EV CHARGER LOCATION PLAN

DESIGN CRITERIA

OCCUPANCY USE - PREVIOUS USE TYPE OF CONSTRUCTION

BUSINESS MULTIFAMILY MUI TIFAMII Y TYPE VB - LEVEL 2 ALTERATION SITE APPROVEMENT PROTECTION

. BASIS OF DESIGN

ALL CONSTRUCTION IS DESIGNED AS FOLLOWS: FLORIDA BUILDING CODE 7TH EDITION 2020 AS FOLLOWED BELOW: FBC, ACCESSIBILITY-2020 FBC. BUILDING-2020 FBC EXISTING BUILDING-2020

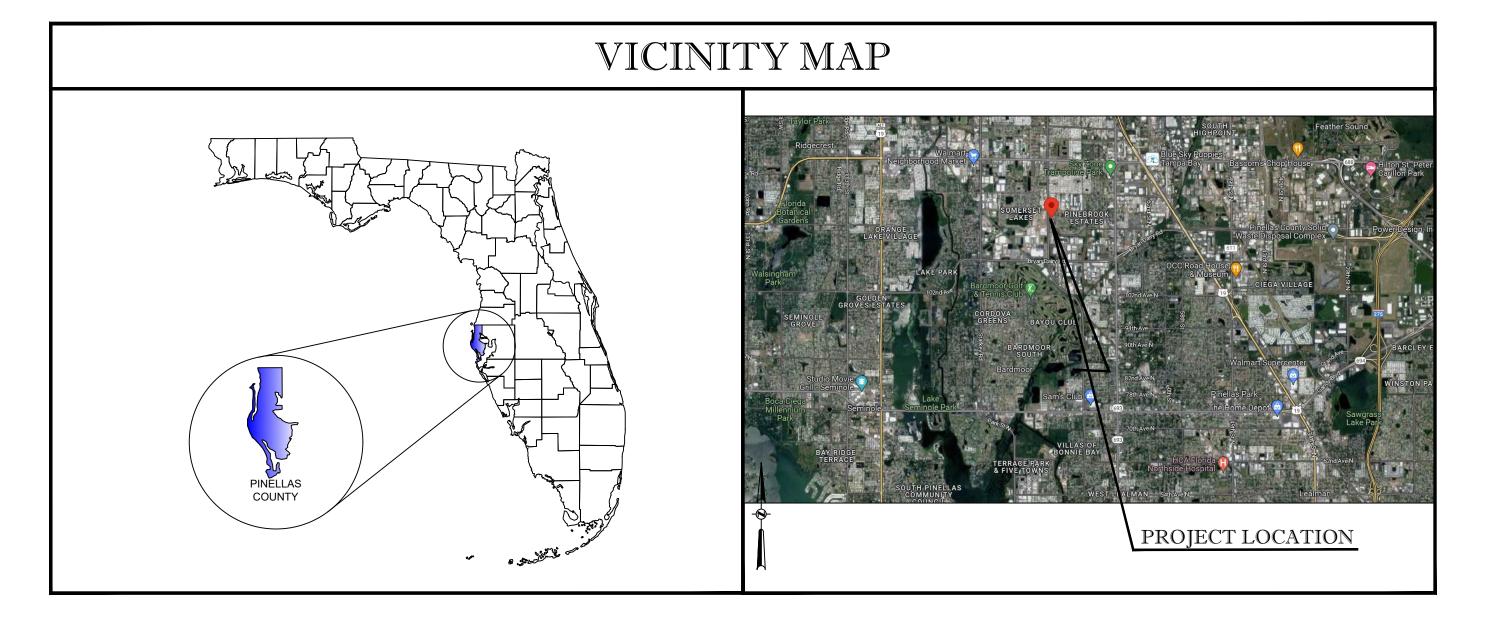
FBC, NATIONAL ELECTRICAL CODE(NEC) 2017

II. DESIGN LOADS

EXPOSURE CATEGORY '

ROOF SLOPE: 4:12 INTERNAL PRESSURE COEFFICIENTS GCpi = +/- .18, ENCLOSED STRUCTURE BASIC WIND PRESSURE: q= 36.2 P.S.F. (C&C)

Palomar Properties Harbour Cay Apartments 12001 S Belcher Rd, Largo, FL 33773



SCOPE OF WORK

- 1.1. SELECTIVE DEMOLITION OF EXISTING CONC. SIDEWALK FOR NEW CONDUIT FOR EV CHARGERS.
- 1.2. SELECTIVE DEMOLITION OF EXISTING PAVEMENT ALONG FRONT OF EXISTING PARKING SPACES.

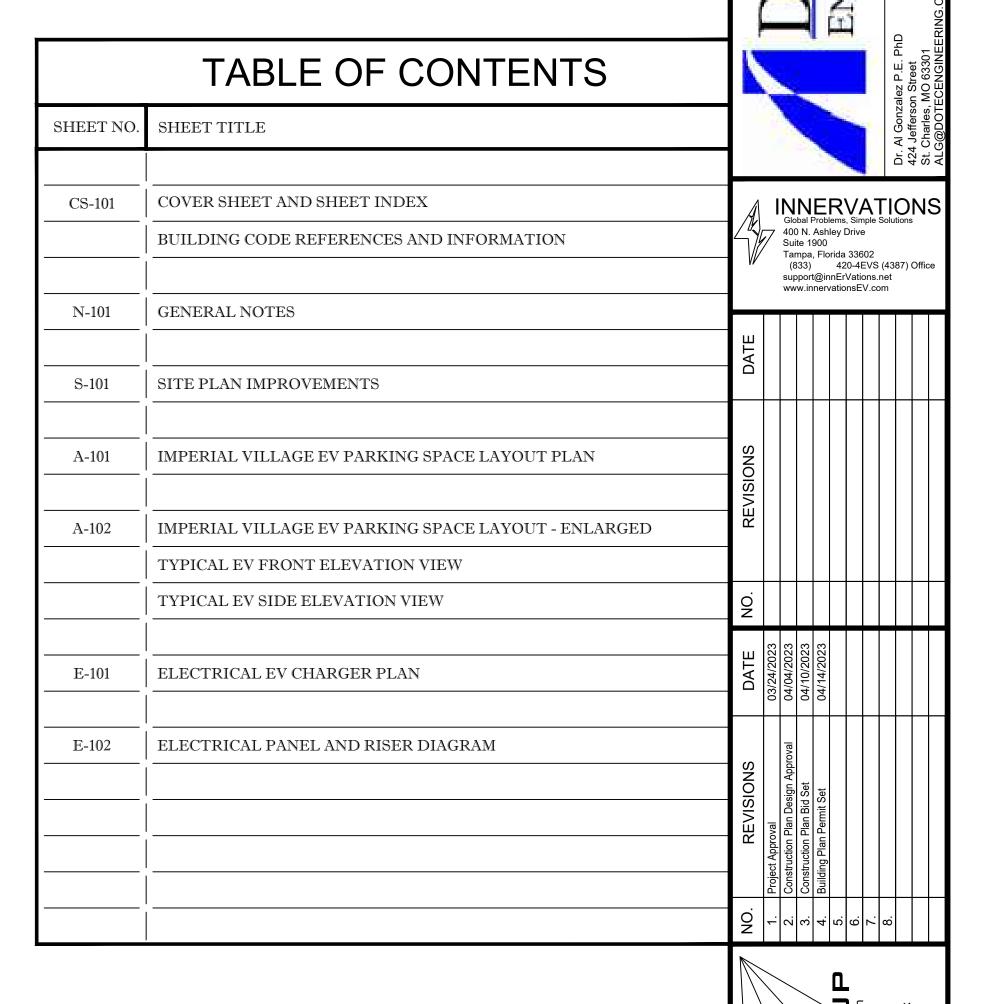
2. BUILDING

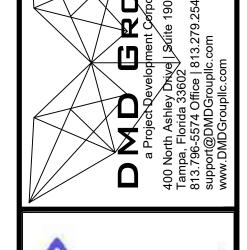
- 2.1 REMOVE EXISTING ASSOCIATED PANELS IN EXISTING MAIN BUILDING. 2.2 INSTALL SIX (6) NEW XEAL ENERGY LEVEL 2 EV CHARGERS IN EXISTING DESIGNATED PARKING SPACES PER FLOOR PLAN.
- 2.3 CONTRACTOR CAN SUBMIT ANY REQUEST FOR INFORMATION (RFI) VIA EMAIL AT SUPPORT@DMDGROUPLLC.COM FOR RESPONSES DURING BIDDING PROCESS AND LATER DURING CONSTRUCTION.
- MECHANICAL 3.1. NO WORK PERFORMED FOR THIS PERMIT SUBMITTAL.

- 4.1. REMOVE EXISTING 200-AMP SERVICE AND ASSOCIATED PANELS 4.2. INSTALL NEW 400-AMP DUKE ENERGY APPROVED METER CAN WITH
- 400-AMP PANEL BY THE EXISTING TRASH CMPACTOR. 4.3. REWORK ELECTRICAL CIRCUITRY FOR 400-AMP.
- 4.4. INSTALL NEW 2-POLE 40 amp CIRCUIT BREAKERS FOR EACH NEW XEAL ENERGY EV CHARGER IN NEW PANELS IN EXISTING UTILTY ROOM.
- 4.5. DIRECTIONAL BORE FROM NEW 400-AMP PANEL AND METER CAN APPROXIMATELY 200' UNDER EXISTING PAVEMENT TO NEW EV LOCATION IN LANDSCAPE AREA.
- 4.6. PULL NEW WIRE FROM NEW 400-AMP TO NEW JUNCTION BOX IN
- EXISTING LANDSCAPE AREA. 4.7. TRENCH AND COMPACT IN LANDSCAPED AREA AS NECESSARY, LAY NEW CONDUCT FOR A TOTAL OF SIX (6) 40-AMP 240v XEAL ENERGY EV
- 4.8. FORM AND PUR SIX (6) CONCRETE BASES FOR NEW XEAL ENERGY EV

5. PLUMBING

5.1. NO WORK PERFORMED FOR THIS PERMIT SUBMITTAL.







Palomar Harbour (12001 S Bel Largo, Florid Pinellas Cou

Job No: <u>2303125</u> Project No: 18200107-EV-HBCY 03/24/2023 Drawn: Design: <u>DRH</u>

Cover Sheet

GENERAL NOTES: HANDICAP ACCESSIBILITY CODES. OVER SMALL SCALE DRAWINGS. LLC. (DMD). RECORD OF ANY DISCREPANCIES.. ORDINANCES. 12. UPON COMPLETION OF PROJECT, GENERAL CONTRACTOR SHALL OBTAIN ALL FINAL INSPECTIONS IF REQUIRED. DURING CONSTRUCTION. 15. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SET-UP AND COORDINATION OF ALL THE UTILITY SERVICES FOR THE PROJECT. CEILINGS ARE PART OF THE DESIGN. ASTM C926, ASTM C1063 AND THE PROVISIONS OF FBC R703.7.1 THRU 703.7.5. 24.1. TWO LAYERS OF AN APPROVED WATER-RESISTANT BARRIER OR HOUSE WRAP, OR UPON FINAL PAYMENT.

RESIDENTIA

- ALL WORK SHALL BE IN COMPLIANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL BUILDING CODES, REGULATIONS, ORDINANCES AND STANDARDS INCLUDING ADA AND OR OTHER
 - GENERAL CONTRACTOR SHALL COORDINATE WITH THE OWNER'S VENDORS REGARDING CONSTRUCTION SCHEDULING AND SEQUENCING OF THE WORK.
 - THE CONSTRUCTION NOTES AND DRAWINGS ARE SUPPLIED TO ILLUSTRATE THE DESIGN AND GENERAL TYPE OF CONSTRUCTION DESIRED AND ARE INTENDED TO IMPLY THE FINEST QUALITY OF CONSTRUCTION, MATERIAL AND WORKMANSHIP THROUGHOUT.
 - THE DRAWINGS ARE NOT TO BE SCALED. FOR INFORMATION CONCERNING EXISTING CONDITIONS, ETC., VERIFICATION MUST BE DONE IN THE FIELD. LARGE SCALE DRAWINGS HAVE PRECEDENCE
 - PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION, CONTRACTOR SHALL VERIFY EXISTENCE AND LOCATION OF ALL EXISTING ABOVE AND BELOW GRADE, UTILITIES, INCLUDING SANITARY SEWER, STORM SEWER, WATER, GAS, ELECTRICAL, TELEPHONE, ETC. ANY DISCREPANCIES IN UTILITY LOCATIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE DMD GROUP CONSULTANTS,
 - GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL BUILDING DIMENSIONS PRIOR TO BEGINNING CONSTRUCTION AND SHALL IMMEDIATELY NOTIFY DMD ENGINEER OF
 - DESIGN OF SYSTEMS IS BASED ON INFORMATION FURNISHED BY OTHER WITH NO GUARANTEE AS TO ACCURACY. PROIR TO BID DATE, CONTRACTORS SHALL EXAMINE THE SITE, CONTACT LOCAL UTILITIES TO VERIFY SERVICE REQUIREMENTS, AND SHALL INCLUDE IN THE BASE BID ALL COST FOR REQUIREMENTS, FEES, CONNECTIONS, AND METERING FOR COMPLETE AND TEMPORARY ELECTRICAL AND TELEPHONE SERVICES IN ACCORDANCE WITH GOVERNING CODES AND
 - GENERAL CONTRACTOR TO INFORM DMD ENGINEER OF RECORD OF ANY VARIANCE OR DISCREPANCY AFFECTING EXISTING OR NEW CONSTRUCTION PRIOR TO PROCEEDING WITH WORK.
 - CONTRACTOR SHALL PROVIDE ALL NECESSARY BLOCKING IN WALLS FOR SUPPORT OF ALL EQUIPMENT, SHELVING, ACCESSORIES, SIGNAGE, AND OTHER DEVICES REQUIRED.
 - 10. ALL PENETRATIONS SHALL RECEIVE CAULKING TO SEAL ANY TYPE OF ENERGY LOSS.
 - 11. THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL APPLICABLE DIMENSIONS OF FIXTURES AND EQUIPMENT SUPPLIED AND/OR INSTALLED BY OTHERS.
 - AS REQUIRED BY LOCAL AUTHORITY HAVING JURISDICTION (AHJ) AND FURNISH OWNER WITH EVIDENCE OF ALL SUCH INSPECTIONS AND CERTIFICATES OF OCCUPANCY.
 - 13. GENERAL CONTRACTOR SHALL INCLUDE THE COST OF ELECTRICAL IMPROVEMENT AND ADDITION
 - 14. GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE OWNER'S VENDORS ON SITE

 - 16. ALL EXTERIOR FLOOR PLAN DIMENSIONS ARE TO EXTERIOR FACE OF MASONRY UNLESS OTHERWISE NOTED. ALL INTERIOR FLOOR PLAN DIMENSIONS ARE TO FACE OF FINISH UNLESS OTHERWISE
 - 17. ALL FIRE PLYWOOD REFERENCES TO BE FIRE-RETARDANT TREATED PLYWOOD. (IF REQUIRED)
 - 18. ALL PT PLYWOOD REFERENCES TO BE PRESSURE TREATED CDX.
 - 19. ALL INTERIOR WALL TO HAVE BATTEN INSULATION. MINIMUM 6" ABOVE CEILING. (OPTIONAL)
 - 20. ALL WALL AND FLOOR FINISHES TO BE CHOSEN BY OWNER.
 - 21. ALL AIR-CONDITIONED SPACE 10'-0" CEILING HEIGHT UNLESS OTHERWISE NOTED.
- 22. TRAY CEILINGS SHALL BE A MINIMUM OF 12" DEEP WITH EACH TEIR A MINIMUM OF 8" DEEP, SEE IRUSS PROFILE SHEET S-100 AND ROOF FRAMING PLAN, SHEET S-101 FOR MORE DETAILS IF TRAY
- 23. THE INSTALLATION OF ALL EXTERIOR COVERING AND PLASTER SHALL BE IN COMPLIANCE WITH
- 24. THE INSTALLATION OF ALL EXTERIOR COVERING AND PLASTER OVER FRAME CONSTRUCTION SHALL BE IN COMPLIANCE WITH FLORIDA BUILDING CODE SECTION 1404.2.1 WHERE CEMENT PLASTER (STUCCO) IS TO BE APPLIED TO LATH OVER FRAME CONSTRUCTION, MEASURES SHALL BE TAKEN TO PREVENT BONDING BETWEEN THE CEMENT PLASTER AND THE WATER RESISTIVE BARRIER. A BOND BREAK SHALL BE PROVIDED BETWEEN THE WATER RESISTIVE BARRIER AND THE CEMENT PLASTER (STUCCO) CONSISTING OF ONE OF THE FOLLOWING:
- 24.2. ONE LAYER OF AN APPROVED WATER-RESISTANT BARRIER OVER AN APPROVED PLASTIC
- 24.3. OTHER APPROVED METHODS OR MATERIALS APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- 25. ALL DRAWINGS, COMPUTATIONS, DETAILS, DESIGN CALCULATIONS, ELECTRONIC FILES. 3D SCANS. VIDEOGRAPHY AND OTHER DOCUMENTS THAT RESULT FROM DMD GROUP CONSULTANTS, LLC. (DMD) UNDER THIS PROJECT, ARE AND REMAIN THE PROPERTY OF DMD AS INSTRUMENTS OF SERVICE. REUSE OR MODIFICATION BY THE CLIENT IS PROHIBITED. ANY UNAPPROVED USE OR MODIFICATION SHALL BE AT CLIENT'S OR OTHERS SOLE RISK WITHOUT LIABILITY OR LEGAL EXPOSURE TO DMD UNLESS APPROVED IN WRITING. OWNERSHIP OF ALL DOCUMENTS WILL REVERT TO CLIENT
- 26. NO CHANGES OR ALTERATIONS TO DESIGN OR STRUCTURAL CHARACTERISTICS SHALL BE MADE EXCEPT BY DMD. ANY MODIFICATIONS NEEDED TO PLAN DUE TO CLIENTS CHANGE OF MIND OR ENACTMENT OF NEW CODES SHALL BE CHARGED BASED UPON THE AMOUNT OF SERVICES NEEDED. IF REQUIRED, CLIENTS SHALL RECEIVE WRITTEN NOTICE OF AMOUNT CHARGED FOR MODIFICATIONS TO PLANS AND SHALL BE APPROVED BY CLIENT BEFORE WORK COMMENCES.

- 27. CLIENT HEREBY ACKNOWLEDGES THAT DMD CANNOT WARRANT THAT ANY COST ESTIMATES FOR CONSTRUCTION WILL NOT VARY FROM ACTUAL COSTS INCURRED BY THE CLIENT.
- 28. IF GENERAL CONTRACTOR PRODUCES VALUE ENGINEERING WHICH WILL SAVE CLIENT MONEY ON THIS PROJECT DURING THE ESTIMATION STAGE OR DURING CONSTRUCTION, THEN GENERAL CONTRACTOR SHALL SUBMIT DESIGN CHANGE TO DMD FOR REVIEW AND APPROVAL. ANY CHANGES ARE CHARGEABLE TO GENERAL CONTRACTOR. SUCH CHARGES WILL BE BASED UPON WORK PERFORMED AND PROVIDED TO GENERAL CONTRACTOR IN WRITING FOR APPROVAL BEFORE SUCH CHANGES ARE STARTED.
- 29. IN RECOGNITION OF THE RELATIVE RISKS AND BENEFITS OF THE PROJECT TO BOTH THE CLIENT AND DMD, THE RISKS HAVE BEEN ALLOCATED SUCH THAT THE CLIENT AGREES, TO THE FULLEST EXTENT PERMITTED BY LAW, TO LIMIT THE LIABILITY OF DMD AND IT'S SUB CONSULTANTS TO THE CLIENT AND TO ALL CONSTRUCTION CONTRACTORS AND SUBCONTRACTORS ON THE PROJECT ANY AND ALL CLAIMS, LOSSES, COSTS, DAMAGES OF ANY NATURE WHATSOEVER OR CLAIMS EXPENSES FROM ANY CAUSE OF CAUSES, SO THAT THE TOTAL AGGREGATE LIABILITY OF DMD AND ITS SUB CONSULTANTS TO ALL THOSE NAMED SHALL NOT EXCEED THE AMOUNT OF DMD'S FEE FOR THIS PROJECT. THIS LIMITATION SHALL APPLY REGARDLESS OF THE CAUSE OF ACTION OR LEGAL THEORY PLED OR ASSERTED.
- 30. THE CLIENT OR DMD MAY TERMINATE THIS PROJECT AT ANY TIME PROVIDED 10 DAYS WRITTEN NOTICE IS ISSUED. IN THE EVENT THAT THE AGREEMENT IS TERMINATED BY THE CLIENT, ALL OUTSTANDING INVOICES SHALL BE PAID WITHIN 30 DAYS. THIS PROJECT MAY ALSO BE TERMINATED BY DMD IF THE WORK DESCRIBED UNDER THE SCOPE OF SERVICES IS DORMANT OR SUSPENDED FOR 6 MONTHS OR MORE. IF PROJECT IS DORMAT FOR 6 MONTHS OR MORE, THEN DMD WILL REQUIRE THAT THE PROJECT BE REVIEWED PER CURRENT BUILDING CODES AND WILL CHARGE ADDITIONAL FEES PER SCOPE OF NEW WORK.
- 31. DMD STATES THAT IF BUILDING COMMENTS ARE RECEIVED FROM PERMITTING DEPARTMENT BY THE AUTHORITY HAVING JURISDICTION (AHJ), THEN DMD WILL CORRECT AND RESUBMIT CLIENT'S PLANS TO ENSURE THAT PLANS PASS PERMITTING. ANY MEETINGS TO REVIEW PLANS AND/OR CORRECTIONS TO PASS PERMITTING ARE INCLUDED VIA VIDEO TELECONFERENCE, UNLESS SUCH CORRECTIONS REQUESTED IN WRITING BY THE CLIENT ARE DUE TO DESIGN CHANGE OR LOCAL AHJ CODE CHANGES. ANY IN PERSON MEETINGS WITH AHJ ARE CHARGEABLE PER THE SCOPE OF WORK REQUIRED. DMD IS NOT HELD RESPONSIBLE OR LIABLE FOR ANY LOSES OF ANY KIND BECAUSE OF THE LENGTH OF TIME TO REVIEW OR A CHANGE IN CODES BY THE LOCAL BUILDING DEPARTMENT. HOWEVER, DMD WILL ENSURE THAT COMMENTS FROM THE AHJ WILL BE ANSWERED WITHIN A REASONABLE AMOUNT OF TIME. ONE (1) RESPONSE OF AHJ BUILDING COMMENTS ARE INCLUDED IN THIS PROJECT.
- 32. DMD WILL PROVIDE LIMITED CONSTRUCTION SUPPORT FOR PROJECT. GENERAL CONTRACTOR AND SUBCONTRACTORS WILL BE SUPPORTED BY RESPONDING TO REQUEST FOR INFORMATION (RFI). RFI SUPPORT WILL INCLUDE ONLY PHONE CALLS FOR REVIEW OF CONDITIONS ON SITE. ANY ENGINEERED LETTERS, UPDATED CONSTRUCTION DOCUMENTS, AS-BUILT DRAWINGS, AND/OR ON-SITE VISITS SHALL BE BILLED TO THE REQUESTOR AT A REASONABLE RATE PER THE SCOPE OF WORK AND PROVIDED IN WRITING BEFORE WORK STARTS.
- FOR ALL RFI'S, ANY CORRESPONDENCE SHALL BE FOLLOWED BY A BACKUP EMAIL REQUEST OF INFORMATION FOR PROPER RECORD KEEPING BY GENERAL CONTRACTOR OR GENERAL CONTRACTOR'S REPRESENTATIVE. IF DMD IS NEEDED TO REVIEW FIELD ISSUES DURING CONSTRUCTION, DMD TEAM WILL REQUIRE ANY NECESSARY PHOTOS OR SKETCHES OF ISSUE TO REVIEW WITH GENERAL CONTRACTOR SENT VIA EMAIL AT SUPPORT@DMDGROUPLLC.COM BEFORE FIELD REVIEW. ANY DELIVERY OR MAILING CHARGES FOR ANY DOCUMENTS TO CLIENT, GENERAL CONTRACTOR, AHJ, OR GENERAL CONTRACTOR SUBCONTRACTORS SHALL BE CHARGED PER LOCAL DELIVERY FEES. ANY ENGINEERED LETTERS OR ON-SITE VISITS SHALL BE CHARGED TO REQUESTOR PER SCOPE OF WORK AND WILL BE INVOICED BY DMD TO REQUESTOR.
- 34. THE FOLLOWING IS NOT INCLUDED IN THIS PERMIT SET SUBMITTAL: GREEN BUILDING CERTIFICATION SERVICES (E.G. LEED)
- IT IS ASSUMED THAT FIRE PROTECTION "PERFORMANCE SPECIFICATIONS" WILL BE PROVIDED FOR ALL SPACES AND THAT FULL FP DESIGN IS NOT REQUIRED.
- ANY ADDITIONAL AS-BUILT SITE DRAWINGS, AS-BUILT BUILDING DRAWINGS, VALUE ENGINEERED DRAWINGS, TRUSS MANUFACTURER SHOP DRAWINGS, OR STEEL SHOP DRAWINGS REVIEW THAT IS REQUIRED BY OWNER, AHJ, GENERAL CONTRACTOR, SUBCONTRACTOR OR INSPECTOR ARE CHARGEABLE. SUCH CHARGES TO BE DETERMINED BY THE WORK REQUIRED TO PRODUCE THEM AND CLIENT WILL BE NOTIFIED BY DMD IN WRITING WITH AN ADDENDUM PROPOSAL WILL BE SUBMITTED FOR APPROVAL.
- ADDITIONAL DETAILS REQUIRED DUE TO CLIENT CHANGES OR LOCAL BUILDING DEPARTMENT CORRECTIONS AFTER PERMITTING WILL BE CHARGED BASED UPON THE WORK PERFORMED. CLIENT WILL BE NOTIFIED BY DMD IN WRITING IF ADDITIONAL DETAILS ARE NEEDED AND SUBMITTED FOR APPROVAL.
- 35. THE SCHEDULE OF THE PROJECT IS NOT GUARANTEED. THE CLIENT UNDERSTANDS THAT FEDERAL STATE, AND LOCAL GOVERNMENTAL PERMITTING IS REQUIRED AND DMD CANNOT GUARANTEE TIMEFRAMES FOR REVIEW OR APPROVAL OF PROJECT DOCUMENTS. ANY AND ALL SCHEDULE DATES PROVIDED ARE ESTIMATES ONLY. WORK SHALL COMMENCE UPON RECEIPT OF REQUIRED DEPOSIT AS NOTICE TO PROCEED.
- 36. THE PROJECT INCLUDES AN ARCHITECTURAL SITE LAYOUT PER PROPERTY SURVEY OR LANDLORD SITE PLAN. ANY ADDITIONAL SITE ENGINEERED DRAINAGE, CIVIL SITE DESIGN/PLANS, LANDSCAPE PLAN, AND PHOTOMETRIC ANALYSIS/PLANS ARE CHARGABLE. SUCH CHARGES TO BE DETERMINED BY THE WORK REQUIRED TO PRODUCE THEM AND CLIENT WILL BE NOTIFIED BY DMD IN WRITING WITH AN ADDENDUM FOR APPROVAL BEFORE ADDITIONAL WORK IS STARTED.
- 37. CURRENT ENERGY CODES SHALL BE MET WITH A DESIGN, PLAN LAYOUT, AND ENERGY CALCULATIONS PROVIDED SEPARATELY BY A CERTIFIED MECHANICAL ENGINEER OR DESIGNER ACCORDING TO THE LOCAL AHJ REQUIREMENTS.
- 38. THE LOCAL AHJ CONFIRMED THAT THESE CONSTRUCTION DOCUMENTS ARE NOT REQUIRED TO BE SIGNED AND SEALED BY A CERTIFIED ENGINEER. THESE CONSTRUCTION AND PERMITTING PLAN DOCUMENTS SHALL BE SUBMITTED TO THE LOCAL AHJ WITHIN 6-MONTHS OR LESS. IF THIS IS NOT SUBMITTED BY CLIENT OR CLIENT REPRESENTATIVE, THEN CLIENT SHALL BE REQUIRED TO PAY AN ADDITIONAL FEE FOR REVIEW OF CURRENT AND LOCAL CODES. IN ADDITION, IF LOCAL AHJ REQUIRES THAT THESE DOCUMENTS ARE SIGNED AND SEALED BY STATE CERTIFIED ENGINEER, THEN THERE WILL BE AN ADDITIONAL FEE BASED UPON THE SCOPE OF WORK.
- 39. FAILURE TO EXAMINE AND BE FAMILIAR WITH THE DRAWINGS, SPECIFICATIONS, AND/OR EXISTING CONDITIONS SHALL NOT BE USED AS A BASIS OF ADDITIONAL SERVICES. SHOULD ANY DISCREPANCIES OCCUR BETWEEN THE PLANS AND EXISTING CONDITIONS, ARCHITECT AND ENGINEER SHALL BE NOTIFIED PRIOR TO CONSTRUCTION IN WRITING TO DMD GROUP CONSULTANTS LLC AT SUPPORT@DMDGROUPLLC.COM.

SYMBOLS:

FINISH

107

103A

Α

REVISION NUMBER

FINISH TAG

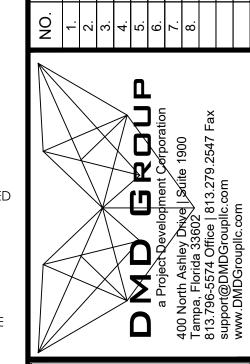
EQUIPMENT TAG

ROOM TAG

DOOR TAG

WINDOW TAG

KEYNOTE



INNERVATIONS

400 N. Ashley Drive

Tampa, Florida 33602

(833) 420-4EVS (4387) Office

support@innErVations.net www.innervationsEV.com



· Properties · Cay Apartments alomar larbour 2001 S Be argo, Florid inellas Cou Project No: <u>18200107-EV-HBCY</u>

Date:

Design: <u>DRH</u>

(A) WALL SECTION TAG

ELEVATION DATUM TAG

EXTERIOR ELEVATION TAG

BUILDING SECTION TAG

DETAIL TAG

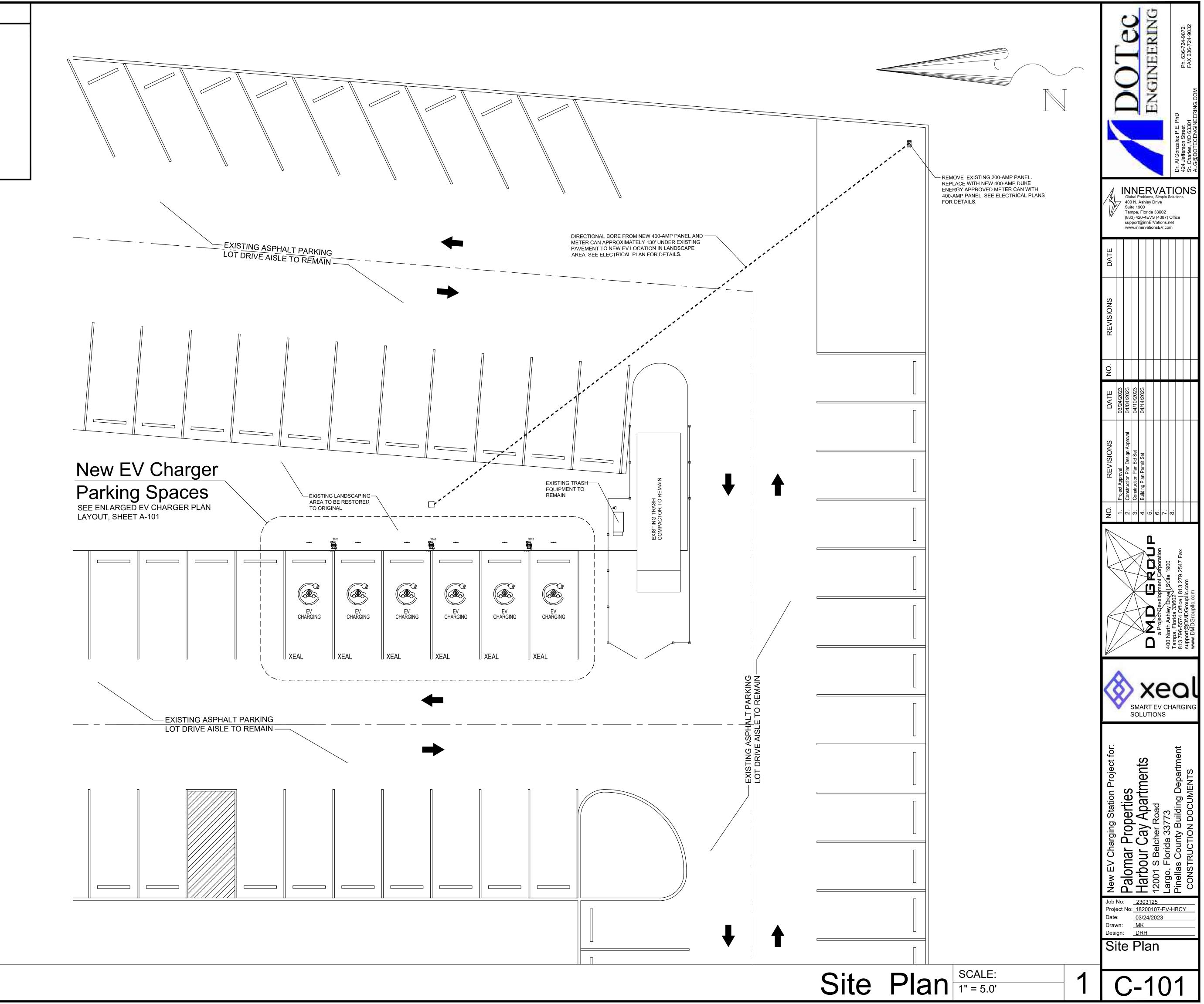
General Notes N.T.S

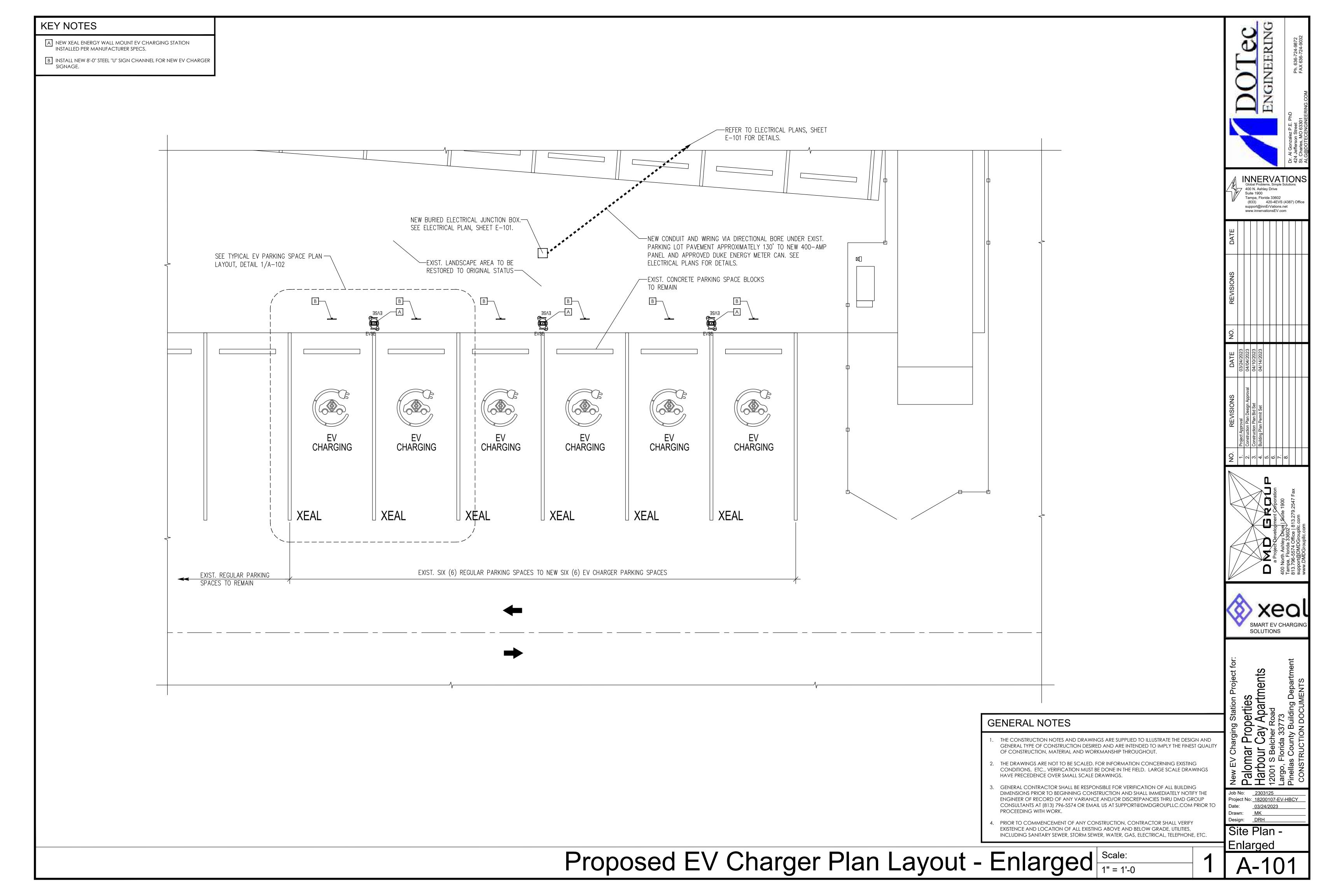
General Notes

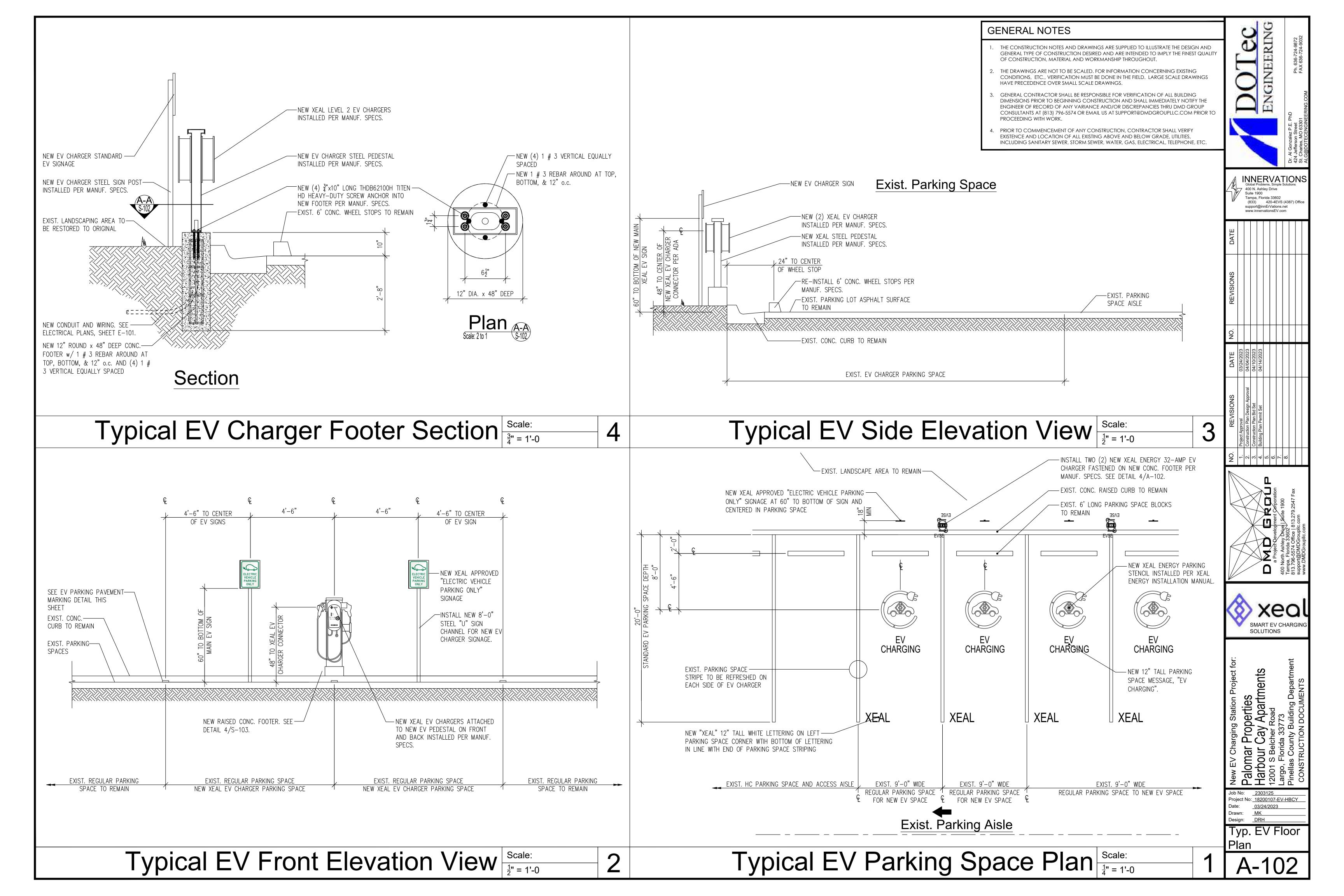
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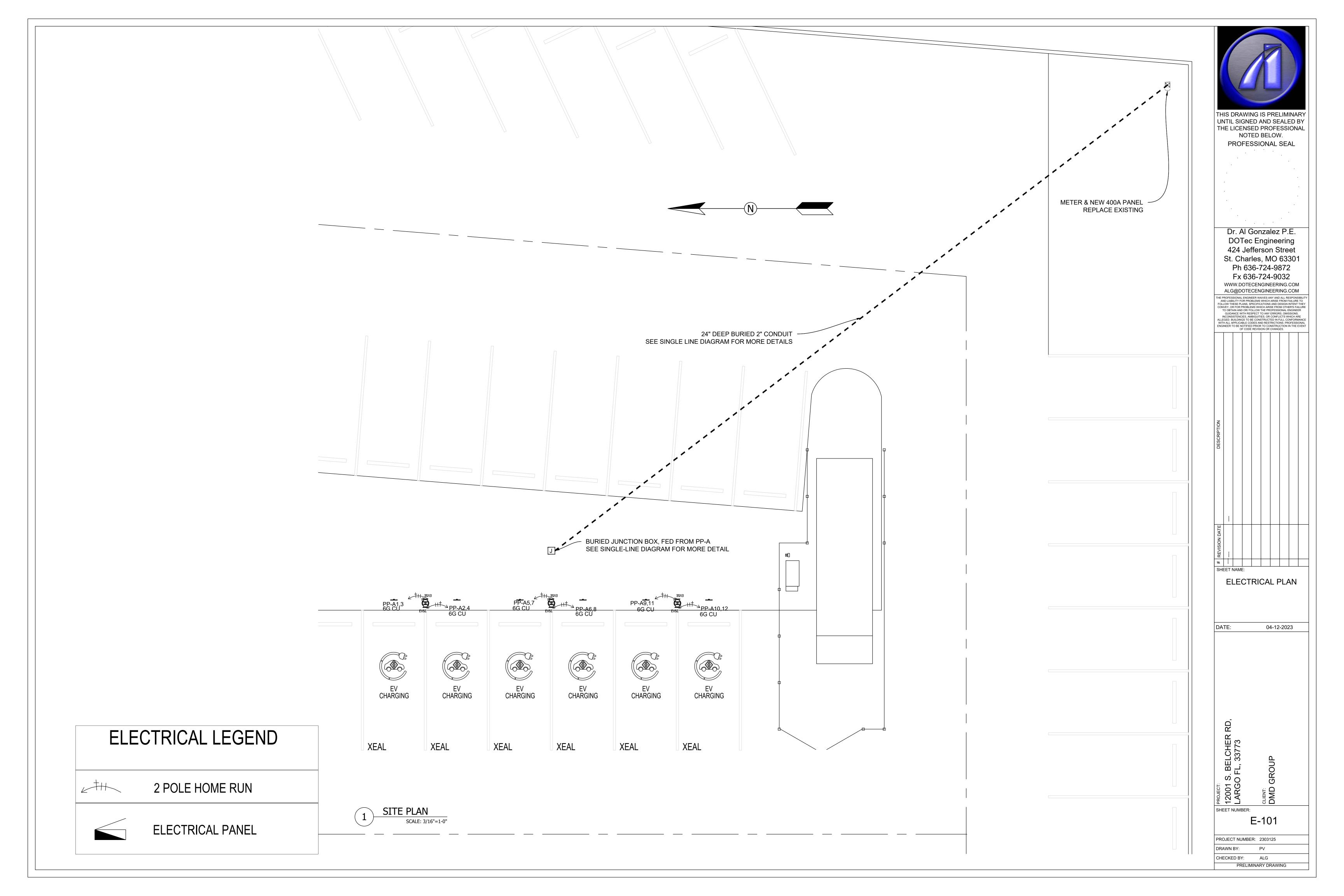
GENERAL NOTES

- 1. THE CONSTRUCTION NOTES AND DRAWINGS ARE SUPPLIED TO ILLUSTRATE THE DESIGN AND GENERAL TYPE OF CONSTRUCTION DESIRED AND ARE INTENDED TO IMPLY THE FINEST QUALITY OF CONSTRUCTION, MATERIAL AND WORKMANSHIP THROUGHOUT.
- 2. THE DRAWINGS ARE NOT TO BE SCALED. FOR INFORMATION CONCERNING EXISTING CONDITIONS, ETC., VERIFICATION MUST BE DONE IN THE FIELD. LARGE SCALE DRAWINGS HAVE PRECEDENCE OVER SMALL SCALE DRAWINGS.
- 3. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL BUILDING DIMENSIONS PRIOR TO BEGINNING CONSTRUCTION AND SHALL IMMEDIATELY NOTIFY THE ENGINEER OF RECORD OF ANY VARIANCE AND/OR DISCREPANCIES THRU DMD GROUP CONSULTANTS AT 813-993-6197 OR EMAIL US AT SUPPORT@DMDGROUPLLC.COM PRIOR TO PROCEEDING WITH WORK.
- 4. ALL EXTERIOR FOUNDATION PLAN DIMENSIONS ARE TO EXTERIOR FACE OF MASONRY UNLESS OTHERWISE NOTED. ALL INTERIOR FLOOR PLAN DIMENSIONS ARE TO FACE OF FINISH UNLESS OTHERWISE NOTED.
- PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION, CONTRACTOR SHALL VERIFY EXISTENCE AND LOCATION OF ALL EXISTING ABOVE AND BELOW GRADE, UTILITIES, INCLUDING SANITARY SEWER, STORM SEWER, WATER, GAS, ELECTRICAL, TELEPHONE, ETC.









ELECTRICAL SPECIFICATIONS

PART 1 - GENERAL 1.01 RELATED DOCUMENTS:

THE GENERAL DOCUMENTS APPLY TO WORK SPECIFIED IN THIS SECTION: CONSULT THEM IN DETAIL FOR

APPLICABLE INSTRUCTIONS

1.02 WORK INCLUDED: PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO COMPLETE ALL WORK OF THIS SECTION. WITHOUT RESTRICTING THE GENERALITY OF THE FOREGOING, THE FOLLOWING ITEMS OF WORK ARE INCLUDED:

- A. PERMITS AND FEES B. TEMPORARY POWER AND LIGHT
- C. SERVICE PROVISIONS AND METERING
- D. PANELBOARDS
- E. TELEPHONE PROVISIONS
- F. RACEWAYS
- G. BOXES H. WIRING
- I. GROUNDING
- J. LIGHTING FIXTURES AND LAMPS
- K. WIRING DEVICES AND PLATES
- L. CONNECTIONS TO EQUIPMENT M. DIRECTORIES AND NAMEPLATES
- N. TESTING
- O. CLEANING AND REMOVAL OF RUBBISH P. SUBMITTALS
- 1.03 RELATED WORK OF OTHER SECTIONS
- A. CONCRETE AND MASONRY B. PAINTING
- 1.04 QUALITY ASSURANCE
- A. USE ADEQUATE NUMBERS OF SKILLED WORKMEN WHO ARE THOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS AND WHO ARE COMPLETELY FAMILIAR WITH THE SPECIFIED REQUIREMENTS AND THE METHODS NEEDED FOR THE PROPER PERFORMANCE OF THE WORK OF THIS SECTION.
- B. ALL WORK SHALL BE OF THE HIGHEST QUALITY IN CONFORMANCE WITH THE BEST PRACTICES OF THE TRADE AND IN COMPLIANCE WITH ALL GOVERNING CODES.
- 1.05 CODES, PERMITS, FEES, AND REGULATIONS A. ALL WORK SHALL BE CARRIED OUT IN CONFORMITY WITH THE RULES AND REGULATIONS OF THE 2020
- NATIONAL ELECTRICAL CODE, AS ADOPTED BY THE VARIOUS LOCAL AGENCIES HAVING JURISDICTION. B. THE CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES, OBTAIN ALL PERMITS AND PAY ALL GOVERNMENTAL TAXES, FEES, DEPOSITS AND OTHER COSTS IN CONNECTION WITH HIS WORK; FILE ALL NECESSARY PLANS, PREPARE ALL DOCUMENTS AND OBTAIN NECESSARY APPROVALS OF ALL AGENCIES BEFORE REQUEST FOR ACCEPTANCE AND FINAL PAYMENT FOR THE WORK.

1.06 STORAGE OF MATERIALS

- A. STORE MATERIALS AND EQUIPMENT ON THE PREMISES WHERE DIRECTED BY THE OWNER.
- 1.07 OTHER TRADES
- A. BIDDERS SHALL EXAMINE THE SIZE AND THE COMPLETE SET OF PLANS AND SPECIFICATIONS COVERING THE ENTIRE PROJECT. THEY SHALL BECOME FULLY CONVERSANT WITH THE TYPE OF GENERAL CONSTRUCTION AS WELL AS ALL PERTINENT FACTS AFFECTING THE COST OF CARRYING OUT THE WORK THEY WILL CONTRACT TO PERFORM.
- B. THE CONTRACTOR SHALL COOPERATE TO THE FULLEST WITH ALL OTHER TRADES. HE SHALL PLAN HIS WORK IN SUCH A WAY, AND FURNISH ALL NECESSARY EQUIPMENT AND INFORMATION TO THE OTHER TRADES SO AS NOT TO DELAY ANY OTHER TRADE OR HINDER THE PROGRESS OF THE WORK.
- 1.08 SUBMITTALS A. SUBMIT MANUFACTURER'S TECHNICAL PRODUCT DATA LITERATURE FOR ALL MATERIALS SPECIFIED HEREIN. INDICATE AND HIGHLIGHT ON THE SUBMITTALS DETAILS OF ALL ITEMS TO INDICATE CORRECT INTERPRETATION OF THE CONTRACT DOCUMENTS. INCLUDE SUBMITTALS FOR THE FOLLOWING: LIGHTING FIXTURES

2. WIRING DEVICES 1.09 CONFLICTS

A. ANY CONTRADICTIONS BETWEEN THE WRITTEN SPECIFICATIONS AND DRAWINGS SHALL BE CONSIDERED AMBIGUOUS. AND WILL BE THE RESPONSIBILITY OF THE BIDDER TO SECURE CLARIFICATION PRIOR TO

BIDDING. PART 2 - PRODUCTS

2.01 GENERAL

- ALL MATERIAL, EQUIPMENT, AND INSTALLATIONS SHALL CONFORM TO THE REQUIREMENTS OF THE **FOLLOWING CODES:**
- 1. L&I CODE 2. NATIONAL ELECTRICAL CODE
- 3. INTERNATIONAL BUILDING CODE
- 4. OSHA
- 5. LOCAL JURISDICTIONAL CODES 2.03 PANELBOARDS
- A. INSTALL NEW PANELBOARDS AS DETAILED ON THE DRAWINGS COMPLETE WITH REQUIRED CIRCUIT
- B. CIRCUIT BREAKERS SHALL BE: QUICK MAKE, QUICK BREAK, THERMAL MAGNETIC, TRIP INDICATION, AIC
- RATING. AMPACITY AS REQUIRED. C. DETAILS OF THE PANELBOARDS AND BRANCH CIRCUIT BREAKERS SHALL BE AS INDICATED ON THE
- DRAWING PANEL SCHEDULES. 2.04 LIGHTING
- A. THE CONTRACTOR SHALL PROVIDE ALL LIGHTING FIXTURES, POLES AND ACCESSORIES IN CONFORMANCE
- WITH THE FIXTURE SCHEDULE. B. FURNISH PHOTOCELL(S), TIME CLOCK(S), AND CONTACTOR(S) AS REQUIRED FOR SITE LIGHTING CONTROL.
- 2.05 WIRING DEVICES A. FURNISH AND INSTALL QUALITY DEVICES BEARING UL LABEL FOR THE SERVICE AND ELECTRICAL RATING
- WHERE USED.
- B. SWITCHES SHALL BE 20 AMPERE, 120/277 VOLT A.C. RATED AS SCHEDULED IN LEGEND.
- C. GFCI RECEPTACLES SHALL BE 20 AMPERE DUPLEX, UNLESS NOTED OTHERWISE. 2.06 RACEWAYS
- A. ALL BRANCH CIRCUIT WIRING SHALL BE IN RIGID GALVANIZED CONDUIT WHERE EXPOSED TO DAMAGE AND
- TO THE PUBLIC. E.M.T. MAY BE USED WITHIN BUILDING INTERIORS, UNLESS CONDUIT IS EXPOSED TO
- B. WHERE FLEXIBLE CONNECTIONS ARE NECESSARY PROVIDE F.M.C., NO LONGER THAN 6 FEET LONG. PROVIDE LIQUID-TIGHT F.M.C. IN WET LOCATIONS.
- C. ALL RACEWAYS SHALL BE 1/2" MINIMUM SIZE, UNLESS OTHERWISE NOTED.
- 2.07 OUTLET AND JUNCTION BOXES
- A. OUTLET BOXES FOR CEILING FIXTURES SHALL BE 4" OCTAGONAL GALVANIZED STEEL BOXES NOT LESS THAN 2-1/2" DEEP.
- B. CONCEALED OUTLET BOX(ES) FOR WALL-MOUNTED EQUIPMENT, SWITCH(ES), OR RECEPTACLE(S) SHALL BE A 4" SQUARE GALVANIZED STEEL BOX WITH RAISED COVER OF SUFFICIENT DEPTH TO ACCOMMODATE WALL SURFACE MATERIAL, UNLESS NOTED OTHERWISE
- C. EXPOSED OUTLET BOX(ES) IN DRY LOCATIONS FOR EQUIPMENT, SWITCHES, OR RECEPTACLES SHALL BE A 4" SQUARE GALVANIZED STEEL BOX WITH GALVANIZED STEEL COVER, UNLESS NOTED OTHERWISE.
- 2.08 WIRES AND CABLES A. PROVIDE AND INSTALL ALL WIRING AND CABLE AS REQUIRED TO CONNECT ALL ELECTRICAL EQUIPMENT AND DEVICES INDICATED ON THE PLANS.
- B. ALL WIRES #10 AWG AND SMALLER SHALL BE SOLID COPPER, 75 DEGREE C, AND 600 VOLT INSULATION, TYPE THWN.
- C. ALL WIRES #8 AWG AND LARGER SHALL BE STRANDED COPPER, 75 DEGREE C, AND 600 VOLT INSULATION,
- D. LIGHTING FIXTURE WIRES SHALL NOT BE LESS THAN #14 AWG, SFF-2. E. CONTROL WIRING SHALL NOT BE LESS THAN #14 AWG, THWN.
- F. UNLESS INDICATED OTHERWISE ALL LIGHTING AND POWER CONDUCTORS SHALL BE #12 AWG, THWN.
- PART 3 EXECUTION 3.01 WORKMANSHIP
- A. ALL WORK SHALL BE INSTALLED: IN ACCORDANCE WITH NECA 1 IN STRICT ACCORDANCE WITH THE
- RESPECTIVE MANUFACTURER'S PUBLISHED INSTRUCTIONS.
- 3.02 TEMPORARY LIGHTING AND POWER
- A. FURNISH AND INSTALL TEMPORARY LIGHTING & POWER AS MAY BE REQUIRED BY ALL TRADES

3.03 SUPPORTS

- A. PROVIDE ALL MATERIALS AND LABOR REQUIRED TO ADEQUATELY SUPPORT AND BRACE EQUIPMENT AND FIXTURES FURNISHED AS PART OF THIS WORK.
- ALL RACEWAYS, BOXES, ETC., SHALL BE SUPPORTED DIRECTLY FROM THE STRUCTURE, INDEPENDENT OF
- DUCT, PIPING OR OTHER WORK.
- C. ALL CONDUITS SHALL BE SECURELY AND INDEPENDENTLY SUPPORTED SO THAT NO TENSION WILL BE TRANSMITTED TO OUTLET BOX AND PULL BOX SUPPORTS, ETC.
- 3.04 BRANCH CIRCUITS
- A. PROVIDE ALL CONDUITS, OUTLETS, BOXES, WIRES, SWITCHES, RECEPTACLES, ETC., FOR A COMPLETE ELECTRICAL SYSTEM AS SHOWN ON THE DRAWINGS.
- B. CONTRACTOR SHALL REVIEW AND ACKNOWLEDGE THE MECHANICAL DRAWINGS AND SPECIFICATIONS TO CONFIRM THE EXTENT OF POWER AND CONTROL WIRING TO BE PROVIDED. CONTROL WIRING SHALL BE THE RESPONSIBILITY OF OTHERS.
- C. CONTRACTOR SHALL ENSURE ALL PHASES ARE BALANCED WITHIN 15% OF EACH OTHER.

- A. THE ELECTRICAL SYSTEMS SHALL BE COMPLETELY AND EFFECTIVELY GROUNDED AS REQUIRED BY THE NATIONAL ELECTRICAL CODE. ALL GROUND SYSTEMS AND CONNECTIONS SHALL BE MECHANICALLY
- SECURE AND ELECTRICALLY CONTINUOUS.

OR ADJUSTED BY THE CONTRACTOR.

- 3.06 LOCATION OF RECEPTACLES AND EQUIPMENT A. THE PLANS SHOW CONDITIONS AS ACCURATELY AS POSSIBLE BUT DO NOT NECESSARILY SHOW ALL THE FITTINGS, ETC., NECESSARY TO SUIT BUILDING CONDITIONS. LOCATIONS OF RECEPTACLES, EQUIPMENT, ETC., ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFIRMING THE PROPER
- LOCATIONS IN ORDER TO COORDINATE WITH DETAILS FROM ARCHITECTURAL DRAWINGS. B. THE OWNER OR ARCHITECT RESERVE THE RIGHT TO CHANGE LOCATION OF RECEPTACLES AND EQUIPMENT WITHIN A DISTANCE OF THREE FEET FROM LOCATION SHOWN AT NO ADDITIONAL COST TO THE
- OWNER. C. UNLESS NOTED OTHERWISE ON THE DRAWINGS, ALL DEVICES SHALL BE MOUNTED AT A STANDARD HEIGHT
- D. THE CONTRACTOR SHALL COORDINATE THE LOCATION OF ELECTRICAL EQUIPMENT WITH THE WORK OF OTHERS.
- E. VERIFY ALL DOOR SWINGS BEFORE ROUGHING IN FOR SWITCHES. F. ALL ELECTRICAL INSTALLATIONS IN AREAS OF NEW CONSTRUCTION SHALL BE FLUSH MOUNTED. ELECTRICAL EQUIPMENT IS NOT TO BE SURFACE MOUNTED WITHOUT THE APPROVAL OF THE ENGINEER OR

ARCHITECT, WITH THE EXCEPTION OF SURFACE MOUNTED LIGHTING FIXTURES, UNLESS NOTED

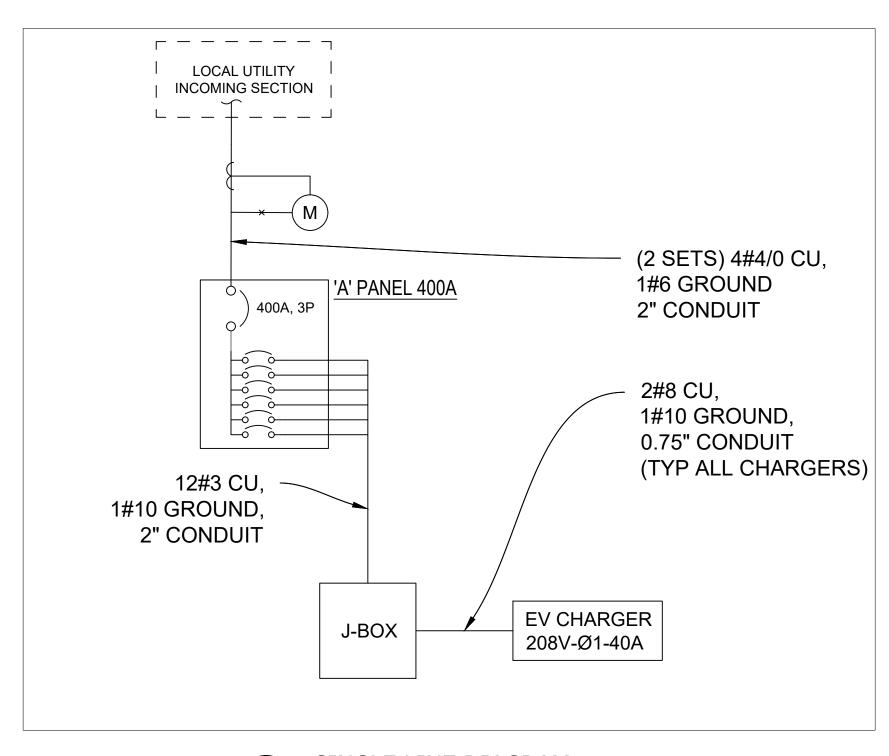
- OTHERWISE.
- 3.07 CLEANING AND REMOVAL OF RUBBISH A. CONTRACTOR SHALL KEEP THE PREMISES FREE OF ALL WASTE, SURPLUS MATERIALS, RUBBISH OR DEBRIS
- GENERATED BY HIS CREW. B. RUBBISH SHALL BE PLACED IN DUMPSTERS DAILY.
- C. AFTER ALL EQUIPMENT AND DEVICES HAVE BEEN INSTALLED, REMOVE ALL TEMPORARY LABELS, STICKERS, STAINS, TEMPORARY COVERS, ETC.

EV CHARGER MAXIMUM CABLE RUN LENGTHS WITH 3% VOLTAGE DROP CONDUCTOR SIZE (Cu) MAXIMUM DISTANCE (FT) 107 168 261 3 323

* INCREASE WIRE AND CONDUIT SIZE AS NEEDED TO COMPLY WITH MAXIMUM CABLE RUN LENGTHS AS PRESENTED IN THE TABLE ABOVE.

* REMOVE AND REPLACE ALL EXISTING EQUIPMENT WITH EQUIPMENT DETAILED IN THIS PACKAGE. EQUIPMENT NOT INCLUDED HERE SHALL BE REPLACED WITH LIKE EQUIPMENT IF DAMAGED.

PANEL A										
VOLTAGE:		120/208	TRAL BUS	FULL		BUS	AMPS:	400 A		
PANEL TYPE:		NEMA-3R GROUND BUS:FULL					MINIMUM A.I.		22,000 A	
MOUNTING:		SURFACE			XFMR		MAIN		400 A DC	
LOAD		BRKR	CKT		DAD PER		CKT	BRKR		LOAD
TYPE	CIRCUIT DESCRIPTION	SIZE	NO.	Α	В	С	NO.	SIZE	CIRCUIT DESCRIPTION	TYPE
С	EV CHARGER 1	40/2	1	3,850 3,850			2	40/2	EV CHARGER 2	С
С	EV CHARGER 1	40/2	3		3,850 3,850		4	40/2	EV CHARGER 2	C
С	EV CHARGER 3	40.40	5		•	3,850 3,850		10.10	EV CHARGER 4	С
С	EV CHARGER 3	40/2	7	3,850 3,850		, , , , , , , , , , , , , , , , , , , ,	8	40/2	EV CHARGER 4	С
С	EV CHARGER 5		9	3,555	3,850 3,850		10		EV CHARGER 6	С
С	EV CHARGER 5	40/2	11	<u> </u>	0,000	3,850 3,850		40/2	EV CHARGER 6	С
	SPACE		13			0,000	14		SPACE	
	SPACE		15				16		SPACE	
	SPACE		17				18		SPACE	
	SPACE		19				20		SPACE	
	SPACE		21				22		SPACE	
	SPACE		23				24		SPACE	
	SPACE		25				26		SPACE	
	SPACE		27				28		SPACE	
	SPACE		29				30		SPACE	
CONNECTED LOADS			15 400	15,400	15 400		-S:	OI AUL		
"C" CONTINUOUS AND LIGHTING LOAD (25%)					3,850	3,850			AMEND EXISITNG ELECTRI	[CAL
"M" 25% OF LARGEST MOTOR				0	0	0	1	•		
SUBTOTALS PER PHASE				19,250 19,250 19,250			1			
SUBTOTAL				57,750]			
"R" RECEPTACLE DEMAND PER 220-44				0]			
"K" KITCHEN LOAD PER 220-56				0						
CODE VOLT-AMPERES				57,750						
	CODE LOAD AMPS	160.3								



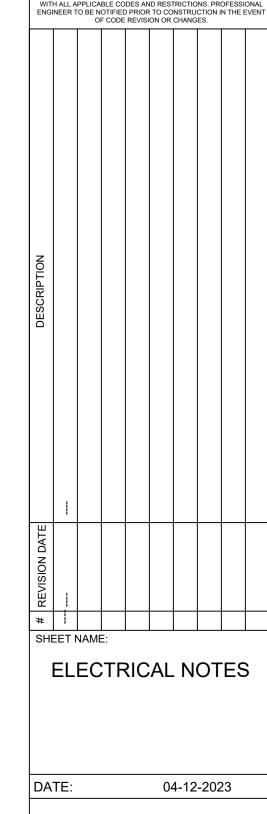




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Dr. Al Gonzalez P.E.

DOTec Engineering 424 Jefferson Street St. Charles, MO 63301 Ph 636-724-9872 Fx 636-724-9032 WWW.DOTECENGINEERING.COM ALG@DOTECENGINEERING.COM THE PROFESSIONAL ENGINEER WAIVES ANY AND ALL RESPONSIBILITY
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