NOTES: STUCCO
R703.6 EXTERIOR PLASTER. INSTALLATION OF THESE MATERIALS SHALL BE IN COMPLIANCE WITH ASTM C926 AND ASTM C 1063 AND THE PROVISIONS OF THIS CODE.
R703.6.1 LATH. ALL LATH AND LATH ATTACHMENTS SHALL BE OF CORROSION-RESISTANT MATERIALS. EXPANDED METAL OR WOVEN WIRE LATH SHALL BE ATTACHED WITHIN 1-1/2" LONG, 11 GAGE NAILS HAVING A 7/16" HEAD, OR 7/8" LONG, 16 GAGE STAPLES, SPACED AT NO MORE THAN 6", OR AS OTHERWISE APPROVED.
R703.6.2 PLASTER. PLASTERING WITH PORTLAND CEMENT PLASTER SHALL NOT BE LESS THAN THREE COATS WHEN APPLIED OVER METAL LATH OR WIRE LATH AND SHALL BE NOT LESS THAN TWO COATS WHEN APPLIED OVER MASONRY, CONCRETE, PRESSURE-PRESERVATIVE TREATED WOOD, OR DECAY-RESISTANT WOOD AS SPECIFIED IN SECTION R317.1 OR GYPSUM BACKING. IF THE PLASTER SURFACE COMPLETELY COVERED BY VENEER OR OTHER FACING MATERIAL OR IS COMPLETELY CONCEALED, PLASTER APPLICATION NEED BY ONLY TWO COATS, PROVIDED THE TOTAL THICKNESS IS AS SET FORTH IN TABLE R702.1(1). ON WOOD-FRAME CONSTRUCTION WITH AN ON-GRADE FLOOR SLAB SYSTEM, EXTERIOR PLASTER SHALL BE APPLIED TO COVER, BY NOT EXTEND BELOW, LATH, PAPER, AND SCREED. THE PROPORTIONS OF AGGREGATE TO CONTENTIOUS MATERIALS SHALL BE AS SET FORTH IN TABLE R702.1(3).
R703.6.2.1 WEEP SCREEDS. A MINIMUM NO. 26 GALVANIZED SHEET GAGE, CORROSION-RESISTANT WEEP SCREED OR PLASTIC WEEP SCREED, WITH A MINIMUM VERTICAL ATTACHMENT FLANGE OF 3-1/2" SHALL BE PROVIDED AT OR BELOW THE FOUNDATION PLATE LINE ON EXTERIOR STUD WALLS IN ACCORDANCE WITH ASTM C 926. THE WEEP SCREED SHALL BE PLACED A MINIMUM OF 4" ABOVE THE EARTH OR 2" ABOVE PAVED AREAS AND SHALL BE OF A TYPE THAT WILL ALLOW TRAPPED WATER TO DRAIN TO THE EXTERIOR OF THE BUILDING. THE WEATHER-RESISTANT BARRIER SHALL LAP THE ATTACHMENT FLANGE. THE EXTERIOR LATH SHALL COVER AND TERMINATE ON THE ATTACHMENT FLANGE OF THE WEEP SCREED.
R703.6.3 WATER-RESISTIVE BARRIERS. WATER-RESISTIVE BARRIERS SHALL BE INSTALLED AS REQUIRED BY SECTION R703.2 AND, WHERE APPLIED OVER WOOD-BASED SHEATHING, SHALL INCLUDE A WATER-RESISTIVE VAPOR-PERMEABLE BARRIER WITH A PERFORMANCE AT LEAST EQUIVALENT TO TWO LAYERS OF GRADE D PAPER. THE INDIVIDUAL LAYERS SHALL BE INSTALLED INDEPENDENTLY SUCH THAT EACH LAYER PROVIDES A SEPARATE CONTINUOUS PLANE AND ANY FLASHING (INSTALLED IN ACCORDANCE WITH SECTION R703.8) INTENDED TO DRAIN TO THE WATER-RESISTIVE BARRIER IS DIRECTED BETWEEN THE LAYERS.
R703.6.4 APPLICATION. EACH COAT SHALL BE KEPT IN A MOIST CONDITION FOR AT LEAST 48 HOURS PRIOR TO APPLICATION OF THE NEXT COAT. EXCEPTION: APPLICATIONS INSTALLED IN ACCORDANCE WITH ASTM C 926.
R703.6.5 CURING. THE FINISH COAT FOR TWO-COAT CEMENT PLASTER SHALL NOT BE APPLIED SOONER THAN SEVEN DAYS AFTER APPLICATION OF THE FIRST COAT. FOR THREE-COAT CEMENT PLASTER, THE SECOND COAT SHALL NOT BE APPLIED SOONER THAN 48 HOURS AFTER APPLICATION OF THE FIRST COAST. THE FINISH COAT FOR THREE-COAT CEMENT PLASTER SHALL NOT BE APPLIED SOONER THAN SEVEN DAYS AFTER APPLICATION OF THE SECOND COAT.

GENERAL NOTES: CONTINUED
13.05 SUBSTITUTIONS OF MATERIALS HAVING LIKE QUALITY TO THOSE SPECIFIED OR NOTED WILL BE CONSIDERED BY THE DESIGNER , WHERE DESIGN OR DETAIL MODIFICATIONS ARE REQUIRED TO INCORPORATE THESE SUBSTITUTIONS, THE CONTRACTOR SHALL PROVIDE ALL DRAWINGS AND DATA TO THE DESIGNER FOR APPROVAL AS REQUESTED TO VERIFY THE QUALITY AND CHARACTER OF THE PRODUCTS AND SHOWING THEIR CORRECT INCORPORATION INTO THE PROJECT. THE CONTRACTOR SHALL NOT MAKE CHANGES WITHOUT THE PRIOR WRITTEN APPROVAL OF THE DESIGNER .

13.06 PRIOR TO SUBMISSION TO THE DESIGNER , THE CONTRACTOR SHALL CHECK ALL SHOP DRAWINGS AND OTHER SUCH DATA FOR QUANTITY, SIZE AND DIMENSIONS. DESIGNER WILL ANSWER QUESTIONS RAISED AND WILL MAKE DETERMINATIONS REGARDING QUALITY OF MATERIAL AND EQUIPMENT,DESIGN AND ARRANGEMENT DECISIONS AND COLOR SELECTIONS BUT WILL NOT BE RESPONSIBLE FOR QUANTITY, SIZE OR DIMENSIONAL ERRORS. SUBMIT THREE COPIES OF DRAWINGS REQUESTED, ONE TO BE RETAINED BY THE DESIGNER .

13.07 THE CONTRACTOR SHALL MEET WITH THE DESIGNER AND VERIFY ALL PORTIONS OF THE WORK TO BE UNDERTAKEN ON A "DESIGN-BUILD BASIS." THE CONTRACTOR SHALL SUBMIT FOR THE DESIGNER 'S REVIEW PRODUCT DATA OF ALL FIXTURES AND SHALL VERIFY THEIR LOCATION WITH THE DESIGNER PRIOR TO INSTALLATION.

14.0 CLOSE OUT
14.01 UPON COMPLETION OF THE WORK, CONTRACTOR SHALL LEAVE SITE AND BUILDING CLEAN AND SUITABLE FOR OCCUPANCY TO THE SATISFACTION OF THE DESIGNER AND THE BUILDING OWNER.
14.02 A LIST OF CORRECTIVE MEASURES REQUIRED FOR COMPLETION SHALL BE DEVELOPED BY THE DESIGNER AND ADDRESSED BY THE CONTRACTOR IN AN EXPEDITIOUS MANNER.
14.03 ALL CONSTRUCTION ACCESS PATHS, DELIVERY AND STORAGE AREAS, SHAFTS, PLENUMS, CONCEALED SPACES, AND OTHER AREAS AFFECTED BY CONSTRUCTION OPERATIONS SHALL BE THOROUGHLY CLEANED TO THE SATISFACTION OF THE DESIGNER AND THE BUILDING OWNER.
14.04 THE CONTRACTOR SHALL PROVIDE RECORDS OF ALL INSPECTIONS AND TESTS PERFORMED IN CONJUNCTION WITH THE WORK AS WELL AS ALL MANUFACTURERS' WARRANTIES, GUARANTIES, INSTRUCTION SHEETS, AND PARTS LISTS PROVIDED FOR MATERIALS AND EQUIPMENT INCORPORATED INTO THE WORK.
14.05 CONTRACTOR SHALL GUARANTEE ALL WORKMANSHIP AND MATERIALS FOR A PERIOD OF AT LEAST ONE YEAR BEYOND THE DATE OF COMPLETION UNLESS SPECIFICALLY AGREED TO IN WRITING PRIOR TO THE AWARD OF A CONTRACT FOR CONSTRUCTION.

GENERAL NOTES: CONTINUED
12.0 MATERIALS AND WORKMANSHIP
12.01 ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE APPLICABLE STANDARDS AND SPECIFICATIONS OF THE NATIONAL ASSOCIATIONS OF THE VARIOUS TRADES.
12.02 UNLESS NOTED TO THE CONTRARY, ALL MATERIALS AND EQUIPMENT ARE TO BE NEW.
12.03 ONLY COMPETENT WORKERS SKILLED IN THEIR RESPECTIVE TRADES SHALL BE EMPLOYED ON THE WORK.
12.04 THE DESIGNER SHALL HAVE ACCESS TO THE PROJECT SITE AT ALL TIMES DURING THE EXECUTION OF THE WORK.
12.05 WORKMANSHIP PROVIDED FOR THE EXECUTION AND COMPLETION OF THE WORK SHALL CONFORM TO THE HIGHEST STANDARDS OF THE TRADE.
12.06 MATERIALS SHALL BE MANUFACTURED, HANDLED, AND INCORPORATED INTO THE WORK IN A WORKMANLIKE MANNER AND IN CONFORMANCE WITH THE SPECIFICATIONS AND INSTRUCTIONS OF THE MANUFACTURER.
12.07 WHERE REQUIRED BY APPLICABLE CODES, MATERIALS SHALL BEAR MARKINGS AND IDENTIFICATION AS REQUIRED.

13.0 SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES
13.01 THE CONTRACTOR SHALL PREPARE AND SUBMIT TO THE DESIGNER OR TO THE OWNER SHOP DRAWINGS, PRODUCT DATA, SAMPLES AND SIMILAR SUBMITTALS REQUIRED BY THE CONSTRUCTION DOCUMENTS WITH REASONABLE PROMPTNESS AND IN SUCH SEQUENCE AS TO CAUSE NO DELAY IN THE WORK OR IN THE ACTIVITIES OF THE OWNER OR OF SEPARATE CONTRACTORS. NO PORTION OF THE WORK REQUIRING A SHOP DRAWING OR SAMPLE SUBMISSION SHALL BE COMMENCED UNTIL THE SUBMISSION HAS BEEN APPROVED BY THE DESIGNER . ALL SUCH PORTIONS OF THAT WORK SHALL BE IN ACCORDANCE WITH APPROVED SHOP DRAWINGS AND SAMPLES.
13.02 WHEN PROFESSIONAL CERTIFICATION OF PERFORMANCE CRITERIA OF MATERIALS, SYSTEMS OR EQUIPMENT IS REQUIRED BY THE CONSTRUCTION DOCUMENTS, THE DESIGNER SHALL BE ENTITLED TO RELY UPON THE ACCURACY AND COMPLETENESS OF SUCH CALCULATIONS AND CERTIFICATIONS.
13.03 SAMPLES OF ALL FINISHES, COLORS AND MATERIALS SHALL BE SUBMITTED TO THE DESIGNER FOR REVIEW AND APPROVAL PRIOR TO ORDERING OF PRODUCTS OR COMMENCING RELATED WORK.
13.04 SUBSTITUTIONS OF MATERIALS HAVING LIKE QUALITY TO THOSE SPECIFIED OR NOTED WILL BE CONSIDERED BY THE DESIGNER , WHERE DESIGN OR DETAIL MODIFICATIONS ARE REQUIRED TO INCORPORATE THESE SUBSTITUTIONS, THE CONTRACTOR SHALL PROVIDE ALL DRAWINGS AND DATA TO THE DESIGNER FOR REVIEW AND APPROVAL PRIOR TO ORDERING OF PRODUCTS OR COMMENCING RELATED WORK.

GENERAL NOTES: CONTINUED
10.0 COORDINATION
10.01 THE CONTRACTOR, UPON COMMENCING WITH THE WORK SHALL SUBMIT A CONSTRUCTION SCHEDULE TO THE BUILDING OWNER AND THE DESIGNER DESCRIBING THE CHRONOLOGICAL PHASES OF THE EXECUTION AND COMPLETION OF THE WORK.
10.02 THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF ALL SUBCONTRACTOR TRADES AND SHALL SCHEDULE THESE TRADES TO MAINTAIN A LOGICAL SEQUENCE FOR THE EXECUTION AND COMPLETION OF THE WORK.
10.03 THE CONTRACTOR SHALL COORDINATE THE DESIGNER, MECHANICAL, PLUMBING, ELECTRICAL, AND FIRE PROTECTION DRAWINGS FOR THE SIZE AND LOCATION OF WALL, FLOOR AND ROOF AND SHAFT OPENINGS, WALL OFFSETS, PROVISIONS FOR EQUIPMENT, ATTACHMENT AND MOUNTING OF FIXTURES, BACKING, INSERTS,OTHER EMBEDDED ITEMS, HARDWARE, PIPE, VENT, DUCT AND CONDUIT AND SCHEDULE THE INSTALLATION OF THESE ITEMS TO MAINTAIN A LOGICAL SEQUENCE FOR THE EXECUTION AND COMPLETION OF THE WORK.
10.04 THE CONTRACTOR SHALL ALSO COORDINATE AND COOPERATE WITH ALL OTHER TRADES UNDER SEPARATE CONTRACT WITH THE OWNER TO MAINTAIN A LOGICAL SEQUENCE FOR THE EXECUTION AND COMPLETION OF THE PROJECT.
10.05 THE CONTRACTOR SHALL REVIEW WITH THE DESIGNER ALL MECHANICAL, PLUMBING, ELECTRICAL, AND FIRE PROTECTION DRAWINGS PRIOR TO CONSTRUCTION TO ENSURE CONSULTATION COORDINATION.

11.0 PROTECTION
11.01 THE CONTRACTOR SHALL PROTECT EXISTING CONDITIONS AND NEW CONSTRUCTION FROM DAMAGE DURING CONSTRUCTION.
11.02 THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING THE AREA OF WORK AS REQUIRED TO PREVENT DAMAGE AND/OR LOSS OF MATERIALS, EQUIPMENT, AND PRODUCTS ASSOCIATED WITH THE WORK.
11.03 THE CONTRACTOR SHALL PROVIDE AND BE RESPONSIBLE FOR ADEQUATE DESIGN AND CONSTRUCTION OF ALL FORMS AND SHORING REQUIRED FOR SUPPORT OF ALL CONSTRUCTION LOADS AND PROTECTION OF EXISTING CONDITIONS TO REMAIN DURING DEMOLITION AND/OR CONSTRUCTION.
11.04 THE CONTRACTOR SHALL PROTECT ALL COMPLETED WORK FROM THE DETRIMENTAL EFFECTS OF THE SUBSEQUENT PHASES OR TRADES AS NECESSARY TO PREVENT DAMAGE AND DEFECTS.
11.05 THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMMEDIATE REMOVAL, REPAIR, AND REPLACEMENT OF ALL DAMAGED AND DEFECTIVE MATERIALS AND WORKMANSHIP TO THE SATISFACTION OF THE BUILDING OWNER AND THE DESIGNER .

GENERAL NOTES: CONTINUED
7.0 PERMITS
7.01 NO WORK IS TO BE PERFORMED WITHOUT PERMITS REQUIRED BY THE APPLICABLE CODES.
7.02 THE CONTRACTOR SHALL OBTAIN AND BE RESPONSIBLE FOR THE COSTS OF ALL PERMITS, APPROVALS, TESTING, AND INSPECTIONS REQUIRED BY THE APPLICABLE CODES UNLESS AGREED TO IN WRITING PRIOR TO THE AWARD OF A CONTRACT FOR CONSTRUCTION.
7.03 THE CONTRACTOR SHALL PROVIDE COPIES OF ALL PERMITS AS REQUESTED BY THE BUILDING OWNER OR THE DESIGNER.

8.0 CONTRACT DRAWINGS AND DOCUMENTS
8.01 ALL DETAILS, SECTIONS AND NOTES SHOWN ON DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS ELSEWHERE UNLESS NOTED OTHERWISE. WHERE SPECIFIC DIMENSIONS, DETAILS, OR DESIGN INTENT CANNOT BE DETERMINED, CONSULT DESIGNER BEFORE PROCEEDING WITH THE WORK.
8.02 DIMENSIONS ARE CONSIDERED TO BE "NOMINAL" UNLESS OTHERWISE NOTED. ~~ALL MEASUREMENTS ARE TO FINISHED SURFACE UNLESS OTHERWISE NOTED.~~
8.03 ALL DIMENSIONS HAVE PREFERENCE OVER SCALE. DO NOT SCALE DRAWING.
8.04 IN THE EVENT THAT QUESTIONS ARISE WITH RESPECT TO THE INTENT OF THE CONTRACT DOCUMENTS THE CONTRACTOR SHALL NOTIFY THE DESIGNER FOR CLARIFICATION OF THE INTENT.
8.05 IT IS THE INTENTION OF THESE DOCUMENTS TO PROVIDE A PROJECT COMPLETE AND READY FOR OCCUPANCY IN EVERY RESPECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THIS RESULT AND SHALL NOTIFY THE DESIGNER OF APPARENT DEFICIENCIES PRIOR TO THE SUBMITTAL OF CONSTRUCTION BIDS.
8.06 THE CONTRACTOR SHALL SUBMIT TO THE DESIGNER ANY REQUESTS FOR MODIFICATIONS TO THE CONTRACT DOCUMENTS IN THE FORM OF FIELD DRAWINGS, SHOP DRAWINGS, SAMPLES OR OTHER MEANS APPROPRIATE WITH SPECIFIC CHANGES IDENTIFIED FOR REVIEW.

9.0 CONSTRUCTION FACILITIES
9.02 THE CONTRACTOR SHALL MAINTAIN ON THE PROJECT SITE A CURRENT SET OF THE CONSTRUCTION DOCUMENTS FOR REFERENCE BY ALL TRADES, AND SHALL UPDATE SUCH DOCUMENTS TO INSURE COORDINATION OF ANY CHANGES WHICH OCCUR DURING THE CONSTRUCTION PHASE.
9.03 THE CONTRACTOR SHALL DESIGNATE A REPRESENTATIVE WHO SHALL HAVE THE AUTHORITY TO ACT ON BEHALF OF THE CONTRACTOR AND SHALL BE PRESENT AT THE PROJECT SITE WHENEVER WORK IS IN PROGRESS. THE DESIGNER SHALL BE NOTIFIED AS TO THE NAME OF THE REPRESENTATIVE.
9.04 THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ADEQUATE SANITATION FACILITIES FOR CONSTRUCTION PERSONNEL THROUGH THE COURSE OF CONSTRUCTION AS APPROVED BY THE BUILDING OWNER.

GENERAL NOTES: CONTINUED
6.0 PROJECT SITE
6.01 THE CONTRACTOR SHALL VISIT THE PROJECT SITE AND BE KNOWLEDGEABLE OF CONDITIONS THEREON. CONTRACTOR SHALL INVESTIGATE, VERIFY AND BE RESPONSIBLE FOR THE COORDINATION OF THE WORK WITH ALL CONDITIONS AND DIMENSIONS OF THE PROJECT SITE AND SHALL NOTIFY THE DESIGNER OF ANY CONDITIONS REQUIRING MODIFICATION OF THE PLANS PRIOR TO THE SUBMITTAL OF CONSTRUCTION BIDS FOR THE WORK.
6.02 UNDER NO CIRCUMSTANCES WILL ADDITIONAL COMPENSATION BE ALLOWED FOR THE EXECUTION OF THE WORK SOLELY AS A RESULT OF THE EXISTING CONDITIONS.
6.03 SUBMITTAL OF CONSTRUCTION BIDS SHALL BE DEEMED AS EVIDENCE THAT THE CONTRACTOR HAS REVIEWED THE EXISTING CONDITIONS AND HAS INCLUDED COSTS FOR THE INHERENT CONDITIONS AND/OR DIFFICULTIES WHICH AFFECT THE EXECUTION AND COMPLETION OF THE WORK.
6.04 THE CONTRACTOR SHALL FURNISH AND PAY THE COST OF ALL TEMPORARY SERVICES COMPLETELY AS REQUIRED FOR THE EXECUTION AND COMPLETION OF THE WORK. UPON COMPLETION OF THE WORK, SUCH TEMPORARY FACILITIES ARE TO REMOVED AND CONDITIONS RESTORED TO THEIR ORIGINAL STATE AT THE CONTRACTORS EXPENSE.
6.05 THROUGHOUT ALL PHASES OF CONSTRUCTION, INCLUDING SUSPENSION OF THE WORK, AND UNTIL FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL KEEP THE PROJECT SITE CLEAN AND FREE FROM THE ACCUMULATION OF RUBBISH AND DEBRIS. THE CONTRACTOR SHALL ABATE DUST NUISANCE AS NECESSARY. ALL RUBBISH AND DEBRIS SHALL BE REMOVED FROM THE PROJECT SITE AND DISPOSED OF AS LAWFULLY REQUIRED.
6.06 MATERIALS AND EQUIPMENT SHALL BE REMOVED FROM THE PROJECT SITE AS SOON AS THEY ARE NO LONGER NECESSARY FOR THE EXECUTION OF THE WORK.
6.07 NO DEMOLITION TO BE PERFORMED OUTSIDE OF NORMAL CITY CONSTRUCTION HOURS.
6.08 THE CONTRACTOR IS RESPONSIBLE FOR ALL WATERPROOFING AND RESPONSIBLE FOR ENSURING THAT THE SUB-CONTRACTORS WATERPROOF APPROPRIATELY. WATERPROOFING INCLUDES THE ENTIRE SITE AND BUILDING.

GENERAL NOTES
3.0 LICENSING
3.01 THE CONTRACTOR SHALL OBTAIN AND MAINTAIN IN FORCE A VALID LICENSE APPROPRIATE FOR THE WORK PERFORMED UNDER THIS CONTRACT AS REQUIRED. COPIES OF THESE LICENSES SHALL BE MADE AVAILABLE TO THE OWNER OR DESIGNER UPON REQUEST.
4.0 INSURANCE
4.01 CONTRACTOR SHALL OBTAIN AND MAINTAIN IN FORCE WORKMEN'S COMPENSATION INSURANCE AS REQUIRED BY THE APPLICABLE CODES. COPIES OF CERTIFICATES OF INSURANCE SHALL BE MADE AVAILABLE TO THE OWNER OR DESIGNER UPON REQUEST.
4.02 CONTRACTOR SHALL OBTAIN AND MAINTAIN IN FORCE LIABILITY INSURANCE AS REQUIRED BY THE CONTRACT FOR CONSTRUCTION. THE LIMITS AND AMOUNTS OF INSURANCE COVERAGE SHALL BE AGREED TO IN WRITING PRIOR TO THE AWARD OF A CONTRACT FOR CONSTRUCTION. COPIES OF CERTIFICATES OF INSURANCE SHALL BE MADE AVAILABLE TO THE OWNER OR DESIGNER UPON REQUEST.
5.0 BUILDING OWNER
5.01 THE CONTRACTOR SHALL CONTACT THE BUILDING OWNER TO DETERMINE ALL RULES GOVERNING THE EXECUTION OF THE WORK WITHIN THE BUILDING AND SHALL FULLY COMPLY WITH SUCH RULES TO THE SATISFACTION OF THE BUILDING OWNER THROUGHOUT THE COURSE OF CONSTRUCTION.
5.02 ALL LIMITATIONS ON THE EXECUTION AND COMPLETION OF THE WORK SHALL BE IDENTIFIED PRIOR TO THE SUBMITTAL OF CONSTRUCTION BIDS AND SHALL BE CONSIDERED AND INCLUDED IN THE COST OF THE WORK.
5.03 USE OF BUILDING FACILITIES FOR DELIVERY, LOADING, STORAGE, TRANSPORT AND PLACEMENT OF MATERIALS AND EQUIPMENT NECESSARY FOR THE EXECUTION AND COMPLETION OF THE WORK SHALL BE SCHEDULED AND APPROVED AS REQUIRED BY THE BUILDING OWNER.
5.04 UNDER NO CIRCUMSTANCES WILL ADDITIONAL COMPENSATION BE ALLOWED FOR THE EXECUTION AND COMPLETION OF THE WORK SOLELY AS A RESULT OF THE OWNER'S REQUIREMENTS.
5.05 ALL PROJECT CORRESPONDENCE ORIGINATING FROM THE CONTRACTOR TO THE BUILDING OWNER OR DESIGNER SHALL BE COPIED TO THE OTHER PARTY.

GENERAL NOTES
1.0 GENERAL
1.01 THE PROVISIONS OF THE AMERICAN INSTITUTE OF ARCHITECTS (AIA) DOCUMENT A107 "STANDARD FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR" SHALL BE A PART OF THESE CONTRACT DOCUMENTS EXCEPT AS SPECIFICALLY AGREED TO IN WRITING BY ALL PARTIES.
1.02 REFERENCES IN THESE NOTES TO APPLICABLE CODES SHALL INCLUDE COMPREHENSIVELY THE LATEST EDITION OF ALL FEDERAL, REGIONAL, STATE, CITY, FIRE DEPARTMENT AND LOCAL CODES, LAWS, ORDINANCES, ORDERS, RULES, AND GUIDELINES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARITY WITH THE APPLICABLE CODES AND COMPLY FULLY AS REQUIRED.
1.03 REFERENCES IN THESE NOTES TO THE CONTRACTOR SHALL APPLY TO THE CONTRACTOR, HIS AGENTS, ALL SUB CONTRACTORS AND ALL OTHERS EMPLOYED BY THE CONTRACTOR FOR THE PURPOSE OF THE EXECUTION OF THE WORK.
1.04 REFERENCES IN THESE NOTES TO THE BUILDING OWNER OR DESIGNER SHALL INCLUDE ALL AUTHORIZED AGENTS OR REPRESENTATIVES OF THESE PARTIES.
1.05 REFERENCES IN THESE NOTES TO THE WORK SHALL INCLUDE ALL ELEMENTS AND COMPONENTS OF THE CONTRACT DOCUMENTS, DRAWINGS, AND SPECIFICATIONS WHETHER OR NOT SPECIFICALLY IDENTIFIED.

2.0 CODES
2.01 THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LABOR CODES. DISCRIMINATION IN ANY FORM WILL NOT BE PERMITTED OR TOLERATED.
2.02 ALL CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE BUILDING, ELECTRICAL, AND MECHANICAL, PLUMBING, FIRE PROTECTION, AND LIFE SAFETY CODES.
2.03 THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE OCCUPATIONAL SAFETY AND CONSTRUCTION SAFETY CODES.
2.04 THE CONTRACTOR SHALL CONTINUOUSLY MAINTAIN ALL EXISTING LIFE SAFETY PROVISIONS DURING THE COURSE OF CONSTRUCTION IN COMPLIANCE WITH APPLICABLE CODES, AND TO THE SATISFACTION OF THE BUILDING OWNER INCLUDING BUT NOT LIMITED TO EXISTING EXITS, EXIT LIGHTING, FIRE PROTECTION DEVICES, FIRE AND SECURITY ALARMS, RATED ENCLOSURES, AND OTHER PERTINENT PROVISIONS.
2.05 THE OWNER OR DESIGNER DO NOT ACCEPT ANY RESPONSIBILITY FOR THE CONTRACTOR'S FAILURE TO COMPLY WITH APPLICABLE CODES.
2.06 WHERE DISCREPANCIES OR CONFLICTS OCCUR BETWEEN APPLICABLE CODES AND/OR THE CONTRACT DOCUMENTS, THE MORE STRINGENT REQUIREMENTS SHALL APPLY UNLESS AGREED TO IN WRITING BY THE GOVERNING JURISDICTION.

NOTES: CITY: FIRE DEPARTMENT, CONTINUED
BUILDING REQUIREMENTS
18. INTERIOR FINISH, DECORATIVE MATERIALS, AND FURNISHINGS (CFC 801.1): THE PROVISIONS OF THIS CHAPTER SHALL GOVERN INTERIOR FINISH, INTERIOR TRIM, FURNITURE, DECORATIVE MATERIALS, AND DECORATIVE VEGETATION IN BUILDINGS. EXISTING BUILDINGS SHALL COMPLY WITH SECTION 803 THROUGH 808. NEW BUILDINGS SHALL COMPLY WITH SECTIONS 804 THROUGH 808 AND SECTION 803 OF THE CALIFORNIA BUILDING CODE.
19. IDENTIFICATION (CFC 510.1): FIRE PROTECTION EQUIPMENT SHALL BE IDENTIFIED IN AN APPROVED MANNER. ROOMS CONTAINING CONTROLS FOR AIR-CONDITIONING SYSTEMS, SPRINKLER RISERS, AND VALVES, OR OTHER FIRE DETECTION, SUPPRESSION OR CONTROL ELEMENTS SHALL BE IDENTIFIED FOR THE USE OF THE FIRE DEPARTMENT. APPROVED SIGNS REQUIRED TO IDENTIFY FIRE PROTECTION EQUIPMENT AND EQUIPMENT LOCATION, SHALL BE CONSTRUCTED OF DURABLE MATERIALS, PERMANENTLY INSTALLED, AND READILY VISIBLE.
20. PREMISES IDENTIFICATION (505.1): NEW AND EXISTING BUILDINGS SHALL HAVE APPROVED ADDRESS NUMBERS, BUILDING NUMBERS, OR APPROVED BUILDING IDENTIFICATION PLACED IN A POSITION THAT IS PLAINLY LEGIBLE AND VISIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY. THESE NUMBERS SHALL CONTRAST WITH THEIR BACKGROUND. ADDRESS NUMERALS SHALL BE ARABIC NUMBERS OR ALPHABETICAL LETTERS. NUMBERS SHALL BE A MINIMUM 4 INCHES HIGH FOR R-3 OCCUPANCIES AND 6" - 12" FOR ALL OTHER OCCUPANCIES DEPENDING ON DISTANCE FROM STREET WITH A MINIMUM STROKE WIDTH OF .5 INCH. WHERE ACCESS IS BY MEANS OF A PRIVATE ROAD AND THE BUILDING CANNOT BE VIEWED FROM THE PUBLIC WAY, A MONUMENT, POLE, OR OTHER SIGN OP MEANS SHALL BE USED TO IDENTIFY THE STRUCTURE.

NOTES: CAL GREEN
1. THE SITE SHALL BE PLANNED AND DEVELOPED TO KEEP SURFACE WATER AWAY FROM BUILDINGS. PLANS SHALL BE PROVIDED AND APPROVED BY THE CITY ENGINEER THAT SHOW SITE GRADING AND PROVIDE STORM WATER RETENTION AND DRAINAGE DURING CONSTRUCTION. BMP'S THAT ARE CURRENTLY ENFORCED BY THE CITY ENGINEER MUST BE IMPLEMENTED PRIOR TO INITIAL INSPECTION BY THE BUILDING DEPARTMENT. CGC 4.106.3.
3. THE BUILDER IS TO PROVIDE AN OPERATION MANUAL (CONTAINING INFORMATION FOR MAINTAINING APPLIANCES, ETC.) FOR THE OWNER AT THE TIME OF FINAL INSPECTION. CGC 4.410.1.
4. DURING CONSTRUCTION, THE ENDS OF DUCT OPENINGS ARE TO BE SEALED, AND MECHANICAL EQUIPMENT IS TO COVERED. CGC 4.504.1.5.
5. VOC'S MUST COMPLY WITH THE LIMITATIONS LISTED IN SECTION 4.504.3 AND TABLES 4.504.1, 4.504.2, 4.504.4, AND 4.504.5 FOR: ADHESIVES, PAINTS AND COATINGS, CARPET, AND COMPOSITION WOOD PRODUCTS. CGC 4.504.2.
6. THE INTERIOR MOISTURE CONTROL AT SLAB ON GRADE FLOORS SHALL BE PROVIDED BY THE SOIL ENGINEER RESPONSIBLE FOR THE PROJECT SOIL REPORT PER CGC SECTION 4.505.2.1, ITEM 3.
7. THE MOISTURE CONTENT OF WOOD SHALL NOT EXCEED 19% BEFORE IT IS ENCLOSED IN CONSTRUCTION. THE MOISTURE CONTENT NEEDS TO BE CERTIFIED BY ONE OF 3 METHODS SPECIFIED. BUILDING MATERIALS WITH VISIBLE SIGNS OF WATER DAMAGE SHOULD NOT BE USED IN CONSTRUCTION. THE MOISTURE CONTENT MUST BE DETERMINED BY THE CONTRACTOR BY ONE OF THE METHODS LISTED IN CGC SECTION 4.505.3.
8. BATHROOM FANS SHALL BE ENERGY STAR RATED, VENTED DIRECTLY TO THE OUTSIDE, AND CONTROLLED BY A HUMIDISTAT. CGC 4.506.1.
9. WHOLE HOUSE EXHAUST FANS SHALL HAVE INSULATED COVERS OR LOUVERS WHICH CLOSE WHEN THE FAN IS OFF. THE COVERS OR LOUVERS SHALL HAVE MINIMUM R4.2 INSULATION. CGC 5.507.1.
10. HEATING AND AC SHALL BE SIZED AND SELECTED BY ACCA MANUAL J OR ASHRAE HANDBOOK OR EQUIVALENT. THE DUCT SIZING SHALL BE SIZED IN ACCORDANCE WITH ONE OF THE ACCA METHODS LISTED IN CGC SECTION 4.507.2.
11. PRIOR TO FINAL APPROVAL OF THE BUILDING THE LICENSED CONTRACTOR, ARCHITECT, OR ENGINEER IN RESPONSIBLE CHARGE OF THE OVERALL CONSTRUCTION MUST COMPLETE AND SIGN THE GREEN BUILDING STANDARDS CERTIFICATION FORM AND GIVEN TO THE BUILDING DEPARTMENT OFFICIAL TO BE FILED WITH THE APPROVED PLANS.
12. REFER TO AX: PLUMBING ISOMETRIC AND SPECIFICATIONS, FOR TABLE 4.303.2: FIXTURE FLOW RATES. CGC 4.303.1.
13. WHEN A SHOWER IS PROVIDED WITH MULTIPLE SHOWER HEADS, THE SUM OF FLOW TO ALL THE HEADS SHALL NOT EXCEED THE 20% REDUCED LIMIT, OR THE SHOWER SHALL BE DESIGNED SO THAT ONLY ONE HEAD IS ON AT A TIME. CGC 4.303.2.
30. ELECTRIC VEHICLE CHARGING: ELECTRICAL VEHICLE SUPPLY EQUIPMENT (EVSE) IS REQUIRED FOR NEW ONE AND TWO FAMILY DWELLING AND TOWNHOMES WITH ATTACHED GARAGES. A MINIMUM SIZE 1" CONDUIT ORIGINNATING FROM A PANEL OR SERVICE HAVING A SPARE 40 AMPERE 240 VOLT CAPACITY TERMINATING IN A BOX LOCATED IN CLOSE PROXIMITY TO THE LOCATION OF THE FUTURE EV CHARGER. CGC 4.106.4.
31. STORM WATER DRAINAGE / RETENTION DURING CONSTRUCTION: PROJECTS WHICH DISTURB LESS THAN ONE ACRE OF SOIL SHALL MANAGE STORM WATER DRAINAGE DURING CONSTRUCTION BY ONE OF THE FOLLOWING:
- A. RETENTION BASINS.
- B. WHERE STORM WATER IS CONVEYED TO A PUBLIC DRAINAGE SYSTEM, WATER SHALL BE FILTERED BY USE OF A BARRIER SYSTEM, WATTLE, OR OTHER APPROVED METHOD.

CGC SECTION 4.106.2.
32A. GRADING AND PAVING: SITE GRADING OR DRAINAGE SYSTEM WILL MANAGE ALL SURFACE WATER FLOWS TO KEEP WATER FROM ENTERING BUILDINGS (SWALES, WATER COLLECTION, FRENCH DRAINS, ETC). CGC SECTION 4.106.3.
32B. MULTIPLE SHOWER HEADS: THE SUM OF FLOW TO ALL HEADS SHALL NOT EXCEED 2.0 GPM @ 80 PSI, OR THE SHOWER SHALL BE DESIGNED SO THAT ONLY ONE HEAD IS ON AT A TIME. CGC SECTION 4.303.1.3.2.
33. LANDSCAPE IRRIGATION WATER USE SHALL HAVE WEATHER OR SOIL BASED CONTROLLERS. CGC SECTION 4.304.1.
34. RECYCLING: A MINIMUM OF 65% OF CONSTRUCTION WASTE IS TO BE RECYCLED. CGC SECTION 4.408.1.

NOTES: MASONRY
R606.1 GENERAL. MASONRY CONSTRUCTION SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF THIS SECTION TMS 403 OR IN ACCORDANCE WITH THE PROVISIONS OF TMS 402/ACI 530/ASCE 5.
R607.1 MORTAR. MORTAR FOR USE IN MASONRY CONSTRUCTION SHALL COMPLY WITH ASTM C 270. THE TYPE OF MORTAR SHALL BE IN ACCORDANCE WITH SECTION R607.1.1, R607.1.2, AND R607.1.3 AND SHALL MEET THE PROPORTION SPECIFICATIONS OF TABLE R607.1 OR THE PROPERTY SPECIFICATIONS OF ASTM C 270.

NOTES: GAS
1. ALL PLUMBING FOR GAS LINES SHALL CONFORM TO 2016 UPC.
2. CAST IRON PIPE SHALL NOT BE USED. UPC 1209.5.2.1
3. STEEL & WROUGHT-IRON PIPE SHALL BE AT LEAST OF STANDARD WEIGHT (SCHEDULE 40) AND SHALL COMPLY WITH: ASTM A 53, STANDARD SPECIFICATION FOR PIPE, STEEL, BLACK AND HOT-DIPPED, ZINC-COATED WELDED & SEAMLESS. UPC 1209.5.2.2 & 1209.5.2.2(2)
4. PLASTIC PIPE, TUBING, AND FITTINGS SHALL BE USED OUTSIDE UNDERGROUND ONLY AND SHALL CONFORM WITH ASTM D 2513, STANDARD SPECIFICATION FOR THERMOPLASTIC GAS PRESSURE PIPE, TUBING, AND FITTINGS. PIPE TO BE USED SHALL BE MARKED "GAS" AND "ASTM D 2513." UPC 1209.5.4
5. ALL GAS LINES, SIZES AND CONFIGURATIONS TO BE VERIFIED FOR ADEQUACY BASED UPON THE SIZE AND DEMAND REQUIREMENTS OF THE APPLIANCE OR EQUIPMENT SPECIFICATIONS.
6. ALL GAS LINES TO BE VERIFIED BY A CERTIFIED GAS INSTALLER PRIOR TO DESIGN OR INSTALLATION.

NOTES: CITY: FIRE DEPARTMENT
1. THE CALIFORNIA FIRE CODE (CFC) IS THE 2016 EDITION WITH ADDITIONS, DELETIONS, AND AMENDMENTS PER CITY OF PALM SPRINGS ORDINANCE 1781.
2. THE CALIFORNIA RESIDENTIAL CODE (CRC) IS THE 2016 EDITION WITH ADDITIONS, DELETIONS, AND AMENDMENTS PER CITY OF PALM SPRINGS ORDINANCE 1780.
3. NFPA STANDARDS:
- NFPA 130 - STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS IN ONE AND TWO FAMILY DWELLINGS AND MANUFACTURED HOMES, 2016 EDITION.
- NFPA 72 - NATIONAL FIRE ALARM CODE, 2016 EDITION.
- NFPA 241 - STANDARD FOR SAFEGUARDING CONSTRUCTION, ALTERATIONS, AND DEMOLITION OPERATIONS, 2016 EDITION.
- NFPA 720 - STANDARD FOR THE INSTALLATION OF CARBON MONOXIDE (CO) DETECTION AND WARNING EQUIPMENT, 2016 EDITION.

FIRE SAFETY DURING CONSTRUCTION AND DEMO.
5. CONSTRUCTION AND DEMOLITION: STRUCTURES IN THE COURSE OF CONSTRUCTION, ALTERATION, OR DEMOLITION SHALL COMPLY WITH CHAPTER 14 OF THE 2016 CALIFORNIA FIRE CODE AND NFPA 241.

FIRE PROTECTION WATER SYSTEM
6. FIRE HYDRANT FLOW AND NUMBER OF FIRE HYDRANTS: FIRE HYDRANTS SHALL BE PROVIDED IN ACCORDANCE WITH 2016 CALIFORNIA FIRE CODE (CFC) APPENDIX B, SECTION B101.1 FOR THE PROTECTION OF BUILDINGS, OR PORTIONS OF BUILDINGS, HEREAFTER CONSTRUCTED. THE REQUIRED FIRE HYDRANT FLOW FOR THIS PROJECT IS 500 GALLONS PER MINUTE (CFC APPENDIX B, SECTION B105) AND ONE AVAILABLE FIRE HYDRANT IS REQUIRED WITH FIRE SPRINKLERS. (CFC APPENDIX C, SECTION C103) ONE AVAILABLE FIRE HYDRANT MUST BE WITHIN 250 FEET FROM ANY POINT ON YOUR LOT STREET OR ROAD FRONTAGE AND 500 FEET AVERAGE SPACING BETWEEN FIRE HYDRANTS. (CFC APPENDIX C, SECTION C105) FIRE HYDRANTS #1084 & 1950 DO MEET THE ABOVE REQUIREMENTS.
7. ADDITIONAL FIRE HYDRANTS ARE NOT REQUIRED.

FIRE DEPARTMENT ACCESS
8. BUILDINGS AND FACILITIES (CFC 503.1.1): APPROVED FIRE APPARATUS ACCESS ROADS SHALL BE PROVIDED FOR EVERY FACILITY, BUILDING, OR PORTION OF A BUILDING HEREAFTER CONSTRUCTED OR MOVED INTO OR WITHIN THE JURISDICTION. THE FIRE APPARATUS ROAD SHALL COMPLY WITH THE REQUIREMENTS OF THIS SECTION AND SHALL EXTEND TO WITHIN 150 FEET (45,720 MM) OF ALL PORTIONS OF THE FACILITY AND ALL PORTIONS OF THE EXTERIOR WALLS OF THE FIRST STORY OF THE BUILDING AS MEASURED BY AN APPROVED ROUTE AROUND THE EXTERIOR OF THE BUILDING OR FACILITY.

FIRE PROTECTION AND LIFE SAFETY SYSTEMS
9. FIRE SPRINKLERS REQUIRED (CFC 903.2.8 & CRC R313.2): AN AUTOMATIC FIRE SPRINKLER SYSTEM IS REQUIRED. ONLY A C-16 LICENSED FIRE SPRINKLER CONTRACTOR SHALL PERFORM SYSTEM DESIGN AND INSTALLATION. SYSTEM TO BE DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA STANDARD 130, 2016 EDITION, AS MODIFIED BY LOCAL ORDINANCE. NO PORTION OF THE FIRE SPRINKLER SYSTEM MAY BE INSTALLED PRIOR TO PLAN APPROVAL.
10. RESIDENTIAL SMOKE AND CARBON MONOXIDE ALARMS INSTALLATION (CFC 907.2.11.2/3/4; CRC R314 & R315L AND CALIFORNIA HEALTH & SAFETY CODE 17926): PROVIDE AND INSTALL RESIDENTIAL SMOKE AND CARBON MONOXIDE ALARMS (KIDDE SM120X RELAY / POWER SUPPLY MODULE CONNECTED TO MULTI-STATION KIDDE SMOKE AND CARBON MONOXIDE ALARMS OR EQUAL SYSTEM AND FIRE SPRINKLER SLOW SWITCH). ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING, AND SHALL BE EQUIPPED WITH A BATTERY BACKUP. IN NEW CONSTRUCTION, ALTERATIONS, REPAIRS, AND ADDITIONS, SMOKE ALARMS AND CARBON MONOXIDE ALARMS SHALL BE INTERCONNECTED. THE OPERATION OF ANY SMOKE ALARM WILL CAUSE ALL SMOKE ALARMS WIHTIN THE DWELLING TO SOUND. THE OPERATION OF ANY CARBON MONOXIDE ALARM WILL CAUSE ALL CARBON MONOXIDE ALARMS WITHIN THE DWELLING TO SOUND. THE WIRING OF THIS SYSTEM SHALL BE IN ACCORDANCE WITH KIDDE SM12X RELAY / POWER SUPPLY MODULE MANUAL AND FIGURE 2 (SEE ATTACHED). THE 120 VOLT DEVISE WIRED TO TURN ON WHEN ALARM SOUNDS IS THE EXTERIOR HORN / STROBE. THE PULL FOR FIRE DEVICE IS THE FIRE SPRINKLER FLOW SWITCH.
11. RESIDENTIAL SMOKE ALARM REQUIREMENTS (CFC 907.2.11.2): SINGLE OR MULTIPLE-STATION SMOKE ALARMS SHALL BE INSTALLED AND MAINTAINED AT ALL OF THE FOLLOWING LOCATIONS:
- 1. ON THE CEILING OR WALL OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF BEDROOMS.
- 2. IN EACH ROOM USED FOR SLEEPING PURPOSES
- 3. IN EACH STORY WITHIN A DWELLING UNIT, INCLUDING BASEMENTS. IN DWELLING UNITS WITH SPLIT LEVELS AND WITHOUT AN INTERVENING DOOR BETWEEN THE ADJACENT LEVELS, A SMOKE ALARM INSTALLED ON THE UPPER LEVEL SHALL SUFFICE FOR THE ADJACENT LOWER LEVEL PROVIDED T HAT THE LOWER LEVEL IS LESS THAN ONE FULL STORY BELOW THE UPPER LEVEL.

12. ADDITIONAL RESIDENTIAL SMOKE ALARM REQUIREMENTS (NFPA 72: 29.5.1.3): WHERE THE INTERIOR FLOOR AREA FOR A GIVEN LEVEL OF A DWELLING UNIT, EXCLUDING GARAGE, IS GREATER THAN 1,000 SQ. FT., THE ADDITIONAL REQUIREMENTS ARE THAT ALL POINTS ON THE CEILING SHALL HAVE:
- A. SMOKE ALARMS WITHIN A DISTANCE OF 30 FT. TRAVEL DISTANCE.
- B. AN EQUIVALENT OF ONE SMOKE ALARM PER 500 SQ. FT. OF FLOOR AREA.

ONE SMOKE ALARM PER 500 SQ. FT. IS EVALUATED BY DIVIDING THE TOTAL INTERIOR SQUARE FOOTAGE OF FLOOR AREA PER LEVEL BY 500 SQ. FT.
13. CARBON MONOXIDE ALARM OR DETECTOR LOCATIONS (NFPA 720: 9.4.1.1 & 9.4.1.2; CRC R315.2.6): CARBON MONOXIDE ALARMS OR DETECTORS SHALL BE INSTALLED AS FOLLOWS:
- 1. OUTSIDE OF EACH SEPARATE DWELLING UNIT SLEEPING AREA IN THE IMMEDIATE VICINITY OF BEDROOMS.
- 2. ON EVERY OCCUPIABLE LEVEL OF A DWELLING UNIT, INCLUDING BASEMENTS, EXCLUDING ATTICS, AND CRAWL SPACES.
- 3. OTHER LOCATIONS WHERE REQUIRED BY APPLICABLE LAWS, CODES, OR STANDARDS.

EACH ALARM OR DETECTOR SHALL BE LOCATED ON THE WALL, CEILING, OR OTHER LOCATION AS SPECIFIED IN THE MANUFACTURER'S PUBLISHED INSTRUCTIONS THAT ACCOMPANY THE UNIT.
14. SMOKE ALARM REPLACEMENT FOR ONE AND TWO FAMILY DWELLINGS (NFPA 72: 14.4.7.1): SMOKE ALARMS SHALL BE REPLACED WHEN THEY FAIL TO RESPOND TO OPERABILITY TESTS BUT SHALL NOT REMAIN IN SERVICE LONGER THAN 10 YEARS FROM THE DATE OF MANUFACTURE.
15. CARBON MONOXIDE ALARM REPLACEMENT (FFPA 720: 8.7.2): CARBON MONOXIDE ALARMS SHALL BE REPLACED WHEN EITHER THE END-OF-LIFE SIGNAL IS ACTIVATED OR THE MANUFACTURER'S REPLACEMENT DATE IS REACHED (USUALLY 7 YEARS FROM THE DATE OF MANUFACTURE). ALARMS SHALL ALSO BE REPLACED WHEN THEY FAIL TO RESPOND TO OPERABILITY TESTS.
16. AUDIBLE RESIDENTIAL WATER FLOW ALARMS (CFC 903.4.2 & CFC APPENDIX K: 6.16): AN APPROVED AUDIBLE SPRINKLER FLOW ALARM (WHEELOCK HORN / STROBE # MT4-115-WH-VFR BACK BOX OR EQUAL) SHALL BE PROVIDED ON THE EXTERIOR OF THE BUILDING IN AN APPROVED LOCATION. THE HORN / STROBE SHALL BE OUTDOOR RATED.
17. LISTED EQUIPMENT INSTALLATIONS: ALL LISTED EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE TERMS OF THEIR LISTINGS AND THE MANUFACTURER'S INSTRUCTIONS.

FIRE PROTECTION
3. AN AUTOMATIC RESIDENTIAL FIRE SPRINKLER SYSTEM SHALL BE INSTALLED. SECTION R313.2.

PROJECT DRAWINGS

ARCHITECTURAL
A0.00	COVER SHEET	
A0.30	GEOTECHNICAL UPDATE | HOA APPROVAL	
T-24.1	TITLE 24 REPORT	
T-24.2	TITLE 24 REPORT	
-	TOPOGRAPHIC SURVEY	SURVEYOR
1	PRECISE GRADING PLAN	CIVIL
2	PRECISE GRADING PLAN	CIVIL
A1.01	SITE PLAN: PROPOSED	
A1.02.0	FLOOR PLAN: PROPOSED	
~~A1.02.1~~	~~FLOOR PLAN: CONCRETE~~	
~~A1.02.2~~	~~FLOOR PLAN: FIXTURES~~	
A1.03	ROOF PLAN	
A1.04	ELECTRICAL PLAN: POWER	
A1.05	ELECTRICAL PLAN: LIGHTING	
A2.01	ELEVATIONS	
A3.01	SECTIONS	
~~A3.02~~	~~SECTIONS~~	
~~A3.03~~	~~SECTIONS~~	
A5.03.1	DETAILS: CONCRETE AND MASONRY	
A5.07.1	DETAILS: THERMAL AND MOISTURE AND METALS	
A6.01	SCHEDULES: WINDOWS AND DOORS	

STRUCTURAL
S1	GENERAL NOTES AND TYPICAL DETAILS
S2	FOUNDATION PLAN
S3	ROOF FRAMING PLAN
S4	STRUCTURAL DETAILS

FIRE SPRINKLERS
FP-1	RESIDENTIAL FIRE SPRINKLER PLAN: SITE PLAN, NOTES, ETC.

MECHANICAL
M1.02	MECHANICAL PLAN

PLUMBING
P1	PLUMBING NOTES AND DETAILS
P2	PLUMBING FLOOR PLAN
P3	ISOMETRICS

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NOTES: LOT LEGAL DESCRIPTION
PROJECT ADDRESS INFORMATION
700 LA ESTRELLA
PALM SPRINGS, CA 92262

ADDRESS / LEGAL DESCRIPTION INFORMATION

THOMAS BROTHERS GRID:	PAGE 786, GRID F-1
APN:	512-320-012-2
TRACT:	29632
MAP REFERENCE:	M B 340-51/55
LOT:	2

NOTES: PROJECT DATA
A PROPOSED NEW RESIDENCE LOCATED AT 700 LA ESTRELLA.

TOTAL LOT AREA:	17,682 S.F.
EXISTING LOT COVERAGE:	0%
PROPOSED INTERIOR SQUARE FOOTAGE:	3,175 S.F. (2)
STORAGE:	170 S.F.
GARAGE:	500 S.F.
TOTAL PROPOSED STRUCTURE	3,845 S.F. (2)
PROPOSED LOT COVERAGE	22%

CITY OF PALM SPRINGS ZONING DATA
ZONE:	R-1-B
SITE SETBACKS:	FRONT: MAIN: 25 FEET
	FRONT: SECONDARY: 20 FEET
	SIDE: 10 FEET
	REAR: 15 FEET
USDA ZONE:	10-A
SUNSET MAGAZINE TIME:	13

APPLICABLE CODES: SECTION R106.1. PROJECT TO COMPLY WITH:
2016 CALIFORNIA RESIDENTIAL CODE	ADOPTING 2015 IRC
2016 CALIFORNIA BUILDING CODE	ADOPTING 2015 IBC
2016 CALIFORNIA MECHANICAL CODE	ADOPTING 2015 UMC
2016 CALIFORNIA PLUMBING CODE	ADOPTING 2015 UPC
2016 CALIFORNIA ELECTRICAL CODE	ADOPTING 2014 NEC
2016 CALIFORNIA ENERGY CODE	ADOPTING 2013 ES
2016 CALIFORNIA FIRE CODE	ADOPTING 2009 IFC
2016 CALIFORNIA GREEN BUILDING CODE	
ALL LOCAL CODES AND ALLOWANCES	

ABBREVIATION LIST
A.F.F. = ABOVE FINISH FLOOR	R.O. = ROUGH OPENING
B.O.B. = BOTTOM OF BEAM	T.O.CH. = TOP OF CHIMNEY
B.O.H. = BOTTOM OF HEADER	T.O.DH. = TOP OF DOGHOUSE
C.L. = CENTER LINE	T.O.P. = TOP OF TOP PLATE
E.Q. = EQUAL	T.O.R. = TOP OF RIDGE
F.F. = FINISH FLOOR	T.O.S. = TOP OF SHEATHING
F.G. = FINISH GRADE	T.O.W. = TOP OF WALL
F.O.C. = FACE OF CONCRETE	TYP. = TYPICAL
F.O.W. = FACE OF WALL	U.N.O. = UNLESS NOTED OTHERWISE
N.T.S. = NOT TO SCALE	V.I.F. = VERIFY IN FIELD
P.L. PROPERTY LINE	

NOTES: ENERGY CONSERVATION
36. COMPLIANCE WITH THE DOCUMENATION REQUIREMENTS OF THE 2016 ENERGY EFFICIENCY STANDARDS IS NECESSARY FOR THIS PROJECT. REGISTERED, SIGNED, AND DATED COPIES OF THE APPROPRIATE CF1R, CF2R, AND CF3R FORMS SHALL BE MADE AVAILABLE AT NECESSARY INTERVALS FOR BUILDING INSPECTOR REVIEW. FINAL COMPLETED FORMS WILL BE AVAILABLE FOR THE BUILDING OWNER.
37. ELECTRIC VEHICLE CHARGING: ELECTRICAL VEHICLE SUPPLY EQUIPMENT (EVSE) ROUGH-IN ONLY IS REQUIRE IN ONE AND TWO FAMILY DWELLINGS AND TOWNHOMES WITH ATTACHED GARAGES. THE EVSE ROUGH-IN CONSISTS OF A MINIMUM 1" CONDUIT EXTENDING FROM THE MAIN PANEL TO A JUNCTION BOX WHERE THE EVSE RECEPTACLE BOX WILL BE PROVIDED. THE MAIN SERVICE PANEL MUST BE SIZED TO ACCOMMODATE A FUTURE 208/240 VOLT 40 AMPERE DEDICATED BRANCH CIRCUIT. CGC 4.106.4
38. DESIGN REQUIREMENTS FOR GAS WATER HEATERS INSTALLED TO SERVE INDIVIDUAL DWELLING UNITS:
- A. GAS PIPING SIZING BASED UPON A MINIMUM INPUT OF 200,000 BTU/HR.
- B. A CONDENSATE DRAIN INSTALLED NO HIGHER THAN 2" ABOVE THE BASE OF THE HEATER THAT ALSO ALLOWS FOR GRAVITY DRAINAGE.
- C. THE "B" VENT INSTALLED IN A STRAIGHT POSITION FROM THE ROOM CONTAINING THE WATER HEATER TO THE ROOF TERMINATION. (FOR FUTURE POSSIBLE SLEEVING FOR HIGH EFFICIENCY HEATER VENTING).
- D. A 120 VOLT RECEPTACLE ACCESSIBLE TO THE HEATER INSTALLED WITH THREE FEET.

ES 150.0(N).
39. INSTANTANEOUS WATER HEATERS SHALL HAVE ISOLATION VALVES ON BOTH THE COLD AND THE HOT WATER PIPING LEAVING THE WATER HEATER COMPLETE WITH HOSE BIBS OR OTHER FITTINGS ON EACH VALVE FOR FLUSHING THE WATER HEATER WHEN THE VALVES ARE CLOSED. ES 110.3.
(1) 40. ALL DOMESTIC HOT WATER PIPING TO HAVE THE FOLLOWING MINIMUM INSULATION INSTALLED: 1/2" PIPE (1/2" INSULATION); 3/4" PIPE (1" INSULATION); 1" TP 1-1/2" PIPE (1-1/2" INSULATION). CPC 609.11 & ES 150.0(J). ADDITIONALLY, THE 1/2" HOT WATER PIPE TO THE KITCHEN SINK AND THE COLD WATER PIPE WITHIN FIVE FEET OF THE WATER HEATER ARE BOTH REQUIRED TO BE 1" MINIMUM INSULATED. ES 150.0(J)

NOTES: PLUMBING
1. ALL PLUMBING FOR WATER SUPPLY LINES SHALL CONFORM TO 2016 CALIFORNIA PLUMBING CODE.
2. WATER DISTRIBUTION PIPE, BUILDING SUPPLY WATER PIPE, AND FITTINGS SHALL BE OF BRASS, COPPER, CAST IRON, CPVC, GALVANIZED MALLEABLE IRON, GALVANIZED WROUGHT IRON, GALVANIZED STEEL, PEX, OR OTHER APPROVED MATERIALS. ASBESTOS-CEMENT, PE, PVC, PEX-AL-PEX WATER PIPE, TUBING, AND FITTINGS MANUFACTURED TO RECOGNIZED STANDARDS MAY BE USED FOR HOT AND COLD WATER DISTRIBUTION SYSTEMS WITHIN A BUILDING. pE-AL-PE WATER PIPE AND FITTINGS MAY BE USED FOR COLD WATER DISTRIBUTION SYSTEMS WITHIN A BUILDING. ALL MATERIALS USED IN THE WATER SUPPLY SYSTEM, EXCEPT VALVES AND SIMILAR DEVICES, SHALL BE OF A LIKE MATERIAL, EXCEPT WHERE OTHERWISE APPROVED BY THE AUTHORITY HAVING JURISDICTION. UPC 604.1
3. LISTED FLEXIBLE COPPER WATER CONNECTORS SHALL BE INSTALLED IN READILY ACCESSIBLE LOCATIONS, UNLESS OTHERWISE LISTED. UPC 604.4
4. CAST IRON FITTINGS UP TO AND INCLUDING TWO (2) INCHES IN SIZE, WHEN USED IN CONNECTION WITH POTABLE WATER PIPING, SHALL BE GALVANIZED. UPC 604.5
5. ALL MALLEABLE IRON WATER FITTINGS SHALL BE GALVANIZED. UPC 604.6
6. APPROVED PLASTIC MATERIALS MAY BE USED IN WATER SERVICE PIPING, PROVIDED THAT WHERE METAL WATER SERVICE PIPING IS USED OR ELECTRICAL GROUNDING PURPOSES, REPLACEMENT PIPING THEREFOR SHALL BE OF LIKE MATERIALS. UPC 604.8
7. CROSS-LINKED POLYETHYLENE (PEX) TUBING SHALL BE MARKED WITH THE APPROPRIATE STANDARD DESIGNATION(S) LISTED IN UPC TABLE 14-1 FOR WHICH THE TUBING HAS BEEN APPROVED. PEX TUBING SHALL BE INSTALLED IN COMPLIANCE WITH THE PROVISIONS OF THE FOLLOWING:
- PEX TUBING SHALL NOT BE INSTALLED WITHIN THE FIRST EIGHTEEN (18) INCHES OF PIPING CONNECTED TO A WATER HEATER. UPC 604.11 & 604.11.2

(1) 8. WATER CONSERVING FIXTURES: NEW WATER CLOSETS SHALL USE NO MORE THAN 1.28 GALLONS OF WATER PER FLUSH, KITCHEN FAUCETS MAY NOT EXCEED 1.8 GPM, LAVATORIES ARE LIMITED TO 1.2 GPM, AND SHOWERHEADS MAY NOT EXCEED 1.8 GPM OF FLOW. CPC SECTIONS 407, 408, 411, 412.
9. ABS SCHEDULE 40 SHALL BE USED FOR THE SITE SEWER.
28. THE GAS PIPE SIZING FOR INSTANTANEOUS TYPE WATER HEATER SHALL BE BASED UPON A MINIMUM 199,000 BTU GAS INPUT RATING. ENERGY STANDARDS 150.0(N).
29. THE CONTROL VALUES IN SHOWERS, TUB/SHOWERS, BATHTUBS, AND BIDETS MUST BE PRESSURE BALANCED OR THERMOSTATIC MIXING VALVES. CPC SECTIONS 408, 409, 410.



NOTES: COLUMNS
R407.1 WOOD COLUMN PROTECTION. WOOD COLUMNS SHALL BE PROTECTED AGAINST DECAY AS SET FORTH IN SECTION R317.
R407.2 STEEL COLUMN PROTECTION. ALL SURFACES (INSIDE AND OUTSIDE) OF STEEL COLUMNS SHALL BE GIVEN A SHOP COAT OF RUST-INHIBITIVE PAINT, EXCEPT FOR CORROSION-RESISTANT STEEL AND STEEL TREATED WITH COATINGS TO PREVENT CORROSION RESISTANCE.

NOTES: PLUMBING: FIXTURE FLOW RATES: CGBC 4.303
FIXTURE TYPE	(1) MAXIMUM FLOW RATE AT > 20% REDUCTION
SHOWER HEADS	1.8 GPM @ 80 PSI
KITCHEN FAUCETS	1.8 GPM @ 60 PSI
LAVATORY FAUCETS, RESIDENTIAL	1.2 GPM @ 60 PSI
METERING FAUCETS	0.25 GALLONS PER CYCLE
GRAVITY TANK-TYPEWATER CLOSETS	1.28 GALLONS PER FLUSH
URINALS	0.5 GALLONS PER FLUSH
URINALS (WALL MOUNTED)	0.125 GALLONS PER FLUSH

INCLUDE SINGLE AND DUAL FLUSH WATER CLOSETS WITH AN EFFECTIVE FLUSH OF 1.28 GALLONS OR LESS.
- SINGLE FLUSH TOILETS: THE EFFECTIVE FLUSH VOLUME SHALL NOT EXCEED 1.28 GALLONS (4.8 LITERS). THE EFFECTIVE FLUSH VOLUME IS THE AVERAGE FLUSH VOLUME WHEN TESTED IN ACCORDANCE WITH ASME A112.19.233.2.
- DUAL FLUSH TOILETS: THE EFFECTIVE FLUSH VOLUME SHALL NOT EXCEED 1.28 GALLONS (4.8 LITERS). THE EFFECTIVE FLUSH VOLUME IS DEFINED AS THE COMPOSITE, AVERAGE FLUSH VOLUME OF TWO REDUCED FLUSHES AND ONE FULL FLUSH. FLUSH VOLUMES WILL BE TESTED IN ACCORDANCE WITH ASME A112.19.2 AND ASME A112.19.14.

(1) LAVATORY FAUCETS SHALL NOT HAVE A FLOW RATE LESS THAN 0.8 GPM AT 20 PSI.

NOTES: AUTOMATIC VEHICULAR GATE
A0103.1 VEHICULAR GATES INTENDED FOR AUTOMATION. VEHICULAR GATES INTENDED FOR AUTOMATION SHALL BE DESIGNED, CONSTRUCTED, AND INSTALLED TO COMPLY WITH THE REQUIREMENTS OF ASTM F 2200.
A0103.2 VEHICULAR GATE OPENERS. VEHICULAR GATE OPENERS, WHEN PROVIDED, SHALL BE LISTED IN ACCORDANCE WITH UL 325.

NOTES: WOOD VENEER
R702.5 OTHER FINISHES. WOOD VENEER PANELING AND HARDBOARD PANELING SHALL BE PLACED ON WOOD OR COLD-FORMED STEEL FRAMING NOT MORE THAN 16" ON CENTER. WOOD VENEER AND HARDBOARD PANELING LESS THAN 1/4" NOMINAL THICKNESS SHALL NOT HAVE LESS THAN 3/8" GYPSUM BOARD BACKER. WOOD VENEER PANELING NOT LESS THAN 1/4" NOMINAL THICKNESS SHALL CONFORM TO ANSI/HPVA HP-1. HARDBOARD PANELING SHALL CONFORM TO CPA/ANSI A135.5.

NOTES: GYPSUM BOARD
R702.3 GYPSUM BOARD. ALL GYPSUM BOARD MATERIALS AND ACCESSORIES SHALL CONFORM TO ASTM C 22, C 475, C 514, C 1002, C 1047, C 1177, C 1178, C 1278, C 1396, OR C 1658 AND SHALL BE INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF THIS SECTION. ADHESIVES FOR THE INSTALLATION OF GYPSUM BOARD SHALL CONFORM TO ASTM C 557.
R702.3.2 WOOD FRAMING. WOOD FRAMING SUPPORTING GYPSUM BOARD SHALL NOT BE LESS THAN 2" NOMINAL THICKNESS IN THE LEAST DIMENSION EXCEPT THAT WOOD FURRING STRIPS NOT LESS THAN 1" BY 2" NOMINAL DIMENSION MAY BE USED OVER SOLID BACKING OR FRAMING SPACED NOT MORE THAN 24" ON CENTER.
R702.3.6 FASTENERS. SCREWS FOR ATTACHING GYPSUM BOARD TO WOOD FRAMING SHALL BE TYPE W OR TYPE S IN ACCORDANCE WITH ASTM C 1002 AND SHALL PENETRATE THE WOOD NOT LESS THAN 5/8".

NOTES: FLASHING
R708.8 FLASHING. APPROVED CORROSION-RESITANT FLASHING SHALL BE APPLIED SINGLE-FASHION IN A MANNER TO PREVENT ENTRY OF WATER INTO THE WALL CAVITY OR PENETRATION OF WATER TO THE BUILDING STRUCTURAL FRAMING COMPONENTS. SELF-ADHERED MEMBRANES USED AS FLASHING SHALL COMPLY WITH AAMA 711. THE FLASHING SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH. APPROVED CORROSION-RESISTANT FLASHING SHALL BE INSTALLED AT ALL OF THE FOLLOWING LOCATIONS:
1. EXTERIOR WINDOW AND DOOR OPENINGS. FLASHING AT EXTERIOR WINDOW AND DOOR OPENINGS SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH OR TO THE WATER-RESISTIVE BARRIER FOR SUBSEQUENT DRAINAGE. FLASHING AT EXTERIOR WINDOW AND DOOR OPENINGS SHALL BE INSTALLED IN ACCORDANCE WITH ONE OR MORE OF THE FOLLOWING:
   - A. THE FENESTRATION MANUFACTURER'S INSTALLATION AND FLASHING INSTRUCTIONS, OR FOR APPLICATIONS NOT ADDRESSED IN THE FENESTRATION MANUFACTURER'S INSTRUCTIONS, IN ACCORDANCE WITH THE FLASHING MANUFACTURER'S INSTRUCTIONS. WHERE FLASHING INSTRUCTION DETAILS ARE NOT PROVIDED, PAN FLASHING SHALL BE INSTALLED AT THE SILL OF EXTERIOR WINDOW AND DOOR OPENINGS. PAN FLASHING SHALL BE SEALED OR SLOPED IN SUCH A MANNER AS TO DIRECT WATER TO THE SURFACE OF THE EXTERIOR WALL FINISH OR TO THE WATER-RESISTIVE BARRIER FOR SUBSEQUENT DRAINAGE. OPENINGS USING PAN FLASHING SHALL ALSO INCORPORATE FLASHING OR PROTECTION AT THE HEAD AND SIDES.
   - B. IN ACCORDANCE WITH THE FLASHING DESIGN OR METHOD OF A REGISTERED DESIGN PROFESSIONAL.
   - C. IN ACCORDANCE WITH OTHER APPROVED METHODS.

NOTES: CONCRETE FLOORS
R506.1 GENERAL. CONCRETE SLAB-ON-GRADE FLOORS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF THIS SECTION OR ACI 332. FLOORS SHALL BE A MINIMUM 3-1/2" THICK. THE SPECIFIED STRENGTH OF CONCRETE SHALL BE SET FOR IN SECTION R402.2.
R506.2 SITE PREPARATION. THE ARE WITHIN THE FOUNDATION WALLS SHALL HAVE ALL VEGETATION, TOP SOIL, AND FOREIGN MATERIAL REMOVED.
R506.2.1 FILL. FILL MATERIAL SHALL BE FREE OF VEGETATION AND FOREIGN MATERIAL. THE FILL SHALL BE COMPACTED TO ASSURE UNIFORM SUPPORT OF THE SLAB, AND EXCEPT WHERE APPROVED, THE FILL DEPTHS SHALL NOT EXCEED 24" FOR CLEAN SAND OR GRAVEL AND 8" FOR EARTH.
R506.2.2 BASE. A 4" THICK BASE COURSE CONSISTING OF CLEAN GRADED SAND, GRAVEL, CRUSHED STONE, OR CRUSHED BLAST-FURNACE SLAB PASSING A 2" SIEVE SHALL BE PLACED ON THE PREPARED SUBGRADE WHEN THE SLAB IN BELOW GRADE.
- EXCEPTION. A BASE COURSE IS NOT REQUIRED WHEN THE CONCRETE SLAB IN INSTALLED ON WELL-DRAINED OR SAND-GRAVEL MIXTURE SOILS GLASSIFIED AS GROUP I ACCORDING TO THE UNITED SOIL CLASSIFICATION SYSTEM IN ACCORDANCE WITH TABLE R405.1.

R506.2.3 VAPOR RETARDER. A 6-MIL POLYETHYLENE OR APPROVED VAPOR RETARDER WITH JOINTS LAPPED LOT LESS THAN 6" SHALL BE PLACED BETWEEN THE CONCRETE FLOOR SLAB AND THE BASE COURSE OR THE PREPARED SUBGRADE WHERE NO BASE COURSE EXISTS.
- EXCEPTION. THE VAPOR RETARDER MAY BE OMMITED:
  1. FROM GARAGES, UTILITY BUILDINGS, AND OTHER UNHEATED ACCESSORY STRUCTURES.
  2. FOR UNHEATED STORAGE ROOMS HAVING AN AREA OF LESS THAN 70 SQ FT.
  3. FROM DRIVEWAYS, WALKS, PATIOS, AND OTHER FLATWORK NOT LIKELY TO BE ENCLOSED AND HEATED AT A LATER DATE.
  4. WHERE APPROVED BY THE BUILDING OFFICIAL, BASED ON LOCAL SITE CONDITIONS.

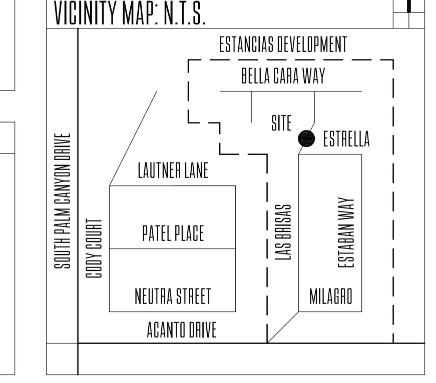
R506.2.3.1 CAPILLARY BREAK. WHEN A VAPOR RETARDER IS REQUIRED, A CAPILLARY BREAK SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS CODE, CHAPTER 4, DIVISION 4.5.

NOTES: DRAIN, WASTE, AND VENTS
A. DRAIN LINE SHALL NOT DRAIN INTO BUILDING WASTE LINE (OR TO PUBLIC SEWER)

1. ALL DRAINS, WASTES, AND VENT PLUMBING SHALL CONFORM TO 2016 CALIFORNIA PLUMBING CODE.
2. DRAINAGE PIPING SHALL BE CAST IRON, GALVANIZED STEEL, GALVANIZED WROUGHT IRON, LEAD, COPPER, BRASS, SCHEDULE 40 ABS DWV, SCHEDULE 40 PVC DWV, EXTRA STRENGTH VITRIFIED CLAY PIPE, OR OTHER APPROVED MATERIALS HAVING A SMOOTH AND UNIFORM BORE (UPC 701.1), EXCEPT THAT:
   - -NO GALVANIZED WROUGHT IRON OR GALVANIZED STEEL PIPE SHALL BE USED UNDERGROUND AND SHALL BE KEPT AT LEAST SIX (6) INCHES ABOVE GROUND. UPC 701.1.1
   - -ABS AND PVC DWV PIPING INSTALLATIONS SHALL BE INSTALLED IN ACCORDANCE WITH IS 5, IS 9, AND CHAPTER 15 "FIRESTOP PROTECTION." UPC 701.1.2
   - -NO VITRIFIED CLAY PIPE OR FITTINGS SHALL BE USED ABOVE GROUND. THEY SHALL BE KEPT AT LEAST TWELVE INCHES BELOW GROUND. UPC 701.1.3
   - -COPPER TUBE FOR DRAINAGE AND VENT PIPING SHALL HAVE A WEIGHT OF NOT LESS THAN THAT OF COPPER DRAINAGE TUBE TYPE DWV. UPC 701.1.4
3. DRAINAGE FITTINGS SHALL BE OF CAST IRON, MALLEABLE IRON, LEAD, BRASS, COPPER, ABS, PVC, VITRIFIED CLAY, OR OTHER APPROVED MATERIALS HAVING A SMOOTH INTERIOR WATERWAY OF THE SAME DIAMETER AS THE PIPING SERVED, AND ALL SUCH FITTINGS SHALL BE COMPATIBLE WITH THE TYPE OF PIPE USED. UPC 701.2
4. FITTINGS ON SCREWED PIPE SHALL BE OF THE RECESSED DRAINAGE TYPE. BURRED ENDS SHALL BE REAMED TO THE FULL BORE OF THE PIPE. UPC 701.2.1
5. THREADS OF DRAINAGE FITTINGS SHALL BE TAPPED SO AS TO ALLOW ONE-QUARTER (1/4) INCH PER FOOT GRADE. UPC 701.2.2
6. FITTINGS USED FOR DRAINAGE SHALL BE OF THE DRAINAGE TYPE, HAVE A SMOOTH INTERIOR WATERWAY, AND BEC ONSTRUCTED SO AS TO ALLOW ONE-QUARTER (1/4) INCH PER FOOT GRADE. UPC 701.2.3
7. VENTS SHALL BE JOINED IN STRUCTURE AS CONDITIONS PERMIT WITH SIZING PER UPC TABLE 7-5 TO MINIMIZE ROOF PENETRATIONS.
8. VENTS SHALL TERMINATE A MINIMUM OF 6" ABOVE THE ROOF THROUGH AN APPROVED FLASHING.
9. VENTS SHALL TERMINATE ON THE BACK SIDE OF ROOF, IN MECHANICAL WELL OR AS ABLE TO AVOID AS MUCH IMPACT ON THE ARCHITECTURAL CHARACTER AS POSSIBLE.
10. VENTS SHALL TERMINATE NOT LESS THAN TEN FEET HORIZONTALLY OR AT LEAST THREE FEET ABOVE ANY OPERABLE WINDOW, DOOR, OPENING, AIR INTAKE OR VENT SHAFT OR NOT LESS THAN THREE FEET IN EVERY DIRECTION FROM A LOT LINE.
11. ABS SCHEDULE 40 IS SPECIFIED FOR USE WITHIN THE SITE SEWER SYSTEM.
12. WHERE ROOF DRAINS ARE REQUIRED, OVERFLOW DRAINS HAVING THE SAME SIZE AS THE ROOF DRAINS SHALL BE INSTALLED WITH THE INLET FLOW LINE LOCATED TWO INCHES ABOVE THE LOW POINT OF THE ROOF, OR OVERFLOW SCUPPERS HAVING THREE TIMES THE SIZE OF THE ROOF DRAINS AND HAVING A MINIMUM OPENING HEIGHT OF FOUR INCHES SHALL BE INSTALLED IN THE ADJACENT PARAPET WALLS WITH THE INLET FLOW LOCATED TWO INCHES ABOVE THE LOW POINT OF THE ROOF SERVED. THE INSTALLATION AND SIZING OF OVERFLOW DRAINS, LEADERS, AND CONDUCTORS, SHALL COMPLY WITH THE CALIFORNIA PLUMBING CODE.

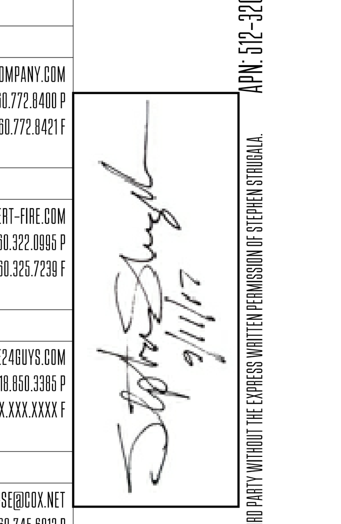
PERMIT APPLICATIONS
4. OBTAIN SEPARATE APPLICATIONS FOR THE FOLLOWING ITEMS:
- A. RETAINING WALLS OR BLOCK FENCE WALLS
- B. GRADING WORK
- C. SWIMMING POOLS
- D. FIRE SPRINKLERS

MECHANICAL, ELECTRICAL ,AND HVAC SYSTEMS TO BE DESIGN BUILD. CONTRACTOR TO INCLUDE NECESSARY DESIGN, DRAWINGS, AND PERMITTING REQUIREMENTS.

VICINITY MAP: N.T.S.


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APN: 512-320-012-2



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REVISION
- BID SET: 08-15-2019
- PLAN CHECK CORRECTIONS: 07-10-2019
- CITY SUBMITTAL: 06-24-2019

DRAWING TITLE
COVER SHEET: INDEX, GENERAL INFO

DRAWING NUMBER
A0.00

City of Palm Springs

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www.palmsprings-ca.gov

Standard Wall Detail – Not Retaining
2016

Design is limited to six (6) foot maximum high masonry wall. Six or eight inch block, run at staggered joints.

Notes:
1. This is not a retaining wall. Maximum grade differential on opposing sides of wall is 6 inches.
2. Height of wall is measured from top of footing to top of wall.
3. Center reinforcing steel in the center of the masonry blocks.
4. Lap all rebar a minimum of 24 inches. Maintain 3 inch clear from soil.
5. Grout ONLY cells that contain rebar.
6. Alternately reverse direction of rebar hook in footing. 6 inch min. hook.
7. Materials: Concrete 2,000psi. Mortar 1,800psi Grout 2,000psi Blocks C-90 N.

Inspections:
1. Footing: After trenching and placement of steel, but prior to pour.
2. Rebar: After blocks are set, and rebar is placed, but prior to grout.
3. Final: When all work is complete.

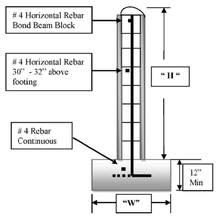


Table " A "		
" H "	" W "	Vertical Reinforcement
4'	20"	#4 @ 48" o.c.
5'	23"	#4 @ 48" o.c.
6'	29"	#4 @ 24" o.c.

Disclaimer: Alternate designs may be possible when provided with engineered analysis. Use of this standard design is at the user's risk and carries no implied or inferred guarantee.

b. On every level of a dwelling unit including basements.

c. Install per manufacturer instructions.

5. Multiple - Purpose Alarms.

Carbon monoxide alarms combined with smoke alarms shall comply with all applicable standards, and requirements for listing and approval by the State Fire Marshal for smoke alarms.

SMOKE ALARMS - CRC R314

1. Alterations, Repairs, and Additions

Smoke alarms are required for all dwelling units intended for human occupancy for a permit for alterations, repairs, or additions, exceeding $1,000. When a sleeping room is added or created, the dwelling unit shall be equipped with smoke alarms as required for new dwellings.

2. Alarm Locations

a. In each sleeping room.

b. Outside each separated sleeping area in the immediate vicinity of the bedrooms.

c. On each additional story, including basements, habitable attics, and split levels.

3. Power Source

Smoke alarms shall receive their primary power from the building wiring and battery backup. Battery only operated alarm may apply to work in existing dwelling units where repairs or alterations do not result in the removal of wall and ceiling finishes or there is no access by means of attic, basement or crawl space.

4. Interconnection

Where more than one smoke alarm is required, the smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the unit. Interconnection is not required where battery only operated alarms are allowed.

5. Alarm Requirements

All smoke alarms shall be listed as complying with UL217 and NFPA 72 as approved by the State Fire Marshal. Alarms shall be installed according to manufacturer's installation instructions.

CARBON MONOXIDE & SMOKE ALARM REQUIREMENTS

2013 CALIFORNIA RESIDENTIAL CODE

RESIDENTIAL BUILDINGS – ONE & TWO DWELLING UNITS

BACKGROUND

Senate Bill No. 183 (2010) amended the Health & Safety Code Section 17926, requiring property owners for all existing single -family dwelling units intended for human occupancy to install a carbon monoxide device on or before July 1, 2011. As of 2013, the same requirement applies to all other existing dwelling units (condos or apartments).

The adopted 2013 California Residential Code (Effective date: January 1, 2014) also requires Carbon Monoxide Devices and Smoke Alarms to be installed when a building a permit is issued for work exceeding $1,000.

CARBON MONOXIDE ALARMS - CRC R315

1. New Construction

Carbon monoxide alarms shall be installed for units within which fuel - burning appliances are installed and in units have attached garages. The new construction work includes new dwelling units, additions, repairs, and alterations to existing dwelling units. The primary power supply shall be directly connected to the permanent building wiring with battery back - up. Interconnection is required when more than one carbon monoxide alarms are installed.

Battery only operated alarm may apply to work in existing dwelling units where repairs or alterations do not result in the removal of wall and ceiling finishes or there is no access by means of attic, basement or crawl space.

2. Existing Dwellings

Where a permit is required for alterations, repairs or additions exceeding $1,000, existing dwellings or sleeping units that have attached garages or fuel - burning appliances shall be provided with a carbon monoxide alarm.

3. Alarm Requirements

Carbon monoxide alarms shall be listed as complying with UL2034. Carbon monoxide detectors shall be listed as complying with UL2075. Alarms & detectors shall be on the approved listing and installed according to manufacturer's installation instructions.

4. Alarm Locations

a. Outside of each separate dwelling unit sleeping area in the immediate vicinity of any bedroom.

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With the adoption of the 2016 California Building Codes there have been some minor changes with regard to private swimming pools. Please take note.

SWIMMING POOL SAFETY STANDARDS

Section AV100.3 of the 2016 California Residential Building Code addresses the pool safety standards for pools, spas and hot tubs installed for single family residences.

For the purpose of this code, the following definitions are applicable:

Swimming Pool: Any structure intended for swimming or recreational bathing that contains water over 18 inches deep.

Enclosure: A fence, wall, or other barrier that isolates a swimming pool from access to the home.

Enclosure Requirements:

An outdoor swimming pool, including hot tubs or spas shall be surrounded by a barrier which shall comply with the following:

1. Top of the barrier shall be at least **60** inches above grade measured on the side of the barrier which faces away from the swimming pool.

   a. Openings in the barrier shall not allow the passage of a 4 inch diameter sphere.

   b. Openings between the finish grade and the bottom of the barrier shall be a maximum of 2 inches.

   c. Barriers shall be installed so as not have any features which aid in climbing.

2. Access gates shall be a minimum of 60 inches above grade and shall be self-closing and have a self-latching device. Gates must open outward from the pool. Gates shall meet the same provisions as listed for barriers.
3. Outside surfaces shall be free of anything that can make the barrier climbable.
4. If using the wall of the house as an enclosure, exit alarms must be placed on all doors that provide direct access to the pool.

Suction Outlets:

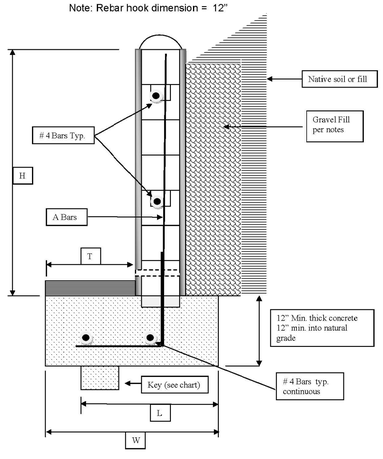
1. Pools and spas must have at least two circulation outlets, which are hydraulically balanced and separated by three feet, or
2. Utilization of skimmers, perimeter overflow systems, or other pre-approved devices in lieu of traditional suction devices.
3. The use of other outlet devices which may meet ANSI/APSP-7 standards but do not have a minimum of three feet between outlets is prohibited.

Rev:04/27/2017

Sloped Backfill Retaining Wall
2 to 1 slope

Wall Height (H)	< 4'-0"	4'-0"	4'-8"
Wall Thickness	6	8	8
Heel Dimension (L)	1'-0"	1'-0"	1'-4"
Toe Dimension (T)	1'-2"	1'-8"	1'8"
Vertical Bars (A)	#4 @ 24"	#4 @ 24"	#4 @ 24"
Footing Width (W)	2'-2"	2'-8"	3'-0"
Key (W x D)	6" x 6"	6" x 6"	8" x 12"
Block Thickness	6"	8"	8"

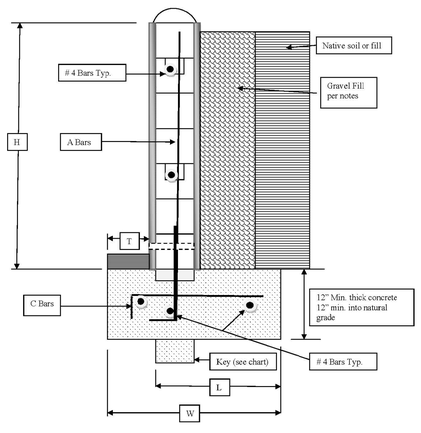
Note: Rebar hook dimension = 12"



Level Backfill Retaining Wall

Wall Height (H)	< 4'-0"	4'-0"	4'-8"	5'-4"
Wall Thickness	6	8	8	8
Heel Dimension (L)	None	None	1'-4"	1'-4"
Toe Dimension (T)	6"	6"	11"	1'-6"
Vertical Bars (A)	#4 @ 24"	#4 @ 24"	#4 @ 24"	#4 @ 16"
Footing Width (W)	1'-9"	2'-1"	2'-3"	2'-10"
Footing Bars (C)	None	None	None	$4 @ 24"
Key (W x D)	None	None	6" x 8"	8" x 12"
Block Thickness	6"	8"	8"	8"

Note: Standard Hook dimension – 6" minimum.



City of Palm Springs

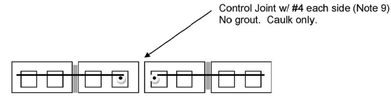
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RETAINING WALL STANDARD PLAN
Maximum 5'4" wall heights
2013

Notes:
1. Blocks must be laid with joints staggered. No running bond.
2. Height of wall is measured from top of footing to top of wall.
3. Center reinforcing steel in the center of the masonry blocks.
4. Lap all rebar a minimum of 24inches. Maintain 3 inch clear from soil.
5. Rebar hooks shall be a minimum of 6" for level backfill and 12" for sloped.
6. Mortar key: Provide 1.5" deep by 3.5" wide mortar key at top of footing.
7. Drains: Provide thru wall drainage at 6' intervals by leaving out the mortar in the vertical spaces between all blocks in the first course above the soil or head joint. Backfill with gravel 12" wide from top of footing to top of wall.
8. Materials: Concrete 2,500psi. Mortar 1,800psi Grout 2,000psi Rebar grade 60.
9. Provide 3/8" control joints for every 25' of running wall length.

Disclaimer:
Alternate designs may be possible when provided with engineered analysis. Use of this standard design is at the user's risk and carry no implied of inferred guarantee.

Inspections:
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2. Rebar: After blocks are set, and rebar is placed, but prior to grout.
3. Final: When all work is complete.



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Standard Wall Detail – Not Retaining
2016

Design is limited to six (6) foot maximum high masonry wall. Six or eight inch block, run at Stacked joints.

Notes:
1. This is not a retaining wall. Maximum grade differential on opposing sides of wall is 6 inches.
2. Height of wall is measured from top of footing to top of wall.
3. Center reinforcing steel in the center of the masonry blocks.
4. Lap all rebar a minimum of 24 inches. Maintain 3 inch clear from soil.
5. Grout ONLY cells that contain rebar.
6. Alternately reverse direction of rebar hook in footing. 6 inch min. hook.
7. Materials: Concrete 2,000psi. Mortar 1,800psi Grout 2,000psi Blocks C-90 N.

Inspections:
1. Footing: After trenching and placement of steel, but prior to pour.
2. Rebar: After blocks are set, and rebar is placed, but prior to grout.
3. Final: When all work is complete.

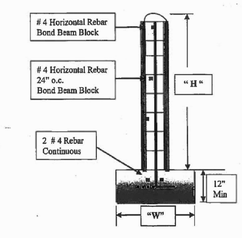


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6'	29"	#4 @ 24" o.c.

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APN: 512-320-012-2



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CITY SUBMITTAL 08-24-2018

REVISION

DRAWING NUMBER
A0.10

DRAWING TITLE
CITY CODES

- The materials are local, appropriate and reinforce the Canyons
- The site plan takes advantage of nearby views and responds to both private needs and the adjacent street life.

Architectural Style:
- The styles reflect a range of desert contemporary and Mediterranean influences the spirit of the site and fitting the extreme climate.

Architectural Materials:
- Hand-troweled, smooth stucco
- Stone and marble veneers
- Cast in place concrete board formed walls w/ applied stain
- Painted aluminum window frames
- Low E, high performance double glazing
- Recessed glazing for sun control / privacy
- Random stone paving
- Stained concrete paving at walkways

Architectural Colors:
- Saturated earth tones, including more vibrant southwest influenced colors
- Metal with aging "patina" finishes (copper, bronze, Core 10)
- Earth color stains for concrete

Architectural Textures:
- Stone and marble panels.
- Masonry walls with articulated joints
- Textured and patterned stained concrete walkways
- Smooth trowel finished stucco where it occurs

Roofing Materials:
- Tile roofs shall use a single-barrel design with mudded joints
- Metal roofs shall exhibit an aging patina appearance

Garden and Perimeter Walls:
- Garden and perimeter walls shall reflect the materials of the main re provide an accent counterpoint (e.g. smooth stucco residence with field sto

C. Residential Development

1. Permitted and Conditionally Permitted Uses

This Specific Plan shall allow all uses identified in and subject to the provisions of the W-R-1-/ R-1-A and R-1-B Zoning Districts described in Section 92.01.01 and 92.20.03 of the Pal Springs Zoning Ordinance, except as specifically described below. In general, this planning are is consistent with the provisions outlined in the City's Single-family Residential Zones.

2. Residential Development Standards

Two (2) single-family residential zones, R-1-A and R-1-B, exist in this area to provide a variet of low-density housing types and neighborhoods. Development standards have been designed b the City of Palm Springs to provide protection and enhancement of the natural and urban settir consistent with the goals of the general plan [Ord. 1294 (part), 1988]. In addition, thos properties designated with a "W" prefix, in the Watercourse Zone, will adhere to addition development standards set forth in Section 92.20.03 of the Palm Springs Zoning Ordinance.

Under Planned Development District procedures, residential projects may alter the developme standards as follows:

- Building heights may be increased to 22 feet (30 feet for hillside sites).
- Front yard setbacks may be decreased to 10 feet for habitable spaces (20 feet to garag door) provided that building designs are submitted and approved as provided in th Planned Development District.
- Building Coverage shall be a maximum of 35%.
- Garages and guest houses may be detached.

A density transfer is also included for the 115 acre "Gans" property, located on the western er of the Specific Plan, in Planning Area 2. The western 35 acres of this property shall be dedicate to conservation prior to recordation of any map on this property. As a result of this dedicatio the 70 units which would have been allowable on this acreage may be transferred to the 8 remaining acres, subject to the provisions of the Planned Development District. Therefore, th maximum number of units, 230, will occur on 80 acres, due to the density transfer.

3. Architectural Guidelines

The objectives of architectural guidelines for the Canyon residential uses are: to encourag diversity of design; both project to project and within individual developments; to encourag superior design; and to encourage a design association/relationship between the resort hotel an the single-family residential architecture.

Current Planning Director Fagg advised me that his preference is to follow the interpretation of former Director Wheeler, thereby NOT requiring architectural review and Planning Commission approval of the remaining lots in Estancias.

Of the 48 lots in Estancias, it appears that 23 were processed either under the original PDD, as minor amendments to the PDD or as individual SFR's through architectural review with Planning Commission approval – even though they were not on major thoroughfares or on hillside lots.

Below is an excerpt from Zoning Code Section 94.04.00 (E):

E. Procedures

1. Architectural review shall be required for the following:

a. All industrial, commercial, professional and residential structures and related landscape areas, except for single-family residences not located on major thoroughfares;

b. Hillside developments, including all structures, grading, landscaping, and exterior lighting, in accordance with Section 93.13.00 (Hillside developments), which may require public hearings before the planning commission;

THUS, THIS WOULD IMPLY THAT ONLY THOSE LOTS IN ESTANCIAS ON MAJOR THOROUGHFARES OR HILLSIDE LOTS MUST BE PROCESSED UNDER 94.04.00.

Development standards and guidelines for the development within the Canyon South Specific Plan are outlined in Section IV *"Development Standards and Guidelines"*. Part 4C *"Residential Development"* beginning on page IV-31 , provides the guidelines and standards for single family residential development. All residential development in Estancias and the Canyon South Specific Plan must follow these guidelines and will be reviewed by the Building Department as part of the plan check process for conformance with these standards.

The Planning Department requires that submittals for building permits for projects in Estancias must be accompanied by a letter from the HOA indicating architectural approval of the proposed development.

Below are the architectural guidelines for residential development within the Canyon South Specific Plan including Estancias.

stephen strugala

From: Ken Lyon <KenLyon@palmspringsca.gov>
Sent: Wednesday, April 5, 2017 11:55 AM
To: stephen strugala; 'Sean Lockyer'
Subject: Projects in Estancias Subdivision

Dear Stephen and Sean
Confirming our phone conversation, 664 Estrella and 3224 Estaban Way are lots in the Estancias Subdivision. The Estancias original entitlement was done under TTM 29632, Case 5.0845 PDD 262. Below is an excerpt of the PD approval for Estancias regarding development standards from City Council Reso 19317 which approved Estancias:

The PD is requesting minor adjustments to the R-1-B property development standards as follows: 1) guesthouse setback reductions of five (5) feet into the required front yard setback of twenty-five (25) feet. This request would be on an individual lot basis as guesthouses are optional. 2) Maximum building height of twenty-two (22) feet above approved grading plan pad elevations (single story houses only); 3) The perimeter wall along Acanto Drive, adjacent to the horse trail, is proposed to be six (6) to eight (8) feet high with the eight (8) foot high section to be no more than 40% of the total length of the Acanto wall frontage. The remaining perimeter is proposed to have walls of six (6) feet in height. All other property development standards for the R-1-B zone will be complied with. These modifications are consistent with the SP-1 and are minor adjustments to existing property development standards.

Estancias is within the Canyon South Specific Plan.

The Canyon South Specific Plan was approved in 2003 under Case 5.0576.

The Canyon South Specific Plan provides procedural guidance for development within the Specific Plan under Section II *"General Plan"* and specifically part *"C, Zoning"* on page II-5, which states *"The following processes will apply to development within the specific plan boundary"*, and under bullet point 2 denotes *"Architectural Review subject to Section 94.04.00"*. It further notes, *"Specifically the clubhouse reconstruction will be processed under Major Architectural Review."*

It should be noted that for single family residential development, Zoning Code Section 94.04.00 applies only to residential development on hillside lots (defined as a lot with any part with a slope greater than 10%) and those on major thoroughfares.

However former Planning Director Ewing took a more liberal interpretation of the above statement in the Specific Plan and determined that it meant ALL SFR's in Estancias require approval under Section 94.04.

Subsequently, former Planning Director Wheeler took a more literal interpretation of the reference to 94.04 in the Specific Plan and determined that if the proposed SFR's in Estancias did not meet the specific criteria under 94.04 for residential development, then they would be processed only through the Building Permit process and did NOT require Planning Commission approval under 94.04.

Thus, in answer to your question; Estaban and Estrella do NOT need to be processed under 94.04 and do not need Planning Commission approval. They must conform to the development standards of the Estancias Tract and the standards for the Canyon South Specific Plan which are reviewed like any other non-hillside / non-major thoroughfare SFR through the Building Department's Plan Check process.

Please let us know if you have further questions.

Ken Lyon, RA
Associate City Planner
Department of Planning Services
City of Palm Springs, California
3200 Tahquitz Canyon Way
Palm Springs, California 92263
T 760 323 8245 F 760 322 8360

"Make no little plans,
They have no magic to stir men's blood
And probably will not be realized.
Make big plans;
Aim high in work and hope,
Let your watchword be order,
And your beacon beauty."
Daniel Burnham, Architect and Planner

June 6, 2017 -3- Project No. 544-17167
17-06-228

If you have questions regarding this memo or the referenced report, please contact the undersigned.

Respectfully submitted,
SLADDEN ENGINEERING

Brett L. Anderson
Principal Engineer

Letter/gvm

REGISTERED PROFESSIONAL ENGINEER * BRETT L. ANDERSON No. C45398 Exp. 9/30/18 CIVIL ENGINEERING * STATE OF CALIFORNIA

Copies: 4/Mr. John Zaffarano & Mr. Tom Davila

June 6, 2017 -2- Project No. 544-17167
17-06-228

Settlements may result from the anticipated foundation loads. These estimated ultimate settlements are calculated to be a maximum of 1 inch when using the recommended bearing pressers. As a practical matter, differential settlements between footings can be assumed as one-half of the total settlement. These elastic settlements are expected to occur during construction.

Resistance to lateral loads may be provided by a combination of friction acting at the base of the slabs or foundations and passive earth pressure along the sides of the foundations. A coefficient of friction of 0.40 between soil and concrete may be used for dead load forces only. A passive earth pressure of 400 pounds per square foot, per foot of depth, may be used along the sides of footings that are placed against properly compacted native or approved import soil. If used in combination with passive resistance, the friction coefficient should be reduced by one third. These allowable lateral values are also applicable for the design of site walls and other minor structures.

It is our opinion that the remedial grading recommended in the referenced Geotechnical Investigation report remains applicable for the proposed residential structure. Because the building pad has been rough graded, the remedial grading required prior to construction should be minimal. The weathered surface soil should be moisture conditioned so that near optimum moisture content is attained to a depth of at least one foot below the bottom of the footings. The exposed surface should then be compacted so that a minimum of 90 percent relative compaction is attained. Moisture conditioning and compaction should be verified by testing.

The bearing soil is generally non-expansive and falls within the "very low" expansion category in accordance with the 2016 (CBC) classification criteria.

Sladden has reviewed the 2016 California Building Code (CBC) and summarized the current seismic design parameters for the proposed structure. The seismic design category for a structure may be determined in accordance with Section 1613 of the 2016 CBC or ASCE7. According to the 2016 CBC, Site Class D may be used to estimate design seismic loading for the proposed structure. The 2016 CBC Seismic Design Parameters are summarized below.

Risk Category (Table 1.5-1): I/II/III
Site Class (Table 1613.3.2): D
S_S (Figure 1613.3.1): 1.506g
S1 (Figure 1613.3.1): 0.706g
F_a (Table 1613.3.3(1)): 1.0
F_v (Table 1613.5.3(2)): 1.5
S_{MS} (Equation 16-37 [F_a X S_S]): 1.506g
S_{M1} (Equation 16-38 [F_v X S1]): 1.059g
S_{DS} (Equation 16-39 [2/3 X S_{MS}]): 1.004g
S_{D1} (Equation 16-40 [2/3 X S_{M1}]): 0.706g
Seismic Design Category: D

Sladden Engineering

Sladden Engineering

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6782 Stanton Avenue, Suite A, Buena Park, CA 90621 (714) 523-0952
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June 6, 2017 Project No. 544-17167
17-06-228

Mr. John Zaffarano & Mr. Tom Davila
2222 Maravilla Drive
Los Angeles, California 90068

Project: Proposed Custom Residence
664 La Estrella
The Estancias – Lot 12
Palm Springs, California

Subject: Geotechnical Update

Ref: Geotechnical Investigation report prepared by CHJ Incorporated dated July 1997; CHJ Job No. 97389-3

As requested, we have reviewed the referenced Geotechnical Investigation report prepared for the Estancias residential subdivision as it relates to the design and construction of the custom residence proposed for the currently vacant lot located at 664 La Estrella within the Estancias residential development in the City of Palm Springs, California.

The referenced Geotechnical Investigation report includes recommendations pertaining to the construction of the residential building foundations and site improvements. Based upon our review of the referenced report, it is our opinion that the recommendations included in the referenced report remain applicable for the design and construction of the proposed custom residence.

Conventional shallow spread footings bearing upon properly compacted engineered fill soil are recommended for structure support. Footings should extend at least 12 inches beneath lowest adjacent grade. Isolated square or rectangular footings at least 2 feet square and continuous footings at least 12 inches wide may be designed using an allowable bearing pressure of 1800 pounds per square foot (psf). Allowable increases of 400 psf for each additional 1 foot of width and 350 psf for each additional 6 inches of depth may be utilized, if desired. The maximum allowable bearing pressures should be 3000 psf. The allowable bearing pressures are for dead and frequently applied live loads and may be increased by 1/3 to resist wind, seismic or other transient loading. These allowable bearing pressures are also applicable for the design of site walls and other minor structures.

The recommendations made in the preceding paragraph are based on the assumption that all footings will be supported by properly compacted soil. Prior to the placement of the reinforcing steel and concrete, we recommend that any new footing excavations be inspected in order to verify that they extend into the firm compacted soil and are free of loose and disturbed materials.

ESTANCIAS AT SOUTH CANYON
C/O DESERT MANAGEMENT
400 S. Farrell Drive, Suite #B-210
Palm Springs, CA 92262
(760) 325-4257 FAX (760) 778-6846

June 20, 2019

John Zaffarano
2222 Maravilla Dr.
Los Angeles, CA 90068

Re: Estancias at South Canyon HOA/ (Lot 12)
Architectural application

Dear Mr. Zaffarano,

The revised set of building plans submitted for the above referenced property have been reviewed and approved by the Architectural Committee with the following condition:

The east privacy wall for lot 12 shall be as follows:

That section of the east privacy wall that extends beyond the terminus of the west privacy wall of lot 11, shall not add on to said privacy wall, but rather be a separate wall constructed on lot 12 running parallel to the lot 11 wall. It shall extend from 12 inches north of the terminus of the existing lot 11 wall to the end of the proposed lot 12 privacy wall, as per plans, and be finished on both sides consistent with other privacy walls proposed for lot 12.

Your patience and understanding during this review process is greatly appreciated. Please feel free in contacting me with any questions or concerns you may have.

Sincerely,

Naudia Sharp, CCAM
On Behalf of the Board of Directors
Estancias at South Canyon HOA

ESTANCIAS AT SOUTH CANYON
C/O DESERT MANAGEMENT
400 S. Farrell Drive, Suite #B-210
Palm Springs, CA 92262
(760) 325-4257 FAX (760) 778-6846

April 25, 2017

John Zaffarano
2222 Maravilla Dr.
Los Angeles, CA 90068

Re: Estancias at South Canyon HOA/664 La Estrella (Lot 12)
Architectural application

Dear Mr. Zaffarano,

The building plans submitted for the above referenced property have been reviewed and approved by the Architectural Committee.

The plans were approved which incorporated following:

1. The set back from the street was increased to 15 ft.
2. Additional landscaping was added to the setback area.
3. The square footage of the house was increased to 3450 sq. ft.

In conjunction with the fore mentioned, the installation of solar panels above the garage which will have a parapet above the great room with the visibility of the panels being 4-6" on the low end and 10-12" on the high end was also approved.

Your patience and understanding during this review process is greatly appreciated. Please feel free in contacting me with any questions or concerns you may have.

Sincerely,

Naudia Sharp, CCAM
Estancias at South Canyon HOA
On Behalf of the Board of Directors

Sladden Engineering

45090 Golf Center Parkway, Suite F, Indio, CA 92201 (760) 863-0713 Fax (760) 863-0647
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August 24, 2017 Project No. 544-17167
17-08-358

Mr. John Zaffarano & Mr. Tom Davila
2222 Maravilla Drive
Los Angeles, California 90068

Project: Proposed Custom Residence
700 La Estrella
The Estancias – Lot 12
Palm Springs, California

Subject: Foundation and Precise Grading Plan Review

Ref: Geotechnical Update report prepared by Sladden Engineering dated June 6, 2017; Project No. 544-17167, Report No. 17-06-228

As requested, we have reviewed the Foundation Plans and Details prepared by Martin Structural Consulting, Inc. along with the Precise Grading Plans prepared by Essi Engineering. The plans reviewed were prepared for proposed custom residence to be constructed on the currently vacant lot located at 700 La Estrella (identified as Lot 12) within the Estancias development in the City of Palm Springs, California. Based on our review, it is our opinion that the recommendations provided in the above referenced Geotechnical Update as well as the previous geotechnical report have been properly incorporated into these plans.

If you have questions regarding this memo or the referenced reports, please contact the undersigned.

Respectfully submitted,
SLADDEN ENGINEERING

Brett L. Anderson
Principal Engineer

Letter/gvm

REGISTERED PROFESSIONAL ENGINEER * BRETT L. ANDERSON No. C45398 Exp. 9/30/18 CIVIL ENGINEERING * STATE OF CALIFORNIA

Copies: 4 / Mr. John Zaffarano & Mr. Tom Davila

Sladden Engineering
www.Sladdenengineering.com

DRAWINGS PRODUCED BY
STEPHEN STRUGALA DESIGN LLC
STEPHEN@STEPHENSTRUGALADESIGN.COM
619.823.5442

PROJECT NAME
NEW CUSTOM RESIDENCE
700 LA ESTRELLA
PALM SPRINGS, CA 92264

APN: 512-320-012-2

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CITY SUBMITTAL 08-24-2018

REVISION

DRAWING NUMBER
A0.30

DRAWING TITLE
GEOTECHNICAL REPORT | HOA APPROVAL

GENERAL INFORMATION					
01	Project Name	Residential Building			
02	Calculation Description	Title 24 Analysis			
03	Project Location	700 La Estrella,			
04	City	Palm Springs	05	Standards Version	Compliance 2017
06	Zip Code	92264	07	Compliance Manager Version	BEMCmpMgr 2016.3.1 (1149)
08	Climate Zone	CZ15	09	Software Version	EnergyPro 7.2
10	Building Type	Single Family	11	Front Orientation (deg/Cardinal)	180
12	Project Scope	Newly Constructed	13	Number of Dwelling Units	1
14	Total Cond. Floor Area (ft²)	3200	15	Number of Zones	1
16	Slab Area (ft²)	3200	17	Number of Stories	1
18	Addition Cond. Floor Area(ft²)	n/a	19	Natural Gas Available	Yes
20	Addition Slab Area (ft²)	n/a	21	Glazing Percentage (%)	40.2%

COMPLIANCE RESULTS	
01	Building Complies with Computer Performance
02	This building incorporates features that require field testing and/or verification by a certified HERS rater under the supervision of a CEC-approved HERS provider.
03	This building incorporates one or more Special Features shown below

ENERGY USE SUMMARY

04	05	06	07	08
Energy Use (kTDV/ft²-yr)	Standard Design	Proposed Design	Compliance Margin	Percent Improvement
Space Heating	3.08	7.25	-4.17	-135.4%
Space Cooling	98.21	109.97	-11.76	-12.0%
IAQ Ventilation	0.89	0.89	0.00	0.0%
Water Heating	4.06	3.61	0.45	11.1%
Photovoltaic Offset	----	-17.32	17.32	----
Compliance Energy Total	**106.24**	**104.40**	**1.84**	**1.7%**

ENERGY DESIGN RATING

Energy Design Rating (EDR) is an alternate way to express the energy performance of a building using a scoring system where 100 represents the energy performance of the Residential Energy Services (RESNET) reference home characterization of the 2006 International Energy Conservation Code (IECC) with California modeling assumptions. A score of zero represents the energy performance of a building that combines high levels of energy efficiency with renewable generation to"zero out" its TDV energy. Because EDR includes consideration of components not regulated by Title 24, Part 6 (such as domestic appliances and consumer electronics), it is not used to show compliance with Part 6 but may instead be used by local jurisdictions pursuing local ordinances under Title 24, Part 11 (CALGreen).
As a Standard Design building under the 2016 Building Energy Efficiency Standards is significantly more efficient than the baseline EDR building, the EDR of the Standard Design building is provided for Information. Similarly, the EDR score of the Proposed Design is provided separately from the EDR value of installed PV so that the effects of efficiency and renewable energy can both be seen

EDR of Standard Efficiency	EDR of Proposed Efficiency	EDR Value of Proposed PV + Battery	Final Proposed EDR
53.1	59.1	11.5	47.6

☐	Design meets Tier 1 requirement of 15% or greater code compliance margin (CALGreen A4.203.1.2.1) and QII verification prerequisite.
☐	Design meets Tier 2 requirement of 30% or greater code compliance margin (CALGreen A4.203.1.2.2) and QII verification prerequisite.
☐	Design meets Zero Net Energy (ZNE) Design Designation requirement for Single Family in climate zone CZ15 (CALGreen A4.203.1.2.3) including on-site photovoltaic (PV) renewable energy generation sufficient to achieve a Final Energy Design Rating (EDR) of zero or less. The PV System and QII must be verified.

Notes:
- **PV generation will be capped @ proposed design electric use (no battery)**

ENERGY DESIGN RATING PV SYSTEM INPUTS - DETAILED

DC System Size (kWdc)	Module Type	CFI	Azimuth (deg)	Tilt Input	Array Angle (deg)	Tilt: (x in 12)	Inverter Eff. (%)
2.7	Standard	☐	180	deg	22.0	4.8	96

- PV System offsets 19% of the total proposed design kTDV/ft-yr

REQUIRED SPECIAL FEATURES

The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis.

- **PV System: 2.7 kWdc**
- **Cool roof**
- **Window overhangs and/or fins**
- **Non-standard duct location (any location other than attic)**
- **Recirculation with demand control, push button**

HERS FEATURE SUMMARY

The following is a summary of the features that must be field-verified by a certified HERS Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional detail is provided in the building components tables below.

Building-level Verifications:
- **IAQ mechanical ventilation**

Cooling System Verifications:
- **Minimum Airflow**
- **Verified EER**
- **Verified SEER**
- **Fan Efficacy Watts/CFM**

HVAC Distribution System Verifications:
- **Duct Sealing**
- **Low-leakage Air Handling Unit**

Domestic Hot Water System Verifications:
- **-- None --**

BUILDING - FEATURES INFORMATION

01	02	03	04	05	06	07
Project Name	Conditioned Floor Area (ft²)	Number of Dwelling Units	Number of Bedrooms	Number of Zones	Number of Ventilation Cooling Systems	Number of Water Heating Systems
Residential Building	3200	1	3	1	0	2

ZONE INFORMATION

01	02	03	04	05	06	07
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft²)	Avg. Ceiling Height	Water Heating System 1	Water Heating System 2
1st Floor	Conditioned	New AC1	3200	9	DHW Sys 1	DHW Sys 2

OPAQUE SURFACES

01	02	03	04	05	06	07	08
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft²)	Window & Door Area (ft²)	Tilt (deg)
S Wall	1st Floor	R-23 Wall insulation	180	Front	1040.4	209.5	90
N Wall	1st Floor	R-23 Wall insulation	0	Back	1040.4	173.25	90
W Wall	1st Floor	R-23 Wall insulation	270	Left	1038	561.75	90
E Wall	1st Floor	R-23 Wall insulation	90	Right	1038	377.302	90
Interior Surface	1st Floor>>__Garage__	R-15 Wall	n/a	n/a	250	0	n/a
Interior Surface 2	1st Floor>>__Garage__	R-15 Wall	n/a	n/a	250	0	n/a
S Wall 2	__Garage__	R-23 Wall insulation	180	Front	120	64	90
N Wall 2	__Garage__	R-23 Wall insulation	0	Back	120	0	90
W Wall 2	__Garage__	R-23 Wall insulation	270	Left	65	30	90
E Wall 2	__Garage__	R-23 Wall insulation	90	Right	216	0	90
S Wall 3	__Garage__	R-0 Wall	180	Front	250	0	90
N Wall 3	__Garage__	R-0 Wall	0	Back	200	0	90
E Wall 3	__Garage__	R-0 Wall	90	Right	200	156	90

OPAQUE SURFACES – Cathedral Ceilings

01	02	03	04	05	06	07	08	09	10
Name	Zone	Type	Orientation	Area (ft²)	Skylight Area (ft2)	Roof Rise (x in 12)	Roof Reflectance	Roof Emittance	Cool Roof
Roof	1st Floor	R-30 Roof with R6 Rigid	Back	3200	7.7	0	0.69	0.91	Yes
Roof 2	__Garage__	Garage R-30 Roof With R6	Back	170	0	0	0.69	0.91	No
Roof 3	__Garage__	Garage R-30 Roof With R6	Back	500	0	0	0.69	0.91	No

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10
Name	Type	Surface (Orientation-Azimuth)	Width (ft)	Height (ft)	Multiplier	Area (ft²)	U-factor	SHGC	Exterior Shading
Glass Door P4	Window	S Wall (Front-180)	3.0	9.0	1	27.0	0.43	0.19	Insect Screen (default)
Windows 16	Window	S Wall (Front-180)	1.5	9.0	1	13.5	0.34	0.24	Insect Screen (default)
Windows 1	Window	S Wall (Front-180)	3.0	9.0	1	27.0	0.34	0.24	Insect Screen (default)
Windows 7	Window	S Wall (Front-180)	1.5	9.0	1	13.5	0.34	0.24	Insect Screen (default)
Glass Door S3	Window	S Wall (Front-180)	8.0	9.0	1	72.0	0.49	0.22	Insect Screen (default)
Windows 15	Window	S Wall (Front-180)	1.5	9.0	1	13.5	0.34	0.24	Insect Screen (default)
Windows 11	Window	N Wall (Back-0)	----	----	1	74.3	0.34	0.24	Insect Screen (default)
Windows 12	Window	N Wall (Back-0)	----	----	1	27.0	0.52	0.26	Insect Screen (default)
Windows 13	Window	N Wall (Back-0)	----	----	1	13.5	0.34	0.24	Insect Screen (default)
Windows 14	Window	N Wall (Back-0)	----	----	1	13.5	0.34	0.24	Insect Screen (default)
Glass Door 16	Window	N Wall (Back-0)	----	----	1	45.0	0.49	0.22	Insect Screen (default)
Windows 9	Window	W Wall (Left-270)	2.0	9.0	1	18.0	0.34	0.24	Insect Screen (default)
Windows 8	Window	W Wall (Left-270)	4.5	9.0	1	40.5	0.34	0.24	Insect Screen (default)
Windows 6	Window	W Wall (Left-270)	1.3	9.0	1	11.3	0.34	0.24	Insect Screen (default)
Glass Door S2	Window	W Wall (Left-270)	30.0	11.0	1	330.0	0.49	0.22	Insect Screen (default)
Glass Door P2	Window	W Wall (Left-270)	3.0	9.0	1	27.0	0.43	0.19	Insect Screen (default)
Windows 5	Window	W Wall (Left-270)	4.0	9.0	1	36.0	0.34	0.24	Insect Screen (default)
Windows 4	Window	W Wall (Left-270)	7.0	9.0	1	63.0	0.34	0.24	Insect Screen (default)
Windows 3	Window	W Wall (Left-270)	1.5	9.0	1	13.5	0.34	0.24	Insect Screen (default)
Windows 2	Window	W Wall (Left-270)	2.5	9.0	1	22.5	0.52	0.26	Insect Screen (default)
Windows 17	Window	E Wall (Right-90)	1.3	9.0	0.966	11.3	0.34	0.24	Insect Screen (default)
Glass Door S1	Window	E Wall (Right-90)	30.0	11.0	1	330.0	0.49	0.22	Insect Screen (default)
Glass Door P3	Window	E Wall (Right-90)	4.0	9.0	1	36.0	0.43	0.19	Insect Screen (default)
Skylight SKY1	Skylight	Roof (Back-0)			1	4.4	0.48	0.27	
Skylight SKY2	Skylight	Roof (Back-0)			1	3.3	0.48	0.27	

OPAQUE DOORS

01	02	03	04
Name	Side of Building	Area (ft²)	U-factor
Door P1	S Wall	43.0	0.50
Door 20	S Wall 2	64.0	1.00
Door 23	W Wall 2	30.0	1.00
Door 21	E Wall 3	156.0	1.00

OVERHANGS AND FINS

01	02	03	04	05	06	07	08	09	10	11	12	13	14
		Overhang				Left Fin				Right Fin			
Window	Depth	Dist Up	Left Extent	Right Extent	Flap Ht.	Depth	Top Up	Dist L	Bot Up	Depth	Top Up	Dist R	Bot Up
Glass Door P4	4	0.1	4	4	0	0	0	0	0	0	0	0	0
Windows 16	2	0.1	2	2	0	0	0	0	0	0	0	0	0
Windows 1	2	0.1	2	2	0	0	0	0	0	0	0	0	0
Windows 7	2	0.1	2	2	0	0	0	0	0	0	0	0	0
Glass Door S3	4	0.1	4	4	0	0	0	0	0	0	0	0	0
Windows 15	2	0.1	2	2	0	0	0	0	0	0	0	0	0
Windows 9	2	0.1	2	2	0	0	0	0	0	0	0	0	0
Windows 8	2	0.1	2	2	0	0	0	0	0	0	0	0	0
Windows 6	2	0.1	2	2	0	0	0	0	0	0	0	0	0
Glass Door S2	10	0.1	10	10	0	0	0	0	0	0	0	0	0
Glass Door P2	4	0.1	4	4	0	0	0	0	0	0	0	0	0
Windows 5	2	0.1	2	2	0	0	0	0	0	0	0	0	0
Windows 4	2	0.1	2	2	0	0	0	0	0	0	0	0	0
Windows 3	2	0.1	2	2	0	0	0	0	0	0	0	0	0
Windows 2	2	0.1	2	2	0	0	0	0	0	0	0	0	0
Windows 17	2	0.1	2	2	0	0	0	0	0	0	0	0	0
Glass Door S1	10	0.1	10	10	0	0	0	0	0	0	0	0	0
Glass Door P3	4	0.1	4	4	0	0	0	0	0	0	0	0	0

OPAQUE SURFACE CONSTRUCTIONS

01	02	03	04	05	06	07
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Winter Design U-factor	Assembly Layers
R-23 Wall insulation	Exterior Walls	Wood Framed Wall	2x6 @ 16 in. O.C.	R 23	0.066	• *Inside Finish: Gypsum Board* • *Cavity / Frame: R-23 / 2x6* • *Exterior Finish: 3 Coat Stucco*
Garage R-30 Roof With R6	Cathedral Ceilings	Wood Framed Ceiling	2x12 @ 16 in. O.C.	R 30	0.029	• *Inside Finish: Gypsum Board* • *Cavity / Frame: R-30 / 2x12* • *Roof Deck: Wood Siding/sheathing/decking* • *Above Deck Insulation: R6 Sheathing* • *Roofing: Light Roof (Asphalt Shingle)*
R-0 Wall	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O.C.	none	0.361	• *Inside Finish: Gypsum Board* • *Cavity / Frame: no insul. / 2x4* • *Exterior Finish: 3 Coat Stucco*
R-30 Roof with R6 Rigid	Cathedral Ceilings	Wood Framed Ceiling	2x12 @ 16 in. O.C.	R 30	0.029	• *Inside Finish: Gypsum Board* • *Cavity / Frame: R-30 / 2x12* • *Roof Deck: Wood Siding/sheathing/decking* • *Above Deck Insulation: R6 Sheathing* • *Roofing: Light Roof (Asphalt Shingle)*
R-15 Wall	Interior Walls	Wood Framed Wall	2x4 @ 16 in. O.C.	R 15	0.086	• *Inside Finish: Gypsum Board* • *Cavity / Frame: R-15 / 2x4* • *Other Side Finish: Gypsum Board*

SLAB FLOORS

01	02	03	04	05	06	07
Name	Zone	Area (ft²)	Perimeter (ft)	Edge Insul. R-value & Depth	Carpeted Fraction	Heated
Slab-on-Grade	1st Floor	3200	651	None	0.8	No
Slab-on-Grade 2	__Garage__	170	25	None	0	No
Slab-on-Grade 3	__Garage__	500	25	None	0	No

BUILDING ENVELOPE - HERS VERIFICATION

01	02	03	04
Quality Insulation Installation (QII)	Quality Installation of Spray Foam Insulation	Building Envelope Air Leakage	CFM50
Not Required	Not Required	Not Required	n/a

WATER HEATING SYSTEMS

01	02	03	04	05	06
Name	System Type	Distribution Type	Water Heater	Number of Heaters	Solar Fraction (%)
DHW Sys 1	DHW	Recirculation with demand control, push button	DHW Heater 1 (1)	1	.0%
DHW Sys 2	DHW	Recirculation with demand control, push button	DHW Heater 2 (1)	1	.0%

WATER HEATERS

01	02	03	04	05	06	07	08	09	10	11	12
Name	Heater Element Type	Tank Type	Number of Units	Tank Volume (gal)	Uniform Energy Factor / Energy Factor / Efficiency	Input Rating / Pilot / Thermal Efficiency	Tank Insulation R-value (Int/Ext)	Standby Loss / Recovery Eff	First Hour Rating / Flow Rate	NEEA Heat Pump Brand / Model / Other	Tank Location or Ambient Condition
DHW Heater 1	Gas	Small Instantaneous	1	0	0.96 EF	<= 200 kBtu/hr	R-0/R-0	0	n/a	n/a	n/a

WATER HEATERS

01	02	03	04	05	06	07	08	09	10	11	12
Name	Heater Element Type	Tank Type	Number of Units	Tank Volume (gal)	Uniform Energy Factor / Energy Factor / Efficiency	Input Rating / Pilot / Thermal Efficiency	Tank Insulation R-value (Int/Ext)	Standby Loss / Recovery Eff	First Hour Rating / Flow Rate	NEEA Heat Pump Brand / Model / Other	Tank Location or Ambient Condition
DHW Heater 2	Gas	Small Instantaneous	1	0	0.96 EF	<= 200 kBtu/hr	R-0/R-0	0	n/a	n/a	n/a

SPACE CONDITIONING SYSTEMS

01	02	03	04	05	06
SC Sys Name	System Type	Heating Unit Name	Cooling Unit Name	Fan Name	Distribution Name
New AC1	Heat Pump Heating and Cooling System	Heat Pump System 1	Heat Pump System 1	HVAC Fan 1	Air Distribution System 1

HVAC - HEAT PUMPS

01	02	03	04	05	06	07	08	09	10	11
	System	Number of	Heating			Cooling		Zonally	Compressor	HERS
Name	Type	Units	HSPF/COP	Cap 47	Cap 17	SEER	EER	Controlled	Type	Verification
Heat Pump System 1	SplitHeatPump	4	9.5	35000	27000	16	13	Not Zonal	Single Speed	Heat Pump System 1-hers-cool

HVAC COOLING - HERS VERIFICATION

01	02	03	04	05	06
Name	Verified Airflow	Airflow Target	Verified EER	Verified SEER	Verified Refrigerant Charge
Heat Pump System 1-hers-cool	Required	350	Required	Required	Not Required

HVAC - DISTRIBUTION SYSTEMS

01	02	03	04	05	06	07
Name	Type	Duct Leakage	Insulation R-value	Duct Location	Bypass Duct	HERS Verification
Air Distribution System 1	DuctsOutdoor	Specified Lower Leakage Target	8	Outside	None	Air Distribution System 1-hers-dist

HVAC DISTRIBUTION - HERS VERIFICATION

01	02	03	04	05	06	07	08
Name	Duct Leakage Verification	Duct Leakage Target (%)	Verified Duct Location	Verified Duct Design	Buried Ducts	Deeply Buried Ducts	Low-leakage Air Handler
Air Distribution System 1-hers-dist	Required	5.0	Not Required	Not Required	Not Required	Not Required	Required

HVAC - FAN SYSTEMS

01	02	03	04
Name	Type	Fan Power (Watts/CFM)	HERS Verification
HVAC Fan 1	Single Speed PSC Furnace Fan	0.38	HVAC Fan 1-hers-fan

HVAC FAN SYSTEMS - HERS VERIFICATION

01	02	03
Name	Verified Fan Watt Draw	Required Fan Efficiency (Watts/CFM)
HVAC Fan 1-hers-fan	Required	0.38

IAQ (Indoor Air Quality) FANS

01	02	03	04	05	06
Dwelling Unit	IAQ CFM	IAQ Watts/CFM	IAQ Fan Type	IAQ Recovery Effectiveness(%)	HERS Verification
SFam IAQVentRpt	62	0.25	Default	0	Required

Project:
700 LA ESTRELLA RESIDENCE

Location:
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Palm Springs, CA 92264

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Drawing title:
TITLE-24 REPORT

Discipline: ARCHITECTURE
Date: 05.13.2019
Scale: N.T.S
Phase:

Revision

N°	Date	Description

Sheet n° T-24.1

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2016 Low-Rise Residential Mandatory Measures Summary

NOTE: Low-rise residential buildings subject to the Energy Standards must comply with all applicable mandatory measures, regardless of the compliance approach used. Review the respective section for more information. "Exceptions may apply.
(Revised04/2017)

Building Envelope Measures:	
§ 110.6(a)1:	**Air Leakage.** Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 cfm/ft² or less when tested per NFRC-400 or ASTM E283 or AAMA/WDMA/CSA 101/I.S.2/A440-2011."
§ 110.6(a)5	**Labeling.** Fenestration products must have a label meeting the requirements of § 10-111(a).
§ 110.6(b):	**Field fabricated exterior doors and fenestration** products must use U-factors and solar heat gain coefficient (SHGC) values from TABLES 110.6-A and 110.6-B for compliance and must be caulked and/or weatherstripped."
§ 110.7:	**Air Leakage.** All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulked, gasketed, or weather stripped.
§ 110.8(a):	**Insulation Certification by Manufacturers.** Insulation specified or installed must meet Standards for Insulating Material.
§ 110.8(g):	**Insulation Requirements for Heated Slab Floors.** Heated slab floors must be insulated per the requirements of § 110.8(g).
§ 110.8(i):	**Roofing Products Solar Reflectance and Thermal Emittance.** The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) when the installation of a cool roof is specified on the CFRR.
§ 110.8(j):	**Radiant Barrier.** A radiant barrier must have an emittance of 0.05 or less and be certified to the Department of Consumer Affairs.
§ 150.0(a):	**Ceiling and Rafter Roof Insulation.** Minimum R-22 insulation in wood-frame ceiling; or the weighted average U-factor must not exceed 0.043. Minimum R-19 or weighted average U-factor of 0.054 or less in a rafter roof alteration. Attic access doors must have permanently attached insulation using adhesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage. Insulation must be installed in direct contact with a continuous roof or ceiling which is sealed to limit infiltration and exfiltration as specified in § 110.7, including but not limited to placing insulation either above or below the roof deck or on top of a drywall ceiling."
§ 150.0(b):	**Loose-fill Insulation.** Loose-fill insulation must meet the manufacturer's required density for the labeled R-value.
§ 150.0(c):	**Above Grade Wall Insulation.** Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less (R-19 in 2x6 or U-factor of 0.074 or less). Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102, equivalent to an installed value of R-13 in a wood framed assembly."
§ 150.0(d):	**Raised-floor Insulation.** Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor."
§ 150.0(f):	**Slab Edge Insulation.** Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone without facings, no greater than 0.3%, have a water vapor permeance no greater than 2.0 perm/inch, be protected from physical damage and UV light deterioration; and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g).
§ 150.0(g)1:	**Vapor Retarder.** In Climate Zones 1-16, the earth floor of an enclosed crawl space must be covered with a Class I or Class II vapor retarder. This requirement also applies to controlled ventilation crawl space for buildings complying with the exception to § 150.0(d).
§ 150.0(g)2	**Vapor Retarder.** In Climate Zones 14 and 16, a Class I or Class II vapor retarder must be installed on the conditioned space side of all insulation in all exterior walls, vented attics, and unvented attics with air-permeable insulation.
§ 150.0(q):	**Fenestration Products.** Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must have a maximum U-factor of 0.58, or the weighted average U-factor of all fenestration must not exceed 0.58."
Fireplaces, Decorative Gas Appliances, and Gas Log Measures:	
§ 150.0(e)1A:	**Closable Doors.** Masonry or factory-built fireplaces must have a closable metal or glass door covering the entire opening of the firebox.
§ 150.0(e)1B:	**Combustion Intake.** Masonry or factory-built fireplaces must have a combustion outside air intake, which is at least six square inches in area and is equipped with a readily accessible, operable, and tight-fitting damper or combustion-air control device."
§ 150.0(e)1C:	**Flue Damper.** Masonry or factory-built fireplaces must have a flue damper with a readily accessible control."
§ 150.0(e)2	**Pilot Light.** Continuous burning pilot lights and the use of indoor air for cooling a firebox jacket, when that indoor air is vented to the outside of the building, are prohibited.
Space Conditioning, Water Heating, and Plumbing System Measures:	
§ 110.0-§ 110.3:	**Certification.** Heating, ventilation and air conditioning (HVAC) equipment, water heaters, showerheads, faucets, and all other regulated appliances must be certified by the manufacturer to the Energy Commission."
§ 110.2(a):	**HVAC Efficiency.** Equipment must meet the applicable efficiency requirements in TABLE 110.2-A through TABLE 110.2-K."
§ 110.2(b):	**Controls for Heat Pumps with Supplementary Electric Resistance Heaters.** Heat pumps with supplementary electric resistance heaters must have controls that prevent supplementary heater operation when the heating load can be met by the heat pump alone, and 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."
§ 110.2(c):	**Thermostats.** All unitary heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat."
§ 110.3(c)5:	**Water Heating Recirculation Loops Serving Multiple Dwelling Units.** Water heating recirculation loops serving multiple dwelling units must meet the air release valve, backflow prevention, pump priming, pump isolation valve, and recirculation loop connection requirements of § 110.3(c)5.
§ 110.3(c)7:	**Isolation Valves.** Instantaneous water heaters with an input rating greater than 6.8 kBTU/hr (2 kW) must have isolation valves with hose bibbs or other fittings on both cold water and hot water lines of water heating systems to allow for water tank flushing when the valves are closed.
§ 110.5:	**Pilot Lights.** Continuously burning pilot lights are prohibited for natural gas: fan-type central furnaces; household cooking appliances (appliances without an electrical supply voltage connection with pilot lights that consume less than 150 Btu/hr are exempt), and pool and spa heaters."
§ 150.0(j)1:	**Building Cooling and Heating Loads.** Heating and/or cooling loads are calculated in accordance with ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume; SMACNA Residential Comfort System Installation Standards Manual, or ACCA Manual J using design conditions specified in § 150.0(h)2.

2016 Low-Rise Residential Mandatory Measures Summary

§ 150.0(j)3A:	**Clearances.** Installed air conditioner and heat pump outdoor condensing units must have a clearance of at least 5 feet from the outlet of any dryer vent.
§ 150.0(j)3B:	**Liquid Line Drier.** Installed air conditioner and heat pump systems must be equipped with liquid line filter driers if required, as specified by manufacturer's instructions.
§ 150.0(j)1:	**Storage Tank Insulation.** Unfired hot water tanks, such as storage tanks and backup storage tanks for solar water-heating systems, must have R-12 external insulation or R-16 internal insulation where the internal insulation R-value is indicated on the exterior of the tank.
§ 150.0(j)2A:	**Water piping and cooling system line insulation.** For domestic hot water system piping, whether buried or unburied, all of the following must be insulated according to the requirements of TABLE 120.3-A: the first 5 feet of hot and cold water pipes from the storage tank; all piping with a nominal diameter of 3/4 inch or larger; all piping associated with a domestic hot water recirculation system regardless of the pipe diameter; piping from the heating source to storage tank or between tanks; piping buried below grade; and all hot water pipes from the heating source to kitchen fixtures."
§ 150.0(j)2B:	**Water piping and cooling system line insulation.** All domestic hot water pipes that are buried below grade must be installed in a water proof and non-crushable casing or sleeve."
§ 150.0(j)2C:	**Water piping and cooling system line insulation.** Pipe for cooling system lines must be insulated as specified in § 150.0(j)2A. Distribution piping for steam and hydronic heating systems or hot water systems must meet the requirements in TABLE 120.3-A."
§ 150.0(j)3:	**Insulation Protection.** Insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind.
§ 150.0(j)3A:	**Insulation Protection.** Insulation exposed to weather must be installed with a cover suitable for outdoor service. For example, protected by aluminum, sheet metal, painted canvas, or plastic cover. The cover must be water retardant and provide shielding from solar radiation that can cause degradation of the material.
§ 150.0(j)3B:	**Insulation Protection.** Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must have a Class I or Class II vapor retarder.
§ 150.0(j)1I:	**Gas or Propane Systems.** Systems using gas or propane water heaters to serve individual dwelling units must include all of the following: a. 120-V electrical receptacle within 3 feet of the water heater, a Category III or IV vent, or a Type B vent with straight pipe between the outside termination and the space where the water heater is installed; a condensate drain that is no more than 2 inches higher than the base of the water heater, and allows natural draining without pump assistance; and a gas supply line with a capacity of at least 200,000 Btu/hr.
§ 150.0(j)2	**Recirculating Loops.** Recirculating loops serving multiple dwelling units must meet the requirements of § 110.3(c)5.
§ 150.0(n)3	**Solar Water-heating Systems.** Solar water-heating systems and collectors must be certified and rated by the Solar Rating and Certification Corporation (SRCC) or by a listing agency that is approved by the Executive Director.
Ducts and Fans Measures:	
§ 110.8(d)3	**Ducts.** Insulation installed on an existing space-conditioning duct must comply with § 604.0 of the California Mechanical Code (CMC), if a contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement.
§ 150.0(m)1:	**CMC Compliance.** All air-distribution system ducts and plenums must be installed, sealed, and insulated to meet the requirements of CMC §§ 601.0, 602.0, 603.0, 604.0, 605.0 and ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible 3rd Edition. Portions of supply-air and return-air ducts and plenums must be insulated to a minimum installed level of R-6.0 (or higher if required by CMC § 605.0) or a minimum installed level of R-4.2 when entirely in conditioned space as confirmed through field verification and diagnostic testing (RA3.1.4.3.8). Connections of metal ducts and inner core of flexible ducts must be mechanically fastened. Openings must be sealed with mastic, tape, or other duct-closure system that meets the applicable requirements of UL 181, UL 181A, or UL 181B or aerosol sealant that meets the requirements of UL 723. If mastic or tape is used to seal openings greater than ¼ inch, the combination of mastic and either mesh or tape must be used. Building cavities, support platforms for air handlers, and plenums designed or constructed with materials other than sealed sheet metal, duct board or flexible duct must not be used for conveying conditioned air. Building cavities and support platforms may contain ducts. Ducts installed in cavities and support platforms must not be compressed to cause reductions in the cross-sectional area of the ducts."
§ 150.0(m)2	**Factory-Fabricated Duct Systems.** Factory-fabricated duct systems must comply with applicable requirements for duct construction, connections, and closures; joints and seams of duct systems and their components must not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.
§ 150.0(m)3	**Field-Fabricated Duct Systems.** Field-fabricated duct systems must comply with applicable requirements for: pressure-sensitive tapes, mastics, sealants, and other requirements specified for duct construction.
§ 150.0(m)7:	**Backdraft Dampers.** All fan systems that exchange air between the conditioned space and the outside of the building must have backdraft or automatic dampers.
§ 150.0(m)8	**Gravity Ventilation Dampers.** Gravity ventilating systems serving conditioned space must have either automatic or readily accessible, manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.
§ 150.0(m)9:	**Protection of Insulation.** Insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather must be suitable for outdoor service. For example, protected by aluminum, sheet metal, painted canvas, or plastic cover. Cellular foam insulation must be protected as above or painted with a coating that is water retardant and provides shielding from solar radiation.
§ 150.0(m)10:	**Porous Inner Core Flex Duct.** Porous inner core flex duct must have a non-porous layer between the inner core and outer vapor barrier.
§ 150.0(m)11:	**Duct System Sealing and Leakage Test.** When space conditioning systems use forced air duct systems to supply conditioned air to an occupiable space, the ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with § 150.0(m)11and Reference Residential Appendix RA3.
§ 150.0(m)12:	**Air Filtration.** Mechanical systems that supply air to an occupiable space through ductwork exceeding 10 feet in length and through a thermal conditioning component, except evaporative coolers, must be provided with air filter devices that meet the design, installation, efficiency, pressure drop, and labeling requirements of § 150.0(m)12.

2016 Low-Rise Residential Mandatory Measures Summary

§ 150.0(m)13:	**Duct System Sizing and Air Filter Grille Sizing.** Space conditioning systems that use forced air ducts to supply cooling to an occupiable space must have a hole for the placement of a static pressure probe (HSPP), or a permanently installed static pressure probe (PSPP) in the supply plenum. The space conditioning system must also demonstrate airflow ≥ 350 CFM per ton of nominal cooling capacity through the return grilles, and an air-handling unit fan efficacy ≤ 0.58 W/CFM as confirmed by field verification and diagnostic testing, in accordance with Reference Residential Appendix RA3.3. This applies to both single zone central forced air systems and every zone for zonally controlled central forced air systems."
§150.0(o):	**Ventilation for Indoor Air Quality.** All dwelling units must meet the requirements of ASHRAE Standard 62.2. Neither window operation nor continuous operation of central forced air system air handlers used in central fan integrated ventilation systems are permissible methods of providing whole-building ventilation.
§ 150.0(o)1A:	**Field Verification and Diagnostic Testing.** Whole-building ventilation airflow must be confirmed through field verification and diagnostic testing, in accordance with Reference Residential Appendix RA3.7.
Pool and Spa Systems and Equipment Measures:	
§ 110.4(a):	**Certification by Manufacturers.** Any pool or spa heating system or equipment must be certified to have all of the following: a thermal efficiency that complies with the Appliance Efficiency Regulations; an on-off switch mounted outside of the heater that allows shutting off the heater without adjusting the thermostat setting; a permanent weatherproof plate or card with operating instructions; and must not use electric resistance heating."
§ 110.4(b)1:	**Piping.** Any pool or spa heating equipment must be installed with at least 36 inches of pipe between the filter and the heater, or dedicated suction and return lines, or built-in or built-up connections to allow for future solar heating.
§ 110.4(b)2:	**Covers.** Outdoor pools or spas that have a heat pump or gas heater must have a cover.
§ 110.4(b)3:	**Directional inlets and time switches for pools.** Pools must have directional inlets that adequately mix the pool water, and a time switch that will allow all pumps to be set or programmed to run only during off-peak electric demand periods.
§ 110.5:	**Pilot Light.** Natural gas pool and spa heaters must not have a continuously burning pilot light.
§ 150.0(p):	**Pool Systems and Equipment Installation.** Residential pool systems or equipment must meet the specified requirements for pump sizing, flow rate, piping, filters, and valves."
Lighting Measures:	
§ 110.9:	**Lighting Controls and Components.** All lighting control devices and systems, ballasts, and luminaires must meet the applicable requirements of § 110.9."
§ 110.9(a):	**JA8 High Efficacy Light Sources.** To qualify as a JA8 high efficacy light source for compliance with § 150.0(k), a residential light source must be certified to the Energy Commission according to Reference Joint Appendix JA8.
§ 150.0(k)1A:	**Luminaire Efficacy.** All installed luminaires must be high efficacy in accordance with TABLE 150.0-A.
§ 150.0(k)1B:	**Blank Electrical Boxes.** The number of electrical boxes that are more than 5 feet above the finished floor and do not contain a luminaire or other device must be no greater than the number of bedrooms. These electrical boxes must be served by a dimmer, vacancy sensor control, or fan speed control.
§ 150.0(k)1C:	**Recessed Downlight Luminaires in Ceilings.** Luminaires recessed into ceilings must meet all of the requirements for: insulation contact (IC) labeling; air leakage, sealing, maintenance; and socket and light source as described in § 150.0(k)1C. A JA8-2016-E light source rated for elevated temperature must be installed by final inspection in all recessed downlight luminaires in ceilings.
§ 150.0(k)1D:	**Electronic Ballasts.** Ballasts for fluorescent lamps rated 13 watts or greater must be electronic and must have an output frequency no less than 20 kHz.
§ 150.0(k)1E:	**Night Lights.** Permanently installed night lights and night lights integral to installed luminaires or exhaust fans must be rated to consume no more than 5 watts of power per luminaire or exhaust fan as determined in accordance with § 130.0(c). Night lights do not need to be controlled by vacancy sensors.
§ 150.0(k)1F:	**Lighting Integral to Exhaust Fans.** Lighting integral to exhaust fans (except when installed by the manufacturer in kitchen exhaust hoods) must meet the applicable requirements of § 150.0(k)."
§ 150.0(k)1G:	**Screw based luminaires.** Screw based luminaires must not be recessed downlight luminaires in ceilings and must contain lamps that comply with Reference Joint Appendix JA8. Installed lamps must be marked with "JA8-2016" or "JA8-2016-E" as specified in Reference Joint Appendix JA8."
§ 150.0(k)1H:	**Enclosed Luminaires.** Light sources installed in enclosed luminaires must be JA8 compliant and must be marked with "JA8-2016-E."
§ 150.0(k)2A:	**Interior Switches and Controls.** All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A.
§ 150.0(k)2B:	**Interior Switches and Controls.** Exhaust fans must be switched separately from lighting systems."
§ 150.0(k)2C:	**Interior Switches and Controls.** Luminaires must be switched with readily accessible controls that permit the luminaires to be manually switched ON and OFF.
§ 150.0(k)2D:	**Interior Switches and Controls.** Controls and equipment must be installed in accordance with manufacturer's instructions.
§ 150.0(k)2E:	**Interior Switches and Controls.** No control must bypass a dimmer or vacancy sensor function if the control is installed to comply with § 150.0(k).
§ 150.0(k)2F:	**Interior Switches and Controls.** Lighting controls must comply with the applicable requirements of § 110.9.
§ 150.0(k)2G:	**Interior Switches and Controls.** An energy management control system (EMCS) may be used to comply with dimmer requirements if it functions as a dimmer according to § 110.9, meets the Installation Certificate requirements of § 130.4, meets the EMCS requirements of § 130.5(f), and meets all other requirements in § 150.0(k)2.
§ 150.0(k)2H:	**Interior Switches and Controls.** An EMCS may be used to comply with vacancy sensor requirements in § 150.0(k) if it meets all of the following: it functions as a vacancy sensor according to § 110.9, the Installation Certificate requirements of § 130.4, the EMCS requirements of § 130.5(f), and all other requirements in § 150.0(k)2.
§ 150.0(k)2I:	**Interior Switches and Controls.** A multiscene programmable controller may be used to comply with dimmer requirements in § 150.0(k) if it provides the functionality of a dimmer according to § 110.9, and complies with all other applicable requirements in § 150.0(k)2.

2016 Low-Rise Residential Mandatory Measures Summary

§ 150.0(k)2J:	**Interior Switches and Controls.** In bathrooms, garages, laundry rooms, and utility rooms, at least one luminaire in each of these spaces must be controlled by a vacancy sensor.
§ 150.0(k)2K:	**Interior Switches and Controls.** Dimmers or vacancy sensors must control all luminaires required to have light sources compliant with Reference Joint Appendix JA8, except luminaires in closets less than 70 square feet and luminaires in hallways."
§ 150.0(k)2L:	**Interior Switches and Controls.** Undercabinet lighting must be switched separately from other lighting systems.
§ 150.0(k)3A:	**Residential Outdoor Lighting.** For single-family residential buildings, outdoor lighting permanently mounted to a residential building, or to other buildings on the same lot, must meet the requirement in item § 150.0(k)3Ai (ON and OFF switch) and the requirements in either item § 150.0(k)3Aii (photocell and motion sensor) or item § 150.0(k)3Aiii (photo control and automatic time switch control), astronomical time clock, or EMCS).
§ 150.0(k)3B:	**Residential Outdoor Lighting.** For low-rise multifamily residential buildings, outdoor lighting for private patios, entrances, balconies, and porches, and outdoor lighting for residential parking lots and residential carports with less than eight vehicles per site must comply with either § 150.0(k)3A or with the applicable requirements in §§ 110.9, 130.0, 130.2, 130.4, 140.7 and 141.0.
§ 150.0(k)3C:	**Residential Outdoor Lighting.** For low-rise residential buildings with four or more dwelling units, outdoor lighting not regulated by § 150.0(k)3B or § 150.0(k)3D must comply with the applicable requirements in §§ 110.9, 130.0, 130.2, 130.4, 140.7, and 141.0.
§ 150.0(k)3D:	**Residential Outdoor Lighting.** Outdoor lighting for residential parking lots and residential carports with a total of eight or more vehicles per site must comply with the applicable requirements in §§ 110.9, 130.0, 130.2, 130.4, 140.7, and 141.0.
§ 150.0(k)4	**Internally illuminated address signs.** Internally illuminated address signs must comply with § 142(f), or must consume no more than 5 watts of power as determined according to § 130.0(j).
§ 150.0(k)5	**Residential Garages for Eight or More Vehicles.** Lighting for residential parking garages for eight or more vehicles must comply with the applicable requirements for nonresidential garages in §§ 110.9, 130.0, 130.1, 130.4, 140.6, and 141.0.
§ 150.0(k)6A:	**Interior Common Areas of Low-rise Multi-Family Residential Buildings.** In a low-rise multifamily residential building where the total interior common area in a single building equals 20 percent or less of the floor area, permanently installed lighting in the interior common areas in that building must be high efficacy luminaires and controlled by an occupant sensor.
§ 150.0(k)6B:	**Interior Common Areas of Low-rise Multi-Family Residential Buildings.** In a low-rise multifamily residential building where the total interior common area in a single building equals more than 20 percent of the floor area, permanently installed lighting in that building must: i. Comply with the applicable requirements in §§ 110.9, 130.0, 130.1, 140.6 and 141.0; and ii. Lighting installed in corridors and stairwells must be controlled by occupant sensors that reduce the lighting power in each space by at least 50 percent. The occupant sensors must be capable of turning the light fully on and off from all designed paths of ingress and egress.
Solar Ready Buildings:	
§ 110.10(a)1:	**Single Family Residences.** Single family residences located in subdivisions with ten or more single-family residences and where the application for a tentative subdivision map for the residences has been deemed complete by the enforcement agency must comply with the requirements of § 110.10(b) through § 110.10(e).
§ 110.10(a)2:	**Low-rise Multi-family Buildings.** Low-rise multi-family buildings must comply with the requirements of § 110.10(b) through § 110.10(d).
§ 110.10(b)1:	**Minimum Area.** The solar zone must have a minimum total area as described below. The solar zone must comply with access, pathway, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other Parts of Title 24 or in any requirements adopted by a local jurisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas greater than 10,000 square feet. For single family residences the solar zone must be located on the roof or overhang of the building and have a total area no less than 250 square feet. For low-rise multi-family buildings the solar zone must be located on the roof or overhang of the building or on the roof or overhang of another structure located within 250 feet of the building, or on covered parking installed with the building project, and have a total area no less than 15 percent of the total roof area of the building excluding any skylight area."
§ 110.10(b)2:	**Orientation.** All sections of the solar zone located on sloped roofs must be oriented between 110 degrees and 270 degrees of true north.
§ 110.10(b)3A:	**Shading.** The solar zone must not contain any obstructions, including but not limited to vents, chimneys, architectural features, and roof mounted equipment."
§ 110.10(b)3B:	**Shading.** Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at least twice the distance, measured in the horizontal plane, of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in the vertical plane."
§ 110.10(b)4	**Structural Design Loads on Construction Documents.** For areas of the roof designated as solar zone, the structural design loads for roof dead load and roof live load must be clearly indicated on the construction documents.
§ 110.10(c):	**Interconnection Pathways.** The construction documents must indicate a location for inverters and metering equipment and a pathway for routing of conduit from the solar zone to the point of interconnection with the electrical service (for single family residences the point of interconnection will be the main service panel), and a pathway for routing of plumbing from the solar zone to the water-heating system.
§ 110.10(d):	**Documentation.** A copy of the construction documents or a comparable document indicating the information from § 110.10(b) through § 110.10(c) must be provided to the occupant.
§ 110.10(e)1:	**Main Electrical Service Panel.** The main electrical service panel must have a minimum busbar rating of 200 amps.
§ 110.10(e)2	**Main Electrical Service Panel.** The main electrical service panel must have a reserved space to allow for the installation of a double-pole circuit breaker for a future solar electric installation. The reserved space must be positioned at the opposite (load) end from the input feeder location or main circuit location, and permanently marked as "For Future Solar Electric".

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **CF1R-PRF-01**

Project Name: Residential Building — **Calculation Date/Time:** 12:42, Mon, Jun 03, 2019 — **Page 10 of 10**

Calculation Description: Title 24 Analysis — **Input File Name:** 700 La Estrella, Palm Springs, CA 92264.ribd16x

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	
I, I certify that this Certificate of Compliance documentation is accurate and complete.	
Documentation Author Name: Arash Nazari	Documentation Author Signature: *Arash Nazari*
Company: A & N Design Group Inc.	Signature Date: 06/03/2019
Address: 21550 Oxnard Street #300	CEA/HERS Certification Identification (if applicable):
City/State/Zip: Woodland Hills, CA 91367	Phone: 818-288-4361
RESPONSIBLE PERSON'S DECLARATION STATEMENT	
I certify the following under penalty of perjury, under the laws of the State of California: 1. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design identified on this Certificate of Compliance. 2. I certify that the energy features and performance specifications identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations. 3. 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.	
Responsible Designer Name: Arash Nazari	Responsible Designer Signature: *Arash Nazari*
Company: A & N Design Group Inc.	Date Signed: 06/03/2019
Address: 21550 Oxnard Street #300	License:
City/State/Zip: Woodland Hills, CA 91367	Phone: 818-288-4361

Registration Number: 419-P010055606A-000-000-0000000-0000 — Registration Date/Time: 06/03/2019 13:12 — HERS Provider: CHEERS

CA Building Energy Efficiency Standards - 2016 Residential Compliance — Report Version - CF1R-01162019-1149 — Report Generated at: 2019-06-03 12:42:53

CHEERS

Project:
700 LA ESTRELLA RESIDENCE

Location:
700 La Estrella,
Palm Springs, CA 92264

120 DEGREE Z Engineering
222 North Sepulveda Blvd. Suite 2000
El Segundo, CA 90245
www.120degreez.com
818.312.1304
Mechanical | Electrical | Plumbing

Drawing title:
TITLE-24 REPORT

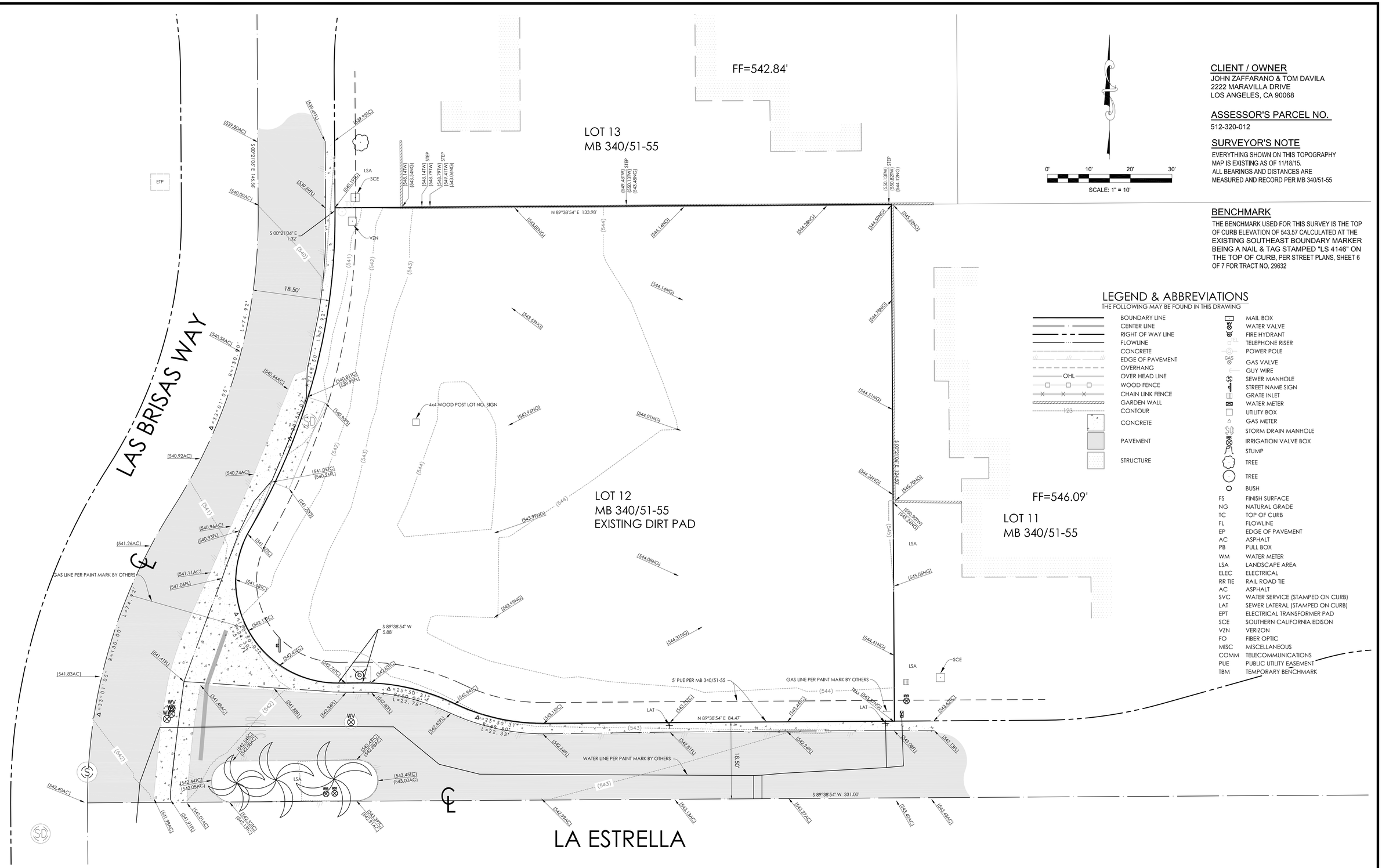
Discipline: ARCHITECTURE
Date: 05.13.2019
Scale: N.T.S
Phase:

Revision

N°	Date	Description

Sheet n° T-24.2

THESE DRAWINGS REMAIN PROPERTY OF MAYA ARCHITECTS. ALL RIGHTS RESERVED.
PARTIAL OR TOTAL REPRODUCTION IS PROHIBITED.



0' 10' 20' 30'

SCALE: 1" = 10'

CLIENT / OWNER

JOHN ZAFFARANO & TOM DAVILA
2222 MARAVILLA DRIVE
LOS ANGELES, CA 90068

ASSESSOR'S PARCEL NO.

512-320-012

SURVEYOR'S NOTE

EVERYTHING SHOWN ON THIS TOPOGRAPHY MAP IS EXISTING AS OF 11/18/15.
ALL BEARINGS AND DISTANCES ARE MEASURED AND RECORD PER MB 340/51-55

BENCHMARK

THE BENCHMARK USED FOR THIS SURVEY IS THE TOP OF CURB ELEVATION OF 543.57 CALCULATED AT THE EXISTING SOUTHEAST BOUNDARY MARKER BEING A NAIL & TAG STAMPED "LS 4146" ON THE TOP OF CURB, PER STREET PLANS, SHEET 6 OF 7 FOR TRACT NO. 29632

LEGEND & ABBREVIATIONS

THE FOLLOWING MAY BE FOUND IN THIS DRAWING

- BOUNDARY LINE
- CENTER LINE
- RIGHT OF WAY LINE
- FLOWLINE
- CONCRETE
- EDGE OF PAVEMENT
- OVERHANG
- OVER HEAD LINE
- WOOD FENCE
- CHAIN LINK FENCE
- GARDEN WALL
- CONTOUR
- CONCRETE
- PAVEMENT
- STRUCTURE

- MAIL BOX
- WATER VALVE
- FIRE HYDRANT
- TELEPHONE RISER
- POWER POLE
- GAS VALVE
- GUY WIRE
- SEWER MANHOLE
- STREET NAME SIGN
- GRATE INLET
- WATER METER
- UTILITY BOX
- GAS METER
- STORM DRAIN MANHOLE
- IRRIGATION VALVE BOX
- STUMP
- TREE
- TREE
- BUSH

FS	FINISH SURFACE
NG	NATURAL GRADE
TC	TOP OF CURB
FL	FLOWLINE
EP	EDGE OF PAVEMENT
AC	ASPHALT
PB	PULL BOX
WM	WATER METER
LSA	LANDSCAPE AREA
ELEC	ELECTRICAL
RR TIE	RAIL ROAD TIE
AC	ASPHALT
SVC	WATER SERVICE (STAMPED ON CURB)
LAT	SEWER LATERAL (STAMPED ON CURB)
EPT	ELECTRICAL TRANSFORMER PAD
SCE	SOUTHERN CALIFORNIA EDISON
VZN	VERIZON
FO	FIBER OPTIC
MISC	MISCELLANEOUS
COMM	TELECOMMUNICATIONS
PUE	PUBLIC UTILITY EASEMENT
TBM	TEMPORARY BENCHMARK

Principal

PROFESSIONAL LAND SURVEYOR MICHAEL D. VANNOTT NO. 8932 STATE OF CALIFORNIA

Prepared Under The Supervision Of:

Date: 5-1-17

PROFESSIONAL LAND SURVEYOR 8932

Approved By:

Date:

Scale: 1" = 10'

Date: MAY, 2017

Bench Mark: SEE ABOVE

P:760-913-7574 F:760-625-0082
WWW.PLUMBLINESURVEYING.COM
PLUMB LINE SURVEYING, INC.

IN THE CITY OF PALM SPRINGS, COUNTY OF RIVERSIDE
STATE OF CALIFORNIA

TOPOGRAPHY SURVEY

Sheet No. 1 OF 1 SHTS

FILE NAME:

IN THE CITY OF PALM SPRINGS, CALIFORNIA

PRECISE GRADING AND PAVING PLAN
LOT 12, TRACT 29632 MB 340/51
ZAFFARANO & DAVILA RESIDENCE

POR. OF OF SECTION 35, T 4 S, R 4 E, SBM

GRADING PLAN NOTES:

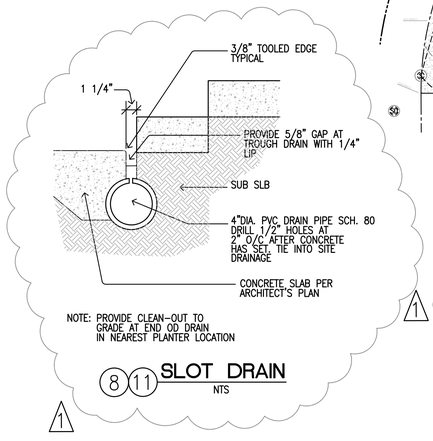
1. The work shall be done in accordance with the Standard Drawing of the City of Palm Springs and the Standard Specifications for Public Works Construction, 2012 Edition.
2. The Contractor shall be responsible for providing an effective means of dust control which shall include provisions for adequate watering during the grading process and provisions for continuance of dust control until the graded surface presents sufficient cover against wind or water erosion, so that special dust control measures are no longer necessary.
3. Nothing in these Plans shall relieve the Contractor from obtaining permits as required by Chapter 14.16 of the City of Palm Springs Municipal Code.
4. The Contractor shall set an appointment for inspection with the engineering inspector a minimum of 24 hours prior to the date of inspection.
5. All grading shall comply with Section 1804 and Appendix J of the 2013 California Building Code.
6. The Location of existing underground utilities are to be shown in a schematic manner only. Subject to the provisions of Section 4215 of the California Government Code, the Contractor shall determine the exact location of all existing utilities before commencing the Work. Contact Underground Service Alert (U.S.A.) at 1-800-227-2600 two working days prior to any excavation.
7. Dimensioning to curbs shall be to face of curb.
8. Contractor shall dispose of all debris off-site daily, unless otherwise specified by the City Engineer.
9. Contractor shall remove any abandoned utility facilities and show limits of removals on the record drawing.
10. The Contractor shall be responsible for the removal, replacement or relocation of all regulatory, warning and guide signs.
11. A "Record Drawing" (formerly called "As-Built" Drawing) of this Plan shall be submitted by the project Engineer of record to the City Engineer, for approval prior to acceptance of the Work.
12. Construction signing, lighting and barricading shall be provided on all projects as required by City Standards or as directed by the City Engineer. As a minimum, all construction signing, lighting and barricading shall be in accordance with Part 6 "Temporary Traffic Control" of the California Manual on Uniform Traffic Control Devices for Street and Highway, dated January 13, 2012, or subsequent editions in force at the time of construction.
13. The flow line of all curb and gutters and cross gutters shall be water tested before acceptance of the work.
14. Parking stalls shall be clearly delineated with a 4 to 6 inch stripe "hairpin" or elongated "U" design or other approved striping or stall delineation.
15. Final site grading and drainage flow lines shall be certified, in writing, by the Engineer of Record to be in conformance to the approved grading plan PRIOR TO FINAL INSPECTION.
16. For projects in excess of 1 acre, a Notice of Intent to comply with California General Construction Stormwater Permit (Water Quality Order 2009-0009-DWQ as modified September 2, 2009, as well prior to issuance of Grading or Building Permit, via the California Regional Water Quality Control Board (Phone No. (760) 346-7491). **A updated copy of the project-specific Storm Water Pollution Prevention Plan (SWPPP) must be kept at the project site at all times.**
17. A city approved fugitive dust (PM-10) control plan is required prior to issuance of a grading permit. All dust control measures described in AQMD Rule 403 (BEST AVAILABLE CONTROL MEASURES) and in the City-approved fugitive dust control plan shall be implemented at all times. A wind fence and proper signage, shall be erected, inspected and approved by the City's Dust Control Inspector prior to initiation of clearing, grubbing, grading or import/export of soil, or fill material at the site. Failure to call 760-323-8253, extension 8740 for inspection 72 hours prior to initiating work will result in issuance of citation by the City.
18. The block walls, retaining walls, and other structures shown on the grading plan are for location purposes only. Separate permits for the above are required from the Building Department.
19. All provisions of the preliminary soils report **(with the date of the report specified on the Grading Plan)** prepared by **a California registered Geotechnical Engineer**, shall be complied with.

STREET PAVEMENT

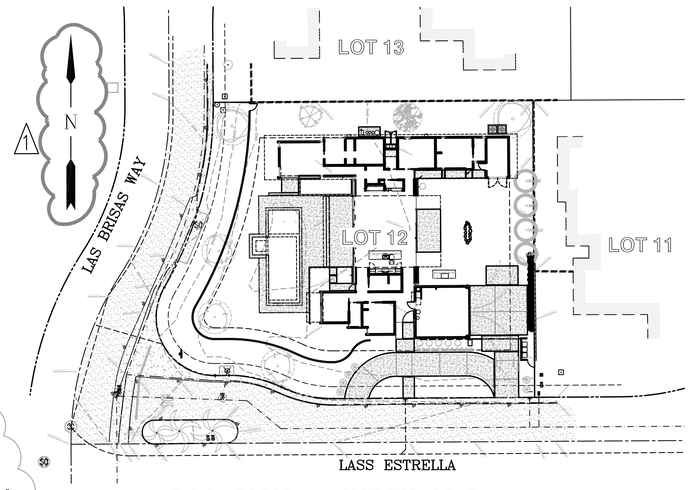
20. The asphalt concrete design shall meet the City of Palm Springs Std. Dwg. No 110 and Standard Specifications for Public Works Construction, **2012** Edition; use Type B for the base lift and Type C2 for the final 1" cap. The design shall have a HVEEM stability of 35 AND 33 respectively per the California Test Method 304 and 366. Performance Grade asphalt (PG 70-10) meeting **the 2010** Caltrans Standard Specifications shall be used.
The specified miscellaneous base shall be crushed miscellaneous base according to the Standard Specifications for Public Works Construction, **2012** Edition.

TRENCH PAVEMENT

21. Street cuts shall be paved with temporary A.C. paving immediately. Major and Secondary Thoroughfares shall be permanently paved within 15 days of the initial excavation (30 days on collector and residential streets) per City of Palm Springs Std. Dwg. No. 115. See Ordinance No. 14.16.375.
22. Trenches shall be completely backfilled and compacted to support traffic at the end of each work day. The Contractor shall place permanent pavement through intersections at the end of each work day. No trench excavation or pipe laying on Fridays, weekends or holidays will be permitted on major and secondary thoroughfares or collector streets without prior approval of the City Engineer. Contractor shall place permanent paving each Friday.
23. If, in the opinion of the City Engineer, the trench backfill is unsafe to traffic, the Contractor shall place permanent paving at the end of each work day.
24. Steel trench plating shall conform to the Caltrans Encroachment Permit Manual Section 602.1 **as revised July, 2009.**
25. The specified miscellaneous base shall be crushed miscellaneous base according to the Standard Specifications for Public Works Construction, **2012** Edition.



8 11 SLOT DRAIN
NTS



LOCATION & INDEX MAP

SHEET 1 - INDEX/FACE SHEET
SHEET 2 - PRECISE GRADING PLAN

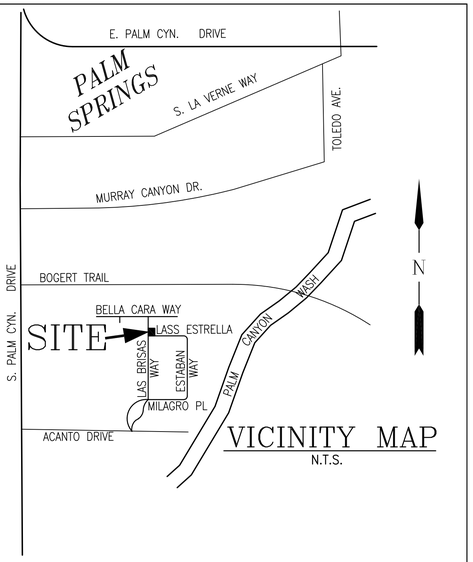
GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 000 ft.

CONSTRUCTION NOTES & QUANTITY ESTIMATE:

1	CONSTRUCT 4" THICK DRIVEWAY REINFORCED W/WWF 6X6 W1.4XW1.4 OVER 2" THICK RIVER WASHED SAND, NATURAL GRAY COLOR TOPCAST #5, RETARDANT FINISH.	1560 SF
2	CONSTRUCT YARD DRAIN. NDS #50, 6" DIA. GREEN COLOR GRATE FOR GRASS AREA AND #60S, 6" DIA. SAND COLOR . GRATE FOR DECOMPOSED GRANITE AREA.	30 EA
3	CONSTRUCT 6"X45° BEND (SDR-35).	2 EA
4	CONSTRUCT 6" PVC PIPE, (SDR-35). SLOPE AT 1% UNLESS OTHERWISE NOTED ON PLANS.	613 LF
5	CONSTRUCT BUBBLER BOX WITH GRATE TOP. NYLOPLAST 12" DRAIN BASIN PER DETAIL ON HEREON.	1 EA
6	CONSTRUCT GARDEN / RETAINING WALL PER SEPARATE PLAN AND PERMIT. HEIGHT AS SHOWN ON PLANS.	190 LF
7	CONSTRUCT RETAINING WALL PER SEPARATE PLAN AND PERMIT. HEIGHT AS SHOWN ON PLANS.	37 LF
8	INSTALL SLOT DRAIN PER DETAIL HEREON.	82 LF
9	INSTALL 4" PVC PIPE, (SDR-35). S=2% MIN. TO CONNECT ROOF/SLOT DRAINS TO ONSITE DRAIN SYSTEM.	28 LF
10	CONSTRUCT 4" THICK CONCRETE PAVEMENT OVER 2" THICK. WASHED RIVER SAND, FRENCH GRAY COLOR, TOPCAST #5 RETARDANT FINISH.	1420 SF
11	CONSTRUCT CLEAN OUT, SET FLUSH WITH FINISH SURFACE	1 EA
12	INSTALL 6"x6" TEE (PVC-SDR-35).	2 EA
13	CONSTRUCT DRAINAGE SWALES PER DETAIL ON SHEET 2.	215 LF

LEGEND

TC	TOP OF CURB
G	GUTTER
FL	FLOWLINE
FS	FINISH SURFACE
TP	TOP OF AC PVMT
C/L	CENTERLINE
R/W	RIGHT OF WAY
P/L	PPROPERTY LINE
GB	GRADE BREAK
HP	HIGH POINT
LP	LOW POINT
FF	FINISH FLOOR ELEVATION
PE	PAD ELEVATION
TRW	TOP OF RETAINING WALL
TW	TOP OF WALL
TF	TOP OF FOOTING
NG	NATURAL GROUND
FG	FINISH GROUND
SBL	SETBACK LINE
( )	EXISTING
	EXISTING BLOCK WALL
	PROPOSED BLOCK WALL PER BLDG & SAFETY HANDOUT OR SEPARATE DESIGN
	PROPOSED RETAINING WALL PER BLDG & SAFETY HANDOUT OR SEPARATE DESIGN
	PLASTIC GRASS PAVING SYSTEM
	EXTENDED STEM WALL PER ARCHITECT'S PLANS
TSW	TOP OF STEM WALL
TCO	TOP OF SEWER CLEAN OUT
SMH	SEWER MANHOLE
	PROPOSED STONE
	FLOWLINE
	CONCRETE
	STEPPING STONES PER ARCHITECT'S SPEC'S
	PREFABRICATED STAIRS PER ARCHITECT'S SPEC'S
	INDICATES PAVEMENT REMOVAL
A	INDICATES TREE TO REMAIN PER LANDSCAPE PLANS
B	INDICATES TREE TO BE REMOVED PER LANDSCAPE PLANS
C	INDICATES TREE TO BE RELOCATED PER LANDSCAPE PLANS



VICINITY MAP
N.T.S.

THOMAS BRO'S GUIDE REFERENCE:
PAGE 786, GRID F-1

OWNER/DEVELOPER:
JOHN ZAFFARANO & TOM DAVILA
2222 MARAVILLA DRIVE
LOS ANGELES, CA 90068
(323) 327-8292
CONTACT: JOHN ZAFFARANO

GEOTECHNICAL REPORT BY:
SLADDEN ENGINEERING
45-090 GOLF CENTER PARKWAY, SUITE "F"
INDIO, CA 92201
(760) 772-3893
CONTACT: BRETT ANDERSON, PE

LEGAL DESCRIPTION
LOT 12 OF TRACT MAP NO 29632 AS SHOWN BY A MAP ON FILE IN BOOK 340, PAGES 51 THROUGH 55 INCLUSIVE OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA,

ASSESSOR'S PARCEL #:
LOT 12: 512-320-012

LOT ADDRESS:
700 LA ESTRELLA

LOT AREA:
17,859.60 SF OR 0.41 ACRES

1ST REPLACEMENT MYLAR	
THIS MYLAR REPLACES THE MYLAR APPROVED BY THE CITY ENGINEERING ON	9/26/2017

REGISTERED PROFESSIONAL ENGINEER ESFANDIAR SHAHANDEH No. 47834 CIVIL STATE OF CALIFORNIA

EARTHWORK QUANTITY ESTIMATE:
200 CY RAW CUT 200 CY RAW FILL

NOTE: THE QUANTITIES SHOWN ON THESE PLANS IS FOR PERMITTING PURPOSES ONLY! THE CONTRACTOR IS RESPONSIBLE FOR THEIR OWN QUANTITIES FOR BIDDING PURPOSES!

NOTE: NOTHING SHALL BE CONSTRUCTED OR PLANTED IN THE DRIVEWAY AREA OR THE CORNER CUT-BACK AREA THAT DOES OR WILL EXCEED THE HEIGHT DISTANCE PER CITY ZONING SECTION 93.02.00D REQUIRED TO MAINTAIN AN APPROPRIATE SIGHT

NOTE: ALL IMPROVEMENTS WITHIN THE PUBLIC RIGHT-OF-WAY REQUIRE AN ENCROACHMENT PERMIT FROM THE CITY OF PALM SPRINGS

NOTE: ALL PROPOSED TREES WITHIN THE PUBLIC RIGHT-OF-WAY AND WITHIN 10' OF THE PUBLIC SIDEWALK AND/OR CURB SHALL HAVE CITY APPROVED DEEP ROOT BARRIERS INSTALLED IN ACCORDANCE WITH CPS STD DWG 904.

NOTE: ALL STORMWATER RUNOFF ACROSS THE PROPERTY SHALL BE ACCEPTED AND CONVEYED IN A MANNER ACCEPTABLE TO THE CITY ENGINEER AND RELEASED TO AN APPROVED DRAINAGE SYSTEM. STORMWATER RUNOFF MAY NOT BE RELEASED DIRECTLY INTO THE ADJACENT STREETS WITHOUT FIRST INTERCEPTING AND TREATING WITH APPROVED BEST MANAGEMENT PRACTICES (BMP'S).

UTILITY PURVEYORS:
WATER: DESERT WATER AGENCY-DEBBIE RANDALL (760) 323-4971
WHITEWATER MUTUAL WATER CO. C/O DEBBIE RANDALL (760) 323-4971
SEWER: VEOLIA WATER-GARY GRAY (760) 323-8166
TELEPHONE: VERIZON-LIZ SHIPLEY (760) 778-6952 cdsunbelt@verizon.com
GAS: THE GAS COMPANY-KEN VELASQUEZ (909) 335-7507 kvelasquez@semperutilities.com
CABLE: TIME-WARNER CABLE-RON GARRISON (760) 674-5469 ron.garrison@twcable.com
ELECTRIC: EDISON-DOUGLAS PENDLETON (760) 202-4286 douglas.pendleton@sce.com
SCHOOL DISTRICT: PALM SPRINGS UNIFIED SCHOOL DISTRICT: DAHLIA DIAZ, FACILITIES (760) 416-6000

Underground Service Alert
CALL BEFORE YOU DIG
Call: TOLL FREE
1-800
227-2600
TWO WORKING DAYS BEFORE YOU DIG

BASIS OF BEARINGS
THE BASIS OF BEARINGS FOR THIS MAP IS THE CENTERLINE OF LA ESTRELLA PER TRACT MAP NO. 29632 AS SHOWN BY A MAP ON FILE IN BOOK 340, PAGES 51 THROUGH 55 INCLUSIVE OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, BEING:
NORTH 89°38'54" EAST

SOILS ENGINEER'S CERTIFICATE
WE HAVE REVIEWED THIS PRECISE GRADING PLAN AND FOUND IT TO BE IN SUBSTANTIAL CONFORMANCE WITH THE RECOMMENDATIONS OF THE REPORT BY CHJ JOB NO. 97389-3, DATED JULY 1997 AND UPDATE LETTER PREPARED BY SLADDEN ENGINEERING, PROJECR NO. 544-17167, 17-06-228, DATED JUNE 6, 2017.

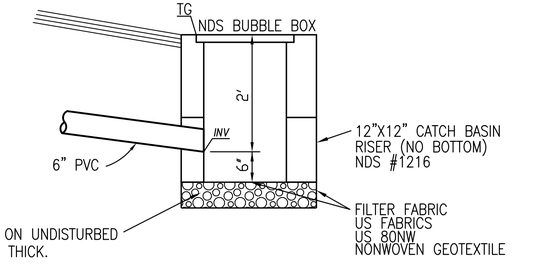
BY _____ DATED _____
BRETT L. ANDERSON RCE NO. 45389

REGISTERED PROFESSIONAL ENGINEER BRETT L. ANDERSON No. C45389 CIVIL ENGINEERING STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER ESFANDIAR SHAHANDEH No. 47834 CIVIL STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER JOHN M. BRUDIN No. 41836 CIVIL STATE OF CALIFORNIA

PERMITS REQUIRED:
GRADING PERMIT
PM10
WALL PERMIT
CITY OF PALM SPRINGS ENCROACHMENT PERMIT



5 MODIFIED BUBBLER BOX DETAIL
NTS

NO.	REVISION	APPROVED	DATE
1	REVISED SLOT DRAIN DETAIL & CONSTRUCTION NOTE #9.		
	ADDED CONSTRUCTION NOTE #13. ADDED NORTH ARROW & SCALE BAR.		
	REVISED CONSTRUCTION NOTE #1.		

BENCK MARK: ELEV. 543.57 DATUM = NGVD29
THE BENCHMARK USED FOR THIS SURVEY IS THE TOP OF CURB ELEVATION OF 543.57 CALCULATED AT THE EXISTING SOUTHEAST BOUNDARY MARKER BEING A NAIL & TAG STAMPED "LS 4146" ON THE TOP OF CURB, PER STREET PLANS, SHEET 6 OF 7 FOR TRACT NO. 29632

PREPARED UNDER THE DIRECT SUPERVISION OF:
ESSI ENGINEERING
77-570 SPRINGFIELD LANE, SUITE "C"
PALM DESERT, CA 92211
(760) 772-8400 OFFICE
(760) 772-8421 FAX
CIVIL AND STRUCTURAL ENGINEERING - PLANNING - SURVEYING
ESSI SHAHANDEH-CIVIL ENGINEER-RCE47834-EXP 12/31/17

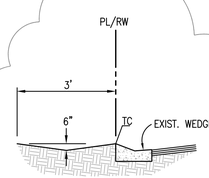
DESIGN BY: ES	CHECK	RIGHT-OF-WAY	INITIAL	DATE	REVIEWED BY: JOHN M. BRUDIN R.C.E. NO. 41836 DATE
DRAWN BY: ES		TRAFFIC ENG'G			RECOMMENDED BY: CITY OF PALM SPRINGS, CALIFORNIA MARCUS L. FULLER, P.E. R.C.E. NO. 57271 DATE
CHECKED BY: AMG	DATE	FIELD ENG'G			

CITY OF PALM SPRINGS, CALIFORNIA
PRECISE GRADING PLAN FOR
ZAFFARANO & DAVILA RESIDENCE
LOT 12, TRACT 29632, MB 340/51
APN: 512-320-012

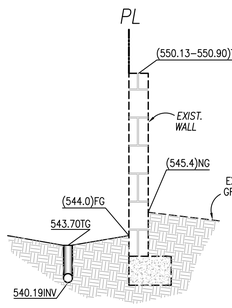
FILE NO. E-4230
DWG. NO. 20170119
CADD FILE NAME PG119001
SHEET 1A OF 2 SHTS.

CONSTRUCTION NOTES

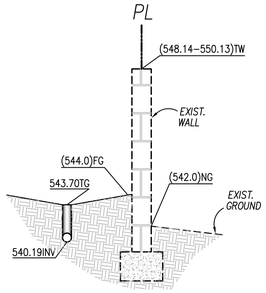
1. CONSTRUCT 4" THICK DRIVEWAY REINFORCED W/WWF 6X6 WI.4XWI.4 OVER 2" THICK RIVER WASHED SAND, NATURAL GRAY COLOR TOPCAST #5, RETARDANT FINISH.
2. CONSTRUCT YARD DRAIN. NDS #50, 6" DIA. GREEN COLOR GRATE FOR GRASS AREA AND #60S, 6" DIA. SAND COLOR. GRATE FOR DECOMPOSED GRANITE AREA.
3. CONSTRUCT 6"X45° BEND (SDR-35).
4. CONSTRUCT 6" PVC PIPE, (SDR-35). SLOPE AT 1% UNLESS OTHERWISE NOTED ON PLANS.
5. CONSTRUCT BUBBLER BOX WITH GRATE TOP. NYLOPLAST 12" DRAIN BASIN PER DETAIL ON SHEET 1.
6. CONSTRUCT GARDEN / RETAINING WALL PER SEPARATE PLAN AND PERMIT. HEIGHT AS SHOWN ON PLANS.
7. CONSTRUCT RETAINING WALL PER SEPARATE PLAN AND PERMIT. HEIGHT AS SHOWN ON PLANS.
8. INSTALL SLOT DRAIN PER DETAIL ON SHEET 1.
9. INSTALL 4" PVC PIPE, (SDR-35). S=2% MIN. TO CONNECT ROOF/SLOT DRAINS TO ONSITE DRAIN SYSTEM.
10. CONSTRUCT 4" THICK CONCRETE PAVEMENT OVER 2" THICK. WASHED RIVER SAND, FRENCH GRAY COLOR, TOPCAST #5 RETARDANT FINISH.
11. CONSTRUCT CLEAN OUT, SET FLUSH WITH FINISH SURFACE
12. INSTALL 6"x4" TEE (PVC-SDR-35).
13. CONSTRUCT DRAINAGE SWALES PER DETAIL HEREON.



13 DRAINAGE SWALES SECTION
PER THE CONDITION APPROVAL #25
NTS



SECTION "A-A"
NTS



SECTION "B-B"
NTS

Underground Service Alert

CALL BEFORE YOU DIG

Call: TOLL FREE
1-800
227-2600

TWO WORKING DAYS BEFORE YOU DIG

LOT 13
FF=(542.84)
PE=(542.0)
APN: 512-320-013
EXIST. RESIDENCE

LOT 12
FF=544.50
PE=(544.0)

LOT 11
FF=(546.09)
PE=(545.4)
APN: 512-320-011
EXIST. RESIDENCE

LAS BRISAS WAY

LASS ESTRELLA

1ST REPLACEMENT MYLAR

THIS MYLAR REPLACES THE MYLAR APPROVED BY THE CITY ENGINEERING ON 9/26/2017

REGISTERED PROFESSIONAL ENGINEER ESFANDIAR SHAHANDEH No. 47834 CIVIL STATE OF CALIFORNIA

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10' ft.

GAS LINE PER PAINT MARK BY OTHERS

NO.	REVISION	APPROVED	DATE
1	REDUCED BUILDING SIZE & CORRESPONDING HARDSCAPE. ADDED DETAIL & CONSTRUCTION NOTE #13. REVISED CONSTRUCTION NOTE #9.		
	REVISED CONSTRUCTION NOTE #1.		

BENCK MARK: ELEV. 543.57
DATUM = NGVD29

THE BENCHMARK USED FOR THIS SURVEY IS THE TOP OF CURB ELEVATION OF 543.57 CALCULATED AT THE EXISTING SOUTHEAST BOUNDARY MARKER BEING A NAIL & TAG STAMPED "LS 4146" ON THE TOP OF CURB, PER STREET PLANS, SHEET 6 OF 7 FOR TRACT NO. 29632

PREPARED UNDER THE DIRECT SUPERVISION OF:
ESSI ENGINEERING
77-570 SPRINGFIELD LANE, SUITE "C"
PALM DESERT, CA 92211
(760) 772-8400 OFFICE
(760) 772-8421 FAX
CIVIL AND STRUCTURAL ENGINEERING · PLANNING · SURVEYING
ESSI SHAHANDEH-CIVIL ENGINEER-RCE47834-EXP 12/31/17

DESIGN BY: AMG	CHECK	RIGHT-OF-WAY	INITIAL / DATE
DRAWN BY: AMG		TRAFFIC ENG'G	
CHECKED BY: ES	DATE	FIELD ENG'G	

REVIEWED BY: JOHN M. BRUDIN, R.C.E. NO. 41836, DATE

RECOMMENDED BY: CITY OF PALM SPRINGS, CALIFORNIA
MARCUS L. FULLER, P.E., R.C.E. NO. 57271, DATE

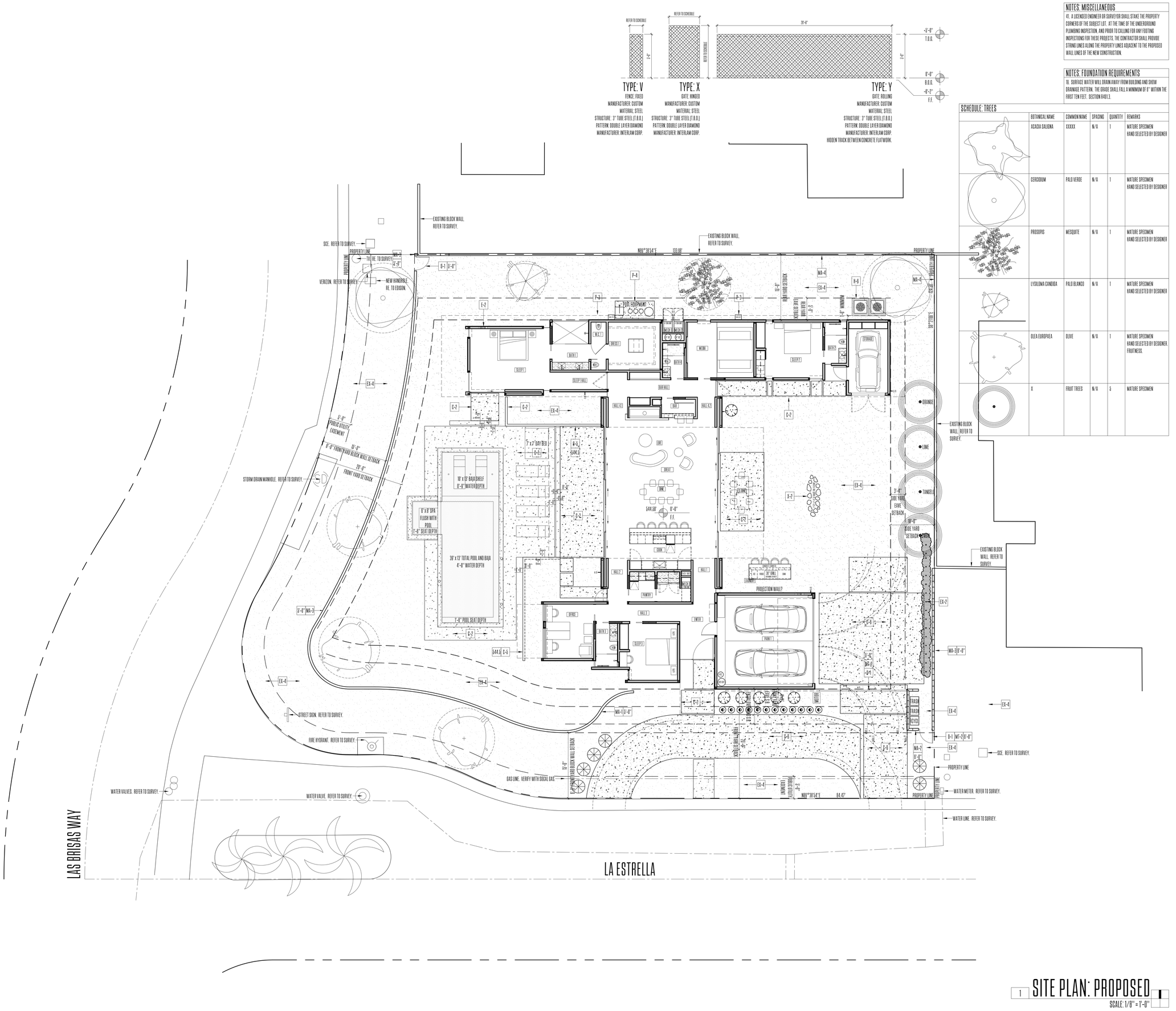
CITY OF PALM SPRINGS, CALIFORNIA

PRECISE GRADING PLAN FOR
ZAFFARANO & DAVILA RESIDENCE
LOT 12, TRACT 29632, MB 340/51
APN: 512-320-012

FILE NO. E-4230
DWG. NO. 20170119
CADD FILE NAME PG119002
SHEET 2A OF 2 SHTS.

REGISTERED PROFESSIONAL ENGINEER ESFANDIAR SHAHANDEH No. 47834 CIVIL STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER JOHN M. BRUDIN No. 41836 CIVIL STATE OF CALIFORNIA



NOTES: MISCELLANEOUS

41. A LICENSED ENGINEER OR SURVEYOR SHALL STAKE THE PROPERTY CORNERS OF THE SUBJECT LOT. AT THE TIME OF THE UNDERGROUND PLUMBING INSPECTION, AND PRIOR TO CALLING FOR ANY FOOTING INSPECTIONS FOR THESE PROJECTS, THE CONTRACTOR SHALL PROVIDE STRING LINES ALONG THE PROPERTY LINES ADJACENT TO THE PROPOSED WALL LINES OF THE NEW CONSTRUCTION.

NOTES: FOUNDATION REQUIREMENTS

16. SURFACE WATER WILL DRAIN AWAY FROM BUILDING AND SHOW DRAINAGE PATTERN. THE GRADE SHALL FALL A MINIMUM OF 8" WITHIN THE FIRST TEN FEET. SECTION R401.3.

SCHEDULE: TREES

	BOTANICAL NAME	COMMON NAME	SPACING	QUANTITY	REMARKS
	ACACIA SALIGNA	XXXXX	N/A	1	MATURE SPECIMEN HAND SELECTED BY DESIGNER
	CERCIDIUM	PALO VERDE	N/A	1	MATURE SPECIMEN HAND SELECTED BY DESIGNER
	PROSOPIS	MESQUITE	N/A	1	MATURE SPECIMEN HAND SELECTED BY DESIGNER
	LYCIUM/A CANDIDA	PALO BLANCO	N/A	1	MATURE SPECIMEN HAND SELECTED BY DESIGNER
	OLEA EUROPACA	OLIVE	N/A	1	MATURE SPECIMEN HAND SELECTED BY DESIGNER. FRUITLESS.
	X	FRUIT TREES	N/A	5	MATURE SPECIMEN

LEGEND: PROPOSED: EXTERIOR

ALL ITEMS IN LEGEND: PROPOSED, TO BE INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND SPECIFICATIONS.

03 CONCRETE
- C-1 CONCRETE SLAB ON GRADE. RE: STRUCTURAL. RE: SOILS. FINISH: POLISH AND SEAL. 1000 GRIT
- C-2 CONCRETE SLAB ON GRADE. RE: CIVIL. RE: SOILS. FINISH: ACID WASH.
- C-5 CAST IN PLACE CONCRETE WALL. RE: STRUCTURAL. 2'-X-X" SMOOTH PANELS FORMED FINISH. PROVIDE WATER REPELLENT.
- C-6 CONCRETE SLAB ON GRADE. RE: CIVIL. RE: SOILS. FINISH: SAND. COLOR: NATURAL GREY.

04 MASONRY
- MA-3 CONCRETE BLOCK WALL. SIZE: 8X8X16. SOLID TOP COURSE. MANUFACTURER: ORCO FINISH: PRECISION. STANDARD WHEN NOT EXPOSED. COLOR: GREY. MEDIUM WEIGHT.
- MA-4 EXISTING CONCRETE BLOCK WALL. FINISH: STUCCO. TEXTURED. 20/30 SAND FLOAT. COLOR: CRYSTAL WHITE.

05 METAL
- M-2 METAL GATE / FENCE. DESIGN T.B.D.

08 OPENINGS
- D-1 DOOR. RE: A0.01. DOOR TYPES AND SCHEDULE: DOORS.

10 SPECIALTIES
- X-2 AT GRADE GAS FIREPLACE.
- X-3 BBQ. BUILT IN CAST IN PLACE CONCRETE WALL. BBQ INSTALLATION GUIDE TO BE PROVIDED TO BUILDING INSPECTOR TO VERIFY ALL CLEARANCES TO COMBUSTIBLES.
- X-4 RAISED FIREPLACE. CAST IN PLACE CONCRETE WALLS.

23 HVAC
- H-6 HVAC CONDENSER.

22 PLUMBING
- P-1 HOSE BIB.
- P-3 WATER HEATER.
- P-4 GAS METER.

26 ELECTRICAL
- E-1 ELECTRIC METER.
- E-2 ELECTRIC MAIN SERVICE PANEL.

32 EXTERIOR IMPROVEMENTS
- EX-1 TREE. REFER TO LANDSCAPE PLAN.
- EX-2 FICUS. REFER TO LANDSCAPE PLAN.
- EX-3 GRASS. ARTIFICIAL
- EX-4 DECOMPOSED GRANITE. DESERT GOLD.
- EX-5 WATER FEATURE. T.B.D. PROVIDE STUBS FOR FUTURE FEATURE.

NOTES: PROJECT DATA

A PROPOSED NEW RESIDENCE LOCATED AT 700 LA ESTRELLA.

TOTAL LOT AREA:	17,882 S.F.
EXISTING LOT COVERAGE:	0%
PROPOSED INTERIOR SQUARE FOOTAGE:	3,173 S.F. 2
STORAGE:	170 S.F.
GARAGE:	500 S.F.
TOTAL PROPOSED STRUCTURE	3,843 S.F. 2
PROPOSED LOT COVERAGE	22%

CITY OF PALM SPRINGS ZONING DATA

ZONE:	R-1-B
SITE SETBACKS:	FRONT: MAIN: 25 FEET
	FRONT: SECONDARY: 20 FEET
	SIDE: 10 FEET
	REAR: 15 FEET
USDA ZONE:	10-A
SUNSET MAGAZINE TIME:	13

1 SITE PLAN: PROPOSED
SCALE: 1/8" = 1'-0"

DRAWINGS PRODUCED BY
STEPHEN STROBALA DESIGN LLC
STEPHEN@STEPHENSTROBALADESIGN.COM
619.823.5442

PROJECT: 18014
NEW CUSTOM RESIDENCE
700 LA ESTRELLA
PALM SPRINGS, CA 92264
APN: 512-320-012-2

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REVISION
BID SET: 08-14-2019
PLAN CHECK CORRECTIONS: 09-24-2019
CITY SUBMITTAL: 08-24-2019

DRAWING TITLE
SITE PLAN: PROPOSED

DRAWING NUMBER
A1.01

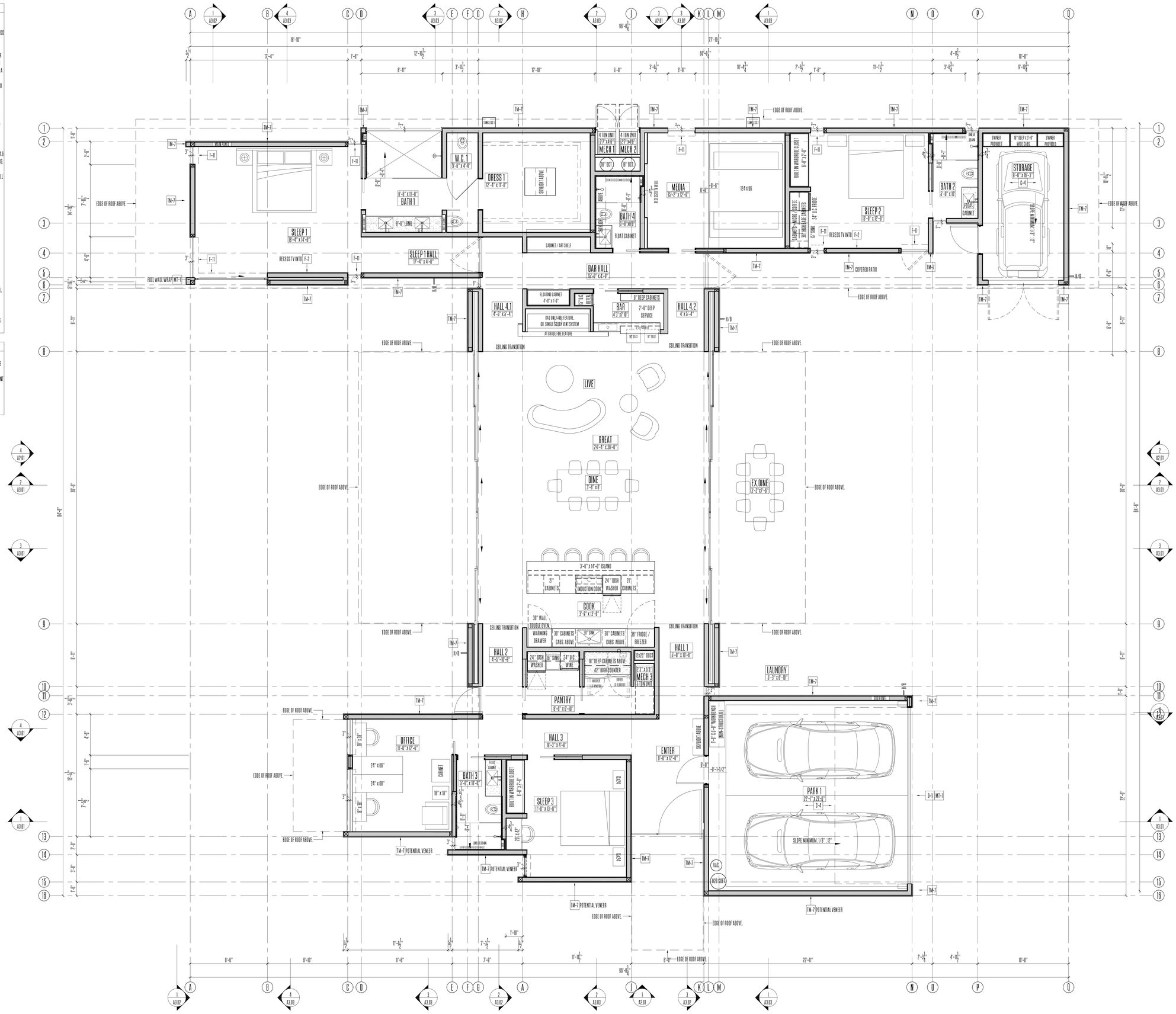
NOTES: PLUMBING

1. ALL PLUMBING FOR WATER SUPPLY LINES SHALL CONFORM TO 2019 CALIFORNIA PLUMBING CODE.
2. WATER DISTRIBUTION PIPE. BUILDING SUPPLY WATER PIPE, AND FITTINGS SHALL BE OF BRASS, COPPER, CAST IRON, CPVC, GALVANIZED MALLEABLE IRON, GALVANIZED WROUGHT IRON, GALVANIZED STEEL, PEX, OR OTHER APPROVED MATERIALS. ASBESTOS-CEMENT, PE, PVC, PEX-AL-PEX WATER PIPE, TUBING, AND FITTINGS MANUFACTURED TO RECOGNIZED STANDARDS MAY BE USED FOR HOT AND COLD WATER DISTRIBUTION SYSTEMS WITHIN A BUILDING. (IE-AL-PE WATER PIPE AND FITTINGS MAY BE USED FOR COLD WATER DISTRIBUTION SYSTEMS WITHIN A BUILDING. ALL MATERIALS USED IN THE WATER SUPPLY SYSTEM, EXCEPT VALVES AND SIMILAR DEVICES, SHALL BE OF A LIKE MATERIAL, EXCEPT WHERE OTHERWISE APPROVED BY THE AUTHORITY HAVING JURISDICTION. UPC 604.1
3. LISTED FLEXIBLE COPPER WATER CONNECTORS SHALL BE INSTALLED IN READILY ACCESSIBLE LOCATIONS, UNLESS OTHERWISE LISTED. UPC 604.4
4. CAST IRON FITTINGS UP TO AND INCLUDING TWO (2) INCHES IN SIZE, WHEN USED IN CONNECTION WITH POTABLE WATER PIPING, SHALL BE GALVANIZED. UPC 604.5
5. ALL MALLEABLE IRON WATER FITTINGS SHALL BE GALVANIZED. UPC 604.6
6. APPROVED PLASTIC MATERIALS MAY BE USED IN WATER SERVICE PIPING, PROVIDED THAT WHERE METAL WATER SERVICE PIPING IS USED OR ELECTRICAL GROUNDING PURPOSES, REPLACEMENT PIPING THEREFOR SHALL BE OF LIKE MATERIALS. UPC 604.9
7. CROSS-LINKED POLYETHYLENE (PEX) TUBING SHALL BE MARKED WITH THE APPROPRIATE STANDARD DESIGNATION(S) LISTED IN UPC TABLE 14-1 FOR WHICH THE TUBING HAS BEEN APPROVED. PEX TUBING SHALL BE INSTALLED IN COMPLIANCE WITH THE PROVISIONS OF THE FOLLOWING:
   PEX TUBING SHALL NOT BE INSTALLED WITHIN THE FIRST EIGHTEEN (18) INCHES OF PIPING CONNECTED TO A WATER HEATER. UPC 604.11 & 604.11.2
8. WATER CONSERVING FIXTURES: NEW WATER CLOSETS SHALL USE NO MORE THAN 1.28 GALLONS OF WATER PER FLUSH. KITCHEN FAUCETS MAY NOT EXCEED 1.8 GPM. LAVATORIES ARE LIMITED TO 1.2 GPM, AND SHOWERHEADS MAY NOT EXCEED 1.8 GPM OF FLOW. CPC SECTIONS 407, 408, 411, 412.
9. ABS SCHEDULE 40 SHALL BE USED FOR THE SITE SEWER.
28. THE GAS PIPE SIZING FOR INSTANTANEOUS TYPE WATER HEATER SHALL BE BASED UPON A MINIMUM 199,000 BTU GAS INPUT RATING. ENERGY STANDARDS 150.0(N).
29. THE CONTROL VALVES IN SHOWERS, TUB/SHOWERS, BATHTUBS, AND BIDETS MUST BE PRESSURE BALANCED OR THERMOSTATIC MIXING VALVES. CPC SECTIONS 408, 409, 410.

NOTES: MECHANICAL

23. THE TOTAL LENGTH OF 4" FLEXIBLE METAL DUCT SHALL NOT EXCEED 0 FEET. THE MAXIMUM LENGTH OF 4" DIAMETER RIGID METAL DUCT SHALL BE 85 FEET FOR ZERO 90 DEGREE ELBOWS. 35 FEET FOR 1, 47 FEET FOR 2, 38 FEET FOR 3, AND 29 FEET FOR 4 90 DEGREE ELBOWS. THE DRYER SHALL VENT TO THE EXTERIOR THROUGH THE ROOF.

LAUNDRY
MANUFACTURER: LG
MODEL: DLEX8701W (GAS)



LEGEND: PROPOSED

ALL ITEMS IN LEGEND: PROPOSED, TO BE INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND SPECIFICATIONS.

03 CONCRETE
C-1 CONCRETE SLAB ON GRADE. RE: STRUCTURAL. RE: SOILS.
FINISH: POLISH AND SEAL. 1000 GRIT. REFER TO A1.02.1 FOR CONCRETE CONTROL JOINT PLAN. VERIFY WITH CONTRACTOR.
C-3 CONCRETE FOOTING. RE: STRUCTURAL. RE: SOILS.
C-4 CONCRETE SLAB ON GRADE. RE: STRUCTURAL. RE: SOILS.
FINISH: STANDARD CONCRETE. EPOXY SEALER.

04 MASONRY
MA-1 CONCRETE BLOCK WALL. SIZE: 8X8X16. STACK BOND.
MANUFACTURER: ORCO
FINISH: PRECISION.
COLOR: GREY, MEDIUM WEIGHT.

06 METAL
MT-1 BREAK METAL FASCIA. 18 GAGE.
MANUFACTURER: TAYLOR METALS
MODEL / COLOR: KYNAR / (DARK GREY)
MT-2 PARAPET SCREED.
MANUFACTURER: TEKTRIM
MODEL: XXXXX

06 WOOD
W-1 2x6. PRESSURE TREATED.
W-2 2x4
W-3 2x6
W-4 2x8

07 THERMAL AND MOISTURE PROTECTION
TM-1 WALL INSULATION. REFER TO TITLE 24 REPORT.
TM-2 SLAB INSULATION. REFER TO TITLE 24 REPORT.
TM-3 CEILING INSULATION. REFER TO TITLE 24 REPORT. PROVIDE VENTILATED AIR SPACE BETWEEN INSULATION AND ROOF DECK.
TM-4 SPRAY FOAM ROOF. SLOPE MINIMUM 1/4" : 12" TO EAVES, SCUPPERS, AND/OR ROOF DRAINS. R805.B.1. R806.1.1.
CLASS "A" ASSEMBLY. ICC-ES: 2122
MANUFACTURER: HENRY COMPANY
MODEL: PERMAX 2.0 WITH PRO-GRADE 295 COATING
TM-5 EDGE GANT STRIP.
TM-8 ROOF CRICKET.
TM-7 STUCCO SYSTEM OVER METAL LATHE.
MANUFACTURER: LA HABRA
FINISH: SANTA BARBARA MISSION.
COLOR: CRYSTAL WHITE.
TM-8 STUCCO PLASTER STOP. PROVIDE SEALANT WHERE OCCURS.
MANUFACTURER: VINYLCORP
MODEL 7/8" 6078
TM-9 BITHUTHENE WATER PROOFING MEMBRANE.
TM-10 TWO LAYERS 30# FELT. CONTRACTOR CHOICE.
TM-11 VAPOR BARRIER.
TM-12 DPE RAINSCREEN
MANUFACTURER: SOLUS LUMBER
SIZE: 1" X 4"
TM-13 EXTERIOR CEILING VENTING.
MANUFACTURER: VINYLCORP
MODEL: RE: A1.05: ELECTRICAL PLAN. NOTES: ROOF VENTS, FOR APPROPRIATE CONTINUOUS VENTING SIZE.

08 OPENINGS
0-1 DOOR. RE: 2A7.1, DOOR TYPES AND SCHEDULE: DOORS.
0-2 WINDOW. RE: 3A7.1, WINDOW TYPES AND SCHED: WINDOWS.
0-3 GLASS PANEL. RE: 2A7.1, DOOR TYPES AND SCHEDULE: DOORS.

09 FINISHES
F-1 5/8" TYPE "X" GYPSUM BOARD. FROM FLOOR TO ROOF DECK. LEVEL 4/5 FINISH. PAINTED (COLOR T.B.D.)
F-2 5/8" GYPSUM BOARD. LEVEL 4/5 FINISH. PAINTED (COLOR).
F-3.1 GYPSUM BOARD "J" EDGE METAL.
F-3.2 GYPSUM BOARD BASEBOARD EDGE METAL. 1" REVEAL.
F-4 CABINETS. REFER TO INTERIOR ELEVATIONS.
F-5 COUNTERTOP. REFER TO LEGEND: COUNTERTOPS.
F-6 TILE / SLAB. REFER TO LEGEND: TILE / SLAB
F-7 CLOSET ROD AND SHELVING. RE. TO INTER. ELVTNS. FOR SPECS.
F-8 MIRROR. REFER TO INTERIOR ELEVATIONS FOR SPECIFICATIONS
F-9 WOOD VENEER. REFER TO LEGEND: COUNTERTOP, CABINETS, CLOSETS. F-5-9
F-10 CURTAIN TRACK. RECESS INTO CEILING MATERIAL.
MANUFACTURER: CURTAIN-TRACKS.COM
MODEL: 84005
F-12 WALL PAPER. REFER TO SPECIFICATIONS.

12 FURNISHINGS
F-11 RECESSED ROLLING SHADES. MOTORIZED AND MANUAL.
MANUFACTURER: SKYCO
MODEL: SINGLE ROLLER.

10 SPECIALTIES
X-1 GAS FIRE FEATURE.
X-2 AT GRADE GAS FIRE FEATURE.
X-3 BBQ. BUILT IN MASONRY BLOCK WALL. BBQ INSTALLATION GUIDE TO BE PROVIDED TO BUILDING INSPECTOR TO VERIFY ALL CLEARANCES TO COMBUSTIBLES.

23 HVAC
H-1 HVAC UNIT. RE: M.1 FOR SPECIFICATIONS.
H-2 HVAC DUCT. RE: M.1 FOR SPECIFICATIONS.
H-3 HVAC GRILL. RE: M.1 FOR SPECIFICATIONS.
H-4 DRYER DUCT. VENT THROUGH WALL TO ROOF ABOVE.
H-5 HVAC DOORBOOK.
H-6 HVAC CONDENSER.

22 PLUMBING
P-1 HOSE BIB.
P-2 PLUMBING FIXTURE.
P-3 WATER HEATER.
P-4 ROOF DRAIN AND OVERFLOW. REFER TO A1.03: ROOF PLAN PROPOSED. NOTES: PLUMBING: ROOF DRAIN SIZING.
P-5 MISTING SYSTEM. REFER TO SPECIFICATIONS.
P-6 PLUMBING VENT. REFER TO A1.03: ROOF. PAINT "X" COLOR. CONCEAL FROM PEDESTRIAN VIEW AT EXTERIOR AND FROM INTERIOR VIEW AT SKYLIGHTS.

26 ELECTRICAL
E-1 ELECTRIC METER.
E-2 ELECTRIC MAIN SERVICE PANEL. REFER TO ELECTRICAL.
E-3 ELECTRIC SUB-PANEL. REFER TO ELECTRICAL

STRUCTURAL
S-1 WOOD BEAM. RE: STRUCTURAL.
S-2 WOOD ENGINEERED BEAM. RE: STRUCTURAL.
S-3 WOOD COLUMN. RE: STRUCTURAL.
S-4 PLYWOOD SHEATHING. RE: STRUCTURAL.
S-5 WOOD JOIST. RE: STRUCTURAL.
S-6 WOOD RAFTERS. RE: STRUCTURAL.
S-7 WOOD HEADER. RE: STRUCTURAL.
S-8 STEEL COLUMN. RE: STRUCTURAL.
S-9 STEEL BEAM. RE: STRUCTURAL.

1 FLOOR PLAN: PROPOSED
SCALE: 1/4" = 1'-0"

DRAWINGS PRODUCED BY
STEMEN STRUGALA DESIGN LLC
STEPHEN@STEPHENSTRUGALADESIGN.COM
619.823.5442

PROJECT: 18014
NEW CUSTOM RESIDENCE
700 LA ESTRELLA
PALM SPRINGS, CA 92264
APN: 512-320-012-2

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REVISION
BID SET: 09-24-2019
PLANCHECK CORRECTIONS: 07-10-2019
CITY SUBMITTAL: 06-24-2019

DRAWING NUMBER
A1.02.0
DRAWING TITLE
FLOOR PLAN: PROPOSED

NOTES: MECHANICAL

23. THE TOTAL LENGTH OF 4" FLEXIBLE METAL DUCT SHALL NOT EXCEED 8 FEET. THE MAXIMUM LENGTH OF 4" DIAMETER RIGID METAL DUCT SHALL BE 85 FEET FOR ZERO 90 DEGREE ELBOWS, 55 FEET FOR 1, 47 FEET FOR 2, 39 FEET FOR 3, AND 29 FEET FOR 4 90 DEGREE ELBOWS. THE DRYER SHALL VENT TO THE EXTERIOR THROUGH THE ROOF.

LAUNDRY
MANUFACTURER: LG
MODEL: DLEX8010W (GAS)

NOTES: PLUMBING: ROOF DRAIN SIZING

AVERAGE HOURLY RAINFALL AMOUNT FOR PALM SPRINGS: 3"

1. PARK:

ROOF AREA: 495 SQ. FT.
PIPE SIZE: 2" AND 2" OVERFLOW DRAIN (000 TOTAL SQUARE FOOTAGE COVERED PER DRAIN)

2. REMAINING ROOF:

THE REMAINING ROOF SHALL SLOPE TO DRAIN OVER THE ROOF EDGES AND DRAIN PER THE GRADING PLANS SHEET 1 AND SHEET 2.

R903.4: ROOF DRAINAGE: UNLESS ROOFS ARE SLOPED TO DRAIN OVER ROOF EDGES, ROOF DRAINS SHALL BE INSTALLED AT EACH LOW POINT OF THE ROOF WHERE REQUIRED FOR ROOF DRAINAGE. SCUPPERS SHALL BE PLACED LEVEL WITH THE ROOF SURFACE IN A WALL OR PARAPET. THE SCUPPER SHALL BE LOCATED AS DETERMINED BY THE ROOF SLOPE AND CONTRIBUTING ROOF AREA.
R903.4.1: OVERFLOW DRAINS AND SCUPPERS: WHERE ROOF DRAINS ARE REQUIRED, OVERFLOW DRAINS HAVING THE SAME SIZE AS THE ROOF DRAINS SHALL BE INSTALLED WITH THE INLET FLOW LINE LOCATED 2" ABOVE THE LOW POINT OF THE ROOF. OR OVERFLOW SCUPPERS HAVING THREE TIMES THE SIZE OF THE ROOF DRAINS AND HAVING A MINIMUM OPENING HEIGHT OF 4" SHALL BE INSTALLED IN THE ADJACENT PARAPET WALLS WITH THE INLET FLOW LOCATED 2" ABOVE THE LOW POINT OF THE ROOF SERVED. THE INSTALLATION AND SIZING OF OVER FLOW DRAINS, LEADERS, AND CONDUCTORS SHALL COMPLY WITH THE PLUMBING SUBCODE IN (A.A.C. 9.23-3.1G). OVERFLOW DRAINS SHALL DISCHARGE TO AN APPROVED LOCATION AND SHALL NOT BE CONNECTED TO ROOF DRAIN LINES.

SCHEDULE: METAL EAVE

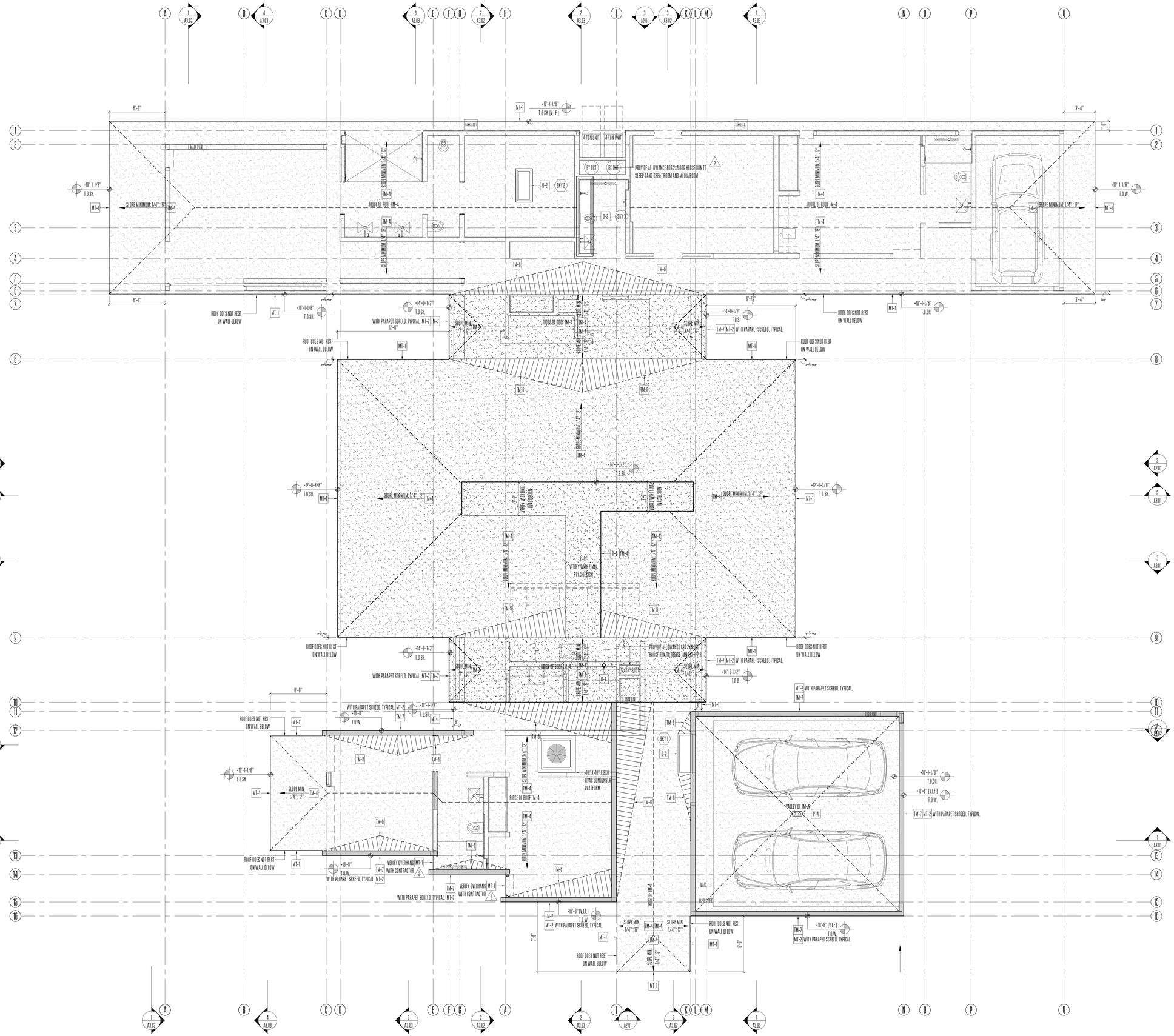
	MANUFACTURER	GUAGE	DEPTH	LOCATION	QUANTITY
MT-1	TAYLOR MADE	16. TYP.	12" +/-	ENTRY	21'-6" L.F.
MT-1			12" +/-	HALL 1	11'-8" L.F.
MT-1			12" +/-	HALL 2	3'-8" L.F.
MT-1			12" +/-	OFFICE	23'-6" L.F.
MT-1			12" +/-	BATH 3	11'-8" L.F.
MT-1			12" +/-	SLEEP 3	2'-8" L.F.
MT-1			12" +/-	E. GREAT	58' L.F.
MT-1			12" +/-	W. GREAT	64' L.F.
MT-1			12" +/-	SLEEP 2...	137' L.F.
MT-1			12" +/-	SLEEP 1	38' L.F.
MT-1			12" +/-	HALL 4.1	1' L.F.
					334' L.F.

SCHEDULE: METAL PARAPET

	MANUFACTURER	GUAGE	DEPTH	LOCATION	QUANTITY
MT-X	T.B.D., TYP.	22. TYP.	T.B.D.	PARK	58' L.F.
MT-X	T.B.D., TYP.	22. TYP.	T.B.D.	SLEEP 3	13'-6" L.F.
MT-X	T.B.D., TYP.	22. TYP.	T.B.D.	BATH 3	11'-8" L.F.
MT-X	T.B.D., TYP.	22. TYP.	T.B.D.	OFFICE	29'-6" L.F.
MT-X	T.B.D., TYP.	22. TYP.	T.B.D.	PANTRY	40' L.F.
MT-X	T.B.D., TYP.	22. TYP.	T.B.D.	BAR	16' L.F.
MT-X	T.B.D., TYP.	22. TYP.	T.B.D.	HALL 1	16' L.F.
MT-X	T.B.D., TYP.	22. TYP.	T.B.D.	SLEEP 1	29' L.F.
				BATH 1	11' L.F.
					235'-6" L.F.

SCHEDULE: ROOFING

	MANUFACTURER	MODEL	LOCATION	QUANTITY
TM-4			PARK	488' S.F.
TM-4			ENTRY, HALL 1	220' S.F.
TM-4	HENRY, TYPICAL	PERMAX 2.5 WITH PRO-GRADE 295, TYPICAL	OFFICE, SLEEP 3, BATH 3, HALL 3, PANTRY, LAUNDRY	688' S.F.
TM-4			PANTRY HIGH	200' S.F.
TM-4			GREAT ROOM	1,479' S.F.
TM-4			BAR HIGH	208' S.F.
TM-4			SLEEP WING	1,650' S.F.
				5,886' S.F.



LEGEND: PROPOSED

ALL ITEMS IN LEGEND: PROPOSED, TO BE INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND SPECIFICATIONS.

03 CONCRETE
C-1 CONCRETE SLAB ON GRADE. RE: STRUCTURAL. RE: SOILS. FINISH: POLISH AND SEAL. 1,000 DIST.. REFER TO A1.02.1 FOR CONCRETE CONTROL JOINT PLAN. VERIFY WITH CONTRACTOR.
C-3 CONCRETE FOOTING. RE: STRUCTURAL. RE: SOILS.
C-4 CONCRETE SLAB ON GRADE. RE: STRUCTURAL. RE: SOILS. FINISH: STANDARD CONCRETE. EPOXY SEALER.

04 MASONRY
MA-1 CONCRETE BLOCK WALL. SIZE: 8X8X16. STACK BOND. MANUFACTURER: ORCO FINISH: PRECISION. COLOR: GREY, MEDIUM WEIGHT.

05 METAL
MT-1 BREAK METAL FASCIA. 16 GAGE. MANUFACTURER: TAYLOR METALS MODEL / COLOR: KYNAR / (DARK GREY)
MT-2 PARAPET SCREED. MANUFACTURER: TEKTRIM MODEL XXXXX

06 WOOD
W-1 2x6, PRESSURE TREATED.
W-2 2x4
W-3 2x6
W-4 2x8

07 THERMAL AND MOISTURE PROTECTION
TM-1 WALL INSULATION. REFER TO TITLE 24 REPORT.
TM-2 SLAB INSULATION. REFER TO TITLE 24 REPORT.
TM-3 CEILING INSULATION. REFER TO TITLE 24 REPORT. PROVIDE VENTILATED AIR SPACE BETWEEN INSULATION AND ROOF DECK.
TM-4 SPRAY FOAM ROOF. SLOPE MINIMUM 1/4" : 12" TO EAVES, SCUPPERS, AND/OR ROOF DRAINS. R905.8.1. R806.1.1. CLASS "A" ASSEMBLY. ICC-ES. 2122 MANUFACTURER: HENRY COMPANY MODEL: PERMAX 2.5 WITH PRO-GRADE 295 COATING
TM-5 FOOD SAINT STRIP.
TM-8 ROOF CRICKET.
TM-7 STUCCO SYSTEM OVER METAL LATHE. MANUFACTURER: LA HABRA FINISH: SANTA BARBARA MISSION. COLOR: CRYSTAL WHITE.
TM-8 STUCCO PLASTER STOP. PROVIDE SEALANT WHERE OCCURS. MANUFACTURER: VINYLCORP MODEL 7 /8" 6678
TM-9 BITHUTHENE WATER PROOFING MEMBRANE.
TM-10 TWO LAYERS 30# FELT. CONTRACTOR CHOICE.
TM-11 VAPOR BARRIER.
TM-12 DPE BRANDSCREEN MANUFACTURER: SOLUS LUMBER SIZE: 1" X 4"
TM-13 EXTERIOR CEILING VENTING. MANUFACTURER: VINYLCORP MODEL RE: A1.05: ELECTRICAL PLAN. NOTES: ROOF VENTS, FOR APPROPRIATE CONTINUOUS VENTING SIZE.

08 OPENINGS
O-1 DOOR. RE: 2A2.1, DOOR TYPES AND SCHEDULE: DOORS.
O-2 WINDOW. RE: 3A2.1, WINDOW TYPES AND SCHED: WINDOWS.
O-3 GLASS PANEL. RE: 2A2.1, DOOR TYPES AND SCHEDULE: DOORS.

09 FINISHES
F-1 5/8" TYPE "X" GYPSUM BOARD. FROM FLOOR TO ROOF DECK. LEVEL 4/5 FINISH. PAINTED (COLOR T.B.D.)
F-2 5/8" GYPSUM BOARD. LEVEL 4/5 FINISH. PAINTED (COLOR).
F-3.1 GYPSUM BOARD "J" EDGE METAL.
F-3.2 GYPSUM BOARD BASEBOARD EDGE METAL. 1" REVEAL.
F-4 CABINETS. REFER TO INTERIOR ELEVATIONS.
F-5 COUNTERTOP. REFER TO LEGEND: COUNTERTOPS.
F-6 TILE / SLAB. REFER TO LEGEND: TILE / SLAB
F-7 CLOSET ROD AND SHELVING. RE: TO INTERI. ELEVNS. FOR SPECS.
F-8 MIRROR. REFER TO INTERIOR ELEVATIONS FOR SPECIFICATIONS
F-9 WOOD VENEER. REFER TO LEGEND: COUNTERTOP. CABINETS: CLOSETS: 1-E-5
F-10 CURTAIN TRACK. RECESS INTO CEILING MATERIAL MANUFACTURER: CURTAIN-TRACKS.COM MODEL: 64005
F-12 WALL PAPER. REFER TO SPECIFICATIONS.

12 FURNISHINGS
F-11 RECESSED ROLLING SHADES. MOTORIZED AND MANUAL. MANUFACTURER: SKYCO MODEL: SINGLE ROLLER.

10 SPECIALTIES
X-1 GAS FIRE FEATURE.
X-2 AT GRADE GAS FIRE FEATURE.
X-3 BBQ. BUILT IN MASONRY BLOCK WALL. BBQ INSTALLATION GUIDE TO BE PROVIDED TO BUILDING INSPECTOR TO VERIFY ALL CLEARANCES TO COMBUSTIBLES.

23 HVAC
H-1 HVAC UNIT. RE: M.1 FOR SPECIFICATIONS.
H-2 HVAC DUCT. RE: M.1 FOR SPECIFICATIONS.
H-3 HVAC GRILL. RE: M.1 FOR SPECIFICATIONS.
H-4 DRYER DUCT. VENT THROUGH WALL TO ROOF ABOVE.
H-5 HVAC DOGHOUSE.
H-6 HVAC CONDENSER.

22 PLUMBING
P-1 ROOF DRN.
P-2 PLUMBING FIXTURE.
P-3 WATER HEATER.
P-4 ROOF DRAIN AND OVERFLOW. REFER TO A1.03: ROOF PLAN PROPOSED: NOTES: PLUMBING: ROOF DRAIN SIZING.
P-5 MISTING SYSTEM. REFER TO SPECIFICATIONS.
P-6 PLUMBING VENT. REFER TO A1.03: ROOF. PAINT "X" COLOR. CONCEAL FROM PEDESTRIAN VIEW AT EXTERIOR AND FROM INTERIOR VIEW AT SKYLIGHTS.

26 ELECTRICAL
E-1 ELECTRIC METER.
E-2 ELECTRIC MAIN SERVICE PANEL. REFER TO ELECTRICAL.
E-3 ELECTRIC SUB PANEL. REFER TO ELECTRICAL

STRUCTURAL
S-1 WOOD BEAM. RE: STRUCTURAL.
S-2 WOOD ENGINEERED BEAM. RE: STRUCTURAL.
S-3 WOOD COLUMN. RE: STRUCTURAL.
S-4 PLYWOOD SHEATHING. RE: STRUCTURAL.
S-5 WOOD JOIST. RE: STRUCTURAL.
S-6 WOOD RAFTERS. RE: STRUCTURAL.
S-7 WOOD HEADER. RE: STRUCTURAL.
S-8 STEEL COLUMN. RE: STRUCTURAL.
S-9 STEEL BEAM. RE: STRUCTURAL.

1 ROOF PLAN: PROPOSED
SCALE: 1/4" = 1'-0"

DRAWINGS PRODUCED BY
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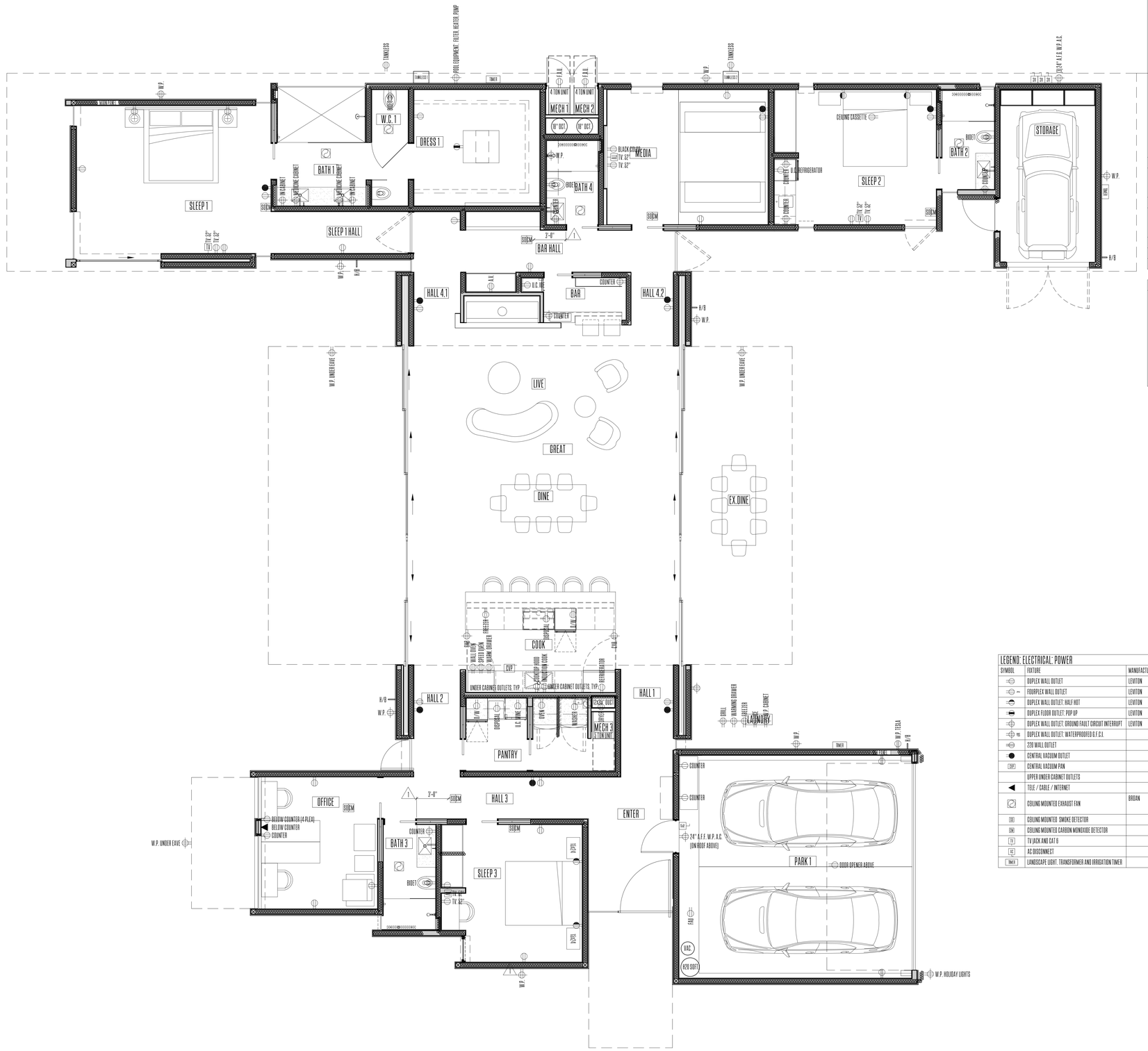
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REVISION
DD SET: 10-15-2019
PLAN CHECK CORRECTIONS: 12-16-2019
CITY SUBMITTAL: 06-24-2020

DRAWING TITLE
ROOF PLAN: PROPOSED

DRAWING NUMBER
A1.03



SCHEDULE: ELECTRICAL LOAD

LOAD FACTOR	EQUATION	SUB TOTAL
GENERAL LIGHTING: MAIN	3 x 3,200 = 9,600	9,600
SMALL APPLIANCE CIRCUITS @ 1,500 WATTS	4 x 1,500 = 6,000	6,000
PANTRY WASHER	1 x 120 = 120	120
PANTRY DRYER	1 x 1,000 =1,000	1,000
COOK REFRIGERATOR	1 x 1,000 =1,000	1,000
COOK ISLAND FREEZER	1 x 1,725 = 1,725	1,725
COOK SPEED OVEN (MICROWAVE)	1 x 2,200 = 2,200	2,200
COOK WALL OVEN	1 x 5,200 = 5,200	5,200
COOK WARMING DRAWER	1 x 1,000 = 1,000	1,000
COOK INDUCTION COOKTOP	1 x 1,000 = 1,000	1,000
COOK COOKTOP HOOD	1 x 450 = 450	450
DISHWASHER	2 x 1,500 = 3,000	3,000
DISPOSAL	2 x 800 = 1,200	1,200
PANTRY OVEN	1 x 4,100 = 4,100	4,100
PANTRY WINE REFRIGERATOR	1 x 130 = 130	130
PANTRY ICE	1 x 400 = 400	400
SLEEP 3 REFRIGERATOR	1 x 130 = 130	130
BBQ GRILL	1 x 1,000 = 1,000	1,000
BBQ WARMING DRAWER	1 x 1,000 = 1,000	1,000
BBQ REFRIGERATOR	1 x 130 = 130	130
BBQ ICE	1 x 290 = 290	290
WATER HEATER	2 X N/A = N/A	N/A
POOL EQUIPMENT	1 x 9,000 = 9,000	9,000
WATER-FEATURE EQUIPMENT	1 x 2,000 = 2,000	2,000
EXTERIOR CEILING HEATERS	1 x 4,000 = 4,000	4,000
	SUB TOTAL	53,568
APPLYING DEMAND FACTOR		
FIRST 10,000 WATTS @ 100% (10,000 x 1.00)		10,000
REMAINING WATTS @ 40% (53,568 – 10K x 40%)		17,424
	SUB TOTAL	27,424
A/C UNIT (3 OR MORE) (4 @3,000 x .5 = 6,000) USE A/C OR HEATING		6,000
A/C UNIT (4 @ 3,700 x 1.00 = 23,040)		23,040
	SUB TOTAL	29,040
8,000 WATT NON DERATED FUTURE		8,000
	TOTAL	56,464

MAIN SERVICE

SERVICE CALCULATION: 56,464 WATTS / 240 VOLTS = 235.27 AMPS
USE 400 AMP 120 / 240 V, 1" DIAMETER SERVICE (VERIFY WITH ELECTRICIAN AND EDISON)

NOTE: MINIMUM WIRE SIZE NO. 14 COPPER FOR OUTLETS AND LIGHT FIXTURES. NO. 12 COPPER OR LARGER FOR OTHER.

THE MAIN SWITCH AND / OR DISTRIBUTION PANEL OF A SINGLE-FAMILY DWELLING OCCUPANCY SHALL HAVE AN ADEQUATE CAPACITY TO CARRY THE CALCULATED LOAD, PLUS AND 8 KW FUTURE WITH FOUR SPARE SPACES AT THE TIME OF FINAL INSPECTION. THE 8 KW LOAD IS NOT T BE REDUCED BY ANY DEMAND FACTOR.

NOTES: ELECTRICAL

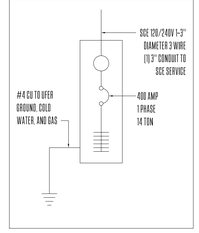
1. PROVIDE A 400 AMP ELECTRICAL METER WITH No. 4 UNDERGROUND CONNECTED TO COLD WATER PIPE AND GAS PIPE.
2. ALL INCANDESCENT LIGHT FIXTURES RECESSED INTO INSULATED CEILINGS SHALL BE APPROVED FOR ZERO CLEARANCE INSULATION COVER (TYPE IC) BY U.L. OR OTHER APPROVED LAB.
3. FLUORESCENT FIXTURES SHALL NOT CONTAIN MEDIUM BASE INCANDESCENT LAMP SOCKETS AND SHALL BE SEPARATE SWITCHES FROM ANY INCANDESCENT LIGHT.
4. PROVIDE TWO MIN. SEPARATE 20 AMP CIRCUITS TO KITCHEN APPLIANCES.
5. PROVIDE ONE MINI. SEPARATE 20 AMP CIRCUIT TO LAUNDRY APPLIANCES.
6. GENERAL LIGHTING TO BE FLOURESCENT AND FIRSTLIGHT SWITCHED AS ENTERING BATHROOMS AND KITCHEN AREA.
7. ALL HABITABLE ROOMS THE CEILING FANS WILL INCLUDE LIGHT KITS.
8. BATHROOM RECEPTACLE OUTLETS. SHALL BE SUPPLIED BY A MINIMUM OF ONE 20 AMPERE BRANCH CIRCUIT. SUCH CIRCUITS SHALL HAVE NO OTHER OUTLETS. THIS CIRCUIT MAY SERVE MORE THAN ONE BATHROOM. NEC. ART. 210-52(d).
9. IN DWELLING UNITS, OUTLETS ARE REQUIRED AT THE FOLLOWING LOCATIONS PER ARTICLES 210-50(c) AND 210-52:
   A. WALL SPACES 2'-0" IN WIDTH
   B. NO MORE THAN 12'-0" APART ALONG WALL SURFACE
   C. WITHIN 6'-0" OF ALL DOORS, FIREPLACES AND OPENINGS
10. A FAN IN ANY ROOM WITHOUT OTHER SWITCHED LIGHTS OR HALF-HOT OUTLETS WILL INCLUDE LIGHT KITS.
11. SERVICE LOAD THE MAIN SWITCH AND/OR DISTRIBUTION PANEL OF A SINGLE FAMILY DWELLING OR CONDO. OCCUPANCY SHALL HAVE AN ADEQUATE CAPACITY AND SPACE TO CARRY THE CALCULATED LOAD, PLUS AN 8 KW FUTURE WITH FOUR SPARE SPACES AT THE TIME OF FINAL INSPECTION. THE 8 KW LOAD IS NOT TO BE REDUCED BY ANY DEMAND FACTOR.
12. NO ALUMINUM WIRING SHALL BE USED. EXCEPTION: ALUMINUM WIRING 1/0 AND LARGER MAY BE USED FOR MAIN FEED TO SUBPANELS ONLY AND SHALL BE ENCLOSED IN A RACEWAY.
13. SMOKE DETECTORS TO BE 110 V. POWERED WITH BATTERY BACK-UP PER CBC 310.9.1.3. POWER SOURCE: IN NEW CONSTRUCTION, REQUIRED SMOKE DETECTORS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WHEN SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE AND SHALL BE EQUIPPED WITH BATTERY BACK-UP. THE DETECTOR SHALL EMIT A SIGNAL WHEN THE BATTERIES ARE LOW. WIRING SHALL BE PERMANENT AND WITHOUT A DISCONNECTING SWITCH OTHER THAN THOSE REQUIRED FOR OVER-CURRENT PROTECTION. SMOKE DETECTORS MAY BE SOLELY BATTERY OPERATED WHEN INSTALLED IN EXISTING BUILDING OR IN BUILDINGS WITHOUT COMMERCIAL POWER, OR IN BUILDINGS WHICH UNDERGO ALTERATIONS, REPAIRS, OR ADDITIONS REGULATED BY SECTION 310.9.1.2.
14. LUMINARIES FOR GENERAL LIGHTING IN KITCHENS SHALL HAVE LAMPS WITH AN EFFICACY 40 LUMENS/WATT OR GREATER FOR GENERAL LIGHTING IN KITCHENS. THIS GENERAL LIGHTING SHALL BE CONTROLLED BY A SWITCH ON A READILY ACCESSIBLE LIGHTING CONTROL PANEL AT AN ENTRANCE TO THE KITCHEN.
16. ROOMS WITH A SHOWER OR A BATHTUB MUST EITHER HAVE AT LEAST ONE LUMINAIRE WITH LAMPS WITH AN EFFICACY OF 40 LUMENS/WATT OR GREATER SWITCHED AT THE ENTRANCE OF THE ROOM OR ONE OF THE ALTERNATIVE TO THIS REQUIREMENT ALLOWED IN 150(K)2F. AND RECESSED CEILING ARE IC (INSULATION COVER) APPROVED.
16. RECEPTACLE OUTLET LOCATIONS WILL COMPLY WITH NEC ARTICLE 210-52(b).
17. PER NEC ARTICLE 210-11(c)3. BATHROOM CIRCUITING SHALL BE EITHER:
   a) A 20 AMPERE CIRCUIT DEDICATED TO EACH BATHROOM, OR
   b) AT LEAST ONE 20 AMPERE CIRCUIT SUPPLYING ONLY BATHROOM RECEPTACLE OUTLETS
16. BEDROOM BRANCH CIRCUITS WILL BE ARC FAULT CIRCUIT PROTECTED.
16. WHERE MORE THAN ONE SMOKE ALARM IS REQUIRED (MAIN HOUSE OF THIS PROJECT) THEY SHALL BE INSTALLED ON THAT THEY ARE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF ONE ALARM SHALL ACTIVATE THE ALARMS OF ALL UNITS.
SHALL ACTIVATE THE ALARMS OF ALL UNITS.
20. ANY NEW ELECTRICAL DEVICES BEING INSTALLED:
   a) TAMPER RESISTANT RECEPTACLES REQUIRED FOR ALL NEW LOCATIONS.
   b) ARC-FAULT PROTECTION FOR ALL NEW OUTLETS (NOT JUST RECEPTACLES) LOCATED IN ROOMS DESCRIBED IN NEC 210.12(B) FAMILY, LIVING, BEDROOMS, DINING, HALL, ETC.
21. BATTERY-OPERATED SMOKE ALARMS SHALL BE PROVIDED IN ALL EXISTING BEDROOMS AND HALLWAYS LEADING TO BEDROOMS FOR EXISTING BEDROOMS. SECTION R314.3.1.
22. BATTERY-OPERATED CARBON MONOXIDE ALARMS SHALL BE PROVIDED OUTSIDE EACH SEPARATE SLEEP AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS AT EXISTING BEDROOMS. SECTION R315.2.
24. FOR A SINGLE-FAMILY DWELLING UNIT, AT LEAST ONE RECEPTACLE OUTLET ACCESSIBLE AT GRADE LEVEL MUST BE INSTALLED OUTDOORS AT THE FRONT AND BACK OF THE DWELLING. (SEE ARTICLE 210.52(E). THE RECEPTACLE MUST BE GFCI PROTECTED.
25. A WALL RECEPTACLE MUST BE PLACED WITHIN 30" OF EACH LAVATORY IN THE BATHROOM. (SEE 210.52(D).
26. A 1" DIAMETER ELECTRICAL CONDUIT SHALL BE PROVIDED FOR INSTALLATION OF FUTURE SOLAR PV ENERGY SYSTEMS ON SINGLE FAMILY DWELLINGS. THE 1" DIAMETER ELECTRICAL CONDUIT SHALL EXTEND FROM THE EXTERIOR WALL LOCATION ADJACENT TO THE MAIN ELECTRICAL SERVICE PANEL AND TERMINATE INTO THE ATTIC SPACE. AT EACH LOCATION, THE CONDUIT SHALL TERMINATE AT A TWO-GANG, ELECTRIC JUNCTION BOX. THREE OPEN SPACES SHALL BE PROVIDED AT THE BOTTOM OF THE BOSS TO ACCOMMODATE FUTURE SOLAR PV SYSTEMS.

LEGEND: ELECTRICAL: POWER

SYMBOL	FIXTURE	MANUFACTURER	MODEL	COLOR	QUANTITY	REMARKS
	DUPLEX WALL OUTLET	LEVITON	DECORA	WHITE, U.N.O.	74	HORIZONTAL, SCREWLESS, U.N.O.
	FOURPLEX WALL OUTLET	LEVITON	DECORA	GREY AT ENCRT.	2	
	DUPLEX WALL OUTLET: HALF HOT	LEVITON	DECORA		4	
	DUPLEX FLOOR OUTLET: POP UP	LEVITON	DECORA		1	
	DUPLEX WALL OUTLET: GROUND FAULT CIRCUIT INTERRUPT	LEVITON	DECORA		16	
	DUPLEX WALL OUTLET: WATERPROOFED G.F.C.I.				28	
	220 WALL OUTLET				2	
	CENTRAL VACUUM OUTLET				9	VERIFY IF DRESS 1.1 OUTLET REQ.
CVUP	CENTRAL VACUUM PAN				1	
	UPPER UNDER CABINET OUTLETS				LF	
	TELE / CABLE / INTERNET				1	
	CEILING MOUNTED EXHAUST FAN	BROAN	QTR80B QUIET FAN		8	80 CFM MIN. DUCT TO THE EX. "SONE" 1 NOISE RATING.
SD	CEILING MOUNTED SMOKE DETECTOR				7	KEEP 3' AWAY FROM BATH OPENING.
CM	CEILING MOUNTED CARBON MONOXIDE DETECTOR				7	
TV	TV JACK AND CAT 6				6	
AC	AC DISCONNECT				4	
Thm'k	LANDSCAPE LIGHT, TRANSFORMER AND IRRIGATION TIMER				1 B.U.	

NOTES: ELECTRICAL: SINGLE LINE DIAGRAM

THE AIC RATING FOR THE SERVICE FEEDER OVER CURRENT DEVICES IS A MINIMUM of 22,000 AIC AND THAT THE SYSTEM IS DESIGNED AS A "SERIES RATED" SYSTEM (IN ORDER TO LIMIT AVAILABLE FAULT CURRENT TO 10,000 AMPS ON BRANCH CIRCUITS).



NOTES: HVAC: WHOLE HOUSE VENTILATION

1. A MECHANICAL EXHAUST SYSTEM, SUPPLY SYSTEM, OR COMBINATION THEREOF SHALL BE INSTALLED FOR EACH DWELLING UNIT TO PROVIDE WHOLE-BUILDING VENTILATION WITH OUTDOOR AIR EACH HOUR AT NO THAN THE RATE SPECIFIED BASED ON THE FLOOR AREA OF THE CONDITIONED SPACE AND NUMBER OF BEDROOMS.
2. LOCAL MECHANICAL EXHAUST SYSTEM SHALL BE INSTALLED IN EACH KITCHEN AND BATHROOM (FOR SOURCE CONTROL OF MOISTURE).
3. THE DESIGN MUST MATCH OR EXCEED THE INFORMATION ON ENERGY FORM: EF-08-MECH.

CONDITIONED SPACE:	3,200 SQ. FT. - 170 SQ. FT. STORAGE
NUMBER OF BEDROOMS:	2-3
VENTILATION AIR REQUIREMENTS:	75 CFM (VENTILATION AIR REQUIREMENTS, TABLE 4.1A)
NOISE RATING (SONE):	1
KITCHEN:	HOOD
VENTILATION AIR REQUIREMENTS:	100 CFM
NOISE RATING (SONE):	1

USE 4" DIAMETER SMOOTH DUCT FOR SINGLE FAN EXHAUST SYSTEM. EXHAUST TO THE EXTERIOR.

NOTES: ELECTRICAL: APPLIANCES

REFER TO MANUFACTURER SPECIFICATIONS AND INSTALLATION INSTRUCTIONS FOR ALL APPLIANCE ELECTRICAL REQUIREMENTS.

1 ELECTRICAL PLAN: POWER
SCALE: 1/4" = 1'-0"

DRAWINGS PRODUCED BY
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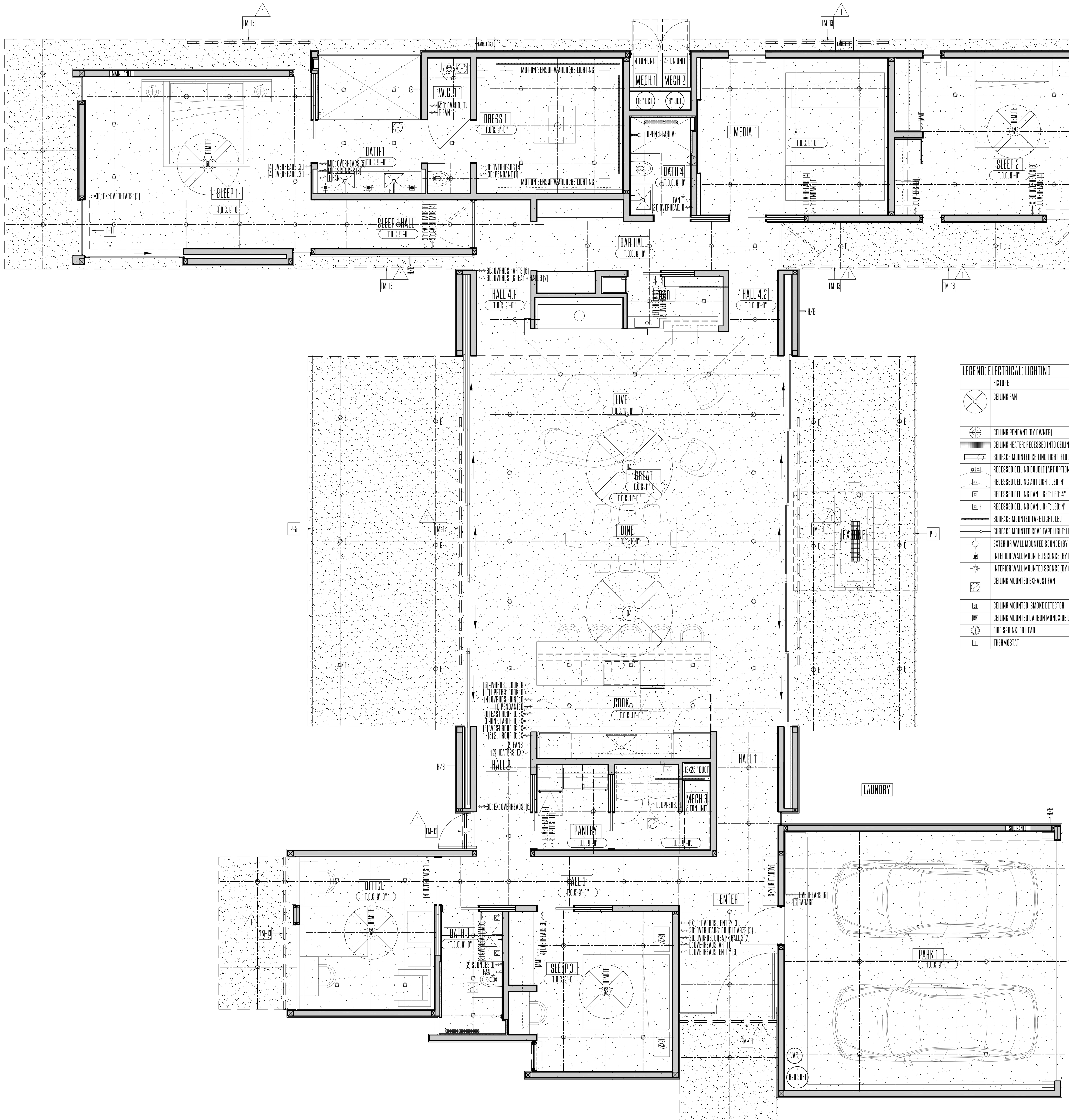
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BID SET: 08-15-2019
PLAN CHECK CORRECTIONS: 09-24-2019
CITY SUBMITTAL: 08-14-2019

REVISION

DRAWING TITLE
ELECTRICAL PLAN: POWER

DRAWING NUMBER
A1.04



NOTES: FIRE SPRINKLERS

FIRE SPRINKLER PLAN TO BE REVIEWED WITH PROJECT DESIGNER PRIOR TO FIRE SPRINKLER CONSTRUCTION FOR ALIGNMENT COORDINATION.

SCHEDULE: MISTING

	MANUFACTURER	FINISH	LOCATION	QUANTITY
P-5	KOOLFOG	XXX	WEST PATIO	30' L.F.
P-5			EAST PATIO	30' L.F.
P-5				60'-0" L.F.

NOTES: ELEC.: ENERGY LIGHTING REQUIREMENTS

1. IN BATHROOMS, GARAGES, LAUNDRY ROOMS, AND UTILITY ROOMS, ALL FIXTURES MUST BE HIGH EFFICACY STYLE OR BE CONTROLLED BY A VACANCY SENSOR.
2. ALL OTHER ROOMS REQUIRE ANY INSTALLED FIXTURES TO BE HIGH EFFICACY OR BE CONTROLLED BY A VACANCY SENOR OR DIMMER. (CLOSETS UNDER 70 SQUARE FEET ARE EXEMPT).
3. OUTDOOR LIGHTING FIXTURES THAT ARE ATTACHED TO A BUILDING ARE REQUIRED TO BE HIGH EFFICACY OR CONTROLLED BY A COMBINATION PHOTO-CONTROL / MOTION SENSOR.

NOTE: GENERALLY A HIGH EFFICACY STYLE OF FIXTURE IS FLUORESCENT, COMPLETE WITH ELECTRONIC BALLASTS. REGULAR INCANDESCENT, QUARTZ HALOGEN, LOW VOLTAGE, AND HALOGEN MR LAMPS DO NOT COMPLY.

NOTES: HVAC: WHOLE HOUSE VENTILATION

1. A MECHANICAL EXHAUST SYSTEM, SUPPLY SYSTEM, OR COMBINATION THEREOF SHALL BE INSTALLED FOR EACH DWELLING UNIT TO PROVIDE WHOLE-BUILDING VENTILATION WITH OUTDOOR AIR EACH HOUR AT NO THAN THE RATE SPECIFIED BASED ON THE FLOOR AREA OF THE CONDITIONED SPACE AND NUMBER OF BEDROOMS.
2. LOCAL MECHANICAL EXHAUST SYSTEM SHALL BE INSTALLED IN EACH KITCHEN AND BATHROOM (FOR SOURCE CONTROL OF MOISTURE).
3. THE DESIGN MUST MATCH OR EXCEED THE INFORMATION ON ENERGY FORM: CF-6R-MECH.

CONDITIONED SPACE:	3,200 SQ. FT. + 170 SQ. FT. STORAGE
NUMBER OF BEDROOMS:	2-3
VENTILATION AIR REQUIREMENTS:	75 CFM (VENTILATION AIR REQUIREMENTS, TABLE 4.1A)
NOISE RATING (SONE):	1
KITCHEN:	HOOD
VENTILATION AIR REQUIREMENTS:	100 CFM
NOISE RATING (SONE):	1

USE 4" DIAMETER SMOOTH DUCT FOR SINGLE FAN EXHAUST SYSTEM, EXHAUST TO THE EXTERIOR.

NOTES: ROOF VENTS

1. ROOF SYSTEM SHALL BE CLASS "C."
3. REFER TO A1.05: ELECTRICAL PLAN: LIGHTING, FOR LOCATIONS OF CONTINUOUS EAVE VENTING. PROVIDE KNOCKOUT HOLES WITHIN STRUCTURAL MEMBERS TO PROVIDE REQUIRED ATTIC VENTILATION.
4. 100 SQ. IN. OF MAKE UP AIR IS REQUIRED IN LAUNDRY ROOM (TO MAKE UP OF EXHAUST AIR BEING VENTED OUT BY DRYER AND FOR ANY EXHAUST FAN IF ONE WAS PROVIDED). DOOR TO LAUNDRY ROOM IS NOT TO BE LOUVERED.
5. DRYER VENT TO THE EXTERIOR WITH TERMINATION TO BE A MINIMUM OF 3 FT FROM ANY OPENING.
10. WHERE EAVE VENTS ARE INSTALLED, INSULATION SHALL NOT BLOCK THE FREE FLOW OF AIR. A MINIMUM OF 1" OF AIR SPACE SHALL BE PROVIDED BETWEEN THE INSULATION AND THE ROOF SHEATHING. TO ACCOMMODATE THE THICKNESS OF INSULATION PLUS THE REQUIRED 1" CLEARANCE, MEMBER SIZES MAY HAVE TO BE INCREASED FOR RAFTER-CEILING JOISTS. SECTION R806.3.
11. ANY ATTIC VENTILATION OPENINGS SHALL BE COVERED WITH CORROSION-RESISTANT METAL MESH WITH MESH OPENINGS OF 1/16" MINIMUM TO 1/4" MAXIMUM IN DIMENSION. SECTION R806.1. CONTINUOUS VENTING SHALL ALSO COMPLY.
4. REQUIRED VENTILATION FOR ATTICS (OR ENCLOSED RAFTER SPACES FORMED WHERE CEILINGS ARE APPLIED DIRECTLY TO THE UNDERSIDE OF ROOF RAFTERS). THE MINIMUM VENT AREA IS 1/150 OF ATTIC AREA ((OR 1/300 OF ATTIC AREA IF AT LEAST 40% (BUT NOT MORE THAN 50%) OF THE REQUIRED VENT IS LOCATED NO MORE THAN 3 FEET BELOW THE RIDGE)). SECTION R806.2. REFER TO TM-13 TAGS FOR VENTILATION LOCATIONS.

AREA 1: PARK 1
470 SQ FT / 150 = 3.1 SQ FT
TOTAL VENTILATION REQUIRED:
(144 x 3.1 = 451 SQ IN)
VENTILATION PROVIDED: 468 SQ IN
PROVIDE ONE 19'-6" x 2" WIDE CONTINUOUS VENTING AT PARK 1 EAST WALL : 468 SQ IN

AREA 2: ENTRY, HALL 1, HALL 2, HALL 3, PANTRY, LAUNDRY
265 SQ FT / 150 = 1.8 SQ FT
TOTAL VENTILATION REQUIRED:
(144 x 2.9 = 254 SQ IN)
VENTILATION PROVIDED: 259 SQ IN
PROVIDE ONE 7'-10" x 2" WIDE CONTINUOUS VENTING AT ENTRY SOUTH OVERHANG : 189 SQ IN
PROVIDE ONE 3'-0" x 2" WIDE CONTINUOUS VENTING AT HALL 2 WEST OVERHANG : 70 SQ IN

AREA 3: OFFICE, BATH 3, SLEEP 3
345 SQ FT / 150 = 2.3 SQ FT
TOTAL VENTILATION REQUIRED:
(144 x 2.3 = 331 SQ IN)
VENTILATION PROVIDED: 353 SQ IN
PROVIDE ONE 12'-4" x 2" WIDE CONTINUOUS VENTING AT OFFICE WEST OVERHANG : 296 SQ IN
PROVIDE ONE 2'-4" x 2" WIDE CONTINUOUS VENTING AT SLEEP 3 WEST OVERHANG : 57 SQ IN

AREA 4: GREAT ROOM
763 SQ FT / 150 = 5.1 SQ FT
TOTAL VENTILATION REQUIRED:
(144 x 5.1 = 732 SQ IN)
VENTILATION PROVIDED: 960 SQ IN
PROVIDE ONE 20'-0" x 2" WIDE CONTINUOUS EAVE VENTING AT GREAT ROOM EAST OVERHANG: 480 SQ IN
PROVIDE ONE 20'-0" x2" WIDE CONTINUOUS EAVE VENTING AT GREAT ROOM WEST OVERHANG: 480 SQ IN

AREA 5: MEDIA, BAR HALL, BATH 4, DRESS 1, MECH 4
360 S.Q. F.T. / 150 = 2.4 S.Q. F.T.
TOTAL VENTILATION REQUIRED:
(144 x 2.4 = 346 S.Q. I.N.)
VENTILATION PROVIDED: 443 SQ IN
PROVIDE ONE 10'-0" x 2" WIDE CONTINUOUS EAVE VENTING AT MEDIA NORTH OVERHANG: 238 SQ IN
PROVIDE ONE 8'-6" x 2" WIDE CONTINUOUS EAVE VENTING AT MEDIA SOUTH OVERHANG: 205 SQ IN

AREA 6: SLEEP 2, BATH 2, STORAGE
390 S.Q. F.T. / 150 = 2.6 S.Q. F.T.
TOTAL VENTILATION REQUIRED:
(144 x 2.6 = 374 S.Q. I.N.)
VENTILATION PROVIDED: 526 SQ IN
PROVIDE ONE 12'-0" x 2" WIDE CONTINUOUS EAVE VENTING AT BATH 1 OVERHANG: 288 SQ IN
PROVIDE ONE 10'-0" x 2" WIDE CONTINUOUS EAVE VENTING AT STORAGE NORTH OVERHANG: 238 SQ IN

AREA 6: SLEEP 1, BATH 1, W.C. 1, SLEEP 1 HALL
415 S.Q. F.T. / 150 = 2.8 S.Q. F.T.
TOTAL VENTILATION REQUIRED:
(144 x 2.8 = 398 S.Q. I.N.)
VENTILATION PROVIDED: 443 SQ IN
PROVIDE ONE 10'-0" x 2" WIDE CONTINUOUS EAVE VENTING AT SLEEP 1 NORTH OVERHANG: 238 SQ IN
PROVIDE ONE 8'-6" x 2" WIDE CONTINUOUS EAVE VENTING AT SLEEP 1 HALL SOUTH OVERHANG: 205 SQ IN

LEGEND: ELECTRICAL: LIGHTING

	FIXTURE	MANUFACTURER	MODEL	LAMP	TRIM	QUANTITY	REMARKS
	CEILING FAN	HAIKU HAIKU HAIKU	LUXE SERIES: 84" I SERIES: 60" I SERIES: 52"	NO LED LIGHT NO LED LIGHT NO LED LIGHT	WHITE WHITE WHITE	2 3 5	REFER TO LIGHTING PLAN FOR SENSEME TECHNOLOGY WALL SWITCH OR REMOTE CONTROL OPERATION.
	CEILING PENDANT (BY OWNER)					2	
	CEILING HEATER: RECESSED INTO CEILING	INFRATECH	WD4024			1	4000 WATTS
	SURFACE MOUNTED CEILING LIGHT: FLUORESCENT	NICOR				2	2'-0" AND 4'-0" LENGTHS
	RECESSED CEILING DOUBLE (ART OPTION) LIGHT:					6	
	RECESSED CEILING ART LIGHT: LED: 4"					27	
	RECESSED CEILING CAN LIGHT: LED: 4"					69	
E	RECESSED CEILING CAN LIGHT: LED: 4": EXTERIOR RATED					31	
	SURFACE MOUNTED TAPE LIGHT: LED					XX LF	INCLUDE DRIVER. CONCEAL FROM BELOW.
	SURFACE MOUNTED COVE TAPE LIGHT: LED					XX LF	INCLUDE DRIVER. CONCEAL FROM BELOW.
	EXTERIOR WALL MOUNTED SCONCE (BY OWNER)						MOUNT AT 6'-0" HIGH
	INTERIOR WALL MOUNTED SCONCE (BY OWNER)					5	
	INTERIOR WALL MOUNTED SCONCE (BY OWNER)					6	
	CEILING MOUNTED EXHAUST FAN	BROAN	QTR080 QUIET FAN			9	60 CFM MIN. DUCT TO THE EX. "SONE" 1 NOISE RATING.
SD	CEILING MOUNTED SMOKE DETECTOR					8	
CM	CEILING MOUNTED CARBON MONOXIDE DETECTOR					8	
F	FIRE SPRINKLER HEAD						REFER TO FIRE SPRINKLER PLAN
T	THERMOSTAT						REFER TO MECHANICAL PLAN

SPECIFICATIONS: INSULATION

1. CEILING INSULATION SHALL BE INSTALLED PER TITLE 24 REPORT.

CEILING INSULATION:	
MANUFACTURER:	OWENS CORNING
MODEL:	R-30C ECOTOUCH PINK FIBERGLAS
THICKNESS:	8-1/4"
R VALUE:	30

NOTES: HVAC UNITS

1. ZONE 1 (ENTER, SLEEP, 3, OFFICE, GREAT ROOM)
MANUFACTURER: XXXX
MODEL: XXX HEAT PUMP
SEER: X TON XX+
CFM: XXX
ELECTRICAL: XX AMP / XXX V
2. ZONE 2 (SLEEP 1):
MANUFACTURER: XXXX
MODEL: XXX HEAT PUMP
SEER: X TON XX+
CFM: XXXX
ELECTRICAL: XX AMP / XXX V
3. ZONE 3 (MEDIA, GREAT ROOM):
MANUFACTURER: XXX
MODEL: XXX HEAT PUMP
SEER: X TON XX+
CFM: XXXX
ELECTRICAL: XX AMP / XXX V
4. ZONE 4 (SLEEP 2, STORAGE):
MANUFACTURER: XXX
MODEL: XXX
SEER: X TON XX+
CFM: XXXX
ELECTRICAL: XX AMP / XXX V

LINEAR SLOT DIFFUSER TYPICAL THROUGHOUT.

LEGEND: HVAC

	DUCTING	LOCATION	REMARKS
	HVAC SUPPLY	CEILING / DOGHOUSE	RE: MECHANICAL PLAN, FOR SIZING
ZZZZ	HVAC RETURN	CEILING / DOGHOUSE	RE: MECHANICAL PLAN, FOR SIZING
	HVAC SUPPLY REGISTER	CEILING / DOGHOUSE	RE: MECHANICAL PLAN, FOR SIZING
	HVAC RETURN REGISTER	CEILING / DOGHOUSE	RE: MECHANICAL PLAN, FOR SIZING

LEGEND: PROPOSED

ALL ITEMS IN LEGEND: PROPOSED, TO BE INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND SPECIFICATIONS.

03 CONCRETE
C-1 CONCRETE SLAB ON GRADE. RE: STRUCTURAL. RE: SOILS. FINISH: POLISH AND SEAL. 1500 GRIT. REFER TO A1.02.1 FOR CONCRETE CONTROL JOINT PLAN. VERIFY WITH CONTRACTOR.
C-3 CONCRETE FOOTING. RE: STRUCTURAL. RE: SOILS.
C-4 CONCRETE SLAB ON GRADE. RE: STRUCTURAL. RE: SOILS. FINISH: STANDARD CONCRETE. EPOXY SEALER.

04 MASONRY
MA-1 CONCRETE BLOCK WALL. SIZE: 8X6X16. STACK BOND. MANUFACTURER: ORCO FINISH: PRECISION. COLOR: GREY. MEDIUM WEIGHT.

05 METAL
MT-1 BREAK METAL FASCIA. 16 GAGE. MANUFACTURER: TAYLOR METALS MODEL / COLOR: KYNAR / (DARK GREY)
MT-2 PARAPET SCREED. MANUFACTURER: TEKTRIM MODEL: XXXXX

06 WOOD
W-1 2XX, PRESSURE TREATED.
W-2 2x4
W-3 2x6
W-4 2x8

07 THERMAL AND MOISTURE PROTECTION
TM-1 WALL INSULATION. REFER TO TITLE 24 REPORT.
TM-2 SLAB INSULATION. REFER TO TITLE 24 REPORT.
TM-3 CEILING INSULATION. REFER TO TITLE 24 REPORT. PROVIDE VENTILATED AIR SPACE BETWEEN INSULATION AND ROOF DECK.
TM-4 SPRAY FOAM ROOF. SLOPE MINIMUM 1/4" : 12" TO EAVES, SCUPPERS, AND/OR ROOF DRAINS. R905.9.1. R106.1.1. CLASS "A" ASSEMBLY. ICC-ES: 2132 MANUFACTURER: HENRY COMPANY MODEL: PERMAX 2.5 WITH PRO-GRADE 285 COATING
TM-5 FIBER CANT STRIP.
TM-6 ROOF CRICKET.
TM-7 STUCCO SYSTEM OVER METAL LATHE. MANUFACTURER: LA HABRA FINISH: SANTA BARBARA MISSION. COLOR: CRYSTAL WHITE.
TM-8 STUCCO PLASTER STOP. PROVIDE SEALANT WHERE OCCURS. MANUFACTURER: VINYLCORP MODEL: 7/8" 6678
TM-9 BITHUTHENE WATER PROOFING MEMBRANE.
TM-10 TWO LAYERS 30# FELT. CONTRACTOR CHOICE.
TM-11 VAPOR BARRIER.
TM-12 IPE RAINSCREEN MANUFACTURER: SOLUS LUMBER SIZE: 1" x 4"
TM-13 EXTERIOR CEILING VENTING. MANUFACTURER: VINYLCORP MODEL: RE: A1.05: ELECTRICAL PLAN: NOTES: ROOF VENTS, FOR APPROPRIATE CONTINUOUS VENTING SIZE.

08 OPENINGS
O-1 DOOR. RE: 2A7.1, DOOR TYPES AND SCHEDULE: DOORS.
O-2 WINDOW. RE: 3A7.1, WINDOW TYPES AND SCHED: WINDOWS.
O-3 GLASS PANEL. RE: 2A7.1, DOOR TYPES AND SCHEDULE: DOORS.

09 FINISHES
F-1 5/8" TYPE "X" GYPSUM BOARD, FROM FLOOR TO ROOF DECK. LEVEL 4/5 FINISH. PAINTED (COLOR T.B.D.)
F-2 5/8" GYPSUM BOARD. LEVEL 4/5 FINISH. PAINTED (COLOR).
F-3.1 GYPSUM BOARD "J" EDGE METAL.
F-3.2 GYPSUM BOARD BASEBOARD EDGE METAL. 1" REVEAL.
F-4 CABINETS. REFER TO INTERIOR ELEVATIONS.
F-5 COUNTERTOP. REFER TO LEGEND: COUNTERTOPS.
F-6 TILE / SLAB. REFER TO: LEGEND: TILE / SLAB
F-7 CLOSET ROD AND SHELVING. RE. TO INTRR. ELVTNS. FOR SPECS.
F-8 MIRROR. REFER TO INTERIOR ELEVATIONS FOR SPECIFICATIONS
F-9 WOOD VENEER. REFER TO LEGEND: COUNTERTOP: CABINETS: CLOSETS: I-C-5
F-10 CURTAIN TRACK. RECESS INTO CEILING MATERIAL. MANUFACTURER: CURTAIN-TRACKS.COM MODEL: 94005
F-12 WALL PAPER. REFER TO SPECIFICATIONS.

12 FURNISHINGS
F-11 RECESSED ROLLING SHADES. MOTORIZED AND MANUAL. MANUFACTURER: SKYCO MODEL: SINGLE ROLLER.

10 SPECIALTIES
X-1 GAS FIRE FEATURE.
X-2 AT GRADE GAS FIRE FEATURE.
X-3 BBQ. BUILT IN MASONRY BLOCK WALL. BBQ INSTALLATION GUIDE TO BE PROVIDED TO BUILDING INSPECTOR TO VERIFY ALL CLEARANCES TO COMBUSTIBLES.

23 HVAC
H-1 HVAC UNIT. RE: M.1 FOR SPECIFICATIONS.
H-2 HVAC DUCT. RE: M.1 FOR SPECIFICATIONS.
H-3 HVAC GRILL. RE: M.1 FOR SPECIFICATIONS.
H-4 DRYER DUCT. VENT THROUGH WALL TO ROOF ABOVE.
H-5 HVAC DOGHOUSE.
H-6 HVAC CONDENSER.

22 PLUMBING
P-1 HOSE BIB.
P-2 PLUMBING FIXTURE.
P-3 WATER HEATER.
P-4 ROOF DRAIN AND OVERFLOW. REFER TO A1.03: ROOF. PLAN:PROPOSED: NOTES: PLUMBING: ROOF DRAIN SIZING.
P-5 MISTING SYSTEM. REFER TO SPECIFICATIONS.
P-6 PLUMBING VENT. REFER TO A1.03: ROOF. PAINT "X" COLOR. CONCEAL FROM PEDESTRIAN VIEW AT EXTERIOR AND FROM INTERIOR VIEW AT SKYLIGHTS.

26 ELECTRICAL
E-1 ELECTRIC METER.
E-2 ELECTRIC MAIN SERVICE PANEL. REFER TO ELECTRICAL.
E-3 ELECTRIC SUB PANEL. REFER TO ELECTRICAL

STRUCTURAL
S-1 WOOD BEAM. RE: STRUCTURAL.
S-2 WOOD ENGINEERED BEAM. RE: STRUCTURAL.
S-3 WOOD COLUMN. RE: STRUCTURAL.
S-4 PLYWOOD SHEATHING. RE: STRUCTURAL.
S-5 WOOD JOIST. RE: STRUCTURAL.
S-6 WOOD RAFTERS. RE: STRUCTURAL.
S-7 WOOD HEADER. RE: STRUCTURAL.
S-8 STEEL COLUMN. RE: STRUCTURAL.
S-9 STEEL BEAM. RE: STRUCTURAL.

1 ELECTRICAL PLAN: LIGHTING
SCALE: 1/4" = 1'-0"

DRAWINGS PRODUCED BY
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PROJECT: 16014
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700 LA ESTRELLA
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REVISION
BID SET: 08-15-2019
PLAN CHECK CORRECTIONS: 07-10-2019
CITY SUBMITTAL: 06-24-2019

DRAWING TITLE
ELECTRICAL PLAN: LIGHTING

DRAWING NUMBER
A1.05

DRAWING NUMBER
A2.01
DRAWING TITLE
BUILDING ELEVATIONS: PROPOSED

REVISION
- 08 OCT. 08-15-2018
- PLAN CHECK CORRECTIONS_01-18-2018
- CITY SUBMITTAL_08-24-2018

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LEGEND: PROPOSED

ALL ITEMS IN LEGEND: PROPOSED. TO BE INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND SPECIFICATIONS.

01 CONCRETE
- C-1 CONCRETE SLAB ON GRADE. RE: STRUCTURAL. RE: SOILS ENGINEER REPORT FOR MOISTURE BARRIER BELOW SLAB. FINISH: BROOM FINISH. COLOR: NATURAL GREY. REFER TO DETAIL FOR CONTROL JOINT LAYOUT.
- C-2 CONCRETE SLAB ON GRADE. RE: STRUCTURAL. RE: SOILS ENGINEER REPORT FOR MOISTURE BARRIER BELOW SLAB. FINISH: SMOOTH TROWEL FINISH. COLOR: NATURAL GREY.
- C-3 CONCRETE SLAB ON GRADE. RE: STRUCTURAL. RE: SOILS ENGINEER REPORT FOR MOISTURE BARRIER BELOW SLAB. FINISH: STANDARD CONCRETE. FROST SCRATCH.
- C-4 CONCRETE SLAB ON GRADE. RE: STRUCTURAL. RE: SOILS ENGINEER REPORT FOR MOISTURE BARRIER BELOW SLAB. FINISH: STANDARD CONCRETE. FROST SCRATCH.

04 MASONRY
- MA-1 CONCRETE BLOCK WALL. SIZE: 8"X8"X16". STACK BOND. MANUFACTURER: BRCD. FINISH: PRESSURE WASHED. COLOR: GREY. MEDIUM WEIGHT.

05 METAL
- ME-1 FASCIA METAL. FASCIA. BOARD. MANUFACTURER: TAYLOR METALS. MODEL / COLOR: KYNAR / PEARL GREY. FINISH: SMOOTH.
- ME-2 PLANTER SCREEN. MANUFACTURER: TEKTRUM. MODEL: XXXXX

06 WOOD
- W-1 2X4. PRESSURE TREATED.
- W-2 2X4
- W-3 2X6
- W-4 2X8

07 THERMAL AND MOISTURE PROTECTION
- TM-1 WALL INSULATION. REFER TO TITLE 24 REPORT.
- TM-2 SLAB INSULATION. REFER TO TITLE 24 REPORT.
- TM-3 CEILING INSULATION. REFER TO TITLE 24 REPORT. PROVIDE VENTILATED AIR SPACE BETWEEN INSULATION AND ROOF DECK.
- TM-4 SPRAY FOAM ROOF. CLOSE CELL. MINIMUM R-VALUE: 13". TO MEET ENERGY CODE REQUIREMENTS. ROOF SLOPE: 1/4" PER FOOT.
- TM-5 SCUPPERS, LINED FOR ROOF DRAINS. SIZE: 6" X 7". REFER TO PLUMBING DRAWINGS FOR LOCATIONS.
- TM-6 CLASS 'A' ASSEMBLY. ICC-ES: ESR-1463
- TM-7 MANUFACTURER: EXCAVY COMPANY. MODEL: PERFECT 4 PLY WITH PVC-BONDED COLD ADHESIVE. FIBER CLASS: FLEECE. ROOF CONCRETE.
- TM-8 STUCCO SYSTEM OVER METAL LATHE. MANUFACTURER: E.R.BARRA. FINISH: SANTA BARBARA MEDIUM. COLOR: CRYSTAL WHITE.
- TM-9 STUCCO PLASTER STOP. PROVIDE SEALANT WHERE DISSIMILAR MATERIALS MEET. MANUFACTURER: VINYLCORP
- TM-10 MODEL: 7/8" REVEAL
- TM-11 TEXTURED WATER PROOFING MEMBRANE.
- TM-12 TEXTURED SLAB DETAIL. COMPARTMENTALIZE SURFACE.
- TM-13 MANUFACTURER: VINYLCORP
- TM-14 OFF SCAFFOLDING
- TM-15 MANUFACTURER: SOLUS LUMBER
- TM-16 SIZE: 7" X 4"
- TM-17 EXTERIOR CEILING VENTING. MANUFACTURER: VINYLCORP
- TM-18 MODEL: RE: A100. ELECTRICAL PLAN. NOTE: ROOF VENTS SHALL BE APPROPRIATE FOR CONDITIONS VENTING SIZE

08 OPENINGS
- D-1 DOOR: RE: 2017 3000 TYPES AND SPECIFIC DOORS.
- D-2 WINDOW: RE: 2017 3000 TYPES AND SPECIFIC WINDOWS.
- D-3 GLASS TYPE: RE: 2017 3000 TYPES AND SPECIFIC DOORS.

09 FINISHES
- F-1 6.5" TYPE "A" GYPSUM BOARD. FROM FLOOR TO ROOF DECK. LEVEL 4.5 FINISH. PAINTED (COLOR 1 OF 3.)
- F-2 5/8" GYPSUM BOARD. LEVEL 4.5 FINISH. PAINTED (COLOR 1 OF 3.)
- F-3 GYPSUM BOARD. 1" FURR METAL.
- F-3.2 GYPSUM BOARD ASSEMBLY RISE METAL. 1" FURRING.
- F-4 GASKETS. REFER TO INTERIOR ELEVATIONS.
- F-5 CEMENTITIOUS. REFER TO EXTERIOR ELEVATIONS.
- F-6 TILE. CASE. MATERIAL. REFER TO INTERIOR ELEVATIONS.
- F-7 TILE. CASE. MATERIAL. REFER TO INTERIOR ELEVATIONS FOR SPECIFICATIONS.
- F-8 WOOD VENEER. REFER TO LEGEND COUNTERTOP CABINETS.
- F-9 CLOSETS: 1+5+5
- EGGSTONE TRACK. RECESSED INTO CEILING MATERIAL.
- F-10 MANUFACTURER: EGGSTONE-TRACKS.COM
- MODEL: 84005
- F-12 WALL PAPER. REFER TO SPECIFICATIONS.

12 FURNISHINGS
- F-11 RECESSED BUILDING SHADES. MOTORIZED AND MANUAL.
- MANUFACTURER: SOLUS
- MODEL: SINGLE ROLLER.

10 SPECIALTIES
- X-1 GAS FIRE FEATURE.
- X-2 AT EDGE GAS FIRE FEATURE.
- X-3 BBQ. BUILT IN MASONRY BLOCK WALL. BBQ INSTALLATION GUIDE TO BE PROVIDED TO BUILDING INSPECTOR TO VERIFY ALL CLEARANCES TO COMBUSTIBLES

23 HVAC
- H-1 HVAC UNIT. RE: MA 1100 SPECIFICATIONS.
- H-2 HVAC DUCT. RE: MA 1100 SPECIFICATIONS.
- H-3 HVAC GRILL. RE: MA 1100 SPECIFICATIONS.
- H-4 GYPSUM VENT. VENT THROUGH WALL TO ROOF ABOVE.
- H-5 HVAC CONDENSER.
- H-6 HVAC CONDENSER.

22 PLUMBING
- P-1 HOSE BIB
- P-2 PLUMBING FIXTURE
- P-3 WATER HEATER
- P-4 ROOF DRAIN AND OVERFLOW. REFER TO ASCE 7005 ROOF DRAINAGE REQUIREMENTS. PROVIDE ROOF DRAINAGE.
- P-5 MASTER SYSTEM. REFER TO SPECIFICATIONS.
- P-6 PLUMBING VENT. REFER TO ALL ELEVATIONS. PAINT "L" COLOR CONCRETE FROM STREETSCAPE VIEW AT EXTERIOR AND FROM INTERIOR VIEW AT SKYLIGHTS.

26 ELECTRICAL
- E-1 ELECTRIC METER.
- E-2 ELECTRIC MAIN SERVICE PANEL. REFER TO ELECTRICAL.
- E-3 ELECTRIC SUB PANEL. REFER TO ELECTRICAL.

STRUCTURAL
- S-1 WOOD BEAM. RE: STRUCTURAL.
- S-2 WOOD ENGINEERED BEAM. RE: STRUCTURAL.
- S-3 WOOD COLUMN. RE: STRUCTURAL.
- S-4 PLYWOOD SHEATHING. RE: STRUCTURAL.
- S-5 WOOD JOIST. RE: STRUCTURAL.
- S-6 WOOD RAFTERS. RE: STRUCTURAL.
- S-7 WOOD HEADER. RE: STRUCTURAL.
- S-8 STEEL COLUMN. RE: STRUCTURAL.
- S-9 STEEL BEAM. RE: STRUCTURAL.

ELEVATION: WEST
1 SCALE: 1/4" = 1'-0"

ELEVATION: NORTH
2 SCALE: 1/4" = 1'-0"

ELEVATION: EAST
3 SCALE: 1/4" = 1'-0"

ELEVATION: SOUTH
4 SCALE: 1/4" = 1'-0"

DRAWING NUMBER

A3.01

DRAWING TITLE

BUILDING SECTIONS: PROPOSED

REVISION

- 08-14-2018
- PLAN CHECK CORRECTIONS_01-18-2018
- CITY SUBMITTAL_06-24-2018

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APN: 512-320-012-2

PROJECT: 18014

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LEGEND: PROPOSED

ALL ITEMS IN LEGEND: PROPOSED. TO BE INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND SPECIFICATIONS.

02 CONCRETE
- C-1 CONCRETE SLAB ON GRADE. RE: STRUCTURAL. RE: SOILS. FINISH: POLISHED. RE: COLOR SCHEDULE FOR COLOR. REFER TO DETAIL 1/A4.0
- C-2 CONCRETE FOOTING. RE: STRUCTURAL. RE: SOILS
- C-3 CONCRETE SLAB ON GRADE. RE: STRUCTURAL. RE: SOILS.
- C-4 FINISH: STANDARD CONCRETE. FINISH SEALER.

04 MASONRY
- MA-1 CONCRETE BLOCK WALL. SIZE: 8"X8"X16" STACK BOND.
  MANUFACTURER: BRCO
  FINISH: PRESSURE
  COLOR: GREY. MEDIUM WEIGHT.

05 METAL
- MT-1 BREAK METAL FASCIA. 18 GAGE.
  MANUFACTURER TAYLOR METALS
  MODEL / COLOR: KYNAR / (PALM GREY)
- MT-2 PASADENA SCREEN
  MANUFACTURER: TENTRIM
  MODEL: XXXXX

06 WOOD
- W-1 2X4. PRESSURE TREATED.
- W-2 2X4
- W-3 2X6
- W-4 2X8

07 THERMAL AND MOISTURE PROTECTION
- TM-1 WALL INSULATION. REFER TO TITLE 24 REPORT.
- TM-2 SLAB INSULATION. REFER TO TITLE 24 REPORT.
- TM-3 CEILING INSULATION. REFER TO TITLE 24 REPORT. PROVIDE VENTILATED AIR SPACE BETWEEN INSULATION AND ROOF DECK.
- TM-4 SPRAY FOAM ROOF. SLOPE MINIMUM 1/4" : 12" TO EAVES.
  SCUPPERS, LINE AND ROOF DRAINS. REFER TO DETAIL
  CLASS "A" ASSEMBLY. RCC-CR- 2322
  MANUFACTURER: GENTY COMPANY
  MODEL: 2 PLY MOD BIT + 1 APP PER SPARKS CSI: 07311M
  ROOF CONCRETE
- TM-5 STUCCO SYSTEM OVER METAL LATHE.
- TM-6 FIBER CEMENT SIDING
- TM-7 STUCCO SYSTEM OVER METAL LATHE.
  MANUFACTURER: LA HABRA
  FINISH: SANTA BARBARA MISSION.
- TM-8 STUCCO PLASTER STOP. PROVIDE SEALANT WHERE OCCURS.
  MANUFACTURER: VINYLSHOP
- TM-9 MODEL: 7/8" RIB-D
- TM-10 ENTRANCE WATER FEATURE WITH WINDBOX.
- TM-11 TYVEK HOME WRAP TYP. CONTRACTOR SOURCE.
- TM-12 WINDOW SILL FLASHING
  MANUFACTURER: DURA-TRACK
  MODEL: XXXXX
- TM-13 EXTERIOR CEILING VENTING.
  MANUFACTURER: VINYLSHOP
  MODEL: RE: 9100. ELECTRICAL PLAN. NOTE: ROOF VENTS: 6SQ IN APPROPRIATE CONCENTRATIONS UPON BID SIZE

08 OPENINGS
- D-1 DOOR. RE: 2017 3000 TYPES AND SPECIFIC DOORS.
- D-2 WINDOW. RE: 2017 3000 TYPES AND SPECIFIC WINDOWS.
- D-3 GLASS PANEL. RE: 2017 3000 TYPES AND SPECIFIC DOORS.

09 FINISHES
- F-1 5/8" TYPE "X" GYPSUM BOARD. FROM FLOOR TO ROOF DECK.
  LEVEL 4/5 FINISH. PAINTED (COLOR T.B.D.)
- F-2 5/8" GYPSUM BOARD. LEVEL 4/5 FINISH. PAINTED (COLOR T.B.D.)
- F-3 GYPSUM BOARD SOFFIT
- F-3.2 GYPSUM BOARD BULKHEAD EDGE METAL. 7" REVEAL
- F-4 SEAMLESS. REFER TO INTERIOR ELEVATIONS
- F-5 CERAMIC TILE. REFER TO INTERIOR ELEVATIONS
- F-6 CERAMIC TILE. MATCH GROUT TO TILE. REFER TO INTERIOR ELEVATIONS
- F-7 MIRROR. REFER TO INTERIOR ELEVATIONS FOR SPECIFICATIONS
- F-8 WOOD VENEER. REFER TO LEGEND COUNTERTOP CABINETS
- F-9 CLOSETS: 1+5+5
  EGRESS TRACK. RECESSED WITH SCREEN MATERIAL
  MANUFACTURER: DURA-TRACK.COM
- F-10 MODEL: XXXXX
- F-12 WALL PAPER. REFER TO SPECIFICATIONS.

10 FURNISHINGS
- F-11 RECESSED BUILDING BRICKS. MOTORIZED AND MANUAL
- F-11 MANUFACTURER: SOMFY
  MODEL: SINGLE ROLLER.

11 SPECIALTIES
- X-1 GAS FIRE FEATURE.
  AT EDGE GAS FIRE FEATURE.
- X-2 BBQ. BUILT IN MASONRY BLOCK WALL. BBQ
- X-3 INSTALLATION GUIDE TO BE PROVIDED TO BUILDING INSPECTOR
  TO VERIFY ALL CLEARANCES TO COMBUSTIBLES

21 PLUMBING
- P-1 BOSS BBQ
- P-2 PLUMBING FIXTURE
- P-3 WATER HEATER
- P-4 ROOF DRAIN AND OVERFLOW. REFER TO A2.0 SERIES
- P-5 ROOF DRAIN AND OVERFLOW. REFER TO A2.0 SERIES
- P-6 MASTER SYSTEM. REFER TO SPECIFICATIONS
- P-7 PLUMBING VENT. REFER TO A2.0 SERIES. PAINT "L" COLOR
- P-8 CONCEAL FROM STREET. SCREEN VIEW AT EXTERIOR. PAINT FROM INTERIOR VIEW AT SKYLIGHTS.

26 ELECTRICAL
- E-1 ELECTRIC METER
- E-2 ELECTRIC MAIN SERVICE PANEL. REFER TO ELECTRICAL
- E-3 ELECTRIC SUB PANEL. REFER TO ELECTRICAL

STRUCTURAL
- S-1 WOOD BEAM. RE: STRUCTURAL
- S-2 WOOD ENGINEERED BEAM. RE: STRUCTURAL
- S-3 WOOD COLUMN. RE: STRUCTURAL
- S-4 PLYWOOD SHEATHING. RE: STRUCTURAL
- S-5 WOOD JOIST. RE: STRUCTURAL
- S-6 WOOD RAFTER. RE: STRUCTURAL
- S-7 WOOD BATTENS. RE: STRUCTURAL
- S-8 WOOD HEADER. RE: STRUCTURAL
- S-9 STEEL COLUMN. RE: STRUCTURAL
- S-10 STEEL BEAM. RE: STRUCTURAL

4 SECTION: WEST | EAST
SCALE: 1/4" = 1'-0"

3 SECTION: WEST | EAST
SCALE: 1/4" = 1'-0"

2 SECTION: EAST | WEST
SCALE: 1/4" = 1'-0"

1 SECTION: EAST | WEST
SCALE: 1/4" = 1'-0"

DRAWING NUMBER

A3.02

DRAWING TITLE

BUILDING SECTIONS: PROPOSED

REVISION

- 08-16-2019
- PLAN CHECK CORRECTIONS: 07-18-2019
- CITY SUBMITTAL: 06-24-2019

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APN: 612-320-012-2

PROJECT: 19014

NEW CUSTOM RESIDENCE

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PALM SPRINGS, CA 92264

DRAWINGS PREPARED BY

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LEGEND: PROPOSED

ALL ITEMS IN LEGEND: PROPOSED. TO BE INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND SPECIFICATIONS.

02 CONCRETE
- C-1 CONCRETE SLAB ON GRADE. RE: STRUCTURAL. RE: SOILS. FINISH: POLISHED. RE: CONCRETE FINISH SCHEDULE
- C-2 CONCRETE SLAB ON GRADE. RE: STRUCTURAL. RE: SOILS. FINISH: BROOM FINISH. RE: CONCRETE FINISH SCHEDULE
- C-3 CONCRETE FOOTING. RE: STRUCTURAL. RE: SOILS
- C-4 CONCRETE SLAB ON GRADE. RE: STRUCTURAL. RE: SOILS. FINISH: STANDARD CONCRETE - FROST SCALED.

04 MASONRY
- MA-1 CONCRETE BLOCK WALL. SIZE: 8"X8"X16". STACK BOND. MANUFACTURER: BRCD. FINISH: PRESSURE. COLOR: GREY. MEDIUM WEIGHT.

05 METAL
- MT-1 BREAK METAL FASCIA. 8 GAGE. MANUFACTURER TO FIT METALS. MODEL / COLOR: KYNAR / (DARK GREY)
- MT-2 PERFORATED SCREEN. MANUFACTURER: TEKTRIM. MODEL: XXXXX

06 WOOD
- W-1 2X4, PRESSURE TREATED.
- W-2 2X4
- W-3 2X6
- W-4 2X8

07 THERMAL AND MOISTURE PROTECTION
- TM-1 WALL INSULATION. REFER TO TITLE 24 REPORT.
- TM-2 SLAB INSULATION. REFER TO TITLE 24 REPORT.
- TM-3 CEILING INSULATION. REFER TO TITLE 24 REPORT. PROVIDE VENTILATED AIR SPACE BETWEEN INSULATION AND ROOF DECK.
- TM-4 SPRAY FOAM ROOF. CLOSE CELL. MINIMUM 4" X 12" TO EAVES. SEAMLESS. AND / OR ROOF BOARD. R30 @ 1" THICK.
- TM-5 CLASS "A" ASSEMBLY. ICC-ES: ESR-2532
- TM-6 MANUFACTURER: CERTAINTEED. MODEL: FIBERGLASS WITH PRE-PAINTED COATING
- TM-7 ROOF CONCRETE
- TM-8 STUCCO SYSTEM OVER METAL LATHE. MANUFACTURER: LA HABRA. FINISH: SANTA BARBARA MISSION. COLOR: CRYSTAL WHITE.
- TM-9 STUCCO PLASTER STOP. PROVIDE SEALANT WHERE OCCURS. MANUFACTURER: VINYLCORP
- TM-10 MODEL: 7/8" BEAD
- TM-11 DRYVIT MOISTURE MANAGEMENT SYSTEM. MANUFACTURER: DRYVIT. MODEL: SUPREME
- TM-12 WINDOW SILL FLASHING
- TM-13 EIFS CANOPIES
- TM-14 MANUFACTURER: DUROCK-TRUEXCEL. MODEL: R-WALL
- TM-15 ESTERIOR CEILING PAINTING. MANUFACTURER: VINYLCORP. MODEL: RE: 9100. ELECTRICAL PLAN. WHITE. ROOF VENTS. COLOR: APPROPRIATE COLOR/FINISH TO MATCH ADJACENT SURFACE

08 OPENINGS
- D-1 DOOR. RE: 2017. DOOR TYPES AND SPECIFICS. DOORS
- D-2 WINDOW. RE: 2017. DOOR TYPES AND SPECIFICS. WINDOWS
- D-3 GLASS PANEL. RE: 2017. DOOR TYPES AND SPECIFICS. DOORS

09 FINISHES
- F-1 5/8" TYPE "X" GYPSUM BOARD. FROM FLOOR TO ROOF DECK.
- F-2 LEVEL 4/5 FINISH. PAINTED (COLOR 1 OF 3)
- F-3 5/8" GYPSUM BOARD. LEVEL 4/5 FINISH. PAINTED (COLOR 1 OF 3)
- F-3.2 GYPSUM BOARD. 1" FURR METAL.
- F-4 GYPSUM BOARD ASSEMBLY RATED. METAL. 1" FURRAL.
- F-5 CEILING HEIGHTS. REFER TO INTERIOR ELEVATIONS.
- F-6 SOFFITS. REFER TO INTERIOR ELEVATIONS.
- F-7 FLOOR FINISH. REFER TO FLOOR FINISH SCHEDULE.
- F-8 CEILING FINISH. REFER TO REFLECTED CEILING PLANS FOR SPECS.
- F-9 MIRROR. REFER TO INTERIOR ELEVATIONS FOR SPECIFICATIONS.
- F-9 WOOD VENEER. REFER TO LEGEND / COUNTERTOP / CABINETS.
- F-10 CLOSETS: 1+5+5
- CURTAIN TRACK. RECESSED INTO CEILING MATERIAL.
- MANUFACTURER: CURTAIN-TRACKS.COM
- MODEL: #2405
- F-12 WALL PAPER. REFER TO SPECIFICATIONS.

10 FURNISHINGS
- F-11 RECESSED BUILDING BRACE. MOTORIZED AND MANUAL.
- MANUFACTURER: BRCD
- MODEL: SINGLE ROLLER.

10 SPECIALTIES
- X-1 GAS FIRE FEATURE.
- X-2 AT EDGE GAS FIRE FEATURE.
- X-3 BBQ. BUILT IN MASONRY BLOCK WALL. BBQ
- INSTALLATION GUIDE TO BE PROVIDED TO BUILDING INSPECTOR
- TO VERIFY ALL CLEARANCES TO COMBUSTIBLES

21 PLUMBING
- P-1 BOSS 880
- P-2 PLUMBING FIXTURE
- P-3 WATER HEATER
- P-4 ROOF DRAIN AND OVERFLOW. REFER TO ELEC SHEET
- P-5 ROOF DRAIN AND OVERFLOW. REFER TO PLUMBING SHEET
- P-6 MASTER SYSTEM. REFER TO SPECIFICATIONS
- P-6 PLUMBING VENT. REFER TO ELEVATIONS. PAINT "L" COLOR
- P-6 CONCEAL FROM STREET. PAINT TO MATCH ADJACENT SURFACE
- INTERIOR VIEW AT SKYLIGHTS.

26 ELECTRICAL
- E-1 ELECTRICAL METER.
- E-2 ELECTRIC MAIN SERVICE PANEL. REFER TO ELECTRICAL
- E-3 ELECTRIC SUB PANEL. REFER TO ELECTRICAL

STRUCTURAL
- S-1 WOOD BEAM. RE: STRUCTURAL
- S-2 WOOD ENGINEERED BEAM. RE: STRUCTURAL
- S-3 WOOD COLUMN. RE: STRUCTURAL
- S-4 PLYWOOD SHEATHING. RE: STRUCTURAL
- S-5 WOOD JOIST. RE: STRUCTURAL
- S-6 WOOD RAFTER. RE: STRUCTURAL
- S-7 WOOD BEAM. RE: STRUCTURAL
- S-8 STEEL COLUMN. RE: STRUCTURAL
- S-9 STEEL BEAM. RE: STRUCTURAL

DRAWING NUMBER

A3.03

DRAWING TITLE

BUILDING SECTIONS: PROPOSED

REVISION

08 OCT. 08-15-2018	
PLAN CHECK CORRECTIONS. 07-18-2018	
CITY SUBMITTAL. 06-24-2018	

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APN: 612-320-012-2

PROJECT: 1004

NEW CUSTOM RESIDENCE

700 LA ESTRELLA

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DRAWN/ES PREPARED BY

STEPHEN STRUDALA DESIGN LLC

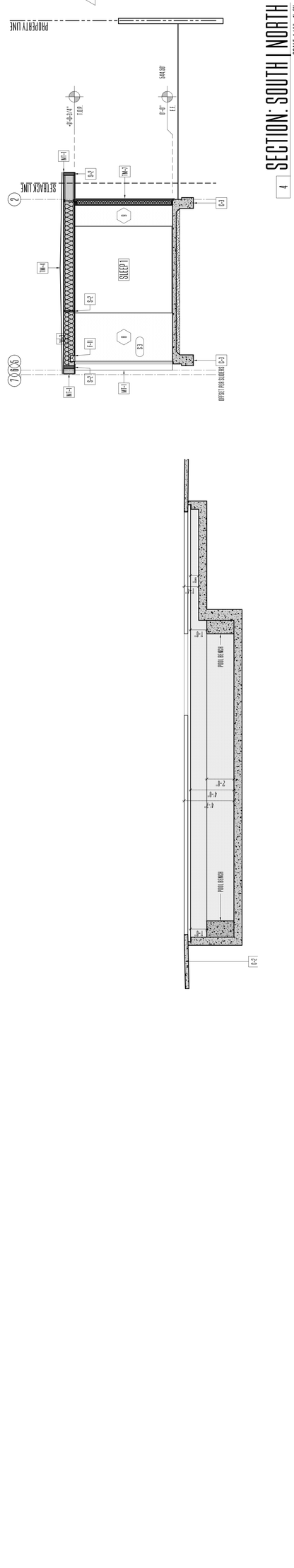
STEPHEN@STEPHENSTRUDALADESIGN.COM

609.923.5442

LEGEND: PROPOSED

ALL LETTERS IN LEGEND: PREPARED TO BE INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND SPECIFICATIONS.

01 CONCRETE		
C-1	CONCRETE SLAB ON GRADE. RE: STRUCTURAL RE: SOILS. FINISH: TROWEL FINISH, SEE DRAWING #XXXX FOR FINISH LOCATION	
C-2	CONCRETE SLAB ON GRADE. RE: STRUCTURAL RE: SOILS. CONCRETE STAINING. RE: STRUCTURAL RE: SOILS	
C-3	CONCRETE SLAB ON GRADE. RE: STRUCTURAL RE: SOILS. FINISH: STANDARD CONCRETE - BROOM FINISH.	
C-4		
04 MASONRY		
M-1	CONCRETE BLOCK WALL. SIZE: XXXCM. STACK BOND. MANUFACTURER: BRCD FINISH: PRESCRIBED COLOR: GREY, MEDIUM WEIGHT.	
05 METAL		
M-1	BRICK METAL FASCIA. 18 GAGE. MANUFACTURER TAYLOR METALS MODEL / COLOR: KYNAR / (PALM GREY)	
M-2	PLANTER SCREEN MANUFACTURER: TEKTRIM MODEL: XXXXX	
06 WOOD		
W-1	2X4. PRESSURE TREATED.	
W-2	2X4	
W-3	2X6	
W-4	2X8	
07 THERMAL AND MOISTURE PROTECTION		
TM-1	WALL INSULATION. REFER TO TITLE 24 REPORT	
TM-2	SLAB INSULATION. REFER TO TITLE 24 REPORT	
TM-3	CEILING INSULATION. REFER TO TITLE 24 REPORT. PROVIDE	
TM-4	VENTILATED AIR SPACE BETWEEN INSULATION AND RIGID BACK. SPRAY FOAM ROOF. SUPP. MINIMUM 6" X 12" TO EAVES. SOFFITS, AND FOR RIGID BOARD. RIGID R-1. R-VALUE CLASS "A" ASSEMBLY. ICC-ES: ESR-2332	
TM-5	MANUFACTURER: CERTAINTEED FIBER CEMENT SIDING	
TM-6	ROOF SOCKET	
TM-7	STUCCO SYSTEM OVER METAL LATHE. MANUFACTURER: 3 A RABBA FINISH: SANTA BARBARA MISSION. COLOR: CRYSTAL WHITE.	
TM-8	STUCCO PLASTER STOP. PROVIDE SEALANT WHERE OCCURS. MANUFACTURER: VINYLSHOP	
TM-9	MODEL: P/B "BEV"	
TM-10	BITUMINOUS WATER PROOFING MEMBRANE.	
TM-11	TYVEK HOME WRAP SELECT. COMPARABLE SUBSTITUTE ACCEPTABLE	
TM-12	MANUFACTURER: DUROCK	
TM-13	MANUFACTURER: SOLUS LUMBER SIZE: 1" X 4"	
TM-14	EXTERIOR CEILING VENTING. MANUFACTURER: VINYLSHOP MODEL: RE: A165. ELECTRICAL PLAN. NOTE: RUBY VENTS. 6500 APPROPRIATE FOR CONDITIONS EXISTING SITE	
08 OPENINGS		
D-1	DOOR. RE: 2017 3000 TYPES AND SPECIFIC DOORS.	
D-2	WINDOW. RE: 2017 3000 TYPES AND SPECIFIC WINDOWS.	
D-3	GLASS PANEL. RE: 2017 3000 TYPES AND SCHEDULE DOORS.	
F-1	6.5" "TYPE "1" GYPSUM BOARD. FROM FLOOR TO ROOF DECK. LEVEL 4/5 FINISH. PAINTED (COLOR T.B.D.)	
F-2	5/8" GYPSUM BOARD. LEVEL 4/5 FINISH. PAINTED (COLOR T.B.D.)	
F-3.1	GYPSUM BOARD SOFFIT. PROVIDE SEALANT WHERE OCCURS.	
F-3.2	GYPSUM BOARD BULKHEAD. REFER TO ELEVATIONS.	
F-4	CASINGS. REFER TO INTERIOR ELEVATIONS	
F-5	COUNTERTOP. REFER TO ELEVATIONS. CONFIRM DEPTH.	
F-6	TILE. CASE, BACKSPLASH, FLOOR. REFER TO ELEVATIONS.	
F-7	CERAMIC TILE. MANUFACTURER: DAL-TILE. SEE PLANS FOR SPECS	
F-8	WOOD VENEER. REFER TO LEGEND. COUNTERTOP. CABINETS:	
F-9	CLOSETS: F+5	
F-10	EGGSHELL FINISH. MANUFACTURER: BENJAMIN MOORE.	
F-11	MANUFACTURER: DURYEA - TRACKS.COM MODEL: B4005	
F-12	WALL PAPER. REFER TO SPECIFICATIONS.	
12 FURNISHINGS		
F-01	RECESSED BUILDING SHADES. MOTORIZED AND MANUAL MANUFACTURER: SHADE-O-MATIC MODEL: SINGLE ROLLER.	
10 SPECIALTIES		
X-1	GAS FIRE FEATURE. AT EDGE GAS FIRE FEATURE.	
X-2	BBQ. BUILT IN MASONRY BBQ IN WALL. BBQ.	
X-3	INSTALLATION GUIDE TO BE PROVIDED TO BUILDING INSPECTOR TO VERIFY ALL CLEARANCES TO COMBUSTIBLES.	
23 HVAC		
H-1	HVAC UNIT. RE: M-1100 SPECIFICATIONS.	
H-2	HVAC DUCT. RE: M-1100 SPECIFICATIONS.	
H-3	HVAC GRILL. RE: M-1100 SPECIFICATIONS.	
H-4	EXHAUST VENT. VENT THROUGH WALL TO ROOF ABOVE.	
H-5	HVAC DOWNSPOUT.	
H-6	HVAC CONDENSER.	
22 PLUMBING		
P-1	HOSE BIB.	
P-2	PLUMBING FIXTURE.	
P-3	WATER HEATER.	
P-4	ROOF DRAIN AND OVERFLOW. REFER TO A3.03 SHOW ROOF DRAIN AND OVERFLOW ON ROOF DRAINAGE PLAN.	
P-5	MASTER SYSTEM. REFER TO SPECIFICATIONS.	
P-6	PLUMBING VENT. REFER TO A3.03 EDGE "GRAVITY" FLOW CONCEPT. FROM PRESENTATION VIEW AT EXTERIOR UNIT FROM INTERIOR VIA A SKYLIGHTS.	
26 ELECTRICAL		
E-1	ELECTRICAL METER.	
E-2	ELECTRIC MAIN SERVICE PANEL. REFER TO ELECTRICAL	
E-3	ELECTRIC SUB PANEL. REFER TO ELECTRICAL	
STRUCTURAL		
S-1	WOOD BEAM. RE: STRUCTURAL	
S-2	WOOD CANTILEVER BEAM. RE: STRUCTURAL	
S-3	WOOD COLUMN. RE: STRUCTURAL	
S-4	PLYWOOD SHEATHING. RE: STRUCTURAL	
S-5	WOOD JOIST. RE: STRUCTURAL	
S-6	WOOD RAFTERS. RE: STRUCTURAL	
S-7	WOOD HEADER. RE: STRUCTURAL	
S-8	STEEL COLUMN. RE: STRUCTURAL	
S-9	STEEL BEAM. RE: STRUCTURAL	



SCHEDULE: DOORS: CONTRACTOR TO VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO ORDERING DOORS.

DOOR TAG:	DOOR TYPE:	EXTERIOR DOOR	DOOR DIMENSIONS: WIDTH	HEIGHT	FINISH: PNT. O.N.O.	DETAILS: SILL	HEAD	JAMB	JAMB WIDTH	LOCKSET	REMARKS:
1	E	■	3'-0"	8'-0"					-	RE: NOTES	SELF-CLOSING AND SELF LATCHING DOOR.
2	B		2'-10"	8'-0"						PRIVACY	
3	B		2'-10"	8'-0"						PRIVACY	
4	B		4'-0"	8'-0"						PRIVACY	
5	B		2'-10"	8'-0"						PASSAGE	
10	B		3'-0"	8'-0"		8.0-1.0U.1 / 4.0.W.1	8.0-1.0U.2 / 4.0.W.1	8.0-1.0U.3 / 4.0.W.1	X-X/X"	PRIVACY	
11	B		3'-4"	8'-0"						PASSAGE	
12	D		5'-0"	8'-0"	M/A	8.0-1.0U.1 / 4.0.W.1	8.0-1.0U.2 / 4.0.W.1	8.0-1.0U.3 / 4.0.W.1	N/A	N/A	
13	D		3'-0"	8'-0"						PRIVACY	
14	B		2'-8"	8'-0"						PASSAGE	
15	B		2'-8"	8'-0"						PRIVACY	
16	D		2'-4"	8'-0"						LOCKSET	
17	B		2'-10"	8'-0"		8.0-1.0U.1 / 4.0.W.1	8.0-1.0U.2 / 4.0.W.1	8.0-1.0U.3 / 4.0.W.1		PRIVACY	
18	B		2'-10"	8'-0"		9-1.2U.1 / 4.0.W.1	9-1.2U.2 / 4.0.W.1	9-1.2U.3 / 4.0.W.1	6-3/4"	PRIVACY	
19	D		2'-5"	8'-0"	M/A	28.2T.3U.1 / 4.0.W.1	28.2T.3U.2 / 4.0.W.1	28.2T.3U.3 / 4.0.W.1	N/A	N/A	
20	M	■	7'-0"	8'-0"	M/A				X-X/X"	GARAGE MOTOR	POWDER COATED WHITE.
21	L	■	16'-5"	8'-0"	M/A				X-X/X"	GARAGE MOTOR	POWDER COATED WHITE.
22	G	■	2'-3"	8'-0"						PASSAGE	VERIFY DOOR HEIGHT WITH HVAC CONSULT.
23	H	■	6'-0"	8'-0"					X-X/X"	LOCKSET	VERIFY DOOR HEIGHT WITH HVAC CONSULT.
23	F	■	3'-0"	8'-0"						RE: NOTES	SELF-CLOSING AND SELF LATCHING DOOR.
24	B		2'-6"	8'-0"						PASSAGE	
28	D		2'-5"	8'-0"							

SCHEDULE: DOORS: SLIDING: CONTRACTOR TO VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO ORDERING DOORS. DOORS TO BE BLOCK FRAMED UNLESS OTHERWISE NOTED.

DOOR TAG:	DOOR TYPE:	EXTERIOR DOOR	DOOR DIMENSIONS: WIDTH	HEIGHT	FINISH:	DETAILS: SILL	HEAD	JAMB	JAMB	LOCKSET	REMARKS:
S.1	SA	■	39'-8"	11'-0"	BRK. BRNZ.	8.0-1.0U.1 / 4.0.W.1	8.0-1.0U.1 / 4.0.W.1	8.0-1.0U.2 / 4.0.W.1	8.0-1.0U.1 / 4.0.W.1	FLUSH-MOUNTED HANDLE	BLACK HARDWARE, TYPICAL
S.2	SA	■	39'-8"	11'-0"	BRK. BRNZ.	8.0-1.0U.1 / 4.0.W.1	8.0-1.0U.1 / 4.0.W.1	8.0-1.0U.2 / 4.0.W.1	8.0-1.0U.1 / 4.0.W.1	FLUSH-MOUNTED HANDLE	BLACK HARDWARE, TYPICAL
S.3	SB	■	8'-0"	8'-0"	BRK. BRNZ.	9-1.0U.1 / 4.0.W.1	9-1.0U.1 / 4.0.W.1	9-1.0U.2 / 4.0.W.1	9-1.0U.1 / 4.0.W.1	FLUSH-MOUNTED HANDLE	BLACK HARDWARE, TYPICAL

SCHEDULE: PIVOT / HINGED DOORS: CONTRACTOR TO VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO ORDERING DOORS. DOORS TO BE BLOCK FRAMED UNLESS OTHERWISE NOTED.

DOOR TAG:	DOOR TYPE:	EXTERIOR DOOR	DOOR DIMENSIONS: WIDTH	HEIGHT	FINISH:	DETAILS: SILL	HEAD	JAMB		LOCKSET	REMARKS:
P.1	PA	■	4'-10"	9'-0"	WOOD	8.0-1.0U.1 / 4.0.W.1	8.0-1.0U.2 / 4.0.W.1	8.0-1.0U.3 / 4.0.W.1			-
P.2	PB	■	3'-0"	9'-0"	BRK. BRNZ.	8.0-1.0T.1 / 4.0.W.1	8.0-1.0T.2 / 4.0.W.1	8.0-1.0T.3 / 4.0.W.1			
P.3	PB	■	3'-11"	9'-0"	BRK. BRNZ.	8.0-1.0T.1 / 4.0.W.1	8.0-1.0T.2 / 4.0.W.1	8.0-1.0T.3 / 4.0.W.1			
P.4	PB		3'-0"	9'-0"	BRK. BRNZ.						

SCHEDULE: GATES: EXTERIOR: CONTRACTOR TO VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO ORDERING GATES.

DOOR TAG:	DOOR TYPE:	EXTERIOR DOOR	DOOR DIMENSIONS: WIDTH	HEIGHT	FINISH: POWDER COATED, XXXXX, U.N.O.	DETAILS: SILL	HEAD	JAMB	LOCKSET	REMARKS:
EX.2	Y	■	28'-8"	5'-8"						
EX.4	X	■	3'-0"	6'-0"					■	
EX.6	X	■	3'-0"	5'-8"					■	
EX.7	V	■	2'-5"	5'-8"						

SCHEDULE: WINDOWS: CONTRACTOR TO VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO ORDERING WINDOWS. WINDOWS TO BE BLOCK FRAMED U.O.N.

WINDOW TAG:	WINDOW TYPE:	WINDOW DIMENSIONS: WIDTH	HEIGHT	FINISH: DARK BRONZE, ANODIZED, U.N.O.	DETAILS: SILL	HEAD	JAMB	REMARKS:
1	1	2'-11"	8'-4"		8.0-2.0U.1 / 4.0.W.2	8.0-2.0U.2 / 4.0.W.2	8.0-2.0U.3 / 4.0.W.2	
2	2	2'-6"	8'-4"					OPERABLE FULL HEIGHT CASEMENT
3	1	1'-6"	8'-4"					
4	1	7'-6"	8'-4"		8.0-2.U.1 / 4.0.W.2	8.0-2.U.2 / 4.0.W.2	8.0-2.U.3 / 4.0.W.2	
5	1	4'-6"	8'-4"		8.0-2.W.1 / 4.0.W.2	8.0-2.W.2 / 4.0.W.2	8.0-2.W.3 / 4.0.W.2	
6	1	1'-3"	8'-4"		8.0-2.U.1 / 4.0.W.2	8.0-2.U.2 / 4.0.W.2	8.0-2.U.3 / 4.0.W.2	
7	1	1'-8"	8'-4"		8.0-2.U.1 / 4.0.W.2	8.0-2.U.2 / 4.0.W.2	8.0-2.U.3 / 4.0.W.2	
8	1	4'-8"	8'-4"					
9	1	2'-8"	8'-4"		8.0-2.U.1 / 4.0.W.2	8.0-2.U.2 / 4.0.W.2	8.0-2.U.3 / 4.0.W.2	
10	1	1'-6"	8'-4"					
11	1	1'-3"	8'-4"		8.0-2.U.1 / 4.0.W.2	8.0-2.U.2 / 4.0.W.2	8.0-2.U.3 / 4.0.W.2	
12	1	3'-4"	8'-4"		8.0-2.W.1 / 4.0.W.2	8.0-2.W.2 / 4.0.W.2	8.0-2.W.3 / 4.0.W.2	
13	1	1'-8"	8'-4"		8.0-2.W.1 / 4.0.W.2	8.0-2.W.2 / 4.0.W.2	8.0-2.W.3 / 4.0.W.2	
14	1	1'-8"	8'-4"		8.0-2.U.1 / 4.0.W.2	8.0-2.U.2 / 4.0.W.2	8.0-2.U.3 / 4.0.W.2	
15	1	1'-8"	7'-8"		8.0-2.W.1 / 4.0.W.2	8.0-2.W.2 / 4.0.W.2	8.0-2.W.3 / 4.0.W.2	
16	1	1'-8"	8'-4"		8.0-2.W.1 / 4.0.W.2	8.0-2.W.2 / 4.0.W.2	8.0-2.W.3 / 4.0.W.2	
17	1	1'-8"	8'-4"		8.0-2.W.1 / 4.0.W.2	8.0-2.W.2 / 4.0.W.2	8.0-2.W.3 / 4.0.W.2	

SCHEDULE: WINDOWS: SKYLIGHTS: CONTRACTOR TO VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO ORDERING WINDOWS.

WINDOW TAG:	WINDOW TYPE:	ROUGH DIMENSIONS: WIDTH	LENGTH	FINISH: ALUMINUM, U.N.O.	DETAILS: SILL	HEAD	JAMB	REMARKS:
SKY1	SKY1	7'-2-1/2"	4'-4"					-
SKY2	SKY1	7'-2-1/2"	3'-4"		7.0-2.U.1 / 4.0.W.2	7.0-2.U.2 / 4.0.W.2		-

SPECIFICATIONS: DOOR HARDWARE

TYPE A / E (SWING DOORS):
HINGES: MANUFACTURER: SUGATSUNE HG530-XXX (T.B.D.)
HANDLES: MANUFACTURER: T.B.D.
T.B.D.
ROSETTE: MANUFACTURER: T.B.D.
T.B.D.

TYPE B / C (POCKET DOORS):
PULL PLATE: MANUFACTURER: (T.B.D.)
(T.B.D.)
SECURITY LOCK: MANUFACTURER: (T.B.D.)
(T.B.D.)

TYPE PA (ENTRY PIVOT DOOR):
SELF CLOSING PIVOT HARDWARE RECESSED INTO FLOOR AND HEAD WITH 90 DEGREE OPEN OPTION.
HANDLE: MANUFACTURER: T.B.D.
T.B.D.
LOCK: MANUFACTURER: T.B.D.
T.B.D.

TYPE SA / SB / SD (SLIDING DOORS):
HANDLE: MANUFACTURER: WESTERN FLUSH-MOUNT, BLACK
LOCK: MANUFACTURER: WESTERN EXTERIOR KEYED FOR SD

SPECIFICATIONS: INTERIOR POCKET DOORS

TRACK HARDWARE
MANUFACTURER: CAVITY SLIDERS
MODEL: CS FR-CEILING MOUNT TRACK - SINGLE / DOUBLE

CARRIAGE
MANUFACTURER: CAVITY SLIDERS
MODEL: M8 CARRIAGE PACK

FRAME SEPARATE (NOT INCLUDED). DO NOT USE FRAME HEADER.

SPECIFICATIONS: WINDOWS AND DOORS

1. WINDOWS AND DOORS TO BE RECESSED INTO FLOOR, WALLS, AND CEILINGS UNLESS OTHERWISE NOTED. DETAILS FORTHCOMING.
2. WINDOWS AND DOORS TO BE BLOCK FRAMING UNLESS OTHERWISE NOTED.

NOTES: GLAZING

6. GLAZING IN THE FOLLOWING LOCATIONS SHOULD BE SAFETY GLAZING MATERIAL IN ACCORDANCE WITH SECTION R308.4:
A. GLAZING IN DOORS.
B. GLAZING IN THE WALLS/DOORS FACING OR CONTAINING BATHTUBS OR SHOWERS WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60" ABOVE THE STANDING SURFACE.
C. GLAZING IN INDIVIDUAL OR OPERABLE PANELS THAT MEET ALL OF THE FOLLOWING CONDITIONS:
I. EXPOSED AREA OF AN INDIVIDUAL PANE IS GREATER THAN NINE SQUARE FEET, AND
II. EXPOSED BOTTOM EDGE IS LESS THAN 18" ABOVE THE FLOOR, AND;
III. EXPOSED TOP EDGE IS GREATER THAN 36" ABOVE THE FLOOR, AND;
IV. ONE OR MORE WALKING SURFACES ARE WITHIN 36" HORIZONTALLY OF THE PLANE OF THE GLAZING.

SPECIFICATIONS: GLASS

SLIDING GLASS DOORS (FLEETWOOD)
NON-THERMALLY BROKEN
GUARDIAN SNX®: CLEAR
U = 0.51 (ARGON)
SHGC = 0.23 (ARGON)

HINGED GLASS DOORS (FLEETWOOD)
THERMALLY BROKEN
GUARDIAN SNX®: CLEAR
U = 0.43 (ARGON)
SHGC = 0.18 (ARGON)

CASEMENT WINDOW (FLEETWOOD)
THERMALLY BROKEN
CARDINAL 368: CLEAR
U = 0.47 (ARGON)
SHGC = 0.18 (ARGON)

FIXED WINDOW (FLEETWOOD)
THERMALLY BROKEN
CARDINAL 368: CLEAR
U = 0.34 (ARGON)
SHGC = 0.24 (ARGON)

SKYLIGHTS (VELUX)
THERMALLY BROKEN
LAMINATED LOW-E
U = 0.49 (VERIFY)
SHGC = 0.27 (VERIFY)

SHOWER GLASS
MANUFACTURER T.B.D.
OWNER TO VERIFY COLOR

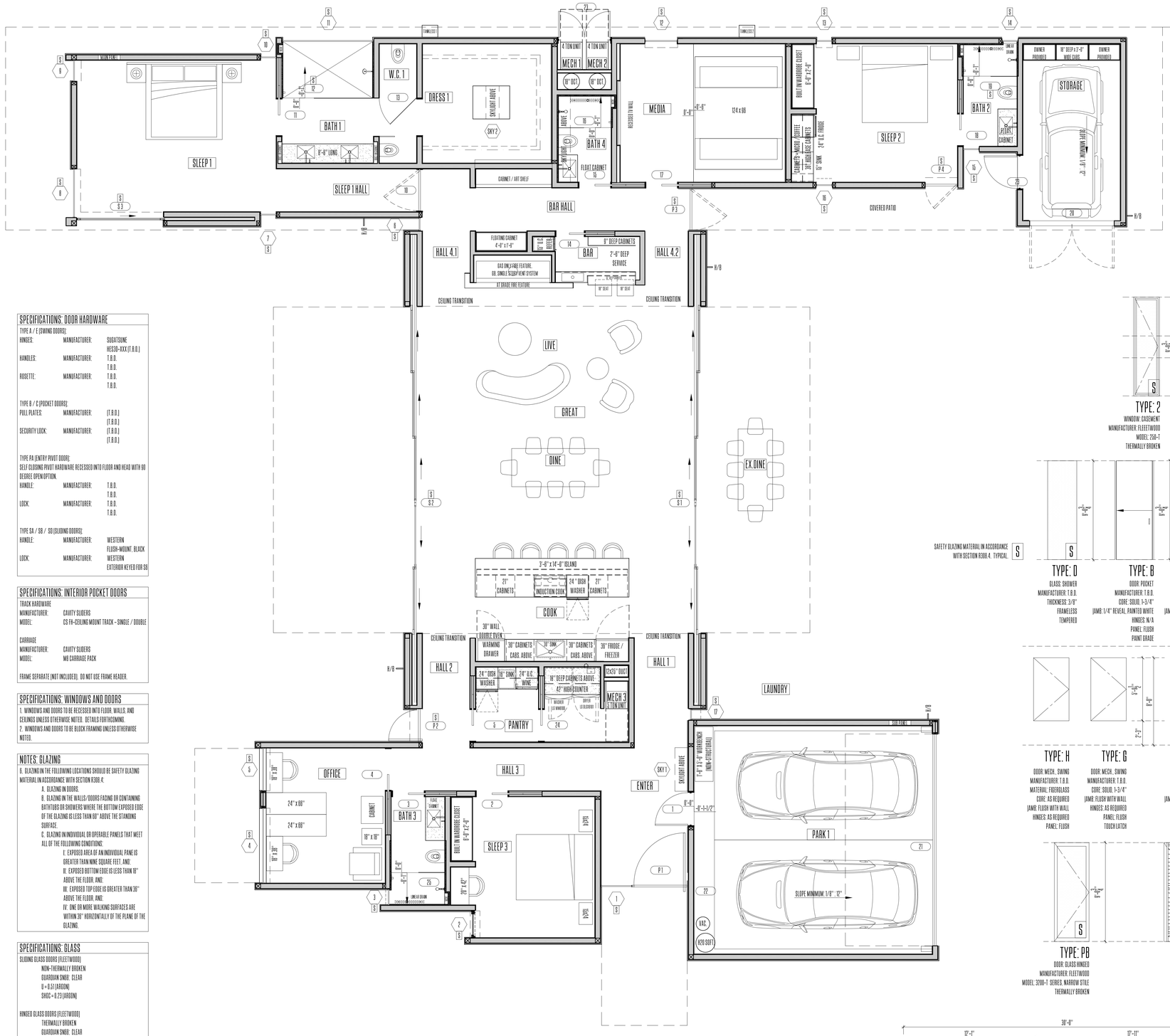
NOTES: WINDOWS AND DOORS

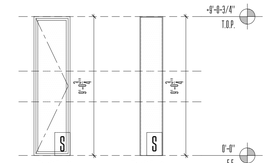
1. EXTERIOR DOORS MAY SWING OUTWARD ONLY IF THE EXTERIOR LANDING IS NOT MORE THAN 1-1/2" LOWER THAN THE TOP OF THE THRESHOLD. R311.3.1.

R612.1 GENERAL. WINDOWS AND DOORS SHALL BE INSTALLED AND FLASHED IN ACCORDANCE WITH THE FENESTRATION MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS. WINDOW AND DOOR OPENINGS SHALL BE FLASHED IN ACCORDANCE WITH SECTION R703.8. WRITTEN INSTALLATION INSTRUCTIONS SHALL BE PROVIDED BY THE FENESTRATION MANUFACTURER FOR EACH WINDOW OR DOOR.

NOTES: GARAGE AND CARPORTS

12. THE GARAGE SHALL BE SEPARATED FROM THE RESIDENCE AND ITS ATTIC BY NOT LESS THAN 1/2" GYPSUM BOARD APPLIED TO THE GARAGE SIDE (AT WALLS). GARAGES BENEATH HABITABLE ROOMS SHALL BE SEPARATED BY NOT LESS THAN 5/8" TYPE X GYPSUM BOARD. SECTION R302.6.
13. OPENINGS BETWEEN THE GARAGE AND THE DWELLING SHALL BE SELF-CLOSING, SELF LATCHING, AND EITHER 1-3/8" SOLID CORE OR A LISTED 20 MINUTE ASSEMBLY. SECTION R302.5.1.
14. WINDOWS BETWEEN THE GARAGE AND THE DWELLING MUST BE AT LEAST 20 MINUTE RATED WINDOW.
15. PROVIDE AN ADEQUATE BARRIER TO PROTECT THE WATER HEATER FROM VEHICLE DAMAGE. CPC SECTION 507.13.
R308.4 AUTOMATIC GARAGE DOOR OPENERS. AUTOMATIC GARAGE DOOR OPENERS SHALL BE LISTED AND LABELED IN ACCORDANCE WITH UL 325.
R612.4 GARAGE DOORS. GARAGE DOORS SHALL BE TESTED IN ACCORDANCE WITH EITHER ASTM E 330 OR ANSI/DASMA 108, AND SHALL MEET THE ACCEPTANCE CRITERIA OF ANSI/DASMA 108.





TYPE: 2
WINDOW: CASEMENT
MANUFACTURER: FLEETWOOD
MODEL: 250-T
THERMALLY BROKEN

TYPE: 1
WINDOW: FIXED
MANUFACTURER: FLEETWOOD
MODEL: 250-T
NON THERMALLY BROKEN

SAFETY GLAZING MATERIAL IN ACCORDANCE WITH SECTION R308.4: TYPICAL S

TYPE: D
GLASS: SHOWER
MANUFACTURER: T.B.D.
THICKNESS: 3/8"
FRAMELESS
TEMPERED

TYPE: B
DOOR: POCKET
MANUFACTURER: T.B.D.
CORE: SOLID, 1-3/4"
JAMB: 1/4" REVEAL PAINTED WHITE
HINGES: N/A
PANEL: FLUSH
PAINT GRADE

TYPE: A
DOOR: SWING
MANUFACTURER: T.B.D.
CORE: SOLID, 1-3/4"
JAMB: 1/4" REVEAL, PAINTED WHITE
HINGES: THREE, CONCEALED
PANEL: FLUSH
PAINT GRADE

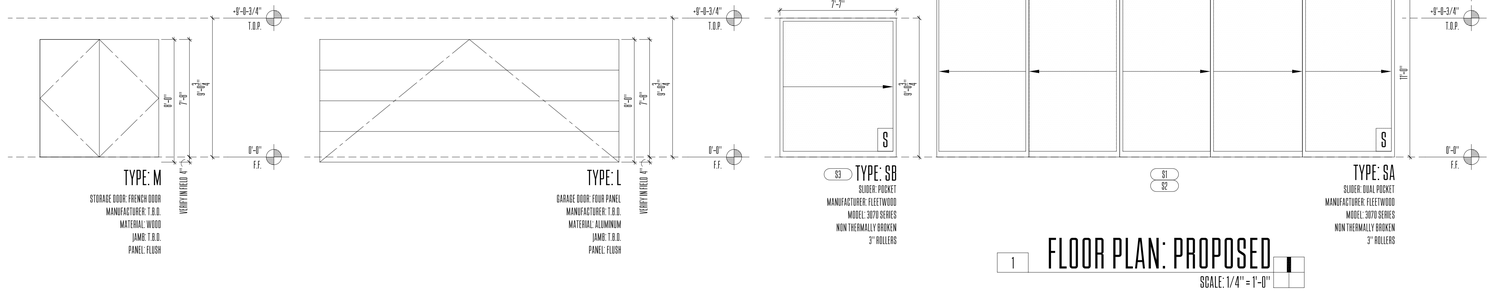
TYPE: H
DOOR: MECH., SWING
MANUFACTURER: T.B.D.
MATERIAL: FIBERGLASS
CORE: AS REQUIRED
JAMB: FLUSH WITH WALL
HINGES: AS REQUIRED
PANEL: FLUSH

TYPE: G
DOOR: MECH., SWING
MANUFACTURER: T.B.D.
CORE: SOLID, 1-3/4"
JAMB: FLUSH WITH WALL
HINGES: AS REQUIRED
PANEL: FLUSH
TOUCH LATCH

TYPE: E
DOOR: FLUSH SWING, GARAGE
MANUFACTURER: T.B.D.
CORE: SOLID, 1-3/4"
JAMB: 1/4" REVEAL, PAINTED WHITE
HINGES: FOUR, CONCEALED
PANEL: FLUSH
PAINT GRADE

TYPE: PB
DOOR: GLASS HINGED
MANUFACTURER: FLEETWOOD
MODEL: 3200-T SERIES, NARROW STILE
THERMALLY BROKEN

TYPE: PA
DOOR: ENTRY PIVOT
MANUFACTURER: CUSTOM
MODEL: WOOD FEATURE DOOR



TYPE: M
STORAGE DOOR: FRENCH DOOR
MANUFACTURER: T.B.D.
MATERIAL: WOOD
JAMB: T.B.D.
PANEL: FLUSH

TYPE: L
GARAGE DOOR: FOUR PANEL
MANUFACTURER: T.B.D.
MATERIAL: ALUMINUM
JAMB: T.B.D.
PANEL: FLUSH

TYPE: SB
SLIDER: POCKET
MANUFACTURER: FLEETWOOD
MODEL: 3070 SERIES
NON THERMALLY BROKEN
3" ROLLERS

TYPE: SA
SLIDER: DUAL POCKET
MANUFACTURER: FLEETWOOD
MODEL: 3070 SERIES
NON THERMALLY BROKEN
3" ROLLERS

1 FLOOR PLAN: PROPOSED
SCALE: 1/4" = 1'-0"

DRAWINGS PRODUCED BY
STEPHEN STRUGALA DESIGN LLC
STEPHEN@STEPHENSTRUGALADESIGN.COM
619.823.5442

PROJECT: 1804
NEW CUSTOM RESIDENCE
700 LA ESTRELLA
PALM SPRINGS, CA 92264
APN: 512-320-012-2

BID SET: 10-15-2018
PLAN CHECK CORRECTIONS: 12-28-2018
DEV. SUBMITTAL: 08-24-2018

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DRAWING TITLE
SCHEDULES: WINDOWS AND DOORS

DRAWING NUMBER
A6.01

GENERAL NOTES
1. ALL CONSTRUCTION, INCLUDING MATERIAL AND WORKMANSHIP, SHALL CONFORM TO THE PROVISIONS OF THE 2016 EDITION OF THE "CALIFORNIA BUILDING CODE", AND STANDARDS REFERENCED THEREIN.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS AND SITE CONDITIONS BEFORE STARTING WORK. THE ARCHITECT SHALL IMMEDIATELY BE NOTIFIED IN WRITING, OF ANY DISCREPANCIES.
3. ALL OMISSIONS AND/OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF, AND A SOLUTION GIVEN BY, THE ENGINEER BEFORE PROCEEDING WITH ANY WORK SO INVOLVED.
4. IF A SPECIFIC DETAIL IS NOT SHOWN FOR ANY PART OF THE WORK, THE CONSTRUCTION SHALL BE THE SAME AS FOR SIMILAR WORK.
5. WORKING DIMENSIONS SHALL NOT BE SCALED FROM PLANS, SECTIONS OR DETAILS ON THESE STRUCTURAL DRAWINGS.
6. EXPANSION INDEX HAS BEEN DETERMINED TO BE LESS THAN 20 AND NO SPECIAL DESIGN REQUIRED FOR STABILITY OF THE STRUCTURE DURING ALL PHASES OF CONSTRUCTION.

FOUNDATIONS AND SOILS
1. AN EXPLORATION OF THE SOILS UNDERLYING THE SITE OF THIS PROJECT WAS MADE BY: CHJ INC. AND IS DESCRIBED IN A REPORT DATED: 7/31/97 WHICH IS ON FILE WITH THE ARCHITECT. THE CONTRACTOR SHOULD BECOME FAMILIAR WITH THE INFORMATION CONTAINED THEREIN, PRIOR TO COMMENCING ANY WORK.
2. BEFORE COMMENCING ANY EARTHWORK, THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES, VALVE PITS OR VAULTS AND SHALL NOT PERFORM ANY WORK THAT WILL DAMAGE OR INTERFERE WITH THE SERVICE OF SAME.
3. FOOTING EXCAVATIONS SHALL BE NEAT AND TRUE TO LINE, WITH ALL LOOSE MATERIAL AND STANDING WATER REMOVED BEFORE FOOTING CONCRETE IS PLACED.
4. EARTH FORMS MAY BE USED FOR FOOTINGS ONLY WHERE THE SOIL IS FIRM AND STABLE AND THE CONCRETE WILL NOT BE EXPOSED.
5. SOIL COMPACTION AND SITE PREPARATION SHALL BE IN ACCORDANCE WITH THE SOILS REPORT. ALL SOILS SITE WORK SHALL BE DONE UNDER THE DIRECT SUPERVISION OF THE SOILS ENGINEER.
6. FOUNDATIONS SUPPORTING WOOD SHALL EXTEND AT LEAST 8" ABOVE THE ADJACENT FINISH GRADE PROVIDE 18" CLEARANCE UNDER WOOD JOISTS AND 12" CLEARANCE UNDER WOOD GIRDERS.
7. THE GEOTECHNICAL AND GEOLOGIC CONSULTANTS, AS RELEVANT, SHOULD PROVIDE OBSERVATION AND TESTING SERVICES FOR ALL GEOTECHNICAL RELATED ACTIVITIES, INCLUDING THE FOLLOWING: ALL EXCAVATIONS, INCLUDING OVEREXCATIONS AND EXCAVATIONS FOR FOOTINGS AND UTILITIES; PROCESSING OF SOILS; PLACEMENT OF FILLS; BACKFILLING OF UTILITY TRENCHES; PREPARATION OF SLAB SUBGRADE; BACKFILLING BEHIND RETAINING WALLS; SUBDRAINS AND WALL BACKDRAINS.
8. EXCAVATIONS FOR FOUNDATIONS SHOULD BE OBSERVED BEFORE PLACING REINFORCING STEEL. SUCH OBSERVATIONS ARE CONSIDERED ESSENTAIL TO IDENTIFY FIELD CONDITIONS THAT MAY DIFFER FROM THOSE OBSERVED DURING ROUGH GRADING.
9. PRIOR TO THE CONTRACTOR REQUESTING A BUILDING DEPARTMENT FOUNDATION INSPECTION, THE SOILS ENGINEER SHALL ADVISE THE BUILDING OFFICAL IN WRITING THAT:
   A. THE BUILDING PAD WAS PREPARED IN ACCORDANCE WITH THE SOILS REPORT.
   B. THE UTILITY TRENCHES HAVE BEEN PROPERLY BACKFILLED AND COMPACTED.
   C. THE FOUNDATION EXCAVATIONS, THE SOILS EXPANSIVE CHARACTERISTICS AND BEARING CAPACITY CONFORM TO THE SOILS REPORT.

REINFORCED CONCRETE
1. THE MINIMUM 28-DAY CYLINDER COMPRESSIVE STRENGTHS SHALL BE 2500 PSI FOR ALL CONCRETE. WATER TO CEMENTITIOUS MATERIALS RATIO SHALL BE 0.5 MAX.
2. PORTLAND CEMENT SHALL CONFORM TO ASTM C150, TYPE V.
3. AGGREGATES FOR NORMAL WEIGHT CONCRETE SHALL CONFORM TO ASTM C33.
4. ADMIXTURES SHALL CONFORM TO ASTM A494 AND SHALL NOT BE CONSIDERED TO REDUCE THE SPECIFIED MINIMUM CEMENT CONTENT.
5. READY-MIX CONCRETE SHALL BE MIXED AND DELIVERED IN ACCORDANCE WITH ASTM C94.
6. ALL VERTICAL SURFACES OF CONCRETE ABOVE FINISHED GRADE SHALL BE FORMED.
7. TYPICAL EMBEDMENT OF 5/8" DIAMETER ANCHOR BOLTS SHALL BE 7".
8. TYPICAL ANCHOR BOLTS FOR HOLDOWNS SHALL BE PER DETAIL 1/-. HOLDOWN ANCHORS SHALL BE TIED IN PLACE PRIOR TO FOUNDATION INSPECTIONS.
9. THIS DESIGN ASSUMES THE SOILS TO HAVE NEGLIGIBLE SULFATE CONTENT. IF SULFATE CONTENT IS BELIEVED TO BE MODERATE OR WORSE, THE ENGINEER SHALL BE CONTACTED IMMEDIATELY FOR REVISED CONCRETE SPECIFICATIONS.

REINFORCING STEEL
1. BAR REINFORCEMENT SHALL CONFORM TO GRADE 60 OF ASTM A615, INCLUDING SUPPLEMENT S1. ALL REINFORCEMENT TO BE WELDED SHALL CONFORM TO ASTM A706.
2. DETAILS OF REINFORCEMENT SHALL BE IN ACCORDANCE WITH CHAPTER 7 OF THE AMERICAN CONCRETE INSTITUTE (ACI) 318, U.O.N.
3. BAR SUPPORTS SHALL BE PROVIDED IN ACCORDANCE WITH THE PROVISIONS OF "BAR SUPPORT SPECIFICATIONS" AS CONTAINED IN THE OF THE "MANUAL OF STANDARD PRACTICE" BY THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI).
4. REINFORCING STEEL DETAILING, BENDING AND PLACING SHALL BE IN ACCORDANCE WITH THE CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE".
5. ALL REINFORCEMENT SHALL BE SECURELY TIED IN PLACE BEFORE PLACING CONCRETE OR GROUT.
6. WELDING OF CROSSING BARS AND TACK WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED.

DESIGN CRITERIA
1. VERTICAL LOADS: (PSF)

	DEAD	LIVE	TOTAL
ROOF:	15	20	35
EXT. WALL:	14	–	14
INT. WALL:	7	–	7

2. LATERAL LOADS:
   WIND: BASIC WIND SPEED = 123 MPH ULT
   I = 1.000
   EXPOSURE = C
   P_S = 16.8 PSF (HORIZONTAL PRESSURE ON VERTICAL SURFACE)
   SEISMIC: I = 1.000
   S_S = 1.6565
   S_1 = 0.7853
   SITE CLASS = D
   S_{DS} = 1.104
   S_{D1} = 0.785
   CATEGORY = D
   BASIC SYSTEM = WOOD STRUCTURAL PANELS
   R = 6.500
   C_S = 0.1699
3. ALLOWABLE SOIL BEARING:
   1800 PSF PER SOILS REPORT

STRUCTURAL STEEL
1. MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" PUBLISHED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION, U.O.N.
2. MATERIALS AND WORKMANSHIP FOR FABRICATION AND ERECTION SHALL CONFORM TO THE "CODE OF STANDARD PRACTICE" PUBLISHED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION, U.O.N.
3. STRUCTURAL STEEL FOR THE USE OR LOCATION INDICATED SHALL CONFORM TO THE FOLLOWING:

USE OR LOCATION	ASTM SPECIFICATION	GRADE
TYP. STRUCTURAL STEEL	A36	---
STEEL PIPE	A53	B
STRUCTURAL STEEL TUBING	A500	B

4. BOLTS SHALL CONFORM TO ASTM A307 GRADE A. NUTS SHALL CONFORM TO ASTM A563 HEX GRADE A.
5. ALL WELDING SHALL CONFORM TO THE PROVISIONS OF AWS D1.1-2010, "STRUCTURAL WELDING CODE-STEEL" OF THE AMERICAN WELDING SOCIETY AND SHALL BE PERFORMED BY CERTIFIED WELDERS QUALIFIED UNDER THE PROCEDURES CONTAINED THEREIN.
6. FILLER METAL USED IN ARC WELDING SHALL BE IN ACCORDANCE WITH TABLE 4.1.1 OF AWS D1.1, "STRUCTURAL WELDING CODE-STEEL" OF THE AMERICAN WELDING SOCIETY. THE MINIMUM NOMINAL TENSILE STRENGTH FOR FILLER METAL SHALL BE 70 KSI.
7. STEEL ITEMS TO BE GALVANIZED SHALL BE COATED IN ACCORDANCE WITH ASTM A123 WITH A MINIMUM OF 2.3 OUNCES OF ZINC PER SQ. FT.
8. ALL STEEL SHALL BE FABRICATED IN AN ICBO OR CITY APROVED SHOP.
9. STEEL SHALL BE PRIMED WITH A SHOP APPLIED PRIMER EXCEPT AS FOLLOWS:
   A. STEEL TO RECEIVE FIREPROOFING (MONOKOTE)
   B. STEEL TO BE EMBEDDED IN CONCRETE
   C. SURFACES WITHIN 2" OF FIELD WELD LOCATIONS

CONCRETE BLOCK/UNIT MASONRY
1. ALL CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90, TYPE I, MEDIUM WEIGHT, COMPRESSIVE STRENGTH OF UNITS SHALL BE AT LEAST 1900 PSI. DESIGN f'm = 1,500 PSI. SINGLE OR DOUBLE OPEN END UNITS SHALL BE USED ON ALL SOLID GROUTED WALLS.
2. MORTAR SHALL BE TYPE "S" PORTLAND CEMENT/LIME OR MORTAR CEMENT, CONFORMING TO IBC TABLE NO. 2103.8 AND ATTAINING A MINIMUM COMPRESSIVE STRENGTH OF 1800 PSI PRIOR TO BACKFILLING BEHIND WALLS. PLASTIC AND MASONRY CEMENTS ARE NOT ACCEPTABLE.
3. GROUT SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI PRIOR TO BACKFILLING BEHIND WALLS AND BE IN CONFORMANCE WITH IBC SECTION 2103.12 AND SHALL CONTAIN A WATER REDUCING ADMIXTURE.
4. ALL REINFORCEMENT SHALL CONFORM TO GRADE 60 OF ASTM A615, INCLUDING SUPPLEMENT S1.
5. VERTICAL REINFORCEMENT SHALL BE TIED OR OTHERWISE FIXED IN POSITION AT THE TOP AND BOTTOM AND AT INTERMEDIATE LOCATIONS.
6. VERTICAL REINFORCEMENT IN WALLS, PILASTERS, ETC., SHALL BE DOWELED TO THE FOOTINGS WITH DOWELS THE SAME SIZE AND SPACING AS THE VERTICAL REINFORCEMENT.
7. ELECTRICAL CONDUIT SHALL NOT BE PLACED IN THE SAME CELL AS REINFORCEMENT UNLESS APPROVED BY THE ENGINEER.
8. OVERHANGING MORTAR AND MORTAR DROPPINGS AND ALL DEBRIS SHALL BE REMOVED FROM ALL CELLS TO RECEIVE GROUT.
9. PROVIDE INSPECTION AND CLEAN-OUT HOLES AT THE BASES OF VERTICAL CELLS HAVING GROUT LIFTS WHICH ARE MORE THAN 4'-0" IN HEIGHT.
10. SOLID GROUT ALL MASONRY CELLS.
11. WHEN GROUTING IS STOPPED FOR ONE HOUR OR MORE, HORIZONTAL CONSTRUCTION JOINTS SHALL BE FORMED BY STOPPING THE POUR OF GROUT 1-1/2" BELOW THE TOP OF THE UPPERMOST UNIT.
12. GROUT SHALL BE CONSOLIDATED IN LIFTS WITH A MECHANICAL VIBRATOR.

WOOD NOTES
1. SAWN WOOD MEMBERS SHALL BE DOUGLAS FIR-LARCH, S4S, CONFORMING TO IBC STANDARD 23-1 AND SHALL BE GRADED UNDER "WWPA" OR "WCLIB" STANDARDS. ACCEPTABLE SPECIES MARKS ARE DOUGLAS FIR AND WESTERN LARCH. NORTH (N) OR SOUTH SPECIES ARE NOT ACCEPTABLE.
2. WOOD GRADES, UNLESS NOTED, SHALL BE AS FOLLOWS:

MEMBERS	GRADE
ALL 2x's, 3x's, & 4x's	#2
ALL 6x's	#1

3. SIMPLE SPAN WOOD MEMBERS, NOT SHOP CAMBERED, SHALL BE ERECTED WITH THE NATURAL CAMBER UP. FOR CANTILEVERED WOOD MEMBERS, CONSULT WITH ENGINEER.
4. PLYWOOD OR OSB SHALL BE OF THE FOLLOWING GRADES AND PANEL IDENTIFICATION INDEXES:

USE	GRADE	SPAN INDEX
ROOF SHEATHING	1/2" OSB	24/0
FLOOR SHEATHING	3/4" OSB	40/20
SHEAR PANELS	3/8" STR.I OSB	32/16

   DIAPHRAGM NAILING SHALL CONFORM TO IBC TABLES 2306.3.1 AND 2306.4.1 AND THE FOLLOWING, U.O.N. ON THE DIAPHRAGM NAILING SCHEDULE: 10d COMMONS @ 6" @ ALL EDGES, 12" @ FIELD AT ROOF AND FLOOR. HORIZONTAL FLOOR DIAPHRAGMS SHALL BE FASTENED TO FLOOR FRAMING WITH GLUE & RING SHANK NAILS. DIAPHRAGMS SHALL BE UNBLOCKED UNLESS OTHERWISE NOTED.
5. FRAMING ANCHORS, POST CAPS, COLUMN BASES, ETC. SHALL BE AS MANUFACTURED BY "SIMPSON COMPANY" OR AN APPROVED EQUAL.
6. BARS, PLATES, STRAPS, SPECIAL FABRICATIONS, UNHEADED BOLTS, WASHERS AND DRIFT BOLTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A36.
7. BOLTS SHALL CONFORM TO ASTM A 307. NUTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A563, GRADE A.
8. ALL BOLT HEADS, NUTS AND LAG SCREWS BEARING ON WOOD SHALL HAVE CUT WASHERS, U.O.N.
9. BOLT HOLES IN WOOD SHALL BE DRILLED 1/32" LARGER THAN THE NOMINAL BOLT DIAMETER.
10. NAILING OF SAWN WOOD MEMBERS, UNLESS OTHERWISE SHOWN ON THE DRAWINGS, SHALL CONFORM TO IBC TABLE 2304.9.1
11. ALL NAILS IN PLYWOOD DIAPHRAGMS AND SHEAR WALLS SHALL BE COMMON NAILS CONFORMING TO FEDERAL SPECIFICATION FF-N-105B WITH FULL HEADS AND .131" DIAMETER FOR 8d COMMON & .148" DIAMETER FOR 10d & .162" DIAMETER FOR 16d.
12. UNLESS SPECIFIED TO BE SINKER BY MANUFACTURER SUCH AS WITH MSTC STRAPS, NAILS IN HARDWARE SHALL BE COMMON NAILS WITH FULL HEADS CONFORMING TO ASTM F1667. 16d SINKERS MAY BE USED WHERE 10d COMMON NAILS ARE SPECIFIED IN HARDWARE. NAIL DIAMETER AND PENETRATION SHALL BE AS FOLLOWS:

NAIL	DIAMETER	MIN. PENETRATION
8d	0.131"	1 5/8"
10d	0.148"	1 3/4"
16d SINKERS	0.148"	1 3/4"
16d	0.162"	2"

13. NAILS LARGER THAN 16d AND ALL NAILING TENDING TO CAUSE SPLITTING OF WOOD MEMBERS, SHALL BE INSTALLED IN PREDRILLED HOLES.
14. HOLDOWNS SHALL BE ATTACHED TO 4x MINIMUM. EDGE NAILING SHALL BE PROVIDED AT ALL MEMBERS WITH HOLDOWNS.
15. TOP PLATE SPLICES AT STRUCTURAL WALLS SHALL HAVE 4'-0" MINIMUM LAP AND SHALL HAVE 18-16D NAILS WITHIN THE LAP LENGTH. OPTION TO LAP WITH NAILS SHALL BE TO USE 'MSTC28' STRAP.
16. AT CALIFORNIA FILL AREAS, EXTEND AND NAIL LOWER PLYWOOD FULL LENGTH BEFORE BUILDING FILL.
17. NAILING SHALL BE PER IBC TABLE 2304.9.1.
18. DO NOT CUT, NOTCH, DRILL, BORE, SHAVE, TAPER OR FOR ANY REASONS MODIFY PRE-ENGINEERED/ MANUFACTURED STRUCTURAL ELEMENTS SUCH AS GLUED-LAMINATED MEMBERS, PARALLAMS, MICROLAMS, I-JOISTS, LIGHT GAUGE METAL MEMBERS AND OTHER SIMILAR TIMBER OR STEEL PRODUCTS UNLESS SUCH MODIFICATIONS ARE WITHIN THE WRITTEN PARAMETERS SET FORTH BY THE MANUFACTURER OF THAT PRODUCT OR A LETTER OF CERTIFICATION FROM THE MANUFACTURER'S ENGINEER WITH DETAIL SIGNED AND STAMPED IS ISSUED AND AUTHORIZED BY THE PROJECT ENGINEER OF RECORD AND APPROVED BY THE BUILDING OFFICIAL.
19. ALL PARALLAM BEAMS, TIMBERSTRAND RIMS AND TRUSS JOISTS SHALL BE MANUFACTURED BY I LEVEL BY WEYERHAUSER OR AN APPROVED EQUAL. TJI = ESR-1153
    PARALLAM AND TIMBERSTRAND = ESR-1387
20. DIAPHRAGM SHEATHING NAILS OR OTHER APPROVED SHEATHING CONNECTORS SHALL BE DRIVEN SO THAT THEIR HEAD OR CROWN IS FLUSH WITH THE SURFACE OF THE SHEATHING.
21. FASTENERS FOR PRESERVATIVE-TREATED AND FIRE-RETARDANT-TREATED WOOD SHOULD BE OF HOT DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE, OR COPPER. THE COATING WEIGHTS FOR ZINC-COATED FASTENERS SHALL BE ACCORDANCE WITH ASTM A 153. FASTENINGS FOR WOOD FOUNDATIONS SHOULD BE AS REQUIRED IN AF&PA TECHNICAL REPORT NO.7. REVISE SPECIFICATION FOR NAILS AND SCREWS ACCORDINGLY. (CBC 2304.9.5)
22. HOLD-DOWN CONNECTOR BOLTS INTO WOOD FRAMING REQUIRE APPROVED PLATE WASHERS; AND HOLD-DOWNS SHALL BE FINGER TIGHT AND 1/2 WRENCH TURN JUST PRIOR TO COVERING THE WALL FRAMING. CONNECTOR BOLTS INTO WOOD FRAMING REQUIRE STEEL PLATE WASHERS ON THE POST ON THE OPPOSITE SIDE OF THE ANCHORAGE DEVICE. PLATE SIZE SHALL BE A MINIMUM OF 0.229 INCH BY 3 INCHES BY 3 INCHES.
23. ROOF DIAPHRAGM NAILING TO BE INSPECTED BEFORE COVERING. FACE GRAIN OF PLYWOOD SHALL BE PERPENDICULAR TO SUPPORTS. FLOOR SHALL HAVE TONGUE AND GROOVE OR BLOCKED PANEL EDGES. PLYWOOD SPANS SHALL CONFORM WITH TABLE 2304.7.

SPECIAL INSPECTION

STATEMENT OF SPECIAL INSPECTION:
SPECIAL INSPECTION SHALL BE PROVIDED FOR WELDING, STRONG WALLS, PLYWOOD SHEAR WALLS, EPOXY, TITEN HD ANCHORS AND SOILS IN ACCORDANCE WITH THE FOLLOWING TABLE:

TYPE OF INSPECTION	INSPECTION TASK	FREQUENCY OF INSPECTION
STRUCTURAL WELDING	MATERIALS, WELDING PRODUCTS AND QUALIFICATIONS OF WELDERS SHALL BE VERIFIED PRIOR TO THE START OF WORK AND PERIODIC INSPECTIONS AND VISUAL INSPECTIONS OF ALL WELDS SHALL BE MADE PRIOR TO SHIPMENTS OF SHOP WELDING.	PERIODIC
STRONG WALLS	SPECIAL INSPECTOR SHALL VERIFY THAT ANCHORAGE OF STRONG WALL IS IN ACCORDANCE WITH SIMPSON REQUIREMENTS	PERIODIC
PLYWOOD SHEAR WALLS	SPECIAL INSPECITION IS REQUIRED FOR NAILING, BOLTING, AND ANCHORING OF WOOD SHEAR WALLS AND DIAPHRAGMS EXCEPT WHERE FASTENER SPACING OF THE PLYWOOD IS GREATER THAN 4"O.C.	PERIODIC
ANCHORS IN SET-XP EPOXY (ESR-2508)	THE SPECIAL INSPECTOR MUST BE ON THE JOBSITE DURING ANCHOR INSTALLATION TO VERIFY ANCHOR TYPE,ANCHOR DIMENSIONS, CONCRETE TYPE, HOLE DIMENSIONS, HOLE CLEANING PROCEDURES, ANCHOR SPACING, EDGE DISTANCES, CONCRETE THICKNESS, ANCHOR EMBEDMENT. THE SPECIAL INSPECTOR MUST VERIFY THE INITAIL INSTALLATIONS OF EACH TYPE AND SIZE OF ADHESIVE ANCHOR BY CONSTRUCTION PERSONNEL ON SITE. SUBSEQUENT INSTALLATIONS OF THE SAME ANCHOR TYPE AND SIZE BY THE SAME CONSTRUCTION PERSONNEL MUST BE PERMITTED TO BE PERFORMED IN THE ABSENCE OF THE CONTINUOUS SPECIAL INSPECTOR.	PERIODIC (HOLDOWN ANCHORS TO EXST. FTG.)
TITEN HD ANCHORS (ESR-2713)	THE SPECIAL INSPECTOR MUST BE ON THE JOBSITE CONTINUOUSLY DURING ANCHOR INSTALLATION TO VERIFY ANCHOR TYPE, CONCRETE COMPRESSIVE STRENGTH, HOLE DIMENSIONS, HOLE CLEANING PROCEDURES, ANCHOR SPACING, EDGE DISTANCES, CONCRETE THICKNESS, ANCHOR EMBEDMENT, AND TIGHTENING TORQUE.	PERIODIC (ANCHOR BOLTS TO EXST. FTG.)
SOILS	1. VERIFY MATERIALS BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	PERIODIC
	2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	PERIODIC

A. THE SPECIAL INSPECTIONS LISTED ARE IN ADDITION TO THE STANDARD CITY INSPECTIONS, AS AMENDED. SPECIAL INSPECTION IS NOT A SUBSTITUTE FOR INSPECTION BY A CITY INSPECTOR.
B. CONTINUOUS INSPECTION IS ALWAYS REQUIRED DURING THE PERFORMANCE OF THE WORK UNLESS OTHERWISE SPECIFIED. WHEN WORK IN MORE THAN ONE CATEGORY OF WORK REQUIRING SPECIAL INSPECTION IS TO BE PERFORMED SIMULTANEOUSLY, OR THE GEOGRAPHIC LOCATION OF THE WORK IS SUCH THAT IT CANNOT BE CONTINUOUSLY OBSERVED IN ACCORDANCE WITH THE PROVISIONS OF IBC CHAPTER 17, IT IS THE AGENT'S RESPONSIBILITY TO EMPLOY A SUFFICIENT NUMBER OF INSPECTORS TO ASSURE THAT ALL THE WORK IS INSPECTED IN ACCORDANCE WITH THOSE PROVISIONS.
C. THE SPECIAL INSPECTORS MUST BE CERTIFIED BY THE CITY OF RECORD DEVELOPMENT SERVICES DIVISION TO PERFORM THE TYPE OF INSPECTION SPECIFIED.
D. PERIODIC SPECIAL INSPECTION SHALL BE PERFORMED BY EITHER THE REGISTERED DESIGN PROFESSIONAL OF RECORD OR A REGISTERED SPECIAL INSPECTOR.
E. SOIL ENGINEER OF RECORD SHALL SUBMIT A FINAL COMPACTION REPORT TO BE SUBMITTED TO THE BUILDING INSPECTOR PRIOR TO FOUNDATION INSPECTION.
F. A PROPERTY OWNER'S FINAL REPORT OF WORK REQUIRING SPECIAL INSPECTION MUST BE COMPLETED BY THE PROPERTY OWNER, PROPERTY OWNERS AGENT OF RECORD, ARCHITECT OF RECORD, OR ENGINEER OF RECORD AND SUBMITTED TO THE INSPECTION SERVICES DIVISION.

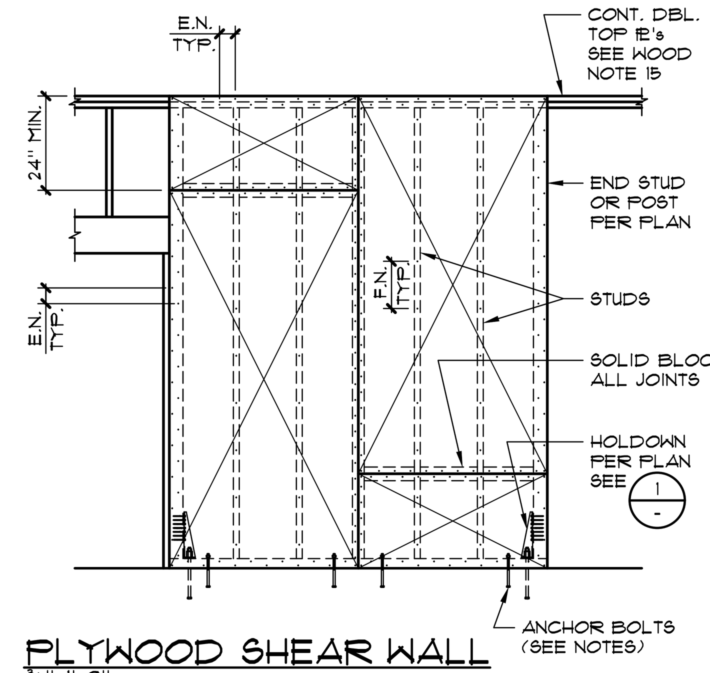
EXCEPTIONS:
1. SOILS INSPECTIONS BY THE SOILS ENGINEER OF RECORD.
2. SMOKE CONTROL SYSTEM, BY THE MECHANICAL ENGINEER OF RECORD.
3. WHEN WAIVED BY THE BUILDING OFFICIAL.

G. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE SPECIAL INSPECTOR OR INSPECTION AGENCY AT LEAST ONE WORKING DAY PRIOR TO PERFORMING ANY WORK THAT REQUIRES SPECIAL INSPECTION.
H. WORK REQUIRING SPECIAL INSPECTION THAT IS INSTALLED OR COVERED WITHOUT THE APPROVAL OF THE CITY INSPECTOR IS SUBJECT TO REMOVAL OR EXPOSURE AT NO COST TO THIS JURISDICTION.
I. A CERTIFICATE OF SATISFACTORY COMPLETION OF WORK REQUIRING SPECIAL INSPECTION MUST BE COMPLETED AND SUBMITTED TO THE INSPECTION SERVICES DIVISION.
J. AN APPLICATION FOR OFF-SITE FABRICATION MUST BE SUBMITTED TO THE FIELD INSPECTION DIVISION FOR APPROVAL PRIOR TO FABRICATION. SEE BUILDING NEWSLETTER 17-6 FOR OFF-SITE FABRICATION REQUIREMENTS.
K. A CERTIFICATE OF COMPLIANCE FOR OFF-SITE FABRICATION MUST BE COMPLETED AND SUBMITTED TO THE FIELD INSPECTION DIVISION PRIOR TO ERECTION OF PRE-FABRICATED COMPONENTS.
L. THE SPECIAL INSPECTOR MUST BE CERTIFIED BY THE CITY OF RECORD, DEVELOPMENT SERVICES, IN THE CATEGORY OF WORK REQUIRED TO HAVE SPECIAL INSPECTION.

TYPICAP NAILING SCHEDULE PER CBC TABLE NO. 2304.10.1

DESCRIPTION OF BUILDING ELEMENTS	# AND TYPE OF FASTENER	SPACING AND LOCATION
1. BLOCKING BETWEEN CEILING JOISTS, RAFTERS OR TRUSSES TO TOP PLATE OR OTHER FRAMING BELOW	3-8d COMMON OR 3-10d BOX OR 3-16d SINKER	EACH END, TOENAIL
FLAT BLOCKING TO TRUSS AND WEB FILLER	16d COMMON OR 16d SINKER	6" O.C. FACE NAIL 6" O.C. FACE NAIL
2. CEILING JOISTS TO PLATE	3-8d COMMON OR 3-10d BOX OR 3-16d SINKER	EACH JOIST, TOENAIL
3. CEILING JOISTS NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER PARTITIONS (NO THRUST)	3-16d COMMON OR 4-10d BOX OR 4-16d SINKER	FACE NAIL
4. CEILING JOISTS ATTACHED TO PARALLEL RAFTER (HEEL JOINT)	PER PABLE 2308.7.3.1	FACE NAIL
5. COLLAR TIE TO RAFTER	3-10d COMMON OR 4-10d BOX OR 4-16d SINKER	FACE NAIL
6. RAFTER OR ROOF TRUSS TO TOP PLATE	3-10d COMMON OR 4-10d BOX OR 4-16d SINKER	TOENAIL
7. ROOF RAFTERS TO RIDGE VALLEY OR HIP RAFTERS: OR ROOF RAFTER TO 2-INCH RIDGE BEAM	2-16d COMMON OR 3-10d BOX OR 3-16d SINKER	END NAIL
	3-10d COMMON OR 4-10d BOX OR 4-16d SINKER	TOENAIL
8. STUD TO STUD (NOT AT BRACED WALL PANELS)	16d COMMON OR 10d BOX OR 16d SINKER	24" O.C. FACE NAIL 16" O.C. FACE NAIL
9. STUD TO STUD AND ABUTTING STUDS AT INTERSECTING WALL CORNERS (AT BRACED WALL PANELS)	16d COMMON OR 16d SINKER	16" O.C. FACE NAIL 12" O.C. FACE NAIL
10. BUILT-UP HEADER (2" TO 2" HEADER)	16d COMMON	16" O.C. EACH EDGE, FACE NAIL
11. CONTINUOUS HEADER TO STUD	4-8d COMMON OR 4-10d BOX	TOENAIL
12. TOP PLATE TO TOP PLATE	16d COMMON OR 10d BOX OR 16d SINKER	16" O.C. FACE NAIL 12" O.C. FACE NAIL
13. TOP PLATE TO TOP PLATE AT END JOINTS	8-16d COMMON OR 12-10d BOX OR 12-16d SINKER	EACH SIDE OF END JOINT, FACE NAIL (MIN. 24" LAP SPLICE LGTH. EACH SIDE OF END JOINT)
14. BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (NOT AT BRACED WALL PANELS)	16d COMMON OR 16d BOX OR 16d SINKER	16" O.C. FACE NAIL 12" O.C. FACE NAIL
15. BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (AT BRACED WALL PANELS)	2-16d COMMON OR 3-16d BOX OR 4-16d SINKER	16" O.C. FACE NAIL
16. STUDS TO TOP AND BOTTOM PLATE	4-8d COMMON OR 4-10d BOX OR 4-16d SINKER	TOENAIL
	2-16d COMMON OR 3-10d BOX OR 3-16d SINKER	END NAIL
17. TOP OR BOTTOM PLATE TO STUD	2-16d COMMON OR 3-10d BOX OR 3-16d SINKER	END NAIL
18. TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	2-16d COMMON OR 3-10d BOX OR 3-16d SINKER	FACE NAIL
	WALL	
19. 1" BRACE TO EACH STUD AND PLATE	2-8d COMMON OR 2-10d BOX OR 2-16d SINKER	FACE NAIL
20. 1" x 6" SHEATHING TO EACH BEARING	2-8d COMMON OR 2-10d BOX	FACE NAIL
21. 1" x 8" AND WIDER SHEATHING TO EACH BEARING	3-8d COMMON OR 3-10d BOX	FACE NAIL
	FLOOR	
22. JOIST TO SILL, TOP PLATE, OR GIRDER	3-8d COMMON OR 3-10d BOX OR 3-16d SINKER	TOENAIL
23. RIM JOIST, BAND JOIST, OR BLOCKING TO TOP PLATE, SILL OR OTHER FRAMING BELOW	8d COMMON OR 10d BOX OR 16d SINKER	6" O.C. TOENAIL
24. 1" x 6" SUBFLOOR OR LESS TO EACH JOIST	2-8d COMMON OR 2-10d BOX OR	FACE NAIL
25. 2" SUBFLOOR TO JOIST OR GIRDER	2-16d COMMON	FACE NAIL
26. 2" PLANKS (PLANK & BEAM - FLOOR & ROOF)	2-16d COMMON	EACH BEARING, FACE NAIL
27. BUILT-UP GIRDERS AND BEAMS, 2" LUMBER LAYERS	10d BOX OR 16d SINKER	24" O.C. FACE NAIL AT TOP & BOT. STGR'D ON OPP. SIDES
	3-16d COMMON OR 3-10d BOX OR 3-16d SINKER	ENDS AND AT EACH SPLICE, FACE NAIL
28. LEDGER STRIP SUPPORTING JOISTS OR RAFTERS	3-16d COMMON OR 4-10d BOX OR 4-16d SINKER	EACH JOIST OR RAFTER, FACE NAIL
29. JOIST TO BAND JOIST OR RIM JOIST	3-16d COMMON OR 4-10d BOX OR 4-16d SINKER	END NAIL
30. BRIDGING OR BLOCKING TO JOIST, RAFTER OR TRUSS	2-8d COMMON OR 2-10d BOX OR 2-16d SINKER	EACH END, TOENAIL

13



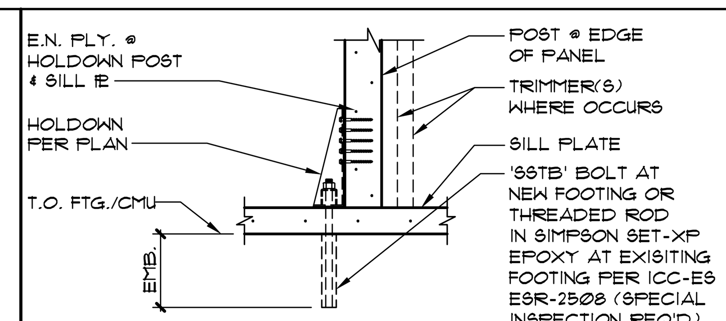
PLYWOOD SHEAR WALL
3/8"=1'-0"

SHEAR WALL SCHEDULE

MARK	MATERIAL	EDGE NAIL SPACING	ANCHOR BOLTS	SILL NAILING	ALLOWABLE SHEAR (PLF)
⟨2⟩	3/8" STR. I	2"	5/8"ϕ A.B. @ 16"	16d @ 2"	730
⟨3⟩	3/8" STR. I	3"	5/8"ϕ A.B. @ 24"	16d @ 3"	550
⟨4⟩	3/8" STR. I	4"	5/8"ϕ A.B. @ 32"	16d @ 4"	350
⟨6⟩	3/8" STR. I	6"	5/8"ϕ A.B. @ 48"	16d @ 6"	280

NOTES:
1. F.N. @ 12" TYPICAL.
2. NAILS ARE 8d COMMON.
3. 3x MINIMUM FRAMING IS REQUIRED AT ALL SILL PLATES AT FOUNDATION (NOT AT UPPER WALLS) AND ALL MEMBERS RECEIVING EDGE NAILING FROM ABUTTING PANELS AT SHEAR WALL TYPES ⟨2⟩ & ⟨3⟩.
4. 4x MINIMUM REQUIRED AT ALL HOLDOWN DEVICES.
5. ALL ANCHOR BOLTS SHALL HAVE 3"x3"x1/4" PLATE WASHERS.

5

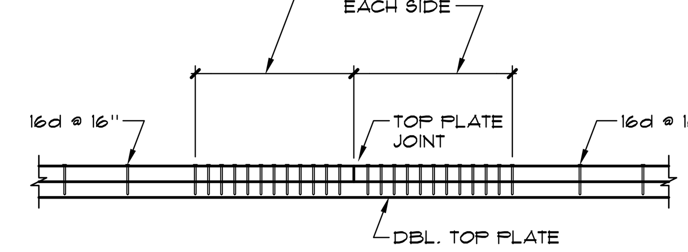


MARK	POST MIN.	NUMBER OF 'SDS1/4x3' TO POST	BOLT IN NEW FOOTING	THREADED ROD AND EMBED IN EXISTING FOOTING
'HDU2'	2-2x	6	'SSTB20'	5/8"ϕ - 8"
'HDU5'	2-2x	14	'SSTB24'	5/8"ϕ - 10"
'HDU8'	4x	20	'PAB7'	7/8"ϕ - 12"
'HDU14'	6x6	36	'PAB8'	1"ϕ - 14"

NOTES:
1. MINIMUM DISTANCE FROM THE CENTER OF ANCHOR ROD TO THE EDGE OF FOOTING SHALL BE 1 3/4".
2. DEEPEN FOOTINGS AS REQUIRED FOR 3" COVER AT ANCHORS.
3. EMBEDMENT DEPTH FOR 'PAB' ANCHORS SHALL BE 18" MIN.

TYPICAL HOLDOWN
1"=1'-0"

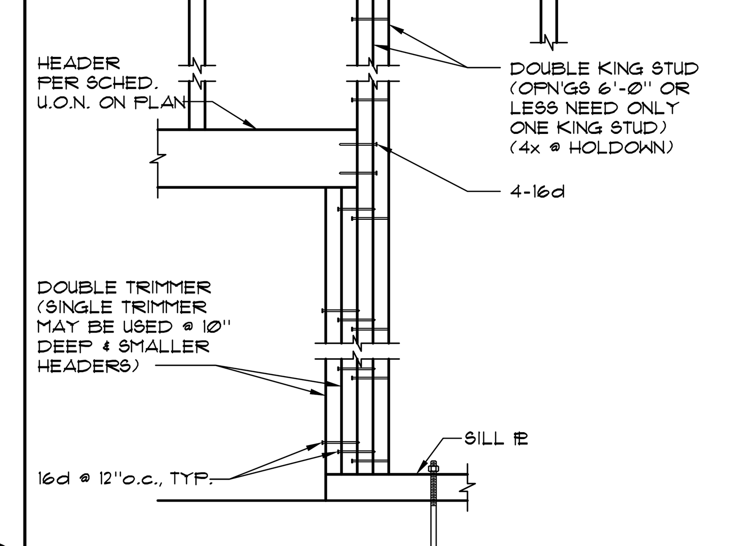
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NOTES:
1. JOINTS IN LOWER PLATE SHALL BE AT CENTER OF STUD.
2. STAGGER JOINTS 4'-0" MINIMUM.
3. IF JOINT IN UPPER & LOWER PLATE ARE IN LINE, JOINT SHALL OCCUR OVER STUD & PLATES SHALL BE CONNECTED W/ 'MSTC28' STRAP.

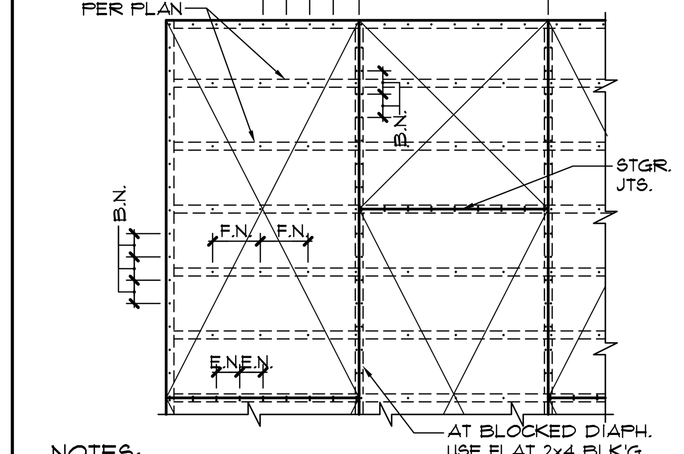
NAILED PLATE SPLICE
1"=1'-0"

10



HEADER FRAMING
1"=1'-0"

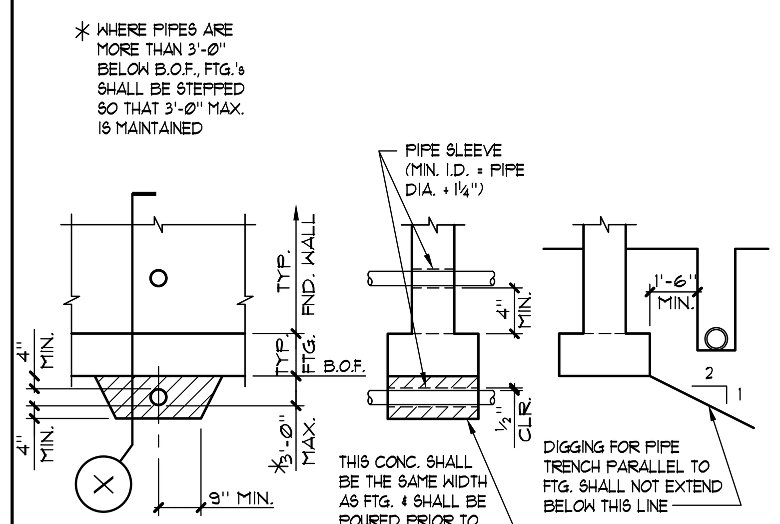
6



NOTES:
1. LAY SHEATHING PERPENDICULAR TO FRAMING.
2. ALL UNDERSIZED SHEETS WITH LESS THAN A 24" DIMENSION SHALL HAVE ALL EDGES SUPPORTED BY FRAMING OR BLOCKING.
3. DIAPHRAGM IS NOT REQUIRED TO BE BLOCKED UNLESS NOTED.

DIAPHRAGM NAILING
3/4"=1'-0"

2



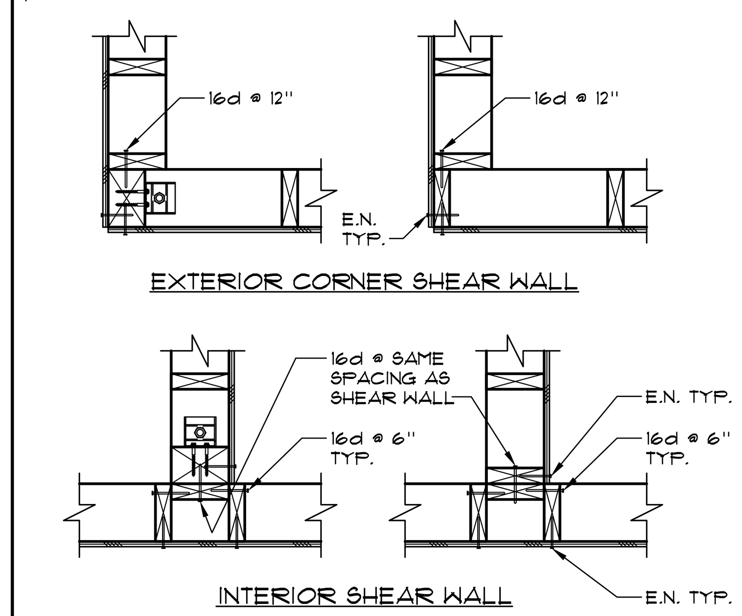
PIPE PERPENDICULAR TO FOUNDATION WALL OR FOOTING

SECTION (X)

PIPE PARALLEL TO FOOTING

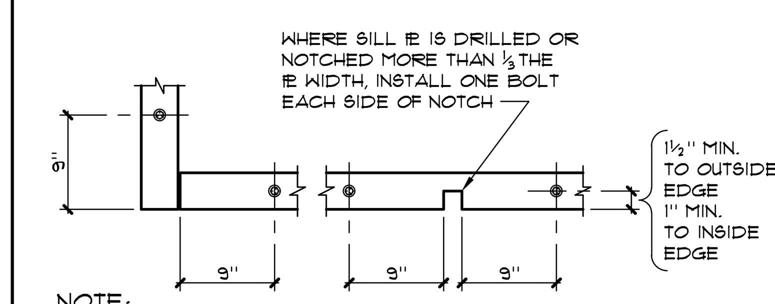
1"=1'-0"

11



TYP. WALL INTERSECTION
1"=1'-0"

7

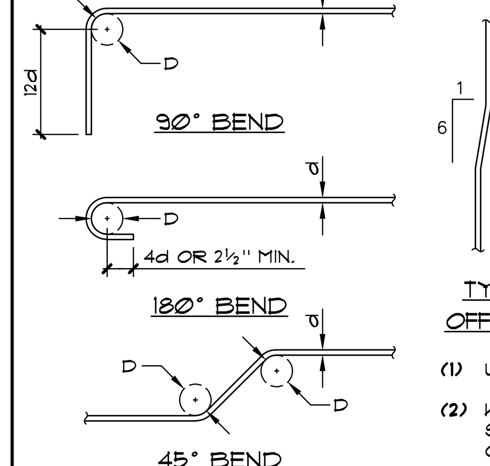


NOTE:
ALL SILLS OR PLATES BEARING ON CONCRETE OR CMU SHALL BE PRESSURE TREATED DOUGLAS FIR (P.T.D.F.) AND SHALL HAVE 5/8"ϕ x 10" ANCHOR BOLTS WITH 7" MINIMUM EMBEDMENT.

A. PLACED 9" FROM EACH END (OR FROM A NOTCH).
B. SPACED AS SHOWN ON SHEAR WALL SCHEDULE OR @ 60" MAX. OR SHOTPINS PER ICC-ES ESR-2138 @ 32" MAY BE USED AT INTERIOR NON SHEAR WALLS.
C. PROVIDE A MINIMUM OF 2 BOLTS PER PIECE OF SILL PLATE. SHOTPINS SHALL BE SIMPSON 'PDP300' (.145"ϕ x 3") OR EQUAL.
D. ALL ANCHOR BOLTS SHALL HAVE 3"x3"x1/4" PLATE WASHERS.

SILL PLATE BOLTING
1"=1'-0"

3



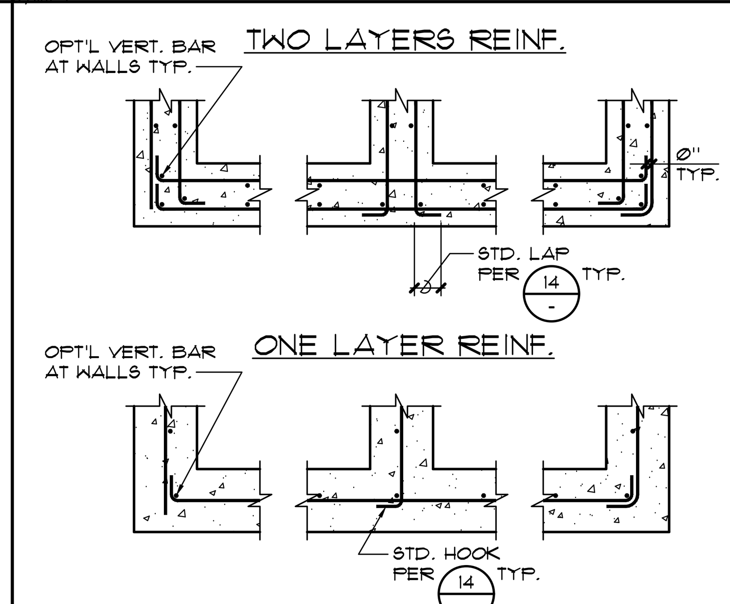
BAR	LAP LENGTH
#3	18"
#4	24"
#5	30"
#6	36"
#7	52"
#8	60"
#9	68"

(1) UNLESS OTHERWISE NOTED
(2) WHEN TWO BAR SIZES ARE SPLICED, USE LAP LENGTH OF SMALLER BAR.

NOTE:
D = 6d FOR #3 THRU #8
D = 8d FOR #9 THRU #10 & #11

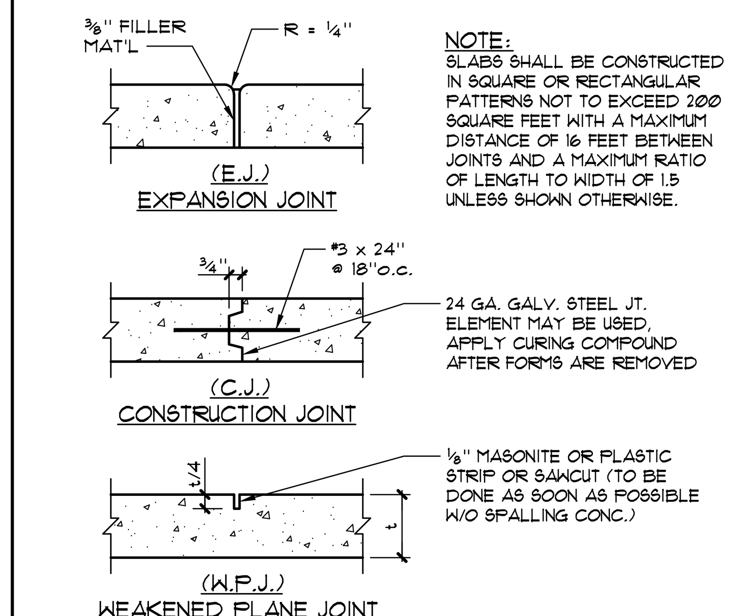
TYP. REINFORCING BENDS / LAPS
1"=1'-0"

12



REINF. @ CONC. WALL & FOOTING INTERSECTIONS
3/4"=1'-0"

8



NOTE:
SLABS SHALL BE CONSTRUCTED IN SQUARE OR RECTANGULAR PATTERNS NOT TO EXCEED 200 SQUARE FEET WITH A MAXIMUM DISTANCE OF 16 FEET BETWEEN JOINTS AND A MAXIMUM RATIO OF LENGTH TO WIDTH OF 1.5 UNLESS SHOWN OTHERWISE.

SLAB ON GRADE JOINTS
1 1/2"=1'-0"

4

14

15

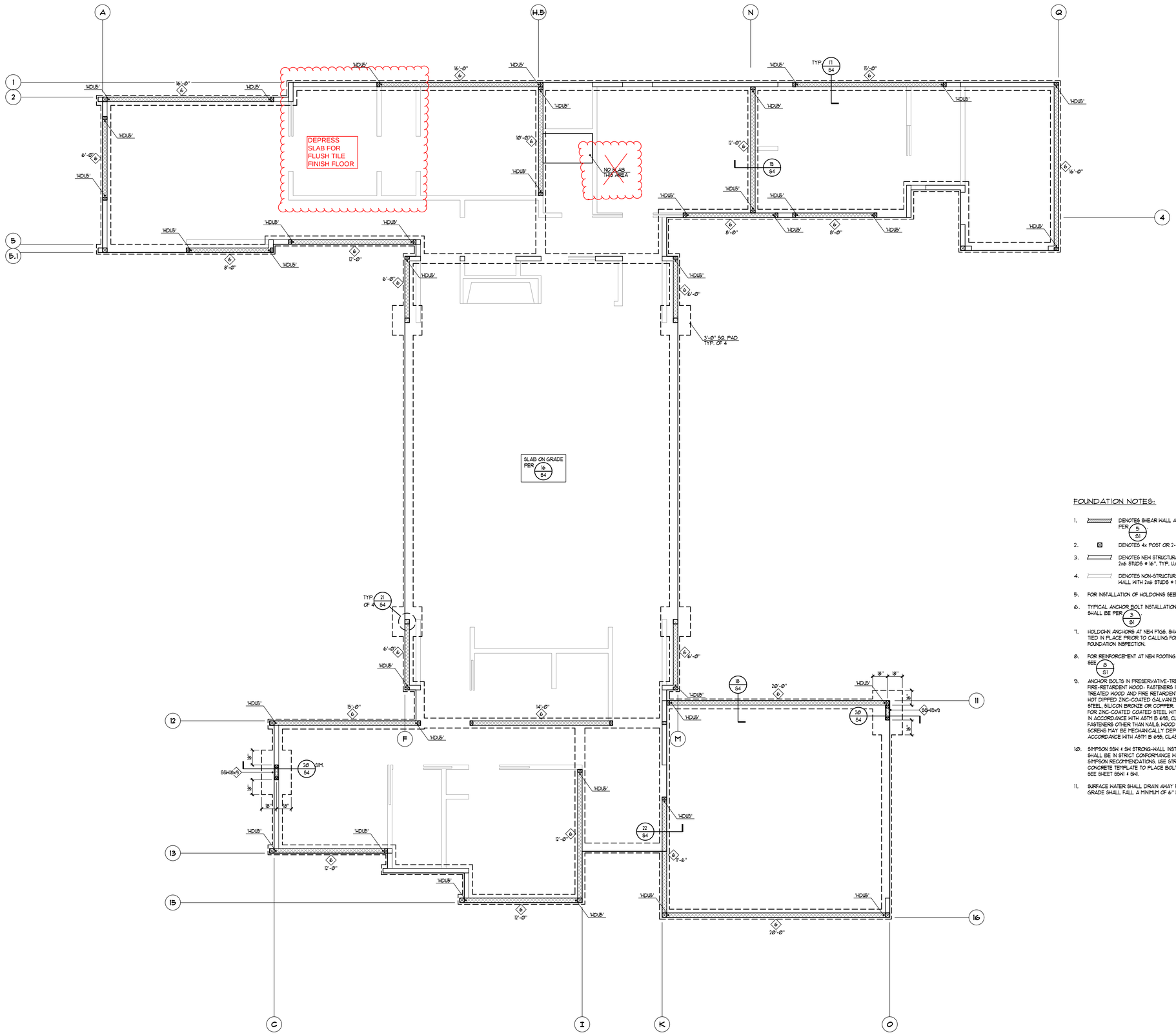
REVISIONS



MARTIN
STRUCTURAL CONSULTING, INC.
547 E. 6TH AVE., ESCONDIDO, CA 92025 (760) 745-6012

Gen.l Notes & Typ. Details
New Residence
700 La Estrella
Palm Springs, CA 92264

DRAWN	LBD
CHECKED	TDM
DATE	7/10/19
SCALE	AS NOTED
JOB NUMBER	1727
SHEET NUMBER	S1



FOUNDATION PLAN

1/4"=1'-0"

FOUNDATION NOTES:

1. DENOTES SHEAR WALL ABOVE PIER 5/S1
2. DENOTES 4x POST OR 2-2x @ HD ABV. U.O.N.
3. DENOTES NEW STRUCTURAL WALL WITH 2x6 STUDS @ 16", TYP. U.O.N.
4. DENOTES NON-STRUCTURAL OR EXST. WALL WITH 2x6 STUDS @ 16" TYP.
5. FOR INSTALLATION OF HOLDOWNS SEE 1/S1
6. TYPICAL ANCHOR BOLT INSTALLATION AT NEW WALLS SHALL BE PER 3/S1
7. HOLDOWN ANCHORS AT NEW FTGS. SHALL BE TIED IN PLACE PRIOR TO CALLING FOR FOUNDATION INSPECTION.
8. FOR REINFORCEMENT AT NEW FOOTING INTERSECTIONS SEE 8/S1
9. ANCHOR BOLTS IN PRESERVATIVE-TREATED WOOD AND FIRE-RETARDENT WOOD: FASTENERS IN PRESERVATIVE-TREATED WOOD AND FIRE RETARDENT WOOD SHALL BE HOT DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER. THE COATING WEIGHTS FOR ZINC-COATED COATED STEEL WITH COATING WEIGHTS IN ACCORDANCE WITH ASTM B 695, CLASS 55 MINIMUM. FASTENERS OTHER THAN NAILS, WOOD SCREWS AND LAG SCREWS MAY BE MECHANICALLY DEPOSITED ZINC IN ACCORDANCE WITH ASTM B 695, CLASS 55.
10. SIMPSON SSW 4 SW STRONG-WALL INSTALLATION SHALL BE IN STRICT CONFORMANCE WITH SIMPSON RECOMMENDATIONS. USE STRONG-WALL CONCRETE TEMPLATE TO PLACE BOLTS. SEE SHEET SSW1 4 SW1.
11. SURFACE WATER SHALL DRAIN AWAY FROM BUILDING. GRADE SHALL FALL A MINIMUM OF 6" WITHIN THE FIRST 10'.

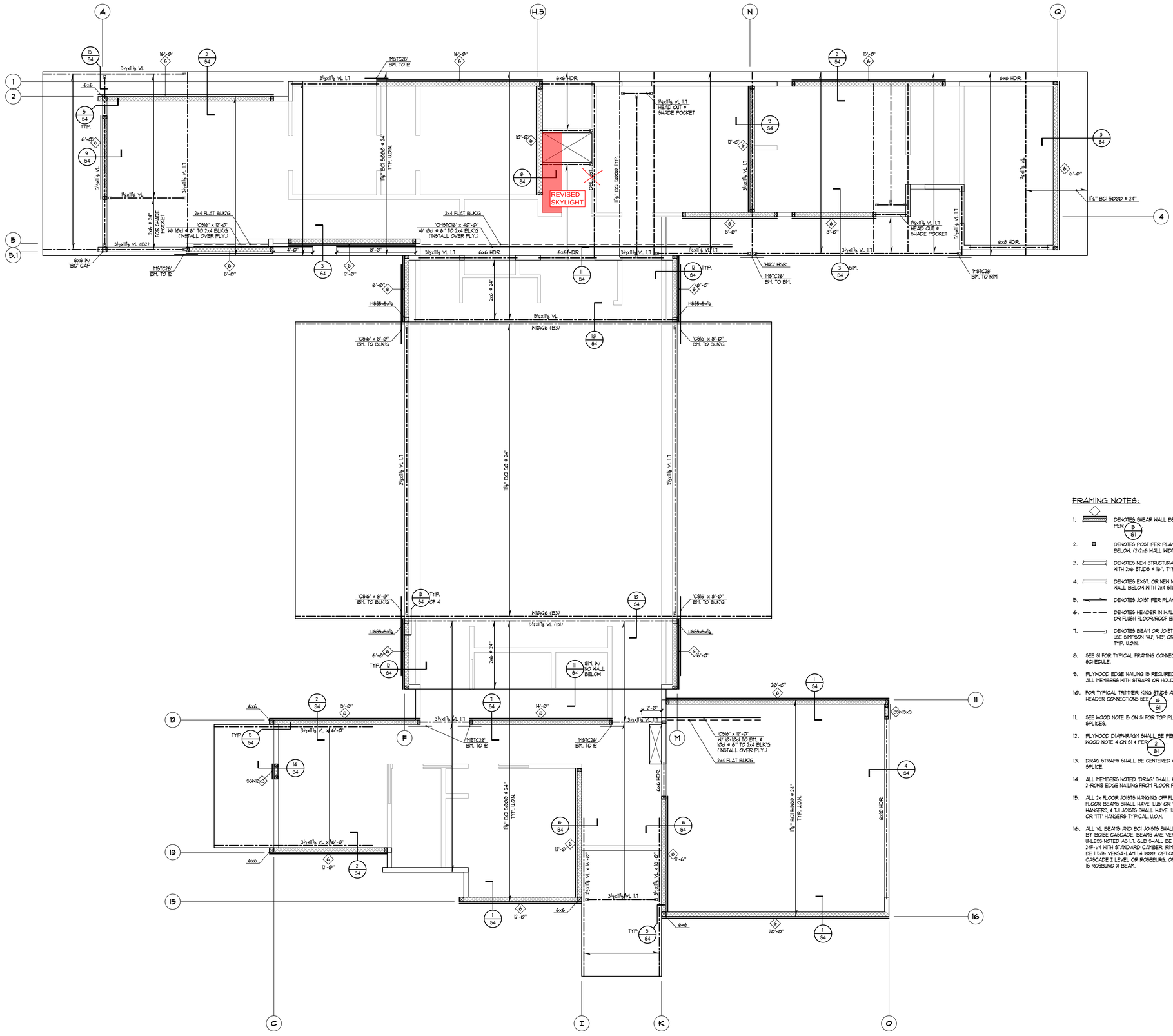
REVISIONS

REGISTERED PROFESSIONAL ENGINEER
TODD D. MARTIN
No. 004086
Exp. 9/31/18
STRUCTURAL
STATE OF CALIFORNIA

MARTIN STRUCTURAL CONSULTING, INC.
547 E. 6TH AVE., ESCONDIDO, CA 92025 (760) 745-6012

Foundation Plan
New Residence
100 La Estrella
Palm Springs, CA 92264

DRAWN: LBD
CHECKED: TDM
DATE: 7/10/19
SCALE: 1/4"=1'-0"
JOB NUMBER: 1721
SHEET NUMBER: S2



ROOF FRAMING PLAN

½"=1'-0"

FRAMING NOTES:

1. DENOTES SHEAR WALL BELOW PER 5/S1
2. DENOTES POST PER PLAN IN WALL BELOW. (2-2x6 WALL WIDTH TYP. U.O.N.)
3. DENOTES NEW STRUCTURAL WALL BELOW WITH 2x6 STUDS @ 16". TYP. U.O.N.
4. DENOTES EXST. OR NEW NON-STRUCTURAL WALL BELOW WITH 2x4 STUDS @ 16" TYP.
5. DENOTES JOIST PER PLAN TYP. U.O.N.
6. DENOTES HEADER IN WALL BELOW OR FLUSH FLOOR/ROOF BEAM U.O.N.
7. DENOTES BEAM OR JOIST SEAT. USE SIMPSON 'HU', 'HB', OR 'HUC' HGR. TYP. U.O.N.
8. SEE S1 FOR TYPICAL FRAMING CONNECTION SCHEDULE.
9. PLYWOOD EDGE NAILING IS REQUIRED AT ALL MEMBERS WITH STRAPS OR HOLDOWNS.
10. FOR TYPICAL TRIMMER, KING STUDS AND HEADER CONNECTIONS SEE 6/S1
11. SEE WOOD NOTE 15 ON S1 FOR TOP PLATE SPLICES.
12. PLYWOOD DIAPHRAGM SHALL BE PER WOOD NOTE 4 ON S1 & PER 2/S1
13. DRAG STRAPS SHALL BE CENTERED ON SPLICE.
14. ALL MEMBERS NOTED 'DRAG' SHALL HAVE 2-ROWS EDGE NAILING FROM FLOOR PLYWOOD.
15. ALL 2x FLOOR JOISTS HANGING OFF FLUSH FLOOR BEAMS SHALL HAVE 'LUS' OR 'JB' HANGERS, & TJI JOISTS SHALL HAVE 'IUS' OR 'ITT' HANGERS TYPICAL, U.O.N.
16. ALL VL BEAMS AND BCI JOISTS SHALL BE MANUFACTURED BY BOISE CASCADE. BEAMS ARE VERSA-LAM 2.0 2800 UNLESS NOTED AS 1.7. GLB SHALL BE BOISE GLU-LAM 24F-V4 WITH STANDARD CAMBER. RIM JOISTS SHALL BE 1 5/16 VERSA-LAM 1.4 1800. OPTION TO BOISE CASCADE T LEVEL OR ROSEBURG. OPTION FOR GLB IS ROSBURO X BEAM.

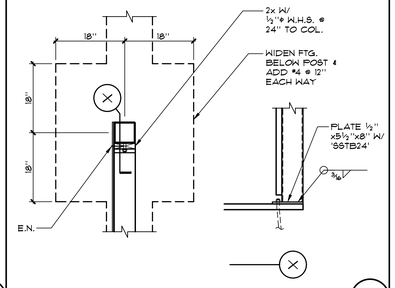
REVISIONS

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TODD D. MARTIN
No. 004086
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STATE OF CALIFORNIA

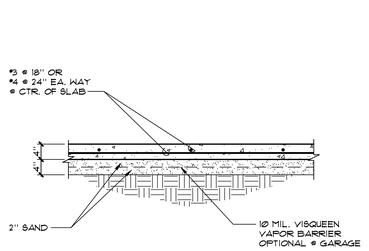
MARTIN STRUCTURAL CONSULTING, INC.
547 E. 6TH AVE., ESCONDIDO, CA 92025 (760) 745-6012

Roof Framing Plan
New Residence
700 La Estrella
Palm Springs, CA 92264

DRAWN	LED
CHECKED	TDM
DATE	7/10/19
SCALE	¼" = 1'-0"
JOB NUMBER	1727
SHEET NUMBER	S3

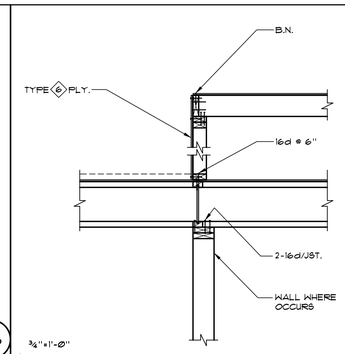


26 — ¾"=1'-Ø"

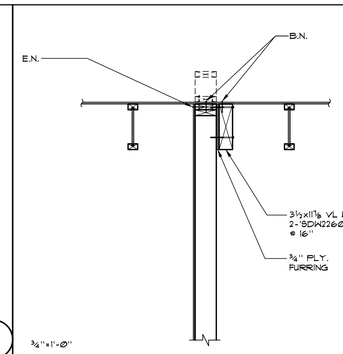


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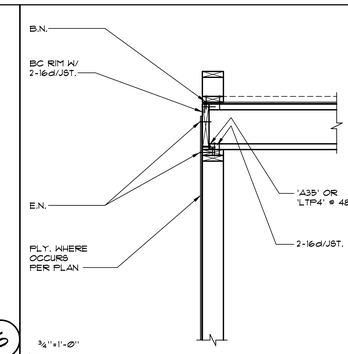
TYPICAL SLAB ON GRADE



16 — ¾"=1'-Ø"



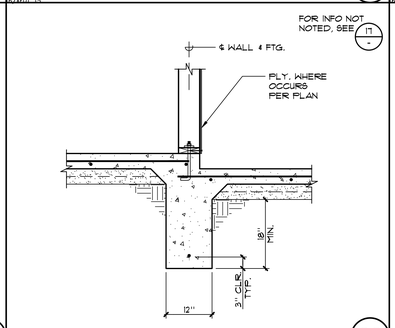
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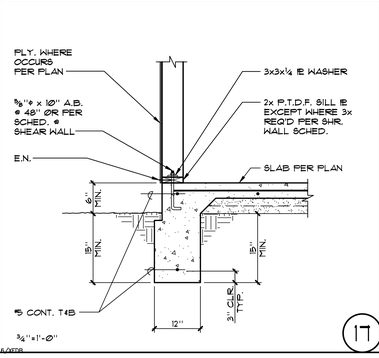
6 — ¾"=1'-Ø"

1 — ¾"=1'-Ø"

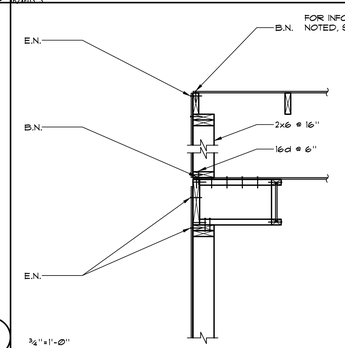
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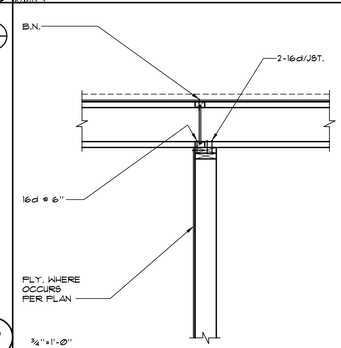
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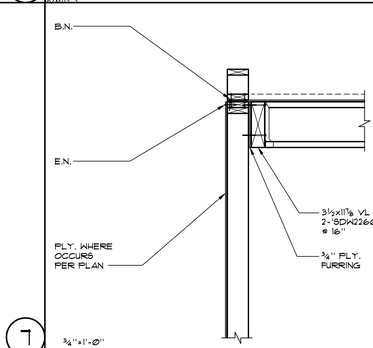
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12 — ¾"=1'-Ø"



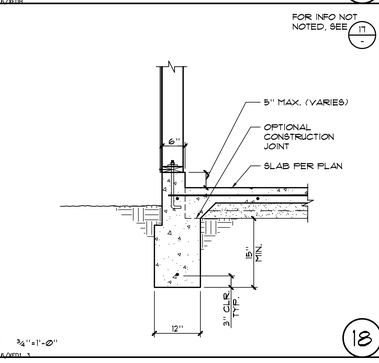
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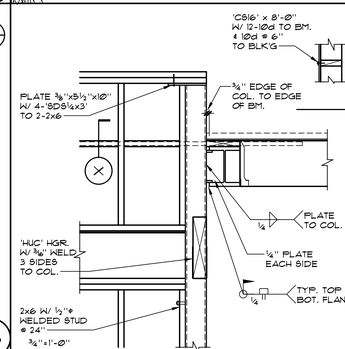
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28 — ¾"=1'-Ø"

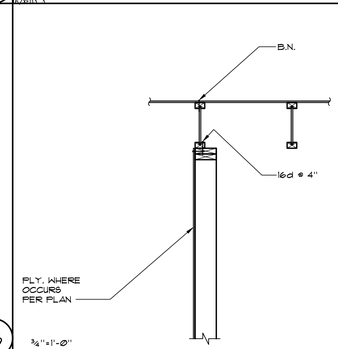
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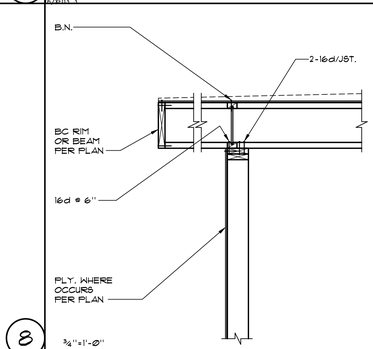
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13 — ¾"=1'-Ø"



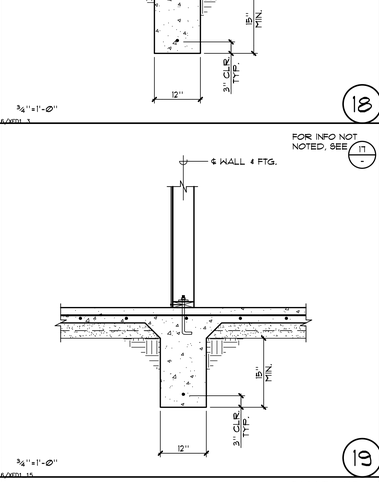
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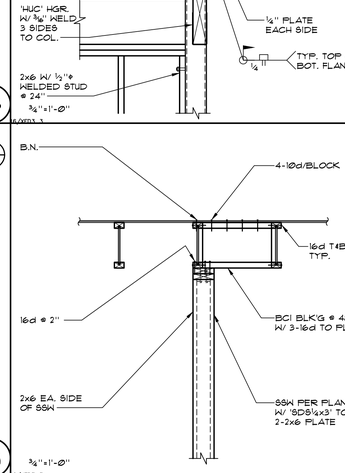
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29 — ¾"=1'-Ø"

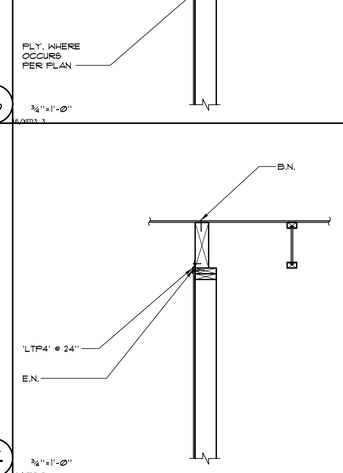
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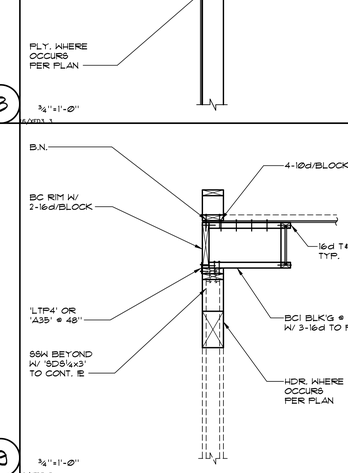
19 — ¾"=1'-Ø"



14 — ¾"=1'-Ø"



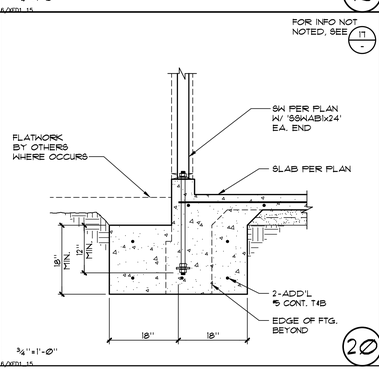
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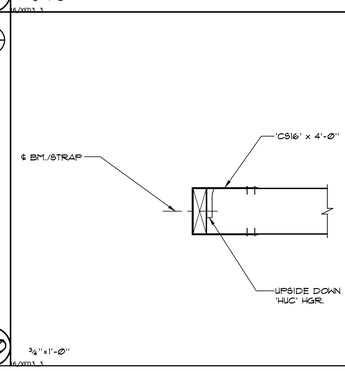
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30 — ¾"=1'-Ø"

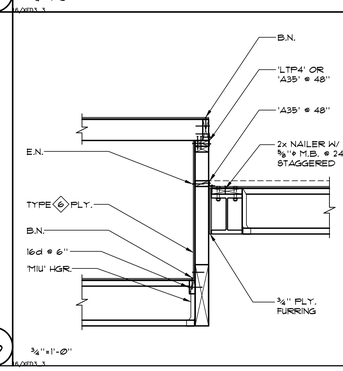
25 — ¾"=1'-Ø"



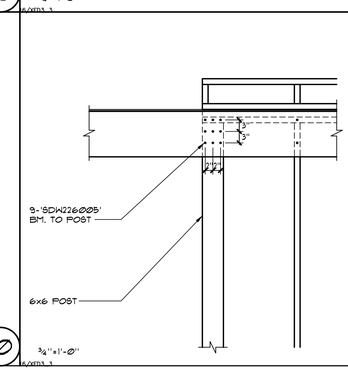
20 — ¾"=1'-Ø"



15 — ¾"=1'-Ø"



10 — ¾"=1'-Ø"



5 — ¾"=1'-Ø"

REVISIONS

REGISTERED PROFESSIONAL ENGINEER
TODD D. MARTIN
No. 004086
Exp. 9/31/18
STRUCTURAL
STATE OF CALIFORNIA

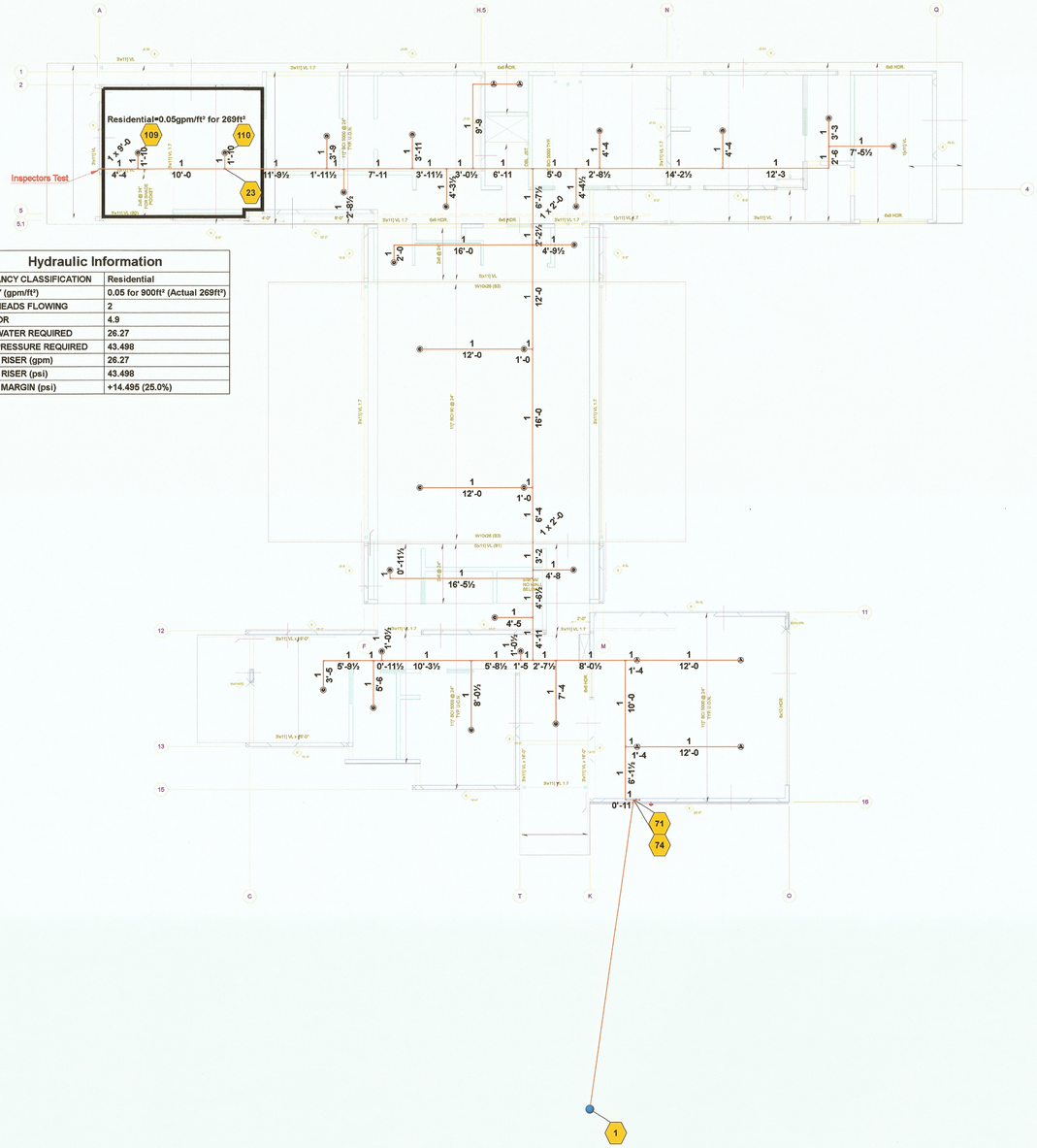
MARTIN
STRUCTURAL CONSULTING, INC.
541 E. 6TH AVE., ESCONDIDO, CA 92025 (760) 745-6012

Structural Details

New Residence
700 La Estrella
Palm Springs, CA 92264

DRAWN: LBD
CHECKED: TDM
DATE: 7/10/19
SCALE: AS NOTED
JOB NUMBER: 1721
SHEET NUMBER: S4

ALL RIGHTS RESERVED: DATA SHOWN ON THIS SHEET MAY NOT BE USED IN ANY FORM WITHOUT PERMISSION OF A.F.P. SYSTEMS, INC.



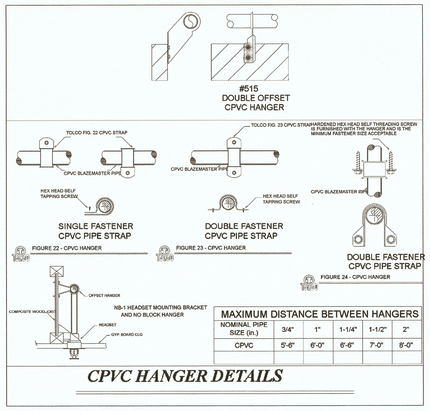
Hydraulic Information

OCCUPANCY CLASSIFICATION	Residential
DENSITY (gpm/ft²)	0.05 for 900ft² (Actual 269ft²)
TOTAL HEADS FLOWING	2
K-FACTOR	4.9
TOTAL WATER REQUIRED	26.27
TOTAL PRESSURE REQUIRED	43.498
BASE of RISER (gpm)	26.27
BASE of RISER (psi)	43.498
SAFETY MARGIN (psi)	+14.495 (25.0%)

LAYOUT SCALE= 1/8" = 1'



VICINITY MAP N.T.S.



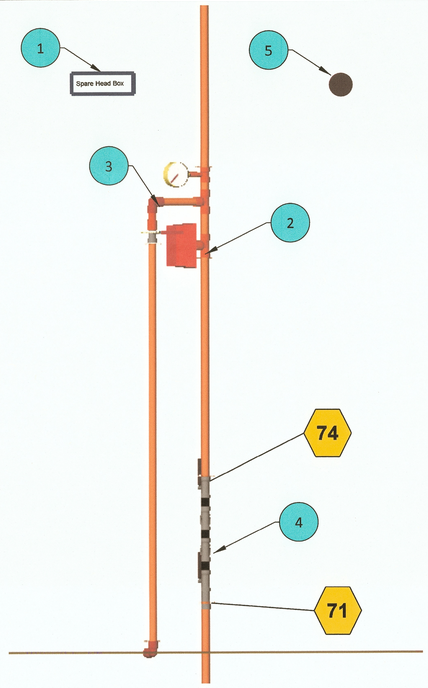
CPVC HANGER DETAILS

State of California
CONTRACTOR'S STATE LICENSE BOARD
ACTIVE LICENSE
License Number 936000 Entity CORP
Business Name AFP SYSTEMS INC
Classification(s) C16
Expiration Date 9-30-2019
James A Bayne

FIRE DEPARTMENT NOTES (NFPA 13D)

1. THE INSTALLATION OF THE FIRE SPRINKLER SYSTEMS OR MODIFICATIONS TO EXISTING FIRE SPRINKLER SYSTEMS SHALL COMPLY WITH:
   - NFPA 13D (2016)
   - CALIFORNIA RESIDENTIAL CODE (2016 EDITION)
   - CALIFORNIA FIRE CODE (2016 EDITION)
   - THE CITY OF PALM SPRINGS MUNICIPAL CODE CHAPTER 11.02 OF TITLE 11
   - PALM SPRINGS FIRE DEPARTMENT DEVELOPEMENT GUIDELINES, APPENDIX L
2. THE FIRE PREVENTION BUREAU WILL REQUIRE THE FOLLOWING INSPECTIONS AND TESTS AS A MINIMUM:
   - OVERHEAD INSTALLATION AND HYDROSTATIC TEST - WORKING PRESSURE
   - FINAL FIRE SPRINKLER AND UNDERGROUND INSPECTIONS.

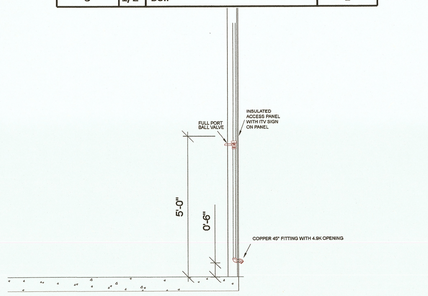
   TO SCHEDULE INSPECTIONS, CALL THE BUILDING DEPARTMENT BEFORE TWELVE MIDNIGHT THE NIGHT BEFORE THE INSPECTION AT (760) 323.8243. INSPECTIONS ARE CONDUCTED MONDAY THRU THURSDAY.
3. WATERFLOW TEST SWITCH AND ALARM. A WATER FLOW SWITCH SHALL BE INSTALLED IN EVERY DEWELLING UNIT FIRE SPRINKLER SYSTEM. THE SYSTEM SHALL INCLUDE:
   - AN APPROVED AUDIBLE SPRINKLER FLOW ALARM (WHEELOCK HORN/STROBE #MT4-115-WH-VFR WITH WBB BACK BOX,OR EQUAL) SHALL BE PROVIDED ON THE EXTERIOR OF THE BUILDING IN AN APPROVED LOCATION. THE HORN/ STROBE SHALL BE OUTDOOR-RATED.
   - RESIDENTIAL SMOKE ALARMS (KIDDE SM120X RELAY / POWER SUPPLY MODULE CONNECTED TO MULTI-STATION KIDDE SMOKE ALARMS OR EQUAL AND FIRE SPRINKLER FLOW SWITCH) SHALL BE INTERCONNECTED SO THAT OPERATION OF ANY SMOKE ALARM OR FIRE SPRINKLER FLOW SWITCH CAUSES ALL SMOKE ALARMS WITHIN THE DWELLING TO SOUND AND ACTIVATE THE EXTERIOR HORN/STROBE. THE WIRING OF THE SYSTEM SHALL BE IN ACCORDANCE WITH KIDDE SM120X RELAY / POWER SUPPLY MODULE MANUAL AND FIGURE 2 (SEE ATTACHED). THE"120 VOLT DEVICE WIRED TO TURN ON WHEN ALARM SOUNDS" IS THE EXTERIOR HORN/STROBE. THE "PULL FOR FIRE" DEVICE IS THE FIRE SPRINKLER FLOW SWITCH.



RISER DETAIL N.T.S.

Parts Legend

Key Note	Size	Description	Quantity
1		6 Spare Head Box w/ Wrench	1
2	1"	Potter RD-13 Residential Riser	1
3	¾"	Main Drain	1
4	1	Ames 2000B Backflow	1
5	1/2"	Bell	1



INSPECTORS TEST

N.T.S.

General Notes

1. AFP SYSTEM, INC., to design and install a new wet fire sprinkler system to protect the new structure based on NFPA #13D 2016 (ED) w/minimum density of .05 GPM with 2 heads flowing.
2. The building is constructed with combustible materials and qualifies as unobstructed construction.
3. All hanger assemblies shall be spaced and installed in accordance with NFPA & manufacturer's specifications. (see details)
4. All materials used on this project will be UL List and/or FM approved.
5. All above ground pipe to be CPVC unless noted.
6. Sprinklers are permitted to be omitted from bathrooms that are less than 55 sq. ft., attic spaces, closets that are less than 24 sq. ft. with a maximum depth of 36 inches, and stairs that are open & attached.
7. Maximum spacing for pendent sprinklers is 16'x16'.
8. Minimum spacing between sprinklers is 8'-0".
9. The owner is responsible for all appropriate maintenance of the sprinkler system in accordance with NFPA, as well as state & local codes.
10. The owner is responsible for the freeze protection of all sprinkler system piping and components that are not designed for freezing conditions.
11. All painting of pipe and any wiring of devices are to be done by others.

(X) - 12. Denotes Hydraulic Reference Points

REVISIONS

NO	DATE	BY	DESCRIPTION

SPRINKLER SYMBOL DESCRIPTION

SYMBOL	SIZE	MODEL	MAKE	FINISH	STYLE	TEMP	K-FACTOR	SIN	TOTAL
●	¾"	Residential Concealed	Viking	White	Pendent	155°	4.9	VK694	26
▲	¾"	Residential Concealed	Viking	White	Pendent	200°	4.9	VK694	6

TOTAL SPRINKLERS THIS SHEET 32

Scale: 1/8" = 1'

CONTRACT:
Martin Structural Consulting
547 E. 6th AVE
Escondido, CA 92025

PROJECT:
Estrella Residence
700 La Estrella
Palm Springs, CA 92264

Fire Sprinkler Layout

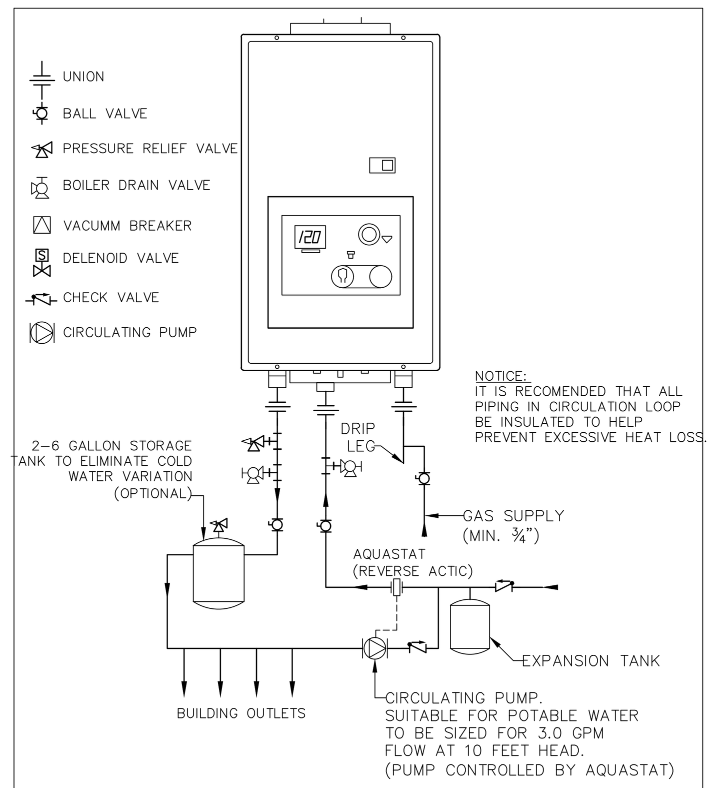
AUTOMATIC FIRE PROTECTION SYSTEMS, INC.

3154 CASA BONITA
PALM SPRINGS, CA 92234
(503) 692-0284
FAX: (503) 692-1186

OR CCB# 0067534
WA CCB# AFPSYI*091BZ

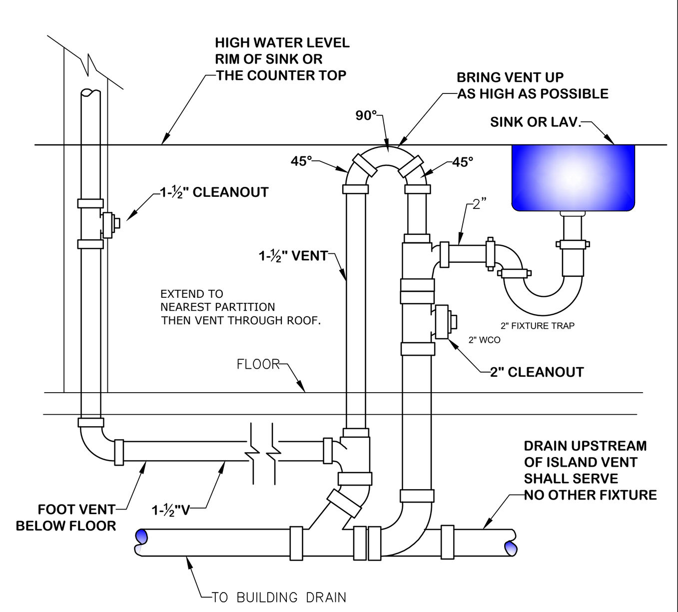
DRAWN BY: J. Bayne
DATE: 24 JUN 2019
AHJ: City of Palm Springs

SHEET:
FP-1 of 1
AFP PROJECT #: #####



SECTION:
DETAIL: WATER HEATERS INSTALLATION DETAIL

A

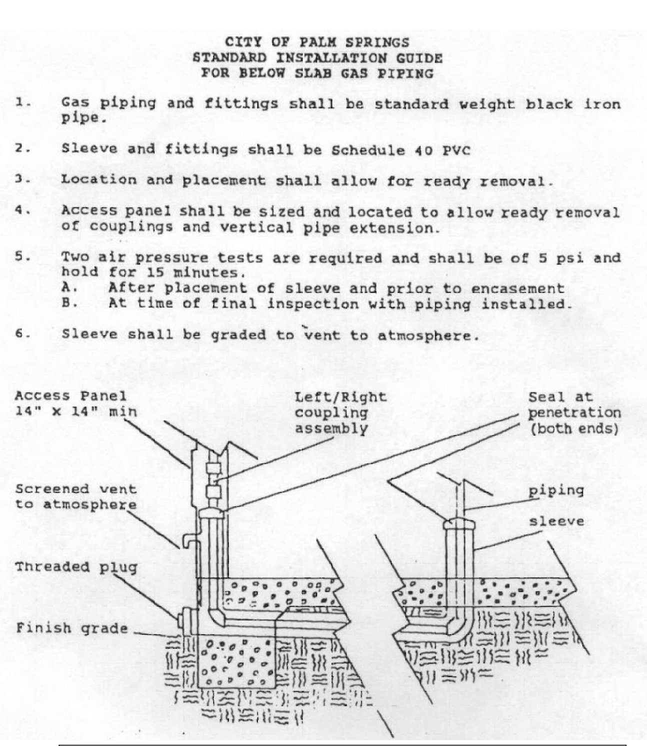


NOTES:

TRAPS FOR ISLAND SINKS AND SIMILAR EQUIPMENT SHALL BE ROUGHED IN ABOVE THE FLOOR AND MAY BE VENTED BY EXTENDING THE VENT AS HIGH AS POSSIBLE. BUT NO LESS THAN DRAIN BOARD HEIGHT. THE VENT IS THEN RETURNED DOWNWARD AND CONNECTED TO THE HORIZONTAL SINK DRAIN IMMEDIATELY DOWNSTREAM FROM THE VERTICAL FIXTURE DRAIN. THE DRAWING ABOVE ILLUSTRATES THE CONSTRUCTION OF THE COMPLETED ISLAND VENTING SYSTEM.

SECTION: 909.0 CPC 2016
DETAIL: ISLAND VENT DETAIL

B


CITY OF PALM SPRINGS
STANDARD INSTALLATION GUIDE
FOR BELOW SLAB GAS PIPING

1. Gas piping and fittings shall be standard weight black iron pipe.
2. Sleeve and fittings shall be Schedule 40 PVC
3. Location and placement shall allow for ready removal.
4. Access panel shall be sized and located to allow ready removal of couplings and vertical pipe extension.
5. Two air pressure tests are required and shall be of 5 psi and hold for 15 minutes.
   A. After placement of sleeve and prior to encasement
   B. At time of final inspection with piping installed.
6. Sleeve shall be graded to vent to atmosphere.

SECTION:
DETAIL: GAS SLEEVE DETAIL NO SCALE

C

NOTE:

TO TANK-LESS WATER HEATER
PROVIDE THE FOLLOWING DESIGN CRITERIA:

PER 2016 BUILDING ENERGY EFFICIENCY STANDARDS
SECTION 150.0 - MANDATORY FEATURES AND DEVICES
(n) WATER HEATER SYSTEM

1. SYSTEMS USING GAS OR PROPANE WATER HEATERS TO SERVE INDIVIDUAL DWELLING UNITS SHALL INCLUDE THE FOLLOWING COMPONENTS:
A. A 120 VOLT RECEPTACLE ACCESSIBLE TO THE HEATER INSTALLED WITHIN 3 FEET.
B. THE "B" VENT INSTALLED IN A STRAIGHT POSITION (*NO BENDS*) FROM THE ROOM CONTAINING THE WATER HEATER TO THE ROOF TERMINATION (*FOR FUTURE POSSIBLE SLEEVING FOR HIGH EFFICIENCY WATER HEATER VENTING.)*
C. A ¾" CONDENSATE DRAIN INSTALLED NO HIGHER THAN 2" ABOVE THE BASE OF THE HEATER THAT ALSO ALLOWS FOR GRAVITY DRAINAGE.
D. A GAS SUPPLY LINE WITH A CAPACITY OF AT LEAST 200,000 Btu/hr

ENERGY STANDARDS NOTES

2016 Low-Rise Residential Mandatory Measures Summary by Energy Standards

NOTE: Low-rise residential buildings subject to the ***Energy Standards*** must comply with all applicable mandatory measures, regardless of the compliance approach\ used. Review the respective section for more information.
*Exceptions may apply.
(Revised 04/2017)

Building Envelope Measures:

§ 110.3(c)5: Water Heating Recirculation Loops Serving Multiple Dwelling Units. Water heating recirculation loops serving multiple dwelling units must meet the air release valve, backflow prevention, pump priming, pump isolation valve, and recirculation loop connection requirements of § 110.3(c)5.

§ ***150.0(j)1***: Storage Tank Insulation. Unfired hot water tanks, such as storage tanks and backup storage tanks for solar water-heating systems, must have R-12 external insulation or R-16 internal insulation where the internal insulation R-value is indicated on the exterior of the tank.

§ ***150.0(j)2A***: Water piping and cooling system line insulation. For domestic hot water system piping, whether buried or unburied, all of the following must be insulated according to the requirements of TABLE 120.3-A: the first 5 feet of hot and cold water pipes from the storage tank; all piping with a nominal diameter of 3/4 inch or larger; all piping associated with a domestic hot water recirculation system regardless of the pipe diameter; piping from the heating source to storage tank or between tanks; piping buried below grade; and all hot water pipes from the heating source to kitchen fixtures.*

§ ***150.0(j)2B***: Water piping and cooling system line insulation. All domestic hot water pipes that are buried below grade must be installed in a water proof and non-crushable casing or sleeve.*

§ 150.0(j)2C: Water piping and cooling system line insulation. Pipe for cooling system lines must be insulated as specified in § 150.0(j)2A. Distribution piping for steam and hydronic heating systems or hot water systems must meet the requirements in TABLE 120.3-A.*

§ 150.0(j)3: Insulation Protection. Insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind.

§ 150.0(j)3A: Insulation Protection. Insulation exposed to weather must be installed with a cover suitable for outdoor service. For example, protected by aluminum, sheet metal, painted canvas, or plastic cover. The cover must be water retardant and provide shielding from solar radiation that can cause degradation of the material.

§ 150.0(j)3B: Insulation Protection. Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must have a Class I or Class II vapor retarder.

§ 150.0(n)1: Gas or Propane Systems. Systems using gas or propane water heaters to serve individual dwelling units must include all of the following: a 120V electrical receptacle within 3 feet of the water heater; a Category III or IV vent, or a Type B vent with straight pipe between the outside termination and the space where the water heater is installed; a condensate drain that is no more than 2 inches higher than the base of the water heater, and allows natural draining without pump assistance; and a gas supply line with a capacity of at least 200,000 Btu/hr.

§ 150.0(n)2: Recirculating Loops. Recirculating loops serving multiple dwelling units must meet the requirements of § 110.3(c)5.

§ 150.0(n)3: Solar Water-heating Systems. Solar water-heating systems and collectors must be certified and rated by the Solar Rating and Certification Corporation (SRCC) or by a listing agency that is approved by the Executive Director

MANDATORY RATES

Division 4.3 – WATER EFFICIENCY AND CONSERVATION (INDOOR WATER USE)
4.303.1
Water conserving plumbing fixtures and fittings
Plumbing fixtures and fittings shall comply with the following:
4.303.1.1 Water Closets: ≤ 1.28 gal/flush
4.303.1.2 Wall Mounted Urinals: ≤ 0.125 gal/flush; all other urinals ≤ 0.5 gal/flush
4.303.1.3.1 Single Showerheads: 1.8 gpm @ 80 psi
4.303.1.3.2 Multiple Showerheads: combined flow rate of all showerheads controlled by a single valve shall not exceed 1.8 gpm @ 80 psi, or only one shower outlet is to be in operation at a time
4.303.1.4.1 Residential Lavatory Faucets: Maximum Flow Rate ≤ 1.2 gpm @ 60 psi; Minimum Flow Rate ≥ 0.8 gpm @ 20 psi
4.303.1.4.2 Lavatory Faucets in Common and Public Use Areas of Residential Buildings: ≤ 0.5 gpm @ 60 psi
4.303.1.4.3 Metering Faucets: ≤ 0.25 gallons per cycle
4.303.1.4.4 Kitchen Faucets: ≤ 1.8 gpm @ 60 psi; temporary increase to 2.2 gpm allowed but shall default to 1.8 gpm

GAS CALCULATION

SIZING PER TABLE 1216.2 (20) CPC 2016 (POLYETHYLENE PIPE)								
SIZE	@ 70'	@ 100'	@ 125'	@ 200'	@ 250'	@ 300'	@ 350'	
1"	254	221	185	144	127			CFH
1-1/4"	477	383	321	249	221			CFH
1-1/2"	721	579	485	376	333			CFH
2"					598	542		CFH
3"					1639	1485	1366	CFH

SIZING PER TABLE 1216.2 (16) CPC 2016 (CSST PIPE)								
SIZE	@ 29'	@ 65'	@ 89'	@ 125'	@ 180'	@ 200'	@250'	
½"	55	36	32	23	21	21	23	CFH
¾"	112	74	65	48	44	44	48	CFH
1"	218	141	125	91	82	82	90	CFH
1-1/4"	374	248	219	171	148	148	185	CFH
1-1/2"	723	440	415	320	277	277	277	CFH

SIZING PER TABLE 1216.2 (1) CPC 2016 (SCHEDULE 40 MET. PIPE)								
SIZE	@ 60'	@ 100'	@ 125'	@ 150'	@ 200'	@ 250'	@ 300'	
1/2"	65	50	44	40	34	30	27	CFH
3/4"	137	104	92	83	71	63	57	CFH
1"	257	195	173	157	134	119	108	CFH
1-1/4"	528	400	355	322	275	244	221	CFH
1-1/2"	791	600	532	482	412	366	331	CFH
2"	1520	1160	1020	928	794	704	638	CFH
2-1/2"					1270	1120	1020	CFH

GAS DEMAND PER UNIT				
QTY	FIXTURES	BTU EA.	CFH. EA.	TOTAL
1	CT	100000	100	100
2	WH	200000	200	400
1	BBQ	85000	85	85
1	DRY	35000	35	35
1	FP	100000	100	100
1	LL	40000	400	400
1	P.EQUIP	500000	500	500
			TOTAL	1620

WATER CALCULATION

TOTAL DEVELOPED LENGTH	
FROM METER TO REGULATOR	>100'
FROM PRV TO MOST REMOTE OUTLET	150'
PRESSURE RANGE AT METER OUTLET	>60 PSI
AT REGULATOR OUTLET	46-60 PSI
SIZING	
WATER METER SIZE	1"
REQUIRED GPM	31
AT REGULATOR OUTLET	>60 PSI
WATER SERVICE SIZE	1-1/2"
PRESSURE REGULATOR SIZE	1-1/2"
PRESSURE RANGE	46-60 PSI

WATER SIZING			
QTY	FIXTURE	FU	TOTAL
4	SH	2	8
6	LAV	1	6
1	KS	1.5	1.5
2	DW	1.5	3.0
4	BS	1	4.0
2	WM	4	8
1	HB	2.5	2.5
5	HB	1	5
6	WC	2.5	15.0
1	ICE	0.5	0.5
1			
		TOTAL	53.5

MAXIMUM PER TABLE 610.4 CPC 2016			
SIZE	F/U	SIZE	F/U
½"	2	1 ¼"	44
¾"	9	1 ½"	80
1"	23	2"	85

WATER HEATER SYSTEM SCHEDULE				
DESIGN	ITEM	MANUFACTURER	MODEL #	DESCRIPTION
WH-1 WH-2	WATER HEATER	NAVIEN	NPE-2405	TANK-LESS WATER HEATER, 19,900-199,900 BTU, EF: 0.97, 3"VENT, T&P DISCHARGE TO EXTERIOR, FLOW 5.7 GPM @ 67°F RISE, 120V, 60HZ.
ET-1 ET-2	EXPANSION TANK	WATTS	DET-5	INSTALL WHEN BLDG. SUPPLY EXCEEDS T&P VALVE SETTING OR WHEN ANY DEVICE IS INSTALLED WHICH PREVENTS PRESSURE RELIEF THROUGH THE BUILDING SUPPLY PER CPC 608.3
CP-1 CP-2	CIRC PUMP	ARMSTRONG	ASTRO 25B1/ 2S	3000 RPM, .58 AMP, 1/25 HP, 115 V, 60 HZ, SINGLE PHASE

DRAIN WASTE & VENT

TABLE 703.2
Maximum Unit Loading and Maximum Length of Drainage and Vent Piping

Size of Pipe, inches	1-1/4	1-1/2	2	2-1/2	3	4	5	6	8	10	12
Maximum Units Drainage Piping [1] Vertical	1	2 [2]	16 [3]	32 [3]	48 [4]	256	600	1380	3600	5600	8400
Horizontal	1	1	8 [3]	14 [3]	35 [4]	216 [5]	428 [5]	720 [5]	2640 [5]	4680 [5]	8200 [5]
Maximum Length Drainage Piping Vertical, feet Horizontal (Unlimited)	45	65	85	148	212	300	390	510	750		
Vent Piping (See note) Horizontal and Vertical Maximum Units	1	8 [3]	24	48	84	256	600	1380	3600		
Maximum Lengths, feet	45	60	120	180	212	300	390	510	750		

1. Excluding trap arm.
2. Except sinks, urinals and dishwashers.
3. Except six-unit traps or water closets.
4. Only four (4) water closets or six-unit traps allowed on any vertical pipe or stack; and not to exceed three (3) water closets or six-unit traps on any horizontal branch or drain. –
5. Based on one-fourth (1/4) loch per foot (20.9 mm/m) slope. For one-eighth (1/8) inch per foot (10.4 mm/m) slope, multiply horizontal fixture units by a factor of 0.8. – –

Note: The diameter of an individual vent shall not be less than one and one-fourth (1-1/4) inches (31.8 mm) nor less than one-half (1/2) the diameter of the drain to which it is connected. Fixture unit load values for drainage and vent piping shall be computed from Tables 7-3 and 7-4. Not to exceed one-third (1/3) of the total permitted length of any vent may be installed in a horizontal position. When vents are increased one (1) pipe size for their entire length, the maximum length limitations specified in this table do not apply.

DRAIN WASTE & VENT SIZING CALCULATION			
DRAINAGE/VENT FIXTURE UNIT CALCULATION SYSTEM:			
QTY	FIXTURE	F/U EA.	F.U. TOTAL
4	SH	2	8
5	LAV	1	5
5	WC	4	20
1	SK	2	2
1	KS	2	2
2	BS	1	2
1	WM	3	3
		TOTAL	39

PLUMBING INSTALLATION NOTES

1. ***LEAD CONTENT*** - THE MAXIMUM ALLOWABLE LEAD CONTENT IN PIPES, PIPE FITTINGS, PLUMBING FITTINGS, AND FIXTURES INTENDED TO CONVEY OR DISPENSE WATER FOR HUMAN CONSUMPTION SHALL BE NOT MORE THAN A WEIGHTED AVERAGE OF 0.25 PERCENT WITH RESPECT TO THE WETTED SURFACES OF PIPES, PIPE FITTINGS, PLUMBING FITTINGS AND FIXTURES. FOR SOLDER AND FLUX, THE LEAD CONTENT SHALL BE NOT MORE THAN 0.2 PERCENT WHEN USED IN PIPING SYSTEMS THAT CONVEY OR DISPENSE WATER FOR HUMAN CONSUMPTION. CPC 604.2

EXCEPTIONS:

A. PIPES, PIPE FITTINGS, PLUMBING FITTINGS, FIXTURES OR BACK-FLOW PREVENTERS USED FOR NON-POTABLE SERVICES SUCH AS MANUFACTURING, INDUSTRIAL PROCESSING, IRRIGATION, OUTDOOR WATERING OR ANY OTHER USES WHERE THE WATER IS NOT USED FOR HUMAN CONSUMPTION.

B. FLUSH VALVES, FILL VALVES, FLUSHOMETER VALVES, TUB FILLERS, SHOWER VALVES, SERVICE SADDLES OR WATER DISTRIBUTION MAIN GATE VALVES THAT ARE 2 INCHES (50 MM) IN DIAMETER OR LARGER.

2. ALL PLUMBING FIXTURES AND FIXTURE FITTINGS SHALL BE LISTED IN CONFORMANCE WITH CPC CHAPTER 4.

3. ***MANDATORY FIXTURE RATES*** - WATER CONSERVING FIXTURES: NEW WATER CLOSETS SHALL USE NO MORE THAN 1.28 GALLONS OF WATER PER FLUSH, KITCHEN FAUCETS MAY NOT EXCEED 1.8 GPM, LAVATORIES ARE LIMITED TO 1.2 GPM AND SHOWERHEAD MAY NOT EXCEED 2.0 GPM OF FLOW. CPC SECTION 407, 408, 411, 412; CGBS 2016 SECTION 4.303.1.1 & 4.303.1.3.1

4. ***INSTALLATION AND ACCESS*** - BATHTUBS AND WHIRLPOOL BATHTUBS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. ACCESS OPENINGS SHALL BE OF SIZE AND OPENING TO PERMIT THE REMOVAL AND REPLACEMENT OF THE CIRCULATION PUMP. WHIRLPOOL PUMP ACCESS LOCATED IN THE CRAWL SPACE SHALL BE LOCATED NOT MORE THAN 20 FEET (6096 MM) FROM AN ACCESS DOOR, TRAP DOOR, OR CRAWL HOLE. THE CIRCULATION PUMP SHALL BE LOCATED ABOVE THE CROWN WEIR OF THE TRAP.

5. THE PUMP AND THE CIRCULATION PIPING SHALL BE SELF-DRAINING TO MINIMIZE WATER RETENTION. SUCTION FITTINGS ON WHIRPOOL BATHTUBS SHALL BE LISTED IN ACCORDANCE WITH ASME A112.19.7/CSA B45.10, CPC 409.6.

6. ***TESTS FOR SHOWER RECEPTORS*** - SHOWER RECEPTORS SHALL BE TESTED FOR WATERTIGHTNESS BY FILLING WITH WATER TO THE LEVEL OF THE ROUGH THRESHOLD. THE TEST PLUG SHALL BE SO PLACED THAT BOTH UPPER AND UNDER SIDES OF THE SUB PAN SHALL BE SUBJECTED TO THE TEST AT THE POINT WHERE IT IS CLAMPED TO THE DRAIN. (PER CPC SECTION 408.7.5).

7. CONTROL VALVES IN SHOWERS, BATHTUBS, AND BIDETS MUST BE PRESSURE BALANCED OR THERMOSTATIC MIXING VALVES. CPC SECTIONS 408, 409, 410.

8. ***INDIVIDUAL SHOWER AND TUB-SHOWER COMBINATION CONTROL VALVES*** - SHOWERS AND TUB-SHOWER COMBINATIONS SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE, THERMOSTATIC, OR COMBINATION PRESSURE BALANCE/THERMOSTATIC MIXING VALVE TYPE THAT PROVIDE SCALD AND THERMAL SHOCK PROTECTION FOR THE RATED FLOW RATE OF THE INSTALLED SHOWERHEAD. THESE VALVES SHALL BE INSTALLED AT THE POINT OF USE AND IN ACCORDANCE WITH ASSE I 016 OR ASME AI12.18.L/CSA B 125.1. GANG SHOWERS WHERE SUPPLIED WITH A SINGLE TEMPERATURE CONTROLLED WATER SUPPLY PIPE, SHALL BE CONTROLLED BY A MIXING VALVE THAT IS IN ACCORDANCE WITH ASSE 1069. HANDLE POSITION STOPS SHALL BE PROVIDED ON SUCH VALVES AND SHALL BE ADJUSTED PER THE MANUFACTURER'S INSTRUCTIONS TO DELIVER A MAXIMUM MIXED WATER SETTING OF 120°F (49°C). WATER HEATER THERMOSTATS SHALL NOT BE CONSIDERED A SUITABLE CONTROL FOR MEETING THIS PROVISION. (PER CPC SEC. 408.3).
8. a) 45. WATER HEATING THERMOSTATS SHALL NOT BE CONSIDERED A SUITABLE CONTROL FOR MEETING THIS PROVISION. (CPC 408.3)

9. HOT AND COLD WATER PIPING SHALL BE INSULATED (PER CPC 609.11)

10. DOMESTIC WATER HEATERS SHALL BE CERTIFIED AND LISTED BY THE CALIFORNIA ENERGY COMMISSION.

11. NO WATER HEATER SHALL BE HEREINAFTER INSTALLED WHICH DOES NOT COMPLY IN ALL RESPECTS WITH THE TYPE AND MODEL OF EACH SIZE THEREOF APPROVED BY THE ADMINISTRATIVE AUTHORITY.

12. ALL GAS STORAGE TANK WATER HEATERS SHALL BE PROVIDED WITH AN APPROVED PRESSURE RELIEF DEVICE AND AN APPROVED TEMPERATURE RELIEF DEVICE, OR COMBINATION THEREOF. (PER CPC SECTION 504.6). AND RELIEF VALVES SHALL TERMINATE PER CPC SECTIONS 608.5.n

13. APPLIANCES REQUIRING COMBUSTION AIR (UNLESS SEALED COMBUSTION CHAMBERS) SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO DESIGN AND PROVIDE IN ACCORDANCE WITH CPC SECTION 506.0 AND CMC CHAPTER 9.

14. WATER HEATERS SHALL BE ANCHORED OR STRAPPED TO RESIST HORIZONTAL DISPLACEMENT DUE TO EARTHQUAKE MOTION. STRAPPING SHALL BE AT POINTS WITHIN THE UPPER ONE-THIRD (1/3) AND LOWER ONE-THIRD (1/3) OF ITS VERTICAL DIMENSIONS. AT THE LOWER POINT, A MINIMUM DISTANCE OF FOUR (4) INCHES SHALL BE MAINTAINED ABOVE THE CONTROLS WITH THE STRAPPING. (PER CPC SECTION 507.2)

15. ***DRAINAGE PAN*** - WHEN A WATER HEATER IS LOCATED IN AN ATTIC OR ON AN ATTIC-CEILING ASSEMBLY, FLOOR-CEILING ASSEMBLY, OR FLOOR-SUBFLOOR ASSEMBLY WHERE DAMAGE RESULTS FROM A LEAKING WATER HEATER, A WATERTIGHT PAN OF CORROSION-RESISTANT MATERIALS SHALL BE INSTALLED BENEATH THE WATER HEATER WITH NOT LESS THAN ¼ OF AN INCH (20 MM) DIAMETER DRAIN TO AN APPROVED DRAINAGE PAN. SUCH PAN SHALL BE NOT LESS THAN 1 1/, INCHES (38 MM) IN DEPTH. (PER CPC 507.5)

16. ***GAS VENT TERMINATION REQUIREMENTS*** - A GAS VENT SHALL TERMINATE IN ACCORDANCE WITH ONE OF THE FOLLOWING: GAS VENTS THAT ARE 12 INCHES (305 MM) OR LESS IN SIZE AND LOCATED NOT LESS THAN 8 FEET (2438 MM) FROM A VERTICAL WALL OR SIMILAR OBSTRUCTION SHALL TERMINATE ABOVE THE ROOF IN ACCORDANCE WITH FIGURE 509.6.2 AND TABLE 509.6.2. GAS VENTS THAT ARE OVER 12 INCHES (305 MM) IN SIZE OR ARE LOCATED LESS THAN 8 FEET (2438 MM) FROM A VERTICAL WALL OR SIMILAR OBSTRUCTION, SHALL TERMINATE NOT LESS THAN 2 FEET (610 MM) ABOVE THE HIGHEST POINT WHERE THEY PASS THROUGH THE ROOF AND NOT LESS THAN 2 FEET (610 MM) ABOVE A PORTION OF A BUILDING WITHIN 10 FEET (3048 MM) HORIZONTALLY. PER SECTION CPC 509.6.2

17. APPROVED NON-REMOVABLE BACKFLOW DEVICE SHALL BE INSTALLED AT ALL HOSE BIBBS AND FAUCETS FITTED WITH THREADED CONNECTIONS. PER CPC SECTION 603.

18. WHERE LOCAL STATIC WATER PRESSURE IS IN EXCESS OF 80 PSI, AN APPROVED TYPE PRESSURE REGULATOR PRECEDED BY AN ADEQUATE STRAINER SHALL BE INSTALLED AND THE STATIC PRESSURE REDUCED TO 80 PSI OR LESS. PER CPC SECTION 608.2

19. EXPANSION TANKS, AND COMBINATION TEMPERATURE AND PRESSURE RELIEF VALVES - A WATER SYSTEM PROVIDED WITH A CHECK VALVE, BACKFLOW PREVENTER, OR OTHER NORMALLY CLOSED DEVICE THAT PREVENTS DISSIPATION OF BUILDING PRESSURE BACK INTO THE WATER MAIN, INDEPENDENT OF THE TYPE OF WATER HEATER USED, SHALL BE PROVIDED WITH AN APPROVED, LISTED, AND ADEQUATELY SIZED EXPANSION TANK OR OTHER APPROVED DEVICE HAVING A SIMILAR FUNCTION TO CONTROL THERMAL EXPANSION. SUCH EXPANSION TANK OR OTHER APPROVED DEVICE SHALL BE INSTALLED ON THE BUILDING SIDE OF THE CHECK VALVE, BACKFLOW PREVENTER, OR OTHER DEVICE AND SHALL BE SIZED AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. PER CPC SECTION 608.3.

20. HORIZONTAL DRAINAGE PIPING SHALL BE RUN IN PRACTICAL ALIGNMENT AND A UNIFORM SLOPE OF NOT LESS THAN ONE-FOURTH (1/4) OF AN INCH PER FOOT OR TWO

(2) PERCENT TOWARD THE POINT OF DISPOSAL PROVIDED THAT, WHERE IT IS IMPRACTICAL DUE TO THE DEPTH OF THE STREET SEWER OR TO THE STRUCTURAL FEATURES OR TO THE ARRANGEMENT OF ANY BUILDING OR STRUCTURE TO OBTAIN A SLOPE OF ONE-FOURTH (1/4) OR AN INCH PER FOOT OR TWO (2) PERCENT, ANY SUCH PIPE OR PIPING FOUR (4) INCHES OR LARGER IN DIAMETER MAY HAVE A SLOPE OF NOT LESS THAN ONE-EIGHTH (1/8) OF AN INCH PER FOOT OR ONE PERCENT, WHEN FIRST APPROVED BY THE ADMINISTRATIVE AUTHORITY. PER CPC SECTION 708.0.

21. VENT TERMINATION CLEARANCE - EACH VENT SHALL TERMINATE NOT LESS THAN 10 FEET (3048 MM) FROM, OR NOT LESS THAN 3 FEET (914 MM) ABOVE, AN OPENABLE WINDOW/SKYLIGHT, DOOR, OPENING, AIR INTAKE, OR VENT SHAFT, OR NOT LESS THAN 3 FEET (914 MM) IN EVERY DIRECTION FROM A LOT LINE, ALLEY AND STREET EXCEPTED. PER CPC 906.2; 906.2.1 [OSHPD 1, 2, 3 & 4 EACH VENT PIPE SHALL TERMINATE NOT LESS THAN TWENTY-FIVE (25) FEET (7620 MM) FROM ANY AIR INTAKE OR VENT SHAFT.

22. VENT TERMINATION - EACH VENT PIPE OR STACK SHALL TERMINATE VERTICALLY NOT LESS THAN 6 INCHES ABOVE THE ROOF NOR LESS THAN ONE FOOT FROM ANY VERTICAL SURFACE. (CPC 906.1)

23. FLOOR DRAIN OR SIMILAR TRAPS DIRECTLY CONNECTED TO THE DRAINAGE SYSTEM AND SUBJECT TO INFREQUENT USE SHALL BE PROTECTED WITH A TRAP SEAL PRIMER, EXCEPT WHERE NOT DEEMED NECESSARY FOR SAFETY OR SANITATION BY THE AUTHORITY HAVING JURISDICTION. TRAP SEAL PRIMERS SHALL BE ACCESSIBLE FOR MAINTENANCE. PER CPC SECTION 1007.0

24. INSTALLATION OF ALL PIPING SYSTEMS SHALL BE IN ACC0RDANCE WITH APPLICABLE IAPMO INSTALLATION STANDARDS AS LISTED IN APPENDIX I.

25. WATER SYSTEM SHALL BE STERILIZED USING A CHLORINE SOLUTION AND TEST CERTIFICATION PROVIDED FROM APPROVED TESTING FACILITY IF REQUIRED BY OWNER OR ARCHITECTS (PER CPC 609.9)

26. HANGERS AND SUPPORTS SHALL BE IN ACCORDANCE WITH CPC SECTION 313.0

27. ALL SYSTEMS SHALL BE TESTED IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE UNIFORM BUILDING CODE WITNESSED BY THE BUILDING AUTHORITY AND OWNERS REPRESENTATIVE IF REQUIRED.

28. CONTRACTOR SHALL COMPLETE CALIFORNIA ENERGY FORM CF-1R AND SIGN CERTIFYING WATER HEATER EQUIPMENT INSTALLATION PRIOR TO FINAL INSPECTION.

29. APPLIANCES CONNECTED TO A PIPING SYSTEM SHALL HAVE AN ACCESSIBLE, APPROVED MANUAL SHUTOFF VALVE WITH A NONDISPLACEABLE VALVE MEMBER, OR A LISTED GAS CONVENIENCE OUTLET. APPLIANCE SHUTOFF VALVES AND CONVENIENCE OUTLETS SHALL SERVE A SINGLE APPLIANCE AND SHALL BE INSTALLED WITHIN 6 FEET (1829 MM) OF THE APPLIANCE IT SERVES. WHERE A CONNECTOR IS USED, THE VALVE SHALL BE INSTALLED UPSTREAM OF THE CONNECTOR. A UNION OR FLANGED CONNECTION SHALL BE PROVIDED DOWNSTREAM FROM THE VALVE TO PERMIT REMOVAL OF APPLIANCE CONTROLS. SHUTOFF VALVES SERVING DECORATIVE APPLIANCES SHALL BE PERMITTED TO BE INSTALLED IN FIREPLACES WHERE LISTED FOR SUCH USE. [NFPA 54:9.6.4, 9.6.4.1]. PER SECTION CPC 1212.5

EXCEPTIONS:

A. SHUTOFF VALVES SHALL BE PERMITTED TO BE ACCESSIBLY LOCATED INSIDE OR UNDER AN APPLIANCE WHERE SUCH APPLIANCE IS REMOVED WITHOUT REMOVAL OF THE SHUTOFF VALVE.

B. SHUTOFF VALVES SHALL BE PERMITTED TO BE ACCESSIBLY LOCATED INSIDE WALL HEATERS AND WALL FURNACES LISTED FOR RECESSED INSTALLATION WHERE NECESSARY MAINTENANCE IS PERFORMED WITHOUT REMOVAL OF THE SHUTOFF VALVE.

30. PLASTIC GAS PIPING SHALL HAVE AT LEAST EIGHTEEN (18) INCHES OF EARTH COVER OR OTHER EQUIVALENT PROTECTION. RISERS, INCLUDING PREFABRICATED RISERS INSERTED WITH PLASTIC PIPE, SHALL BE METALLIC AND SHALL BE WRAPPED OR COATED TO A POINT AT LEAST SIX (6) INCHES ABOVE GRADE OR PROTECTED IN AN APPROVED MANNER COMPLYING WITH CPC SECTION 1210.1 AND HAVE AN ELECTRICALLY CONTINUOUS INSULATED NUMBER 14 AWG (YELLOW COATED OR BARE) COPPER TRACER WIRE ATTACHED TO UNDERGROUND NON-METALLIC GAS PIPING AND SHALL TERMINATE ABOVE GRADE AT EACH END.

31. CONDENSATE SHALL BE COLLECTED AND DISCHARGED TO AN APPROVED PLUMBING FIXTURE OR APPROVED DISPOSAL AREA. REFER TO CPC SECTION 804.1 FOR ADDITIONAL REQUIREMENTS FOR CONDENSATE DRAINAGE PIPING.

32. ***WATER HAMMER*** - BUILDING WATER SUPPLY SYSTEMS WHERE QUICK-ACTING VALVES ARE INSTALLED SHALL BE PROVIDED WITH WATER HAMMER ARRESTER(S) TO ABSORB HIGH PRESSURES RESULTING FROM THE QUICK CLOSING OF THESE VALVES. WATER HAMMER ARRESTERS SHALL BE APPROVED MECHANICAL DEVICES IN ACCORDANCE WITH ASSE 1010 OR PDI-WH 201 AND SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO QUICK-ACTING VALVES. (CPC 609.10)

33. MINIMUM RECOVERY RATING OF THE WATER HEATER IN ACCORDANCE WITH THE FIRST HOUR RATING LISTED IN CPC TABLE 501.1 (CPC 501.0)

34. FIREPLACE VALVES SHALL BE LOCATED OUTSIDE OF THE REQUIRED HEARTH AREA, BUT NOT MORE THAN 6' (6 FEET) AWAY.

35. NO GAS PIPING SHALL BE INSTALLED IN OR ON THE GROUND UNDER ANY BUILDING OR STRUCTURE UNLESS INSTALLED IN AN APPROVED ENCASEMENT SYSTEM SUCH AS GASTITE. THIS INCLUDES PIPING UNDER COVERED PATIOS PER CPC 1210.1.6.1 AND 1210.1.6.2.

36. PLASTIC MATERIALS FOR OUTSIDE UNDERGROUND WATER SERVICE PIPING SHALL HAVE A BLUE INSULATED COPPER TRACER WIRE NOT LESS THAN 18 AWG TERMINATING ABOVE GROUND AT EACH END OF NON-METALLIC PIPING. CPC 604.10.1

37. PROVIDE MINIMUM R-12 INSULATION FOR SMALL STORAGE WATER HEATERS WITH AN INPUT RATING LESS THAN OR EQUAL TO 75,000 BTU/HR. BEES 110.3 and 150.0 (J) I).

38. ALL HOT WATER PIPING SIZED 3/4" OR LARGER IS REQUIRED TO BE INSULATED AS FOLLOWS: 1" PIPE SIZE OR LESS: 1" THICK INSULATION; LARGER PIPE SIZES REQUIRE 1-1/2" THICK INSULATION. ALL HOT WATER PIPES RUNNING FROM THE HEATING SOURCE TO THE KITCHEN FIXTURES SHALL INCLUDE A MINIMUM OF 1" INSULATION. 2016 BUILDING ENERGY EFFICIENCY STANDARDS 110.3 and 150.0 (J) 2vi). - ALL DOMESTIC HOT WATER PIPING TO HAVE THE FOLLOWING MINIMUM INSULATION INSTALLED: ½" PIPE (1/2" INSULATION); ¾" PIPE (1" INSULATION); 1"-1 ½" PIPE (1 ½" INSULATION). CPC 609.11 & ES 150.0(J)

39. BELOW GRADE HOT WATER PIPING MUST BE INSTALLED IN A WATERPROOF AND NON-CRUSHABLE SLEEVE OR CASING THAT ALLOWS FOR REPLACEMENT OF BOTH THE PIPING AND INSULATION. BUILDING ENERGY EFFICIENCY STANDARD 150.O (J)

40. CLOTHES WASHER STANDPIPES MUST BE 2" DIAMETER. THE WEIR OF THE TRAP MUST BE ROUGHED IN 6" - 18" ABOVE THE FLOOR; THE STANDPIPE MUST BE A MINIMUM OF 18" AND A MAXIMUM OF 30" ABOVE THE TRAP. [CPC 804.1]

41. PLUMBING FIXTURES ARE REQUIRED TO BE CONNECTED TO A SANITARY SEWER OR TO APPROVED SEWAGE DISPOSAL SYSTEM. [R306.3]

42. BATHTUB AND SHOWER FLOORS, WALLS ABOVE BATHTUBS WITH A SHOWERHEAD, AND SHOWER COMPARTMENTS SHALL BE FINISHED WITH A NONABSORBENT SURFACE. SUCH WALL SURFACES SHALL EXTEND TO HEIGHT OF NOT LESS THAN 6 FEET ABOVE THE FLOOR. [R307.2]

43. INSTANTANEOUS WATER HEATERS SHALL HAVE ISOLATION VALVES ON BOTH THE COLD AND THE HOT WATER PIPING LEAVING THE WATER HEATER COMPLETE WITH HOSE BIBS OR OTHER FITTINGS ON EACH VALVE FOR FLUSHING THE WATER HEATER WHEN THE VALVES ARE CLOSED. ES 110.3
44. ALL DOMESTIC HOT WATER PIPING TO HAVE THE FOLLOWING MINIMUM INSULATION INSTALLED: 1/2" PIPE (1/2" INSULATION); 3/4" PIPE (1" INSULATION); 1" TO 1-1/2" PIPE (1-1/2" INSULATION). CPC 609.11 & ES 150.0(J)
a) ADDITIONALLY, THE 1/2" HOT WATER PIPE TO THE KITCHEN SINK, AND THE COLD WATER PIPE WITHIN 5' OF THE WATER HEATER BOTH REQUIRE 1" MINIMUM INSULATION. ES 150.O(j)
45. DOMESTIC DISHWASHERS REQUIRE AN APPROVAL DISHWASHER AIR GAP FITTING ON THE DISCHARGE SIDE OF THE DISHWASHER. LISTED AIR GAPS SHALL BE INSTALLED WITH THE FLOOD-LEVEL (FL) MARKING AT OR ABOVE THE FLOOD-LEVEL OF THE SINK OR DRAINBOARD, WHICHEVER IS HIGHER. (CPC 807.3)

GENERAL PLUMBING NOTES

1. **INSTALLATION OF PLUMBING WORK SHALL BE IN ACCORDANCE WITH THE FOLLOWING CODES:**

   2016 CALIFORNIA PLUMBING CODE AND ALL CODES AND ORDINANCES, ETC. OF ALL AUTHORITIES HAVING JURISDICTION OVER THE WORK.

2. **ALL EQUIPMENT AND DEVICES SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE EQUIPMENT MANUFACTURERS' RECOMMENDATIONS. ALL MATERIALS USED OUTSIDE SHALL BE UV-RESISTANT (PVC PIPING, SEALANTS AND CAULKS, ETC.).**
3. **THE DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND AS SUCH DO NOT SHOW EVERY FITTING, OFFSET, TRANSITION, ETC. REQUIRED. THE DRAWINGS INDICATE REQUIRED SIZES AND TERMINATIONS OF PIPING AND SUGGEST ROUTES OF PIPING TO CONFORM TO THE STRUCTURE, TO AVOID OBSTRUCTIONS, AND TO PRESERVE CLEARANCE.**
4. **COORDINATE PLUMBING WORK WITH WORK OF ALL OTHER TRADES.**
5. **VERIFY REQUIRED OPENINGS THROUGH BUILDING STRUCTURE FOR PLUMBING WORK WITH GENERAL CONTRACTOR BEFORE ROUGH-IN.**
6. **LOCATE ALL PLUMBING DEVICES SUCH AS VALVES, ETC. REQUIRING ACCESS ABOVE AREAS WITH ACCESSIBLE CEILINGS, OR PROVIDE ACCESS DOORS OF REQUIRED SIZE AND FIRE RATING, ONLY WITH PRIOR APPROVAL OF ARCHITECT.**
7. **BEFORE COMMENCEMENT OF WORK, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS, ELEVATIONS, SIZES, AND MATERIALS OF ALL UTILITIES AND PIPING, AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT OF ALL DISCREPANCIES.**
8. **REFER TO ARCHITECTURAL DRAWINGS FOR THE EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL PLUMBING FIXTURES.**
9. **INSTALL PLUMBING WORK TO AVOID INTERFERENCE WITH THE STRUCTURE AND WITH MECHANICAL AND ELECTRICAL EQUIPMENT.**
10. **ALL CLEANOUTS SHALL BE INSTALLED IN READILY ACCESSIBLE LOCATIONS. THE CONTRACTOR SHALL COORDINATE CLEANOUT LOCATIONS WITH CABINETS, EQUIPMENT, ETC., AND WITH THE ARCHITECT.**
11. **ALL PLUMBING VENTS THROUGH ROOF SHALL TERMINATE AT LEAST 12 INCHES FROM ANY VERTICAL SURFACE, 3 FEET ABOVE AND/OR 10 FEET FROM ANY OUTSIDE AIR INTAKES.**
12. **BEFORE FABRICATION OR INSTALLATION OF PLUMBING ROUGH-IN, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS OF ALL MECHANICAL EQUIPMENT AND EQUIPMENT PROVIDED UNDER OTHER SPECIFICATION SECTIONS. BEFORE INSTALLATION OF PLUMBING TRIM, THE CONTRACTOR SHALL VERIFY THE FINAL FINISHES AND/OR SURFACE TREATMENTS.**
13. **FIRESTOPPING: PENETRATIONS THROUGH RATED WALLS, FLOORS, AND ROOFS SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASES WHEN SUBJECTED TO THE REQUIREMENTS OF TEST STANDARD SPECIFIC OF FIRE STOPS ASTM E-814. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF FIRE-RATED ASSEMBLIES, WHICH INCLUDE COMMON WALLS BETWEEN TENANT SPACES.**
14. **SUBMITTALS: AT LEAST TWO WEEKS PRIOR TO ORDERING, FABRICATION, OR INSTALLATION OF ANY WORK, SUBMIT TO ARCHITECT FOUR SETS OF PRODUCT DATA FOR ALL EQUIPMENT, DEVICES, AND MATERIAL TO BE USED.**
15. **WARRANTEE: THE COMPLETE JOB SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER DATE OF FINAL ACCEPTANCE BY THE OWNER. ANY WORK, MATERIAL, OR EQUIPMENT FOUND TO BE DEFECTIVE DURING THIS PERIOD SHALL BE CORRECTED IMMEDIATELY, UPON WRITTEN NOTIFICATION AT THE CONTRACTOR'S EXPENSE.**
16. **CONDENSATE SHALL BE COLLECTED AND DISCHARGED TO AN APPROVED PLUMBING FIXTURE OR APPROVED DISPOSAL AREA.**
17. **ALL HOSE BIBBS ARE TO BE PROVIDED WITH A BACKFLOW / ANTI-SIPHON VALVE.**
18. **WHERE ANY 2" VENTS RUN HORIZONTALLY TROUGH WALL STUDS, THE MINIMUM STUD SIZE OF 2x6 SHALL BE USED FOR THAT PLUMBING WALL.**

DWV NOTES

1- VENTS SHALL BE JOINED IN STRUCTURE AS CONDITIONS PERMIT WITH SIZING PER UPC TABLE 7-5 TO MINIMIZE ROOF PENETRATIONS.

2- VENTS SHALL TERMINATE A MINIMUM OF 6" ABOVE THE ROOF THROUGH AN APPROVED FLASHING.

3- VENTS SHALL TERMINATE ON THE BACK SIDE OF ROOF, IN MECHANICAL WELL OR AS ABLE TO AVOID AS MUCH IMPACT ON THE ARCHITECTURAL CHARTER AS POSSIBLE.

4- VENTS SHALL TERMINATE NOT LESS THAN TEN FEET OR AT LEAST THREE FEET ABOVE ANY OPENABLE WINDOW, DOOR, OPENING, AIR INTAKE OR VENT SHAFT OR NOT LESS THAN THREE FEET IN EVERY DIRECTION FROM ANY LOT LINE.

NOTES:

1- EFFECTIVE JANUARY 1, 2011 NO PERSON SHALL USE ANY PIPE, OR PLUMBING FITTING OR FIXTURE, SOLDER, OR FLUX THAT IS NOT LEAD FREE IN THE INSTALLATION OR REPAIR OF ANY PUBLIC WATER SYSTEM OR ANY PLUMBING IN A FACILITY PROVIDING WATER FOR HUMAN CONSUMPTION, EXCEPT WHEN NECESSARY FOR THE REPAIR OF LEADED JOINTS OF CAST IRON PIPES. (HEALTH & SAFETY CODE 116875)

INFORMATIONAL: FOR THE PURPOSE OF THIS SECTION "LEAD FREE" MEANS NOT MORE THAN 0.2 PERCENT LEAD WHEN USED WITH RESPECT TO SOLDER AND FLUX AND NOT MORE THAN 8 PERCENT WHEN USED WITH RESPECT TO PIPES AND PIPE FITTINGS. WITH RESPECT TO PLUMBING FITTINGS AND FIXTURES, "LEAD FREE" MEANS NO MORE THAN 4 PERCENT BY DRY WEIGH AFTER AUGUST 6, 2002.

2- A WATER HEATER SUPPORTED FROM THE GROUND SHALL REST ON LEVEL CONCRETE OR OTHER APPROVED BASE EXTENDING NOT LESS THAN (3) INCHES ABOVE THE ADJOINING GROUND LEVEL. (CPC 508.3)

3- WATER HEATER APPLIANCES IN RESIDENTIAL GARAGES AND IN ADJACENT SPACES THAT OPEN TO THE GARAGE SHALL BE INSTALLED SO THAT BURNERS AND BURNER-IGNITION DEVICES ARE LOCATED NOT LESS THAN EIGHTEEN (18) INCHES ABOVE THE FLOOR. (CPC 508.1491))

4- PROVIDE ACCESSIBLE APPLIACE/EQUIPMENT SHUTOFF VALVE (S) WITHIN 6 FEET OF THE APPLIANCE/EQUIPMENT IT SERVES. (CPC 1212.3.5)

CALIFORNIA BUILDING CODE HOUSING ACCESSIBILITY NOTES:

- KITCHEN SINK FAUCET CONTROLS. FAUCET CONTROLS AND OPERATING MECHANISMS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 POUNDS. LEVER-OPERATED, PUSH-TYPE AND ELECTRONICALLY CONTROLLED MECHANISMS ARE EXAMPLES OF ACCEPTABLE DESIGNS. SELF-CLOSING VALVES ARE ALLOWED IF THE FAUCET REMAINS OPEN FOR AT LEAST 10 SECONDS. PER CBC SECTION 1133A.6

- PLUMBING PROTECTION. WATER SUPPLY AND DRAIN PIPES UNDER KITCHEN SINKS SHALL BE INSULATED OR OTHERWISE COVERED. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER KITCHEN SINKS.

PLUMBING MATERIALS LIST		
SEWER	✓	ABS SCHED 40
	.	ABS SDR 35
	.	HUBLESS CAST IRON
DWV BELOW SLAB	✓	PVC DWV SCHED 40
	.	HUBLESS CAST IRON
WASTE ABOVE SLAB	✓	PVC DWV SCHED 40
	.	HUBLESS CAST IRON
WATER SERVICE	.	COPPER TYPE K
	✓	PVC 40
	.	PVC 80
WATER BELOW SLAB	.	COPPER TYPE K
	✓	COPPER TYPE L
	✓	WIRSBO AQUAPEX
	.	CPVC
WATER ABOVE SLAB	.	COPPER TYPE K
	✓	COPPER TYPE L
	.	WIRSBO AQUAPEX
	.	CPVC
GAS BELOW GRADE	✓	POLYETHYLENE
	.	STEEL PIPE SCHED 40 W/RAPPED
GAS ABOVE GRADE	✓	STEEL PIPE BLK SCHED 40
	.	CSST (TRACPIPE OR EQUAL)
ROOF DRAIN PIPING	✓	ABS SCHED 40
	.	HUBLESS CAST IRON
	.	RECTANGULAR FIBERGLASS
VALVES	✓	APPROVED MANUFACTURER
	.	NO GATES VALVES
INSULATION REQUIRED	.	DWV
	.	COLD WATER
	✓	HOT WATER
	.	ROOF DRAINS
	.	CONDENSATE
INSULATION	.	FIBERGLASS W/AP JACKET
	✓	POLYETHYLENE CLOSET CELL
	.	CELLULAR GLASS INSERTS
INDIRECT WASTE	✓	PVC SCHED 40
	.	TYPE M COPPER

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DATE: 6-24-2019

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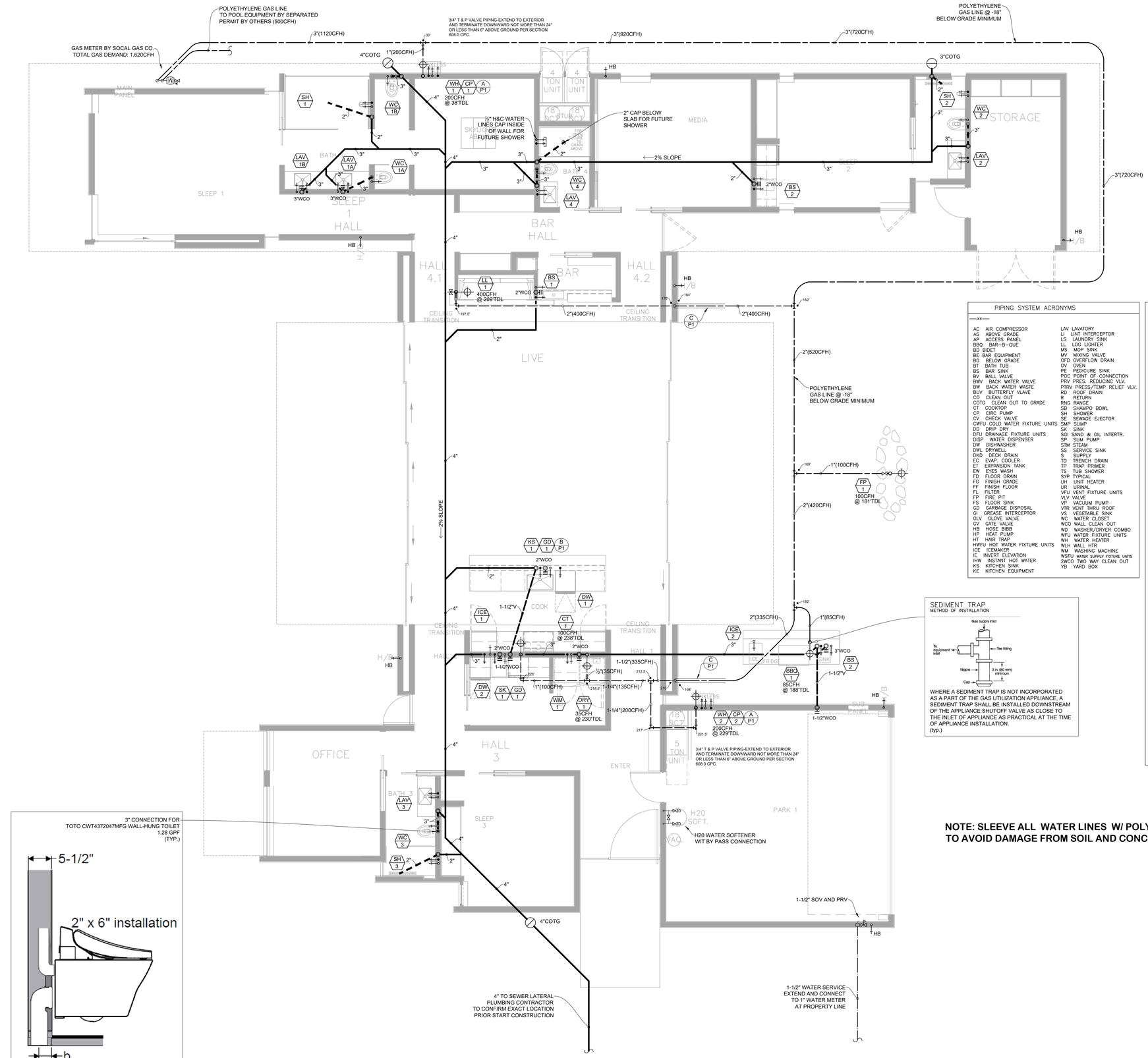
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PLUMBING NOTES AND DETAILS

DRAWING NUMBER
P1



SEDIMENT TRAP
METHOD OF INSTALLATION

WHERE A SEDIMENT TRAP IS NOT INCORPORATED AS A PART OF THE GAS UTILIZATION APPLIANCE, A SEDIMENT TRAP SHALL BE INSTALLED DOWNSTREAM OF THE APPLIANCE SHUTOFF VALVE AS CLOSE TO THE INLET OF APPLIANCE AS PRACTICAL AT THE TIME OF APPLIANCE INSTALLATION. (typ.)

PIPING SYSTEM ACRONYMS

—XX—

AC AIR COMPRESSOR	LAV LAVATORY
AG ABOVE GRADE	LI LINT INTERCEPTOR
AP ACCESS PANEL	LS LAUNDRY SINK
BBQ BAR-B-QUE	LL LOG LIGHTER
BD BIDET	MS MOP SINK
BE BAR EQUIPMENT	MV MIXING VALVE
BG BELOW GRADE	OFD OVERFLOW DRAIN
BT BATH TUB	OV OVEN
BS BAR SINK	PE PEDICURE SINK
BV BALL VALVE	POC POINT OF CONNECTION
BWV BACK WATER VALVE	PRV PRES. REDUCING VLV.
BW BACK WATER WASTE	PTRV PRESS./TEMP RELIEF VLV.
BUV BUTTERFLY VLAVE	RD ROOF DRAIN
CO CLEAN OUT	R RETURN
COTG CLEAN OUT TO GRADE	RNG RANGE
CT COOKTOP	SB SHAMPO BOWL
CP CIRC PUMP	SH SHOWER
CV CHECK VALVE	SE SEWAGE EJECTOR
CWFU COLD WATER FIXTURE UNITS	SMP SUMP
DD DRIP DRY	SK SINK
DFU DRAINAGE FIXTURE UNITS	SOI SAND & OIL INTERTR.
DISP WATER DISPENSER	SP SUM PUMP
DW DISHWASHER	STM STEAM
DWL DRYWELL	SS SERVICE SINK
DKD DECK DRAIN	S SUPPLY
EC EVAP. COOLER	TD TRENCH DRAIN
ET EXPANSION TANK	TP TRAP PRIMER
EW EYES WASH	TS TUB SHOWER
FD FLOOR DRAIN	TYP TYPICAL
FG FINISH GRADE	UH UNIT HEATER
FF FINISH FLOOR	UR URINAL
FL FILTER	VFU VENT FIXTURE UNITS
FP FIRE PIT	VLV VALVE
FS FLOOR SINK	VP VACUUM PUMP
GD GARBAGE DISPOSAL	VTR VENT THRU ROOF
GI GREASE INTERCEPTOR	VS VEGETABLE SINK
GLV GLOVE VALVE	WC WATER CLOSET
GV GATE VALVE	WCO WALL CLEAN OUT
HB HOSE BIBB	WD WASHER/DRYER COMBO
HP HEAT PUMP	WFU WATER FIXTURE UNITS
HT HAIR TRAP	WH WATER HEATER
HWFU HOT WATER FIXTURE UNITS	WLH WALL HTR
ICE ICEMAKER	WM WASHING MACHINE
IE INVERT ELEVATION	WSFU WATER SUPPLY FIXTURE UNITS
IHW INSTANT HOT WATER	2WCO TWO WAY CLEAN OUT
KS KITCHEN SINK	YB YARD BOX
KE KITCHEN EQUIPMENT	

PLUMBING SYMBOLS

SYMBOL	DESCRIPTION
	BALL VALVE
	BUTTERFLY VALVE
	CHECK VALVE
	GATE VALVE
	GATE VALVE (ANGLE)
	GATE VALVE (OS & Y)
	GLOBE VALVE
	GLOBE VALVE (ANGLE)
BFP	BACKFLOW PREVENTER
FCO	FLOOR CLEANOUT
DCO	DOUBLE CLEAN OUT
WCO	WALL CLEAN OUT
CO	END OF PIPE CLEAN OUT
	EXPANSION JOINT
	FLEXIBLE PIPE CONNECTION
	PIPE ANCHOR
	PRESSURE GAUGE WITH VALVE
	STEAM TRAP
	STRAINER
	STRAINER W/BLOW-OFF VALVE
	THERMOMETER
	TEST PLUG (PRESS/TEMP)
	ELBOW - TURNED UP
	ELBOW - TURNED DOWN
	FLANGE CONNECTION
	TEE - OUTLET UP
	TEE - OUTLET DOWN
	UNION
	FLANGED UNION
	GAS PLUG
	CAP ON END OF PIPE

SYMBOL	DESCRIPTION
	HOSE BIBB W/VAC BREAKER
	NEEDLE VALVE
	PLUG VALVE COCK
	PRESSURE REDUCING VALVE
	GAS REGULATOR
	RELIEF OR SAFETY VALVE
	SOLENOID VALVE
M	METER
	DIRECTION OF FLOW
	COLD WATER STUB
	HOT WATER STUB/RETURN
	HOT WATER RETURN
	POINT OF CONNECTION
	PUMP
	PLUMBING EQUIPMENT DESIGNATION
	GAS STUB
TP	TRAP PRIMER
	WATER HAMMER ARRESTORS
	UPPER TERMINAL DRAIN
	STACK DRAIN
	STACK VENT
	VENT THROUGH ROOF
	STORM DRAIN OUT
	FLOOR SINK

	DRAIN WASTE
	WASTE ARM
	VENT
	COLD WATER PIPING
	HOT WATER PIPING
	HOT WTR RETURN PIPING
	GAS PIPING
	GAS PIPING BELOW GRADE
	GAS PIPING BELOW SLAB

NOTE: SLEEVE ALL WATER LINES W/ POLYWRAP-C TO AVOID DAMAGE FROM SOIL AND CONCRETE

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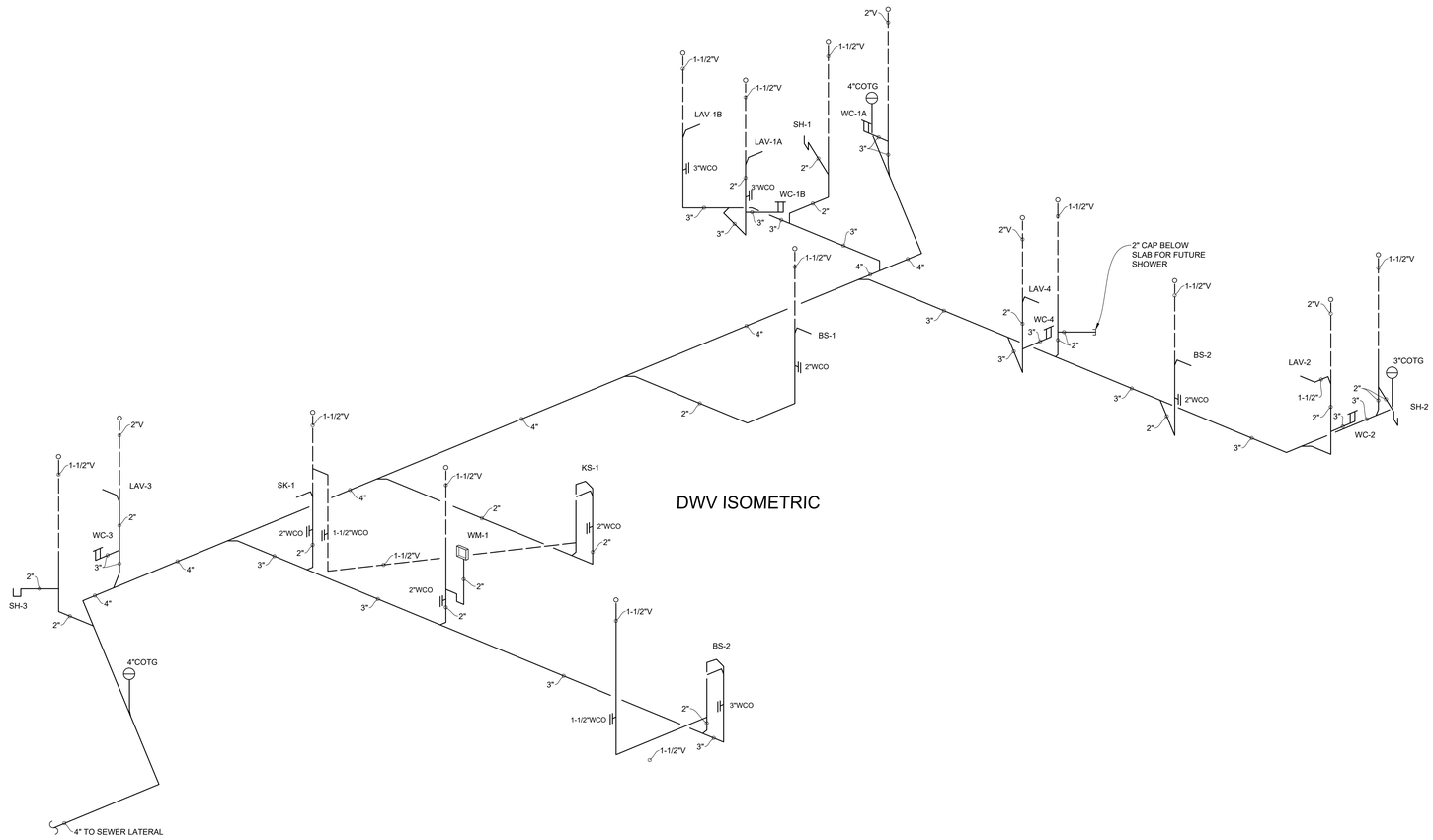
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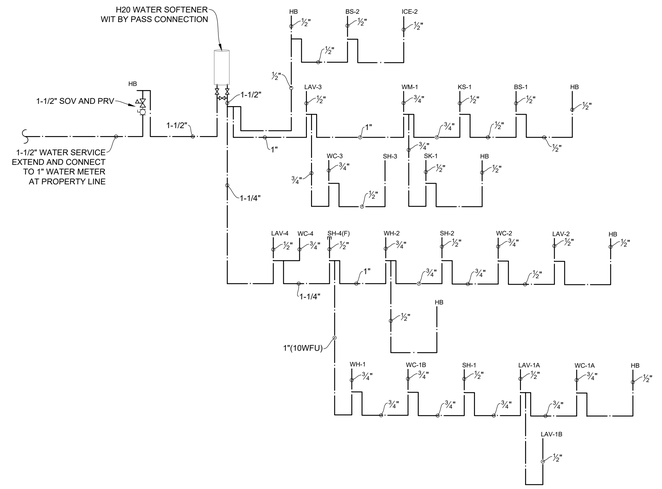
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PLUMBING FLOOR PLAN

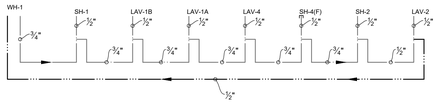
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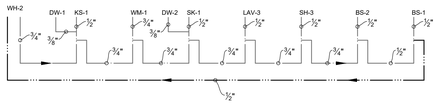
DWV ISOMETRIC



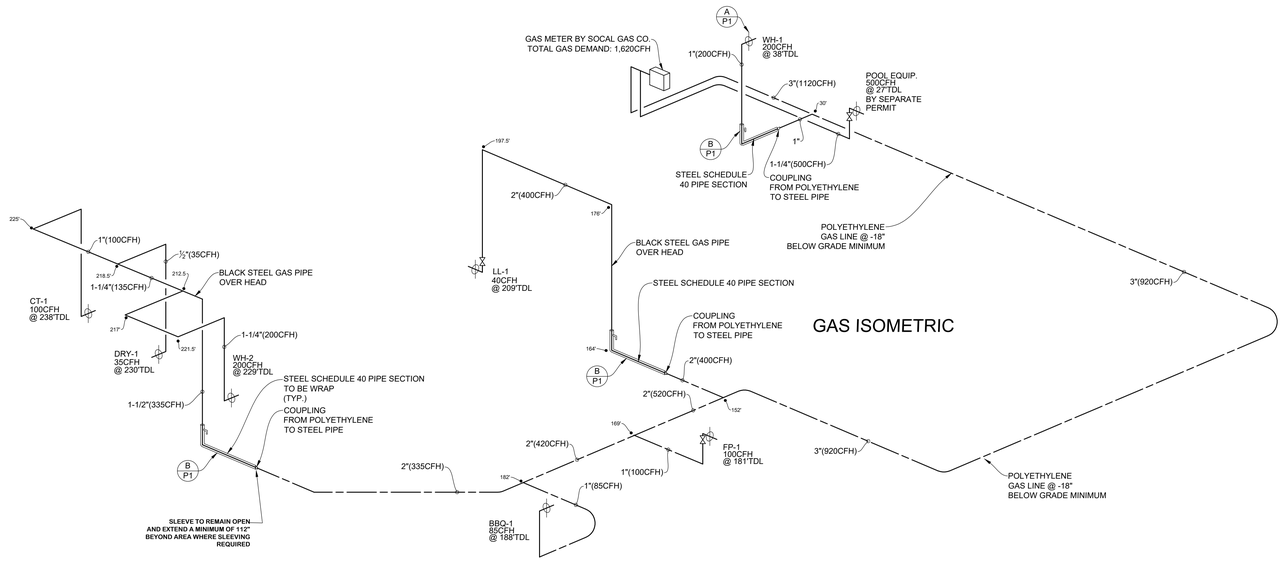
COLD WATER DIAGRAM



HOT WATER DIAGRAM WH-1



HOT WATER DIAGRAM WH-2



GAS ISOMETRIC

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GAS ISOMETRICS

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