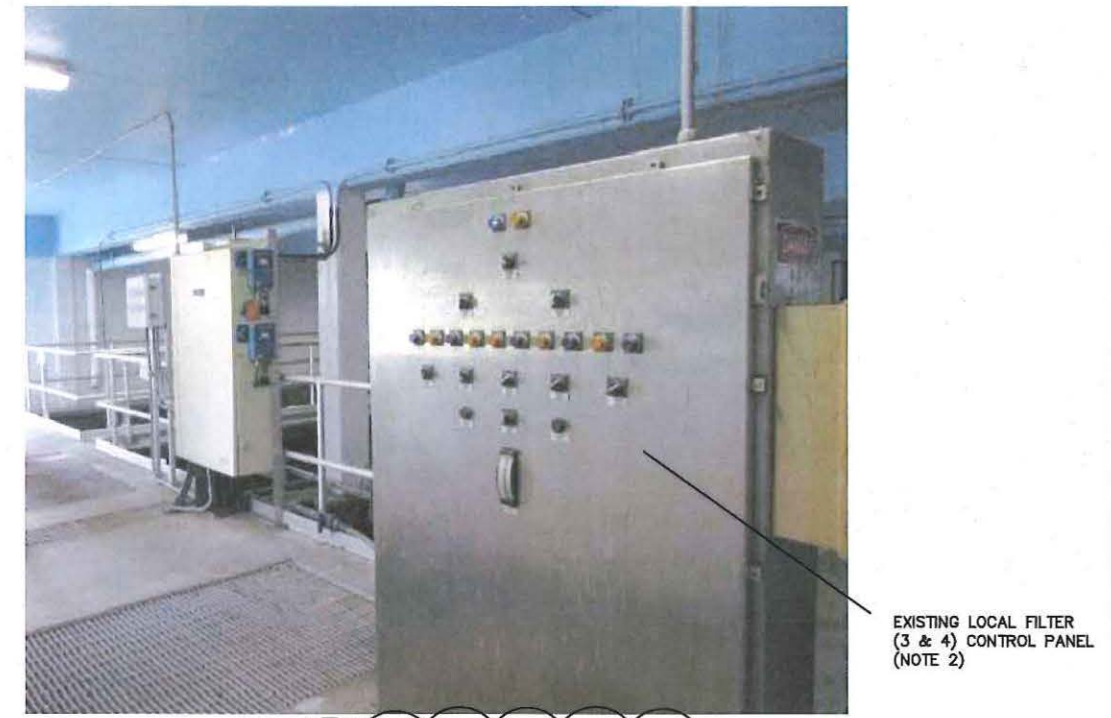




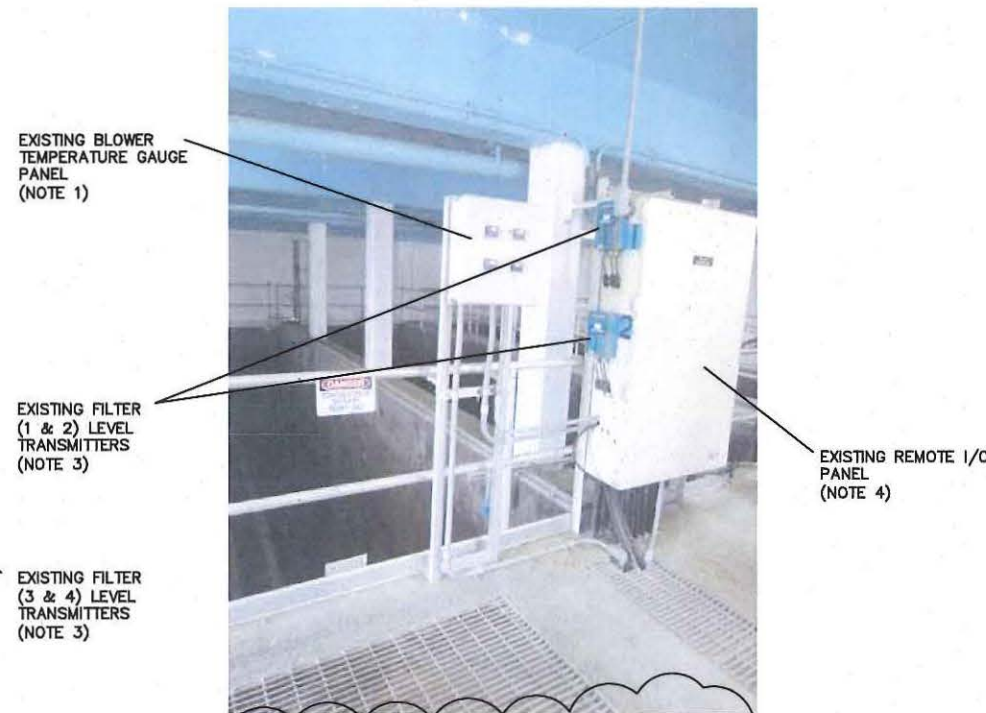
△ FIGURE 1: EXISTING FILTER REMOTE I/O PANEL



△ FIGURE 2: EXISTING FILTERS (3 & 4) LOCAL CONTROL PANEL



△ FIGURE 3: EXISTING FILTER LEVEL TRANSMITTERS (FILTERS 3 & 4)



△ FIGURE 4: EXISTING BLOWER TEMPERATURE GAUGE PANEL

- NOTES:
1. RELOCATE EXISTING BLOWER TEMPERATURE GAUGES (MOTOR & AIR TEMPERATURE GAUGES) TO NEW FILTER PLC PANEL AS SHOWN IN FIGURE 4. ONCE GAUGES ARE RELOCATED AND INSTALLED, REMOVE BLOWER TEMPERATURE GAUGE PANEL AND MOUNTING RACK.
  2. LOCAL FILTER CONTROLS AND MONITORING PANEL INSTRUMENTS AND COMPONENTS SHALL BE PROVIDED, FOR EACH FILTER, ON THE NEW FILTER PLC PANEL SHOWN IN DRAWINGS 1-2, 3, & 4. THE EXISTING TWO FILTER LOCAL CONTROL PANELS SHALL BE REMOVED AFTER THE NEW PLC PANEL HAS BEEN INSTALLED AND SUCCESSFULLY TESTED AND OPERATIONAL.
  3. RELOCATE EXISTING FILTER LEVEL TRANSMITTERS (TOTAL OF 4) TO A NEW STAINLESS STEEL MOUNTING RACK. MOUNTING RACK LOCATION SHALL BE ON THE LEFT SIDE ADJACENT TO THE NEW FILTER PLC PANEL.
  4. REPLACE EXISTING REMOTE I/O PANEL WITH NEW FILTER PLC PANEL SHOWN IN DRAWINGS 1-2, 3, & 4.
  5. ALL ENCLOSURES AND PANEL EQUIPMENT REMOVED BY THE CONTRACTOR DURING THE COURSE OF THIS WORK SHALL BE SALVAGED OR DISPOSED OF OFFSITE AT THE OWNER'S DISCRETION. OFFSITE DISPOSAL OF THE EXISTING ENCLOSURES AND EQUIPMENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
  6. THE EXISTING REMOTE I/O PANEL SALVAGED EQUIPMENT, SUCH AS THE PLC EQUIPMENT, NETWORK EQUIPMENT, AND PANEL COMPONENTS, SHALL BE CAREFULLY REMOVED AND BOXED FOR STORAGE WITH AN ITEMIZED BILL OF MATERIALS AND PROVIDED TO THE OWNER.

NO.	REVISION	DATE

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 Clearwater, Florida 33756  
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**LEE COUNTY**  
 SOUTHWEST FLORIDA

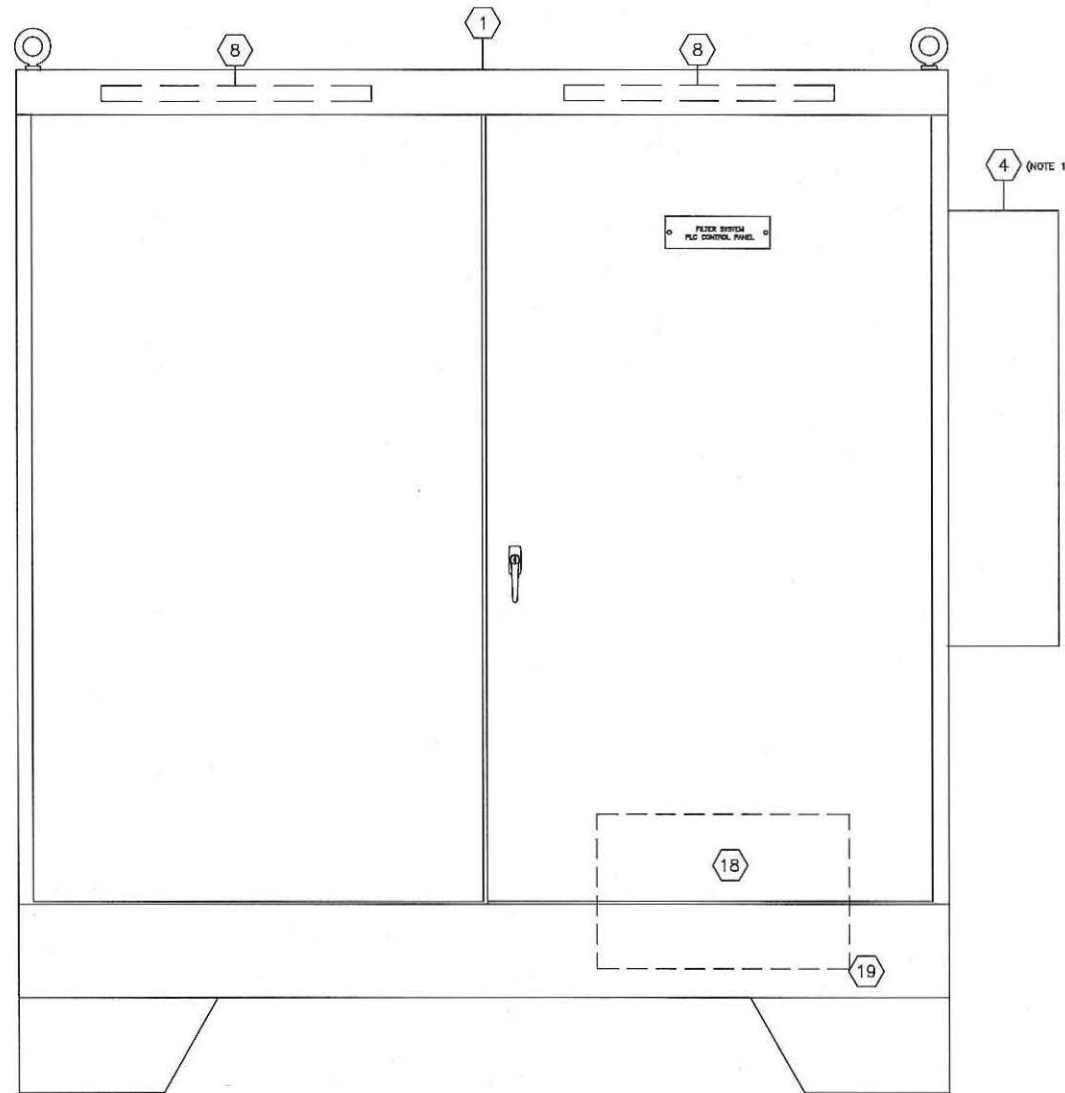
**LEE COUNTY, FL**  
**FIESTA VILLAGE WWTP**  
**EXISTING FILTER BUILDING**  
**RETROFIT & DEMO DETAILS**

DATE: <b>AUGUST 2018</b>	SCALE:	ISSUES:
USE PROJ # <b>18-00-0008</b>	HORIZONTAL:	-1-
DRAWN <b>MS</b>	N/A	
DESIGNED <b>MS</b>	N/A	
CHECKED <b>MS</b>	N/A	
PROJ. MGR. <b>MS</b>	N/A	REVISION:
<b>ISSUE FOR BID</b>		

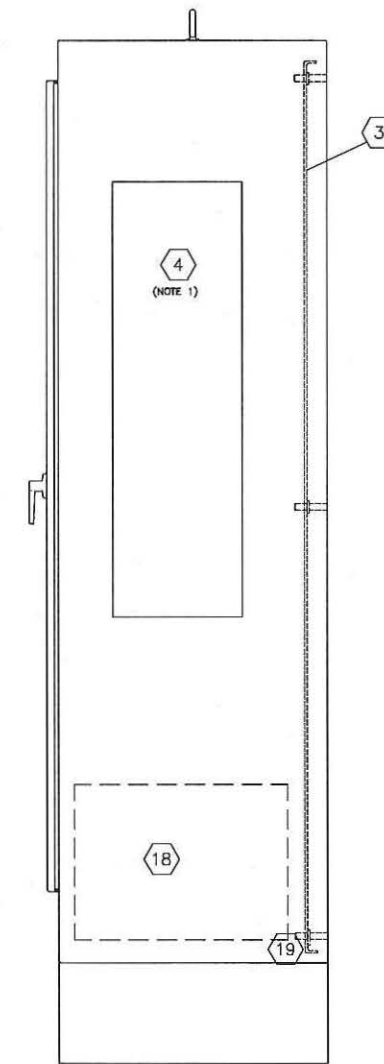
Lee County 18-00-0008 - Fiesta Village WTP - Upgrade Filtration - Existing Filter Building - Retrofit & Demo Details - Issue for Bid

NOTES:

1. PANEL SIDE-MOUNTED AC UNIT SIZE SHALL BE DETERMINED FROM PANEL HEAT CALCULATIONS.
2. REFER TO BILL OF MATERIALS AND NAMEPLATE SCHEDULE ON DRAWING I-5.



ENCLOSURE EXTERIOR (FRONT)  
NTS



ENCLOSURE EXTERIOR (SIDE)  
NTS

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REV	DESCRIPTION	DATE

SEAL  
Digitally signed by G. Michael Stoup  
State of Florida P.E. No. 65702  
Date: 2016.08.03 13:11:36 -0400

SEAL

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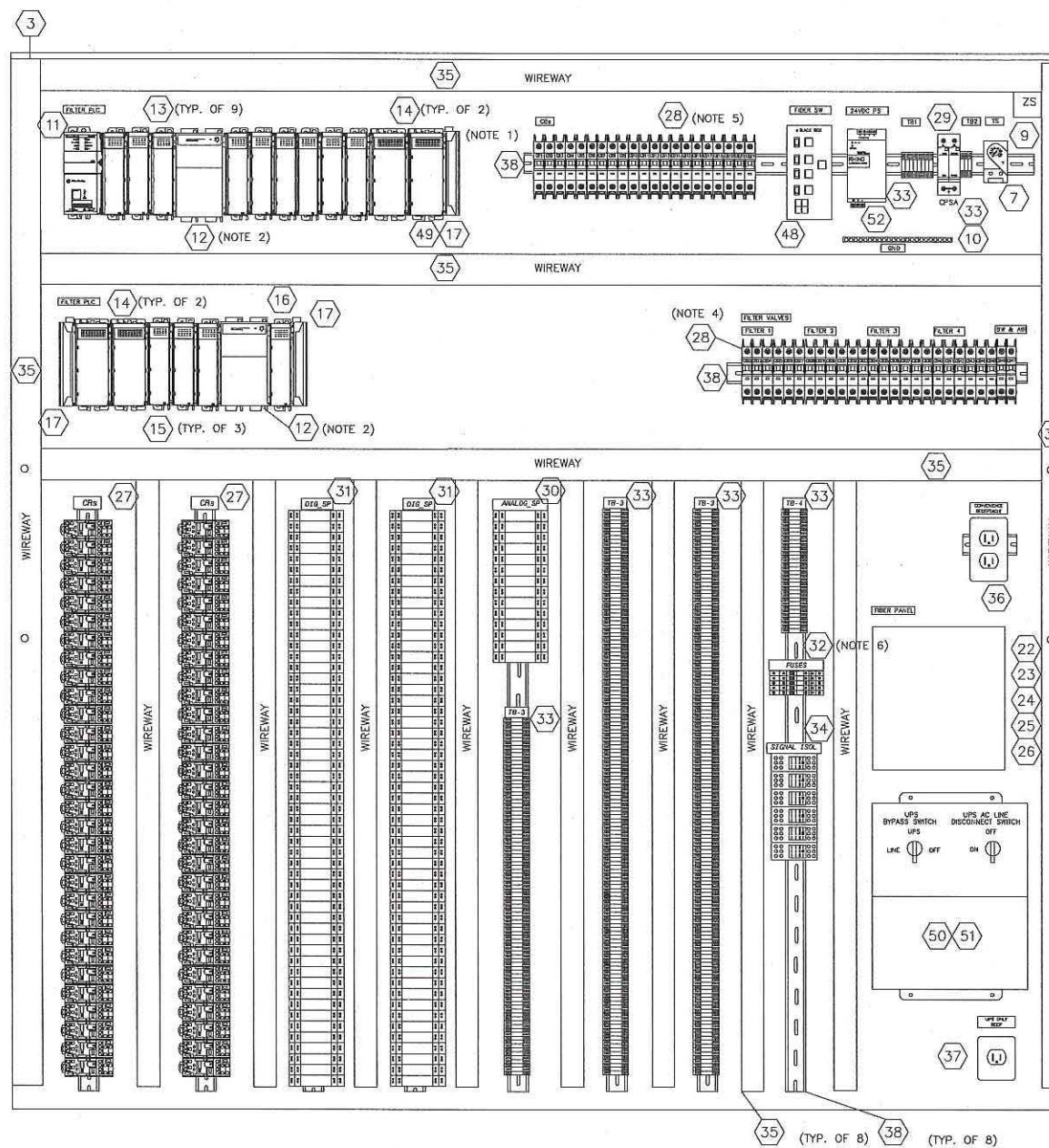
**LEE COUNTY**  
SOUTHWEST FLORIDA

LEE COUNTY, FL  
FIESTA VILLAGE WWTP  
**NEW FILTER PLC PANEL LAYOUT (EXTERIOR)**

DATE: AUGUST 2016	SCALE:	DRAWING NUMBER:
MCE PROJ. # 5540-0005	HORIZONTAL: N/A	I-2
DRAWN: RRO	VERTICAL: N/A	
DESIGNED: RRO	STATUS:	REVISION:
CHECKED: MS	ISSUE FOR BID	
PROJ. MGR.: MS		

NOTES:

1. ARRANGE I/O MODULES IN THE FOLLOWING ORDER: DIGITAL INPUT MODULES; DIGITAL OUTPUT MODULES; ANALOG INPUT MODULES; ANALOG OUTPUT MODULES.
2. THE RACK LOCATION OF EACH PLC POWER SUPPLY SHALL BE DETERMINED BY PLC POWER DISTRIBUTION CALCULATIONS PER MANUFACTURER'S INSTRUCTIONS.
3. PANEL SIDE-MOUNTED AC UNIT SIZE SHALL BE DETERMINED FROM PANEL HEAT CALCULATIONS.
4. POWER OF 120VAC SHALL BE SUPPLIED FROM FILTER CONTROL PANEL TO EACH FILTER VALVE. ONE (1) AMP CIRCUIT BREAKER SHALL BE PROVIDED FOR EACH VALVE WHERE EACH GROUP OF FILTER VALVES WILL HAVE A MAIN BREAKER OF FIVE (5) AMPS.
5. USE CIRCUIT BREAKERS FOR ALL EQUIPMENT AS SPECIFIED UNDER SPECIFICATION SECTION 13330, CONTROL PANELS.
6. USE FUSES FOR ALL ANALOG INPUTS.



SUBPANEL LAYOUT (BACK PANEL)

NTS

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REV. NO.	DESCRIPTION	DATE

Digitally signed by G. Michael Stoup State of Florida P.E. No. 65702 Date: 2016.08.03 13:12:00 -0400

Digitally signed by G. Michael Stoup State of Florida P.E. No. 65702 Date: 2016.08.03 13:12:00 -0400

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**LEE COUNTY**  
 SOUTHWEST FLORIDA

LEE COUNTY, FL  
 FIESTA VILLAGE WWTP  
 NEW FILTER PLC PANEL LAYOUT  
 (INTERIOR)

DATE: AUGUST 2016	SCALE:	DRAWING NUMBER:
MCE PROJ. # 5540-0005	HORIZONTAL:	I-3
DRAWN: RRD	VERTICAL:	N/A
DESIGNED: RRD	REVISION:	
CHECKED: MS		
PROJ. MGR: MS		

STATUS: ISSUE FOR BID



FILTER PLC CONTROL PANEL -- BILL OF MATERIALS					
ITEM NO.	QTY	DEVICE ID	MANUFACTURER	PART NO.	DESCRIPTION
1	1	PNL	HOFFMAN	A74H7224SSLP3PT	ENCLOSURE, 72"Hx72"Wx24"D, TWO-DOOR, WELDED CABINET DIVIDER, NEMA 4X, 316 SS, POWDER COATED WHITE, 3-PT LATCHES, AND FEET
2	2	PNL	HOFFMAN	(CUSTOM)	INNER-DOOR BOTH SIDES: UNFINISHED BRUSHED ALUMINUM, 0.125" THICK MINIMUM
3	1	PNL	HOFFMAN	A72P72	SUBPANEL, 304SS, EPOXY WHITE FINISH
4	1	PNL	HOFFMAN	PENTAIR	PANEL SIDE-MOUNTED AIR CONDITION UNIT
5	2	PNL	HOFFMAN	ADSTOPKSS6	DOOR STOP KIT, 316 SS
6	2	PNL	HOFFMAN	A-HCI10E	CORROSION INHIBITOR
7	1	TS	HOFFMAN	ATEMNC	PANEL HIGH TEMPERATURE SWITCH
8	2	PNL1, PNL2	HOFFMAN	PANELITE	CABINET LIGHT, LED, 120VAC
9	2	ZS	HOFFMAN	ALFSWD	PANEL LIGHT DOOR SWITCH
10	1	GND	SQUARE D	PK12GTA	POWER DISTRIBUTION GROUND BAR KIT
11	1	PLC_CPU	ALLEN BRADLEY	1769-L30ERM	COMPACTLOGIX, 5370L3 CONTROLLER, 1MB
12	2	PLC_PS1,2	ALLEN BRADLEY	1769-PA4	COMPACTLOGIX POWER SUPPLY
13	9	PLC_DI_MOD1,2,3,4,5,6,7,8,9	ALLEN BRADLEY	1769-IA16	COMPACTLOGIX, DISCRETE INPUT MODULE, 16PT, 120VAC
14	3	PLC_DO_MOD1,2,3,4	ALLEN BRADLEY	1769-OA16	COMPACTLOGIX, DISCRETE OUTPUT MODULE, 16PT, 5A VAC/VDC RELAY OUTPUTS
15	2	PLC_AI_MOD1,2,3	ALLEN BRADLEY	1769-IF-4I	COMPACTLOGIX, ANALOG INPUT MODULE, ISOLATED, 4 CHANNEL
16	1	PLC_AO_MOD1	ALLEN BRADLEY	1769-OF4CI	COMPACTLOGIX, ANALOG OUTPUT MODULE, ISOLATED, 4 CHANNEL
17	A/R	PLC-EB	ALLEN BRADLEY	1769-ECL, ECR	COMPACTLOGIX, END BLOCK LEFT & RIGHT
18	1	UPS	APC	SMART UPS -- SMT3000	UNINTERRUPTIBLE POWER SUPPLY, 2880VA
19	1	UPS_SHELF	CUSTOM		UPS STAND
20	1	UPS_ENET	APC	AP9630	UPS ETHERNET CARD
21	1	UPS_ENET_CBL	APC	940-0299	UPS SERIAL CABLE
22	1	FIB_PNL	CORNING	WCH-02P	FIBER OPTIC PATCH PANEL, WALL MOUNTABLE
23	1	FIB_PNL	CORNING	CCH-CP12-25T	FIBER OPTIC 12 FIBER CLOSET HOUSING PANEL
24	1	FIB_PNL	CORNING	FAN-BT25-12	FIBER OPTIC BUFFER TUBE FAN OUT KIT
25	12	FIB_PNL	CORNING	95-000-50	ST CONNECTORS
26	1	FIB_PNL	ALLENTEL	GBST2-D2-02	FIBER OPTIC PATCH CORD
27	A/R	CR	POTTER & BRUMFIELD	KHA	CONTROL RELAY, 120VAC OR 24VDC COIL, LED INDICATOR, PUSH-TO-TEST
28	A/R	CB1-47	SQUARE D	QQU	AC CIRCUIT BREAKER, 1 POLE (SIZES VARIES W/LOAD REQUIREMENTS)
29	1	CPSA	EDCO	HSP-121	SURGE ARRESTOR, 120VAC POWER SUPPLY
30	A/R	ANALOG_SP	ERICO	CRITEC UTB SERIES	SURGE ARRESTOR, ANALOG
31	A/R	DIG_SP	ERICO	CRITEC UTB SERIES	SURGE ARRESTOR, DIGITAL
32	A/R	FUSE	LITTELFUSE		FUSES
33	A/R	TB	ALLEN BRADLEY	1492-H6	TERMINAL BLOCK & FUSE HOLDER W/BLOWN FUSE INDICATION
34	6	ISO	YOKOGAWA	VJH7-026-AA0	SIGNAL ISOLATOR/BOOSTER/CONVERTER/REPEATER/SPLITTER
35	A/R	WIREWAY	PANDUIT		WIRE DUCT & COVER
36	1	GFCL_RECIP	PHOENIX CONTACT	5600462	CONV. GFCI DUPLEX RECEPTACLE, 20A, PANEL MOUNT
37	1	UPS_RECIP	PHOENIX CONTACT	2963860	UPS SIMPLEX RECEPTACLE
38	A/R	DIN_RL	IDEC		DIN RAIL
39	1	PMTR	RED LION	CUB4CL20	PANEL MOUNT PROCESS METER, LED, NEMA 4X
40	1	CTR	YOKOGAWA	UT55A-040-10-00	CONTROLLER W/MAN-AUTO CONTROL & LOCAL DISPLAY
41	22	SW-2	SQUARE D	9001	2-POSITION SELECTOR SWITCH, 30MM MAINTAINED, NEMA 4X
42	8	SW-3	SQUARE D	9001	3-POSITION SELECTOR SWITCH, 30MM MAINTAINED, NEMA 4X
43	4	PB	SQUARE D	9001	PUSHBUTTON, MOMENTARY CONTACT
44	2	PL-A	SQUARE D	9001	PILOT LIGHT, NEMA 4X, PUSH-TO-TEST, LED 30MM, AMBER LENS
45	27	PL-G	SQUARE D	9001	PILOT LIGHT, NEMA 4X, PUSH-TO-TEST, LED 30MM, GREEN LENS
46	22	PL-R	SQUARE D	9001	PILOT LIGHT, NEMA 4X, PUSH-TO-TEST, LED 30MM, RED LENS
47	5	PL-B	SQUARE D	9001	PILOT LIGHT, NEMA 4X, PUSH-TO-TEST, LED 30MM, BLUE LENS
48	1	ENET_SW	BLACK BOX	LEH2004A-4GSFP	INDUSTRIAL ETHERNET SWITCH, 8-PORT, SFP GIGABIT MANAGED FIBER SWITCH
49	1	PLC_CBL	ALLEN BRADLEY	1769-CRL3	COMPACTLOGIX EXTENSION CABLE
50	1	UPS_BYPASS_SW	EATON/CUTLER HAMMER	BPE-01-MB8-AS-1A	UPS BYPASS SWITCH
51	1	UPS_BYPASS_SW_CBL	EATON/CUTLER HAMMER	BAA-0325	UPS BYPASS SWITCH AS400 CONNECTION CABLE
52	1	24VDC_PS	RHINO	PSM24	POWER SUPPLY, 24VDC, INDUSTRIAL, DIN-RAIL MOUNT

NAMEPLATE SCHEDULE		
N.P. NO.	QTY	ENGRAVING (LINE1/LINE2/ETC.)
A	1	FILTER PLC CONTROL PANEL
B	1	FILTER NO. 1
C	1	FILTER NO. 2
D	1	FILTER NO. 3
E	1	FILTER NO. 4
F	4	INFLUENT VALVE
G	4	EFFLUENT VALVE
H	4	CLEAN BACKWASH VALVE
I	4	DIRTY WATER VALVE
J	4	BACKWASH AIR VALVE
K	2	SEMI-AUTO BACKWASH
L	2	SEMI-AUTO BUMP
M	1	BACKWASH BLOWERS
N	1	WASH SUMP LEVEL
P	1	CLEARWELL AERATION VALVE
Q	1	BACKWASH VALVE
R	1	BACKWASH AIR PRESSURE TO FILTERS
S	1	BACKWASH WATER PRESSURE
T	1	BACKWASH VALVE CONTROL
U	1	BACKWASH PUMPS
V	1	FILTER MANUAL/AUTO (SELECT)
W	2	MOTOR TEMPERATURE
X	2	AIR TEMPERATURE
Y	1	BLOWER NO. 1
Z	1	BLOWER NO. 2
AA	1	PUMP NO. 1
BB	1	PUMP NO. 2
CC	1	IN AUTO
DD	4	IN REMOTE
EE	4	ON
FF	21	OPEN
GG	21	CLOSE
HH	21	OPEN/CLOSE
II	1	FILTERS A/M SELECT
JJ	1	AUTO/MAN
KK	2	1/OFF/2
LL	2	3/OFF/4
MM	4	HAND/OFF/REMOTE
NN	2	OUT OF SERVICE
PP	2	FILTER SELECT
QQ	1	PIPE GALLERY
RR	1	HI LEVEL
SS	2	LOW

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REVISION	DESCRIPTION	DATE

Digitally signed by G. Michael Stoup  
State of Florida P.E. No. 65702  
Date: 2016.08.03 13:12:40 -0400

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**LEE COUNTY**  
SOUTHWEST FLORIDA

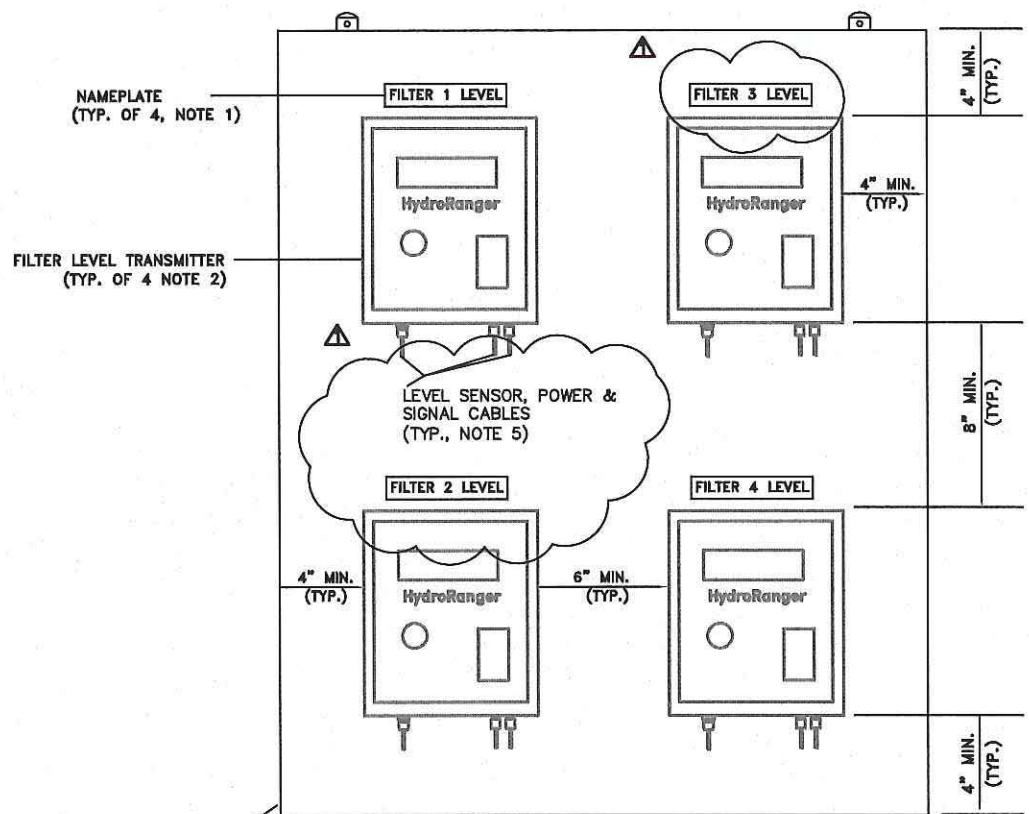
LEE COUNTY, FL  
FIESTA VILLAGE WWTP  
**NEW FILTER PLC PANEL  
BILL OF MATERIALS &  
NAMEPLATE SCHEDULE**

DATE: AUGUST 2016  
MCE PROJ. # 5540-0005  
DRAWN: RRO  
DESIGNED: RRO  
CHECKED: MS  
PROJ. MGR.: MS

SCALE  
HORIZONTAL: N/A  
VERTICAL: N/A

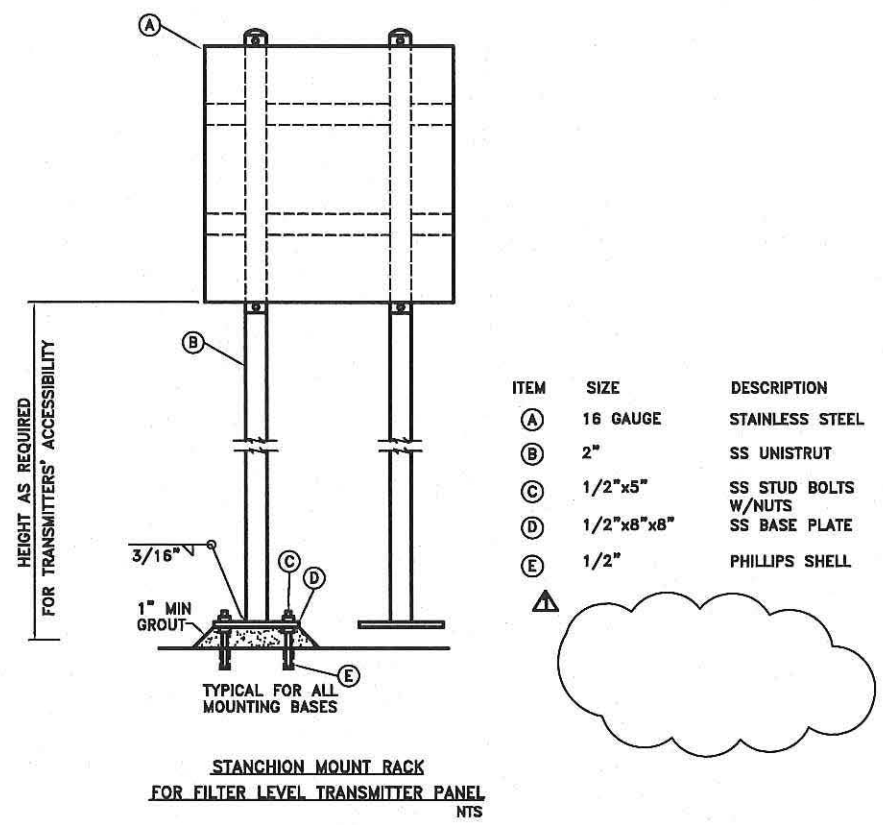
DRAWING NUMBER  
**1-5**

STATUS: ISSUE FOR BID



STAINLESS STEEL PANEL (NOTE 3)  
**FILTER LEVEL TRANSMITTER PANEL**  
 NTS

- NOTES:**
1. PROVIDE LEVEL TRANSMITTER NAMEPLATES: FILTER LEVEL 1; FILTER LEVEL 2; FILTER LEVEL 3; FILTER LEVEL 4.
  2. EXISTING MILTRONICS HYDRORANGER LEVEL TRANSMITTERS.
  3. STAINLESS STEEL PANEL APPROXIMATE DIMENSIONS: 36"X30"W.
  4. RELOCATE EXISTING HOSE TO ACCOMMODATE THE NEW FILTER LEVEL TRANSMITTER PANEL RACK AND FILTER PLC PANEL. NEW LOCATION FOR THE EXISTING HOSE SHALL BE COORDINATED WITH THE OWNER.
  5. REUSE EXISTING MANUFACTURER'S CABLE, BETWEEN THE EXISTING LEVEL SENSOR AND TRANSMITTER, WHERE FEASIBLE, WITHOUT SPLICING THE CABLE. PROVIDE NEW CABLE AND PROBE. IF ADDITIONAL LENGTH IS REQUIRED FOR TRANSMITTERS' NEW LOCATION.
  6. REUSE EXISTING MANUFACTURER'S CABLE, BETWEEN THE EXISTING TEMPERATURE TRANSDUCERS/PROBES AND TRANSMITTER, WHERE FEASIBLE, WITHOUT SPLICING THE CABLE. PROVIDE NEW CABLE AND PROBE. IF ADDITIONAL LENGTH IS REQUIRED FOR TRANSMITTERS' NEW LOCATION.



ITEM	SIZE	DESCRIPTION
(A)	16 GAUGE	STAINLESS STEEL
(B)	2"	SS UNISTRUT
(C)	1/2"x5"	SS STUD BOLTS W/NUTS
(D)	1/2"x8"x8"	SS BASE PLATE
(E)	1/2"	PHILLIPS SHELL

**STANCHION MOUNT RACK**  
**FOR FILTER LEVEL TRANSMITTER PANEL**  
 NTS



**FILTER LEVEL TRANSMITTER PANEL RACK & FILTER PLC PANEL LOCATION**

NO.	REVISION	DATE	BY	CHKD.
1	REVISION 1			



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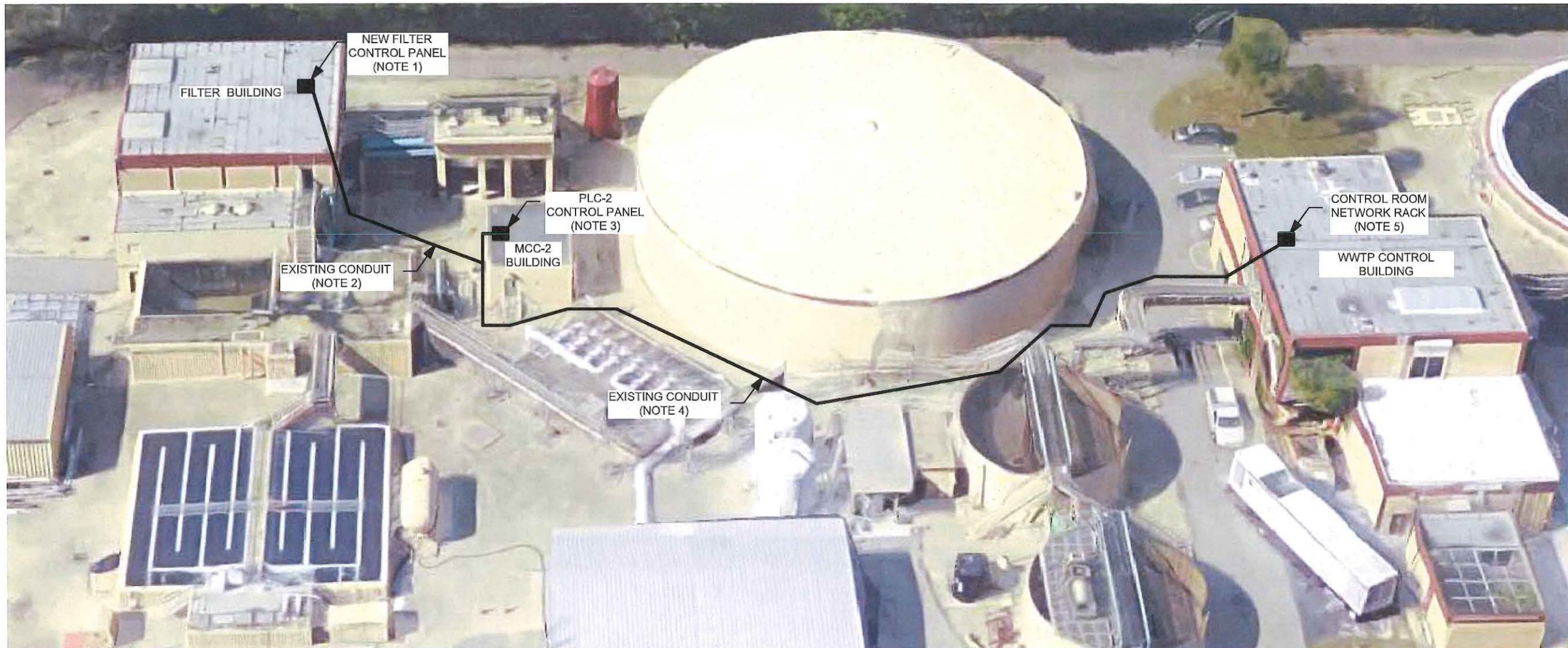
**LEE COUNTY**  
 SOUTHWEST FLORIDA

**LEE COUNTY, FL**  
**FIESTA VILLAGE WWTP**  
**NEW MOUNTING PANEL RACK**  
**INSTALLATION DETAILS FOR**  
**EXISTING FILTER LEVEL TRANSMITTERS**

DATE: AUGUST 2019	SCALE: 1/8"=1'-0"	DRAWING NUMBER: <b>1-6</b>
DRAWN: [Signature]	HORIZONTAL: N/A	
DESIGNED: [Signature]	VERTICAL: N/A	
CHECKED: [Signature]	DATE: [Signature]	
STATUS: <b>ISSUE FOR BID</b>	REVISION:	

NOTES:

1. REFER TO DRAWING I-3 FOR NEW FILTER CONTROL PANEL FIBER OPTIC PATCH PANEL LOCATION.
2. REPLACE EXISTING COPPER COAX CABLE, LOCATED INSIDE EXISTING CONDUIT RUN BETWEEN FILTER BUILDING AND MCC-2 BUILDING, WITH NEW FIBER OPTIC CABLE. COORDINATE WITH LCU FOR CONDUIT AND PULL BOXES' LOCATIONS.
3. REPLACE EXISTING FIBER OPTIC PATCH PANEL, LOCATED INSIDE PLC-2 CONTROL PANEL, WITH NEW FIBER OPTIC PATCH PANEL. REFER TO SPECIFICATION SECTION 13350 FOR FIBER OPTIC PATCH PANEL SPECIFICATION.
4. REPLACE EXISTING FIBER OPTIC CABLE, LOCATED INSIDE EXISTING CONDUIT RUN BETWEEN MCC-2 BUILDING AND WWTP CONTROL BUILDING, WITH NEW 24 STRAND FIBER OPTIC CABLE. COORDINATE WITH LCU FOR CONDUIT AND PULL BOXES' LOCATIONS.
5. TERMINATE NEW FIBER OPTIC CABLE INSIDE CONTROL ROOM NETWORK RACK FIBER OPTIC PATCH PANEL. COORDINATE WITH LCU FOR TERMINATION LOCATION.
6. REFER TO SPECIFICATION SECTIONS 13300 AND 13350 FOR SCOPE OF WORK AND FIBER OPTIC CABLE & EQUIPMENT SPECIFICATIONS ALONG WITH SUBMITTAL AND TESTING REQUIREMENTS.



3/15/2010 - Lee County, FL - Fiesta Village WWTP - New Fiber Optic Network Connection Route & Details - 2/27/2010 2:44:53 PM - mckimcreed.com

NO.	REVISION	DATE	BY



  
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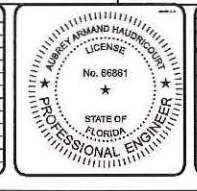
  
**LEE COUNTY**  
 SOUTHWEST FLORIDA

**LEE COUNTY, FL**  
**FIESTA VILLAGE WWTP**  
**NEW FIBER OPTIC NETWORK**  
**CONNECTION ROUTE & DETAILS**

DATE: AUGUST 2009	SCALE:	DRAWING NUMBER: <b>1-7</b>
ISSUE PROJ. # 09-00-0008	HORIZONTAL: N/A	
DRAWN: [initials]	VERTICAL: N/A	
DESIGNED: [initials]		
CHECKED: [initials]		
PROJ. MGR.: [initials]		
STATUS: <b>ISSUE FOR BID</b>		

PLAN SYMBOLS	PLAN SYMBOLS (CONTINUED)	CONTROL DIAGRAM SYMBOLS (CONTINUED)	ABBREVIATIONS (CONTINUED)
<p>HOME RUN TO PANELBOARD. NO. OF ARROWS INDICATE NO. OF CIRCUITS, HASH MARKS INDICATE NO. OF #12 AWG. CONDUCTORS. NO HASH MARKS INDICATE 2 #12 CONDUCTORS.</p> <p>CONDUIT RUN EXPOSED. RUN PARALLEL OR PERPENDICULAR TO STRUCTURE OR WALL.</p> <p>FLEXIBLE CONDUIT WITH EQUIPMENT CONNECTION.</p> <p>CONCRETE ENCASED DUCTBANK.</p> <p>CEILING MOUNTED LIGHTING FIXTURE, LETTER INDICATES TYPE (TYPICAL).</p> <p>WALL MOUNTED LIGHTING FIXTURE.</p> <p>FLUORESCENT LIGHTING FIXTURE, CEILING MOUNTED.</p> <p>EXTERIOR LUMINAIRE AND MOUNTING STANDARD.</p> <p>EXTERIOR YARD LIGHTING</p> <p>EMERGENCY BATTERY PACK LIGHTING FIXTURE.</p> <p>JUNCTION BOX N.E.C. SURFACE MOUNTED UNLESS INDICATED OTHERWISE.</p> <p>JUNCTION BOX PER N.E.C., FLUSH MOUNTED UNLESS INDICATED OTHERWISE.</p> <p>FLUSH OR SURFACE MOUNTED LIGHTING PANELBOARD.</p> <p>FLUSH OR SURFACE MOUNTED POWER PANELBOARD.</p> <p>DRY TYPE TRANSFORMER. NO. INDICATES KVA RATING.</p> <p>90A, 208V, 1Ø WELDING OUTLET</p> <p>20A, 125V, 3W DUPLEX RECEPTACLE IN FLUSH OUTLET BOX, 18" ABOVE FINISHED FLOOR.</p> <p>20A, 125V, 3W DUPLEX RECEPTACLE IN FLUSH OUTLET BOX, 48" ABOVE FINISHED FLOOR OR 2" ABOVE COUNTER AS REQUIRED.</p> <p>20A, 125V, 3W DUPLEX RECEPTACLE, SURFACE MOUNTED.</p> <p>20A, 125V, 3W DUPLEX RECEPTACLE IN NEMA 4 SERVICE OUTLET BOX. RECEPTACLES SHALL BE GFI TYPE, EXCEPT FOR RECEPTACLES DEDICATED TO HEAT TRACING, WHICH SHALL BE POWERED FROM A GFI BREAKER.</p> <p>DISCONNECT RACK MOUNTED</p> <p>REMOTE CONTROL DEVICE AND DISCONNECT RACK MOUNTED</p> <p>30A, 250V 1Ø, 3W SINGLE RECEPTACLE IN FLUSH OUTLET BOX, 18" ABOVE FINISHED FLOOR.</p> <p>SINGLE POLE SWITCH IN FLUSH OUTLET BOX, 48" ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED (TYPICAL).</p> <p>SINGLE POLE SWITCH, SURFACE-MOUNTED NEMA 4X BOX.</p> <p>SINGLE POLE SWITCH, SURFACE MOUNTED.</p> <p>MOMENTARY CONTACT SWITCH IN FLUSH OUTLET BOX.</p> <p>THREE-WAY SWITCH IN FLUSH OUTLET BOX.</p> <p>FOUR-WAY SWITCH IN FLUSH OUTLET BOX.</p> <p>NON-FUSIBLE DISCONNECT SWITCH, 30A,3P UNLESS OTHERWISE INDICATED.</p> <p>NON-FUSIBLE DISCONNECT SWITCH, 30A,3P UNLESS OTHERWISE INDICATED, WITH REMOTE CONTROL STATION AS REQUIRED BY ELEMENTARY DIAGRAMS OR SPECS</p> <p>ELECTRIC A.C. MOTOR, NO. INDICATES HORSEPOWER.</p> <p>FUSED DISCONNECT SWITCH (30/20: 30=SWITCH RATING, 20=FUSE RATING)</p> <p>MOTORIZED VALVE</p> <p>COMBINATION MOTOR STARTER</p> <p>VARIABLE FREQUENCY DRIVE</p> <p>THERMOSTAT</p> <p>ELECTRIC HEATER</p> <p>FLUSH OUTLET BOX AND TELEPHONE COVER PLATE 48" ABOVE FINISHED FLOOR.</p> <p>CONTROL PULLBOX. SEE "PULL BOX DETAIL"</p> <p>POWER MANHOLE. SEE "MANHOLE DETAIL"</p> <p>TERMINATION CABINET, CLASS 1, DIVISION 2</p> <p>CROUSE HINDS EYSR FITTING AND CORRESPONDING "CHICO" CEMENT. COMBINATION SHALL BE RATED TO SEPARATE A CLASS 1, DIVISION 2 INSTALLATION.</p> <p>MOTOR DUTY, FOUR POLE DISCONNECT, NEMA 4X STAINLESS STEEL</p> <p>PHOTO DIRECTIONAL INDICATOR NO. = PHOTO NUMBER CUT = PLAN REFERENCE E-SHEET PIC = PHOTO REFERENCE E-SHEET TRIANGLE POINT ON CUT-SHEET INDICATES PHOTOGRAPHER'S PERSPECTIVE</p>	<p>AIT ANALYZING INDICATING TRANSMITTER</p> <p>FE FLOW ELEMENT</p> <p>FS FLOW SWITCH</p> <p>FS FLOW SWITCH</p> <p>LS LIMIT SWITCH</p> <p>XS TORQUE SWITCH</p> <p>PSH PRESSURE SWITCH</p> <p>SH SPACE HEATER</p> <p>SV SOLENOID VALVE</p> <p>LLS LIQUID LEVEL SWITCH</p> <p>LSH HIGH LEVEL FLOAT SWITCH</p> <p>VS VIBRATION SWITCH</p>	<p>FTI FLOW INDICATING TRANSMITTER</p> <p>LIT LEVEL INDICATING TRANSMITTER</p> <p>PIT PRESSURE INDICATING TRANSMITTER</p> <p>ZT POSITION SWITCH</p> <p>O/R OFF REMOTE</p>	<p>ELR EMERGENCY LOCK-OUT RELAY</p> <p>ENCL ENCLOSURE</p> <p>EP EXPLOSION PROOF</p> <p>ESB ENERGY SAVING BALLAST</p> <p>ETM ELAPSED TIME METER</p> <p>EUH ELECTRIC UNIT HEATER</p> <p>EVA ELECTRIC VALVE ACTUATOR</p> <p>EXH EXHAUST</p> <p>EXIST EXISTING</p> <p>F&amp;I FINISH AND INSTALL</p> <p>FE FLOW ELEMENT</p> <p>FLA FULL LOAD AMPACITY</p> <p>FMC FLEXIBLE METAL CONDUIT</p> <p>FSL FLOW SWITCH LOW</p> <p>FVC FULL VOLTAGE CONTACTOR</p> <p>FPL FLORIDA POWER AND LIGHT</p> <p>FVNR FULL VOLTAGE NON-REVERSING GENERATOR</p> <p>GFI GROUND FAULT INTERRUPTER</p> <p>GND GROUND</p> <p>GRS GALVANIZED RIGID STEEL</p> <p>HOA HAND-OFF-AUTOMATIC</p> <p>HOLR HAND-OFF-LOCAL-REMOTE</p> <p>HOR HAND-OFF-REMOTE</p> <p>HP HORSEPOWER</p> <p>HPS HIGH PRESSURE SODIUM HIGHWAY</p> <p>HWY HIGHWAY</p> <p>INSTR INSTRUMENTATION</p> <p>IAP INTERLOCK ASSEMBLY PANEL</p> <p>KVA KILOVOLT-AMPERES</p> <p>KW KILOWATT</p> <p>LDR LOAD DUMP RELAY</p> <p>LTG LIGHTING</p> <p>MAX MAXIMUM</p> <p>MCC MOTOR CONTROL CENTER</p> <p>MFR MANUFACTURER</p> <p>MH METAL HALIDE</p> <p>MIN MINIMUM</p> <p>MLO MAIN LUGS ONLY</p> <p>MR MOTOR RUNNING</p> <p>MSC MANUFACTURER SUPPLIED CABLE MOUNTED</p> <p>MTD MOUNTED</p> <p>MTS MANUAL TRANSFER SWITCH</p> <p>MV MERCURY VAPOR</p> <p>NEC NATIONAL ELECTRIC CODE</p> <p>NEUT NEUTRAL</p> <p>NTS NOT TO SCALE</p> <p>OC ON CENTER</p> <p>OH OVERHEAD</p> <p>P POLE</p> <p>PC PUMP CALL</p> <p>PCP PUMP CONTROL PANEL</p> <p>PEF PROGRESS ENERGY OF FLORIDA</p> <p>PIT PRESSURE INDICATING TRANSMITTER</p> <p>PM PHASE MONITOR</p> <p>PNL PANEL</p> <p>PS PUMP STATION</p> <p>PVC POLYVINYL CHLORIDE</p> <p>RA RIGID ALUMINUM RECEPTACLE</p> <p>RS RAPID START</p> <p>RVNR REDUCED VOLTAGE NON-REVERSING</p> <p>RWMP RAW WATER MONITOR PANEL</p> <p>SCP STARTER CONTROL PANEL</p> <p>SS STAINLESS STEEL</p> <p>SSC SOLID STATE CONTACTOR</p> <p>SSM SOLID STATE MODE</p> <p>SSS SOLID STATE STARTER</p> <p>STR STARTER</p> <p>SUPP SUPPRESSOR</p> <p>SW SWITCH</p> <p>SWGR SWITCHGEAR</p> <p>TBR TO BE REMOVED</p> <p>TC TERMINATION CABINET</p> <p>TR TRANSFORMER</p> <p>TR TYPICAL</p> <p>UG UNDERGROUND</p> <p>UN UNLESS OTHERWISE NOTED</p> <p>UNINTERRUPTIBLE POWER SUPPLY</p> <p>UV ULTRAVIOLET</p> <p>V VOLT</p> <p>VFD VARIABLE FREQUENCY DRIVE</p> <p>W WATT</p> <p>WITH WITH</p> <p>WP WEATHERPROOF</p> <p>WPCP WELL PUMP CONTROL PANEL PHASE</p>
<p>SINGLE LINE DIAGRAM SYMBOLS</p> <p>COMBINATION MOTOR STARTER</p> <p>VOLTMETER</p> <p>AMMETER</p> <p>THREE PHASE VOLT SWITCH</p> <p>THREE PHASE AMP SWITCH</p> <p>GROUND FAULT RELAY</p> <p>FUSE</p> <p>CAPACITOR</p> <p>DRAW-OUT CIRCUIT BREAKER</p> <p>MOLDED CASE CIRCUIT BREAKER</p> <p>TYPICAL SELECTOR SWITCH AND CONTROL. SEE ELEMENTARY DIAGRAMS FOR EXACT TYPE.</p> <p>ELECTRIC A.C. MOTOR, NO. INDICATES HORSEPOWER.</p> <p>ELECTRIC D.C. MOTOR, NO. INDICATES HORSEPOWER.</p> <p>SERVICE OR EQUIPMENT GROUND.</p> <p>NON-FUSIBLE DISCONNECT SWITCH, 30A,3P UNLESS OTHERWISE INDICATED.</p> <p>NON-FUSIBLE DISCONNECT SWITCH, 30A,3P UNLESS OTHERWISE INDICATED, WITH REMOTE CONTROL STATION AS REQUIRED BY ELEMENTARY DIAGRAMS OR SPECS</p> <p>LIGHTING PANELBOARD</p> <p>POWER PANELBOARD</p> <p>KIRK KEY INTERLOCK</p> <p>CURRENT TRANSFORMERS</p> <p>POTENTIAL TRANSFORMERS</p> <p>MANUAL OR AUTOMATIC TRANSFER SWITCH</p>		<p>CONTROL DIAGRAM SYMBOLS (CONTINUED)</p> <p>FLOW SWITCH, NORMALLY OPEN</p> <p>FLOW SWITCH, NORMALLY CLOSED</p> <p>TEMPERATURE SWITCH, NORMALLY OPEN</p> <p>TEMPERATURE SWITCH, NORMALLY CLOSED</p> <p>NORMALLY OPEN, TIMED TO CLOSE CONTACT</p> <p>NORMALLY CLOSED, TIMED TO OPEN CONTACT</p> <p>NORMALLY CLOSED, TIMED TO CLOSE CONTACT</p> <p>NORMALLY OPEN, TIMED TO OPEN CONTACT</p> <p>LIMIT SWITCH</p> <p>TORQUE SWITCH</p> <p>PRESSURE SWITCH</p> <p>SEAL FAIL SWITCH</p> <p>SOLENOID VALVE</p> <p>LIQUID LEVEL SWITCH</p> <p>TEMPERATURE SWITCH</p> <p>ALARM RELAY (LOW OIL)</p> <p>ALARM TIMER</p> <p>CONTROL RELAY</p> <p>MOTOR STARTER</p> <p>TIMING RELAY</p> <p>ALARM INDICATING LIGHT</p> <p>RUN INDICATING LIGHT</p> <p>MOMENTARY CONTACT PUSHBUTTON</p> <p>MOMENTARY BREAK PUSHBUTTON OR RESET</p> <p>KEYED SWITCH</p> <p>MAINTAINED CONTACT ON-OFF SWITCH</p> <p>THREE POSITION MAINTAINED CONTACT SELECTOR SWITCH</p> <p>FUSE</p> <p>MOLDED CASE CIRCUIT BREAKER</p> <p>CONTROL POWER TRANSFORMER</p> <p>MCC OR VFD TERMINAL FOR REMOTE FIELD WIRING</p> <p>ABBREVIATIONS</p> <p>A AMPERES</p> <p>ACCU AIR COOLED CONDENSING UNIT</p> <p>AE ANALYZER ELEMENT</p> <p>AER AERATOR</p> <p>AFF ABOVE FINISHED FLOOR</p> <p>AHU AIR HANDLING UNIT</p> <p>AIC AMPS INTERRUPTING CURRENT</p> <p>AIT ANALYZER INDICATING TRANSMITTER</p> <p>ATS AUTOMATIC TRANSFER SWITCH</p> <p>AUX AUXILIARY</p> <p>BKR BREAKER</p> <p>BLDG BUILDING</p> <p>CAB CABINET</p> <p>CB CIRCUIT BREAKER</p> <p>CP CONTROL PANEL</p> <p>CU COPPER</p> <p>DH DATA HIGHWAY</p> <p>DISC DISCONNECT</p> <p>DO DIGITAL OUTPUT</p> <p>DPDT DOUBLE POLE DOUBLE THROW</p> <p>DPIT DIFFERENTIAL PRESSURE INDICATING TRANSMITTER</p> <p>DPST DOUBLE POLE SINGLE THROW</p> <p>EA EACH</p> <p>EFF EFFLUENT</p> <p>ELEC ELECTRICAL</p>	
<p>GENERAL NOTES</p> <ol style="list-style-type: none"> <li>DO NOT SCALE THE ELECTRICAL DRAWINGS. REFER TO THE MECHANICAL AND CIVIL DRAWINGS, AND APPROVED MANUFACTURER'S SHOP DRAWINGS FOR THE EXACT LOCATION OF ALL EQUIPMENT.</li> <li>ALL WORK SHALL COMPLY WITH N.E.C. AND LOCAL CODES.</li> <li>CONDUCTORS SHALL NOT BE SPLICED EXCEPT AS NOTED IN SPECS.</li> <li>ALL CONDUITS SHALL HAVE A BOND WIRE SIZED PER TABLE 250-122 OF THE N.E.C. (UNLESS OTHERWISE NOTED).</li> <li>PROVIDE 4 INCH CONCRETE EQUIPMENT PADS FOR ALL FREE-STANDING PANELS, UPS, ETC.</li> <li>ALL CONTROL PANELS SHALL BE UL LISTED.</li> <li>ALL CONDUIT FOR POWER AND SIGNAL TO VALVES SHALL BE REPLACED. ALL EXISTING LIGHTING CONDUIT SHALL REMAIN. REPLACE ALL EXISTING PVC CONDUIT REVEALED. ALL NEW CONDUIT SHALL BE RIGID ALUMINUM, MINIMUM SIZE 0.75".</li> <li>CONDUIT ROUTING AND STAGING PLANS SHALL BE APPROVED BY THE COUNTY PRIOR TO CONSTRUCTION OR DEMOLITION.</li> <li>POWER WIRE FOR CIRCUITS OTHER THAN VALVES SHALL BE MINIMUM SIZE #12AWG CU XHHW. CONTROL WIRE FOR DISCRETE CIRCUITS SHALL BE #14AWG CU XHHW. CONTROL WIRE FOR ANALOG CIRCUITS SHALL BE TN-CU 2COND #16AWG SHIELDED.</li> </ol>			

REVNO.	DESCRIPTIONS	DATE



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Aubrey Armand  
Haudricourt P.E.  
No. 66861  
Date: 2016.08.05  
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LEE COUNTY, FL  
FIESTA VILLAGE WWTP

**ELECTRICAL LEGEND**

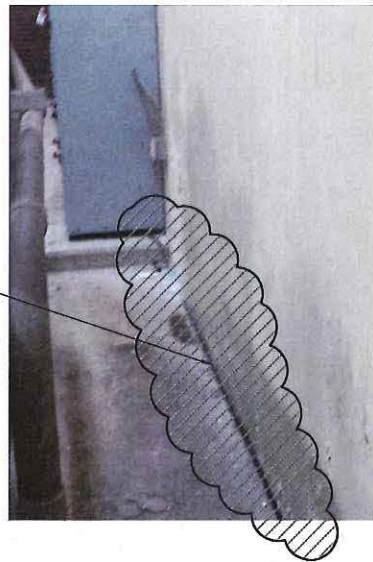
DATE: JULY 2016	SCALE:	DRAWING NUMBER:
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DESIGNED: AAH	VERTICAL: NTS	
CHECKED: MAC		
PROJ. MGR. MS		
STATUS: ISSUE FOR BID		





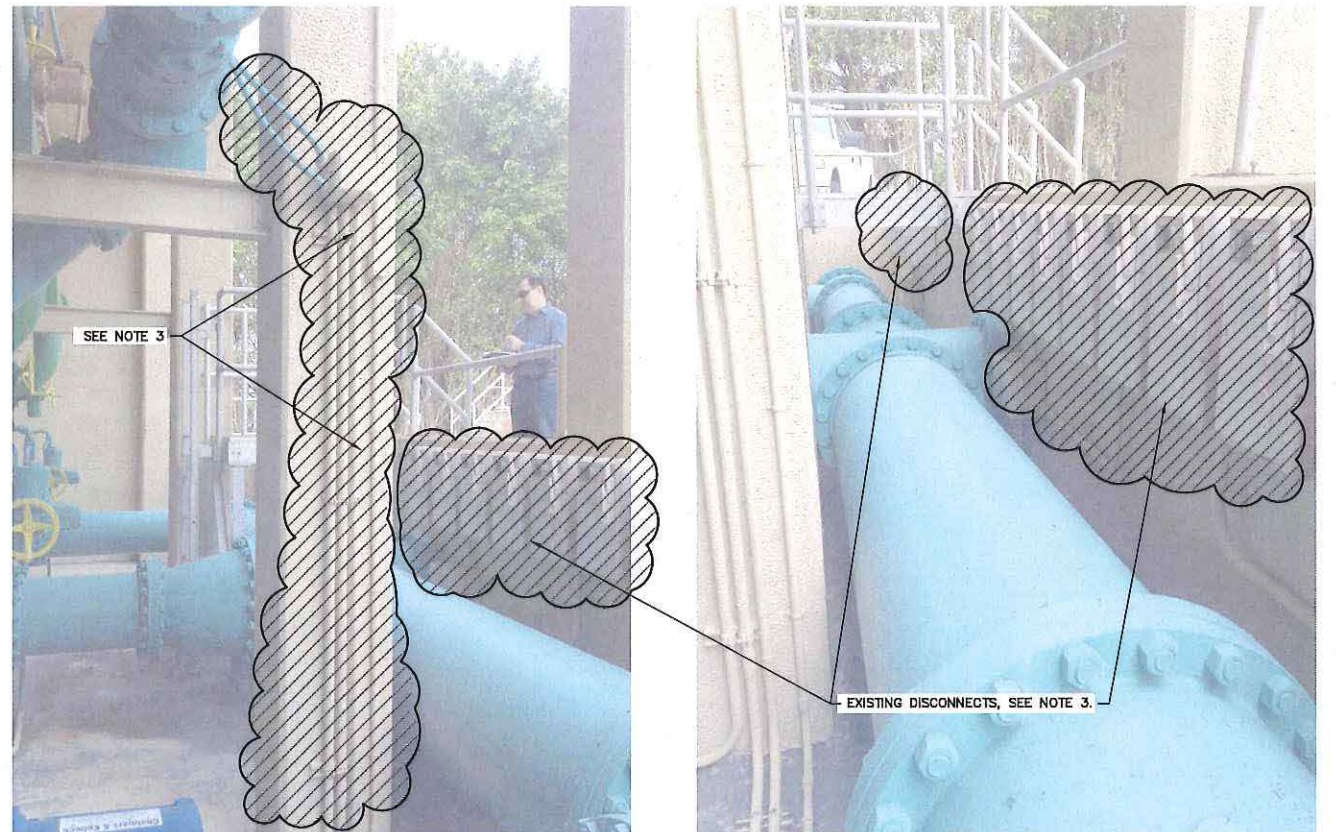
NOTES:

1. COORDINATE ALL CONSTRUCTION AND DEMOLITION SERVICES WITH THE COUNTY. FOR DEMOLITION OF EXISTING CONTROL AND I/O PANELS REFER TO NOTES SHT 1-1.
2. PULL NEW WIRE FOR EXISTING CONTROL CIRCUITS, REUSE EXISTING CONDUIT WHERE ABLE.
3. REPLACE EXISTING FIXTURES AND PULL NEW WIRE FOR EXISTING LIGHTING CIRCUITS IN FILTER GALLERY, REUSE EXISTING CONDUIT WHERE ABLE.
4. PAINT AND FINISH AFFECTED SURFACES AS NEEDED TO MATCH EXISTING.
5. DEMO EXISTING POWER AND SIGNAL WIRE, CONDUITS, JUNCTION BOXES, AND DISCONNECTS FOR MOTORIZED VALVE ACTUATORS.
6. UTILIZE EXISTING CONDUIT ENTRY POINT FOR NEW FILTER CONTROL VALVE SIGNAL WIRES AND CONDUITS.
7. EXISTING CHLORINE ANALYZER CIRCUITS TO REMAIN.
8. DEMO SO CORD BETWEEN EXISTING CONTROL PANEL AND MCC-4A.
9. ALL NEW CONDUIT TO BE RIGID ALUMINUM. REPLACE EXISTING PVC CONDUIT WITH ALUMINUM WHERE UNCOVERED



SEE NOTE 8

PHOTO <sup>1B</sup>/<sub>E4 E3</sub> EXISTING SO CABLE  
SCALE: NTS



SEE NOTE 3

EXISTING DISCONNECTS, SEE NOTE 3.

PHOTO <sup>2A</sup>/<sub>E4 E3</sub> EXISTING DISCONNECTS AND CONDUIT FOR  
SCALE: NTS FILTER CONTROL VALVES IN PUMP GALLERY.

PHOTO <sup>2B</sup>/<sub>E4 E3</sub>  
SCALE: NTS



SEE NOTES 2 & 4

SEE NOTES 6 & 8

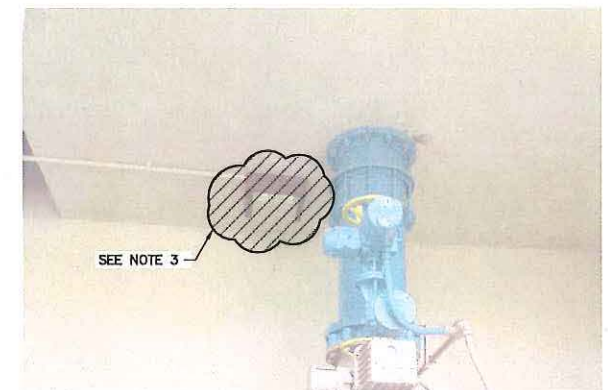
EXISTING CONTROL AND I/O PANELS TO BE REPLACED. SEE NOTES 1 & 2

PHOTO <sup>1A</sup>/<sub>E6 E3</sub> EXISTING FILTER CONTROL PANELS  
SCALE: NTS AND I/O TERMINAL CABINET



SEE NOTE 7

PHOTO <sup>3</sup>/<sub>E4 E3</sub> EXISTING CHLORINE ANALYZER  
SCALE: NTS



SEE NOTE 3

PHOTO <sup>4</sup>/<sub>E4 E3</sub> EXISTING FILTER GALLERY LIGHTING FIXTURES (TYP OF 4)  
SCALE: NTS

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REVNO.	DESCRIPTIONS	DATE



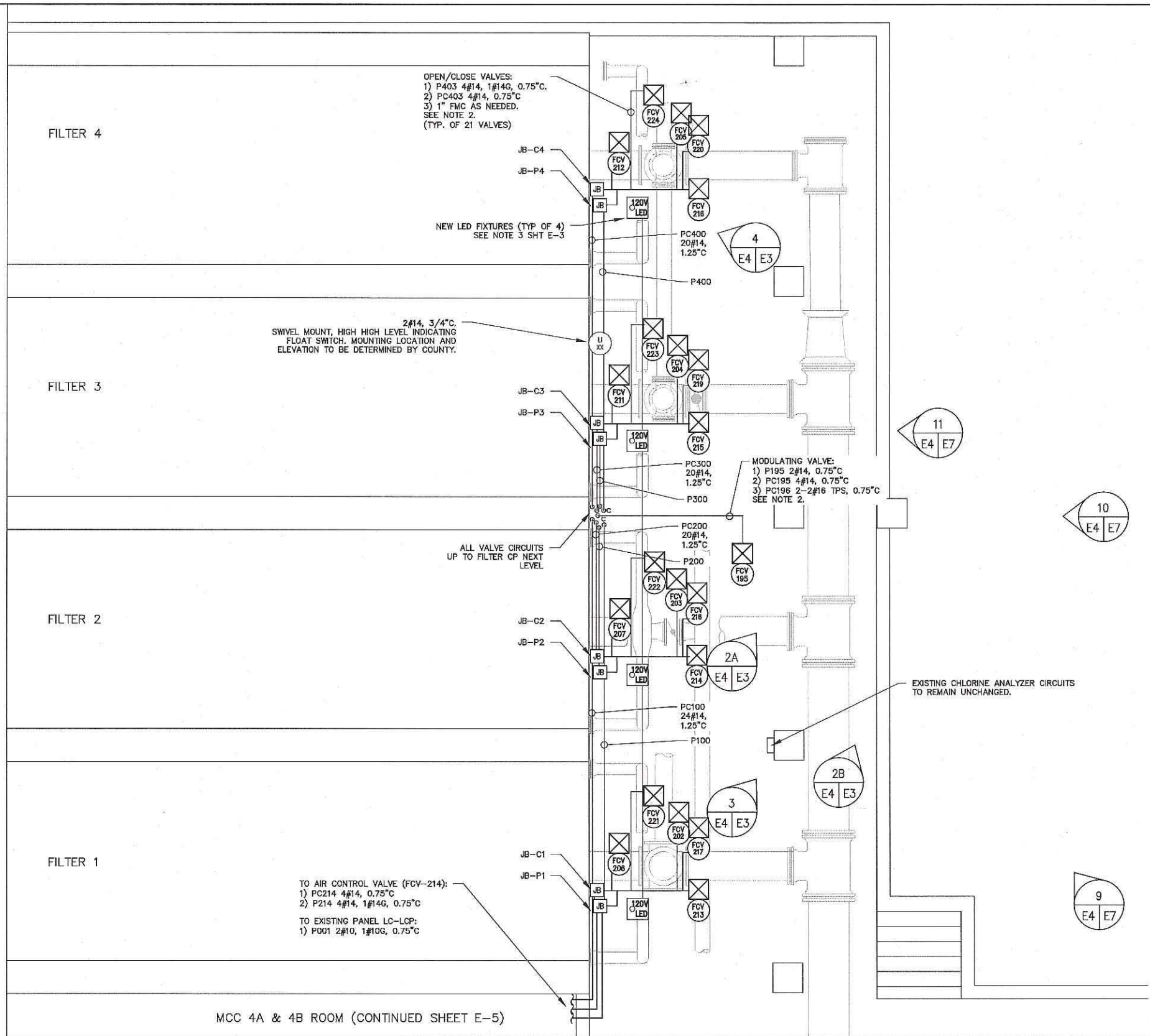
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Aubrey Armand  
Haudricourt P.E.  
No. 66861  
Date: 2016.08.05  
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**LEE COUNTY**  
SOUTHWEST FLORIDA

LEE COUNTY, FL  
FIESTA VILLAGE WWTP  
**ELECTRICAL  
DEMOLITION**

DATE: JULY 2016	SCALE: NTS	DRAWING NUMBER: <b>E-3</b>
MCE PROJ. # 5540-0005	HORIZONTAL: NTS	
DRAWN: LLS	VERTICAL: NTS	
DESIGNED: AAH		
CHECKED: MAC		
PROJ. MGR.: MS		
STATUS: <b>ISSUE FOR BID</b>		



NOTES:  
 1. REFER TO NOTE 5, SHT E-1.  
 2. INSTALL MOTOR RATED TOGGLE SWITCH (NOT SHOWN) AS CLOSE TO THE VALVE AS IS PRACTICAL FOR EACH VALVE ACTUATOR.

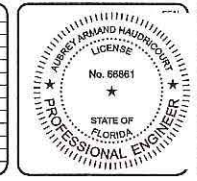
CONDUIT SCHEDULE			
NUMBER	FROM	TO	REMARKS
P001	LC-LCP	FILTER CP	POWER TO FILTER CP
P100	FILTER CP	JB-P1	POWER, ALL FCV FILTER #1 & AIR CONTROL VALVE
P101	JB-P1	FCV-213	POWER, FILTER #1 BACKWASH VALVE
P102	JB-P1	FCV-206	POWER, FILTER #1 EFFLUENT VALVE
P103	JB-P1	FCV-221	POWER, FILTER #1 BACKWASH AIR VALVE
P104	JB-P1	FCV-217	POWER, FILTER #1 DIRTY BACKWASH VALVE
P105	JB-P1	FCV-202	POWER, FILTER #1 INFLUENT VALVE
P195	FILTER CP	FCV-195	POWER, BACKWASH CONTROL VALVE (MODULATING)
P214	JB-P1	FCV-214	POWER, AIR CONTROL VALVE
P200	FILTER CP	JB-P1	POWER, ALL FCV FILTER #2
P201	JB-P2	FCV-214	POWER, FILTER #2 BACKWASH VALVE
P202	JB-P2	FCV-207	POWER, FILTER #2 EFFLUENT VALVE
P203	JB-P2	FCV-222	POWER, FILTER #2 BACKWASH AIR VALVE
P204	JB-P2	FCV-218	POWER, FILTER #2 DIRTY BACKWASH VALVE
P205	JB-P2	FCV-203	POWER, FILTER #2 INFLUENT VALVE
P300	FILTER CP	JB-P3	POWER, ALL FCV FILTER #3
P301	JB-P3	FCV-215	POWER, FILTER #3 BACKWASH VALVE
P302	JB-P3	FCV-211	POWER, FILTER #3 EFFLUENT VALVE
P303	JB-P3	FCV-223	POWER, FILTER #3 BACKWASH AIR VALVE
P304	JB-P3	FCV-219	POWER, FILTER #3 DIRTY BACKWASH VALVE
P305	JB-P3	FCV-204	POWER, FILTER #3 INFLUENT VALVE
P400	FILTER CP	JB-P4	POWER, ALL FCV FILTER #4
P401	JB-P4	FCV-216	POWER, FILTER #4 BACKWASH VALVE
P402	JB-P4	FCV-212	POWER, FILTER #4 EFFLUENT VALVE
P403	JB-P4	FCV-224	POWER, FILTER #4 BACKWASH AIR VALVE
P404	JB-P4	FCV-220	POWER, FILTER #4 DIRTY BACKWASH VALVE
P405	JB-P4	FCV-205	POWER, FILTER #4 INFLUENT VALVE
PC100	FILTER CP	JB-C1	POWER, ALL FCV FILTER #1 & AIR CONTROL VALVE
PC101	JB-C1	FCV-213	POWER, FILTER #1 BACKWASH VALVE
PC102	JB-C1	FCV-206	POWER, FILTER #1 EFFLUENT VALVE
PC103	JB-C1	FCV-221	POWER, FILTER #1 BACKWASH AIR VALVE
PC104	JB-C1	FCV-217	POWER, FILTER #1 DIRTY BACKWASH VALVE
PC105	JB-C1	FCV-202	POWER, FILTER #1 INFLUENT VALVE
PC195A	FILTER CP	FCV-195	DISCRETE SIGNAL, BACKWASH CONTROL VALVE MODULATING
PC195A	FILTER CP	FCV-195	ANALOG SIGNAL, BACKWASH CONTROL VALVE MODULATING
PC214	JB-C1	FCV-214	CONTROL, AIR CONTROL VALVE
PC200	FILTER CP	JB-C2	CONTROL, ALL FCV FILTER #2
PC201	JB-C2	FCV-214	CONTROL, FILTER #2 BACKWASH VALVE
PC202	JB-C2	FCV-207	CONTROL, FILTER #2 EFFLUENT VALVE
PC203	JB-C2	FCV-222	CONTROL, FILTER #2 BACKWASH AIR VALVE
PC204	JB-C2	FCV-218	CONTROL, FILTER #2 DIRTY BACKWASH VALVE
PC205	JB-C2	FCV-203	CONTROL, FILTER #2 INFLUENT VALVE
PC300	FILTER CP	JB-C3	CONTROL, ALL FCV FILTER #3
PC301	JB-C3	FCV-215	CONTROL, FILTER #3 BACKWASH VALVE
PC302	JB-C3	FCV-211	CONTROL, FILTER #3 EFFLUENT VALVE
PC303	JB-C3	FCV-223	CONTROL, FILTER #3 BACKWASH AIR VALVE
PC304	JB-C3	FCV-219	CONTROL, FILTER #3 DIRTY BACKWASH VALVE
PC305	JB-C3	FCV-204	CONTROL, FILTER #3 INFLUENT VALVE
PC400	FILTER CP	JB-C4	CONTROL, ALL FCV FILTER #4
PC401	JB-C4	FCV-216	CONTROL, FILTER #4 BACKWASH VALVE
PC402	JB-C4	FCV-212	CONTROL, FILTER #4 EFFLUENT VALVE
PC403	JB-C4	FCV-224	CONTROL, FILTER #4 BACKWASH AIR VALVE
PC404	JB-C4	FCV-220	CONTROL, FILTER #4 DIRTY BACKWASH VALVE
PC405	JB-C4	FCV-205	CONTROL, FILTER #4 INFLUENT VALVE

MCC 4A & 4B ROOM (CONTINUED SHEET E-5)

FILTER GALLERY PARTIAL SITE PLAN  
 SCALE: 1/4" = 1'-0"

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REV. NO.	DESCRIPTION	DATE



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 Aubrey Armand  
 Haudricourt P.E.  
 No. 66861  
 Date: 2016.08.05  
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LEE COUNTY, FL  
 FIESTA VILLAGE WWTP  
 PROPOSED ELECTRICAL PLAN  
 FILTER GALLERY

DATE: JULY 2016	SCALE: HORIZONTAL: NTS	DRAWING NUMBER: E-4
MCE PROJ. # 5540-0005	VERTICAL: NTS	
DRAWN: LLS		
DESIGNED: AAH		
CHECKED: MAC		
PROJ. MGR. MS		
STATUS: ISSUE FOR BID		



PHOTO 5 MCC 4A & 4B  
SCALE: NTS



PHOTO 6 ELECTRICAL ROOM PARTIAL LAYOUT  
SCALE: NTS

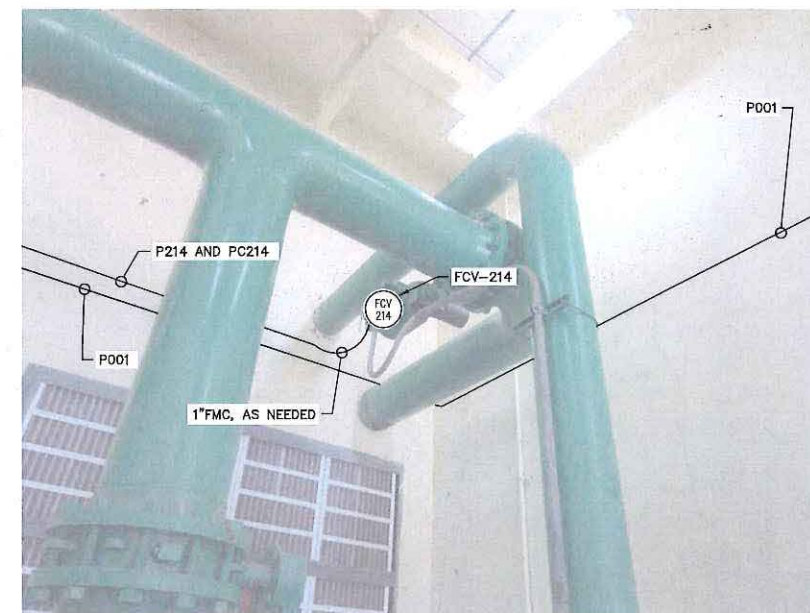
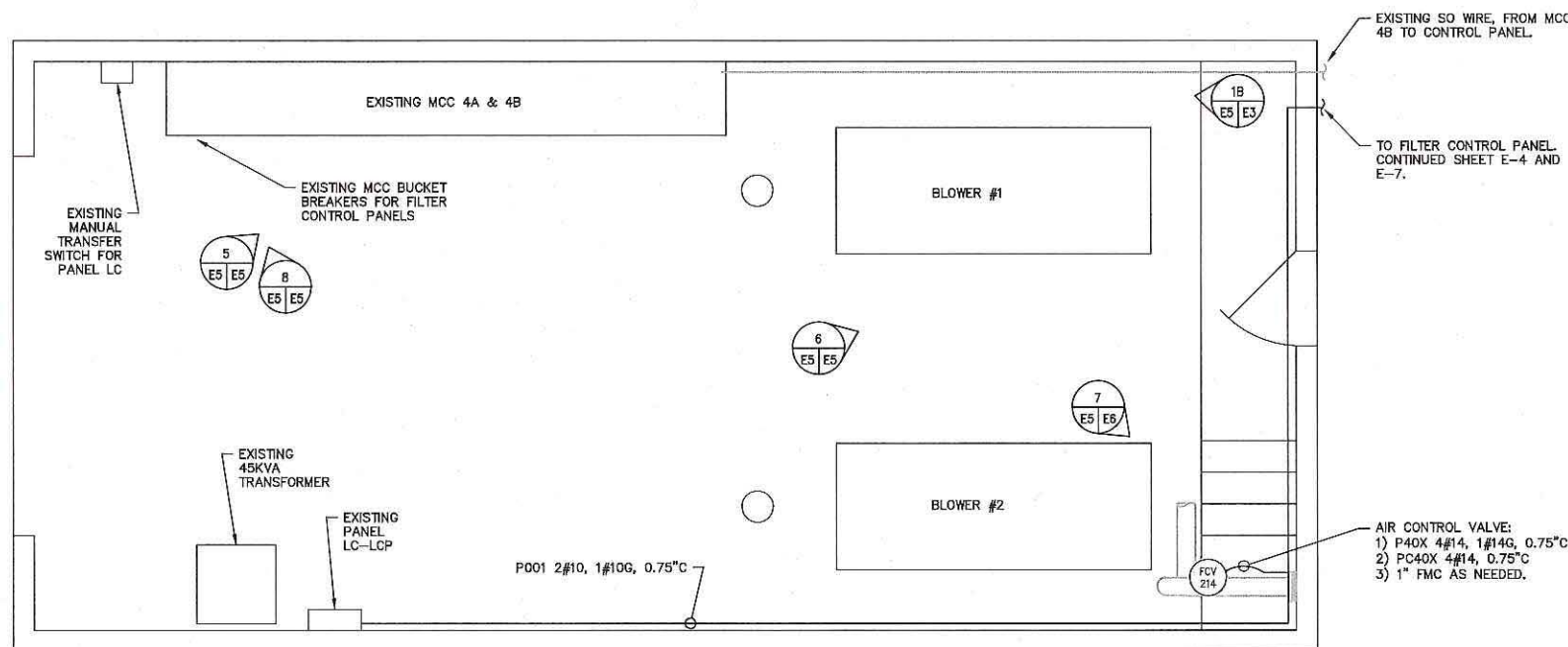


PHOTO 7 AIR CONTROL MOTOR OPERATED VALVE (FCV-214)  
SCALE: NTS



PHOTO 8 MTS FOR PANEL LC AND PARTIAL VIEW OF MCC 4A  
SCALE: NTS



ELECTRICAL ROOM LAYOUT  
SCALE: 1/4" = 1'-0"

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REV. NO.	DESCRIPTION	DATE



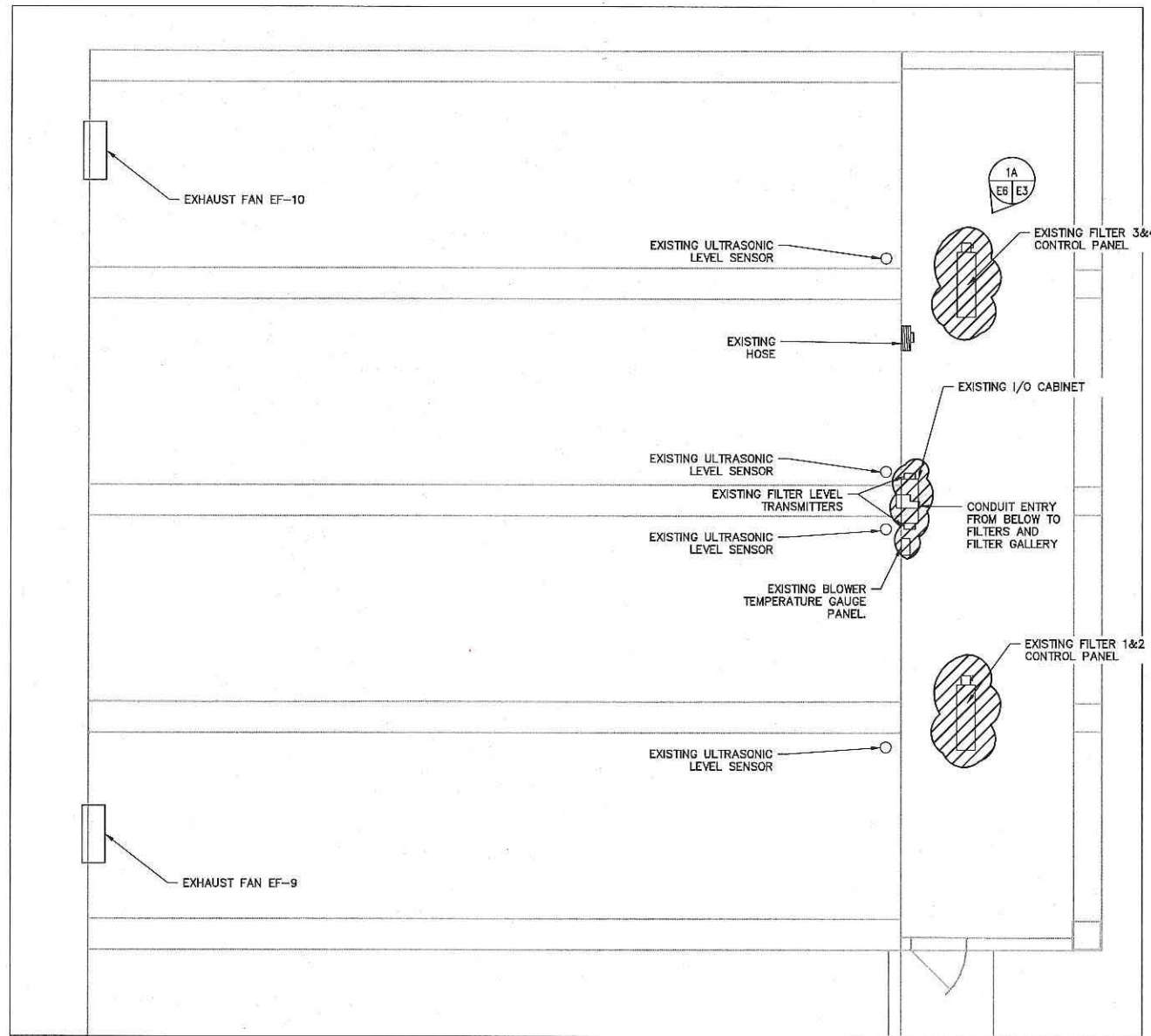
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Haudricourt P.E.  
No. 66861  
Date: 2016.08.05  
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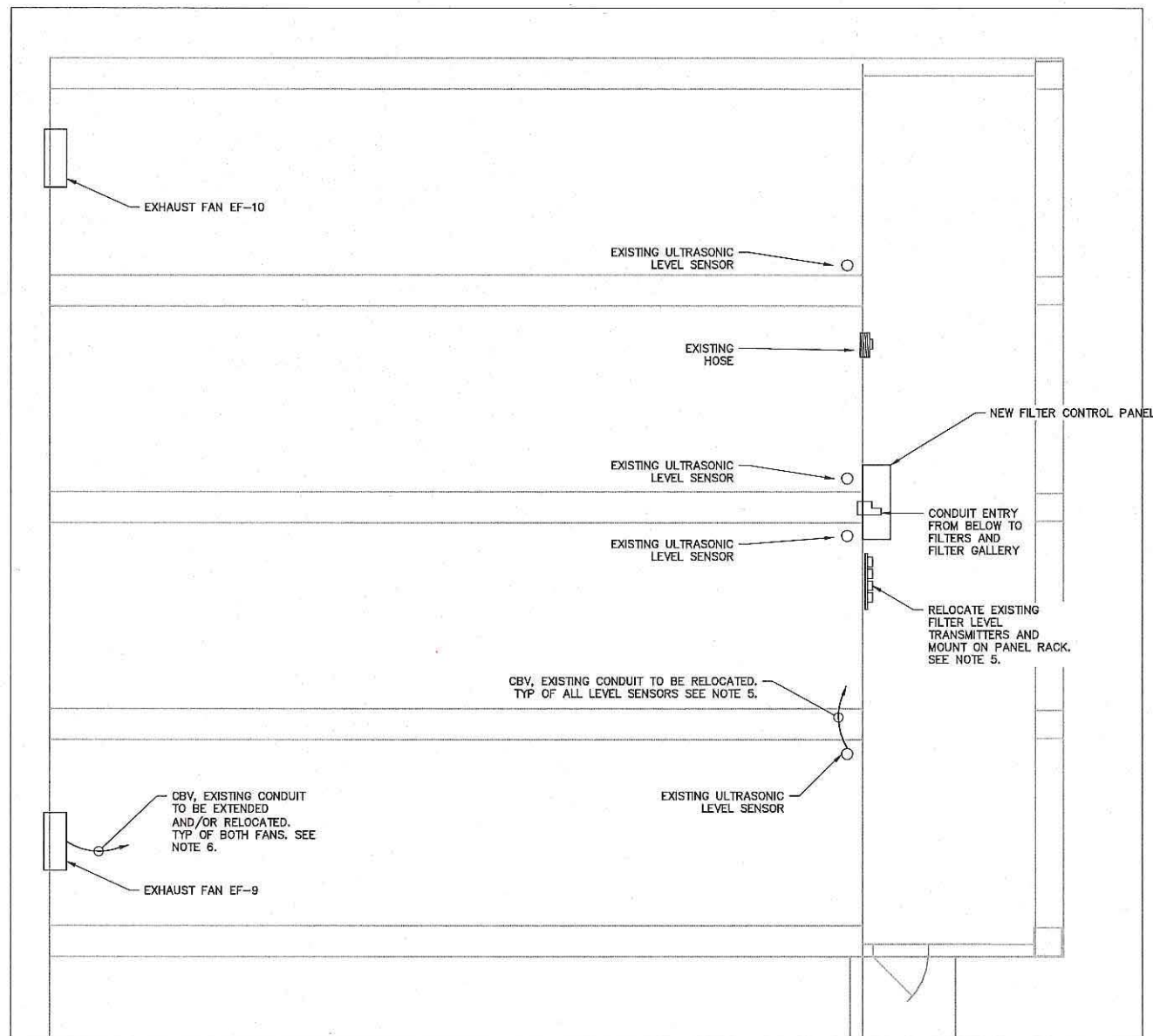
**LEE COUNTY**  
SOUTHWEST FLORIDA

LEE COUNTY, FL  
FIESTA VILLAGE WWT  
**ELECTRICAL PLAN**  
MCC 4A & 4B

DATE: AUGUST 2016	SCALE: NTS	DRAWING NUMBER: E-5
MCC PROJ. # 8540-0025	HORIZONTAL: NTS	
DRAWN: LLS	VERTICAL: NTS	
DESIGNED: AAH		
CHECKED: MAC		
PROJ. MGR. MS		
STATUS: <b>ISSUE FOR BID</b>		



FILTER ROOM DEMO  
SCALE: 1/4" = 1'-0"



FILTER ROOM PROPOSED  
SCALE: 1/4" = 1'-0"

NOTES:

- COORDINATE WITH INSTRUMENTATION DRAWINGS FOR FILTER CONTROL EQUIPMENT. ALL NEW CONDUIT TO BE RIGID ALUMINUM. REPLACE EXISTING PVC CONDUIT WITH ALUMINUM WHERE UNCOVERED.
- JUNCTION AND CONDUIT BOXES SHALL BE INSTALLED AS NEEDED TO MAINTAIN MAXIMUM BEND RADIUS OF LESS THAN 360 DEGREES DURING CONDUIT RUNS.
- CONTRACTOR SHALL SUBMIT DETAILED CONDUIT ROUTING PLAN PRIOR TO CONSTRUCTION OR DEMOLITION.
- ALL POWER WIRE FOR CIRCUITS OTHER THAN VALVES SHALL BE A MINIMUM SIZE #12AWG CU XHHW. CONTROL WIRE FOR DISCRETE CIRCUITS SHALL BE #14AWG CU XHHW. CONTROL WIRE FOR ANALOG CIRCUITS SHALL BE TN-CU 2COND #16AWG SHIELDED. SPLICING SHALL NOT BE ALLOWED, EXCEPT AS APPROVED BY COUNTY IN WRITING.
- RELOCATE EXISTING CONDUIT FROM FILTER LEVEL SENSORS TO TRANSMITTER NEW LOCATION. REPLACE WIRE AND CONDUIT TO LEVEL SENSORS AS NEEDED. IF SENSOR AND CABLE ARE STANDARD EQUIPMENT AS A SINGLE UNIT, THEN EQUIPMENT SHALL BE REPLACED TOGETHER.
- RELOCATE AND EXTEND EXISTING SIGNAL CONDUIT FROM EXHAUST FANS TO NEW FILTER CONTROL PANEL. REPLACE WIRE AS NEEDED.

S:\5540 - Lee County\0005\MC-Drawing\00-Drawing\00-005 ELEC ELEVATION - A.dwg, 8/2/2016 8:46:07 AM, Local Bldg

REV.	DESCRIPTION	DATE



Digitally signed by  
Aubrey Armand  
Haudricourt P.E.  
No. 66861  
Date: 2016.08.05  
09:10:52 -04'00'

1365 Hamlet Avenue  
Clearwater, Florida 33756  
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LEE COUNTY, FL  
FIESTA VILLAGE WWTP

PROPOSED ELECTRICAL PLAN  
FILTER ROOM

DATE: JULY 2016	SCALE:	DRAWING NUMBER <b>E-6</b>
MCE PROJ # 5540-005	HORIZONTAL: NTS	
DRAWN: LLS	VERTICAL: NTS	REVISION
DESIGNED: AAH		
CHECKED: MAC		
PROJ. MGR.: MS		
STATUS: <b>ISSUE FOR BID</b>		

NOTES:

- COORDINATE WITH STRUCTURAL DRAWINGS FOR PLACEMENT OF ALL CONDUIT AND ASSOCIATED EQUIPMENT ALONG CATWALKS AND RAILINGS. ALL NEW CONDUIT TO BE RIGID ALUMINUM. REPLACE EXISTING PVC CONDUIT WITH ALUMINUM WHERE UNCOVERED.
- EXISTING VALVES AND ACTUATORS TO BE REPLACED. REFER TO VALVE SPECIFICATIONS FOR EQUIPMENT DETAILS.
- JUNCTION AND CONDUIT BOXES SHALL BE INSTALLED AS NEEDED TO MAINTAIN MAXIMUM BEND RADIUS OF LESS THAN 360 DEGREES DURING CONDUIT RUNS.
- REMOVE ALL EXISTING WIRE, CONDUIT, AND PULL BOXES FOR POWER AND CONTROL CIRCUITS TO MOV'S. REPLACE PER SPECIFICATIONS. WIRE AND CONDUITS FOR LIGHTING CIRCUITS AND OTHER EXISTING PANEL LP-LCP CIRCUITS TO REMAIN.
- CONTRACTOR SHALL SUBMIT DETAILED CONDUIT ROUTING PLAN PRIOR TO CONSTRUCTION OR DEMOLITION.
- REPLACE EXISTING FIXTURES (TOTAL OF 4) WITH LED EQUIVALENT AND PULL NEW WIRE FOR EXISTING LIGHTING CIRCUITS IN FILTER GALLERY. REUSE EXISTING CONDUIT WHERE ABLE. NEW FIXTURES TO BE LED 65 WATT, 4000 K, 6169 LUMEN; VANLED65N BY RAB LIGHTING OR APPROVED EQUAL TO MATCH EXISTING.
- POWER WIRE FOR CIRCUITS OTHER THAN VALVES SHALL BE A MINIMUM SIZE #12AWG CU XHHW. CONTROL WIRE FOR DISCRETE CIRCUITS SHALL BE #14AWG CU XHHW. CONTROL WIRE FOR ANALOG CIRCUITS SHALL BE TN-CU 2COND #16AWG SHIELDED.
- SEE NOTE 7, SHT E-1.

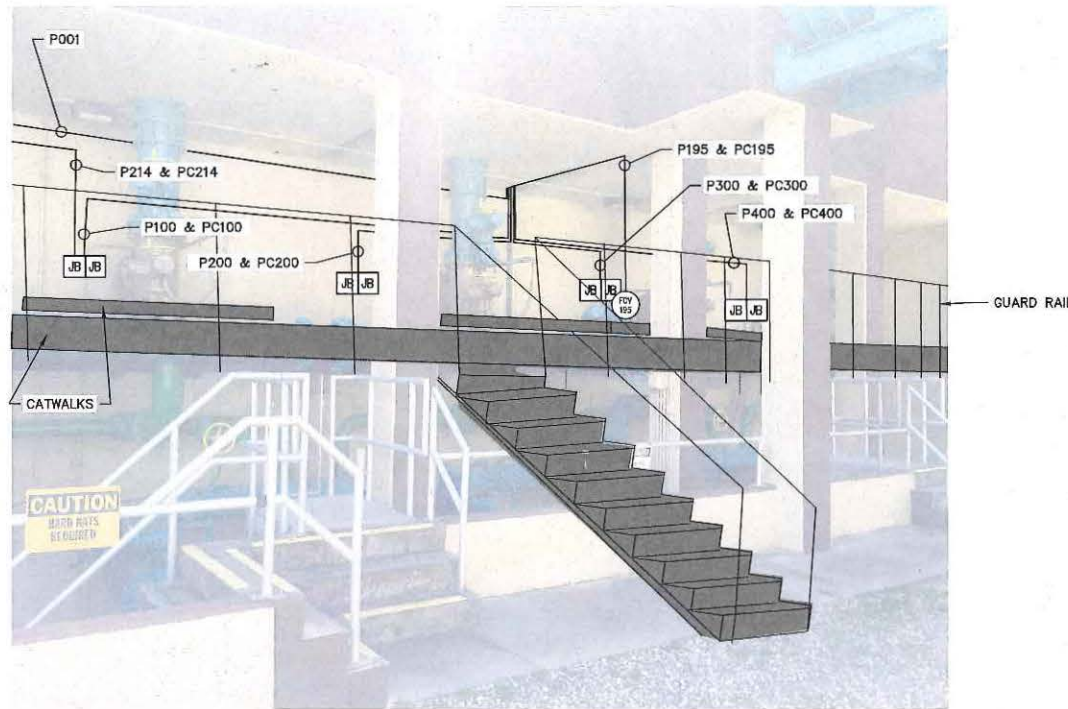


PHOTO  FILTER GALLERY CONTROL VALVE - CONDUIT PLAN II  
SCALE: NTS

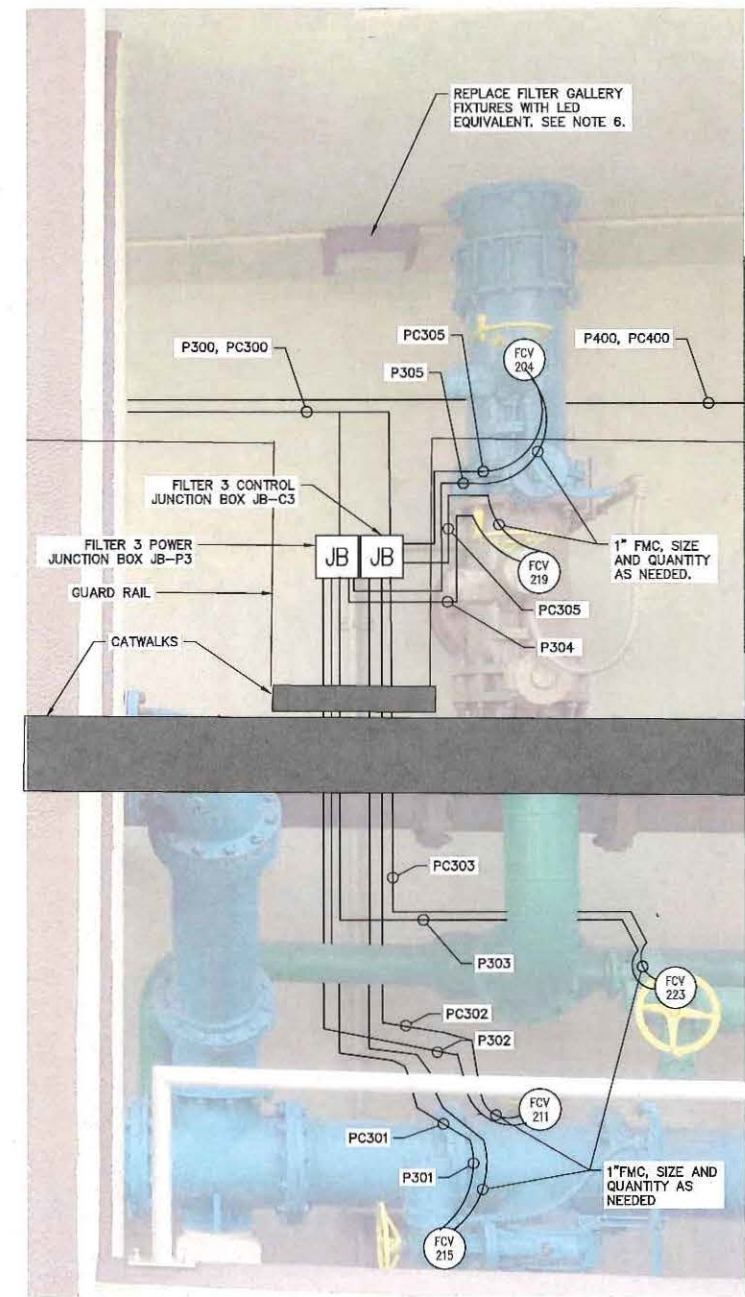



PHOTO  FILTER 3 CONTROL VALVE CONDUIT PLAN DETAIL (TYP OF 4)  
SCALE: NTS

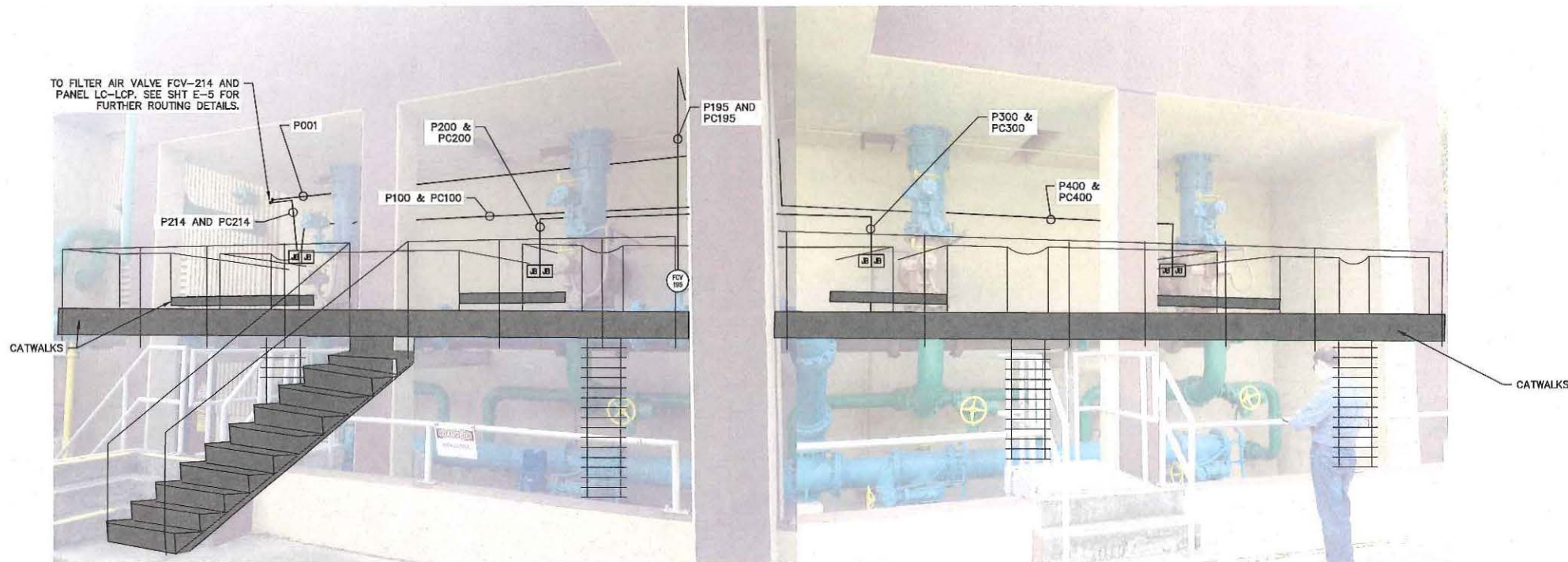


PHOTO  FILTER GALLERY CONTROL VALVE - CONDUIT PLAN I  
SCALE: NTS

REV.	DESCRIPTION	DATE



Digitally signed by  
Aubrey Armand  
Haudricourt P.E.  
No. 66861  
Date: 2016.08.05  
09:11:57 -04'00'

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www.mckimcreed.com



LEE COUNTY, FL  
FIESTA VILLAGE WWTP  
PROPOSED ELECTRICAL PLAN  
FILTER GALLERY DETAIL

DATE: JULY 2016	SCALE: NTS	DRAWING NUMBER: E-7
MCE PROJ. # 9540-0005	HORIZONTAL: NTS	
DRAWN: LLS	VERTICAL: NTS	
DESIGNED: AAH		
CHECKED: MAC		
PROJ. MGR: MS		
STATUS: ISSUE FOR BID		

S:\3346 - Lee County\3346-Design\3346-Design\3346-0005 ELEVATION - B.Fig. 6/7/2016 8:48:14 AM Layer: 5000

**STRUCTURAL NOTES:**

**1.0 FOUNDATIONS**

1.1 ASSUMED DESIGN ALLOWABLE SOIL BEARING PRESSURE - 1,000 PSF. IN AREAS WHERE THE SOIL DOES NOT YIELD THIS BEARING STRESS VALUE, THE ENGINEER SHALL PROVIDE SOIL IMPROVEMENT RECOMMENDATIONS. CONTRACTOR IS RESPONSIBLE FOR PERFORMING ANY SUCH RECOMMENDATIONS.

1.2 PREPARE THE EXISTING SUBGRADE AS SHOWN ON DRAWINGS. IN THE EVENT UNUSUAL SOIL CONDITIONS ARE UNCOVERED, NOTIFY THE OWNER AND ENGINEER PRIOR TO SLAB CONSTRUCTION FOR INSTRUCTIONS HOW TO PROCEED.

1.3 ALL FILL BELOW FOUNDATIONS AND AS REQUIRED SHALL BE SELECT MATERIAL FREE FROM ROOTS, TRASH WOOD SCRAPS, AND OTHER EXTRANEIOUS MATERIALS. PLACE FILL IN LIFTS NOT EXCEEDING 6 INCHES.

1.4 SLAB ELEVATIONS SHALL NOT BE RAISED OR LOWERED WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER.

1.5 ALL EXCAVATIONS SHALL BE ADEQUATELY DEWATERED BEFORE PLACEMENT OF REINFORCING STEEL AND CONCRETE.

1.6 EXCAVATIONS AND FORMS SHALL BE REVIEWED BY AN OWNER'S CONSTRUCTION REPRESENTATIVE PRIOR TO PLACEMENT OF REINFORCING STEEL.

1.7 ANCHOR BOLTS SHALL BE SET BY MEANS OF TEMPLATE. "FLOATING" ANCHOR BOLTS INTO PLACE IS PROHIBITED.

**2.0 REINFORCING STEEL**

2.1 REINFORCING STEEL FOR ALL CONCRETE WORK SHALL BE GRADE 60 STEEL AND CONFORMING TO ASTM A 615

2.2 DETAIL AND FABRICATE REINFORCING STEEL IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE "ACI DETAILING MANUAL," LATEST PUBLICATION.

2.3 REINFORCING STEEL IN PLACE SHALL BE REVIEWED BY THE OWNER'S CONSTRUCTION REPRESENTATIVE PRIOR TO PLACEMENT OF CONCRETE. IN GENERAL "CLR" DISTANCES FOR CONCRETE COVER ARE AS FOLLOWS:

- A) SURFACES CAST AGAINST EARTH 3" MIN
- B) ALL OTHER SURFACES 2" MIN

2.4 BARS SHALL BE COLD BENT AND SHALL NOT BE HEATED FOR ANY REASON.

2.5 REFERENCE THIS DRAWING FOR REQUIREMENTS FOR LAP REINFORCING STEEL IN CONCRETE.

2.6 LAP SPliced BARS IN CONCRETE ARE TO BE WIRE TIED.

**3.0 CONCRETE**

3.1 CAST-IN-PLACE REINFORCED CONCRETE SHALL HAVE A MINIMUM (28) DAY COMPRESSIVE STRENGTH OF 4,000 PSI. IN ADDITION THE CONCRETE MIX/WORK SHALL INCLUDE THE FOLLOWING:

- a.) CEMENT MATERIAL SUPPLIED SHALL BE TYPE I OR TYPE II PORTLAND CEMENT THAT IS IN CONFORMANCE W/ ASTM C150.
- b.) FLY ASH THAT IS IN CONFORMANCE W/ ASTM C618, CLASS F MAY BE INCLUDED IN THE MIX. FLY ASH SHALL BE USED AS A PARTIAL CEMENT REPLACEMENT & NOT EXCEED 20% OF THE TOTAL CEMENTITIOUS CONTENT.
- c.) AGGREGATE SHALL BE "NORMAL" WEIGHT THAT IS IN CONFORMANCE W/ ASTM C33. FINE AGGREGATE SHALL BE NATURAL SILICA SAND. COARSE AGGREGATE SHALL BE #57 STONE.
- d.) WATER SHALL BE IN CONFORMANCE W/ ASTM C894.
- e.) AIR ENTRAINING ADMIXTURE IS ALLOWED PROVIDED IT IS IN CONFORMANCE W/ ASTM C260. THE TOTAL AIR CONTENT REQUIRED IS 4% ± 1%.
- f.) WATER REDUCING ADMIXTURE IS ALLOWED PROVIDED IT IS IN CONFORMANCE W/ ASTM C494, TYPE A OR D.
- g.) MAXIMUM SLUMP = 3" W/OUT WATER REDUCING ADMIXTURE & 6" W/ A WATER REDUCING ADMIXTURE.
- h.) WATER/CEMENT RATIO (w/c) = 0.45 MAXIMUM.
- i.) ALL CONCRETE WORK IS TO BE MOISTURE CURED.

3.2 CONCRETE WORK SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", ACI 318 (LATEST EDITION).

3.3 CHAMFER EXPOSED EDGES OF CONCRETE 3/4 INCH, UNLESS NOTED OTHERWISE.

3.4 CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER CURING OF ALL CONCRETE.

3.5 CONTRACTOR SHALL SUBMIT REBAR SHOP DRAWINGS FOR APPROVAL TO OWNER'S CONSTRUCTION REPRESENTATIVE PRIOR TO FABRICATION. DO NOT FABRICATE REINFORCING PRIOR TO RECEIPT OF APPROVED SHOP DRAWINGS.

3.6 CONCRETE MIXES TO BE REVIEWED BY THE OWNER'S CONSTRUCTION REPRESENTATIVE PRIOR TO PLACEMENT OF CONCRETE. COMPRESSIVE STRENGTH TEST CYLINDERS TO BE REVIEWED BY THE OWNER'S CONSTRUCTION REPRESENTATIVE THROUGHOUT CONCRETE CONSTRUCTION OF THE PROJECT.

**4.0 ALUMINUM**

4.1 ALUMINUM FABRICATION SHALL BE IN CONFORMANCE WITH THE ALUMINUM ASSOCIATION, INC. "SPECIFICATIONS FOR ALUMINUM STRUCTURES".

4.2 UNLESS NOTED OTHERWISE, MATERIALS SHALL BE:

- a. PLATE & SHEET - ASTM B209; 6061-T6, 6061-T651 ALLOY.
- b. EXTRUDED SHAPES - ASTM B221; 6061-T6, 6061-T651 ALLOY. PIPE SECTIONS ARE SCHEDULE 40 U.N.O..
- c. CASTINGS - ASTM B109; 214 ALLOY.
- d. BOLTS - ASTM 276; TYPE 316 STAINLESS STEEL.
- e. NUTS - ASTM A194; GRADE M, OR ASTM 276; TYPE 316 STAINLESS STEEL.

4.3 ALUMINUM SHALL BE SEPARATED FROM DIRECT CONTACT WITH OTHER MATERIALS (STEEL, CONCRETE, ETC.) BY PRESSURE SENSITIVE TAPE, BITUMASTIC COATING, OR OTHER PROTECTIVE METHOD SUBMITTED BY THE CONTRACTOR AND APPROVED BY THE OWNER'S CONSTRUCTION REPRESENTATIVE.

4.4 CONNECTIONS SHALL HAVE A MINIMUM OF TWO 3/4" DIAMETER STAINLESS STEEL BOLTS.

4.5 WELDING ALUMINUM SHALL CONFORM TO AWS A5.10 & THE REQUIREMENTS OF THE ALUMINUM ASSOCIATIONS "ALUMINUM DESIGN MANUAL" (LATEST EDITION) TABLE 7.1-1 FOR WELD FILLERS FOR WROUGHT ALLOYS.

4.6 THE CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY BRACING, SHORING, AND GUYING OF STEEL FRAMING AGAINST WIND, CONSTRUCTION LOADS, AND OTHER TEMPORARY FORCES UNTIL SUCH PROTECTION IS NO LONGER REQUIRED FOR THE SAFE SUPPORT OF THE FRAMING.

4.7 ALL COPIES, BLOCKS, CUTS, CUT-OFFS AND OTHER CUTTING OF STRUCTURAL MEMBERS SHALL HAVE ALL RE-ENTRANT CORNERS SHAPED, AND NOTCH-FREE TO A RADIUS OF AT LEAST 1/2 INCH. THE FILLET AND ITS CONTIGUOUS CUTS SHALL MEET WITHOUT OFFSET OR CUTTING PAST THE POINT OF TANGENCY.

4.8 ANCHOR BOLTS SHALL BE AISI 316 S.S. AND SHALL EITHER BE HEADED OR AS REQUIRED BY THE DRAWINGS.

4.9 OVERSIZED AND SLOTTED HOLES SHALL NOT BE USED FOR BOLTED CONNECTIONS ON THIS PROJECT EXCEPT AT LOCATIONS NOTED ON DRAWINGS.

4.10 SPlicing OF MEMBERS IS PROHIBITED WITHOUT THE APPROVAL OF THE STRUCTURAL ENGINEER, AS TO LOCATION AND TYPE OF SPLICE. ANY MEMBER HAVING A SPLICE NOT SHOWN AND DETAILED ON THE SHOP DRAWINGS WILL BE REPLACED.

4.11 PRE-GROUTING BASE PLATES IS NOT PERMITTED.

4.12 ALL HOLES IN ALUMINUM ARE TO BE PUNCHED OR DRILLED. FLAME CUTTING OF ALUMINUM IS STRICTLY PROHIBITED.

4.13 STRUCTURAL STEEL ERECTION SHALL BE REVIEWED BY THE OWNER'S CONSTRUCTION REPRESENTATIVE.

4.14 IN GENERAL SHOP CONNECTIONS SHALL BE EITHER WELDED OR BOLTED AND FIELD CONNECTIONS SHALL BE BOLTED UNLESS NOTED OTHERWISE.

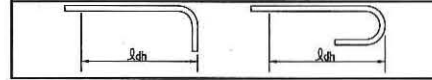
4.15 FABRICATOR/CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR OWNER/ENGINEER APPROVAL PRIOR TO FABRICATION. ALL SHOP DRAWINGS MAY BE EXPEDITED IF THE FABRICATOR ADHERES CLOSELY TO THE DETAILS, NOTES, AND INSTRUCTIONS, SHOWN ON THE DRAWINGS.

4.16 REFERENCE PROJECT SPECIFICATIONS FOR HANDRAIL REQUIREMENTS.

**DEVELOPMENT LENGTH OF STANDARD HOOKS**

BAR SIZE	DEVELOPMENT LENGTH $l_d$	
	BASIC	W/ CONC COVER *
#3	8"	8"
#4	10"	7"
#5	1'-0"	9"
#6	1'-2"	10"
#7	1'-5"	1'-0"
#8	1'-7"	1'-1"
#9	1'-9"	1'-3"
#10	2'-0"	1'-9"
#11	2'-2"	1'-8"

\*SIDE COVER NORMAL TO PLANE OF HOOK AT LEAST 2 1/2"; AND FOR 90° HOOK END COVER BEYOND OUTSIDE END OF HOOK AT LEAST 2".



**BASIC DEVELOPMENT LENGTH AND SPLICE LENGTH**

FOR BARS IN TENSION		FOR BARS IN COMPRESSION	
$f_y = 60,000$ psi		$f_c = 4000$ psi OR GREATER	
BASIC DEVELOPMENT LENGTH	BAR SIZE	BASIC DEVELOPMENT LENGTH	BAR SIZE
8"	# 3	12"	# 3
10"	# 4	1'-3"	# 4
1'-0"	# 5	1'-7"	# 5
1'-3"	# 6	1'-11"	# 6
1'-5"	# 7	2'-2"	# 7
1'-7"	# 8	2'-6"	# 8
1'-9"	# 9	2'-10"	# 9
2'-0"	# 10	3'-2"	# 10
2'-2"	# 11	3'-6"	# 11

\* BAR ENCLOSED WITHIN SPIRALS OF NOT LESS THAN 1/4 INCH DIAMETER AND NOT MORE THAN 4 INCH PITCH OR WITHIN #4 TIES IN CONFORMANCE WITH ACI 318, SECTION 7.10.5 AT NOT MORE THAN 4 INCHES ON CENTER, FACTOR 0.75 USED.

\*\* BAR ENCLOSED WITHIN TIES PER ACI 350-01 SECTION 12.17.2.4.

**BASIC DEVELOPMENT LENGTH AND SPLICE LENGTH**

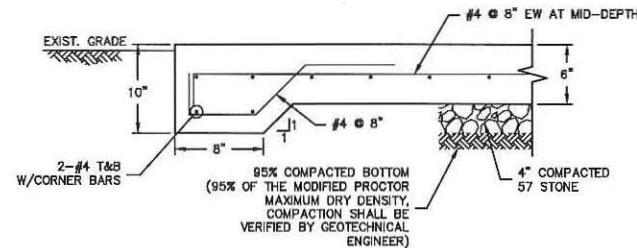
FOR BARS IN TENSION				FOR BARS IN TENSION			
$f_y = 60,000$ psi				$f_c = 4000$ psi OR GREATER, NORMAL WEIGHT CONCRETE			
BASIC DEVELOPMENT LENGTH **		CLASS B SPLICE LENGTH **		BASIC DEVELOPMENT LENGTH **		CLASS B SPLICE LENGTH **	
$l_d$		1.3 $l_d$		$l_d$		1.3 $l_d$	
CLEAR SPACING $\geq 2d_b$	CLEAR SPACING $< 2d_b$	BAR SIZE	CLEAR SPACING $\geq 2d_b$	CLEAR SPACING $< 2d_b$	BAR SIZE	CLEAR SPACING $\geq 2d_b$	CLEAR SPACING $< 2d_b$
1'-3"	1'-7"	# 3	1'-7"	2'-0"	# 3	2'-4"	3'-0"
1'-7"	2'-1"	# 4	2'-1"	2'-8"	# 4	3'-1"	4'-0"
2'-0"	2'-7"	# 5	2'-7"	3'-4"	# 5	3'-10"	5'-0"
2'-5"	3'-1"	# 6	3'-1"	4'-0"	# 6	4'-8"	6'-0"
3'-0"	4'-5"	# 7	4'-5"	5'-10"	# 7	6'-9"	8'-9"
4'-0"	5'-2"	# 8	5'-2"	6'-8"	# 8	7'-9"	10'-0"
4'-6"	5'-9"	# 9	5'-9"	7'-6"	# 9	8'-8"	11'-3"
4'-11"	6'-5"	# 10	6'-5"	8'-4"	# 10	9'-8"	12'-6"
5'-5"	7'-1"	# 11	7'-1"	9'-2"	# 11	10'-8"	13'-9"

\* TOP REINFORCEMENT IS HORIZONTAL REINFORCEMENT SO PLACED THAT MORE THAN 12 INCHES OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE REINFORCEMENT.

\*\* LENGTHS SHOWN IN CHART SHALL BE MODIFIED WHERE REQUIRED TO CONFORM TO THE PROVISIONS OF ACI 318, SECTION 12.2.

**SCHEDULE - REINF. BAR SPLICE REQUIREMENTS**

SCALE: N.T.S.



**DETAIL - TYP. CONCRETE LANDING PAD**

SCALE: N.T.S.

**DESIGN LOADS:**

- LIVE LOAD: 100 PSF SLAB-ON-GRADE, 100 PSF STAIRS & PLATFORMS
- ROOF: NA
- SNOW: NA, IMPORTANCE FACTOR (I<sub>s</sub>): NA
- SEISMIC: NA, IMPORTANCE FACTOR (I<sub>e</sub>): NA
- WIND: ZONE: 169 mi/hr, EXPOSURE C, RISK CATEGORY III
- ULTIMATE WINDSPEED

FLORIDA BUILDING CODE (FBC) 2014 & ASCE 7-10 WIND DESIGN:

**DESIGN CRITERIA:**

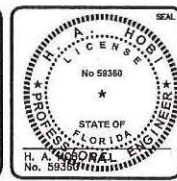
- CONCRETE 28 DAY COMPRESSIVE STRENGTH:  $f_c = 4,000$  psi
- SLAB-ON-GRADE:  $f_c = 3,000$  psi
- SIDEWALK: ASTM A615, GRADE 60
- REINFORCING STEEL: ASTM A185
- WELDED WIRE FABRIC: REF. STRUCTURAL NOTE 4.2
- ALUMINUM: REF. STRUCTURAL NOTE 4.2
- BOLTS SHALL BE 3/4" # ASTM A325 OR TYPE 316 S.S. REF. STRUCTURAL NOTE 4.2.d
- ANCHOR BOLTS SHALL BE 3/4" # TYPE 316 S.S. (ALUMINUM): REF. STRUCTURAL NOTE 4.8
- ALUMINUM WELD FILLERS ALLOYS SHALL CONFORM TO: AWS A5.10 (REF. STRUCTURAL NOTE 4.5)
- SOIL BEARING CAPACITY: REF. STRUCTURAL NOTE 3.1

**LEGEND:**

- ENLARGED PLAN AREA, DETAIL: - - - - -
- CONC. WALL, PAD, ETC. - [Pattern]
- GROUT - [Pattern]
- GRATING - [Pattern]
- DETAIL OR SECTION NUMBER/SHOWN ON SHEET - [Symbol]
- PROJECT NORTH - [North Arrow]
- ELEVATION DATUM - [Symbol]

15:18:30 04/08/2016 10:50:27 AM Plot: 15:18:30 04/08/2016 10:50:27 AM Plot: 15:18:30 04/08/2016 10:50:27 AM

H.A. Hobi, State of Florida, Professional Engineer, License No. 59360. This item has been electronically signed and sealed by H.A. Hobi, PE on August 4, 2016 using a SHA-1 authentication code. Printed copies of this document are not considered signed and sealed and the SHA-1 authentication code must be verified on any electronic copies.

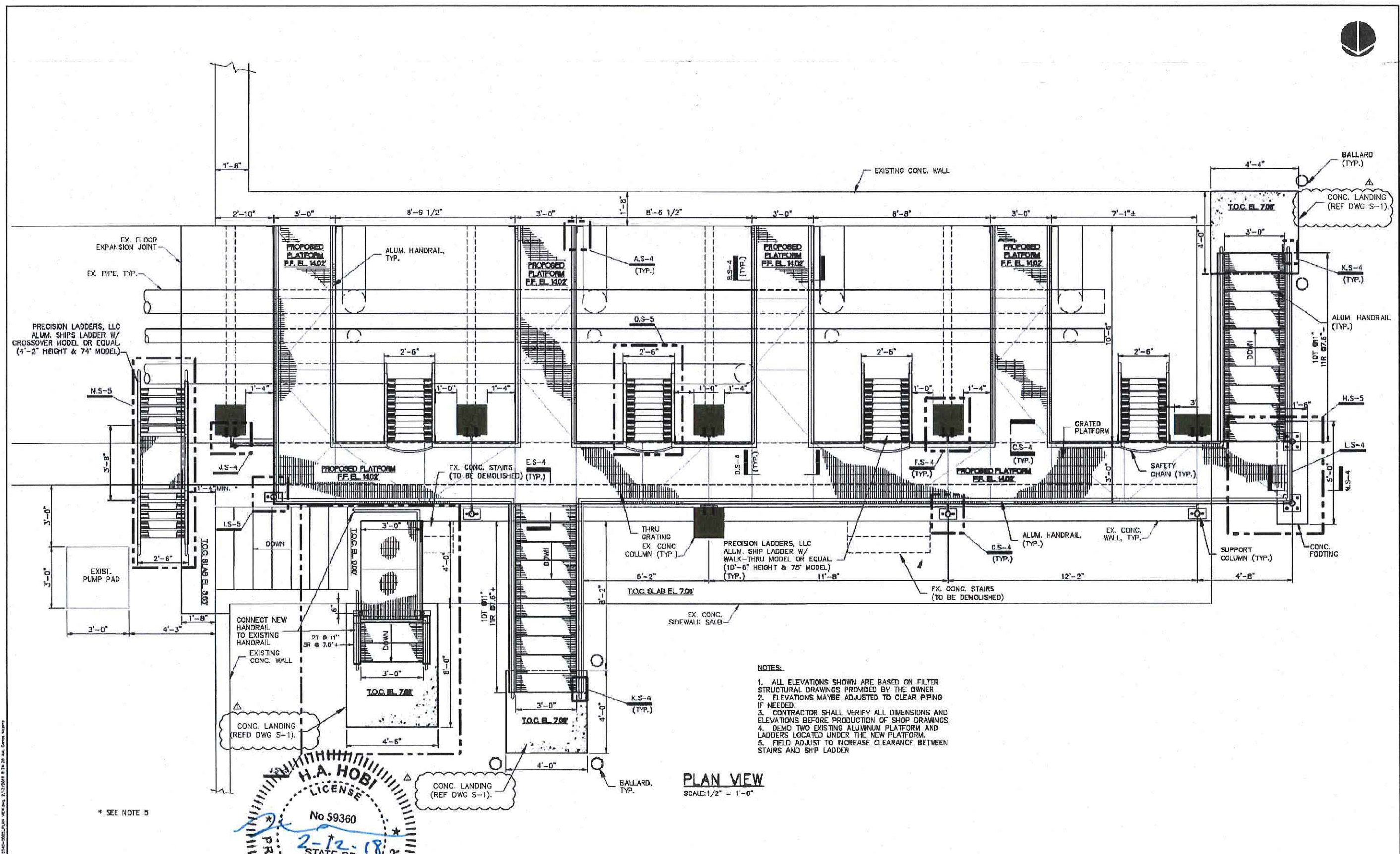


Digitally signed by H.A. Hobi, Florida, PE No. 59360 Date: 2016.08.04 15:18:30 -04'00'



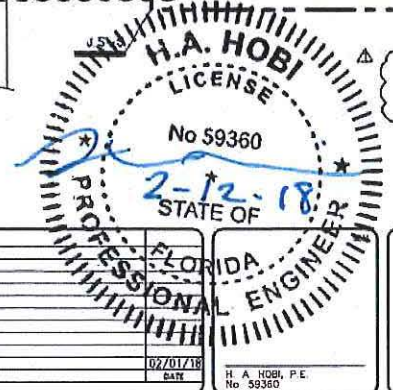
LEE COUNTY, FL  
FIESTA VILLAGE WWTP  
PROPOSED VALVE ACCESS WALKWAY  
STRUCTURAL NOTES

DATE: AUGUST 5, 2016	SCALE:	DRAWING NUMBER:
MCE PROJ # 8540-0069	HORIZONTAL:	S-1
DRAWN: PY	VERTICAL:	NA
DESIGNED: SH	NA	REVISION:
CHECKED: SH	NA	ISSUE FOR BID
PROJ. MGR.: P.J.		
STATUS:		



- NOTES:**
1. ALL ELEVATIONS SHOWN ARE BASED ON FILTER STRUCTURAL DRAWINGS PROVIDED BY THE OWNER
  2. ELEVATIONS MAYBE ADJUSTED TO CLEAR PIPING IF NEEDED.
  3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS BEFORE PRODUCTION OF SHOP DRAWINGS.
  4. DEMO TWO EXISTING ALUMINUM PLATFORM AND LADDERS LOCATED UNDER THE NEW PLATFORM.
  5. FIELD ADJUST TO INCREASE CLEARANCE BETWEEN STAIRS AND SHIP LADDER

**PLAN VIEW**  
SCALE: 1/2" = 1'-0"



\* SEE NOTE 5

NO.	REVISION	DATE
1	REVISION 1	02/07/18

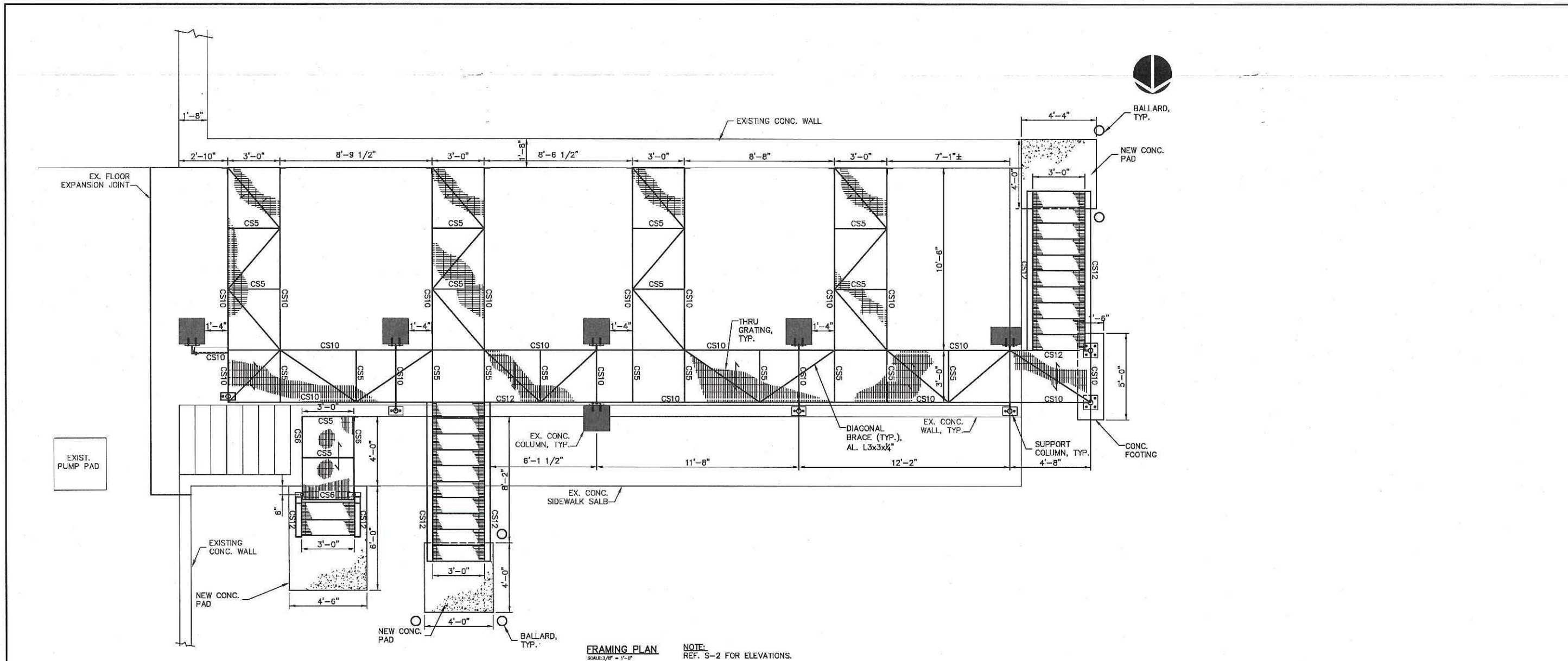
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**LEE COUNTY**  
SOUTHWEST FLORIDA

**LEE COUNTY**  
FIESTA VILLAGE  
  
PROPOSED VALVE  
ACCESS WALKWAY

DATE: AUGUST 2016	SCALE: HORIZONTAL: AS NOTED	DRAWING NUMBER: S-2
MEET PROJ # 5540-0095	DESIGNED: JSL	VERTICAL: NA
DRAWN: CES	CHECKED: JSL	PROJ MGR: P.L.
STATUS: ISSUE FOR BID	REVISION:	



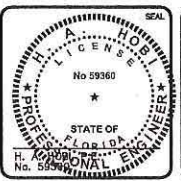


**FRAMING PLAN**  
SCALE: 1/8" = 1'-0"  
**NOTE:**  
REF. S-2 FOR ELEVATIONS.

- NOTES:**
- "←" SYMBOL ON PLANS INDICATES SPAN DIRECTION OF GRATING MAIN BEARING BARS. GRATING IS ALUMINUM (AL) RECTANGULAR BAR U.N.O.  
G1 = 1-1/2" X 3/8" AL. RECTANGULAR BAR GRATING (MFG'S 19 "SG" SERIES SPACE PROFILE OR GREATER)
  - ATTACH GRATING TO AL SUPPORT FRAMING W/ S.S. CLIPS PER GRATE MFG'S RECOMMENDATIONS.
  - ALUMINUM FRAMING SECTIONS:  
AL CS5 = CS5 x 3.09 ALUMINUM ASSOCIATION STD. CHANNEL SECTION  
AL CS6 = CS6 x 4.03 ALUMINUM ASSOCIATION STD. CHANNEL SECTION  
AL CS10 = CS10 x 8.36 ALUMINUM ASSOCIATION STD. CHANNEL SECTION  
AL CS12 = CS12 x 8.27 ALUMINUM ASSOCIATION STD. CHANNEL SECTION  
X.B. = ALUMINUM L3x3x1/4 L-SHAPE SECTION "X"-CROSS BRACING
  - IN GENERAL FOR PLATFORM CONNECTIONS NOT SHOWN, IT IS THE FABRICATOR'S RESPONSIBILITY TO PROVIDE IN THE PROJECT SHOP DRAWINGS.
  - WHERE SLAB WILL BE CONSTRUCTED ADJACENT TO CONCRETE SIDEWALK CAULK & SEAL THE TOP OF JOINT W/ SONOLASTIC "SL-2" POLYURETHANE OR APPROVED EQUAL.
  - PROVIDE NON-SHRINK GROUT PAD TO ENSURE EQUIPMENT INSTALLED LEVEL W/IN ALLOWED TOLERANCE. GC TO FIELD COORDINATE T.O. CONC. EL. AS REQ'D.

8/1/2016 10:00 AM - Lee County\2016\08-04-Structural\5-3 - Framing Plans.dwg, 8/4/2016 2:41:14 PM, P.J. Waldrop

H.A. Hobi, State of Florida, Professional Engineer, License No. 59360. This item has been electronically signed and sealed by H.A. Hobi, PE on August 4, 2016 using a SHA-1 authentication code. Printed copies of this document are not considered signed and sealed and the SHA-1 authentication code must be verified on any electronic copies.



Digitally signed by H. A. Hobi, Florida, PE No. 59360  
Date: 2016.08.04 15:20:45 -04'00'

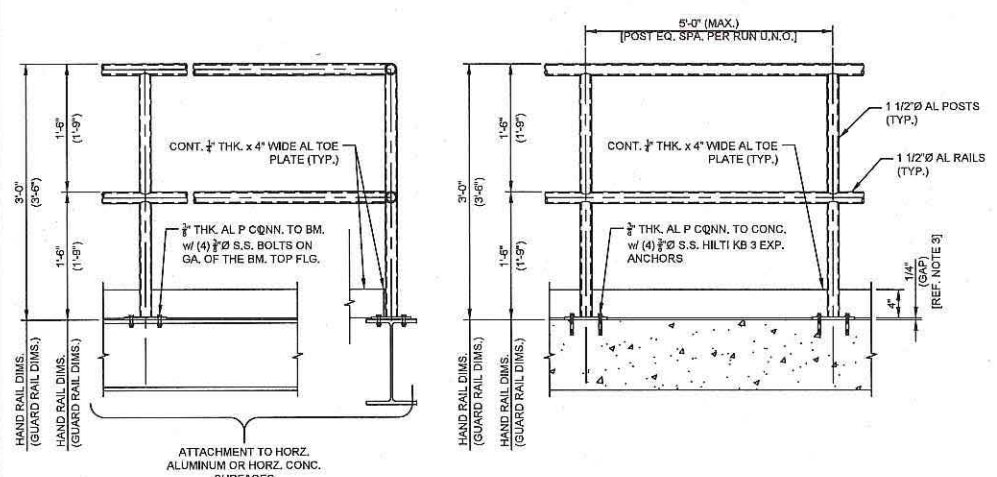
**MCKIM & CREED**  
1365 Hamlet Avenue  
Clearwater, Florida 33756  
Phone: (727)442-7196, Fax: (727)461-3827  
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**LEE COUNTY**  
SOUTHWEST FLORIDA

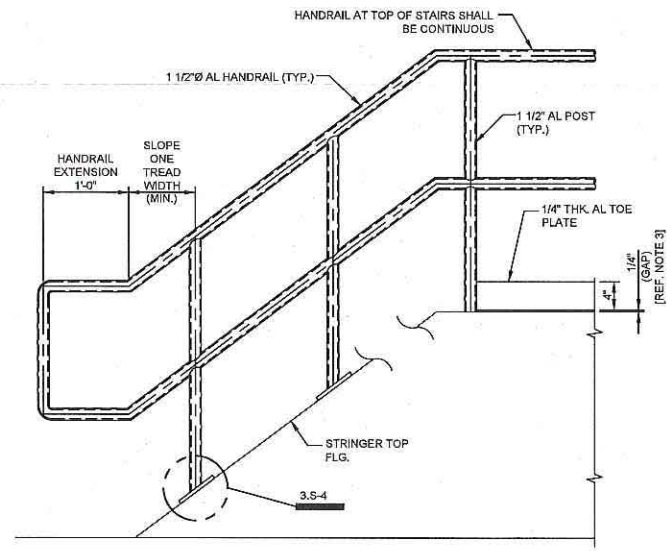
LEE COUNTY, FL  
FIESTA VILLAGE WWTP  
PROPOSED VALVE  
ACCESS WALKWAY  
STRUCTURAL FRAMING PLAN

DATE: AUGUST 5, 2016	SCALE:	DRAWING NUMBER: <b>S-3</b>
MCE PROJ. # 8540-0085	HORIZONTAL:	
DRAWN: PY	AS NOTED	
DESIGNED: SH	VERTICAL:	
CHECKED: SH	NA	
PROJ. MGR.: P.J.	STATUS: ISSUE FOR BID	REVISION:

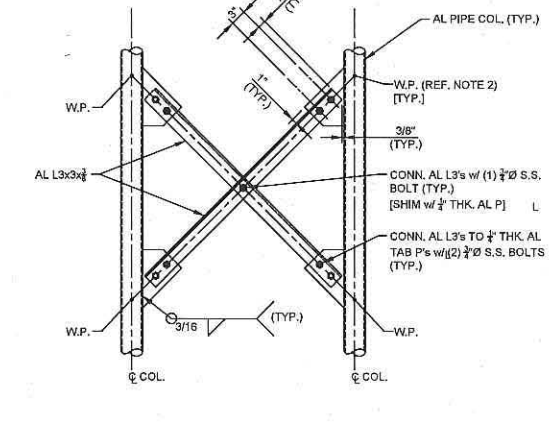
NOTE:  
 1. USE HILTI HIT-RE 500 V3 ADHESIVE FOR ADHESIVE ANCHORS WITH 6" MIN. EMBED.  
 2. ADHESIVE ANCHOR SHALL BE 3/4" SS 316 THREADED RODS W/ SS 316 NUTS AND WASHERS.  
 3. ALL CONNECTION BOLTS AND WASHERS SHALL BE 3/4" Ø SS316 UNLESS OTHERWISE NOTED.



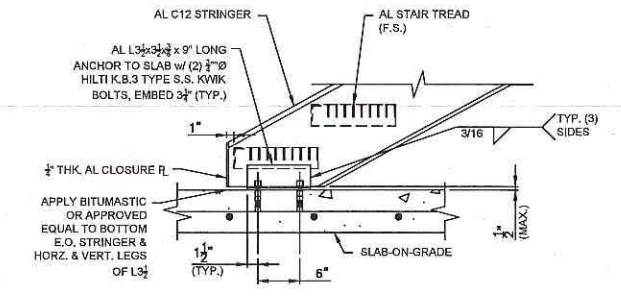
**1 - DETAIL - AL HAND RAIL / GUARDRAIL & POST CONN.'s**  
 SCALE: 1" = 1'-0"



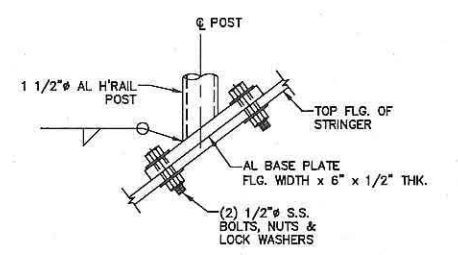
**2 - DETAIL - AL RAIL STAIR STRINGER INFO.**  
 SCALE: 1" = 1'-0"



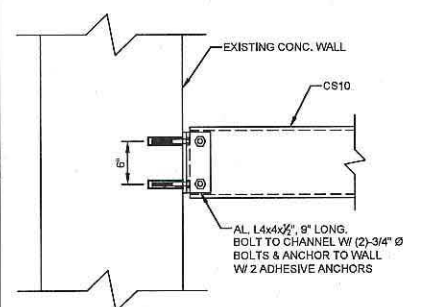
**9 - DETAIL - AL PLATFORM X.B.**  
 SCALE: 3/4" = 1'-0"



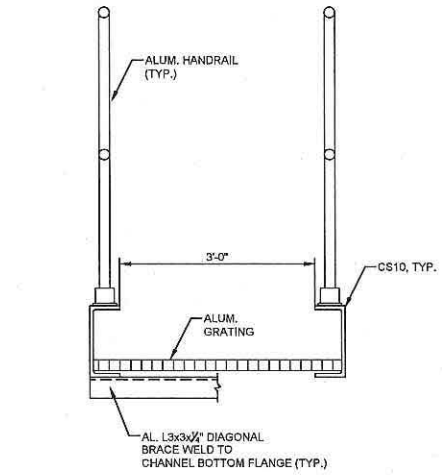
**K - DETAIL - AL STAIR / S.O.G. CONN.**  
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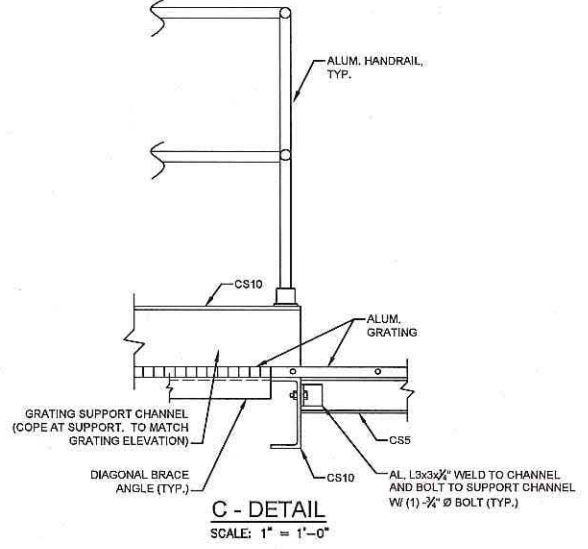
**3 - DETAIL - AL POST STRINGER CONN.**  
 SCALE: 3" = 1'-0"



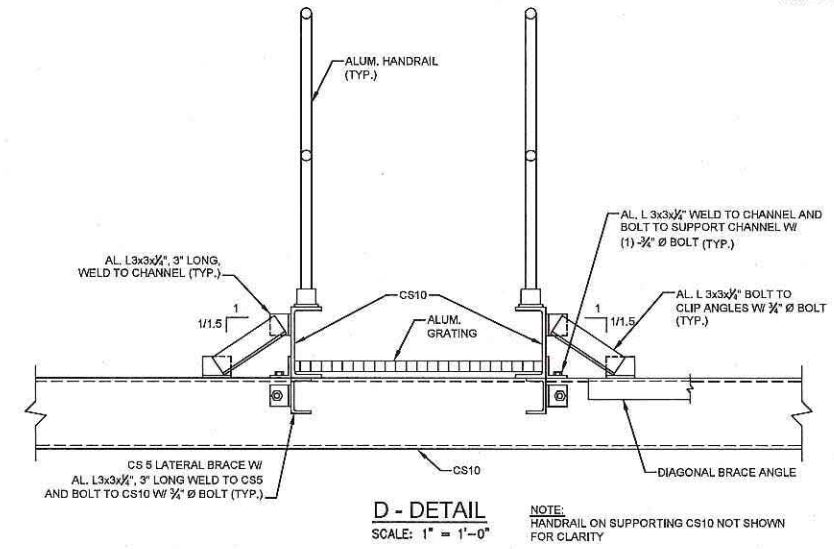
**A - DETAIL**  
 SCALE: 1" = 1'-0"



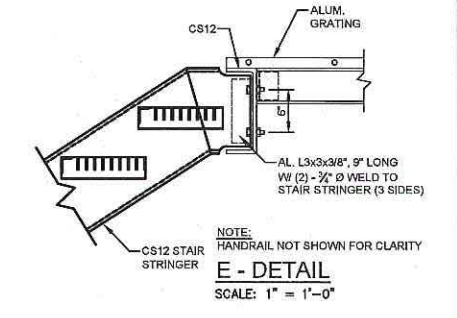
**B - DETAIL**  
 SCALE: 1" = 1'-0"



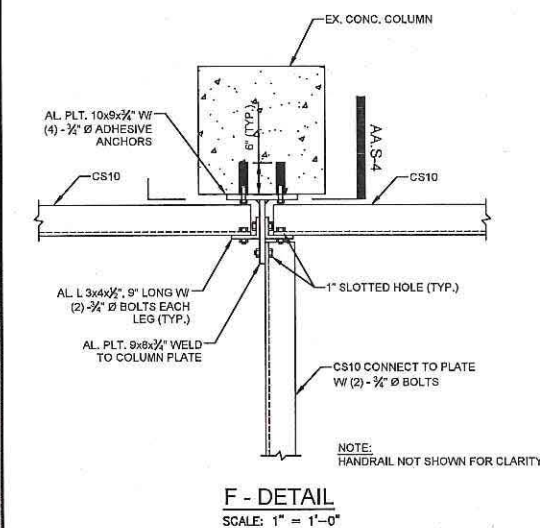
**C - DETAIL**  
 SCALE: 1" = 1'-0"



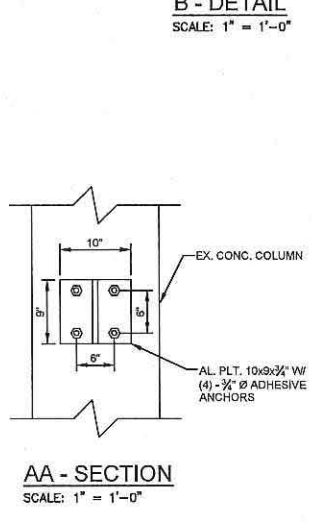
**D - DETAIL**  
 SCALE: 1" = 1'-0"



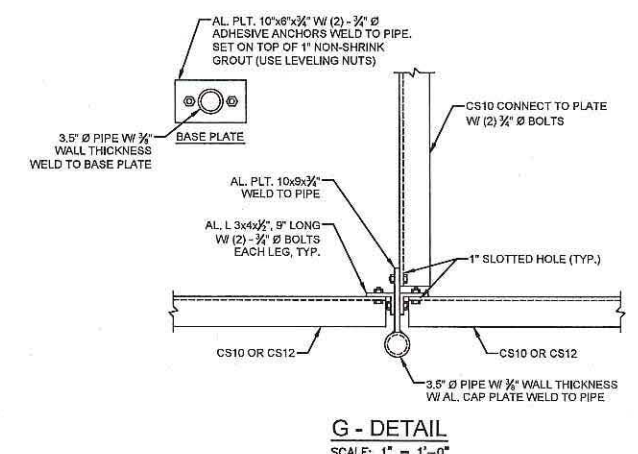
**E - DETAIL**  
 SCALE: 1" = 1'-0"



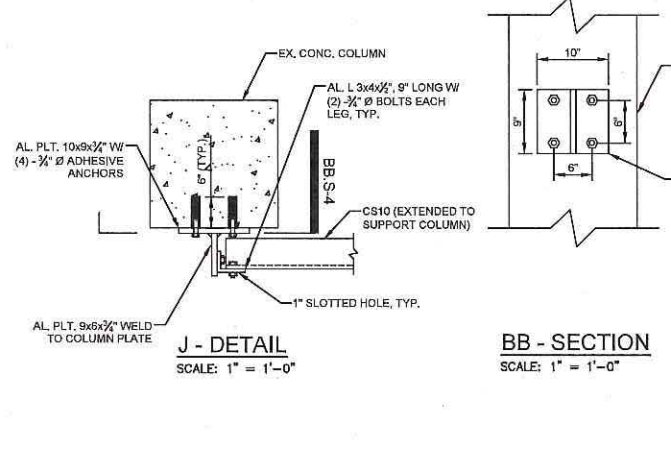
**F - DETAIL**  
 SCALE: 1" = 1'-0"



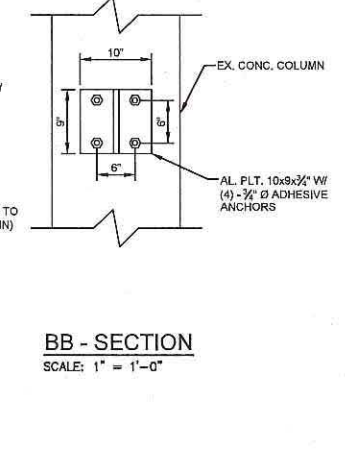
**AA - SECTION**  
 SCALE: 1" = 1'-0"



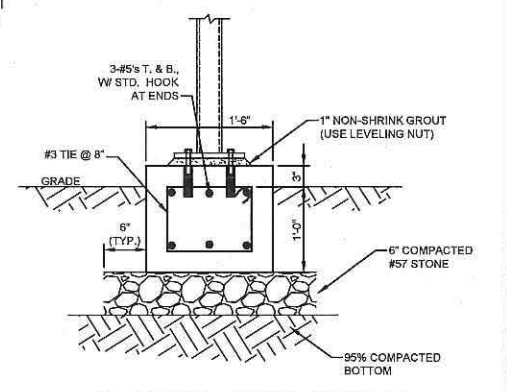
**G - DETAIL**  
 SCALE: 1" = 1'-0"



**J - DETAIL**  
 SCALE: 1" = 1'-0"

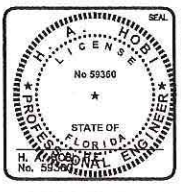


**BB - SECTION**  
 SCALE: 1" = 1'-0"



**M - DETAIL - CONC. FOOTER**  
 SCALE: 1" = 1'-0"

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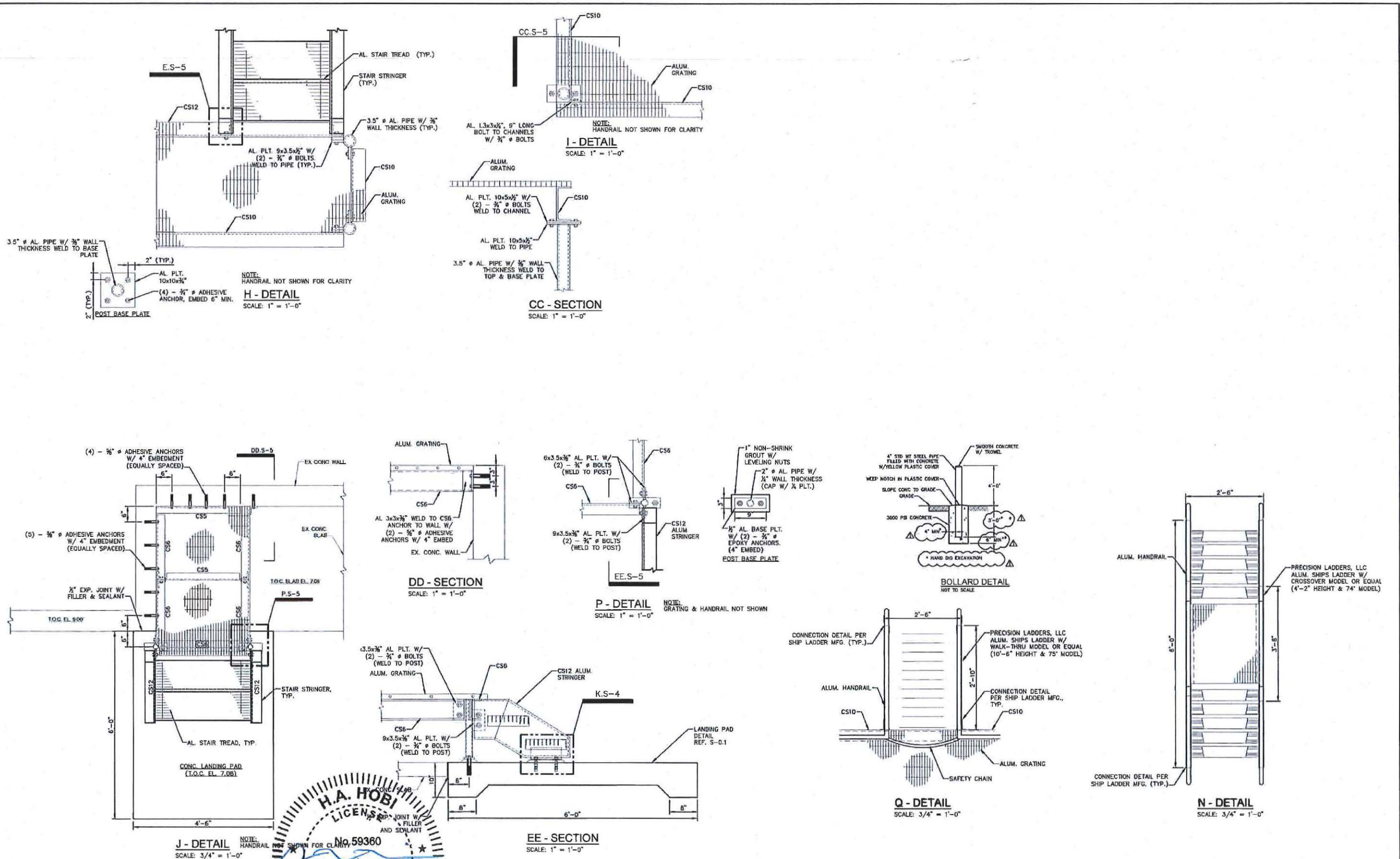
Digitally signed by H.A. Hobi, Florida, PE No. 59360  
 Date: 2016.08.04 15:22:55 -04'00'

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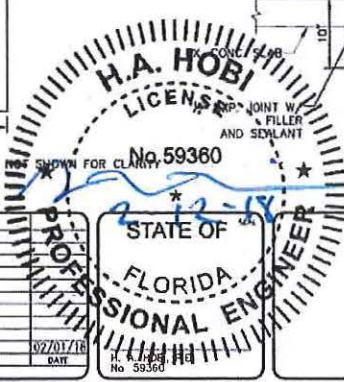
**LEE COUNTY**  
 SOUTHWEST FLORIDA

**LEE COUNTY, FL**  
**FIESTA VILLAGE WWTP**  
**PROPOSED VALVE**  
**ACCESS WALKWAY**  
**SECTIONS & DETAILS**

DATE: AUGUST 5, 2016	SCALE	DRAWING NUMBER
MCE PROJ. # 5940-0005	HORIZONTAL: AS NOTED	S-4
DRAWN: PY	VERTICAL: NA	
DESIGNED: SH	STATUS: ISSUE FOR BID	REVISION
CHECKED: SH		
PROJ. MGR.: PUL		



3/21/2016 Lee County, Florida, Lee County Department of Public Works, 3017/2016 8:21:10 AM, Central Time



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**LEE COUNTY**  
 SOUTHWEST FLORIDA

**LEE COUNTY**  
**FIESTA VILLAGE**  
 PROPOSED VALVE  
 ACCESS WALKWAY  
 SECTIONS & DETAILS

DATE:	AUGUST 2016	SCALE:	DIW/REV. NUMBER:
MCX PROJ #:	2016-0099	HORIZONTAL:	S-5
DRAWN:	DES	AS NOTED:	
DESIGNED:		VERTICAL:	
CHECKED:	JSL	NA:	
PROJ MGR:	P.A.		
STATUS:	ISSUE FOR BID	REVISION:	