

F.A.C. 61G15-32.006 DESIGN OF FIRE ALARMS AND DETECTION SYSTEMS.

(1) FIRE ALARMS AND DETECTION SYSTEMS INCLUDE FIRE PROTECTION SUPERVISION, EMERGENCY ALARM CIRCUITS, ACTIVATION OF LIFE SAFETY SYSTEM CONTROLS AND REMOTE SIGNALING OF EMERGENCY CONDITIONS.

(2) THE DESIGN SPECIFICATIONS SHALL BE BASED ON THE FLORIDA BUILDING CODE, THE FLORIDA FIRE PREVENTION CODE, OR AS REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION, THE FLORIDA BUILDING CODE AND THE FLORIDA FIRE PREVENTION CODE ARE INCORPORATED BY REFERENCE IN RULE 61G15-18.011, F.A.C.

(3) FOR FIRE ALARM PLANS ON SMALL SYSTEMS BELOW THE THRESHOLD REQUIREMENTS FOR MANDATORY USE OF PROFESSIONAL ENGINEERING SERVICES, THE ENGINEER OF RECORD SHALL SPECIFY THE MINIMUM SYSTEM REQUIREMENTS.

(4) TO ENSURE MINIMUM DESIGN QUALITY OF FIRE ALARM AND DETECTION SYSTEMS ENGINEERING DOCUMENTS, SAID DOCUMENTS SHALL INCLUDE AS A MINIMUM THE FOLLOWING INFORMATION WHEN APPLICABLE:

(a) THE DOCUMENTS SHALL BE CLEAR, WITH A SYMBOLS LEGEND, SYSTEM RISER DIAGRAM SHOWING ALL INITIATION AND NOTIFICATION COMPONENTS, AND CABLING REQUIREMENTS. THE DOCUMENTS SHALL INDICATE LOCATIONS WHERE FIRE RATINGS ARE REQUIRED AS DETERMINED BY THE SYSTEMS SURVIVABILITY REQUIREMENTS, AND SHALL IDENTIFY THE GENERAL OCCUPANCY OF THE PROTECTED PROPERTY AND EACH ROOM AND AREA UNLESS IT IS CLEAR FROM FEATURES SHOWN.

(b) LOCATE INITIATION AND NOTIFICATION DEVICES AND CONNECTIONS TO RELATED SYSTEMS ON THE FLOOR PLANS AND SECTIONS WHEN NEEDED FOR CLARITY. RELATED SYSTEMS INCLUDE ELEVATOR CONTROLS SMOKE CONTROL SYSTEMS, DAMPERS, AND DOORS.

(c) STROBE INTENSITY AND SPEAKER OUTPUT RATINGS FOR ALL NOTIFICATION DEVICES.

(d) IDENTIFY THE CLASS OF CIRCUITS AS LISTED IN NFPA 72, WHICH IS CONTAINED WITHIN AND INCORPORATED INTO THE FLORIDA FIRE PREVENTION CODE.

(e) IDENTIFY THE FUNCTIONS REQUIRED BY THE ALARM AND CONTROL SYSTEMS INCLUDING THE TRANSMISSION OF EMERGENCY SIGNALS BEING MONITORED OR ANNUNCIATED.

(f) INDICATE WHETHER THE FIRE ALARM IS CONVENTIONAL OR ADDRESSABLE, AND INDICATE ALL ZONING.

(g) LOCATE SURGE PROTECTIVE DEVICES AND REQUIRED PROTECTIVE FEATURES.

(h) LOCATE SYSTEM DEVICES THAT ARE SUBJECT TO ENVIRONMENTAL FACTORS, AND INDICATE REQUIREMENTS FOR THE PROTECTION OF EQUIPMENT FROM TEMPERATURE, HUMIDITY OR CORROSIVE ATMOSPHERES, INCLUDING COASTAL SALT AIR.

(i) THE DOCUMENTS SHALL INCLUDE A SITE PLAN OF THE IMMEDIATE AREA AROUND THE PROTECTED BUILDING, STRUCTURE OR EQUIPMENT WHEN ALARM DEVICES ARE REQUIRED OUTSIDE THE STRUCTURE.

(j) IN BUILDINGS WHERE SMOKE DETECTION WILL BE OBSTRUCTED BY WALLS, BEAMS OR CEILING FEATURES, THE ENGINEER OF RECORD SHALL PROVIDE APPLICABLE DESIGN AND DETAILS TO DIRECT THE INSTALLER TO MITIGATE THE OBSTRUCTIONS. IN BUILDINGS WITH SMOKE DETECTION UNDER A PITCHED ROOF, THE PLANS SHALL INDICATE THE ROOF PITCH AND A BUILDING SECTION SHALL BE PROVIDED AS PART OF THE ENGINEERING DESIGN DOCUMENTS.

(k) FOR FIRE DETECTION SYSTEMS UTILIZING SMOKE DETECTION IN SITUATIONS WHERE SMOKE STRATIFICATION IS ANTICIPATED, THE DESIGN SHALL PROVIDE THE NECESSARY CRITERIA TO MITIGATE THE DETECTION PROBLEMS.

(l) SYSTEMS DESIGNED USING PERFORMANCE BASED CRITERIA SHALL BE IDENTIFIED AND REFERENCED TO DESIGN GUIDES OR STANDARDS APPROVED BY THE LOCAL AUTHORITY HAVING JURISDICTION CONSISTENT WITH STANDARDS ADOPTED BY THE FLORIDA FIRE PREVENTION CODE AND THE FLORIDA BUILDING CODE.

(m) THE SYSTEM DESIGN MUST INDICATE IF THE SYSTEM IS TO PROVIDE A GENERAL EVACUATION SIGNAL OR A ZONED EVACUATION FOR ALL HIGH-RISE BUILDINGS OR MULTI-TENANTED PROPERTIES AS DEFINED IN SECTION 2 OF THE FLORIDA BUILDING CODE, BUILDING.

(n) WIRING REQUIREMENTS FOR UNDERGROUND, WET LOCATIONS, CAMPUS STYLE WIRING, PROTECTION AGAINST DAMAGE AND BURIAL DEPTH SHALL BE SPECIFIED OR INDICATED ON THE ENGINEERING DESIGN DOCUMENTS.

(o) REQUIREMENTS FOR OPERATIONS AND MAINTENANCE PROCEDURES, MANUALS, SYSTEM DOCUMENTATION, AND INSTRUCTION OF OWNER'S OPERATING PERSONNEL, AS NEEDED TO OPERATE THE SYSTEMS AS INTENDED OVER TIME.

(5) IN THE EVENT THAT THE ENGINEER OF RECORD ELECTS TO SPECIFY SPECIFIC EQUIPMENT AND TO SHOW THE REQUIRED WIRING, BATTERY AND VOLTAGE DROP (CIRCUIT ANALYSIS) CALCULATIONS SHALL BE COMPLETED. THE CALCULATIONS SHALL BE COMPLETED USING THE EQUIPMENT MANUFACTURER'S DATA AND APPLICABLE NFPA 72 PROCEDURES.

(6) SYSTEM TEST REQUIREMENTS SHALL BE NOTED ON THE ENGINEERING DESIGN DOCUMENTS.

(7) WHEN THE ENGINEER DETERMINES THAT SPECIAL REQUIREMENTS ARE REQUIRED BY THE OWNER, INSURANCE UNDERWRITER OR LOCAL FIRE CODE AMENDMENTS THESE REQUIREMENTS SHALL BE DOCUMENTED OR REFERENCED ON THE ENGINEERING DESIGN DOCUMENTS.

(a) THE DOCUMENTS SHALL BE CLEAR, WITH A SYMBOLS LEGEND, SYSTEM RISER DIAGRAM SHOWING ALL INITIATION AND NOTIFICATION COMPONENTS, AND CABLING REQUIREMENTS. THE DOCUMENTS SHALL INDICATE LOCATIONS WHERE FIRE RATINGS ARE REQUIRED AS DETERMINED BY THE SYSTEMS SURVIVABILITY REQUIREMENTS AND SHALL IDENTIFY THE GENERAL OCCUPANCY OF THE PROTECTED PROPERTY AND EACH ROOM AND AREA UNLESS IT IS CLEAR FROM FEATURES SHOWN.

Symbol legend is located on drawing E0.01.
FA riser diagram is located on drawing E5.04.
Cabling requirements are addressed on Fire Alarm Riser Diagram General Note #13.
Survivability requirements are addressed on Fire Alarm Riser Diagram General Note #12.
Room identifications are shown on floor plans.

(b) LOCATE INITIATION AND NOTIFICATION DEVICES AND CONNECTIONS TO RELATED SYSTEMS ON THE FLOOR PLANS AND SECTIONS WHEN NEEDED FOR CLARITY. RELATED SYSTEMS INCLUDE ELEVATOR CONTROLS SMOKE CONTROL SYSTEMS, DAMPERS, AND DOORS. *Fire alarm devices are indicated on floor plans with symbols and plan notes.*

(c) STROBE INTENSITY AND SPEAKER OUTPUT RATINGS FOR ALL NOTIFICATION DEVICES.
Per symbol legend remark 'n1' on drawing E0.01 (referencing fire alarm symbol legend) all strobe intensities are to be 75cd (or as noted on drawings). Audible notification is via horn type devices with a fixed output as listed by manufacture complying with UL and NFPA 72.

(d) IDENTIFY THE CLASS OF CIRCUITS AS LISTED IN NFPA 72, WHICH IS CONTAINED WITHIN AND INCORPORATED INTO THE FLORIDA FIRE PREVENTION CODE.
Circuit Class identification is addressed on Fire Alarm Riser Diagram General Note #14 on drawing E5.04.

(e) IDENTIFY THE FUNCTIONS REQUIRED BY THE ALARM AND CONTROL SYSTEMS INCLUDING THE TRANSMISSION OF EMERGENCY SIGNALS BEING MONITORED OR ANNUNCIATED.
Fire alarm functions are addressed on input-output matrix on drawing E6.02.

(f) INDICATE WHETHER THE FIRE ALARM IS CONVENTIONAL OR ADDRESSABLE AND INDICATE ALL ZONING.
Fire alarm is a non-coded addressable type system as indicated on Fire Alarm Riser Diagram General Note #16 on drawing E5.04, as well as Specification 287220 - Section 2.2(K).

(g) LOCATE SURGE PROTECTIVE DEVICES AND REQUIRED PROTECTIVE FEATURES.
Surge suppression requirements are addressed on Fire Alarm Riser Diagram General Notes #1 and #5 on drawing E5.04.

(h) LOCATE SYSTEM DEVICES THAT ARE SUBJECT TO ENVIRONMENTAL FACTORS AND INDICATE REQUIREMENTS FOR THE PROTECTION OF EQUIPMENT FROM TEMPERATURE, HUMIDITY OR CORROSIVE ATMOSPHERES, INCLUDING COASTAL SALT AIR.
Weatherproof devices are indicated on electrical floor plans and are on symbol legend located on drawing E0.01.

(i) THE DOCUMENTS SHALL INCLUDE A SITE PLAN OF THE IMMEDIATE AREA AROUND THE PROTECTED BUILDING, STRUCTURE OR EQUIPMENT WHEN ALARM DEVICES ARE REQUIRED OUTSIDE THE STRUCTURE.
Site plan of the project immediate area is provided on drawing E1.01.

(j) IN BUILDINGS WHERE SMOKE DETECTION WILL BE OBSTRUCTED BY WALLS, BEAMS OR CEILING FEATURES, THE ENGINEER OF RECORD SHALL PROVIDE APPLICABLE DESIGN AND DETAILS TO DIRECT THE INSTALLER TO MITIGATE THE OBSTRUCTIONS. IN BUILDINGS WITH SMOKE DETECTION UNDER A PITCHED ROOF, THE PLANS SHALL INDICATE THE ROOF PITCH AND A BUILDING SECTION SHALL BE PROVIDED AS PART OF THE ENGINEERING DESIGN DOCUMENTS.
All smoke detectors are located on smooth ceilings.

(k) FOR FIRE DETECTION SYSTEMS UTILIZING SMOKE DETECTION IN SITUATIONS WHERE SMOKE STRATIFICATION IS ANTICIPATED, THE DESIGN SHALL PROVIDE THE NECESSARY CRITERIA TO MITIGATE THE DETECTION PROBLEMS.
Smoke stratification is not expected to occur.

(l) SYSTEMS DESIGNED USING PERFORMANCE BASED CRITERIA SHALL BE IDENTIFIED AND REFERENCED TO DESIGN GUIDES OR STANDARDS APPROVED BY THE LOCAL AUTHORITY HAVING JURISDICTION CONSISTENT WITH STANDARDS ADOPTED BY THE FLORIDA FIRE PREVENTION CODE AND THE FLORIDA BUILDING CODE.
Refer to fire alarm Specification 287220 - Section 1.2-SYSTEM DESCRIPTION. References to the applicable codes have been included in the fire alarm input-output matrix on drawing E6.02.

(m) THE SYSTEM DESIGN MUST INDICATE IF THE SYSTEM IS TO PROVIDE A GENERAL EVACUATION SIGNAL OR A ZONED EVACUATION FOR ALL HIGH-RISE BUILDINGS OR MULTI-TENANTED PROPERTIES AS DEFINED IN SECTION 2 OF THE FLORIDA BUILDING CODE, BUILDING.
Building is not a high-rise building. Fire alarm evacuation signal is a general building wide evacuation signal. Refer to Fire Alarm Riser Diagram General Note #15 on drawing E5.04 and fire alarm counterpoise detail on drawing E6.01.

(n) WIRING REQUIREMENTS FOR UNDERGROUND, WET LOCATIONS, CAMPUS STYLE WIRING, PROTECTION AGAINST DAMAGE AND BURIAL DEPTH SHALL BE SPECIFIED OR INDICATED ON THE ENGINEERING DESIGN DOCUMENTS.
Refer to Fire Alarm Riser Diagram General Note #3 on drawing E5.04.

(o) REQUIREMENTS FOR OPERATIONS AND MAINTENANCE PROCEDURES, MANUALS, SYSTEM DOCUMENTATION, AND INSTRUCTION OF OWNER'S OPERATING PERSONNEL, AS NEEDED TO OPERATE THE SYSTEMS AS INTENDED OVER TIME.
Requirements for operations and maintenance procedures and manuals are referenced in fire alarm Specification 287220 - Section 1.4(E)-OPERATION AND MAINTENANCE DATA. This section includes requirements for maintenance and operation manuals. Requirements for system documentation is referenced in FA Specification 287220 - Section 3.5-FIELD QUALITY CONTROL. This section includes requirements for initial inspections, testing, and factory service representative documentation. Requirements for instruction of Owner's operating personnel is referenced in FA Specification Section 287220 - 3.6-DEMONSTRATION. This section includes direction for Owner's personnel operation and maintenance of FA system.

(6) SYSTEM TEST REQUIREMENTS SHALL BE NOTED ON THE ENGINEERING DESIGN DOCUMENTS.
System test requirements are listed in FA Specification 287220 - Section 3.5(B).

(7) WHEN THE ENGINEER DETERMINES THAT SPECIAL REQUIREMENTS ARE REQUIRED BY THE OWNER, INSURANCE UNDERWRITER OR LOCAL FIRE CODE AMENDMENTS THESE REQUIREMENTS SHALL BE DOCUMENTED OR REFERENCED ON THE ENGINEERING DESIGN DOCUMENTS.
The engineer is not aware of any special requirements by the owner, insurance underwriter, or local fire code amendments.

LIGHTING FIXTURE SCHEDULE - APARTMENT BUILDINGS								
TYPE	LAMP DATA		FIXTURE DESCRIPTION	FIXTURE DATA			VOLTAGE	SEE NOTE
	NO.	TYPE		MANUFACTURER	CATALOG NUMBER	MOUNT		
A	NA	64W LED	52"L X 12"W LINEAR PUFF LED LUMINAIRE WITH WHITE FINISH AND WHITE ACRYLIC LENS	DMVNE LTG.	5212-WH-LED64-30-WA	SURF	120	5,9
B	5	25W TYPE G INCAND.	36" INCANDESCENT BATH VANITY LIGHT BAR WITH BRUSHED NICKEL FINISH	KICHLER LTG.	626-NI	WALL	120	1,4
B1	6	25W TYPE G INCAND.	48" INCANDESCENT BATH VANITY LIGHT BAR WITH BRUSHED NICKEL FINISH	KICHLER LTG.	628-NI	WALL	120	1,4
BM	4	25W TYPE G INCAND.	24" INCANDESCENT BATH VANITY LIGHT BAR WITH BRUSHED NICKEL FINISH	KICHLER LTG.	624-NI	WALL	120	1,4
C	NA	9W LED	4" DIAMETER FLUSH MOUNTED LED LUMINAIRE WITH WHITE FINISH	LIGHTING SCIENCE	LS-GL-P4-W27-120-WH	REC	120	9
D	NA	13W LED	6" DIAMETER FLUSH MOUNTED LED LUMINAIRE WITH WHITE FINISH	LIGHTING SCIENCE	LS-GL-P6-W27-120-WH	REC	120	9
D1	NA	13W LED	7.5" DIAMETER FLUSH MOUNTED LED LUMINAIRE WITH WHITE FINISH	UTILITECH	749834	REC	120	5,9
D2	NA	13W LED	6" DIAMETER FLUSH MOUNTED LED LUMINAIRE WITH WHITE FINISH	LIGHTING SCIENCE	LS-GL-P6-W27-120-WH	REC	120	9
F1	NA	16W LED	50" PADDLE FAN, BRUSHED NICKEL FINISH WITH LIGHT KIT	ROYAL PACIFIC	1004-LED-BN	PEND	120	3,10
G	NA	28W LED	7" DIAMETER LED FLUSH MOUNTED SHOWER LIGHT, WHITE FINISH, LISTED FOR WET LOCATIONS	LITHONIA	FMML-7-830-WL	REC	120	6
H	1	60W A19	DECORATIVE 6.25" DIAMETER MINI-PENDANT INCANDESCENT LIGHT WITH BRUSHED NICKEL FINISH AND ALABASTER GLASS DIFFUSER	VALUE LTG.	102280BN	PEND	120	1,2
K	1	100W A19	PORCELAIN LAMP HOLDER WITH WIRE GUARD	N/A	CONTRACTOR'S SELECTION	TRUSS	120	1
L	NA	39W LED	32 5/8" X 18" OVAL CEILING MOUNTED LED DECORATIVE FIXTURE WITH BRUSHED NICKEL FINISH AND WHITE ACRYLIC DIFFUSER	PROGRESS LTG.	P7251-0930K9	CLG	120	
M	NA	18W LED	2" LED STRIP LIGHT WITH OPAL ACRYLIC LENS	ROYAL PACIFIC	4309WH	SURF	120	
N	NA	27W LED	2" LED ENCLOSED & GASKETED LUMINAIRE WITH FIBERGLASS HOUSING AND INJECTED-MOLDED ACRYLIC LENS	LITHONIA LTG.	DMW2-L24-3000LM-ACL-MD-120-GZ10-35K-80CRI	SURF	120	
SLW	NA	23W LED	FULL CUT-OFF LED WALL PACK WITH DIE-CAST ALUMINUM HOUSING AND BLACK FINISH	LITHONIA LTG.	WDGE2-LED-P3-30K-80CRI-VF-MVOLT-DBLXD	WALL	120	6,7,8
V	NA	12W LED	WALL MOUNTED LED ADDRESS SIGN LIGHT	DMVNE LTG.	ML-XX-LED12-30	WALL	120	6,7,8
WL1	1	9W LED	DECORATIVE EXTERIOR WALL SCONCE WITH COPPER OXIDE FINISH	MAXIM LTG.	55163GFCO	WALL	120	6,7

NOTES:

1. PROVIDE LAMPS.
2. VERIFY MOUNTING HEIGHT WITH ARCHITECT.
3. PROVIDE 3 SPEED SOLID STATE CONTROL SWITCH
4. REFER TO ARCHITECT'S ELEVATIONS IN BATHROOMS.
5. U.L. DAMP LOCATION LISTED.
6. U.L. WET LOCATION LISTED.
7. REFER TO ARCHITECT'S BUILDING ELEVATIONS FOR MOUNTING HEIGHT.
8. VERIFY COLOR/FINISH WITH ARCHITECT PRIOR TO ORDERING.
9. VERIFY FIXTURE COLOR TEMPERATURE WITH ARCHITECT PRIOR TO ORDERING.
10. COORDINATE DOWNROD LENGTH WITH ARCHITECT.

LIGHTING FIXTURE SCHEDULE - CLUBHOUSE & TRASH ENCLOSURE								
TYPE	LAMP DATA		FIXTURE DESCRIPTION	FIXTURE DATA			VOLTAGE	SEE NOTE
	NO.	TYPE		MANUFACTURER	CATALOG NUMBER	MOUNT		
A	NA	20W LED	13" DIAMETER SURFACE MOUNTED LED DOWNLIGHT WITH DIFFUSING LENS AND WHITE FINISH (1800 LUMEN OUTPUT)	JUNO LTG.	JSF-13M-18LM-30K-90CRI-MVOLT ZT-WH	CLG	120	7
B	NA	13W LED	7" DIAMETER SURFACE MOUNTED LED DOWNLIGHT WITH DIFFUSING LENS AND WHITE FINISH (1000 LUMEN OUTPUT)	JUNO LTG.	JSF-7IN-10LM-30K-90CRI-MVOLT ZT-WH	CLG	120	7
C	3	4W G9 LED	20" THREE LIGHT BATH/VANITY FIXTURE WITH COATED GLASS SHADES AND CHROME FINISH	EGLO LTG.	200217/ALEA1	WALL	120	1,6
EM	2	FURNISHED	EMERGENCY BATTERY LUMINAIRE, U.L. LISTED	LITHONIA LTG.	ELMB-LED-W	SURF	120	4,7
EMW	2	FURNISHED	EMERGENCY BATTERY LUMINAIRE, WET LOCATION, U.L. LISTED	EXTRONIX	CP-EMW-8-LED-SA-WL	SURF	120	4,8
F1	NA	NA	56" CEILING FAN WITH GLOSS WHITE FINISH AND WHITE BLADE COLOR	MODERN FAN CO.	IC3-GW-56-WH-NL-WC	PEND	120	2
F2	1	100W T4 E11 MIN. CAND.	52" OUTDOOR CEILING FAN WITH BRUSHED NICKEL FINISH AND INTEGRATED LIGHT	MINKA AIR	F577-BNW	PEND	120	2,7
F3	NA	NA	54" STUDIO FAN WITH BRUSHED PEWTER FINISH	MONTE CARLO FAN CO.	3SU54BP	PEND	120	2
H	NA	22W LED	24" LED STRIP LIGHT WITH DIFFUSE LENS	LITHONIA LTG.	ZL1D-L24-2500LM-FST-120-35K	TRUSS	120	
K	NA	41W LED	48" LED STRIP LIGHT WITH DIFFUSE LENS	LITHONIA LTG.	ZL1D-L48-5000LM-FST-120-35K	CLG	120	
SLW	NA	23W LED	FULL CUT-OFF LED WALL PACK WITH DIE-CAST ALUMINUM HOUSING AND BLACK FINISH	LITHONIA LTG.	WDGE2-LED-P3-30K-80CRI-VF-MVOLT-DBLXD	WALL	120	8,10
WL1	NA	21W LED	25" HIGH DECORATIVE EXTERIOR WALL SCONCE WITH WHITE ACRYLIC DIFFUSER AND BLACK FINISH	BROWNLEE	7329-BL-H21-30K	WALL	120	8,10
X	NA	LED	SELF-POWERED UNIVERSAL LED EXIT SIGN WITH RED LETTERS AND WHITE HOUSING, U.L. LISTED.	LITHONIA LTG.	LQM-S-W-3-R-120-ELN	SURF	120	3, 4, 7

NOTES:

1. PROVIDE LAMPS.
2. VERIFY DOWNROD LENGTH WITH ARCHITECT/INTERIOR DESIGNER.
3. PROVIDE CHEVRONS AS SHOWN ON PLANS.
4. CONNECT FIXTURE TO LOCAL CIRCUIT AHEAD OF SWITCHING.
5. VERIFY COLOR/FINISH WITH ARCHITECT PRIOR TO ORDERING.
6. REFER TO ARCHITECT'S ELEVATIONS IN BATHROOMS.
7. U.L. DAMP LOCATION LISTED.
8. U.L. WET LOCATION LISTED.
9. IC RATED FOR DIRECT CONTACT WITH INSULATION.
10. REFER TO ARCHITECT'S ELEVATIONS FOR MOUNTING HEIGHT/LOCATIONS.

GENERAL ELECTRICAL NOTES

- 1) ALL 120V, 20A CIRCUIT HOMERUNS OVER 50FT. SHALL BE #10 CU. MINIMUM, UNLESS NOTED OTHERWISE.
- 2) ALL 120V, 20A CIRCUIT HOMERUNS OVER 150FT. SHALL BE #8 CU. MINIMUM, UNLESS NOTED OTHERWISE.
- 3) COORDINATE EXACT LOCATION OF LIGHTING FIXTURES IN MECH. ROOMS/SPACES WITH DUCTWORK INSTALLER PRIOR TO ROUGH-IN. LOCATE BELOW DUCTWORK (8'-0" AFF MINIMUM) CENTERED IN ROOM AS MUCH AS POSSIBLE.
- 4) COORDINATE EXACT INSTALLATION REQUIREMENTS OF OUTLETS IN MILLWORK WITH ARCHITECTURAL DRAWINGS, APPROVED SHOP DRAWINGS AND MILLWORK INSTALLER PRIOR TO ROUGH-IN.
- 5) VERIFY EXACT LOCATION OF ALL MECHANICAL EQUIPMENT WITH MECHANICAL INSTALLER PRIOR TO ROUGH-IN.
- 6) REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF ALL LIGHT FIXTURES.
- 7) PROVIDE NYLON PULLSTRINGS IN ALL EMPTY CONDUITS.
- 8) COORDINATE THE REQUIRED SIZE OF ALL CIRCUIT BREAKERS FEEDING EQUIPMENT, (I.E. MOTORS, HVAC, SPECIAL PURPOSE OUTLETS, OWNER FURNISHED EQUIPMENT ETC.) WITH APPROVED EQUIPMENT SHOP DRAWINGS AND OWNER REPRESENTATIVES PRIOR TO ORDERING PANELBOARDS. BREAKERS SHALL BE SIZED PER THE NEC, THE EQUIPMENT NAME PLATE AND MANUFACTURERS RECOMMENDATIONS.
- 9) THE USE OF ANY PROCESS INVOLVING ASBESTOS OR PCB, AND THE INSTALLATION OF ANY PRODUCT, INSULATION, COMPOUND OF MATERIAL CONTAINING OR INCORPORATING ASBESTOS OR PCB, IS PROHIBITED. THE REQUIREMENTS OF THIS SPECIFICATION FOR A COMPLETE AND PROPERLY OPERATING ELECTRICAL SYSTEM SHALL BE MET WITHOUT THE USE OF ASBESTOS OR PCB.
- 10) THE POWER COMPANY SHALL BE CONTACTED WITHIN 10 DAYS OF THE AWARD OF THE CONTRACT BY THE CONTRACTOR TO VERIFY THE ACTUAL AVAILABLE SHORT CIRCUIT FAULT CURRENT (SCC) AT THE TRANSFORMER SECONDARY BUSHINGS. THE CONTRACTOR SHALL PROVIDE ELECTRICAL DISTRIBUTION AND UTILIZATION EQUIPMENT AND PANELBOARDS WHICH HAVE AIC/WITHSTAND RATINGS GREATER THAN THE AVAILABLE SSC AT EACH POINT IN THE ELECTRICAL SYSTEM.
- 11) VISIT THE EXISTING FACILITY AND CAREFULLY EXAMINE THOSE PORTIONS OF THE BUILDING AND SITE AFFECTED BY THIS WORK BEFORE SUBMITTING PROPOSALS, SO AS TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS AND DIFFICULTIES THAT WILL AFFECT EXECUTION OF THE WORK. SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT SUCH EXAMINATION HAS BEEN MADE AND LATER CLAIMS FOR LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED WILL NOT BE RECOGNIZED.
- 12) CONTRACTOR SHALL INCLUDE IN HIS BID THE TRANSPORT AND DISPOSAL OR RECYCLING OF ALL WASTE MATERIALS GENERATED BY THIS PROJECT IN ACCORDANCE WITH ALL RULES, REGULATIONS AND GUIDELINES APPLICABLE.
- 13) PANEL SCHEDULES INDICATE CIRCUIT DESIGNATIONS ONLY. CONTRACTOR TO PROVIDE MATERIALS AS REQUIRED WHEN NEUTRALS ARE SHARED TO COMPLY WITH NEC REQUIREMENTS. ALL SINGLE PHASE MULTIWIRE BRANCH CIRCUITS SHALL BE FED VIA A TWO POLE BREAKER OR TWO SINGLE POLE BREAKERS WITH AN IDENTIFIED HANDLE TIE.
- 14) TYPE NM AND SE/SEER CABLE IS PERMISSIBLE WHERE INSTALLED PER 2014 NEC REQUIREMENTS IN MULTI-FAMILY STRUCTURES ONLY.
- 15) ALL PENETRATIONS THROUGH FIRE RESISTANCE RATED PARTITIONS AND OTHER ASSEMBLIES, INCLUDING EMPTY OPENINGS AND OPENINGS CONTAINING CABLES, CONDUITS AND OTHER PENETRATING ITEMS, SHALL BE FIRE-STOPPED TO PRESERVE THE FIRE RATING OF THE ASSEMBLY. ALL OUTLET BOXES LOCATED IN FIRE RATED WALLS/CEILINGS ARE TO BE RATED IN ORDER TO PRESERVE THE FIRE RATING OF THE ASSEMBLY. REFER TO ARCHITECTURAL PLANS FOR FIRE-STOPPING DETAILS.
- 16) AN IN-BUILDING RADIO SIGNAL AMPLIFICATION SYSTEM TO PROVIDE COMPLETE COVERAGE FOR THE PUBLIC SAFETY AGENCIES, AS REQUIRED BY THE LOCAL AHJ, MAY BE REQUIRED IN ALL BUILDINGS. REFER TO GENERAL NOTE #8 ON DRAWING E6.02 REGARDING MINIMUM REQUIREMENTS FOR BDA SYSTEM AS WELL AS REQUIREMENTS FOR ALTERNATE BIDS.

BRANCH CIRCUIT WIRING

- 1) WIRING IS SHOWN ON DRAWINGS ONLY FOR SPECIFIC ROUTES OR SPECIAL CONDITIONS.
- 2) WIRING AND CONDUIT SHALL BE REQUIRED BETWEEN ALL OUTLETS INDICATED WITH CIRCUIT NUMBERS AND PANEL DESIGNATIONS.
- 3) ALL SWITCH CONTROLS SHALL BE PROVIDED WITH WIRING AND CONDUIT AS REQUIRED.
- 4) ALTHOUGH ALL BRANCH WIRE AND CONDUIT IS NOT SHOWN, IT IS THE INTENT OF THESE DOCUMENTS THAT A COMPLETE BRANCH CIRCUIT WIRING SYSTEM BE INSTALLED.
- 5) PROVIDE A GREEN GROUND CONDUCTOR IN ALL CIRCUITS. APPROPRIATELY INCREASE SIZE OF CONDUITS TO ACCOMMODATE GROUND CONDUCTOR.
- 6) UNLESS SHOWN OTHERWISE (BRANCH CIRCUITING INSTRUCTIONS):
 - A) 1600 VOLT-AMPS MAXIMUM PER 20A/1P CIRCUIT, UNLESS SHOWN OTHERWISE.
 - B) 6 CONVENIENCE OUTLETS MAXIMUM PER 20A/1P BRANCH CIRCUIT.
- 7) OUTLETS MOUNTED IN FIRE WALLS AND CEILINGS SHALL COMPLY WITH U.L. CATEGORY OF "OUTLET BOXES AND FITTINGS CLASSIFIED FOR FIRE RESISTANCE".
- 8) UTILIZE 15A RATED DEVICES IN ALL RESIDENTIAL UNITS. UTILIZE 20A RATED DEVICES IN CLUBHOUSE, MAIL KIOSK AND FOR ALL DEVICES UTILIZED IN MULTI-FAMILY BUILDINGS (NOT LOCATED IN APARTMENT UNITS).
- 9) ALL RECEPTACLES INSTALLED IN WET LOCATIONS SHALL BE PROVIDED WITH WEATHERPROOF "IN-USE" COVER.
- 10) IN ADDITION TO WEATHER PROOF (WP) COVER AND GFCI PROTECTION, 15A AND 20A, 125V AND 250V RECEPTACLES INSTALLED IN DAMP OR WET LOCATIONS SHALL BE LISTED "WEATHER-RESISTANT" TYPE (WR) PER NEC SECTIONS 406.9(A) AND 406.9(B)(1).

TELEVISION CABLING

- 1) PROVIDE ALL NECESSARY CABLING, BOXES AND RELATED ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION OF TELEVISION CABLING SERVICE TO EACH UNIT. REFER TO SPECIFICATIONS.
- 2) COORDINATE WITH OWNER'S LOCAL CABLE TELEVISION COMPANY.

TELE-VOICE/DATA CABLING

- 1) PROVIDE ALL NECESSARY CABLING, BOXES AND RELATED ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION OF VOICE/DATA CABLING SERVICE TO EACH UNIT. REFER TO SPECIFICATIONS.
- 2) COORDINATE WITH OWNER'S LOCAL TELECOMMUNICATIONS COMPANY.

PERMIT REVIEW STAMP

ISSUE HISTORY		
No.	Date	Description
1	11/22/19	SCHEMATIC DESIGN
2	12/06/19	DESIGN DEVELOPMENT
3	02/28/20	PERMIT REVIEW SET

REVISION HISTORY		
No.	Date	Description
2	06/03/20	PERMIT COMMENT RESPONSES

2555 Temple Trail, Winter Park, FL 32789 (407) 629-0595
 www.fuglebergkoch.com BR569

CONSULTANT
SALAS O'BRIEN
Expect a difference!

1801 Quince Orchard, Suite 100
 Gaithersburg, MD 20878
 (410) 381-4000
 CERT. OF AUTH. NO. 0106

DESIGN: A. WILKERSON, P.E. 43167
 CHECKED: L. CARTER, P.E. 03089
 IN CHARGE: J. ORMAN, P.E. 09029
 PROJECT MANAGER: P.E. 70000

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM S. LEWIS, P.E. ON DATE INDICATED IN DIGITAL SIGNATURE USING A DIGITAL SIGNATURE.
 PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

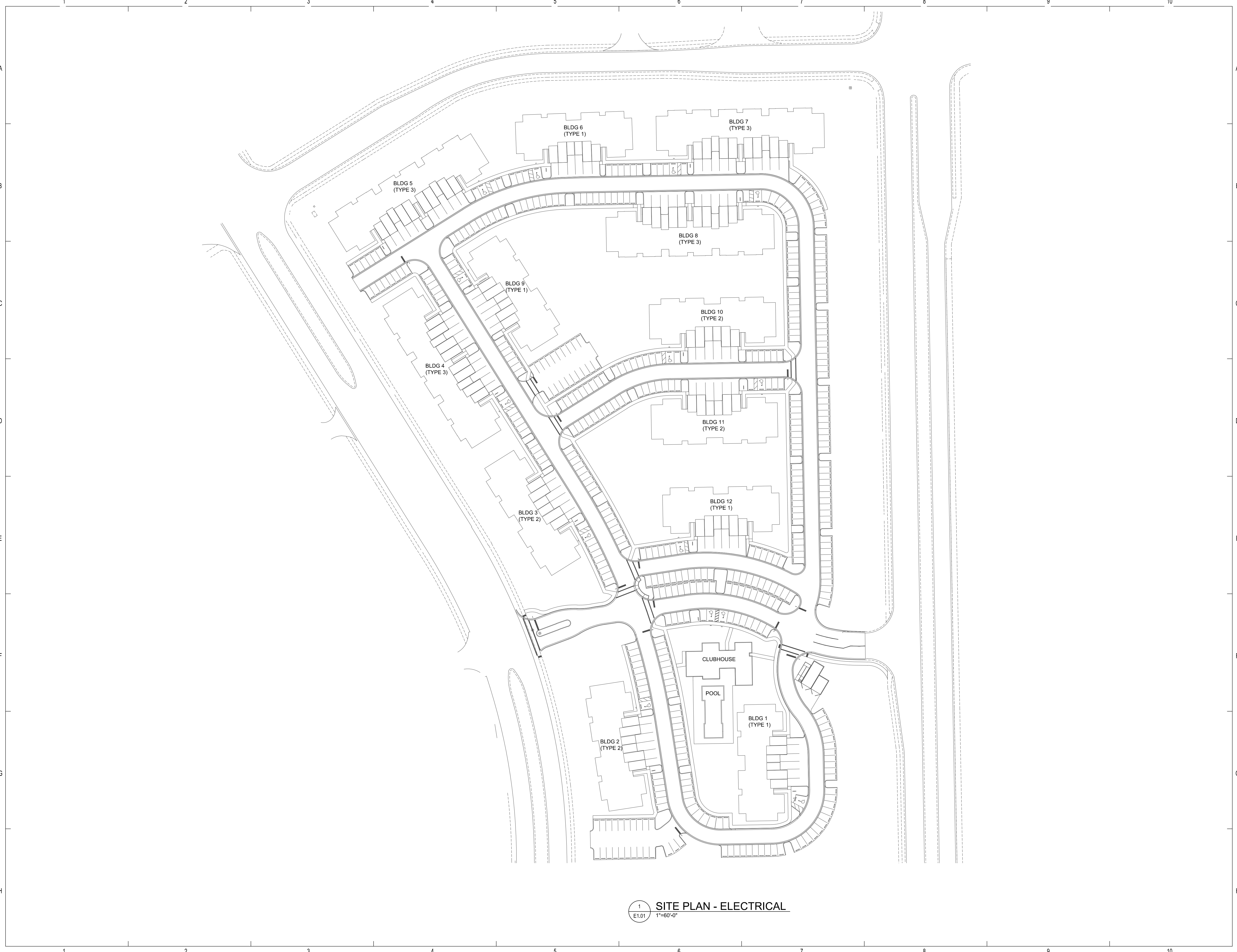
Drawn:	SWC
Checked:	GPM
Approved:	ASL
Date:	09/10/2019
Project #:	5592

THE ROBERT

FT. MYERS, FL

LIGHT FIXT. SCHED. AND GEN. NOTES - ELECTRICAL

E0.02



1 SITE PLAN - ELECTRICAL
E1.01 1"=60'-0"

GENERAL NOTES

1. THIS PLAN PROVIDED FOR REFERENCE ONLY.

PERMIT REVIEW STAMP

ISSUE HISTORY

No.	Date	Description
1	11/22/19	SCHEMATIC DESIGN
2	12/06/19	DESIGN DEVELOPMENT
3	02/28/20	PERMIT REVIEW SET

REVISION HISTORY

No.	Date	Description
2	06/03/20	PERMIT COMMENT RESPONSES



FUGLEBERG KOCH
PLLC

2555 Temple Trail, Winter Park, FL 32789 (407) 629-0595
www.fuglebergkoch.com BR569



CONSULTANT
SALAS O'BRIEN
Expect a difference

3901 Quincewedge Boulevard, Suite 100
Orlando, Florida 32817
(407) 388-6000
CENT. OF AUTH. NO. 6106

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM S. LEVINE, P.E. ON DATE INDICATED IN DIGITAL SIGNATURE USING A DIGITAL SIGNATURE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Drawn:	SWC
Checked:	GPM
Approval:	ASL
Date:	09/10/2019
Project #:	5592

THE ROBERT

FT. MYERS, FL

SITE PLAN - ELECTRICAL

E1.01

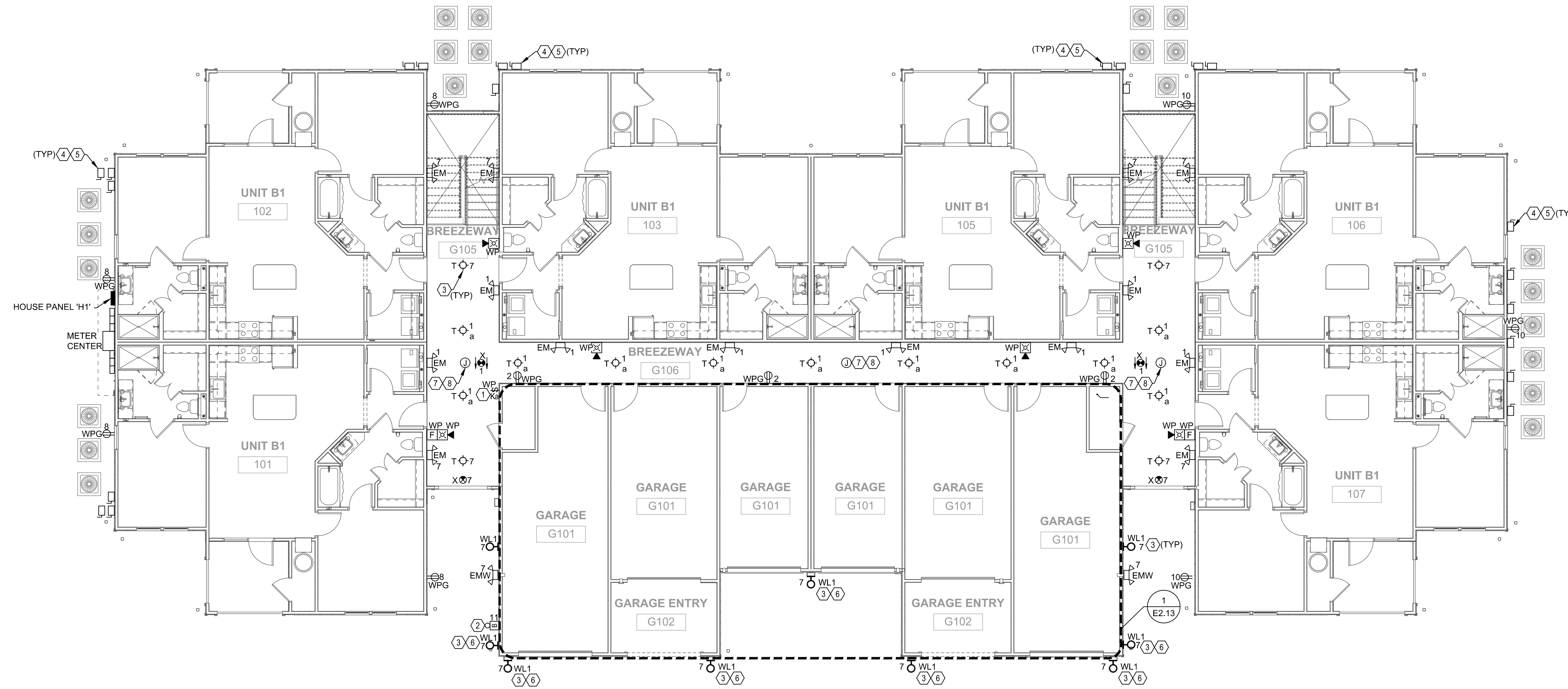
© 2019 These documents and their contents are the property of FUGLEBERG KOCH, PLLC. Any reproduction, revision, or modification of these documents without the expressed written consent of FUGLEBERG KOCH, PLLC is prohibited by law.

REFERENCE NOTES

- ① PROVIDE SINGLE POLE KEY SWITCH FOR CONTROL OF CORRIDOR LIGHTS. COORDINATE LOCATION WITH OWNER PRIOR TO ROUGH-IN.
- ② REFER TO FIRE PROTECTION SHEETS AND CONTRACTOR FOR EXACT LOCATION OF ELECTRICAL BELL PRIOR TO ROUGH-IN.
- ③ CONNECT CIRCUIT #7 VIA PHOTOCELL (OR LIGHTING CONTACTOR IF PROVIDED).
- ④ DISCONNECT SWITCH FOR CONDENSING UNIT SERVING ASSOCIATED UNIT. REFER TO MECHANICAL FLOOR PLANS FOR CONDENSING UNIT DESIGNATIONS AND ROUTE CIRCUIT TO THAT CORRESPONDING UNIT PANEL. REFER TO UNIT PANEL SCHEDULE FOR CIRCUIT NUMBER FOR EACH UNIT. DISCONNECTING MEANS SHALL BE WITHIN 10'-0" OF EQUIPMENT BEING SERVED. LOCATE DISCONNECT SWITCH IN ORDER TO MAINTAIN REQUIRED CLEARANCES PER NEC.
- ⑤ COORDINATE FINAL LOCATIONS OF MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR IN ORDER TO MAINTAIN REQUIRED CLEARANCES PER NEC 110.
- ⑥ REFER TO BUILDING ELEVATIONS ON ARCHITECTURAL PLANS FOR EXACT LOCATION.
- ⑦ PROVIDE 18"x12"x6" DEEP J-BOX IN CEILING SPACE FOR THE BDA SYSTEM DAS ANTENNA, POWER DIVIDER OR COUPLER. REFER TO BDA SYSTEM RISER DIAGRAM ON DRAWING E6.02 FOR CONDUIT/CABLE SIZES.
- ⑧ PROVIDE 18"x18" CEILING RATED ACCESS PANEL.

GENERAL NOTES

1. VERIFY EXACT LOCATION OF ALL MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
2. ALL 120/208V CIRCUITS SHALL BE CONNECTED TO HOUSE PANEL 'H1' (UNLESS NOTED OTHERWISE).
3. REFER TO EQUIPMENT FEEDER SCHEDULE ON SHEET E4.03 FOR ALL MECHANICAL EQUIPMENT CONNECTION REQUIREMENTS.
4. CONNECT ALL EXIT SIGNS AND BATTERY LIGHTS TO LOCAL LIGHTING CIRCUIT AHEAD OF ALL SWITCHES AND CONTROLS.
5. REFER TO TYPICAL UNIT PLANS FOR ALL ELECTRICAL REQUIREMENTS IN UNITS.
6. FURNISH AND INSTALL COMPLETE LIGHTNING PROTECTION SYSTEM PER NFPA 780 AND U.L. REFER TO SPECIFICATIONS.
7. ELECTRICAL CONTRACTOR TO COORDINATE REQUIRED SPACE ON BUILDING EXTERIOR WALL FOR INSTALLATION OF APPROVED METER CENTER/HOUSE PANEL WITH GENERAL CONTRACTOR PRIOR TO CONSTRUCTION.



1 BUILDING TYPE 1 - GROUND LEVEL - ELECTRICAL
E2.01 1/8" = 1'-0"

ISSUE HISTORY		
No.	Date	Description
1	11/22/19	SCHEMATIC DESIGN
2	12/06/19	DESIGN DEVELOPMENT
3	02/28/20	PERMIT REVIEW SET

REVISION HISTORY		
No.	Date	Description

FUGLEBERG KOCH
PLLC
2555 Temple Trail, Winter Park, FL 32789 (407) 629-0395
www.fuglebergkoch.com BR569

CONSULTANT
SALAS O'BRIEN
Expect a difference
3901 Quince Orchard, Suite 100
Gaithersburg, MD 20878
(410) 386-6800
CERT. OF AUTH. NO. 4106

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM S. LEWIS, P.E. ON DATE INDICATED IN DIGITAL SIGNATURE USING A DIGITAL SIGNATURE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

THE ROBERT FT. MYERS, FL	Drawn: SWC
	Checked: GPM
	Approval: ASL
	Date: 09/10/2019
	Project #: 5592

BUILDING TYPE 1 - GROUND LEVEL - ELECTRICAL

E2.01

© 2019 These documents and their contents are the property of FUGLEBERG KOCH, PLLC and are intended only for the specific project noted on these drawings. Any reproduction, revision, or modification of these documents without the expressed written consent of FUGLEBERG KOCH, PLLC is prohibited by law.

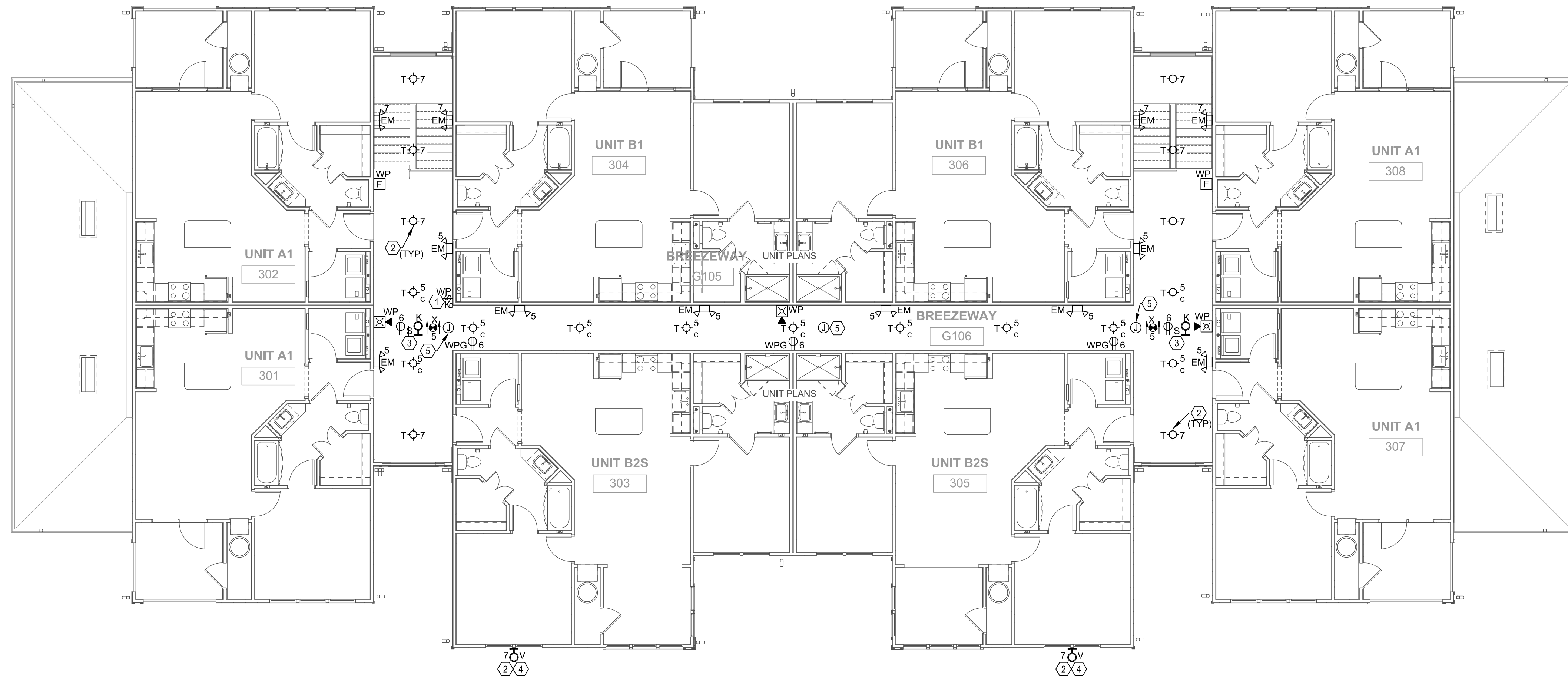
PLOTTED: 6/4/2020 11:34:39 AM

REFERENCE NOTES

- ① PROVIDE SINGLE POLE KEY SWITCH FOR CONTROL OF CORRIDOR LIGHTS. COORDINATE LOCATION WITH OWNER PRIOR TO ROUGH-IN.
- ② CONNECT CIRCUIT #7 VIA PHOTOCELL (OR LIGHTING CONTACTOR IF PROVIDED).
- ③ LIGHT FIXTURE SWITCH AND RECEPTACLE IN ATTIC ADJACENT TO ACCESS. COORDINATE LOCATION PRIOR TO ROUGH-IN.
- ④ REFER TO BUILDING ELEVATIONS ON ARCHITECTURAL PLANS FOR EXACT LOCATION.
- ⑤ PROVIDE 18"x12"x6" DEEP J-BOX IN CEILING SPACE FOR THE BDA SYSTEM DAS ANTENNA, POWER DIVIDER OR COUPLER. REFER TO BDA SYSTEM RISER DIAGRAM ON DRAWING E6.02 FOR CONDUIT/CABLE SIZES.

GENERAL NOTES

1. ALL 120/208V CIRCUITS SHALL BE CONNECTED TO HOUSE PANEL 'H1' (UNLESS NOTED OTHERWISE).
2. CONNECT ALL EXIT SIGNS AND BATTERY LIGHTS TO LOCAL LIGHTING CIRCUIT AHEAD OF ALL SWITCHES AND CONTROLS.
3. REFER TO TYPICAL UNIT PLANS FOR ALL ELECTRICAL REQUIREMENTS IN UNITS.



1 BUILDING TYPE 1 - 3RD LEVEL - ELECTRICAL
E2.03 1/8" = 1'-0"

PERMIT REVIEW STAMP

ISSUE HISTORY

No.	Date	Description
1	11/22/19	SCHEMATIC DESIGN
2	12/06/19	DESIGN DEVELOPMENT
3	02/28/20	PERMIT REVIEW SET

REVISION HISTORY

No.	Date	Description



FUGLEBERG KOCH
PLLC
2555 Temple Trail, Winter Park, FL 32789 (407) 629-0595
www.fuglebergkoch.com BR569

CONSULTANT
SALAS O'BRIEN
Expect a difference
3901 Quince Orchard Boulevard, Suite 100
Gaithersburg, Florida 32817
(407) 388-6800
CENT. OF AUTH. NO. 6106

■ GARY A. WILKERSON, P.E., 43167
■ DAVID L. CHAFFIN, P.E., 52889
■ JEFF A. SPANAN, P.E., 69029
■ ADAM S. LEVINE, P.E., 77019

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM S. LEVINE, P.E. ON DATE INDICATED IN DIGITAL SIGNATURE USING A DIGITAL SIGNATURE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Drawn:	SWC
Checked:	GPM
Approval:	ASL
Date:	09/10/2019
Project #:	5592

THE ROBERT
FT. MYERS, FL

BUILDING TYPE 1 - 3RD LEVEL - ELECTRICAL

E2.03

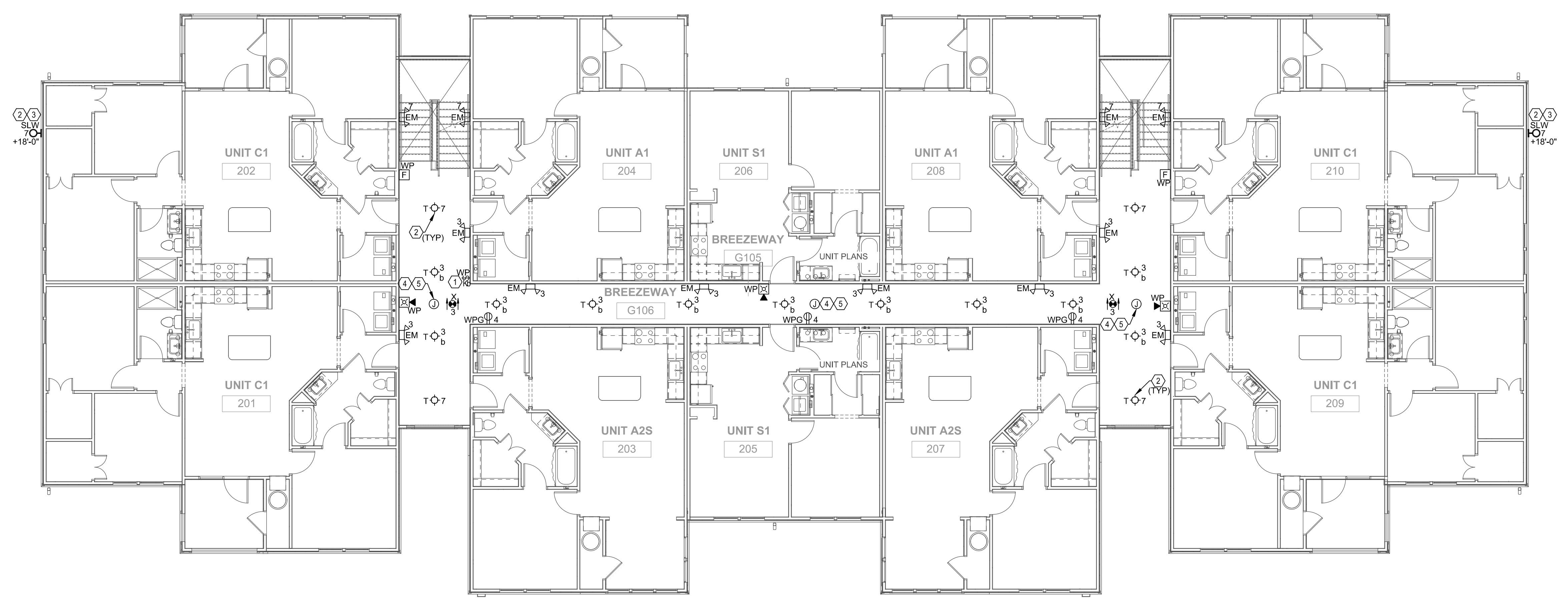
© 2019 These documents and their contents are the property of FUGLEBERG KOCH - A00002101, and are intended only for the specific project noted on these drawings. Any reproduction, revision, or modification of these documents without the expressed written consent of FUGLEBERG KOCH is prohibited by law.

REFERENCE NOTES

- ① PROVIDE SINGLE POLE KEY SWITCH FOR CONTROL OF CORRIDOR LIGHTS. COORDINATE LOCATION WITH OWNER PRIOR TO ROUGH-IN.
- ② CONNECT CIRCUIT #7 VIA PHOTOCELL (OR LIGHTING CONTACTOR IF PROVIDED).
- ③ REFER TO BUILDING ELEVATIONS ON ARCHITECTURAL PLANS FOR EXACT LOCATION.
- ④ PROVIDE 18"x12"x6" DEEP J-BOX IN CEILING SPACE FOR THE BDA SYSTEM DAS ANTENNA POWER DIVIDER OR COUPLER. REFER TO BDA SYSTEM RISER DIAGRAM ON DRAWING E6.02 FOR CONDUIT/CABLE SIZES.
- ⑤ PROVIDE 18"x18" CEILING RATED ACCESS PANEL.

GENERAL NOTES

1. ALL 120/208V CIRCUITS SHALL BE CONNECTED TO HOUSE PANEL 'H2' (UNLESS NOTED OTHERWISE).
2. CONNECT ALL EXIT SIGNS AND BATTERY LIGHTS TO LOCAL LIGHTING CIRCUIT AHEAD OF ALL SWITCHES AND CONTROLS.
3. REFER TO TYPICAL UNIT PLANS FOR ALL ELECTRICAL REQUIREMENTS IN UNITS.



1
E2.06 **BUILDING TYPE 2 - 2ND LEVEL - ELECTRICAL**
1/8" = 1'-0"

PERMIT REVIEW STAMP

ISSUE HISTORY		
No.	Date	Description
1	11/22/19	SCHEMATIC DESIGN
2	12/06/19	DESIGN DEVELOPMENT
3	02/28/20	PERMIT REVIEW SET

REVISION HISTORY		
No.	Date	Description

FUGLEBERG KOCH
PLLC
2555 Temple Trail, Winter Park, FL 32789 (407) 629-0395
www.fuglebergkoch.com BR569

CONSULTANT
SALAS O'BRIEN
Expect a difference
3901 Quindridge Boulevard, Suite 100
Orlando, Florida 32817
(407) 388-6800
CENT. OF AUTH. NO. 4166

■ GARY A. WILKERSON, P.E. 43167
 ■ DAVID L. CHRYSLER, P.E. 53889
 ■ JEFF A. HIRSHMAN, P.E. 69029
 ■ ADAM S. LEVINE, P.E. 77019

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM S. LEVINE, P.E. ON DATE INDICATED IN DIGITAL SIGNATURE USING A DIGITAL SIGNATURE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

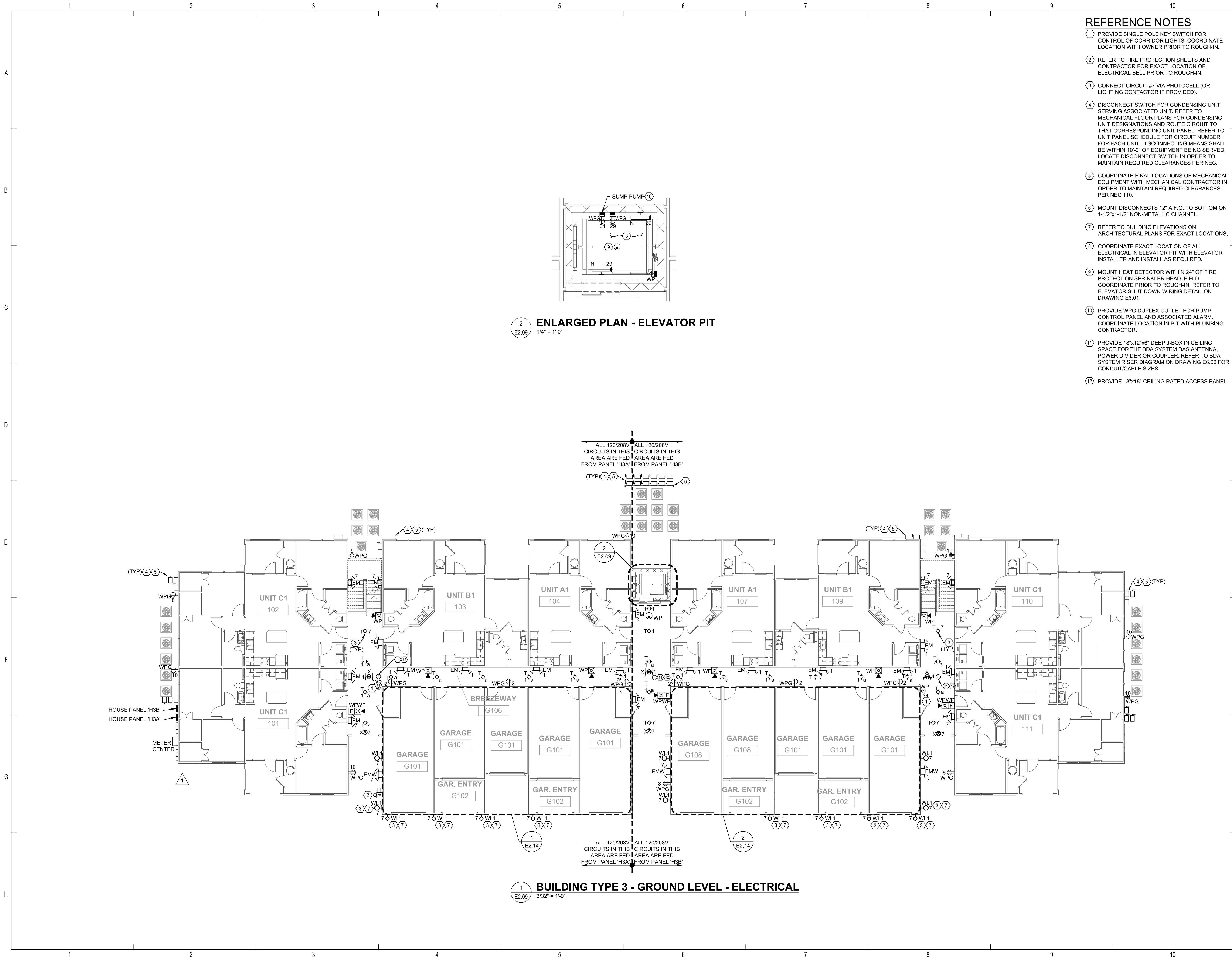
THE ROBERT FT. MYERS, FL	Drawn: SWC
	Checked: GPM
	Approval: ASL
	Date: 09/10/2019
	Project #: 5592

BUILDING TYPE 2 - 2ND LEVEL - ELECTRICAL

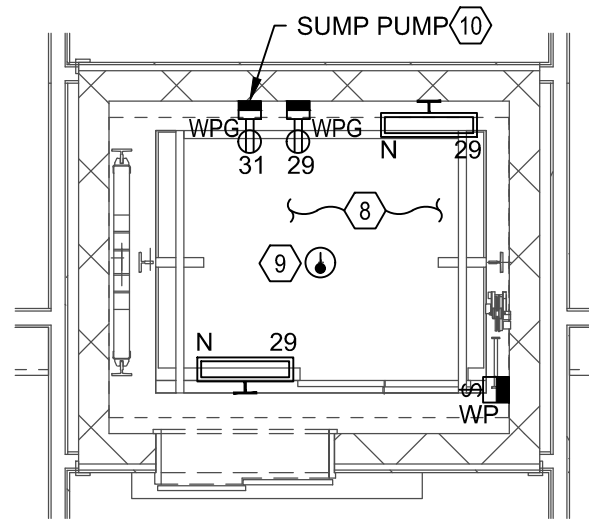
E2.06

© 2019 These documents and their contents are the property of FUGLEBERG KOCH - A00002101, and are issued only for the specific project noted on these drawings. Any reproduction, revision, or modification of these documents without the expressed written consent of FUGLEBERG KOCH is prohibited by law.

PLOTTED: 6/4/2020 11:36:03 AM



2 ENLARGED PLAN - ELEVATOR PIT
 1/4" = 1'-0"



1 BUILDING TYPE 3 - GROUND LEVEL - ELECTRICAL
 3/32" = 1'-0"

REFERENCE NOTES

- 1 PROVIDE SINGLE POLE KEY SWITCH FOR CONTROL OF CORRIDOR LIGHTS. COORDINATE LOCATION WITH OWNER PRIOR TO ROUGH-IN.
- 2 REFER TO FIRE PROTECTION SHEETS AND CONTRACTOR FOR EXACT LOCATION OF ELECTRICAL BELL PRIOR TO ROUGH-IN.
- 3 CONNECT CIRCUIT #7 VIA PHOTOCELL (OR LIGHTING CONTACTOR IF PROVIDED).
- 4 DISCONNECT SWITCH FOR CONDENSING UNIT SERVING ASSOCIATED UNIT. REFER TO MECHANICAL FLOOR PLANS FOR CONDENSING UNIT DESIGNATIONS AND ROUTE CIRCUIT TO THAT CORRESPONDING UNIT PANEL. REFER TO UNIT PANEL SCHEDULE FOR CIRCUIT NUMBER FOR EACH UNIT. DISCONNECTING MEANS SHALL BE WITHIN 10'-0" OF EQUIPMENT BEING SERVED. LOCATE DISCONNECT SWITCH IN ORDER TO MAINTAIN REQUIRED CLEARANCES PER NEC.
- 5 COORDINATE FINAL LOCATIONS OF MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR IN ORDER TO MAINTAIN REQUIRED CLEARANCES PER NEC 110.
- 6 MOUNT DISCONNECTS 12" A.F.G. TO BOTTOM ON 1-1/2"x1-1/2" NON-METALLIC CHANNEL.
- 7 REFER TO BUILDING ELEVATIONS ON ARCHITECTURAL PLANS FOR EXACT LOCATIONS.
- 8 COORDINATE EXACT LOCATION OF ALL ELECTRICAL IN ELEVATOR PIT WITH ELEVATOR INSTALLER AND INSTALL AS REQUIRED.
- 9 MOUNT HEAT DETECTOR WITHIN 24" OF FIRE PROTECTION SPRINKLER HEAD. FIELD COORDINATE PRIOR TO ROUGH-IN. REFER TO ELEVATOR SHUT DOWN WIRING DETAIL ON DRAWING E6.01.
- 10 PROVIDE WPG DUPLEX OUTLET FOR PUMP CONTROL PANEL AND ASSOCIATED ALARM. COORDINATE LOCATION IN PIT WITH PLUMBING CONTRACTOR.
- 11 PROVIDE 18"x12"x6" DEEP J-BOX IN CEILING SPACE FOR THE BDA SYSTEM DAS ANTENNA, POWER DIVIDER OR COUPLER. REFER TO BDA SYSTEM RISER DIAGRAM ON DRAWING E6.02 FOR CONDUIT/CABLE SIZES.
- 12 PROVIDE 18"x18" CEILING RATED ACCESS PANEL.

GENERAL NOTES

1. VERIFY EXACT LOCATION OF ALL MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
2. ALL 120/208V CIRCUITS SHALL BE CONNECTED TO RESPECTIVE HOUSE PANEL AS NOTED ON PLANS (UNLESS NOTED OTHERWISE).
3. REFER TO EQUIPMENT FEEDER SCHEDULE ON SHEET E4.03 FOR ALL MECHANICAL EQUIPMENT CONNECTION REQUIREMENTS.
4. CONNECT ALL EXIT SIGNS AND BATTERY LIGHTS TO LOCAL LIGHTING CIRCUIT AHEAD OF ALL SWITCHES AND CONTROLS.
5. REFER TO TYPICAL UNIT PLANS FOR ALL ELECTRICAL REQUIREMENTS IN UNITS.
6. FURNISH AND INSTALL COMPLETE LIGHTNING PROTECTION SYSTEM PER NFPA 780 AND U.L. REFER TO SPECIFICATIONS.
7. ELECTRICAL CONTRACTOR TO COORDINATE REQUIRED SPACE ON BUILDING EXTERIOR WALL FOR INSTALLATION OF APPROVED METER CENTER/HOUSE PANEL(S) WITH GENERAL CONTRACTOR PRIOR TO CONSTRUCTION.

PERMIT REVIEW STAMP

ISSUE HISTORY

No.	Date	Description
1	11/22/19	SCHEMATIC DESIGN
2	12/06/19	DESIGN DEVELOPMENT
3	02/28/20	PERMIT REVIEW SET

REVISION HISTORY

No.	Date	Description
1	05/06/20	PERMIT COMMENT RESPONSES

FUGLEBERG KOCH
 PLLC
 2555 Temple Trail, Winter Park, FL 32789 (407) 629-0395
 www.fuglebergkoch.com BR569

CONSULTANT
SALAS O'BRIEN
 "Expect a difference!"
 3901 Quince Orchard Boulevard, Suite 100
 Gaithersburg, Florida 32817
 (410) 381-6200
 CERT. OF AUTH. NO. 0106

DESIGNED BY: A. WILKINSON, P.E. 43167
 CHECKED BY: S. CHERRY, P.E. 53889
 IN CHARGE: J. SPURMAN, P.E. 69629
 PROJECT MANAGER: J. LEWIS, P.E. 77050

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM S. LEWIS, P.E. ON DATE INDICATED IN DIGITAL SIGNATURE USING A DIGITAL SIGNATURE.
 PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

THE ROBERT
 FT. MYERS, FL

Drawn:	SWC
Checked:	GPM
Approval:	ASL
Date:	09/10/2019
Project #:	5592

BUILDING TYPE 3 - GROUND LEVEL - ELECTRICAL

E2.09

© 2019 These documents and their contents are the property of FUGLEBERG KOCH, and are intended only for the specific project noted on these drawings. Any reproduction, revision, or modification of these documents without the expressed written consent of FUGLEBERG KOCH is prohibited by law.

REFERENCE NOTES

- ① PROVIDE SINGLE POLE KEY SWITCH FOR CONTROL OF CORRIDOR LIGHTS. COORDINATE LOCATION WITH OWNER PRIOR TO ROUGH-IN.
- ② CONNECT CIRCUIT #7 VIA PHOTOCELL (OR LIGHTING CONTACTOR IF PROVIDED).
- ③ REFER TO BUILDING ELEVATIONS ON ARCHITECTURAL PLANS FOR EXACT LOCATION.
- ④ PROVIDE 18"x12"x6" DEEP J-BOX IN CEILING SPACE FOR THE BDA SYSTEM DAS ANTENNA, POWER DIVIDER OR COUPLER. REFER TO BDA SYSTEM RISER DIAGRAM ON DRAWING E6.02 FOR CONDUIT/CABLE SIZES.
- ⑤ PROVIDE 18"x18" CEILING RATED ACCESS PANEL.

GENERAL NOTES

1. VERIFY EXACT LOCATION OF ALL MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
2. ALL 120/208V CIRCUITS SHALL BE CONNECTED TO RESPECTIVE HOUSE PANEL AS NOTED ON PLANS (UNLESS NOTED OTHERWISE).
3. REFER TO EQUIPMENT FEEDER SCHEDULE ON SHEET E4.03 FOR ALL MECHANICAL EQUIPMENT CONNECTION REQUIREMENTS.
4. CONNECT ALL EXIT SIGNS AND BATTERY LIGHTS TO LOCAL LIGHTING CIRCUIT AHEAD OF ALL SWITCHES AND CONTROLS.
5. REFER TO TYPICAL UNIT PLANS FOR ALL ELECTRICAL REQUIREMENTS IN UNITS.

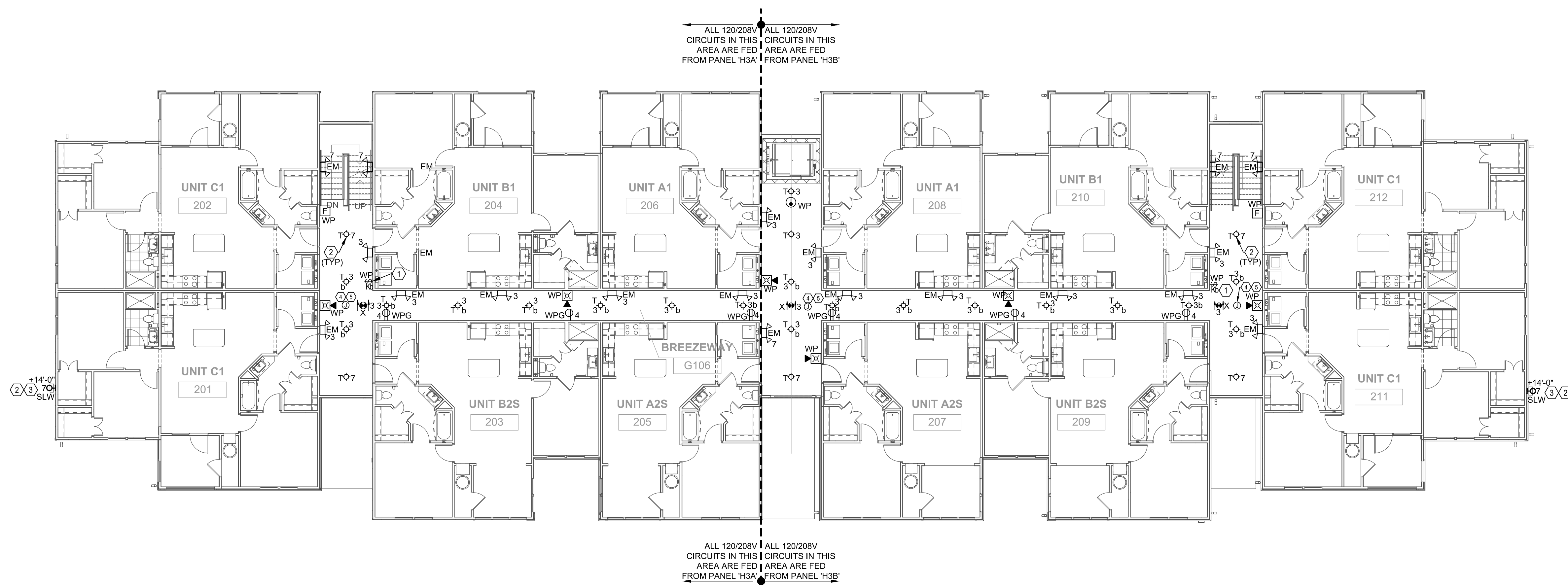
PERMIT REVIEW STAMP

ISSUE HISTORY

No.	Date	Description
1	11/22/19	SCHEMATIC DESIGN
2	12/06/19	DESIGN DEVELOPMENT
3	02/28/20	PERMIT REVIEW SET

REVISION HISTORY

No.	Date	Description



1 BUILDING TYPE 3 - 2ND LEVEL - ELECTRICAL
E2.10 3/32" = 1'-0"

FUGLEBERG KOCH PLLC
2555 Temple Trail, Winter Park, FL 32789 (407) 629-0595
www.fuglebergkoch.com BR569

CONSULTANT
SALAS O'BRIEN
Expect a difference!
3901 Quince Orchard Boulevard, Suite 100
Orlando, Florida 32817
(407) 388-4800
CERT. OF AUTH. NO. 6106

DESIGNED BY: ADAM S. LEVINE, P.E. 43167
CHECKED BY: GUY A. WILKINSON, P.E. 50889
DRAWN BY: GUY A. WILKINSON, P.E. 50889
SCALE: AS SHOWN

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM S. LEVINE, P.E. ON DATE INDICATED IN DIGITAL SIGNATURE USING A DIGITAL SIGNATURE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Drawn: SWC
Checked: GPM
Approval: ASL
Date: 09/10/2019
Project #: 5592

THE ROBERT
FT. MYERS, FL

BUILDING TYPE 3 - 2ND LEVEL - ELECTRICAL

E2.10

© 2019 These documents and their contents are the property of FUGLEBERG KOCH, and are intended only for the specific project noted on these drawings. Any reproduction, revision, or modification of these documents without the expressed written consent of FUGLEBERG KOCH is prohibited by law.

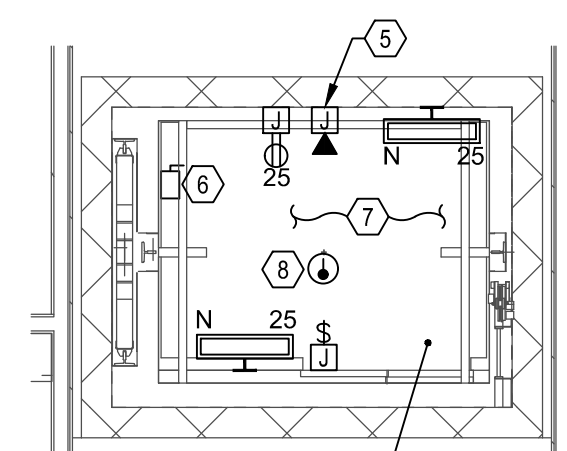
PLOTTED: 6/4/2020 11:37:13 AM

REFERENCE NOTES

- ① PROVIDE SINGLE POLE KEY SWITCH FOR CONTROL OF CORRIDOR LIGHTS. COORDINATE LOCATION WITH OWNER PRIOR TO ROUGH-IN.
- ② CONNECT CIRCUIT #7 VIA PHOTOCELL (OR LIGHTING CONTACTOR IF PROVIDED).
- ③ LIGHT FIXTURE SWITCH AND RECEPTACLE IN ATTIC ADJACENT TO ACCESS. COORDINATE LOCATION PRIOR TO ROUGH-IN.
- ④ REFER TO BUILDING ELEVATIONS ON ARCHITECTURAL PLANS FOR EXACT LOCATION.
- ⑤ PROVIDE TELEPHONE LINE TO ELEVATOR EQUIPMENT.
- ⑥ PROVIDE 3P, 60A, HD, NEMA 1, 250V, LOCKABLE NF DISCONNECT SWITCH WITH NONC AUXILIARY CONTACTS (FED FROM MAIN ELEVATOR DISCONNECT SWITCH IN 1ST FLOOR CLOSET ADJACENT TO GARAGES - SEE DRAWING E2.14). CONNECT LOAD SIDE TO ELEVATOR EQUIPMENT IN HOISTWAY.
- ⑦ COORDINATE ALL WORK IN HOISTWAY WITH ELEVATOR INSTALLER AND LOCATE ALL LIGHTS, RECEPTACLES, DISC. SWITCHES, ETC. AS REQUIRED.
- ⑧ MOUNT HEAT DETECTOR WITHIN 24" OF FIRE PROT. SPRINKLER HEAD. FIELD COORDINATE PRIOR TO ROUGH-IN.
- ⑨ PROVIDE FIRE ALARM MONITORING OF ELEVATOR SHUNT TRIP CONTROL CIRCUIT AND CONTROL FOR PRIMARY ELEVATOR RECALL, SECONDARY ELEVATOR RECALL, ELEVATOR POWER SHUNT TRIP AND FIREFIGHTERS HAT LAMP.
- ⑩ PROVIDE 18"x12"x6" DEEP J-BOX IN CEILING SPACE FOR THE BDA SYSTEM DAS ANTENNA, POWER DIVIDER OR COUPLER. REFER TO BDA SYSTEM RISER DIAGRAM ON DRAWING E6.02 FOR CONDUIT/CABLE SIZES.

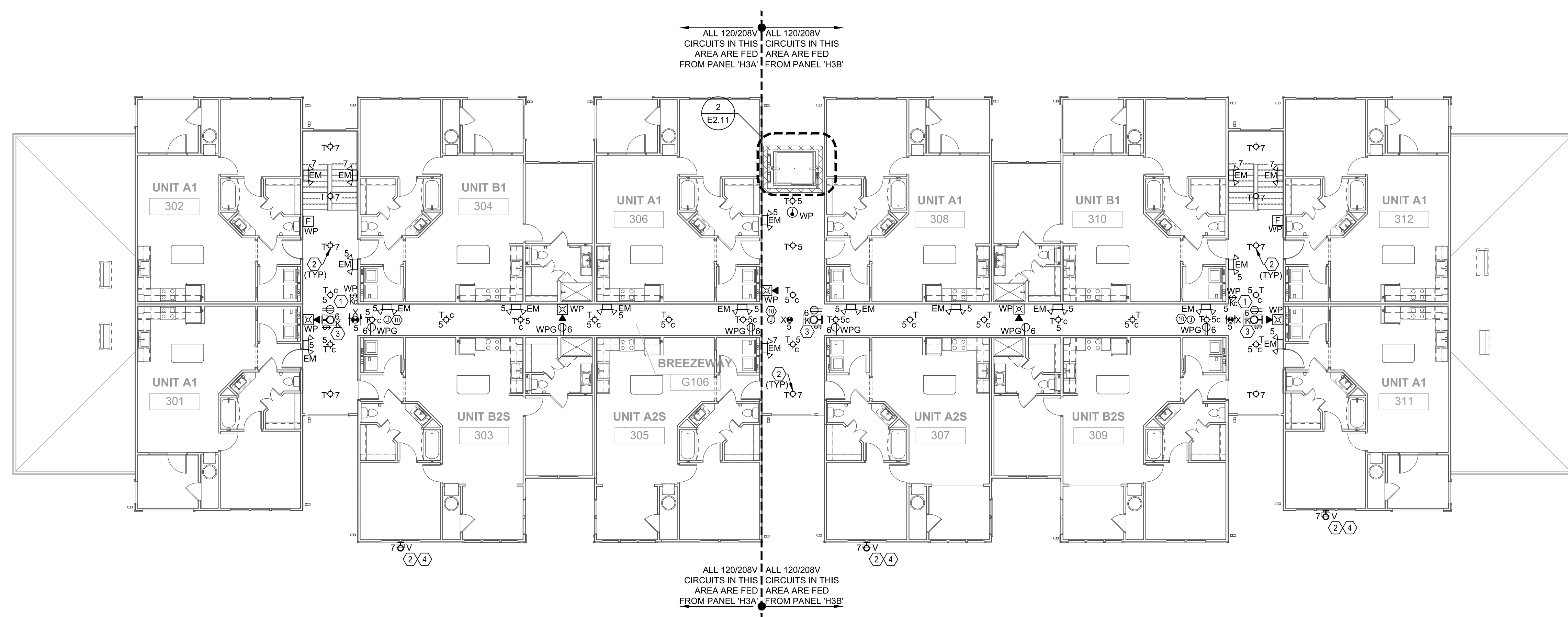
GENERAL NOTES

1. ALL 120/208V CIRCUITS SHALL BE CONNECTED TO RESPECTIVE HOUSE PANEL AS NOTED ON PLANS (UNLESS NOTED OTHERWISE).
2. REFER TO EQUIPMENT FEEDER SCHEDULE ON SHEET E4.03 FOR ALL EQUIPMENT CONNECTION REQUIREMENTS.
3. CONNECT ALL EXIT SIGNS AND BATTERY LIGHTS TO LOCAL LIGHTING CIRCUIT AHEAD OF ALL SWITCHES AND CONTROLS.
4. REFER TO TYPICAL UNIT PLANS FOR ALL ELECTRICAL REQUIREMENTS IN UNITS.



- ESR AOM
- ES AOM
- EPR AOM
- EM AIM
- EHL AOM
- AOM

2 ENLARGED PLAN - ELEVATOR HOISTWAY
1/4" = 1'-0"



ALL 120/208V CIRCUITS IN THIS AREA ARE FED FROM PANEL 'H3A'

ALL 120/208V CIRCUITS IN THIS AREA ARE FED FROM PANEL 'H3B'

1 BUILDING TYPE 3 - 3RD LEVEL - ELECTRICAL
3/32" = 1'-0"

ISSUE HISTORY

No.	Date	Description
1	11/22/19	SCHEMATIC DESIGN
2	12/06/19	DESIGN DEVELOPMENT
3	02/28/20	PERMIT REVIEW SET

REVISION HISTORY

No.	Date	Description

FUGLEBERG KOCH
PLLC
2555 Temple Trail, Winter Park, FL 32789 (407) 629-0595
www.fuglebergkoch.com BR569

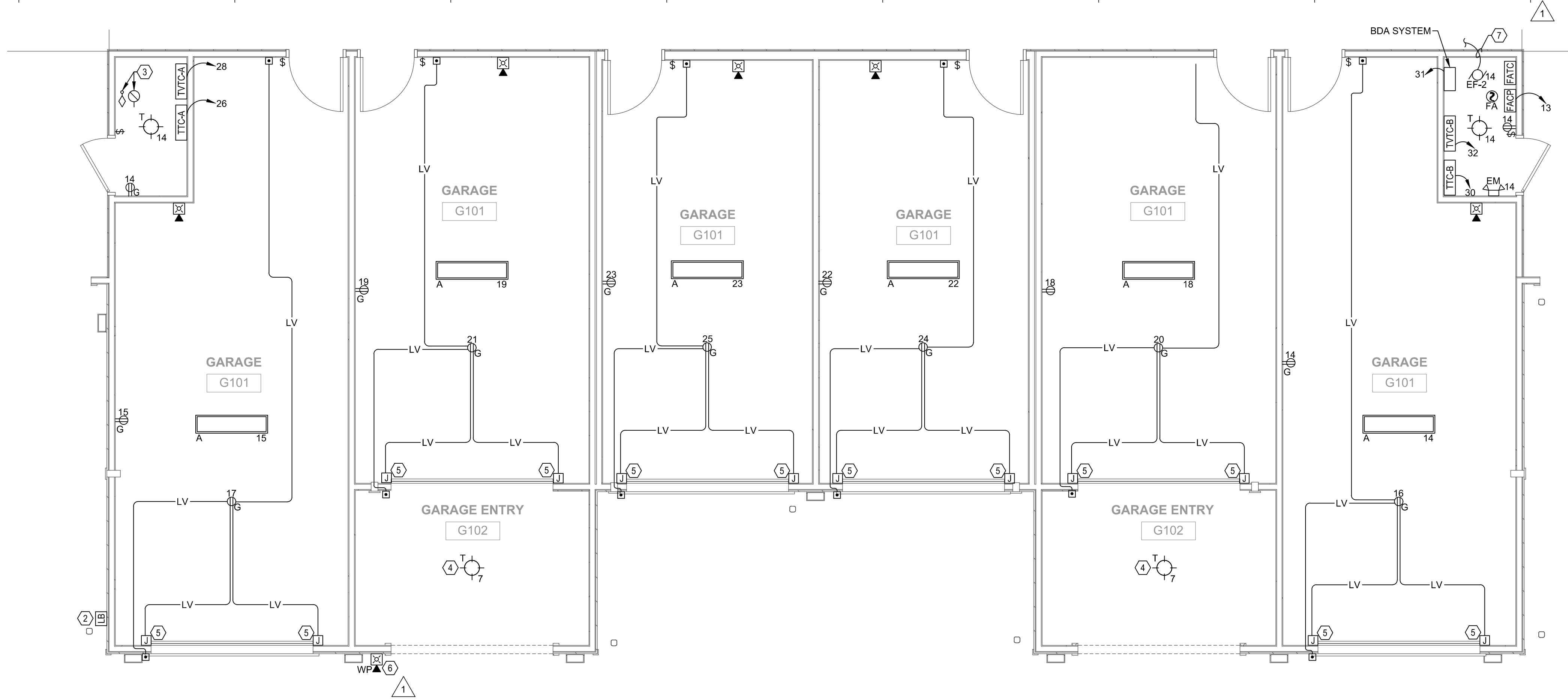
CONSULTANT
SALAS O'BRIEN
Expect a difference!
3001 Gandybridge Boulevard, Suite 100
Orlando, Florida 32817
(407) 385-4800
CENT. OF ARCH. NO. 4106

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM S. LEVINE, PE ON DATE INDICATED IN DIGITAL SIGNATURE USING A DIGITAL SIGNATURE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

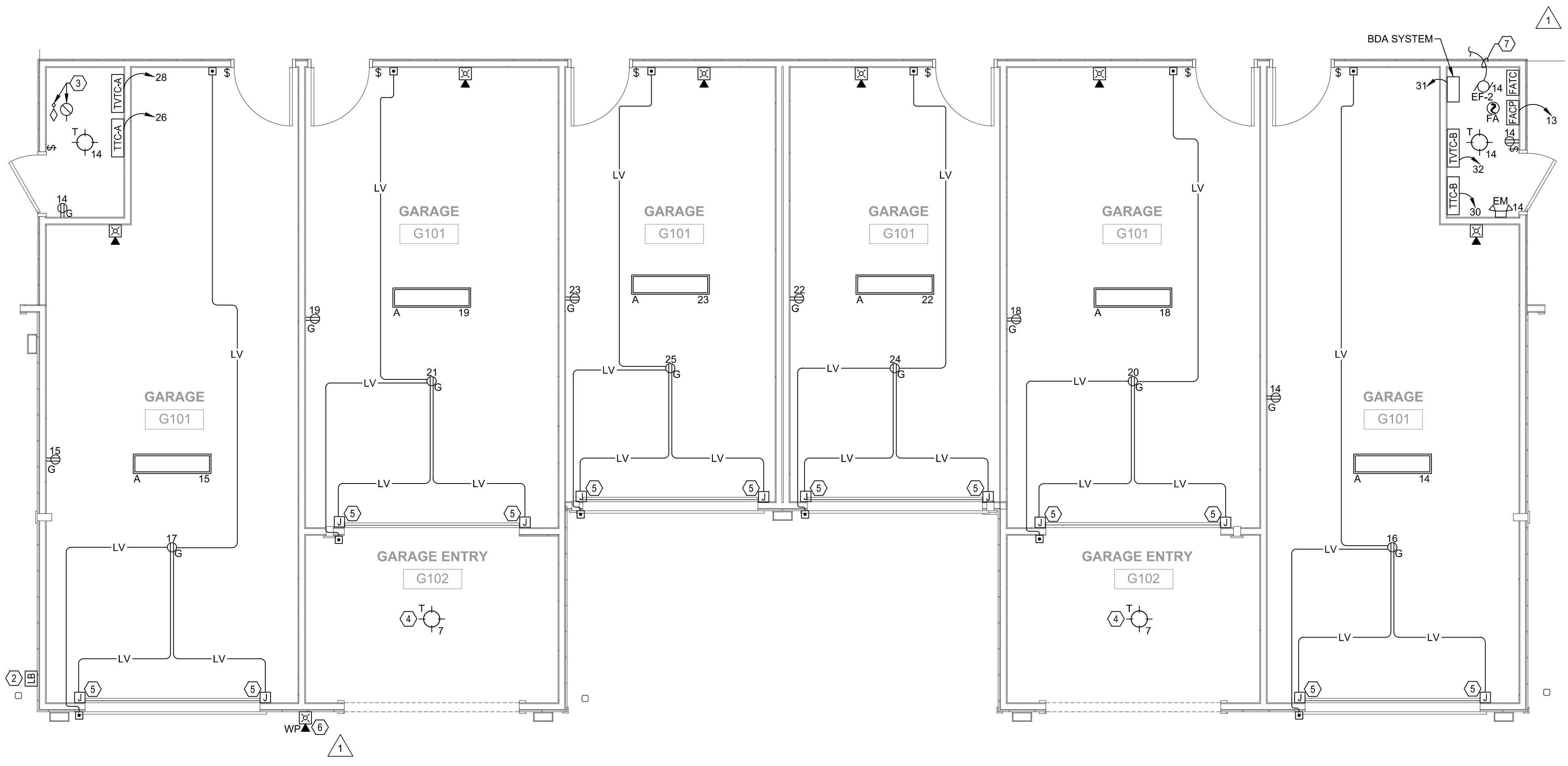
THE ROBERT FT. MYERS, FL	Drawn: SWC Checked: GPM Approval: ASL Date: 09/10/2019 Project #: 5592
BUILDING TYPE 3 - 3RD LEVEL - ELECTRICAL	
E2.11	

© 2019 These documents and their contents are the property of FUGLEBERG KOCH, and are intended only for the specific project noted on these drawings. Any reproduction, revision, or modification of these documents without the expressed written consent of Fugleberg Koch is prohibited by law.

PLOTTED: 6/4/2020 11:37:37 AM



2 BUILDING TYPE 2 - GARAGE - ELECTRICAL
 E2.13 1/4" = 1'-0"



1 BUILDING TYPE 1 - GARAGE - ELECTRICAL
 E2.13 1/4" = 1'-0"

REFERENCE NOTES

- 1 REFER TO TELEPHONE AND CATV RISER DIAGRAMS.
- 2 PROVIDE KNOX BOX AND CONNECT TO FIRE ALARM SYSTEM AS REQUIRED. EXACT MOUNTING HEIGHT TO BE DETERMINED BY THE BUILDING AHJ AND FIRE DEPARTMENT.
- 3 PROVIDE ADDRESSABLE MONITORING MODULE (FLOW SWITCH, TAMPER SWITCH AND BACK FLOW PREVENTER TAMPER SWITCHES ON SITE). PROVIDE SURGE SUPPRESSION TO SIGNALING LINE CIRCUIT. FED FROM FIRE ALARM CONTROL PANEL. PROVIDE SURGE SUPPRESSION TO CIRCUITS COMING FROM FLOW SWITCHES AND TAMPER SWITCH. ALL CONDUIT CONNECTIONS TO FIRE PROTECTION SWITCHES SHALL BE WITH U.L. LISTED LIQUID TIGHT FLEXIBLE CONDUIT.
- 4 CONNECT CIRCUIT #7 VIA PHOTOCELL CONTROLLED UNIT.
- 5 J-BOX FOR LOW VOLTAGE CONNECTION TO GARAGE DOOR OPENER SAFETY PHOTO-EYE AT BOTTOM OF GARAGE DOOR JAMB.
- 6 COORDINATE LOCATION WITH LOCAL FIRE MARSHAL AND AHJ.
- 7 CONNECT VIA LINE VOLTAGE THERMOSTAT FURNISHED BY MECHANICAL CONTRACTOR; INSTALLED BY ELECTRICAL CONTRACTOR.

GENERAL NOTES

1. REFER TO SYMBOL LEGEND ON DRAWING E0.01
2. REFER TO GENERAL NOTES ON DRAWING E0.02.
3. REFER TO SPECIFICATIONS.
4. VERIFY EXACT LOCATION OF ALL MECHANICAL EQUIPMENT WITH RESPECTIVE MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
5. ALL 120/240V. CIRCUITS SHALL BE CONNECTED TO RESPECTIVE BUILDING HOUSE PANEL (UNLESS NOTED OTHERWISE).
6. REFER TO EQUIPMENT FEEDER SCHEDULE ON SHEET E4.03 FOR ALL MECHANICAL EQUIPMENT CONNECTION REQUIREMENTS.
7. CONNECT ALL EXIT SIGNS AND BATTERY LIGHTS TO LOCAL LIGHTING CIRCUIT AHEAD OF ALL SWITCHES AND CONTROLS.
8. ALL WIRING SHALL BE #10 THWN CU. MINIMUM.

PERMIT REVIEW STAMP

ISSUE HISTORY

No.	Date	Description
1	11/22/19	SCHEMATIC DESIGN
2	12/06/19	DESIGN DEVELOPMENT
3	02/28/20	PERMIT REVIEW SET

REVISION HISTORY

No.	Date	Description
1	05/06/20	PERMIT COMMENT RESPONSES



FUGLEBERG KOCH
 PLLC
 2555 Temple Trail, Winter Park, FL 32789 (407) 629-0595
 www.fuglebergkoch.com BR569

CONSULTANT
SALAS O'BRIEN
Expect a difference
 3901 Quince Orchard, Suite 100
 Gaithersburg, Florida 32817
 (407) 388-6800
 CERT. OF AUTH. NO. 6106

DESIGNED BY: ADAM S. LEVINE, P.E. 43167
 CHECKED BY: JEFF A. SPURMAN, P.E. 50829
 IN CHARGE: ADAM S. LEVINE, P.E. 70020

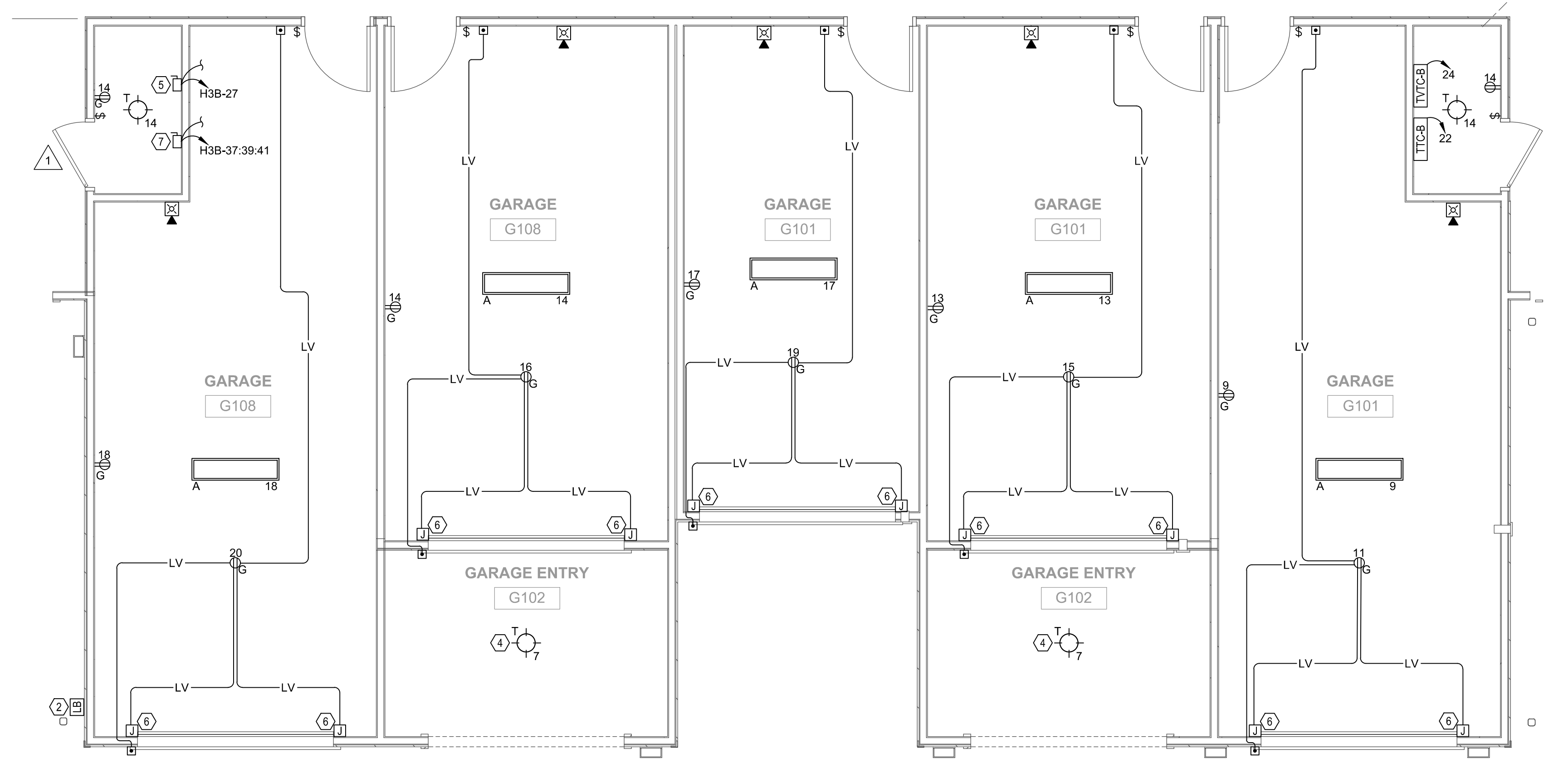
THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM S. LEVINE, P.E. ON DATE INDICATED IN DIGITAL SIGNATURE USING A DIGITAL SIGNATURE.
 PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Drawn:	SWC
Checked:	GPAM
Approval:	ASL
Date:	09/10/2019
Project #:	5592

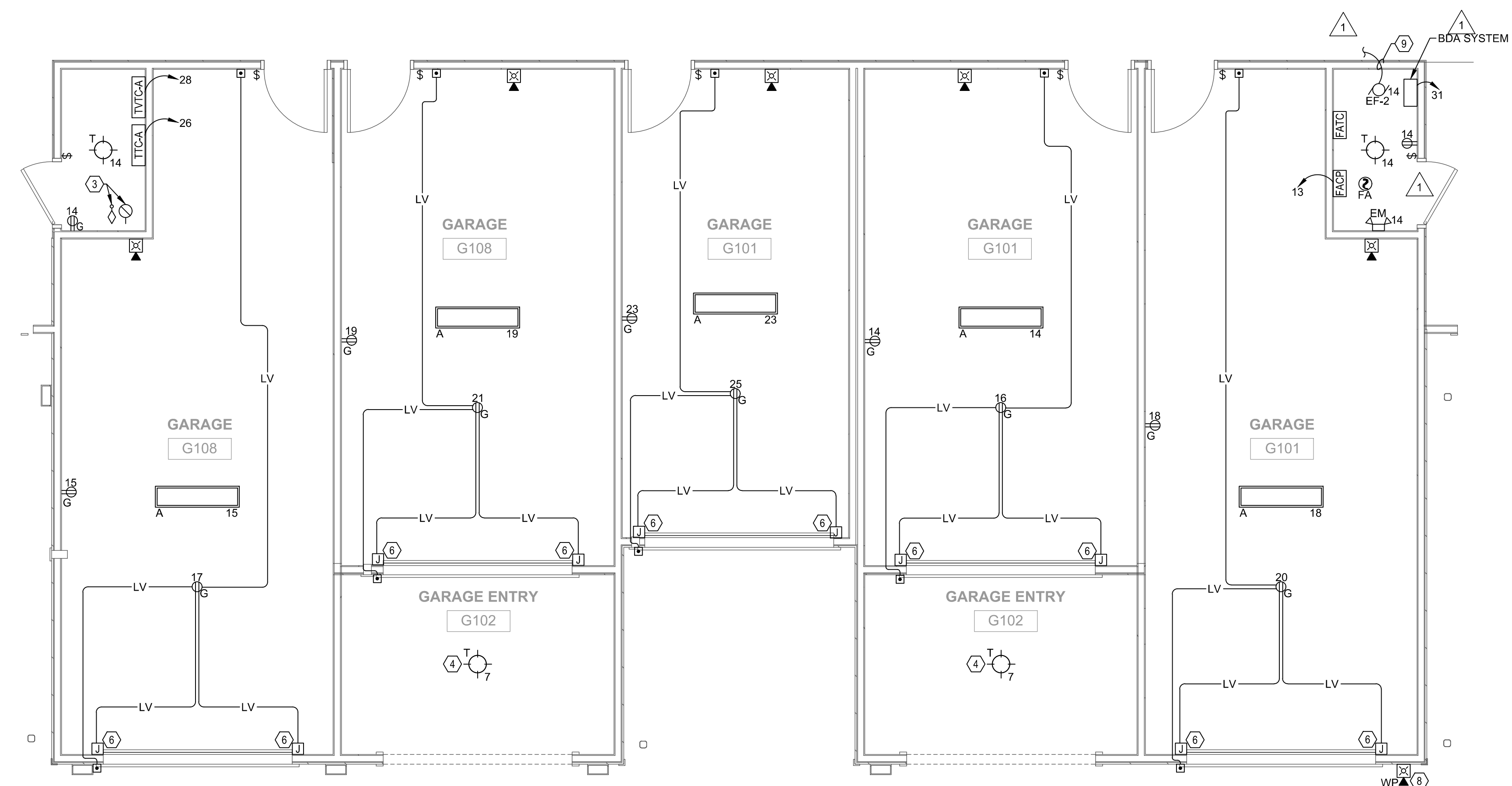
THE ROBERT
 FT. MYERS, FL

ENLARGED GARAGE PLANS - ELECTRICAL

E2.13



2 BUILDING TYPE 3 - GARAGE - ELECTRICAL
E2.14 1/4" = 1'-0"



1 BUILDING TYPE 3 - GARAGE - ELECTRICAL
E2.14 1/4" = 1'-0"

REFERENCE NOTES

- 1 REFER TO TELEPHONE AND CATV RISER DIAGRAMS.
- 2 PROVIDE KNOX BOX AND CONNECT TO FIRE ALARM SYSTEM AS REQUIRED. EXACT MOUNTING HEIGHT TO BE DETERMINED BY THE BUILDING AHJ AND FIRE DEPARTMENT.
- 3 PROVIDE ADDRESSABLE MONITORING MODULE (FLOW SWITCH, TAMPER SWITCH AND BACK FLOW PREVENTER TAMPER SWITCHES ON SITE). PROVIDE SURGE SUPPRESSION TO SIGNALING LINE CIRCUIT. FED FROM FIRE ALARM CONTROL PANEL. PROVIDE SURGE SUPPRESSION TO CIRCUITS COMING FROM FLOW SWITCHES AND TAMPER SWITCH. ALL CONDUIT CONNECTIONS TO FIRE PROTECTION SWITCHES SHALL BE WITH U.L. LISTED LIQUID TIGHT FLEXIBLE CONDUIT.
- 4 CONNECT CIRCUIT #7 VIA PHOTOCELL CONTROLLED UNIT.
- 5 PROVIDE 30A, 120V LOCKABLE DISCONNECT SWITCH WITH REJECTION CLIPS AND 20A RK5 FUSE. LABEL "ELEVATOR CAB LIGHTS". CONNECT TO SECONDARY NON-FUSED DISCONNECT SWITCH IN HOISTWAY AT LEVEL 3. (2) #12 AND #12 GND. IN 1/2" C.
- 6 J-BOX FOR LOW VOLTAGE CONNECTION TO GARAGE DOOR OPENER SAFETY PHOTO-EYE AT BOTTOM OF GARAGE DOOR JAMB.
- 7 PROVIDE LOCKABLE DISCONNECT SWITCH WITH 20A AUXILIARY CONTACTS AND TYPE DFJ FUSES AS REQUIRED BY ELEVATOR INSTALLER. CONNECT TO ELEVATOR MOTOR SECONDARY, NON-FUSED DISCONNECT SWITCH IN HOISTWAY AT LEVEL 3.
- 8 COORDINATE LOCATION WITH LOCAL FIRE MARSHAL AND AHJ.
- 9 CONNECT VIA LINE VOLTAGE THERMOSTAT FURNISHED BY MECHANICAL CONTRACTOR. INSTALLED BY ELECTRICAL CONTRACTOR.

GENERAL NOTES

1. REFER TO SYMBOL LEGEND ON DRAWING E0.01
2. REFER TO GENERAL NOTES ON DRAWING E0.02.
3. REFER TO SPECIFICATIONS.
4. VERIFY EXACT LOCATION OF ALL MECHANICAL EQUIPMENT WITH RESPECTIVE MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
5. ALL 120/240V. CIRCUITS SHALL BE CONNECTED TO RESPECTIVE BUILDING HOUSE PANEL (UNLESS NOTED OTHERWISE).
6. REFER TO EQUIPMENT FEEDER SCHEDULE ON SHEET E4.03 FOR ALL MECHANICAL EQUIPMENT CONNECTION REQUIREMENTS.
7. CONNECT ALL EXIT SIGNS AND BATTERY LIGHTS TO LOCAL LIGHTING CIRCUIT AHEAD OF ALL SWITCHES AND CONTROLS.
8. ALL WIRING SHALL BE #10 THWN CU. MINIMUM.

PERMIT REVIEW STAMP

ISSUE HISTORY

No.	Date	Description
1	11/22/19	SCHEMATIC DESIGN
2	12/06/19	DESIGN DEVELOPMENT
3	02/28/20	PERMIT REVIEW SET

REVISION HISTORY

No.	Date	Description
1	05/06/20	PERMIT COMMENT RESPONSES

FUGLEBERG KOCH
PLLC
2555 Temple Trail, Winter Park, FL 32789 (407) 629-0395
www.fuglebergkoch.com BR569

CONSULTANT
SALAS O'BRIEN
Expect a difference
3901 Quince Orchard, Suite 100
Gaithersburg, MD 20878
(410) 386-6000
CENT. OF ARCH. NO. 6106

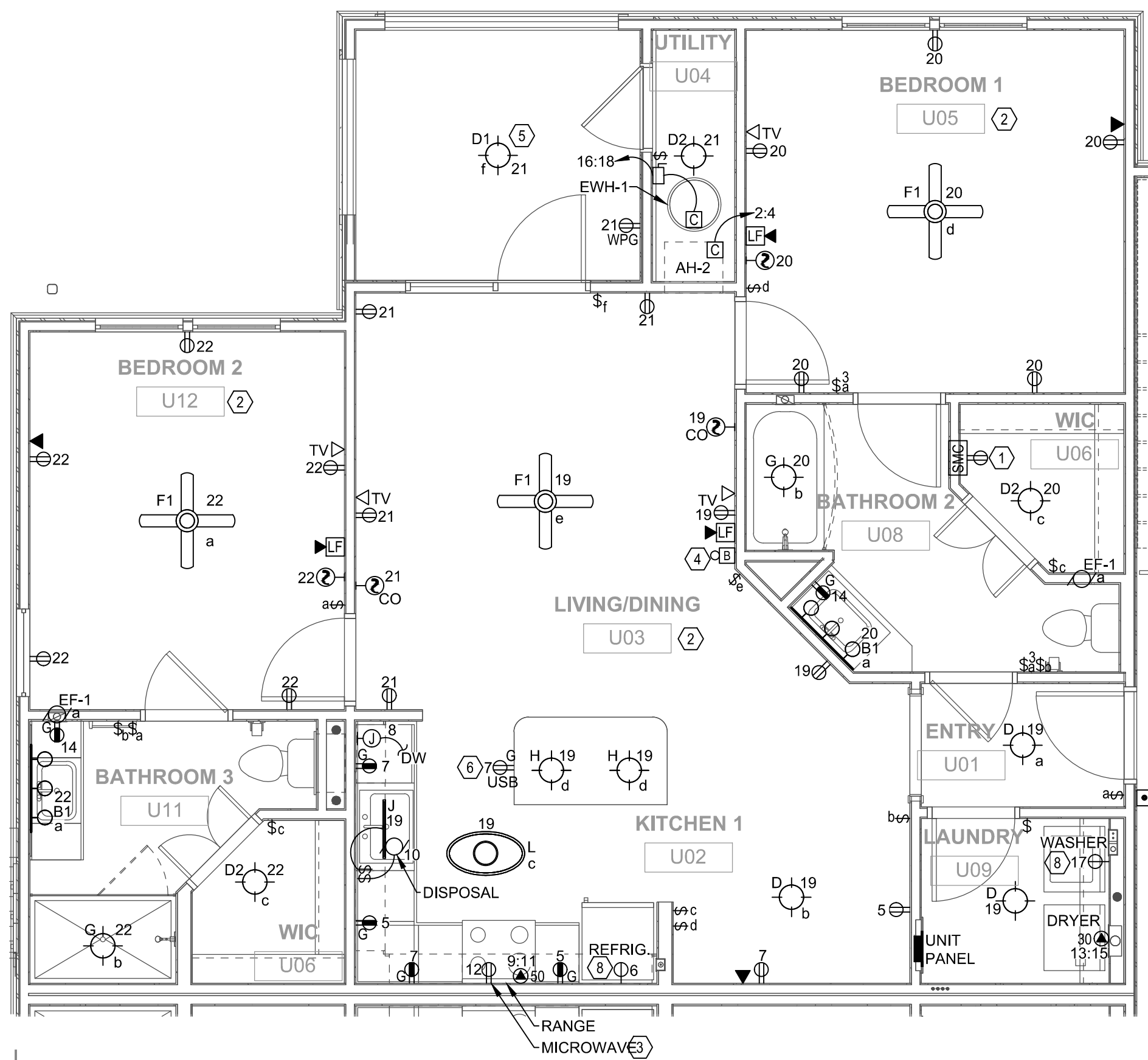
THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM S. LEVINE, P.E. ON DATE INDICATED IN DIGITAL SIGNATURE USING A DIGITAL SIGNATURE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Drawn:	SWC
Checked:	GPM
Approval:	ASL
Date:	09/10/2019
Project #:	5592

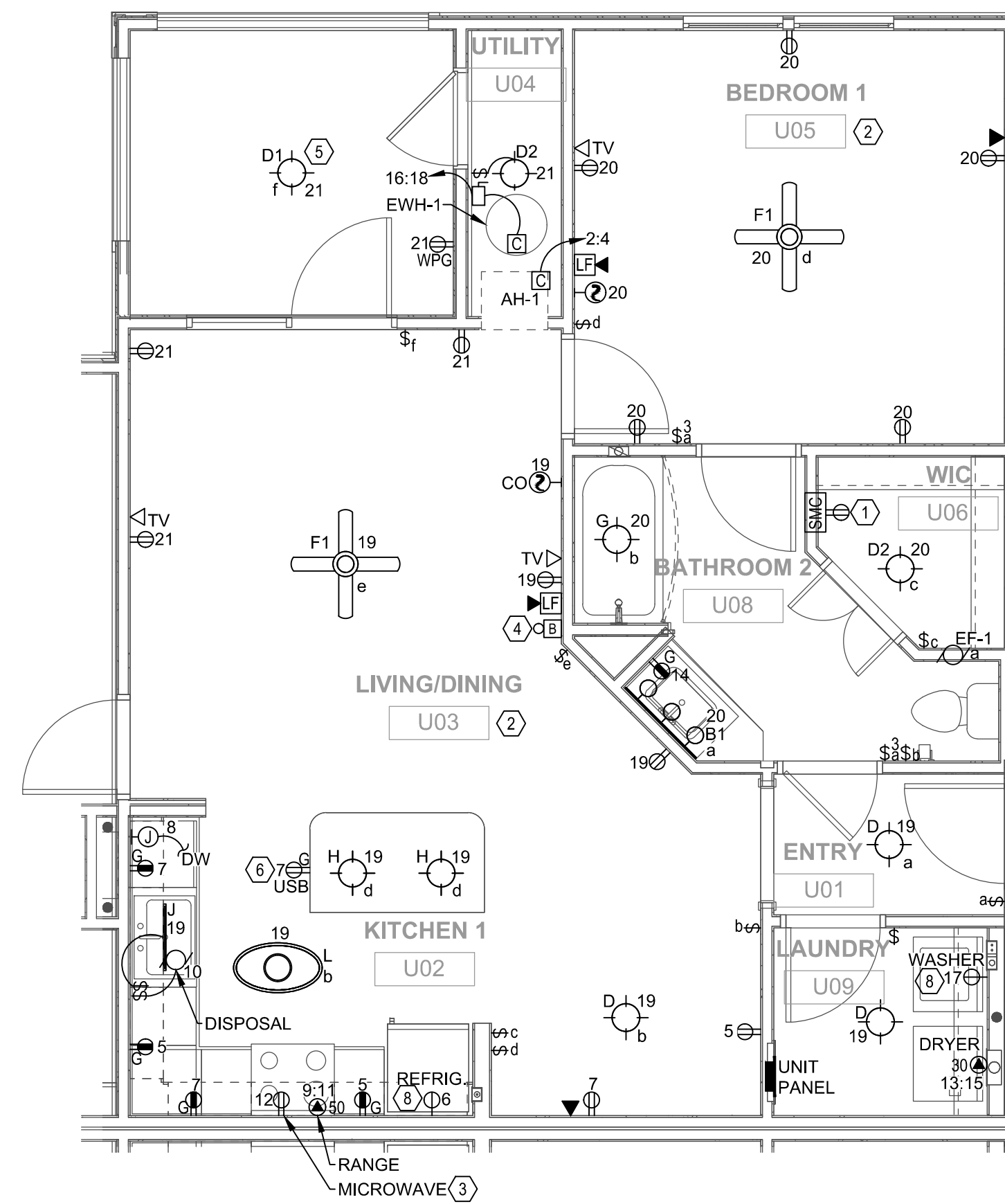
THE ROBERT
FT. MYERS, FL
ENLARGED GARAGE PLANS -
ELECTRICAL

E2.14

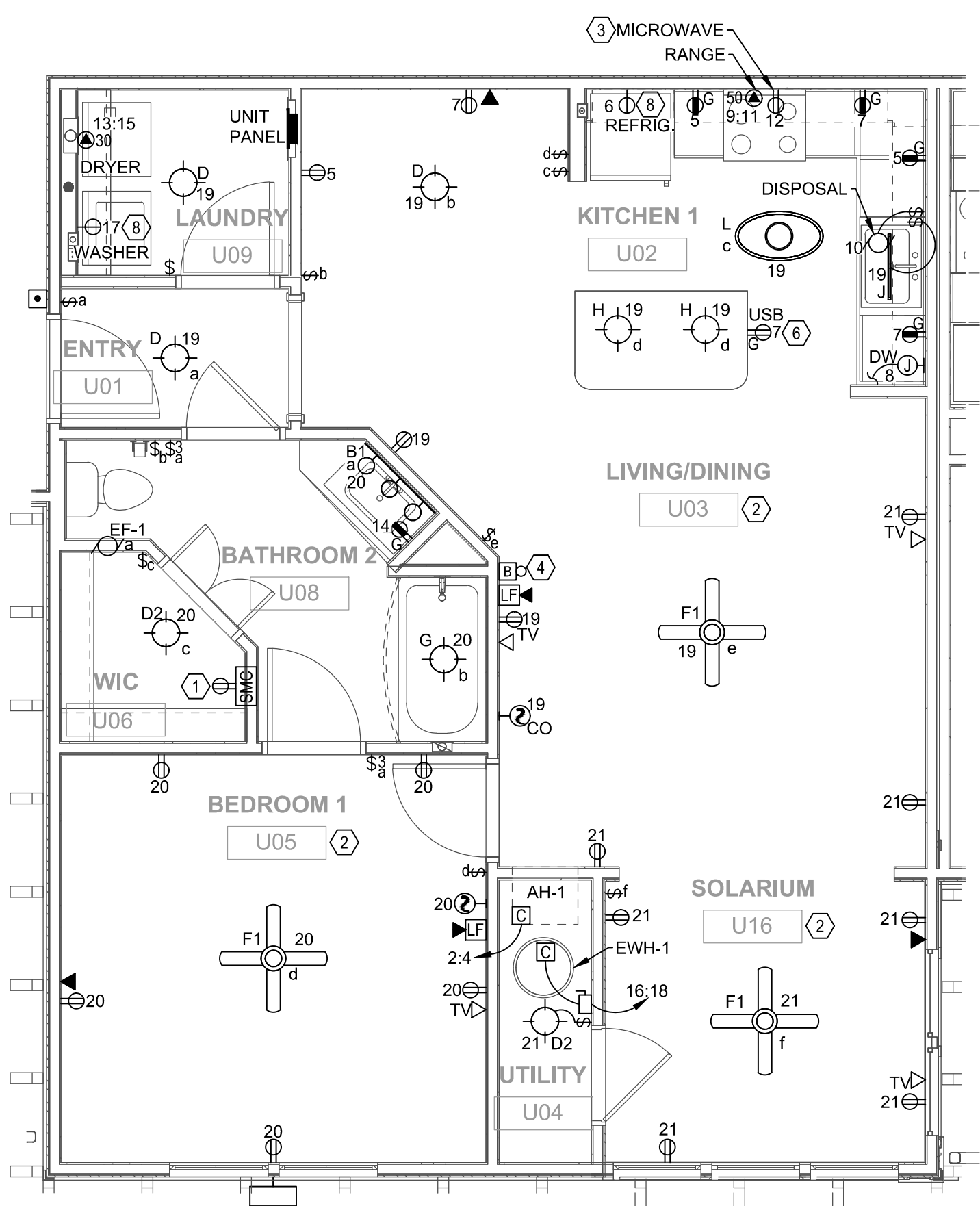
© 2019 These documents and their contents are the property of FUGLEBERG KOCH, and are issued only for the specific project noted on these drawings. Any reproduction, revision, or modification of these documents without the expressed written consent of FUGLEBERG KOCH is prohibited by law.



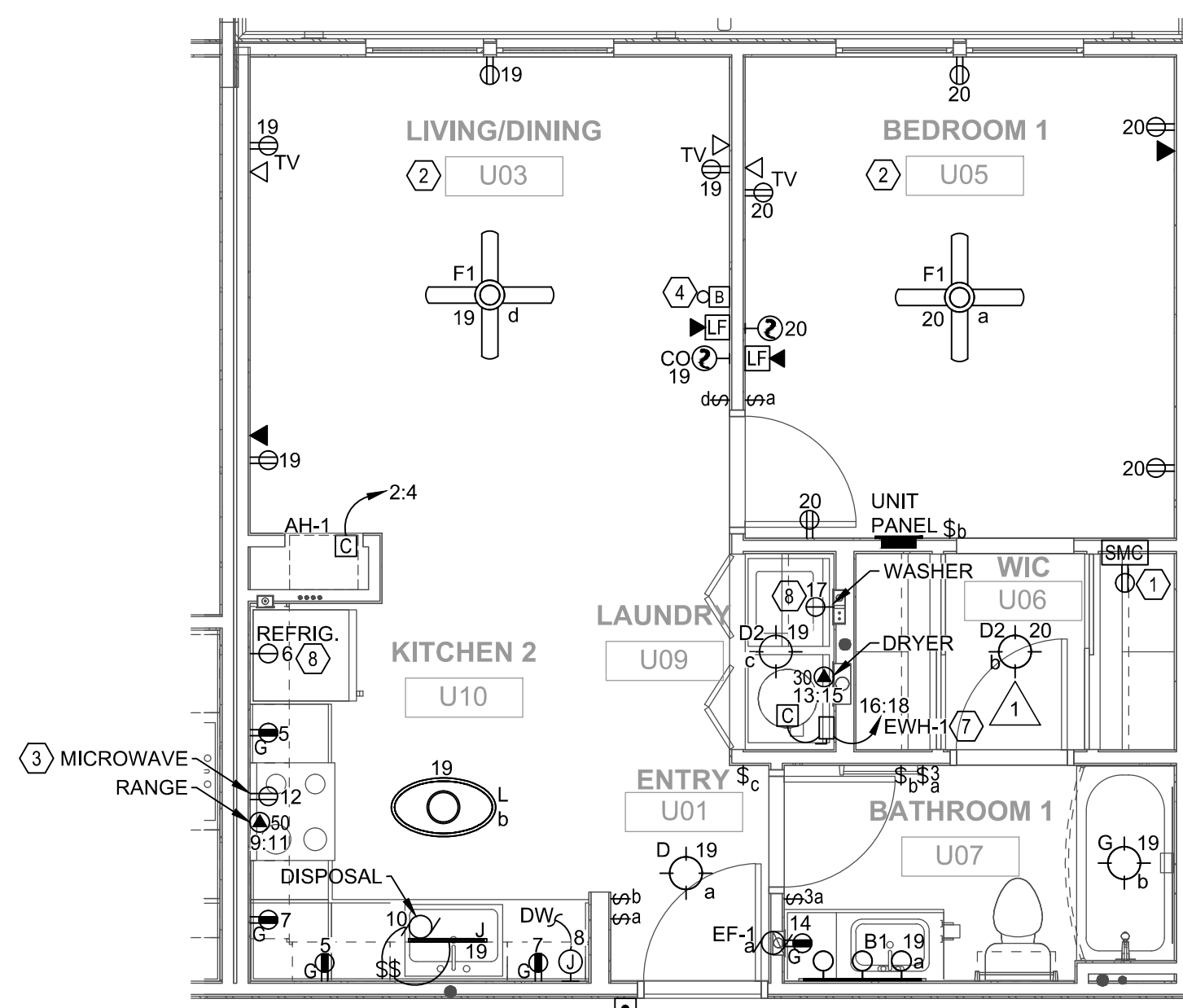
4 UNIT B1 FLOOR PLAN - ELECTRICAL
E3.01 1/4" = 1'-0"



2 UNIT A1 FLOOR PLAN - ELECTRICAL
E3.01 1/4" = 1'-0"



3 UNIT A2S FLOOR PLAN - ELECTRICAL
E3.01 1/4" = 1'-0"



1 UNIT S1 FLOOR PLAN - ELECTRICAL
E3.01 1/4" = 1'-0"

REFERENCE NOTES

- ① RECEPTACLE INSTALLED INSIDE SYSTEM PANEL.
- ② PROVIDE ARC FAULT CURRENT PROTECTION FOR ALL BRANCH CIRCUITS SUPPLYING FAMILY ROOMS, KITCHENS, DINING ROOMS, LIVING ROOMS, SUNROOMS, BEDROOMS, LAUNDRY ROOMS, CLOSETS, HALLWAYS OR SIMILAR ROOMS, IN ACCORDANCE WITH NEC 210.12(A). NOTE THAT ARC FAULT CIRCUIT PROTECTION REQUIRES A DEDICATED NEUTRAL FROM THE CIRCUIT BREAKER. MULTI-WIRE BRANCH CIRCUITS ARE THEREFORE NOT PERMITTED FOR ARC FAULT CIRCUITS.
- ③ LOCATE OUTLET IN MILLWORK FOR MICROWAVE/EXHAUST FAN. REFER TO ARCHITECTURAL DRAWING FOR ADDITIONAL INFORMATION.
- ④ PROVIDE STEP DOWN TRANSFORMER/CHIME/DOORBELL AND CONNECT COMPLETE.
- ⑤ FLUSH MOUNTED JUNCTION BOX USED FOR LIGHT SHALL BE U.L. LISTED FOR OWNERS' FUTURE USE AS A SOLE SUPPORT OF A CEILING SUSPENDED (PADDLE) FAN. PROVIDE JUNCTION BOX IN ACCORDANCE WITH NEC 314.27 RATED FOR 35lbs AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE HOT WIRE CAPPED IN JUNCTION BOX FOR FULL CHAIN CONTROL IN FAN.
- ⑥ LOCATE TOP OF OUTLET/SWITCH COVER PLATE 1" BELOW BOTTOM OF MILLWORK DRAWERS.
- ⑦ MOUNTED ABOVE DRYER.
- ⑧ PROVIDE 20A/120V SINGLE RECEPTACLE.

GENERAL NOTES

1. VERIFY EXACT LOCATION OF ALL MECHANICAL EQUIPMENT WITH RESPECTIVE MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
2. ALL CIRCUITS ORIGINATE FROM THEIR RESPECTIVE UNIT PANEL LOCATED WITHIN THE UNIT, UNLESS NOTED OTHERWISE.
3. REFER TO EQUIPMENT FEEDER SCHEDULE ON SHEET E4.03 FOR ALL MECHANICAL EQUIPMENT CONNECTION REQUIREMENTS.
4. ALL OUTLETS SHALL BE SPACED IN ACCORDANCE WITH NEC ARTICLE 210.52.
5. ALL OUTLETS SHALL BE TAMPER RESISTANT IN ACCORDANCE WITH NEC ARTICLE 406.12.
6. ADJUST ELECTRICAL INSTALLATION AS NECESSARY FOR "MIRRORED" UNITS.
7. REFER TO DRAWING E4.02 FOR UNIT PANEL SCHEDULES.
8. REFER TO BUILDING PLANS FOR CONDENSING UNIT LOCATIONS. REFER TO UNIT PANEL SCHEDULE AND EQUIPMENT FEEDER SCHEDULE FOR FEEDER, CIRCUIT BREAKER AMPERAGE AND DISCONNECT SWITCH REQUIREMENTS. TYPICAL FOR EACH UNIT.

PERMIT REVIEW STAMP

ISSUE HISTORY

No.	Date	Description
1	11/22/19	SCHEMATIC DESIGN
2	12/06/19	DESIGN DEVELOPMENT
3	02/28/20	PERMIT REVIEW SET

REVISION HISTORY

No.	Date	Description
1	05/06/20	PERMIT COMMENT RESPONSES

FUGLEBERG KOCH PLLC
2555 Temple Trail, Winter Park, FL 32789 (407) 629-0595
www.fuglebergkoch.com BR569

CONSULTANT
SALAS O'BRIEN
Expect a difference!
1901 Quatrefoil Boulevard, Suite 100
Orlando, Florida 32817
(407) 388-6800
CENT. OF AUTH. NO. 4106

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM S. LEVINE, PE ON DATE INDICATED IN DIGITAL SIGNATURE USING A DIGITAL SIGNATURE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

THE ROBERT
FT. MYERS, FL

Drawn:	SWC
Checked:	GPM
Approval:	ASL
Date:	09/10/2019
Project #:	5592

UNIT PLANS - ELECTRICAL

E3.01

VOLTS L-N : 120	MAIN OPTIONS REQUIRED	PANEL : UNIT A1	ENCLOSURE DATA
VOLTS PH : 208	S.E. RATED : N/A	MCB : N/A AMPS	NEMA : 1
PHASE : 1	GFI PROT. : N/A	MLO : 125 AMPS	SECTIONS : 1
MOUNTING : FLUSH	SHUNT TRIP : N/A		WIDTH/SECT. : 14.25
MFR : SQ. D			DEPTH : 3.75
TYPE : QO			
AIC RATING (FULLY RATED OR SERIES RATED):			65 KA (MINIMUM, SEE SPECIFICATIONS)

NOTES	DESCRIPTION	LOAD CONN	AMPS	AMPS	C.B. AMPS	C.B. POLES	CKT. NUM.	CKT. NUM.	C.B. POLES	C.B. AMPS	AMPS	AMPS	LOAD CONN	DESCRIPTION	NOTES
2	CU-1	7	7		15	2	1	2	2	25	19		19	AH-1	2
2	====	7	7	====	3	4	====	====	====	====	19	19	====	====	2
1	SMALL APPLIANCE	12	12		20	1	5	6	1	20	10		10	REFRIGERATOR	1
1	SMALL APPLIANCE	12		12	20	1	7	8	1	20		8	8	DISHWASHER	3
	RANGE	40	40		50	2	9	10	1	20	8		8	DISPOSAL	1
	====	40		40	====	11	12	1	20	====	8	8	8	MICROWAVE/HOOD	1
	DRYER	24	24		30	2	13	14	1	20	2		1	BATHROOM RECPT.	
	====	24	24	====	15	16	2	40	====	29	29	29	29	EW-1	2
3	WASHER	10	10		20	1	17	18	====	====	29	29	====	====	2
1	LIGHTS/RECEPTACLES	1200		10	15	1	19	20	1	15		10	1200	BEDROOM LTS/RECPPTS	1
1	LIGHTS/RECEPTACLES	1200	10		15	1	21	22	1		0			SPACE	
	SPACE			0		1	23	24	1					SPACE	

	AMPS	KVA
171 : AMPS PHASE A	ACTUAL CONN. LOAD : 195	41
167 : AMPS PHASE B	NEC DEMAND : 109	23

PANEL NOTES:
 1) PROVIDE AFCI CIRCUIT BREAKER PER NEC 210.12(A).
 2) COORDINATE CIRCUIT BREAKER SIZE WITH MECHANICAL CONTRACTOR.
 3) PROVIDE COMBINATION GFI AND AFCI TYPE CIRCUIT BREAKER.

VOLTS L-N : 120	MAIN OPTIONS REQUIRED	PANEL : UNIT B1	ENCLOSURE DATA
VOLTS PH : 208	S.E. RATED : N/A	MCB : N/A AMPS	NEMA : 1
PHASE : 1	GFI PROT. : N/A	MLO : 125 AMPS	SECTIONS : 1
MOUNTING : FLUSH	SHUNT TRIP : N/A		WIDTH/SECT. : 14.25
MFR : SQ. D			DEPTH : 3.75
TYPE : QO			
AIC RATING (FULLY RATED OR SERIES RATED):			65 KA (MINIMUM, SEE SPECIFICATIONS)

NOTES	DESCRIPTION	LOAD CONN	AMPS	AMPS	C.B. AMPS	C.B. POLES	CKT. NUM.	CKT. NUM.	C.B. POLES	C.B. AMPS	AMPS	AMPS	LOAD CONN	DESCRIPTION	NOTES
2	CU-2	8	8		15	2	1	2	2	25	19		19	AH-2	2
2	====	8	8	====	3	4	====	====	====	====	19	19	====	====	2
1	SMALL APPLIANCE	12	12		20	1	5	6	1	20	10		10	REFRIGERATOR	1
1	SMALL APPLIANCE	12		12	20	1	7	8	1	20		8	8	DISHWASHER	3
	RANGE	40	40		50	2	9	10	1	20	8		8	DISPOSAL	1
	====	40		40	====	11	12	1	20	====	8	8	8	MICROWAVE/HOOD	1
	DRYER	24	24		30	2	13	14	1	20	3		2	BATHROOM RECPT.	
	====	24	24	====	15	16	2	40	====	29	29	29	29	EW-1	2
3	WASHER	10	10		20	1	17	18	====	====	29	29	====	====	2
1	LIGHTS/RECEPTACLES	1200		10	15	1	19	20	1	15		10	1200	BEDROOM LTS/RECPPTS	1
1	LIGHTS/RECEPTACLES	1200	10		15	1	21	22	1	15	10		1200	BEDROOM LTS/RECPPTS	1
	SPACE			0		1	23	24	1					SPACE	

	AMPS	KVA
183 : AMPS PHASE A	ACTUAL CONN. LOAD : 203	42
168 : AMPS PHASE B	NEC DEMAND : 112	23

PANEL NOTES:
 1) PROVIDE AFCI CIRCUIT BREAKER PER NEC 210.12(A).
 2) COORDINATE CIRCUIT BREAKER SIZE WITH MECHANICAL CONTRACTOR.
 3) PROVIDE COMBINATION GFI AND AFCI TYPE CIRCUIT BREAKER.

VOLTS L-N : 120	MAIN OPTIONS REQUIRED	PANEL : UNIT C1	ENCLOSURE DATA
VOLTS PH : 208	S.E. RATED : N/A	MCB : N/A AMPS	NEMA : 1
PHASE : 1	GFI PROT. : N/A	MLO : 125 AMPS	SECTIONS : 1
MOUNTING : FLUSH	SHUNT TRIP : N/A		WIDTH/SECT. : 14.25
MFR : SQ. D			DEPTH : 3.75
TYPE : QO			
AIC RATING (FULLY RATED OR SERIES RATED):			65 KA (MINIMUM, SEE SPECIFICATIONS)

NOTES	DESCRIPTION	LOAD CONN	AMPS	AMPS	C.B. AMPS	C.B. POLES	CKT. NUM.	CKT. NUM.	C.B. POLES	C.B. AMPS	AMPS	AMPS	LOAD CONN	DESCRIPTION	NOTES
2	CU-2	8	8		15	2	1	2	2	25	19		19	AH-2	2
2	====	8	8	====	3	4	====	====	====	====	19	19	====	====	2
1	SMALL APPLIANCE	12	12		20	1	5	6	1	20	10		10	REFRIGERATOR	1
1	SMALL APPLIANCE	12		12	20	1	7	8	1	20		8	8	DISHWASHER	3
	RANGE	40	40		50	2	9	10	1	20	8		8	DISPOSAL	1
	====	40		40	====	11	12	1	20	====	8	8	8	MICROWAVE/HOOD	1
	DRYER	24	24		30	2	13	14	1	20	5		3	BATHROOM RECPT.	
	====	24	24	====	15	16	2	40	====	29	29	29	29	EW-1	2
3	WASHER	10	10		20	1	17	18	====	====	29	29	====	====	2
1	LIGHTS/RECEPTACLES	1200		10	15	1	19	20	1	15		10	1200	BEDROOM LTS/RECPPTS	1
1	LIGHTS/RECEPTACLES	1200	10		15	1	21	22	1	15	10		1200	BEDROOM LTS/RECPPTS	1
	SPACE			0		1	23	24	1					SPACE	

	AMPS	KVA
165 : AMPS PHASE A	ACTUAL CONN. LOAD : 215	45
178 : AMPS PHASE B	NEC DEMAND : 106	22

PANEL NOTES:
 1) PROVIDE AFCI CIRCUIT BREAKER PER NEC 210.12(A).
 2) COORDINATE CIRCUIT BREAKER SIZE WITH MECHANICAL CONTRACTOR.
 3) PROVIDE COMBINATION GFI AND AFCI TYPE CIRCUIT BREAKER.

VOLTS L-N : 120	MAIN OPTIONS REQUIRED	PANEL : UNIT A2S	ENCLOSURE DATA
VOLTS PH : 208	S.E. RATED : N/A	MCB : N/A AMPS	NEMA : 1
PHASE : 1	GFI PROT. : N/A	MLO : 125 AMPS	SECTIONS : 1
MOUNTING : FLUSH	SHUNT TRIP : N/A		WIDTH/SECT. : 14.25
MFR : SQ. D			DEPTH : 3.75
TYPE : QO			
AIC RATING (FULLY RATED OR SERIES RATED):			65 KA (MINIMUM, SEE SPECIFICATIONS)

NOTES	DESCRIPTION	LOAD CONN	AMPS	AMPS	C.B. AMPS	C.B. POLES	CKT. NUM.	CKT. NUM.	C.B. POLES	C.B. AMPS	AMPS	AMPS	LOAD CONN	DESCRIPTION	NOTES
2	CU-1	7	7		15	2	1	2	2	25	19		19	AH-1	2
2	====	7	7	====	3	4	====	====	====	====	19	19	====	====	2
1	SMALL APPLIANCE	12	12		20	1	5	6	1	20	10		10	REFRIGERATOR	1
1	SMALL APPLIANCE	12		12	20	1	7	8	1	20		8	8	DISHWASHER	3
	RANGE	40	40		50	2	9	10	1	20	8		8	DISPOSAL	1
	====	40		40	====	11	12	1	20	====	8	8	8	MICROWAVE/HOOD	1
	DRYER	24	24		30	2	13	14	1	20	2		1	BATHROOM RECPT.	
	====	24	24	====	15	16	2	40	====	29	29	29	29	EW-1	2
3	WASHER	10	10		20	1	17	18	====	====	29	29	====	====	2
1	LIGHTS/RECEPTACLES	1200		10	15	1	19	20	1	15		10	1200	BEDROOM LTS/RECPPTS	1
1	LIGHTS/RECEPTACLES	1200	10		15	1	21	22	1		0			SPACE	
	SPACE			0		1	23	24	1					SPACE	

	AMPS	KVA
171 : AMPS PHASE A	ACTUAL CONN. LOAD : 195	41
167 : AMPS PHASE B	NEC DEMAND : 110	23

PANEL NOTES:
 1) PROVIDE AFCI CIRCUIT BREAKER PER NEC 210.12(A).
 2) COORDINATE CIRCUIT BREAKER SIZE WITH MECHANICAL CONTRACTOR.
 3) PROVIDE COMBINATION GFI AND AFCI TYPE CIRCUIT BREAKER.

VOLTS L-N : 120	MAIN OPTIONS REQUIRED	PANEL : UNIT B2S	ENCLOSURE DATA
VOLTS PH : 208	S.E. RATED : N/A	MCB : N/A AMPS	NEMA : 1
PHASE : 1	GFI PROT. : N/A	MLO : 125 AMPS	SECTIONS : 1
MOUNTING : FLUSH	SHUNT TRIP : N/A		WIDTH/SECT. : 14.25
MFR : SQ. D			DEPTH : 3.75
TYPE : QO			
AIC RATING (FULLY RATED OR SERIES RATED):			65 KA (MINIMUM, SEE SPECIFICATIONS)

NOTES	DESCRIPTION	LOAD CONN	AMPS	AMPS	C.B. AMPS	C.B. POLES	CKT. NUM.	CKT. NUM.	C.B. POLES	C.B. AMPS	AMPS	AMPS	LOAD CONN	DESCRIPTION	NOTES
2	CU-2	8	8		15	2	1	2	2	25	19		19	AH-2	2
2	====	8	8	====	3	4	====	====	====	====	19	19	====	====	2
1	SMALL APPLIANCE	12	12		20	1	5	6	1	20	10		10	REFRIGERATOR	1
1	SMALL APPLIANCE	12		12	20	1	7	8	1	20		8	8	DISHWASHER	3
	RANGE	40	40		50	2	9	10	1	20	8		8	DISPOSAL	1
	====	40		40	====	11	12	1	20	====	8	8	8	MICROWAVE/HOOD	1
	DRYER	24	24		30	2	13	14	1	20	3		2	BATHROOM RECPT.	
	====	24	24	====	15	16	2	40	====	29	29	29	29	EW-1	2
3	WASHER	10	10		20	1	17	18	====	====	29	29	====	====	2
1	LIGHTS/RECEPTACLES	1200		10	15	1	19	20	1	15		10	1200	BEDROOM LTS/RECPPTS	1
1	LIGHTS/RECEPTACLES	1200	10		15	1	21	22	1	15	10		1200	BEDROOM LTS/RECPPTS	1
	SPACE			0		1	23	24	1					SPACE	

	AMPS	KVA
183 : AMPS PHASE A	ACTUAL CONN. LOAD : 203	42
168 : AMPS PHASE B	NEC DEMAND : 106	22

PANEL NOTES:
 1) PROVIDE AFCI CIRCUIT BREAKER PER NEC 210.12(A).
 2) COORDINATE CIRCUIT BREAKER SIZE WITH MECHANICAL CONTRACTOR.
 3) PROVIDE COMBINATION GFI AND AFCI TYPE CIRCUIT BREAKER.

VOLTS L-N : 120	MAIN OPTIONS REQUIRED	PANEL : UNIT S1	ENCLOSURE DATA
VOLTS PH : 208	S.E. RATED : N/A	MCB : N/A AMPS	NEMA : 1
PHASE : 1	GFI PROT. : N/A	MLO : 125 AMPS	SECTIONS : 1
MOUNTING : FLUSH	SHUNT TRIP : N/A		WIDTH/SECT. : 14.25
MFR : SQ. D			DEPTH : 3.75
TYPE : QO			
AIC RATING (FULLY RATED OR SERIES RATED):			65 KA (MINIMUM, SEE SPECIFICATIONS)

NOTES	DESCRIPTION	LOAD CONN	AMPS	AMPS	C.B. AMPS	C.B. POLES	CKT. NUM.	CKT. NUM.	C.B. POLES	C.B. AMPS	AMPS	AMPS	LOAD CONN	DESCRIPTION	NOTES
2	CU-1														

VOLTS L-N : 120		MAIN OPTIONS REQUIRED		PANEL : H1		ENCLOSURE DATA									
VOLTS PH : 208		S.E. RATED : N/A		MCB : N/A AMPS		NEMA : 3R									
PHASE : 3		GFI PROT. : N/A		MLO : 125 AMPS		SECTIONS : 1									
MOUNTING : SURFACE		SHUNT TRIP : N/A				WIDTH/SECT. : 14.75									
MFR : SQ. D.						DEPTH : 4.52									
TYPE : OO															
AIC RATING (FULLY RATED OR SERIES RATED): 65 KA (MINIMUM, SEE SPECIFICATIONS)															
NOTES	DESCRIPTION	LOAD CONN	AMPS	AMPS	C.B. AMPS	C.B. POLES	CKT. NUM	CKT. NUM	C.B. POLES	AMPS	AMPS	AMPS	LOAD CONN	DESCRIPTION	NOTES
	LEV 1 COR LTS/EMERG	1200	10		20	1	1	2	1	20	5		3	CORR. RECEPT. LEVEL 1	
	LEV 2 COR LTS/EMERG	1100		9	20	1	3	4	1	20			3	CORR. RECEPT. LEVEL 2	
	LEV 3 COR LTS/EMERG	1100		9	20	1	5	6	1	20			5	CORR. RECEPT. LEVEL 3	
2	EXTERIOR LTS/EMERG	850	7		20	1	7	8	1	20	6		4	OUTDOOR RECEPT.	
	UNIT HEATER HI	8		8	20	1	9	10	1	20		6	4	OUTDOOR RECEPT.	
1	FIRE PROTECT. BELL	3		3	20	1	11	12	1	20		7	850	LEV 1 LTS/RECEPIEMERG	
1	FACP	5	5		20	1	13	14	1	20	3		2	GARAGE LTS/RECEPT.	
	GARAGE LTS/RECEPT.	2		3	20	1	15	16	1	20		10	10	GARAGE DOOR	
	GARAGE DOOR	10		10	20	1	17	18	1	20		3	2	GARAGE LTS/RECEPT.	
	GARAGE LTS/RECEPT.	2		3	20	1	19	20	1	20	10		10	GARAGE DOOR	
	GARAGE DOOR	10		10	20	1	21	22	1	20		3	2	GARAGE LTS/RECEPT.	
	GARAGE LTS/RECEPT.	2		3	20	1	23	24	1	20		10	10	GARAGE DOOR	
	GARAGE DOOR	10		10	20	1	25	26	1	20	3		3	TTT-A	
3	LANDSCAPE LIGHTS	1000		8	20	1	27	28	1	20		3	3	TTT-C-A	
3	LANDSCAPE LIGHTS	1000		8	20	1	29	30	1	20		3	3	TTT-C-B	
1	BDA SYSTEM	5	5		20	1	31	32	1	20	3		3	TTT-C-B	
	SPARE			0	20	1	33	34	1	20		0		SPACE	
	SPARE			0	20	1	35	36	1	20		0		SPACE	
	SPARE			0	20	1	37	38	3	30	0			SURGE PROT. DEVICE	
	SPARE			0	20	1	39	40	4	40	0			SPACE	
	SPARE			0	20	1	41	42	4	40	0			SPACE	
												AMPS KVA			
												70 : AMPS PHASE A		ACTUAL CONN. LOAD :	66 24
												65 : AMPS PHASE B		NEC DEMAND :	66 24
												64 : AMPS PHASE C			

- PANEL NOTES:
- 1) PROVIDE CIRCUIT BREAKER WITH RED LOCKING HANDLE.
 - 2) CONNECT CIRCUIT VIA PHOTOCELL FOR CONTROL OF EXTERIOR/STAR LIGHTS.
 - 3) LANDSCAPE LIGHTING TO BE PROVIDED UNDER SEPARATE CONTRACT.

VOLTS L-N : 120		MAIN OPTIONS REQUIRED		PANEL : H3A		ENCLOSURE DATA									
VOLTS PH : 208		S.E. RATED : N/A		MCB : N/A AMPS		NEMA : 3R									
PHASE : 3		GFI PROT. : N/A		MLO : 125 AMPS		SECTIONS : 1									
MOUNTING : SURFACE		SHUNT TRIP : N/A				WIDTH/SECT. : 15									
MFR : SQ. D.						DEPTH : 4.52									
TYPE : OO															
AIC RATING (FULLY RATED OR SERIES RATED): 65 KA (MINIMUM, SEE SPECIFICATIONS)															
NOTES	DESCRIPTION	LOAD CONN	AMPS	AMPS	C.B. AMPS	C.B. POLES	CKT. NUM	CKT. NUM	C.B. POLES	AMPS	AMPS	AMPS	LOAD CONN	DESCRIPTION	NOTES
	LEV 1 COR LTS/EMERG	1200	10		20	1	1	2	1	20	5		3	CORR. RECEPT. LEVEL 1	
	LEV 2 COR LTS/EMERG	1100		9	20	1	3	4	1	20			3	CORR. RECEPT. LEVEL 2	
	LEV 3 COR LTS/EMERG	1100		9	20	1	5	6	1	20			5	CORR. RECEPT. LEVEL 3	
2	EXTERIOR LTS/EMERG	850	7		20	1	7	8	1	20	6		4	OUTDOOR RECEPT.	
	UNIT HEATER HI	8		8	20	1	9	10	1	20		6	4	OUTDOOR RECEPT.	
1	FIRE PROTECT. BELL	3		3	20	1	11	12	1	20		7	850	LEV 1 LTS/RECEPIEMERG	
1	FACP	5	5		20	1	13	14	1	20	3		2	GARAGE LTS/RECEPT.	
	GARAGE LTS/RECEPT.	2		3	20	1	15	16	1	20		10	10	GARAGE DOOR	
	GARAGE DOOR	10		10	20	1	17	18	1	20		3	2	GARAGE LTS/RECEPT.	
	GARAGE LTS/RECEPT.	2		3	20	1	19	20	1	20	10		10	GARAGE DOOR	
	GARAGE DOOR	10		10	20	1	21	22	1	20		3	3	TTT-A	
	GARAGE LTS/RECEPT.	2		3	20	1	23	24	1	20		3	3	TTT-C-A	
3	LANDSCAPE LIGHTS	1000		8	20	1	27	28	1	20		0		SPARE	
3	LANDSCAPE LIGHTS	1000		8	20	1	29	30	1	20		0		SPARE	
1	BDA SYSTEM	5	5		20	1	31	32	1	20	0		0	SPACE	
	SPARE			0	20	1	33	34	1	20		0		SPACE	
	SPARE			0	20	1	35	36	1	20		0		SPACE	
	SPARE			0	20	1	37	38	3	30	0			SURGE PROT. DEVICE	
	SPARE			0	20	1	39	40	4	40	0			SPACE	
	SPARE			0	20	1	41	42	4	40	0			SPACE	
												AMPS KVA			
												64 : AMPS PHASE A		ACTUAL CONN. LOAD :	60 22
												62 : AMPS PHASE B		NEC DEMAND :	60 22
												54 : AMPS PHASE C			

- PANEL NOTES:
- 1) PROVIDE CIRCUIT BREAKER WITH RED LOCKING HANDLE.
 - 2) CONNECT CIRCUIT VIA PHOTOCELL FOR CONTROL OF EXTERIOR/STAR LIGHTS.
 - 3) LANDSCAPE LIGHTING TO BE PROVIDED UNDER SEPARATE CONTRACT.

PROJECT: THE ROBERT APARTMENTS - BUILDING TYPES 1, 2, & 3															DATE: 6/4/20				
EQUIPMENT DESCRIPTION	VOLTS	PH	NEUT Y OR N	MOTOR (LARGEST) H.P. FLA	ADDITIONAL MOTORS H.P. FLA	HEATER OR LIGHTING LOAD KW	MISC AMPS	TOTAL AMPS	P.N. C.B. SIZE AMPS	DISCONNECT SIZE AMPS	STARTER SIZE NEMA	VOLTAGE DROP	WIRE PER PHASE	NEUT WIRE	GND WIRE	# OF RUNS	CONDUIT SIZE	NOTES	
AH-1	208	1	N	0.20	1.30			3.7	17.8			1.65%	#10		#10	1	1/2"	e	
AH-2	208	1	N	0.20	1.30			3.7	17.8			1.65%	#10		#10	1	1/2"	e	
CU-1	208	1	N		6.00	0.70			7	15	30	N.F.	1.55%	#10		#10	1	1/2"	
CU-2	208	1	N		7.70	0.70			8	15	30	N.F.	1.84%	#10		#10	1	1/2"	
EF-1	120	1	Y		1.00				1	20		0.03%	#12	#12	#12	1	1/2"		
EF-2	120	1	Y		1.00				1	20		0.08%	#12	#12	#12	1	1/2"	a	
EWH-1, 2	208	1	N			6.0	28.8		29	40	60	N.F.	0.79%	#8		#10	1	3/4"	
RANGE	208	1	Y				40.0		40	50		0.47%	#6	#6	#10	1	1"		
DRYER	208	1	Y				24.0		24	30		0.97%	#10	#10	#10	1	1/2"		
ELEVATOR	208	3	N		43.00				43	60	60	45	2.22%	#8		#8	1	1-1/4"	f
ELEVATOR SUMP PUMP	120	1	Y	0.50	9.80				10	20		2.94%	#10	#10	#10	1	1/2"	g	

- GENERAL NOTES:
- (1) - PROVIDE DISC. SW AT ALL PIECES OF EQUIPMENT, UNLESS OTHERWISE NOTED ON THIS SCHEDULE
 - (2) - C.B., STARTER, DISC & FUSE SIZES SHOWN FOR REFERENCE ONLY, SIZE AS RECOMMENDED BY EQUIPMENT MANUFACTURER. VERIFY REQUIREMENTS WITH APPROVED EQUIPMENT SHOP DRAWINGS.
 - (3) - PROVIDE NEMA OUTDOOR RATED ENCLOSURES FOR ALL DISC. SWS MOUNTED OUTDOORS.
 - (4) - COORDINATE STARTER TYPE WITH EQUIPMENT PROVIDER.
 - (5) - E.C. TO VERIFY THAT C.B.'S FOR MOTORS ARE SUFFICIENT TO ALLOW STARTING OF MOTOR, IF REQUIRED FOR STARTING C.B. TO BE INCREASED TO A MAX OF 225% OF LARGEST MOTOR F.L.A.
 - (6) - INCREASE CONDUCTOR SIZES AS REQUIRED TO MAINTAIN A MAXIMUM OF 3% VOLTAGE DROP BASED ON ACTUAL CIRCUIT LENGTHS AS INSTALLED.
 - (7) - TOTAL AMPS SHOWN DO NOT INCLUDE NON-COINCIDENTAL LOADS.
- ABBREVIATIONS:
- MOP = MOTOR CIRCUIT PROTECTOR C.B.
MMS = MTR. STARTER 20A SW. WITH O.L. AND PILOT
MSS = MOTOR STARTING 20A SW. WITHOUT O.L.
VFD = VARIABLE FREQ. DRIVE UNIT.
CBMC = COMB. DISC(MCP) AND MAG. MOTOR STARTER(MMC)
MMC = MAGNETIC MOTOR CONTROLLER W/O L.
- N.F. = NON-FUSED
O.L. = THERMAL OVER LOAD ELEMENT
I = NEMA I ENCLOSURE
3R = NEMA 3R ENCLOSURE
4SS = NEMA 4 W.P. STAINLESS STEEL ENCL.
- NOTES:
- (a) - CONNECT VIA LINE VOLTAGE TSTAT. FURNISHED BY MECHANICAL CONTRACTOR
 - (b) - CONNECT VIA CONTROL DEVICES FURNISHED BY MECHANICAL CONTRACTOR
 - (c) - CONNECT VIA VFD FURNISHED BY MECHANICAL CONTRACTOR
 - (d) - CONNECT VIA STARTER FURNISHED BY MECHANICAL CONTRACTOR
 - (e) - CONNECT VIA UNIT MTD DISC. SW. FURNISHED WITH EQUIPMENT
 - (f) - VERIFY ELEC. REQUIREMENTS WITH ELEV. CONSULTANT/INSTALLER PRIOR TO ROUGH-IN.
 - (g) - PROVIDE 120V/20A WPG RECEPTACLE IN ELEVATOR PIT.

VOLTS L-N : 120		MAIN OPTIONS REQUIRED		PANEL : H2		ENCLOSURE DATA									
VOLTS PH : 208		S.E. RATED : N/A		MCB : N/A AMPS		NEMA : 3R									
PHASE : 3		GFI PROT. : N/A		MLO : 125 AMPS		SECTIONS : 1									
MOUNTING : SURFACE		SHUNT TRIP : N/A				WIDTH/SECT. : 15									
MFR : SQ. D.						DEPTH : 4.52									
TYPE : OO															
AIC RATING (FULLY RATED OR SERIES RATED): 65 KA (MINIMUM, SEE SPECIFICATIONS)															
NOTES	DESCRIPTION	LOAD CONN	AMPS	AMPS	C.B. AMPS	C.B. POLES	CKT. NUM	CKT. NUM	C.B. POLES	AMPS	AMPS	AMPS	LOAD CONN	DESCRIPTION	NOTES
	LEV 1 COR LTS/EMERG	1200	10		20	1	1	2	1	20	0		3	CORR. RECEPT. LEVEL 1	
	LEV 2 COR LTS/EMERG	1100		9	20	1	3	4	1	20			3	CORR. RECEPT. LEVEL 2	
	LEV 3 COR LTS/EMERG	1100		9	20	1	5	6	1	20			5	CORR. RECEPT. LEVEL 3	
2	EXTERIOR LTS/EMERG	850	7		20	1	7	8	1	20	6		4	OUTDOOR RECEPT.	
	UNIT HEATER HI	8		8	20	1	9	10	1	20		6	4	OUTDOOR RECEPT.	
1	FIRE PROTECT. BELL	3		3	20	1	11	12	1	20		7	850	LEV 1 LTS/RECEPIEMERG	
1	FACP	5	5		20	1	13	14	1	20	3		2	GARAGE LTS/RECEPT.	
	GARAGE LTS/RECEPT.	2		3	20	1	15	16	1	20		10	10	GARAGE DOOR	
	GARAGE DOOR	10		10	20	1	17	18	1	20		3	2	GARAGE LTS/RECEPT.	
	GARAGE LTS/RECEPT.	2		3	20	1	19	20	1	20	10		10	GARAGE DOOR	
	GARAGE DOOR	10		10	20	1	21	22	1	20		3	2	GARAGE LTS/RECEPT.	
	GARAGE LTS/RECEPT.	2		3	20	1	23	24	1	20		10	10	GARAGE DOOR	
	GARAGE DOOR	10		10	20	1	25	26	1	20	3		3	TTT-A	
3	LANDSCAPE LIGHTS	1000		8	20	1	27	28	1	20		3	3	TTT-C-A	
3	LANDSCAPE LIGHTS	1000		8	20	1	29	30	1	20		3	3	TTT-C-B	
1	BDA SYSTEM	5	5		20	1	31	32	1	20	3		3	TTT-C-B	
	SPARE			0	20	1	33	34	1	20		0		SPACE	
	SPARE			0	20	1	35	36	1	20		0		SPACE	
	SPARE	</													

VOLTS L-N : 120		MAIN OPTIONS REQUIRED		PANEL : MDP		ENCLOSURE DATA								
VOLTS PH : 240		S.E. RATED : YES		MCB : 600 AMPS		NEMA : 3R								
PHASE : 1		GFI PROT. : N/A		MLO : N/A AMPS		SECTIONS : 1								
MOUNTING : SURFACE		SHUNT TRIP : N/A		WIDTHSECT. : 32		DEPTH : 10								
MFR : SQ. D.														
TYPE : HCM														
AIC RATING (FULLY RATED OR SERIES RATED):				65 KA (MINIMUM, SEE SPECIFICATIONS)										
NOTES	DESCRIPTION	LOAD CONN	AMPS	AMPS	C.B. AMPS	C.B. POLES	CKT. NUM	CKT. NUM	C.B. AMPS	C.B. POLES	CKT. NUM	LOAD CONN	DESCRIPTION	NOTES
	AH-1C	47	47	60	2	1	2	2	100	75	75	75	POOL EQUIPMENT	
	====	47	47	60	2	1	2	2	100	75	75	75	====	
	CU-1C	18	18	35	2	5	6	2	20	10	1200	1200	POOL DECK LIGHTS	1,2
	====	18	18	35	2	5	6	2	20	10	1200	1200	====	1,2
	CU-2C	8	8	15	2	9	10	1	20	10	1200	1200	LANDSCAPE LIGHTS	1,2
	====	8	8	15	2	9	10	1	20	10	1200	1200	====	1,2
	CU-3C	14	14	25	2	13	14	1					SPACE	
	====	14	14	25	2	13	14	1					====	
	SPACE	0	0	1	17	18	1						SPACE	
	SPACE	0	0	1	19	20	1						SPACE	
	SPACE	0	0	1	21	22	1						SPACE	
	SPACE	0	0	1	23	24	1						SPACE	
	PANEL HC1 SEC. 1	139	139	175	2	25	26	1					SPACE	
	====	139	139	175	2	25	26	1					====	
	PANEL HC1 SEC. 2	128	128	175	2	29	30	2	30	0			SURGE PROT. DEVICE	
	====	128	128	175	2	29	30	2	30	0			====	
		449 : AMPS PHASE A		ACTUAL CONN. LOAD :		449		KVA						
		449 : AMPS PHASE B		NEC DEMAND :		441		106						

VOLTS L-N : 120		MAIN OPTIONS REQUIRED		PANEL : HC1 (SECTION #1)		ENCLOSURE DATA								
VOLTS PH : 240		S.E. RATED : N/A		MCB : N/A AMPS		NEMA : 1								
PHASE : 1		GFI PROT. : N/A		MLO : 200 AMPS		SECTIONS : 1								
MOUNTING : SURFACE		SHUNT TRIP : N/A		WIDTHSECT. : 14.25		DEPTH : 3.75								
MFR : SQ. D.														
TYPE : QO														
AIC RATING (FULLY RATED OR SERIES RATED):				65 KA (MINIMUM, SEE SPECIFICATIONS)										
NOTES	DESCRIPTION	LOAD CONN	AMPS	AMPS	C.B. AMPS	C.B. POLES	CKT. NUM	CKT. NUM	C.B. AMPS	C.B. POLES	CKT. NUM	LOAD CONN	DESCRIPTION	NOTES
	TTC	5	5	20	1	1	2	1	20	6	750	750	INTERIOR LTS/EMERG.	5
	====	5	5	20	1	1	2	1	20	6	750	750	====	5
	1 TVTC	5	5	20	1	3	4	1	20	5	625	625	INTERIOR LTS/EMERG.	6
	====	5	5	20	1	3	4	1	20	5	625	625	====	6
	1 FACP	4	4	20	1	5	6	1	20	5	585	585	INTERIOR LTS/EMERG.	7
	====	4	4	20	1	5	6	1	20	5	585	585	====	7
	EXERCISE EQUIP RM 77	12	12	20	1	7	8	1	20	5	875	875	EXTERIOR LIGHTS	2
	====	12	12	20	1	7	8	1	20	5	875	875	====	2
	EXERCISE EQUIP RM 77	12	12	20	1	9	10	1	20	5	650	650	CEILING FANS ROOM 77	
	====	12	12	20	1	9	10	1	20	5	650	650	====	
	EXERCISE EQUIP RM 77	12	12	20	1	11	12	1	20	3	325	325	CLG FANS LOGGIA 71	
	====	12	12	20	1	11	12	1	20	3	325	325	====	
	EXERCISE EQUIP RM 77	12	12	20	1	13	14	1	20	4	475	475	CEILING FANS ROOM 70	
	====	12	12	20	1	13	14	1	20	4	475	475	====	
	EXERCISE EQUIP RM 77	12	12	20	1	15	16	1	20	6	6	4	RECEPT-ROOM 70	
	====	12	12	20	1	15	16	1	20	6	6	4	====	
	RECEPT-RM 75, 76, 79	4	4	6	20	1	19	20	2	35	28	28	AH-2C	
	====	4	4	6	20	1	19	20	2	35	28	28	====	
	RECEPT-RM 72, 73, EXT.	0	0	20	1	21	22	2	22	28	28	28	====	
	====	0	0	20	1	21	22	2	22	28	28	28	====	
	EXERCISE EQUIP RM 77	12	12	20	1	23	24	1	20	0	6	6	SMC-ROOM 77	4
	====	12	12	20	1	23	24	1	20	0	6	6	====	4
	RECEPT-ROOM 77	3	5	20	1	25	26	1	20	0	0	0	SPARE	
	====	3	5	20	1	25	26	1	20	0	0	0	====	
	RECEPT-EXT. LOGGIA	10	10	20	1	27	28	2	30	0	0	0	SURGE PROT. DEVICE	
	====	10	10	20	1	27	28	2	30	0	0	0	====	
	RECEPT-EXT. LOGGIA	10	10	20	1	29	30	2	30	0	0	0	====	
	====	10	10	20	1	29	30	2	30	0	0	0	====	
		120 : AMPS PHASE A		ACTUAL CONN. LOAD :		128		KVA						
		138 : AMPS PHASE B		NEC DEMAND :		128		31						

EQUIPMENT FEEDER SCHEDULE																				
PROJECT: THE ROBERT APARTMENTS - CLUBHOUSE & TRASH ENCLOSURE																				
DATE: 6/4/20																				
EQUIPMENT DESCRIPTION	VOLTS	PH	NEUT	MOTOR (LARGEST)	ADDITIONAL MOTORS	HEATER OR LIGHTING LOAD	MISC.	TOTAL AMPS	PAN. C.B. SIZE AMPS	DISCONNECT SIZE AMPS	STARTER FUSE SIZE NEMA	VOLTAGE DROP	WIRE PER PHASE	NEUT WIRE	GND WIRE	# OF RUNS	CONDUIT SIZE	NOTES		
AH-1C	240	1	N	0.75	6.90			9.6	40.0	47	60	60	N.F.			#10	1	3/4"	i	
AH-2C	240	1	N	0.75	6.90			4.5	18.8	26	35					#10	1	3/4"	i	
AH-3C	240	1	N	0.75	6.90			6.0	25.0	32	40					#10	1	3/4"	i	
CU-1C	240	1	N		16.70	0.95				18	35	60	N.F.	1.78%	#8	#8	1	3/4"		
CU-2C	240	1	N		7.70	0.70				8	15			0.35%	#12	#12	1	1/2"	j	
CU-3C	240	1	N		12.80	0.95				14	25			0.57%	#12	#12	1	1/2"	j	
EF-1C, 2C, 3C, 4C	120	1	Y		1.00					1	20			0.25%	#12	#12	#12	1	1/2"	c
EF-5C	120	1	Y		1.00					1	20			0.47%	#12	#12	#12	1	1/2"	d
EF-6C	120	1	Y		1.00					1	15			0.47%	#12	#12	#12	1	1/2"	e
EVH-1, 2	240	1	N					6.0	25.0	25	35	60	N.F.	1.95%	#8	#10	1	3/4"	k	
TRASH COMPACTOR	240	3	N	15.00	42.00					42	60	100	N.F.	0.52%	#4	#8	1	1-1/4"	h	

GENERAL NOTES:

- PROVIDE DISC. SW. AT ALL PIECES OF EQUIPMENT, UNLESS OTHERWISE NOTED ON THIS SCHEDULE.
- C.B., STARTER, DISC. & FUSE SIZES SHOWN FOR REFERENCE ONLY. SIZE AS RECOMMENDED BY EQUIPMENT MANUFACTURER. VERIFY REQUIREMENTS WITH APPROVED EQUIPMENT SHOP DRAWINGS.
- PROVIDE NEMA OUTDOOR RATED ENCLOSURES FOR ALL DISC. SW. MOUNTED OUTDOORS.
- COORDINATE STARTER TYPE WITH EQUIPMENT PROVIDER.
- E.C. TO VERIFY THAT C.B.'S FOR MOTORS ARE SUFFICIENT TO ALLOW STARTING OF MOTOR, IF REQUIRED FOR STARTING C.B. TO BE INCREASED TO A MAX. OF 225% OF LARGEST MOTOR F.L.A.
- INCREASE CONDUCTOR SIZES AS REQUIRED TO MAINTAIN A MAXIMUM OF 3.0% VOLTAGE DROP BASED ON ACTUAL CIRCUIT LENGTHS AS INSTALLED.
- TOTAL AMPS SHOWN DO NOT INCLUDE NON-COINCIDENTAL LOADS.

ABBREVIATIONS:

MCP = MOTOR CIRCUIT PROTECTOR C.B.
MMS = MAN. MTR. STARTER 20A SW. WITH O.L. AND PILOT
MSS = MOTOR STARTING 20A SW. WITHOUT O.L.
VFD = VARIABLE FREQ. DRIVE UNIT.
CBMC = COMB. DISC/MCP AND MAG. MOTOR STARTER(MMC)
MMC = MAGNETIC MOTOR CONTROLLER W/O.L.

N.F. = NON-FUSED
O.L. = THERMAL OVER LOAD ELEMENT
1 = NEMA 1 ENCLOSURE
3R = NEMA 3R ENCLOSURE
4SS = NEMA 4 W.P. STAINLESS STEEL ENCL.

NOTES:

- CONNECT VIA LINE VOLTAGE T STAT. FURNISHED BY MECHANICAL CONTRACTOR.
- CONNECT VIA CONTROL DEVICES FURNISHED BY MECHANICAL CONTRACTOR.
- CONNECT VIA LOCAL LIGHT SWITCH/CONTROL DEVICE.
- CONNECT VIA LOCAL PROGRAMMABLE TIMER SWITCH.
- CONNECT VIA UNIT MTD DISC. SW. FURNISHED WITH EQUIPMENT.
- INSTALL AND CONNECT CONTROLLERS FURNISHED WITH EQUIP.
- PROVIDE SINGLE POLE SWITCH FOR DISCONNECTING MEANS.
- VERIFY ELECTRICAL REQUIREMENTS WITH OWNER'S VENDOR.
- DISCONNECT SWITCH NOT REQUIRED FOR AIR HANDLER.
- DISCONNECT SWITCH NOT REQUIRED FOR COND. UNIT.

VOLTS L-N : 120		MAIN OPTIONS REQUIRED		PANEL : TE		ENCLOSURE DATA								
VOLTS PH : 240		S.E. RATED : YES		MCB : 100 AMPS		NEMA : 3R								
PHASE : 3		GFI PROT. : N/A		MLO : N/A AMPS		SECTIONS : 1								
MOUNTING : SURFACE		SHUNT TRIP : N/A		WIDTHSECT. : 20		DEPTH : 6								
MFR : SQ. D.														
TYPE : NG														
AIC RATING (FULLY RATED OR SERIES RATED):				65 KA (MINIMUM, SEE SPECIFICATIONS)										
NOTES	DESCRIPTION	LOAD CONN	AMPS	AMPS	C.B. AMPS	C.B. POLES	CKT. NUM	CKT. NUM	C.B. AMPS	C.B. POLES	CKT. NUM	LOAD CONN	DESCRIPTION	NOTES
	TRASH COMPACTOR	42	42	80	3	1	2	1	20	1	160	160	EXTERIOR LIGHTS	
	====	42	42	80	3	1	2	1	20	1	160	160	====	
	SPACE (HIGH LEG)	0	0	42	3	4	1						SPACE (HIGH LEG)	3
	====	0	0	42	3	4	1						====	3
	SPACE (HIGH LEG)	0	0	20	1	7	8	1					SPACE (HIGH LEG)	3
	====	0	0	20	1	7	8	1					====	3
	SPACE (HIGH LEG)	0	0	20	1	11	12	1					SPACE (HIGH LEG)	
	====	0	0	20	1	11	12	1					====	
	SPACE (HIGH LEG)	0	0	1	13	14	3	30	0				SURGE PROT. DEVICE	
	====	0	0	1	13	14	3	30	0				====	
	SPACE	0	0	1	17	18	1						SPACE	
	====	0	0	1	17	18	1						====	
		43 : AMPS PHASE A		ACTUAL CONN. LOAD :		43		KVA						
		42 : AMPS PHASE B		NEC DEMAND :		43		15						
		44 : AMPS PHASE C												

VOLTS L-N : 120		MAIN OPTIONS REQUIRED		PANEL : HC1 (SECTION #2)		ENCLOSURE DATA								
VOLTS PH : 240		S.E. RATED : N/A		MCB : N/A AMPS		NEMA : 1								
PHASE : 1		GFI PROT. : N/A		MLO : 200 AMPS		SECTIONS : 1								
MOUNTING : SURFACE		SHUNT TRIP : N/A		WIDTHSECT. : 14.25		DEPTH : 3.75								
MFR : SQ. D.														
TYPE : QO														
AIC RATING (FULLY RATED OR SERIES RATED):				65 KA (MINIMUM, SEE SPECIFICATIONS)										
NOTES	DESCRIPTION	LOAD CONN	AMPS	AMPS	C.B. AMPS	C.B. POLES	CKT. NUM	CKT. NUM	C.B. AMPS	C.B. POLES	CKT. NUM	LOAD CONN	DESCRIPTION	NOTES
	KIT RECEPT-ROOM 70	12	12	20	1	31	32	2	35	25	2			

GENERAL NOTES:

- COORDINATE ALL WORK WITH LOCAL UTILITY CO. (FP&L) PRIOR TO COMMENCING WORK.
- ALL MAIN CIRCUIT BREAKERS RATED 1200A OR GREATER SHALL COMPLY WITH NEC 240.87 (ARC ENERGY REDUCTION) REQUIRING BOTH BREAKER DOCUMENTATION AS WELL AS APPROVED METHOD TO REDUCE CLEARING TIME.

REFERENCE NOTES:

- COORDINATE EXACT LOCATION AND QUANTITIES OF UTILITY TRANSFORMERS WITH CIVIL ENGINEER AND LOCAL POWER COMPANY PRIOR TO ROUGH-IN.
- FURNISH AND INSTALL 120/208V, 3 PHASE, 4W, 1200A MAIN CIRCUIT BREAKER METER CENTER IN NEMA 3R ENCLOSURE WITH A TOTAL OF (8) METER SECTIONS. SERVICE ENTRANCE RATED AND LABELED WITH MINIMUM A.I.C. RATING OF 65K. REFER TO POWER RISER DIAGRAM FOR METER SOCKET AND CIRCUIT BREAKER SIZE REQUIREMENTS. LABEL "MAIN SERVICE DISCONNECT."
- COORDINATE/VERIFY METERING EQUIPMENT CONFIGURATION WITH LOCAL UTILITY CO.
- CONNECT SPD VIA 2P, NEMA 3R DISCONNECT SWITCH FUSED AT 30A.
- PROVIDE SURGE PROTECTIVE DEVICE (SQ. D "HWA" SERIES OR APPROVED SUBSTITUTION), MINIMUM 100KA RATING.
- #3/0 COPPER GROUND CONDUCTOR.
- GROUNDING ELECTRODE CONDUCTOR TO (2) 5/8"x20'-0" COPPERCLAD GROUND RODS MINIMUM 20'-0" APART.
- PROVIDE CONCRETE ENCASED ELECTRODE (ENCASE (1)#3/0 CU BARE CONDUCTOR IN CONCRETE FOOTER, MINIMUM 20'-0" OF CONDUCTOR WITH AT LEAST 2" OF CONCRETE COVER). BOND TO REBAR WHERE APPLICABLE.
- PROVIDE EXTERNAL INTERSYSTEM BONDING TERMINATION (PER NEC 250.94) WITH MIN. #2 COPPER GROUND CONDUCTOR CONNECTION TO EQUIPMENT GROUNDING BUS IN METER CENTER. THE INTERSYSTEM BONDING TERMINATION SHALL HAVE A MIN. OF THREE TERMINATION POINTS.
- PROVIDE PHOTOCELL FOR CONTROL OF EXTERIOR BUILDING LIGHTS. MOUNT 9'-0" A.F.G. ON BUILDING EXTERIOR. AIM NORTH.
- PROVIDE LABELING FOR ALL APT. UNIT METERS AS REQUIRED INCLUDING APPROVED ADDRESSES AND SUITE NUMBERS.
- UTILITY TRANSFORMER PAD FURNISHED BY UTILITY COMPANY AND INSTALLED BY ELECTRICAL CONTRACTOR.
- ALL PRIMARY CONDUIT FURNISHED BY UTILITY COMPANY AND INSTALLED BY ELECTRICAL CONTRACTOR AS REQUIRED PER COORDINATION WITH LOCAL UTILITY COMPANY.
- PROVIDE 3PH METER SOCKET AND 3P/175A CIRCUIT BREAKER FOR HOUSE PANEL.
- PROVIDE 3PH METER SOCKET AND 3P/175A CIRCUIT BREAKER FOR HOUSE PANEL.
- ALL OTHER METER SECTIONS TO BE 1PH WITH 2P CIRCUIT BREAKERS AS INDICATED.

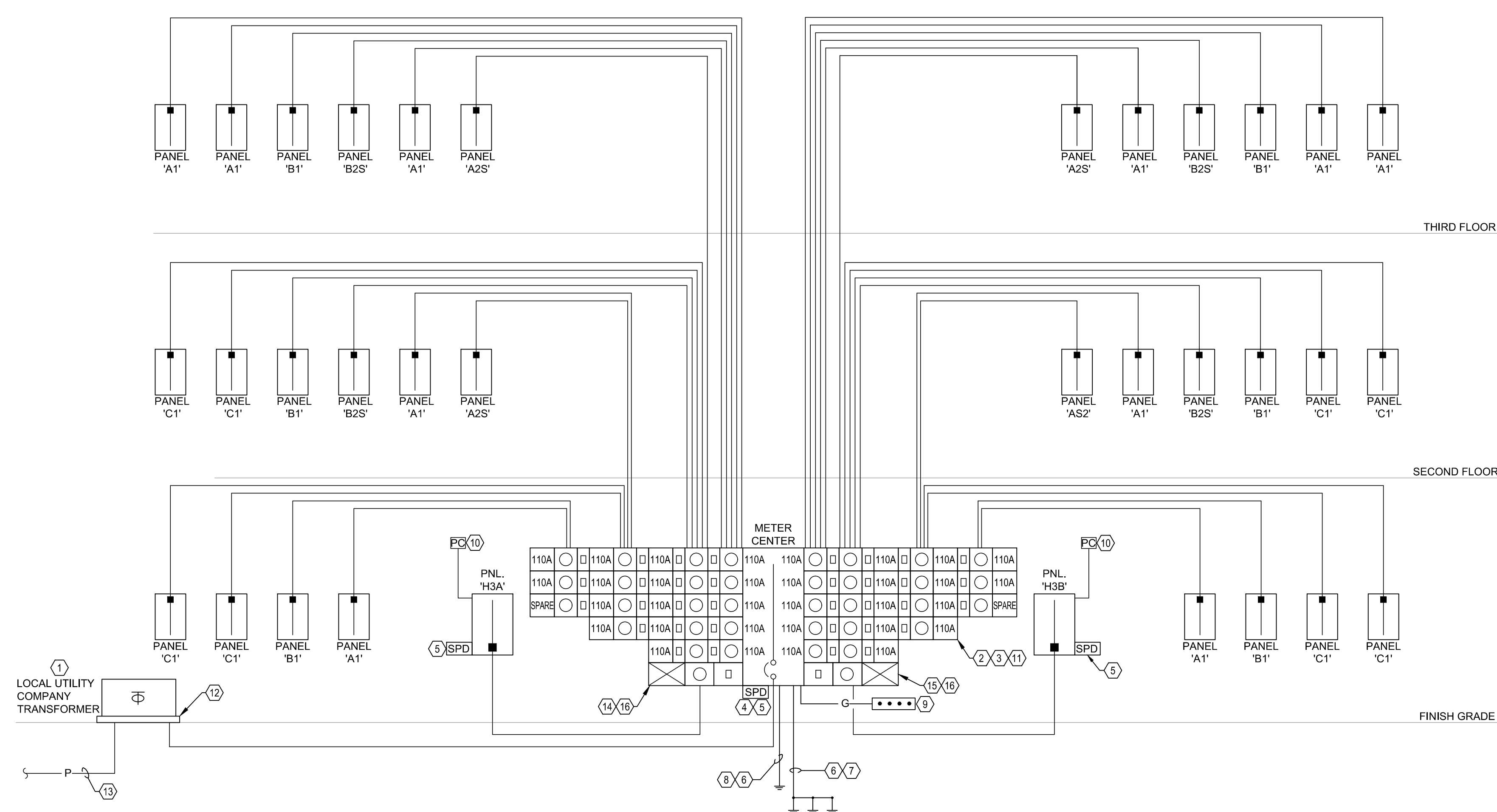
PERMIT REVIEW STAMP

ISSUE HISTORY

No.	Date	Description
1	11/22/19	SCHEMATIC DESIGN
2	12/06/19	DESIGN DEVELOPMENT
3	02/28/20	PERMIT REVIEW SET

REVISION HISTORY

No.	Date	Description



PANEL FEEDER SCHEDULE

JOB NUMBER: THE ROBERT APARTMENTS - BUILDING TYPE 3 DATE: 06/04/20

FEEDER	CIRCUIT BREAKER	FEEDER	FEEDER	PARALLEL RUNS	PHASE WIRE	NEUTRAL WIRE	GROUND WIRE	ISOLATED GROUND	COPPER/ALUMINUM	CONDUIT SIZE
METER CENTER	1200	208	3	1240	1.80	4	#500	#500	N/A	4"
UNIT PANEL A1	110	208	1	155	1.76	1	#2/0	#3/0	#1/0	N/A
UNIT PANEL A2S	110	208	1	135	1.69	1	#2/0	#2/0	#1	N/A
UNIT PANEL B1	110	208	1	135	1.83	1	#2/0	#2/0	#1	N/A
UNIT PANEL B2S	110	208	1	135	1.83	1	#2/0	#2/0	#1	N/A
UNIT PANEL C1	110	208	1	155	1.82	1	#3/0	#3/0	#1/0	N/A
PANEL H3A	100	208	3	100	0.42	1	#8	#8	N/A	1-1/4"
PANEL H3B	175	208	3	175	0.29	1	#2/0	#2/0	#6	2"

1 BUILDING TYPE 3 POWER RISER DIAGRAM
ES.02 NOT TO SCALE

FUGLEBERG KOCH
PLLC
2555 Temple Trail, Winter Park, FL 32789 (407) 629-0595
www.fuglebergkoch.com BR569

CONSULTANT
SALAS O'BRIEN
Expect a difference!
3901 Quince Orchard Blvd., Suite 100
Gaithersburg, MD 20878
(410) 381-6800
CERT. OF AUTH. NO. 0106

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM S. LEVINE, P.E. ON DATE INDICATED IN DIGITAL SIGNATURE USING A DIGITAL SIGNATURE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

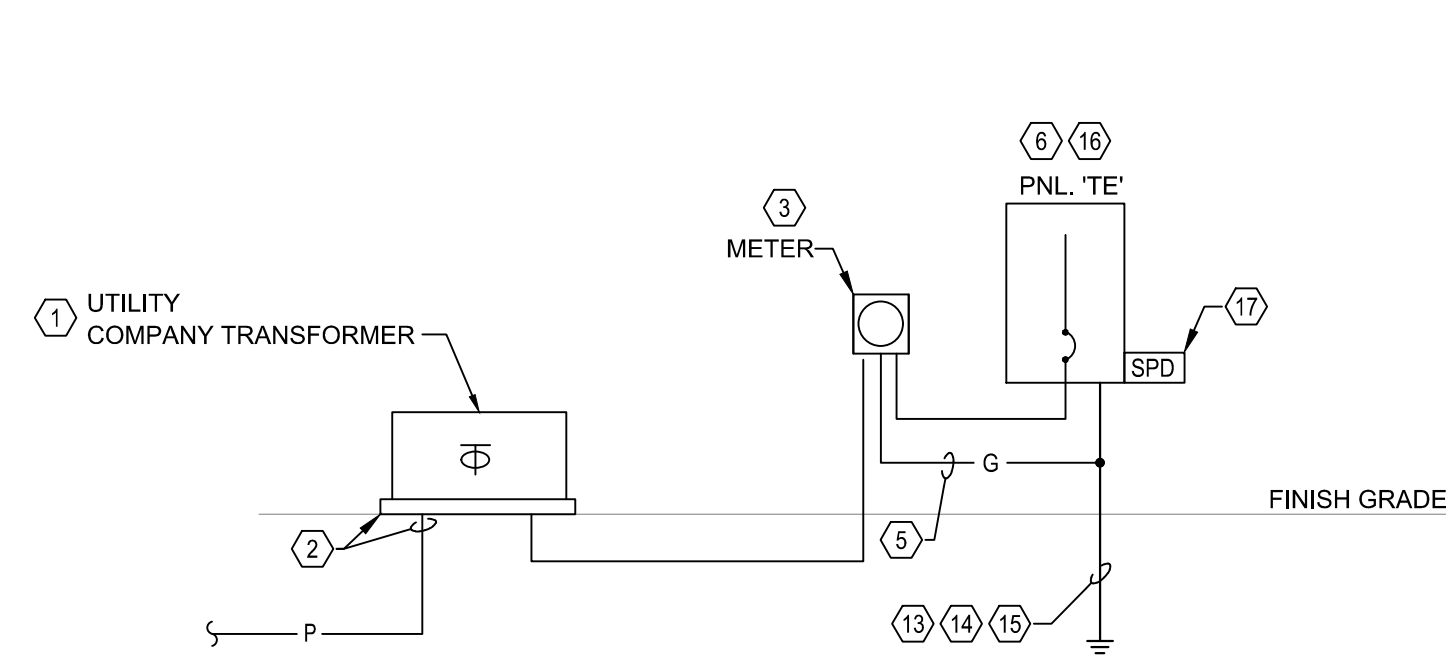
THE ROBERT
FT. MYERS, FL

Drawn:	SWC
Checked:	GPM
Approval:	ASL
Date:	09/10/2019
Project #:	5592

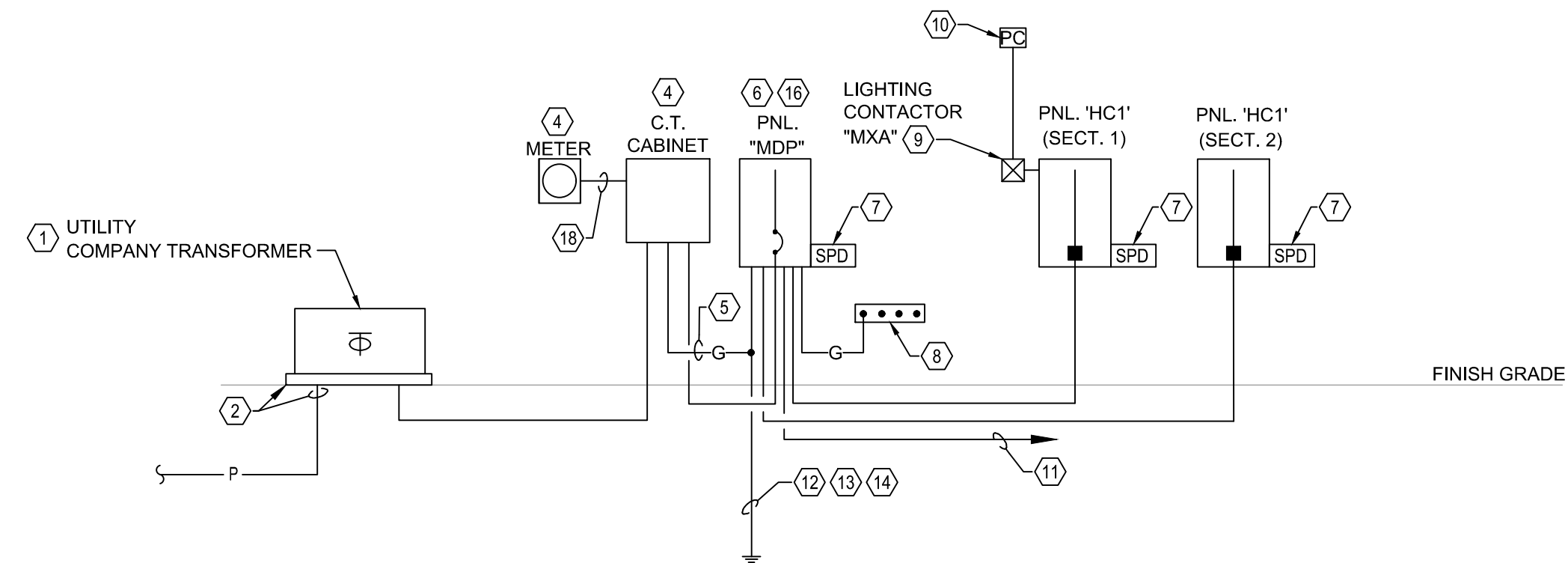
POWER RISER DIAGRAMS - ELECTRICAL

E5.02

© 2019 These documents and their contents are the property of FUGLEBERG KOCH, PLLC and are intended only for the specific project noted on these drawings. Any reproduction, revision, or modification of these documents without the expressed written consent of FUGLEBERG KOCH, PLLC is prohibited by law.



2 TRASH ENCLOSURE POWER RISER DIAGRAM
E5.03 NOT TO SCALE



1 CLUBHOUSE POWER RISER DIAGRAM
E5.03 NOT TO SCALE

PANEL FEEDER SCHEDULE												
JOB NUMBER: THE ROBERT APARTMENTS - CLUBHOUSE & TRASH ENCLOSURE DATE: 06/04/20												
FEEDING	FEEDER CIRCUIT BREAKER			FEEDER FEEDER			FEEDER			CONDUIT		
	AMP SIZE	VOLTS	PHASE	CAPACITY	VOLT DROP %	PARALLEL RUNS	PHASE WIRE	NEUTRAL WIRE	GROUND WIRE	ISOLATED GROUND	COPPER/ALUMINUM	SIZE
CLUBHOUSE												
C.T. CABINET	600	240	1	620	1.58	2	#500	#500	N/A	N/A	ALUMINUM	3"
MAIN SERVICE PANEL MDP	600	240	1	620	0.09	2	#500	#500	N/A	N/A	ALUMINUM	3"
PANEL HC1 (SECTION 1)	175	240	1	180	0.88	1	#4/0	#4/0	#4	N/A	ALUMINUM	2"
PANEL HC1 (SECTION 2)	175	240	1	180	0.88	1	#4/0	#4/0	#4	N/A	ALUMINUM	2"
POOL EQUIP. PANEL	100	240	1	115	1.67	1	#2	#2	#6	N/A	COPPER	1-1/4"
TRASH ENCLOSURE												
METER	100	240	3	130	1.62	1	#1	#1	N/A	N/A	COPPER	1-1/2"
PANEL TE	100	240	3	100	0.07	1	#3	#3	N/A	N/A	COPPER	1-1/4"

ELECTRICAL SERVICE CALCULATION						
Project: THE ROBERT APARTMENTS CLUBHOUSE						
NEC	LOAD SERVED	CONN LOAD KVA	DEMAND FACTOR	DEMAND LOAD KVA	DEMAND LOAD AMPS	
220.42	LIGHTING	9	100%	9	0	
220.44	RECEPTACLES					
	1ST 19KVA	9	100%	9	37	
	REMAINDER OVER 10 KVA	0	50%	0	0	
220.50	MOTORS					
	LARGEST MOTOR (NOTE 2)	5	25%	1	5	
	AHUS	0	100%	0	0	
	EX FANS	0	100%	0	0	
	HEAT PUMPS	0	100%	0	0	
	COMPRESSOR/COND UNITS (NOTE 1)	10	80%	8	32	
	REMAINING MOTORS	0	100%	0	0	
220.51	ELECTRIC HEAT					
	AHUS WITH ELECTRIC HEAT	25	100%	25	105	
	REMAINING LOADS					
	ELECTRIC WATER HEATERS	12	100%	12	50	
	MISC. EQUIPMENT	43	100%	43	179	
220.60	NOTE 1					
	WHEN COMPRESSOR/COND UNIT LOAD IS NON-COINCIDENTAL TO ELECTRIC HEAT, DEMAND EQUALS 100% OF THE LARGEST LOAD AND 0% OF THE NON-COINCIDENTAL SMALLER LOAD OR APPLICABLE PORTION					
430.24	NOTE 2					
	PLUS 25% DEMAND OF LARGEST MOTOR LARGEST MOTOR FULL LOAD INCLUDED IN MOTOR LOADS LISTED					
	VOLTAGE: 120/240V, 3W, 1PH	CONN KVA		DEMAND KVA	DEMAND AMPS	
	SUB-TOTALS	108		107	446	
230.42	MINIMUM SERVICE SIZE			KVA	AMPS	
	DEMAND			107	446	
	PLUS 25% OF CONTINUOUS LOADS (LIGHTING)			2	9	
	ALLOWANCE FOR MOTOR STARTING (PLUS 75% OF LARGEST MOTOR)			4	15	
	PLUS SPARE FOR EXPANSION 15 %			16	67	
	TOTALS			129	537	
	SELECTED SERVICE SIZE			144	600	

REFERENCE NOTES

- COORDINATE EXACT LOCATION OF UTILITY TRANSFORMER WITH CIVIL ENGINEER AND LOCAL POWER COMPANY PRIOR TO ROUGH-IN.
- ALL UTILITY TRANSFORMER PADS AND UNDERGROUND PRIMARY CONDUIT FURNISHED BY UTILITY COMPANY (FP&L) AND INSTALLED BY ELECTRICAL CONTRACTOR.
- PROVIDE 3PH/100A METER BASE PER UTILITY COMPANY REQUIREMENTS.
- PROVIDE C.T. CABINET AND METER BASE PER UTILITY COMPANY REQUIREMENTS.
- PROVIDE GROUNDING PER REQUIREMENTS OF UTILITY COMPANY AND LOCAL AHJ.
- LABEL "MAIN SERVICE DISCONNECT".
- PROVIDE SURGE PROTECTIVE DEVICE (SQ. D "HWA" SERIES OR APPROVED SUBSTITUTION), MINIMUM 100KA SURGE CURRENT RATING.
- PROVIDE EXTERNAL INTERSYSTEM BONDING TERMINATION (PER NEC 250.94) WITH MIN. #2 COPPER GROUND CONDUCTOR CONNECTION TO EQUIPMENT GROUNDING BUS IN METER CENTER. THE INTERSYSTEM BONDING TERMINATION SHALL HAVE A MIN. OF THREE TERMINATION POINTS.
- REFER TO WIRING DETAIL/SCHEMATIC ON DRAWING E6.01.
- PROVIDE PHOTOCELL FOR CONTROL OF BUILDING EXTERIOR LIGHTS. MOUNT ON BUILDING EXTERIOR 9'-0" A.F.G. AIM NORTH.
- TO POOL EQUIPMENT PANEL. COORDINATE/VERIFY EXACT POWER REQUIREMENTS AND LOCATION OF POOL EQUIPMENT WITH POOL CONTRACTOR PRIOR TO COMMENCEMENT OF WORK.
- #2/0 COPPER GROUND CONDUCTOR.
- GROUNDING ELECTRODE CONDUCTOR TO (2) 5/8"x20'-0" COPPERCLAD GROUND RODS MINIMUM 20'-0" APART.
- PROVIDE CONCRETE ENCASED ELECTRODE (ENCASE 1) #2/0 CU BARE CONDUCTOR IN CONCRETE FOOTER, MINIMUM 20'-0" OF CONDUCTOR WITH AT LEAST 2" OF CONCRETE COVER). BOND TO REBAR WHERE APPLICABLE.
- #6 CU GROUND CONDUCTOR.
- PROVIDE PERMANENT LABELING TO INDICATE MAXIMUM AVAILABLE FAULT CURRENT PER NEC 110.24.
- PROVIDE SURGE PROTECTIVE DEVICE (SQ. D "SDSA3650" OR APPROVED SUBSTITUTION).
- 1-1/2" GLAV. RIGID CONDUIT WITH BUSHINGS AND PULLSTRING.

GENERAL NOTES

- COORDINATE ALL WORK WITH LOCAL UTILITY CO. (FP&L) PRIOR TO COMMENCING WORK.
- PROVIDE PERMANENT LABELING FOR ALL PANELBOARDS SUPPLIED BY FEEDERS TO INDICATE EACH DEVICE OR EQUIPMENT WHERE THE POWER ORIGINATES PER NEC 408.4(B).

PERMIT REVIEW STAMP

ISSUE HISTORY

No.	Date	Description
1	11/22/19	SCHEMATIC DESIGN
2	12/06/19	DESIGN DEVELOPMENT
3	02/28/20	PERMIT REVIEW SET

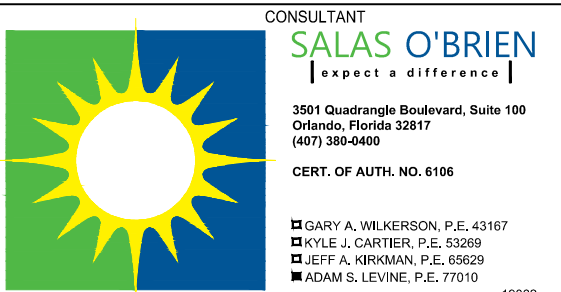
REVISION HISTORY

No.	Date	Description
1	05/06/20	PERMIT COMMENT RESPONSES



FUGLEBERG KOCH
PLLC

2555 Temple Trail, Winter Park, FL 32789 (407) 629-0395
www.fuglebergkoch.com BR569



CONSULTANT
SALAS O'BRIEN
[expect a difference]
3901 Quindridge Boulevard, Suite 100
Orlando, Florida 32817
(407) 388-6800
CENT. OF ARCH. NO. 6166
DWAYNE A. WILKERSON, P.E. 43167
DANIEL S. CARTER, P.E. 53889
JEFF A. ORMAN, P.E. 69029
MICHAEL LEVINE, P.E. 77010

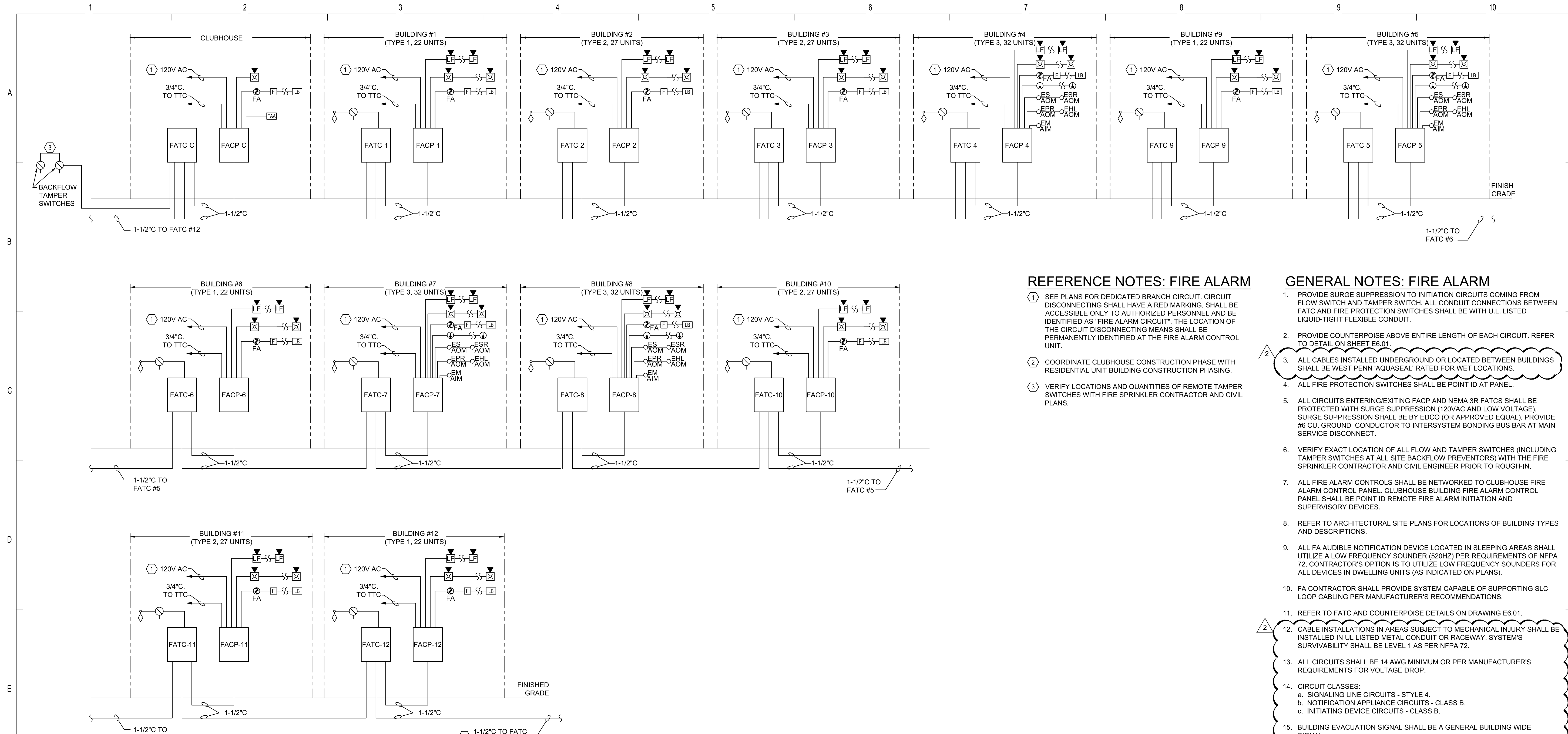
THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM S. LEVINE, P.E. ON DATE INDICATED IN DIGITAL SIGNATURE USING A DIGITAL SIGNATURE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Drawn:	SWC
Checked:	GPM
Approval:	ASL
Date:	09/10/2019
Project #:	5592

THE ROBERT
FT. MYERS, FL

POWER RISER DIAGRAMS - ELECTRICAL

E5.03



2 FIRE ALARM RISER DIAGRAM
E5.04 NOT TO SCALE

REFERENCE NOTES: FIRE ALARM

- ① SEE PLANS FOR DEDICATED BRANCH CIRCUIT. CIRCUIT DISCONNECTING SHALL HAVE A RED MARKING. SHALL BE ACCESSIBLE ONLY TO AUTHORIZED PERSONNEL AND BE IDENTIFIED AS "FIRE ALARM CIRCUIT". THE LOCATION OF THE CIRCUIT DISCONNECTING MEANS SHALL BE PERMANENTLY IDENTIFIED AT THE FIRE ALARM CONTROL UNIT.
- ② COORDINATE CLUBHOUSE CONSTRUCTION PHASE WITH RESIDENTIAL UNIT BUILDING CONSTRUCTION PHASING.
- ③ VERIFY LOCATIONS AND QUANTITIES OF REMOTE TAMPER SWITCHES WITH FIRE SPRINKLER CONTRACTOR AND CIVIL PLANS.

GENERAL NOTES: FIRE ALARM

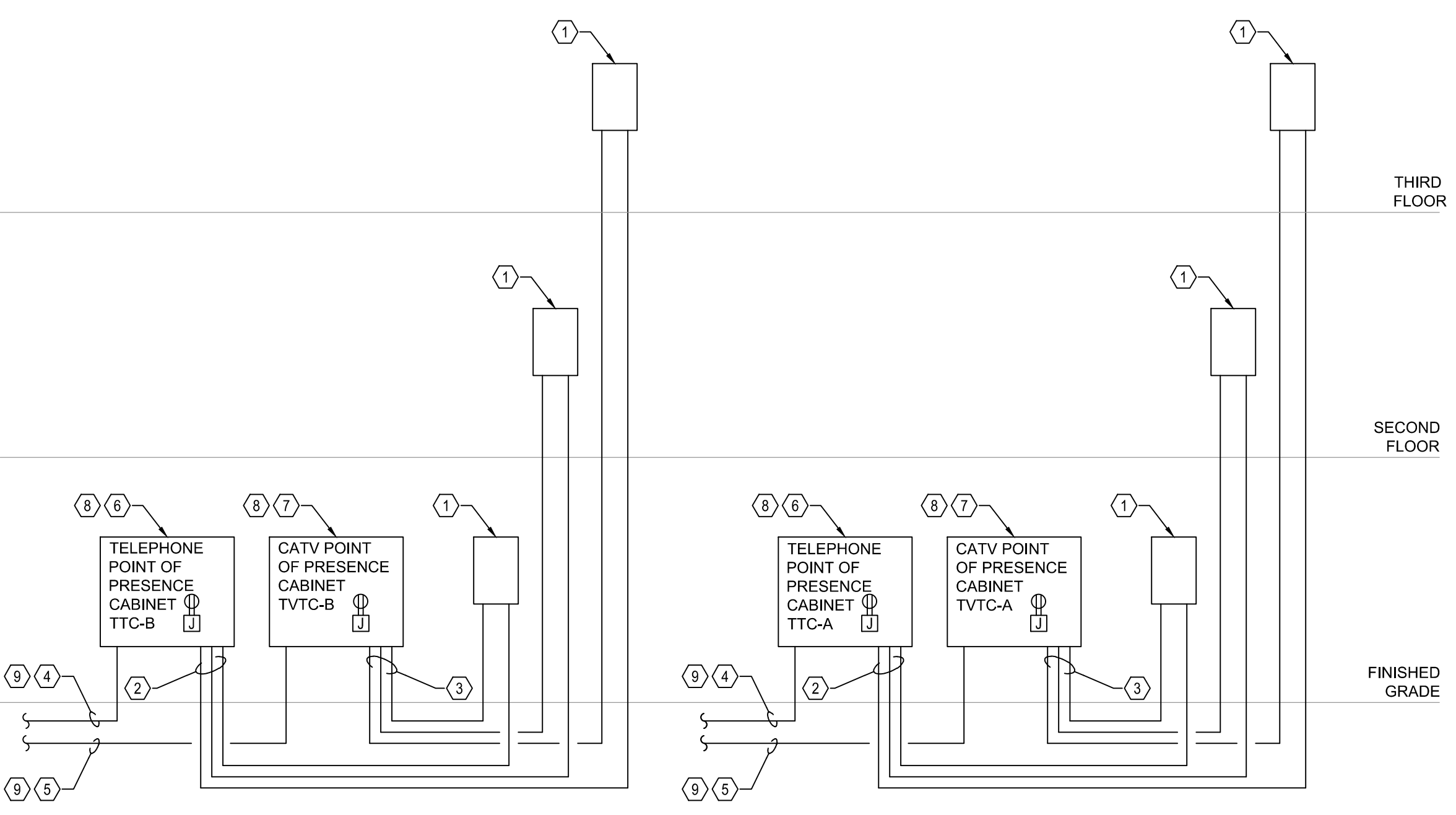
1. PROVIDE SURGE SUPPRESSION TO INITIATION CIRCUITS COMING FROM FLOW SWITCH AND TAMPER SWITCH. ALL CONDUIT CONNECTIONS BETWEEN FATC AND FIRE PROTECTION SWITCHES SHALL BE WITH U.L. LISTED LIQUID-TIGHT FLEXIBLE CONDUIT.
2. PROVIDE COUNTERPOISE ABOVE ENTIRE LENGTH OF EACH CIRCUIT. REFER TO DETAIL ON SHEET E6.01.
3. ALL CABLES INSTALLED UNDERGROUND OR LOCATED BETWEEN BUILDINGS SHALL BE WEST PENN 'AQUASEAL' RATED FOR WET LOCATIONS.
4. ALL FIRE PROTECTION SWITCHES SHALL BE POINT ID AT PANEL.
5. ALL CIRCUITS ENTERING/EXITING FACP AND NEMA 3R FATCS SHALL BE PROTECTED WITH SURGE SUPPRESSION (120VAC AND LOW VOLTAGE). SURGE SUPPRESSION SHALL BE BY EDCO (OR APPROVED EQUAL). PROVIDE #6 CU GROUND CONDUCTOR TO INTERSYSTEM BONDING BUS BAR AT MAIN SERVICE DISCONNECT.
6. VERIFY EXACT LOCATION OF ALL FLOW AND TAMPER SWITCHES (INCLUDING TAMPER SWITCHES AT ALL SITE BACKFLOW PREVENTORS) WITH THE FIRE SPRINKLER CONTRACTOR AND CIVIL ENGINEER PRIOR TO ROUGH-IN.
7. ALL FIRE ALARM CONTROLS SHALL BE NETWORKED TO CLUBHOUSE FIRE ALARM CONTROL PANEL. CLUBHOUSE BUILDING FIRE ALARM CONTROL PANEL SHALL BE POINT ID REMOTE FIRE ALARM INITIATION AND SUPERVISORY DEVICES.
8. REFER TO ARCHITECTURAL SITE PLANS FOR LOCATIONS OF BUILDING TYPES AND DESCRIPTIONS.
9. ALL FA AUDIBLE NOTIFICATION DEVICE LOCATED IN SLEEPING AREAS SHALL UTILIZE A LOW FREQUENCY SOUNDER (520HZ) PER REQUIREMENTS OF NFPA 72. CONTRACTOR'S OPTION IS TO UTILIZE LOW FREQUENCY SOUNDERS FOR ALL DEVICES IN DWELLING UNITS (AS INDICATED ON PLANS).
10. FA CONTRACTOR SHALL PROVIDE SYSTEM CAPABLE OF SUPPORTING SLC LOOP CABLING PER MANUFACTURER'S RECOMMENDATIONS.
11. REFER TO FATC AND COUNTERPOISE DETAILS ON DRAWING E6.01.
12. CABLE INSTALLATIONS IN AREAS SUBJECT TO MECHANICAL INJURY SHALL BE INSTALLED IN UL LISTED METAL CONDUIT OR RACEWAY. SYSTEMS SURVIVABILITY SHALL BE LEVEL 1 AS PER NFPA 72.
13. ALL CIRCUITS SHALL BE 14 AWG MINIMUM OR PER MANUFACTURER'S REQUIREMENTS FOR VOLTAGE DROP.
14. CIRCUIT CLASSES:
a. SIGNALING LINE CIRCUITS - STYLE 4.
b. NOTIFICATION APPLIANCE CIRCUITS - CLASS B.
c. INITIATING DEVICE CIRCUITS - CLASS B.
15. BUILDING EVACUATION SIGNAL SHALL BE A GENERAL BUILDING WIDE SIGNAL.
16. FIRE ALARM SYSTEM IS NON-CODED ADDRESSABLE TYPE.
17. PROVIDE SUPERVISORY MONITORING OF BDA SYSTEM PER REQUIREMENTS OF BDA RISER DIAGRAM AND FA INPUT/OUTPUT MATRIX ON DRAWING E6.02.

ISSUE HISTORY

No.	Date	Description
1	11/22/19	SCHEMATIC DESIGN
2	12/06/19	DESIGN DEVELOPMENT
3	02/28/20	PERMIT REVIEW SET

REVISION HISTORY

No.	Date	Description
2	06/03/20	PERMIT COMMENT RESPONSES



1 RESIDENTIAL BLDG. TELEPHONE/CATV RISER DIAGRAM
E5.04 NOT TO SCALE

REFERENCE NOTES: RESIDENTIAL TELEPHONE/CATV

- ① RESIDENTIAL STRUCTURED MEDIA CENTER JUNCTION BOX. PROVIDE 14"x14"x3.5" ENCLOSURE FOR 1 AND 2 BEDROOM UNITS AND 28"x14"x3.5" ENCLOSURE FOR 3 BEDROOM UNITS WITH SCREW-ON COVER. COORDINATE POWER OUTLET REQUIREMENTS WITH UNIT ELECTRICAL PLANS. COORDINATE QUANTITY OF BOXES REQUIRED WITH BUILDING TYPE.
- ② PROVIDE TO EACH UNIT (1) CAT 6 CABLE FOR TELEPHONE COMPANY SERVICE.
- ③ PROVIDE TO EACH UNIT (1) RG-6 COAX CABLE FOR CATV COMPANY SERVICE.
- ④ TELEPHONE COMPANY SERVICE ENTRY 3" STUB-OUT. STUB-OUT 5'-0" FROM BUILDING. COORDINATE LOCATION WITH CIVIL ENGINEER AND TELEPHONE COMPANY PRIOR TO ROUGH-IN.
- ⑤ CATV COMPANY SERVICE ENTRY 3" STUB-OUT. STUB-OUT 5'-0" FROM BUILDING. COORDINATE LOCATION WITH CIVIL ENGINEER AND CATV COMPANY PRIOR TO ROUGH-IN.
- ⑥ PROVIDE TELEPHONE POINT OF PRESENCE CABINET. 36"x36"x8"D CABINET WITH HINGED PAD-LOCKABLE HANDLE.
- ⑦ PROVIDE CATV POINT OF PRESENCE CABINET. 36"x36"x8"D CABINET WITH HINGED PAD-LOCKABLE HANDLE.
- ⑧ PROVIDE #4 CU GROUND CONDUCTOR TO INTERSYSTEM BONDING BUS BAR AT MAIN SERVICE DISCONNECT.
- ⑨ COORDINATE LOCATION OF CABINET AND STUB-OUT WITH LOCAL UTILITY COMPANY PRIOR TO ROUGH-IN.

FUGLEBERG KOCH
PLLC
2555 Temple Trail, Winter Park, FL 32789 (407) 629-0595
www.fuglebergkoch.com BR569

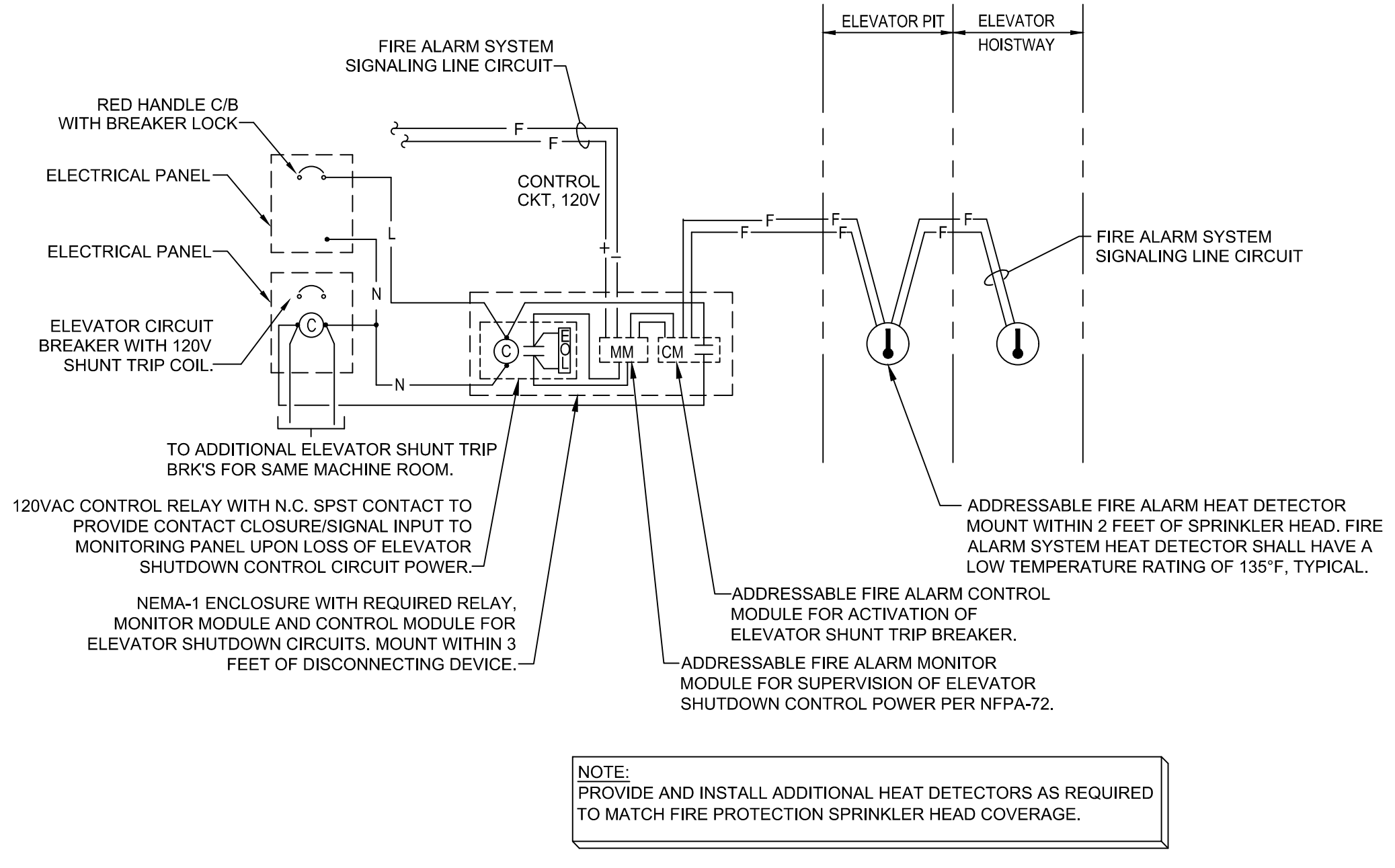
CONSULTANT
SALAS O'BRIEN
Expect a difference!
3901 Quince Orchard Boulevard, Suite 100
Gaithersburg, Florida 32817
(407) 388-6800
CENT. OF AUTH. NO. 0106
SALAS O'BRIEN, P.E. 43167
DANIEL J. CRONIN, P.E. 03089
DAVID A. O'BRIEN, P.E. 06029
MICHAEL S. LEVINE, P.E. 77050
THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM S. LEVINE, P.E. ON DATE INDICATED IN DIGITAL SIGNATURE USING A DIGITAL SIGNATURE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Drawn:	SWC
Checked:	GPW
Approved:	ASL
Date:	09/10/2019
Project #:	5592

THE ROBERT
FT. MYERS, FL
SYSTEM RISER DIAGRAMS - ELECTRICAL

E5.04

© 2019 These documents and their contents are the property of FUGLEBERG KOCH, PLLC, and are intended only for the specific project noted on these drawings. Any reproduction, revision, or modification of these documents without the expressed written consent of Fugleberg Koch, is prohibited by law.

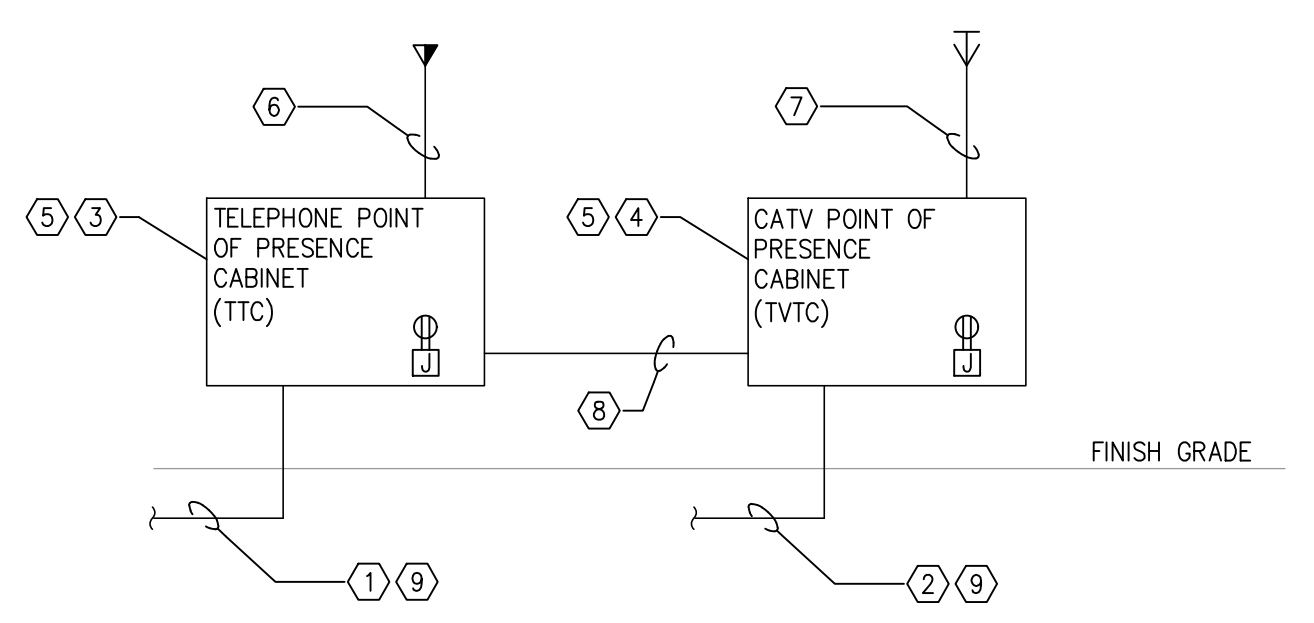


ELEVATOR SHUTDOWN CONTROL WIRING WITH ADDRESSABLE FIRE ALARM SYSTEM DEVICES

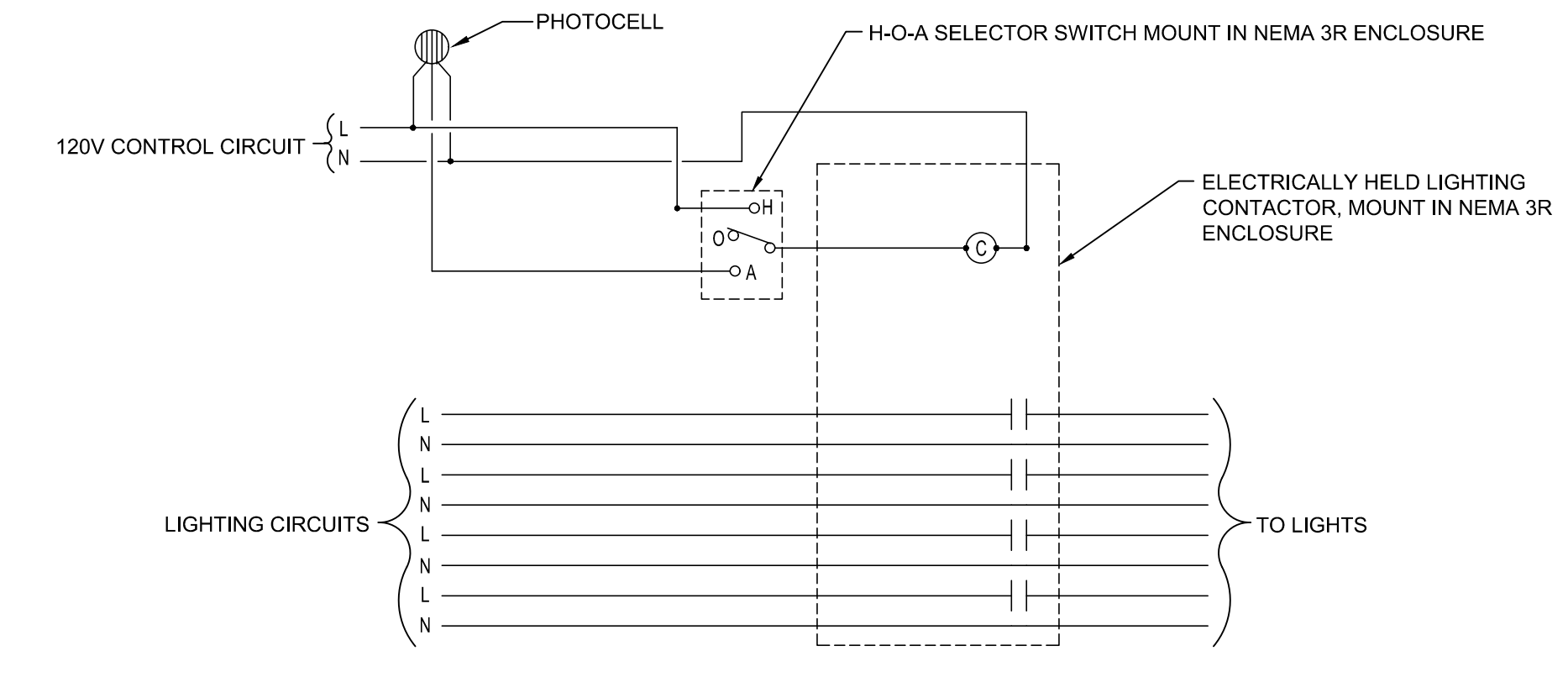
6 E6.01 NOT TO SCALE

**REFERENCE NOTES:
CLUBHOUSE TELEPHONE/CATV**

- 1 TELEPHONE COMPANY ENTRY 3" CONDUIT STUB-OUT. STUB-OUT 5'-0" FROM BUILDING. COORDINATE LOCATION WITH CIVIL ENGINEER AND TELEPHONE COMPANY PRIOR TO ROUGH-IN.
- 2 CATV COMPANY SERVICE ENTRY 3" CONDUIT STUB-OUT. STUB-OUT 5'0" FROM BUILDING. COORDINATE LOCATION WITH CIVIL ENGINEER AND CATV COMPANY PRIOR TO ROUGH-IN.
- 3 PROVIDE TELEPHONE POINT OF PRESENCE CABINET. 24"x18"x6" CABINET WITH HINGED PAD-LOCKABLE HANDLE.
- 4 PROVIDE CATV POINT OF PRESENCE CABINET 24"x18"x6" CABINET WITH HINGED PAD-LOCKABLE HANDLE.
- 5 PROVIDE #4 CU GROUND CONDUCTOR TO INTERSYSTEM BONDING BUS BAR AT MAIN SERVICE DISCONNECT.
- 6 PROVIDE (2) CAT 5e CABLES TO EACH COMMUNICATION OUTLET.
- 7 PROVIDE (1) RG-6 COAX CABLE AND (1) CAT. 5e CABLE FOR EACH TELEVISION OUTLET.
- 8 PROVIDE 2" CONDUIT NIPPLE.
- 9 COORDINATE ALL WORK WITH LOCAL TELEPHONE/CATV COMPANY.



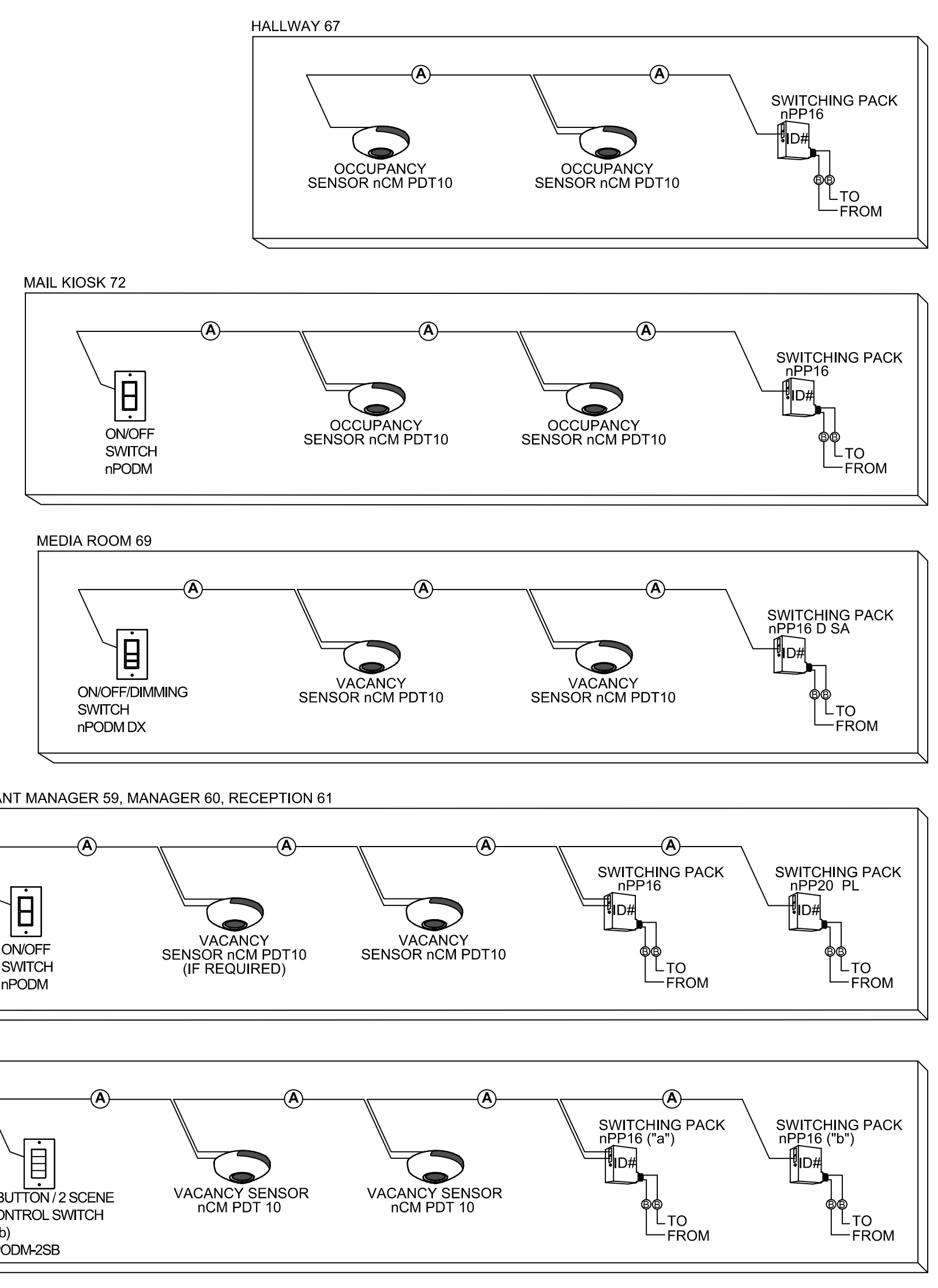
5 E6.01 NOT TO SCALE



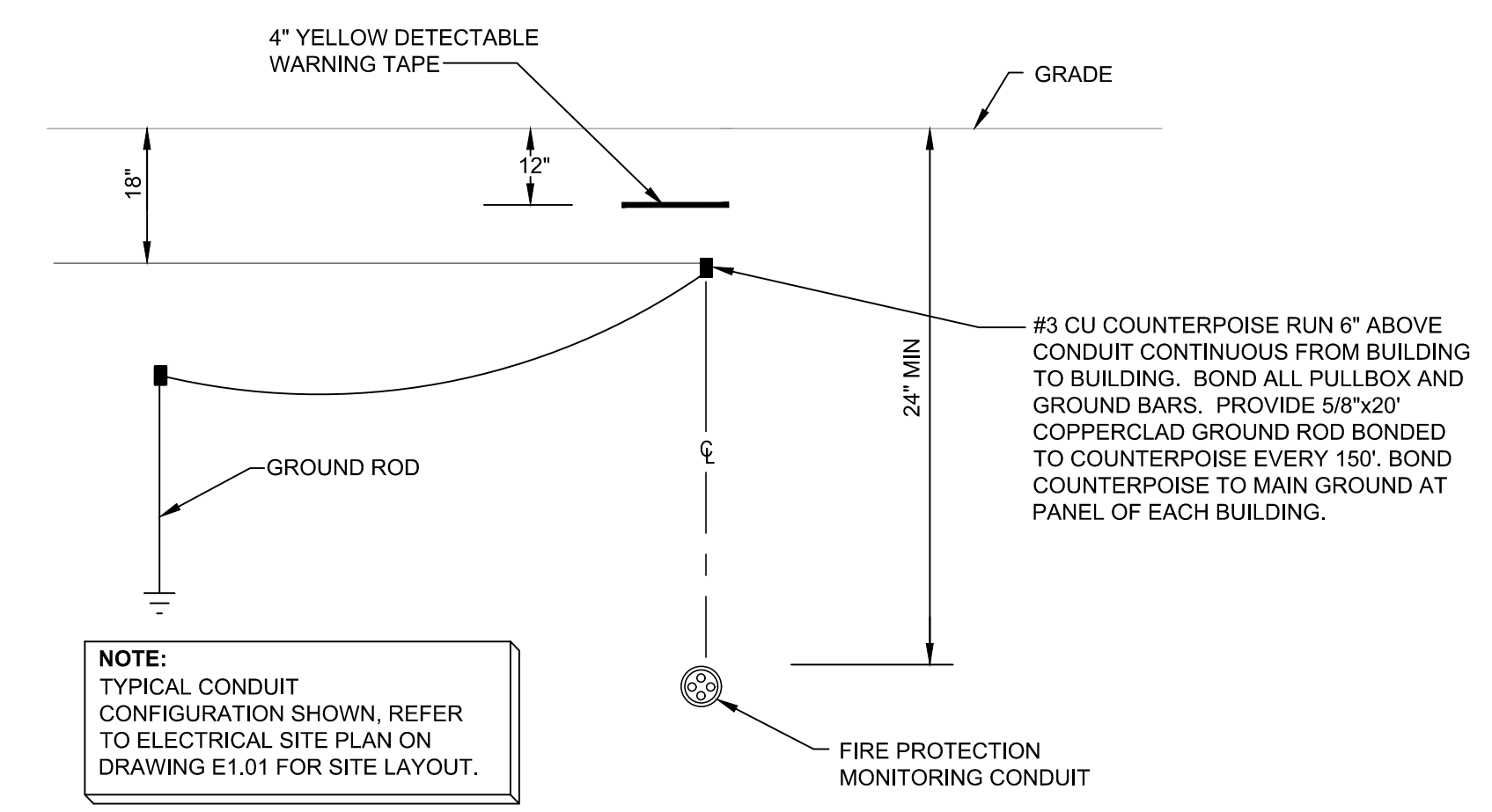
NOTES:
PROVIDE, INSTALL & CONNECT ADDITIONAL CONTACTS AND/OR CONTACTORS COMPLETE WITH ENCLOSURES AS REQUIRED PER APPLICATION. SEE ELECTRICAL DRAWINGS TO DETERMINE EXACT NUMBER OF POLES. SEE ELECTRICAL DRAWINGS FOR ACTUAL CIRCUIT NUMBERS. PROVIDE MINIMUM OF (4) ADDITIONAL/SPARE CONTACTS.

LIGHTING CONTACTOR 'MXA' SCHEMATIC - PHOTOCELL CONTROLLED

3 E6.01 NOT TO SCALE



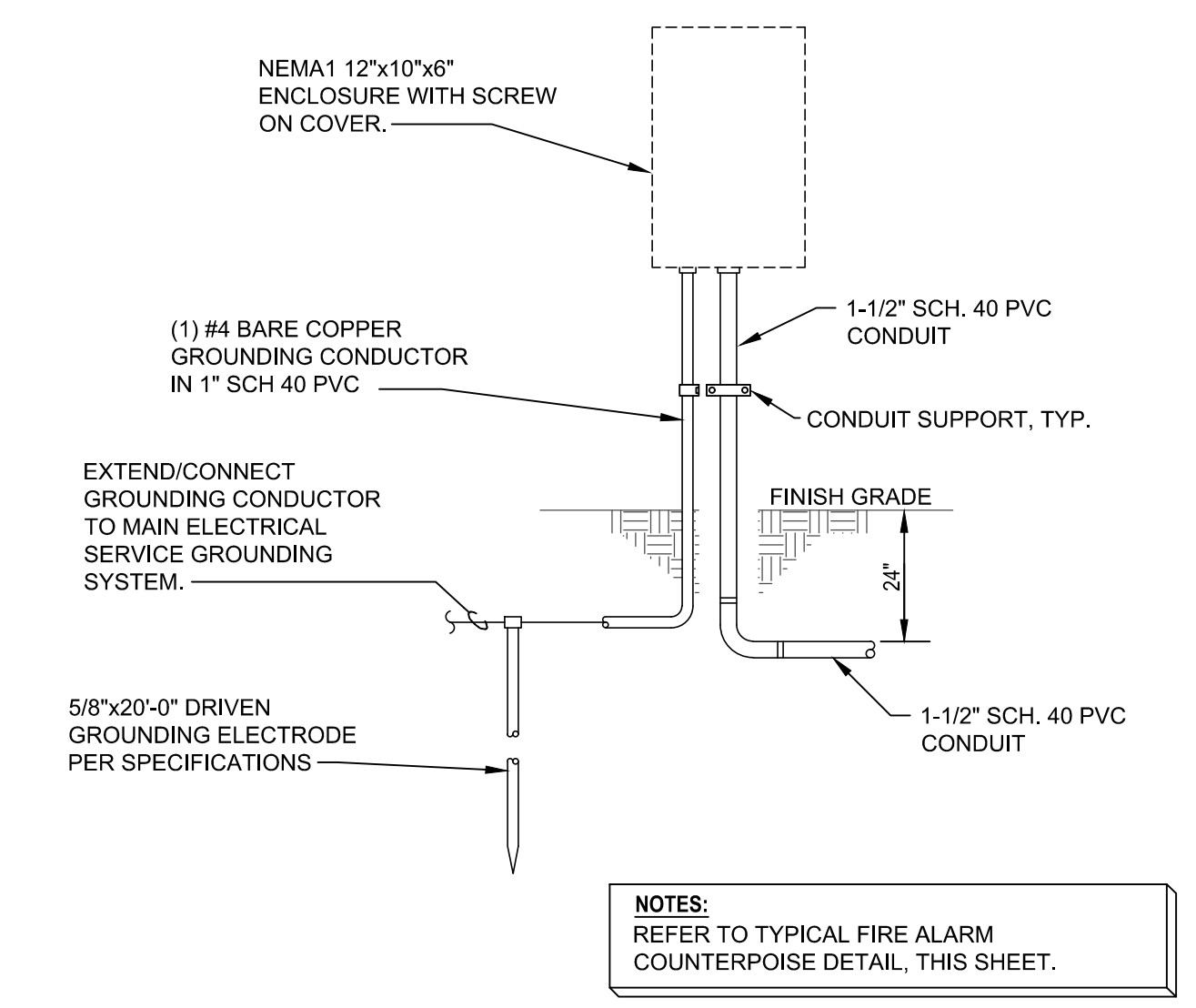
4 E6.01 NOT TO SCALE



NOTE:
TYPICAL CONDUIT CONFIGURATION SHOWN, REFER TO ELECTRICAL SITE PLAN ON DRAWING E1.01 FOR SITE LAYOUT.

TYPICAL FIRE ALARM COUNTERPOISE DETAIL

2 E6.01 NOT TO SCALE



NOTES:
REFER TO TYPICAL FIRE ALARM COUNTERPOISE DETAIL, THIS SHEET.

1 E6.01 NOT TO SCALE

ISSUE HISTORY

No.	Date	Description
1	11/22/19	SCHEMATIC DESIGN
2	12/06/19	DESIGN DEVELOPMENT
3	02/28/20	PERMIT REVIEW SET

REVISION HISTORY

No.	Date	Description

FUGLEBERG KOCH PLLC
2555 Temple Trail, Winter Park, FL 32789 (407) 629-0595
www.fuglebergkoch.com BR569

CONSULTANT
SALAS O'BRIEN
Expect a difference

3901 Quince Orchard, Suite 100
Gaithersburg, MD 20878
(410) 381-6800
CERT. OR AUTH. NO. 4106

1906
DESIGNED BY: ADAM S. LEVINE, P.E. ON DATE INDICATED IN DIGITAL SIGNATURE USING A DIGITAL SIGNATURE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

THE ROBERT
FT. MYERS, FL

Drawn: SWC
Checked: GPM
Approval: ASL
Date: 09/10/2019
Project #: 5592

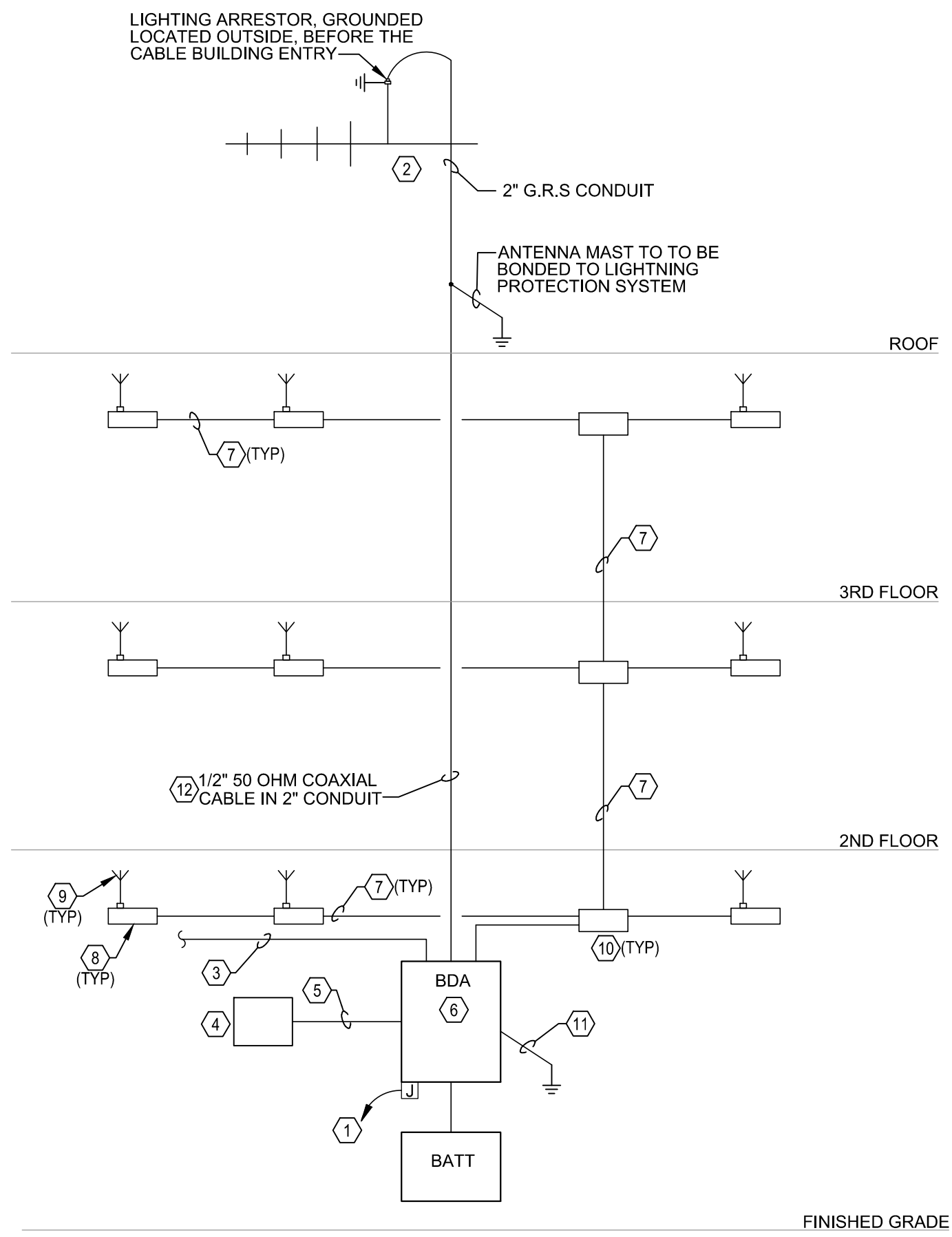
E6.01

	System Outputs																
	Control Unit Annunciation						System Functions										
	FACP Alarm Sounder	FACP Alarm Light	FACP Supervisory Sounder	FACP Supervisory Light	FACP Trouble Light	FACP Trouble Light	Activate General Alarm Horns	Activate General Alarm Horns	Tenant Alarm Signal to Monitoring Station	Tenant Alarm Signal to Monitoring Station	Tenant Alarm Signal to Monitoring Station	Bypass Notification	Recall Elevator to Primary Recall Level	Recall Elevator to Secondary Recall Level	Recall Elevator to Secondary Recall Level	Alarm Transfer to Design Warning Light	
ALARM INPUTS																	
A1 Manual Fire Alarm Boxes	X	X					X	X	X								A1
A2 Water Flow Sw Itch	X	X					X	X	X								A2
A3 Spot Type Smoke Detectors - General	X	X					X	X	X								A3
A4 Spot Type Heat Detectors - Elevator Lobby Level 1							X	X							X		A4
A5 Spot Type Heat Detectors - Elevator Lobby Other Levels							X	X						X			A5
A6 Spot Type Heat Detectors - Elevator Hoistway							X	X					X		X	X	A6
SUPERVISORY INPUTS																	
S1 Fire Sprinkler Back Flow Preventer			X	X							X						S1
S2 Lock Box			X	X							X						S2
S3 BDA Antenna Malfunction			X	X							X						S3
S4 BDA Signal Booster Failure			X	X							X						S4
S5 BDA Low Battery			X	X							X						S5
S6 BDA Loss of AC Power			X	X							X						S6
S7 BDA Battery Charger Failure			X	X							X						S7
TROUBLE INPUTS																	
T1 Ground Fault					X	X								X			T1
T2 Short Circuit					X	X								X			T2
T3 Open Circuit					X	X								X			T3
T4 Battery Fail					X	X								X			T4
T5 A/C Power Fail					X	X								X			T5
T6 Misc. General System Trouble					X	X								X			T6
SYSTEM CONTROL INPUTS																	
C1 Notification Appliance Activate	X	X					X	X	X					X	X		C1
C2 Notification Appliance Bypass					X	X					X	X					C2

APPLICABLE CODES
 Florida Building Code 6th Edition (2017)
 Florida Building Code Accessibility 6th Edition (2017)
 National Electrical Code (2014)
 Florida Mechanical Code 6th Edition (2017)
 Florida Fire Prevention Code (Latest Adopted Edition)
 NFPA 101 Life Safety Code (Latest Adopted Edition) with Florida Amendments
 NFPA 1 Uniform Fire Code (Latest Adopted Edition) with Florida Amendments
 Florida Statutes Florida Administrative Codes

NOTE:
 System functions associated with elevator only required in Multi-Family Building Type 3.

2 FIRE ALARM SYSTEM INPUT/OUTPUT MATRIX
 E6.02 NOT TO SCALE



1 BDA SYSTEM RISER DIAGRAM
 E6.02 NOT TO SCALE

GENERAL NOTES

- A RADIO COVERAGE SURVEY SHALL BE CONDUCTED PRIOR TO, DURING, AND POST CONSTRUCTION TO ENSURE THE TWO-WAY RADIO COVERAGE MEETS THE REQUIREMENTS OF THE NFPA 72 SECTIONS 24.5.2.2.1 AND 24.5.2.2.2.
- THE BUILDING THAT CANNOT SUPPORT THE REQUIRED LEVEL OF RADIO COVERAGE SHALL BE EQUIPPED WITH A DISTRIBUTED ANTENNA SYSTEM (DAS) WITH FCC-CERTIFIED SIGNAL BOOSTERS IN ORDER TO ACHIEVE THE REQUIRED ADEQUATE RADIO COVERAGE.
- THE SIGNAL STRENGTH SHALL MEET THE REQUIREMENTS OF THE NFPA 72 SECTIONS 24.5.2.3.1 AND 24.5.2.3.2.
- THE BI-DIRECTIONAL AMPLIFIER SYSTEM (BDA) SHALL BE CAPABLE OF TRANSMITTING ALL PUBLIC SAFETY RADIO FREQUENCIES ASSIGNED TO THE JURISDICTION AND BE CAPABLE OF USING ANY MODULATION TECHNOLOGY.
- THE BI-DIRECTIONAL AMPLIFIER SYSTEM (BDA) SHALL BE CAPABLE OF UPGRADING TO ALLOW FOR INSTANCES WHERE THE JURISDICTION CHANGES OR ADDS SYSTEM FREQUENCIES, IN ORDER TO MAINTAIN RADIO SYSTEM COVERAGE AS ORIGINALLY DESIGNED.
- ALL BI-DIRECTIONAL AMPLIFIER SYSTEM (BDA) EQUIPMENT SHALL BE NEW, UL 2524 LISTED AND SHALL BE COMPATIBLE WITH THE FIRE ALARM SYSTEM.
- ALL BDA EQUIPMENT 120V CIRCUITS SHALL BE PROVIDED WITH SURGE PROTECTION AND BREAKER LOCKOUT.
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE AN EVALUATION TEST PLAN (ETP) IN THEIR BASE BID. THE CONTRACTORS SHALL PRICE AND OFFER A DAS PROPOSAL AS AN ADD ALTERNATE TO THE OWNER IN THE CONTRACTORS BAS BID. ETP IS NOT OPTIONAL, AND IS REQUIRED. REFER TO SPECIFICATION SECTION 285000 FOR DETAILS AND REQUIREMENTS. THE DRAWINGS INCLUDE CAPACITY FOR A PATHWAY BETWEEN FLOORS AND LOCATION OF BDA SYSTEM PANEL AS WELL AS A PATHWAY TO THE ROOFTOP FOR DAS ANTENNAS IF PROJECT REQUIRES DAS.
- IN CLUBHOUSE DAS ANTENNA LOCATIONS ON 2ND AND 3RD FLOOR ARE NOT APPLICABLE.

REFERENCE NOTES

- 120 VAC DEDICATED CIRCUIT. REFER TO LOCAL BUILDING HOUSE PANEL OR BRANCH PANEL (CLUBHOUSE).
- DONOR ANTENNA, FACING DIRECTION AS REQUIRED PER RADIO COVERAGE SURVEY.
- PROVIDE CONNECTION TO THE LOCAL FIRE ALARM PANEL. PROVIDE 5 SUPERVISORY MODULES FOR THE BDA ANTENNA FAILURE, BDA TROUBLE, BDA POWER LOSS, BDA CHARGER TROUBLE AND BDA LOW BATTERY.
- BDA STATUS ANNUNCIATOR, MOUNT IN A STANDARD 4" 2-GANG JUNCTION BOX.
- # 18 AWG CABLE IN 1" C.
- BDA SYSTEM AND BATTERY BACKUP, REFER TO SYMBOL LEGEND FOR MANUFACTURER'S PART NUMBER.
- 1/2" CABLE, RED JACKET, IMPRINTED 1/2" CORRUGATED ALUM PLENUM AIR DIELECTRIC, 50 OHM COAXIAL CABLE IN 1-1/2" C.
- DIRECTIONAL COUPLER, REFER TO SYMBOL LEGEND FOR MANUFACTURER'S PART NUMBER.
- DAS ANTENNAS, REFER TO SYMBOL LEGEND FOR MANUFACTURER'S PART NUMBER.
- POWER DIVIDER, REFER TO SYMBOL LEGEND FOR MANUFACTURER'S PART NUMBER.
- #6 CU GROUND CONDUCTOR TO INTERSYSTEM BONDING BUS BAR.
- FURNISH AND INSTALL PROTECTIVE WRAP FOR ROOFTOP ANTENNA RISER CONDUIT IN ORDER TO PROVIDE A 2 HOUR FIRE RATING. PROVIDE ADDITIONAL CONDUIT SUPPORT AS REQUIRED FOR INSTALLATION OF PROTECTIVE WRAP. AS AN OPTION A 2 HOUR RATED COAXIAL CABLE MAY BE UTILIZED.

ISSUE HISTORY

No.	Date	Description
1	11/22/19	SCHEMATIC DESIGN
2	12/06/19	DESIGN DEVELOPMENT
3	02/28/20	PERMIT REVIEW SET

REVISION HISTORY

No.	Date	Description
2	06/03/20	PERMIT COMMENT RESPONSES

FUGLEBERG KOCH PLLC
 2555 Temple Trail, Winter Park, FL 32789 (407) 629-0395
 www.fuglebergkoch.com BR569

CONSULTANT
SALAS O'BRIEN
 3901 Quince Orchard, Suite 100
 Gaithersburg, MD 20878
 (410) 381-6000
 CERT. OF AUTH. NO. 4106

DESIGNED BY: ADAM S. LEWIS, P.E. 43167
 CHECKED BY: ADAM S. LEWIS, P.E. 43167
 DRAWN BY: ADAM S. LEWIS, P.E. 43167
 DATE: 09/10/2019

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM S. LEWIS, P.E. ON DATE INDICATED IN DIGITAL SIGNATURE USING A DIGITAL SIGNATURE.
 PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

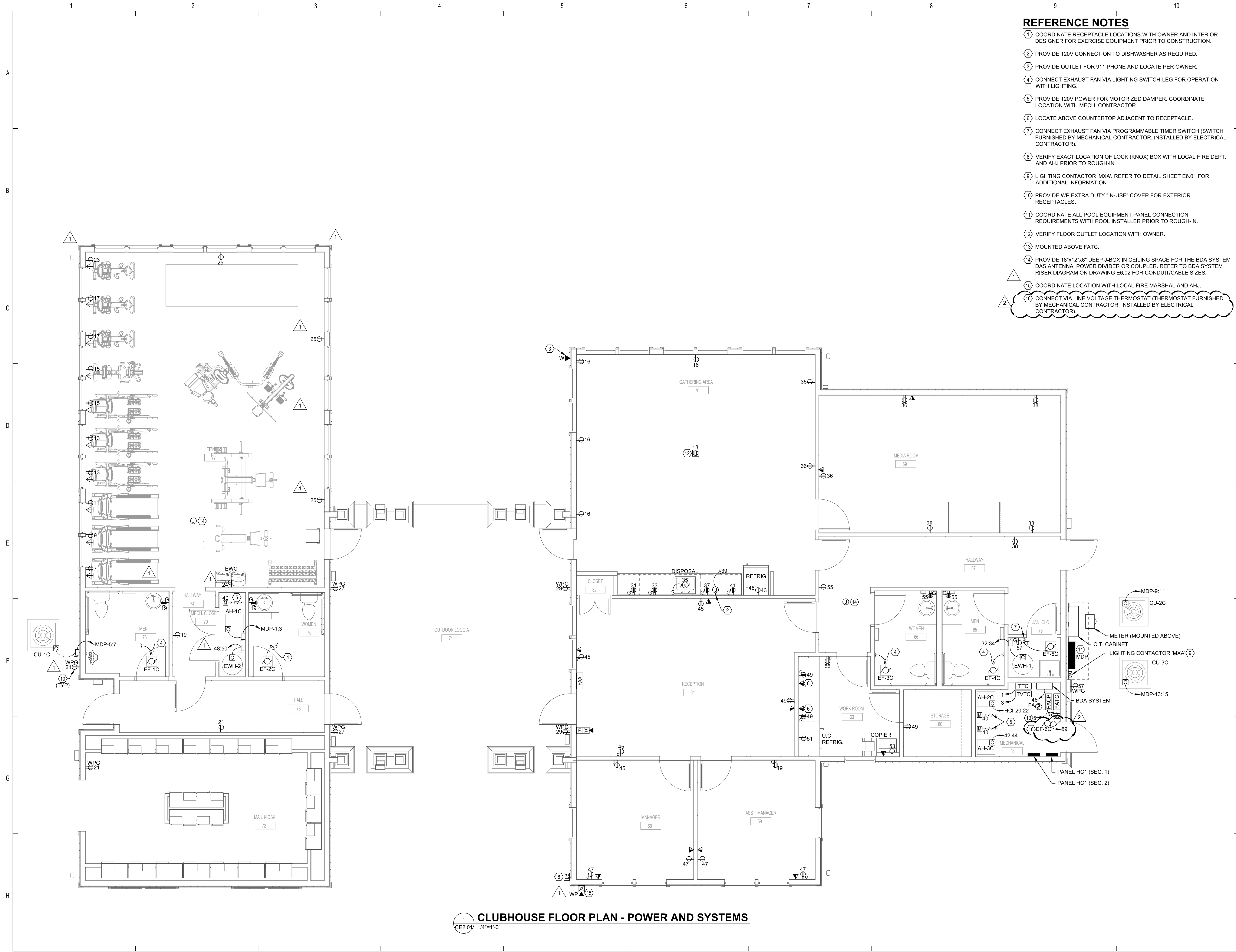
THE ROBERT
 FT. MYERS, FL

Drawn: SWC
 Checked: GPM
 Approved: ASL
 Date: 09/10/2019
 Project #: 5592

DETAILS AND SYSTEM RISER - ELECTRICAL

E6.02

© 2019 These documents and their contents are the property of FUGLEBERG KOCH, and are intended only for the specific project noted on these drawings. Any reproduction, revision, or modification of these documents without the expressed written consent of FUGLEBERG KOCH is prohibited by law.



- ### REFERENCE NOTES
- 1 COORDINATE RECEPTACLE LOCATIONS WITH OWNER AND INTERIOR DESIGNER FOR EXERCISE EQUIPMENT PRIOR TO CONSTRUCTION.
 - 2 PROVIDE 120V CONNECTION TO DISHWASHER AS REQUIRED.
 - 3 PROVIDE OUTLET FOR 911 PHONE AND LOCATE PER OWNER.
 - 4 CONNECT EXHAUST FAN VIA LIGHTING SWITCH-LEG FOR OPERATION WITH LIGHTING.
 - 5 PROVIDE 120V POWER FOR MOTORIZED DAMPER. COORDINATE LOCATION WITH MECH. CONTRACTOR.
 - 6 LOCATE ABOVE COUNTERTOP ADJACENT TO RECEPTACLE.
 - 7 CONNECT EXHAUST FAN VIA PROGRAMMABLE TIMER SWITCH (SWITCH FURNISHED BY MECHANICAL CONTRACTOR, INSTALLED BY ELECTRICAL CONTRACTOR).
 - 8 VERIFY EXACT LOCATION OF LOCK (KNOX) BOX WITH LOCAL FIRE DEPT. AND AHJ PRIOR TO ROUGH-IN.
 - 9 LIGHTING CONTACTOR 'MXA'. REFER TO DETAIL SHEET E6.01 FOR ADDITIONAL INFORMATION.
 - 10 PROVIDE WP EXTRA DUTY "IN-USE" COVER FOR EXTERIOR RECEPTACLES.
 - 11 COORDINATE ALL POOL EQUIPMENT PANEL CONNECTION REQUIREMENTS WITH POOL INSTALLER PRIOR TO ROUGH-IN.
 - 12 VERIFY FLOOR OUTLET LOCATION WITH OWNER.
 - 13 MOUNTED ABOVE FATC.
 - 14 PROVIDE 18"x12"x6" DEEP J-BOX IN CEILING SPACE FOR THE BDA SYSTEM DAS ANTENNA, POWER DIVIDER OR COUPLER. REFER TO BDA SYSTEM RISER DIAGRAM ON DRAWING E6.02 FOR CONDUIT/CABLE SIZES.
 - 15 COORDINATE LOCATION WITH LOCAL FIRE MARSHAL AND AHJ.
 - 16 CONNECT VIA LINE VOLTAGE THERMOSTAT (THERMOSTAT FURNISHED BY MECHANICAL CONTRACTOR, INSTALLED BY ELECTRICAL CONTRACTOR).

- ### GENERAL NOTES
1. ALL 120/240V CIRCUITS ON THIS PLAN ARE FED FROM PANEL 'HC1' (UNLESS NOTED OTHERWISE).
 2. VERIFY EXACT LOCATION OF ALL MECHANICAL EQUIPMENT WITH RESPECTIVE MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
 3. REFER TO EQUIPMENT FEEDER SCHEDULE ON SHEET E4.04 FOR ALL MECHANICAL EQUIPMENT CONNECTION REQUIREMENTS.
 4. FURNISH AND INSTALL COMPLETE LIGHTNING PROTECTION SYSTEM PER NFPA 780 AND U.L. REFER TO SPECIFICATIONS.

PERMIT REVIEW STAMP

ISSUE HISTORY		
No.	Date	Description
1	11/22/19	SCHEMATIC DESIGN
2	12/06/19	DESIGN DEVELOPMENT
3	02/28/20	PERMIT REVIEW SET

REVISION HISTORY		
No.	Date	Description
1	05/06/20	PERMIT COMMENT RESPONSES
2	06/03/20	PERMIT COMMENT RESPONSES

2555 Temple Trail, Winter Park, FL 32789 (407) 629-0395
www.fuglebergkoch.com BR569

CONSULTANT
SALAS O'BRIEN
Expect a difference

3901 Quatrefoil Boulevard, Suite 100
Orlando, Florida 32817
(407) 388-6800
CENT. OF AUTH. NO. 0106

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM S. LEWIS, P.E. ON DATE INDICATED IN DIGITAL SIGNATURE USING A DIGITAL SIGNATURE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

1 CLUBHOUSE FLOOR PLAN - POWER AND SYSTEMS
CE2.01 1/4"=1'-0"

<p>THE ROBERT</p> <p>FT. MYERS, FL</p>	Drawn: SWC
	Checked: GPM
	Approval: ASL
	Date: 09/10/2019
Project #: 5592	

CLUBHOUSE FLOOR PLAN - POWER AND SYSTEMS

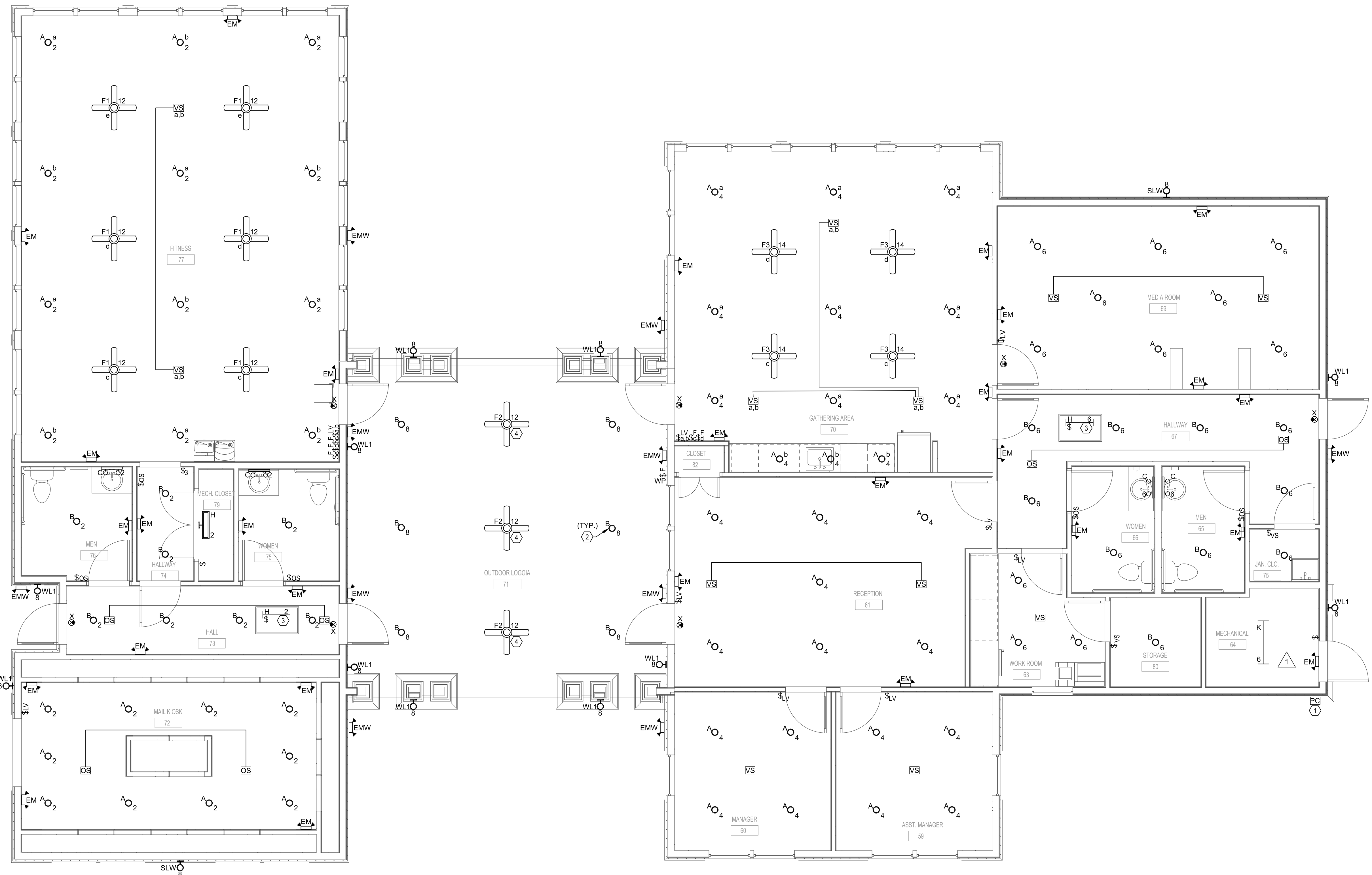
CE2.01

REFERENCE NOTES

- ① PHOTOCELL MOUNTED ON FACE OF BUILDING. CONTRACTORS SHALL MOUNT PHOTOCELL ON NORTH SIDE OF BUILDING AND FACE DUE NORTH. CONTRACTOR TO VERIFY IN FIELD PRIOR TO ROUGH-IN.
- ② CONNECT ALL EXTERIOR LIGHTS VIA LIGHTING CONTACTOR 'MXA'. PROVIDE #10 AWG CONDUCTORS MINIMUM FOR VOLTAGE DROP.
- ③ LOCATE IN ATTIC ADJACENT TO ACCESS HATCH.
- ④ CONNECT INTEGRATED FAN LIGHT TO EXTERIOR LIGHTING CIRCUIT VIA LIGHTING CONTACTOR 'MXA' (HCI-8).

GENERAL NOTES

1. ALL LIGHT FIXTURES ON THIS PLAN ARE TYPE "A" (UNLESS NOTED OTHERWISE).
2. CONNECT ALL EXIT SIGNS AND EMERGENCY LIGHTS TO LOCAL LIGHTING CIRCUIT AHEAD OF SWITCH/CONTROL DEVICE.
3. ALL 120/240V CIRCUITS ON THIS PLAN ARE FED FROM PANEL 'HC1' (UNLESS NOTED OTHERWISE).
4. ALL FIXTURES DESIGNATED WITH "NL" ARE NIGHT LIGHT FIXTURES AND SHALL BE CONNECTED AHEAD OF ALL SWITCHES AND CONTROLS FOR 24 HOUR OPERATION.
5. THE CONTRACTOR SHALL PERFORM THE FUNCTIONAL TESTING OF THE CONTROLS FOR ALL AUTOMATIC LIGHTING SYSTEMS PER REQUIREMENTS OF THE FLORIDA ENERGY CONSERVATION CODE C408.3.1 AND PROVIDE FINAL DOCUMENTATION TO THE REGISTERED DESIGN PROFESSIONAL THAT THE LIGHTING CONTROL SYSTEMS HAVE BEEN TESTED TO ENSURE THAT CONTROL HARDWARE AND SOFTWARE ARE CALIBRATED, ADJUSTED, PROGRAMMED, AND IN PROPER WORKING CONDITION IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS CERTIFYING THAT THE INSTALLED LIGHTING CONTROLS MEET DOCUMENTED PERFORMANCE CRITERIA OF FLORIDA ENERGY CONSERVATION CODE SECTION C405 ARE TO BE PROVIDED TO THE BUILDING OWNER WITHIN 90 DAYS FROM THE DATE OF RECEIPT OF THE CERTIFICATE OF OCCUPANCY.
6. REFER TO LIGHTING CONTROL WIRING DIAGRAM ON DRAWING E6.01.
7. LOCATE ALL CEILING OCCUPANCY/VACANCY SENSOR POWER/RELAY PACKS IN ACCESSIBLE LOCATIONS (ELECT/MECH. ROOM ATTIC ADJACENT TO ACCESS, ETC.). IDENTIFY ALL LOCATIONS ON "AS-BUILT" DRAWINGS.
8. VERIFY COLOR TEMP OF ALL LAMPS AND LED FIXTURES WITH INTERIOR DESIGNER.
9. ALL IC RATED RECESSED LIGHT FIXTURES SHALL BE SEALED AT HOUSING/INTERIOR FINISH AND LABELED TO INDICATED "LESS THAN OR EQUAL TO 2CFM LEAKAGE AT 75PA".
10. REFER TO ARCHITECTURAL EXTERIOR ELEVATIONS FOR LOCATIONS OF EXTERIOR WALL SCONCE FIXTURES.



ISSUE HISTORY

No.	Date	Description
1	11/22/19	SCHEMATIC DESIGN
2	12/06/19	DESIGN DEVELOPMENT
3	02/28/20	PERMIT REVIEW SET

REVISION HISTORY

No.	Date	Description
1	05/06/20	PERMIT COMMENT RESPONSES

FUGLEBERG KOCH
 PLLC
 2555 Temple Trail, Winter Park, FL 32789 (407) 629-0595
 www.fuglebergkoch.com BR569

SALAS O'BRIEN
 CONSULTANT
 Expect a difference!
 3901 Quince Orchard Blvd., Suite 100
 Gaithersburg, MD 20878
 (410) 386-6800
 CERT. OF AUTH. NO. 4106

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM S. LEVINE, P.E. ON DATE 09/10/2019. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Drawn:	SWC
Checked:	GPM
Approval:	ASL
Date:	09/10/2019
Project #:	5592

THE ROBERT
 FT. MYERS, FL

CLUBHOUSE FLOOR PLAN - LIGHTING

CE2.02

2 CLUBHOUSE FLOOR PLAN - LIGHTING
 CE2.02 1/4"=1'-0"