

## GENERAL NOTES

- THE ELECTRICAL DRAWINGS, SPECIFICATIONS AND GENERAL NOTES DESCRIBE THE RECOMMENDED SCOPE OF WORK AND THE DOCUMENTS SHALL BE USED FOR THE PURPOSE OF BIDDING, BUILDING DEPARTMENT REVIEW, AND TO SECURE THE NECESSARY CONSTRUCTION PERMIT ONLY. CONTRACTOR SHALL PROVIDE CONSTRUCTION DRAWINGS AND OBTAIN WRITTEN APPROVAL OF ALL INSPECTION AUTHORIZED GOVERNMENTAL AGENCIES AND UTILITY COMPANIES PRIOR TO START OF AFFECTED WORK.
- CONTRACTOR SHALL PROVIDE CONSTRUCTION AND SHOP DRAWINGS BASED ON THESE DRAWINGS. PROVIDE CONSTRUCTION DRAWINGS TO ALL GOVERNMENTAL AGENCIES AND UTILITY COMPANIES HAVING JURISDICTION INCLUDING POLICE AND FIRE DEPARTMENT FOR THEIR REVIEW AND APPROVAL FOR CONSTRUCTION.
- CONTRACTOR'S BID SHALL NOT BE LIMITED TO THE WORK SHOWN ON THE PLANS AND SPECIFIC-TIONS, ALL PREMIUM OVERTIME COSTS, UTILITY CHARGES, COST FOR TEMPORARY UTILITY SERVICES, ALTERATION, DEMOLITION AND EXTENSIONWORKS, PLANCHHECK/INSPECTION FEES, MISCELLANEOUS CONTINGENCY COSTS, ETC., SHALL BE INCLUDED IN THE BID.(THE CONTINGENCY COST SHALL NOT BE LESS THAN 25% OF OVERALL ELECTRICAL BID.
- ALL EQUIPMENT SHOWN IS NEW, CONTRACTOR FURNISHED AND INSTALLED, UNLESS OTHERWISE NOTED. IF CONTRACTOR PROPOSED TO SUBSTITUTE FOR EQUIPMENT SPECIFIED, HE SHALL SUBMIT HIS REQUEST FOR CONSIDERATION TO THE OWNER AND ENGINEER PRIOR TO THE BID IN WRITING. ALL SUBSTITUTIONS MUST BE REVIEWED BY THE ENGINEER. SHOP REVIEW SHALL NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH THE REQUIREMENTS OF ALL APPLICABLE CODES. ANY PROPOSED SUBSTITUTIONS WHICH BEYOND THE PARTS OF THE DRAWINGS OR ANY CHANGES IN THE FIELD, WHICH AFFECT THE PROPOSED SUBSTITUTIONS WHICH BEYOND THE PARTS OF THE DRAWINGS OR SUBSTITUTIONS WHICH AFFECT OTHER PARTS OF HIS OWN WORK OR THE WORK OF OTHER CONTRACTORS.
- THE ELECTRICAL DRAWINGS, CONDUIT RUNS, WIRINGS AND ELECTRICAL INSTALLATIONS ARE DIA-GRAMMATIC ONLY. DO NOT SCALE THE ELECTRICAL DRAWINGS TO DETERMINE THE LOCATION OF EQUIPMENT OR OUTLETS.
- REFER TO THE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATIONS OF ALL LIGHTING FIXTURES, CEILING MOUNTED OUTLETS AND EQUIPMENTS.
- ALL RECEPTACES AND OUTLETS MOUNTING HEIGHTS AND EXACT LOCATION SHALL BE COOR-DINATED WITH ARCHITECTURAL DRAWINGS ELEVATIONS PRIOR TO ROUGH-IN WORK.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY TYPES OF CEILING SYSTEM AND TO FURNISH AND INSTALL ALL NECESSARY MOUNTING HARDWARE AND ACCESSORIES. FIXTURES LOCATED IN DAMP OR WET LOCATIONS SHALL BE LABELED FOR USE IN SUCH LOCATIONS.
- ALL RECESSED LIGHTING FIXTURES, PANELBOARDS, SWITCHES, ETC., MOUNTED IN FIRE RATED STRUCTURES SHALL BE ENCASED WITH AN APPROVED ENCLOSURE CARRYING THE SAME FIRE RATING AS THE STRUCTURE.
- POSITIONS OF THE CEILING SYSTEMS MAY BE INACCESSIBLE. THEREFORE, THE CONTRACTOR SHALL STRATEGICALLY LOCATE ACCESS BOXES, ETC., WHICH SHALL BE READILY ACCESSIBLE. ALL LIGHTING FIXTURE WIRING, BALLASTS, J-BOXES, ETC. SHALL BE ACCESSIBLE FROM FIXTURE OPENING.
- ALL WIRING AND ELECTRICAL EQUIPMENT INSTALLED FOR MECHANICAL AND PLUMBING EQUIPMENT SHALL BE IN ACCORDANCE WITH THE MECHANICAL AND PLUMBING CONTRACT DOCUMENTS.
- ALL FINAL CONNECTIONS TO OWNER FURNISHED EQUIPMENT SHALL BE MADE BY THE CONTRACTOR UNLESS OTHERWISE NOTED. VERIFY ELECTRICAL CHARACTERISTICS AND ULL LISTING PRIOR TO CONNECTION.
- THE CONTRACTOR SHALL VERIFY THE LOAD INPUT VOLTAGE OF ALL EQUIPMENT PRIOR TO INSTALLATION. ACCEPTING ANY EQUIPMENT RESULT IN LOAD INCREASE SHALL BE THE RESPONSIBILITY OF CONTRACTOR.
- ELECTRICAL OUTLETS ON OPPOSITE SIDES OF FIRE RATED WALLS AND PARTITIONS MUST BE SEPARATED BY DISTANCE OF 24 IN HORIZONTAL, IN ACCORDANCE WITH I.B.C. SEC. 711.3.2. OPENINGS IN FIRE RATED WALLS GREATER THAN 18 SQ. IN. MUST BE FIRE STOPPED.
- PROVIDE AN ADDITIONAL JUNCTION BOX (SIZE AS REQUIRED) WHERE THE NUMBER OF CONDUCTORS EXCEEDS THE MAXIMUM ALLOWED FOR A GIVEN JUNCTION POINT OR OUTLET.
- CONDUCTORS SHALL BE COPPER THHN/THWN 600 VOLT INSULATION UNLESS OTHERWISE NOTED. USE PROPER THUNDERBOLT PROTECTIVE DEVICES AND WIRING METHODS TO PROTECT CONDUCTORS FROM OVERCURRENT CORRECTION FACTORS AS INDICATED IN NEC TABLE 310 AND ELSEWHERE IN CODE.
- DO ALL DRILLING, CUTTING, CHANNELING AS REQUIRED TO ELECTRICAL WORK AND INDICATED OR SPECIFIED. ALL HOLES, CURBS, ETC., IN FLOORS, CEILINGS AND WALLS SHALL BE PATCHED, UNLESS INDICATED OTHERWISE. PAINT ALL EXPOSED ELECTRICAL RACEWAYS, CABINETS, ENCLOSURES AND FITTING TO MATCH IN COLOR ADJACENT SURFACES IN FINISHED AREAS.
- SEAL ALL PENETRATIONS THROUGH FIRE RATED WALLS, CEILINGS, FLOORS, ETC., TO MAINTAIN THE FIRE RATING. FURNISH AND INSTALL FIRE RATED ENCLOSURE FOR ALL EQUIPMENTS PENETRATING INTO FIRE RATED ENVELOPS, SPACES ETC.
- EMERGENCY LIGHTING SHALL BE PROVIDED PER U.B.C. AND SHALL BE DESIGN TO PROVIDE MINIMUM REQUIRE FOOTCANDLES AND LUMENS. PROVIDE ADDITIONAL EMERGENCY ILLUMINATION AS REQUIRED BY INSPECTION AUTHORITIES HAVING JURISDICTIONS.
- ALL ELECTRICAL EQUIPMENT SHALL BE BRACED OR ANCHORED TO RESIST A HORIZONTAL FORCE ACTING IN ANY DIRECTION USING THE FOLLOWING CRITERIA. (NON HEALTH CARE FACILITY INCLUDE)
 

HEALTH CARE FACILITY)	33% OF OPERATING WEIGHT
FIXED EQUIPMENT ON GRADE	50% OF OPERATING WEIGHT
EMERGENCY POWER AND COMMUNICATION EQUIPMENT ON GRADE	50% OF OPERATING WEIGHT
FLEXIBLE MOUNTED EQUIPMENT USE 2 X THE ABOVE VALUES. SIMULTANEOUS VERTICAL FORCE - USE 1/3 X HORIZONTAL FORCE.	
- BRANCH CONTROL, CIRCUITING AND WIRE COUNT MAY NOT BE INDICATED ON THESE PLANS. CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL NECESSARY INFORMATION FROM PLANNING, ARCHITECTURAL AND AS REQUIRED BY AUTHORITY. CONTRACTOR SHALL SUBMIT AS-BUILT DRAWINGS AS A PART OF RECORD DRAWING SUBMITTAL TO ARCHITECT AND AUTHORITY HAVING JURISDICTION (AHJ).
- ALL EXISTING UTILITIES OR STRUCTURES REPORTED BY THE OWNER OR OTHERS AND THOSE SHOWN ON THESE DRAWINGS ARE INDICATED WITH THEIR APPROXIMATE LOCATION AND EXTENT BY ACCEPTING THESE PLANS OR PROCEEDING WITH IMPROVEMENTS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT EXISTING UTILITIES AND STRUCTURES. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY THE OWNERS OF THE UTILITIES OR STRUCTURES CONCERNED BEFORE STARTING WORK ON THE UTILITIES OR STRUCTURE.
- COORDINATE ALL PHASES OF CONSTRUCTION AND OBTAIN APPROVAL OF WORK SCHEDULE, SHUTDOWN, CLOSURE, OPENING WORK, ETC. WITH BUILDING ENGINEER OR OWNER. PROVIDE ALL TEMPORARY SERVICE, STAIRWAY CONSTRUCTION WORK. PROVIDE THE WATCH, ETC. AS REQUIRED TO MAINTAIN UNINTERRUPTED FACILITY OPERATION DURING CONSTRUCTION WORK.
- THE CONTRACTOR AGREE THAT IN ACCORDANCE WITH GENERALLY CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND HOLD OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH PERFORMANCE OF WORK ON THIS PROJECT.
- ELECTRICAL INSTALLATION SHALL COMPLY WITH NATIONAL ELECTRICAL CODE (20011 NEC) ADAPTED BY THE JURISDICTION AND ANY LOCAL SUPPLEMENT.
- ELECTRICAL EQUIPMENT SHALL BE LISTED BY A CITY OF LOS ANGELES RECOGNIZED ELECTRICAL TESTING LABORATORY OR APPROVED BY THE DEPARTMENT.
- NO PIPING, DUCTS OR EQUIPMENT FOREIGN TO ELECTRICAL EQUIPMENT SHALL BE PERMITTED TO BE LOCATED WITHIN THE DEDICATED SPACE ABOVE THE ELECTRICAL EQUIPMENT PER NEC 110.26
- THE LIGHTING CONTROL DEVICES AND EQUIPMENT SHALL BE CERTIFIED BY THE CALIFORNIA ENERGY COMMISSION.
- PER NEC 210.12, ALL BRANCH CIRCUITS THAT SUPPLY 125-VOLT, SINGLE-PHASE, 15- AND 20-AMPERE OUTLETS INSTALLED IN DWELLING UNIT BEDROOMS SHALL BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTER LISTED TO PROVIDE PROTECTION OF THE ENTIRE BRANCH CIRCUIT IN DWELLING UNIT BEDROOMS.
- PER NEC 406.12, ALL AREAS SPECIFIED IN 210.52, ALL NON-LOCK TYPE 125V, 15A AND 20A RECEPTACLES SHALL BE LISTED TAMPER RESISTANCE RECEPTACLES

## SYMBOLS AND NOTES

- EMERGENCY LIGHT WITH 90 MINUTE BATTERY PACK  
SHADOWED OUTLET INDICATE FIXTURE WITH 90 MINUTE BATTERY PACK  
SELF CONTAINED EXIT SIGN WITH 90 MINUTES BATTERY BACKUP. PROVIDE LOW LEVEL EXIT SIGN AS REQUIRED BY THE DEPARTMENT OR U.B.C.
- NOTES:
- FIXTURE TYPE TO BE SELECTED BY ARCHITECT
  - FIXTURE SHALL HAVE MINIMUM 3 LUMENS/WATT EFFICIENCY REQUIRED BY CALIFORNIA ENERGY COMMISSION (C.E.C.)
  - CALIFORNIA ENERGY COMMISSION (C.E.C.)
1. SINGLE POLE TORQUE SWITCH 20 AMP, 120 V \_\_\_\_\_ HEIGHT AS REQUIRED BETWEEN 48" - 60" AFF
2. THREE WAY SWITCH 20 AMP, 120 V \_\_\_\_\_ HEIGHT AS REQUIRED BETWEEN 48" - 60" AFF
3. FOUR WAY SWITCH 20 AMP, 120 V \_\_\_\_\_ HEIGHT AS REQUIRED BETWEEN 48" - 60" AFF
4. DIMMER SWITCH 1800 WATTS, 15 AMP MINIMUM, 120 V \_\_\_\_\_ HEIGHT AS REQUIRED BETWEEN 48" - 60" AFF
5. MOTOR RATED SWITCH H.P. RATED \_\_\_\_\_ HEIGHT AS REQUIRED BETWEEN 48" - 60" AFF
6. SINGLE RECEPTACLE, NEMA RATING AS NOTED \_\_\_\_\_ HEIGHT AS REQUIRED BETWEEN 48" - 60" AFF
7. DUPLEX RECEPTACLE 20 AMP, 120 V GROUNDING TYPE \_\_\_\_\_ HEIGHT AS REQUIRED BETWEEN 48" - 60" AFF
8. DOUBLE DUPLEX RECEPTACLE 20 AMP GROUNDING TYPE \_\_\_\_\_ HEIGHT AS REQUIRED BETWEEN 48" - 60" AFF
9. DUPLEX RECEPTACLE 20 AMP, 220 V GROUNDING TYPE \_\_\_\_\_ HEIGHT AS REQUIRED BETWEEN 48" - 60" AFF
10. CEILING MOUNTED DUPLEX RECEPTACLE SAME AS ABOVE \_\_\_\_\_ HEIGHT AS REQUIRED BETWEEN 48" - 60" AFF
11. REFER TO ARCHITECTURAL FOR EXACT LOCATION
12. P.O.S. DATA OUTLET TO DATA TERMINAL AND PRODUCT ISLAND
13. TELEPHONE OUTLET WITH 3/4" CONDUIT TO TEL. BACKBOARD
14. P.O.S. DATA OUTLET WITH 3/4" CONDUIT TO DATA TERMINAL
15. TELEPHONE OUTLET WITH 3/4" CONDUIT TO TELEPHONE BACKBOARD
16. FLOOR TYPE DUPLEX RECEPTACLE 20A GROUNDING TYPE \_\_\_\_\_ HEIGHT AS REQUIRED BETWEEN 48" - 60" AFF
17. CLOSED CIRCUIT TELEVISION ANTENNA OUTLET \_\_\_\_\_ HEIGHT AS REQUIRED BETWEEN 48" - 60" AFF
18. MOTOR OR CEILING EXHAUST FAN \_\_\_\_\_ HEIGHT AS REQUIRED BETWEEN 48" - 60" AFF
19. JUNCTION BOX TO SUIT THE FIELD CONDITIONS \_\_\_\_\_ HEIGHT AS REQUIRED BETWEEN 48" - 60" AFF
20. EXHAUST AIR REGISTER \_\_\_\_\_ HEIGHT AS REQUIRED BETWEEN 48" - 60" AFF
21. OCCUPANCY SENSOR \_\_\_\_\_ HEIGHT AS REQUIRED BETWEEN 48" - 60" AFF
22. CARBON MONOXIDE DETECTOR \_\_\_\_\_ HEIGHT AS REQUIRED BETWEEN 48" - 60" AFF
23. SMOKE DETECTOR \_\_\_\_\_ HEIGHT AS REQUIRED BETWEEN 48" - 60" AFF

NOTES: 1. SUBSCRIPT LETTER NEXT TO THE ABOVE SYMBOLS INDICATES DEVICE CONTROLLED

2. DEVICES AND COVER PLATE COLOR AS SELECTED BY ARCHITECT. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF OUTLET. UNLESS NOTED

3. RECEPTACLES IN BATHROOM, LAUNDRY ROOM, AND KITCHEN SHALL HAVE GROUND FAULT TYPE (GFI) BREAKER

EMERGENCY CIRCUIT. LOCK ON DEVICE FOR BREAKER SERVING BREAKER

SWITCH AND FUSES

DISCONNECT SWITCH

COMBINATION MAGNETIC STARTER & FUSED DISCONNECT

PUSHBUTTON OPERATOR FOR ELECTRIC DOOR

TELEPHONE CABINET WITH BACK BOARD

0-2 HR. MANUAL BY-PASS TIMER FOR LIG. ZONE CONTROL. PROVIDE AS REQUIRED BY C.E.C. FOR ELECTRIC METERS SPACE OF GREATER THAN 5000 S.F.

NOTES: 1. BREAKERS, SWITCHES, FUSES, METER SOCKETS, AND CURRENT CARRYING DEVICES SHALL BE DESIGNED TO WITHSTAND MAXIMUM AVAILABLE FAULT CURRENT AND SHORT CIRCUIT CURRENT. SWITCHBOARDS BUSBARS SHALL BE BRACED TO WITHSTAND MAXIMUM AVAILABLE FAULT CURRENT

2. CONDUIT RUN CONCEALED IN CEILING SPACE OR IN WALL

3. CONDUIT RUN BELOW FLOORS OR IN GRADE

4. HASH MARKS INDICATE QUANTITY OF CONDUCTORS. NO HASH MARK INDICATES ONE CONDUCTOR. NUMBER OF CONDUCTORS #10 AND TABLE 3A AND 3B SHALL BE BASED ON TABLE 1, CHAPTER 9 OF N.E.C. AND TABLE 3A AND 3B SHALL DETERMINE THE CONDUIT SIZES. MINIMUM CONDUIT SIZE SHALL BE 3/4".

5. TELEPHONE ANTENNA CABLES IN CONDUIT

6. TELEVISION ANTENNA CABLES IN CONDUIT

7. DATA/COMMUNICATION CABLES IN CONDUIT

8. ALL CONDUIT SHALL BE RIGID STEEL OR EMT. FLEXIBLE CONDUIT SHALL BE USED ONLY FOR UNDERGROUND INSTALLATION. CONDUIT SHALL BE USED ONLY FOR UNDERGROUND RE-ENTRY CONDUIT AS REQUIRED TO INCLUDE GROUNDING CONDUCTOR.

9. CONTRACTOR MAY USE NON METALLIC-SHEATHED CABLES WIRING METHOD (NMC) AND (NMC) FOR WIRING WITHIN THE RESIDENTIAL DWELLING UNIT IF PERMITTED BY AN INSPECTION AUTHORITY HAVING JURISDICTION.

10. TELEPHONE AND TELEVISION CABLES MAY BE PREWIRED BY LOCAL TEL./COWM/CABLE TV. COMPANY.

11. 20 AMP MECHANICALLY HELD (TWO WIRES CONTROL) RELAY CONTROLLING CKT. INDICATED WITH PROGRAMMABLE TIME SWITCH CONTROLLING COIL. ASSIGN CONTROL CHANNEL AND DURATION.

12. NIGHT LIGHT CONTROLLED BY TIME SWITCH DUSK TO DAWN EXTERIOR SECURITY LIGHTING CIRCUIT EVENING LIGHT CONTROLLED BY TIME SWITCH DUSK TO BUSINESS CLOSING TIME EXTENSION LIGHTING CIRCUIT INTERIOR EMERGENCY OR 24/7 LIGHTING ON CONSTANT CIRCUIT, OR DEDICATED CIRCUIT.

13. EMERGENCY LIGHT, WITH 90MIN BATTERY BACK UP

14. EXISTING

15. UNLESS OTHERWISE NOTED

16. GROUND FAULT INTERRUPTER

17. ARC FAULT CIRCUIT INTERRUPTER

18. DEDICATED CIRCUIT

19. INDICATES MOUNTING HEIGHT FROM FINISHED FLOOR TO CENTER OF DEVICE

20. +12"

21. -1"

22. -2"

23. -3"

24. -4"

25. -5"

26. -6"

27. -7"

28. -8"

29. -9"

30. -10"

31. -11"

32. -12"

33. -13"

34. -14"

35. -15"

36. -16"

37. -17"

38. -18"

39. -19"

40. -20"

41. -21"

42. -22"

43. -23"

44. -24"

45. -25"

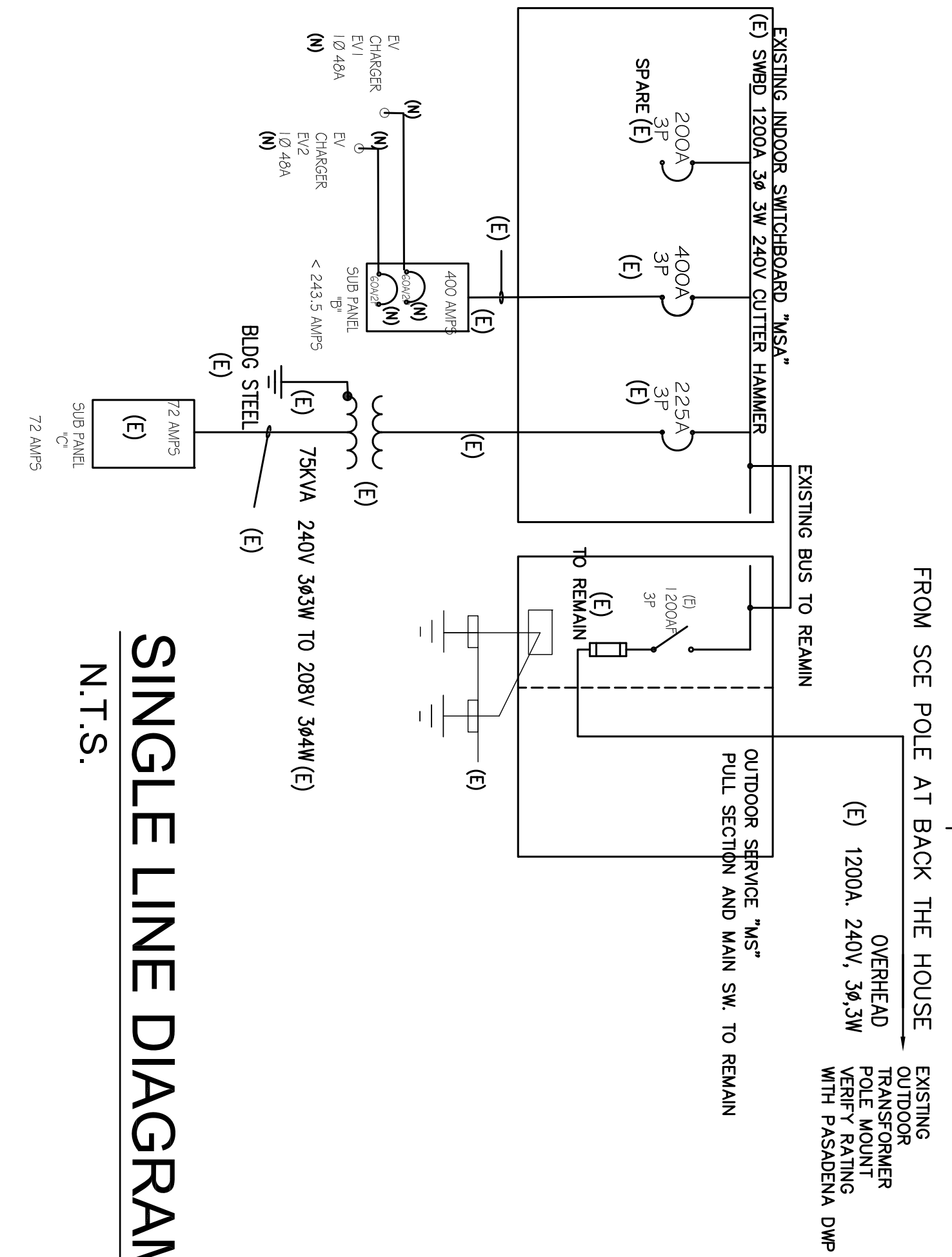
46. -26"

47. -27"

48. -28"

49. -29"

PANEL LOAD SUMMARY				
TOTAL SCOPE AREA = WAREHOUSE AREA (10050 ) SQFT				
TOTAL LOADS FOR	SQUARE FT	CONNECT LOAD (W)	NEC LOAD FACTOR	DEMAND LOAD (W)
16555 SQFT	30150	-	=30150*125%	37688
LIGHTING CONNECTED LOAD	1200	-	125%	1500
SIGN CONNECTED LOAD	10050	-	100%	10050
RECEPTACLE NEC220,114 1W/SF	150750	-	100%	150750
HVAC LOAD 15W/SQFT	20000	-	75%	15000
PROCESS LOAD(TABLE E3-1)	23000	-	100%	23000
NEC 430.22 (FUTURE MACHINE)	-	-	-	-
(M) EV CHARGER X 2 11.5KW/EA	-	-	-	-
25% LARGEST MOTOR (HVAC)	-	-	-	-
TOTAL WATTS	81600	24183	25%	2573
TOTAL AMPS @ 240V 3ø 3W	336	100.76		107.25
CONCLUSION: SAFE				
TOTAL FEEDER DEMAND LOAD 579 AMPS WITHIN MAIN BREAKER 1200 AMPS SAFETY RANGE				



## SINGLE LINE DIAGRAM

N.T.S.

## SHEET INDEX

SHEET NUMBER	TITLE
E-1	GENERAL NOTES & SINGLE LINE DIAGRAM
E-2	SITE PLAN

## NOTICE

THESE DRAWINGS ARE MADE BY THE OWNER'S REQUEST WHICH MAY HAVE INCORRECT INFORMATION. THE DRAWINGS ARE DIAGNOSTIC ONLY, AND THE OWNER AND DESIGNER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND AUTHORITY HAVING JURISDICTION (AHJ). BY THE ACT OF SUBMITTING A BID PROPOSAL FOR WORK, THE CONTRACTOR HAS REVIEWED THE PLANS THOROUGHLY AND ACCEPTS FULL RESPONSIBILITY OF PLAN CORRECTIONS AND CONSTRUCTION COSTS REQUIRED BY AHJ.

## WORK SCOPE

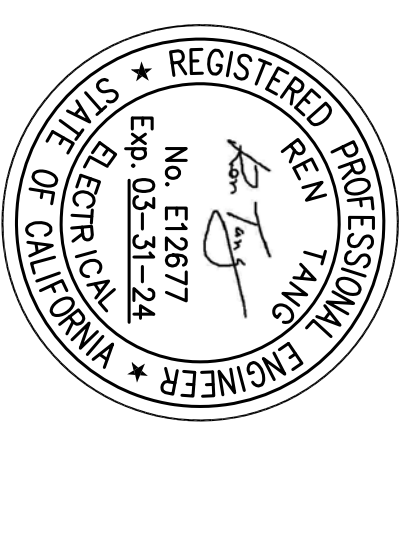
THE PURPOSE OF THIS SUBMITTAL IS TO ADD TWO EV CHARGERS TO THE EXISTING ELECTRICAL SYSTEM. THE SPEC. OF EV CHARGER IS LISTED ON SHEET E2. A LICENSE C10 CONTRACTOR TO INSTALL THE SPECIFIED EV CHARGER

3354 E. COLORADO BOULEVARD  
PASADENA, CA 91107  
(626)440-1688

ACE HARDWARE  
60 & 62 N. SIERRA MADRE  
PASADENA, CA

## ISSUES & REVISIONS

SHEET TITLE  
GENERAL NOTE  
SINGLE LINE



PROJECT NUMBER  
DRAWN BY  
SHEET NUMBER

E-1

MEP22015



