

57MP EXISTING PANEL WITH EXISTING CIRCUITS SHOWN FOR REFERENCE ONLY											
ROOM MOUNTING SURFACE FED FROM UTILITY NOTE			VOLTS 240/120V 3P 4W BUS AMPS 400 NEUTRAL 100%			A/C 22,000 MAIN BKR MLO LUGS STANDARD					
CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA			CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA		
			A	B	C				A	B	C
1	100/3	EXISTING - SEC SLUDGE TRANSFER PUMPS (1 OP, 1 SP)	2	2		2	70/3	EXISTING - DOSING PUMPS CONT. PANEL (1 OP, 1 SP)	3	3	
3						4					
5					2	6					3
7	30/3	EXISTING - CHLORINE PUMP (UNKNOWN LOAD)	0	0		8	150/3	PANEL 57DP (FED W/150A)	10	10	
9						10					
11					0	12					10
13	30/3	SPARE				14	30/3	SPARE	0	0	
15			0	0		16					
17					0	18					0
19	100/3	PANEL 57DP1	4	0		20	60/3	EXISTING - 15KVA XFMR (INCIN. BLDG)	1	1	
21						22					
23					5	24					1
25	100/3	EXISTING - SLUDGE PUMPS (UNKNOWN LOAD)	0	0		26	20/3	EXISTING - STEAM CLEANER FEEDER - 1 PHASE ONLY	0	0	
27						28					
29					0	30					0
TOTAL CONNECTED KVA BY PHASE									20	20	20
			CONN KVA	CALC KVA					CONN KVA	CALC KVA	
LIGHTING			4	4	(125%)	CONTINUOUS			3	4	(125%)
LARGEST MOTOR			9	10	(125%)	HEATING			10	10	(100%)
OTHER MOTORS			30	30	(100%)	COOLING			0	0	(N/A)
RECEPTACLES			0.4	0.4	(50%>10)	NONCONTINUOUS			0	0	(100%)
KITCHEN EQUIP			0	0	(N/A)	DIVERSE			0	0	(N/A)
						METERED DEMAND			0	0	(125%)
						TOTAL KVA			60	70	
						BALANCED 3-PHASE AMPS			200		

PANEL SUPPLIED WITH STANDBY GENERATOR POWER

BEFORE STARTING WORK AND ORDERING MATERIALS, REMOVE PANEL COVERS AND VERIFY ALL SPARES AND EXISTING BREAKERS AND CIRCUITS TO BE REUSED.

57DP EXISTING PANEL WITH EXISTING AND NEW CIRCUITS											
ROOM MOUNTING SURFACE FED FROM 57MP NOTE			VOLTS 240/120V 3P 4W BUS AMPS 200 NEUTRAL 100%			A/C 10,000 MAIN BKR 200 LUGS STANDARD ISO GND BUS					
CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA			CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA		
			A	B	C				A	B	C
1	50/3	EXISTING	0	0		2	50/3	EXCELSIOR BLOWER SYSTEM MODEL 3MR DSL "EXCEL CUBE" OR APPROVED EQUAL	3	3	
3						4					
5					0	6					3
7	70/3	SPARE	0	0		8	50/3	TRICKLING FILTER MOTOR	0.3	0.3	
9						10					
11					0	12					0.3
13	40/3	SPARE	0	0		14	40/3	EXISTING - HEAT EXCHANGER CONTROL PANEL	3	3	
15						16					
17					0	18					3
19	20/3	EXISTING - CONVEYOR 1	0.3	0.3		20	30/3	EXISTING - SLUDGE PUMP 2 (1 SPARE)	0	0	
21						22					
23					0.3	24					0
25	30/3	EXISTING - SLUDGE PUMP 1 (1OPER)	3	3		26	30/3	EXISTING - COMMUNICATOR (MUFFIN MONSTER)	1	1	
27					0.3	28					1
29						30					
31	20/3	EXISTING - CONVEYOR 2	0.3	0.3		32	20/3	EXISTING - MAKE UP AIR UNIT MUA-1 (FORMER CIRCULATION PUMP FEEDER)	0.4	0.4	
33						34					
35					0.3	36					0.4
37	20/1	BLANK	0	0		38	20/1	BLANK	0	0	
39	20/1	SPARE				40	20/1	SPARE	0	0	
41	20/1	BLANK			0	42	20/1	BLANK			0
TOTAL CONNECTED KVA BY PHASE									10	10	10
			CONN KVA	CALC KVA					CONN KVA	CALC KVA	
LIGHTING			0	0	(125%)	CONTINUOUS			0	0	(125%)
LARGEST MOTOR			9	10	(125%)	HEATING			9	9	(100%)
OTHER MOTORS			20	20	(100%)	COOLING			0	0	(N/A)
RECEPTACLES			0	0	(50%>10)	NONCONTINUOUS			0	0	(100%)
KITCHEN EQUIP			0	0	(N/A)	DIVERSE			0	0	(N/A)
						METERED DEMAND			0	0	(125%)
						TOTAL KVA			40	40	
						BALANCED 3-PHASE AMPS			90		

PANEL SUPPLIED WITH STANDBY GENERATOR POWER

NEW CIRCUITS

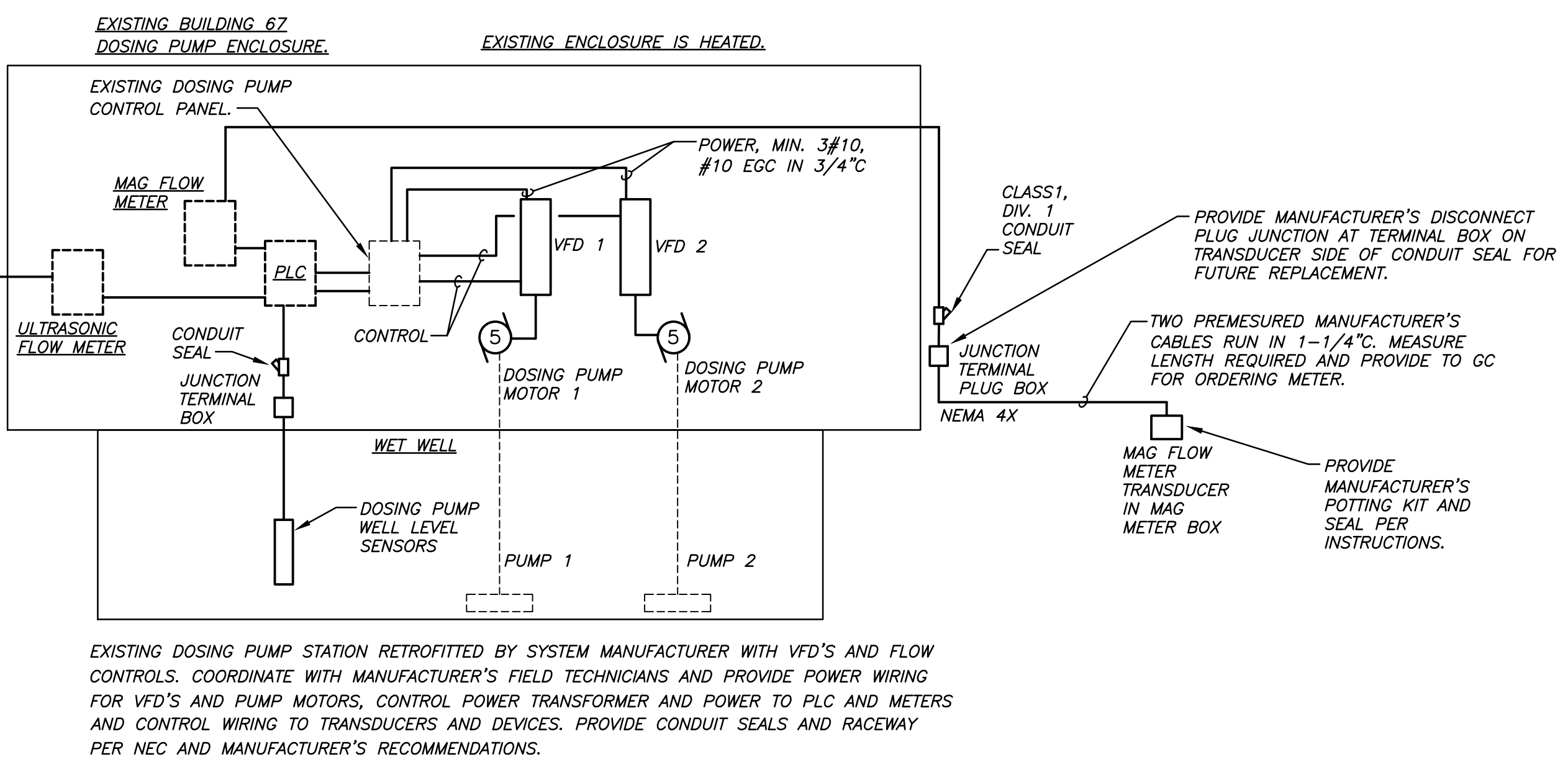
COORDINATE WITH GC AND DOSING PUMP STATION RETROFIT TECHNICIAN TO PROVIDE PROGRAMMING PORT AND LAPTOP FOR PLC WITH PROGRAMMER GUI SOFTWARE. ALSO INCLUDE SOFTWARE FOR NEW METERS AND SETUP ACCESS ON LAPTOP. TRAIN OWNER TO ACCESS SYSTEM WITH THREE 2-HOUR TRAINING SESSIONS SPACED ONE MONTH APART AND AS SCHEDULED WITH GC.

NOTE: MAIN 230V POWER SUPPLIED IS FROM STANDBY POWER. ENSURE NEW CONTROL POWER IS BY TRANSFORMERS FROM THE STANDBY POWER SUPPLY AND NOT FROM NEARBY 120V POWER THAT IS NOT SUPPLIED BY GENERATOR.

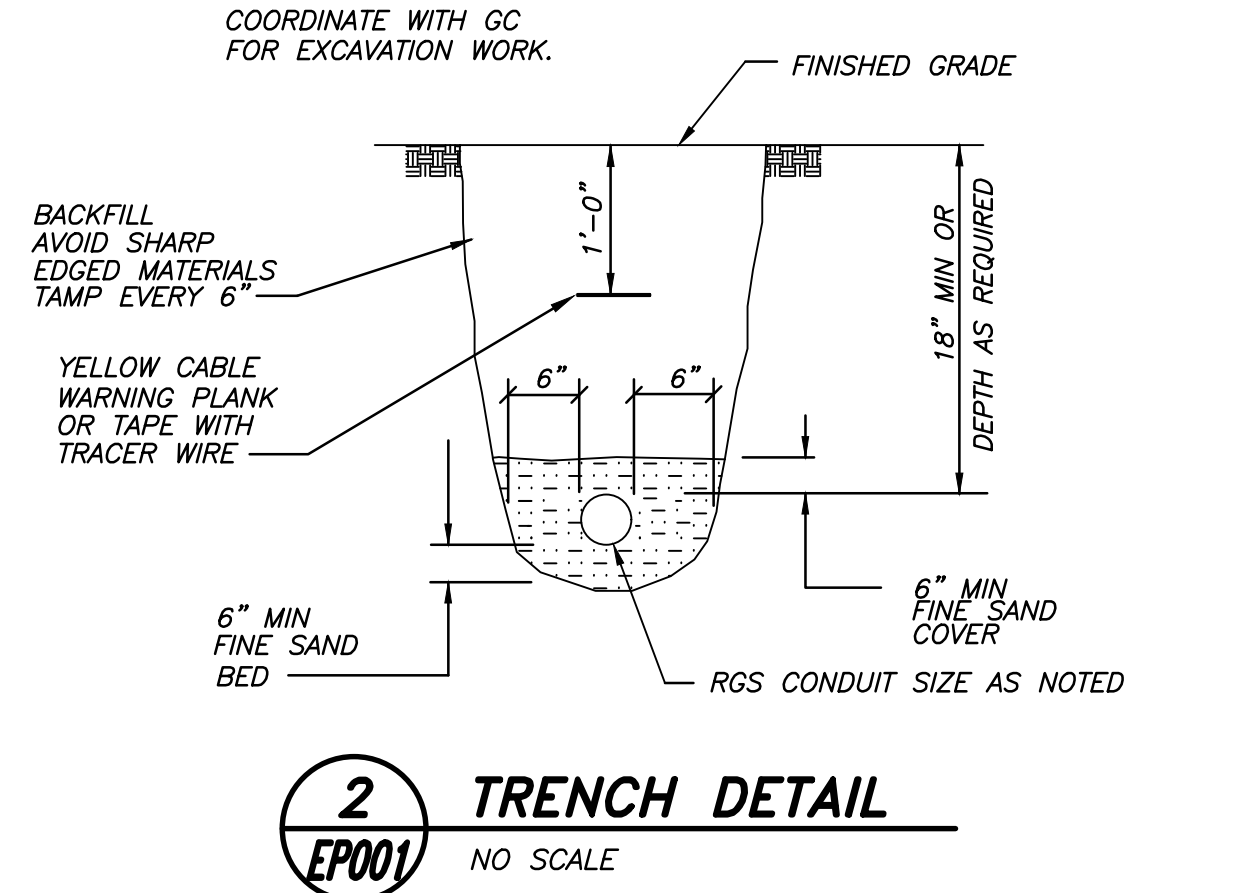
PROVIDE MANUFACTURER'S BULK TIENET CABLE PART 604304050 LENGTH AS REQUIRED RUN IN 1-1/4". PROVIDE FACTORY EXPANSION BOX PART NO. 604307023 ON TRANSDUCER SIDE OF CONDUIT SEAL FOR FUTURE REPLACEMENT. COORDINATE WITH GC BEFORE ORDERING METER.

ULTRASONIC FLOW METER TRANSDUCER IN PARSHALL FLUME BOX

ALL CONDUIT SHALL BE RMC.



1 BUILDING 67 DOSING PUMP ELECTRICAL SCHEMATIC NO SCALE



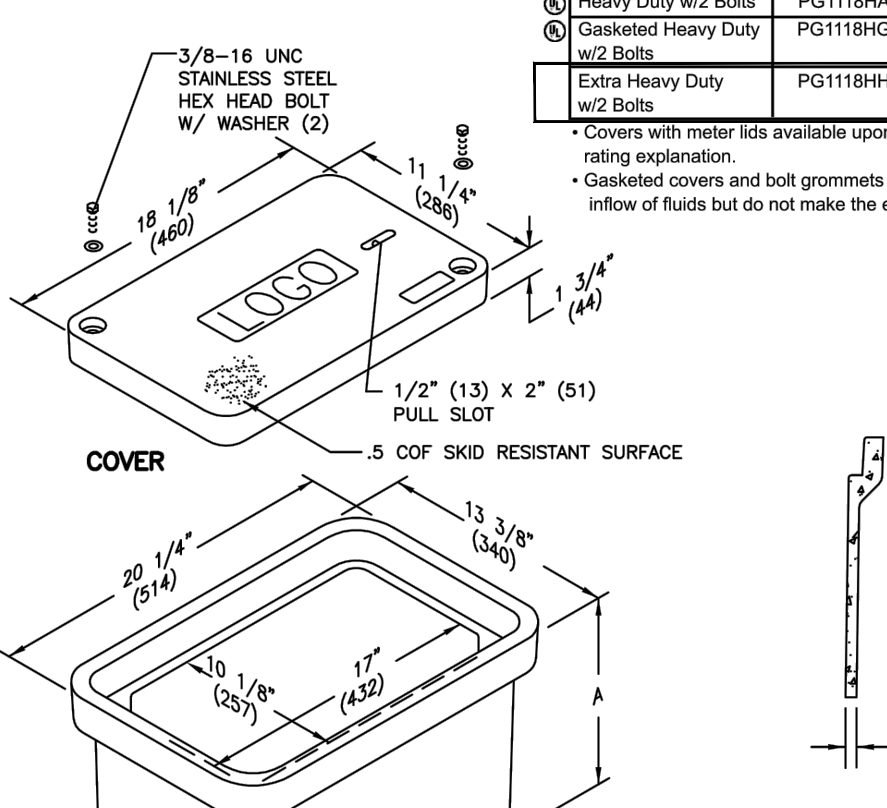
2 TRENCH DETAIL NO SCALE

LUMINAIRE SCHEDULE										
CALLOUT	SYMBOL	LAMP	DESCRIPTION	BALLAST	MOUNTING	MODEL	INPUT WATTS	VOLTS	NOTE 1	
F1		(1) 54W LED, 35K	EXPLOSION PROOFCLASS 1, DIV. 1 LED FIXTURE	LED	SURFACE	INDATECH HXPFL 50 U 35K	54	120V 1P 2W	COORDINATE MOUNTING WITH TRICKLING FILTER SHOP DRAWINGS	

SPECIFICATIONS/DATA

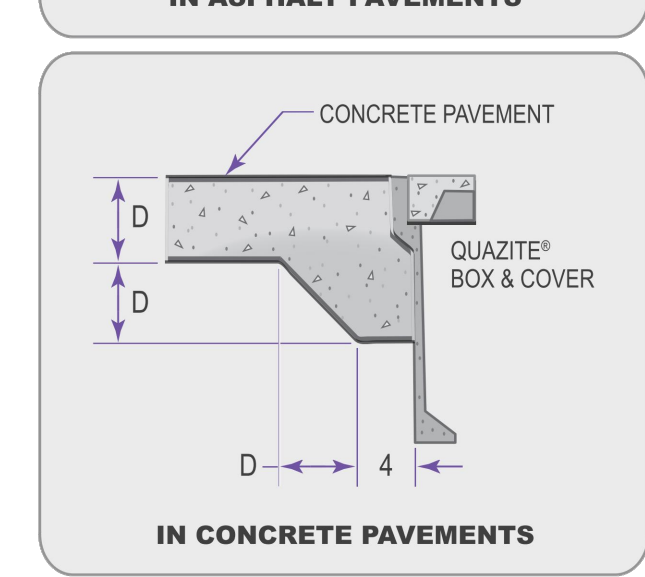
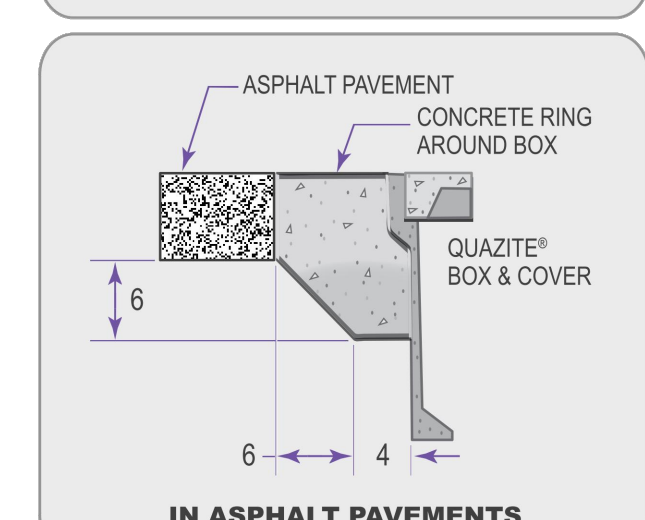
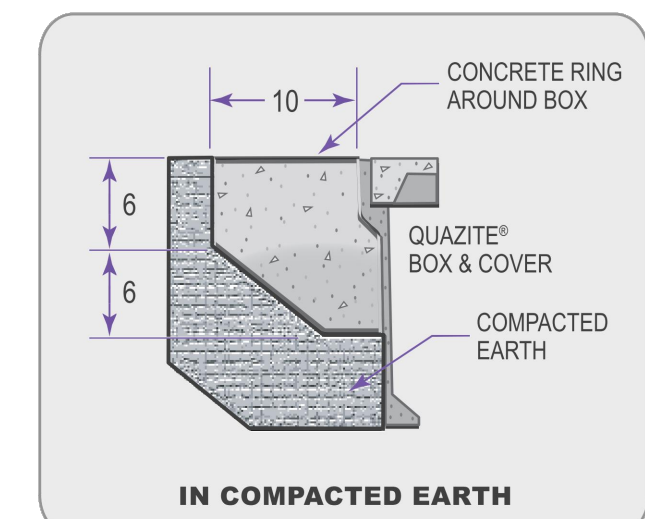
11" x 18" PG Style (Stackable) Assembly

Covers (Blank unless logo is specified)				
DESCRIPTION	PART NO.	WEIGHT #	DESIGN/TEST LOAD #	ANSI TIER*
W2 Bolts	PG1118CA00	27 (12.2 kg)	8,000 / 12,000	8
Gasketed w/2 Bolts	PG1118CG00	27 (12.2 kg)	8,000 / 12,000	8
No Bolts	PG1118HA00	27 (12.2 kg)	8,000 / 12,000	8
Heavy Duty w/2 Bolts	PG1118HA00	27 (12.2 kg)	15,000 / 22,500	15
Gasketed Heavy Duty w/2 Bolts	PG1118HG00	27 (12.2 kg)	15,000 / 22,500	15
Extra Heavy Duty w/2 Bolts	PG1118HH00	27 (12.2 kg)	22,500 / 33,750	22



PROVIDE 11x18 HANDHOLE 18" DEEP WITH BOLTED GASKETED COVER AND ENCLOSURE, TIER 22, BASIS OF DESIGN HUBBELL QUAZITE PG STYLE, OPEN BOTTOM FOOTED BOX, BEDDED AND BACKFILLED PER MANUFACTURER'S RECOMMENDATIONS WITH 10" CONCRETE RING.

Boxes (Stackable with self-aligning, replaceable EZ-lift)				
DESCRIPTION	PART NO.	WEIGHT #	DIMENSION A	DESIGN/TEST LOAD #
Open Bottom	PG1118BA12	40 (18 kg)	12" (305 mm)	22,500 / 33,750
Open Bottom w/ Gasket	PG1118BA18	63 (24 kg)	18" (457 mm)	22,500 / 33,750
Open Bottom w/ Gasket	PG1118BB12	40 (18 kg)	12" (305 mm)	22,500 / 33,750
Open Bottom w/ Gasket	PG1118BB18	63 (24 kg)	18" (457 mm)	22,500 / 33,750
Open Bottom w/ Gasket	PG1118BB24	86 (34 kg)	24" (609 mm)	22,500 / 33,750
Open Bottom w/ Gasket	PG1118BA12	43 (19.5 kg)	12 1/2" (318 mm)	22,500 / 33,750
Open Bottom w/ Gasket	PG1118BA18	66 (27 kg)	18 1/2" (470 mm)	22,500 / 33,750
Open Bottom w/ Gasket	PG1118BA24	89 (35 kg)	24 1/2" (618 mm)	22,500 / 33,750
Open Bottom w/ Gasket	PG1118BA12	41 (18 kg)	12 1/2" (318 mm)	22,500 / 33,750
Open Bottom w/ Gasket	PG1118BA18	65 (25 kg)	18 1/2" (470 mm)	22,500 / 33,750



3,000 PSI CONCRETE MINIMUM

3 HAND HOLE DETAIL NO SCALE

FINAL DESIGN (100%)

Revisions:

Date:

PROJECT PRIME/ENGINEER:

Sigma Psi Consulting

MECHANICAL/ELECTRICAL/PLUMBING ENGINEERS/PLLC

4 COLLAMER ROAD
MALTA, NY 12020
518-581-9428
http://www.sigmampi.com

CIVIL ENGINEER:

Barton & Loguidice

Engineers • Environmental Scientists
Planners • Landscape Architects

Drawing Title

ELECTRICAL PLANS AND SCHEMATICS

Approved: Project Director

Project Title

Renovate Sewage Treatment Plant Trickling Filter

VA Hudson Valley Healthcare System
at Castle Point, New York

Project Number

VA 620A4-14-108

Building Number

Location

**41 Castle Point Road
Wappinger Falls, NY 12590**

Date

APRIL 26, 2018

Checked

PJM

Drawn

NM

Drawing Number

EP001

Office of Construction and Facilities Management

Department of Veterans Affairs