOR		THERMAL SENSING RTD STRIP
	IN-LINE CAPACITANCE FLOW ELEMENT		HYDROSTATIC PRESSURE LEVEL SENSOR
	MAGNETIC FLOWMETER		
	PANAMETRICS FLOWMETER		
	SONIC FLOWMETER (DOPPLER OR TRANSIT TIME)		
	POSITIVE DISPLACEMENT METER		
	THERMAL MASS FLOW ELEMENT		
	ANNUBAR		
	PITOT TUBE		
	PROPELLER OR TURBINE METER		
	DENSITY METER		

MISCELLANEOUS SYMBOLS

	HARDWIRED INTERLOCK - SEE CONTROL PHILOSOPHY FOR SOFT INTERLOCK
	RESET FOR LATCH-TYPE OPERATOR
	ANNUNCIATOR HORN
	GROUND
	INSTRUMENT LOOP SHIELD GROUND
	BOND
	A. DETAIL OR SECTION NUMBER
	TARGET DRAWING SOURCE DRAWING (FIRST OCCURRENCE)
	SEE DETAIL A. DETAIL OR SECTION NUMBER
	SPECIALTY PRODUCT XX = AREA NUMBER YYY = TAG NUMBER
	WATER LEVEL
	MOTOR CONTROL CENTRE

LINE DESIGNATIONS

	ELECTRIC POWER SUPPLY 120 VAC 60 HZ (UNLESS OTHERWISE NOTED)
	INSTRUMENT QUALITY AIR SUPPLY

INSTRUMENT AND FUNCTION SYMBOLS

	PRIMARY LOCATION ***NORMALLY ACCESSIBLE TO OPERATOR	FIELD MOUNTED	AUXILIARY LOCATION ***NORMALLY ACCESSIBLE TO OPERATOR
DISCRETE INSTRUMENTS	1.	2.	3.
SHARED DISPLAY SHARED CONTROL	4.	5.	6.
COMPUTER FUNCTION	7.	8.	9.
PROGRAMMABLE LOGIC CONTROL	10.	11.	12.

*SYMBOL SIZE MAY VARY ACCORDING TO THE USER'S NEEDS AND THE TYPE OF DOCUMENT. A SUGGESTED SQUARE AND CIRCLE SIZE FOR LARGER DIAGRAMS IS SHOWN ABOVE. CONSISTENCY IS RECOMMENDED.

**ABBREVIATION OF THE USER'S CHOICE SUCH AS IPI (INSTRUMENT PANEL #1), IC2 (INSTRUMENT CONSOLE #2), CC3 (COMPUTER CONSOLE #3), ECT., MAY BE USED WHEN IT IS NECESSARY TO SPECIFY INSTRUMENT OR FUNCTION LOCATION.

***NORMALLY INACCESSIBLE OR BEHIND-THE-PANEL DEVICES OR FUNCTIONS MAY BE DEPICTED BY USING THE SAME SYMBOLS BUT WITH DASHED HORIZONTAL BARS, I.E.

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1	ISSUED FOR CONSTRUCTION	TR	AR 18.05.23
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Client/Project

Iqaluit
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IQALUIT WASTEWATER TREATMENT PLANT UPGRADE

City of Iqaluit, Nunavut

File Name: P603

TRchd
Dwn.

Chkd.
Dign.

2017.10.03
YY.MM.DD

Title

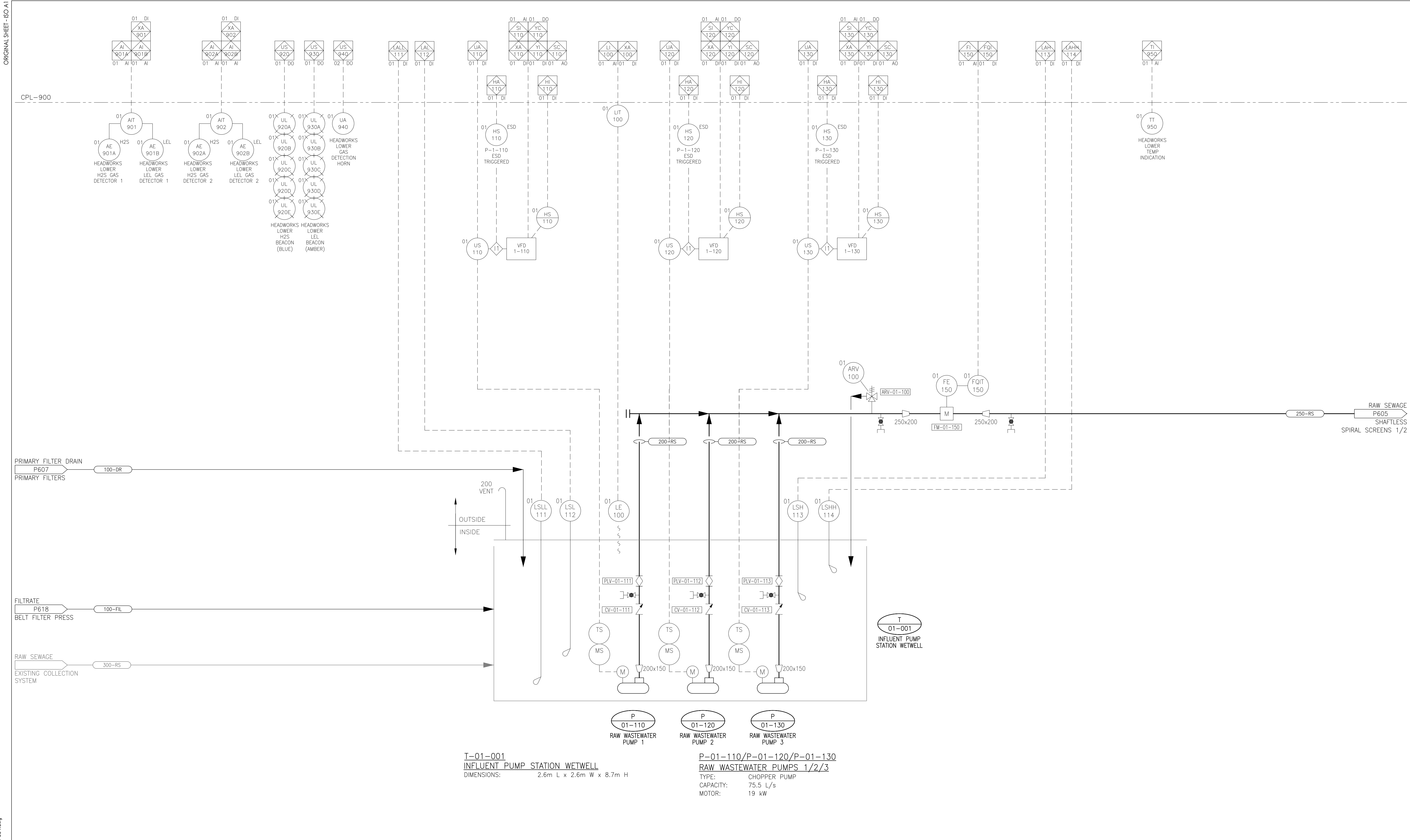
**PROCESS
PIPING AND INSTRUMENTATION DIAGRAM
LEGEND SHEET**

Project No. 110126045	Scale NTS
Drawing No.	Sheet
Revision	

P603

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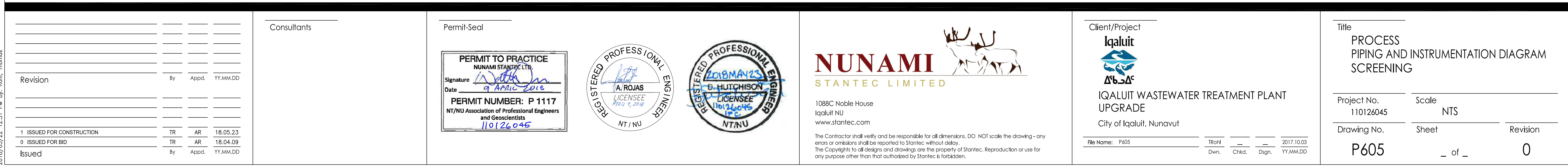
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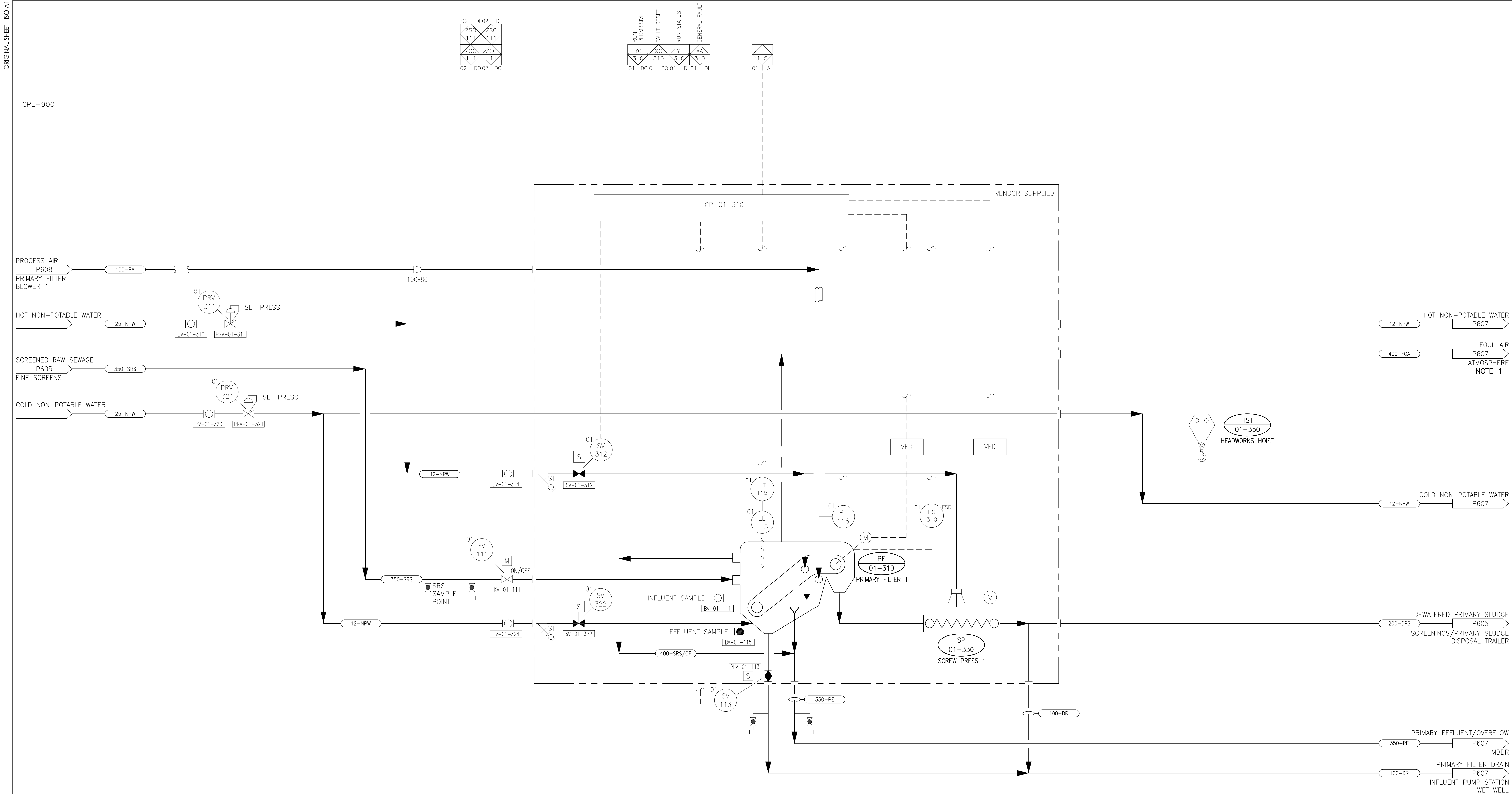


T-01-001
INFLUENT PUMP STATION WETWELL
DIMENSIONS: 2.6m L x 2.6m W x 8.7m H

P-01-110/P-01-120/P-01-130
RAW WASTEWATER PUMPS 1/2/3
TYPE: CHOPPER PUMP
CAPACITY: 75.5 L/s
MOTOR: 19 kW

<table border="1"><thead><tr><th>Revision</th><th>By</th><th>Appd.</th><th>YY.MM.DD</th></tr></thead><tbody><tr><td>1</td><td>ISSUED FOR CONSTRUCTION</td><td>TR</td><td>AR</td><td>18.05.23</td></tr><tr><td>0</td><td>ISSUED FOR BID</td><td>TR</td><td>AR</td><td>18.04.09</td></tr><tr><td colspan="2">Issued</td><td>By</td><td>Appd.</td><td>YY.MM.DD</td></tr></tbody></table>	Revision	By	Appd.	YY.MM.DD	1	ISSUED FOR CONSTRUCTION	TR	AR	18.05.23	0	ISSUED FOR BID	TR	AR	18.04.09	Issued		By	Appd.	YY.MM.DD	Consultants	Permit-Seal 1088C Noble House Iqaluit NU www.stantec.com The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.	Client/Project IQUALUIT WASTEWATER TREATMENT PLANT UPGRADE City of Iqaluit, Nunavut	Title PROCESS PIPING AND INSTRUMENTATION DIAGRAM WET WELL
Revision	By	Appd.	YY.MM.DD																				
1	ISSUED FOR CONSTRUCTION	TR	AR	18.05.23																			
0	ISSUED FOR BID	TR	AR	18.04.09																			
Issued		By	Appd.	YY.MM.DD																			
Project No. 110126045		Scale NTS		Drawing No. Sheet		Revision 0																	
File Name: P604		T:Rohi Dwn.		Chkd. Dign.		2017.10.03 YY.MM.DD																	





NOTES

1. THE ARRANGEMENT OF PRIMARY FILTERS 1 AND 2 SHARES A UNIQUE FOUL AIR PIPELINE TO ATMOSPHERE

2. CONTRACTOR TO SUPPLY AND INSTALL ANALOG SIGNAL SPLITTER INSIDE PRIMARY FILTER CONTROL PANEL FOR LIT-01-115. SEE PC10X FOR DETAILS.

PF-01-310
PRIMARY FILTER 1

TYPE: LEAP PRIMARY

CAPACITY: 121 L/s

FAN MOTOR: 0.18 kW

FILTER BELT MOTOR: 0.75 kW

SP-01-330
SCREW PRESS 1

AUGER MOTOR: 0.37 kW

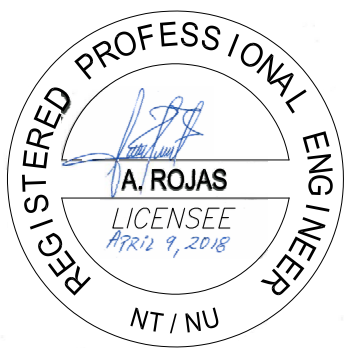
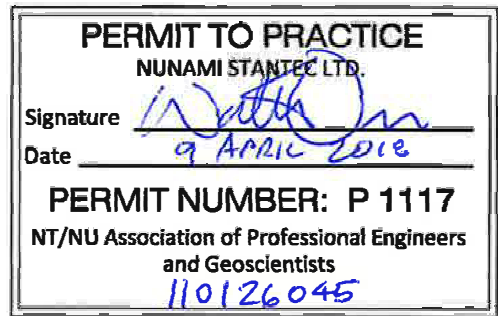
HST -01-350
HEADWORKS HOIST

CAPACITY: 1 TONNE

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1	ISSUED FOR CONSTRUCTION	TR	AR 18.05.23
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Client/Project



IQALUIT WASTEWATER TREATMENT PLANT
UPGRADE
City of Iqaluit, Nunavut

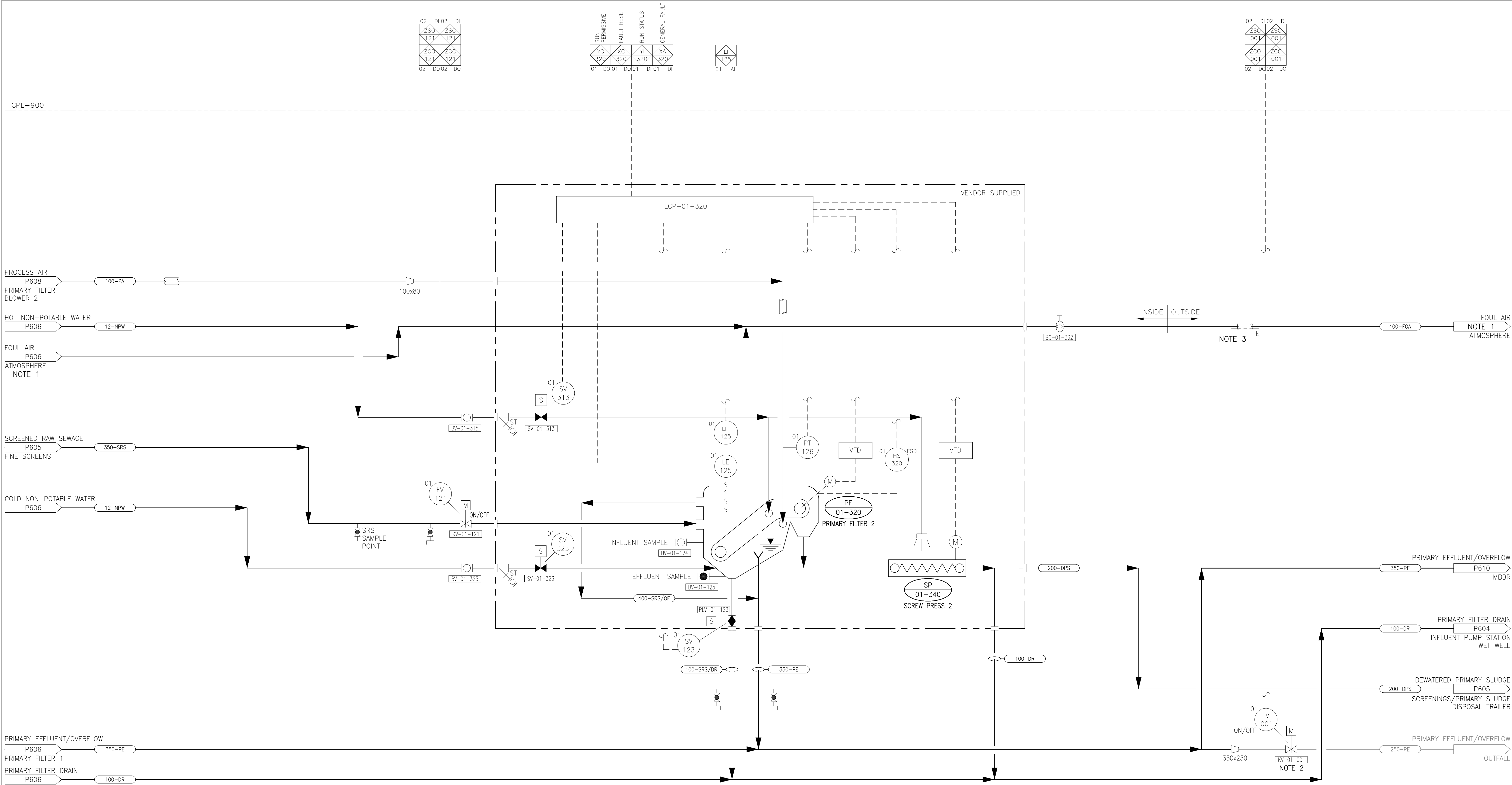
File Name: P606	TRcht	Chkd.	Dgn.	2017.10.03
	Dwn.			YY.MM.DD

Title

PROCESS
PIPING AND INSTRUMENTATION DIAGRAM
PRIMARY FILTER 1

Project No. 110126045	Scale NTS
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- NOTES**
1. THE ARRANGEMENT OF PRIMARY FILTERS 1 AND 2 SHARES A UNIQUE FOUL AIR PIPELINE TO ATMOSPHERE.
 2. REPLACE EXISTING MANUAL VALVE WITH NEW ELECTRICALLY OPERATED OPEN/CLOSE VALVE.
 3. INSULATE AND HEAT TRACE ALL FOUL AIR OUTSIDE PIPING.
 4. CONTRACTOR TO SUPPLY AND INSTALL ANALOG SIGNAL SPLITTER INSIDE PRIMARY FILTER 2 CONTROL PANEL FOR LIT-01-125. SEE PC-10X FOR DETAILS.

PF-01-320
PRIMARY FILTER 2
TYPE: LEAP PRIMARY
CAPACITY: 121 L/s
FAN MOTOR: 0.18 kW
FILTER BELT MOTOR: 0.75 kW

SP-01-340
SCREW PRESS 2
AUGER MOTOR: 0.37 kW

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PERMIT TO PRACTICE
NUNAMI STANTEC LTD.
Signature: *[Signature]*
Date: 9 APRIL 2018
PERMIT NUMBER: P 1117
NT/NU Association of Professional Engineers and Geoscientists
110126045

REGISTERED PROFESSIONAL ENGINEER
A. ROJAS
LICENSEE
1803 1 2018
NT/NU

REGISTERED PROFESSIONAL ENGINEER
B. HUTCHISON
LICENSEE
1802 2018
NT/NU

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Client/Project

Iqaluit
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IQALUIT WASTEWATER TREATMENT PLANT
UPGRADE
City of Iqaluit, Nunavut

File Name: P607

TRcht
Dwn.

Chkd.
Dign.

2017.10.03
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Title

**PROCESS
PIPING AND INSTRUMENTATION DIAGRAM
PRIMARY FILTER 2**

Project No. 110126045

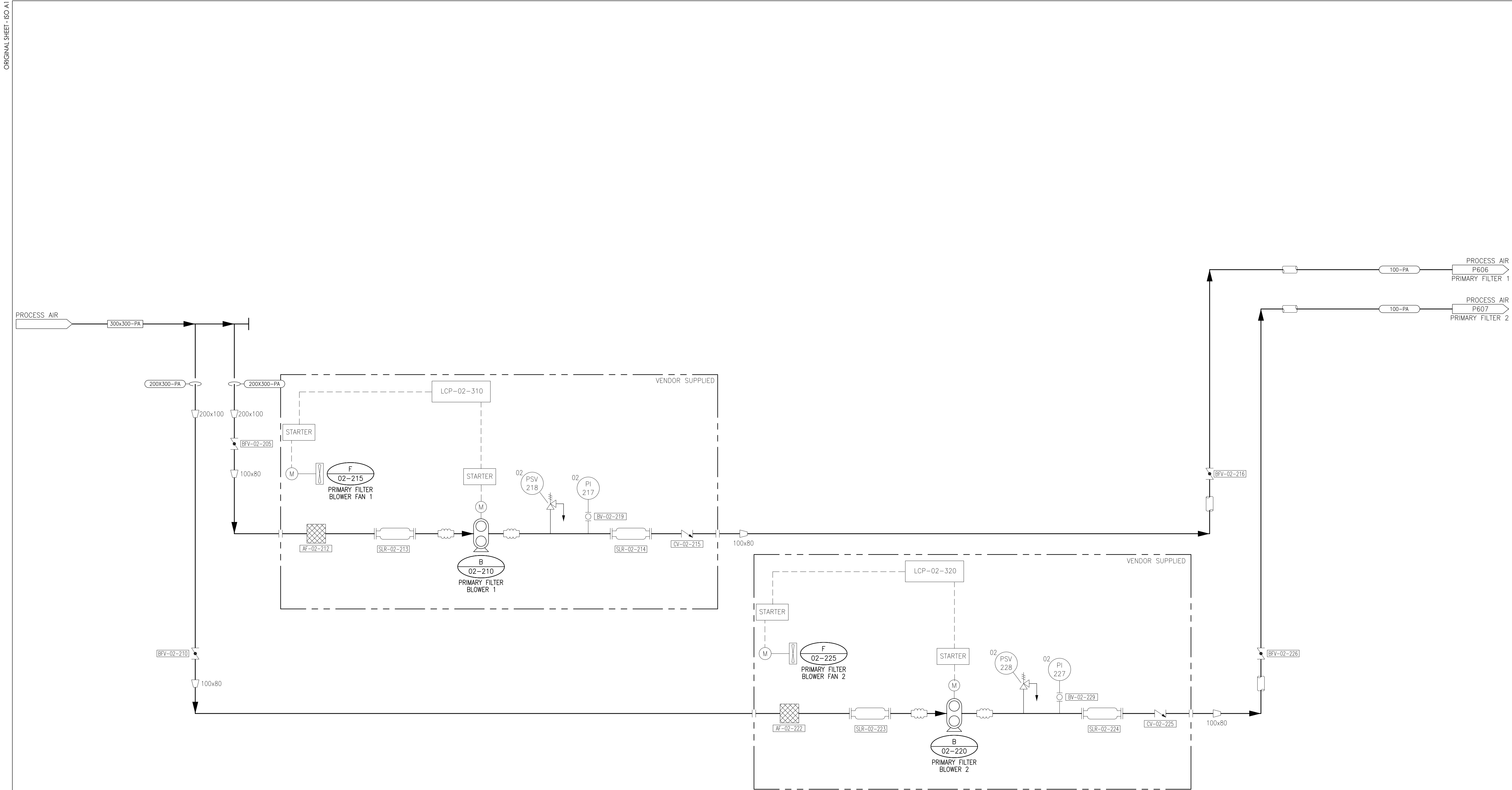
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F-02-215/F-02-225
PRIMARY FILTER BLOWER FANS 1/2
MOTOR: 0.18 kW

B-02-210/B-02-220
PRIMARY FILTER AERATION BLOWERS 1/2
TYPE: POSITIVE DISPLACEMENT
CAPACITY: 5.6 m³/min @ 40 kPa
MOTOR: 7.5 kW

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REGISTERED PROFESSIONAL ENGINEER
A. ROJAS
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REGISTERED PROFESSIONAL ENGINEER
B. HUTCHISON
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Client/Project
Iqaluit
Iqaluit Wastewater Treatment Plant Upgrade
City of Iqaluit, Nunavut

File Name: P608
TRcht
Dwn.
Chkd.
Dign.
2017.10.03
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Title
PROCESS
PIPING AND INSTRUMENTATION DIAGRAM
PRIMARY FILTER BLOWERS

Project No.
110126045

Drawing No.
P608

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NTS

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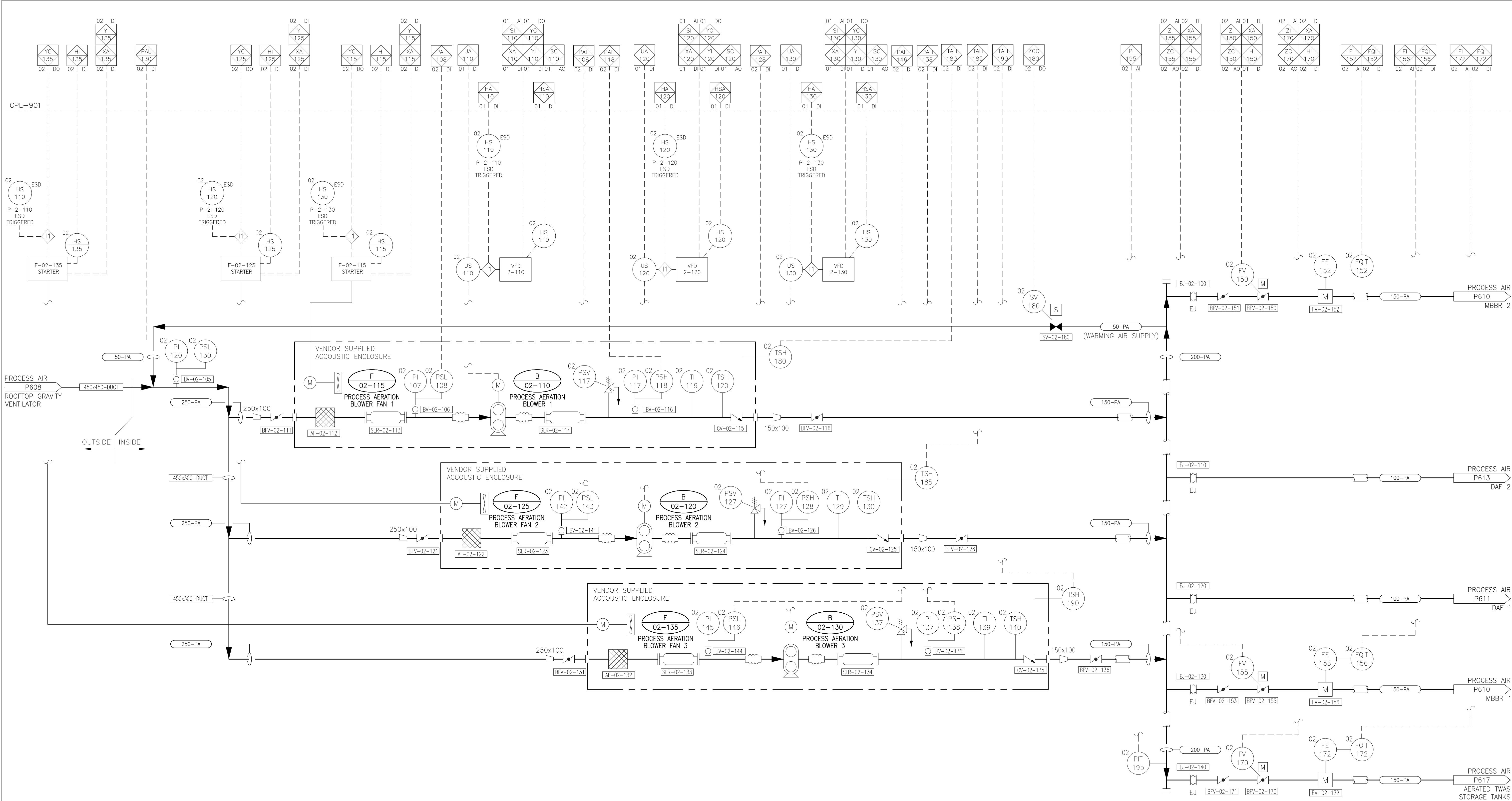
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2018/05/22 12:52 PM By: Rohi, Thomas

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NOTES:

1. VENDOR SUPPLIED AERATION PACKAGE EQUIPMENT TO COME WITH PLANT PLC-A AS WELL AS ETHERNET CONNECTION ALLOWING COMMUNICATION LINK TO NETWORK SWITCH.
2. PROCESS AERATION FAN STARTER TO BE INTERLOCKED WITH RESPECTIVE PROCESS AERATION BLOWER ESD.

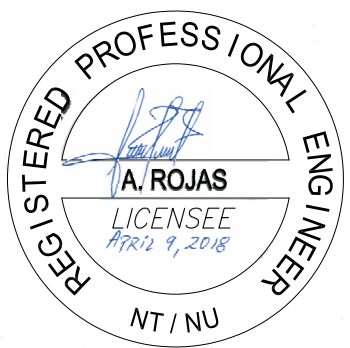
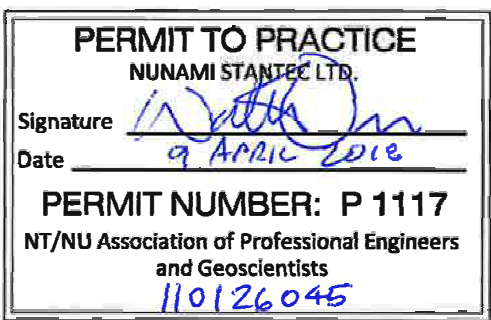
F-02-115/F-02-125/F-02-135
PROCESS AERATION BLOWER FANS 1/2/3
MOTOR: 0.375 kW

B-02-110/B-02-120/B-02-130
PROCESS AERATION BLOWERS 1/2/3
TYPE: POSITIVE DISPLACEMENT
CAPACITY: 13.1 m³/min @ 46 kPa
MOTOR: 19.0 kW

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Client/Project



IQALUIT WASTEWATER TREATMENT PLANT
UPGRADE
City of Iqaluit, Nunavut

File Name: P609

TRchd
Dwn. Chkd. Dign. 2017.10.03
YY.MM.DD

Title

PROCESS
PIPING AND INSTRUMENTATION DIAGRAM
PROCESS AERATION BLOWERS

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110126045

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NTS

Drawing No.

Sheet

Revision

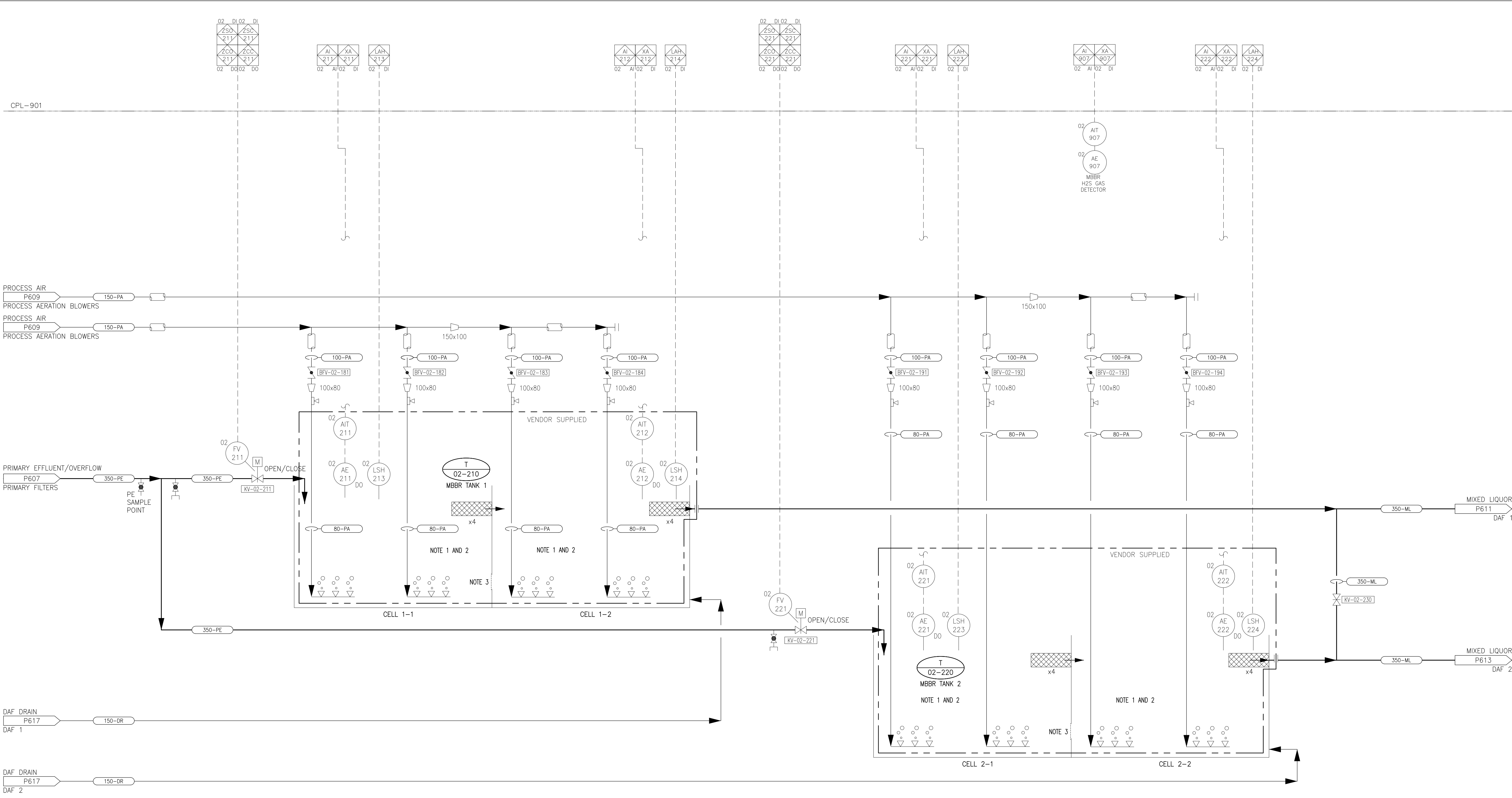
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2018/05/22 12:52 PM By: Rohi, Thomas



NOTES:

1. MBBR TANKS ARE EXISTING WITH SOME MODIFICATIONS, REFER TO STRUCTURAL DRAWINGS.
2. INTERNAL ELEMENTS OF MBBR TRAINS INCLUDING INSTRUMENTATION ARE VENDOR SUPPLIED.
3. PROVIDE 300x300 HOLES WITH 15mm MESH FLAT SCREENS ON THE INTERMEDIA WALLS OF THE MBBR TRAINS BETWEEN CELLS 1 AND 2. REFER TO STRUCTURAL DRAWINGS FOR LOCATION OF THE HOLES.

T-02-210/T-02-220

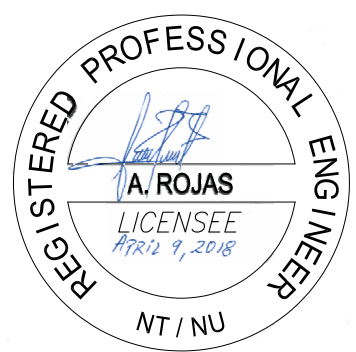
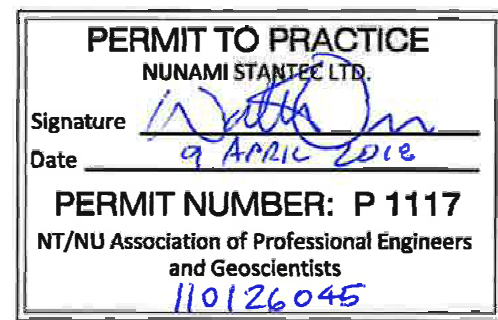
MBBR TANKS 1/2

VOLUME: 196 m³ x 2
WATER DEPTH: 4.1 m

Revision	By	Appd.	YY.MM.DD
1	ISSUED FOR CONSTRUCTION	TR	AR 18.05.23
0	ISSUED FOR BID	TR	AR 18.04.09
Issued	By	Appd.	YY.MM.DD

Consultants

Permit-Seal

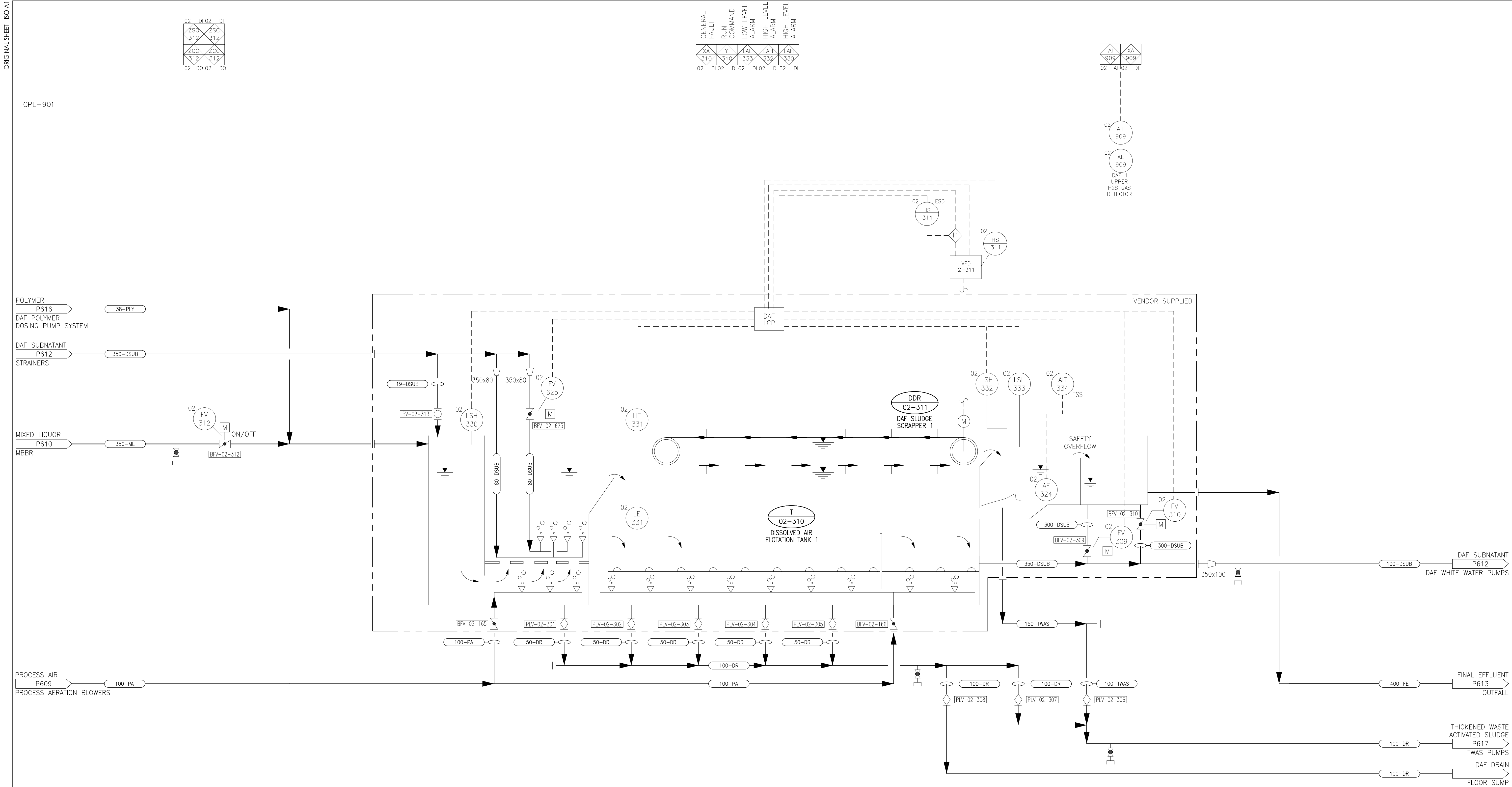


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Client/Project			
Iqaluit			
			
IQALUIT WASTEWATER TREATMENT PLANT UPGRADE			
City of Iqaluit, Nunavut			
File Name: P610	TRchd Dwn.	Chkd. Dgn.	2017.10.03 YY.MM.DD

Title	PROCESS PIPING AND INSTRUMENTATION DIAGRAM MOVING BED BIOFILM REACTORS		
Project No.	110126045	Scale	NTS
Drawing No.	P610	Sheet	0



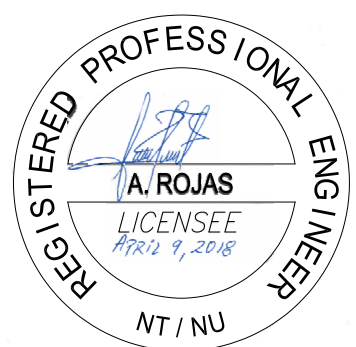
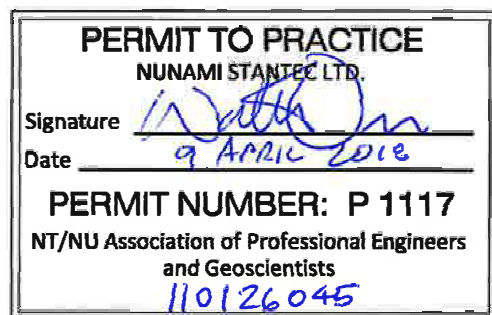
T-02-310
DISSOLVED AIR FLOTATION TANK 1
DIMENSIONS: 7610 L x 2730 W x 3650 H
CAPACITY: 60.4 L/s

DDR-02-311
DAF SLUDGE SCRAPER 1
MOTOR: 0.37 kW

Revision	By	Appd.	YY.MM.DD
1	ISSUED FOR CONSTRUCTION	TR	AR 18.05.23
0	ISSUED FOR BID	TR	AR 18.04.09
Issued	By	Appd.	YY.MM.DD

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IQALUIT WASTEWATER TREATMENT PLANT
UPGRADE
City of Iqaluit, Nunavut

File Name: P611

TRcht
Dwn.

Chkd.

Dign.

2017.10.03
YY.MM.DD

Title

PROCESS
PIPING AND INSTRUMENTATION DIAGRAM
DISSOLVED AIR FLOTATION 1

Project No.
110126045

Scale
NTS

Drawing No.

Sheet

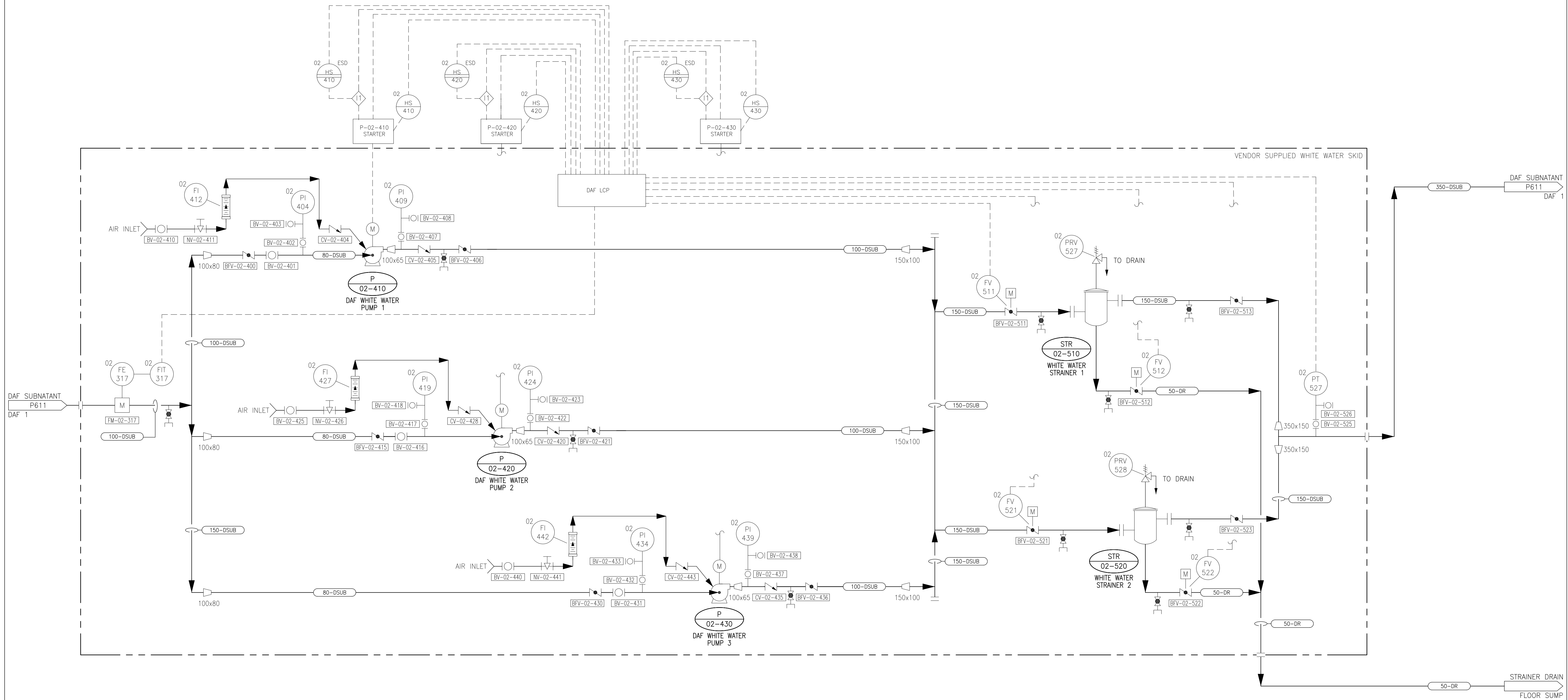
Revision

P611

_ of _

0

CPL-901



P-02-410/P-02-420/P-02-430
DAF WHITE WATER PUMPS 1/2/3
TYPE: CENTRIFUGAL
CAPACITY: 5.5L/s @ 56m
MOTOR: 7.5 kW

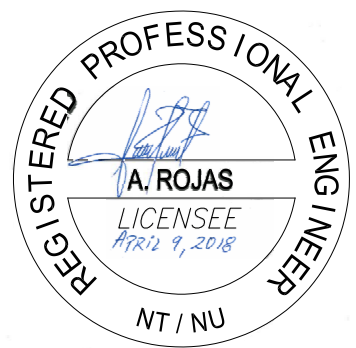
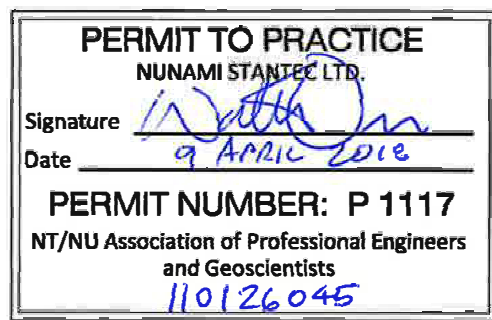
STR-02-510/P-02-520
WHITE WATER STRAINERS 1/2
TYPE: BASKET
OPENING: 1.0 mm

\\A1107\active\110126045\drawings\04-process\current\p612.dwg
2018/05/22 12:48 PM By: Rohi, Thomas

Revision	By	Appd.	YY.MM.DD
1	ISSUED FOR CONSTRUCTION	TR	AR 18.05.23
0	ISSUED FOR BID	TR	AR 18.04.09
Issued		By	Appd. YY.MM.DD

Consultants

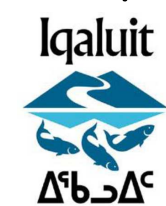
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IQALUIT WASTEWATER TREATMENT PLANT
UPGRADE
City of Iqaluit, Nunavut

File Name: P612
T:Rohi
Dwn. Chkd. Dign. 2017.10.03
YY.MM.DD

Title

PROCESS
PIPING AND INSTRUMENTATION DIAGRAM
DISSOLVED AIR FLotation 1 - WHITewater PUMPing

Project No.
110126045

Scale
NTS

Drawing No.

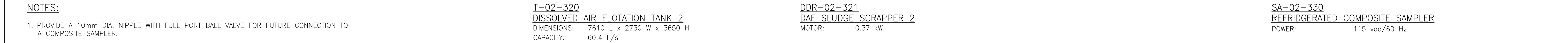
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Revision

P612

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Revision	By	Appd.	YY.MM.DD
1 ISSUED FOR CONSTRUCTION	TR	AR	18.05.23
0 ISSUED FOR BID	TR	AR	18.04.09
Issued	By	Appd.	YY.MM.DD

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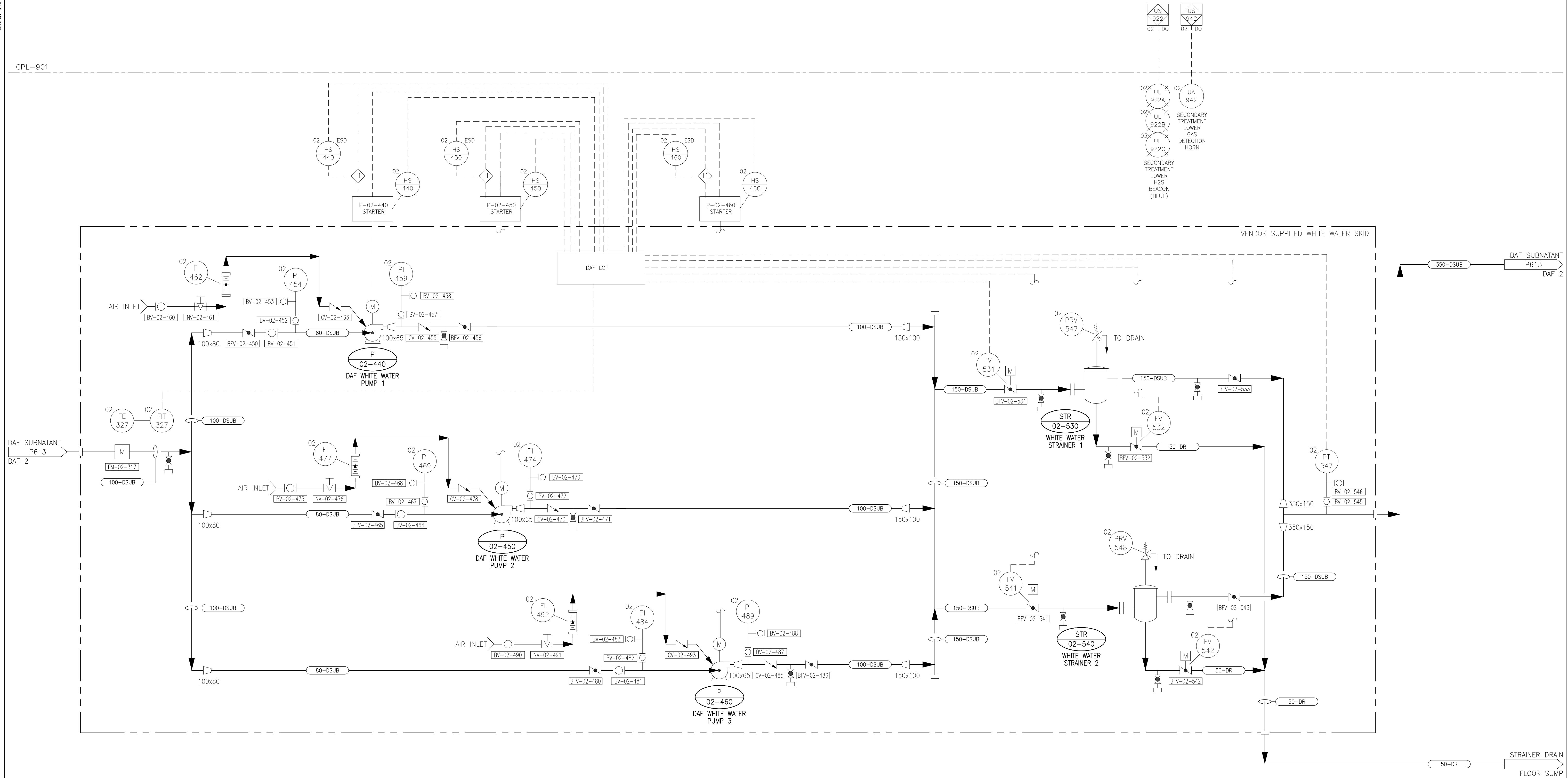


TRohl	—	—	2017.10.03
Dwn.	Chkd.	Dsgn.	YY.MM.DD

Revision

C

CPL-901



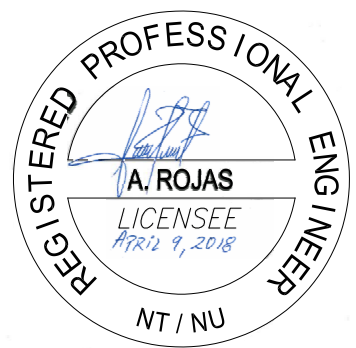
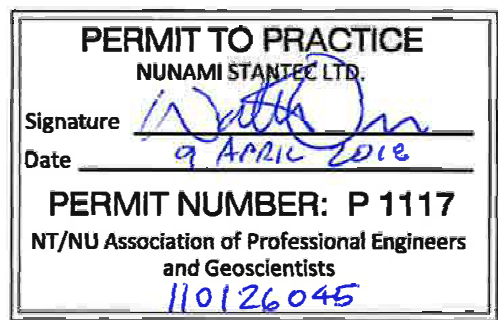
P-02-440/P-02-450/P-02-460
DAF WHITE WATER PUMPS 1/2/3
TYPE: CENTRIFUGAL
CAPACITY: 5.5L/s @ 56M
MOTOR: 7.5 kW

STR-02-530/P-02-540
WHITE WATER STRAINERS 1/2
TYPE: BASKET
OPENING: 1.0 mm

Revision	By	Appd.	YY.MM.DD
1	ISSUED FOR CONSTRUCTION	TR	AR 18.05.23
0	ISSUED FOR BID	TR	AR 18.04.09
Issued	By	Appd.	YY.MM.DD

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IQUALUIT WASTEWATER TREATMENT PLANT
UPGRADE
City of Iqaluit, Nunavut

File Name: P614

TRcht
Dwn.

Chkd.

Dign.

2017.10.03
YY.MM.DD

Title

PROCESS
PIPING AND INSTRUMENTATION DIAGRAM
DISSOLVED AIR FLotation 2 - WHITEwater PUMPing

Project No.
110126045

Scale
NTS

Drawing No.

Sheet

Revision

P614

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0

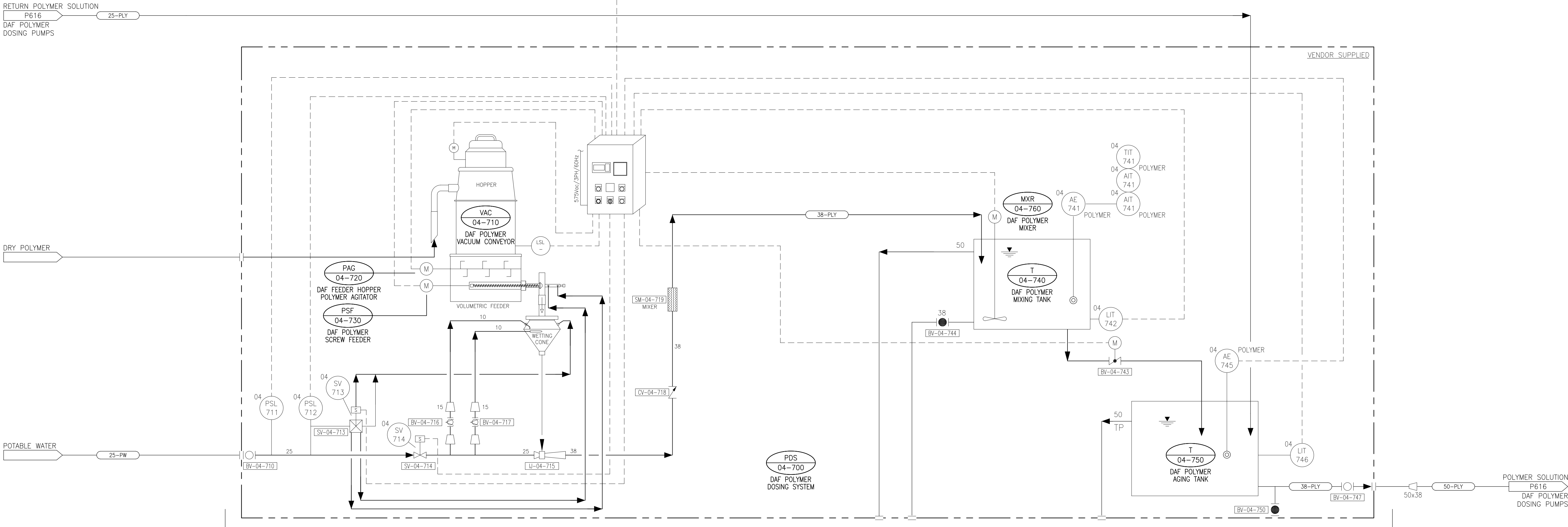
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VA:1107\active\110126045\drawings\04-process\current\p615.dwg
2018/05/22 12:53 PM By: Rohi, Thomas

Y1	XA	LAL	FAL	LI	HA
700	700	700	700	700	700
04	DI 04	DI 04	DI 04	AI 04	DI

RUN	GENERAL	LOW LEVEL	HIGH	PRESSURE	DAF TANK	INDICATION	AUTO STATUS
COMMAND	FAULT	ALARM	ALARM	LEVEL	LEVEL		
Y1	XA	LAL	FAL	LI	HA		
700	700	700	700	700	700		
04	DI 04	DI 04	DI 04	AI 04	DI		

CPL-901



PDS-04-700
DAF POLYMER DOSING SYSTEM

TYPE: VACUUM CONVEYOR AND HOPPER
CAPACITY: 0.49 kg DRY POLYMER/hr

VAC-04-710
DAF POLYMER VACUUM CONVEYOR

POWER: 9.2 AMP

PAG-04-720
DAF FEEDER HOPPER POLYMER AGITATOR

POWER: 0.37kW

PSF-04-730
DAF POLYMER SCREW FEEDER

POWER: 0.18 kW

T-04-740
DAF POLYMER MIXING TANK

VOLUME: 250 L

T-04-750
DAF POLYMER AGING TANK

VOLUME: 250 L

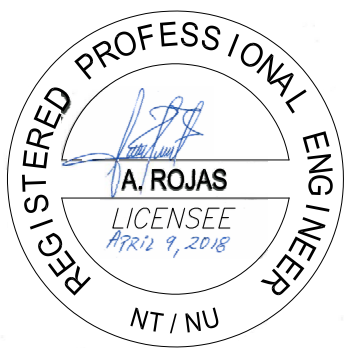
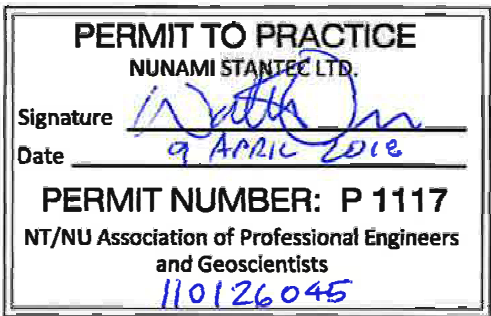
MXR-04-760
DAF POLYMER MIXER

MOTOR: 0.25 kW

Revision	By	Appd.	YY.MM.DD
1	ISSUED FOR CONSTRUCTION	TR	AR 18.05.23
0	ISSUED FOR BID	TR	AR 18.04.09
Issued	By	Appd.	YY.MM.DD

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Client/Project



IQALUIT WASTEWATER TREATMENT PLANT
UPGRADE
City of Iqaluit, Nunavut

File Name: P615
T:Rohi
Dwn.
Chkt.
Dign.
2017.10.03
YY.MM.DD

Title

PROCESS
PIPING AND INSTRUMENTATION DIAGRAM
DAF POLYMER SYSTEM

Project No.
110126045

Scale
NTS

Drawing No.

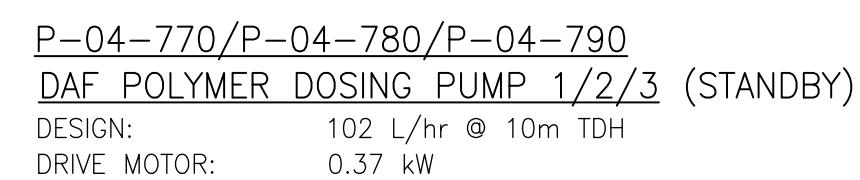
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Revision

P615

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0



Revision	By	Appd.	YY.MM.DD
1 ISSUED FOR CONSTRUCTION	TR	AR	18.05.23
0 ISSUED FOR BID	TR	AR	18.04.09
Issued	By	Appd.	YY.MM.DD

Permit-Seal



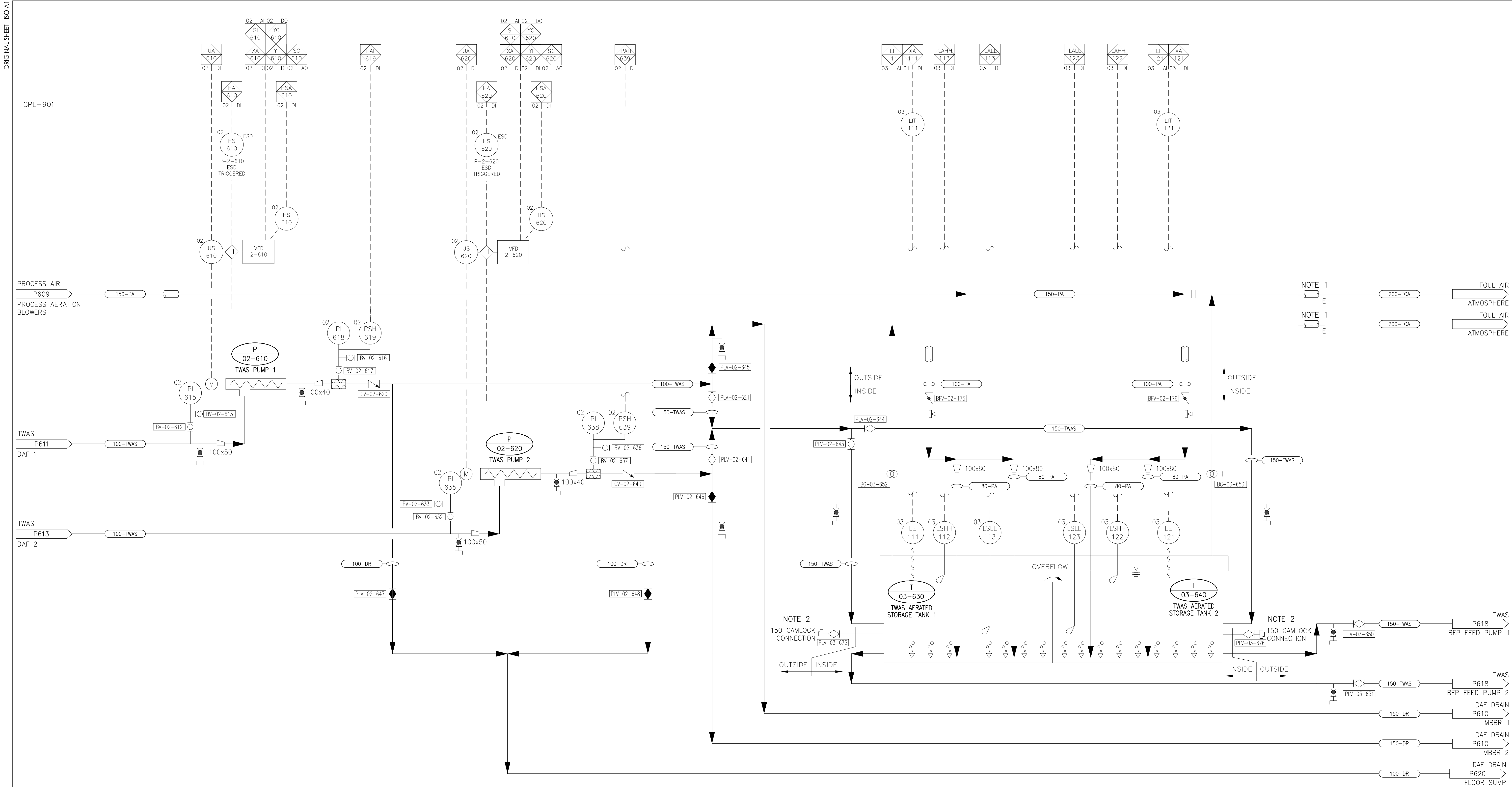
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Trchl	—	—	2017.10.03
Dwn.	Chkd.	Dsgn.	YY.MM.DD

Revision

0



NOTES
1. INSULATE AND HEAT TRACE ALL FOUL AIR OUTSIDE PIPING.
2. PROVIDE INSULATED AND HEAT TRACED BOX AROUND ALL CAMLOCK CONNECTIONS.
(REFER TO MECHANICAL AND ARCHITECTURAL DRAWINGS)

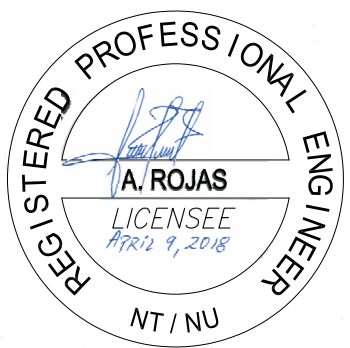
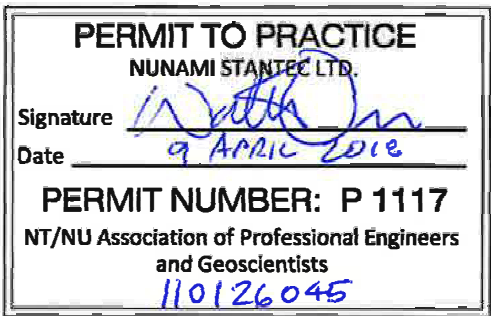
P-02-610/P-02-620
TWAS PUMPS 1/2
TYPE: PROGRESSIVE CAVITY
CAPACITY: 917 L/hr @ 6.0m TDH
MOTOR: 0.75 kW

T-03-630/T-03-640
TWAS AERATED STORAGE TANKS 1/2
VOLUME: 109 m³ (EACH TANK)
LIQUID DEPTH: 4.0 m

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
Revision	By	Appd.	YY.MM.DD
_____	_____	_____	_____
_____	_____	_____	_____
1 ISSUED FOR CONSTRUCTION	TR	AR	18.05.23
0 ISSUED FOR BID	TR	AR	18.04.09
Issued	By	Appd.	YY.MM.DD

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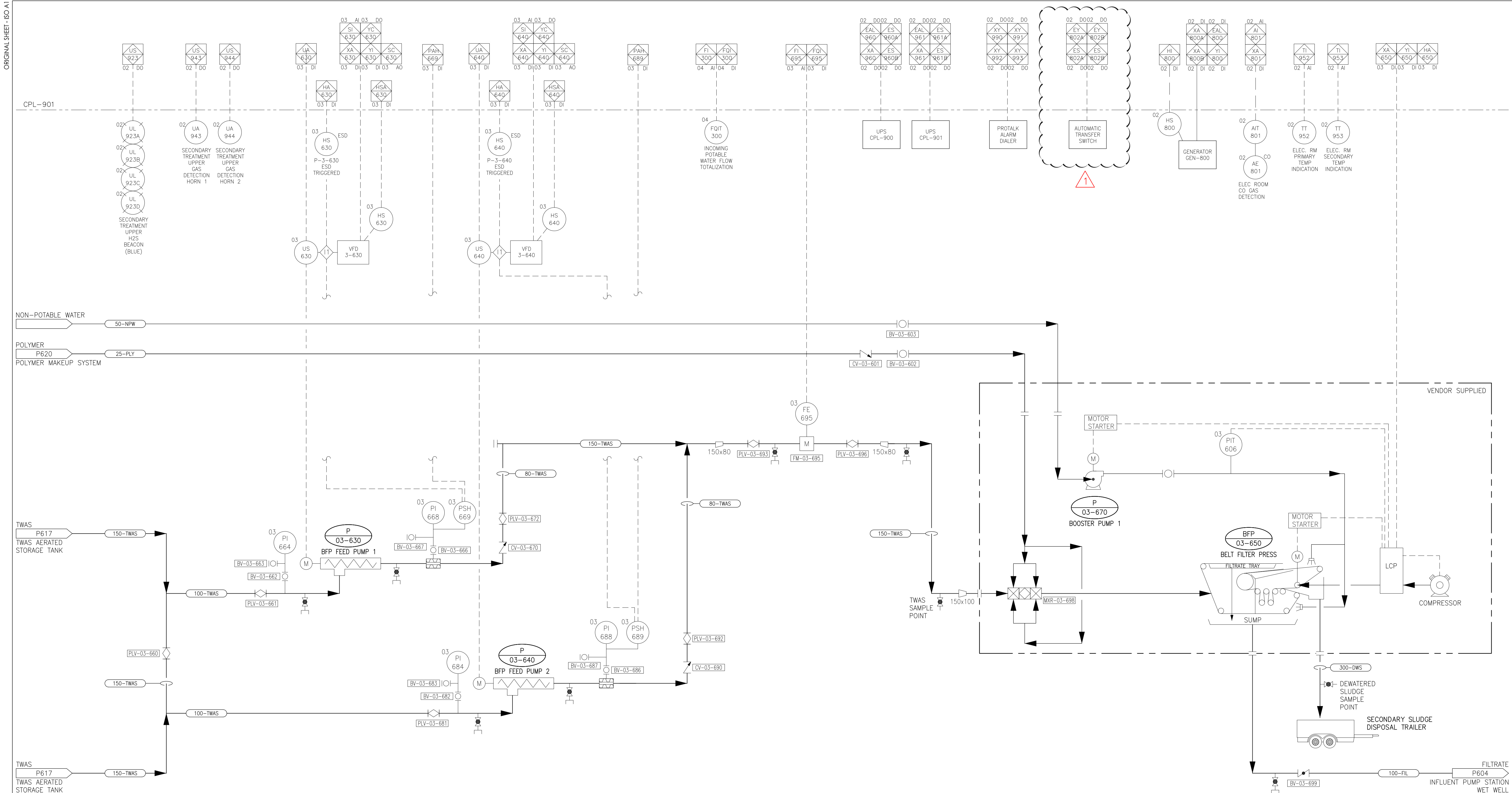
IQALUIT WASTEWATER TREATMENT PLANT
UPGRADE
City of Iqaluit, Nunavut

File Name: P617
T:Rohi
Dwn. Chkd. Dign. 2017.10.03
YY.MM.DD

Title

PROCESS
PIPING AND INSTRUMENTATION DIAGRAM
TWAS PUMPS AND TWAS AERATED STORAGE TANKS

Project No. 110126045
Drawing No. _____
Scale NTS
Sheet _____ of _____
Revision 0



P-03-630/P-03-640
BFP FEED PUMPS 1/2
TYPE: PROGRESSIVE CAVITY
CAPACITY: 2.0 L/s @ 20m TDH
MOTOR: 1.5 kW

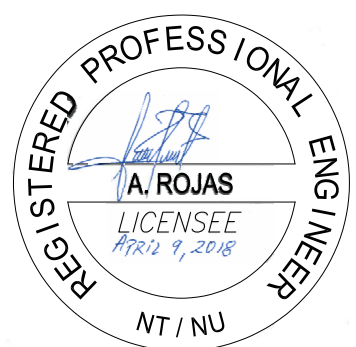
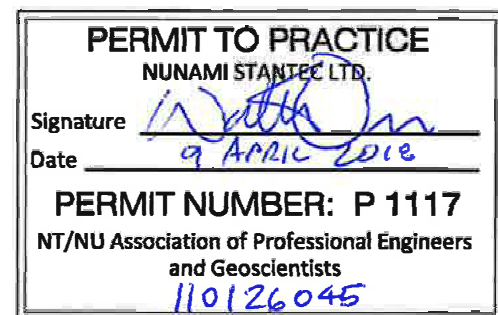
P-03-670
BOOSTER PUMP 1
TYPE: CENTRIFUGAL
CAPACITY: 3.5 L/s
MOTOR: 5.5 kW

BFP-03-650
BELT FILTER PRESS
CAPACITY: 2.0 L/s
BELT MOTOR: 0.75 kW
COMPRESSOR MOTOR: 1.5 kW
WASHWATER: 3.5 L/s @ 84.0m

1	ISSUED FOR ADDENDUM #2	AB	DH 18.04.27
Revision		By	Appd. YY.MM.DD
1	ISSUED FOR CONSTRUCTION	TR	AR 18.05.23
0	ISSUED FOR BID	TR	AR 18.04.09
Issued		By	Appd. YY.MM.DD

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Client/Project



IQUALUIT WASTEWATER TREATMENT PLANT
UPGRADE
City of Iqaluit, Nunavut

File Name: P618	TRchd	Chkd.	Dign.	2017.10.03
	Dwn.			YY.MM.DD

Title

PROCESS
PIPING AND INSTRUMENTATION DIAGRAM
BFP PUMPS AND BELT FILTER PRESS

Project No.
110126045

Scale
NTS

Drawing No.

Sheet

Revision

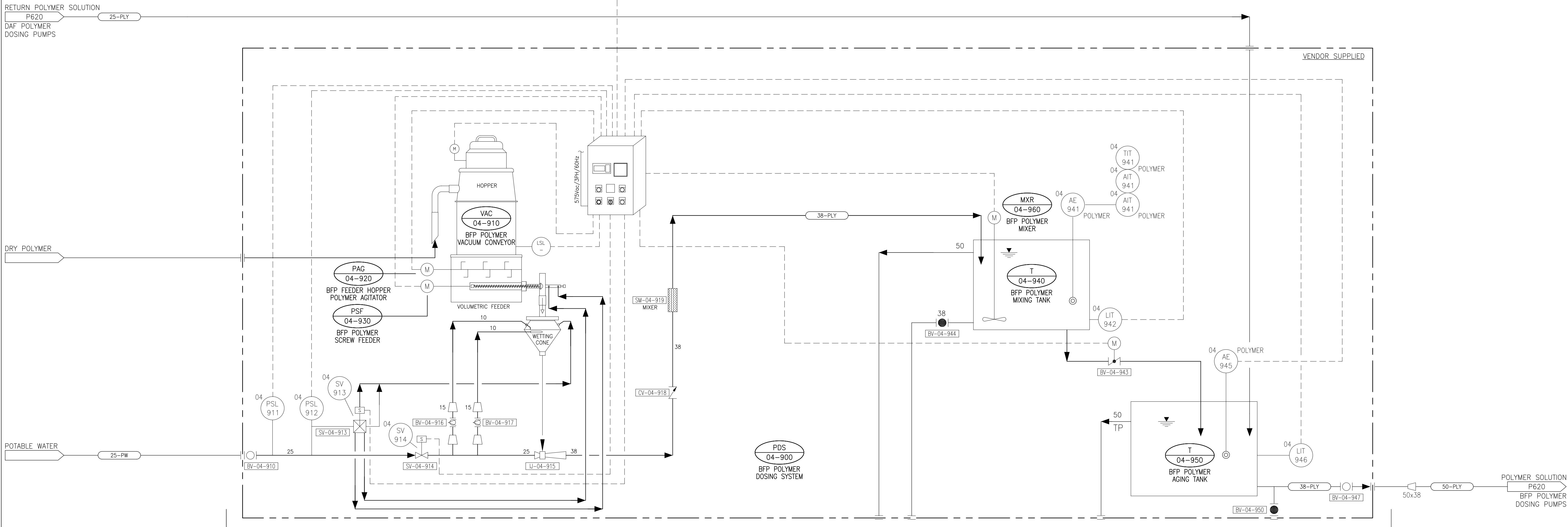
P618

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1

RUN COMMAND	GENERAL FAULT	LOW LEVEL ALARM	AUTO STATUS	AGING TANK OVER FILL INDICATION
Y1 900	XA 900	LAH 900	HA 900	LI 900
04 DI 04	04 DI 04	04 DI 04	04 DI 04	04 AI

CPL-901



PDS-04-900
BFP POLYMER DOSING SYSTEM
TYPE: VACUUM CONVEYOR AND HOPPER
CAPACITY: 2.18 kg DRY POLYMER/hr

VAC-04-910
BFP POLYMER VACUUM CONVEYOR
POWER: 9.2 AMP

PAG-04-920
BFP FEEDER HOPPER POLYMER AGITATOR
POWER: 0.37kW

PSF-04-930
BFP POLYMER SCREW FEEDER
POWER: 0.18 kW

T-04-940
BFP POLYMER MIXING TANK
VOLUME: 508 L

T-04-950
BFP POLYMER AGING TANK
VOLUME: 508 L

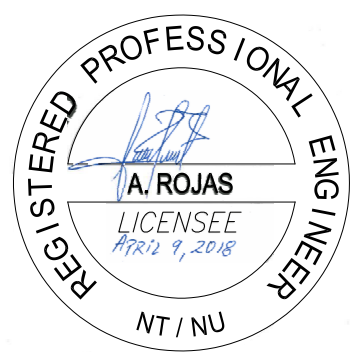
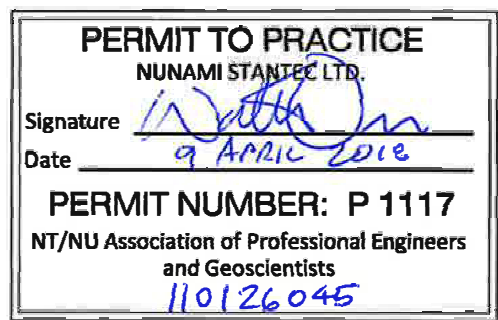
MXR-04-960
BFP POLYMER MIXER
MOTOR: 0.37 kW

SECONDARY CONTAINMENT

Revision	By	Appd.	YY.MM.DD
1 ISSUED FOR CONSTRUCTION	TR	AR	18.05.23
0 ISSUED FOR BID	TR	AR	18.04.09
Issued	By	Appd.	YY.MM.DD

Consultants

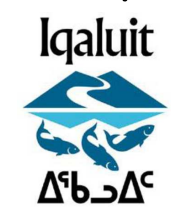
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IQALUIT WASTEWATER TREATMENT PLANT
UPGRADE
City of Iqaluit, Nunavut

File Name: P619

TRcht
Dwn.

Chkt.
Dign.

2017.10.03
YY.MM.DD

Title

PROCESS
PIPING AND INSTRUMENTATION DIAGRAM
BELT FILTER PRESS POLYMER DOSING SYSTEM

Project No.
110126045

Scale
NTS

Drawing No.

Sheet

Revision

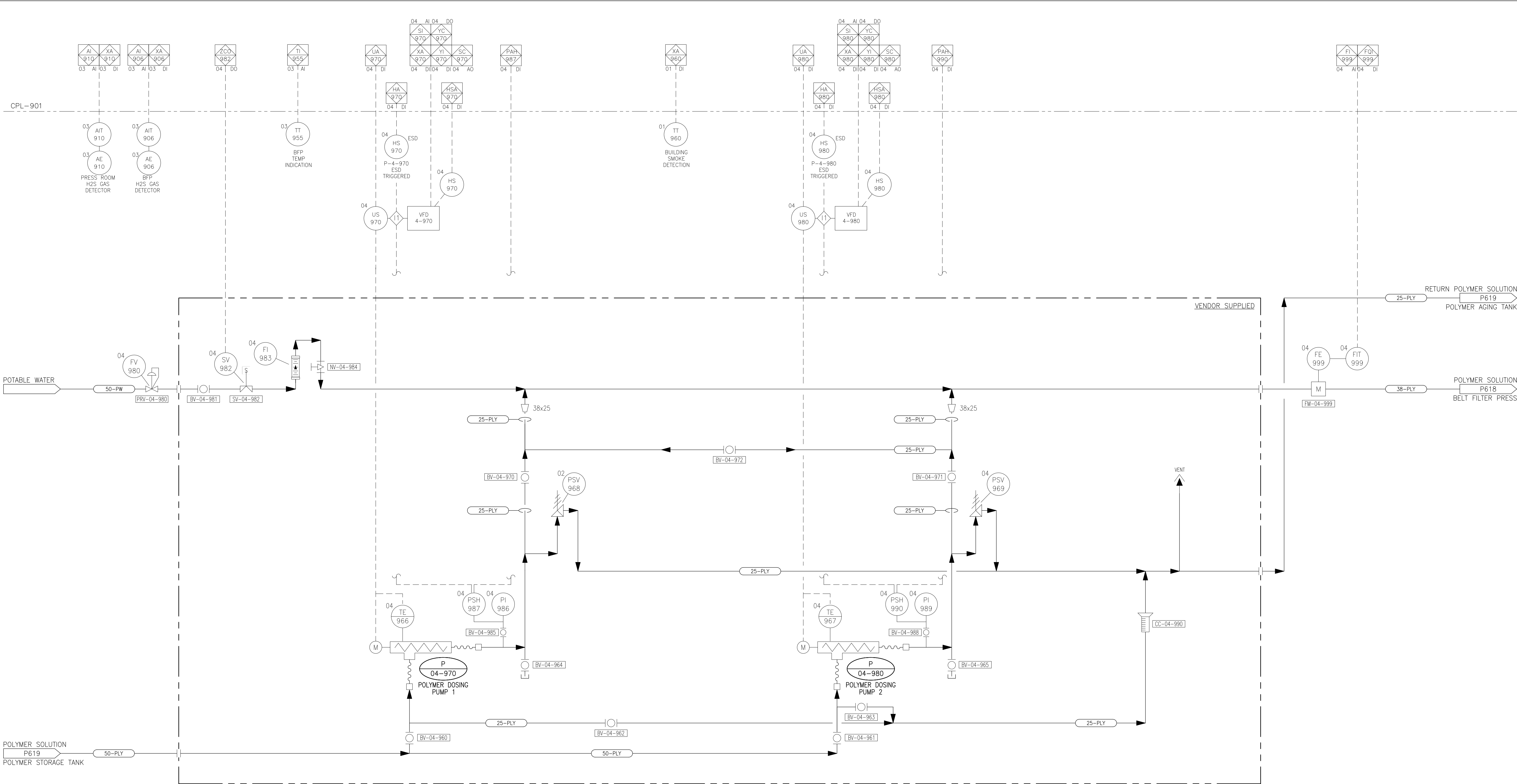
P619

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0

ORIGINAL SHEET - ISO A1

VA1107\\active\\110126045\\drawings\\04-process\\current\\P620.dwg
2018/05/22 12:54 PM By: Rohi, Thomas



P-04-970/P-04-980
BELT FILTER PRESS POLYMER DOSING PUMP 1/2
TYPE: PROGRESSIVE CAVITY
DESIGN: 554 L/hr @ 20m TDH
DRIVE MOTOR: 0.50 kW

<table border="1"><thead><tr><th>Revision</th><th>By</th><th>Appd.</th><th>YY.MM.DD</th></tr></thead><tbody><tr><td>1</td><td>ISSUED FOR CONSTRUCTION</td><td>TR</td><td>AR</td><td>18.05.23</td></tr><tr><td>0</td><td>ISSUED FOR BID</td><td>TR</td><td>AR</td><td>18.04.09</td></tr><tr><td colspan="2">Issued</td><td>By</td><td>Appd.</td><td>YY.MM.DD</td></tr></tbody></table>	Revision	By	Appd.	YY.MM.DD	1	ISSUED FOR CONSTRUCTION	TR	AR	18.05.23	0	ISSUED FOR BID	TR	AR	18.04.09	Issued		By	Appd.	YY.MM.DD	Consultants	Permit-Seal PERMIT TO PRACTICE NUNAMI STANTEC LTD. Signature: <i>[Signature]</i> Date: 9 APRIL 2018 PERMIT NUMBER: P 1117 NT/NU Association of Professional Engineers and Geoscientists 110126045 REGISTERED PROFESSIONAL ENGINEER A. ROJAS NT/NU REGISTERED PROFESSIONAL ENGINEER D. HUTCHISON 110126045 NT/NU	NUNAMI STANTEC LIMITED 1088C Noble House Iqaluit NU www.stantec.com The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.	Client/Project Iqaluit IQUALUIT WASTEWATER TREATMENT PLANT UPGRADE City of Iqaluit, Nunavut <table border="1"><tr><td>File Name: P620</td><td>TRcht Dwn.</td><td>Chkt. —</td><td>Dign. —</td><td>2017.10.03 YY.MM.DD</td></tr></table>	File Name: P620	TRcht Dwn.	Chkt. —	Dign. —	2017.10.03 YY.MM.DD	Title PROCESS PIPING AND INSTRUMENTATION DIAGRAM BELT FILTER PRESS POLYMER DOSING PUMP SYSTEM <table border="1"><tr><td>Project No. 110126045</td><td>Scale NTS</td></tr><tr><td>Drawing No.</td><td>Sheet</td><td>Revision</td></tr><tr><td>P620</td><td>— of —</td><td>0</td></tr></table>	Project No. 110126045	Scale NTS	Drawing No.	Sheet	Revision	P620	— of —	0
Revision	By	Appd.	YY.MM.DD																																		
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0	ISSUED FOR BID	TR	AR	18.04.09																																	
Issued		By	Appd.	YY.MM.DD																																	
File Name: P620	TRcht Dwn.	Chkt. —	Dign. —	2017.10.03 YY.MM.DD																																	
Project No. 110126045	Scale NTS																																				
Drawing No.	Sheet	Revision																																			
P620	— of —	0																																			