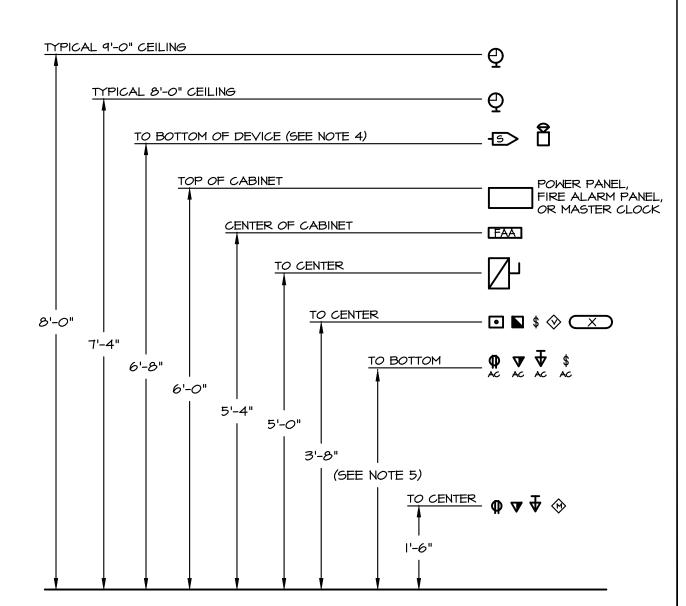
FIRE ALARM FIRE ALARM CONTROL PANEL FIRE ALARM ANNUNCIATOR/GRAPHIC MAP FARPS FIRE ALARM REMOTE POWER SUPPLY CONTROL MODULE MONITOR MODULE MANUAL PULLDOWN STATION WALL MOUNTED ADA STROBE ADA HORN OR SPEAKER WITH STROBE MINI HORN / STROBE ELECTROMAGNETIC DOOR HOLD OPEN SPRINKLER FLOW SWITCH SPRINKLER TAMPER SWITCH THERMAL DETECTOR PHOTOELECTRIC SMOKE DETECTOR DUCT SMOKE DETECTOR, SUPPLY OR RETURN REMOTE INDICATING LIGHT (TEST SWITCH) 120V. MOTORIZED SMOKE DAMPER RESCUE ASSISTANCE PHONE FIRE FIGHTERS PHONE JACK



- WHERE MULTIPLE LINE VOLTAGE DEVICES ARE SHOWN ADJACENT TO EACH OTHER, THEY ARE ALL TO SHARE THE SAME JUNCTION BOX, UP TO FOUR GANGS.
- 2. WHERE MORE THAN FOUR DEVICES ARE SHOWN ADJACENT TO EACH OTHER, DEVICES ARE TO STACK VERTICALLY ABOVE ONE ANOTHER IN TWO ROWS IN AS SMALL OF GANG BOXES AS POSSIBLE. I.E. SIX DEVICES WILL USE TWO THREE GANG BOXES, FIVE DEVICES WILL USE ONE THREE GANG AND ONE TWO GANG BOX.
- 3. SEPARATELY GANGED DEVICES ARE NOT ALLOWED TO BE INSTALLED ADJACENT

TO ONE ANOTHER HORIZONTALLY WITHIN THE SAME STUD BAY.

- 4. AUDIBLE/VISUAL FIRE ALARM DEVICES SHOWN ARE TO BE MOUNTED AT 90" OR 6" BELOW CEILING, WHICHEVER IS LOWER. ADA STROBES TO BE MOUNTED AT 80" AFF OR 6" BELOW CEILING, WHICHEVER IS LOWER.
- 5. THE E.C. SHALL REFER TO INTERIOR DESIGN ELEVATIONS TO COORDINATE ALL COUNTER HEIGHTS. ALL "AC" DEVICES SHALL HAVE BOTTOM OF BACK-BOX MOUNTED 4" ABOVE THE BACK/SIDE SPLASH.

1 MOUNTING HEIGHTS DETAIL

ABBREVIATIONS AND SYMBOLS

AMPERE(S ABOVE COUNTER ABOVE FINISHED FLOOR ABOVE FINISHED GRADE AUTHORITY HAVING JURISDICTION AMPERES INTERRUPTING CAPACITY

AUTOMATIC TRANSFER SWITCH BELOW FINISHED FLOOR

CONDUIT CATV CABLE TELEVISION CIRCUIT BREAKER CORRELATED COLOR TEMPERATURE

CLG CURRENT TRANSFORMER DEDICATED CIRCUIT

DISC DISCONNEC^{*} DISHWASHER

DRAWING(S)

DWG(S)

GC

EXISTING TO REMAIN ELECTRICAL CONTRACTOR EXHAUST FAN

EXISTING TO BE RELOCATED **EMERGENCY** EMERGENCY POWER OFF ELECTRIC WATER COOLER

FULL LOAD AMPS GROUND

GENERAL CONTRACTOR GARBAGE DISPOSAL GROUND FAULT CIRCUIT INTERRUPTER GROUND FAULT PROTECTION

HORSEPOWER INTERMEDIATE DISTRIBUTION FACILITY ISOLATED GROUND SHORT CIRCUIT CURRENT

KVA KILOVOLT AMPERE(S) KILOWATT(S) LT6 LIGHTING

MINIMUM CIRCUIT AMPERE(S) MCB MAIN CIRCUIT BREAKER MAIN DISTRIBUTION CENTER

MAIN DISTRIBUTION FACILITY MAIN LUGS ONLY MTS MANUAL TRANSFER SWITCH

MICROWAVE NORMALLY CLOSED

NIGHT LIGHT - SEE GENERAL NOTES NORMALLY OPEN

OVERHEAD POLE PARTIAL CIRCUIT

РΗ, Φ PHASE REMOVED, EXISTING TO BE REMOVED

OR APPROVED EQUAL

RECEPTACLE REF REFRIGERATOR RELOCATED LOCATION

SURGE PROTECTION DEVICE UNDER COUNTER/CABINET UNDERGROUND

UNLESS OTHERWISE NOTED VOLT(S)

WATT(S) OR WIRE WIRE GUARD **WEATHERPROOF** XFMR TRANSFORMER

UON

POOL EQUIPMENT SCHEDULE NOTATION KITCHEN EQUIPMENT SCHEDULE NOTATION

MECHANICAL EQUIPMENT SCHEDULE NOTATION

 \Leftrightarrow DETAIL NOTE

DELTA REVISION NOTE ELECTRICAL WIRE SIZE

LIGHTING CONTROLS SEQUENCE OF OPERATION

DETAIL REFERENCE TAG

CENTER LINE DESIGNATION

LIGHTING FIXTURES

LUMINAIRE TYPE, REFERENCING LUMINAIRE SCHEDULE, TYPICAL ALL FIXTURES. SUBSCRIPT, IF SHOWN, REFERENCES WALL SWITCH OR RELAY/ZONE CONTROL.

Y WALL MOUNTED LUMINAIRE SURFACE OR PENDANT MOUNTED LUMINAIRE

RECESSED LUMINAIRE DOWNLIGHT LUMINAIRE SURFACE CEILING LUMINAIRE

PENDANT LUMINAIRE ARROW INDICATES DIRECTIONAL LUMINAIRE

> MONOPOINT LUMINAIRE SURFACE OR PENDANT TRACK LUMINAIRE REFER TO FIXTURE SCHEDULE FOR HEAD

LED TAPE LUMINAIRE FESTOON LIGHTING

RECESSED MULTI-HEAD LUMINAIRE 00000 FLOOR OR TABLE LAMP

EXIT LUMINAIRE - SHADED INDICATES FACE/ DIRECTIONAL ARROWS AS SHOWN. BATTERY PACK EMERGENCY LUMINAIRE

HATCH INDICATES EMERGENCY LUMINAIRE PORCELAIN KEYLESS LAMP HOLDER

STEP LIGHT TYPE LUMINAIRE IN-GRADE UPLIGHT

BOLLARD PEDESTRIAN POLE OR POST TOP LUMINAIRE

WIRING DEVICES

EXTERIOR AREA LIGHT

DUPLEX RECEPTACLE FOUR PLEX RECEPTACLE

SINGLE RECEPTACLE

COMBO RECEPTACLE/SWITCH SWITCHED DUPLEX RECEPTACLE

SPECIAL PURPOSE RECEPTACLE

FLOOR MOUNTED SPECIAL PURPOSE

FLOOR MOUNTED RECEPTACLE DUPLEX/QUAD ► SR → SURFACE RACEWAY

CLOCK RECEPTACLE

JUNCTION BOX WALL MOUNTED J-BOX

FLOOR MOUNTED JUNCTION BOX

MOLDED CASE CIRCUIT BREAKER IN ENCLOSURE

NON-FUSED DISCONNECT SWITCH FUSED DISCONNECT SWITCH

MAGNETIC CONTROLLER (STARTER) COMBINATION STARTER/DISCONNECT SWITCH

MOTOR R RELAY

TIME CLOCK

PHOTOCELL THERMAL OVERLOAD SWITCH

SINGLE POLE SWITCH 3-WAY SWITCH

4-WAY SWITCH

KEY OPERATED SWITCH DIMMER SWITCH

\$DOOR RECESSED DOOR SWITCH LIGHTING CONTROL DEVICE. REFER TO DETAILS FOR CONTROL INTENT.

SYSTEMS

TTB, MDF OR IDF SYSTEM BACKBOARD TELECOMMUNICATION OUTLET FLOOR MOUNTED TELECOMMUNICATION OUTLET

TELEVISION OUTLET SPEAKER - PAGING AND OR SOUND SYSTEM

(x) - INDICATES SPEAKER ZONE MICROPHONE OUTLET

VOLUME CONTROL PUSH BUTTON

CLOSED CIRCUIT TELEVISION CAMERA

CABLE TRAY (LENGTH AS INDICATED ON DRAWINGS)

ELECTRICAL GENERAL NOTES

- THE CONTRACTOR SHALL PROVIDE ALL LABOR AND MATERIAL NECESSARY FOR A COMPLETE AND FUNCTIONING ELECTRICAL SYSTEM. MATERIALS AND INSTALLATION SHALL COMPLY WITH CODES, LAWS AND ORDINANCES OF FEDERAL, STATE AND LOCAL GOVERNING BODIES
- HAVING JURISDICTION. MATERIALS AND EQUIPMENT SHALL BE LISTED AND/OR LABELED BY U.L.,
- ETL, CSA OR ANOTHER RECOGNIZED TESTING LAB.
- ALL WORK REQUIRED FOR THE INSTALLATION AS SHOWN ON DRAWINGS INCLUDING LABOR, EQUIPMENT AND MATERIALS SHALL BE IN STRICT COMPLIANCE WITH THE BUILDING STANDARDS, EXCEPT AS NOTED
- THE CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, GOVERNMENTAL FEES, TAXES AND LICENSES NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE ELECTRICAL WORK.
- THE CONTRACTOR SHALL PREPARE AND SUBMIT TO GOVERNMENTAL AGENCIES AND UTILITY COMPANIES SHOP DRAWINGS, WHICH ARE REQUIRED BY THESE AGENCIES, FOR THEIR APPROVAL.
- THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER/OWNER OF ANY MATERIALS OR APPARATUS BELIEVED TO BE INADEQUATE, UNSUITABLE, IN VIOLATION OF LAWS, ORDINANCES, RULES OR REGULATIONS OF AUTHORITIES HAVING JURISDICTION.
- FOR ALL JOBS THAT INCLUDE DEMOLITION WORK BY THE ELECTRICAL CONTRACTOR. DURING AND AFTER DEMOLITION, EC SHALL MAINTAIN CIRCUIT CONTINUITY TO ALL EXISTING DEVICES THAT ARE TO REMAIN. EC SHALL REMOVE, RELOCATE, AND/OR REWORK ANY CONDUIT AND WIRING TO FACILITATE THE NEW CONSTRUCTION SCOPE OF WORK. FOR ALL LUMINAIRES THAT ARE EXISTING TO REMAIN OR EXISTING TO BE RELOCATED, EC SHALL CLEAN LENSES AND REPLACE ALL EXTINGUISHED LAMPS, UON.
- THE CONTRACTOR SHALL CAREFULLY EXAMINE THE CONTRACT DOCUMENTS, VISIT THE SITE, AND THOROUGHLY BECOME FAMILIAR WITH THE BUILDING STANDARDS AND LOCAL CONDITIONS RELATING TO THE WORK. FAILURE TO DO SO WILL NOT RELIEVE THE CONTRACTOR OF THE OBLIGATIONS OF THE CONTRACT.
- IO. ALL MATERIALS, AND EQUIPMENT SHALL BE ERECTED, INSTALLED, CONNECTED, CLEANED, ADJUSTED, TESTED, CONDITIONED, AND PLACED IN SERVICE IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS AND
- ALL CUTTING, DRILLING AND PATCHING OF MASONRY, STEEL OR IRON WORK BELONGING TO THE BUILDING MUST BE DONE BY THIS CONTRACTOR IN ORDER THAT HIS WORK MAY BE PROPERLY INSTALLED, BUT UNDER NO CONDITIONS MAY STRUCTURAL WORK BE CUT, EXCEPT AT THE DIRECTION OF THE ARCHITECT-DESIGNER OR THEIR REPRESENTATIVE.
- 12. E.C. IS TO REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ALL FIRE RATED PENETRATION INSTALLATION REQUIREMENTS. E.C. IS TO NOTIFY ENGINEER AND ARCHITECT PRIOR TO INSTALLING ANY FIXTURES WITHIN A FIRE RATED CEILING OR WALL. FIRE RATING MUST BE MAINTAINED FOR THIS TYPE OF INSTALLATION WITH DRYWALL TENTING.
- E.C. SHALL PROVIDE COORDINATION STUDY OF NEW AND/OR NEW GEAR COMBINED WITH EXISTING GEAR DURING THE SUBMITTAL PROCESS.
- SHOP DRAWINGS SHALL INCLUDE MANUFACTURER'S NAMES, CATALOG NUMBERS, CUTS, DIAGRAMS AND OTHER SUCH DESCRIPTIVE DATA AS MAY BE REQUIRED TO IDENTIFY AND REVIEW THE EQUIPMENT. SUBMITTALS SHALL BE IN LOGICAL GROUPS, FOR EXAMPLE, ALL LIGHTING FIXTURES, PARTIAL SUBMITTALS WILL NOT BE REVIEWED.
- SUBMIT (3) COPIES OF THE FOLLOWING SHOP DRAWINGS FOR REVIEW. SWITCH BOARD, PANELBOARDS, AND METERING EQUIPMENT
- DISCONNECTS FIRE ALARM SYSTEM
- LIGHT FIXTURES LIGHTING CONTROLS
- TRANSFORMERS PROVIDE "AS-BUILT" DRAWINGS AND SUBMIT TO ARCHITECT/DESIGNER.
- PROVIDE THE FOLLOWING INFORMATION, PER IECC 2015 C408.2.5.2 TO THE PARTY RESPONSIBLE FOR PROJECT COMMISSIONING PLAN (COMMISSIONING AGENT/ MECHANICAL ENGINEER) AND ELECTRICAL
- a. CUTSHEETS FOR ALL INSTALLED LIGHTING AND LIGHTING CONTROLS.
- b. OPERATION AND MAINTENANCE MANUALS FOR EACH PIECE OF INSTALLED LIGHTING, REQUIRED ROUTINE MAINTENANCE ACTIONS, CLEANING AND RECOMMENDED RELAMPING SHALL BE CLEARLY c. SCHEDULE FOR INSPECTING AND RECALIBRATING ALL LIGHTING
- CONTROLS. INSPECTION OF ALL LIGHTING CONTROLS SHALL BE PERFORMED PRIOR TO ELECTRICAL ENGINEER'S COMMISSIONING SITE VISIT. RECALIBRATION OF LIGHTING CONTROLS SHALL BE PERFORMED FOLLOWING SITE VISIT AND SHALL BE BASED UPON THE RECOMMENDATIONS OF THE ELECTRICAL ENGINEER.
- ALL MATERIAL, EQUIPMENT, WIRING DEVICES, ETC. SHALL BE NEW, UNLESS SPECIFICALLY INDICATED AS EXISTING TO BE REUSED.
- 18. CONTRACTOR SHALL OBTAIN AND VERIFY EXACT UTILITY COMPANY DRAWINGS AND REQUIREMENTS. ELECTRICAL CONTRACTOR IS TO SUBMIT A COMPLETE CONSTRUCTION DRAWING SET TO THE ELECTRICAL UTILITY COMPANY WITHIN IO DAYS OF AWARD OF CONTRACT. COORDINATE TIMELINE OF THE REVIEW, APPROVAL, ALL ASSOCIATED DOWN TIME, CONSTRUCTION SCHEDULING, DELIVERY, AND INSTALLATION OF THE UTILITY TRANSFORMER. NOTIFY OWNER OF SCHEDULING CONFLICTS.
- ALL NEW CIRCUIT BREAKERS FOR NEW OR EXISTING PANELBOARDS SHALL MATCH EXISTING BUILDING PANELBOARD MANUFACTURER AND BREAKER TYPE. THE CONTRACTOR SHALL PROVIDE NEW TYPE WRITTEN PANEL DIRECTORIES FOR ALL NEW PANELS AND EXISTING PANELS WHICH HAVE CHANGED. PANELBOARD SHALL BE MARKED WHERE THE SOURCE OF POWER SUPPLY ORIGINATES, AND IF SERIES COMBINATION SYSTEMS ARE UTILIZED AND THEIR LISTED AMPERE RATING.
- 20. DO NOT SHARE NEUTRAL CONDUCTORS FOR MULTIWIRE BRANCH CIRCUITS. WHERE SHARED NEUTRAL CONDUCTORS ARE REQUIRED (SUCH AS POWERED FURNITURE SYSTEMS), HANDLE TIES SHALL BE PROVIDED ON THE CIRCUIT BREAKERS, WITH SHARED NEUTRALS, SUCH THAT IT WILL SIMULTANEOUSLY DISCONNECT ALL UNGROUNDED CONDUCTORS. ALL HANDLE TIES ARE REQUIRED TO BE INDICATED ON THE PANELBOARD SHOP DRAWINGS.
- DESIGNATIONS TO VARY, INDICATE THE CIRCUIT NUMBER USED ON THE "AS-BUILT" DRAWINGS. 22. ALL SERVICE EQUIPMENT (OTHER THAN IN DWELLING UNITS) SHALL BE LEGIBLY MARKED IN THE FIELD BY THE ELECTRICAL CONTRACTOR WITH

THE MAXIMUM AVAILABLE FAULT CURRENT AS INDICATED WITHIN THESE

DOCUMENTS. THE FIELD MARKING(S) SHALL COMPLY WITH ELECTRICAL

SHOULD ACTUAL FIELD CONDITIONS REQUIRE INDICATED CIRCUIT

- SPECIFICATIONS FOR READABILITY AND DURABILITY. 23. PROVIDE COMPLETE METAL RACEWAY SYSTEMS AND ENCLOSURES FOR ALL WIRING THROUGHOUT THE EXTENT OF THE REQUIRED DISTRIBUTION
- A. UTILIZE RIGID POLYVINYL CHLORIDE CONDUIT (PVC) IN THE FOLLOWING LOCATIONS: a. UNDERGROUND
- B. UTILIZE ELECTRICAL METALLIC TUBING (EMT), MINIMUM SIZE OF 3/4", IN THE FOLLOWING LOCATIONS: a. SERVICE AND FEEDERS b. POWER CIRCUIT HOMERUN c. BRANCH CIRCUITS IN CONCEALED OR EXPOSED LOCATIONS
- d. TELEPHONE/DATA/CATY ROUGH-IN C. UTILIZE METAL-CLAD CABLE (MC) IN THE FOLLOWING LOCATIONS: a. BRANCH CIRCUIT IN CONCEALED LOCATIONS b. FINAL CONNECTION TO RECESSED LIGHTING FIXTURES

c. FINAL CONNECTION TO STEP-DOWN TRANSFORMERS

24. ALL NEW CIRCUITS SHALL HAVE A GROUND WIRE INSTALLED.

THAT MAY BE REQUIRED TO ENCLOSE RECEPTACLES.

- 25. ALL WIRING NOT INSTALLED IN CONDUIT AND INSTALLED IN THE CEILING SPACE SHALL BE PLENUM RATED.
- 26. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL SPECIAL OUTLET BOXES
- 27. EACH SWITCH, LIGHT, RECEPTACLE AND OTHER MISCELLANEOUS DEVICE SHALL BE PROVIDED WITH A GALVANIZED OR PRESSED STEEL OUTLET BOX OF THE KNOCKOUT TYPE, OF NOT LESS THAN NO. 14 U.S. GAUGE STEEL CONDUITS SHALL BE FASTENED WITH LOCKNUTS AND BUSHINGS AND ALL UNUSED KNOCKOUTS MUST BE LEFT SEALED. THERE MUST BE SUFFICIENT ROOM FOR WIRES AND BUSHINGS AND DEEP BOXES SHALL BE INSTALLED WHERE REQUIRED. BOXES SHALL BE SECURELY AND ADEQUATELY
- 26. IN EXPOSED AND SUSPENDED CEILING APPLICATIONS, ROUTE CONDUIT AS CLOSE TO STRUCTURAL SLAB OR DECK AS POSSIBLE, AND SUPPORT CONDUIT AND JUNCTION BOXES DIRECTLY FROM THE STRUCTURAL SLAB, DECK, OR FRAMING PROVIDED FOR THAT PURPOSE. LIGHTING BRANCH CIRCUIT CONDUITS SHALL NOT BE CLIPPED TO THE CEILING SYSTEM HAS BEEN SPECIFICALLY DESIGNED FOR THAT PURPOSE.
- ALL EXPOSED CONDUIT SHALL BE CONCEALED TO THE GREATEST EXTENT POSSIBLE, AND SHALL BE INSTALLED PARALLEL AND CLOSE TO STRUCTURAL MEMBERS. GENERAL CONTRACTOR SHALL PAINT CONDUIT TO MATCH ADJACENT FINISHES.
- 30. WHERE FLOOR FITTINGS REQUIRE PENETRATION OF THE FLOOR SLAB, THEY SHALL BE STANDARD DEVICE LISTED BY UL FOR THE PURPOSE AND HAVE A UL FIRE RATING EQUAL TO THE FLOOR RATING. FLOOR SERVICE BOXES SHALL BE MODULAR, ADJUSTABLE FLUSH TYPE, DUAL SERVICE UNITS SUITABLE FOR WIRING METHOD USED. COMPARTMENT BARRIERS SHALL SEPARATE POWER FROM LOW VOLTAGE CABLING. PROVIDE RECTANGULAR SERVICE PLATE WITH SATIN FINISH.
- 31. ALL RECEPTACLES SHALL BE SPECIFICATION GRADE NEMA 5-20R, UNLESS OTHERWISE NOTED.
- 32. ALL LIGHT SWITCHES SHALL BE SPECIFICATION GRADE, QUIET OPERATION RATED 120/277 VOLT, 20 AMPS, UNLESS OTHERWISE NOTED.
- 33. ALL FACE PLATE AND DEVICE COLORS SHALL BE APPROVED BY ARCHITECT OR OWNER/LEASEE.
- 34. PROVIDE LUMINAIRES SHOWN AS SHADED WITH EMERGENCY BATTERY BACKUP POWER. EMERGENCY LUMINAIRES SHALL SENSE UNSWITCHED POWER TO THE SPACE AND OPERATE AUTOMATICALLY UPON LOSS OF NORMAL POWER. ALL EMERGENCY LUMINAIRES WITH LED SOURCES SHALL BE PROVIDED WITH 90 MINUTES OF BATTERY BACKUP POWER. ALL EMERGENCY LUMINAIRES SHALL HAVE INTEGRAL OR REMOTE TEST SWITCHES AS INDICATED IN THE FIXTURE SCHEDULE AND VISIBLE INDICATING LIGHTS. CONNECT THE EMERGENCY BATTERY TO THE UN-SWITCHED LEG OF THE LIGHTING CIRCUIT INDICATED.
- 35. ALL EXIT SIGNAGE LUMINAIRES SHALL BE CONNECTED TO THE LIGHTING CIRCUIT FEEDING THE ADJACENT AREA AND WIRED AHEAD OF ANY LOCAL SWITCHING, UON.
- 36. UNLESS OTHERWISE NOTED, LUMINAIRES DESIGNATED AS NIGHT LIGHT (NL) SHALL BE CONNECTED AHEAD OF LOCAL SWITCHING AND REMAIN ON 24
- 37. ALL DIMMED LIGHTING CIRCUITS ARE TO RECEIVE DEDICATED NEUTRALS. DO NOT SHARE NEUTRALS ON DIMMED LIGHTING CIRCUITS.
- 38. WHERE DUAL LEVEL SWITCHING IS INDICATED, THE SWITCH CLOSEST TO THE DOOR SHALL CONTROL ALL OUTER LAMPS IN THE INDICATED LUMINAIRE AND THE ADJACENT SWITCH SHALL CONTROL ALL INNER LAMP(S) IN THE INDICATED LUMINAIRES, UON.
- 39. PROVIDE OWNER WITH A COMPLETE LISTING OF ALL LAMPS UTILIZED ON THE PROJECT INCLUDING MANUFACTURER AND CATALOG INFORMATION. PROVIDE A SUGGESTED SOURCE, INCLUDING CONTACT NAME AND PHONE NUMBER, FOR REORDERING.
- 40. THE CONTRACTOR SHALL VERIFY THE CEILING TYPE BEFORE ORDERING JIGHTING FIXTURES.
- MECHANICAL EQUIPMENT SUBMITTALS ARE THOROUGHLY REVIEWED FOR CHANGES. NOTIFY ENGINEER OF ANY DISCREPANCIES. 42. FINAL LAYOUT AND QUANTITY OF ALL FIRE ALARM DEVICES SUBJECT TO

41. ROUGH-IN FOR MECHANICAL EQUIPMENT SHALL ONLY OCCUR AFTER

- APPROVAL OF LOCAL AUTHORITY HAVING JURISDICTION. 43. THE POWER AND CONTROL REQUIREMENTS FOR ALL EQUIPMENT CONNECTIONS SHALL BE CONFIRMED WITH APPROVED SHOP DRAWINGS PRIOR TO ELECTRICAL ROUGH-IN. FINAL POWER REQUIREMENTS, DIMENSIONED ROUGH-IN LOCATIONS, LOW VOLTAGE SYSTEM CONNECTIONS,
- ETC. SHALL BE CONFIRMED AND MODIFIED AS REQUIRED. 44. ALL DEVICES IN OR ABOVE COUNTERS SHALL HAVE LOCATIONS AND MOUNTING HEIGHTS CONFIRMED WITH ARCHITECTURAL ELEVATIONS & OWNER PRIOR TO ROUGH-IN. ANY ADJUSTMENTS TO MOUNTING HEIGHTS REQUIRED BY LACK OF COORDINATION WILL BE AT THE CONTRACTOR'S
- 45. ALL EXISTING ELECTRICAL SERVICES NOT SPECIFICALLY INDICATED TO
- BE REMOVED OR ALTERED SHALL REMAIN AS THEY PRESENTLY EXIST. 46. G.C. SHALL INCLUDE IN HIS COST THE REMOVAL OF ALL EXISTING ELECTRICAL DEVICES, CONDUITS, FIXTURES AND EQUIPMENT. TURN EQUIPMENT OVER TO OWNER AS INDICATED OR RECYCLE/DISCARD ALL EQUIPMENT AS REQUIRED. E.C. SHALL BE RESPONSIBLE FOR DISCONNECTING PRIMARY SERVICE AND TEMPORARY POWER.
- 47. WHERE EXISTING CEILINGS ARE REVISED FROM ACCESSIBLE TO NON-ACCESSIBLE, CONTRACTOR IS TO INCLUDE IN HIS BID THE COSTS ASSOCIATED WITH RELOCATING ALL ELECTRICAL EQUIPMENT REQUIRING ACCESS ABOVE THE EXISTING CEILING TO A NEW ACCESSIBLE CEILING LOCATION APPROVED BY ARCHITECT AND ENGINEER. THE USE OF ACCESS PANELS IN THE NEW CEILING TO AVOID RELOCATION OF THIS EQUIPMENT IS NOT ACCEPTABLE.
- 48. CONTRACTOR TO CONDUCT FUNCTIONAL TESTING OF LIGHTING CONTROLS EQUIPMENT AS REQUIRED BY IECC 2012/2015, SECTION C408.3. AFTER THIS TESTING IS OBSERVED AND COMPLETED, THE COMMISSIONING AUTHORITY SHALL PROVIDE DOCUMENTATION TO THE AHJ THAT CERTIFIES THAT THE INSTALLATION MEETS THE DOCUMENTED PERFORMANCE CRITERIA OF SECTION C405.A
- CIRCUIT NUMBER. USE HOT, STAMPED, OR ENGRAVED MACHINE PRINTING WITH BLACK-FILLED LETTERING ON FACE OF PLATE, AND DURABLE WIRE MARKERS OR TAGS INSIDE OUTLET BOXES.

AE DESIGN

49. IDENTIFY EACH RECEPTACLE WITH PANELBOARD IDENTIFICATION AND

50. UNLESS OTHERWISE NOTED, ALL GFCI RECEPTACLES SHALL HAVE TEST/RESET SWITCHES INTEGRAL TO RECEPTACLE DEVICE.

 \mathcal{O} COMPLIANCE

Integrated Lighting and Electrical Solutions 1900 Wazee Street #205 | Denver, CO 80202 | 303.296.3034

Project #:5377.00

Sheet Title CTRICAL COVER SHEET **Sheet Number**

onsequences. Changes made from the plans without consent of the architect are unauthorized and shall relieve the architect of responsibility for all consequences arriving out of such changes. All design, documents and data prepared by Eric Smith Associates, P.C. as instruments of service shall remain property of Eric Smith Associates, P.C and shall not be copied, changed or disclosed in any form whatsoever without first obtaining the express written consent of Eric Smith Associates, P.C. Eric Smith Associates, P.C REVISIONS

04/27/2022

NOTICE: DUTY OF COOPERATION

operation among the owner, his contractor and the

architect. Design and construction are complex.

Although the architect and his consultants have

performed their services with due care and diligence

they cannot guarantee perfection. Communication

imperfect and every contingency cannot be anticipated

Any ambiguity or discrepancy discovered by the use of

these plans shall be reported immediately to the

architect. Failure to notify the architect compounds

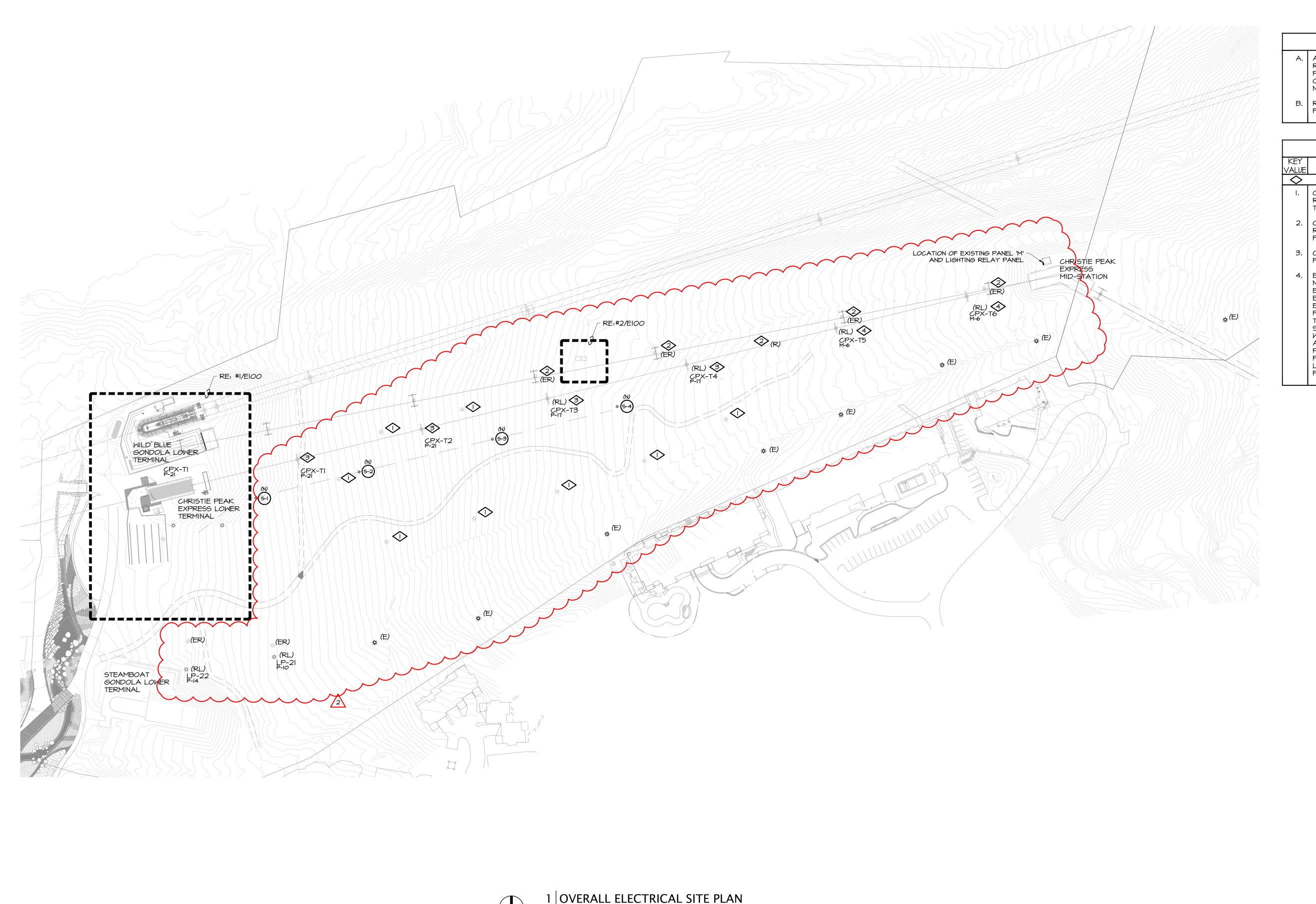
nisunderstanding and increases construction costs. A

failure to cooperate by a simple notice to the architect

shall relieve the architect from responsibility for the

Release of these plans contemplates further

<u>lob Number:</u> Date: ENM, SPM <u>Drawn By:</u> 1PK Checked By: **Project Phase** ONSTRUCTION DOCUMENTS



GENERAL NOTES

- ALL LIGHTING THAT IS EXISTING TO BE RELOCATED SHALL MAINTAIN EXISTING POWER BRANCH CIRCUIT AND CONTROL CONNECTIONS, UNLESS OTHERWISE NOTED.
- B. REFER TO ARCHITECTURAL SITE PLANS FOR ADDITIONAL INFORMATION.

KEYNOTE LEGEND

- CONTRACTOR TO DISCONNECT AND REMOVE EXISTING LIGHT FIXTURE AND TURN OVER TO OWNER.
- 2. OWNER/SSRC TO DISCONNECT AND REMOVE EXISTING NIGHT SKI LIGHTING FIXTURE AT LOCATION SHOWN.
- OWNER TO INSTALL NIGHT SKI LIGHTING FIXTURE ON NEW CPX SKI LIFT TOWER.
- EC SHALL RECONNECT RELOCATED NIGHT SKI LIGHTING FIXTURE TO EXISTING CIRCUIT ON PANEL 'M' AND EXISTING LIGHTING CONTROL RELAY AT EXISTING MID-STATION. LIGHTING FIXTURE TO BE RE-INSTALLED AT NEW TOWER LOCATION BY OWNER/SSRC. EC SHALL EXTEND EXISTING CIRCUIT WIRING AND CONDUIT TO NEW LOCATION AS NECESSARY TO MAINTAIN EXISTING POWER AND CONTROLS AND MAKE ALL FINAL TERMINATIONS AT RELOCATED LIGHT FIXTURE. EXISTING CIRCUIT SHOWN FOR REFERENCE.

AE DESIGN

Integrated Lighting and Electrical Solutions

1900 Wazee Street #205 | Denver, CO 80202 | 303.296.3034 **aedesign-inc.com** Project #:5377.00

NOTICE: DUTY OF COOPERATION Release of these plans contemplates further cooperation among the owner, his contractor and the architect. Design and construction are complex.

Although the architect and his consultants have performed their services with due care and diligence, imperfect and every contingency cannot be anticipated.

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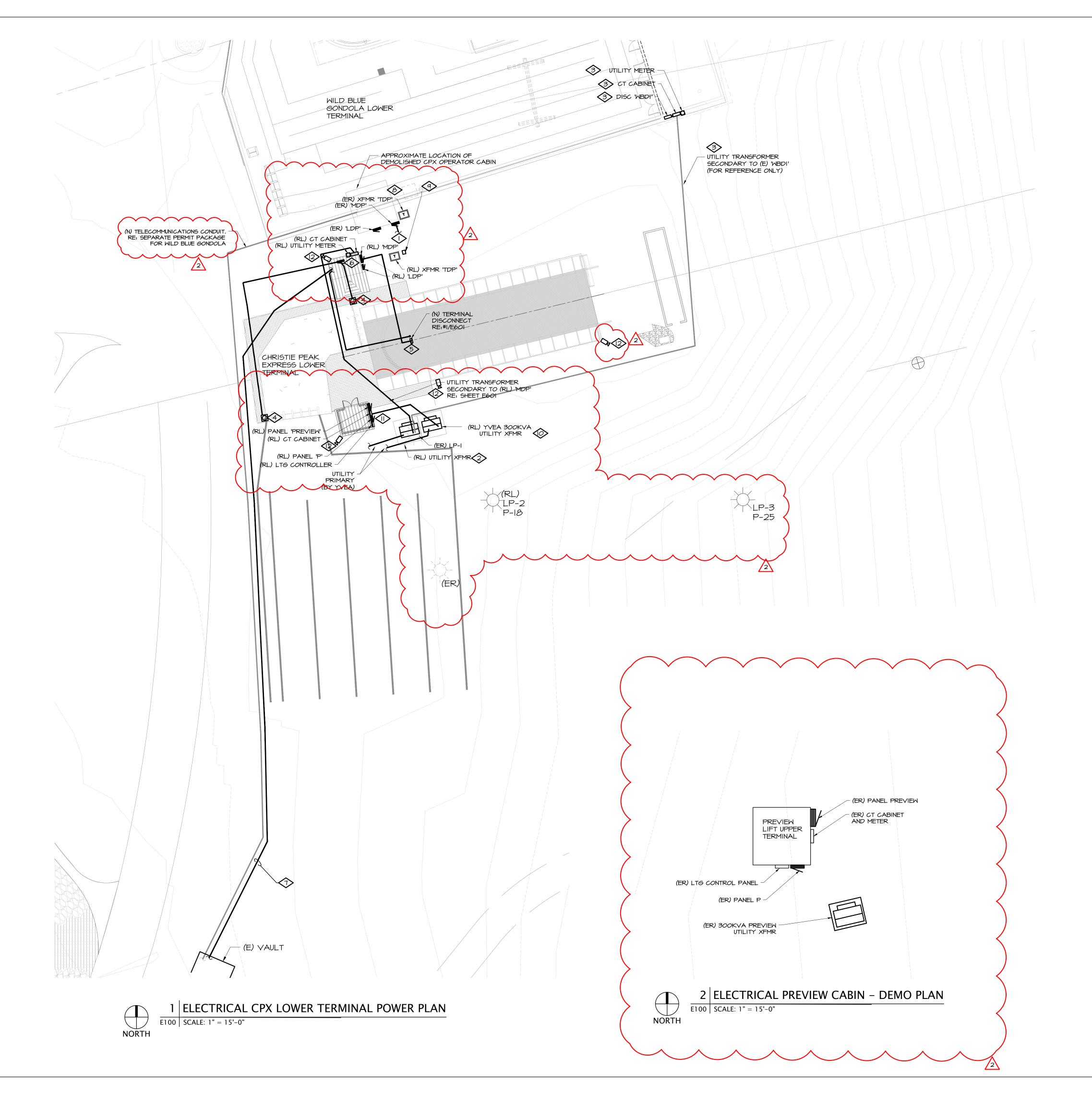
Eric Smith Associates, P.C.

REVISIONS BLDG PERMIT REV

Drawn By: ENM, S
Checked By: 1PK

Sheet Number

1 OVERALL ELECTRICAL SITE PLAN E001 | SCALE: 1" = 80'-0"



GENERAL NOTES

- A. | REFER TO ELECTRICAL ONE-LINE DIAGRAM, #1/E601, FOR ADDITIONAL INFORMATION.
- REFER TO CIVIL SITE DEMOLITION AND UTILITY DRAWINGS FOR ADDITIONAL INFORMATION REGARDING EXISTING AND DEMOLISHED UNDERGROUND POWER AND TELECOMMUNICATIONS UTILITIES

KEYNOTE LEGEND

- EXTEND EXISTING CONDUIT AND WIRING FROM PREVIOUS DISTRIBUTION PANEL 'MDP' LOCATION TO NEW 'MDP' LOCATION AS REQUIRED TO MAINTAIN EXISTING BRANCH CIRCUIT AND DISTRIBUTION FEEDER ELECTRICAL CONNECTIONS. REFER TO ELECTRICAL ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION. EC SHALL VERIFY ALL EXISTING TO REMAIN LOADS AND CONNECTIONS AT RELOCATED DISTRIBUTION PANEL 'MDP' IN FIELD PRIOR TO COMMENCING WORK.
- SHOWN FOR REFERENCE ONLY. EXISTING YAMPA VALLEY ELECTRIC ASSOCIATION (YVEA) TRANSFORMER SHALL BE RELOCATED UNDER SEPARATE CONTRACT AND CONSTRUCTION PACKAGE. REFER TO ELECTRICAL ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
- SHOWN FOR REFERENCE ONLY. ELECTRICAL GEAR INSTALLED UNDER SEPARATE SCOPE OF WORK.
- PROVIDE 13" X 24 "X 18"D HUBBELL QUAZITE PG SERIES IN-GRADE PULL-BOX WITH (2) PVC OUTDOOR RATED, WATER-TIGHT JUNCTION BOXES MOUNTED INSIDE PULL-BOX ENCLOSURE, (1) FOR LOW-VOLTAGE POWER CONNECTION AND (I) FOR DATA CONNECTIONS TO NEW ENTRY GATE AND TICKET SCANNER EQUIPMENT. PROVIDE I"C FOR POWER AND I-1/4"C FOR COMMUNICATIONS CABLING ROUTED FROM PULL-BOX TO RELOCATED OPERATOR CABIN. COORDINATE EXACT LOCATIONS AND CONDUIT ROUTING WITH OWNER PRIOR TO ROUGH-IN. COORDINATE INSTALLATION WITHIN FINISHED PAVERS WITH GENERAL CONTRACTOR.
- APPROXIMATE LOCATION OF RELOCATED LIFT TERMINAL MAIN ELECTRICAL PANEL/TERMINATION. EC SHALL COORDINATE EXACT LOCATION AND TERMINATION REQUIREMENTS IN FIELD WITH LIFT INSTALLER (LEITNER POMA) PRIOR TO COMMENCING WORK, ALL ELECTRICAL DISTRIBUTION, EQUIPMENT, CONDUIT, AND WIRING INCLUDING ALL BRANCH CIRCUIT CONNECTION SUPPLIED LIFT TERMINAL ELECTRICAL PANEL OR EQUIPMENT SHALL BE BY OTHERS (LIFT INSTALLER), UNLESS OTHERWISE NOTED.
- 6. APPROXIMATE LOCATION OF RELOCATED OPERATOR CABIN PANEL. EC SHALL COORDINATE EXACT LOCATION AND TERMINATION REQUIREMENTS IN FIELD WITH LIFT INSTALLER (LEITNER POMA) PRIOR TO COMMENCING WORK. ALL ELECTRICAL DISTRIBUTION, EQUIPMENT, CONDUIT, AND WIRING INCLUDING ALL BRANCH CIRCUIT CONNECTION SUPPLIED BY OPERATOR CABIN PANEL SHALL BE BY OTHERS (LIFT CONSULTANT), UNLESS OTHERWISE NOTED.
- PROVIDE (2) 3" PVC CONDUIT ROUTED 30" BELOW GRADE FROM EXISTING VAULT TO NEW LOW-VOLTAGE CABLING WALL-MOUNTED NEMA 3R PULL-BOX AT EXTERIOR WALL OF RELOCATED OPERATOR CABIN FOR FIBER OPTIC/TELEPHONE SERVICE CABLING TO SSRC INTERCONNECTION POINT. EC SHALL EXTEND CONDUIT PATHWAY FROM PULL-BOX TO LIFT TERMINAL TOWER AS REQUIRED FOR ROUTING OF FIBER OPTIC CABLING ALONG LIFT TO CPX MID-STATION. ELECTRICAL CONTRACTOR SHALL VERIFY EXACT CONDUIT SIZING, QUANTITY, AND ROUTING WITH OWNER PRIOR TO COMMENCING WORK.
- DEMOLISH METER, CT CABINET AND COMBINATION DISTRIBUTION PANEL EQUIPMENT. PER UTILITY THIS METER AND CONNECTED LOADS ARE DISCONNECT AND NOT IN SERVICE. CONFIRM WITH SSRC THAT CONNECTED LOADS ARE NO LONGER IN USE.
- EXISTING 60A 120/208V, 3PH, 4W LIGHTING CONTROLLER SERVING EXISTING PROMENADE LIGHTING. CURRENTLY FED FROM PANEL LDP (PANELBOARD ON CPX OPERATOR CABIN). RELOCATE LIGHTING CONTROLLER AND ASSOCIATED EQUIPMENT/CONNECTIONS TO NEW LOCATION ADJACENT TO RELOCATED TRANSFORMER 'TDP'. PROVIDE NEW PAD AS NECESSARY. INTERCEPT EXISTING 60-AMP FEEDER CONNECTION AND RECONNECT TO PANELBOARD LDP. RECONNECT ALL EXISTING TO REMAIN BRANCH CIRUITS SERVING EXISTING PROMENADE LIGHTING AND OTHER LOADS AS NECESSARY TO MAINTAIN CONNECTIONS.
- EXISTING YAMPA VALLEY ELECTRIC ASSOCIATION (YVEA) 300 KVA TRANSFORMER SHALL BE RELOCATED FROM TOP OF DEMOLISHED PREVIEW LIFT TO NEW LOCATION A BASE OF RELOCATED CPX LIFT AS SHOWN TO MAINTAIN CONNECTIONED TO EXISTING AND RELOCATED NIGHT SKI LIGHTING. CONTRACTOR SHALL COORDINATE EXACT TRANSFORMER LOCATION AND ORIENTATION WITH UTILITY AS REQUIRED TO PROVIDE MINIMUM CLEARANCES, INCLUDING 10'-0" CLEAR IN FRONT OF TRANSFORMER CABINET ACCESS DOORS, AND AS REQUIRED TO COORDINATE POSITION OF PRIMARY AND SECONDARY CONDUIT ENTRY AREAS WITHIN PAD AND TRANSFORMER ENCLOSURE. UTILITY SHALL DE-ENERGIZE UTILITY POWER SUPPLY TO EXISTING TRANSFORMER AND DISCONNECT BOTH THE PRIMARY AND SECONDARY CONDUCTORS FROM THEIR RESPECTIVE LUGS WITHIN THE TRANSFORMER TO PREPARE TRANSFORMER FOR RELOCATION. CONTRACTOR SHALL COORDINATE EXACT CONCRETE PAD INSTALLATION REQUIREMENTS WITH UTILITY PRIOR TO COMMENCING WORK. NEW PRIMARY FEEDER ANTICIPATED TO BE PROVIDED BY UTILITY (YVEA) AS NECESSARY TO EXTEND PRIMARY TO NEW TRANSFORMER LOCATION. CONTRACTOR SHALL PROVIDE NEW SECONDARY WIRING AND CONDUIT AS SHOWN. REFER TO ELECTRICAL ONE-LINE DIAGRAM FOR MORE INFORMATION. ALL NEW FEEDER CONDUCTOR AND CONDUIT INSTALLATIONS SHALL COMPLY WITH ALL APPLICABLE NEC REQUIREMENTS, INCLUDING BUT NOT LIMITED TO ARTICLES IIO.14(B), 230.46, 300.5(E), 300.13 AND 300.15. COORDINATE ALL WORK WITH OWNER AND UTILITY (YVEA) PRIOR TO START OF CONSTRUCTION. ALL OUTAGES SHALL BE SCHEDULED A MINIMUM OF TWO WEEKS IN ADVANCE. CONTRACTORS SHALL COORDINATE EXECUTION OF WORK AND OUTAGES WITH YVEA TO MINIMIZE DOWNTIME.
- CONTRACTOR SHALL PROVIDE GALVANIZED STEEL U-CHANNEL SUPPORT STRUCTURE SUITABLE FOR OUTDOOR ENVIRONMENT FOR MOUNTING OF NEW ELECTRICAL SERVICE DISTRIBUTION EQUIPMENT SUPPLIED FROM NEW UTILITY TRANSFORMER. COORDINATE SUPPORT MOUNTING TO CONCRETE PAD OR STRUCTURAL FOOTINGS WITH CIVIL ENGINEER AND/OR GENERAL CONTRACTOR PRIOR TO COMMENCING WORK. REFER TO SHEET EGIO FOR ADDITIONAL
- 12. EC SHALL PROVIDE WEATHERPROOF RECESSED MOUNTED JUNCTION ENTENDED BOX AT EXTERIOR WALL AND 3/4" CONDUIT TO STUB OUT A BOREVIEWED ACCESSIBLE CEILING AT BUILDING INTERIOR FOR SECURIT CAMERA. ROUTE CONDUIT FROM SECURITY CAMERA TO OP CABIN B 105. COORDINATE EXACT LOCATION, CONNECTION REQUIRENTENTS, AND CONDUIT ROUTING WITH SECURITY VENDOR AND OWNER PRIORCODE TO ROUGH-IN. VERIFY MOUNTING HEIGHT WITH ARCHITECT PRIOR TO ROUGH-IN. REFER TO SECURITY CAMERA ROUGH-IN MOUNTING OMPLEMENT DETAIL, #2/E610, FOR MORE INFORMATION.



Drawn By:

Sheet Number

AE DESIGN Integrated Lighting and Electrical Solutions Project #:5377.00 6/24/2022

NOTICE: DUTY OF COOPERATION Release of these plans contemplates further eration among the owner, his contractor and the architect. Design and construction are complex Although the architect and his consultants have performed their services with due care and diligence. imperfect and every contingency cannot be anticipated Any ambiguity or discrepancy discovered by the use of these plans shall be reported immediately to the architect. Failure to notify the architect compounds misunderstanding and increases construction costs. A failure to cooperate by a simple notice to the architect shall relieve the architect from responsibility for the consequences. Changes made from the plans without consent of the architect are unauthorized and shall relieve the architect of responsibility for all

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consequences arriving out of such changes.

REVISIONS BLDG PERMIT RE\

NOLL

<u>Job Number:</u> ENM, SPM Checked By: 1PK

ONSTRUCTION DOCUMENTS

- I. FEEDER FOR SECONDARY OF SEPARATELY DERIVED SYSTEM (SDS). GROUND SIZE PER NEC 250.66.
- 2. ALL CONDUCTORS ARE SINGLE CONDUCTOR ALUMINUM THWN UNLESS NOTED OTHERWISE. AMPACITY BASED ON NEC TABLE 310.16.
- 3. ALL CONDUITS ARE EMT UNLESS NOTED OTHERWISE, FILL RATIOS BASED ON NEC ANNEX C TABLE CI.
- 4. ALL EQUIPMENT FEEDERS RATED FOR LESS THAN 100 AMPS AND ALL GROUNDING CONDUCTORS SHALL BE SINGLE CONDUCTOR COPPER

	SCHEDULE (COPPER)		T
1 . —	FEEDER CONDUIT	KEY/	FEEDER CONDUIT
AMPS	AND CONDUCTORS	AMPS	AND CONDUCTORS
SERVICE E	NTRANCE FEEDERS	SDS XFM	R FEEDERS (NOTE I)
400N	2[4#3/O, 2"C]	305	4#IO, I#86, 3/4"C
600N	2[4#350, 3"C]	505	4#6, I#8G, I-I/4"C
800N	2[4#5 <i>00</i> , 3-1/2"C]	1005	4#I, I#66, I-I/2"C
1000N	3[4#400, 3-1/2"C]	1509	4#I/O, I#6G, 2"C
1200N	4[4#350, 3"C]	2509	4#250, I#26, 3"C
1600N	5[4#4 <i>00</i> , 3-1/2"C]	4005	2[4#3/O, I#2G, 2-I/2"C]
2000N	6[4#400, 3-1/2"C]	5005	2[4#250, I#I/0G, 3"C]
2500N	7[4#500, 3-1/2"C]	8005	2[4#500, I#2/0G, 3"C]
3000N	8[4#500, 3-1/2"C]	10005	3[4#400, I#3/0G, 3-I/2"C]
3500N	10[4#500, 3-1/2"6]	16005	5[4#400, I#3/0G, 3-I/2"C]
4000N	II[4#500, 3-I/2"C]	25005	7[4#500, I#3/0G, 3-I/2"C]
EQUIPMENT	·		
20NG	4#12, 1#126, 3/4"C	206	3#I2, I#I2G, 3/4"C
30NG	4#IO, I#IOG, 3/4"C	306	3#IO, I#IOG, 3/4"C
40NG	4#8, I#IOG, I"C	406	3#8, I#IOG, I"C
50NG	4#6, I#IOG, I-I/4"C	506	3#6, I#IOG, I"C
60NG	4#4, I#IOG, I-I/4"C	606	3#4, I#IOG, I"C
70NG	4#4, I#8G, I-I/4"C	706	3#4, I#86, I-I/4"C
80NG	4#3, #86, - /4"C	806	3#3, I#86, I-I/4"C
9016	4#2, #86, - /2"C	906	3#2, #86, - /4"C
IOONG	4#I, I#8G, I-I/2"C	1006	3#I, I#86, I-I/2"C
IIONG	4#I, I#6G, 2"C	1106	3#I, I#66, I-I/2"C
12516	4#I/O, I#6G, 2"C	1256	3#I/O, I#6G, I-I/2"C
150NG	4#I/O, I#6G, 2"C	1506	3#I/O, I#6G, I-I/2"C
175NG	4#2/0, I#6G, 2"C	1756	3#2/0, I#66, 2"C
200NG	4#3/0, I#66, 2-I/2"C	2006	3#3/0, I#66, 2"C
225NG	4#4/0, I#46, 2-1/2"C	2256	3#4/0, I#46, 2"C
250NG	4#250, I#46, 3"C	2506	3#250, I#46, 2-I/2"C
300NG	4#350, I#46, 3"C	3006	3#350, I#46, 2-1/2"C
350NG	4#500, I#36, 3-I/2"C	3506	3#500, I#36, 3"C
400NG	2[4#3/0, I#36, 2-I/2"C]	4006	2[3#3/0, I#36, 2"C]
450NG	2[4#4/0, #26, 2-1/2"C]	4506	2[3#4/0, I#26, 2"C]
500NG		5006	
600NG	2[4#250, 1#2G, 3"C] 2[4#350, 1#1G, 3"C]	6006	2[3#250, I#26, 2-I/2"C] 2[3#350, I#I6, 2-I/2"C]
700NG	2[4#500, I#I/06, 3-I/2"C]	7006	2[3#500, I#I/06, 3"C]
800NG	2[4#500, I#I/06, 3-I/2°C]		2[3#500, 1#1/06, 5 C] 2[3#500, 1#1/06, 3"C]
1000NG	3[4#400, I#2/06, 3-1/2°C]	8006	3[3#400, I#2/06, 3"C]
1200NG	4[4#350, 1#3/06, 3"C]	12006	4[3#350, I#3/06, 3"C]
			5[3#400, I#4/06, 3"C]
1600NG	5[4#400, #4/0G, 3- /2"C]	16006	
2000NG	6[4#400, #2506, 3-1/2"C]	20006	6[3#400, I#250G, 3"C]
	S CONDUCTORS	ABBREVI	
68	I#8, 3/4" C	MECH	SEE MECH SCHEDULE
66	I#6, 3/4" C	XFMR	SEE XFMR SCHEDULE
64	I#4, 3/4" C		
62	I#2, 3/4" C		
610	# /O, 3/4" C		

UNLESS NOTED OTHERWISE. AMPACITY BASED ON THE NEC

BASED ON NEC ANNEX C TABLE C.I.

TABLE INCLUDED IN ARTICLE 310. 3. ALL CONDUITS ARE EMT UNLESS NOTED OTHERWISE, FILL RATIOS

(PREVIOUSLY RELOCATED) ---

500KVA PAD MOUNTED

UTILITY TRANSFORMER

277/480V, 3PH, 4W

EXISTING UTILITY

PRIMARY-

3500N	10[4#500, 3-1/2"C]	16005	5[4#400, I#3/0G, 3-I/2"C]
4000N	II[4#500, 3-I/2"C]	25005	7[4#5 <i>00</i> , #3/0 6 , 3- /2"C]
EQUIPMENT	FEEDERS		
20NG	4#12, 1#12 <i>G</i> , 3/4"C	206	3#12, 1#12 <i>G</i> , 3/4"C
30NG	4#IO, I#IOG, 3/4"C	306	3#IO, I#IOG, 3/4"C
40NG	4#8, # 0G, "C	406	3#8, # 0G, "C
50NG	4#6, # 06, - /4"C	5 <i>06</i>	3#6, # 0G, "C
60NG	4#4, # <i>06</i> , - /4"C	606	3#4, # <i>06</i> , "C
70NG	4#4, I#86, I-I/4"C	706	3#4, I#86, I-I/4"C
80NG	4#3, I#86, I-I/4"C	806	3#3, I#86, I-I/4"C
90NG	4#2, #86, - /2"C	906	3#2, #86, - /4"C
100116	4#I, I#86, I-I/2"C	1006	3#I, I#86, I-I/2"C
IIONG	4#I, I#66, 2"C	1106	3#I, I#66, I-I/2"C
125NG	4#I/O, I#6G, 2"C	1256	3#I/O, I#6G, I-I/2"C
150NG	4#I/O, I#6G, 2"C	15 <i>06</i>	3#I/O, I#6G, I-I/2"C
175NG	4#2/0, I#66, 2"C	1756	3#2/0, I#6 6 , 2"C
200NG	4#3/0, #66, 2- /2"C	2006	3#3/0, I#66, 2"C
225NG	4#4/0, #4 6 , 2- /2"C	225 <i>G</i>	3#4/0, I#4 6 , 2"C
250NG	4#250, I#46, 3"C	25 <i>06</i>	3#250, #4 6 , 2- /2"C
300NG	4#350, I#46, 3"C	3006	3#350, I#4 6 , 2-I/2"C
350NG	4#500, I#36, 3-I/2"C	35 <i>06</i>	3#5 <i>00</i> , I#3 6 , 3"C
400NG	2[4#3/0, I#36, 2-I/2"C]	4006	2[3#3/0, I#36, 2"C]
450NG	2[4#4/0, I#2 6 , 2-I/2"C]	45 <i>06</i>	2[3#4/O, I#2 6 , 2"C]
500NG	2[4#250, I#26, 3"C]	5006	2[3#250, I#2 6 , 2-I/2"C]
600NG	2[4#350, I#IG, 3"C]	6006	2[3#350, I#IG, 2-I/2"C]
700NG	2[4#5 <i>00</i> , # <i>/06</i> , 3- /2"C]	7006	2[3#5 <i>00</i> , I#I <i>/06</i> , 3"C]
800NG	2[4#5 <i>00</i> , # <i>/06</i> , 3- /2"C]	8006	2[3#5 <i>00</i> , I#I <i>/06</i> , 3"C]
1000NG	3[4#4 <i>00</i> , I#2/ <i>06</i> , 3-I/2"C]	10006	3[3#400, I#2/06, 3"C]
1200NG	4[4#350, I#3/06, 3"C]	12006	4[3#350, I#3/06, 3"C]
1600NG	5[4#4 <i>00</i> , I#4/ <i>06</i> , 3-I/2"C]	16006	5[3#400, #4/06, 3"C]
2000NG	6[4#400, I#2506, 3-I/2"C]	20006	6[3#400, I#2506, 3"C]
GROUNDING	5 CONDUCTORS	ABBREVI	ATIONS
68	I#8, 3/4" C	MECH	SEE MECH SCHEDULE
66	I#6, 3/4" C	XFMR	SEE XFMR SCHEDULE
64	l#4, 3/4" €		
<i>6</i> 2	l#2, 3/4" €		
610	I#I/O, 3/4" C		
620	I#2/O, 3/4" C		
630	1#3/0, 3/4" C		
NOTES:			
I.	FEEDER FOR SECONDARY OF S		
	SYSTEM (SDS). GROUND SIZE PI	ER NEC TA	BLE INCLUDED IN
	ARTICLE 250.66.		
2.	ALL CONDUCTORS ARE SINGLE	CONDUCTO	OR COPPER THWN

FAULT CURRENT AND VOLTAGE DROP CALCULATION TABLE - RELOCATED PREVIEW EQUIPMENT # OF PARALLEL % OF VOLTAGE VOLTAGE POINT LOCATION VOLTAGE PHASE WIRE CONDUCTOR CONDUCTOR ISC AVAILABLE ON FEEDER CLASS Volt Loss VALUE AT EQUIP VOLTAGE AT START AT END DESCRIPTION (ft) Factor (EL-L) | SIZE | MATERIAL TYPE MATERIAL RUNS UPSTREAM DROP (/L-L) FO (RL) UTILITY XFMR -FI (RL) CT CABINET 30
F2 (RL) PANEL PREVIEW 5 -- -- 15,500 0.08 0.93 14,418 0.01 0.99 14,245 0.04 0.96 13,638
 --< THREE SINGLE CONDUCTORS NONMAGNETIC 600V 186 11174
THREE SINGLE CONDUCTORS STEEL 600V 194 10740
THREE SINGLE CONDUCTORS STEEL 600V 353 5717 14,418 14,245 ALL CALCULATIONS WERE DONE USING BUSSMAN "POINT-TO-POINT" METHOD.

LET THRU TAKEN FROM BUSSMAN "CURRENT LIMITATION CURVES."

ALL YELLOW SQUARES REQUIRE USER INPUT. VERIFY THAT THIS CELL REFERENCES THE CORRECT VALUE UPSTREAM OF THE EQUIPMENT. THIS CALCULATION TABLE DOES NOT TAKE INTO ACCOUNT SECONDARY TRANSFORMERS.

| | | | | | | | _ | | <u> </u> | | | | | | | | | | | | | |
|-------|---|------------|-----------|--------|--------|---|------|-----------|-------------------------|-------------|---------|-----------|-------|---------------|---------------|------|------|------------------|---------|----------|---------|----------|
| | | | | | | | | | | | | | | | | | | | | | | |
| FAUL: | AULT CURRENT AND VOLTAGE DROP CALCULATION TABLE | | | | | | | | | | | | | | | | | | | | | |
| POINT | LOCATION | LENGTH (L) | LOAD | Power | | | MIRE | CONDUCTOR | CONDUCTOR | CONDUIT | VOLTAGE | Conductor | С | # OF PARALLEL | Isc AVAILABLE | f | М | lsc | % OF | VOLTAGE | VØLTAGE | POINT |
| | DESCRIPTION | (ft) | ON FEEDER | Factor | (EL-L) | | SIZE | MATERIAL | TYPE | MATERIAL | CLASS | Volt Loss | VALUE | RUNS | UPSTREAM | L-L | L-L | AT EQUIP | VOLTAGE | AT START | AT END | 1 1' |
| | | | (Amps) | (%) | | | | | | | | | | | | | | (13ph) OR (1L-L) | DROP | (/L-L) | (/L-L) | <u> </u> |
| XO | UTILITY XFMR | | | - | | | | | | | | | - | | | | | 15,500 | | 480 | - | XO |
| XI | (RL) CT CABINET | 70 | 255 | 90% | 480 | 3 | 500 | ALUMINUM | THREE SINGLE CONDUCTORS | NONMAGNETIC | 600V | 96 | 21390 | 2 | 15,500 | 0.09 | 0.92 | 14,200 | 0.2% | 480 | 479 | XI |
| X2 | (RL) 600A MDP | 5 | 255 | 90% | 480 | 3 | 500 | ALUMINUM | THREE SINGLE CONDUCTORS | STEEL | 600V | 106 | 18755 | 2 | 14,200 | 0.01 | 0.99 | 14,104 | 0.0% | 479 | 479 | X2 |
| ХЗ | (E) PNL HVI | 535 | 180 | 90% | 480 | 3 | 250 | ALUMINUM | THREE SINGLE CONDUCTORS | STEEL | 600V | 173 | 12122 | | 14,104 | 2.25 | 0.31 | 4,345 | 3.5% | 479 | 462 | X3 |
| X4 | (RL) 75KVA XFMR PRI | 5 | 180 | 90% | 480 | 3 | 1 | COPPER | THREE SINGLE CONDUCTORS | STEEL | 600V | 292 | 7292 | | 4,345 | 0.01 | 0.99 | 4,299 | 0.1% | 479 | 479 | X4 |
| X5 | (RL) 75KVA XFMR SEC | 0 | 180 | 90% | 208 | 3 | 250 | COPPER | THREE SINGLE CONDUCTORS | STEEL | 600V | 123 | 16483 | | 4,299 | 0.00 | 1.00 | 4,299 | 0.0% | 207 | 207 | X5 |
| X6 | (RL) PNL LDP | 0 | 180 | 90% | 208 | 3 | 250 | ALUMINUM | THREE SINGLE CONDUCTORS | STEEL | 600V | 173 | 12122 | | 4,299 | 0.03 | 0.97 | 4,175 | 0.1% | 207 | 207 | X6 |
| ΧT | (E) PNL LVI | 535 | 38 | 90% | 208 | 3 | I | ALUMINUM | THREE SINGLE CONDUCTORS | STEEL | 600V | 432 | 4645 | | 4,175 | 4.00 | 0.20 | 834 | 4.2% | 207 | 198 | Χī |
| XΒ | (RL) CPX CABIN PNL | 0 | 30 | 90% | 208 | 3 | 4 | COPPER | THREE SINGLE CONDUCTORS | STEEL | 600V | 528 | 3806 | | 4,175 | 0.09 | 0.92 | 3 <i>8</i> 26 | 0.1% | 207 | 206 | XB |
| Xq | (RL) CPX TERMINAL | 540 | 80 | 90% | 480 | 3 | I | COPPER | THREE SINGLE CONDUCTORS | STEEL | 600V | 292 | 7292 | | 14,104 | 3.77 | 0.21 | 2,958 | 2.6% | 479 | 466 | Xq |

ALL CALCULATIONS WERE DONE USING BUSSMAN "POINT-TO-POINT" METHOD. LET THRU TAKEN FROM BUSSMAN "CURRENT LIMITATION CURVES."

ALL YELLOW SQUARES REQUIRE USER INPUT.

| 3. | VERIFY THAT THIS CELL | REFERENCES THE CORRECT VALUE UPSTREAM OF THE EQUIPMENT. |
|----|------------------------|---|
| 4. | THIS CALCULATION TABLE | E DOES NOT TAKE INTO ACCOUNT SECONDARY TRANSFORMERS. |

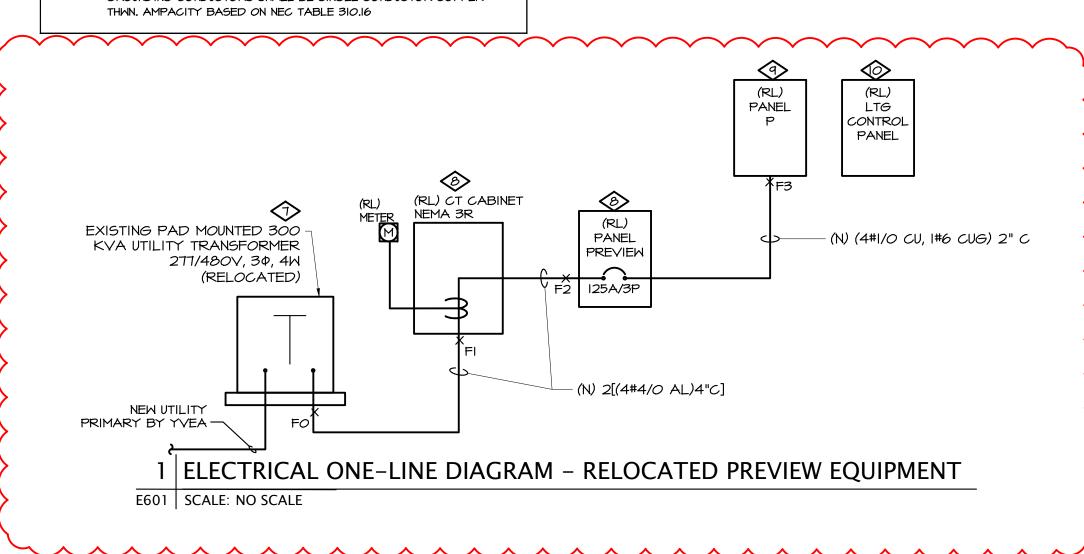
| TRANSF | TRANSFORMER SCHEDULE - COPPER WINDINGS (2016 DOE EFFICIENCY STANDARDS) | | | | | | | | | | | | | | |
|---------|--|---------------|----------------|---------------------------|-----------------|---------------------------------|---------------------|-------------|-------|----------|--------|---------|----------|--|--|
| KVA | PRIMARY | SECONDARY | PRIMARY | PRIMARY | SECONDARY | SECONDARY | GROUNDING ELECTRODE | TRANSFORMER | APPRO | OX. DIME | NSIONS | APPROX. | SPECIFIC | | |
| RATING | FLA | FLA | PROTECTION | FEEDER | PROTECTION | FEEDER | CONDUCTOR (GEC) | IMPEDANCE | HIGH | MIDE | DEEP | WEIGHT | NOTES | | |
| 15 | 18.1 | 41.7 | 25A/3P | 3#10, 1#106, 3/4"C | 50A/3P | 4#6, I#8 6 , I-I/4"C | I#8, 3/4"C | 2.88% | 26 | 21.88 | 17.75 | 250LBS | | | |
| 30 | 36.1 | 83.3 | 45A/3P | 3#6, # 06, "C | 100A/3P | 4#I, I#6G, I-I/2"C | I#6, 3/4"C | 2.56% | 36.88 | 24.88 | 21.13 | 415LBS | | | |
| 45 | 54.2 | 125 <i>.0</i> | 70A/3P | 3#4, I#86, I-I/4"C | 150A/3P | 4#I/O, I#6G, 2"C | I#6, 3/4"C | 3.44% | 36.88 | 24.88 | 21.13 | 478LBS | | | |
| 75 | 90.3 | 208.3 | 125A/3P | 3#I, I#66, I-I/2"C | 250A/3P | 4#250MCM, I#26, 3"C | l#26, 3/4"C | 3.21% | 43 | 30.54 | 24 | 676LBS | | | |
| 112.5 | 135.4 | 312.5 | 175A/3P | 3#2/O, I#6G, 2"C | 400A/3P | 2[4#3/0, I#2G, 2-I/2"C] | l#26, 3/4"C | 3.63% | 51 | 34.5 | 31.5 | 1263LBS | | | |
| GENERAL | NOTES: | | | | | | | | | | | | | | |
| A. | ALL TRAN | ISFORMERS AR | RE 480V, 3PHAS | SE, DELTA PRIMARY AND 208 | BY/I20V, 3PHASE | SECONDARY. | | | | | | | | | |

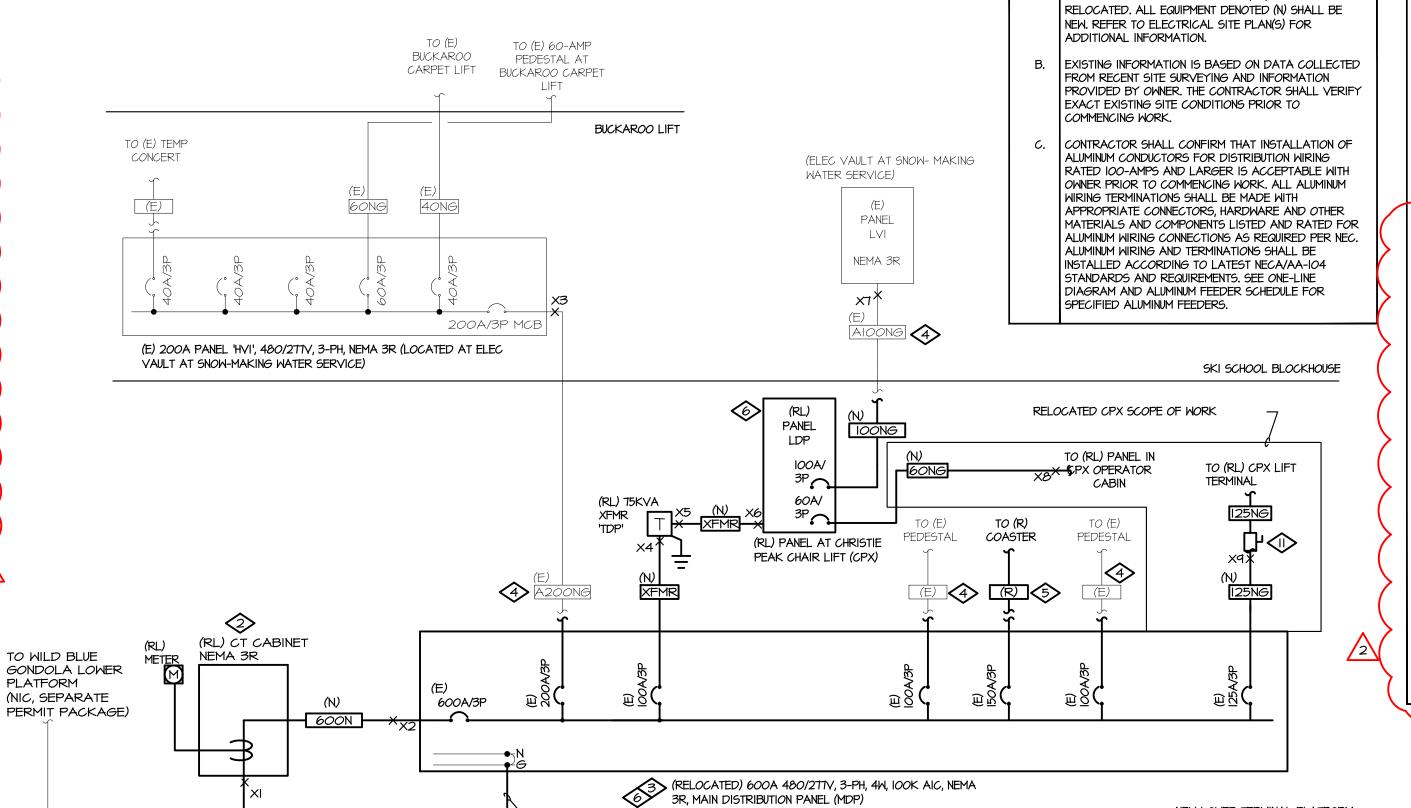
- B. ALL CONDUCTORS ARE THWN, COPPER, SEE PLANS FOR INCREASED CONDUCTOR SIZE DUE TO VOLTAGE DROP. BONDING AND GROUNDING CONDUCTORS ARE TO BE INSTALLED PER NEC 250.30 - GROUNDING SEPERATELY DERIVED ALTERNATING
- CURRENT SYSTEMS. D. WEIGHT SHOWN FOR REFERENCE ONLY, AND MAY VARY BY MANUFACTURER.

SPECIFIC NOTES:

TRANSFORMER IMPEDANCE IS THE ASSUMED VALUE AND IS USED FOR FAULT-CURRENT CALCULATIONS. IF SUBMITTED TRANSFORMER IS OF A DIFFERENT VALUE, REVISED CALCULATIONS MAY BE REQUIRED.

2. EC TO FIELD VERIFY WEIGHTS OF NON DOE 2016 AS THEY MAY VARY BY MANUFACTURER.





ONE-LINE KEYNOTE LEGEND KEY VALUE

KEYNOTE TEXT

EXISTING PAD-MOUNTED UTILITY TRANSFORMER TO BE RELOCATED UNDER SEPARATE CONTRACT SCOPE OF WORK TO ACCOMMODATE NEW LOWER TERMINAL STATION PLATFORM. EC SHALL DEMOLISH EXISTING SECONDARY AS REQUIRED TO REPLACE WITH NEW. REPLACED SECONDARY SHALL BE INSTALLED AND ROUTED TO RELOCATED METERING EQUIPMENT AND RELOCATED SWITCHBOARD EQUIPMENT AS NECESSARY TO MAINTAIN SERVCE TO EXISTING TO REMAIN LOADS AND EQUIPMENT. NEW TRANSFORMER SECCONDARY SHALL BE PROVIDED TO SERVICE NEW LOWER TERMINAL PLATFORM AS SHOWN, PANEL TO BE RELOCATED TO NEW ELECTRICAL VAULT. EC SHALL COORDINATE EXACT TRANSFORMER LOCATION WITH

EXISTING CT CABINET AND METER SHALL BE RELOCATED TO ACCOMMODATE NEW LOWER TERMINAL PLATFORM CONSTRUCTION.

EXISTING 600-AMP PANEL TO BE RELOCATED TO ACCOMMODATE NEW LOWER TERMINAL PLATFORM CONSTRUCTION. EC SHALL DEMOLISH EXISTING FEEDER INDICATED AS NECESSARY TO REPLACE EXISTING WIRING TO CT CABINET AND TO UTILITY TRANSFORMER SECONDARY.

EXISTING LOAD TO REMAIN. EC SHALL EXTEND ALL CONDUIT AND WIRING FOR EXISTING TO REMAIN LOADS TO NEW PANEL 'MOP' LOCATION AS REQUIRED TO MAINTAIN POWER CONNECTIONS. EC SHALL REPLACE EXISTING WIRING WITH NEW AND RE-USE AND EXTEND EXISTING UNDERGROUND CONDUIT WHERE POSSIBLE. EC SHALL VERIFY EXISTING CONDUIT/WIRING TYPE AND SIZING IN FIELD PRIOR TO COMMENCING WORK.

EXISTING LOAD ANTICIPATED TO BE DEMOLISHED IN ORDER TO ACCOMMODATE NEW CPX CHAIRLIFT LOCATION. COORDINATE EXACT TIMING OF REMOVAL OF EXISTING LOAD AND ASSOCIATED EXISTING ELECTRICAL CONDUIT/WIRING WITH OWNER PRIOR TO COMMENCING WORK, CONTRACTOR SHALL UPDATE EXISTING PANEL SCHEDULES AND RE-LABEL BREAKERS MADE AVAILABLE/SPARE AS NECESSARY.

GENERAL NOTES

REMAIN. ALL EQUIPMENT DENOTED (RL) SHALL BE

ALL EQUIPMENT DENOTED AS (E) SHALL BE EXISTING TO

NEW LOWER TERMINAL PLATFORM

EXISTING DISTRIBUTION EQUIPMENT, PANELBOARDS, AND CONNECTED BRANCH CIRCUIT LOADS SHALL BE RECONNECTED AS INDICATED. CONNECTED LOAD SHALL NOT BE INCREASED FROM EXISTING LOADS AND NO NEW LOADS SHALL BE REQUIRED TO BE CONNECTED TO EXISTING DISTRIBUTION EQUIPMENT, PANELBOARDS OR INDIVIDUAL BRANCH CIRCUITS, THEREFORE EXISTING ELECTRICAL DISTRIBUTION EQUIPMENT AND RATINGS

EXISTING PAD-MOUNTED UTILITY TRANSFORMER TO BE RELOCATED. REFER TO ELECTRICAL POWER PLAN, SHEET EIOO, FOR MORE INFORMATION.

EXISTING EQUIPMENT SHALL BE RELOCATED FROM DEMOLISHED CABIN AT TOP OF PREVIEW TO SHED AT BOTTOM OF RELOCATED CPX LIFT TERMINAL AS REQUIRED TO ACCOMMODATE RELOCATED NIGHT SKI LIGHTING ELECTRICAL SERVICE AND EQUIPMENT LOCATIONS.

EXISTING PANEL TO BE RELOCATED FROM CABIN AT TOP OF PREVIEW TO SHED AT BOTTOM OF RELOCATED CPX LIFT TERMINAL AS REQUIRED TO MAINTAIN EXISTING POWER CONNECTIONS TO EXISTING AND RELOCATED NIGHT SKI LIGHTING SERVED BY PANEL INDICATED. REFER TO SITE PLAN AND PANEL SCHEDULE FOR MORE INFORMATION. ALL EXISTING POWER CONNECTIONS SHALL MAINTAIN EXISTING CONTROL CONNECTIONS THROUGH RELOCATED LIGHTING CONTROL RELAY PANEL.

EXISTING NIGHT SKI LIGHTING LOADS TO REMAIN. EC SHALL EXTEND ALL CONDUIT AND WIRING FOR EXISTING TO REMAIN LOADS TO NEW LIGHTING CONTROL RELAY PANEL LOCATION AS REQUIRED TO MAINTAIN CONTROL CONNECTIONS. EC SHALL REPLACE EXISTING WIRING WITH NEW AND RE-USE AND EXTEND EXISTING UNDERGROUND CONDUIT WHERE POSSIBLE. EC SHALL

VERIFY EXISTING CONDUIT/WIRING TYPE AND SIZING IN

FIELD PRIOR TO COMMENCING WORK. RELOCATED OPERATOR CABIN.

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Integrated Lighting and Electrical Solutions

1900 Wazee Street #205 | Denver, CO 80202 | 303.296.3034

NEW 208V, 60-AMP, 3-POLE DISCONNECT SWITCH NEMA 3R RATED, LOCATED AT EXTERIOR OF LOCATED AT

Project #:5377.00

Checked By:

Sheet Title

Sheet Number

2 ELECTRICAL ONE-LINE DIAGRAM - CPX E601 | SCALE: NO SCALE

10

6/24/2022

NOTICE: DUTY OF COOPERATION

Release of these plans contemplates further

architect. Design and construction are complex.

performed their services with due care and diligence

they cannot guarantee perfection. Communication is imperfect and every contingency cannot be anticipated

these plans shall be reported immediately to the architect. Failure to notify the architect compounds nisunderstanding and increases construction costs. A

shall relieve the architect from responsibility for the

consent of the architect are unauthorized and shall

consequences arriving out of such changes.

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Eric Smith Associates, P.C

REVISIONS

<u>Job Number:</u> ENM, SPM **Drawn By:** 1PK **Project Phase**

DNSTRUCTION DOCUMENTS

CTRICAL ONE-LINE DIAGRAN

LOAD TYPE: L=LIGHTING, R=RECEPTACLE, M=MOTOR, LM=LARGEST MOTOR, E=EQUIPMENT, KE=KITCHEN EQUIPMENT, C=CONTINUOUS, S=SUBFEED PANEL GFCI=5MA GROUND FAULT CIRCUIT INTERRUPTER, GFEP=30MA GROUND FAULT PROTECTION FOR EQUIPMENT, AFCI=ARC FAULT CIRCUIT INTERRUPTER CAFCI=COMBINATION ARC FAULT & 5MA GROUND FAULT CIRCUIT INTERRUPTER, ST=SHUNT TRIP, HT#=HANDLE TIE WITH GROUPING #

| + | HC=HANDLE | CLAMP FO | OR LOCKING IN ON/OFF POSITION, LOCK=PERMANE | ENTLY LOCKABLE BREAKER | | | |
|----------------------|-----------|----------|---|------------------------|--------------|------|------|
| LOAD TYPE: | LOAD | MULT | DEMAND LOAD | TOTAL CONNECTED L | OADS | | |
| LIGHTING: | 14100 | 1.25 | 17625 VA | | Α | В | C |
| RECEPTACLE: | 0 | 1.0 | O VA | VA 6 | 6600 | 3000 | 4500 |
| OVER IOK: | 0 | 0.5 | O VA | TOTAL DEMANDED LO |)ADS | | |
| MOTOR: | 0 | 1.0 | O VA | | Α | В | C |
| L <i>G</i> ST MOTOR: | 0 | 1.25 | O VA | VA 8 | 325 <i>0</i> | 3750 | 5625 |
| EQUIPMENT: | 0 | 1.0 | O VA | AMPS | 30 | 14 | 20 |
| KITCH EQUIP: | 0 | 0 | O VA | TOTAL ON | | 18 | KVA |
| CONTINUOUS | 0 | 1.25 | O VA | PANEL: | | 21 | AMP5 |
| SUBFEED PNL: | 0 | 1.0 | O VA | | | | |

NI. EXISTING LOAD ON EXISTING CIRCUIT BREAKER.

N2. NEW LOAD ON EXISTING CIRCUIT BREAKER. N3. NEW LOAD ON NEW CIRCUIT BREAKER. CIRCUIT BREAKER TYPE AND AIC RATING TO MATCH EXISTING.

| KEY | DESCRIPTION | VOLTS | PH | LOAD | MOCP/ | BRANCH CIRCUIT | DISCONNECT | CIRCUIT | NOTES |
|-----|----------------|-------|----|--------|--------|--------------------|------------------|-----------|-------|
| | | | | HP,M,A | MFS | (WIRE AND CONDUIT) | | NUMBER | |
| S-I | SNOWMAKING GUN | 480 | 3 | 30KW | 60A/3P | 4#I, I#8G, I-I/2"C | INTEGRAL | SEE PANEL | 1,2 |
| | EXISTING | | | | | | 60A/3P BY MANUF. | SCHEDULE | |
| 5-2 | SNOWMAKING GUN | 480 | 3 | 30KW | 60A/3P | 4#I, I#86, I-I/2"C | INTEGRAL | SEE PANEL | 1,2 |
| | NEW | | | | | | 60A/3P BY MANUF. | SCHEDULE | |
| 5-3 | SNOWMAKING GUN | 480 | 3 | 30KW | 60A/3P | 4#I, I#86, I-I/2"C | INTEGRAL | SEE PANEL | 1,2 |
| | NEW | | | | | | 60A/3P BY MANUF. | SCHEDULE | |
| S-4 | SNOWMAKING GUN | 480 | 3 | 30KW | 60A/3P | 4#I, I#8G, I-I/2"C | INTEGRAL | SEE PANEL | 1,2 |
| | NEW | | | | | | 60A/3P BY MANUF. | SCHEDULE | |
| S-5 | SNOWMAKING GUN | 480 | 3 | 30KW | 60A/3P | 4#I, I#8G, I-I/2"C | (FUTURE) | (FUTURE) | 1,2 |
| | (FUTURE) | | | | 1 | (FUTURE) | | | |

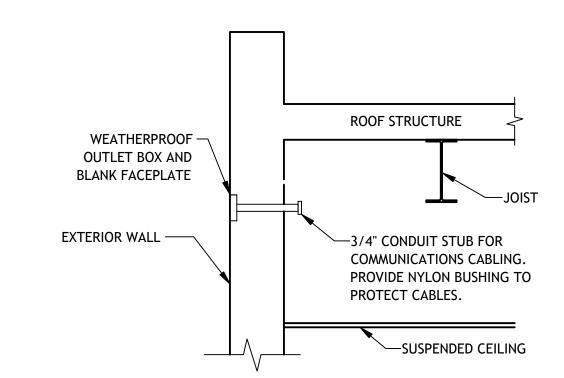
- A. ALL CONDUCTORS ARE COPPER THHN, UNLESS OTHERWISE NOTED.
- B. PRIOR TO ROUGH-IN, REFER TO OWNER EQUIPMENT SHOP DRAWINGS FOR FINAL CONNECTION REQUIREMENTS INCLUDING ROUGH-IN HEIGHTS AND LOCATIONS, SPECIFIC POWER REQUIREMENTS, AND RECEPTACLE NEMA
- C. PROVIDE ALL 120V CONTROL WIRING, REFER TO SPECIFICATIONS FOR FURTHER CONTROL WIRING CLARIFICATION. D. EXTERIOR DISCONNECT SWITCHES ARE TO BE PROVIDED AS NEMA 3R EQUIPMENT UNLESS OTHERWISE NOTED.
- E. ALL EQUIPMENT INDUSTRIAL CONTROL PANELS SHALL BE MARKED IN COMPLIANCE WITH NEC 409.110. ALL MOTOR CONTROLLERS AND MOTOR CONTROL CENTERS SHALL BE MARKED IN COMPLIANCE WITH NEC 430.8 AND 430.98. ALL CIRCUIT BREAKERS SHALL BE MARKED IN COMPLIANCE WITH NEC 240.83. PRIOR TO INSTALLATION, THE EC SHALL VERIFY THAT ALL EQUIPMENT SHALL BE
- IN COMPLIANCE WITH ALL LISTED SHORT CIRCUIT CURRENT RATINGS AND MARKINGS AS REQUIRED PER THE CODE. F. EC TO PROVIDE HAND/OFF/AUTO STARTERS FOR ALL MOTORS WHEN NOT INDICATED AS TO BE PROVIDED BY THE MECHANICAL CONTRACTOR ON THE MECHANICAL PLANS, SIZE OF STARTER TO BE BASED UPON SIZE OF MOTOR HORSEPOWER INDICATED.

SPECIFIC NOTES:

I. SNOWMAKING GUNS PROVIDED WITH DEDICATED CIRCUIT. REFER TO PANEL SCHEDULES FOR MORE INFORMATION. EC SHALL COORDINATE EXACT EQUIPMENT CONNECTION REQUIREMENTS WITH EQUIPMENT VENDOR PRIOR TO COMMENCING WORK.

EACH SNOWMAKING GUN TO BE PROVIDED WITH INTEGRAL 60-AMP CIRCUIT BREAKER DISCONNECT BY MANUFACTURER.

2. FEEDER UPSIZED DUE TO VOLTAGE DROP.



2 CAMERA EXTERIOR WALL MOUNTING DETAIL

E610 | SCALE: N.T.S.

PANEL 'PREVIEW' VOLTAGE L-L: LOWER TERMINAL SHED YOLTAGE L-N: 277 BUS RATING: 400 AMPS TYPE: 3PH/4W MAIN CB: 400 A/3P SURFACE MOUNTING: FED FROM: PANEL 'MIDWAY' NOTES: RELOCATED PANEL AIC RATING: FULLY RATED AT LEAST EQUAL TO: 14K AIC NEMA 3R CIR. LOAD LOAD LOAD CIRCUIT BREAKER BUS CIRCUIT BREAKER LOAD LOAD CIR TYPE TRIP POLE DESCRIPTION (NOTE N#) TYPE DESCRIPTION (NOTE N#) POLE TRIP TYPE TYPE 3 SNOW GUN 5-2 (N3) 10000 | SNOW GUN 5-1 (N3) 10000 10000 10000 10000 10000 60 SNOW GUN S-3 (N3) 10000 SPARE (N4) 10000 10000 8250 125 3 | PANEL 'P' (N2) 3750 27700 EXISTING SNOW GUN (NI) 5625 27700 10000 60 27700 SNOW GUN S-4 (N3) 10000 1AIN BREAKER (SEE ABOVE) 10000 (FUTURE) SNOW GUN S-5 (N3) 10000 OT BUSSED SPACE 10000 NOT BUSSED SPACE 10000

LOAD TYPE: L=LIGHTING, R=RECEPTACLE, M=MOTOR, LM=LARGEST MOTOR, E=EQUIPMENT, KE=KITCHEN EQUIPMENT, C=CONTINUOUS, S=SUBFEED PANEL GFCI=5MA GROUND FAULT CIRCUIT INTERRUPTER, GFEP=30MA GROUND FAULT PROTECTION FOR EQUIPMENT, AFCI=ARC FAULT CIRCUIT INTERRUPTER CAFCI=COMBINATION ARC FAULT & 5mA GROUND FAULT CIRCUIT INTERRUPTER, ST=SHUNT TRIP, HT#=HANDLE TIE WITH GROUPING #

| + | HC=HANDLE | CLAMP FO | OR LOCKING IN ON/OFF PO | SITION, LOCK=PERMANENTLY LOCKABLE | BREAKER | | | | |
|----------------------|-----------|----------|-------------------------|-----------------------------------|----------------|---------------|---------------|---------------|--|
| LOAD TYPE: | LOAD | MULT | DEMAND LOAD | | TOTAL CONNECTE | D LOADS | | | |
| LIGHTING: | 0 | 1.25 | O VA | | | Α | В | C | |
| RECEPTACLE: | 0 | 1.0 | O VA | | VA | <i>8</i> 5950 | 8145 <i>0</i> | <i>8</i> 3325 | |
| OVER IOK: | 0 | 0.5 | O VA | | TOTAL DEMANDE | D LOADS | | | |
| MOTOR: | 0 | 1.0 | O VA | | | Α | В | C | |
| L <i>G</i> ST MOTOR: | 0 | 1.25 | O VA | | VA | <i>8</i> 5950 | 8145 <i>0</i> | 83325 | |
| EQUIPMENT: | 233100 | 1.0 | 233100 VA | | AMPS | 310 | 294 | 301 | |
| KITCH EQUIP: | 0 | 0 | O VA | | TOTAL ON | | 251 | KVA | |
| CONTINUOUS | 0 | 1.25 | O VA | | PANEL: | | 302 | AMPS | |
| SUBFEED PNL: | 17625 | 1.0 | 17625 VA | | | | | | |
| | | | | | | | | | |

- NI. EXISTING LOAD ON EXISTING CIRCUIT BREAKER.
- N2. NEW LOAD ON EXISTING CIRCUIT BREAKER.
- N3. NEW LOAD ON NEW CIRCUIT BREAKER, CIRCUIT BREAKER TYPE AND AIC RATING TO MATCH EXISTING.

N4. EXISTING BREAKER MADE SPARE/AVAILABLE FROM DEMOLITION OF EXISTING LOAD. CONTRACTOR TO VERIFY IN FIELD.

- 3'-0" -CT CABINET PANEL PANEL 'PREVIEW' (TYPICAL) METER (TYPICAL) (EXISTING) BASIS OF DESIGN EATON LIGHTING (WEIGHT 225-LBS) (WEIGHT: SEE NOTES) CONTROLLER H-FRAME SUPPORT RACKING OR U-CHANNEL (EXISTING) CONCRETE FOUNDATION FOOTINGS

1 ELECTRICAL H-FRAME DETAIL 'FRONT'

E610 | SCALE: N.T.S.

GENERAL NOTES

- A. | ELECTRICAL EQUIPMENT SIZES AND INFORMATION INDICATED ARE APPROXIMATE PER SIMILAR PRODUCT/EQUIPMENT SIZING. CONTRACTOR SHALL VERIFY EXISTING EQUIPMENT WEIGHTS IN FIELD AS REQUIRED FOR ALL RELOCATED AND RE-USED ELECTRICAL CT CABINETS, PANELS AND LIGHTING RELAY CONTROLLERS. ARRANGEMENT INDICATED FOR COORDINATION PURPOSES ONLY. CONTRACTOR SHALL COORDINATE EXACT INSTALLATION WITH FIELD VERIFIED EQUIPMENT DIMENSIONS, WEIGHTS, AND REQUIREMENTS PRIOR TO COMMENCING WORK. REFER TO ELECTRICAL PLANS AND ONE-LINE DIAGRAM FOR SPECIFIC EQUIPMENT QUANTITIES AND SIZES/REQUIREMENTS.
- B. CONTRACTOR SHALL PROVIDE ALL H-FRAME STRUCTURAL SUPPORTS, J-CHANNELING, RACKING, AND/OR FOUNDATIONS AS REQUIRED TO MOUNT ELECTRICAL EQUIPMENT. CONTRACTOR SHALL INCLUDE DESIGN-BUILD SERVICES AND SCOPE AS REQUIRED TO PROVIDE STRUCTURAL SUPPORT SYSTEMS FOR ELECTRICAL EQUIPMENT. CONTRACTOR SHALL DETERMINE ALL REQUIRED SUPPORT STRUCTURAL SPECIFICATIONS AND INSTALLATION REQUIREMENTS INCLUDING OVERALL RACKING DIMENSIONS, SPACING, CONNECTIONS, FOUNDATIONS, FOOTINGS, AND MATERIAL SPECIFICATIONS AND STRENGTH CHARACTERISTICS AS NECESSARY FOR COMPLETE INSTALLATION. CONTRACTOR SHALL PROVIDE ANY STRUCTURAL DETAILS AND SHOP DRAWINGS FOR CONSTRUCTION, INSTALLATION, OR INSPECTIONS/APPROVALS (IF REQUIRED).
- PANELBOARD(S) AND DISCONNECT SWITCH(ES) MOUNTING HEIGHTS SHALL COMPLY WITH NEC REQUIREMENTS FOR MAXIMUM CIRCUIT BREAKER OR SWITCH HANDLE HEIGHT ABOVE FINISHED GRADE (6'-7") FOR ACCESS OPERATION PER NEC ARTICLE 404.8.

6/24/2022

NOTICE: DUTY OF COOPERATION Release of these plans contemplates further ooperation among the owner, his contractor and the architect. Design and construction are complex. Although the architect and his consultants have performed their services with due care and diligence, they cannot guarantee perfection. Communication is imperfect and every contingency cannot be anticipated Any ambiguity or discrepancy discovered by the use of these plans shall be reported immediately to the architect. Failure to notify the architect compounds misunderstanding and increases construction costs. A failure to cooperate by a simple notice to the architect shall relieve the architect from responsibility for the onsequences. Changes made from the plans without consent of the architect are unauthorized and shall relieve the architect of responsibility for all consequences arriving out of such changes.

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Eric Smith Associates, P.C.

REVISIONS



Job Number: **Drawn By: Checked By: Project Phase** INSTRUCTION DOCUMENTS

Sheet Title

CODE ∑

BID

Sheet Number

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