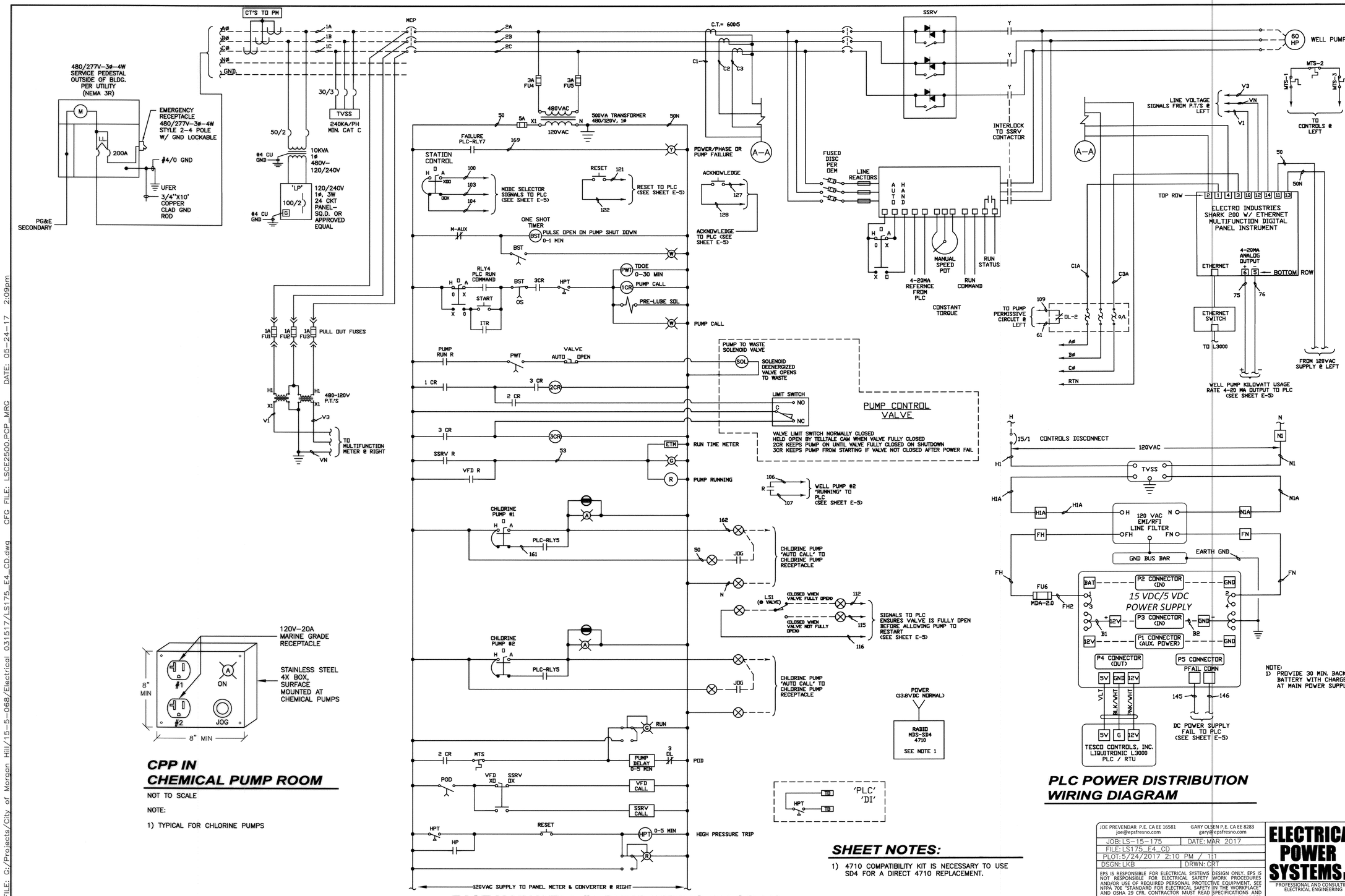

CPP IN CHEMICAL PUMP ROOM

NOT TO SCALE

NOTE:

1) TYPICAL FOR CHLORINE PUMPS

EAST MAIN WELL #1 PUMP WIRING DIAGRAM

PLC POWER DISTRIBUTION WIRING DIAGRAM

SHEET NOTES:

1) 4710 COMPATIBILITY KIT IS NECESSARY TO USE SD4 FOR A DIRECT 4710 REPLACEMENT.

CONTROL DIAGRAM
Construction of Pump Station
East Main Ave. Well #1
City of Morgan Hill
Morgan Hill, California

DATE: 4-30-2017

LUHDORFF & SCALMANINI CONSULTING ENGINEERS
500 FIRST STREET
WOODLAND, CALIFORNIA
PHONE: (530) 661-0109

REVISIONS

NO.	DATE	REVISION

DATE: MARCH 2017
JOB NO.: 15-6-068
DESIGN BY:
DRAWN BY:
CHECKED BY:
FILE:

SHEET: E-4

JOE PREVENDAR P.E. CA EE 16581 joe@epsfresno.com
GARY OLSEN P.E. CA EE 8283 gary@epsfresno.com

JOB: LS-15-175 | DATE: MAR 2017
FILE: LS175_E4_CD
PLOT: 5/24/2017 2:10 PM / 1:1
DSGN: LKB | DRWN: CRT

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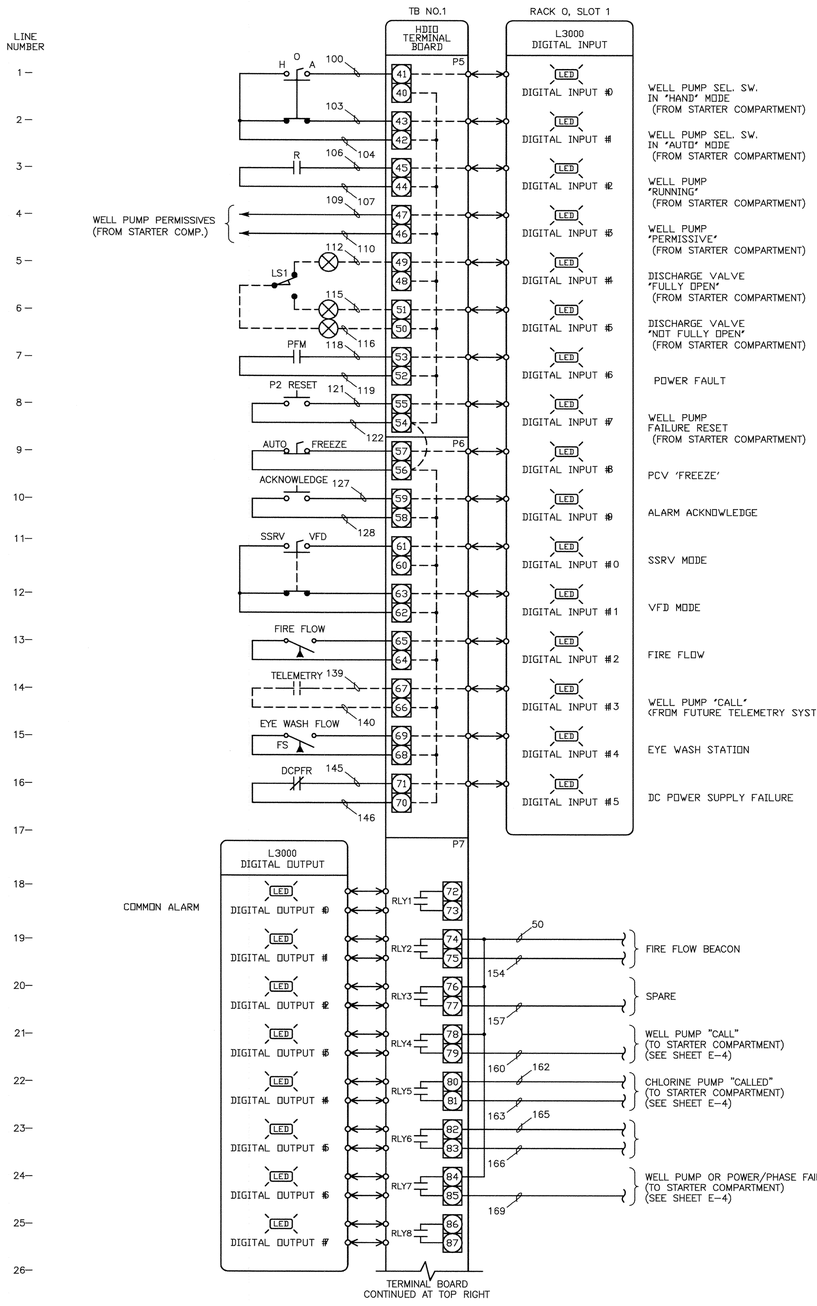
ELECTRICAL POWER SYSTEMS INC.
PROFESSIONAL AND CONSULTING ELECTRICAL ENGINEERING
4049 N FRESNO ST, FRESNO , CA 93726
P: (559) 221-7230 F: (559) 221-0507

CAD FILE: G:/Projects/City of Morgan Hill/15-5-068/Electrical 031517/LS175_E4_CD.dwg CFG FILE: LSCE2500.PCP_MRG DATE: 05-24-17 2:09pm



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JOE PREVENDAR P.E. CA EE 16581 joe@epsfresno.com
GARY OLSEN P.E. CA EE 8283 gary@epsfresno.com

JOB: LS-15-175 DATE: MAR 2017
FILE: LS175_E5_PLC
PLOT: 5/24/2017 2:08 PM / 1:1
DSGN: LKB DRWN: CRT

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REGISTERED PROFESSIONAL ENGINEER JOE PREVENDAR No. 16581 ELECTRICAL STATE OF CALIFORNIA
DATE: 5-10-2017

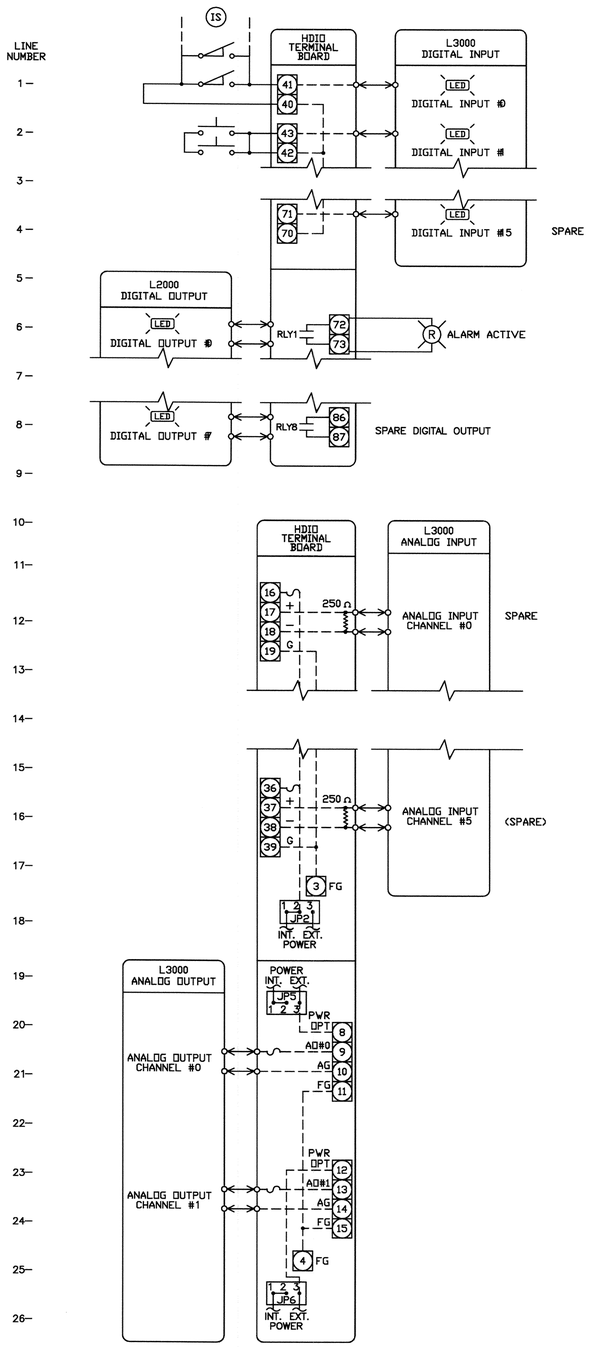
PLC
Construction of Pump Station
East Main Ave. Well #1
City of Morgan Hill
Morgan Hill, California

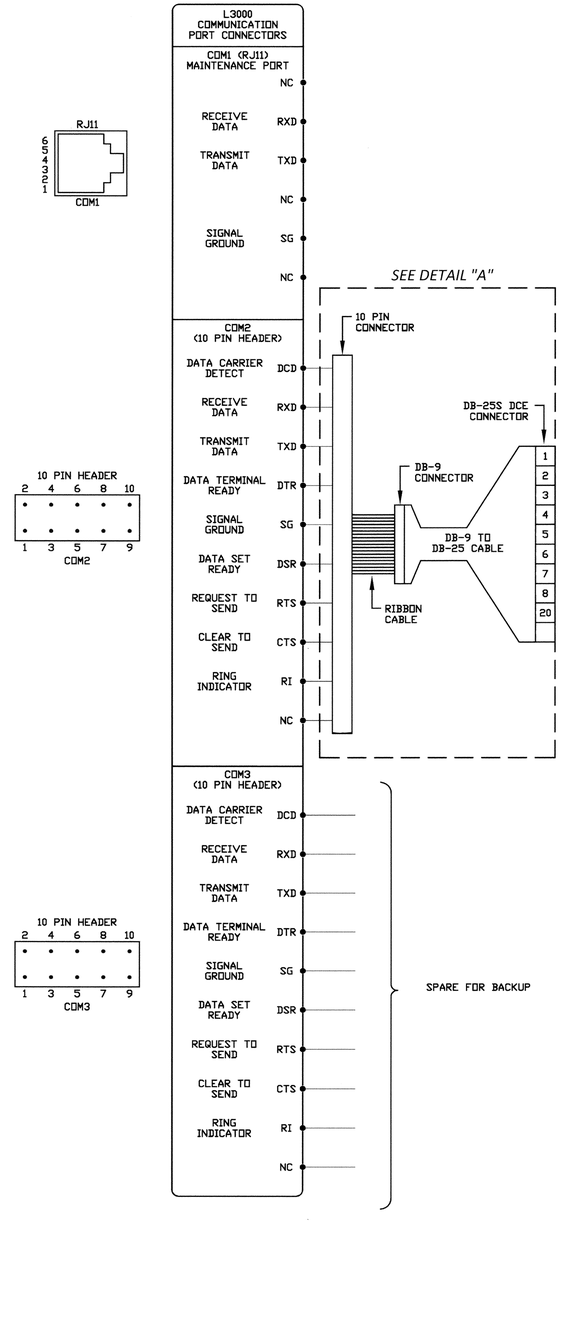
LUHDORFF & SCALMANINI CONSULTING ENGINEERS
500 FIRST STREET
WOODLAND, CALIFORNIA
PHONE: (530) 661-0109

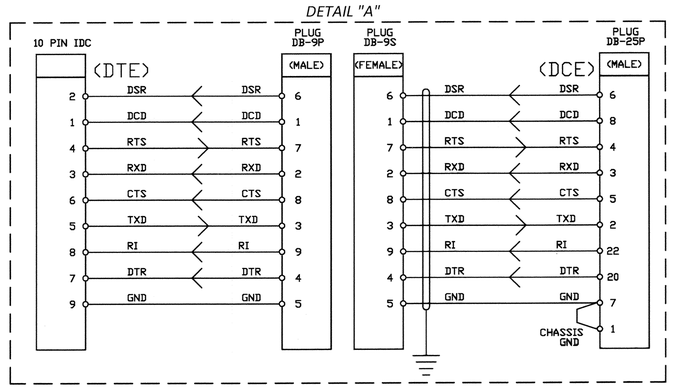
REVISIONS		
NO.	DATE	REVISION

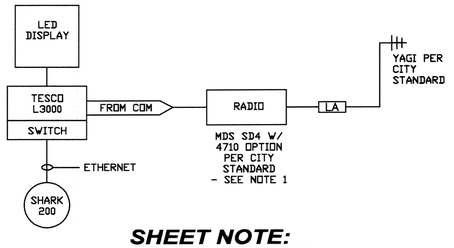
DATE: MARCH 2017
JOB NO.: 15-6-068
DESIGN BY:
DRAWN BY:
CHECKED BY:
FILE:

SHEET:
E-5









SHEET NOTE:

1) ALL SCADA/PLC PROGRAMMING WORK, INTEGRATION WORK PREFORMED BY GENERAL CONTRACTOR. NO THIRD PARTY CITY AGENT IS ASSIGNED TO DO THIS WORK.

JOE PREVENDAR P.E. CA EE 16581 joe@epsfresno.com
GARY OLSEN P.E. CA EE 8283 gary@epsfresno.com

JOB: LS-15-175 | DATE: MAR 2017
FILE: LS175_E6_PLC
PLOT: 5/24/2017 2:07 PM / 1:1
DSGN: LKB | DRWN: CRT

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4049 N FRESNO ST, FRESNO , CA 93726
P: (559) 221-7230 F: (559) 221-0507

REGISTERED PROFESSIONAL ENGINEER — JOSEPH P. PREVENDAR — No. 16581 — ELECTRICAL — STATE OF CALIFORNIA
DATE: 5-30-2017

PLC INPUT/OUTPUT/COMMUNICATION
Construction of Pump Station
East Main Ave. Well #1
City of Morgan Hill
Morgan Hill, California

LUHDORFF & SCALMANINI CONSULTING ENGINEERS
500 FIRST STREET
WOODLAND, CALIFORNIA
PHONE: (530) 661-0109

REVISIONS

NO.	DATE	REVISION

DATE: MARCH 2017
JOB NO.: 15-6-068
DESIGN BY:
DRAWN BY:
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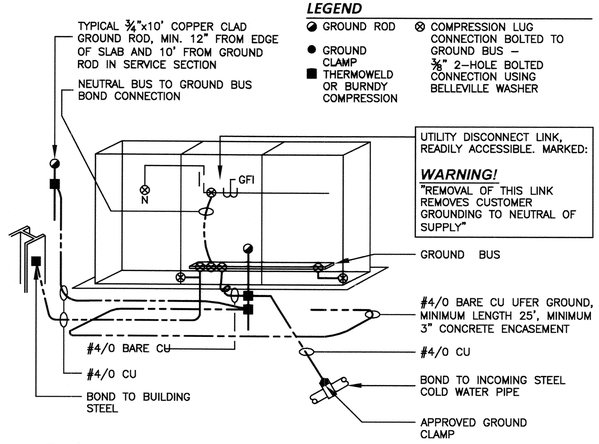
FILE:

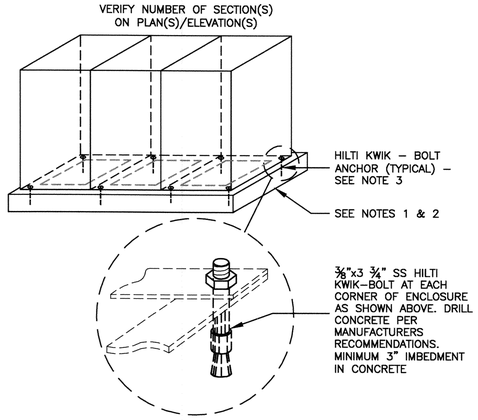
SHEET:
E-6

CAD FILE: G:/Projects/City of Morgan Hill/15-6-068/Electrical 031517/LS175_E6_PLC.dwg CFG FILE: LSCE2500.PCP MRG DATE: 05-24-17 2:06pm



1 SWITCHBOARD GROUNDING

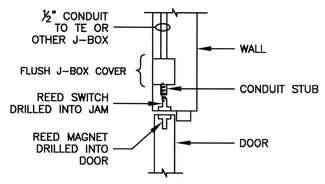
NOTE: SERVICE GROUND SIZE AS SHOWN OR AS PER TABLE 250-94-CEC (CURRENT). ALL GROUND CONDUCTORS TO BE COPPER.



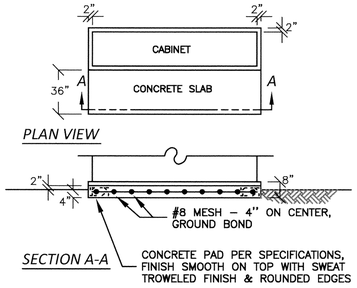
2 SWITCHBOARD SLAB MOUNT

NOTES:

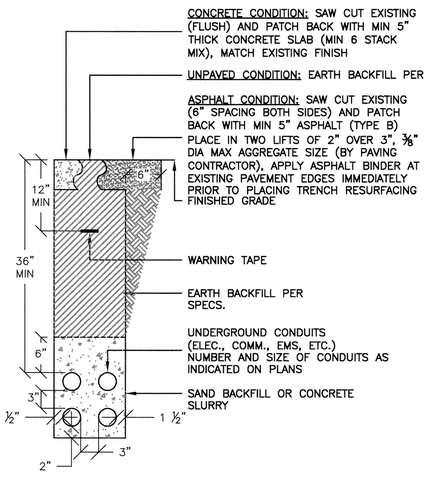
1) FOR INDOORS – 1 ½" HIGH HOUSEKEEPING PAD. 2" WIDE ALONG BACK, BOTH SIDES AND FRONT.
2) FOR OUTDOORS – 3 ½" HIGH HOUSEKEEPING PAD. 2" WIDE ALONG BACK, BOTH SIDES AND AS SHOWN ON PLANS FOR FRONT.
3) 4 ANCHORS FOR 1ST SECTION AND 2 ANCHORS FOR EACH ADDITIONAL SECTION.



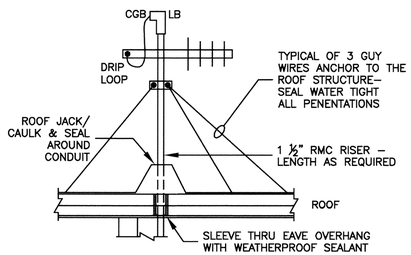
3 SECURITY DOOR SWITCH



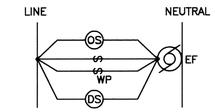
4 CABINET SLAB MOUNT



5 TRENCH SECTION



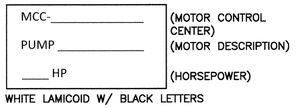
6 ANTENNA ROOF MOUNT



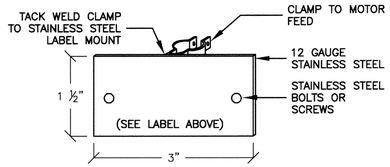
7 EF CONNECTION

(DS) = DOOR SWITCH – 120V RATED HEAVY DUTY LIMIT SWITCH

(OS) = WATTSTOPPER OCCUPANCY SENSOR

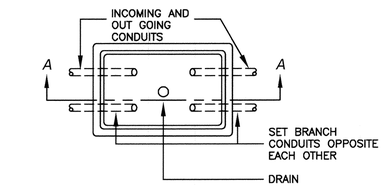


AT STARTER

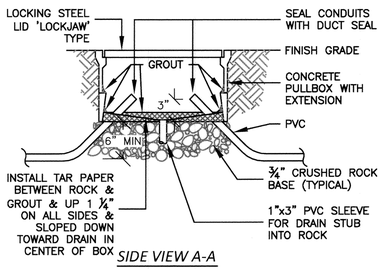


AT MOTOR

8 MOTOR LABELING



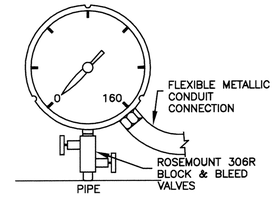
PLAN VIEW



SIDE VIEW A-A

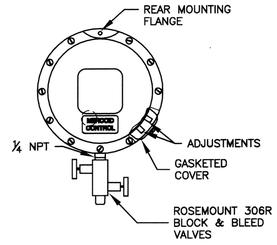
CHRISTY N9 (#3 1/2), N30 (#5), N36 (#6) OR LARGER PULLBOXES SIMILAR

9 PULLBOX WITH EXTENSION

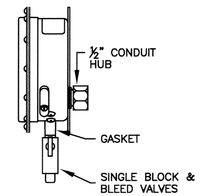


10 ASHCROFT DURATRAN PRESSURE TRANSMITTER

0–160 PSI



FRONT VIEW



SIDE VIEW

11 MERCOID DAW SNAP ACTION HPS DETAIL

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JOB: LS-15-175 DATE: MAR 2017
FILE: LS175_E7_DT
PLOT: 5/24/2017 2:05 PM / 1:1
DSGN: LKB DRWN: CRT

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REGISTERED PROFESSIONAL ENGINEER — JOE PREVENDAR — No. 16581 — ELECTRICAL — STATE OF CALIFORNIA
DATE: 5-30-2017

ELECTRICAL DETAILS
Construction of Pump Station
East Main Ave. Well #1
City of Morgan Hill
Morgan Hill, California

LUHDORFF & SCALMANINI CONSULTING ENGINEERS
500 FIRST STREET
WOODLAND, CALIFORNIA
PHONE: (530) 661-0109

REVISIONS		
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DATE: MARCH 2017
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DESIGN BY:
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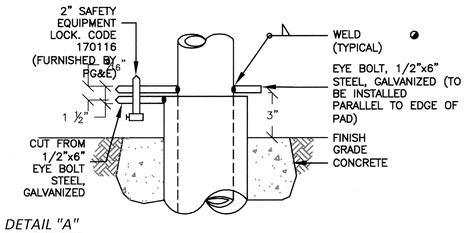
FILE:

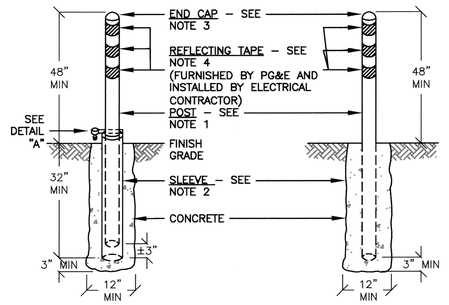
SHEET: E-7

CAD FILE: G:/Projects/City of Morgan Hill/15-5-068/Electrical 031517/LS175_E7_DT.dwg CFG FILE: LSCE2500.PCP_MRG DATE: 05-24-17 2:05pm



DETAIL "A"

● WELDS SHALL BE PAINTED OVER WITH A ZINC PRIMER

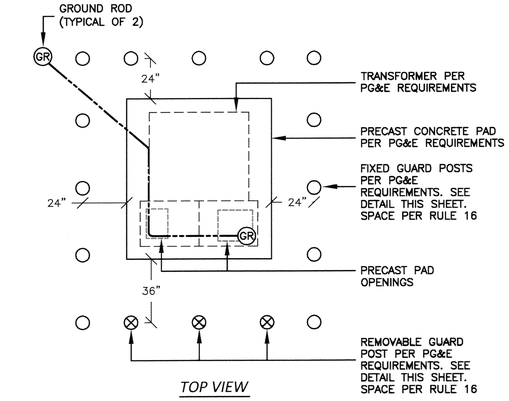


REMOVABLE POST *FIXED POST*

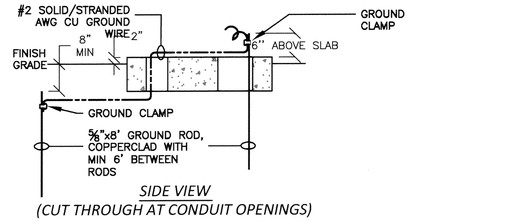
1 PG&E GUARD POST

NOTES:

1) POST, 4"x60" GALVANIZED STEEL PIPE, STANDARD, SCHEDULE 40. FILL FIXED POST W/ CONCRETE TO TOP.
2) SLEEVE, 5"x36" GALVANIZED STEEL PIPE SLEEVE, STANDARD, SCHEDULE 40
3) CAP, 4" GALVANIZED MALLEABLE IRON CAP. MAY BE SCREWED.
4) TAPE, VISIBILITY REFLECTIVE YELLOW ADHESIVE STRIPS (2"x12")



TOP VIEW



SIDE VIEW
(CUT THROUGH AT CONDUIT OPENINGS)

2 PG&E PRECAST TRANSFORMER PAD INSTALLATION

NOTES:

1) TRANSFORMER PAD SIZE & QUANTITY OF GUARD POSTS PER PG&E RULE 16.
2) ALL PG&E RULE 16 APPLY.
3) CONTRACTOR IS RESPONSIBLE FOR SETTING THE TRANSFORMER PAD.

◯ = FIXED
⊗ = REMOVABLE

REGISTERED PROFESSIONAL ENGINEER JOSEPH P. PREVENDAR No. 16581 ELECTRICAL STATE OF CALIFORNIA
DATE: 5-30-2017

ELECTRICAL DETAILS
Construction of Pump Station
East Main Ave. Well #1
City of Morgan Hill
Morgan Hill, California

LUHDORFF & SCALMANINI CONSULTING ENGINEERS
500 FIRST STREET
WOODLAND, CALIFORNIA
PHONE: (530) 661-0109

REVISIONS

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FILE:

SHEET:
E-8

JOE PREVENDAR P.E. CA EE 16581 joe@epsfresno.com
GARY OLSEN P.E. CA EE 8283 gary@epsfresno.com

JOB: LS-15-175 | DATE: MAR 2017
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