

GENERAL NOTES

1. MINIMUM WIRE SIZE FOR LINE VOLTAGE WIRING SHALL BE #12, UNLESS NOTED AS LARGER.
2. ALL CONDUIT SIZES SHALL CONFORM TO THE CALIFORNIA ELECTRICAL CODE (CEC) 2013 EDITION.
3. SUBSCRIPTS, a,b,c ETC., AT SWITCH SYMBOLS, ARE TO DISTINGUISH BETWEEN SWITCHES.
4. +46" INDICATES A MOUNTING HEIGHT FROM FINISHED FLOOR TO CENTER OF EQUIPMENT OR OUTLET PLATE.
5. M.H. INDICATES HEIGHT FROM FINISHED FLOOR TO BOTTOM OF FIXTURE.
6. REFER TO WIRING DIAGRAMS ON MECHANICAL DRAWINGS.
7. NOT ALL SYMBOLS SHOWN IN THE SYMBOL LIST ARE USED ON THIS PROJECT.
8. EVERY OUTLET HEIGHT SHALL BE VERIFIED ON EACH WALL WITH THE ARCHITECTURAL DRAWINGS KITCHEN/ REFRIGERATION EQUIPMENT SUPPLIERS AND CABINET SHOP DRAWINGS TO INSURE THE PROPER HEIGHT AND LOCATION WITH RESPECT TO CABINETS, EQUIPMENT, CHALKBOARDS, TACKBOARDS, ETC.
9. COORDINATE WITH ALL OTHER TRADES, IN ADVANCE OF CONSTRUCTION, THE CEILING AREAS IN WHICH RECESSED LIGHTING FIXTURES OCCURS. THIS SHALL INCLUDE PLUMBING, HEATING, AND VENTILATING, AIR CONDITIONING AND CARPENTRY. IN THE EVENT OF ANY CONFLICT, THE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY FOR INSTRUCTIONS.
10. SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF LIGHTING FIXTURES.
11. A GREEN INSULATED COPPER GROUNDING CONDUCTOR SHALL BE INSTALLED IN EACH AND EVERY CONDUIT AND SHALL BE CONNECTED TO EACH OUTLET, ENCLOSURE, DEVICE, FIXTURE, ETC. THROUGHOUT THE ENTIRE PROJECT. THE RACEWAYS SHALL NOT BE RELIED UPON FOR "EQUIPMENT GROUNDING".
12. **PANEL HOMERUN DESIGNATIONS:**
BA 1&3 = ONE THREE PHASE, 3-WIRE CIRCUIT, NO NEUTRAL TO A 3-POLE CIRCUIT BREAKER IN PANEL "BA".
BA 1&3 = ONE SINGLE PHASE, 2-WIRE CIRCUIT, NO NEUTRAL TO A 2-POLE CIRCUIT BREAKER IN PANEL "BA".
BA 1-3-5 = THREE SINGLE PHASE CIRCUITS WITH COMMON NEUTRAL TO A 3-POLE CIRCUIT BREAKER IN PANEL "BA" PER CEC 210.4.
BA 1-3 = TWO SINGLE PHASE CIRCUITS WITH COMMON NEUTRAL TO 2-POLE CIRCUIT BREAKER IN PANEL "BA" PER CEC 210.4.
BA 2,4,6 = THREE SINGLE PHASE CIRCUITS WITH SEPARATE NEUTRAL FOR EACH CIRCUIT TO 1-POLE CIRCUIT BREAKER IN PANEL "BA".
SEE DRAWINGS FOR ADDITIONAL VARIATIONS AND REQUIREMENTS
14. MULTIWIRE BRANCH CIRCUITS: PROVIDE A SEPARATE NEUTRAL FOR EACH PHASE CIRCUIT IN ALL MULTIWIRE BRANCH CIRCUIT.
15. GROUNDING SHALL BE EXECUTED IN ACCORDANCE WITH ALL APPLICABLE CODES. PROVIDE A 3/4" 1/8 GROUND TO THE GROUND BUS IN EACH PANEL PER NEC 517-14 FOR BONDING GROUNDING SYSTEM OF NORMAL AND EMERGENCY SYSTEM.
16. THE FACE PLATES OR DEVICE PLATES ON ALL POWER OUTLETS, RECEPTACLES, SWITCHES, DIMMERS, CIRCUIT BREAKERS AND JUNCTION BOXES. ENGRAVE COVER PLATE WITH 1/4" HIGH LETTERS WITH BLACK FILL TO INDICATE CIRCUIT NUMBER AND PANEL BOARD. e.g.: "1LL1 2" INDICATES PANEL "1LL1" CIRCUIT NUMBER 2. CIRCUITS ON EMERGENCY POWER SHALL RED FILL.
17. ELECTRICAL EQUIPMENT AND MATERIAL TO BE LISTED, LABELED, AND INSTALLED PER THE CEC, THE INSTALLATION STANDARDS/MANUFACTURER'S RECOMMENDATIONS AND, IF REQUIRED, A RECOGNIZED ELECTRICAL TESTING LABORATORY.

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













































































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MECHANICAL COORDINATION NOTES

1. PROVIDE CONDUIT ONLY FROM MECHANICAL UNITS TO RESPECTIVE CONTROL DEVICES (T-STAT., BY-PASS TIMER, ENERGY MANAGEMENT SYSTEM, ETC), COORDINATE LOCATIONS AND REQUIREMENTS WITH MECHANICAL CONTRACTOR/DRAWINGS, AND COMPLY.
2. REFER TO MECHANICAL DRAWINGS/CONTRACTOR FOR CONTROLS AND OTHER WORK REQUIRED BUT NOT SHOWN HERE, AND COMPLY. E.C. IS ALSO TO PROVIDE CONDUITS REQUIRED FOR LOW-VOLTAGE CONTROL WIRING (BY OTHERS).
3. FUSES FOR MECHANICAL EQUIPMENT ARE TO BE CLASS "RK-1", "BUSS" TYPE "LPN-RK" (208V), OR "LPS-RK" (480V) "LOW-PEAK". EQUIPMENT NAMEPLATE RATING SUPERCEDES DESIGN VALUES.
4. ALL MECHANICAL AND EQUIPMENT AND DISCONNECT SWITCHES TO BE MARKED.
5. ALL FLEX CONDUIT SHALL CARRY A COPPER BONDING WIRE, SIZED PER NEC TABLE 250-122.
6. ALL ROOF MOUNTED AND EXTERIOR EQUIPMENT SHALL BE RATED WEATHERPROOF (NEMA 3R).
7. CONTRACTOR IS TO PROVIDE ADEQUATE SUPPORT FOR ROOF-MOUNTED EQUIPMENT.
8. NO CONDUIT IS TO RUN ON ROOF FOR MORE THAN 4'-0". ALL OTHER CONDUIT IS TO RUN BELOW ROOF AND STUB THRU NEAR EQUIPMENT. VERIFY LOCATIONS OF ALL STUB-UPS WITH MECHANICAL DRAWINGS/CONTRACTOR PRIOR TO ROUGH-IN, AND COMPLY. ALL ELECTRICAL PENETRATIONS THRU ROOF SHALL BE FLASHED.
9. ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. (CEC 2013, SECTION 110.12)

ELECTRICAL SYMBOL LIST (NOT ALL SYMBOLS SHOWN APPLY TO THIS PROJECT)

	DUPLEX RECEPTACLE, +18" OR AS NOTED.		1'X4' FLUORESCENT LIGHT FIXTURE, RECESSED IN CEILING.
	SINGLE RECEPTACLE, +18" OR AS NOTED.		1'X4' FLUORESCENT LIGHT FIXTURE, SURFACE MOUNTED ON CEILING.
	SPECIAL POWER RECEPTACLE, SINGLE PHASE. SEE DRAWINGS FOR SIZE AND DESCRIPTION.		2'X2' FLUORESCENT LIGHT FIXTURE, RECESSED IN CEILING.
	JUNCTION BOX, MOUNTED ABOVE ACCESSIBLE CEILING.		2'X2' FLUORESCENT LIGHT FIXTURE, SURFACE MOUNTED ON CEILING.
	JUNCTION BOX, FLUSH IN WALL, +18" OR AS NOTED.		2'X4' EMERGENCY FLUORESCENT LIGHT FIXTURE, RECESSED IN CEILING.
	JUNCTION BOX, CEILING MOUNTED.		1'X4' EMERGENCY FLUORESCENT LIGHT FIXTURE, RECESSED IN CEILING.
	MANUAL MOTOR STARTER WITH THERMAL OVERLOADS.		2'X2' EMERGENCY FLUORESCENT LIGHT FIXTURE, RECESSED IN CEILING.
	BY-PASS LIGHTING TIMER, +46".		2'X2' EMERGENCY FLUORESCENT LIGHT FIXTURE, SURFACE MOUNTED ON CEILING.
	MAGNETIC MOTOR STARTER WITH OVERLOADS.		FLUORESCENT STRIP LIGHT FIXTURE SLAVE
	MOTOR RATED NON-FUSED DISCONNECT SWITCH (EXO). 30AMP MINIMUM.		FLUORESCENT STRIP LIGHT FIXTURE, SURFACE OR PENDANT MOUNTED ON CEILING.
	MOTOR RATED FUSIBLE DISCONNECT SWITCH (EXO), 30A MINIMUM, SIZE AND NUMBER OF POLES AND FUSES SIZED AS REQUIRED		EMERGENCY FLUORESCENT STRIP LIGHT FIXTURE, SURFACE OR PENDANT MOUNTED ON CEILING.
	EMERGENCY GENERATOR SIZE AS NOTED.		LIGHT FIXTURE WALL MOUNTED.
	MAIN SWITCHBOARD OR DISTRIBUTION BOARD, FLOOR STANDING 90" HIGH.		LIGHT FIXTURE, RECESSED IN CEILING.
	FLUSH MOUNTED PANELBOARD, +6'-6" TO TOP.		LIGHT FIXTURE, SURFACE MOUNTED ON CEILING.
	FLUSH MOUNTED CABINET OR EQUIPMENT AS NOTED, +6'-6" TO TOP.		EMERGENCY WALL MOUNTED LIGHT FIXTURE.
	SURFACE MOUNTED PANELBOARD, +6'-6" TO TOP.		EMERGENCY LIGHT FIXTURE RECESSED IN CEILING.
	SURFACE MOUNTED CABINET OR EQUIPMENT AS NOTED, +6'-6" TO TOP.		EMERGENCY LIGHT FIXTURE, SURFACE MOUNTED ON CEILING.
	3/4" THICK PLYWOOD TERMINAL BOARD WITH SPECIAL FIRE RETARDANT TREATMENT AND WHITE PAINT, SIZE AS INDICATED OR SPECIFIED.		WALL WASHER LIGHT FIXTURE, RECESSED IN CEILING.
	PULL BOX. SEE DRAWING FOR SIZE.		LIGHT TRACK SURFACE MOUNTED ON CEILING.
	CONDUIT RUN CONCEALED ABOVE CEILING OR IN WALL.		LIGHT FIXTURE MOUNTED ON LIGHT TRACK
	CONDUIT RUN CONCEALED UNDER FLOOR OR BELOW GRADE.		SELF-LUMINOUS EXIT SIGN, SURFACE MOUNTED ON CEILING, DOUBLE FACE WITH ARROWS AS INDICATED.
	CONDUIT RUN EXPOSED PARALLEL OR PERPENDICULAR TO STRUCTURE, ALIGN WITH STRUCTURE.		SELF-LUMINOUS EXIT SIGN SURFACE MOUNTED ON CEILING, SINGLE FACE EXIT SIGN WITH ARROWS AS INDICATED.
	FLEXIBLE STEEL CONDUIT.		SELF-LUMINOUS EXIT SIGN, SURFACE WALL MOUNTED WITH ARROW AS INDICATED.
	CONDUIT "HOME RUN," CONNECT TO PANEL, TERMINAL CABINET OR TERMINAL BOARD.		SELF-LUMINOUS EXIT SIGN, WALL OR DOOR MOUNTED. "L" INDICATES LOW LEVEL EXIT SIGN, LOCATE BOTTOM OF SIGN 6" ABOVE FINISHED FLOOR AND WITHIN 4" OF LATCH SIDE OF DOOR WHEN LOCATED AT EXIT DOOR
	CONDUIT RISING UP FROM BELOW.		INTERNALLY ILLUMINATED EXIT SIGN, SURFACE WALL MOUNTED WITH ARROWS AS INDICATED.
	CONDUIT DROPPING DOWN FROM ABOVE.		INTERNALLY ILLUMINATED EXIT SIGN, WALL MOUNTED. "L" INDICATES LOW LEVEL EXIT SIGN, LOCATE BOTTOM OF SIGN 6" ABOVE FINISHED FLOOR AND WITHIN 4" OF LATCH SIDE OF DOOR WHEN LOCATED AT EXIT DOOR.
	CONDUIT ONLY STUB OUT WITH CAP AND MARKER.		INTERNALLY ILLUMINATED DOUBLE FACE EXIT SIGN, SURFACE MOUNTED ON CEILING WITH ARROWS AS INDICATED.
	CONDUIT WITH SEALING FITTING.		INTERNALLY ILLUMINATED SINGLE FACE EXIT SIGN, SURFACE MOUNTED ON CEILING WITH ARROWS AS INDICATED.
	3/4" 2#12		CEILING MOUNTED ONE WAY OCCUPANCY LIGHT SENSOR, DIRECTION AS INDICATED BY ARROW. NOTE: WHERE TOGGLE SWITCH AND OCCUPANCY SENSOR ARE BOTH SHOWN IN THE SAME ROOM, THE TOGGLE SWITCH SHALL BE WIRED AHEAD OF THE OCCUPANCY SENSOR SWITCH POWER PACK.
	3/4" 4#12		TWO-WAY OCCUPANCY LIGHT SENSOR, SURFACE MOUNTED ON CEILING. NOTE: WHERE TOGGLE SWITCH AND OCCUPANCY SENSOR ARE BOTH SHOWN IN THE SAME ROOM, THE TOGGLE SWITCH SHALL BE WIRED AHEAD OF THE OCCUPANCY SENSOR SWITCH POWER PACK.
	1" 6#10		WALL SWITCH / OCCUPANCY LIGHT SENSOR ab INDICATES WITH BY-LEVEL WALL SWITCHES WHERE INDICATED, +46"
	WIRE SIZE OTHER THAN #12 OR #10 IS NOTED ON EACH CONDUIT RUN WITH SIZE OF CONDUIT (e.g.: 3/4" 3#8) INCLUDE A GREEN GROUND CONDUCTOR IN EACH CONDUIT. (GREEN GROUND CONDUCTOR NOT SHOWN).		WALL DIMMER SWITCH, +46".
	NEW PANELBOARD DESIGNATION.		TOGGLE SWITCH, +46". SUFFIXES ON SWITCH SYMBOLS SHALL INDICATE THE FOLLOWING: NO SUFFIX = SINGLE POLE, 2 = 2 POLE, 3 = 3 WAY, 4 = 4 WAY, M = MOMENTARY CONTACT, LV = LOW VOLTAGE LIGHTING CONTROL, K = LOCK TYPE SWITCH, P = PILOT LIGHT.
	TERMINAL CABINET OR BACKBOARD DESIGNATION.		FLUSH FLOOR SERVICE BOX WITH TWO DUPLEX RECEPTACLES AND COMBINATION VOICE/DATA OUTLET WITH NUMBER OF VOICE AND DATA JACKS AS NOTED.
	FEEDEr DESIGNATION (SEE FEEDER SCHEDULE OR SINGLE LINE DIAGRAM). REFERENCE NOTE FOR ITEM ON DRAWING.		DOUBLE DUPLEX RECEPTACLE IN FLUSH FLOOR BOX WITH HINGED COVER.
	INDICATES: 1 = FIXTURE TYPE; 2/32 = NUMBER OF LAMPS AND WATTAGE PER LAMP. ALSO NUMBER ADJACENT TO FIXTURE = CIRCUIT NUMBER, AND LOWER CASE LETTER = CONTROLLING SWITCH. SEE DRAWINGS OR SPECIFICATIONS, SECTION 16500 FOR LIGHT FIXTURE DESCRIPTION.		DUPLEX RECEPTACLE FLUSH IN CEILING.
	COMBINATION VOICE/DATA OUTLET WITH NUMBER OF VOICE AND DATA JACKS AS NOTED, +18" OR AS NOTED.		SINGLE RECEPTACLE FLUSH IN CEILING.
	2'X4' FLUORESCENT LIGHT FIXTURE, SURFACE MOUNTED ON CEILING.		GROUND FAULT INTERRUPTING DUPLEX RECEPTACLE, +18" OR AS NOTED.
	2'X4' FLUORESCENT LIGHT FIXTURE, RECESSED IN CEILING.		DOUBLE DUPLEX RECEPTACLE, +18" OR AS NOTED.
	TELEPHONE OUTLET, +18" OR AS NOTED.		
	TELEVISION OUTLET, +8'-0" OR AS NOTED.		
	PHOTO-ELECTRIC SMOKE DETECTOR, CEILING MOUNTED.		

ABBREVIATIONS

U.G.	UNDERGROUND
C.O.	CONDUIT ONLY WITH PULL WIRE
W.P.	WEATHERPROOF
+45"	HEIGHT FROM FINISH FLOOR TO CENTERLINE OF OUTLET
V.L.	VERIFY EXACT LOCATION
N.I.C.	NOT IN CONTRACT
U.O.N.	UNLESS OTHERWISE NOTED
A.F.F.	ABOVE FINISH FLOOR
G.F.I.	GROUND FAULT CURRENT INTERRUPTER

FILE: 151102WK1STE10
DRAWN: M.L.

ARCHITECT:
S L A R C H I T E C T S
140 W. VALLEY BLVD., STE 215, SAN GABRIEL, CA 91776
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PROJECT:
**LA VALLEY GARDEN PLAZA
NEW COMMERCIAL BUILDING**
9933-9961 VALLEY BLVD.,
EL MONTE, CA 91731

PROJ. NO. 2017-00153
DATE: 02/08/2018
SCALE: 1/8" = 1'-0"
JOB NO: 151102
P.C. CORRECTION
3/10/2018

C E G Engineering Inc.
Consulting Engineers Group JOB #: E17039
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E-0.1

SCOPE OF WORK

IT IS THE INTENT AND PURPOSE OF THESE SPECIFICATIONS AND ACCOMPANYING DRAWINGS THAT THE CONTRACTOR PROVIDE THE NECESSARY MATERIALS, LABOR, WORKMANSHIP, TOOLS, EQUIPMENT, ETC., FOR THE COMPLETE AND PROPER INSTALLATION AND OPERATION OF THE ELECTRICAL SYSTEMS SPECIFIED HEREIN.

NOT THE PREMISES TO BECOME AWARE OF THE CONDITIONS TO BE ENCOUNTERED. NO EXTRA PAYMENTS WILL BE ALLOWED FOR ANY EXTRA WORK WHICH MAY BE REQUIRED DUE TO FAILURE OF THE CONTRACTOR TO THOROUGHLY EXAMINE THE PREMISES PRIOR TO BID.

WORK INCLUDED IN THIS SECTION

A COMPLETE AND OPERABLE EXTENSION OF THE NEW 208/120V, 3-PHASE, 4-WIRE AND POWER SYSTEMS INCLUDING CONDUIT, WIRE, FITTINGS, FITURES, RECEPTABLES, SWITCHES, ETC.

APPLICABLE CODES AND REGULATIONS

2019 CALIFORNIA ELECTRICAL CODE
REGULATIONS OF ALL OTHER AUTHORITIES HAVING JURISDICTION.

PERMITS AND APPROVALS

AS REQUIRED BY CITY ORDINANCES TO BE OBTAINED AND PAID FOR BY THE CONTRACTOR.

LOCATIONS

THE DRAWINGS INDICATE DIAGRAMMATICALLY THE DESIRED LOCATION OR ARRANGEMENT OF CONDUIT RUNS, OUTLETS, EQUIPMENT, ETC., AND ARE TO BE INTERPRETED AS CLOSELY AS POSSIBLE. PROPER JUDGMENT MUST BE EXERCISED IN DETERMINING THE WORK LOCUS AS TO SECURE THE BEST POSSIBLE INSTALLATION WITHIN THE AVAILABLE SPACE AND TO OVERCOME DIFFICULTIES DUE TO SPACE LIMITATIONS OR INTERFERENCE OF STRUCTURAL CONDITIONS WHERE ENCOUNTERED. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY AND COORDINATE THE LOCATION OF ALL OUTLETS AND LIGHTING FIXTURES WITH THE ARCHITECTURAL, STRUCTURAL AND MECHANICAL DRAWINGS AND WITH ALL SHOP DRAWINGS, INCLUDING CASEWORK, SHOP DRAWINGS, ARCHITECTURAL ELEVATIONS AND REFLECTED CEILING PLANS, SHALL GENERALLY TAKE PRECEDENCE. HOWEVER, IN THE EVENT OF LARGE VARIATIONS BETWEEN ARCHITECTURAL AND ELECTRICAL DRAWINGS THE ARCHITECT SHALL BE CONSULTED FOR INSTRUCTIONS. UNLESS SPECIFICALLY INDICATED OTHERWISE, ALL LIGHTING FIXTURES AND/OR FUTURE ITEMS SHALL BE PLACED SYMMETRICALLY WITH RESPECT TO THE CEILING TILE PATTERN OR OTHER ARCHITECTURAL CEILING AND WALL MODULES.

REPAIRS

ANY DAMAGE TO THE STRUCTURE OR FINISHED SURFACES DUE TO THE INSTALLATION OF THE ELECTRICAL WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REPAIR BY THE TRADESMAN OF THE TRADE INVOLVED.

SHOP DRAWINGS

PROVIDE FIVE COPIES OF CATALOG CUTS FOR EACH OF THE FOLLOWING ITEMS:
1. PANELBOARDS.
2. INTERNAL LEST.

STRUCTURAL CONDITIONS

PENETRATE NO STRUCTURAL ELEMENTS INCLUDING SHEAR WALLS, WITHOUT WRITTEN CONSENT OF ARCHITECT.

COORDINATION

REFER TO MECHANICAL DRAWINGS AND SPECIFICATIONS FOR WIRING DIAGRAMS, EXACT EQUIPMENT LOCATION, AND OTHER INFORMATION REGARDING THE EXTENT OF ELECTRICAL WORK REQUIRED BUT NOT INDICATED ON ELECTRICAL DRAWINGS.

EXCAVATIONS

DO ALL EXCAVATING NECESSARY FOR THE PROPER INSTALLATION OF THE ELECTRICAL WORK WHETHER OR NOT INDICATED ON THE DRAWINGS OR SPECIFIED. WHEN ON THE OWNERS PROPERTY, UNDERGROUND PRIMARY AND SECONDARY SERVICES AND HIGH VOLTAGE DEVICES SHALL BE BURIED NOT LESS THAN 24" BELOW FINISH GRADE; AND OTHER CONDUIT RUNS CONTAINING CIRCUITS OF 600 VOLTS OR LESS SHALL BE NOT LESS THAN 18" BELOW FINISH GRADE.

AFTER THE INSTALLATION OF WORK REQUIRED FOR EXCAVATIONS HAS BEEN INSPECTED AND APPROVED, ALL EXCAVATIONS SHALL BE FILLED WITH CLEAN EARTH AND TAMPED TO A CONSISTENCY SO THAT NO SETTLEMENT WILL OCCUR, AND THE GROUND LEFT FIRM AT NATURAL GRADE. ALL EXCAVATED EARTH WHICH IS NOT USED FOR BACKFILL SHALL BE REMOVED FROM THE PREMISES OR OTHERWISE DISPOSED OF AS DIRECTED.

ALL PLANTS, SHRUBS, TURF AND SURFACING THAT OCCUR IN THE AREA OF THE EXCAVATION SHALL BE CAREFULLY REMOVED AND PLACED WHERE THEY WILL NOT BE DAMAGED. AFTER THE EXCAVATIONS ARE FILLED, THE PLANTS, SHRUBS, TURF AND SURFACING SHALL BE REPLACED AS DIRECTED. ALL SIDEWALKS, DRIVEWAYS OR OTHER CEMENT OR ASPHALT SURFACES WHICH ARE DAMAGED DURING EXCAVATION SHALL BE REPAIRED TO MATCH THE ADJACENT WORK IN MATERIAL AND FINISH.

CONDUITS

INSTALL ALL CONDUIT CONCEALED EXCEPT AS NOTED ON DRAWINGS.

GALVANIZED OR SPHEROANODIZED RIGID STEEL CONDUIT FOR EXPOSED CONDUIT BELOW 8 FT, WHEN USED EXPOSED ON EXTERIOR OR WHEN INSTALLED IN MASONRY OR CONCRETE. USE GALVANIZED COUPLINGS, LOCKWATS, BUSINGS AND CONNECTORS.

NON-METALLIC: RIGID PVC ELECTRICAL CONDUIT EXTENDED TO SCHEDULE 40 DIMENSIONS OF HIGH IMPACT, VIRGIN POLYVINYL CHLORIDE AND SHALL BEAR UL LABEL, PVC SCHEDULE 40 CONDUIT SHALL BE USED FOR ALL UNDERGROUND RUNS. ENCASE IN CONCRETE OF MINIMUM THICKNESS IN ALL SIZES. USE STANDARD STEEL CONDUIT ELLS WHEREVER RIGID TUBES UP ABOVE GROUND OR CONCRETE SLABS. WHERE CONDUIT SIZE IS INCREASED FOR GROUND CONDUCTOR BY A CHANGE TO PVC, INCREASE THE SIZE OF THE ENTIRE LENGTH OF THE CONDUIT RUN TO MATCH.

ELECTRICAL METALLIC TUBING: THIN WALL GALVANIZED STEEL WITH COMPRESSION FITTINGS ONLY. FOR ALL CONCEALED WORK OR WHEN EXPOSED ABOVE 8 FT.

FLEXIBLE METALLIC CONDUIT: SPIRAL INTERLOCKED, GALVANIZED STEEL, CONDUIT CONCEALED ABOVE GROUND, NOT ENCASED IN MASONRY OR CONCRETE AND PROHIBITED IN WET OR DAMP LOCATIONS. SEAL-TITE OR RESISTANT FLEXIBLE CONDUIT WITH PROPER FITTINGS FOR WET OR DAMP LOCATIONS, WHERE FLEXIBLE METALLIC CONDUIT IS PERMITTED, THE TOTAL LENGTH OF THE CONDUIT IN ANY ONE RUN SHALL NOT EXCEED 6 FEET.

HFC-80 HOSPITAL GRADE ARMORED STEEL CABLES MAY BE USED FOR DROPPED TO OUTLETS IN WALLS AND HORIZONTAL RUNS IN WALL. HOSPITALS CONDUITS ABOVE CEILING AND ALL HORIZONTAL RUNS ABOVE CEILING SHALL EMT.

INSTALL METALLIC CONDUIT AS A COMPLETE SYSTEM, CONTINUOUS FROM OUTLET TO CLOSET, CABINET, BOX OR FITTINGS, AND SO MECHANICALLY AND ELECTRICALLY CONNECTED THAT ADEQUATE ELECTRICAL CONTINUITY FROM ONE CONDUIT TO ANOTHER IS SECURED. HOWEVER THIS SHALL NOT CONSTITUTE THE MECHANICAL GROUND FOR THE CIRCUIT.

INSTALL CONDUIT AS INDICATED ON PLANS AND FINALLY SECURED AT LEAST 8" FROM ANY HOT WATER PIPE, HOT AIR DUCT, FLUE OR VENT.

FLASH AND COUNTER FLASH ALL CONDUIT PENETRATING SLOPED ROOFS WITH GALVANIZED SHEET STEEL, ROOF JACKS, ALL PENETRATIONS THROUGH FLAT ROOF SURFACES BY ELECTRICAL CONDUIT SHALL BE THROUGH PITCH POCKET PANS A MINIMUM OF 6" LARGER THAN THE CONDUIT. PAN SHALL BE FILLED WITH HOT COAL TAR PUTCH.

CONDUCTORS

80% CONDUCTIVITY, SOFT DRAWN COPPER, TYPE THIN WIRE, 90% INSULATION FOR GENERAL WIRING, TYPE THIN WIRE, 90% INSULATION FOR USE WHERE AMBIENT EXCEEDS 90 DEGREES C. COPPER WIRE FOR ALL CONDUCTORS. MANUFACTURED BY AMERONICA, GENERAL CABLE, GENERAL ELECTRIC, OR EQUAL. CONDUCTORS 18 AND LARGER SHALL BE STRANDED. CONDUCTORS #10 AND SMALLER SHALL BE SOLID.

DO NOT USE ANY MECHANICAL DEVICE TO PULL WIRE UNLESS SPECIFICALLY APPROVED BY ELECTRICAL ENGINEER.

IDEAL YELLOW #70 OR EQUAL PULLING COMPOUND IS THE ONLY LUBRICANT PERMITTED FOR PULLING WIRE.

USE SPLIT BOLT OR PRESS COMPRESSION CONNECTORS FOR 16 AWG AND LARGER CONDUCTORS. WRAP JOINTS WITH A MINIMUM OF THREE (3) LAYERS OF SCOTCH TAPE #3 WHERE SPLICES ARE TO BE WATERPROOFED. ADD PROPER HOT-SHINK OR COLD-SHINK TUBES WITH A MIN 3M SCOTCHCAST EPOXY RESIN.

USE 3M SCOTCH-LOCK OR IDEAL WING-OUT CONNECTIONS FOR 16 AWG AND SMALLER CONDUCTORS.

OUTLET BOXES

GALVANIZED PRESSED STEEL, KNOCKOUT TYPE FOR GENERAL INTERIOR WIRING. PROPER SIZE FOR NUMBER OF WIRES BUT NOT LESS THAN 4" SQUARE. WATERPROOF CAST BOXES FOR EXTERIOR WIRING AND IN WET OR DAMP LOCATIONS. MANUFACTURED BY CROUSE HINDS OR APPLETON.

PRESTOPPING

ALL OUTLET BOXES INSTALLED IN RATED WALLS (1 OR 2 HOUR) SHALL NOT BE CLOSER THAN 2", ALL SUCH OUTLET BOXES SHALL ALSO BE WRAPPED WITH AN APPROVED PRESTOPPING PADS, UL LISTED AND CERTIFIED PADS SHALL BE IPE TYPE FSP1077 OR EQUAL, BY NELSON. OUTLETS OR BOXES GREATER THAN 1" SQUARE SHALL BE ENCLOSED IN A RATED ENCLOSURE EQUAL TO THE RATED WALL IN WHICH INSTALLED.

SWITCHBOARDS

PROVIDE NEMA STANDARD DESIGNED, DREAD FRONT, DEAD REAR, BUS BARS OF 96 PERCENT COPPER, BRACED FOR 50,000 AMPERES RMS SYMMETRICAL AVAILABLE CURRENT. CURRENT SWITCHBOARD FABRICATED AND ASSEMBLED BY ONE MANUFACTURER. DESIGN OF SWITCHBOARD TO BE COMPLIABLE WITH CODE REQUIREMENTS AND THE REQUIREMENTS OF THE OF THE SERVING UTILITY COMPANY. INCLUDE THE UTILITY METERING EQUIPMENT'S COMPONENTS AND MOUNTING DEVICES AS THOUGH SPECIFIED HEREIN. OVERCURRENT DEVICES SHALL SOL-200 QUICK-ACK, AMBIENT COMPENSATED, THERMAL MAGNETIC TYPE SINGLE HANDLE, COMMON TRIP FOR 2 AND 3 POLES BREAKERS.

PANELBOARDS

SOL-200 TYPE, AMBIENT COMPENSATED, THERMAL MAGNETIC TYPE CIRCUIT BREAKERS SERIES RATING, SINGLE HANDLE, COMMON TRIP FOR 2 AND 3 POLE BREAKERS. BUSBARS SHALL BE COPPER. INSTALL A TYPENET DIRECTORY ON INSIDE OF DOOR TO DESIGNATE OUTLETS OR EQUIPMENT SERVED BY CIRCUIT. FLUSH OR SURFACE MOUNTED AS INDICATED WITH HANDBOOKS, GRAY FINISH AS MANUFACTURED BY SQUARE D CO. PANELBOARDS MANUFACTURED BY SQUARE D, EATON OR SIEMENS. FLUSH PANEL TRIM SHALL BE A ONE PIECE ASSEMBLY WITH HINGED LOCKABLE DOOR.

ALL PANELBOARDS SHALL HAVE BUS BRACING AND CIRCUIT BREAKER FAULT INTERRUPTING CAPABILITY TO WITHSTAND AND INTERRUPT THE AVAILABLE RMS SYMMETRICAL FAULT CURRENTS INDICATED ON THE DRAWINGS. IN NO CASE, HOWEVER, SHALL THIS CAPABILITY BE LESS THAN FOR 10,000 AMPERES @ 480/240 VOLTS.

EXTERIOR WEATHERPROOF PANELBOARDS SHALL BE NEMA TYPE 3R, NEMA 5 AND NEMA 12 RATED WITH GASKETING AND OTHER MEANITIES TO COMPLY WITH ALL RATINGS.

MOTOR STARTERS

MOTOR SWITCHES: PROVIDE FOR FRACTIONAL, HORSEPOWER MOTORS WHERE NO REMOTE CONTROLS IS REQUIRED. FOR CONTROLLING SINGLE PHASE MOTORS OF 3/4 HORSEPOWER OR LESS RATING EQUIPPED WITH INTEGRAL THERMAL PROTECTION. PROVIDE SQUARE D, CLASS 250V OR OTHER GENERAL ELECTRIC TYPE CIR01.

MAGNETIC MOTOR STARTERS, UNLESS OTHERWISE INDICATED, PROVIDE NON-REVERSING, FULL VOLTAGE, ACROSS THE LINE MECHANISMS, CLOSSED BY COIL ACTION AND OPENED BY GRAVITY. EQUIP STARTERS WITH 120 VOLT COILS AND SELF CONTAINED CONTROL SYSTEMS UNLESS OTHERWISE INDICATED. RESET BUTTON TO BE ACCESSIBLE WITHOUT OPENING ENCLOSURES. PROVIDE STARTER SIZES AS INDICATED OR REQUIRED BUT NOT SMALLER THAN NEMA SIZE 1. GENERAL ELECTRIC CR106 OR SQUARE D, CLASS B06.

COMBINATION STARTERS: PROVIDE A CIRCUIT BREAKER OR SWITCH IN COMMON ENCLOSURE WITH MAGNETIC STARTER WHERE INDICATED TO FORM A COMBINATION, STARTER MECHANISM, FACTORY CONNECT LINE SIDE OF STARTER TO BREAKER OR SWITCH. EQUIP SWITCH WITH FUSES WHERE INDICATED. SEE BREAKERS, SWITCHES AND FUSES AS INDICATED OR AS REQUIRED FOR THE LOAD CONTROLLED IF NOT INDICATED. PROVIDE DUAL ELEMENT FUSES FOR MOTOR LOADS AND FEEDERS SERVING "PACKAGED EQUIPMENT" WHICH IS LABELED BY U.L. LABELS FOR USE ONLY ON FUSED CIRCUITS.

PROVIDE ENCLOSURES FOR MOTOR STARTERS, MOTOR SWITCHES, AND COMBINATION STARTERS UNLESS INDICATED OR SPECIFIED TO MOUNT WITHIN THE ENCLOSURE SPECIFIED FOR ANOTHER PRODUCT. PROVIDE NEMA 1 ENCLOSURES FOR INDOOR USE AND NEMA 3R ENCLOSURES FOR OUT OF DOORS AND AREAS SUBJECT TO MOISTURE.

PROVIDE PILOT LIGHTS AND CONTROL DEVICES AS INDICATED. OPERABLE AT FRONT OF ENCLOSURE WITHOUT OPENING ENCLOSURES. WHERE NOT OTHERWISE INDICATED, EQUIP MAGNETIC STARTERS WITH STOP START PUSH BUTTON STATIONS WHERE NO REMOTE AUTOMATIC CONTROLS IS INDICATED, AND WITH HAND OFF AUTO SELECTOR SWITCHES WHERE CONTROLLED BY AUTOMATIC DEVICE.

DISCONNECT SWITCHES

DISCONNECT SWITCHES SHALL BE 200 VOLT OR 600 VOLT A.C., COMPLYING WITH SOURCE VOLTAGE, HEAVY DUTY NEMA TYPE HD, QUICK MAKE, QUICK BREAK, HORSEPOWER RATED, NON-REVERSIBLE OR FUSIBLE SWITCHES IN NEMA TYPE 1 ENCLOSURE WITH NUMBER OF POLES AND AMPERAGE AS INDICATED ON THE DRAWINGS. FUSIBLE SWITCHES SHALL BE EQUIPPED WITH REACTION CLIPS TO PREVENT THE USE OF ONE-TIME AND RENEWABLE FUSES. WHERE ENCLOSURE IS INDICATED "WEATHERPROOF", AND FOR OUTDOOR USE, SWITCHES SHALL BE IN RAINWIGHT NEMA TYPE 3R ENCLOSURE.

WHERE FUSES ARE REQUIRED: PROVIDE DUAL ELEMENT "BUS" "FUSIONKIT" FUSES UNLESS OTHERWISE INDICATED ON DRAWING.

DEVICES

CIRCUIT SWITCHES

1. CIRCUIT SWITCHES SHALL BE WHITE, TOTALLY ENCLOSED, BAKEITE, OR COMPOSITION BASE, TOGGLE TYPE WITH 240 VOLT, A.C. RATING FOR FULL CAPACITY OF CONTACTS FOR NON-INCANDESCENT OR FLUORESCENT LAMP LOADS. SWITCH RATINGS SHALL BE 20 AMPERE ONLY. SWITCHES SHALL BE BACK AND SIDE WIRED.
2. LOCK TYPE SWITCHES SHALL MATCH EXISTING SWITCHES WHERE NEW WORK CONSISTS OF REHABILITATION OR ADDITION TO EXISTING WORK.
3. SWITCHES SHALL BE WHITE COLOR FOR NORMAL POWER AND RED WHEN CONNECTED TO EMERGENCY POWER.

DIMMERS AND DAYLIGHT CONTROLS

1. 0-10 VOLT VALL BOX DIMMERS IN OPEN OFFICE AREAS SHALL BE LEVITON #WMS17-70W (WHITE) OR APPROVED EQUAL. DIMMER SHALL BE RATED 800 WATTS AT 120/277 VOLTS.
2. 0-10 VOLT VALL BOX DIMMER OCCUPANCY SENSORS SHALL BE LUTRON #MS-2101-4AH (WHITE) OR APPROVED EQUAL. DIMMER SHALL BE RATED 800 WATTS AT 120/277 VOLTS.
3. STAND ALONE PHOTOCELL / PHOTOCELL FOR DAYLIGHT HARVESTING SHALL BE GREENGATE #DLC-PD-01N.

OCCUPANCY LIGHT SENSOR CONTROL

1. WALL SWITCH SENSORS SHALL BE CAPABLE OF DETECTION OF OCCUPANCY AT DESKTOP LEVEL UP TO 300 SQUARE FEET, AND GROSS MOTION UP TO 1000 SQUARE FEET.
2. WALL SWITCH SENSORS SHALL BE DUAL TECHNOLOGY ACCOMMODATING LOADS FROM 0 TO 800 WATTS AT 120 VOLTS; 0 TO 1200 WATTS AT 277 VOLTS AND SHALL HAVE 180° COVERAGE CAPABILITY.
3. WALL SWITCH PRODUCTS SHALL UTILIZE ZERO CROSSING CIRCUITRY WHICH INCREASES RELAY LIFE, PROTECTS FROM THE EFFECTS OF HURSH CURRENT, AND INCREASES SENSORS LONGEVITY. WALL SWITCH SENSORS SHALL HAVE NO LEAKAGE CURRENT TO LOAD, IN MANUAL, OR IN AUTO OFF MODE FOR SAFETY PURPOSES AND SHALL HAVE VOLTAGE DROP PROTECTION.
4. WALL SWITCH SENSORS SHALL PROVIDE A FIELD SELECTABLE OPTION TO CONVERT SENSOR OPERATION FROM AUTOMATIC TO MANUAL ON AND HAVE VANDAL RESISTANT CONSTRUCTION AND UTILIZE A HARD LENS WITH A MINIMUM .10MM THICKNESS. PRODUCTS UTILIZING A SOFT LENS WILL NOT BE CONSIDERED.
5. ALL SENSORS SHALL CONSIST OF PASSIVE INFRARED AND ULTRASONIC TECHNOLOGIES FOR OCCUPANCY DETECTION.

ELECTRICAL SPECIFICATIONS

PRODUCTS THAT REACT TO NOISE OR AMBIENT SOUND SHALL NOT BE CONSIDERED.

6. WALL SWITCH/OCCUPANT LIGHT SENSOR SHALL BE GREENGATE #DWM-1001-4M-W WITH A SINGLE SWITCH AND #DWM-2-1001-20M-W (WHITE) WHERE A LEVEL LIGHT CONTROL IS INDICATED.
7. CEILING OCCUPANCY LIGHT SENSORS SHALL BE GREENGATE #DWC-07-2000-0M FOR HARDID CEILING AND/OR #DWC-07-2000, DMC-07-1000, DMC-07-0001 WITH A HEAVY DUTY SWITCH/PAK #SP20-V.

DUPLEX RECEPTABLES

1. DUPLEX RECEPTABLES SHALL BE WHITE, GROUNDING TYPE, 125 VOLT, 20 AMPERE AND SHALL HAVE TWO CURRENT CARRYING CONTACTS AND ONE GROUNDING CONTACT WHICH IS INTERNALLY CONNECTED TO THE FRAME. OUTLET SHALL ACCOMMODATE STANDARD PARALLEL BLADE CAP AND SHALL BE SIDE WIRED ONLY. RECEPTABLES SHALL HAVE SELF-GROUNDING STRAPS, WHICH ARE UL APPROVED FOR INSTALLATION WITHOUT A BONDING JUMPER.
2. RECEPTABLES SHALL BE INSTALLED WITH THE "N" GROUNDING CONTACT AT THE TOP. EXCEPT FOR RECEPTABLES INSTALLED FOR RIVED APPLIANCES, WHERE RECEPTABLES NEED TO BE MOUNTED HORIZONTALLY, THEY SHALL BE INSTALLED WITH THE NEUTRAL CONTACT AT THE TOP.
3. SAFETY TYPE DUPLEX RECEPTABLES: SAFETY TYPE DUPLEX RECEPTABLES SHALL BE GROUNDING TYPE, 15 AMPERE, 125 VOLT WITH TWO CURRENT CARRYING CONTACTS AND ONE GROUNDING CONTACT WHICH IS INTERNALLY CONNECTED TO THE FRAME. INTERNAL CONSTRUCTION SHALL BE SO THAT CURRENT IS SHUNTED AWAY FROM METALLIC OBJECTS INSERTED INTO ANY OPENING. OUTLET SHALL ACCOMMODATE STANDARD PARALLEL BLADE CAP.

4. DUPLEX G.F.I. RECEPTABLE: GROUNDING TYPE DUPLEX RECEPTABLE WITH GROUND FAULT INTERRUPTER SHALL CONFORM TO NEMA CONFIGURATION 6-3P, 2-24AMP RECEPTABLE AND A CIRCUIT CAPACITY OF 20 AMPERES. RECEPTABLE SHALL BE SELF TESTING TO PROVIDE CONTINUOUS ELECTRONIC SENSING & TESTING, UTILIZING DIAGNOSTIC SOFTWARE - IMMEDIATE INDICATION IF UNIT HAS LOST THE ABILITY TO PROTECT. RECEPTABLE SHALL TRADITIONAL TESTING MODE BY MANUALLY OPERATING THE "TEST" AND "RESET" BUTTONS. WHEN LEAKAGE EXCEEDS 5 mA, THE INTERRUPTER SHALL OPEN THE CIRCUIT AT THE RECEPTABLE WITHIN 1/30 OF A SECOND. INTERRUPTER SHALL ONLY PROTECT THE RECEPTABLE INDICATED UNLESS INDICATED ON THE DRAWINGS AS FEEDTHRU TYPE. RECEPTABLE SHALL BE COMPLETE WITH TEST AND RESET BUTTONS. RECEPTABLE SHALL BE INSTALLED IN A 4" SQUARE BY 2 1/8" DEEP BOX WITH SINGLE GANG PLASTER RING COMPLETE WITH STAINLESS STEEL PLATE AT DRY LOCATIONS AND WITH WEATHERPROOF HINGED DOOR COVER WHERE INDICATED AS "WEATHERPROOF" (W.P.). ON EXPOSED CONDUIT RUNS USE TO CONDUIT WITH HINGED COVER. RECEPTABLE SHALL BE WHITE. HUBBELL #GFSR300ST OR APPROVAL, EQUAL WITH SELF TEST DIAGNOSTIC DESIGN.

5. OTHER DEVICES: WHITE COLOR, SPECIFICATION GRADE, OF TYPE NOTED IN SYMBOL LIST AND PLANS.

6. MANUFACTURED BY PASS & SEYMOUR, LEVITON, BRYANT, GENERAL ELECTRIC OR ARROW-HART.

DEVICE PLATES

1. REQUIRED FOR ALL WIRING DEVICES, TELEPHONE AND DATA OUTLETS AND SIMILAR APPLICATIONS.
2. WALL PLATES: WHITE, PLASTIC, #DWP TYPE 300 ALLOY STAINLESS STEEL, SPECIFICATION GRADE, STANDARD SIZE, SMOOTH AND SHALL BE LISTED BY UNDERWRITERS' LABORATORIES. ALL WALL PLATES SHALL BE OF ONE MAKE AND DESIGN, EQUAL TO PASS A SEYMOUR PLASTIC LINE) (STAINLESS STEEL LINE). ENGRAVE ALL PLATES AS NOTED ON PLANS OR OF 3 GANG OR MORE, ALLOW 1.5 CHARACTERS PER GANG.
3. GANG COVERS: ALLOW 30 CHARACTERS PER GANG.

SURFACE METER RACKWAY

1. FACTORY PREPARED, STEEL METER RACKWAY SHALL BE USED FOR ALL EXPOSED INTERIOR WIRING.
2. EACH RUN SHALL INCLUDE ALL OUTLET BOXES, ELBOWS, COUPLINGS, TEES, OFFSETS, COVERS, CONDUIT ENTRY FITTING AND OTHER FITTINGS NECESSARY FOR A COMPLETE AND PROPERLY INSTALLED ASSEMBLY.
3. ALL SURFACE METER RACKWAY SHALL BE OF THE SIZE RECOMMENDED IN THE MANUFACTURERS PUBLISHED DATA FOR THE NUMBER AND SIZE OF CONDUCTORS CONTAINED IN THE RACKWAY AND SHALL BE EQUAL TO THE WIREMOLD CO. PRODUCTS.
4. TYPE "1" RACKWAY AS INDICATED ON THE DRAWINGS SHALL BE A TWO COMPARTMENT WITH EMERGENCY POWER RECEPTABLES IN ONE COMPARTMENT AND NORMAL POWER RECEPTABLES IN THE OTHER COMPARTMENT. RACKWAY SHALL BE WIREMOLD 4000 SERIES WITH DUPLEX RECEPTABLES AND PLATES INSTALL ONE CENTER AS INDICATED ON THE DRAWINGS.
5. TYPE "2" RACKWAY AS INDICATED ON THE DRAWINGS SHALL BE ONE-PIECE RACKWAY RECEPTABLES IN RACKWAY OUTLET BOXES, LOCATED AS INDICATED ON THE DRAWINGS. RACKWAY AND DEVICE OUTLET BOXES SHALL BE WIREMOLD 700M SERIES WITH RECEPTABLES AND ACCESSORIES AS INDICATED HEREIN.

NAMEPLATES

PROVIDE BLACK-ON-WHITE NAMEPLATES FOR EACH SWITCHBOARD, PANEL, TERMINAL CABINET, CONTROL CENTER, PULL BOX, DISCONNECT SWITCH AND MAGNETIC MOTOR STARTER TO CORRESPOND WITH DESIGNATIONS ON THE DRAWINGS. NAMEPLATES SHALL BE SECURED WITH SCREWS, BOLTS OR RIVETS, OTHER MEANS OF ATTACHMENT SHALL NOT BE ACCEPTED. "DINO" TYPE LABELS WILL NOT BE ACCEPTED, NAMEPLATES FOR DEVICES OR EQUIPMENT SUPPLIED BY EMERGENCY POWER SHALL BE RED-ON-WHITE.

LIGHTING FIXTURES

FURNISH AND INSTALL, UL APPROVED LIGHTING FIXTURES AT ALL LIGHTING OUTLETS INDICATED ON THE DRAWINGS.

FIXTURES ARE LISTED AND DESCRIBED IN THE FIXTURE SCHEDULE ON THE DRAWINGS.

INSTALL FIXTURES AT HEIGHTS INDICATED ON THE DRAWINGS OR AS DIRECTED. FURNISH AND INSTALL ALL SUPPORTS REQUIRED FOR THE INSTALLATION OF THE FIXTURES.

SOCKETS: CORROSION RESISTANT METALS OF BRASS, BRONZE OR COPPER ALLOY; PRESSED ALUMINUM SHELLS OR CONTACTS ARE NOT ACCEPTABLE.

INSTALL LAMPS IN ALL FIXTURES.

DIFFUSERS

UNLESS NOTED OTHERWISE, ALL LIGHTING FIXTURE DIFFUSER SHALL BE VIRGIN ACRYLIC PLASTIC.

ALL PLAST PLATIC DIFFUSERS SHALL BE CLEAR WITH MALE CONICAL PRISMS AND MANUFACTURED FROM CLEAR VIRGIN ACRYLIC. LENS SHALL BE AS MANUFACTURED BY ROHM & HAAS CO. 18H OR CONTINENTAL POLYMERS. NOMINAL 2 1/4" OR SMALLER LENSES SHALL HAVE A MINIMUM UNPENETRATED DEPTH OF 0.045" AND A MINIMUM OVERALL THICKNESS OF 0.1075". SHAPED ACRYLIC LENSES SHALL BE MANUFACTURED FROM ROHM & HAAS PLEXALUX T.V. TYPE 820 OR VML OR APPROVED EQUAL USING INJECTION MOLDING OR EXTRUSION.

LAMPS

PROVIDE 120 VOLT INCANDESCENT LAMPS, GENERAL SERVICE, INSIDE Frosted, NEMA BASE. FLUORESCENT LAMPS SHALL BE 32 WATT T-8, 3000 K, 2000 LUMENS AS LISTED IN FIXTURE SCHEDULE OR AS REQUIRED. LAMPS SHALL BE MANUFACTURED BY NORTH AMERICAN PHILIPS, G.E. SYLVANIA, OSRAM OR EQUAL.

METAL HALIDE LAMPS: METAL HALIDE LAMPS SHALL BE OF THE WATTAGE SHOWN, CLEAR OR PHOSPHOR-COATED AS DESCRIBED UNDER "FIXTURE TYPES". LAMPS SHALL BE FOR BASE UP, BASE DOWN OR FOR BURNING POSITIONS OTHER THAN VERTICAL BASE UP OR BASE DOWN AS SPECIFICALLY REQUIRED FOR EACH FIXTURE. THE EXACT LAMP SHALL BE USED FOR EACH CONDITION. LAMPS SHALL BE STANDARD LINE TYPE UNLESS NOTED AS HIGH OUTPUT.

HIGH PRESSURE SODIUM LAMPS: HIGH PRESSURE SODIUM LAMPS SHALL BE USED ONLY WITH HIGH PRESSURE SODIUM BALLASTS AND SHALL BE OF THE WATTAGE AS CALLED FOR ON THE DRAWINGS AND/OR AS SPECIFIED HEREIN UNDER "FIXTURE TYPES". LAMPS SHALL BE CAPABLE OF OPERATION IN ANY POSITION. BULB FINISH SHALL BE CLEAR OR DIFFUSE AS CALLED FOR UNDER "FIXTURE TYPES".

BALLASTS

FLUORESCENT ELECTRONIC BALLAST SHALL BE INTEGRATED CIRCUIT, FULLY SOLID STATE TYPE, UL LISTED AND LABELED AND FULLY SELF PROTECTED. BALLAST SHALL BE SUITABLE FOR F40, T12, ENERGY SAVING 32 WATT AND 32 WATT 18, 4F 18PM RAPID START LAMPS. BALLAST SHALL HAVE A 5-YEAR LABOR AND MATERIAL WARRANTY FROM DATE OF MANUFACTURE. ELECTROMAGNETIC INTERFERENCE SHALL MEET OR BETTER THE FEDERAL COMMUNICATIONS COMMISSION CLASS A AND CLASS B EMISSION LIMITATIONS. HIGH VOLTAGE SURGE PROTECTION SHALL BE WITHIN THE GUIDELINES OF IEEE PUBLICATION #77, CATEGORY A. NEUTRAL PHASE (THIRD HARMONIC) CURRENT SHALL BE LIMITED TO A MAXIMUM OF 20% FOR ALL LAMPS.

BALLAST NOISE LEVEL SHALL BE BELOW AUDIBLE UNDER TYPICAL "QUIET" AMBIENT CONDITIONS SUCH AS SOUND STAGES. CREST FACTOR SHALL NOT EXCEED 1.2.

METAL HALIDE AND HIGH PRESSURE SODIUM BALLASTS: ALL BALLASTS FOR METAL HALIDE LAMPS SHALL BE HIGH POWER FACTOR, CONSTANT WATTAGE, AUTOTRANSFORMER AND DESIGNED AND MANUFACTURED IN ACCORDANCE WITH ANSI AND UL SPECIFICATIONS AND STANDARDS. CORE AND COIL BALLASTS SHALL BE UL COMPONENT, RECOGNIZED AND BEAR THE UL LOGO. FCAN BALLASTS SHALL BE UL LISTED AND BEAR THE UL LOGO.

ALL BALLASTS FOR HIGH PRESSURE SODIUM LAMPS SHALL BE HIGH POWER FACTOR, HIGH REACTANCE, AUTOTRANSFORMER TYPE AND DESIGNED AND MANUFACTURED IN ACCORDANCE WITH ANSI AND UL SPECIFICATIONS AND STANDARDS. CORE AND COIL BALLASTS SHALL BE UL COMPONENT, RECOGNIZED AND BEAR THE UL LOGO. FCAN BALLASTS SHALL BE UL LISTED AND BEAR THE UL LOGO.

CORE-AND-COIL BALLASTS SHALL INCORPORATE A CLASS 100°C INSULATION SYSTEM (CLASS H) AND BE VACUUM IMPREGNATED WITH GULON FILLED POLYESTER VARNISH TO ASSURE COOL, QUIET, LONG LIFE OPERATION. WHERE CAPACITOR VOLTAGES ARE 300 VOLTS OR LESS, THE CAPACITOR SHALL BE POTTED IN A NON-CONDUCTIVE CONTAINER, HAVE NO EXPOSED LIFE PARTS, AND BEAR THE LOGO, CAPACITOR CASE TEMPERATURE LIMITATION SHALL BE 100°C.

IGNITORS, WHERE REQUIRED FOR METAL HALIDE OR HIGH PRESSURE SODIUM LAMPS, SHALL BE POTTED IN A NON-CONDUCTIVE CONTAINER, IGNITOR CASE TEMPERATURE LIMITATION SHALL BE 100°C FOR 100 VOLT 115V LAMPS, 250 AND 400 WATT HPS) AND 90° FOR ALL OTHER HPS AND METAL HALIDE LAMPS. IGNITORS AND CAPACITORS SHALL ALSO BEAR THE UL LOGO.

BALLAST VOLTAGE, REGARDLESS OF VOLTAGES THAT MAY BE IMPLIED BY CATALOG NUMBERS AND OTHER INFORMATION INCLUDED UNDER FIXTURE DESCRIPTIONS, THE CONTRACTOR SHALL VERIFY THE CORRECT VOLTAGE AND BALLASTS AND SHALL ORDER THE CORRECT BALLASTS ACCORDINGLY.

LED LUMINAIRE REQUIREMENTS

1. ELECTRICAL COMPONENTS, DEVICES, AND ACCESSORIES LISTED AND LABELED AS DEFINED IN NFPA 70, BY A QUALIFIED TESTING AGENCY, AND MARKED FOR INTENDED LOCATION AND APPLICATION.
2. NFPA COMPLIANCE: LUMINAIRES FOR HAZARDOUS LOCATIONS SHALL BE LISTED AND LABELED FOR INDICATED CLASS AND DIVISION OF HAZARD BY AN NFPA.
3. FM GLOBAL COMPLIANCE: LUMINAIRES FOR HAZARDOUS LOCATIONS SHALL BE LISTED AND LABELED FOR INDICATED CLASS AND DIVISION OF HAZARD BY FM GLOBAL.
4. RECESSED FIXTURES: COMPLY WITH NEMA 4.
5. BULB SHAPE COMPLYING WITH ANSI C78.1.
6. LAMP BASE COMPLYING WITH ANSI C81.01/CIEC 60085-1.
7. CRP OF MINIMUM 80, CCT AT 4100 K.
8. RATED LAMP LIFE OF 50,000 HOURS MINIMUM.
9. LAMPS DIMMABLE FROM 100 PERCENT TO 0 PERCENT OF MAXIMUM LIGHT OUTPUT.
10. INTERNAL DRIVER WITH 0-10 VOLT DIMMING CONTROLLER AS INDICATED ON THE DRAWINGS.
11. LED DRIVER SHALL BE OPTICALLY ISOLATED.
12. NOMINAL INPUT OPERATING VOLTAGE: 120/277 V AC.
13. LED DRIVER AND LEDS SHALL HAVE A 10 YEAR LIMITED WARRANTY. THE WARRANTY INFORMATION SHALL BE SUBMITTED WITH THE SHOP DRAWINGS.
14. LENS THICKNESS: AT LEAST 0.01875 INCH MINIMUM UNLESS OTHERWISE INDICATED.

WARRANTY

PROVIDE A WARRANTY FOR ALL LABOR AND EQUIPMENT FOR A PERIOD OF ONE YEAR AFTER ACCEPTANCE OF THE PROJECT. ANY ELECTRICAL TROUBLE DEVELOPING DURING THIS PERIOD DUE TO FAULTY WORKMANSHIP OR MANUFACTURE SHALL BE COVERED UNDER THE WARRANTY AND IMMEDIATELY CORRECTED AT NO COST TO THE OWNER.

TESTS

TEST ALL WIRE FOR SHORTS, OPENS, GROUNDS, OR OTHER DEFECTS; CORRECT ANY DEFECTIVE WORK, DEMONSTRATE CONTINUOUS SATISFACTORY OPERATION OF ALL ELECTRICAL WORK WITH THE OWNER BY RUNNING THROUGH MANUAL OPERATIONS.

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FILE: 151102WK1STE10
DRAWN: M.L.

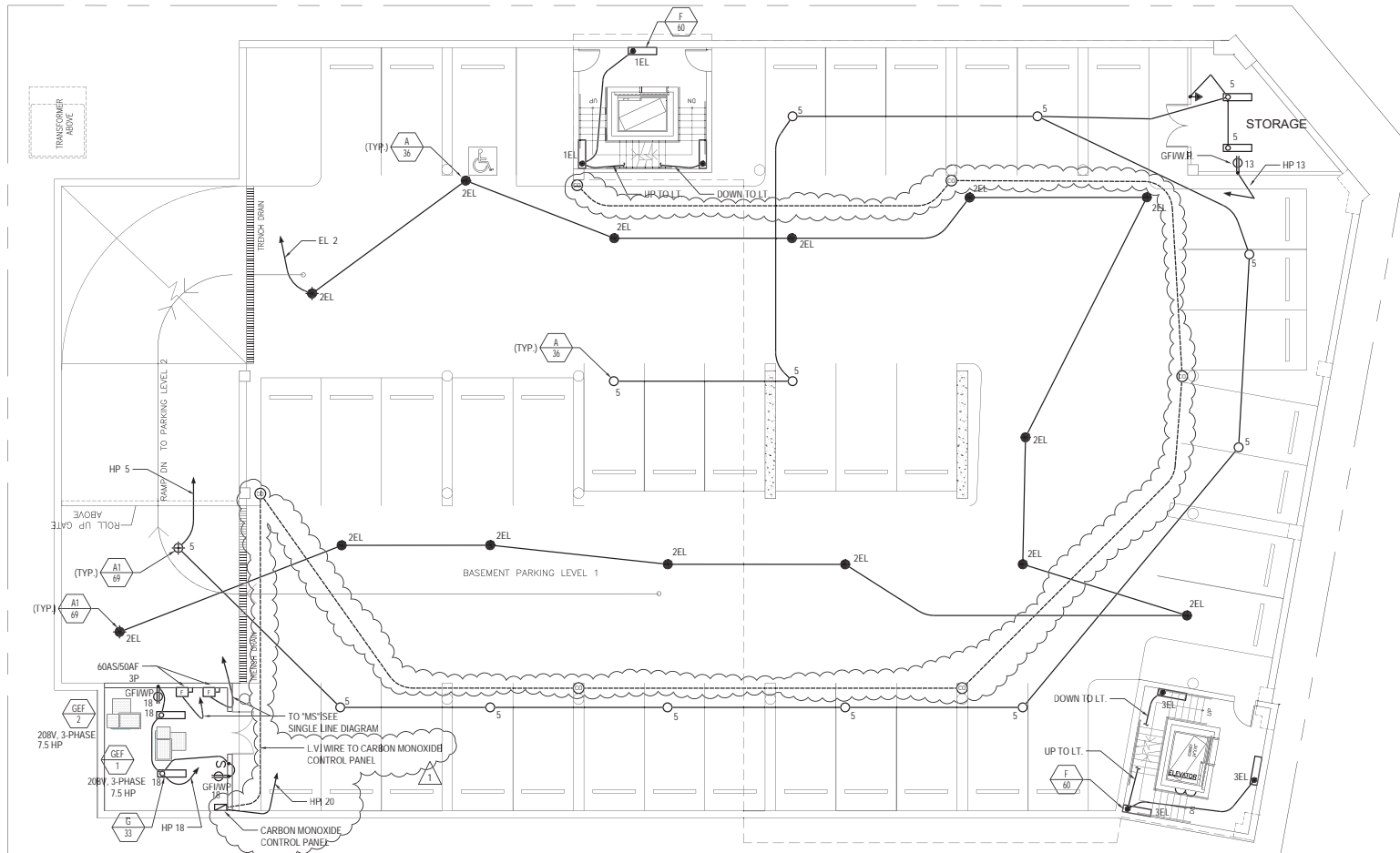
PROJECT: ARCHITECT: S L A R C H I T E C T S
LA VALLEY GARDEN PLAZA
NEW COMMERCIAL BUILDING
9933-9961 VALLEY BLVD.,
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PROFESSIONAL SEAL
C E G Engineering Inc.
Professional Engineer
No. 151102
Exp. 6/30/2018
State of California
City and County of Los Angeles

JOB NO: 151102
P.C. CORRECTION
3/10/2018

E-0.2



BASEMENT PARKING 1 ELECTRICAL PLAN

SCALE: 1/8"=1'-0"



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ARCHITECT: **S L A R C H I T E C T S**



PROJECT: **LA VALLEY GARDEN PLAZA
NEW COMMERCIAL BUILDING**

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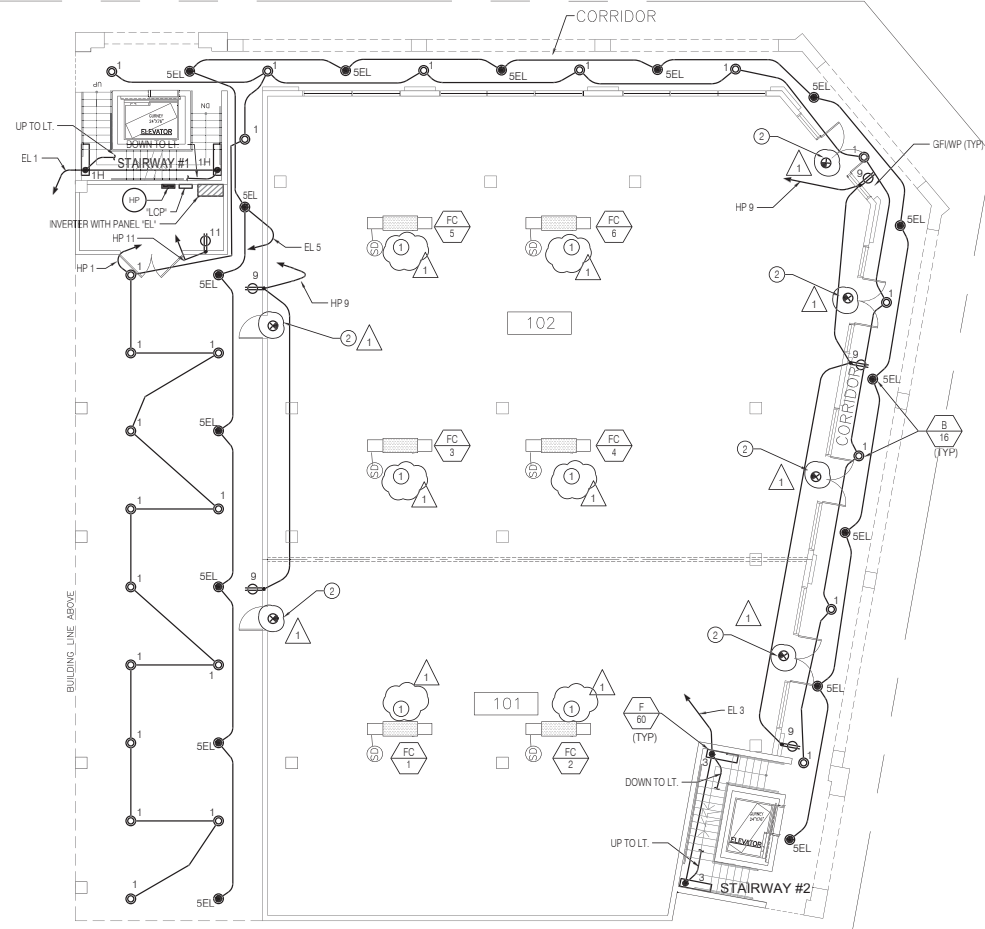


JOB NO: 151102
P.C. CORRECTION
3/10/2018

E-2.2

REFERENCE NOTES

1. PROVIDE (1)1" C.O. FOR FAN COIL UNIT AND SMOKE DETECTOR POWER CONNECTION UNDER TENANT IMPROVEMENT PROJECT BY OTHERS.
2. PROVIDE (1)3/4" C.O. FOR EXIT SIGN POWER CONNECTION UNDER TENANT IMPROVEMENT PROJECT BY OTHERS.



FIRST FLOOR ELECTRICAL PLAN

SCALE: 1/8"=1'-0"



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FILE: 151102WK1STE10
DRAWN: M.L.

ARCHITECT: **S L A R C H I T E C T S**
140 W. VALLEY BLVD., STE 215, SAN GABRIEL, CA 91776
P: 626-5717-8000 E: simon.lee@slarcht.com



PROJECT: **LA VALLEY GARDEN PLAZA
NEW COMMERCIAL BUILDING**
9933-9961 VALLEY BLVD.,
EL MONTE, CA 91731



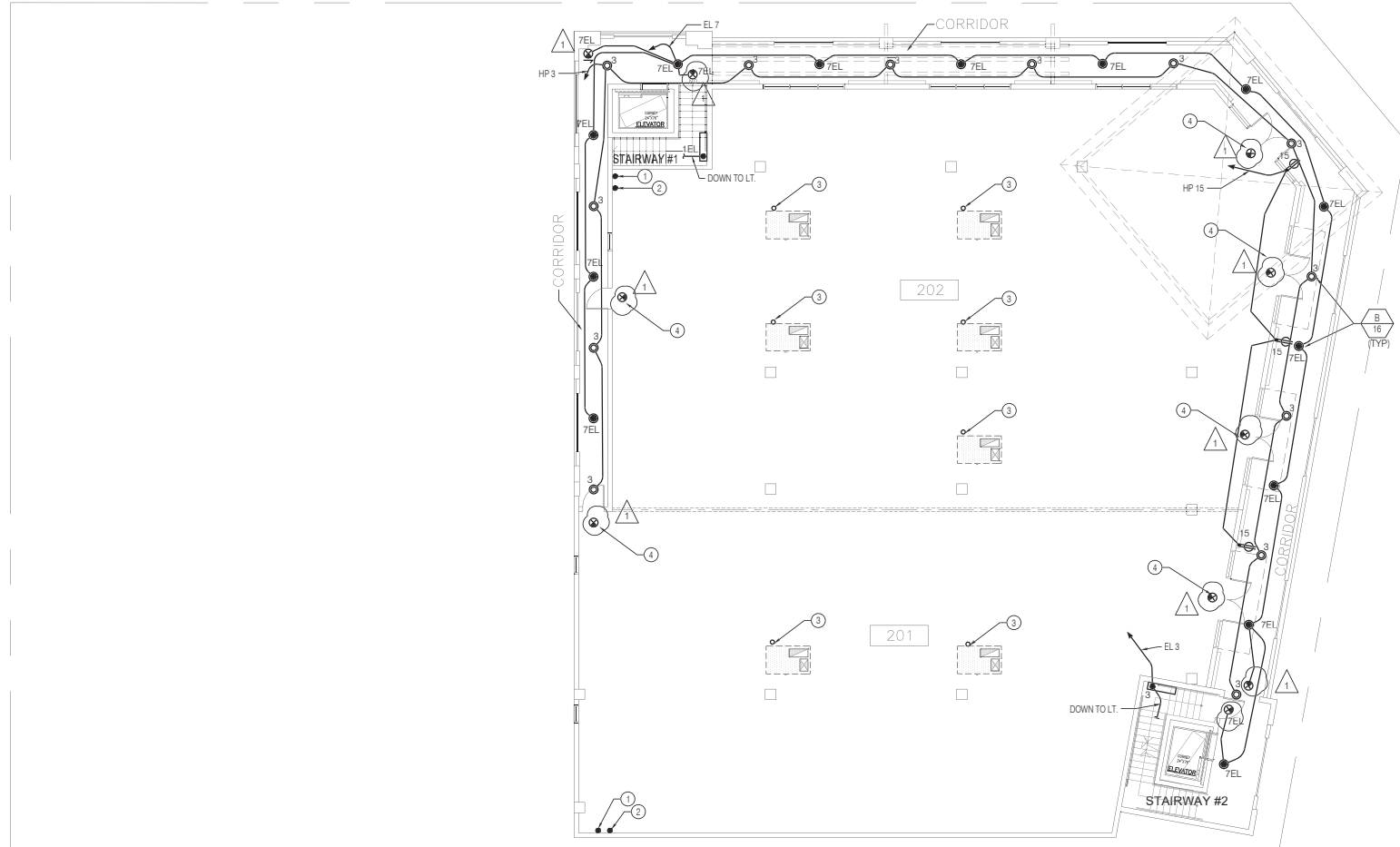
JOB NO: 151102

P.C. CORRECTION
3/10/2018

E-2.3

REFERENCE NOTES

- (2) 2" C.O. STUB-UP ON TENANT SPACE FROM MAIN SWITCHBOARD 'MS' FOR FUTURE TENANT POWER SYSTEM UNDER TENANT IMPROVEMENT BY OTHERS.
- (2) 2" C.O. STUB-UP ON TENANT SPACE FROM VOICE/DATA TERMINAL BOARD 'TTB' ONE FOR VOICE/DATA SYSTEM AND ANOTHER ONE FOR FIRE ALARM SYSTEM CONNECTION UNDER FUTURE TENANT IMPROVEMENT PROJECT BY OTHERS.
- PROVIDE (1) 1" C.O. FOR FUTURE POWER CONNECTION AND (1) 1/2" C.O. FOR INTERLOCKING CONTROL FOR FUTURE TENANT IMPROVEMENT PROJECT BY OTHERS.
- PROVIDE (1) 3/4" C.O. FOR EXIT SIGN POWER CONNECTION UNDER TENANT IMPROVEMENT PROJECT BY OTHERS.



SECOND FLOOR ELECTRICAL PLAN

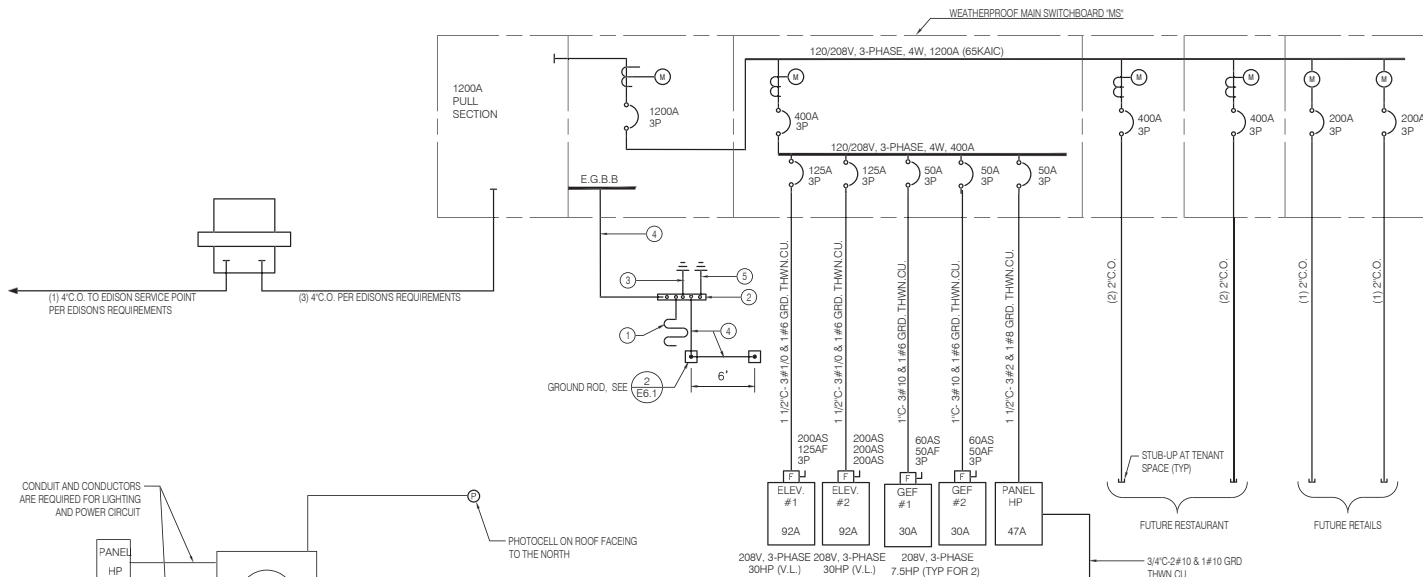
SCALE: 1/8"=1'-0"



CEG Engineering Inc.

Consulting Engineers Group JOB #: E17039

1543 W. Garvey Ave. North, Suite #210, West Covina, CA 91790
TEL: 626.308.1268 FAX: 626.308.1216 ceg@cegme.com



NOTE: PROVIDE SHUNT-TRIP BREAKER FOR ELEVATOR DISCONNECT

SINGLE LINE DIAGRAM

SCALE: NONE

2
E-3.1

LCP ID: LCP
Location: Electrical Room
Supply Circuit:

Relay	Circuit	Description	Switch/Sensor	Comment
1	HP-2	PARKING LOT	TIME CLOCK, PHOTOCELL OVERRIDE	
2	HP-1	FIRST FLOOR EXTERIOR	TIME CLOCK, PHOTOCELL OVERRIDE	
3	HP-4	EXTERIOR WALL SCONCE	TIME CLOCK, PHOTOCELL OVERRIDE	
4	HP-3	2ND FLOOR EXTERIOR	TIME CLOCK, PHOTOCELL OVERRIDE	
5	EL-5	FIRST FLOOR EXTERIOR	TIME CLOCK, PHOTOCELL OVERRIDE	
6	EL-7	2ND FLOOR EXTERIOR	TIME CLOCK, PHOTOCELL OVERRIDE	
7	PHOTOCELL			
8				

EXTERIOR LIGHTING CONTROL WIRING DIAGRAM

SCALE: NONE

3
E-3.1

LUMINAIRE SCHEDULE

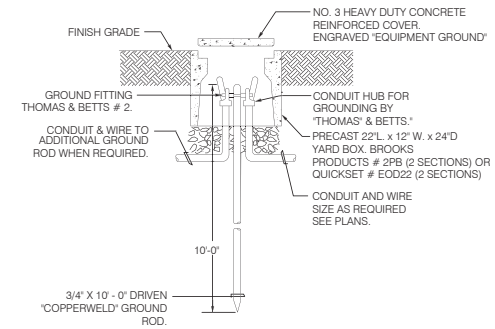
ITEM NO./WATTS	DESCRIPTIONS	LAMPS	MOUNTING	REMARKS
A/36	HE WILLIAMS LTG. #VG1-LED30-740-T5-SM-BLK-DIM-UNV-SBLOG	36W LED	SURFACE	PARKING GARAGE
A1/69	HE WILLIAMS LTG. #VG1-LED65-740-T5-SM-BLK-DIM-UNV-SBLOG	69W LED	SURFACE	PARKING GARAGE
B/16	PEACHTREE LIGHTING.#6BLRD-18-40-80-SH-TRW-120-SBLOG	18W LED	6" RECESS	
C/154	LSI LTG. #XALM-FT-LED-S5-40-UE-BLK-IMS-SBCEG WITH POLE #ULS-SSA-4151-15	154W LED	18" POLE	DRILLED-MOUNT ON SLAB PER STRUCTURE ENGR CALCULATION
D/23	BROWNLEE LTG. #7333-AB-F23LED-40K	ED	WALL	EXTERIOR WALL
F/60	NEW STAR LTG #STWL-4TRES-L2-40-UNV-SD3	60W LED	SURFACE	STAIRWELL
G/33	LSI INDUSTRIES-WNA10-LED-S5-NW-UE-SBLOG	33W LED	SURFACE	
⊕	EMERGILTE-XSLX-20-X-R-AF-N-SBCEG	-	SURFACE	

EMERGENCY CENTRAL INVERTER "EL"					
INPUT VOLTAGE: 208 VOLTS			MAIN CIRCUIT: 30A-2P		
OUTPUT VOLTAGE 120 VOLTS			A/C RATING: 14KAC		
OUTPUT RATING: 5.0KVA/5.0KW			POWER FACTOR:		
CR	BRKR	LIGHTS	VOLT AMPS	SERVING/LOCATION	REMARKS
1	20A-1P	8	480	STAR WAY #1	
2	20A-1P	15	850	BASEMENT PARKING 1 EM. LTG.	
3	20A-1P	8	480	STAR WAY#2	
4	20A-1P	15	850	BASEMENT PARKING 2 EM. LTG.	
5	20A-1P	16	256	FIRST FLOOR EMERGENCY LTG	
6	20A-1P		0	SPARE	
7	20A-1P	10	160	SECOND FLOOR EMERGENCY LTG	
8	20A-1P				
9					
10					
11					
12					
TOTAL			3076		

PANEL * HP *									
VOLTAGE: 120/208V, 3PH 4W.					MOUNT: SURFACE				
BUS AMPS: 125A					LOCATION: ELEC ROOM				
MAIN: M.L.O.					FED FROM: MAIN SWITCHBOARD				
BREAKER	LOAD	CIRCUIT	CTY	TOTAL V.A.	CTY	CIRCUIT	LOAD	BREAKER	
#	AMP	POLE	LTG	REC	DESCRIPTION	V.A.	A	B	C
1	20	1	23		FIRST FL EXTERIOR LTG	368	948		800
2	20	1	13		2ND FL EXTERIOR LTG	256		508	200
3	20	1	12		BASEMENT PARKING 1	1000			1400
7	20	1	15		BASEMENT PARKING 2	1000	1000		500
9	20	1	5		FIRST RECEPTACLE	800		1400	500
11	20	1	1		ELECTRICAL ROOM RECEPT	200			700
13	20	1	1		MECH ROOM RECEPT	200	700		500
15	20	1	3		2ND FL RECEPTACLES	840		140	200
17	30	1	1		WPC-1	2280		2680	400
19	30	1	1		SKIVA INVERTER "EL"	2500	2700		200
21	30	2				2500		2500	
23					SPACE				22
25					SPACE				24
27					SPACE				26
29					SPACE				28
31					SPACE				30
33					SPACE				32
35					SPACE				34
37					SPACE				36
39					SPACE				38
41					SPACE				40
43					SPACE				42
SUBTOTAL CONNECTED VA:					5888	5142	1750		
25% CONTINUOUS LOAD & 25% LARGEST MOTOR:					1219				
65% KITCHEN EQUIPMENT LOAD:					0				
TOTAL CONNECTED VA:					17015				
TOTAL CONNECTED AMPS:					47				

REFERENCE NOTES

1. UFER GROUND FOR EQUIPMENT GROUND SYSTEM, 20 FEET LONG BARE #3/0 ENCASED IN CONCRETE SLAB.
2. GROUND BUS 'EGGBY' IN ELEC ROOM. GROUND BUS SHALL BE 3" WIDE X 1/4" THICK X 36" LONG COPPER BUS. MOUNT - 24" ABOVE FLOOR ON 1" STANDOFF INSULATORS WITH LUG HOLES 1/4" DIA. DRILLED AND TAPPED 1" ON CENTERS. PROVIDE A BLACK PHENOLIC NAMEPLATE 1/4" HIGH ENGRAVED LETTERING TO READ "EQUIPMENT GROUND BUS". ATTACH NAMEPLATE TO WALL ABOVE GROUND BUS.
3. 1" C-1 #3/0 EQUIPMENT GROUND TO BUILDING STEEL.
4. 1" C-1 #3/0 ELECTRODE GROUND.
5. FOR COLD WATER GROUND BOND WITHIN FIVE(5) FEET OF COLD WATER PIPE ENTERING TO THE BUILDING.



GROUND ROD DETAIL

SCALE: NONE

1
E-3.1

MAIN SWITCHBOARD "MS" LOAD CALCULATION			
NEW RESTAURANT SPACE: 9,433 SQ.FT.			
LIGHTING LOAD : 2VA/SQ.FT. X 9,433 SQ.FT. X 125% LCL =	23,583	VA	
GENERAL RECEPTACLES: 1VA X 9,433 SQ.FT. =	9,433	VA	
KITCHEN EQUIPMENT: 30VA X 3,500 SQ.FT.	105,000	VA	
HVAC: 8VA/SQ.FT. X 9,433 SQ.FT. =	75,464	VA	
SUB-TOTAL:	213,480	VA	
NEW RETAIL SPACE: 7,318 SQ.FT.			
LIGHTING LOAD : 3VA/SQ.FT. X 7,318 SQ.FT. X 125% LCL =	27,443	VA	
GENERAL RECEPTACLES: 1VA X 7,318 SQ.FT. =	7,318	VA	
HVAC: 8VA/SQ.FT. X 7,318 SQ.FT. =	58,544	VA	
SUB-TOTAL:	93,305	VA	
	853	AMP	
HOUSE PANEL LOADS:	250	AMP	
TOTAL MAIN SWITCHBOARD "MS" ESTIMATE LOADS:	208V, 3-PHASE, 4-WIRE	1,103	AMP

C E G Engineering Inc.
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FILE: 151102WK1STE10
DRAWN: M.L.

ARCHITECT:
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140 W. VALLEY BLVD., STE 215, SAN GABRIEL, CA 91776
E: simon.lee@slarchitect.com
PH: 626-571-8000

PROJECT:
**LA VALLEY GARDEN PLAZA
NEW COMMERCIAL BUILDING**

9933-9961 VALLEY BLVD.,
EL MONTE, CA 91731

JOB NO: 151102

E-3.1

STATE OF CALIFORNIA
INDOOR LIGHTING
(SEE SPECIFICATIONS TO E-4, Section 0510)
CERTIFICATE OF COMPLIANCE
Indoor Lighting
Project Name: LA VALLEY GARDEN PLAZA
Date Prepared: 12/20/2017
NRCC-LTI-03-E
(Page 1 of 6)

A. General Information
Climate Zone: 9
Conditioned Floor Area: 17280 SQ.FT.
Building Type: ☒ Nonresidential ☐ High-Rise Residential ☐ Hotel/Motel
☒ Schools ☐ Detachable Public Schools ☐ Conditioned Spaces ☐ Unconditioned Spaces
Phase of Construction: ☒ New Construction ☐ Addition ☐ Alteration
Method of Compliance: ☒ Complete Building ☐ Area Category ☐ Tailored
Project Address:

B. Lighting Compliance Documents (select yes for each document included)
For detailed information on the use of this and all Energy Efficiency Standards compliance documents, refer to the Nonresidential Manual published by the California Energy Commission.
YES NO COMP. DOC. TITLE
☒ ☐ NRCC-LTI-03-E Certificate of Compliance. All Pages required on plans for all submittals.
☒ ☐ NRCC-LTI-03-E Lighting Controls, Certificate of Compliance, and PM Calculation. All Pages required on plans for all submittals.
☒ ☐ NRCC-LTI-03-E Indoor Lighting Power Allowance
☒ ☐ NRCC-LTI-04-E Tailored Method Worksheets
☒ ☐ NRCC-LTI-05-E Line Voltage Track Lighting Worksheets
☒ ☐ NRCC-LTI-06-E Indoor Lighting Existing Conditions

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance April 2016

STATE OF CALIFORNIA
INDOOR LIGHTING
(SEE SPECIFICATIONS TO E-4, Section 0510)
CERTIFICATE OF COMPLIANCE
Indoor Lighting
Project Name: LA VALLEY GARDEN PLAZA
Date Prepared: 12/20/2017
NRCC-LTI-03-E
(Page 4 of 6)

G. Installed Portable Luminaires in Offices - Exception to Section 140.4(a)
This section shall be filled out ONLY for portable luminaires in offices (As defined in §100.1). All other planned portable luminaires shall be documented on next page of this compliance document.
This section is used to determine if greater than 0.3 watts of portable lighting is planned for any office
Fill out a separate line for each different office. Small offices that are typical (having the same general and portable lighting) may be grouped together. This allowance shall not be traded between offices having different lighting systems.
Office Portable Luminaires Schedule
01 02 03 04 05 06 07 08 09 10
Complete Luminaires Description (i.e., LED, under cabinet, luminaire mounted direct/indirect)
Watts per luminaire
Number of luminaires
Installed portable luminaire watts in this office (003 x 003)
Watts per square foot (004 / 003)
If 006 is 0.3, enter 006
If 006 is 0.3, (006 / 0.3)
005 x 007
Identify Office area in which these portable luminaires are installed
Indirect
Field Inspector
Total installed portable luminaire watts that are greater than 0.3 W/ft² per office:
Enter sum total of all pages into NRCC-LTI-03-E, Page 2

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance April 2016

STATE OF CALIFORNIA
INDOOR LIGHTING
(SEE SPECIFICATIONS TO E-4, Section 0510)
CERTIFICATE OF COMPLIANCE
Indoor Lighting
Project Name: LA VALLEY GARDEN PLAZA
Date Prepared: 12/20/2017
NRCC-LTI-03-E
(Page 2 of 6)

C. Summary of Allowed Lighting Power
Conditioned and Unconditioned space lighting must not be combined for compliance
Indoor Lighting Power for Conditioned Spaces
01 Installed Lighting
NRCC-LTI-03-E, Table 14, page 5
Watts
02 Portable Only for Offices
NRCC-LTI-03-E, Table 14, page 5
Watts
03 Minus Lighting Control Credits
NRCC-LTI-03-E, page 2
Watts
04 Adjusted Installed Lighting Power
(row 1 plus row 2 minus row 3)
Watts
Complies ONLY if installed < Allowed (Box 04 < Box 05)
Allowed Lighting Power
Conditioned NRCC-LTI-03-E, page 1
Attention with replacement luminaires that have at least 50/50% lower power compared to the original existing luminaires, may instead use the allowed wattage from NRCC-LTI-06, page 2
Unconditioned Lighting Power for Unconditioned Spaces
01 Installed Lighting
NRCC-LTI-03-E, Table 14, page 5
Watts
02 Minus Lighting Control Credits
NRCC-LTI-03-E, page 2
Watts
03 Adjusted Installed Lighting Power
(row 1 minus row 2)
Watts
Complies ONLY if installed < Allowed (Box 04 < Box 05)
Allowed Lighting Power
Unconditioned NRCC-LTI-03-E, page 1
Attention with replacement luminaires that have at least 50/50% lower power compared to the original existing luminaires, may instead use the allowed wattage from NRCC-LTI-06, page 2

D. Declaration of Required Certificates of Installation
Declare by selecting yes for all of the Certificates that will be submitted. (Retain copies and verify forms are completed and signed.)
YES NO Form/Title
☒ ☐ NRCC-LTI-03-E - Must be submitted for all buildings
☒ ☐ NRCC-LTI-03-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.
☒ ☐ NRCC-LTI-03-E - Must be submitted for a line-voltage track lighting integral current limiter, or for a supplementary overcurrent protection panel used to energize only line-voltage track lighting, to be recognized for compliance.
☒ ☐ NRCC-LTI-04-E - Must be submitted for two interlocked systems serving an auditorium, a convention center, a conference room, a multipurpose room, or a theater to be recognized for compliance.
☒ ☐ NRCC-LTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.
☒ ☐ NRCC-LTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance.

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance April 2016

STATE OF CALIFORNIA
INDOOR LIGHTING
(SEE SPECIFICATIONS TO E-4, Section 0510)
CERTIFICATE OF COMPLIANCE
Indoor Lighting
Project Name: LA VALLEY GARDEN PLAZA
Date Prepared: 12/20/2017
NRCC-LTI-03-E
(Page 5 of 6)

A Separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for:
☒ CONDITIONED SPACE ☐ UNCONDITIONED SPACE
H. Indoor Lighting Schedule and Field Inspection Energy Checklist
Luminaire Schedule
01 02 03 04 05 06 07 08
Number of luminaires
Complete Luminaires Description (i.e., 3 lamp fluorescent troffer, P177E, one dimmable electronic ballast)
Watts per luminaire
Number of luminaires
Total installed luminaire watts (003 x 004)
Primary function area in which these luminaires are installed
Field Inspector
INSTALLED WATTS PAGE TOTAL
Enter sum total of all pages into NRCC-LTI-03-E, Page 2

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance April 2016

STATE OF CALIFORNIA
INDOOR LIGHTING
(SEE SPECIFICATIONS TO E-4, Section 0510)
CERTIFICATE OF COMPLIANCE
Indoor Lighting
Project Name: LA VALLEY GARDEN PLAZA
Date Prepared: 12/20/2017
NRCC-LTI-03-E
(Page 3 of 6)

E. Declaration of Required Certificates of Acceptance
Declare by selecting yes for all of the Certificates of Acceptance that will be submitted. (Retain copies and verify forms are completed and signed.)
YES NO FORM/TITLE
☒ ☐ NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.
☒ ☐ NRCA-LTI-03-A - Must be submitted for automatic daylight controls.
☒ ☐ NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.
☒ ☐ NRCA-LTI-05-A - Must be submitted for institutional tuning power adjustment factor (PAF).
A Separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for:
☒ CONDITIONED SPACE ☐ UNCONDITIONED SPACE
F. Indoor Lighting Schedule and Field Inspection Energy Checklist
The actual indoor lighting power listed on the next 2 pages includes all installed permanent and planned portable lighting systems.
When Complete Building Method is used for compliance, list each different type of luminaire on separate lines.
When Area Category Method or Tailored Method is used for compliance, list each different type of luminaire by each different function area on separate lines.
Also include track lighting in schedule, and submit the track lighting compliance document (NRCC-LTI-05-E) when line-voltage track lighting is installed.

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance April 2016

STATE OF CALIFORNIA
INDOOR LIGHTING
(SEE SPECIFICATIONS TO E-4, Section 0510)
CERTIFICATE OF COMPLIANCE
Indoor Lighting
Project Name: LA VALLEY GARDEN PLAZA
Date Prepared: 12/20/2017
NRCC-LTI-03-E
(Page 6 of 6)

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
I, the undersigned, declare that this Certificate of Compliance documentation is accurate and complete.
Documentation Author Signature: Jessica Yuen
Signature Date: 3/1/2017
Title: CEO ENGINEERING
Address: 1543 W. GARVEY AVE., NORTH #210
City: WEST COVINA, CA 91790
Phone: (626) 308-1268
RESPONSIBLE PERSON'S DECLARATION STATEMENT
I certify the following under penalty of perjury, under the laws of the State of California:
1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 1 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.
Responsible Designer Signature: Jessica Yuen
Signature Date: 3/1/2017
Title: CEO ENGINEERING
Address: 1543 W. GARVEY AVE., NORTH #210
City: WEST COVINA, CA 91790
Phone: (626) 308-1268

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance April 2016

 **CEG Engineering Inc.**
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tel: 626.308.1268 fax: 626.308.1216 ceg@cegmp.com

STATE OF CALIFORNIA
OUTDOOR LIGHTING
CERTIFICATE OF COMPLIANCE
NRECC-LTD-01-E
(Page 3 of 4)

Project Name: PACIFIC VILLA ALHAMBRA - LOT 4 Date Received: 3/1/2017

A. General Information

Project Address: 836 N. STONEMAN AVE., ALHAMBRA, CA 91801 Total Illuminated Hardscape Area: 11187 SQ.FT.

Phase of Construction: ☒ New Construction ☐ Addition ☐ Alteration

Outdoor Lighting Zone (LZ): ☐ LZ-1 ☐ LZ-2 ☒ LZ-3 ☐ LZ-4

I have confirmed with the AHJ which LZ applies to this site. For default lighting zone designations, see Title 24 Part 6, §10-114.

B. Lighting Compliance Documents (Check box for each document included)

For general instructions on the use of this and all energy efficiency standards compliance documents, refer to the Nonresidential Manual published by the California Energy Commission.

☒ NRECC-LTD-01-E Certificate of Compliance

☒ NRECC-LTD-02-E Outdoor Lighting Controls Certificate of Compliance

☒ NRECC-LTD-03-E Outdoor Lighting Power Allowance Certificate of Compliance

☐ NRECC-LTD-04-E Outdoor Lighting Existing Conditions Certificate of Compliance

C. Summary of Allowed Outdoor Lighting Power

Sum Total ALLOWED Outdoor Lighting Wattage from NRECC-LTD-03-E, page 1 Watts 2206.05

Alterations with NO increase of connected lighting load may instead use the allowed wattage from NRECC-LTD-04, page 2.

Complies ONLY if installed (Box 02) < Allowed (Box 01)

Sum Total INSTALLED Outdoor Lighting Wattage from NRECC-LTD-01-E, page 3. 786

D. Declaration of Required Installation Certificates

Declare by checking all of the Certificates of Acceptance that will be submitted. (Retain copies and verify compliance documents are completed and signed.)

☐ NRECC-LTD-01-E - Must be submitted for all buildings ☐ Field Inspector

☐ NRECC-LTD-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS) to be recognized for compliance. ☐ Field Inspector

E. Declaration of Required Certificates of Acceptance

Declare by checking all of the Certificates of Acceptance that will be submitted. (Retain copies and verify compliance documents are completed and signed.)

☐ NRECC-LTD-03-E - Must be submitted for outdoor lighting controls. ☐ Field Inspector

F. Schedule of Luminaires Exempt from the Outdoor Lighting Power Requirements in §140.7

01	02
Name or Symbol	Description of exempt luminaire in accordance with the exemptions

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance April 2016

STATE OF CALIFORNIA
OUTDOOR LIGHTING
CERTIFICATE OF COMPLIANCE
NRECC-LTD-01-E
(Page 2 of 4)

Project Name: PACIFIC VILLA ALHAMBRA - LOT 4 Date Received: 3/1/2017

G. Schedule of Luminaires Exempt from the Cutoff Requirements in §130.2(b)

01	02
Name or Symbol	Description of exempt luminaire in accordance with the exemptions

H. Schedule of Luminaires Exempt from the Outdoor Lighting Control Requirements in §130.2(c)

01	02
Name or Symbol	Description of exempt luminaire in accordance with the exemptions

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance April 2016

STATE OF CALIFORNIA
OUTDOOR LIGHTING
CERTIFICATE OF COMPLIANCE
NRECC-LTD-01-E
(Page 3 of 4)

Project Name: PACIFIC VILLA ALHAMBRA - LOT 4 Date Received: 3/1/2017

I. Outdoor Lighting Schedule and Field Inspection Energy Checklist

01 Name or Item Tag	02 Complete Luminaire Description	03 Watts per Luminaire	04 How wattage was determined			05 Number of Luminaires	06 Total Installed Watts in this area (04 x 05)	07 Location Primary Function area in which these luminaires are installed (Outdoor Lighting Zone)	08 Bugs Rating	09 Field Inspector	
			04.01 Cutoff Data	04.02 Manufacturer's Data	04.03 Field Inspection					Pass	Fail
A	LED EXTERIOR WALL SCENE	17	<input type="checkbox"/>	<input checked="" type="checkbox"/>		38	646				
B	LED EXTERIOR STEP LIGHTS	4	<input type="checkbox"/>	<input checked="" type="checkbox"/>		35	140				
			<input type="checkbox"/>	<input type="checkbox"/>			0				
INSTALLED WATTS PAGE TOTAL:								786	Enter sum total of all pages (Sum Total INSTALLED Outdoor Lighting wattage) into NRECC-LTD-01-E, Page 1		786

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance April 2016

STATE OF CALIFORNIA
OUTDOOR LIGHTING
CERTIFICATE OF COMPLIANCE
NRECC-LTD-01-E
(Page 4 of 4)

Project Name: PACIFIC VILLA ALHAMBRA - LOT 4 Date Received: 3/1/2017

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I, Jessica Yu, certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Jessica Yu Documentation Author Signature: Jessica Yu

Company: CEG Engineering, Inc. Signature Date: 3/1/2017

Address: 1543 W. Garvey Ave. North, Suite #210 (SA Certificate requires 2 addresses)

City/County: West Covina, CA 91790 Phone: 626-308-1268

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

- The information provided on this Certificate of Compliance is true and correct.
- I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
- The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
- The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
- I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: Jessica Yu Responsible Designer Signature: Jessica Yu

Company: CEG Engineering, Inc. Date Signed: 3/1/2017

Address: 1543 W. Garvey Ave. North, Suite 210 City/County: West Covina, CA 91790

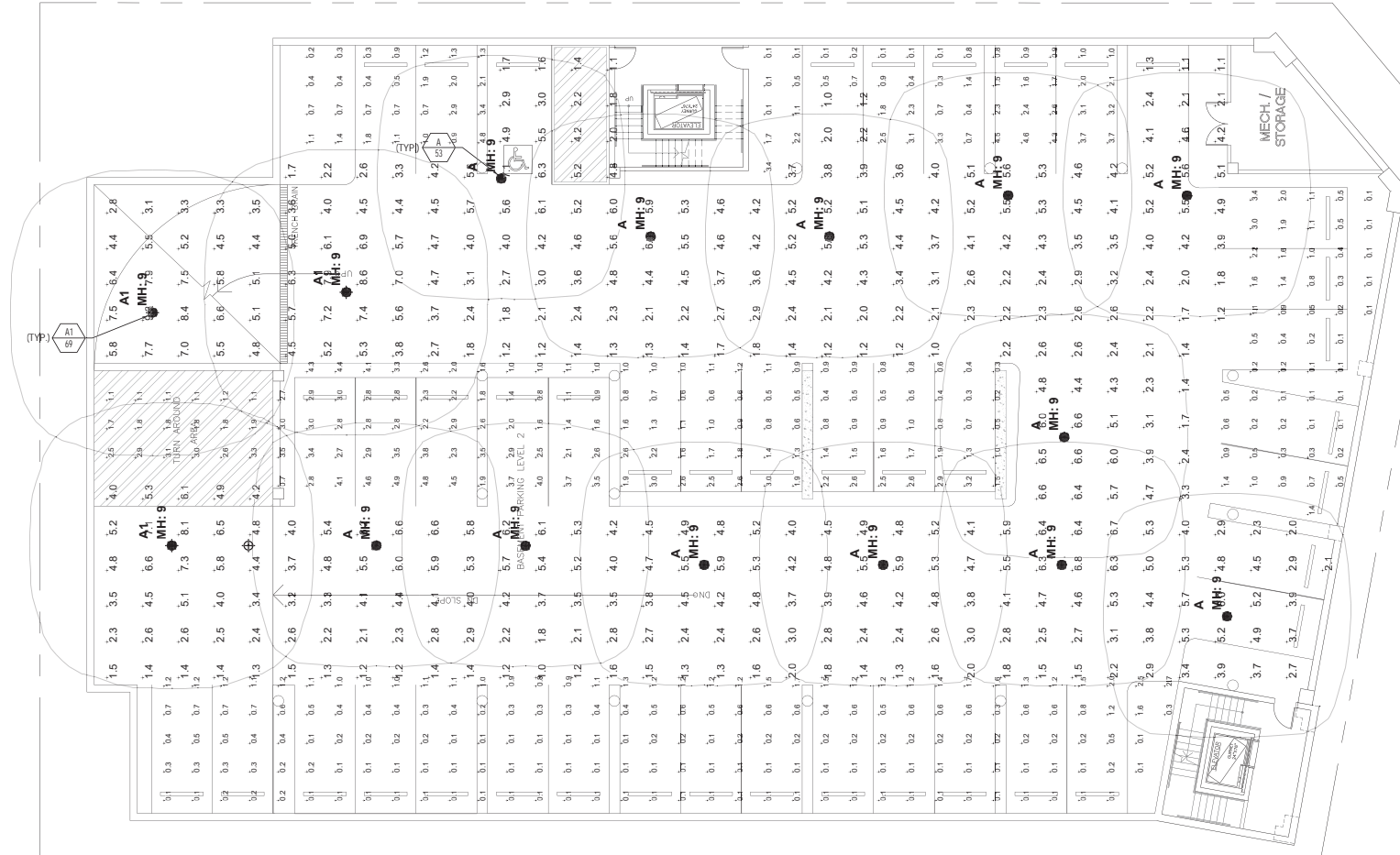
Phone: 626-308-1268

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance April 2016

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance January

LUMINAIRE SCHEDULE								
SYMBOL	QTY	LABEL	ARRANGEMENT	LLF	DESCRIPTION	LUM. LUMENS	LUM. WATTS	TOTAL WATTS
•	24	A	SINGLE	0.900	HE WILLIAMS: VG1-L30-740-T5-SM-BLK-DIM-UNV-SBLOG	3359	36	864
•	6	A1	SINGLE	0.900	HE WILLIAMS: VG1-L65-740-T5-SM-BLK-DIM-UNV-SBLOG	5700	69	414

CALCULATION SUMMARY							
LABEL	UNITS	AVG	MAX	MIN	AVG/MIN	MAX/MIN	HEIGHT OF CALC. POINTS
EGRESS PATH - BASEMENT 1	FC	4.02	11.4	1.0	4.03	11.40	0
EGRESS PATH - BASEMENT 2	FC	9.93	9.3	1.0	9.93	9.30	0
PARKING STALLS - BASEMENT 1	FC	1.34	5.9	0.1	13.40	59.00	0
PARKING STALLS - BASEMENT 2	FC	1.14	4.9	0.1	11.40	49.00	0



BASEMENT PARKING 2 EMERGENCY PHOTOMETRIC PLAN

SCALE: 1/8"=1'-0"



CEG Engineering Inc.
Consulting Engineers Group JOB #: E17039
1543 W. Garvey Ave. North, Suite #210, West Covina, CA 91790
tel: 626.305.1268 fax: 626.305.1216 ceg@cegmap.com



JOB NO: 151102
P.C. CORRECTION
3/10/2018

E-5.1

PROJECT:
**LA VALLEY GARDEN PLAZA
NEW COMMERCIAL BUILDING**

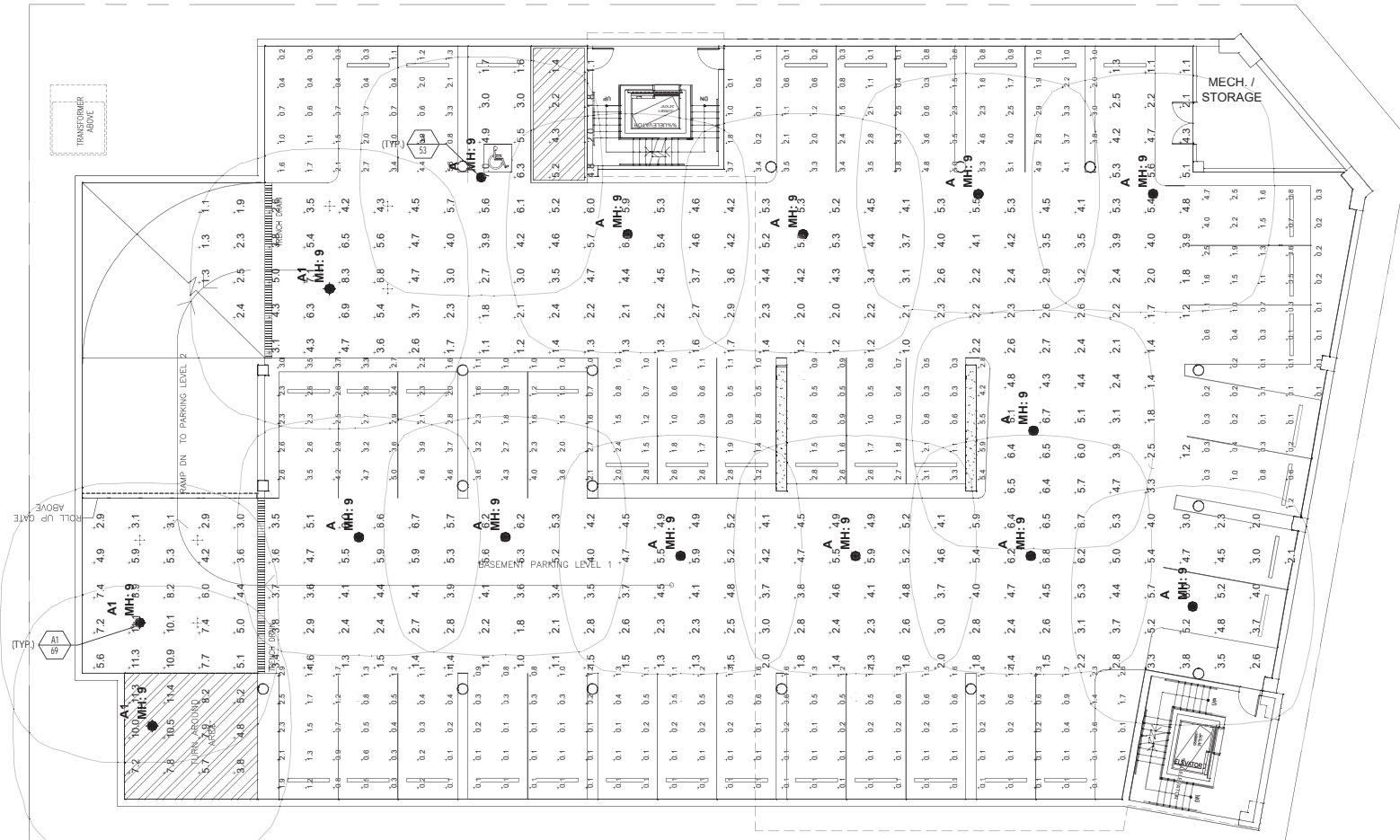


ARCHITECT:
**S L A
ARCHITECTS**
140 W. VALLEY BLVD., STE 215, SAN GABRIEL, CA 91776
PH: 626.571.8000
E: simon.lee@slarchi.com

FILE: 151102WK1STE10
DRAWN: M.L.

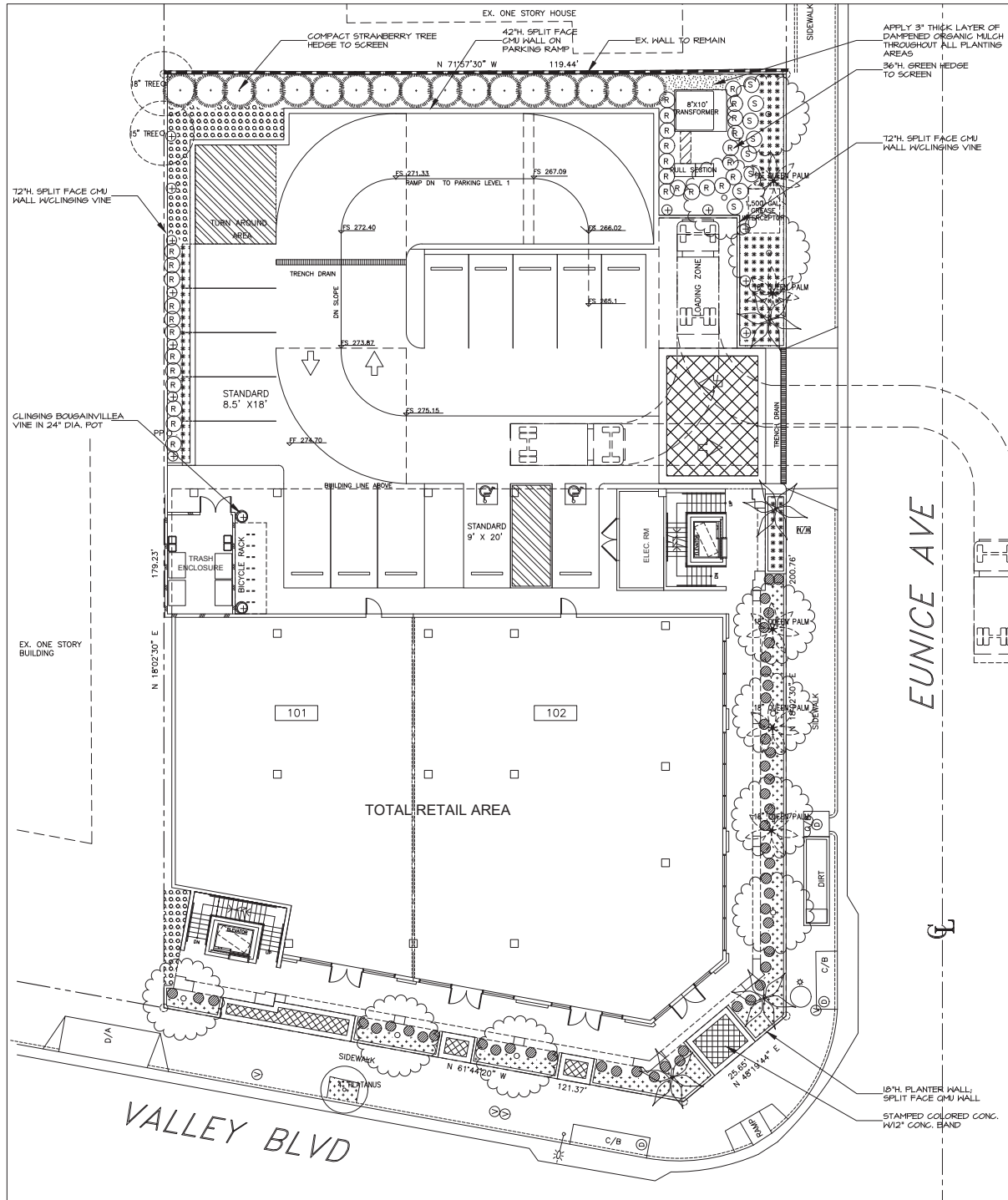
LUMINAIRE SCHEDULE									
SYMBOL	QTY	LABEL	ARRANGEMENT	LLF	DESCRIPTION	LUM. LUMENS	LUM. WATTS	TOTAL WATTS	
1	24	A	SINGLE	0.900	HE WILLIAMS: VG1-L30-740-T5-SM-BLK-DIM-UNV-SBLOG	3359	36	864	
2	6	A1	SINGLE	0.900	HE WILLIAMS: VG1-L65-740-T5-SM-BLK-DIM-UNV-SBLOG	5700	69	414	

CALCULATION SUMMARY							
LABEL	UNITS	AVG	MAX	MIN	AVG/MIN	MAX/MIN	HEIGHT OF CALC. POINTS
EGRESS PATH - BASEMENT 1	FC	4.02	11.4	1.0	4.02	11.40	0
EGRESS PATH - BASEMENT 2	FC	3.93	9.3	1.0	3.93	9.30	0
PARKING STALLS - BASEMENT 1	FC	1.34	5.9	0.1	13.40	59.00	0
PARKING STALLS - BASEMENT 2	FC	1.14	4.9	0.1	11.40	49.00	0



BASEMENT PARKING 1 EMERGENCY PHOTOMETRIC PLAN
SCALE: 1/8"=1'-0"

CEG Engineering Inc.
Consulting Engineers Group JOB #: E17039
1543 W. Garvey Ave. North, Suite #210, West Covina, CA 91790
Tel: 626.308.1268 Fax: 626.308.1216 ceg@cegmap.com



PLANTING LEGEND

TREES

- EX. TREES TO REMAIN
- EX. TREES TO BE REMOVED
- 10 MELALEUCA NESOPHILA
- 24" BOX PINK MELALEUCA (L)(T)
- 17 ARBUTUS UNEDO 'COMPACTA'
- 24" BOX COMPACT STRAWBERRY TREE (L)(T)
- 04 PHOENIX DACTYLIFERA
- 20' CT DATE PALM (L)(T)

SHRUBS

- 30 RHAMNUS CALIFORNICA 'EVE CASE'
- 15 GAL EVE CASE COFFEEBERRY (L)(S) - AT 30" O.C.
- 09 SALVIA LEUCANTHA 'SANTA BARBARA'
- 5 GAL SANTA BARBARA MEXICAN BUSH SAGE (L)(S)
- AT 48" O.C.
- 12 BOUGAINVILLEA 'SAN DIEGO RED'
- 5 GAL RED BOUGAINVILLEA VINE (L)(V) - AT 120" O.C.
- 51 ANIGONANTHOS 'BUSH TANGO'
- 5 GAL ORANGE KANGAROO PAW (L)(P) - AT 30" O.C.

GROUNDCOVERS

- 377 S.F. LANTANA SELLOWIANA 'MONSIEUR'
- 5 GAL LAVENDER SWIRL TRAILING LANTANA (L)(Gc) - AT 36" O.C.
- 395 S.F. LANTANA 'SPREADING SUNSET'
- 5 GAL ORANGE RED LANTANA (L)(Gc) - AT 48" O.C.
- 210 S.F. BERBERIS REPENS
- 1 GAL CREEPING MAHONIA (L)(Gc) - AT 36" O.C.

W.U.C.O.L.S REGION 4 PLANT FACTOR: (L)-LOW, (M)-MODERATE, (H)-HIGH, (T)-TREE, (S)-SHRUB, (P)-PERENNIAL, (Gc)-GROUND COVER, (V)-VINE

LOT COVERAGE SUMMARY:
TOTAL LANDSCAPED AREA: 2,478 SF.
LOT AREA: 22,970 SF.
TOTAL LANDSCAPE COVERAGE: 10.79%
2478 SF. OF LOW WATER USE PLANTS (100%)

THE LANDSCAPE PLAN WILL COMPLY WITH THE WATER EFFICIENT LANDSCAPE ORDINANCE.

PLANTING NOTES

- PLANTS SHALL BE OF NO.1 GRADE CONFORMING TO CA. STANDARD GRADING CODE OF NURSERY STOCKS, AVERAGE FOR THE CONTAINER SIZE, HEALTHY, VIGOROUS AND FREE FROM INSECT INFESTATION AND DISEASES.
- WORK PROCEDURES APPLYING TO ALL PLANTING AREAS PRIOR TO PLANT MATERIAL INSTALLATION- (1) ALL DEBRIS, RUBBISH, WEEDS, ROCKS, ETC., SHALL BE CLEARED FROM SITE PRIOR TO PLANT INSTALLATION, (2) FINISH GRADE ARE FREE OF WATER POCKETS, AND GRADE TO ONE INCH FROM TOP OF CURBS OR PAVING; CONTRACTOR TO VERIFY ALL GRADING WORK WITH GRADING PLAN.
- GROUND COVER INDICATED AREA SHALL BE CONTINUOUS UNDER SHRUBS.
- PLANTING AREAS WHICH HAVE NO TURF SHALL RECEIVE 3" MIN. FINE REDWOOD BARK AS A GROUND COVER.
- TOPSOIL, IF REQUIRED, SHALL CONSIST OF SANDY-LOAM TEXTURE FERTILE SOIL WITH A PH RANGE OF 6.5 - 7.5 AND AN E.C.E. VALUE THAT DOES NOT EXCEED 3.0. TOP SOIL SUPPLIER: CAL BLEND SOIL INC. TEL:1.800.425.3631
- SOIL PREPARATION- PRIOR TO SOIL PREPARATION, CONTRACTOR SHALL OBTAIN SOIL TEST FOLLOWING ROUGH GRADING TO DETERMINE PROPER SOIL AMENDMENTS. THE FOLLOWING AMENDMENTS ARE FOR BIDDING PURPOSES ONLY; AMENDMENTS RECOMMENDED BY SOIL ANALYSIS REPORT SHALL BE USED.
- PLANT PITS SHALL BE TWICE AS WIDE AND DEEP AS THE PLANT ROOT BALL. NATIVE SOIL UNDER ROOT ONLY; ROOT BALL SIDES TO BE BACKFILLED AND COMPACTED TO 80% WITH 100% EXCAVATED NATIVE SITE SOIL, UNLESS OTHERWISE NOTED. PROVIDE GRO-POWER PLANT TABLETS AT THE FOLLOWING RATES: 1 GAL-2, 5 GAL-5, 15 GAL-10, 24" BOX AND UP- 14.
- CONTRACTOR TO INSTALL AND MAINTAIN PLANTING IN ACCORDANCE WITH THE GOVERNING AGENCY'S GUIDELINES AND SPECIFICATIONS UNLESS NOTED OTHERWISE IN THESE NOTES OR ON THE PLANS.
- MAINTENANCE OPERATIONS SHALL BEGIN IMMEDIATELY AFTER EACH PLANT IS PLANTED AND SHALL BE CONTINUED SATISFACTORILY FOR A PERIOD OF 90 DAYS AFTER THE TIME OF ALL ITEMS OF THE WORK HAVE BEEN COMPLETED TO THE SATISFACTION OF THE OWNER AND LANDSCAPE ARCH.
- AT THE END OF THE MAINTENANCE PERIOD, THE CONTRACTOR SHALL REQUEST A FINAL INSPECTION BY THE LANDSCAPE ARCHITECT, IF THE AREA IS NOT MAINTAINED TO THE SATISFACTION OF THE LANDSCAPE ARCHITECT, OWNER AND THE GOVERNING AGENCY, THE MAINTENANCE OPERATION WILL CONTINUE AT NO COST TO THE OWNER UNTIL ALL ITEMS NEEDING ATTENTION REACH SATISFACTION TO THE ABOVE LISTED PARTIES.
- MAINTENANCE FOR AREAS MINIMUM 90 DAYS INCLUDED IN CONTRACT TO BE AS FOLLOWS:
 - PROPER WATERING 3 DAYS A WEEK (TUESDAY, FRIDAY & SUNDAY) OR AS NEEDED, AND LESS AS PLANTS BECOME ESTABLISHED. NO WATERING DURING THE HOURS OF 9:00AM THROUGH 5:00PM. WATERING IS LIMITED TO A TOTAL OF 15 MINUTES PER STATION PER ALLOWED DAYS.
 - FERTILIZATION- RE-FERTILIZE 30 DAYS AFTER PLANTING.
 - WEED CONTROL- RE-APPLY PRE-EMERGENT HERBICIDE AFTER 25 DAYS & CONTINUE AS NEEDED.
 - PEST CONTROL- AS NEEDED
- CONSTRUCTION AROUND EXISTING TREES MUST BE CAREFULLY CONTROLLED AND LIMITED TO ACCESS IN ORDER TO MAINTAIN PROPER SOIL CONDITIONS. SKILLED PRUNING OF THE TREE CANOPIES AND BRANCHES SHOULD BE DONE AT THE DIRECTION OF A CERTIFIED ARBORIST TO REMOVE ANY DEAD OR BROKEN BRANCHES, AND TO PROVIDE THE NECESSARY CLEARANCE FOR THE CONSTRUCTION EQUIPMENTS.
- SOIL AMENDMENT LISTED IN THIS NOTE IS FOR BIDDING PURPOSE ONLY. ACTUAL AMENDMENTS AND BACKFILL MIXES SHOULD CONFORM TO SOIL ANALYSIS REPORT RECOMMENDATIONS. SOIL TESTING FOR AGRICULTURAL SUITABILITY SHOULD BE DONE FOLLOWING FINAL GRADING, IRRIGATION TRENCHING AND INSTALLATION OF IRRIGATION MAINLINE AND LATERAL LINES AND BEFORE PLANTING AND INSTALLATION OF DRIPLINE. AS THE SURFACE SOIL IN LANDSCAPE AREAS WILL BE DIFFERENT THAN PRIOR TO GRADING WORK.
 - 200 LBS GRO-POWER.
 - 4 CUBIC YARDS NITROGENIZED, MINERALIZED FIR BARK OR REDWOOD SHAVINGS
 - APPLY PRE-EMERGENT WEED KILLER (DEVINOL-STAUFFER CHEMICAL CO.)
 - ADD 8 LBS OF GRO-POWER CONTROLLED RELEASE
 - 12-8-8 PER CUBIC YARD OF MIX
 - APPLY DAMPENED ORGANIC MULCH 3" THROUGH-OUT ALL PLANTING AREAS



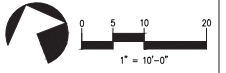
LANDSCAPE PLANTING PLAN

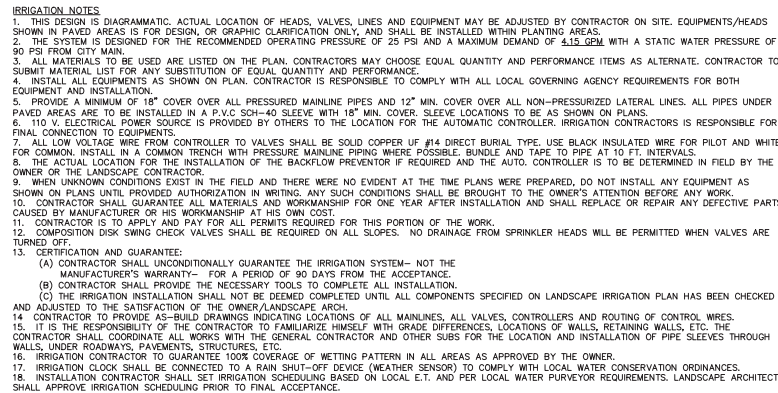
LA VALLEY GARDEN PLAZA
9933 VALLEY BLVD
EL MONTE, CA 91731
























DATE	REVISIONS

SCALE	AS SHOWN
DATE	03-16-2018
PROJECT NO.	P1553
DRAWN BY	CP
CHECKED BY	

SHEET NO.	L-1
OF 3 SHEETS	



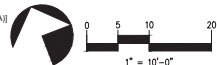


IRRIGATION LEGEND				
SYMBOLS	DESCRIPTION	MFG. & MODEL	DET	
	POINT OF CONNECTION			
	1" WATER METER	NEW PER CIVIL		
	1" R.P. BACKFLOW	TEBBO® 825Y OR APPROVED EQUAL.	L-3/F	
	1" MASTER VALVE	TORO® P220	L-3/F	
	FLOW SENSOR, 1" PLASTIC TEE	TORO® TFS-100	L-3/F	
	AUTOMATIC SMART CONTROLLER	TORO® TMC-424E OUT OR INDOOR (OD/IN)	L-3/F	
	WIRELESS RAIN SENSOR	TORO® TWRS	L-3/F	
	PRECISION SOIL SENSOR	TORO® PSS-KIT	L-3/F	
	SLEEVE (X LINE SIZE)	SCH-40 PVC	L-3/F	
	PRESSURE MAINLINE	SCH-40 PVC	L-3/F	
	NON-PRESSURE LATERAL LINE	SCH-40 PVC		
	1" LOW-FLOW "DRIP ZONE KIT" INLINE WITH PRESS. REGULATOR, Y-FILTER & FITTINGS	TORO® DZK-TPV-1-1F LOW FLOW= 0.1-8 GPM	L-3/F	
	AIR VACUUM RELIEF VALVE (INSTALL AT HIGH POINT)	TORO® T-YDV-500-34	L-3/C	
	AUTO FLUSH VALVE/CAP (INSTALL AT LOW POINT)	TORO® T-FCH-1N-FIPT	L-3/F	
	5/8" TORO DRIP-IN PRESSURE COMPENSATING ON-DEMAND BROWN DRIP LINE 1.0 GPH, 18" O.C. EMITTERS x 18" O.C. LINE SPACING FOR SHRUB/GROUND COVER		L-3/C	
				
				
				
				
				
				
				
				
	</			

LANDSCAPE ARCHITECT: CAMILLE PERNG (RLA # 5840)
TWO TREES DESIGN INC.
626.278.2766
PROJECT ADDRESS: 9933 VALLEY BLVD, EL MONTE, CA 91731
ASSESSOR PARCEL NUMBER: 8577-011-014
PROJECT OWNER: JOHNSON FANG TEL: 626.688.8631

WATER EFFICIENT LANDSCAPE WORKSHEET								
REFERENCE ETO: 50.2				COMMERCIAL PROJECT				
HYDROZONE X	PLANT FACTOR (PF)	IRRIG. METHOD	IRRIG. EFFICIENCY (E)	ETAF (PF / E)	HYDROZONE AREA (IN SF FT)	ETAF X AREA	EST. TOTAL WATER USE (ETWU)	
REGULAR LANDSCAPE AREAS								
11	LOW WATER	0.2	DRIP	0.81	0.247	2478	612.086	19049.942
12								
13								
14								
15								
TOTALS						2478	612.086	19049.942
SPECIAL LANDSCAPE AREA (SLA) - Includes areas irrigated with recycled water.								
					1	0	0	0
Total ETAF x Area						0	0	0
Total Area						0	0	0
Average ETAF						0	0	0
						0	0	0
TOTALS					01	00	00	00
							ETWU TOTAL	
ETWU = 50.2 x 0.62 x 612.086							19,049.942	
MAWA = 50.2 x 0.62 [(0.45 x 2478) + 0]							34,706.372	

Plant Factor (PF): NW 0.1, V 0.2, MW 0.5, WST 0.6, HW 0.85
 Irrigation Method- Overhead Spray or Drip
 Irrigation Efficiency (IE)- 0.75 for Overhead Spray, 0.81 for Drip
 ETWU (Annual Gallons required) = $ET_o \times 0.62 \times ETAF \div Area$
 MAWA (Annual Gallons Allowed) = $ET_o \times 0.62 \times [(ETAF \times Area) + ((1-ETAF) \times SLA)]$
 0.62 Conversion Factor
 Area is total Reg. Landscape area
 SLA is total Special Landscape area
 ETAF is 0.55 for residential areas, and 0.45 for non-residential areas

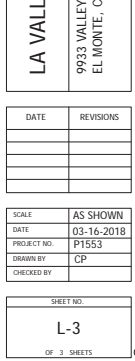
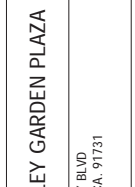
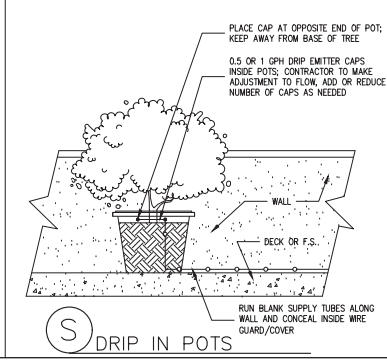
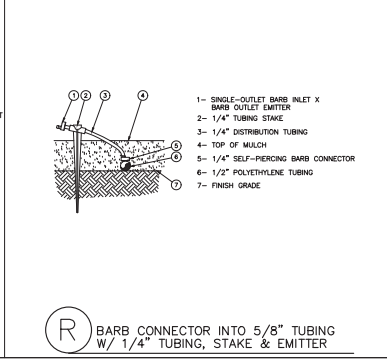
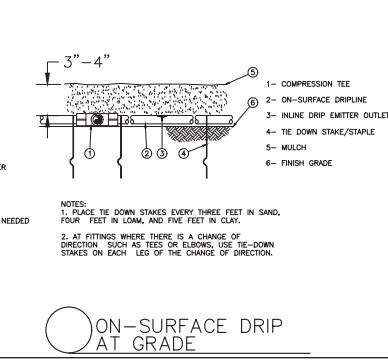
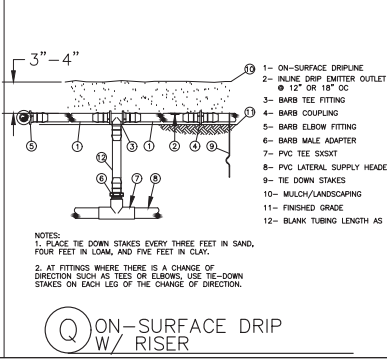
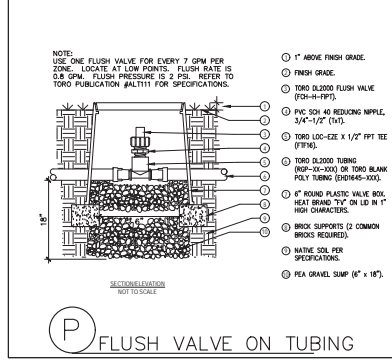
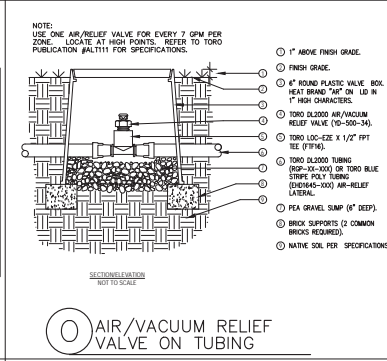
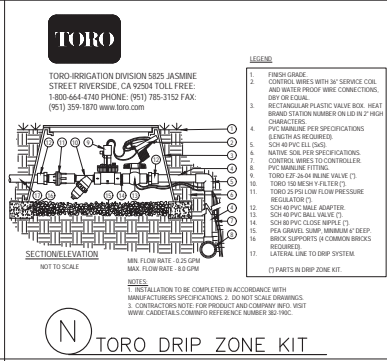
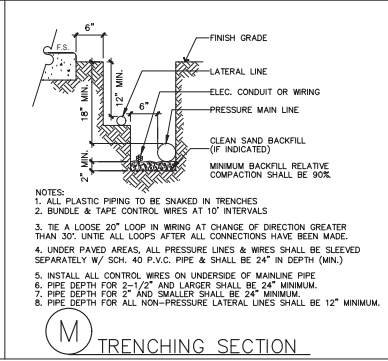
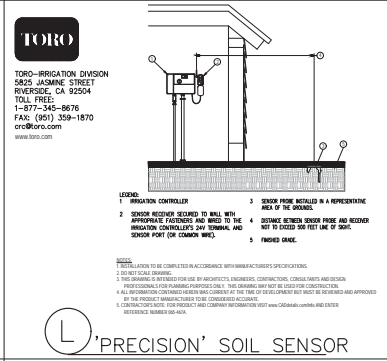
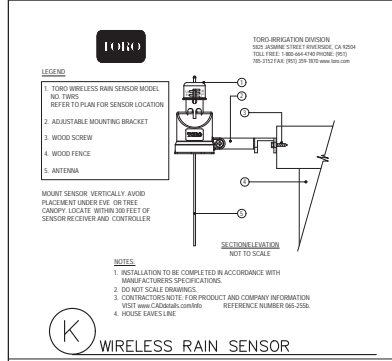
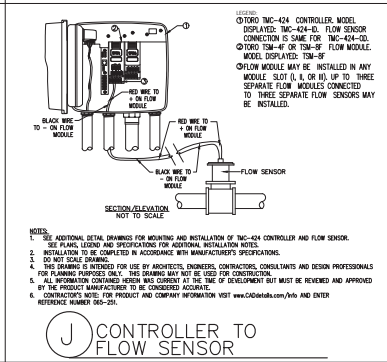
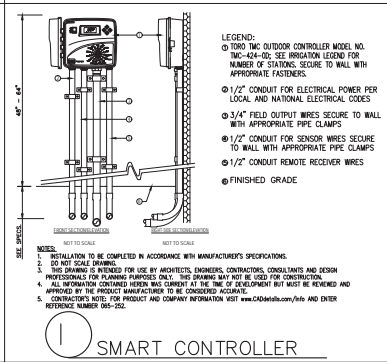
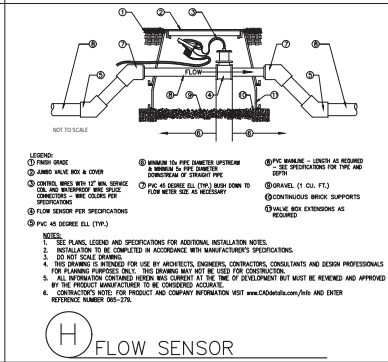
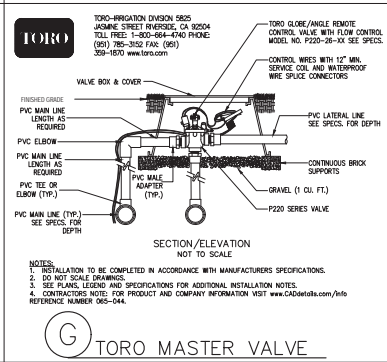
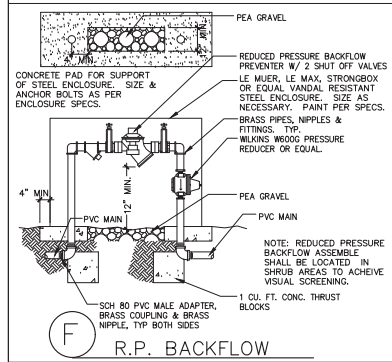
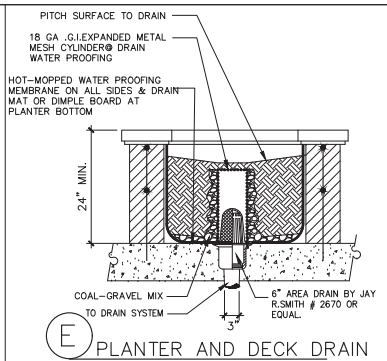
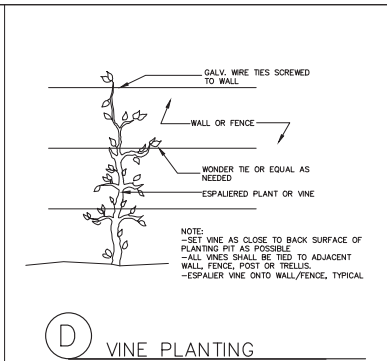
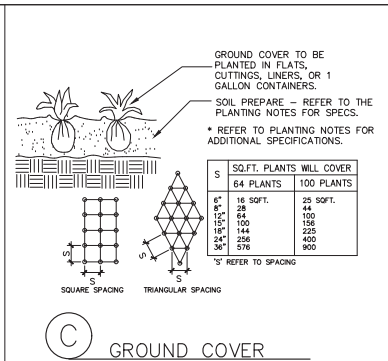
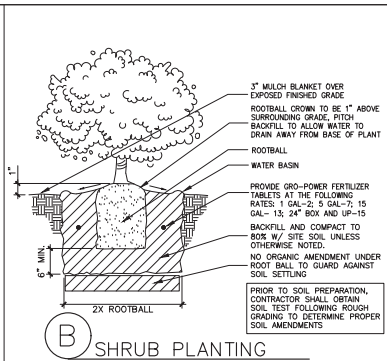
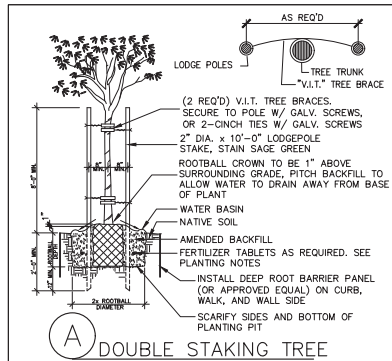
LANDSCAPE
IRRIGATION PLAN

LA VALLEY GARDEN PLAZA
9933 VALLEY BLVD
EL MONTE CA 91731

DATE	REVISIONS

SCALE	AS SHOWN
DATE	03-16-2017
PROJECT NO.	P1553
DRAWN BY	CP

SHEET NO.
L-2



TITLE 24 ENERGY STANDARD NOTES	
10. ADMINISTRATIVE REQUIREMENTS:	
A) THE PERSON WITH OVERALL RESPONSIBILITY FOR CONSTRUCTION OR THE PERSON RESPONSIBLE FOR THE INSTALLATION OF REGULATED FEATURES, MATERIALS, COMPONENTS, OR MANUFACTURED DEVICES SHALL POST, OR MAKE AVAILABLE WITH THE (LOCAL PERMITS) ISSUED FOR THE BUILDING, THE REQUIRED INSTALLATION CERTIFICATE(S) FOR FEATURES, MATERIALS, COMPONENTS, OR MANUFACTURED DEVICES REGULATED BY THE APPLIANCE EFFICIENCY REGULATIONS OR PART 6. SUCH INSTALLATION CERTIFICATE(S) SHALL BE MADE AVAILABLE TO THE ENFORCEMENT AGENCY FOR ALL APPROPRIATE INSPECTIONS. THESE CERTIFICATES SHALL:	
1) IDENTIFY FEATURES, MATERIALS, COMPONENTS, OR MANUFACTURED DEVICES REQUIRED TO VERIFY COMPLIANCE WITH THE APPLIANCE EFFICIENCY REGULATIONS AND PART 6.	SEC. 10-103 (c) 3 A
2) INCLUDE A STATEMENT INDICATING THAT THE FEATURES, MATERIALS, COMPONENTS, OR MANUFACTURED DEVICE CONFORM TO THE APPLIANCE EFFICIENCY REGULATIONS AND PART 6 AND THE REQUIREMENTS FOR SUCH FEATURES, MATERIALS, COMPONENTS, OR MANUFACTURED DEVICES GIVEN IN THE PLANS AND SPECIFICATIONS APPROVED BY THE LOCAL ENFORCEMENT AGENCY.	SEC. 10-103 (c) 3 A
3) STATE THE NUMBER OF THE BUILDING PERMIT UNDER WHICH THE CONSTRUCTION OR INSTALLATION WAS PERFORMED.	SEC. 10-103 (c) 3 A
B) IF INSTALLING WALL, CEILING, OR FLOOR INSULATION, THE INSTALLER SHALL MAKE AVAILABLE TO THE ENFORCEMENT AGENCY OR PERMIT SHALL BE IN A CONSPICUOUS LOCATION IN THE BUILDING A CERTIFICATE SIGNED BY THE INSTALLER STATING THAT THE INSTALLATION IS CONSISTENT WITH THE PLANS AND SPECIFICATIONS DESCRIBED IN SEC. 10-103 (A) 2. THE CERTIFICATE SHALL ALSO STATE THE MANUFACTURER'S NAME, MATERIAL IDENTIFICATION, AND THE INSTALLED R-VALUE.	SEC. 10-103 (c) 4
C) WITHIN 90 DAYS AFTER ISSUANCE OF CERTIFICATE OF OCCUPANCY RECORD DRAWINGS SHALL BE PROVIDED TO THE OWNER, IF ANY CHARACTERISTIC IS MATERIALLY CHANGED BEFORE FINAL CONSTRUCTION AND INSTALLATION, SUCH THAT THE BUILDING MAY NO LONGER COMPLY WITH PART 6. THE BUILDING MUST BE BROUGHT INTO COMPLIANCE, AND SO INDICATED ON AMENDED PLANS AND CERTIFICATE OF COMPLIANCE THAT SHALL BE SUBMITTED FOR PLAN APPROVAL.	SEC. 10-103 (c) 2B
D) THE BUILDER SHALL PROVIDE THE BUILDING OWNER OR THE PERSON(S) RESPONSIBLE FOR BUILDING MAINTENANCE (IN CASE OF MULTI-TENANT OR CENTRALLY OPERATED BUILDINGS) AT OCCUPANCY THE FOLLOWING:	SEC. 10-103 (c) 2B
1) OPERATING INFORMATION: THE APPROPRIATE CERTIFICATE(S) OF COMPLIANCE AND A LIST OF THE FEATURES, MATERIALS, COMPONENTS, AND MECHANICAL DEVICES INSTALLED IN THE BUILDING AND INSTRUCTIONS ON HOW TO OPERATE THEM EFFICIENTLY.	SEC. 116 (c)
2) MAINTENANCE INFORMATION: REQUIRED ROUTINE MAINTENANCE ACTIONS SHALL BE CLEARLY STATED AND INCORPORATED ON A READILY ACCESSIBLE LABEL. THE LABEL MAY BE LIMITED TO IDENTIFYING THE OPERATION AND MAINTENANCE MANUAL.	SEC. 116 (c)
3) VENTILATION INFORMATION: A DESCRIPTION OF THE QUANTITIES OF OUTDOOR AND RECIRCULATED AIR THAT THE VENTILATION SYSTEMS ARE DESIGNED TO PROVIDE TO EACH AREA.	SEC. 10-103 (b)
11. MANDATORY MEASURES:	
A) MANUFACTURED PENETRATION PRODUCTS AND EXTERIOR DOORS SHALL:	SEC. 116 (c)
1) HAVE A TEMPORARY LABEL MEETING THE REQUIREMENTS OF SEC. 10-111 (A) 1, NOT TO BE REMOVED BEFORE INSPECTION BY THE ENFORCEMENT AGENCY, LISTING THE CERTIFIED U-FACTOR AND C-VALUE AND CERTIFYING THAT THE AIR LEAKAGE REQUIREMENTS OF SEC. 116 (A) 1 ARE MET FOR EACH PRODUCT LINE; AND	SEC. 116 (c)
2) HAVE A PERMANENT LABEL MEETING THE REQUIREMENTS OF SEC. 10-111 (A) 2 IF THE CERTIFICATE IS RATED USING NFRC PROCEDURES.	SEC. 116 (c)
B) FIELD-FABRICATED PENETRATION AND FIELD-FABRICATED EXTERIOR DOORS SHALL BE CAULKED BETWEEN THE PENETRATION PRODUCTS OR EXTERIOR DOOR AND THE BUILDING, AND SHALL BE WEATHER STRIPPED, EXCEPT: UNFRAMED GLASS DOORS AND FIRE DOORS.	SEC. 116 (c)
C) JOINTS AND OTHER OPENINGS IN THE BUILDING ENVELOPE THAT ARE POTENTIAL SOURCES OF AIR LEAKAGE SHALL BE CAULKED, GASKETED, WEATHER STRIPPED, OR OTHERWISE SEALED TO LIMIT INFILTRATION AND EXFILTRATION.	SEC. 117
D) THE OPAQUE PORTIONS OF FRAMED DEMISING WALLS IN NONRESIDENTIAL BUILDINGS SHALL BE INSULATED WITH AN INSTALLED R-VALUE OF NO LESS THAN R-13 BETWEEN FRAMING MEMBERS.	SEC. 118 (c)
E) ALL INSULATING MATERIAL SHALL BE INSTALLED IN COMPLIANCE WITH THE FLAME SPREAD RATING AND SMOKE DENSITY REQUIREMENTS OF THE CBC.	SEC. 118 (c)
F) ANY ROOFING PRODUCT USED AS A COOL ROOF SHALL BE CERTIFIED AND LABELED IN ACCORDANCE WITH THE REQUIREMENTS OF SEC. 10-113 BY THE COOL ROOF RATING COUNCIL (CRR) AND MEET CONDITIONS SET IN SEC. 118 (f) 1.	SEC. 118 (f)
G) HEAT PUMPS WITH SUPPLEMENTARY ELECTRIC RESISTANCE HEATERS SHALL HAVE CONTROLS:	SEC. 118 (f)
1) THAT PREVENT SUPPLEMENTARY HEATER OPERATION WHEN THE HEATING LOAD CAN BE MET BY THE HEAT PUMP ALONE; AND	SEC. 118 (f)
2) IN WHICH THE CUT-ON TEMPERATURE FOR COMPRESSION HEATING IS HIGHER THAN THE CUT-ON TEMPERATURE FOR SUPPLEMENTARY HEATING, AND THE CUT-OFF TEMPERATURE FOR COMPRESSION HEATING IS HIGHER THAN THE CUT-OFF TEMPERATURE FOR SUPPLEMENTARY HEATING.	SEC. 118 (f)
H) THE LESSER OF THE MINIMUM RATE OF OUTDOOR AIR REQUIRED BY SEC. 121 (B) 2, OR THREE COMPLETE AIR CHANGES SHALL BE SUPPLIED TO THE ENTIRE BUILDING DURING THE ONE-HOUR PERIOD IMMEDIATELY BEFORE THE BUILDING IS NORMALLY OCCUPIED.	SEC. 121 (c) 2
I) HOTEL/MOTEL GUEST ROOM THERMOSTATS SHALL HAVE NUMERIC TEMPERATURE SETPOINTS IN DEGREES F AND SETPOINT SLOTS ACCESSIBLE ONLY TO AUTHORIZED PERSONNEL, TO RESTRICT OVERHEATING AND OVER-COOLING.	SEC. 122 (c)
J) ALL AIR DISTRIBUTION SYSTEM DUCTS AND PLenums, INCLUDING, BUT NOT LIMITED TO, BUILDING CAVITIES, MECHANICAL CLOSETS, AIR-HANDLER BOXES AND SUPPORT PLATFORMS USED AS DUCTS OR PLenums, SHALL BE INSTALLED, SEALED AND INSULATED TO MEET THE REQUIREMENTS OF THE 2007 CALIFORNIA MECHANICAL CODE, SUPPLY-AIR AND RETURN-AIR DUCTS CONVEYING HEATED OR COOLED AIR SHALL BE INSULATED TO A MINIMUM INSTALLED LEVEL OF R-8, UNLESS DUCTS ARE IN CONDITIONED SPACE.	SEC. 124 (c)
K) THE THERMOSTATIC CONTROLS FOR HVAC SYSTEMS SHALL MEET THE FOLLOWING REQUIREMENTS AS APPLICABLE:	SEC. 124 (c)
a) EACH SPACE CONDITIONING ZONE SHALL BE CONTROLLED BY AN INDIVIDUAL THERMOSTATIC CONTROL THAT RESPONDS TO TEMPERATURE WITHIN THE ZONE AND MEETS THE APPLICABLE REQUIREMENTS OF SECTION(D).	SEC. 124 (c)
b) EACH THERMOSTATIC CONTROL, REQUIRED BY SECTION (A) SHALL BE CAPABLE OF BEING SET LOCALLY OR REMOTELY BY ADJUSTMENT OR SELECTION OF SENSORS TO CONTROL:	SEC. 124 (c)
1) COMFORT HEATING DOWN TO 55°F OR LOWER.	SEC. 124 (c)
2) COMFORT COOLING UP TO 85°F OR HIGHER.	SEC. 124 (c)
3) BOTH HEATING AND COOLING, THE THERMOSTATIC CONTROLS SHALL BE CAPABLE OF PROVIDING A TEMPERATURE RANGE OR DEAD BAND OF AT LEAST 5°F WITHIN WHICH THE SUPPLY OF HEATING AND COOLING ENERGY TO THE ZONE IS SHUT OFF OR REDUCED TO A MINIMUM.	SEC. 122 (c) 2
L) OUTDOOR AIR SUPPLY AND EXHAUST EQUIPMENT SHALL BE INSTALLED WITH DAMPERS THAT AUTOMATICALLY CLOSE UPON FAN SHUTDOWN.	SEC. 122(f)
M) DEMAND CONTROL VENTILATION SYSTEMS (CO2 SENSORS) SHALL BE INSTALLED IN ACCORDANCE WITH SEC. 121(c) 4, SEC. 121 (c) 4.	SEC. 121 (c) 4
N) EACH SPACE-CONDITIONING SYSTEM SHALL BE INSTALLED WITH CONTROLS THAT COMPLY WITH ITEMS 1 AND 2 BELOW:	SEC. 122 (c)
1) ARE CAPABLE OF AUTOMATICALLY SHUTTING OFF THE SYSTEM DURING PERIODS OF NON-USE AND SHALL HAVE:	SEC. 122 (c)
a) AN AUTOMATIC TIME SWITCH CONTROL DEVICE COMPLYING WITH SEC. 119(c), WITH AN ACCESSIBLE MANUAL OVERRIDE THAT ALLOWS OPERATION OF THE SYSTEM FOR UP TO 4 HOURS; OR	SEC. 122 (c)
b) AN OCCUPANCY SENSOR; OR	SEC. 122 (c)
c) A FOUR-HOUR TIMER THAT CAN BE MANUALLY OPERATED.	SEC. 122 (c)
2) EXCEPT MECHANICAL SYSTEMS SERVING RETAIL STORES AND ASSOCIATED MALLS, RESTAURANTS, GROCERY STORES, CHURCHES, AND THEATERS EQUIPPED WITH 7-DAY PROGRAMMABLE TIMERS.	SEC. 122 (c)
3) AUTOMATICALLY RESTART AND TEMPORARILY OPERATE THE SYSTEM AS REQUIRED TO MAINTAIN:	SEC. 122 (c)
a) A SETBACK HEATING THERMOSTAT SETPOINT, IF THE SYSTEM PROVIDES MECHANICAL HEATING; AND	SEC. 122 (c)
b) A SETBACK COOLING THERMOSTAT SETPOINT, IF THE SYSTEM PROVIDES MECHANICAL COOLING.	SEC. 122 (c)
EXCEPTION: AREA WITH THE DESIGN SUMMER OUTDOOR TEMPERATURE OF LESS THAN 100°F.	SEC. 122 (c)
EXCEPTION: SYSTEMS SERVING HOTEL/MOTEL GUEST ROOMS, IF THEY HAVE A READILY ACCESSIBLE MANUAL SHUT-OFF SWITCH.	SEC. 122 (c)
O) THE PIPING FOR ALL SPACE CONDITIONING AND SERVICE WATER HEATING SYSTEMS SHALL BE INSULATED IN ACCORDANCE WITH TABLE 123-A.	SEC. 123
P) WATER HEATING SYSTEMS SHALL BE EQUIPPED WITH AUTOMATIC TEMPERATURE CONTROLS CAPABLE OF ADJUSTMENT FROM THE LOWEST TO THE HIGHEST AVAILABLE SETTINGS FOR THE INTENDED USE AS LISTED IN TABLE 2, CHAPTER 9 OF THE ASHRAE HANDBOOK, HVAC APPLICATIONS VOLUME.	SEC. 113 (c) 2
Q) SERVICE WATER HEATING SYSTEMS AND EQUIPMENT SHALL MEET THE APPLICABLE REQUIREMENTS OF THE APPLIANCE EFFICIENCY REGULATIONS AS REQUIRED BY SEC. 111.	SEC. 113(b)
R) SERVICE HOT WATER SYSTEMS WITH CIRCULATING PUMPS OR WITH ELECTRICAL HEAT TRACE SYSTEMS SHALL BE CAPABLE OF AUTOMATICALLY TURNING OFF THE SYSTEM.	SEC. 113 (c) 2
S) LAVATORIES IN PUBLIC RESTROOMS SHALL HAVE CONTROLS THAT LIMIT THE WATER SUPPLY TEMPERATURE TO 110°F.	SEC. 113 (c) 3

NOTES	
1. SUPPLY AIR, RETURN AIR, AND OUTSIDE AIR FOR HEATING, COOLING, OR EVAPORATIVE COOLING SYSTEMS SHALL BE CONDUCTED THROUGH DUCT SYSTEMS CONSTRUCTED OF METAL AS SET FORTH IN THE ASHRAE/MACHA 006-2006 HVAC DUCT CONSTRUCTION STANDARDS – METAL AND FLEXIBLE, OR ANOTHER APPROVED DUCT CONSTRUCTION STANDARD.	
2. ROOF MOUNTED EQUIPMENT SHALL BE LABELED AS TO THE SPACE IT SERVES.	
3. OUTDOOR AIR INTAKE OPENINGS SHALL BE COVERED WITH A SCREEN HAVING NOT LESS THAN 1/4-INCH OPENINGS AND NOT MORE THAN 1/2-INCH OPENINGS.	
4. GARAGE VENTILATION EXHAUST AIR INLETS SHALL BE INSTALLED SO THAT THE HIGHEST ELEVATION OF THE EXHAUST AIR INLET IS NO GREATER THAN 12 INCHES BELOW THE LOWEST CEILING LEVEL. (CMC 403.9.1.2)	
5. GARAGE VENTILATION EXHAUST AIR INLETS SHALL BE SPACED TO BE WITHIN 50' FROM ALL PORTIONS OF THE GARAGE. (CMC 403.9.1.2)	
6. DUCT SYSTEMS USED WITH BLOWER TYPE EQUIPMENT WHICH ARE PORTIONS OF A HEATING, COOLING, ABSORPTION, EVAPORATIVE COOLING OR OUTDOOR AIR VENTILATION SYSTEM SHALL BE SIZED IN ACCORDANCE WITH CHAPTER 17 OF THE CALIFORNIA MECHANICAL CODE.	
8. SUPPLY AIR, RETURN AIR, AND OUTSIDE AIR FOR HEATING, COOLING, OR EVAPORATIVE COOLING SYSTEMS SHALL BE CONDUCTED THROUGH DUCT SYSTEMS CONSTRUCTED OF METAL AS SET FORTH IN THE ASHRAE/MACHA 006-2006 HVAC DUCT CONSTRUCTION STANDARDS – METAL AND FLEXIBLE, OR ANOTHER APPROVED DUCT CONSTRUCTION STANDARD.	


EQUIPMENT SCHEDULE	
SPLIT HEAT PUMP SYSTEMS	
FAN COIL UNIT CARRIER MODEL: FV40CB006 2000 CFM @ 0.45" ESP 3/4" HP, 208V/1PH/60HZ, 15A BREAKER, W/EXTERNAL FLOOR RACK & MERV 8 FILTER. WT: 207 LBS	
CARRIER MODEL: 25HC0560 SPLIT COOLING: 57,500 BTUH (T), 44,750 BTUH (SC) HEATING: 57,000 BTUH SEER=15, EER=12.5, HSPF=8.5 ELECT: MCA=34.2, 50A BREAKER, 230V/1PH/60HZ WT: 294 LBS	
REFRIGERANT LINES: LIQUID LINE(OD) = 7/8" (INSULATE LIQUID LINE) VAPOR LINE(OD) = 1-1/8"	
CARRIER MODEL 48HC046, 5 TON A/C 60,400 BTU/H TOTAL COOLING, 48,000 BTU/H SENSIBLE COOLING SEER = 8.5, EER = 6.77 GAS HEATING INPUT/OUTPUT CAPACITY: 50,000 BTU/50,000 BTU/H, AFUE=81% SEER = 15.5, EER= 12.45, 2000 CFM SUPPLY AIR @ 0.6" ESP R410A REFRIGERANT 208 VOLTS, 3 PHASE, 60 CYCLES FLA = 22.5A, 40A BREAKER FACTORY ECONOMIZER W/AUTOMATIC FAULT DETECTION AND DIAGNOSTICS, BAROMETRIC RELIEF AIR DAMPER, FACTORY CURBS, FILTER RACK W/MERV 8 FILTERS & OUTSIDE AIR MODE. PROVIDE CO2 DEMAND CONTROLLED VENTILATION. UNIT TOTAL WT. = 600 LBS UNIT HEIGHT (INCL. 8" CURB) = 50"	
SPLIT A/C (COOLING ONLY)	
OUTDOOR CONDENSING UNIT CARRIER MODEL: 38MFC009 CARRIER MODEL: 38MFC009 COOLING CAPACITY: 48,000 BTU/H, 15 SEER, 10EER ELECT: MCA=19, 30A BREAKER, 120V/1PH/60HZ R410A REFRIGERANT REFRIGERANT LINE(LIQUID): 1/4", (VAPOR): 3/8" WT: 59 LBS	
INDOOR WALL-MOUNTED UNIT CARRIER MODEL: 40MFC009 192 CFM, 0.20HP 0.02 HP MOTOR, POWER FROM OUTDOOR UNIT. WT: 16 LBS LOCATION: ELEVATOR MECH. ROOM	
PARKING GARAGE VENTILATION FANS	
COOK MODEL: 300CPV FLOOR MOUNTED BELT DRIVE UPBLAST AIRFLOW CENTRIFUGAL BLOWER. CFM =14,000, TSP =1.5" WG, FAN RPM =942 W/ISOLATION RAILS, HOUSED SPRING ISOLATORS, 110 200K BEARING,SPRINKLE INLET GUARD, BELT GUARD, 7.5 HP, FLA=24.2, 208V/3PH/60HZ, WT=863 LBS FAN CONTROLLED BY CO SENSING SYSTEM.	
COOK MODEL: 300 CPV CENTRIFUGAL UTILITY FAN CLOCKWISE UP-BLAST CFM=13,000, SP=1.5"WG, FAN RPM=902, PROVIDE INLET GUARD, ISOLATION RAIL, FLOOR MOUNTED SPRING ISOLATORS: 5"=220 SET(4), 7.5 HP, FLA=24.2, 208V/3PH/60HZ, WT=863 LBS NOTE: FAN CONTROLLED BY TIME CLOCK AND RUN CONTINUALLY IN THE BUSINESS HOURS.	
GARAGE VENTILATION CALCULATION	
BASEMENT PARKING 1 ACCORDING TO 403.7.2.2 OF 2016 CMC. PARKING SHALL: 40 OPERATING VEHICLES: 40X2.5X=1, 1 OPERATING VEHICLE. EXHAUST RATE: 14,000X1=14,000 CFM EXHAUST FAN GET=(14,000 CFM) CONTROLLED BY AUTOMATIC CARBON MONOXIDE SENSING SYSTEM.	
BASEMENT PARKING 2 ACCORDING TO 403.7 OF 2016 CMC. PARKING AREA: 17,215 SQFT EXHAUST RATE: 0.75X17,215=12,912 CFM EXHAUST FAN GET=20,13,000 CFM CONTROLLED BY TIME CLOCK AND RUN CONTINUALLY IN THE BUSINESS HOURS.	

GENERAL NOTES	
ALL WORKS SHOULD COMPLY WITH CMC 2016 AND 2016 TITLE 24 ENERGY STANDARD.	
1. POWER WIRING, CONDUIT, SWITCHES AND TIME CLOCKS SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.	
2. LOW VOLTAGE WIRE AND CONDUIT SHALL BE FURNISHED & INSTALLED BY ELECTRICAL CONTRACTOR. FINAL CONNECTIONS BY AIR CONDITIONING CONTRACTOR.	
3. CONDENSATE DRAIN PIPING (COPPER OR GALV.) TO AN APPROVED RECEPTOR BY PLUMBING CONTRACTOR. CONDENSATE DRAIN TO BE TRAPPED.	
4. GENERAL CONTRACTOR SHALL FURNISH AND/OR INSTALL CUTTING, PATCHING, FRAMING, ROOFING, PAINTING, EQUIPMENT, SCREENING, CURBS, OR PLATFORMS WITH THE REQUIREMENTS OF THE AIR CONDITIONING SYSTEM.	
5. EQUIPMENT, INSTALLATION AND OPERATION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE CODES.	
6. ALL A/C SYSTEMS SHALL BE TESTED AND BALANCED IN ACCORDANCE WITH ASHRAE GUIDELINES. THE T & B CONTRACTOR SHALL NOTIFY MECHA CONTRACTOR OF ANY DEFICIENCY IN THE SYSTEMS AND HAVE THEM CORRECTED PRIOR TO FINAL START UP OF A/C SYSTEMS.	
7. TOILET EXHAUST DUCTS SHALL BE MADE OUT OF GALV. STEEL.	
8. LISTED FIRE DAMPERS AND SMOKE DAMPERS ARE REQUIRED TO BE INSTALLED AT ALL DUCT PENETRATIONS THROUGH FIRE RATED SHAPTS.	
9. PROVIDE SMOKE/VIEW OF HVAC SYSTEM SERVING SMOKE DAMPERS OR COMBINATION SMOKE-FIRE DAMPERS WHEN AUTOMATIC ACTIVATION OF DAMPER COULDS. (SFM EXCEPTION: HVAC SYSTEMS SERVING A SMOKE EVACUATION SYSTEM OR AN ENCLOSED SPACE HAVING A COMMON ATMOSPHERE WHERE OPENINGS ARE REQUIRED TO BE PROTECTED).	
10. MATERIALS EXPOSED WITHIN DUCTS OR PLenums SHALL BE NONCOMBUSTIBLE OR SHALL HAVE A FLAME-SPREAD INDEX NOT GREATER THAN TWENTY-FIVE (25) AND A SMOKE DEVELOPED INDEX NOT GREATER THAN FIFTY (50) WHEN TESTED AS A COMPOSITE FOR APPLICABLE TESTING STANDARD.	
11. WHEN FIRE DETECTION OR ALARM SYSTEMS ARE PROVIDED FOR THE BUILDING, ANY REQUIRED SMOKE DETECTORS SHALL BE SUPERVISED BY SDC SYSTEMS AND SHALL BE CAPABLE OF ACTIVATING THE FIRE ALARM SYSTEM.	
12. ALL APPLIANCE AND PLUMBING VENTS AND THE DISCHARGE OUTLET OF EXHAUST FANS SHALL BE AT LEAST TEN (10) FEET IN A HORIZONTAL DIRECTION, OR THREE (3) FEET ABOVE THE OUTSIDE-AIR INTAKES FOR HVAC UNITS.	
13. ALL APPLIANCES DESIGNED TO BE FIXED IN POSITION SHALL BE SECURELY FASTENED IN PLACE PER BUILDING CODE REQUIREMENTS OR WT: 50 LBS	
14. ROOF MOUNTED EQUIPMENT SHALL BE LABELED AS TO THE SPACE IT SERVES.	
15. WHOLE HOUSE EXHAUST FANS INSTALLED SHALL HAVE INSULATED LOWERS OR COVERS (MINIMUM R-2) WHICH CLOSE WHEN THE FAN IS OFF. (403.7.1)	
16. ALL MECHANICAL EXHAUST FANS IN ROOMS WITH A BATHTUB OR SHOWER SHALL COMPLY WITH THE FOLLOWING:	
A. FANS SHALL BE ENERGY STAR COMPLIANT AND BE DUCTED TO TERMINATE OUTSIDE THE BUILDING.	
B. FANS MUST BE CONTROLLED BY A READILY ACCESSIBLE HUMIDISTAT UNLESS FUNCTIONING AS A COMPONENT OF A WHOLE HOUSE VENTILATION SYSTEM. (403.9.1)	
17. AT THE TIME OF ROUGH INSTALLATION, OR DURING STORAGE ON THE CONSTRUCTION SITE AND UNTIL FINAL STARTUP OF THE HEATING AND COOLING EQUIPMENT, ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC, SHEET METAL, OR OTHER ACCEPTABLE METHODS TO REDUCE THE AMOUNT OF DUST OF DEBRIS WHICH MAY COLLECT IN THE SYSTEM. CODE 5.0.3.1	
TITLE 24 NOTES	
1. ALL DUCTWORK, INCLUDING INSULATION, SHALL CONFORM TO CALIFORNIA ADMINISTRATIVE CODE, 2016 TITLE 24, AND THE CMC LOW VELOCITY DUCT CONSTRUCTION STANDARDS, LATEST 2016 EDITION.	
2. ALL EXHAUST FANS TO BE FURNISHED WITH BACKDRIFT DAMPERS.	
3. ALL A/C UNITS SHALL BE PROVIDED WITH A THERMOSTAT FOR AUTOMATIC REGULATION OF TEMPERATURE, AND A FOUR HOUR OVERIDE TIMER/THERMOSTAT AND TIMER SHALL BE READILY ACCESSIBLE AND BE MANUALLY ADJUSTABLE.	
4. ALL THERMOSTATS SHALL BE CAPABLE OF BEING SET TO MAINTAIN SPACE TEMPERATURE SET POINTS FROM 55 DEGREES F. TO 85 DEGREES F. AND SHALL BE CAPABLE OF OPERATING THE SYSTEM HEATING AND COOLING SEQUENCE.	
5. ALL THERMOSTATS SHALL BE ADJUSTABLE TO PROVIDE A TEMPERATURE RANGE OF UP TO 5 DEGREES F. BETWEEN FULL HEATING AND FULL COOLING AND SHALL HAVE THE CAPABILITY OF TERMINATING ALL HEATING AT A TEMPERATURE NO MORE THAN 10 DEGREES F. AND OF TERMINATING ALL COOLING AT A TEMPERATURE NOT LESS THAN 78 DEGREES F.	
6. TRANSVERSE JOINTS FOR ALL AIR SUPPLY DUCTS INSTALLED WHERE AIR LEAKAGE WOULD BE NON-BENEFICIAL, TO THE OCCUPIED AREA TEMPERATURE REQUIREMENTS SHALL BE SEALED WITH APPROVED MASTIC OR TAPE.	
7. A MAINTENANCE LABEL SHALL BE AFFIXED TO MECHANICAL EQUIPMENT AND A MAINTENANCE MANUAL SHALL BE PROVIDED FOR THE OWNERS USE.	
DUCT MOUNTED SMOKE DETECTOR REQUIREMENT	
ALL HVAC UNITS SYSTEMS WITH 2000 CFM OR MORE OR SERVING A COMMON AIR SPACE MUST BE INTERCONNECTED TO SHUT DOWN IMMEDIATELY UPON ALARM CONDITION FROM DUCT DETECTORS (OR FIRE ALARM SYSTEM WHEN USING AREA SMOKE DETECTORS IN LIEU OF DUCT DETECTORS) WITHOUT INTERFERENCE FROM EMS OR ANY OTHER SYSTEMS. ALL CONTROL RELAYS USED FOR SHUT DOWN MUST BE CALIFORNIA STATE FIRE MARSHAL LISTED FOR RELAYSING SERVICE. DUCT MOUNTED SMOKE DETECTOR MANUFACTURE: AIR PRODUCTS & CONTROLS INC. MODEL: SM 501-P, WITH PHOTOELECTRIC DETECTOR HEAD. CSFM LISTED NO. 3240-1004-108 TEL: (888) 332-2241	
VENTILATION AND PURGE CYCLE	
AS REQUIRED BY CEC ALL VENTILATION SHALL MEET CEC GUIDELINES. A/C UNIT SHALL START 1 HR. PRIOR TO OCCUPANCY AND CYCLE TO PROVIDE PURGE CYCLE.	

LEGEND		
SYMBOL	ABBREVIATION	DESCRIPTION
SA	SA	SUPPLY AIR DUCT
RA	RA	RETURN AIR DUCT
EAD	EAD	EXHAUST AIR DUCT
OA	OA	OUTSIDE AIR DUCT
TRANSITION	TRANSITION	TRANSITION - RECTANGULAR TO RECT-ANGULAR
TRANSITION	TRANSITION	TRANSITION - RECTANGULAR TO ROUND
ELBOW	ELBOW	ELBOW W/TURNING VANE
DUCT	DUCT	DUCT, DUCT SIZE WITH L FOR SINGLE LINE
RISE	RISE	RISE IN DIRECTION OF AIRFLOW
DROP	DROP	DROP IN DIRECTION OF AIRFLOW
DUCT ENCLOSURE	DUCT ENCLOSURE	DUCT ENCLOSURE IN GYPSUM BOARD FOR 2 HOURS RATING
FLEXIBLE DUCT	FLEXIBLE DUCT	FLEXIBLE DUCT
THERMOSTAT	THERMOSTAT	THERMOSTAT WITH AUTOMATIC CHANGE-OVER & VENTED LOCKABLE CLEAR COVER
SUPPLY AIR DUCT	SUPPLY AIR DUCT	SUPPLY AIR DUCT - SECTION
RETURN, EXHAUST, OR OUTSIDE AIR DUCT	RETURN, EXHAUST, OR OUTSIDE AIR DUCT	RETURN, EXHAUST, OR OUTSIDE AIR DUCT - SECTION
ROUND DUCT OR STACK	ROUND DUCT OR STACK	ROUND DUCT OR STACK - SECTION
1/2" X 1/2" NECK PERFORATED CEILING	1/2" X 1/2" NECK PERFORATED CEILING	1/2" X 1/2" NECK PERFORATED CEILING
6" X 6" PERFORATED CEILING REGISTER	6" X 6" PERFORATED CEILING REGISTER	6" X 6" PERFORATED CEILING REGISTER
CONDENSATE DRAIN	CONDENSATE DRAIN	CONDENSATE DRAIN
DN	DN	DOWN
DWG	DWG	DRAWING
OPD	OPD	OPPOSED BLADE DAMPER
SD	SD	DUCT MOUNTED SMOKE DETECTOR
VD	VD	VOLUME DAMPER
CFSD	CFSD	COMBINATION FIRE/SMOKE DAMPER
FD	FD	FIRE DAMPER

AIR DISTRIBUTION	
CEILING DIFFUSER - T-BAR CEILING TITUS: PCS, PERFORATED CEILING SUPPLY DIFFUSER WITH ADJUSTABLE CURVED REFLECTOR BLADES. #26 WHITE.	
CEILING DIFFUSER - HARD CEILING TITUS: TDC, CEILING SUPPLY DIFFUSER #26 WHITE.	
RETURN & EXHAUST AIR GRILLES/REGISTERS FOR T-BAR CEILING: RETURN: PAR, PERFORATED FLUSH FACE CEILING RETURN DIFFUSER, #26 WHITE. FOR HARD CEILING: RETURN: 300R, RETURN GRILLE, #26 WHITE.	
SUPPLY GRILLE TITUS: 300S RETURN GRILLES TITUS: 300RS	
DUCT WORK	
SHEET METAL CALVANIZED IRON FABRICATED & INSTALLED AS PER 2016 CMC CODE & 2016 CALIFORNIA TITLE 24 STANDARDS.	
SUPPLY & RETURN MAINS 1. SPIRAL DUCT FABRICATED, INSTALLED, & INSULATED AS PER CMC CODE, & INSULATED PER INSULATION SCHEDULE. OR 2. RECTANGULAR OR ROUND, FABRICATED & INSTALLED AS PER CMC CODE, & INSULATED PER INSULATION SCHEDULE.	
FINAL CONNECTORS TO AIR DEVICES 1. FLEXIBLE FIBERGLASS DUCT, MAXIMUM 7'-0" LONG, 1 1/2" TK. HEAVY DENSITY FIBERGLASS WITH LINER & VAPOR JACKET, CLASS I, STANDARD 181.	

SHEET INDEX	
SHEET NO.	SHEET TITLE
M-01	NOTES AND SCHEDULE
M-02	DETAILS
M-11	HVAC SITE PLAN
M-21	HVAC BASEMENT PARKING 1 & 2 PLANS
M-22	HVAC 1ST & 2ND FLOOR PLANS
M-23	HVAC ROOF PLAN
M-31-33	TITLE 24 ENERGY COMPLIANCE FORMS



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JOB NO: 151102

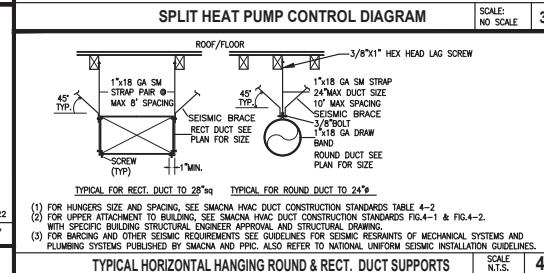
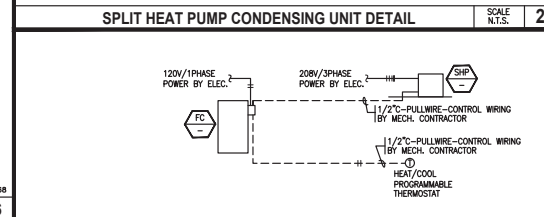
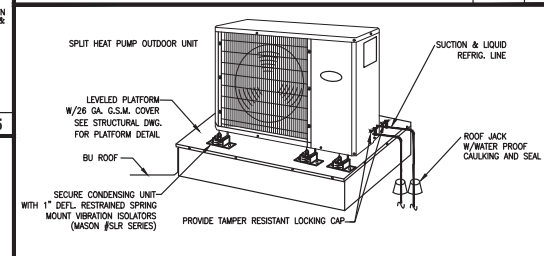
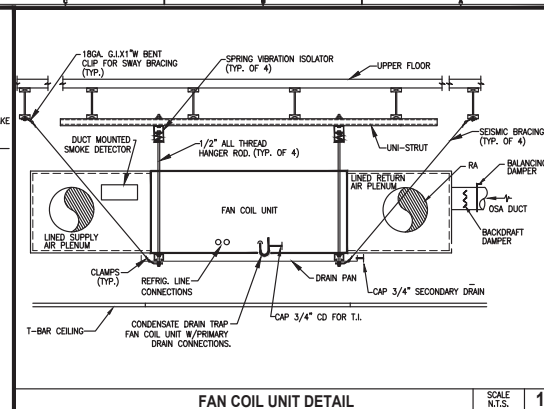
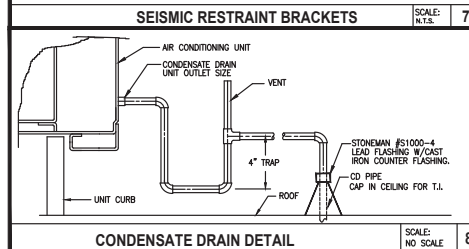
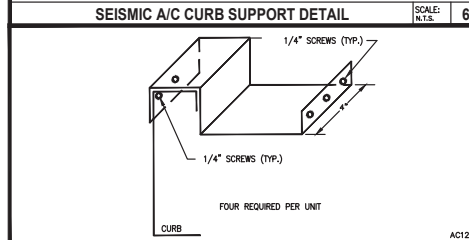
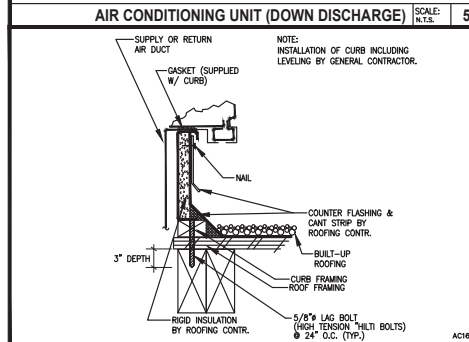
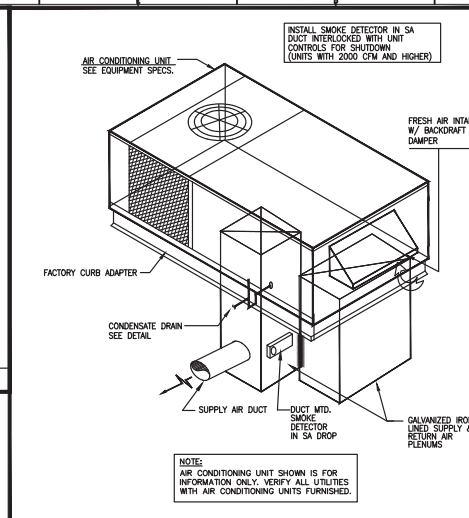
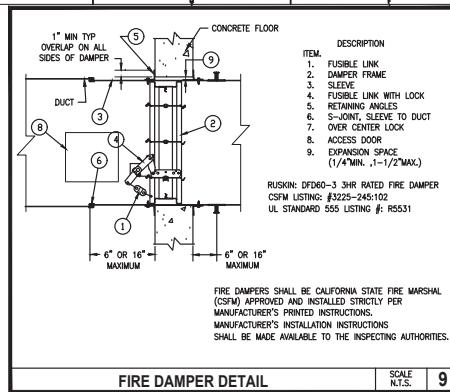
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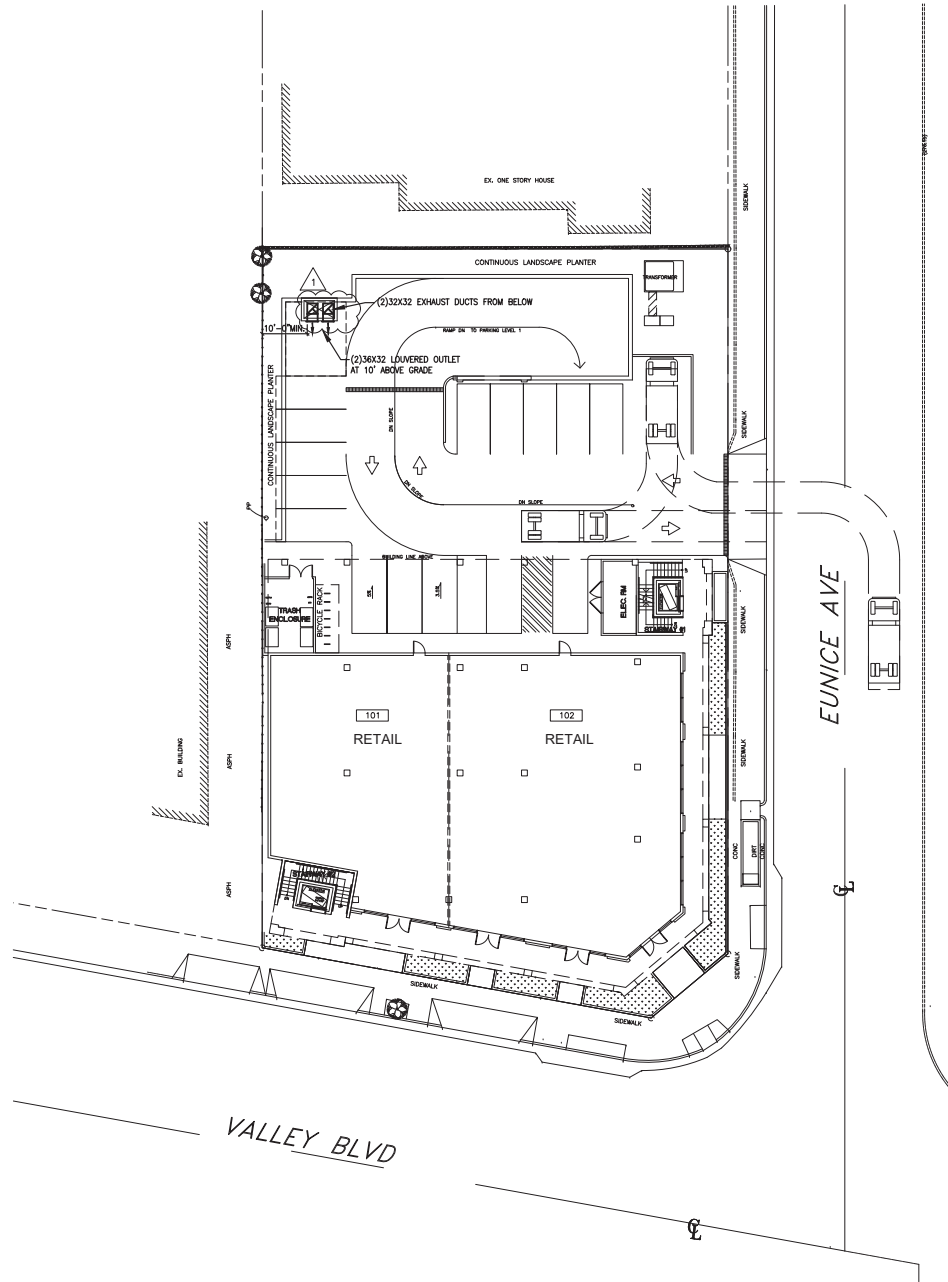
PROJECT: LA VALLEY GARDEN PLAZA
NEW COMMERCIAL BUILDING

ARCHITECT: S L A R C H I T E C T S

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PH: 626-571-8000
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9933-9961 VALLEY BLVD.,
EL MONTE, CA 91731





HVAC SITE PLAN
SCALE: 1/16"=1'-0"



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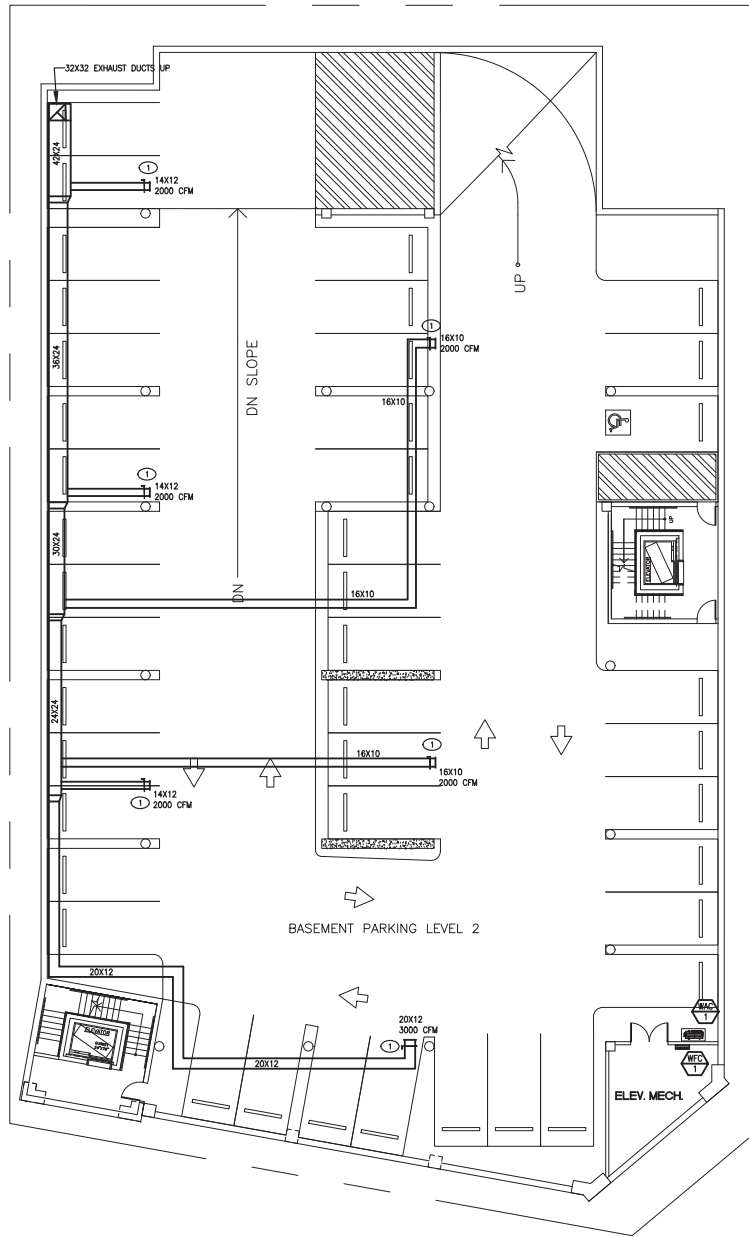
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P.C. CORR. 3/09/2018

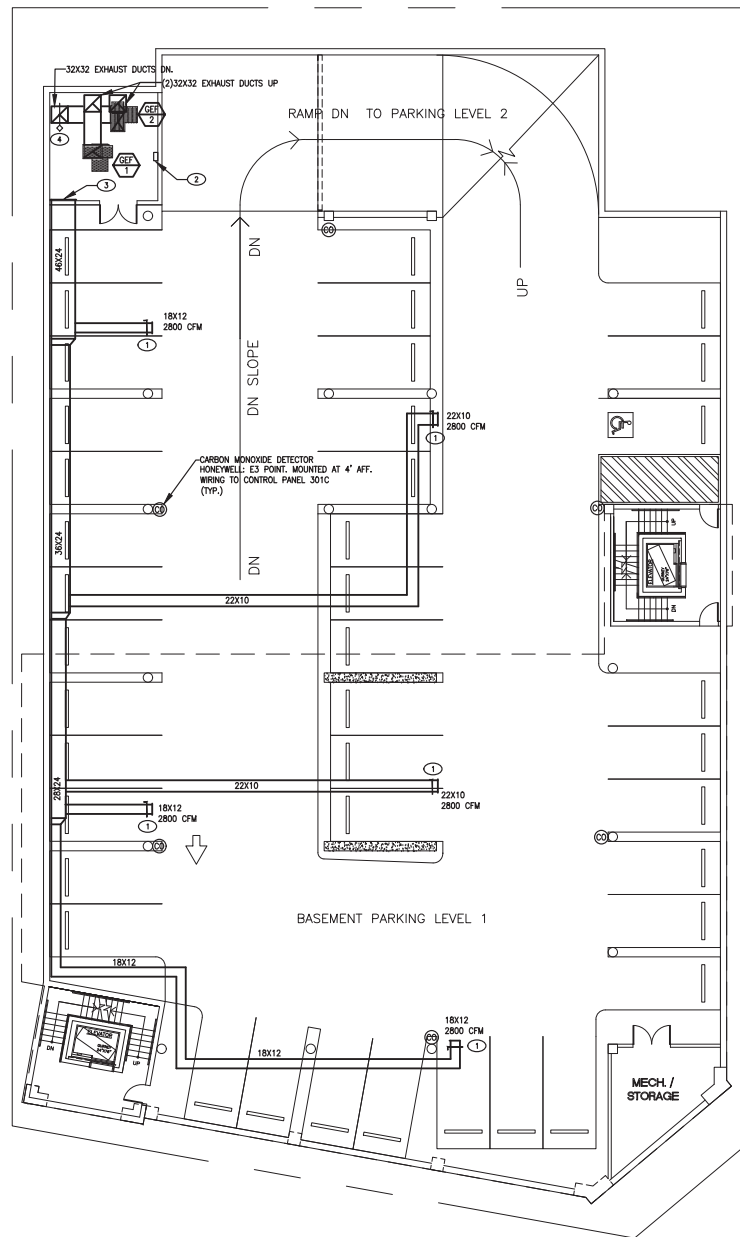
ARCHITECT: **S L A A R C H I T E C T S**
140 W. VALLEY BLVD., STE 215, SAN GABRIEL, CA 91776
PH: 626-571-8000 E: simon.lee@slarch.com

PROJECT: **LA VALLEY GARDEN PLAZA
NEW COMMERCIAL BUILDING**
9933-9961 VALLEY BLVD.,
EL MONTE, CA 91731



HVAC BASEMENT PARKING 2 PLAN

SCALE: 1"=10'-0"



HVAC BASEMENT PARKING 1 PLAN

SCALE: 1"=10'-0"

NOTE:
AUTOMATIC CARBON MONOXIDE (CO) SENSING DEVICES SHALL BE SPACED AS PER THE MANUFACTURER'S SPECIFICATIONS AND AT LEAST ONE SENSOR PER 5,000 SQ. FT. THESE AUTOMATIC SENSING CONTROL SYSTEM SHALL BE INTERLOCKED WITH THE EXHAUST FANS TO AUTOMATICALLY TURN ON THE SYSTEM TO MAINTAIN A MAXIMUM AVERAGE CONCENTRATION OF CARBON MONOXIDE OF 50 PPM DURING ANY EIGHT HOUR PERIOD, WITH A MAXIMUM CONCENTRATION NOT EXCEEDING 200 PPM FOR A PERIOD OF NOT MORE THAN ONE HOUR.

REFERENCE NOTES:

- ① EXHAUST AIR INLET LOCATED AT NO GREATER THAN 12" BELOW THE LOWEST CEILING DECK WITH MANUAL DAMPER AND 1/4" S.S. WIRE MESH
- ② GARAGE VENTILATION CONTROL PANEL: HONEYWELL-301C FOR GEF-1
- ③ 42X24 DUCT BELOW DECK AT HIGH WALL
- ④ FIRE DAMPER AT THE FLOOR PENETRATION.
FIRE DAMPER RISING: 90D40-3, 3HR RATED FIRE DAMPER
UL STANDARD 555 LISTING #: R5531, CSFM LISTING: #3225-245-102

FILE: 151102WK1ST1E10
DRAWN: ---
P.C. CORR. 3/09/2016

ARCHITECT: **S L A ARCHITECTS**
140 W. VALLEY BLVD., STE 215, SAN GABRIEL, CA 91776
PH: 626-571-8000
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PROJECT: **LA VALLEY GARDEN PLAZA
NEW COMMERCIAL BUILDING**
9933-9961 VALLEY BLVD.,
EL MONTE, CA 91731

PROJECT:

JOB NO: 151102

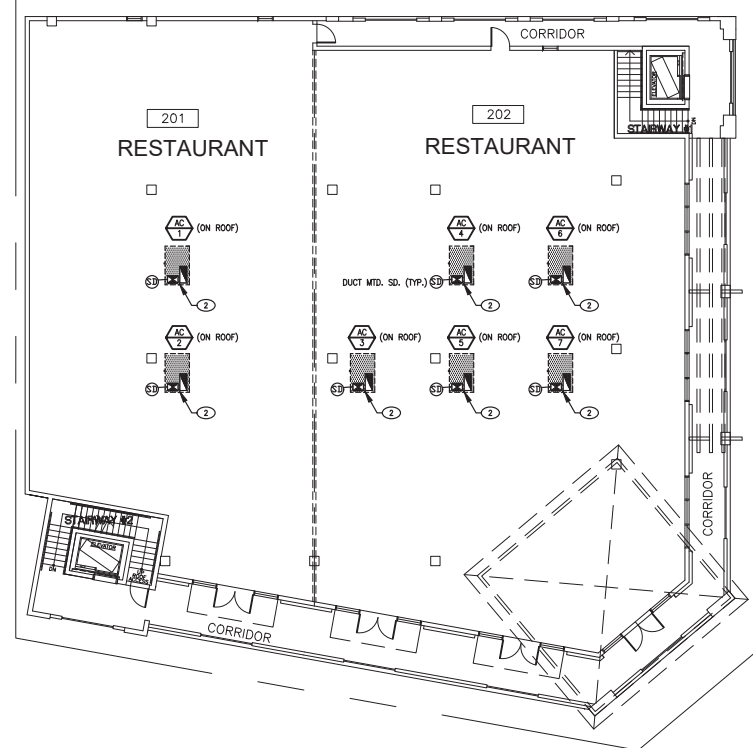


CEG Engineering Inc.

Consulting Engineers Group JOB NO: E17039

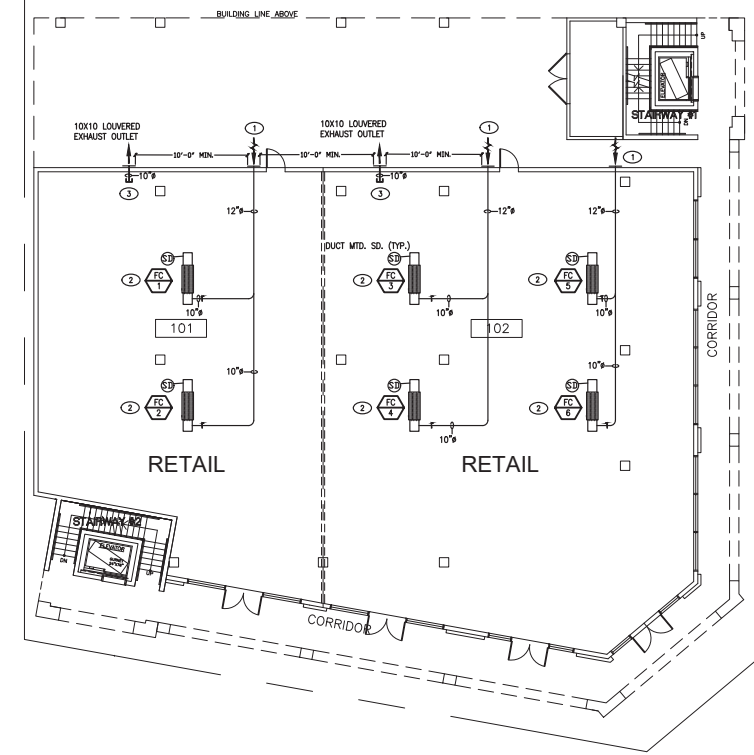
1543 W. Garvey Ave. North, Suite #210, West Covina, CA 91790
Tel: 626.306.1268 Fax: 626.306.1216 ceg@cegmep.com

M-2.1

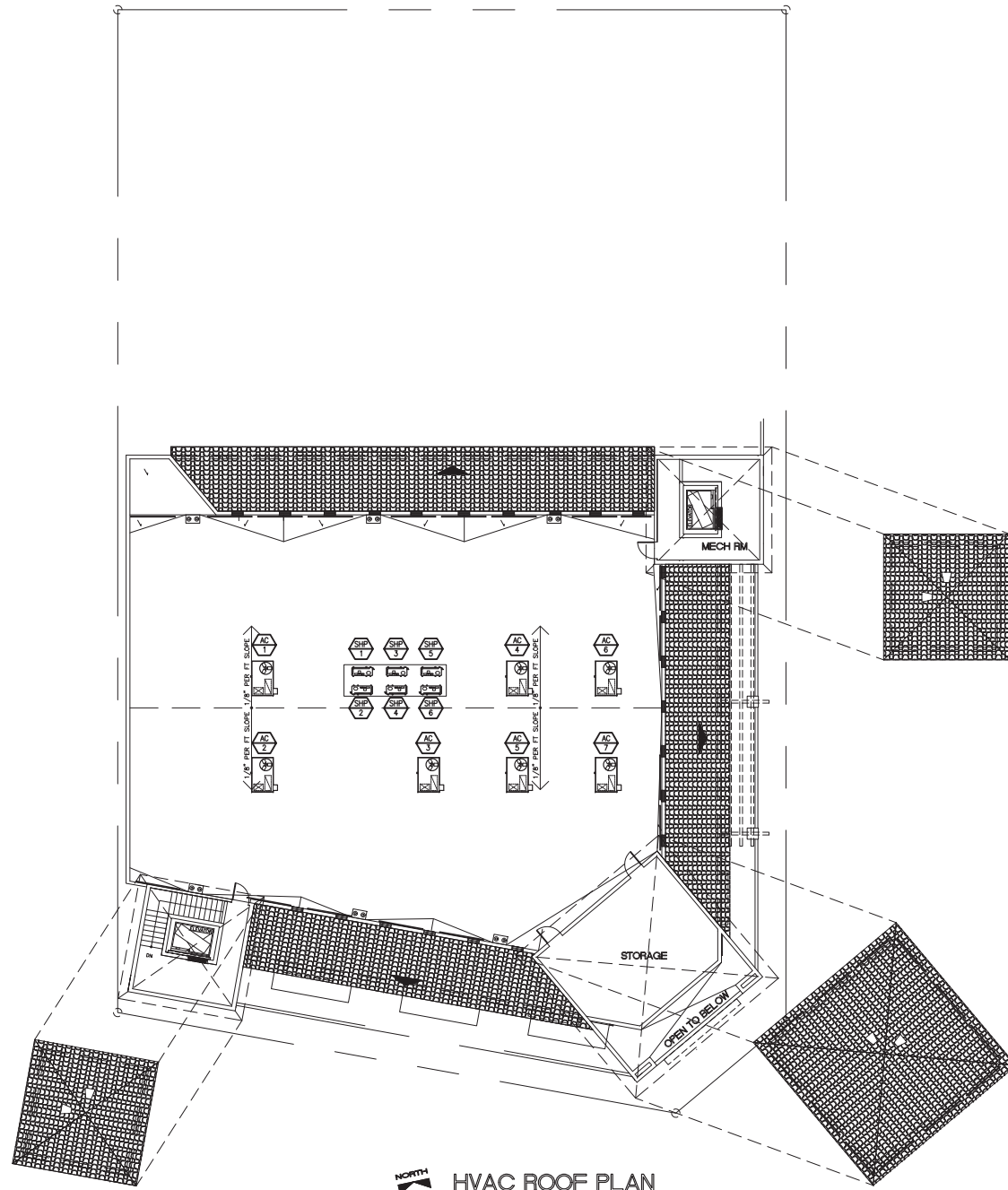


HVAC 2ND FLOOR PLAN
 SCALE: 1"=10'-0"

- REFERENCE NOTES:
- ① 18X18 LOUVERED OSA INLET WITH 1/4" WIRE MESH.
 - ② CAP THE SA & RA PLENUM FOR T.J., CAP THE CONDENSATE DRAIN FOR T.J.
 - ③ CAP THE EXHAUST OUTLET FOR T.J.



HVAC 1ST FLOOR PLAN
 SCALE: 1"=10'-0"



HVAC ROOF PLAN
SCALE: 1"=10'-0"



C E G Engineering Inc.
Consulting Engineers Group JOB NO: E17039
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FILE: 151102WK1STE10
DRAWN: ---
P.C. CORR. 3/09/2016

ARCHITECT: **S L A**
A R C H I T E C T S
140 W. VALLEY BLVD., STE 215, SAN GABRIEL, CA 91776
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PROJECT: **LA VALLEY GARDEN PLAZA**
NEW COMMERCIAL BUILDING
9933-9961 VALLEY BLVD.,
EL MONTE, CA 91731

JOB NO: 151102

M-2.3

CA Building Energy Efficiency Standards- 2016 Nonresidential Compliance Report Version: NRECC-PDF-01-E-12202017B-S160 Report Generated at: 2017-12-20 14:31:18

CA Building Energy Efficiency Standards- 2016 Nonresidential Compliance Report Version: NRCC-PRF-01-E-122020178-5160 Report Generated at: 2017-12-20 14:31:18

7. Oppose Surfaces & Orientation	8. Total Gross Surface Area	9. Total Penetration Area	10. Window to Wall Ratio	
North Wall	3,296 ft ²	114 ft ²	03.6%	<input type="checkbox"/>
East Wall	2,362 ft ²	36.7%	<input type="checkbox"/>	<input type="checkbox"/>
South Wall	3,533 ft ²	1,235 ft ²	37.7%	<input type="checkbox"/>
West Wall	2,226 ft ²	0 ft ²	00.0%	<input type="checkbox"/>
Total	11,117 ft ²	2,237 ft ²	20.1%	<input type="checkbox"/>
Roof	9,433 ft ²	0 ft ²	00.0%	<input type="checkbox"/>

CA Building Energy Efficiency Standards, 2016 Nonresidential Compliance Report Version: NBEES-PRE-01-E-122020178-5160 Report Generated at: 2017-12-20 14:31:18

CA Building Energy Efficiency Standards 2016 Nonresidential Compliance Report Version: NRCCE-PBP-01-6-122020176-0140 Report Generated at: 2017-12-20 14:31:18

CA Building Energy Efficiency Standards- 2016 Nonresidential Compliance Report Version: NRCC-PRF-01-E-122020178-S160 Report Generated at: 2017-12-20 14:31:18

a. CRACK SURFACE SUMMARY							§ 1207.9.140.3		Confirmed	
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
Surface Name	Surface Type	Area (ft ²)	Framing Type	Crack Ratio	Crack Ratio	R Factor / F Factor	R Factor / F Factor	Crack Type	Crack Type	Crack Type
R-20-100 Steel Deck (Hill)	Exterior/Floor	11127	NA	0	0	U-Factor: 0.72	U-Factor: 0.72	H	<input type="checkbox"/>	<input type="checkbox"/>
Concrete Wale Floor(2)	Exterior/Floor	7318	NA	0	0	U-Factor: 0.26	U-Factor: 0.26	H	<input type="checkbox"/>	<input type="checkbox"/>
R-12-700 Floor	Exterior/Floor	2115	Wood	10	NA	U-Factor: 0.06	U-Factor: 0.06	H	<input type="checkbox"/>	<input type="checkbox"/>
R-8-200 Slab	Roof	9453	Wood	38	NA	U-Factor: 0.29	U-Factor: 0.29	H	<input type="checkbox"/>	<input type="checkbox"/>
R-0 Interior Floor(2)	Interior/Floor	7318	NA	0	0	U-Factor: 0.83	U-Factor: 0.83	H	<input type="checkbox"/>	<input type="checkbox"/>

C&B Buildup Energy Efficiency Standards, 2016 Nonresidential Compliance Report Version: NRC-PRE-01-F-122020178-S160 Report Generated at: 2017.12.20 16:31:18

CA Building Energy Efficiency Standards- 2016 Nonresidential Compliance Report Version: NRCC-PRF-01-E-122020178-5160 Report Generated at: 2017-12-20 14:31:18

CA Building Energy Efficiency Standards- 2016 Nonresidential Compliance Report Version: NRCC-PRF-01-E-122020178-5160 Report Generated at: 2017-12-20 14:31:18

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CA Building Energy Efficiency Standards, 2016 Nonresidential Compliance Report Version: NBEES-PRE-01-E-122020178-5160 Report Generated at: 2017-12-20 14:31:18

Project Name:	LA VALLEY GARDEN PLAZA	NRC-PRF-01-E	Page 10 of 19
Project Address:	9933-9961 VALLEY BLVD., EL MONTE 91731	Calculation Date/Time:	14:30, Wed, Dec 20, 2017
Compliance Scope:	New/EnvelopeAndMechanical	Input File Name:	LA VALLEY GARDEN PLAZA.cdb16x

N. ECONOMIZER & FAN SYSTEMS SUMMARY										\$ 140.4	Confirmed
1.		2.		3.		4.		5.		7kg	8kg
Equipment		Outdoor Air		Supply Fan		Return Fan		Economizer Type (if present)			
CFM	CFM	HP	BHP	TSP (Inch WC)	Control	CFM	HP	BHP	TSP (Inch WC)	Control	
423HCC360_10	221	2.000	0.730	1.43	ConstantVolume	NA	NA	NA	NA	NA	<input type="checkbox"/>
423HCC360_20	897	2.000	0.730	1.43	ConstantVolume	NA	NA	NA	NA	FixedDrybulb	<input type="checkbox"/>
423HCC360_20	2	545	2.000	0.730	1.43	ConstantVolume	NA	NA	NA	FixedDrybulb	<input type="checkbox"/>

Minimum outdoor air flow rate shall be based on the ASHRAE 62.1-2010 Table 6.2.1

O. EQUIPMENT CONTROLS										\$ 120.2	Confirmed
1.		2.		3.		4.		5.		7	8
Equip Name		Equip Type		Controls		Controls		Controls			
423HCC360_101		SZHP		No OCV Controls No Economizer No Supply Air Temp. Control No Optimum Start No Desuperheater Cooler No Heat Recovery		No OCV Controls No Economizer No Supply Air Temp. Control No Optimum Start No Desuperheater Cooler No Heat Recovery		No OCV Controls No Economizer No Supply Air Temp. Control No Optimum Start No Desuperheater Cooler No Heat Recovery		<input type="checkbox"/>	<input type="checkbox"/>
423HCC360_102		SZHP		No OCV Controls No Economizer No Supply Air Temp. Control No Optimum Start No Desuperheater Cooler No Heat Recovery		No OCV Controls No Economizer No Supply Air Temp. Control No Optimum Start No Desuperheater Cooler No Heat Recovery		No OCV Controls No Economizer No Supply Air Temp. Control No Optimum Start No Desuperheater Cooler No Heat Recovery		<input type="checkbox"/>	<input type="checkbox"/>
424HCLC400_201		SZAC		1 Zones With CO2Sensor Vent. Control Fixed Drybulb Economizer No Supply Air Temp. Control No Optimum Start No Desuperheater Cooler No Heat Recovery		1 Zones With CO2Sensor Vent. Control Fixed Drybulb Economizer No Supply Air Temp. Control No Optimum Start No Desuperheater Cooler No Heat Recovery		1 Zones With CO2Sensor Vent. Control Fixed Drybulb Economizer No Supply Air Temp. Control No Optimum Start No Desuperheater Cooler No Heat Recovery		<input type="checkbox"/>	<input type="checkbox"/>

CA Building Energy Efficiency Standards: 2016 Nonresidential Compliance Report Version: NRC-PRF-01-E-122020178-5160 Report Generated at: 2017-12-20 14:31:18

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Project Address:	9933-9961 VALLEY BLVD., EL MONTE 91731	Calculation Date/Time:	14:30, Wed, Dec 20, 2017
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G. EQUIPMENT CONTROLS										\$ 120.2	Confirmed	
1.		2.		3.						Yes	No	
Equip Name		Equip Type		Controls								
(5)4BHCL046_202		SZAC		1 Zones With CO2Sensor Vent. Control Fixed Drybulb Economizer No Supply Air Temp. Control No Optimum Start No Economizer Cooler No Heat Recovery						<input type="checkbox"/>	<input type="checkbox"/>	

P. SYSTEM DISTRIBUTION SUMMARY										\$ 120.4 / \$ 140.40		Confirmed	
1.		2.		3.		4.		5.		7kg	8kg		
Equipment Name		Equipment Type		Duct Leakage and Sealing (Required per 140.4)		Duct Leakage will be verified per 140.4 and N/A		Insulation R-Value					
								Location		Status ¹			
423HCC360_101		SZHP		No		No		Other		n			
423HCC360_201		SZHP		No		No		Other		n			
423HCC360_202		SZAC		No		No		Other		n			
423HCC360_202		SZAC		No		No		Other		n			

Does the Project Include Zonal Systems? (If "Yes", see NRC-PRF-MCH-DETAILS for system information)
Does the Project Include a Solar Hot Water System? (If "Yes", see NRC-PRF-MCH-DETAILS for system information)
Multi-Family or Hotel? (If "Yes", see NRC-PRF-MCH-DETAILS for DHW system info)
This Section Does Not Apply

Q. INDOOR CONDITIONED LIGHTING SCHEDULE (Adapted from NRC-PRF-LI-01-E)
This Section Does Not Apply

R. INDOOR CONDITIONED LIGHTING SCHEDULE (Adapted from NRC-PRF-LI-01-E)
This Section Does Not Apply

CA Building Energy Efficiency Standards: 2016 Nonresidential Compliance Report Version: NRC-PRF-01-E-122020178-5160 Report Generated at: 2017-12-20 14:31:18

Project Name:	LA VALLEY GARDEN PLAZA	NRC-PRF-01-E	Page 12 of 19
Project Address:	9933-9961 VALLEY BLVD., EL MONTE 91731	Calculation Date/Time:	14:30, Wed, Dec 20, 2017
Compliance Scope:	New/EnvelopeAndMechanical	Input File Name:	LA VALLEY GARDEN PLAZA.cdb16x

S1. COVERED PROCESS SUMMARY - ENCLOSED PARKING GARAGES										\$ 140.9	Confirmed
This Section Does Not Apply											

S2. COVERED PROCESS SUMMARY - COMMERCIAL KITCHENS										\$ 140.9	Confirmed
This Section Does Not Apply											

S3. COVERED PROCESS SUMMARY - COMPUTER ROOMS										\$ 140.9	Confirmed
This Section Does Not Apply											

S4. COVERED PROCESS SUMMARY - LABORATORY EXHAUSTS										\$ 140.9	Confirmed
This Section Does Not Apply											

T. UNMET LOAD HOURS											Confirmed
This Section Does Not Apply											

U. ENERGY USE SUMMARY											Confirmed
This Section Does Not Apply											
Energy Component											
Standard Design Site (MW)											
Space Heating										1.7	14.3
Space Cooling										26.5	18.8
Infiltration										54.3	18.7
Heat Rejection										1.7	14.3
Pumps & Misc.										0.8	1.7
Domestic Hot Water										409.9	409.9
Ventilation										79.3	6.0
COMPLIANCE TOTAL										158.3	158.3
Receptacle										50.4	50.4
Process										50.4	50.4
Other Use										50.4	50.4
Process Motors										50.4	50.4
TOTAL										195.9	208.7

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Project Name:	LA VALLEY GARDEN PLAZA	NRC-PRF-01-E	Page 13 of 19
Project Address:	9933-9961 VALLEY BLVD., EL MONTE 91731	Calculation Date/Time:	14:30, Wed, Dec 20, 2017
Compliance Scope:	New/EnvelopeAndMechanical	Input File Name:	LA VALLEY GARDEN PLAZA.cdb16x

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT										\$ 10-100	Confirmed
I certify that this Certificate of Compliance documentation is accurate and complete.											
Documentation Author Name: Tuan Taly Morikita P.E.											
Company: CEG Engineering, Inc.											
Address: 1343 W. Garvey Ave. North, Suite #210											
City/State/Zip: West Covina, CA 91790											
Phone: (626) 308-1268											
Signature Date: 12/21/2017											

RESPONSIBLE PERSON'S DECLARATION STATEMENT											Confirmed
I certify the following under penalty of perjury, under the laws of the State of California:											
1. I am the owner, or the person responsible for the preparation of this document, and I am licensed in the State of California as a civil engineer, mechanical engineer, electrical engineer, or a licensed architect.											
2. I affirm that I am eligible under the provisions of Division 3 of the Business and Professions Code by section 5502.7 or 5517.3 to sign this document as the person responsible for its preparation, and that I am a licensed contractor performing this work.											
3. I affirm that I am eligible under Division 3 of the Business and Professions Code to sign this document because it pertains to a structure or type of work described as exempt pursuant to Business and Professions Code Sections 5501.5, 5508 and 5517.3.											

Responsible Designer Name: TAYLOR, TUN											
Company: SLA ARCHITECTS											
Address: 1401 W. VALLEY BLVD., SUITE 215											
City/State/Zip: SAN GABRIEL, CA 91776											
Phone: (626) 311-8888											
Responsible Lighting Designer Name: TAYLOR, TUN											
Company: CEG Engineering, Inc.											
Address: 1343 W. Garvey Ave. North, Suite #210											
City/State/Zip: West Covina, CA 91790											
Phone: (626) 308-1268											
Signature Date: 12/21/2017											

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NRC-PRF-ENV-DETAILS - SECTION START

A. OPAQUE SURFACE ASSEMBLY DETAILS							Confirmed	
1.		2.		3.		4.		
Surface Name	Surface Type	Description of Assembly Layers			Notes	✓	✗	
R-29#3 Wood Stud Wall	Exterior/Wall	Sluice - 7/8 in. Vapor permeable felt - 1/8 in. Wood framed wall, 2in. OC, 5.5in., R-19 Gypsum board - 1/2 in.				□	□	
Concrete Floor Floor10	Exterior Floor	Compliance Insulation R0.10 Concrete - 140 lb/ft3 - 4 in. Capset - 3/4 in.				□	□	
R-19 Floor10	Exterior Floor	Wood framed floor, 16 in. OC, 11.25in., R-19 Plywood - 1/2 in. Capset - 3/4 in.				□	□	
R-38 Roof15	Roof	Asphalt shingles - 1/4 in. Vapor permeable felt - 1/8 in. Plywood - 1/2 in. Air - Cavity - Wall-Roof Ceiling - 4 in. or more Wood framed roof, 16in. OC, 11.25in., R-38 Gypsum board - 1/2 in.				□	□	
R-0 Interior Floor17	Interior Floor	Air - Cavity - Wall-Roof Ceiling - 4 in. or more Plywood - 1/2 in. Capset - 3/4 in.				□	□	

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average U-factor of the floor assembly shall not exceed 0.269.



WASTE & WATER FIXTURE UNITS (FOR RETAIL)					
FIXTURE IN FUTURE	WASTE			WATER	
	QUANTITY	FIXTURE UNITS	TOTAL	FIXTURE UNITS	TOTAL
WATER CLOSET (FLUSH VALVE)	2	4	8	8	16
LAVATORY	2	1	2	2	2
TOTAL			10		18 FU (34 GP)

SEWER LINE: 4" (10 FU) WASTE FOR RETAIL.
WATER LINE: 1-1/2" (18FU) CW MAIN PIPE FOR RETAIL.

WATER PIPE SIZING CALCULATIONS (FOR RETAIL)

STREET WATER PRESSURE: 94 PSI (HIGH), 90 PSI (LOW)

WATER SIZING CALCULATIONS - $10\text{ PSI}/(34\text{GPM}) (1\text{--}1/2" \text{ CW MAIN})$

1. STREET WATER PRESSURE.....	_____ 90 PSI
2. MINUS $1\text{--}1/2" \text{ WATER METER PRESSURE LOSS}$	_____ 1.3 PSI
3. MINUS $1\text{--}1/2" \text{ WILKINS 375DAL LEAD FREE BRPPR PRESSURE LOSS}$	_____ 11.0 PSI
4. $1\text{--}1/2" \text{ WILKINS 500 HPV PRESSURE LOSS}$ PRESSURE SET AT 80 PSI.....	_____ 5.7 PSI
5. MINUS VERT. LIFT(MAX.) $10 \text{ FT. X } 0.434$	_____ 4.3 PSI
6. MINUS PRESSURE REQUIRED AT FIXTURE.....	_____ 25 PSI

TOTAL PRESSURE AVAILABLE FOR FRICTION LOSS 42.7 PSI

TOTAL LENGTH(FARTHEST) 265 FT X $F \text{ T X } 1.25 = \text{TOTAL EQUIVALENT LENGTH (T.E.L.)}$ 331 FT

42.4 PSI X 100 FT + 331 T.E.L. = 12.8 PSI

12.8 PSI LOSS PER 100 FT COLD WATER- SELECTED

COLD WATER PIPING							(FOR RETAIL)
PIPE SIZE	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	
F.W. FU	0	0	0	14	35	132	
F.T. FU	4	13	30	56	103	254	
12.6 PSI LOSS/100FT; 8 FT/S MAX. VEL.							

HOT WATER PIPING							(FOR RETAIL)
PIPE SIZE	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	
F.T. FU	3	8	16	28	46	119	
12.6 PSI LOSS/100FT; 5 FT/S MAX. VEL.							

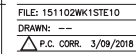
PIPE MATERIAL SCHEDULE			
SERVICE	PIPE	FITTINGS	LOCATION
WASTE & VENT	CAST IRON NO HUB	CAST IRON NO HUB	ABOVE GRADE BELOW GRADE
STORM DRAIN	CAST IRON NO HUB	CAST IRON NO HUB	ABOVE GRADE BELOW GRADE
HOT AND COLD WATER	COPPER TYPE "L" HARD DRAIN	WROUGHT COPPER	ABOVE GRADE
COLD WATER	COPPER TYPE "L" HARD DRAIN	WROUGHT COPPER	BELOW GRADE
INDIRECT WASTE CONDENSATE DRAIN	COPPER TYPE "H" HARD DRAIN	WROUGHT COOPER	ABOVE GRADE
GAS	BLACK STEEL SCHEDULE 40	BLACK STEEL WALLEDED IRON	ABOVE GRADE
GAS	BLACK STEEL SCH. 40 W/COATING	BLACK STEEL WALLEDED IRON W/COATING	BELOW GRADE

SHEET INDEX	
SHEET NO.	SHEET TITLE
P-0.1	NOTES, DETAILS AND SCHEDULE
P-1.1	PLUMBING SITE PLAN
P-2.1	PLUMBING BASEMENT PARKING 2, PARKING 1 PLAN
P-2.2	PLUMBING 1ST FLOOR & 2ND FLOOR PLAN
P-2.3	PLUMBING ROOF PLAN, WASTE/GREASE WASTE AND VENT RISER DIAGRAM

SYMBOLS AND LEGEND			
SYMBOLS		ABBREV.	DESCRIPTION
		SW	SEWER WASTE
		V	VENT LINE
		CW	COLD WATER
		HW	HOT WATER
		HWR	HOT WATER RETURN
		GW	GREASE WASTE
		G	GAS
		CD	CONDENSATE DRAIN
		SOL	SOIL WASTE ABOVE FLOOR OR GRADE
		CWV	COMBINATION WASTE & VENT
		DS	DOWNSPUT
		FS	FLOOR SINK
		WCO	WALL CLEAN OUT
		COG	CLEAN OUT TO GRADE
		FCO	FLOOR CLEAN OUT
		FD	FLOOR DRAIN
		PC	POINT OF CONNECTION
		TP	TRAP PRIMER
	ACCESS PANEL		
	AUTO. FIRE SPRINKLER RISER		
	BROCKTON PREVENTER		
	BACK BALANCING COCK		
	CATCH BASIN		
	CLEANOUT		
	DOWN CHA		
	HEADER		
		LD.	INDIRECT DRAIN
		LE	INVERT ELEVATION
		MH	MANHOLE
		ROF	ROUGH-IN & CONNECT
		ROF	ROUGH DRAIN
		OFL	OVERFLOW DRAIN
		SOD	SHUT OFF COCK
		SOV	SHUT OFF VALVE
		PRV	NON PRESSURE REDUCING VALVE
		EC	EXISTING
		NA	NOT APPLICABLE
		N.I.C.	NOT IN CONTRACT
		VTR	VENT THROUGH ROOF
		DD	DECK DRAIN

GENERAL NOTES

1. ALL MATERIALS AND INSTALLATION SHALL CONFORM TO 16 CALIFORNIA PLUMBING CODE.
2. WASTE AND VENT PIPING INSIDE BUILDING SHALL BE HUBLESS CAST IRON WITH STAINLESS STEEL CLAMPS.
3. HOT AND COLD WATER PIPING INSIDE BUILDING SHALL BE TYPE 'L' COPPER WITH 95-5 LEAD FREE SOLDER JOINTS.
4. CONDENSATE DRAIN PIPING SHALL BE TYPE 'M' COPPER WITH 95-5 LEAD FREE SOLDER JOINTS.
5. ALL WATER SHUT OFF VALVES SHALL BE QUARTER TURN BE BRASS, BRONZE OR STAINLESS STEEL BODY.
6. COPPER AND STEEL PIPE AND VALVE CONNECTIONS SHALL HAVE DI-ELECTRIC UNIONS.
7. ALL FLEXIBLE METAL PIPE CONNECTIONS SHALL BE BRANDED STAINLESS STEEL, 150 PSIG RATED, NO NON-METALLIC FLEX CONNECTIONS ARE ALLOWED.
8. NATURAL GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL WITH SOLDERED ON CONNECTIONS.
9. ALL WATER AND GAS PIPING SHALL BE PRESSURE TESTED WITH COMPRESSED AIR OR NITROGEN WITH MAIN LINES CAPPED WITH PRESSURE GAGE AND CHARGING FITTING AND PRESSURIZED AT 120 PSIG, HELD FOR 24 HOURS, NO DROP IN PRESSURE SHALL BE NOTICED AT THE END OF 24 HOURS, ANY DROP IN PRESSURE INDICATES A LEAK CONDITION. PLUMBING CONTRACTOR SHALL USE SOAP WATER TEST OR DETECTOR TO DETECT ANY LEAK AND FIX AND RERUN THE TEST UNTIL NO LEAKS ARE DETECTED.
10. ALL WASTE LINES SHALL BE TESTED FOR LEAKS WITH CAPPED MAIN LINE AND WATER FILLED TO HIGHEST LEVEL OPEN PIPE FOR 24 HOURS, THERE SHALL BE NO DROP IN WATER LEVEL, ANY DROP IN WATER LEVEL INDICATES LEAK IN THE SYSTEM AND PLUMBING CONTRACTOR SHALL DETECT AND FIX LEAK AND RE-TEST FOR LEAK FREE CONDITION.
11. ALL TESTING SHALL BE MONITORED BY ARCHITECT OR HIS REPRESENTATIVE.
12. PLUMBING CONTRACTOR SHALL VERIFY IN FIELD, EXACT LOCATIONS OF SITE WATER, SEWER AND GAS LINES FOR CONNECTIONS BUILDING LINES.
13. PLUMBING CONTRACTOR SHALL VERIFY ALL INFORMATION PERTAINING TO CONNECTIONS OF WASTE, WATER AND GAS LINES. VERIFY INVERT ELEVATION OF SEWER LATERALS, MANHOLE FLOW LINE ETC. IN THE EVENT OF CONFLICTS HE SHALL NOTIFY ARCHITECT PRIOR TO PREPARING BID COSTS.
14. ALL WASTE, WATER AND GAS LINES SHALL BE RUN AWAY FROM FOUNDATION FOOTINGS. INSTALL WALL FLUTES AND BEAMS AND RUN INSIDE CHASES.
15. PROVIDE WALL AND FLOOR CLEANOUTS AS PER 2016 CPC FOR CLEANING WASTE LINES.
16. INSTALL SHUT-OFF VALVES FOR ALL PLUMBING FIXTURES AND PROVIDE ACCESS PANELS FOR EASY SHUT-OFF.
17. RUN ALL WASTE AND OTHER GRAVITY DRAINS INCLUDING ROOF DRAINS AT 1/4 INCH PER LF.
18. RUN ALL PIPING INSIDE BUILDING CHASES AS MUCH AS POSSIBLE. AVOID RUNNING PIPES THROUGH SILL PLATES AND BEAMS AND RUN INSIDE CHASES.
19. REDUCED PRESSURE BACK FLOW PREVENTION DEVICE AS REQUIRED BY CODE IS PART OF SITE WORK. THIS SHALL BE CO-ORDINATED WITH CIVIL ENGINEERING SITE PLAN.
20. ALL PIPE PENETRATIONS THROUGH FIRE RATED CONSTRUCTION SHALL BE CAULKED WITH ICBO APPROVED FIRE STOPPING CAULKING.
21. ALL WATER HEATERS SHALL BE CEC CERTIFIED.
22. ALL HW PIPING SHALL BE INSULATED PER CEC.
23. MAXIMUM HW TEMP. SHALL BE 110°F AT THE SINK, BATH TUB/SHOWER OUTPUT.
24. ALL PLUMBING FIXTURES SHALL BE LOW WATER CONSUMPTION TYPE AS OUTLINED IN CEC.
25. ALL RAIN WATER PIPING WITH BUILDINGS SHALL BE CAST IRON WITH HMPD APPROVED FITTINGS.
26. ALL PIPE FITTINGS & JOINTS SHALL BE FLANGED & GASKETED FOR SIZES 2-1/2" AND LARGER
27. ALL MATERIAL SHALL COMPLY WITH AHS9053 LEAD FREE REQUIREMENT.
28. COMPLY WITH 2016 CPC FOR ALL OTHER REQUIREMENTS.



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4



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3

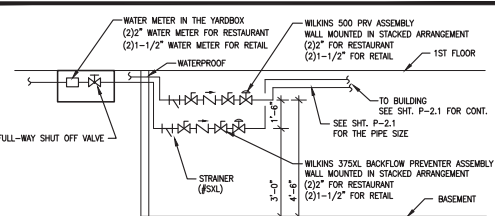
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P-0.1



WATER PIPE SIZING CALCULATIONS (FOR RESTAURANT)

FIXTURE UNITS(MAX) FOR EACH RESTAURANT 80 F.U. = 61 GPM

STREET WATER PRESSURE: 94 PSI (HIGH), 90 PSI (LOW)

WATER SIZING CALCULATIONS – 80F(61GPM) (2" CW MAIN)

1. STREET WATER PRESSURE. _____ 90 PSI
2. MINUS 2" WATER METER PRESSURE LOSS _____ 1.5 PSI
3. MINUS 2" WILKINS 375XL LEAD FREE RPBP PRESSURE LOSS _____ 10.8 PSI
4. 2" WILKINS 500 PIV PRESSURE LOSS _____ 6.9 PSI
PRESSURE SET AT 80 PSI
5. MINUS VERT. LIFT(MAX) _____ 10.0 PSI
6. MINUS PRESSURE REQUIRED AT FIXTURE _____ 25 PSI

TOTAL PRESSURE AVAILABLE FOR FRICTION LOSS 35.8 PSI

TOTAL LENGTH(FARTHEST) 295 FT x 1.25 = TOTAL EQUIVALENT LENGTH (T.E.L.) 369 FT

35.3 PSI x 100 FT + 369 T.E.L. = 9.7 PSI

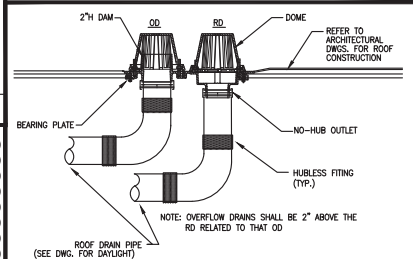
9.6 PSI LOSS PER 100 FT CHOSEN – SELECTED

COLD WATER PIPING							(FOR RESTAURANT)
PIPE SIZE	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	
F.V. FU	0	0	0	14	35	132	
F.T. FU	3	12	26	56	103	254	

9.6 PSI LOSS/100FT; 8 FT/S MAX. VEL.

HOT WATER PIPING							(FOR RESTAURANT)
PIPE SIZE	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	
F.T. FU	3	8	16	28	46	119	

9.6 PSI LOSS/100FT; 5 FT/S MAX. VEL.



ROOF DRAIN & OVERFLOW DRAIN DETAIL	SCALE N.T.S.	3								
<p>313.6 Hanger Rod Sizes. Hanger rod sizes shall be not smaller than those shown in Table 313.6.</p> <p style="text-align: center;">TABLE 313.6 HANGER ROD SIZES</p> <table> <tr> <th>PIPE AND TUBE SIZE (inches)</th><th>ROD SIZE (inches)</th></tr> <tr> <td>1½ - 4</td><td>¾</td></tr> <tr> <td>5 - 8</td><td>1</td></tr> <tr> <td>10 - 12</td><td>1½</td></tr> </table> <p>For SI units: 1 inch = 25.4 mm</p>			PIPE AND TUBE SIZE (inches)	ROD SIZE (inches)	1½ - 4	¾	5 - 8	1	10 - 12	1½
PIPE AND TUBE SIZE (inches)	ROD SIZE (inches)									
1½ - 4	¾									
5 - 8	1									
10 - 12	1½									

PIPING HANGER ROD SIZE TABLE	SCALE N.T.S.	5
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BACKFLOW PREVENTER ASSEMBLY DETAIL

SCALE
N.T.S.

GREASE INTERCEPTORS

1000 GALLON
IN ACCORDANCE WITH L.A. COUNTY GWMS 2004-0
TRAFFIC AREA ACCORDING TO SDWA

1" DIA. TRAP	1" DIA. TRAP	1" DIA. TRAP	1" DIA. TRAP	1" DIA. TRAP	1" DIA. TRAP	1" DIA. TRAP	1" DIA. TRAP
1" DIA. TRAP	1" DIA. TRAP	1" DIA. TRAP	1" DIA. TRAP	1" DIA. TRAP	1" DIA. TRAP	1" DIA. TRAP	1" DIA. TRAP

TRAFFIC RISERS (LOAD WITH DRY
WEAR BELOW TANK)
LAUREL RISE-ROOFING CONTRACTORS ARE LICENSED TO
SEE INSTALLATION PHOTOGRAPHY FOR ADDITIONAL INFO.
PRODUCT INFORMATION

SAMPLE BOX WITH PIPE CONNECTORS

MODEL 15/20

BOSS DESIGN MUST BE PLACED ON SURFACE BASE OF COMPACTED SOIL OR UNDISTURBED EARTH
BOSS DESIGN LOADS (15-20) TRAFFIC
BOSS 10-1 SURFACE AREA (1-1.5) SQ. FT.

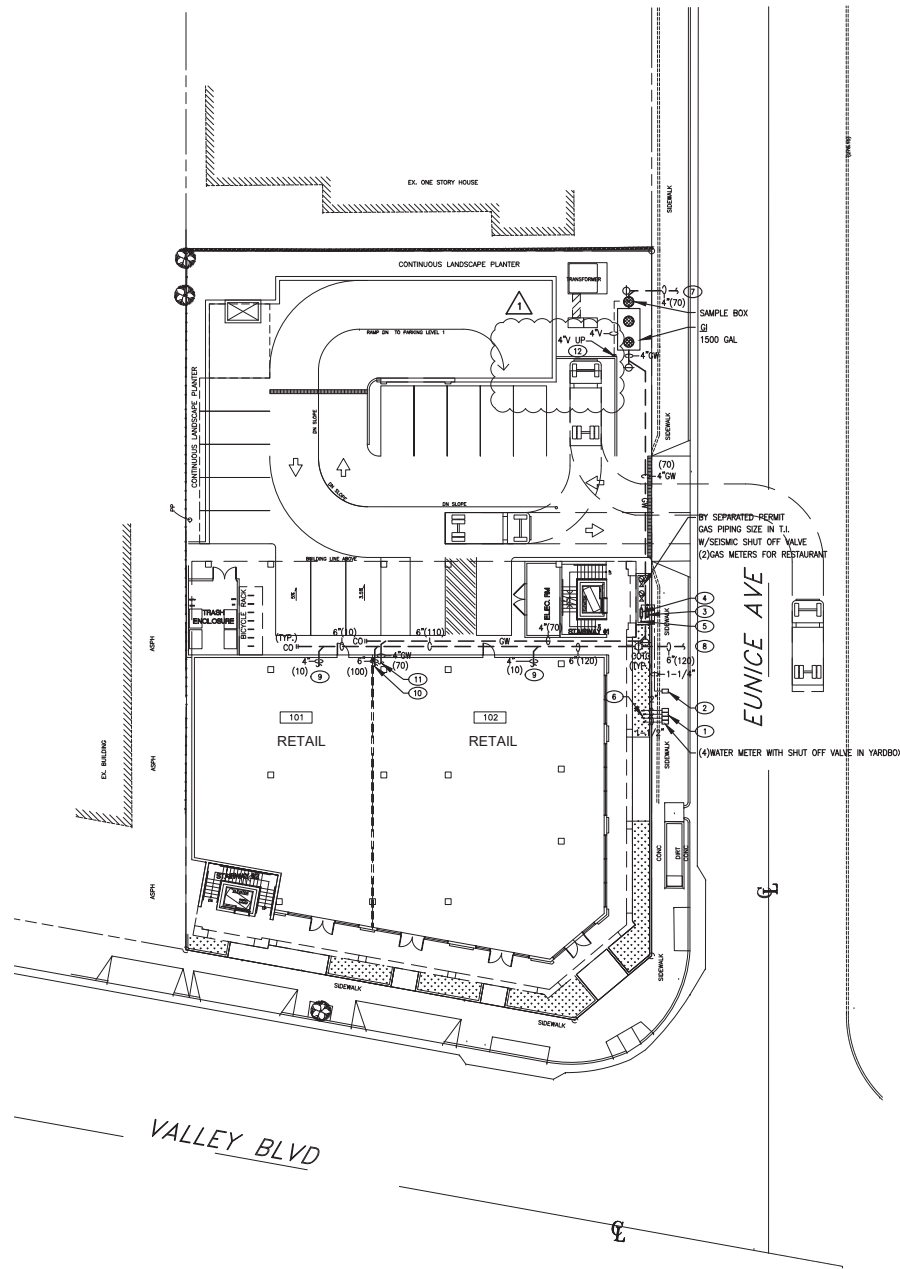
SAMPLE BOX MUST BE PLACED ON SURFACE BASE OF COMPACTED SOIL OR UNDISTURBED EARTH

FOR COMPLETE DESIGN AND PRODUCT INFORMATION CONTACT AGEN PRECAST.

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GREASE INTERCEPTOR DETAIL			SCALE N.T.S.	4
TABLE 313.3 HANGERS AND SUPPORTS				
TRIALS	TYPES OF JOINTS	HORIZONTAL	VERTICAL	
	Lead and Oakum	5 feet, except 10 feet where 10 foot lengths are installed ^{1, 2, 3}	Base and each floor, not to exceed 15 feet	
	Compression Gasket	Every other joint, unless over 4 feet then support each joint ^{1, 2, 3}	Base and each floor, not to exceed 15 feet	
ables	Shielded Coupling	Every other joint, unless over 4 feet then support each joint ^{1, 2, 3, 4}	Base and each floor, not to exceed 15 feet	
Copper Alloys	Soldered, Braised, Threaded, or Mechanical	1/4 inch and smaller, 4 feet; 2 inches and larger, 10 feet	Each floor, not to exceed 10 feet ⁵	
or Water or	Threaded or Welded	1/4 inch and smaller, 10 feet; 1 inch and larger, 12 feet	Every other floor, not to exceed 25 feet ⁶	
Gas	Threaded or Welded	1/2 inch, 6 feet; 3/4 inch and 1 inch, 8 feet; 1 1/4 inches and larger, 10 feet	Base and each floor, provide mid-story guides, provide for expansion every 30 feet	
PVC and	Solvent Cemented	All sizes, 4 feet; allow for expansion every 30 feet ⁷	Base and each floor, provide mid-story guides, provide for expansion every 30 feet	
	Solvent Cemented	1 inch and smaller, 3 feet; 1 1/4 inches and larger, 4 feet	Base and each floor; provide mid-story guides	
1 inch = 25.4 mm, 1 foot = 304.8 mm				
<p>(adjacent to joint, not to exceed 18 inches (457 mm). to exceed 40 feet (12 192 mm) intervals to prevent horizontal movement. each horizontal branch connection. shall not be placed on the coupling. one floor shall be permitted to be supported in accordance with recognized engineering principles with regard to expansion and contraction, where used by the Authority Having Jurisdiction.</p>				
PIPING HANGER AND SUPPORT SCHEDULE			SCALE N.T.S.	4

PIPING HANGER ROD SIZE TABLE	SCALE N.T.S.	5
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NOTE:
1. ALL SEWER LINES ARE RUNNING AT 2% SLOPE EXCEPT SPECIFIED IN DRAWING.

REFERENCE NOTES:

- (1) (4) WATER METER WITH SHUT OFF VALVE IN YARDBOX
- (2) 2\"/>



PLUMBING SITE PLAN

SCALE: 1/16\"/>

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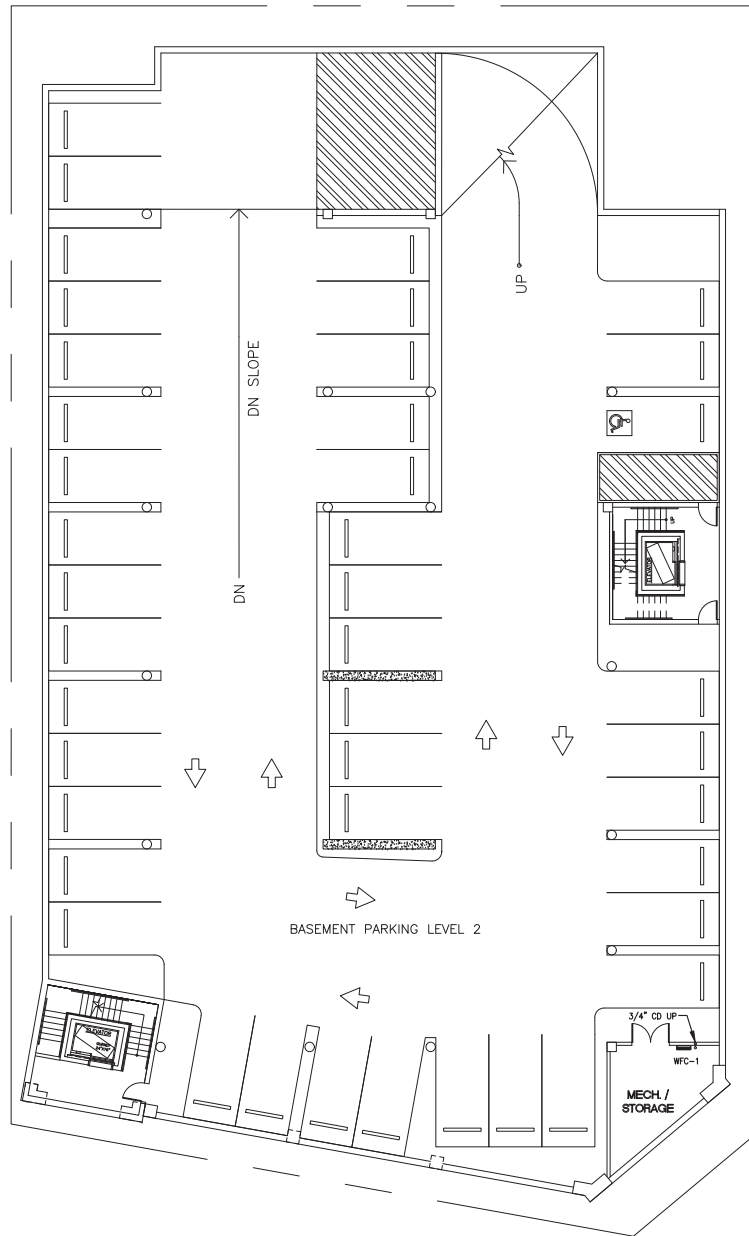
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P.C. CORR. 3/09/2016

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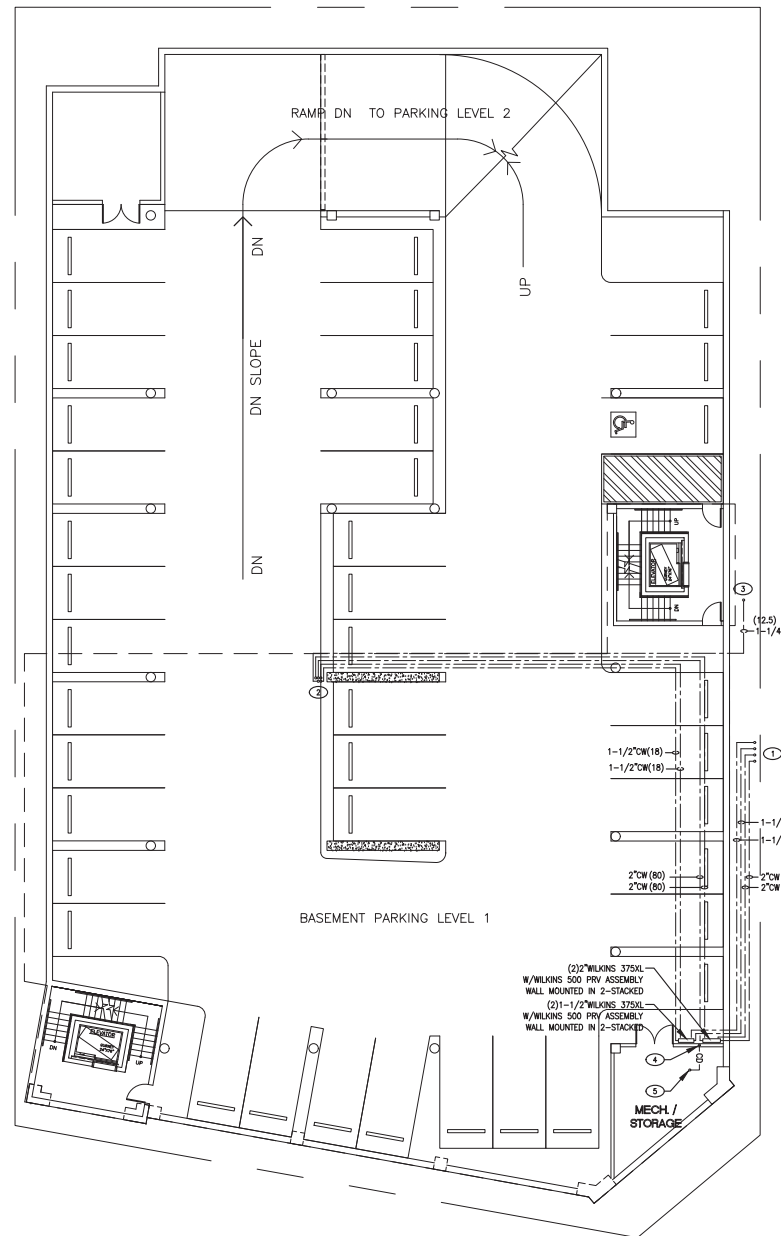
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PLUMBING BASEMENT PARKING 2 PLAN

SCALE: 1"=10'-0"



PLUMBING BASEMENT PARKING 1 PLAN

SCALE: 1"=10'-0"

REFERENCE NOTES:

- ① (4) 2" CW MAIN PIPE FROM ABOVE
- (2) 2" CW MAIN PIPE FOR (2) RESTAURANT
- (2) 1-1/2" CW MAIN PIPE FOR (2) RETAIL
- SEE SHI, P-1.1 FOR CONT.
- ② (3) 2" CW MAIN PIPE UP
- (2) 2" CW MAIN PIPE FOR (2) RESTAURANT
- (2) 1-1/2" CW MAIN PIPE FOR (2) RETAIL
- (2) 1-1/4" CW MAIN PIPE FOR COMMON
- SEE SHI, P-2.2 FOR CONT.
- ③ 1-1/4" CW MAIN PIPE FROM ABOVE
- SEE SHI, P-1.1 FOR CONT.
- ④ 3/4" CD FROM BELOW & UP TO CEILING
- ⑤ 3/4" CD UP



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P-2.2

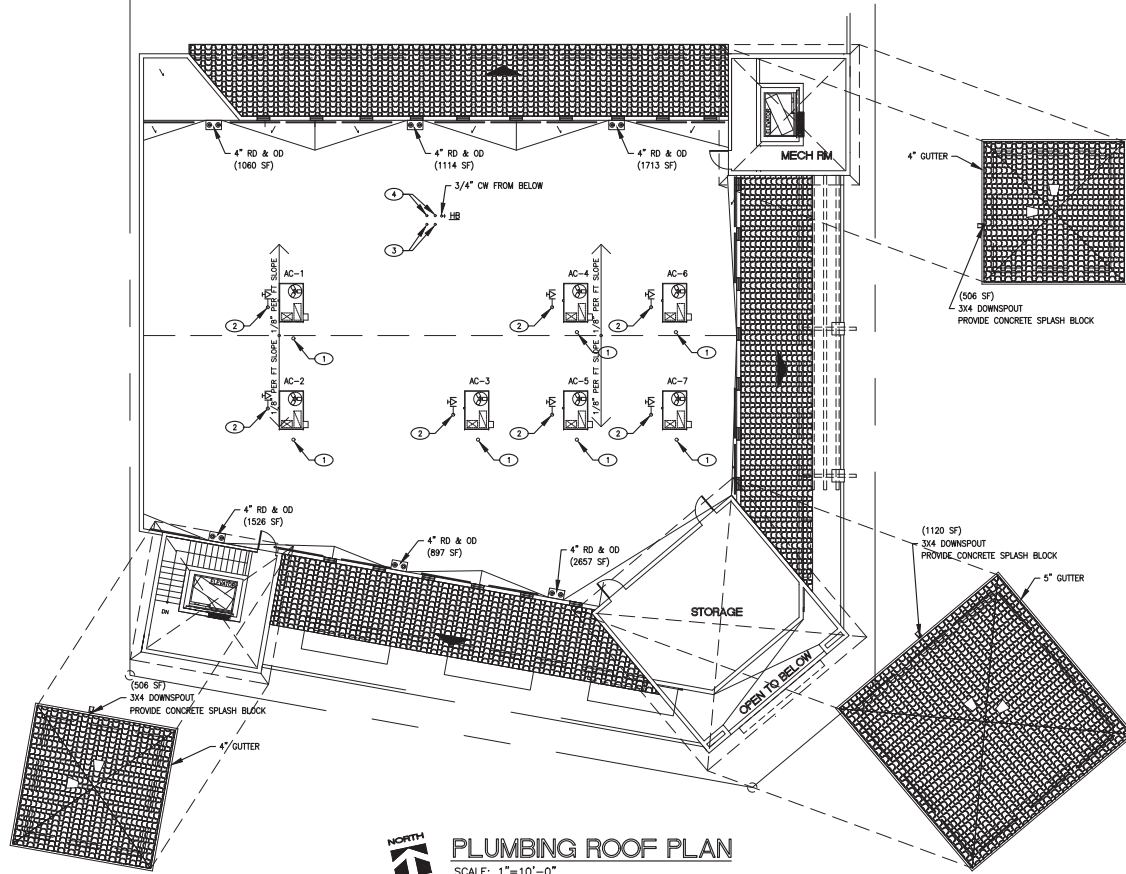
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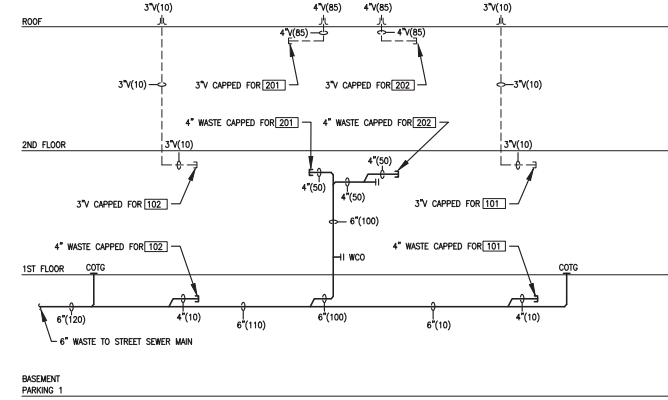
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- NOTE:
 1. ALL ROOF DRAINS ARE SIZING AT 3" RAINFALL PER HOUR AND RUNNING AT 1/4"/LF SLOPE.
 2. ALL GUTTER ARE SIZING AT 3" RAINFALL PER HOUR AND RUNNING AT 1/4"/LF SLOPE.
 3. EACH PLUMBING VENT SHALL TERMINATE NOT LESS THAN TEN (10) FEET FROM OR AT LEAST THREE (3) FEET ABOVE ANY WINDOW, DOOR, OPENING, AIR INTAKE OR VENT SHAFT.
- REFERENCE NOTES:
 (1) 3/4" CD DN.
 (2) 3/4" GAS PIPE DN., PROVIDE SHUT OFF VALVE.
 (3) 3"VIR
 (4) 4"VIR

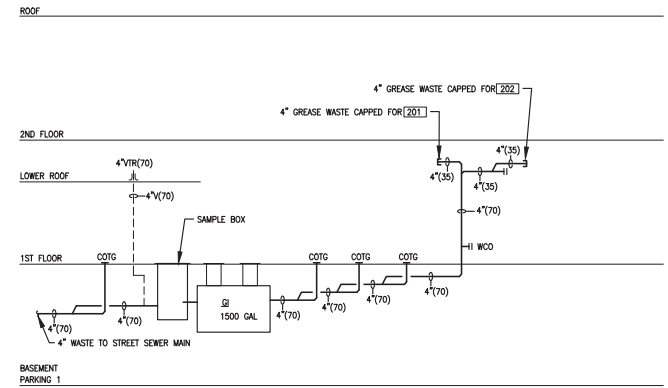


PLUMBING ROOF PLAN
 SCALE: 1"=10'-0"



WASTE AND VENT RISER DIAGRAM

SCALE: N.T.S.

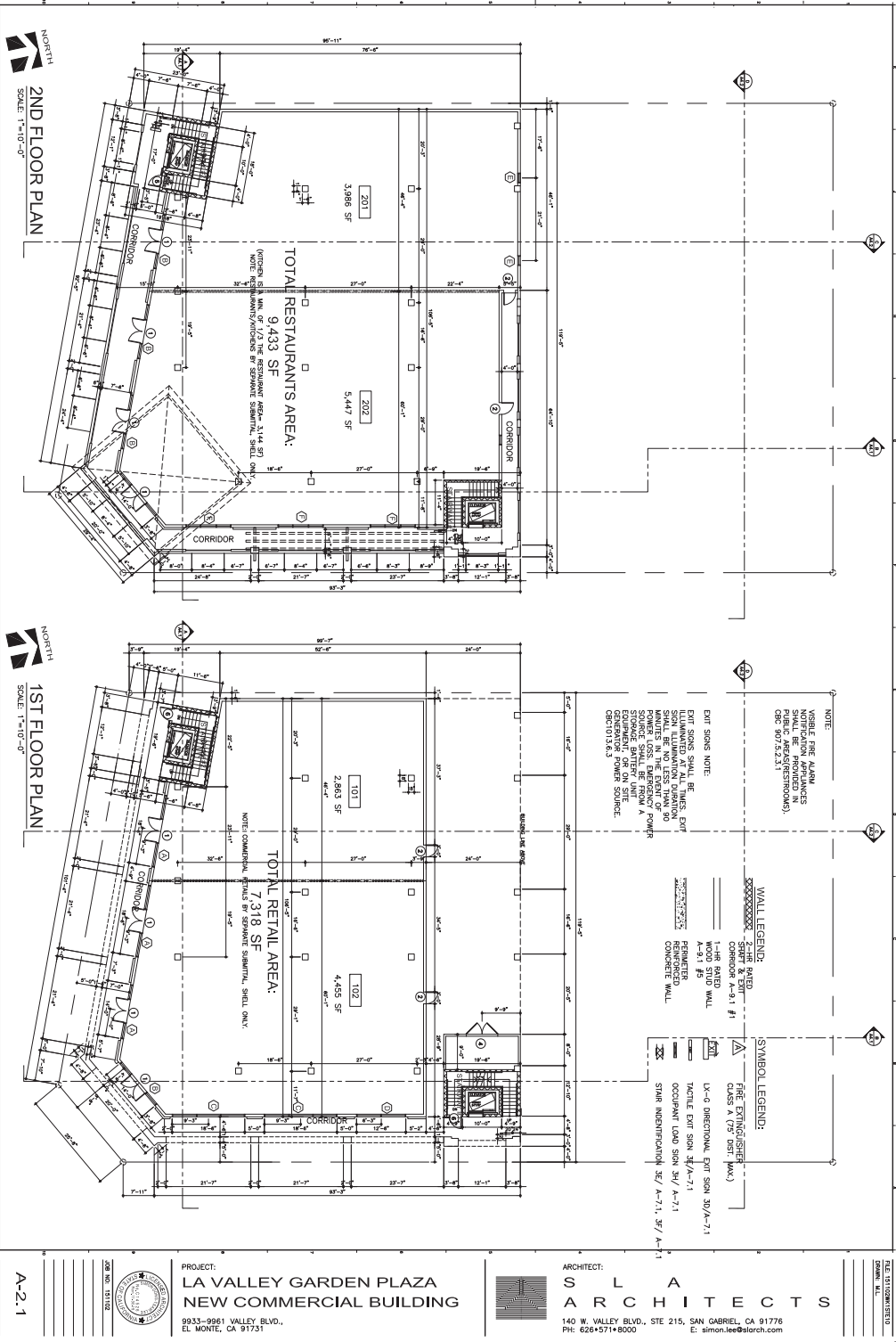


GREASE WASTE AND VENT RISER DIAGRAM

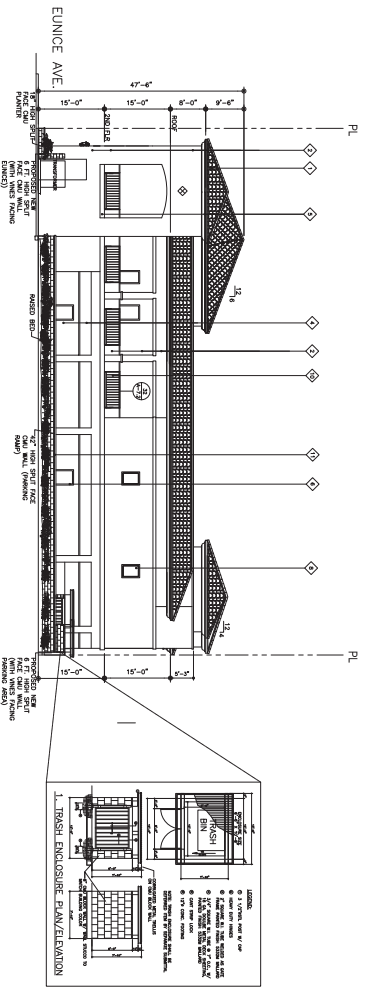
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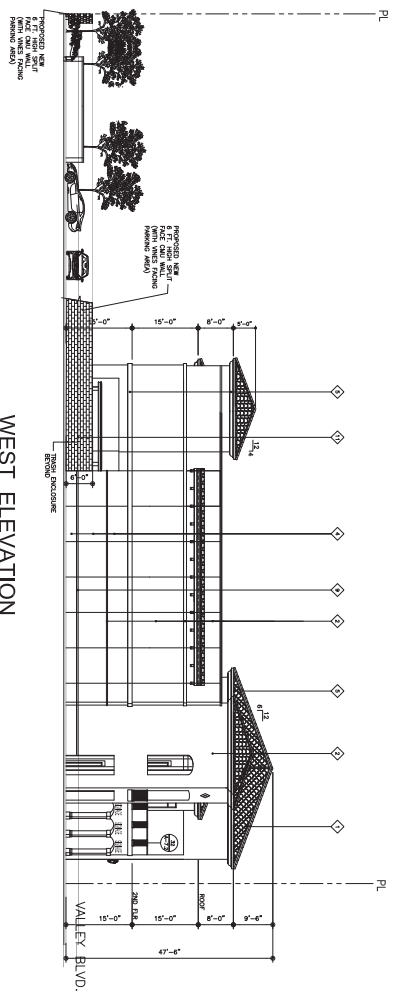
REGISTERED PROFESSIONAL ENGINEER
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 Exp. Date 09/25/19
 State of California



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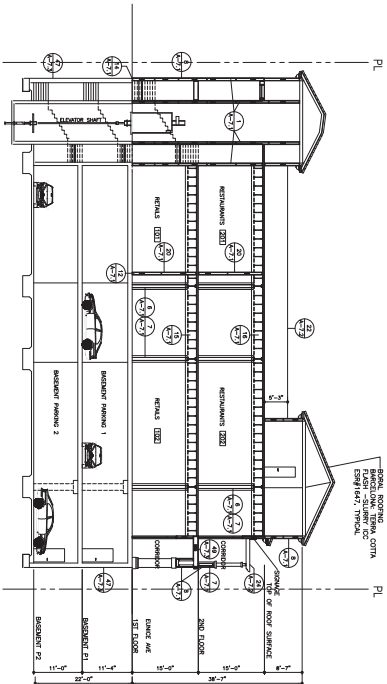
NORTH ELEVATION
SCALE: 1"=10'-0"



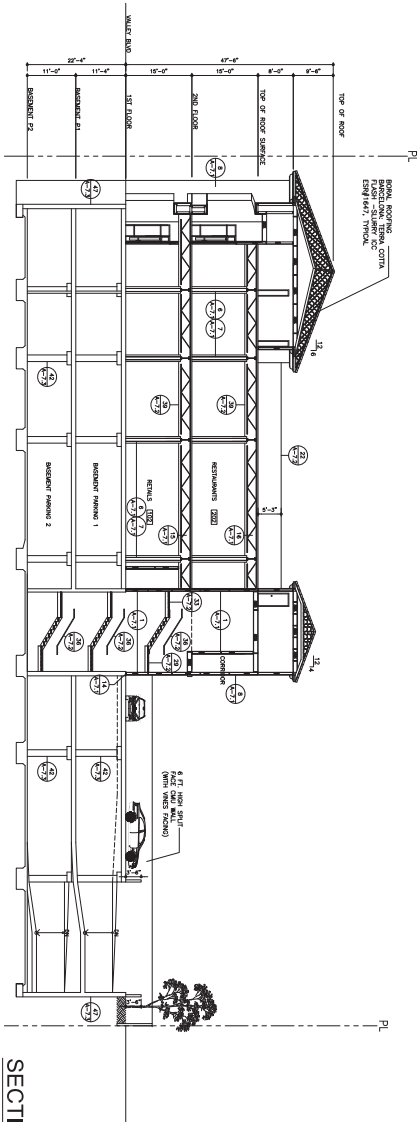
WEST ELEVATION
SCALE: 1"=10'-0"

EXTERIOR FINISH SCHEDULE

NUMBER	NAME	DESCRIPTION	FINISH
1	CONC. ROOF TILE	APPLICATION	TERAZZO, POLISHED, GLOSSY, 1/4" THICK, 12" X 12" SQUARE
2	STUCCO, 1/4" THICK	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
3	TRIM (MELLS EXCISE)	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
4	STUCCO	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
5	STUCCO, 1/4" THICK	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
6	TRIM (MELLS EXCISE)	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
7	STUCCO, 1/4" THICK	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
8	TRIM (MELLS EXCISE)	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
9	STUCCO, 1/4" THICK	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
10	TRIM (MELLS EXCISE)	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
11	STUCCO, 1/4" THICK	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
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48	TRIM (MELLS EXCISE)	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
49	STUCCO, 1/4" THICK	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
50	TRIM (MELLS EXCISE)	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
51	STUCCO, 1/4" THICK	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
52	TRIM (MELLS EXCISE)	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
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59	STUCCO, 1/4" THICK	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
60	TRIM (MELLS EXCISE)	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
61	STUCCO, 1/4" THICK	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
62	TRIM (MELLS EXCISE)	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
63	STUCCO, 1/4" THICK	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
64	TRIM (MELLS EXCISE)	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
65	STUCCO, 1/4" THICK	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
66	TRIM (MELLS EXCISE)	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
67	STUCCO, 1/4" THICK	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
68	TRIM (MELLS EXCISE)	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
69	STUCCO, 1/4" THICK	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
70	TRIM (MELLS EXCISE)	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
71	STUCCO, 1/4" THICK	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
72	TRIM (MELLS EXCISE)	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
73	STUCCO, 1/4" THICK	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
74	TRIM (MELLS EXCISE)	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
75	STUCCO, 1/4" THICK	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
76	TRIM (MELLS EXCISE)	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
77	STUCCO, 1/4" THICK	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
78	TRIM (MELLS EXCISE)	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
79	STUCCO, 1/4" THICK	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
80	TRIM (MELLS EXCISE)	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
81	STUCCO, 1/4" THICK	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
82	TRIM (MELLS EXCISE)	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
83	STUCCO, 1/4" THICK	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
84	TRIM (MELLS EXCISE)	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
85	STUCCO, 1/4" THICK	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
86	TRIM (MELLS EXCISE)	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
87	STUCCO, 1/4" THICK	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
88	TRIM (MELLS EXCISE)	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
89	STUCCO, 1/4" THICK	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
90	TRIM (MELLS EXCISE)	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
91	STUCCO, 1/4" THICK	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
92	TRIM (MELLS EXCISE)	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
93	STUCCO, 1/4" THICK	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
94	TRIM (MELLS EXCISE)	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
95	STUCCO, 1/4" THICK	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
96	TRIM (MELLS EXCISE)	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
97	STUCCO, 1/4" THICK	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
98	TRIM (MELLS EXCISE)	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
99	STUCCO, 1/4" THICK	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE
100	TRIM (MELLS EXCISE)	SMOOTH	FLUOROPOLYMER, 1/4" THICK, 12" X 12" SQUARE



SECTION A
SCALE: 1"=10'-0"



SECTION B
SCALE: 1"=10'-0"

A-4.1



PROJECT:
**LA VALLEY GARDEN PLAZA
NEW COMMERCIAL BUILDING**
8933-9961 VALLEY BLVD.,
EL MONTE, CA 91731

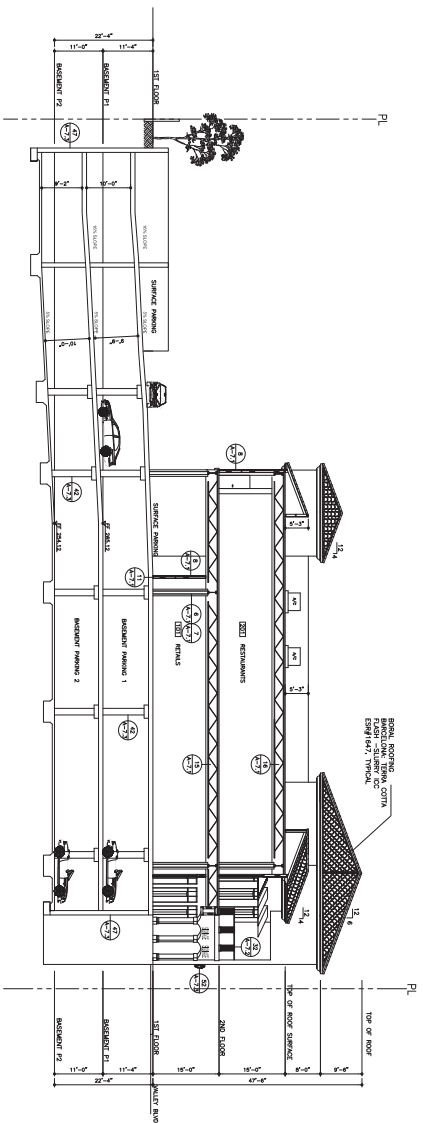


ARCHITECT:
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140 W. VALLEY BLVD., STE 215, SAN GABRIEL, CA 91776
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FILE: 131102001-125110

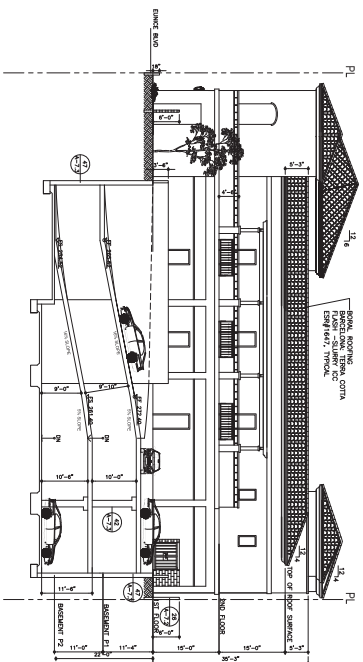
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BY: SLA



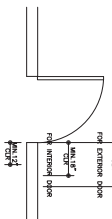
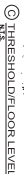
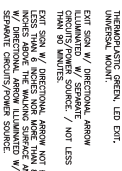
SECTION C
SCALE: 1"=10'-0"

SCALE: 1"=10'-0"



SECTION D
SCALE: 1"=10'-0"

SCALE: 1"=10'-0"



② HANDICAPPED ACCESS DETAILS

SIGNS & IDENTIFICATION NOTES

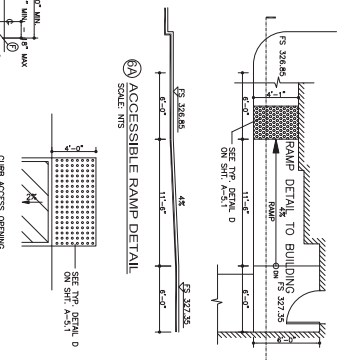
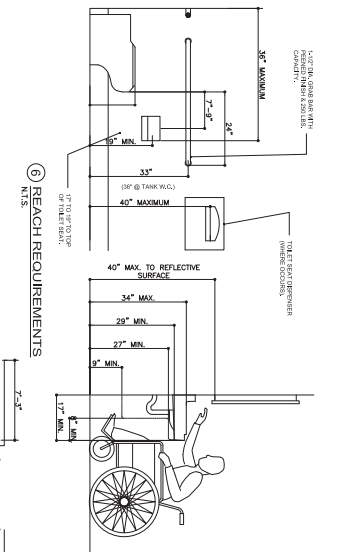
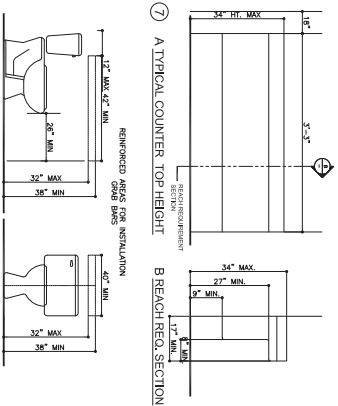
① HANDICAPPED PARKING DETAILS



PROJECT:
LA VALLEY GARDEN PLAZA
NEW COMMERCIAL BUILDING
9933-9961 VALLEY BLVD.,
EL MONTE, CA 91731

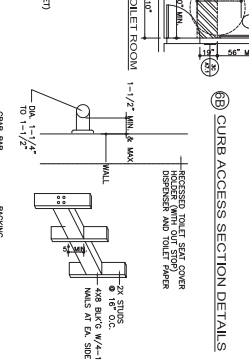
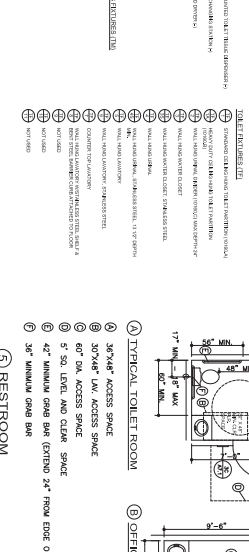
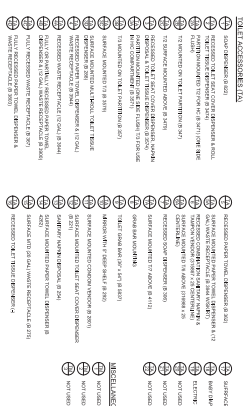
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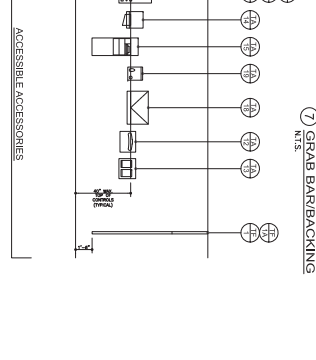
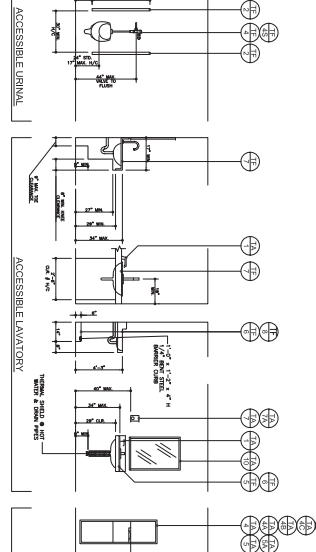
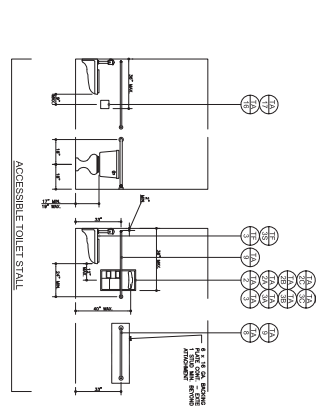
PROJECT: LA VALLEY GARDEN PLAZA
9833-9961 VALLEY BLVD.,
EL MONTE, CA 91731

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PROJECT:
LA V
NEV
9933-99
EL MONTE



FILE: 1511020K1STE10
CRUMB: M.L.

1



EDRESS NOTE:
EMERGENCY EDRESS LIGHTING SHALL BE
PROVIDED THROUGHOUT PER 2013
CALIFORNIA FIRE SECTION 1006.

SYMBOL LEGEND

WALL MOUNT

----- STRUCTURE ABOVE/BELLOW

ACCESSIBLE MEANS OF EGRESS

 EMERGENCY EXIT PROVIDING NO LESS THAN 1 FOOTCANDLE (11 LUX) AT THE WALKING SURFACE

EGRESS
1ST FLOOR PLAN
SCALE: 1"=10'-0"

A-5.3

INTERNATIONAL SYMBOL OF ACCESSIBILITY

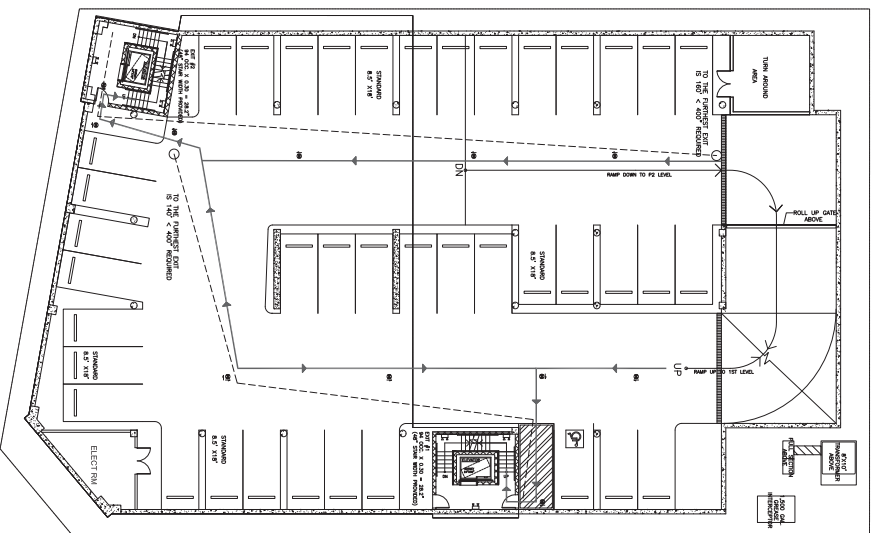
SYMBOL LEGEND:

	EXT. SPARKS W/ ELECTRICAL ARROW ILLUMINATED W/ SEPARATE CIRCUITS/POWER SOURCE. BATTERY BACK-UP, NOT LESS THAN 90 MINUTES		90
	EXT. SPARKS AT LOWER LEVELS, SHALL NOT BE LESS THAN 6 INCHES NOR MORE THAN 8 INCHES ABOVE THE WALKING SURFACE AND W/ ELECTRICAL ARROW ILLUMINATED W/ SEPARATE CIRCUITS/POWER SOURCE/ NOT LESS THAN 90 MINUTES		90
	EMERGENCY LIGHT PROVIDING NO LESS THAN 1 FOOT CANDLE (11 LUX) AT THE WALKING SURFACE		90

WALL MOUNT

STRUCTURE ABOVE/BELLOW

ACCESSIBLE MEANS OF EGRESS



OCC, LOND CALC

S-2
BASEMENT AREA: 18,744 SF. / 200 PER OCC = 93.7



EGRESS
BASEMENT PARKING 1
SCALE: 1"=10'-0"

A-5.5

PROJECT:
LA VALLEY GARDEN PLAZA
NEW COMMERCIAL BUILDING

9933-9961 VALLEY BLVD.,
EL MONTE, CA 91731



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FILE: 1511020K15TE10
COUNT: M.L.

FILE: 1511020K1STE10
COUNT: 11

ARCHITECT:



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A R C H I T E C T S

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PROJECT:

LA VALLEY GARDEN PLAZA
NEW COMMERCIAL BUILDING

9933-9961 VALLEY BLVD.,
EL MONTE, CA 91731



SEP 20 2012

NO. 25112

A-6.1

FINISH, LIGHTING, & JOINTS

- PAINT (P) — 1. PAINT LATEX
2. COLOR-GLOSS ENAMEL
3. SEMI-GLOSS ENAMEL
4. VENEER FINISH
5. VENEER
6. NONE

- COVERING (C) — 1. CARPET
2. SHEET VINYL
3. CONCRETE
4. GRANITE/MARBLE
5. HARDWOOD
6. WOOD BASE
7. SHEET VINYL COVE
8. GRANITE/MARBLE

- TEXTURE (T) — 1. POP MANUFACTURE
2. POP
3. POP
4. POP
5. POP
6. POP
7. POP
8. POP
9. POP
10. POP
11. POP
12. POP

- NOTE: 1. ALL INTERIOR WALLS AND CEILING FINISHES SHALL COMPLY WITH CHAPTER 8 OF UBC.
2. COLOR & TEXTURE SHALL BE SELECTED BY THE OWNER OR ARCHITECT.
3. PAINT SHALL BE SEMI-GLOSS IN ALL INTERIOR ROOMS.

- NOTE: 1. INTERIOR FINISHES SHALL NOT EXCEED THE FLOOR FINISHES.
2. INTERIOR FINISHES SHALL NOT EXCEED THE FLOOR FINISHES.

FINISH	FINISH	FINISH	FINISH	FINISH	FINISH
COVERING	COVERING	COVERING	COVERING	COVERING	COVERING
PAINT	PAINT	PAINT	PAINT	PAINT	PAINT
TEXTURE	TEXTURE	TEXTURE	TEXTURE	TEXTURE	TEXTURE

- NOTE: 1. ALL INTERIOR WALLS AND CEILING FINISHES SHALL COMPLY WITH CHAPTER 8 OF UBC.
2. COLOR & TEXTURE SHALL BE SELECTED BY THE OWNER OR ARCHITECT.
3. PAINT SHALL BE SEMI-GLOSS IN ALL INTERIOR ROOMS.

ROOM FINISH SCHEDULE

ROOM FINISH SCHEDULE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
SPACE	FLOOR	BASE	WALL	CEILING	REMARKS	LEVEL																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
						ROOM NUMBER	ROOM NAME	CARPET	SHEET VINYL	CONCRETE	GRANITE/MARBLE	HARDWOOD	WOOD BASE	SHEET VINYL COVE	GRANITE/MARBLE	DRYWALL/PAINTED	DRYWALL/WALL COVER'G	C.W.B./CERAMIC TILE 6"x6"-0" HT.	PAINT FINISH	DRYWALL SEMI - GLOSS PAINT	ACOUSTIC TILE	DRYWALL/PAINT	EXPOSED STRUCTURE	PAINT FINISH	DRYWALL SEMI - GLOSS PAINT	CEILING HEIGHT																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
						2ND FLOOR	CORRIDOR																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			</



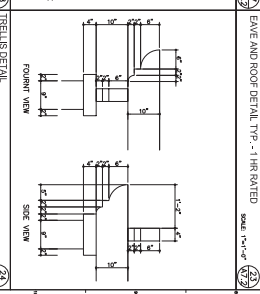
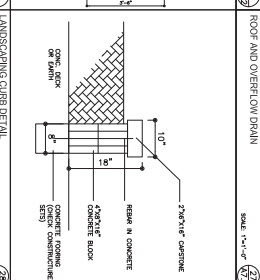
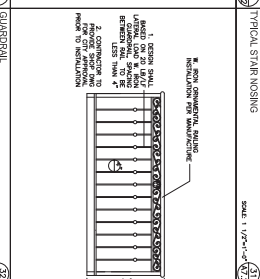
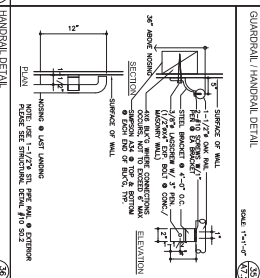
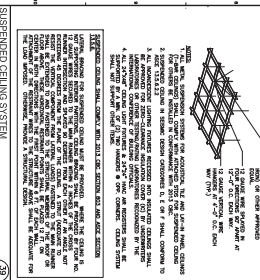
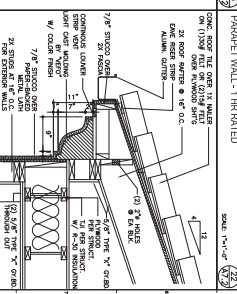
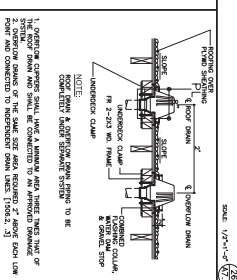
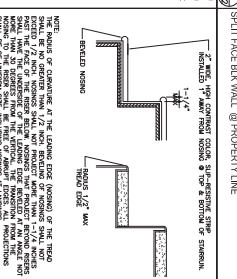
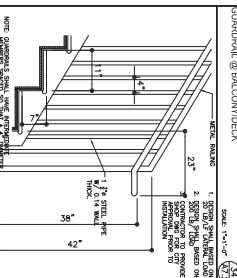
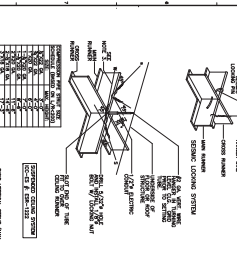
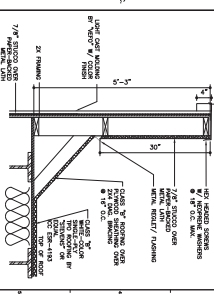
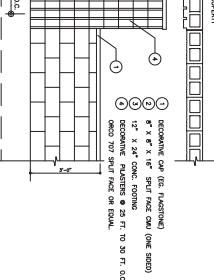
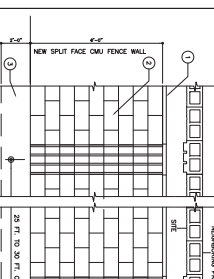
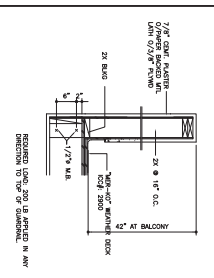
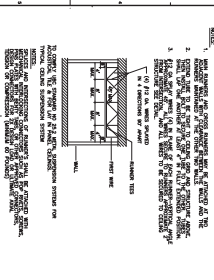
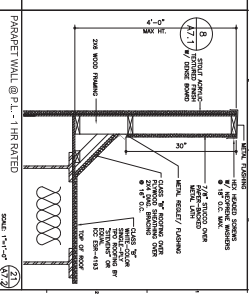
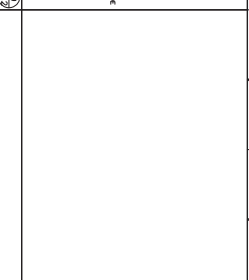
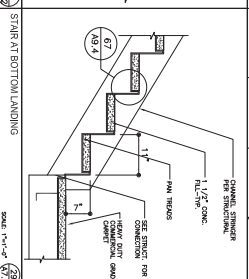
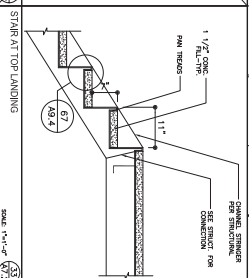
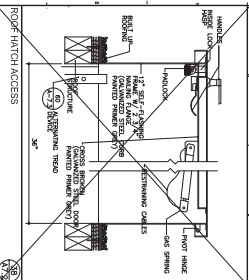
ARCHITECT:
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ARCHITECTS
140 W. VALLEY BLVD., STE 215, SAN GABRIEL, CA 91776
PH: 626-571-8000 E: simon.lee@slarch.com

PROJECT:
LA VALLEY GARDEN PLAZA
NEW COMMERCIAL BUILDING
9933-9961 VALLEY BLVD.,
EL MONTE, CA 91731



SEP 20 2012

A-6.2



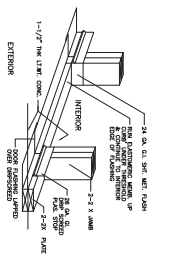
PROJECT:
LA VALLEY GARDEN PLAZA
NEW COMMERCIAL BUILDING
9833-9961 VALLEY BLVD.,
EL MONTE, CA 91731



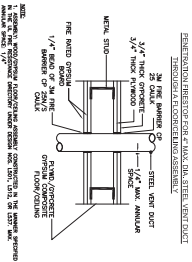
ARCHITECT:
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140 W. VALLEY BLVD., STE 215, SAN GABRIEL, CA 91776
PH: 626-5714-8000
E: simon.lee@slarch.com

DATE: 01/11/2010
DRAWN: SLL
SCALE: 1/4" = 1'-0"

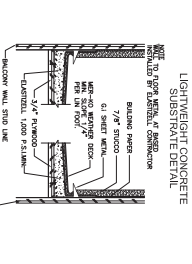
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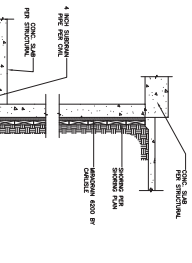
FLASH @ EXT. DOOR



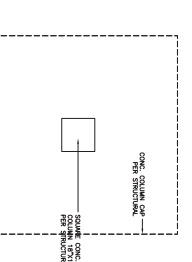
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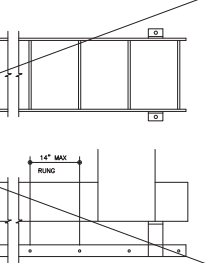
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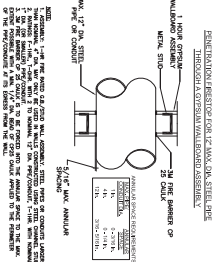
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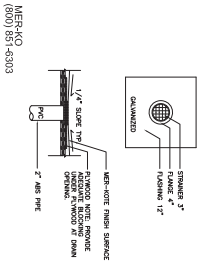
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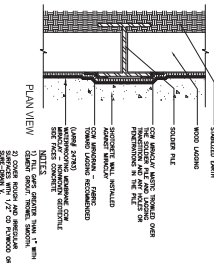
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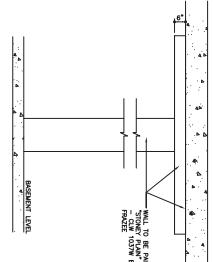
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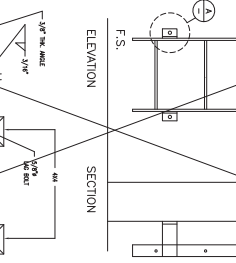
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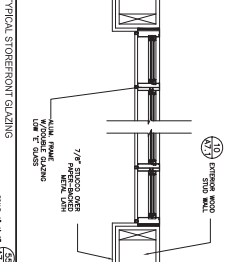
BASEMENT WALL WATERPROOFING



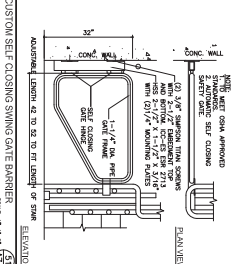
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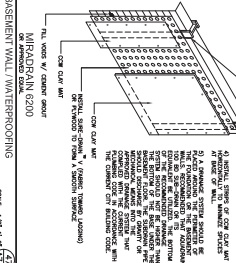
TYPICAL STOREFRONT GLAZING



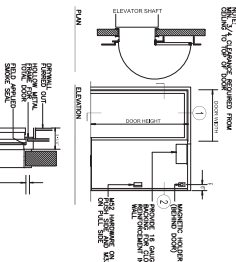
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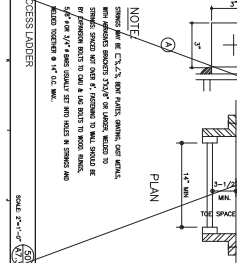
CUSTOM SELF-CLOSING SWINGS GATE BARRIER



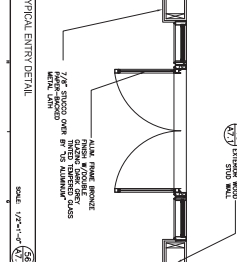
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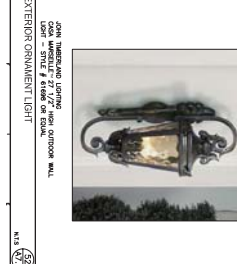
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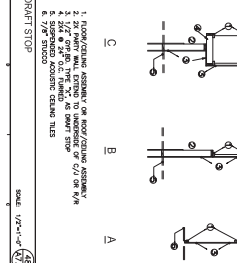
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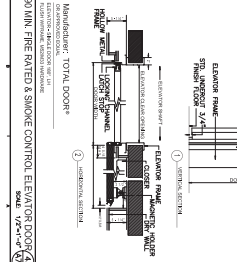
TYPICAL ENTRY DETAIL



EXTERIOR ORNAMENT LIGHT



DRAFT STOP



BASEMENT COLUMN AND PAINT DETAIL

9933-9961 VALLEY BLVD., EL MONTE, CA 91731

[illegible][illegible]

ARCHITECT:

S L A

A R C H I T E C T S

140 W. VALLEY BLVD., STE 215, SAN GABRIEL, CA 91776
PH: 626•571•8000 E: simon.lee@slarch.com

PROJECT:
LA VALLEY GARDEN PLAZA
NEW COMMERCIAL BUILDING
9933-9961 VALLEY BLVD.,
EL MONTE, CA 91731



ARCHITECT:
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PROJECT:
LA VALLEY GARDEN PLAZA
NEW COMMERCIAL BUILDING
9933-9961 VALLEY BLVD.,
EL MONTE, CA 91731



PG NO. 351732

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<p>LA VALLEY GARDEN PLAZA 9933-9961 VALLEY BLVD., EL MONTE, CA 91731</p> <p>PROJECT: LA VALLEY GARDEN PLAZA ARCHITECT: S L A R C H I T E C T S</p>	<p>REVISIONS:</p> <table border="1"><thead><tr><th>NO.</th><th>DATE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>1</td><td>10/15/2021</td><td>ISSUED FOR PERMIT</td></tr></tbody></table>	NO.	DATE	DESCRIPTION	1	10/15/2021	ISSUED FOR PERMIT	<p>APPROVED FOR PERMIT:</p> <p>CITY OF EL MONTE:</p> <p>PLANNING DEPARTMENT:</p> <p>PLANNING MANAGER:</p> <p>PLANNING ASSISTANT:</p>	<p>APPROVED FOR PERMIT:</p> <p>CITY OF EL MONTE:</p> <p>PLANNING DEPARTMENT:</p> <p>PLANNING MANAGER:</p> <p>PLANNING ASSISTANT:</p>	<p>APPROVED FOR PERMIT:</p> <p>CITY OF EL MONTE:</p> <p>PLANNING DEPARTMENT:</p> <p>PLANNING MANAGER:</p> <p>PLANNING ASSISTANT:</p>
NO.	DATE	DESCRIPTION								
1	10/15/2021	ISSUED FOR PERMIT								
<p>1. PROVIDE A LIST OF ALL THE UTILITIES CROSSING THE PROJECT SITE AND THE LOCATION OF THE UTILITIES. SEE SHEET T-2-1 THRU T-2-4.</p> <p>2. PROVIDE THE MECHANICAL AFFIDAVIT OF NON-EXISTENCE OF ALL UTILITIES CROSSING THE PROJECT SITE. THE DEVELOPER/OWNER HAS SENT TO THE CITY OF EL MONTE FOR REVIEW AND APPROVAL.</p> <p>3. PROVIDE A DRAFT COAR'S FOR THE PROJECT SITE.</p> <p>4. PROVIDE A DRAFT CONSTRUCTION NOTICE FOR RESIDENCES WITHIN 300 FEET OF THE PROJECT BOUNDARY FOR REVIEW AND APPROVAL.</p> <p>5. PROVIDE A TRUCK/TRAFFIC MANAGEMENT PLAN.</p> <p>6. PROVIDE A STRIPING & SIGNAGE PLAN.</p> <p>7. PROVIDE A CONTRACT AGREEMENT WITH THE CITY OF EL MONTE. THE CITY OF EL MONTE HAS REVIEWED THE CONTRACT AND HAS APPROVED IT.</p> <p>8. PROVIDE PHOTOS OF THE PROJECT SITE.</p> <p>9. PROVIDE COPIES OF ALL TRANSPORTATION PLANS THAT ARE REQUIRED TO COMPLETE CONSTRUCTION.</p>	<p>REVISIONS:</p> <table border="1"><thead><tr><th>NO.</th><th>DATE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>1</td><td>10/15/2021</td><td>ISSUED FOR PERMIT</td></tr></tbody></table>	NO.	DATE	DESCRIPTION	1	10/15/2021	ISSUED FOR PERMIT	<p>APPROVED FOR PERMIT:</p> <p>CITY OF EL MONTE:</p> <p>PLANNING DEPARTMENT:</p> <p>PLANNING MANAGER:</p> <p>PLANNING ASSISTANT:</p>	<p>APPROVED FOR PERMIT:</p> <p>CITY OF EL MONTE:</p> <p>PLANNING DEPARTMENT:</p> <p>PLANNING MANAGER:</p> <p>PLANNING ASSISTANT:</p>	<p>APPROVED FOR PERMIT:</p> <p>CITY OF EL MONTE:</p> <p>PLANNING DEPARTMENT:</p> <p>PLANNING MANAGER:</p> <p>PLANNING ASSISTANT:</p>
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**2016 CALGREEN STANDARDS
(NON-RESIDENTIAL MANDATORY REQUIREMENTS)
CALIFORNIA GREEN BUILDING STANDARDS CODE - MASTER ADOPTION TABLE**

CHAPTER 5 - PLANNING AND DESIGN

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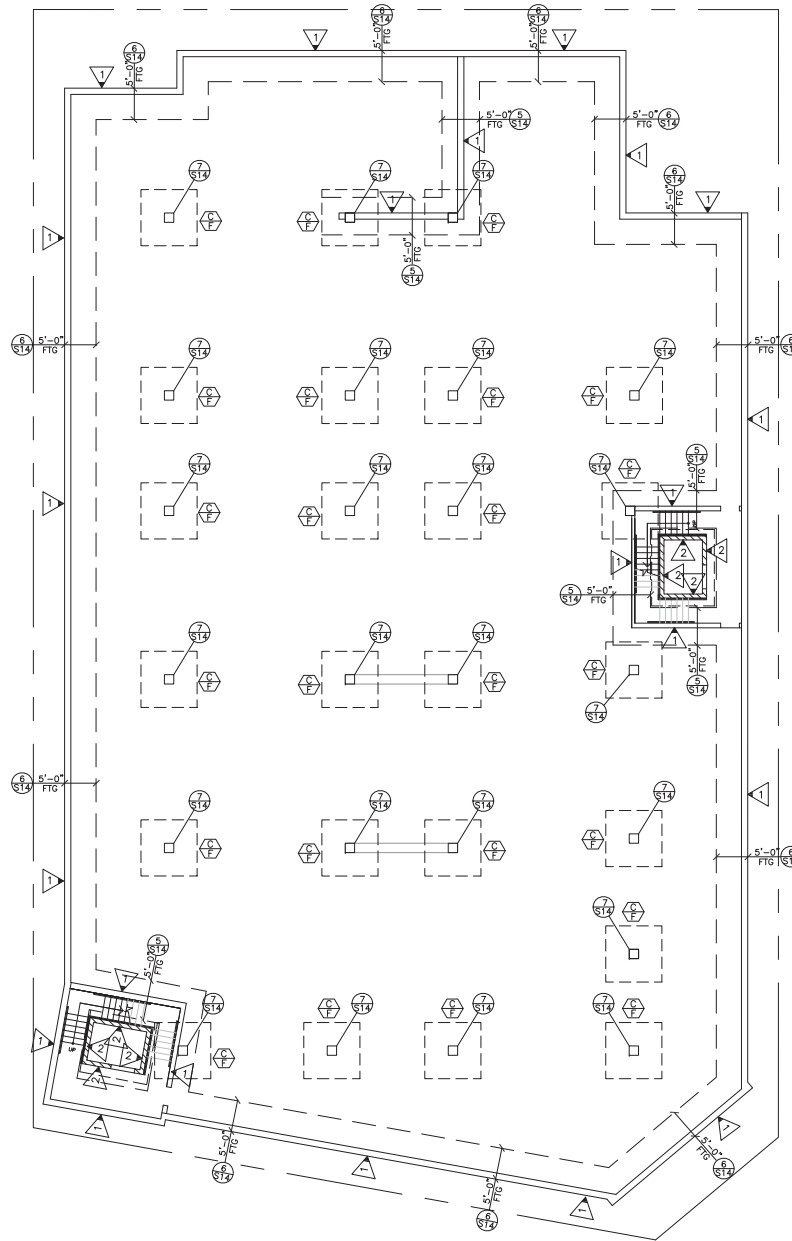
SECTION 5.1.206

SECTION 5.1.207

SECTION 5.1.208



Signature	License No.	Date
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BASEMENT / FOUNDATION PLAN
SCALE : 1"= 10'-0"

NOTES:

1. PROVIDE 4" CONC. SLAB ON GRADE WITH #4 REBAR @18"O.C. EW AT MIDDLE-HEIGHT OF SLAB, OVER 6-MIL VINYL MEMBRANE, SANDWICHED WITH 2" SAND AT TOP, 2" SAND AT BOTTOM.
2. ALL FOUNDATION EXCAVATIONS MUST BE OBSERVED AND APPROVED BY THE PROJECT ENGINEERING GEOLOGIST AND/OR PROJECT GEOTECHNICAL ENGINEER PRIOR TO REINFORCING STEEL. SOIL ENGINEER REPORT SHALL BE SUBMITTED TO THE BUILDING INSPECTOR AT TIME OF INSPECTION.

BASEMENT		FOOTING	
FOOTING	SIZE	THICKNESS	REINFC
	14'-0" SQ.	30"	18 - #8 E.W.

BASEMENT CONCRETE COLUMN		COLUMN	
COLUMN	SIZE	VERT. REINF.	COL. CAP.
 CONC. COLUMN		12-#8 #4 TIE @12" O.C.	42"x42"x12"

WALL SCHEDULE			
WALL	THICKNESS	VERT. REINF.	HORIZ. REINF.
 1	12" CONC. WALL	#6@8" O.C. BOTH SIDES	#6@8" O.C.
 2	8" CONC. BLOCK WALL	#6@8" O.C.	#6@8" O.C.

REVISIONS	BY

PETER LEE ENGINEERING, INC.
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ROCKLEDGE, CA 91775
TEL : (626) 285-5000
FAX : (626) 285-5051

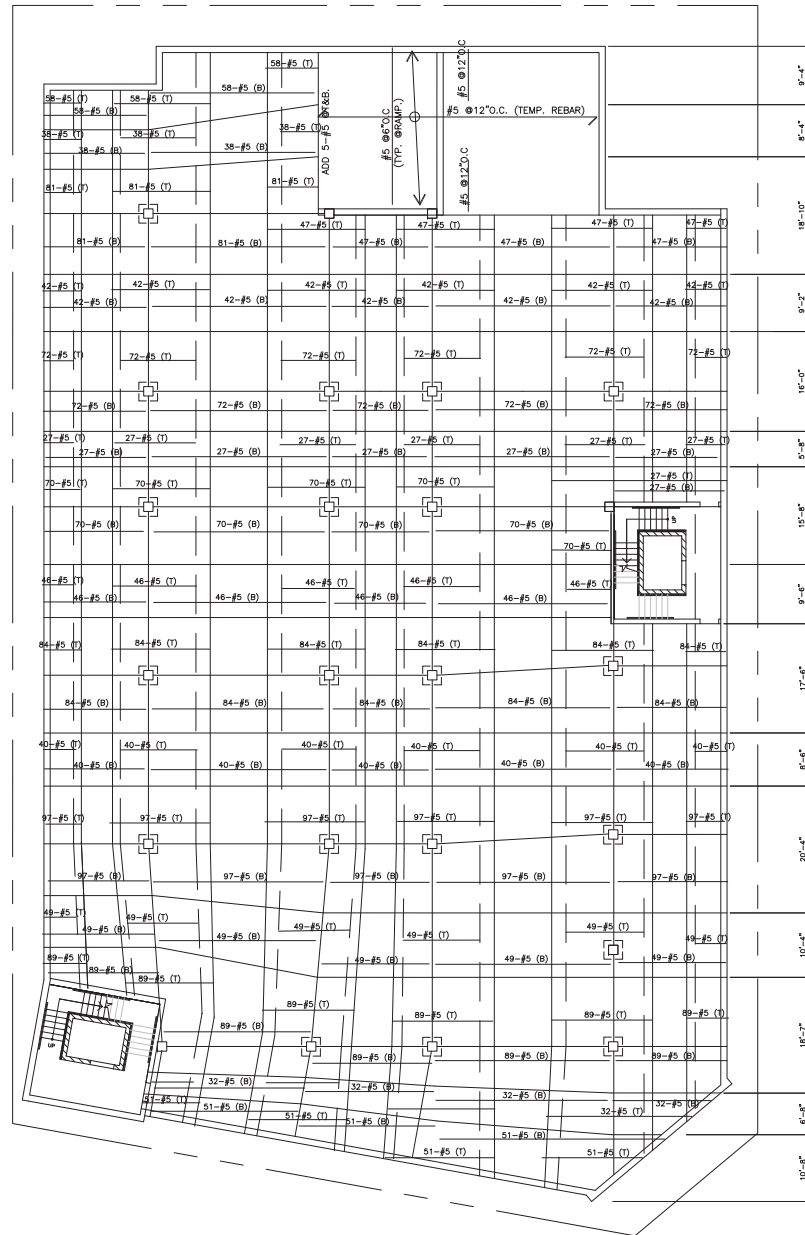
STRUCTURAL PLAN

Sheet Title



Project Name
LA VALLEY GARDEN PLAZA
9933-9961 VALLEY BLVD.
EL MONTE, CA 91731

Date	OCT. 2017
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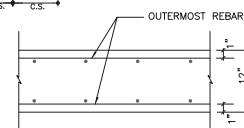
INNERMOST REBAR PLAN - (1ST FLOOR DECK)
SCALE : 1"=10'-0"



NOTES:

1. C.S. INDICATES COLUMN STRIP
M.S. INDICATES MIDDLE STRIP
2. TYPICAL COLUMN CAP 42"x42"x12" SEE S-14
3. TYPICAL DECK REBAR DETAIL SEE S-14

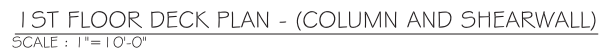
REVISIONS	BY
PETER LEE ENGINEERING, INC. STRUCTURAL ENGINEER 8745 VALLEY BLVD., #1 REDWOOD, CA 91770 TEL : (626) 285-9000 FAX : (626) 285-9091	
Sheet Title STRUCTURAL PLAN	
	
Project Name LA VALLEY GARDEN PLAZA 9933-9961 VALLEY BLVD. EL MONTE, CA 91731	
Date	OCT. 2017
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Of	14





NOTES:

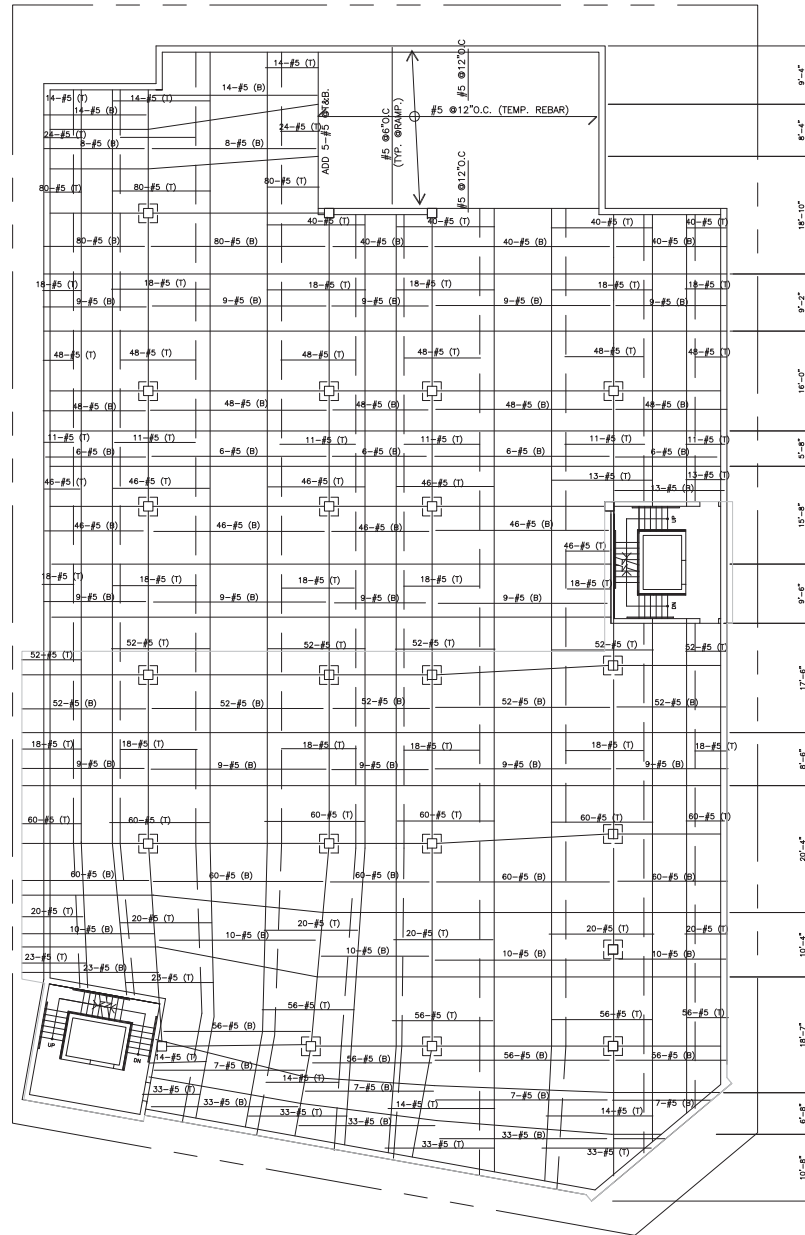
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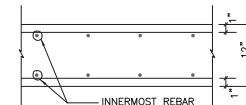


WALL		SCHEDULE	
WALL		VERT. REINF.	HORIZ. REINF.
	12" CONC. WALL THICKNESS	#6@8" O.C. BOTH SIDES	#6@8" O.C. BOTH SIDES
	8" CONC. BLOCK WALL	#6@8" O.C.	#6@8" O.C.

Of Sheets



INNERMOST REBAR PLAN - (2ND FLOOR DECK)
SCALE : 1"=10'-0"



NOTES:

1. C.S. INDICATES COLUMN STRIP
M.S. INDICATES MIDDLE STRIP
2. TYPICAL COLUMN CAP 42"x42"x12" SEE S-14
3. TYPICAL DECK REBAR DETAIL SEE S-14

REVISIONS	BY

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STRUCTURAL PLAN

Sheet Title



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LA VALLEY GARDEN PLAZA
9933-9961 VALLEY BLVD.
EL MONTE, CA 91731

Date OCT. 2017

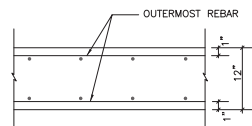
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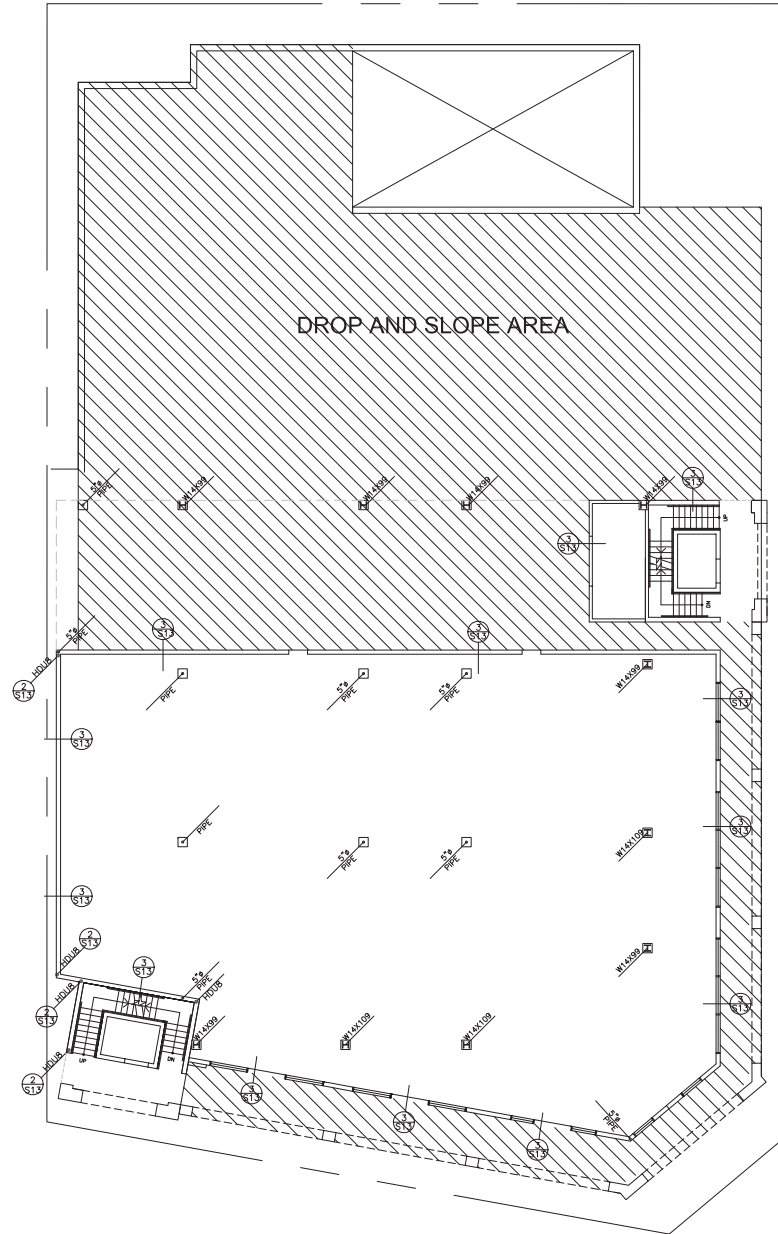
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


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Of Sheets

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DECK PLAN
SCALE : 1"= 10'-0"

NOTES :

1. ALL SILL PLATE TO BE 3 X DFPT.
2. ANCHOR BOLT 5/8" Ø X12" LONG WITH 7" EMBEDMENT. SPACING PER SHEAR WALL SCHEDULE. STARTING WITHIN 12" FROM EA. END, MIN. TWO BOLTS FOR EA. WALL, W/ 3X3X0.228 PLATE WASHER AT TOP OF ANCHOR BOLT.
3. INDICATES COLUMN BASE TYPE ON DECK. SEE 
INDICATES ANCHOR BOLT DETAIL SEE 
INDICATES HOLDOWN DETAIL SEE 
4. SHADING AREA INDICATES DROP AND SLOPE AREA SEE ARCH AND GRADING PLAN.
5. HOLD-DOWN HARDWARE MUST BE SECURED IN PLACE PRIOR TO FOUNDATION INSPECTION.
6. HOLD-DOWN CONNECTOR BOLTS INTO WOOD FRAMING REQUIRE APPROVED PLATE WASHERS: AND HOLD-DOWN SHALL BE TIGHTENED JUST PRIOR TO COVERING THE WALL FRAMING.

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STRUCTURAL PLAN

Sheet Title



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LA VALLEY GARDEN PLAZA
9933-9961 VALLEY BLVD.
EL MONTE, CA 91731

Date OCT. 2017

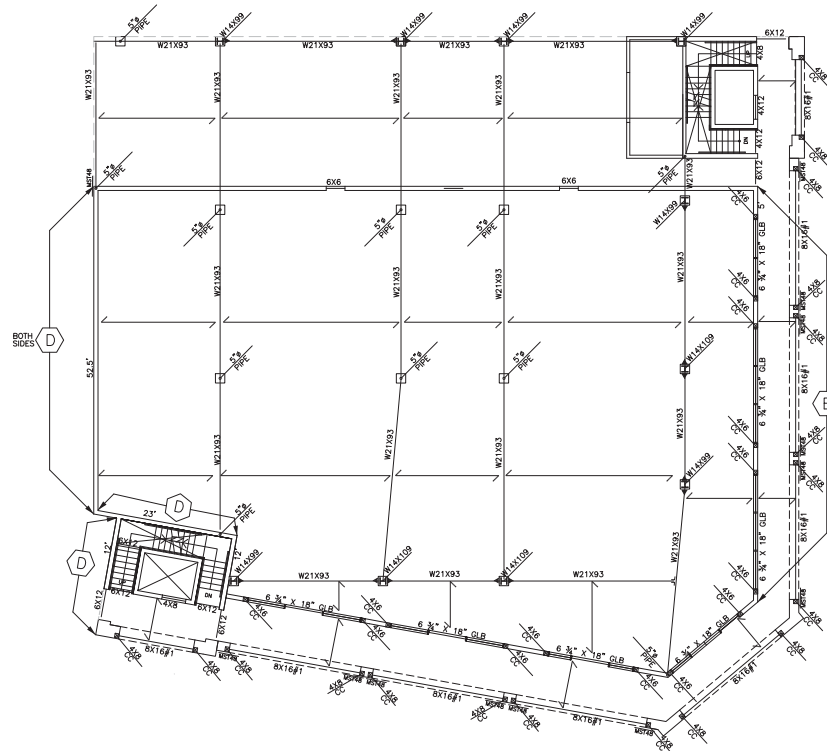
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2ND FLOOR FRAMING/ 1ST FLOOR PLAN

SCALE : 1" = 10'-0"

NOTES

1  FLOOR TRUSS 2-TJ 560 (18" DEEP) @16" O.C. BY TRUSS JOIST COMPANY,
CORRIDOR TJ 560 (14" DEEP) @16" O.C.

2  INDICATES SHEAR WALL TYPE, SEE S-1 SCHEDULE

3 ALL EXTERIOR STUD TO BE 2X6 STUD MIN. @16" O.C. (U.N.O.)
INTERIOR STUD TO BE 2X4 @16" O.C. MIN. (U.N.O.)

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STRUCTURAL PLAN

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Date OCT, 2017

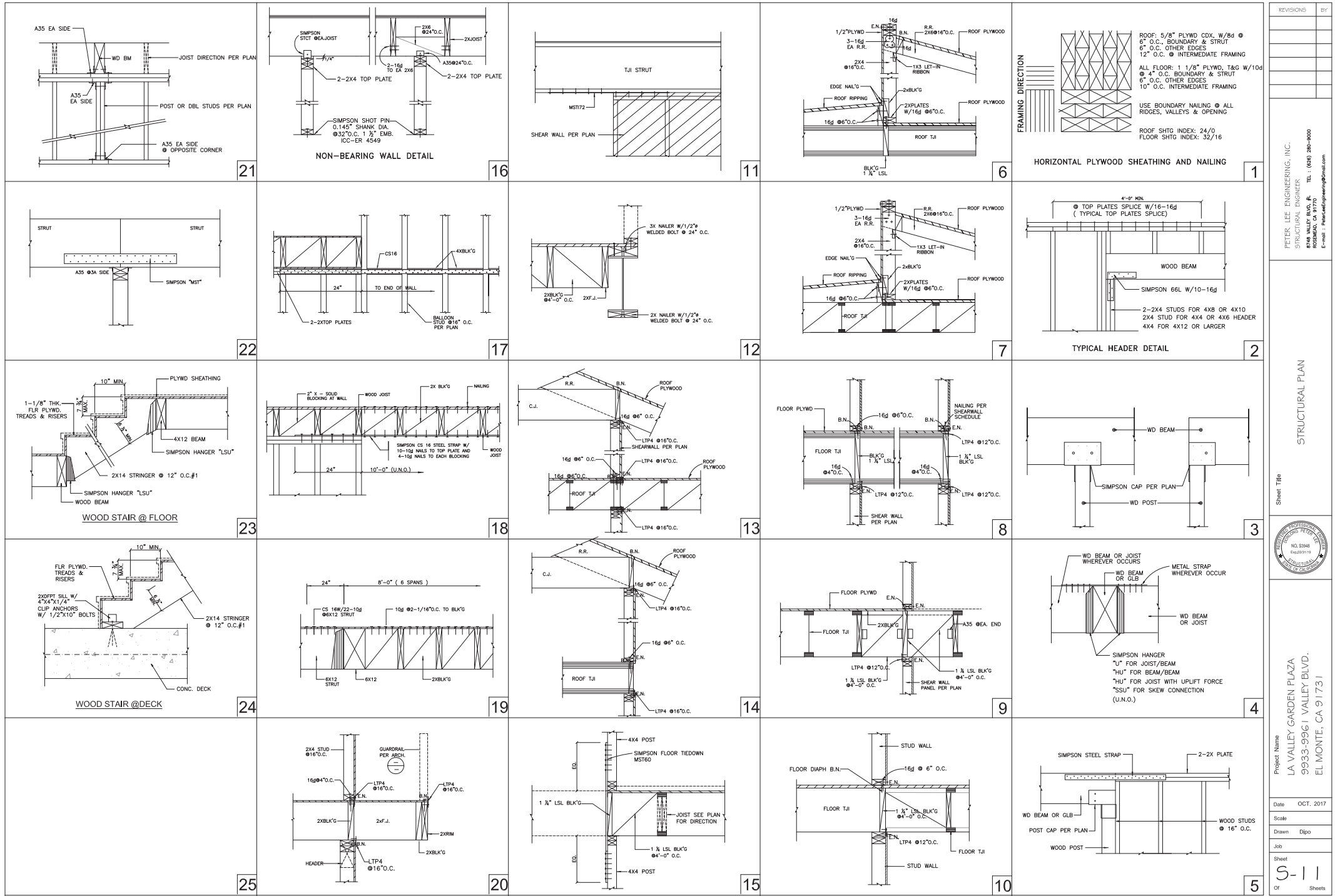
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Of Sheets



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STRUCTURAL PLAN		
Sheet Title		
Project Name LA VALLEY GARDEN PLAZA 9933-9961 VALLEY BLVD. EL MONTE, CA 91731		
Date	OCT. 2017	
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Of	Sheets	

REVISIONS

BY

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STRUCTURAL PLAN

Sheet Title

Project Name

LA VALLEY GARDEN PLAZA

9933-996 I VALLEY BLVD.

EL MONTE, CA 91731

Date

OCT, 2017

Scale

Drawn

Dipo

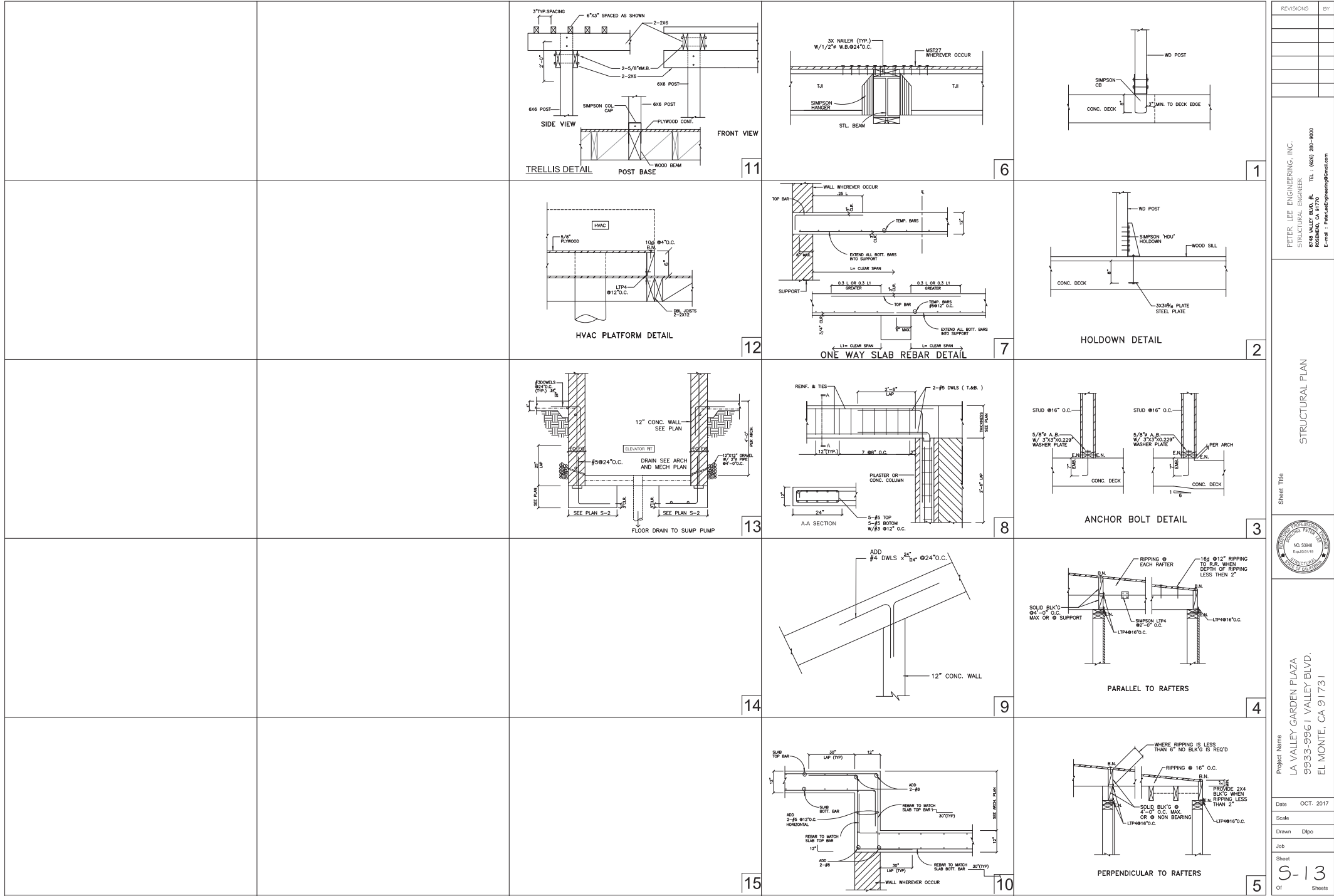
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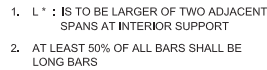
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Of

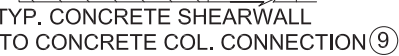
Sheets



REVISIONS		BY
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STRUCTURAL PLAN		
Sheet Title		
		
Project Name LA VALLEY GARDEN PLAZA 9933-996 I VALLEY BLVD. EL MONTE, CA 91731		
Date	OCT. 2017	
Scale		
Drawn	Dipo	
Job		
Sheet	S-13	
Of		
Sheets		



TYPICAL COLUMN STRIP STEEL PLACEMENT (A)



SLAB DEPRESSION DETAIL (2)



TYP. OPENING DETAIL (3)



DETAIL (5)

[illegible]

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e. Gouges and notches are not permitted. The transitional slope of any area where gouges and notches have been removed shall not exceed 1:5.

f. Material removed by grinding that extends more than 1/16 inch below the surface of the base metal shall be filled with weld metal. The contour of the weld at the ends shall provide a smooth transition, free of notches and sharp corners.

5. Continuity Plate

- 6. Doubler Plate**
Web doubler plates, as illustrated in Detail 2, 3, or 4 on Sheet 3, shall be welded using either Detail 5, 6, or 7 on Sheet 3.
- 7. Requirements for "k" Area**
Welds shall terminate short of the "k" area for continuity plates as illustrated in Detail 11 on Sheet 3.

VII. EXEMPTIONS

1. Reduction from certain quality assurance components of this Standard QA Plan, as listed in Part VII Item 2, are permitted for the following buildings or structures:
 - a. One- to two family dwellings not more than 1 story in height and 2,500 sf of floor area.
 - b. Buildings or structures accessory to residential uses (such as carport, storage, garage) and
 - c. Miscellaneous structures (such as walkway, canopy, patio cover, gazebo, storage rack).
2. Buildings or structures, as listed in Part VII Item 1, are exempt from providing the following quality assurance components:
 - a. Electrode Storage and Atmospheric Exposure, Part IV Item 5(f) and 5(g).
 - b. Plastic Hinging Zone Protection, Part IV Item 6.
 - c. Additional CNN Notch 1oughness Testing, Part IV Item 7.
 - d. Non-Destructive Testing, Part IV Item 8.
 - e. Freshair and Intergate Testing, Part V Item 4.
 - f. Post Weld Heat Treatment, Part V Item 5.

BASE METAL		FILLER METAL		
Group	Steel Specification	Welding Process	AWS Electrode Specification	Electrode Classification
I	ASTM A36 < 3/4 in.	SMAW	A5.1	E70XX
			A5.5 (a)	E70XX-X
		FCAW	A5.20 (a)	E70XX-1, E7XX-XM
			A5.29 (a)	E70XX-X, E7XX-XM
II	ASTM A36 ≥ 3/4 in. ASTM A572 Grade 50 ASTM A913 Grade 50 ASTM A992	SMAW	A5.1	E7015, E7016, E7018, E7028
			A5.5 (a)	E70XX-X
		FCAW	A5.20 (a)	E70XX-1, E7XX-XM
			A5.29 (a)	E70XX-X, E7XX-XM
RELATIONSHP	BASE METAL(S)	FILLER METAL STRENGTH RELATIONSHP REQUIRED		
Matching	Any steel to itself or any steel to another in the same group	Any filler metal listed in the same group		
	Any steel in one group to any steel in another	Any filler metal listed for a lower strength group (SMAW electrodes shall be the low-hydrogen classification)		
Under-Matching	Any steel to any steel to any group			

NOTES:

1. The base metal/fillet metal strength relationships above shall be used to determine whether matching or under-matching fillet metals are required. Refer to AWS D1.1/D1.1M:2002, Section 4.
2. Preheating of joints involving base metals of different groups shall be in conformance with the requirements applicable to the higher strength group.
3. When welds are to be stress-relieved, the deposited weld metal shall not exceed 0.05 percent carbon.
4. Adapted with permission from the AWS D1.1 Committee on Structural Welding, Structural Welding Code - Steel, AWS D1.1/D1.1M: 2002, Table 1, "Minimum American Welding Society, Table 3.1."
5. FCAW electrodes with the 2, -2M, -3, -4, -7, -10, -11, -13, -14, -C, -GS suffix shall be excluded from the list of electrodes that are not recommended for use.
6. Fillet metals alloy group 83, B31, B4, B44, B5, B55, B6, B6L, B7, B7L, B8, B8L, B9, or any BXH grade in AWS A5.0 or A5.2 are not prequalified for use in the as-weld condition.

VARIABLE	POSITION OF WELD	WELD TYPE	SMAW	FCAW
Maximum Electrode Diameter	Flat (F)	Filler (4)	5/16 in.	1/8 in.
		Groove (4)	1/4 in.	
		Root Pass	3/16 in.	
	Horizontal (H)	Filler	1/4 in.	1/8 in.
		Groove	3/16 in.	
		Vertical (V)	All	
Maximum Current	Overhead (OH)	All	3/16 in.	5/64 in.
	All	Filler	Within the range of recommended operation by the filler metal manufacturer and a WPS approved by engineer of record.	Within the range of recommended operation by the filler metal manufacturer and a WPS approved by engineer of record.
	All	Groove weld root pass with opening		
		Groove weld root pass without opening		
		Groove weld fil passes		
		Groove weld cap pass		
Maximum Root Pass Thickness (5)	Flat (F)	All	3/8 in.	3/8 in.
	Horizontal (H)		5/16 in.	5/16 in.
	Vertical (V)		1/2 in.	1/2 in.
	Overhead (OH)		5/16 in.	5/16 in.
Maximum Fil Pass Thickness	All	All	3/16 in.	1/4 in.
Maximum Single Pass Fillet Weld Size	Flat (F)	Filler	3/8 in.	1/2 in.
	Horizontal (H)		5/16 in.	3/8 in.
	Vertical (V)		1/2 in.	1/2 in.
	Overhead (OH)		5/16 in.	5/16 in.
Maximum Single Pass Layer Width	All	Root opening >1/2 in.	Split layers	
		Any layer of width w	Not applicable. (6)	

NOTES:

1. Application provisions of AWS D1.1/D1.1M:2002 Section 3 "Prequalification of WPSs" must be maintained for prequalified status of SMAW and FCAW WPSs.
2. Refer to Detail 13 on Sheet 3 for diagram of weld pass sequence.
3. Adapted with permission from the AWS D1.1 Committee on Structural Welding, Structural Welding Code - Steel, AWS D1.1/D1.1M: 2002, Miami: American Welding Society, Table 3.7.
4. Except root passes.
5. See AWS D1.1/D1.1M:2002, Section 3.7.2, for width-to-depth limitations.
6. In the F, H, or OH positions for nontubulars, split layers when the layer width $w \leq 8$ inch. In the V position for nontubulars or the 5G or 6G for tubulars, split layers when the width $w > 1$ inch.

STRUCTURAL OBSERVATION PROGRAM (Steel Moment Frame for Seismic Application)	
<input type="checkbox"/>	Orientation and placement of connected components.
<input type="checkbox"/>	Removal of backing bars, as required on the plans.
<input type="checkbox"/>	Removal of runoff tabs, as required on the plans.
<input type="checkbox"/>	Presence of continuity plates, as required on the plans.
<input type="checkbox"/>	Presence of doubler plates, as required on the plans.
<input type="checkbox"/>	Configuration and finish of weld access holes, if applicable.
<input type="checkbox"/>	Contour of RSS profile, if applicable.
<input type="checkbox"/>	Verify that no welded attachments occur in the plastic hinging region.
<input type="checkbox"/>	Review NDT and deputy inspection reports for general compliance.

NOTES:

1. Weld qualities shall be verified by the Deputy Inspector.
2. The structural observations listed in this Table are in addition to the structural observations that may be required on the structural plans.

	PREPARED BY	TYPE OF REPORT
1.	Structural Observer(s)	Structural Observation Reports
2.	Deputy Inspector(s)	Deputy Inspection Reports
3.	NDT Technician(s)	Non-Destructive Testing Reports

REQUIRED LOCATIONS		OMF	IMF	SMF
1.	CJP Groove Weld Ultrasonic test shall be performed on all CJP groove welds in materials 5/16 inch (8 mm) thick or greater. In addition, magnetic particle test shall be performed on all beam-to-column CJP groove welds.	B	A	A
2.	"K" Area When welding of doubler plates, continuity plates, or stiffeners has been performed in the k-area, the web shall be tested for cracks using magnetic particle testing. The magnetic particle test area shall include the k-area base metal within 3 in. (75 mm) of the weld.	C	B	B
3.	Beam Cope and Access Hole At welded splices and connections, thermally cut surfaces of beam copes and access holes shall be tested using magnetic particle testing, when the flange thickness exceeds 1-1/2 in. (38 mm) for rolled shapes.	C	B	B
4.	Reduced Beam Section Repair Magnetic particle testing shall be performed on any weld and adjacent area of the RBS plastic hinge region that has been repaired by welding, or on the base metal of the RBS plastic hinge region if a sharp notch has been removed by grinding.	B	B	A
5.	Base Metal Lamellar Tearing and Laminations at CJP Groove Weld Base metal thicker than 1-1/2 in. (38 mm) shall be ultrasonically tested for discontinuities behind and adjacent to the fusion line when the base metal is loaded in tension in the through thickness direction in the beam and column joints and the connected material is greater than 3/4 in. (19 mm). Any base metal discontinuities found within 1/4 of the steel surface shall be accepted or rejected on the basis of factors of AWS D1.1 Table 6.2, where 1 is the thickness of the part subjected to the through-thickness strain.	B	B	A
6.	End of Weld at Weld Tab Removal Site Magnetic particle testing shall be performed on the end of welds from which the weld tabs have been removed, except for continuity plate weld tabs.	C	B	B
7.	PJP Groove Weld Ultrasonic testing shall be performed on PJP groove welds used in column splices with an effective throat of 3/4 in. (19.1 mm) thick or greater.	C	B	A

NOTE: A, B, and C are the frequencies of non-destructive tests listed in Table 3.

	Frequency Designation		
	A	B	C
Ultrasonic Testing (UT)	100% of joints	50% of joints	25% of joints
Magnetic Particle Testing (MT)	50% of joints	25% of joints	Not Required

NOTES:

1. Refer to Table 2 for locations of non-destructive testing.
2. Rate of non-destructive testing may be reduced as permitted in Sheet 1, Part IV, Item 8(d).

STEEL SPECIFICATION	WELDING PROCESS	THICKNESS OF THICKEST PART AT POINT OF WELDING (in.)	MINIMUM PREHEAT AND INTERPASS TEMPERATURE (°F)
ASTM A36	SMAW with low-hydrogen electrodes, FCAW	1/8 to 3/4 incl.	32
ASTM A572 Grade 50		Over 3/4 to 1-1/2 incl.	50
ASTM A913 Grade 50		Over 1-1/2 to 2-1/2 incl.	150
ASTM A992		Over 2-1/2	225

NOTES:

1. Surfaces to be welded and surfaces adjacent to welds shall be free of moisture pursuant to AWS D1.1/D1.1M:2002 Section 5.15. Use a higher preheat temperature from this Table to remove moisture.
2. Adapted with permission from the AWS D1.1 Committee on Structural Welding, Structural Welding Code - Steel, AWS D1.1/D1.1M: 2002, Miami: American Welding Society, Table 3.2.

SITE ADDRESS:

OWNER:

STANDARD QUALITY ASSURANCE PLAN

For Steel Moment Frames

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Engineer of Record

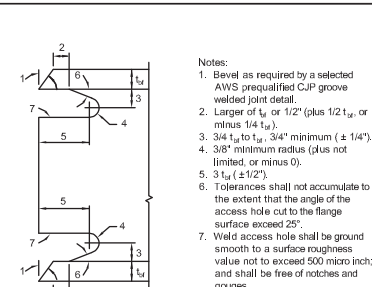


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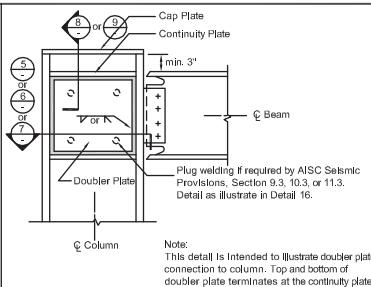
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Sheet 2 of 3



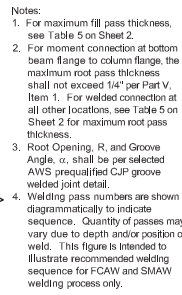
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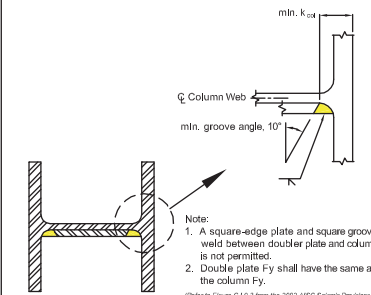
Detail 8

	Detail 4
	Scale: 1/4" = 1'-0"

1. The illustrative details provided herein are intended to highlight the minimum fabrication and welding details that should be reflected on the structural plan. It shall not be used as a substitute for or in lieu of structural details that the Engineer or Architect of Record must provide on the structural plan.
2. The illustrative details does not provide information such as, but not limited to, size of columns and beams, continuity or double plate thicknesses, size and length of the fillet welds, the type of beam to column connections, steel column frame to foundation connections, or length and location of plastic hinge zones. This information shall be determined by the Engineer or Architect of Record and specified on the structural plan.
3. Where the illustrative details provide information such as weld type to use at a particular weld joint, minimum or maximum dimensions for length, weld size, or gap between base metals, it should be appropriately reflected on the structural plan by the Engineer or Architect of Record.

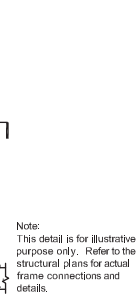


	Detail 13
	Exterior Wall Section



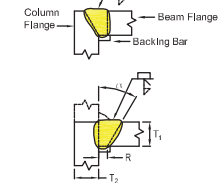
Detail 9

Detail 5



Detail 1

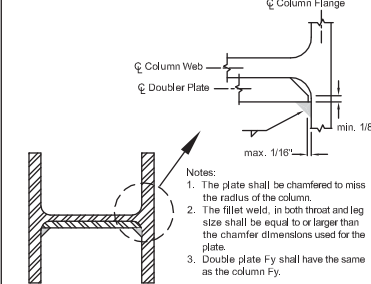
Welding Process	Joint Designation	Base Metal Thickness (U = unlimited)		Groove Preparation		Allowed Welding Positions	Gas Shielding for FCAW
		T ₁	T ₂	Root Opening	Groove Angle		
SMAW	TC-U4a	U	U	R = 1/4	α = 45°	All	-
				R = 3/8	α = 30°	F, V, OH	-
FCAW	TC-U4a-GF	U	U	R = 3/16	α = 30°	All	Required
				R = 3/8	α = 30°	F	Not required
				R = 1/4	α = 45°	All	Not required



Notes:

- 1. Groove welds in corner and T-joints of cyclically loaded structures shall be reinforced with fillet welds equal to $T_1/4$, but need not exceed 3/8 inch.
- 2. For corner joints, the outside groove preparation may be in either or both members, provided the basic groove configuration is not changed and adequate edge distance is maintained to support the welding operations without excessive edge metting.
- 3. Adapted with permission from the AWS D.1.1 Committee on Structural Welding, Structural Welding Code - Steel, AWS D.1.1/D.1.1M: 2002, Miami: American Welding Society, Figure 3.4 pg. 92 (top left).

Detail 14

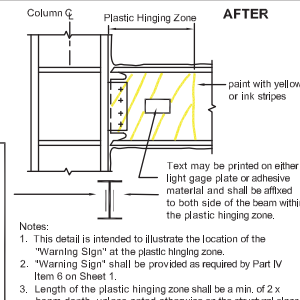


Detail 10

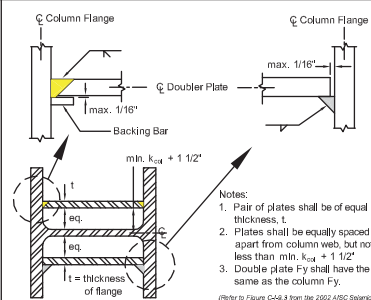
	Detail 6
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	Detail 2
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Detail 15




	Detail 11
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	Detail 7
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	Detail 3
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Engineer of Record

 Date: 06/20/2005
 Scale: Not to Scale
 Sheet:
 Sheet 3 of 3

2.