# SWITCHGEAR REPLACEMENT

# LEE COUNTY GOVERNMENT

CONSTITUTIONAL COMPLEX 2480 THOMPSON STREET FORT MYERS, FLORIDA

# TLC Engineering Solutions





PROJECT VICINITY MAP

SHEET INDEX					
SHEET	DESCRIPTION	ISSUED			
C001	COVER SHEET				
E001	ELECTRICAL LEGEND & GENERAL NOTES	Yes			
E101	ELECTRICAL CONSTRUCTION - ENLARGED PLANS	Yes			

## **CONTACT INFORMATION**

LEE COUNTY GOVERNMENT TLC PROJECT MANAGER:

JEFF MCGARY

(239) 707-6448 MIKE J. BARRILE, PE (239) 985-2012

3099 S. Cleveland Ave., Ste. 500 Fort Myers, Florida 33907-3869 www.tlc-engineers.com COA 15

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No.	Date	Description	

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**COVER SHEET** 

Drawing No.:

C001

PROVIDE AN OPERATING AND MAINTENANCE MANUAL TO OWNER PRIOR TO THE FINAL ACCEPTANCE. THE MANUAL SHALL INCLUDE, AS A MINIMUM, (1) SUBMITTAL DATA STATING EQUIPMENT RATING AND SELECTED OPTIONS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE. ALSO PROVIDE TWO OPERATIONS AND MAINTENANCE MANUALS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE. REQUIRED ROUTINE MAINTENANCE ACTIONS AND METHOD OF OPERATION FOR EQUIPMENT SHALL BE CLEARLY IDENTIFIED, AND THE NAME, PHONE NUMBER AND ADDRESS OF AT LEAST ONE QUALIFIED SERVICE AGENCY.

INCLUDE ALL COSTS FOR EXCAVATION, SAW CUTTING, DIRECTIONAL BORING, CORE DRILLING, BACKFILLING, SURFACE RESTORATION, REPAIR OF FINISHES, ETC. THAT IS REQUIRED IN ORDER TO MEET THE PROJECT REQUIREMENTS.

INCLUDE IN BID ALL COSTS ASSOCIATED WITH TEMPORARY ELECTRICAL SERVICE AS REQUIRED FOR USE BY ALL TRADES DURING CONSTRUCTION. REMOVE TEMPORARY POWER AT THE COMPLETION OF THE PROJECT. OBTAIN AND PAY FOR ALL REQUIRED PERMITS FOR TEMPORARY POWER. ENGINEER OF RECORD SHALL BE PROVIDED WITH ADDITIONAL COMPENSATION FROM THE CONTRACTOR WHERE SIGNED & SEALED DRAWINGS ARE REQUESTED BY THE CONTRACTOR TO THE ENGINEER OF RECORD IF REQUIRED BY THE AHJ FOR THE TEMPORARY POWER.

PROVIDE A COMPLETE UL LISTED LIGHTNING PROTECTION SYSTEM WITH A MASTER LABEL FOR THE ENTIRE FACILITY PER THE REQUIREMENTS OF NFPA 780, AND THE DIVISION 26 SPECIFICATIONS, UNLESS NOTED OTHERWISE. LIGHTNING PROTECTION SYSTEM SHALL INCLUDE BURIED COUNTERPOISE, UNLESS NOTED OTHERWISE.

LOCATE, IDENTIFY, PROTECT AND DOCUMENT ALL UTILITY LINES LOCATED WITHIN THE PROJECT BOUNDARY. FOR LOCATING SITE UTILITIES, CONTACT SUNSHINE STATE ONE CALL OF FLORIDA, INC. AT LEAST 48 HOURS IN ADVANCE PRIOR TO DIGGING, AT 1-800-432-4770.

INCLUDE IN BID THE TRANSPORT AND DISPOSAL OR RECYLING OF ALL WASTE MATERIALS GENERATED BY THIS PROJECT IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL RULES. REGULATIONS AND GUIDELINES APPLICABLE. COMPLY FULLY WITH FLORIDA STATUTES REGARDING MERCURY-CONTAINING DEVICES, AND WITH ALL DEP AND EPA APPLICABLE GUIDELINES AT THE TIME OF DISPOSAL. PROVIDE OWNER WITH WRITTEN CERTIFICATION OF ACCEPTED DISPOSAL.

**COORDINATION:** 

VERIFY AND COORDINATE LOCATIONS OF ANY MISCELLANEOUS EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS (I.E., COPIERS, FAX MACHINES, PRINTERS, KITCHEN APPLIANCES, LAUNDRY APPLIANCES, PROJECTION SCREENS, SHOP TOOLS, MACHINE, ELEVATORS, ETC.) WITH APPROVED SHOP DRAWINGS. OWNER-PROVIDED CUT SHEETS, MANUFACTURER'S INSTRUCTIONS, AND EQUIPMENT NAMEPLATE INFORMATION, PRIOR TO ROUGH IN, AND PROVIDE ALL NECESSARY ELECTRICAL REQUIRED.

VERIFY AND COORDINATE LOCATIONS AND EXACT ELECTRICAL REQUIREMENTS FOR ALL MECHANICAL. PLUMBING AND FIRE PROTECTION EQUIPMENT PRIOR TO SUBMITTAL OF SHOP DRAWINGS OF ELECTRICAL EQUIPMENT. PROVIDE ALL NECESSARY RACEWAYS, CONDUCTORS, BOXES, EQUIPMENT ACCESSORIES, ASSOCIATED DISCONNECT SWITCHES, CIRCUIT BREAKERS, CONTROL TRANSFORMERS, FIRE ALARM SHUTDOWN, ETC. REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. COORDINATE WITH APPROPRIATE TRADE'S APPROVED SHOP DRAWINGS, MANUFACTURER'S INSTRUCTIONS, AND EQUIPMENT NAMEPLATE INFORMATION, PRIOR TO ROUGH IN, AND PROVIDE ALL NECESSARY ELECTRICAL REQUIRED, UNLESS OTHERWISE NOTED.

THIS PROJECT REQUIRES COORDINATION DRAWINGS BY THE CONTRACTOR. PARTICIPATE IN THE COORDINATION DRAWING PREPARATION PROCESS AND PROVIDE ALL NECESSARY INFORMATION REQUIRED TO COORDINATE ALL TRADE INFORMATION.

ALL WORK ON THE ELECTRICAL SYSTEM REQUIRED BY THE CONTRACT DOCUMENTS SHALL BE COORDINATED WITH THE WORK OF ALL OTHER DIVISIONS/TRADES PRIOR TO COMMENCEMENT OF WORK. AVOID INTERFERENCES WITH THE PROGRESS OF OTHER DIVISIONS/TRADES.

WHERE STRUCTURAL WALLS ARE OF TILT-UP CONSTRUCTION. PROVIDE COORDINATION FOR EXACT DIMENSIONS AND OPENINGS REQUIRED FOR ALL ELECTRICAL COMPONENTS INSTALLED WITHIN TILT-UP WALLS DURING THE SHOP DRAWING REVIEW PROCESS OF THE TILT-UP WALLS, PRIOR TO MANUFACTURE OF THE TILT-UP WALLS

LOCATIONS OF VFD'S, DISCONNECTS, MOTOR STARTERS, ETC, FOR HVAC EQUIPMENT ARE DIAGRAMMATIC ON THE PLAN DRAWINGS. EXACT LOCATIONS ARE TO BE COORDINATED WITH CONTRACTOR'S COORDINATION DRAWINGS PRIOR TO ROUGHING IN TO ENSURE PROPER NEC CLEARANCES AND APPROPRIATE MOUNTING SURFACE

COORDINATE RECEPTACLE LOCATIONS WITH TECHNOLOGY DRAWINGS OR OWNER'S VENDOR DRAWINGS SO THAT A 120V 20A 5-20R RECEPTACLE IS LOCATED ADJACENT TO EACH VOICE/DATA OUTLET AND TV OUTLET INDICATED ON PLANS. RECEPTACLE IS TO BE CONNECTED TO NEAREST 120V RECEPTACLE CIRCUIT, UNLESS OTHERWISE NOTED ON PLANS

REFER TO ARCHITECTURAL, MECHANICAL, PLUMBING, FIRE PROTECTION, CIVIL, LANDSCAPE, INTERIOR DESIGN, TECHNOLOGY, STRUCTURAL, AND KITCHEN EQUIPMENT DRAWINGS FOR RELATED INFORMATION AND ADDITIONAL INSTALLATION REQUIREMENTS TO BE PERFORMED AS PART OF THE

WHERE A DISCREPANCY OR CONFLICT IS FOUND BETWEEN ONE DRAWING AND ANOTHER, OR BETWEEN A DRAWING AND APPLICABLE SPECIFICATIONS, NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY IN WRITTEN FORM. IN GENERAL, THE MOST STRINGENT REQUIREMENT SHALL GOVERN UNLESS THE DISCREPANCY CONFLICTS WITH APPLICABLE CODES OR OWNER'S DESIGN STANDARDS, WHEREIN THE CODE OR OWNER'S DESIGN STANDARDS SHALL GOVERN.

CAREFULLY EXAMINE THOSE PORTIONS OF THE BUILDING AND/OR SITE AFFECTED BY THIS WORK PRIOR TO SUBMITTAL BID PRICE, SO AS TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND DIFFICULTIES THAT MAY AFFECT EXECUTION OF THE WORK. SUBMISSION OF A BID PRICE SHALL BE CONSTRUED AS EVIDENCE THAT SUCH EXAMINATION HAS BEEN MADE. LATER CLAIMS FOR LABOR. EQUIPMENT AND/OR MATERIALS REQUIRED DUE TO DIFFICULTIES ENCOUNTERED THAT COULD HAVE BEEN REASONABLY OBSERVED WILL NOT BE RECOGNIZED.

0. COORDINATE ALL PROJECT SCHEDULING AND PHASING REQUIREMENTS WITH ARCHITECT/ENGINEER AND OWNER PRIOR TO SUBMITTING BID PRICE. THIS PROJECT MAY REQUIRE PHASING SEQUENCES AND POTENTIAL PREMIUM TIME WORK AND ALL COSTS FOR SUCH SHALL BE INCLUDED IN THE BID PRICE. PROVIDE ADEQUATE WORK FORCE AND EQUIPMENT, AND INCLUDE PREMIUM TIME AS MAY BE REQUIRED IN ORDER TO ADHERE TO THE PROJECT SCHEDULE. ADDITIONALLY, ENSURE THAT LONG LEAD ITEMS DO NOT IMPACT THE PROJECT'S SCHEDULE OR PHASING.

ANY TEMPORARY INTERRUPTION ON POWER REQUIRED FOR THE SYSTEM TIE-IN OR SWITCHOVER FOR ANY PORTION OF THE ELECTRICAL SYSTEM SHALL BE PRE-APPROVED IN WRITING BY THE OWNER AND SCHEDULED IN ADVANCE.

12. COORDINATE EXACT REQUIREMENTS WITH THE LOCAL UTILITY COMPANIES AND PROVIDERS (ELECTRIC, TELEPHONE, CABLE TV, ETC.) AND INCLUDE ALL COSTS FOR PROVIDING TEMPORARY AND PERMANENT SERVICES REQUIRED FOR THIS PROJECT IN THE BID PRICE. BID PRICE SHALL INCLUDE, BUT NOT BE LIMITED TO, EXCAVATION, RACEWAYS, BACKFILL, EQUIPMENT, EQUIPMENT PADS, BACKBOARDS, METERS, GROUNDING, UTILITY ENGINEERING AND IMPACT FEES.

3. CONDUCT WORK OPERATIONS AND DEBRIS REMOVAL IN A MANNER THAT ENSURES MINIMUM INTERFERENCE WITH NORMAL BUSINESS OPERATIONS, TRAFFIC, PARKING, ETC. ONGOING IN ADJACENT OCCUPIED SPACES OR FACILITIES. PROVIDE ALL THAT IS REQUIRED TO EFFECTIVELY PROTECT SURROUNDING OCCUPANTS, EQUIPMENT, FINISHES, FURNITURE, ETC. FROM DAMAGE OR EXCESSIVE NOISE THROUGHOUT THE DURATION OF THIS PROJECT. CONTRACTOR IS RESPONSIBLE FOR ANY LOSSES OR DAMAGE. ANY DAMAGE RESULTING FROM THE FAILURE TO ADHERE TO THIS REQUIREMENT. RESTORE DAMAGED ELEMENTS TO ORIGINAL CONDITION BY THE CONTRACTOR TO THE SATISFACTION OF THE ARCHITECT/ENGINEER AND OWNER, AT NO ADDITIONAL COSTS. REPORT OF ANY SUCH OCCURRENCE TO THE ARCHITECT/ENGINEER AND OWNER IMMEDIATELY AND AWAIT WRITTEN DIRECTION PRIOR TO PROCEEDING WITH REPAIRS.

 COORDINATE THE LOCATION OF ALL LIGHT FIXTURES, DEVICES AND BOXES WITH WINDOWS, MIRRORS, MILLWORK, CABINETS, GLASS CURTAIN WALLS, AND GLASS WALLS PRIOR TO INSTALLATION OF CONDUITS OR BOXES. REVIEW ALL CONTRACT DRAWINGS TO ASCERTAIN ANY CONFLICTS PRIOR TO BIDDING. OBTAIN CLARIFICATION FROM A/E PRIOR TO BID. CONTRACTOR SHALL NOT BE ENTITLED TO ADDITIONAL COMPENSATION FOR WORK REQUIRED TO RELOCATE OUTLET BOXES OR RACEWAYS FOR COORDINATION WITH OTHER TRADE'S WORK.

**ELECTRICAL EQUIPMENT** 

EQUIPMENT SHALL BE OF MATERIALS SUITABLE FOR AND RATED FOR THE ENVIRONMENT IN WHICH THEY ARE TO BE INSTALLED. ALL COMPONENTS OF THE ELECTRICAL SYSTEM LOCATED OUTDOORS OF INDOORS WHERE EXPOSED TO SIGNIFICANT MOISTURE SHALL BE WEATHERPROOF, NEMA 3R, AS A MINIMUM, WHETHER INDICATED ON THE CONTRACT DRAWINGS OR NOT.

TERMINATION PROVISIONS FOR ALL ELECTRICAL EQUIPMENT (PANELBOARDS, SWITCHBOARD. TRANSFORMERS, DISCONNECT SWITCHES, MOTOR CONTROLLERS, AUTOMATIC TRANSFER SWITCHES, ENCLOSED CIRCUIT BREAKERS, WIREWAYS, ETC.) SHALL BE LISTED AND IDENTIFIED FOR USE WITH MINIMUM 75 DEG. F CONDUCTORS IN ACCORDANCE WITH NEC.

WORKING CLEARANCES FOR ELECTRICAL EQUIPMENT SHALL BE IN COMPLIANCE WITH NEC.

THE EXCLUSIVELY DEDICATED SPACE EXTENDING FROM FLOOR TO 6' ABOVE EQUIPMENT OR STRUCTURAL CEILING, WHICHEVER DISTANCE IS LOWER, WITH A WIDTH AND DEPTH OF THE PANELBOARD OR SWITCHBOARD MUST BE CLEAR OF ALL PIPING, DUCTS, EQUIPMENT FOREIGN TO THE ELECTRICAL EQUIPMENT OR ARCHITECTURAL APPURTENANCES IN ACCORDANCE WITH NEC.

PROVIDE A REINFORCED CONCRETE PAD. SIZED 4" LARGER IN ALL DIRECTIONS THAN THE FOOTPRINT OF THE EQUIPMENT, AND 4" HIGH, FOR ALL FREESTANDING, FLOOR-MOUNTED ELECTRICAL EQUIPMENT. PROVIDE VIBRATION ISOLATORS AND/OR ANCHORS PER MANUFACTURER'S INSTRUCTIONS.

PROVIDE HACR RATED CIRCUIT BREAKER FOR ALL HVAC EQUIPMENT.

PROVIDE AFCI PROTECTION TO COMPLY WITH NEC IN ALL GUEST ROOMS AND GUEST SUITES WITH PROVISIONS FOR COOKING, IN ALL DWELLING UNITS, APARTMENTS AND CONDOMINIUMS.

**ELECTRICAL GENERAL NOTES** 

PROVIDE ALL PENETRATIONS THROUGH FLOORS, WALL, CEILINGS AND ROOFS WHERE

LENGTH. THE USE OF NON-METALLIC CONDUIT ABOVE GRADE IS PROHIBITED.

WITH THE NEC FOR 40% MAXIMUM FILL AND DERATING REQUIREMENTS.

AS WALK-IN COOLERS OR FREEZERS, KITCHEN WASH-DOWN AREAS, ETC.

MINIMUM RACEWAY SIZE SHALL BE 3/4" UNLESS NOTED OTHERWISE.

ENGRAVED METAL TAG INDICATING CONDUIT DESIGNATION.

COMPRESSION FITTINGS SHALL BE USED FOR EMT CONDUIT

UNLESS A/E OR OWNER GRANTS WRITTEN PERMISSION.

APPURTENANCES IN ACCORDANCE WITH NEC 408.

AND EQUIPMENT CONTROLLERS PER NEC ARTICLE 110.76.

WHICH THEY ARE TO BE INSTALLED.

CONDUCTORS:

METAL CONDUIT.

SYMBOL

ARE TO BE SEALED WATERTIGHT.

REQUIRED. COORDIANTE LOCATIONS AND SIZES WITH ARCHITECTURAL AND STRUCTURAL

DRAWINGS, FIELD CONDITIONS AND WORK OF ALL OTHER DIVISIONS/TRADES. ALL OPENINGS

ALL RACEWAYS THAT TURN UP INTO THE SLAB OR ELECTRICAL EQUIPMENT FROM UNDERGROUND

PANEL SCHEDULES AND FLOOR PLANS MAY INDICATE DEDICATED HOMERUNS FOR EACH BRANCH

NOT EXCEED 3 PHASE CONDUCTORS, 3 NEUTRAL CONDUCTORS, AND 1 EQUIPMENT GROUND. THE

HOMERUN RACEWAY SIZE AND CONDUCTOR SIZE SHALL BE INCREASED AS NECESSARY TO COMPLY

IT IS THE INTENT THAT ALL RACEWAYS BE CONCEALED IN WALLS, ABOVE CEILINGS, IN SLAB, OR

BELOW SLAB UNLESS SPECIFICALLY NOTED OTHERWISE, OR UNLESS A/E GRANTS WRITTEN

STRUCTURAL DRAWINGS AND THE STRUCTURAL ENGINEER PRIOR TO INSTALLATION.

PROVIDE SEAL OFF FITTINGS. APPROVED FOR SUCH USE, WHERE RACEWAYS PENETRATE

PROVIDE POLYOLEFIN JET-LINE #232 (NYLON PULL STRING) IN EACH EMPTY CONDUIT WITH

THE USE OF ALUMINUM CONDUCTORS, RACEWAYS, BOXES, BUSSING, WINDINGS, ETC. ARE

OTHER GENERAL NOTES:

EQUIPMENT SHALL BE OF MATERIALS SUITABLE FOR AND RATED FOR THE ENVIRONMENT IN

WORKING CLEARANCES FOR ELECTRICAL EQUIPMENT SHALL BE IN COMPLIANCE WITH NEC 110.

THE EXCLUSIVELY DEDICATED SPACE EXTENDING FROM FLOOR TO STRUCTURAL CEILING WITH

A WIDTH AND DEPTH OF THE PANELBOARD OR SWITCHBOARD MUST BE CLEAR OF ALL PIPING,

CONNECTIONS TO TRANSFORMERS, AHU'S, AND PUMPS SHALL BE WITH LIGUIDTIGHT, FLEXIBLE

ARC FLASH DANGER/WARNIG LABELS SHALL BE APPLIED TO SWITCHBOARD, PANELBOARDS.

ELECTRICAL SYMBOL LEGEND

**BASIC MATERIALS** 

BRANCH CIRCUIT PANELBOARD, SURFACE MOUNTED

DESCRIPTION

**AUTOMATIC TRANSFER SWITCH** 

GROUND OR GROUND ROD AS NOTED

EXISTING AFFECTED BY THIS PROJECT

NOTE: SOME SYMBOLS SHOWN ON THIS LEGEND MAY NOT

PERTAIN TO THIS PROJECT.

TRANSFORMER

— — — EXISTING TO BE REMOVED

EXISTING TO REMAIN

— — — — FUTURE

DUCTS, EQUIPMENT FOREIGN TO THE ELECTRICAL EQUIPMENT OR ARCHITECTURAL

PROHIBITED. ALL MATERIALS SHALL BE COPPER, UNLESS SPECIFICALLY NOTED OTHERWISE OR

PERMISSION. WHERE RACEWAYS ARE INSTALLED IN SLABS, THE MINIMUM SPACING, MAXIMUM

RACEWAY SIZE, AND ANY OTHER STRUCTURAL LIMITATIONS SHALL BE COORDINATED WITH THE

BETWEEN A DRY, CONDITIONED ENVIRONMENT AND THE EXTERIOR OR WET ENVIRONMENTS SUCH

SHALL BE RIGID GALVANIZED STEEL (RGS) WITH BITUMASTIC COATING FOR AT LEAST THE FINAL 18" IN

CIRCUIT. BRANCH CIRCUITS MAY BE GROUPED IN A COMMON HOMERUN WHERE THE HOMERUN DOES

ALL PANELBOARDS OR DISCONNECT SWITCHES LOCATED IN KITCHEN AREAS SHALL BE STAINLESS STEEL (COVER AND DOOR WHERE PANEL IS FLUSH MOUNTED, PANEL BOX, COVER & DOOR WHERE SURFACE MOUNTED).

PROVIDE SURGE PROTECTION DEVICE FOR ALL MAIN SERVICE EQUIPMENT, PANELBOARDS SERVING SENSITIVE ELECTRONIC EQUIPMENT (DATA RACKS) OR COMPUTERS, LIGHTING PANELS SERVING EXTERIOR LIGHTING, POWER CIRCUITS OR LOW VOLTAGE (FIRE ALARM, TELECOMMUNICATIONS) EXITING THE BUILDING. PROVIDE MINIMUM 30A/3P BREAKER IN PANELBOARDS AND 60A/3P DISTRIBUTION PANEL OR SWITCHBOARD, UNLESS OTHERWISE NOTED, OR PER THE SPD MANUFACTURER'S RECOMMENDATIONS FOR SURGE PROTECTION DEVICE.

CONTRACTOR IS TO SUBMIT FOR APPROVAL TO THE ENGINEER OF RECORD FINAL COORDINATED SETTINGS REQUIRED FOR MAIN CIRCUIT BREAKER AND ALL DOWNSTREAM ADJUSTABLE OVERCURRENT PROTECTIVE DEVICES, BASED ON SELECTED EQUIPMENT MANUFACTURER

<u>IDENTIFICATION</u>:

PROVIDE TYPED PANEL DIRECTORIES FOR ALL NEW PANELBOARDS, AND EXISTING PANELBOARDS AFFECTED BY THIS PROJECT. DIRECTORIES SHALL REFLECT PROJECT AS-BUILT CONDITIONS FOR ALL BRANCH CIRCUITS. DIRECTORIES SHALL INCLUDE WHERE EACH PANEL IS FED FROM. ADDITIONALLY, EACH BRANCH CIRCUIT LOAD DESCRIPTION SHALL INCLUDE THE ROOM NUMBER(S) FOR EACH LOAD SERVICE (I.E., RECEPTACLES-RMS 501,503). ROOM NUMBERS SHALL BE BASED ON ACTUAL ROOM SIGNAGE INSTALLED IN FIELD. COORDINATE EXACT ROOM NUMBERS WITH A/E AND OWNER PRIOR TO COMPLETION OF PANEL DIRECTORIES.

PROVIDE ENGRAVED PLASTIC LAMINATE NAME TAGS ON EACH SWITCHBOARD, SWITCHGEAR, DISTRIBUTION PANEL, PANELBOARD, MOTOR CONTROL CENTER, SAFETY SWITCH, ENCLOSED CIRCUIT BREAKER, CABINET, STEP-DOWN TRANSFORMER, TRANSFER SWITCH, ETC., AND ANY OTHER MAJOR COMPONENT OF THE ELECTRICAL SYSTEM.

PROVIDE ENGRAVED PLASTIC LAMINATE NAME TAGS FOR EACH DISTRIBUTION BREAKER OR BRANCH CIRCUIT BREAKER IN SWITCHGEAR, SWITCHBOARDS, MOTOR CONTROL CENTERS AND OTHER DISTRIBUTION EQUIPMENT. NAME TAG SHALL INCLUDE LOAD DESCRIPTION AND ROOM NUMBER FOR EACH LOAD SERVICE.

ARC FLASH DANGER/WARNING LABELS SHALL BE APPLIED TO SWITCHBOARD, PANELBOARDS, AND EQUIPMENT CONTROLLERS PER NEC

PROVIDE LABELS ON THE INSIDE OF EACH DEVICE COVERPLATE, IDENTIFYING THE PANEL(S)/ CIRCUIT NUMBER(S) DEVICE IS CONNECTED TO.

PROVIDE NEATLY, HANDWRITTEN IDENTIFICATION ON THE EXTERIOR COVER OF ALL JUNCTION BOXES, PULLBOXES AND WIREWAYS, IDENTIFYING THE PANEL(S)/ CIRCUIT NUMBER(S) CONTAINED WITHIN.

PROVIDE A PERMANENT SIGN ON THE MAIN ELECTRICAL ROOM DOOR TO THE BUILDING STATING THAT THE MAIN SERVICE DISCONNECTING MEANS IS LOCATED INSIDE.

PROVIDE A PERMANENT LABEL ON ALL PANELBOARDS, SWITCHBOARDS, SWITCHGEAR, MOTOR CONTROLS CENTERS AND DISTRIBUTION PANELS STATING "DO NOT WORK ON EQUIPMENT WHILE ENERGIZED. LOCK-OUT TAG-OUT REQUIRED".

PROVIDE REQUIRED IDENTIFICATION PER ANSI STANDARDS, NEC REQUIREMENTS, AND OWNER'S PUBLISHED DESIGN STANDARDS WHERE APPLICABLE.

ELECTRICAL DEVICES, OUTLET BOXES, JUNCTION BOXES

LIGHT SWITCHES SHALL BE MOUNTED 48 INCHES ABOVE FINISHED FLOOR TO CENTER LINE OF

DEVICE, UNLESS OTHERWISE NOTED. RECEPTACLES, VOICE/DATA OUTLETS, WALL FURNITURE FEEDS SHALL BE MOUNTED 18 INCHES ABOVE FINISHED FLOOR TO CENTER LINE OF DEVICE, UNLESS OTHERWISE NOTED. ABOVE COUNTER RECEPTACLES SHALL BE MOUNTED 6" ABOVE BACK SPLASH TO CENTERLINE OF

DEVICE, UNLESS OTHERWISE NOTED. WHEN ELECTRICAL BOXES ARE LOCATED IN VERTICAL FIRE-RESISTIVE ASSEMBLIES, (CLASSIFIED AS FIRE/SMOKE AND SMOKE PARTITIONS), THEY SHALL BE INSTALLED WITHOUT AFFECTING THE FIRE CLASSIFICATION. ALL OF THE FOLLOWING CONDITIONS SHALL BE MET:

A. ALL ELECTRICAL BOXES SHALL BE METALLIC.

B. BOX OPENING SHALL OCCUR ONLY ON ONE SIDE OF FRAMING SPACE.

C. BOX OPENING SHALL NOT EXCEED 16 SQUARE INCHES.

D. ALL CLEARANCES BETWEEN OUTLET BOX AND GYPSUM BOARD SHALL BE COMPLETELY FILLED WITH JOINT COMPOUND (OR OTHER APPROVED MATERIAL).

PROVIDE A WALL AROUND OUTLETS LARGER THAN 16 SQUARE INCHES. THE INTEGRITY OF THE WALL RATING SHALL BE MAINTAINED.

F. THE TOTAL AGGREGATE SURFACE AREA OF THE BOXES SHALL NOT EXCEED 100 SQUARE INCHES PER 100 SQUARE FEET.

G. OUTLET BOXES LOCATED ON OPPOSITE SIDES OF FIRE RESISTIVE ASSEMBLIES SHALL BE SEPARATED BY A MINIMUM HORIZONTAL DISTANCE OF 24 INCHES.

H. OUTLET BOXES SHALL BE SECURELY FASTENED TO WALL FRAMING MEMBERS.

I. THE OPENING IN THE GYPSUM BOARD FACING SHALL BE CUT NOT TO EXCEED 1/8 INCH BETWEEN THE EDGES OF THE OUTLET BOX AND THE EDGES OF THE OPENING.

IT IS THE INTENT THAT ALL DEVICE OUTLET BOXES (POWER AND SYSTEMS) BE FLUSH MOUNTED IN WALLS, CEILINGS OR FLOORS, AND JUNCTION BOXES FLUSH MOUNTED IN WALLS, CEILINGS, OR FLOORS, OR CONCEALED ABOVE ACCESSIBLE CEILINGS, AND NOT SURFACE MOUNTED, UNLESS SPECIFICALLY NOTED ON THE CONTRACT DRAWINGS, OR UNLESS A/E GRANTS WRITTEN PERMISSION.

ALL COMPONENTS OF THE ELECTRICAL SYSTEM (INCLUDE RACEWAYS, ELECTRICAL EQUIPMENT, OUTLET BOXES, JUNCTION BOXES, ETC.) LOCATED IN A HAZARDOUS (CLASSIFIED) LOCATION SHALL BE APPROVED FOR USE IN SAID LOCATION, AS

DEFINED BY THE NEC, WHETHER INDICATED ON THE CONTRACT DOCUMENTS OR AQT DEVICES SHALL BE MOUNTED VERTICALLY, UNLESS OTHERWISE NOTED.

ALL RECEPTACLES SHALL BE MOUNTED SUCH THAT THE GROUND PIN IS MOUNTED UP. WHERE DEVICES ARE SHOWN IN WALLS BACK-TO-BACK ON OPPOSITE SIDES, INSTALL SO THAT

THEY ARE SEPARATED BY AT LEAST 12". RECEPTACLES OR JUNCTION BOXES FOR ELECTRIC WATER COOLERS SHALL BE LOCATED DIRECTLY BEHIND ELECTRIC WATER COOLER, CONCEALED FROM DIRECT VIEW. RECEPTACLES SHALL BE GFCI TYPE. JUNCTION BOXES FOR HARD-WIRED CONNECTION TO EWC SHALL BE

CIRCUITED TO GFCI PROTECTED CIRCUIT BREAKER IN PANELBOARD. 10. ALL EXTERIOR RECEPTACLES OR RECEPTACLES LOCATED IN AREAS SUBJECT TO MOISTURE (PARKING GARAGE, WASHDOWN AREAS IN KITCHEN, ETC) SHALL BE GFCI TYPE. ALL EXTERIOR

RECEPTACLES SHALL BE PROVIDED WITH CAST METAL, IN-USE COVER UNLESS NOTED OTHERWISE. ALL RECEPTACLES LOCATED IN KITCHENS, BATHROOMS OR WITHIN 6' OF THE INSIDE FACE OF A SINK, IN MECHANICAL ROOMS, JANITOR CLOSETS, ELEVATOR SHAFTS, ELEVATOR SUMP PUMP. AND ELEVATOR EQUIPMENT ROOMS SHALL BE GFCI TYPE OR GFCI PROTECTED.

RACEWAYS:

FLEXIBLE METAL CONDUIT AND LIQUIDTIGHT METAL CONDUIT (FMC & LFMC) SHALL NOT BE USED IN LENGTHS THAT EXCEED 6'-0" UNLESS SPECIFICALLY NOTED OTHERWISE, OR UNLESS A/E GRANTS WRITTEN PERMISSION.

CONDUIT (LFNC) ARE PROHIBITED UNLESS SPECIFICALLY NOTED OTHERWISE, OR UNLESS A/E OR

ALL FEEDER AND BRANCH CIRCUIT CONDUCTORS, INCLUDING LOW VOLTAGE SYSTEMS, SHALL BE INSTALLED IN A COMPLETE RACEWAY SYSTEM (CONDUIT) UNLESS SPECIFIED NOTED OTHERWISE. THE USE OF ELECTRICAL NON-METALLIC TUBING (ENT) AND LIQUIDTIGHT FLEXIBLE NON-METALLIC

OWNER GRANTS WRITTEN PERMISSION. CONNECTIONS TO TRANSFORMERS, AHU'S, AND PUMPS SHALL BE WITH LIGUIDTIGHT, FLEXIBLE METAL

NO PVC CONDUIT MAY BE USED INSIDE OF BUILDING UNLESS ROUTED UNDERGROUND, AND UNLESS

OTHERWISE NOTED. ALL CONDUIT TERMINATIONS AT TERMINAL BOARDS ARE TO HAVE GROUNDING BUSHINGS AT CONDUIT ENDS.

ALL CONDUITS ARE TO BE CONCEALED UNLESS IMPOSSIBLE DUE TO EXISTING CONDITIONS (I.E. EXPOSED CEILINGS, BUILDING EXTERIOR WALL RUNS). CONCEAL ALL CONDUITS ABOVE CEILINGS OR IN WALLS AND MILLWORK, WHERE EXISTING CONDITIONS DICTATE THAT CONDUITS CANNOT BE CONCEALED, NOTIFY ARCHITECT/ENGINEER PRIOR TO INSTALLING CONDUIT FOR RESOLUTION TO

SEAL ALL PENETRATIONS AND OPENINGS MADE DURING EXECUTION OF WORK IN FIRE-RATED WALLS. WALLS SHALL BE SEALED WITH UL-APPROVED PRODUCT WITH THE SAME OR GREATER RATING OF WALL PENETRATED.

**ELECTRICAL DEMOLITION NOTES** 

DEVICES, LIGHT FIXTURES AND EQUIPMENT SHOWN IN DASHED LINE TYPE ARE EXISTING TO BE DEMOLISHED; DEVICES, LIGHT FIXTURES AND EQUIPMENT SHOWN IN LIGHT SOLID LINE TYPE ARE EXISTING TO REMAIN, UNLESS OTHERWISE NOTED.

EXISTING EQUIPMENT, LIGHT FIXTURES, DEVICES SHOWN ARE BASED ON FIELD SURVEYS AND RECORD DRAWINGS PROVIDED BY THE OWNER, AND IS NOT NECESSARILY ALL INCLUSIVE IN EVERY AREA AS FAR AS EXISTING ELECTRICAL EQUIPMENT, LIGHIT FIXTURES AND DEVICES. EXISTING CIRCUITING SHOWN IS BASED ON RECORD DRAWINGS AND THE SURVEYED PANEL DIRECTORIES, WHERE THEY WERE AVAILABLE. THE ACTUAL CONDITIONS MAY VARY. ALL EXISTING CONDITIONS MUST BE VERIFIED PRIOR TO BID. THE CONDITIONS SHOWN ARE INTENDED TO SHOW THE LOCATIONS OF EXISTING DEVICES, LIGHT FIXTURES AND EQUIPMENT, WHERE SHOWN ON THE PLAN DRAWINGS, AND IN NO WAY RELIEVES THE CONTRACTOR FROM PROVIDING ANY AND ALL COORDINATION NECESSARY TO COMPLETE THE NEW WORK. FIELD CONDITIONS SHALL GOVERN.

WHERE EXISTING DEVICES ARE INDICATED TO REMAIN OR RELOCATED. LOCATED WITHIN THE SCOPE OF THIS PROJECT AND EXISTING CIRCUITING INFORMATION IS UNAVAILABLE, CONTRACTOR IS TO PROVIDE CIRCUIT TRACING TO IDENTIFY PANEL AND CIRCUIT DEVICES ARE CONNECTED TO AND PROVIDE THAT INFORMATION TO A/E PRIOR TO ROUTING CONDUITS AND WIRING FOR NEW DEVICES AND EQUIPMENT WITHIN THE SCOPE OF THIS PROJECT.

WHERE EXISTING DEVICES ARE TO REMAIN, CONTRACTOR MUST EXTEND EXISTING CIRCUITING WHERE NECESSARY TO MAINTAIN CONTINUITY OF CIRCUIT.

COORDINATE WITH THE OWNER FOR DISPOSITION OF ELECTRICAL ITEMS TO BE DEMOLISHED. OWNER SHALL HAVE THE OPTION TO RETAIN REUSABLE ITEMS SUCH AS COVERPLATES, RECEPTACLES, LIGHT FIXTURES, PANELBOARDS, TRANSFORMERS, ETC, NOT BEING USED IN THE FINISHED WORK. COORDINATE WITH THE OWNER PRIOR TO START OF DEMOLITION. PROPERLY AND LEGALLY DISPOSE OF ALL EQUIPMENT AND MATERIALS BEING REMOVED.

ALL AREAS OUTSIDE THE SCOPE OF CONSTRUCTION ARE TO REMAIN ENERGIZED. COORDINATE PHASING WITH CONSTRUCTION MANAGER AND OWNER PRIOR TO DEMOLITION WHICH MAY RESULT IN INTERRUPTION OF POWER.

REFER TO ARCHITECTURAL DEMOLITION DRAWINGS FOR EXTENT OF AREA REQUIRING DEMOLITION AND ADDITIONAL INFORMATION ON ELECTRICAL DEMOLITION WITHIN THAT AREA. DISCONNECT ELECTRICAL SERVICE TO ALL EQUIPMENT BEING REMOVED. DEMOLITION SHALL BE PHASED AS REQUIRED BY THE OWNER

CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING ALL OPENINGS IN EXISTING CONSTRUCTION AFTER REMOVAL OF EQUIPMENT AND ELECTRICAL DEVICES, UNLESS OTHERWISE NOTED ON PLANS. REPAIRS ARE TO BE DONE TO LOGICAL EDGES OF SURFACES AFFECTED AND SHALL MATCH IMMEDIATE ADJACENT AREAS IN CONSTRUCTION, MATERIAL, FIRE RATING, FINISH AND COLOR.

FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO COMMENCEMENT OF WORK AND OBTAIN CLARIFICATIONS FROM ENGINEER IF NECESSARY.

10. COORDINATE SERVICE INTERRUPTION WITH CONSTRUCTION MANAGER, OWNER, LANDLORD, AND UTILITY COMPANY, WHERE APPLICABLE, AND DO NOT INTERRUPT POWER WITHOUT WRITTEN PERMISSION. PROVIDE A MINIMUM OF ONE WEEK'S WRITTEN NOTIFICATION WHEN POWER IS DESIRED

EXERCISE EXTREME CAUTION WHEN REMOVING/ RELOCATING WIRING AND EQUIPMENT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT OTHER WIRING DEVICES, EQUIPMENT AND LIGHT FIXTURES THAT MAY BE CONNECTED TO THE SAME CIRCUIT REMAIN OPERATIONAL AND ACTIVE.

INFORMATION INDICATED IN THE DEMOLITION PORTION OF THE CONTRACT DRAWINGS IS DIAGRAMMATIC IN NATURE. FIELD VERIFY ELECTRICAL CIRCUIT HOMERUNS TO ALL ELECTRICAL ITEMS SCHEDULED TO BE DEMOLISHED AND PERFORM THE WORK AS INTENDED AND DEPICTED

13. UPDATE ALL EXISTING ELECTRICAL EQUIPMENT NAMEPLATES AND DIRECTORIES AS NECESSARY TO REFLECT FINAL AS-BUILT CONDITIONS AT THE END OF CONSTRUCTION.

STORE ITEMS INDICATED TO BE RETURNED TO THE OWNER IN A DRY, CLEAN AND PROTECTED AREA. NOTIFY OWNER WHEN ITEMS ARE READY TO BE REMOVED.

15. COORDINATE ANY ALTERATION AND CHANGES TO THE ELECTRICAL SERVICE WITH THE LOCAL

UTILITY COMPANY AND THE OWNER PRIOR TO COMMENCEMENT OF WORK. 16. SCHEDULE ALL POWER INTERRUPTION WITH OWNER FOR EXACT DATE, TIME AND DURATION. PROVIDE A MINIMUM OF 72 HOURS NOTICE PRIOR TO DISCONNECTING ANY POWER TO ANY PORTION OF THE BUILDING, AND MAKE ARRANGEMENTS TO MAINTAIN POWER TO ALL CRITICAL EQUIPMENT AS NEEDED AND REQUESTED BY THE OWNER PRIOR TO COMMENCEMENT OF WORK

17. THE DEMOLITION PLAN IS NOT INCLUSIVE OF ALL FLECTRICAL DEVICES WITHIN THE PROJECT. AREA. IT IS INTENDED TO PROVIDE A GENERAL KNOWLEDGE OF THE EXISTING CONDITIONS WITHIN THE PROJECT AREA. ANY DISCREPANCIES OR CONDITIONS NOT SHOWN ON THE PLAN SHALL BE BROUGHT TO THE ATTENTION OF THE A/E. THE CONTRACTOR IS RESPONSIBLE FOR ALL

18. ALL CONDUITS SERVING OTHER SPACES THAT RUN THROUGH THE PROJECT AREA SHALL REMAIN ACTIVE DURING CONSTRUCTION SO AS NOT TO CAUSE DISRUPTION TO THESE OTHER SPACES. ENSURE THAT ALL CONDUITS, NEW OR EXISTING WITHIN THE PROJECT AREA ARE PROPERLY SUPPORTED IN ACCORDANCE WITH THE NEC.

19. REMOVE ALL ABANDONED WIRING AND CONDUIT THAT IS WITHIN THE PROJECT AREA PRIOR TO THE END OF CONSTRUCTION.

## APPLICABLE CODES

ALL WORK AND EQUIPMENT UNDER THIS DIVISION SHALL BE IN STRICT COMPLIANCE WITH THE CODES, STANDARDS AND PRACTICES LISTED HEREIN:

A. LIFE SAFETY CODE, NFPA 101.

B. UNDERWRITERS LABORATORIES, INC. (UL) PUBLICATIONS.

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA).

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) NATIONAL ELECTRICAL CODE (NEC), 2014 EDITION.

INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE).

NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION (NEMA). REQUIREMENTS OF LOCAL POWER COMPANY.

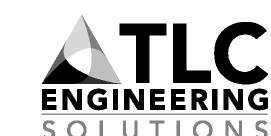
THE AMERICANS WITH DISABILITIES ACT (ADA). OWNER'S PUBLISHED DESIGN STANDARDS. THE FLORIDA ACCESSIBILITY CODE.

THE FLORIDA ENERGY CONSERVATION CODE

FLORIDA FIRE PREVENTION CODE, 2014 EDITION. N. FLORIDA BUILDING CODE, 2017 EDITION. INTERNATIONAL BUILDING CODE.

#### COMPLIANCE STATEMENT

TO THE BEST OF MY KNOWLEDGE. THESE DRAWINGS AND THE PROJECT MANUAL ARE COMPLETE AND COMPLY WITH THE FLORIDA BUILDING CODE.



13099 S. Cleveland Ave., Ste. 500 Fort Myers, Florida 33907-3869 PH: 239.275.4240 www.tlc-engineers.com COA 15

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No. Date Description

> Michael J. Barrile, P.E. Florida License #71562

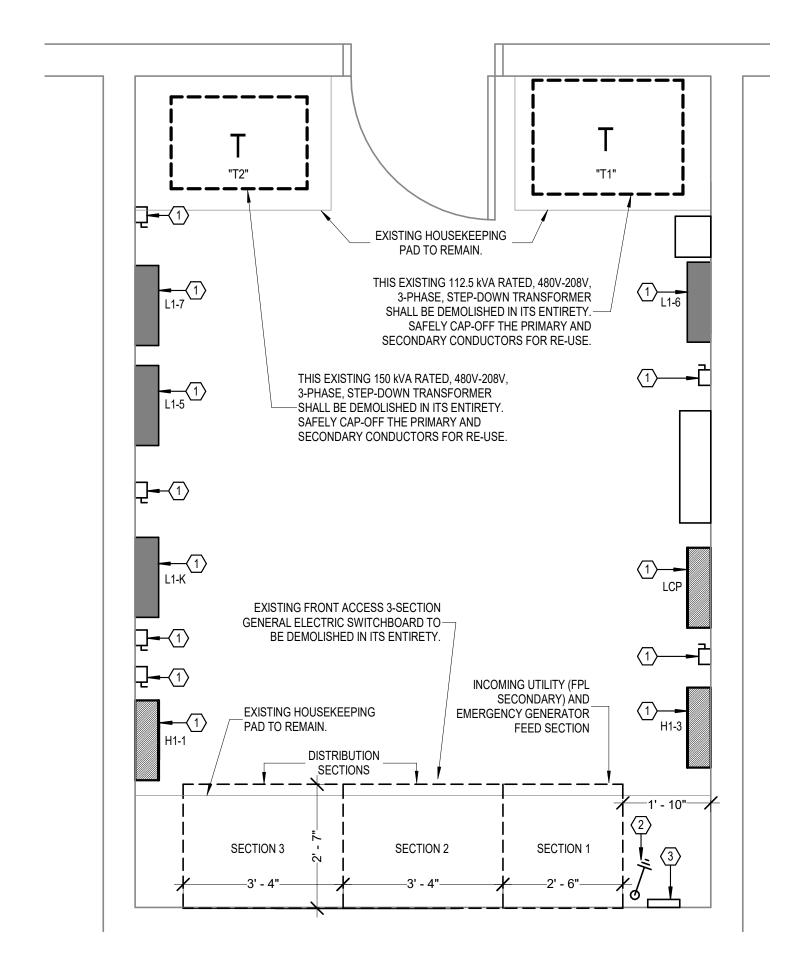
Project No.: 719006 Issue Date: 08/09/2019

Approved By:

Drawn By:

**ELECTRICAL** LEGEND & GENERAL NOTES

WHERE THERE IS A DISCREPANCY BETWEEN ABOVE GENERAL NOTES AND SPECIFICATIONS, WHERE APPLICABLE, SPECIFICATIONS SHALL BE FOLLOWED



ENLARGED PLAN - DEMOLITION - ELECTRICAL ROOM 158

**Switchboard: SWBD** 

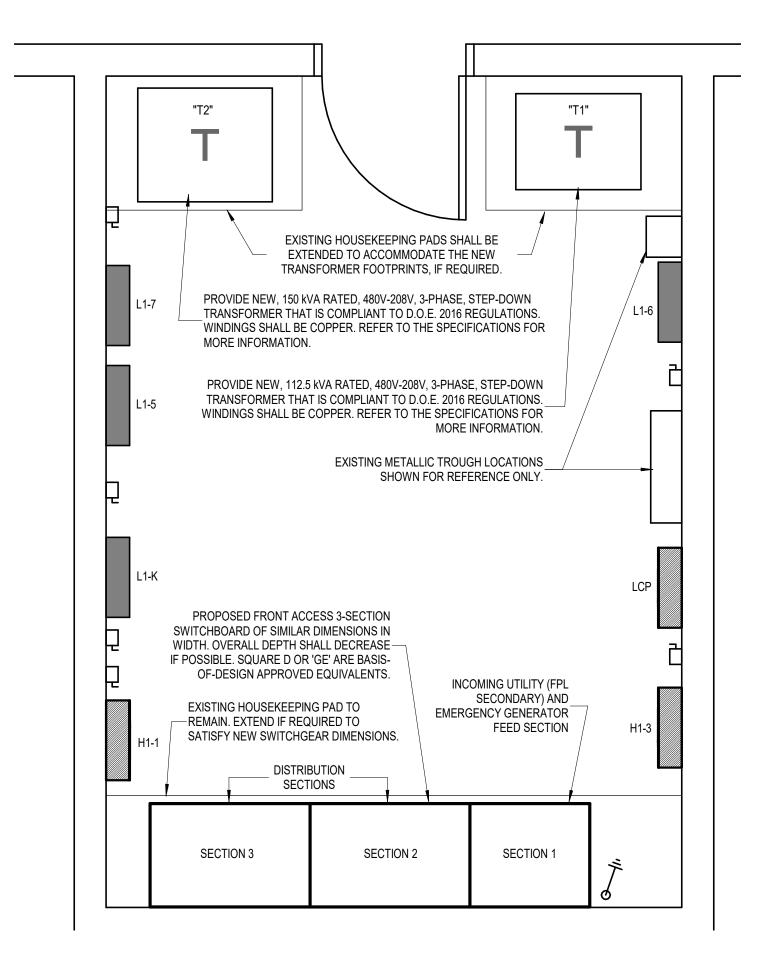
Location: MAIN ELEC ROOM

Supply From: FPL / GENSET

Mounting: Surface

Enclosure: NEMA 1

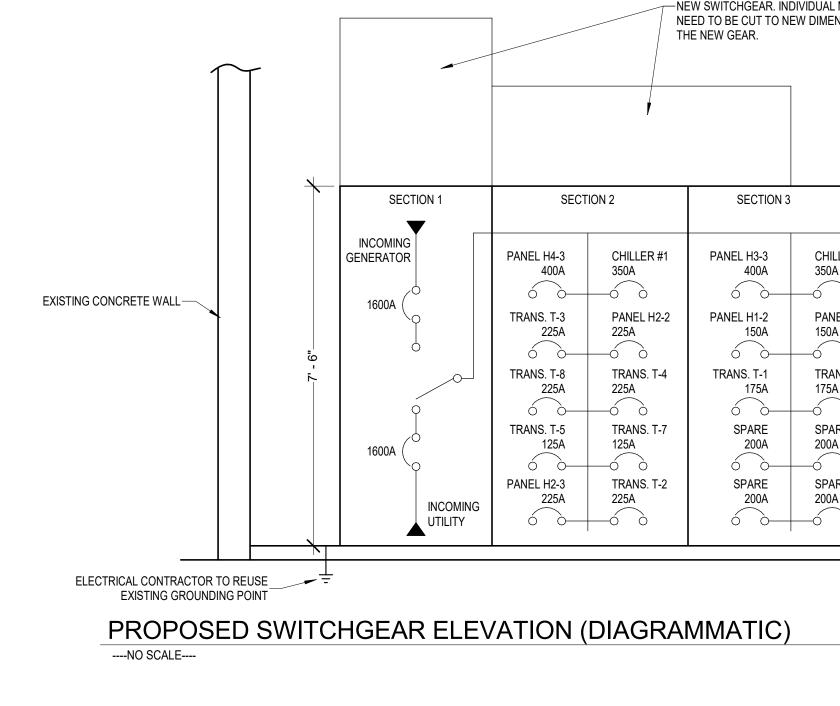
PANEL SCHEDULE OF PROPOSED SWITCHBOARD.



ENLARGED PLAN - NEW CONSTRUCTION - ELECTRICAL ROOM 158

#### Volts: 480/277 Wye A.I.C. Rating: 65 kAIC Mains Type: MCB Phases: 3 Mains Rating: 1600 A Wires: 4 MCB Rating: 1600 A Neutral Rating:

СКТ	Circuit Description	# of Poles	Trip Rating	Remarks
1	SPD	3	60 A	SPD INTEGRAL TO NEW GE
2	PANEL H4-3	3	400 A	
3	TRANSFORMER T-3	3	225 A	
4	TRANSFORMER T-8	3	225 A	
5	TRSNSFORMER T-5	3	125 A	
6	PANEL H2-3	3	225 A	
7	CHILLER #1	3	350 A	
8	PANEL H2-2	3	225 A	
9	TRANSFORMER T-4	3	225 A	
10	TRANSFORMER T-7	3	125 A	
11	TRANSFORMER T-2	3	225 A	
12	PANEL H3-3	3	400 A	
13	PANEL H1-2	3	150 A	
14	PANEL TRANSFORMER T-1	3	175 A	
15	CHILLER #2	3	350 A	
16	PANEL H1-1	3	150 A	
17	TRANSFORMER T-6	3	175 A	
18	SPARE	3	200 A	
19	SPARE	3	200 A	
20	SPARE	3	200 A	



#### **ELECTRICAL KEY NOTES**

- 1 THIS KEYNOTED PIECE OF ELECTRICAL EQUIPMENT SHALL REMAIN AS IS, AND IS BEING SHOWN FOR REFERENCE ONLY. ONLY THE MAIN SWITCHBOARD AND THE TRANSFORMERS ARE WITHIN THE SCOPE OF REPLACEMENT WORK.
- EXISTING ELECTRICAL GROUNDING POINT SHALL REMAIN AS IS AND BE RE-UTILIZED FOR THE NEW SWITCHGEAR INSTALLATION.
- EXISTING 'HAWKEYE 8100' MONITORING METER ADJACENT TO THE EXISTING SWITCHGEAR SHALL BE REMOVED DURING DEMOLTION AND RETURNED TO THE OWNER.

### SCOPE OF WORK

THE SCOPE OF WORK INCLUDES THE COMPLETE DEMOLITION AND REPLACEMENT OF THE 3-SECTION MAIN SWITCHBOARD AND BOTH PAD-MOUNTED STEP-DOWN TRANSFORMERS IN THE MAIN ELECTRICAL ROOM (T1 - 112.5 kVA AND T2 - 150 kVA). THE EXISTING SWITCHBOARD CONTAINS TWO MAIN BREAKERS - ONE FOR THE UTILITY AND ONE FOR THE GENERATOR - AND FED THROUGH AN INTERNAL CLOSED-TRANSITION TRANSFER SWITCH. CONTRACTOR SHALL INCLUDE PROVISIONS TO DISCONTINUE THE CLOSED TRANSITION AGREEMENT WITH FP&L AS PART OF THE

THE NEW 3-SECTION SWITCHBOARD SHALL BE MANUFACTURED AT OR CLOSE TO THE SAME DIMENSIONS DUE TO INCOMING & OUTGOING CONDUIT/CONDUCTOR LOCATIONS, BUT SHOULD BE SHALLOWER IN DEPTH TO FIT ON THE CURRENT HOUSEKEEPING PAD. THE NEW SURGE PROTECTION DEVICE SHALL BE INTEGRAL WITH THE NEW SWITCHBOARD, DUE TO LACK OF EXTERIOR/REMOTE MOUNTING OPTIONS. ALL NEW CIRCUIT BREAKERS PROVIDED IN THE SWITCHGEAR SHALL COME WITH ELECTRONIC TRIPPING CAPABILITY. FULL "LSIG" CAPABILITY ON THE MAIN BREAKER AND THE EMERGENCY GENERATOR MAIN BREAKER, AND MINIMUM "LI" ON THE DISTRIBUTION CIRCUIT BREAKERS. PROVIDE "MIMIC BUSS" ON THE FRONT FACE OF THE NEW SWITCHGEAR.

THE CONCRETE HOUSEKEEPING PADS AT TRANSFORMERS T1 & T2 SHALL BE EXTENDED IF NECESSARY TO ACCOMMODATE THE NEW TRANSFORMER FOOTPRINT, DUE TO THE LARGER SIZE NECESSITATED BY D.O.E. 2016 CODE COMPLIANCE.

ALL CONDUCTOR EXTENSIONS / SPLICES MUST BE INSPECTED AND APPROVED BY THE LEE COUNTY ELECTRICAL DEPARTMENT PRIOR TO ACCEPTANCE.

ELECTRICAL CONTRACTOR MUST PROVIDE WARNING LABELS ON THE FRONT ACCESS PANEL OF BOTH MAIN CIRCUIT BREAKERS THAT THERE ARE TWO (2) SOURCES OF POWER ENERGIZING THE GEAR. THE LABEL MUST BE FASTENED PERMANENTLY WITH HARDWARE AND STATE, "WARNING: MULTIPLE POWER SOURCES IN THIS SWITCHGEAR. FPL & GENERATOR."

COORDINATION OF CIRCUIT BREAKERS ON THE SWITCHGEAR AND ARC FLASH ANALYSIS OF THE SWITCHGEAR SHALL BE PROVIDED BY THE ENGINEER AT THE TIME OF INSTALLATION.

INSTALLATION OF THE SWITCHGEAR SHALL OCCUR OVER A 3-DAY WEEKEND PER LEE COUNTY REQUEST. CONTRACTOR SHALL COORDINATE WITH THE OWNER AS REQUIRED.

#### **GENERAL DEMOLITION NOTES:**

- 1. ALL EXISTING CONDITIONS MUST BE VERIFIED PRIOR TO BID. FIELD CONDITIONS SHALL GOVERN.
- ALL EXISTING ELECTRICAL MATERIAL ASSOCIATED WITH THE PROJECT SHALL BE REMOVED. COORDINATE WITH THE PROJECT MANAGER PRIOR TO
- 3. THE DEMOLITION SCOPE DESCRIPTION IS INTENDED TO PROVIDE THE CONTRACTOR WITH A GENERAL KNOWLEDGE OF THE AREA OF DEMOLITION WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED DEMOLITION WHETHER SHOWN ON THE PLANS OR NOT.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL CONDUITS. NEW OR EXISTING, WITHIN THE PROJECT AREA ARE PROPERLY SUPPORTED AND PROVIDED WITH BONDING BUSHINGS IN ACCORDANCE WITH THE 2014 NATIONAL ELECTRICAL CODE.
- 5. ALL ITEMS REMOVED UNDER THIS PROJECT SHALL BE DISPOSED OF OR TURNED OVER TO THE OWNER AT THE OWNER'S DISCRETION.

EXISTING METALLIC WIREWAYS SHALL BE REMOVED & RETAINED FOR RE-ASSEMBLY AFTER INSTALLATION OF -NEW SWITCHGEAR. INDIVIDUAL METAL PANELS MAY NEED TO BE CUT TO NEW DIMENSIONS TO FIT WITH CHILLER #2 -EXISTING CONCRETE WALL 350A PANEL H1-1 150A TRANS. T-6 175A SPARE 200A SPARE 200A -EXISTING HOUSEKEEPING PAD WITH CONDUIT STUB-UPS TO REMAIN

SOLUTIONS

13099 S. Cleveland Ave., Ste. 500 Fort Myers, Florida 33907-3869 PH: 239.275.4240 www.tlc-engineers.com COA 15

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> Michael J. Barrile, P.E. Florida License #71562

Project No.: 719006 Issue Date: 08/09/2019 MJB Drawn By: BLS Approved By: Scale: As indicated

Drawing Title: **ELECTRICAL CONSTRUCTION -**

**ENLARGED PLANS** 

Drawing No.:

E101