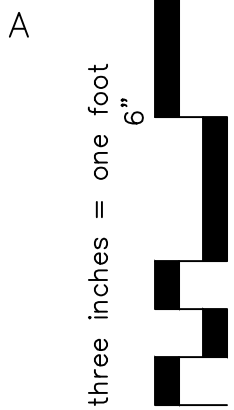
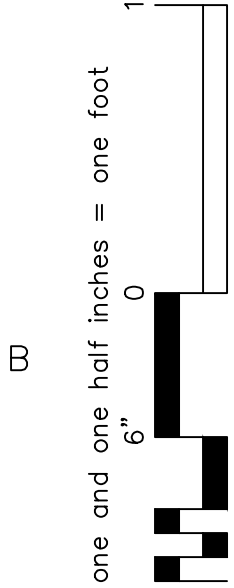


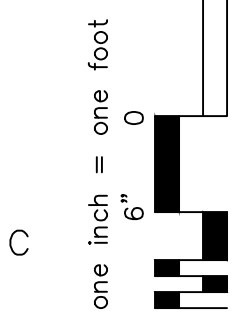
A



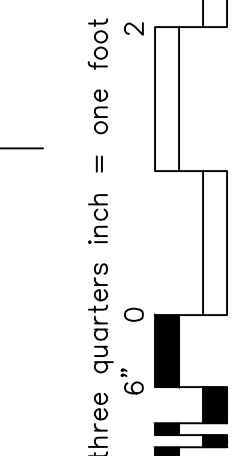
B



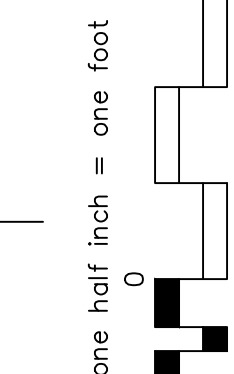
C



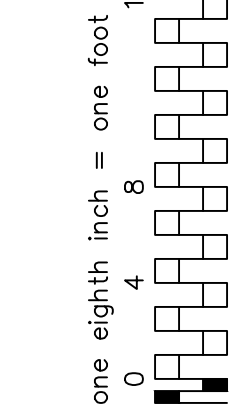
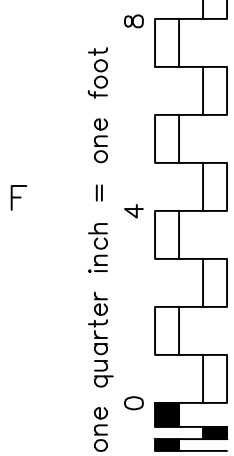
D



E

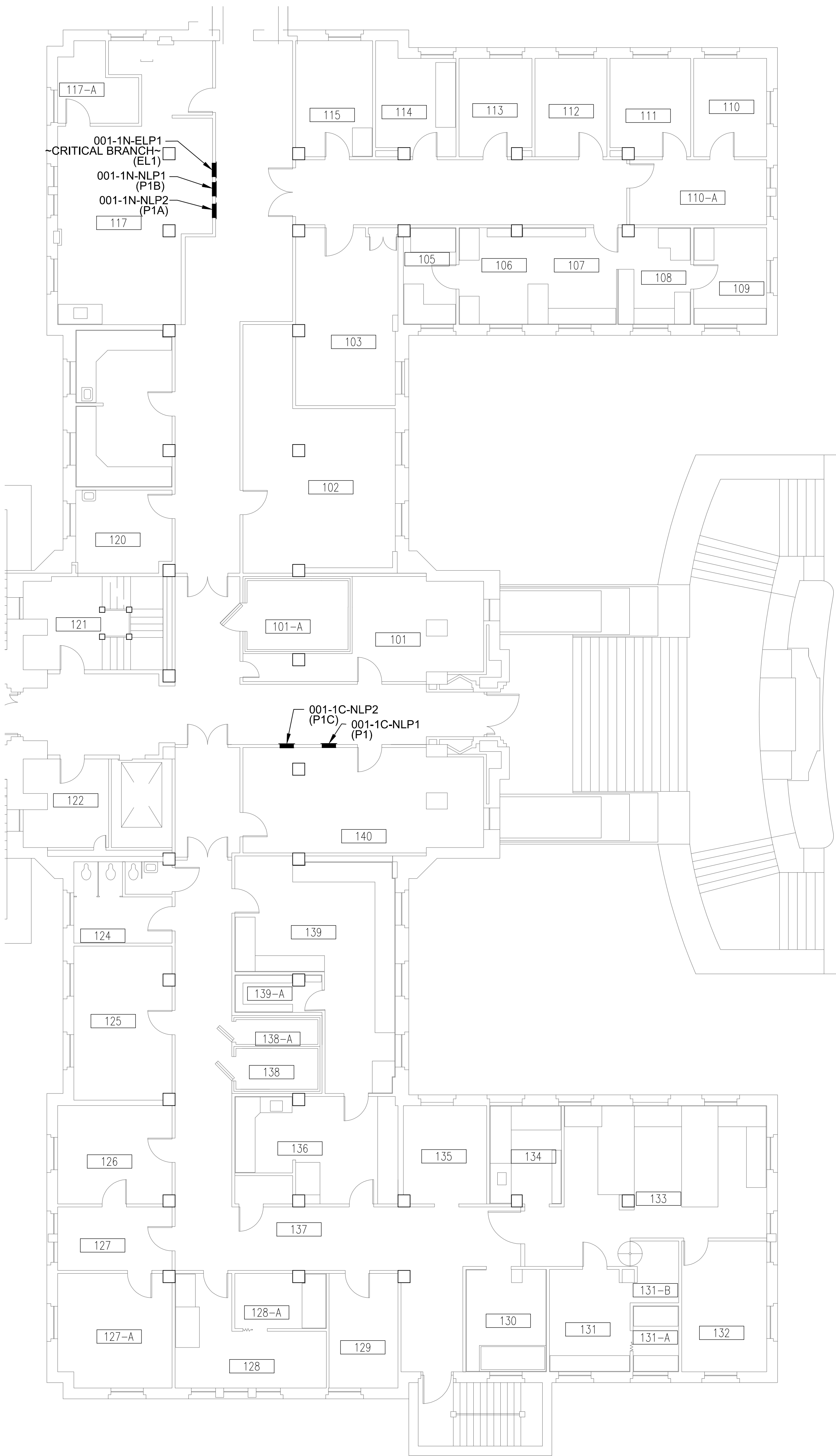


F



FIRST FLOOR
ELECTRICAL PANEL LAYOUT PLAN

SCALE: 1/8"=1'-0"



SHEET GENERAL NOTES

- FEDERAL OSHA SAFETY PROCEDURES, VA MEDICAL CENTER SAFETY PROCEDURES AND CORPS OF ENGINEERS SAFETY MANUAL EM-385-1-1 SHALL BE FOLLOWED WHILE WORKING IN AND AROUND ALL 15-kV, 5-kV AND 600 VOLT SYSTEMS.
- COORDINATE REMOVAL AND REPLACEMENT OF THE 15-kV SWITCHGEAR, 5-kV SUBSTATIONS AND 600-VOLT ELECTRICAL EQUIPMENT WITH THE U.S. ARMY CORPS OF ENGINEERS CONSTRUCTION MANAGER, CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE (COTR) AND VETERANS AFFAIRS MEDICAL CENTER (VAMC) ELECTRICAL MAINTENANCE SHOP SUPERVISOR.
- REFER TO SPECIFICATION **SECTION 01011, SUMMARY OF WORK FOR SUGGESTED SEQUENCE OF CONSTRUCTION**.
- ADDITIONAL DEMOLITION AND INSTALLATION INFORMATION FOR OTHER EQUIPMENT INCLUDING SWITCHGEAR, SWITCHBOARDS, PANELBOARDS, CABLES, CONDUITS, LIGHT FIXTURES, ETC. IS SHOWN ON OTHER DRAWINGS INCLUDED IN THIS SET.
- APPLY ADHESIVE "ARC FLASH AND SHOCK HAZARD" WARNING LABELS PER NFPA 70E TO ALL ELECTRICAL ITEMS SUCH AS PANEL BOARDS, MOTOR CONTROLLERS (STARTERS), SAFETY SWITCHES, SEPARATELY ENCLOSED CIRCUIT BREAKERS, INDIVIDUAL CIRCUIT BREAKERS AND CONTROLLERS IN SWITCHBOARDS, SWITCHGEAR AND MOTOR CONTROL ASSEMBLIES, SUBSTATION EQUIPMENT, CONTROL DEVICES AND OTHER SIGNIFICANT EQUIPMENT. ARC FLASH IDENTIFICATION INFORMATION AND LABELS WILL BE PROVIDED BY COTR.
- APPLY ADHESIVE MARKER TAPE TO THE FLOOR TO IDENTIFY CODE REQUIRED MINIMUM ACCESS AND WORKING SPACE IN FRONT OF ALL ELECTRICAL EQUIPMENT.
- BOLD LINETYPE INDICATES NEW WORK.
- CABLE LENGTHS SHOWN ARE ESTIMATES, TYP. FIELD VERIFY DISTANCES BEFORE INSTALLATION. DO NOT SPLICE NEW CABLE PULLS.

FOR REFERENCE ONLY
NOT IN CONTRACT

CONSULTANTS:

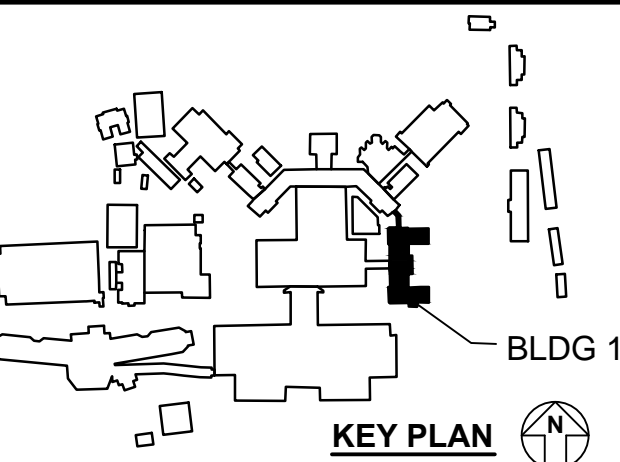


GHD Inc.
2235 Mercury Way, Suite 150
Santa Rosa, California 95407 USA
T 1 707 523 1010 F 1 707 527 8679
W www.ghd.com

GENERAL CONTRACTOR:



HELIX ELECTRIC
CONSTRUCTORS • ENGINEERS



ARCHITECT:

Drawing Title
**FIRST FLOOR ELECTRICAL PANEL
LAYOUT PLAN**

Approved: Project Director
Medical Center Director:
LAWRENCE H. CARROLL
Chief Engineer:
JAMES PRIDLIDES

Project Title
**ELECTRICAL
SYSTEM UPGRADES
PROJECT 662-07-028ES**

Location
SFVA MEDICAL CENTER
Date
JANUARY 3, 2010
Checked
SMD
Drawn
CSC

Project Number
11054-07-001
Building Number
1

Drawing Number
E-B001-102
Dwg. 46 of 227

Office of
Facilities
Management



A

three inches = one foot
6"

B

one and one half inches = one foot
1 1/2"

C

one inch = one foot
1"

three quarters inch = one foot
3/4"

D

one half inch = one foot
1/2"

E

three eighths inch = one foot
3/8"

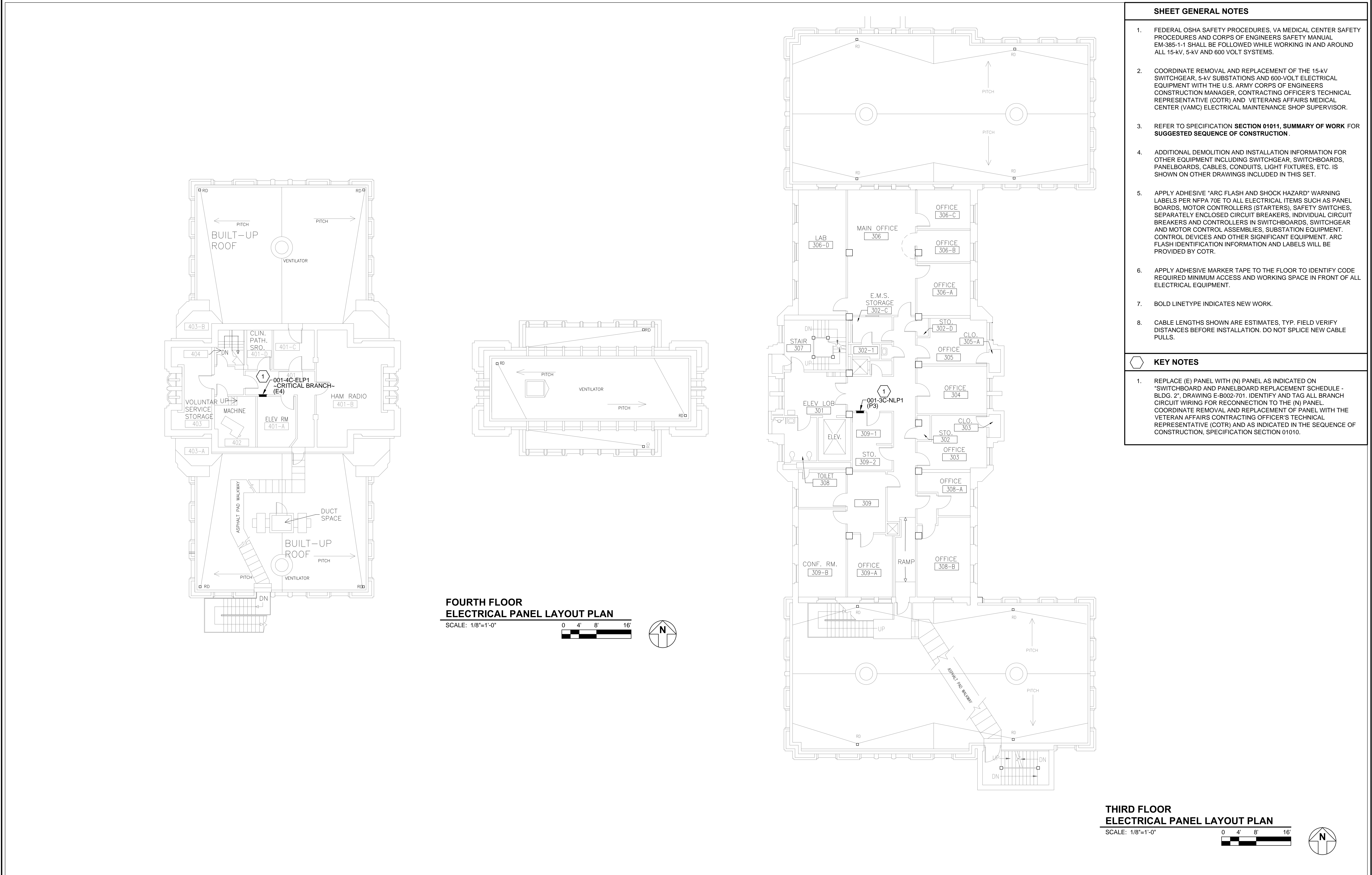
F

one quarter inch = one foot
1/4"

one eighth inch = one foot
1/8"

one eighth inch = one foot
1/8"

one eighth inch = one foot
1/8"



SHEET GENERAL NOTES

- FEDERAL OSHA SAFETY PROCEDURES, VA MEDICAL CENTER SAFETY PROCEDURES AND CORPS OF ENGINEERS SAFETY MANUAL EM-385-1-1 SHALL BE FOLLOWED WHILE WORKING IN AND AROUND ALL 15-kV, 5-kV AND 600 VOLT SYSTEMS.
- COORDINATE REMOVAL AND REPLACEMENT OF THE 15-kV SWITCHGEAR, 5-kV SUBSTATIONS AND 600-VOLT ELECTRICAL EQUIPMENT WITH THE U.S. ARMY CORPS OF ENGINEERS CONSTRUCTION MANAGER, CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE (COTR) AND VETERANS AFFAIRS MEDICAL CENTER (VAMC) ELECTRICAL MAINTENANCE SHOP SUPERVISOR.
- REFER TO SPECIFICATION SECTION 01011, SUMMARY OF WORK FOR SUGGESTED SEQUENCE OF CONSTRUCTION .
- ADDITIONAL DEMOLITION AND INSTALLATION INFORMATION FOR OTHER EQUIPMENT INCLUDING SWITCHGEAR, SWITCHBOARDS, PANELBOARDS, CABLES, CONDUITS, LIGHT FIXTURES, ETC. IS SHOWN ON OTHER DRAWINGS INCLUDED IN THIS SET.
- APPLY ADHESIVE "ARC FLASH AND SHOCK HAZARD" WARNING LABELS PER NFPA 70E TO ALL ELECTRICAL ITEMS SUCH AS PANEL BOARDS, MOTOR CONTROLLERS (STARTERS), SAFETY SWITCHES, SEPARATELY ENCLOSED CIRCUIT BREAKERS, INDIVIDUAL CIRCUIT BREAKERS AND CONTROLLERS IN SWITCHBOARDS, SWITCHGEAR AND MOTOR CONTROL ASSEMBLIES, SUBSTATION EQUIPMENT, CONTROL DEVICES AND OTHER SIGNIFICANT EQUIPMENT. ARC FLASH IDENTIFICATION INFORMATION AND LABELS WILL BE PROVIDED BY COTR.
- APPLY ADHESIVE MARKER TAPE TO THE FLOOR TO IDENTIFY CODE REQUIRED MINIMUM ACCESS AND WORKING SPACE IN FRONT OF ALL ELECTRICAL EQUIPMENT.
- BOLD LINETYPE INDICATES NEW WORK.
- CABLE LENGTHS SHOWN ARE ESTIMATES, TYP. FIELD VERIFY DISTANCES BEFORE INSTALLATION. DO NOT SPLICE NEW CABLE PULLS.

KEY NOTES

- REPLACE (E) PANEL WITH (N) PANEL AS INDICATED ON "SWITCHBOARD AND PANELBOARD REPLACEMENT SCHEDULE - BLDG. 21" DRAWING E-8002-701. IDENTIFY AND TAG ALL BRANCH CIRCUIT WIRING FOR RECONNECTION TO THE (N) PANEL. COORDINATE REMOVAL AND REPLACEMENT OF PANEL WITH THE VETERAN AFFAIRS CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE (COTR) AND AS INDICATED IN THE SEQUENCE OF CONSTRUCTION, SPECIFICATION SECTION 01010.

CONSULTANTS:



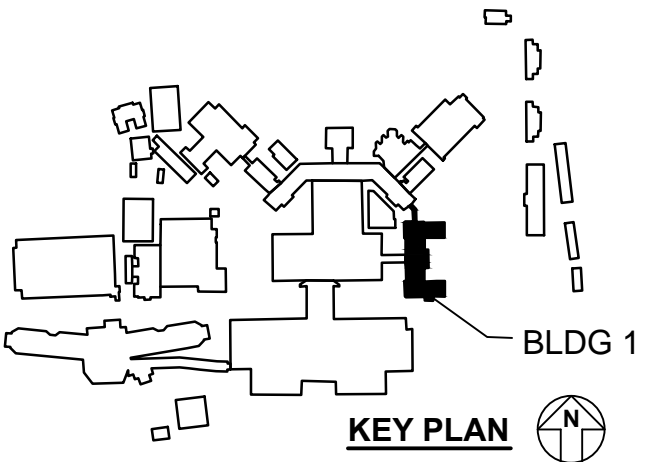
GHD Inc.
2235 Mercury Way, Suite 150
Santa Rosa, California 95407 USA
T 1 707 523 1010 F 1 707 527 8679
W www.ghd.com

GENERAL CONTRACTOR:



HELIX ELECTRIC
CONSTRUCTORS • ENGINEERS

ARCHITECT:



Drawing Title
THIRD AND FOURTH FLOOR
ELECTRICAL PANEL LAYOUT PLAN

Approved: Project Director
Medical Center Director:
LAWRENCE H. CARROLL
Chief Engineer:
JAMES PRIDLIDES

Project Title
ELECTRICAL
SYSTEM UPGRADES
PROJECT 662-07-028ES

Location
SFVA MEDICAL CENTER
Date
JANUARY 3, 2010
Checked
SMD
Drawn
CSC

Project Number
11054-07-001
Building Number
1

Drawing Number
E-B001-104
Dwg. 48 of 227

Office of
Facilities
Management



A

three inches = one foot
6"

B

one and one half inches = one foot
18"

C

one inch = one foot
12"

D

three quarters inch = one foot
9"

E

one half inch = one foot
6"

F

three eighths inch = one foot
4 1/2"

G

one quarter inch = one foot
3"

H

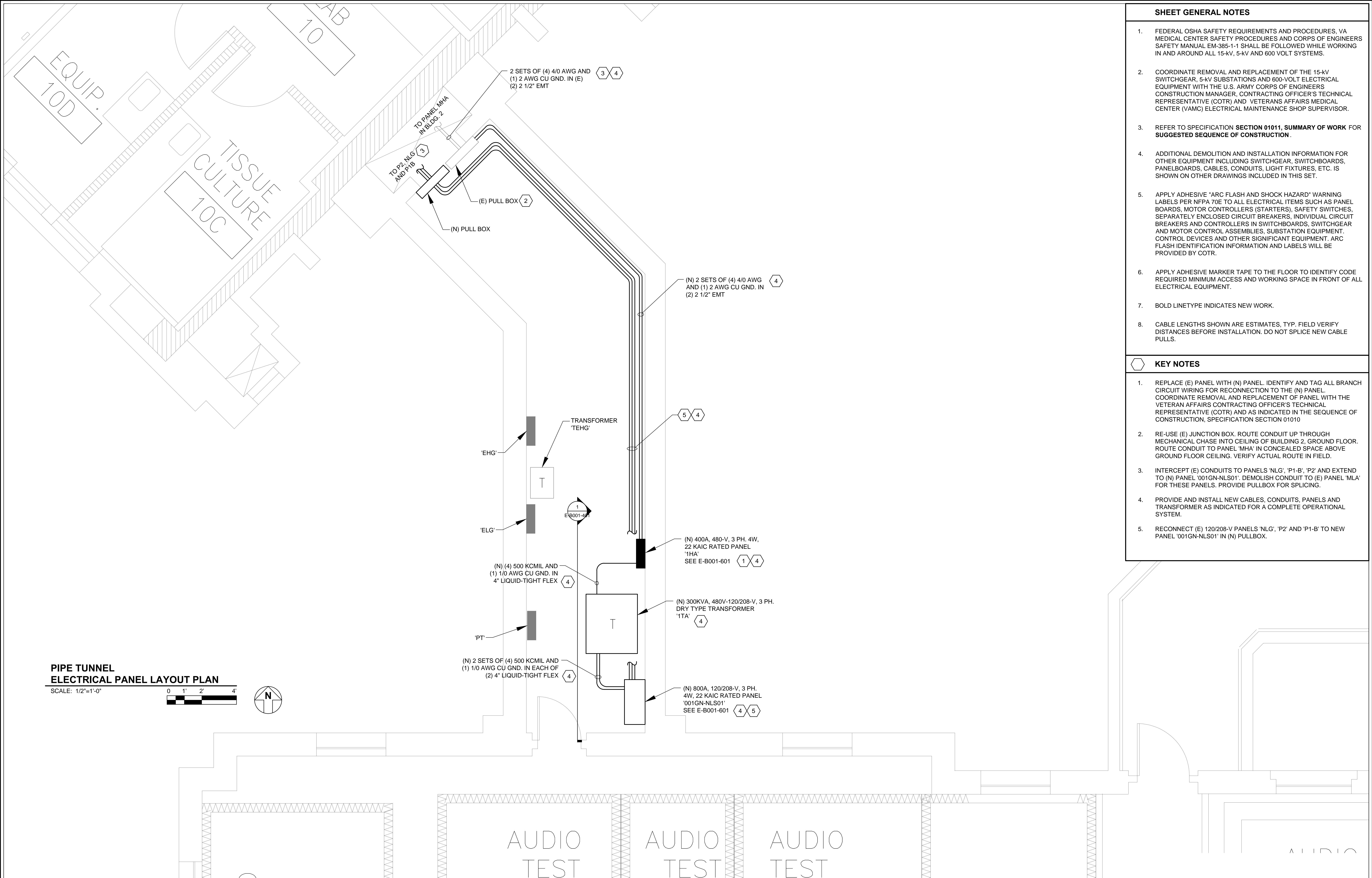
one eighth inch = one foot
1 1/2"

I

one quarter inch = one foot
3"

J

one eighth inch = one foot
1 1/2"



SHEET GENERAL NOTES

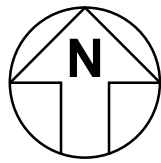
- FEDERAL OSHA SAFETY REQUIREMENTS AND PROCEDURES, VA MEDICAL CENTER SAFETY PROCEDURES AND CORPS OF ENGINEERS SAFETY MANUAL EM-385-1-1 SHALL BE FOLLOWED WHILE WORKING IN AND AROUND ALL 15-kV, 5-kV AND 600 VOLT SYSTEMS.
- COORDINATE REMOVAL AND REPLACEMENT OF THE 15-kV SWITCHGEAR, 5-kV SUBSTATIONS AND 600-VOLT ELECTRICAL EQUIPMENT WITH THE U.S. ARMY CORPS OF ENGINEERS CONSTRUCTION MANAGER, CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE (COTR) AND VETERANS AFFAIRS MEDICAL CENTER (VAMC) ELECTRICAL MAINTENANCE SHOP SUPERVISOR.
- REFER TO SPECIFICATION **SECTION 01011, SUMMARY OF WORK FOR SUGGESTED SEQUENCE OF CONSTRUCTION**.
- ADDITIONAL DEMOLITION AND INSTALLATION INFORMATION FOR OTHER EQUIPMENT INCLUDING SWITCHGEAR, SWITCHBOARDS, PANELBOARDS, CABLES, CONDUITS, LIGHT FIXTURES, ETC. IS SHOWN ON OTHER DRAWINGS INCLUDED IN THIS SET.
- APPLY ADHESIVE "ARC FLASH AND SHOCK HAZARD" WARNING LABELS PER NFPA 70E TO ALL ELECTRICAL ITEMS SUCH AS PANEL BOARDS, MOTOR CONTROLLERS (STARTERS), SAFETY SWITCHES, SEPARATELY ENCLOSED CIRCUIT BREAKERS, INDIVIDUAL CIRCUIT BREAKERS AND CONTROLLERS IN SWITCHBOARDS, SWITCHGEAR AND MOTOR CONTROL ASSEMBLIES, SUBSTATION EQUIPMENT, CONTROL DEVICES AND OTHER SIGNIFICANT EQUIPMENT. ARC FLASH IDENTIFICATION INFORMATION AND LABELS WILL BE PROVIDED BY COTR.
- APPLY ADHESIVE MARKER TAPE TO THE FLOOR TO IDENTIFY CODE REQUIRED MINIMUM ACCESS AND WORKING SPACE IN FRONT OF ALL ELECTRICAL EQUIPMENT.
- BOLD LINETYPE INDICATES NEW WORK.
- CABLE LENGTHS SHOWN ARE ESTIMATES, TYP. FIELD VERIFY DISTANCES BEFORE INSTALLATION. DO NOT SPLICE NEW CABLE PULLS.

KEY NOTES

- REPLACE (E) PANEL WITH (N) PANEL. IDENTIFY AND TAG ALL BRANCH CIRCUIT WIRING FOR RECONNECTION TO THE (N) PANEL. COORDINATE REMOVAL AND REPLACEMENT OF PANEL WITH THE VETERAN AFFAIRS CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE (COTR) AND AS INDICATED IN THE SEQUENCE OF CONSTRUCTION, SPECIFICATION SECTION 01010
- RE-USE (E) JUNCTION BOX. ROUTE CONDUIT UP THROUGH MECHANICAL CHASE INTO CEILING OF BUILDING 2, GROUND FLOOR. ROUTE CONDUIT TO PANEL 'MHA' IN CONCEALED SPACE ABOVE GROUND FLOOR CEILING. VERIFY ACTUAL ROUTE IN FIELD.
- INTERCEPT (E) CONDUITS TO PANELS 'NLG', 'P1-B', 'P2' AND EXTEND TO (N) PANEL '001GN-NLS01'. DEMOLISH CONDUIT TO (E) PANEL 'MLA' FOR THESE PANELS. PROVIDE PULLBOX FOR SPLICING.
- PROVIDE AND INSTALL NEW CABLES, CONDUITS, PANELS AND TRANSFORMER AS INDICATED FOR A COMPLETE OPERATIONAL SYSTEM.
- RECONNECT (E) 120/208-V PANELS 'NLG', 'P2' AND 'P1-B' TO NEW PANEL '001GN-NLS01' IN (N) PULLBOX.

PIPE TUNNEL
ELECTRICAL PANEL LAYOUT PLAN

SCALE: 1/2"=1'-0"



CONSULTANTS:



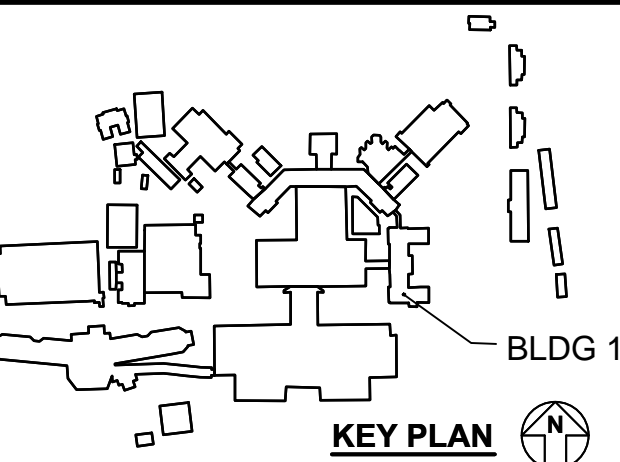
GHD Inc.
2235 Mercury Way, Suite 150
Santa Rosa, California 95407 USA
T 1 707 523 1010 F 1 707 527 8679
W www.ghd.com

GENERAL CONTRACTOR:



HELIX ELECTRIC
CONSTRUCTORS • ENGINEERS

ARCHITECT:



Drawing Title

**PIPE TUNNEL ELECTRICAL PANEL
LAYOUT PLAN**

Approved: Project Director

Medical Center Director:
LAWRENCE H. CARROLL
Chief Engineer:
JAMES PRIDLIDES

Project Title

**ELECTRICAL
SYSTEM UPGRADES
PROJECT 662-07-028ES**

Location

SFVA MEDICAL CENTER

Date

JANUARY 3, 2010

Checked

SMD

Drawn

NWW

Project Number

11054-07-001

Building Number

1

Drawing Number

E-B001-201

Dwg 49A of 227

**Office of
Facilities
Management**



A

WD

C

D

E

F

16

three inches = one foot

one and one half inches = one foot

one inch = one foot

three quarters inch = one foot

one half inch = one foot

three eighths inch = one foot

one quarter inch = one foot

one eighth inch = one foot

A

B

C

D

E

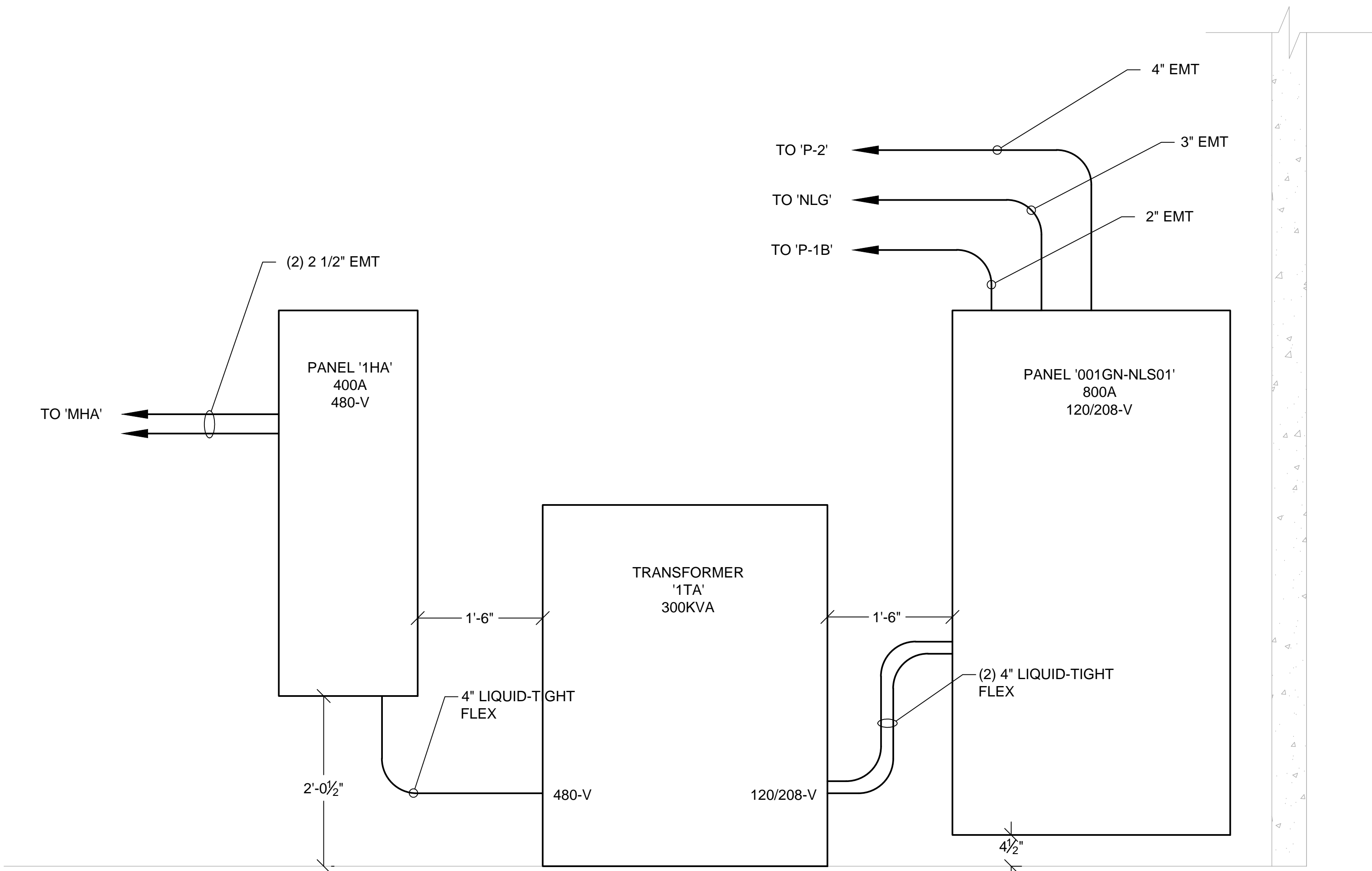
F

Office of
Facilities
Management

Department of
Veterans Affairs

SHEET GENERAL NOTES

- FEDERAL OSHA SAFETY REQUIREMENTS AND PROCEDURES, VA MEDICAL CENTER SAFETY PROCEDURES AND CORPS OF ENGINEERS SAFETY MANUAL EM-385-1-1 SHALL BE FOLLOWED WHILE WORKING IN AND AROUND ALL 15-kV, 5-kV AND 600 VOLT SYSTEMS.
- COORDINATE REMOVAL AND REPLACEMENT OF THE 15-kV SWITCHGEAR, 5-kV SUBSTATIONS AND 600-VOLT ELECTRICAL EQUIPMENT WITH THE U.S. ARMY CORPS OF ENGINEERS CONSTRUCTION MANAGER, CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE (COTR) AND VETERANS AFFAIRS MEDICAL CENTER (VAMC) ELECTRICAL MAINTENANCE SHOP SUPERVISOR.
- REFER TO SPECIFICATION **SECTION 01011, SUMMARY OF WORK FOR SUGGESTED SEQUENCE OF CONSTRUCTION**.
- ADDITIONAL DEMOLITION AND INSTALLATION INFORMATION FOR OTHER EQUIPMENT INCLUDING SWITCHGEAR, SWITCHBOARDS, PANELBOARDS, CABLES, CONDUITS, LIGHT FIXTURES, ETC. IS SHOWN ON OTHER DRAWINGS INCLUDED IN THIS SET.
- APPLY ADHESIVE "ARC FLASH AND SHOCK HAZARD" WARNING LABELS PER NFPA 70E TO ALL ELECTRICAL ITEMS SUCH AS PANEL BOARDS, MOTOR CONTROLLERS (STARTERS), SAFETY SWITCHES, SEPARATELY ENCLOSED CIRCUIT BREAKERS, INDIVIDUAL CIRCUIT BREAKERS AND CONTROLLERS IN SWITCHBOARDS, SWITCHGEAR AND MOTOR CONTROL ASSEMBLIES, SUBSTATION EQUIPMENT, CONTROL DEVICES AND OTHER SIGNIFICANT EQUIPMENT. ARC FLASH IDENTIFICATION INFORMATION AND LABELS WILL BE PROVIDED BY COTR.
- APPLY ADHESIVE MARKER TAPE TO THE FLOOR TO IDENTIFY CODE REQUIRED MINIMUM ACCESS AND WORKING SPACE IN FRONT OF ALL ELECTRICAL EQUIPMENT.
- BOLD LINETYPE INDICATES NEW WORK.
- CABLE LENGTHS SHOWN ARE ESTIMATES, TYP. FIELD VERIFY DISTANCES BEFORE INSTALLATION. DO NOT SPLICE NEW CABLE PULLS.



PIPE TUNNEL
ELECTRICAL PANEL WALL ELEVATION
E-B001-201 E-B001-401 SCALE: 1"=1'-0"

AS-BUILT RECORD DRAWINGS	10-23-14
Revisions:	Date

CONSULTANTS:

GHD

GHD Inc.
2235 Mercury Way, Suite 150
Santa Rosa, California 95407 USA
T 1 707 523 1010 F 1 707 527 8679
W www.ghd.com

GENERAL CONTRACTOR:

HIE **HELIX ELECTRIC**
CONSTRUCTORS • ENGINEERS

KEY PLAN

BLDG 1

ARCHITECT:

Drawing Title
PIPE TUNNEL ELECTRICAL PANEL LAYOUT PLAN

Approved: Project Director
Medical Center Director:
LAWRENCE H. CARROLL
Chief Engineer:
JAMES PRIDLIDES

Project Title
ELECTRICAL SYSTEM UPGRADES PROJECT 662-07-028ES

Location
SFVA MEDICAL CENTER

Date
JANUARY 3, 2010

Checked
SMD

Drawn
NWW

Project Number
11054-07-001

Building Number
1

Drawing Number
E-B001-401

Dwg 496 of 227

SHEET GENERAL NOTES

1. FEDERAL OSHA SAFETY PROCEDURES, VA MEDICAL CENTER SAFETY PROCEDURES AND CORPS OF ENGINEERS SAFETY MANUAL EM-385-1-1 SHALL BE FOLLOWED WHILE WORKING IN AND AROUND ALL 15-kV, 5-kV AND 600 VOLT SYSTEMS.

2. COORDINATE REMOVAL AND REPLACEMENT OF THE 15-kV SWITCHGEAR, 5-kV SUBSTATIONS AND 600-VOLT ELECTRICAL EQUIPMENT WITH THE U.S. ARMY CORPS OF ENGINEERS CONSTRUCTION MANAGER, CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE (COTR) AND VETERANS AFFAIRS MEDICAL CENTER (VAMC) ELECTRICAL MAINTENANCE SHOP SUPERVISOR.

3. REFER TO SPECIFICATION SECTION 01011, SUMMARY OF WORK FOR SUGGESTED SEQUENCE OF CONSTRUCTION .
4. ADDITIONAL DEMOLITION AND INSTALLATION INFORMATION FOR OTHER EQUIPMENT INCLUDING SWITCHGEAR, SWITCHBOARDS, PANELBOARDS, CABLES, CONDUITS, LIGHT FIXTURES, ETC. IS SHOWN ON OTHER DRAWINGS INCLUDED IN THIS SET.

5. APPLY ADHESIVE "ARC FLASH AND SHOCK HAZARD" WARNING LABELS PER NFPA 70E TO ALL ELECTRICAL ITEMS SUCH AS PANEL BOARDS, MOTOR CONTROLLERS (STARTERS), SAFETY SWITCHES, SEPARATELY ENCLOSED CIRCUIT BREAKERS, INDIVIDUAL CIRCUIT BREAKERS AND CONTROLLERS IN SWITCHBOARDS, SWITCHGEAR AND MOTOR CONTROL ASSEMBLIES, SUBSTATION EQUIPMENT, CONTROL DEVICES AND OTHER SIGNIFICANT EQUIPMENT. ARC FLASH IDENTIFICATION INFORMATION AND LABELS WILL BE PROVIDED BY COTR.
6. APPLY ADHESIVE MARKER TAPE TO THE FLOOR TO IDENTIFY CODE REQUIRED MINIMUM ACCESS AND WORKING SPACE IN FRONT OF ALL ELECTRICAL EQUIPMENT.

7. BOLD LINETYPE INDICATES NEW WORK.

8. CABLE LENGTHS SHOWN ARE ESTIMATES, TYP. FIELD VERIFY DISTANCES BEFORE INSTALLATION. DO NOT SPLICE NEW CABLE PULLS.

KEY NOTES

1. PROVIDE (N) EQUIPMENT IN (N) OR (E) ENCLOSURE AS INDICATED ON SWITCHBOARD AND PANELBOARD REPLACEMENT SCHEDULE ON SHEET E-B002-701.
2. PROVIDE (N) CABLE IN (N) OR (E) CONDUIT AS INDICATED.
3. (NOT USED).
4. PROVIDE (N) CIRCUIT BREAKER IN (E) PANELBOARD.

TABLE - CONDUIT AND CABLE SCHEDULE

NO.	CB SIZE	EMT CONDUIT SIZE ¹	RMC CONDUIT SIZE ¹	PVC SCH. 80 CONDUIT SIZE ¹	PVC SCH. 40 CONDUIT SIZE ¹	CABLE AMPACITY ²	CABLE SIZE CU CONDUCTORS) ² (600-V,		
							PER PHASE	NEUTRAL	GROUND ³
1	15 AMP	0.75-INCH	0.75-INCH	0.75-INCH	0.75-INCH	20 AMP	14 AWG	14 AWG	14 AWG
2	20 AMP	0.75-INCH	0.75-INCH	0.75-INCH	0.75-INCH	25 AMP	12 AWG	12 AWG	12 AWG
3	30 AMP	0.75-INCH	0.75-INCH	0.75-INCH	0.75-INCH	30 AMP	10 AWG	10 AWG	10 AWG
4	50 AMP	0.75-INCH	0.75-INCH	0.75-INCH	0.75-INCH	55 AMP	6 AWG	6 AWG	10 AWG
5	70 AMP	1.0-INCH	1.0-INCH	1.25-INCH	1.0-INCH	70 AMP	4 AWG	4 AWG	8 AWG
6	90 AMP	1.25-INCH	1.25-INCH	1.25-INCH	1.25-INCH	95 AMP	2 AWG	2 AWG	8 AWG
7	100 AMP	1.25-INCH	1.25-INCH	1.25-INCH	1.25-INCH	130 AMP	1 AWG	1 AWG	6 AWG
8	110 AMP	1.25-INCH	1.25-INCH	1.25-INCH	1.25-INCH	130 AMP	1 AWG	1 AWG	6 AWG
9	125 AMP	1.25-INCH	1.25-INCH	1.5-INCH	1.5-INCH	130 AMP	1 AWG	1 AWG	6 AWG
10	150 AMP	1.25-INCH	1.25-INCH	2.0-INCH	2.0-INCH	150 AMP	1/0 AWG	1/0 AWG	6 AWG
11	175 AMP	2.0-INCH	2.0-INCH	2.0-INCH	2.0-INCH	175 AMP	2/0 AWG	2/0 AWG	4 AWG
12	200 AMP	2.0-INCH	2.0-INCH	2.0-INCH	2.0-INCH	200 AMP	3/0 AWG	3/0 AWG	4 AWG
13	225 AMP	2.0-INCH	2.0-INCH	2.5-INCH	2.0-INCH	230 AMP	4/0 AWG	4/0 AWG	2 AWG
14	250 AMP	2.5-INCH	2.5-INCH	2.5-INCH	2.5-INCH	255 AMP	250 KCMIL	250 KCMIL	2 AWG
15	300 AMP	2.5-INCH	3.0-INCH	3.0-INCH	3.0-INCH	310 AMP	350 KCMIL	350 KCMIL	2 AWG
16	350 AMP	3.0-INCH	3.0-INCH	3.5-INCH	3.0-INCH	380 AMP	500 KCMIL	500 KCMIL	1/0 AWG
17	350 AMP	2.5-INCH	2.5-INCH	3.0-INCH	2.5-INCH	350 AMP	2 - 2/0 AWG	2 - 2/0 AWG	1/0 AWG
18	400 AMP	4.0-INCH	4.0-INCH	4.0-INCH	4.0-INCH	380 AMP	500 KCMIL	500 KCMIL	1/0 AWG
19	400 AMP	2.5-INCH	3.0-INCH	3.0-INCH	3.0-INCH	400 AMP	2 - 3/0 AWG	2 - 3/0 AWG	1/0 AWG
20	600 AMP	3.5-INCH	4.0-INCH	4.0-INCH	4.0-INCH	620 AMP	2 - 350 KCMIL	2 - 350 KCMIL	1/0 AWG
21	800 AMP	2 - 4.0-INCH	2 - 4.0-INCH	2 - 4.0-INCH	2 - 4.0-INCH	760 AMP	2 - 500 KCMIL	2 - 500 KCMIL	2 - 1/0 AWG
22	1,200 AMP	3 - 4.0-INCH	3 - 4.0-INCH	3 - 4.0-INCH	3 - 4.0-INCH	1,140 AMP	3 - 500 KCMIL	3 - 500 KCMIL	3 - 1/0 AWG
23	1,600 AMP	4 - 4.0-INCH	4 - 4.0-INCH	4 - 4.0-INCH	4 - 4.0-INCH	1,520 AMP	4 - 500 KCMIL	4 - 500 KCMIL	4 - 1/0 AWG
24	2,000 AMP	5 - 4.0-INCH	5 - 4.0-INCH	5 - 4.0-INCH	5 - 4.0-INCH	1,900 AMP	5 - 500 KCMIL	5 - 500 KCMIL	5 - 1/0 AWG

REFERENCE: 2008 NATIONAL ELECTRICAL CODE (NFPA 70).

NOTE¹ PER NEC APPENDIX C, TABLES C-1, C-8, C-9 AND C-10.

NOTE² PER NEC TABLE 310-16 FOR 600-VOLT, CU CABLES. 60 C AMPACITY FOR 100 A OR LESS, 75 C AMPACITY FOR GREATER THAN 100 A CKT.

NOTE³ PER NEC TABLE 250-122 FOR EQUIPMENT GROUNDING CONDUCTORS.

FROM BLDG 200, PANEL 200-BA-EHD2, CONTINUED ON SHEET E-B200-604

SEE DRAWING E-B200-604 FOR CABLE & CONDUIT SIZE

FROM BLDG 2, PANEL 002-0W-NHS1, CONTINUED ON SHEET E-B002-605

2 SETS OF (4) 4/0 AWG AND (1) 2 AWG GND EACH IN (E) 2 1/2" EMT CONDUIT

2 SETS OF (4) 4/0 AWG AND (1) 2 AWG GND EACH IN 2 1/2" EMT CONDUIT

(4) 500kcmil AND (1) #1/0 AWG GND IN 4" FLEX CONDUIT

2 SETS OF (4) 500kcmil AND (1) #1/0 AWG GND IN EACH OF 2-4" FLEX CONDUIT

(4) 350kcmil AND (1) #2 AWG GND IN 3" CONDUIT

(4) 500kcmil AND (1) #1/0 AWG GND IN 4" CONDUIT

(4) #4/0 AWG AND (1) #2 AWG GND IN 2" CONDUIT

(4) #4/0 AWG AND (1) #2 AWG GND IN 3" CONDUIT

(4) #4/0 AWG AND (1) #2 AWG GND IN 3" CONDUIT

(4) #4/0 AWG AND (1) #2 AWG GND IN 3" CONDUIT

(4) #1/0 AND (1) #6 AWG GND IN 2" CONDUIT

CONSULTANTS:

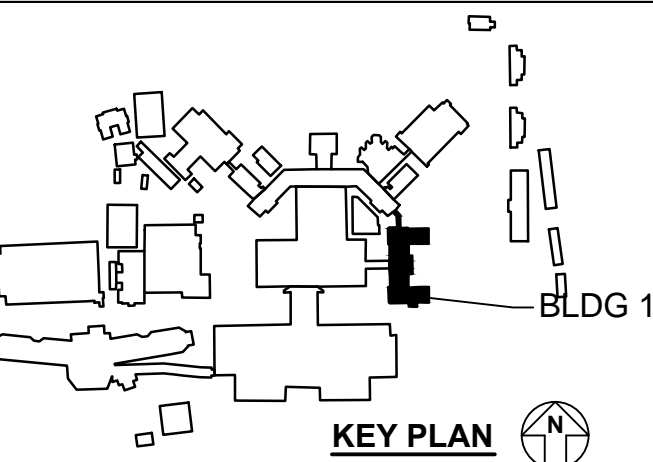


GHD Inc.
2235 Mercury Way, Suite 150
Santa Rosa, California 95407 USA
T 1 707 523 1010 F 1 707 527 8679
W www.ghd.com

GENERAL CONTRACTOR:



HELIX ELECTRIC
CONSTRUCTORS • ENGINEERS



ARCHITECT:

Drawing Title
SINGLE LINE DIAGRAM

Approved: Project Director
Medical Center Director:
LAWRENCE H. CARROLL
Chief Engineer:
JAMES PRIDLIDES

Project Title
**ELECTRICAL
SYSTEM UPGRADES
PROJECT 662-07-028ES**

Location
SFVA MEDICAL CENTER
Date
JANUARY 3, 2010
Checked
SMD
Drawn
BAT

Project Number
11054-07-001
Building Number
1
Drawing Number
E-B001-601
Dwg. 50 of 227

Office of
Facilities
Management

