

EQUALIZATION TANKS
TK-1000/1100

MAN.: DRAGON PRODUCTS
TYPE: STORAGE TANKS
SIZE: 13.7m LG x 2.6m WD x 2.7m HIGH
CAP: 79.5CU.M (500BBL)
MAT: COATED CARBON STEEL
NOTES: -

EQ TRANSFER PUMP
P-1300A/B

MAN.: -
TYPE: CENTRIFUGAL PUMP
SIZE: XXmm INLET, XXmm OUTLET
FLOW: 312 LPM (82 GPM)
HEAD: -
DRIVER: 3 HP @ 1725 RPM 3 P/ 60 Hz 575 V
NOTES: -

PACKAGE NO. ----

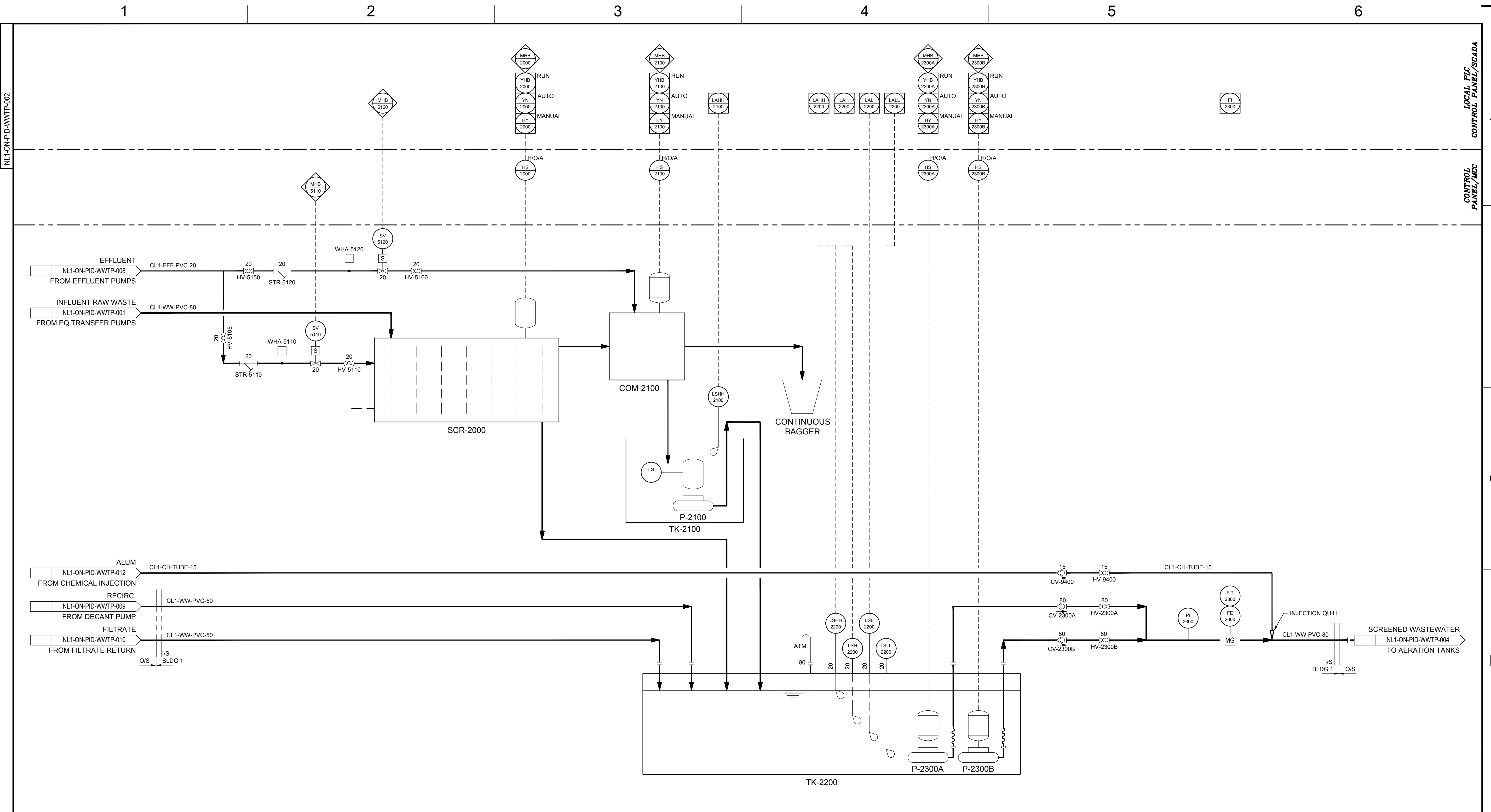
REFERENCE NUMBER	REFERENCE TITLE	STAMPS

REV NO	REVISION	DATE	DRN	CKD	DES	LDE	PE
A	ISSUED FOR REVIEW	2018/05/25	RM	SM			

CONSULTANT NAME AND LOGO
 Associated Engineering <small>BEST MANAGED COMPANIES</small>
REVISION DESCRIPTION BASE CASE
PROJECT NO. 2017-016
LSD ----
ISSUE DATE 2018/05/25
SCALE NTS

 Cenovus FCCL Ltd	
TITLE NARROWS LAKE COMMERCIAL AREA OWLS NEST WASTEWATER TREATMENT PLANT EQUALIZATION SYSTEM PIPING AND INSTRUMENTATION DIAGRAM	
DRAWING NO. NL1-ON-PID-WWTP-001	REVISION NO. A

NOTE:
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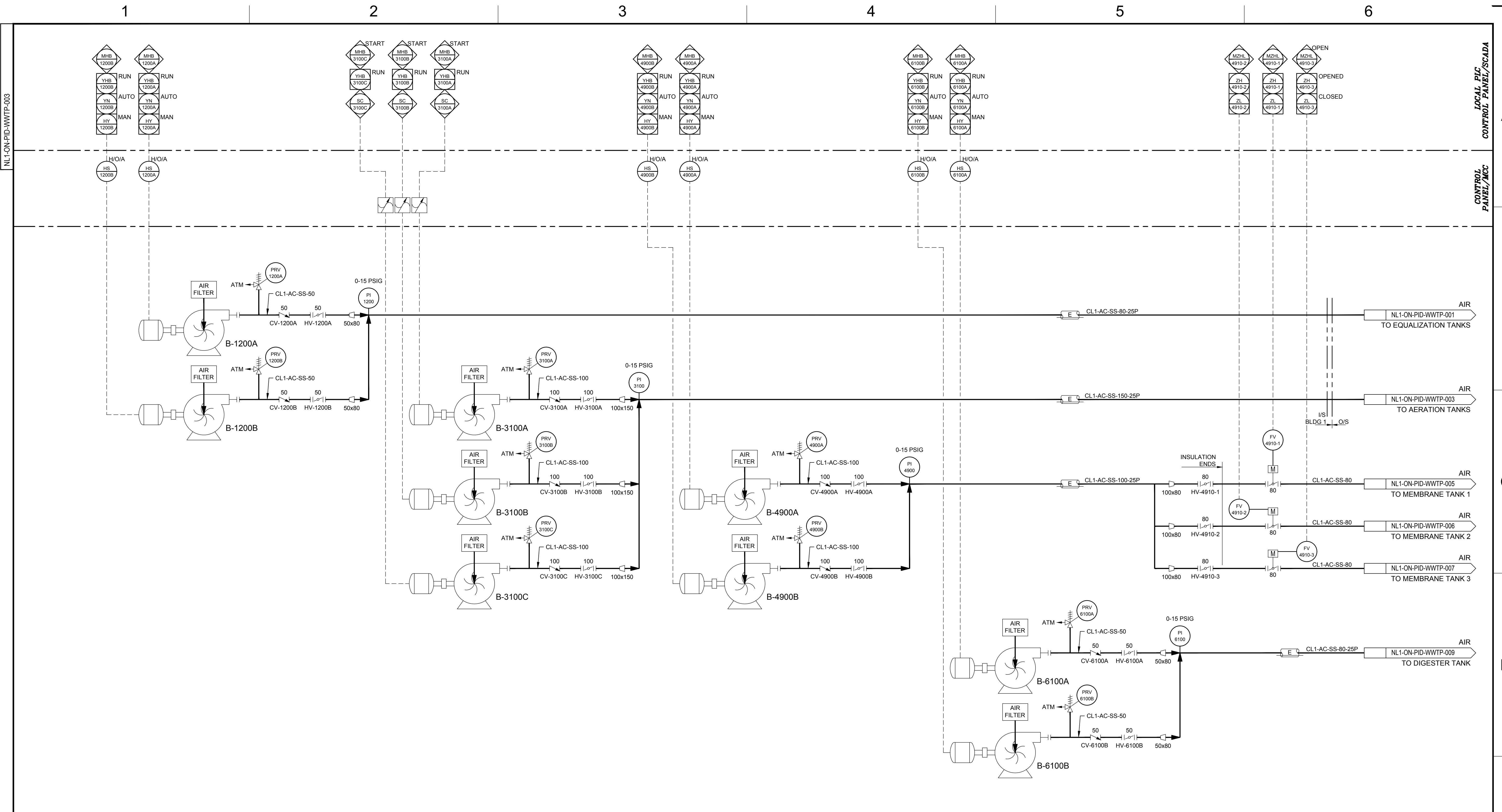


INFLUENT SCREEN SCR-2000	SCREEN SOLIDS COMPACTOR COM-2100	COMPACTOR FILTRATE TANK TK-2100	COMPACTOR FILTRATE PUMP P-2100	INFLUENT TANK TK-2200	INFLUENT PUMPS P-2300A/B
MAN: - TYPE: - SIZE: - FLOW: 313 LPM (8.8 GPM) DESIGN DRIVER: 0.33 HP 3 PH/ 60Hz/ 575 V MAT: 304SS	MAN: - TYPE: - SIZE: 1 CU.M. (4.4 GPM) @ >10% SOLIDS FLOW: - DRIVER: 1.5 HP 3 PH/ 60Hz/ 575 V NOTES: -	MAN: - TYPE: - SIZE: 0.4m DIA. x 1m HIGH CAP: 125L (4.4 CU.FT.) MAT: POLYETHYLENE NOTES: -	MAN: - TYPE: SUBMERSIBLE PUMP SIZE: XXmm OUTLET FLOW: 69 LPM (18.2 GPM) HEAD: - DRIVER: 0.16 HP @ 1 PH/ 60 Hz/ 120 V NOTES: -	MAN: - TYPE: STORAGE TANK SIZE: 2.4m LG x 1.1m WD x 1.5m HIGH CAP: 3.9 CU.M. MAT: ALUMINIUM NOTES: -	MAN: - TYPE: SUBMERSIBLE PUMP SIZE: XXmm OUTLET FLOW: 312 LPM (82 GPM) HEAD: - DRIVER: 0.5 HP @ 1800 RPM 3 PH/ 60 Hz/ 575 V NOTES: -

PACKAGE NO. ----

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			A	ISSUED FOR REVIEW	2018/05/25	RM	SM				 Associated Engineering <small>BEST MANAGED COMPANIES</small>	 Cenovus FCCL Ltd NARROWS LAKE COMMERCIAL AREA OWLS NEST WASTEWATER TREATMENT PLANT SCREENING SYSTEM PIPING AND INSTRUMENTATION DIAGRAM

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EQUALIZATION TANK BLOWERS
B-1200A/B

MAN: FPZ BLOWER
TYPE: REGENERATIVE
SIZE: 50mm STRAIGHT PIPE OUTLET
CAPACITY: 180N CU.M/Hr (105scfm)
DRIVER: 6.2 HP @ 3600 RPM 3 P/ 60 Hz/ 575 V
NOTES:

AERATION TANK BLOWERS
B-3100A/B/C

MAN: FPZ BLOWER
TYPE: REGENERATIVE
SIZE: 100mm STRAIGHT PIPE OUTLET
CAPACITY: 580N CU.M/Hr (341scfm)
DRIVER: 20 HP @ 3600 RPM 3 P/ 60 Hz/ 575 V
NOTES:

MEMBRANE TANK BLOWERS
B-4900A/B

MAN: FPZ BLOWER
TYPE: REGENERATIVE
SIZE: 100mm STRAIGHT PIPE OUTLET
CAPACITY: 318N CU.M/Hr (187scfm)
DRIVER: 15 HP @ 3600 RPM 3 P/ 60 Hz/ 575 V
NOTES:

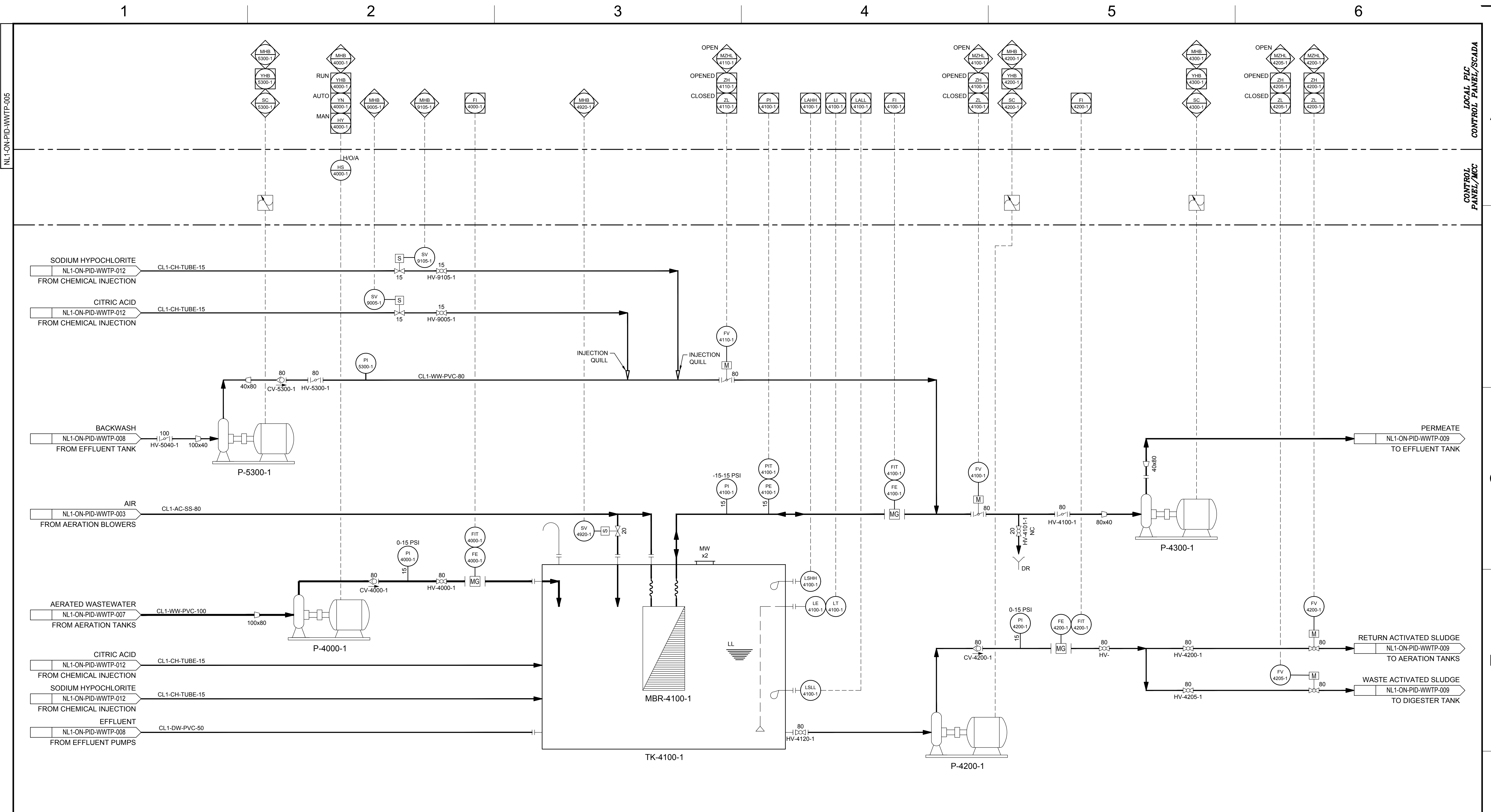
DIGESTER TANK BLOWERS
B-6100A/B

MAN: FPZ BLOWER
TYPE: REGENERATIVE
SIZE: 50mm STRAIGHT PIPE OUTLET
CAPACITY: 170N CU.M/Hr (100scfm)
DRIVER: 6.2 HP @ 3600 RPM 3 P/ 60 Hz/ 575 V
NOTES:

PACKAGE NO. ----

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			A	ISSUED FOR REVIEW	2018/05/25	RM	SM				 Associated Engineering BEST MANAGED COMPANIES	
											REVISION DESCRIPTION BASE CASE PROJECT NO. 2017-016 LSD ---- ISSUE DATE 2018/05/25 SCALE NTS	
											DRAWING NO. NL1-ON-PID-WWTP-003 REVISION NO. A	

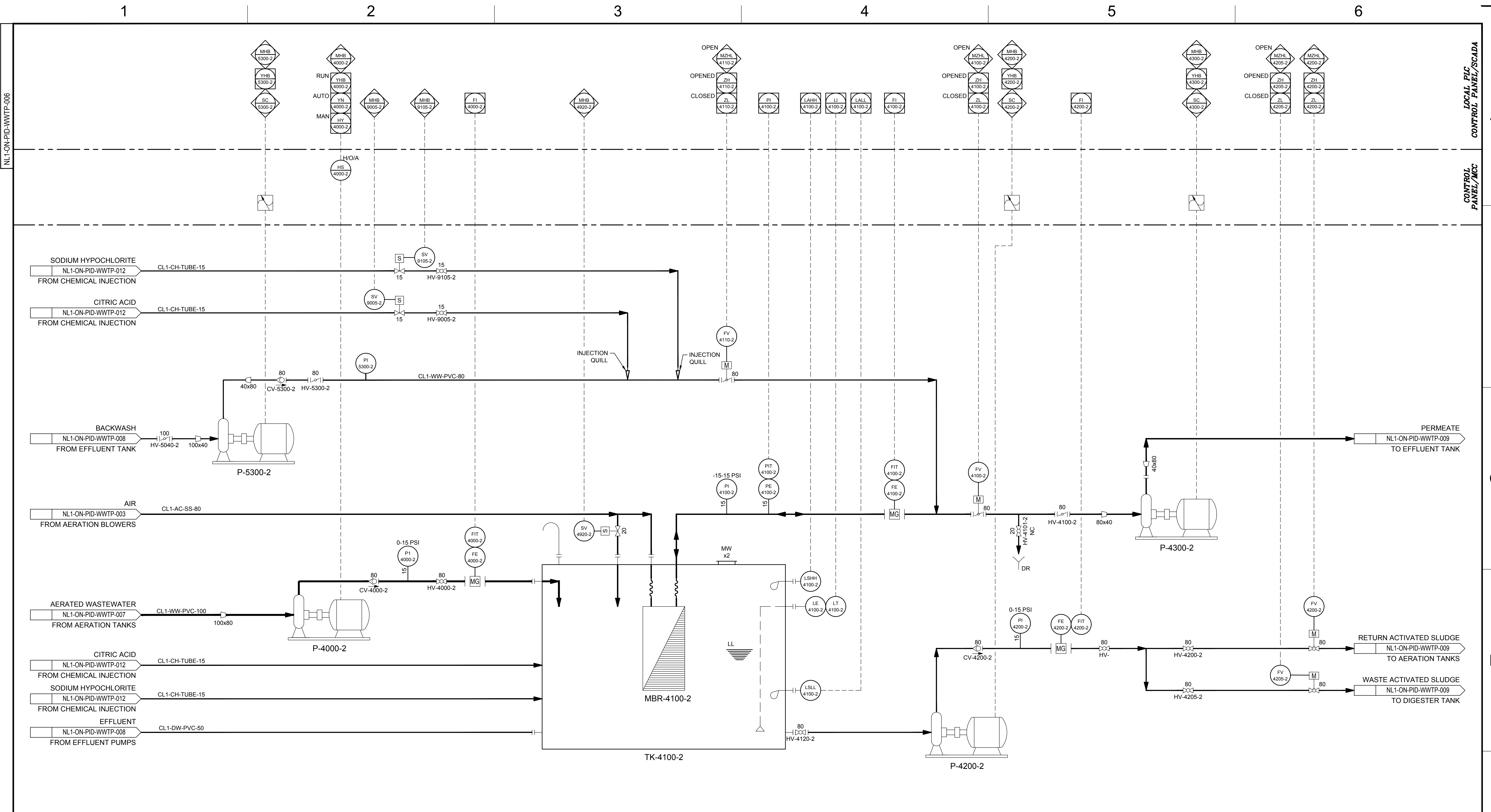
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BACKWASH PUMPS P-5300-1	MEMBRANE FEED PUMP P-4000-1	MEMBRANE TANK 1 TK-4100-1	MEMBRANE 1 MBR-4100-1	RAS/WAS PUMP P-4200-1	PERMEATE PUMP P-4300-1
MAN: - TYPE: CENTRIFUGAL PUMP SIZE: XXmm INLET, XXmm OUTLET FLOW: 300 LPM (7.5 GPM) HEAD: XXX METRES (XXX FT) DRIVER: 5 HP @ 3600 RPM 3 P/ 60 Hz/ 575 V NOTES: -	MAN: - TYPE: CENTRIFUGAL PUMP SIZE: XXmm INLET, XXmm OUTLET FLOW: 521 LPM (13.8 GPM) HEAD: - DRIVER: 3 HP @ 1725 RPM 3 P/ 60 Hz/ 575 V NOTES: -	MAN: - TYPE: - SIZE: 2.0m LG x 1.2m WD x 3.2m HIGH CAP: 7.7 CU.M MAT: STAINLESS STEEL NOTES: -	MAN: - TYPE: - AREA: 600 CU.M MAT: - NOTES: -	MAN: - TYPE: CENTRIFUGAL PUMP SIZE: XXmm INLET, XXmm OUTLET FLOW: 417 LPM (11.0 GPM) HEAD: - DRIVER: 3 HP @ 1725 RPM 3 P/ 60 Hz/ 575 V NOTES: -	MAN: BALDOR RELIANCE 34K36-2907 TYPE: CENTRIFUGAL PUMP SIZE: XXmm INLET, XXmm OUTLET FLOW: 130 LPM (3.4 GPM) HEAD: - DRIVER: 0.75 HP @ 3450 RPM 3 P/ 60 Hz/ 575 V NOTES: -

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			A	ISSUED FOR REVIEW	2018/05/25	RM	SM				 Associated Engineering BEST MANAGED COMPANIES	
											REVISION DESCRIPTION BASE CASE PROJECT NO. 2017-016 LSD - ISSUE DATE 2018/05/25 SCALE NTS	
											DRAWING NO. NL1-ON-PID-WWTP-005 REVISION NO. A	

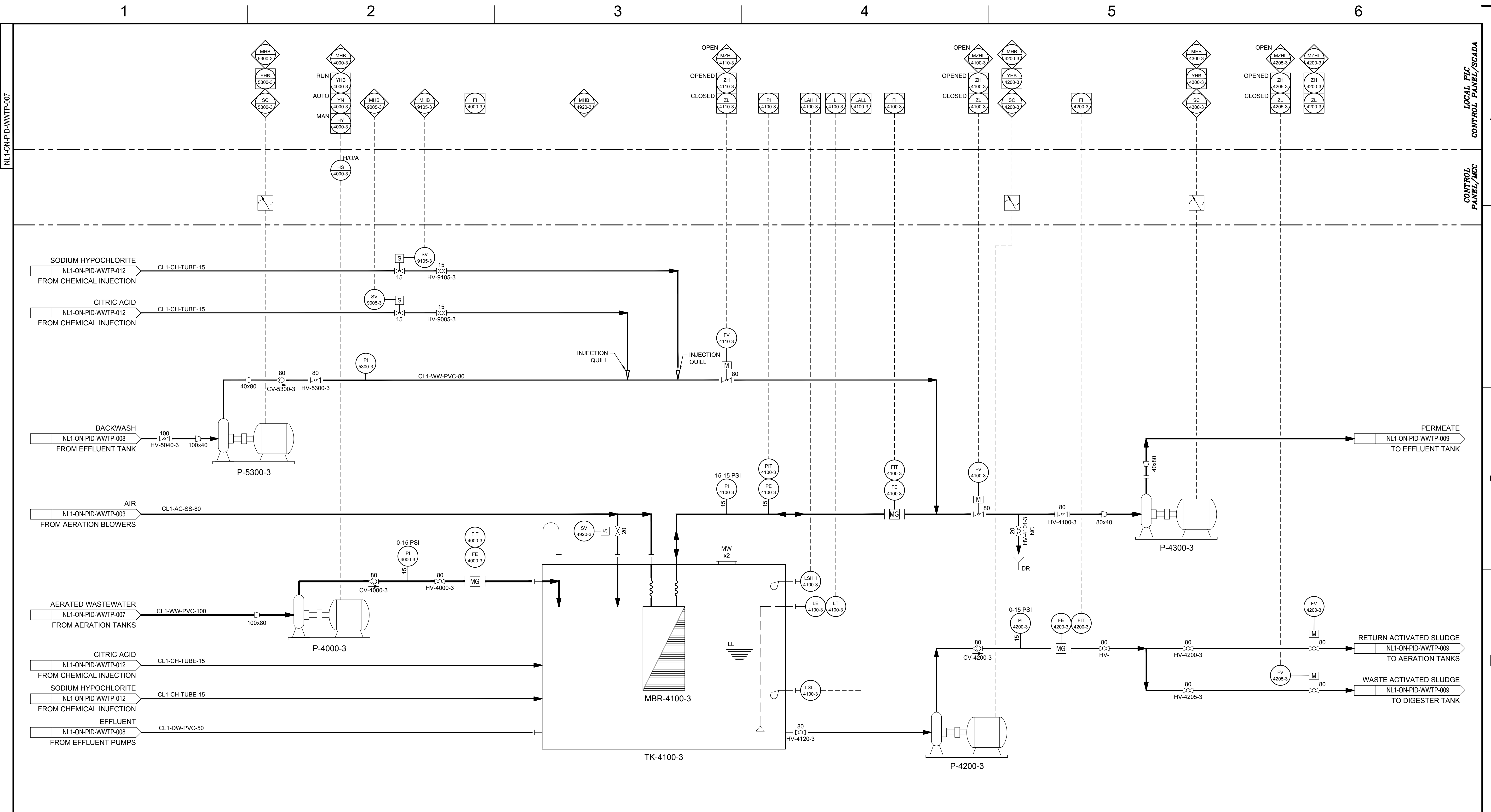
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BACKWASH PUMPS P-5300-2	MEMBRANE FEED PUMP P-4000-2	MEMBRANE TANK 2 TK-4100-2	MEMBRANE 2 MBR-4100-2	RAS/WAS PUMP P-4200-2	PERMEATE PUMP P-4300-2
MAN: - TYPE: CENTRIFUGAL PUMP SIZE: XXmm INLET, XXmm OUTLET FLOW: 300 LPM (7.5 GPM) HEAD: XXX METRES (XXX FT) DRIVER: 5 HP @ 3600 RPM 3 P/ 60 Hz/ 575 V NOTES: -	MAN: - TYPE: CENTRIFUGAL PUMP SIZE: XXmm INLET, XXmm OUTLET FLOW: 521 LPM (13.8 GPM) HEAD: - DRIVER: 3 HP @ 1725 RPM 3 P/ 60 Hz/ 575 V NOTES: -	MAN: - TYPE: - SIZE: 2.0m LG x 1.2m WD x 3.2m HIGH CAP: 7.7 CU.M MAT: STAINLESS STEEL NOTES: -	MAN: - TYPE: - AREA: 600 CU.M MAT: - NOTES: -	MAN: - TYPE: CENTRIFUGAL PUMP SIZE: XXmm INLET, XXmm OUTLET FLOW: 417 LPM (11.0 GPM) HEAD: - DRIVER: 3 HP @ 1725 RPM 3 P/ 60 Hz/ 575 V NOTES: -	MAN: BALDOR RELIANCE 34K36-2807 TYPE: CENTRIFUGAL PUMP SIZE: XXmm INLET, XXmm OUTLET FLOW: 130 LPM (3.4 GPM) HEAD: - DRIVER: 0.75 HP @ 3450 RPM 3 P/ 60 Hz/ 575 V NOTES: -

REFERENCE NUMBER	REFERENCE TITLE	STAMPS	REV NO	REVISION	DATE	DRN	CKD	DES	LDE	PE	CONSULTANT NAME AND LOGO	 Cenovus FCCL Ltd TITLE NARROWS LAKE COMMERCIAL AREA OWLS NEST WASTEWATER TREATMENT PLANT MEMBRANE SYSTEM 2 PIPING AND INSTRUMENTATION DIAGRAM
			A	ISSUED FOR REVIEW	2018/05/25	RM	SM				 Associated Engineering BEST MANAGED COMPANIES	
											REVISION DESCRIPTION BASE CASE PROJECT NO. 2017-016 LSD - ISSUE DATE 2018/05/25	
											SCALE NTS DRAWING NO. NL1-ON-PID-WWTP-006 REVISION NO. A	

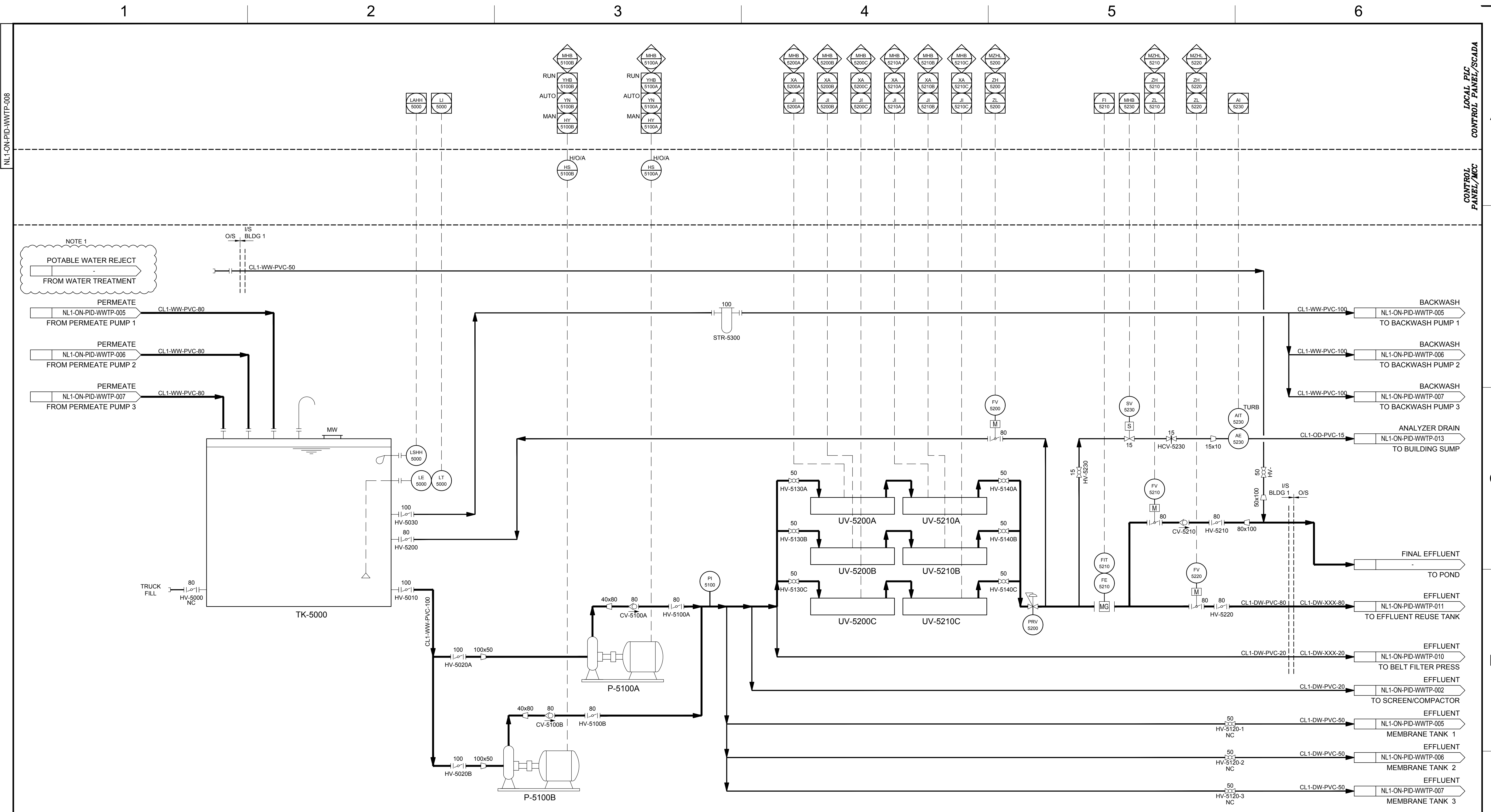
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BACKWASH PUMPS P-5300-3	MEMBRANE FEED PUMP P-4000-3	MEMBRANE TANK 3 TK-4100-3	MEMBRANE 3 MBR-4100-3	RAS/WAS PUMP P-4200-3	PERMEATE PUMP P-4300-3
MAN: - TYPE: CENTRIFUGAL PUMP SIZE: XXmm INLET, XXmm OUTLET FLOW: 300 LPM (7.5 GPM) HEAD: XXX METRES (XXX FT) DRIVER: 5 HP @ 3600 RPM 3 P/ 60 Hz/ 575 V NOTES: -	MAN: - TYPE: CENTRIFUGAL PUMP SIZE: XXmm INLET, XXmm OUTLET FLOW: 521 LPM (13.8 GPM) HEAD: - DRIVER: 3 HP @ 1725 RPM 3 P/ 60 Hz/ 575 V NOTES: -	MAN: - TYPE: - SIZE: 2.0m LG x 1.2m WD x 3.2m HIGH CAP: 7.7 CU.M MAT: STAINLESS STEEL NOTES: -	MAN: - TYPE: - AREA: 600 CU.M MAT: - NOTES: -	MAN: - TYPE: CENTRIFUGAL PUMP SIZE: XXmm INLET, XXmm OUTLET FLOW: 417 LPM (110 GPM) HEAD: - DRIVER: 3 HP @ 1725 RPM 3 P/ 60 Hz/ 575 V NOTES: -	MAN: BALDOR-RELIANCE 34K36-2807 TYPE: CENTRIFUGAL PUMP SIZE: XXmm INLET, XXmm OUTLET FLOW: 130 LPM (3.4 GPM) HEAD: - DRIVER: 0.75 HP @ 3450 RPM 3 P/ 60 Hz/ 575 V NOTES: -

REFERENCE NUMBER	REFERENCE TITLE	STAMPS	REV NO	REVISION	DATE	DRN	CKD	DES	LDE	PE	CONSULTANT NAME AND LOGO	 Cenovus FCCL Ltd TITLE NARROWS LAKE COMMERCIAL AREA OWLS NEST WASTEWATER TREATMENT PLANT MEMBRANE SYSTEM 3 PIPING AND INSTRUMENTATION DIAGRAM
			A	ISSUED FOR REVIEW	2018/05/25	RM	SM				 Associated Engineering BEST MANAGED COMPANIES	
											REVISION DESCRIPTION BASE CASE PROJECT NO. 2017-016 LSD - ISSUE DATE 2018/05/25 SCALE NTS	
											DRAWING NO. NL1-ON-PID-WWTP-007 REVISION NO. A	

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NOTE 1
POTABLE WATER REJECT
FROM WATER TREATMENT

PERMEATE
NL1-ON-PID-WWTP-005
FROM PERMEATE PUMP 1

PERMEATE
NL1-ON-PID-WWTP-006
FROM PERMEATE PUMP 2

PERMEATE
NL1-ON-PID-WWTP-007
FROM PERMEATE PUMP 3

O/S
BLDG 1

CL1-WW-PVC-50

MW

IS

O/S

BLDG 1

O/S

IS

O/S

BLDG 1

O/S

IS

O/S

BLDG 1

O/S

IS

O/S

BLDG 1

O/S

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O/S

BLDG 1

O/S

IS

O/S

BLDG 1

O/S

IS

O/S

BLDG 1

O/S

NOTE:
1. COULD NOT BE CONFIRMED.

EFFLUENT TANK
TK-5000
MAN: -
TYPE: -
SIZE: 3.4m LG x 1.0m WD x 3.0m HIGH
CAP: 10.9 CU.M.
MAT: ALUMINIUM
NOTES: -

EFFLUENT PUMPS
P-5100A/B
MAN: -
TYPE: CENTRIFUGAL PUMP
SIZE: XXmm INLET, XXmm OUTLET
FLOW: 486 LPM (128 GPM)
HEAD: XXX METRES (XXX FT)
DRIVER: 5 HP @ 3500 RPM 3 PH 60 Hz/ 575 V
NOTES: -

ULTRAVIOLET
UV-5200A/B/C/5210A/B/C
MAN: -
TYPE: ULTRAVIOLET DISINFECTION
SIZE: XXmm INLET, XXmm OUTLET
FLOW: XX LPM (XX GPM)
HEAD: XXX METRES (XXX FT)
DRIVER: -
NOTES: -

PACKAGE NO. ----

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CONSULTANT NAME AND LOGO

Associated Engineering
BEST MANAGED COMPANIES

REVISION DESCRIPTION
BASE CASE

PROJECT NO.
2017-016

LSD

ISSUE DATE
2018/05/25

SCALE
NTS

cenovus ENERGY

Cenovus FCCL Ltd

TITLE
NARROWS LAKE COMMERCIAL AREA
OWLS NEST WASTEWATER TREATMENT PLANT
EFFLUENT SYSTEM
PIPING AND INSTRUMENTATION DIAGRAM

DRAWING NO.
NL1-ON-PID-WWTP-008

REVISION NO.
A

NL1-ON-PID-WWTP-008

LOCAL PLC CONTROL PANEL/SCADA

CONTROL PANEL/MCC

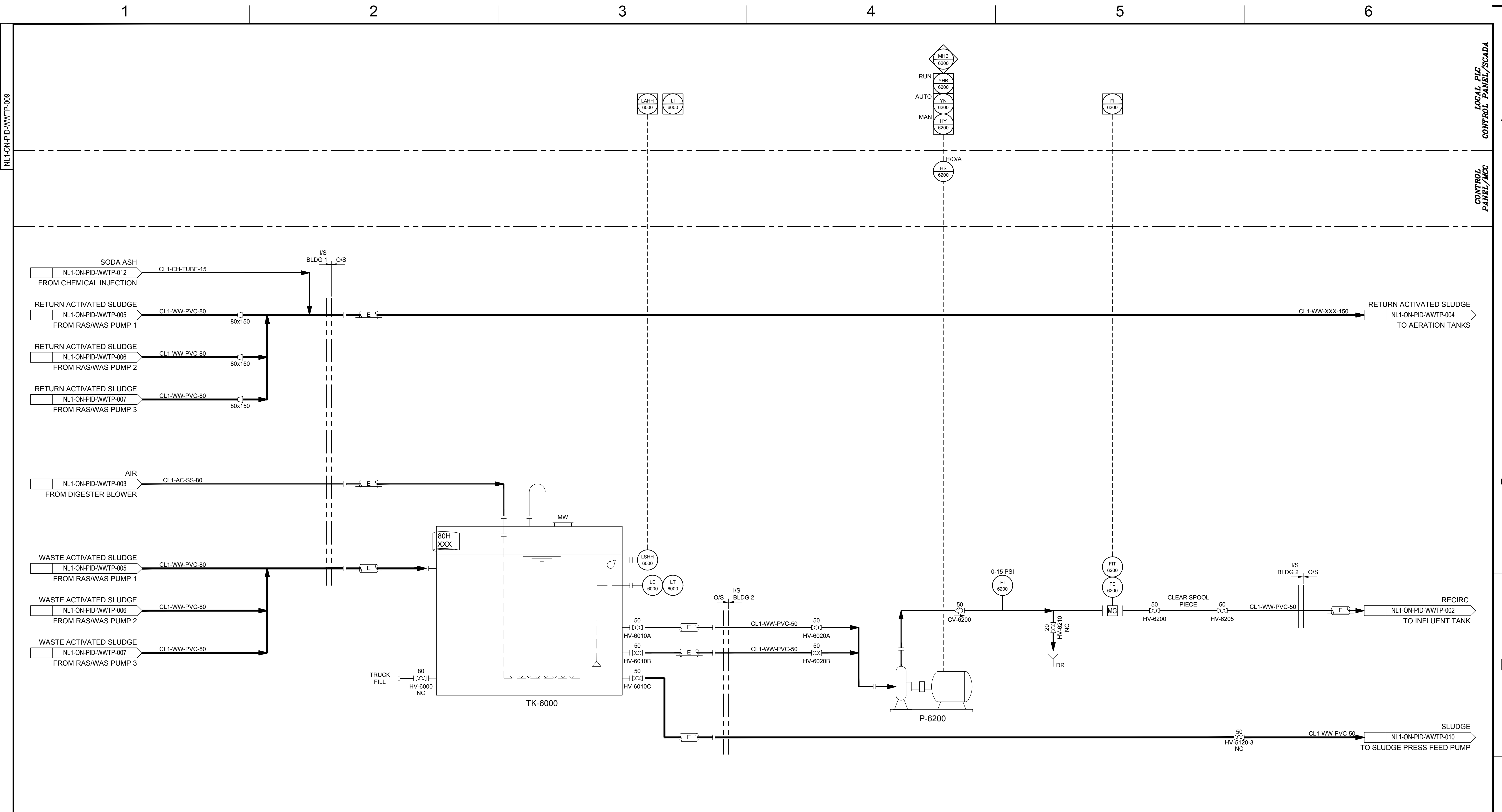
B

C

D

E

EQUIPMENT DATA



DIGESTER TANK
TK-6000

MAN: -
TYPE: STORAGE TANK
SIZE: 9.1m LG x 2.4m WD x 2.3m HIGH
CAP: 52.3 CU/M
MAT: COATED CARBON STEEL
NOTES: -

DECANT PUMP
P-6200

MAN: BALDOR-RELIANCE 35M019M231G1
TYPE: CENTRIFUGAL PUMP
SIZE: 50mm INLET, 50mm OUTLET
FLOW: 115 LPM (50 GPM)
HEAD: XXX METRES (XXX FT)
DRIVER: 1.5 HP @ 1760 RPM, 3 P/ 80 Hz/ 575 V
NOTES: -

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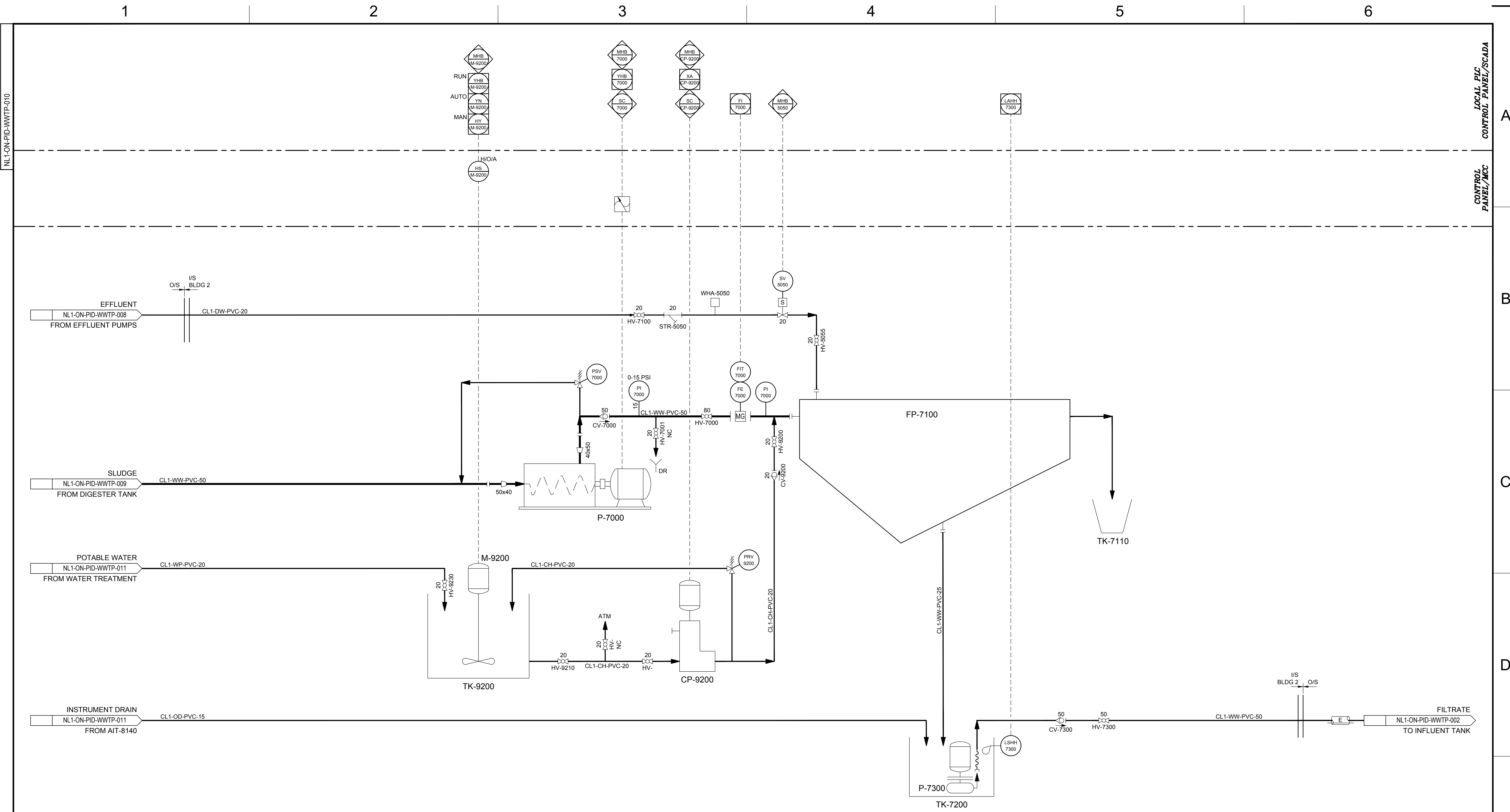
cenovus ENERGY

Cenovus FCCL Ltd

TITLE
NARROWS LAKE COMMERCIAL AREA
OWLS NEST WASTEWATER TREATMENT PLANT
SLUDGE DIGESTER SYSTEM
PIPING AND INSTRUMENTATION DIAGRAM

DRAWING NO.
NL1-ON-PID-WWTP-009

REVISION NO.
A



MAN:	TYPE:	SIZE:	CAP:	MAT:	NOTES:
POLYMER MIXING TANK TK-9200					
-	STORAGE TANK	XXmm DIA x XXm HIGH	560 L	POLYETHYLENE	-
SLUDGE PRESS FEED PUMP P-7000					
MAN:	BALDOR-RELIANCE 3BL9295411G1	TYPE:	PROGRESSIVE CAVITY PUMP	SIZE:	40mm INLET, 40mm OUTLET
FLOW:	20 LPM (5.2 GPM)	HEAD:	-	DRIVER:	2 HP @ 1150 RPM 3 P/ 60 Hz/ 575 V
NOTES:	-				
MIXED POLYMER METERING PUMP CP-9200					
MAN:	OMNI	TYPE:	MECH. DIAPHRAM METERING PUMP	SIZE:	XXmm INLET, XXmm OUTLET
FLOW:	212 LPH	HEAD:	-	DRIVER:	X HP @ XXX RPM 1 P/ 60 Hz/ 120 V
NOTES:	-				
BELT FILTER PRESS FP-7100					
MAN:	-	TYPE:	BELT FILTER PRESS	SIZE:	5.43 CU.M/DAY
FLOW:	-	HEAD:	-	DRIVER:	0.5 HP @ XXX RPM 3 P/ 60 Hz/ 575 V
NOTES:	-				
FILTRATE RETURN PUMP P-7300					
MAN:	-	TYPE:	SUBMERSIBLE PUMP	SIZE:	XXmm OUTLET
FLOW:	208 LPM (55 GPM)	HEAD:	-	DRIVER:	0.5 HP @ XXX RPM 1 P/ 60 Hz/ 120 V
NOTES:	-				
FILTRATE TANK TK-7200					
MAN:	-	TYPE:	STORAGE TANK	SIZE:	2.0m LG x 1.1m WD x 0.3m HIGH
CAP:	0.5 CU.M	MAT:	ALUMINIUM	NOTES:	-
SOLIDS BIN TK-7110					
MAN:	-	TYPE:	STORAGE TANK	SIZE:	XXm LG x XXm WD x XXm HIGH
CAP:	1.0 CU.M	MAT:	-	NOTES:	-

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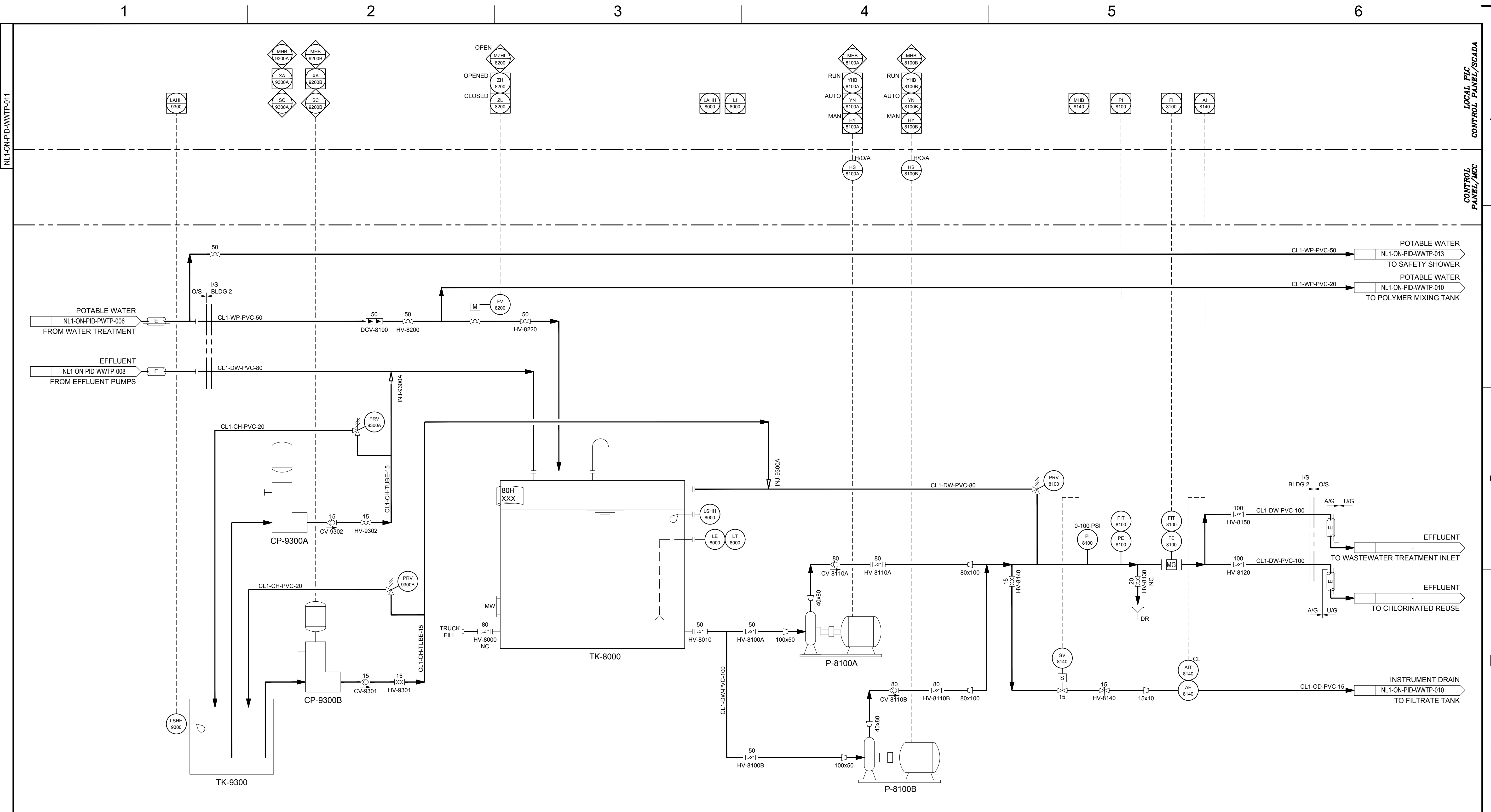
SCALE
NTS

cenovus ENERGY
Cenovus FCCL Ltd

TITLE
NARROWS LAKE COMMERCIAL AREA
OWLS NEST WASTEWATER TREATMENT PLANT
SLUDGE DEWATERING SYSTEM
PIPING AND INSTRUMENTATION DIAGRAM

DRAWING NO.
NL1-ON-PID-WWTP-010

REVISION NO.
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SODIUM HYPOCHLORITE TANK TK-9300		SODIUM HYPOCHLORITE PUMPS CP-9300A/B		EFFLUENT REUSE TANK TK-8000		EFFLUENT REUSE PUMP P-8100A/B	
MAN:	-	MAN:	BLUE-WHITE	MAN:	-	MAN:	-
TYPE:	STORAGE TANK	TYPE:	PERISTALTIC METERING PUMP	TYPE:	STORAGE TANK	TYPE:	CENTRIFUGAL PUMP
SIZE:	0.4m DIA. x 1.0m HIGH	SIZE:	XXmm INLET, XXmm OUTLET	SIZE:	2.35m LG x 2.0m WD x 2.35m HIGH	SIZE:	50mm INLET, 50mm OUTLET
CAP:	95L	FLOW:	15 LPH	CAP:	11 CU.M	FLOW:	485 LPM (128 GPM)
MAT:	POLYETHYLENE	HEAD:	-	MAT:	ALUMINIUM	HEAD:	XXX METRES (XXX FT)
NOTES:	-	DRIVER:	50W @ 60 RPM 1 Ph 60 Hz 120 V	NOTES:	-	DRIVER:	5 HP @ 3500 RPM 3 Ph 60 Hz 575 V
		NOTES:	-			NOTES:	-

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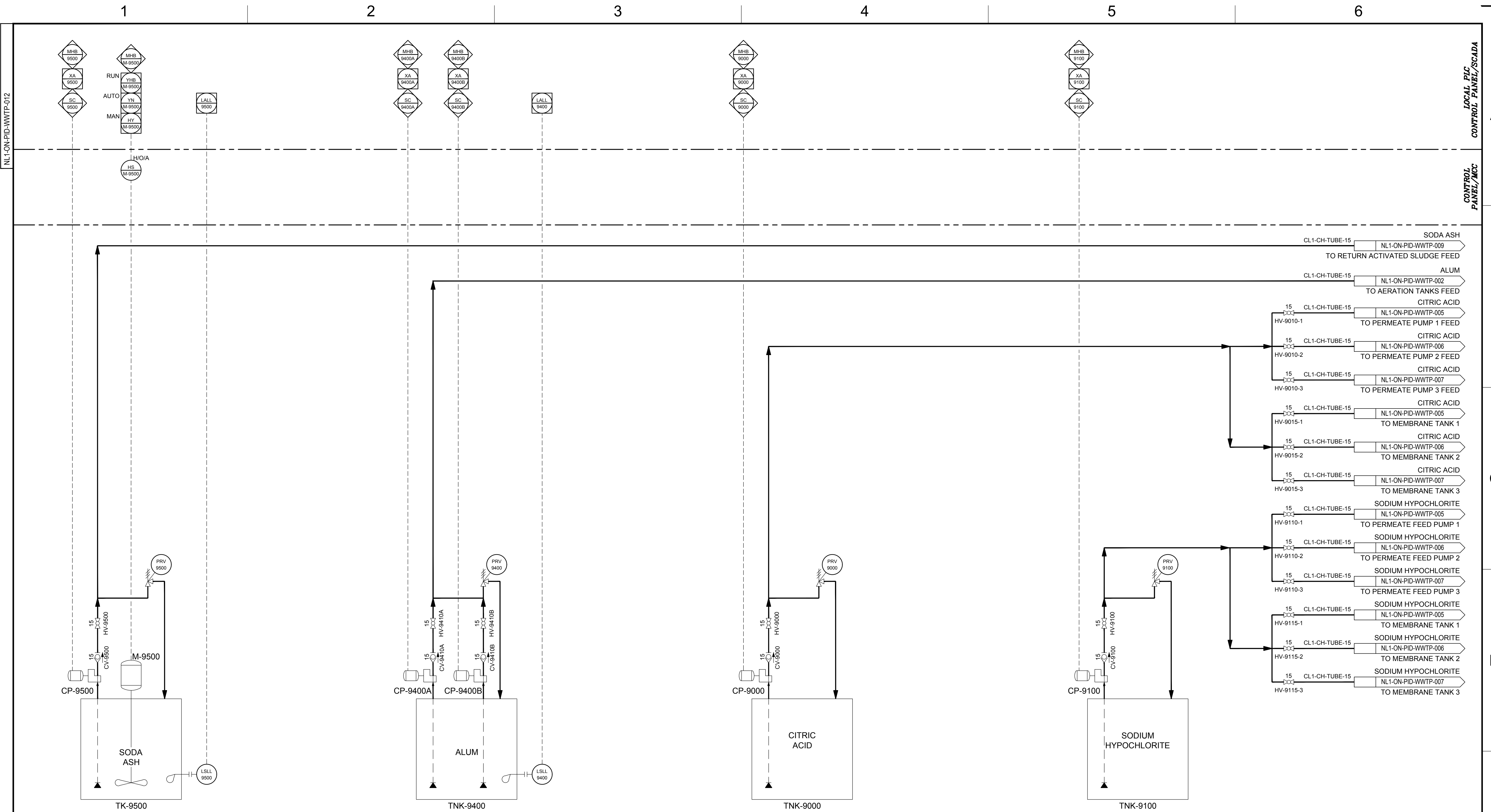
cenovus ENERGY

Cenovus FCCL Ltd

TITLE
NARROWS LAKE COMMERCIAL AREA
OWLS NEST WASTEWATER TREATMENT PLANT
EFFLUENT REUSE SYSTEM
PIPING AND INSTRUMENTATION DIAGRAM

DRAWING NO.
NL1-ON-PID-WWTP-011

REVISION NO.
A



SODA ASH METERING PUMP CP-9500		SODA ASH STORAGE TANK TK-9500		ALUM METERING PUMPS CP-9400A/B		ALUM STORAGE TANK TK-9400		CITRIC ACID METERING PUMP CP-9000		CITRIC ACID STORAGE TANK TK-9000		SODIUM HYPOCHLORITE METERING PUMP CP-9100		SODIUM HYPOCHLORITE STORAGE TANK TK-9100	
MAN:	BLUE-WHITE	MAN:	-	MAN:	BLUE-WHITE	MAN:	-	MAN:	BLUE-WHITE A1N30V-7T	MAN:	-	MAN:	BLUE-WHITE	MAN:	-
TYPE:	PERISTALTIC METER PUMP	TYPE:	STORAGE TANK	TYPE:	PERISTALTIC METER PUMP	TYPE:	STORAGE TANK	TYPE:	PERISTALTIC METER PUMP	TYPE:	STORAGE TANK	TYPE:	PERISTALTIC METER PUMP	TYPE:	STORAGE TANK
SIZE:	12mm INLET, 12mm OUTLET	SIZE:	0.4m DIA x 1.0m HIGH	SIZE:	12mm INLET, 12mm OUTLET	SIZE:	0.4m DIA x 1.0m HIGH	SIZE:	12mm INLET, 12mm OUTLET	SIZE:	0.4m DIA x 1.0m HIGH	SIZE:	12mm INLET, 12mm OUTLET	SIZE:	0.4m DIA x 1.0m HIGH
FLOW:	15 LPH	CAP:	95 LITRES	FLOW:	15 LPH	CAP:	95 LITRES	FLOW:	15 LPH	CAP:	95 LITRES	FLOW:	15 LPH	CAP:	95 LITRES
HEAD:	X METRES	MAT:	POLYETHYLENE	HEAD:	X METRES	MAT:	POLYETHYLENE	HEAD:	X METRES	MAT:	POLYETHYLENE	HEAD:	X METRES	MAT:	POLYETHYLENE
DRIVER:	50W @ 60 RPM 1 P/ 60 Hz/ 120 V	NOTES:	c/w MIXER	DRIVER:	50W @ 60 RPM 1 P/ 60 Hz/ 120 V	NOTES:	-	DRIVER:	50W @ 60 RPM 1 P/ 60 Hz/ 120 V	NOTES:	-	DRIVER:	50W @ 60 RPM 1 P/ 60 Hz/ 120 V	NOTES:	-
NOTES:	-			NOTES:	-			NOTES:	-			NOTES:	-		

REFERENCE NUMBER		REFERENCE TITLE		STAMPS		REV NO		REVISION		DATE		DRN		CKD		DES		LDE		PE		CONSULTANT NAME AND LOGO		 Cenovus FCCL Ltd	
						A		ISSUED FOR REVIEW		2018/05/25		RM		SM								 Associated Engineering		TITLE NARROWS LAKE COMMERCIAL AREA OWLS NEST WASTEWATER TREATMENT PLANT CHEMICAL DOSING PIPING AND INSTRUMENTATION DIAGRAM	
																						REVISION DESCRIPTION BASE CASE		PROJECT NO. 2017-016	
																						LSD ----		DRAWING NO. NL1-ON-PID-WWTP-012	
																						ISSUE DATE 2018/05/25		SCALE NTS	
																						REVISION NO. A			

NOTE:
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 OR REPRESENTS THE ORIGINAL DESIGN AS CONTAINED IN THE CONTRACT
 DOCUMENTS.

PACKAGE NO.

NL1-ON-PID-WWTP-012

LOCAL PLC
 CONTROL PANEL/SCADA

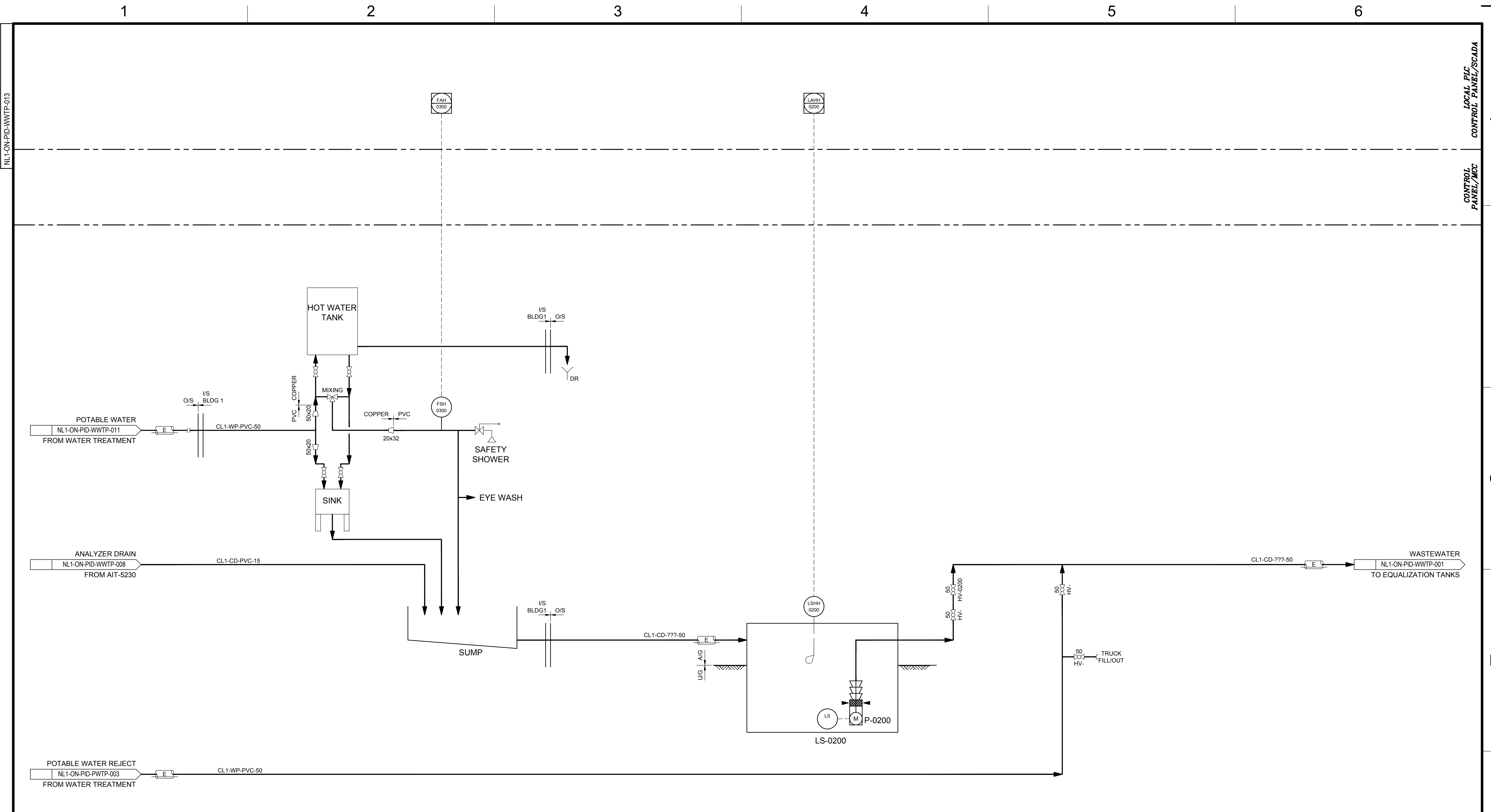
CONTROL
 PANEL/MCC

B

C

D

EQUIPMENT
 DATA



**LIFT STATION SUMP PUMP
P-0200**

MAN: -
TYPE: SUBMERSIBLE
SIZE: XXmm OUTLET
FLOW: 9 CU.M/Hr
HEAD: X METRES
DRIVER: 0.4 HP @ 3400 RPM 1 P/ 60 Hz/ 120 V
NOTES: -

**LIFT STATION
LS-0200**

MAN: -
TYPE: STORAGE TANK
SIZE: XXm WD x XXm HIGH
CAP: 1 CU.M
MAT: ALUMINIUM
NOTES: -

PACKAGE NO. ----

REFERENCE NUMBER	REFERENCE TITLE	STAMPS

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REV NO	REVISION	DATE	DRN	CKD	DES	LDE	PE
A	ISSUED FOR REVIEW	2018/05/25	RM	SM			

CONSULTANT NAME AND LOGO

Associated Engineering

REVISION DESCRIPTION
BASE CASE

PROJECT NO.
2017-016

LSD

ISSUE DATE
2018/05/25

SCALE
NTS

cenovus
ENERGY

Cenovus FCCL Ltd

TITLE
NARROWS LAKE COMMERCIAL AREA
OWLS NEST WASTEWATER TREATMENT PLANT
POTABLE WATER AND DRAIN SYSTEMS
PIPING AND INSTRUMENTATION DIAGRAM

DRAWING NO.
NL1-ON-PID-WWTP-013

REVISION NO.
A