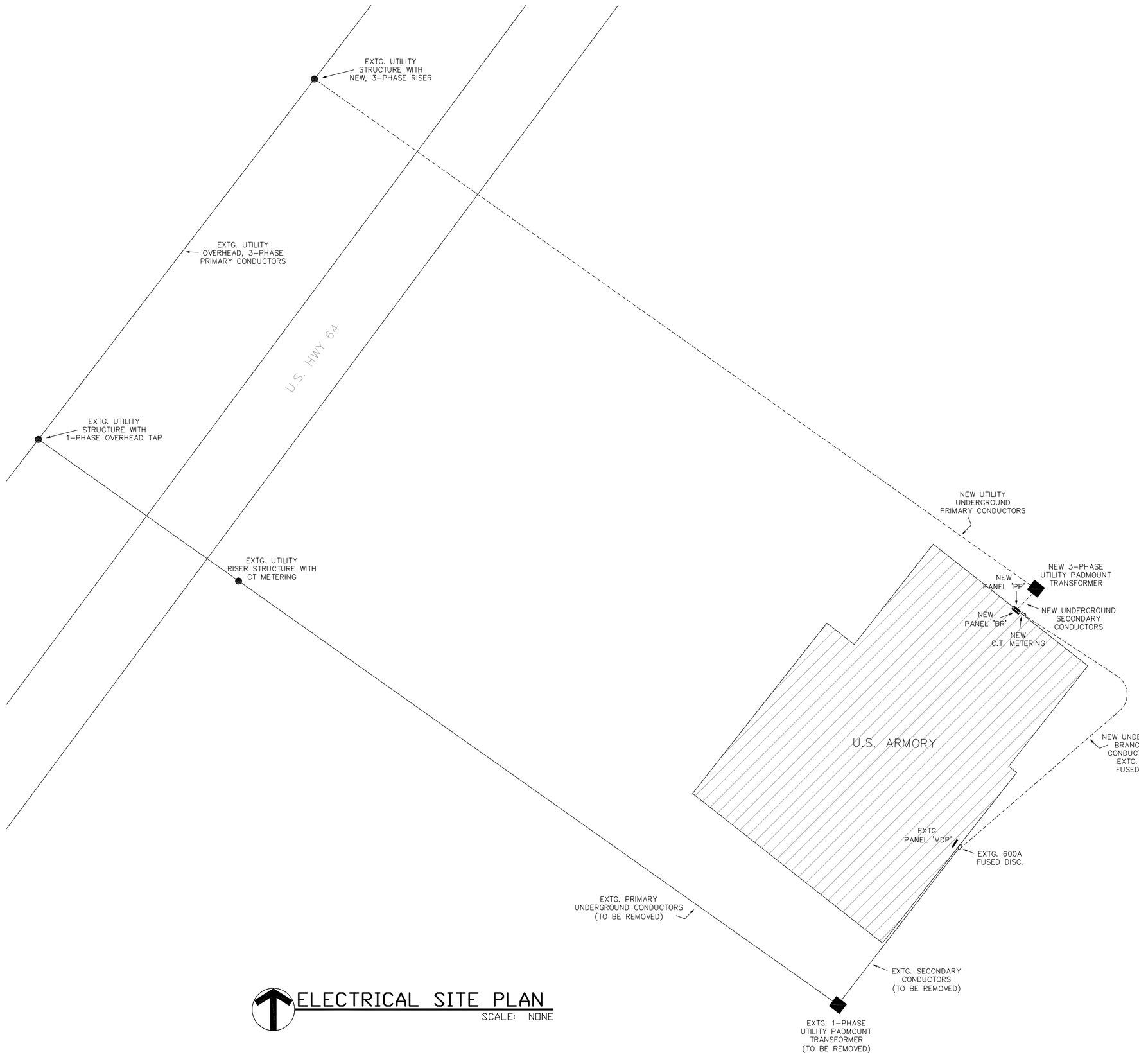
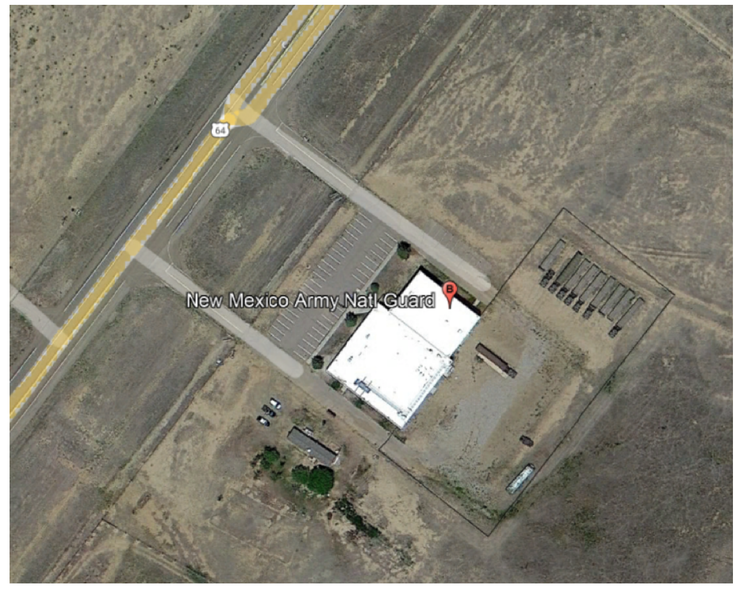


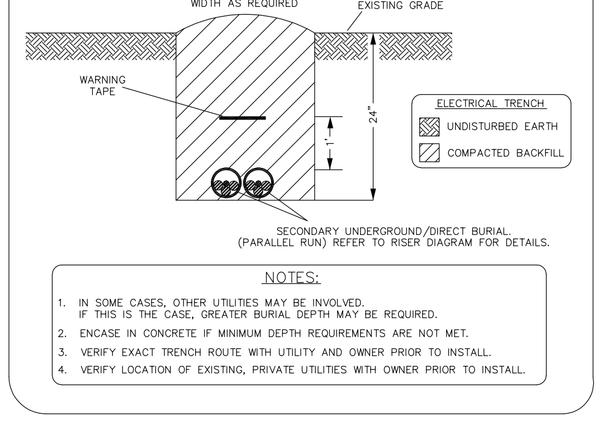
ELECTRICAL SITE PLAN
SCALE: NONE

#	MISC. INFORMATION
1	ENME, INC. IS RESPONSIBLE FOR DESIGN ONLY. ANY QUESTIONS NOT RELATED TO THE SPECIFIC INFORMATION NOTED IN THESE DESIGN DOCUMENTS SHALL BE DIRECTED TO THOSE LISTED BELOW.
2	ALL QUESTIONS, OTHER THAN ELECTRICAL DESIGN, SHALL BE DIRECTED TO SCOTT BERRY, CITY MANAGER FOR CITY OF RATON. (575) 445-9551.
3	TENANT INFO: COLIN TAWNEY, BLU DRAGONFLY BREWING, LLC. (575) 376-1110. JASON BENNETT, LEFT TURN DISTILLERY. (575) 245-7837.
4	SERVICING ELECTRICAL UTILITY: SPRINGER ELECTRIC COOPERATIVE, INC. (575) 483-2421.
5	THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE ELECTRICAL UTILITY, THE CITY MANAGER AND TENANTS/OCCUPIERS.



PROJECT LOCATION:
SCALE: NONE

TRENCH DETAIL:
MINIMUM REQUIREMENTS (U.N.O.)



NOTES:
1. IN SOME CASES, OTHER UTILITIES MAY BE INVOLVED. IF THIS IS THE CASE, GREATER BURIAL DEPTH MAY BE REQUIRED.
2. ENCASE IN CONCRETE IF MINIMUM DEPTH REQUIREMENTS ARE NOT MET.
3. VERIFY EXACT TRENCH ROUTE WITH UTILITY AND OWNER PRIOR TO INSTALL.
4. VERIFY LOCATION OF EXISTING, PRIVATE UTILITIES WITH OWNER PRIOR TO INSTALL.

	CODE COMPLIANCE
A	THIS ELECTRICAL DESIGN WAS DEVELOPED USING THE MOST RECENT, APPLICABLE CODES AT THE TIME THESE DOCUMENTS WERE SEALED. NEC: 2017 EDITION NMAC, TITLE 14, CHAPTER 10, PART 4: 2017 NEW MEXICO ELECTRICAL CODE **CAVEAT**: THE APPLICABLE, LOCAL INSPECTING AUTHORITY MAY HAVE THE ABILITY TO REQUIRE MORE STRICT OR STRINGENT DESIGN REQUIREMENTS OTHER THAN THOSE INCLUDED IN THESE DESIGN DOCUMENTS. IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO NOTIFY THE ENGINEER OF ANY ISSUES (POTENTIAL OR ACTUAL) PRIOR TO ROUGH-IN OR PURCHASE OF EQUIPMENT OR MATERIALS SO THAT ANY REQUIRED CORRECTIONS OR MODIFICATIONS CAN BE ADDRESSED. REFERENCE "GENERAL NOTE C" ON THIS SAME SHEET.

	GENERAL NOTES
A	IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW THE CONSTRUCTION DOCUMENTS, PLANS AND SITE FOR ANY DISCREPANCIES OR OMISSIONS AND RESOLVE ANY CONFLICTS PRIOR TO CONSTRUCTION AND PURCHASE OF MATERIALS.
B	FIELD-ROUTE ALL CONDUCTORS USING THE SHORTEST DISTANCE POSSIBLE TO MINIMIZE VOLTAGE DROP ON CIRCUIT.
C	ENSURE COMPLIANCE WITH ALL LOCAL, STATE AND FEDERAL CODES, RULES AND REGULATIONS.
D	COORDINATE AND COOPERATE WITH ALL TRADES ON THE PROJECT.
E	TEST ALL WIRING FOR CONTINUITY AND GROUNDS BEFORE CONNECTING ANY FIXTURES OR DEVICES. PERFORM INSULATION RESISTANCE TESTS ON ALL WIRING #8 AWG OR LARGER TO ENSURE THAT ALL PORTIONS ARE FREE FROM SHORT CIRCUITS AND GROUNDS.
F	PROVIDE GROUNDING IN ACCORDANCE WITH THE NEC FOR THE ELECTRICAL SYSTEM INCLUDING EQUIPMENT FRAMES, CONDUITS, SWITCHES, CONTROLLERS, WIREWAYS, NEUTRAL CONDUCTORS AND OTHER EQUIPMENT. PROVIDE A GROUNDING CONDUCTOR IN ALL POWER CIRCUITS.
G	LABEL ALL JUNCTION BOXES WITH PERMANENT MARKER IDENTIFYING CIRCUIT NUMBER AND PANELBOARD OF CIRCUITS CONTAINED WITHIN.
H	WHERE FUSE PROTECTION IS SPECIFICALLY REQUIRED BY THE EQUIPMENT MANUFACTURER, PROVIDE FUSE SWITCHES IN LIEU OF NON-FUSE SWITCHES OR IN LIEU OF ENCLOSED CIRCUIT BREAKERS OR OTHER DEVICES INDICATED.
I	SECURE APPROVED SHOP DRAWINGS SHOWING WIRING DIAGRAMS, ROUGH-IN AND HOOK-UP DETAILS FROM OTHER INVOLVED CONTRACTORS FOR EQUIPMENT WHICH MUST BE CONNECTED ELECTRICALLY.
J	MECHANICAL EQUIPMENT WILL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR. THE LOCATIONS SHOWN ON THE ELECTRICAL DRAWINGS ARE APPROXIMATE. COORDINATE WITH THE MECHANICAL CONTRACTOR TO DETERMINE THE EXACT LOCATION OF EACH PIECE OF EQUIPMENT AND DETERMINE THE EXACT ROUGH-IN AND CONNECTION REQUIREMENTS.
K	WHERE AN INDIVIDUALLY MOUNTED SAFETY SWITCH, STARTER OR CIRCUIT BREAKER IS SHOWN ADJACENT TO ITS RESPECTIVE LOAD AND NOT MOUNTED ON A WALL, PROVIDE ALL SUPPORTS, BRACKETS, ANCHORING, ETC. NECESSARY TO PROPERLY SUPPORT THE DEVICE.
L	COORDINATE LIGHTING FIXTURES WITH GRILLES, DIFFUSERS, SPRINKLER HEADS AND ACCESS PANELS, ETC.
M	COORDINATE LOCATIONS OF SWITCHES, RECEPTACLES AND TELE/DATA OUTLETS WITH OTHER WALL MOUNTED DEVICES SUCH AS THERMOSTATS AND CONTROL STATIONS. DO NOT MOUNT WIRING DEVICES BACK TO BACK. PROVIDE MINIMUM OF ONE STUD SEPARATION.
N	RECEPTACLES FOR ELECTRIC WATER COOLERS (EWC) SHALL BE INSTALLED OUT OF VIEW AND BEHIND THE EWC ENCLOSURE. VERIFY THE MOUNTING HEIGHT WITH THE EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN.
O	THOROUGHLY REVIEW AND COORDINATE ALL CASEWORK, DOOR SWINGS AND CABINET DRAWINGS AND ARCHITECTURAL ELEVATIONS WITH DEVICE LOCATIONS PRIOR TO ROUGH-IN OF OUTLET BOXES.
P	WHERE MULTIPLE GANG BOX HAS CIRCUITS OF DIFFERENT VOLTAGES OR SYSTEMS WHICH ARE REQUIRED TO BE SEPARATED, PROVIDE THE CODE-REQUIRED SEPARATION USING A FULL HEIGHT AND DEPTH BARRIER PLATE.
Q	FOR ANY WALL OR FLOOR PENETRATIONS THROUGH FIRE RATED STRUCTURES, PROVIDE FIRE-PROOFING TO SEAL ALL THE PENETRATIONS AFTER THE CONDUIT HAS BEEN INSTALLED. FIRE PROOFING FOR PENETRATIONS SHALL BE U.L. APPROVED PER THE PENETRATION MADE IN ORDER TO MAINTAIN FIRE RATED INTEGRITY OF THE STRUCTURE.
R	LOCATION OF EQUIPMENT AND DEVICES SHOWN ON THE PLANS ARE APPROXIMATE AND SHALL BE FIELD-VERIFIED PRIOR TO ROUGH-IN.
S	THE CONDUIT RUNS AS SHOWN ON THE PLANS INDICATE APPROXIMATE ROUTING. EXACT LOCATION OF CONDUIT RUNS SHALL BE AS FIELD CONDITIONS DICTATE.
T	CONTRACTOR SHALL MAKE AS-BUILT DRAWINGS DOCUMENTING ANY AND ALL WIRING AND EQUIPMENT CONDITIONS AND CHANGES WHILE COMPLETING THIS PROJECT. PROVIDE UPDATED, TYPEWRITTEN DIRECTORIES FOR ALL PANELS. PROVIDE PANEL LABELS AS NOTED IN ELECTRICAL SPECIFICATIONS.
U	CONTRACTOR SHALL PROVIDE AND INSTALL TIE HANDLES ON ALL CIRCUIT BREAKERS SHARING A NEUTRAL CONDUCTOR PER THE N.E.C.

ELECTRICAL SPECIFICATIONS:

1. LOCATION OF EQUIPMENT, CONDUIT & DEVICES SHOWN ON THE DRAWINGS ARE APPROXIMATE AND SHALL BE COORDINATED WITH THE MECHANICAL DRAWINGS AND FIELD CONDITIONS PRIOR TO ROUGH-IN.
2. EXACT LOCATIONS AND ROUTING OF CONDUIT SHALL BE DETERMINED BY THE ELECTRICAL CONTRACTOR BASED ON EXISTING CONDITIONS.
3. PROVIDE PULL BOXES AND JUNCTION BOXES WHERE INDICATED OR REQUIRED. INSTALL PER NEC 314.
4. WIRING METHODS SHALL BE AC OR MC CABLE, EMT, INTERMEDIATE AND RIGID METALLIC CONDUIT. EMT, INTERMEDIATE AND RIGID CONDUIT SHALL HAVE BENDS MADE IN ACCORDANCE WITH THE NEC. NO RIGHT ANGLE DEVICES OTHER THAN STANDARD CONDUIT ELBOWS WITH 12" MINIMUM INSIDE SWEEPS FOR ALL CONDUITS 2" AND LARGER.
5. CABLE AND CONDUIT FITTINGS SHALL BE DIE-CAST, MALLEABLE IRON OR STEEL. SET SCREW FITTINGS SHALL BE USED ONLY IN AREAS INTERIOR TO THE BUILDING. COMPRESSION TYPE OR WATER TIGHT FITTINGS SHALL BE USED IN THE EXTERIOR.
6. ALL WIRE SHALL BE TYPE THHN/THWN, SOLID, ANNEALED COPPER. MNIMUM SIZE #14 FOR CONTROLS AND #12 FOR LIGHTING AND POWER CIRCUIT UP TO SIZE #10 AWG (#8 AND LARGER SHALL BE CONCENTRIC STRANDED) 75° C (167° F) CONDUCTIVITY.
7. ALL NEW MATERIAL SHALL HAVE A U.L. LABEL OR AN NRTL APPROVED EQUIPMENT LABEL.
8. THE CONTRACTOR SHALL REPAIR ALL DAMAGE TO WALLS, CEILING, ETC. IN A PROFESSIONAL MANNER. SEAL ALL WALL OR CEILING OPENINGS WITH MATCHING MATERIAL. PROVIDE PITCH PANS WHERE CONDUITS PENETRATE EXISTING ROOF FOR ARCHITECTURAL APPROVAL.
9. CONDUIT ROUGH-IN SHALL BE COORDINATED WITH THE MECHANICAL TO AVOID LOCATION CONFLICTS. VERIFY WITH MECHANICAL AND COMPLY AS REQUIRED.
10. ALL PANEL DIRECTORIES SHALL BE TYPEWRITTEN NOT HAND WRITTEN. PANEL DIRECTORIES SHALL INCLUDE SPECIFIC LOAD INFORMATION PER NEC 110.22.
11. ALL WIRING IN FINISHED AREAS SHALL BE ROUTED IN CONDUIT AND SHALL BE CONCEALED IN WALLS OR ABOVE CEILINGS WHENEVER POSSIBLE UNLESS OTHERWISE NOTED.
12. INSTALL AN EQUIPMENT GROUNDING CONDUCTOR IN ALL FEEDER CIRCUITS. THE EQUIPMENT GROUNDING CONDUCTORS SHALL BE BONDED AT ALL PULLBOXES, DISCONNECT SWITCHES, PANEL BOARDS, ETC. ARMORED AND METAL CLAD CABELING SHALL HAVE AN INTERAL BONDING STRIP OR PROVIDE AN ADEQUATE PATH FOR EQUIPMENT GROUNDING PER NEC 250.
13. ALL DISCONNECT SWITCHES, STARTERS AND OTHER CONTROLLING DEVICES SHALL BE PROVIDED WITH ENGRAVED LAMICOID NAMEPLATES INDICATING EQUIPMENT CONTROLLED, BRANCH CIRCUIT INSTALLED ON AND PANEL LOCATION FED FROM (NO EXCEPTIONS).
14. ALL ELECTRICAL DEVICES AND INSTALLATION OF THE DEVICES SHALL COMPLY WITH ADA AS ADOPTED BY THE STATE OF NEW MEXICO.
15. ALL CIRCUITS SHALL CONTAIN A DEDICATED NEUTRAL. REFER TO NEC 210.4 FOR MULTIWIRE BRANCH CIRCUIT REQUIREMENTS.
16. BRANCH CIRCUIT AND FEEDER DESIGN SHALL ALLOW FOR NO MORE THAN A 5% VOLTAGE DROP AS PER NMAC 14.10.4.11F(3).
17. ALL NEW INSTALLATIONS SHALL HAVE A CONCRETE ENCASED GROUNDING ELECTRODE OTHERWISE THE ELECTRICAL CONTRACTOR SHALL PROVIDE A UFER GROUND AS PER NEC 250.52(A)(3).
18. ELECTRICAL DEVICE INSTALLATION SHALL COMPLY WITH ACCESSSIBILITY CODES ADOPTED BY NEW MEXICO. MOUNT APPLICABLE SWITCHES, RECEPTACLES & ENVIRONMENTAL CONTROLS SO THAT THEY ARE MOUNTED WITH THE TOP OF THE DEVICE NO HIGHER THAN 48 INCHES ABOVE FINISHED FLOORS AND THE BOTTOM OF THE DEVICE NO LOWER THAN 14 INCHES ABOVE FINISHED FLOORS.
19. THE DRAWINGS SHOW ONLY THE GENERAL RUN OF RACEWAYS AND APPROXIMATE LOCATION OF OUTLETS. THESE SHALL BE FIELD COORDINATED AND INSTALLED AS PER AL NEC AND NEW MEXICO STATE BUILDING CODE REQUIREMENTS.
20. ALL FINAL CONNECTIONS TO MECHANICAL EQUIPMENT SHALL BE MADE USING FLEXIBLE METALLIC CONDUIT. CONNECTIONS TO MECHANICAL EQUIPMENT ON THE EXTERIOR OF THE BUILDING SHALL USE WEATHERPROOF, FLEXIBLE CONDUIT.
21. ALL NEW LIGHTING SHALL COMPLY WITH THE MOST CURRENT NEW MEXICO ENERGY CONSERVATION CODE.
22. ELECTRICAL DEVICE INSTALLATION SHALL COMPLY WITH THE ACCESSIBILITY CODES ADOPTED FOR NEW MEXICO. NMAC 14.10.4.13.
23. EXTERIOR AND PARKING LOT LIGHTING SHALL UTILIZE PHOTOCELL "ON" AND TIME CLOCK "OFF" CONTROL.
24. EXTERIOR LIGHTING SHALL COMPLY WITH THE NEW MEXICO NIGHT SKY PROTECTION ACT OR LOCAL LIGHTING ORDINANCE; WHICHEVER IS STRICTER. NMAC 14.10.4.14.
25. RACEWAYS AND CABLES INSTALLED ON ROOFTOPS ARE SUBJECT TO CORRECTION FACTORS IN TABLE 310.15(B)(2)(C) BASED ON DISTANCE ABOVE THE ROOF SURFACE.
26. CONDUCTORS AND CABLES INSTALLED IN ABOVEGRADE RACEWAYS LOCATED IN WET LOCATIONS ARE REQUIRED TO BE SUITABLE FOR USE IN WET LOCATIONS IN ACCORDANCE WITH NEC 310.8(C).
27. THE INTERIOR OF ENCLOSURES AND RACEWAYS INSTALLED UNDERGROUND ARE CONSIDERED WET LOCATIONS. NEC 300.5(B).
28. INDUSTRIAL CONTROL PANELS WHICH CONTAIN ONLY CONTROL CIRCUITS AND DEVICES DO NOT REQUIRE A SHORT-CIRCUIT CURRENT RATING ACCORDING TO NEC 409.110(3).
29. RECEPTACLES FOR VENDING MACHINE USE MUST COMPLY WITH NEC 422.51 GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION REQUIREMENTS.
30. ELECTRIC DRINKING WATER FOUNTAINS MUST BE PROTECTED BY GROUND-FAULT CIRCUIT INTERRUPTERS. NEC 422.52.
31. SERVICE MASTS MUST BE A MINIMUM OF TWO-INCH RIGID METAL CONDUIT, INTERMEDIATE METAL CONDUIT OR COMPLY WITH LOCAL UTILITY REQUIREMENTS AS PER NMAC 14.10.4.11.F(2) WHEN USED FOR THE SUPPORT OF SERVICE DROP CONDUCTORS.
32. AN EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED IN ALL BRANCH CIRCUIT AND FEEDER RACEWAYS ON OR ABOVE A ROOF. NMAC 14.10.4.11.G(7).
33. ALUMINUM CONDUCTORS USED IN GENERAL WIRING APPLICATIONS SHALL BE OF THE AA-8000 SERIES OR EQUIVALENT AND SHALL BE LIMITED TO SIZE 8 AWG OR LARGER. NMAC 14.10.4.11.I.
34. WHERE AN EVAPORATIVE COOLER IS INSTALLED, THE RACEWAY SHALL CONTAIN AN EQUIPMENT-GROUNDING CONDUCTOR FROM THE CONTROL POINT OUTLET BOX TO THE JUNCTION BOX AT THE UNIT. NMAC 14.10.4.11.P.
35. ELECTRICAL EQUIPMENT SHALL BE FIELD MARKED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS. NEC 110.16, NFPA 70E ARTICLE 130.

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ANTONIO R. SANCHEZ, JR.
NEW MEXICO
16463
LICENSED PROFESSIONAL ENGINEER
01/08/2022

JOB NO:
DATE: 01/08/2022
REV A

Sheet Title: SITE PLAN, PROJECT LOCATION, ELECTRICAL SPECS & GENERAL NOTES
Drawn By: AS
Checked By: Antonio R. Sanchez, Jr., PE

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