

DRAWING NUMBER	REFERENCE DRAWINGS
----------------	--------------------



DEVICE SCHEDULE				
TYPE	DESCRIPTION	MANUFACTURER	CAT. NO.	NOTES
1	EMERGENCY STOP PUSHBUTTON	ALLEN BRADLEY	800H SERIES	PUSHBUTTON WITH FOLLOWING FEATURES: 1. BODY AND COVER: COPPER FREE ALUMINUM 2. INTEGRAL SEALING WELL OR EXTERNAL SEAL 3. RED MUSHROOM HEAD BUTTON, MAINTAINED CONTACT 4. 2 N.C. CONTACTS, RATED 10A @ 120 VAC 5. NAMEPLATE 6. NEMA 4 RATED
2	347V, SINGLE POLE SWITCH	CROUSE HINDS	DSDSR30120-SA EDSC271-SA	SWITCH WITH FOLLOWING FEATURES: 1. BODY AND COVER: COPPER FREE ALUMINUM 2. 30A, 600V CONTACT 3. SINGLE POLE ON/OFF SELECTOR SWITCH
3	15A, 120V RECEPTACLE	CROUSE HINDS	ENR21151 M4	SINGLE RECEPTACLE WITH FOLLOWING FEATURES: 1. RATING: CSA TYPE 5-15R, 15A, 125 V 2. RECEPTACLE HOUSING: COPPER FREE ALUMINUM WITH SPRING DOOR 3. DEAD FRONT INTERLOCKED DESIGN SUCH THAT ELECTRICAL ARC IS CONFINED IN THE CHAMBER 4. FACTORY SEALED UNIT SO THAT NO ADDITIONAL EXTERNAL SEALS ARE REQUIRED 5. NEMA 4 RATED
4	DIFFERENTIAL PRESSURE SWITCH	UNITED ELECTRIC	H117-540	DIFFERENTIAL PRESSURE SWITCH WITH FOLLOWING FEATURES: 1. HOUSING: EPOXY POWDER COATED CAST ALUMINUM 2. SETTING RANGE: 0.8" - 7" W.C., FIELD ADJUSTABLE SETPOINT 3. CONTACTS: SPST, 10A, 120VAC 4. FACTORY SEALED UNIT SO THAT NO ADDITIONAL EXTERNAL SEALS ARE REQUIRED
5	LIMIT SWITCH	ALLEN-BRADLEY	802X	LIMIT SWITCH WITH FOLLOWING FEATURES: 1. TO REPLACE EXISTING ALLEN-BRADLEY TYPE 802T-AP LIMIT SWITCH 2. LEVERS AND SWITCH ACTION SAME AS EXISTING
6	60A, 600V RECEPTACLE	CROUSE HINDS	FSQC5640	SINGLE RECEPTACLE WITH FOLLOWING FEATURES: 1. RATING: 60A, 600V, 3 WIRE, 4 POLE 2. RECEPTACLE HOUSING: COPPER FREE ALUMINUM WITH SPRING DOOR 3. DEAD FRONT INTERLOCKED DESIGN SUCH THAT ELECTRICAL ARC IS CONFINED IN THE CHAMBER
7	NOT USED			
8	CONVEYOR LIMIT SWITCH	ALLEN-BRADLEY	802XR	LIMIT SWITCH WITH FOLLOWING FEATURES: 1. TO REPLACE EXISTING MICROSWITCH CAT. NO. 1LS3. 2. LEVERS AND SWITCH ACTION: SAME AS EXISTING 3. NAMEPLATE 4. FACTORY SEALED UNIT SO THAT NO ADDITIONAL EXTERNAL SEALS ARE REQUIRED
9	STROBE	CROUSE HINDS	XB16UL	STROBE WITH FOLLOWING FEATURES: 1. LENS: AMBER POLYCARBONATE 2. CORROSION RESISTANT ENCLOSURE, NEMA 4X 3. VOLTAGE: 120 VAC 4. FLASHRATE: 120 FPM 5. WIRE GUARD
10	HORN	CROUSE HINDS	DB1PULA110D3NNNR	HORN WITH FOLLOWING FEATURES: 1. 108 dB(A) @ 3.05M 2. CORROSION RESISTANT ALLOY BODY 3. VOLTAGE: 120 VAC 4. TONE SELECTABLE
11	CONVEYOR PULL SWITCH	CROUSE HINDS	AFUX0333-S752	CONVEYOR PULL SWITCH WITH FOLLOWING FEATURES: 1. TO REPLACE EXISTING CROUSE HINDS AFUL2 2. RATING: 15A 3. CONTACTS: 2 N.C. 4. HOUSING: IRON ALLOY 5. RED PAINTED INDICATING ARM
12	SPEAKER	CROUSE HINDS	DB16UC	SPEAKER WITH FOLLOWING FEATURES: 1. CORROSION RESISTANT BODY, BLACK COLOUR 2. MOUNTING BRACKET: STAINLESS STEEL 3. 30 WATT OUTPUT 4. TRANSFORMER
13	NOT USED			
14	DOOR SWITCH	TOPWORX	31-17526-A2	LEVERLESS LIMIT SWITCH WITH FOLLOWING FEATURES: 1. MATERIAL: STAINLESS STEEL 2. CONTACTS: SPDT, 6A, 120VAC
15	COMBINATION CONTACTOR	CUTLER-HAMMER		COMBINATION CONTACTOR SEE DWG 1-0102G-E0031
16	ELECTRIC MOTOR DOOR OPERATOR, AND RELATED CONTROLS	RICHARDS-WILCOX CUSTOM SYSTEMS		REPLACEMENT EXPLOSION PROOF DOOR OPERATOR AND RELATED CONTROLS AS FOLLOWS: 1. EXISTING DOOR OPERATOR: MANARAS MGH4X, S/N 98-14495 2. SUITABLE FOR 575V, 3 PHASE INPUT 3. OPEN/CLOSE/STOP PUSHBUTTON CONTROL STATION 4. PNEUMATIC REVERSING SAFETY EDGE 5. MISC FITTINGS 6. REMOTE DCS CONTROL
17	347V, 3 WAY SWITCH, 3 CIRCUIT	CROUSE HINDS	DSDSR30121-SA (3) EDSCM21 (3)	SWITCHES WITH FOLLOWING FEATURES: 1. BODY AND COVER: COPPER FREE ALUMINUM 2. 30A, 600V CONTACTS 3. THREE, SINGLE POLE, DOUBLE-THROW WITHOUT OFF POSITION

DEVICE SCHEDULE				
ITEM	DESCRIPTION	MANUFACTURER	CAT. NO.	NOTES
18	PUSHBUTTON STATION	ALLEN BRADLEY	800H SERIES	PUSHBUTTON STATION WITH FOLLOWING FEATURES: 1. BODY AND COVER: COPPER FREE ALUMINUM 2. INTEGRAL SEALING WELL OR EXTERNAL SEAL 3. THREE MOMENTARY PUSHBUTTONS, 1 N.O. & 1 N.C. 10A, 120V CONTACT PER BUTTON 4. NAMEPLATE 5. NEMA 4 RATED
19	NOT USED			
20	MANUAL MOTOR STARTER	CROUSE HINDS	EDS2199	MANUAL MOTOR STARTER WITH FOLLOWING FEATURES: 1. BODY AND COVER: COPPER FREE ALUMINUM 2. FACTORY SEALED UNIT SO THAT NO ADDITIONAL EXTERNAL SEALS ARE REQUIRED 3. 1 POLE, 120VAC 4. MAXIMUM HP: 1 HP 5. INTERCHANGEABLE HEATER SIZED TO MOTOR CURRENT 6. NAMEPLATE
21	ELECTRIC MOTOR AND FAN			ELECTRIC MOTOR AND FAN WITH FOLLOWING FEATURES: 1. VOLTAGE: 115V, 1 PHASE, 60 HZ 2. RATING: 0.37kW (0.5 HP), 1800 RPM 3. HAZARDOUS CLASS I, ZONE 2 RATING 4. CONTINUOUS DUTY, TEMP CODE T3C, CLASS B INSULATION 5. AUTOMATIC RESET THERMAL OVERLOAD 6. FAN SPARK RESISTANCE: TYPE A
22	COMBINATION CONTACTOR			COMBINATION CONTACTOR WITH FOLLOWING FEATURES: 1. ENCLOSURE: EXPLOSION PROOF SEE DWG 1-0102G-E0032
23	LINE THERMOSTAT	CROUSE HINDS	HRC 1	LINE VOLTAGE THERMOSTAT WITH FOLLOWING FEATURES: 1. ENCLOSURE: COPPER FREE ALUMINUM 2. SWITCH RATED FOR 10A, 120V 3. TEMPERATURE RANGE: 2°C TO 28°C 4. TEMPERATURE DIFFERENTIAL: 1.5°C
24	HORIZONTAL UNIT HEATER			UNIT HEATER WITH FOLLOWING FEATURES: 1. CAPACITY: 16kW BASED ON 93°C EWT AND 11°C DROP 2. MOTOR: 0.075kW (1/10 HP), 115V, 1 PHASE, 1550 RPM 3. HAZARDOUS CLASS I, ZONE 2 RATING
25	VERTICAL UNIT HEATER			UNIT HEATER WITH FOLLOWING FEATURES: 1. CAPACITY: 19kW BASED ON 93°C EWT AND 11°C DROP 2. MOTOR: 0.124kW (1/6 HP), 115V, 1 PHASE, 1550 RPM 3. HAZARDOUS CLASS I, ZONE 2 RATING
26	CIRCUIT BREAKER AND ENCLOSURE	CROUSE HINDS	EBMBB-WT	CIRCUIT BREAKER AND ENCLOSURE WITH FOLLOWING FEATURES: 1. ENCLOSURE: EXPLOSION PROOF, COPPER FREE ALUMINUM 2. VOLTAGE: 3 PHASE, 600V, 60 HZ 3. CIRCUIT BREAKER: 3P, 15A 4. CONDUIT ENTRANCES FOR EXISTING POWER CONDUITS 5. NAMEPLATE
27	CCTV CAMERA	BOSCH	VEN-650V05 SERIES	CCTV CAMERA, LENS AND ENCLOSURE WITH FOLLOWING FEATURES: 1. EXPLOSION PROOF HOUSING 2. RESOLUTION: 540 LINES 3. DAY/NIGHT IMAGE SENSOR 4. BACKLIGHT COMPENSATION, AUTO GAIN CONTROL 5. LENS: 2.8-12mm, AUTO IRIS 6. CONNECTION: COAX 7. POWER SUPPLY: 24 VAC SUPPLIED FROM STEPDOWN TRANSFORMER HOUSED IN SEPARATE ENCLOSURE
28	VALVE ACTUATOR	ROTORK	IQ25Z EXPLOSION PROOF, 29 RPM/400 Nm TORQUE, 575/3/60, WIRING DIAGRAM 3000-001, SIDE HANDWHEEL, FA16 MOUNTING FLANGE	REPLACEMENT EXPLOSION PROOF ELECTRIC ACTUATORS AS FOLLOWS: 1. SUITABLE FOR 575V, 3PHASE, 60HZ SUPPLY 2. MULTI-TURN, 29 RPM 3. 400 Nm MAX. TORQUE 4. 2-5/8" STEM ACCEPTANCE 5. SIDE HANDWHEEL 22.5:1 RATIO 6. ON-BOARD DATA LOGGER INCLUDED AS STANDARD 7. NON-INTRUSIVE INFRARED SETTING TOOL, ACTUATOR DISPLAY 8. MOUNTING FLANGE FA16
29	347V, 3 WAY SWITCH, 1 CIRCUIT	CROUSE HINDS	DSDSR30121-SA EDSC271-SA	SWITCH WITH FOLLOWING FEATURES: 1. BODY AND COVER: COPPER FREE ALUMINUM 2. 30A, 600V CONTACTS 3. SINGLE POLE, DOUBLE-THROW WITHOUT OFF POSITION
30	347V, THREE POLE SWITCH	CROUSE HINDS	DSDSR30320-SA EDSC271-SA	SWITCH WITH FOLLOWING FEATURES: 1. BODY AND COVER: COPPER FREE ALUMINUM 2. 30A, 600V CONTACTS 3. THREE POLE ON/OFF SELECTOR SWITCH 4. LOCKABLE
31	SUBMERSIBLE LEVEL SWITCH	FLYGT	ENM-10	SWITCH WITH FOLLOWING FEATURES: 1. MATERIAL: POLYPROPYLENE 2. RATING: 10A, 120 VAC
32	CONVEYOR SPEED SWITCH	K-TEK	A22	SWITCH WITH FOLLOWING FEATURES: 1. EXPLOSION PROOF HOUSING 2. VOLTAGE: 120 VAC 3. NON-LATCHING RELAY 4. EPOXY COATED ENCLOSURE 5. 20 RPM SET POINT

01

NO.	REVISIONS	DATE	DESIGN	CHECK
01	ADDED SPEED SWITCH	2012/03/22	TMC	CJR
00	ISSUED FOR TENDER, BID OPP: 7-2012	2012/02/08	TMC	CJR

DESIGNED BY:	T. CHURCH
CHECKED BY:	C. REIMER
DRAWN BY:	S. FUNK
APPROVED BY:	C. REIMER
SCALE:	NTS
RELEASED FOR CONSTRUCTION BY:	N. HARRINGTON
DATE:	2011/07/06
DATE:	2012/02/15
CONSULTANT NO.:	112577-0113-47DD-0001

ENGINEER'S SEAL
ORIGINAL DRAWING SEALED BY:
T. M. CHURCH
SNC-Lavalin
MEMBER # 32682
2012/03/02
REV. 00

SOUTH END WATER POLLUTION CONTROL CENTRE	
ELECTRICAL CLASSIFICATION UPGRADES	
SCHEDULES	
DEVICE & LUMINAIRE	
CITY DRAWING NUMBER	1-0102A-E0010
SHEET	001
REV.	01
SIZE	A1