ELECTRICAL PLAN SYMBOLS

IDENTIFICATION SYMBOLS

EQUIP # — EQUIPMENT IDENTIFICATION

EQUIPMENT/INSTRUMENT LOCATOR

LUMINAIRE IDENTIFICATION
a = DEVICE SWITCHED FROM
b = CIRCUIT DESIGNATION
c = MOUNTING HEIGHT IN FEET TO BOTTOM OF FIXTURE

XXXX — CONDUIT IDENTIFICATION
XXXX = CONDUIT NUMBER,
REFER TO CONDUIT SCHEDULE

1 — INDICATES KEYNOTE 1
(PERTAINS ONLY TO SHEET WHERE NOTE IS FOUND)

EQUIPMENT ENCLOSURE

GROUNDING

UNDERGROUND GROUND CABLE #4/0 SDBC
UNLESS OTHERWISE NOTED

GROUND ROD

GROUND ROD AND GROUND WELL

GROUND CABLE TEE OR CROSS CONNECTION

LUMINAIRES

2', 4', OR 8' FLUORESCENT STRIP

2' X 2' LAY-IN TROFFER
REFER TO LUMINAIRE SCHEDULE

2' X 4' LAY-IN TROFFER
REFER TO LUMINAIRE SCHEDULE

LUMINAIRE POLE MOUNTED

STROBE
a = COLOR
R = RED
G = GREEN
A = AMBER

LUMINAIRE, EMERGENCY BATTERY-POWERED

LUMINAIRE, EMERGENCY/EXIT BATTERY-POWERED

LUMINAIRE, EMERGENCY BATTERY-POWERED REMOTE

LUMINAIRE, SURFACE OR PENDANT MOUNTED

LUMINAIRE, WALL MOUNTED

LUMINAIRE, FLOOD/SPOT

LUMINAIRE, EXIT ONE OR TWO FACES AS INDICATED.
ARROW POINTS IN DIRECTION OF EGRESS.

LUMINAIRE, WALL WASHER

SWITCHES/RECEPTACLES

SINGLE POLE SWITCH
a = DEVICE SWITCHED DESIGNATION
b = CIRCUIT DESIGNATION

IF c =

2 = DOUBLE POLE SWITCH
3 = THREE-WAY SWITCH
4 = FOUR-WAY SWITCH
K = KEY OPERATED SWITCH
F = SWITCH AND FUSESTAT HOLDER
P = SWITCH AND PILOT LIGHT
T = THERMOSTAT
D = DIMMER SWITCH
L = LOW VOLTAGE LIGHT SWITCH
M = MANUAL MOTOR STARTER

OCCUPANCY SENSOR
a = CIRCUIT DESIGNATION
b = DEVICE SWITCHED DESIGNATION

SWITCH AND SINGLE RECEPTACLE
a = CIRCUIT DESIGNATION
b = DEVICE TYPE DESIGNATION
S = SWITCH AND SINGLE RECEPTACLE

DUPLEX RECEPTACLE
a = CIRCUIT DESIGNATION
b = DEVICE TYPE DESIGNATION

QUADRUPLEX RECEPTACLE
a = CIRCUIT DESIGNATION
b = DEVICE TYPE DESIGNATION

IN FLOOR DUPLEX RECEPTACLE
a = CIRCUIT DESIGNATION
b = DEVICE TYPE DESIGNATION

IN FLOOR QUADRUPLEX RECEPTACLE
a = CIRCUIT DESIGNATION
b = DEVICE TYPE DESIGNATION

DUPLEX RECEPTACLE w/SPLIT WIRE
a = CIRCUIT DESIGNATION
b = DEVICE TYPE DESIGNATION

WELDING OR APPLIANCE RECEPTACLE
a = CIRCUIT DESIGNATION
b = DEVICE TYPE DESIGNATION

WELDING RECEPTACLE
a = CIRCUIT DESIGNATION
b = DISCONNECT TYPE

SPECIAL PURPOSE RECEPTACLE
a = CIRCUIT DESIGNATION
b = DEVICE TYPE DESIGNATION

CLOCK RECEPTACLE
a = MOUNTING HEIGHT

FAN RECEPTACLE
a = MOUNTING HEIGHT

TWIST LOCK RECEPTACLE
a = AMP RATING

TELEPHONE OUTLET
a = MOUNTING HEIGHT

DATA COMMUNICATIONS OUTLET
a = MOUNTING HEIGHT

DISCONNECT SWITCH
a = TYPE, REFER TO DISCONNECT SCHEDULE

PE — PHOTOCELL

SMOKE DETECTOR
a = TYPE
I = IONIZATION
P = PHOTOELECTRIC
d = DUCT DETECTOR

FACP — FIRE ALARM CONTROL PANEL

F — FIRE ALARM PULL STATION

FIRE ALARM HORN/STROBE COMBINATION

FIRE ALARM STROBE

FIRE SPRINKLER
F = FLOW SWITCH
T = TAMPER SWITCH

RACEWAY

EXPOSED CONDUIT

INDICATES BREAK IN CONDUIT RUN

EXPOSED CONDUIT HIDDEN BEHIND WALLS, FLOORS OR OTHER STRUCTURES

UNDERGROUND CONDUIT, DIRECT BURIED OR IN DUCTBANK

CONDUIT IN SLAB

CONDUIT VERTICAL CHANGE IN DIRECTION

J — JUNCTION BOX

CONDUIT SEAL

DUCTBANK
APPROXIMATE DIMENSIONS
SHOWN ON DUCTBANK SCHEDULE

CONDUIT SIZE AND CONDUCTORS

INDIVIDUAL CONDUCTORS

W"C-(3-X (Ø), 1-Y (N) & 1-Z (G))

W"C (WHERE INDICATED); W = CONDUIT TRADE SIZE

3-X (Ø):
3 = QUANTITY
X = SIZE OF CONDUCTORS
(Ø) = DESIGNATES PHASE CONDUCTORS

1-Y (N)(WHERE INDICATED):
1 = QUANTITY
Y = SIZE OF CONDUCTORS
(N) = DESIGNATES NEUTRAL CONDUCTORS

1-Z (G)(WHERE INDICATED):
1 = QUANTITY
Z = SIZE OF CONDUCTORS
(G) = DESIGNATES GROUND CONDUCTORS

U(3-X (Ø) & 1-X (G))
U = NUMBER OF PARALLEL RUNS

MULTI CONDUCTOR CABLES

K/2/C#16S
K (WHERE INDICATED) = NUMBER OF PAIRS
2/C#16S = TWO CONDUCTOR, 16 GAUGE, TWISTED SHIELDED PAIR

K/3/C#16S
K (WHERE INDICATED) = NUMBER OF TRIPLETS
3/C#16S = THREE CONDUCTOR, 16 GAUGE, TWISTED SHIELDED TRIPLETS

N/CX
N = NUMBER OF CONDUCTORS IN THE CABLE
X = SIZE OF CONDUCTORS

FIBER OPTIC CABLES

FO/N
N = NUMBER OF INDIVIDUAL FIBERS

ELECTRICAL ONE-LINE SYMBOLS

MEDIUM VOLTAGE

52 — CIRCUIT BREAKER, MEDIUM VOLTAGE
a = CIRCUIT BREAKER NUMBER
b = FRAME SIZE

ANSI RELAY DEVICE
a = ANSI DEVICE FUNCTION
b = QUANTITY

MEDIUM VOLTAGE DISCONNECT SWITCH NON-FUSED CUT OUT

MEDIUM VOLTAGE DISCONNECTING FUSE SINGLE FUSE CUT OUT

MEDIUM VOLTAGE DISCONNECTING FUSE DOUBLE FUSE CUT OUT

MEDIUM VOLTAGE SINGLE FUSE

MEDIUM VOLTAGE DOUBLE FUSE

MEDIUM VOLTAGE LIVE FRONT TERMINATOR

MEDIUM VOLTAGE ELBOW

MEDIUM VOLTAGE T

MEDIUM VOLTAGE CONTACTOR

MEDIUM VOLTAGE STARTER

MOV-ELBOW ARRESTER

LOW VOLTAGE

LOW VOLTAGE CIRCUIT BREAKER
a = TYPE
MCP = MOTOR CIRCUIT PROTECTOR
TM = THERMAL MAGNETIC
SS = SOLID STATE
b = FRAME SIZE (MANUFACTURER TO DETERMINE FRAME SIZE UNLESS INDICATED)
c = NUMBER OF POLES
d = TRIP SETTING (AT = AMP TRIP)
(AC = MCP CONTINUOUS RATING)
e = DESIGNATION
f = INTERRUPTING RATING

LOW VOLTAGE CIRCUIT BREAKER
AUXILIARY OPERATOR
* = S = SHUNT TRIP
= K = KIRK KEY INTERLOCK
= G = GROUND FAULT INTERRUPTER
= V = SOLENOID KEY RELEASE

DISCONNECT SWITCH
a = TYPE, REFER TO DISCONNECT SCHEDULE

FUSED DISCONNECT SWITCH
a = TYPE, REFER TO DISCONNECT SCHEDULE
b = FUSE RATING

FUSE

COMBINATION STARTER
WITH CONTROL POWER TRANSFORMER
a = CIRCUIT BREAKER DISCONNECT, TYPE AS NOTED
b = STARTER TYPE
c = NEMA STARTER SIZE
d = OVERLOAD HEATERS

VARIABLE FREQUENCY DRIVE
WITH FEATURES AS SHOWN
a = INPUT CONTACTOR
b = OUTPUT CONTACTOR
c = BYPASS STARTER
d = INPUT CIRCUIT BREAKER

LR — LINE REACTOR

LL — LOAD REACTOR

REDUCED VOLTAGE SOLID STATE STARTER
WITH FEATURES AS SHOWN
BC = BYPASS CONTACTOR

MISCELLANEOUS

HP — MOTOR
HP = HORSEPOWER RATING
FULL LOAD AMPS AS NOTED

PACKAGED EQUIPMENT
LOAD RATING AS INDICATED
a = RATED LOAD
b = UNIT(HP, KW, KVA) AS INDICATED

TRANSFORMER
a = DEVICE I.D.
b = KVA RATING
c = NUMBER OF PHASES
d = PRIMARY VOLTAGE
e = SECONDARY VOLTAGE
f,g = CONNECTION TYPE SYMBOL
h = IMPEDANCE

GROUNDED WYE CONNECTION

DELTA CONNECTION

G — ENGINE-GENERATOR RATINGS AS INDICATED ON THE DRAWINGS
a = KVA/KW
b = VOLTAGE/CONNECTION
c = PHASE
d = WIRE
e = PF

CURRENT TRANSFORMER WITH SHORTING TERMINAL BLOCK
a = QUANTITY
b = RATIO

POTENTIAL TRANSFORMER
a = QUANTITY
b = RATIO
c,d = CONNECTION TYPE SYMBOL

SSM — SOLID STATE MULTIFUNCTION METER

ATP — AMPERE TEST POINT

VTP — VOLTAGE TEST POINT

UTILITY METER

LIGHTNING ARRESTER

SPD — SURGE PROTECTIVE DEVICE

DRAWOUT CONNECTION

GROUND

CAPACITOR

BATTERY

K — KIRK KEY INTERLOCK

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — TIMOTHY A. VARLEY — No. 12679 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
LEGEND & SYMBOLS

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 — 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 00E01
SHEET NO. 274 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1100E01.dgn

Plot Date: 16-SEP-2013 5:57:03 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: vcastro

ABBREVIATIONS

A	AMP
ABS	ABSOLUTE
AC	ALTERNATING CURRENT
ACK	ACKNOWLEDGE
ACTR	ACTUATOR
AF	AMP FRAME
AFC	AUTOMATIC FREQUENCY CONTROL
AIC	AMP INTERRUPTING CAPACITY
AM	AMMETER
ANN	ANNUNCIATOR
ANT	ANTENNA
APU	AUXILIARY POWER UNIT
ARM	ARMORED CABLE
AS	AMMETER SWITCH
ASYM	ASYMMETRICAL
AT	AMP TRIP
ATO	AUTOMATIC THROW OVER
ATP	AMMETER TEST POINT
ATS	AUTOMATIC TRANSFER SWITCH
AUTO XFMR	AUTOMATIC TRANSFORMER
AUX	AUXILIARY
AWG	AMERICAN WIRE GAGE
B	BELL
BAT	BATTERY
BFG	BELOW FINISHED GRADE
BHP	BRAKE HORSEPOWER
BKR	BREAKER
BRF	BELOW RAISED FLOOR
C	CONDUIT / CONTINUOUS LOAD
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CCW	COUNTER CLOCKWISE
CKT	CIRCUIT
COAX	COAXIAL CABLE
COM	COMMON
COMM	COMMUNICATION
CPT	CONTROL POWER TRANSFORMER
CS	CONTROL SWITCH
CT	CURRENT TRANSFORMER
CV	CONTROL VALVE
CW	CLOCKWISE / COOL WHITE
DC	DIRECT CURRENT
DCS	DISTRIBUTED CONTROL SYSTEM
DCU - X	DISTRIBUTED CONTROL UNIT NO. X
DEMO	DEMOLITION
DISC	DISCONNECT SWITCH
DM	DEMAND METER
DPDT	DOUBLE POLE DOUBLE THROW
DPST	DOUBLE POLE SINGLE THROW
DS	DOOR SWITCH
E/G	EMERGENCY GENERATOR
EM	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
ENCL	ENCLOSURE
ENG	ENGINE
ENT	ELECTRICAL NON-METALLIC TUBING
EO	ELECTRICAL OPERATED
EP	EXPLOSION PROOF
ETM	ELAPSED TIME METER
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FDR	FEEDER
FLA	FULL LOAD AMPS
FLX	FLEXIBLE CONDUIT
FO	FIBER OPTIC
FRC	FIBERGLASS RIGID CONDUIT
FREQ	FREQUENCY
FU	FUSE
FU	SW FUSED SWITCH
FVNR	FULL VOLTAGE NON-REVERSING
FVR	FULL VOLTAGE REVERSING
FWD	FORWARD
G	GROUND / EQUIPMENT GROUND / GROUND FAULT
GEN	GENERATOR
GRC	GALVANIZED STEEL RIGID CONDUIT
GFCI	GROUND FAULT CIRCUIT INTERRUPTER (RECEPTACLE)
GFI	GROUND FAULT INTERRUPTER (BREAKER)
GFR	GROUND FAULT RELAY
H	HOT-LEG
HF	HIGH FREQUENCY
HP	HORSEPOWER
HPS	HIGH PRESSURE SODIUM
HR	HOUR
HSTAT	HUMIDISTAT
HV	HIGH VOLTAGE
HVAC	HEATING/VENTILATION/AIR CONDITIONING
HZ	HERTZ
I	INSTANTANEOUS LOAD
IC	INTERRUPTING CAPACITY
IJB	INSTRUMENT JUNCTION BOX
IMC	INTERMEDIATE METAL CONDUIT
INST	INSTANTANEOUS
INT	INTERLOCK
INTERCOM	INTERCOMMUNICATION

J	JUNCTION BOX
K	KEY INTERLOCK
KA	KILOAMP
KV	KILOVOLT
KVA	KILOVOLT AMPERE
KVAR	KILOVAR (REACTANCE)
KW	KILOWATT
KWD	KILOWATT DEMAND
KWH	KILOWATT HOUR
L	LONG-TIME
L-B	LINE-BUS
L-G	LINE-GROUND
LA	LIGHTNING ARRESTOR
LBL	LABEL
LC	LIGHTING CONTACT OR
LCP- X	LOCAL CONTROL PANEL NO. X
LL	LEAD-LAG LOAD REACTOR
LP	LIGHT POLE
LP - X	LIGHTING PANEL NO. X
LTG	LIGHTING
LV	LOW VOLTAGE
LVL	LEVEL
M-X	MOTOR CONTROLLER NO. X
MA	MILLIAMPERE
MCA	MOTOR CIRCUIT AMPS
MCC - X	MOTOR CONTROL CENTER NO. X
MCP	MOTOR CIRCUIT PROTECTOR
MH	MANHOLE / MOUNTING HEIGHT
MLO	MAIN LUGS ONLY
MO	MECHANICAL OPERATED
MOD	MOTOR OPERATED DAMPER
MOV	METAL OXIDE VARISTOR
MRP	MOTOR PROTECTION RELAY
MS-X	MOTOR STARTER NO. X
MSP	MOTOR STARTING PANEL
MTO	MANUAL THROW OVER
MTR-X	MOTOR NO. X
MTS	MANUAL TRANSFER SWITCH
MV	MEGAVOLT
MVA	MEGAVOLT-AMPERES
MVS	MEDIUM VOLTAGE SWITCH
MW	MEGAWATT
N	NEUTRAL
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NFC	NONMETALLIC FLEXIBLE CONDUIT
NL	NIGHT LIGHT
NO	NORMALLY OPEN
NP	NAMEPLATE
O	OPEN OR OPENED
OH	OVERHEAD
OL	OVERLOAD RELAY
P	POLE
PA	PUBLIC ADDRESS
PB	PUSHBUTTON / PULL BOX
PCS	PVC COATED GALVANIZED STEEL CONDUIT
PCM	PROCESS CONTROL MODULE
PE	PHOTOCELL
PF	POWER FACTOR
PFCC	POWER FACTOR CORRECTION CAPACITOR
PFR	PHASE FAILURE RELAY
PH	PHASE
PNL	PANEL
PPX	POWER PANEL NO. X
PRI	PRIMARY
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE RIGID PLASTIC CONDUIT
PWR	POWER
RAC	RIGID ALUMINUM CONDUIT
RECPT	RECEPTACLE
REV	REVERSE
RF	RADIO FREQUENCY
RMS	ROOT MEAN SQUARED
RVAT	REDUCED VOLTAGE AUTO TRANSFORMER
RVNR	REDUCED VOLTAGE NON-REVERSING
RVSS	REDUCED VOLTAGE SOLID STATE
S	SHIELD / SHORT-TIME
SA	SURGE ARRESTER
SC	SHORT CIRCUIT
SDBC	SOFT DRAWN BARE COPPER
SFL	SUB FEED LUGS
SLT	SEALTIGHT LIQUIDTIGHT FLEXIBLE CONDUIT
SM	SURFACE MOUNTED
SP	SINGLE POLE
SPD	SURGE PROTECTIVE DEVICE
SPDT	SINGLE POLE DOUBLE THROW
SPST	SINGLE POLE SINGLE THROW
SPKR	SPEAKER
SS	SOLID STATE
STB	SHORTING TERMINAL BLOCK
SW	SWITCH
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
SYM	SYMMETRICAL

TACH	TACHOMETER
TB - X	TERMINAL BLOCK - UNIT X
TC	THERMOCOUPLE / TIME CLOCK / TRAY CABLE
TD	TEMPERATURE DETECTOR RELAY
TE	TOTALLY ENCLOSED
TEFC	TOTALLY ENCLOSED FAN COOLED
TENV	TOTALLY ENCLOSED NON-VENTILATED
TERM	TERMINAL
TJB	TERMINAL JUNCTION BOX
TM	THERMAL MAGNETIC
TP	TWISTED PAIR
TS	TEMPERATURE SWITCH
TS1W	TWO SPEED CONSEQUENT POLE, ONE WINDING
TS2W	TWO SPEED SEPARATE WINDING
TSTAT	THERMOSTAT
UHF	ULTRA HIGH FREQUENCY
UNG	UNGROUNDED
UPS	UNINTERRUPTABLE POWER SUPPLY
UVR	UNDER VOLTAGE RELAY
V	VOLT
VA	VOLT AMPERE
VAR	VARMETER
VCP	VENDOR CONTROL PANEL
VFD	VARIABLE FREQUENCY DRIVE
VHF	VERY HIGH FREQUENCY
VM	VOLTMETER
VP	VAPORPROOF
VR	VOLTAGE REGULATOR
VS	VOTAGE SWITCH
VT	VOLTAGE TRANSFORMER
VTP	VOLTAGE TEST POINT
W	WATT / WEST
WT	WATER TIGHT
WP	WEATHER PROOF
XFMR	TRANSFORMER

NOTES:

1. REFER TO SPECIFICATIONS OTHER DRAWINGS FOR ADDITIONAL ABBREVIATIONS.

POWER DEVICE FUNCTION NUMBERS

1	MASTER ELEMENT
2	TIME-DELAY STARTING OR CLOSING RELAY
3	CHECKING OR INTERLOCKING RELAY
4	MASTER CONTACTOR
5	STOPPING DEVICE
6	STARTING CIRCUIT BREAKER
7	ANODE CIRCUIT BREAKER
8	CONTROL POWER DISCONNECTING DEVICE
9	REVERSING DEVICE
10	UNIT SEQUENCE SWITCH
11	MULTIFUNCTION DEVICE
12	OVER-SPEED DEVICE
13	SYNCHRONOUS-SPEED DEVICE
14	UNDER-SPEED DEVICE
15	SPEED OR FREQUENCY MATCHING DEVICE
16	DATA COMMUNICATIONS DEVICE
17	SHUNTING OR DISCHARGE SWITCH
18	ACCELERATING OR DECELERATING DEVICE
19	STARTING-TO-RUNNING TRANSITION CONTACTOR
20	ELECTRICALLY OPERATED VALVE
21	DISTANCE RELAY
22	EQUALIZER CIRCUIT BREAKER
23	TEMPERATURE CONTROL DEVICE
24	VOLTS PER HERTZ RELAY
25	SYNCHRONIZING OR SYNCHRONISM-CHECK DEVICE
26	APPARATUS THERMAL DEVICE
27	UNDERVOLTAGE RELAY
27N	GROUND FAULT UNDERVOLTAGE RELAY
28	FLAME DETECTOR
29	ISOLATING CONTACTOR
30	ANNUNCIATOR RELAY
31	SEPARATE EXCITATION DEVICE
32	DIRECTIONAL POWER RELAY
33	POSITION SWITCH
34	MASTER SEQUENCE DEVICE
35	BRUSH-OPERATING OR SLIP-RING SHORT-CIRCUITING DEVICE
36	POLARITY DEVICE
37	UNDERCURRENT OR UNDERPOWER RELAY
38	BEARING PROTECTIVE DEVICE
39	MECHANICAL CONDITION MONITOR
40	FIELD RELAY
41	FIELD CIRCUIT BREAKER
42	RUNNING CIRCUIT BREAKER
43	MANUAL TRANSFER OR SELECTOR DEVICE
44	UNIT SEQUENCE STARTING RELAY
45	ABNORMAL ATMOSPHERIC CONDITION MONITOR
46	REVERSE-PHASE OR BALANCE CURRENT RELAY
47	PHASE-BALANCE OR PHASE-SEQUENCE VOLTAGE RELAY
48	INCOMPLETE SEQUENCE RELAY
49	MACHINE OR TRANSFORMER THERMAL RELAY
50	INSTANTANEOUS OVERCURRENT RELAY
51	AC TIME OVERCURRENT RELAY
52	AC CIRCUIT BREAKER
53	FIELD EXCITATION RELAY
54	TURNING GEAR ENGAGING DEVICE
55	POWER FACTOR RELAY
56	FIELD APPLICATION RELAY
57	SHORT-CIRCUITING OR GROUNDING DEVICE
58	RECTIFICATION FAILURE RELAY
59	OVERVOLTAGE RELAY
60	VOLTAGE OR CURRENT BALANCE RELAY
61	DENSITY SWITCH OR SENSOR
62	TIME-DELAY STOPPING OR OPENING RELAY
63	PRESSURE SWITCH
64	GROUND DETECTOR RELAY
65	GOVERNOR
66	NOTCHING OR JOGGING DEVICE
67	AC DIRECTIONAL OVERCURRENT RELAY
68	BLOCKING OR OUT OF STEP RELAY
69	PERMISSIVE CONTROL DEVICE
70	RHEOSTAT
71	LIQUID LEVEL SWITCH
72	DC CIRCUIT BREAKER
73	LOAD-RESISTOR CONTACTOR
74	ALARM RELAY
75	POSITION CHANGING MECHANISM
76	DC OVERCURRENT RELAY
77	TELEMETERING DEVICE
78	PHASE-ANGLE MEASURING RELAY
79	AC RECLOSING RELAY
80	FLOW SWITCH
81	FREQUENCY RELAY
82	DC LOAD MEASURING RECLOSING RELAY
83	AUTOMATIC SELECTIVE CONTROL OR TRANSFER RELAY
84	OPERATING MECHANISM
85	PILOT COMMUNICATIONS, CARRIER OR PILOT-WIRE RELAY
86	LOCKOUT RELAY
87	DIFFERENTIAL PROTECTIVE RELAY
88	AUXILIARY MOTOR OR MOTOR GENERATOR
89	LINE SWITCH
90	REGULATING DEVICE
91	VOLTAGE DIRECTIONAL RELAY
92	VOLTAGE AND POWER DIRECTIONAL RELAY
93	FIELD-CHANGING CONTACTOR
94	TRIPPING OR TRIP-FREE RELAY

COMMONLY USED SUFFIX LETTERS APPLIED TO POWER DEVICE FUNCTION NUMBERS

A	ALARM ONLY
B	BUS PROTECTION
G	GROUND FAULT PROTECTION (RELAY CT IN A SYSTEM NEUTRAL CIRCUIT OR GENERATOR PROTECTION)
GS	GROUND FAULT PROTECTION (RELAY CT IN TOROIDAL OR GROUND SENSOR TYPE)
L	LINE PROTECTION
M	MOTOR PROTECTION
N	GROUND FAULT PROTECTION (RELAY COIL CONNECTED IN RESIDUAL CT CIRCUIT)
T	TRANSFORMER PROTECTION
V	VOLTAGE
P	PHASE PROTECTION

ABBREVIATIONS

AFD	- ARC FLASH DETECTOR
CLK	- CLOCK OR TIMING SOURCE
DDR	- DYNAMIC DISTURBANCE RECORDER
DFR	- DIGITAL FAULT RECORDER
ENV	- ENVIRONMENTAL DATA
HIZ	- HIGH IMPEDANCE FAULT DETECTOR
HMI	- HUMAN MACHINE INTERFACE
HST	- HISTORIAN
LGC	- SCHEME LOGIC
MET	- SUBSTATION METERING
PDC	- PHASOR DATA CONCENTRATOR
PMU	- PHASOR MEASUREMENT UNIT
PQM	- POWER QUALITY MONITOR
RIO	- REMOTE I/O DEVICE
RTU	- DATA CONCENTRATOR
SER	- SEQUENCE OF EVENTS RECORDER
TCM	- TRIP CIRCUIT MONITOR

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — JAMES R. VARELA — No. 12679 — ELECTRICAL — STATE OF CALIFORNIA
9/16/2013

carollo®

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
ABBREVIATIONS

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 00E02
SHEET NO. 275 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1100E02.dgn

Plot Date: 16-SEP-2013 5:57:21 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: vcastro

DISCONNECT SCHEDULE

9/16/2013

		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
VOLTAGE	120 VAC																XXX	XXX	XXX	XXX			
	240 VAC										XXX	XXX	XXX								XXX		
	600 VAC	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX				XXX	XXX	XXX							
	125 VDC																						
	250 VDC																						
	500 VDC																						
POLES	1P																XXX	XXX	XXX	XXX			
	2P										XXX	XXX	XXX								XXX		
	3P	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX				XXX	XXX	XXX							
	6P																						
	NEUT.																						
	GND.																						
AMPS	30A	XXX	XXX	XXX										XXX							XXX		
	60A				XXX	XXX	XXX								XXX								
	100A							XXX	XXX	XXX						XXX							
	200A																						
	400A																						
	600A																						
	1200A																						
NEMA CLASS	1										XXX						XXX						
	2																						
	3																						
	3R												XXX						XXX				
	4	XXX			XXX			XXX				XXX						XXX					
	4X								XXX														
	4X-SS		XXX			XXX														XXX	XXX		
	7												XXX	XXX	XXX	XXX							
	9																						
	12			XXX			XXX			XXX													
TYPE	NON-FUSED	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX				XXX	XXX	XXX	XXX	XXX	XXX				
	FUSED																						
	CIRCUIT BREAKER																						
	MAN. START w/ OL																						
	MAN. STARTER w/o OL										XXX	XXX	XXX				XXX	XXX	XXX				
RATINGS	HORSEPOWER										1	1	1				1	1	1				
	FUSE SIZE																						
	BREAKER AF/AT																						
ACCESSORIES																							

ELECTRICAL HANDHOLE AND MANHOLE SCHEDULE

9/13/2013

TAG NO	MINIMUM INTERIOR DIMENSIONS (INCHES)			CONSTRUCTION	TYPICAL DETAIL	SURFACE LOADING	COMMENTS
	WIDTH	LENGTH	DEPTH				
MH-E01	84	84	84	PRECAST	EM062	ROADWAY	
HH-E02	48	48	54	PRECAST	EM058	ROADWAY	
MH-E03	72	72	84	PRECAST	EM062	ROADWAY	
HH-E04	48	48	48	PRECAST	EM058	ROADWAY	
MH-E05	96	20	84	PRECAST	EM062	ROADWAY	
HH-E06	48	48	48	PRECAST	EM058	ROADWAY	
MH-E07	72	72	84	PRECAST	EM062	ROADWAY	
HH-E08	48	48	48	PRECAST	EM058	ROADWAY	
HH-E09	48	48	48	PRECAST	EM058	ROADWAY	
MH-E10	72	72	84	PRECAST	EM062	ROADWAY	
HH-E11	48	48	48	PRECAST	EM058	ROADWAY	
HH-E12	36	36	36	PRECAST	EM058	ROADWAY	
HH-E14	36	36	36	PRECAST	EM058	ROADWAY	
HH-E15	36	36	48	PRECAST	EM058	ROADWAY	
HH-E16	36	36	48	PRECAST	EM058	ROADWAY	
MH-F1	72	72	84	PRECAST	EM062	ROADWAY	
HH-F2	36	36	48	PRECAST	EM058	ROADWAY	
HH-F3	36	36	48	PRECAST	EM058	ROADWAY	
HH-F4	36	36	48	PRECAST	EM058	ROADWAY	
HH-S01	48	48	48	PRECAST	EM058	ROADWAY	
HH-S02	36	36	36	PRECAST	EM058	ROADWAY	
HH-S03	36	36	42	PRECAST	EM058	ROADWAY	
HH-S04	48	48	48	PRECAST	EM058	ROADWAY	
HH-S05	48	48	48	PRECAST	EM058	ROADWAY	
HH-S06	36	36	36	PRECAST	EM058	ROADWAY	
HH-S07	48	48	48	PRECAST	EM058	ROADWAY	
HH-S08	36	36	36	PRECAST	EM058	ROADWAY	
HH-S09	36	36	36	PRECAST	EM058	ROADWAY	
HH-S10	36	36	36	PRECAST	EM058	ROADWAY	
HH-S11	36	36	36	PRECAST	EM058	ROADWAY	
HH-S12	36	36	36	PRECAST	EM058	ROADWAY	
HH-S13	48	48	48	PRECAST	EM058	ROADWAY	
HH-S14	36	36	36	PRECAST	EM058	ROADWAY	
HH-S15	36	36	36	PRECAST	EM058	ROADWAY	
HH-S16	36	36	36	PRECAST	EM058	ROADWAY	
HH-U1	36	36	36	PRECAST	EM058	ROADWAY	CONFORMED WITH PG&E STANDARD
HH-U2	36	36	36	PRECAST	EM058	ROADWAY	CONFORMED WITH PG&E STANDARD
HH-U3	36	36	36	PRECAST	EM058	ROADWAY	CONFORMED WITH PG&E STANDARD
HH-U4	36	36	36	PRECAST	EM058	ROADWAY	CONFORMED WITH PG&E STANDARD

NOTES:

1. SEE SPECIFICATION 02581 FOR PRECAST ELECTRICAL HANDHOLES AND MANHOLES.

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — JAMES R. VARELA — No. 12679 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY

LOS OSOS WATER RECYCLING FACILITY PROJECT

ELECTRICAL

DISCONNECT & HANDHOLE/MANHOLE SCHEDULES

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 00E03
SHEET NO. 276 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1100E03.dgn

LAST SAVED BY: ejohnson PlotScale: 2:1 DesignScript: Carollo_Std_Pen_v0905.pen ColorTable: gshade.ctb Model: Layout1 Plot Date: 16-SEP-2013 5:57:38 PM User: AWulff

LUMINAIRE SCHEDULE

9/12/2013

ITEM	DESCRIPTION	MOUNTING METHOD	LAMP QUANTITY	LAMP TYPE	LUMINAIRE SPECIFICATIONS MANUFACTURER	CATALOG	VOLTS	LOAD (WATTS)	USE
A	WALL MOUNT LED FIXTURE, COPPER FREE ALUMINUM HOUSING WITH EPOXY POWER COAT FINISH, NEMA 4X RATED, FACTORY SEALED. EQUIVALENT TO 200-400 W HID LUMINAIRE.	WALL MOUNT	-	LED	CROUSE-HINDS CHAMP PRO PVM SERIES	PVM11L2TWDM1/UNV	120	134w	EXTERIOR FACILITIES
B	STANCHION MOUNT LED FIXTURE, COPPER FREE ALUMINUM HOUSING WITH EPOXY POWER COAT FINISH, NEMA 4X RATED, FACTORY SEALED 25° STANTION MOUNT, FOR 1 1/2" STANCHION . EQUIVALENT TO 200-400 W HID LUMINAIRE. ROUND PVC COATED STEEL POLE 10 ' HIGH, 2" DIAMETER, SCHEDULE 80, WITH BASE PLATE AND CONDUIT REDUCER FOR 1 1/2" CONNECTION TO LIGHT FIXTURE . TO COME WITH GFCI 120V RECEPTACLE WHEN NOTED ON DRAWINGS	10-FOOT STANCHION	-	LED	CROUSE-HINDS CHAMP PRO PVM SERIES	PVM11LJDM1/UNV	120	134w	EXTERIOR FACILITIES
C	STANCHION MOUNT LED FIXTURE, COPPER FREE ALUMINUM HOUSING WITH EPOXY POWER COAT FINISH, NEMA 4X RATED, FACTORY SEALED 90° STANTION MOUNT. FOR 1 1/2" STANCHION. EQUIVALENT TO 200-400W HID LUMINAIRE. ROUND PVC COATED STEEL POLE 10 ' HIGH, 2" DIAMETER, SCHEDULE 80, WITH BASE PLATE AND CONDUIT REDUCER FOR 1 1/2" CONNECTION TO LIGHT FIXTURE . TO COME WITH GFCI 120V RECEPTACLE WHEN NOTED ON DRAWINGS	10-FOOT STANCHION	-	LED	CROUSE-HINDS CHAMP PRO PVM SERIES	PVM11LPDM1/UNV	120	134w	EXTERIOR FACILITIES (ON WALKWAYS)
D	PENDANT MOUNTED HIGHBAY LED FIXTURE, COPPER FREE ALUMINUM HOUSING WITH EPOXY POWDER COAT FINISH, WET LOCATIONS, NEMA 4 RATED, UL-1598, UL-1598A, UL-8750, UL-844, SILICON RUBBER GASKET, STAINLESS STEEL RETENTIVE BOLTS ON LENS DOOR, THERMAL SHOCK & IMPACT RESISTANT FLAT TEMPERED GLASS LEDS, T4, -25°C TO 40°C ABIANT.	CEILING MOUNT OR SUSPENDED AS NEEDED	-	LED	APPLETON AREA MASTER SERIES	AMLED77YBU1	120	143w	EXTERIOR & INTERIOR FACILITIES (FLOODLIGHT UNDER SUNSHADE OR ROOF)
E	WALL MOUNTED HIGHBAY LED FIXTURE, COPPER FREE ALUMINUM HOUSING WITH EPOXY POWDER COAT FINISH, WET LOCATIONS, NEMA 4 RATED, UL-1598, UL-1598A, UL-8750, UL-844, SILICON RUBBER GASKET, STAINLESS STEEL RETENTIVE BOLTS ON LENS DOOR, THERMAL SHOCK & IMPACT RESISTANT FLAT TEMPERED GLASS LEDS, T4, -25°C TO 40°C ABIANT. WITH WALL MOUNT BRACKET.	WALL MOUNT	-	LED	APPLETON AREA MASTER SERIES	AMLED77YBU1, WITH WALL MOUNT BRACKET G-AM-8-WB	120	143w	EXTERIOR & INTERIOR FACILITIES (FLOODLIGHT)
E1	POLE MOUNTED HIGHBAY LED FIXTURE, COPPER FREE ALUMINUM HOUSING WITH EPOXY POWDER COAT FINISH, WET LOCATIONS, NEMA 4 RATED, UL-1598, UL-1598A, UL-8750, UL-844, SILICON RUBBER GASKET, STAINLESS STEEL RETENTIVE BOLTS ON LENS DOOR, THERMAL SHOCK & IMPACT RESISTANT FLAT TEMPERED GLASS LEDS, T4, -25°C TO 40°C ABIANT. WITH POLE MOUNT BRACKET.	POLE MOUNT	-	LED	APPLETON AREA MASTER SERIES	AMLED77YBU1, WITH POLE MOUNT BRACKET	120	143w	EXTERIOR FACILITIES (FLOODLIGHT)
G	QUANTUM SINGLE FACE EXIT SIGN, UL DAMP LOCATION LISTED, DUAL VOLTAGE 120/277 w/GREEN EXIT LETTERS, SELF-CONTAINED, SEALED MAINTENANCE FREE 1,2V BATTERIES.	WALL MOUNT	-	LED	LITHONIA	LQM S W 3 G 120/277 EL N	120	1w	INTERIOR FACILITIES (EXIT LIGHT)
H	LINEAR LED 2'X4', DAMP LOCATION, LOW PROFILE, ALUMINUM HOUSING (COPPER/FREE) IMPACT RESISTANT GLASS, NEMA 4X, OPERATING TEMPERATURE RANGE- 35°C TO 55°C.	CEILING MOUNT	-	LED	CROUSE-HINDS LL48 SERIES	LL48-60W-765/F-1M	120	56w	EXTERIOR FACILITIES (UNDER SUNSHADES)
I	POLE MOUNTED LED STREET LIGHT, 2 LIGHT ENGINES, 4000K, NEMA TYPE 3 DISTRIBUTION PATTERN, 277V, COLOR PER CLIENT SQUARE STRAIGHT STEEL POLE 20 FT WITH SIDE TENON, COLOR PER CLIENT	POLE	-	LED	AMERICAN ELECTRIC LIGHTING AUTOBAHN SERIES ATBO LITHONIA	ATB0-30BLEDE10-MVOLT-R3-4000K-UP SSS-20-4C with SMACST	277	143w	EXTERIOR ROADWAYS
J	STANCHION MOUNT LED FIXTURE, COPPER FREE ALUMINUM HOUSING WITH EPOXY POWDER COAT FINISH, CLASS 1, DIVISION 2, GROUPS ABCD, NEMA 4X, 25° STANCHON MOUNT, T5, FOR 1 1/2" STANCHION, EQUIVALENT TO 200 - 400 W HID LUMINAIRE. ROUND PVC COATED STEEL POLE 10 ' HIGH, 2" DIAMETER, SCHEDULE 80, WITH BASE PLATE AND CONDUIT REDUCER FOR 1 1/2" CONNECTION TO LIGHT FIXTURE . TO COME WITH GFCI 120V RECEPTACLE WHEN NOTED ON DRAWINGS	10 FOOT STANCHION	-	LED	CROUSE-HINDS VMV LED SERIES	VMV11LJDM1/UNV	120	134w	EXTERIOR FACILITIES
K	STANCHION MOUNT LED FIXTURE, COPPER FREE ALUMINUM HOUSING WITH EPOXY POWDER COAT FINISH, CLASS 1, DIVISION 2, GROUPS ABCD, NEMA 4X, 90° STANCHION MOUNT, T5, 1 1/2 " STANCHION, EQUIVALENT TO 200 - 400 W HID LUMINAIRE. ROUND PVC COATED STEEL POLE 10 ' HIGH, 2" DIAMETER, SCHEDULE 80, WITH BASE PLATE AND CONDUIT REDUCER FOR 1 1/2" CONNECTION TO LIGHT FIXTURE . TO COME WITH GFCI 120V RECEPTACLE WHEN NOTED ON DRAWINGS	10 FOOT STANCHION	-	LED	CROUSE-HINDS VMV LED SERIES	VMV11LPDM1/UNV	120	134w	EXTERIOR FACILITIES (ON WALKWAYS)
L	WALL MOUNT LED FIXTURE, COPPER FREE ALUMINUM HOUSING WITH EPOXY POWDER COAT FINISH, CLASS 1, DIVISION 2, GROUPS ABCD, NEMA 4X, 90° STANCHION MOUNT, T5, 1 1/2 " STANCHION, EQUIVALENT TO 200 - 400 W HID LUMINAIRE.	WALL MOUNT	-	LED	CROUSE-HINDS VMV LED SERIES	VMV11L2TWDM1/UNV	120	134w	EXTERIOR FACILITIES
M	CEILING MOUNTED (CHAIN HUNG) 2 X 4' FLUORESCENT LIGHT FIXTURE, NEMA 1, ELECTRONIC BALLAST, BATTERY BACK UP, WITH CAPABILITY FOR REMOTE OPERATION. (REMOTE SWITCH).	CEILING MOUNT OR SUSPENDED AS NEEDED	2	2-F32W/T8	COUSE-HIND HAZMAX INTREPID	SPP-4-2-1-7-0	120	80w	INTERIOR FACILITIES (BATTERY BACKUP LITES AT GENERATOR)
N	CEILING MOUNTED 4' FLUORESCENT LIGHT FIXTURE, NEMA 1, CONTINOUS INTERLOCKING WRAPAROUND ACRYLIC PRISMATIC DIFFUSER, THERMALLY PROTECTED, CLASS P UL LISTED BALLAST, CONFORMS TO UL 935 AND 1570, T8 LAMPS.	CEILING MOUNT	2	2-F32W/T8 FLUORESCENT	LITHONIA LIGHTING CB SERIES	CB-2-32-120-GEB10IS	120	80w	INTERIOR FACILITIES (DEWATER BLDG ELEC & CONTROL RMS)
O	CEILING MOUNTED (CHAIN HUNG) 4' NON-METALLIC, SEALED, AND GASKETED FLUORESCENT, SUITABLE FOR WET LOCATIONS, WITH ELECTRONIC HIGH OUTPUT BALLAST.	CEILING MOUNT OR SUSPENDED AS NEEDED	2	2-F32W/T8 FLUORESCENT	HOLOPHANE LTG EMS SERIES	EMS4-2-32-BMPCL-120V-GEB10ISH-LP830	120	80w	INTERIOR FACILITIES (ELECT BLDG ELEC & CONTROL RMS)

GENERAL NOTES:

1. LIGHTING FIXTURES SHALL MEET COUNTY DESIGN STANDARDS. THIS SHALL INCLUDE PROPER SHIELDING, PROPER ORIENTATION, AND APPLICABLE HEIGHT STANDARDS. ALL LIGHTING FIXTURES SHALL BE SHIELDED SO THAT NEITHER THE LAMP NOR THE RELATED REFLECTOR INTERIOR APPLICABLE HEIGHT STANDARDS. ALL LIGHTING FIXTURES SHALL BE SHIELDED SO THAT NEITHER THE LAMP NOR THE RELATED REFLECTOR INTERIOR SURFACE IS VISIBLE FROM ADJACENT PROPERTIES OR PUBLIC AREAS. LIGHT HOODS SHALL BE DARK-COLORED. LIGHTING ASSOCIATED WITH ALL PROJECT COMPONENTS SHALL BE THE MINIMUM NEEDED FOR PUMP STATION OPERATIONS WHICH REQUIRE LIGHTING FOR OPERATIONS AND/OR DURING EMERGENCY SITUATIONS. LIGHTING FIXTURE SUBMITTALS SHALL PROVIDE CONFIRMATION OF COMPLIANCE WITH THESE REQUIREMENTS.

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER JAMES R. VARLEY No. 12879 ELECTRICAL STATE OF CALIFORNIA 9/16/2013

carollo®

SAN LUIS OBISPO COUNTY

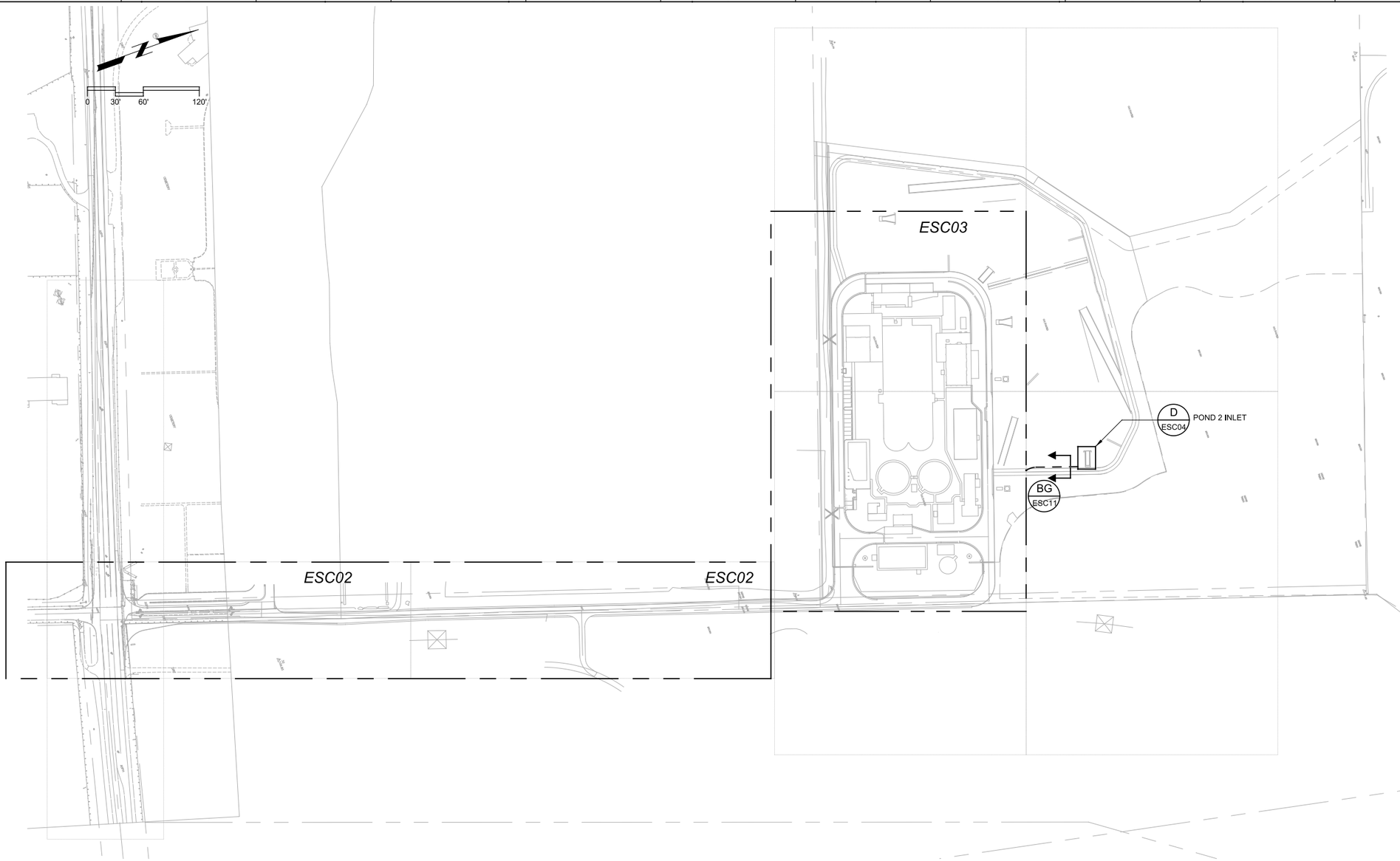
SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
LUMINAIRE SCHEDULE

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 00E04
SHEET NO. 277 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1100E04.dgn

Plot Date: 16-SEP-2013 5:57:57 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson



Plot Date: 16-SEP-2013 5:58:17 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: adiaz

REV	DATE	BY	DESCRIPTION

DESIGNED JGB
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY

LOS OSOS WATER RECYCLING FACILITY PROJECT

ELECTRICAL

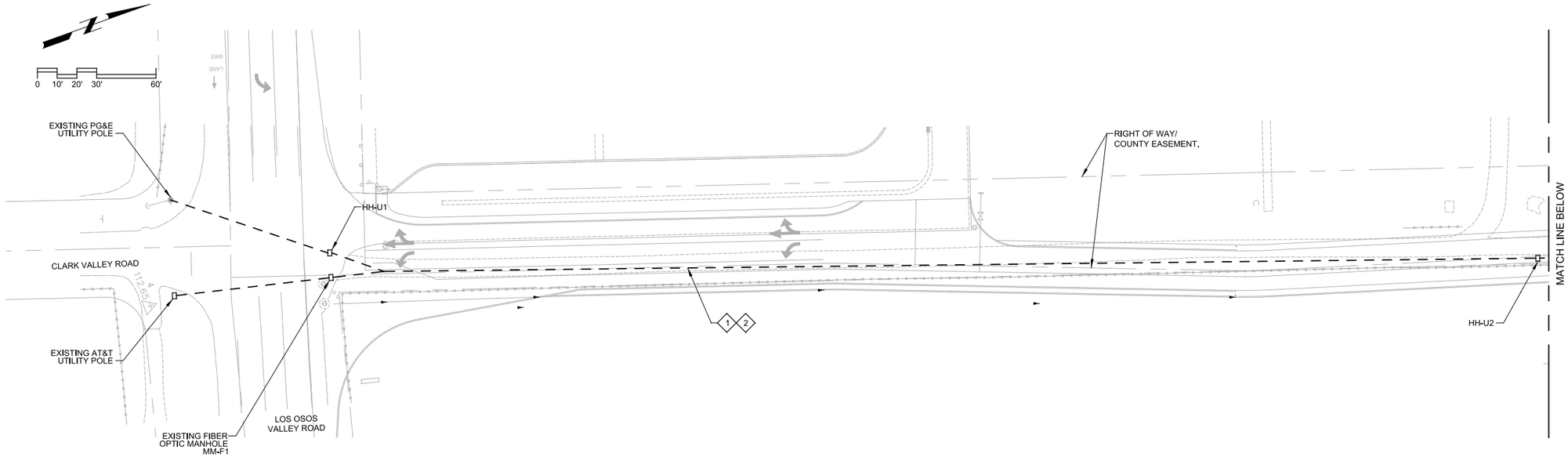
OVERALL SITE PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. ESC01
SHEET NO. 278 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1100ESC01.dgn

Plot Date: 16-SEP-2013 5:58:38 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

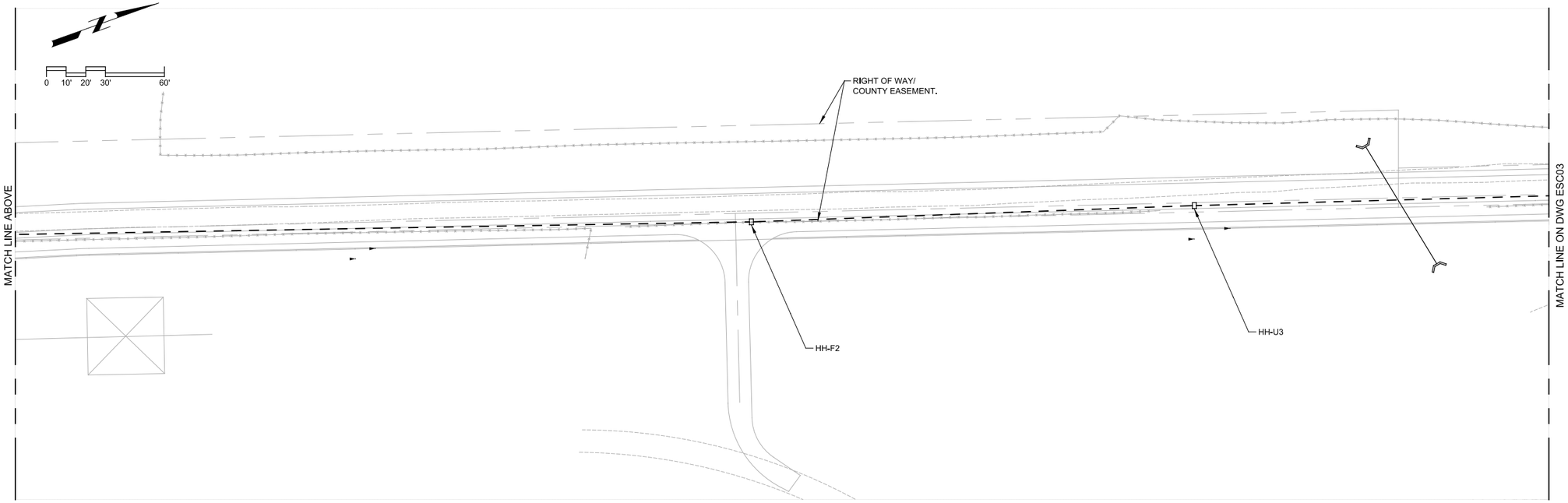


GENERAL NOTES:

1.

KEY NOTES:

1. REFER TO PG&E DOCUMENT S5453 EXHIBIT B FOR SPACING CRITERIA FROM OTHER UTILITIES.
2. WET UTILITIES NOT TO SHARE SAME TRENCH AS DRY UTILITIES.



REV	DATE	BY	DESCRIPTION

DESIGNED JGB
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER JAMES R. VARLEY No. 12679 ELECTRICAL STATE OF CALIFORNIA 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY

LOS OSOS WATER RECYCLING FACILITY PROJECT

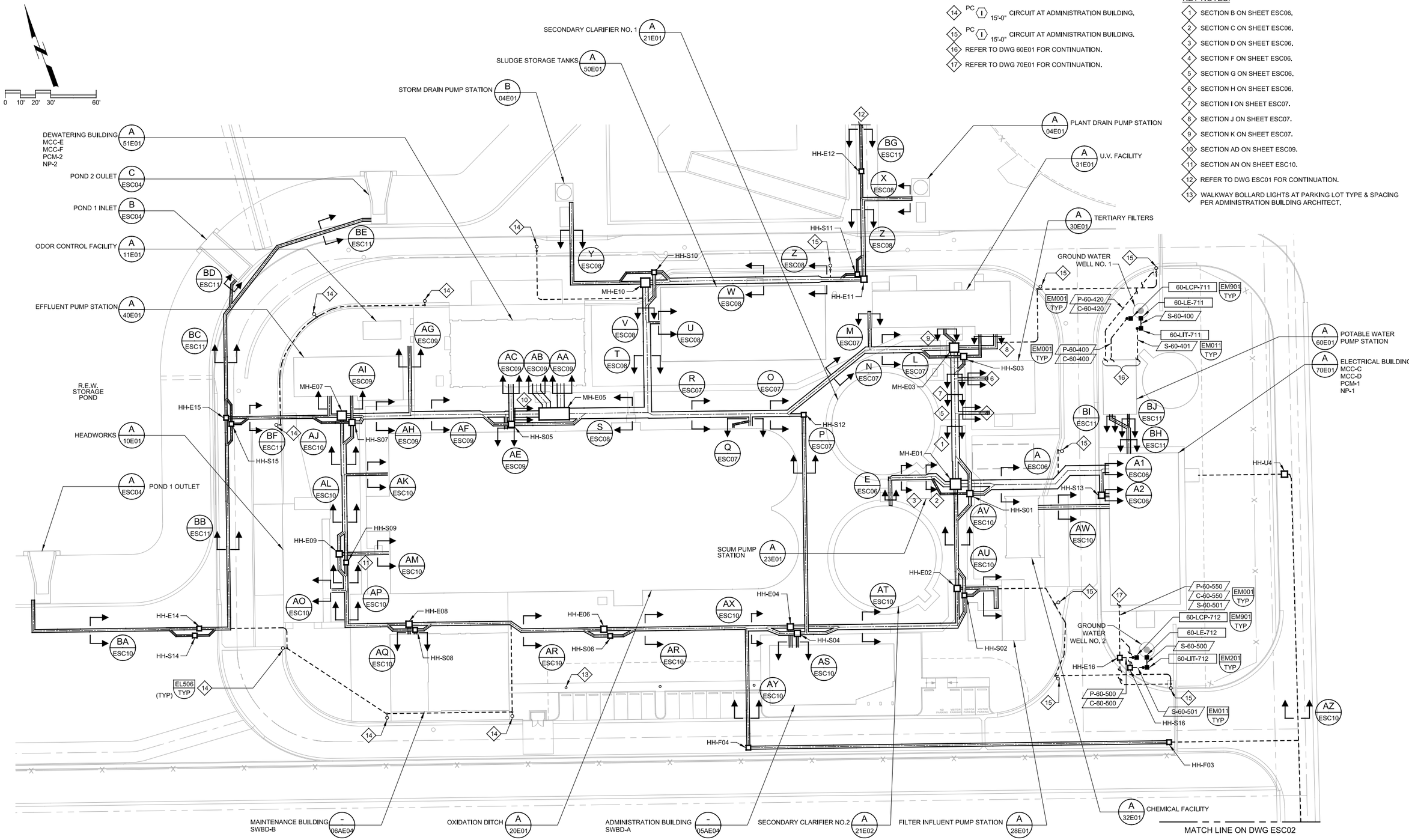
ELECTRICAL

SITE PLAN - I

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. ESC02
SHEET NO. 279 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1100ESC02.dgn



KEY NOTES:

1. SECTION B ON SHEET ESC06.
2. SECTION C ON SHEET ESC06.
3. SECTION D ON SHEET ESC06.
4. SECTION F ON SHEET ESC06.
5. SECTION G ON SHEET ESC06.
6. SECTION H ON SHEET ESC06.
7. SECTION I ON SHEET ESC07.
8. SECTION J ON SHEET ESC07.
9. SECTION K ON SHEET ESC07.
10. SECTION AD ON SHEET ESC09.
11. SECTION AN ON SHEET ESC10.
12. REFER TO DWG ESC01 FOR CONTINUATION.
13. WALKWAY BOLLARD LIGHTS AT PARKING LOT TYPE & SPACING PER ADMINISTRATION BUILDING ARCHITECT.
14. PC I 15'-0" CIRCUIT AT ADMINISTRATION BUILDING.
15. PC I 15'-0" CIRCUIT AT ADMINISTRATION BUILDING.
16. REFER TO DWG 60E01 FOR CONTINUATION.
17. REFER TO DWG 70E01 FOR CONTINUATION.

REV	DATE	BY	DESCRIPTION

DESIGNED JGB
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER IAN R. VARLEY No. 12879 ELECTRICAL STATE OF CALIFORNIA 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

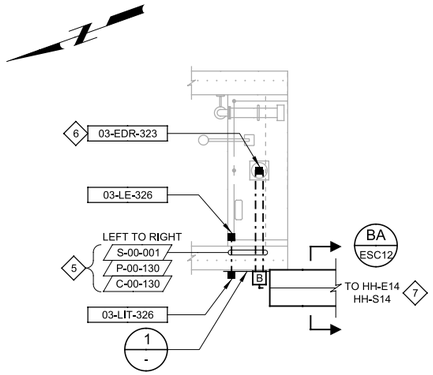
SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
SITE PLAN - II

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. ESC03
SHEET NO. 280 OF 549

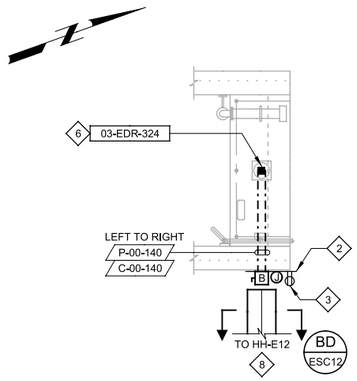
PROJECT NO. 8930A.11 FILE NAME: 8930A1100ESC03.dgn

Plot Date: 16-SEP-2013 5:58:58 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson



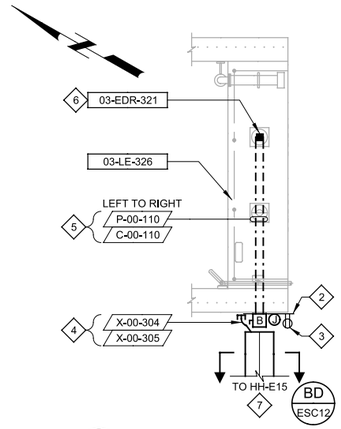
A POND 1 OUTLET- PLAN

A / ESC03 — SCALE: 1/4"=1'-0"
FILE: 8930A1100ESC102.2dm



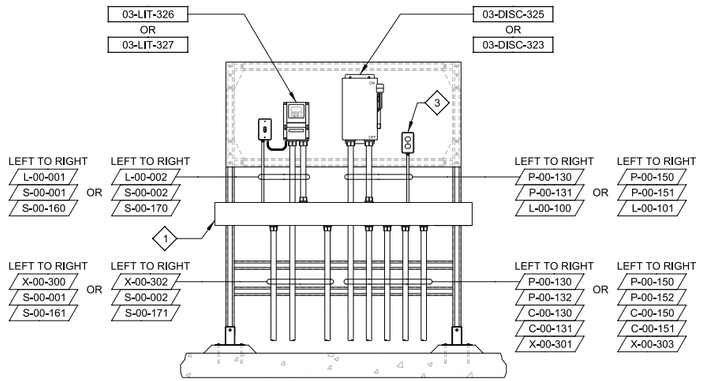
D POND 2 INLET- PLAN

D / ESC01 — SCALE: 1/4"=1'-0"
FILE: 8930A1100ESC102.2dm



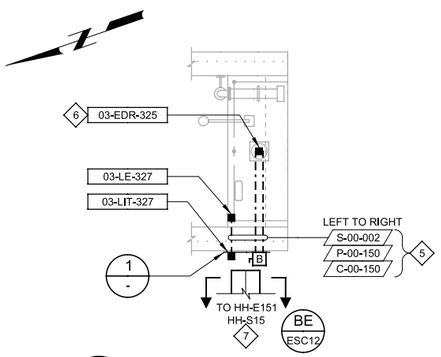
B POND 1 INLET- PLAN

B / ESC03 — SCALE: 1/4"=1'-0"
FILE: 8930A1100ESC102.2dm



1 DETAIL

1 / - — SCALE: NO SCALE
FILE: 8930A1100ET400.typ



C POND 2 OUTLET- PLAN

C / ESC03 — SCALE: 1/4"=1'-0"
FILE: 8930A1100ESC102.2dm

GENERAL NOTES:

1. REFER TO SPECIFICATION SECTION 16050 FOR HAZARDOUS AREA CLASSIFICATIONS.

KEY NOTES:

1. SIZE NEMA 4X WIREWAY PER NEC AND PROVIDE DIVIDER TO SEPARATE POWER/CONTROL WITH ANALOG SIGNAL. MOUNT ON COMMON SUPPORT.
2. MOUNT DISCONNECT SWITCH AND RECEPTACLE ON STAND PER DETAIL EM202/TYP.
3. DUPLEX RECEPTACLE WP, GFCI LPBF-1
4. STUB-UP 6" AND CAP PER DETAIL EM105/TYP.
5. ROUTE CONDUIT INSIDE THE SLAB PER EM115/TYP.
6. PER DETAIL EM402/TYP.
7. REFER TO DWG. ESC03 FOR CONTINUATION.
8. REFER TO DWG. ESC01 FOR CONTINUATION.

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — TARA R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
PARTIAL SITE PLANS

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

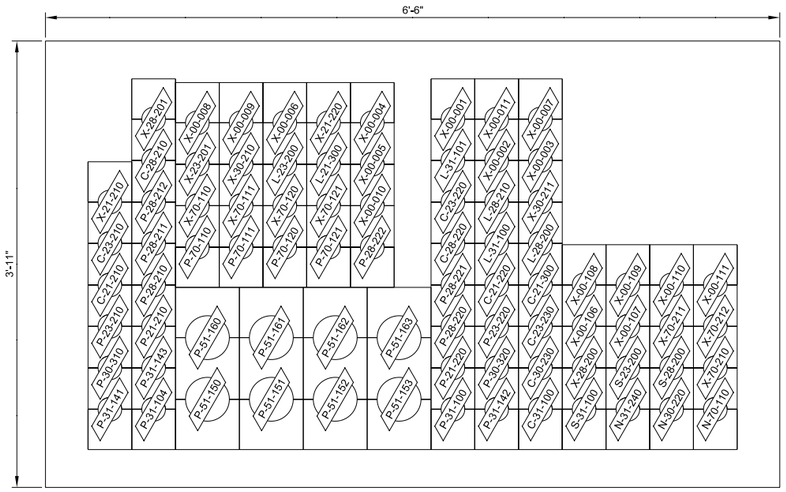
JOB NO. 8930A.11
DRAWING NO. ESC04
SHEET NO. 281 OF 549

Plot Date: 16-SEP-2013 5:59:19 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: vcastro

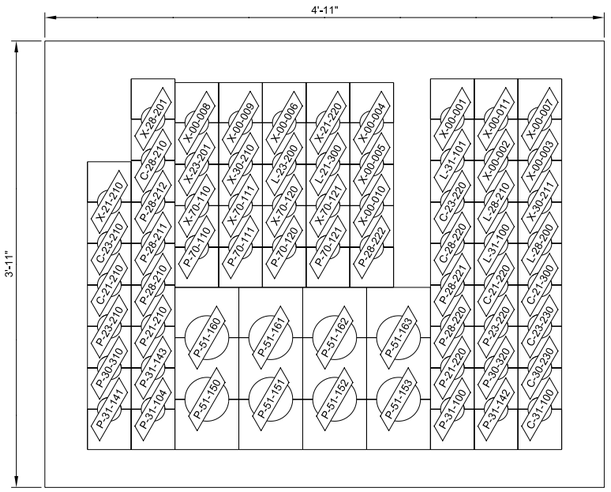
Plot Date: 16-SEP-2013 5:59:40 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

GENERAL NOTES:

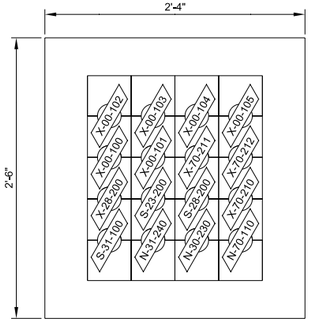
1. CONSTRUCT DUCTBANK IN ACCORDANCE WITH DETAIL EM001/TYP, UNLESS OTHERWISE NOTED.



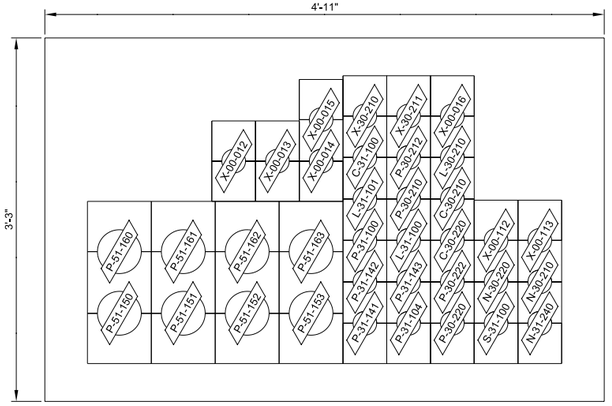
A DUCTBANK SECTION
ESC03



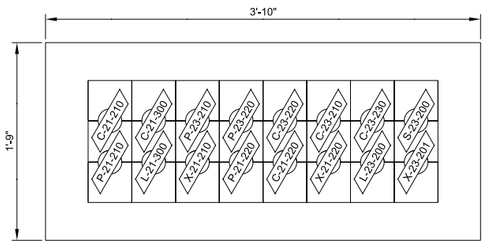
A1 DUCTBANK SECTION
ESC03, 70E02, 70E03



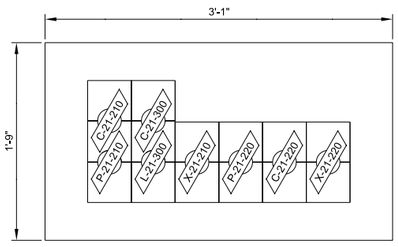
A2 DUCTBANK SECTION
ESC03, 70E02, 70E03



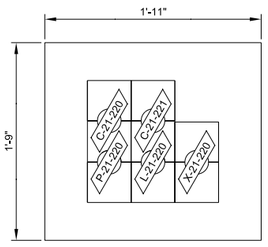
B DUCT BANK SECTION
ESC03



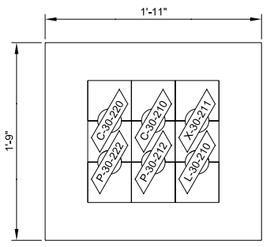
C DUCTBANK SECTION
ESC03, 23E01



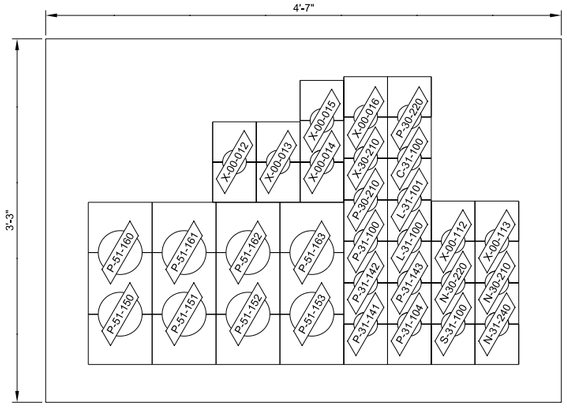
D DUCTBANK SECTION
ESC03, 23E01, 21E01



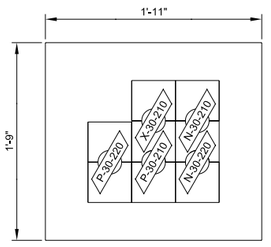
E DUCT BANK SECTION
ESC03, 21E01, 21E02



F DUCT BANK SECTION
ESC03, 30E02



G DUCTBANK SECTION
ESC03



H DUCTBANK SECTION
ESC03,30E02

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY

LOS OSOS WATER RECYCLING FACILITY PROJECT

ELECTRICAL

DUCTBANK SECTIONS- I

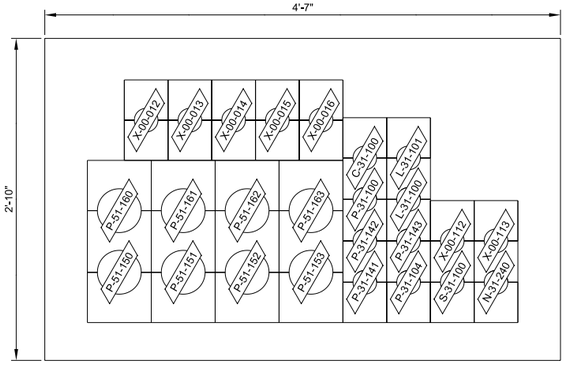
VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. ESC06
SHEET NO. 282 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1100ESC06.dgn

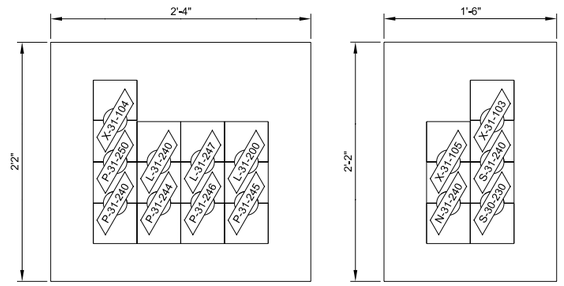
GENERAL NOTES:

1. CONSTRUCT DUCTBANK IN ACCORDANCE WITH DETAIL EM001/TYP, UNLESS OTHERWISE NOTED.



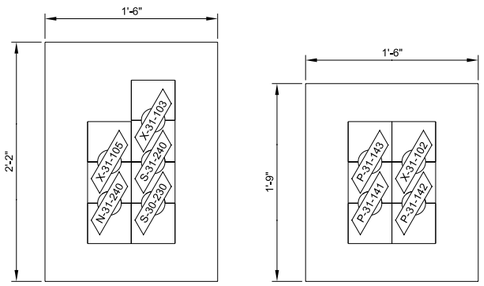
I DUCTBANK SECTION

ESC03



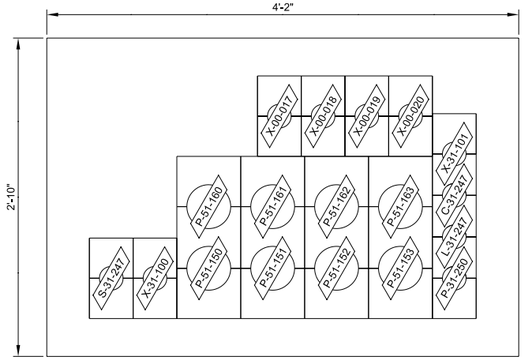
J DUCT BANK SECTION

ESC03, 31E01



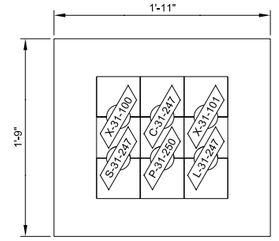
K DUCTBANK SECTION

ESC03, 31E01



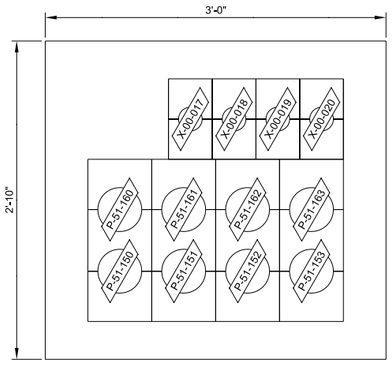
L DUCT BANK SECTION

ESC03



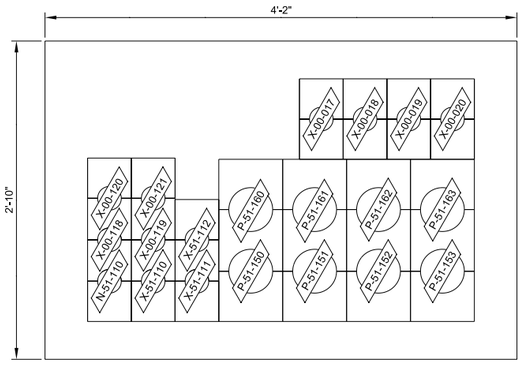
M DUCT BANK SECTION

ESC03, 31E01



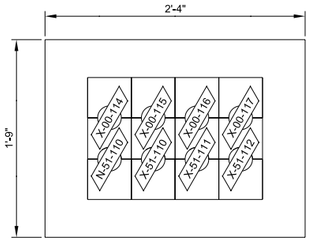
N DUCTBANK SECTION

ESC03



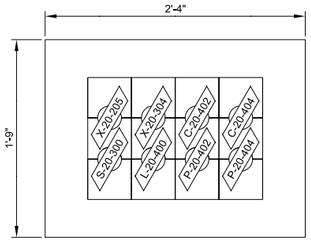
O DUCTBANK SECTION

ESC03



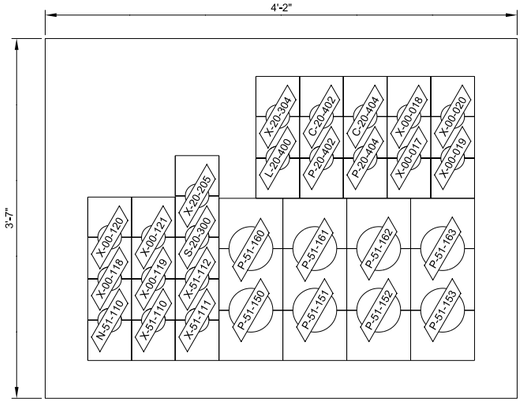
P DUCTBANK SECTION

ESC03



Q DUCTBANK SECTION

ESC03, 20E02



R DUCTBANK SECTION

ESC03

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER IAN R. VARLEY No. 12879 ELECTRICAL STATE OF CALIFORNIA 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY

LOS OSOS WATER RECYCLING FACILITY PROJECT

ELECTRICAL

DUCTBANK SECTIONS- II

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

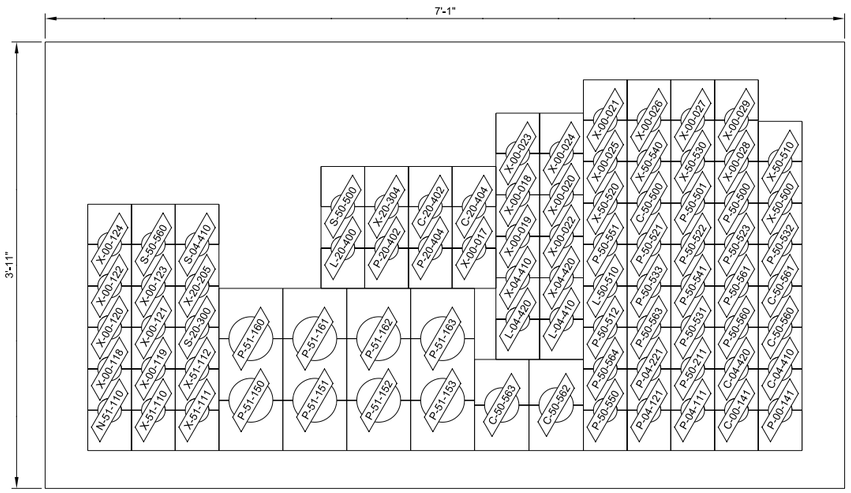
JOB NO. 8930A.11
DRAWING NO. ESC07
SHEET NO. 283 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1100ESC07.dgn

Plot Date: 16-SEP-2013 6:00:00 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

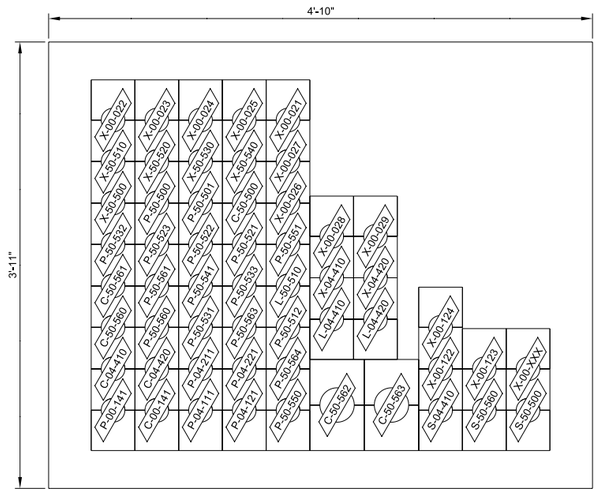
GENERAL NOTES:

1. CONSTRUCT DUCTBANK IN ACCORDANCE WITH DETAIL EM001/TYP, UNLESS OTHERWISE NOTED.



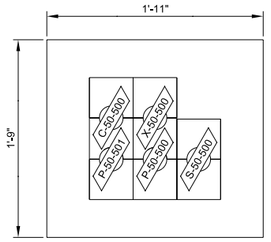
S DUCTBANK SECTION

ESC03



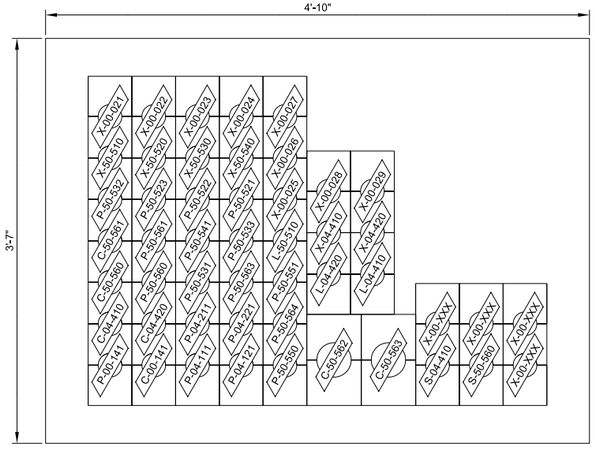
T DUCTBANK SECTION

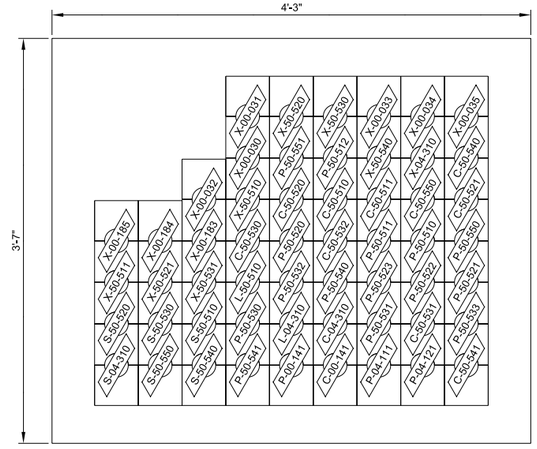
ESC03

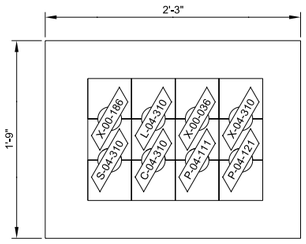


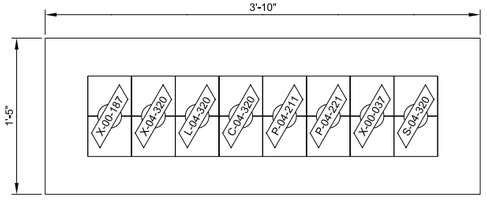
U DUCTBANK SECTION

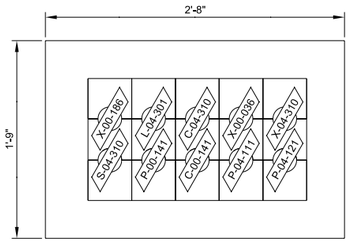
ESC03, 50E01











V DUCTBANK SECTION

ESC03

W DUCTBANK SECTION

ESC03, 50E03

X DUCTBANK SECTION

ESC03

Y DUCTBANK SECTION

ESC03

Z DUCTBANK SECTION

ESC03

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12679 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
DUCTBANK SECTIONS- III

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. ESC08
SHEET NO. 284 OF 549

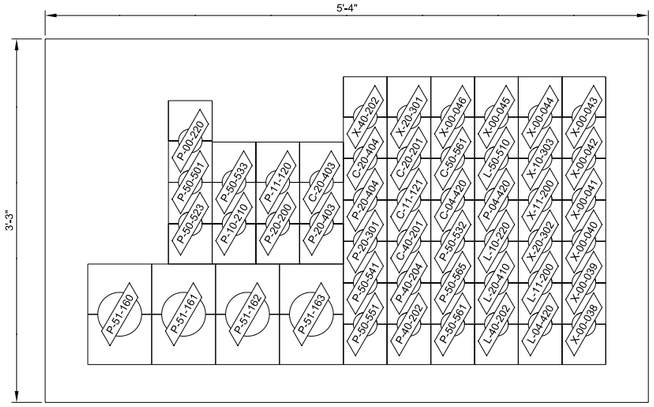
PROJECT NO. 8930A.11 FILE NAME: 8930A1100ESC08.dgn

Plot Date: 16-SEP-2013 6:00:19 PM
User: AWulff
Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1
LAST SAVED BY: ejohnson

Plot Date: 16-SEP-2013 6:00:40 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

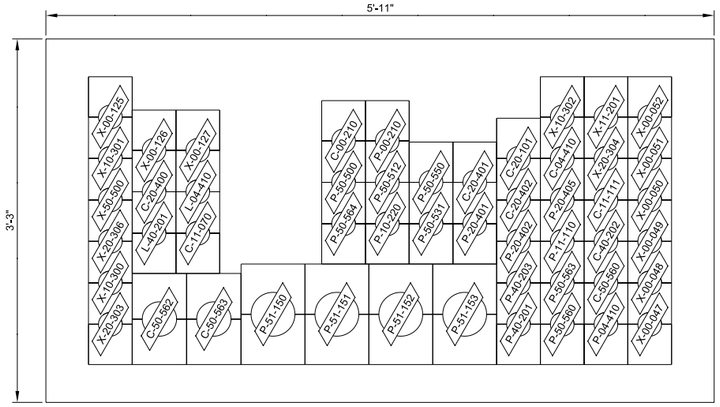
GENERAL NOTES:

1. CONSTRUCT DUCTBANK IN ACCORDANCE WITH DETAIL EM001/TYP, UNLESS OTHERWISE NOTED.



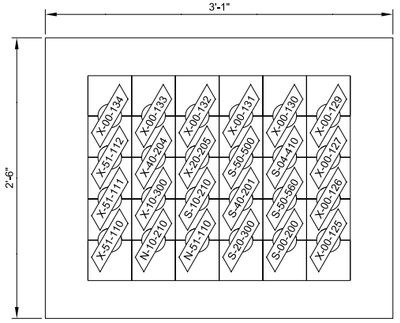
AA DUCTBANK SECTION

ESC03, 51E05, 51E06



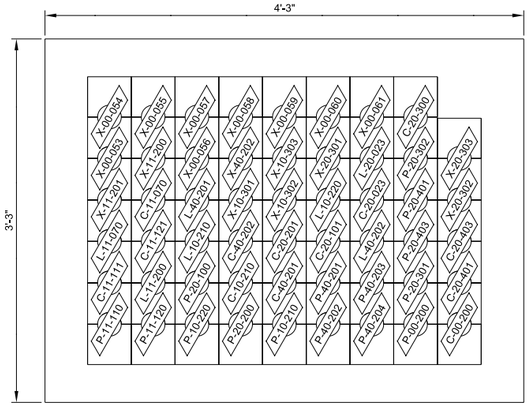
AB DUCTBANK SECTION

ESC03, 51E05, 51E06



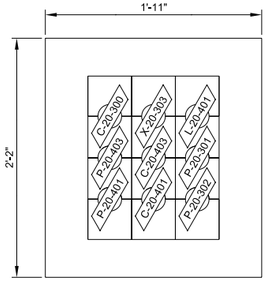
AC DUCTBANK SECTION

ESC03, 51E05, 51E06



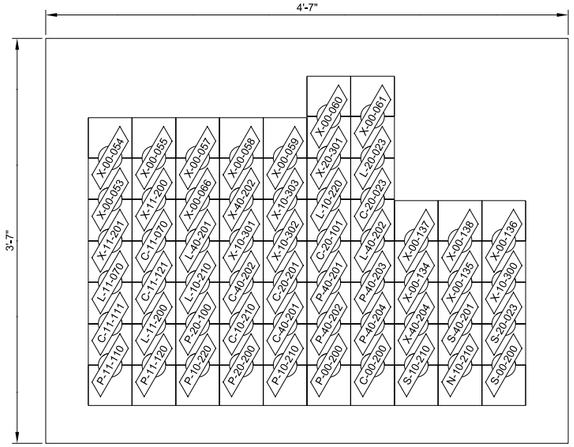
AD DUCTBANK SECTION

ESC03



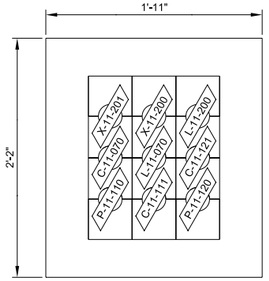
AE DUCTBANK SECTION

ESC03, 20E02



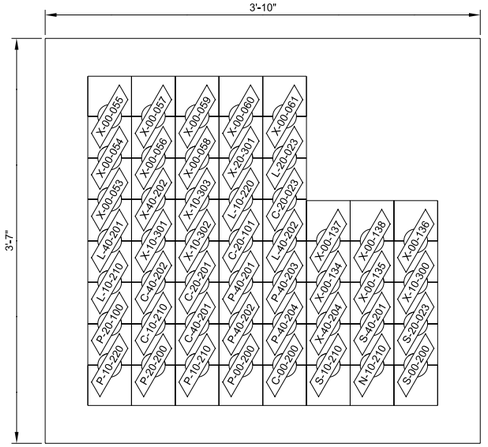
AF DUCTBANK SECTION

ESC03



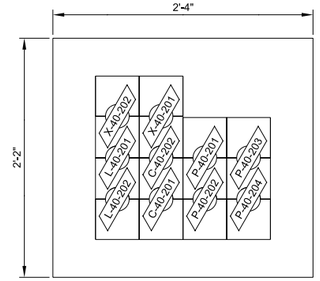
AG DUCTBANK SECTION

ESC03, 11E01



AH DUCTBANK SECTION

ESC03



AI DUCTBANK SECTION

ESC03, 40E01

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo®

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
DUCTBANK SECTIONS- IV

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

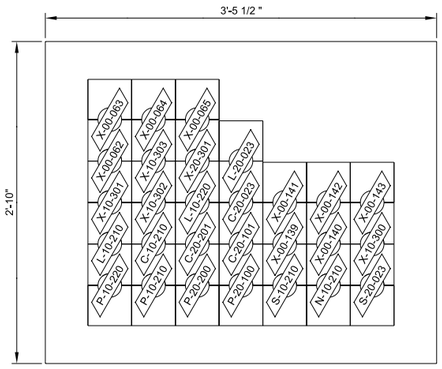
JOB NO. 8930A.11
DRAWING NO. ESC09
SHEET NO. 285 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1100ESC09.dgn

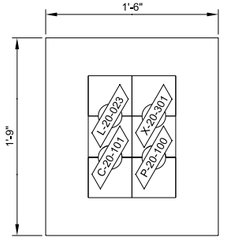
Plot Date: 16-SEP-2013 6:00:59 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

GENERAL NOTES:

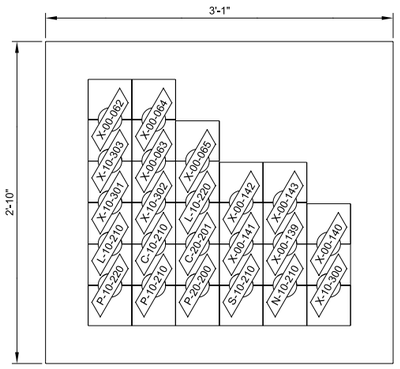
1. CONSTRUCT DUCTBANK IN ACCORDANCE WITH DETAIL EM001/TYP, UNLESS OTHERWISE NOTED.



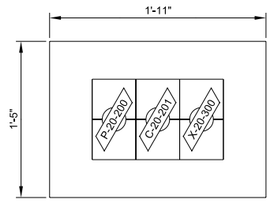
AJ DUCTBANK SECTION
ESC03



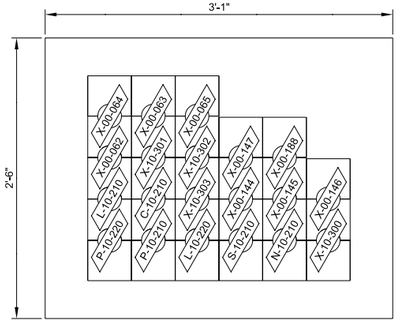
AK DUCTBANK SECTION
ESC03, 20E01



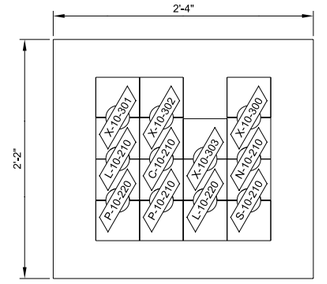
AL DUCTBANK SECTION
ESC03



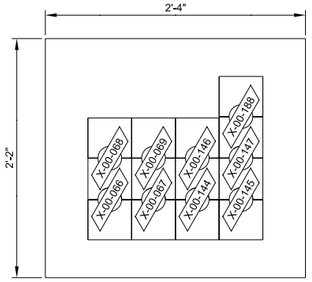
AM DUCTBANK SECTION
ESC03, 20E01



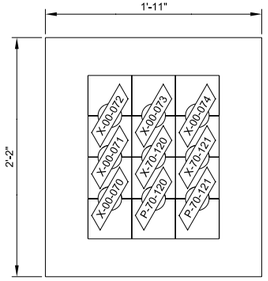
AN DUCTBANK SECTION
ESC03



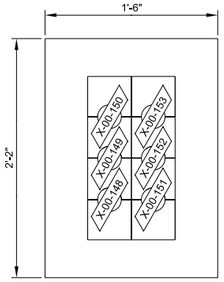
AO DUCTBANK SECTION
ESC03, 10E01

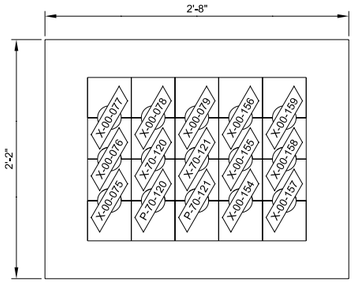


AP DUCTBANK SECTION
ESC03

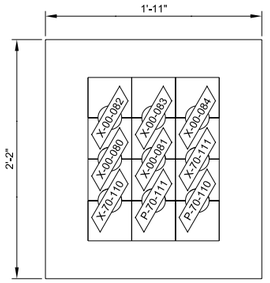


AQ DUCTBANK SECTION
ESC03

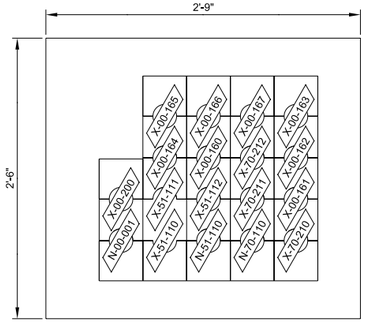


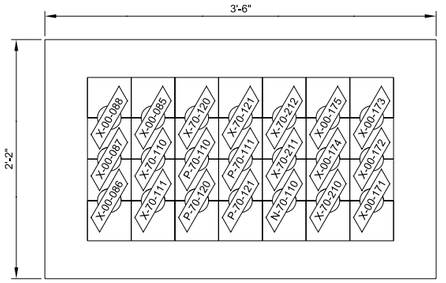


AR DUCTBANK SECTION
ESC03

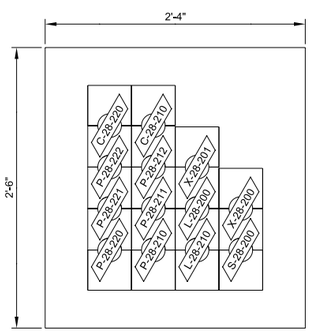


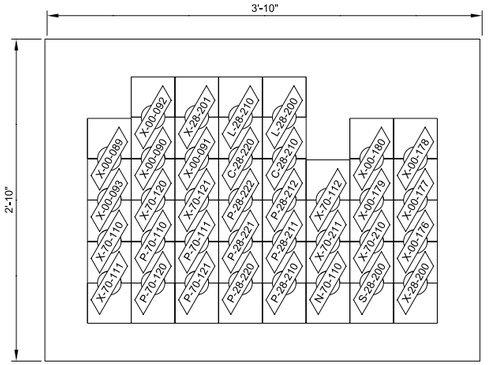
AS DUCTBANK SECTION
ESC03





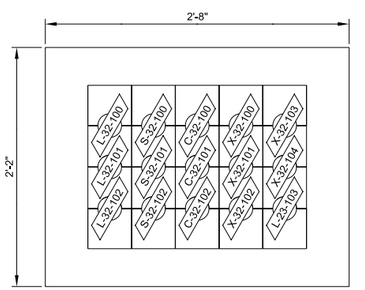
AT DUCTBANK SECTION
ESC03



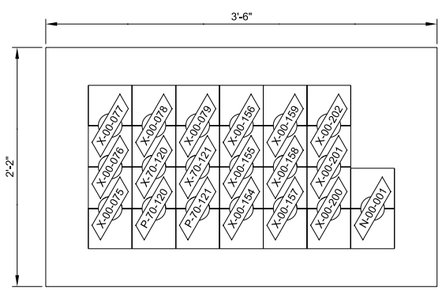


AU DUCTBANK SECTION
ESC03, 28E01

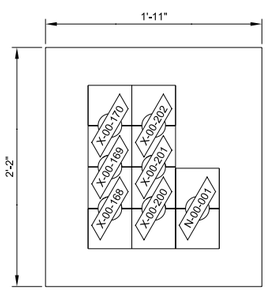
AV DUCTBANK SECTION
ESC03



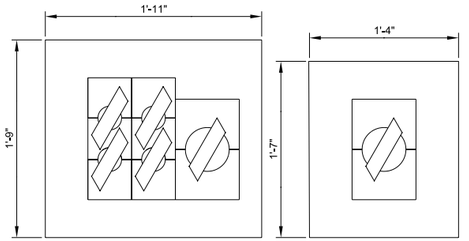
AW DUCTBANK SECTION
ESC03, 70E01, 70E02, 70E03



AX DUCTBANK SECTION
ESC03



AY DUCTBANK SECTION
ESC03



AZ DUCTBANK SECTION
ESC03

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IVAN R. VARLAND — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA
9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
DUCTBANK SECTIONS- V

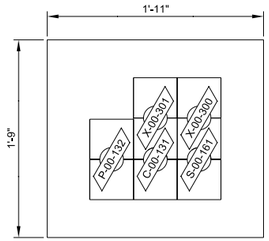
VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. ESC10
SHEET NO. 286 OF 549

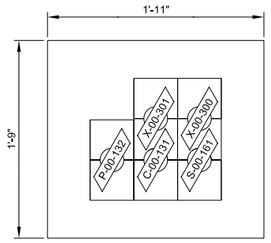
PROJECT NO. 8930A.11 FILE NAME: 8930A1100ESC10.dgn

GENERAL NOTES:

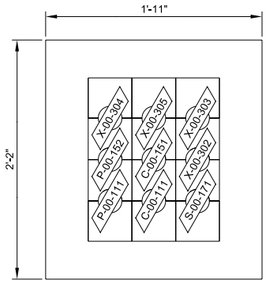
1. CONSTRUCT DUCTBANK IN ACCORDANCE WITH DETAIL EM001/TYP, UNLESS OTHERWISE NOTED.



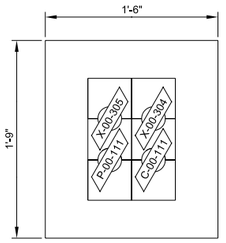
BA DUCTBANK SECTION
ESC03, ESC04



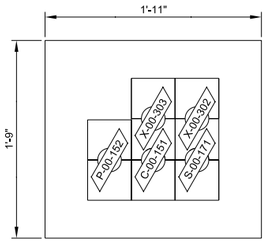
BB DUCTBANK SECTION
ESC03, ESC04



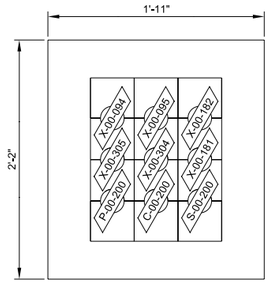
BC DUCTBANK SECTION
ESC03, ESC04



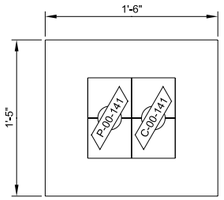
BD DUCTBANK SECTION
ESC03, ESC04

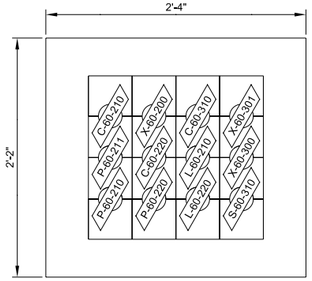


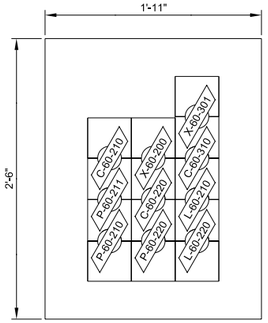
BE DUCTBANK SECTION
ESC03, ESC04

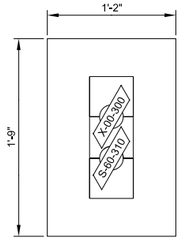


BF DUCTBANK SECTION
ESC03, ESC04









BG DUCTBANK SECTION
ESC03, ESC04

BH DUCTBANK SECTION
ESC03, ESC04, 70E02, 70E03

BI DUCTBANK SECTION
ESC03, 60E01

BJ DUCTBANK SECTION
ESC03, 60E01

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — TARA R. VARLEY — No. 12873 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
DUCTBANK SECTIONS- VI

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. ESC11
SHEET NO. 287 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1100ESC11.dgn

Plot Date: 16-SEP-2013 6:01:19 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

CONDUIT SCHEDULE AREA 00

9/16/13

LOS OSOS WATER RECYCLING FACILITY

SITE PLAN

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-00-110	ESC04	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: 03-EDR-321	C-00-111
									TO: JB	
									12 #14 >> CONTROL: 03-EDR-321	
C-00-111	ESC11	2"	2	#12	XHHW-2	1	#12	XHHW-2	FR: JB	C-00-200
			12	#14	XHHW-2				TO: HH-E15	
									12 #14 >> CONTROL: 03-EDR-321	C-00-110
									2 #12 >> LPBF-1: RECEPTACLE	
C-00-130	ESC04	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: 03-EDR-323	C-00-131
									TO: WIRWAY	
									12 #14 >> CONTROL: 03-EDR-323	
C-00-131	ESC04	2"	4	#12	XHHW-2	2	#12	XHHW-2	FR: WIRWAY	C-00-200
	ESC10		12	#14	XHHW-2				TO: HH-E15 VIA HH-E14	
	ESC11								2 #12 >> LPBF-1: RECEPTACLE	L-00-100
									2 #12 >> POWER: 03-LIT-326	L-00-001
									12 #14 >> CONTROL: 03-EDR-323	C-00-130
C-00-140	ESC04	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: 03-EDR-324	C-00-141
									TO: JB	
									12 #14 >> CONTROL: 03-EDR-324	
C-00-141	ESC11	2"	2	#10	XHHW-2	1	#10	XHHW-2	FR: JB	C-00-210
	ESC08		12	#14	XHHW-2				TO: MH-E05 VIA HH-E12, HH-E11, MH-E10	
									12 #14 >> CONTROL: 03-EDR-324	C-00-140
									2 #10 >> LPBF-1: RECEPTACLE	
C-00-150	ESC04	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: 03-EDR-325	C-00-151
	ESC09								TO: WIREWAY	
									12 #14 >> CONTROL: 03-EDR-325	
C-00-151	ESC04	1"	4	#12	XHHW-2	2	#12	XHHW-2	FR: WIREWAY @ POND NO. 2 OUTLET	C-00-200
	ESC09		12	#14	XHHW-2				TO: HH-E15	
									12 #14 >> CONTROL: 03-EDR-325	C-00-150
									2 #12 >> POWER: 03-LIT-327	L-00-002
									2 #12 >> LPBF-1: RECEPTACLE	L-00-101
C-00-200	ESC11	2"	10	#12	XHHW-2	2	#12	XHHW-2	FR: HH-E15	C-00-210
	ESC09		36	#14	XHHW-2				TO: MH-E05 VIA MH-E07	
									12 #14 >> CONTROL: 03-EDR-321	C-00-111
									2 #12 >> LPBF-1: RECEPTACLE	C-00-111
									2 #12 >> LPBF-1: RECEPTACLE	C-00-131
									2 #12 >> POWER: 03-LIT-326	C-00-131
									12 #14 >> CONTROL: 03-EDR-323	C-00-131
									12 #14 >> CONTROL: 03-EDR-325	C-00-151
									2 #12 >> POWER: 03-LIT-327	C-00-151
									2 #12 >> LPBF-1: RECEPTACLE	C-00-151
C-00-210	51E06	2"	4	#12	XHHW-2	1	#12	XHHW-2	FR: MH-E05	
	ESC09		48	#14	XHHW-2				TO: PCM-2	
									12 #14 >> CONTROL: 03-EDR-324	C-00-141
									12 #14 >> CONTROL: 03-EDR-321	C-00-200
									2 #12 >> POWER: 03-LIT-326	C-00-200
									12 #14 >> CONTROL: 03-EDR-323	C-00-200
									12 #14 >> CONTROL: 03-EDR-325	C-00-200
									2 #12 >> POWER: 03-LIT-327	C-00-200
L-00-001	ESC04	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 03-LIT-326	C-00-131
									TO: WIREWAYVIA DISCONNECT	
									2 #12 >> POWER: 03-LIT-326	
L-00-002	ESC04	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 03-LIT-327	C-00-151
									TO: WIREWAYVIA DISCONNECT	
									2 #12 >> POWER: 03-LIT-327	
L-00-100	ESC04	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: RECEPTACLE	C-00-131
									TO: WIRWAY	
									2 #12 >> LPBF-1: RECEPTACLE	
L-00-101	ESC04	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: RECEPTACLE	C-00-151
									TO: WIREWAY @ POND NO. 2 OUTLET	
									2 #12 >> LPBF-1: RECEPTACLE	
L-00-200	51E05	2"	2	#10	XHHW-2	1	#10	XHHW-2	FR: MH-E05	
			6	#12	XHHW-2				TO: MCC-F	
									2 #10 >> LPBF-1: RECEPTACLE	C-00-141
									2 #12 >> LPBF-1: RECEPTACLE	C-00-200
									2 #12 >> LPBF-1: RECEPTACLE	C-00-200
									2 #12 >> LPBF-1: RECEPTACLE	C-00-200

CONDUIT SCHEDULE AREA 00

9/16/13

LOS OSOS WATER RECYCLING FACILITY

SITE PLAN

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
N-00-001	ESC10	2"	1	72/FO		1	#14	XHHW-2	FR: EXISTING TELEPHONE POLE	
									TO: ADMINSTRATION BUILDING VIA MH-F1, HH-F2/F3/F4,S04	
									1 72/FO >> NETWORK:	
P-00-110	ESC04	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 03-EDR-321	P-00-111
									TO: DISCONNECT SWTICH	
									3 #12 >> POWER: 03-EDR-321	
P-00-111	ESC11	2"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWTICH	P-00-200
									TO: HH-E15	
									3 #12 >> POWER: 03-EDR-321	P-00-110
P-00-130	ESC04	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 03-EDR-323	P-00-131
									TO: DISCONNECT SWTICH	
									3 #12 >> POWER: 03-EDR-323	
P-00-131	ESC04	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWTICH	P-00-132
									TO: WIRWAY	
									3 #12 >> POWER: 03-EDR-323	P-00-130
P-00-132	ESC04	2"	3	#12	XHHW-2	2	#12	XHHW-2	FR: WIRWAY	P-00-200
	ESC10								TO: HH-E15 VIA HH-E014	
	ESC11								3 #12 >> POWER: 03-EDR-323	P-00-131
P-00-140	ESC04	1"	3	#10	XHHW-2	1	#10	XHHW-2	FR: 03-EDR-324	P-00-141
									TO: DISCONNECT SWTICH	
									3 #10 >> POWER: 03-EDR-324	
P-00-141	ESC11	2"	3	#10	XHHW-2	1	#10	XHHW-2	FR: DISCONNECT SWTICH	P-00-220
	ESC08								TO: MH-E05 VIA HH-E12, HH-E11, MH-E10	
									3 #10 >> POWER: 03-EDR-324	P-00-140
P-00-150	ESC04	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 03-EDR-325	P-00-151
									TO: DISCONNECT SWTICH	
									3 #12 >> POWER: 03-EDR-325	
P-00-151	ESC04	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWTICH	P-00-152
									TO: WIREWAY	
									3 #12 >> POWER: 03-EDR-325	P-00-150
P-00-152	ESC04	2"	3	#12	XHHW-2	1	#12	XHHW-2	FR: WIREWAY @ POND NO. 2 OUTLET	P-00-200
	ESC11								TO: HH-E15	
									3 #12 >> POWER: 03-EDR-325	P-00-151
P-00-200	ESC11	2"	9	#12	XHHW-2	3	#12	XHHW-2	FR: HH-E15	P-00-210
	ESC09								TO: MH-E05 VIA MH-E07	
									3 #12 >> POWER: 03-EDR-321	P-00-111
									3 #12 >> POWER: 03-EDR-323	P-00-132
									3 #12 >> POWER: 03-EDR-325	P-00-152
P-00-210	51E05	2"	6	#12	XHHW-2	2	#12	XHHW-2	FR: MH-E05	
	ESC09								TO: MCC-E	
									3 #12 >> POWER: 03-EDR-321	P-00-200
									3 #12 >> POWER: 03-EDR-323	P-00-200
P-00-220	51E05	2"	3	#10	XHHW-2	1	#10	XHHW-2	FR: MH-E05	
	ESC09		3	#12	XHHW-2	1	#12	XHHW-2	TO: MCC-F	
									3 #10 >> POWER: 03-EDR-324	P-00-141
									3 #12 >> POWER: 03-EDR-325	P-00-200
S-00-001	ESC04	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 03-LE-326	
									TO: 03-LIT-326	
									1 MFR >> SIGNAL: 03-LIT-326	
S-00-002	ESC04	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 03-LE-327	
									TO: 03-LIT-327	
									1 MFR >> SIGNAL: 03-LIT-327	
S-00-160	ESC04	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 03-LIT-326	S-00-161
									TO: WIRWAY	
									1 2/CS-#16 >> SIGNAL: 03-LIT-326	
S-00-161	ESC04	2"	1	2/CS-#16		1	#14	XHHW-2	FR: WIRWAY	S-00-200
	ESC10								TO: HH-S15 VIA HH-S14	
	ESC11								1 2/CS-#16 >> SIGNAL: 03-LIT-326	S-00-160
S-00-170	ESC04	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 03-LIT-327	S-00-171
									TO: WIREWAY	
									1 2/CS-#16 >> SIGNAL: 03-LIT-327	
S-00-171	ESC10	2"	1	2/CS-#16		1	#14	XHHW-2	FR: WIREWAY @ POND NO. 2 OUTLET	S-00-200
	ESC11								TO: HH-S15	
									1 2/CS-#16 >> SIGNAL: 03-LIT-327	S-00-170

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12679 — ELECTRICAL — STATE OF CALIFORNIA
9/16/2013

carollo®

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
SITE PLAN
CONDUIT SCHEDULE- I

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. ESC12
SHEET NO. 288 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1100ESC12.dgn

Plot Date: 16-SEP-2013 6:01:36 PM
User: AWulff
PlotScale: 2.1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: adiaz

CONDUIT SCHEDULE AREA 00

9/16/13

LOS OSOS WATER RECYCLING FACILITY

SITE PLAN

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
S-00-200	ESC09	2"	2	2/CS-#16		1	#14	XHHW-2	FR: HH-S15 TO: PCM-2 VIA HH-S07, HH-S05 1 2/CS-#16 >> SIGNAL: 03-LIT-326 1 2/CS-#16 >> SIGNAL: 03-LIT-327	 S-00-161 S-00-171
X-00-001	70E03 ESC06	2"	1	PULL	ROPE				FR: ELECTRICAL BUILDING, CONTROL ROOM TO: MH-E01 1 PULL >> CONTROL, SPARE	
X-00-002	70E03 ESC06	2"	1	PULL	ROPE				FR: ELECTRICAL BUILDING, CONTROL ROOM TO: MH-E01 1 PULL >> CONTROL, SPARE	
X-00-003	70E03 ESC06	2"	1	PULL	ROPE				FR: ELECTRICAL BUILDING, CONTROL ROOM TO: MH-E01 1 PULL >> CONTROL, SPARE	
X-00-004	70E02 ESC06	2"	1	PULL	ROPE				FR: ELECTRICAL BUILDING @ MCC-C TO: MH-E01 1 PULL >> POWER, SPARE	
X-00-005	70E02 ESC06	2"	1	PULL	ROPE				FR: ELECTRICAL BUILDING @ MCC-C TO: MH-E01 1 PULL >> POWER, SPARE	
X-00-006	70E02 ESC06	2"	1	PULL	ROPE				FR: ELECTRICAL BUILDING @ MCC-D TO: MH-E01 1 PULL >> POWER, SPARE	
X-00-007	70E02 ESC06	2"	1	PULL	ROPE				FR: ELECTRICAL BUILDING @ MCC-D TO: MH-E01 1 PULL >> POWER, SPARE	
X-00-008	70E03 ESC06	2"	1	PULL	ROPE				FR: ELECTRICAL BUILDING @ MCC-C TO: MH-E01 1 PULL >> CONTROL, SPARE	
X-00-009	70E03	2"	1	PULL	ROPE				FR: ELECTRICAL BUILDING @ MCC-C TO: MH-E01 1 PULL >> CONTROL, SPARE	
X-00-010	70E03 ESC06	2"	1	PULL	ROPE				FR: ELECTRICAL BUILDING @ MCC-D TO: MH-E01 1 PULL >> CONTROL, SPARE	
X-00-011	70E03 ESC06	2"	1	PULL	ROPE				FR: ELECTRICAL BUILDING @ MCC-D TO: MH-E01 1 PULL >> CONTROL, SPARE	
X-00-012	ESC06 ESC07	2"	1	PULL	ROPE				FR: MH-E01 TO: MH-E03 1 PULL >> POWER/CONTROL, SPARE	
X-00-013	ESC06 ESC07	2"	1	PULL	ROPE				FR: MH-E01 TO: MH-E03 1 PULL >> POWER/CONTROL, SPARE	
X-00-014	ESC06 ESC07	2"	1	PULL	ROPE				FR: MH-E01 TO: MH-E03 1 PULL >> POWER/CONTROL, SPARE	
X-00-015	ESC06 ESC07	2"	1	PULL	ROPE				FR: MH-E01 TO: MH-E03 1 PULL >> POWER/CONTROL, SPARE	
X-00-016	ESC06 ESC07	2"	1	PULL	ROPE				FR: MH-E01 TO: MH-E03 1 PULL >> POWER/CONTROL, SPARE	
X-00-017	ESC07 ESC08	2"	1	PULL	ROPE				FR: MH-E03 TO: MH-E05 1 PULL >> POWER/CONTROL, SPARE	
X-00-018	ESC07 ESC08	2"	1	PULL	ROPE				FR: MH-E03 TO: MH-E05 1 PULL >> POWER/CONTROL, SPARE	
X-00-019	ESC07 ESC08	2"	1	PULL	ROPE				FR: MH-E03 TO: MH-E05 1 PULL >> POWER/CONTROL, SPARE	

CONDUIT SCHEDULE AREA 00

9/16/13

LOS OSOS WATER RECYCLING FACILITY

SITE PLAN

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
X-00-020	ESC07 ESC08	2"	1	PULL	ROPE				FR: MH-E03 TO: MH-E05 1 PULL >> POWER/CONTROL, SPARE	
X-00-021	ESC08	2"	1	PULL	ROPE				FR: MH-E10 TO: MH-E05 1 PULL >> POWER/CONTROL, SPARE	
X-00-022	ESC08	2"	1	PULL	ROPE				FR: MH-E10 TO: MH-E05 1 PULL >> POWER/CONTROL, SPARE	
X-00-023	ESC08	2"	1	PULL	ROPE				FR: MH-E10 TO: MH-E05 1 PULL >> POWER/CONTROL, SPARE	
X-00-024	ESC08	2"	1	PULL	ROPE				FR: MH-E10 TO: MH-E05 1 PULL >> POWER/CONTROL, SPARE	
X-00-025	ESC08	2"	1	PULL	ROPE				FR: MH-E10 TO: MH-E05 1 PULL >> POWER/CONTROL, SPARE	
X-00-026	ESC08	2"	1	PULL	ROPE				FR: MH-E10 TO: MH-E05 1 PULL >> POWER/CONTROL, SPARE	
X-00-027	ESC08	2"	1	PULL	ROPE				FR: MH-E10 TO: MH-E05 1 PULL >> POWER/CONTROL, SPARE	
X-00-028	ESC08	2"	1	PULL	ROPE				FR: MH-E10 TO: MH-E05 1 PULL >> POWER/CONTROL, SPARE	
X-00-029	ESC08	2"	1	PULL	ROPE				FR: MH-E10 TO: MH-E05 1 PULL >> POWER/CONTROL, SPARE	
X-00-030	50E05 ESC08	2"	1	PULL	ROPE				FR: WIREWAY @ STAND NO. 1 TO: MH-E10 1 PULL >> POWER/CONTROL, SPARE	
X-00-031	50E05 ESC08	2"	1	PULL	ROPE				FR: WIREWAY @ STAND NO. 2 TO: MH-E10 1 PULL >> POWER/CONTROL, SPARE	
X-00-032	50E05 ESC08	2"	1	PULL	ROPE				FR: WIREWAY @ STAND NO. 3 TO: MH-E10 1 PULL >> POWER/CONTROL, SPARE	
X-00-033	50E05 ESC08	2"	1	PULL	ROPE				FR: WIREWAY @ STAND NO. 4 TO: MH-E10 1 PULL >> POWER/CONTROL, SPARE	
X-00-034	50E05 ESC08	2"	1	PULL	ROPE				FR: WIREWAY @ STAND NO. 5 TO: MH-E10 1 PULL >> POWER/CONTROL, SPARE	
X-00-035	ESC08	2"	1	PULL	ROPE				FR: HH-E11 TO: MH-E10 1 PULL >> POWER/CONTROL, SPARE	
X-00-036	04E01 ESC08	2"	1	PULL	ROPE				FR: WIREWAY @ STORM WATER DRAIN PUMP STATION TO: HH-E11 1 PULL >> POWER/CONTROL, SPARE	
X-00-037	04E01 ESC08	2"	1	PULL	ROPE				FR: WIREWAY @ PLANT DRAIN PUMP STATION TO: MH-E10 1 PULL >> POWER/CONTROL, SPARE	
X-00-038	51E05 ESC08	2"	1	PULL	ROPE				FR: DEWATERING ELECTRICAL ROOM AT MCC-F TO: MH-E05 1 PULL >> POWER, SPARE	
X-00-039	51E05 ESC08	2"	1	PULL	ROPE				FR: DEWATERING ELECTRICAL ROOM AT MCC-F TO: MH-E05 1 PULL >> POWER, SPARE	
X-00-040	51E05 ESC08	2"	1	PULL	ROPE				FR: DEWATERING ELECTRICAL ROOM AT MCC-F TO: MH-E05 1 PULL >> POWER, SPARE	

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER · JAMES R. VARLEY · No. 12879 · ELECTRICAL · STATE OF CALIFORNIA
9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
SITE PLAN
CONDUIT SCHEDULE- II

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. ESC13
SHEET NO. 289 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1100ESC13.dgn

Plot Date: 16-SEP-2013 6:01:50 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: vcastro

CONDUIT SCHEDULE AREA 00

9/16/13

LOS OSOS WATER RECYCLING FACILITY

SITE PLAN

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
X-00-041	51E05 ESC08	2"	1	PULL	ROPE				FR: DEWATERING ELECTRICAL ROOM AT MCC-F TO: MH-E05 1 PULL >> POWER, SPARE	
X-00-042	51E05 ESC08	2"	1	PULL	ROPE				FR: DEWATERING ELECTRICAL ROOM AT MCC-F TO: MH-E05 1 PULL >> POWER, SPARE	
X-00-043	51E06 ESC08	2"	1	PULL	ROPE				FR: DEWATERING ELECTRICAL ROOM AT MCC-F TO: MH-E05 1 PULL >> CONTROL, SPARE	
X-00-044	51E06 ESC08	2"	1	PULL	ROPE				FR: DEWATERING ELECTRICAL ROOM AT MCC-F TO: MH-E05 1 PULL >> CONTROL, SPARE	
X-00-045	51E06 ESC08	2"	1	PULL	ROPE				FR: DEWATERING ELECTRICAL ROOM AT MCC-F TO: MH-E05 1 PULL >> CONTROL, SPARE	
X-00-046	51E06 ESC08	2"	1	PULL	ROPE				FR: DEWATERING ELECTRICAL ROOM AT MCC-F TO: MH-E05 1 PULL >> CONTROL, SPARE	
X-00-047	51E05 ESC09	2"	1	PULL	ROPE				FR: DEWATERING ELECTRICAL ROOM AT MCC-E TO: MH-E05 1 PULL >> POWER, SPARE	
X-00-048	51E05 ESC09	2"	1	PULL	ROPE				FR: DEWATERING ELECTRICAL ROOM AT MCC-E TO: MH-E05 1 PULL >> POWER, SPARE	
X-00-049	51E05 ESC09	2"	1	PULL	ROPE				FR: DEWATERING ELECTRICAL ROOM AT MCC-E TO: MH-E05 1 PULL >> POWER, SPARE	
X-00-050	51E06 ESC09	2"	1	PULL	ROPE				FR: DEWATERING ELECTRICAL ROOM AT MCC-E TO: MH-E05 1 PULL >> CONTROL, SPARE	
X-00-051	51E06 ESC09	2"	1	PULL	ROPE				FR: DEWATERING ELECTRICAL ROOM AT MCC-E TO: MH-E05 1 PULL >> CONTROL, SPARE	
X-00-052	51E06 ESC09	2"	1	PULL	ROPE				FR: DEWATERING ELECTRICAL ROOM AT MCC-E TO: MH-E05 1 PULL >> CONTROL, SPARE	
X-00-053	ESC09	2"	1	PULL	ROPE				FR: MH-E05 TO: MH-E07 1 PULL >> POWER/CONTROL, SPARE	
X-00-054	ESC09	2"	1	PULL	ROPE				FR: MH-E05 TO: MH-E07 1 PULL >> POWER/CONTROL, SPARE	
X-00-055	ESC09	2"	1	PULL	ROPE				FR: MH-E05 TO: MH-E07 1 PULL >> POWER/CONTROL, SPARE	
X-00-056	ESC09	2"	1	PULL	ROPE				FR: MH-E05 TO: MH-E07 1 PULL >> POWER/CONTROL, SPARE	
X-00-057	ESC09	2"	1	PULL	ROPE				FR: MH-E05 TO: MH-E07 1 PULL >> POWER/CONTROL, SPARE	
X-00-058	ESC09	2"	1	PULL	ROPE				FR: MH-E05 TO: MH-E07 1 PULL >> POWER/CONTROL, SPARE	
X-00-059	ESC09	2"	1	PULL	ROPE				FR: MH-E05 TO: MH-E07 1 PULL >> POWER/CONTROL, SPARE	
X-00-060	ESC09	2"	1	PULL	ROPE				FR: MH-E05 TO: MH-E07 1 PULL >> POWER/CONTROL, SPARE	
X-00-061	ESC09	2"	1	PULL	ROPE				FR: MH-E05 TO: MH-E07 1 PULL >> POWER/CONTROL, SPARE	

CONDUIT SCHEDULE AREA 00

9/16/13

LOS OSOS WATER RECYCLING FACILITY

SITE PLAN

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
X-00-062	ESC10	2"	1	PULL	ROPE				FR: MH-E07 TO: HH-E09 1 PULL >> POWER/CONTROL, SPARE	
X-00-063	ESC10	2"	1	PULL	ROPE				FR: MH-E07 TO: HH-E09 1 PULL >> POWER/CONTROL, SPARE	
X-00-064	ESC10	2"	1	PULL	ROPE				FR: MH-E07 TO: HH-E09 1 PULL >> POWER/CONTROL, SPARE	
X-00-065	ESC10	2"	1	PULL	ROPE				FR: MH-E07 TO: HH-E09 1 PULL >> POWER/CONTROL, SPARE	
X-00-066	ESC10	2"	1	PULL	ROPE				FR: HH-E09 TO: HH-E08 1 PULL >> POWER/CONTROL, SPARE	
X-00-067	ESC10	2"	1	PULL	ROPE				FR: HH-E09 TO: HH-E08 1 PULL >> POWER/CONTROL, SPARE	
X-00-068	ESC10	2"	1	PULL	ROPE				FR: HH-E09 TO: HH-E08 1 PULL >> POWER/CONTROL, SPARE	
X-00-069	ESC10	2"	1	PULL	ROPE				FR: HH-E09 TO: HH-E08 1 PULL >> POWER/CONTROL, SPARE	
X-00-070	ESC10	2"	1	PULL	ROPE				FR: HH-E08 TO: MAINTENANCE BUILDING 1 PULL >> POWER/CONTROL, SPARE	
X-00-071	ESC10	2"	1	PULL	ROPE				FR: HH-E08 TO: MAINTENANCE BUILDING 1 PULL >> POWER/CONTROL, SPARE	
X-00-072	ESC10	2"	1	PULL	ROPE				FR: HH-E08 TO: MAINTENANCE BUILDING 1 PULL >> POWER/CONTROL, SPARE	
X-00-073	ESC10	2"	1	PULL	ROPE				FR: HH-E08 TO: MAINTENANCE BUILDING 1 PULL >> POWER/CONTROL, SPARE	
X-00-074	ESC10	2"	1	PULL	ROPE				FR: HH-E08 TO: MAINTENANCE BUILDING 1 PULL >> POWER/CONTROL, SPARE	
X-00-075	ESC10	2"	1	PULL	ROPE				FR: HH-E08 TO: HH-E04 VIA HH-E06 1 PULL >> POWER/CONTROL, SPARE	
X-00-076	ESC10	2"	1	PULL	ROPE				FR: HH-E08 TO: HH-E04 VIA HH-E06 1 PULL >> POWER/CONTROL, SPARE	
X-00-077	ESC10	2"	1	PULL	ROPE				FR: HH-E08 TO: HH-E04 VIA HH-E06 1 PULL >> POWER/CONTROL, SPARE	
X-00-078	ESC10	2"	1	PULL	ROPE				FR: HH-E08 TO: HH-E04 VIA HH-E06 1 PULL >> POWER/CONTROL, SPARE	
X-00-079	ESC10	2"	1	PULL	ROPE				FR: HH-E08 TO: HH-E04 VIA HH-E06 1 PULL >> POWER/CONTROL, SPARE	
X-00-080	ESC10	2"	1	PULL	ROPE				FR: HH-E04 TO: ADMINSTRATION BUILDING 1 PULL >> POWER/CONTROL, SPARE	
X-00-081	ESC10	2"	1	PULL	ROPE				FR: HH-E04 TO: ADMINSTRATION BUILDING 1 PULL >> POWER/CONTROL, SPARE	
X-00-082	ESC10	2"	1	PULL	ROPE				FR: HH-E04 TO: ADMINSTRATION BUILDING 1 PULL >> POWER/CONTROL, SPARE	

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA
9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
SITE PLAN
CONDUIT SCHEDULE- III

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. ESC14
SHEET NO. 290 OF 549

Plot Date: 16-SEP-2013 6:02:07 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: vcastro

PROJECT NO. 8930A.11 FILE NAME: 8930A1100ESC14.dgn

CONDUIT SCHEDULE AREA 00

9/16/13

LOS OSOS WATER RECYCLING FACILITY

SITE PLAN

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
X-00-083	ESC10	2"	1	PULL	ROPE				FR: HH-E04 TO: ADMINSTRATION BUILDING 1 PULL >> POWER/CONTROL, SPARE	
X-00-084	ESC10	2"	1	PULL	ROPE				FR: HH-E04 TO: ADMINSTRATION BUILDING 1 PULL >> POWER/CONTROL, SPARE	
X-00-085	ESC10	2"	1	PULL	ROPE				FR: HH-E04 TO: HH-E02 1 PULL >> POWER/CONTROL, SPARE	
X-00-086	ESC10	2"	1	PULL	ROPE				FR: HH-E04 TO: HH-E02 1 PULL >> POWER/CONTROL, SPARE	
X-00-087	ESC10	2"	1	PULL	ROPE				FR: HH-E04 TO: HH-E02 1 PULL >> POWER/CONTROL, SPARE	
X-00-088	ESC10	2"	1	PULL	ROPE				FR: HH-E04 TO: HH-E02 1 PULL >> POWER/CONTROL, SPARE	
X-00-089	ESC11	2"	1	PULL	ROPE				FR: HH-E02 TO: MH-E01 1 PULL >> POWER/CONTROL, SPARE	
X-00-090	ESC11	2"	1	PULL	ROPE				FR: HH-E02 TO: MH-E01 1 PULL >> POWER/CONTROL, SPARE	
X-00-091	ESC11	2"	1	PULL	ROPE				FR: HH-E02 TO: MH-E01 1 PULL >> POWER/CONTROL, SPARE	
X-00-092	ESC11	2"	1	PULL	ROPE				FR: HH-E02 TO: MH-E01 1 PULL >> POWER/CONTROL, SPARE	
X-00-093	ESC11	2"	1	PULL	ROPE				FR: HH-E02 TO: MH-E01 1 PULL >> POWER/CONTROL, SPARE	
X-00-094	ESC11	2"	1	PULL	ROPE				FR: HH-E15 TO: MH-E07 1 PULL >> POWER/CONTROL, SPARE	
X-00-095	ESC11	2"	1	PULL	ROPE				FR: HH-E15 TO: MH-E07 1 PULL >> POWER/CONTROL, SPARE	
X-00-100	70E03 ESC06	2"	1	PULL	ROPE				FR: ELECTRICAL BUILDING CONTROL ROOM NP-1 TO: HH-S13 1 PULL >> SIGNAL, SPARE	
X-00-101	70E03 ESC06	2"	1	PULL	ROPE				FR: ELECTRICAL BUILDING CONTROL ROOM TO: HH-S13 1 PULL >> SIGNAL, SPARE	
X-00-102	70E03 ESC06	2"	1	PULL	ROPE				FR: ELECTRICAL BUILDING CONTROL ROOM TO: HH-S13 1 PULL >> SIGNAL, SPARE	
X-00-103	70E03 ESC06	2"	1	PULL	ROPE				FR: ELECTRICAL BUILDING CONTROL ROOM TO: HH-S13 1 PULL >> SIGNAL, SPARE	
X-00-104	70E03 ESC06	2"	1	PULL	ROPE				FR: ELECTRICAL BUILDING CONTROL ROOM TO: HH-S13 1 PULL >> SIGNAL, SPARE	
X-00-105	70E03 ESC06	2"	1	PULL	ROPE				FR: ELECTRICAL BUILDING CONTROL ROOM TO: HH-S13 1 PULL >> SIGNAL, SPARE	
X-00-106	ESC06	2"	1	PULL	ROPE				FR: HH-S13 TO: HH-S01 1 PULL >> SIGNAL, SPARE	
X-00-107	ESC06	2"	1	PULL	ROPE				FR: HH-S13 TO: HH-S01 1 PULL >> SIGNAL, SPARE	

CONDUIT SCHEDULE AREA 00

9/16/13

LOS OSOS WATER RECYCLING FACILITY

SITE PLAN

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
X-00-108	ESC06	2"	1	PULL	ROPE				FR: HH-S13 TO: HH-S01 1 PULL >> SIGNAL, SPARE	
X-00-109	ESC06	2"	1	PULL	ROPE				FR: HH-S13 TO: HH-S01 1 PULL >> SIGNAL, SPARE	
X-00-110	ESC06	2"	1	PULL	ROPE				FR: HH-S13 TO: HH-S01 1 PULL >> SIGNAL, SPARE	
X-00-111	ESC06	2"	1	PULL	ROPE				FR: HH-S13 TO: HH-S01 1 PULL >> SIGNAL, SPARE	
X-00-112	ESC06 ESC07	2"	1	PULL	ROPE				FR: HH-S01 TO: HH-S03 1 PULL >> SIGNAL, SPARE	
X-00-113	ESC06 ESC07	2"	1	PULL	ROPE				FR: HH-S01 TO: HH-S03 1 PULL >> SIGNAL, SPARE	
X-00-114	ESC07	2"	1	PULL	ROPE				FR: HH-S12 TO: HH-S04 1 PULL >> SIGNAL, SPARE	
X-00-115	ESC07	2"	1	PULL	ROPE				FR: HH-S12 TO: HH-S04 1 PULL >> SIGNAL, SPARE	
X-00-116	ESC07	2"	1	PULL	ROPE				FR: HH-S12 TO: HH-S04 1 PULL >> SIGNAL, SPARE	
X-00-117	ESC07	2"	1	PULL	ROPE				FR: HH-S12 TO: HH-S04 1 PULL >> SIGNAL, SPARE	
X-00-118	ESC07	2"	1	PULL	ROPE				FR: HH-S12 TO: HH-S05 1 PULL >> SIGNAL, SPARE	
X-00-119	ESC07	2"	1	PULL	ROPE				FR: HH-S12 TO: HH-S05 1 PULL >> SIGNAL, SPARE	
X-00-120	ESC07	2"	1	PULL	ROPE				FR: HH-S12 TO: HH-S05 1 PULL >> SIGNAL, SPARE	
X-00-121	ESC07	2"	1	PULL	ROPE				FR: HH-S12 TO: HH-S05 1 PULL >> SIGNAL, SPARE	
X-00-122	ESC08	2"	1	PULL	ROPE				FR: HH-S10 TO: HH-S05 1 PULL >> SIGNAL, SPARE	
X-00-123	ESC08	2"	1	PULL	ROPE				FR: HH-S10 TO: HH-S05 1 PULL >> SIGNAL, SPARE	
X-00-124	ESC08	2"	1	PULL	ROPE				FR: HH-S10 TO: HH-S05 1 PULL >> SIGNAL, SPARE	
X-00-125	51E06 ESC09	2"	1	PULL	ROPE				FR: DEWATERING CONTROL ROOM TO: HH-S05 1 PULL >> SIGNAL, SPARE	
X-00-126	51E06 ESC09	2"	1	PULL	ROPE				FR: DEWATERING CONTROL ROOM TO: HH-S05 1 PULL >> SIGNAL, SPARE	
X-00-127	51E06 ESC09	2"	1	PULL	ROPE				FR: DEWATERING CONTROL ROOM TO: HH-S05 1 PULL >> SIGNAL, SPARE	
X-00-129	51E06 ESC09	2"	1	PULL	ROPE				FR: DEWATERING CONTROL ROOM TO: HH-S05 1 PULL >> SIGNAL, SPARE	

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA
9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
SITE PLAN
CONDUIT SCHEDULE- IV

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. ESC15
SHEET NO. 291 OF 549

Plot Date: 16-SEP-2013 6:02:24 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: vcastro

PROJECT NO. 8930A.11 FILE NAME: 8930A1100ESC15.dgn

CONDUIT SCHEDULE AREA 00

9/16/13

LOS OSOS WATER RECYCLING FACILITY

SITE PLAN

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
X-00-130	51E06 ESC09	2"	1	PULL	ROPE				FR: DEWATERING CONTROL ROOM TO: HH-S05 1 PULL >> SIGNAL, SPARE	
X-00-131	51E06 ESC09	2"	1	PULL	ROPE				FR: DEWATERING CONTROL ROOM TO: HH-S05 1 PULL >> SIGNAL, SPARE	
X-00-132	51E06 ESC09	2"	1	PULL	ROPE				FR: DEWATERING CONTROL ROOM TO: HH-S05 1 PULL >> SIGNAL, SPARE	
X-00-133	51E06 ESC09	2"	1	PULL	ROPE				FR: DEWATERING CONTROL ROOM TO: HH-S05 1 PULL >> SIGNAL, SPARE	
X-00-134	51E06 ESC09	2"	1	PULL	ROPE				FR: DEWATERING CONTROL ROOM TO: HH-S05 1 PULL >> SIGNAL, SPARE	
X-00-134	ESC09	2"	1	PULL	ROPE				FR: HH-S05 TO: HH-S07 1 PULL >> SIGNAL, SPARE	
X-00-135	ESC09	2"	1	PULL	ROPE				FR: HH-S05 TO: HH-S07 1 PULL >> SIGNAL, SPARE	
X-00-136	ESC09	2"	1	PULL	ROPE				FR: HH-S05 TO: HH-S07 1 PULL >> SIGNAL, SPARE	
X-00-137	ESC09	2"	1	PULL	ROPE				FR: HH-S05 TO: HH-S07 1 PULL >> SIGNAL, SPARE	
X-00-138	ESC09	2"	1	PULL	ROPE				FR: HH-S05 TO: HH-S07 1 PULL >> SIGNAL, SPARE	
X-00-139	ESC10	2"	1	PULL	ROPE				FR: HH-S07 TO: HH-S09 1 PULL >> SIGNAL, SPARE	
X-00-140	ESC10	2"	1	PULL	ROPE				FR: HH-S07 TO: HH-S09 1 PULL >> SIGNAL, SPARE	
X-00-141	ESC10	2"	1	PULL	ROPE				FR: HH-S07 TO: HH-S09 1 PULL >> SIGNAL, SPARE	
X-00-142	ESC10	2"	1	PULL	ROPE				FR: HH-S07 TO: HH-S09 1 PULL >> SIGNAL, SPARE	
X-00-143	ESC10	2"	1	PULL	ROPE				FR: HH-S07 TO: HH-S09 1 PULL >> SIGNAL, SPARE	
X-00-144	ESC10	2"	1	PULL	ROPE				FR: HH-S09 TO: HH-S08 1 PULL >> SIGNAL, SPARE	
X-00-145	ESC10	2"	1	PULL	ROPE				FR: HH-S09 TO: HH-S08 1 PULL >> SIGNAL, SPARE	
X-00-146	ESC10	2"	1	PULL	ROPE				FR: HH-S09 TO: HH-S08 1 PULL >> SIGNAL, SPARE	
X-00-147	ESC10	2"	1	PULL	ROPE				FR: HH-S09 TO: HH-S08 1 PULL >> SIGNAL, SPARE	
X-00-148	ESC10	2"	1	PULL	ROPE				FR: MAINTENANCE BUILDING TO: HH-S08 1 PULL >> SIGNAL, SPARE	
X-00-149	ESC10	2"	1	PULL	ROPE				FR: MAINTENANCE BUILDING TO: HH-S08 1 PULL >> SIGNAL, SPARE	

CONDUIT SCHEDULE AREA 00

9/16/13

LOS OSOS WATER RECYCLING FACILITY

SITE PLAN

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
X-00-150	ESC10	2"	1	PULL	ROPE				FR: MAINTENANCE BUILDING TO: HH-S08 1 PULL >> SIGNAL, SPARE	
X-00-151	ESC10	2"	1	PULL	ROPE				FR: MAINTENANCE BUILDING TO: HH-S08 1 PULL >> SIGNAL, SPARE	
X-00-152	ESC10	2"	1	PULL	ROPE				FR: MAINTENANCE BUILDING TO: HH-S08 1 PULL >> SIGNAL, SPARE	
X-00-153	ESC10	2"	1	PULL	ROPE				FR: MAINTENANCE BUILDING TO: HH-S08 1 PULL >> SIGNAL, SPARE	
X-00-154	ESC10	2"	1	PULL	ROPE				FR: HH-S08 TO: HH-S04 VIA HH-S06 1 PULL >> SIGNAL, SPARE	
X-00-155	ESC10	2"	1	PULL	ROPE				FR: HH-S08 TO: HH-S04 VIA HH-S06 1 PULL >> SIGNAL, SPARE	
X-00-156	ESC10	2"	1	PULL	ROPE				FR: HH-S08 TO: HH-S04 VIA HH-S06 1 PULL >> SIGNAL, SPARE	
X-00-157	ESC10	2"	1	PULL	ROPE				FR: HH-S08 TO: HH-S04 VIA HH-S06 1 PULL >> SIGNAL, SPARE	
X-00-158	ESC10	2"	1	PULL	ROPE				FR: HH-S08 TO: HH-S04 VIA HH-S06 1 PULL >> SIGNAL, SPARE	
X-00-159	ESC10	2"	1	PULL	ROPE				FR: HH-S08 TO: HH-S04 VIA HH-S06 1 PULL >> SIGNAL, SPARE	
X-00-160	ESC10	2"	1	PULL	ROPE				FR: ADMINSTRATION BUILDING TO: HH-S04 1 PULL >> SIGNAL, SPARE	
X-00-161	ESC10	2"	1	PULL	ROPE				FR: ADMINSTRATION BUILDING TO: HH-S04 1 PULL >> SIGNAL, SPARE	
X-00-162	ESC10	2"	1	PULL	ROPE				FR: ADMINSTRATION BUILDING TO: HH-S04 1 PULL >> SIGNAL, SPARE	
X-00-163	ESC10	2"	1	PULL	ROPE				FR: ADMINSTRATION BUILDING TO: HH-S04 1 PULL >> SIGNAL, SPARE	
X-00-164	ESC10	2"	1	PULL	ROPE				FR: ADMINSTRATION BUILDING TO: HH-S04 1 PULL >> SIGNAL, SPARE	
X-00-165	ESC10	2"	1	PULL	ROPE				FR: ADMINSTRATION BUILDING TO: HH-S04 1 PULL >> SIGNAL, SPARE	
X-00-166	ESC10	2"	1	PULL	ROPE				FR: ADMINSTRATION BUILDING TO: HH-S04 1 PULL >> SIGNAL, SPARE	
X-00-167	ESC10	2"	1	PULL	ROPE				FR: ADMINSTRATION BUILDING TO: HH-S04 1 PULL >> SIGNAL, SPARE	
X-00-168	ESC10	2"	1	PULL	ROPE				FR: HH-F3 TO: ADMINSTRATION BUILDING, VIA HH-F4, HH-S04 1 PULL >>	
X-00-169	ESC10	2"	1	PULL	ROPE				FR: HH-F3 TO: ADMINSTRATION BUILDING, VIA HH-F4, HH-S04 1 PULL >>	
X-00-170	ESC10	2"	1	PULL	ROPE				FR: HH-F3 TO: ADMINSTRATION BUILDING, VIA HH-F4, HH-S04 1 PULL >>	

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER IAN R. VARLEY No. 12879 ELECTRICAL STATE OF CALIFORNIA
9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
SITE PLAN
CONDUIT SCHEDULE- V

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. ESC16
SHEET NO. 292 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1100ESC16.dgn

Plot Date: 16-SEP-2013 6:02:44 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: vcastro

CONDUIT SCHEDULE AREA 00

9/16/13

LOS OSOS WATER RECYCLING FACILITY

SITE PLAN

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
X-00-171	ESC10	2"	1	PULL	ROPE				FR: HH-S04 TO: HH-S02 1 PULL >> SIGNAL, SPARE	
X-00-172	ESC10	2"	1	PULL	ROPE				FR: HH-S04 TO: HH-S02 1 PULL >> SIGNAL, SPARE	
X-00-173	ESC10	2"	1	PULL	ROPE				FR: HH-S04 TO: HH-S02 1 PULL >> SIGNAL, SPARE	
X-00-174	ESC10	2"	1	PULL	ROPE				FR: HH-S04 TO: HH-S02 1 PULL >> SIGNAL, SPARE	
X-00-175	ESC10	2"	1	PULL	ROPE				FR: HH-S04 TO: HH-S02 1 PULL >> SIGNAL, SPARE	
X-00-176	ESC11	2"	1	PULL	ROPE				FR: HH-S02 TO: HH-S01 1 PULL >> SIGNAL, SPARE	
X-00-177	ESC11	2"	1	PULL	ROPE				FR: HH-S02 TO: HH-S01 1 PULL >> SIGNAL, SPARE	
X-00-178	ESC11	2"	1	PULL	ROPE				FR: HH-S02 TO: HH-S01 1 PULL >> SIGNAL, SPARE	
X-00-179	ESC11	2"	1	PULL	ROPE				FR: HH-S02 TO: HH-S01 1 PULL >> SIGNAL, SPARE	
X-00-180	ESC11	2"	1	PULL	ROPE				FR: HH-S02 TO: HH-S01 1 PULL >> SIGNAL, SPARE	
X-00-181	ESC11	2"	1	PULL	ROPE				FR: HH-S15 TO: HH-S07 1 PULL >> SIGNAL, SPARE	
X-00-182	ESC11	2"	1	PULL	ROPE				FR: HH-S15 TO: HH-S07 1 PULL >> SIGNAL, SPARE	
X-00-183	50E05 ESC08	2"	1	PULL	ROPE				FR: WIREWAY @ STAND NO. 1 TO: HH-S10 1 PULL >> SIGNAL, SPARE	
X-00-184	50E05 ESC08	2"	1	PULL	ROPE				FR: WIREWAY @ STAND NO. 2 TO: HH-S10 1 PULL >> SIGNAL, SPARE	
X-00-185	ESC08	2"	1	PULL	ROPE				FR: HH-S10 TO: HH-S11 1 PULL >> SIGNAL, SPARE	
X-00-186	04E01 ESC08	2"	1	PULL	ROPE				FR: WIREWAY @ PLANT DRAIN PUMP STATION TO: HH-S11 1 PULL >> SIGNAL, SPARE	
X-00-187	04E01 ESC08	2"	1	PULL	ROPE				FR: WIREWAY @ STORM WATER DRAIN PUMP STATION TO: HH-S10 1 PULL >> SIGNAL, SPARE	
X-00-188	ESC10	2"	1	PULL	ROPE				FR: HH-S09 TO: HH-S08 1 PULL >> SIGNAL, SPARE	
X-00-200	ESC10	2"	1	PULL	ROPE				FR: EXISTING TELEPHONE POLE TO: ADMINSTRATION BUILDING VIA MH-F1, HH-F2/F3/F4,S04 1 PULL >> TELEPHONE, SPARE	
X-00-201	ESC10	2"	1	PULL	ROPE				FR: EXISTING TELEPHONE POLE TO: ADMINSTRATION BUILDING VIA MH-F1, HH-F2/F3/F4,S04 1 PULL >>	
X-00-202	ESC10	2"	1	PULL	ROPE				FR: EXISTING TELEPHONE POLE TO: ADMINSTRATION BUILDING VIA MH-F1, HH-F2/F3/F4,S04 1 PULL >>	

CONDUIT SCHEDULE AREA 00

9/16/13

LOS OSOS WATER RECYCLING FACILITY

SITE PLAN

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
X-00-300	ESC04 ESC10 ESC11	2"	1	PULL	ROPE				FR: WIREWAY@ POND NO. 1 OUTLET TO: HH-S15 VIA HH-S14 1 PULL >> SIGNAL, SPARE	
X-00-301	ESC04 ESC10 ESC11	2"	1	PULL	ROPE				FR: WIREWAY@ POND NO. 1 OUTLET TO: HH-E15 VIA HH-E14 1 PULL >> POWER/CONTROL, SPARE	
X-00-302	ESC04 ESC11	2"	1	PULL	ROPE				FR: WIREWAY @ POND NO. 2 OUTLET TO: HH-S15 1 PULL >> SIGNAL, SPARE	
X-00-303	ESC04 ESC11	2"	1	PULL	ROPE				FR: WIREWAY @ POND NO. 2 OUTLET TO: HH-E15 1 PULL >> POWER/CONTROL, SPARE	
X-00-304	ESC04	2"	1	PULL	ROPE				FR: STUB-UP @ POND 1 INLET TO: MH-E07 VIA HH-E15 1 PULL >> FUTURE EDR-322(CONTROL)	
X-00-305	ESC04	2"	1	PULL	ROPE				FR: STUB-UP @ POND 1 INLET TO: MH-E07 VIA HH-E15 1 PULL >> FUTURE EDR-322(POWER)	

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
SITE PLAN
CONDUIT SCHEDULE- VI

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. ESC17
SHEET NO. 293 OF 549

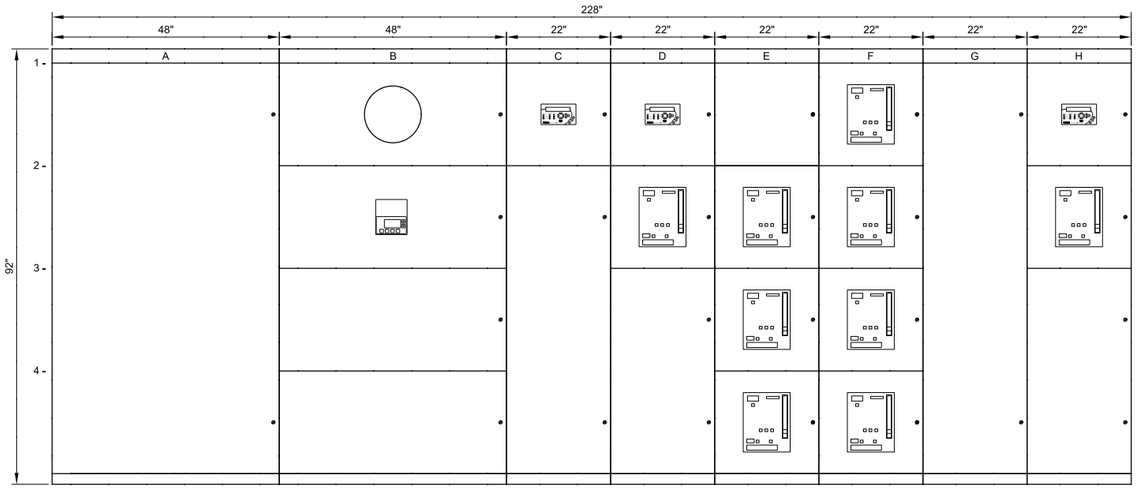
PROJECT NO. 8930A.11 FILE NAME: 8930A1100ESC17.dgn

Plot Date: 16-SEP-2013 6:03:02 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: vcastro

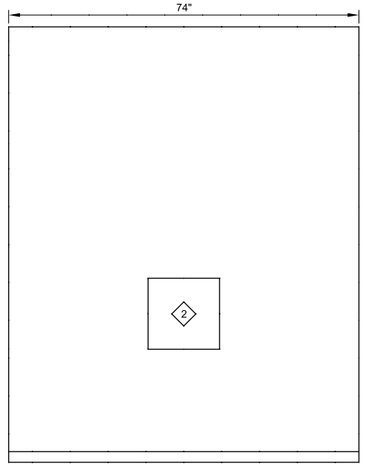
Plot Date: 16-SEP-2013 5:56:32 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

KEY NOTES:

1. UTILITY METER SWITCHBOARD SECTION, ASSOCIATE TRANSFORMERS AND TAP TO FIRE PUMP TO CONFORM TO ARTICLE 695.3.A.1 OF N.E.C. CODE.
2. BUS DUCT CONNECTION. REFER TO PG&E DOCUMENT #063929 FOR CONNECTION.



A FRONT
SCALE: 3/4"=1'-0"
FILE: 8930A110E604.dgn



B SIDE
SCALE: 3/4"=1'-0"
FILE: 8930A110E604.dgn

LOW VOLTAGE SWITCHGEAR BREAKER AND DEVICE TABLE

COMPARTMENT	BREAKER/ DEVICE	DESCRIPTION	LONG TIME	SHORT TIME	INSTANTANEOUS	GROUND FAULT	ACCESSORIES	CONTROL VOLTAGE
A		INCOMMING BUS DUCT SECTION						
B1		PG & E METERING CABINET						
B2		SPD						
B3		FIRE PUMP BREAKER						
B4		SPACE						
C1		ATS RELAY, BATTERIES						
C2		TRANSITION						
D1		SSM1						
D2	MS-M	MAIN INCOMING BREAKER	X	X	X	X	1, 8, 12	120V
E1	MS-F1	SPACE	-	-	-	-		120V
E2	MS-F2	SWBD-A ADMINISTRATIVE BLDG	X	X	X	X		120V
E3	MS-F4	MCC-C ELECTRICAL ROOM	X	X	X	X		120V
E4	MS-F8	MCC-F DEWATERING BLDG	X	X	X	X		120V
F1	MS-F5	EQUIPPED SPARE	X	X	X	X		120V
F2	MS-F3	SWBD-B MAINTENANCE BLDG	X	X	X	X		120V
F3	MS-F6	MCC-D ELECTRICAL ROOM	X	X	X	X		120V
F4	MS-F7	MCC-E DEWATERING BLDG	X	X	X	X		120V
G		TRANSITION						
H1		SSM1						
H2	MS-G	GENERATOR BREAKER	X	X	X	X	1, 8, 12	120V

SETTINGS TO BE DETERMINED PER PROTECTIVE DEVICE COORDINATION STUDY
ACCESSORY CODE:
1= ELECTRIC OPERATOR
2= REMOTE CLOSE SOLENOID
3= SHUNT TRIP
4= KEY INTERLOCK DEVICE
5= AUXILIARY STATUS SWITCH
6 = REMOTE CHARGE DEVICE
7= BELL ALARM
8= PADLOCKABLE PUSHBUTTON COVER
9= TERMINAL BLOCKS
10= OPERATIONS COUNTER
11= NEUTRAL CURRENT SENSOR

REV	DATE	BY	DESCRIPTION

DESIGNED IRV
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo®

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
MAIN SWITCHGEAR SWGR-MS ELEVATION

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. EOL01
SHEET NO. 294 OF 549

21KV PG&E
SERVICE FEEDER

PG&E SERVICE ENTRANCE

PG&E TRANSFORMER
2500 KVA
21KV, 480V/277V

SPD

GENERATOR ROOM

70-GEN-805

1500KW
480V/277V
3 Ø
3W
EMERGENCY GENERATOR

(2256A MAX AT 0.8 PT)
MAX 3 PHASE FAULT CURRENT
12,239 AMPS

100% RATED
LSI-P
2000A

SS
65 KAIC

100% RATED
LSI-P
1500A

400 AF
3P
110 AT

TM
65 KAIC

LOAD BANK
(1000KW)

6{3-350 KCMIL & 1-4 KCMIL (G)}

7{3-750 KCMIL & 1-4 KCMIL (G)}

3-#6 (Ø) & 1-#3 (G)

3-#6 (Ø) & 1-#3 (G)

FIRE PUMP ROOM

MS-D
3200 AF
3P
2500 AT

SS
65 KAIC

SSM

AUTOMATIC
TRANSFER
CONTROLLER (ATC)

MS-H
3200 AF
3P
2000 AT

SS
65 KAIC

SSM

MAIN SWITCHGEAR SWGR-MS 480V, 3200A, 3Ø, 3W, 65KASC RMS SYM BRACING

MS-E1	MS-E2	MS-E3	MS-E4	MS-F1	MS-F2	MS-F3	MS-F4
	800AF 3P 200AT SS 65KAIC	800AF 3P 200AT SS 65KAIC	800AF 3P 400AT SS 65KAIC	1200AF 3P 800AT SS 65KAIC	800AF 3P 400AT SS 65KAIC	1200AF 3P 1000AT SS 65KAIC	1200AF 3P 1000AT SS 65KAIC
SPACE	SWBD-A ADMINISTRATIVE BUILDING	SWBD-B MAINTENANCE BUILDING	MCC-C ELECTRICAL ROOM (DWG. EOL04)	EQUIPPED SPARE	MCC-D ELECTRICAL ROOM (DWG. EOL06)	MCC-E DEWATERING BUILDING (DWG. EOL10)	MCC-F DEWATERING BUILDING (DWG. EOL12)
	2{3-#2/0 (Ø) & 1-#6 (G)}	2{3-#3/0 (Ø) & 1-#4 (G)}	2{3-250 KCMIL & 1-#3 (G)}		2{3-250 KCMIL & 1-#3 (G)}	4{3-750 KCMIL & 1-#1/0 (G)}	4{3-750 KCMIL & 1-#1/0 (G)}

70-VCP-720

40

70-PMP-720

FIRE PUMP

KEY NOTES:

1. UTILITY METER SWITCHBOARD SECTION, ASSOCIATE TRANSFORMERS AND TAP TO FIRE PUMP TO CONFORM TO ARTICLE 695.3.A.1 OF N.E.C. CODE.
2. 3000A BUS DUCT, CONTRACTOR SUPPLIED.
3. CT PROVIDED AND INSTALLED BY P.G. & E.
4. GROUNDING PER LOCAL UTILITY STANDARDS.
5. 3000A BUSDUCT ENTRANCE TERMINATOR BOX. PG&E SUPPLIED. REFER TO PG&E DOCUMET #063929.
6. 3000A BUSDUCT, 480V/277V, 3(Ø), 4W WITH GROUND BUS, 65KAIC RMS SYM BRACING.
7. SWITCHGEAR INTERNAL BATTERY SYSTEM WITH UNDERVOLTAGE RELAY 74.
8. PROVIDED WITH PROTECTIVE RELAYING 47N, 27, 59, 81-O/U, 50G.
9. PROVIDED WITH SOLID STATE MULTI FUNCTION POWER METER.
10. FIRE PUMP BREAKER IN ISOLATED COMPARTMENT.
11. MAIN AND GENERATOR BREAKER ARE ELECTRONICALLY OPERATED. ALL LOAD BREAKERS ARE MECHANICALLY OPERATED.

REV	DATE	BY	DESCRIPTION

DESIGNED IRV
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER · JAMES R. VARLEY · No. 12879 · ELECTRICAL · STATE OF CALIFORNIA · 9/16/2013

carollo®

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY

LOS OSOS WATER RECYCLING FACILITY PROJECT

ELECTRICAL

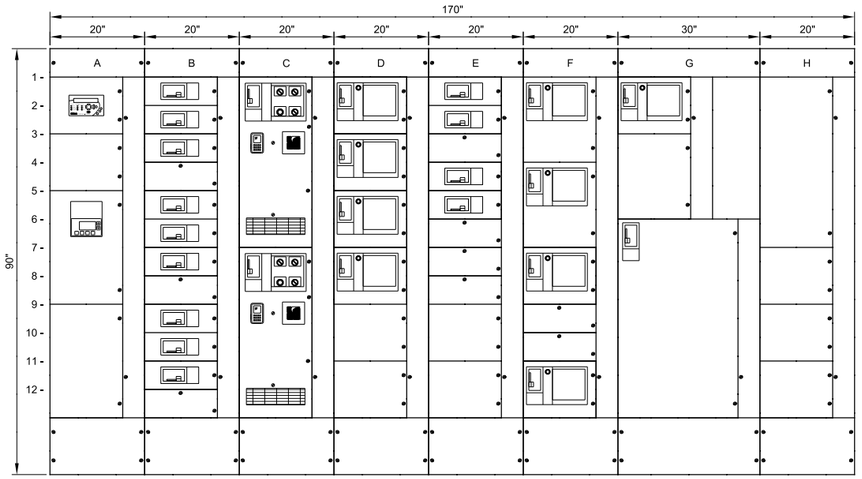
MAIN SWITCHGEAR SWGR-MS
ONE-LINE DIAGRAM

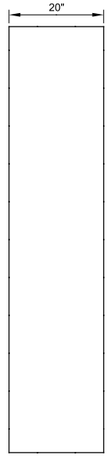
VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. EOL02
SHEET NO. 295 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A110EOL02.dgn

Plot Date: 16-SEP-2013 5:56:54 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson





A - FRONT
SCALE: 3/4"=1'-0"
FILE: 8930A11-089-600.dgn

B - SIDE
SCALE: 3/4"=1'-0"
FILE: 8930A11-089-600.dgn

A1- POWER MONITOR

A3- SPACE

A5- SPD

A9- MAIN LUGS

B1- 31-EMD-244 UV DISINFECTION CHANNEL NO. 1 INLET VALVE

B2- 31-UVPDC-241A/B/C UV DISINFECTION CHANNEL NO. 1 TRANSFORMER TR-C1

B3- 31-EDR-247 UV DISINFECTANT CHANNEL NO. 1 PW REFILL VALVE

B4- SPACE

B5- 31-EMD-246 UV DISINFECTION CHANNEL NO. 3 INLET VALVE

B6- 31-UVPDC-243A/B/C UV DISINFECTION CHANNEL NO. 3 TRANSFORMER TR-C2

B7- 31-EDR-249 UV DISINFECTANT CHANNEL NO. 3 PW REFILL VALVE

B8- SPACE

B9- 31-EDR-240 TERTIARY FILTER TO WASTE VALVE

B10- 30-EDR-211 TERTIARY FILTER NO. 1 INLET VALVE

B11- 30-VCP-210 TERTIARY FILTER NO. 1

B12- SPACE

C1- 28-PMP-181 FILTER INFLUENT PUMP NO.1

C7- 28-PMP-182 FILTER INFLUENT PUMP NO. 2

D1- 23-PMP-131 SECONDARY SCUM PUMP NO. 1

D3- 21-CLR-111 SECONDARY CLARIFIER NO. 1 DRIVER

D5- 28-PMP-185 FLASH MIX PUMP NO.1

D7- 60-PMP-711 GROUND WATER WELL PUMP NO. 1

D9- SPACE

D11- SPACE

E1- 21-HOI-111 SECONDARY CLARIFIER NO. 1 BASKET HOIST

E2- 23-EDR-130 SCUM MIXING VALVE

E3- SPACE

E4- 70-VCP-721 JOCKEY PUMP

E5- 28-EAM-188 PLANT WATER SUPPLEMENT FLOW VALVE

E6- SPACE

E7- SPACE

E8- SPACE

E9- SPACE

E11- SPACE

F1- 60-PMP-731 NON POTABLE WATER PRESSURIZATION PUMP NO. 1

F4- 60-PMP-733 NON POTABLE WATER PRESSURIZATION PUMP NO. 3

F7- 60-PMP-761 POTABLE WATER PRESSURIZATION PUMP NO. 1

F10- 60-PMP-763 POTABLE WATER PRESSURIZATION PUMP NO. 3

G1- 29-FLO-201 (FUTURE FLOCCULATION)

G3- SPACE

G6- T-BC TRANSFORMER

H1- LP-BC LIGHTING PANELBOARD

H7- SPACE

H9- SPACE

G11- SPACE

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

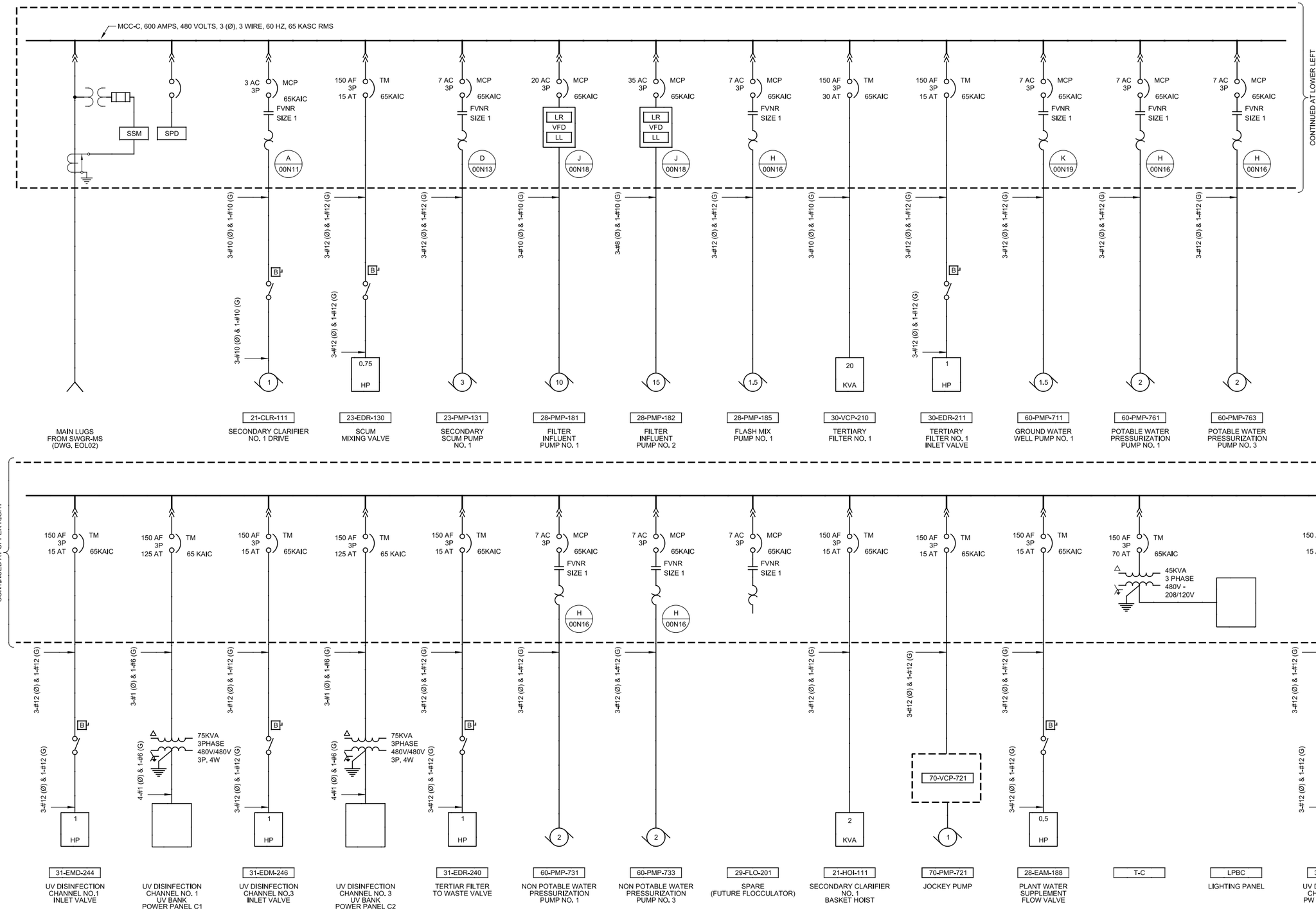
SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
MCC-C ELEVATION

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. EOL03
SHEET NO. 296 OF 549

PROJECT NO. 8930A.11
FILE NAME: 8930A110EOL03.dgn

Plot Date: 16-SEP-2013 5:57:15 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson



REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — TARA A. VARELA — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY

LOS OSOS WATER RECYCLING FACILITY PROJECT

ELECTRICAL

MCC-C
ONE-LINE DIAGRAM

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. EOL04
SHEET NO. 297 OF 549

Plot Date: 16-SEP-2013 5:57:34 PM
User: AWulff
Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1
LAST SAVED BY: ejohnson

PROJECT NO. 8930A.11 FILE NAME: 8930A110EOL04.dgn

PANEL LP-BC

9/13/2013

LOCATION:	MCC-C	NEMA:	1	PH A WEIGHTED VA	8316					
VOLTS:	208 / 120	FEED:	BOTTOM	PH B WEIGHTED VA	9899					
PHASE & WIRE:	3PH 4W	MTG.	SURFACE	PH C WEIGHTED VA	9862					
INTERRUPT:	18 KAIC	BUS RATING:	150							
		MAIN:	CB	EQUIP SIZING VA	29697					
		MAIN RATING	125 AF 90 AT	PANEL AMPS	82.4					

I/C/F	DESCRIPTION	LOAD (VA)	BKR	CIR	Ø	CIR	BKR	LOAD (VA)	DESCRIPTION	I/C/F
C	70-VCP-806 BATTERY CHARGER	180	20A-1P	1	A	2	30A-1P	3000	NP-1	C
C	70-VCP-806 JACKET WATER HEATER	4500	60A-2P	3	B	4	20A-1P	500	70-VCP-806 GENERATOR CONTROL PANEL POWER	C
C		4500		5	C	6	20A-1P	250	SODIUM HYDROCHLORITE PUMP NO. 2 (32-PMP-282)	C
I	ALUM PUMP NO. 1 (32-PMP-271)	250	20A-1P	7	A	8	20A-1P	250	SODIUM HYDROCHLORITE PUMP NO. 4 (32-PMP-284)	C
I	SODIUM HYDROCHLORITE PUMP NO. 1 (32-PMP-281)	250	20A-1P	9	B	10	20A-1P	864	SODIUM HYDROCHLORITE POTABLE WATER TANK	C
I	SODIUM HYDROCHLORITE PUMP NO. 3 (32-PMP-283)	250	20A-1P	11	C	12	20A-1P	864	SODIUM HYDROCHLORITE FIRE WATER TANK VALVE	C
I	SODIUM HYDROCHLORITE PUMP NO. 5 (32-PMP-285)	250	20A-1P	13	A	14	20A-1P	1656	RESERVOIR MIXER	C
C	GENERATOR DAY TANK (70-VCP-804)	100	20A-1P	15	B	16	20A-1P	696	GEN ROOM EXHAUST FAN NO. 2 (70-EF-802)	C
C	GEN ROOM EXHAUST FAN NO. 1 (70-EF-801)	696	20A-1P	17	C	18	20A-1P	600	FIRE ROOM EXHAUST FAN (70-EF-721)	C
C	CCTV CAMERA MAIN ENTRANCE	180	20A-1P	19	A	20	20A-1P	333	32-EDR-281B	I
C	INTERCOMM & CARD READER MAIN ENTRANCE	360	20A-1P	21	B	22	20A-1P	333	32-EDR-281C	I
C	CCTV CAMERA SERVICE ENTRANCE (TBD)	180	20A-1P	23	C	24	20A-1P	333	32-EDR-281D	I
C	INTERCOMM & CARD REDR SERVICE ENTRANCE (TBD)	360	20A-1P	25	A	26	20A-1P	360	SPARE	
C	GENERATOR FUEL TANK (70-VCP-803)	100	20A-1P	27	B	28	20A-1P	333	NON-POTABLE WATER STORAGE (60-EDR-713)	
	SPARE		20A-1P	29	C	30	20A-1P	333	POTABLE WATER STORAGE (60-EDR-760)	

PANEL PP-C1

9/13/2013

LOCATION:	MCC-F	NEMA:	1	PH A WEIGHTED VA	20419					
VOLTS:	480 / 277	FEED:	BOTTOM	PH B WEIGHTED VA	20419					
PHASE & WIRE:	3PH 4W	MTG.	MCC	PH C WEIGHTED VA	20419					
INTERRUPT:	18 KAIC	BUS RATING:	250							
OPTIONS:	SPD	MAIN:	MLO	EQUIP SIZING VA	61257					
				PANEL AMPS	73.7					

I/C/F	DESCRIPTION	LOAD (VA)	BKR	CIR	Ø	CIR	BKR	LOAD (VA)	DESCRIPTION	I/C/F
C	UV DISINFECTION CHANNEL #1 BANK 1-1	5445	20A-3P	1	A	2	20A-3P	5445	UV DISINFECTION CHANNEL #1 BANK 1-2	C
C		5445	-	3	B	4	-	5445		C
C		5445	-	5	C	6	-	5445		C
C	UV DISINFECTION CHANNEL #1 BANK 1-3	5445	20A-3P	7	A	8	20A-3P		SPARE	C
C		5445	-	9	B	10	-			C
C		5445	-	11	C	12	-			C

PANEL PP-C2

9/13/2013

LOCATION:	MCC-F	NEMA:	1	PH A WEIGHTED VA	20419					
VOLTS:	480 / 277	FEED:	BOTTOM	PH B WEIGHTED VA	20419					
PHASE & WIRE:	3PH 4W	MTG.	MCC	PH C WEIGHTED VA	20419					
INTERRUPT:	18 KAIC	BUS RATING:	250							
OPTIONS:	SPD	MAIN:	MLO	EQUIP SIZING VA	61257					
				PANEL AMPS	73.7					

I/C/F	DESCRIPTION	LOAD (VA)	BKR	CIR	Ø	CIR	BKR	LOAD (VA)	DESCRIPTION	I/C/F
C	UV DISINFECTION CHANNEL #3 BANK 3-1	5445	20A-3P	1	A	2	20A-3P	5445	UV DISINFECTION CHANNEL #3 BANK 3-2	C
C		5445	-	3	B	4	-	5445		C
C		5445	-	5	C	6	-	5445		C
C	UV DISINFECTION CHANNEL #3 BANK 3-3	5445	20A-3P	7	A	8	20A-3P		SPARE	C
C		5445	-	9	B	10	-			C
C		5445	-	11	C	12	-			C

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN CC
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA
9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY

LOS OSOS WATER RECYCLING FACILITY PROJECT

ELECTRICAL

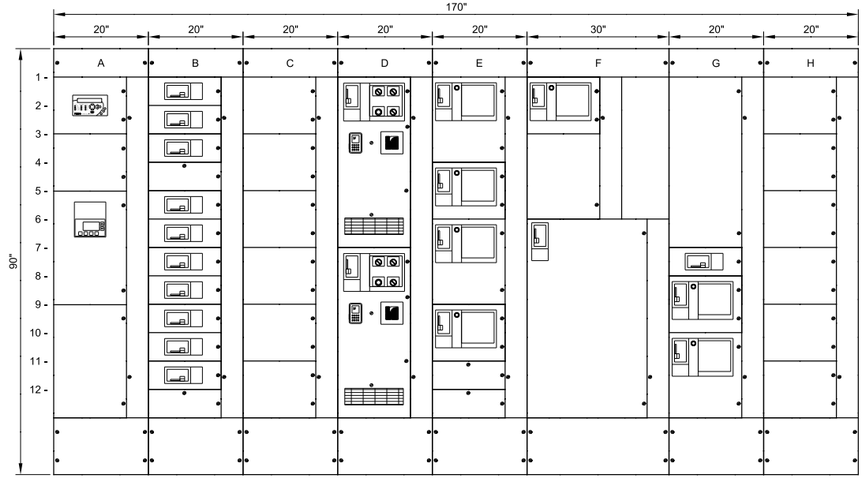
MCC-C
PANELBOARD SCHEDULE

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

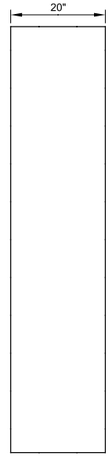
JOB NO. 8930A.11
DRAWING NO. EOL05
SHEET NO. 298 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A110EOL05.dgn

Plot Date: 16-SEP-2013 5:57:55 PM
User: AWulff
Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1
LAST SAVED BY: ejohnson



A - FRONT
SCALE: 3/4=1'-0"
FILE: 8930A11-089-601.dgn



B - SIDE
SCALE: 3/4"=1'-0"
FILE: 8930A11-089-601.dgn

A1- POWER MONITOR

A3- SPACE

A5- SPD

A9- MAIN LUGS

B1- 31-EMD-245 UV DISINFECTION CHANNEL NO. 2 INLET VALVE

B2- 31-UVPDC-242A/B/C UV DISINFECTION CHANNEL NO. 2 TRANSFORMER TR-D1

B3- 31-EDR-248 UV DISINFECTANT CHANNEL NO. 3 PW REFILL VALVE

B4- SPACE

B5- 31-HOI-241 MONORAIL NO. 1

B6- 30-EDR-221 TERTIARY FILTER NO. 2 INLET VALVE

B7- 30-VCP-220 TERTIARY FILTER NO. 2

B8- 05-GAT-820 MAIN ENTRANCE GATE

B9- 06-GAT-840 SERVICE ENTRANCE GATE

B10- 70-HTR-722 FIRE PUMP ROOM UNIT HEATER

B11- 70-ACU-800 ELECTRICAL ROOM ACU UNIT

B12- SPACE

C1- SPACE

C3- SPACE

C5- SPACE

C7- SPACE

C9- SPACE

C11- SPACE

D1- 28-PMP-183 FILTER INFLUENT PUMP NO. 3

D7- 28-PMP-184 FILTER INFLUENT PUMP NO. 4

E1- 60-PMP-732 NON POTABLE WATER PRESSURIZATION PUMP NO. 2

E4- 21-CLR-112 SECONDARY CLARIFIER NO. 2 DRIVE

E6- 23-PMP-132 SECONDARY SCUM PUMP NO. 2

E9- 28-PMP-186 FLASH MIX PUMP NO. 2

E11- SPACE

E12- SPACE

F1- 29-FLO-202 (FUTURE FLOCCULATION)

F3- SPACE

F6- T-BD TRANSFORMER

G1- LP-BD LIGHTING PANELBOARD

G7- 21-HOI-112 SECONDARY CLARIFIER NO. 2 BASKET HOIST

G8- 60-PMP-712 GROUND WATER WELL PUMP NO. 2

G10- 60-PMP-762 POTABLE WATER PRESSURIZATION PUMP NO. 2

H1- SPACE

H3- SPACE

H5- SPACE

H7- SPACE

H9- SPACE

H11- SPACE

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY

LOS OSOS WATER RECYCLING FACILITY PROJECT

ELECTRICAL

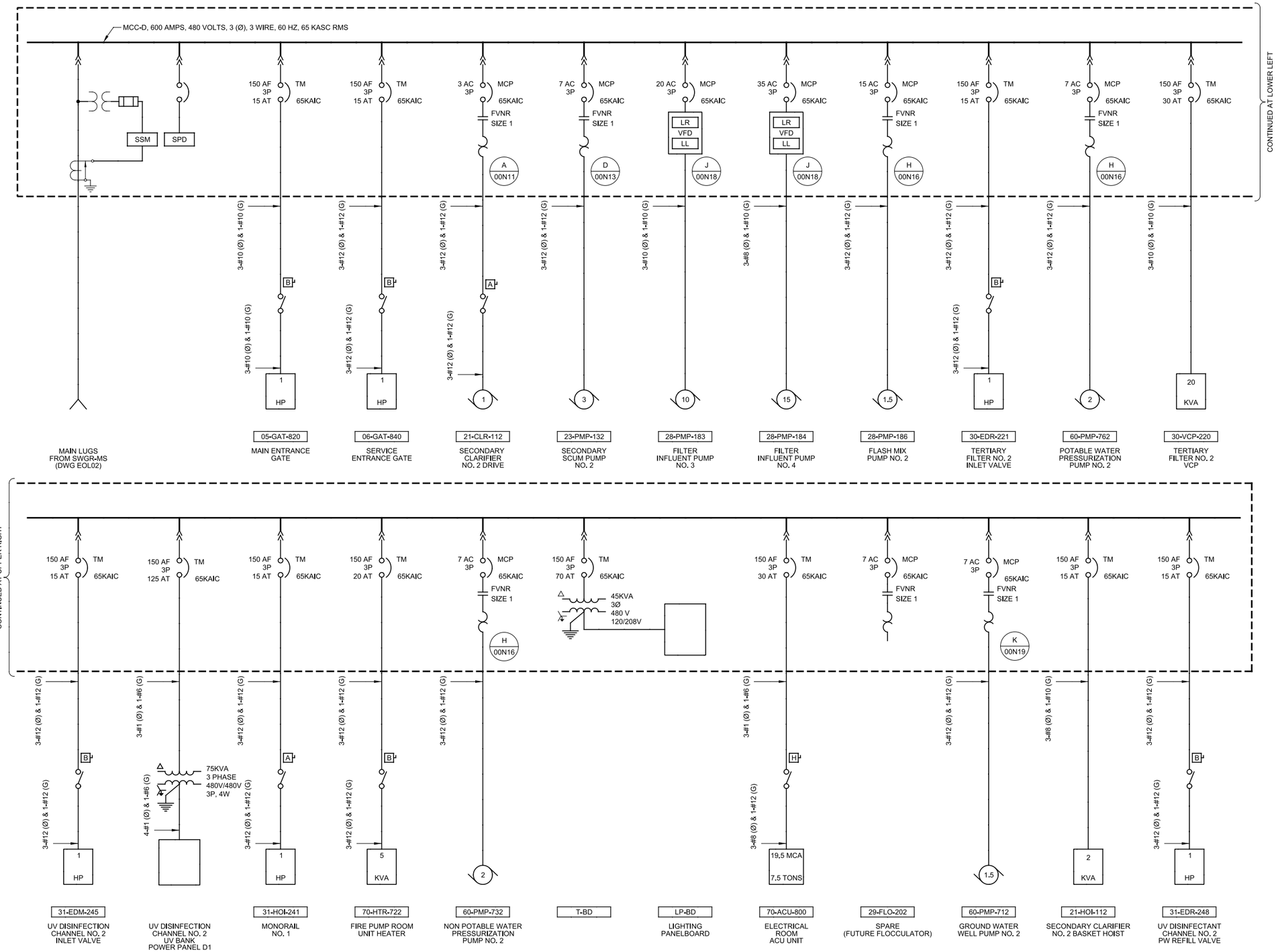
MCC-D ELEVATION

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. EOL06
SHEET NO. 299 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A110EOL06.dgn

Plot Date: 16-SEP-2013 5:58:14 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson



REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — TARA VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY

LOS OSOS WATER RECYCLING FACILITY PROJECT

ELECTRICAL

MCC-D
ONE-LINE DIAGRAM

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. EOL07
SHEET NO. 300 OF 549

LAST SAVED BY: ejohnson
Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1
Plot Date: 16-SEP-2013 5:58:32 PM
User: AWulff

PROJECT NO. 8930A.11 FILE NAME: 8930A110EOL07.dgn

PANEL LP-BD

9/13/2013

LOCATION: MCC-D
VOLTS: 208 / 120
PHASE & WIRE: 3PH 4W
INTERRUPT: 18 KAIC

NEMA: 1
FEED: BOTTOM
MTG. MCC
BUS RATING: 225
MAIN: MLO

PH A WEIGHTED VA: 9983
PH B WEIGHTED VA: 7301
PH C WEIGHTED VA: 6947
EQUIP SIZING VA: 29949
PANEL AMPS: 83.1

I/C/F	DESCRIPTION	LOAD (VA)	BKR	CIR	Ø	CIR	BKR	LOAD (VA)	DESCRIPTION	I/C/F
	UV FILTER MAIN PLC PANEL 31-UVDCC-240	2880	30A-1P	1	A	2	20A-1P	360	RECPT: SEC. CLARIFIER NO. 1& NO. 2 & SCUM PUMP	I
I	UV FILTER ANALYSER (31-COS-247)	768	20A-1P	3	B	4	20A-1P	938	LIGHT: SEC. CLARIFIER NO. 1& NO. 2 & SCUM PUMP	I
C	ALUM PUMP NO. 2 (32-PMP-272)	250	20A-1P	5	C	6	20A-1P	180	RECPT: FILTER INFLUENT PUMP STATION	I
	SPARE		20A-1P	7	A	8	20A-1P	134	LIGHT: FILTER INFLUENT PUMP STATION	I
I	RECPT: POTABLE WATER PUMP STATION	360	20A-1P	9	B	10	20A-1P	642	LIGHT: UV FILTERS	C
I	LIGHT: POTABLE WATER PUMP STATION	268	20A-1P	11	C	12	20A-1P	938	LIGHT: UV FILTERS	C
C	LIGHT:ELECT BLDG EXTERIOR	266	20A-1P	13	A	14	20A-1P	900	RECPT: UV FILTERS	I
	SPARE		20A-1P	15	B	16	20A-1P	900	RECPT: UV FILTERS	I
	SPARE		20A-1P	17	C	18	20A-1P	390	LIGHT: TERTIARY FILTERS	C
	SPARE		20A-1P	19	A	20	20A-1P	360	RECPT: TERTIARY FILTERS	I
	SPARE		20A-1P	21	B	22	20A-1P	360	RECPT: TERTIARY FILTERS	I
	SPARE		20A-1P	23	C	24	20A-1P	1144	LIGHT: CHEMICAL FACILITY	C
	SPARE		20A-1P	25	A	26	20A-1P	360	LIGHT & RECEPTACLE: SCUM PUMP STATION	C
	SPARE		30A-1P	27	B	28	20A-1P	360	RECPT: CHEMICAL FACILITY	I
	SPARE		20A-1P	29	C	30	20A-1P	360	RECPT: CHEMICAL FACILITY	I
	SPARE		20A-1P	31	A	32	20A-1P	1430	LIGHT: ELECT RM	C
	SPARE		20A-1P	33	B	34	20A-1P	1098	LIGHT: CONTROL RM, STORAGE RM #1	C
	SPARE		20A-1P	35	C	36	20A-1P	1144	LIGHT: FIRE PUMP RM, STORAGE RM #2	C
	SPARE		20A-1P	37	A	38	20A-1P	1647	LIGHT: GENERATOR RM	C
	SPARE		20A-1P	39	B	40	20A-1P	1440	RECPT: ELECT RM, CONTROL RM, STORAGE RM #1	I
	EMERGENCY LIGHTING: ELECTRICAL BUILDING	37	20A-1P	41	C	42	20A-1P	1260	RECPT: FIRE PUMP RM, STORAGE RM #2, GENERATOR RM	I

PANEL PP-D1

9/13/2013

LOCATION: MCC-F
VOLTS: 480 / 277
PHASE & WIRE: 3PH 4W
INTERRUPT: 18 KAIC
OPTIONS: SPD

NEMA: 1
FEED: BOTTOM
MTG. MCC
BUS RATING: 250
MAIN: MLO

PH A WEIGHTED VA: 20419
PH B WEIGHTED VA: 20419
PH C WEIGHTED VA: 20419
EQUIP SIZING VA: 61257
PANEL AMPS: 73.7

I/C/F	DESCRIPTION	LOAD (VA)	BKR	CIR	Ø	CIR	BKR	LOAD (VA)	DESCRIPTION	I/C/F
C	UV DISINFECTION CHANNEL #2 BANK 2-1	5445	20A-3P	1	A	2	20A-3P	5445	UV DISINFECTION CHANNEL #2 BANK 2-2	C
C		5445	-	3	B	4	-	5445		C
C		5445	-	5	C	6	-	5445		C
C	UV DISINFECTION CHANNEL #2 BANK 2-3	5445	20A-3P	7	A	8	20A-3P		SPARE	C
C		5445	-	9	B	10	-			C
C		5445	-	11	C	12	-			C

REV	DATE	BY	DESCRIPTION

DESIGNED: AMS
DRAWN: VCP
CHECKED: RAM
DATE: SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

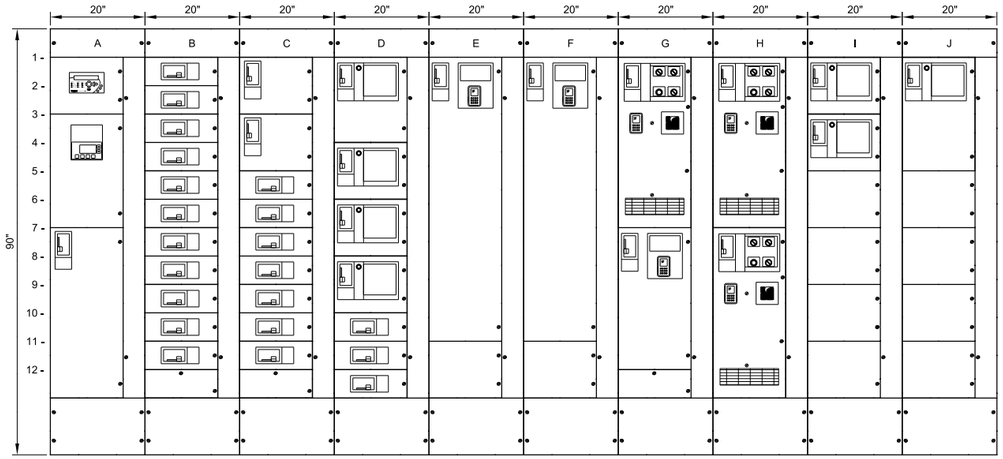
SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
MCC-D
PANELBOARD SCHEDULE

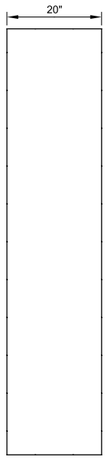
VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. EOL08
SHEET NO. 301 OF 549

PROJECT NO. 8930A.11
FILE NAME: 8930A110EOL08.dgn

LAST SAVED BY: ejohnson
Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1
Plot Date: 16-SEP-2013 5:58:51 PM
User: AWulff





A - FRONT

SCALE: 3/4"=1'-0"
FILE: 8930A11-089-602.dgn

B - SIDE

SCALE: 3/4"=1'-0"
FILE: 8930A11-089-602.dgn

A1- POWER MONITOR

A3- SPD

A7- MAIN BREAKER

B1- 03-EDR-321 REW POND NO. 1 INLET GATE

B2- 03-EDR-323 REW POND NO. 1 OUTLET GATE

B3- 50-EDR-421 DEWATERING INLET VALVE NO. 1

B4- 50-EDR-424 DEWATERING OULET VALVE NO. 1

B5- 50-GRI-422 DEWATERING FEED GRINDER NO. 1

B6- 50-EDM-413 SLUDGE STOREAGE TANK NO. 1 GATE WEIR GATE NO. 1

B7- 50-EDM-414 SLUDGE STOREAGE TANK NO. 1 GATE WEIR GATE NO. 2

B8- 10-VCP-040 SCREENING NO. 1

B9- 50-EDR-404 BLOWER NO. 1 DISCHARGE VALVE

B10- 50-EDR-407 BLOWER CROSS-TIE VALVE NO. 1

B11- 50-EAM-128 WAS ISOLATION VALVE NO. 1

B12- 03-EDR-322 (FUTURE)

C1- 20-VFD-091 MECHANICAL AERATOR NO. 1

C3- 20-VFD-092 MECHANICAL AERATOR NO. 2

C5- 10-EDR-041 SCREEN INLET GATE NO. 1

C6- 10-EDR-042 SCREEN OUTLET GATE NO. 1

C7- 20-EDM-094 MIX LIQUOR SPLITTER WEIR GATE NO. 1

C8- 50-EDR-417 SLUDGE STORAGE TANK NO. 1 DEWATERING FEED VALVE

C9- 50-EDR-411 SLUDGE STORAGE TANK NO. 1 WAS FEED VALVE

C10- 50-EAM-124 RAS SUCTION VALVE NO. 1

C11- 51-PRE-431 SCREW PRESS NO. 1

C12- SPACE

D1- 20-MIX-090 ANOXIC MIXER NO. 1

D4- 51-EF-474 EXHAUST FAN NO. 4

D6- 51-SF-477 SUPPLY FAN NO. 1

D8- 51-EF-473 EXHAUST FAN NO. 3

D10- 51-DRV-478A ROLL UP DOOR NO. 1

D11- 51-DRV-478B ROLL UP DOOR NO. 2

D12- 51-DRV-478C ROLL UP DOOR NO. 3

E1- 40-PMP-301 EFFLUENT PUMP NO. 1

E11- SPACE

F1- 40-PMP-303 EFFLUENT PUMP NO. 3

F11- SPACE

G1- 50-PMP-423 DEWATERING FEED PUMP NO. 1

G7- 50-BLO-401 SLUDGE AERATION BLOWER NO. 1

G12- SPACE

H1- 50-PMP-121 RAW/WAS PUMP NO.1

H7- 04-PMP-501 PLANT DRAIN PUMP NO.1

I1- 04-PMP-601 STORM WATER PUMP NO. 1

I3- 11-FAN-071 ODOR CONTROL FAN NO. 1

I5 SPACE

I7- SPACE

I9- SPACE

I11- SPACE

J1- 51-CNV-433 CAKE CONVEYOR NO. 1

J5- SPACE

J7- SPACE

J9- SPACE

J11- SPACE

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER · JAMES R. VARLEY · No. 12679 · ELECTRICAL · STATE OF CALIFORNIA · 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY

LOS OSOS WATER RECYCLING FACILITY PROJECT

ELECTRICAL

MCC-E ELEVATION

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. EOL09
SHEET NO. 302 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A110EOL09.dgn

Plot Date: 16-SEP-2013 5:59:10 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: gjohnson

MCC-E, 1200 AMPS, 480 VOLTS, 3 (Ø), 3 WIRE, 60 HZ, 65 KASC RMS

1200 AF 3P 1000 AT SS 65KAIC	250 AC 3P MCP 65KAIC	250 AC 3P MCP 65KAIC	150 AF 3P 15 AT TM 65KAIC	150 AF 3P 15 AT TM 65KAIC	100 AC 3P MCP 65KAIC	45 AC 3P MCP 65KAIC	150 AF 3P 15 AT TM 65KAIC	150 AF 3P 15 AT TM 65KAIC	150 AF 3P 20 AT TM 65KAIC	150 AF 3P 30AT TM 65KAIC	
SSM, SPD	RVSS	RVSS			RVSS	LR VFD LL					
	F 00N15	F 00N15			M 00N21	L 00N20					
3-#2/0 (Ø) & 1-#4 (G)	3-#2/0 (Ø) & 1-#4 (G)	3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	3-#4 (Ø) & 1-#6 (G)	3-#8 (Ø) & 1-#10 (G)	3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	3-#10 (Ø) & 1-#10 (G)	
		B	B			B	B	B		3-#12 (Ø) & 1-#12 (G)	
		3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)							51-VCP-431	
100	100	2 HP	2 HP	50	20	1 HP	1 HP	5 HP	5		
40-PMP-301	40-PMP-303	03-EDR-321	03-EDR-323	50-BLO-401	50-PMP-423	50-EDR-421	50-EDR-424	50-GRI-422	51-PRE-431		
MAIN BREAKER FROM SWGR-MS (DWG EOL02)	EFFLUENT PUMP NO. 1	EFFLUENT PUMP NO. 3	REW POND NO. 1 INLET GATE	REW POND NO. 1 OUTLET GATE	SLUDGE AERATION BLOWER NO. 1	DEWATERING FEED PUMP NO. 1	DEWATERING INLET VALVE NO. 1	DEWATERING OUTLET VALVE NO. 1	DEWATERING FEED GRINDER NO. 1	SCREW PRESS NO. 1	

CONTINUED AT LOWER LEFT

CONTINUED AT UPPER RIGHT

150 AF 3P 15 AT TM 65KAIC	150 AF 3P 20 AT TM 65KAIC	15 AC 3P MCP 65KAIC	3 AC 3P MCP 65KAIC	150 AF 3P 15 AT TM 65KAIC	150 AF 3P 15 AT TM 65KAIC	150 AF 3P 30 AT TM 65 KAIC	150 AF 3P 15 AT TM 65KAIC	7 AC 3P MCP 65KAIC	30 AC 3P MCP 65KAIC	225 AF 3P 150 AT TM 65KAIC	225 AF 3P 150 AT TM 65KAIC	150 AF 3P 15 AT TM 65KAIC	20 AC 3P MCP 65KAIC	150 AF 3P 15 AT TM 65KAIC	
		TS2W SIZE 1	FVNR SIZE 1					FVNR SIZE 1	FVNR SIZE 2				LR VFD LL		
		Q 00N24	P 00N23					G 00N16	I 00N17				N 00N22		
3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	6-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	3-#4 (Ø) & 1-#10 (G)	3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	3-#8 (Ø) & 1-#10 (G)	3-#1/0 (Ø) & 1-#6 (G)	3-#1/0 (Ø) & 1-#6 (G)	3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	
B	B	B	B	B	B	3-#12 (Ø) & 1-#12 (G)	B	B		3-#1 (Ø) & 1-#6 (G)	3-#1 (Ø) & 1-#6 (G)	B		B	
3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	6-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	10-VCP-040	3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	3-#8 (Ø) & 1-#10 (G)	18-PULSE VFD LL	18-PULSE VFD LL	3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	
						3-#12 (Ø) & 1-#12 (G)				E 00N14	E 00N14				
5 HP	5 HP	7.5	.5	0.75 HP	2 HP	5 5	2 HP	3	15	75	75	2 HP	7.5	1 HP	
50-EDM-413	50-EDM-414	51-SF-477	51-EF-473	50-EAM-128	10-EDR-041	10-CMP-044 10-MBS-043	10-EDR-042	11-FAN-071	20-MIX-090	20-VFD-091 20-AER-091	20-VFD-092 20-AER-092	20-EDM-094	50-PMP-121	50-EDR-417	
SLUDGE STORAGE TANK NO. 1 WEIR GATE NO. 1	SLUDGE STORAGE TANK NO. 1 WEIR GATE NO. 2	SUPPLY FAN NO. 1	EXHAUST FAN NO. 3	WAS ISOLATION VALVE NO. 1	SCREEN INLET GATE NO. 1	SCREENINGS NO. 1	SCREEN OUTLET GATE NO. 1	ODOR CONTROL FAN NO. 1	ANOXIC MIXER NO. 1	MECHANICAL AERATOR NO. 1	MECHANICAL AERATOR NO. 2	MIX LIQUOR SPLITTER WEIR GATE NO. 1	RAS/WAS PUMP NO. 1	SLUDGE STORAGE TANK NO. 1 DEWATERING FEED VALVE	

CONTINUED ON SHEET EOL13

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER JAMES R. VARLEY No. 12679 ELECTRICAL STATE OF CALIFORNIA 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
MCC-E
ONE-LINE DIAGRAM

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. EOL10
SHEET NO. 303 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A110EOL10.dgn

Plot Date: 16-SEP-2013 5:59:54 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

CONTINUED FROM SHEET EOL-12

MCC-E, 1200 AMPS, 480 VOLTS, 3 (Ø), 3 WIRE, 60 HZ, 65 KASC RMS

1	2	3	4	5	6	7	8	9	10
150 AF 3P 15 AT TM 65KAIC	150 AF 3P 15 AT TM 65KAIC	150 AF 3P 15 AT TM 65KAIC	150 AF 3P 15 AT TM 65KAIC	30 AC 3P MCP 65KAIC FVNR SIZE 1	3 AC 3P MCP 65KAIC FVNR SIZE 1	150 AF 3P 15 AT TM 65KAIC	30 AC 3P MCP 65KAIC FVNR SIZE 1	35 AC 3P MCP 65KAIC LR VFD LL	150 AF 3P 15 AT TM 65KAIC
				D 00N13	P 00N23		B 00N12	J 00N18	
3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	3-#10 (Ø) & 1-#10 (G)	3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	3-#6 (Ø) & 1-#8 (G)	3-#12 (Ø) & 1-#12 (G)
B	B	B	B		B	B			
3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)		3-#12 (Ø) & 1-#12 (G)				
1 HP	1 HP	1 HP	0.75 HP	5	.5	2 HP	10	15	.75 HP
50-EDR-404	50-EDR-407	50-EDR-411	50-EAM-124	04-PMP-601	51-EF-474	03-EDR-322	51-CNV-433	04-PMP-501	51-DRV-478A
BLOWER NO. 1 DISCHARGE VALVE	BLOWER CROSS-TIE VALVE NO. 1	SLUDGE STORAGE TANK NO. 1 WAS FEED VALVE	RAS SUCTION VALVE NO. 1	STORM WATER PUMP NO. 1	EXHAUST FAN NO. 4	REW POND NO. 1 INLET GATE FROM POND 3 (FUTURE)	CAKE CONVEYOR NO. 1	PLANT DRAIN PUMP NO. 1	ROLL UP DOOR NO. 1

11	12	13
150 AF 3P 15 AT TM 65KAIC	150 AF 3P 15 AT TM 65KAIC	150 AF 3P 15 AT TM 65KAIC
3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)
.75 HP	.75 HP	.75 HP
51-DRV-478B	51-DRV-478C	
ROLL UP DOOR NO. 2	ROLL UP DOOR NO. 3	

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA
9/16/2013

carollo®

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY

LOS OSOS WATER RECYCLING FACILITY PROJECT

ELECTRICAL

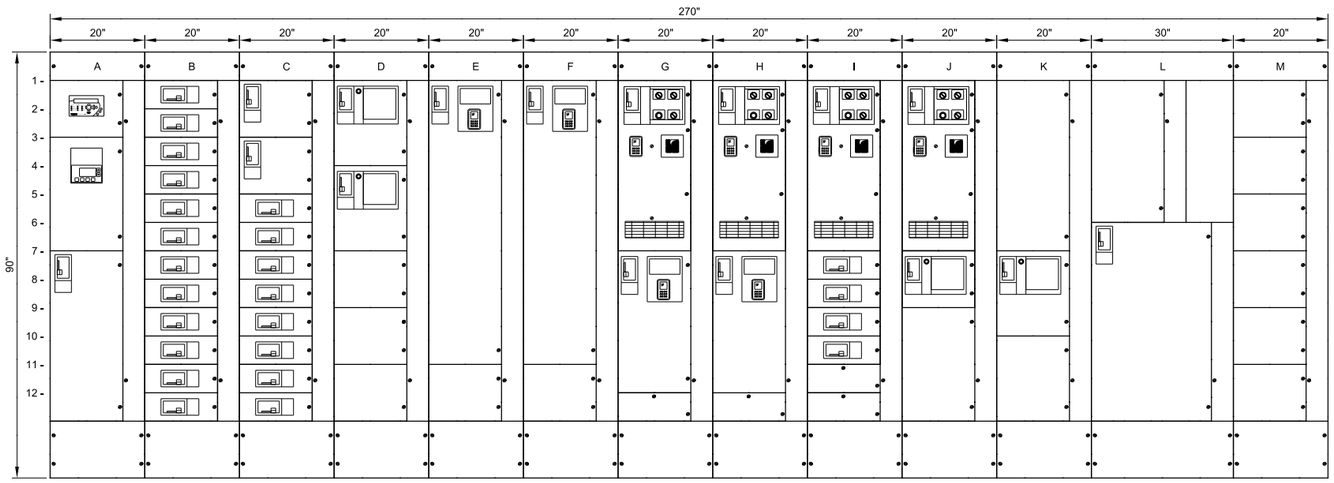
MCC-E
ONE-LINE DIAGRAM

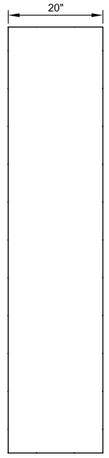
VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. EOL11
SHEET NO. 304 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A110EOL11.0dgn

Plot Date: 16-SEP-2013 6:00:13 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson





A FRONT
SCALE: 3/4"=1'-0"
FILE: 8930A11-089-603.dgn

B SIDE
SCALE: 3/4"=1'-0"
FILE: 8930A11-089-603.dgn

A1- POWER MONITOR
A3- SPD
A7- MAIN BREAKER

B1- 03-EDR-324 REW POND NO. 2 INLET GATE
B2- 03-EDR-325 REW POND NO. 2 OUTLET GATE
B3- 50-EDR-425 DEWATERING INLET VALVE NO. 2
B4- 50-EDR-428 DEWATERING OUTLET VALVE NO. 2
B5- 50-EAM-127 WAS DISCHARGE VALVE
B6- 50-EDM-415 STORAGE TANK NO. 2 WEIR GATE NO. 1
B7- 50-EDM-416 STORAGE TANK NO. 2 WEIR GATE NO. 2
B8- 10-VCP-050 SCREENINGS NO. 2
B9- 50-EDR-405 BLOWER NO. 2 DISCHARGE VALVE
B10- 50-EDR-406 BLOWER NO. 3 DISCHARGE VALVE
B11- 50-EDR-408 BLOWER CROSS-TIE VALVE NO. 2
B12- 51-PRE-432 SCREW PRESS NO. 2

C1- 20-VFD-101 MECHANICAL AERATOR NO. 3
C3- 20-VFD-102 MECHANICAL AERATOR NO. 4
C5- 10-EDR-051 SCREEN INLET GATE NO. 2
C6- 10-EDR-052 SCREEN OUTLET GATE NO. 2
C7- 20-EDM-104 MIXED LIQUOR SPLITTER WEIR GATE NO. 2
C8- 50-EDR-418 SLUDGE STORAGE TANK NO. 2 DEWATERING FEED VALVE
C9- 50-EDR-412 SLUDGE STORAGE TANK NO. 2 WAS FEED VALVE
C10- 50-EAM-125 RAS SUCTION VALVE NO. 2
C11- 50-EAM-129 WAS ISOLATION VALVE NO. 2
C12- 50-VCP-419 SLUDGE STORAGE TANK SUMP PUMPS

D1- 11-FAN-072 ODOR CONTROL FAN NO. 2
D4- 20-MIX-100 ANOXIC MIXER NO. 2
D7- SPACE
D9- SPACE
D11- SPACE

E1- 40-PMP-302 EFFLUENT PUMP NO. 2
E11- SPACE

F1- 40-PMP-304 EFFLUENT PUMP NO. 4
F11- SPACE

G1- 50-PMP-427 DEWATERING FEED PUMP NO. 2
G7- 50-BLO-402 SLUDGE AERATION BLOWER NO. 2
G12- SPACE

H1- 50-PMP-122 RAS/WAS PUMP NO. 2
H7- 50-BLO-403 SLUDGE AERATION BLOWER NO. 3
H12- SPACE

I1- 50-PMP-123 RAS/WAS PUMP NO. 3
I7- 50-GRI-426 DEWATERING GRINDER NO. 2
I8- 51-ACU-470 ELECTRICAL ROOM AIR CONDITIONING UNIT
I9- 51-HOI-431 MONORAIL HOIST NO. 1
I10- 51-HOI-432 MONORAIL HOIST NO. 2
I11- SPACE
I12- SPACE

J1- 04-PMP-502 PLANT DRAIN PUMP NO. 2
J7- 04-PMP-602 STORM WATER PUMP NO. 2
J9- SPACE

K1- LP-BF LIGHTING PANELBOARD
K7- 51-CNV-434 CAKE CONVEYOR NO. 2
K10- SPACE

L1- SPACE
L6- T-BF TRANSFORMER

M1- 51-EF-475 EXHAUST FAN NO. 5
M3- 51-EF-476 EXHAUST FAN NO. 6
M5- SPACE
M7- SPACE
M9- SPACE
M11- SPACE

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — JAMES R. VARELA — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA
9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
MCC-F ELEVATION

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. EOL12
SHEET NO. 305 OF 549

MCC-F, 1200 AMPS, 480 VOLTS, 3 (Ø), 3 WIRE, 60 HZ, 65 KASC RMS

CONTINUED AT LOWER LEFT

1200 AF 3P 1000 AT SS 65KAIC		250 AC 3P MCP 65KAIC	250 AC 3P MCP 65KAIC	150 AF 3P 15 AT TM 65KAIC	150 AF 3P 15 AT TM 65KAIC	100 AC 3P MCP 65KAIC	100 AC 3P MCP 65KAIC	45 AC 3P MCP 65KAIC	150 AF 3P 15 AT TM 65KAIC	150 AF 3P 15 AT TM 65KAIC	150 AF 3P 20 AT TM 65KAIC	150 AF 3P 15 AT TM 65KAIC
SSM, SPD		RVSS, F 00N15	RVSS, F 00N15	2 HP	2 HP	RVSS, M 00N21	RVSS, M 00N21	LR, VFD, LL, L 00N20	1 HP	1 HP	5 HP	5 HP
		3-#2/0 (Ø) & 1-#4 (G)	3-#2/0 (Ø) & 1-#4 (G)	3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	3-#4 (Ø) & 1-#6 (G)	3-#4 (Ø) & 1-#6 (G)	3-#8 (Ø) & 1-#10 (G)	3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)
		100	100	50	50	20						
MAIN BREAKER FROM SWGR-MS (DWG EOL02)		40-PMP-302 EFFLUENT PUMP NO. 2	40-PM-304 EFFLUENT PUMP NO. 4	03-EDR-324 REW POND NO. 2 INLET GATE	03-EDR-325 REW POND NO. 2 OUTLET GATE	50-BLO-402 SLUDGE AERATION BLOWER NO. 2	50-BLO-403 SLUDGE AERATION BLOWER NO. 3	50-PMP-427 DEWATERING FEED PUMP NO. 2	50-EDR-425 DEWATERING INLET VALVE NO. 2	50-EDR-428 DEWATERING OUTLET VALVE NO. 2	50-GRI-426 DEWATERING FEED GRINDER NO. 2	50-EDM-415 SLUDGE STORAGE TANK NO. 2 WEIR GATE NO. 1

CONTINUED AT UPPER RIGHT

CONTINUED AT SHEET EOL16

150 AF 3P 15 AT TM 65KAIC	150 AF 3P 15 AT TM 65KAIC	150 AF 3P 15 AT TM 65KAIC	150 AF 3P 70 AT TM 65KAIC	150 AF 3P 20 AT TM 65KAIC	30 AC 3P MCP 65KAIC	150 AF 3P 30 AT TM 65KAIC	150 AF 3P 15 AT TM 65KAIC	150 AF 3P 15 AT TM 65KAIC	150 AF 3P 30 AT TM 65KAIC	7 AC 3P MCP 65KAIC	30 AC 3P MCP 65KAIC	225 AF 3P 150 AT TM 65KAIC	225 AF 3P 150 AT TM 65KAIC
5 HP	3.5 KVA	3.5 KVA	45KVA 3Ø 480 V 120/208V	51-VCP-432	FVNR SIZE 1, B 00N12	31 MCA 12.5 TONS	2 HP	2 HP	10-VCP-050	FVNR SIZE 2, G 00N16	FVNR SIZE 2, I 00N17	18-PULSE VFD, LL, E 00N14	18-PULSE VFD, LL, E 00N14
3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)		3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	3-#8 (Ø) & 1-#10 (G)	3-#12 (Ø) & 1-#12 (G)	3-#12 (Ø) & 1-#12 (G)	3-#4 (Ø) & 1-#10 (G)	3-#8 (Ø) & 1-#10 (G)	3-#8 (Ø) & 1-#10 (G)	3-#1/0 (Ø) & 1-#6 (G)	3-#1/0 (Ø) & 1-#6 (G)
				5	10				5 5	3	15	75	75
50-EDM-416 SLUDGE STORAGE TANK NO. 2 WEIR GATE NO. 2	51-HOI-431 MONORAIL HOIST NO. 1	51-HOI-432 MONORAIL HOIST NO. 2	T-BF	LP-BF LIGHTING PANELBOARD	51-PRE-432 SCREW PRESS NO. 2	51-CNV-434 CAKE CONVEYOR NO. 2	51-ACU-470 ELECTRICAL ROOM AIR CONDITIONING UNIT	10-EDR-051 SCREEN INLET GATE NO. 2	10-EDR-052 SCREEN OUTLET GATE NO. 2	10-CMP-054 10-MBS-053 SCREENINGS NO. 2	11-FAN-072 ODOR CONTROL FAN NO. 2	20-MIX-100 ANOXIC MIXER NO. 2	20-VFD-101 20-AER-101 MECHANICAL AERATOR NO. 3	20-VFD-102 20-AER-102 MECHANICAL AERATOR NO. 4

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — JAMES R. VARLEY — No. 12679 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY

LOS OSOS WATER RECYCLING FACILITY PROJECT

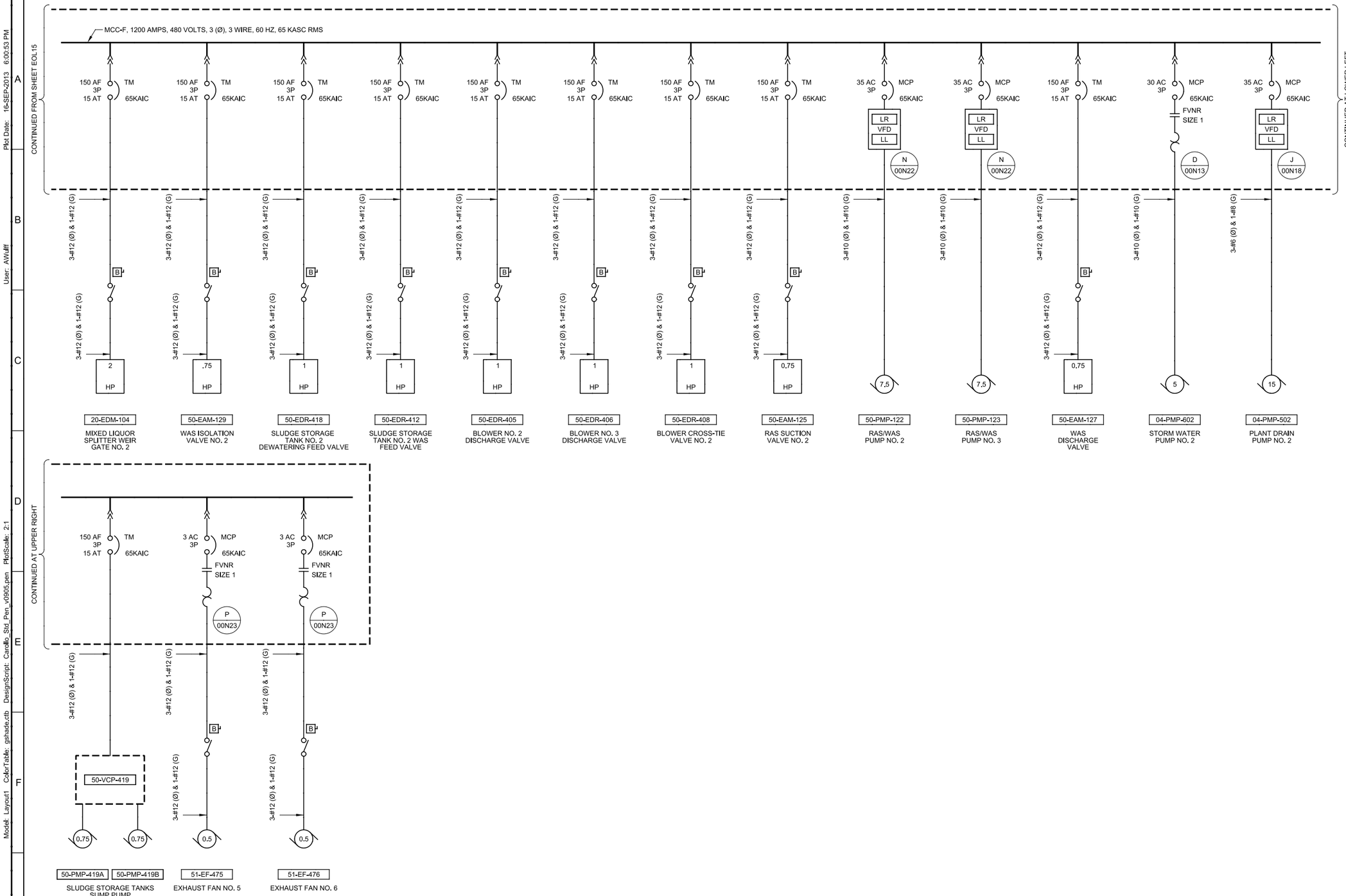
ELECTRICAL

MCC-F ONE-LINE DIAGRAM

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. EOL13
SHEET NO. 306 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A110EOL13.dgn



REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER TARA A. VARLEY No. 12879 ELECTRICAL STATE OF CALIFORNIA 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY

LOS OSOS WATER RECYCLING FACILITY PROJECT

ELECTRICAL

MCC-F
ONE-LINE DIAGRAM

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. EOL14
SHEET NO. 307 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A110EOL14.dgn

Plot Date: 16-SEP-2013 6:00:53 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

PANEL LP-BF

9/13/2013

LOCATION:	MCC-F	NEMA:	1	PH A WEIGHTED VA	10564
VOLTS:	208 / 120	FEED:	BOTTOM	PH B WEIGHTED VA	11581
PHASE & WIRE:	3PH 4W	MTG.	MCC	PH C WEIGHTED VA	10970
INTERRUPT:	18 KAIC	BUS RATING:	250		
OPTIONS:	SPD	MAIN:	MLO	EQUIP SIZING VA	34743
				PANEL AMPS	96.4

I/C/F	DESCRIPTION	LOAD (VA)	BKR	CIR	Ø	CIR	BKR	LOAD (VA)	DESCRIPTION	I/C/F
I	RECPT: POND 1 AND 2	720	20A-1P	1	A	2	20A-1P	720	RECPT: HEADWORKS	I
	SPARE		20A-1P	3	B	4	20A-1P	938	LIGHTING: HEADWORKS	I
I	DEWATERING POLYMER BLENDER UNIT (51-PBU-451)	2400	30A-1P	5	C	6	20A-1P	268	LIGHTING: HEADWORKS VAULT	I
I	DEWATERING POLYMER BLENDER UNIT (51-PBU-452)	2400	30A-1P	7	A	8	20A-1P	1260	RECPT: ODOR CONTROL FACILITY & EFFL. PMP STATION	I
I	SECONDARY TREATMENT POLYMER (51-PBU-453)	2400	30A-1P	9	B	10	20A-1P	930	LIGHTING: ODOR CONTROL FACILITY & EFFL. PMP STATION	I
I	EXHAUST FAN NO. 1 (51-EF-471)	864	20A-1P	11	C	12	20A-1P	720	RECPT: OXIDATION NO. 1 AND NO. 2	I
I	EXHAUST FAN NO. 2 (51-EF-472)	864	20A-1P	13	A	14	20A-1P		RECPT:: OXIDATION NO. 1 AND NO.2	I
I	INFLUENT SAMPLER (10-CSO-011)		20A-1P	15	B	16	20A-1P	268	RECPT: PLANT & STORM DRAIN PUMP STATIONS	I
I	ODOR CONTROL FACILITY (11-VCP-70)		20A-1P	17	C	18	20A-1P	360	LIGHTING: PLANT & STORM DRAIN PUMP STATIONS	I
I	RAS SAMPLER (50-COS-126)	100	20A-1P	19	A	20	20A-1P	1072	LIGHTING: SLUDGE STORAGE TANKS (DRY PIT)	I
I	04-LCP-500	100	20A-1P	21	B	22	20A-1P	360	RECPT: SLUDGE STORAGE TANKS	I
I	04-LCP-603	100	20A-1P	23	C	24	20A-1P	1716	LIGHTING: DEWATERING BUILDING	C
	SPARE		20A-1P	25	A	26	20A-1P	240	LIGHTING: DEWATERING BUILDING ELECTRICAL ROOM	C
C	NP-2	3000	30A-1P	27	B	28	20A-1P	1144	LIGHTING: DEWATERING BUILDING TRUCK LOADING	C
	SPARE		20A-1P	29	C	30	20A-1P	1440	RECPT: DEWATERING BUILDING	I
	LIGHTING: OXIDATION NO. 1 AND NO.2	536	20A-2P	31	A	32	20A-1P	1620	RECPT:DEWATERING BUILDING	I
		536		33	B	34	20A-2P	735	LIGHTING: OXIDATION NO. 1 AND NO.2	I
	LIGHTING: OXIDATION NO. 1 AND NO.2	670	20A-2P	35	C	36		735		I
		670		37	A	38	20A-1P		SPARE	I
	SPARE		20A-1P	39	B	40	20A-1P		SPARE	I
C	EMERGENCY LIGHTING: DEWATERING BUILDING	23	20A-1P	41	C	42	20A-1P	1072	LIGHTING:SLUDGE STORAGE TANKS (UPPER DECK)	I

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
MCC-F
PANELBOARD SCHEDULE

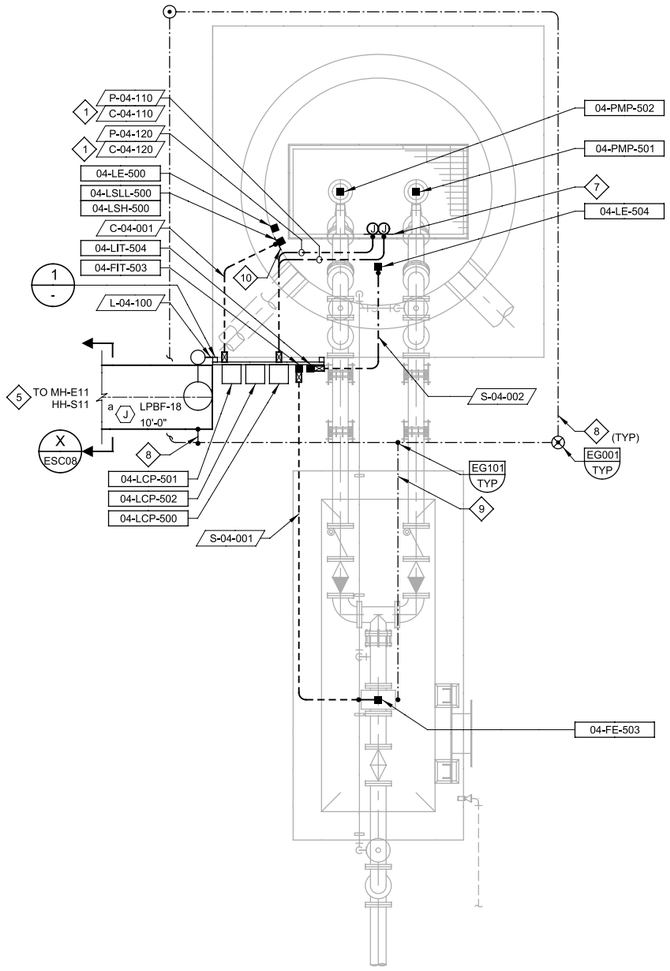
VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

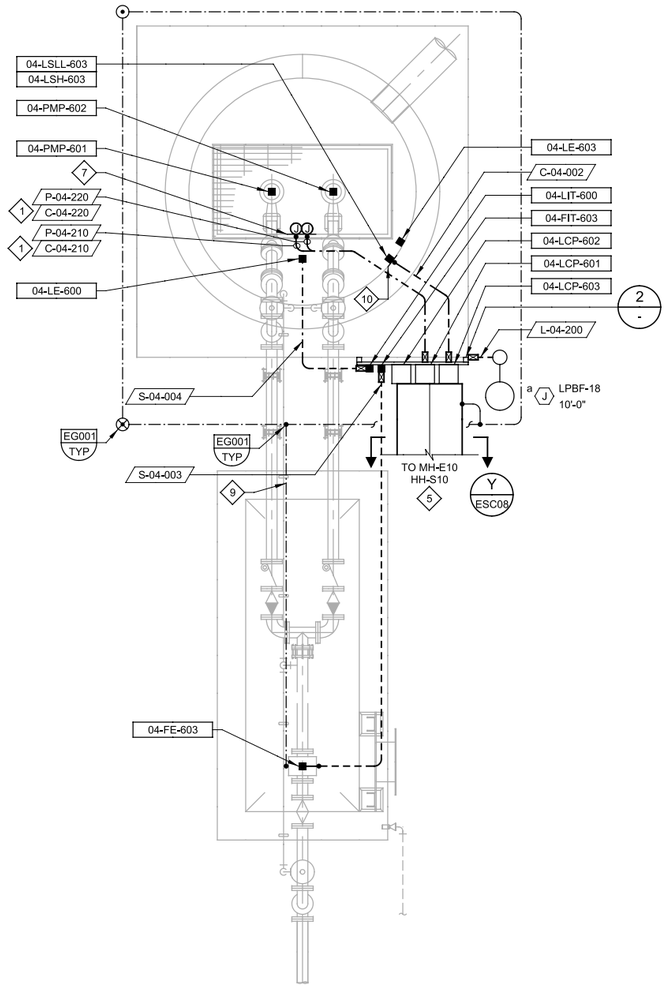
JOB NO. 8930A.11
DRAWING NO. EOL15
SHEET NO. 308 OF 549

PROJECT NO. 8930A.11
FILE NAME: 8930A110EOL15.dgn

LAST SAVED BY: ejohnson
Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1
Plot Date: 16-SEP-2013 6:01:13 PM
User: AWulff

Plot Date: 16-SEP-2013 6:03:24 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: adiaz





A PLANT DRAIN PUMP STATION- PLAN

SCALE: 3/8" = 1'-0"
FILE: 8930A1104E101

B STORM DRAIN PUMP STATION- PLAN

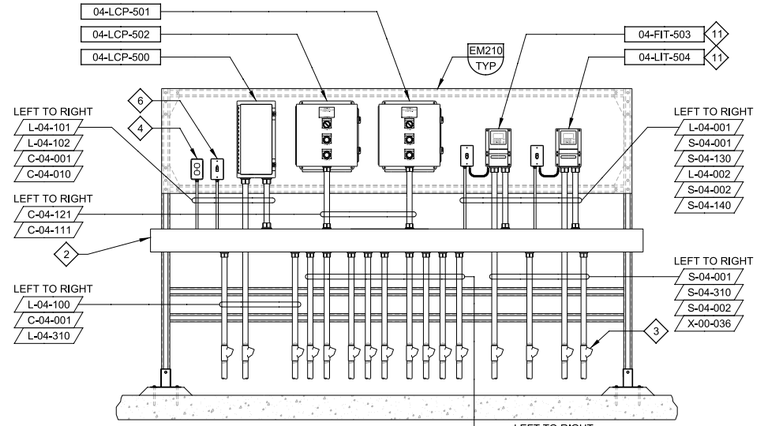
SCALE: 3/8" = 1'-0"
FILE: 8930A1104E102

GENERAL NOTES:

1. REFER TO SPECIFICATION SECTION 16050 FOR HAZARDOUS AREA CLASSIFICATIONS.

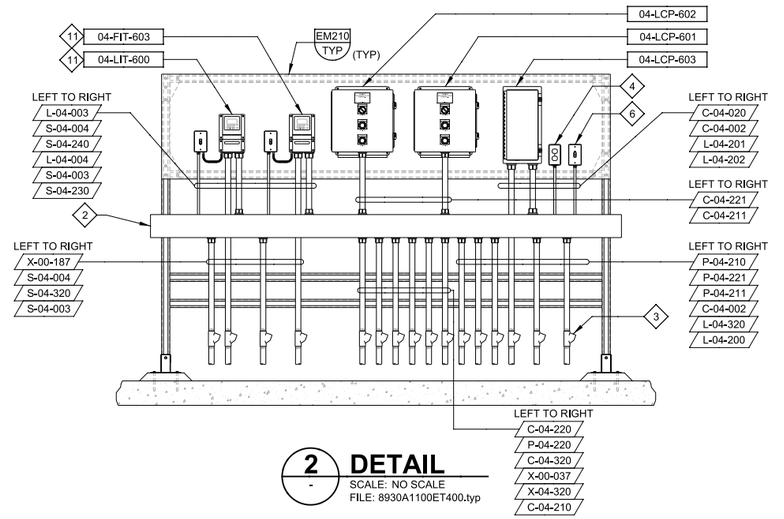
KEY NOTES:

1. ALL CONDUITS ARE NOT SHOWN FOR CLARITY
2. SIZE NEMA 4X-SS WIREWAY PER NEC AND PROVIDE DIVIDER TO SEPARATE POWER/CONTROL WITH ANALOG SIGNAL. MOUNT ON COMMON SUPPORT.
3. PROVIDE CONDUIT SEAL PER DETAIL EM108/TYP.
4. DUPLEX RECEPTACLE WP, GFCI LPBF-16
5. REFER TO DRAWING ESC03 FOR CONTINUATION.
6. a S LPBF-18 WP
7. INSTALL TERMINAL JUNCTION BOX PER DETAIL EM909/TYP.
8. #2/0 SDBC.
9. #2 SDBC.
10. INSTALL TERMINAL JUNCTION BOX ON STAND SIMILAR TO DETAIL EM909/TYP.
11. PROVIDE SUNSHIELD PER DETAIL NM108//TYP.



1 DETAIL

SCALE: NO SCALE
FILE: 8930A1100ET400.typ



2 DETAIL

SCALE: NO SCALE
FILE: 8930A1100ET400.typ

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — TARA R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
PLANT DRAIN & STORM DRAIN PUMP STATION PLANS

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 04E01
SHEET NO. 309 OF 549

CONDUIT SCHEDULE AREA 04

9/11/13

LOS OSOS WATER RECYCLING FACILITY

PLANT AND STORM DRAIN PUMP STATIONS

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-04-001	04E01	1"	4	#14	XHHW-2	1	#14	XHHW-2	FR: 04-LSLL-500 & 04-LSH-500 TO: 04-LCP-500 4 #14 >> CONTROL: 04-LE-500	
C-04-002	04E01	1"	4	#14	XHHW-2	1	#14	XHHW-2	FR: 04-LSLL-603 & 04-LSH-603 TO: 04-LCP-603 4 #14 >> CONTROL: 04-LCP-603	
C-04-010	040E1	0.75"	2 10	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: 04-LCP-500 TO: WIREWAY 2 #12 >> POWER: 04-LCP-500 (PCM-2) 2 #14 >> CONTROL: 04-PMP-501/LCP-500 2 #14 >> CONTROL: 04-PMP-502/LCP-500 6 #14 >> CONTROL: 04-LCP-500, 2-SPARE	C-04-310
C-04-020	040E1	0.75"	2 10	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: 04-LCP-603 TO: WIREWAY 2 #12 >> POWER: 04-LCP-603 (PCM-2) 2 #14 >> CONTROL: 04-PMP-601/LCP-603 2 #14 >> CONTROL: 04-PMP-602/LCP-603 6 #14 >> CONTROL: 04-LCP-603, 2-SPARE	C-04-320
C-04-110	04E01	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: TJB TO: WIREWAY 4 #14 >> CONTROL: 04-TSH-501/04-MSH-501	C-04-111
C-04-111	04E01	1.5"	2 24	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: 04-LCP-501 TO: WIREWAY 20 #14 >> CONTROL: 04-LCP-501, 4-SPARE 2 #12 >> POWER: 04-PPR-501 4 #14 >> CONTROL: 04-TSH-501/04-MSH-501	C-04-310 C-04-110
C-04-120	04E01	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: TJB TO: 04-LCP-502 4 #14 >> CONTROL: 04-TSH-502/04-MSH-502	
C-04-121	04E01	1"	2 20	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: 04-LCP-502 TO: WIREWAY 20 #14 >> CONTROL: 04-LCP-502, 4-SPARE 2 #12 >> POWER: 04-PPR-502	C-04-310
C-04-210	04E01	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: TJB TO: WIREWAY 4 #14 >> CONTROL: 04-TSH-601/04-MSH-601	
C-04-211	04E01	1"	2 20	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: 04-LCP-601 TO: WIREWAY 20 #14 >> CONTROL: 04-LCP-601, 4-SPARE 2 #12 >> POWER: 04-PPR-601	C-04-320
C-04-220	04E01	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: TJB TO: WIREWAY 4 #14 >> CONTROL: 04-TSH-602/04-MSH-602	
C-04-221	04E01	1"	2 20	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: 04-LCP-602 TO: WIREWAY 20 #14 >> CONTROL: 04-LCP-602, 4-SPARE 2 #12 >> POWER: 04-PPR-602	C-04-320
C-04-310	04E01	2"	10 46	#12 #14	XHHW-2 XHHW-2	2	#12	XHHW-2	FR: WIREWAY TO: HH-E10 VIA HH-E11 6 #14 >> CONTROL: 04-LCP-500, 2-SPARE 20 #14 >> CONTROL: 04-LCP-501, 4-SPARE 2 #12 >> POWER: 04-PPR-501 20 #14 >> CONTROL: 04-LCP-502, 4-SPARE 2 #12 >> POWER: 04-PPR-502 2 #12 >> POWER: 04-LIT-504 2 #12 >> POWER: 04-FIT-503 2 #12 >> POWER: 04-LCP-500 (PCM-2)	C-04-410 C-04-010 C-04-111 C-04-111 C-04-121 C-04-121 L-04-002 L-04-001 C-04-010
C-04-320	04E01	2"	10 46	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: WIREWAY TO: HH-E10 2 #12 >> POWER: 04-LCP-603 (PCM-2) 6 #14 >> CONTROL: 04-LCP-603, 2-SPARE 20 #14 >> CONTROL: 04-LCP-601, 4-SPARE 2 #12 >> POWER: 04-PPR-601 20 #14 >> CONTROL: 04-LCP-602, 4-SPARE 2 #12 >> POWER: 04-PPR-602 2 #12 >> POWER: 04-FIT-603 2 #12 >> POWER: 04-LIT-600	C-04-410 C-04-020 C-04-020 C-04-211 C-04-211 C-04-221 C-04-221 L-04-004 L-04-003

CONDUIT SCHEDULE AREA 04

9/11/13

LOS OSOS WATER RECYCLING FACILITY

PLANT AND STORM DRAIN PUMP STATIONS

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-04-410	51E06 ESC08	2"	4 40	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: HH-E10 TO: MCC-E VIA MH-E05 20 #14 >> CONTROL: 04-LCP-501, 4-SPARE 2 #12 >> POWER: 04-PPR-501 20 #14 >> CONTROL: 04-LCP-601, 4-SPARE 2 #12 >> POWER: 04-PPR-601	 C-04-310 C-04-310 C-04-320 C-04-320
C-04-420	51E06 ESC08	2"	4 40	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: HH-E10 TO: MCC-F VIA MH-E05 20 #14 >> CONTROL: 04-LCP-502, 4-SPARE 2 #12 >> POWER: 10-PPR-502 20 #14 >> CONTROL: 04-LCP-604, 2-SPARE 2 #12 >> CONTROL: 04-PPR-602	 C-04-310 C-04-310 C-04-320 C-04-320
L-04-001	04E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 04-FIT-503 TO: WIREWAY 2 #12 >> POWER: 04-FIT-503	C-04-310
L-04-002	04E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 04-LIT-504 TO: WIREWAY 2 #12 >> POWER: 04-LIT-504	C-04-310
L-04-003	04E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 04-LIT-600 TO: WIREWAY 2 #12 >> POWER: 04-LIT-600	C-04-320
L-04-004	04E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 04-FIT-603 TO: WIREWAY 2 #12 >> POWER: 04-FIT-603	C-04-320
L-04-100	04E01	1"	2	#10	XHHW-2	1	#10	XHHW-2	FR: LUMINAIRES TO: WIREWAY 2 #10 >> LPBF-18: LIGHTING	L-4-102
L-04-101	04E01	0.75"	2	#10	XHHW-2	1	#10	XHHW-2	FR: RECEPTACLE TO: WIREWAY 2 #10 >> LPBF-16: RECEPT	L-04-310
L-04-102	04E01	0.75"	2	#10	XHHW-2	1	#10	XHHW-2	FR: LIGHT SWITCH TO: WIREWAY 2 #10 >> LPBF-18: LIGHTING	L-04-310
L-04-200	04E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: LUMINAIRES TO: WIREWAY 2 #12 >> LPBF-18: LIGHTING	
L-04-201	04E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: RECEPTACLE TO: WIREWAY 2 #12 >> LPBF-16: RECEPT	L-04-320
L-04-202	04E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: LIGHT SWITCH TO: WIREWAY 2 #12 >> LPBF-18: LIGHTING	L-04-320
L-04-310	04E01	0.75"	4	#10	XHHW-2	1	#10	XHHW-2	FR: WIREWAY TO: HH-E10 VIA HH-E11 2 #10 >> LPBF-18: LIGHTING 2 #10 >> LPBF-16: RECEPT	 L-04-102 L-04-101
L-04-320	04E01	0.75"	4	#12	XHHW-2	1	#12	XHHW-2	FR: WIREWAY TO: HH-E10 2 #12 >> LPBF-18: LIGHTING 2 #12 >> LPBF-16: RECEPT	 L-04-202 L-04-201
L-04-410	51E05	2"	12 12	#12 #14	XHHW-2 XHHW-2	2	#12	XHHW-2	FR: HH-E10 TO: PCM-2 VIA MH-E05 2 #12 >> POWER: 04-LIT-504 2 #12 >> POWER: 04-FIT-503 2 #12 >> POWER: 04-LCP-500 (PCM-2) 6 #14 >> CONTROL: 04-LCP-500, 2-SPARE 2 #12 >> POWER: 04-LCP-603 (PCM-2) 2 #12 >> POWER: 04-FIT-603 2 #12 >> POWER: 04-LIT-600 6 #14 >> CONTROL: 04-LCP-603, 2-SPARE	 C-04-310 C-04-310 C-04-310 C-04-320 C-04-320 C-04-320 C-04-320
L-04-420	51E05	2"	4 4	#10 #12	XHHW-2 XHHW-2	1 1	#10 #12	XHHW-2 XHHW-2	FR: HH-E10 TO: MCC-F VIA MH-E05 2 #10 >> LPBF-18: LIGHTING 2 #10 >> LPBF-16: RECEPT 2 #12 >> LPBF-16: RECEPT 2 #12 >> LPBF-18: LIGHTING	 L-04-301 L-04-301 L-04-302 L-04-302

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA
9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY

LOS OSOS WATER RECYCLING FACILITY PROJECT

ELECTRICAL

PLANT DRAIN & STORM DRAIN PUMP STATIONS
CONDUIT SCHEDULE- I

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 04E02
SHEET NO. 310 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1104E02.dgn

Plot Date: 16-SEP-2013 6:03:47 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: adiaz

CONDUIT SCHEDULE AREA 04

9/11/13

LOS OSOS WATER RECYCLING FACILITY

PLANT AND STORM DRAIN PUMP STATIONS

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
P-04-110	04E01	1"	3	#6	XHHW-2	1	#8	XHHW-2	FR: TJB TO: WIREWAY 3 #6 >> POWER: 04-PMP-501	
P-04-111	04E01 ESC08 ESC09	2"	3	#6	XHHW-2	1	#8	XHHW-2	FR: WIREWAY TO: MCC-E VIA HH-E12, HH-E11, MH-E10, MH-E05 3 #6 >> POWER: 04-PMP-501	
P-04-120	04E01	1"	3	#6	XHHW-2	1	#8	XHHW-2	FR: TJB TO: WIREWAY 3 #6 >> POWER: 04-PMP-502	
P-04-121	04E01 ESC08 ESC09	2"	3	#6	XHHW-2	1	#8	XHHW-2	FR: WIREWAY TO: MCC-F VIA HH-E12, HH-E11, MH-E10, MH-E05 3 #6 >> POWER: 04-PMP-502	
P-04-210	04E01	1"	3	#10	XHHW-2	1	#10	XHHW-2	FR: TJB TO: WIREWAY 3 #10 >> POWER: 04-PMP-601	
P-04-211	04E01 ESC08 ESC09	2"	3	#10	XHHW-2	1	#10	XHHW-2	FR: WIREWAY TO: MCC-E VIA MH-E10, MH-E05 3 #10 >> POWER: 04-PMP-601	
P-04-220	04E01	2"	3	#10	XHHW-2	1	#10	XHHW-2	FR: TJB TO: WIREWAY 3 #10 >> POWER: 04-PMP-602	
P-04-221	04E01 ESC08 ESC09	2"	3	#10	XHHW-2	1	#10	XHHW-2	FR: WIREWAY TO: MCC-F VIA MH-E10, MH-E05 3 #10 >> POWER: 04-PMP-602	
S-04-001	04E01	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 04-FE-503 TO: 04-FIT-503 1 MFR >> SIGNAL: 10-FIT-503	
S-04-002	04E01	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 04-LE-504 TO: 04-LIT-504 1 MFR >> SIGNAL: 04-LIT-504	
S-04-003	04E01	0.75"	1	MFR	CABLE	1	#14	XHHW-2	FR: 04-FE-603 TO: 04-FIT-603 1 MFR >> SIGNAL: 04-FIT-603	
S-04-004	04E01	0.75"	1	MFR	CABLE	1	#14	XHHW-2	FR: 04-LE-600 TO: 04-LIT-600 1 MFR >> SIGNAL: 04-LIT-600	
S-04-130	04E01	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 04-FIT-503 TO: WIREWAY 1 2/CS-#16 >> SIGNAL: 04-FIT-503	S-04-310
S-04-140	04E01	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 04-LIT-504 TO: WIREWAY 1 2/CS-#16 >> SIGNAL: 04-LIT-504	S-04-310
S-04-230	040E1	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 04-FIT-603 TO: WIREWAY 1 2/CS-#16 >> SIGNAL: 04-FIT-603	S-04-320
S-04-240	040E1	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 04-LIT-600 TO: WIREWAY 1 2/CS-#16 >> SIGNAL: 04-LIT-600	S-04-320
S-04-310	04E01 ESC08	2"	2	2/CS-#16		1	#14	XHHW-2	FR: WIREWAY TO: HH-S10 VIA HH-S11 1 2/CS-#16 >> SIGNAL: 04-FIT-503 1 2/CS-#16 >> SIGNAL: 04-LIT-504	S-04-410 S-04-130 S-04-140
S-04-320	04E01 ESC08	2"	2	2/CS-#16		1	#14	XHHW-2	FR: WIREWAY TO: HH-S10 1 2/CS-#16 >> SIGNAL: 04-FIT-603 1 2/CS-#16 >> SIGNAL: 04-LIT-600	S-04-410 S-04-230 S-04-240
S-04-410	51E06 ESC08 ESC09	2"	4	2/CS-#16		1	#14	XHHW-2	FR: HH-S10 TO: PCM VIA HH-S05 1 2/CS-#16 >> SIGNAL: 04-FIT-603 1 2/CS-#16 >> SIGNAL: 04-LIT-600 1 2/CS-#16 >> SIGNAL: 04-FIT-503 1 2/CS-#16 >> SIGNAL: 04-LIT-504	S-04-320 S-04-320 S-04-310 S-04-310

CONDUIT SCHEDULE AREA 04

9/11/13

LOS OSOS WATER RECYCLING FACILITY

PLANT AND STORM DRAIN PUMP STATIONS

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
X-04-310		2"	1	PULL	ROPE				FR: WIREWAY TO: ELECTRIC BUILDING VIA HH-E11, HH-E10, MH-E05 1 PULL >> SPARE POWER/CONTROL	
X-04-311		2"	1	PULL	ROPE				FR: WIREWAY TO: HH-S11 1 PULL >> SPARE SIGNAL	
X-04-320		2"	1	PULL	ROPE				FR: WIREWAY TO: ELECTRIC BUILDING VIA HH-E10, MH-E05 1 PULL >> SPARE POWER/CONTROL	
X-04-321		2"	1	PULL	ROPE				FR: WIREWAY TO: HH-S10 1 PULL >> SPARE SIGNAL	

END OF CONDUIT SCHEDULE

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — JAMES R. VARELA — No. 12079 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

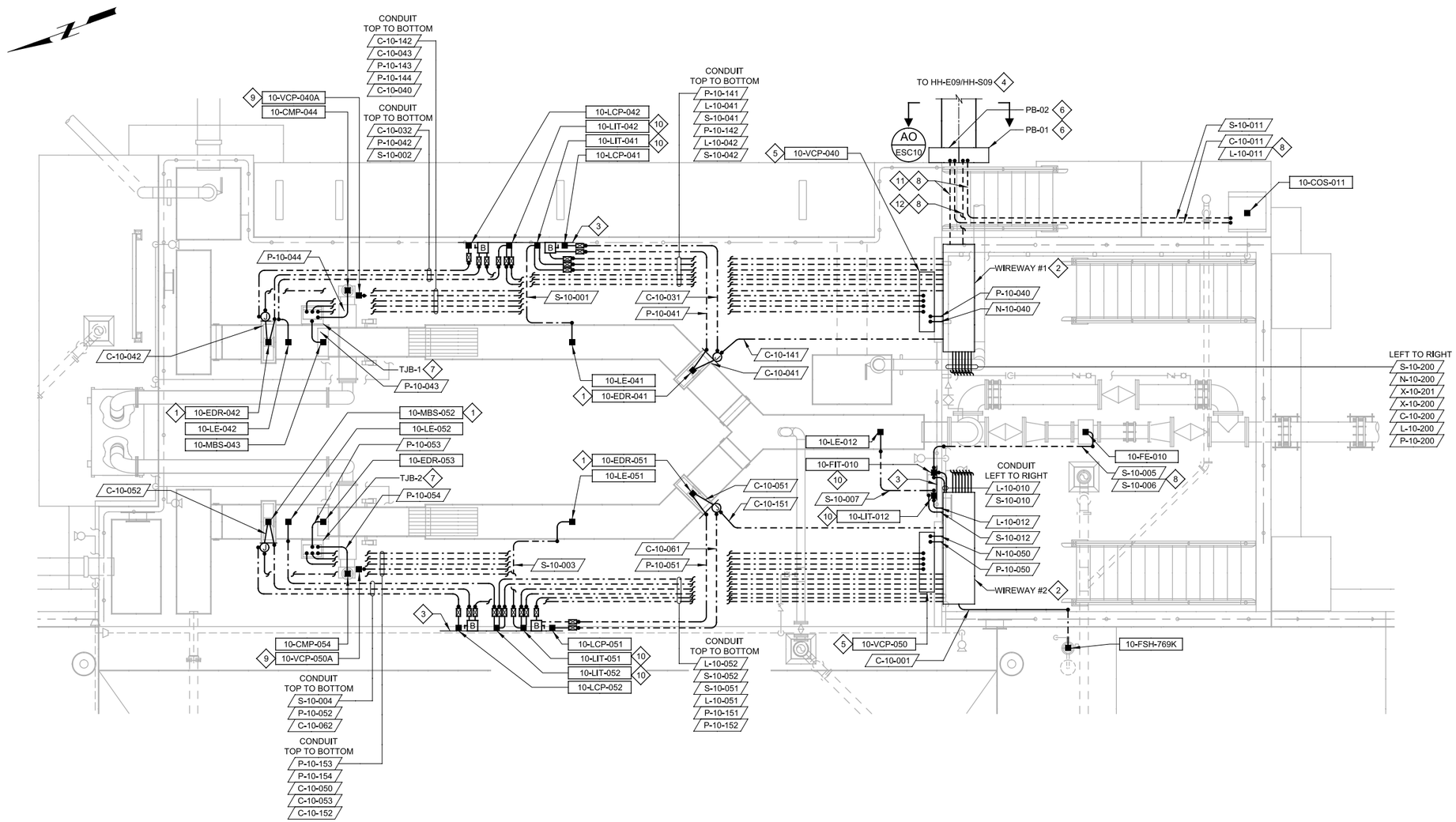
SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
PLANT DRAIN & STORM DRAIN PUMP STATIONS
CONDUIT SCHEDULE- II

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 04E03
SHEET NO. 311 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1104E03.dgn

Plot Date: 16-SEP-2013 6:04:06 PM
User: AWulff
PlotScale: 2:1
Carollo_Std_Pen_v0905.pen
DesignScript:
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: adiaz



A PLAN

SCALE: 1/4" = 1'-0"
FILE: 8930A1110E100.dgn

GENERAL NOTES:

1. REFER TO SPECIFICATION SECTION 16050 FOR HAZARDOUS AREA CLASSIFICATIONS.
2. ROUTE CONDUIT IN SLAB EMBEDDED PER DETAILS EM115/TYP AND EM117/TYP, UNLESS NOTED OTHERWISE.

KEY NOTES:

1. PER DETAIL EM902/TYP .
2. SIZE NEMA 4X-SS WIREWAY PER NEC AND PROVIDE DIVIDER TO SEPARATE POWER/CONTROL WITH ANALOG SIGNAL. MOUNT THE WIREWAY PER DETAIL EM904/TYP ON WALL.
3. MOUNT DISCONNECT SWITCH/LIT/FIT/LCP PER DETAIL EM202/TYP.
4. REFER TO DRAWING ESC03 FOR CONTINUATION.
5. MOUNT THE VCP ON THE WALL.
6. MOUNT THE PULL BOX ON STAND PER DETAIL EM202/TYP. AND SIZE THE PULL BOX PER NEC.
7. VENDOR PROVIDED NEMA 7 TERMINAL JUNCTION BOX. PROVIDE INDIVIDUAL 3/4-INCH CONDUIT WITH 2#14 CONDUCTORS TO EACH SOLENOID VALVE AND LIMIT SWITCH AS SHOWN ON P&ID DRAWINGS.
8. ALL CONDUITS ARE NOT SHOWN FOR CLARITY.
9. MOUNT THE VCP ON DEVICE STAND PER EM201/TYP.
10. PROVIDE DISCONNECT SWITCH PER DETAIL NA900/TYP.
11. C-10-201 / P-10-201 / L-10-201 / P-10-202 / L-10-202 / X-10-202
12. S-10-201 / N-10-201 / X-10-203

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
HEADWORKS
POWER AND CONTROL PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 10E01
SHEET NO. 312 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1110E01.dgn

Plot Date: 16-SEP-2013 6:11:04 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: awulff

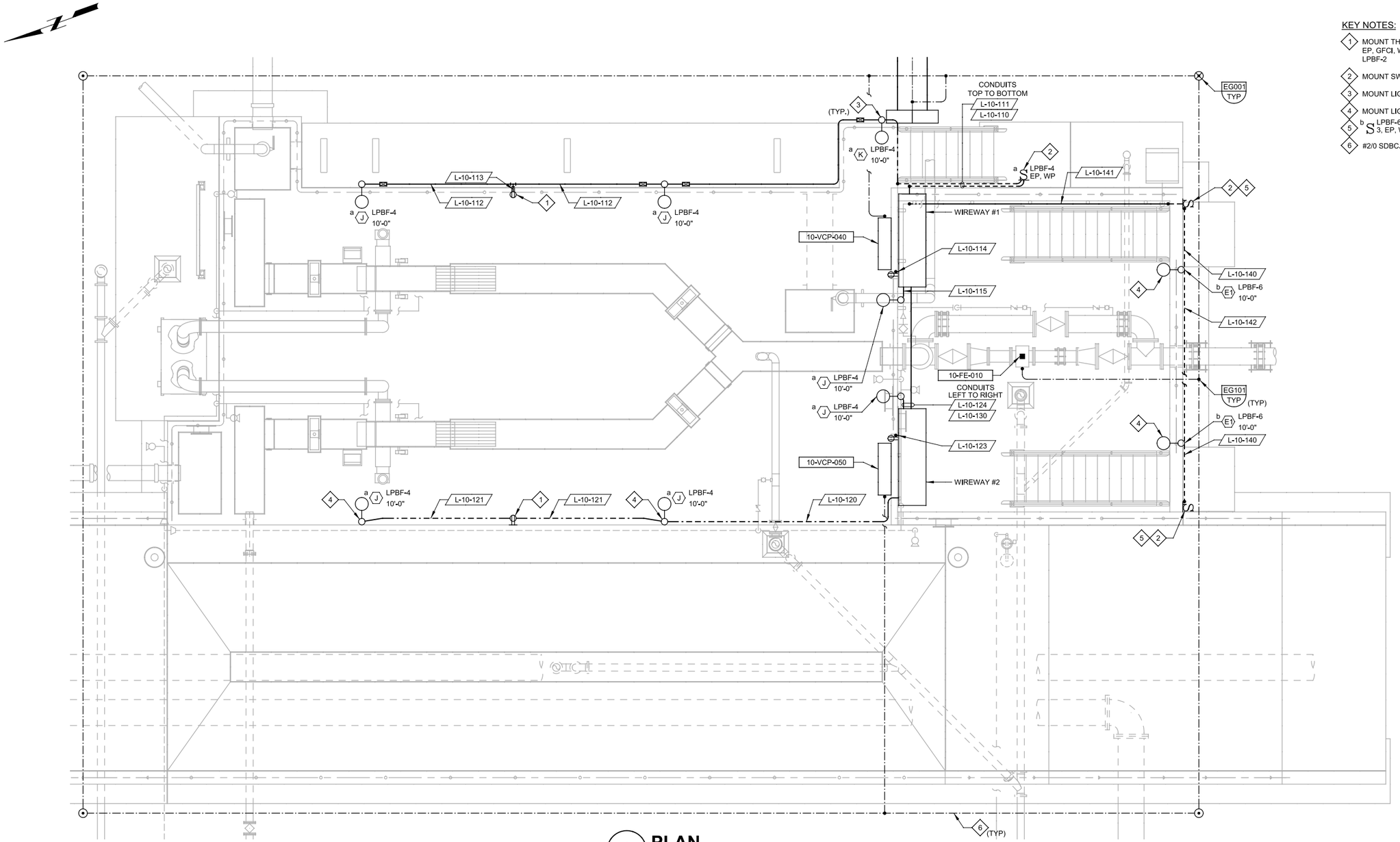
Plot Date: 16-SEP-2013 6:11:24 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: awulff

GENERAL NOTES:

1. REFER TO SPECIFICATION SECTION 16050 FOR HAZARDOUS AREA CLASSIFICATIONS.

KEY NOTES:

1. MOUNT THE DUPLEX RECEPTACLE ON SAME STAND AS LCP/LIT. EP, GFCI, WP LPBF-2
2. MOUNT SWITCH ON DEVICE STAND PER DETAIL EM201/TYP.
3. MOUNT LIGHTING FIXTURE PER DETAIL EL505/TYP.
4. MOUNT LIGHTING FIXTURE PER DETAIL EL503/TYP.
5. b S LPBF-6 3, EP, WP
6. #2/0 SDBC.



A PLAN

SCALE: 1/4" = 1'-0"
FILE: 8930A1110E102.dgn

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
HEADWORKS
LIGHTING, RECEPTACLES, & GROUNDING PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 10E02
SHEET NO. 313 OF 549

CONDUIT SCHEDULE AREA 10

9/11/13

LOS OSOS WATER RECYCLING FACILITY

HEADWORKS

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-10-011	10E01	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 10-COS-011 TO: PB-02 2 #14 >> CONTROL: 10-COS-011	C-10-201
C-10-001	10E01	1"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 10-FSH-769K TO: WIREWAY #2 2 #14 >> CONTROL: 10-FSH-769K	C-10-200
C-10-031	10E01	1"	10	#14	XHHW-2	1	#14	XHHW-2	FR: JB TO: 10-LCP-041 10 #14 >> CONTROL: 10-LCP-041	C-10-041
C-10-032	10E01	1"	10	#14	XHHW-2	1	#14	XHHW-2	FR: JB TO: 10-LCP-042 10 #14 >> CONTROL: 10-LCP-042	C-10-042
C-10-040	10E01	1"	14	#14	XHHW-2	1	#14	XHHW-2	FR: 10-VCP-040 TO: TJB-1 14 #14 >> CONTROL: 10-VCP-040, 2-SPARE	
C-10-041	10E01	1"	20	#14	XHHW-2	1	#14	XHHW-2	FR: 10-EDR-041 TO: JB 10 #14 >> CONTROL: 10-LCP-041 10 #14 >> CONTROL: 10-EDR-041	C-10-031
C-10-042	10E01	1"	20	#14	XHHW-2	1	#14	XHHW-2	FR: 10-EDR-042 TO: JB 10 #14 >> CONTROL: 10-LCP-042 10 #14 >> CONTROL: 10-EDR-042	C-10-032
C-10-043	10E01	1"	6	#14	XHHW-2	1	#14	XHHW-2	FR: 10-VCP-040A TO: 10-VCP-040 6 #14 >> CONTROL: 10-VCP-040A, 2-SPARE	
C-10-050	10E01	1"	14	#14	XHHW-2	1	#14	XHHW-2	FR: 10-VCP-050 TO: TJB-2 14 #14 >> CONTROL: 10-VCP-050, 2-SPARE	
C-10-051	10E01	1"	20	#14	XHHW-2	1	#14	XHHW-2	FR: 10-EDR-051 TO: JB 10 #14 >> CONTROL: 10-LCP-051 10 #14 >> CONTROL: 10-EDR-051	C-10-061
C-10-052	10E01	1"	20	#14	XHHW-2	1	#14	XHHW-2	FR: 10-EDR-052 TO: JB 10 #14 >> CONTROL: 10-LCP-052 10 #14 >> CONTROL: 10-EDR-052	C-10-062
C-10-053	10E01	1"	6	#14	XHHW-2	1	#14	XHHW-2	FR: 10-VCP-050A TO: 10-VCP-050 6 #14 >> CONTROL: 10-VCP-050A, 2-SPARE	
C-10-061	10E01	1"	10	#14	XHHW-2	1	#14	XHHW-2	FR: JB TO: 10-LCP-051 10 #14 >> CONTROL: 10-LCP-051	C-10-051
C-10-062	10E01	1"	10	#14	XHHW-2	1	#14	XHHW-2	FR: JB TO: 10-LCP-052 10 #14 >> CONTROL: 10-LCP-052	C-10-052
C-10-141	10E01	1"	10	#14	XHHW-2	1	#14	XHHW-2	FR: JB TO: WIREWAY #1 10 #14 >> CONTROL: 10-EDR-041	C-10-201 C-10-041
C-10-142	10E01	1"	10	#14	XHHW-2	1	#14	XHHW-2	FR: JB TO: 10-LCP-042 10 #14 >> CONTROL: 10-EDR-042	C-10-201 C-10-042
C-10-151	10E01	1"	10	#14	XHHW-2	1	#14	XHHW-2	FR: JB TO: WIREWAY #2 10 #14 >> CONTROL: 10-EDR-051	C-10-200 C-10-051
C-10-152	10E01	1"	10	#14	XHHW-2	1	#14	XHHW-2	FR: JB TO: WIREWAY #2 10 #14 >> CONTROL: 10-EDR-052	C-10-200 C-10-052
C-10-200	10E01	1"	22	#14	XHHW-2	1	#14	XHHW-2	FR: WIREWAY #2 TO: WIREWAY #1 10 #14 >> CONTROL: 10-EDR-052 10 #14 >> CONTROL: 10-EDR-051 2 #14 >> CONTROL: 10-FSH-769K	C-10-201 C-10-152 C-10-151 C-10-001

CONDUIT SCHEDULE AREA 10

9/11/13

LOS OSOS WATER RECYCLING FACILITY

HEADWORKS

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-10-201	10E03	1.5"	44	#14	XHHW-2	1	#14	XHHW-2	FR: WIREWAY #1 TO: PB-02 2 #14 >> CONTROL: 10-COS-011 10 #14 >> CONTROL: 10-EDR-041 10 #14 >> CONTROL: 10-EDR-042 10 #14 >> CONTROL: 10-EDR-052 10 #14 >> CONTROL: 10-EDR-051 2 #14 >> CONTROL: 10-FSH-769K	C-10-210 C-10-011 C-10-141 C-10-142 C-10-200 C-10-200 C-10-200
C-10-210	ESC09 ESC10	2"	44	#14	XHHW-2	1	#14	XHHW-2	FR: PB-02 TO: MH-E05 VIA HH-E09, MH-E07 2 #14 >> CONTROL: 10-COS-011 10 #14 >> CONTROL: 10-EDR-041 10 #14 >> CONTROL: 10-EDR-042 10 #14 >> CONTROL: 10-EDR-052 10 #14 >> CONTROL: 10-EDR-051 2 #14 >> CONTROL: 10-FSH-769K	C-10-310 C-10-201 C-10-201 C-10-201 C-10-201 C-10-201
C-10-310	51E05 ESC09	2"	12 44	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: MH-E05 TO: PCM-2 2 #14 >> CONTROL: 10-COS-011 10 #14 >> CONTROL: 10-EDR-041 10 #14 >> CONTROL: 10-EDR-042 10 #14 >> CONTROL: 10-EDR-052 10 #14 >> CONTROL: 10-EDR-051 2 #14 >> CONTROL: 10-FSH-769K 2 #12 >> POWER: 10-LIT-041 2 #12 >> POWER: 10-LIT-042 2 #12 >> POWER: 10-FIT-010 2 #12 >> POWER: 10-LIT-012 2 #12 >> POWER: 10-LIT-051 2 #12 >> POWER: 10-LIT-052	C-10-210 C-10-210 C-10-210 C-10-210 C-10-210 C-10-210 L-10-210 L-10-210 L-10-210 L-10-210 L-10-210 L-10-210
L-10-010	10E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 10-FIT-010 TO: WIREWAY #2 2 #12 >> POWER: 10-FIT-010	L-10-200
L-10-011	10E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 10-COS-011 TO: PB-02 2 #12 >> POWER:10-COS-011	
L-10-012	10E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 10-LIT-012 TO: WIREWAY #2 2 #12 >> POWER: 10-LIT-012	L-10-200
L-10-041	10E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 10-LIT-041 TO: WIREWAY #1 2 #12 >> POWER: 10-LIT-041	L-10-201
L-10-042	10E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 10-LIT-042 TO: WIREWAY #1 2 #12 >> POWER: 10-LIT-042	L-10-201
L-10-051	10E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 10-LIT-051 TO: WIREWAY #2 2 #12 >> POWER: 10-LIT-051	L-10-200
L-10-052	10E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 10-LIT-052 TO: WIREWAY #2 2 #12 >> POWER: 10-LIT-052	L-10-200
L-10-110	10E02	1"	4	#8	XHHW-2	1	#8	XHHW-2	FR: WIREWAY #1 TO: LIGHT SWITCH 2 #8 >> LPBF-4, LIGHT 2 #8 >> LPBF-2, RECEPTACLE	L-10-111
L-10-111	10E02	1"	4	#8	XHHW-2	1	#8	XHHW-2	FR: LIGHTING SWITCH TO: LUMINAIRES 2 #8 >> LPBF-4, LIGHT 2 #8 >> LPBF-2, RECEPTACLE	L-10-112 L-10-110 L-10-110
L-10-112	10E02	1"	4	#8	XHHW-2	1	#8	XHHW-2	FR: LUMINAIRES TO: LUMINAIRES 2 #8 >> LPBF-4, LIGHT 2 #8 >> LPBF-2, RECEPTACLE	L-10-111 L-10-111
L-10-113	10E02	1"	2	#8	XHHW-2	1	#8	XHHW-2	FR: CONUIT TEE TO: RECEPTACLE 2 #8 >> LPBF-2, RECEPTACLE	
L-10-114	10E02	0.75"	2	#8	XHHW-2	1	#8	XHHW-2	FR: RECEPTACLE TO: WIREWAY #1 2 #8 >> LPBF-2, RECEPTACLE	

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER · JAMES R. VARLEY · No. 12879 · ELECTRICAL · STATE OF CALIFORNIA
9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
HEADWORKS
CONDUIT SCHEDULE- I

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 10E03
SHEET NO. 314 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1110E03.dgn

LAST SAVED BY: adiaz PlotScale: 2:1 DesignScript: Carollo_Std_Pen_v0905.pen ColorTable: gshade.ctb Model: Layout1 User: AWulff Plot Date: 16-SEP-2013 6:11:43 PM

CONDUIT SCHEDULE AREA 10

9/11/13

LOS OSOS WATER RECYCLING FACILITY

HEADWORKS

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
L-10-115	10E02	0.75"	2	#8	XHHW-2	1	#8	XHHW-2	FR: LUMINAIRES TO: WIREWAY #1 2 #8 >> LPBF-4: LIGHT	
L-10-120	10E02	1"	4	#8	XHHW-2	1	#8	XHHW-2	FR: LUMINAIRES TO: WIREWAY #2 2 #8 >> LPBF-4, LIGHT 2 #8 >> LPBF-2, RECEPTACLE	L-10-130
L-10-121	10E02	1"	4	#8	XHHW-2	1	#8	XHHW-2	FR: LUMINAIRES TO: RECEPTACLE 2 #8 >> LPBF-4, LIGHT 2 #8 >> LPBF-2, RECEPTACLE	L-20-120
L-10-123	10E02	0.75"	2	#8	XHHW-2	1	#8	XHHW-2	FR: RECEPTACLE TO: WIREWAY #2 2 #8 >> LPBF-2, RECEPTACLE	L-10-130
L-10-124	10E02	0.75"	2	#8	XHHW-2	1	#8	XHHW-2	FR: LUMINAIRES TO: WIREWAY #2 2 #8 >> LPBF-4: LIGHT	
L-10-130	10E02	1"	4	#8	XHHW-2	1	#8	XHHW-2	FR: WIREWAY #1 TO: WIREWAY #2 2 #8 >> LPBF-4, LIGHT 2 #8 >> LPBF-2, RECEPTACLE	L-10-202 L-10-120 L-10-123
L-10-140	10E02	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: LUMINAIRES TO: LUMINAIRES 2 #12 >> LPBF-6, LIGHT	L-10-141
L-10-141	10E02	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: LIGHT SWITCH TO: WIREWAY #1 2 #12 >> LPBF-6	L-10-202 L-10-140
L-10-142	10E02	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: LUMINARIES TO: LUMINARIES 2 #12 >> LPBF-6	
L-10-200	10E01	0.75"	8	#12	XHHW-2	1	#12	XHHW-2	FR: WIREWAY #2 TO: WIREWAY #1 2 #12 >> POWER: 10-FIT-010 2 #12 >> POWER: 10-LIT-012 2 #12 >> POWER: 10-LIT-051 2 #12 >> POWER: 10-LIT-052	L-10-201 L-10-010 L-10-012 L-10-051 L-10-052
L-10-201	10E03	1"	12	#12	XHHW-2	1	#12	XHHW-2	FR: WIREWAY #1 TO: PB-02 2 #12 >> POWER: 10-LIT-041 2 #12 >> POWER: 10-LIT-042 2 #12 >> POWER: 10-FIT-010 2 #12 >> POWER: 10-LIT-012 2 #12 >> POWER: 10-LIT-051 2 #12 >> POWER: 10-LIT-052	L-10-210 L-10-041 L-10-042 L-10-200 L-10-200 L-10-200 L-10-200
L-10-202	10E03	1"	4 2	#8 #12	XHHW-2 XHHW-2	1	#8	XHHW-2	FR: WIREWAY #1 TO: PB-02 2 #8 >> LPBF-4 2 #8 >> LPBF-2 2 #12 >> LPBF-6	L-10-220 L-10-130 L-10-130 L-10-141
L-10-210	ESC09 ESC10	2"	12	#12	XHHW-2	1	#12	XHHW-2	FR: PB-02 TO: MH-E05 VIA HH-E09, MH-E07 2 #12 >> POWER: 10-LIT-041 2 #12 >> POWER: 10-LIT-042 2 #12 >> POWER: 10-FIT-010 2 #12 >> POWER: 10-LIT-012 2 #12 >> POWER: 10-LIT-051 2 #12 >> POWER: 10-LIT-052	C-10-310 L-10-201 L-10-201 L-10-201 L-10-201 L-10-201 L-10-201
L-10-220	51E05 ESC09 ESC10	2"	4 4	#8 #12	XHHW-2 XHHW-2	1	#8	XHHW-2	FR: PB-02 TO: MCC-F VIA HH-09, MH-E07, MH-E05 2 #12 >> POWER:10-COS-011 2 #8 >> LPBF-4 2 #8 >> LPBF-2 2 #12 >> LPBF-6	 L-10-202 L-10-202 L-10-202 L-10-202
N-10-040	10E01	1"	1	6/FO		1	#14	XHHW-2	FR: 10-VCP-040 TO: WIREWAY #1 1 6/FO >> NETWORK: 10-VCP-040	N-10-201

CONDUIT SCHEDULE AREA 10

9/11/13

LOS OSOS WATER RECYCLING FACILITY

HEADWORKS

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
N-10-050	10E01	1"	1	6/FO		1	#14	XHHW-2	FR: 10-VCP-050 TO: WIREWAY #2 1 6/FO >> NETWORK: 10-VCP-050	N-10-200
N-10-200	10E01	1"	1	6/FO		1	#14	XHHW-2	FR: WIREWAY #2 TO: WIREWAY #1 1 6/FO >> NETWORK: 10-VCP-050	N-10-201 N-10-050
N-10-201	1.00E+02	1.5"	2	6/FO		1	#14	XHHW-2	FR: WIREWAY #1 TO: PB-01 1 6/FO >> NETWORK: 10-VCP-040 1 6/FO >> NETWORK: 10-VCP-050	N-10-210 N-10-040 N-10-200
N-10-210	51E06 ESC09 ESC10	2"	2	6/FO		1	#14	XHHW-2	FR: PB-01 TO: NP-2 VIA HH-S09, HH-S07, MH-S05 1 6/FO >> NETWORK: 10-VCP-040 1 6/FO >> NETWORK: 10-VCP-050	 N-10-201 N-10-201
P-10-040	10E01	1"	3	#8	XHHW-2	1	#8	XHHW-2	FR: 10-VCP-040 TO: WIREWAY #1 3 #8 >> POWER: 10-VCP-040	P-10-202
P-10-041	10E01	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 10-EDR-041 TO: DISCONNECT SWITCH 3 #12 >> POWER: 10-EDR-041	P-10-141
P-10-042	10E01	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 10-EDR-042 TO: DISCONNECT SWITCH 3 #12 >> POWER: 10-EDR-042	P-10-142
P-10-043	10E01	0.75"	5 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: 10-MBS-043 TO: TJB-1 3 #12 >> POWER: 10-MBS-043 2 #12 >> 10-MWH-043 2 #14 >> 10-TSH-043	P-10-143
P-10-044	10E01	0.75"	5 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: 10-CMP-044 TO: TJB-1 3 #12 >> POWER: 10-CMP-044 2 #12 >> 10-MWH-044 2 #14 >> 10-TSH-044	P-10-144
P-10-050	10E01	1"	3	#8	XHHW-2	1	#8	XHHW-2	FR: 10-VCP-050 TO: WIREWAY #2 3 #8 >> POWER: 10-VCP-050	P-10-200
P-10-051	10E01	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 10-EDR-051 TO: DISCONNECT SWITCH 3 #12 >> POWER: 10-EDR-051	P-10-151
P-10-052	10E01	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 10-EDR-052 TO: DISCONNECT SWITCH 3 #12 >> POWER: 10-EDR-052	P-10-152
P-10-053	10E01	1"	5 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: 10-MBS-053 TO: TJB-2 3 #12 >> POWER: 10-MBS-053 2 #12 >> 10-MWH-053 2 #14 >> 10-TSH-053	P-10-153
P-10-054	10E01	1"	5 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: 10-VCP-050 TO: TJB-2 3 #12 >> POWER: 10-MBS-054 2 #12 >> 10-MWH-054 2 #14 >> 10-TSH-054	P-10-154
P-10-141	10E01	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWITCH TO: WIREWAY #1 3 #12 >> POWER: 10-EDR-041	P-10-202 P-10-041
P-10-142	10E01	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWITCH TO: WIREWAY #1 3 #12 >> POWER: 10-EDR-042	P-10-200 P-10-042
P-10-143	10E01	1"	5 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: TJB-1 TO: 10-VCP-040 3 #12 >> POWER: 10-MBS-043 2 #12 >> 10-MWH-043 2 #14 >> 10-TSH-043	 P-10-043 P-10-043 P-10-043

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA
9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
HEADWORKS
CONDUIT SCHEDULE- II

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 10E04
SHEET NO. 315 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1110E04.dgn

Plot Date: 16-SEP-2013 6:11:55 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: adiaz

CONDUIT SCHEDULE AREA 10

9/11/13

LOS OSOS WATER RECYCLING FACILITY

HEADWORKS

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
P-10-144	10E01	1"	5 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: TJB-1 TO: 10-VCP-040 3 #12 >> POWER: 10-CMP-044 2 #12 >> 10-MWH-044 2 #14 >> 10-TSH-044	 P-10-044 P-10-044 P-10-044
P-10-151	10E01	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWITCH TO: WIREWAY #2 3 #12 >> POWER: 10-EDR-051	 P-10-051
P-10-152	10E01	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWITCH TO: WIREWAY #2 3 #12 >> POWER: 10-EDR-052	P-10-200 P-10-052
P-10-153	10E01	1"	5 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: TJB-2 TO: 10-VCP-050 3 #12 >> POWER: 10-MBS-053 2 #12 >> 10-MWH-053 2 #14 >> 10-TSH-053	 P-10-053 P-10-053 P-10-053
P-10-154	10E01	1"	5 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: TJB-2 TO: 10-VCP-050 3 #12 >> POWER: 10-MBS-054 2 #12 >> 10-MWH-054 2 #14 >> 10-TSH-054	 P-10-054 P-10-054 P-10-054
P-10-200	10E01	1.5"	3 6	#4 #12	XHHW-2 XHHW-2	1 2	#8 #12	XHHW-2 XHHW-2	FR: WIREWAY #2 TO: WIREWAY #1 3 #4 >> POWER: 10-VCP-050 3 #12 >> POWER: 10-EDR-051 3 #12 >> POWER: 10-EDR-052	P-10-201 P-10-050 P-10-142 P-10-152
P-10-201	10E01	1.5"	3 6	#4 #12	XHHW-2 XHHW-2	1	#8	XHHW-2	FR: WIREWAY #1 TO: PB-02 3 #4 >> POWER: 10-VCP-050 3 #12 >> POWER: 10-EDR-051 3 #12 >> POWER: 10-EDR-052	P-10-210 P-10-200 P-10-200 P-10-200
P-10-202	10E01	1.5"	3 6	#4 #12	XHHW-2 XHHW-2	1	#8	XHHW-2	FR: WIREWAY #1 TO: PB-02 3 #4 >> POWER: 10-VCP-040 3 #12 >> POWER: 10-EDR-041 3 #12 >> POWER: 10-EDR-042	P-10-220 P-10-040 P-10-141 P-10-142
P-10-210	51E05	2"	3 6	#4 #12	XHHW-2 XHHW-2	1 2	#8 #12	XHHW-2 XHHW-2	FR: PB-02 TO: MCC-F VIA HH-E09, MH-E07, MH-E05 3 #4 >> POWER: 10-VCP-050 3 #12 >> POWER: 10-EDR-042 3 #12 >> POWER: 10-EDR-052	 P-10-201 P-10-201 P-10-201
P-10-220	51E05	2"	3 6	#4 #12	XHHW-2 XHHW-2	1	#8	XHHW-2	FR: PB-02 TO: MCC-E VIA HH-E09, MH-E07, MH-E05 3 #4 >> POWER: 10-VCP-040 3 #12 >> POWER: 10-EDR-041 3 #12 >> POWER: 10-EDR-042	 P-10-202 P-10-202 P-10-202
S-10-001	10E01	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 10-LE-041 TO: 10-LIT-041 1 MFR >> SIGNAL: 10-LIT-041	
S-10-002	10E01	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 10-LE-042 TO: 10-LIT-042 1 MFR >> SIGNAL; 10-LIT-042	
S-10-003	10E01	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 10-LE-051 TO: 10-LIT-051 1 MFR >> SIGNAL: 10-LIT-051	
S-10-004	10E01	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 10-LE-012 TO: 10-LIT-012 1 MFR >> SIGNAL: 10-LIT-012	
S-10-005	10E01	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 10-FE-010 TO: 10-FIT-010 1 MFR >> SIGNAL: 10-FIT-010	
S-10-006	10E01	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 10-FE-010 TO: 10-FIT-010 1 MFR >> POWER: 10-FIT-010	
S-10-007	10E01	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 10-LE-052 TO: 10-LIT-052 1 MFR >> SIGNAL: 10-LIT-052	

CONDUIT SCHEDULE AREA 10

9/11/13

LOS OSOS WATER RECYCLING FACILITY

HEADWORKS

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
S-10-010	10E01	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 10-FIT-010 TO: WIREWAY #2 1 2/CS-#16 >> SIGNAL: 10-FIT-010	S-10-200
S-10-011	10E01	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 10-COS-011 TO: WIREWAY #1 1 2/CS-#16 >> SIGNAL: 10-COS-011	S-10-201
S-10-012	10E01	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 10-LIT-012 TO: WIREWAY #2 1 2/CS-#16 >> SIGNAL: 10-LIT-012	S-10-200
S-10-041	10E01	1"	1	2/CS-#16		1	#14	XHHW-2	FR: 10-LIT-041 TO: WIREWAY #1 1 2/CS-#16 >> SIGNAL: 10-LIT-041	S-10-201
S-10-042	10E01	1"	1	2/CS-#16		1	#14	XHHW-2	FR: 10-LIT-042 TO: WIREWAY #1 1 2/CS-#16 >> SIGNAL: 10-LIT-042	S-10-201
S-10-051	10E01	1"	1	2/CS-#16		1	#14	XHHW-2	FR: 10-LIT-051 TO: WIREWAY #2 1 2/CS-#16 >> SIGNAL: 10-LIT-051	S-10-200
S-10-052	10E01	1"	1	2/CS-#16		1	#14	XHHW-2	FR: 10-LIT-052 TO: WIREWAY #2 1 2/CS-#16 >> SIGNAL: 10-LIT-052	S-10-200
S-10-200	10E01	1"	4	2/CS-#16		1	#14	XHHW-2	FR: WIREWAY #2 TO: WIREWAY #1 1 2/CS-#16 >> SIGNAL: 10-FIT-010 1 2/CS-#16 >> SIGNAL: 10-LIT-012 1 2/CS-#16 >> SIGNAL: 10-LIT-051 1 2/CS-#16 >> SIGNAL: 10-LIT-052	S-10-201 S-10-010 S-10-012 S-10-051 S-10-052
S-10-201	10E03	1.5"	7	2/CS-#16		1	#14	XHHW-2	FR: WIREWAY #1 TO: PB-01 1 2/CS-#16 >> SIGNAL: 10-COS-011 1 2/CS-#16 >> SIGNAL: 10-LIT-041 1 2/CS-#16 >> SIGNAL: 10-LIT-042 1 2/CS-#16 >> SIGNAL: 10-FIT-010 1 2/CS-#16 >> SIGNAL: 10-LIT-012 1 2/CS-#16 >> SIGNAL: 10-LIT-051 1 2/CS-#16 >> SIGNAL: 10-LIT-052	S-10-210 S-10-011 S-10-041 S-10-042 S-10-200 S-10-200 S-10-200 S-10-200
S-10-210	51E06 ESC09 ESC10	2"	7	2/CS-#16		1	#14	XHHW-2	FR: PB-01 TO: PCM-2 VIA HH-S09, HH-S07, MH-S05 1 2/CS-#16 >> SIGNAL: 10-COS-011 1 2/CS-#16 >> SIGNAL: 10-LIT-041 1 2/CS-#16 >> SIGNAL: 10-LIT-042 1 2/CS-#16 >> SIGNAL: 10-FIT-010 1 2/CS-#16 >> SIGNAL: 10-LIT-012 1 2/CS-#16 >> SIGNAL: 10-LIT-051 1 2/CS-#16 >> SIGNAL: 10-LIT-052	 S-10-201 S-10-201 S-10-201 S-10-201 S-10-201 S-10-201 S-10-201
X-10-200	10E01	2"	1	PULL	ROPE				FR: WIREWAY #1 TO: WIREWAY #2 1 PULL >> POWER/CONTROL SPARE	
X-10-201	10E01	2"	1	PULL	ROPE				FR: WIREWAY #1 TO: WIREWAY #2 1 PULL >> SIGNAL SPARE	
X-10-202	10E01	2"	1	PULL	ROPE				FR: WIREWAY #1 TO: PB-02 1 PULL >> POWER/CONTROL SPARE	
X-10-203	10E01	2"	1	PULL	ROPE				FR: WIREWAY #1 TO: PB-01 1 PULL >> SIGNAL SPARE	
X-10-300	ESC09 ESC10 51E06	2"	1	PULL	ROPE				FR: PB-01 TO: CONTROL ROOM VIA HH-S09, HH-S07, MH-S05 1 PULL >> SIGNAL SPARE	
X-10-301	ESC09 ESC10 51E06	2"	1	PULL	ROPE				FR: PB-02 TO: CONTROL ROOM VIA HH-E09, MH-E07, MH-E05 1 PULL >> CONTROL SPARE	
X-10-302	ESC09 ESC10 51E05	2"	1	PULL	ROPE				FR: PB-02 TO: MCC-E VIA HH-E09, MH-E07, MH-E05 1 PULL >> POWER/CONTROL SPARE	

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

LICENSED PROFESSIONAL ENGINEER — TIMOTHY A. VARLEY — No. 12679 — ELECTRICAL — STATE OF CALIFORNIA
9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
HEADWORKS
CONDUIT SCHEDULE- III

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 10E05
SHEET NO. 316 OF 549

LAST SAVED BY: adiaz
Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1 User: AWulff Plot Date: 16-SEP-2013 6:12:12 PM

PROJECT NO. 8930A.11 FILE NAME: 8930A1110E05.dgn

CONDUIT SCHEDULE AREA 10

9/11/13

LOS OSOS WATER RECYCLING FACILITY

HEADWORKS

CONDUIT			CONDUCTORS			GROUND			
NUMBER	**DWG**	**SIZE**	**#**	**SIZE**	**TYPE**	**#**	**SIZE**	**TYPE**	**DESCRIPTION** / **CONNECTING SEGMENTS**
X-10-303	ESC09 ESC10 51E05	2"	1	PULL	ROPE				FR: PB-02 TO: MCC-F VIA HH-E09, MH-E07, MH-E05 1 PULL >> POWER/CONTROL SPARE

END OF CONDUIT SCHEDULE

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN AD
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
HEADWORKS
CONDUIT SCHEDULE- IV

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 10E06
SHEET NO. 317 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1110E06.dgn

Plot Date: 16-SEP-2013 6:12:29 PM
User: AWulff
Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1
LAST SAVED BY: adiaz

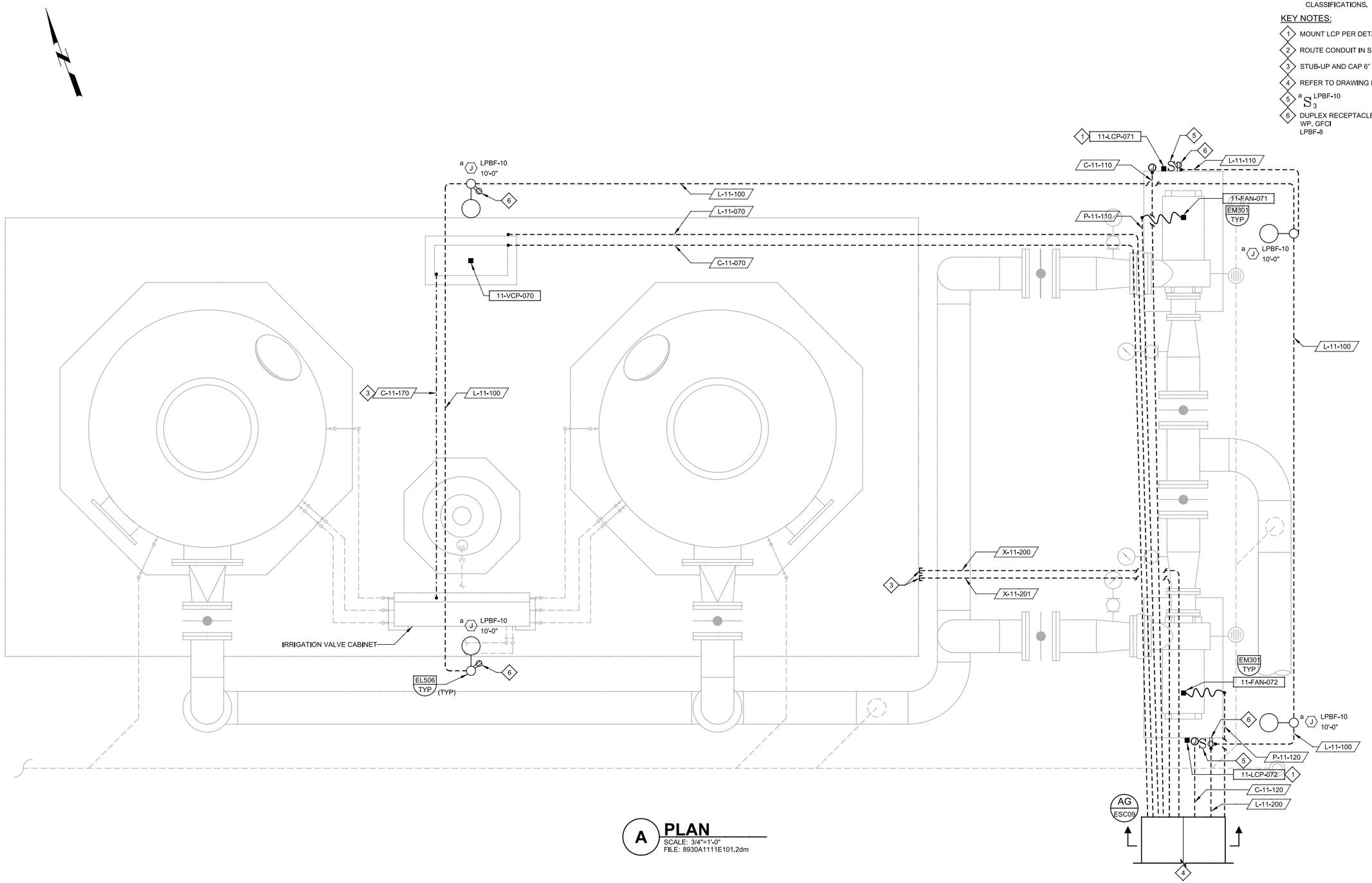
Plot Date: 16-SEP-2013 6:12:46 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: crollins

GENERAL NOTES:

1. REFER TO SPECIFICATION SECTION 16050 FOR HAZARDOUS AREA CLASSIFICATIONS.

KEY NOTES:

1. MOUNT LCP PER DETAIL EM201/TYP.
2. ROUTE CONDUIT IN SLAB PER DETAIL EM115/TYP.
3. STUB-UP AND CAP 6" PER DETAIL EM105/TYP.
4. REFER TO DRAWING ESC03 FOR CONTINUATION.
5. a LPBF-10 S_3
6. DUPLEX RECEPTACLE WP, GFCI LPBF-8



A PLAN

SCALE: 3/4"=1'-0"
FILE: 8930A1111E101.2dm

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN AD
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — JAMES R. VARELA — No. 12679 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
ODOR CONTROL FACILITY PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 11E01
SHEET NO. 318 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1111E01.dgn

CONDUIT SCHEDULE AREA 11

6/25/13

LOS OSOS WATER RECYCLING FACILITY

ODOR CONTROL FACILITY

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-11-070	11E01	2"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 11-VCP-070 TO: PCM-2 VIA MH-EH05 2 #14 >> CONTROL: 11-VCP-070	
C-11-111	11E01	2"	6	#14	XHHW-2	1	#14	XHHW-2	FR: JB @ 11-LCP-071 TO: MCC-E VIA MH-EH05 6 #14 >> CONTROL: 11-LCP-071	
C-11-121	11E01	2"	6	#14	XHHW-2	1	#14	XHHW-2	FR: JB @ 11-LCP-072 TO: MCC-F VIA MH-EH05 6 #14 >> CONTROL: 11-LCP-072	
C-11-170	11E01	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: 11-VCP-070 TO: IRRIGATION VALVE CABINET 12 #14 >> CONTROL: 11-VCP-070, 2-SPARE	
L-11-070	11E01	2"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 11-VCP-070 TO: MCC-F VIA MH-EH05 2 #12 >> LPBF-17	
L-11-100	11E01	1"	4	#12	XHHW-2	1	#12	XHHW-2	FR: SWITCH/LIGHTING FIXTURE TO: LIGHTING FIXTURE 2 #12 >> LPBF-10: LIGHTING 2 #12 >> LPBF-8: RECPT	L-11-200
L-11-200	11E01	2"	4	#12	XHHW-2	1	#12	XHHW-2	FR: SWITCH TO: MCC-F VIA MH-EH05 2 #12 >> LPBF-10: LIGHTING 2 #12 >> LPBF-8: RECPT	 L-11-100 L-11-100
P-11-110	11E01	2"	5	#12	XHHW-2	1	#12	XHHW-2	FR: 11-FAN-071 TO: MCC-E VIA MH-EH05 3 #12 >> POWER: 11-FAN-071 2 #12 >> 10-MWH-071	
P-11-120	11E01	2"	5	#12	XHHW-2	1	#12	XHHW-2	FR: 11-FAN-072 TO: MCC-F VIA MH-EH05 3 #12 >> POWER: 11-FAN-072 2 #12 >> 10-MWH-072	
X-11-200	11E01	2"	1	PULL	ROPE				FR: STUB-UP AT ODOR CONTROL FACILTY TO: PCM-2 VIA MH-EH05 1 PULL >> CONTROL SPARE	
X-11-201	11E01	2"	1	PULL	ROPE				FR: STUB-UP AT ODOR CONTROL FACILTY TO: MCC-F VIA MH-EH05 1 PULL >> POWER SPARE	

END OF CONDUIT SCHEDULE

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

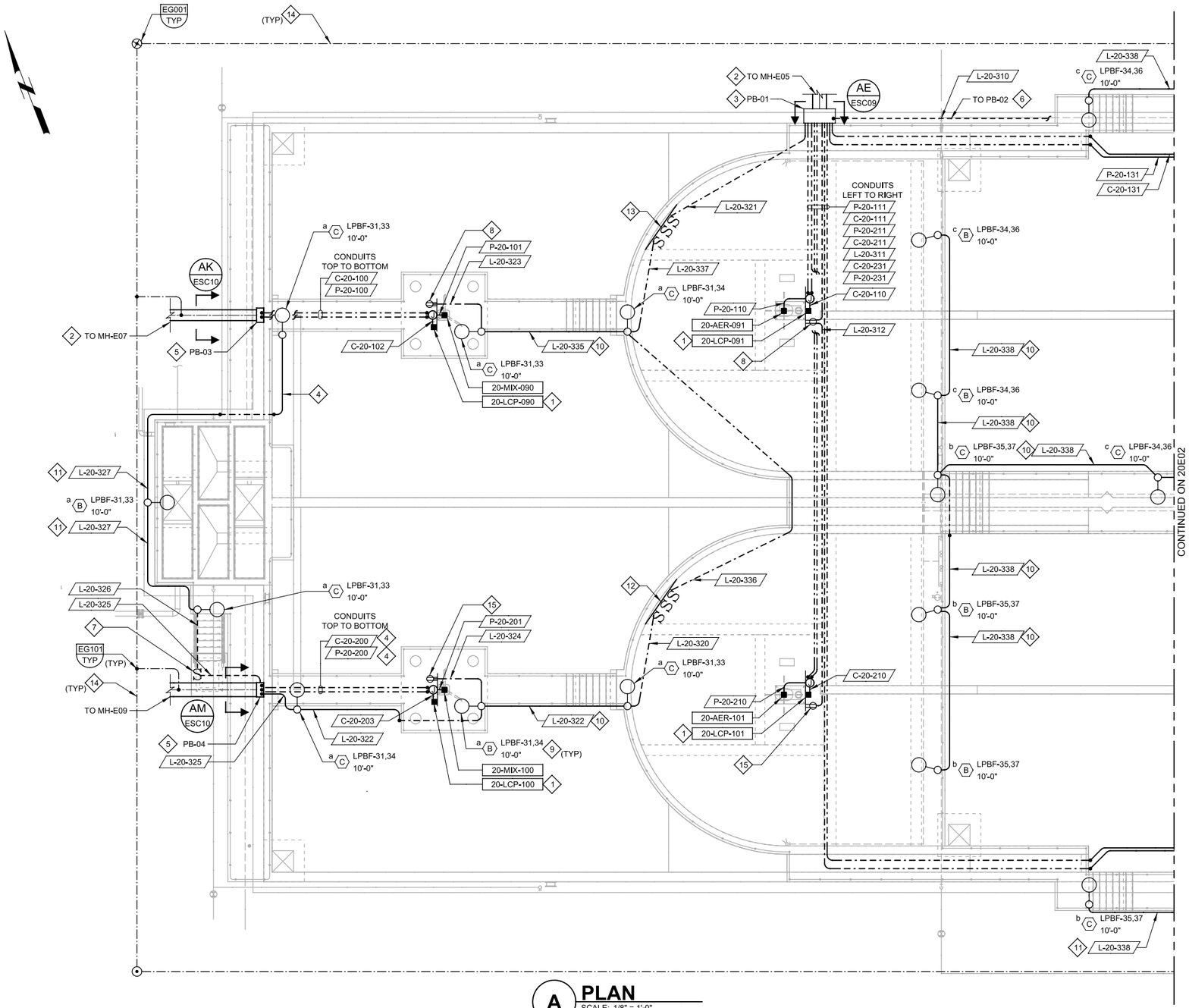
SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
ODOR CONTROL FACILITY
CONDUIT SCHEDULE

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 11E02
SHEET NO. 319 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1111E02.dgn

Plot Date: 16-SEP-2013 6:37:12 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: awulff



A PLAN

SCALE: 1/8" = 1'-0"
FILE: 8930A1120E100.dgn

GENERAL NOTES:

1. REFER TO SPECIFICATION SECTION 16050 FOR HAZARDOUS AREA CLASSIFICATIONS.
2. ROUTE CONDUIT IN SLAB PER DETAIL EM115/TYP UNLESS OTHERWISE NOTED.
3. PROVIDE CONDUIT SEAL FOR EXPOSED CONDUIT PER DETAIL EM108/TYP IN ACCORDANCE WITH NEC.

KEY NOTES:

1. MOUNT THE LCP PER DETAIL EM201/TYP.
2. REFER TO DRAWING ESC03 FOR CONTINUATION.
3. MOUNT THE PULL BOX ON THE WALL PER DETAIL EM0907/TYP AND SIZE PER NEC
4. ROUTE THE CONDUIT ON INNER EDGE OF THE SLAB PER DETAIL EM101/TYP.
5. MOUNT THE PULL BOX ON THE WALL BELOW THE WALKWAY PER DETAIL EM907/TYP AND SIZE PER NEC.
6. REFER TO DRAWING 20E02 FOR CONTINUATION.
7. MOUNT LIGHTING SWITCH DEVICE STAND PER DETAIL EM201/TYP.
   a S LPBF-31, 34 3, WP
8. DUPLEX RECEPTACLE, MOUNT ON LCP STAND AT 4'-6" ABOVE FINISHED GRADE.
   WP, GFCI
   LPBF-12
9. MOUNT THE LUMINAIRE ON 3-INCH POLE PER DETAIL EL505/TYP.
10. ROUTE CONDUIT ON OUTER EDGE OF THE SLAB PER DETAIL EM101/TYP.
11. ROUTE THE CONDUIT EXPOSED ON THE EXTERIOR WALL OF THE OXIDATION DITCH PER DETAIL EM101/TYP.
12. MOUNT THE LIGHT SWITCHES ON STAND PER EM202/TYP.
    a S LPBF-31, 34 3, WP b S LPBF-35, 37 4, WP c S LPBF-34, 36 4, WP
13. MOUNT THE LIGHT SWITCHES ON STAND PER EM202/TYP.
    a S LPBF-31, 34 4, WP b S LPBF-35, 37 4, WP c S LPBF-34, 36 4, WP
14. #2/0 SDBC.
15. DUPLEX RECEPTACLE, MOUNT ON LCP STAND AT 4'-6"ABOVE FINISHED GRADE.
    WP, GFCI
    LPBF-14

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN AD
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — JAMES R. VARLEY — No. 12079 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

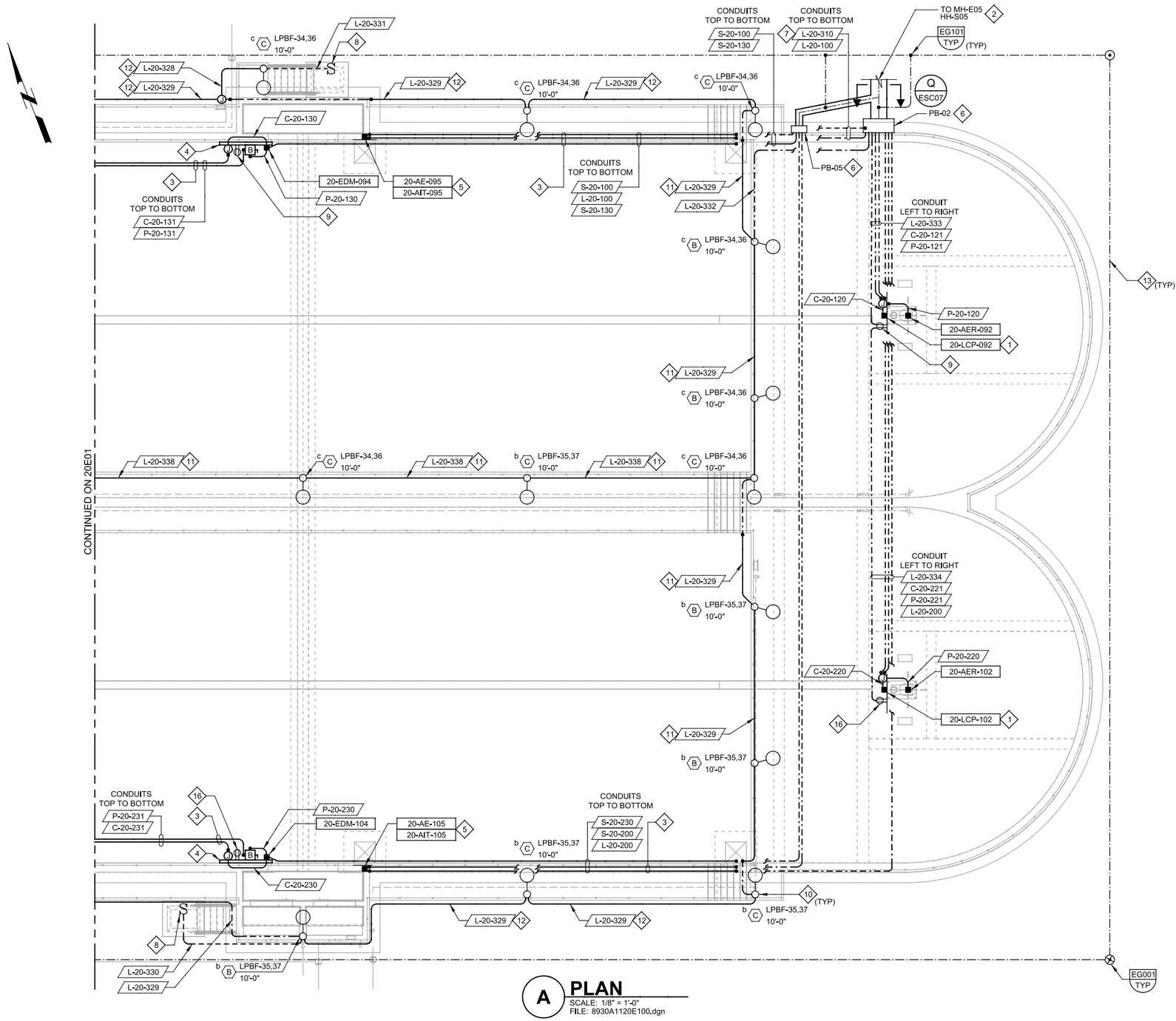
SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
OXIDATION DITCH NO. 1 & NO. 2
PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 — 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 20E01
SHEET NO. 320 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1120E01.dgn

Plot Date: 16-SEP-2013 6:13:20 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: adiaz



A **PLAN**
SCALE: 1/8" = 1'-0"
FILE: 8930A1120E100.dgn

GENERAL NOTES:

1. REFER TO SPECIFICATION SECTION 16050 FOR HAZARDOUS AREA CLASSIFICATIONS.
2. ROUTE CONDUIT IN SLAB PER DETAIL EM115/TYP UNLESS OTHERWISE NOTED.
3. PROVIDE CONDUIT SEAL FOR EXPOSED CONDUIT PER DETAIL EM108/TYP IN ACCORDANCE WITH NEC.

KEY NOTES:

1. MOUNT LCP PER DETAIL EM201/TYP.
2. REFER TO DRAWING ESC03 FOR CONTINUATION.
3. PROVIDE CONDUIT SUPPORT INTERIOR WALL OF THE OXIDATION DITCH PER DETAIL EM103/TYP.
4. MOUNT THE DISCONNECT SWITCH, RECEPTACLE AND JUNCTION BOX PER DETAIL EM900/TYP.
5. MOUNT AIT PER DETAIL EM903/TYP.
6. MOUNT PULL BOX ON THE WALL PER DETAIL EM907/TYP AND SIZE PER NEC.
7. REFER TO DRAWING 20E01 FOR CONTINUATION.
8. MOUNT LIGHTING SWITCH DEVICE STAND PER DETAIL EM202/TYP.
   b S LPBF-34 3,WP c S LPBF-36 3,WP
9. DUPLEX RECEPTACLE, MOUNT ON LCP STAND AT 4'-6" ABOVE FINISHED GRADE. WP, GFCI LPBF-12
10. OUNT THE LUMINAIRE ON 3-INCH POLE PER DETAIL EL505/TYP.
11. ROUTE THE CONDUIT ON OUTER EDGE OF THE SLAB PER DETAIL EM101/TYP.
12. OUTE THE CONDUIT ON THE EXTERIOR WALL OF THE OXIDATION DITCH. PER DETAIL EM101/TP.
13. #2/0 SDBC.
14. DUPLEX RECEPTACLE, MOUNT ON LCP STAND AT 4'-6"ABOVE FINISHED GRADE. WP, GFCI LPBF-14

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN AD
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER IAN R. VARLEY No. 12879 ELECTRICAL STATE OF CALIFORNIA 9/16/2013

carollo®

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
OXIDATION DITCH NO. 1 & NO. 2
PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 20E02
SHEET NO. 321 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1120E02.dgn

Plot Date: 16-SEP-2013 6:13:39 PM
User: AWulff
Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1
LAST SAVED BY: adiaz

CONDUIT SCHEDULE AREA 20

9/16/13

LOS OSOS WATER RECYCLING FACILITY

OXIDATION DITCH NO. 1 AND NO. 2

CONDUIT			CONDUCTORS			GROUND					
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION		CONNECTING SEGMENTS
C-20-100	20E01	1"	2 12	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: TO: 2 #12 2 #14 2 #14 8 #14	JB @ 20-LCP-090 PB-03 >> CONTROL: 20-MWH-090 >> CONTROL: 20-LSL-090 >> CONTROL: 20-TSH-090 >> CONTROL: 20-LCP-090, 2-SPARE	C-20-101 P-20-101 P-20-101 P-20-101 C-20-102
C-20-101	ESC09 ESC10	2"	2 12	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: TO: 2 #12 2 #14 2 #14 8 #14	PB-03 MCC-E VIA HH-E07, MH-E05 >> CONTROL: 20-MWH-090 >> CONTROL: 20-LSL-090 >> CONTROL: 20-TSH-090 >> CONTROL: 20-LCP-090, 2-SPARE	 C-20-100 C-20-100 C-20-100 C-20-100
C-20-102	20E01	0.75"	8	#14	XHHW-2	1	#14	XHHW-2	FR: TO: 8 #14	20-LCP-090 JB @ 20-LCP-090 >> CONTROL: 20-LCP-090, 2-SPARE	C-20-100
C-20-110	20E01	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: TO: 10 #14	20-AER-091 JB @ 20-LCP-091 >> CONTROL: 20-LCP-091, 2-SPARE	C-20-111
C-20-111	20E01	1"	2 14	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: TO: 2 #12 2 #14 2 #14 10 #14	JB @ 20-LCP-091 PB-01 >> CONTROL: 20-MWH-091 >> CONTROL: 20-LSL-091 >> CONTROL: 20-TSH-091 >> CONTROL: 20-LCP-091, 2-SPARE	C-20-401 P-20-110 P-20-110 P-20-110 C-20-110
C-20-120	20E02	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: TO: 10 #14	20-AER-092 JB @ 20-LCP-092 >> CONTROL: 20-LCP-092, 2-SPARE	
C-20-121	20E02	1"	2 14	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: TO: 2 #12 2 #14 2 #14 10 #14	JB @ 20-LCP-092 PB-02 >> CONTROL: 20-MWH-092 >> CONTROL: 20-LSL-092 >> CONTROL: 20-TSH-092 >> CONTROL: 20-LCP-092, 2-SPARE	C-20-402 P-20-120 P-20-120 P-20-120 C-20-120
C-20-130	20E02	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: TO: 10 #14	20-EDR-094 JB >> CONTROL: 20-EDR-094	C-20-131
C-20-131	20E01 20E02	1"	2 10	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: TO: 10 #14 2 #12	JB PB-01 >> CONTROL: 20-EDR-094 >> LPBF-12: RECEPTACTLES	C-20-300 C-20-130
C-20-200	20E01	1"	2 12	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: TO: 2 #12 2 #14 2 #14 8 #14	20-MIX-100 JB @ 20-LCP-100 >> CONTROL: 20-MWH-100 >> CONTROL: 20-LSL-100 >> CONTROL: 20-TSH-100 >> CONTROL: 20-LCP-100, 2-SPARE	C-20-201 P-20-201 P-20-201 P-20-201 C-20-202
C-20-201	ESC09 ESC10	2"	2 12	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: TO: 2 #12 2 #14 2 #14 8 #14	PB-04 MCC-F VIA HH-E09, HH-E07, MH-E05 >> CONTROL: 20-MWH-100 >> CONTROL: 20-LSL-100 >> CONTROL: 20-TSH-100 >> CONTROL: 20-LCP-100, 2-SPARE	 C-20-200 C-20-200 C-20-200 C-20-200
C-20-202	20E01	0.75"	8	#14	XHHW-2	1	#14	XHHW-2	FR: TO: 8 #14	20-LCP-100 JB @ 20-LCP-100 >> CONTROL: 20-LCP-100, 2-SPARE	C-20-200
C-20-210	20E01	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: TO: 10 #14	20-LCP-101 JB @ 20-LCP-101 >> CONTROL: 20-LCP-101, 2-SPARE	C-20-211
C-20-211	20E01	1"	2 14	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: TO: 2 #14 2 #14 2 #12 10 #14	JB @ 20-LCP-101 PB-01 >> CONTROL: 20-LSL-101 CONTROL: 20-TSH-101 >> CONTROL: 20-MWH-101 >> CONTROL: 20-LCP-101, 2-SPARE	C-20-403 P-20-210 P-20-210 P-20-210 C-20-210
C-20-220	20E02	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: TO: 10 #14	20-LCP-102 JB @ 20-LCP-102 >> CONTROL: 20-LCP-102, 2-SPARE	C-20-221

CONDUIT SCHEDULE AREA 20

9/16/13

LOS OSOS WATER RECYCLING FACILITY

OXIDATION DITCH NO. 1 AND NO. 2

CONDUIT			CONDUCTORS			GROUND					
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION		CONNECTING SEGMENTS
C-20-221	20E02	1"	2 14	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: TO: 2 #14 2 #12 2 #14 10 #14	JB @ 20-LCP-102 PB-02 >> CONTROL: 20-LSL-102 >> CONTROL: 20-MWH-102 >> CONTROL: 20-TSH-102 >> CONTROL: 20-LCP-102, 2-SPARE	C-20-404 P-20-220 P-20-220 P-20-220 C-20-220
C-20-230	20E02	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: TO: 10 #14	20-EDR-104 JB >> CONTROL: 20-EDM-104, 2-SPARE	C-20-231
C-20-231	20E01 20E02	1"	2 10	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: TO: 10 #14 2 #12	JB PB-01 >> CONTROL: 20-EDM-104 >> LPBF-12: RECEPTACTLE	C-20-300 C-20-230
C-20-300	ESC09	2"	20	#14	XHHW-2	1	#14	XHHW-2	FR: TO: 10 #14 10 #14	PB-01 MH-E05 >> CONTROL: 20-EDM-094, 2-SPARE >> CONTROL: 20-EDM-104, 2-SPARE	C-20-400 C-20-131 C-20-231
C-20-400	ESC09 51E06	2"	4 20	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: TO: 10 #14 10 #14 2 #12 2 #12	MH-05 PCM-2 >> CONTROL: 20-EDM-094, 2-SPARE >> CONTROL: 20-EDM-104, 2-SPARE >> POWER: 20-AIT-095 >> POWER: 20-AIT-105	 C-20-300 C-20-300 L-20-400 L-20-400
C-20-401	ESC09 51E06	2"	2 14	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: TO: 2 #12 2 #14 2 #14 10 #14	PB-01 20-VFD-091 VIA MH-E05 >> CONTROL: 20-MWH-091 >> CONTROL: 20-LSL-091 >> CONTROL: 20-TSH-091 >> CONTROL: 20-LCP-091, 2-SPARE	 C-20-111 C-20-111 C-20-111 C-20-111
C-20-402	ESC07 ESC09 51E06	1"	2 14	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: TO: 2 #12 2 #14 2 #14 10 #14	PB-02 20-VFD-092 VIA MH-05 >> CONTROL: 20-MWH-092 >> CONTROL: 20-LSL-092 >> CONTROL: 20-TSH-092 >> CONTROL: 20-LCP-092, 2-SPARE	 C-20-121 C-20-121 C-20-121 C-20-121
C-20-403	ESC09 51E06	2"	2 14	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: TO: 2 #14 2 #14 2 #12 10 #14	PB-01 20-VFD-101 VIA MH-E05 >> CONTROL: 20-LSL-101 CONTROL: 20-TSH-101 >> CONTROL: 20-MWH-101 >> CONTROL: 20-LCP-101, 2-SPARE	 C-20-211 C-20-211 C-20-211 C-20-211
C-20-404	ESC07 ESC09 51E06	2"	2 14	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: TO: 2 #14 2 #12 2 #14 10 #14	PB-02 20-VFD-102 VIA MH-05 >> CONTROL: 20-LSL-102 >> CONTROL: 20-MWH-102 >> CONTROL: 20-TSH-102 >> CONTROL: 20-LCP-102, 2-SPARE	 C-20-221 C-20-221 C-20-221 C-20-221
L-20-100	20E02	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: TO: 2 #12	20-AIT-095 VIS DISC. PB-02 >> POWER: 20-AIT-095	L-20-400
L-20-200	20E02	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: TO: 2 #12	20-AIT-105 VIA DISC. PB-02 >> POWER: 20-AIT-105	L-20-400
L-20-310	20E01 20E02	1.5"	12	#8	XHHW-2	1	#10	XHHW-2	FR: TO: 2 #8 2 #8 4 #8 4 #8	PB-01 PB-02 >> LPBF-12: RECEPTACTLE >> LPBF-14: RECEPTACTLE >> LPBF-35,37: LIGHTING >> LPBF-34,36: LIGHTING	
L-20-311	20E01	1"	4	#8	XHHW-2	1	#10	XHHW-2	FR: TO: 2 #8 2 #8	PB-01 RECEPTACLE @ 20-LCP-091 >> LPBF-12: RECEPTACTLE >> LPBF-14: RECEPTACTLE	L-20-312
L-20-312	20E01	1"	2	#8	XHHW-2	1	#10	XHHW-2	FR: TO: 2 #8	RECEPTACLE @ 20-LCP-091 RECEPTACLE @ 20-LCP-101 >> LPBF-14: RECEPTACTLE	 L-20-311

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER · JAMES R. VARLEY · No. 12879 · ELECTRICAL · STATE OF CALIFORNIA
9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
OXIDATION DITCH NO. 1 & NO. 2
CONDUIT SCHEDULE- I

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 20E03
SHEET NO. 322 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1120E03.dgn

LAST SAVED BY: adiaz
Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1
User: AWulff Plot Date: 16-SEP-2013 6:13:57 PM

CONDUIT SCHEDULE AREA 20

9/16/13

LOS OSOS WATER RECYCLING FACILITY

OXIDATION DITCH NO. 1 AND NO. 2

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
L-20-320	20E01	1"	2 5	#8 #10	XHHW-2 XHHW-2	1	#10	XHHW-2	FR: LIGHT SWITCES TO: LUMINAIRES 5 #10 >> LPBF-31,33: LIGHTING 2 #8 >> LPBF-14: RECEPTACTLE	L-20-322 L-20-321
L-20-321	20E01	1.5"	10 3	#8 #10	XHHW-2 XHHW-2	1	#10	XHHW-2	FR: PB-01 TO: LIGHT SWITCES 3 #8 >> LPBF-35,37: LIGHTING 3 #8 >> LPBF-34,36: LIGHTING 2 #8 >> LPBF-12: RECEPTACTLE 2 #8 >> LPBF-14: RECEPTACTLE 3 #10 >> LPBF-31,33: LIGHTING	L-20-320 L-20-401 L-20-401 L-20-401
L-20-322	20E01	1"	2 5	#8 #10	XHHW-2 XHHW-2	1	#10	XHHW-2	FR: LUMINAIRES TO: LUMINAIRES 5 #10 >> LPBF-31,33: LIGHTING 2 #8 >> LPBF-14: RECEPTACTLES	L-20-323 L-20-320 L-20-320
L-20-323	20E01	1"	2	#8	XHHW-2	1	#10	XHHW-2	FR: LUMINAIRES TO: RECEPTACLE @ 20-LCP-090 2 #8 >> LPBF-12: RECEPTACTLES	 L-20-322
L-20-324	20E01	1"	2	#8	XHHW-2	1	#10	XHHW-2	FR: LUMINAIRES TO: RECEPTACLE @ 20-LCP-100 2 #8 >> LPBF-14: RECEPTACTLES	 L-20-322
L-20-325	20E01	1"	5	#10	XHHW-2	1	#10	XHHW-2	FR: LUMINAIRES TO: LIGHT SWITCH @ EAST SIDE 5 #10 >> LPBF-31,33: LIGHTING	L-20-326 L-20-322
L-20-326	20E01	1"	3	#10	XHHW-2	1	#10	XHHW-2	FR: LIGHT SWITCH @ EAST SIDE TO: LUMINAIRES 3 #10 >> LPBF-31,33: LIGHTING	L-20-327 L-20-325
L-20-327	20E01	1"	2	#10	XHHW-2	1	#10	XHHW-2	FR: LUMINAIRES TO: LUMINAIRES 2 #10 >> LPBF-31,33: LIGHTING	 L-20-326
L-20-328	20E01 20E02	1.5"	10	#8	XHHW-2	1	#10	XHHW-2	FR: LUMINAIRES TO: J-BOX 5 #8 >> LPBF-35,37: LIGHTING 5 #8 >> LPBF-34,36: LIGHTING	L-20-329 L-20-320 L-20-320
L-20-329	20E01 20E02	1.5"	10	#8	XHHW-2	1	#10	XHHW-2	FR: LUMINAIRES TO: LUMINAIRES & J-BOX 5 #8 >> LPBF-35,37: LIGHTING 5 #8 >> LPBF-34,36: LIGHTING	L-20-332 L-20-328 L-20-328
L-20-330	20E02	1.5"	8	#8	XHHW-2	1	#10	XHHW-2	FR: J-BOX TO: LIGHT SWITCH @ SOUTH SIDE 4 #8 >> LPBF-35,37: LIGHTING 4 #8 >> LPBF-34,36: LIGHTING	 L-20-328 L-20-328
L-20-331	20E02	1.5"	8	#8	XHHW-2	1	#10	XHHW-2	FR: J-BOX TO: LIGHT SWITCH @ NORTH SIDE 4 #8 >> LPBF-35,37: LIGHTING 4 #8 >> LPBF-34,36: LIGHTING	 L-20-328 L-20-328
L-20-332	20E02	1.5"	8	#8	XHHW-2	1	#10	XHHW-2	FR: PB-02 TO: LUMINAIRES 4 #8 >> LPBF-35,37: LIGHTING 4 #8 >> LPBF-34,36: LIGHTING	L-20-400 L-20-329 L-20-329
L-20-333	20E02	1"	2	#8	XHHW-2	1	#10	XHHW-2	FR: PB-02 TO: RECEPTACLE @ 20-LCP-092 2 #8 >> LPBF-12: RECEPTACTLES	L-20-334
L-20-334	20E02	1"	2	#8	XHHW-2	1	#10	XHHW-2	FR: RECEPTACLE @ 20-LCP-092 TO: RECEPTACLE @ 20-LCP-102 2 #8 >> LPBF-12: RECEPTACTLES	 L-20-333
L-20-335	20E01	1"	5	#8	XHHW-2	1	#10	XHHW-2	FR: LUMINARIES TO: LUMINARIES 2 #8 >> LPBF-12: RECEPTACTLES 3 #8 >> LPBF-35,37: LIGHTING	
L-20-336	20E01	1.5"	10 7	#8 #10	XHHW-2 XHHW-2	1	#10	XHHW-2	FR: LIGHT SWITCHES TO: LIGHT SWITCHES 2 #10 >> LPBF-12: LIGHTING 5 #10 >> LPBF-31,33: LIGHTING 5 #8 >> LPBF-35,37: LIGHTING 5 #8 >> LPBF-34,36: LIGHTING	

CONDUIT SCHEDULE AREA 20

9/16/13

LOS OSOS WATER RECYCLING FACILITY

OXIDATION DITCH NO. 1 AND NO. 2

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
L-20-337	20E01	1.5"	12 3	#8 #10	XHHW-2 XHHW-2	1	#10	XHHW-2	FR: LUMINARIES TO: LIGHT SWITCHES 2 #8 >> LPBF-12: RECEPTACTLES 3 #10 >> LPBF-31,33: LIGHTING 5 #8 >> LPBF-35,37: LIGHTING 5 #8 >> LPBF-34,36: LIGHTING	
L-20-338	20E01 20E02	1"	6	#8	XHHW-2	1	#10	XHHW-2	FR: LUMINARIES TO: LUMINARIES OR J-BOX 3 #8 >> LPBF-35,37: LIGHTING 3 #8 >> LPBF-34,36: LIGHTING	
L-20-400	ESC09 ESC10	2"	8 4	#8 #12	XHHW-2 XHHW-2	1	#10	XHHW-2	FR: PB-02 TO: MH-E05 4 #8 >> LPBF-35,37: LIGHTING 4 #8 >> LPBF-34,36: LIGHTING 2 #12 >> POWER: 20-AIT-095 2 #12 >> POWER: 20-AIT-105	C-20-400 L-20-332 L-20-332 L-20-100 L-20-200
L-20-410	ESC09 ESC10	2"	10 3	#8 #10	XHHW-2 XHHW-2	2	#10	XHHW-2	FR: MH-E05 TO: MCC-F 2 #8 >> LPBF-12: RECEPTACTLES 2 #8 >> LPBF-14: RECEPTACTLES 3 #8 >> LPBF-35,37: LIGHTING 3 #8 >> LPBF-34,36: LIGHTING 3 #10 >> LPBF-31,33: LIGHTING	
L-20-401	ESC09	2"	4 3	#8 #10	XHHW-2 XHHW-2	1	#10	XHHW-2	FR: PB-01 TO: MH-E05 3 #10 >> LPBF-31,33: LIGHTING 2 #8 >> LPBF-12: RECEPTACTLE 2 #8 >> LPBF-14: RECEPTACTLE	L-20-321 L-20-401 L-20-401 L-20-401
P-20-100	20E01 ESC09 ESC10 50E05	1"	3	#8	XHHW-2	1	#10	XHHW-2	FR: JB @ 20-LCP-090 TO: MH-E05 VIA PB-03, HH-E07 3 #8 >> POWER: 20-MIX-090	P-20-405 P-20-101
P-20-101	20E01	1"	3 2 4	#8 #12 #14	XHHW-2 XHHW-2 XHHW-2	1	#10	XHHW-2	FR: 20-MIX-090 TO: JB @ 20-LCP-090 3 #8 >> POWER: 20-MIX-090 2 #12 >> CONTROL: 20-MWH-090 2 #14 >> CONTROL: 20-LSL-090 2 #14 >> CONTROL: 20-TSH-090	C-20-100
P-20-110	20E01	1.5"	3 2 4	#1 #12 #14	XHHW-2 XHHW-2 XHHW-2	1	#6	XHHW-2	FR: 20-AER-091 TO: JB @ 20-LCP-091 3 #1 >> POWER: 20-AER-091 2 #12 >> CONTROL: 20-MWH-091 2 #14 >> CONTROL: 20-LSL-091 2 #14 >> CONTROL: 20-TSH-091	C-20-111
P-20-120	20E02	1.5"	3 2 4	#1 #12 #14	XHHW-2 XHHW-2 XHHW-2	1	#6	XHHW-2	FR: 20-AER-092 TO: JB @ 20-LCP-92 3 #1 >> POWER: 20-AER-092 2 #12 >> CONTROL: 20-MWH-092 2 #14 >> CONTROL: 20-LSL-092 2 #14 >> CONTROL: 20-TSH-092	C-20-121
P-20-130	20E02	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 20-EDM-094 TO: DISCONNECT SWITCH 3 #12 >> POWER: 20-EDM-094	P-20-131
P-20-131	20E01 20E02	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWITCH TO: PB-01 3 #12 >> POWER: 20-EDM-094	P-20-302 P-20-130
P-20-200	20E01 ESC09 ESC10 50E05	1"	3	#8	XHHW-2	1	#10	XHHW-2	FR: JB @ 20-LCP-100 TO: MCC-F VIA HH-E09, HH-E07, MH-E05 3 #8 >> POWER: 20-MIX-100	 P-20-201
P-20-201	20E01	1"	3 2 4	#8 #12 #14	XHHW-2 XHHW-2 XHHW-2	1	#10	XHHW-2	FR: 20-MIX-100 TO: JB @ 20-LCP-100 3 #8 >> POWER: 20-MIX-100 2 #12 >> CONTROL: 20-MWH-100 2 #14 >> CONTROL: 20-LSL-100 2 #14 >> CONTROL: 20-TSH-100	C-20-200

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
OXIDATION DITCH NO. 1 & NO. 2
CONDUIT SCHEDULE- II

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 20E04
SHEET NO. 323 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1120E04.dgn

Plot Date: 16-SEP-2013 6:14:15 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: vcastro

CONDUIT SCHEDULE AREA 20

9/16/13

LOS OSOS WATER RECYCLING FACILITY

OXIDATION DITCH NO. 1 AND NO. 2

CONDUIT			CONDUCTORS			GROUND						
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION			CONNECTING SEGMENTS
P-20-210	20E01	1.5"	3	#1	XHHW-2	1	#6	XHHW-2	FR:		20-AER-101	C-20-211
			2	#12	XHHW-2				TO:		JB @ 20-LCP-101	
			4	#14	XHHW-2					3 #1	>> POWER: 20-AER-101	
										2 #14	>> CONTROL: 20-LSL-101	
										2 #12	>> CONTROL: 20-MWH-101	
										2 #14	>> CONTROL: 20-TSH-101	
P-20-211	20E01	1.5"	3	#1	XHHW-2	1	#6	XHHW-2	FR:		JB @ 20-LCP-101	P-20-403
									TO:		PB-01	
										3 #1	>> POWER: 20-AER-101	P-20-210
P-20-220	20E02	1.5"	3	#1	XHHW-2	1	#6	XHHW-2	FR:		20-AER-102	C-20-221
			2	#12	XHHW-2				TO:		JB @ 20-LCP-102	
			4	#14	XHHW-2					3 #1	>> POWER: 20-AER-102	
										2 #14	>> CONTROL: 20-LSL-102	
										2 #12	>> CONTROL: 20-MWH-102	
										2 #14	>> CONTROL: 20-TSH-102	
P-20-230	20E02	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR:		20-EDM-104	P-20-231
									TO:		DISCONNECT SWITCH	
										3 #12	>> POWER: 20-EDM-104	
P-20-231	20E01	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR:		DISCONNECT SWITCH	P-20-301
	20E02								TO:		PB-01	
										3 #12	>> POWER: 20-EDM-104	P-20-230
P-20-301	51E05	2"	3	#12	XHHW-2	1	#12	XHHW-2	FR:		PB-01	
									TO:		MCC-F VIA MH-E05	
										3 #12	>> POWER: 20-EDM-104	P-20-231
P-20-302	51E05	2"	3	#12	XHHW-2	1	#12	XHHW-2	FR:		PB-01	P-20-405
									TO:		MH-E05	
										3 #12	>> POWER: 20-EDM-094	P-20-131
P-20-401	51E05	2"	3	#1	XHHW-2	1	#6	XHHW-2	FR:		PB-01	
	ESC09								TO:		20-VFD-091 VIA MH-E05	
										3 #1	>> POWER: 20-AER-091	P-20-110
P-20-402	51E05	1.5"	3	#1	XHHW-2	1	#6	XHHW-2	FR:		PB-02	
	ESC07								TO:		20-VFD-092 VIA MH-05	
	ESC09									3 #1	>> POWER: 20-AER-092	P-20-120
P-20-403	51E05	2"	3	#1	XHHW-2	1	#6	XHHW-2	FR:		PB-01	
	ESC07								TO:		20-VFD-101 VIA MH-E05	
										3 #1	>> POWER: 20-AER-101	P-20-211
P-20-404	51E05	2"	3	#1	XHHW-2	1	#6	XHHW-2	FR:		PB-02	
	ESC07								TO:		20-VFD-102 VIA MH-05	
	ESC09									3 #1	>> POWER: 20-AER-102	P-20-220
P-20-405	51E05	2"	3	#8	XHHW-2	1	#10	XHHW-2	FR:		MH-E05	
	ESC07		3	#12	XHHW-2	1	#12	XHHW-2	TO:		MCC-E	
	ESC09									3 #12	>> POWER: 20-EDM-094	P-20-302
										3 #8	>> POWER: 20-MIX-090	P-20-100
S-20-100	20E02	1"	1	2/CS-#16		1	#14	XHHW-2	FR:		20-AIT-095	S-20-300
									TO:		JB	
										1 2/CS-#16	>> SIGNAL: 20-AIT-095	
S-20-130	20E02	1"	2	2/CS-#16		1	#14	XHHW-2	FR:		20-EDM-094	S-20-300
									TO:		PB-05	
										2 2/CS-#16	>> SIGNAL: 20-EDM-094	
S-20-200	20E02	1"	1	2/CS-#16		1	#14	XHHW-2	FR:		20-AIT-105	S-20-300
									TO:		PB-05	
										1 2/CS-#16	>> SIGNAL: 20-AIT-105	
S-20-230	20E02	1"	2	2/CS-#16		1	#14	XHHW-2	FR:		20-EDM-104	S-20-300
									TO:		PB-05	
										2 2/CS-#16	>> SIGNAL: 20-EDM-104	
S-20-300	20E02	2"	6	2/CS-#16		1	#14	XHHW-2	FR:		PB-05	
	ESC09								TO:		PCM-2 VIA MH-S05	
										1 2/CS-#16	>> SIGNAL: 20-AIT-095	S-20-100
										2 2/CS-#16	>> SIGNAL: 20-EDM-094	S-20-130
										1 2/CS-#16	>> SIGNAL: 20-AIT-105	S-20-200
										2 2/CS-#16	>> SIGNAL: 20-EDM-104	S-20-230
X-20-300	20E01	2"	1	PULL	ROPE				FR:		PB-04	
	ESC10								TO:		HH-E09	
										1 PULL	>> POWER/CONTROL SPARE	

CONDUIT SCHEDULE AREA 20

9/16/13

LOS OSOS WATER RECYCLING FACILITY

OXIDATION DITCH NO. 1 AND NO. 2

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
X-20-301	20E01	2"	1	PULL	ROPE				FR: PB-03	
	ESC09								TO: HH-E07, MH-E05	
	ESC10								1 PULL >> POWER/CONTROL SPARE	
X-20-302	51E05	2"	1	PULL	ROPE				FR: PB-01	
	ESC09								TO: MCC-F VIA MH-E05	
									1 PULL >> POWER/CONTROL SPARE	
X-20-303	51E05	2"	1	PULL	ROPE				FR: PB-01	
	ESC09								TO: PCM-2 VIA MH-05	
									1 PULL >> CONTROL SPARE	
X-20-304	51E05	2"	1	PULL	ROPE				FR: PB-02	
	ESC09								TO: MCC-E VIA MH-E05	
									1 PULL >> POWER/CONTROL SPARE	
X-20-305	20E02	2"	1	PULL	ROPE				FR: PB-05	
	ESC09								TO: PCM-2 VIA HH-S03, MH-S05	
									1 PULL >> SIGNAL SPARE	

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

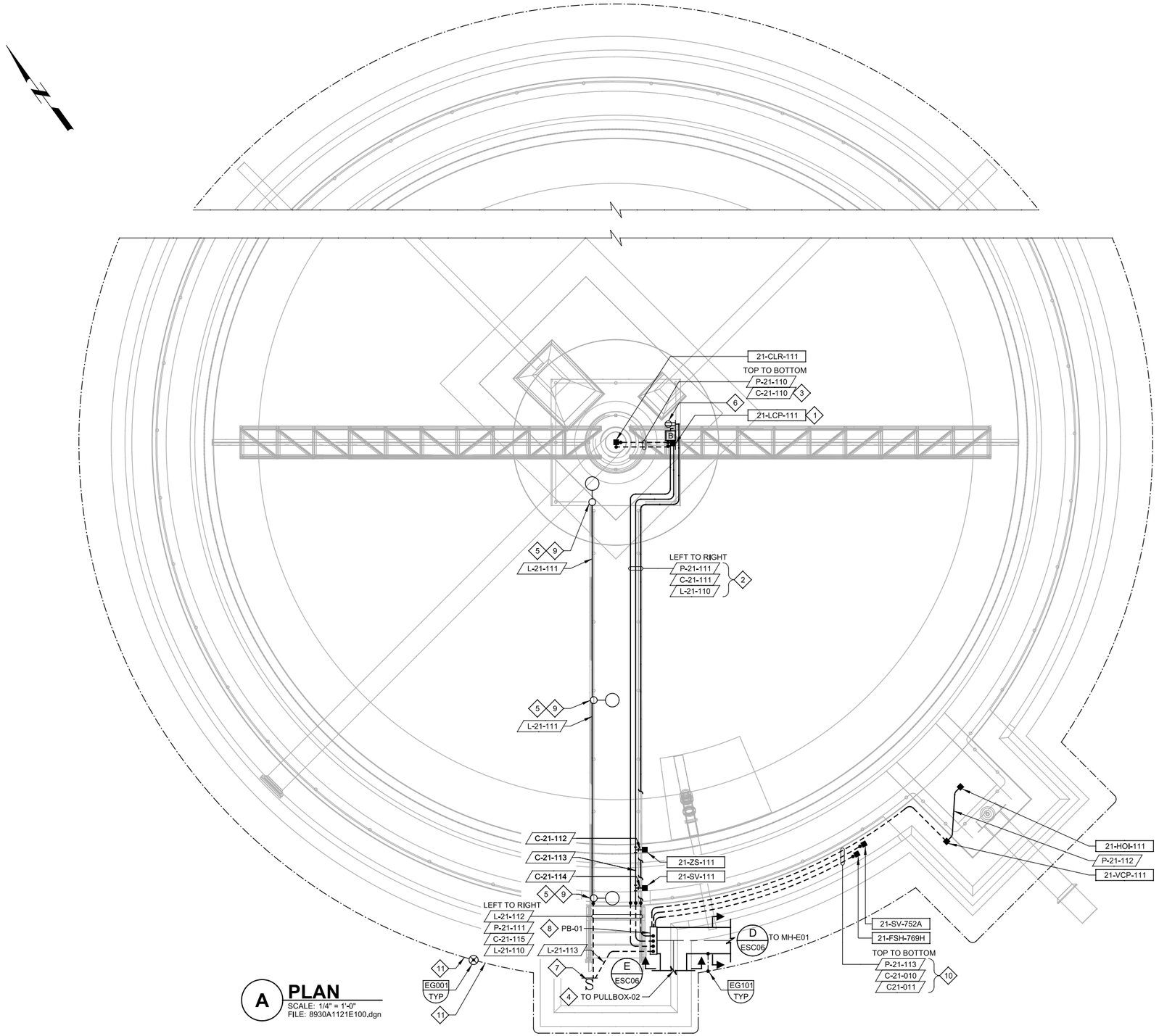
SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
OXIDATION DITCH NO. 1 & NO. 2
CONDUIT SCHEDULE- III

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 20E05
SHEET NO. 324 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1120E05.dgn

Plot Date: 16-SEP-2013 6:14:33 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: vcastro



A **PLAN**
SCALE: 1/4" = 1'-0"
FILE: 8930A1121E100.dgn

GENERAL NOTES:

1. REFER TO SPECIFICATION SECTION 16050 FOR HAZARDOUS AREA CLASSIFICATIONS.
2. ALL CONDUIT SEALS ARE NOT SHOWN FOR CLARITY, PROVIDE CONDUIT SEAL PER DETAIL EM108/TYP AND IN ACCORDANCE WITH NEC.

KEY NOTES:

1. MOUNT LCP PER DETAIL EM905/TYP.
2. ROUTE CONDUIT ALONG WALKWAY BRIDGE PER DETAIL EM908.
3. ROUTE CONDUIT UNDER THE WALKWAY, PROVIDE UNISTRUTS AS REQUIRED.
4. REFER TO DRAWING ESC03 FOR CONTINUATION.
5. MOUNT LUMINAIRE PER DETAIL EL504/TYP.
6. DUPLEX RECEPTACLE WP, GFCI LPBD-2
7. MOUNT LIGHTING SWITCH ON DEVICE SUPPORT PER DETAIL EM201/TYP. a S LPBD-4 WP
8. MOUNT NEMA 4X-SS PULL BOX PER DETAIL EM202/TYP AND SIZE PER NEC.
9. a C LPBD-4 10'-0"
10. PROVIDE PCS TYPE CONDUIT
11. #2/0 SDBC

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

LICENSED PROFESSIONAL ENGINEER — TIMOTHY R. VARLEY — No. 12673 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

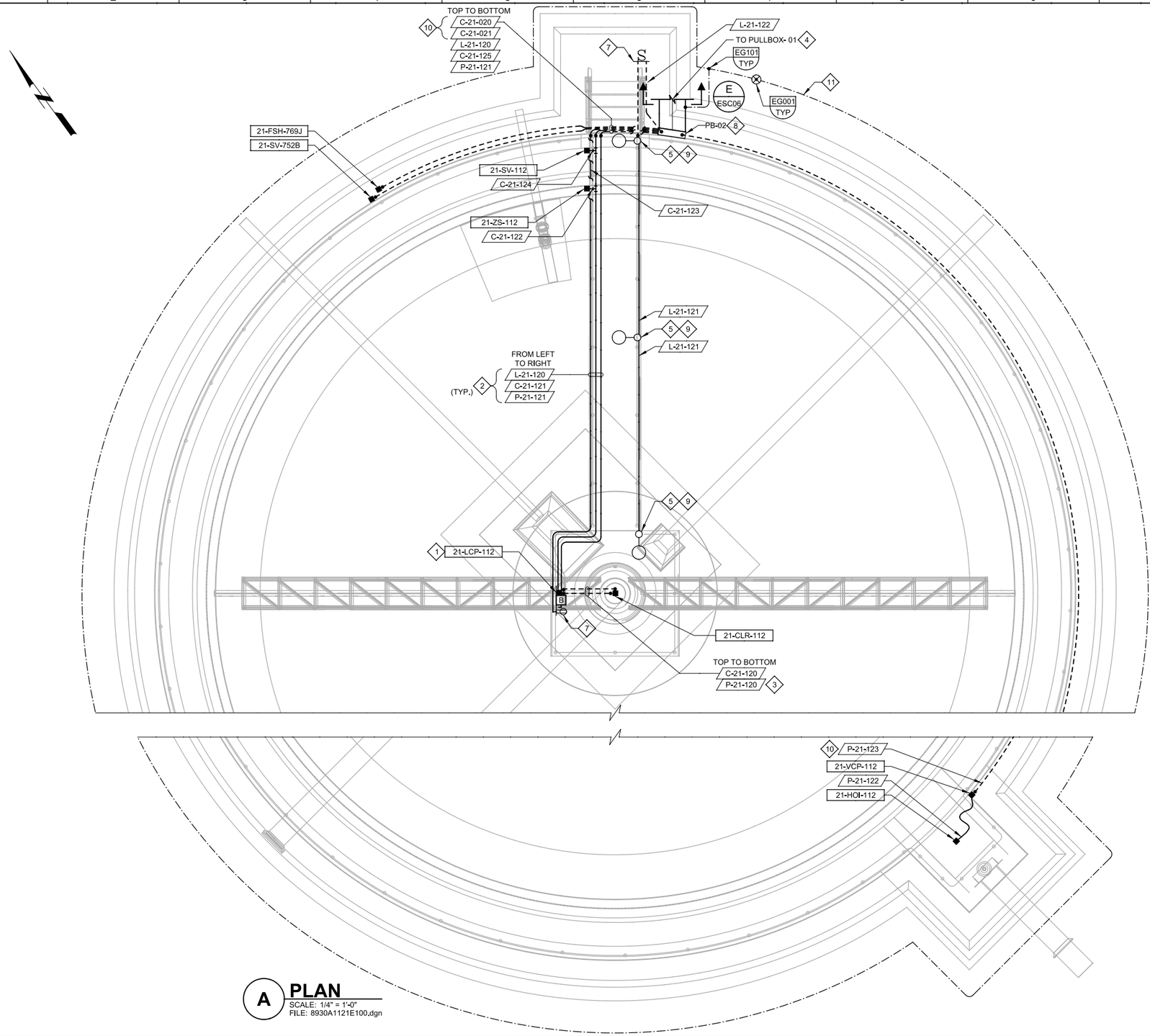
SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
SECONDARY CLARIFIER NO. 1
PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 21E01
SHEET NO. 325 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1121E01.dgn

Plot Date: 16-SEP-2013 6:14:52 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: adiaz



GENERAL NOTES:

1. REFER TO SPECIFICATION SECTION 16050 FOR HAZARDOUS AREA CLASSIFICATIONS.
2. ALL CONDUIT SEALS ARE NOT SHOWN FOR CLARITY. PROVIDE CONDUIT SEAL PER DETAIL EM108/TYP AND IN ACCORDANCE WITH NEC.

KEY NOTES:

1. MOUNT LCP PER DETAIL EM905/TYP.
2. ROUTE CONDUIT ALONG WALKWAY BRIDGE PER DETAIL EM908/TYP.
3. ROUTE CONDUIT UNDER THE WALKWAY, PROVIDE PREFORMED CHANNELS AS REQUIRED.
4. REFER TO DRAWING ESC03 FOR CONTINUATION.
5. MOUNT LIGHTING FIXTURE PER DETAIL EL504/TYP.
6. DUPLEX RECEPTACLE
   WP, GFCI
   LPBD-2
7. MOUNT LIGHT SWITCH ON DEVICE SUPPORT PER DETAIL EM201/TYP.
   a S LPBD-4 WP
8. MOUNT NEMA 4X-SS PULL BOX PER DETAIL EM202/TYP AND SIZE PER NEC.
9. a C LPBD-4 10'-0"
10. PROVIDE PCS TYPE CONDUIT.
11. #2/0 SDBC

A PLAN
SCALE: 1/4" = 1'-0"
FILE: 8930A1121E100.dgn

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
SECONDARY CLARIFIER NO. 2
PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 21E02
SHEET NO. 326 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1121E02.dgn

Plot Date: 16-SEP-2013 6:15:13 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: awulff

CONDUIT SCHEDULE AREA 21

9/16/13

LOS OSOS WATER RECYCLING FACILITY

SECONDARY CLARIFIER NO. 1 & NO. 2

CONDUIT			CONDUCTORS			GROUND					
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION		CONNECTING SEGMENTS
C-21-110	21E01	0.75"	6	#14	XHHW-2	1	#14	XHHW-2	FR: 21-CLR-111		C-21-111
									TO: WIREWAY		
									2 #14	>> CONTROL: 21-XS-111	
									2 #14	>> CONTROL: 21-XSH-111	
									2 #14	>> CONTROL: 21-XSHH-111	
C-21-010	21E01	1"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 21-SV-752A		C-21-300
									TO: PB-01		
									2 #14	>> CONTROL: 21-SV-752A	
C-21-011	21E01	1"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 21-FSH-769H		C-21-300
									TO: PB-01		
									2 #14	>> CONTROL: 21-SV-769H	
C-21-020	21E02	1"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 21-SV-752B		C-21-221
									TO: PB-02		
									2 #14	>> CONTROL: 21-SV-752B	
C-21-021	21E02	1"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 21-FSH-769J		C-21-221
									TO: PB-02		
									2 #14	>> CONTROL: 21-FSH-769J	
C-21-111	21E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: WIREWAY		C-21-113
			16	#14	XHHW-2				TO: CONDUIT TEE		
									8 #14	>> CONTROL: 21-LCP-111, 2-SPARE	
									2 #14	>> CONTROL: 21-XS-111	C-21-110
									2 #14	>> CONTROL: 21-XSH-111	C-21-110
									2 #12	>> CONTROL: 21-MWH-111	P-21-110
									2 #14	>> CONTROL: 21-TSH-111	P-21-110
									2 #14	>> CONTROL: 21-XSHH-111	C-21-110
C-21-112	21E01	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 21-ZS-111		C-21-113
									TO: CONDUIT TEE		
									2 #14	>> CONTROL: 21-ZS-111	
C-21-113	21E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE		C-21-115
			18	#14	XHHW-2				TO: CONDUIT TEE		
									8 #14	>> CONTROL: 21-LCP-111, 2-SPARE	
									2 #14	>> CONTROL: 21-XS-111	C-21-111
									2 #14	>> CONTROL: 21-XSH-111	C-21-111
									2 #12	>> CONTROL: 21-MWH-111	C-21-111
									2 #14	>> CONTROL: 21-TSH-111	C-21-111
									2 #14	>> CONTROL: 21-XSHH-111	C-21-111
									2 #14	>> CONTROL: 21-ZS-111	C-21-112
C-21-114	21E01	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 21-SV-111		C-21-115
									TO: CONDUIT TEE		
									2 #14	>> CONTROL: 21-SV-111	
C-21-115	21E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE		C-21-210
			20	#14	XHHW-2				TO: PB-01		
									8 #14	>> CONTROL: 21-LCP-111, 2-SPARE	
									2 #14	>> CONTROL: 21-XS-111	C-21-113
									2 #14	>> CONTROL: 21-XSH-111	C-21-113
									2 #12	>> CONTROL: 21-MWH-111	C-21-113
									2 #14	>> CONTROL: 21-TSH-111	C-21-113
									2 #14	>> CONTROL: 21-XSHH-111	C-21-113
									2 #14	>> CONTROL: 21-SV-111	C-21-114
									2 #14	>> CONTROL: 21-ZS-111	C-21-113
C-21-120	21E02	0.75"	6	#14	XHHW-2	1	#14	XHHW-2	FR: 21-CLR-112		C-21-121
									TO: WIREWAY		
									2 #14	>> CONTROL: 21-XS-112	
									2 #14	>> CONTROL: 21-XSH-112	
									2 #14	>> CONTROL: 21-XSHH-112	
C-21-121	21E02	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: WIREWAY		C-21-123
			16	#14	XHHW-2				TO: CONDUIT TEE		
									8 #14	>> CONTROL: 21-LCP-112, 2-SPARE	
									2 #12	>> CONTROL: 21-MWH-112	P-21-120
									2 #14	>> CONTROL: 21-TSH-112	P-21-120
									2 #14	>> CONTROL: 21-XS-112	C-21-120
									2 #14	>> CONTROL: 21-XSH-112	C-21-120
									2 #14	>> CONTROL: 21-XSHH-112	C-21-120
C-21-122	21E02	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 21-ZS-112		C-21-123
									TO: CONDUIT TEE		
									2 #14	>> CONTROL: 21-ZS-112	

CONDUIT SCHEDULE AREA 21

9/16/13

LOS OSOS WATER RECYCLING FACILITY

SECONDARY CLARIFIER NO. 1 & NO. 2

CONDUIT			CONDUCTORS			GROUND					
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION		CONNECTING SEGMENTS
C-21-123	21E02	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE		C-21-125
			18	#14	XHHW-2				TO: CONDUIT TEE		
									2 #14	>> CONTROL: 21-ZS-112	C-21-122
									8 #14	>> CONTROL: 21-LCP-112, 2-SPARE	C-21-121
									2 #12	>> CONTROL: 21-MWH-112	C-21-121
									2 #14	>> CONTROL: 21-TSH-112	C-21-121
									2 #14	>> CONTROL: 21-XS-112	C-21-121
									2 #14	>> CONTROL: 21-XSH-112	C-21-121
									2 #14	>> CONTROL: 21-XSHH-112	C-21-121
C-21-124	21E02	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 21-SV-112		C-21-125
									TO: CONDUIT TEE		
									2 #14	>> CONTROL: 21-SV-112	
C-21-125	21E02	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE		C-21-220
			20	#14	XHHW-2				TO: PB-02		
									2 #14	>> CONTROL: 21-ZS-112	C-21-123
									8 #14	>> CONTROL: 21-LCP-112, 2-SPARE	C-21-123
									2 #12	>> CONTROL: 21-MWH-112	C-21-123
									2 #14	>> CONTROL: 21-TSH-112	C-21-123
									2 #14	>> CONTROL: 21-XS-112	C-21-123
									2 #14	>> CONTROL: 21-XSH-112	C-21-123
									2 #14	>> CONTROL: 21-XSHH-112	C-21-123
									2 #14	>> CONTROL: 21-SV-112	C-21-124
C-21-210	70E02	2"	2	#12	XHHW-2	1	#12	XHHW-2	FR: PB-01		
	ESC06		12	#14	XHHW-2				TO: MCC-C VIA MH-E01		
									8 #14	>> CONTROL: 21-LCP-111, 2-SPARE	C-21-115
									2 #14	>> CONTROL: 21-XS-111	C-21-115
									2 #12	>> CONTROL: 21-MWH-111	C-21-115
									2 #14	>> CONTROL: 21-XSHH-111	C-21-115
C-21-220	70E02	2"	2	#12	XHHW-2	1	#12	XHHW-2	FR: PB-02		
	ESC06		12	#14	XHHW-2				TO: MCC-D VIA MH-E01		
									8 #14	>> CONTROL: 21-LCP-112, 2-SPARE	C-21-125
									2 #12	>> CONTROL: 21-MWH-112	C-21-125
									2 #14	>> CONTROL: 21-XS-112	C-21-125
									2 #14	>> CONTROL: 21-XSHH-112	C-21-125
C-21-221	ESC06	2"	12	#14	XHHW-2	1	#14	XHHW-2	FR: PB-02		C-21-300
									TO: PB-01		
									2 #14	>> CONTROL: 21-SV-112	C-21-125
									2 #14	>> CONTROL: 21-TSH-112	C-21-125
									2 #14	>> CONTROL: 21-XSH-112	C-21-125
									2 #14	>> CONTROL: 21-ZS-112	C-21-125
									2 #14	>> CONTROL: 21-SV-752B	C-21-020
									2 #14	>> CONTROL: 21-FSH-769J	C-21-021
C-21-300	70E03	2"	24	#14	XHHW-2	1	#14	XHHW-2	FR: PB-01 VIA MH-E01		
	ESC06								TO: PCM-1		
									2 #14	>> CONTROL: 21-XSH-111	C-21-115
									2 #14	>> CONTROL: 21-TSH-111	C-21-115
									2 #14	>> CONTROL: 21-SV-111	C-21-115
									2 #14	>> CONTROL: 21-ZS-111	C-21-115
									2 #14	>> CONTROL: 21-SV-112	C-21-221
									2 #14	>> CONTROL: 21-TSH-112	C-21-221
									2 #14	>> CONTROL: 21-XSH-112	C-21-221
									2 #14	>> CONTROL: 21-ZS-112	C-21-221
									2 #14	>> CONTROL: 21-SV-752B	C-21-221
									2 #14	>> CONTROL: 21-FSH-769J	C-21-221
									2 #14	>> CONTROL: 21-SV-769H	C-21-011
									2 #14	>> CONTROL: 21-SV-752A	C-21-010
L-21-110	21E01	1"	2	#10	XHHW-2	1	#10	XHHW-2	FR: RECEPTACLE @ 21-LCP-111 STAND		L-21-300
									TO: PB-01		
									2 #10	>> LPBD-2: RECEPTACLE	
L-21-111	21E01	1"	2	#10	XHHW-2	1	#10	XHHW-2	FR: LUMINAIRE		L-21-112
									TO: LUMINAIRE		
									2 #10	>> LPBD-4: LIGHTING	
L-21-112	21E01	1"	2	#10	XHHW-2	1	#10	XHHW-2	FR: LUMINAIRE		L-21-113
									TO: LIGHT SWITCH		
									2 #10	>> LPBD-4: LIGHTING	L-21-111
L-21-113	21E01	1"	2	#10	XHHW-2	1	#10	XHHW-2	FR: LIGHT SWITCH		L-21-300
									TO: PB-01		
									2 #10	>> LPBD-4: LIGHTING	L-21-112
L-21-120	21E02	1"	2	#10	XHHW-2	1	#10	XHHW-2	FR: RECEPTACLE @ 21-LCP-112 STAND		L-21-220
									TO: PB-02		
									2 #10	>> LPBD-2: RECEPTACLE	

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER · JAMES R. VARLEY · No. 12879 · ELECTRICAL · STATE OF CALIFORNIA
9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
SECONDARY CLARIFIERS
CONDUIT SCHEDULE- I

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 21E03
SHEET NO. 327 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1121E03.dgn

Plot Date: 16-SEP-2013 6:15:32 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: adiaz

CONDUIT SCHEDULE AREA 21

9/16/13

LOS OSOS WATER RECYCLING FACILITY

SECONDARY CLARIFIER NO. 1 & NO. 2

CONDUIT			CONDUCTORS			GROUND						
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE			DESCRIPTION	CONNECTING SEGMENTS
L-21-121	21E02	0.75"	2	#10	XHHW-2	1	#10	XHHW-2	FR:		LUMINAIRE	L-21-122
									TO:		LUMINAIRE	
										2 #10	>> LPBD-4: LIGHTING	
L-21-122	21E02	1"	2	#10	XHHW-2	1	#10	XHHW-2	FR:		LUMINAIRE	L-21-123
									TO:		LIGHT SWITCH	
										2 #10	>> LPBD-4: LIGHTING	L-21-121
L-21-123	21E01	1"	2	#10	XHHW-2	1	#10	XHHW-2	FR:		LIGHT SWITCH	L-21-220
									TO:		PB-02	
										2 #10	>> LPBD-4: LIGHTING	L-21-122
L-21-220	ESC06	2"	4	#10	XHHW-2	1	#10	XHHW-2	FR:		PB-02	L-21-300
									TO:		PB-01	
										2 #10	>> LPBD-2: RECEPTACLE	L-21-120
										2 #10	>> LPBD-4: LIGHTING	L-21-123
L-21-300	70E02 ESC06	2"	8	#10	XHHW-2	2	#10	XHHW-2	FR:		PB-01	
									TO:		MCC-D VIA MH-E01	
										2 #10	>> LPBD-4: LIGHTING	L-21-113
										2 #10	>> LPBD-2: RECEPTACLE	L-21-110
										2 #10	>> LPBD-2: RECEPTACLE	L-21-220
										2 #10	>> LPBD-4: LIGHTING	L-21-220
P-21-110	21E01	0.75"	3	#10	XHHW-2	1	#10	XHHW-2	FR:		21-CLR-111	C-21-111
			2	#12	XHHW-2				TO:		WIREWAY	
			2	#14	XHHW-2					3 #10	>> POWER: 21-CLR-111	
										2 #12	>> CONTROL: 21-MWH-111	
										2 #14	>> CONTROL: 21-TSH-111	
P-21-111	21E01	0.75"	3	#10	XHHW-2	1	#10	XHHW-2	FR:		WIREWAY	P-21-210
									TO:		PB-01	
										3 #10	>> POWER: 21-CLR-111	P-21-110
P-21-112	21E01	0.75"	3	#10	XHHW-2	1	#10	XHHW-2	FR:		21-HOI-111	
									TO:		21-VCP-111	
										3 #10	>> POWER: 21-HOI-111	
P-21-113	21E01	1"	3	#10	XHHW-2	1	#10	XHHW-2	FR:		21-VCP-111	P-21-210
									TO:		PB-01	
										3 #10	>> POWER: 21-VCP-111	
P-21-120	21E02	0.75"	3	#10	XHHW-2	1	#10	XHHW-2	FR:		21-CLR-112	C-21-121
			2	#12	XHHW-2				TO:		WIREWAY	
			2	#14	XHHW-2					3 #10	>> POWER: 21-CLR-112	
										2 #12	>> CONTROL: 21-MWH-112	
										2 #14	>> CONTROL: 21-TSH-112	
P-21-121	21E02	0.75"	3	#10	XHHW-2	1	#10	XHHW-2	FR:		WIREWAY	P-21-220
									TO:		PB-02	
										3 #10	>> POWER: 21-CLR-112	P-21-120
P-21-122	21E2	0.75"	3	#10	XHHW-2	1	#10	XHHW-2	FR:		21-HOI-112	
									TO:		21-VCP-112	
										3 #10	>> POWER: 21-HOI-112	
P-21-123	21E02	1"	3	#10	XHHW-2	1	#10	XHHW-2	FR:		21-VCP-112	P-21-220
									TO:		PB-02	
										3 #10	>> POWER: 21-VCP-112	
P-21-210	70E02 ESC06	2"	6	#10	XHHW-2	2	#10	XHHW-2	FR:		PB-01	
									TO:		MCC-C VIA MH-E01	
										3 #10	>> POWER: 21-CLR-111	P-21-111
										3 #10	>> POWER: 21-VCP-111	P-21-113
P-21-220	70E02 ESC06	2"	6	#10	XHHW-2	2	#10	XHHW-2	FR:		PB-02	
									TO:		MCC-D VIA MH-E01	
										3 #10	>> POWER: 21-CLR-112	P-21-121
										3 #10	>> POWER: 21-VCP-112	P-21-123
X-21-210	70E02 ESC06	2"	1	PULL	ROPE				FR:		PB-01	
									TO:		MCC-C VIA MH-E01	
										1 PULL	>> SPARE	
X-21-220	70E02 ESC06	2"	1	PULL	ROPE				FR:		PB-02	
									TO:		MCC-D VIA MH-E01	
										1 PULL	>> SPARE	

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

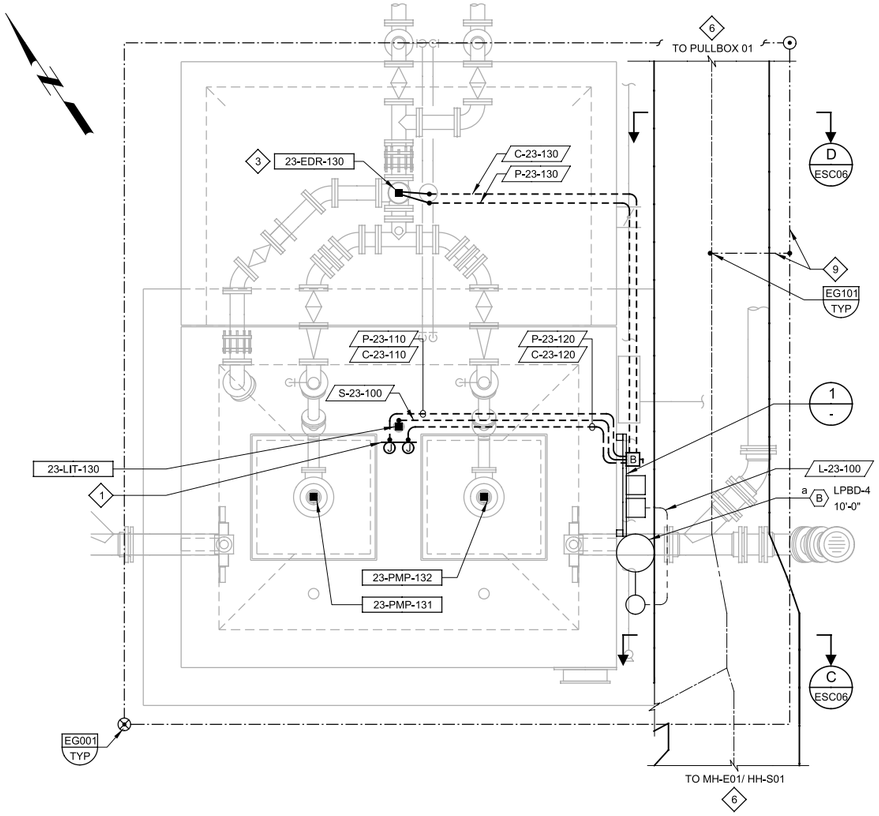
SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
SECONDARY CLARIFIERS
CONDUIT SCHEDULE- II

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

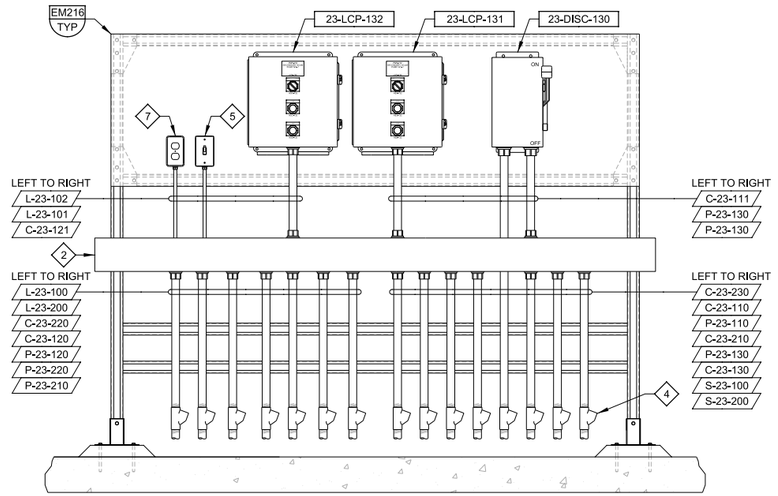
JOB NO. 8930A.11
DRAWING NO. 21E04
SHEET NO. 328 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1121E04.dgn

Plot Date: 16-SEP-2013 6:15:50 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: adiaz



A **PLAN**
SCALE: 1/2" = 1'-0"
FILE: 8930A1123E100.dgn



1 **DETAIL**
SCALE: NO SCALE
FILE: 8930A1100ET400.typ

GENERAL NOTES:

1. REFER TO SPECIFICATION SECTION 16050 FOR HAZARDOUS AREA CLASSIFICATIONS.

KEY NOTES:

1. INSTALL TERMINAL JUNCTION BOX PER DETAIL EM909/TYP.
2. SIZE NEMA 4X-SS WIREWAY PER NEC AND PROVIDE DIVIDER TO SEPARATE POWER/CONTROL WITH ANALOG SIGNAL. MOUNT ON COMMON SUPPORT.
3. PER DETAIL EM402/TYP.
4. PROVIDE CONDUIT SEAL PER DETAIL EM108/TYP.
5. DUPLEX RECEPTACLE
   WP, GFCI
   LPBD-2
6. REFER TO DRAWING ESC03 FOR CONTINUATION.
7. a S LPBD-4 WP
8. PER DETAIL EL500/TYP.
9. #2/0 SDBC.

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
SCUM PUMP STATION
PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 23E01
SHEET NO. 329 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1123E01.dgn

LAST SAVED BY: adiaz
Model: Layout1 ColorTable: oshade.ctb DesignScript: Carollo Std Pen v0905.pen PlotScale: 2:1
Plot Date: 16-SEP-2013 6:16:09 PM
User: AWulff

CONDUIT SCHEDULE AREA 23

9/16/13

LOS OSOS WATER RECYCLING FACILITY

SCUM PUMP STATION

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-23-110	23E01	1"	4	#14	XHHW-2	1	#14	XHHW-2	FR: TJB TO: WIREWAY 4 #14 >> CONTROL: 23-MSH-131/23-TSH-131	C-23-111
C-23-111	23E01	1.5"	2 21	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: 23-LCP-131 TO: WIREWAY 4 #14 >> CONTROL: 23-MSH-131/23-TSH-131 17 #14 >> CONTROL: 23-LCP-131, 4-SPARE 2 #12 >> POWER: 23-PPR-131	C-23-210 C-23-110
C-23-120	23E01	1"	4	#14	XHHW-2	1	#14	XHHW-2	FR: TJB TO: WIREWAY 4 #14 >> CONTROL: 23-MSH-132/23-TSH-132	C-23-121
C-23-121	23E01	1.5"	2 21	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: 23-LCP-132 TO: WIREWAY 4 #14 >> CONTROL: 23-MSH-132/23-TSH-132 17 #14 >> CONTROL: 23-LCP-132, 4-SPARE 2 #12 >> POWER: 23-PPR-132	C-23-220 C-23-120
C-23-130	23E01	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: 23-EDR-130 TO: WIREWAY 12 #14 >> CONTROL: 23-EDR-130, 4-SPARE	C-23-230
C-23-210	23E01 ESC06 70E03	2"	2 17	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: WIREWAY TO: MCC-C VIA MH-E01 17 #14 >> CONTROL: 23-LCP-131, 4-SPARE 2 #12 >> POWER: 23-PPR-131	 C-23-111 C-23-111
C-23-220	23E01 ESC06 70E03	2"	2 17	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: WIREWAY TO: MCC-D VIA MH-E01 17 #14 >> CONTROL: 23-LCP-132, 4-SPARE 2 #12 >> POWER: 23-PPR-132	 C-23-121 C-23-121
C-23-230	23E01 ESC06 70E03	2"	14	#14	XHHW-2	1	#14	XHHW-2	FR: WIREWAY TO: PCM-1 VIA MH-E01 14 #14 >> CONTROL: 23-EDR-130, 4-SPARE	 C-23-130
L-23-100	23E01	1"	2	#10	XHHW-2	1	#10	XHHW-2	FR: WIREWAY TO: LUMINAIRES 2 #10 >> LPB-D-4: LIGHTING	L-23-200
L-23-101	23E01	0.75"	2	#10	XHHW-2	1	#10	XHHW-2	FR: LIGHT SWITCH TO: WIREWAY 2 #10 >> LPB-D-4: LIGHTING	
L-23-102	23E01	0.75"	2	#10	XHHW-2	1	#10	XHHW-2	FR: RECEPTACLE TO: WIREWAY 2 #10 >> LPB-D-2: RECEPTACLE	L-23-200
L-23-200	23E01 70E02 ESC06	2"	4	#10	XHHW-2	1	#10	XHHW-2	FR: WIREWAY TO: MCC-D VIA MH-E01 2 #10 >> LPB-D-4: LIGHTING 2 #10 >> LPB-D-2: RECEPTACLE	 L-23-100 L-23-102
P-23-110	23E01	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: TJB TO: WIREWAY 3 #12 >> POWER:23-PMP-131	P-23-210
P-23-120	23E01	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: TJB TO: WIREWAY 3 #12 >> POWER: 23-PMP-132	P-23-220
P-23-130	23E01	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 23-EDR-130 TO: WIREWAY VIA DISCONNECT 3 #12 >> POWER: 23-EDR-130	P-23-210
P-23-210	23E01 70E02 ESC06	2"	6	#12	XHHW-2	2	#12	XHHW-2	FR: WIREWAY TO: MCC-C VIA MH-E01 3 #12 >> POWER:23-PMP-131 3 #12 >> POWER: 23-EDR-130	 P-23-110 P-23-130
P-23-220	23E01 70E02	2"	3	#12	XHHW-2	1	#12	XHHW-2	FR: WIREWAY TO: MCC-D VIA MH-E01 3 #12 >> POWER: 23-PMP-132	 P-23-120
S-23-100	23E01	1"	1	2/CS-#16		1	#14	XHHW-2	FR: 23-LIT-130 TO: WIREWAY 1 2/CS-#16 >> SIGNAL: 23-LIT-130	S-23-200
S-23-200	23E01 70E03 ESC06	2"	1	2/CS-#16		1	#14	XHHW-2	FR: WIREWAY TO: PCM-1 VIA HH-S01, HH-S13 1 2/CS-#16 >> SIGNAL: 23-LIT-130	 S-23-100

CONDUIT SCHEDULE AREA 23

9/16/13

LOS OSOS WATER RECYCLING FACILITY

SCUM PUMP STATION

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
X-23-201	23E01 70E03	2"	1	PULL	ROPE				FR: WIREWAY TO: MCC-D VIA MH-E01 1 PULL >> SPARE POWER/CONTROL	

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — TARA V. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA
9/16/2013

carollo

SAN LUIS OBISPO COUNTY

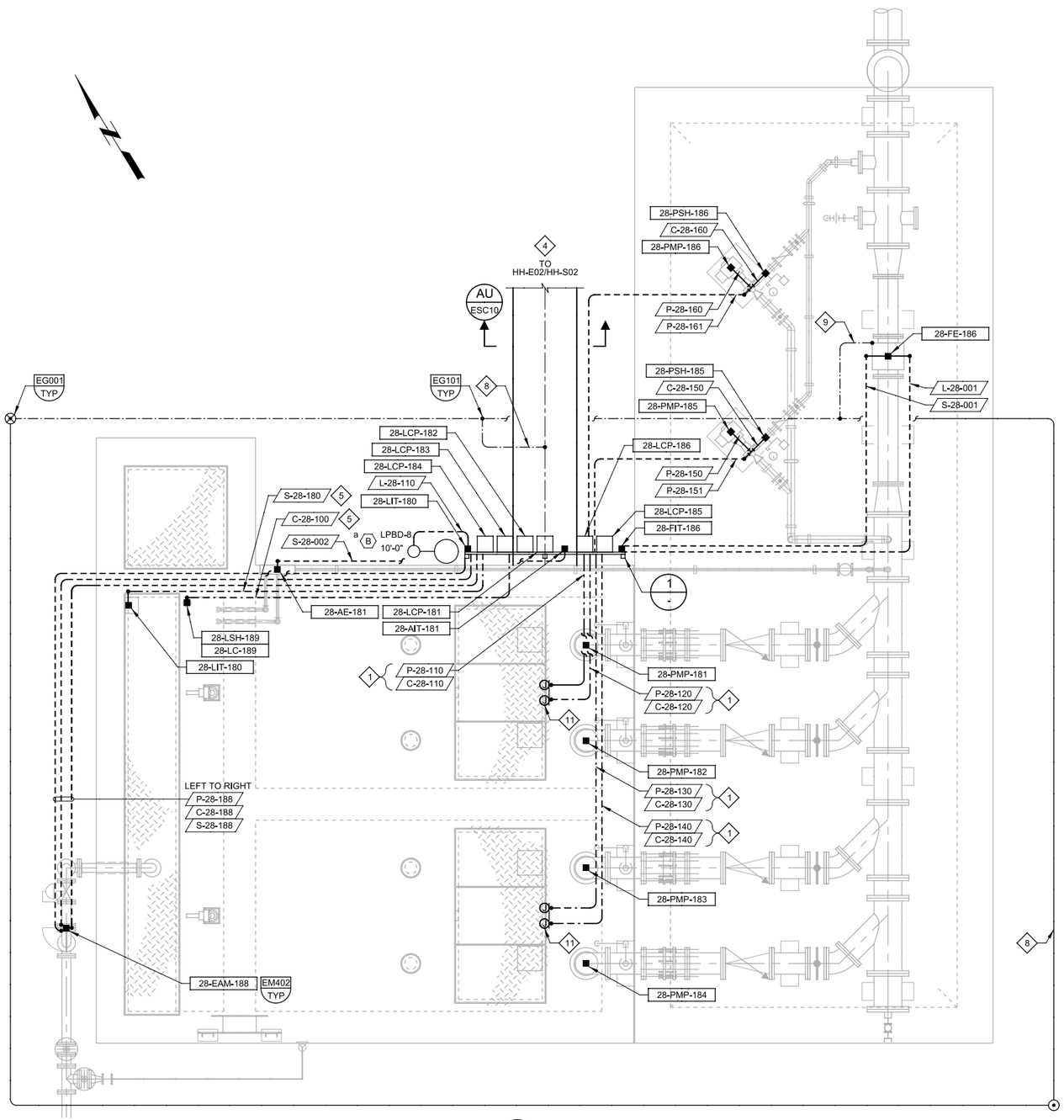
SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
SCUM PUMP STATION
CONDUIT SCHEDULE

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

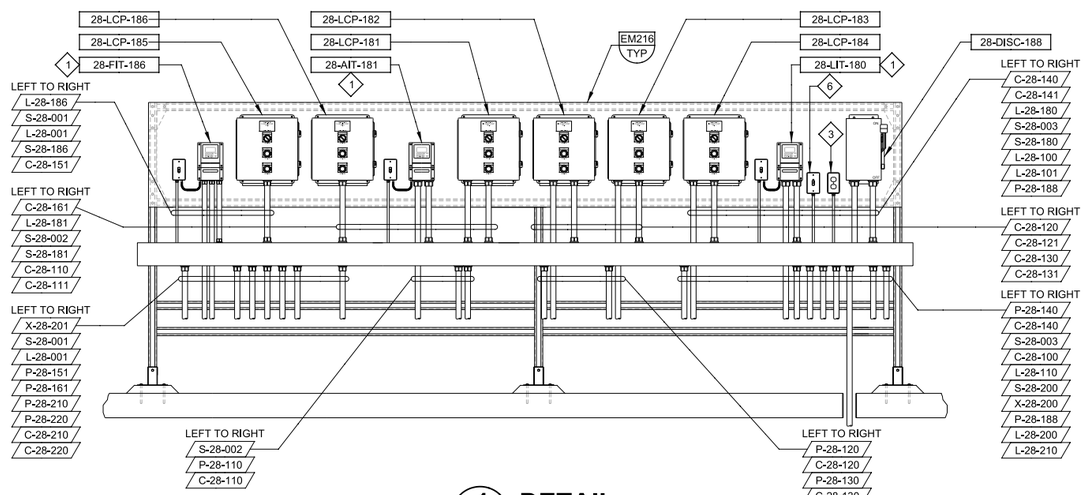
JOB NO. 8930A.11
DRAWING NO. 23E02
SHEET NO. 330 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1123E02.dgn

Plot Date: 16-SEP-2013 6:16:30 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: adiaz



A PLAN
SCALE: 3/8" = 1'-0"
FILE: 8930A1128E0101



1 DETAIL
SCALE: NO SCALE
FILE: 8930A1100ET400.typ

GENERAL NOTES:

1. REFER TO SPECIFICATION SECTION 16050 FOR HAZARDOUS AREA CLASSIFICATIONS.

KEY NOTES:

1. PROVIDE SUNSHIELD PER DETAIL NM108/TYP.
2. SIZE NEMA 4X-SS WIREWAY PER NEC AND PROVIDE DIVIDER TO SEPARATE POWER/CONTROL WITH ANALOG SIGNAL. MOUNT ON COMMON SUPPORT.
3. DUPLEX RECEPTACLE WP, GFCI LPBD-6
4. REFER TO DRAWING ESC03 FOR CONTINUATION.
5. ROUTE CONDUIT EMBEDDED IN THE SLAB PER DETAIL EM115/TYP.
6. a S LPBD-8 WP
7. PER DETAIL EM315/TYP.
8. #2/0 SDBC.
9. #2 SDBC.
10. ALL CONDUITS ARE NOT SHOWN FOR CLARITY.
11. INSTALL TERMINAL JUNCTION BOX PER DETAIL EM909/TYP.

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
FILTER INFLUENT PUMP STATION PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 28E01
SHEET NO. 331 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1128E01.dgn

LAST SAVED BY: ejohnson
Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1
Plot Date: 16-SEP-2013 6:16:49 PM
User: AWulff

CONDUIT SCHEDULE AREA 28

9/5/13

LOS OSOS WATER RECYCLING FACILITY

FILTER INFLUENT PUMP STATION

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-28-100	28E01	1"	4	#14	XHHW-2	1	#14	XHHW-2	FR: 28-LSH/LL-189 TO: WIREWAY 4 #14 >> CONTROL: 28-LSH/LL-189	L-28-200
C-28-110	28E01	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: JB TO: 28-LCP-181 VIA WIREWAY 4 #14 >> CONTROL: 28-PMP-181	
C-28-111	28E01	1"	20	#14	XHHW-2	1	#14	XHHW-2	FR: 28-LCP-181 TO: WIREWAY 20 #14 >> CONTROL: 28-LCP-181, 2-SPARE	C-28-210
C-28-120	28E01	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: JB TO: 28-LCP-182 VIA WIREWAY 4 #14 >> CONTROL: 28-PMP-182	
C-28-121	28E01	1"	20	#14	XHHW-2	1	#14	XHHW-2	FR: 28-LCP-182 TO: WIREWAY 20 #14 >> CONTROL: 28-LCP-182, 2-SPARE	C-28-210
C-28-130	28E01	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: JB TO: 28-LCP-183 VIA WIREWAY 4 #14 >> CONTROL: 28-PMP-183	
C-28-131	28E01	1"	20	#14	XHHW-2	1	#14	XHHW-2	FR: 28-LCP-183 TO: WIREWAY 20 #14 >> CONTROL: 28-LCP-183, 2-SPARE	C-28-220
C-28-140	28E01	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: JB TO: 28-LCP-184 VIA WIREWAY 4 #14 >> CONTROL: 28-PMP-184	
C-28-141	28E01	1"	20	#14	XHHW-2	1	#14	XHHW-2	FR: 28-LCP-184 TO: WIREWAY 20 #14 >> CONTROL: 28-LCP-184, 2-SPARE	C-28-220
C-28-150	28E01	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 28-PSH-185 TO: CONDUIT TEE 2 #14 >> CONTROL: 28-PSH-185	P-28-151
C-28-151	28E01	0.75"	8	#14	XHHW-2	1	#14	XHHW-2	FR: 28-LCP-185 TO: WIREWAY 8 #14 >> CONTROL: 28-LCP-185 2 SPARE	
C-28-160	28E01	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 28-PSH-186 TO: CONDUIT TEE 2 #14 >> CONTROL: 28-PSH-186	P-28-161
C-28-161	28E01	0.75"	8	#14	XHHW-2	1	#14	XHHW-2	FR: 28-LCP-186 TO: WIREWAY 8 #14 >> CONTROL: 28-LCP-186 2 SPARE	
C-28-210	28E01 70E03 ESC06 ESC10	2"	2 44	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: WIREWAY TO: MCC-C VIA MH-E02, MH-E01 20 #14 >> CONTROL: 28-LCP-182, 2-SPARE 20 #14 >> CONTROL: 28-LCP-181, 2-SPARE 2 #12 >> CONTROL: 28-MWH-185 2 #14 >> CONTROL: 28-TSH-185 2 #14 >> CONTROL: 28-PSH-185	C-28-121 C-28-111 P-28-151 P-28-151 P-28-151
C-28-220	28E01 70E03 ESC06 ESC10	2"	2 44	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: WIREWAY TO: MCC-D VIA MH-E02, MH-E01 20 #14 >> CONTROL: 28-LCP-184, 2-SPARE 20 #14 >> CONTROL: 28-LCP-183, 2-SPARE 2 #12 >> CONTROL: 28-MWH-186 2 #14 >> CONTROL: 28-TSH-186 2 #14 >> CONTROL: 28-PSH-186	C-28-141 C-28-131 P-28-161 P-28-161 P-28-161
L-28-100	28E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: RECEPTACLE TO: WIREWAY 2 #12 >> LPBD-6: RECEPTACLE	L-28-210
L-28-101	28E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: LIGHTING SWITCH TO: WIREWAY 2 #12 >> LPBD-8: LIGHTING	L-28-110
L-28-110	28E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: WIREWAY TO: LIGHTING FIXTURE 2 #12 >> LPBD-8: LIGHTING	L-28-101
L-28-180	28E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 28-LIT-180 TO: WIREWAY VIA DISCONNECT 2 #12 >> POWER: 28-LIT-180	L-28-200

CONDUIT SCHEDULE AREA 28

9/5/13

LOS OSOS WATER RECYCLING FACILITY

FILTER INFLUENT PUMP STATION

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
L-28-181	28E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 28-AIT-181 TO: WIREWAY VIA DISCONNECT 2 #12 >> POWER: 28-AIT-181	L-28-200
L-28-186	28E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 28-FIT-186 TO: WIREWAY VIA DISCONNECT 2 #12 >> POWER: 28-FIT-186	L-28-200
L-28-200	28E01 70E02 ESC06 ESC10	2"	6 4	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: WIREWAY TO: PCM-1 VIA MH-E02, MH-E01 4 #14 >> CONTROL: 28-LSH/L-180 2 #12 >> POWER: 28-LIT-180 2 #12 >> POWER: 28-AIT-181 2 #12 >> POWER: 28-FIT-186	C-28-100 L-28-180 L-28-181 L-28-186
L-28-210	28E01 70E02 ESC06 ESC10	2"	4	#10	XHHW-2	1	#10	XHHW-2	FR: WIREWAY TO: MCC-D VIA MH-E02, MH-E01 2 #10 >> LPBD-8: LIGHTING 2 #10 >> LPBD-6: RECEPTACLE	L-28-101 L-28-100
P-28-110	28E01	0.75"	3	#10	XHHW-2	1	#10	XHHW-2	FR: JB TO: WIREWAY 3 #10 >> POWER: 28-PMP-181	P-28-210
P-28-111		1"	3 4	#10 #12	XHHW-2 XHHW-2	1	#10	XHHW-2	FR: STB PUMP 28-PMP-181 TO: JB 3 #10 >> POWER:28-PMP-181 2 #12 >> CONTROL: 28-MSH-181 2 #12 >> CONTROL: 28-TSH-181	
P-28-120	28E01	0.75"	3	#8	XHHW-2	1	#10	XHHW-2	FR: JB TO: WIREWAY 3 #8 >> POWER: 28-PMP-182	P-28-210
P-28-121		1"	7	#12	XHHW-2	1	#12	XHHW-2	FR: STB PUMP 28-PMP-182 TO: JB 3 #12 >> POWER: 28-PMP-182 2 #12 >> CONTROL: 28-MSH-182 2 #12 >> CONTROL: 28-TSH-182	
P-28-130	28E01	0.75"	3	#10	XHHW-2	1	#10	XHHW-2	FR: JB TO: WIREWAY 3 #10 >> POWER: 28-PMP-183	P-28-220
P-28-131		1"	3 4	#10 #12	XHHW-2 XHHW-2	1	#10	XHHW-2	FR: STB PUMP 28-PMP-183 TO: JB 3 #10 >> POWER: 28-PMP-183 2 #12 >> CONTROL: 28-MSH-183 2 #12 >> CONTROL: 28-TSH-183	
P-28-140	28E01	0.75"	3	#8	XHHW-2	1	#10	XHHW-2	FR: JB TO: WIREWAY 3 #8 >> POWER: 28-PMP-184	P-28-220
P-28-141		1"	7	#12	XHHW-2	1	#12	XHHW-2	FR: STB PUMP 28-PMP-184 TO: JB 3 #12 >> POWER: 28-PMP-184 2 #12 >> CONTROL: 28-MSH-184 2 #12 >> CONTROL: 28-TSH-184	
P-28-150	28E01	0.75"	5 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: 28-PMP-185 TO: CONDUIT TEE 3 #12 >> POWER: 28-PMP-185 2 #12 >> CONTROL: 28-MWH-185 2 #14 >> CONTROL: 28-TSH-185	P-28-151
P-28-151	28E01	1"	5 4	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: WIREWAY 3 #12 >> POWER: 28-PMP-185 2 #12 >> CONTROL: 28-MWH-185 2 #14 >> CONTROL: 28-TSH-185 2 #14 >> CONTROL: 28-PSH-185	C-28-210 P-28-150 P-28-150 P-28-150 C-28-150
P-28-160	28E01	0.75"	5 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: 28-PMP-186 TO: CONDUIT TEE 3 #12 >> POWER: 28-PMP-186 2 #12 >> CONTROL: 28-MWH-186 2 #14 >> CONTROL: 28-TSH-186	P-28-161

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
FILTER INFLUENT PUMP STATION
CONDUIT SCHEDULE- I

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 28E02
SHEET NO. 332 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1128E02.dgn

Plot Date: 16-SEP-2013 6:17:08 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

CONDUIT SCHEDULE AREA 28

9/5/13

LOS OSOS WATER RECYCLING FACILITY

FILTER INFLUENT PUMP STATION

CONDUIT			CONDUCTORS			GROUND				CONNECTING SEGMENTS
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	
P-28-161	28E01	1"	5	#12	XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE	C-28-220
			4	#14	XHHW-2				TO: WIREWAY	
									3 #12 >> POWER: 28-PMP-186	P-28-160
									2 #12 >> CONTROL: 28-MWH-186	P-28-160
									2 #14 >> CONTROL: 28-TSH-186	P-28-160
									2 #14 >> CONTROL: 28-PSH-186	C-28-160
P-28-188	28E01	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 28-EAM-188	P-28-210
									TO: DISCONNECT VIA WIREWAY	
									3 #12 >> POWER; 28-EAM-188	
P-28-210	28E01	2"	3	#8	XHHW-2	1	#10	XHHW-2	FR: WIREWAY	
	70E02		3	#10	XHHW-2	2	#12	XHHW-2	TO: MCC-C VIA MH-E02, MH-E01	
			6	#12	XHHW-2				3 #8 >> POWER: 28-PMP-182	P-28-120
									3 #10 >> POWER: 28-PMP-181	P-28-110
									3 #12 >> POWER: 28-PMP-185	P-28-151
									3 #12 >> POWER; 28-EAM-188	P-28-188
P-28-220	28E01	2"	3	#8	XHHW-2	1	#10	XHHW-2	FR: WIREWAY	
	70E02		3	#10	XHHW-2	2	#12	XHHW-2	TO: MCC-D VIA MH-E02, MH-E01	
			3	#12	XHHW-2				3 #8 >> POWER: 28-PMP-184	P-28-140
									3 #10 >> POWER: 28-PMP-183	P-28-130
									3 #12 >> POWER: 28-PMP-186	P-28-161
S-28-001	28E01	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 28-FE-186	
									TO: 28-FIT-186	
									1 MFR >> SIGNAL: 28-FIT-186	
S-28-002	28E01	0.75"	1	MFR	CABLE	1	#14	XHHW-2	FR: 28-AE-181	
									TO: 28-AIT-181	
									1 MFR >> SIGNAL: 28-AIT-181	
S-28-180		0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 28-LIT-180	S-28-200
									TO: WIREWAY	
									1 2/CS-#16 >> SIGNAL:28-LIT-180	
S-28-181	28E01	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 28-AIT-181	S-28-200
									TO: WIREWAY	
									1 2/CS-#16 >> SIGNAL: 28-AIT-181	
S-28-186	28E01	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 28-FIT-186	S-28-200
									TO: WIREWAY	
									1 2/CS-#16 >> SIGNAL: 28-FIT-186	
S-28-200	28E01	2"	3	2/CS-#16		1	#14	XHHW-2	FR: WIREWAY	
	70E03								TO: PCM-1 VIA HH-S02, HH-S01, HH-S13	
									1 2/CS-#16 >> SIGNAL: 28-AIT-181	S-28-181
									1 2/CS-#16 >> SIGNAL: 28-FIT-186	S-28-186
									1 2/CS-#16 >> SIGNAL:28-LIT-180	S-28-180
X-28-200	28E01	2"	1	PULL	ROPE				FR: WIREWAY	
	70E03								TO: PCM-1 VIA HH-S02, HH-S01, HH-S13	
	ESC10								1 PULL >> SIGNAL SPARE	
	ESC06									
X-28-201	28E01	2"	1	PULL	ROPE				FR: WIREWAY	
	70E02								TO: MCC-D VIA MH-E02, MH-E01	
	ESC10								1 PULL >> POWER/CONTROL SPARE	
	ESC06									

END OF CONDUIT SCHEDULE

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

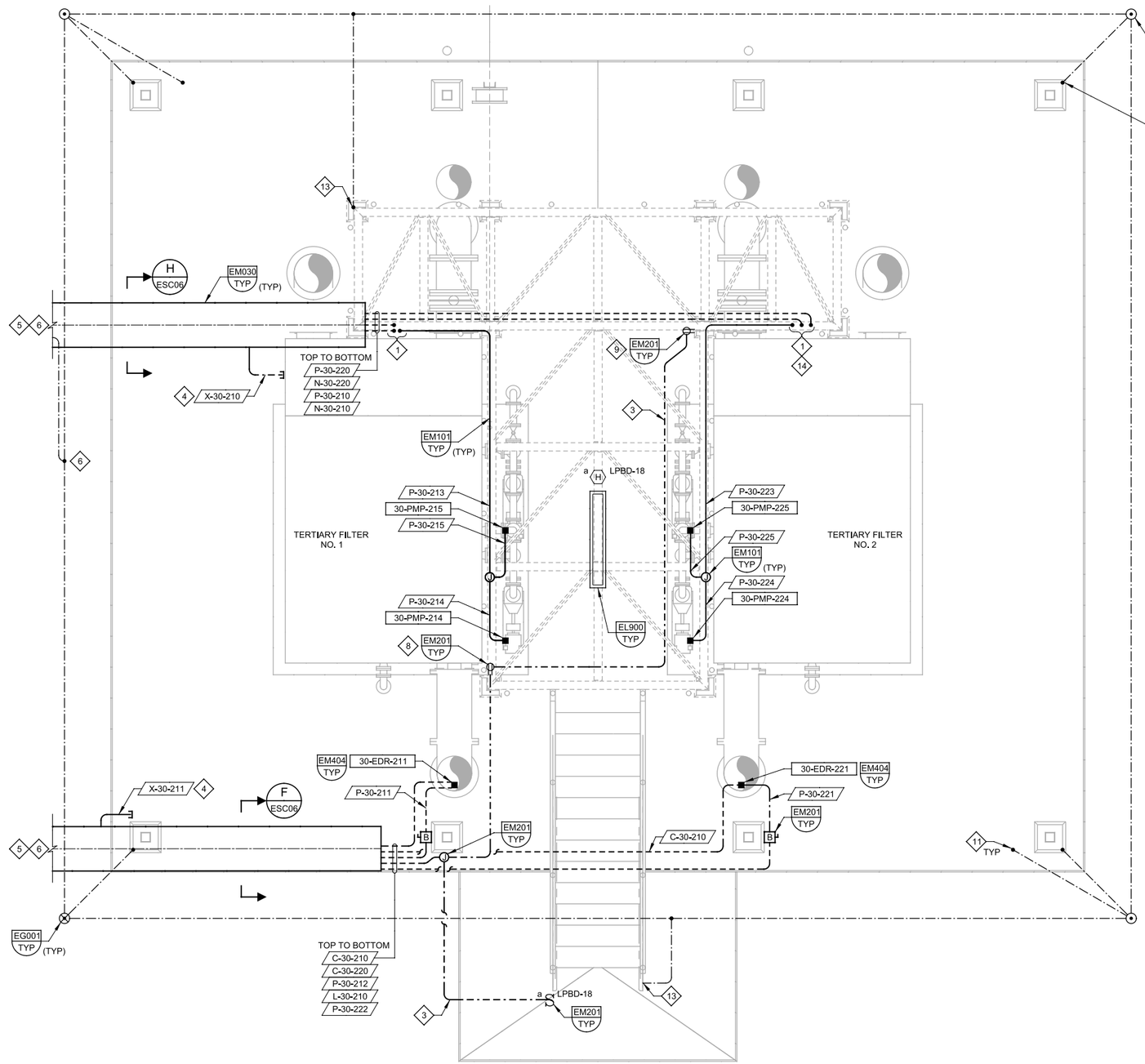
SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
FILTER INFLUENT PUMP STATION
CONDUIT SCHEDULE- II

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 28E03
SHEET NO. 333 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1128E03.dgn

Plot Date: 16-SEP-2013 6:17:26 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson



GENERAL NOTES:

1. ALL INSTRUMENT TAGGING ON THIS SHEET SHALL BE PRECEDED WITH FACILITY INDEX NO. 30 UNLESS OTHER WISE NOTED.

KEY NOTES:

1. CONTINUED ON 30E02.
2. NOT USED.
3. ROUTE CONDUIT IN SLAB PER DETAIL EM115/TYP.
4. STUB UP AND CAP 6" PER DETAIL EM 105/TYP.
5. REFER TO DRAWING ESC 03 FOR CONTINUATION.
6. EXTEND AND BOND DUCT BANK GROUNDS TO GROUND GRID.
7. NOT USED.
8. 18" AFF DUPLEX RECEPTACLE WP, GFCI LPBD-20.
9. 18" AFF DUPLEX RECEPTACLE WP, GFCI LPBD-22.
10. #2 BARE COPPER.
11. BOND #4/0 BARE COPPER TO FOUNDATION REBAR PER EG303 TYP (TYP).
12. BOND #2 BARE COPPER TO METAL SKID OF FILTER.
13. BOND #2 BARE COPPER TO COLUMN SUPPORT FRAME.
14. CONDUIT STUB UP PER DETAILS EM033/EM107 (TYP). ALL LOCATIONS WITH NO HOUSEKEEPING PADS.

A PLAN

SCALE: 3/8" = 1'-0"
FILE: 8930A1130E101

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN AD
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12073 — ELECTRICAL — STATE OF CALIFORNIA
9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
TERTIARY FILTERS LOWER PLAN

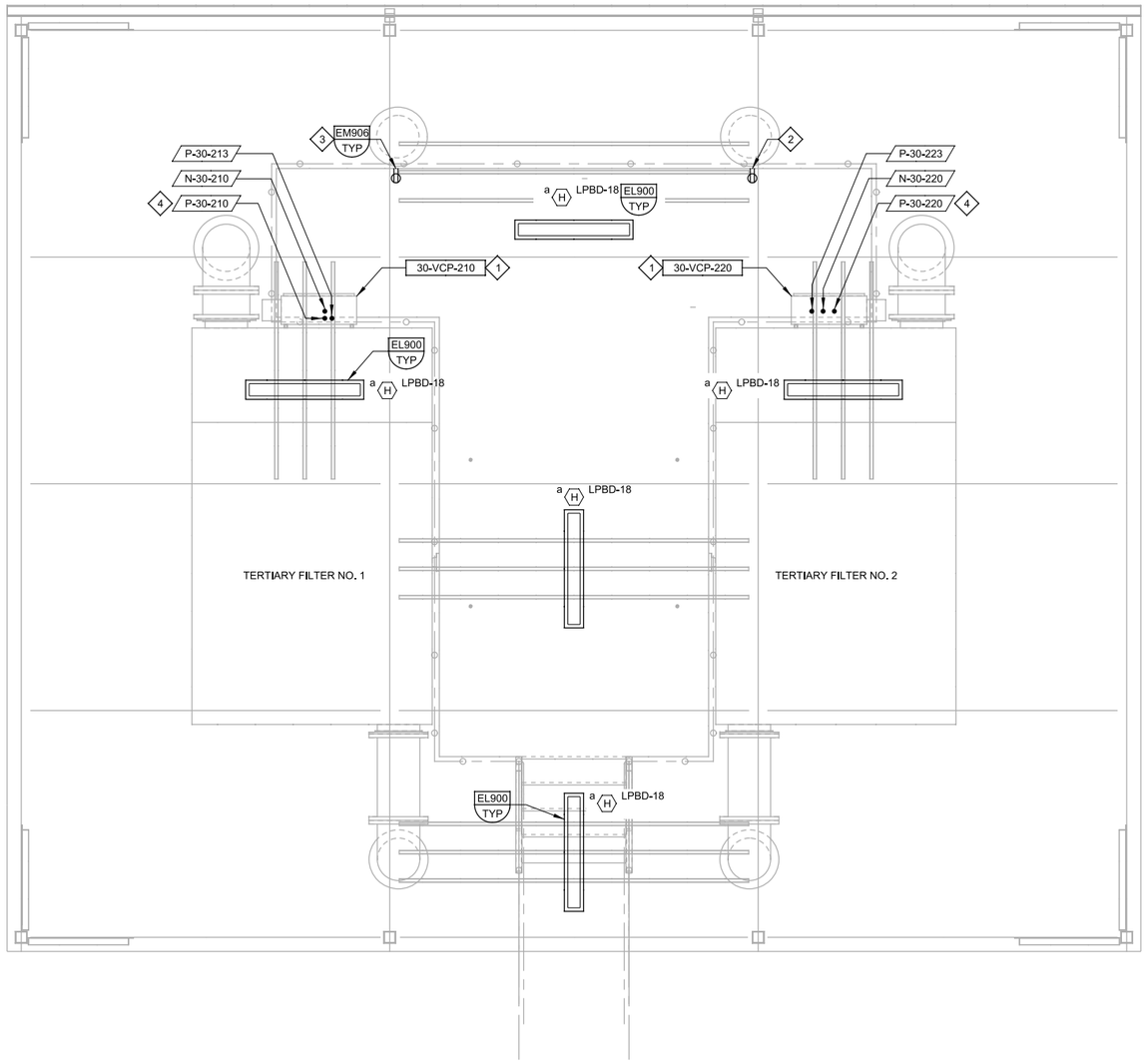
VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 30E01
SHEET NO. 334 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1130E01.dgn

Plot Date: 16-SEP-2013 6:09:11 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

Plot Date: 16-SEP-2013 6:09:24 PM
User: AWulff
Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1
LAST SAVED BY: crollins



GENERAL NOTES:

1. ALL INSTRUMENT TAGGING ON THIS SHEET SHALL BE PRECEDED WITH FACILITY INDEX NO. 30 UNLESS OTHER WISE NOTED.

KEY NOTES:

1. VENDOR VCP MOUNTED WITH TERTIARY FILTER.
2. DUPLEX RECEPTACLE WP, GFCI LPBD-20.
3. DUPLEX RECEPTACLE WP, GFCI LPBD-22.
4. CONTINUED ON 30E01.

A FLOOR PLAN

SCALE: 3/8" = 1'-0"
FILE: 8930A1130E100.2dm

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IVAN R. VARLEY — No. 12679 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo®

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
TERTIARY FILTERS UPPER PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 30E02
SHEET NO. 335 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1130E02.dgn

CONDUIT SCHEDULE AREA 30

9/11/13

LOS OSOS WATER RECYCLING FACILITY

TERTIARY FILTERS

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-30-210	30E01 ESC06	2"	10	#14	XHHW-2	1	#14	XHHW-2	FR: 30-EDR-211 TO: MH-E01 10 #14 >> CONTROL:30-EDR-211	C-30-230
C-30-220	30E01 ESC06	2"	10	#14	XHHW-2	1	#14	XHHW-2	FR: 30-EDR-221 TO: MH-E01 10 #14 >> CONTROL:30-EDR-221	C-30-230
C-30-230	ESC06 70E03	2"	20	#14	XHHW-2	1	#14	XHHW-2	FR: MH-E01 TO: PCM 1IN CONTROL ROOM 10 #14 >> CONTROL:30-EDR-211 10 #14 >> CONTROL:30-EDR-221	 C-30-210 C-30-220
L-30-210	30E01 ESC06	2"	4	#12	XHHW-2	1	#12	XHHW-2	FR: JUNCTION BOX: LIGHTING & RECEPTACLES TO: MCC-D VIA MH-E01 4 #12 >> POWER:LIGHTING & RECEPTACLES	P-30-320
N-30-210	30E01 ESC06	2"	1	6/FO		1	#14	XHHW-2	FR: 30-VCP-210 TO: HH-S01 1 6/FO >> SIGNAL:30-VCP-210	N-30-230
N-30-220	30E01 ESC06	2"	1	6/FO		1	#14	XHHW-2	FR: 30-VCP-220 TO: HH-S01 1 6/FO >> SIGNAL:30-VCP-220	N-30-230
N-30-230	ESC06 70E03	2"	2	6/FO		1	#14	XHHW-2	FR: HH-S01 TO: NP-1 IN CONTROL ROOM VIA HH-S013 1 6/FO >> SIGNAL:30-VCP-210 1 6/FO >> SIGNAL:30-VCP-220	 N-30-210 N-30-220
P-30-210	30E01 ESC06	2"	3	#10	XHHW-2	1	#10	XHHW-2	FR: 30-VCP-210 TO: MH-E01 3 #10 >> POWER:30-VCP-210	P-30-310
P-30-211	30E01	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 30-EDR-211 TO: DISCONNECT 3 #12 >> POWER: 30-EDR-211	P-30-212
P-30-212	30E01 ESC06	2"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: MH-E01 3 #12 >> POWER: 30-EDR-211	P-30-310 P-30-211
P-30-213	30E01	1"	10 4	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: JUNCTION BOX TO: VCP 210 5 #12 >> POWER:30-PMP-215 & HEATERS 5 #12 >> POWER:30-PMP-214 & HEATERS 2 #14 >> 30-PMP-214 TSH 2 #14 >> 30-PMP-215 TSH	 P-30-215 P-30-214
P-30-214	30E01	0.75"	5 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: 30-PMP-214 TO: JUNCTION BOX 5 #12 >> POWER:30-PMP-214 & HEATERS 2 #14 >> 30-PMP-214 TSH	P-30-213
P-30-215	30E01	0.75"	5 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: 30-PMP-215 TO: JUNCTION BOX 5 #12 >> POWER:30-PMP-215 & HEATERS 2 #14 >> 30-PMP-215 TSH	P-30-213
P-30-220	30E01 ESC06	2"	3	#10	XHHW-2	1	#10	XHHW-2	FR: 30-VCP-220 TO: MH-E01 3 #10 >> POWER:30-VCP-220	P-30-320
P-30-221	30E01	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 30-EDR-221 TO: DISCONNECT 3 #12 >> POWER: 30-EDR-221	P-30-222
P-30-222	30E01 ESC06	2"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: MH-E01 3 #12 >> POWER: 30-EDR-221	P-30-320 P-30-221
P-30-223	30E01	1"	10 4	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: JUNCTION BOX TO: VCP-220 5 #12 >> POWER:30-PMP-224 & HEATERS 5 #12 >> POWER: 30-PMP-225 & HEATERS 2 #14 >> 30-PMP-224 TSH 2 #14 >> 30-PMP-225 TSH	 P-30-224 P-30-225
P-30-224	30E01	0.75"	5 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: P-30-224 TO: JUNCTION BOX 5 #12 >> POWER:30-PMP-224 & HEATERS 2 #14 >> 30-PMP-224 TSH	P-30-223

CONDUIT SCHEDULE AREA 30

9/11/13

LOS OSOS WATER RECYCLING FACILITY

TERTIARY FILTERS

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
P-30-225	30E01	0.75"	5 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: P-30-225 TO: JUNCTION BOX 5 #12 >> POWER: 30-PMP-225 & HEATERS 2 #14 >> 30-PMP-225 TSH	P-30-223
P-30-310	ESC06 70E02	2"	3 3	#10 #12	XHHW-2 XHHW-2	1 1	#10 #12	XHHW-2 XHHW-2	FR: MH-E01 TO: MCC-C 3 #10 >> POWER:30-VCP-210 3 #12 >> POWER: 30-EDR-211	 P-30-210 P-30-212
P-30-320	ESC06 70E02	2"	3 7	#10 #12	XHHW-2 XHHW-2	1 1	#10 #12	XHHW-2 XHHW-2	FR: MH-E01 TO: MCC-D 3 #10 >> POWER:30-VCP-220 3 #12 >> POWER: 30-EDR-221 4 #12 >> POWER:LIGHTING & RECEPTACLES	 P-30-220 P-30-222 L-30-210
X-30-210	ESC06 70E03	2"	1	PULL	ROPE				FR: STUB UP AT FILTER TO: STUB UP AT PCM-1IN CONTROL RM VIA MH-E01 1 PULL >> SPARE CONDUIT	
X-30-211	ESC06 70E03	2"	1	PULL	ROPE				FR: STUB UP AT FILTER TO: STUB UP AT ELECT ROOM VIA MH-E01 1 PULL >> SPARE CONDUIT	

END OF CONDUIT SCHEDULE

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN CC
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY

LOS OSOS WATER RECYCLING FACILITY PROJECT

ELECTRICAL

TERTIARY FILTER CONDUIT SCHEDULE

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 30E03
SHEET NO. 336 OF 549

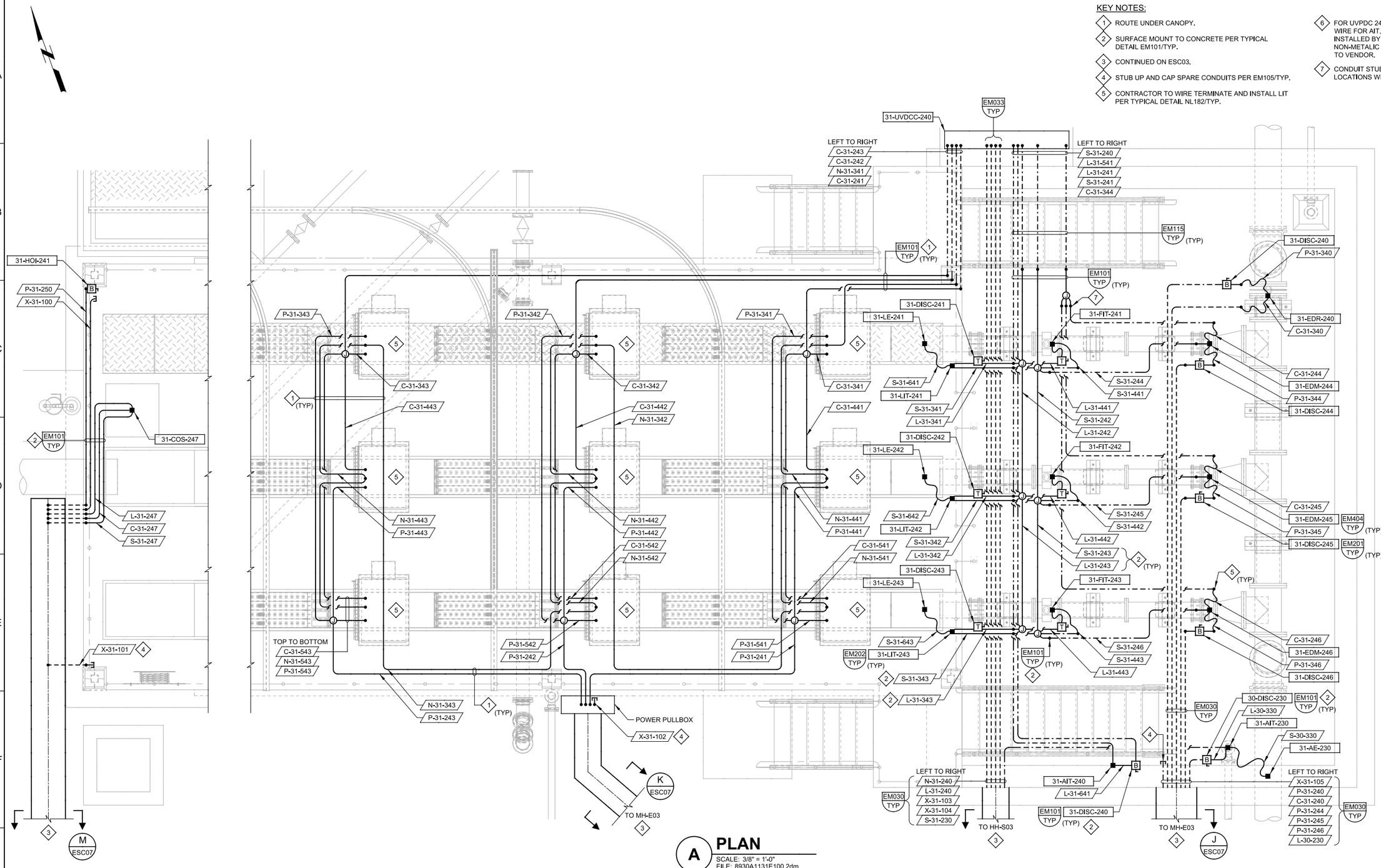
PROJECT NO. 8930A.11 FILE NAME: 8930A1130E03.dgn

LAST SAVED BY: ejohnson Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1 User: AWulff Plot Date: 16-SEP-2013 6:37:33 PM

Plot Date: 16-SEP-2013 6:10:00 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

KEY NOTES:

1. ROUTE UNDER CANOPY.
2. SURFACE MOUNT TO CONCRETE PER TYPICAL DETAIL EM101/TYP.
3. CONTINUED ON ESC03.
4. STUB UP AND CAP SPARE CONDUITS PER EM105/TYP.
5. CONTRACTOR TO WIRE TERMINATE AND INSTALL LIT PER TYPICAL DETAIL NL182/TYP.
6. FOR UVPDC 241A THRU 243C INSTRUMENTS AND WIRE FOR AIT, DRV AND UVL PROVIDED AND INSTALLED BY VENDOR. CONTRACTOR TO PROVIDE NON-METALIC 1/2" HUBBEL G1050 FLEX AND WIRE TO VENDOR.
7. CONDUIT STUB UP PER EM033/EM107(TYP). ALL LOCATIONS WITH NO HOUSEKEEPING PADS.



A PLAN

SCALE: 3/8" = 1'-0"
FILE: 8930A1131E100.2dm

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo®

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY

LOS OSOS WATER RECYCLING FACILITY PROJECT

ELECTRICAL

UV DISINFECTION POWER & CONTROL PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

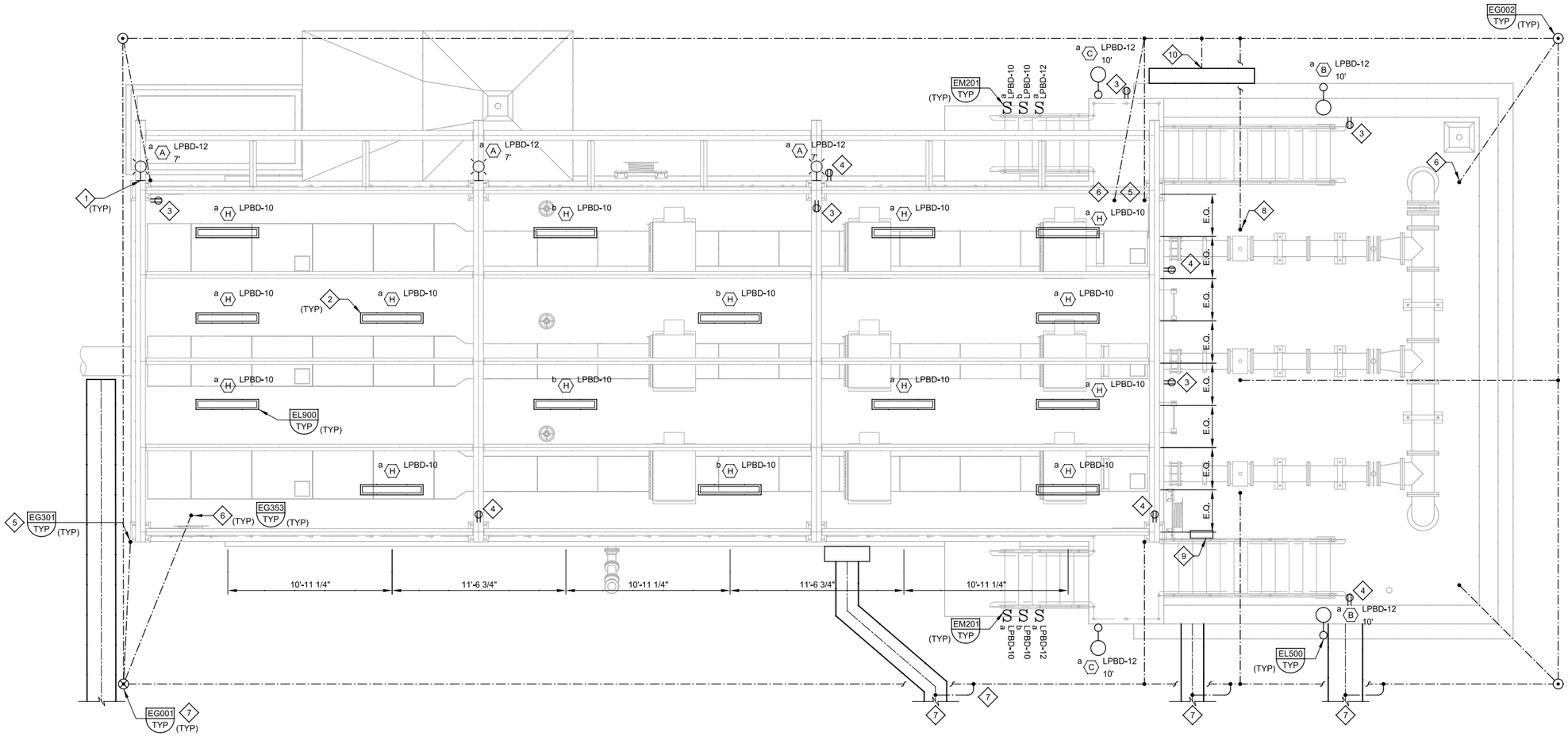
JOB NO. 8930A.11
DRAWING NO. 31E01
SHEET NO. 337 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1131E01.dgn

Plot Date: 16-SEP-2013 6:10:21 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

KEY NOTES:

1. WALL MOUNTED LIGHT FIXTURE. MOUNTED ON COLUMN 7' ABOVE U. V. FACILITY SLAB.
2. CONTRACTOR TO COORDINATE PRECISE PLACEMENT OF LIGHT FIXTURES WITH POWER & CONTROL CONDUIT RISERS FOR U. V. UNITS AND MONORAIL TRACK.
3. DUPLEX RECEPTACLE WP, GFCI LPBD-14
4. DUPLEX RECEPTACLE WP, GFCI LPBD-16
5. BOND #2 BARE CU TO COLUMN OF SUN SHADE.
6. BOND #4/0 BARE CU TO FOUNDATION REBAR.
7. EXTEND AND BOND DUCT BANK GROUND TO GROUND GRID.
8. BOND #2 BARE CU TO #8 BARE CU FOR MAGMETERS PER TYP/NF135.
9. U.V. FACILITY LIGHTING AND RECEPTACLE PULL BOX. CONNECT TO L-31-200 IN DUCT BANK.
10. #2 BARE COPPER.



A PLAN

SCALE: 1/4" = 1'-0"
FILE: 8930A1131E101.2dm

REV	DATE	BY	DESCRIPTION

DESIGNED IRV
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
UV DISINFECTION
LIGHTING AND RECEPTACLE PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 31E02
SHEET NO. 338 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1131E02.dgn

CONDUIT SCHEDULE AREA 31

9/11/13

LOS OSOS WATER RECYCLING FACILITY

UV DISINFECTION

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-31-100	31E01 ESC06 ESC07	2"	2 12	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: MH-E03 TO: PCM-1 VIA MANHOLE MH-E01 2 #12 >> POWER: 30-AIT-230 10 #14 >> CONTROL: 31-EDR-240 2 #14 >> CONTROL: 31-COS-247	 L-31-230 C-31-240 C-31-247
C-31-240	31E01	2"	10	#14	XHHW-2	1	#14	XHHW-2	FR: JUNCTION BOX TO: MANHOLE # MH-E03 10 #14 >> CONTROL: 31-EDR-240	C-31-100 C-31-340
C-31-241	31E01	0.75"	12	#14	XHHW-2	1	#14	XHHW-2	FR: UV CONTROL JUNCTION BOX #1 TO: UV SYSTEMS MASTER PLC 4 #14 >> CONTROL: 31-UVPDC-241A 2 SPARE 4 #14 >> CONTROL:-31-UVPDC-241B 2 SPARE 4 #14 >> CONTROL:-31-UVPDC-241C 2 SPAR	 C-31-341 C-31-441 C-31-541
C-31-242	31E01	0.75"	12	#14	XHHW-2	1	#14	XHHW-2	FR: UV CONTROL JUNCTION BOX #2 TO: UV SYSTEMS MASTER PLC 4 #14 >> CONTROL:-31-UVPDC-242A 2 SPAR 4 #14 >> CONTROL:-31-UVPDC-242B 2 SPARE 4 #14 >> CONTROL:-31-UVPDC-242C 2 SPAR	 C-31-342 C-31-442 C-31-542
C-31-243	31E01	0.75"	12	#14	XHHW-2	1	#14	XHHW-2	FR: UV CONTROL JUNCTION BOX #3 TO: UV SYSTEM MASTER PLC 4 #14 >> CONTROL:-31-UVPDC-243A 2 SPAR 4 #14 >> CONTROL:-31-UVPDC-243B 2 SPARE 4 #14 >> CONTROL:-31-UVPDC-243C 2 SPAR	 C-31-343 C-31-443 C-31-543
C-31-244	31E01	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: 31-EDM-244 TO: JUNCTION BOX 10 #14 >> CONTROL: 31-EDM-244	C-31-344 C-31-344
C-31-245	31E01	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: 31-EDM-245 TO: JUNCTION BOX 10 #14 >> CONTROL: 31-EDM-245	C-31-344 C-31-344
C-31-246	31E01	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: 31-EDM-246 TO: JUNCTION BOX 10 #14 >> CONTROL: 31-EDM-246	C-31-344 C-31-344
C-31-247	31E01 ESC07	2"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 31-COS-247 TO: MANHOLE MH-E03 2 #14 >> CONTROL: 31-COS-247	C-31-100 C-31-100
C-31-340	31E01	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: 31-EDR-240 TO: JUNCTION BOX 10 #14 >> CONTROL: 31-EDR-240	C-31-240 C-31-240
C-31-341	31E01	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: 31-UVPDC-241A TO: UV CONTROL JUNCTION BOX #1 4 #14 >> CONTROL: 31-UVPDC-241A 2 SPARE	C-31-241 C-31-241
C-31-342	31E01	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: 31-UVPDC-242A TO: UV CONTROL JUNCTION BOX #2 4 #14 >> CONTROL:-31-UVPDC-242A 2 SPARE	C-31-242 C-31-242
C-31-343	31E01	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: 31-UVPDC-243A TO: UV CONTROL JUNCTION BOX #3 4 #14 >> CONTROL:-31-UVPDC-243A 2 SPARE	C-31-243 C-31-243
C-31-344	31E01	2"	30	#14	XHHW-2	1	#14	XHHW-2	FR: JUNCTION BOX TO: UVDCC-240 10 #14 >> CONTROL: 31-EDM-244 10 #14 >> CONTROL: 31-EDM-245 10 #14 >> CONTROL: 31-EDM-246	C-31-344 C-31-244 C-31-245 C-31-246
C-31-441	31E01	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: 31-UVPDC-241B TO: UV CONTROL JUNCTION BOX #1 4 #14 >> CONTROL:-31-UVPDC-241B 2 SPARE	C-31-241 C-31-241
C-31-442	31E01	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: 31-UVPDC-242B TO: UV CONTROL JUNCTION BOX #2 4 #14 >> CONTROL:-31-UVPDC-242B 2 SPARE	C-31-242 C-31-242
C-31-443	31E01	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: 31-UVPDC-243B TO: UV CONTROL JUNCTION BOX #3 4 #14 >> CONTROL:-31-UVPDC-243B 2 SPARE	C-31-243 C-31-243
C-31-541	31E01	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: 31-UVPDC-241C TO: UV CONTROL JUNCTION BOX #1 4 #14 >> CONTROL:-31-UVPDC-241C 2 SPARE	C-31-241 C-31-241

CONDUIT SCHEDULE AREA 31

9/11/13

LOS OSOS WATER RECYCLING FACILITY

UV DISINFECTION

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-31-542	31E01	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: 31-UVPDC-242C TO: UV CONTROL JUNCTION BOX #2 4 #14 >> CONTROL:-31-UVPDC-242C 2 SPARE	C-31-242 C-31-242
C-31-543	31E01	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: 31-UVPDC-243C TO: UV CONTROL JUNCTION BOX #3 4 #14 >> CONTROL:-31-UVPDC-243C 2 SPARE	C-31-243 C-31-243
L-31-100	31E01 ESC06 ESC07 70E02	2"	8	#8	XHHW-2	1	#8	XHHW-2	FR: MANHOLE MH-E03 TO: MCC-D VIA MANHOLE MH-E01 8 #8 >> POWER: LIGHTING & RECEPTACLES	 L-31-200
L-31-101	31E01 ESC06 ESC07 70E02	2"	2 2	#10 #12	XHHW-2 XHHW-2	1	#10	XHHW-2	FR: MANHOLE MH-E03 TO: MCC-D VIA MANHOLE MH-E01 2 #10 >> POWER: 31-UVDCC-240 2 #12 >> POWER: 31-COS-247	 L-31-240 L-31-247
L-31-200	31E01	2"	8	#8	XHHW-2	1	#8	XHHW-2	FR: LIGHTING JUNCTION BOX COLUMN D2 TO: MANHOLE MH-E03 8 #8 >> POWER: LIGHTING & RECEPTACLES	L-31-100 L-31-100
L-31-230	31E01	2"	2	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: MANHOLE # MH-E03 2 #12 >> POWER: 30-AIT-230	C-31-100 L-31-330
L-31-240	31E01	2"	2	#10	XHHW-2	1	#10	XHHW-2	FR: 31-UVDCC-240 TO: MANHOLE MH-E03 2 #10 >> POWER: 31-UVDCC-240	L-31-101 L-31-101
L-31-241	31E01	2"	12	#12	XHHW-2	1	#12	XHHW-2	FR: L241 JUNCTION BOX TO: 31-UVDCC-240 2 #12 >> POWER: 31-LIT-241 2 #12 >> POWER: 31-FIT 241 2 #12 >> POWER: 31-LIT-242 2 #12 >> POWER: 31-FIT 242 2 #12 >> POWER: 31-LIT-243 2 #12 >> POWER: 31-FIT 243	 L-31-341 L-31-441 L-31-242 L-31-242 L-31-242 L-31-242
L-31-242	31E01	1"	8	#12	XHHW-2	1	#12	XHHW-2	FR: L242 JUNCTION BOX TO: L241 JUNCTION BOX 2 #12 >> POWER: 31-LIT-242 2 #12 >> POWER: 31-FIT 242 2 #12 >> POWER: 31-LIT-243 2 #12 >> POWER: 31-FIT 243	L-31-241 L-31-342 L-31-442 L-31-243 L-31-243
L-31-243	31E01	1"	4	#12	XHHW-2	1	#12	XHHW-2	FR: L243 JUNCTION BOX TO: L242 JUNCTION BOX 2 #12 >> POWER: 31-LIT-243 2 #12 >> POWER: 31-FIT 243	L-31-242 L-31-343 L-31-443
L-31-247	31E01 ESC07	2"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 31-COS-247 TO: MANHOLE MH-E03 2 #12 >> POWER: 31-COS-247	L-31-101 L-31-101
L-31-330	31E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 30-AIT-230 TO: DISCONNECT 2 #12 >> POWER: 30-AIT-230	L-31-230 L-31-230
L-31-341	31E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 31-LIT-241 TO: L241 JUNCTION BOX 2 #12 >> POWER: 31-LIT-241	L-31-241 L-31-241
L-31-342	31E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 31-LIT-242 TO: L242 JUNCTION BOX 2 #12 >> POWER: 31-LIT-242	L-31-242 L-31-242
L-31-343	31E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 31-LIT-243 TO: L243 JUNCTION BOX 2 #12 >> POWER: 31-LIT-243	L-31-243 L-31-243
L-31-441	31E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 31-FIT-241 TO: L241 JUNCTION BOX 2 #12 >> POWER: 31-FIT 241	L-31-241 L-31-241
L-31-442	31E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 31-FIT-242 TO: L242 JUNCTION BOX 2 #12 >> POWER: 31-FIT 242	L-31-242 L-31-242

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN CC
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IVAN R. VARELA — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY

LOS OSOS WATER RECYCLING FACILITY PROJECT

ELECTRICAL

UV DISINFECTION
CONDUIT SCHEDULE- I

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 31E03
SHEET NO. 339 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1131E03.dgn

Plot Date: 16-SEP-2013 6:10:39 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

CONDUIT SCHEDULE AREA 31

9/11/13

LOS OSOS WATER RECYCLING FACILITY

UV DISINFECTION

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
L-31-443	31E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 31-FIT-243 TO: L243 JUNCTION BOX 2 #12 >> POWER: 31-FIT 243	L-31-243
L-31-541	31E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: 51-UVDCC-240 2 #12 >> POWER: 31-AIT-240	L-31-641
L-31-641	31E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 31-AIT-240 TO: DISCONNECT 2 #12 >> POWER: 31-AIT-240	L-31-541
N-31-240 ESC03 ESC06	31E01	2"	1	6/FO		1	#14	XHHW-2	FR: 31-UVDCC-240 TO: NP-1 VIA HANDHOLE HH-S03,S01 AND S013 1 6/FO >> DATA: TO PLC VIA NP-1	
N-31-341	31E01	1.5"	1	DH+		1	#14	XHHW-2	FR: UV SYSTEMS MASTER PLC TO: 31-UVPDC-241A 1 DH+ >> SIGNAL: 31-UVPDC-241A	
N-31-342	31E01	1.5"	1	DH+		1	#14	XHHW-2	FR: 31-UVPDC-241C TO: 31-UVPDC-242A 1 DH+ >> SIGNAL: 31-UVPDC-242A	
N-31-343	31E01	1.5"	1	DH+		1	#14	XHHW-2	FR: 31-UVPDC-242C TO: 31-UVPDC-243A 1 DH+ >> SIGNAL: 31-UVPDC-243A	
N-31-441	31E01	1.5"	1	DH+		1	#14	XHHW-2	FR: 31-UVPDC-241A TO: 31-UVPDC-241B 1 DH+ >> SIGNAL: 31-UVPDC-241B	
N-31-442	31E01	1.5"	1	DH+		1	#14	XHHW-2	FR: 31-UVPDC-242A TO: 31-UVPDC-242B 1 DH+ >> SIGNAL: 31-UVPDC-242B	
N-31-443	31E01	1.5"	1	DH+		1	#14	XHHW-2	FR: 31-UVPDC-243A TO: 31-UVPDC-243B 1 DH+ >> SIGNAL: 31-UVPDC-243B	
N-31-541	31E01	1.5"	1	DH+		1	#14	XHHW-2	FR: 31-UVPDC-241B TO: 31-UVPDC-241C 1 DH+ >> SIGNAL: 31-UVPDC-241C	
N-31-542	31E01	1.5"	1	DH+		1	#14	XHHW-2	FR: 31-UVPDC-242B TO: 31-UVPCD-242C 1 DH+ >> SIGNAL: 31-UVPDC-242C	
N-31-543	31E01	1.5"	1	DH+		1	#14	XHHW-2	FR: 31-UVPDC-243B TO: 31-UVPDC-243C 1 DH+ >> SIGNAL: 31-UVPDC-243C	
P-31-100	31E01 ESC06 ESC07 70E02	2"	6	#12	XHHW-2	1	#12	XHHW-2	FR: MANHOLE MH-E03 TO: MCC-D VIA MANHOLE MH-E01 3 #12 >> POWER: 31-EDM-245 P-31-245 3 #12 >> POWER: 31-HOI-241 P-31-250	
P-31-104	31E01 ESC06 ESC07 70E02	2"	9	#12	XHHW-2	1	#12	XHHW-2	FR: MANHOLE MH-E03 TO: MCC-C VIA MANHOLE MH-E01 3 #12 >> POWER: 31-EDR-240 P-31-240 3 #12 >> POWER: 31-EDM-244 P-31-244 3 #12 >> POWER: 31-EDM-246 P-31-246	
P-31-141	31E01 ESC07	2"	12	#8	XHHW-2	3	#8	XHHW-2	FR: UV POWER PULL BOX TO: MCC-C VIA MANHOLE # MH-E03 &E01 4 #8 >> POWER: 31-UVPDC-241A P-31-241 4 #8 >> POWER: 31-UVPDC-241B P-31-241 4 #8 >> POWER: 31-UVPDC-241C P-31-241	
P-31-142	31E01 ESC07	2"	12	#8	XHHW-2	3	#8	XHHW-2	FR: UV POWER PULL BOX TO: MCC-D VIA MANHILE # MH-E03 & E01 4 #8 >> POWER: 31-UVPDC-242A P-31-242 4 #8 >> POWER: 31-UVPDC-242B P-31-242 4 #8 >> POWER: 31-UVPDC-242C P-31-242	

CONDUIT SCHEDULE AREA 31

9/11/13

LOS OSOS WATER RECYCLING FACILITY

UV DISINFECTION

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
P-31-143	31E01 ESC07	2"	12	#8	XHHW-2	3	#8	XHHW-2	FR: UV POWER PULL BOX TO: MCC-C VIA MANHOLE # MH-E03 & E01 4 #8 >> POWER: 31-UVPDC-243A P-31-243 4 #8 >> POWER: 31-UVPDC-243B P-31-243 4 #8 >> POWER: 31-UVPDC-243C P-31-243	
P-31-240	31E01 ESC06	2"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: MCC-C VIA MANHOLE # MH-E03 3 #12 >> POWER: 31-EDR-240	P-31-104 P-31-340
P-31-241	31E01	1.5"	12	#8	XHHW-2	1	#8	XHHW-2	FR: UV POWER JUNCTION BOX #1 TO: UV POWER PULL BOX 4 #8 >> POWER: 31-UVPDC-241A 4 #8 >> POWER: 31-UVPDC-241B 4 #8 >> POWER: 31-UVPDC-241C	P-31-141 P-31-341 P-31-441 P-31-541
P-31-242	31E01	1.5"	12	#8	XHHW-2	1	#8	XHHW-2	FR: UV POWER JUNCTION BOX #2 TO: UV POWER PULL BOX 4 #8 >> POWER: 31-UVPDC-242A 4 #8 >> POWER: 31-UVPDC-242B 4 #8 >> POWER: 31-UVPDC-242C	P-31-142 P-31-342 P-31-442 P-31-542
P-31-243	31E01	1.5"	12	#8	XHHW-2	1	#8	XHHW-2	FR: UV POWER JUNCTION BOX #3 TO: UV POWER PULL BOX 4 #8 >> POWER: 31-UVPDC-243A 4 #8 >> POWER: 31-UVPDC-243B 4 #8 >> POWER: 31-UVPDC-243C	P-31-143 P-31-343 P-31-443 P-31-543
P-31-244	31E01 ESC07	2"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: MANHOLE # MH-E03 3 #12 >> POWER: 31-EDM-244	P-31-104 P-31-344
P-31-245	31E01 ESC07	2"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: MANHOLE # MH-E03 3 #12 >> POWER: 31-EDM-245	P-31-100 P-31-345
P-31-246	31E01 ESC07	2"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: MANHOLE # MH-E03 3 #12 >> POWER: 31-EDM-246	P-31-104 P-31-346
P-31-250	31E01 ESC07	2"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 31-HOI-241 TO: MANHHOLE MH-E03 3 #12 >> POWER: 31-HOI-241	P-31-100
P-31-340	31E01	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 31-EDR-240 TO: DISCONNECT 3 #12 >> POWER: 31-EDR-240	P-31-240
P-31-341	31E01	1"	4	#8	XHHW-2	1	#8	XHHW-2	FR: 31-UVPDC-241A TO: UV POWER JUNCTION BOX #1 4 #8 >> POWER: 31-UVPDC-241A	P-31-241
P-31-342	31E01	1"	4	#8	XHHW-2	1	#8	XHHW-2	FR: 31-UVPDC-242A TO: UV POWER JUNCTION BOX #2 4 #8 >> POWER: 31-UVPDC-242A	P-31-242
P-31-343	31E01	1"	4	#8	XHHW-2	1	#8	XHHW-2	FR: 31-UVPDC-243A TO: UV POWER JUNCTION BOX #3 4 #8 >> POWER: 31-UVPDC-243A	P-31-243
P-31-344	31E01	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 31-EDM-244 TO: DISCONNECT 3 #12 >> POWER: 31-EDM-244	P-31-244
P-31-345	31E01	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 31-EDM-245 TO: DISCONNECT 3 #12 >> POWER: 31-EDM-245	P-31-245
P-31-346	31E01	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 31-EDM-246 TO: DISCONNECT 3 #12 >> POWER: 31-EDM-246	P-31-246
P-31-441	31E01	1"	4	#8	XHHW-2	1	#8	XHHW-2	FR: 31-UVPDC-241B TO: UV POWER JUNCTION BOX #1 4 #8 >> POWER: 31-UVPDC-241B	P-31-241

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN CC
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — JAMES V. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA
9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
UV DISINFECTION
CONDUIT SCHEDULE- II

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 31E04
SHEET NO. 340 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1131E04.dgn

Plot Date: 16-SEP-2013 6:10:58 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

CONDUIT SCHEDULE AREA 31

9/11/13

LOS OSOS WATER RECYCLING FACILITY

UV DISINFECTION

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
P-31-442	31E01	1"	4	#8	XHHW-2	1	#8	XHHW-2	FR: 31-UVPDC-242B TO: UV POWER JUNCTION BOX #2 4 #8 >> POWER: 31-UVPDC-242B	P-31-242
P-31-443	31E01	1"	4	#8	XHHW-2	1	#8	XHHW-2	FR: 31-UVPDC-243B TO: UV POWER JUNCTION BOX #3 4 #8 >> POWER: 31-UVPDC-243B	P-31-243
P-31-541	31E01	1"	4	#8	XHHW-2	1	#8	XHHW-2	FR: 31-UVPDC-241C TO: UV POWER JUNCTION BOX #1 4 #8 >> POWER: 31-UVPDC-241C	P-31-241
P-31-542	31E01	1"	4	#8	XHHW-2	1	#8	XHHW-2	FR: 31-UVPDC-242C TO: UV POWER JUNCTION BOX #2 4 #8 >> POWER: 31-UVPDC-242C	P-31-242
P-31-543	31E01	1"	4	#8	XHHW-2	1	#8	XHHW-2	FR: 31-UVPDC-243C TO: UV POWER JUNCTION BOX #3 4 #8 >> POWER: 31-UVPDC-243C	P-31-243
S-31-100	31E01 ESC06 ESC07 70E03	2"	2	2/CS-#16		1	#14	XHHW-2	FR: HANDHOLE HH-S03 TO: PCM-1 VIA HANDHOLE HH-S01, S013 1 2/CS-#16 >> SIGNAL: 30-AIT-230 1 2/CS-#16 >> SIGNAL: 31-COS-247	S-31-230 S-31-247
S-31-230	31E01	2"	1	2/CS-#16		1	#14	XHHW-2	FR: 30-AIT-230 TO: HANDHOLE HH-S03 1 2/CS-#16 >> SIGNAL: 30-AIT-230	S-31-100
S-31-240	31E01	1"	1	2/CS-#16		1	#14	XHHW-2	FR: 31-AIT-240 TO: 31-UVDCC-240 1 2/CS-#16 >> SIGNAL: 31-AIT-240	
S-31-241	31E01	2"	9	2/CS-#16		1	#14	XHHW-2	FR: S241 JUNCTION BOX TO: 31-UVDCC-240 1 2/CS-#16 >> SIGNAL: 31-LIT-241 1 2/CS-#16 >> SIGNAL: 31-FIT-241 1 2/CS-#16 >> SIGNAL: 31-EDM-244 1 2/CS-#16 >> SIGNAL: 31-LIT-242 1 2/CS-#16 >> SIGNAL: 31-FIT-242 1 2/CS-#16 >> SIGNAL: 31-EDM-245 1 2/CS-#16 >> SIGNAL: 31-LIT-243 1 2/CS-#16 >> SIGNAL: 31-FIT-243 1 2/CS-#16 >> SIGNAL: 31-EDM-246	S-31-341 S-31-441 S-31-244 S-31-242 S-31-242 S-31-245 S-31-242 S-31-242 S-31-242
S-31-242	31E01	1.5"	6	2/CS-#16		1	#14	XHHW-2	FR: S242 JUNCTION BOX TO: S241 JUNCTION BOX 1 2/CS-#16 >> SIGNAL: 31-LIT-242 1 2/CS-#16 >> SIGNAL: 31-FIT-242 1 2/CS-#16 >> SIGNAL: 31-EDM-245 1 2/CS-#16 >> SIGNAL: 31-LIT-243 1 2/CS-#16 >> SIGNAL: 31-FIT-243 1 2/CS-#16 >> SIGNAL: 31-EDM-246	S-31-241 S-31-342 S-31-442 S-31-245 S-31-243 S-31-243 S-31-243
S-31-243	31E01	1"	3	2/CS-#16		1	#14	XHHW-2	FR: S243 JUNCTION BOX TO: S242 JUNCTION BOX 1 2/CS-#16 >> SIGNAL: 31-LIT-243 1 2/CS-#16 >> SIGNAL: 31-FIT-243 1 2/CS-#16 >> SIGNAL: 31-EDM-246	S-31-242 S-31-343 S-31-443 S-31-246
S-31-244		0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 31-EDM-244 TO: S241 JUNCTION BOX 1 2/CS-#16 >> SIGNAL: 31-EDM-244	S-31-241
S-31-245		0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 31-EDM-245 TO: S242 JUNCTION BOX 1 2/CS-#16 >> SIGNAL: 31-EDM-245	S-31-242
S-31-246		0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 31-EDM-246 TO: S243 JUNCTION BOX 1 2/CS-#16 >> SIGNAL: 31-EDM-246	S-31-243
S-31-247	31E01	2"	1	2/CS-#16		1	#14	XHHW-2	FR: 31-COS-247 TO: HANDHOLE: HH-S03 1 2/CS-#16 >> SIGNAL: 31-COS-247	S-31-100
S-31-330	31E01	0.75"	1	MFR	CABLE	1	#14	XHHW-2	FR: 30-AE-230 TO: 30-AIT-230 1 MFR >> SIGNAL: 30-AE-230	

CONDUIT SCHEDULE AREA 31

9/11/13

LOS OSOS WATER RECYCLING FACILITY

UV DISINFECTION

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
S-31-341	31E01	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 31-LIT-241 TO: S241 JUNCTION BOX 1 2/CS-#16 >> SIGNAL: 31-LIT-241	S-31-241
S-31-342	31E01	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 31-LIT-242 TO: S242 JUNCTION BOX 1 2/CS-#16 >> SIGNAL: 31-LIT-242	S-31-242
S-31-343	31E01	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 31-LIT-243 TO: S243 JUNCTION BOX 1 2/CS-#16 >> SIGNAL: 31-LIT-243	S-31-243
S-31-441	31E01	1"	1	2/CS-#16		1	#14	XHHW-2	FR: 31-FIT-241 TO: S241 JUNCTION BOX 1 2/CS-#16 >> SIGNAL: 31-FIT-241	S-31-241
S-31-442	31E01	1"	1	2/CS-#16		1	#14	XHHW-2	FR: 31-FIT-242 TO: S242 JUNCTION BOX 1 2/CS-#16 >> SIGNAL: 31-FIT-242	S-31-242
S-31-443	31E01	1"	1	2/CS-#16		1	#14	XHHW-2	FR: 31-FIT-243 TO: S243 JUNCTION BOX 1 2/CS-#16 >> SIGNAL: 31-FIT-243	S-31-243
S-31-641	31E01	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 31-LE-241 TO: 31-LIT-241 1 MFR >> SIGNAL: 31-LE-241	
S-31-642	31E01	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 31-LE-242 TO: 31-LIT-242 1 MFR >> SIGNAL: 31-LE-242	
S-31-643	31E01	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 31-LE-243 TO: 31-LIT-243 1 MFR >> SIGNAL: 31-LE-242	
X-31-100	31E01 ESC07	2"	1	PULL	ROPE				FR: ALONGSIDE 31-HOI-241 TO: MANHOLE MH-E03 1 PULL >> SPARE CONDUIT	
X-31-101	31E01 ESC07	2"	1	PULL	ROPE				FR: ALONGSIDE SOUTH WEST CORNER OF UV UNIT TO: MANHOLE MH-E03 1 PULL >> SPARE CONDUIT	
X-31-102	31E01	2"	1	PULL	ROPE				FR: UV POWER PULL BOX TO: MANHOLE # MH-E03 & E01 1 PULL >> POWER: SPARE CONDUIT	
X-31-103	31E01	2"	1	PULL	ROPE				FR: UNDER 31-UVDCC-240 TO: MANHOLE MH-E03 1 PULL >> POWER: SPARE	
X-31-104	31E01	2"	1	PULL	ROPE				FR: UNDER 31-UVDCC-240 TO: HAND HOLE HH-S03 1 PULL >> SIGNAL: SPARE	
X-31-105	31E01	2"	1	PULL	ROPE				FR: PIT ALONGSIDE 31-AIT-240 TO: MANHOLE MH-E03 1 PULL >> SPARE CONDUIT	

END OF CONDUIT SCHEDULE

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN CC
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — TAHER VARLEY — No. 12679 — ELECTRICAL — STATE OF CALIFORNIA
9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
UV DISINFECTION
CONDUIT SCHEDULE- III

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 31E05
SHEET NO. 341 OF 549

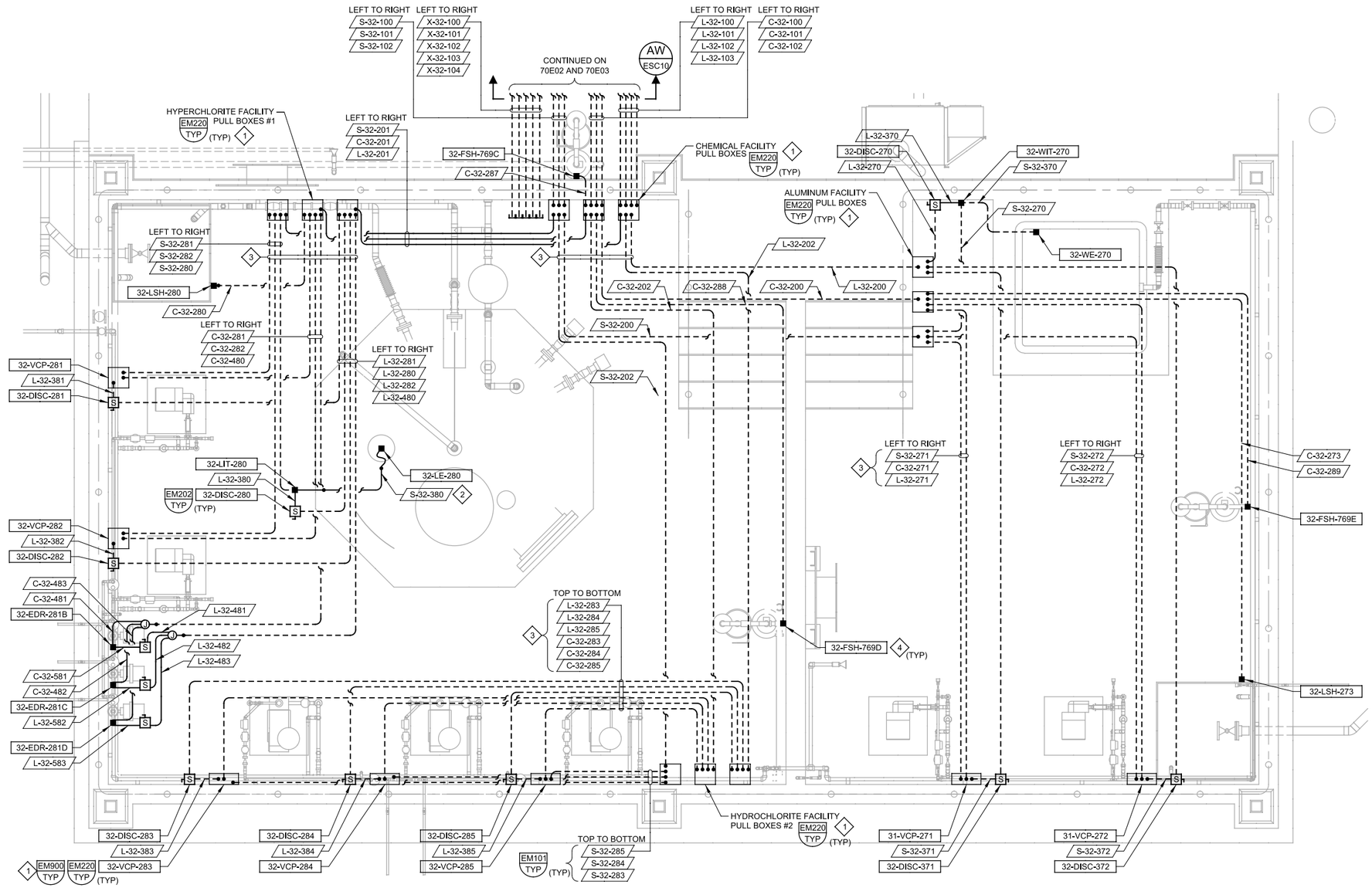
Plot Date: 16-SEP-2013 6:11:18 PM
User: AWulff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

PROJECT NO. 8930A.11 FILE NAME: 8930A1131E05.dgn

Plot Date: 16-SEP-2013 5:26:29 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

KEY NOTES:

1. MOUNT 18" ABOVE TOP OF WALL.
2. MOUNT ON LADDER SUPPORT STEEL.
3. ALL PER DETAIL EM030.
4. CONDUIT STUB UP PER DETAILS EM033/EM107 (TYP). ALL LOCATIONS WITH NO HOUSEKEEPING PADS, CONDUIT RISERS NOT TO CONTAIN ANY FITTINGS BELOW THE DESIGNATED CONTAINMENT LEVEL.



A PLAN

SCALE: 1/2" = 1'-0"
FILE: 8930A1132E100

REV	DATE	BY	DESCRIPTION

DESIGNED IRV
DRAWN AD
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER JAMES R. VARLEY No. 12679 ELECTRICAL STATE OF CALIFORNIA 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY

LOS OSOS WATER RECYCLING FACILITY PROJECT

ELECTRICAL

CHEMICAL FACILITY PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

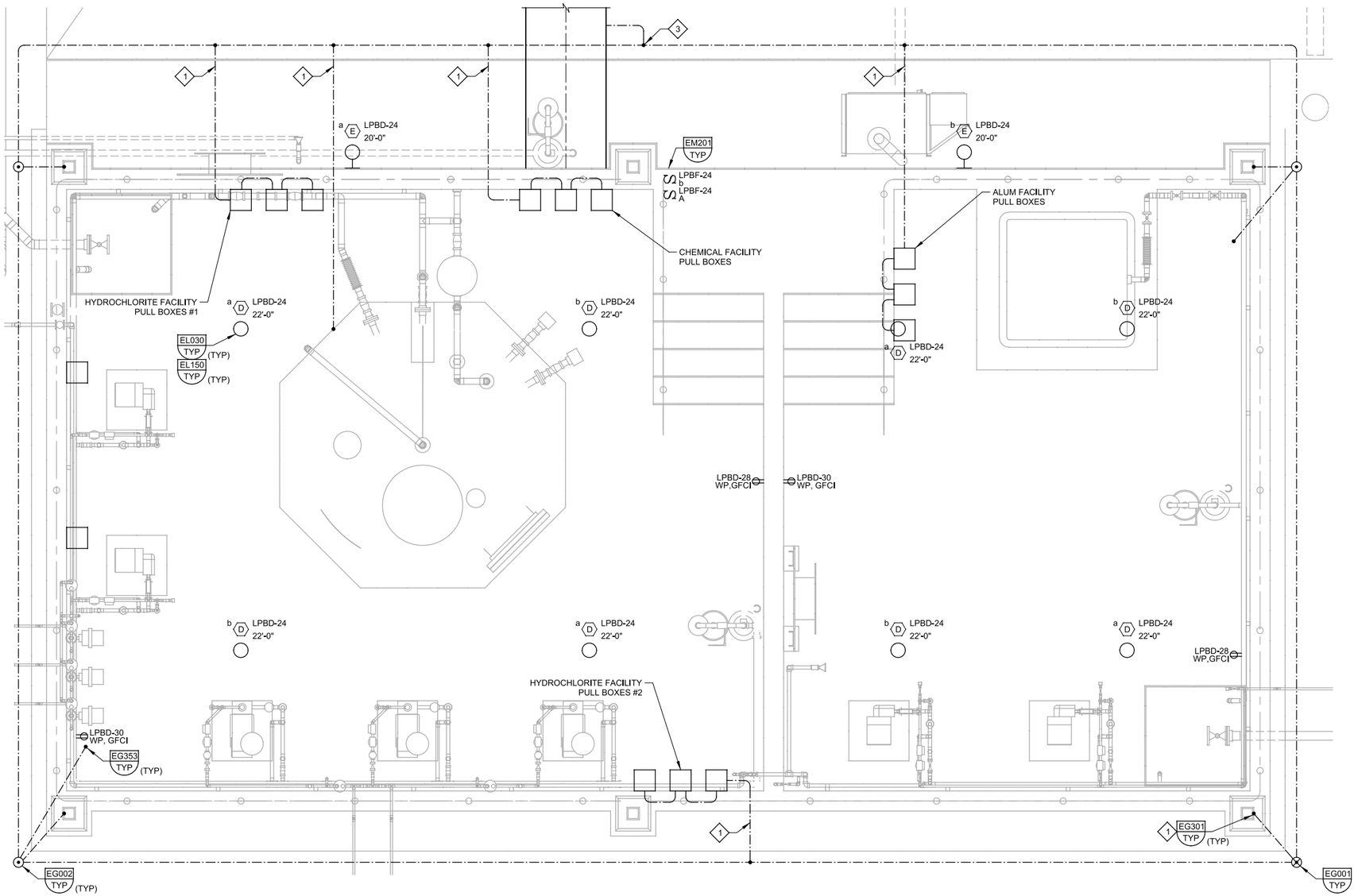
JOB NO. 8930A.11
DRAWING NO. 32E01
SHEET NO. 342 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1132E01.dgn

Plot Date: 16-SEP-2013 5:27:17 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

KEY NOTES:

1. #2 BARE COPPER.
2. BOND #4/0 BARE COPPER TO FOUNDATION REBAR.
3. EXTEND AND BOND DUCT BANK GROUNDS TO GROUND GRID PER TYPICAL DETAIL EG101.



A PLAN

SCALE: 1/2" = 1'-0"
FILE: 8930A1132E100

REV	DATE	BY	DESCRIPTION

DESIGNED IRV
DRAWN AD
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IRA R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
CHEMICAL FACILITY
LIGHTING & RECEPTACLE PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 32E02
SHEET NO. 343 OF 549

CONDUIT SCHEDULE AREA 32

9/4/13

LOS OSOS WATER RECYCLING FACILITY

CHEMICAL FACILITY

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-32-100	32E01 ESC10	2"	20	#14	XHHW-2	1	#14	XHHW-2	FR: CHEMICAL FACILITY CONTROL PULL BOX	
									TO: PCM-1 POWER TERMINALS	
									8 #14 >> CONTROL: 32-VCP-271	C-32-200
									8 #14 >> CONTROL: 32-VCP-272	C-32-200
									2 #14 >> CONTROL: 32-FSH-769E	C-32-200
									2 #14 >> CONTROL: 32-LSH-273	C-32-200
C-32-101	32E01 ESC10	2"	28	#14	XHHW-2	1	#14	XHHW-2	FR: CHEMICAL FACILITY CONTROL PULL BOX	
									TO: PCM-1 POWER TERMINALS	
									2 #14 >> CONTROL: 32-LSH-280	C-32-201
									8 #14 >> CONTROL: 32-VCP-281	C-32-201
									8 #14 >> CONTROL: 32-VCP-282	C-32-201
									8 #14 >> CONTROL: 32-EDR-281B	C-32-201
									2 #14 >> CONTROL: 32-FSH-769C	C-32-287
C-32-102	32E01 ESC10	2"	26	#14	XHHW-2	1	#14	XHHW-2	FR: CHEMICAL FACILITY CONTROL PULL BOX	
									TO: PCM-1 POWER TERMINALS	
									8 #14 >> CONTROL: 32-VCP-283	C-32-202
									8 #14 >> CONTROL: 32-VCP-284	C-32-202
									8 #14 >> CONTROL: 32-VCP-285	C-32-202
									2 #14 >> CONTROL: 32-FSH-769D	C-32-202
C-32-200	32E01	1.5"	20	#14	XHHW-2	1	#14	XHHW-2	FR: ALUM CONTROL PULL BOX	C-32-100
									TO: CHEMICAL FACILITY CONTROL PULL BOX	
									8 #14 >> CONTROL: 32-VCP-271	C-32-271
									8 #14 >> CONTROL: 32-VCP-272	C-32-272
									2 #14 >> CONTROL: 32-FSH-769E	C-32-289
									2 #14 >> CONTROL: 32-LSH-273	C-32-273
C-32-201	32E01	1.5"	56	#14	XHHW-2	1	#14	XHHW-2	FR: HYPOCHLORITE CONTROL PULL BOX #1	C-32-101
									TO: CHEMICAL FACILITY CONTROL PULL BOX	
									2 #14 >> CONTROL: 32-LSH-280	C-32-280
									8 #14 >> CONTROL: 32-VCP-281	C-32-281
									8 #14 >> CONTROL: 32-VCP-282	C-32-282
									8 #14 >> CONTROL: 32-EDR-281B	C-32-381
									10 #14 >> CONTROL: 32-EDR-281B	C-32-480
									10 #14 >> CONTROL: 32-EDR-281C	C-32-480
									10 #14 >> CONTROL: 32-EDR-281D	C-32-480
C-32-202	32E01	1.5"	26	#14	XHHW-2	1	#14	XHHW-2	FR: HYPOCHLORITE CONTROL PULL BOX #2	C-32-102
									TO: CHEMICAL FACILITY CONTROL PULL BOX	
									8 #14 >> CONTROL: 32-VCP-283	C-32-283
									8 #14 >> CONTROL: 32-VCP-284	C-32-284
									8 #14 >> CONTROL: 32-VCP-285	C-32-285
									2 #14 >> CONTROL: 32-FSH-769D	C-32-288
C-32-271	32E01	1"	8	#14	XHHW-2	1	#14	XHHW-2	FR: 31-VCP-271	C-32-200
									TO: ALUM CONTROL PULL BOX	
									8 #14 >> CONTROL: 32-VCP-271	
C-32-272	32E01	1"	8	#14	XHHW-2	1	#14	XHHW-2	FR: 31-VCP-272	C-32-200
									TO: ALUM CONTROL PULL BOX	
									8 #14 >> CONTROL: 32-VCP-272	
C-32-273	32E01	1"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 32-LSH-273	C-32-200
									TO: ALUM CONTROL PULL BOX	
									2 #14 >> CONTROL: 32-LSH-273	
C-32-280	32E01	1"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 32-LSH-280	C-32-201
									TO: HYPOCHLORITE CONTROL PULL BOX #1	
									2 #14 >> CONTROL: 32-LSH-280	
C-32-281	32E01	1"	8	#14	XHHW-2	1	#14	XHHW-2	FR: 32-VCP-281	C-32-201
									TO: HYPOCHLORITE CONTROL PULL BOX #1	
									8 #14 >> CONTROL: 32-VCP-281	
C-32-282	32E01	1"	8	#14	XHHW-2	1	#14	XHHW-2	FR: 32-VCP-282	C-32-201
									TO: HYPOCHLORITE CONTROL PULL BOX #1	
									8 #14 >> CONTROL: 32-VCP-282	
C-32-283	32E01	1"	8	#14	XHHW-2	1	#14	XHHW-2	FR: 32-VCP-283	C-32-202
									TO: HYPOCHLORITE CONTROL PULL BOX #2	
									8 #14 >> CONTROL: 32-VCP-283	
C-32-284	32E01	1"	8	#14	XHHW-2	1	#14	XHHW-2	FR: 32-VCP-284	C-32-202
									TO: HYPOCHLORITE CONTROL PULL BOX #2	
									8 #14 >> CONTROL: 32-VCP-284	

CONDUIT SCHEDULE AREA 32

9/4/13

LOS OSOS WATER RECYCLING FACILITY

CHEMICAL FACILITY

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-32-285	32E01	1"	8	#14	XHHW-2	1	#14	XHHW-2	FR: 32-VCP-285	C-32-202
									TO: HYPOCHLORITE CONTROL PULL BOX #2	
									8 #14 >> CONTROL: 32-VCP-285	
C-32-287	32E01	1"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 32-FSH-769C	C-32-101
									TO: CHEMICAL FACILITY CONTROL PULL BOX	
									2 #14 >> CONTROL: 32-FSH-769C	
C-32-288	32E01	1"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 32-FSH-769D	C-32-202
									TO: HYPOCHLORITE CONTROL PULL BOX #2	
									2 #14 >> CONTROL: 32-FSH-769D	
C-32-289	32E01	1"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 32-FSH-769E	C-32-200
									TO: ALUM CONTROL PULL BOX	
									2 #14 >> CONTROL: 32-FSH-769E	
C-32-381	32E01	1"	8	#14	XHHW-2	1	#14	XHHW-2	FR: 32-EDR-281B	C-32-201
									TO: HYPOCHLORITE CONTROL PULL BOX #1	
									8 #14 >> CONTROL: 32-EDR-281B	
C-32-480		1.5"	30	#14	XHHW-2	1	#14	XHHW-2	FR: HYPOCHLORITE CONTROL PULL BOX #1	C-32-201
									TO: JUNCTION BOX VALVES CONTROL	
									10 #14 >> CONTROL: 32-EDR-281B	C-32-481
									10 #14 >> CONTROL: 32-EDR-281C	C-32-482
									10 #14 >> CONTROL: 32-EDR-281D	C-32-483
C-32-481		0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: JUNCTION BOX VALVES CONTROL	C-32-480
									TO: 32-EDR-281B	
									10 #14 >> CONTROL: 32-EDR-281B	
C-32-482		0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: JUNCTION BOX VALVES CONTROL	C-32-480
									TO: 32-EDR-281C	
									10 #14 >> CONTROL: 32-EDR-281C	
C-32-483		0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: JUNCTION BOX VALVES CONTROL	C-32-480
									TO: 32-EDR-281D	
									10 #14 >> CONTROL: 32-EDR-281D	
L-32-100	32E01 ESC10	2"	4	#12	XHHW-2	1	#12	XHHW-2	FR: CHEMICAL FACILITY POWER PULL BOX	
									TO: MCC-C LIGHTING PANEL	
									2 #12 >> POWER: 32-VCP-271	L-32-200
									2 #12 >> POWER: 32-VCP-272	L-32-200
L-32-101	32E01 ESC10	2"	6	#12	XHHW-2	1	#12	XHHW-2	FR: CHEMICAL FACILITY POWER PULL BOX	
									TO: MCC-C LIGHTING PANEL	
									2 #12 >> POWER: 32-VCP-281	L-32-201
									2 #12 >> POWER: 32-VCP-282	L-32-201
									2 #12 >> POWER: 32-EDR-281B	L-32-201
L-32-102	32E01 ESC10	2"	6	#12	XHHW-2	1	#12	XHHW-2	FR: CHEMICAL FACILITY POWER PULL BOX	
									TO: MCC-C LIGHTING PANEL	
									2 #12 >> POWER: 32-VCP-283	L-32-202
									2 #12 >> POWER: 32-VCP-284	L-32-202
									2 #12 >> POWER: 32-VCP-285	L-32-202
L-32-103		0.75"	4	#12	XHHW-2	1	#12	XHHW-2	FR: CHEMICAL FACILITY POWER PULL BOX	
									TO: PCM-1	
									2 #12 >> POWER: 32-WIT-270	L-32-270
									2 #12 >> POWER: 32-LIT-280	L-32-280
L-32-200	32E01	1.5"	4	#12	XHHW-2	1	#12	XHHW-2	FR: ALUM POWER PULL BOX	L-32-100
									TO: CHEMICAL FACILITY POWER PULL BOX	
									2 #12 >> POWER: 32-VCP-271	L-32-271
									2 #12 >> POWER: 32-VCP-272	L-32-272
L-32-201	32E01	1.5"	12	#12	XHHW-2	1	#12	XHHW-2	FR: HYPOCHLORIDE POWER PULL BOX #1	L-32-101
									TO: CHEMICAL FACILITY POWER PULL BOX	
									2 #12 >> POWER: 32-LIT-280	L-32-280
									2 #12 >> POWER: 32-VCP-281	L-32-281
									2 #12 >> POWER: 32-VCP-282	L-32-282
									2 #12 >> POWER: 32-EDR-281B	L-32-480
									2 #12 >> POWER: 32-EDR-281C	L-32-480
									2 #12 >> POWER: 32-EDR-281D	L-32-480

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN CC
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER IAN R. VARLEY No. 12879 ELECTRICAL STATE OF CALIFORNIA 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
CHEMICAL FACILITY
CONDUIT SCHEDULE- I

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 32E03
SHEET NO. 344 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1132E03.dgn

LAST SAVED BY: ejohnson Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1 Plot Date: 16-SEP-2013 5:27:37 PM User: EJohnson

CONDUIT SCHEDULE AREA 32

9/4/13

LOS OSOS WATER RECYCLING FACILITY

CHEMICAL FACILITY

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
L-32-202	32E01	1.5"	6	#12	XHHW-2	1	#12	XHHW-2	FR: HYPOCHLORIDE POWER PULL BOX #2 TO: CHEMICAL FACILITY POWER PULL BOX 2 #12 >> POWER: 32-VCP-283 2 #12 >> POWER: 32-VCP-284 2 #12 >> POWER: 32-VCP-285	L-32-102 L-32-283 L-32-284 L-32-285
L-32-270	32E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: ALUM POWER PULL BOX 2 #12 >> POWER: 32-WIT-270	L-32-103 L-32-370
L-32-271	32E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 31-VCP-271 TO: ALUM POWER PULL BOX 2 #12 >> POWER: 32-VCP-271	L-32-200
L-32-272	32E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 31-VCP-272 TO: ALUM POWER PULL BOX 2 #12 >> POWER: 32-VCP-272	L-32-200
L-32-280	32E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: HYPOCHLORITE POWER PULL BOX #1 2 #12 >> POWER: 32-LIT-280	L-32-103 L-32-380
L-32-281	32E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT 32-VCP-281 TO: HYPOCHLORITE POWER PULL BOX #1 2 #12 >> POWER: 32-VCP-281	L-32-201 L-32-381
L-32-282	32E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT 32-VCP-282 TO: HYPOCHLORITE POWER PULL BOX #1 2 #12 >> POWER: 32-VCP-282	L-32-201 L-32-382
L-32-283	32E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT 32-VCP-283 TO: HYPOCHLORITE POWER PULL BOX #2 2 #12 >> POWER: 32-VCP-283	L-32-202 L-32-383
L-32-284	32E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT 32-VCP-284 TO: HYPOCHLORITE POWER PULL BOX #2 2 #12 >> POWER: 32-VCP-284	L-32-202 L-32-384
L-32-285	32E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT 32-VCP-285 TO: HYPOCHLORITE POWER PULL BOX #2 2 #12 >> POWER: 32-VCP-285	L-32-202 L-32-385
L-32-370	32E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 32-WIT-270 TO: DISCONNECT 2 #12 >> POWER: 32-WIT-270	L-32-270 L-32-370
L-32-380	32E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 32-LIT-280 TO: DISCONNECT 2 #12 >> POWER: 32-LIT-280	L-32-280 L-32-380
L-32-381	32E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT 32-VCP-281 TO: 32-VCP-281 2 #12 >> POWER: 32-VCP-281	L-32-281 L-32-381
L-32-382	32E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT 32-VCP-282 TO: 32-VCP-282 2 #12 >> POWER: 32-VCP-282	L-32-282 L-32-382
L-32-383	32E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT 32-VCP-283 TO: 32-VCP-283 2 #12 >> POWER: 32-VCP-283	L-32-283 L-32-383
L-32-384	32E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT 32-VCP-284 TO: 32-VCP-284 2 #12 >> POWER: 32-VCP-284	L-32-284 L-32-384
L-32-385	32E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT 32-VCP-285 TO: 32-VCP-285 2 #12 >> POWER: 32-VCP-285	L-32-285 L-32-385

CONDUIT SCHEDULE AREA 32

9/4/13

LOS OSOS WATER RECYCLING FACILITY

CHEMICAL FACILITY

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
L-32-480	32E01	1"	6	#12	XHHW-2	1	#12	XHHW-2	FR: HYPOCHLORITE POWER PULL BOX #1 TO: JUNCTION BOX FOR VALVES POWER 2 #12 >> POWER: 32-EDR-281B 2 #12 >> POWER: 32-EDR-281C 2 #12 >> POWER: 32-EDR-281D	L-32-201 L-32-481 L-32-482 L-32-483
L-32-481	32E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: JUNCTION BOX FOR VALVES POWER TO: DISCONNECT 32-EDR-281B 2 #12 >> POWER: 32-EDR-281B	L-32-480 L-32-581
L-32-482	32E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: JUNCTION BOX FOR VALVES POWER TO: DISCONNECT 32-EDR-281C 2 #12 >> POWER: 32-EDR-281C	L-32-480 L-32-582
L-32-483	32E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: JUNCTION BOX FOR VALVES POWER TO: DISCONNECT 32-EDR-281D 2 #12 >> POWER: 32-EDR-281D	L-32-480 L-32-583
L-32-581	32E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNNECT 32-EDR-281B 32-EDR-281B 2 #12 >> POWER: 32-EDR-281B	L-32-481
L-32-582	32E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNNECT 32-EDR-281C 32-EDR-281B 2 #12 >> POWER: 32-EDR-281C	L-32-482
L-32-583	32E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNNECT 32-EDR-281D 32-EDR-281B 2 #12 >> POWER: 32-EDR-281D	L-32-483
S-32-100	32E01 ESC10 70E02	2"	5	2/CS-#16		1	#14	XHHW-2	FR: CHEMICAL FACILITY SIGNAL PULL BOX TO: PCM-1 PLC INPUT/OUTPUT 1 2/CS-#16 >> SIGNAL: 32-WIT-270 2 2/CS-#16 >> SIGNAL: 31-VCP-271 2 2/CS-#16 >> SIGNAL: 32-VCP-271	S-32-200 S-32-200 S-32-200
S-32-101	32E01 ESC10 70E02	2"	5	2/CS-#16		1	#14	XHHW-2	FR: CHEMICAL FACILITY SIGNAL PULL BOX TO: PCM-1 PLC INPUT/OUTPUT 1 2/CS-#16 >> SIGNAL: 32-LIT-280 2 2/CS-#16 >> SIGNAL: 32-VCP-281 2 2/CS-#16 >> SIGNAL: 32-VCP-282	S-32-201 S-32-201 S-32-201
S-32-102	32E01 ESC10 70E01	2"	6	2/CS-#16		1	#14	XHHW-2	FR: CHEMICAL FACILITY SIGNAL PULL BOX TO: PCM-1 PLC INPUT/OUTPUT 2 2/CS-#16 >> SIGNAL: 32-VCP-283 2 2/CS-#16 >> SIGNAL: 32-VCP-284 2 2/CS-#16 >> SIGNAL: 32-VCP-285	S-32-202 S-32-202 S-32-202
S-32-200	32E01	1.5"	5	2/CS-#16		1	#14	XHHW-2	FR: ALUM SIGNAL PULL BOX TO: CHEMICAL FACILITY SIGNAL PULL BOX 1 2/CS-#16 >> SIGNAL: 32-WIT-270 2 2/CS-#16 >> SIGNAL: 31-VCP-271 2 2/CS-#16 >> SIGNAL: 32-VCP-271	S-32-100 S-32-270 S-32-271 S-32-272
S-32-201	32E01	1.5"	5	2/CS-#16		1	#14	XHHW-2	FR: HYPOCHLORIDE SIGNAL PULL BOX #1 TO: CHEMICAL FACILITY SIGNAL PULL BOX 1 2/CS-#16 >> SIGNAL: 32-LIT-280 2 2/CS-#16 >> SIGNAL: 32-VCP-281 2 2/CS-#16 >> SIGNAL: 32-VCP-282	S-32-101 S-32-280 S-32-281 S-32-282
S-32-202	32E01	1.5"	6	2/CS-#16		1	#14	XHHW-2	FR: HYPOCHLORIDE SIGNAL PULL BOX #2 TO: CHEMICAL FACILITY SIGNAL PULL BOX 2 2/CS-#16 >> SIGNAL: 32-VCP-283 2 2/CS-#16 >> SIGNAL: 32-VCP-284 2 2/CS-#16 >> SIGNAL: 32-VCP-285	S-32-102 S-32-283 S-32-284 S-32-285
S-32-270	32E01	1"	1	2/CS-#16		1	#14	XHHW-2	FR: 32-WIT-270 TO: ALUM SIGNAL PULL BOX 1 2/CS-#16 >> SIGNAL: 32-WIT-270	S-32-200
S-32-271	32E01	1"	2	2/CS-#16		1	#14	XHHW-2	FR: 31-VCP-271 TO: ALUM SIGNAL PULL BOX 2 2/CS-#16 >> SIGNAL: 31-VCP-271	S-32-200

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN CC
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA
9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
CHEMICAL FACILITY
CONDUIT SCHEDULE- II

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 32E04
SHEET NO. 345 OF 549

LAST SAVED BY: ejohnson
Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1
User: EJohnson Plot Date: 16-SEP-2013 5:27:57 PM

PROJECT NO. 8930A.11 FILE NAME: 8930A1132E04.dgn

CONDUIT SCHEDULE AREA 32

9/4/13

LOS OSOS WATER RECYCLING FACILITY

CHEMICAL FACILITY

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
S-32-272	32E01	1"	2	2/CS-#16		1	#14	XHHW-2	FR: 31-VCP-272 TO: ALUM SIGNAL PULL BOX 2 2/CS-#16 >> SIGNAL: 32-VCP-271	S-32-200
S-32-280	32E01	1"	1	2/CS-#16		1	#14	XHHW-2	FR: 32-LIT-280 TO: HYPOCHLORITE SIGNAL PULL BOX #1 1 2/CS-#16 >> SIGNAL: 32-LIT-280	S-32-201
S-32-281	32E01	1"	2	2/CS-#16		1	#14	XHHW-2	FR: 32-VCP-281 TO: HYPOCHLORITE SIGNAL PULL BOX #1 2 2/CS-#16 >> SIGNAL: 32-VCP-281	S-32-201
S-32-282	32E01	1"	2	2/CS-#16		1	#14	XHHW-2	FR: 32-VCP-282 TO: HYPOCHLORITE SIGNAL PULL BOX #1 2 2/CS-#16 >> SIGNAL: 32-VCP-282	S-32-201
S-32-283	32E01	1"	2	2/CS-#16		1	#14	XHHW-2	FR: 32-VCP-283 TO: HYPOCHLORITE SIGNAL PULL BOX #2 2 2/CS-#16 >> SIGNAL: 32-VCP-283	S-32-202
S-32-284	32E01	1"	2	2/CS-#16		1	#14	XHHW-2	FR: 32-VCP-284 TO: HYPOCHLORITE SIGNAL PULL BOX #2 2 2/CS-#16 >> SIGNAL: 32-VCP-284	S-32-202
S-32-285	32E01	1"	2	2/CS-#16		1	#14	XHHW-2	FR: 32-VCP-285 TO: HYPOCHLORITE SIGNAL PULL BOX #2 2 2/CS-#16 >> SIGNAL: 32-VCP-285	S-32-202
S-32-370	32E01	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 32-WE-270 TO: 32-WIT270 1 MFR >> SIGNAL: 32-WE-270	
S-32-380	32E01	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 32-LE-280 TO: 32-LIT-280 1 MFR >> SIGNAL: 32-LE-280	
X-32-100	32E01 70E03 ESC10	2"	1	PULL	ROPE				FR: CHEMICAL FACILITY SPARE CONDUITS STUB UPS TO: PCM-1 PANEL 1 PULL >> SPARE POWER CONDUIT	
X-32-101	32E01 70E03 ESC10	2"	1	PULL	ROPE				FR: CHEMICAL FACILITY SPARE CONDUITS STUB UPS TO: PCM-1 PANEL 1 PULL >> SPARE POWER CONDUIT	
X-32-102	32E01 ESC10	2"	1	PULL	ROPE				FR: CHEMICAL FACILITY SPARE CONDUITS STUB UPS TO: PCM-1 PANEL 1 PULL >> SPARE POWER CONDUIT	
X-32-103	32E01 ESC10	2"	1	PULL	ROPE				FR: CHEMICAL FACILITY SPARE CONDUITS STUB UPS TO: MCC-D LIGHTING PANEL 1 PULL >> SPARE POWER CONDUIT	
X-32-104	32E01	2"	1	PULL	ROPE				FR: CHEMICAL FACILITY SPARE CONDUITS STUB UPS TO: MCC-D LIGHTING PANEL 1 PULL >> SPARE POWER CONDUIT	

END OF CONDUIT SCHEDULE

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN EYJ
CHECKED HGK
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — JAMES V. CAROLLO — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA
9/16/2013

carollo

SAN LUIS OBISPO COUNTY

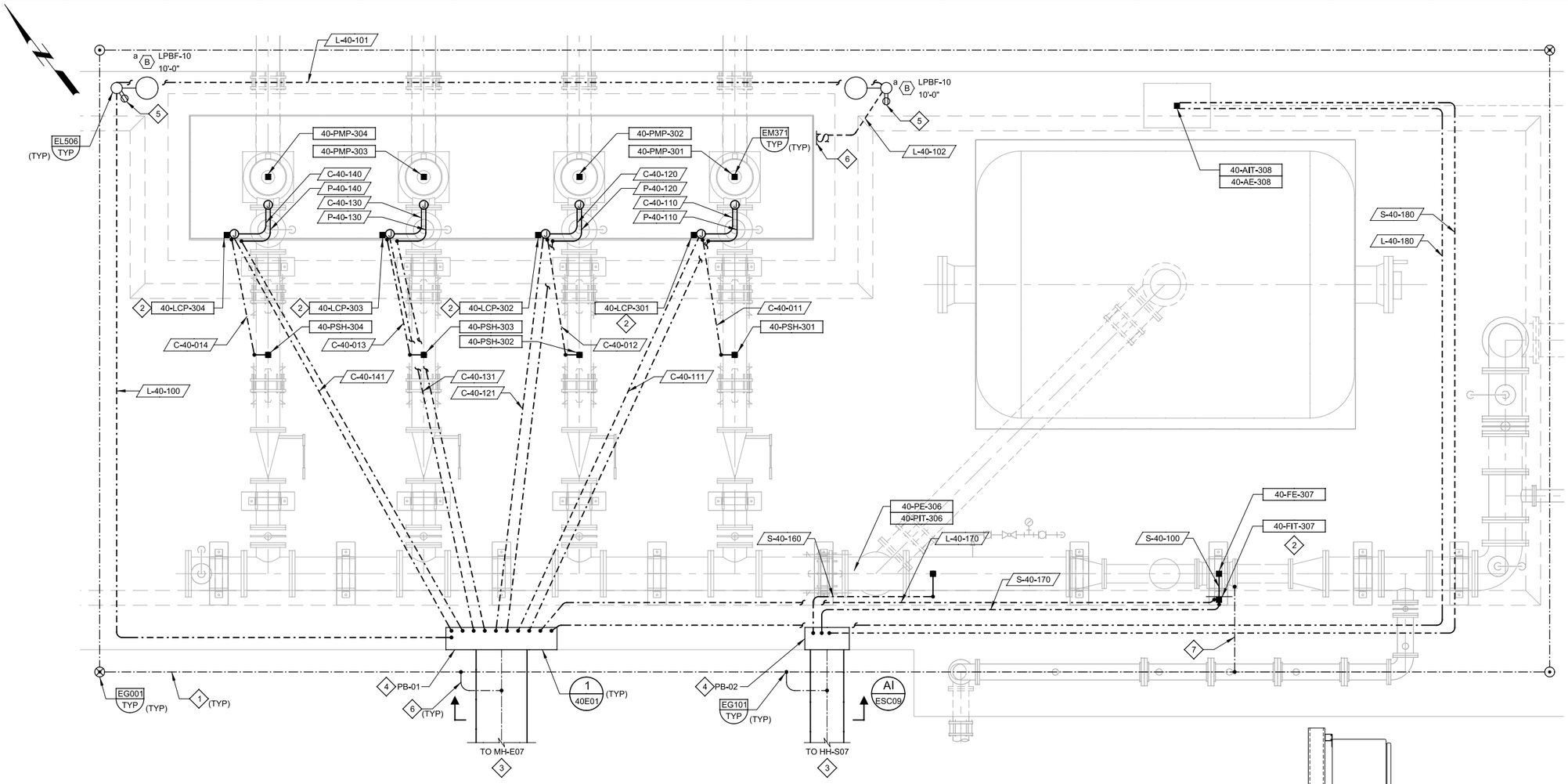
SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
CHEMICAL FACILITY
CONDUIT SCHEDULE- III

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 32E05
SHEET NO. 346 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1132E05.dgn

Plot Date: 16-SEP-2013 5:28:18 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson



A PLAN

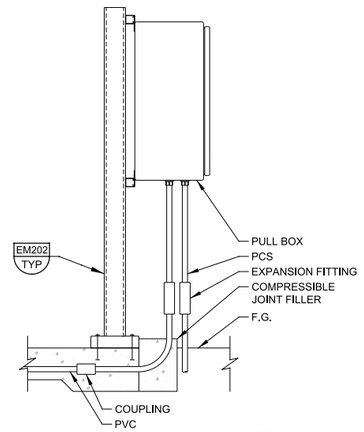
SCALE: 3/8" = 1'-0"
FILE: 8930A1140E100.dgn

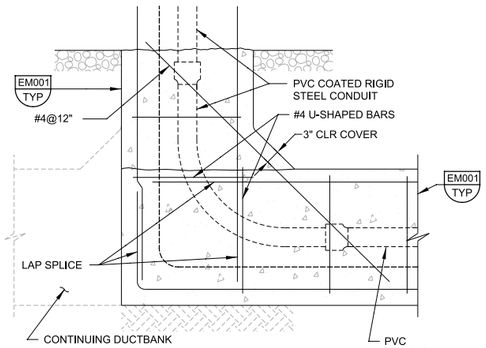
GENERAL NOTES:

1. REFER TO SPECIFICATION SECTION 16050 FOR HAZARDOUS AREA CLASSIFICATIONS.
2. ROUTE CONDUIT IN SLAB PER DETAIL EM115/TYP, UNLESS OTHERWISE NOTED.

KEY NOTES:

1. #2/0 SDBC.
2. MOUNT FIT/LCP PER DETAIL EM201/TYP.
3. REFER TO DRAWING ESC03 FOR CONTINUATION.
4. MOUNT PULL BOX ON STAND PER DETAIL EM202/TYP. SIZE THE PULL BOX PER NEC.
5. DUPLEX RECEPTACLE WP, GFCI LPBF-8
6. LPBF-38
7. #2 SDBC.





1 DETAIL

SCALE: NOT TO SCALE
FILE: 8930A1100ET400.typ

40E01, 60E01

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN AD
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — JAMES VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY

LOS OSOS WATER RECYCLING FACILITY PROJECT

ELECTRICAL

EFFLUENT PUMP STATION PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 40E01
SHEET NO. 347 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1140E01.dgn

Plot Date: 16-SEP-2013 5:28:38 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: adiaz

CONDUIT SCHEDULE AREA 40

9/11/13

LOS OSOS WATER RECYCLING FACILITY

EFFLUENT PUMP STATION

CONDUIT			CONDUCTORS			GROUND					
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION		CONNECTING SEGMENTS
C-40-011	40E01	1"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 40-PSH-301		C-40-111
									TO: JB @ 40-LCP-301		
									2 #14	>> CONTROL: 40-PSH-301	
C-40-012	40E01	1"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 40-PSH-302		C-40-121
									TO: JB @ 40-LCP-302		
									2 #14	>> CONTROL: 40-PSH-302	
C-40-013	40E01	1"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 40-PSH-303		C-40-131
									TO: JB @ 40-LCP-303		
									2 #14	>> CONTROL: 40-PSH-303	
C-40-014	40E01	1"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 40-PSH-304		C-40-141
									TO: JB @ 40-LCP-304		
									2 #14	>> CONTROL: 40-PSH-304	
C-40-110	40E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 40-PMP-301 VIA J-BOX		C-40-111
			2	#14	XHHW-2				TO: JB @ 40-LCP-301		
									2 #14	>> CONTROL: 40-TSH-301	
									2 #12	>> CONTROL: 40-MWH-301	
C-40-111	40E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: JB @ 40-LCP-301		C-40-202
			12	#14	XHHW-2				TO: PB-01		
									2 #14	>> CONTROL: 40-PSH-301	C-40-011
									2 #14	>> CONTROL: 40-TSH-301	C-40-110
									2 #12	>> CONTROL: 40-MWH-301	C-40-110
									8 #14	>> CONTROL: 40-LCP-301, 2-SPARE	
C-40-120	40E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 40-PMP-302 VIA J-BOX		C-40-121
			2	#14	XHHW-2				TO: JB @ 40-LCP-302		
									2 #14	>> CONTROL: 40-TSH-302	
									2 #12	>> CONTROL: 40-MWH-302	
C-40-121	40E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: JB @ 40-LCP-302		C-40-201
			12	#14	XHHW-2				TO: PB-01		
									2 #14	>> CONTROL: 40-PSH-302	C-40-012
									2 #14	>> CONTROL: 40-TSH-302	C-40-120
									2 #12	>> CONTROL: 40-MWH-302	C-40-120
									8 #14	>> CONTROL: 40-LCP-302, 2-SPARE	
C-40-130	40E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 40-PMP-303 VIA J-BOX		C-40-131
			2	#14	XHHW-2				TO: JB @ 40-LCP-303		
									2 #14	>> CONTROL: 40-TSH-303	
									2 #12	>> CONTROL: 40-MWH-303	
C-40-131	40E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: JB @ 40-LCP-303		C-40-202
			12	#14	XHHW-2				TO: PB-01		
									2 #14	>> CONTROL: 40-PSH-303	C-40-013
									2 #14	>> CONTROL: 40-TSH-303	C-40-130
									2 #12	>> CONTROL: 40-MWH-303	C-40-130
									8 #14	>> CONTROL: 40-LCP-303, 2-SPARE	
C-40-140	40E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 40-PMP-304 VIA J-BOX		C-40-141
			2	#14	XHHW-2				TO: JB @ 40-LCP-304		
									2 #14	>> CONTROL: 40-TSH-304	
									2 #12	>> CONTROL: 40-MWH-304	
C-40-141	40E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: JB @ 40-LCP-304		C-40-201
			12	#14	XHHW-2				TO: PB-01		
									2 #14	>> CONTROL: 40-PSH-304	C-40-014
									2 #14	>> CONTROL: 40-TSH-304	C-40-140
									2 #12	>> CONTROL: 40-MWH-304	C-40-140
									8 #14	>> CONTROL: 40-LCP-304, 2-SPARE	
C-40-201	51E06	2"	4	#12	XHHW-2	1	#12	XHHW-2	FR: PB-01		
	ESC09		24	#14	XHHW-2				TO: MCC-F VIA HH-E07, MH-E05		
									2 #14	>> CONTROL: 40-PSH-304	C-40-141
									2 #14	>> CONTROL: 40-TSH-304	C-40-141
									2 #12	>> CONTROL: 40-MWH-304	C-40-141
									8 #14	>> CONTROL: 40-LCP-304, 2-SPARE	C-40-141
									2 #14	>> CONTROL: 40-PSH-302	C-40-121
									2 #14	>> CONTROL: 40-TSH-302	C-40-121
									2 #12	>> CONTROL: 40-MWH-302	C-40-121
									8 #14	>> CONTROL: 40-LCP-302, 2-SPARE	C-40-121

CONDUIT SCHEDULE AREA 40

9/11/13

LOS OSOS WATER RECYCLING FACILITY

EFFLUENT PUMP STATION

CONDUIT			CONDUCTORS			GROUND					
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION		CONNECTING SEGMENTS
C-40-202	51E06	1.5"	4	#12	XHHW-2	1	#12	XHHW-2	FR: PB-01		
	ESC09		24	#14	XHHW-2				TO: MCC-E VIA HH-E07, MH-E05		
									2 #14	>> CONTROL: 40-PSH-303	C-40-131
									2 #14	>> CONTROL: 40-TSH-303	C-40-131
									2 #12	>> CONTROL: 40-MWH-303	C-40-131
									8 #14	>> CONTROL: 40-LCP-303, 2-SPARE	C-40-131
									2 #14	>> CONTROL: 40-PSH-301	C-40-111
									2 #14	>> CONTROL: 40-TSH-301	C-40-111
									2 #12	>> CONTROL: 40-MWH-301	C-40-111
									8 #14	>> CONTROL: 40-LCP-301, 2-SPARE	C-40-111
L-40-100	40E01	1"	4	#12	XHHW-2	1	#12	XHHW-2	FR: LUMINAIRE		L-40-101
									TO: PB-01		
									2 #12	>> LPBF-10: LIGHT	
									2 #12	>> LPBF-8: RECPT	
L-40-101	40E01	1"	4	#12	XHHW-2	1	#12	XHHW-2	FR: LUMINAIRE		L-40-102
									TO: LUMINAIRE		
									2 #12	>> LPBF-10: LIGHT	L-40-100
									2 #12	>> LPBF-8: RECPT	L-40-100
L-40-102	40E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: LUMINAIRE		
									TO: LIGHT SWITCH		
									2 #12	>> LPBF-10: LIGHT	L-40-101
L-40-170	40E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 40-FIT-307		L-40-201
									TO: PB-01		
									2 #12	>> POWER: 40-FIT-307	
L-40-180	40E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 40-AIT-308		L-40-201
									TO: PB-01		
									2 #12	>> POWER: 40-AIT-308	
L-40-201	51E06	2"	4	#12	XHHW-2	1	#12	XHHW-2	FR: PB-01		
									TO: PCM-2 VIA HH-E07, MH-E05		
									2 #12	>> POWER: 40-FIT-307	L-40-170
									2 #12	>> POWER: 40-AIT-308	L-40-180
L-40-202	51E06	2"	4	#12	XHHW-2	1	#12	XHHW-2	FR: PB-01		
									TO: MCC-F VIA HH-E07, MH-E05		
									2 #12	>> LPBF-10: LIGHT	L-40-100
									2 #12	>> LPBF-8: RECPT	L-40-100
P-40-110	40E01	1.5"	3	#2/0	XHHW-2	1	#4	XHHW-2	FR: 40-PMP-301 VIA J-BOX		P-40-201
									TO: PB-01		
									3 #2/0	>> POWER: 40-PMP-301	
P-40-120	40E01	1.5"	3	#2/0	XHHW-2	1	#4	XHHW-2	FR: 40-PMP-302 VIA J-BOX		P-40-202
									TO: PB-01		
									3 #2/0	>> POWER: 40-PMP-302	
P-40-130	40E01	1.5"	3	#2/0	XHHW-2	1	#4	XHHW-2	FR: 40-PMP-303 VIA J-BOX		P-40-203
									TO: PB-01		
									3 #2/0	>> POWER: 40-PMP-303	
P-40-140	40E01	1.5"	3	#2/0	XHHW-2	1	#4	XHHW-2	FR: 40-PMP-304 VIA J-BOX		P-40-204
									TO: PB-01		
									3 #2/0	>> POWER: 40-PMP-304	
P-40-201	51E05	2"	3	#2/0	XHHW-2	1	#4	XHHW-2	FR: PB-01		
	ESC09								TO: MCC-E VIA HH-E07, MH-E05		
									3 #2/0	>> POWER: 40-PMP-301	P-40-110
P-40-202	51E05	2"	3	#2/0	XHHW-2	1	#4	XHHW-2	FR: PB-01		
	ESC09								TO: MCC-F VIA HH-E07, MH-E05		
									3 #2/0	>> POWER: 40-PMP-302	P-40-120
P-40-203	51E05	2"	3	#2/0	XHHW-2	1	#4	XHHW-2	FR: PB-01		
	ESC09								TO: MCC-E VIA HH-E07, MH-E05		
									3 #2/0	>> POWER: 40-PMP-303	P-40-130
P-40-204	51E05	2"	3	#2/0	XHHW-2	1	#4	XHHW-2	FR: PB-01		
	ESC09					1	#12	XHHW-2	TO: MCC-F VIA HH-E07, MH-E05		
									3 #2/0	>> POWER: 40-PMP-304	P-40-140
S-40-100	40E01	0.75"	1	MFR	CABLE	1	#14	XHHW-2	FR: 40-FE-307		
									TO: 40-FIT-307		
									1 MFR	>> SIGNAL: 40-FIT-307	
S-40-160	40E01	1"	1	2/CS-#16		1	#14	XHHW-2	FR: 40-PIT-306		S-40-201
									TO: PB-02		
									1 2/CS-#16	>> SIGNAL: 40-PIT-306	

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
EFFLUENT PUMP STATION
CONDUIT SCHEDULE- I

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 40E02
SHEET NO. 348 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1140E02.dgn

Plot Date: 16-SEP-2013 5:28:58 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: adiaz

CONDUIT SCHEDULE AREA 40

9/11/13

LOS OSOS WATER RECYCLING FACILITY

EFFLUENT PUMP STATION

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
S-40-170	40E01	1"	1	2/CS-#16		1	#14	XHHW-2	FR: 40-FIT-307 TO: PB-02 1 2/CS-#16 >> SIGNAL: 40-FIT-307	S-40-201
S-40-180	40E01	1"	1	2/CS-#16		1	#14	XHHW-2	FR: 40-AIT-308 TO: PB-02 1 2/CS-#16 >> SIGNAL: 40-AIT-308	S-40-201
S-40-201	51E06 ESC09	2"	3	2/CS-#16		1	#14	XHHW-2	FR: PB-02 TO: PCM-2 VIA HH-S07, HH-S05 1 2/CS-#16 >> SIGNAL: 40-PIT-306 1 2/CS-#16 >> SIGNAL: 40-FIT-307 1 2/CS-#16 >> SIGNAL: 40-AIT-308	S-40-160 S-40-170 S-40-180
X-40-201	ESC09	2"	1	PULL	ROPE				FR: PB-01 TO: MH-E07 1 PULL >> SPARE	
X-40-202	51E05 ESC09	2"	1	PULL	ROPE				FR: PB-01 TO: MCC-F VIA MH-E07, MH-E05 1 PULL >> SPARE	
X-40-203	ESC09	2"	1	PULL	ROPE				FR: PB-02 TO: HH-S07 1 PULL >> SPARE	
X-40-204	51E06 ESC09	2"	1	PULL	ROPE				FR: PB-02 TO: CONTROL STATION VIA HH-S07, HH-S05 1 PULL >> SPARE	

END OF CONDUIT SCHEDULE

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
EFFLUENT PUMP STATION
CONDUIT SCHEDULE-II

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 40E03
SHEET NO. 349 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1140E03.dgn

Plot Date: 16-SEP-2013 5:29:18 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: adiaz

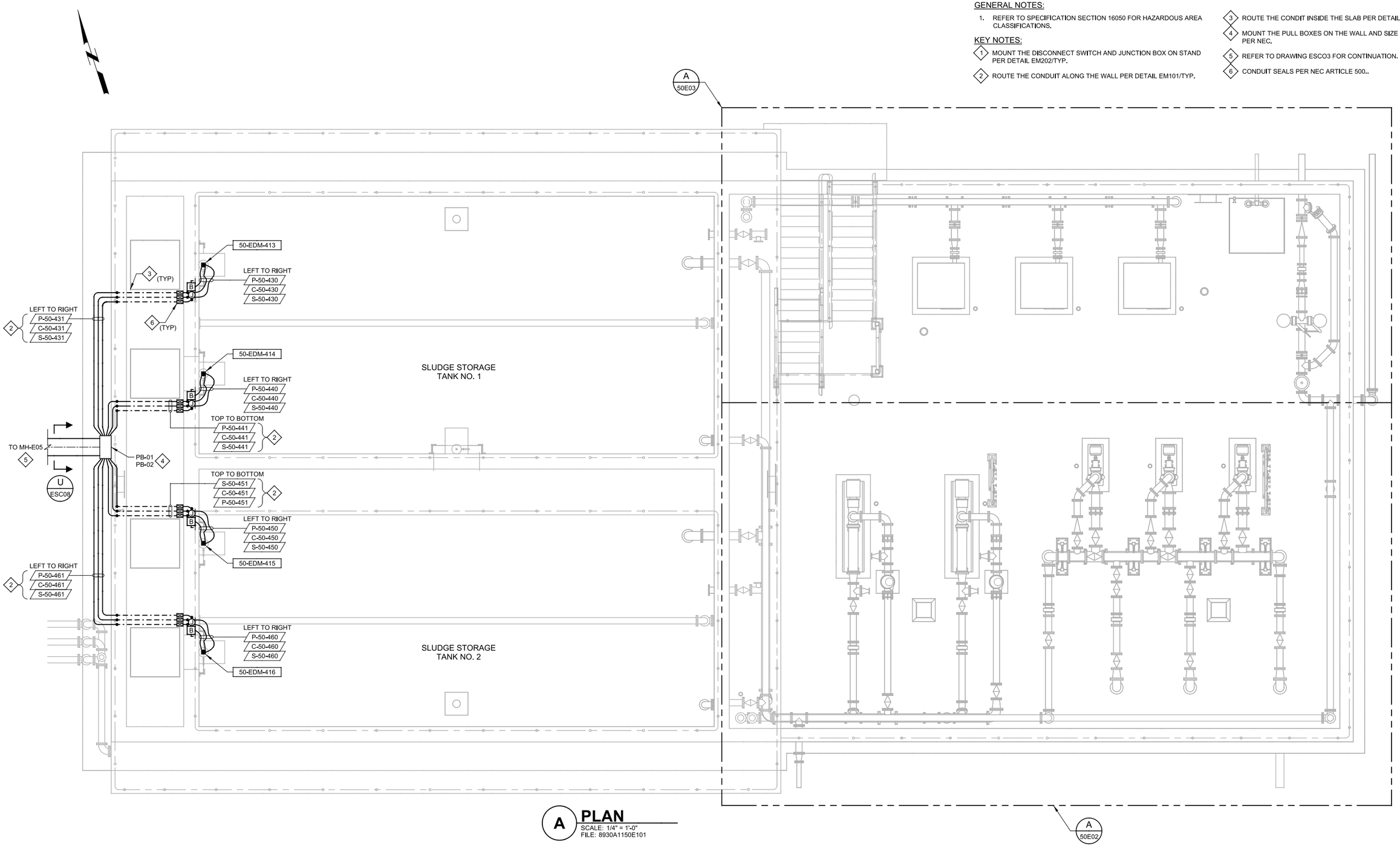
Plot Date: 16-SEP-2013 5:29:39 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

GENERAL NOTES:

1. REFER TO SPECIFICATION SECTION 16050 FOR HAZARDOUS AREA CLASSIFICATIONS.

KEY NOTES:

1. MOUNT THE DISCONNECT SWITCH AND JUNCTION BOX ON STAND PER DETAIL EM202/TYP.
2. ROUTE THE CONDUIT ALONG THE WALL PER DETAIL EM101/TYP.
3. ROUTE THE CONDIT INSIDE THE SLAB PER DETAIL EM115/TYP.
4. MOUNT THE PULL BOXES ON THE WALL AND SIZE THE PULL BOX PER NEC.
5. REFER TO DRAWING ESCO3 FOR CONTINUATION.
6. CONDUIT SEALS PER NEC ARTICLE 500..



A PLAN
SCALE: 1/4" = 1'-0"
FILE: 8930A1150E101

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER · JAMES R. VARLEY · No. 12879 · ELECTRICAL · STATE OF CALIFORNIA · 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
SLUDGE STORAGE TANKS
POWER & CONTROL PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 50E01
SHEET NO. 350 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1150E01.dgn

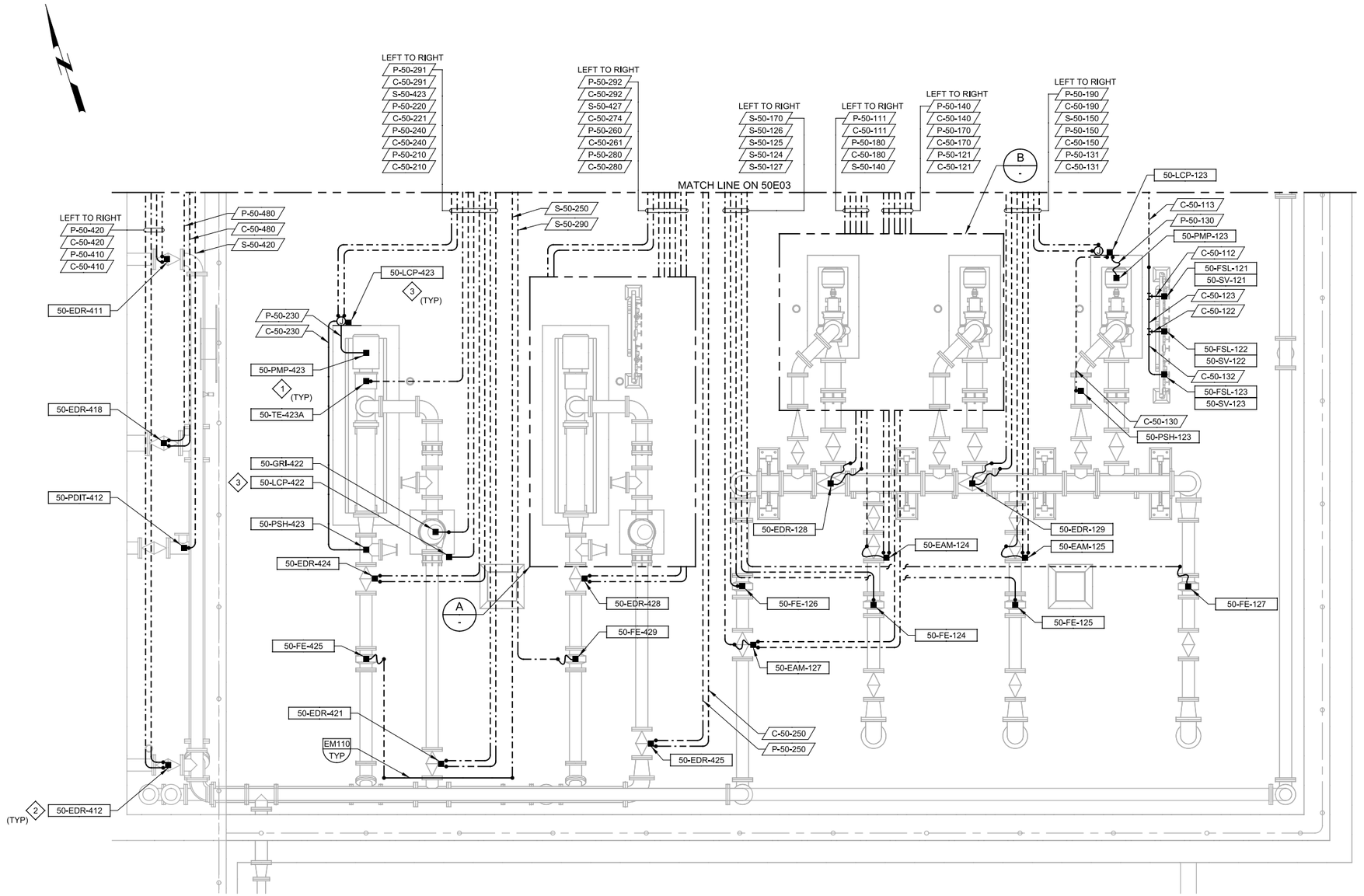
Plot Date: 16-SEP-2013 5:30:04 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

GENERAL NOTES:

1. REFER TO SPECIFICATION SECTION 16050 FOR HAZARDOUS AREA CLASSIFICATIONS.
2. ROUTE ALL CONDUITS INSIDE THE SLAB PER DETAIL EM115/TYP UNLESS OTHERWISE NOTED.

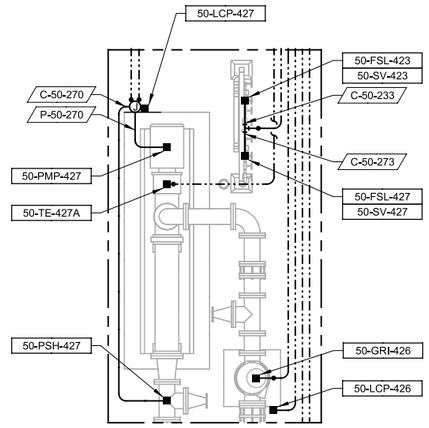
KEY NOTES:

1. PER DETAIL EM301/TYP.
2. PER DETAIL EM404/TYP.
3. MOUNT LCP PER DETAIL EM201/TYP.



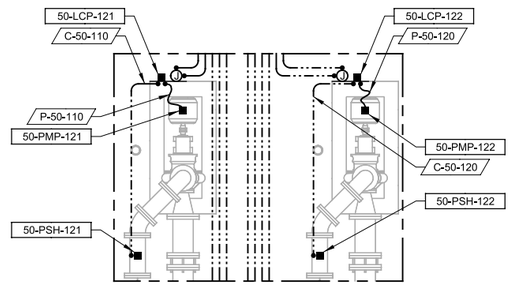
A PLAN

SCALE: 3/8" = 1'-0"
FILE: 8930A1150E101



A DETAIL

SCALE: 3/8" = 1'-0"
FILE: 8930A1150E101



B DETAIL

SCALE: 3/8" = 1'-0"
FILE: 8930A1150E101

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — JAMES R. VARLEY — No. 12073 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
SLUDGE STORAGE TANKS
POWER & CONTROL PARTIAL PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 50E02
SHEET NO. 351 OF 549

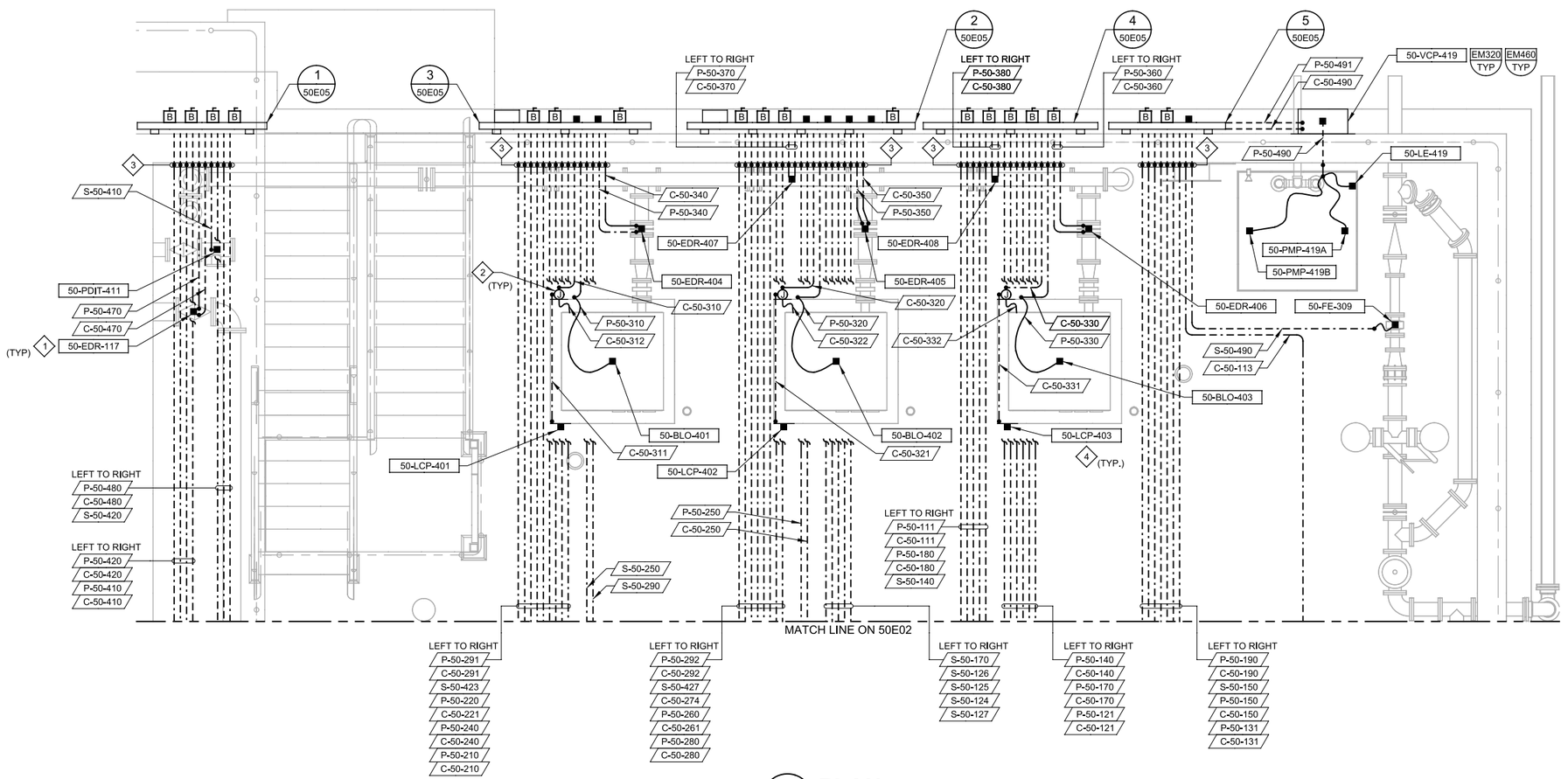
PROJECT NO. 8930A.11 FILE NAME: 8930A1150E02.dgn

GENERAL NOTES:

1. REFER TO SPECIFICATION SECTION 16050 FOR HAZARDOUS AREA CLASSIFICATIONS.
2. ROUTE ALL CONDUITS INSIDE THE SLAB PER DETAIL EM115/TYP, UNLESS OTHERWISE NOTED.

KEY NOTES:

1. PER DETAIL EM402/TYP.
2. MOUNT THE JUNCTION BOX ON STAND PER DETAIL EM201/TYP. PROVIDE FOR EACH INSTRUMENT INSIDE SLUDGE AERATION BLOWER AS SHOWN IN P&ID DRAWING AN INDIVIDUAL 3/4-INCH CONDUIT WITH 2-#14 CONDUCTORS TO COMPLETE THE INSTALLATION.
3. ROUTE CONDUIT VERTICALLY EXPOSED ALONG THE WALL PER DETAIL EM101/TYP. PENETRATE THE DRY PIT MINIMUM OF 12-INCH BELOW THE TOP OF THE WALL. HORIZONTAL SPACING OF CONDUIT PENETRATING THE WALL SHALL BE MINIMUM OF 4X OUTSIDE DIAMETER OF THE LARGER CONDUIT.
4. MOUNT THE LCP PER DETAIL EM201/TYP.



A PLAN
SCALE: 3/8" = 1'-0"
FILE: 8930A1150E101

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
SLUDGE STORAGE TANKS
POWER & CONTROL PARTIAL PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 50E03
SHEET NO. 352 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1150E03.dgn

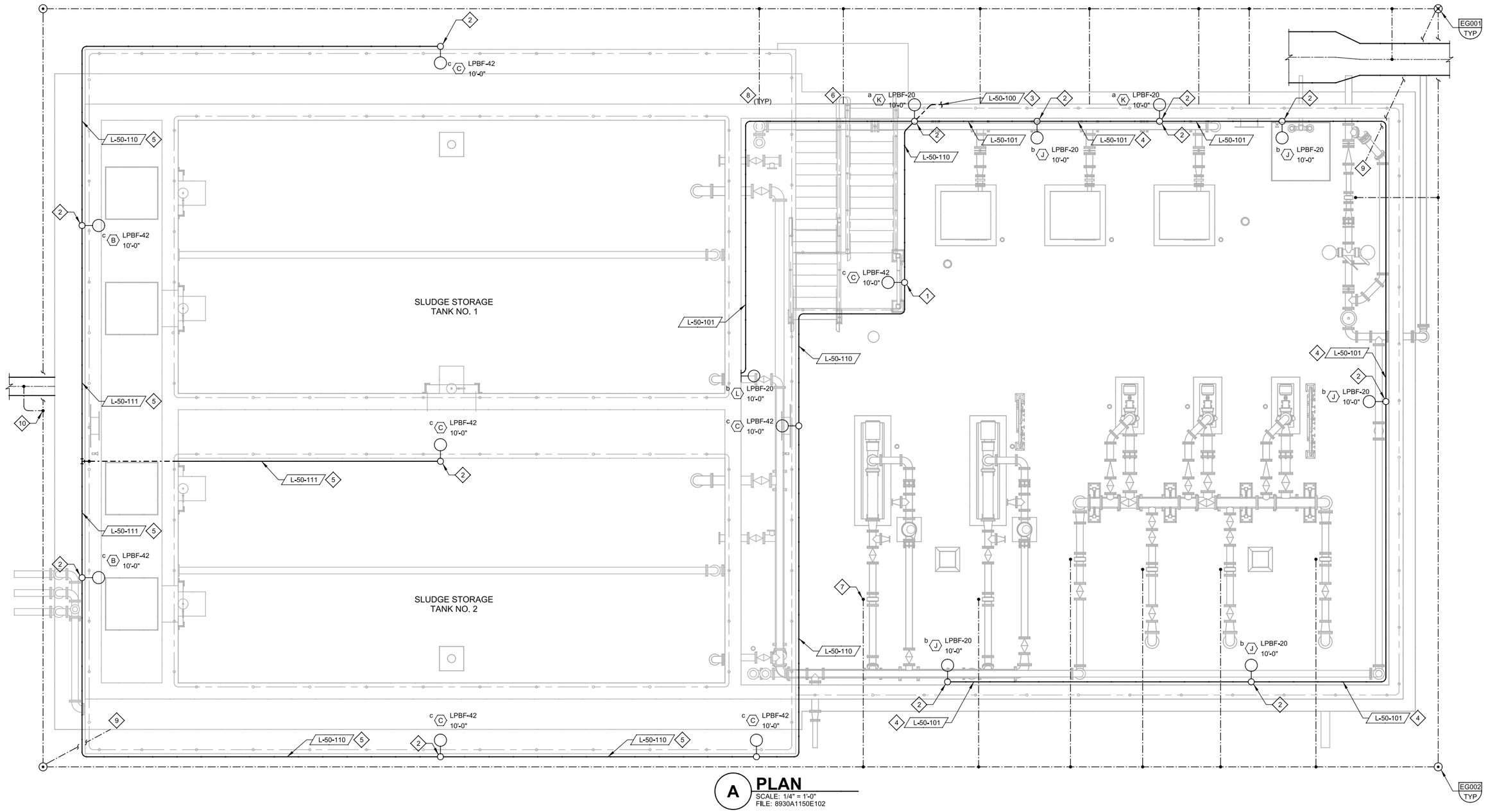
Plot Date: 16-SEP-2013 5:30:28 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

GENERAL NOTES:

1. REFER TO SPECIFICATION SECTION 16050 FOR HAZARDOUS AREA CLASSIFICATIONS.

KEY NOTES:

1. PER DETAIL EL504.
2. PER DETAIL EL505.
3. REFER TO DRAWING 50E03 & ESC08 FOR CONTINUATION.
4. ROUTE THE CONDUIT ALONG THE INTERIOR WALL.
5. ROUTE THE CONDUIT ALONG THE EDGE OF THE SLAB.
6. BOND #2 BARE COPPER TO STAIR SUPPORT FRAME.
7. BOND #2 BARE COPPER TO #2 BARE COPPER FOR MAGMETERS PER NF135/TYP.
8. BOND #2 BARE COPPER TO STAND 1 THROUGH 5 SUPPORT FRAMES.
9. BOND #4/0 TO FOUNDATION BAR PER EG303.
10. EXTEND AND BOND DUCT BANK GROUNDS TO GROUND GRID.



A **PLAN**
SCALE: 1/4" = 1'-0"
FILE: 8930A1150E102

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

LICENSED PROFESSIONAL ENGINEER — TIMOTHY R. VARLEY — No. 12673 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

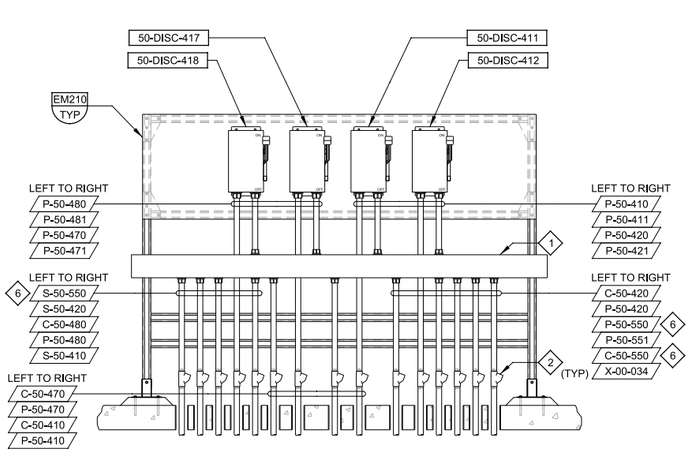
SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
SLUDGE STORAGE TANKS
LIGHTING & RECEPTACLE PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

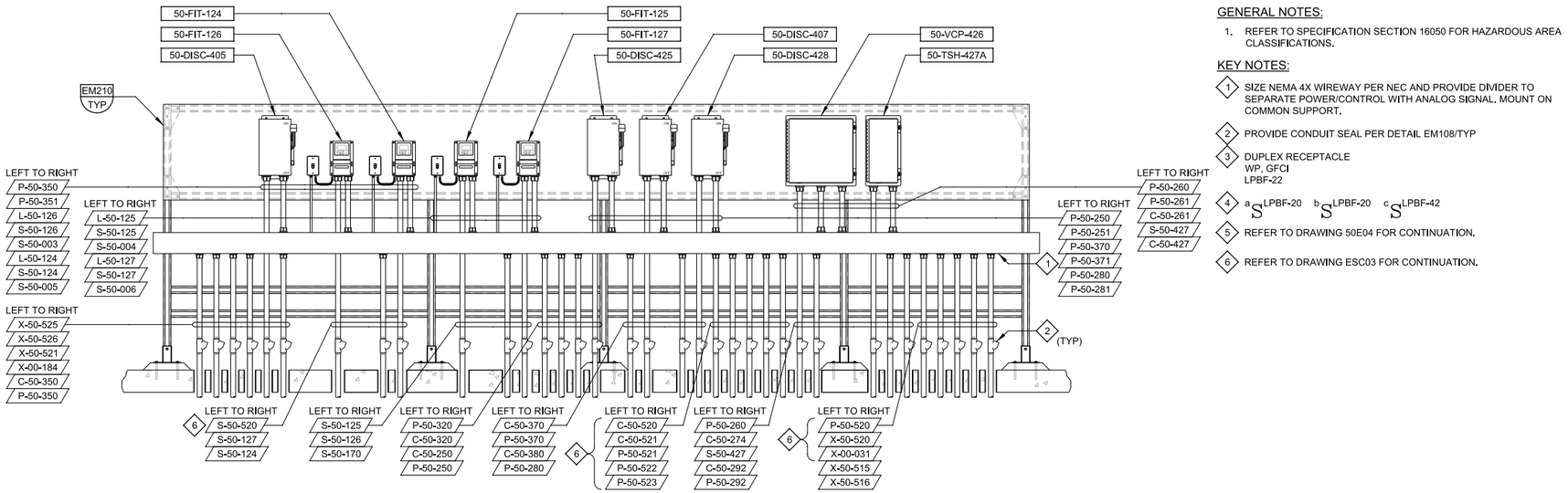
JOB NO. 8930A.11
DRAWING NO. 50E04
SHEET NO. 353 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1150E04.dgn

Plot Date: 16-SEP-2013 5:30:49 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson



1 STAND NO. 5 DETAIL
50E03
SCALE: NOT TO SCALE
FILE: 8930A1100ET400.typ



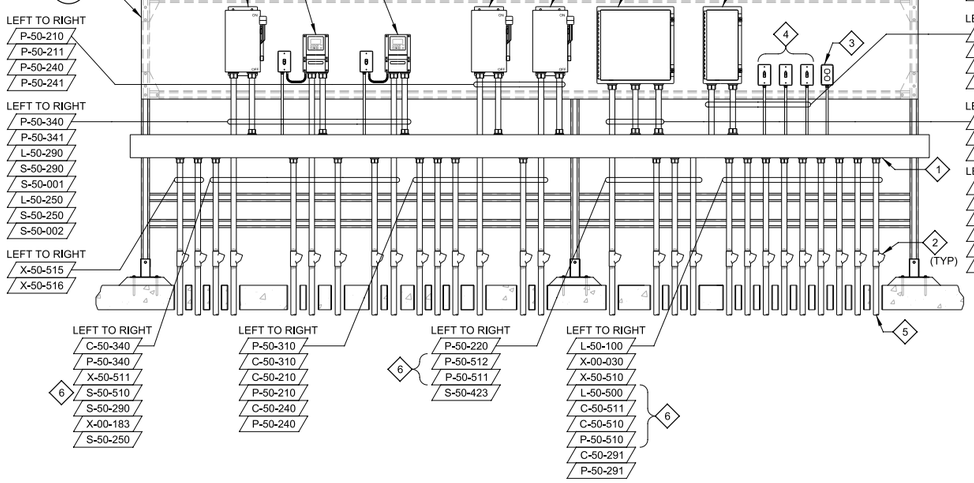
2 STAND NO. 2 DETAIL
50E03
SCALE: NOT TO SCALE
FILE: 8930A1100ET400.typ

GENERAL NOTES:

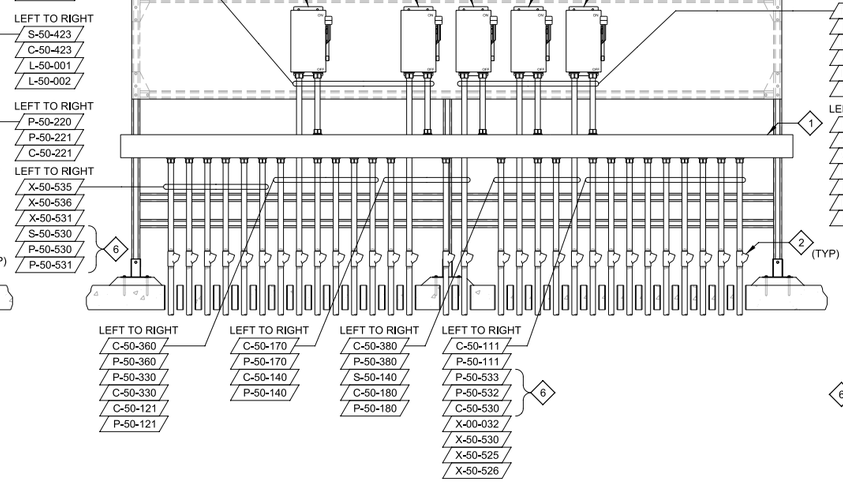
1. REFER TO SPECIFICATION SECTION 16050 FOR HAZARDOUS AREA CLASSIFICATIONS.

KEY NOTES:

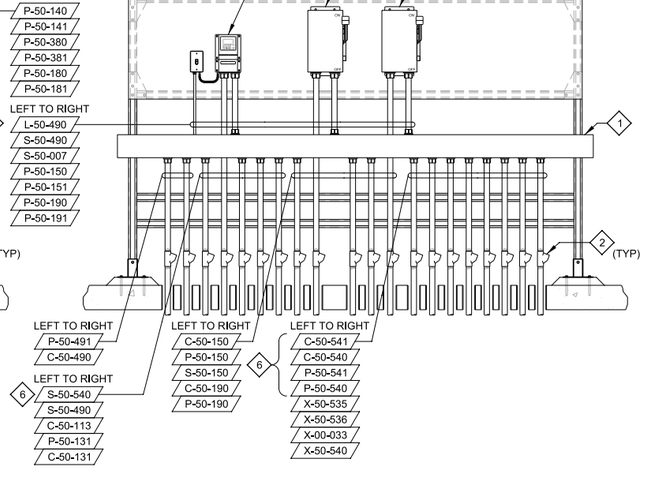
1. SIZE NEMA 4X WIREWAY PER NEC AND PROVIDE DIVIDER TO SEPARATE POWER/CONTROL WITH ANALOG SIGNAL. MOUNT ON COMMON SUPPORT.
2. PROVIDE CONDUIT SEAL PER DETAIL EM108/TYP
3. DUPLEX RECEPTACLE WP, GFCI LPBF-22
4. [a]S LPBF-20 [b]S LPBF-20 [c]S LPBF-42
5. REFER TO DRAWING 50E04 FOR CONTINUATION.
6. REFER TO DRAWING ESC03 FOR CONTINUATION.



3 STAND NO. 1 DETAIL
50E03
SCALE: NOT TO SCALE
FILE: 8930A1100ET400.typ



4 STAND NO. 3 DETAIL
50E03
SCALE: NOT TO SCALE
FILE: 8930A1100ET400.typ



5 STAND NO. 4 DETAIL
50E03
SCALE: NOT TO SCALE
FILE: 8930A1100ET400.typ

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — JAMES VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
SLUDGE STORAGE TANKS DETAILS

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 50E05
SHEET NO. 354 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1150E05.dgn

CONDUIT SCHEDULE AREA 50

9/3/13

LOS OSOS WATER RECYCLING FACILITY

SLUDGE STORAGE TANKS

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-50-110	50E02	1"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 50-PSH-121 TO: JB @ 50-PMP-121 2 #14 >> CONTROL: 50-PSH-121	C-50-111
C-50-111	50E02 50E03 50E05	1"	2 14	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: JB @ 50-PMP-121 TO: WIREWAY @ STAND NO. 3 10 #14 >> CONTROL: 50-LCP-121, 2-SPARE 2 #14 >> CONTROL: 50-PSH-121 2 #12 >> CONTROL: 50-MWH-121 2 #14 >> CONTROL: 50-TSH-121	C-50-531 C-50-110 P-50-110 P-50-110
C-50-112	50E02	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: 50-SV-121 & 50-FSL-121 TO: CONDUIT TEE 4 #14 >> CONTROL: 50-SV-121 & 50-FSL-121	C-50-113
C-50-113	50E02 50E03 50E05	0.75"	12	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: WIREWAY @ STAND NO. 4 4 #14 >> CONTROL: 50-SV-121 & 50-FSL-121 4 #14 >> CONTROL: 50-SV-122 & 50-FSL-122 4 #14 >> CONTROL: 50-SV-123 & 50-FSL-123	C-50-541 C-50-112 C-50-133 C-50-133
C-50-120	50E02	1"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 50-PSH-120 TO: JB @ 50-PMP-122 2 #14 >> CONTROL: 50-PSH-120	C-50-121
C-50-121	50E02 50E03 50E05	1"	2 14	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: JB @ 50-PMP-122 TO: WIREWAY @ STAND NO. 3 2 #14 >> CONTROL: 50-PSH-122 2 #12 >> CONTROL: 50-MWH-122 2 #14 >> CONTROL: 50-TSH-122 10 #14 >> CONTROL: 50-LCP-122, 2-SPARE	C-50-532 C-50-120 P-50-120 P-50-120
C-50-122	50E02	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: 50-SV-122 & 50-FSL-122 TO: CONDUIT TEE 4 #14 >> CONTROL: 50-SV-122 & 50-FSL-122	C-50-133
C-50-130	50E02	1"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 50-PSH-123 TO: JB @ 50-PMP-123 2 #14 >> CONTROL: 50-PSH-123	C-50-131
C-50-131	50E02 50E03 50E05	1"	2 14	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: JB @ 50-PMP-123 TO: WIREWAY @ STAND NO. 4 2 #14 >> CONTROL: 50-PSH-123 2 #12 >> CONTROL: 50-MWH-123 2 #14 >> CONTROL: 50-TSH-123 10 #14 >> CONTROL: 50-LCP-123, 2-SPARE	C-50-541 C-50-130 P-50-130 P-50-130
C-50-132	50E02	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: 50-SV-123 & 50-FSL-123 TO: CONDUIT TEE 4 #14 >> CONTROL: 50-SV-123 & 50-FSL-123	C-50-133
C-50-133	50E02	1"	8	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 4 #14 >> CONTROL: 50-SV-122 & 50-FSL-122 4 #14 >> CONTROL: 50-SV-123 & 50-FSL-123	C-50-113 C-50-122 C-50-132
C-50-140	50E02	1"	10	#14	XHHW-2	1	#14	XHHW-2	FR: 50-EAM-124 TO: WIREWAY @ STAND NO. 3 10 #14 >> CONTROL: 50-EAM-124, 2-SPARE	C-50-530
C-50-150	50E02	1"	10	#14	XHHW-2	1	#14	XHHW-2	FR: 50-EAM-125 TO: WIREWAY @ STAND NO. 4 10 #14 >> CONTROL: 50-EAM-125, 2-SPARE	C-50-540
C-50-170	50E02 50E03 50E05	1"	10	#14	XHHW-2	1	#14	XHHW-2	FR: 50-EAM-127 TO: WIREWAY @ STAND NO. 3 10 #14 >> CONTROL: 50-EAM-127, 2-SPARE	C-50-530
C-50-180	50E02 50E03 50E05	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: 50-EDR-128 TO: WIREWAY @ STAND NO. 3 12 #14 >> CONTROL: 50-EDR-128	C-50-530
C-50-190	50E02 50E03 50E05	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: 50-EDR-129 TO: WIREWAY @ STAND NO. 4 12 #14 >> CONTROL: 50-EDR-129	C-50-540
C-50-210	50E02 50E03 50E05	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: 50-EDR-421 TO: WIREWAY @ STAND NO. 1 12 #14 >> CONTROL: 50-EDR-421, 2-SPARE	C-50-511
C-50-220	50E05	0.75"	12	#14	XHHW-2	1	#14	XHHW-2	FR: 50-VCP-422 TO: WIREWAY @ STAND NO. 1 6 #14 >> CONTROL: 50-VCP-422, 2-SPARE 6 #14 >> CONTROL: 50-PMP-423	C-50-510

CONDUIT SCHEDULE AREA 50

9/3/13

LOS OSOS WATER RECYCLING FACILITY

SLUDGE STORAGE TANKS

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-50-221	50E02	0,75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 50-LCP-422 TO: 50-VCP-422 2 #14 >> CONTROL E STOP: 50-LCP-422	
C-50-230	50E02	0,75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 50-PSH-423 TO: JB @ 50-PMP-423 2 #14 >> CONTROL: 50-PSH-423	C-50-291
C-50-233	50E02	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: 50-SV-423 & 50-FSL-423 TO: CONDUIT TEE 4 #14 >> CONTROL: 50-SV-423 & 50-FSL-423	C-50-274
C-50-240	50E02 50E03 50E05	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: 50-EDR-424 TO: WIREWAY @ STAND NO, 1 12 #14 >> CONTROL: 50-EDR-424, 2-SPARE	C-50-511
C-50-250	50E02 50E03 50E05	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: 50-EDR-425 TO: WIREWAY @ STAND NO. 2 12 #14 >> CONTROL: 50-EDR-425, 2-SPARE	C-50-521
C-50-260	50E05	0,75"	12	#14	XHHW-2	1	#14	XHHW-2	FR: 50-VCP-427 TO: WIREWAY @ STAND NO. 2 6 #14 >> CONTROL: 50-VCP-426, 2-SPARE 6 #14 >> CONTROL: 50-PMP-427	C-50-520
C-50-261		0,75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 50-LCP-426 TO: 50-VCP-426 2 #14 >> CONTROL E STOP 50-LCP-426	
C-50-270	50E02	0,75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 50-PSH-427 TO: JB @ 50-PMP-427 2 #14 >> CONTROL: 50-PSH-427	C-50-292
C-50-273	50E02	0,75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: 50-SV-427 & 50-FSL-427 TO: CONDUIT TEE 4 #14 >> CONTROL:50-SV-427 & 50-FSL-427	C-50-274
C-50-274	50E02 50E03 50E05	1"	8	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: WIREWAY @ STAND NO. 2 4 #14 >> CONTROL: 50-SV-423 & 50-FSL-423 4 #14 >> CONTROL:50-SV-427 & 50-FSL-427	C-50-520 C-50-233 C-50-273
C-50-280	50E02 50E03 50E05	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: 50-EDR-428 TO: WIREWAY @ STAND NO. 1 12 #14 >> CONTROL:50-EDR-428	C-50-521
C-50-291	50E02 50E03 50E05	1"	2 12	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: JB @ 50-PMP-423 TO: WIREWAY @ STAND NO, 1 8 #14 >> CONTORL: 50-LCP-423, 2-SPARE 2 #14 >> CONTROL: 50-PSH-423 2 #12 >> CONTROL: 50-MWH-423 2 #14 >> CONTROL: 50-TSH-423	C-50-510 C-50-230 P-50-230 P-50-230
C-50-292	50E02 50E03 50E05	1"	2 12	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: JB @ 50-PMP-427 TO: WIREWAY @ STAND NO, 2 2 #14 >> CONTROL: 50-PSH-427 8 #14 >> CONTROL: 50-LCP-427, 2-SPARE 2 #12 >> CONTROL: 50-MWH-427 2 #14 >> CONTROL: 50-TSH-427	C-50-520 C-50-270 P-50-270 P-50-270
C-50-310	50E03 50E05	1"	2 15	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: JB @ 50-BLO-401 TO: WIREWAY @ STAND NO. 1 2 #14 >> CONTROL: 50-TSH-401A 2 #14 >> CONTROL: 50-PSH-401A 2 #14 >> CONTROL: 50-PSH-401B 2 #12 >> POWER:50-MWH-401 9 #14 >> CONTROL 50-LCP-401, 3-SPARE	C-50-510 C-50-311 C-50-311 C-50-311 C-50-311 C-50-312
C-50-311	50E03	0,75"	2 6	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: 50-BLO-401 TO: JB @ 50-BLO-401 2 #14 >> CONTROL: 50-TSH-401A 2 #14 >> CONTROL: 50-PSH-401A 2 #14 >> CONTROL: 50-PSH-401B 2 #12 >> POWER:50-MWH-401	C-50-310
C-50-312	50E05	1"	9	#14	XHHW-2	1	#14	XHHW-2	FR: 50-LCP-401 TO: JB @ 50-BLO-401 9 #14 >> CONTROL 50-LCP-401, 3-SPARE	C-50-310

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY

LOS OSOS WATER RECYCLING FACILITY PROJECT

ELECTRICAL

SLUDGE STORAGE TANKS
CONDUIT SCHEDULE- I

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 50E06
SHEET NO. 355 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1150E06.dgn

LAST SAVED BY: ejohnson Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1 Plot Date: 16-SEP-2013 5:31:33 PM User: EJohnson

CONDUIT SCHEDULE AREA 50

9/3/13

LOS OSOS WATER RECYCLING FACILITY

SLUDGE STORAGE TANKS

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-50-320	50E03 50E05	1"	2 15	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: JB @ 50-BLO-402 TO: WIREWAY @ STAND NO. 2 2 #14 >> CONTROL: 50-TSH-402A 2 #14 >> CONTROL: 50-PSH-402A 2 #14 >> CONTROL: 50-PSH-402B 2 #12 >> POWER: 50-MWH-402 9 #14 >> CONTROL 50-LCP-402, 3-SPARE	C-50-520 C-50-321 C-50-321 C-50-321 C-50-321 C-50-322
C-50-321	50E03	0.75"	2 6	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: 50-BLO-402 TO: JB @ 50-BLO-402 2 #14 >> CONTROL: 50-TSH-402A 2 #14 >> CONTROL: 50-PSH-402A 2 #14 >> CONTROL: 50-PSH-402B 2 #12 >> POWER: 50-MWH-402	C-50-320
C-50-322	50E03	1"	9	#14	XHHW-2	1	#14	XHHW-2	FR: 50-LCP-402 TO: JB @ 50-BLO-402 9 #14 >> CONTROL 50-LCP-402, 3-SPARE	C-50-320
C-50-330	50E03	1"	2 15	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: JB @ 50-BLO-403 TO: WIREWAY @ STAND NO. 4 2 #14 >> CONTROL: 50-TSH-403A 2 #14 >> CONTROL: 50-PSH-403A 2 #14 >> CONTROL: 50-PSH-403B 2 #12 >> POWER: 50-MWH-403 9 #14 >> CONTROL 50-LCP-403, 3-SPARE	C-50-530 C-50-331 C-50-331 C-50-331 C-50-331 C-50-332
C-50-331	50E03	0.75"	2 6	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: 50-BLO-403 TO: JB @ 50-BLO-403 2 #14 >> CONTROL: 50-TSH-403A 2 #14 >> CONTROL: 50-PSH-403A 2 #14 >> CONTROL: 50-PSH-403B 2 #12 >> POWER: 50-MWH-403	C-50-330
C-50-332	50E03	0.75"	9	#14	XHHW-2	1	#14	XHHW-2	FR: 50-LCP-402 TO: JB @ 50-BLO-402 9 #14 >> CONTROL 50-LCP-403, 3-SPARE	C-50-330
C-50-340	50E03 50E05	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: 50-EDR-404 TO: WIREWAY @ STAND NO. 1 12 #14 >> CONTROL: 50-EDR-404, 2-SPARE	C-50-511
C-50-350	50E03 50E05	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: 50-EDR-405 TO: WIREWAY @ STAND NO. 2 12 #14 >> CONTROL: 50-EDR-405, 2-SPARE	C-50-521
C-50-360	50E03 50E05	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: 50-EDR-406 TO: WIREWAY @ STAND NO. 2 12 #14 >> CONTROL: 50-EDR-406, 2-SPARE	C-50-530
C-50-370	50E03 50E05	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: 50-EDR-407 TO: WIREWAY @ STAND NO. 2 12 #14 >> CONTROL: 50-EDR-407, 2-SPARE	C-50-521
C-50-380	50E03 50E05	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: 50-EDR-408 TO: WIREWAY @ STAND NO. 3 12 #14 >> CONTROL: 50-EDR-408, 2-SPARE	C-50-530
C-50-410	50E02 50E03 50E05	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: 50-EDR-411 TO: WIREWAY @ STAND NO. 5 12 #14 >> CONTROL: 50-EDR-411, 2-SPARE	C-50-550
C-50-420	50E02	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: 50-EDR-412 TO: WIREWAY @ STAND NO. 5 12 #14 >> CONTROL: 50-EDR-412, 2-SPARE	C-50-550
C-50-423	50E05	0.75"	2 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: 50-TSH-423A TO: WIREWAY @ STAND #1 2 #14 >> CONTROL: 50-TSH-423A 2 #12 >> POWER: 50-TSH-423A	C-50-510
C-50-427		0.75"	2 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: 50-TSH-427A TO: WIREWAY @ STAND #2 2 #14 >> CONTROL: 50-TSH-427A 2 #12 >> POWER: 50-TSH-427A	C-50-520
C-50-430	50E01	0.75"	12	#14	XHHW-2	1	#14	XHHW-2	FR: 50-EDM-413 TO: JB 12 #14 >> CONTROL: 50-EDM-413, 4-SPARE	C-50-431
C-50-431	50E01	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: JB PB-01 TO: 12 #14 >> CONTROL: 50-EDM-413, 4-SPARE	C-50-500 C-50-430

CONDUIT SCHEDULE AREA 50

9/3/13

LOS OSOS WATER RECYCLING FACILITY

SLUDGE STORAGE TANKS

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-50-440	50E01	0.75"	12	#14	XHHW-2	1	#14	XHHW-2	FR: 50-EDM-414 TO: JB 12 #14 >> CONTROL: 50-EDM-414, 4-SPARE	C-50-441
C-50-441	50E01	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: JB TO: PB-01 12 #14 >> CONTROL: 50-EDM-414, 4-SPARE	C-50-500 C-50-440
C-50-450	50E01	0.75"	12	#14	XHHW-2	1	#14	XHHW-2	FR: 50-EDM-415 TO: JB 12 #14 >> CONTROL: 50-EDM-415, 4-SPARE	C-50-451
C-50-451	50E01	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: JB TO: PB-01 12 #14 >> CONTROL: 50-EDM-415, 4-SPARE	C-50-500 C-50-450
C-50-460	50E01	0.75"	12	#14	XHHW-2	1	#14	XHHW-2	FR: 50-EDM-416 TO: JB 12 #14 >> CONTROL: 50-EDM-416	C-50-461
C-50-461	50E01	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: JB TO: PB-01 12 #14 >> CONTROL: 50-EDM-416	C-50-500 C-50-460
C-50-470	50E03 50E05	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: 50-EDR-417 TO: WIREWAY @ STAND NO. 5 12 #14 >> CONTROL: 50-EDR-417, 2-SPARE	C-50-550
C-50-480	50E02 50E03 50E05	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: 50-EDR-418 TO: WIREWAY @ STAND NO. 5 12 #14 >> CONTROL: 50-EDR-418, 2-SPARE	C-50-550
C-50-490	50E03 50E05	1"	18	#14	XHHW-2	1	#14	XHHW-2	FR: 50-VCP-419 TO: WIREWAY @ STAND NO. 4 18 #14 >> CONTROL: 50-VCP-419, 6-SPARE	C-50-540
C-50-500	ESC08 51E06	2"	48	#14	XHHW-2	1	#14	XHHW-2	FR: PB-01 TO: PCM-2 VIA MH-E05 12 #14 >> CONTROL: 50-EDM-413, 4-SPARE 12 #14 >> CONTROL: 50-EDM-414, 4-SPARE 12 #14 >> CONTROL: 50-EDM-415, 4-SPARE 12 #14 >> CONTROL: 50-EDM-416	C-50-562 C-50-431 C-50-441 C-50-451 C-50-461
C-50-510	50E05 ESC08	2"	6 35	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: WIREWAY @ STAND NO. 1 TO: MH-E10 8 #14 >> CONTORL: 50-LCP-423, 2-SPARE 2 #14 >> CONTROL: 50-PSH-423 2 #12 >> CONTROL: 50-MWH-423 2 #14 >> CONTROL: 50-TSH-423 6 #14 >> CONTROL: 50-PMP-423 2 #14 >> CONTROL: 50-TSH-423A 2 #12 >> POWER: 50-TSH-423A 2 #14 >> CONTROL: 50-TSH-401A 2 #14 >> CONTROL: 50-PSH-401A 2 #14 >> CONTROL: 50-PSH-401B 2 #12 >> POWER:50-MWH-401 9 #14 >> CONTROL 50-LCP-401, 3-SPARE	C-50-560 C-50-291 C-50-291 C-50-291 C-50-291 C-50-220 C-50-423 C-50-310 C-50-310 C-50-310 C-50-310 C-50-310
C-50-511	50E05 ESC08	2"	4 42	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: WIREWAY @ STAND NO. 1 TO: MH-E10 6 #14 >> CONTROL: 50-VCP-422, 2-SPARE 12 #14 >> CONTROL: 50-EDR-404, 2-SPARE 12 #14 >> CONTROL: 50-EDR-421, 2-SPARE 12 #14 >> CONTROL: 50-EDR-424, 2-SPARE 2 #12 >> POWER: 50-FIT-425 2 #12 >> POWER: 50-FIT-429	C-50-562 C-50-220 C-50-340 C-50-210 C-50-240 L-50-250 L-50-290
C-50-520	50E05 ESC08	2"	4 43	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: WIREWAY @ STAND NO. 2 TO: MH-E10 2 #14 >> CONTROL: 50-PSH-427 8 #14 >> CONTROL: 50-LCP-427, 2-SPARE 2 #12 >> CONTROL: 50-MWH-427 2 #14 >> CONTROL: 50-TSH-427 6 #14 >> CONTROL: 50-PMP-427 2 #14 >> CONTROL: 50-TSH-427A 2 #14 >> CONTROL: 50-TSH-402A 2 #14 >> CONTROL: 50-PSH-402A 2 #14 >> CONTROL: 50-PSH-402B 2 #12 >> POWER: 50-MWH-402 9 #14 >> CONTROL 50-LCP-402, 3-SPARE 4 #14 >> CONTROL: 50-SV-423 & 50-FSL-423 4 #14 >> CONTROL:50-SV-427 & 50-FSL-427	C-50-560 C-50-292 C-50-292 C-50-292 C-50-292 C-50-260 C-50-427 C-50-320 C-50-320 C-50-320 C-50-320 C-50-320 C-50-274 C-50-274

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — JAMES V. VARELA — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
SLUDGE STORAGE TANKS
CONDUIT SCHEDULE- II

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 50E07
SHEET NO. 356 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1150E07.dgn

Plot Date: 16-SEP-2013 5:31:53 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

CONDUIT SCHEDULE AREA 50

9/3/13

LOS OSOS WATER RECYCLING FACILITY

SLUDGE STORAGE TANKS

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-50-521	50E05 ESC08	2"	8 54	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: WIREWAY @ STAND NO. 2 TO: MH-E10	C-50-563
									12 #14 >> CONTROL: 50-EDR-405, 2-SPARE	C-50-350
									12 #14 >> CONTROL: 50-EDR-407, 2-SPARE	C-50-370
									12 #14 >> CONTROL: 50-EDR-425, 2-SPARE	C-50-250
									12 #14 >> CONTROL:50-EDR-428, 2-SPARE	C-50-280
									6 #14 >> CONTROL: 50-VCP-426, 2-SPARE	C-50-260
									2 #12 >> POWER: 50-FIT-124	L-50-124
									2 #12 >> POWER: 50-FIT-125	L-50-125
									2 #12 >> POWER: 50-FIT-126	L-50-126
									2 #12 >> POWER: 50-FIT-127	L-50-127
C-50-530	50E05 ESC08	2"	2 71	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: WIREWAY @ STAND NO. 3 TO: MH-E10	C-50-563
									12 #14 >> CONTROL: 50-EDR-406, 2-SPARE	C-50-360
									10 #14 >> CONTROL: 50-EAM-127, 2-SPARE	C-50-170
									10 #14 >> CONTROL: 50-EAM-124, 2-SPARE	C-50-140
									12 #14 >> CONTROL: 50-EDR-408, 2-SPARE	C-50-380
									2 #14 >> CONTROL: 50-TSH-403A	C-50-330
									2 #14 >> CONTROL: 50-PSH-403A	C-50-330
									2 #14 >> CONTROL: 50-PSH-403B	C-50-330
									2 #12 >> POWER: 50-MWH-403	C-50-330
									9 #14 >> CONTROL 50-LCP-403, 3-SPARE	C-50-330
									12 #14 >> CONTROL: 50-EDR-128, 2-SPARE	C-50-180
C-50-531	50E05 ESC08	2"	2 14	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: WIREWAY @ STAND NO. 3 TO: MH-E10	C-50-560
									10 #14 >> CONTROL: 50-LCP-121, 2-SPARE	C-50-111
									2 #14 >> CONTROL: 50-PSH-121	C-50-111
									2 #12 >> CONTROL: 50-MWH-121	C-50-111
									2 #14 >> CONTROL: 50-TSH-121	C-50-111
C-50-532	50E05 ESC08	2"	4 29	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: WIREWAY @ STAND NO. 3 TO: MH-E10	C-50-561
									2 #14 >> CONTROL: 50-TSH-403A	C-50-330
									2 #14 >> CONTROL: 50-PSH-403A	C-50-330
									2 #14 >> CONTROL: 50-PSH-403B	C-50-330
									2 #12 >> POWER: 50-MWH-403	C-50-330
									9 #14 >> CONTROL 50-LCP-403, 3-SPARE	C-50-330
									2 #14 >> CONTROL: 50-PSH-122	C-50-121
									2 #12 >> CONTROL: 50-MWH-122	C-50-121
									2 #14 >> CONTROL: 50-TSH-122	C-50-121
									10 #14 >> CONTROL: 50-LCP-122, 2-SPARE	C-50-121
C-50-540	50E05 ESC08	2"	2 40	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: WIREWAY @ STAND NO. 4 TO: MH-E10	C-50-562
									10 #14 >> CONTROL: 50-EAM-125, 2-SPARE	C-50-150
									12 #14 >> CONTROL: 50-EDR-129, 2-SPARE	C-50-190
									2 #12 >> POWER:50-FIT-309	L-50-490
									18 #14 >> CONTROL: 50-VCP-419, 6-SPARE	C-50-490
C-50-541	50E05 ESC08	2"	2 26	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: WIREWAY @ STAND NO. 4 TO: MH-E10	C-50-560
									4 #14 >> CONTROL: 50-SV-121& 50-FSL-121	C-50-113
									4 #14 >> CONTROL: 50-SV-122 & 50-FSL-122	C-50-113
									4 #14 >> CONTROL: 50-SV-123 & 50-FSL-123	C-50-113
									2 #14 >> CONTROL: 50-PSH-123	C-50-131
									2 #12 >> CONTROL: 50-MWH-123	C-50-131
									2 #14 >> CONTROL: 50-TSH-123	C-50-131
									10 #14 >> CONTROL: 50-LCP-123, 2-SPARE	C-50-131
C-50-550	50E05 ESC08	2"	48	#14	XHHW-2	1	#14	XHHW-2	FR: WIREWAY @ STAND NO. 5 TO: MH-E10	C-50-562
									12 #14 >> CONTROL: 50-EDR-411, 2-SPARE	C-50-410
									12 #14 >> CONTROL: 50-EDR-412, 2-SPARE	C-50-420
									12 #14 >> CONTROL: 50-EDR-417, 2-SPARE	C-50-470
									12 #14 >> CONTROL: 50-EDR-418, 2-SPARE	C-50-480

CONDUIT SCHEDULE AREA 50

9/3/13

LOS OSOS WATER RECYCLING FACILITY

SLUDGE STORAGE TANKS

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-50-560	ESC08 ESC09 51E06	2.5"	10 81	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: MH-E10 TO: MCC-E VIA MH-E05	
									8 #14 >> CONTORL: 50-LCP-423, 2-SPARE	C-50-510
									2 #14 >> CONTROL: 50-PSH-423	C-50-510
									2 #12 >> CONTROL: 50-MWH-423	C-50-510
									2 #14 >> CONTROL: 50-TSH-423	C-50-510
									6 #14 >> CONTROL: 50-PMP-423	C-50-510
									2 #14 >> CONTROL: 50-TSH-423A	C-50-510
									2 #12 >> POWER: 50-TSH-423A	C-50-510
									2 #14 >> CONTROL: 50-TSH-401A	C-50-510
									2 #14 >> CONTROL: 50-PSH-401A	C-50-510
									2 #14 >> CONTROL: 50-PSH-401B	C-50-510
									2 #12 >> POWER:50-MWH-401	C-50-510
									9 #14 >> CONTROL 50-LCP-401, 3-SPARE	C-50-510
									10 #14 >> CONTROL: 50-LCP-121, 2-SPARE	C-50-531
									2 #14 >> CONTROL: 50-PSH-121	C-50-531
									2 #12 >> CONTROL: 50-MWH-121	C-50-531
									2 #14 >> CONTROL: 50-TSH-121	C-50-531
									4 #14 >> CONTROL: 50-SV-121& 50-FSL-121	C-50-541
									2 #14 >> CONTROL: 50-PSH-427	C-50-520
									8 #14 >> CONTROL: 50-LCP-427, 2-SPARE	C-50-520
									2 #12 >> CONTROL: 50-MWH-427	C-50-520
									2 #14 >> CONTROL: 50-TSH-427	C-50-520
									6 #14 >> CONTROL: 50-PMP-427	C-50-520
									2 #14 >> CONTROL: 50-TSH-427A	C-50-520
									4 #14 >> CONTROL: 50-SV-423 & 50-FSL-423	C-50-520
									4 #14 >> CONTROL:50-SV-427 & 50-FSL-427	C-50-520
C-50-561	ESC08 ESC09 51E06	2.5"	10 94	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: MH-E10 TO: MCC-F VIA MH-E05	
									2 #14 >> CONTROL: 50-PSH-427	C-50-520
									8 #14 >> CONTROL: 50-LCP-427, 2-SPARE	C-50-520
									2 #12 >> CONTROL: 50-MWH-427	C-50-520
									2 #14 >> CONTROL: 50-TSH-427	C-50-520
									6 #14 >> CONTROL: 50-PMP-427	C-50-520
									2 #14 >> CONTROL: 50-TSH-427A	C-50-520
									2 #14 >> CONTROL: 50-TSH-402A	C-50-520
									2 #14 >> CONTROL: 50-PSH-402A	C-50-520
									2 #14 >> CONTROL: 50-PSH-402B	C-50-520
									2 #12 >> POWER: 50-MWH-402	C-50-520
									9 #14 >> CONTROL 50-LCP-402, 3-SPARE	C-50-520
									4 #14 >> CONTROL: 50-SV-423 & 50-FSL-423	C-50-520
									4 #14 >> CONTROL:50-SV-427 & 50-FSL-427	C-50-520
									2 #14 >> CONTROL: 50-TSH-403A	C-50-532
									2 #14 >> CONTROL: 50-PSH-403A	C-50-532
									2 #14 >> CONTROL: 50-PSH-403B	C-50-532
									2 #12 >> POWER: 50-MWH-403	C-50-532
									9 #14 >> CONTROL 50-LCP-403, 3-SPARE	C-50-532
									2 #14 >> CONTROL: 50-PSH-122	C-50-532
									2 #12 >> CONTROL: 50-MWH-122	C-50-532
									2 #14 >> CONTROL: 50-TSH-122	C-50-532
									10 #14 >> CONTROL: 50-LCP-122, 2-SPARE	C-50-532
									4 #14 >> CONTROL: 50-SV-122 & 50-FSL-122	C-50-541
									4 #14 >> CONTROL: 50-SV-123 & 50-FSL-123	C-50-541
									2 #14 >> CONTROL: 50-PSH-123	C-50-541
									2 #12 >> CONTROL: 50-MWH-123	C-50-541
									2 #14 >> CONTROL: 50-TSH-123	C-50-541
									10 #14 >> CONTROL: 50-LCP-123, 2-SPARE	C-50-541
C-50-562	ESC08 ESC09	3"	6 178	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: MH-E10 TO: PCM-2 VIA MH-E05	
									6 #14 >> CONTROL: 50-VCP-422, 2-SPARE	C-50-511
									12 #14 >> CONTROL: 50-EDR-404, 2-SPARE	C-50-511
									12 #14 >> CONTROL: 50-EDR-421, 2-SPARE	C-50-511
									12 #14 >> CONTROL: 50-EDR-424, 2-SPARE	C-50-511
									2 #12 >> POWER: 50-FIT-425	C-50-511
									2 #12 >> POWER: 50-FIT-429	C-50-511
									10 #14 >> CONTROL: 50-EAM-125, 2-SPARE	C-50-540
									12 #14 >> CONTROL: 50-EDR-129, 2-SPARE	C-50-540
									2 #12 >> POWER:50-FIT-309	C-50-540
									18 #14 >> CONTROL: 50-VCP-419, 6-SPARE	C-50-540
									12 #14 >> CONTROL: 50-EDR-411, 2-SPARE	C-50-550
									12 #14 >> CONTROL: 50-EDR-412, 2-SPARE	C-50-550
									12 #14 >> CONTROL: 50-EDR-417, 2-SPARE	C-50-550
									12 #14 >> CONTROL: 50-EDR-418, 2-SPARE	C-50-550
									12 #14 >> CONTROL: 50-EDM-413, 2-SPARE	C-50-500
									12 #14 >> CONTROL: 50-EDM-414, 2-SPARE	C-50-500
									12 #14 >> CONTROL: 50-EDM-415, 2-SPARE	C-50-500
									12 #14 >> CONTROL: 50-EDM-416	C-50-500

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
SLUDGE STORAGE TANKS
CONDUIT SCHEDULE- III

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 50E08
SHEET NO. 357 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1150E08.dgn

Plot Date: 16-SEP-2013 5:32:13 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

CONDUIT SCHEDULE AREA 50

9/3/13

LOS OSOS WATER RECYCLING FACILITY

SLUDGE STORAGE TANKS

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-50-563	ESC08 ESC09 51E06	3"	8 110	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: MH-E10 TO: PCM-2 VIA MH-E05 12 #14 >> CONTROL: 50-EDR-405, 2-SPARE 12 #14 >> CONTROL: 50-EDR-407, 2-SPARE 12 #14 >> CONTROL: 50-EDR-425, 2-SPARE 12 #14 >> CONTROL:50-EDR-428, 2-SPARE 6 #14 >> CONTROL: 50-VCP-426, 2-SPARE 2 #12 >> POWER: 50-FIT-124 2 #12 >> POWER: 50-FIT-125 2 #12 >> POWER: 50-FIT-126 2 #12 >> POWER: 50-FIT-127 12 #14 >> CONTROL: 50-EDR-406, 2-SPARE 10 #14 >> CONTROL: 50-EAM-127, 2-SPARE 10 #14 >> CONTROL: 50-EAM-124, 2-SPARE 12 #14 >> CONTROL: 50-EDR-408, 2-SPARE 12 #14 >> CONTROL: 50-EDR-128, 2-SPARE	C-50-521 C-50-521 C-50-521 C-50-521 C-50-521 C-50-521 C-50-521 C-50-521 C-50-521 C-50-530 C-50-530 C-50-530 C-50-530 C-50-530
L-50-001	50E05	0.75"	4	#12	XHHW-2	1	#12	XHHW-2	FR: LIGHTING SWITCHES TO: WIREWAY @ STAND NO. 1 4 #12 >> LPBF-20, 42: LIGHTING	L-50-100
L-50-002	50E05	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: RECEPTACLES TO: WIREWAY @ STAND NO. 1 2 #12 >> LPBF-22: RECEPTACLE	L-50-500
L-50-100	50E04 50E05	1"	4	#12	XHHW-2	1	#12	XHHW-2	FR: WIREWAY @ STAND NO. 1 TO: LIGHTING FIXTURE 4 #12 >> LPBF-20, 42: LIGHTING	L-50-101 L-50-001
L-50-101	50E04	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: LIGHTING FIXTURE TO: LIGHTING FIXTURE 2 #12 >> LPBF-20: LIGHTING	L-50-100
L-50-110	50E04	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: LIGHTING FIXTURE TO: LIGHTING FIXTURE 2 #12 >> LPBF-42: LIGHTING	L-50-111 L-50-100
L-50-111	50E04	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: LIGHTING FIXTURE TO: CONDUIT TEE 2 #12 >> LPBF-42: LIGHTING	L-50-110
L-50-124	50E05	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWITCH 50-FIT-124 TO: WIREWAY @ STAND NO. 2 2 #12 >> POWER: 50-FIT-124	C-50-521
L-50-125	50E05	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWITCH 50-FIT-125 TO: WIREWAY @ STAND NO. 2 2 #12 >> POWER: 50-FIT-125	C-50-521
L-50-126	50E05	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWITCH 50-FIT-126 TO: WIREWAY @ STAND NO. 2 2 #12 >> POWER: 50-FIT-126	C-50-521
L-50-127	50E05	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWITCH 50-FIT-127 TO: WIREWAY @ STAND NO. 2 2 #12 >> POWER: 50-FIT-127	C-50-521
L-50-250	50E05	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWITCH 50-FIT-425 TO: WIREWAY @ STAND NO. 1 2 #12 >> POWER: 50-FIT-425	C-50-511
L-50-290	50E05	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWITCH 50-FIT-429 TO: WIREWAY @ STAND NO. 1 2 #12 >> POWER: 50-FIT-429	C-50-511
L-50-490	50E05	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 50-FIT-309 TO: WIREWAY @ STAND NO. 4 2 #12 >> POWER:50-FIT-309	C-50-540
L-50-500	50E05 ESC05 ESC08 ESC09	2"	6	#10	XHHW-2	1	#10	XHHW-2	FR: WIREWAY @ STAND NO. 1 TO: MCC-F VIA HH-E10, MH-E05 2 #10 >> LPBF-22: RECEPTACLE 4 #10 >> LPBF-20, 42: LIGHTING	L-50-002 L-50-001
P-50-110	50E02	1"	3 2 2	#10 #12 #14	XHHW-2 XHHW-2 XHHW-2	1	#10	XHHW-2	FR: 50-PMP-121 TO: JB @ 50-PMP-121 3 #10 >> POWER: 50-PMP-121 2 #12 >> CONTROL: 50-MWH-121 2 #14 >> CONTROL: 50-TSH-121	C-50-111
P-50-111	50E02 ESC03 ESC05	1"	3	#10	XHHW-2	1	#10	XHHW-2	FR: JB @ 50-PMP-121 TO: WIREWAY @ STAND NO. 3 3 #10 >> POWER: 50-PMP-121	P-50-530 P-50-110

CONDUIT SCHEDULE AREA 50

9/3/13

LOS OSOS WATER RECYCLING FACILITY

SLUDGE STORAGE TANKS

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
P-50-120	50E02	0,75"	3 2 2	#10 #12 #14	XHHW-2 XHHW-2 XHHW-2	1	#10	XHHW-2	FR: 50-PMP-122 TO: JB @ 50-PMP-122 3 #10 >> POWER: 50-PMP-122 2 #12 >> CONTROL: 50-MWH-122 2 #14 >> CONTROL: 50-TSH-122	C-50-121
P-50-121	50E02 ESC03 ESC05	1"	3	#10	XHHW-2	1	#10	XHHW-2	FR: JB @ 50-PMP-122 TO: WIREWAY @ STAND NO. 3 3 #10 >> POWER: 50-PMP-122	P-50-532 P-50-120
P-50-130	50E02	0.75"	3 2 2	#10 #12 #14	XHHW-2 XHHW-2 XHHW-2	1	#10	XHHW-2	FR: 50-PMP-123 TO: JB @ 50-PMP-123 3 #10 >> POWER: 50-PMP-123 2 #12 >> CONTROL: 50-MWH-123 2 #14 >> CONTROL: 50-TSH-123	C-50-131
P-50-131	50E02 ESC03 ESC05	1"	3	#10	XHHW-2	1	#10	XHHW-2	FR: JB @ 50-PMP-123 TO: WIREWAY @ STAND NO. 4 3 #10 >> POWER: 50-PMP-123	P-50-540 P-50-130
P-50-140	50E02	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 50-EAM-124 TO: DISCONNECT SWITCH @ STAND NO. 3 3 #12 >> POWER: 50-EAM-124	P-50-141
P-50-141	50E05	0,75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWITCH ON STAND NO. 3 TO: WIREWAY @ STAND NO. 3 3 #12 >> POWER: 50-EAM-124	P-50-531 P-50-140
P-50-150	50E02	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 50-EAM-125 TO: DISCONNECT SWITCH @ STAND NO. 4 3 #12 >> POWER: 50-EAM-125	P-50-151
P-50-151	50E05	0,75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWITCH ON STAND NO. 4 TO: WIREWAY @ STAND NO. 4 3 #12 >> POWER: 50-EAM-125	P-50-541 P-50-150
P-50-170	50E02 ESC03 ESC05	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 50-EAM-127 TO: DISCONNECT SWITCH @ STAND NO. 3 3 #12 >> POWER: 50-EAM-127	P-50-171
P-50-171	50E05	0,75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWITCH ON STAND NO. 3 TO: WIREWAY @ STAND NO. 3 3 #12 >> POWER: 50-EAM-127	P-50-531 P-50-170
P-50-180	50E02 ESC03 ESC05	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 50-EDR-128 TO: DISCONNECT SWITCH @ STAND NO. 3 3 #12 >> POWER: 50-EDR-128	P-50-181
P-50-181	50E05	0,75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWITCH ON STAND NO. 3 TO: WIREWAY @ STAND NO. 3 3 #12 >> POWER: 50-EDR-128	P-50-531 P-50-180
P-50-190	50E02 ESC03 ESC05	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 50-EDR-129 TO: DISCONNECT SWITCH @ STAND NO. 4 3 #12 >> POWER: 50-EDR-129	P-50-191
P-50-191	50E05	0,75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWITCH ON STAND NO. 4 TO: WIREWAY @ STAND NO. 4 3 #12 >> POWER: 50-EDR-129	P-50-541 P-50-190
P-50-210	50E02 ESC03 ESC05	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 50-EDR-421 TO: DISCONNECT SWITCH @ STAND NO. 1 3 #12 >> POWER: 50-EDR-421	P-50-211
P-50-211	50E05	0,75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWITCH ON STAND NO. 1 TO: WIREWAY @ STAND NO. 1 3 #12 >> POWER: 50-EDR-421	P-50-512 P-50-210
P-50-220	50E02 ESC03 ESC05	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 50-GRI-422 TO: 50-VCP-422 & STAND NO. 1 3 #12 >> POWER: 50-GRI-422	
P-50-221	50E05	0,75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 50-VCP-422 TO: WIREWAY @ STAND NO. 1 3 #12 >> POWER: 50-VCP-422	P-50-511
P-50-230	50E02	1"	3 2 2	#8 #12 #14	XHHW-2 XHHW-2 XHHW-2	1	#10	XHHW-2	FR: 50-PMP-423 TO: JB @ 50-PMP-423 3 #8 >> POWER: 50-PMP-423 2 #12 >> CONTROL: 50-MWH-423 2 #14 >> CONTROL: 50-TSH-423	C-50-291

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — TARA R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
SLUDGE STORAGE TANKS
CONDUIT SCHEDULE- IV

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 50E09
SHEET NO. 358 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1150E09.dgn

Plot Date: 16-SEP-2013 5:32:32 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

CONDUIT SCHEDULE AREA 50

9/3/13

LOS OSOS WATER RECYCLING FACILITY

SLUDGE STORAGE TANKS

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
P-50-240	50E02 ESC03 ESC05	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 50-EDR-424 TO: DISCONNECT SWITCH @ STAND NO. 1 3 #12 >> POWER: 50-EDR-424	P-50-241
P-50-241	50E05	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWITCH ON STAND NO. 1 TO: WIREWAY @ STAND NO. 1 3 #12 >> POWER: 50-EDR-424	P-50-512 P-50-240
P-50-250	50E02 ESC03 ESC05	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 50-EDR-425 TO: DISCONNECT SWITCH @ STAND NO. 2 3 #12 >> POWER: 50-EDR-425	P-50-251
P-50-251	50E05	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWITCH ON STAND NO. 2 TO: WIREWAY @ STAND NO. 2 3 #12 >> POWER: 50-EDR-425	P-50-523 P-50-250
P-50-260	50E02 ESC03 ESC05	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 50-GRI-426 TO: 50-VCP-426 @ STAND NO. 2 3 #12 >> POWER: 50-GRI-426	P-50-521
P-50-261	50E05	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 50-VCP-426 @ STAND NO. 2 TO: WIREWAY @ STAND NO. 2 3 #12 >> POWER: 50-VCP-426	
P-50-270	50E02	1"	3 2 2	#8 #12 #14	XHHW-2 XHHW-2 XHHW-2	1	#10	XHHW-2	FR: 50-PMP-427 TO: JB @ 50-PMP-427 3 #8 >> POWER: 50-PMP-427 2 #12 >> CONTROL: 50-MWH-427 2 #14 >> CONTROL: 50-TSH-427	C-50-292
P-50-280	50E02 50E03 50E05	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 50-EDR-428 TO: DISCONNECT SWITCH @ STAND NO. 2 3 #12 >> POWER: 50-EDR-428	P-50-281
P-50-281	50E05	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWITCH ON STAND NO. 2 TO: WIREWAY @ STAND NO. 2 3 #12 >> POWER: 50-EDR-428	P-50-523 P-50-280
P-50-291	50E02 50E03 50E05	1"	3	#8	XHHW-2	1	#10	XHHW-2	FR: JB @ 50-PMP-423 TO: WIREWAY @ STAND NO. 1 3 #8 >> POWER: 50-PMP-423	P-50-510 P-50-230
P-50-292	50E02 50E03 50E05	1"	3	#8	XHHW-2	1	#10	XHHW-2	FR: JB @ 50-PMP-427 TO: WIREWAY @ STAND NO. 2 3 #8 >> POWER: 50-PMP-427	P-50-520 P-50-270
P-50-310	50E03 50E05	1"	3	#4	XHHW-2	1	#6	XHHW-2	FR: 50-BLO-401 VIA J BOX TO: WIREWAY @ STAND NO. 1 3 #4 >> POWER: 50-BLO-401	P-50-511
P-50-320	50E03	1"	3	#4	XHHW-2	1	#6	XHHW-2	FR: 50-BLO-402 VIA J BOX TO: WIREWAY @ STAND NO. 2 3 #4 >> POWER: 50-BLO-402	P-50-521
P-50-330	50E03	1"	3	#4	XHHW-2	1	#6	XHHW-2	FR: 50-BLO-403 VIA J BOX TO: WIREWAY @ STAND NO. 4 3 #4 >> POWER: 50-BLO-403	P-50-532
P-50-340	50E03 50E05	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 50-EDR-404 TO: DISCONNECT SWTICH ON STAND NO. 1 3 #12 >> POWER: 50-EDR-404	P-50-341
P-50-341	50E05	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWITCH ON STAND NO. 1 TO: WIREWAY @ STAND NO. 1 3 #12 >> POWER: 50-EDR-404	P-50-512 P-50-340
P-50-350	50E03 50E05	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 50-EDR-405 TO: DISCONNECT SWTICH ON STAND NO. 2 3 #12 >> POWER: 50-EDR-405	P-50-351
P-50-351	50E05	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWITCH ON STAND NO. 2 TO: WIREWAY @ STAND NO. 2 3 #12 >> POWER: 50-EDR-405	P-50-523 P-50-350
P-50-360	50E03 50E05	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 50-EDR-406 TO: DISCONNECT SWTICH ON STAND NO. 4 3 #12 >> POWER: 50-EDR-406	P-50-361
P-50-361	50E05	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWITCH ON STAND NO. 3 TO: WIREWAY @ STAND NO. 3 3 #12 >> POWER: 50-EDR-406	P-50-533 P-50-360

CONDUIT SCHEDULE AREA 50

9/3/13

LOS OSOS WATER RECYCLING FACILITY

SLUDGE STORAGE TANKS

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
P-50-370	50E03 50E05	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 50-EDR-407 TO: DISCONNECT SWTICH ON STAND NO. 2 3 #12 >> POWER: 50-EDR-407	P-50-371
P-50-371	50E05	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWITCH ON STAND NO. 2 TO: WIREWAY @ STAND NO. 2 3 #12 >> POWER: 50-EDR-407	P-50-522 P-50-370
P-50-380	50E03 50E05	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 50-EDR-408 TO: DISCONNECT SWTICH ON STAND NO. 3 3 #12 >> POWER: 50-EDR-408	P-50-381
P-50-381	50E05	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWITCH ON STAND NO. 3 TO: WIREWAY @ STAND NO. 3 3 #12 >> POWER: 50-EDR-408	P-50-533 P-50-380
P-50-410	50E02 50E03 50E05	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 50-EDR-411 TO: DISCONNECT SWTICH ON STAND NO. 5 3 #12 >> POWER: 50-EDR-411	P-50-411
P-50-411	50E05	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWTICH ON STAND NO. 5 TO: WIREWAY @ STAND NO. 5 3 #12 >> POWER: 50-EDR-411	P-50-550 P-50-410
P-50-420	50E02 50E03 50E05	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 50-EDR-112 TO: DISCONNECT SWTICH ON STAND NO. 5 3 #12 >> POWER: 50-EDR-412	P-50-421
P-50-421	50E05	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWTICH ON STAND NO. 5 TO: WIREWAY @ STAND NO. 5 3 #12 >> POWER: 50-EDR-412	P-50-551 P-50-420
P-50-430	50E01	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 50-EDM-413 TO: DISCONNECT SWITCH 3 #12 >> POWER: 50-EDM-413	P-50-431
P-50-431	50E01	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWITCH TO: PB-01 3 #12 >> POWER: 50-EDM-413	P-50-500 P-50-430
P-50-440	50E01	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 50-EDM-414 TO: DISCONNECT SWITCH 3 #12 >> POWER: 50-EDM-414	P-50-441
P-50-441	50E01	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWITCH TO: PB-01 3 #12 >> POWER: 50-EDM-414	P-50-500 P-50-440
P-50-450	50E01	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 50-EDM-415 TO: DISCONNECT SWITCH 3 #12 >> POWER: 50-EDM-415	P-50-451
P-50-451	50E01	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWITCH TO: PB-01 3 #12 >> POWER: 50-EDM-415	P-50-501 P-50-450
P-50-460	50E01	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 50-EDM-416 TO: DISCONNECT SWITCH 3 #12 >> POWER: 50-EDM-416	P-50-461
P-50-461	50E01	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWITCH TO: PB-01 3 #12 >> POWER: 50-EDM-416	P-50-501 P-50-460
P-50-470	50E03 50E05	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 50-EDR-417 TO: DISCONNECT SWTICH ON STAND NO. 5 3 #12 >> POWER: 50-EDR-417	P-50-471
P-50-471	50E05	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWTICH ON STAND NO. 5 TO: WIREWAY @ STAND NO. 5 3 #12 >> POWER: 50-EDR-417	P-50-550 P-50-470
P-50-480	50E02 50E03 50E05	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 50-EDR-418 TO: DISCONNECT SWTICH ON STAND NO. 5 3 #12 >> POWER: 50-EDR-418	P-50-481
P-50-481	50E05	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWTICH ON STAND NO. 5 TO: WIREWAY @ STAND NO. 5 3 #12 >> POWER: 50-EDR-418	P-50-551 P-50-480

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12679 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
SLUDGE STORAGE TANKS
CONDUIT SCHEDULE- V

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 50E10
SHEET NO. 359 OF 549

Plot Date: 16-SEP-2013 5:32:52 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

PROJECT NO. 8930A.11 FILE NAME: 8930A1150E10.dgn

CONDUIT SCHEDULE AREA 50

9/3/13

LOS OSOS WATER RECYCLING FACILITY

SLUDGE STORAGE TANKS

CONDUIT			CONDUCTORS			GROUND						
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION			CONNECTING SEGMENTS
P-50-490	50E05	2"	3	MFR	CABLE	1	#14	XHHW-2	FR:		50-VCP-419	
									TO:		50-PMP-419A & 50-PMP-419B	
										1 MFR	>> 50-PMP-419A	
										1 MFR	>> 50-PMP-419B	
										1 MFR	>> 50-LE-419	
P-50-491	50E02 50E05	1"	3	#10	XHHW-2	1	#10	XHHW-2	FR:		50-VCP-419	P-50-541
									TO:		WIREWAY @ STAND NO. 4	
										3 #10	>> POWER: 50-VCP-419	
P-50-500	51E05 ESC08 ESC09	2"	6	#12	XHHW-2	2	#12	XHHW-2	FR:		PB-01	
									TO:		MCC-E VIA MH-E05	
										3 #12	>> POWER: 50-EDM-413	P-50-431
										3 #12	>> POWER: 50-EDM-414	P-50-441
P-50-501	51E05 ESC08 ESC09	2"	6	#12	XHHW-2	2	#12	XHHW-2	FR:		PB-01	
									TO:		MCC-F VIA MH-E05	
										3 #12	>> POWER: 50-EDM-415	P-50-451
										3 #12	>> POWER: 50-EDM-416	P-50-461
P-50-510	50E05	2"	3	#8	XHHW-2	1	#10	XHHW-2	FR:		WIREWAY @ STAND NO. 1	P-50-560
									TO:		MH-E10	
										3 #8	>> POWER: 50-PMP-423	P-50-291
P-50-511	50E05	2"	3 3	#4 #12	XHHW-2 XHHW-2	1 1	#6 #12	XHHW-2 XHHW-2	FR:		WIREWAY @ STAND NO. 1	P-50-563
									TO:		MH-E10	
										3 #12	>> POWER: 50-VCP-422	P-50-221
										3 #4	>> POWER: 50-BLO-401	P-50-310
P-50-512	50E05 ESC08 ESC09 50E05 51E05	2"	9	#12	XHHW-2	3	#12	XHHW-2	FR:		WIREWAY @ STAND NO. 1	
									TO:		MCC-E VIA MH-E10, MH-E05	
										3 #12	>> POWER: 50-EDR-421	P-50-211
										3 #12	>> POWER: 50-EDR-424	P-50-241
										3 #12	>> POWER: 50-EDR-404	P-50-341
P-50-520	50E05 ESC05	2"	3	#8	XHHW-2	1	#10	XHHW-2	FR:		WIREWAY @ STAND NO. 2	P-50-561
									TO:		MH-E10	
										3 #8	>> POWER: 50-PMP-427	P-50-292
P-50-521	50E05 ESC08	2"	3 3	#4 #12	XHHW-2 XHHW-2	1 1	#6 #12	XHHW-2 XHHW-2	FR:		WIREWAY @ STAND NO. 2	P-50-561
									TO:		MH-E10	
										3 #4	>> POWER: 50-BLOW-402	P-50-320
										3 #12	>> POWER: 50-GRI-426	P-50-260
P-50-522	50E05 ESC08	2"	3	#12	XHHW-2	1	#12	XHHW-2	FR:		WIREWAY @ STAND NO. 2	P-50-564
									TO:		MH-E10	
										3 #12	>> POWER: 50-EDR-407	P-50-371
P-50-523	50E05 ESC08 ESC09 51E05	2"	9	#12	XHHW-2	3	#12	XHHW-2	FR:		WIREWAY @ STAND NO. 2	
									TO:		MCC-F VIA MH-E10, MH-E05	
										3 #12	>> POWER: 50-EDR-428	P-50-281
										3 #12	>> POWER: 50-EDR-425	P-50-251
										3 #12	>> POWER: 50-EDR-405	P-50-351
P-50-530	50E05	2"	3	#10	XHHW-2	1	#10	XHHW-2	FR:		WIREWAY @ STAND NO. 3	P-50-560
									TO:		MH-E10	
										3 #10	>> POWER: 50-PMP-121	P-50-111
P-50-531	ESC08	0.75"	9	#12	XHHW-2	1	#12	XHHW-2	FR:		WIREWAY @ STAND NO. 3	P-50-562
									TO:		MH-E10	
										3 #12	>> POWER: 50-EDR-128	P-50-181
										3 #12	>> POWER: 50-EAM-124	P-50-141
										3 #12	>> POWER: 50-EAM-127	P-50-171
P-50-532	50E05 ESC08 ESC09 51E05	2"	3 3	#4 #10	XHHW-2 XHHW-2	1 1	#6 #12	XHHW-2 XHHW-2	FR:		WIREWAY @ STAND NO. 3	
									TO:		MCC-F VIA MH-E10, MH-E05	
										3 #4	>> POWER: 50-BLO-403	P-50-330
										3 #10	>> POWER: 50-PMP-122	P-50-121
P-50-533	50E05 ESC08 ESC09 51E05	2"	9	#12	XHHW-2	3	#12	XHHW-2	FR:		WIREWAY @ STAND NO. 3	
									TO:		MCC-F VIA MH-E10, MH-E05	
										3 #12	>> POWER: 50-EDR-408	P-50-381
										3 #12	>> POWER: 50-EDR-406	P-50-361
										3 #12	>> POWER: 50-EAM-127	P-50-171
P-50-540	50E05 ESC08	2"	3	#10	XHHW-2	1	#10	XHHW-2	FR:		WIREWAY @ STAND NO. 4	P-50-565
									TO:		MH-E10	
										3 #10	>> POWER: 50-PMP-123	P-50-131

CONDUIT SCHEDULE AREA 50

9/3/13

LOS OSOS WATER RECYCLING FACILITY

SLUDGE STORAGE TANKS

CONDUIT			CONDUCTORS			GROUND						
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION			CONNECTING SEGMENTS
P-50-541	50E05 ESC08 ESC09 51E05	2"	3 6	#10 #12	XHHW-2 XHHW-2	3	#10	XHHW-2	FR:		WIREWAY @ STAND NO. 4	
									TO:		MCC-F VIA MH-E10, MH-E05	
										3 #12	>> POWER: 50-EDR-129	P-50-191
										3 #12	>> POWER: 50-EAM-125	P-50-151
										3 #10	>> POWER: 50-VCP-419	P-50-491
P-50-550	50E05	2"	6	#12	XHHW-2	2	#12	XHHW-2	FR:		WIREWAY @ STAND NO. 5	P-50-562
									TO:		MH-E10	
										3 #12	>> POWER: 50-EDR-411	P-50-411
										3 #12	>> POWER: 50-EDR-417	P-50-471
P-50-551	50E05 ESC08 ESC09 51E05	2"	6	#12	XHHW-2	2	#12	XHHW-2	FR:		WIREWAY @ STAND NO. 5	
									TO:		MCC-F VIA MH-E10, MH-E05	
										3 #12	>> POWER: 50-EDR-412	P-50-421
										3 #12	>> POWER: 50-EDR-418	P-50-481
P-50-560	ESC08 ESC09 51E05	2"	3 3	#8 #10	XHHW-2 XHHW-2	1 1	#10 #12	XHHW-2 XHHW-2	FR:		MH-E10	
									TO:		MCC-E VIA MH-E05	
										3 #8	>> POWER: 50-PMP-423	P-50-510
										3 #10	>> POWER: 50-PMP-121	P-50-530
P-50-561	ESC08 ESC09 51E05	2"	3 3	#4 #8	XHHW-2 XHHW-2	1 1	#10 #12	XHHW-2 XHHW-2	FR:		MH-E10	
									TO:		MCC-F VIA MH-E05	
										3 #8	>> POWER: 50-PMP-427	P-50-520
										3 #4	>> POWER: 50-BLOW-402	P-50-521
P-50-562	ESC08 ESC09 51E05	2"	9	#12	XHHW-2	1	#12	XHHW-2	FR:		MH-E10	
									TO:		MCC-E VIA MH-E05	
										3 #12	>> POWER: 50-EAM-124	P-50-531
										3 #12	>> POWER: 50-EDR-411	P-50-550
										3 #12	>> POWER: 50-EDR-417	P-50-550
P-50-563	ESC08 ESC09 51E05	2"	3 3	#4 #12	XHHW-2 XHHW-2	1	#6	XHHW-2	FR:		MH-E10	
									TO:		MCC-E VIA MH-E05	
										3 #12	>> POWER: 50-VCP-422	P-50-511
										3 #4	>> POWER: 50-BLO-401	P-50-511
P-50-564	ESC08 ESC09 51E05	2"	6	#12	XHHW-2	3	#12	XHHW-2	FR:		MH-E10	
									TO:		MCC-E VIA MH-E05	
										3 #12	>> POWER: 50-EDR-407	P-50-522
										3 #12	>> POWER: 50-VCP-422	P-50-511
P-50-565	ESC08 ESC09 51E05	2"	3 3	#10 #12	XHHW-2 XHHW-2	2	#10	XHHW-2	FR:		MH-E10	
									TO:		MCC-F VIA MH-E05	
										3 #12	>> POWER: 50-GRI-426	P-50-521
										3 #10	>> POWER: 50-PMP-123	P-50-540
S-50-001	50E05	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR:		50-FIT-425	S-50-510
									TO:		WIREWAY @ STAND NO. 1	
										1 2/CS-#16	>> SIGNAL: 50-FIT-425	
S-50-002	50E05	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR:		50-FIT-429	S-50-510
									TO:		WIREWAY @ STAND NO. 1	
										1 2/CS-#16	>> SIGNAL: 50-FIT-429	
S-50-003	50E05	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR:		50-FIT-126	S-50-520
									TO:		WIREWAY @ STAND NO. 2	
										1 2/CS-#16	>> SIGNAL: 50-FIT-126	
S-50-004	50E05	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR:		50-FIT-125	S-50-520
									TO:		WIREWAY @ STAND NO. 2	
										1 2/CS-#16	>> SIGNAL: 50-FIT-125	
S-50-005	50E05	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR:		50-FIT-124	S-50-520
									TO:		WIREWAY @ STAND NO. 2	
										1 2/CS-#16	>> SIGNAL: 50-FIT-124	
S-50-006	50E05	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR:		50-FIT-127	S-50-520
									TO:		WIREWAY @ STAND NO. 2	
										1 2/CS-#16	>> SIGNAL: 50-FIT-127	
S-50-007	50E05	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR:		50-FIT-309	S-50-540
									TO:		WIREWAY @ STAND NO. 4	
										1 2/CS-#16	>> SIGNAL: 50-FIT-309	
S-50-124	50E02	1"	1	MFR	CABLE	1	#14	XHHW-2	FR:		50-FE-124	
									TO:		50-FIT-124	
										1 MFR	>> SIGNAL: 50-FIT-124	
S-50-125	50E02	1"	1	MFR	CABLE	1	#14	XHHW-2	FR:		50-FE-125	
									TO:		50-FIT-125	
										1 MFR	>> SIGNAL: 50-FIT-125	

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
SLUDGE STORAGE TANKS
CONDUIT SCHEDULE- VI

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 50E11
SHEET NO. 360 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1150E11.dgn

Plot Date: 16-SEP-2013 5:33:13 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

CONDUIT SCHEDULE AREA 50

9/3/13

LOS OSOS WATER RECYCLING FACILITY

SLUDGE STORAGE TANKS

CONDUIT			CONDUCTORS			GROUND			
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION / CONNECTING SEGMENTS
S-50-126	50E02	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 50-FE-126 TO: 50-FIT-126 1 MFR >> SIGNAL: 50-FIT-126
S-50-127	50E02 50E03 50E05	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 50-FE-127 TO: 50-FIT-127 1 MFR >> SIGNAL: 50-FIT-127
S-50-140	50E02 50E03 50E05	1"	2	2/CS-#16		1	#14	XHHW-2	FR: 50-EAM-124 S-50-530 TO: WIREWAY @ STAND NO. 3 2 2/CS-#16 >> SIGNAL: 50-EAM-124
S-50-150	50E02 50E03 50E05	1"	2	2/CS-#16		1	#14	XHHW-2	FR: 50-EAM-125 S-50-540 TO: WIREWAY @ STAND NO. 4 2 2/CS-#16 >> SIGNAL: 50-EAM-125
S-50-170	50E02 50E03 50E05	1"	2	2/CS-#16		1	#14	XHHW-2	FR: 50-EAM-127 S-50-520 TO: WIREWAY @ STAND NO. 2 2 2/CS-#16 >> SIGNAL: 50-EAM-127
S-50-250	50E02	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 50-FE-425 TO: 50-FIT-425 1 MFR >> SIGNAL: 50-FIT-425
S-50-290	50E02	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 50-FE-429 TO: 50-FIT-429 1 MFR >> SIGNAL: 50-FIT-429
S-50-410	50E03 50E05	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 50-PDIT-411 S-50-550 TO: WIREWAY @ STAND NO. 5 1 2/CS-#16 >> SIGNAL: 50-PDIT-411
S-50-420	50E03 50E05	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 50-PDIT-412 S-50-550 TO: WIREWAY @ STAND NO. 5 1 2/CS-#16 >> SIGNAL: 50-PDIT-412
S-50-423	50E02	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 50-TE-423A TO: WIREWAY @ STAND NO. 1 1 MFR >> SIGNAL: 50-TSH-423A
S-50-427	50E02	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 50-TE-427A TO: WIREWAY @ STAND NO. 2 1 MFR >> SIGNAL: 50-TSH-427A
S-50-430		0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 50-EDM-413 S-50-431 TO: JUNCTION BOX 1 2/CS-#16 >> SIGNAL: 50-EDM-413
S-50-431		0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: JUNCTION BOX S-50-500 TO: PB-02 1 2/CS-#16 >> SIGNAL: 50-EDM-413 S-50-430
S-50-440		0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 50-EDM-414 S-50-441 TO: JUNCTION BOX 1 2/CS-#16 >> SIGNAL: 50-EDM-414
S-50-441		0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: JUNCTION BOX S-50-500 TO: PB-02 1 2/CS-#16 >> SIGNAL: 50-EDM-414 S-50-440
S-50-450		0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 50-EDM-415 S-50-451 TO: JUNCTION BOX 1 2/CS-#16 >> SIGNAL: 50-EDM-415
S-50-451		0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: JUNCTION BOX S-50-500 TO: PB-02 1 2/CS-#16 >> SIGNAL: 50-EDM-415 S-50-450
S-50-460		0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 50-EDM-416 S-50-461 TO: JUNCTION BOX 1 2/CS-#16 >> SIGNAL: 50-EDM-416
S-50-461		0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: JUNCTION BOX S-50-500 TO: PB-02 1 2/CS-#16 >> SIGNAL: 50-EDM-416 S-50-460
S-50-490	50E03	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 50-FE-309 TO: 50-FIT-309 1 MFR >> SIGNAL: 50-FIT-309

CONDUIT SCHEDULE AREA 50

9/3/13

LOS OSOS WATER RECYCLING FACILITY

SLUDGE STORAGE TANKS

CONDUIT			CONDUCTORS			GROUND			
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION / CONNECTING SEGMENTS
S-50-500	50E01 ESC03 ESC08 ESC09	2"	4	2/CS-#16		1	#14	XHHW-2	FR: PB-02 TO: PCM-2 1 2/CS-#16 >> SIGNAL: 50-EDM-413 S-50-431 1 2/CS-#16 >> SIGNAL: 50-EDM-414 S-50-441 1 2/CS-#16 >> SIGNAL: 50-EDM-415 S-50-451 1 2/CS-#16 >> SIGNAL: 50-EDM-416 S-50-461
S-50-510	50E05	0.75"	2	2/CS-#16		1	#14	XHHW-2	FR: WIREWAY @ STAND NO. 1 S-50-560 TO: HH-S10 1 2/CS-#16 >> SIGNAL: 50-FIT-425 S-50-001 1 2/CS-#16 >> SIGNAL: 50-FIT-429 S-50-002
S-50-520	50E05	1.5"	6	2/CS-#16		1	#14	XHHW-2	FR: WIREWAY @ STAND NO. 2 S-50-560 TO: HH-S10 1 2/CS-#16 >> SIGNAL: 50-FIT-126 S-50-003 1 2/CS-#16 >> SIGNAL: 50-FIT-125 S-50-004 1 2/CS-#16 >> SIGNAL: 50-FIT-124 S-50-005 1 2/CS-#16 >> SIGNAL: 50-FIT-127 S-50-006 2 2/CS-#16 >> SIGNAL: 50-EAM-127 S-50-170
S-50-530	50E05 ESC08	2"	2	2/CS-#16		1	#14	XHHW-2	FR: WIREWAY @ STAND NO. 3 S-50-560 TO: HH-S10 2 2/CS-#16 >> SIGNAL: 50-EAM-124 S-50-140
S-50-540	50E05	2"	3	2/CS-#16		1	#14	XHHW-2	FR: WIREWAY @ STAND NO. 4 S-50-560 TO: HH-S10 2 2/CS-#16 >> SIGNAL: 50-EAM-125 S-50-150 1 2/CS-#16 >> SIGNAL: 50-FIT-309 S-50-007
S-50-550	50E05 ESC08	2"	2	2/CS-#16		1	#14	XHHW-2	FR: WIREWAY @ STAND NO. 5 S-50-560 TO: HH-S10 1 2/CS-#16 >> SIGNAL: 50-PDIT-411 S-50-410 1 2/CS-#16 >> SIGNAL: 50-PDIT-412 S-50-420
S-50-560	ESC09 ESC08 51E06	2"	15	2/CS-#16		1	#14	XHHW-2	FR: HH-S10 TO: PCM-2 VIA MH-S05 1 2/CS-#16 >> SIGNAL: 50-FIT-425 S-50-510 1 2/CS-#16 >> SIGNAL: 50-FIT-429 S-50-510 1 2/CS-#16 >> SIGNAL: 50-FIT-126 S-50-520 1 2/CS-#16 >> SIGNAL: 50-FIT-125 S-50-520 1 2/CS-#16 >> SIGNAL: 50-FIT-124 S-50-520 1 2/CS-#16 >> SIGNAL: 50-FIT-127 S-50-520 2 2/CS-#16 >> SIGNAL: 50-EAM-127 S-50-520 2 2/CS-#16 >> SIGNAL: 50-EAM-124 S-50-530 2 2/CS-#16 >> SIGNAL: 50-EAM-125 S-50-540 1 2/CS-#16 >> SIGNAL: 50-FIT-309 S-50-540 1 2/CS-#16 >> SIGNAL: 50-PDIT-411 S-50-550 1 2/CS-#16 >> SIGNAL: 50-PDIT-412 S-50-550
X-50-500	ESC09 ESC08 51E06	2"	1	PULL	ROPE				FR: PB-01 TO: STUP UP AT CONTROL ROOM VIA MH-E05 1 PULL >> SPARE CONTROL
X-50-510	50E05	2"	1	PULL	ROPE				FR: WIREWAY @ STAND NO. 1 TO: MH-E05 VIA MH-E10 1 PULL >> POWER/CONTROL, SPARE
X-50-511	50E05	2"	1	PULL	ROPE				FR: WIREWAY @ STAND NO. 1 TO: HH-S10 1 PULL >> SIGNAL, SPARE
X-50-515	50E05	2"	1	PULL	ROPE				FR: WIREWAY @ STAND NO. 1 TO: WIREWAY @ STAND NO. 2 1 PULL >> POWER/CONTROL, SPARE
X-50-516	50E05	2"	1	PULL	ROPE				FR: WIREWAY @ STAND NO. 1 TO: WIREWAY @ STAND NO. 2 1 PULL >> SIGNAL, SPARE
X-50-520	50E05 ESC08	2"	1	PULL	ROPE				FR: WIREWAY @ STAND NO. 2 TO: MH-E05 VIA MH-E10 1 PULL >> POWER/CONTROL, SPARE
X-50-521	50E05 ESC08	2"	1	PULL	ROPE				FR: WIREWAY @ STAND NO. 2 TO: HH-S10 1 PULL >> SIGNAL, SPARE
X-50-525	50E05	2"	1	PULL	ROPE				FR: WIREWAY @ STAND NO. 2 TO: WIREWAY @ STAND NO. 3 1 PULL >> POWER/CONTROL, SPARE

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER · JAMES R. VARLEY · No. 12679 · ELECTRICAL · STATE OF CALIFORNIA
9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
SLUDGE STORAGE TANKS
CONDUIT SCHEDULE- VII

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 50E12
SHEET NO. 361 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1150E12.dgn

Plot Date: 16-SEP-2013 5:33:32 PM
User: EJohnson
PlotScale: 2:1
Carollo_Std_Pen_v0905.pen
DesignScript:
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

CONDUIT SCHEDULE AREA 50

9/3/13

LOS OSOS WATER RECYCLING FACILITY

SLUDGE STORAGE TANKS

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
S-50-126	50E02	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 50-FE-126 TO: 50-FIT-126 1 MFR >> SIGNAL: 50-FIT-126	
S-50-127	50E02 50E03 50E05	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 50-FE-127 TO: 50-FIT-127 1 MFR >> SIGNAL: 50-FIT-127	
S-50-140	50E02 50E03 50E05	1"	2	2/CS-#16		1	#14	XHHW-2	FR: 50-EAM-124 TO: WIREWAY @ STAND NO. 3 2 2/CS-#16 >> SIGNAL: 50-EAM-124	S-50-530
S-50-150	50E02 50E03 50E05	1"	2	2/CS-#16		1	#14	XHHW-2	FR: 50-EAM-125 TO: WIREWAY @ STAND NO. 4 2 2/CS-#16 >> SIGNAL: 50-EAM-125	S-50-540
S-50-170	50E02 50E03 50E05	1"	2	2/CS-#16		1	#14	XHHW-2	FR: 50-EAM-127 TO: WIREWAY @ STAND NO. 2 2 2/CS-#16 >> SIGNAL: 50-EAM-127	S-50-520
S-50-250	50E02	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 50-FE-425 TO: 50-FIT-425 1 MFR >> SIGNAL: 50-FIT-425	
S-50-290	50E02	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 50-FE-429 TO: 50-FIT-429 1 MFR >> SIGNAL: 50-FIT-429	
S-50-410	50E03 50E05	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 50-PDIT-411 TO: WIREWAY @ STAND NO. 5 1 2/CS-#16 >> SIGNAL: 50-PDIT-411	S-50-550
S-50-420	50E03 50E05	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 50-PDIT-412 TO: WIREWAY @ STAND NO. 5 1 2/CS-#16 >> SIGNAL: 50-PDIT-412	S-50-550
S-50-423	50E02	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 50-TE-423A TO: WIREWAY @ STAND NO. 1 1 MFR >> SIGNAL: 50-TSH-423A	
S-50-427	50E02	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 50-TE-427A TO: WIREWAY @ STAND NO. 2 1 MFR >> SIGNAL: 50-TSH-427A	
S-50-430		0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 50-EDM-413 TO: JUNCTION BOX 1 2/CS-#16 >> SIGNAL: 50-EDM-413	S-50-431
S-50-431		0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: JUNCTION BOX TO: PB-02 1 2/CS-#16 >> SIGNAL: 50-EDM-413	S-50-500 S-50-430
S-50-440		0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 50-EDM-414 TO: JUNCTION BOX 1 2/CS-#16 >> SIGNAL: 50-EDM-414	S-50-441
S-50-441		0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: JUNCTION BOX TO: PB-02 1 2/CS-#16 >> SIGNAL: 50-EDM-414	S-50-500 S-50-440
S-50-450		0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 50-EDM-415 TO: JUNCTION BOX 1 2/CS-#16 >> SIGNAL: 50-EDM-415	S-50-451
S-50-451		0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: JUNCTION BOX TO: PB-02 1 2/CS-#16 >> SIGNAL: 50-EDM-415	S-50-500 S-50-450
S-50-460		0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 50-EDM-416 TO: JUNCTION BOX 1 2/CS-#16 >> SIGNAL: 50-EDM-416	S-50-461
S-50-461		0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: JUNCTION BOX TO: PB-02 1 2/CS-#16 >> SIGNAL: 50-EDM-416	S-50-500 S-50-460
S-50-490	50E03	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 50-FE-309 TO: 50-FIT-309 1 MFR >> SIGNAL: 50-FIT-309	

CONDUIT SCHEDULE AREA 50

9/3/13

LOS OSOS WATER RECYCLING FACILITY

SLUDGE STORAGE TANKS

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
S-50-500	50E01 ESC03 ESC08 ESC09	2"	4	2/CS-#16		1	#14	XHHW-2	FR: PB-02 TO: PCM-2 1 2/CS-#16 >> SIGNAL: 50-EDM-413 1 2/CS-#16 >> SIGNAL: 50-EDM-414 1 2/CS-#16 >> SIGNAL: 50-EDM-415 1 2/CS-#16 >> SIGNAL: 50-EDM-416	 S-50-431 S-50-441 S-50-451 S-50-461
S-50-510	50E05	0.75"	2	2/CS-#16		1	#14	XHHW-2	FR: WIREWAY @ STAND NO. 1 TO: HH-S10 1 2/CS-#16 >> SIGNAL: 50-FIT-425 1 2/CS-#16 >> SIGNAL: 50-FIT-429	S-50-560 S-50-001 S-50-002
S-50-520	50E05	1.5"	6	2/CS-#16		1	#14	XHHW-2	FR: WIREWAY @ STAND NO. 2 TO: HH-S10 1 2/CS-#16 >> SIGNAL: 50-FIT-126 1 2/CS-#16 >> SIGNAL: 50-FIT-125 1 2/CS-#16 >> SIGNAL: 50-FIT-124 1 2/CS-#16 >> SIGNAL: 50-FIT-127 2 2/CS-#16 >> SIGNAL: 50-EAM-127	S-50-560 S-50-003 S-50-004 S-50-005 S-50-006 S-50-170
S-50-530	50E05 ESC08	2"	2	2/CS-#16		1	#14	XHHW-2	FR: WIREWAY @ STAND NO. 3 TO: HH-S10 2 2/CS-#16 >> SIGNAL: 50-EAM-124	S-50-560 S-50-140
S-50-540	50E05	2"	3	2/CS-#16		1	#14	XHHW-2	FR: WIREWAY @ STAND NO. 4 TO: HH-S10 2 2/CS-#16 >> SIGNAL: 50-EAM-125 1 2/CS-#16 >> SIGNAL: 50-FIT-309	S-50-560 S-50-150 S-50-007
S-50-550	50E05 ESC08	2"	2	2/CS-#16		1	#14	XHHW-2	FR: WIREWAY @ STAND NO. 5 TO: HH-S10 1 2/CS-#16 >> SIGNAL: 50-PDIT-411 1 2/CS-#16 >> SIGNAL: 50-PDIT-412	S-50-560 S-50-410 S-50-420
S-50-560	ESC09 ESC08 51E06	2"	15	2/CS-#16		1	#14	XHHW-2	FR: HH-S10 TO: PCM-2 VIA MH-S05 1 2/CS-#16 >> SIGNAL: 50-FIT-425 1 2/CS-#16 >> SIGNAL: 50-FIT-429 1 2/CS-#16 >> SIGNAL: 50-FIT-126 1 2/CS-#16 >> SIGNAL: 50-FIT-125 1 2/CS-#16 >> SIGNAL: 50-FIT-124 1 2/CS-#16 >> SIGNAL: 50-FIT-127 2 2/CS-#16 >> SIGNAL: 50-EAM-127 2 2/CS-#16 >> SIGNAL: 50-EAM-124 2 2/CS-#16 >> SIGNAL: 50-EAM-125 1 2/CS-#16 >> SIGNAL: 50-FIT-309 1 2/CS-#16 >> SIGNAL: 50-PDIT-411 1 2/CS-#16 >> SIGNAL: 50-PDIT-412	 S-50-510 S-50-510 S-50-520 S-50-520 S-50-520 S-50-520 S-50-520 S-50-530 S-50-540 S-50-540 S-50-550 S-50-550
X-50-500	ESC09 ESC08 51E06	2"	1	PULL	ROPE				FR: PB-01 TO: STUP UP AT CONTROL ROOM VIA MH-E05 1 PULL >> SPARE CONTROL	
X-50-510	50E05	2"	1	PULL	ROPE				FR: WIREWAY @ STAND NO. 1 TO: MH-E05 VIA MH-E10 1 PULL >> POWER/CONTROL, SPARE	
X-50-511	50E05	2"	1	PULL	ROPE				FR: WIREWAY @ STAND NO. 1 TO: HH-S10 1 PULL >> SIGNAL, SPARE	
X-50-515	50E05	2"	1	PULL	ROPE				FR: WIREWAY @ STAND NO. 1 TO: WIREWAY @ STAND NO. 2 1 PULL >> POWER/CONTROL, SPARE	
X-50-516	50E05	2"	1	PULL	ROPE				FR: WIREWAY @ STAND NO. 1 TO: WIREWAY @ STAND NO. 2 1 PULL >> SIGNAL, SPARE	
X-50-520	50E05 ESC08	2"	1	PULL	ROPE				FR: WIREWAY @ STAND NO. 2 TO: MH-E05 VIA MH-E10 1 PULL >> POWER/CONTROL, SPARE	
X-50-521	50E05 ESC08	2"	1	PULL	ROPE				FR: WIREWAY @ STAND NO. 2 TO: HH-S10 1 PULL >> SIGNAL, SPARE	
X-50-525	50E05	2"	1	PULL	ROPE				FR: WIREWAY @ STAND NO. 2 TO: WIREWAY @ STAND NO. 3 1 PULL >> POWER/CONTROL, SPARE	

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER · JAMES R. VARLEY · No. 12679 · ELECTRICAL · STATE OF CALIFORNIA
9/16/2013

carollo

SAN LUIS OBISPO COUNTY

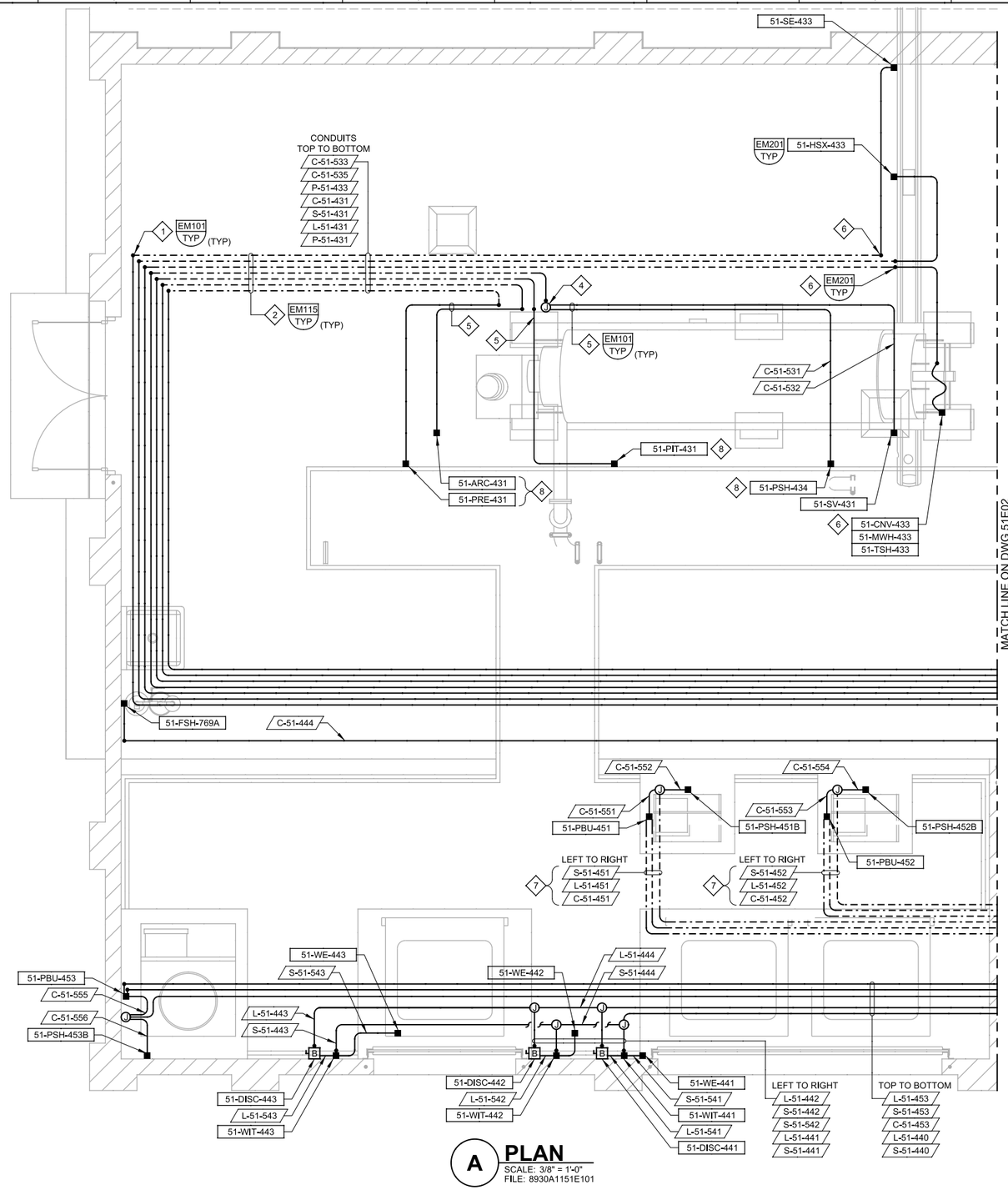
SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
SLUDGE STORAGE TANKS
CONDUIT SCHEDULE- VIII

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 50E13
SHEET NO. 362 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1150E13.dgn

Plot Date: 16-SEP-2013 5:33:52 PM
User: EJohnson
PlotScale: 2:1
Carollo_Std_Pen_v0905.pen
DesignScript:
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson



KEY NOTES:

1. CONDUIT ROUTED ALONG WALL.
2. CONDUITS EMBEDDED IN SLAB.
3. CONDUIT ROUTED ALONG SLAB.
4. STUB UP CONDUITS AT SUPPORT COLUMN OF SCREW COMPRESSOR.
5. CONDUITS ROUTED ALONG FLOOR OR SCREW COMPRESSOR TO INSTRUMENT.
6. STUB UP CONDUITS AT SUPPORT FRAME OF CONVEYOR. ROUTE CONDUITS ALONG CONVEYOR TO INSTRUMENTS.
7. REFER TO DRAWING 51E05 & 51E06 FOR CONDUITS UNDERGROUND AND EMBEDDED IN SLAB FOR ELECTRICAL AND CONTROL ROOM.
8. LOCATED ON SKID FURNISHED WITH VENDOR EQUIPMENT.

A PLAN
SCALE: 3/8" = 1'-0"
FILE: 8930A1151E101

REV	DATE	BY	DESCRIPTION

DESIGNED IRV
DRAWN AD
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER · JAMES R. VARLEY · No. 12879 · ELECTRICAL · STATE OF CALIFORNIA · 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

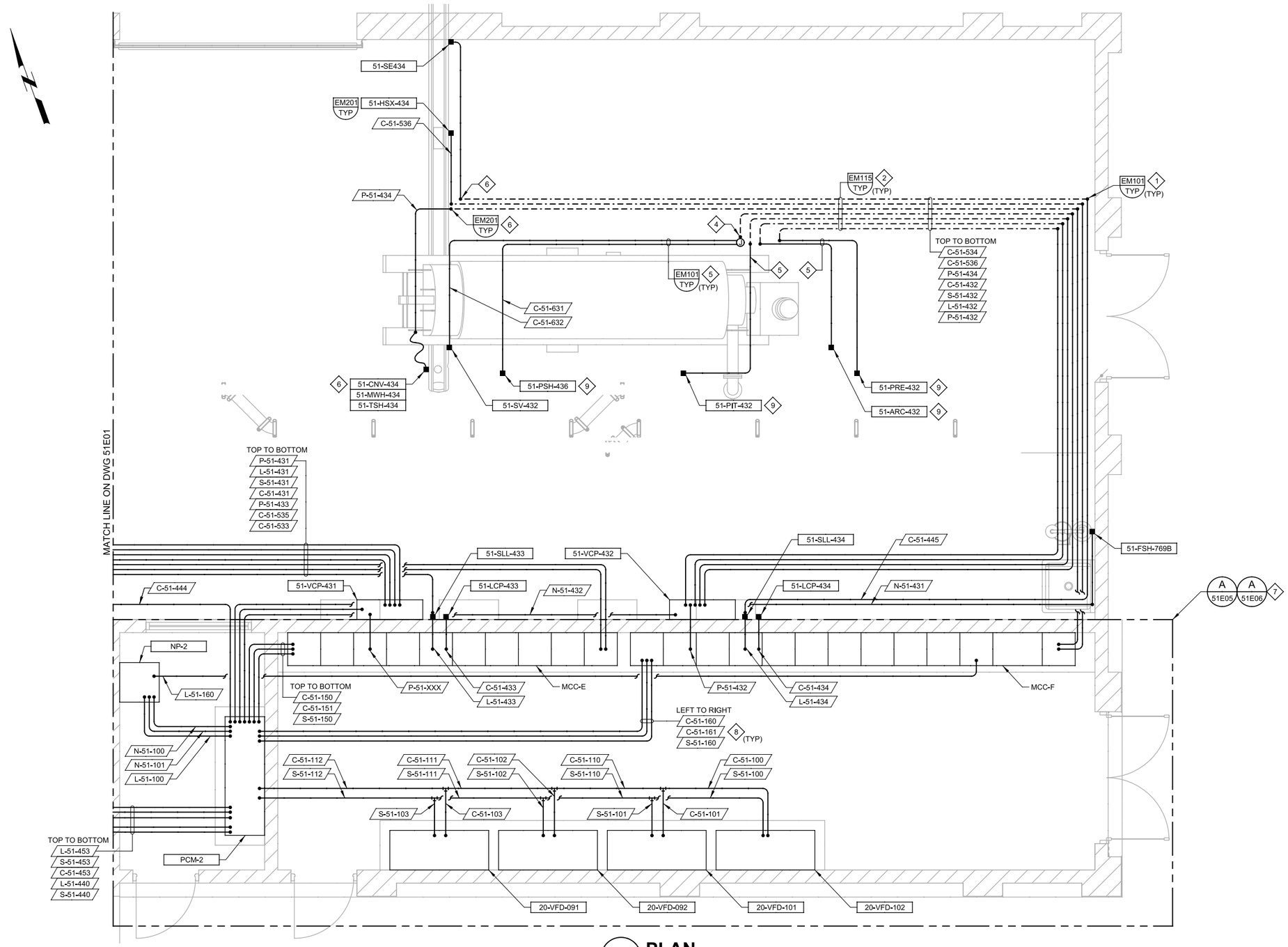
SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
DEWATERING BUILDING POWER AND CONTROL PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 51E01
SHEET NO. 363 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1151E01.dgn

LAST SAVED BY: ejohnson PlotScale: 2:1 DesignScript: Carollo_Std_Pen_v0905.pen ColorTable: gshade.ctb Model: Layout1 User: EJohnson Plot Date: 16-SEP-2013 5:34:13 PM



KEY NOTES:

1. CONDUIT ROUTED ALONG WALL.
2. CONDUIT EMBEDDED IN SLAB.
3. CONDUIT ROUTED ALONG SLAB.
4. CONDUITS ROUTED ALONG FLOOR OR SCREW COMPRESSOR TO INSTRUMENT.
5. STUB UP CONDUITS AT SUPPORT COLUMN OF SCREW COMPRESSOR.
6. STUB UP CONDUITS AT SUPPORT FRAME OF CONVEYOR. ROUTE CONDUITS ALONG CONVEYOR TO INSTRUMENTS.
7. FOR CONDUITS EMBEDDED IN SLAB FOR ELECTRICAL AND CONTROL ROOM.
8. CORE DRILL PER DETAIL EM138/TYP.
9. LOCATED ON SKID FURNISHED WITH VENDOR EQUIPMENT.

A PLAN

SCALE: 3/8" = 1'-0"
FILE: 8930A1151E101

REV	DATE	BY	DESCRIPTION

DESIGNED IRV
DRAWN AD
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
DEWATERING BUILDING POWER AND CONTROL PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 51E02
SHEET NO. 364 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1151E02.dgn

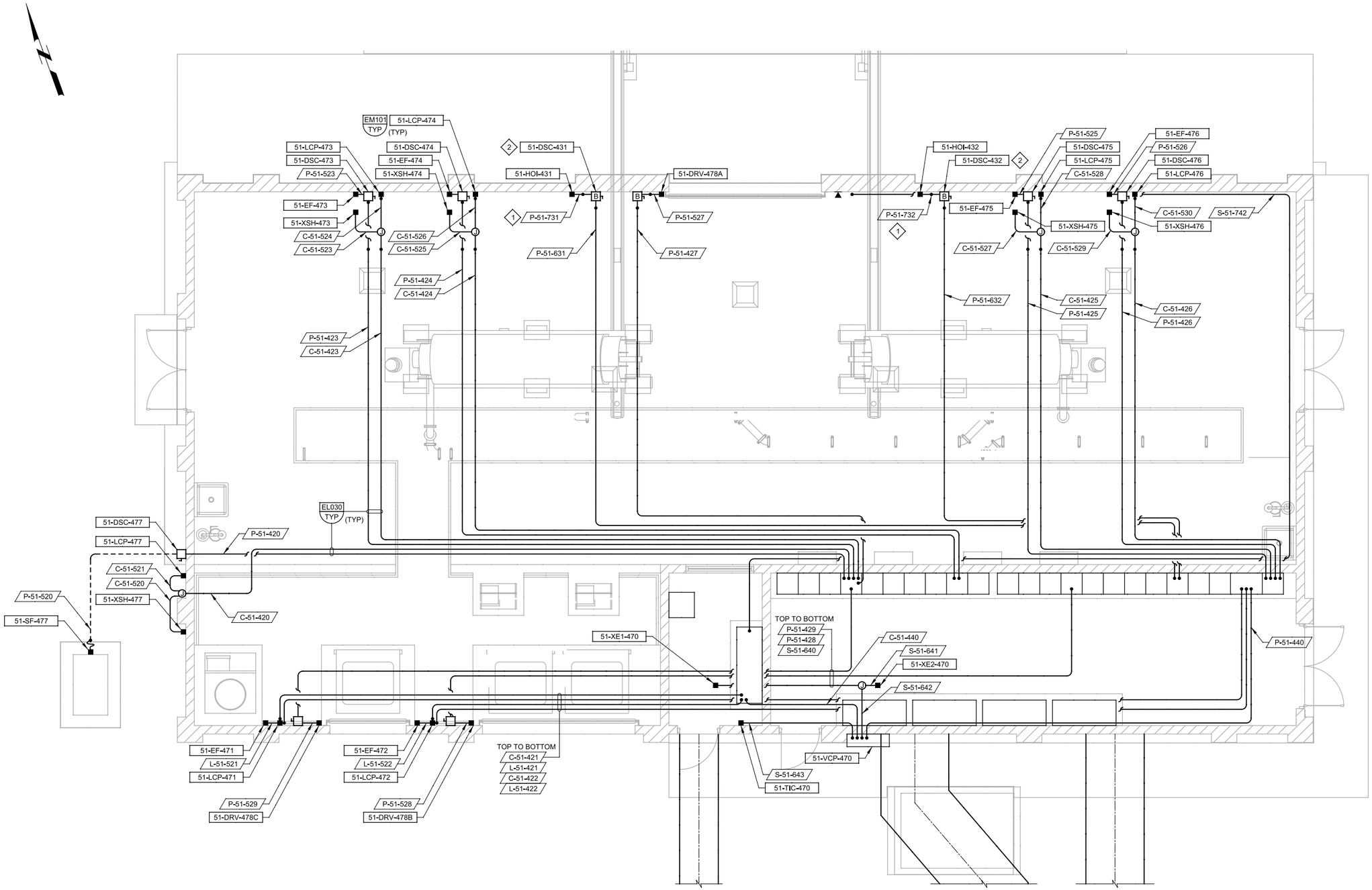
Plot Date: 16-SEP-2013 5:34:32 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

GENERAL NOTES:

1. FOR STRUCTURAL GENERAL NOTES AND EARTHWORK DETAILS SEE DRAWING 00G10 & 00G11.

KEY NOTES:

1. CONNECT TO JUNCTION MONORAIL HOIST AT EL 15' (AFF) APPROXIMATE.
2. FURNISHED WITH EQUIPMENT.



A **PLAN**
SCALE: 1/4" = 1'-0"
FILE: 8930A1151E102

REV	DATE	BY	DESCRIPTION

DESIGNED IRV
DRAWN AD
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER IAN R. VARLEY No. 12879 ELECTRICAL STATE OF CALIFORNIA 9/16/2013

carollo

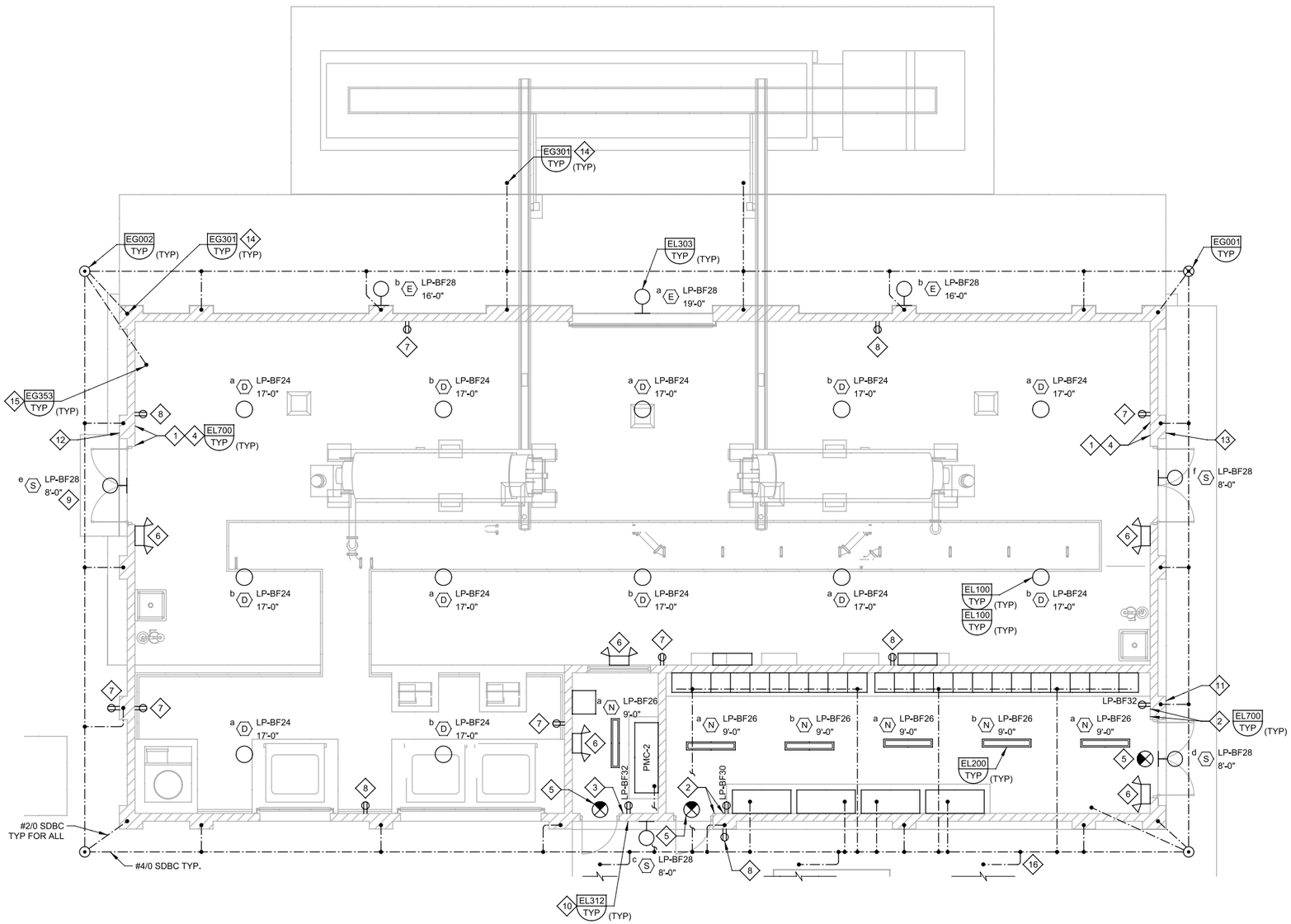
SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
DEWATERING BUILDING
HVAC POWER & CONTROL PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 51E03
SHEET NO. 365 OF 549

Plot Date: 16-SEP-2013 5:34:52 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson



A PLAN

SCALE: 3/16" = 1'-0"
FILE: 8930A1151E101

GENERAL NOTES:

1. FOR STRUCTURAL GENERAL NOTES AND EARTHWORK DETAILS SEE DRAWINGS 00G10 & 00G11.

KEY NOTES:

1. a S3 LP-BF24 b S3 LP-BF24
2. a S3 LP-BF26 b S3 LP-BF26
3. a S LP-BF26
4. a S3 LP-BF28 b S3 LP-BF28
5. G LP-BF41 8'-0"
6. F LP-BF41 8'-0"
7. DUPLEX RECEPTACLE WP, GFCI LPBF-32
8. DUPLEX RECEPTACLE WP, GFCI LPBF-30
9. REFERENCE DRAWING 06AE06 FOR FIXTURE TYPE.
10. c S LP-BF28
11. d S LP-BF28
12. e S LP-BF28
13. f S LP-BF28
14. #2 BARE COPPER.
15. BOND #4/0 BARE COPPER TO FOUNDATION REBAR.
16. EXTEND AND BOND DUCT BANK GROUNDS TO GROUND GRID PER TYPICAL DETAIL EG101.

REV	DATE	BY	DESCRIPTION

DESIGNED IRV
DRAWN AD
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — JAMES R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
DEWATERING BUILDING
LIGHTING, RECEPTACLE, & GROUNDING PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

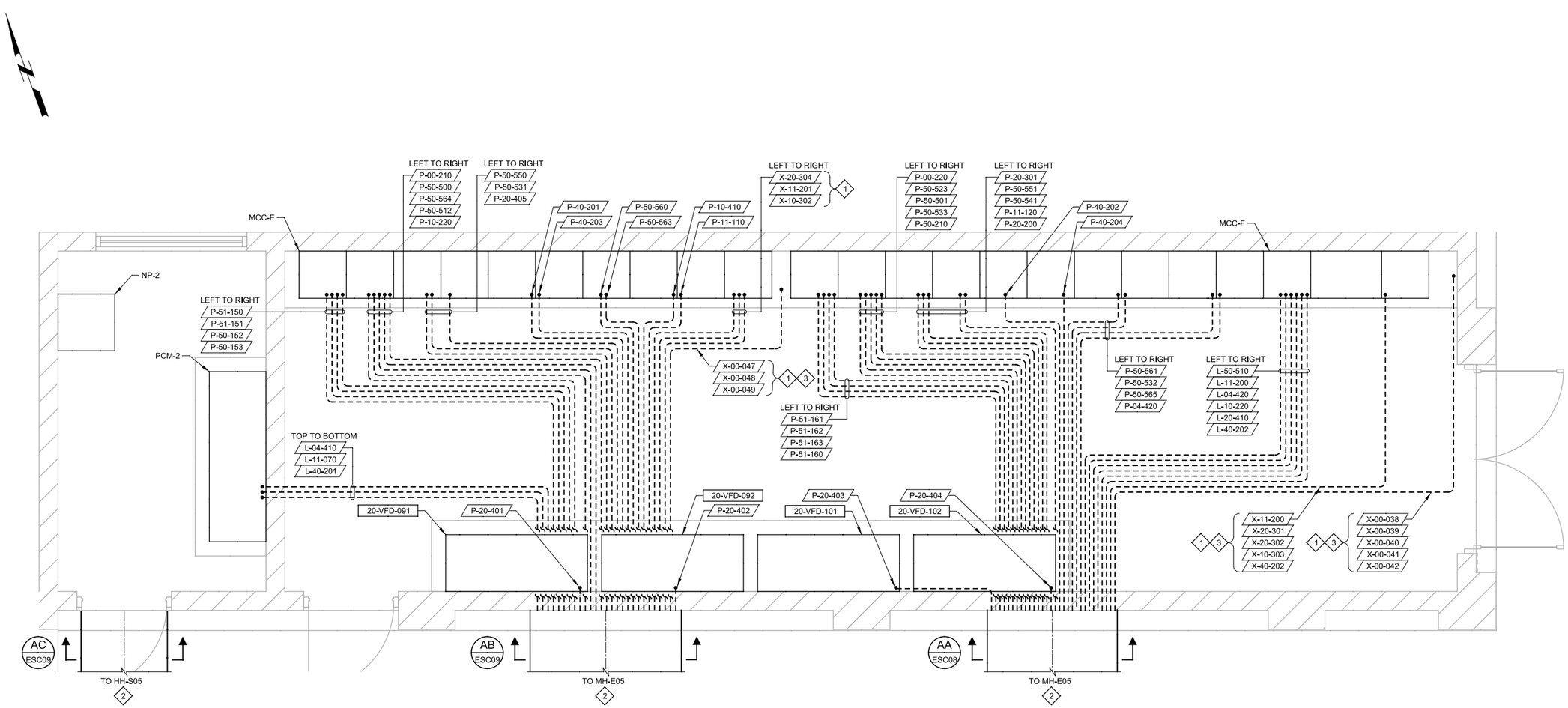
JOB NO. 8930A.11
DRAWING NO. 51E04
SHEET NO. 366 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1151E04.dgn

Plot Date: 16-SEP-2013 5:35:12 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

KEY NOTES:

1. PLUG THE CONDUIT PER DETAIL EM105/TYP.
2. REFER TO DRAWING ESC03 FOR CONTINUATION.
3. FOR CLARITY PURPOSE NOT ALL CONDUITS ARE SHOWN.



A PLAN

SCALE: 1/2"=1'-0"
FILE: 8930A110E104

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER · JAMES R. VARLEY · No. 12879 · ELECTRICAL · STATE OF CALIFORNIA · 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
DEWATERING FACILITY ELECTRICAL ROOM-UNDERGROUND POWER PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 51E05
SHEET NO. 367 OF 549

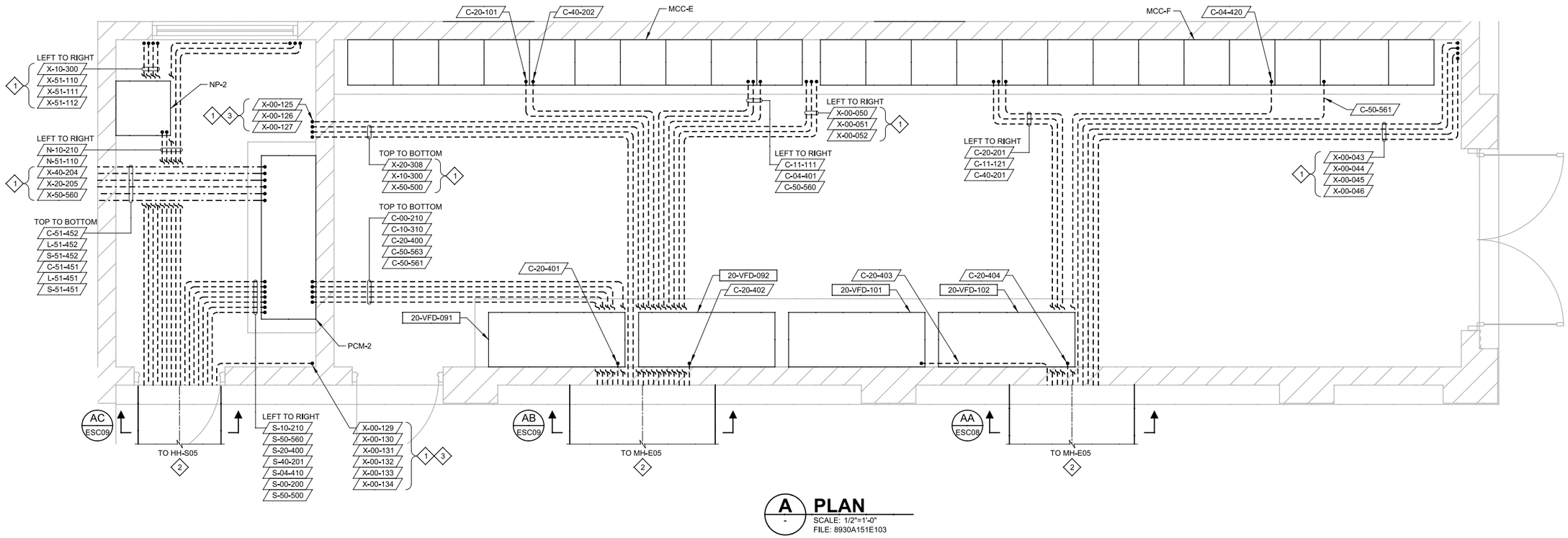
PROJECT NO. 8930A.11 FILE NAME: 8930A1151E05.dgn

Plot Date: 16-SEP-2013 5:35:32 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

Plot Date: 16-SEP-2013 5:35:52 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

KEY NOTES:

1. PLUG THE CONDUIT PER DETAIL EM105/TYP.
2. REFER TO DRAWING ESC03 FOR CONTINUATION.
3. FOR CLARITY PURPOSE NOT ALL CONDUITS ARE SHOWN.



A PLAN

SCALE: 1/2"=1'-0"
FILE: 8930A151E103

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — JAMES R. VARELA — No. 12679 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
DEWATERING FACILITY ELECTRICAL ROOM-UNDERGROUND CONTROL & SIGNAL PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 51E06
SHEET NO. 368 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1151E06.dgn

CONDUIT SCHEDULE AREA 51

9/16/13

LOS OSOS WATER RECYCLING FACILITY

DEWATERING BUILDING

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-51-100	51E02	1"	14	#14	XHHW-2	1	#14	XHHW-2	FR: 20-VFD-102 TO: CONDUIT TEE 14 #14 >> CONTROL: 20-VFD-102, 5-SPARE	C-51-110
C-51-101	51E02	1"	14	#14	XHHW-2	1	#14	XHHW-2	FR: 20-VFD-101 TO: CONDUIT TEE 14 #14 >> CONTROL: 20-VFD-101, 5-SPARE	C-51-110
C-51-102	51E02	1"	14	#14	XHHW-2	1	#14	XHHW-2	FR: 20-VFD-092 TO: CONDUIT TEE 14 #14 >> CONTROL: 20-VFD-092, 5-SPARE	C-51-111
C-51-103	51E02	1"	14	#14	XHHW-2	1	#14	XHHW-2	FR: 20-VFD-091 TO: CONDUIT TEE 14 #14 >> CONTROL: 20-VFD-091, 5-SPARE	C-51-112
C-51-110	51E02	1,5"	28	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 14 #14 >> CONTROL: 20-VFD-102, 5-SPARE 14 #14 >> CONTROL: 20-VFD-101, 5-SPARE	C-51-111 C-51-100 C-51-101
C-51-111	51E02	1.5"	42	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 14 #14 >> CONTROL: 20-VFD-092, 5-SPARE 14 #14 >> CONTROL: 20-VFD-102, 5-SPARE 14 #14 >> CONTROL: 20-VFD-101, 5-SPARE	C-51-112 C-51-102 C-51-110 C-51-110
C-51-112	51E02	1,5"	56	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: PCM-2 14 #14 >> CONTROL: 20-VFD-091, 5-SPARE 14 #14 >> CONTROL: 20-VFD-092, 5-SPARE 14 #14 >> CONTROL: 20-VFD-102, 5-SPARE 14 #14 >> CONTROL: 20-VFD-101, 5-SPARE	C-51-103 C-51-111 C-51-111 C-51-111
C-51-150	51E02	2"	90	#14	XHHW-2	1	#14	XHHW-2	FR: MCC-E TO: PCM-2 10 #14 >> CONTROL: 51-CNV-433, 2-SPARE 14 #14 >> CONTROL: 04-PMP-601, 5-SPARE 14 #14 >> CONTROL: 40-PMP-301, 7-SPARE 14 #14 >> CONTROL: 40-PMP-303, 7-SPARE 10 #14 >> CONTROL: 11-FAN-071, 3-SPARE 14 #14 >> CONTROL: 20-MIX-090, 5-SPARE 14 #14 >> CONTROL: 04-PMP-501, 5-SPARE	
C-51-151	51E02	2"	76	#14	XHHW-2	1	#14	XHHW-2	FR: MCC-E TO: PCM-2 16 #14 >> CONTROL: 50-BLO-401, 6-SPARE 16 #14 >> CONTROL: 50-PMP-121, 6-SPARE 8 #14 >> CONTROL: 51-EF-473, 4-SPARE 8 #14 >> CONTROL: 51-EF-474, 4-SPARE 10 #14 >> CONTROL: 51-SF-477, 2-SPARE 18 #14 >> CONTROL: 50-PMP-423, 7-SPARE	
C-51-160	51E02	2"	90	#14	XHHW-2	1	#14	XHHW-2	FR: MCC-F TO: PCM-2 10 #14 >> CONTROL: 51-CNV-434, 2-SPARE 14 #14 >> CONTROL: 04-PMP-602, 5-SPARE 14 #14 >> CONTROL: 40-PMP-302, 2-SPARE 14 #14 >> CONTROL: 40-PMP-304, 7-SPARE 10 #14 >> CONTROL: 11-FAN-072, 3-SPARE 14 #14 >> CONTROL: 20-MIX-100, 5-SPARE 14 #14 >> CONTROL: 04-PMP-502, 5-SPARE	
C-51-161	51E02	2,5"	98	#14	XHHW-2	1	#14	XHHW-2	FR: MCC-F TO: PCM-2 16 #14 >> CONTROL: 50-BLO-402, 6-SPARE 16 #14 >> CONTROL: 50-BLO-403, 6-SPARE 16 #14 >> CONTROL: 50-PMP-122, 6-SPARE 16 #14 >> CONTROL: 50-PMP-123, 6-SPARE 8 #14 >> CONTROL: 51-EF-475, 2-SPARE 8 #14 >> CONTROL: 51-EF-476, 2-SPARE 18 #14 >> CONTROL: 50-PMP-427, 7-SPARE	
C-51-420	51E03	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: JUNCTION BOX TO: MCC-E 4 #14 >> CONTROL: 51-XSH-477 6 #14 >> CONTROL: 51-LCP-477	C-51-520 C-51-521
C-51-421	51E03	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 51-LCP-471 TO: PCM-2 2 #14 >> CONTROL:-51-LCP-471	

CONDUIT SCHEDULE AREA 51

9/16/13

LOS OSOS WATER RECYCLING FACILITY

DEWATERING BUILDING

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-51-422	51E03	0,75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 51-LCP-472 TO: LP-BF AT MCC-F 2 #14 >> CONTROL:-51-LCP-472	
C-51-423	51E03	0,75"	6	#14	XHHW-2	1	#14	XHHW-2	FR: JUNCTION BOX TO: MCC-E 4 #14 >> CONTROL: 51-XSH-473 2 #14 >> CONTROL: 51-LCP-473	C-51-523 C-51-524
C-51-424	51E03	0,75"	6	#14	XHHW-2	1	#14	XHHW-2	FR: JUNCTION BOX TO: MCC-E 4 #14 >> CONTROL: 51-XSH-474 2 #14 >> CONTROL: 51-LCP-474	C-51-525 C-51-526
C-51-425	51E03	0,75"	6	#14	XHHW-2	1	#14	XHHW-2	FR: JUNCTION BOX TO: MCC-F 4 #14 >> CONTROL: 51-XSH-475 2 #14 >> CONTROL: 51-LCP-475	C-51-527 C-51-528
C-51-426	51E03	0,75"	6	#14	XHHW-2	1	#14	XHHW-2	FR: JUNCTION BOX TO: MCC-F 4 #14 >> CONTROL: 51-XSH-476 2 #14 >> CONTROL: 51-LCP-476	C-51-529 C-51-530
C-51-431	51E02 51E01	1"	4	#14	XHHW-2	1	#14	XHHW-2	FR: SCREW COMPRESSOR #31 CONTROL JB TO: 51-VCP-431 2 #14 >> CONTROL: 51-PSH-434 2 #14 >> CONTROL:51-SV-431	C-51-531 C-51-532
C-51-432	51E02	1"	4	#14	XHHW-2	1	#14	XHHW-2	FR: SCREW COMPRESSOR #32 CONTROL JB TO: 51-VCP-432 2 #14 >> CONTROL: 51-PSH-436 2 #14 >> CONTROL:51-SV-432	C-51-631 C-51-632
C-51-433	51E02	0,75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: 51-LCP-433 TO: MCC-E 10 #14 >> CONTROL:- 51-CNV-433 4 SPARE	
C-51-434	51E02	0,75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: 51-LCP434 TO: MCC-F 10 #14 >> CONTROL:- 51-CNV-434 4 SPARE	
C-51-440	51E03	0,75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: 51-VCP-440 TO: PCM-2 10 #14 >> CONTROL: 51-VCP-440	
C-51-444	51E01 51E02	0,75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 51-FSH-769A TO: PCM-2 2 #14 >> CONTROL: 51-FSH-769A	
C-51-445	51E02	0,75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 51-FSH-769B TO: PCM-2 2 #14 >> CONTROL: 51-FSH-769B	
C-51-451	51E01 51E06	1"	14	#14	XHHW-2	1	#14	XHHW-2	FR: JUNCTION BOX TO: PCM-2 2 #14 >> CONTROL: 51-PBU-451 12 #14 >> CONTROL: 51-PBU-451	C-51-552 C-51-551
C-51-452	51E01 51E06	1"	14	#14	XHHW-2	1	#14	XHHW-2	FR: JUNCTION BOX TO: PCM-2 2 #14 >> CONTROL: 51-PBU-452 12 #14 >> CONTROL: 51-PBU-452	C-51-554 C-51-553
C-51-453	51E01 51E02	1"	14	#14	XHHW-2	1	#14	XHHW-2	FR: JUNCTION BOX TO: PCM-2 12 #14 >> CONTROL: 51-PBU-453 2 #14 >> CONTROL: 51-PBU-453	C-51-555 C-51-556
C-51-520	51E03	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: 51-XSH-477 TO: JUNCTION BOX 4 #14 >> CONTROL: 51-XSH-477	C-51-420

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
DEWATERING BUILDING
CONDUIT SCHEDULE- I

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 51E07
SHEET NO. 369 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1151E07.dgn

Plot Date: 16-SEP-2013 5:36:10 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

CONDUIT SCHEDULE AREA 51

9/16/13

LOS OSOS WATER RECYCLING FACILITY

DEWATERING BUILDING

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-51-521	51E03	0.75"	6	#14	XHHW-2	1	#14	XHHW-2	FR: 51-LCP-477 TO: JUNCTION BOX 6 #14 >> CONTROL: 51-LCP-477	C-51-420
C-51-523	51E03	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: 51-XSH-473 TO: JUNCTION BOX 4 #14 >> CONTROL: 51-XSH-473	C-51-423
C-51-524	51E03	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 51-LCP-473 TO: JUNCTION BOX 2 #14 >> CONTROL: 51-LCP-473	C-51-423
C-51-525	51E03	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: 51-XSH-474 TO: JUNCTION BOX 4 #14 >> CONTROL: 51-XSH-474	C-51-424
C-51-526	51E03	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 51-LCP-474 TO: JUNCTION BOX 2 #14 >> CONTROL: 51-LCP-474	C-51-424
C-51-527	51E03	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: 51-XSH-475 TO: JUNCTION BOX 4 #14 >> CONTROL: 51-XSH-475	C-51-425
C-51-528	51E03	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 51-LCP-475 TO: JUNCTION BOX 2 #14 >> CONTROL: 51-LCP-475	C-51-425
C-51-529	51E03	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: 51-XSH-476 TO: JUNCTION BOX 4 #14 >> CONTROL: 51-XSH-476	C-51-426
C-51-530	51E03	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 51-LCP-426 TO: JUNCTION BOX 2 #14 >> CONTROL: 51-LCP-476	C-51-426
C-51-531	51E01	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 51-PSH-434 TO: SCREW COMPRESSOR #31 CONTROL JB 2 #14 >> CONTROL: 51-PSH-434	C-51-431
C-51-532	51E01	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 51-SV-431 TO: SCREW COMPRESSOR #31 CONTROL JB 2 #14 >> CONTROL:51-SV-431	C-51-431
C-51-533	51E01	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 51-SE-433 TO: 51-SSL-433 1 MFR >> VENDOR CABLE TO ELEMENT	
C-51-534	51E02	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 51-SE-434 TO: 51-SSL-434 1 MFR >> VENDOR CABLE TO ELEMENT	
C-51-535	51E01	1"	4	#14	XHHW-2	1	#14	XHHW-2	FR: 51-HSX-433 TO: MCC-E 4 #14 >> CONTROL: 51-HSX-433	
C-51-536	51E02	1"	4	#14	XHHW-2	1	#14	XHHW-2	FR: 51-HSX-434 TO: MCC-F 4 #14 >> CONTROL: 51-HSX-434	
C-51-551	51E01	0.75"	12	#14	XHHW-2	1	#14	XHHW-2	FR: 51-PBU-451 TO: JUNCTION BOX 12 #14 >> CONTROL: 51-PBU-451	C-51-451
C-51-552	51E01	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 51-PSH-451B TO: JUNCTION BOX 2 #14 >> CONTROL: 51-PBU-451	C-51-451
C-51-553	51E01	0.75"	12	#14	XHHW-2	1	#14	XHHW-2	FR: 51-PBU-452 TO: JUNCTION BOX 12 #14 >> CONTROL: 51-PBU-452	C-51-452
C-51-554	51E01	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 51-PSH-452B TO: JUNCTION BOX 2 #14 >> CONTROL: 51-PBU-452	C-51-452
C-51-555	51E01	0.75"	12	#14	XHHW-2	1	#14	XHHW-2	FR: 51-PBU-453 TO: JUNCTION BOX 12 #14 >> CONTROL: 51-PBU-453	C-51-453
C-51-556	51E01	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 51-PSH-453 TO: JUNCTION BOX 2 #14 >> CONTROL: 51-PBU-453	C-51-453

CONDUIT SCHEDULE AREA 51

9/16/13

LOS OSOS WATER RECYCLING FACILITY

DEWATERING BUILDING

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-51-631	51E02	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 51-PSH-436 TO: SCREW COMPRESSOR #32 CONTROL JB 2 #14 >> CONTROL: 51-PSH-436	C-51-432
C-51-632	51E02	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 51-SV-432 TO: SCREW COMPRESSOR #32 CONTROL JB 2 #14 >> CONTROL:51-SV-432	C-51-432
L-51-100	51E02	0.75"	2	#10	XHHW-2	1	#10	XHHW-2	FR: PCM-2 TO: NP-2 2 #10 >> POWER: PCM-2	
L-51-160	51E02	0.75"	2	#8	XHHW-2	1	#10	XHHW-2	FR: NP-2 TO: MCC-F 2 #8 >> POWER: NP-2(LPBF)	
L-51-421	51E03	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 51-LCP-421 TO: LP-BF AT MCC-F 2 #12 >> POWER: 51-LCP-421	
L-51-422	51E03	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 51-LCP-422 TO: LP-BF AT MCC-F 2 #12 >> POWER: 51-LCP-422	
L-51-431	51E01	1"	3 2	#10 #14	XHHW-2 XHHW-2	1	#10	XHHW-2	FR: 51-ARC-431 TO: 51-VCP-431 3 #10 >> POWER: 51-ARC-431 2 #14 >> CONTROL: 51-ARC-431	
L-51-432	51E02	1"	3 2	#10 #14	XHHW-2 XHHW-2	1	#10	XHHW-2	FR: 51-ARC-431 TO: 51-VCP-431 3 #10 >> POWER: 51-ARC-431 2 #14 >> CONTROL: 51-ARC-431	
L-51-433	51E02	0.75"	2 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: 51-SSL-433 TO: MCC-E 2 #12 >> POWER: 51-SSL-433 2 #14 >> CONTROL: 51-SSL-433	
L-51-434	51E02	0.75"	2 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: 51-SSL-434 TO: MCC-F 2 #12 >> POWER: 51-SSL-434 2 #14 >> CONTROL: 51-SSL-434	
L-51-440	51E01	0.75"	6	#12	XHHW-2	1	#12	XHHW-2	FR: JUNCTION BOX TO: PCM-2 2 #12 >> POWER: 51-WIT-441 L-51-441 2 #12 >> POWER: 51-WIT-443 L-51-444 2 #12 >> POWER: 51-WIT-442 L-51-444	
L-51-441	51E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT L-51-440 TO: JUNCTION BOX 2 #12 >> POWER: 51-WIT-441 L-51-541	
L-51-442	51E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT L-51-444 TO: JUNCTION BOX 2 #12 >> POWER: 51-WIT-442 L-51-542	
L-51-443	51E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT L-51-444 TO: JUNCTION BOX 2 #12 >> POWER: 51-WIT-443 L-51-543	
L-51-444	51E01	0.75"	4	#12	XHHW-2	1	#12	XHHW-2	FR: JUNCTION BOX L-51-440 TO: JUNCTION BOX 2 #12 >> POWER: 51-WIT-443 L-51-443 2 #12 >> POWER: 51-WIT-442 L-51-442	
L-51-451	51E01 51E02	0.75"	2	#10	XHHW-2	1	#10	XHHW-2	FR: 51-PBU-451 TO: LP-BF AT MCC-F 2 #10 >> POWER: 51-PBU-451	
L-51-452	51E01 51E02	0.75"	2	#10	XHHW-2	1	#10	XHHW-2	FR: 51-PBU-452 TO: LP-BF AT MCC-F 2 #10 >> POWER: 51-PBU-452	
L-51-453	51E01 51E02	0.75"	2	#10	XHHW-2	1	#10	XHHW-2	FR: 51-PBU-453 TO: LP-BF AT MCC-F 2 #10 >> POWER: 51-PBU-453	

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
DEWATERING BUILDING
CONDUIT SCHEDULE- II

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 51E08
SHEET NO. 370 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1151E08.dgn

Plot Date: 16-SEP-2013 5:36:29 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

CONDUIT SCHEDULE AREA 51

9/16/13

LOS OSOS WATER RECYCLING FACILITY

DEWATERING BUILDING

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
L-51-521	51E03	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 51-EF-471 TO: 51-LCP-471 2 #12 >> POWER: 51-EF-471	
L-51-522	51E03	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 51-EF-472 TO: 51-LCP-472 2 #12 >> POWER: 51-EF-472	
L-51-541	51E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 51-WIT-441 TO: DISCONNECT 2 #12 >> POWER: 51-WIT-441	L-51-441
L-51-542	51E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 51-WIT-442 TO: DISCONNECT 2 #12 >> POWER: 51-WIT-442	L-51-442
L-51-543	51E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 51-WIT-443 TO: DISCONNECT 2 #12 >> POWER: 51-WIT-443	L-51-443
N-51-100	51E07	1.5"	3	2/FO		1	#14	XHHW-2	FR: NP-2 TO: PCM-2 3 2/FO >> NETWORK	
N-51-101	51E07	1"	4	CAT6A		1	#14	XHHW-2	FR: NP-2 TO: PCM-2 4 CAT6A >> NETWORK	
N-51-110	51E06	1"	1	12/FO		1	#14	XHHW-2	FR: NP-2 TO: NR-MAIN VIA HH-S05, HH-S12, HH-S04 1 12/FO >> NETWORK	
N-51-531	51E01	0.75"	1	CAT6A		1	#14	XHHW-2	FR: 51-VCP-431 TO: NP-2 1 CAT6A >> SIGNAL:51-VCP-431	
N-51-532	51E02	0.75"	1	CAT6A		1	#14	XHHW-2	FR: 51-VCP-432 TO: NP-2 1 CAT6A >> SIGNAL:51-VCP-432	
P-51-150	51E05 70E02	4"	3	750	XHHW-2	1	#1/0	XHHW-2	FR: MCC-E TO: SWGR-MS VIA MH-E05,MH-E03, MH-E01 3 750 >> POWER: MCC-E	
P-51-151	51E05 70E02	4"	3	750	XHHW-2	1	#1/0	XHHW-2	FR: MCC-E TO: SWGR-MS VIA MH-E05,MH-E03, MH-E01 3 750 >> POWER: MCC-E	
P-51-152	51E05 70E02	4"	3	750	XHHW-2	1	#1/0	XHHW-2	FR: MCC-E TO: SWGR-MS VIA MH-E05,MH-E03, MH-E01 3 750 >> POWER: MCC-E	
P-51-153	51E05 70E02	4"	3	750	XHHW-2	1	#1/0	XHHW-2	FR: MCC-E TO: SWGR-MS VIA MH-E05,MH-E03, MH-E01 3 750 >> POWER: MCC-E	
P-51-160	51E05 70E02	4"	3	750	XHHW-2	1	#1/0	XHHW-2	FR: MCC-F TO: SWGR-MS VIA MH-E05,MH-E03, MH-E01 3 750 >> POWER: MCC-F	
P-51-161	51E05 70E02	4"	3	750	XHHW-2	1	#1/0	XHHW-2	FR: MCC-F TO: SWGR-MS VIA MH-E05,MH-E03, MH-E01 3 750 >> POWER: MCC-F	
P-51-162	51E05 70E02	4"	3	750	XHHW-2	1	#1/0	XHHW-2	FR: MCC-F TO: SWGR-MS VIA MH-E05,MH-E03, MH-E01 3 750 >> POWER: MCC-F	
P-51-163	51E05 70E02	4"	3	750	XHHW-2	1	#1/0	XHHW-2	FR: MCC-F TO: SWGR-MS VIA MH-E05,MH-E03, MH-E01 3 750 >> POWER: MCC-F	
P-51-420	51E03	0.75"	6	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: MCC-E 6 #12 >> POWER: 51-SF-477	P-51-520
P-51-423	51E03	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: MCC-E 3 #12 >> POWER: 51-EF-473	P-51-523

CONDUIT SCHEDULE AREA 51

9/16/13

LOS OSOS WATER RECYCLING FACILITY

DEWATERING BUILDING

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
P-51-424	51E03	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: MCC-E 3 #12 >> POWER: 51-EF-474	P-51-524
P-51-425	51E03	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: MCC-F 3 #12 >> POWER: 51-EF-475	P-51-525
P-51-426	51E03	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: MCC-F 3 #12 >> POWER: 51-EF-476	P-51-526
P-51-427	51E03	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: MCC-E 3 #12 >> POWER: 51-DRV-478A	P-51-527
P-51-428	51E03	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: MCC-E 3 #12 >> POWER: 51-DRV-478B	P-51-528
P-51-429	51E03	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: MCC-E 3 #12 >> POWER: 51-DRV-478C	P-51-529
P-51-431	51E01 51E02	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 51-PRE-431 TO: 51-VCP-431 3 #12 >> POWER: 51-PRE-431	
P-51-432	51E02	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 51-PRE-432 TO: 51-VCP-432 3 #12 >> POWER: 51-PRE-432	
P-51-433	51E01 51E02	1"	3 2 2	#10 #12 #14	XHHW-2 XHHW-2 XHHW-2	1	#10	XHHW-2	FR: 51-CNV-433 TO: MCC-E 3 #10 >> POWER:51-CNV-433 2 #12 >> POWER:51-MWH-433 2 #14 >> CONTROL: 51-TSH-433	
P-51-434	51E02	1"	3 2 2	#10 #12 #14	XHHW-2 XHHW-2 XHHW-2	1	#10	XHHW-2	FR: 51-CNV-434 TO: MCC-E 3 #10 >> POWER:51-CNV-434 2 #12 >> POWER:51-MWH-434 2 #14 >> CONTROL: 51-TSH-434	
P-51-440	51E03	0.75"	3	#8	XHHW-2	1	#10	XHHW-2	FR: 51-VCP-470 TO: MCC-F 3 #8 >> POWER: 51-ACU-470	
P-51-520	51E03	0.75"	6	#12	XHHW-2	1	#12	XHHW-2	FR: 51-SF-477 TO: DISCONNECT 6 #12 >> POWER: 51-SF-477	P-51-420
P-51-523	51E03	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 51-EF-473 TO: DISCONNECT 3 #12 >> POWER: 51-EF-473	P-51-423
P-51-524	51E03	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 51-EF-474 TO: DISCONNECT 3 #12 >> POWER: 51-EF-474	P-51-424
P-51-525	51E03	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 51-EF-475 TO: DISCONNECT 3 #12 >> POWER: 51-EF-475	P-51-425
P-51-526	51E03	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 51-EF-476 TO: DISCONNECT 3 #12 >> POWER: 51-EF-476	P-51-426
P-51-527	51E03	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 51-DRV-478A TO: DISCONNECT 3 #12 >> POWER: 51-DRV-478A	P-51-427
P-51-528	51E03	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 51-DRV-478B TO: DISCONNECT 3 #12 >> POWER: 51-DRV-478B	P-51-428

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA
9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
DEWATERING BUILDING
CONDUIT SCHEDULE- III

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 51E09
SHEET NO. 371 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1151E09.dgn

Plot Date: 16-SEP-2013 5:36:47 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

CONDUIT SCHEDULE AREA 51

9/16/13

LOS OSOS WATER RECYCLING FACILITY

DEWATERING BUILDING

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
P-51-529	51E03	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 51-DRV-478C TO: DISCONNECT 3 #12 >> POWER: 51-DRV-478C	P-51-429
P-51-531	51E02	0.75"	3	#10	XHHW-2	1	#10	XHHW-2	FR: 51-VCP-431 TO: MCC-E 3 #10 >> POWER:51-VCP-431	
P-51-532	51E02	0.75"	3	#10	XHHW-2	1	#10	XHHW-2	FR: 51-VCP-432 TO: MCC-F 3 #10 >> POWER:51-VCP-432	
P-51-631	51E03	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 51-DISC-431 TO: MCC-F 3 #12 >> POWER: 51-HOI-431	P-51-731
P-51-632	51E03	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 51-DISC-432 TO: MCC-F 3 #12 >> POWER: 51-HOI-432	P-51-732
P-51-731		0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 51-DISC-431 TO: 51-HOI-431 3 #12 >> POWER: 51-HOI-431	P-51-631
P-51-732		0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 51-DISC-432 TO: 51-HOI-432 3 #12 >> POWER: 51-HOI-432	P-51-632
S-51-100	51E02	0.75"	2	2/CS-#16		1	#14	XHHW-2	FR: 20-VFD-102 TO: CONDUIT TEE 2 2/CS-#16 >> SIGNAL: 20-VFD-102	S-51-110
S-51-101	51E02	0.75"	2	2/CS-#16		1	#14	XHHW-2	FR: 20-VFD-101 TO: CONDUIT TEE 2 2/CS-#16 >> SIGNAL: 20-VFD-101	S-51-110
S-51-102	51E02	0.75"	2	2/CS-#16		1	#14	XHHW-2	FR: 20-VFD-092 TO: CONDUIT TEE 2 2/CS-#16 >> SIGNAL: 20-VFD-092	S-51-111
S-51-103	51E02	0.75"	2	2/CS-#16		1	#14	XHHW-2	FR: 20-VFD-091 TO: CONDUIT TEE 2 2/CS-#16 >> SIGNAL: 20-VFD-091	S-51-112
S-51-110	51E02	1"	4	2/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 2 2/CS-#16 >> SIGNAL: 20-VFD-101 2 2/CS-#16 >> SIGNAL: 20-VFD-102	S-51-111 S-51-101 S-51-100
S-51-111	51E02	1.5"	6	2/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 2 2/CS-#16 >> SIGNAL: 20-VFD-092 2 2/CS-#16 >> SIGNAL: 20-VFD-101 2 2/CS-#16 >> SIGNAL: 20-VFD-102	S-51-112 S-51-102 S-51-110 S-51-110
S-51-112	51E02	1.5"	8	2/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: PCM-2 2 2/CS-#16 >> SIGNAL: 20-VFD-091 2 2/CS-#16 >> SIGNAL: 20-VFD-092 2 2/CS-#16 >> SIGNAL: 20-VFD-101 2 2/CS-#16 >> SIGNAL: 20-VFD-102	S-51-103 S-51-111 S-51-111 S-51-111
S-51-150	51E02	1.5"	6	2/CS-#16		1	#14	XHHW-2	FR: MCC-E TO: PCM-2 2 2/CS-#16 >> SIGNAL: 04-PMP-501 2 2/CS-#16 >> SIGNAL: 50-PMP-423 2 2/CS-#16 >> SIGNAL: 50-PMP-121	
S-51-160	51E02	1.5"	8	2/CS-#16		1	#14	XHHW-2	FR: MCC-E TO: PCM-2 2 2/CS-#16 >> SIGNAL: 04-PMP-502 2 2/CS-#16 >> SIGNAL: 50-PMP-427 2 2/CS-#16 >> SIGNAL: 50-PMP-122 2 2/CS-#16 >> SIGNAL: 50-PMP-123	
S-51-431	51E01	1"	1	2/CS-#16		1	#14	XHHW-2	FR: 51-S-431 TO: 51-VCP-431 1 2/CS-#16 >> SIGNAL: 51-S-431	

CONDUIT SCHEDULE AREA 51

9/16/13

LOS OSOS WATER RECYCLING FACILITY

DEWATERING BUILDING

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
S-51-432	51E02	1"	1	2/CS-#16		1	#14	XHHW-2	FR: 51-S-432 TO: 51-VCP-432 1 2/CS-#16 >> SIGNAL: 51-S-432	
S-51-440	51E03	1"	3	2/CS-#16		1	#14	XHHW-2	FR: JUNCTION BOX TO: PCM-2 1 2/CS-#16 >> SIGNAL: 51-WIT-441 1 2/CS-#16 >> SIGNAL: 51-WIT-442 1 2/CS-#16 >> SIGNAL: 51-WIT-443	S-51-441 S-51-444 S-51-444
S-51-441	51E01	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 51-WIT-441 TO: JUNCTION BOX 1 2/CS-#16 >> SIGNAL: 51-WIT-441	S-51-440
S-51-442	51E01	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 51-WIT-442 TO: JUNCTION BOX 1 2/CS-#16 >> SIGNAL: 51-WIT-442	S-51-444
S-51-443	51E01	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 51-WIT-443 TO: JUNCTION BOX 1 2/CS-#16 >> SIGNAL: 51-WIT-443	S-51-444
S-51-444	51E01	0.75"	2	2/CS-#16		1	#14	XHHW-2	FR: JUNCTION BOX TO: JUNCTION BOX 1 2/CS-#16 >> SIGNAL: 51-WIT-442 1 2/CS-#16 >> SIGNAL: 51-WIT-443	S-51-440 S-51-442 S-51-443
S-51-451	51E01 51E02	0.75"	2	2/CS-#16		1	#14	XHHW-2	FR: 51-PBU-451 TO: PCM-2 2 2/CS-#16 >> SIGNAL: 51-PBU-451	
S-51-452	51E01 51E02	0.75"	2	2/CS-#16		1	#14	XHHW-2	FR: 51-PBU-452 TO: PCM-2 2 2/CS-#16 >> SIGNAL: 51-PBU-452	
S-51-453	51E01 51E02	0.75"	2	2/CS-#16		1	#14	XHHW-2	FR: 51-PBU-453 TO: PCM-2 2 2/CS-#16 >> SIGNAL: 51-PBU-453	
S-51-541	51E01	0.75"	1	MFR	CABLE	1	#14	XHHW-2	FR: 51-WE-441 TO: 51-WIT-441 1 MFR >> ELEMENT CABLE: 51-WIT-441	
S-51-542	51E01	0.75"	1	MFR	CABLE	1	#14	XHHW-2	FR: 51-WE-442 TO: 51-WIT-442 1 MFR >> ELEMENT CABLE: 51-WIT-442	
S-51-543	51E01	0.75"	1	MFR	CABLE	1	#14	XHHW-2	FR: 51-WE-443 TO: 51-WIT-443 1 MFR >> SIGNAL: 51-WIT-443	
S-51-640	51E03	0.75"	1	MFR	CABLE	1	#14	XHHW-2	FR: 51-XE1-470 TO: JUNCTION BOX 1 MFR >> SIGNAL: 51-XE1-470	S-51-642
S-51-641	51E03	0.75"	1	MFR	CABLE	1	#14	XHHW-2	FR: 51-XE2-470 TO: JUNCTION BOX 1 MFR >> SIGNAL: 51-XE2-470	S-51-642
S-51-642	51E03	0.75"	2	MFR	CABLE	1	#14	XHHW-2	FR: JUNCTION BOX TO: 51-VCP-470 1 MFR >> SIGNAL: 51-XE1-470 1 MFR >> SIGNAL: 51-XE2-470	S-51-640 S-51-641
S-51-643	51E03	0.75"	1	MFR	CABLE	1	#14	XHHW-2	FR: 51-TIC-470 TO: 51-VCP-440 1 MFR >> SIGNAL:51-TIC-470	
S-51-742	51E03	0.75"	1	MFR	CABLE	1	#14	XHHW-2	FR: PCM-2 TO: TELEPHONE AT ROLL UP DOOR 1 MFR >> TELEPHONE CABLE	
X-51-110	51E06	0.75"	1	PULL	ROPE				FR: CONTROL ROOM TO: ADMINSTRATION CONTROL ROOM VIA HH-S05/S12/S04 1 PULL >> SPARE	
X-51-111	51E06	0.75"	1	PULL	ROPE				FR: CONTROL ROOM TO: ADMINSTRATION CONTROL ROOM VIA HH-S05/S12/S04 1 PULL >> SPARE	
X-51-112	51E06	0.75"	1	PULL	ROPE				FR: CONTROL ROOM TO: ADMINSTRATION CONTROL ROOM VIA HH-S05/S12/S04 1 PULL >> SPARE	

END OF CONDUIT SCHEDULE

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA
9/16/2013

carollo®

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
DEWATERING BUILDING
CONDUIT SCHEDULE- IV

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 51E10
SHEET NO. 372 OF 549

PROJECT NO. 8930A.11
FILE NAME: 8930A1151E10.dgn

LAST SAVED BY: ejohnson
Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1
User: EJohnson Plot Date: 16-SEP-2013 5:37:06 PM

GENERAL NOTES:

1. REFER TO SPECIFICATION SECTION 16050 FOR HAZARDOUS AREA CLASSIFICATIONS.
2. EMBED THE CONDUIT IN THE SLAB PER DETAIL EM115/TYP, OTHERWISE NOTED.

KEY NOTES:

1. MOUNT LCP/FIT PER DETAIL EM201/TYP.
2. SIZE THE PULL BOX PER NEC AND INSTALL THE PULL PER DETAIL 1/40E01.
3. MOUNT THE DUPLEX RECEPTACLE ON SAME STAND AS VCP/LIT. WP, GFCI LPBD-9
4. MOUNT VCP/LIT PER DETAIL EM202/TYP.
5. REFER TO DWG ESC03 FOR CONTINUATION.
6. CONDUIT CONTINUOUS BELOW THE SLAB PER EM041/TYP TO PB-01.
7. ALL CONDUITS NOT SHOWN FOR CLARITY.

LEFT TO RIGHT
P-60-420
C-60-420
P-60-400
C-60-400

(7) (TYP)
P-60-131
C-60-132
P-60-121
C-60-122
P-60-111
C-60-112
L-60-014
C-60-014

S-60-001
L-60-001
S-60-002
L-60-002
S-60-003
60-PIT-734
(1) 60-FIT-734
60-FE-734

60-PMP-731
60-PSH-731
60-PMP-732
60-PMP-733
60-PSH-732
60-PSH-733

(1) 60-LCP-733
C-60-131
(1) 60-LCP-732
C-60-121
(1) 60-LCP-731
C-60-111

L-60-003
C-60-003
60-AE-715
60-AIT-715
L-60-005
L-60-006
60-AE-713
60-AIT-713

L-60-016
L-60-007
C-60-007

LEFT TO RIGHT
P-60-130
C-60-130
P-60-120
C-60-120
P-60-110
C-60-110
1 -
S-60-006
S-60-005
L-60-004
C-60-004

60-EDR-760
60-EDR-713
S-60-401
S-60-004

TOP TO BOTTOM
S-60-016
S-60-010
L-60-009
S-60-009
(1) 60-FIT-710
L-60-008
S-60-008
60-FE-710

C-60-151
(1) 60-LCP-762
C-60-161
(1) 60-LCP-763
60-LCP-761 (1)
C-60-141
(1) 60-LIT-760
S-60-012

L-60-012
P-60-141
C-60-142
P-60-151
C-60-152
P-60-161
C-60-162
60-FE-764
60-PIT-764

60-PSH-761
60-PSH-762
60-PSH-763
60-PMP-763
60-PMP-762
60-PMP-761

LEFT TO RIGHT
P-60-140
C-60-140
P-60-150
C-60-150
P-60-160
C-60-160

S-60-011
60-LE-760

S-60-013
L-60-013
S-60-014
S-60-017

BI ESC11
BJ ESC11

S-60-015
60-FIT-764 (1)
L-60-015
PB-01 (2)

PB-02 (2)

S-60-020
60-LE-715

60-MIX-714
L-60-020
(4) 60-VCP-714

60-LIT-715 (4)
S-60-021
S-60-022
L-60-022
L-60-024
L-60-023
C-60-023
S-60-023

60-DISC-760
60-DISC-713
LEFT TO RIGHT
L-60-004
L-60-004
C-60-004
C-60-004
LEFT TO RIGHT
L-60-014
C-60-014
L-60-004
C-60-004
C-60-003
L-60-003

(6)

A PLAN
SCALE: 3/8"=1'-0"
FILE: 8930A1160E101

1 - STAND DETAIL
SCALE: NOT TO SCALE

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

Carollo

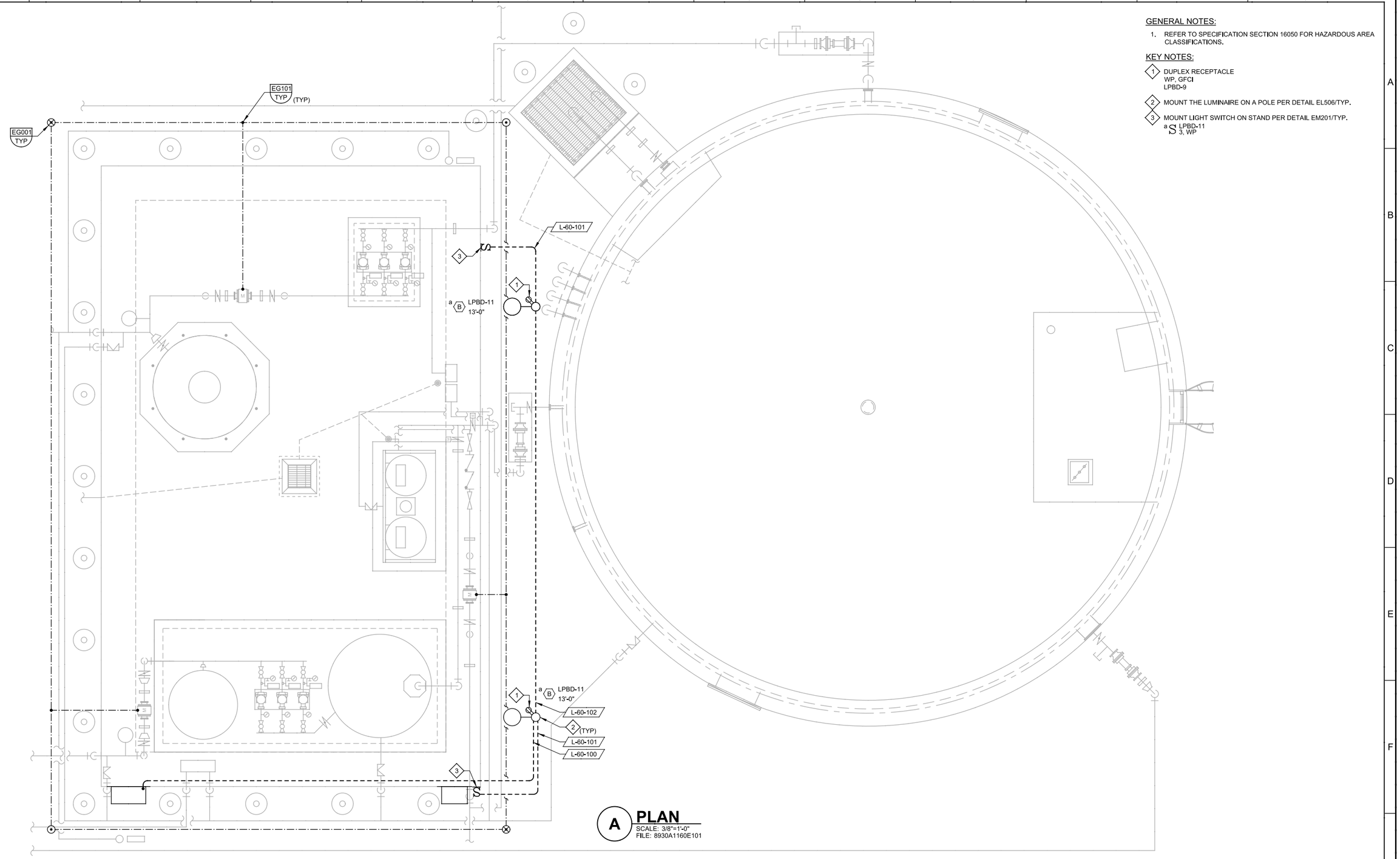
SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
POTABLE WATER PUMP STATION
POWER & CONTROL PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 60E01
SHEET NO. 373 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1160E01.dgn



A **PLAN**
SCALE: 3/8"=1'-0"
FILE: 8930A1160E101

GENERAL NOTES:

1. REFER TO SPECIFICATION SECTION 16050 FOR HAZARDOUS AREA CLASSIFICATIONS.

KEY NOTES:

1. DUPLEX RECEPTACLE WP, GFCI LPBD-9
2. MOUNT THE LUMINAIRE ON A POLE PER DETAIL EL506/TYP.
3. MOUNT LIGHT SWITCH ON STAND PER DETAIL EM201/TYP. a LPBD-11 S 3, WP

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN ANW
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
POTABLE WATER PUMP STATION
LIGHTING & GROUNDING PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 60E02
SHEET NO. 374 OF 549

LAST SAVED BY: awuliff
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
User: ADiaz
Plot Date: 16-SEP-2013 6:00:06 PM

PROJECT NO. 8930A.11 FILE NAME: 8930A1160E02.dgn

CONDUIT SCHEDULE AREA 60

9/16/13

LOS OSOS WATER RECYCLING FACILITY

POTABLE WATER PUMP STATION

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-60-003	60E01	1"	10	#14	XHHW-2	1	#14	XHHW-2	FR: 60-EDR-713	C-60-014
									TO: WIREWAY	
									10 #14 >> CONTROL: 60-EDR-713	
C-60-004	60E01	1"	10	#14	XHHW-2	1	#14	XHHW-2	FR: 60-EDR-760	C-60-014
									TO: WIREWAY	
									10 #14 >> CONTROL: 60-EDR-760	
C-60-007	60E01	1"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 60-FLT-716	
									TO: PB-01	
									2 #14 >> : 60-FLT-716	
C-60-014	60E01	1"	20	#14	XHHW-2	1	#14	XHHW-2	FR: WIREWAY	C-60-310
									TO: PB-01	
									10 #14 >> CONTROL: 60-EDR-713	C-60-003
									10 #14 >> CONTROL: 60-EDR-760	C-60-004
C-60-023	60E01	2"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 60-VCP-714	
									TO: PB-02	
									2 #14 >> CONTROL: 60-VCP-714	
C-60-110	60E01	1"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 60-PSH-731	C-60-112
									TO: JB @ 60-LCP-731	
									2 #14 >> CONTROL: 60-PSH-731	
C-60-111	60E01	0.75"	8	#14	XHHW-2	1	#14	XHHW-2	FR: 60-LCP-731	C-60-112
									TO: JB @ 60-LCP-731	
									8 #14 >> CONTROL: 60-LCP-731, 2-SPARE	
C-60-112	60E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: JB @ 60-LCP-731	C-60-210
			12	#14	XHHW-2				TO: PB-01	
									2 #14 >> CONTROL: 60-PSH-731	C-60-110
									8 #14 >> CONTROL: 60-LCP-731, 2-SPARE	C-60-111
									2 #12 >> CONTROL: 60-MWH-731	P-60-110
									2 #14 >> CONTROL: 60-TSH-731	P-60-110
C-60-120	60E01	1"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 60-PSH-732	C-60-122
									TO: JB @ 60-LCP-732	
									2 #14 >> CONTROL: 60-PSH-732	
C-60-121	60E01	0.75"	8	#14	XHHW-2	1	#14	XHHW-2	FR: 60-LCP-732	C-60-122
									TO: JB @ 60-LCP-732	
									8 #14 >> CONTROL: 60-LCP-732, 2-SPARE	
C-60-122	60E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: JB @ 60-LCP-732	C-60-220
			12	#14	XHHW-2				TO: PB-01	
									2 #14 >> CONTROL: 60-PSH-732	C-60-120
									8 #14 >> CONTROL: 60-LCP-732, 2-SPARE	C-60-121
									2 #12 >> CONTROL: 60-MWH-732	P-60-120
									2 #14 >> CONTROL: 60-TSH-732	P-60-120
C-60-130	60E01	1"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 60-PSH-733	C-60-132
									TO: JB @ 60-LCP-733	
									2 #14 >> CONTROL: 60-PSH-733	
C-60-131	60E01	0.75"	8	#14	XHHW-2	1	#14	XHHW-2	FR: 60-LCP-733	C-60-132
									TO: JB @ 60-LCP-733	
									8 #14 >> CONTROL: 60-LCP-733, 2-SPARE	
C-60-132	60E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: JB @ 60-LCP-733	C-60-210
			12	#14	XHHW-2				TO: PB-01	
									2 #14 >> CONTROL: 60-PSH-733	C-60-130
									8 #14 >> CONTROL: 60-LCP-733, 2-SPARE	C-60-131
									2 #12 >> CONTROL: 60-MWH-733	P-60-130
									2 #14 >> CONTROL: 60-TSH-733	P-60-130
C-60-140	60E01	1"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 60-PSH-761	C-60-142
									TO: JB @ 60-LCP-761	
									2 #14 >> CONTROL: 60-PSH-761	
C-60-141	60E01	0.75"	8	#14	XHHW-2	1	#14	XHHW-2	FR: 60-LCP-761	C-60-142
									TO: JB @ 60-LCP-761	
									8 #14 >> CONTROL: 60-LCP-761, 2-SPARE	
C-60-142	60E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: JB @ 60-LCP-761	C-60-210
			12	#14	XHHW-2				TO: PB-01	
									2 #14 >> CONTROL: 60-PSH-761	C-60-140
									8 #14 >> CONTROL: 60-LCP-761, 2-SPARE	C-60-141
									2 #12 >> CONTROL: 60-MWH-761	P-60-140
									2 #14 >> CONTROL: 60-TSH-761	P-60-140
C-60-150	60E01	1"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 60-PSH-762	C-60-152
									TO: JB @ 60-LCP-762	
									2 #14 >> CONTROL: 60-PSH-762	

CONDUIT SCHEDULE AREA 60

9/16/13

LOS OSOS WATER RECYCLING FACILITY

POTABLE WATER PUMP STATION

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-60-151	60E01	0.75"	8	#14	XHHW-2	1	#14	XHHW-2	FR: 60-LCP-762	C-60-152
									TO: JB @ 60-LCP-762	
									8 #14 >> CONTROL: 60-LCP-762, 2-SPARE	
C-60-152	60E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: JB @ 60-LCP-762	C-60-220
			12	#14	XHHW-2				TO: PB-01	
									2 #14 >> CONTROL: 60-PSH-762	C-60-150
									8 #14 >> CONTROL: 60-LCP-762, 2-SPARE	C-60-151
									2 #12 >> CONTROL: 60-MWH-762	P-60-150
									2 #14 >> CONTROL: 60-TSH-762	P-60-150
C-60-160	60E01	1"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 60-PSH-763	C-60-162
									TO: JB @ 60-LCP-763	
									2 #14 >> CONTROL: 60-PSH-763	
C-60-161	60E01	0.75"	8	#14	XHHW-2	1	#14	XHHW-2	FR: 60-LCP-763	C-60-162
									TO: JB @ 60-LCP-763	
									8 #14 >> CONTROL: 60-LCP-763, 2-SPARE	
C-60-162	60E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: JB @ 60-LCP-763	C-60-210
			12	#14	XHHW-2				TO: PB-01	
									2 #14 >> CONTROL: 60-PSH-763	C-60-160
									8 #14 >> CONTROL: 60-LCP-763, 2-SPARE	C-60-161
									2 #12 >> CONTROL: 60-MWH-763	P-60-160
									2 #14 >> CONTROL: 60-TSH-763	P-60-160
C-60-210	ESC11 70E03	2"	10	#10	XHHW-2	1	#10	XHHW-2	FR: PB-01	
			8	#12	XHHW-2				TO: MCC-C	
			48	#14	XHHW-2				2 #14 >> CONTROL: 60-PSH-731	C-60-112
									8 #14 >> CONTROL: 60-LCP-731, 2-SPARE	C-60-112
									2 #12 >> CONTROL: 60-MWH-731	C-60-112
									2 #14 >> CONTROL: 60-TSH-731	C-60-112
									2 #14 >> CONTROL: 60-PSH-733	C-60-132
									8 #14 >> CONTROL: 60-LCP-733, 2-SPARE	C-60-132
									2 #12 >> CONTROL: 60-MWH-733	C-60-132
									2 #14 >> CONTROL: 60-TSH-733	C-60-132
									2 #14 >> CONTROL: 60-PSH-761	C-60-142
									8 #14 >> CONTROL: 60-LCP-761, 2-SPARE	C-60-142
									2 #12 >> CONTROL: 60-MWH-761	C-60-142
									2 #14 >> CONTROL: 60-TSH-761	C-60-142
									2 #14 >> CONTROL: 60-PSH-763	C-60-162
									8 #14 >> CONTROL: 60-LCP-763, 2-SPARE	C-60-162
									2 #12 >> CONTROL: 60-MWH-763	C-60-162
									2 #14 >> CONTROL: 60-TSH-763	C-60-162
									10 #10 >> CONTROL: 60-LCP-711, 4-SPARE	C-60-400
C-60-220	ESC11 70E03	2"	4	#12	XHHW-2	1	#12	XHHW-2	FR: PB-01	
			24	#14	XHHW-2				TO: MCC-D	
									2 #14 >> CONTROL: 60-PSH-732	C-60-122
									8 #14 >> CONTROL: 60-LCP-732, 2-SPARE	C-60-122
									2 #12 >> CONTROL: 60-MWH-732	C-60-122
									2 #14 >> CONTROL: 60-TSH-732	C-60-122
									2 #14 >> CONTROL: 60-PSH-762	C-60-152
									8 #14 >> CONTROL: 60-LCP-762, 2-SPARE	C-60-152
									2 #12 >> CONTROL: 60-MWH-762	C-60-152
									2 #14 >> CONTROL: 60-TSH-762	C-60-152
C-60-310	ESC11 70E03	2"	14	#12	XHHW-2	1	#12	XHHW-2	FR: PB-01	
			30	#14	XHHW-2				TO: PCM-1	
									2 #12 >> POWER: 60-LIT-715	L-60-023
									2 #12 >> POWER: 60-LIT-760	L-60-012
									2 #12 >> POWER: 60-FIT-764	L-60-015
									2 #12 >> POWER: 60-FIT-710	L-60-009
									2 #12 >> POWER: 60-FIT-734	L-60-002
									2 #12 >> POWER: 60-AE-713/60-AIT-713	L-60-016
									2 #12 >> POWER: 60-AE-715/60-AIT-715	L-60-016
									10 #14 >> CONTROL: 60-EDR-713	C-60-014
									10 #14 >> CONTROL: 60-EDR-760	C-60-014
									10 #14 >> CONTROL: 06-GAT-840	C-60-420
C-60-400	ESC03 60E01	2"	10	#10	XHHW-2	1	#10	XHHW-2	FR: 60-LCP-711	C-60-210
									TO: PB-01	
									10 #10 >> CONTROL: 60-LCP-711, 4-SPARE	
C-60-420	ESC03 60E01	2"	10	#14	XHHW-2	1	#14	XHHW-2	FR: 06-GAT-840	C-60-310
									TO: PB-01	
									10 #14 >> CONTROL: 06-GAT-840	
C-60-500	ESC03	2"	10	#14	XHHW-2	1	#14	XHHW-2	FR: 60-LCP-712	C-60-550
									TO: HH-E16	
									10 #14 >> CONTROL: 60-LCP-712, 4-SPARE	

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY

LOS OSOS WATER RECYCLING FACILITY PROJECT

ELECTRICAL

POTABLE WATER PUMP STATION
CONDUIT SCHEDULE- I

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 60E03
SHEET NO. 375 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1160E03.dgn

Plot Date: 16-SEP-2013 5:38:02 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

CONDUIT SCHEDULE AREA 60

9/16/13

LOS OSOS WATER RECYCLING FACILITY

POTABLE WATER PUMP STATION

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-60-550	ESC03 70E01	2"	10	#14	XHHW-2	1	#14	XHHW-2	FR: HH-E16 TO: MCC-D 10 #14 >> CONTROL: 60-LCP-712, 4-SPARE	C-60-500
L-60-001	60E01	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 60-FE-734 TO: 60-FIT-734 1 MFR >> POWER: 60-FE-734	
L-60-002	60E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 60-FIT-734 TO: PB-01 2 #12 >> POWER: 60-FIT-734	C-60-310
L-60-003	60E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 60-EDR-713 TO: WIREWAY VIA DISCONNECT SWITCH 2 #12 >> POWER: 60-EDR-713	L-60-014
L-60-004	60E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 60-EDR-760 TO: WIREWAY VIA DISCONNECT SWITCH 2 #12 >> POWER: 60-EDR-760	L-60-014
L-60-005	60E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 60-AE-713/60-AIT-713 TO: CONDUIT TEE 2 #12 >> POWER: 60-AE-713/60-AIT-713	L-60-016
L-60-006	60E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 60-AE-715/60-AIT-715 TO: CONDUIT TEE 2 #12 >> POWER: 60-AE-715/60-AIT-715	L-60-016
L-60-007	60E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 60-FLT-716 TO: PB-01 2 #12 >> POWER: 60-FLT-716	L-60-220
L-60-008	60E01	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 60-FE-710 TO: 60-FIT-710 1 MFR >> POWER: 60-FE-710	
L-60-009	60E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 60-FIT-710 TO: PB-01 2 #12 >> POWER: 60-FIT-710	C-60-310
L-60-012	60E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 60-LIT-760 TO: PB-02 2 #12 >> POWER: 60-LIT-760	C-60-310
L-60-013	60E01	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 60-FE-764 TO: 60-FIT-764 1 MFR >> POWER: 60-FIT-764	
L-60-014	60E01	1"	4	#12	XHHW-2	1	#12	XHHW-2	FR: WIREWAY TO: PB-01 2 #12 >> POWER: 60-EDR-713 2 #12 >> POWER: 60-EDR-760	L-60-210 L-60-003 L-60-004
L-60-015	60E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 60-FIT-764 TO: PB-01 2 #12 >> POWER: 60-FIT-764	C-60-310
L-60-016	60E01	0.75"	4	#12	XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: PB-01 2 #12 >> POWER: 60-AE-713/60-AIT-713 2 #12 >> POWER: 60-AE-715/60-AIT-715	C-60-310 L-60-005 L-60-006
L-60-020	60E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 60-MIX-714 TO: 60-VCP-714 2 #12 >> POWER: 60-MIX-714	
L-60-021	60E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 60-LIT-715 TO: J-BOX @ 60-LIT-715 2 #12 >> POWER: 60-LIT-715	L-60-023
L-60-022	60E01	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 60-VCP-714 TO: J-BOX @ 60-LIT-715 2 #12 >> POWER: 60-VCP-714	L-60-023
L-60-023	60E01	2"	2 4	#10 #12	XHHW-2 XHHW-2	1	#10	XHHW-2	FR: J-BOX @ 60-LIT-715 TO: PB-01 2 #12 >> POWER: 60-LIT-715 2 #12 >> POWER: 60-VCP-714 2 #10 >> LBPD-9: RECPT.	C-60-310 L-60-021 L-60-022 L-60-024
L-60-024	60E01	1"	2	#10	XHHW-2	1	#10	XHHW-2	FR: RECEPTACLE TO: J-BOX @ 60-LIT-715 2 #10 >> LBPD-9: RECPT.	L-60-023

CONDUIT SCHEDULE AREA 60

9/16/13

LOS OSOS WATER RECYCLING FACILITY

POTABLE WATER PUMP STATION

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
L-60-100	60E02	1"	4	#10	XHHW-2	1	#10	XHHW-2	FR: LUMINAIRE TO: PB-01 2 #10 >> LBPD-9: RECPT. 2 #10 >> LBPD-11: LIGHT	L-60-102 L-60-101
L-60-101	60E02	1"	2	#10	XHHW-2	1	#10	XHHW-2	FR: LIGHT SWITCH TO: LUMINAIRE 2 #10 >> LBPD-11: LIGHT	L-60-100
L-60-102	60E02	1"	4	#10	XHHW-2	1	#10	XHHW-2	FR: LUMINAIRE TO: LUMINAIRE 2 #10 >> LBPD-9: RECPT. 2 #10 >> LBPD-11: LIGHT	L-60-100 L-60-100
L-60-210	ESC11 70E02	1"	4 6	#10 #12	XHHW-2 XHHW-2				FR: PB-01 TO: MCC-C 2 #10 >> LBPD-9: RECPT. 2 #10 >> LBPD-11: LIGHT 2 #12 >> POWER: 60-VCP-714 2 #12 >> POWER: 60-EDR-713 2 #12 >> POWER: 60-EDR-760	L-60-100 L-60-100 L-60-023 L-60-014 L-60-014
L-60-220	ESC11 70E02	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: PB-01 TO: MCC-D 2 #12 >> POWER: 60-FLT-716	L-60-007
P-60-110	60E01	1"	5 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: 60-PMP-731 TO: JB @ 60-LCP-731 3 #12 >> POWER: 60-PMP-731 2 #12 >> CONTROL: 60-MWH-731 2 #14 >> CONTROL: 60-TSH-731	C-60-112
P-60-111	60E01	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: JB @ 60-LCP-731 TO: PB-01 3 #12 >> POWER: 60-PMP-731	P-60-110
P-60-120	60E01	1"	5 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: 60-PMP-732 TO: JB @ 60-LCP-732 3 #12 >> POWER: 60-PMP-732 2 #12 >> CONTROL: 60-MWH-732 2 #14 >> CONTROL: 60-TSH-732	C-60-122
P-60-121	60E1	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: JB @ 60-LCP-732 TO: PB-01 3 #12 >> POWER: 60-PMP-732	P-60-210 P-60-120
P-60-130	60E01	1"	5 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: 60-PMP-733 TO: JB @ 60-LCP-733 3 #12 >> POWER: 60-PMP-733 2 #12 >> CONTROL: 60-MWH-733 2 #14 >> CONTROL: 60-TSH-733	C-60-132
P-60-131	60E01	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: JB @ 60-LCP-733 TO: PB-01 3 #12 >> POWER: 60-PMP-733	P-60-210 P-60-130
P-60-140	60E01	1"	5 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: 60-PMP-761 TO: JB @ 60-LCP-761 3 #12 >> POWER: 60-PMP-761 2 #12 >> CONTROL: 60-MWH-761 2 #14 >> CONTROL: 60-TSH-761	C-60-142
P-60-141	60E01	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: JB @ 60-LCP-761 TO: PB-01 3 #12 >> POWER: 60-PMP-761	P-60-211 P-60-140
P-60-150	60E01	1"	5 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: 60-PMP-762 TO: JB @ 60-LCP-762 3 #12 >> POWER: 60-PMP-762 2 #12 >> CONTROL: 60-MWH-762 2 #14 >> CONTROL: 60-TSH-762	C-60-152
P-60-151	60E01	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: JB @ 60-LCP-762 TO: PB-01 3 #12 >> POWER: 60-PMP-762	P-60-220 P-60-150
P-60-160	60E01	1"	5 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: 60-PMP-763 TO: JB @ 60-LCP-763 3 #12 >> POWER: 60-PMP-763 2 #12 >> CONTROL: 60-MWH-763 2 #14 >> CONTROL: 60-TSH-763	C-60-162

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — TARA V. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA
9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
POTABLE WATER PUMP STATION
CONDUIT SCHEDULE- II

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 60E04
SHEET NO. 376 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1160E04.dgn

Plot Date: 16-SEP-2013 5:38:21 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

CONDUIT SCHEDULE AREA 60

9/16/13

LOS OSOS WATER RECYCLING FACILITY

POTABLE WATER PUMP STATION

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
P-60-161	60E01	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: JB @ 60-LCP-763 TO: PB-01 3 #12 >> POWER: 60-PMP-763	P-60-211 P-60-160
P-60-210	ESC11 70E02	2"	6	#12	XHHW-2	2	#12	XHHW-2	FR: PB-01 TO: MCC-C 3 #12 >> POWER: 60-PMP-732 3 #12 >> POWER: 60-PMP-733	 P-60-121 P-60-131
P-60-211	ESC11 70E02	2"	9	#12	XHHW-2	3	#12	XHHW-2	FR: PB-01 TO: MCC-C 3 #12 >> POWER: 60-PMP-761 3 #12 >> POWER: 60-PMP-763 3 #12 >> POWER: 60-PMP-711	 P-60-141 P-60-161 P-60-400
P-60-220	ESC11 70E02	2"	3 6	#10 #12	XHHW-2 XHHW-2	3	#10	XHHW-2	FR: PB-01 TO: MCC-D 3 #12 >> POWER: 60-PMP-732 3 #12 >> POWER: 60-PMP-762 3 #10 >> POWER: 06-GAT-840	 P-60-121 P-60-151 P-60-420
P-60-400	ESC03 60E01	2"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 60-PMP-711 VIA TJB TO: PB-01 3 #12 >> POWER: 60-PMP-711	P-60-211
P-60-420	ESC03 60E01	2"	3	#10	XHHW-2	1	#10	XHHW-2	FR: 06-GAT-840 TO: PB-01 3 #10 >> POWER: 06-GAT-840	P-60-220
P-60-500	ESC03	2"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 60-PMP-712 VIA TJB TO: HH-E16 3 #12 >> POWER: 60-PMP-712	P-60-550
P-60-550	ESC03 70E01 70E02	2"	3	#12	XHHW-2	1	#12	XHHW-2	FR: HH-E16 TO: MCC-D 3 #12 >> POWER: 60-PMP-712	 P-60-500
S-60-001	60E01	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 60-FE-734 TO: 60-FIT-734 1 MFR >> SIGNAL: 60-FE-734	
S-60-002	60E01	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 60-FIT-734 TO: J-BOX @ 60-FIT-734 1 2/CS-#16 >> SIGNAL: 60-FIT-734	S-60-004
S-60-003	60E01	1"	1	2/CS-#16		1	#14	XHHW-2	FR: 60-PIT-734 TO: J-BOX @ 60-FIT-734 1 2/CS-#16 >> SIGNAL: 60-PIT-734	S-60-004
S-60-004	60E01	0.75"	2	2/CS-#16		1	#14	XHHW-2	FR: J-BOX @ 60-FIT-734 TO: J-BOX @ 60-FIT-764 1 2/CS-#16 >> SIGNAL: 60-FIT-734 1 2/CS-#16 >> SIGNAL: 60-PIT-734	S-60-010 S-60-002 S-60-003
S-60-005	60E01	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 60-AE-713/60-AIT-713 TO: CONDUIT TEE 1 2/CS-#16 >> SIGNAL: 60-AE-713/60-AIT-713	S-60-016
S-60-006	60E01	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 60-AE-715/60-AIT-715 TO: CONDUIT TEE 1 2/CS-#16 >> SIGNAL: 60-AE-715/60-AIT-715	S-60-016
S-60-008	60E01	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 60-FE-710 TO: 60-FIT-710 1 MFR >> SIGNAL: 60-FE-710	
S-60-009	60E01	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 60-FIT-710 TO: J-BOX @ 60-FIT-710 1 2/CS-#16 >> SIGNAL: 60-FIT-710	S-60-010
S-60-010	60E01	1.5"	6	2/CS-#16		1	#14	XHHW-2	FR: J-BOX @ 60-FIT-710 TO: PB-02 1 2/CS-#16 >> SIGNAL: 60-FIT-734 1 2/CS-#16 >> SIGNAL: 60-PIT-734 1 2/CS-#16 >> SIGNAL: 60-AE-713/60-AIT-713 1 2/CS-#16 >> SIGNAL: 60-AE-715/60-AIT-715 1 2/CS-#16 >> SIGNAL: 60-FIT-710 1 2/CS-#16 >> SIGNAL: 60-LIT-711	S-60-310 S-60-004 S-60-004 S-60-016 S-60-016 S-60-009 S-60-401
S-60-011	60E01	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 60-LE-760 TO: 60-LIT-760 1 MFR >> SIGNAL: 60-LE-760	

CONDUIT SCHEDULE AREA 60

9/16/13

LOS OSOS WATER RECYCLING FACILITY

POTABLE WATER PUMP STATION

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
S-60-012	60E01	1"	1	2/CS-#16		1	#14	XHHW-2	FR: 60-LIT-760 TO: PB-02 1 2/CS-#16 >> SIGNAL: 60-LIT-760	S-60-310
S-60-013	60E01	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 60-FE-764 TO: 60-FIT-764 1 MFR >> SIGNAL: 60-FE-764	
S-60-014	60E01	1"	1	2/CS-#16		1	#14	XHHW-2	FR: 60-PIT-764 TO: J-BOX @ 60-FIT-764 1 2/CS-#16 >> SIGNAL: 60-PIT-764	S-60-017
S-60-015	60E01	1"	1	2/CS-#16		1	#14	XHHW-2	FR: 60-FIT-764 TO: J-BOX @ 60-FIT-764 1 2/CS-#16 >> SIGNAL: 60-FIT-764	S-60-017
S-60-016	60E01	1"	2	2/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: J-BOX @ 60-FIT-710 1 2/CS-#16 >> SIGNAL: 60-AE-713/60-AIT-713 1 2/CS-#16 >> SIGNAL: 60-AE-715/60-AIT-715	S-60-010 S-60-005 S-60-006
S-60-017	60E01	1"	2	2/CS-#16		1	#14	XHHW-2	FR: J-BOX @ 60-FIT-764 TO: PB-02 1 2/CS-#16 >> SIGNAL: 60-PIT-764 1 2/CS-#16 >> SIGNAL: 60-FIT-764	S-60-310 S-60-014 S-60-015
S-60-020	60E01	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 60-LE-715 TO: 60-LIT-715 1 MFR >> SIGNAL: 60-LE-715	
S-60-021	60E01	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 60-LIT-715 TO: J-BOX @ 60-LIT-715 1 2/CS-#16 >> SIGNAL: 60-LIT-715	S-60-023
S-60-022	60E01	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: 60-VCP-714 TO: J-BOX @ 60-LIT-715 1 2/CS-#16 >> SIGNAL: 60-VCP-714	S-60-023
S-60-023	60E01	2"	2	2/CS-#16		1	#14	XHHW-2	FR: J-BOX @ 60-LIT-715 TO: PB-02 1 2/CS-#16 >> SIGNAL: 60-LIT-715 1 2/CS-#16 >> SIGNAL: 60-VCP-714	S-60-310 S-60-021 S-60-022
S-60-310	ESC11 70E03	2"	11	2/CS-#16		1	#14	XHHW-2	FR: PB-02 TO: PCM-1 1 2/CS-#16 >> SIGNAL: 60-FIT-734 1 2/CS-#16 >> SIGNAL: 60-PIT-734 1 2/CS-#16 >> SIGNAL: 60-AE-713/60-AIT-713 1 2/CS-#16 >> SIGNAL: 60-AE-715/60-AIT-715 1 2/CS-#16 >> SIGNAL: 60-FIT-710 1 2/CS-#16 >> SIGNAL: 60-LIT-760 1 2/CS-#16 >> SIGNAL: 60-PIT-764 1 2/CS-#16 >> SIGNAL: 60-FIT-764 1 2/CS-#16 >> SIGNAL: 60-LIT-715 1 2/CS-#16 >> SIGNAL: 60-VCP-714 1 2/CS-#16 >> SIGNAL: 60-LIT-711	 S-60-010 S-60-010 S-60-010 S-60-010 S-60-012 S-60-017 S-60-017 S-60-023 S-60-023 S-60-401
S-60-400	ESC03	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 60-LE-711 TO: 60-LIT-711 1 MFR >> SIGNAL: 60-LE-711	
S-60-401	ESC03 60E01	2"	1	2/CS-#16		1	#14	XHHW-2	FR: 60-LIT-711 TO: J-BOX @ 60-FIT-710 1 2/CS-#16 >> SIGNAL: 60-LIT-711	S-60-010
S-60-500	ESC03	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 60-LE-712 TO: 60-LIT-712 1 MFR >> SIGNAL: 60-LE-712	
S-60-501	ESC03 70E03	2"	1	2/CS-#16		1	#14	XHHW-2	FR: 60-LIT-712 TO: PCM-1 VIA HH-S16 1 2/CS-#16 >> SIGNAL: 60-LIT-712	
X-60-200	ESC11 70E02	2"	1	PULL	ROPE				FR: PB-01 TO: ELECTRICAL ROOM 1 PULL >> SPARE POWER/CONTROL	
X-60-300	ESC11 70E03	2"	1	PULL	ROPE				FR: PB-02 TO: CONTROL ROOM 1 PULL >> SPARE SIGNAL	

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
POTABLE WATER PUMP STATION
CONDUIT SCHEDULE- III

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 60E05
SHEET NO. 377 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1160E05.dgn

Plot Date: 16-SEP-2013 5:38:42 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

CONDUIT SCHEDULE AREA 60

9/16/13

LOS OSOS WATER RECYCLING FACILITY

POTABLE WATER PUMP STATION

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
X-60-301	ESC11 70E03	2"	1	PULL	ROPE				FR: PB-01 TO: CONTROL ROOM 1 PULL >> SPARE CONTROL	
X-60-400	ESC03 70E01 70E02	2"	1	PULL	ROPE				FR: HH-E16 TO: ELECTRICAL ROOM 1 PULL >> SPARE POWER/CONTROL	
X-60-401	ESC03 70E01 70E03	2"	1	PULL	ROPE				FR: HH-S16 TO: CONTROL ROOM 1 PULL >> SPARE SIGNAL	

END OF CONDUIT SCHEDULE

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER IAN R. VARLEY No. 12879 ELECTRICAL STATE OF CALIFORNIA 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

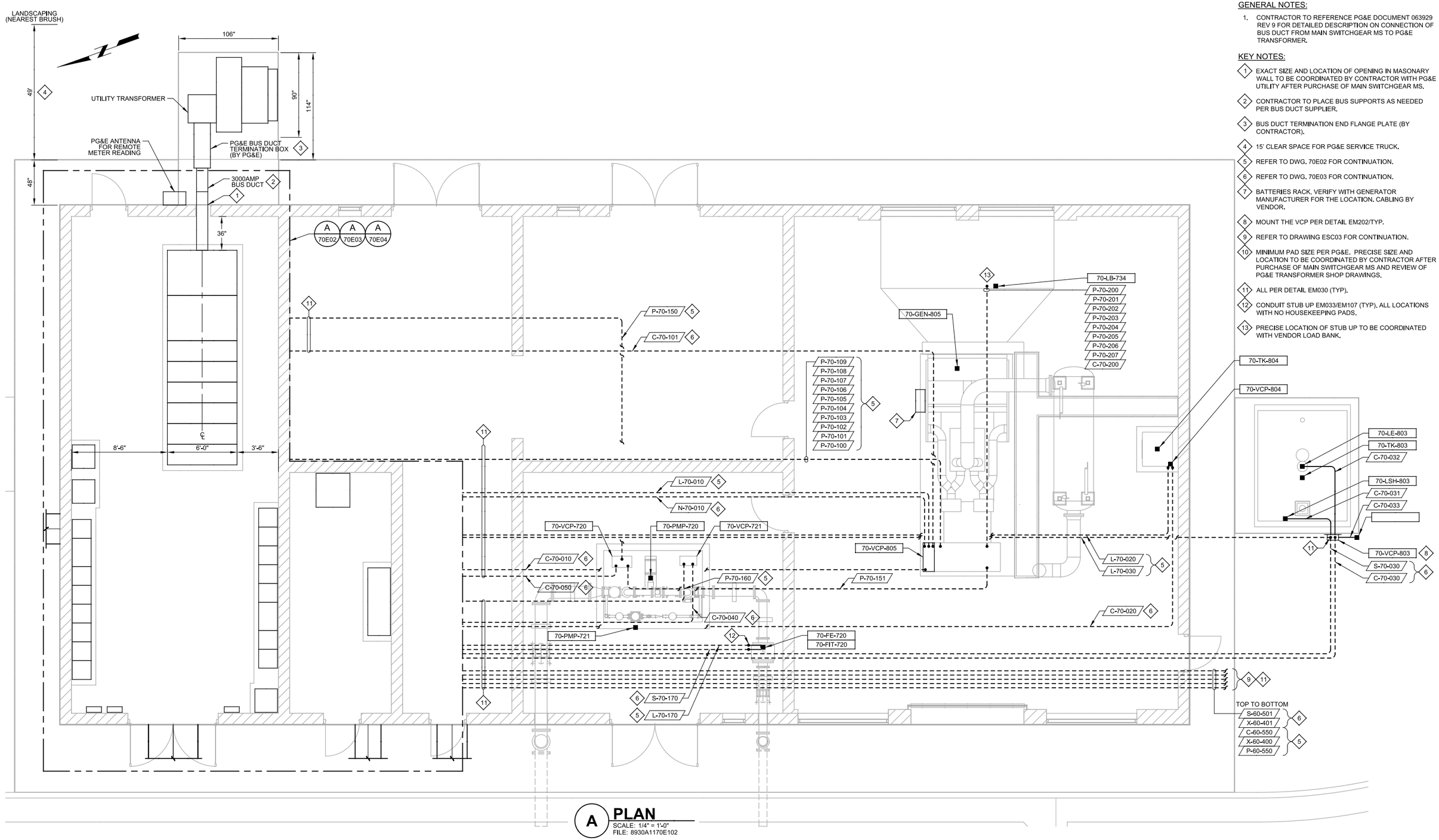
SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
POTABLE WATER PUMP STATION
CONDUIT SCHEDULE- IV

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 60E06
SHEET NO. 378 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1160E06.dgn

LAST SAVED BY: ejohnson Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1 Plot Date: 16-SEP-2013 5:39:02 PM User: EJohnson



A PLAN

SCALE: 1/4" = 1'-0"
FILE: 8930A1170E102

GENERAL NOTES:

1. CONTRACTOR TO REFERENCE PG&E DOCUMENT 063929 REV 9 FOR DETAILED DESCRIPTION ON CONNECTION OF BUS DUCT FROM MAIN SWITCHGEAR MS TO PG&E TRANSFORMER.

KEY NOTES:

1. EXACT SIZE AND LOCATION OF OPENING IN MASONARY WALL TO BE COORDINATED BY CONTRACTOR WITH PG&E UTILITY AFTER PURCHASE OF MAIN SWITCHGEAR MS.
2. CONTRACTOR TO PLACE BUS SUPPORTS AS NEEDED PER BUS DUCT SUPPLIER.
3. BUS DUCT TERMINATION END FLANGE PLATE (BY CONTRACTOR).
4. 15' CLEAR SPACE FOR PG&E SERVICE TRUCK.
5. REFER TO DWG. 70E02 FOR CONTINUATION.
6. REFER TO DWG. 70E03 FOR CONTINUATION.
7. BATTERIES RACK. VERIFY WITH GENERATOR MANUFACTURER FOR THE LOCATION. CABLING BY VENDOR.
8. MOUNT THE VCP PER DETAIL EM202/TYP.
9. REFER TO DRAWING ESC03 FOR CONTINUATION.
10. MINIMUM PAD SIZE PER PG&E. PRECISE SIZE AND LOCATION TO BE COORDINATED BY CONTRACTOR AFTER PURCHASE OF MAIN SWITCHGEAR MS AND REVIEW OF PG&E TRANSFORMER SHOP DRAWINGS.
11. ALL PER DETAIL EM030 (TYP).
12. CONDUIT STUB UP EM033/EM107 (TYP). ALL LOCATIONS WITH NO HOUSEKEEPING PADS.
13. PRECISE LOCATION OF STUB UP TO BE COORDINATED WITH VENDOR LOAD BANK.

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER · JAMES R. VARLEY · No. 12879 · ELECTRICAL · STATE OF CALIFORNIA · 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
ELECTRICAL BUILDING PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 70E01
SHEET NO. 379 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1170E01.dgn

Plot Date: 16-SEP-2013 5:39:20 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: adiaz

BH
ESC11

X-60-200 2

MCC-C
PP-C1
PP-C2
P-31-141
P-31-143

LEFT TO RIGHT
P-70-160
P-21-210
P-23-210
X-00-004
X-00-005

P-60-211
P-60-210
L-60-210

LEFT TO RIGHT
P-31-104
P-30-310
P-28-210

LEFT TO RIGHT
L-70-030
L-70-020
L-32-100
L-32-101
L-32-102
X-32-103
X-32-104

LEFT TO RIGHT
P-60-220
L-60-220
L-60-310
L-70-010
L-70-130

P-70-130
P-70-131

TOP TO BOTTOM
X-70-110
X-70-120
P-70-110
P-70-111
P-51-150
P-51-151
P-51-152
P-51-153

A1
ESC06

TO MH-E01

(FRONT)

PG&E ANTENNA
FOR REMOTE
METER READING

MATCH LINE ON 70E01

P-31-142
X-00-007
X-00-006

LEFT TO RIGHT
L-23-200
L-31-100
L-28-210
L-31-101
L-23-200
L-21-300
L-30-210

P-28-220
P-21-220
P-23-220

P-30-320
P-31-100

PP-D

LEFT TO RIGHT
P-51-163
P-51-162
P-51-161
P-51-160
P-70-121
P-70-120

P-70-141
P-70-140

MAIN SWITCHGEAR
SWGR-MS

P-70-150

MCC-D

P-60-220
L-60-220

MATCH LINE ON 70E01

P-70-109
P-70-108
P-70-107
P-70-106
P-70-105
P-70-104
P-70-103
P-70-102
P-70-101
P-70-100
NP-1

P-60-550
X-60-400

A2
ESC06

TO HH-S13

L-60-320

PCM-1

MATCH LINE ON 70E01

L-70-170

L-32-103

AW
ESC10

MATCH LINE ON 70E01

KEY NOTES:

1. REFER TO DRAWING ESC03 FOR CONTINUATION.
2. CAP PER DETAIL EM105/TYP.
3. TO CHEMICAL FACILITY AREA 32 PULLBOXES.
4. ALL PER DETAIL EM030.
5. CONDUIT STUB UP EM033/EM107 (TYP). ALL LOCATIONS WITH NO HOUSEKEEPING PADS.
6. ALL CONDUITS ARE NOT SHOWN FOR CLARITY.

A PLAN

SCALE: 1/2" = 1'-0"
FILE: 8930A1170E100

REV	DATE	BY	DESCRIPTION

DESIGNED IRV
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — REGISTERED PROFESSIONAL ENGINEER
9/16/2013

carollo

SAN LUIS OBISPO COUNTY

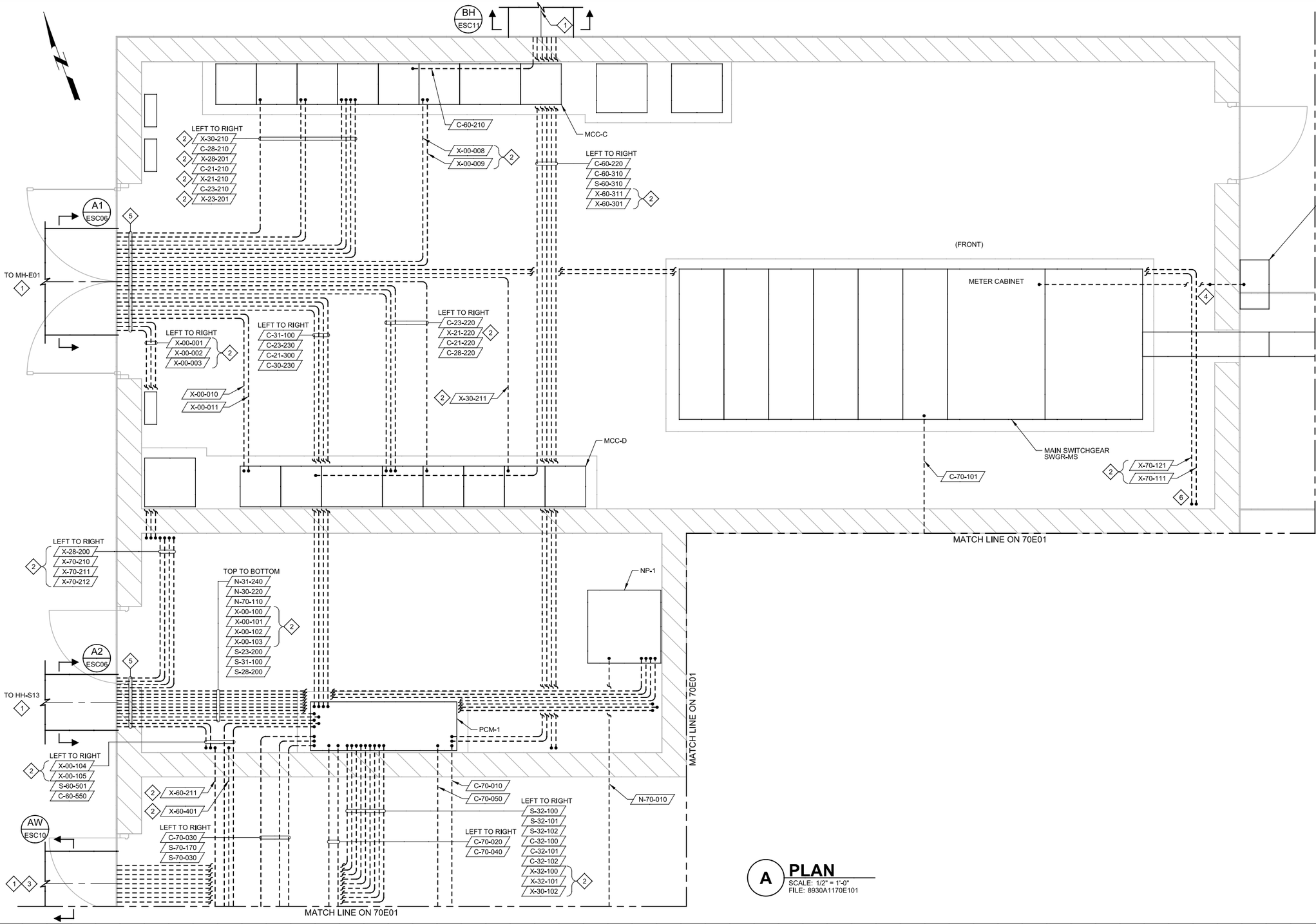
SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
ELECTRICAL BUILDING UNDERGROUND POWER PARTIAL PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 70E02
SHEET NO. 380 OF 549

PROJECT NO. 8930A.11
FILE NAME: 8930A1170E02.dgn

LAST SAVED BY: ejohnson
Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1
User: EJohnson Plot Date: 16-SEP-2013 5:39:40 PM



A PLAN
SCALE: 1/2" = 1'-0"
FILE: 8930A1170E101

REV	DATE	BY	DESCRIPTION

DESIGNED IRV
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — TARA R. VARLEY — No. 12679 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY

LOS OSOS WATER RECYCLING FACILITY PROJECT

ELECTRICAL

ELECTRICAL BUILDING UNDERGROUND CONTROL & SIGNAL PARTIAL PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 70E03
SHEET NO. 381 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1170E03.dgn

Plot Date: 16-SEP-2013 5:39:58 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

Plot Date: 16-SEP-2013 5:40:18 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

MCC-C

PP-C1

PP-C2

P-70-042

P-70-041

P-70-044

TR-C1

TR-C2

P-70-045

LEFT TO RIGHT
C-70-130
S-70-130

PP-D

P-70-046

TR-D1

P-70-043

N-70-100

(FRONT)

MAIN SWITCHGEAR
SWGR-MS

PG&E ANTENNA
FOR REMOTE
METER READING

MATCH LINE ON 70E01

MCC-D

1

LEFT TO RIGHT
C-70-140
S-70-140
C-70-100

NP-1

PCM-1

LEFT TO RIGHT
N-70-002
N-70-001
L-70-001

MATCH LINE ON 70E01

MATCH LINE ON 70E01

KEY NOTES:

1. PENETRATE THE WALL PER DETAIL EM138/TYP.
2. DUCT RISES TO 7' (APPROX) ABOVE FINISHED FLOOR.

A PLAN

SCALE: 1/2" = 1'-0"
FILE: 8930A1170E100

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN CC
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER · JAMES R. VARLEY · No. 12879 · ELECTRICAL · STATE OF CALIFORNIA · 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY

LOS OSOS WATER RECYCLING FACILITY PROJECT

ELECTRICAL

ELECTRICAL BUILDING
ABOVE GROUND PARTIAL PLAN

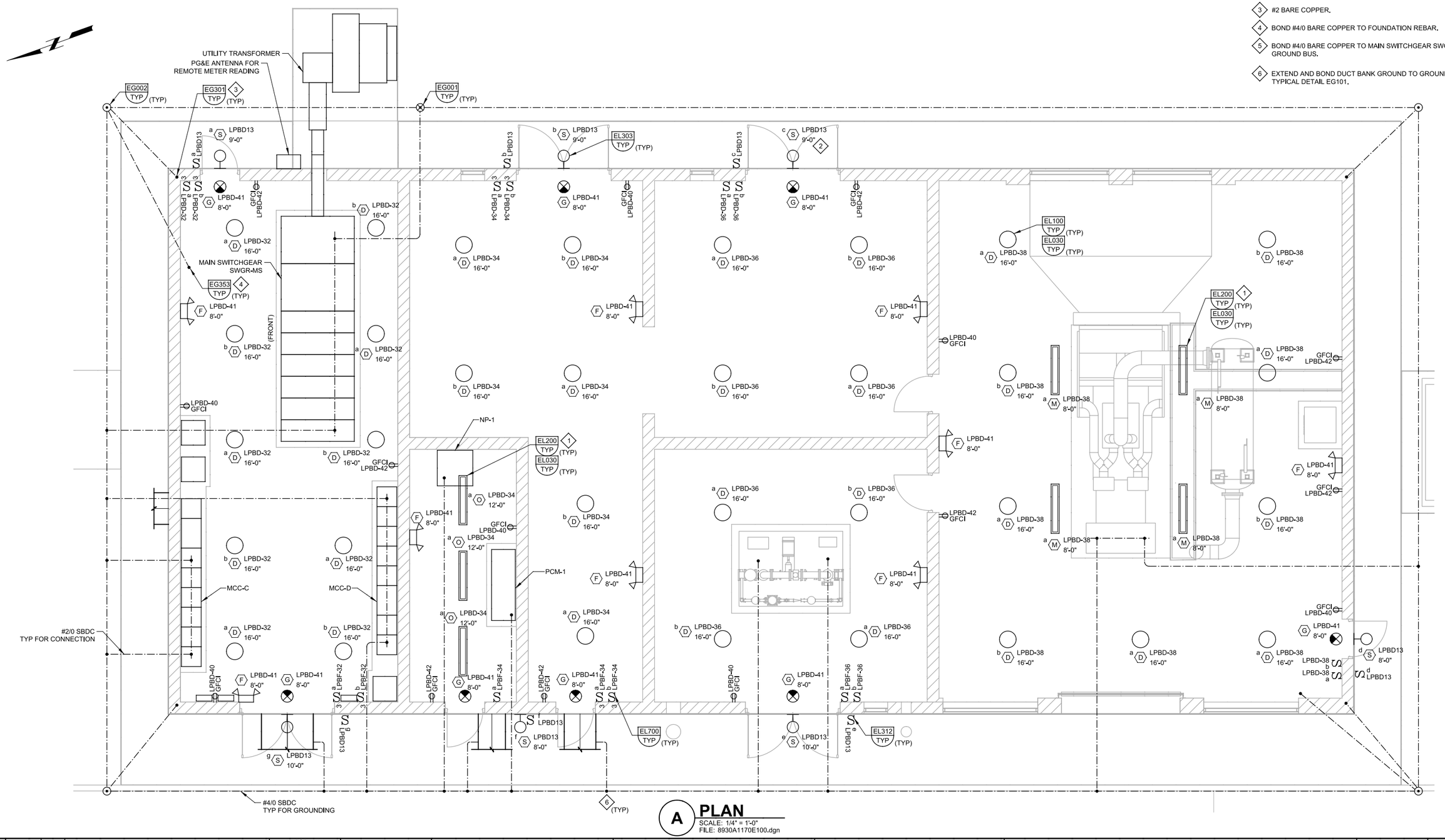
VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 70E04
SHEET NO. 382 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1170E04.dgn

KEY NOTES:

1. SUSPENDED CHAIN HANG.
2. REFERENCE DRAWING 06AE06 FOR FIXTURE TYPE.
3. #2 BARE COPPER.
4. BOND #4/0 BARE COPPER TO FOUNDATION REBAR.
5. BOND #4/0 BARE COPPER TO MAIN SWITCHGEAR SWGR-MS GROUND BUS.
6. EXTEND AND BOND DUCT BANK GROUND TO GROUND GRID PER TYPICAL DETAIL EG101.



A PLAN

SCALE: 1/4" = 1'-0"
FILE: 8930A1170E100.dgn

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12679 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
ELECTRICAL BUILDING LIGHTING, RECEPTACLE, & GROUNDING PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

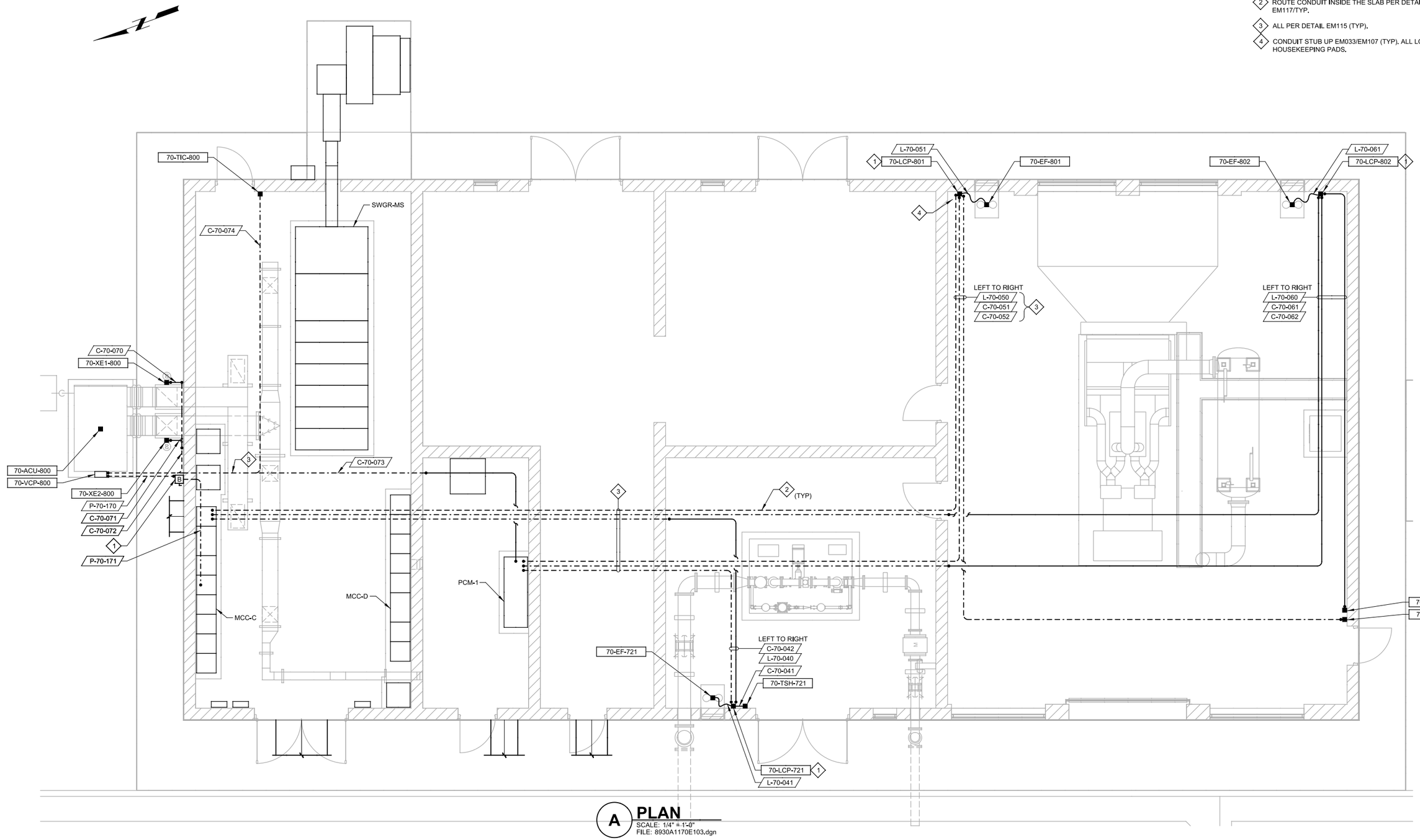
JOB NO. 8930A.11
DRAWING NO. 70E05
SHEET NO. 383 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1170E05.dgn

Plot Date: 16-SEP-2013 5:40:57 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

KEY NOTES:

1. MOUNT THE DISCONNECT SWITCH/LCP ON THE WALL.
2. ROUTE CONDUIT INSIDE THE SLAB PER DETAILS EM115/TYP AND EM117/TYP.
3. ALL PER DETAIL EM115 (TYP).
4. CONDUIT STUB UP EM033/EM107 (TYP). ALL LOCATIONS WITH NO HOUSEKEEPING PADS.



A **PLAN**
SCALE: 1/4" = 1'-0"
FILE: 8930A1170E103.dgn

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — JAMES R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
ELECTRICAL BUILDING HVAC PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 70E06
SHEET NO. 384 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1170E06.dgn

CONDUIT SCHEDULE AREA 70

9/16/13

LOS OSOS WATER RECYCLING FACILITY

ELECTRICAL BUILDING

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-70-010	70E01	1"	8	#14	XHHW-2	1	#14	XHHW-2	FR: 70-VCP-805 TO: PCM-1 8 #14 >> CONTROL: SPARE	
C-70-020	70E01 70E03	1"	8	#14	XHHW-2	1	#14	XHHW-2	FR: 70-VCP-804 TO: PCM-1 8 #14 >> CONTROL: 70-VCP-804	
C-70-030	70E01 70E03	2"	6	#14	XHHW-2	1	#14	XHHW-2	FR: 70-VCP-803 TO: PCM-1 6 #14 >> CONTROL: 70-VCP-803	
C-70-031	70E01	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 70-LSH-803 TO: 70-VCP-803 2 #14 >> CONTROL: 70-LSH-803	
C-70-032	70E01	0.75"	1	MFR	CABLE	1	#14	XHHW-2	FR: 70-LE-803 TO: 70-VCP-803 1 MFR >> CONTROL: 70-LE-803	
C-70-033	70E01	0.75"	1	MFR	CABLE	1	#14	XHHW-2	FR: SOLENOID VALVE TO: 70-VCP-803 1 MFR >> CONTROL: SOLENOID VALVE	
C-70-040	70E01 70E03	1"	6	#14	XHHW-2	1	#14	XHHW-2	FR: 70-VCP-721 TO: PCM-1 6 #14 >> CONTROL: 70-VCP-721, 2-SPARE	
C-70-041	70E06	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 70-TSH-721 TO: 70-LCP-721 2 #14 >> CONTROL: 70-TSH-721	
C-70-042	70E06	1"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 70-LCP-721 TO: PCM-1 2 #14 >> CONTROL: 70-LCP-721	
C-70-050	70E01 70E03	1"	14	#14	XHHW-2	1	#14	XHHW-2	FR: 70-VCP-720 TO: PCM-1 14 #14 >> CONTROL: 70-VCP-720, 7-SPARE	
C-70-051	70E06	1"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 70-LCP-801 TO: PCM-1 2 #14 >> CONTROL: 70-LCP-801	
C-70-052	70E06	1"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 70-LCP-801 TO: 70-TSH-801 2 #14 >> CONTROL: 70-TSH-801	
C-70-061	70E06	1"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 70-LCP-802 TO: PCM-1 2 #14 >> CONTROL: 70-LCP-802	
C-70-062	70E06	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: 70-LCP-802 TO: 70-TSH-802 2 #14 CONTROL: 70-TSH-802	
C-70-070	70E06	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: 70-XE1-800 TO: CONDUIT TEE 4 #14 >> CONTROL: 70-XE1-800	C-70-072
C-70-071	70E06	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: 70-XE2-800 TO: CONDUIT TEE 4 #14 >> CONTROL: 70-XE2-800	C-70-072
C-70-072	70E06	1"	8	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: 70-VCP-800 4 #14 >> CONTROL: 70-XE2-800 4 #14 >> CONTROL: 70-XE1-800	 C-70-071 C-70-070
C-70-073	70E06	1"	8	#14	XHHW-2	1	#14	XHHW-2	FR: 70-VCP-800 TO: PCM-1 8 #14 >> CONTROL: 70-VCP-800, 2-SPARE	
C-70-074	70E06	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: 70-TIC-800 TO: 70-VCP-800 1 MFR >> CONTROL: 70-VCP-800	
C-70-100	70E04	1.5"	24	#14	XHHW-2	1	#14	XHHW-2	FR: SWGR-MS TO: PCM-1 24 #14 >> CONTROL: SWGR-MS 6-SPARE	

CONDUIT SCHEDULE AREA 70

9/16/13

LOS OSOS WATER RECYCLING FACILITY

ELECTRICAL BUILDING

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-70-101	70E01 70E03	1"	6	#14	XHHW-2	1	#14	XHHW-2	FR: 70-VCP-805 TO: SWGR-MS 4 #14 >> CONTROL: SWGR-MS 2 #14 >> LOAD DUMP CONTROL	
C-70-130	70E04	2"	82	#14	XHHW-2	1	#14	XHHW-2	FR: MCC-C TO: PCM-1 10 #14 >> CONTROL: 21-CLR-111, 2-SPARE 11 #14 >> CONTROL: 23-PMP-131, 2-SPARE 11 #14 >> CONTROL: 28-PMP-181, 2-SPARE 11 #14 >> CONTROL: 28-PMP-183, 2-SPARE 10 #14 >> CONTROL: 60-PMP-731, 2-SPARE 10 #14 >> CONTROL: 60-PMP-733, 2-SPARE 9 #14 >> CONTROL: 60-PMP-711, 2-SPARE 10 #14 >> CONTROL: 28-PMP-185, 2-SPARE	
C-70-140	70E04	2"	72	#14	XHHW-2	1	#14	XHHW-2	FR: MCC-D TO: PCM-1 10 #14 >> CONTROL: 21-CLR-112, 2-SPARE 11 #14 >> CONTROL: 23-PMP-132, 2-SPARE 11 #14 >> CONTROL: 28-PMP-182, 2-SPARE 11 #14 >> CONTROL: 28-PMP-184, 2-SPARE 10 #14 >> CONTROL: 60-PMP-732, 2-SPARE 9 #14 >> CONTROL: 60-PMP-712, 2-SPARE 10 #14 >> CONTROL: 28-PMP-186, 2-SPARE	
C-70-200	70E01	0,75"	6	#14	XHHW-2	1	#14	XHHW-2	FR: LOAD BANK TO: 70-VCP-805 2 #14 >> LOAD DUMP CONTROL 4 #14 >> RUN/FAIL STATUS	
L-70-001	70E04	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: PCM-1 TO: NP-1 2 #12 >> POWER:PCM-1	
L-70-010	70E01 70E02	1"	2 2 2	#6 #10 #12	XHHW-2 XHHW-2 XHHW-2	1	#10 #12	XHHW-2	FR: 70-VCP-805 TO: LP-BC 2 #6 >> POWER: WATER JACKET HEATER 2 #10 >> POWER: CONTROL PANEL 2 #12 >> POWER: BATTERY CHARGER	
L-70-020	70E01 70E02	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 70-VCP-804 TO: LP-BC 2 #12 >> POWER: 70-VCP-804	
L-70-030	70E01	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 70-VCP-803 TO: LP-BC 2 #12 >> POWER: 70-VCP-803	
L-70-040	70E06	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 70-LCP-721 TO: LP-BC 2 #12 >> POWER: 70-LCP-721	
L-70-041	70E06	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 70-EF-721 TO: 70-LCP-721 2 #12 >> POWER: 70-EF-721	
L-70-050	70E06	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 70-LCP-801 TO: LP-BC 2 #12 >> POWER: 70-LCP-801	
L-70-051	70E06	0,75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 70-EF-801 TO: 70-LCP-801 2 #12 >> POWER: 70-EF-801	
L-70-060	70E06	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 70-LCP-802 TO: LP-BC 2 #12 >> POWER: 70-LCP-802	
L-70-061	70E-6	0,75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 70-EF-802 TO: 70-LCP-802 2 #12 >> POWER: 70-EF-802	
L-70-130	70E02	1"	3	#10	XHHW-2	1	#10	XHHW-2	FR: NP-1 TO: LP-BC 3 #10 >> POWER: NP-1	
L-70-170	70E01 70E02	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: 70-FE-720/70-FIT-720 TO: PCM-1 2 #12 >> POWER: 70-FIT-720	

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA
9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
ELECTRICAL BUILDING
CONDUIT SCHEDULE- I

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 70E07
SHEET NO. 385 OF 549

Plot Date: 16-SEP-2013 5:41:16 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson

PROJECT NO. 8930A.11 FILE NAME: 8930A1170E07.dgn

CONDUIT SCHEDULE AREA 70

9/16/13

LOS OSOS WATER RECYCLING FACILITY

ELECTRICAL BUILDING

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
N-70-001	70E03	2"	4	2/FO		1	#14	XHHW-2	FR: PCM-1 TO: NP-1 4 2/FO >> NETWORK	
N-70-002	70E03	1"	4	CAT6E		1	#14	XHHW-2	FR: PCM-1 TO: NP-1 4 CAT6E >> NETWORK	
N-70-010	70E01	1"	1	CAT6E		1	#14	XHHW-2	FR: 70-VCP-805 TO: NP-1 1 CAT6E >> NETWORK: 70-VCP-805	
N-70-100	70E04	0.75"	1	CAT6E		1	#14	XHHW-2	FR: SWGR-MS TO: NP-1 1 CAT6E >> NETWORK: SWGR-MS	
N-70-110	70E03	2"	1	12/FO		1	#14	XHHW-2	FR: NP-1 TO: NR-MAIN VIA HH-S13, HH-S01, HH-S02, HH-S04 1 12/FO >> NETWORK	
P-70-041	70E04	1.5"	3	#1	XHHW-2	1	#6	XHHW-2	FR: CHANNEL 1 TRANSFORMER BREAKER TO: CHANNEL 1 TRANSFORMER C1 3 #1 >> CHANNEL 1 TRANSFORMER	
P-70-042	70E04	1.5"	3	#1	XHHW-2	1	#6	XHHW-2	FR: CHANNEL 2 TRANSFORMER BREAKER TO: CHANNEL 2 TRANSFORMER C2 3 #1 >> CHANNEL 2 TRANSFORMER	
P-70-043	70E04	1.5"	3	#1	XHHW-2	1	#6	XHHW-2	FR: CHANNEL 3 TRANSFORMER BREAKER TO: CHANNEL 3 TRANSFORMER D1 3 #1 >> CHANNEL 3 TRANSFORMER	
P-70-044	70E04	1.5"	4	#1	XHHW-2	1	#6	XHHW-2	FR: CHANNEL 1 TRANSFORMER C1 TO: CHANNEL 1 UV POWER PANEL C1 4 #1 >> CHANNEL 1 UV POWER	
P-70-045	70E04	1.5"	4	#1	XHHW-2	1	#6	XHHW-2	FR: CHANNEL 2 TRANSFORMER C2 TO: CHANNEL 2 UV POWER PANEL C2 4 #1 >> CHANNEL 2 UV POWER	
P-70-046	70E04	1.5"	4	#1	XHHW-2	1	#6	XHHW-2	FR: CHANNEL 3 TRANSFORMER D1 TO: CHANNEL 3 UV POWER PANEL D1 4 #1 >> CHANNEL 3 UV POWER	
P-70-100	70E01	4"	3	750	XHHW-2	1	#4	XHHW-2	FR: 70-GEN-805 TO: SWGR-MS 3 750 >> POWER: 70-GEN-805	
P-70-101	70E01	4"	3	750	XHHW-2	1	#4	XHHW-2	FR: 70-GEN-805 TO: SWGR-MS 3 750 >> POWER: 70-GEN-805	
P-70-102	70E01	4"	3	750	XHHW-2	1	#4	XHHW-2	FR: 70-GEN-805 TO: SWGR-MS 3 750 >> POWER: 70-GEN-805	
P-70-103	70E01	4"	3	750	XHHW-2	1	#4	XHHW-2	FR: 70-GEN-805 TO: SWGR-MS 3 750 >> POWER: 70-GEN-805	
P-70-104	70E01	4"	3	750	XHHW-2	1	#4	XHHW-2	FR: 70-GEN-805 TO: SWGR-MS 3 750 >> POWER: 70-GEN-805	
P-70-105	70E01	4"	3	750	XHHW-2	1	#4	XHHW-2	FR: 70-GEN-805 TO: SWGR-MS 3 750 >> POWER: 70-GEN-805	
P-70-106	70E01	4"	3	750	XHHW-2	1	#4	XHHW-2	FR: 70-GEN-805 TO: SWGR-MS 3 750 >> POWER: 70-GEN-805	
P-70-107	70E01	4"	1	PULL	ROPE				FR: 70-GEN-805 TO: SWGR-MS 1 PULL >> SPARE CONDUIT	
P-70-108	70E01	4"	1	PULL	ROPE				FR: 70-GEN-805 TO: SWGR-MS 1 PULL >> SPARE CONDUIT	
P-70-109	70E01	4"	1	PULL	ROPE				FR: 70-GEN-805 TO: SWGR-MS 1 PULL >> SPARE CONDUIT	

CONDUIT SCHEDULE AREA 70

9/16/13

LOS OSOS WATER RECYCLING FACILITY

ELECTRICAL BUILDING

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
P-70-110	70E02	2"	3	#2/0	XHHW-2	1	#6	XHHW-2	FR: PANEL HA ADMIN BLDG TO: SWGR-MS VIA MH-E01, HH-E02, HH-E04 3 #2/0 >> POWER: PANEL HA	
P-70-111	70E02	2"	3	#2/0	XHHW-2	1	#6	XHHW-2	FR: PANEL HA ADMIN BLDG TO: SWGR-MS VIA MH-E01, HH-E02, HH-E04 3 #2/0 >> POWER: PANEL HA	
P-70-120	70E02	2"	3	#3/0	XHHW-2	1	#4	XHHW-2	FR: PANEL HA MNTNCE BLDG TO: SWGR-MS VIA MH-E01, HH-E02, HH-E04, HH-E06, HH-E08 3 #3/0 >> POWER: PANEL HA	
P-70-121	70E02	2"	3	#3/0	XHHW-2	1	#4	XHHW-2	FR: PANEL HA MNTNCE BLDG TO: SWGR-MS VIA MH-E01, HH-E02, HH-E04, HH-E06, HH-E08 3 #3/0 >> POWER: PANEL HA	
P-70-130	70E02	3"	3	250	XHHW-2	1	#3	XHHW-2	FR: MCC-C TO: SWGR-MS 3 250 >> POWER: MCC-C	
P-70-131	70E02	3"	3	250	XHHW-2	1	#3	XHHW-2	FR: MCC-C TO: SWGR-MS 3 250 >> POWER: MCC-C	
P-70-140	70E02	3"	3	250	XHHW-2	1	#3	XHHW-2	FR: MCC-D TO: SWGR-MS 3 250 >> POWER: MCC-D	
P-70-141	70E02	3"	3	250	XHHW-2	1	#3	XHHW-2	FR: MCC-D TO: SWGR-MS 3 250 >> POWER: MCC-D	
P-70-150	70E01	1"	3	#6	XHHW-2	1	#3	XHHW-2	FR: 70-VCP-720 TO: SWGR-MS 3 #6 >> POWER: 70-VCP-720	
P-70-151	70E01	1"	3	#6	XHHW-2	1	#3	XHHW-2	FR: 70-VCP-720 TO: 70-GEN-805 3 #6 >> POWER: 70-VCP-720	
P-70-160	70E01	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: 70-VCP-721 TO: MCC-C 3 #12 >> POWER: 70-VCP-721	
P-70-170	70E06	1"	3	#8	XHHW-2	1	#12	XHHW-2	FR: 70-VCP-800 TO: DISCONNECT SWTICH 3 #8 >> POWER: 70-VCP-800	P-70-171
P-70-171	70E06	1"	3	#8	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT SWTICH TO: MCC-C 3 #8 >> POWER: 70-VCP-800	P-70-170
P-70-200	70E01	4"	3	350	XHHW-2	1	#4	XHHW-2	FR: 70-GEN-805 TO: LOAD BANK 3 350 >> POWER: LOAD BANK	
P-70-201	70E01	4"	3	350	XHHW-2	1	#4	XHHW-2	FR: 70-GEN-805 TO: LOAD BANK 3 350 >> POWER: LOAD BANK	
P-70-202	70E01	4"	3	350	XHHW-2	1	#4	XHHW-2	FR: 70-GEN-805 TO: LOAD BANK 3 350 >> POWER: LOAD BANK	
P-70-203	70E01	4"	3	350	XHHW-2	1	#4	XHHW-2	FR: 70-GEN-805 TO: LOAD BANK 3 350 >> POWER: LOAD BANK	
P-70-204	70E01	4"	3	350	XHHW-2	1	#4	XHHW-2	FR: 70-GEN-805 TO: LOAD BANK 3 350 >> POWER: LOAD BANK	
P-70-205	70E01	4"	3	350	XHHW-2	1	#4	XHHW-2	FR: 70-GEN-805 TO: LOAD BANK 3 350 >> POWER: LOAD BANK	
P-70-206	70E01	4"	1	PULL	ROPE		#4	XHHW-2	FR: 70-GEN-805 TO: LOAD BANK 1 PULL >> SPARE CONDUIT	
P-70-207	70E01	4"	1	PULL	ROPE		#4	XHHW-2	FR: 70-GEN-805 TO: LOAD BANK 1 PULL >> SPARE CONDUIT	

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN VCP
CHECKED RAM
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA
9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
ELECTRICAL BUILDING CONDUIT SCHEDULE- II

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 70E08
SHEET NO. 386 OF 549

LAST SAVED BY: adiaz
Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1
User: EJohnson Plot Date: 16-SEP-2013 5:41:35 PM

PROJECT NO. 8930A.11 FILE NAME: 8930A1170E08.dgn

CONDUIT SCHEDULE AREA 70

9/16/13

LOS OSOS WATER RECYCLING FACILITY

ELECTRICAL BUILDING

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
S-70-030		2"	1	2/CS-#16		1	#14	XHHW-2	FR: 70-VCP-803 TO: PCM-1 1 2/CS-#16 >> SIGNAL: 70-VCP-803	
S-70-130	70E04	2"	4	2/CS-#16		1	#14	XHHW-2	FR: MCC-C TO: PCM-1 2 2/CS-#16 >> SIGNAL: 28-PMP-181 2 2/CS-#16 >> SIGNAL: 28-PMP-183	
S-70-140	70E04	1"	4	2/CS-#16		1	#14	XHHW-2	FR: MCC-D TO: PCM-1 2 2/CS-#16 >> SIGNAL: 28-PMP-182 2 2/CS-#16 >> SIGNAL: 28-PMP-184	
S-70-170	70E01 70E03	1"	1	2/CS-#16		1	#14	XHHW-2	FR: 70-FE-720/70-FIT-720 TO: PCM-1 1 2/CS-#16 >> SIGNAL: 70-FIT-720	
X-70-110	70E02 ESC06 ESC010	2"	1	PULL	ROPE				FR: ELECTRICAL BUILDING TO: ADMINSTRATION BUILDING VIA MH-E01, HH-E02, HH-E04 1 PULL >> POWER, SPARE	
X-70-111	70E03 ESC06 ESC010	2"	1	PULL	ROPE				FR: ELECTRICAL BUILDING TO: ADMINSTRATION BUILDING VIA MH-E01, HH-E02, HH-E04 1 PULL >> CONTROL, SPARE	
X-70-120	70E02 ESC06 ESC010	2"	1	PULL	ROPE				FR: ELECTRICAL BUILDING TO: MAINTENANCE BUILDING VIA MH-E01, HH-E02/E04/E06/E08 1 PULL >> POWER, SPARE	
X-70-121	70E03 ESC06 ESC010	2"	1	PULL	ROPE				FR: ELECTRICAL BUILDING TO: MAINTENANCE BUILDING VIA MH-E01, HH-E02/E04/E06/E08 1 PULL >> CONTROL, SPARE	
X-70-210	70E03	2"	1	PULL	ROPE				FR: ELECTRICAL BUILDING CONTROL ROOM TO: ADMINSTRATION BUILDING VIA MH-E01, HH-E02, HH-E04 1 PULL >> SIGNAL, SPARE	
X-70-211	70E03	2"	1	PULL	ROPE				FR: ELECTRICAL BUILDING CONTROL ROOM TO: ADMINSTRATION BUILDING VIA MH-E01, HH-E02, HH-E04 1 PULL >> SPARE	
X-70-212	70E03	2"	1	PULL	ROPE				FR: ELECTRICAL BUILDING CONTROL ROOM TO: ADMINSTRATION BUILDING VIA MH-E01, HH-E02, HH-E04 1 PULL >> SIGNAL, SPARE	

GENERAL NOTES:

CONDUIT IDENTIFICATION
V-YY-ZZZ
LEGEND:
V → M= MEDIUM VOLTAGE POWER
P= 480V OR 277V POWER
L=120V, 208, OR 240 POWER
C=DISCRETE CONTROL (120VAC)
S= SIGNAL (4-20MA)
N= NETWORK
X=SPARE
YY → FACILITY INDEX
ZZZ→ A UNIQUE NUMBER

REV	DATE	BY	DESCRIPTION

DESIGNED AMS
DRAWN EYJ
CHECKED HGK
DATE SEPT 2013

REGISTERED PROFESSIONAL ENGINEER — IAN R. VARLEY — No. 12879 — ELECTRICAL — STATE OF CALIFORNIA — 9/16/2013

carollo

SAN LUIS OBISPO COUNTY

SAN LUIS OBISPO COUNTY
LOS OSOS WATER RECYCLING FACILITY PROJECT
ELECTRICAL
ELECTRICAL BUILDING
CONDUIT SCHEDULE- III

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 8930A.11
DRAWING NO. 70E09
SHEET NO. 387 OF 549

PROJECT NO. 8930A.11 FILE NAME: 8930A1170E09.dgn

Plot Date: 16-SEP-2013 5:41:54 PM
User: EJohnson
PlotScale: 2:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: ejohnson