

INSTRUMENT SYMBOLS

	CONTROL ROOM LOCATION ACCESSIBLE TO OPERATOR	CONTROL ROOM LOCATION INACCESSIBLE TO OPERATOR	LOCAL LOCATION ACCESSIBLE TO OPERATOR	LOCAL LOCATION INACCESSIBLE TO OPERATOR	FIELD LOCATED
DISCRETE INSTRUMENTS					
HMI FROM DISTRIBUTED CONTROL SYSTEM					
SCADA DISPLAY/COMPUTER FUNCTION					
PROGRAMMABLE LOGIC CONTROLLER					

GENERAL NOTES

1. FADED SYMBOLS AND LINES REPRESENT EXISTING EQUIPMENT.
2. HATCHED EQUIPMENT AND LINES TO BE REMOVED.
3. FOR DETAILS OF INSTRUMENTATION LINES 1" OR LESS REFER TO INSTALLATION OR LOOP DIAGRAMS.
4. INSTRUMENTATION FOLLOWS ISA STANDARDS & PRACTICES 5.1, 55.2, 55.3, 55.4, 55.5.

EQUIPMENT GENERAL

AP - ACID METER PUMP	OMI - OPERATOR MACHINE INTERFACE
B - BLOWER	P - PUMP
BP - CAUSTIC METER PUMP	PG - PRESSURE GAUGE
CRN - O/H CRANE	PLC - PROGRAMMABLE LOGIC CONTROLLER
CPS - COMPUTER	PRV - PRESSURE REDUCING VALVE
CON - CONVEYOR	SCB - SCRUBBER
CV - CHECK VALVE	SCC - SECONDARY CLARIFIER
CP - COMPRESSOR	SCRN - ROTATING SCREEN
EF - EXHAUST FAN	SF - SUPPLY FAN
FC - FLUSHING CONNECTION	SG - SLUICE GATE
HE - HEAT EXCHANGER	SLG - SLUICE GATE
M - MOTOR	SL - STOP LOG
MXR - MIXER	SP - SLUDGE PUMP
MCC - MASTER CONTROL BOARD	SV - SOLENOID VALVE
MCC - MOTOR CONTROL CENTRE	TK - TANK
ME - MECHANICAL EQUIPMENT	VA - VALVE
MV - MOTORIZED VALVE	UP - UTILITY PUMP
	VT - VENTURA-NOZZLE
	WG - WEIR

PROCESS LINE TYPES

	MAIN (OR NEW) PROCESS LINE
	SECONDARY (OR EXISTING) PROCESS LINE
	EXISTING PIPING AND EQUIPMENT
	FUTURE PROCESS LINE
	EXISTING PIPING AND EQUIPMENT TO BE REMOVED
	OPEN CHANNEL (EXIST./NEW)

FLOW UNITS

AIR:	m ³ /HR
CHEMICALS:	kg PER DAY/ GRAMS PER LITRE/ LITRES PER SECOND
SEWERS:	LITRES PER SECOND
SOLIDS:	DRY METRIC TONNES PER DAY/ OR kg/D
WATER:	LITRES PER SECOND

*NOTE: NUMBERS INDICATE MAXIMUM FLOW FOR PIPE AND EQUIPMENT SIZING. CONTROL VALVES MAY BE SIZED FOR LESS.

INSTRUMENT SIGNAL LINE TYPES

	CAPILLARY TUBE OR FILLED SYSTEM SIGNAL LINE
	ELECTRIC INSTRUMENT LINE - ANALOG
	ELECTRIC INSTRUMENT LINE - DIGITAL (ASD DRIVE)
	ELECTRIC INSTRUMENT SIGNAL (EXIST./NEW)
	ELECTRIC OR ELECTRONIC INSTRUMENT SIGNAL WITH DIRECTION AS SHOWN, PROCESS TAPS
	INTERNAL SYSTEM LINK (CPS, HMI)
	INTERNAL SYSTEM LINK (ISL - SOFTWARE OR DATA)
	PNEUMATIC INSTRUMENT SIGNAL
	SPARE

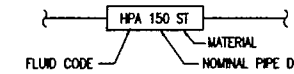
INSTRUMENT FUNCTIONAL IDENTIFICATION LETTERS

FIRST LETTERS (4)		SUCCEEDING LETTERS (3)		
MEASURED OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
A ANALYSIS		ALARM		
B BURNER, COMBUSTION		UNCLASSIFIED	CLOSE-STOP DECREASE	UNCLASSIFIED
C CONDUCTIVITY, pH (ACIDITY)		CLOSE	CONTROL OR CONTROLLER	
D DENSITY, SPECIFIC GRAVITY	DIFFERENTIAL		OPEN-START-INCREASE	
E VOLTAGE (EMF)		SENSOR (PRIMARY ELEMENT)		
F FLOW RATE	RATIO (FRACTION)			FAIL
G GAS, GAUGING (DIMENSIONAL)		GLASS, VIEWING DEVICE		
H HAND, MANUAL				H-HIGH-(ALARM) HH-HIGH-(SHUTDOWN)
I CURRENT (ELECTRICAL)		INDICATE		
J POWER	SCAN			
K TIME, TIME SCHEDULE	TIME RATE OF CHANGE		CONTROL STATION	
L LEVEL		LIGHT		L-LOW-(ALARM) LL-LOW-(SHUTDOWN)
M MOTOR	MOMENTARY	MONITOR, ON OR OPERATE		MIDDLE, INTERMEDIATE
N MOISTURE, HUMIDITY		UNCLASSIFIED	START	USER'S CHOICE
O UNCLASSIFIED		OPEN ORIFICE, RESTRICTION POINT (TEST) CONNECTION	STOP	OVERLOAD
P PRESSURE, VACUUM		POINT (TEST) CONNECTION	PNEUMATIC	
Q QUANTITY	INTEGRATE, TOTALIZE	INTEGRATE, TOTALIZE	INTEGRATE OR TOTALIZE	
R RADIATION, RADIOACTIVITY	RATIO	RECORD		
S SPEED, FREQUENCY, SOLENOID	SAFETY		SWITCH OR SAFETY	
T TEMPERATURE			TRANSMIT	
TQ TORQUE				
TV TELEVISION				
U MULTIVARIABLE		MULTIFUNCTION	MULTIFUNCTION	MULTIFUNCTION
V VIBRATION, MECHANICAL ANALYSIS			VALVE, DAMPER, LOUVRE	
VS VISCOSITY				
W WEIGHT, FORCE		WELL		
X ON/OFF	X AXIS	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED
Y EVENT, STATE OR PRESENCE	Y AXIS		RELAY, COMPUTE, CONVERT	
Z POSITION, DIMENSION PRESENCE	Z AXIS		DRIVER, ACTUATOR, UNCLASSIFIED FINAL CONTROL ELEMENT	

AREA CODES

100	HEADWORKS	-
200	PRIMARY	-
300	ATAD, SEPTAGE, RBS	-
400	TRICKLING FILTER, SOLIDS CONTACT	-
500	SOLIDS DEWATERING	-
600	FGR REMOVAL	-
700	CLARIFIER	-
800	FILTRATION/DISINFECTION	-
900	CONTROL BUILDING, ADMINISTRATION	-

LINE NUMBERING SYSTEM



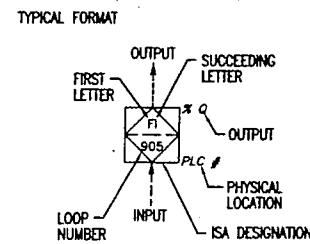
FLUID CODE	FLUID	FLUID CODE	FLUID
CLS	CHLORINE SOLUTION	PLW	PLANT WATER
CS	CRUDE SLUDGE	POL	POLYELECTROLYTE SOLUTION
D	DRAIN	PW	POTABLE WATER
DS	DIGESTED SLUDGE	PS	PRIMARY SLUDGE
FE	FINAL EFFLUENT	RBS	RETURN BIOLOGICAL SLUDGE
FOA	FOUL AIR	RC	RECIRCULATED FLOW
FOM	FOAM	RW	RECLAIMED WATER
FW	FILTERED WATER	SC	SCUM
H ₂ SO ₄	SULPHURIC ACID LINE	SE	SECONDARY EFFLUENT
HDSL	HOT DIGESTED SLUDGE LINE	SS	SUSPENDED SOLIDS/SETTLED SEWAGE
HPA	HIGH PRESSURE AIR	TD	TANK DRAIN
HWR	HOT WATER RETURN	TFE	TRICKLING FILTER EFFLUENT
HWS	HOT WATER SUPPLY	TFR	TRICKLING FILTER RECYCLE
LA	LIQUID ALUM	TSL	THICKENED SLUDGE
LPA	LOW PRESSURE AIR	VT	VENT
NaOH	CAUSTIC LINE	WR	WEIR
NPW	NON POTABLE WATER	WAS	WASTE ACTIVATED SLUDGE
OF	OVERFLOW	WBS	WASTE BIOLOGICAL SLUDGE
OZ	OZONE	WCS	WASTE CHEMICAL SLUDGE
PE	POLYELECTROLYTE SOLUTION		

NOTE: ALSO SEE MECHANICAL AND ELECTRICAL ABBREV.

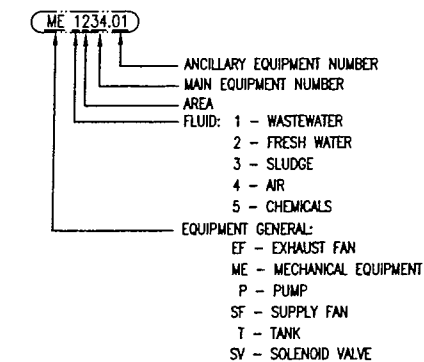
GENERAL SYMBOLS AND TAGS

1. ON DRAWING (E. P101) CONTINUATION IS SHOWN AS:
 2. ON DRAWING (E. P102) CONTINUATION IS SHOWN AS:
- | | |
|--|------------------------|
| | EXISTING EQUIPMENT TAG |
| | NEW EQUIPMENT TAG |
| | EXISTING PIPE TAG |
| | NEW PIPE TAG |
| | REVISION TAG |

ATTRIBUTE LEGEND



EQUIPMENT NUMBER



LINE DESIGNATIONS

- | | |
|---|--|
| | ELECTRIC POWER SUPPLY
120 VAC 60 HZ
(UNLESS OTHERWISE NOTED) |
| | LINE CONTINUATION TO/FROM |
| | SPECIFICATION AND/OR LINE NUMBER CHANGE |
| * | SUPPLIED BY EQUIPMENT VENDOR |

ALARMS:
 H = HIGH ALARM
 L = LOW ALARM
 R = RATE ALARM

AI = ANALOG INPUT
 AO = ANALOG OUTPUT
 DI = DISCRETE INPUT
 DO = DISCRETE OUTPUT
 I = DISCRETE INPUT
 S = STATUS OF SWITCH (EVENT SWITCH)

EXAMPLES:
 P1 = FIELD LOCATED DISCRETE PRESSURE INDICATOR
 LAH = CONTROL ROOM PC COMPUTER DISPLAY HIGH LEVEL ALARM

FILE: P:\Drawings\QUEEN - CHARLOTTE\103-B-4-2\240\103-B-4-2 P1.dwg Tab: Model 09-03-19 09:11:55

PLOT: FULL 1:25 HALF 1:50

ISSUE	DATE	DRAWN	CHK'D	APP'D	DESCRIPTION
A	MAR20/05	DBC	CB	CB	ISSUED FOR TENDER

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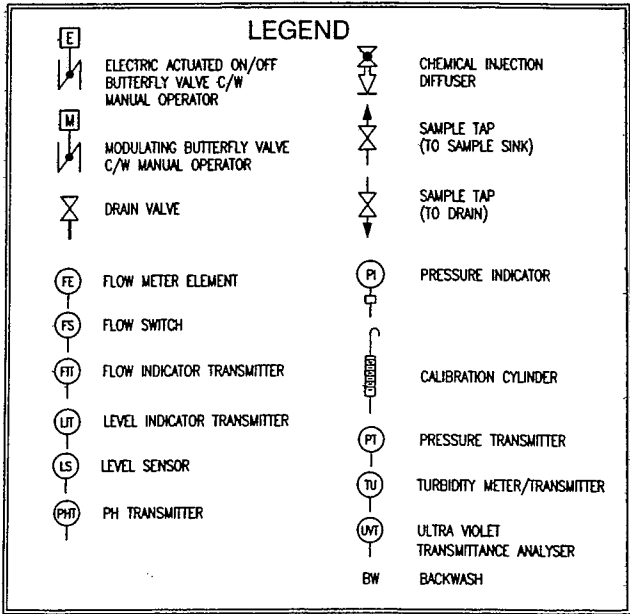
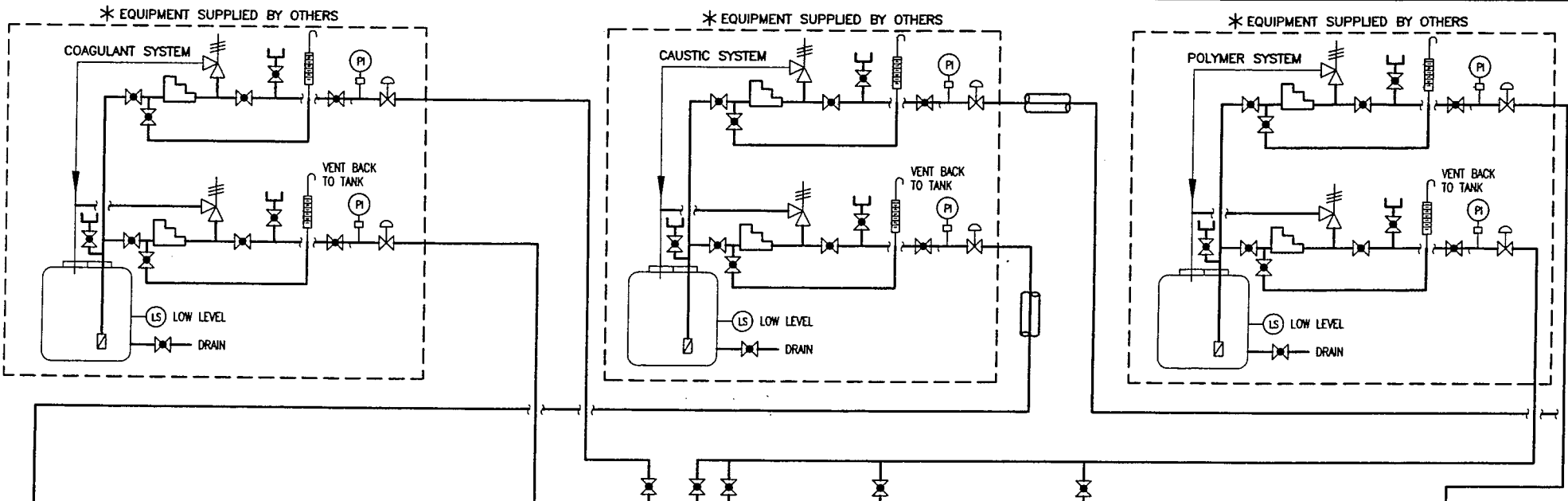
VILLAGE OF QUEEN CHARLOTTE
 HONNA RIVER WATER SUPPLY - WATER TREATMENT PLANT
 P&ID STANDARD TAGS AND ABBREVIATIONS

SCALE: NONE
 DRAWING No. 163.B.4.2
 SHEET No. P1 ISSUE A
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FILE: F:\Drawing\GREEN - CHARLOTTE\163-B-4-2\PAID\163-B-4-2 P2.dwg Tab: Model 09-03-19 DCURTIS

EQUIPMENT	EQUIPMENT REQUIRING DRIVES:	PIPING SYMBOLS	VALVE LABELLING SYSTEM
BAR SCREEN, MECHANICAL BLOWER OR CENTRIFUGAL FAN CALIBRATION COLUMN CONTROL DAMPER CENTRIFUGE COMPRESSOR, ROTARY SCREW DIFFUSER HEADER FILTER OR FILTER-SILENCER INLET AIR MIXER MIXER, HORIZONTAL SURFACE MIXER, INLINE STATIC MOTOR (MAYBE ELECTRIC, HYDRAULIC OR PNEUMATIC) MOTORIZED CONTROL DAMPER OUTFALL DIFFUSER PULSATION DAMPER TELESCOPIC GATE VALVE WEIR	<p>EQUIPMENT TYPES:</p> BLOWER OR FAN CENTRIFUGAL PUMP MOTOR	<p>PIPING SYMBOLS</p> AIR INTAKE AIR VENT ANNULAR TYPE INLINE PRESSURE SENSOR BLIND FLANGE CAMLOCK (UTILITY STATION) CAP OR PLUG CIRCULAR BLANK OR SPECTACLE BLIND <p>OPTIONS: NORMALLY OPEN NORMALLY CLOSED</p> QUICK CONNECTION (HOSE) FIXED CONNECTION (HOSE) DAMPER DESUPERHEATER INLINE DRAIN DRAIN/FUNNEL DRAIN TO FLOOR DRAIN TO TRENCH EJECTOR EQUIPMENT INSULATION EXPANSION JOINT FLAME ARRESTOR FLANGE FLEXIBLE CONNECTOR GOOSE NECK VENT GROUND (ELECTRICAL) GROUND IN-LINE INSTRUMENT INSTRUMENT CHEMICAL DIAPHRAGM SEAL LINE SLOPE LIQUID LEVEL MIXER ORIFICE PLATE PIPE INSULATION PIPE HEAT TRACING <p>E=ELECTRIC S=STEAM</p> PIPE MATERIAL OR SIZE OR NEW / OLD JUNCTION PIPE PLUG PRESSURE GAUGE REDUCER ROTAMETER RUPTURE DISC SENSOR SIGHT GLASS STEAM TRAP WITHOUT BYPASS STEAM TRAP WITH BYPASS TYPICAL 3 OUTPUT SIGNAL TO CONTROL UNION UTILITY STATION (NUMBER, IF ANY, DESIGNATES TYPE) WELDED CAP Y-TYPE STRAINER	<p>VALVE LABELLING SYSTEM</p> BALL CHECK VALVE BALL VALVE BLAST GATE (BG) BUTTERFLY VALVE BUTTERFLY VALVE DAMPER VALVE CHECK VALVE CHEMICAL INJECTION DIFFUSER CONTROL VALVE DIAPHRAGM VALVE FLOAT VALVE FLOW BALANCING VALVE FOOT VALVE FOUR-WAY VALVE GATE/MANUAL VALVE GLOBE VALVE KNIFE GATE VALVE MUD VALVE NEEDLE VALVE PINCH VALVE PLUG VALVE SOLENOID VALVE THREE-WAY VALVE DOUBLE CHECK VALVE BACKFLOW PREVENTER REDUCED PRESSURE BACKFLOW PREVENTER BACK PRESSURE REGULATING VALVE PRESSURE REDUCING PRESSURE REGULATING MODULATING VALVE PRESSURE REGULATING VALVE (EXTERNAL SENSING) PRESSURE REGULATING VALVE (INTERNAL SENSING) ON/OFF VALVE PRESSURE RELIEF VALVE PRESSURE AND VACUUM RELIEF VALVE SAFETY RELIEF VALVE VACUUM RELIEF VALVE
	<p>DRIVES</p> <p>DRIVE TYPES:</p> DRIVE-HYDRAULIC, PNEUMATIC, TURBINE OR INTERNAL COMBUSTION ENGINE ELECTRIC DRIVE		<p>OPTIONS: NORMALLY CLOSED NORMALLY OPEN</p> <p>FAIL OPTIONS: LOSS OF AIR (OR POWER) FO FAIL OPEN FC FAIL CLOSE FI FAIL INDETERMINATE FL FAIL LAST POSITION</p> <p>EXAMPLE: PNEUMATIC CONTROL LINE ON-OFF VALVE NORMALLY CLOSED FAIL CLOSED</p>
	<p>MODIFICATIONS:</p> BACKSTOP, BRAKE OR CLUTCH DRIVE INTERLOCK DRIVE INTERLOCK SEQUENCE TERMINATION DRIVE PERSONAL SAFETY INTERLOCK EXISTING DRIVE NEW DRIVE REVERSIBLE VARIABLE SPEED		<p>VALVE OPERATORS</p> MOTOR ACTUATOR PNEUMATIC CYLINDER BLEED VALVE DIAPHRAGM (PRESSURE BALANCE) SOLENOID DIAPHRAGM (SPRING OPPOSED)
	<p>BUBBLER SYSTEM </p> <p>INTERLOCK - SEE CONTROL STRATEGY DESC. </p> <p>PURGE OR FLUSHING DEVICE </p>		<p>PRIMARY ELEMENT SYMBOLS</p> ANNUBAR ANNULAR TYPE DIAPHRAGM PRESSURE SEAL DIAPHRAGM SEAL DISPLACEMENT LEVEL ELEMENT FLOW ELEMENT INTEGRAL WITH TRANSMITTER (MASS FLOW, ETC) FLOAT LEVEL ELEMENT FLUME (PARSHALL OR TRAPEZOIDAL) IN-LINE PRESSURE SENSOR MAGNETIC FLOWMETER NUCLEAR DENSITY METER PITOT TUBE ROTAMETER 1-10 GPM ROTAMETER W/ NEEDLE VALVE TURBINE OR PROPELLER TYPE METER ULTRASONIC FLOWMETER ULTRASONIC/MICROWAVE LEVEL ELEMENT ULTRASONIC LEVEL METER ULTRASONIC METER (STRAP ON) VENTURI OR FLOW TUBE ANEMOMETER WEIR FLOWMETER

PLOT: FULL 1:25 HALF 1:50		DESIGNED <u>CB</u>		Dayton & Knight Ltd. CONSULTING ENGINEERS #210-885 HARBORSIDE DR., NORTH VANCOUVER, B.C. V7P 3S1 TEL.: (604) 990-4800 FAX: (604) 990-4805 www.dayton-knight.com	SCALE: NONE	
DRAWN <u>DBC</u>		DRAWING No. 163.B.4.2			SHEET No. <u>P2</u> ISSUE <u>A</u>	
CHECKED <u>CB</u>		HONNA RIVER WATER SUPPLY - WATER TREATMENT PLANT P&ID STANDARD SYMBOLS, EQUIPMENT, VALVES AND INSTRUMENTATION			THIS DRAWING REDUCED TO HALFSIZE	

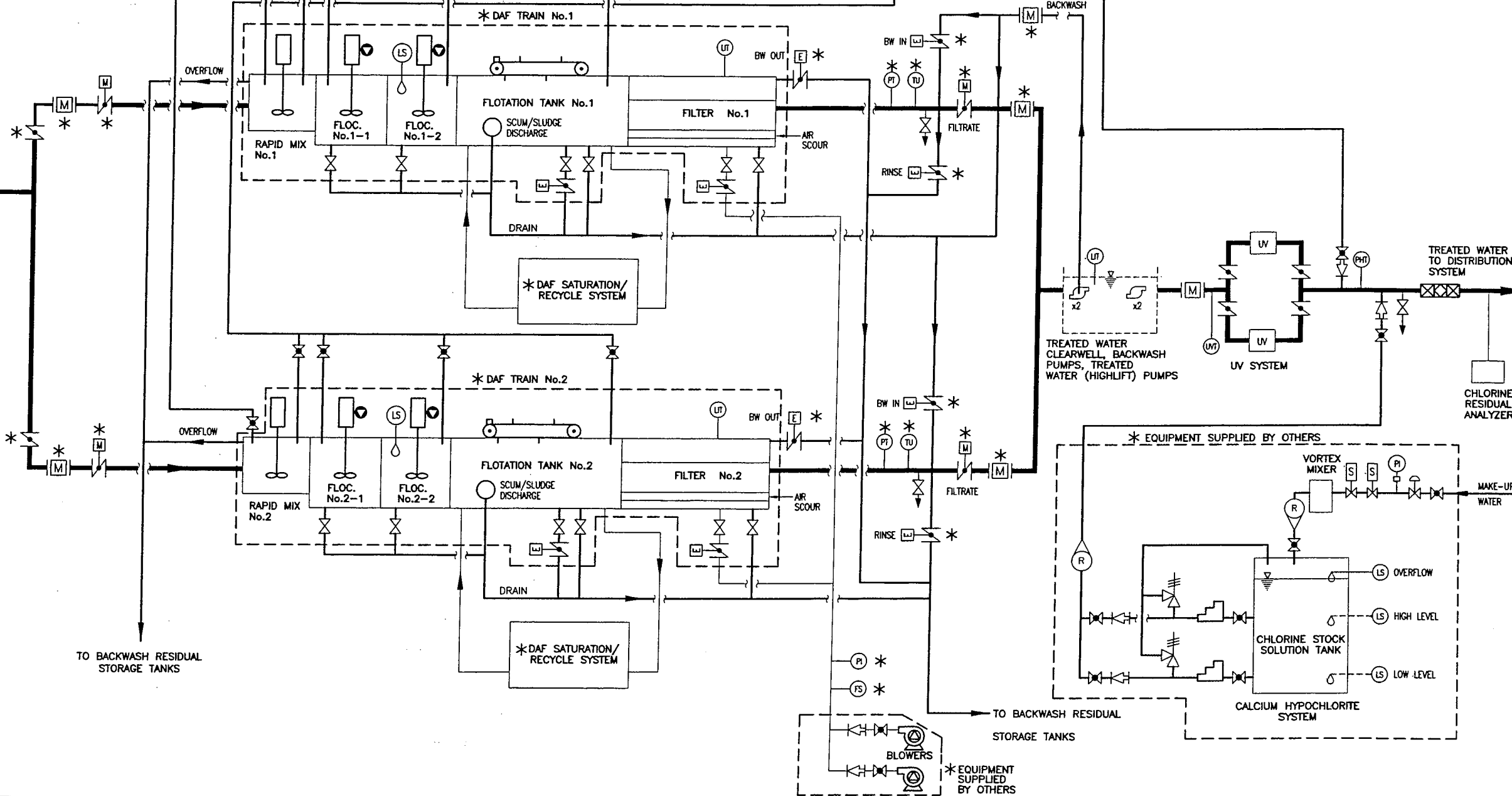


BY OTHERS THIS CONTRACT

150# RAW WATER FROM INTAKE PUMP STATION

- EQUIPMENT SUPPLIED AND INSTALLED BY CONTRACTOR**
- INTERCONNECTING PIPES
 - VALVES UNLESS NOTED OTHERWISE
 - TREATED WATER (HIGH LIFT PUMP)
 - UV SYSTEM, COMPLETE
 - CHLORINE RESIDUAL ANALYZER
 - CHEMICAL INJECTION
 - STATIC MIXER (TREATED WATER)
 - CLEARWELL LEVEL CONTROL
 - BACKWASH RESIDUALS STORAGE TANK PUMPS
 - BACKWASH RESIDUALS TANK LEVEL CONTROL
 - BACKWASH PUMPS
 - MCC PANELS
 - MOTOR STARTERS

- EQUIPMENT SUPPLIED BY OTHERS FOR INSTALLATION BY CONTRACTOR (AS MARKED WITH *)**
- COAGULANT SYSTEM
 - pH CONTROL SYSTEM
 - POLYMER SYSTEM
 - DAF TRAIN No.1 AND No.2
 - DAF BLOWERS
 - DAF RECYCLE PUMPS
 - RAW AND TREATED WATER TURBIDITY METERS
 - pH ANALYZERS
 - MAGNETERS, AS NOTED
 - VALVES, AS NOTED
- NOTE: DAF TRAINS PIPING SUPPLY ENDS AT THE NEAREST FLANGE OR EXTERIOR CONNECTION TO THE TREATMENT PLANT.



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 AutoCAD DRAWING
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A	MAR20/08	DBC	CB	CB	ISSUED FOR TENDER						

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VILLAGE OF QUEEN CHARLOTTE
 HONNA RIVER WATER SUPPLY - WATER TREATMENT PLANT
 PROCESS SCHEMATIC

SCALE: NTS
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 SHEET No. P3 ISSUE A
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SCADA

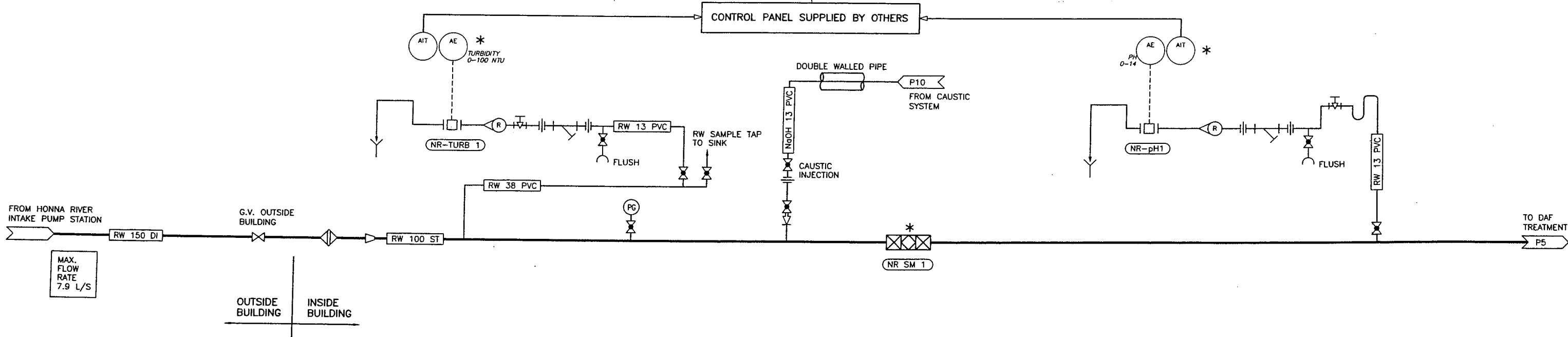
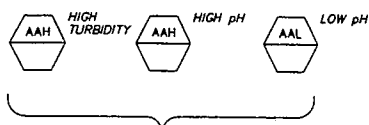
PLC

MCE

HMI

MCC/POWER PANEL

FIELD



MAX. FLOW RATE 7.9 L/S

OUTSIDE BUILDING | INSIDE BUILDING

NOTE :

* EQUIPMENT SUPPLIED LOOSE BY OTHERS FOR INSTALLATION BY CONTRACTOR.

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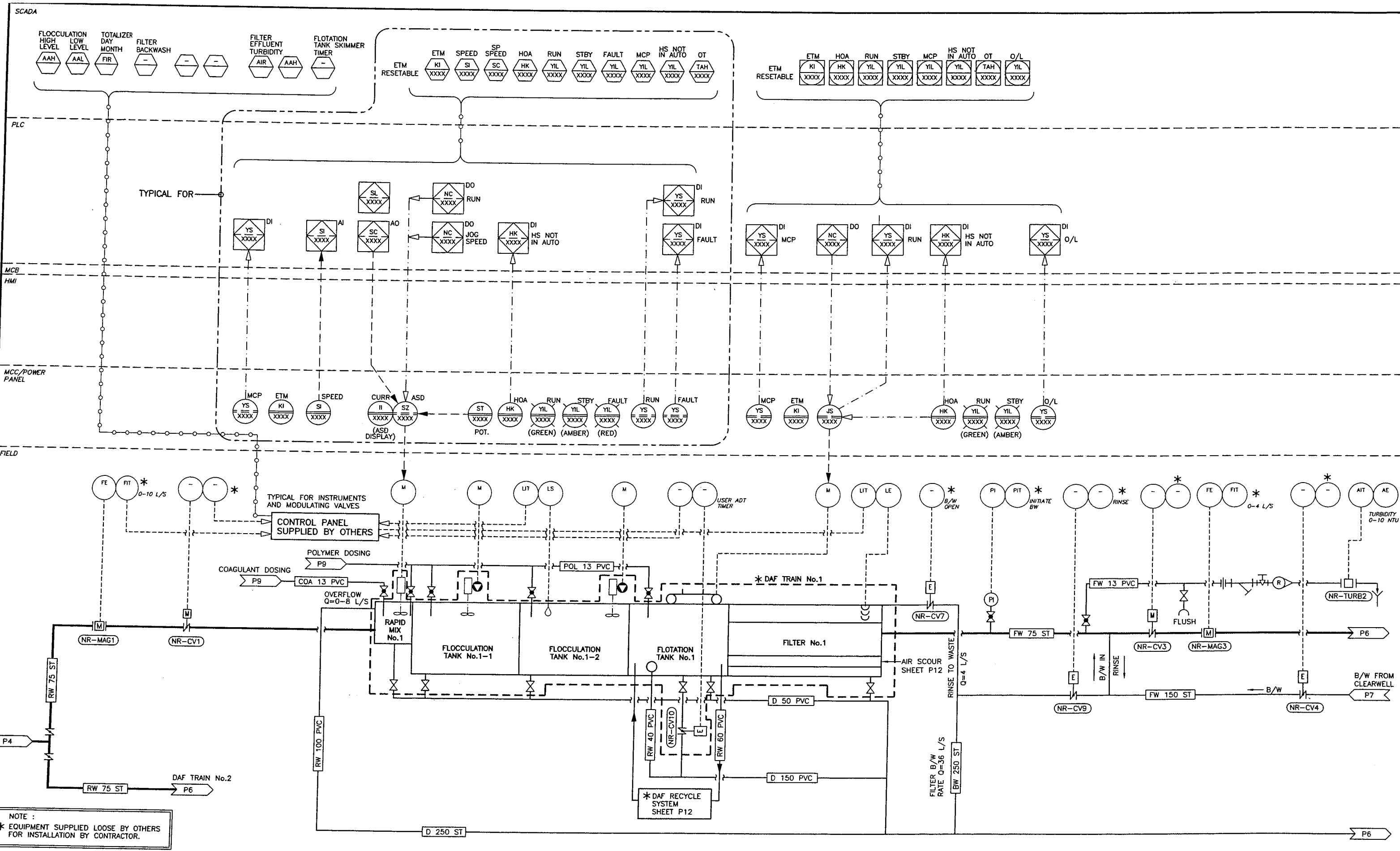
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VILLAGE OF QUEEN CHARLOTTE
 HONNA RIVER WATER SUPPLY - WATER TREATMENT PLANT
 P&ID - RAW WATER PRE-TREATMENT

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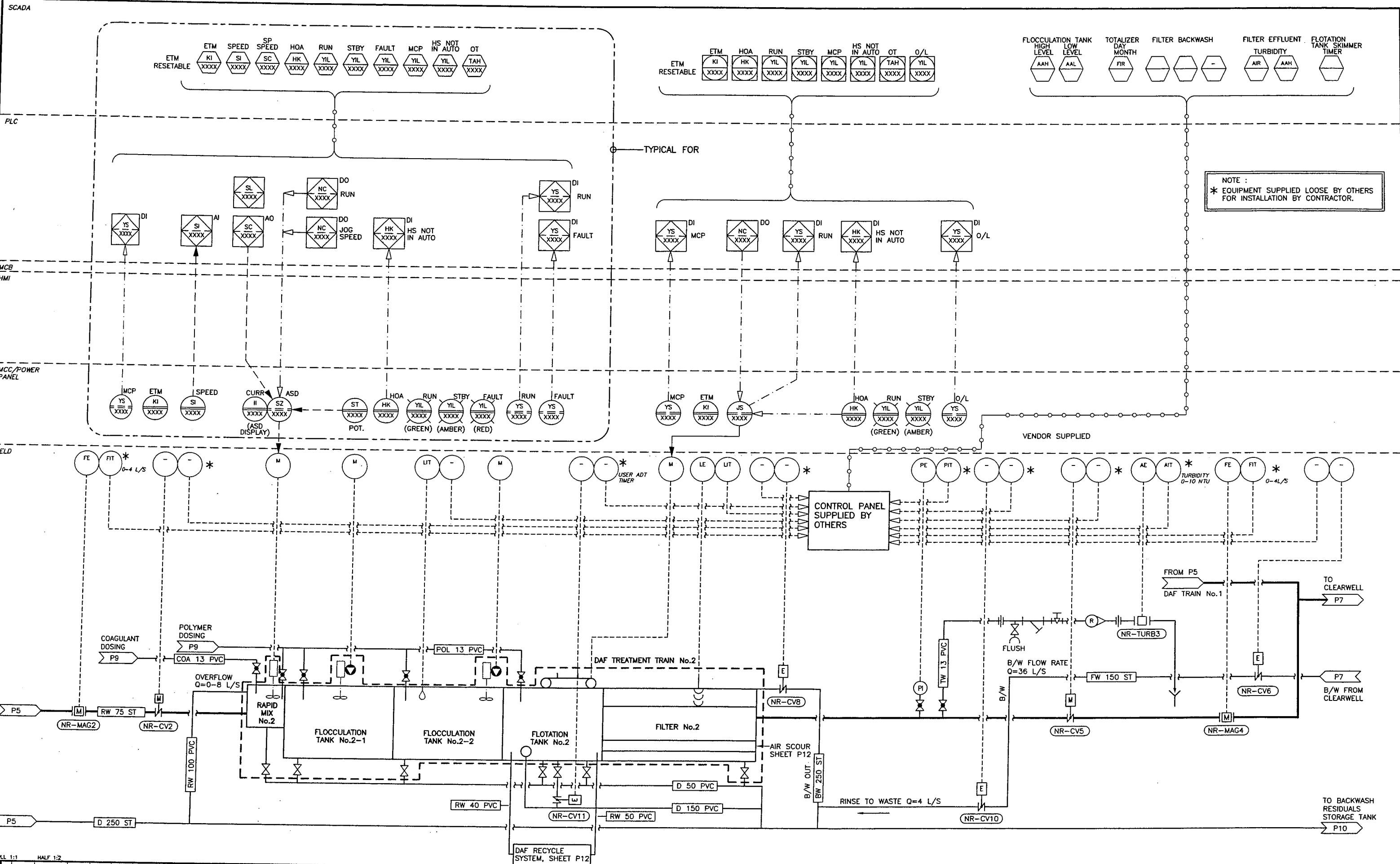
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A	MAR20/05	DBC	CB/BJ	CB	ISSUED FOR TENDER

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 DRAWN DBC
 CHECKED CB



VILLAGE OF QUEEN CHARLOTTE
 HONNA RIVER WATER SUPPLY - WATER TREATMENT PLANT
 P&ID - DAF TREATMENT - TRAIN No.1

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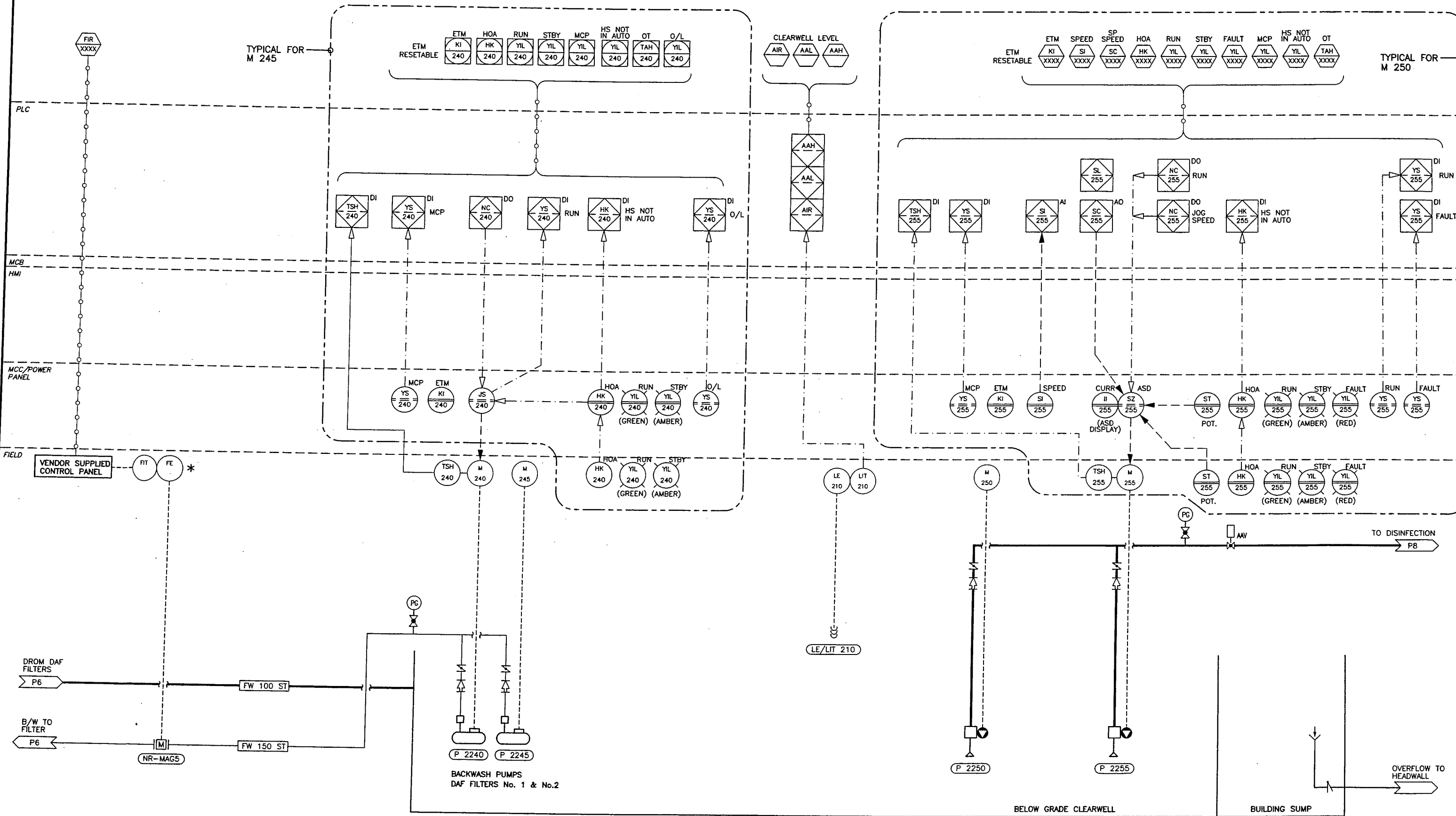
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 REVISIONS
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 VILLAGE OF QUEEN CHARLOTTE
 HONNA RIVER WATER SUPPLY - WATER TREATMENT PLANT
 P&ID - DAF TREATMENT - TRAIN No.2



NOTE :
 * EQUIPMENT SUPPLIED LOOSE BY OTHERS FOR INSTALLATION BY CONTRACTOR.

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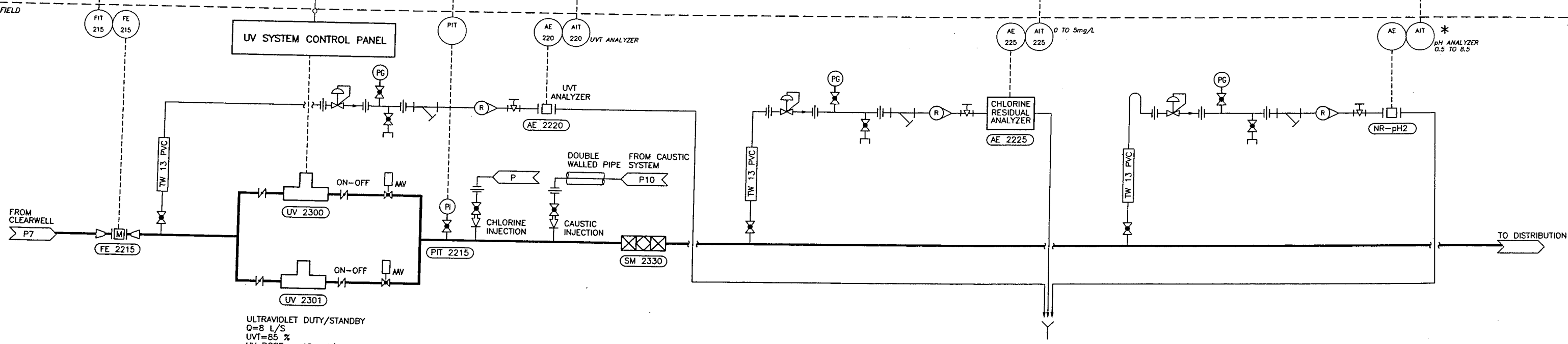
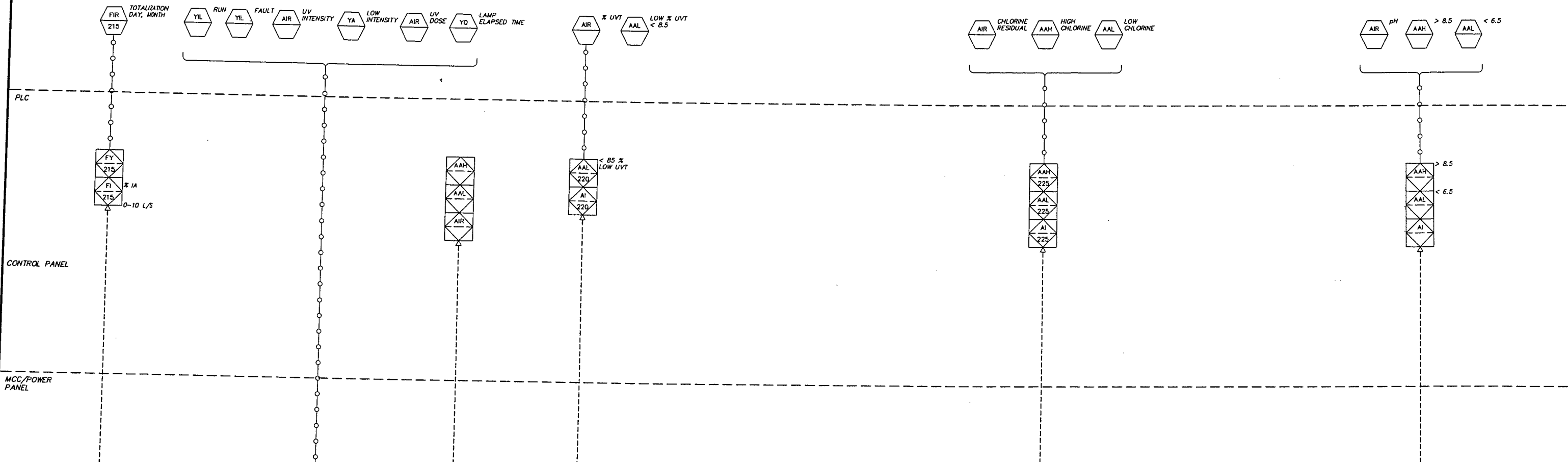
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A	MAR20/05	DBC	CB/BJ	CB		ISSUED FOR TENDER

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VILLAGE OF QUEEN CHARLOTTE
 HONNA RIVER WATER SUPPLY - WATER TREATMENT PLANT
 P&ID - CLEARWELL

SCALE: NTS
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 SHEET No. P7 ISSUE A
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ULTRAVIOLET DUTY/STANDBY
 Q=8 L/S
 UVT=85 %
 UV DOSE = 40 mJ/cm

NOTE :
 * EQUIPMENT SUPPLIED LOOSE BY OTHERS FOR INSTALLATION BY CONTRACTOR.

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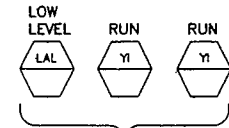
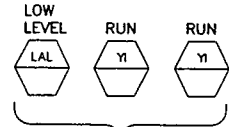
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REVISIONS	ISSUE	DATE	DRAWN	CHK'D	APP'D	ISSUE	DATE	DRAWN	CHK'D	APP'D	DESCRIPTION
	A	MAR20/09	DBC	CB/BJ	CB						ISSUED FOR TENDER

DESIGNED CB
 DRAWN DBC
 CHECKED CB/BJ

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VILLAGE OF QUEEN CHARLOTTE
 HONNA RIVER WATER SUPPLY - WATER TREATMENT PLANT
 P&ID - DISINFECTION AND POST TREATMENT

SCALE: NTS
 DRAWING No. 163.8.4.2
 SHEET No. P8 ISSUE A
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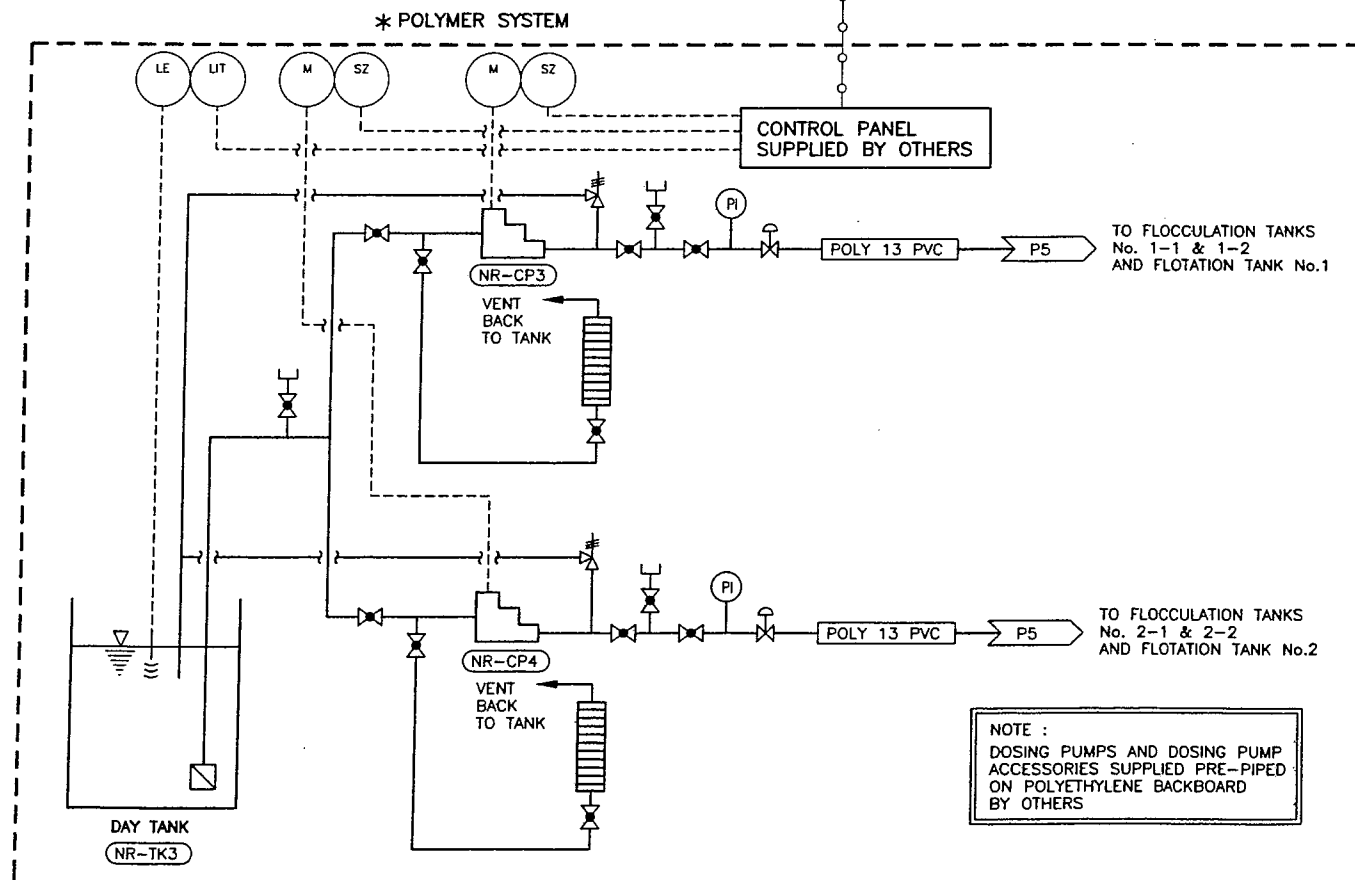
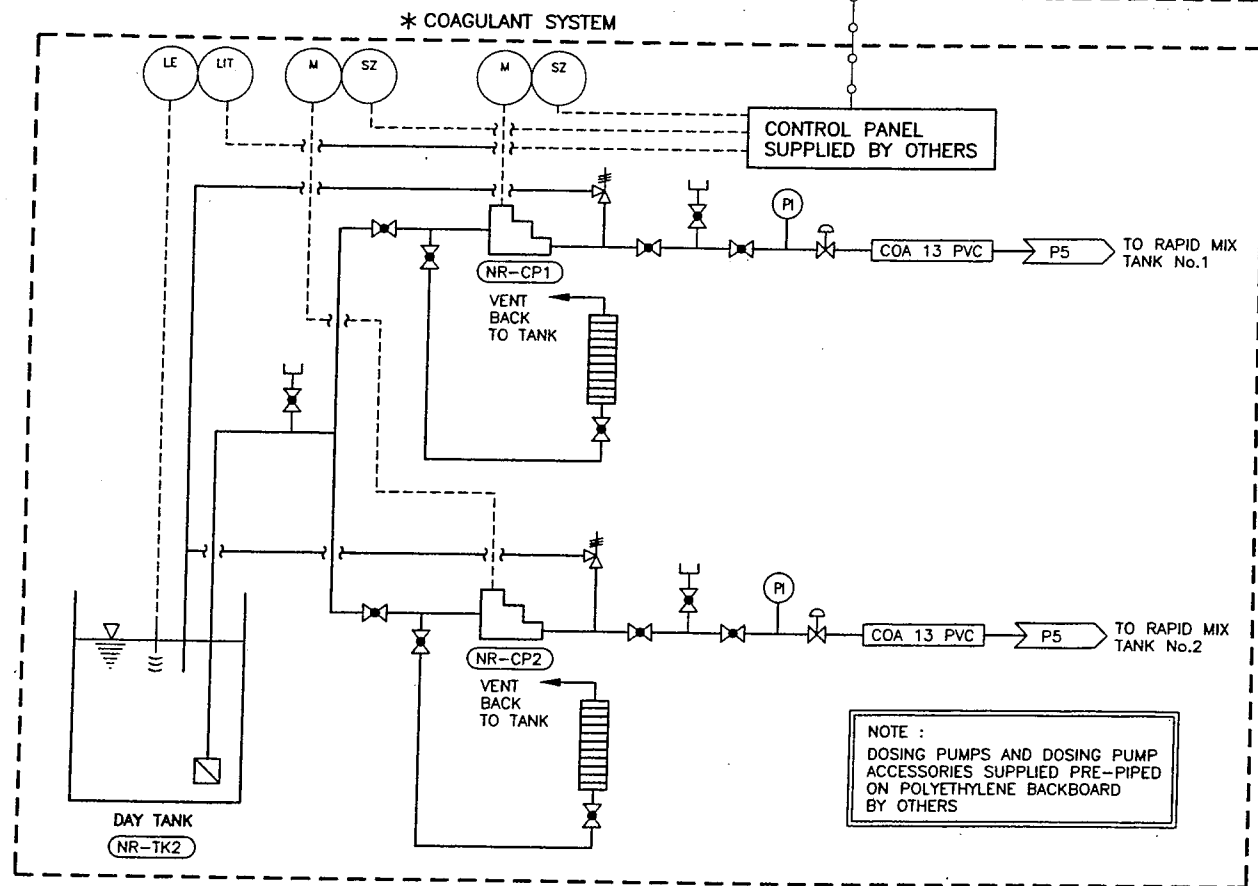


PLC

CONTROL PANEL

MCC/POWER PANEL

FIELD



NOTE :
* EQUIPMENT SUPPLIED LOOSE BY OTHERS FOR INSTALLATION BY CONTRACTOR.

FILE: P:\Drawing\GEN - CHARLOTTE\163.8.4.2 (P&ID)\163.8.4.2 P&ID.dwg Job PG 09-03-19 D:\BIRDS

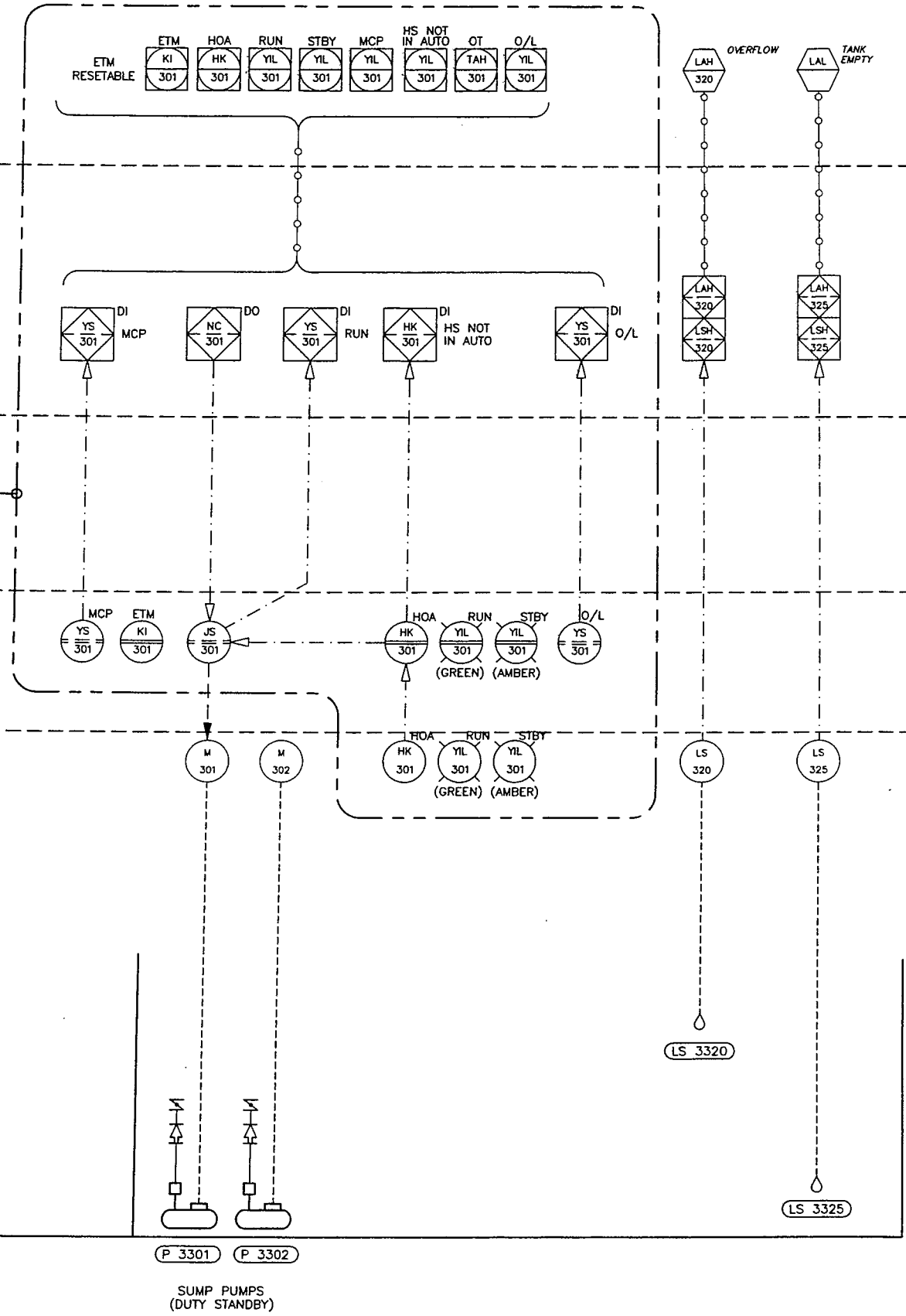
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DESIGNED CB
DRAWN DBC
CHECKED CB/BJ

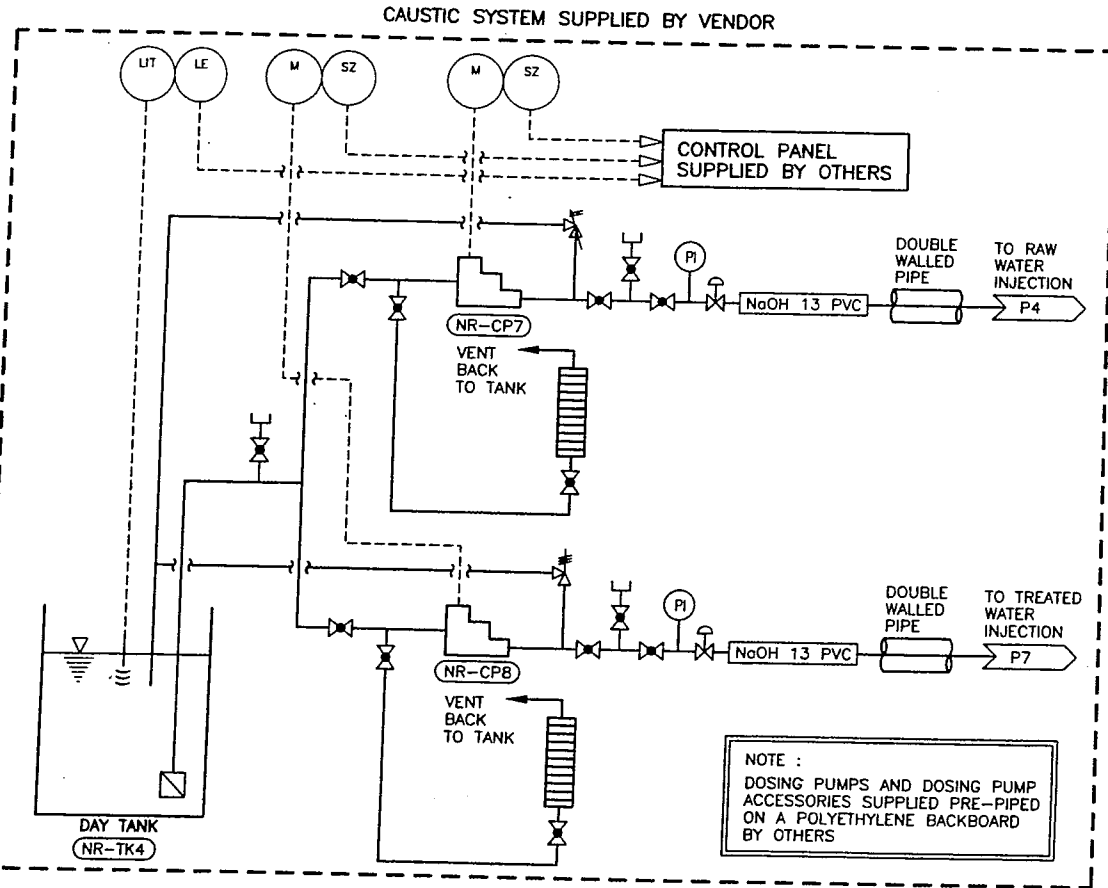
Dayton & Knight Ltd.
CONSULTING ENGINEERS
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VILLAGE OF QUEEN CHARLOTTE
HONNA RIVER WATER SUPPLY - WATER TREATMENT PLANT
P&ID - CHEMICAL FEED SYSTEMS - COAGULANT AND POLYMER

SCALE: NTS
DRAWING No. 163.8.4.2
SHEET No. P9 ISSUE A
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TYPICAL FOR M302



NOTE :
 DOSING PUMPS AND DOSING PUMP ACCESSORIES SUPPLIED PRE-PIPED ON A POLYETHYLENE BACKBOARD BY OTHERS

NOTE :
 * EQUIPMENT SUPPLIED LOOSE BY OTHERS FOR INSTALLATION BY CONTRACTOR.

FILE: P:\Drawings\GREEN - CHARLOTTE\163-8.4-2\163-8.4-2 P10.dwg Job: P10 09-03-19 COURTESY
 PLOT: FULL 1:1 HALF 1:2
 AUTOCAD DRAWING REVISIONS

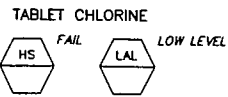
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A	MAR20/08	DBC	CB/BJ	CB	ISSUED FOR TENDER						

DESIGNED CB
 DRAWN DBC
 CHECKED CB/BJ



VILLAGE OF QUEEN CHARLOTTE
 HONNA RIVER WATER SUPPLY - WATER TREATMENT PLANT
 P&ID - CAUSTIC SYSTEM AND BACKWASH RESIDUALS STORAGE TANK

SCALE: NTS
DRAWING No. 163.8.4.2
SHEET No. P10 ISSUE A
THIS DRAWING REDUCED TO HALFSIZE



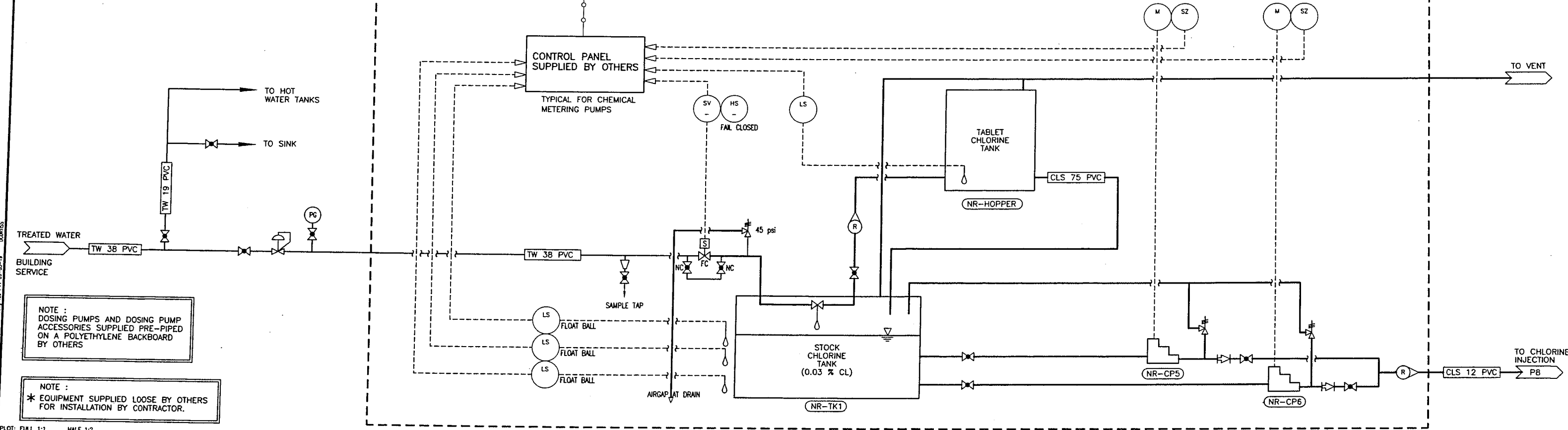
PLC

CONTROL PANEL

MCC/POWER PANEL

FIELD

* CHLORINATION SYSTEM



TO HOT WATER TANKS
TO SINK

TREATED WATER BUILDING SERVICE
TW 38 PVC

NOTE :
DOSING PUMPS AND DOSING PUMP ACCESSORIES SUPPLIED PRE-PIPED ON A POLYETHYLENE BACKBOARD BY OTHERS

NOTE :
* EQUIPMENT SUPPLIED LOOSE BY OTHERS FOR INSTALLATION BY CONTRACTOR.

FILE: P:\Drawings\GENEY - CHARLOTTE\163.8.4.2\PART1\163.8.4.2_P11.dwg Tab: P11 09-03-19 10:08:55 AM

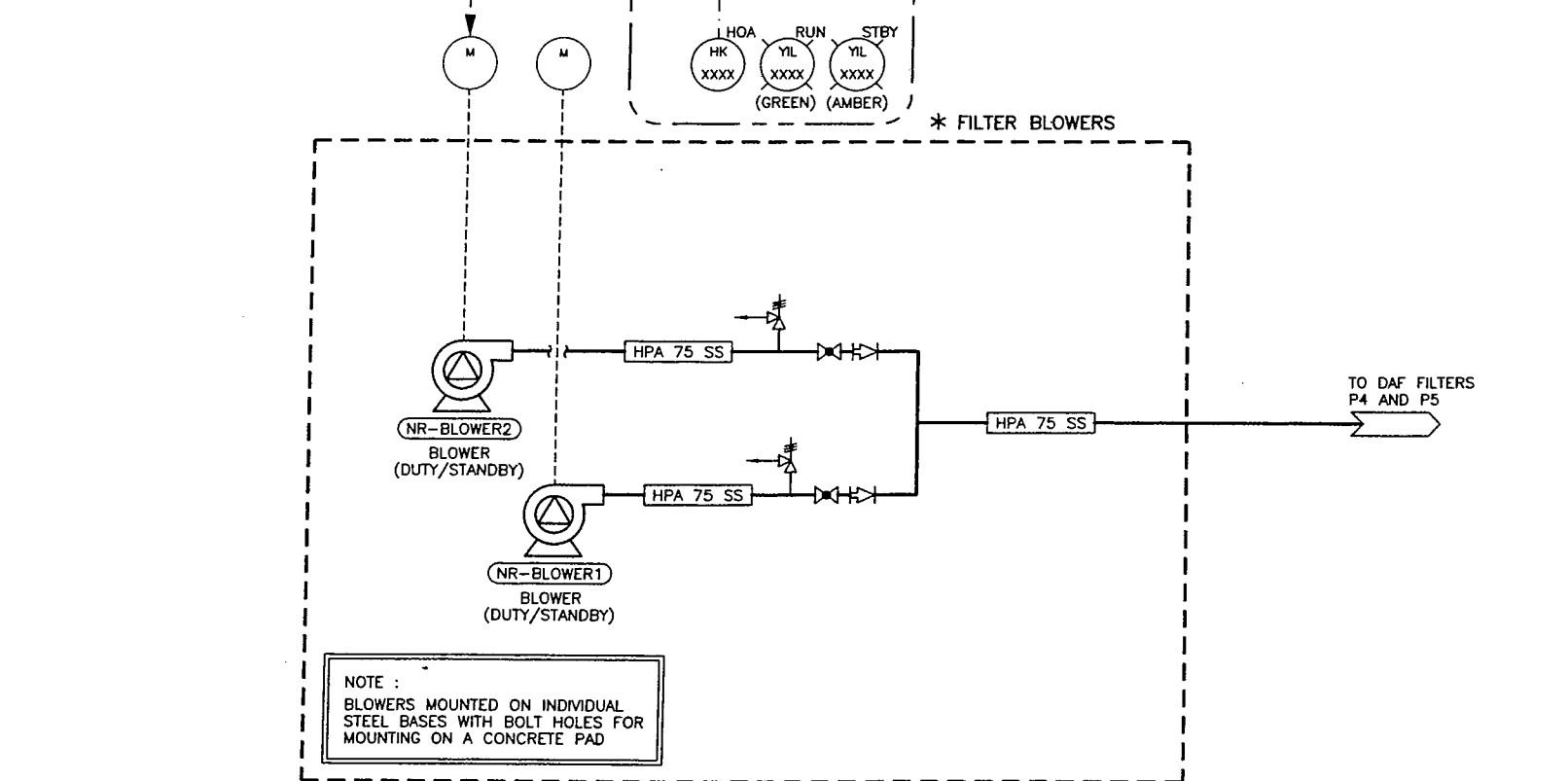
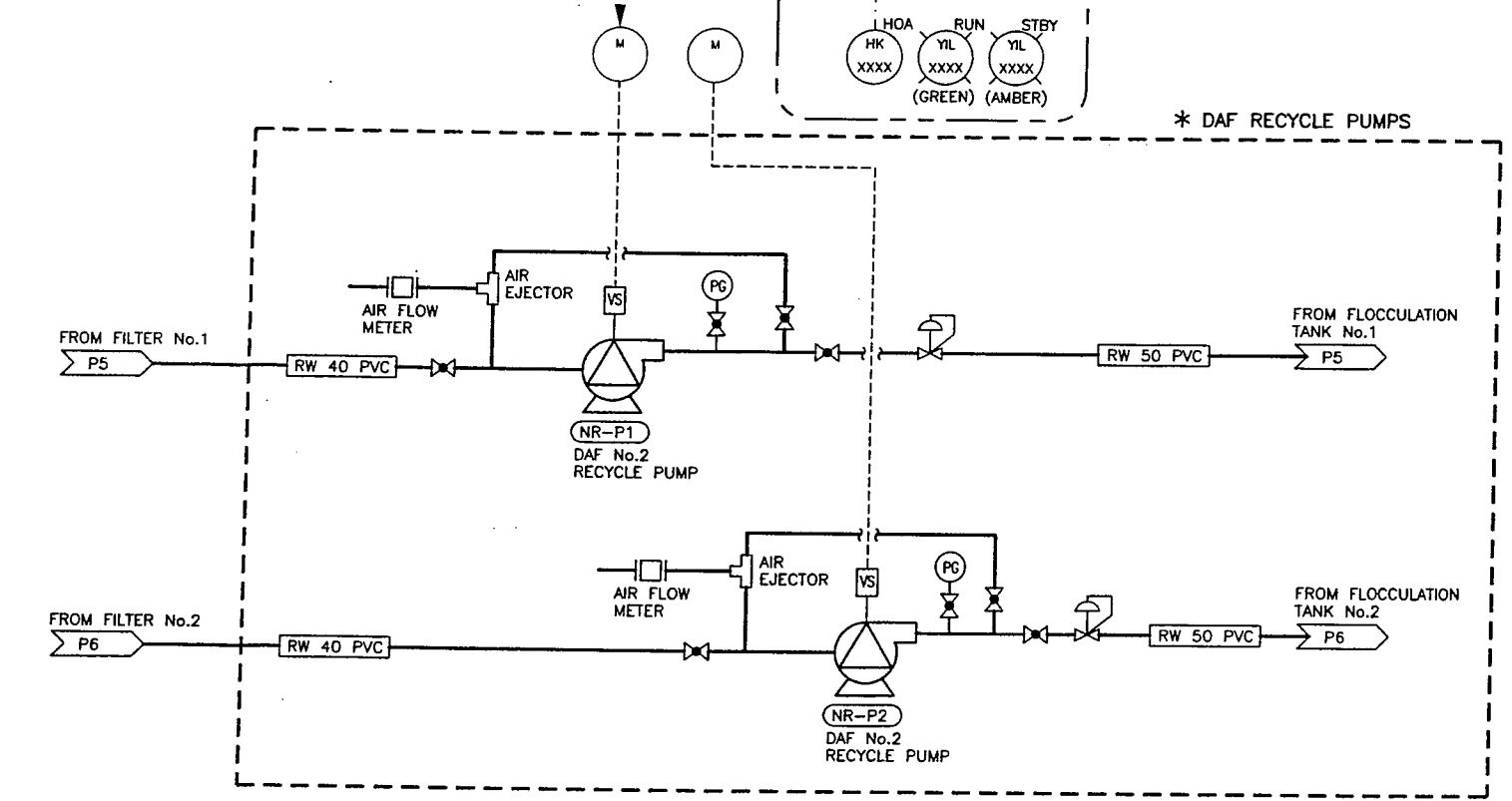
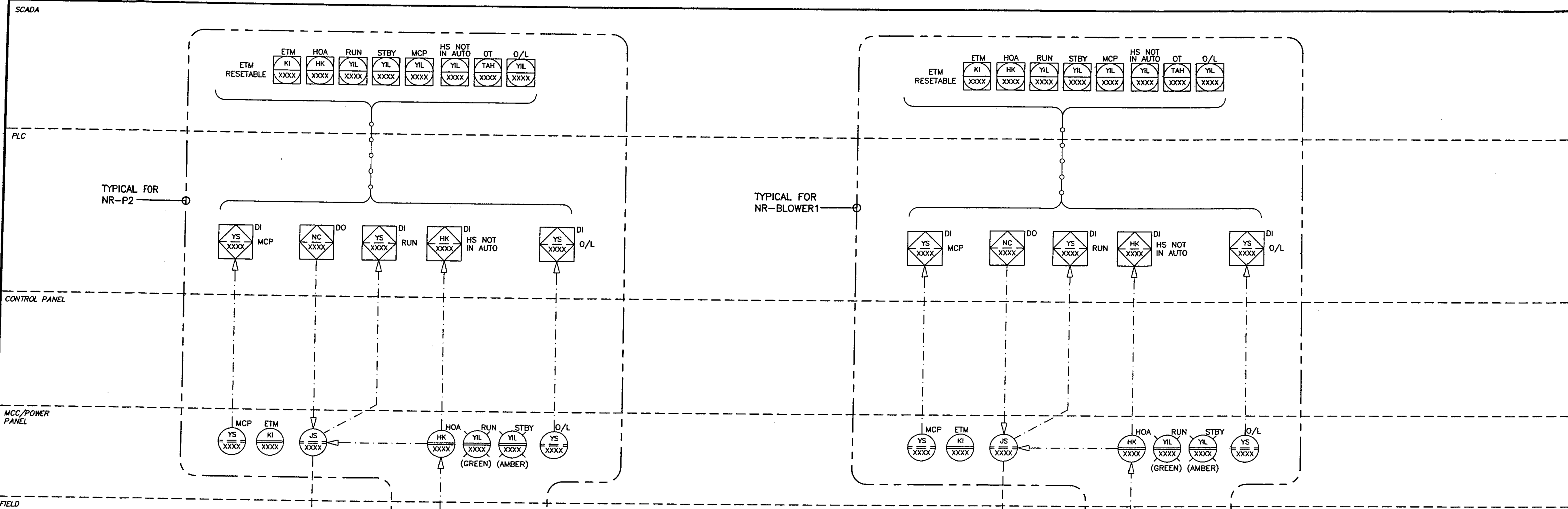
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A	MAR20/09	DBC	CB/BJ	CB	ISSUED FOR TENDER						

DESIGNED CB
DRAWN DBC
CHECKED CB/BJ

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VILLAGE OF QUEEN CHARLOTTE
HONNA RIVER WATER SUPPLY - WATER TREATMENT PLANT
P&ID - CHLORINATION SYSTEM

SCALE: NTS
DRAWING No. 163.8.4.2
SHEET No. P11
ISSUE A
THIS DRAWING REDUCED TO HALFSIZE



NOTE :
* EQUIPMENT SUPPLIED LOOSE BY OTHERS FOR INSTALLATION BY CONTRACTOR.

NOTE :
BLOWERS MOUNTED ON INDIVIDUAL STEEL BASES WITH BOLT HOLES FOR MOUNTING ON A CONCRETE PAD

ISSUE	DATE	DRAWN	CHK'D	APP'D	DESCRIPTION
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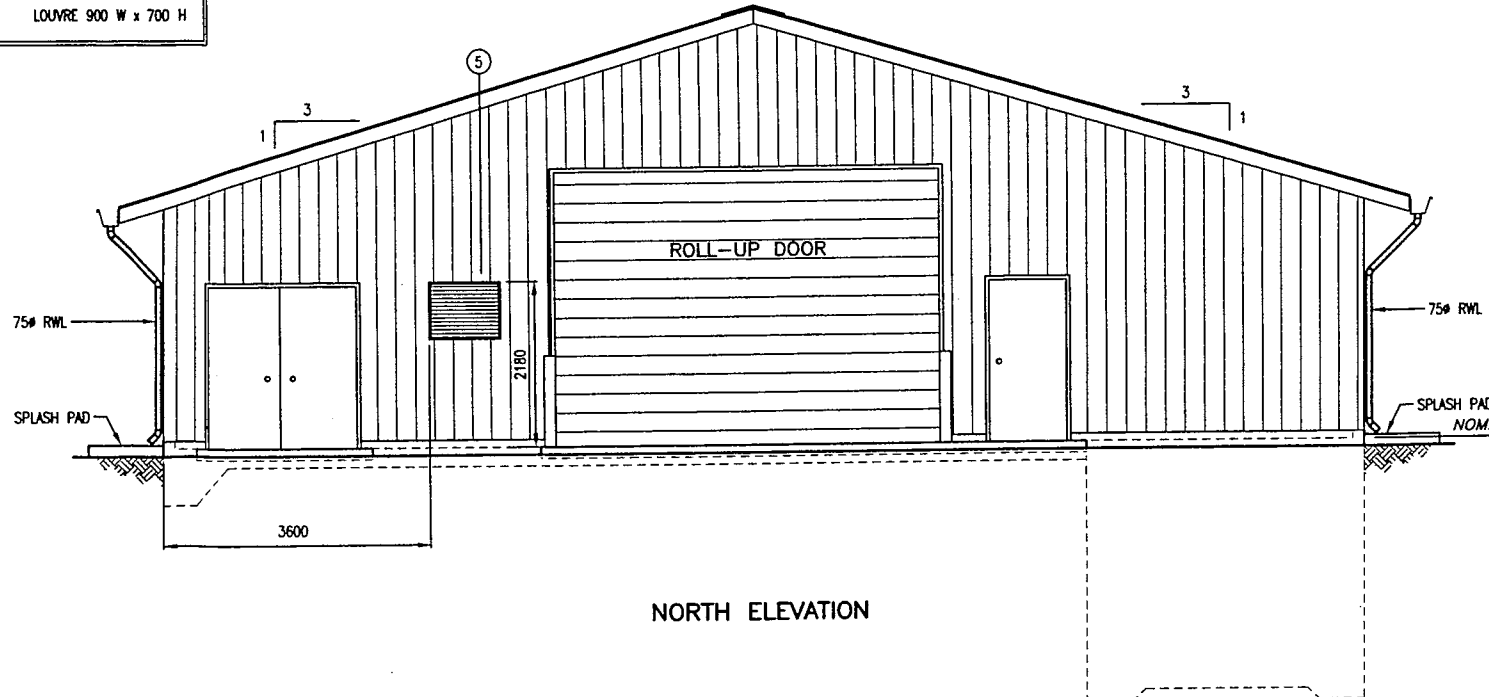
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CHECKED: CB/BJ



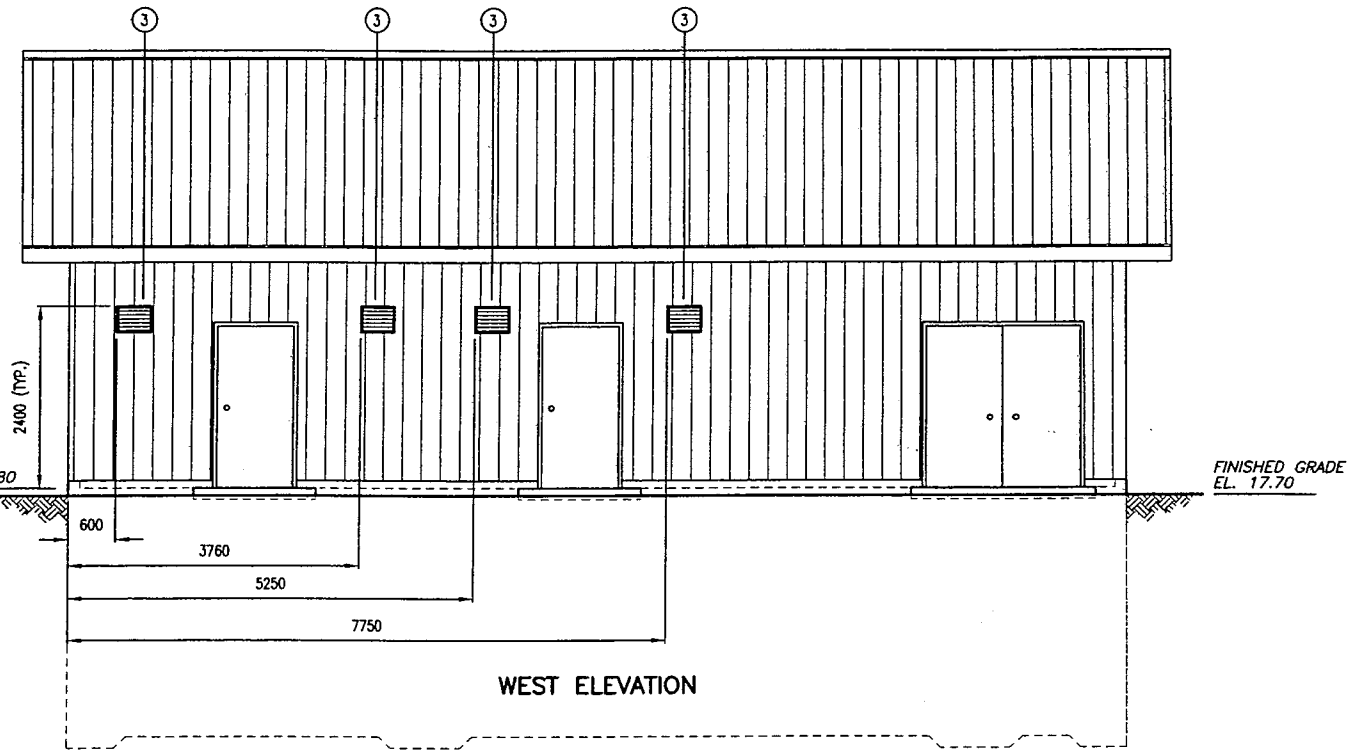
VILLAGE OF QUEEN CHARLOTTE
HONNA RIVER WATER SUPPLY - WATER TREATMENT PLANT
P&ID - DAF RECYCLE PUMPS AND BLOWERS

SCALE: NTS
DRAWING No. 163.8.4.2
SHEET No. P12 ISSUE A
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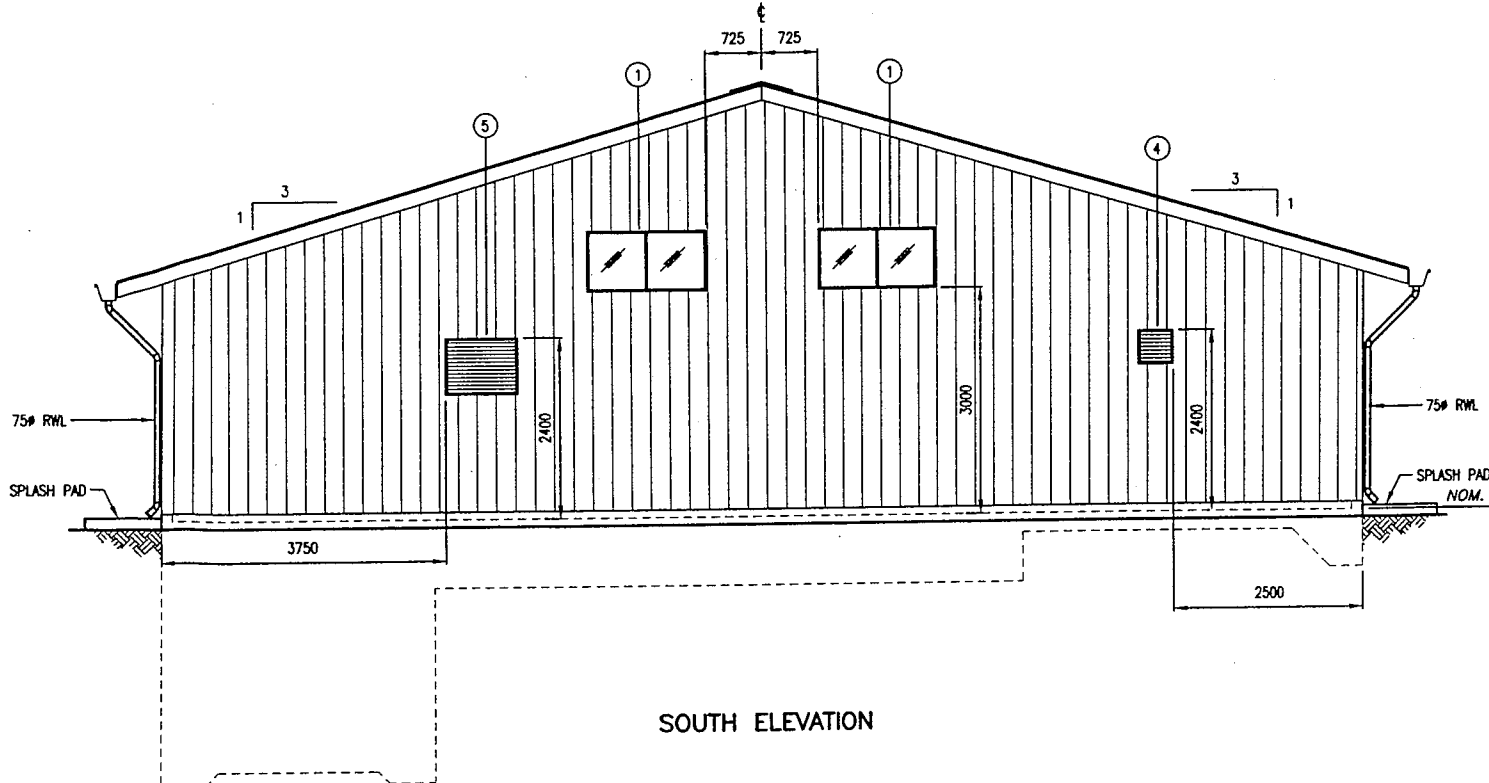
LEGEND	
①	WINDOW 1500 W x 750 H
②	LOUVRE 300 W x 300 H
③	LOUVRE 400 W x 350 H
④	LOUVRE 400 W x 400 H
⑤	LOUVRE 900 W x 700 H



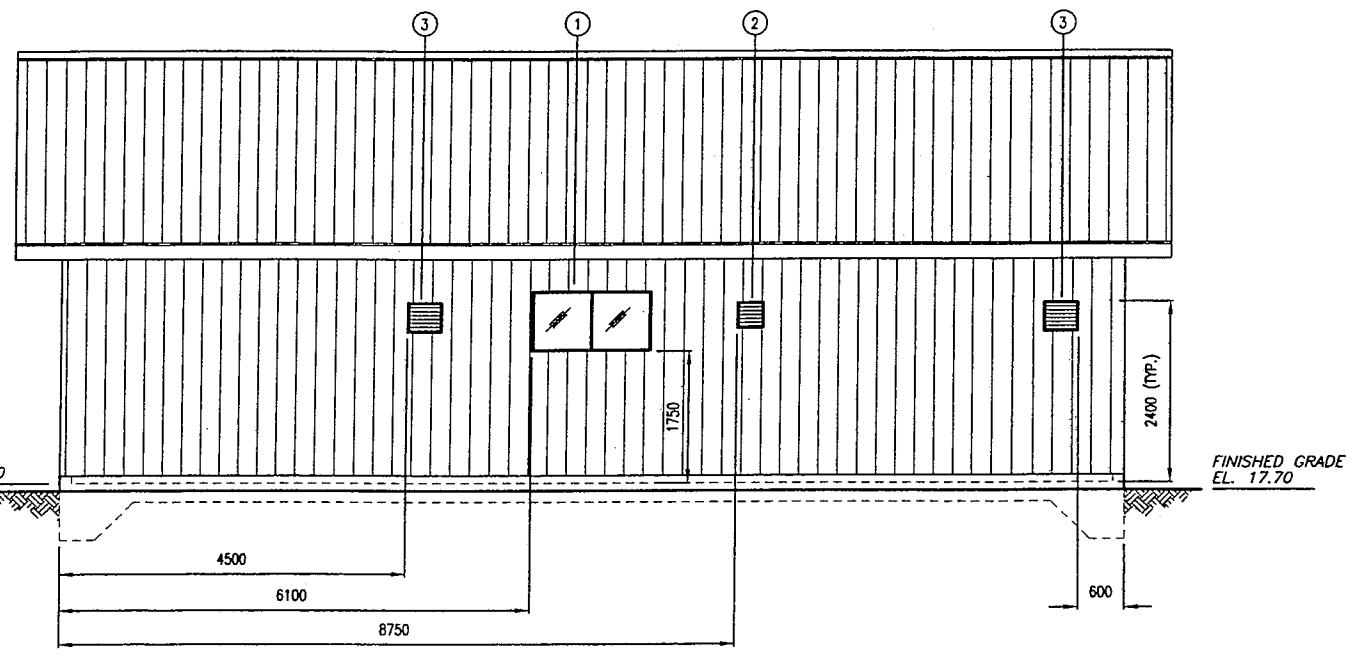
NORTH ELEVATION



WEST ELEVATION



SOUTH ELEVATION



EAST ELEVATION

T:\E. P. Drawing\QUEEN - CHARLOTTE\163-B-4-2\ARCHITECTURAL\163-B-4-2_A1.dwg Tab A1 09-03-18 COURTESY

PLOT: FULL 1:1 HALF 1:2

ISSUE	DATE	DRAWN	CHK'D	APP'D	DESCRIPTION	ISSUE	DATE	DRAWN	CHK'D	APP'D	DESCRIPTION
A	MAR20/09	DBC	CC	CB	ISSUED FOR TENDER						

DESIGNED CB
 DRAWN DBC
 CHECKED CC

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VILLAGE OF QUEEN CHARLOTTE
 HONNA RIVER WATER SUPPLY - WATER TREATMENT PLANT
 BUILDING ELEVATIONS

SCALE: 1:50
DRAWING No. 163.8.4.2
SHEET No. A1 ISSUE A
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