

Address:  
0 MIRADERO AVENUE  
SAN JOSE, CALIFORNIA 95127

APN #: 612-04-048  
Owner: MR SIVAPRAKASAM BALASUBRAMANIAN  
& MRS. RAMARAJ KALAISELVI  
Printed on: 3/29/2023



SCALE: 1/32"=1'-0"

# MIRADERO - RESIDENCE

## NEW CONSTRUCTION

0 MIRADERO AVENUE, SAN JOSE, CALIFORNIA 95127

APN: 612-04-048

FIRE SPRINKLER TO BE DEFERRED ON A SEPARATE PERMIT

INDEX OF DRAWING		APPLICABLE CODES	PROJECT DATA	BEST MANAGEMENT PRACTICES FOR CONSTRUCTION ACTIVITIES:
CVR GN	COVER SHEET GENERAL NOTES	THIS PROJECT SHALL COMPLY WITH THE FOLLOWING MODEL CODES:	OWNER: MR SIVAPRAKASAM BALASUBRAMANIAN & MRS. RAMARAJ KALAISELVI	<p>STORM WATER POLLUTION CONTROL REQUIREMENT FOR CONSTRUCTION ACTIVITIES MINIMUM WATER QUALITY PROTECTION REQUIREMENTS FOR ALL DEVELOPMENT CONSTRUCTION PROJECTS/ CERTIFICATION STATEMENT.</p> <p>THE FOLLOWING IS INTENDING MINIMUM NOTES OR AS AN ATTACHMENTS FOR CONSTRUCTION AND GRADING PLANS AND REPRESENT THE MINIMUM STANDARDS OF GOOD HOUSEKEEPING WHICH MUST BE IMPLEMENTED ON ALL CONSTRUCTION SITES REGARDLESS OF SIZE (APPLIES TO ALL PERMITS).</p> <div><div>1.</div><div>ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ON SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEETFLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES OR WIND.</div></div> <div><div>2.</div><div>STOCKPILES OF EARTH AND OTHER CONSTRUCTION RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.</div></div> <div><div>3.</div><div>FUELS, OILS, SOLVENTS AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.</div></div> <div><div>4.</div><div>NON-STORMWATER RUNOFF FROM EQUIPMENT AND VEHICLE WASHING AND ANY OTHER ACTIVITY SHALL BE CONTAINED AT THE PROJECT SITE.</div></div> <div><div>5.</div><div>EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.</div></div> <div><div>6.</div><div>TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.</div></div> <div><div>7.</div><div>SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY. ACCIDENTAL DEPOSITIONS MUST BE SWEEPED UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.</div></div> <div><div>8.</div><div>ANY SLOPES WITH DISTURBED SOILS OR DENUDED OF VEGETATION MUST BE STABILIZED SO AS TO INHIBIT EROSION BY WIND AND WATER.</div></div>
A-1 A-2 A-3 A-4 A-5 A-6 A-7 A-8 A-9 A-10 E-1 E-2 E-3 E-4 P-1 P-2 D-1	SITE PLAN PROPOSED FLOOR PLAN PROPOSED FLOOR PLAN PROPOSED ROOF PLAN ELEVATIONS ELEVATIONS SECTIONS 3D VIEW 3D VIEW FLOOR AREA CALCULATION ELECTRICAL PLAN ELECTRICAL PLAN LIGHTING PLAN LIGHTING PLAN PLUMBING PLAN PLUMBING PLAN MATERIAL DETAILS	-2022 CBC (CALIFORNIA BUILDING CODE) -2022 CMC (CALIFORNIA MECHANICAL CODE) -2022 CPC (CALIFORNIA PLUMBING CODE) -2022 CFC (CALIFORNIA FIRE CODE) -2022 CEC (CALIFORNIA ELECTRICAL CODE) -2022 CRC (CALIFORNIA RESIDENTIAL CODE) -2022 CGBSC (CALIFORNIA GREEN BUILDING STANDARDS CODE) -2022 CBEES (CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS) -STATE OF CALIFORNIA ENERGY CONSERVATION REQUIREMENTS (T-24) -INCLUDING CITY AND COUNTY AMENDMENTS	PROJECT ADDRESS: 0 MIRADERO AVENUE SAN JOSE, CALIFORNIA 95127 612-04-048 APN: 71.744 SQ.FT. PARCEL AREA (Acres): 1.650 ACRES BLOCK: NONE PAGE: 4 PROPERTY TYPE: SINGLE FAMILY RESIDENTIAL LEGAL DESCPT.: --- ZONING: HS-D1 OCCUPANCY GROUP: R-3 JURISDICTION: SAN JOSE YEAR BUILT: --- CONSTRUCT TYPE: V-B FIRE SPRINKLER: NO	
CAL GREEN G-1 G-2 G-3	CAL GREEN SHEET 1 CAL GREEN SHEET 2 FORMS	SCOPE OF WORK	BUILDING DATA	
		1. NEW CONSTRUCTION MAIN HOUSE (3 STORIES ) 4,304 SQ.FT.	NO. OF STORIES: (N) 3 STORIES  NEW CONSTRUCTION AREA: (N) MAIN LEVEL = 1,829.00 SQ.FT (N) UPPER LEVEL = 852.00 SQ.FT (N) LOWER LEVEL = 1,214.00 SQ.FT (N) GARAGE 3 - CAR = 605.88 SQ.FT TOTAL SQ.FT. (NEW RESIDENCE) = 4,500.88 SQ.FT   LOT COVERAGE= 2,700/71,744=0.037 ~ 4% FAR= 4,500.88/71,744=0.062 ~ 6%	

NOTE	APPROVAL STAMP
CONSTRUCTION FOR WORK FOR WHICH A PERMIT IS REQUIRED SHALL BE SUBJECT TO INSPECTION BY THE BUILDING OFFICIAL AND SUCH CONSTRUCTION OR WORK SHALL REMAIN ACCESSIBLE AND EXPOSED FOR INSPECTION PURPOSES UNTIL APPROVED. APPROVAL AS A RESULT OF AN INSPECTION SHALL NOT BE CONSTRUED TO BE AN APPROVAL OF A VIOLATION OF THE PROVISIONS OF THE JURISDICTION CODE OR OF OTHER ORDINANCES OF THE JURISDICTION. INSPECTIONS PRESUMING TO GIVE AUTHORITY TO VIOLATE OR CANCEL THE PROVISIONS OF THE JURISDICTION CODE OR OF OTHER ORDINANCES OF THE JURISDICTION SHALL NOT BE VALID. IT SHALL BE THE DUTY OF THE PERMIT APPLICANT TO CAUSE THE CORK TO REMAIN ACCESSIBLE AND EXPOSED FOR INSPECTION PURPOSES. NEITHER THE BUILDING OFFICIAL NOR THE JURISDICTION SHALL BE LIABLE FOR EXPENSE ENTAILED IN THE REMOVAL OR REPLACEMENTS OF ANY MATERIAL REQUIRED TO ALLOW INSPECTION.	
GENERAL NOTES	ABBREVIATIONS
<div>1. CONTRACTOR SHALL, PRIOR TO COMMENCEMENT OF WORK FIELD VERIFY ALL EXISTING PROJECT CONDITIONS, INCLUDING DIMENSIONS AND UTILITY LOCATIONS AND UTILITY SIZES.</div> <div>2. FIELD INFORMATION OF DISCREPANCIES SHALL BE RECORDED ON A REPRODUCIBLE DOCUMENT AND IMMEDIATELY TRANSMITTED TO THE DESIGNER FOR PROJECT RECORD COORDINATION AND NECESSARY RESOLUTION PRIOR TO CONTINUE WITH WORK.</div> <div>3. CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL WORK AND MATERIAL - INCLUDING THOSE FURNISHED BY SUBCONTRACTORS.</div> <div>4. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED SIZES, DO NOT SCALE DRAWINGS TO DETERMINE ANY LOCATIONS. THE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES PRIOR TO CONTINUING.</div> <div>5. ALL WORK SHALL CONFORM TO THE LATEST ADOPTED EDITIONS OF ALL APPLICABLE BUILDING CODES, THE AMERICANS WITH DISABILITIES ACT, AS WELL AS ALL OTHER LOCAL GOVERNING CODES AND ORDINANCES.</div> <div>6. ALL ELECTRICAL MECHANICAL, AND PLUMBING WORK SHALL CONFORM TO THE REQUIREMENTS OF ALL LEGALLY CONSTITUTED AUTHORITIES HAVING JURISDICTION.</div> <div>7. THE GENERAL BUILDING PERMITS SHALL BE PAID FOR BY THE OWNER AND SECURED BY THE GENERAL CONTRACTOR. ALL OTHER REQUIRED PERMITS SHALL BE PAID FOR BY THE CONTRACTOR OR SUBCONTRACTOR DIRECTLY RESPONSIBLE.</div> <div>8. ALL REQUIRED CITY AND COUNTY LICENSES SHALL BE ACQUIRED AND PAID FOR BY THE INDIVIDUAL TRADES.</div> <div>9. ALL CONTRACTORS SHALL HAVE VALID CERTIFICATES OF WORKMAN'S COMPENSATION OF FILE WITH THE APPROPRIATE AGENCIES.</div> <div>10. CONTRACTOR SHALL ASSIST OWNER IN OBTAINING FINAL APPROVAL OF LOCAL HEALTH DEPARTMENT AND THE TEMPORARY AND FINAL CERTIFICATES OF OCCUPANCY.</div> <div>11. CONTRACTOR SHALL PROVIDE BACKING FOR SUPPORT OF ALL WALL, CEILING AND PARTITION MOUNTED ITEMS SUCH AS LIGHT FIXTURES, SHELVING, EQUIPMENT AND TELEVISIONS COORDINATE LOCATIONS AND REQUIREMENT WITH THE PLUMBING, MECHANICAL, ELECTRICAL DRAWINGS.</div> <div>12. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHETHER SHOWN HEREIN OR NOT AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR(S) SHALL BEAR ALL EXPENSE FOR THE REPAIR OR REPLACEMENT OF UTILITIES AND ALL OTHER PROPERTY DAMAGED BY OPERATIONS IN CONJUNCTION WITH EXECUTION OF WORK.</div> <div>13. CONTRACTOR SHALL PROVIDE PROTECTION IN ACCORDANCE WITH AL APPLICABLE BUILDING CODES. CONTRACTOR SHALL PROVIDE REQUIRED PROTECTION INCLUDING BUT NOT LIMITED TO SHORING BRACING AND ALL OTHER SUPPORTS (INCLUDING ENGINEERING OF SYSTEMS) NECESSARY TO MAINTAIN OVERALL STRUCTURAL INTEGRITY OF THE BUILDING.</div> <div>14. ALL DEMOLITION AND CUTTING SHALL BE PERFORMED IN A MANNER AND BY METHODS WHICH ENSURE AGAINST DAMAGE TO EXISTING WORK.</div> <div>15. INTERIOR WALL AND CEILING FINISHES SHALL NOT EXCEED FLAME SPREAD CLASSIFICATIONS DICTATED BY ALL APPLICABLE BUILDING CODES.</div> <div>16. GYPSUM BOARD AND SUSPENDED CEILING SYSTEMS SHALL CONFORM TO ALL LOCAL GOVERNING BUILDING CODES AND ORDINANCES.</div> <div>17. ALL GLASS AND GLAZING SHALL COMPLY WITH ALL APPLICABLE BUILDING CODES AS WELL AS THE U.S. CONSUMER PRODUCT SAFETY COMMISSION. SAFETY STANDARDS FOR ARCHITECTURAL GLAZING MATERIAL.</div> <div>18. PIPES, CONDUITS, OR DUCTS EXCEEDING ONE THIRD OF THE SLAB OR MEMBER THICKNESS SHALL NOT BE PLACED IN STRUCTURAL CONCRETE UNLESS SPECIFICALLY DETAILED REFER TO MECHANICAL, ELECTRICAL, PLUMBING AND STRUCTURAL DRAWINGS FOR LOCATION OF SLEEVES AND OTHER ACCESSORIES.</div> <div>19. CONTRACTOR SHALL REFER TO AND CONFORM WITH ALL FINDINGS AND RECOMMENDATIONS SET FORTH IN THE SOILS REPORT.</div> <div>20. THE DESIGNER ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF THE FINDING IN THE SOILS REPORT, NOR FOR THE FINAL RECOMMENDATIONS SHOULD ANY UNUSUAL CONDITIONS BECOME APPARENT DURING GRADING OR FOUNDATION CONSTRUCTION NOTIFY THE SOILS ENGINEER FOR INSTRUCTIONS PRIOR TO CONTINUING WORK.</div> <div>21. EXTERIOR OPENINGS SHALL COMPLY WITH ALL SECURITY REQUIREMENTS AS OUTLINED IN ALL LOCAL BUILDING CODES AND ORDINANCES.</div> <div>22. ACCURATE AS-BUILT DRAWINGS SHALL BE GENERATED BY CONTRACTOR DURING CONSTRUCTION AND SUBMITTED TO OWNER UPON COMPLETION OF FINAL PUNCH LIST, BUT PRIOR TO REQUEST FOR FINAL PAYMENT.</div> <div>23. ROOF OBSTRUCTIONS SUCH AS TELEVISIONS ANTENNA, SOLAR PANELS, AND GUY WIRES SHALL NOT BE LOCATED OR INSTALLED IN SUCH A WAY AS TO PREVENT FIRE DEPARTMENT ACCESS OR EGRESS IN THE EVENT OF A FIRE.</div> <div>24. AUTOMATIC IRRIGATIONS SYSTEM CONTROLLERS INSTALLED AT THE TIME OF FINAL INSPECTION SHALL BE WEATHER OR SOIL MOISTURE-BASED.</div> <div>25. AN OPERATION AND MAINTENANCE MANUAL SHALL BE PROVIDED TO THE BUILDING OCCUPANT OR OWNER.</div> <div>26. SPECIAL INSPECTORS MUST BE QUALIFIED AND ABLE TO DEMONSTRATE COMPETENCE TO THE ENFORCING AGENCY IN THE DISCIPLINE IN WHICH THEY ARE INSPECTING.</div> <div>27. CF-4R AND CF-6R CERTIFICATE FORMS SHALL BE COMPLETED AS APPLICABLE AND BE PRESENTED TO THE FIELD INSPECTOR PRIOR TO FINAL INSPECTION IN ACCORDANCE WITH THE ENERGY CALCULATIONS.</div>	<div># POUNDS OR NUMBER AC AIR CONDITIONING APN ASSESSOR'S PARCEL # APPROX AVERAGE AVG AVERAGE B.O. BOTTOM OF B/T BETWEEN BD BOARD BM BEAM CLG CEILING CLR CLEAR CMU CONCRETE MASONRY UNIT CO CLEANOUT CONC CONCRETE CONT CONTINUOUS CW COLD WATER D PENNY (NAILS) D DRYER DEMO DEMOLISH DIA DIAMETER DIM DIMENSION DM DIMMER DN DOWN DW DISHWASHER (E) EXISTING EL ELEVATION ELEC ELEVATION EPS EXPANDED POLYSTYRENE EQ EQUAL EXT EXTERIOR FD FLOOR DRAIN FIN FINISH FT FOOT GALV GALVANIZED GC GENERAL CONTRACTOR GFCI G. F. CIRCUIT INTERRUPTER GLULAM GLUE-LAMINATED GYP GYPSUM HB HOSE BIB HW HOT WATER INT INTERIOR KWH KILOWATT HOUR MAX MAXIMUM MIN MINIMUM MISC MISCELLANEOUS (N) NEW NTS NOT TO SCALE OSB ORIENTED STRANDBOARD OC ON CENTER OC PERF PERFORATED PERP PERPENDICULAR POLYISO POLYISOCYANURATE PTD PRESSURE-TREATED PT PAINTED QTY QUANTITY R RADIUS OR RISER RCP REFLECTED CEILING PLAN REF REFRIGERATOR REQ'D REQUIRED RM ROOM SD SMOKE DETECTOR SF SQUARE FOOT SIM SIMILAR SPEC SPECIFICATION SYM SYMMETRICAL T.O. TOP OF T&amp;G TONGUE AND GROOVE THRU THROUGH TYP TYPICAL UON UNLESS OTHERWISE NOTED V VOLT, OR VALVE VERT VERTICAL W WATT W WASHER WI WITH WD WASHER &amp; DRYER WO WITHOUT WC WATER CLOSET WD WOOD WH WATER HEATER WP WEATHERPROOF XPS EXTRUDED POLYSTYRENE</div> <div><div>DETAIL:</div><div><div><div>X</div><div>xx</div></div><div>4</div><div>AX X</div><div>1</div><div>2</div></div><div><div>DETAIL NUMBER</div><div>SHEET WHERE DRAWN</div></div><div><div>INTERIOR ELEVATION:</div><div>SHEET WHERE DRAWN</div></div><div><div>ELEVATION NUMBER</div></div><div><div>BUILDING SECTION:</div><div>SECTION NUMBER</div></div><div><div>SHEET WHERE DRAWN</div></div><div><div>CENTER LINE</div><div>FACE DIMENSION</div><div>CENTER LINE DIMENSION</div></div><div><div>ELEVATION</div><div>ELEVATIONS</div><div>ELEVATION NUMBER</div></div><div><div>SHEET WHERE DRAWN</div></div></div>



DRAWINGS PROVIDED BY:  
SOLAR MAX DESIGN  
EMAIL:  
solarmax.dsgn@gmail.com  
WEB:  
www.solarmaxdsgn.com  
TEL:  
(310) 740-9649  
(310) 844-7370

Signature

CLIENT INFORMATION:

SEAL:

PROJECT NAME:

MIRADERO - RESIDENCE  
NEW CONSTRUCTION  
0 MIRADERO AVENUE  
SAN JOSE, CALIFORNIA 95127  
APN: 612-04-048

REV.	DESCRIPTION:	DATE:
A		
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DATE:  
3/29/2023  
SHEET TITLE:

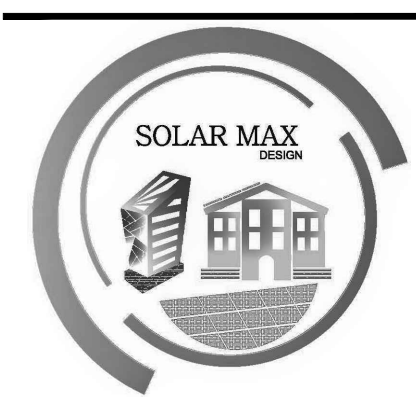
COVER SHEET

SHEET NUMBER:

CVR



<div><div>GENERAL</div><div>1. Provide each bedroom, basement, and habitable attics with a minimum of one exterior window with a 44" maximum clear opening height, 5.7 sq. ft. minimum clear openable area (minimum 5.0 sq. ft. at grade floor openings), 24" minimum clear openable height and 20" minimum clear width, or an operable exterior exit door. (CRC R310.2.1 and CRC R310.2.2) Window wells, ladders, and steps shall comply with CRC R310.2.3. Bars, grilles, covers, and screens shall be releasable or removable from the inside without the use of a key, tool, special knowledge, or force greater than 15lbs to operate the emergency escape and rescue openings. (CRC R310.4) Photovoltaic panels &amp; modules shall not be below an emergency escape and rescue opening within 36". (R324.6.2.2)</div><div>2. Each bathroom containing a bathtub, shower or tub/shower combination shall be mechanically ventilated with Energy Star approved equipment (minimum 50cfm) with an integral humidistat installed. (CRC R303.3.1)</div><div>3. Provide attic cross ventilation: 1/150 of attic area or 1/300 with at least 40% but not more than 50% of vents are a maximum 3 ft. below the ridge or highest space in the attic and the balance is provided in the lower third of the attic space (not limited to eaves or cornice vents). As an alternative in Climate Zone 16 (Truckee region), the net area may be reduced to 1/300 when a Class I or II vapor barrier is installed on the warm/winter side of the ceiling. Baffles are required at eaves for insulation. Provide minimum of 1" inch of air space between insulation and roof sheathing. (CRC R806)</div><div>4. Enclosed rafted spaces shall have a 1-inch clear cross ventilation. (Properly sized rafters for insulation) (CRC R806.3)</div><div>5. Under floor cross ventilation: minimum 1.0 sq. ft. for each 150 sq. ft. of under floor area. When a class I vapor retarder is installed on the ground surface the minimum area of ventilation may be limited to 1sq.ft for each 1,500 square feet of under-floor space. One ventilation opening shall be within three (3) feet of each corner of the building (CRC R408.1). Unvented crawl spaces shall comply with CRC R408.3. Unvented crawl space added option for dehumidification of 70 pints moisture per day per 1,000 sq. ft to requirement for exemption. (R408.3)</div><div>6. Exterior balconies and elevated walking surfaces exposed to water, where structural framing is protected by an impervious moisture barrier requiring construction documents with manufacturer's installation instructions (R106.1.5). Must be inspected and approved before concealing barrier. (R109.1.5.3)</div><div>7. Enclosed framing in exterior balconies and elevated walking surfaces exposed to rain, snow or drainage from irrigation shall be provided with cross-ventilation area of at least 1/150. (R317.1.6)</div><div>8. Provide landings and a porch light at all exterior doors. Landings are to be minimum 3 ft deep x width of door. Landings at exterior egress doors may step down a maximum of 7.75 inches when the door does not swing over the landing and 1.5 inches when door swings onto the landing. Other than required exterior exit doors may have a threshold of 7.75 inches maximum; a landing is not required if a stair with two or fewer risers is located on the exterior side and the door does not swing over the stairway. (CRC R311.3-R311.3.2)</div><div>9. Mezzanines shall not be greater than 1/3 of the story unless fire sprinklers are installed then the area can be 1/2 of the story. (R325.3)</div><div>10. The following windows shall be fully tempered: (CRC R308.4)</div><div><ul style="list-style-type: none"><li>• Sliding/swinging glass doors</li><li>• Glazing in walls and enclosures facing hot tubs, spas, whirlpools, saunas, steam rooms, bathtubs, showers and swimming pools where the glazing is less than 60 inches above the standing surface within the compartment and within 60 inches horizontally of the water's edge (CRC R308.4.5)</li><li>• Glazing within a 24" arc of a door that is less than 60 inches above the floor. Safety glazing required on a wall less than 180 degrees from the plane of the door in a closed position and within 24" of hinge side of an in-swinging door. (R308.4.2)</li><li>• Glazing where the exposed area is greater than 9sq.ft, bottom is less than 18 in. and at least 36 in. above the floor, and adjacent to a walking surface</li><li>• Within 60in. of the bottom tread of a stairway and less than 36in. above the landing</li><li>• Glazing in guards and railings</li><li>• Glazing adjacent to stairways, landings, and ramps within 36in. horizontally of the walking surface less than 36in. above the walking surface</li></ul></div><div><div>FOUNDATIONS &amp; CONCRETE SLABS</div><div>1. Slope drainage 6" within the first 10ft. from the foundation wall. If physical obstructions or lot lines prohibit the 10ft distance, a 2-5 percent slope shall be provided to an approved alternative method of diverting the water away from the foundation. Impervious surfaces shall also be sloped a minimum of 2 percent from 10ft away from structures to an approved drainage way. (CRC R401.3)</div><div>2. Footings shall extend at least 12 inches into the undisturbed ground surface. (CRC R403.1.4) Unless erected on solid rock, to protect against frost and freezing, the minimum foundation depth is 18 inches below grade if between 4,000-7,000 foot elevation and 24 inches below grade for 7,000 foot elevation and above. Exception: Interior footings shall be a minimum of 12 inches below grade. (L-V 3.14)</div><div>3. Stepped footings shall be used when slope of footing bottom is greater than 1 in 10 (V:H). Step footing detail shall be shown on building elevations and foundation plan. (CRC R403.1.5)</div><div>4. Concrete slabs: 3 1/2" minimum (CRC R506.1). Slabs under living areas and garages shall be reinforced with wire 6" x 6", 10 gauge x 10 gauge welded mesh or equivalent steel reinforcement and 4" thickness of 3/6 minimum gravel under the concrete slab. Separate from soil with a 6 mil polyethylene vapor retarder with joints lapped not less than 6 inches in living areas. A capillary break shall be installed when a vapor retarder is required.</div><div>5. Provide an 18" x 24" under-floor access, unobstructed by pipes or ducts and within 5' of each under-floor plumbing cleanout and not located under a door to the residence, is required. Provide a solid cover or screen. (CRC 408.4 &amp; CRC 707.9)</div><div>6. Minimum sill bolting 1/2" anchor bolts or approved anchors at 6 ft. o.c. maximum for one-story. (CRC R403.1.6) Use anchor bolts at 4 ft. o.c. maximum for three story construction. Embed bolts 7" minimum. The anchor bolts shall be placed in the middle third of the width of the plate. Locate end bolts not less than 7 bolt diameters, nor more than 12" from ends of sill members. In SDC DO and above: Provide 3"x3"x0.229 plate washers on each bolt at braced or shear wall locations, standard cut washers shall be permitted for anchor bolts not located in braced/shear wall lines. (CRC R403.1.6.1 &amp; R602.11.1)</div><div><div>CLEARANCES AND TREATMENT FOR WOOD FRAMING</div><div>1. Weather exposed glu-lam, beams and posts shall be pressure treated or shall be wood of natural resistance to decay (CRC R317.1.3 &amp; 5)</div><div>2. Columns exposed to the weather or in basements when supported on concrete pier or metal pedestals shall be pressure treated or natural resistance to decay unless the pier/pedestals project 1" above concrete or 6" above earth and the earth is covered by an approved impervious moisture barrier. (CRC R317.1.4 exc. 1)</div><div>3. Columns in enclosed crawl spaces or unexcavated areas located within the periphery of the building shall be pressure treated or natural resistance to decay unless the column is supported by a concrete pier or metal pedestal of a height 8" or more and the earth is covered by an impervious moisture barrier. (CRC R317.1.4 exc. 2)</div><div>4. Deck posts supported by concrete piers or metal pedestals projecting not less than 1" above a concrete floor or 6" above exposed earth. (CRC R317.1.4 exc. 3)</div></div><div><div>FLOORS</div><div>1. Under-floor areas with storage, fuel-fired equipment or electric-powered equipment with less than 2x10 solid joists shall be protected on the underside by half-inch sheet rock or a sprinkler system. (R302.13)</div><div>2. Balconies must be designed for a minimum live load of 60lbs per square foot. (CRC T-R301.5)</div><div><div>WALLS</div><div>1. Positive connection shall be provided to ensure against uplift and lateral displacement. (CRC R502.9 &amp; CBC 2304.10.7)</div><div>2. All fasteners used for attachment of siding &amp; into pressure treated lumber shall be of a corrosion resistant type. (CRC R317.3)</div><div>3. Fire-block in concealed spaces of stud walls/partitions, vertically at ceiling/floor levels, &amp; horizontally at 10ft. intervals. Fire-block at soffits, drop ceilings/similar locations &amp; in concealed spaces at the top/bottom of stair stringers. (CRC R302.11)</div><div>4. Provide approved building paper under the building siding and approved flashing at exterior openings. (CRC R703.2) Specify a minimum of 2 layers of Grade D paper under stucco and 2 layers of 15lb felt (or equivalent) under stone veneer.</div><div>5. Stucco shall have a minimum clearance to earth of 4 inches and 2 inches to paved surfaces with an approved weed screen. (CRC R703.7.2.1) Masonry stone veneer shall be finished beneath the first course of masonry and provided with weep holes immediately above the flashing. (CRC R703.8.5 and R703.8.6)</div></div><div><div>ROOF</div><div>1. Roof sheathing can only cantilever 9 inches beyond a gable end wall unless supported by overhanging framing. (R802.5.2.1)</div><div>2. Provide a minimum 22" x 30" access opening to attic (CRC R807); may be required to be 30"x30" to remove the largest piece of mechanical equipment per the California Mechanical Code.</div><div>3. Roof drains/gutters required to be installed per the California Plumbing Code with leaf/debris protection also installed.</div></div></div></div></div>	<div>4. Roof construction and coverings shall comply with CRC Chapters 8, 9 and local ordinance. All roofing shall be tested/Listed Class A minimum.</div> <div>5. Asphalt shingles with sloped roofs 2/12 to &lt;4/12 shall have two layers of underlayment applied per CRC R905.2.2.</div> <div><div>GARAGE AND CARPORT</div><div>1. Garage shall be separated from the dwelling unit &amp; attic area by ½ inch gypsum board applied to the garage side. Garage beneath habitable rooms shall be separated by not less than 5/8" type X gypsum board. Structure supporting floor/ceiling assemblies used for required separations shall have ½" gypsum board installed minimum. Door openings from the garage to the dwelling shall be solid wood/steel doors or honeycomb steel doors not less than 1 3/8" thick or a 20-minute rated fire door. Doors shall be self-closing &amp; self-latching. No openings directly into a sleeping room from the garage. When the dwelling and garage has fire sprinklers installed per R309.6 and R313, doors into the dwelling unit from the garage only need to be self-closing and self-latching. (CRC R302.5.1 &amp; T-R302.6)</div><div>2. Ducts penetrating the garage to dwelling separation shall be a minimum of 26 gauge with no openings into the garage. (CRC R302.5.2)</div><div>3. Penetrations through the garage to dwelling separation wall (other than ducts as listed above) shall be fire-blocked per CRC section R302.11, Item #4.</div><div>4. Garage and carport floor surfaces shall be non-combustible material and slope to drain towards the garage door opening. (CRC R309.1)</div><div>5. Appliances and receptacles installed in garage generating a glow, spark or flame shall be located 18" above floor unless it is listed as flameless vapor igniter resistant type. (CMC 305.1) Provide protective post or other impact barrier from vehicles. (CMC 305.1.1)</div><div>6. Appliances in private garages and carports shall be installed with a minimum clearance of 6ft above the floor unless they are protected from vehicular impact. (CBC 406.2.9.3)</div><div><div>STAIRWAYS &amp; RAMPS</div><div>1. Stair landings required every 127" of vertical rise. (CRC R311.7.3)</div><div>2. Exterior stair stringers must be naturally resistant to decay or pressure treated. (CRC R317.1)</div><div>3. Rise shall be maximum 7.75"; Run shall be 10" minimum; headroom 6'-8" minimum; width 36" minimum, 31.5" between a handrail on one side and 27" with handrails on two sides. Variation between rise heights 3/8" maximum. A nosing not less than .75 inches but not more than 1.25 inches shall be provided on stairways with solid risers where the tread depth is less than 11 inches. The leading edge of treads shall project not more than 1.25 inches beyond the tread below. Open risers are permitted, provided the opening between the treads does not permit the passage of a 4" sphere. (Openings are not limited when the stair has a rise of 30" or less). (CRC R311.7)</div><div>4. Stairways with 4" or more risers shall have a handrail on one side 34" to 38" above the tread nosing. Circular handrails shall have an outside diameter of 1.25"-2"; if not circular, it shall have a perimeter dimension of 4"-6.25" with a maximum cross-sectional dimension of 2.25". See R311.7.8.3 Item # 2 for type II handrails with a parameter over 6.25". A minimum clearance of 1.5" shall be maintained from the wall or other surface. Handrails shall be returned, terminate in newel posts, or safety terminals. (CRC R311.7.8.2)</div><div>5. Guards shall be 42" minimum height (unless acting as a handrail/guard for a stairway; the guard height may be 34"-38" in height), with openings less than 4" inches clear (guards on the open sides of stairs may have 4 3/8" openings). (CRC R312)</div><div>6. Provide landings at the top/bottom of the stairway the width of the stairway. The depth of the landing shall be 36" minimum. (see CRC R311.7.6 for exceptions).</div><div>7. Usable spaces underneath enclosed/unenclosed stairways shall be protected by a minimum of ½" gypsum board. (CRC R302.7)</div><div>8. Ramps serving the egress door shall have a slope of not more than 1 unit vertical in 12 units horizontal (8.3-percent slope). All other ramps shall have a maximum slope of 1 unit vertical in 8 units horizontal (12.5-percent slope). Exception: Where it is technically infeasible to comply because of site constraints, ramps shall have a slope of not more than 1 unit vertical in 8 units horizontal (12.5-percent slope) (CRC R311.8.1). Provide 3"x3" landings at the top and bottom of ramps, where doors open onto ramps, and where ramps change directions. (CRC R311.8.2)</div><div><div>DECKS</div><div>1. Guards are required if deck or floor is over 30" above grade, minimum 42" high, with openings less than 4" (CRC R312). Guardrails shall be designed and detailed for lateral forces according to CRC Table 301.5.</div><div>2. Provide deck lateral load connections at each end of the deck and at deck intersections per CRC R507.9.2. Specify connectors with a minimum allowable stress design capacity of 1,500lbs and install with 24" of the end of the deck. 750lb rated devices are allowed (DIT12 as example) if located at 4 points along the deck.</div><div>3. Posts/columns shall be retrained at the bottom end to prevent lateral displacement; clearly show approved post bases, straps, etc to achieve this per CRC R407.3</div><div>4. Joists, girders, structural blocking and support posts shall be wood of natural resistance to decay or pressure-treated lumber when exposed to the weather. (CRC R317.1.3)</div><div><div>ELECTRICAL</div><div>1. No electrical panels in closets of bathrooms. Maintain a clearance of 36" inches in front of panels, 30" wide or width of equipment and 6'-6" high for headroom. (CEC 110.26)</div><div>2. Provide a minimum 3 lug intersystem bonding busbar at the main electrical service. (CEC 250.94)</div><div>3. All automatic garage door openers that are installed in a residence shall have a battery backup function that is designed to operate when activated because of an electrical outage. (CBC 406.2.1)</div><div>4. A concrete-encased electrode (ufer) consisting of 2" of rebar or #4 copper wire placed in the bottom of a footing is required for all new construction. (CEC 250.52(A) (3)) Bond all metal gas and water pipes to ground. All ground clamps shall be accessible and of an approved type. (CEC 250.104)</div><div>5. All 15/20 ampere receptacles installed per CEC 210.52 shall be listed tamper-resistant receptacles. (CEC 406.12)</div><div>6. All branch circuits supplying 15/20 ampere outlets in family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, kitchens, laundry room or similar rooms/areas shall be protected by a listed combination type arc-fault circuit interrupter. (CEC 210.12)</div><div>7. Provide a minimum of one 20A circuit to be used for the laundry receptacle. (CEC 210.11(C)(2)) Provide a minimum of one 20A circuit for bathroom receptacle outlets. (CEC 210.11(C)(3)</div><div>8. Provide at least 1 outlet in basements, garages, laundry rooms, decks, balconies, porches and within 3' of the outside of each bathroom basin. (CEC 210.52 (D), (F) &amp; (G))</div><div>9. Furnaces installed in attics and crawl spaces shall have an access platform (catwalk in attics), light switch and receptacle in the space. Provide a service receptacle for the furnace. (CEC 210.63)</div><div>10. All dwellings must have one exterior outlet at the front and the back of the dwelling. (CEC 210.52(E))</div><div>11. Garage receptacles shall not serve outlets outside the garage. Exception: Garage circuit may serve readily accessible outdoor receptacle outlets. (CEC 210.11(C)(4)) A minimum of 1 receptacle shall be provided for each car space. (210.52(G)(1))</div><div>12. At least one wall switched lighting outlet or fixture shall be installed in every habitable room, bathroom, hallways, stairways, attached garages and detached garages with electrical power, equipment spaces (attics, basements, etc). (CEC 210.70)</div><div>13. Kitchens, dining rooms, pantries, breakfast nooks, and similar areas must have a minimum of two 20A circuits. Kitchen, pantry, breakfast nooks, dining rooms, work spaces and similar areas counter outlets must be installed in every counter space 12" inches or wider, not greater than 4" o.c., within 24" inches of the end of any counter space and not higher than 20" above counter. (CEC 210.52 (C)) Island counter spaces shall have at least 1 receptacle outlet unless a range top or sink is installed then 2 receptacles may be required. 1 receptacle is required for peninsula counter spaces. Receptacles shall be located behind kitchen sinks if the counter area depth behind the sink is more than 12" for straight counters and 18" for corner installations. (CEC Figure 210.52(C)(1))</div><div>14. Receptacles shall be installed at 12' o.c. maximum in walls starting at 6' maximum from the wall end. Walls longer than two feet shall have a receptacle. Hallway walls longer than 10 ft shall have a receptacle in hallways. (CEC 210.52(A))</div><div>15. Receptacles shall not be installed within or directly over a bathtub or shower stall. (CEC 406.9(C) Light pendants, ceiling fans, lighting tracks, etc shall not be located within 3ft horizontally and 8ft vertically above a shower and/or bathtub threshold. (CEC 410.10(D))</div><div>16. All lighting/fan fixtures located in wet or damp locations shall be rated for the application. (CEC 410.10)</div><div>17. GFCI outlets are required: for all kitchen receptacles that are designed to serve counter-top surfaces, dishwashers, bathrooms, in under-floor spaces or below grade level, in unfinished basements, crawl space lighting outlets, in exterior outlets, within 6' of a laundry/utility/wet bar sinks, laundry areas, and in all garage outlets including outlets dedicated to a single device or garage door opener. (CRC 210.8)</div><div>18. Carbon-monoxide alarms shall be installed in dwelling units with fuel-burning appliances or with attached garages (CRC R315);</div></div></div></div></div>	<div>• Outside of each separate sleeping area in the immediate vicinity of bedrooms</div> <div>• On every level of a dwelling unit including basements</div> <div>• Alterations, repairs, or additions exceeding 1,000 dollars (May be battery operated)</div> <div>19. Smoke alarms shall be installed (CRC R314):</div> <div>• In each room used for sleeping purposes.</div> <div>• Outside of each separate sleeping area in the immediate vicinity of bedrooms.</div> <div>• In each story, including basements.</div> <div>20. At the top of stairways between habitable floors where an intervening door or obstruction prevents smoke from reaching the smoke detector.</div> <div>21. Shall not be installed within 20ft horizontally of cooking appliances and no closer than 3ft to mechanical registers, ceiling fans and bathroom doors with a bathtub or shower unless this would prevent placement of a smoke detector (314.3(4)).</div> <div>22. Alterations, repairs, or additions exceeding 1,000 dollars. (May be battery operated.)</div> <div>23. All smoke and carbon-monoxide alarms shall be hardwired with a battery backup</div> <div>24. Smoke detectors within 10 feet to 20 feet of the stove shall be ionization type with alarm silencing switch. CRC R314.3.3.</div> <div>25. All 15/20 ampere receptacles in wet locations shall have in-use (bubble) covers installed. All receptacles in wet locations shall also be listed weather-resistant type. (CEC 406.9(B)(1))</div> <div>26. All new electrical receptacles shall be Arc-Fault and/or GFCI protected.</div> <div><div>PLUMBING</div><div>1. Underfloor cleanouts shall not be more than 5' from an underfloor access, access door or trap door. (CPC 707.9)</div><div>2. ABS piping shall not be exposed to direct sunlight unless protected by water based synthetic latex paints. (CPC 312.13)</div><div>3. PVC piping shall not be exposed to direct sunlight unless protected by water based synthetic latex paint, "d4" thick wrap or otherwise protected from UV degradation. (CPC 312.14)</div><div>4. Underground water supply lines shall have a 14 awg blue tracer wire. (CPC604.10.1)</div><div>5. The adjacent space next to showers without thresholds shall be considered a "wet location" when using the CRC, CBC, and the CEC. (CPC 408.5)</div><div>6. Shower compartments, regardless of shape, shall have a minimum finished interior that is 75 inches but not more than 32" high (32" high shall also be capable of encompassing a 30" circle. The required area and dimensions shall be measured at a height equal to the top of the threshold and shall be maintained to a point of not less than 70" above the shower drain outlet. (CPC 408.6) Provide curtain rod or door a minimum of 22" in width. (CPC 408.5) Showers and tubs with showers require a non-absorbent surface up to 6' above the floor. (CRC R307.2) Minimum shower receptor slope is 1/8" per foot. (408.5)</div><div>7. Show location and size of the water heater on plans. Provide pressure relief valve with drain to outside for water heater. (CPC 504.6) Provide seismic strapping in the pipe &amp; lower third of the water heater a minimum of 4" above controls. (CPC 507.2) The water heater shall be of an instantaneous type or the following shall be provided (new construction only) (CEC 150(N)):</div><div>• A 120V receptacles provided within 3ft</div><div>• A category III or IV vent, or a straight (without bends) Type B vent</div><div>• Condensate drain that is no more than 2 inches higher than the base of the water heater</div><div>• Gas supply line with a minimum 200,000 Btu/hr dedicated capacity for the water heater</div><div>• A dedicated 120/240, 3 wire circuit with 10AWG wire to a receptacle out-let within 3' let within 3' of the water heater. The unused conductor shall be electrically isolated and have a reserved circuit breaker space. Both ends of the conductor shall be labeled "spare" and be electrically isolated. A reserve single-pole circuit breaker space near this circuit labeled "Future 240V Line." (CEC 150.0(N))</div><div>• Domestic hot water lines shall be insulated. Insulation shall be the thickness of the pipe diameter up to 2" in size and minimum 2" thickness for pipes larger than 2" in diameter. (CPC 609.11)</div><div>9. A 3-inch gravity drain shall be provided at the low point of the space, installed which provides 1/4-inch per foot grade and terminate at an exterior point of the building protected from blockage. The opening shall be screened with a corrosion-resistant wire mesh with mesh opening dimension of 1/4-inch in dimension. Lengths of the gravity drains over 10 feet in length shall be first approved by the Building Official. (L-V 8.8)</div><div>10. Water heaters located in attics, ceiling assemblies and raised floor assemblies shall show a water-tight corrosion resistant minimum 1 1/2" deep pan under the water heater with a minimum 3/4 inch drain to the exterior of the building. (CPC 507.5)</div><div>11. Water closet shall be located in a space not less than 30" in width (15" on each side) and 24" minimum clearance in front. (CPC 402.5)</div><div>12. Indicate on the plans that the maximum hot water temperature discharging from a bathtub or whirlpool bathtub filler shall not exceed 120 degrees F. (CPC 406.3)</div><div>13. Provide anti-siphon valves on all hose bibs. (CPC 603.5.7)</div><div>14. Floor drains shall be provided with a trap primer. (CPC 1007)</div><div>15. All glazing less than 60" above a shower or tub floor and within 60" horizontally from fixture's water edge shall be safety glazing. (CRC R308.4, Item 5)</div><div>16. Clearly label on the plans the maximum water flow rates per the (CGBCS 4.303.1):</div><div><ul style="list-style-type: none"><li>• Water Closets: 1.28gpf</li><li>• Urinals: 125gpf</li><li>• Kitchen Faucets: 1.8gpm @ 60psi</li><li>• Lavatory Faucets: 1.2gpm @ 60psi</li><li>• Metering Faucets: 0.25 gallons/Cycle</li><li>• Clothes Washers: Energy-star Certificate</li><li>• Dishwashers: Energy-star Certificate</li><li>• Showerheads: 2.0gpm @ 80psi</li></ul></div><div>17. Per section 301.1.1 CalGreen and civil code 1101.3(c), all non-compliant plumbing fixtures within this residence shall be replaced with water-conserving plumbing fixtures.(New construction and Remodeling)</div><div><div>Mechanical</div><div>1. All newly installed gas fireplaces shall be direct vent and sealed-combustion type. (CEC 912.2)</div><div>2. Any installed wood stove or pellet stove shall meet the U.S. EPA New Source Performance Standard emission limits and shall have a permanent label certifying emission limits.</div><div>3. Top chimney must extend a minimum of 2 ft. above any part of the building within 10 ft. (CMC 802.5.4)</div><div>4. Fireplaces shall have closable metal or glass doors, have combustion air intake drawn from the outside and have a readily accessible flue damper control. Continuous burning pilot lights are prohibited. (CEC 150.0(E))</div><div>5. Provide combustion air for all gas fired appliances per CMC Chapter 7.</div><div>6. Gas vents passing through an insulated assembly shall have a metal insulation shield a minimum 2" above insulation. (CMC 509.6.2.7)</div><div>7. Gas water heater and furnace are not allowed in areas opening into bathrooms, closets or bedrooms unless installed in a closet equipped with a listed gasketed door assembly and a listed self-closing device with all combustion air obtained from the outdoors. (CPC 504)</div><div>8. Roof top equipment on roofs with over 4/12 slope shall have a level 30"x30" working platform. (CMC 304.2)</div><div>9. Exhaust openings terminating to the outdoors shall be covered with a corrosion resistant screen ¼"-1/2" in opening size (not required for clothes dryers). (CMC 502.1)</div><div>10. Vent dryer to outside of building (not to under-floor). Vent length shall be 14 ft. maximum. Shall terminate a minimum of 3' from the property line and any opening into the building. (CMC 504.4.2)</div><div>11. Environmental Air Ducts shall not terminate less than 3' to a property line, 10' to a forced air inlet, 3' to openings into the building and shall not discharge on to a public way. (CMC 502.2.1)</div><div>12. Provide minimum 100 square inches make-up air for clothes dryers installed in closets. (CMC 504.4.1(1))</div><div>13. Heating system is required to maintain 68 degrees at 3 ft. above floor level and 2ft from exterior walls in all habitable rooms. (CRC R303.10)</div><div>14. Wood burning appliances shall not be installed in a new or existing project that is not one of the following:</div><div><ul style="list-style-type: none"><li>• A pellet-fueled wood burning heater.</li><li>• A U.S. EPA Phase II Certified wood burning heater.</li><li>• An appliance or fireplace determined to meet the U.S. EPA particulate matter emission standard of less than 7.5 grams per hour for a non-catalytic wood fired appliance or 4.1 grams per hour for a catalytic wood fired appliance and is approved in writing by the APCO.</li></ul></div><div>15. Bathroom exhaust fans shall be energy star compliant, ducted to terminate outside the building and controlled by a humidistat capable of being adjusted between the relative humidity range of 50 of 80 percent (CGBC4.506)</div><div>16. Gas tank-less w/h to have a uniform energy factor of 0.97 and a recovery efficiency of 0.99 or better (lower).</div></div></div>	<div><div>TITLE 24 ENERGY</div><div>1. All ducts in conditioned spaces must include R-4.2 insulation. (150.1(c)9) Mini-mum heating and cooling filter ratings shall be MERV 13 (150.0(m)12)</div><div>2. Isolation water valves are required for instantaneous water heaters 6.84RTU/hr and above. Valves shall be installed on both cold and hot water lines. Each valve will need a hose bib or other fitting allowing for flushing the water heater when the valves are closed. (CEC 110.3(c)6)</div><div>3. ALL luminaires must be high efficacy (150.0(k)1A)</div><div>• Luminaires recessed in insulated ceilings must meet five requirements (150.0(k)1C):</div><div>• They must be rated for direct insulation contact (IC).</div><div>• They must be certified as airtight (AT) construction.</div><div>• They must have a sealed gasket or caulking between the housing and ceiling to prevent flow of heated or cooled air out of living areas and into the ceiling cavity.</div><div>• They may not contain a screw base sockets</div><div>• They shall contain a JAB compliant light source</div><div>5. In bathrooms, garages, laundry rooms, and utility rooms, at least on luminaire in each of these spaces shall be controlled by a vacancy sensor or occupant sensor provided the occupant sensor is initially programmed like a vacancy sensor (manual-on operation). (150.0(k)2I)</div><div>6. Joint Appendix A (JAB) certified lamps shall be considered high efficacy. JAB compliant light sources shall be controlled by a vacancy sensor or dimmer. (Exception: &lt;70sf closets and hallway) (150.0(k)2K)</div><div>7. Under-cabinet lighting shall be switched separately from other lighting systems. (150.0(k)2L)</div><div>8. All exterior lighting shall be high efficacy, be controlled by a manual on/off switch and have one of the following controls (the manual switch shall not override the automatic control device): (150.0(k)3A)</div><div>• Photo-control and motion sensor</div><div>• Photo-control and automatic time switch control</div><div>• Astronomical time clock control turning lights off during the day</div><div>9. All high efficacy light fixtures shall be certified as "high-efficacy" light fixtures by the California Energy Commission.</div><div>10. Contractor shall provide the homeowner with a luminaire schedule giving the lamps used in the luminaires installed. (10-103(b))</div><div>11. The number of blank electrical boxes more than 5 feet above the finished floor shall not be greater than the number of bedrooms. These electrical boxes must be served by a dimmer, vacancy sensor, or fan speed control. (150(k)1B)</div><div>12. Provide a gasket/ insulation on all interior attic/under-floor accesses. (110.7)</div><div>13. Provide verification on the plans how the building will meet the minimum ventilation and acceptable indoor air quality requirements per ASHRAE Standard 62.2. Window operation is not a permissible method of providing the whole building ventilation airflow required. This is subject to HERS testing. The following label must be attached to the fan switch: "To maintain minimum levels of outside air ventilation required for good health, the fan control should be on at all times when the building is occupied, unless there is severe outdoor air contamination." (California Energy Code 150.0(k)) A minimum 100 CFM indoor air quality fan is required in the kitchen and shall be HERS verified.</div><div><div>WILDLAND URBAN INTERFACE (WUI)</div><div>1. Exterior wall coverings shall be noncombustible, ignition resistant, heavy timber, log wall or fire resistive construction. (CRC R337.7)</div><div>2. Exterior wall coverings shall extend from the foundation to the roof and terminate at 2 inch nominal solid blocking between rafters and overhangs. (CRC R337.7.3.2)</div><div>3. Open/enclosed roof eaves and soffits, exterior porch ceilings, floor projections, under-floor areas and undersides of appendages to comply with ignition resistant construction requirements. (CRC R337.5.9)</div><div>4. Spaces created between roof coverings and roof decking shall be fire stopped by approved materials or have a layer of 72lb mineral surfaced non-perforated cap sheet complying with ASTM D 3909. (CRC R337.5.2)</div><div>5. Indicate on the plans where valley flashing is installed, the flashing shall be not less than 26awg and installed over not less than one layer of minimum 72lb mineral surfaced non-perforated cap sheet complying with ASTM D 3909 and at least 36 inches wide running the full length. (CRC R337.5.3)</div><div>6. Attic gable and eaves above 12ft and under-floor ventilation shall be provided with 1/8 inch and maximum 1/8 inch openings, non-combustible and corrosion resistant. All other eave vents shall be listed/approved to resist the intrusion of flame and burning embers. (CRC R337.6)</div><div>7. Indicate on plans exterior glazing shall have a minimum of one-tempered pane, glass block, have a fire resistive rating of 20 minutes or be tested to meet performance requirements of SFM Standard 12-7A-2. (CRC R337.8.2)</div><div>8. Operable skylights shall be protected by a noncombustible mesh screen 1/8" max openings (R337.8.2)</div><div>9. Exterior doors including garage doors shall be noncombustible, ignition resistant material, minimum 1 3/8 inch solid core, minimum 20 minute fire resistive rating or shall be tested to meet the performance requirements of SFM Standard 12-7A-1. (CRC R337.8.3)</div><div>10. Garage door perimeter gap maximum 1/8". Metal flashing, jamb and header overlap, header overlap, and weather-stripping meeting section requirements are permitted. (R337.8.4)</div><div>11. The walking surface material of decks, porches, balconies and stairs within 10ft of grade level shall be ignition resistant material, exterior fire-retardant treated wood or noncombustible material. (CRC R337.9)</div><div><div>GREEN BUILDING</div><div>1. Projects which disturb less than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre or more, shall manage storm water drainage during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent property, prevent erosion and retain soil runoff on the site (CGBSC 4.106.2):</div><div>• Retention basins of sufficient size shall be utilized to retain storm water on site</div><div>• Where storm water is conveyed to a public drainage system, collection point, gutter, or similar disposal method, water shall be filtered by use of a barrier system, wattle or other method approved by the enforcing agency.</div><div>2. All new residential construction with attached private garages shall have the following for electric vehicle (EV) charging stations (CGBSC 4.106.4):</div><div>3. Install a minimum 1-inch conduit capable of supplying a 208/240V branch circuit to a suitable box location for EV charging. The other end shall terminate to the main service and/or subpanel.</div><div>4. The main panel and/or subpanel shall be of sufficient size to install a 40-ampere dedicated branch circuit. The dedicated overcurrent protection space shall be labeled "EV CAPABLE".</div><div>5. Multiple shower heads serving a single shower shall have a combined flow rate of 1.8 gpm or the shower shall be designed to allow only one shower outlet to be in operation at a time. (CGBSC 4.303.1.3.2)</div><div>6. Residential projects with an aggregate landscape area equal to or greater than 500 square feet shall comply with either a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent. Automatic irrigation system controllers installed at time of final inspection shall have weather or soil based controllers and/or weather based controllers with rain sensors. Soil moisture based controllers are not required to have rain sensor input. (CGBSC 4.304)</div><div>7. Recycle and/or reuse a minimum of 65 percent of nonhazardous construction and demolition waste. (CGBSC 4.408.2)</div><div>8. (Clearly note on the plans) At time of final inspection, a building operation and maintenance manual, compact disc, etc shall be provided containing the following: (CGBSC 4.410)</div><div><ul style="list-style-type: none"><li>• Directions that manual shall remain onsite for the life of the building</li><li>• Operation and maintenance instructions for equipment, appliances, roof/yard drainage, irrigation systems, etc.</li><li>• Information from local utility, water and waste recovery providers</li><li>• Public transportation and carpool options</li><li>• Material regarding importance of keeping humidity levels between 30-60 percent</li><li>• Information regarding routine maintenance procedures</li><li>• State solar energy incentive program information</li><li>• A copy of any required special inspection verifications that were required (if any)</li></ul></div><div>9. The project shall meet minimum pollutant control requirements for adhesives, sealants, caulks, paints, carpet, resilient flooring systems, etc. (CGBSC 4.504)</div><div>10. Duct openings related to HVAC systems shall be covered with tape, plastic, sheet metal or other methods to reduce the amount of water, dust and debris which may enter the system. (CGBSC 4.504.1.)</div></div></div></div>	APPROVAL STAMP
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DRAWINGS PROVIDED BY:  
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EMAIL:  
solarmax.dsgn@gmail.com  
WEB:  
www.solarmaxdsgn.com  
TEL:  
(310) 740-9649  
(310) 844-7370

Signature

CLIENT INFORMATION:

SEAL:

PROJECT NAME:

MIRADERO - RESIDENCE  
NEW CONSTRUCTION  
0 MIRADERO AVENUE  
SAN JOSE, CALIFORNIA 95127  
APN: 612-04-048

REV:	DESCRIPTION:	DATE:
A		
B		
C		

DATE:  
**3/29/2023**  
SHEET TITLE:

GENERAL  
NOTES

SHEET NUMBER:

GN







Tree Removal Summary		
Tree Number	Common Name	DBH (inches)
1	Southern Blue Gum (Multi-Trunk System - 10 total	Approximately 50
2		
3		



DOOR SCHEDULE											
ID.	QTY	TYPE	DOOR SIZE (INCHES)		THICK	MATERIAL	FINISH	U-FACTOR	HARDWARE	THRESHOLD	NOTES
			FINISHED WIDTH	FINISHED HEIGHT							
01	1	SLIDING	72"	84"	0'-1 3/4"	WOOD/GLASS	PAINT	.50	STANDARD	ALUM.	NEW
02	1	GARAGE	96"	84"	0'-1 3/8"	WOOD/GLASS	PAINT	-	STANDARD	ALUM.	NEW
03	1	SINGLE	36"	84"	0'-1 3/8"	WOOD/GLASS	PAINT	-	STANDARD	ALUM.	NEW
04	13	SINGLE	32"	84"	0'-1 3/8"	WOOD	PAINT	-	STANDARD	ALUM.	NEW
05	2	BIFOLD	216"	84"	0'-1 3/8"	WOOD/GLASS	PAINT	.50	STANDARD	ALUM.	NEW
06	3	SLIDING	72"	84"	0'-1 3/4"	VINYL/GLASS	PAINT	.50	STANDARD	ALUM.	NEW
07	1	BIFOLD	144"	84"	0'-1 3/4"	VINYL/GLASS	PAINT	.50	STANDARD	ALUM.	NEW
08	1	DOUBLE	36"	84"	0'-1 3/4"	VINYL/GLASS	PAINT	.50	STANDARD	ALUM.	NEW
09	1	GARAGE	180"	84"	0'-1 3/4"	VINYL/GLASS	PAINT	.50	STANDARD	ALUM.	NEW

WINDOWS SCHEDULE										
		FRAME SIZE (INCHES)		TYPE						NOTES
ID	QTY	FINISHED WIDTH	FINISHED HEIGHT	MATERIAL	TYPE	GLAZING	U-FACTOR	SHGC	STC RATING	
A	1	60"	84"	ALUMINUM COATED	FIXED	TEMPERED	.30	.23	.37	NEW
B	1	72"	120"	ALUMINUM COATED	FIXED	TEMPERED	.30	.23	.37	NEW
C	1	72"	48"	ALUMINUM COATED	AWNING	DUAL GLAZED/ LOW E GLASS	.30	.23	.37	NEW
D	1	144"	48"	ALUMINUM COATED	AWNING	DUAL GLAZED/ LOW E GLASS	.30	.23	.37	NEW
E	5	48"	60"	ALUMINUM COATED	AWNING	DUAL GLAZED/ LOW E GLASS	.30	.23	.37	NEW
F	2	43"	48"	ALUMINUM COATED	FIXED	TEMPERED	.30	.23	.37	NEW
G	4	48"	60"	ALUMINUM COATED	AWNING	DUAL GLAZED/ LOW E GLASS	.30	.23	.37	NEW
H	2	24"	48"	ALUMINUM COATED	HUNGED	TEMPERED	.30	.23	.37	NEW
I	1	48"	48"	ALUMINUM COATED	AWNING	DUAL GLAZED/ LOW E GLASS	.30	.23	.37	NEW

FLOOR PLAN LEGEND

EXISTING WALL

NEW WALL

DEMO WALL

- #

DOOR IDENTIFICATION TO REFER TO DOOR SCHEDULE
- #

WINDOW IDENTIFICATION TO REFER TO WINDOW SCHEDULE
- SD

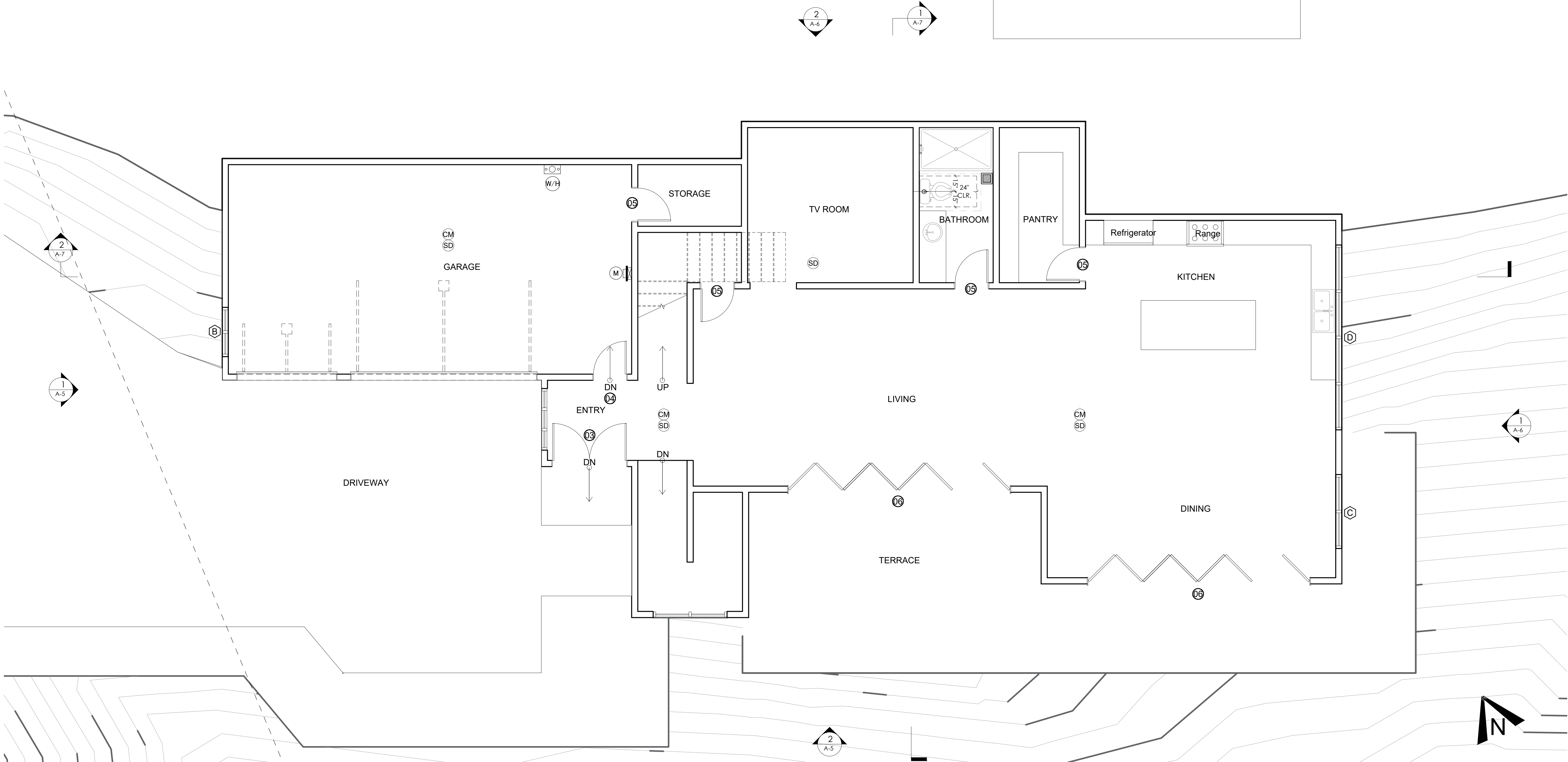
SMOKE ALARM SHALL BE INTERCONNECTED HARD-WIRED WITH BATTERY BACKUP AND SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 72.
- CM

CARBON MONOXIDE ALARM SHALL BE INTERCONNECTED HARD-WIRED WITH BATTERY BACKUP
- EXHAUST FAN SHALL BE PROVIDE HUMIDISTAT HAVE A SENSOR IN BATHROOM AREA. MINIMUM VENTILATION SHALL BE 50 CUBIC FEET PER MINUTE FOR INTERMITTENT VENTILATION OR 20 CUBIC FEET PER MINUTE FOR CONTINUOUS VENTILATION.
- EXHAUST FAN IN KITCHEN DUCTED TO THE OUTSIDE WITH A MINIMUM VENTILATION RATE OF 100 CFM.
- SP

NEW SUB-PANEL 100A
- G

NEW GAS METER
- W/H

NEW WATER HEATER TANK-LESS



1 | PROPOSED FIRST FLOOR PLAN

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



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(310) 844-7370

*[Signature]*

Signature

CLIENT INFORMATION:

SEAL:

PROJECT NAME:

MIRADERO - RESIDENCE

NEW CONSTRUCTION  
0 MIRADERO AVENUE  
SAN JOSE, CALIFORNIA 95127  
APN: 612-04-048

REV.	DESCRIPTION:	DATE:
A		
B		
C		

DATE:  
3/29/2023

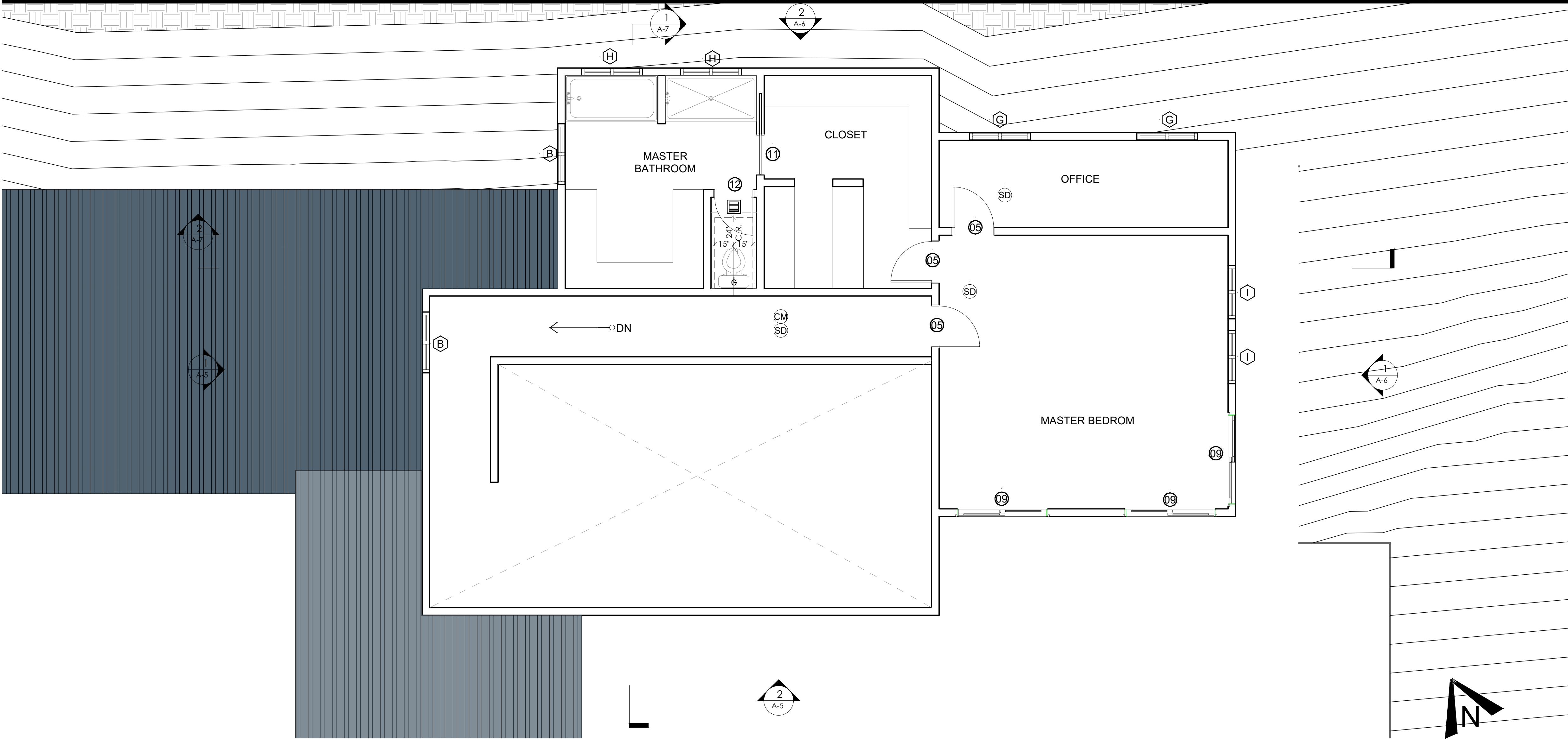
SHEET TITLE:  
EXISTING  
FLOOR PLAN

SHEET NUMBER:

A-2

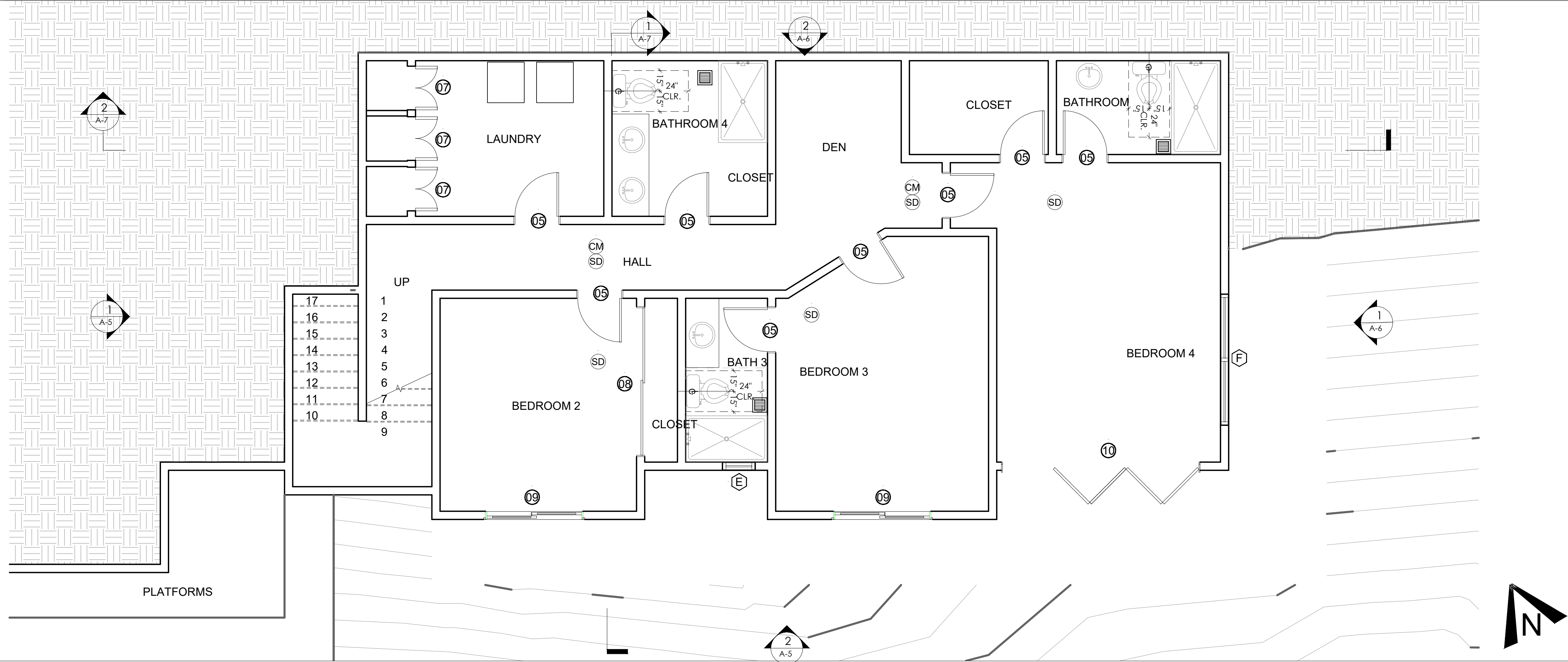
FULL SIZE PRINT: D = 24"X36"





1 | PROPOSED UPPER LEVEL

SCALE: 1/4"-1'-0"



2 | PROPOSED LOWER LEVEL

SCALE: 1/4"-1'-0"

FLOOR PLAN LEGEND

- EXISTING WALL
- DOOR IDENTIFICATION TO REFER TO DOOR SCHEDULE
- WINDOW IDENTIFICATION TO REFER TO DOOR SCHEDULE
- SMOKE DETECTOR WITH A BATTERY BACKUP INTERCONNECTED HARDWARE
- CARBON MONOXIDE ALARM



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MIRADERO - RESIDENCE  
NEW CONSTRUCTION  
0 MIRADERO AVENUE  
SAN JOSE, CALIFORNIA 95127  
APN: 612-04-048

REV.	DESCRIPTION:	DATE:
A		
B		
C		

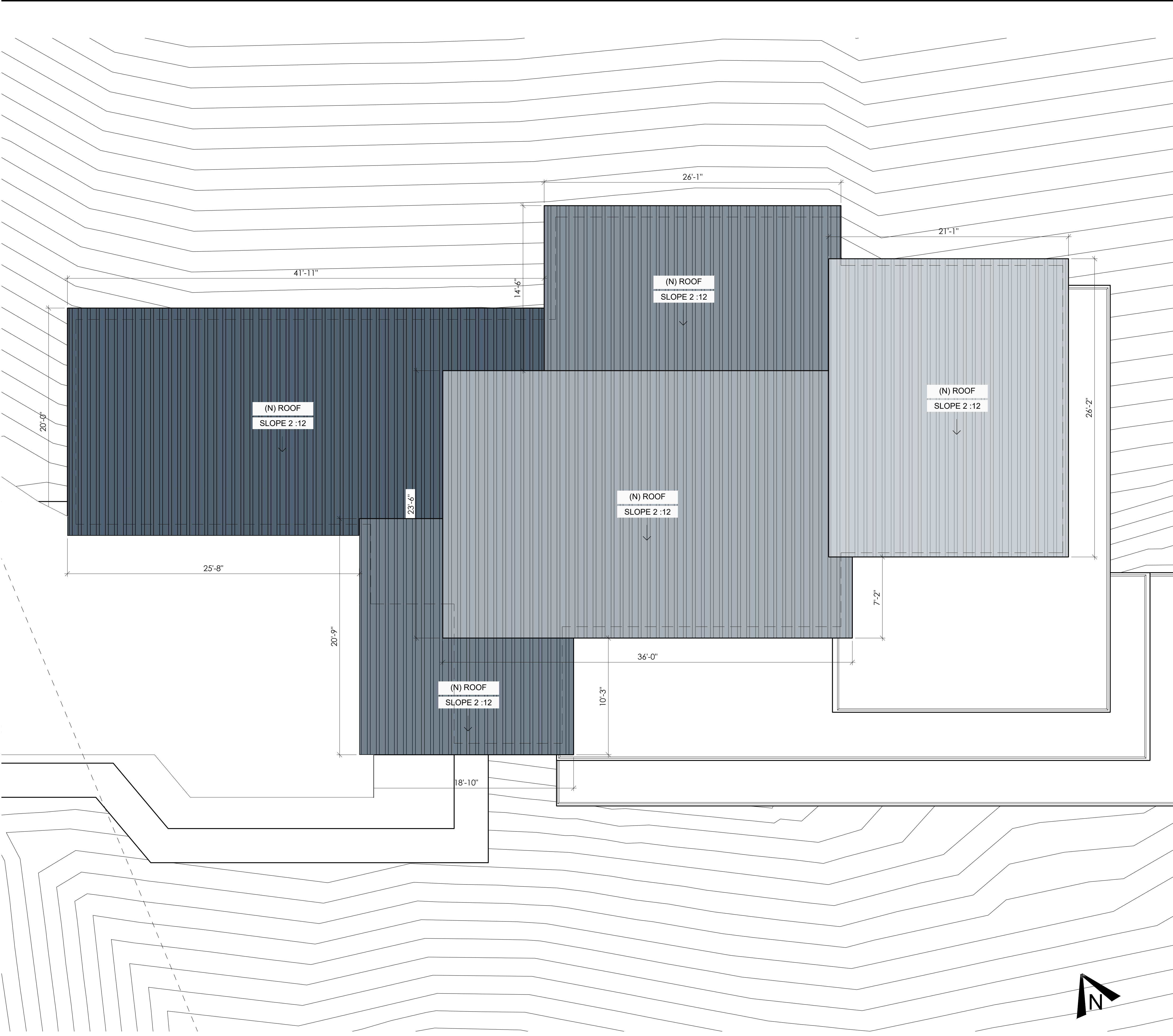
DATE:  
3/29/2023

SHEET TITLE:  
EXISTING  
FLOOR PLAN

SHEET NUMBER:

A-3





NOTES

- 1. NEW ROOF: METAL ROOF
- A. ROOF / ATTIC SPACE : USE W/ R-30 TO 60 BATT
- B. ATTIC RADIANT BARRIER TO BE INSTALLED WITHIN THE ATTIC RAFTERS.
- C. SYNTHETIC ROOFING UNDERLAYMENT/  
CLASS A FIRE /ASTM E108, MEETS & EXCEEDS ASTM D226/  
ICC ESR 2391/ MEETS CLASS 4 HAIL RATING / PERMEABILITY E96.
- 2. GAS TANK-LESS W/H TO HAVE A UNIFORM ENERGY FACTOR OF 0.97  
AND A RECOVERY EFFICIENCY OF 0.99 OR BETTER (LOWER).
- 3. A. NEW ATTIC VENT MASTER FLOW® POWER ATTIC VENT ERV4  
ROOF MOUNT/ OPENING SIZE 15"/COVERAGE AREA (1600 SQ.FT)  
/AIR FLOW 1000 CFM



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CLIENT INFORMATION:

SEAL:

PROJECT NAME:

MIRADERO - RESIDENCE

NEW CONSTRUCTION

0 MIRADERO AVENUE  
SAN JOSE, CALIFORNIA 95127  
APN: 612-04-048

REV.	DESCRIPTION:	DATE:
A		
B		
C		

DATE:  
3/29/2023

SHEET TITLE:  
PROPOSED  
ROOF

SHEET NUMBER:

A-4



TOP ROOF  
471' - 6"

LEVEL 6 UPPER  
LEVEL  
458' - 0"

MAIN LEVEL  
LEVEL  
448' - 0"

LEVEL 8 LOWER  
LEVEL  
438' - 0"

TOP ROOF  
471' - 6"

LEVEL 6 UPPER  
LEVEL  
458' - 0"

MAIN LEVEL  
LEVEL  
448' - 0"

LEVEL 8 LOWER  
LEVEL  
438' - 0"

1 | WEST ELEVATION

SCALE: 1/4"-1'-0"

TOP ROOF  
471' - 6"

LEVEL 6 UPPER  
LEVEL  
458' - 0"

MAIN LEVEL  
LEVEL  
448' - 0"

LEVEL 8 LOWER  
LEVEL  
438' - 0"

TOP ROOF  
471' - 6"

LEVEL 6 UPPER  
LEVEL  
458' - 0"

MAIN LEVEL  
LEVEL  
448' - 0"

LEVEL 8 LOWER  
LEVEL  
438' - 0"

2 | SOUTH ELEVATION

SCALE: 1/4"-1'-0"



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CLIENT INFORMATION:

SEAL:

PROJECT NAME:

MIRADERO - RESIDENCE  
NEW CONSTRUCTION  
0 MIRADERO AVENUE  
SAN JOSE, CALIFORNIA 95127  
APN: 612-04-048

REV:	DESCRIPTION:	DATE:
A		
B		
C		

DATE:

3/29/2023

SHEET TITLE:

ELEVATIONS

SHEET NUMBER:

A-5

FULL SIZE PRINT: D = 24"x36"



TOP ROOF  
471' - 6"

LEVEL 6 UPPER  
LEVEL  
458' - 0"

MAIN LEVEL  
LEVEL  
448' - 0"

LEVEL 8 LOWER  
LEVEL  
438' - 0"

FINAL GRADE

TOP ROOF  
471' - 6"

LEVEL 6 UPPER  
LEVEL  
458' - 0"

MAIN LEVEL  
LEVEL  
448' - 0"

LEVEL 8 LOWER  
LEVEL  
438' - 0"

NOTES  
FOUNDATION TO BE  
DETERMINED BY  
ENGINEERING



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CLIENT INFORMATION:

SEAL:

1 EAST ELEVATION

SCALE: 1/4"-1'-0"

TOP ROOF  
471' - 6"

LEVEL 6 UPPER  
LEVEL  
458' - 0"

MAIN LEVEL  
LEVEL  
448' - 0"

LEVEL 8 LOWER  
LEVEL  
438' - 0"

TOP ROOF  
471' - 6"

LEVEL 6 UPPER  
LEVEL  
458' - 0"

MAIN LEVEL  
LEVEL  
448' - 0"

LEVEL 8 LOWER  
LEVEL  
438' - 0"

PROJECT NAME:

MIRADERO - RESIDENCE

NEW CONSTRUCTION  
0 MIRADERO AVENUE  
SAN JOSE, CALIFORNIA 95127  
APN: 612-04-048

REV:	DESCRIPTION:	DATE:
A		
B		
C		

DATE:  
3/29/2023

SHEET TITLE:  
ELEVATIONS

SHEET NUMBER:

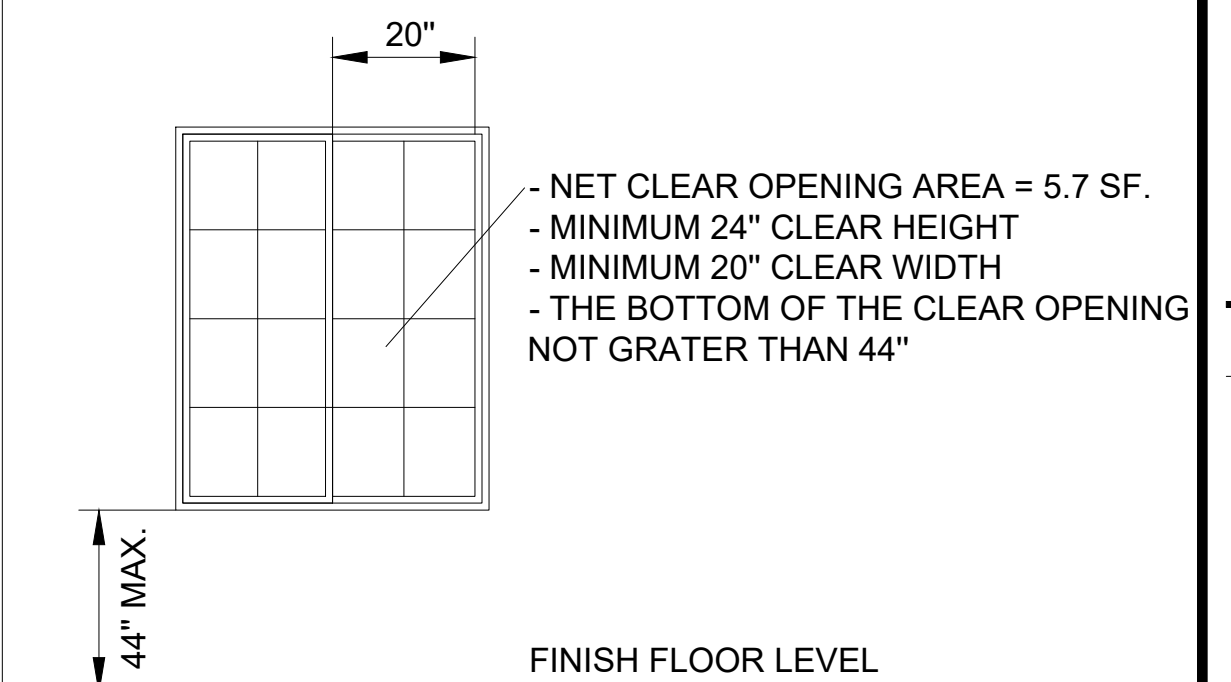
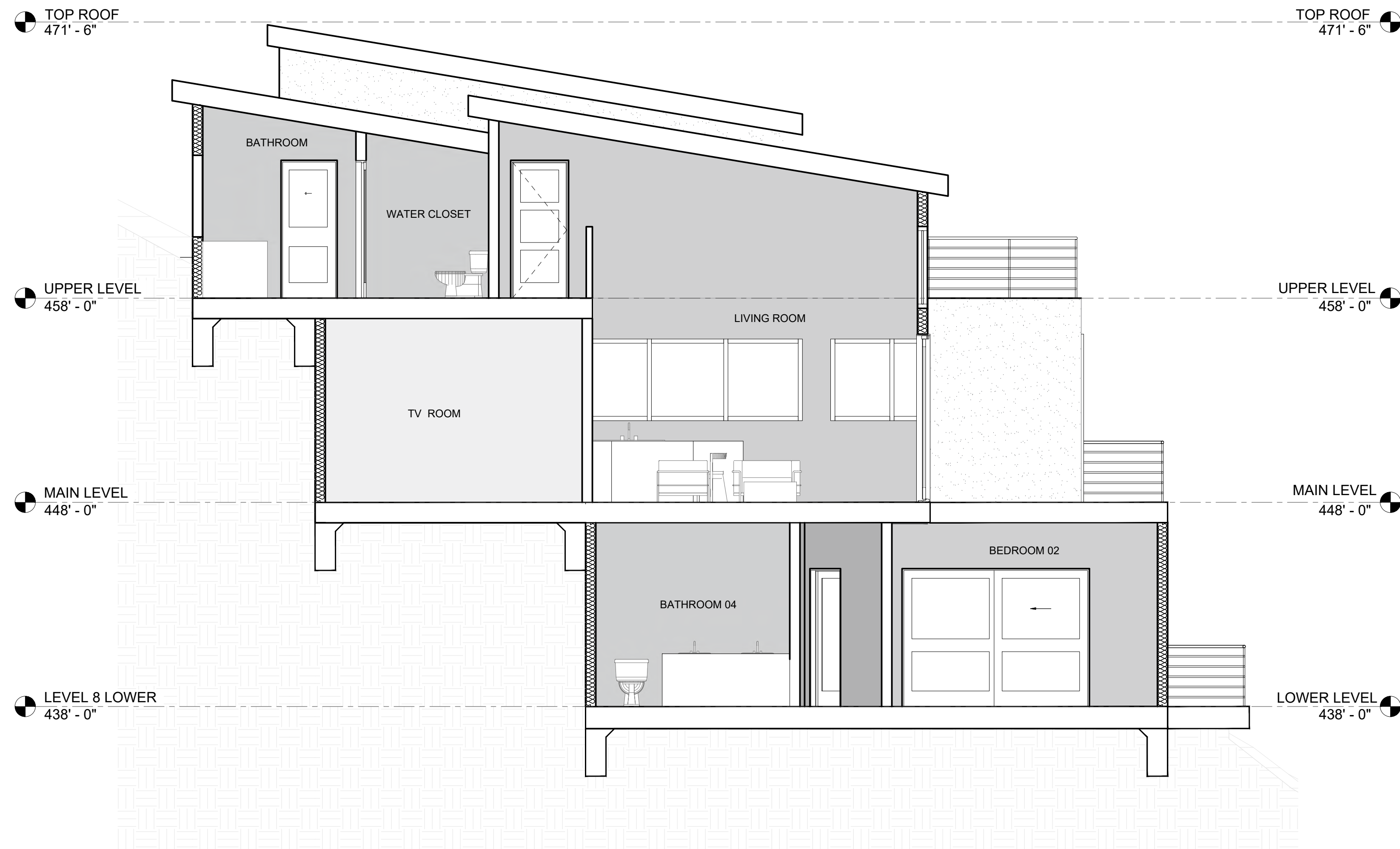
A-6

2 NORTH ELEVATION

SCALE: 1/4"-1'-0"

FULL SIZE PRINT: D = 24"x36"

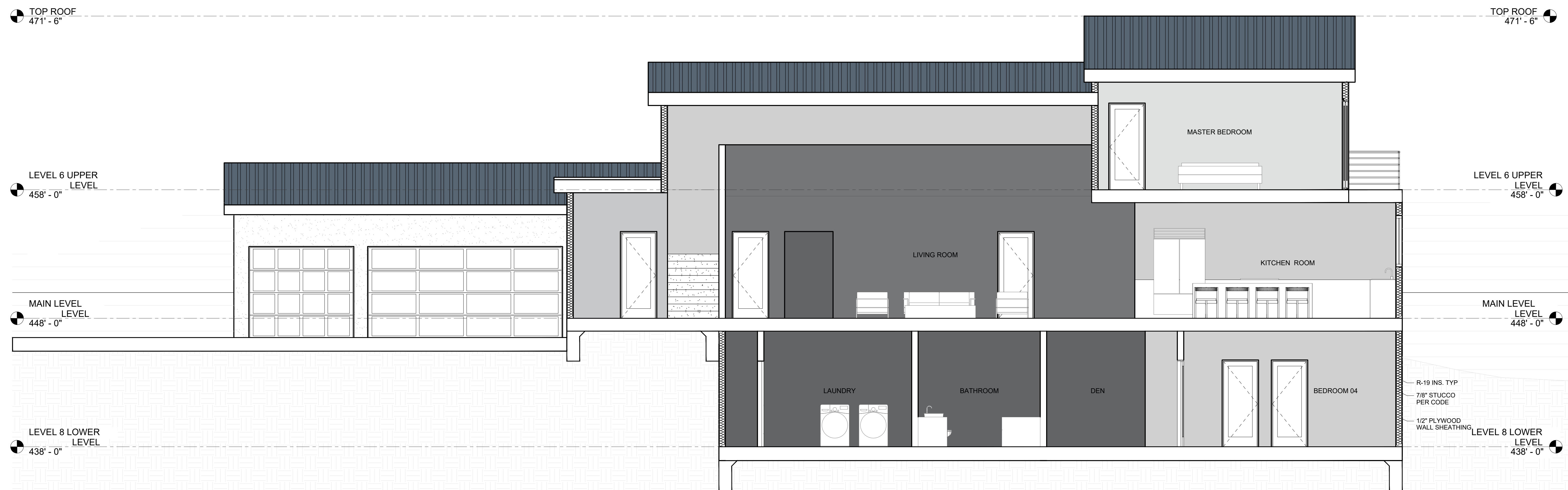




1 SECTION A

SCALE: 1/4"-1'-0"

4 EMERGENCY ESCAPE WINDOW



2 SECTION B

SCALE: 1/4"-1'-0"



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CLIENT INFORMATION:

SEAL:

PROJECT NAME:

MIRADERO - RESIDENCE

NEW CONSTRUCTION  
0 MIRADERO AVENUE  
SAN JOSE, CALIFORNIA 95127  
APN: 612-04-048

REV.	DESCRIPTION:	DATE:
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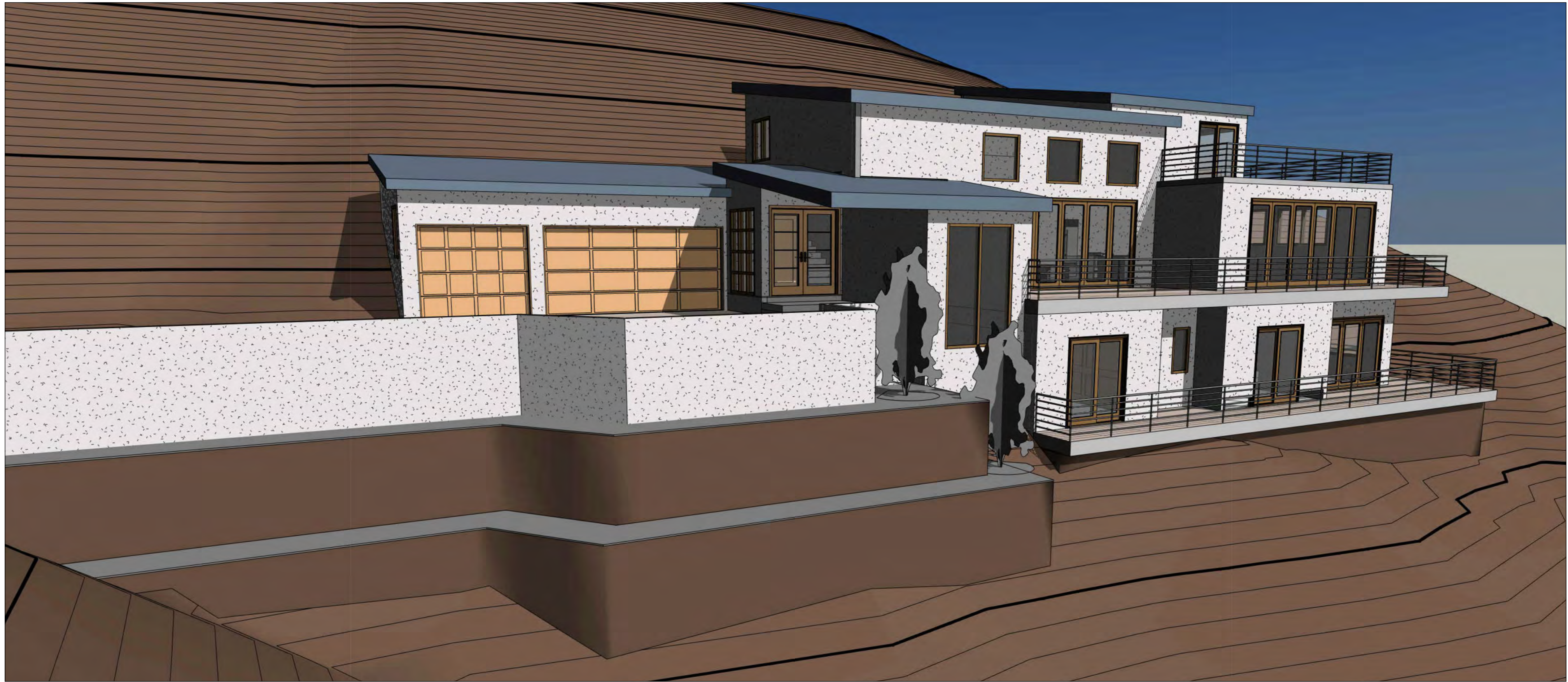
DATE:  
3/29/2023

SHEET TITLE:  
SECTIONS

SHEET NUMBER:

A-7





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SEAL:

PROJECT NAME:

**MIRADERO - RESIDENCE**  
NEW CONSTRUCTION  
0 MIRADERO AVENUE  
SAN JOSE, CALIFORNIA 95127  
APN: 612-04-048

REV.	DESCRIPTION:	DATE:
A		
B		
C		

DATE:

3/29/2023

SHEET TITLE:

**SECTIONS**

SHEET NUMBER:

**A-8**





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CLIENT INFORMATION:

SEAL:

PROJECT NAME:

MIRADERO - RESIDENCE

NEW CONSTRUCTION

0 MIRADERO AVENUE  
SAN JOSE, CALIFORNIA 95127  
APN: 612-04-048

REV:	DESCRIPTION:	DATE:
A		
B		
C		

DATE:  
3/29/2023

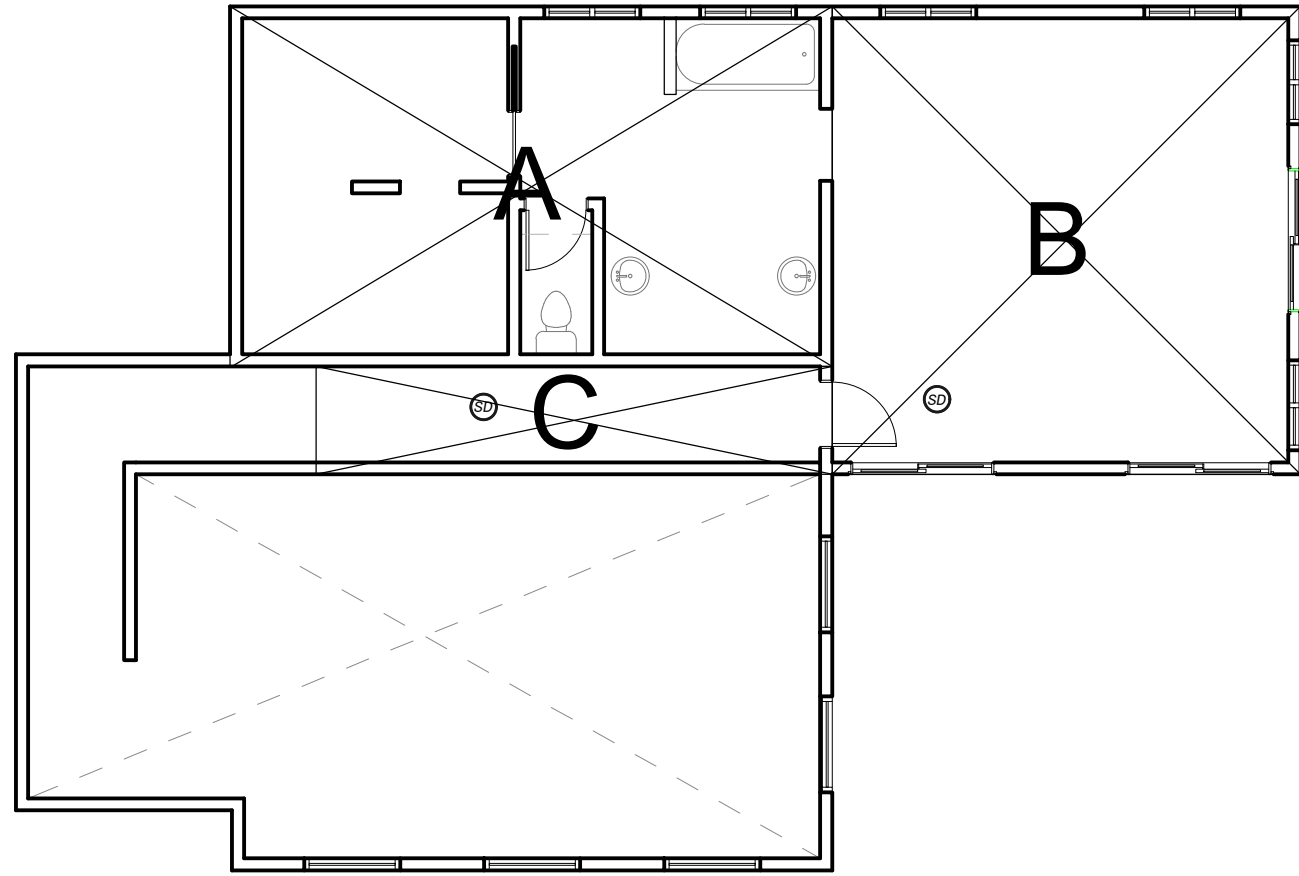
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SECTIONS

SHEET NUMBER:

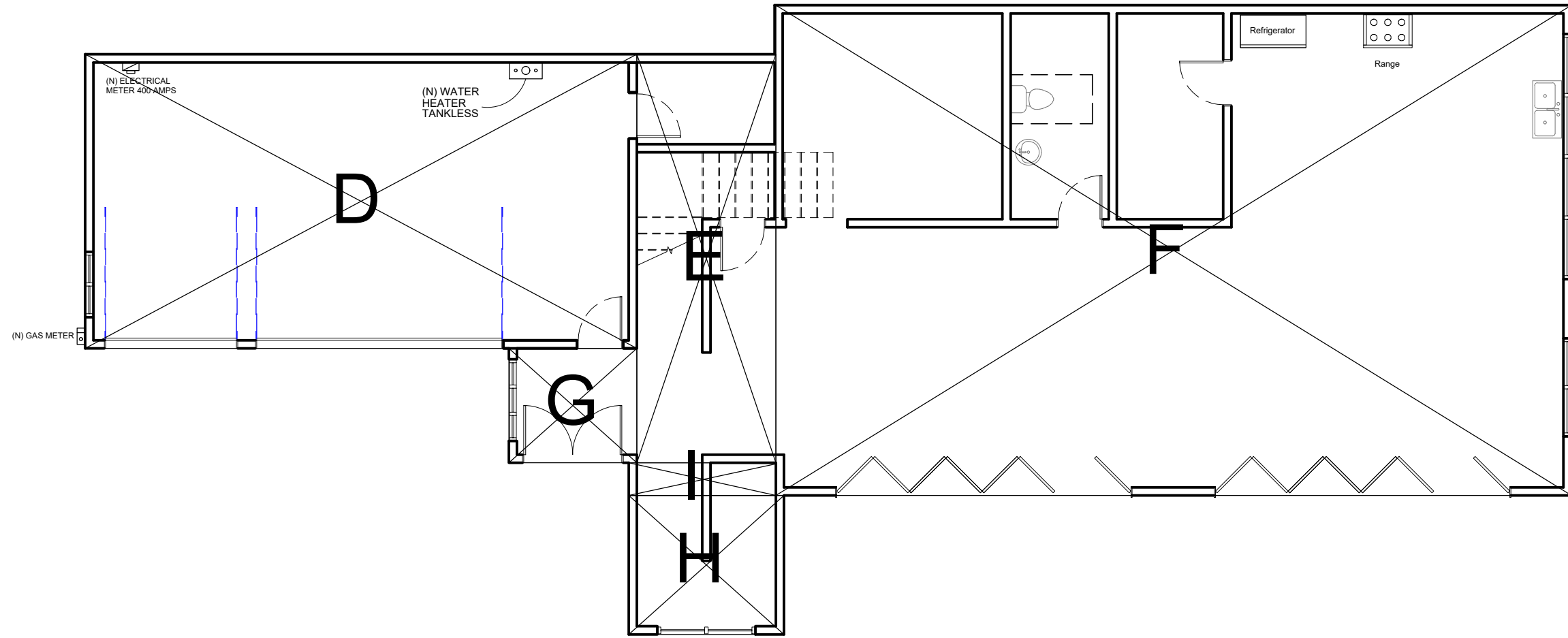
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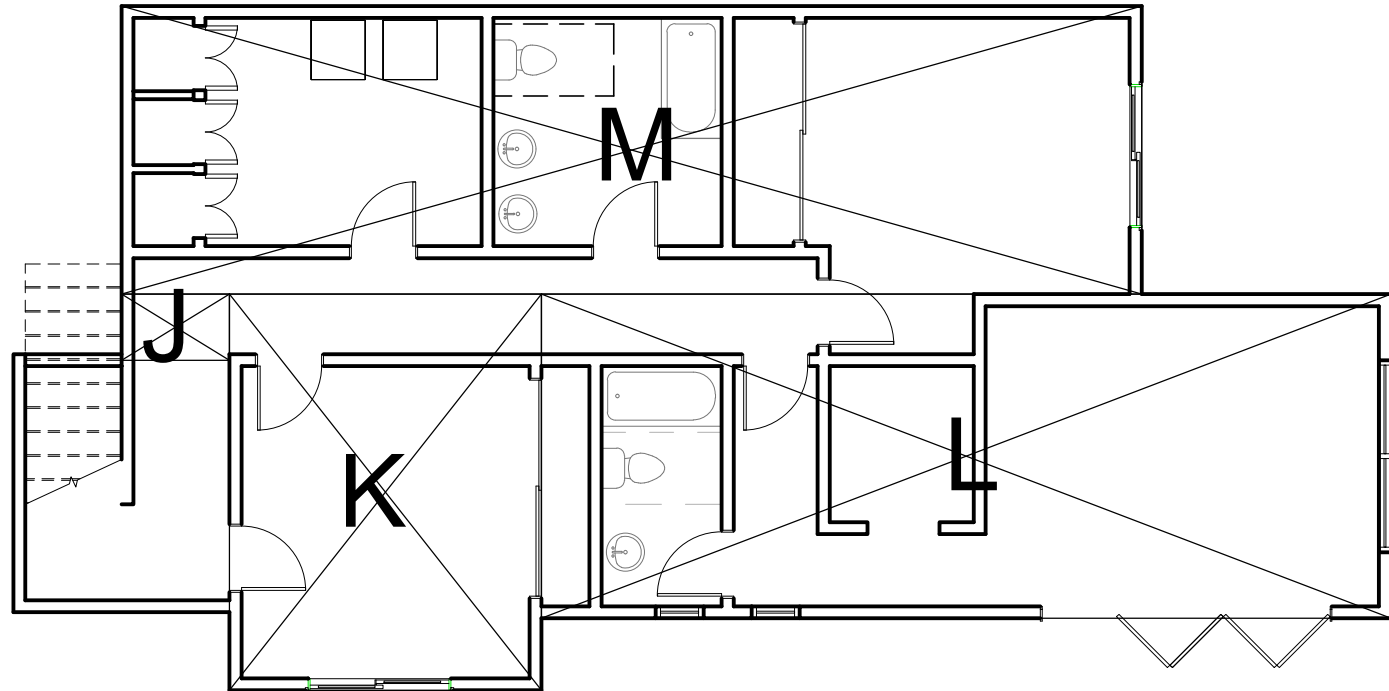




UPPER LEVEL



MAIN LEVEL



LOWER LEVEL

AREA CALCULATION		
	FRAME SIZE (INCHES)	
ID	DIMENSIONS	AREA SQF
A	25' x15'	375
B	19.5' x 19.5'	380.25
C	4.5' x 21.5'	96.75
D	33.66' x 18'	605.88
E	8.5' x 25'	212.5
F	48.75' x 30'	1,462.5
G	7' x 7.83'	54.81
H	8.5' x 9.5'	80.75
I	2' x 9'	18
J	2.75' x 4.5'	12.375
K	13' x 16.5'	214.5
L	13.5' x 35.33'	476.95
M	42.5' X 12'	510
TOTAL		4,500.265



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SEAL:

PROJECT NAME:

MIRADERO - RESIDENCE  
NEW CONSTRUCTION  
0 MIRADERO AVENUE  
SAN JOSE, CALIFORNIA 95127  
APN: 612-04-048

REV:	DESCRIPTION:	DATE:
A		
B		
C		

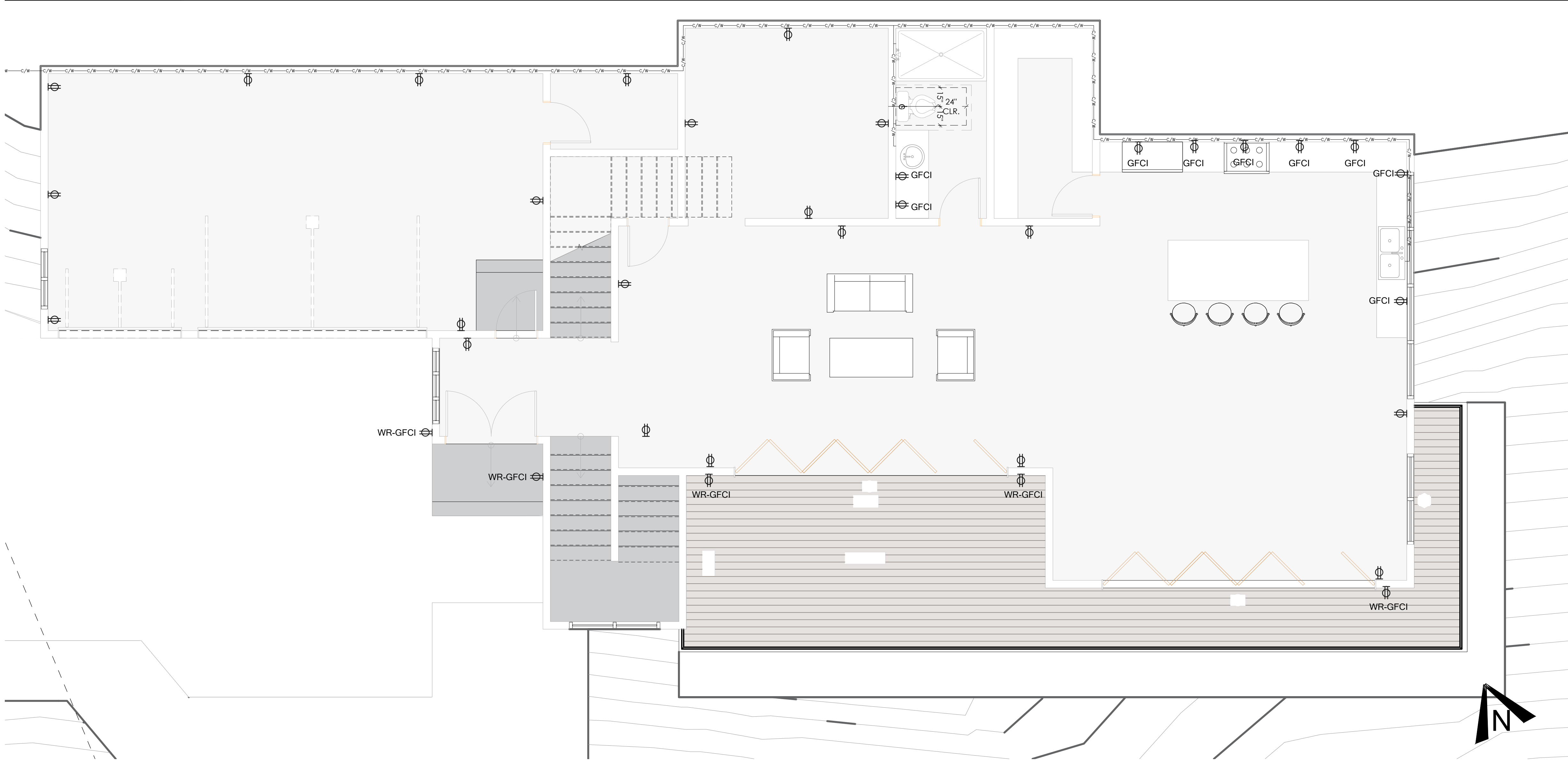
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3/29/2023  
SHEET TITLE:

SECTIONS

SHEET NUMBER:

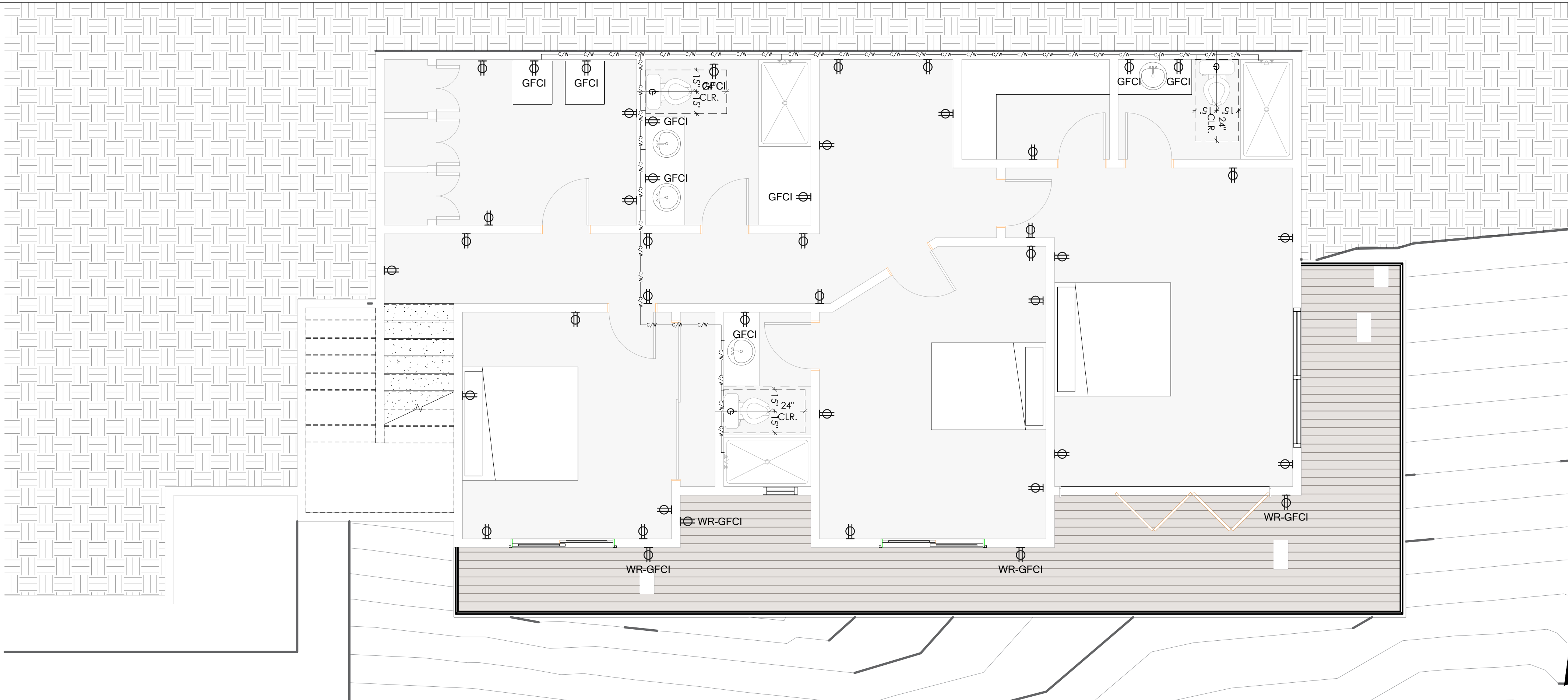
A-10





1 ELECTRICAL MAIN LEVEL FLOOR PLAN

SCALE: 1/4"-1'-0"



2 ELECTRICAL LOWER LEVEL FLOOR PLAN

SCALE: 1/4"-1'-0"

POWER

- ⊕ DUPLEX RECEPTACLE TAMPER-RESISTANT +12" AFF U.N.O. (DIMENSIONS MEASURED ABOVE FINISHED FLOOR TO CENTER OF J-BOX) (DIMENSIONS MEASURED ABOVE FINISHED FLOOR TO CENTER OF J-BOX)
- +36" GROUND FAULT CIRCUIT INTERRUPTER
- ⊕ WEATHER RATED GROUND FAULT CIRCUIT INTERRUPTER TO SERVE OUTDOOR AREA.

SWITCH

- ⊕ SINGLE POLE SWITCH +42" AFF U.N.O.

NOTES

- HIGH EFFICACY LUMINAIRES MUST BE PIN BASED.
- BATHROOM EXHAUST FANS SHALL BE ENERGY STAR COMPLIANT, DUCTED TO TERMINATE OUTSIDE THE BUILDING AND CONTROLLED BY A HUMIDISTAT CAPABLE OF BEING ADJUSTED BETWEEN THE RELATIVE HUMIDITY RANGE OF 50 OF 80 PERCENT [CGBC4.506]
- NET AREA OF SHOWER RECEPTOR SHALL BE NOT LESS THAN 1,024 SQ. IN. OF FLOOR AREA, AND ENCOMPASS 30 INCH DIAMETER CIRCLE. [CRC R307.1 AND CPC 408.6]
- ALL GLAZING LESS THAN 60" ABOVE A SHOWER OR TUB FLOOR AND WITHIN 60" HORIZONTALLY FROM FIXTURE'S WATER EDGE SHALL BE SAFETY GLAZING. [CRC R308.4, ITEM 5]
- KITCHENS. ALL INSTALLED WATTAGE OF LUMINAIRES IN KITCHENS SHALL BE HIGH EFFICACY.
- LIGHTING IN BATHROOMS, GARAGES, LAUNDRY ROOMS AND UTILITY ROOMS. ALL LUMINAIRES SHALL BE HIGH EFFICACY AND SHALL BE CONTROLLED BY A VACANCY SENSOR.
- OTHER ROOMS. ALL LUMINAIRES SHALL BE HIGH EFFICACY AND SHALL BE CONTROLLED BY A VACANCY SENSOR OR DIMMER. CLOSETS THAT ARE LESS THAN 70 SQUARE FOOT ARE EXEMPT FROM THIS REQUIREMENT.
- OUTDOOR LIGHTING. ALL LUMINAIRES MOUNTED TO THE BUILDING OR TO OTHER BUILDINGS ON THE SAME LOT SHALL BE HIGH EFFICACY LUMINAIRES OR SHALL BE CONTROLLED BY A PHOTOCONTROL/MOTION SENSOR COMBINATION (WITH OVERRIDE). SEE 150(K)3 FOR REQUIREMENTS.
- ALL NEW ELECTRICAL RECEPTACLES SHALL BE ARC-FAULT AND/OR GFCI PROTECTED.



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*[Signature]*

Signature

CLIENT INFORMATION:

SEAL:

PROJECT NAME:

MIRADERO - RESIDENCE

NEW CONSTRUCTION

0 MIRADERO AVENUE  
SAN JOSE, CALIFORNIA 95127  
APN: 612-04-048

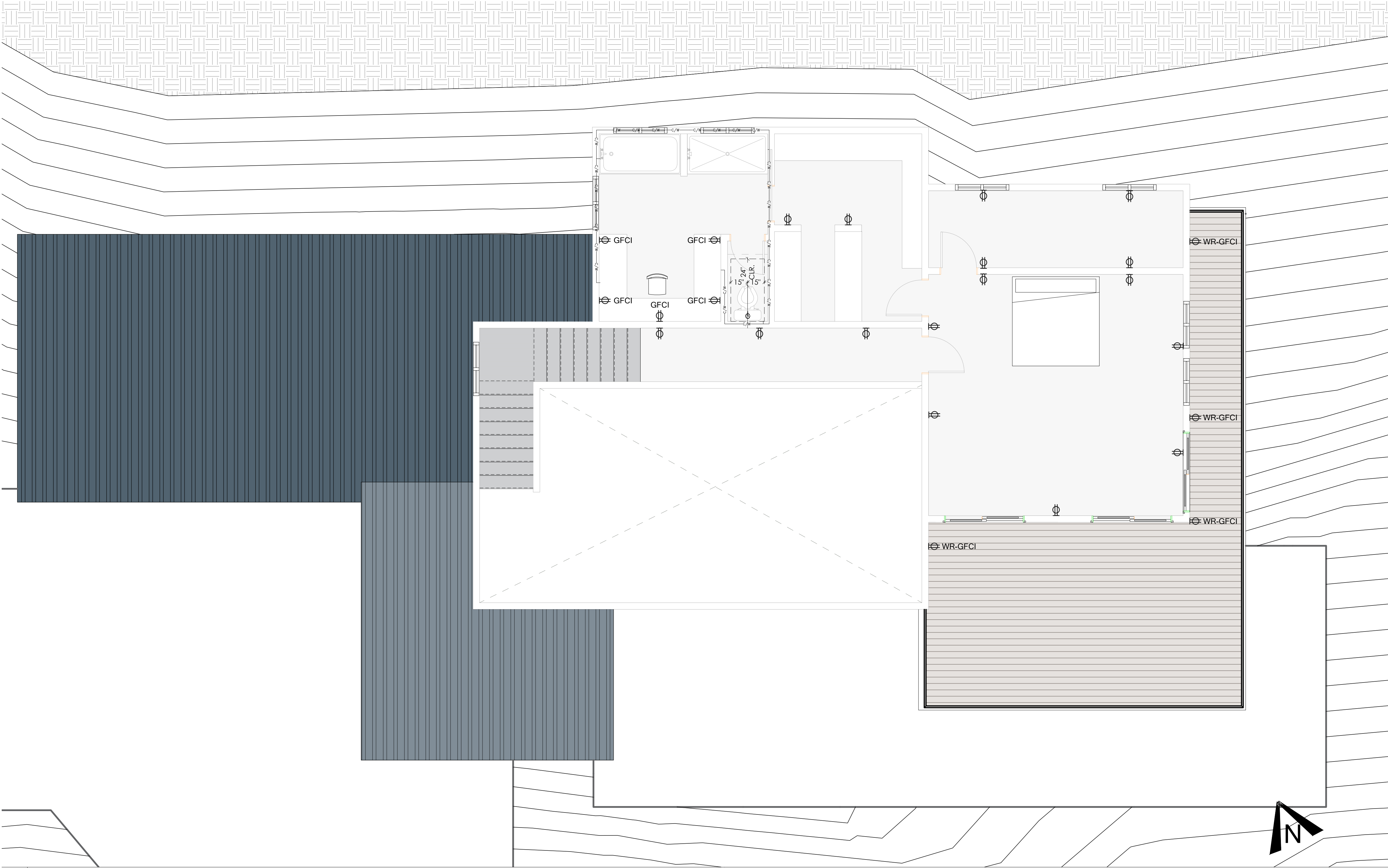
REV:	DESCRIPTION:	DATE:
A		
B		
C		

DATE:  
3/29/2023

SHEET TITLE:  
ELECTRICAL  
PLAN

SHEET NUMBER:

E-1



POWER

- DUPLEX RECEPTACLE TAMPER-RESISTANT +12" AFF U.N.O.  
(DIMENSIONS MEASURED ABOVE FINISHED FLOOR TO CENTER OF J-BOX)
- +36"  
(DIMENSIONS MEASURED ABOVE FINISHED FLOOR TO CENTER OF J-BOX)
- GFCI GROUND FAULT CIRCUIT INTERRUPTER
- WR-GFCI WEATHER RATED GROUND FAULT CIRCUIT INTERRUPTER TO SERVE OUTDOOR AREA.

SWITCH

- SINGLE POLE SWITCH +42" AFF U.N.O.

NOTES

- HIGH EFFICACY LUMINARIES MUST BE PIN BASED.
- BATHROOM EXHAUST FANS SHALL BE ENERGY STAR COMPLIANT, DUCTED TO TERMINATE OUTSIDE THE BUILDING AND CONTROLLED BY A HUMIDISTAT CAPABLE OF BING ADJUSTED BETWEEN THE RELATIVE HUMIDITY RANGE OF 50 OF 80 PERCENT [CGBC4.506]
- NET AREA OF SHOWER RECEPTOR SHALL BE NOT LESS THAN 1,024 SQ. IN. OF FLOOR AREA, AND ENCOMPASS 30 INCH DIAMETER CIRCLE. [CRC R307.1 AND CPC 408.6]
- ALL GLAZING LESS THAN 60" ABOVE A SHOWER OR TUB FLOOR AND WITHIN 60" HORIZONTALLY FROM FIXTURE'S WATER EDGE SHALL BE SAFETY GLAZING. [CRC R308.4, ITEM 5]
- KITCHENS. ALL INSTALLED WATTAGE OF LUMINARIES IN KITCHENS SHALL BE HIGH EFFICACY.
- LIGHTING IN BATHROOMS, GARAGES, LAUNDRY ROOMS AND UTILITY ROOMS. ALL LUMINAIRES SHALL BE HIGH EFFICACY AND SHALL BE CONTROLLED BY A VACANCY SENSOR.
- OTHER ROOMS. ALL LUMINAIRES SHALL BE HIGH EFFICACY AND SHALL BE CONTROLLED BY A VACANCY SENSOR OR DIMMER. CLOSETS THAT ARE LESS THAN 70 SQUARE FOOT ARE EXEMPT FROM THIS REQUIREMENT.
- OUTDOOR LIGHTING: ALL LUMINAIRES MOUNTED TO THE BUILDING OR TO OTHER BUILDINGS ON THE SAME LOT SHALL BE HIGH EFFICACY LUMINAIRES OR SHALL BE CONTROLLED BY A PHOTOCONTROL/MOTION SENSOR COMBINATION (WITH OVERRIDE). SEE 150(K)3 FOR REQUIREMENTS.
- ALL NEW ELECTRICAL RECEPTACLES SHALL BE ARC-FAULT AND/OR GFCI PROTECTED.



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CLIENT INFORMATION:

SEAL:

PROJECT NAME:

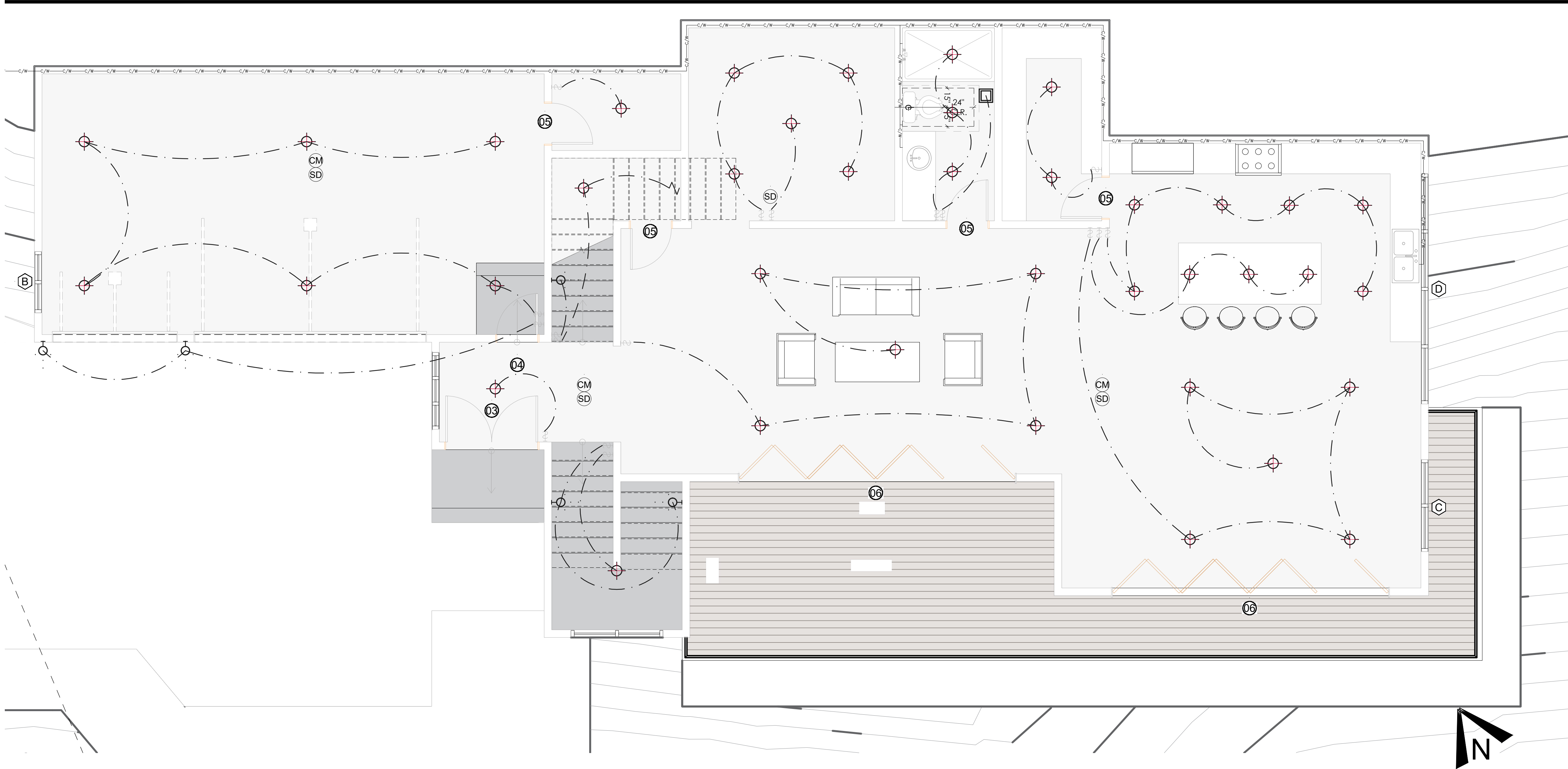
MIRADERO - RESIDENCE  
NEW CONSTRUCTION  
0 MIRADERO AVENUE  
SAN JOSE, CALIFORNIA 95127  
APN: 612-04-048

REV.	DESCRIPTION:	DATE:
A		
B		
C		

DATE:  
3/29/2023  
SHEET TITLE:  
ELECTRICAL  
PLAN

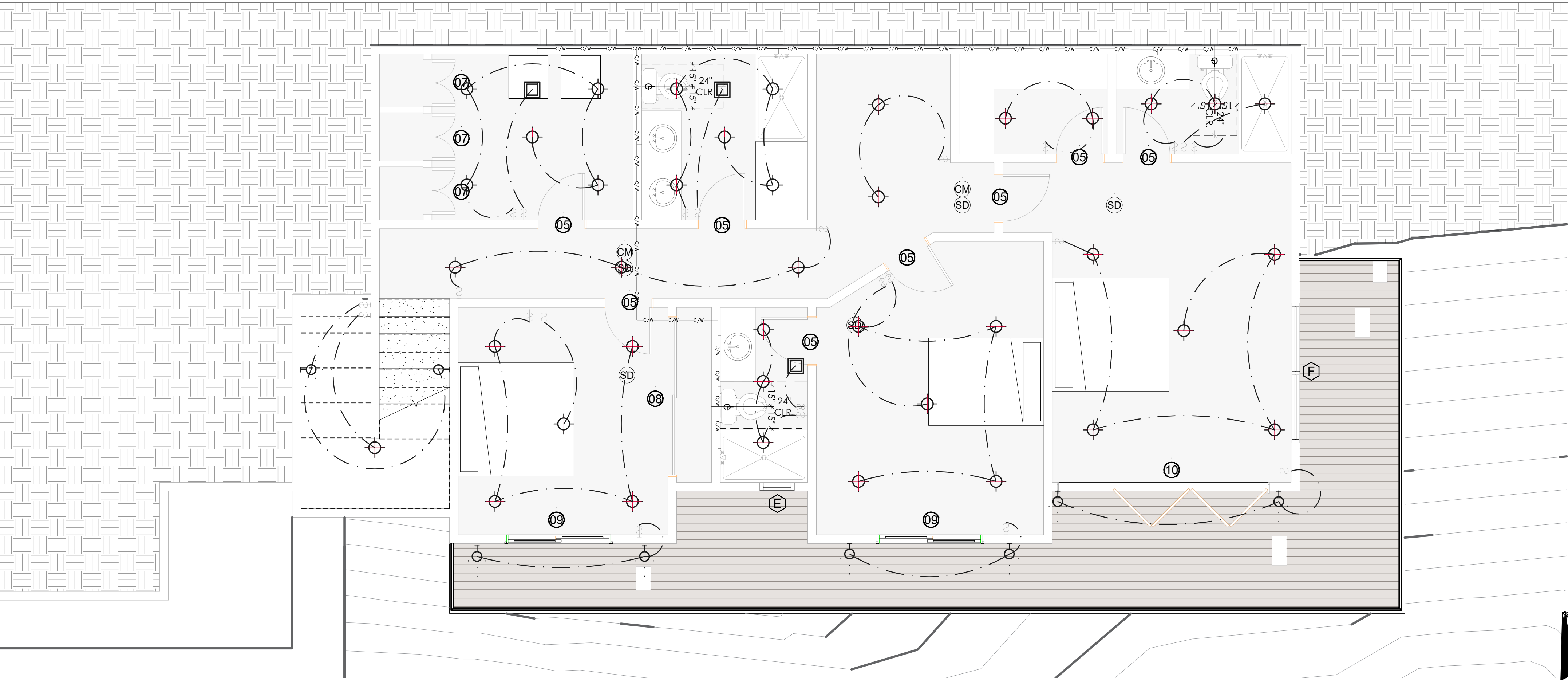
SHEET NUMBER:  
E-2





1 MAIN LEVEL LIGHTING FLOOR PLAN

SCALE: 1/4"-1'-0"



2 LOWER LEVEL LIGHTING FLOOR PLAN

SCALE: 1/4"-1'-0"

## SWITCH

☛ SINGLE POLE SWITCH +42" AFF U.N.O.

## LIGHTING LEGEND

- CENTER LINE DISTANCE TO WALL
- - - CONDUIT
- 4" CAN LOW VOLTAGE, TRIM AND LED LAMP (HIGH EFFICACY LUMINAIRE)
- 6" CAN, TRIM AND LED LAMP ARE TO BE SELECTED
- WALL MOUNTED FIXTURE (OWNER SUPPLIED) (LOW EFFICACY LIGHTING)
- EXHAUST FAN SHALL BE PROVIDE HUMIDISTAT HAVE A SENSOR IN BATHROOM AREA. MINIMUM VENTILATION SHALL BE 50 CUBIC FEET PER MINUTE FOR INTERMITTENT VENTILATION OR 20 CUBIC FEET PER MINUTE FOR CONTINUOUS VENTILATION.
- ☒ EXHAUST FAN IN KITCHEN DUCTED TO THE OUTSIDE WITH A MINIMUM VENTILATION RATE OF 100 CFRN.



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PROJECT NAME:

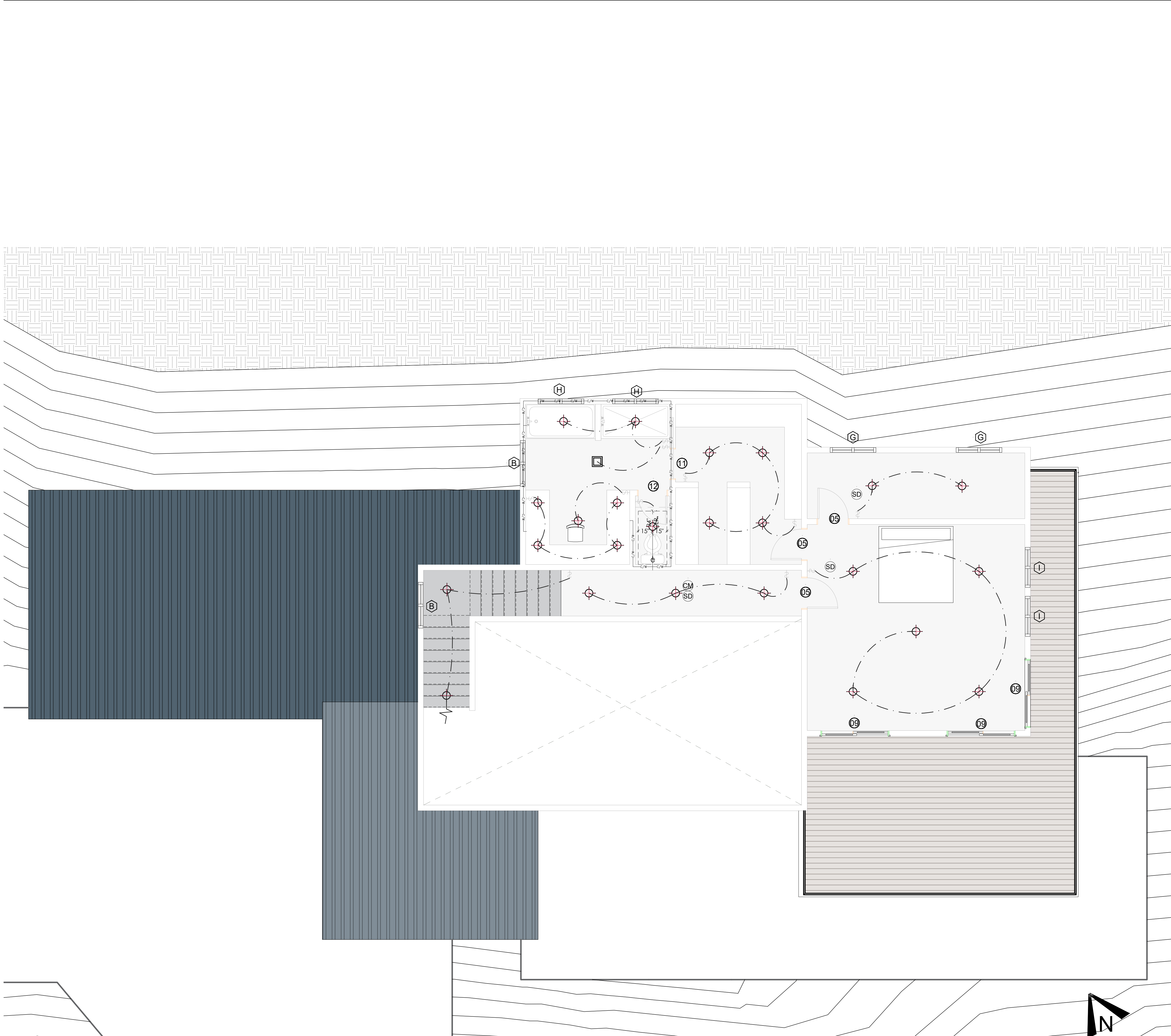
MIRADERO - RESIDENCE  
NEW CONSTRUCTION  
0 MIRADERO AVENUE  
SAN JOSE, CALIFORNIA 95127  
APN: 612-04-048

REV:	DESCRIPTION:	DATE:
A		
B		
C		

DATE:  
3/29/2023  
SHEET TITLE:  
LIGHTING PLAN

SHEET NUMBER:

E-3



1 | UPPER LEVEL LIGHTING FLOOR PLAN

N  
SCALE: 1/4"=1'-0"

SWITCH

☐ SINGLE POLE SWITCH +42" AFF U.N.O.

LIGHTING LEGEND

- CENTER LINE DISTANCE TO WALL
- - - CONDUIT
- 4" CAN LOW VOLTAGE, TRIM AND LED LAMP (HIGH EFFICACY LUMINAIRE)
- 6" CAN, TRIM AND LED LAMP ARE TO BE SELECTED
- WALL MOUNTED FIXTURE (OWNER SUPPLIED) (LOW EFFICACY LIGHTING)
- ☐ EXHAUST FAN SHALL BE PROVIDE HUMIDISTAT HAVE A SENSOR IN BATHROOM AREA. MINIMUM VENTILATION SHALL BE 50 CUBIC FEET PER MINUTE FOR INTERMITTENT VENTILATION OR 20 CUBIC FEET PER MINUTE FOR CONTINUOUS VENTILATION.
- ☒ EXHAUST FAN IN KITCHEN DUCTED TO THE OUTSIDE WITH A MINIMUM VENTILATION RATE OF 100 CFRN.



DRAWINGS PROVIDED BY:  
SOLAR MAX DESIGN  
EMAIL:  
solarmax.dsgn@gmail.com  
WEB:  
www.solarmaxdsgn.com  
TEL:  
(310) 740-9649  
(310) 844-7370

*[Signature]*

Signature

CLIENT INFORMATION:

SEAL:

PROJECT NAME:

MIRADERO - RESIDENCE  
NEW CONSTRUCTION  
0 MIRADERO AVENUE  
SAN JOSE, CALIFORNIA 95127  
APN: 612-04-048

REV:	DESCRIPTION:	DATE:
A		
B		
C		

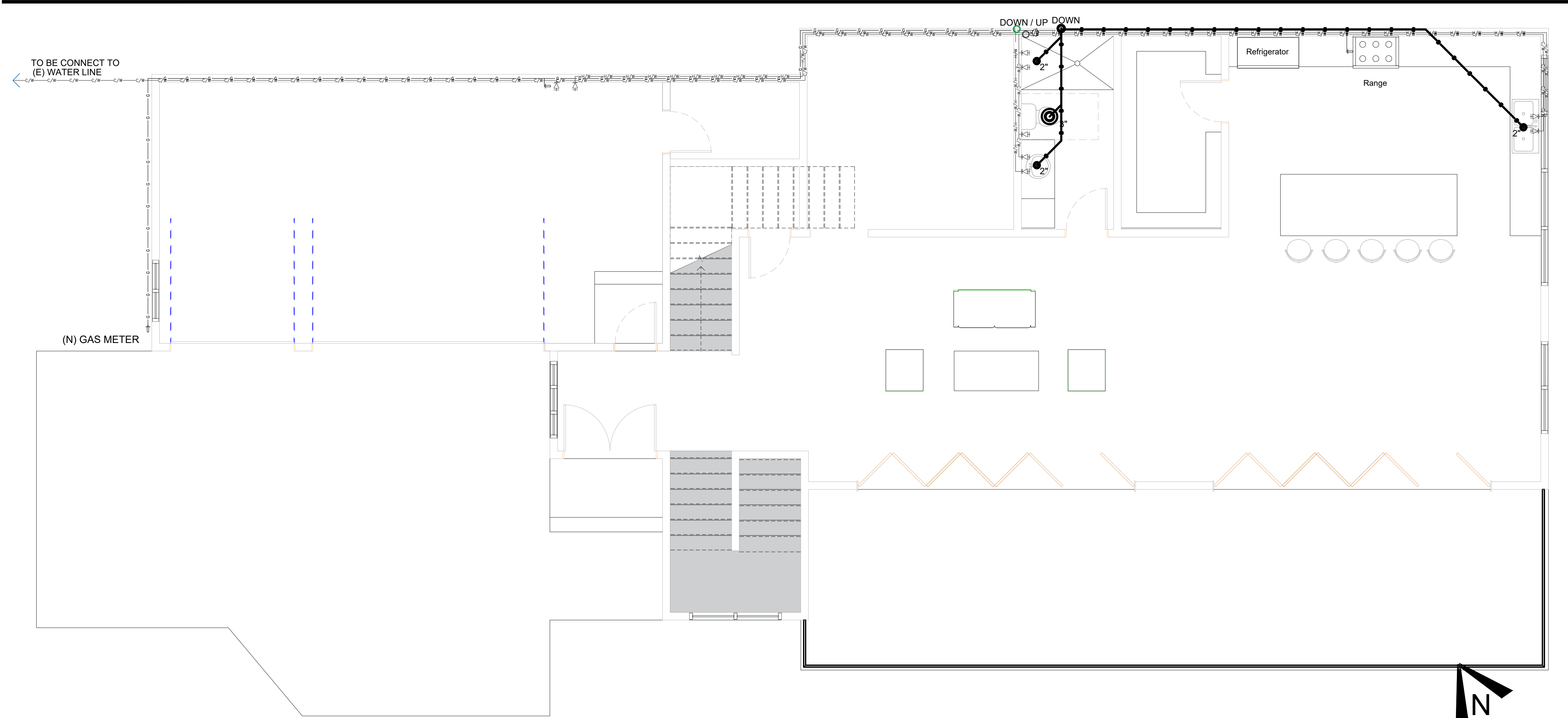
DATE:  
3/29/2023

SHEET TITLE:  
LIGHTING PLAN

SHEET NUMBER:  
E-4

FULL SIZE PRINT: D = 24"X36"





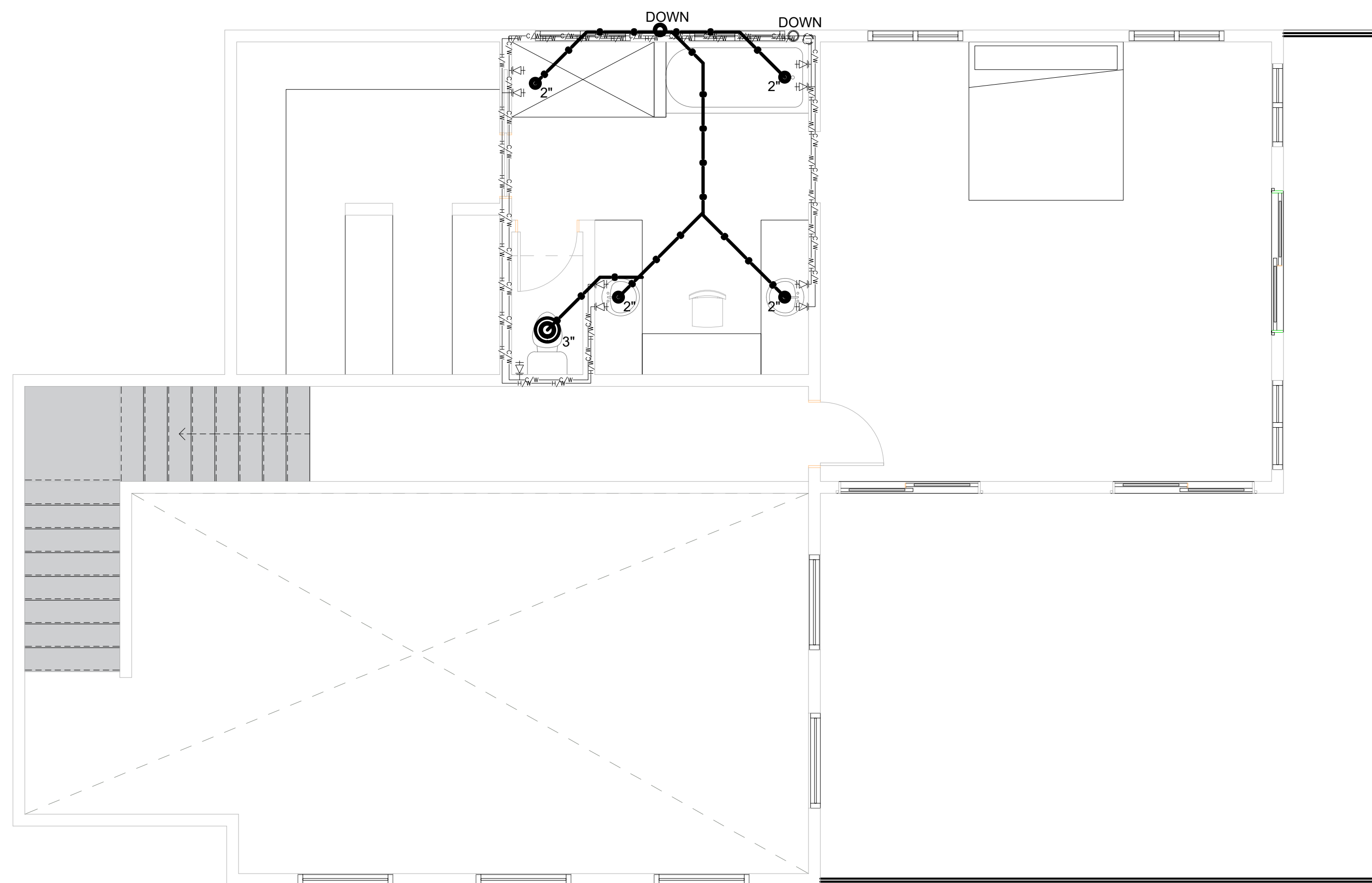
1 UPPER LEVEL PLUMBING FLOOR PLAN

SCALE: 1/4"-1'-0"

## PLUMBING

- COLD WATER
- HOT WATER
- 1/4" COPPER PIPE
- COLD AND HOT WATER VALVES
- GAS LINE
- GAS VALVE

WATER REDUCTION FIXTURE FLOW RATES SECTION 4.303.1	
FIXTURE TYPE	MAXIMUM ALLOWABLE FLOW RATE
SHOWERHEADS	1.8 GPM @ 80 PSI
LAVATORY FAUCET, RESIDENTIAL	1.2 GPM @ 60 PSI 1,3
KITCHEN FAUCETS	1.5 GPM @ 60 PSI 2,4
METERING FAUCETS	0.2 GALLONS/CYCLE
GRAVITY TANK TYPE WATER CLOSETS	1.28 GALLONS/FLUSH 5
CLOTHES WASHERS	ENERGY-STAR CERTIFICATE
DISHWASHERS	ENERGY-STAR CERTIFICATE



2 UPPER LEVEL PLUMBING FLOOR PLAN

SCALE: 1/4"-1'-0"



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TEL:  
(310) 740-9649  
(310) 844-7370

Signature

CLIENT INFORMATION:

SEAL:

PROJECT NAME:

MIRADERO - RESIDENCE  
NEW CONSTRUCTION  
0 MIRADERO AVENUE  
SAN JOSE, CALIFORNIA 95127  
APN: 612-04-048

REV.	DESCRIPTION:	DATE:
A		
B		
C		

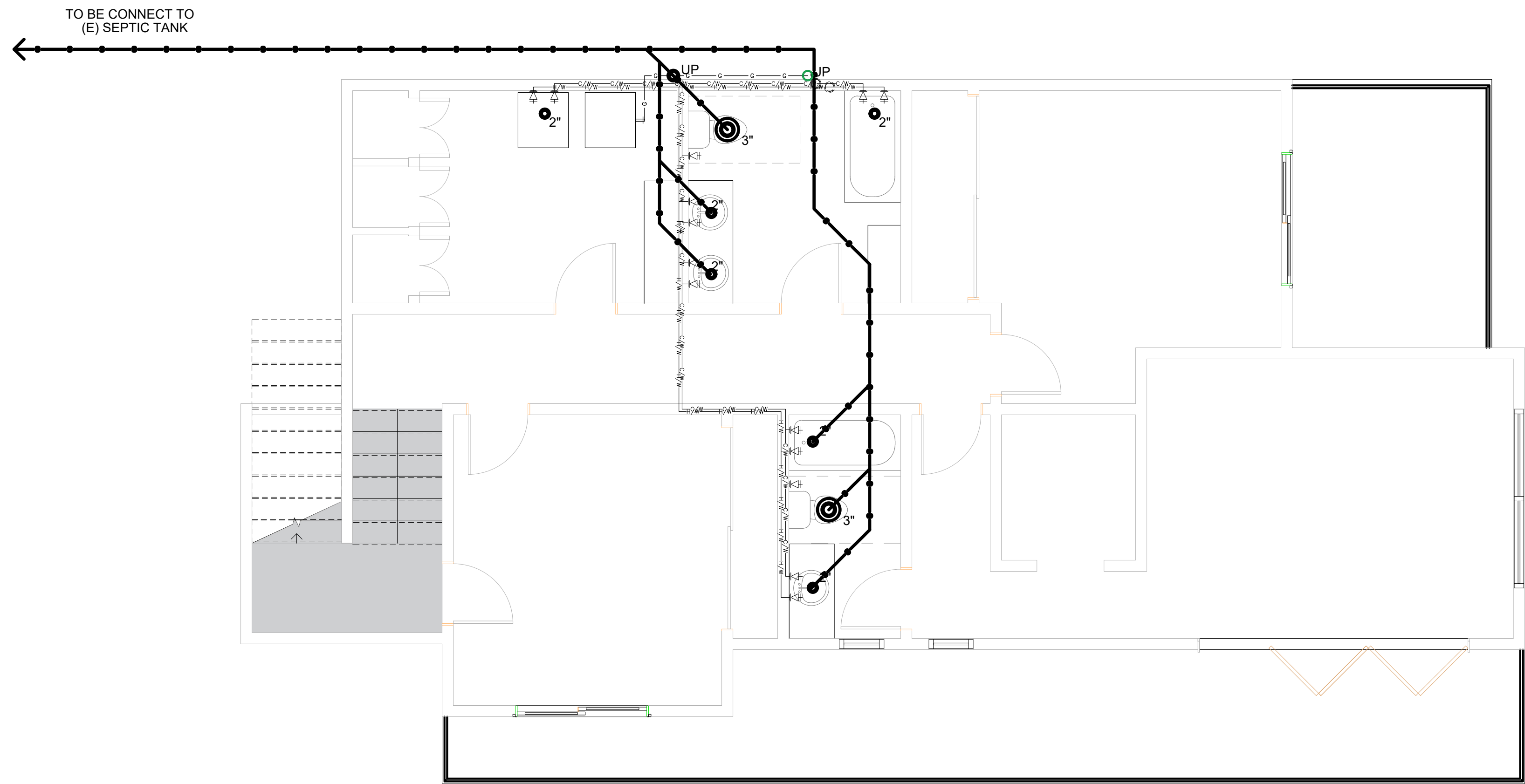
DATE:  
3/29/2023

SHEET TITLE:  
PLUMBING

SHEET NUMBER:

P-1





PLUMBING

- COLD WATER
- HOT WATER
- 1/4" COPPER PIPE
- COLD AND HOT WATER VALVES
- GAS LINE
- GAS VALVE

WATER REDUCTION FIXTURE FLOW RATES SECTION 4.303.1	
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GRAVITY TANK TYPE WATER CLOSETS	1.28 GALLONS/FLUSH 5
CLOTHES WASHERS	ENERGY-STAR CERTIFICATE
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(310) 740-9649  
(310) 844-7370

*[Signature]*

Signature

CLIENT INFORMATION:

SEAL:

PROJECT NAME:

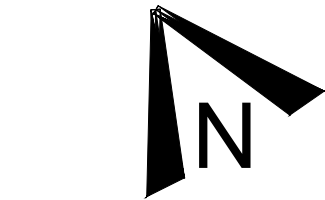
MIRADERO - RESIDENCE  
NEW CONSTRUCTION  
0 MIRADERO AVENUE  
SAN JOSE, CALIFORNIA 95127  
APN: 612-04-048

REV.	DESCRIPTION:	DATE:
A		
B		
C		

DATE:  
3/29/2023  
SHEET TITLE:  
PLUMBING

SHEET NUMBER:

P-2





Y	=	YES
N/A	=	NOT APPLICABLE
RESPON. PARTY	=	RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

# CHAPTER 3

## GREEN BUILDING

### SECTION 301 GENERAL

**301.1 SCOPE.** Buildings shall be designed to include the green building measures specified as mandatory in the application checklists contained in this code. Voluntary green building measures are also included in the application checklists and may be included in the design and construction of structures covered by this code, but are not required unless adopted by a city, county, or city and county as specified in Section 101.7.

**301.1.1 Additions and alterations. [HCD]** The mandatory provisions of Chapter 4 shall be applied to additions or alterations of existing residential buildings where the addition or alteration increases the building's conditioned area, volume, or size. The requirements shall apply only to and/or within the entire specific area of the addition or alteration.

The mandatory provision of Section 4.106.4.2 may apply to additions or alterations of existing parking facilities or the addition of new parking facilities serving existing multifamily buildings. See Section 4.106.4.3 for application.

**Note:** Repairs including, but not limited to, resurfacing, restriping and repairing or maintaining existing lighting fixtures are not considered alterations for the purpose of this section.

**Note:** On and after January 1, 2014, residential buildings undergoing permitted alterations, additions, or improvements shall replace noncompliant plumbing fixtures with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy or final permit approval by the local building department. See Civil Code Section 1101.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and other important enactment dates.

**301.2 LOW-RISE AND HIGH-RISE RESIDENTIAL BUILDINGS. [HCD]** The provisions of individual sections of CALGreen may apply to either low-rise residential buildings high-rise residential buildings, or both. Individual sections will be designated by banners to indicate where the section applies specifically to low-rise only (LR) or high-rise only (HR). When the section applies to both low-rise and high-rise buildings, no banner will be used.

### SECTION 302 MIXED OCCUPANCY BUILDINGS

**302.1 MIXED OCCUPANCY BUILDINGS.** In mixed occupancy buildings, each portion of a building shall comply with the specific green building measures applicable to each specific occupancy.

Exceptions:

- [HCD] Accessory structures and accessory occupancies serving residential buildings shall comply with Chapter 4 and Appendix A4, as applicable.
- [HCD] For purposes of CALGreen, live/work units, complying with Section 419 of the *California Building Code*, shall not be considered mixed occupancies. Live/Work units shall comply with Chapter 4 and Appendix A4, as applicable.

## DIVISION 4.1 PLANNING AND DESIGN

### ABBREVIATION DEFINITIONS:

HCD	Department of Housing and Community Development
BSC	California Building Standards Commission
DSA-SS	Division of the State Architect, Structural Safety
OSHPD	Office of Statewide Health Planning and Development
LRP	Low Rise
HR	High Rise
AA	Additions and Alterations
N	New

# CHAPTER 4

## RESIDENTIAL MANDATORY MEASURES

### SECTION 4.102 DEFINITIONS

**4.102.1 DEFINITIONS**  
The following terms are defined in Chapter 2 *(and are included here for reference)*

**FRENCH DRAIN.** A trench, hole or other depressed area loosely filled with rock, gravel, fragments of brick or similar pervious material used to collect or channel drainage or runoff water.

**WATTLES.** Wattles are used to reduce sediment in runoff. Wattles are often constructed of natural plant materials such as hay, straw or similar material shaped in the form of tubes and placed on a downflow slope. Wattles are also used for perimeter and inlet controls.

**4.106 SITE DEVELOPMENT**

**4.106.1 GENERAL.** Preservation and use of available natural resources shall be accomplished through evaluation and careful planning to minimize negative effects on the site and adjacent areas. Preservation of slopes, management of storm water drainage and erosion controls shall comply with this section.

**4.106.2 STORM WATER DRAINAGE AND RETENTION DURING CONSTRUCTION.** Projects which disturb less than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre or more, shall manage storm water drainage during construction. In order to manage storm water drainage during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent property, prevent erosion and retain soil runoff on the site.

- Retention basins of sufficient size shall be utilized to retain storm water on the site.
- Where storm water is conveyed to a public drainage system, collection point, gutter or similar disposal method, water shall be filtered by use of a barrier system, wattle or other method approved by the enforcing agency.
- Compliance with a lawfully enacted storm water management ordinance.

**Note:** Refer to the State Water Resources Control Board for projects which disturb one acre or more of soil, or are part of a larger common plan of development which in total disturbs one acre or more of soil.

(Website: [https://www.waterboards.ca.gov/water\\_issues/programs/stormwater/construction.html](https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html))

**4.106.3 GRADING AND PAVING.** Construction plans shall indicate how the site grading or drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include, but are not limited to, the following:

- Swales
- Water collection and disposal systems
- French drains
- Water retention gardens
- Other water measures which keep surface water away from buildings and aid in groundwater recharge.

**Exception:** Additions and alterations not altering the drainage path.

**4.106.4 Electric vehicle (EV) charging for new construction.** New construction shall comply with Sections 4.106.4.1 or 4.106.4.2 to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the *California Electrical Code*, Article 625.

**Exceptions:**

- On a case-by-case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions:
  - Where there is no local utility power supply or the local utility is unable to supply adequate power.
  - Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 4.106.4, may adversely impact the construction cost of the project.
- Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities.

**4.106.4.1 New one- and two-family dwellings and townhouses with attached private garages.** For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere 208/240-volt minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

Exemption: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the proposed location of an EV charger at the time of original construction in accordance with the *California Electrical Code*.

**4.106.4.1.1 Identification.** The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE".

**4.106.4.1.1 Identification.** The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE".

	Y	N/A	RESPONDING PARTY
<p><b>4.106.4.2 New multifamily dwellings, hotels and motels and new residential parking facilities.</b>  When parking is provided, parking spaces for new multifamily dwellings, hotels and motels shall meet the requirements of Sections 4.106.4.2.1 and 4.106.4.2.2. Calculations for spaces shall be rounded up to the nearest whole number. A parking space served by electric vehicle supply equipment or designed as a future EV charging space shall count as at least one standard automobile parking space only for the purpose of complying with any applicable minimum parking space requirements established by a local jurisdiction. See Vehicle Code Section 22511.2 for further details.</p>			
<p><b>4.106.4.2 Multifamily development projects with less than 20 dwelling units; and hotels and motels with less than 20 sleeping units or guest rooms.</b>  The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to this section.</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p><b>1.EV Capable.</b> Ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at a minimum of 40 amperes.</p> <p>The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code.</p> <p>Exceptions:</p> <p>1. When EV chargers (Level 2 EVSE) are installed in a number equal to or greater than the required number of EV capable spaces.</p> <p>2. When EV chargers (Level 2 EVSE) are installed in a number less than the required number of EV capable spaces, the number of EV capable spaces required may be reduced by a number equal to the number of EV chargers installed.</p> <p>Notes:</p> <p>a. Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging.</p> <p>b. There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or EV chargers are installed for use.</p> <p><b>2.EV Ready.</b> Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per dwelling unit when more than one parking space is provided for use by a single dwelling unit.</p> <p>Exception: Areas of parking facilities served by parking lifts.</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p><b>4.106.4.2.2 Multifamily development projects with 20 or more dwelling units, hotels and motels with 20 or more sleeping units or guest rooms.</b>  The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to this section.</p>			
<p><b>1.EV Capable.</b> Ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at a minimum of 40 amperes.</p> <p>The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code.</p> <p>Exception: When EV chargers (Level 2 EVSE) are installed in a number greater than five (5) percent of parking spaces required by Section 4.106.4.2.2, Item 3, the number of EV capable spaces required may be reduced by a number equal to the number of EV chargers installed over the five (5) percent required.</p> <p>Notes:</p> <p>a. Construction documents shall show locations of future EV spaces.</p> <p>b. There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or EV chargers are installed for use.</p> <p><b>2.EV Ready.</b> Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per dwelling unit when more than one parking space is provided for use by a single dwelling unit.</p> <p>Exception: Areas of parking facilities served by parking lifts.</p> <p><b>3.EV Chargers.</b> Five (5) percent of the total number of parking spaces shall be equipped with Level 2 EVSE. Where common use parking is provided, at least one EV charger shall be located in the common use parking area and shall be available for use by all residents or guests.</p> <p>When low power Level 2 EV charging receptacles or Level 2 EVSE are installed beyond the minimum required, an automatic load management system (ALMS) may be used to reduce the maximum required electrical capacity to each space served by the ALMS. The electrical system and any on-site distribution transformers shall have sufficient capacity to deliver at least 3.1 kW simultaneously to each EV charging station (EVCS) served by the ALMS. The branch circuit shall have a minimum capacity of 40 amperes, and installed EVSE shall have a capacity of not less than 30 amperes. ALMS shall not be used to reduce the minimum required electrical capacity to the required EV capable spaces.</p>			
<p><b>4.106.4.2.2.1 Electric vehicle charging stations (EVCS).</b>  Electric vehicle charging stations required by Section 4.106.4.2.2, Item 3, shall comply with Section 4.106.4.2.2.1.</p> <p>Exception: Electric vehicle charging stations serving public accommodations, public housing, motels and hotels shall not be required to comply with this section. See California Building Code, Chapter 11B, for applicable requirements.</p>			
<p><b>4.106.4.2.2.1.1 Location.</b>  EVCS shall comply with at least one of the following options:</p> <p>1. The charging space shall be located adjacent to an accessible parking space meeting the requirements of the California Building Code, Chapter 11A, to allow use of the EV charger from the accessible parking space.</p> <p>2. The charging space shall be located on an accessible route, as defined in the California Building Code, Chapter 2, to the building.</p> <p>Exception: Electric vehicle charging stations designed and constructed in compliance with the California Building Code, Chapter 11B, are not required to comply with Section 4.106.4.2.2.1.1 and Section 4.106.4.2.2.1.2, Item 3.</p>			
<p><b>4.106.4.2.2.1.2 Electric vehicle charging stations (EVCS) dimensions.</b>  The charging spaces shall be designed to comply with the following:</p> <p>1. The minimum length of each EV space shall be 18 feet (5486 mm).</p> <p>2. The minimum width of each EV space shall be 9 feet (2743 mm).</p> <p>3. One in every 25 charging spaces, but not less than one, shall also have an 8-foot (2438 mm) wide minimum aisle. A 5-foot (1524 mm) wide minimum aisle shall be permitted provided the minimum width of the EV space is 12 feet (3658 mm).</p> <p>a. Surface slope for this EV space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction.</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p><b>4.106.4.2.2.1.3 Accessible EV spaces.</b>  In addition to the requirements in Sections 4.106.4.2.2.1.1 and 4.106.4.2.2.1.2, all EVSE, when installed, shall comply with the accessibility provisions for EV chargers in the California Building Code, Chapter 11B. EV ready spaces and EVCS in multifamily developments shall comply with California Building Code, Chapter 11A, Section 1109A.</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p><b>4.106.4.2.3 EV space requirements.</b>  1. Single EV space required. Install a listed raceway capable of accommodating a 208/240-volt dedicated branch circuit. The raceway shall be not less than size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or enclosure in close proximity to the location or the proposed location of the EV space. Construction documents shall identify the raceway termination point, receptacle or charger location, as applicable. The service panel and/or subpanel shall have a 40-ampere minimum dedicated branch circuit, including branch circuit overcurrent protective device installed, or space(s) reserved to permit installation of a branch circuit overcurrent protective device.</p> <p>Exception: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the location or the proposed location of the EV space, at the time of original construction in accordance with the California Electrical Code.</p> <p>2. Multiple EV spaces required. Construction documents shall indicate the raceway termination point and the location of installed or future EV spaces, receptacles or EV chargers. Construction documents shall also provide information on ampereage of installed or future receptacles or EVSE, raceway method(s), wiring schematics and electrical load calculations. Plan design shall be based upon a 40-ampere minimum branch circuit. Required raceways and related components that are planned to be installed underground, enclosed, inaccessible or in concealed areas and spaces shall be installed at the time of original construction.</p>			

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**4.303.2 Sub buildings.** Subn Calif

**4.303.3 Sta** accordance 1701.1 of the

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KITCH-
METE
WATE
URINA

FIXTURE TYPE	FLOW RATE
SHOWER HEADS (RESIDENTIAL)	1.8 GPM @ 80 PSI
LAVATORY FAUCETS (RESIDENTIAL)	MAX. 1.2 GPM @ 60 PSI MIN. 0.8 GPM @ 20 PSI
LAVATORY FAUCETS IN COMMON & PUBLIC USE AREAS	0.5 GPM @ 60 PSI
KITCHEN FAUCETS	1.8 GPM @ 60 PSI
METERING FAUCETS	0.2 GAL/CYCLE
WATER CLOSET	1.28 GAL/FLUSH
URINALS	0.125 GAL/FLUSH

**DIRECT-VENT APPLIANCE.** A fuel-burning appliance with a sealed combustion system that draws all air for combustion from the outside atmosphere and discharges all flue gases to the outside atmosphere.







# 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

## RESIDENTIAL MANDATORY MEASURES, SHEET 2 (January 2023)

<p><b>MAXIMUM INCREMENTAL REACTIVITY (MIR).</b> The maximum change in weight of ozone formed by adding a compound to the "Base Reactive Organic Gas (ROG) Mixture" per weight of compound added, expressed to hundredths of a gram (g O<sub>3</sub>/g ROG).</p> <p><b>Note:</b> MIR values for individual compounds and hydrocarbon solvents are specified in CCR, Title 17, Sections 94700 and 94701.</p>																																																																					
<p><b>MOISTURE CONTENT.</b> The weight of the water in wood expressed in percentage of the weight of the oven-dry wood.</p>																																																																					
<p><b>PRODUCT-WEIGHTED MIR (PWMIR).</b> The sum of all weighted-MIR for all ingredients in a product subject to this article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging).</p> <p><b>Note:</b> PWMIR is calculated according to equations found in CCR, Title 17, Section 94521 (a).</p>																																																																					
<p><b>REACTIVE ORGANIC COMPOUND (ROC).</b> Any compound that has the potential, once emitted, to contribute to ozone formation in the troposphere.</p>																																																																					
<p><b>VOC.</b> A volatile organic compound (VOC) broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain hydrogen and may contain oxygen, nitrogen and other elements. See CCR Title 17, Section 94508(a).</p>																																																																					
<p><b>4.503 FIREPLACES</b></p> <p><b>4.503.1 GENERAL.</b> Any installed gas fireplace shall be a direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits. Woodstoves, pellet stoves and fireplaces shall also comply with applicable local ordinances.</p>																																																																					
<p><b>4.504 POLLUTANT CONTROL</b></p> <p><b>4.504.1 COVERING OF DUCT OPENINGS &amp; PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION.</b> At the time of rough installation, during storage on the construction site and until final startup of the heating, cooling and ventilating equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheet metal or other methods acceptable to the enforcing agency to reduce the amount of water, dust or debris which may enter the system.</p>																																																																					
<p><b>4.504.2 FINISH MATERIAL POLLUTANT CONTROL.</b> Finish materials shall comply with this section.</p>																																																																					
<p><b>4.504.2.1 Adhesives, Sealants and Caulks.</b> Adhesives, sealant and caulks used on the project shall meet the requirements of the following standards unless more stringent local or regional air pollution or air quality management district rules apply:</p> <ol style="list-style-type: none"> <li>1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable or SCAQMD Rule 1168 VOC limits, as shown in Table 4.504.1 or 4.504.2, as applicable. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and trichloroethylene), except for aerosol products, as specified in Subsection 2 below.</li> <li>2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than 1 pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of <i>California Code of Regulations</i>, Title 17, commencing with section 94507.</li> </ol>																																																																					
<p><b>4.504.2.2 Paints and Coatings.</b> Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Suggested Control Measure, as shown in Table 4.504.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 4.504.3 shall be determined by classifying the coating as a Flat, Nonflat or Nonflat-High Gloss coating, based on its gloss, as defined in subsections 4.21, 4.36, and 4.37 of the 2007 California Air Resources Board, Suggested Control Measure, and the corresponding Flat, Nonflat or Nonflat-High Gloss VOC limit in Table 4.504.3 shall apply.</p>																																																																					
<p><b>4.504.2.3 Aerosol Paints and Coatings.</b> Aerosol paints and coatings shall meet the Product-weighted MIR Limits for ROC in Section 94522(a)(2) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections 94522(e)(1) and (f)(1) of <i>California Code of Regulations</i>, Title 17, commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air Quality Management District additionally comply with the percent VOC by weight of product limits of Regulation 8, Rule 49.</p>																																																																					
<p><b>4.504.2.4 Verification.</b> Verification of compliance with this section shall be provided at the request of the enforcing agency. Documentation may include, but is not limited to, the following:</p> <ol style="list-style-type: none"> <li>1. Manufacturer's product specification.</li> <li>2. Field verification of on-site product containers.</li> </ol>																																																																					
<table border="1"> <thead> <tr> <th colspan="2">TABLE 4.504.1 - ADHESIVE VOC LIMIT<sub>1,2</sub></th> </tr> <tr> <th colspan="2">(Less Water and Less Exempt Compounds in Grams per Liter)</th> </tr> <tr> <th>ARCHITECTURAL APPLICATIONS</th> <th>VOC LIMIT</th> </tr> </thead> <tbody> <tr> <td>INDOOR CARPET ADHESIVES</td> <td>50</td> </tr> <tr> <td>CARPET PAD ADHESIVES</td> <td>50</td> </tr> <tr> <td>OUTDOOR CARPET ADHESIVES</td> <td>150</td> </tr> <tr> <td>WOOD FLOORING ADHESIVES</td> <td>100</td> </tr> <tr> <td>RUBBER FLOOR ADHESIVES</td> <td>60</td> </tr> <tr> <td>SUBFLOOR ADHESIVES</td> <td>50</td> </tr> <tr> <td>CERAMIC TILE ADHESIVES</td> <td>65</td> </tr> <tr> <td>VCT &amp; ASPHALT TILE ADHESIVES</td> <td>50</td> </tr> <tr> <td>DRYWALL &amp; PANEL ADHESIVES</td> <td>50</td> </tr> <tr> <td>COVE BASE ADHESIVES</td> <td>50</td> </tr> <tr> <td>MULTIPURPOSE CONSTRUCTION ADHESIVE</td> <td>70</td> </tr> <tr> <td>STRUCTURAL GLAZING ADHESIVES</td> <td>100</td> </tr> <tr> <td>SINGLE-PLY ROOF MEMBRANE ADHESIVES</td> <td>250</td> </tr> <tr> <td>OTHER ADHESIVES NOT LISTED</td> <td>50</td> </tr> <tr> <td colspan="2">SPECIALTY APPLICATIONS</td> </tr> <tr> <td>PVC WELDING</td> <td>510</td> </tr> <tr> <td>CPVC WELDING</td> <td>490</td> </tr> <tr> <td>ABS WELDING</td> <td>325</td> </tr> <tr> <td>PLASTIC CEMENT WELDING</td> <td>250</td> </tr> <tr> <td>ADHESIVE PRIMER FOR PLASTIC</td> <td>550</td> </tr> <tr> <td>CONTACT ADHESIVE</td> <td>80</td> </tr> <tr> <td>SPECIAL PURPOSE CONTACT ADHESIVE</td> <td>250</td> </tr> <tr> <td>STRUCTURAL WOOD MEMBER ADHESIVE</td> <td>140</td> </tr> <tr> <td>TOP &amp; TRIM ADHESIVE</td> <td>250</td> </tr> <tr> <td colspan="2">SUBSTRATE SPECIFIC APPLICATIONS</td> </tr> <tr> <td>METAL TO METAL</td> <td>30</td> </tr> <tr> <td>PLASTIC FOAMS</td> <td>50</td> </tr> <tr> <td>POROUS MATERIAL (EXCEPT WOOD)</td> <td>50</td> </tr> <tr> <td>WOOD</td> <td>30</td> </tr> <tr> <td>FIBERGLASS</td> <td>80</td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table>		TABLE 4.504.1 - ADHESIVE VOC LIMIT <sub>1,2</sub>		(Less Water and Less Exempt Compounds in Grams per Liter)		ARCHITECTURAL APPLICATIONS	VOC LIMIT	INDOOR CARPET ADHESIVES	50	CARPET PAD ADHESIVES	50	OUTDOOR CARPET ADHESIVES	150	WOOD FLOORING ADHESIVES	100	RUBBER FLOOR ADHESIVES	60	SUBFLOOR ADHESIVES	50	CERAMIC TILE ADHESIVES	65	VCT & ASPHALT TILE ADHESIVES	50	DRYWALL & PANEL ADHESIVES	50	COVE BASE ADHESIVES	50	MULTIPURPOSE CONSTRUCTION ADHESIVE	70	STRUCTURAL GLAZING ADHESIVES	100	SINGLE-PLY ROOF MEMBRANE ADHESIVES	250	OTHER ADHESIVES NOT LISTED	50	SPECIALTY APPLICATIONS		PVC WELDING	510	CPVC WELDING	490	ABS WELDING	325	PLASTIC CEMENT WELDING	250	ADHESIVE PRIMER FOR PLASTIC	550	CONTACT ADHESIVE	80	SPECIAL PURPOSE CONTACT ADHESIVE	250	STRUCTURAL WOOD MEMBER ADHESIVE	140	TOP & TRIM ADHESIVE	250	SUBSTRATE SPECIFIC APPLICATIONS		METAL TO METAL	30	PLASTIC FOAMS	50	POROUS MATERIAL (EXCEPT WOOD)	50	WOOD	30	FIBERGLASS	80		
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<p>1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED.</p>																																																																					
<p>2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168.</p>																																																																					

TABLE 4.504.2 - SEALANT VOC LIMIT	
(Less Water and Less Exempt Compounds in Grams per Liter)	
SEALANTS	VOC LIMIT
ARCHITECTURAL	250
MARINE DECK	760
NONMEMBRANE ROOF	300
ROADWAY	250
SINGLE-PLY ROOF MEMBRANE	450
OTHER	420
<b>SEALANT PRIMERS</b>	
ARCHITECTURAL	
NON-POROUS	250
POROUS	775
MODIFIED BITUMINOUS	500
MARINE DECK	760
OTHER	750

TABLE 4.504.3 - VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS <sup>2,3</sup>	
GRAMS OF VOC PER LITER OF COATING, LESS WATER & LESS EXEMPT COMPOUNDS	
COATING CATEGORY	VOC LIMIT
FLAT COATINGS	50
NON-FLAT COATINGS	100
NONFLAT-HIGH GLOSS COATINGS	150
<b>SPECIALTY COATINGS</b>	
ALUMINUM ROOF COATINGS	400
BASEMENT SPECIALTY COATINGS	400
BITUMINOUS ROOF COATINGS	50
BITUMINOUS ROOF PRIMERS	350
BOND BREAKERS	350
CONCRETE CURING COMPOUNDS	350
CONCRETE/MASONRY SEALERS	100
DRIVEWAY SEALERS	50
DRY FOG COATINGS	150
FAUX FINISHING COATINGS	350
FIRE RESISTIVE COATINGS	350
FLOOR COATINGS	100
FORM-RELEASE COMPOUNDS	250
GRAPHIC ARTS COATINGS (SIGN PAINTS)	500
HIGH TEMPERATURE COATINGS	420
INDUSTRIAL MAINTENANCE COATINGS	250
LOW SOLIDS COATINGS <sup>1</sup>	120
MAGNESITE CEMENT COATINGS	450
MASTIC TEXTURE COATINGS	100
METALLIC PIGMENTED COATINGS	500
MULTICOLOR COATINGS	250
PRETREATMENT WASH PRIMERS	420
PRIMERS, SEALERS, & UNDERCOATERS	100
REACTIVE PENETRATING SEALERS	350
RECYCLED COATINGS	250
ROOF COATINGS	50
RUST PREVENTATIVE COATINGS	250
SHELLACS	
CLEAR	730
OPAQUE	550
SPECIALTY PRIMERS, SEALERS & UNDERCOATERS	100
STAINS	250
STONE CONSOLIDANTS	450
SWIMMING POOL COATINGS	340
TRAFFIC MARKING COATINGS	100
TUB & TILE REFINISH COATINGS	420
WATERPROOFING MEMBRANES	250
WOOD COATINGS	275
WOOD PRESERVATIVES	350
ZINC-RICH PRIMERS	340

- GRAMS OF VOC PER LITER OF COATING, INCLUDING WATER & EXEMPT COMPOUNDS
- THE SPECIFIED LIMITS REMAIN IN EFFECT UNLESS REVISED LIMITS ARE LISTED IN SUBSEQUENT COLUMNS IN THE TABLE.
- VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, ARCHITECTURAL COATINGS SUGGESTED CONTROL MEASURE, FEB. 1, 2008. MORE INFORMATION IS AVAILABLE FROM THE AIR RESOURCES BOARD.

	Y	NA	RESPON PARTY	
				TABLE 4.504.5 - FORMALDEHYDE LIMITS.
				MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION
				PRODUCTCURRENT LIMIT
				HARDWOOD PLYWOOD VENEER CORE0.05
				HARDWOOD PLYWOOD COMPOSITE CORE0.05
				PARTICLE BOARD0.09
				MEDIUM DENSITY FIBERBOARD0.11
				THIN MEDIUM DENSITY FIBERBOARD;0.13
				1. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIF. AIR RESOURCES BOARD, AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD AS TESTED IN ACCORDANCE WITH ASTM E 1333. FOR ADDITIONAL INFORMATION, SEE CALIF. CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 THROUGH 93120.12.
				2. THIN MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM THICKNESS OF 5/16" (8 MM).
				DIVISION 4.5 ENVIRONMENTAL QUALITY (continued)
				4.504.3 CARPET SYSTEMS. All carpet installed in the building interior shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specification 01350)
				See California Department of Public Health's website for certification programs and testing labs.  https://www.cdph.ca.gov/Programs/CDC/PHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.
				4.504.3.1 Carpet cushion. All carpet cushion installed in the building interior shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specification 01350)
				See California Department of Public Health's website for certification programs and testing labs.  https://www.cdph.ca.gov/Programs/CDC/PHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.
				4.504.3.2 Carpet adhesive. All carpet adhesive shall meet the requirements of Table 4.504.1.
				4.504.4 RESILIENT FLOORING SYSTEMS. Where resilient flooring is installed, at least 80% of floor area receiving resilient flooring shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specification 01350)
				See California Department of Public Health's website for certification programs and testing labs.  https://www.cdph.ca.gov/Programs/CDC/PHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.
				4.504.5 COMPOSITE WOOD PRODUCTS. Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the buildings shall meet the requirements for formaldehyde as specified in ARB's Air Toxics Control Measure for Composite Wood (17 CCR 93120 et seq.), by or before the dates specified in those sections, as shown in Table 4.504.5
				4.504.5.1 Documentation. Verification of compliance with this section shall be provided as requested by the enforcing agency. Documentation shall include at least one of the following:
				1. Product certifications and specifications.
				2. Chain of custody certifications.
				3. Product labeled and invoiced as meeting the Composite Wood Products regulation (see CCR, Title 17, Section 93120, et seq.).
				4. Exterior grade products marked as meeting the PS-1 or PS-2 standards of the Engineered Wood Association, the Australian AS/NZS 2269, European 636 3S standards, and Canadian CSA 0121, CSA 0151, CSA 0153 and CSA 0325 standards.
				5. Other methods acceptable to the enforcing agency.
				4.505 INTERIOR MOISTURE CONTROL
				4.505.1 General. Buildings shall meet or exceed the provisions of the California Building Standards Code.
				4.505.2 CONCRETE SLAB FOUNDATIONS. Concrete slab foundations required to have a vapor retarder by California Building Code, Chapter 19, or concrete slab-on-ground floors required to have a vapor retarder by the California Residential Code, Chapter 5, shall also comply with this section.
				4.505.2.1 Capillary break. A capillary break shall be installed in compliance with at least one of the following:
				1. A 4-inch (101.6 mm) thick base of 1/2 inch (12.7mm) or larger clean aggregate shall be provided with a vapor barrier in direct contact with concrete and a concrete mix design, which will address bleeding, shrinkage, and curling, shall be used. For additional information, see American Concrete Institute, ACI 302.2R-06.
				2. Other approved methods approved by the enforcing agency.
				3. A slab design specified by a licensed design professional.
				4.505.3 MOISTURE CONTENT OF BUILDING MATERIALS. Building materials with visible signs of water damage shall not be installed, and floor framing shall not be enclosed when the framing members exceed 19 percent moisture content. Moisture content shall be verified in compliance with the following:
				1. Moisture content shall be determined with either a probe-type or contact-type moisture meter. Equivalent moisture verification methods may be approved by the enforcing agency and shall satisfy requirements found in Section 101.8 of this code.
				2. Moisture readings shall be taken at a point 2 feet (610 mm) to 4 feet (1219 mm) from the grade stamped end of each piece verified.
				3. At least three random moisture readings shall be performed on wall and floor framing with documentation acceptable to the enforcing agency provided at the time of approval to enclose the wall and floor framing.
				Insulation products which are visibly wet or have a high moisture content shall be replaced or allowed to dry prior to enclosure in wall or floor cavities. Wet-applied insulation products shall follow the manufacturers' drying recommendations prior to enclosure.
				4.506 INDOOR AIR QUALITY AND EXHAUST
				4.506.1 Bathroom exhaust fans. Each bathroom shall be mechanically ventilated and shall comply with the following:
				1. Fans shall be ENERGY STAR compliant and be ducted to terminate outside the building.
				2. Unless functioning as a component of a whole house ventilation system, fans must be controlled by a humidity control.
				a. Humidity controls shall be capable of adjustment between a relative humidity range less than or equal to 50% to a maximum of 80%. A humidity control may utilize manual or automatic means of adjustment.
				b. A humidity control may be a separate component to the exhaust fan and is not required to be integral (i.e., built-in)
				Notes:
				1. For the purposes of this section, a bathroom is a room which contains a bathtub, shower or tub/shower combination.
				2. Lighting integral to bathroom exhaust fans shall comply with the California Energy Code.
				4.507 ENVIRONMENTAL COMFORT
				4.507.2 HEATING AND AIR-CONDITIONING SYSTEM DESIGN. Heating and air conditioning systems shall be sized, designed and have their equipment selected using the following methods:
				1. The heat loss and heat gain is established according to ANSI/ACCA 2 Manual J - 2011 (Residential Load Calculations), ASHRAE handbooks or other equivalent design software or methods.
				2. Duct systems are sized according to ANSI/ACCA 1 Manual D - 2014 (Residential Duct Systems), ASHRAE handbooks or other equivalent design software or methods.
				3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S - 2014 (Residential Equipment Selection), or other equivalent design software or methods.
				Exception: Use of alternate design temperatures necessary to ensure the system functions are acceptable.

## CHAPTER 7

### INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS

#### 702 QUALIFICATIONS

##### 702.1 INSTALLER TRAINING.

HVAC system installers shall be trained and certified in the proper installation of HVAC systems including ducts and equipment by a nationally or regionally recognized training or certification program. Uncertified persons may perform HVAC installations when under the direct supervision and responsibility of a person trained and certified to install HVAC systems or contractor licensed to install HVAC systems. Examples of acceptable HVAC training and certification programs include but are not limited to the following:

1. State certified apprenticeship programs.
2. Public utility training programs.
3. Training programs sponsored by trade, labor or statewide energy consulting or verification organizations.
4. Programs sponsored by manufacturing organizations.
5. Other programs acceptable to the enforcing agency.

##### 702.2 SPECIAL INSPECTION [HCD].

When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition to other certifications or qualifications acceptable to the enforcing agency, the following certifications or education may be considered by the enforcing agency when evaluating the qualifications of a special inspector:

1. Certification by a national or regional green building program or standard publisher.
2. Certification by a statewide energy consulting or verification organization, such as HERS raters, building performance contractors, and home energy auditors.
3. Successful completion of a third party apprentice training program in the appropriate trade.
4. Other programs acceptable to the enforcing agency.

**Notes:**

1. Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.
2. HERS raters are special inspectors certified by the California Energy Commission (CEC) to rate homes in California according to the Home Energy Rating System (HERS).

[BSC] When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition, the special inspector shall have a certification from a recognized state, national or international association, as determined by the local agency. The area of certification shall be closely related to the primary job function, as determined by the local agency.

**Note:** Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.

#### 703 VERIFICATIONS

##### 703.1 DOCUMENTATION.

Documentation used to show compliance with this code shall include but is not limited to, construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which demonstrate substantial conformance. When specific documentation or special inspection is necessary to verify compliance, that method of compliance will be specified in the appropriate section or identified applicable checklist.



Signature

CLIENT INFORMATION:

1. Certification by a national or regional green building program or standard publisher.
2. Certification by a statewide energy consulting or verification organization, such as HERS raters, building performance contractors, and home energy auditors.
3. Successful completion of a third party apprentice training program in the appropriate trade.
4. Other programs acceptable to the enforcing agency.

**Notes:**

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**Note:** Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.

## 703 VERIFICATIONS

**703.1 DOCUMENTATION.** Documentation used to show compliance with this code shall include but is not limited to, construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which demonstrate substantial conformance. When specific documentation or special inspection is necessary to verify compliance, that method of compliance will be specified in the appropriate section or identified applicable checklist.

PROJECT NAME:

MIRADERO - RESIDENCE  
NEW CONSTRUCTION  
0 MIRADERO AVENUE  
SAN JOSE, CALIFORNIA 95127  
APN: 612-04-048

DATE:  
3/29/2023  
SHEET TITLE:

CAL GREEN  
SHEET 2

SHEET NUMBER:

# G-2



0 Miradero Ave, San Jose, CA 95127  
Project Address

PLN23-035  
Project File Number

APN 612-04-048

## Color/Materials Board\*

### Roof

charcoal / GAF roof shingle

Manufacture & Material  
Product Name, Number



### Door & Window Frames, Railings

HOME DEPOT / White

Manufacture / Number  
Color Name, LRV



### Trim

Manufacture / Number  
Color Name, LRV



### Exterior Walls

WILD TRUFFLE Behr paint

Manufacture / Number  
Color Name, LRV



### Architectural Accents (Ex. Stone Veneer)

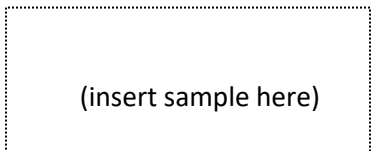
Manufacture / Number  
Color Name, LRV



### Retaining Walls

STONE GRAY

Manufacture / Number  
Color Name, LRV



(insert sample here)

\*This information shall also be provided on the elevation drawings in the plans.

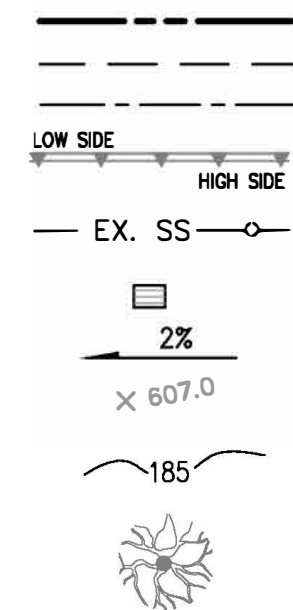
1/24/2019





LEGEND

SYMBOL

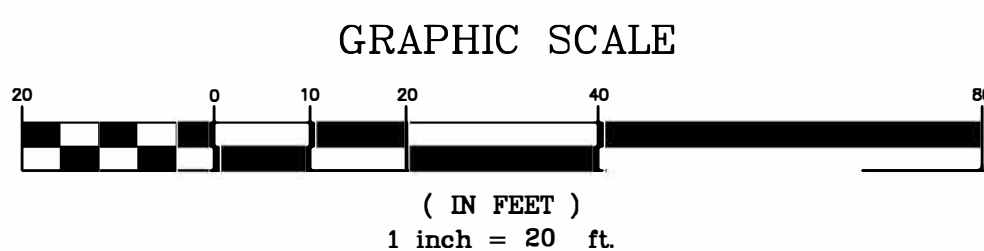


DESCRIPTIONS

BOUNDARY / RIGHT-OF-WAY LINE  
EASEMENT LINE  
CENTERLINE (CL)  
RETAINING WALL  
SANITARY SEWER LINE AND  
MANHOLE OR CLEANOUT  
DRAIN INLET  
PERCENT GRADE  
EXISTING GRADE ELEVATION  
EXISTING CONTOUR w/ ELEVATION  
EXISTING TREE w/ DBH

ABBREVIATIONS

AC AIR CONDITIONER UNIT  
AD AREA DRAIN  
BSW BACK OF WALK  
BW BOTTOM OF WALL (EXPOSED FACE)  
CONC. CONCRETE  
DBH DIAMETER AT BREAST HEIGHT  
DI DRAIN INLET  
DS DOWNSPOUT  
EP EDGE OF PAVEMENT  
EM ELECTRIC METER  
EX EXISTING  
FF FINISHED FLOOR ELEVATION  
FG FINISHED GRADE ELEVATION  
FL FLOW LINE ELEVATION  
FW FACE OF WALL  
GM GAS METER  
MB MAIL BOX  
O/H OVERHEAD  
PL PROPERTY LINE  
PUE PUBLIC UTILITY EASEMENT  
R= RADIUS OF CURVE  
Δ= INCLUDED ANGLE OF CURVE  
L= LENGTH OF CURVE  
WM WATER METER



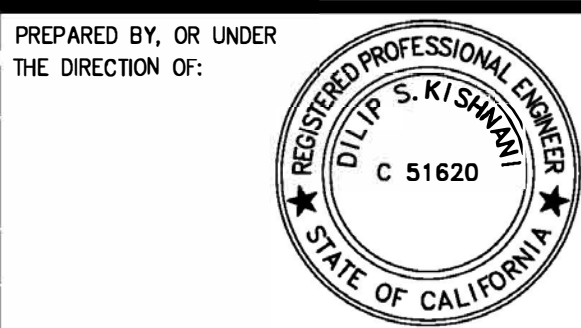
BENCHMARK: ELEVATIONS ASSUMED

BASIS OF BEARINGS: CALCULATED BEARING OF N57°52'24"W BETWEEN A FOUND 1" IRON PIPE HELD AS THE PROPERTY CORNER AT THE NEELY TERMINUS OF THE COURSE LISTED AS N56°42'E 408.88' AND A FOUND 1" IRON PIPE IN WELL MONUMENT AT THE MOST WESTERLY CORNER OF THAT CERTAIN 0.191 AC R/W PARCEL AS SHOWN ON THAT CERTAIN RECORD OF SURVEY RECORDED SEP. 19, 1956 IN BOOK 74 OF MAPS AT PAGE 45, SANTA CLARA COUNTY RECORDS.

BOUNDARY: BOUNDARY BASED UPON FIELD SURVEY PERFORMED BY HELMUT KORSTICK, PLS 7739 IN NOVEMBER 2017.



DATE: MAY 29, 2024					
SCALE: AS NOTED					
DRAWN: DSK					
DESIGNED: DSK					
ENGINEER: DSK					
MANAGER: DSK					
NO.	BY	DATE	REVISIONS	CITY	APPR



PREPARED BY:  
**STERLING CONSULTANTS**  
46560 FREMONT BOULEVARD, SUITE NO. 205  
FREMONT, CA 94538  
1sterlingconsultants@gmail.com PHONE: 510.344.8955

PREPARED FOR:  
SIVAPRAKASAM BALASUBRAMANIAN & RAMARAJ KALAISELVI  
10076 CABACHON COURT  
ELLICOTT CITY, MD 21042

APN: 612-04-048

BOUNDARY AND TOPOGRAPHIC SURVEY

CITY OF SAN JOSE

SANTA CLARA COUNTY

CALIFORNIA

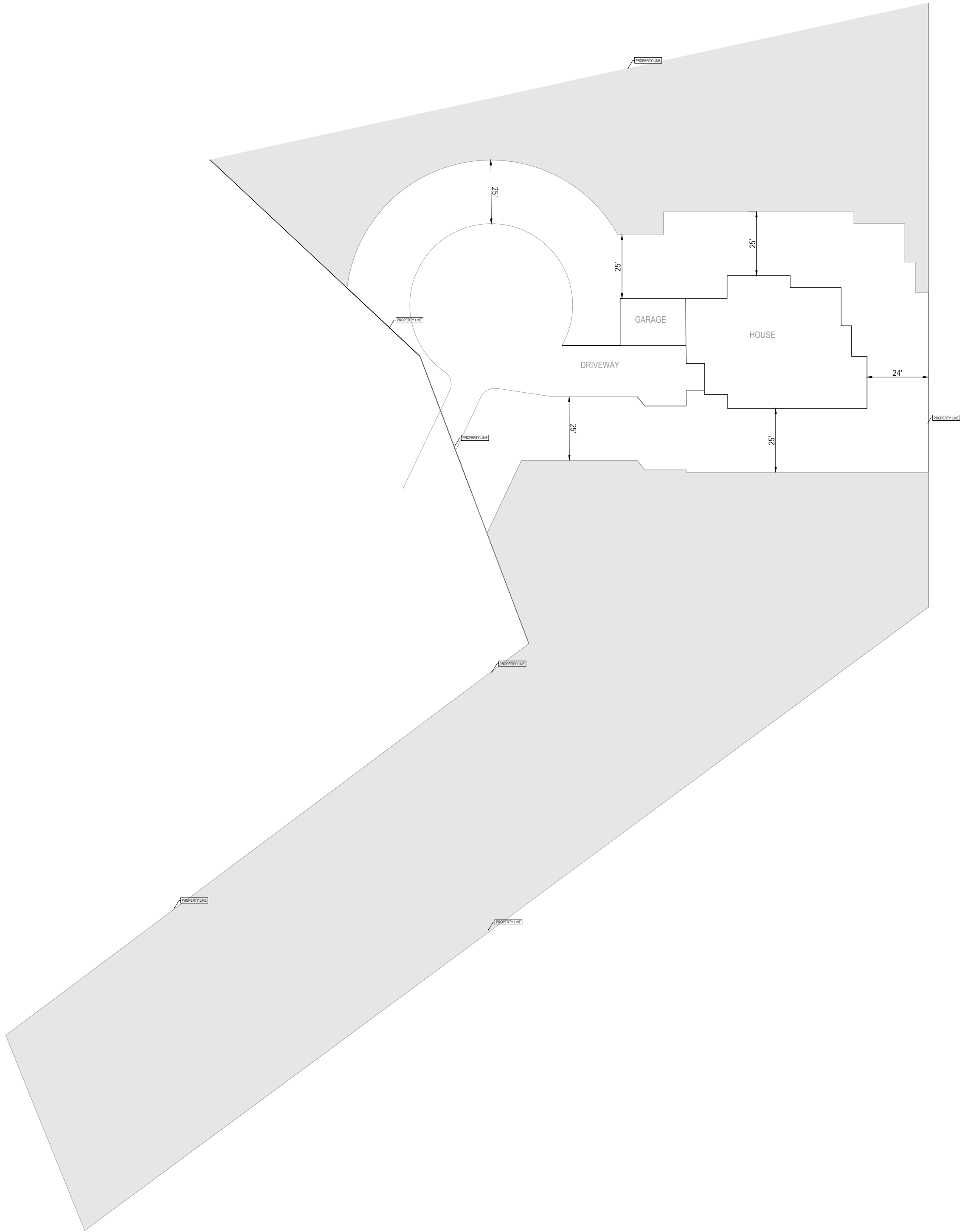
MIRADERO AVE.

SHEET NO.

1

JOB NO. 2016-249





$S = \frac{L}{A} \times 100$ , where  
S is the average slope of the area in percent  
L is the combined length of contour lines in feet  
A=21803 SF (Developed Area)  
SO,  
 $S = \frac{5 \times 2176}{21803} \times 100$   
=49.92%



**CECILIA HOME**  
WWW.CECILIA123.COM  
CHIEF ENGINEER: LEI ZHENG (MASON)  
PHONE: (510) 909-1933  
EMAIL: ENGINEER.LEI@GMAIL.COM

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0 Miradero Ave, San Jose,  
CA 95127

REV.	DESCRIPTION	DATE
0	APPLY FOR PERMITS	05-10-2024

Jurisdiction:

Licensor:



SHEET TITLE:  
**AVERAGE SLOPE**

SHEET NUMBER:



PROPERTY INFO

OWNER:

MR SIVAPRAKASAM  
BALASUBRAMANIAN & MRS.  
RAMARAJ KALAISELVI

PROJECT ADDRESS:

0 MIRADERO AVENUE  
SAN JOSE, CALIFORNIA 95127  
612-04-048

APN:

612-04-048

LOT AREA:

71.744 SQ.FT.

PARCEL AREA (Acres):

1.650 ACRES

PROPERTY TYPE:

SINGLE FAMILY RESIDENTIAL

LEGAL DESCPT.:

-----

ZONING:

HS

OCCUPANCY GROUP:

R3/U

JURISDICTION:

SAN JOSE

YEAR BUILT:

-----

CONSTRUCT TYPE:

V-B

FIRE SPRINKLER:

NO

NOTES

1. ALL LANDSCAPE AREAS SHALL HAVE POSITIVE SURFACE DRAINAGE OF TWO PERCENT (2%) MINIMUM.

LEGEND

GRASS GARDEN

DRIVEWAY & WALKWAY  
CONCRETE

ROCK / GRAVEL

MULCH

RAIN WATER FLOW (2% MIN.)

WG

WATER GUM  
(TRISTANIOPSIS LAURINA)

PR

PHOENIX ROEBELENI  
(PIGMEO DATE PALM)

BP

BIRD OF PARADISE  
(STRELITZIA REGINAE)

OG

OGON  
(ARCORUS GRAMINEUS)

OR

ORANGE  
(CITRUS SPP)

EL

ERYSIMUM LINIFOLIUM  
(POURR. EX PERS)

EC

ERYSIMUM CHEIRI CHEIRANTHUS ALLIONII  
(CHEIRANTHUS)

FT

FRINGE TREE  
(CHIONANTHUS VIRNICUS)

CH

CHERRY  
(PRUNUS SPP)

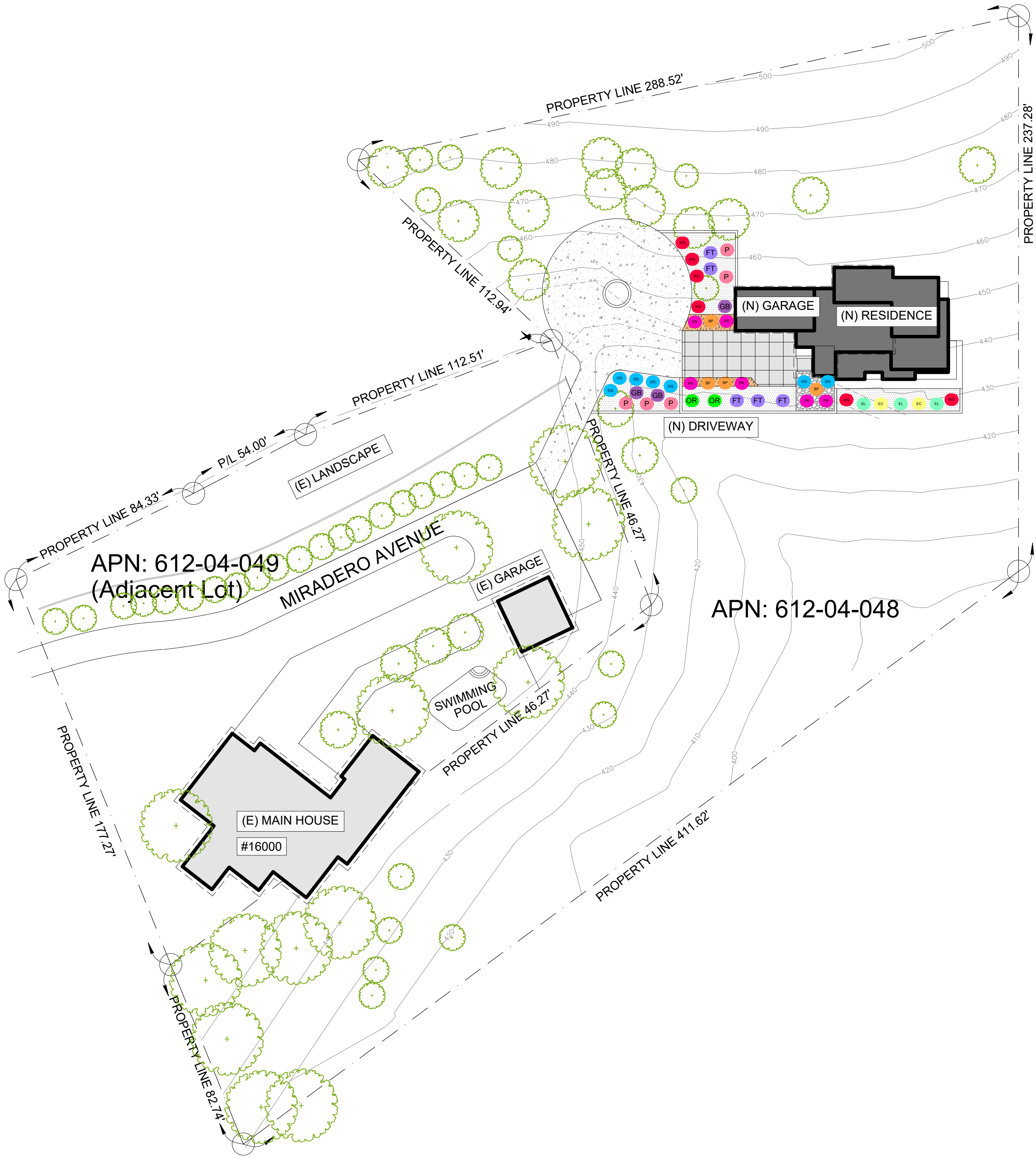
P

PRIVET  
(LIGUSTRUM JAPONICUM)

GB

GINKGO  
(GINKGO BILOBA)

EXISTING TREE



1 LANDSCAPE PLAN

SCALE: 1/32"-1'-0"

North

WG WATER GUM (TRISTANIOPSIS LAURINA)	PR PHOENIX ROEBELENI (PIGMEO DATE PALM)	BP BIRD OF PARADISE (STRELITZIA REGINAE)
OG OGON (ARCORUS GRAMINEUS)	OR ORANGE (CITRUS SPP)	EL ERYSIMUM LINIFOLIUM (POURR. EX PERS)
EC ERYSIMUM CHEIRI CHEIRANTHUS (CHEIRANTHUS)	FT FRINGE TREE (CHIONANTHUS VIRNICUS)	CH CHERRY (PRUNUS SPP)
P PRIVET (LIGUSTRUM JAPONICUM)	GB GINKGO (GINKGO BILOBA)	

RESIDENTIAL | COMMERCIAL | INDUSTRIAL  
ARCHITECTURAL & SOLAR PLANS  
308 E 2ND STREET, SUITE C  
LONG BEACH, CA 90803  
Email: solarmax.dsgn@gmail.com  
Web: www.solarmaxdsgn.com  
Phone: (310) 844-7370 &  
(310) 740-9649

Signature

OWNER:

MR SIVAPRAKASAM  
BALASUBRAMANIAN &  
MRS. RAMARAJ KALAISELVI

CONSULTANTS:

SEAL:

PROJECT NAME:

MIRADERO - RESIDENCE  
NEW CONSTRUCTION

0 MIRADERO AVENUE  
SAN JOSE, CALIFORNIA 95127  
APN: 612-04-048

REV: DESCRIPTION: DATE:

A

B

C

DATE:

5/8/2024

SHEET TITLE:

LANDSCAPE

SHEET NUMBER:

L-1

FULL SIZE PRINT: D = 24"X36"



# PRELIMINARY GRADING PLAN

## FOR

# ACCESSORY DWELLING UNIT

0 Miradero Ave, San Jose, CA 95127

### GENERAL NOTES

- ALL CONSTRUCTION WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE SOILS AND/OR GEOTECHNICAL REPORT PREPARED BY DATED. THIS REPORT IS SUPPLEMENTED BY: 1) THESE PLANS AND SPECIFICATIONS; 2) THE COUNTY OF SANTA CLARA STANDARD DETAILS; 3) THE COUNTY OF SANTA CLARA STANDARD SPECS; 4) STATE OF CALIFORNIA STANDARD DETAILS; 5) STATE OF CALIFORNIA STANDARD SPECIFICATIONS. IN THE EVENT OF CONFLICT THE FORMER SHALL TAKE PRECEDENCE OVER THE LATTER. THE PERFORMANCE AND COMPLETION OF ALL WORK MUST BE TO THE SATISFACTION OF THE COUNTY.
- DEVELOPER IS RESPONSIBLE FOR INSTALLATION OF THE IMPROVEMENTS SHOWN ON THESE PLANS AND HE OR HIS SUCCESSOR PROPERTY OWNERS ARE RESPONSIBLE FOR THEIR CONTINUED MAINTENANCE.
- DEVELOPER SHALL BE RESPONSIBLE FOR CORRECTION OF ANY ERRORS OR OMISSIONS IN THESE PLANS. THE COUNTY SHALL BE AUTHORIZED TO REQUIRE DISCONTINUANCE OF ANY WORK AND SUCH CORRECTION AND MODIFICATION OF PLANS AS MAY BE NECESSARY TO COMPLY WITH COUNTY STANDARDS OR CONDITIONS OF DEVELOPMENT APPROVAL.
- DEVELOPER SHALL OBTAIN ENCROACHMENT PERMITS FROM THE SANTA CLARA VALLEY WATER DISTRICT AND CALIFORNIA DEPARTMENT OF TRANSPORTATION WHERE NEEDED. COPIES OF THESE PERMITS SHALL BE KEPT AT THE JOB SITE FOR REVIEW BY THE COUNTYS INSPECTOR.
- DEVELOPER SHALL REMOVE OR TRIM ALL TREES TO PROVIDE AN UNOBSTRUCTED FIFTEEN (15) FOOT VERTICAL CLEARANCE FOR ROADWAY AREA.
- THIS PLAN AUTHORIZES THE REMOVAL OF ONLY THOSE TREES WITH TRUNK DIAMETERS GREATER THAN 12 INCHES MEASURED 4.5 FEET ABOVE THE GROUND THAT ARE SHOWN TO BE REMOVED UNLESS AN AMENDED PLAN IS APPROVED OR A SEPARATE TREE REMOVAL PERMIT IS OBTAINED FROM THE PLANNING OFFICE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT REMOVAL OF ADDITIONAL TREES HAS BEEN PERMITTED.
- DEVELOPER SHALL PROVIDE ADEQUATE DUST CONTROL AS REQUIRED BY THE COUNTY INSPECTOR.
- ALL PERSONS MUST COMPLY WITH SECTION 4442 OF THE PUBLIC RESOURCES CODE AND SECTION 13005 OF THE HEALTH AND SAFETY CODE RELATING TO THE USE OF SPARK ARRESTERS.
- UPON DISCOVERING OR UNEARTHING ANY BURIAL SITE AS EVIDENCED BY HUMAN SKELETAL REMAINS OR ARTIFACTS, THE PERSON MAKING SUCH DISCOVERY SHALL IMMEDIATELY NOTIFY THE COUNTY CORONER AT (408) 454-2520 AND LAND DEVELOPMENT ENGINEERING OFFICE AT (408) 299-5730. NO FURTHER DISTURBANCE OF THE SITE MAY BE MADE EXCEPT AS AUTHORIZED BY THE LAND DEVELOPMENT OFFICE IN ACCORD WITH PROVISIONS OF THIS ORDINANCE (COUNTY ORDINANCE CODE SECTION B6-18).
- THESE PLANS ARE FOR THE WORK DESCRIBED IN THE SCOPE OF WORK ONLY. A SEPARATE PERMIT WILL BE REQUIRED FOR THE SEPTIC LINE CONSTRUCTION.
11. ANY DEVIATION FROM THESE APPROVED PLANS SHALL BE RE-APPROVED IN WRITING BY THE COUNTY ENGINEER PRIOR TO CONSTRUCTION.

### CONSTRUCTION STAKING

- THE DEVELOPER'S ENGINEER IS RESPONSIBLE FOR THE INITIAL PLACEMENT AND REPLACEMENT OF CONSTRUCTION GRADE STAKES, THE STAKES ARE TO BE ADEQUATELY IDENTIFIED, LOCATED, STABILIZED, ETC. FOR THE CONVENIENCE OF CONTRACTORS. LATERAL OFFSET OF STAKES SET FOR CURBS AND GUTTERS SHALL NOT EXCEED 2 1/2 FEET FROM BACK OF CURB.
- ANY PROPERTY LINE STAKES OR ROAD MONUMENTS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY DEVELOPER'S ENGINEER AND LICENSED LAND SURVEYOR.
- PROPERTY LINE STAKING MUST BE PERFORMED BY THE PROJECT ENGINEER OR LAND SURVEYOR TO ESTABLISH OR RE-ESTABLISH THE PROJECT BOUNDARY AND SHALL BE INSPECTED BY THE COUNTY INSPECTOR PRIOR TO THE BEGINNING OF THE WORK.
- PROPER CONSTRUCTION STAKES SHALL BE SET IN THE FIELD BY THE PROJECT ENGINEER OR LAND SURVEYOR AND VERIFIED BY THE COUNTY INSPECTOR PRIOR TO THE COMMENCEMENT OF GRADING.

### CONSTRUCTION INSPECTION

- CONTRACTOR SHALL NOTIFY PERMIT INSPECTION UNIT, SANTA CLARA COUNTY PRIOR TO COMMENCING WORK AND FOR FINAL INSPECTION OF WORK AND SITE.
- THE COUNTY REQUIRES A MINIMUM OF 24 HOURS ADVANCE NOTICE FOR GENERAL INSPECTION, 48 HOURS FOR ASPHALT CONCRETE INSPECTION.
- INSPECTION BY SANTA CLARA COUNTY SHALL BE LIMITED TO INSPECTION OF MATERIALS AND PROCESSES OF CONSTRUCTION TO OBSERVE THEIR COMPLIANCE WITH PLANS & SPECIFICATIONS BUT DOES NOT INCLUDE RESPONSIBILITY FOR THE SUPERINTENDANT OF CONSTRUCTION, SITE CONDITIONS, EQUIPMENT OR PERSONNEL. CONTRACTOR SHALL NOTIFY THE COUNTY LAND DEVELOPMENT INSPECTOR AT PHONE (408) 299-6868 AT LEAST 24 HOURS PRIOR TO COMMENCING WORK AND FOR FINAL INSPECTION OF WORK AND SITE.
- DEVELOPER AND/OR HIS AUTHORIZED REPRESENTATIVE MUST SUBMIT WRITTEN REQUEST FOR FINAL INSPECTION AND ACCEPTANCE. SAID REQUEST SHALL BE DIRECTED TO THE INSPECTION OFFICE NOTED ON THE PERMIT FORM.
- THE CONTRACTOR SHALL PROVIDE TO THE COUNTY CONSTRUCTION INSPECTOR WITH PAD ELEVATION AND LOCATION CERTIFICATES, PREPARED BY THE PROJECT ENGINEER OR LAND SURVEYOR, PRIOR TO COMMENCEMENT OF THE BUILDING FOUNDATION.

### SITE PREPARATION (CLEARING AND GRUBBING)

- EXISTING TREES AUTHORIZED FOR REMOVAL, ROOTS, AND FOREIGN MATERIAL IN AREAS TO BE IMPROVED WILL BE REMOVED TO AN AUTHORIZED DISPOSAL SITE AS FOLLOWS:
  - TO A MINIMUM DEPTH OF TWO FEET BELOW THE FINISHED GRADE OF PROPOSED ROADWAYS (EITHER PRIVATE OR TO BE DEDICATED TO PUBLIC USE)
  - FROM AREAS AFFECTED BY THE PROPOSED GRADING EXCEPT WHERE NOTED ON THE PLANS.
- IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO MOVE OR RELOCATE UTILITY POLES AND OTHER OBSTRUCTIONS IN THE WAY OF CONSTRUCTION.

### UTILITY LOCATION, TRENCHING & BACKFILL

- CONTRACTOR SHALL NOTIFY USA (UNDERGROUND SERVICE ALERT) AT 1-800-277-2600 A MINIMUM OF 24 HOURS BEFORE BEGINNING UNDERGROUND WORK FOR VERIFICATION OF THE LOCATION OF UNDERGROUND UTILITIES.
- ACCURATE VERIFICATION AS TO SIZE, LOCATION, AND DEPTH OF EXISTING UNDERGROUND CONDUITS OR FACILITIES SHALL BE THE INDIVIDUAL CONTRACTORS RESPONSIBILITY. PLAN LOCATIONS ARE APPROXIMATE AND FOR GENERAL INFORMATION ONLY.
- ALL UNDERGROUND INSTALLATIONS SHALL BE IN PLACE AND THE TRENCH BACKFILLED AND COMPACTED BEFORE PLACING AGGREGATE BASE MATERIAL OR SURFACE STRUCTURES. SURFACING MAY BE DONE IF THE UTILITY COMPANY CONCERNED INDICATES BY LETTER THAT IT WILL BORE UNLESS SPECIFICALLY AUTHORIZED BY THE COUNTY. GAS AND WATER MAINS SHALL BE INSTALLED OUTSIDE THE PAVED AREAS.
- TRENCH BACKFILL IN EXISTING PAVEMENT AREAS SHALL BE SAND MATERIAL IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE SPECIFICATIONS. THE STRUCTURAL SECTION FOR TRENCH REPLACEMENT SHALL CONSIST OF NOT LESS THAN 12 INCHES OF APPROVED AGGREGATE BASE MATERIAL COMPACTED TO A RELATIVE COMPACTION OF AT LEAST 98% AND 4 INCHES OF HOT ASPHALT CONCRETE PLACED IN TWO LIFTS. TRENCH RESTORATION FOR HIGHER TYPE PAVEMENTS SHALL BE MADE IN KIND OR AS DIRECTED BY THE COUNTY.
- TRENCH BACKFILL IN NEW CONSTRUCTION AREAS SHALL BE SAND MATERIAL COMPACTED TO A RELATIVE COMPACTION OF AT LEAST 90%. THE REQUIREMENT FOR SELECT MATERIAL MAY BE WAIVED BY COUNTY IF THE NATIVE SOIL IS SUITABLE FOR USE AS TRENCH BACKFILL BUT THE COMPACTION REQUIREMENTS WILL NOT BE THEREBY WAIVED.
- BACKFILL AND TRENCH RESTORATION REQUIREMENTS SHALL APPLY AS MINIMUM STANDARDS TO ALL UNDERGROUND FACILITIES INSTALLED BY OTHER FIRMS OR PUBLIC AGENCIES.

### RETAINING WALL

- REINFORCED CONCRETE AND CONCRETE MASONRY UNIT RETAINING WALLS SHALL HAVE FOUNDATION AND REINFORCEMENT INSPECTED BY THE COUNTY ENGINEERING INSPECTOR AND ENGINEER OF RECORD PRIOR TO POURING THE FOUNDATION AND FORMING THE WALL.
- SEGMENTAL BLOCK RETAINING WALLS SHALL HAVE FOUNDATION AND REINFORCEMENT INSPECTED BY THE COUNTY ENGINEERING INSPECTOR.

### GRADING NOTES

- EXCAVATED MATERIAL SHALL BE PLACED IN THE FILL AREAS DESIGNATED OR SHALL BE HAULED AWAY FROM THE SITE TO A COUNTY APPROVED DISPOSAL SITE. WHERE FILL MATERIAL IS TO BE PLACED ON NATURAL GROUND, IS SHALL BE STRIPPED OF ALL VEGETATION TO ACHIEVE A PROPER BOND WITH THE FILL MATERIAL. THE SURFACE OF THE GROUND SHALL BE SCARIFIED TO DEPTH OF 6" BEFORE FILL IS PLACED. WHERE NATURAL GROUND IS STEEPER THAN 4:1, IT SHALL BE BENCHED AND THE FILL KEYED IN TO ACHIEVE STABILITY. WHERE NEW FILL IS TO BE PLACED ON EXISTING FILL, THE EXISTING FILL SHALL BE REMOVED UNTIL MATERIAL COMPACTED TO 90% RELATIVE COMPACTION IS EXPOSED. THEN THE NEW FILL MATERIAL SHALL BE PLACED AS PER THESE CONSTRUCTION NOTES. FILL MATERIAL SHALL BE PLACED IN UNIFORM LIFTS NOT EXCEEDING 6" IN UNCOMPACTED THICKNESS. BEFORE COMPACTION BEGINS, THE FILL SHALL BE BROUGHT TO A WATER CONTENT THAT WILL PERMIT PROPER COMPACTION BY EITHER 1) AERATING THE FILL IF IT IS TOO WET OR 2) MOISTENING THE FILL WITH WATER IF IT IS TOO DRY. EACH LIFT SHALL BE THOROUGHLY MIXED BEFORE COMPACTION TO ENSURE A UNIFORM DISTRIBUTION OF MOISTURE.
- EXCESS CUT MATERIAL SHALL NOT BE SPREAD OR STOCKPILED ON THE SITE.
- SURPLUS EARTH FILL MATERIAL SHALL BE PLACED IN A SINGLE (8" MAX) THICK LAYER COMPACTED TO WITHSTAND WEATHERING IN THE AREA(S) Delineated ON THE PLAN.
- NO ORGANIC MATERIAL SHALL BE PLACED IN ANY FILL. NO TREES SHALL BE REMOVED OUTSIDE OF CUT, FILL OR ROADWAY AREAS.
- THE UPPER 6" OF SUBGRADE BELOW DRIVEWAY ACCESS ROAD OR PARKING AREA SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY.
- MAXIMUM CUT SLOPE SHALL BE 2 HORIZONTAL TO 1 VERTICAL. MAXIMUM FILL SLOPE SHALL BE 2 HORIZONTAL TO 1 VERTICAL. NOTE: FILL VOLUMES INCLUDE 10% SHRINKAGE. EXCESS MATERIAL SHALL BE OFF HAULED TO A COUNTY APPROVED DUMP SITE.

LOCATION	CUT (C.Y.)	FILL (C.Y.)	IMPORT (C.Y.)	EXPORT (C.Y.)	VERT. DEPTH
RESIDENCE	597.3	87.6	-	509.7	10'
RETAINING WALL (DRIVEWAY)	2321.6	70.3	-	2251.3	15.5'
POOL/HARDSCAPE	-	-	-	-	-
LANDSCAPE	-	-	-	-	-
DRIVEWAY	196.3	9	-	187.3	6'
OFF SITE IMPROVEMENTS	-	-	-	-	-
TOTAL	3115.2	166.9	-	2948.3	-

- NOTE: FILL VOLUMES INCLUDE 10% SHRINKAGE.
- EXCESS MATERIAL SHALL BE OFF HAULED TO A COUNTY APPROVED DUMP SITE.
- NOTIFY SOILS ENGINEER TWO (2) DAYS PRIOR TO COMMENCEMENT OF ANY GRADING WORK TO COORDINATE THE WORK IN THE FIELD.
  - ALL MATERIALS FOR FILL SHOULD BE APPROVED BY THE SOILS ENGINEER BEFORE IT IS BROUGHT TO THE SITE.
  - THE UPPER 6" OF THE SUBGRADE SOIL SHALL BE SCARIFIED, MOISTURE CONDITIONED AND COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 95%.
  - ALL AGGREGATE BASE MATERIAL SHALL BE COMPACTED TO A MINIMUM 95% RELATIVE COMPACTION.
  - THE GEOTECHNICAL PLAN REVIEW LETTER MUST BE REVIEWED AND APPROVED BY THE COUNTY GEOLOGIST PRIOR TO FINAL APPROVAL BY THE COUNTY ENGINEER FOR BUILDING OCCUPANCY.
  - THE PROJECT GEOTECHNICAL ENGINEER SHALL PERFORM COMPACTION TESTING AND PRESENT THE RESULTS TO THE COUNTY ENGINEERING INSPECTOR PRIOR TO THE CONSTRUCTION OF ANY PAVED AREA.
  - GRADING WORK BETWEEN OCTOBER 15TH AND APRIL 15TH IS AT THE DISCRETION OF THE SANTA CLARA COUNTY GRADING OFFICIAL.
  - TOTAL DISTURBED AREA FOR THE PROJECT \_\_\_\_\_ SF.
  - VOID NO.
  - THE INSPECTOR MAY VERIFY THAT A VALID NOTICE OF INTENT (NOI) HAS BEEN ISSUED BY THE STATE AND THAT A CURRENT AND UP TO DATE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS AVAILABLE ON SITE.

### ACCESS ROADS AND DRIVEWAYS

- DRIVEWAY LOCATIONS SHALL BE AS SHOWN ON THE IMPROVEMENT PLANS WITH CENTERLINE STATIONING. THE MINIMUM CONCRETE THICKNESS SHALL BE 6 INCHES THROUGHOUT (WITH A MAXIMUM APPROACH SLOPE OF 1 1/4 INCHES PER FOOT).
- ALL DRIVEWAY OR COMMON ACCESS ROAD SECTIONS IN EXCESS OF 15 LONGITUDINAL SLOPE MUST BE PAVED WITH A MINIMUM 2-INCH ASPHALT LIFT OR FULL DEPTH CONCRETE LIFT PRIOR TO ANY COMBUSTIBLE FRAMING.
- THE OWNER AND PRIME CONTRACTOR ARE RESPONSIBLE FOR MAINTAINING PROJECT SITE ACCESS AND NEIGHBORHOOD ACCESS FOR EMERGENCY VEHICLES AND LOCAL RESIDENTS.
- ROADWAYS DESIGNATED AS NOT COUNTY MAINTAINED ROADS AS SHOWN ON THE PLAN WILL NOT BE ELIGIBLE FOR COUNTY MAINTENANCE UNTIL THE ROADWAYS ARE IMPROVED (AT NO COST TO THE COUNTY) TO THE PUBLIC MAINTENANCE ROAD STANDARDS APPROVED BY THE BOARD OF SUPERVISORS AND IN EFFECT AT SUCH TIME THAT THE ROADWAYS ARE CONSIDERED FOR ACCEPTANCE INTO THE COUNTY'S ROAD SYSTEM.
- ALL WORK IN THE COUNTY ROAD RIGHT-OF-WAY REQUIRES AN ENCROACHMENT PERMIT FROM THE ROADS AND AIRPORTS DEPARTMENT. EACH INDIVIDUAL ACTIVITY REQUIRES A SEPARATE PERMIT - I.E. CABLE, ELECTRICAL, GAS, SEWER, WATER, RETAINING WALLS, DRIVEWAY APPROACHES, FENCES, LANDSCAPING, TREE REMOVAL, STORM DRAINAGE IMPROVEMENTS, ETC.

### STREET LIGHTING

- PACIFIC GAS & ELECTRIC ELECTROLIER SERVICE FEE SHALL BE PAID BY THE DEVELOPER AND/OR HIS AUTHORIZED REPRESENTATIVE.

### SANITARY SEWER

- THE SANITARY SEWER AND WATER UTILITIES SHOWN ON THESE PLANS ARE NOT PART OF THIS GRADING PERMIT AND ARE SHOWN FOR REFERENCE ONLY.
- ALL MATERIALS AND METHODS OF CONSTRUCTION OF SANITARY SEWERS SHALL CONFORM TO THE SPECIFICATIONS OF THE JURISDICTION INVOLVED. INSPECTION OF SANITARY SEWER WORK SHALL BE DONE BY SAID JURISDICTION.

### PORTLAND CEMENT CONCRETE

- CONCRETE USED FOR STRUCTURAL PURPOSES SHALL BE CLASS "A" (6 SACK PER CUBIC YARD) AS SPECIFIED IN THE STATE STANDARD SPECIFICATIONS. CONCRETE PLACED MUST DEVELOP A MINIMUM STRENGTH FACTOR OF 2800 PSI IN A SEVEN-DAY PERIOD. THE CONCRETE MIX DESIGN SHALL BE UNDER THE CONTINUAL CONTROL OF THE COUNTY INSPECTOR.

### AS-BUILT PLANS STATEMENT

- THIS IS A TRUE COPY OF THE AS-BUILT PLANS. THERE (\_\_\_\_\_) (\_\_\_\_\_) WERE NOT MINOR FIELD CHANGES - MARKED WITH THE SYMBOL (\*). THERE (\_\_\_\_\_) WERE (\_\_\_\_\_) WERE NOT PLAN REVISIONS INDICATING SIGNIFICANT CHANGES REVIEWED BY THE COUNTY ENGINEER AND MARKED WITH THE SYMBOL Δ.

- |           |           |
|-----------|-----------|
| SIGNATURE | SIGNATURE |
| DATE      | DATE      |
- NOTE: THIS STATEMENT IS TO BE SIGNED BY THE PERSON AUTHORIZED BY THE COUNTY ENGINEER TO PERFORM THE INSPECTION WORK. A REPRODUCIBLE COPY OF THE AS-BUILT PLANS MUST BE FURNISHED TO THE COUNTY ENGINEER AFTER CONSTRUCTION.

### SHEET INDEX

- |                                 |     |
|---------------------------------|-----|
| TITLE SHEET                     | C-1 |
| PRECISE GRADING & DRAINAGE PLAN | C-2 |
| SECTIONS AND DETAILS            | C-3 |
| EROSION CONTROL PLAN            | C-4 |
| POLLUTION PREVENTION BMP        | C-5 |

#### OWNER

MR SIVAPRAKASAM BALASUBRAMANIAN  
& MRS. RAMARAJ KALAISELVI  
ADDRESS: 0 Miradero Ave, San Jose, CA 95127  
PHONE:  
EMAIL:

#### ARCHITECTURAL DESIGNER

NAME: SOLAR MAX DESIGN  
PHONE: (310) 740-9649 / (310) 844-7370  
EMAIL: solarmax.dsgn@gmail.com

#### STRUCTURAL ENGINEER PROVIDER

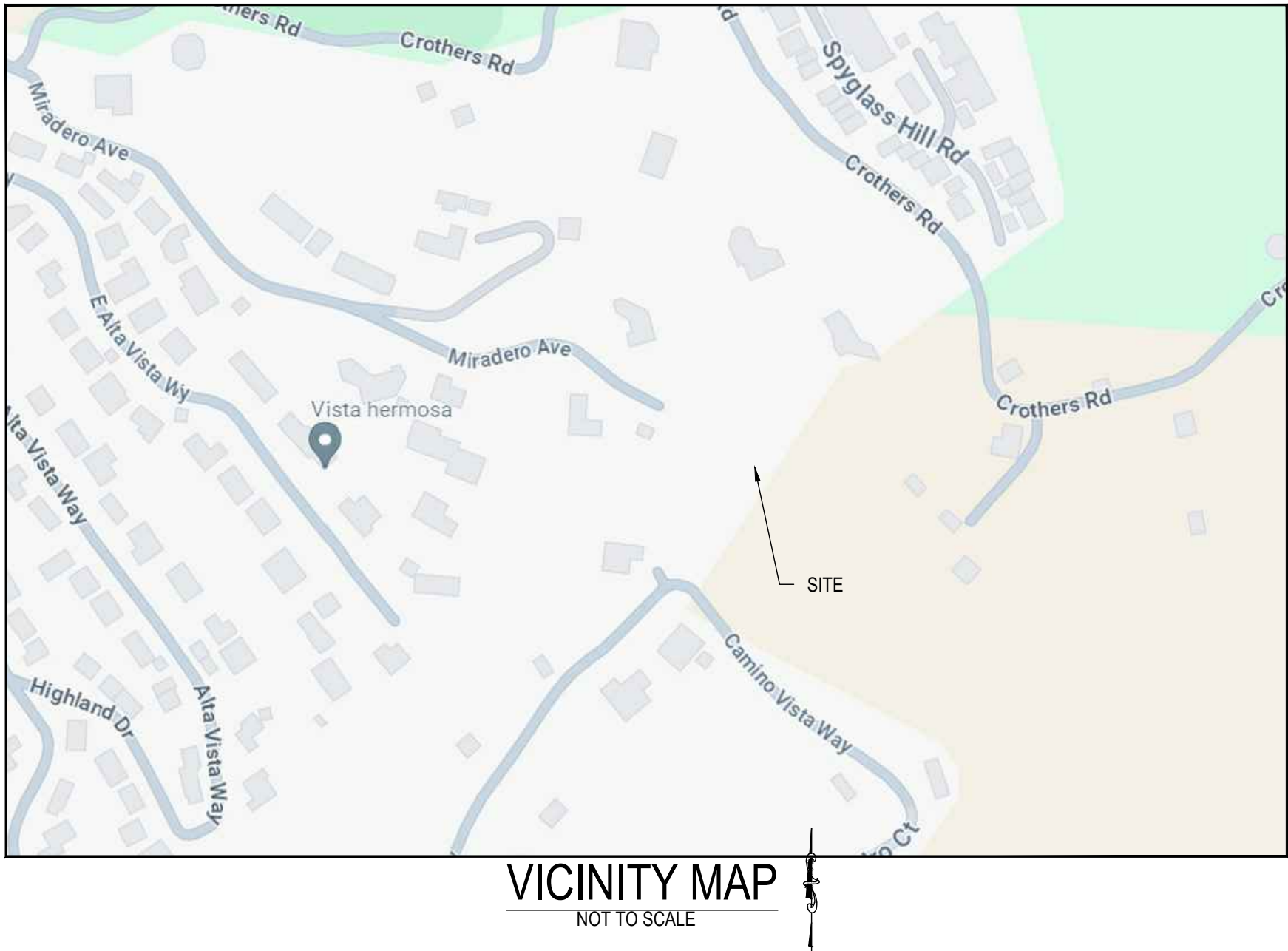
NAME:  
PHONE:  
EMAIL:

#### CIVIL ENGINEER

NAME: LEI ZHENG  
PHONE: (510) 909-1933  
EMAIL: engineer.lei@gmail.com

#### SURVEYOR

STERLING CONSULTANTS  
ADDRESS: 11040 BOLLINGER CANYON RD, SUITE E-102SAN RAMON,CA 94582  
PHONE: (925) 705-3633  
EMAIL: 1sterlingconsultants@gmail.com





WWW.CECILIA123.COM  
CHIEF ENGINEER: LEI ZHENG (MASON)  
PHONE: (510) 909-1933  
EMAIL: ENGINEER.LEI@GMAIL.COM

DURING CONSTRUCTION IF ANY DIFFICULTY OCCUR, PLEASE CONTACT ENGINEER IMMEDIATELY. IF CONTRACTOR DEVIATE FROM THE DRAWING WITHOUT PRIOR APPROVAL FROM ENGINEER, THE CONTRACTOR WILL TAKE ALL THE LIABILITY DUE TO DEVIATION.

0 Miradero Ave, San Jose,  
CA 95127

REV.	DESCRIPTION	DATE
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Jurisdiction:

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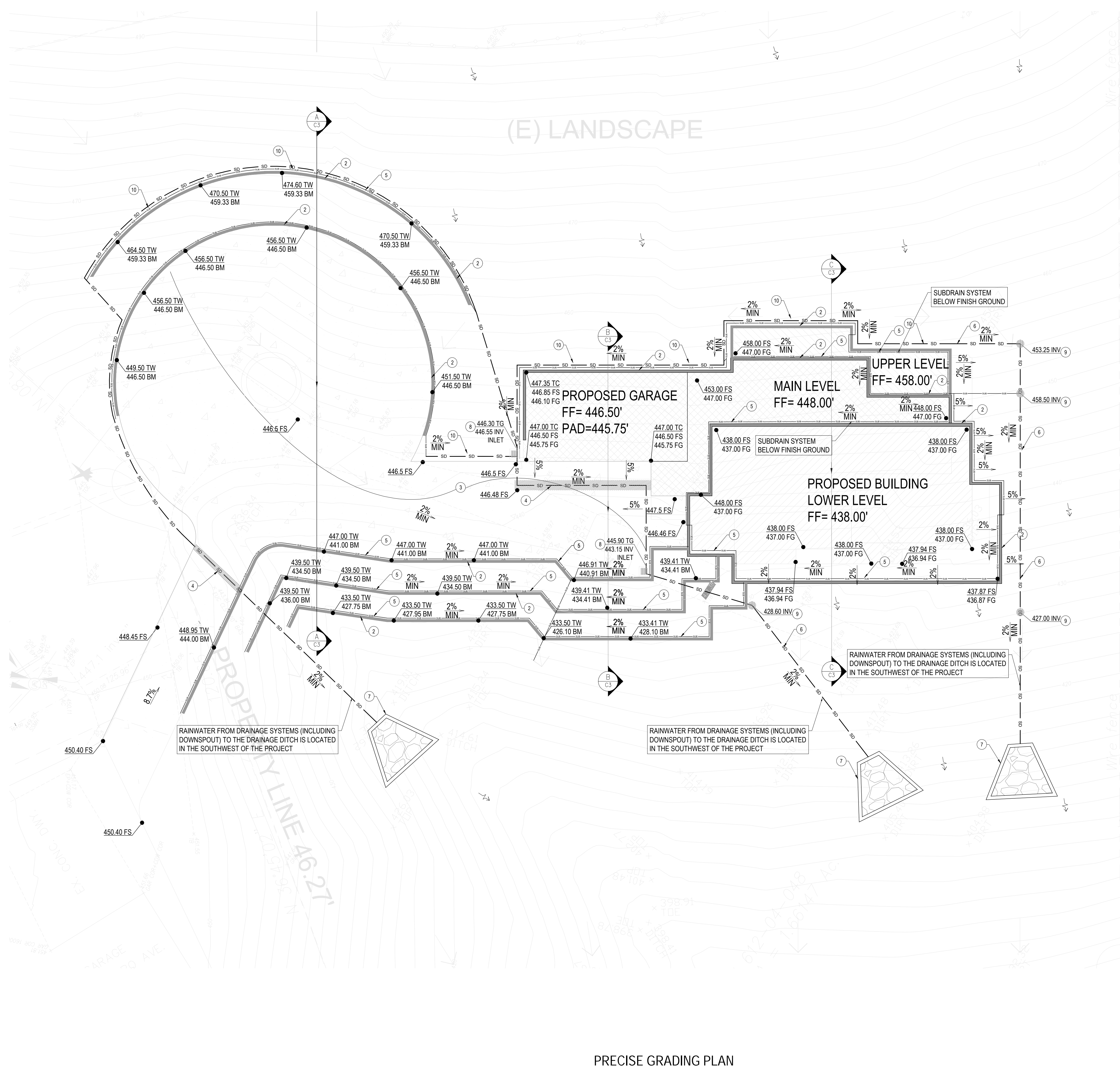
SHEET TITLE:

TITLE SHEET

SHEET NUMBER:

C-1





PRECISE GRADING PLAN  
SCALE 1"= 10'

CONSTRUCTION NOTE

- (E) CONCRETE BLOCK WALL
- NEW RETAINING WALL
- CONSTRUCT NEW DRIVEWAY PER DETAIL 1/C-3.
- INSTALL CHANNEL DRAIN SEE DETAIL 6/C-3
- INSTALL SUBDRAIN SYSTEM
- INSTALL 4" DIA. PVC SCHEDULE 40 OR SDR 35 PIPE DRAIN SYSTEM.
- INSTALL RIP RAP
- INSTALL NDS 12" SQUARE CATCH BASIN (TYP)
- INSTALL 4" DIA. PVC OR SDR 35 PIPE DRAIN SYSTEM FOR DOWNSPOUT CONNECT TO DRAINAGE SYSTEM
- INSTALL SWALE DRAIN SYSTEM SEE DETAIL 8/C-3

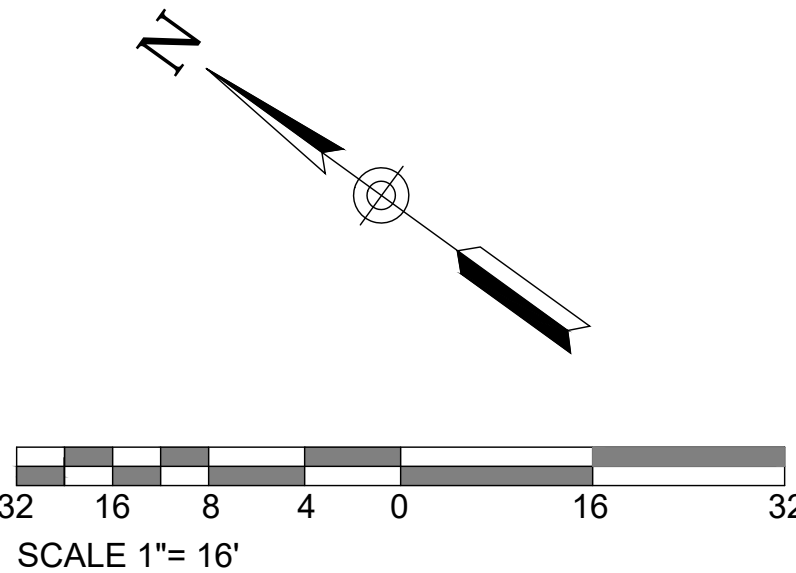
NOTE  
SEPARATE ENCROACHMENT PERMIT IS REQUIRED FOR ALL WORK DONE IN THE PUBLIC RIGHT-OF-WAY.  
ALL DRAINAGE SHALL BE DIRECTED TOWARD THE STREET, APPROVED DRAINAGE SYSTEM, OR NATURAL WATERCOURSE.  
PER 2016 C.B.C. 1804.4, ALL SURFACES IMMEDIATELY ADJACENT TO FOUNDATIONS SHALL SLOPE AWAY AT A MINIMUM 2% FOR IMPERVIOUS SURFACES AND 3% FOR PERVIOUS SURFACES.  
CONTRACTOR TO PROVIDE LANDSCAPING ON SLOPE AREA AT THE REAR OF THE PROPERTY FOR EROSION CONTROL PURPOSE.  
SEE ARCHITECTURAL PLANS FOR SITE DEMOLITION INFORMATION.  
ALL WALLS UNDER SEPARATE PERMIT.  
TOTAL FOOTING DEPTH = DEEPENED FOOTING DEPTH (DF) + MINIMUM FOOTING EMBEDMENT  
ALL DRAINAGE PIPE WILL BE 1% SLOPE UNLESS NOTE OTHERWISE

LEGEND

- 100 EXISTING CONTOUR
- 100FS SPOT ELEVATION
- PROPOSED CONCRETE AREA
- PROPOSED DECK AREA
- VIEW TERRACE (STONE PAVERS)
- PROPOSED DECOMPOSED GRANITE (DG)
- 4 INCH PERFORATED PVC PIPE
- PROPOSED STORM DRAIN
- FLOW LINE
- PROPERTY LINE
- XX% SURFACE SLOPE
- S=XX% STORM DRAIN SLOPE
- NATURAL SLOPE, MAXIMUM 50%
- PAD PROPOSED PAD ELEVATION
- FS PROPOSED FINISHED SURFACE
- FG PROPOSED FINISHED GROUND
- FF PROPOSED FINISHED FLOOR
- PL PROPERTY LINE
- HP HIGH POINT

	IMPERVIOUS AREA	
	PRE-DEVELOPED	POST-DEVELOPED
LOT SIZE	71,744 SF	71,744 SF
BUILDING COVERAGE AREA	0 SF	3,148 SF
IMPERMEABLE CONCRETE AREA	0 SF	4,770 SF
IMPERVIOUS SURFACE AREA (TOTAL)	0 SF	7,918 SF

DISTURBED AREA 12,044 SF



**CECILIA HOME**  
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PHONE: (510) 909-1933  
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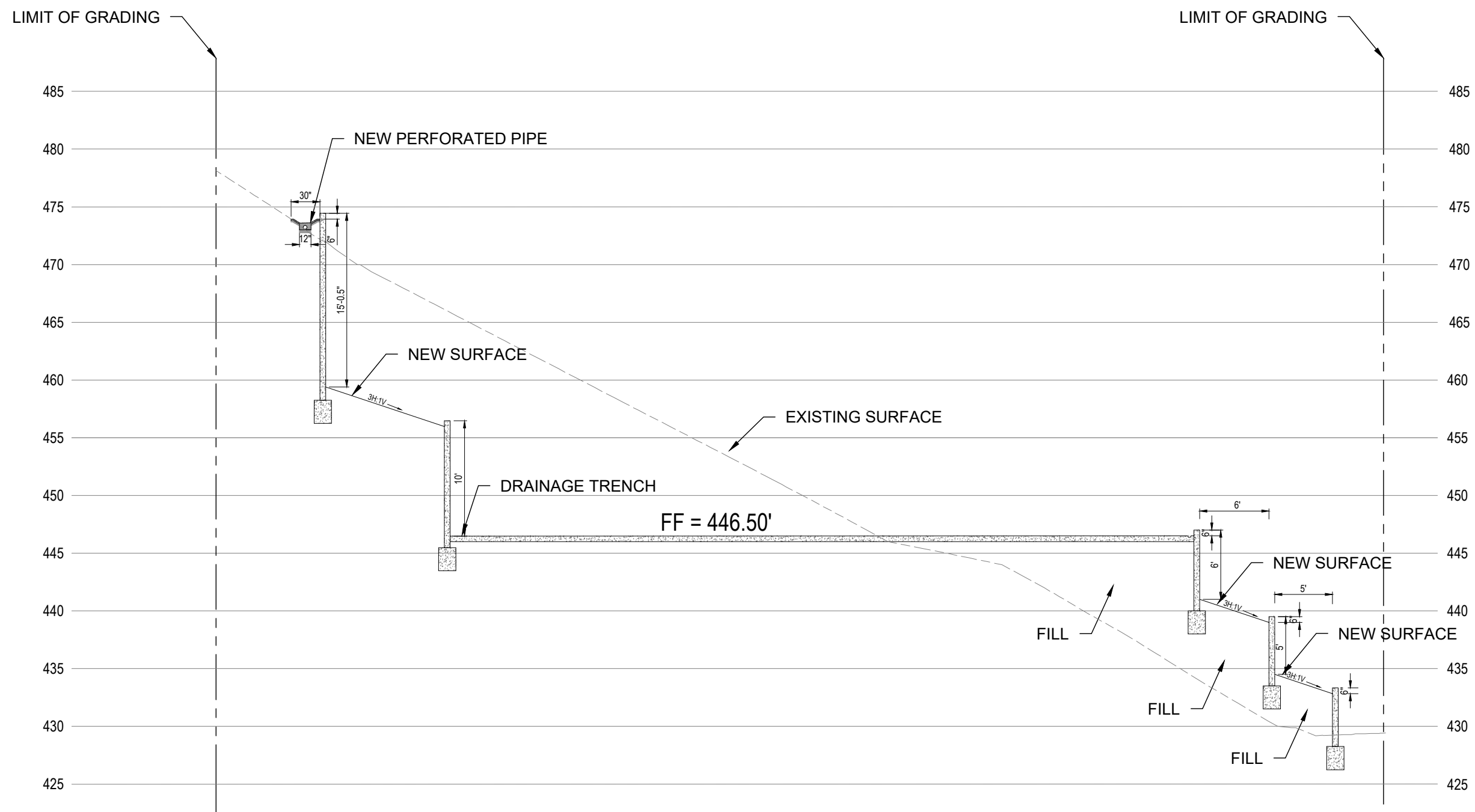
Jurisdiction:

Licenser:

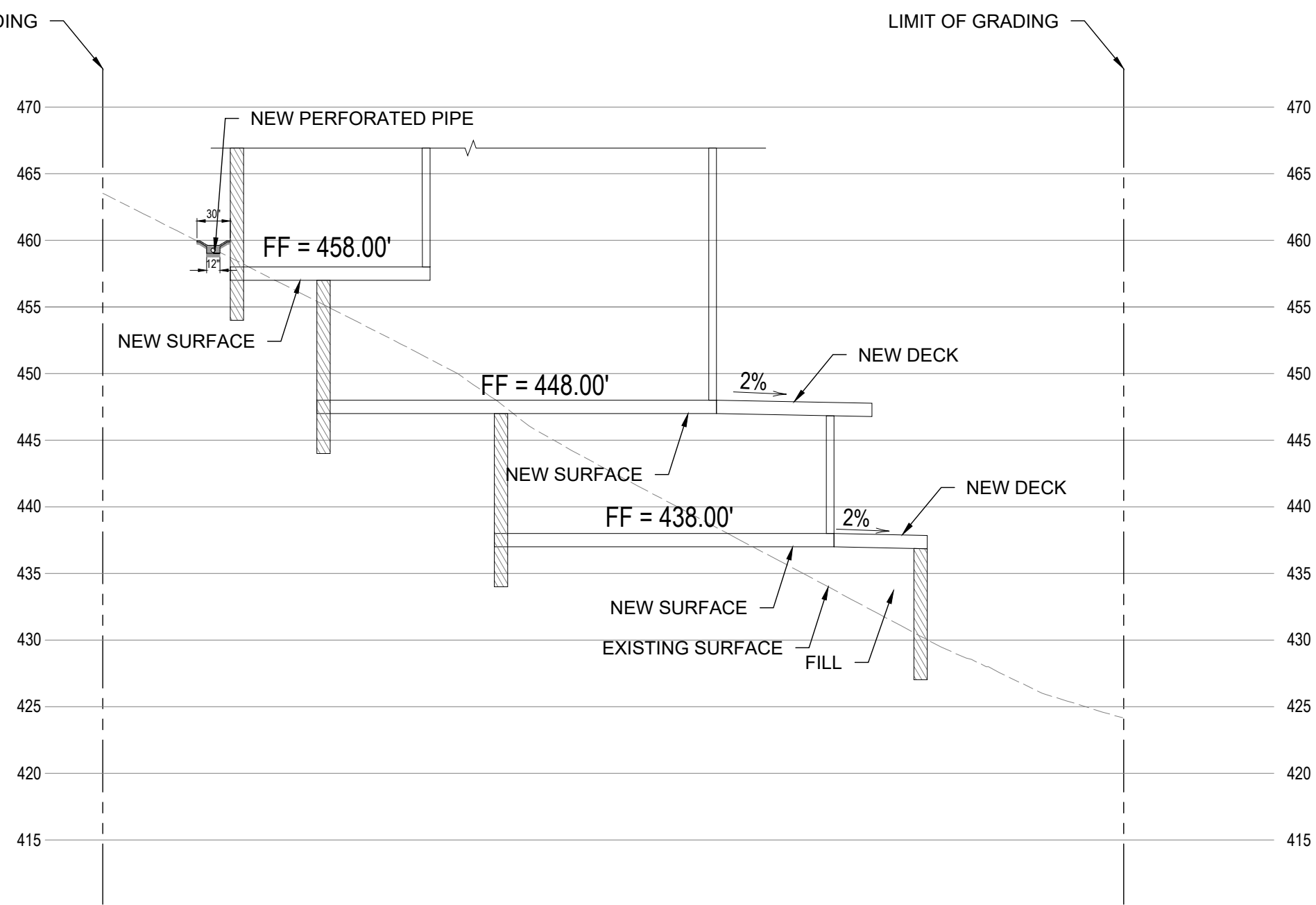
SHEET TITLE:  
**PRECISE GRADING  
& DRAINAGE PLAN**

SHEET NUMBER:  
**C-2**

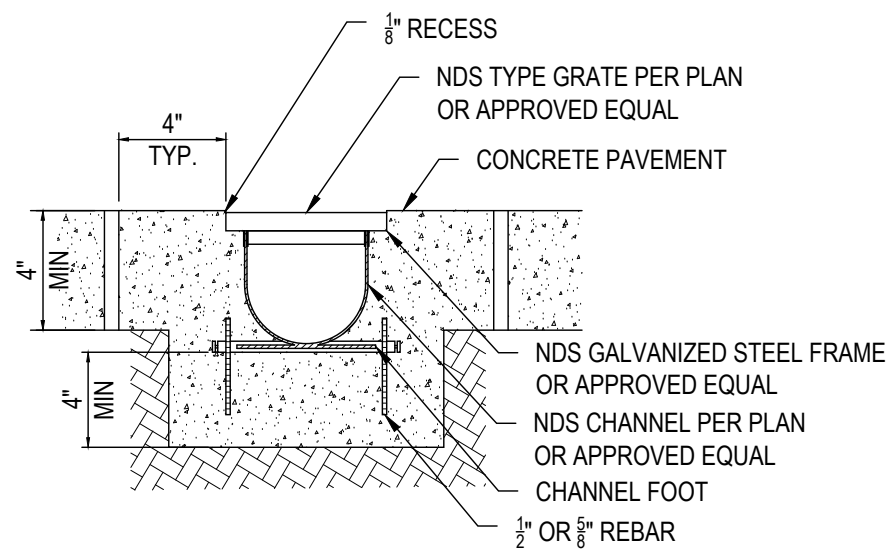




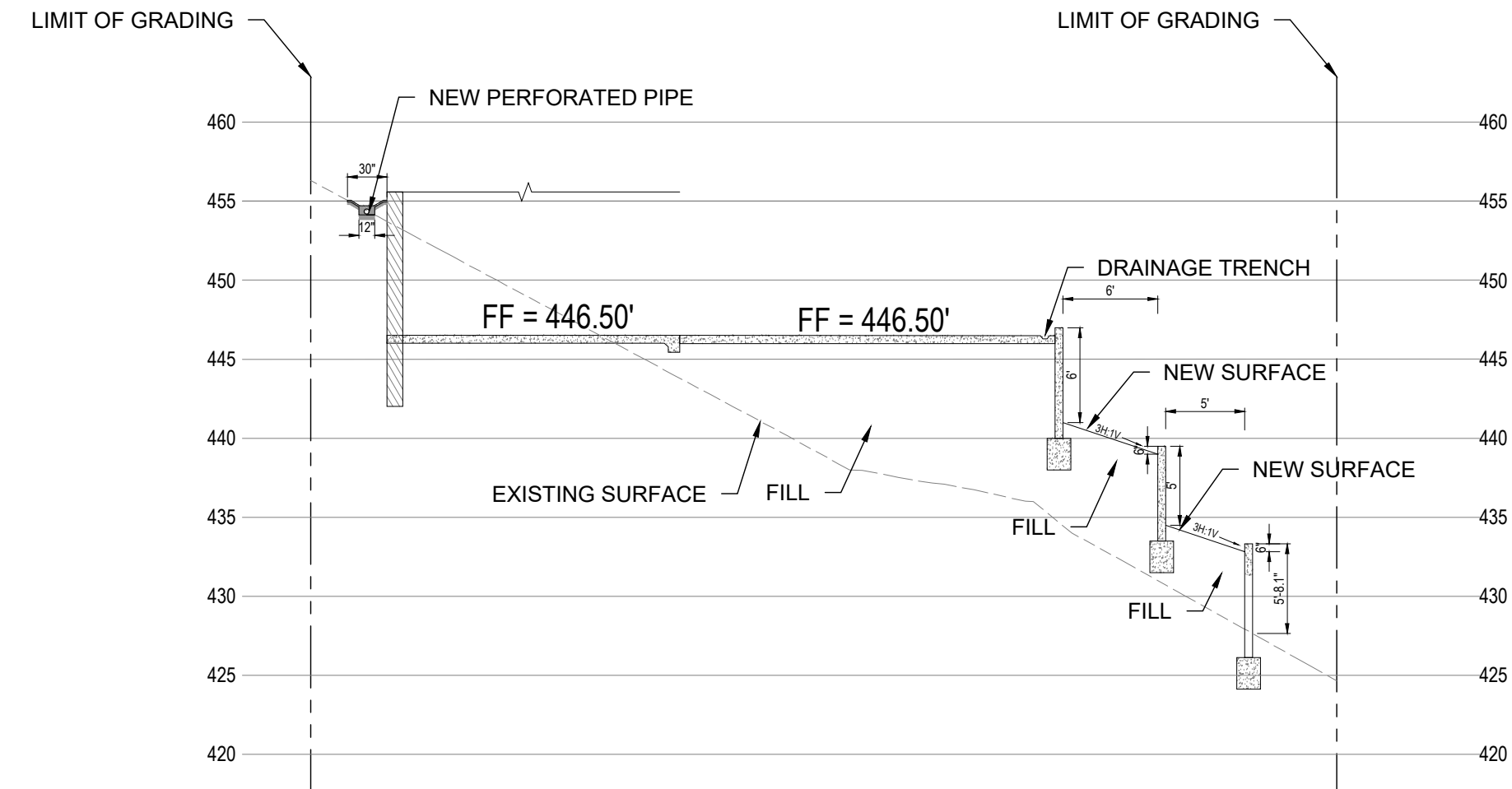
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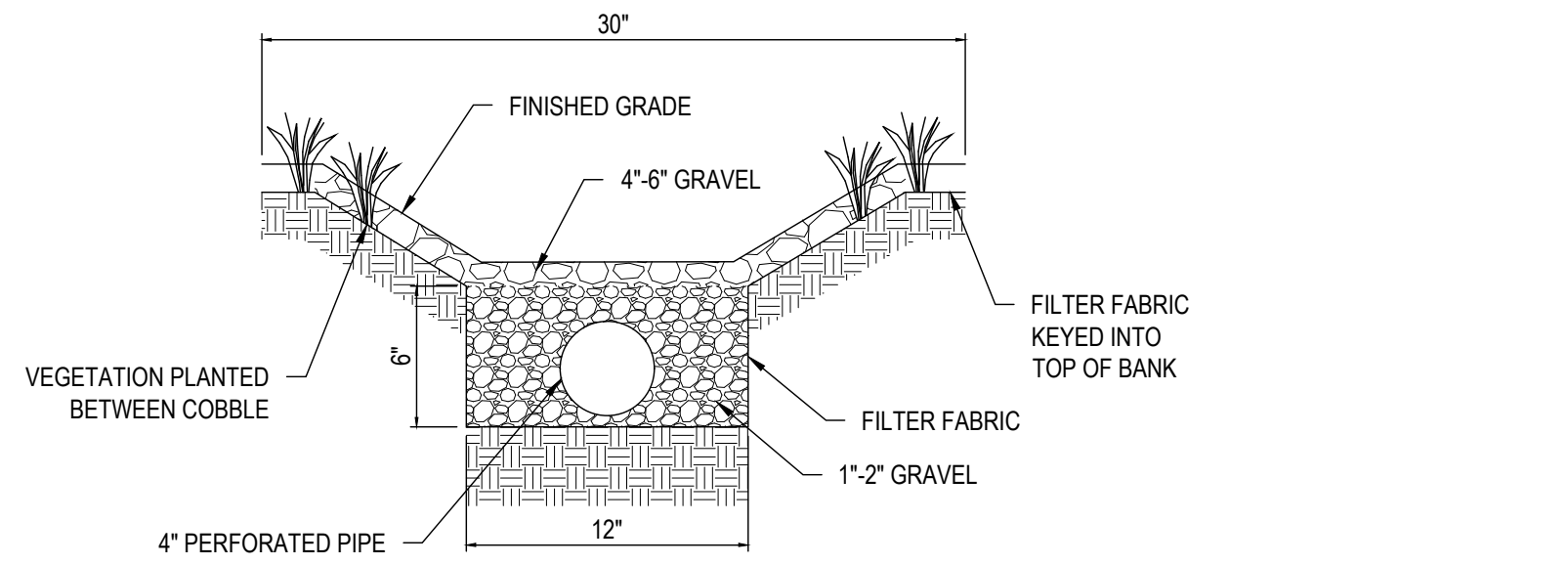
SECTION C-C  
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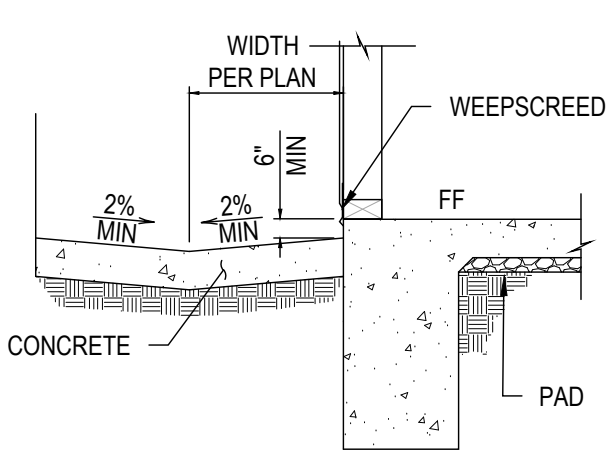
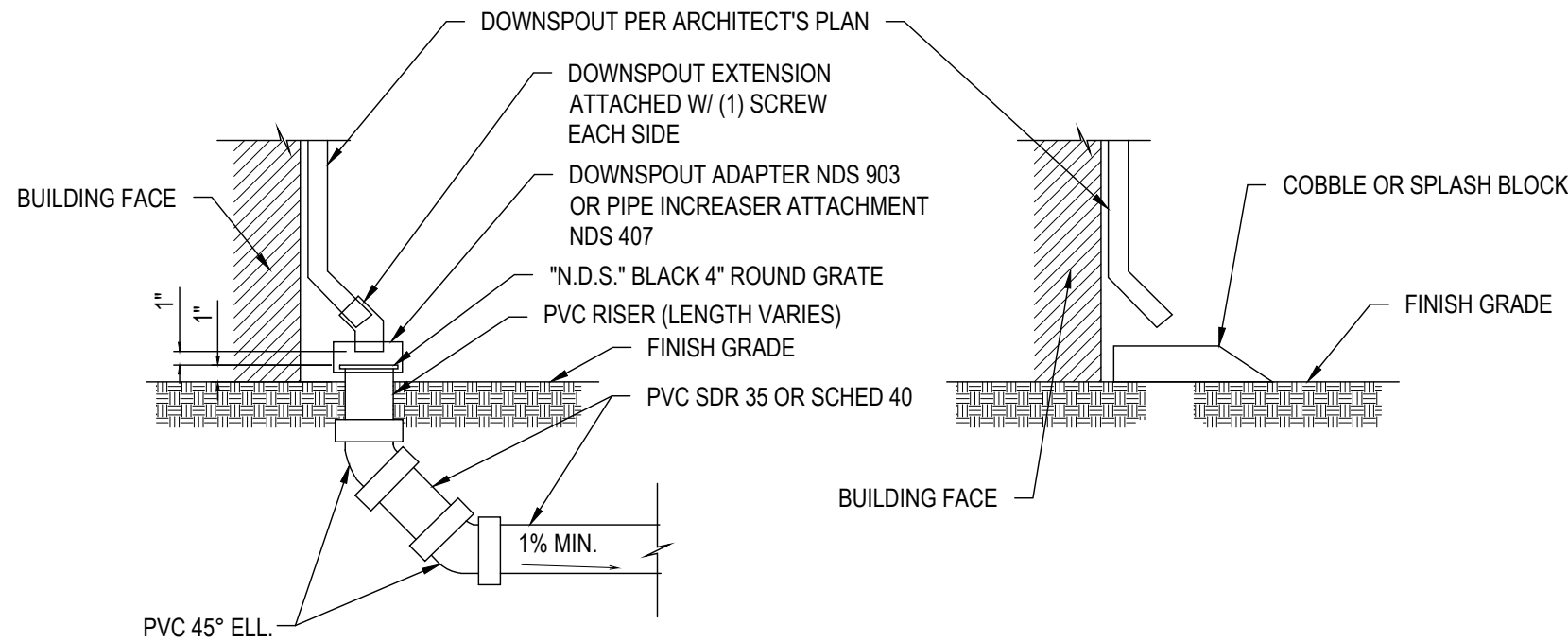
DETAIL  
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NOT TO SCALE



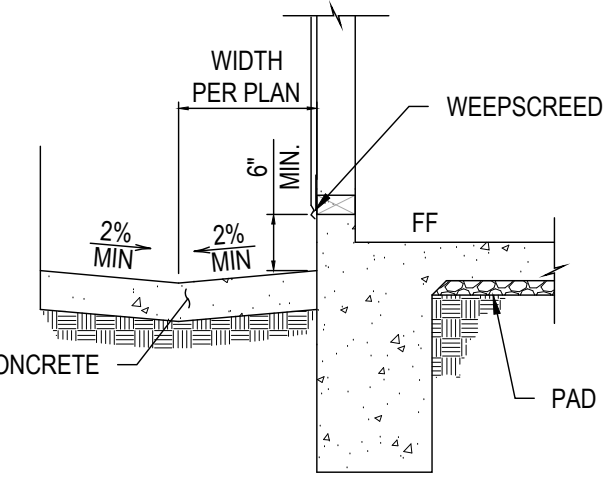
SECTION B-B  
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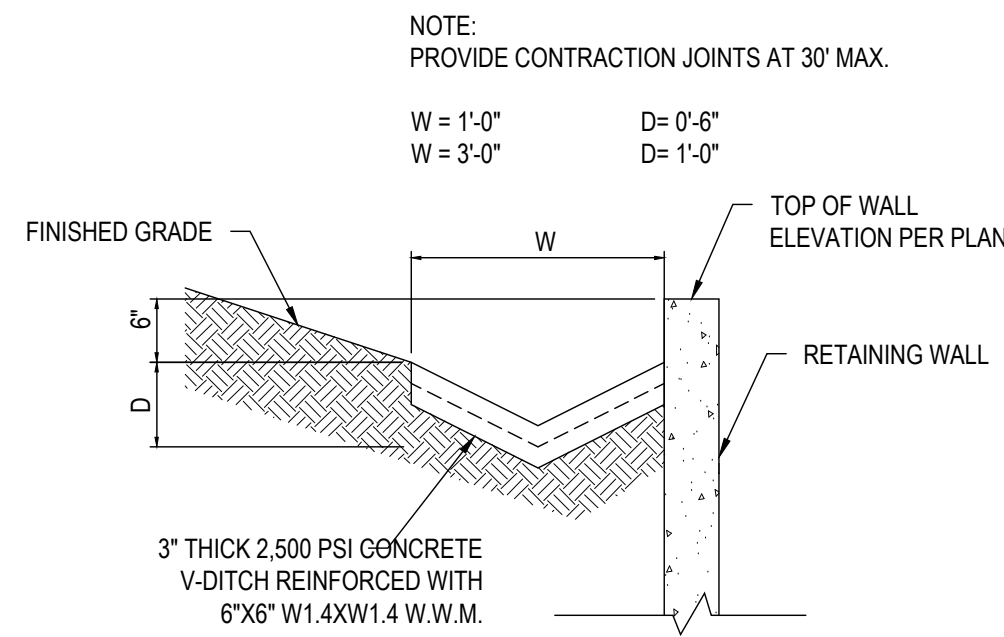
DETAIL  
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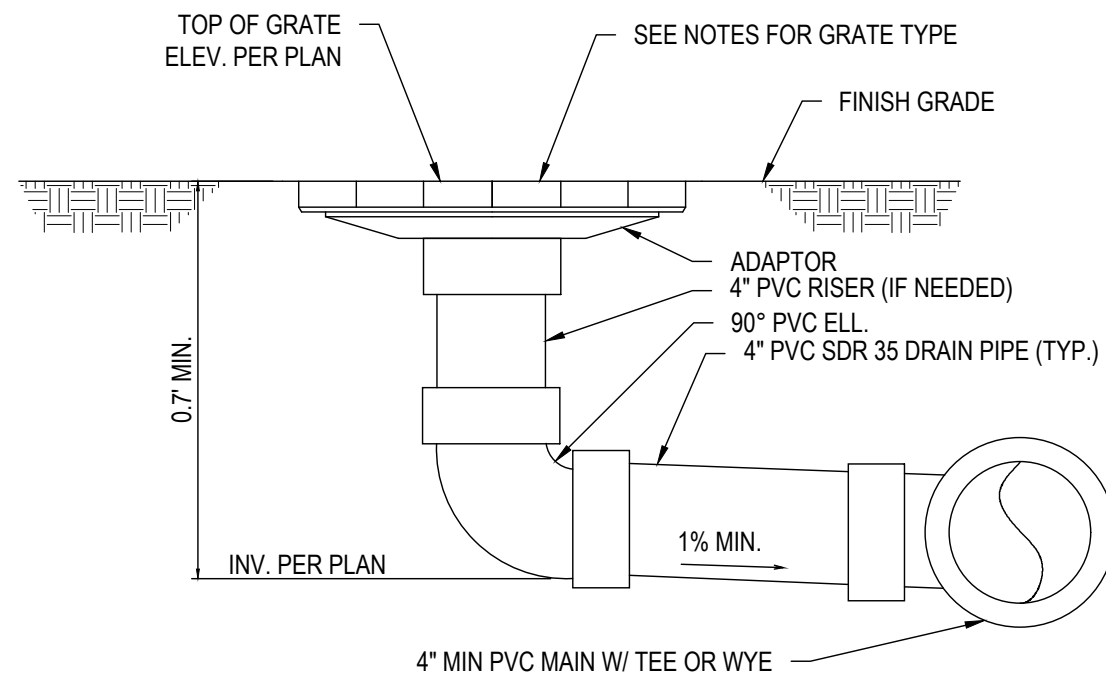
DETAIL  
BUILDING DRAINAGE 5  
NOT TO SCALE



DETAIL  
BUILDING DRAINAGE 4  
NOT TO SCALE

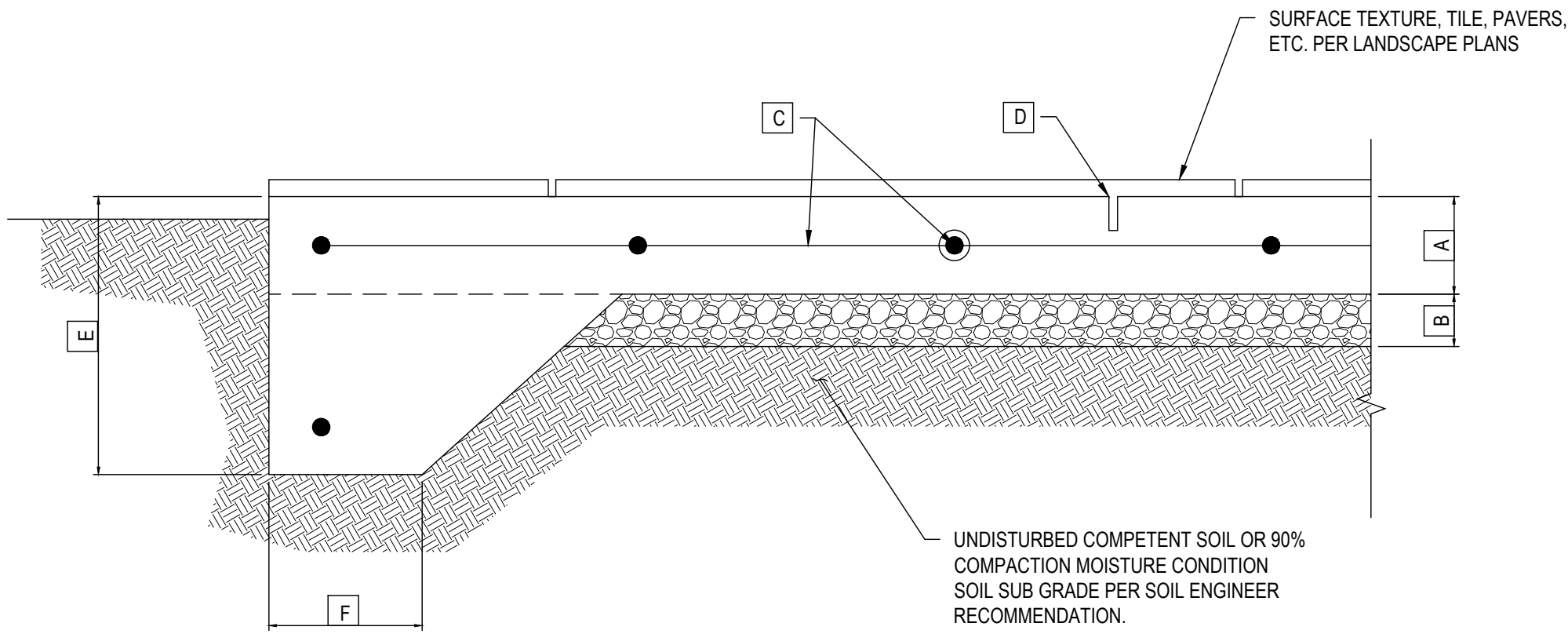
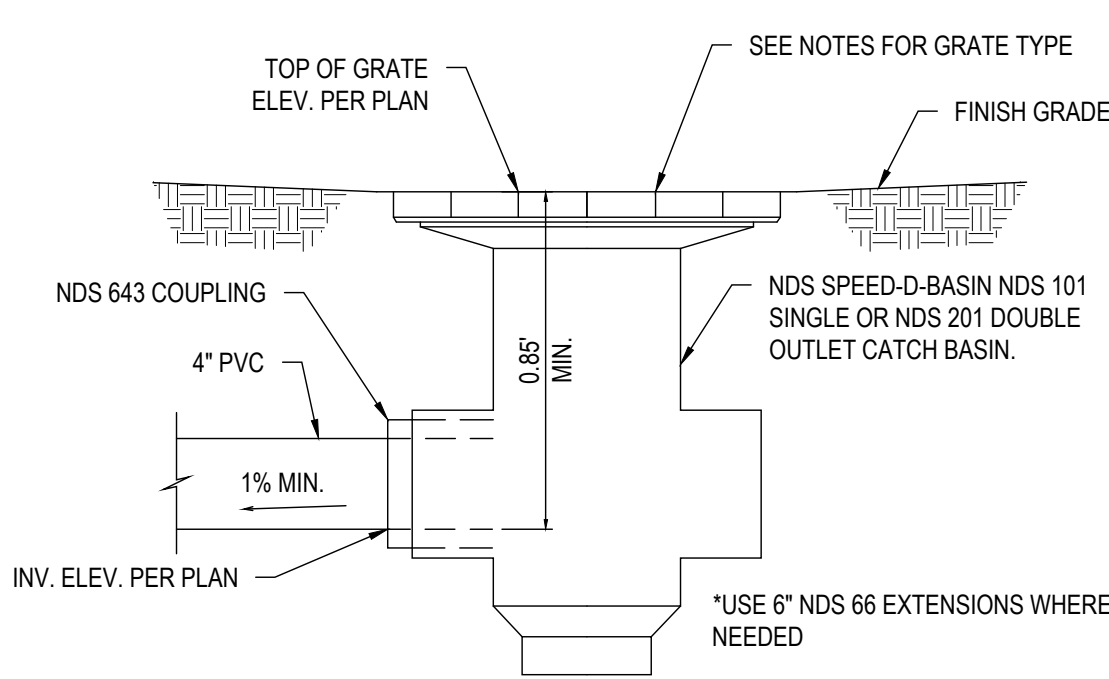


DETAIL  
RETAINING WALL CONCRETE V-DITCH 7  
NOT TO SCALE



DETAIL  
INLET DRAIN 2  
NOT TO SCALE

DETAIL  
DOWNSPOUT 3  
NOT TO SCALE



NOTES:  
1. THIS DETAIL IS FOR REFERENCE ONLY TO ILLUSTRATE SOILS REPORT REQUIREMENTS. HARDSCAPE DESIGN BY OTHERS.  
2. SEE SOILS REPORT FOR OVEREXCAVATION AND SUBGRADE PREPARATION REQUIREMENTS.

		DRIVEWAYS	HARDSCAPE
A	MIN. SLAB THICKNESS	6"	4"
B	MIN. AGG. BASE THICKNESS	6"	4"
C	MIN. REINFORCEMENT (O.C./E.W.)	#4@12"	#4@12"
D	MAX. SAWCUT OR COLD JT. SPACING	6"	6"
E	THICKENED EDGE DEPTH	12"	12"
F	THICKENED EDGE WIDTH	8"	8"

DETAIL  
TYPICAL DRIVEWAY / HARDSCAPE SECTION 1  
NOT TO SCALE

  
**CECILIA HOME**  
WWW.CECILIA123.COM  
CHIEF ENGINEER: LEI ZHENG (MASON)  
PHONE: (510) 909-1933  
EMAIL: ENGINEER.LEI@GMAIL.COM

DURING CONSTRUCTION IF ANY DIFFICULTY OCCUR, PLEASE CONTACT ENGINEER IMMEDIATELY. IF CONTRACTOR DEVIATE FROM THE DRAWING WITHOUT PRIOR APPROVAL FROM ENGINEER, THE CONTRACTOR WILL TAKE ALL THE LIABILITY DUE TO DEVIATION.

0 Miradero Ave, San Jose,  
CA 95127

REV.	DESCRIPTION	DATE
0	APPLY FOR PERMITS	05-10-2024

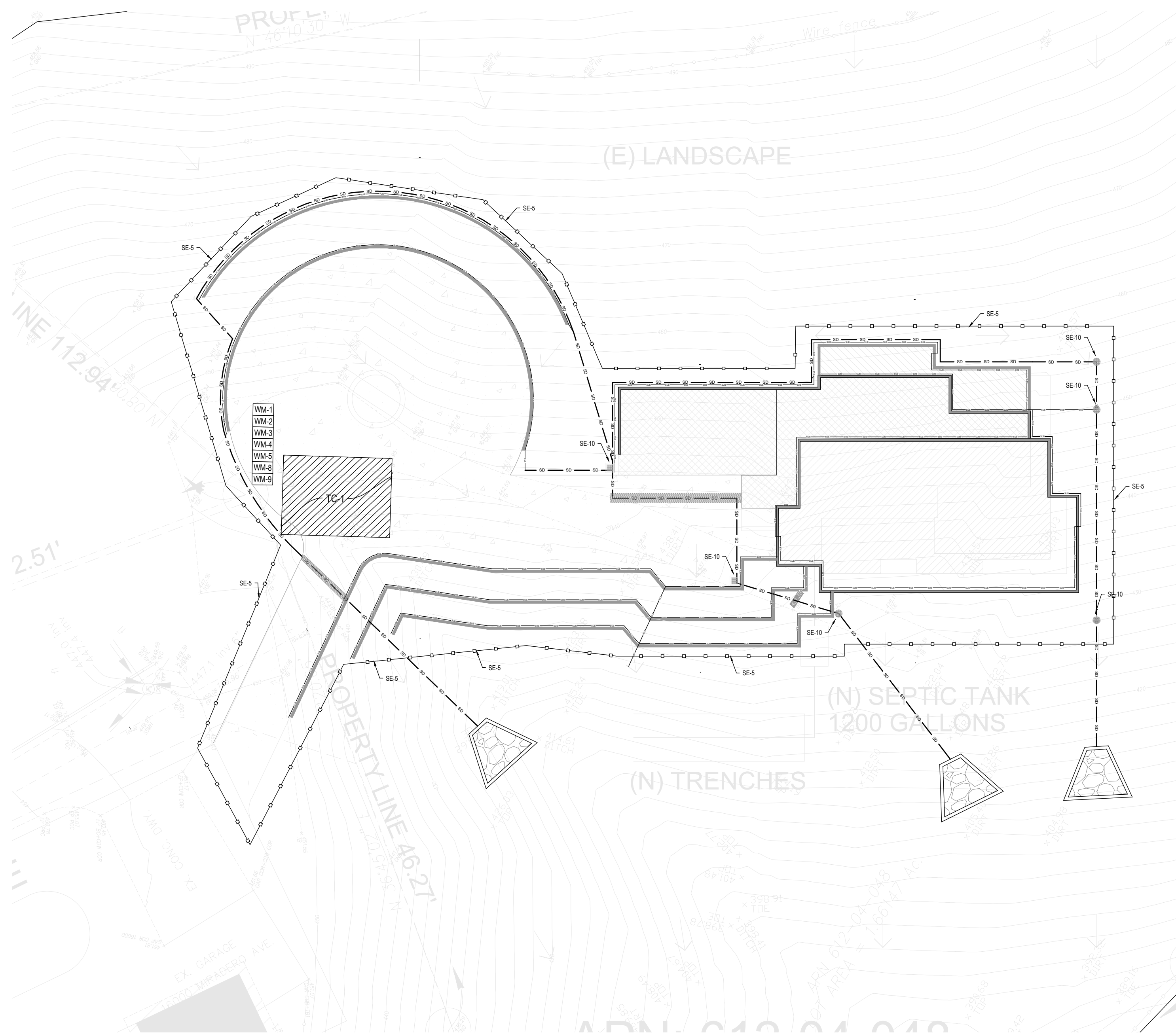
Jurisdiction:

Licenser:  


SHEET TITLE:  
**SECTIONS AND DETAILS**

SHEET NUMBER:  
**C-3**

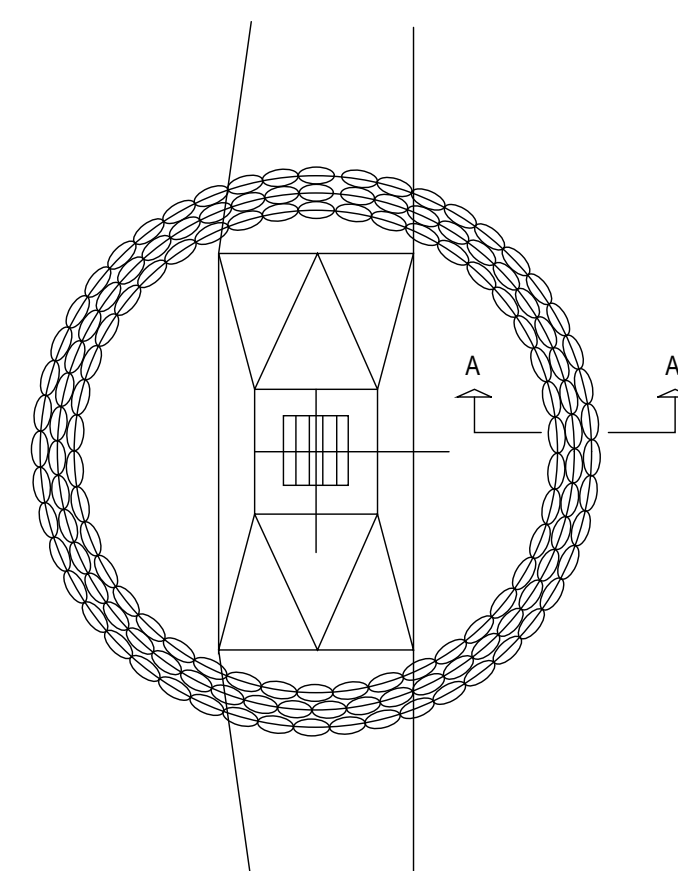
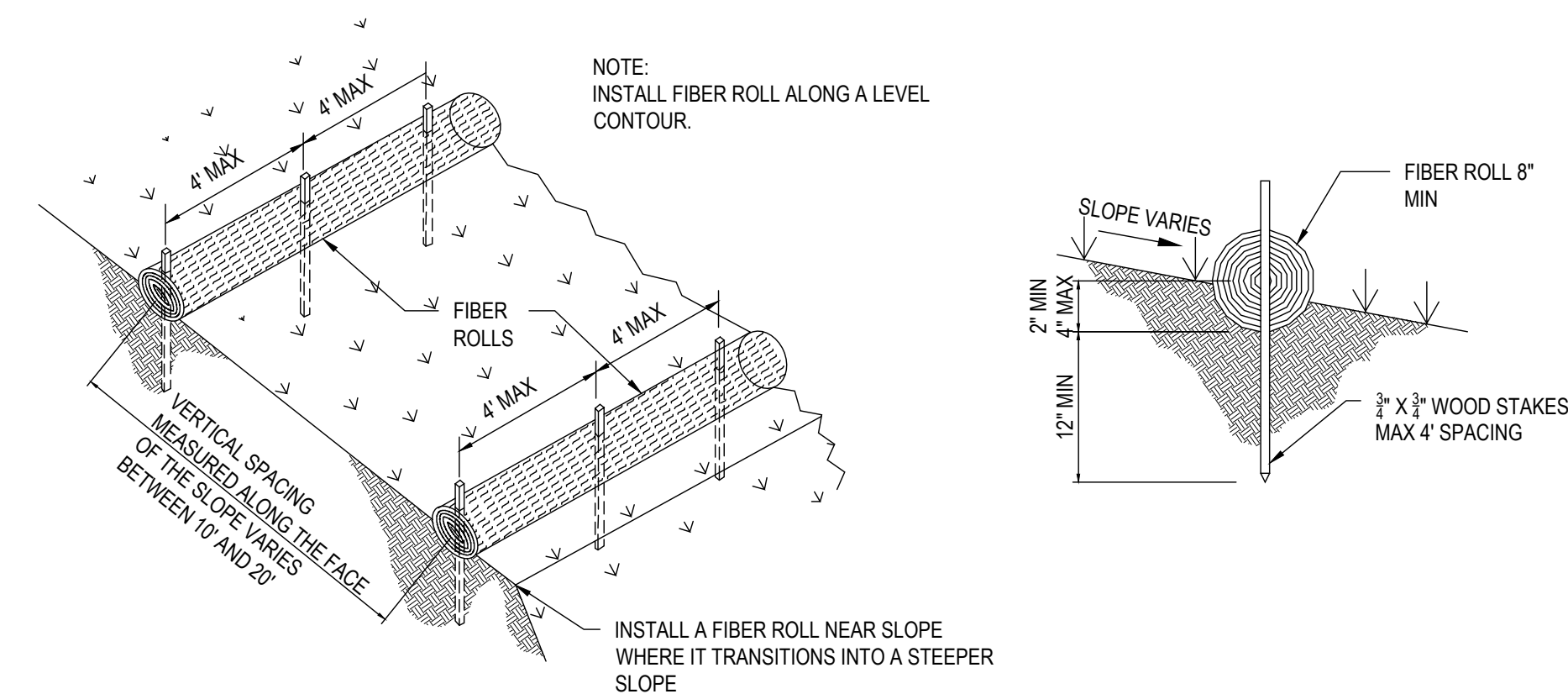




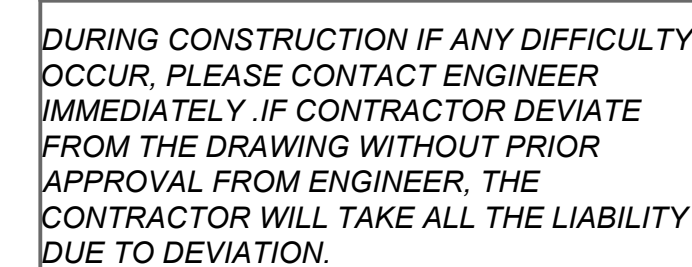
32 16 8 4 0 16 32

SCALE 1"= 16'

WM-1	MATERIAL DELIVERY AND STORAGE	MATERIALS SHALL BE STORED ON-SITE IN ORIGINAL MARKED CONTAINERS AND COVERED FROM RAIN AND WIND. MATERIAL INVENTORY SHALL CONSIST OF SUPPLY REQUIRED FOR A FEW DAYS.
WM-2	MATERIAL USE	MATERIALS FOR CONSTRUCTION SHALL BE USED IN ACCORDANCE WITH PRODUCT DIRECTION.
WM-3	STOCKPILE MANAGEMENT	MATERIALS STOCKPILES SHALL BE SURROUNDED BY A TEMPORARY SEDIMENT BARRIER AND COVERED TO MAINTAIN DUST CONTROL.
WM-4	SPILL PREVENTION AND CONTROL	AMPLE CLEAN-UP SUPPLIES FOR STORED MATERIALS SHALL BE KEPT ON-SITE. EMPLOYEE SHALL BE EDUCATED ON THE CLASSIFICATION OF SPILLS AND APPROPRIATE RESPONSES.
WM-5	SOLID WASTE MANAGEMENT	SOLID WASTE FROM CONSTRUCTION ACTIVITIES SHALL BE STORED IN APPROPRIATE CONTAINERS. FULL CONTAINERS SHALL BE DISPOSED OF PROPERLY.
WM-8	CONCRETE WASTE MANAGEMENT	AN ON-SITE CONCRETE WASHOUT AREA SHALL BE CONSTRUCTED, USED, AND DISPOSED OF IN A MANNER WHICH MEETS THE REQUIREMENT OF THE CITY.
WM-9	SANITARY / SEPTIC WASTE MANAGEMENT	ON-SITE FACILITY SHALL BE PROVIDED AND MAINTAINED BY THE CONTRACTOR FOR THE DURATION OF THE PROJECT.



**DETAIL**  
**STABILIZED CONSTRUCTION ENTRANCE**  
NOT TO SCALE



0 Miradero Ave, San Jose,  
CA 95127

REV.	DESCRIPTION	DATE
0	APPLY FOR PERMITS	05-10-2024

Jurisdiction:

Licensors:



SHEET TITLE:

## EROSION CONTROL PLAN

SHEET NUMBER:

C-4



# POLLUTION PREVENTION — IT’S PART OF THE PLAN

Construction projects are required to implement year-round stormwater BMPs, as they apply to your project.

Runoff from streets and other paved areas is a major source of pollution to San Francisco Bay. Construction activities can directly affect the health of the Bay unless contractors and crews plan ahead to keep construction dirt, debris, and other pollutants out of storm drains and local creeks. Following these guidelines will ensure your compliance with City of Palo Alto Ordinance requirements.



## MATERIALS & WASTE MANAGEMENT

### Non-Hazardous Materials

- ☐ Berm and cover stockpiles of sand, dirt or other construction material with tarps when rain is forecast or when they are not in use.
- ☐ Use (but don’t overuse) reclaimed water for dust control.
- ☐ Ensure dust control water doesn’t leave site or discharge to storm drains.

### Hazardous Materials

- ☐ Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state and federal regulations.
- ☐ Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecast.
- ☐ Follow manufacturer’s application instructions for hazardous materials and do not use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.
- ☐ Arrange for appropriate disposal of all hazardous wastes.

### Waste Management

- ☐ Cover and maintain dumpsters. Check frequently for leaks. Place dumpsters under roofs or cover with tarps or plastic sheeting secured around the outside of the dumpster. A plastic liner is recommended to prevent leaks. Never clean out a dumpster by hosing it down on the construction site.
- ☐ Place portable toilets away from storm drains. Make sure they are in good working order. Check frequently for leaks.
- ☐ Dispose of all wastes and demolition debris properly. Recycle materials and wastes that can be recycled, including solvents, water-based paints, vehicle fluids, broken asphalt and concrete, wood, and cleared vegetation.
- ☐ Dispose of liquid residues from paints, thinners, solvents, glues, and cleaning fluids as hazardous waste.
- ☐ Keep site clear of litter (e.g. lunch items, cigarette butts).
- ☐ Prevent litter from uncovered loads by covering loads that are being transported to and from site.

### Construction Entrances and Perimeter

- ☐ Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off site.
- ☐ Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking. Never hose down streets to clean up tracking.



## EQUIPMENT MANAGEMENT & SPILL CONTROL

### Maintenance and Parking

- ☐ Designate an area of the construction site, well away from streams or storm drain inlets and fitted with appropriate BMPs, for auto and equipment parking, and storage.
- ☐ Perform major maintenance, repair jobs, and vehicle and equipment washing off site.
- ☐ If refueling or vehicle maintenance must be done onsite, work in a bermed area away from storm drains and over a drip pan or drop cloths big enough to collect fluids. Recycle or dispose of fluids as hazardous waste.
- ☐ If vehicle or equipment cleaning must be done onsite, clean with water only in a bermed area that will not allow rinse water to run into gutters, streets, storm drains, or surface waters.
- ☐ Do not clean vehicle or equipment onsite using soaps, solvents, degreasers, or steam cleaning equipment, and do not use diesel oil to lubricate equipment or parts onsite.

### Spill Prevention and Control

- ☐ Keep spill cleanup materials (e.g., rags, absorbents and cat litter) available at the construction site at all times.
- ☐ Maintain all vehicles and heavy equipment. Inspect frequently for and repair leaks. Use drip pans to catch leaks until repairs are made.
- ☐ Clean up leaks, drips and other spills immediately and dispose of cleanup materials properly.
- ☐ Use dry cleanup methods whenever possible (absorbent materials, cat litter and/or rags).
- ☐ Sweep up spilled dry materials immediately. Never attempt to “wash them away” with water, or bury them.
- ☐ Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
- ☐ Report any hazardous materials spills immediately! Call City of Palo Alto Communications, (650) 329-2413. If the spill poses a significant hazard to human health and safety, property or the environment, you must report it to the State Office of Emergency Services. (800) 852-7550 (24 hours).



## EARTHMOVING

### Grading and Earthwork

- ☐ Schedule grading and excavation work during dry weather.
- ☐ Stabilize all denuded areas, install and maintain temporary erosion controls (such as erosion control fabric or bonded fiber matrix) until vegetation is established.
- ☐ Remove existing vegetation only when absolutely necessary, plant temporary vegetation for erosion control on slopes or where construction is not immediately planned.
- ☐ Prevent sediment from migrating offsite and protect storm drain inlets, drainage courses and streams by installing and maintaining appropriate BMPs (e.g., silt fences, gravel bags, fiber rolls, temporary swales, etc.).
- ☐ Keep excavated soil on site and transfer it to dump trucks on site, not in the streets.

### Contaminated Soils

- ☐ If any of the following conditions are observed, test for contamination and contact the Regional Water Quality Control Board:
  - Unusual soil conditions, discoloration, or odor.
  - Abandoned underground tanks.
  - Abandoned wells.
  - Buried barrels, debris, or trash.
- ☐ If the above conditions are observed, document any signs of potential contamination and clearly mark them so they are not disturbed by construction activities.

### Landscaping

- ☐ Protect stockpiled landscaping materials from wind and rain by storing them under tarps all year-round.
- ☐ Stack bagged material on pallets and under cover.
- ☐ Discontinue application of any erodible landscape material within 2 days before a forecast rain event or during wet weather.



## CONCRETE MANAGEMENT & DEWATERING

### Concrete Management

- ☐ Store both dry and wet materials under cover, protected from rainfall and runoff and away from storm drains or waterways. Store materials off the ground, on pallets. Protect dry materials from wind.
- ☐ Wash down exposed aggregate concrete only when the wash water can (1) flow onto a dirt area; (2) drain onto a bermed surface from which it can be pumped and disposed of properly; or (3) block any storm drain inlets and vacuum washwater from the gutter. If possible, sweep first.
- ☐ Wash out concrete equipment/trucks offsite or in a designated washout area, where the water will flow into a temporary waste pit, and make sure wash water does not leach into the underlying soil. (See CASQA Construction BMP Handbook for properly designed concrete washouts.)

### Dewatering

- ☐ Reuse water for dust control, irrigation or another on-site purpose to the greatest extent possible.
- ☐ Be sure to obtain a Permit for Construction in the Public Street from Public Works Engineering before discharging water to a street, gutter, or storm drain. Call the Regional Water Quality Control Plant (RWQCP) at (650) 329-2598 for an inspection prior to commencing discharge. Use filtration or diversion through a basin, tank, or sediment trap as required by the approved dewatering plan. Dewatering is not permitted from October to April.
- ☐ In areas of known contamination, testing is required prior to reuse or discharge of groundwater. Consult with the City inspector to determine what testing to do and to interpret results. Contaminated groundwater must be treated or hauled off-site for proper disposal.



## PAVING/ASPHALT WORK

### Paving

- ☐ Avoid paving and seal coating in wet weather or when rain is forecast, to prevent materials that have not cured from contacting stormwater runoff.
- ☐ Cover storm drain inlets and manholes when applying seal coat, slurry seal, fog seal, or similar materials.
- ☐ Collect and recycle or appropriately dispose of excess abrasive gravel or sand. Do NOT sweep or wash it into gutters.

### Sawcutting & Asphalt/Concrete Removal

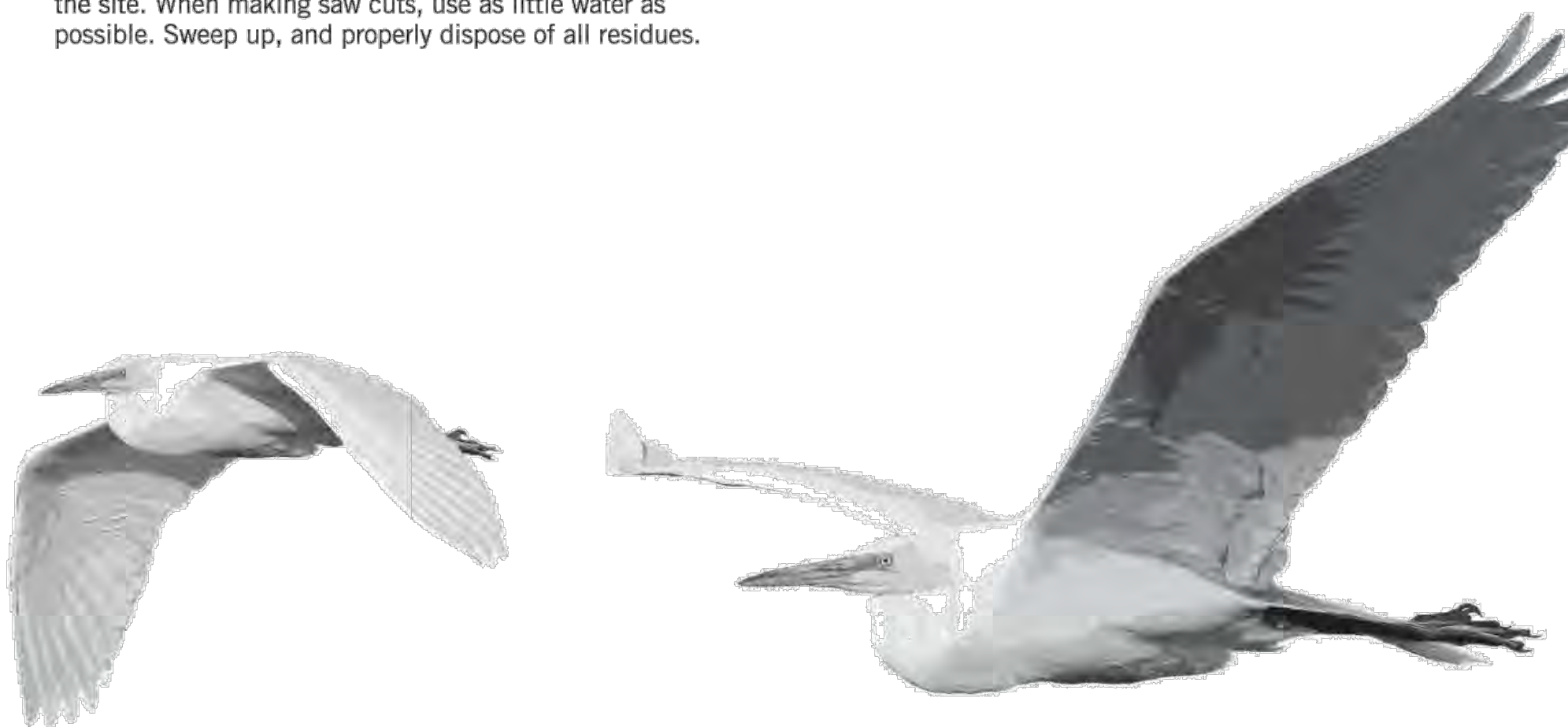
- ☐ Protect storm drain inlets during saw cutting.
- ☐ If saw cut slurry enters a catch basin, clean it up immediately.
- ☐ Shovel or vacuum saw cut slurry deposits and remove from the site. When making saw cuts, use as little water as possible. Sweep up, and properly dispose of all residues.



## PAINTING & PAINT REMOVAL

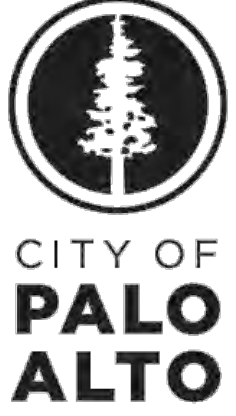
### Painting Cleanup and Removal

- ☐ Never clean brushes or rinse paint containers into a street, gutter, storm drain, or stream.
- ☐ For water-based paints, paint out brushes to the extent possible, and rinse into a drain that goes to the sanitary sewer. Never pour paint down a storm drain.
- ☐ For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids as hazardous waste.
- ☐ Sweep up or collect paint chips and dust from non-hazardous dry stripping and sand blasting into plastic drop cloths and dispose of as trash.
- ☐ Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury, or tributyltin must be disposed of as hazardous waste. Lead based paint removal requires a state certified contractor.



STORM DRAIN POLLUTERS MAY BE LIABLE FOR FINES OF UP TO \$10,000 PER DAY!

250 Hamilton Avenue  
Palo Alto, CA 94301  
650.329.2211  
cityofpaloalto.org





WWW.CECILIA123.COM  
CHIEF ENGINEER: LEI ZHENG (MASON)  
PHONE: (510)909-1933  
EMAIL: ENGINEER.LEI@GMAIL.COM


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CA 95127

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Jurisdiction:

Licenser:



SHEET TITLE:  
POLLUTION PREVENTION  
BMP

SHEET NUMBER:  
C-5