## STRUCTURAL SPECIFICATIONS:

THIS PROJECT SHALL COMPLY WITH THE FOLLOWING CODES

2022 CALIFORNIA BUILDING CODE 2022 CALIFORNIA RESIDENTIAL CODE CEC -2022 CALIFORNIA ELECTRIC CODE CMC-2022 CALIFORNIA MECHANICAL CODE CPC 2022 CALIFORNIA PLUMBING CODE CENC-2022 CALIFORNIA ENERGY (EFFICIENCY) CODE 2022 CALIFORNIA HISTORICAL BUILDING CODE CHBC-CFC-

2022 CALIFORNIA FIRE CODE CEBC-2022 CALIFORNIA EXISTING BUILDING CODE 2022 CALIFORNIA GREEN BUILDING CODE CGBC-

ALL AMENDMENTS TO THE CA CODES ADOPTED BY THE COUNTY OF SAN MATEO, AND ALL OTHER CODES, REGULATIONS, AND APPROVALS ESTABLISHED BY THE COUNTY OF SAN MATEO

### PROPERTY INFORMATION

		047-105-100 814 AVENUE BALBOA, EL GRANADA , CA 94018					
OCCUPANCY: ZONING CODE : TYPE OF CONSTRUCTION: STORIES:	R-1 S-17 V-B 2	, DR/CD	DESCRIPTION OF USE FIRE SPRINKLERS MAX HEIGHT	S.F.D. YES 28'-0"			

6,250

115

2,178

ACREAGE

TWO CAR GARAGE 398

NUMBER OF BATHS 2.5

# SCOPE OF WORK

CONSTRUCT NEW TWO STORY WOOD FRAME SINGLE FAMILY RESIDENCE WITH A FRONT BALCONY AND TWO CAR GARAGE

6,250 SQFT

MAXIMUM LOT COVERAGE - 35% **ACTUAL LOT SIZE -**

LOT SIZE (SQFT)

BALCONY

TOTAL LIVING AREA (SQFT)

NUMBER OF BEDROOMS

MAXIMUM ALLOWED LOT COVERAGE - 2,187.5 SQFT 1ST FLOOR LIVING 150 SQFT 398 SQFT **ENTRY WAY STAIR MORE THAN 18"** 87 SQFT ABOVE NATURAL GRADE CANTILEVERED BALCONY 39 SQFT CRAWL SPACE 1,513 SQFT PROPOSED LOT COVERAGE 2,187 SQFT

WE DO NOT EXCEED MAXIMUM LOT COVERAGE ALLOWABLE MAXIMUM FLOOR AREA ALLOWED -ACTUAL LOT SIZE -6,250 SQFT MAXIMUM FLOOR AREA 3,312.5 SQFT

1ST FLOOR LIVING 150 SQFT 2ND FLOOR LIVING 2,028 SQFT 398 SQFT 2,576 SQFT

PROPOSED FLOOR AREA

WE DO NOT EXCEED MAXIMUM FLOOR AREA ALLOWABLE

LANDSCAPE TO LOT SIZE RATIO: 0.48:1 100% OF PLANTS ON LIST REQUIRE LOW WATER

LOT SIZE: 6,250 SQFT

2,061 SQFT	33.0%
439 SQFT	7.0%
730 SQFT	11.6%
3,020 SQFT	48.4%
0 SQFT	0.0%
6,250 SQFT	100.00%
	439 SQFT 730 SQFT 3,020 SQFT 0 SQFT

TOTAL IRRIGATED LANDSCAPE 1,208 SQFT TOTAL NON IRRIGATED LANDSCAPED 1,812 SQFT ALL IRRIGATION IS DRIP IRRIGATION

MEASUREMENTS ARE FROM THE TOP OF THE PIPING TO ROUGH

GRADE (Not including concrete, etc...)

# **Architectural Designer**

WEST COAST DESIGN BUILD 1500 MARINER DRIVE SUITE B **OXNARD CA, 93036** (805) 436-6918

Soils Engineer

SIGMA PRIME GEOSCIENCES, INC

332 PRINCETON AVENUE

HALF MOON BAY, CALIFORNIA 94019

**Coastwest Fire Protection** 

169 Stanford Ave Unit 3

Half Moon Bay, CA 94037

(650) 784-6002

1. NEW RESIDENTIAL BUILDINGS SHALL HAVE INTERNALLY

THE BACKGROUND SO AS TO BE SEEN FROM THE

ADDRESS NUMBERS SHALL BE AT LEAST SIX FEET

PUBLIC ROADWAY, ADDITIONAL SIGNAGE AT THE

RIVEWAY/ROADWAY ENTRANCE LEADING TO THE

BUILDING AND/OR ON EACH INDIVIDUAL BUILDING

SHALL BE REQUIRED BY THE COASTSIDE FIRE

TO HY-KO 911 OR EQUIVALENT.

BY FIRE DEPARTMENT

SEPARATE SUBMITTAL AND PERMIT 4. FIRE PROTECTION - UNDERGROUND FLUSH IS

ABOVE THE FINISHED SURFACE OF THE DRIVEWAY.

WHERE BUILDINGS ARE LOCATED REMOTELY TO THE

DISTRICT. THIS REMOTE SIGNAGE SHALL CONSIST OF A

WITH 3 INCH REFLECTIVE NUMBERS/ LETTERS SIMILAR

6 INCH BY 18 INCH GREEN REFLECTIVE METAL SIGN

2. FIRE SPRINKLERS ARE TO BE SEPARATE SUBMITTAL

TO THE COASTSIDE FIRE PROTECTION DISTRICT

THROUGHOUT THE NEW RESIDENCE UNDER

5. A FUEL BREAK OR DEFENSIBLE SPACE IS REQUIRED

AROUND THE PERIMETER OF ALL STRUCTURES,

THAN 30 FEET AND MAY BE REQUIRED TO A

THIS IS NEITHER A REQUIREMENT NOR AN

THE GROUND. NEW TREES PLANTED IN THE

AUTHORIZATION FOR THE REMOVAL OF LIVING

TREES. TREES LOCATED WITHIN THE DEFENSIBLE

SPACE SHALL BE PRUNED TO REMOVE DEAD AND

DYING PORTIONS, AND LIMBED UP 6 FEET ABOVE

DEFENSIBLE SPACE SHALL BE LOCATED NO CLOSER

THAN 10' TO ADJACENT TREES WHEN FULLY GROWN

OR AT MATURITY.REMOVE THAT PORTION OF ANY

EXISTING TREES, WHICH EXTENDS WITHIN 10 FEET

WITHIN 5' OF ANY STRUCTURE. REMOVE THAT

OF THE OUTLET OF A CHIMNEY OR STOVEPIPE OR IS

PORTION OF ANY EXISTING TREES, WHICH EXTENDS

OVERHANGING A BUILDING FREE OF DEAD OR DYING

to non-metallic piping and

at both ends. Pipe depths

placed over the trench.

shall terminate above grade

minimum of 4" of concrete is

WITHIN10 FEET OF THE OUTLET OF A CHIMNEY OR

STOVEPIPE OR IS WITHIN 5' OF ANY STRUCTURE.

MAINTAIN ANY TREE ADJACENT TO OR

EXISTING AND NEW, TO A DISTANCE OF NOT LESS

DISTANCE OF 100 FEET OR TO THE PROPERTY LINE.

PROVIDE AUTOMATIC FIRE EXTINGUISHING SYSTEM

REQUIRED FOR THIS PROJECT. MUST BE WITNESSED

PUBLIC WAY FRONTING THE BUILDING. RESIDENTIAL

ILLUMINATED ADDRESS NUMBERS CONTRASTING WITH

(650) 728-3590

# CELL (805) 320-2501

Structural Engineer

JO ENGINEER

# **Energy Calculations**

Carstairs Energy 2238 Bayview Heights Drive suite E Los Osos, CA 93402 (805) 904-9048

# sheet index

SITE PLAN **GENERAL NOTES** 

**GREEN NOTES** FLOOR PLAN

1ST FLOOR DIMENSION 2ND FLOOR DIMENSION 1ST FLOOR ELECTRICAL PLAN 2ND FLOOR ELECTRICAL PLAN

FRONT AND RIGHT ELEVATION

BMP CONSTRUCTION BEST PRACTICES

C1 GRADING AND DRAINAGE

11. REAR AND LEFT ELEVATION A-D SECTIONS 13. E AND F SECTIONS

> CS1 Exterior Color Selections L1 LANDSCAPE TS1 TOPOGRAPHY

14. MARKETING

**ROOF PLAN** 

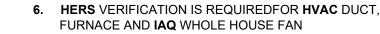
# C2 EROSION CONTROL

FIRE SPRINKLERS GENERAL CONTRACTOR PACIFIC IMAGE BUILDERS INC.

1369 EAST WALDON WAY FRESNO CA, 93730 (559) 903-8902

7. THE INSTALLATION OF AN APPROVED SPARK AND NEW. SPARK ARRESTERS SHALL BE CONSTRUCTED OF WOVEN OR WELDED WIRE SCREENING OF 12-GAUGE USA STANDARD WIRE HAVING OPENINGS NOT EXCEEDING 1/2"

10. UNDERGROUND ELECTRICAL SERVICE SHALL BE AND REMODELS WHERE THE ESTIMATED COST OF VALUATION OF THE BUILDING. UNDERGROUND SERVICE SHALL BE INSTALLED IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE PACIFIC GAS AND ELECTRIC COMPANY ELECTRIC AND GAS SERVICE REQUIREMENTS, SECTION 5, ELECTRIC SERVICE UNDERGROUND. (ORD. C-14-10 1(PART),

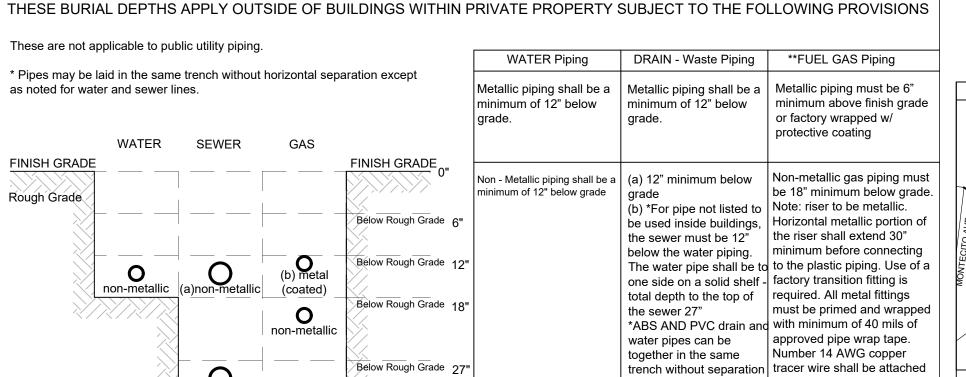


ARRESTER IS REQUIRED ON ALL CHIMNEYS, EXISTING

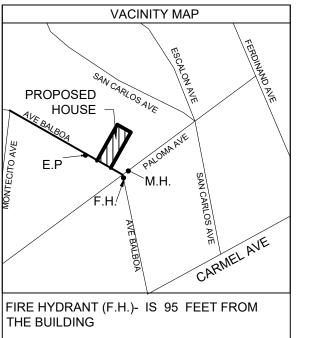
8. A FUEL BREAK OR DEFENSIBLE SPACE IS REQUIRED AROUND THE PERIMETER OF ALL STRUCTURES, EXISTING AND NEW, TO A DISTANCE OF NOT LESS THAN 30 FEET AND MAY BE REQUIRED TO A DISTANCE OF 100 FEET OR TO THE PROPERTY LINE. THIS IS NEITHER A REQUIREMENT NOR AN AUTHORIZATION FOR THE REMOVAL OF LIVING TREES. ADD THE FOLLOWING NOTE TO THE PLANS: TREES LOCATED WITHIN THE DEFENSIBLE SPACE SHALL BE PRUNED TO REMOVE DEAD AND DYING PORTIONS, AND LIMBED UP 6 FEET ABOVE THE GROUND. NEW TREES PLANTED IN THE DEFENSIBLE SPACE SHALL BE LOCATED NO CLOSER THAN 10' TO ADJACENT TREES WHEN FULLY GROWN

OR AT MATURITY. REMOVE THAT PORTION OF ANY EXISTING TREES. WHICH EXTENDS WITHIN 10 FEET OF THE OUTLET OF A CHIMNEY OR STOVEPIPE OR IS WITHIN 5' OF ANY STRUCTURE. REMOVE THAT PORTION OF ANY EXISTING TREES, WHICH EXTENDS WITHIN 10 FEET OF THE OUTLET OF A CHIMNEY OR STOVEPIPE OR IS WITHIN 5' OF ANY STRUCTURE. MAINTAIN ANY TREE ADJACENT TO OR OVERHANGING A BUILDING FREE OF DEAD OR DYING WOOD.

PROVIDED IN ALL NEW CONSTRUCTION, ADDITIONS OF MORE THAN 25% OF THE EXISTING FLOOR AREA. CONSTRUCTION IS 50% OR MORE OF THE ASSESSED 2010: ORD. 1-08 2(PART), 2008) PER MUNICIPAL CODE SECTION 14.04.070 (A)

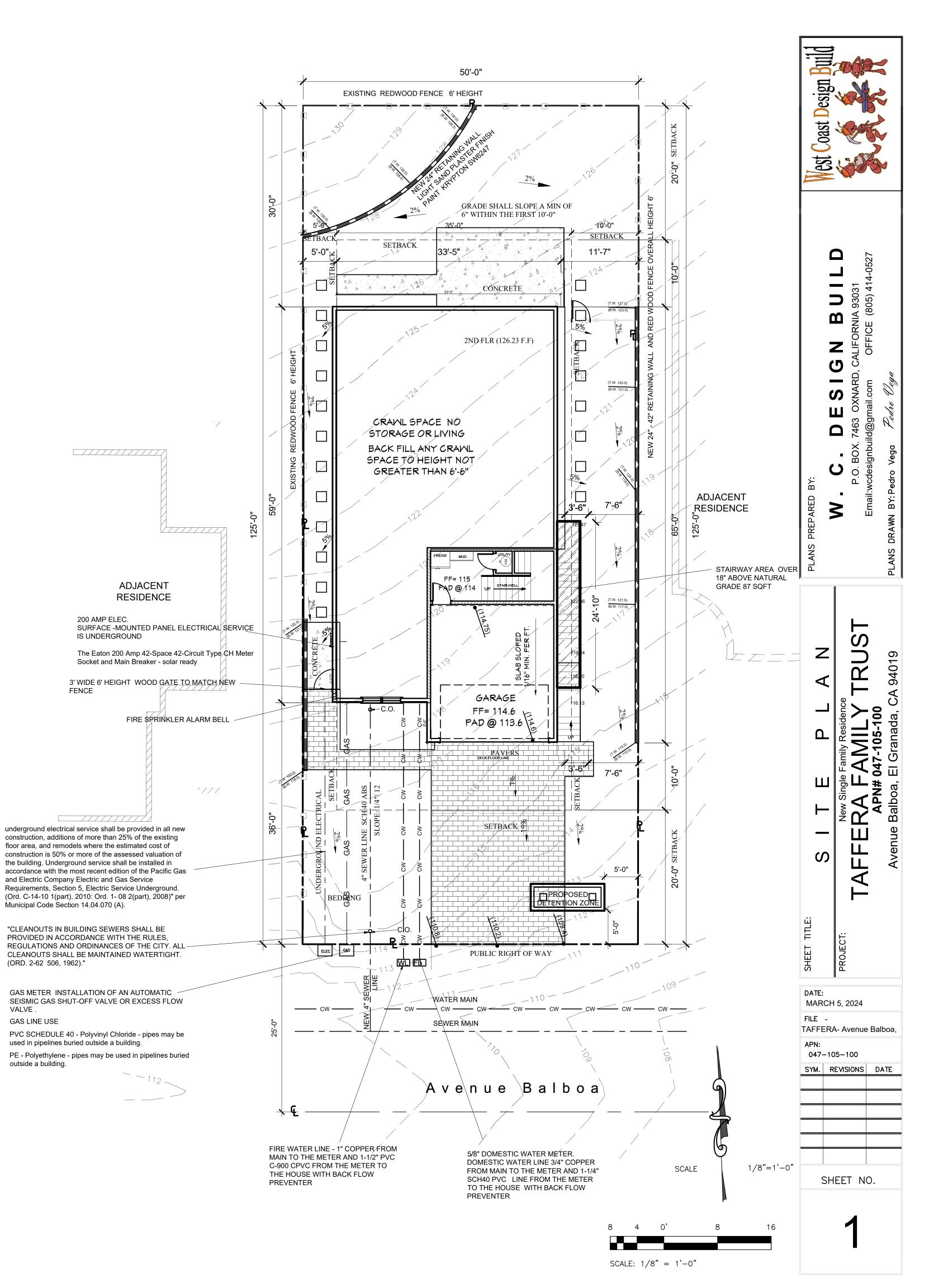


BURIAL DEPTHS FOR YARD PIPING & CONDUIT



THE BUILDING NOTE: A FIRE HYDRANT IS REQUIRED may be reduced by 6" when a WITHIN 250 FEET OF THE BUILDING AND THE FLOW A MINIMUM OF 1000 GPM AT 20 PSI ELECTRICAL POLE (E.P.) - IS 80 FEET FROM

THE BUILDING MAN HOLE (M.H.) - IS 50 FEET FROM THE



CEC -2022 CALIFORNIA ELECTRIC CODE CMC-2022 CALIFORNIA MECHANICAL CODE CPC 2022 CALIFORNIA PLUMBING CODE

CENC-2022 CALIFORNIA ENERGY (EFFICIENCY) CODE CHBC-2022 CALIFORNIA HISTORICAL BUILDING CODE CFC-2022 CALIFORNIA FIRE CODE

CEBC-2022 CALIFORNIA EXISTING BUILDING CODE 2022 CALIFORNIA GREEN BUILDING CODE CGBC-

### DESIGN

1. All work shall conform to the current california code

2. New residential buildings shall have an internally illuminated address . the numbers / letters shall be 4 inches in height with a minimum 3/4 inch stroke contrasting with the background

All contractors shall verify all dimensions and acknowledge full cognizance of local building code

Dimensions on drawing take precedence over scale Building shall comply with city burglary security ordinance

6. It is the responsibility of the owner or his agent to install h.v.a.c. equipment which is approved by california energy

7. Habitable rooms (except kitchens) shall not be less than 7'-0" in any dimension or 70 sq. ft. in area. kitchens shall be at least 50 sq. ft. in area with 3'-0" clearance between counters and appliances/walls. (r304.1; r304.2)

8. 7'-6" Minimum ceiling height for habitable rooms (except kitchens) and hallways (r305.1)

9. 7'-0" Minimum ceiling height for kitchens, storage rooms, laundry rooms, and bathrooms (r305.1)

10. Basement without habitable spaces shall have a ceiling height of no less than 6-ft. 8-in., except 6-ft. 4-in. is allowed under beams or ducts. (r305.1.1)

11. Hallways shall be a minimum width of 36". (r311.6)

### GENERAL

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 openable 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, ands screens shall be releasable or re- movable 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 R310.4.4) Photovoltaic panels & modules shall not be below an emergency escape and rescue opening within 36". (R324.6.3)

Each bathroom containing a bathtub, shower or tub/shower combination shall be me-chanically ventilated with Energy Star approved equipment (minimum 50cfm) with an integral humidistat installed. (CRC R303.3.1)

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). Baffles are required at vents for insulation. Provide minimum of 1" inch of air space between insulation and roof sheathing. (CRC R806.2)

Enclosed rafter spaces shall have a 1-inch clear cross ventilation. (Properly sized rafters for insulation) (CRC R806.1) Under floor cross ventilation: minimum 1.0 sq. ft. for each 150 sq. ft. of under floor area. When a class 1 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 com- ply with CRC R408.2. Unvented crawl space added option for dehumidification of 70 pints moisture per day per 1,000 sf to requirement for exemption. (R408.3)

Exterior balconies and elevated walking surfaces exposed to water, where structural framing is protected by an impervious moisture barrier require construction documents with manufacturer's installation instructions. (R106.1.6) Must be inspected and approved before concealing barrier. (R109.1.5.3) 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. (R317.1.3) Provide landings and a porch light at all exterior doors. Landings are to be minimum 3 ft deep x width of door. Landings at required 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) 9. Mezzanines shall not be greater than 1/3 of the story unless fire sprinklers are installed then the area can be ½ of the story.

10. At least one egress door shall be provided for each dwelling unit, the egress door shall be side hinged with a minimum openable width of 32 inches; the minimum clear openable height shall be 78 inches minimum (other doors shall not be required to comply with these dimensions). Egress doors shall be readily openable from the inside without the use of a key, special knowledge, or effort. (CRC R311.2)

11. Operable windows more than 72" above finish grade with a clear opening height less than 24" shall have openings not more than 4" apart or needs a compliant guard. (R312.2)

12. The following windows shall be fully tempered: (CRC R308.4) 12.1. Sliding/swinging glass doors

12.2. Glazing in walls and enclosures facing hot tubs, spas, whirlpools, saunas, steam rooms, bathtubs, showers and wimming pools where the glazing is less than 60 inch- es above the standing surface within the compartment and within 60 inches horizon- tally of the water's edge (CRC R308.4.5)

12.3. 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-swing door. (R308.4.2) 12.4. 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 12.5. Within 60in. of the bottom tread of a stairway and less than 36in. above the landing

12.6. Glazing in guards and railings

12.7. Glazing adjacent to stairways, landings, and ramps within 36in. horizontally of the walking surface less than 36in. above the walking surface

# FOUNDATIONS & CONCRETE SLABS

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 for 10ft away from structures to an approved drainage way.

Footings shall extend at least 12 inches into the undisturbed ground surface. (CRC R403.1.4)

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) Concrete slabs: 3 ½" 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 3/8 minimum gravel under the

areas. A capillary break shall be installed when a vapor retarder is required. 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 & CPC 707.9)

concrete slab. Separate from soil with a 6-mil polyethylene vapor retarder with joints lapped not less than 6 inches in living

Minimum sill bolting: ½" 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 con-struction. 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 D0 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 & R602.11.1) CLEARANCES AND TREATMENT FOR WOOD

# FRAMING

Weather exposed glu-lam, beams and posts shall be pressure treated or shall be wood of natural resistance to decay (CRC

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

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. 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

FLOORS

immedi-ately above the flashing. (CRC R703.8.5 and R703.8.6)

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)

2. Balconies must be designed for a minimum live load of 60lbs per square foot. (CRC T-R301.5)

# WALLS

 Specify post to beam connections. Positive connection shall be provided to ensure against uplift and lateral displacement. (CRC R502.9 & CBC 2304.10.7)

2. All fasteners used for attachment of siding & into pressure treated lumber shall be of a corrosion resistant type. (CRC

3. Fire-block in concealed spaces of stud walls/partitions, vertically at ceiling/floor levels, & horizontally at 10ft. intervals. Fire-block at soffits, drop ceilings/similar locations & in concealed spaces at the top/bottom of stair stringers. (CRC R302.11)

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. 5. Stucco shall have a minimum clearance to earth of 4 inches and 2 inches to paved surfaces with an approved weep screed.

(CRC R703.7.2.1) Masonry stone veneer shall be flashed beneath the first course of masonry and provided with weep holes

Roof sheathing can only cantilever 9 inches beyond a gable end wall unless supported by overhang framing. (CRC 803.2.3) Provide a minimum 22" x 30" access opening to attic (CRC R807.1); may be required to be 30"x30" to remove the largest piece of mechanical equipment per the California Mechanical Code.

Roof drains/gutters required to be installed per the California Plumbing Code with leaf/ debris noncombustible protection also 5. Roof construction and coverings shall comply with CRC Chapters 8, 9 and local ordi-nance. All roofing shall be tested/listed

Asphalt shingles with sloped roofs 2/12 to <4/12 shall have two layers of underlayment applied per CRC R905.2.2.

Roof sheathing fasteners shall be 6-inches on center in field and at panel edges [Table R602.3(1)]. GARAGE AND

## CARPORT

Garage shall be separated from the dwelling unit & 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 & 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 & T-R302.6)

Ducts penetrating the garage to dwelling separation shall be a minimum of 26 gauge with no openings into the garage. (CRC

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.

4. Garage and carport floor surfaces shall be non-combustible material and slope to drain towards the garage door opening. 5. Appliances and receptacles installed in garage generating a glow, spark or flame shall be located 18" above floor unless it is

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)

listed as flammable vapor ignition resistant. (CMC 305.1) Provide protective post or other impact barrier from vehicles. (CMC

### STAIRWAYS & RAMPS

Stair landings required every 12'7" of vertical rise. (CRC R311.7.3)

Exterior stair stringers must be naturally resistant to decay or pressure treated. (CRC R317.1)

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 riser 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 R311.7.5.1)

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 crosssectional dimension of 2.25". See R311.7.8.5 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 R311.7.8.4)

Guards shall be 42" minimum height (unless acting as a handrail/guard for a stair- way; 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) 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).

Usable spaces underneath enclosed/unenclosed stairways shall be protected by a minimum of ½" gypsum board. (CRC

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)

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.

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 (DTT1Z as example) if located at 4 points along the deck.

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

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(8))

# ELECTRICAL

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)

Provide a minimum 3 lug intersystem bonding busbar at the main electrical service. (CEC 250.94)

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)

A concrete-encased electrode (ufer) consisting of 20' 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) All 15/20 ampere receptacles installed per CEC 210.52 including attached and detached garages and accessory buildings

shall be listed tamper-resistant receptacles. (CEC 406.12) 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) 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)

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) & (G)) 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) 10. All dwellings must have one exterior outlet at the front and the back of the dwelling. (CEC 210.52(E)) 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.

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)

13. Surge protection device (SPD) required for all services supplying dwelling units. The SPD shall be an integral part of the service equipment or shall be located immediately adjacent thereto. The SPD shall be a Type 1 or Type 2 SPD. [CEC

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 surfaces 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 than 2 receptacles may be required. 1 receptacle is required for peninsular 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))

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)) 15. Stairways with 6 or more risers shall have wall switch at each floor level at the stair landings. (CEC 210.70(A)(2))

16. 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.

17. All lighting/fan fixtures located in wet or damp locations shall be rated for the appli-cation. (CEC 410.10) 18. GFCI outlets are required: for all kitchen receptacles that are designed to serve coun-tertop 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, indoor damp locations, mud rooms, finished basements, laundry areas and

in all garage outlets including outlets dedicated to a single device or garage door opener. (CEC 210.8) 19. Carbon-monoxide alarms shall be installed in dwelling units with fuel-burning appli-ances or with attached garages (CRC R315.3):

19.1. Outside of each separate sleeping area in the immediate vicinity of bedrooms 19.2. On every level of a dwelling unit including basements

19.3. Alterations, repairs, or additions exceeding 1,000 dollars (May be battery operated) 20. Smoke alarms shall be installed (CRC (R314.3)

20.1. In each room used for sleeping purposes.

20.2. Outside of each separate sleeping area in the immediate vicinity of bedrooms. 20.3. In each story, including basements.

20.4. At the top of stairways between habitable floors where an intervening door or obstruction prevents smoke from reaching the smoke detector. 20.5. 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)). 20.6. Alterations, repairs, or additions exceeding 1,000 dollars. (May be battery operated.) 20.7. All smoke and carbon-monoxide alarms shall be hardwired with a battery backup (smoke alarms shall have a 10-year

sealed battery). (CRC R314.4 & R315.1) 20.8. Smoke detectors within 10 feet to 20 feet of the stove shall be ionization type with alarm silencing switch. CRC R314.3.3. 21. All 15/20 ampere receptacles in wet locations shall have in-use (bubble) covers in-stalled. All receptacles in wet locations shall also be listed weather-resistant type. (CEC 406.9(B)(1))

**ENERGY STORAGE SYSTEMS** 

Energy storage systems shall only be installed in detached garages and accessory structures, attached garages, outdoor not less than 3' from door and windows and enclosed utility closets, basements, storage or utility closets within dwelling units with finished or noncombustible walls and ceiling. (CRC R328.4)

Individual ESS units shall have a maximum rating of 20 kWh. The aggregate rating of the ESS shall not exceed 40 kWh within utility closets, basements and storage or utility spaces, 80 kWh in attached or detached garages or detached accessory structures, 80 kWh on exterior walls and 80 kWh outdoors on the ground, (CRC R328.5)

3. Rooms and areas within structures in which ESS are installed shall be protected by smoke alarms. A heat detector shall be

installed in locations within structures where smoke alarms cannot be installed based on their listing. (CRC R328.7) 4. ESS installed in locations subject to vehicle damage shall be provided with impact protection. (CRC R328.8)

PLUMBING

Underfloor cleanouts shall not be more than 5' from an underfloor access, access door or trap door. (CPC 707.9) Kitchen sinks require a cleanout above the floor level of the lowest floor of the building. ABS piping shall not be exposed to direct sunlight unless protected by water based synthetic latex paints. (CPC 906.1) PVC

piping shall not be exposed to direct sunlight unless protected by water based synthetic latex paint, .04" thick wrap or

otherwise protected from UV degradation. (CPC 605.12) Underground water supply lines shall have a 14 awg blue tracer wire. (CPC 604.10.1)

The entire floor space in a room containing a shower without thresholds shall be considered a "wet location" when using the CRC, CBC, and the CEC. (CPC 408.5) Shower compartments, regardless of shape, shall have a minimum finished interior of 1024 square inches (32" by 32") and 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)

absorbent surface up to 6' above the floor. (CRC R307.2) Minimum shower receptor slope is 1/8" per foot. (408.5) 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 upper & 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

Provide curtain rod or door a minimum of 22" in width. (CPC 408.5) Showers and tubs with showers require a non-

7.1. A 120V receptacles provided within 3ft

7.2. A category III or IV vent, or a straight (without bends) Type B vent

7.3. Condensate drain that is no more than 2 inches higher than the base of the water heater 7.4. Gas supply line with a minimum 200,000 Btu/hr dedicated capacity for the water heater

7.5. A dedicated 120/240, 3 wire circuit with 10AWG wire to a receptacle out- 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 Use." (CEC 150.0(n))

Water heaters using gas or propane shall designate a space 2.5 feet by 2.5 feet and 7 feet tall suitable for future installation of a heat pump water heater. Additional features are required. (California Energy Code 150.0(n)) 9. 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 609.12) 10. 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 corrosionresistant wire mesh with mesh openings 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)

11. Water heaters located in attics, ceiling assemblies and raised floor assemblies shall show a water-tight corrosion resistant minimum 1 ½" deep pan under the water heater with a minimum ¾ inch drain to the exterior of the building. (CPC 507.5) 12. Isolation water valves required for instantaneous water heaters 6.8kBTU/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) 13. Water closet shall be located in a space not less than 30" in width (15" on each side) and 24" minimum clearance in front.

14. 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 408.3.2) 15. Provide anti-siphon valves on all hose bibs. (CPC 603.5.7) 16. Floor drains shall be provided with a trap primer. (CPC 1007)

17. Clearly label on the plans the maximum water flow rates per the (CGBSC 4.303.1): 17.1. Water Closets: 1.28gpf

17.2. Urinals: .125gpf 17.3. Kitchen Faucets: 1.8gpm @ 60psi

17.4. Lavatory Faucets: 1.2gpm @ 60psi 17.5. Showerheads: 1.8gpm

**MECHANICAL** 

1. All newly installed gas fireplaces shall be direct vent and sealed-combustion type. (CMC 912.2) Any installed wood stove or pellet stove shall meet the U.S. EPA New Source Per-formance Standard emission limits and shall have a permanent label certifying emission limits.

Top chimney must extend a minimum of 2 ft. above any part of the building within 10

4. Fireplaces shall have closable metal or glass doors, have combustion air intake drawn from the outside and have a readily accessible flue dampener control. Continuous burning pilot lights are prohibited. (CEC 150.0(e))

Provide combustion air for all gas fired appliances per CMC Chapter 7. 6. Gas vents passing through an insulated assembly shall have a metal insulation shield a minimum 2" above insulation. (CMC 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) 8. Roof top equipment on roofs with over 4/12 slope shall have a level 30"x30" working platform. (CMC 304.2) 9. Exhaust openings terminating to the outdoors shall be covered with a corrosion resistant screen 1/4"-1/2" in opening size

(not required for clothes dryers). (CMC 502.1) 10. Vent dryer to outside of building (not to under-floor area). 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) 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) 12. Provide minimum 100 square inches make-up air for clothes dryers installed in clos-ets. (CMC 504.4.1(1)) 13. Heating system is required to maintain 68 degrees at 3 ft. above floor level and 2ft from exterior walls in all habitable rooms.

14. Wood burning appliances shall not be installed in a new or existing project that is not one of the following: 14.1. A pellet-fueled wood burning heater.

14.2. A U.S. EPA Phase II Certified wood burning heater. 14.3. 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. 15. All ducts in conditioned spaces must include R-4.2 insulation. (150.1(c)9) Minimum heating and cooling filter ratings shall be MRV 13 (150.0(m)12)

# **TITLE 24 ENERGY**

1. All ducts in conditioned spaces must include R-4.2 insulation. (150.1(c)9) Minimum heating and cooling filter ratings shall be

Provide compliance documentation for mandatory measures to shown throughout the plans. All ducts in conditioned spaces must include R-4.2 insulation. (California Energy Code 150.1(c)9) Minimum heating and cooling filter ratings shall be MRV 13. (California Energy Code 150.0(m) 12)

Isolation water valves required for instantaneous water heaters 6.8kBTU/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. (California Energy Code 110.3(c)6)

4.2. A dedicated raceway from the main service panel to a panelboard (sub panel) that supplies the following branch circuits:

4. Energy storage system (ESS) ready. At least one of the following shall be provided: 4.1. ESS ready interconnection equipment with a minimum backed-up capacity of 60 amps and a minimum of four ESS-supplied branch circuits, or

refrigerator, lighting circuit near primary egress door, sleeping room receptacle and one additional. The main panelboard shall have a minimum busbar rating of 225 amps. Space shall be re- served to allow future installation of a system isolation equipment/transfer switch within 3 feet of the main panelboard. Raceways shall be installed between the panelboard and the system isolation equipment to allow the connection of backup power source.

Heat pump space heater ready. Systems using a gas or propane furnace shall include a dedicated 240-volt branch circuit with 3 feet of the furnace. The branch circuit shall be rated at 30 amps minimum. The main electrical service shall have a reserved space to allow for the installation of a double pole circuit breaker. The reserved space shall be permanently marked as "For future 240V use". (California Energy Code 150.0(t)) Electric cooktop ready. Systems using a gas or propane cooktop shall include a dedicated 240-volt branch circuit with 3 feet

space to allow for the installation of a double pole circuit breaker. The reserved space shall be permanently marked as "For future 240V use". (California Energy Code 150.0(u)) Electrical clothes dryer ready. Systems using a gas or propane dryer shall include a dedicated 240-volt branch circuit with 3 feet of the clothes dryer. The branch circuit shall be rated at 30 amps minimum. The main electrical service shall have a reserved space to allow for the installation of a double pole circuit breaker. The reserved space shall be permanently marked

of the cooktop. The branch circuit shall be rated at 50 amps minimum. The main electrical service shall have a reserved

as "For future 240V use". (California Energy Code 150.0(v)) 9. ALL luminaires must be high efficacy (150.0(k)1A) 9.1. Luminaries recessed in insulated ceilings must meet five requirements (150.0(k) 1C):

vacancy sensor or dimmer. (Exception: <70sf closets and hallway) (150.0(k)2K)

9.2. They must be rated for direct insulation contact (IC). 9.3. They must be certified as airtight (AT) construction.

9.4. 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. 9.5. They may not contain a screw base sockets 9.6. They shall contain a JA8 compliant light source

10. In bathrooms, garages, walk-in closet, 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)2l) 11. Lighting in habitable spaces, including but not limited to living rooms, dining rooms, kitchens and bedrooms, shall have readily accessible dimming controls. (California Energy Code 150(k) 2F) 12. Joint Appendix A (JA8) certified lamps shall be considered high efficacy. JA8 compli-ant light sources shall be controlled by a 13. Under-cabinet lighting shall be switched separately from other lighting systems. (150.0(k)2L)

1.1. Retention basins of sufficient size shall be utilized to retain storm water on site

14. 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)

14.1. Photo-control and motion sensor

14.2. Photo-control and automatic time switch control 14.3. Astronomical time clock control turning lights off during the day

16. Contractor shall provide the homeowner with a luminaire schedule giving the lamps used in the luminaires installed.

15. All high efficacy light fixtures shall be certified as "high-efficacy" light fixtures by the California Energy Commission.

17. 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) 18. Provide a gasket/ insulation on all interior attic/under-floor accesses. (110.7)

19. 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(o)) A minimum 110 CFM Hood Over Electrical Range or minimum 180 CFM Hood Over Natural Gas Range indoor air quality fan is required in the kitchen and shall be HERS verified.

### GREEN BUILDING

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

1.2. 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. All new residential construction with attached private garages shall have the follow-ing for electric vehicle (EV) charging

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.

overcurrent protection space shall be labeled "EV CAPABLE". 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)

4. The main panel and/or subpanel shall be of sufficient size to install a 40-ampere dedicated branch circuit. The dedicated

6. At time of final inspection, a building operation and maintenance manual, compact disc, etc shall be provided containing the following: (CGBSC 4.410.1) 6.1. Directions that manual shall remain onsite for the life of the building

6.2. Operation and maintenance instructions for equipment, appliances, roof/yard drain- age, irrigation systems, etc. Information from local utility, water and waste recovery providers 6.3. Public transportation and carpool options

6.4. Material regarding importance of keeping humidity levels between 30-60 percent Information regarding routine maintenance procedures 6.5. State solar energy incentive program information

6.6. A copy of any required special inspection verifications that were required (if any)

1.a. 5.7 sq. ft. minimum net clear open able area (5.0 sq. ft. for grade-level openings);

1.b. 24" minimum net clear open able height; r310.1.2

7. The project shall meet minimum pollutant control requirements for adhesives, seal-ants, caulks, paints, carpet, resilient flooring systems, etc. (CGBSC 4.504.2.1) 8. 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)

1. Sleeping rooms and basements must have an exterior egress door or window (r310.1) with:

1.c. 20" minimum net clear open able width; r310.1.3 1.d. rescue openings no greater than 44" from floor to sill height 1.e. direct opening to public way or yard/court opening to pub. way;

1.f. window wells of 9 sq. ft. horizontal area and 36" minimum dimensions and equipped with ladders/steps for escape.

2. All window area of at least 8% of the floor area in each room or show on utility plan permanently wired lighting supplying average illumination of 10 foot-candles over area of the room at 30" height. (r303.1) 3. Guess rooms & habitable rooms within a dwelling unit or congregate residence shall be provided with natural ventilation by means of operable exterior openings with a area of not less than 1/20 of the floor area of such rooms with a minim of 5

# GARAGE

1. Garages beneath habitable rooms shall be separated by no less than 5/8-in. type x gypsum board. provide minimum 1/2-in. gypsum board on the garage side elsewhere. (t-r302.6) 2. Provide minimum 1/2-in. gypsum board on the garage side of detached garages less than 3-ft. from a dwelling unit or

structural members supporting floor or ceiling assemblies. (t-r302.6) 3. Doors to the dwelling unit shall be solid wood or solid or honeycomb core steel and not less than 1-3/8-in. thick, or 20 minute rated, unless the dwelling unit and the garage are protected by an automatic fire sprinkler system. doors shall be self-closing and self-latching. (r302.5.1)

Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. (r302.5.1) Garage floor surfaces shall be of an approved noncombustible material, and the area used to park vehicles shall be sloped to a drain or toward the main vehicle entry. (r309.1)

6. Floors in garage/carport shall be designed to support a uniformly distributed load of 50-psf or concentrated live loads of 2,000-lbs acting on an area of 20-sq. in. (t-r301.5) 7. A minimum 18" high platform - from source of ignition - for water heater and heating/cooling equipment capable of igniting flammable vapors (unless listing report number provided showing ignition-resistant appliance). (cpc 508.14(1) and cmc

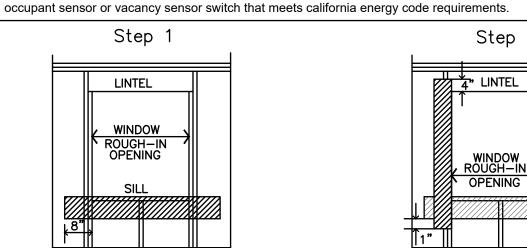
8. Protection of water heater and/or heating/cooling equipment subject to vehicular impact. (cpc 508.14)

# BATHROOM NOTES 1. For the purpose of humidity control, bathrooms containing a bathtub, shower or tub/shower combination, shall be

mechanically ventilated at a rate of 20 cfm for continuous ventilation; otherwise a rate of 50 cfm shall be used for intermittent ventilation. an operable window is not a permissible method. exhaust air shall be ducted to terminate outside the building. crc r303.3.1, cgbc 4.506.1 2. In bathroom, water closet compartments and other similar rooms, provide a window not less than 3 sq. ft. glazing area, 1/2"

of which shall be operable, or provide exhaust fans with exhaust rate of 50 cfm for intermittent ventilation or 20 cfm for continuous ventilation, the exhaust air shall be exhausted directly to the outdoors, crc 303.3.1. Bathtub and shower compartments shall be finished with nonabsorbent surface to a height of 72" above the floor

Glazing (glass) within 60" of tub or shower walking surface must be tempered, safety glass or other listed material. All bathroom receptacles to be ground-fault circuit-interrupter protected. (gfci) Lighting - permanently installed luminaries shall be of high efficacy type (led or pin-base fluorescent) and provide manual-on



Attach sill strip with top edge level with rough sill;

extend beyond edge of rough opening at least 8".

Secure all building paper or similar approved flashing

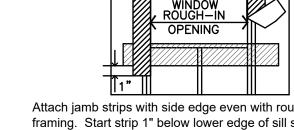
material with galvanized nails or power driven staples.

Step 3

Install window into rough opening with sill and jamb

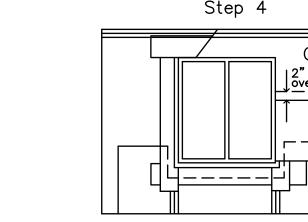
flanges over previously installed flashing. Attach

head flashing over the window flange.



Attach jamb strips with side edge even with rough-jamb framing. Start strip 1" below lower edge of sill strip and extend 4" above lower edge of lintel.

Step 2



Commencing at the bottom(sole plate) of the wall, lay building paper under sill strip. Cut any excess building paper that may extend above the sill flange line on each side of opening (shown as dashed line). Do not cut building paper horizontally so the paper will lap over the jamb strips. Install successive lines of building paper (B,C,D etc) over jamb and head flanges, lapping each course.

 $\mathbf{\Omega}$ Z

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DATE: MARCH 5, 2024

FILE -TAFFERA- Avenue Balboa, 047-105-100

SYM. REVISIONS DATE

SHEET NO.

WINDOW FLASHING DETAIL

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 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

## 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.

[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

CHAPTER 4

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

# RESIDENTIAL MANDATORY MEASURES

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.

SECTION 4.102 DEFINITIONS

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.

1. Retention basins of sufficient size shall be utilized to retain storm water on the site.

2. 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. 3. 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)

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:

2. Water collection and disposal systems

3. French drains 4. Water retention gardens

construction cost of the project.

5. 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)

# 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: 1.1 Where there is no local utility power supply or the local utility is unable to supply adequate power.

1.2 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

shall be installed in accordance with the California Electrical Code, Article 625.

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

Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities.

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.

and/or subpanel shall provide capacity to install a 40-ampere 208/240-volt minimum dedicated branch circuit and

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". 4.106.4.2 New multifamily dwellings, hotels and motels and new residential parking facilities.

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.

4.106.4.2.1Multifamily development projects with less than 20 dwelling units; and hotels and motels with less than 20 sleeping units or quest rooms. The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to

1.EV Capable. 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

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.

1.When EV chargers (Level 2 EVSE) are installed in a number equal to or greater than the required number of EV

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.

Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV

There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or EV chargers are installed for use.

2.EV Ready. 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.

Exception: Areas of parking facilities served by parking lifts.

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.

The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to

1.EV Capable. 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.

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.

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.

### a. Construction documents shall show locations of future EV spaces.

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.

2.EV Ready. 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.

### Exception: Areas of parking facilities served by parking lifts.

3.EV Chargers. 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.

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 3.3 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

### 4.106.4.2.2.1 Electric vehicle charging stations (EVCS).

Electric vehicle charging stations required by Section 4.106.4.2.2, Item 3, shall comply with Section 4.106.4.2.2.1.

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.

### 4.106.4.2.2.1.1 Location. EVCS shall comply with at least one of the following options:

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.

2. The charging space shall be located on an accessible route, as defined in the California Building Code, Chapter 2, to

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.

4.106.4.2.2.1.2 Electric vehicle charging stations (EVCS) dimensions. The charging spaces shall be designed to comply with the following:

1. The minimum length of each EV space shall be 18 feet (5486 mm).

2. The minimum width of each EV space shall be 9 feet (2743 mm).

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

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.

# 4.106.4.2.2.1.3 Accessible EV spaces.

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 vith 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.

### 4.106.4.2.3 EV space requirements. 1.Single EV space required. Install a listed raceway capable of accommodating a 208/240-volt dedicated 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 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.

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.

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 amperage 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.

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.

### 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.

4.106.4.2.4 Identification.

4.201 GENERAL

4.106.4.2.5 Electric Vehicle Ready Space Signage.

# Electric vehicle ready spaces shall be identified by signage or pavement markings, in compliance with Caltrans Traffic

Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s). 4.106.4.3 Electric vehicle charging for additions and alterations of parking facilities serving existing multifamily

When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten (10) percent of the total number of parking spaces added or altered shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE.

1. Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV

# 2. There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.

4.201.1 SCOPE. For the purposes of mandatory energy efficiency standards in this code, the California Energy Commission will continue to adopt mandatory standards.

# DIVISION 4.3 WATER EFFICIENCY AND CONSERVATION

4.303 INDOOR WATER USE 4.303.1 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the sections 4.303.1.1, 4.303.1.2, 4.303.1.3, and

Note: All noncompliant plumbing fixtures in any residential real property shall be replaced 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

Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Tank-type Toilets.

4.303.1.1 Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush.

Note: The effective flush volume of dual flush toilets is defined as the composite, average flush volume of two reduced

4.303.1.2 Urinals. The effective flush volume of wall mounted urinals shall not exceed 0.125 gallons per flush. The effective flush volume of all other urinals shall not exceed 0.5 gallons per flush.

4.303.1.3.1 Single Showerhead. Showerheads shall have a maximum flow rate of not more than 1.8 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Showerheads.

4.303.1.3.2 Multiple showerheads serving one shower. When a shower is served by more than one showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi, or the shower shall be designed to only allow one shower outlet to be in operation at a time.

Note: A hand-held shower shall be considered a showerhead.

## 4.303.1.4 Faucets.

4.303.1.4.1 Residential Lavatory Faucets. The maximum flow rate of residential lavatory faucets shall not exceed 1.2 gallons per minute at 60 psi. The minimum flow rate of residential lavatory faucets shall not be less than 0.8 gallons per minute at 20 psi.

4.303.1.4.2 Lavatory Faucets in Common and Public Use Areas. The maximum flow rate of lavatory faucets installed in common and public use areas (outside of dwellings or sleeping units) in residential buildings shall not exceed 0.5 gallons per minute at 60 psi.

4.303.1.4.3 Metering Faucets. Metering faucets when installed in residential buildings shall not deliver more than 0.2

4.303.1.4.4 Kitchen Faucets. The maximum flow rate of kitchen faucets shall not exceed 1.8 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per

Note: Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.

## 4.303.1.4.5 Pre-rinse spray valves.

When installed, shall meet the requirements in the California Code of Regulations, Title 20 (Appliance Efficiency Regulations), Sections 1605.1 (h)(4) Table H-2, Section 1605.3 (h)(4)(A), and Section 1607 (d)(7) and shall be equipped with an integral automatic shutoff.

minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per minute at 60 psi.

FOR REFERENCE ONLY: The following table and code section have been reprinted from the California Code of Regulations, Title 20 (Appliance Efficiency Regulations), Section 1605.1 (h)(4) and Section 1605.3 (h)(4)(A).

TABLE - MAXIMUM FIXTURE WATER USE	
FIXTURE TYPE	FLOW RATE
SHOWER HEADS (RESIDENTIAL)	1.8 GMP @ 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

Title 20 Section 1605.3 (h)(4)(A): Commercial prerinse spray values manufactured on or after January 1, 2006, shall have a minimum spray force of not less than 4.0 ounces-force (ozf)[113 grams-force(gf)]

4.303.2 Submeters for multifamily buildings and dwelling units in mixed-used residential/commercial buildings. Submeters shall be installed to measure water usage of individual rental dwelling units in accordance with the California Plumbing Code.

4.303.3 Standards for plumbing fixtures and fittings. Plumbing fixtures and fittings shall be installed in accordance with the California Plumbing Code, and shall meet the applicable standards referenced in Table 1701.1 of the California Plumbing Code.

THIS TABLE COMPILES THE DATA IN SECTION 4.303.1, AND IS INCLUDED AS A CONVENIENCE FOR THE USER.

TABLE H-2				
STANDARDS FOR COMMERCIAL PRE-RINSE SPRAY VALUES MANUFACTURED ON OR AFTER JANUARY 28, 2022				
PRODUCT CLASS [spray force in ounce force (ozf)]	MAXIMUM FLOW RATE (gpm)			
Product Class 1 (≤ 5.0 ozf)	1.00			
Product Class 2 (> 5.0 ozf and ≤ 8.0 ozf)	1.20			
1 10ddol 01d33 2 (* 3.0 021 d11d = 0.0 021)				

# 4 304 OUTDOOR WATER USE

4.304.1 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS. Residential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.

The Model Water Efficient Landscape Ordinance (MWELO) is located in the California Code Regulations, Title 23, Chapter 2.7, Division 2. MWELO and supporting documents, including water budget calculator, are available at: https://www.water.ca.gov/

# DIVISION 4.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY

4.406 ENHANCED DURABILITY AND REDUCED MAINTENANCE

4.406.1 RODENT PROOFING. Annular spaces around pipes, electric cables, conduits or other openings in sole/bottom plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or a similar method acceptable to the enforcing agency.

4.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING 4.408.1 CONSTRUCTION WASTE MANAGEMENT. Recycle and/or salvage for reuse a minimum of 65 percent of the non-hazardous construction and demolition waste in accordance with either Section 4.408.2, 4.408.3 or 4.408.4, or meet a more stringent local construction and demolition waste management ordinance.

Excavated soil and land-clearing debris. Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist or are not located reasonably close to the jobsite. The enforcing agency may make exceptions to the requirements of this section when isolated jobsites are

located in areas beyond the haul boundaries of the diversion facility. 4.408.2 CONSTRUCTION WASTE MANAGEMENT PLAN. Submit a construction waste management plan in conformance with Items 1 through 5. The construction waste management plan shall be updated as necessary and shall be available during construction for examination by the enforcing agency.

1. Identify the construction and demolition waste materials to be diverted from disposal by recycling, reuse on the project or salvage for future use or sale. 2. Specify if construction and demolition waste materials will be sorted on-site (source separated) or bulk mixed (single stream).

3. Identify diversion facilities where the construction and demolition waste material collected will be taken. 4. Identify construction methods employed to reduce the amount of construction and demolition waste generated. 5. Specify that the amount of construction and demolition waste materials diverted shall be calculated by weight or

4.408.3 WASTE MANAGEMENT COMPANY. Utilize a waste management company, approved by the enforcing agency, which can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill complies with Section 4.408.1.

Note: The owner or contractor may make the determination if the construction and demolition waste materials will be diverted by a waste management company. 4.408.4 WASTE STREAM REDUCTION ALTERNATIVE [LR]. Projects that generate a total combined weight of

construction and demolition waste disposed of in landfills, which do not exceed 3.4 lbs./sq.ft. of the building area shall

meet the minimum 65% construction waste reduction requirement in Section 4.408.1

4.408.4.1 WASTE STREAM REDUCTION ALTERNATIVE. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 2 pounds per square foot of the building area, shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1

4.408.5 DOCUMENTATION. Documentation shall be provided to the enforcing agency which demonstrates compliance with Section 4.408.2, items 1 through 5, Section 4.408.3 or Section 4.408.4..

### 1. Sample forms found in "A Guide to the California Green Building Standards Code (Residential)" located at ww.hcd.ca.gov/CALGreen.html may be used to assist in documenting compliance with this section.

2. Mixed construction and demolition debris (C & D) processors can be located at the California Department of Resources Recycling and Recovery (CalRecycle). 4.410 BUILDING MAINTENANCE AND OPERATION

4.410.1 OPERATION AND MAINTENANCE MANUAL. At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the enforcing agency which includes all of the following shall be placed in the building:

. Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure. 2. Operation and maintenance instructions for the following: a. Equipment and appliances, including water-saving devices and systems, HVAC systems, photovoltaic

d. Landscape irrigation systems. e. Water reuse systems. B. Information from local utility, water and waste recovery providers on methods to further reduce resource

consumption, including recycle programs and locations.

b. Roof and yard drainage, including gutters and downspouts.

Space conditioning systems, including condensers and air filters.

4. Public transportation and/or carpool options available in the area. 5. Educational material on the positive impacts of an interior relative humidity between 30-60 percent and what methods an occupant may use to maintain the relative humidity level in that range. 6. Information about water-conserving landscape and irrigation design and controllers which conserve water.

systems, electric vehicle chargers, water-heating systems and other major appliances and equipment.

the foundation 8. Information on required routine maintenance measures, including, but not limited to, caulking, painting, grading around the building, etc.

. Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from

9. Information about state solar energy and incentive programs available.

10. A copy of all special inspections verifications required by the enforcing agency or this code. 11. Information from the Department of Forestry and Fire Protection on maintenance of defensible space around residential structures.

12. Information and/or drawings identifying the location of grab bar reinforcements.

4.410.2 RECYCLING BY OCCUPANTS. Where 5 or more multifamily dwelling units are constructed on a building site, provide readily accessible area(s) that serves all buildings on the site and are identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waster, and metals, or meet a lawfully enacted local recycling ordinance, if more restrictive.

Exception: Rural jurisdictions that meet and apply for the exemption in Public Resources Code Section 42649.82 (a)(2)(A) et seq. are note required to comply with the organic waste portion of this section.

DIVISION 4.5 ENVIRONMENTAL QUALITY

### **SECTION 4.501 GENERAL** 4.501.1 Scope

The provisions of this chapter shall outline means of reducing the quality of air contaminants that are odorous, irritating and/or harmful to the comfort and well being of a building's installers, occupants and neighbors.

### SECTION 4.502 DEFINITIONS 5.102.1 DEFINITIONS

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

AGRIFIBER PRODUCTS. Agrifiber products include wheatboard, strawboard, panel substrates and door cores, not including furniture, fixtures and equipment (FF&E) not considered base building elements.

COMPOSITE WOOD PRODUCTS. Composite wood products include hardwood plywood, particleboard and medium density fiberboard. "Composite wood products" does not include hardboard, structural plywood, structural panels. structural composite lumber, oriented strand board, glued laminated timber, prefabricated wood I-joists or finger-jointed lumber, all as specified in California Code of regulations (CCR), title 17, Section 93120.1.

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.

MAXIMUM INCREMENTAL REACTIVITY (MIR). 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<sup>3</sup>/g ROC). Note: MIR values for individual compounds and hydrocarbon solvents are specified in CCR, Title 17, Sections 94700

MOISTURE CONTENT. The weight of the water in wood expressed in percentage of the weight of the oven-dry wood.

PRODUCT-WEIGHTED MIR (PWMIR). 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). Note: PWMIR is calculated according to equations found in CCR, Title 17, Section 94521 (a).

hydrogen and may contain oxygen, nitrogen and other elements. See CCR Title 17, Section 94508(a).

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

REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute to

4.503.1 GENERAL. 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. 4.504 POLLUTANT CONTROL

4.504.1 COVERING OF DUCT OPENINGS & PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION. 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.

4.504.2 FINISH MATERIAL POLLUTANT CONTROL. Finish materials shall comply with this section. **4.504.2.1 Adhesives, Sealants and Caulks.** 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

prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride,

California Code of Regulations, Title 17, commencing with section 94507.

agency. Documentation may include, but is not limited to, the following:

management district rules apply: 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

perchloroethylene and tricloroethylene), except for aerosol products, as specified in Subsection 2 below. 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

4.504.2.2 Paints and Coatings. 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.

ozone depleting substances, in Sections 94522(e)(1) and (f)(1) of California Code of Regulations, 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.

4.504.2.3 Aerosol Paints and Coatings. 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

4.504.2.4 Verification. Verification of compliance with this section shall be provided at the request of the enforcing

TABLE 4.504.1 - ADHESIVE VOC LIMIT<sub>1,2</sub> Manufacturer's product specification. 2. Field verification of on-site product containers. (Less Water and Less Exempt Compounds in Grams per Liter) ARCHITECTURAL APPLICATIONS VOC LIMIT 50 INDOOR CARPET ADHESIVES TABLE 4.504.5 - FORMALDEHYDE LIMIT CARPET PAD ADHESIVES 50 MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS 150 UTDOOR CARPET ADHESIVES PER MILLION 100 VOOD FLOORING ADHESIVES PRODUCT LIMIT 60 RUBBER FLOOR ADHESIVES HARDWOOD PLYWOOD VENEER CORE 0.05 50 SUBFLOOR ADHESIVES HARDWOOD PLYWOOD COMPOSITE CORE 0.05 CERAMIC TILE ADHESIVES 65 0.09 PARTICLE BOARD VCT & ASPHALT TILE ADHESIVES 50 MEDIUM DENSITY FIBERBOARD 0.11 50 DRYWALL & PANEL ADHESIVES THIN MEDIUM DENSITY FIBERBOARD2 0.13 COVE BASE ADHESIVES 702.2 SPECIAL INSPECTION [HCD]. When required by the enforcing agency, the owner or the responsible Values in this table are derived from those specified by MULTIPURPOSE CONSTRUCTION ADHESIVE 70 entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other he calif. air resources board, air toxics control measure for duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to composite wood as tested in accordance with astm e 1333. STRUCTURAL GLAZING ADHESIVES or additional information, see calif. code of regulations, title SINGLE-PLY ROOF MEMBRANE ADHESIVES 250 ', sections 93120 through 93120.12. OTHER ADHESIVES NOT LISTED Thin medium density fiberboard has a maximum SPECIALTY APPLICATIONS thickness of 5/16" (8 mm) 510 PVC WELDING

490 CPVC WELDING TABLE 4.504.2 - SEALANT VOC LIMI 325 ABS WELDING (Less Water and Less Exempt Compounds in Grams per Liter) PLASTIC CEMENT WELDING 250 SEALANTS **VOC LIMIT** 550 ADHESIVE PRIMER FOR PLASTIC 250 ARCHITECTURAL CONTACT ADHESIVE 760 MARINE DECK SPECIAL PURPOSE CONTACT ADHESIVE 250 STRUCTURAL WOOD MEMBER ADHESIVE 140 300 NONMEMBRANE ROOF TOP & TRIM ADHESIVE 250 250 ROADWAY SUBSTRATE SPECIFIC APPLICATIONS 450 SINGLE-PLY ROOF MEMBRANE METAL TO METAL 30 420 PLASTIC FOAMS **SEALANT PRIMERS** POROUS MATERIAL (EXCEPT WOOD) 50 ARCHITECTURAL

WOOD

**FIBERGLASS** 

. If an adhesive is used to bond dissimilar substrates

together, the adhesive with the highest voc content shall be

2. For additional information regarding methods to measure

the voc content specified in this table, see south coast air

quality management district rule 1168.

250

775

500

760

750

NON-POROUS

MODIFIED BITUMINOUS

POROUS

MARINE DECK

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/CCDPHP/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/CCDPHP/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

See California Department of Public Health's website for certification programs and testing labs. hhtps://www.cdph.ca.gov/Programs/CCDPHP/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:

 Product certifications and specifications. Chain of custody certifications.

3. A slab design specified by a licensed design professional.

Section 101.8 of this code.

recommendations prior to enclosure.

3. Product labeled and invoiced as meeting the Composite Wood Products regulation (see CCR, Title 17, Section

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. Other methods acceptable to the enforcing agency.

### 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

4.505 INTERIOR MOISTURE CONTROL

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

4.505.1 General. Buildings shall meet or exceed the provisions of the California Building Standards Code.

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 equivalent methods approved by the enforcing agency.

damage shall not be installed. Wall 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

4.505.3 MOISTURE CONTENT OF BUILDING MATERIALS. Building materials with visible signs of water

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

# 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 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.,

1. For the purposes of this section, a bathroom is a room which contains a bathtub, shower or tub/shower

## 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 Calculation), 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 nandbooks 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

. Other programs acceptable to the enforcing agency.

California according to the Home Energy Rating System (HERS).

 State certified apprenticeship programs. Public utility training programs. Training programs sponsored by trade, labor or statewide energy consulting or verification organizations. Programs sponsored by manufacturing organizations.

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:

Successful completion of a third party apprentice training program in the appropriate trade.

Certification by a national or regional green building program or standard publisher. . Certification by a statewide energy consulting or verification organization, such as HERS raters, building performance contractors, and home energy auditors.

4. Other programs acceptable to the enforcing agency. 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.

. HERS raters are special inspectors certified by the California Energy Commission (CEC) to rate homes in

[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**

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.

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

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MARCH 5, 2024 FILE -TAFFERA- Avenue Balboa,

SYM. REVISIONS DATE

047-105-100

SMOKE ALARMS AND CARBON MONOXIDE Smoke alarms shall be listed per UL 217, installed per NFPA 72 and shall be California State Fire Marshal listed. 2. Smoke alarms in new construction shall be installed, maintained and connected in the following locations/manner: [R314.3, .4, .6]

a. In each sleeping room.

b. Outside each separate sleeping area in the immediate vicinity of the bedrooms. c. On each additional story of the dwelling, including basement and split levels. d. A minimum of 3 feet horizontally from the door or opening of a bathroom that contains a bathroom or shower. e. When more than one smoke alarm is installed, the alarm devices shall be interconnected such that the actuation of one

alarm will activate all the alarms. f. Smoke alarms shall receive their primary power from the building wiring and shall be equipped with a battery backup.

3. In existing dwellings where a permit for alterations, repairs or additions exceed \$1000 smoke alarms shall be installed, maintained and connected in the following locations/manner [R314.2.2, .6, .8] a. The dwelling shall be equipped with smoke alarms located as require for new construction b. Smoke alarms are permitted to be solely battery operated where no construction is taking place.

CARBON MONOXIDE (CO) ALARMS [R315] 4. For new dwelling unit construction having an attached garage, fuel-burning appliances or a fireplace, an approved carbon monoxide alarm shall be installed, maintained and connected in the following locations/manner: a. Outside of each sleeping area in the immediate vicinity of the bedroom(s). b. On every culpable level of a dwelling unit including

c. In the bedroom where a fuel burning appliance is located within the bedroom or its attached bathroom d. Where more than one CO alarm is installed, the alarm shall be interconnected in a manner that activation of one alarm shall activate all of the alarms.

5. In existing dwelling units where an addition is made, or a fuel burning heater, appliance, or fireplace is added CO alarms shall be installed, maintained and connected in the following locations/manner: [R315.2.2] a. The dwelling shall be equipped with CO alarms located as require for new construction. b. CO alarms are permitted to be solely battery operated where no construction is taking place.

- WATER HEATERS NOTES:

  1. WATER HEATERS SHALL BE NATIONALLY LISTED AND BE INSTALLED IN ACCORDANCE WITH THE INSTALLATION INSTRUCTIONS THAT WERE APPROVED AS PART OF THEIR LISTING." "THE GAS PIPING SERVING THIS APPLIANCE MUST BE SIZED IN COMPLIANCE WITH THE WATER HEATER'S LISTED INSTALLATION INSTRUCTIONS AND THE 2022 CALIFORNIA PLUMBING CODE."
- 2. ALL NEW DOMESTIC HOT WATER PIPING SHALL BE INSULATED AS SPECIFIED IN CPC SECTION 609.11. THE FOLLOWING DOMESTIC HOT WATER SYSTEM PIPING CONDITIONS SHALL HAVE A MINIMUM INSULATION WALL THICKNESS OF 1 INCH OR A MINIMUM R-VALUE OF 7.7:
- 3. THE FIRST 5 FEET OF COLD WATER PIPES FROM THE STORAGE TANK.
- 4. ALL HOT WATER PIPING WITH A NOMINAL DIAMETER EQUAL TO OR GREATER THAN 3/4 INCH AND LESS
- 5. ALL HOT WATER PIPING WITH A NOMINAL DIAMETER LESS THAN 3/4 INCH ASSOCIATED WITH RECIRCULATION SYSTEMS, FROM THE HEATING SOURCE TO KITCHEN FIXTURES, OR BURIED BELOW GRADE. NOTE ON PLANS.

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See note 7

for backfill

requirements

cover (typ.)

-----<u>--</u>---'

the box shall be staked prior to its installation.

or as directed by the District.

per applicable CCWD trench detail.

 $\frac{3}{4}$  or 1" dia. Type K soft copper pipe. Unions or couplings not permitted.

8) Meter box, Christy No. B9 for 3" meter and No. B16 for 1", cover shall be

probe hole shall be provided in traffic areas and where directed by the

purchased from the District. H-20 traffic rated box and H-20 cover with 1¾"

 $\frac{1}{4}$  or 1" compression ball angle meter valve, Mueller B-24258N.

line per Section 15100.

bank location and size.

Double strap bronze service saddle, Mueller BR2B "CC".

(2)  $\frac{3}{4}$ " or 1" corporation stop, Mueller B-25008N.

) Insulated meter coupling, Mueller H-10871N.

7) ¾" or 1" meter check valve Mueller H—14243N.

specifications, shall be mechanically compacted.

(10) Encase DIP in V—Bio enhanced polyethylene.

District. See detail CC-08 for meter box clearances.

(9) ¾" drain rock per Section 31 80 00 of the District's standard

COASTSIDE COUNTY

WATER DISTRICT

766 MAIN STREET

HALF MOON BAY, CA

) ¾ or 1" meter (furnished by District).

3. Use Mueller Pack Joint V-15442 (female) or V-15440 (male) when customer's service is PVC.

3/4" OR 1" SERVICE CONNECTION

David Dickson, General Manager

fire and

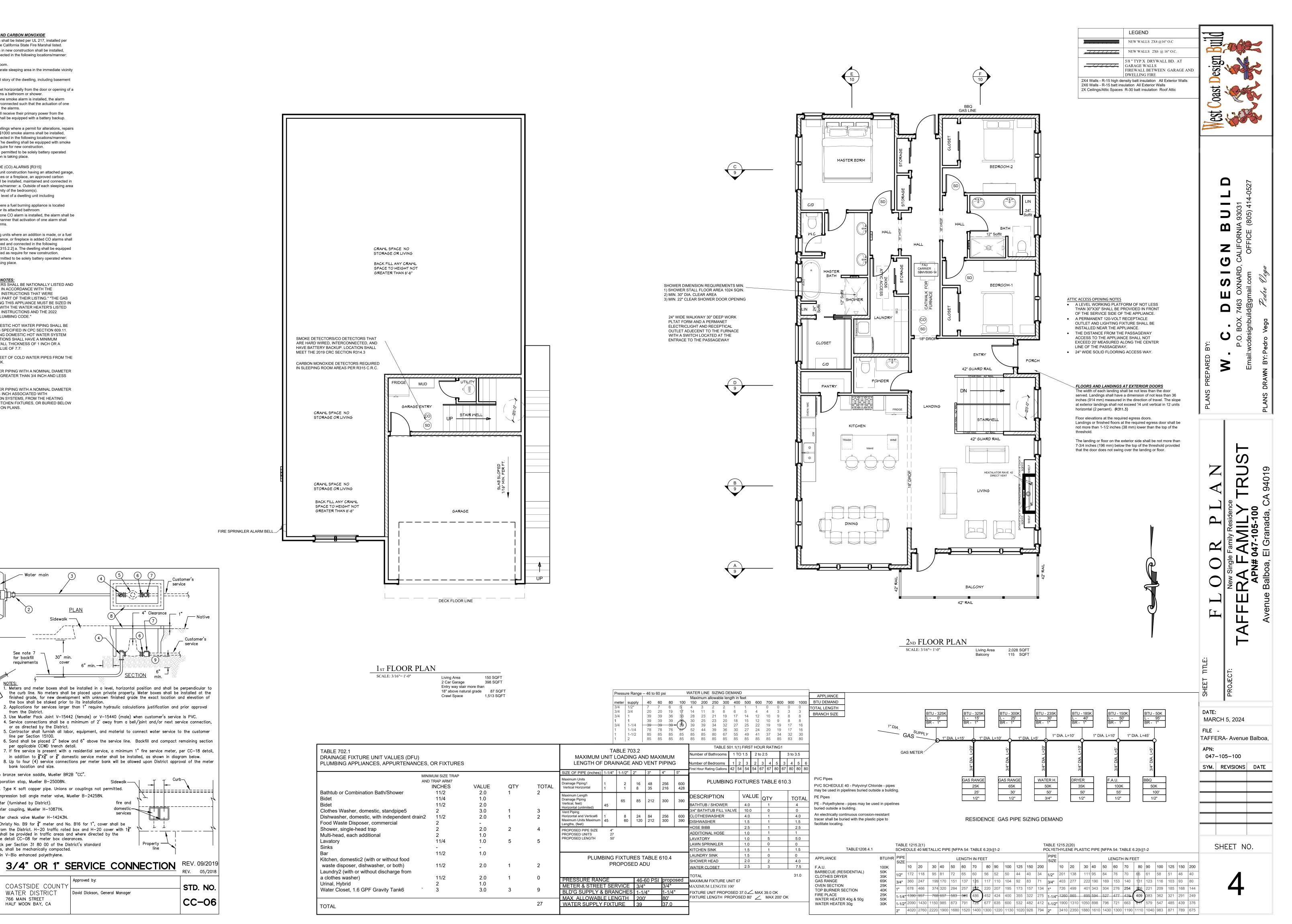
domestic-

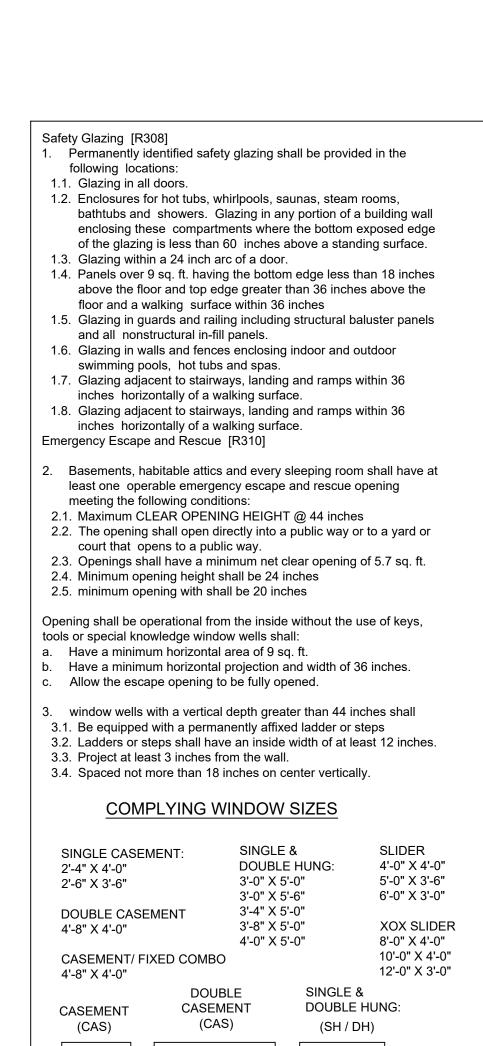
cover

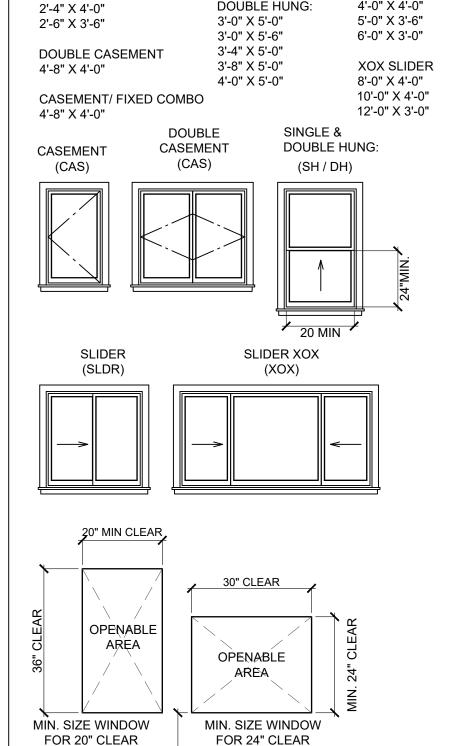
Customer's service

service

— 4" Clearance .







HEIGHT

(1.) WATER RESISTANT GYPSUM BACKING BOARD IN

(2.) WALL COVERING IN SHOWER SHALL HAVE A

SHOWER SHALL NOT BE USED ON BATHROOM

SMOOTH HARD NONABSORBENT SURFACE OF

CEMENT PLASTER TILE OR OTHER APPROVED

3. PROVIDE 2X6 STUDS AT PLUMBING WALL FOR 3"

4.) EACH SINK LAVATORY BATHTUBS AND SHOWER

(5.) IF A WINDOW IS PROVIDED FOR VENTILATION THE

6.) EXHAUST FAN 50 CFM 3 SONE MAX (SWITCHED)

(7.) PROVIDE SAFETY GLAZING IN WALLS OF TUB AND

SHOWER ENCLOSURE WHERE THE BOTTOM

ABOVE A STANDING SURFACE & DRAIN INLET

(8.) SHOWER DIMENSION REQUIREMENTS MIN.

9. INSIDE FINISHED DIMENSIONS OF TOILET

(10) PROVIDE A PERMANENTLY ACCESSIBLE 12"

NON-SLIP-JOINT TRAP SHALL BE USED

**ENERGY STAR W/ HUMIDISTAT** 

OPENING SHALL BE A MINIMUM OF 5% OF THE

FLOOR AREA BEING SERVED AND NOT LESS THAN

EXPOSED EDGE OF THE GLAZING IS LESS THAN 60"

SHOWER STALL FLOOR AREA 1024 SQIN. 2) MIN. 30"

DIA. CLEAR AREA 3) MIN. 22" CLEAR SHOWER DOOR

COMPARTMENT MUST BE 30" MIN WIDTH AND 24"

CLEAR SPACE IN FRONT OF TOILET (MINIMUM 15"

FROM THE CENTER OF TOILET TO SIDE WALL)

SQUARE BATHTUB TRAP ACCESS DOOR OR A

WATER FOR ITS NORMAL OPERATION

MATERIALS TO A HEIGHT OF NOT LESS THAN 72"

DIA. OR LARGER PIPES RUNNING THROUGH STUDS

SHALL BE EQUIPPED WITH HOT AND COLD RUNNING

CEILING WHERE FRAMING MEMBER SPACING

FIRST FLOOR FINISHED INTERIOR FLOOR

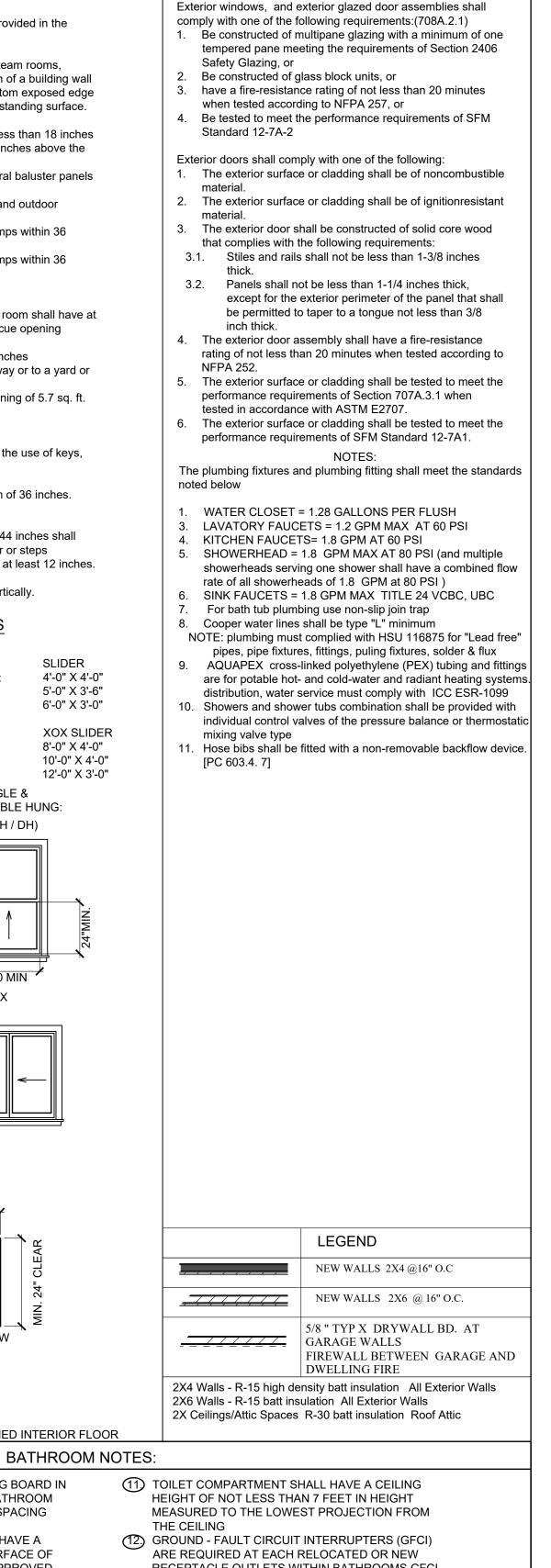
WIDTH

EXCEEDS 12" O.C.

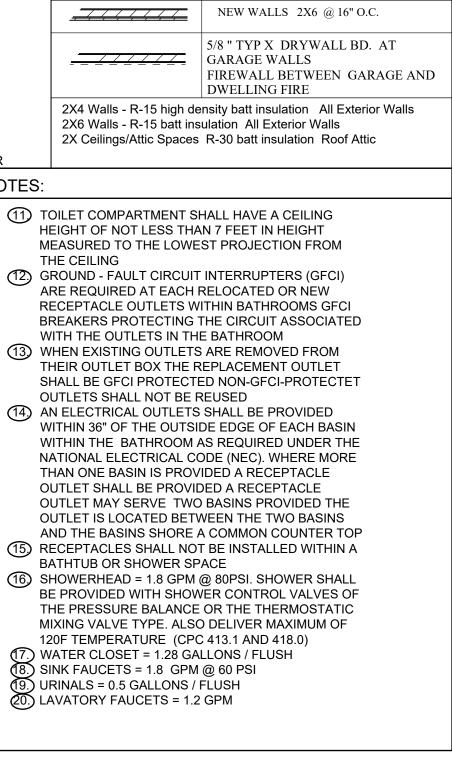
ABOVE DRAIN INLET

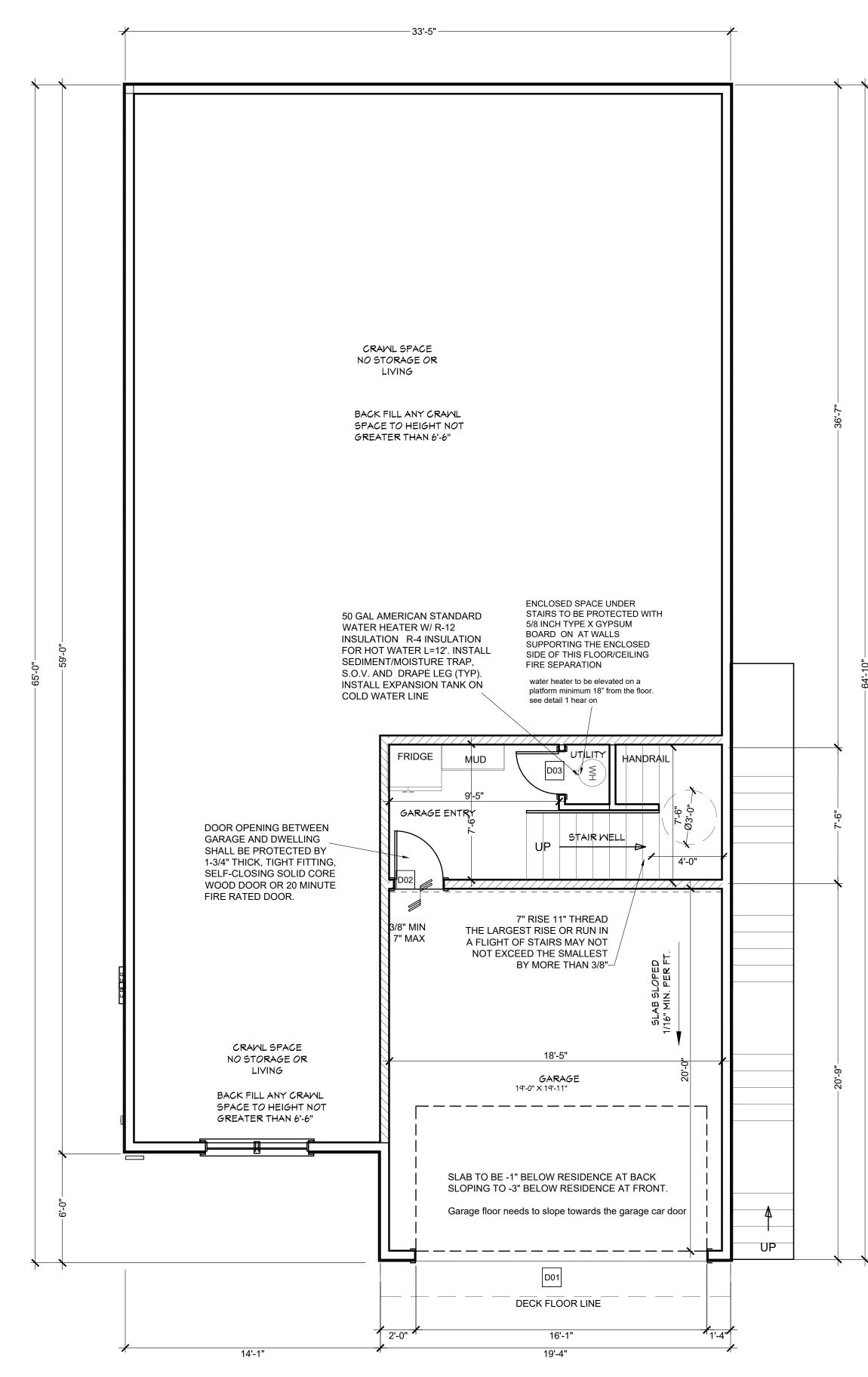
1.5 SQFT

OPENING

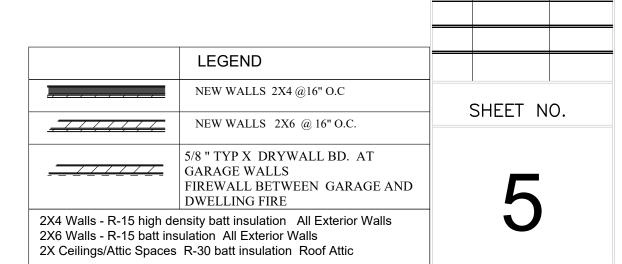


TEMPERED WINDOW AND DOOR REQUIREMENTS





1st. Floor Plan With Dimension
SCALE 1/4" = 1'-0"



SOS

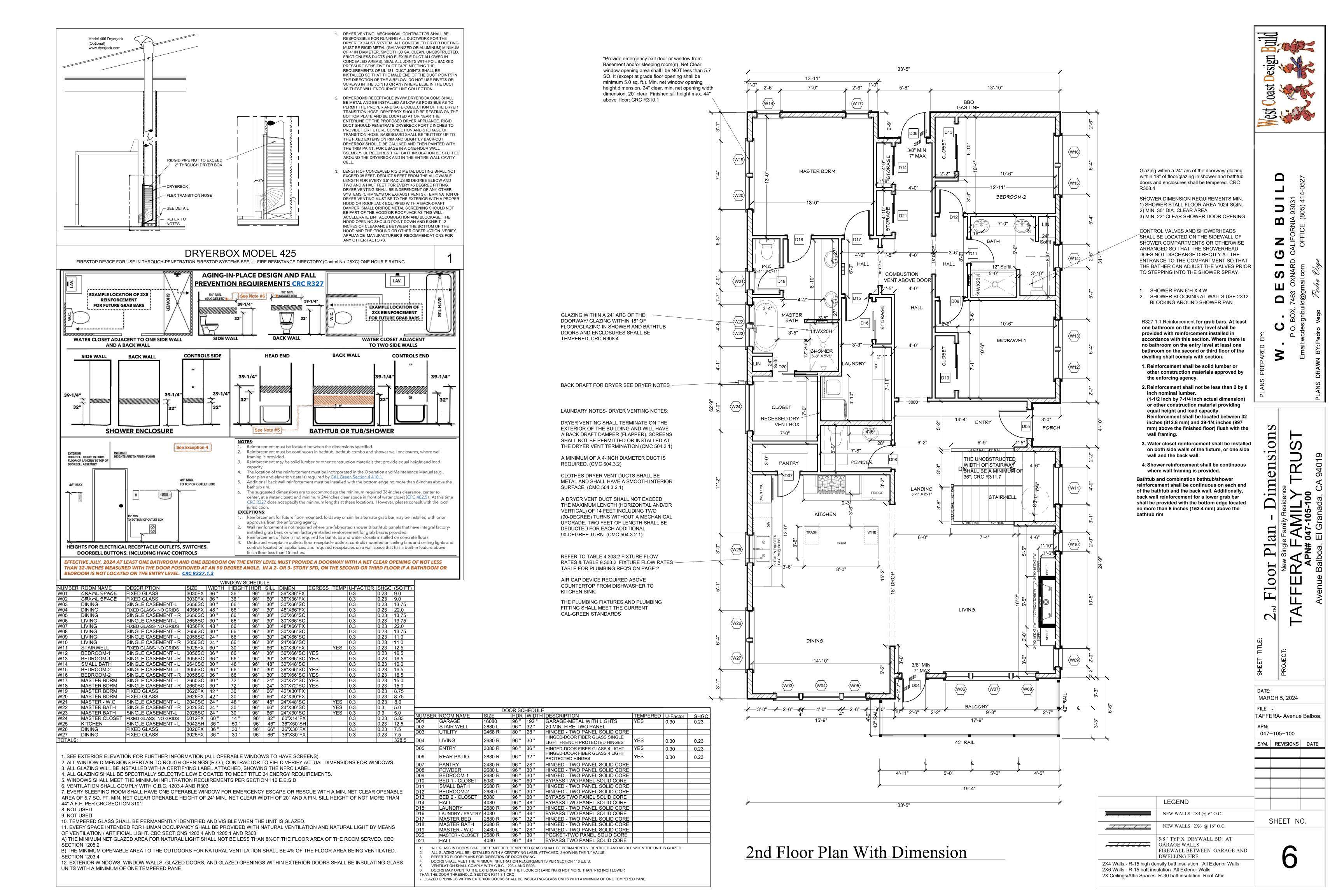
MARCH 5, 2024

047-105-100

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SYM. REVISIONS DATE

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ELECTRICAL LIGHTING NOTES PER 2022 CEC AND 2022 CGBSC:

- 1. ALL INTERIOR AND EXTERIOR LIGHTING SHALL BE HIGH EFFICACY PER TABLE 150.0-A AND JOINT APPENDIX JAS.
- 2. EXTERIOR LIGHTING SHALL BE CONTROLLED BY A PHOTOCELL AND EITHER
- A MOTION SENSOR OR A TIMESWITCH. 3. AT LEAST ONE LUMINAIRE IN BATHROOMS, LAUNDRY ROOMS, UTILITY
- ROOMS AND GARAGES SHALL BE CONTROLLED BY A VACANCY SENSOR.
- 4. BALLASTS SHALL BE ELECTRONIC TYPE WITH OUTPUT FREQUENCY NOT LESS THAN 20HZ.
- 5. ALL LUMINAIRES NOT REQUIRED TO HAVE A VACANCY SENSOR SHALL HAVE DIMMER CONTROLS.
- 6. LIGHTING FIXTURES IN CLOTHES CLOSETS SHALL BE A SURFACE MOUNTED OR RECESSED FIXTURE WITH A COMPLETELY ENCLOSED LAMP WITH MIN. 12" CLEARANCE HORIZONTALLY AND VERTICALLY TO COMBUSTIBLE
- 7. ATTICS AND EQUIPMENT SPACES SHALL BE SERVED BY A LIGHT FIXTURE OR LIGHTING OUTLET CONTROLLED BY A WALL SWITCH, LIGHTING AND SWITCH TO BE LOCATED NEAR EQUIPMENT REQUIRING SERVICING.
- 8. AT LEAST ONE LIGHT FIXTURE OR LIGHTING OUTLET CONTROLLED BY A WALL SWITCH SHALL BE PROVIDED IN EACH HABITABLE ROOM AND BATHROOMS, HALLWAYS, S STAIRWAYS AND GARAGES. STAIRS WITH SIX OR MORE RISERS SHALL HAVE A LIGHT SWITCH AT EACH FLOOR LEVEL EXTERIOR ENTRANCES SHALL HAVE A LIGHT FIXTURE ON THE EXTERIOR SIDE CONTROLLED BY A WALL SWITCH.
- 9. LIGHTING FIXTURES IN SHOWERS AND WITHIN THE BATHTUB AREA AND LESS THAN 8 FEET ABOVE THE RIM OF TUB SHALL BE RECESSED AND RATED FOR WET LOCATIONS
- 10. EXHAUST FANS ARE TO BE SWITCHED SEPARATELY FROM LIGHTING. 11. HIGH EFFICACY LUMINAIRES SHALL CONTAIN ONLY HIGH EFFICACY LAMPS
- AND NOT MEDIUM SCREW BASE SOCKETS. 12. BALLASTS FOR LAMPS 13 WATIS AND LARGER SHALL BE ELECTRONIC TYPE
- WITH OUTPUT FREQUENCY NOT LESS THAN 20HZ.
- 13. LUMINAIRES RECESSED INTO CEILINGS SHALL BE APPROVED IC TYPE CERTIFIED AND LABELED AIRTIGHT.
- 14. KITCHEN INTERNAL CABINET LIGHTING SHALL NOT EXCEED 20 WATTS PER LINEAR FOOT 15. ALL 125 VOLT SINGLE PHASE 15 AND 20 AMP RECEPTACLES INSTALLED IN BATHROOMS, GARAGES, ACCESSORY BUILDINGS, OUTDOORS, CRAWL
- SPACES, UNFINISHED BASEMENTS, KITCHEN COUNTERTOP SURFACES, LAUNDRY, UTILITY AND WET BAR SINKS WHERE RECEPTACLES ARE INSTALLED WITHIN 6 FEET OF THE SINK EDGE SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION. [210.8]
- 16. ALL 125 VOLT SINGLE PHASE 15 AND 20 AMP BRANCH CIRCUITS SUPPLYING OUTLETS INSTALLED IN FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES DENS BEDROOMS, SUNROOMS RECREATION ROOMS CLOSETS AND HALLWAYS SHALL BE PROTECTED BY A LISTED ARC-FAULT TYPE CIRCUIT INTERRUPTER.
- 17. RECEPTACLES SHALL BE INSTALLED SO THAT NO POINT MEASURED HORIZONTALLY ALONG THE FLOOR LINE IN ANY WALL SPACE OF 2 FEET OR MORE IN WIDTH IS MORE THAN 6 FEET FROM A RECEPTACLE KITCHEN COUNTER OUTLETS SHALL BE INSTALLED AT EACH WALL COUNER SPACE THAT IS 12 INCHES OR WIDER SO THAT NO POINT ALONG THE WALL LINE IS MORE THAN 241NCHES FROM A RECEPTACLE OUTLET. [CEC 210.52]
- 18. AT LEAST ONE GFCI PROTECTED OUTLET SHALL BE LOCATED IN BATHROOMS WITHIN 3 FEET OF THE SINK EDGE, ON BALCONIES OVER 20 SQUARE FEET, AND AT THE FRONT AND BACK OF THE DWELLING NOT MORE THAN 6.5 FEET ABOVE GRADE, WITHIN 25 FEET OF ANY HEATING AND AIR CONDITIONING EQUIPMENT, IN HALLWAYS 10 FEET OR MORE IN LENGTH, IN EACH BASEMENT AND GARAGE (ONE OUTLET MINIMUM), AT LAUNDRY EQUIPMENT (ONE MINIMUM). [210.52, 210.63, 210.8]
- 19. BATH EXHAUST FANS LOCATED WITHIN SHOWER ENCLOSURE SHALL BE RATED FOR WET LOCATIONS.
- 20. A MINIMUM OF (1) 20-AMP CIRCUIT FOR BATHROOM(S) OUTLET SUCH CIRCUIT SHALL HAVE NO OTHER OUTLETS. THIS CIRCUIT MAY SERVE MORE THAN ONE BATHROOM (210-11(C)3
- 21. "AF.C.I." PROTECTION FOR ALL 15 AND 20 AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS IN DWELLING UNIT KITCHENS, FAMILY, DINING, LIVING, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, OR SIMILANOOMS AND AREAS," (210.12)
- 22. PROVIDE A MINIMUM OF 2- 20 AMP SMALL APPLIANCE CIRCUITS FOR THE KITCHEN COUNTER TOPS. SUCH CIRCUIT SHALL HAVE NO OTHER OUTLETS LOADS SHALL BE BALANCED" (210-52(8)(2))

# **ELECTRICAL NOTES:**

- 1. ALL LIGHTS THROUGHOUT THE RESIDENCE, INCLUDING THE GARAGE AND EXTERIOR SHALL BE HIGH EFFICACY. [CENC 150.0(K)1A]
- 2. AT LEAST ONE LIGHT FIXTURE IN BATHROOMS, GARAGES, LAUNDRY ROOMS, AND UTILITY ROOMS SHALL BE CONTROLLED BY A VACANCY SENSOR, [CENC 150.0(K)2J]
- 3. OUTDOOR LIGHTS MUST BE HIGH EFFICACY AND CONTROLLED BY AN ASTRONOMICAL TIME CLOCK, OR BY AN ENERGY MANAGEMENT CONTROL SYSTEM, OR BY BOTH A MOTION SENSOR AND PHOTOCELL. [CENC 150.0(K)(3)]
- 4. ALL RECESSED LIGHTS MUST BE ON A DIMMER OR VACANCY SENSOR AND COMPLY WITH JA8-2019-E. [CENC TABLE 150.0-A #7] SCREW BASES ARE NOT ALLOWED FOR LUMINARIES RECESSED IN CEILINGS. [CENC 150.0(K)1GI] **ELECTRICAL**
- 1. KITCHEN -THE LIGHTING FIXTURES THAT ARE RECESSED INTO INSULATED CEILINGS ARE REQUIRED TO BE RATED FOR INSULATION CONTACT (IC RATED) SO THAT INSULATION CAN BE PLACED OVER THEM. THE HOUSING OF THE FIXTURE SHALL BE AIRTIGHT TO PREVENT CONDITIONED AIR FROM ESCAPING INTO THE CEILING CAVITY OR ATTIC SPACE OR PREVENT UNCONDITIONED AIR FROM INFILTRATING INTO CONDITIONED SPACE.
- LIGHTING IN ROOMS OTHER THAN BATHROOMS, GARAGES, LAUNDRY ROOMS, & UTILITY ROOMS: PERMANENTLY INSTALLED LIGHTS IN ROOMS OTHER THAN RESTROOMS, GARAGES, LAUNDRY ROOMS, & UTILITY ROOMS SHALL BE HIGH EFFICACY LUMINAIRES. CALIFORNIA ENERGY CODE 150(K) 7
- 3. SCREW BASED SOCKETS: LUMINAIRES WITH SCREW BASED SOCKETS SHALL MEET THE FOLLOWING REQUIREMENTS:
- 3.1. THE LUMINAIRE SHALL NOT BE A RECESSED DOWN-LIGHT IN A CEILING; THE LUMINAIRE SHALL CONTAIN LAMPS THAT COMPLY WITH REFERENCE JOINT APPENDIX JA8; AND
- THE INSTALLED LAMPS SHALL BE MARKED WITH "JAS-2019" OR 'JAS-2019-E" AS SPECIFIED IN REFERENCE JOINT APPENDIX JA8. 4. DIMMERS OR VACANCY SENSORS SHALL CONTROL ALL LUMIMIRES REQUIRED TO HAVE LIGHT SOURCES COMPLIANT WITH REFERENCE JOINT
- 5. ALL LIGHTING SHALL BE HIGH EFFICACY, PROVIDE LIGHTING SCHEDULE LISTING ALL LIGHTING FIXTURES. SCREW BASED LUMINARIES MUST
- CONTAIN LAMPS LISTED JA8-2019 CERTIFIED 6. LIGHTING IN BATHROOMS, GARAGE, LAUNDRY ROOM, UTILITY ROOM SHALL BE HIGH EFFICACY AND EQUIPPED WITH OCCUPANT SENSOR.
- 7. UNDERCABINET LIGHTING SHALL BE SWITCH SEPARATELY FROM OTHER SYSTEMS

8. LIGHTS IN EXHAUST FANS SHALL BE HIGH EFFICACY.

# **ELECTRIC READY NOTES: 2022 ENERGY EFFICIENCY STANDARDS 150.0**

### (S) ENERGY STORAGE SYSTEMS (ESS) READY. ALL SINGLE-FAMILY RESIDENCES THAT INCLUDE ONE OR TWO DWELLING UNITS SHALL MEET THE FOLLOWING. ALL ELECTRICAL COMPONENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE:

AT LEAST ONE OF THE FOLLOWING SHALL BE PROVIDED: ESS READY INTERCONNECTION EQUIPMENT WITH A MINIMUM BACKED-UP CAPACITY OF 60 AMPS AND A MINIMUM OF FOUR ESS-SUPPLIED BRANCH CIRCUITS, OR

B. A DEDICATED RACEWAY FROM THE MAIN SERVICE TO A PANELBOARD (SUBPANEL) THAT SUPPLIES THE BRANCH CIRCUITS IN SECTION 150.0(S)(2). ALL BRANCH CIRCUITS ARE PERMITTED TO BE SUPPLIED BY THE MAIN SERVICE PANEL PRIOR TO THE INSTALLATION OF AN ESS. THE TRADE SIZE OF THE RACEWAY SHALL BE NOT LESS THAN ONE THE PANELBOARD THAT SUPPLIES THE BRANCH CIRCUITS (SUBPANEL) MUST BE LABELED "SUBPANEL SHALL INCLUDE ALL BACKED-UP LOAD CIRCUITS."

2. A MINIMUM OF FOUR BRANCH CIRCUITS SHALL BE IDENTIFIED AND HAVE THEIR SOURCE OF SUPPLY COLLOCATED AT A SINGLE PANELBOARD SUITABLE TO BE SUPPLIED BY THE ESS. AT LEAST ONE CIRCUIT SHALL SUPPLY THE REFRIGERATOR, ONE LIGHTING CIRCUIT SHALL BE LOCATED NEAR THE PRIMARY EGRESS, AND AT LEAST ONE CIRCUIT SHALL SUPPLY A SLEEPING ROOM RECEPTACLE OUTLET.

3. THE MAIN PANEL BOARD SHALL HAVE A MINIMUM BUSBAR RATING OF 225

4. SUFFICIENT SPACE SHALL BE RESERVED TO ALLOW FUTURE INSTALLATION OF A SYSTEM ISOLATION EQUIPMENT/TRANSFER SWITCH WITHIN 3 FEET OF THE MAIN PANELBOARD. RACEWAYS SHALL BE INSTALLED BETWEEN THE PANELBOARD AND THE SYSTEM ISOLATION EQUIPMENT/TRANSFER SWITCH LOCATION TO ALLOW THE CONNECTION OF BACKUP POWER SOURCE.

### (T) HEAT PUMP SPACE HEATER READY. SYSTEMS USING GAS OR PROPANE FURNACE TO SERVE INDIVIDUAL DWELLING UNITS SHALL INCLUDE THE FOLLOWING:

1. A DEDICATED 240 VOLT BRANCH CIRCUIT WIRING SHALL BE INSTALLED WITHIN 3 FEET FROM THE FURNACE AND ACCESSIBLE TO THE FURNACE WITH NO OBSTRUCTIONS. THE BRANCH CIRCUIT CONDUCTORS SHALL BE RATED AT 30 AMPS MINIMUM. THE BLANK COVER SHALL BE IDENTIFIED AS "240V READY." ALL ELECTRICAL COMPONENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.

2. THE MAIN ELECTRICAL SERVICE PANEL SHALL HAVE A RESERVED SPACE TO ALLOW FOR THE INSTALLATION OF A DOUBLE POLE CIRCUIT BREAKER FOR A FUTURE HEAT PUMP SPACE HEATER INSTALLATION. THE RESERVED SPACE SHALL BE PERMANENTLY MARKED AS "FOR FUTURE 240V USE."

### (U) ELECTRIC COOKTOP READY. SYSTEMS USING GAS OR PROPANE COOKTOP TO SERVE INDIVIDUAL DWELLING UNITS SHALL INCLUDE THE FOLLOWING:

1. A DEDICATED 240 VOLT BRANCH CIRCUIT WIRING SHALL BE INSTALLED WITHIN 3 FEET FROM THE COOKTOP AND ACCESSIBLE TO THE COOKTOP WITH NO OBSTRUCTIONS. THEBRANCH CIRCUIT CONDUCTORS SHALL BE RATED AT 50 AMPS MINIMUM. THE BLANK COVER SHALL BE IDENTIFIED AS "240V ALL ELECTRICAL COMPONENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.

THE MAIN ELECTRICAL SERVICE PANEL SHALL HAVE A RESERVED SPACE TO ALLOW FOR THE INSTALLATION OF A DOUBLE POLE CIRCUIT BREAKER FOR A FUTURE ELECTRIC COOKTOP INSTALLATION. THE RESERVED SPACE SHALL BE PERMANENTLY MARKED AS "FOR FUTURE 240V USE."

### (V) ELECTRIC CLOTHES DRYER READY. CLOTHES DRYER LOCATIONS WITH GAS OR PROPANE PLUMBING TO SERVE INDIVIDUAL DWELLING UNITS SHALL **INCLUDE THE FOLLOWING:**

1. A DEDICATED 240 VOLT BRANCH CIRCUIT WIRING SHALL BE INSTALLED WITHIN 3 FEET FROM THE CLOTHES DRYER LOCATION AND ACCESSIBLE TO THE CLOTHES DRYER LOCATION WITH NO OBSTRUCTIONS. THE BRANCH CIRCUIT CONDUCTORS SHALL BE RATED AT 30 AMPS MINIMUM. THE BLANK COVER SHALL BE IDENTIFIED AS "240V READY." ALL ELECTRICAL COMPONENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE.

2. THE MAIN ELECTRICAL SERVICE PANEL SHALL HAVE A RESERVED SPACE TO ALLOW FOR THE INSTALLATION OF A DOUBLE POLE CIRCUIT BREAKER FOR A FUTURE ELECTRIC CLOTHES DRYER INSTALLATION. THE RESERVED SPACE SHALL BE PERMANENTLY MARKED AS "FOR FUTURE 240V USE."

# Table 6-1: Summary of Compliant Luminaire Types JA8 High Efficacy Lighting – Lamps and Light Sources that \*Recessed Downlight

g Zouc, Zuaoo	must be JA8-certified	Luminaires in Ceilings			
Pin-based linear fluorescent Pin-based compact fluorescent Pulse-start metal halide High pressure sodium GU-24 other than LEDs Inseparable SSL luminaires installed outdoors Inseparable SSL luminaires with colored light sources for decorative lighting purpose	Light sources in ceiling recessed downlight luminaires.* LED luminaires with integral sources Screw-based LED lamps (Alamps, PAR lamps, etc.) Pin-based LED lamps (MR16, AR-111, etc.) GU-24 based LED light source Any source or luminaire not listed elsewhere on this table	Shall not have screw based sockets     Shall contain JA8- certified light sources     Shall meet all performance requirements in 150.0(k)1C			

	-	` ,
Dwelling Unit Floor Area (ft2)	Hood Over Electric Range	Hood Over Natural Gas Range
>1500	50% CE or 110 cfm	70% CE or 180 cfm
>1000 - 1500	50% CE or 110 cfm	80% CE or 250 cfm
750 - 1000	55% CE or 130 cfm	85% CE or 280 cfm
<750	65% CE or 160 cfm	85% CE or 280 cfm

Table 150.0-G Kitchen Range Hood Airflow Rates (cfm)

Table 150.0-H Prescriptive Ventilation System Duct Sizing										
Fan Airflow Rating, c static pressuref 0.25 (L/s at minimum 62.5	in. water	≤50 (25)	≤80 (40)	≤100 (50)	≤125 (60)	≤150 (70)	≤175 (85)	≤200 (95)	≤250 (120)	≤350 (165)
Minimum Duct Diame For Rigid duct	eter, in. (mm) a,b	4 e (100)	5 (125)	5 (125)	6 (150)	6 (150)	7 (180)	7 (180)	8 (205)	9 (230)
Minimum Duct Diame For Flex duct c	eter, in. (mm) a,b	4 (100)	5 (125)	6 (150)	6 (100)	7 (100)	7 (180)	8 (205)	8 (205)	9 (230)

Footnotes for Table 150.0-H a. For noncircular ducts, calculate the diameter as four times the cross-sectional area divided by the perimeter.

b. NP = application of the prescriptive table is not permitted for this scenario. Use of this table for verification of flex duct systems requires flex duct to be fully extended and any flex duct elbows to have a minimum bend radius to duct

diameter ratio of 1.0. d. For this scenario, use of elbows is not permitted.

For this scenario, 4 in. (100 mm) oval duct shall be permitted, provided the minor axis of the oval is greater than or equal to 3 in. (75 mm) When a vented range hood utilizes a capture efficiency rating to demonstrate compliance with 150.0(o)1Giiib, a static pressure greater than or equal to 0.25

in. of water at the rating point shall not be required, and the airflow listed in the approved directory corresponding to the compliant capture efficiency rating point shall be applied to Table 150.0-H for determining compliance.

_						
	2022 Single- 110.9:	-Family Residential Mandatory Requirements Summary Lighting Measures: Lighting Controls and Components. All lighting control devices and systems, ballasts, and luminaires must meet the applicable requirements of § 110.9. *	150.0(k)1G: 150.0(k)1H:	Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. * Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not	150.0(k)2E:	150.0(k)2A. Automatic Shutoff Controls. In bathrooms, garages, laundry rooms, utility rooms and walk-in closets, at least one installed luminaire must be controlled by an occupancy or vacancy sensor providing automatic-off functionality. Lighting inside drawers and cabinets with
	150.0(k)1A:	Luminaire Efficacy. All installed luminaires must meet the requirements in Table 150.0-A, except lighting integral to exhaust fans, kitchen range hoods, bath vanity mirrors, and garage door openers; navigation lighting less than 5 watts; and lighting internal to drawers, cabinets, and linen closets with an efficacy of at least 45	150.0(k)1I:	be installed in enclosed or recessed luminaires. Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closets are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit no more than 150 lumens, and are equipped with controls	150.0(k)2F:	opaque fronts or doors must have controls that turn the light off when the drawer or door is closed.  Dimmers. Lighting in habitable spaces (e.g., living rooms, dining rooms, kitchens, and bedrooms) must have readily accessible wall mounted dimming controls that allow the lighting to be manually adjusted up and down. Forward phase cut dimmers controlling LED
	150.0(k)1B:	lumens per watt. Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. *		that automatically turn the lighting off when the drawer, cabinet or linen closet is closed.	150.0(k)2K:	light sources in these spaces must comply with NEMA SSL 7A. Independent controls. Integrated lighting of exhaust fans shall be
	150.0(k)1C:	Recessed Downlight Luminaires in Ceilings. Luminaires recessed into ceilings must not contain screw based sockets, must be airtight, and must be sealed with a gasket or caulk. California Electrical Code §	150.0(k)2A: 150.0(k)2B:	Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A. Interior Switches and Controls. Exhaust fans must be controlled		controlled independently from the fans. Lighting under cabinets or shelves, lighting in display cabinets, and switched outlets must be controlled separately from ceiling-installed lighting.
	150.0(k)1D:	410.116 must also be met.  Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant with the JA8 elevated	150.0(k)2A:	separately from lighting systems. * Accessible Controls. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually turned on	150.0(k)3A:	Residential Outdoor Lighting. For single-family residential buildings, outdoor lighting permanently mounted to a residential building, or to other buildings on the same lot, must have a manual on/off switch and
	150.0(k)1E:	temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires. Blank Electrical Boxes. The number of electrical boxes that are more than five feet above the finished floor and do not contain aluminaire or	150.0(k)2B:	and off. * Multiple Controls. Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sensor is installed to comply with § 150.0(k).		either a photocell and motion sensor or automatic time switch control) or an astronomical time clock. An energy management control system that provides the specified control functionality and meets all applicable requirements may be used to meet these requirements.
		other device shall be no more than the number of bedrooms. These boxes must be served by a dimmer, vacancy sensor control, low	150.0(k)2C: 150.0(k)2D:	Mandatory Requirements. Lighting controls must comply with the applicable requirements of § 110.9.  Energy Management Control Systems. An energy management	150.0(k)4:	Internally illuminated address signs. Internally illuminated address signs must either comply with § 140.8 or consume no more than 5 watts of power.
	150.0(k)1F:	voltage wiring, or fan speed control. Lighting Integral to Exhaust Fans. Lighting integral to exhaust fans (except when installed by the manufacturer in kitchen exhaust must meet the applicable requirements of § 150.0(k). *	150.0(K)ZD.	control system (EMCS) may be used to comply with dimming, occupancy, and control requirements if it provides the functionality of the specified control per § 110.9 and the physical controls specified in	150.0(k)5:	Residential Garages for Eight or More Vehicles. Lighting for residential parking garages for eight or more vehicles must comply with the applicable requirements for nonresidential garages in §§

	NEW WALLS 2X6 @ 16" O.C.					
	5/8 " TYP X DRYWALL BD. AT GARAGE WALLS FIREWALL BETWEEN GARAGE AND DWELLING FIRE					
2X6 Walls - R-15	high density batt insulation All Exterior Walls batt insulation All Exterior Walls Spaces R-30 batt insulation Roof Attic					
SYMBOL	DESCRIPTION					
R	recessed led light fixture model # : CER6730WH (ASTM E283-04)					
	the installed lamps shall be marked with "JAS-2019-E" as specified in reference joint appendix JA8.					
₩	Single pole switch w/ dimmer or manual motion sensor					
₩	Dimmer switch					
₩3	Three way switch					
AFCI	ARC fault 110V duplex receptacle all outlets areas not just the receptacles					
AFCI F.R. BOX	Fire Test of Building Construction Materials ARC FAULT 110V DUPLEX RECEPTACLE FIRE RESISTANCE electrical box ANSI / UL 263 File No. CEYY.R9379 Brand: fiberglassBOX					
<del>-</del>	110V DUPLEX RECEPTACLE					
<b>=</b>	220V DUPLEX RECEPTACLE					

LEGEND

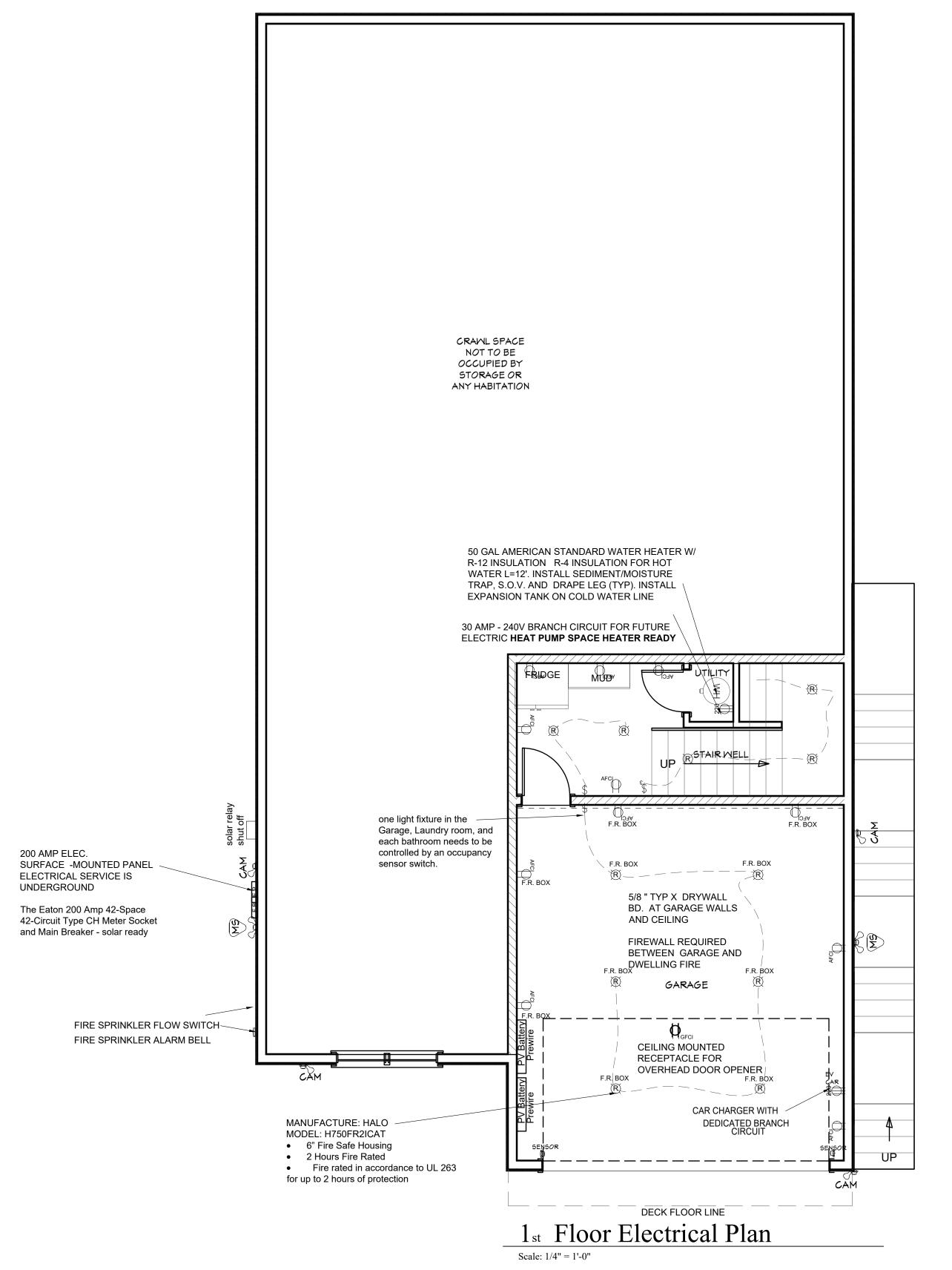
NEW WALLS 2X4 @16" O.C

7	Т	Third may difficult					
=	AFCI	ARC fault 110V duplex receptacle all outlets areas not just the receptacles					
_	AFCI F.R. BOX	Fire Test of Building Construction Materials ARC FAULT 110V DUPLEX RECEPTACLE FIRE RESISTANCE electrical box ANSI / UL 263 File No. CEYY.R9379 Brand: fiberglassBOX					
<b>=</b>	⊃	110V DUPLEX RECEPTACLE					
<b>#</b>		220V DUPLEX RECEPTACLE					
<b>G</b> FI		110V duplex receptacle ground fault interrupted					
	⊃ WP	110V duplex receptacle w/ weatherproof cover					
$\Diamond$	<b>©</b>	110V Exterior light fixture					
(8)	ф	Exhaust fan 50 CFM energy star w/ humidistat with light fixture fluorescent					
SI	9	smoke detector interconnected 120 volt hard wired with battery back up					
(00		carbon monoxide interconnected detectors120 volt hard wired with battery back up					

All receptacle outlets in kitchens, dining rooms, breakfast room, pantry, or similar rooms shall be served by no less than two, 20-ampere branch circuits that have no other outlets. CEC 210.52

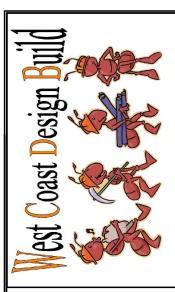
(AFCI) All electrical circuits serving all outlets must be Arc-Fault Circuit Interrupter (AFCI) protected. An outlet includes receptacles, lighting fixtures, ceiling fans, switches, hard-wired smoke and carbon monoxide alarms.

110.9, 130.0, 130.1, 130.4, 140.6, and 141.0.



# VS-CACANCY SENSOR NOTES

- 1. IN BATHROOMS, GARAGES, LAUNDRY ROOMS, AND UTILITY ROOMS, AT LEAST ONE LIGHT FIXTURE SHALL BE CONTROLLED BY A VACANCY SENSOR.
- 2. DIMMERS OR VACANCY SENSOR SHALL CONTROL ALL FIXTURES WITH JA8-2016 COMPLIANT LIGHT BULBS
- 3. EXCEPT: LIGHTING FIXTURES IN CLOSETS LESS THAN 70 SQUARE FEET AND LIGHT FIXTURES IN HALLWAYS.



MARCH 5, 2024 FILE -TAFFERA- Avenue Balboa, 047-105-100 SYM. REVISIONS DATE

Smoke Detectors which are hard wired: As per the California Building Code, State Fire Marshal regulations, and Coastside Fire District Ordinance 2016-01, the applicant is required to install State Fire Marshal approved and listed smoke detectors which are hard wired, interconnected, and have battery backup. These detectors are required to be placed in each new and recondition sleeping room and at a point centrally located in the corridor or area giving access to each separate sleeping area. In existing sleeping rooms, areas may have battery powered smoke alarms. A minimum of one detector shall be placed on each floor. Smoke detectors shall be tested and approved prior to the building final. Date of installation must be added to exterior of the smoke alarm and will be

- 1. Smoke alarm/detector are to be hardwired, interconnected, or with battery back-up. Smoke alarms to be installed per manufactures instruction and NFPA 72.
- 2. Escape or rescue windows shall have a minimum net clear open able area of 5. 7 square feet. 5. O sq. ft. allowed at grade. The minimum net clear openable height dimension shall be 24 inches. The net clear openable width dimension shall be 20 inches. Finished sill height shall be not more than 44 inches above the finished floor. (CFC 1030).
- 3. All rescue window to be identify and verify that they meet all requirements in each bedroom
- 4. New residential buildings shall have internally illuminated address numbers contrasting with the background so as to be seen from the public way fronting the building. The letters/numerals for permanent address signs shall be 4 inches in height with a minimum 112-inch stroke. Residential address numbers shall be at least six feet above the finished surface of the driveway. Where buildings are located remotely to the public roadway, additional signage at the driveway/roadway entrance leading to the building and/or on each individual building shall be required by the Coastside Fire District. This remote signage shall consist of a 6 inch by 18 inch green reflective metal sign with 3 inch reflective Numbers/ Letters similar to Hy-Ko 911 or equivalent. (TEMPORARY ADDRESS NUMBERS SHALL BE POSTED PRIOR TO COMBUSTIBLES BEING PLACED ON SITE).
- 5. As per Coastside Fire District Ordinance 2016-01, the roof covering of every new building or structure, and materials applied as part of a roof covering assembly, shall have a minimum fire rating of Class "B" or higher as defined in the current edition of the California Building Code.

### Vegetation Management (LRA)

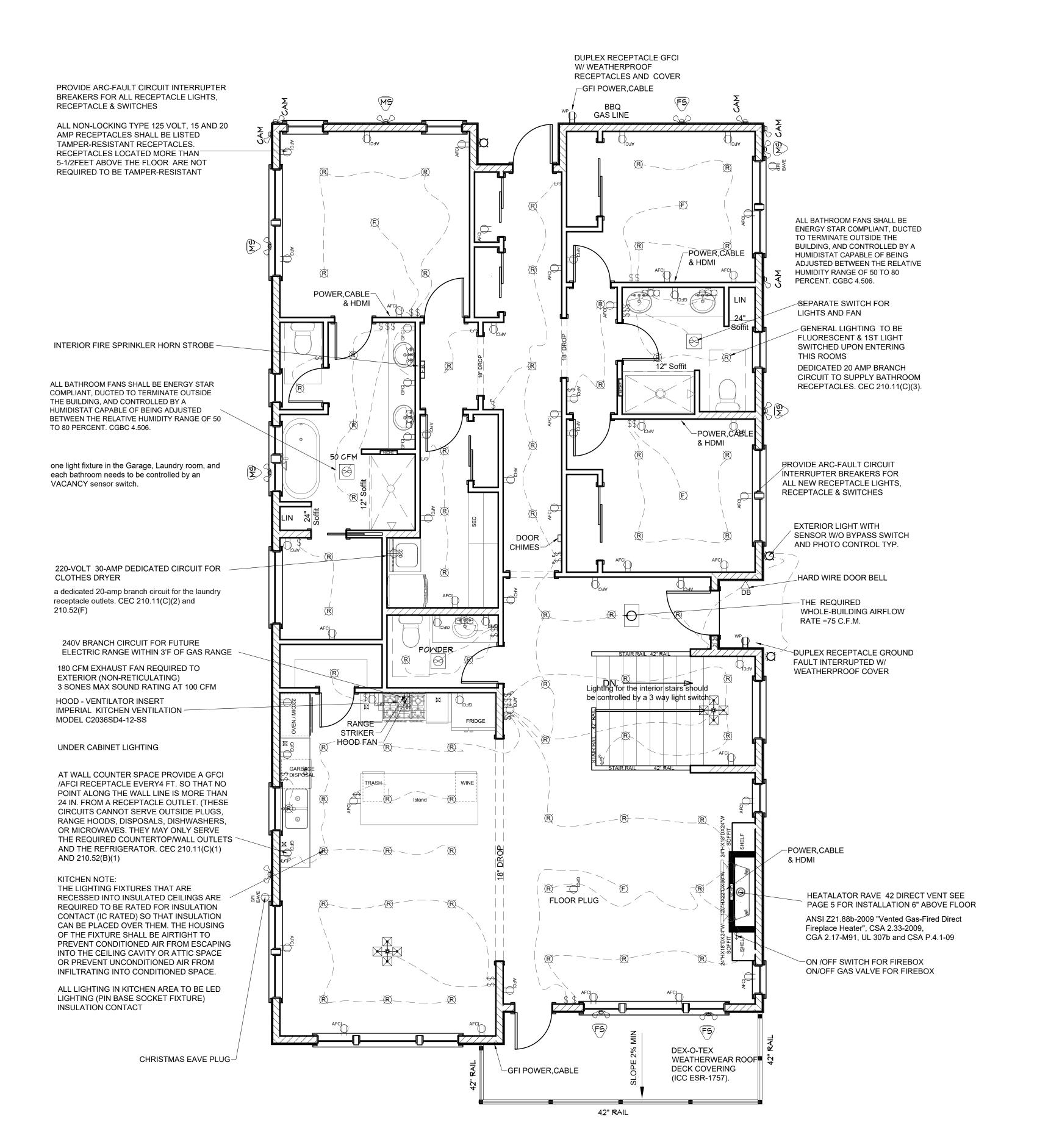
- 6. The Coastside Fire District Ordinance 2016-01, the 2016 California. Fire Code 304.1.2 6.1. A fuel break of defensible space is required around the perimeter of all structures to a distance of not less than 30 feet and may be required to a distance of 100 feet or to the property line. This is neither a requirement nor an authorization for the removal of living
- 6.2. Trees located within the defensible space shall bf] pruned to remove dead and dying portions, and limbed up 6 feet above the ground. New trees planted in the defensible space shall be located no closer than 1 O' to adjacent trees when fully grown or at
- 6.3. Remove that portion of any existing trees, which extends within 1 O feet of the outlet of a chimney or stovepipe or is within 5' of any structure. Maintain any tree adjacent to or overhanging a building free of dead or dying wood

- The applicant must have a maintained asphalt surface road for ingress and egress of fire apparatus. The City of Half Moon Bay Department of Public Works, San Mateo County Department of Public Works, the Coastside Fire District Ordinance 2016-01, and the California Fire Code shall set road standards. As per the 2016 CFC, dead-end roads exceeding 150 feet shall be provided with a turnaround in accordance with Coastside Fire District specifications. As per the 2016 CFC, Section Appendix D, road width shall not be less than 20 feet. Fire access roads shall be installed and made serviceable prior to combustibles being placed on the project site and maintained during construction. Approved signs and painted curbs or lines shall be provided and maintained to identify fire access roads and state the prohibition of their obstruction. If the road width does not allow parking on the street (20 foot road) and on-street parking is desired, an additional improved area shall be developed for that use.
- 8. As per 2016 CFC, Appendix B and C, a fire district approved fire hydrant (Clow 960) must be located within 500 feet of the proposed single-family dwelling unit measured by way of drivable access. As per 2016 CFC, Appendix B the hydrant must produce a minimum fire flow of 500 gallons per minute at 20 pounds per square inch residual pressure for 2 hours. Contact the local water purveyor for water flow details.
- 9. Automatic Fire Sprinkler System: (Fire Sprinkler plans will require a separate permit). As per San Mateo County Building Standards and Coastside Fire District Ordinance Number 2016-01, the applicant is required to install an automatic fire sprinkler system throughout the proposed or improved dwelling and garage. All attic access locations will be provided with a pilot head on a metal upright. Sprinkler coverage shall be provided throughout the residence to include all bathrooms, garages, and any area used for storage. The only exception is small linen closets less than 24 square feet with full depth shelving. The plans for this system must be submitted to the San Mateo County Planning and Building Division or The City of HMB. A building permit will not be issued until plans are received, reviewed and approved. Upon submission of plans, the County or City will forward a complete set to the Coastside Fire District for review.
- 10. Installation of underground sprinkler pipe shall be flushed and visually inspected by Fire District prior to hook-up to riser. Any soldered fittings must be pressure tested with trench open. Please call Coastside Fire District to schedule an inspection. Fees shall be paid prior to plan review.
- 11. Exterior bell and interior horn/strobe: are required to be wired into the required flow switch on your fire sprinkler system. The bell, horn/strobe and flow switch, along with the garage door opener are to be wired into a separate circwc breaker at the main electrical panel and labeled

PANEL SCHE	DULE AND LOAD CAL				SEF	RVICI	<u> </u>
LOAD TYPE		Volt-A	mps				LOAD VALUE
		AMPS	PROTECTION # C		F RCUITS		
General Lighting (2,223	15	-		5	5	6,669	
kitchen small appliance (	1,500)( 2MIN.)	20	DU.	AL DFCI	2	2	3,000
Laundry Circuit	1,500	20	DU.	AL DFCI	-	•	1,500
Microwave		20	GF	CI		1	1,400
Trash Compactor		20	GF	CI	-		-
Dishwasher	1,500	20	GF	CI		1	1,500
Disposal		20	GF		-	1	1,000
ELECTRICAL OVEN	2,000	20	GF	CI	-		-
ELECTRICAL RANGE	8,500	20	GF	CI	-		-
Electric Clothes Washer	500	20	GF	GFCI -			500
Electric Vehicle Supply Equ	ipment (EVSE	50				-	
WATER HEATER	20	GFI -			-		
(A) Sub-Total Volt-Amps Us	ed						15,569
(A) 15,569	(B)	5,56	9 (C)				2,228
-10,000 V-A		<u>X 0.</u>	40			-	<u>+10,000</u>
SUBTOTAL = 5,569	SUBTOTAL =	2,2	27.6	General lo	ad =	=	12,228
AC load at	•	mps) (2				1,464 VA	
Heat load at	(6.82	amps) (	240 v	/olts)		1,637 VA	
take the larger of the two		LARGE	ES LO	DAD		1,637 VA	
General load + Larges load						13,865	
Total Current Demand (Volt-An	nps) =	(13,865)	/ (2	40)		58 AMPS	
future Photovoltaic System (Rc	of Solar Panels)					40 AMPS	
min. panel capacity						108 AI	MPS
PROPOSED ELECTRICAL PA	NFI						
Square D by Schneider E 40-Circuit Outdoor Surfac SC2040M200C	lectric Homelin					200 AMPS	

0.01 (F.A.) + 7.5 (BEDROOMS +1) 0.01 (749)+7.5(3)= 30 CFM < 50 CFM OK USE 50 CFM WHOLE HOUSE FAN WITH 5" DUCT VENTED THRU ROOF

WHOLE HOUSE FAN- Quiet Cool Model # QC 50 CFM MIN. MUST BE A MAX 1 SONE CONTINUOUS USE A DUCT SIZE DIAMETER OF

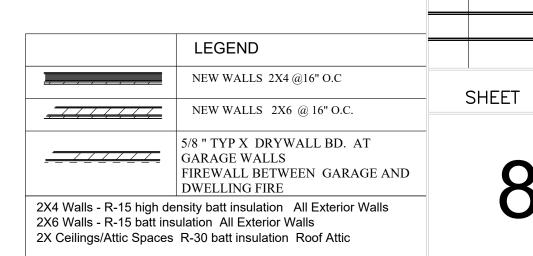


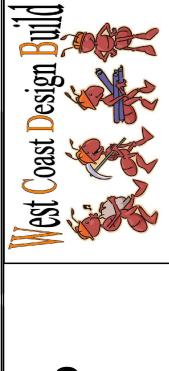
# 2<sub>ND</sub> Floor Electrical Plan

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

**VS-CACANCY SENSOR NOTES** 

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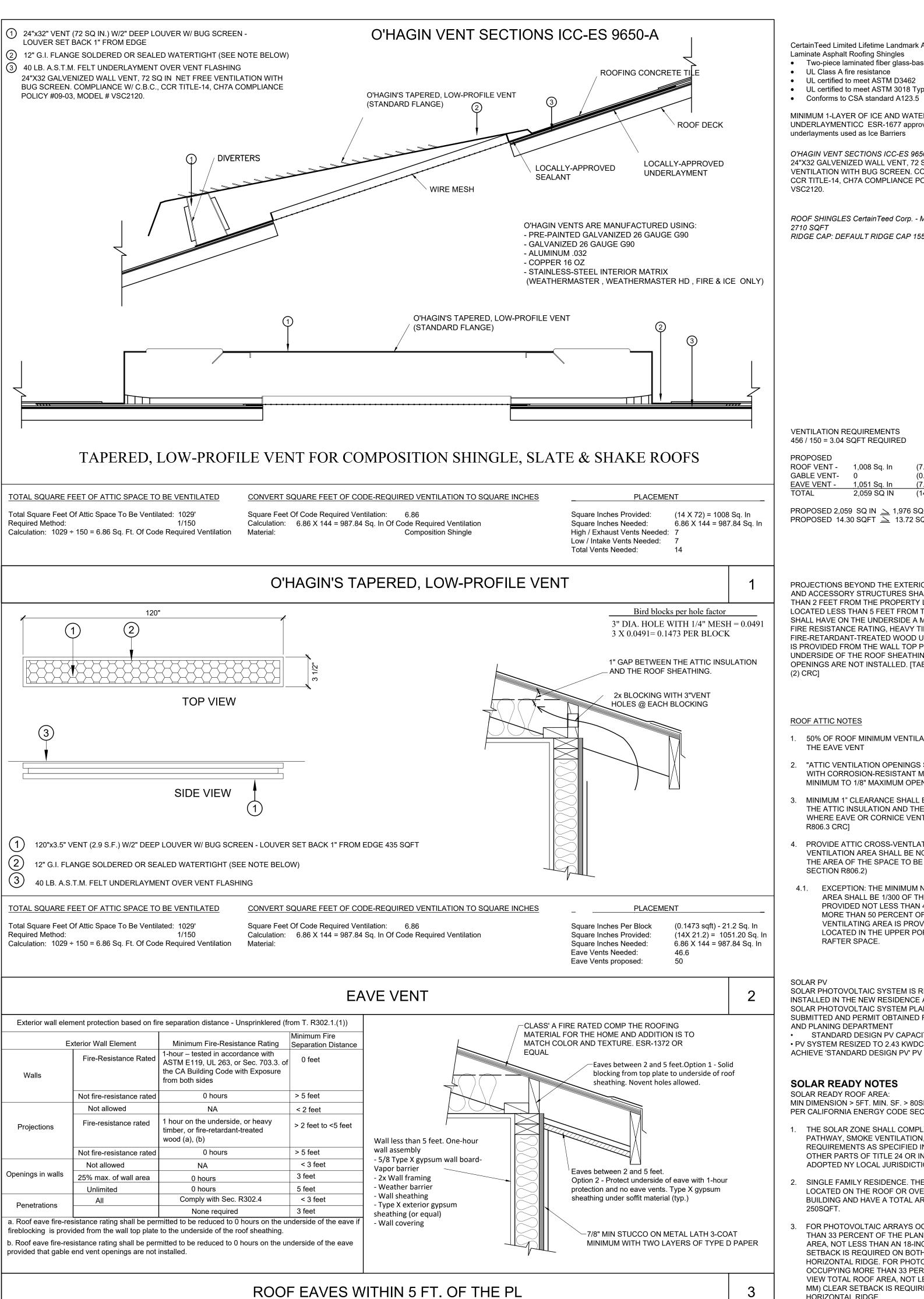


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MARCH 5, 2024

FILE -TAFFERA- Avenue Balboa,

047-105-100 SYM. REVISIONS DATE



CertainTeed Limited Lifetime Landmark AR Cobblestone Gray Laminate Asphalt Roofing Shingles Two-piece laminated fiber glass-based construction

 UL Class A fire resistance UL certified to meet ASTM D3462

UL certified to meet ASTM 3018 Type I

MINIMUM 1-LAYER OF ICE AND WATER SHIELD ROLL ROOFING UNDERLAYMENTICC ESR-1677 approval for Self-Adhered underlayments used as Ice Barriers

O'HAGIN VENT SECTIONS ICC-ES 9650-A. 24"X32 GALVENIZED WALL VENT, 72 SQ IN NET FREE VENTILATION WITH BUG SCREEN. COMPLIANCE W/ C.B.C., CCR TITLE-14. CH7A COMPLIANCE POLICY #09-03. MODEL #

ROOF SHINGLES CertainTeed Corp. - Max Def Cobblestone Gray -

RIDGE CAP: DEFAULT RIDGE CAP 155 LINEL FT

VENTILATION REQUIREMENTS 456 / 150 = 3.04 SQFT REQUIRED

1,008 Sq. In (7.00 SQFT) GABLE VENT- 0 (0.00 SQFT) 1,051 Sq. In (7.30 SQFT) 2,059 SQ IN (14.30 SQFT)

PROPOSED 2,059 SQ IN  $\,\underline{\,\,\,\,\,}$  1,976 SQFT REQUIRED - OK 

PROJECTIONS BEYOND THE EXTERIOR WALL OF DWELLINGS AND ACCESSORY STRUCTURES SHALL NOT EXTEND CLOSER THAN 2 FEET FROM THE PROPERTY LINE. PROJECTIONS LOCATED LESS THAN 5 FEET FROM THE PROPERTY LINE SHALL HAVE ON THE UNDERSIDE A MINIMUM OF ONE HOUR FIRE RESISTANCE RATING, HEAVY TIMBER, OR FIRE-RETARDANT-TREATED WOOD UNLESS FIRE BLOCKING IS PROVIDED FROM THE WALL TOP PLATE TO THE UNDERSIDE OF THE ROOF SHEATHING OR GABLE VENT OPENINGS ARE NOT INSTALLED. [TABLE R302.1 (1) & R302.1

# ROOF ATTIC NOTES

- 1. 50% OF ROOF MINIMUM VENTILATION MUST COME FROM THE EAVE VENT
- 2. "ATTIC VENTILATION OPENINGS SHALL BE COVERED WITH CORROSION-RESISTANT METAL MESH WITH 1/16" MINIMUM TO 1/8" MAXIMUM OPENINGS. SECTION R806.1.
- 3. MINIMUM 1" CLEARANCE SHALL BE PROVIDED BETWEEN THE ATTIC INSULATION AND THE ROOF SHEATHING WHERE EAVE OR CORNICE VENTS ARE INSTALLED
- 4. PROVIDE ATTIC CROSS-VENTLATION THE NET FREE VENTILATION AREA SHALL BE NOT LESS THAN 1/150 OF THE AREA OF THE SPACE TO BE VENTILATED (CRC
- 4.1. EXCEPTION: THE MINIMUM NET FREE VENTILATION AREA SHALL BE 1/300 OF THE VENTED SPACE PROVIDED NOT LESS THAN 40 PERCENT AND NOT MORE THAN 50 PERCENT OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE ATTIC OR RAFTER SPACE.

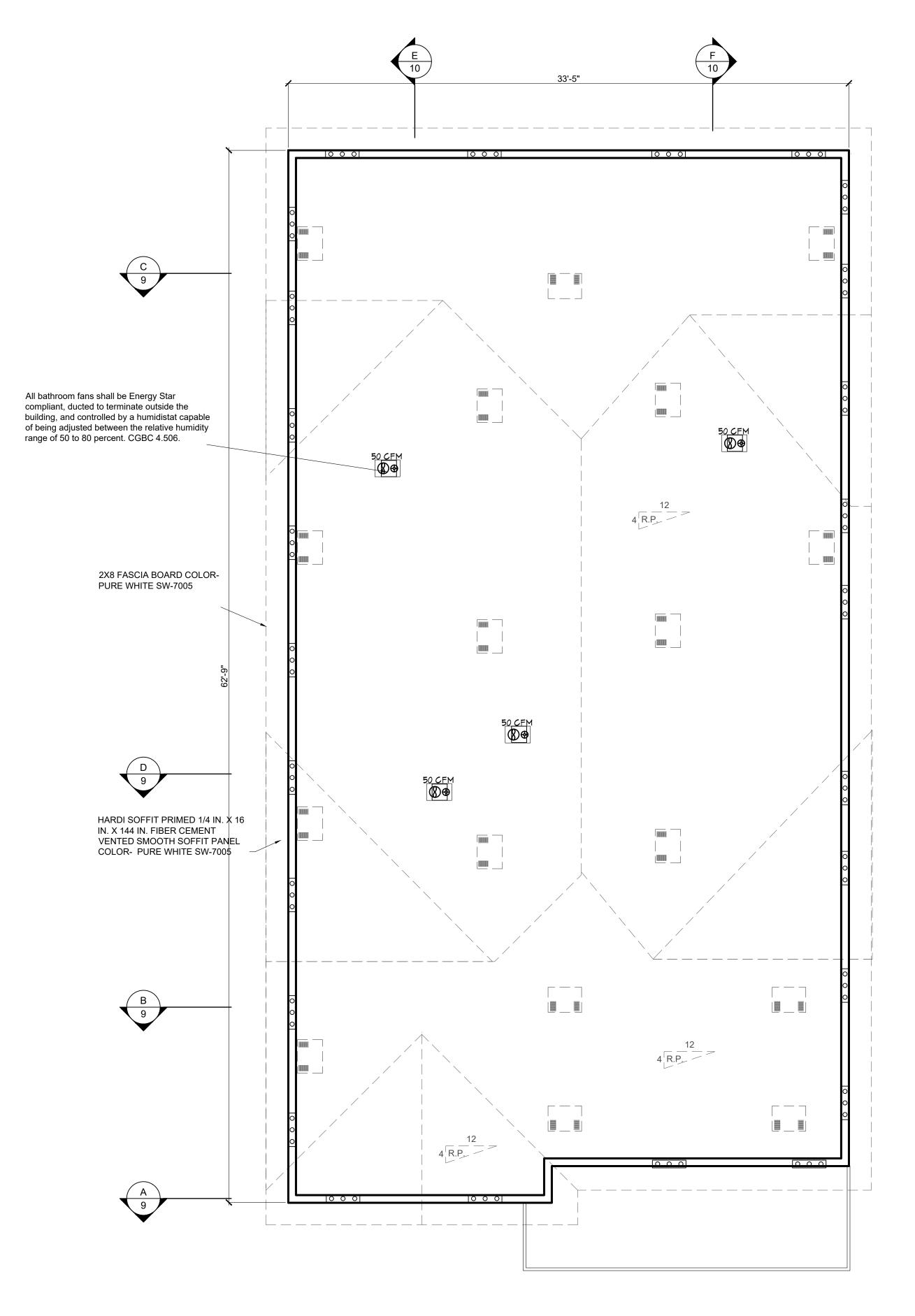
SOLAR PHOTOVOLTAIC SYSTEM IS REQUIRED TO BE INSTALLED IN THE NEW RESIDENCE AND GARAGE. SEPARATE SOLAR PHOTOVOLTAIC SYSTEM PLANS ARE TO BE SUBMITTED AND PERMIT OBTAINED FROM FIRE PREVENTION AND PLANING DEPARTMENT

 STANDARD DESIGN PV CAPACITY: 2.43 KWDC • PV SYSTEM RESIZED TO 2.43 KWDC (A FACTOR OF 2.429) TO ACHIEVE 'STANDARD DESIGN PV' PV SCALING

# **SOLAR READY NOTES** SOLAR READY ROOF AREA:

MIN DIMENSION > 5FT. MIN. SF. > 80SF. PER CALIFORNIA ENERGY CODE SECTION 110.10(b)

- 1. THE SOLAR ZONE SHALL COMPLY WITH ACCESS, PATHWAY, SMOKE VENTILATION, AND SIPACING REQUIREMENTS AS SPECIFIED IN TILE 24, PART 9 OR OTHER PARTS OF TITLE 24 OR IN ANY REQUIREMENTS ADOPTED NY LOCAL JURISDICTION
- 2. SINGLE FAMILY RESIDENCE. THE SOLAR ZONE SHALL BE LOCATED ON THE ROOF OR OVERHANG OF THE BUILDING AND HAVE A TOTAL AREA OF NO LESS THAN
- 3. FOR PHOTOVOLTAIC ARRAYS OCCUPYING NOT MORE THAN 33 PERCENT OF THE PLAN VIEW TOTAL ROOF AREA, NOT LESS THAN AN 18-INCH (457 MM) CLEAR SETBACK IS REQUIRED ON BOTH SIDES OF A HORIZONTAL RIDGE. FOR PHOTOVOLTAIC ARRAYS OCCUPYING MORE THAN 33 PERCENT OF THE PLAN VIEW TOTAL ROOF AREA, NOT LESS THAN A 36-INCH (914 MM) CLEAR SETBACK IS REQUIRED ON BOTH SIDES OF A HORIZONTAL RIDGE



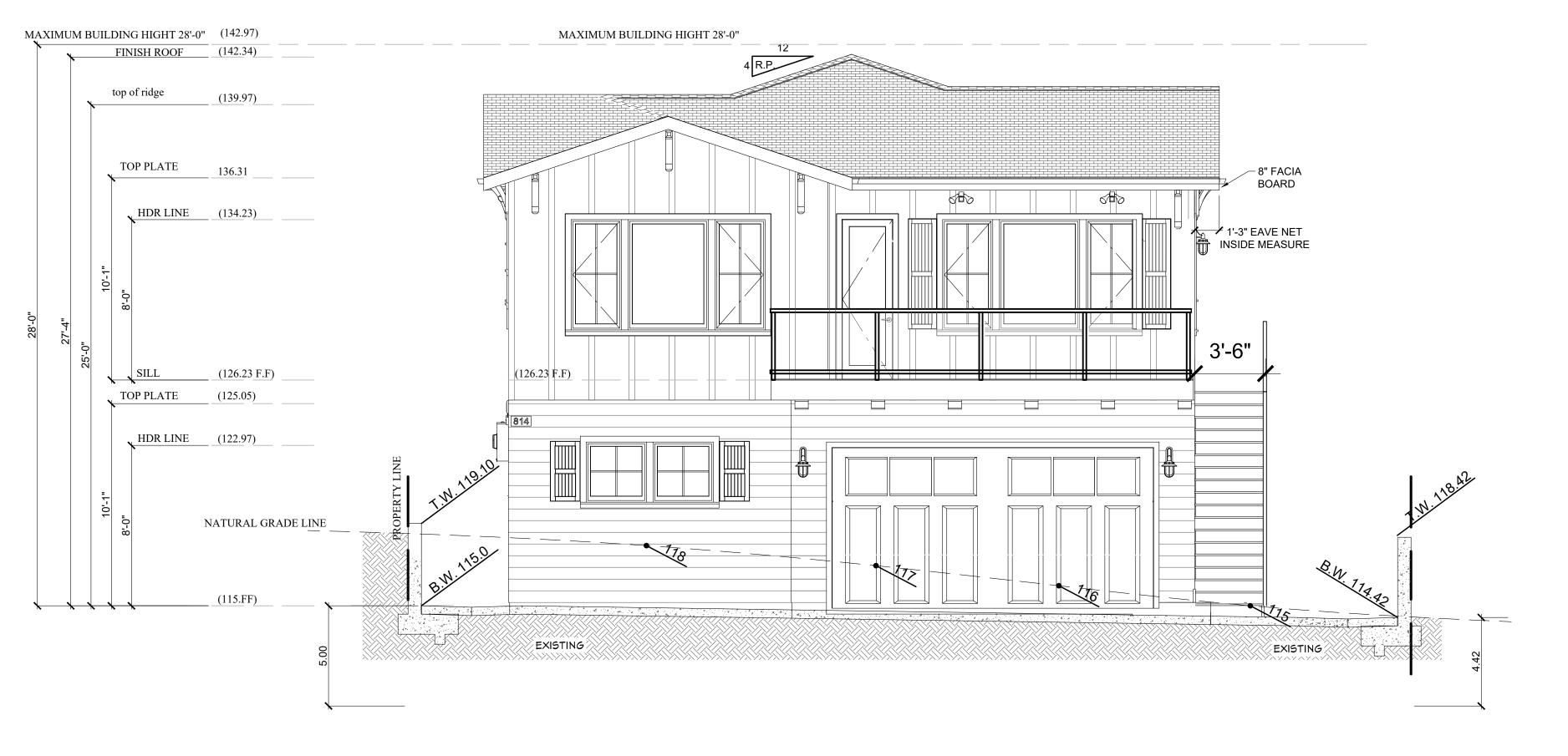
Plan Roof Scale: 1/4" = 1'-0"

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MARCH 5, 2024 FILE -

TAFFERA- Avenue Balboa, 047-105-100

SYM. REVISIONS DATE



SOUTH ELEVATION

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

**ELEVATION NOTES:** 

- 1 SMOOTH HARDIEPLANK 8-1/4" LAP SIDING (ESR-2290) W/ HARDIEWRAP WEATHER BARRIER (ESR-2658)
- 2 SMOOTH HARDIEBOARD BOARD/ BATTEN (ESR-2290) 16 "ON CENTER HARDIEWRAP WEATHER BARRIER
- (ESR-2658) 3 SMOOTH - HARDIEBOARD -SOFFIT VENTED 16" W
- 4 HARDIEBOARD -TRIM 3-1/2"X 5/4" SMOOTH
- 5 GARAGE OVER HANG HARDIE V GROOVE 8" SMOOTH
- 6 FINISH GRADE SHALL SLOPE AWAY FROM BUILDING 6" MIN. VERTICALLY FOR THE FIRST 10 HORIZONTAL FEET
- TWO IF BY SEA BLACK LED DARK SKY COMPLIANT 18"HX6"W
- 8 DUPLEX RECEPTACLE GROUND FAULT INTERRUPTED W/ WEATHERPROOF COVER
- GertainTeed Limited Lifetime Landmark AR Cobblestone Gray Laminate Asphalt Roofing Shingles
- Two-piece laminated fiber glass-based construction
- UL Class A fire resistance
- UL certified to meet ASTM D3462 UL certified to meet ASTM 3018 Type I
- Conforms to CSA standard A123.5

MINIMUM 1-LAYER OF ICE AND WATER SHIELD ROLL ROOFING UNDERLAYMENTICC ESR-1677 approval for Self-Adhered underlayments used as Ice Barriers

- 10 O'HAGIN VENT SECTIONS ICC-ES 9650-A. 24"X32 GALVENIZED WALL VENT, 72 SQ IN NET FREE VENTILATION WITH BUG SCREEN. COMPLIANCE W/ C.B.C., CCR TITLE-14, CH7A COMPLIANCE POLICY #09-03, MODEL # VSC2120.
- 11 2X8 FASCIA BOARD COLOR- PURE WHITE SW-7005
- CONTINUOUS 28 GAUGE GALVANIZED METAL FLASHING WITH 2-1/2" DRIP EDGE AT PERIMETER OF ROOF WITH 4" WIDE GUTTERS PAINT (COLOR- PURE WHITE SW-7005) CONNECTED TO DOWNSPOUTS THAT DRAIN OVER 12"X18" MINIMUM CONCRETE SPLASH PAD.
- 13 FLOORS AND LANDINGS AT EXTERIOR DOORS The width of each landing shall be not less than the door served. Landings shall have a dimension of not less than 36 inches (914 mm) measured in the direction of travel. The slope at exterior landings shall not exceed '/4 unit vertical in 12 units horizontal (2 percent). (R311.3)
- Floor elevations at the required egress doors. Landings or finished floors at the required egress door shall be not more than 1-1/2 inches (38 mm) lower than the top of the threshold.
- The landing or floor on the exterior side shall be not more than 7-3/4 inches (196 mm) below the top of the threshold provided that the door does not swing over the landing or
- SEE WINDOW SCHEDULE IN SHEET 5
  Egress window -see window notes
- Maximum sill height 44 inches Minimum opening height shall be 24 inches
- Minimum opening with shall be 20 inches
- All glazing to be double glazed

- and a shgc of 0.25
- All glazing to have non-metal frames
   All glazing areas shall have a u-factor of minimum of 0.32

  EXTERIOR MOTION LED FLOOD HALO TGS 2500 LUMEN WITH MOTION ACTIVATED COLOR BLACK
  - W/2 ROUND HEADS 4000K DARK SKY COMPLIANT

JOINT PERMEABLE QUARRY STONE - COLOR - SEQUOIA

Z

address numbers shall be at least six feet above the finished surface of the driveway. Where buildings are located remotely to the public roadway, additional signage at the driveway/roadway entrance leading to the building and/or on each individual building shall be required by the Coastside Fire District. This remote signage shall consist of a 6 inch by 18 inch green reflective metal sign with 3 inch reflective Numbers/ Letters similar to Hy-Ko 911 or equivalent. (TEMPORARY ADDRESS NUMBERS SHALL BE POSTED PRIOR TO COMBUSTIBLES BEING PLACED ON SITE).

42"-HIGH PROTECTIVE GUARDRAIL FOR PORCHES, BALCONIES, DECKS, AND OPEN SIDES OF LANDINGS MAXIMUM CLEAR OPENING BETWEEN ANY MEMBERS OF THE GUARDRAIL SHALL BE LESS THAN 4". SEE NOTES STAIRWAYS, LANDINGS & HAND RAILS ON SHEET 2

Address sigh - KICHLER TEXTURE BLACK LED 4 WATTS

seen from the public way fronting the building. The

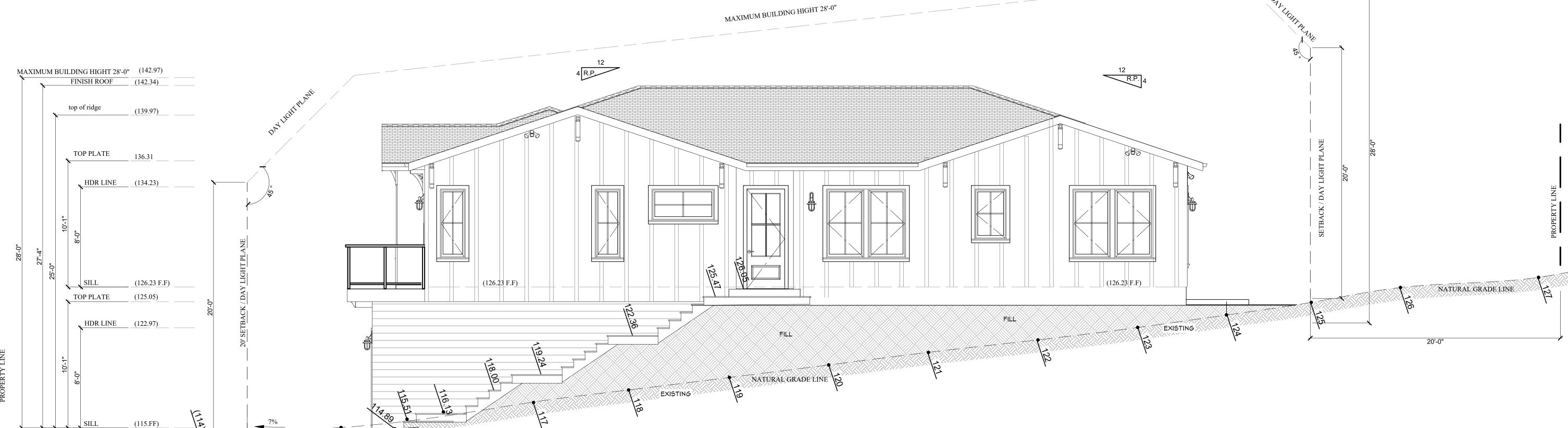
New residential buildings shall have internally illuminated

letters/numerals for permanent address signs shall be 4

address numbers contrasting with the background so as to be

inches in height with a minimum 112-inch stroke. Residential

- 17 EXTERIOR TRIM COLOR-PURE WHITE SW-7005
- 18 EXTERIOR COMMUNITY COLOR-KRYPTON SW-6247
- ENTRY DOOR- THERMATRU FIBERGLAS 2/3 RD LIGHT GRIDS COLOR SW 6249 STORM CLOUD
- 20 EXTERIOR BRACKETS COLOR PURE WHITE SW-7005. PROWOOD MARKET #02T12 3-1/2" W X 14" D X24" H
- GARAGE DOOR- CLOPAY COACHMAN COLLECTION SERIES 1, DESIGN 11, REC 13 (GLASS) COLOR -STANDERD WHITE WITH BLACK HANDLES
- ENTRY DOOR AND REAR DOOR THERMATRU : FIBERGLAS HALF LIGHT GRIDS TO MATCH WINDOW
- BALCONY DOOR THERMATRU FIBERGLASS SINGLE LIGHT FRENCH DOOR
- MILLGARD TUSCANY WHITE VINYL CASEMENT WITH FOUR LIGHTS
- 25 SHUTTERS 18" W VINYL COLOR SW 6249 STORM CLOUD
- 26 SHAPED CORBELS ABOVE GARAGE DOOR PURE WHITE SW-7005 6"H X 8"W X 44" D
- BALCONY DECK COATING BY MER-KO DECK COLOR: DOVER GRAY
- BALCONY RAILING- RAILS ,E GLASS 810 SERIES 3/8"
  TEMPERED GLASS WITH WHITE POWDER COAT SOLI TEMPERED GLASS WITH WHITE POWDER COAT SOLID ALUMINUM TOP BOTTOM AND VERTICAL SUPPORTS
- RETAINING WALL LIGHT SAND PLASTER FINISH COLOR KRYPTON SW-6247
- DRIVEWAY / PATH WAY PAVERS CALSTONE NARROW SAND STONE



**EAST ELEVATION** 

RIGHT

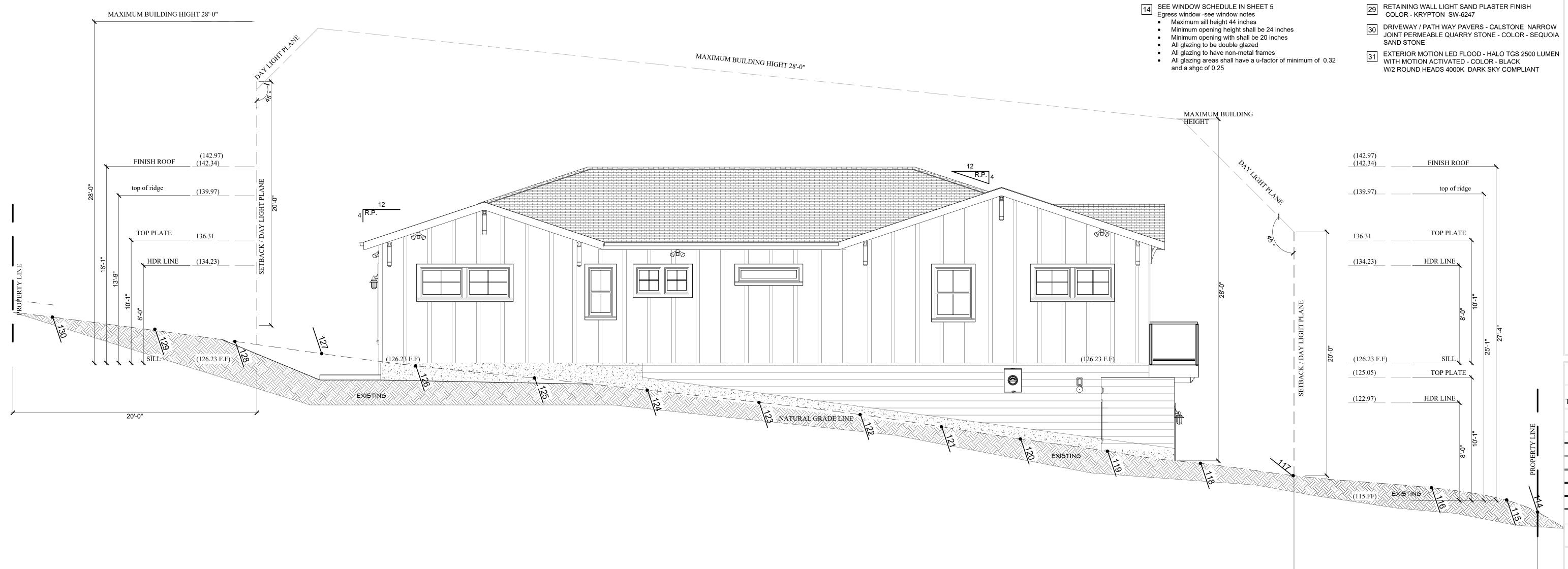
SCALE: 1/4"= 1'-0"

MARCH 5, 2024 FILE -

TAFFERA- Avenue Balboa 047-105-100

SYM. REVISIONS DATE

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



# **ELEVATION NOTES:**

- 1 SMOOTH HARDIEPLANK 8-1/4" LAP SIDING (ESR-2290) W/ HARDIEWRAP WEATHER BARRIER (ESR-2658)
- 2 SMOOTH HARDIEBOARD BOARD/ BATTEN (ESR-2290) 16 "ON CENTER HARDIEWRAP WEATHER BARRIER
- 3 SMOOTH HARDIEBOARD -SOFFIT VENTED 16" W
- 4 HARDIEBOARD -TRIM 3-1/2"X 5/4" SMOOTH

(ESR-2658)

18"HX6"W

- 5 GARAGE OVER HANG HARDIE V GROOVE 8" SMOOTH 6 FINISH GRADE SHALL SLOPE AWAY FROM BUILDING 6" MIN. VERTICALLY FOR THE FIRST 10 HORIZONTAL FEET
- 7 EXTERIOR SCONCE LIGHTS MODERN FORMS STYLE TWO IF BY SEA BLACK LED DARK SKY COMPLIANT
- B DUPLEX RECEPTACLE GROUND FAULT INTERRUPTED W/ WEATHERPROOF COVER
- GertainTeed Limited Lifetime Landmark AR Cobblestone Gray Laminate Asphalt Roofing Shingles
- Two-piece laminated fiber glass-based construction
- UL Class A fire resistance UL certified to meet ASTM D3462
- UL certified to meet ASTM 3018 Type I
- Conforms to CSA standard A123.5

MINIMUM 1-LAYER OF ICE AND WATER SHIELD ROLL ROOFING UNDERLAYMENTICC ESR-1677 approval for Self-Adhered underlayments used as Ice Barriers

- 0'HAGIN VENT SECTIONS ICC-ES 9650-A. 24"X32 GALVENIZED WALL VENT, 72 SQ IN NET FREE VENTILATION WITH BUG SCREEN, COMPLIANCE W/ C.B.C.. CCR TITLE-14, CH7A COMPLIANCE POLICY #09-03, MODEL # VSC2120.
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- 12 units horizontal (2 percent). (R311.3) Floor elevations at the required egress doors.
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- The landing or floor on the exterior side shall be not more than 7-3/4 inches (196 mm) below the top of the threshold provided that the door does not swing over the landing or

- Address sigh KICHLER TEXTURE BLACK LED 4 WATTS New residential buildings shall have internally illuminated address numbers contrasting with the background so as to be seen from the public way fronting the building. The letters/numerals for permanent address signs shall be 4 inches in height with a minimum 112-inch stroke. Residential address numbers shall be at least six feet above the finished surface of the driveway. Where buildings are located remotely to the public roadway, additional signage at the driveway/roadway entrance leading to the building and/or on each individual building shall be required by the Coastside Fire District. This remote signage shall consist of a 6 inch by 18 inch green reflective metal sign with 3 inch reflective Numbers/ Letters similar to Hy-Ko 911 or equivalent.
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(TEMPORARY ADDRESS NUMBERS SHALL BE POSTED

PRIOR TO COMBUSTIBLES BEING PLACED ON SITE).

- EXTERIOR TRIM COLOR-PURE WHITE SW-7005
- EXTERIOR COMMUNITY COLOR-KRYPTON SW-6247
- ENTRY DOOR- THERMATRU FIBERGLAS 2/3 RD LIGHT GRIDS COLOR SW 6249 STORM CLOUD
- EXTERIOR BRACKETS COLOR
  PURE WHITE SW-7005. PROWOOD MARKET #02T12 3-1/2" W X 14" D X24" H
- GARAGE DOOR- CLOPAY COACHMAN COLLECTION
  SERIES 1 DESIGN 44 DESIGN SERIES 1, DESIGN 11, REC 13 (GLASS) COLOR -STANDERD WHITE WITH BLACK HANDLES
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6"H X 8"W X 44" D

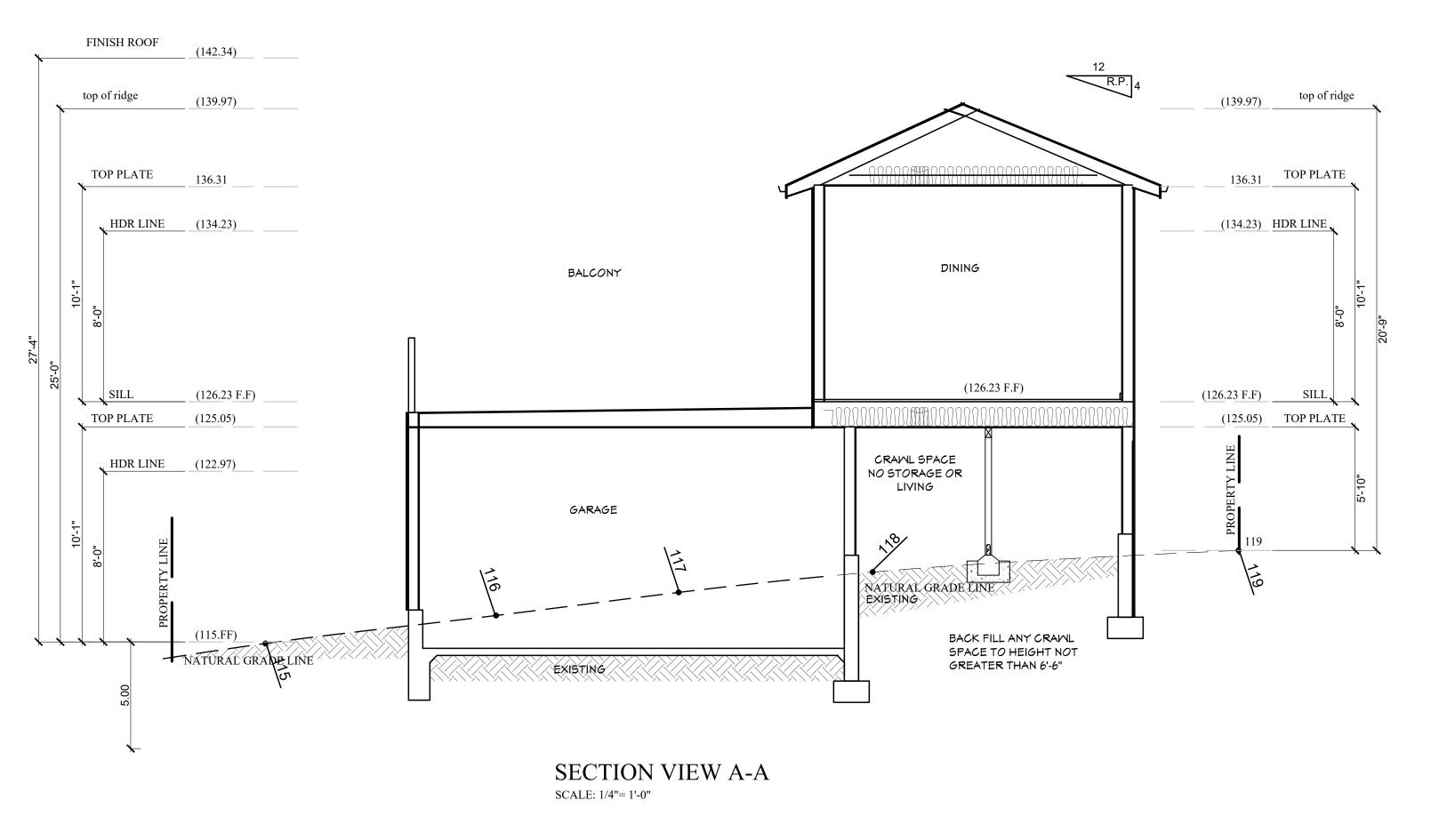
- 26 SHAPED CORBELS ABOVE GARAGE DOOR PURE WHITE SW-7005
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- JOINT PERMEABLE QUARRY STONE COLOR SEQUOIA
  - W/2 ROUND HEADS 4000K DARK SKY COMPLIANT

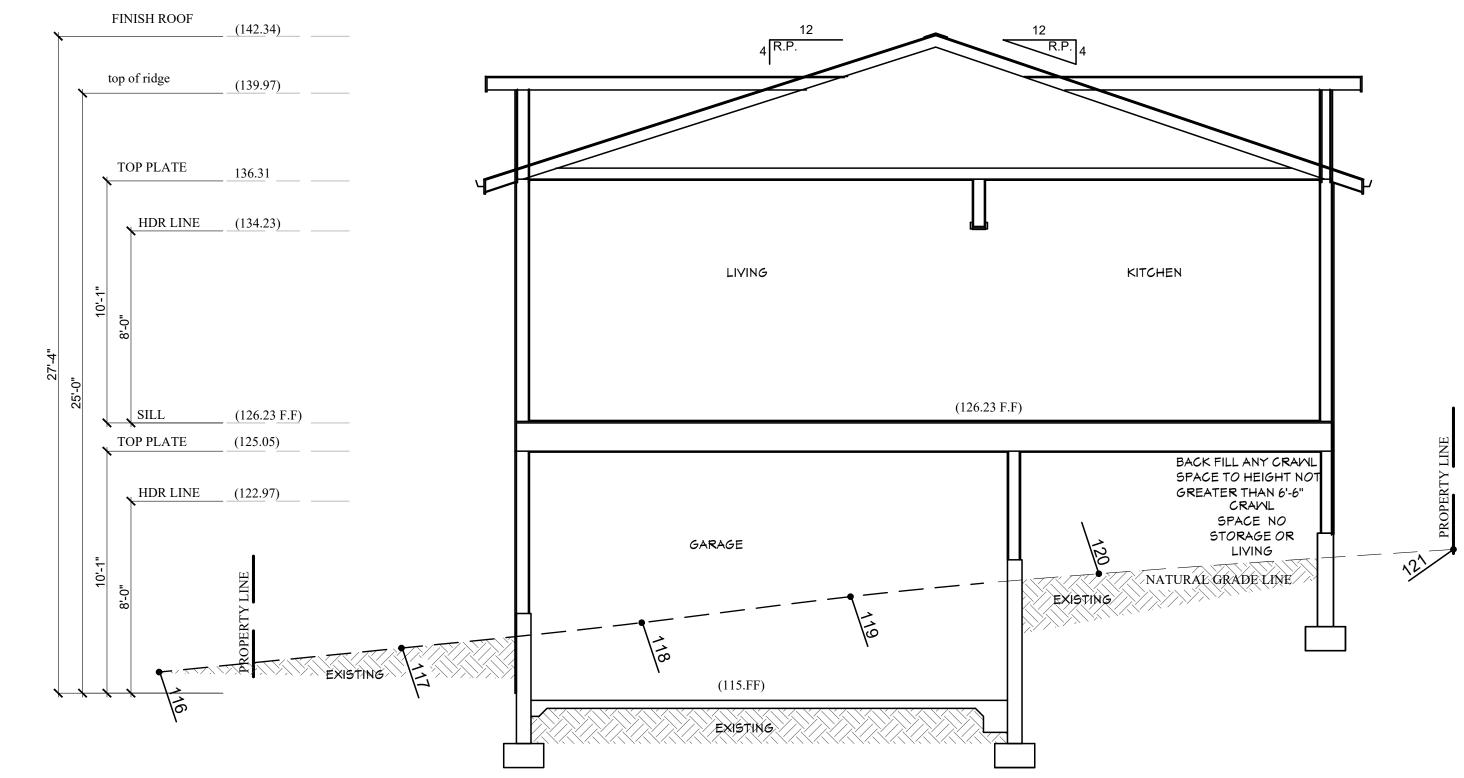
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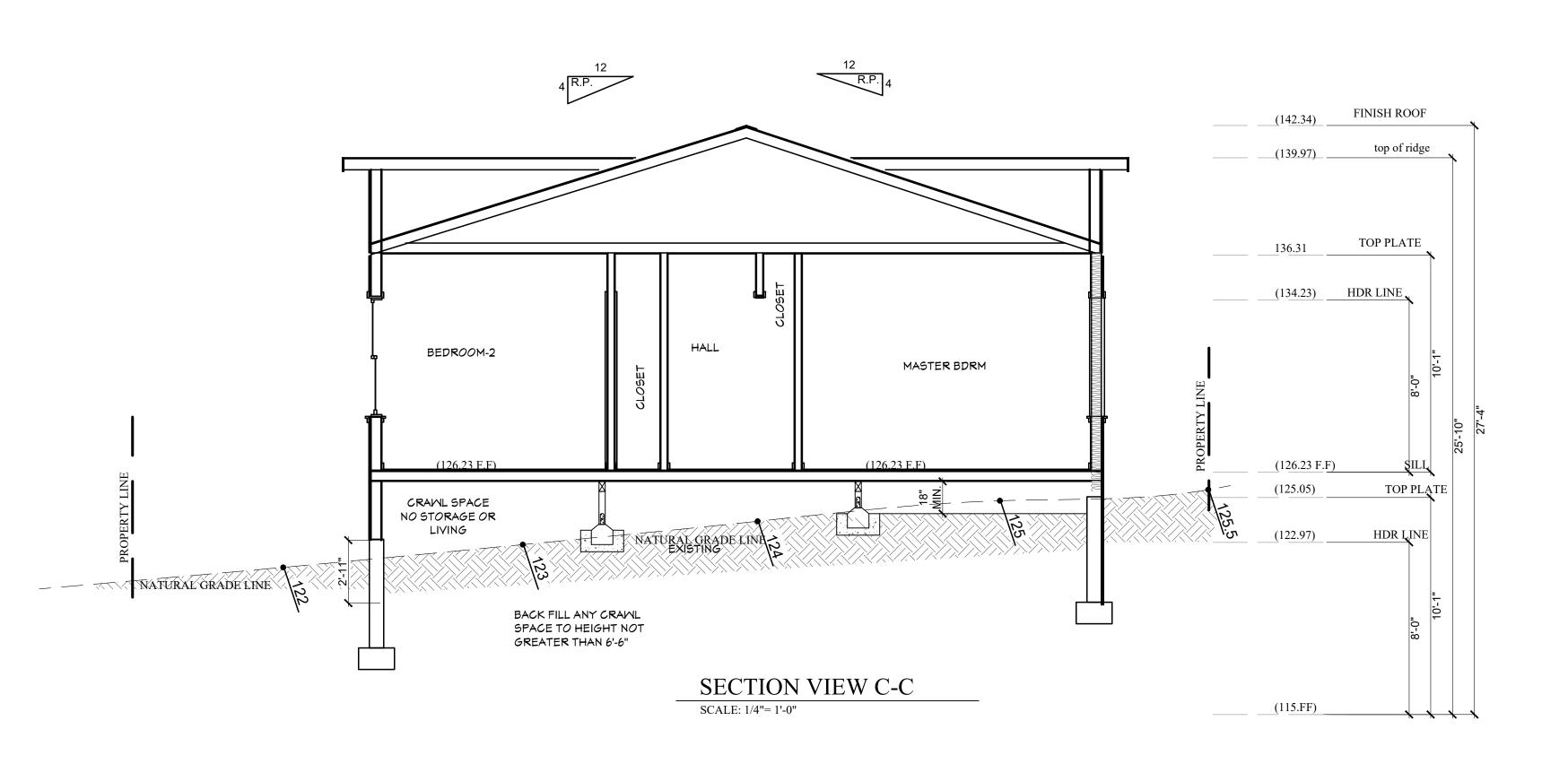
MARCH 5, 2024

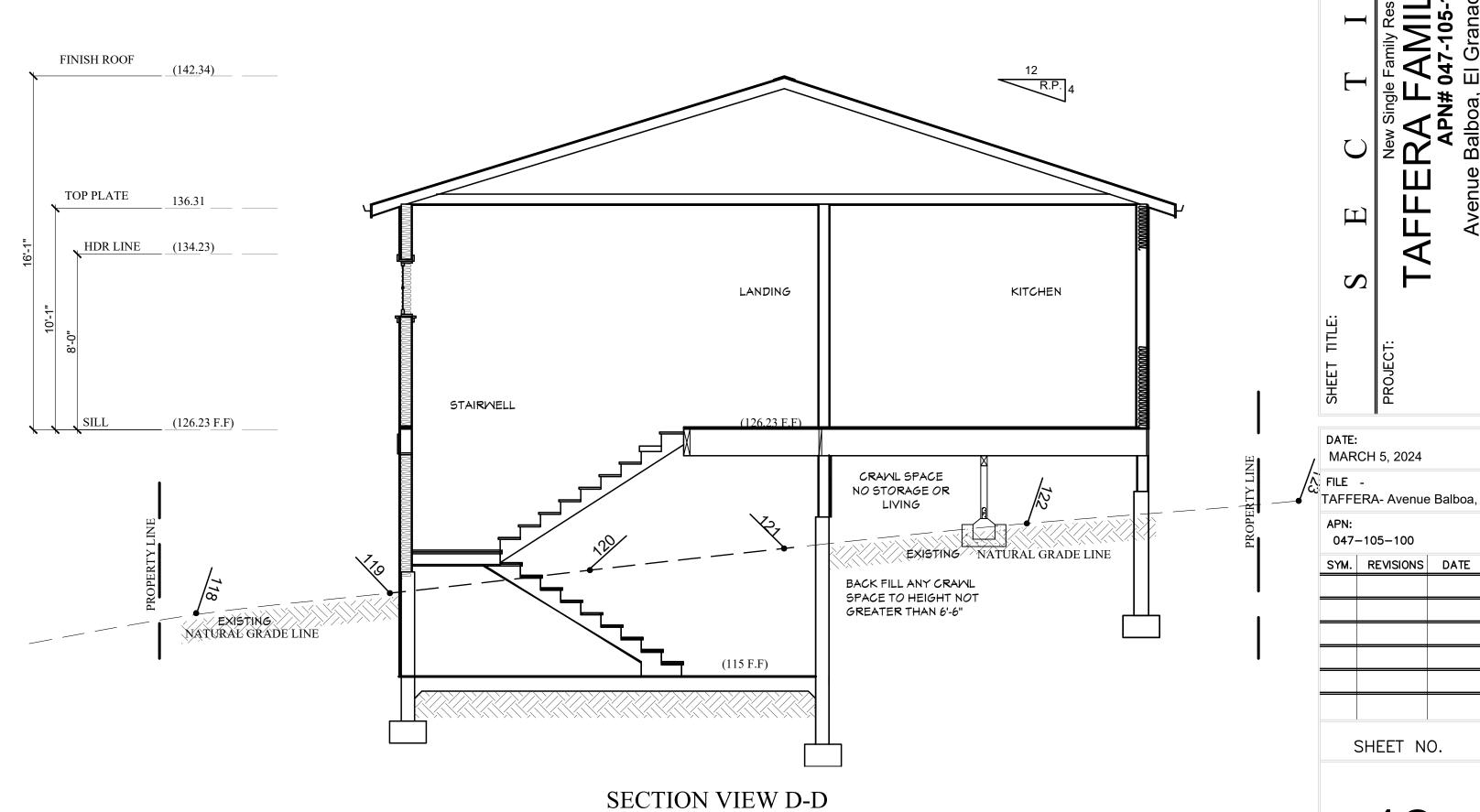
FILE -TAFFERA- Avenue Balboa

047-105-100 SYM. REVISIONS DATE









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

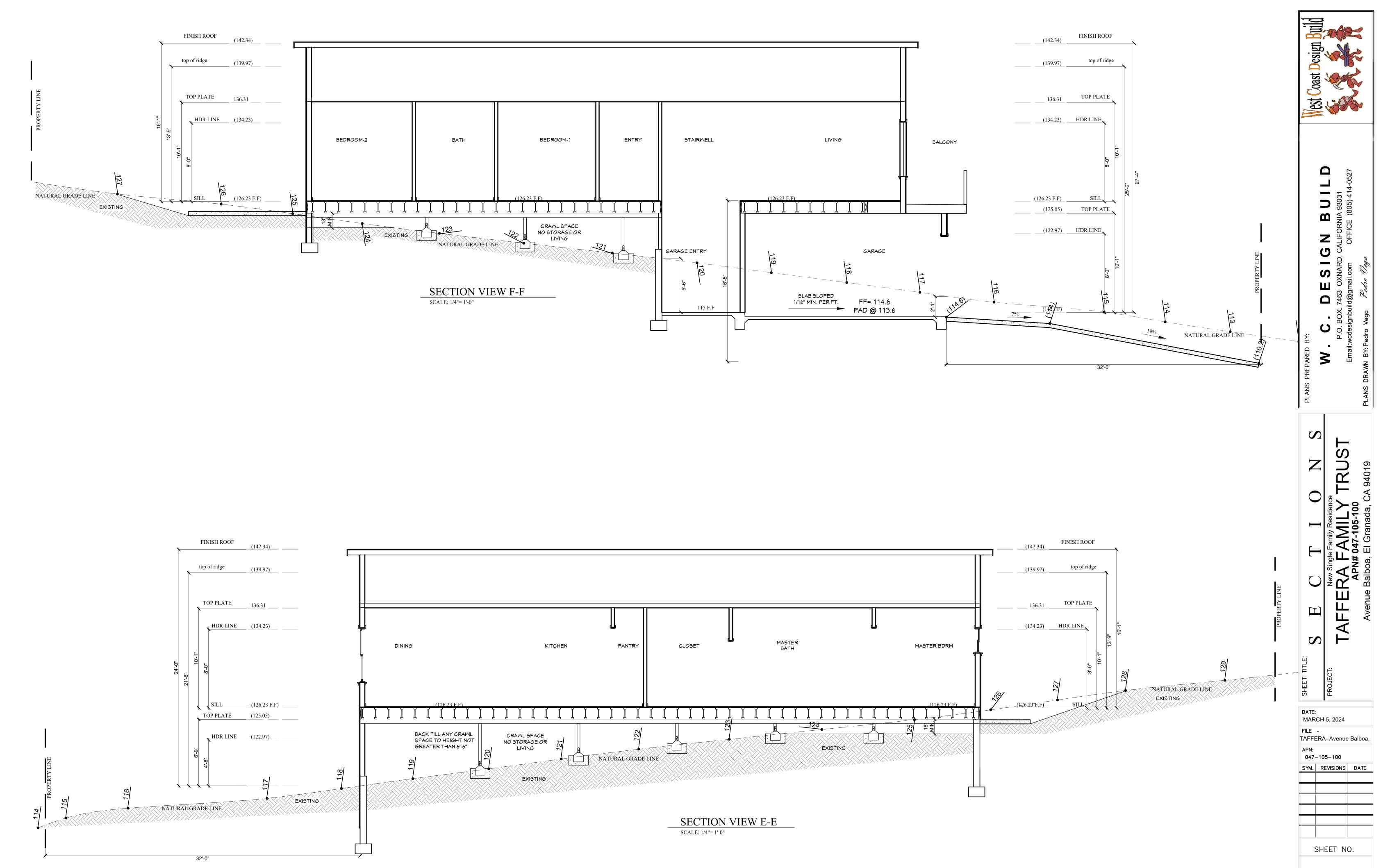
SECTION VIEW B-B

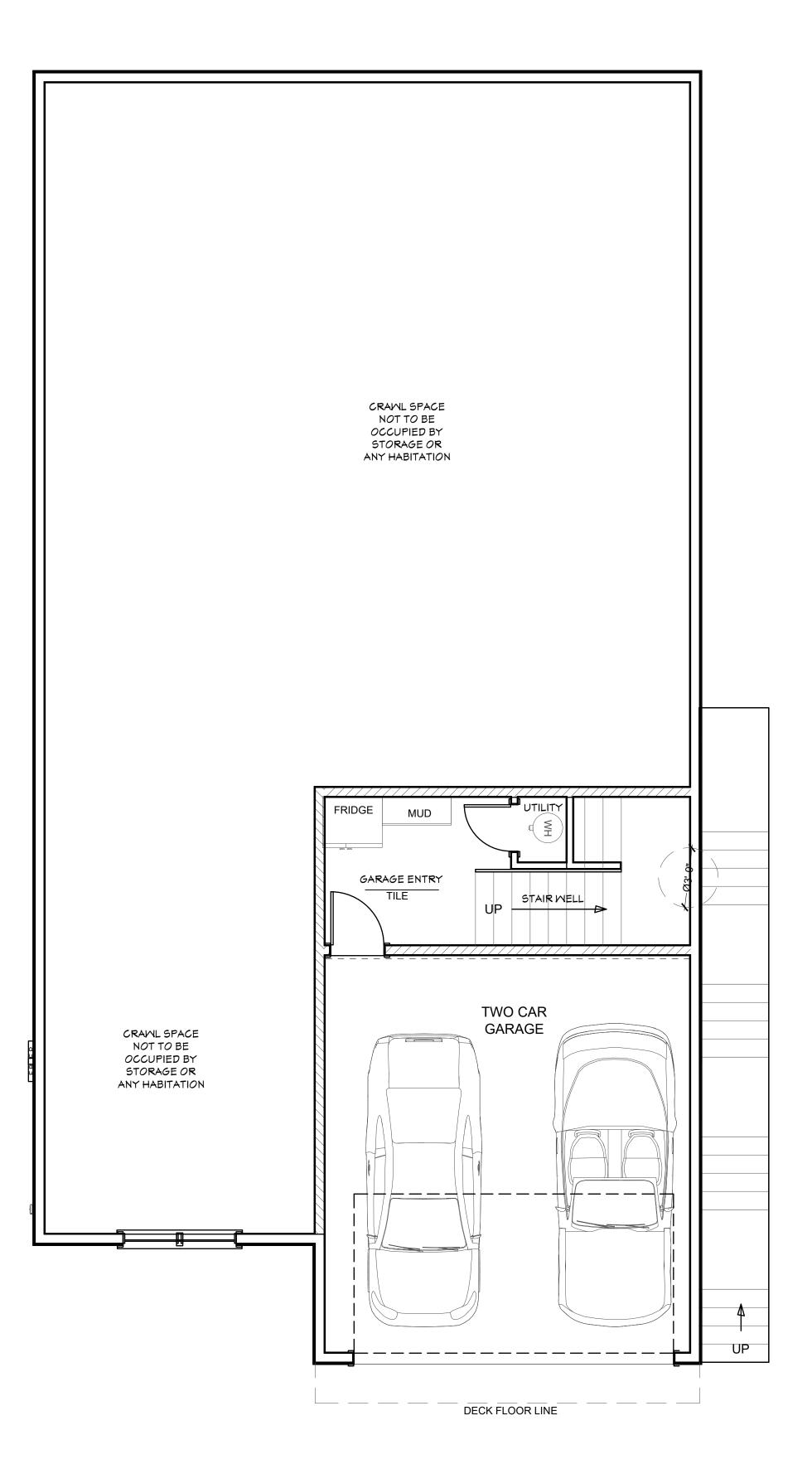
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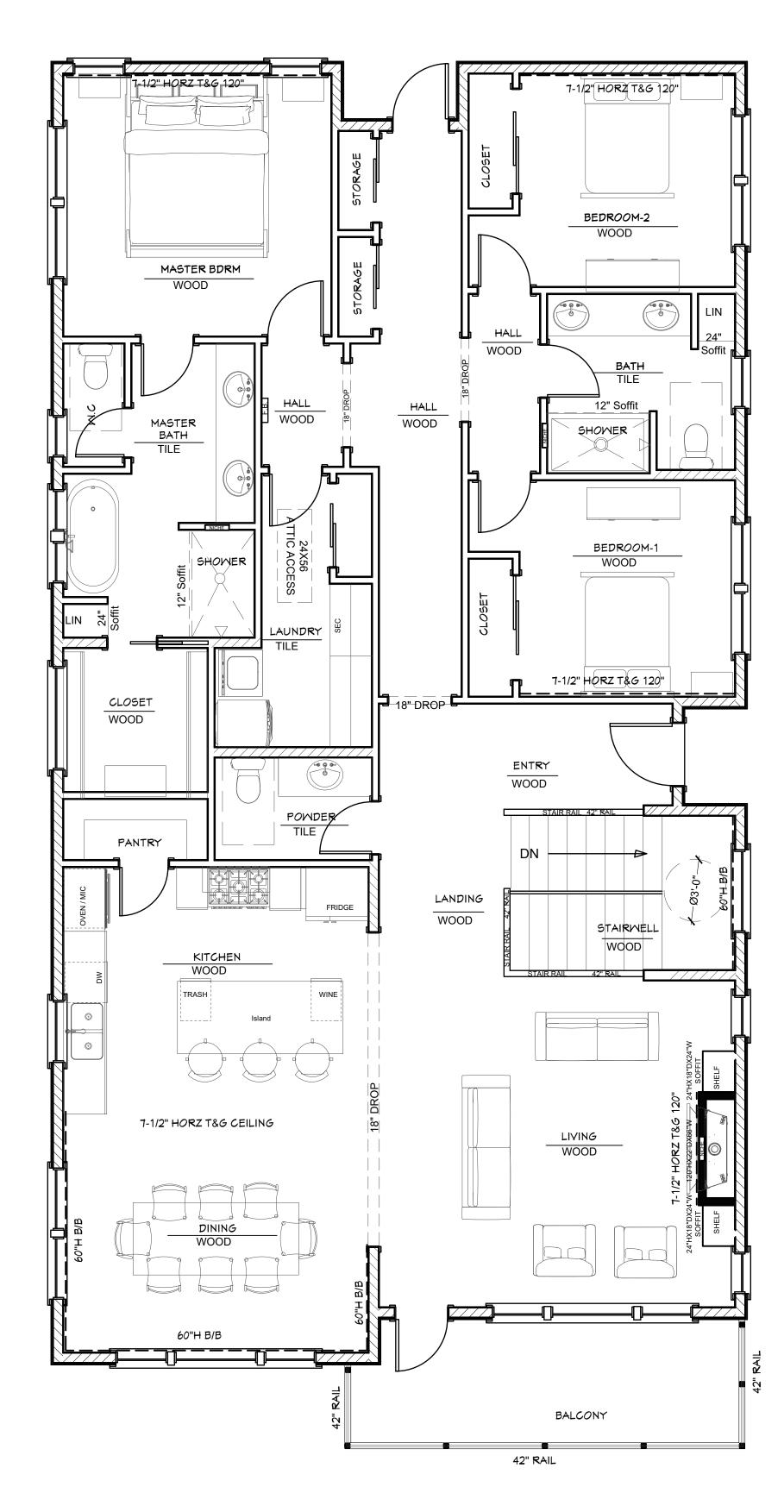
SHEET NO.

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

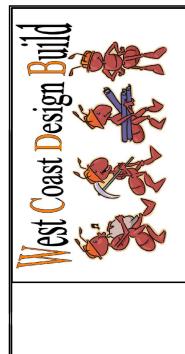




1st FLOOR PLAN Living Area 150 SQFT
2 Car Garage 398 SQFT
Entry way stair more than
18" above natural grade 87 SQFT
Crawl Space 1,513 SQFT SCALE: 3/16"= 1'-0"



2<sub>ND</sub> FLOOR PLAN SCALE: 3/16"= 1'-0" 2,028 SQFT 115 SQFT Living Area Balcony



SOS

DATE: MARCH 5, 2024

FILE -TAFFERA- Avenue Balboa,

047-105-100 SYM. REVISIONS DATE





Roof Shingles Brand: Owens Corning Color: Cobblestone Gray



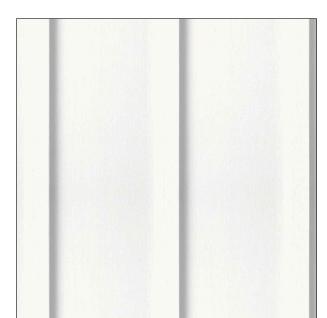
Garage Doors
Brand: Clopay Coachman Collection
series 1, design 11, rec 13 (glass)
Color: standerd white with black handles



SW 6247



Exterior Sconce Lights Brand: Modern Forms Color: Black Style: Two if by sea Dark Sky - LED 18"H X 6" W



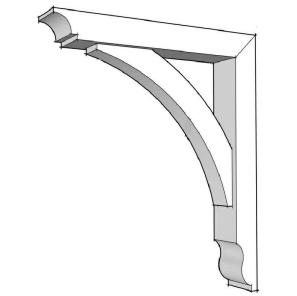
BRAND: JAMES HARDI BOARD / BATTEN 16" ON CENTER DATE: SEPTEMBER 16, 2023 FILE -TAFFERA- Avenue Balboa, 047-105-100

BRAND: JAMES HARDI 8-1/4" LAP SIDING

SHEET NO.

SYM. REVISIONS DATE

LED Adress Light Brand: Kichler Finish: Textured Black style: 43800BKTLED



Brand : TIMBERBUILD model: Wood Bracket 02T12 MPN:02T12-1624 PRODUCT LINE:Brackets - 02 PROJECTION:16 in HEIGHT:24 in THICKNESS:3 1/2 in BRACE THICKNESS:2 1/2 in BRACE SETTING:Recessed 1/2 in BODY TIMBER:3 1/2 in x 3 1/2 in

Storm Cloud

Exterior Door and Shutter Color Brand: Sherwin Williams Color: STORM CLOUD - SW6249



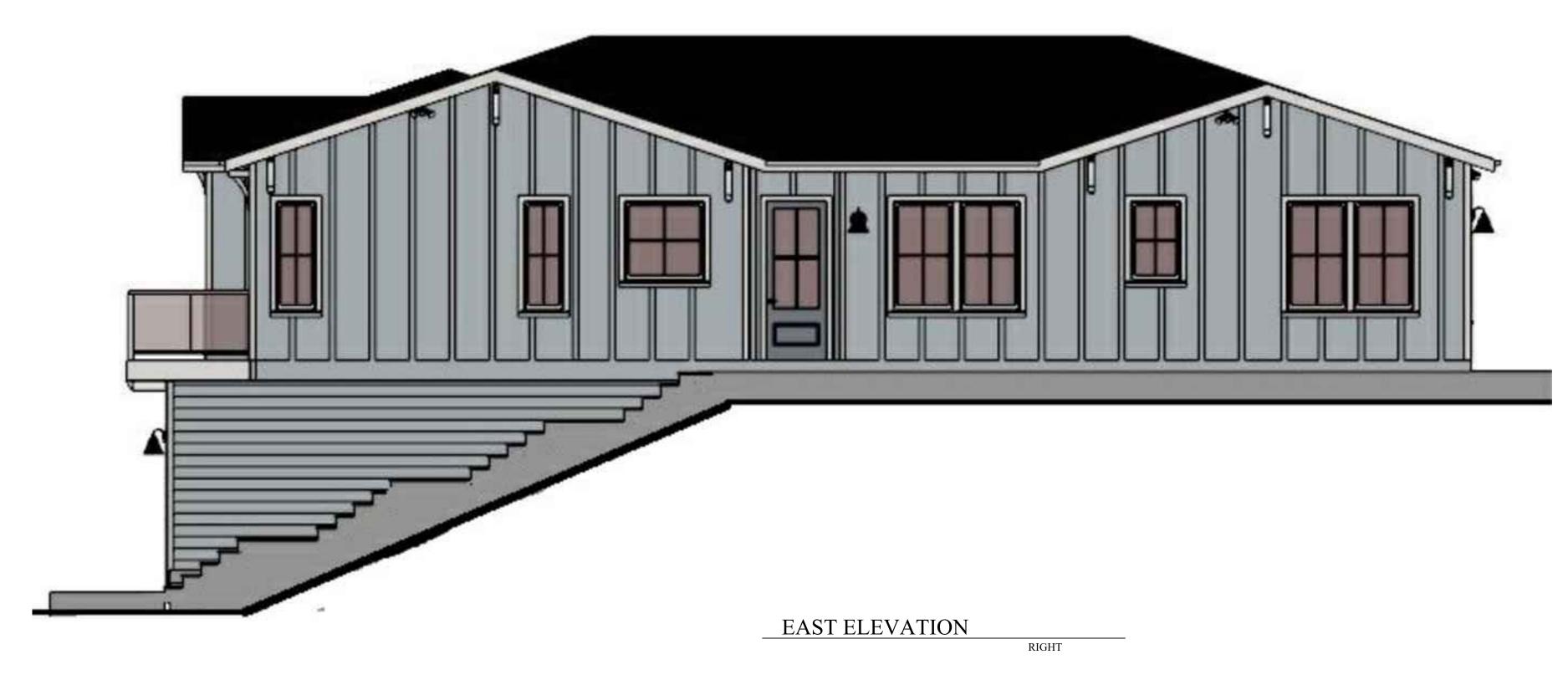
Exterior - COMMUNITY COLOR Brand: Sherwin Williams Color: KRYPTON - SW 6247

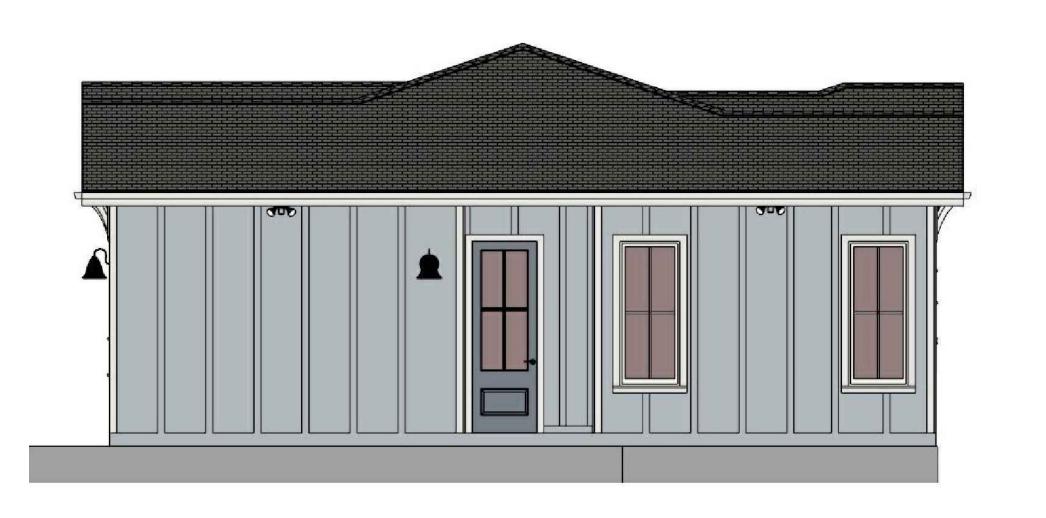


Driveway / Pathway Pavers Brand: Calstone Style: Narrow joint permeable Quarry Stone Color: Sequoia Sanstone Pattern: 6" X9"

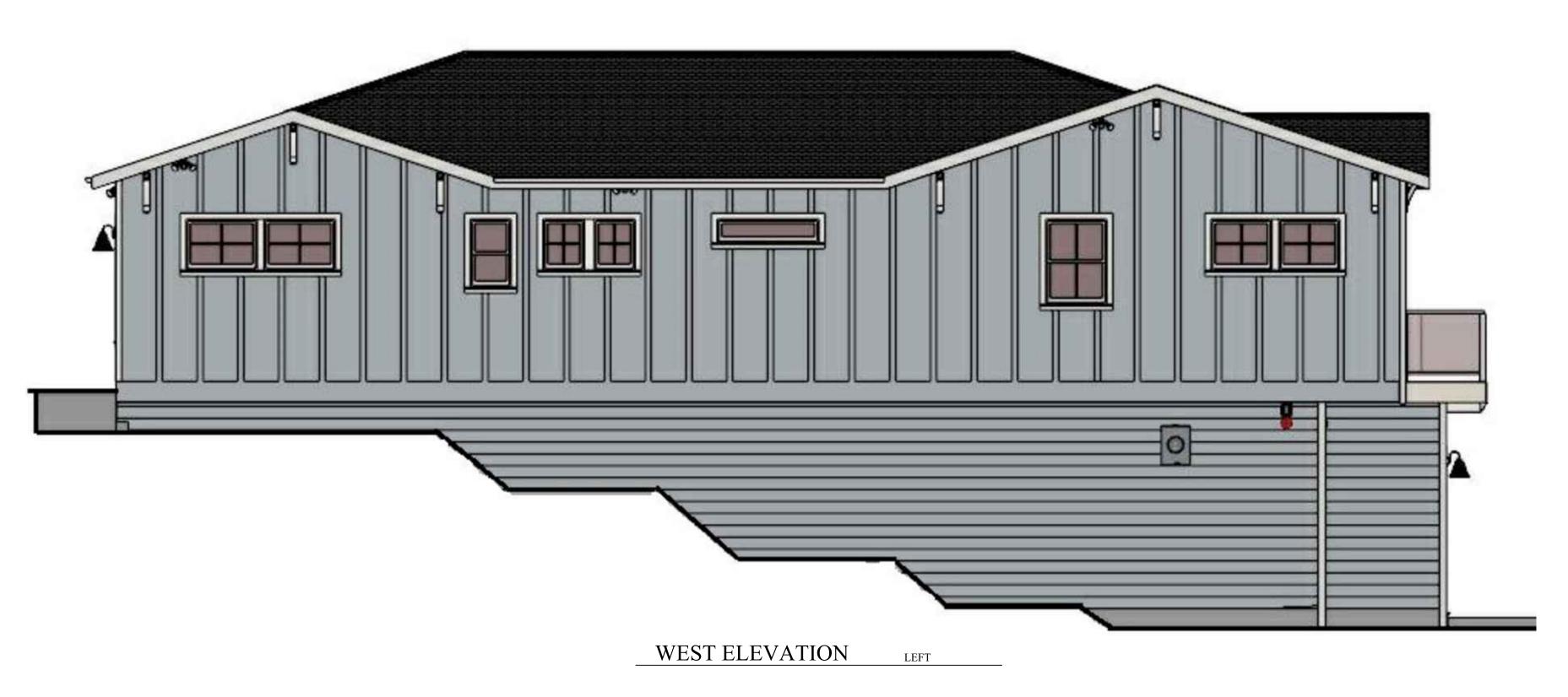


SOUTH ELEVATION FRONT





NORTH ELEVATION REAR



JILD 3031 5) 414-0527

V. C. DE

New Single Family Residence

RA FAMILY TRUST

Le Balboa, El Granada, CA 94019

SHEET TIT

DATE:
SEPTEMBER 16, 2023

FILE TAFFERA- Avenue Balboa,

APN:

APN: 047-105-100 SYM. REVISIONS DATE

SHEET NO.

C22

# I AGREE TO COMPLY WITH THE REQUIREMENTS OF THE PRESCRIPTIVE COMPLIANCE OPTION TO THE MWELO

incorporate compost at a rate of at least four cubic yards per 1,000 square feet to a depth of six-inches into landscape area (unless contra-indicated by a soil test)

A minimum three inch (3") layer of mulch shall be applied on. all exposed soil surfaces of Planting areas except in turf areas, creeping or rooting groundcovers or direct seeding applications where mulch is contraindicated.

# (5). irrigation systems shall comply with the following:

(A) Automatic irrigation controllers are required and must use evapotranspiration or soil moisture sensor data and utilize a rain

(B) Irrigation controllers shall be of a type which does not lose programming data in the event the primary power source is interrupted.

(C) Pressure regulators shalt be installed on the irrigation system to ensure the dynamic pressure of the system is within the manufacturers recommended pressure range.

(D) Manual shut.off.valves (such as a gate valve, ball valve, or butterfly valve) shall be installed as close as possible to the point of connection of the water supply.

(E) All irrigation emission devices must meet the requirements set in the ANSI standard, ASABE/ICC 802-2014. "landscape Irrigation Sprinkler and Emitter Standard," All sprinkler heads installed in the landscape must document a distribution uniformity low quarter of 0.65 or higher using the protocol defined in ASABE/ICC 802-2014.

(F) Areas less than ten ( 100 feet in width in any direction shall be irrigated with subsurface irrigation or other means that produces no runoff or overspray.

(6) For non - residential projects with landscape areas of 1,000 sq. ft. or more, a private submeter(s) to measure landscape water use shall be installed.

(c) At the time of final inspection, the permit applicant must provide the owner of the property with a certificate of completion, certificate of installation, irrigation schedule and a schedule of landscape and irrigation maintenance

1 Loropetalum chinense & cvs. Low 10-30% ET0 2 RUSSELIA – ST. ELMO'S FIRE (FIRECRACKER PLANT) Low 10-30% ET0

WUCOLS WATER USAGE

1///

3 SUNSHINE PRIVET Low 10-30% ET0 4 MEERLO LAVENDER Low 10-30% ET0

5 PLATINUM BEAUTY LOMANDRA Low 10-30% ET0 Euphorbia - Euphorbia hypercifolia 'Silverfog Very Low < 10% ET0

7 STATICE Low 10-30% ET0 8 MOONSHINE YARROW Low 10-30% ET0 9 SENECIO Low 10-30% ET0

(10) WESTRINGIA FRUTICOSA 'MORNING LIGHT' Low 10-30% ET0 (1) STREIBS FINDLING COTONEASTER Low 10-30% ET0

POKER PLANT - ECHO ROJO RED HOT POKER KNIPHOFIA UVARIA Low 10-30% ET0

Low 10-30% ET0 15 BRAKELIGHTS- RED YUCCA Very Low < 10% ET0

HESPERALOE PARVIFLORA 'PERPA'

RETAINING WALLS WILL BE 6" CINDER BLOCK WITH LIGHT SAND PLASTER FINISH COLOR WILL BE PURE WHITE SW7005

PLANT KEY / MATERIAL KEY

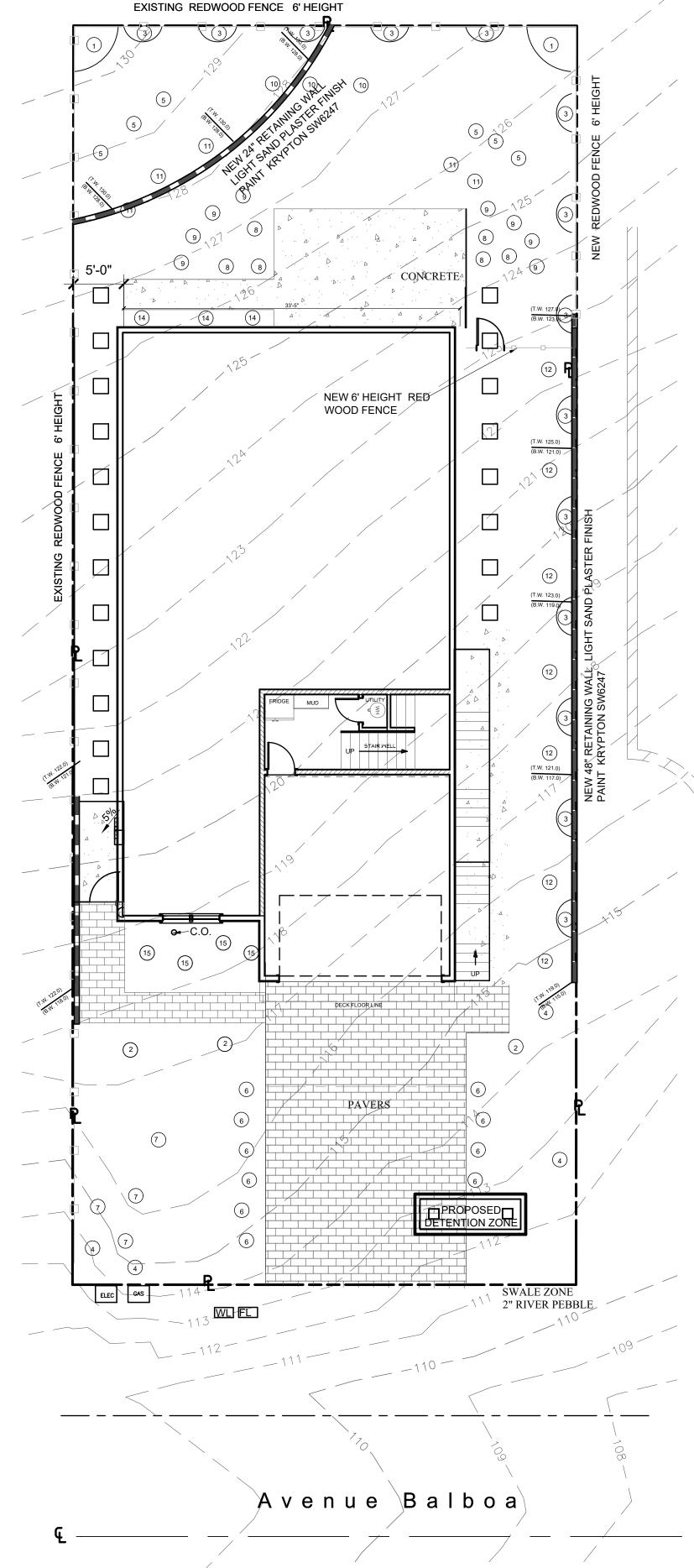
LANDSCAPE TO LOT SIZE RATIO: 0.48:1 100% OF PLANTS ON LIST REQUIRE LOW WATER

LOT SIZE: 6,250 SQFT BUILDING FOOT PRINT (S) 2,061 SQFT IMPERMEABLE SURFACES (CONCRETE) 439 SQFT PERMEABLE SURFACES (PAVERS) 730 SQFT 3,020 SQFT 48.4% 0 SQFT 0.0% LANDSCAPING (NON TURF) 6,250 SQFT

TOTAL IRRIGATED LANDSCAPE 1,208 SQFT TOTAL NON IRRIGATED LANDSCAPED 1,812 SQFT **ALL IRRIGATION IS DRIP IRRIGATION** 

DRIVEWAY / PATH WAY PAVERS - CALSTONE NARROW JOINT PERMEABLE QUARRY STONE - COLOR - SEQUOIA SAND STONE

STANDARD CONCRETE



SNS

MARCH 5, 2024 FILE -TAFFERA- Avenue Balboa,

047-105-100 SYM. REVISIONS DATE

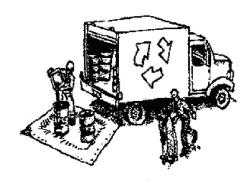


# **Construction Best Management Practices (BMPs)**

Construction projects are required to implement the stormwater best management practices (BMP) on this page, as they apply to your project, all year long.

Clean Water. Healthy Community.

### **Materials & Waste Management**



### Non-Hazardous Materials

- ☐ Berm and cover stockpiles of sand, dirt or other construction material with tarps when rain is forecast or if not actively being used within 14 days.
- ☐ Use (but don't overuse) reclaimed water for dust control.

### **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 be careful not to 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 Managemen

- X Cover waste disposal containers securely with tarps at the end of every work day and during wet weather.
- Check waste disposal containers frequently for leaks and to make sure they are not overfilled. Never hose down a dumpster on the construction site.
- (Clean or replace portable toilets, and inspect them frequently for leaks and spills.
- Dispose of all wastes and debris properly. Recycle materials and wastes that can be recycled (such as asphalt, concrete, aggregate base materials, wood, gyp board, pipe, etc.)
- ☑ Dispose of liquid residues from paints, thinners, solvents, glues, and cleaning fluids as hazardous waste.

### **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**



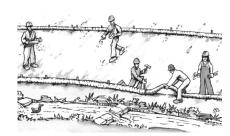
### **Maintenance and Parking**

- Designate an area, fitted with appropriate BMPs, for vehicle 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.

### **Spill Prevention and Control**

- Keep spill cleanup materials (e.g., rags, absorbents and cat litter) available at the construction site at all times.
- Inspect vehicles and equipment frequently for and repair leaks promptly. Use drip pans to catch leaks until repairs are made.
- (Clean up spills or leaks immediately and dispose of cleanup materials properly.
- Do not hose down surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter, and/or rags).
- Sweep up spilled dry materials immediately. Do not try to wash them away with water, or bury them.
- Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
- X2 Report significant spills immediately. You are required by law to report all significant releases of hazardous materials, including oil. To report a spill: 1) Dial 911 or your local emergency response number, 2) Call the Governor's Office of Emergency Services Warning Center, (800) 852-7550 (24 hours).

### **Earthmoving**



- 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, and seed or plant vegetation for erosion control on slopes or where construction is not immediately planned.
- Prevent sediment from migrating offsite and protect storm drain inlets, gutters, ditches, and drainage courses by installing and maintaining appropriate BMPs, such as fiber rolls, silt fences, sediment basins, gravel bags, berms, 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.

## Paving/Asphalt Work



- 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, tack coat, slurry seal, fog seal, etc.
- Collect and recycle or appropriately dispose of excess abrasive gravel or sand.
   Do NOT sweep or wash it into gutters.
- ☐ Do not use water to wash down fresh asphalt concrete pavement.

### Sawcutting & Asphalt/Concrete Removal

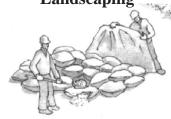
- ☐ Protect nearby storm drain inlets when saw cutting. Use filter fabric, catch basin inlet filters, or gravel bags to keep slurry out of the storm drain system.
- ☐ Shovel, abosorb, or vacuum saw-cut slurry and dispose of all waste as soon as you are finished in one location or at the end of each work day (whichever is sooner!).
- ☐ If sawcut slurry enters a catch basin, clean it up immediately.

# Concrete, Grout & Mortar Application



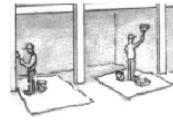
- ☐ Store concrete, grout, and mortar away from storm drains or waterways, and on pallets under cover to protect them from rain, runoff, and wind.
- ☐ Wash out concrete equipment/trucks offsite or in a designated washout area, where the water will flow into a temporary waste pit, and in a manner that will prevent leaching into the underlying soil or onto surrounding areas. Let concrete harden and dispose of as garbage.
- ☐ When washing exposed aggregate, prevent washwater from entering storm drains. Block any inlets and vacuum gutters, hose washwater onto dirt areas, or drain onto a bermed surface to be pumped and disposed of properly.

### 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.

## **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.
- Paint chips and dust from non-hazardous dry stripping and sand blasting may be swept up or collected in plastic drop cloths and disposed 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.

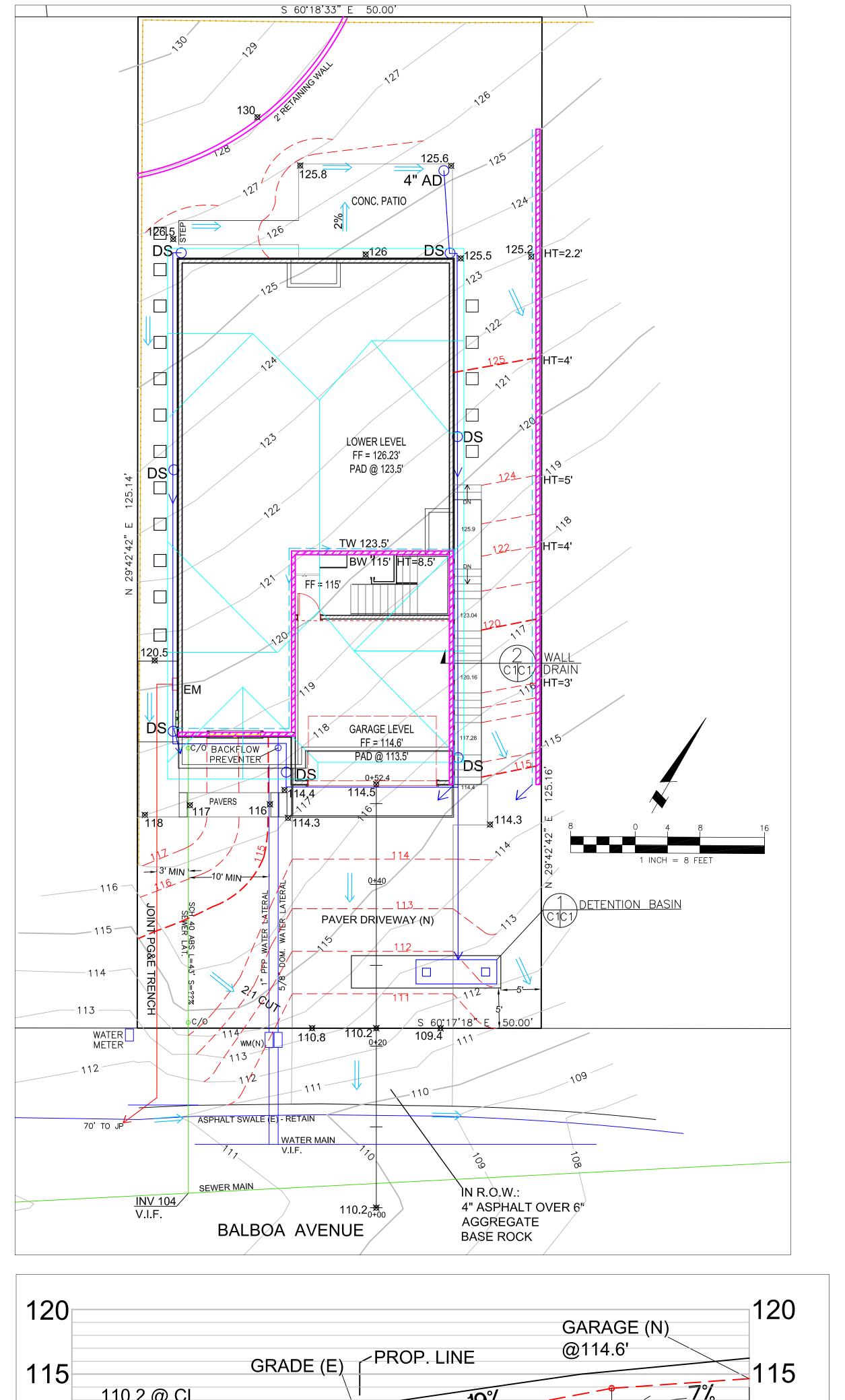
  Lead based paint removal requires a statecertified contractor.

### **Dewatering**



- ☐ Discharges of groundwater or captured runoff from dewatering operations must be properly managed and disposed. When possible send dewatering discharge to landscaped area or sanitary sewer. If discharging to the sanitary sewer call your local wastewater treatment plant.
- ☐ Divert run-on water from offsite away from all disturbed areas.
- ☐ When dewatering, notify and obtain approval from the local municipality before discharging water to a street gutter or storm drain. Filtration or diversion through a basin, tank, or sediment trap may be required.
- ☐ In areas of known or suspected contamination, call your local agency to determine whether the ground water must be tested. Pumped groundwater may need to be collected and hauled off-site for treatment and proper disposal.

Storm drain polluters may be liable for fines of up to \$10,000 per day!



# 110.2 @ CL GRADE (N) 110 0+52.4 110 -----`110.2 @ PL DRIVEWAY PROFILE 1"=5"

# **LEGEND**

// EXISTING CONTOURS

/ PROPOSED CONTOURS

≈114.4 PROPOSED SPOT ELEVATION

DOWNSPOUT

DIRECTION OF SURFACE DRAINAGE

4" SOLID PLASTIC DRAIN PIPE, SDR 35 @ 1% MINIMUM SLOPE.

4" PERFORATED PLASTIC DRAIN PIPE, SDR 35 @ 1% MINIMUM SLOPE.

PROPOSED RETAINING WALL

# GENERAL NOTES

1. PLANS PREPARED AT THE REQUEST OF: ANTHONY TAFFERA, OWNER 2. SURVEY AND TOPOGRAPHY BY S. MICALLEF, SURVEYED ON JANUARY 20, 2016. 3. ELEVATION DATUM ASSUMED. 4. THIS IS NOT A BOUNDARY SURVEY.

# **GRADING NOTES**

CUT VOLUME: 275 CY FILL VOLUME: 220 CY TOTAL CUT/FILL: 495 CY

1. ABOVE VOLUMES ARE APPROXIMATE. 2. MAXIMUM GRADIENT OF ANY MODIFIED SLOPES SHALL BE 2:1 (H:V). 3. ALL GRADING SHALL CONFORM TO LOCAL CODES AND ORDINANCES. 4. ALL TRENCHES IN PROPOSED LANDSCAPE AREAS SHALL BE BACKFILLED WITH COMPACTED APPROVED GRANULAR MATERIAL TO WITHIN ONE FOOT OF FINISHED GRADE, AND THEN FILLED WITH HAND

# DRAINAGE NOTES

TAMPED SOILS.

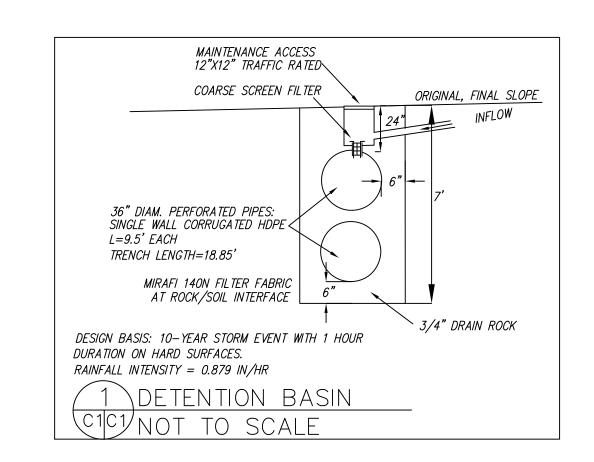
1. DRAINAGE INTENT: IT IS THE INTENT OF THE DRAINAGE SYSTEM TO CONVEY ROOF AND DRIVEWAY RUNOFF TO A SAFE LOCATION, AND TO MINIMIZE EXCESSIVE MOISTURE AROUND FOUNDATIONS.

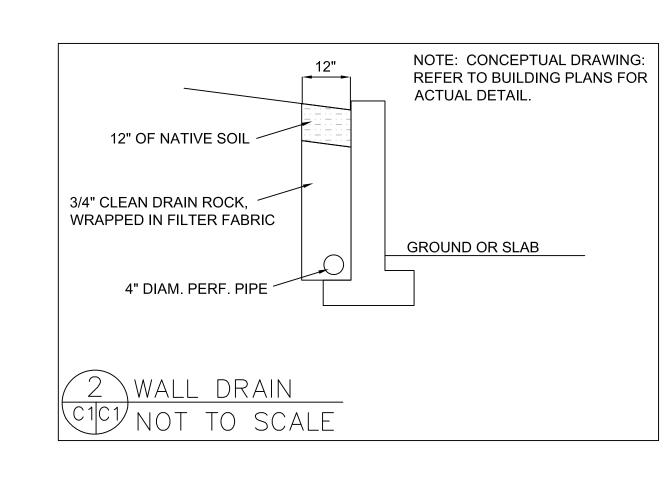
- 2. ALL ROOF DRAIN LINES SHALL LEAD TO DETENTION BASIN SHOWN.
- 3. ALL DRAINAGE PIPES SHALL BE 4" DIAMETER SOLID PIPE, SLOPED AT 1% MINIMUM.

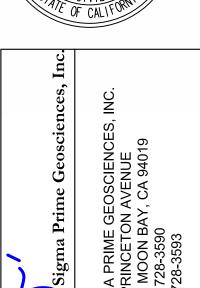
4. IT IS THE RESPONSIBILITY OF THE OWNER TO MAINTAIN THE DRAINAGE SYSTEM. THE DRAINS PIPES AND DETENTION BASIN SHALL BE CHECKED EVERY FALL AND CLEARED OF

# SECTION AND DETAIL CONVENTION

SECTION OR DETAIL IDENTIFICATION REFERENCE SHEET No. REFERENCE SHEET No. ON FROM WHICH SECTION OR DETAIL IS TAKEN WHICH SECTION OR DETAIL IS SHOWN



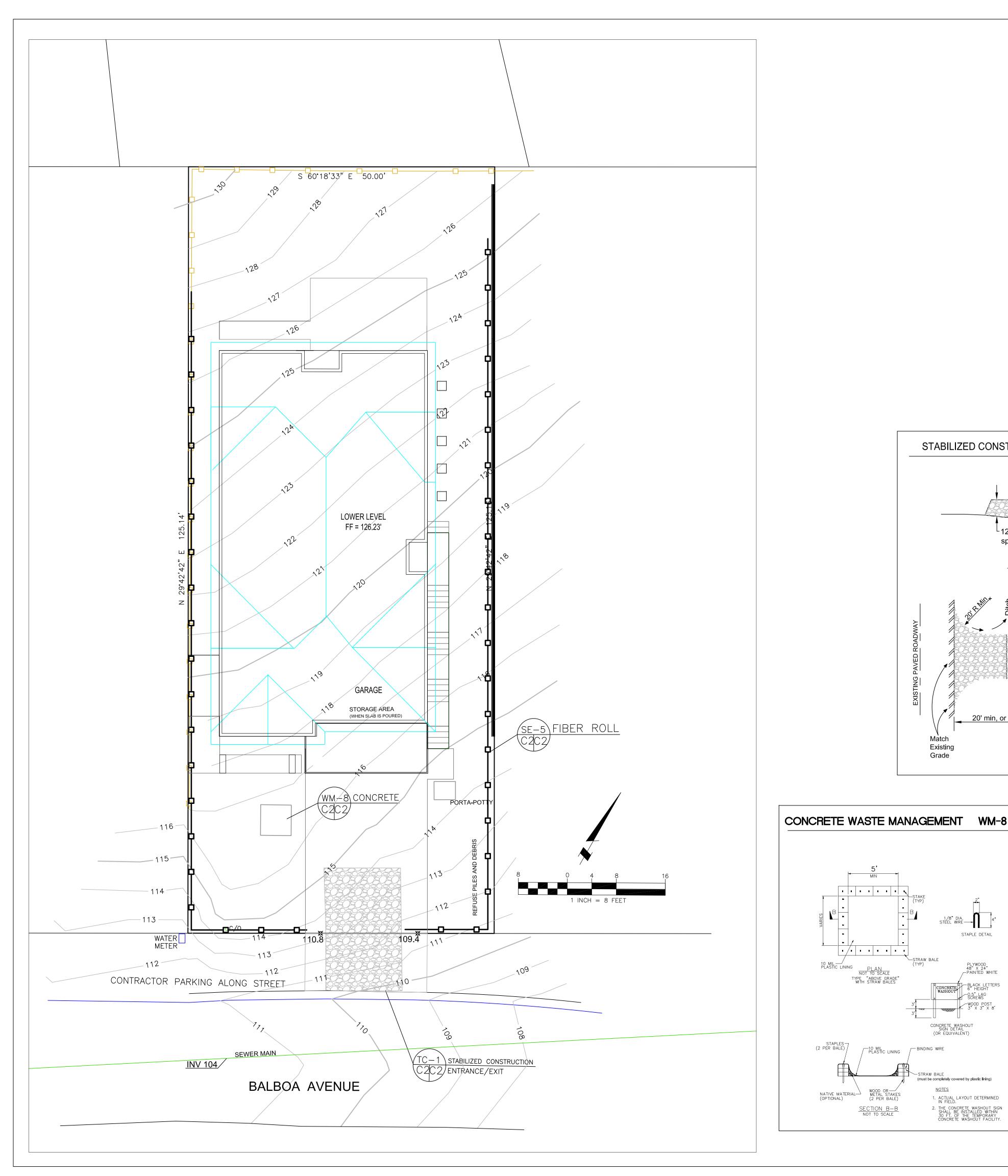


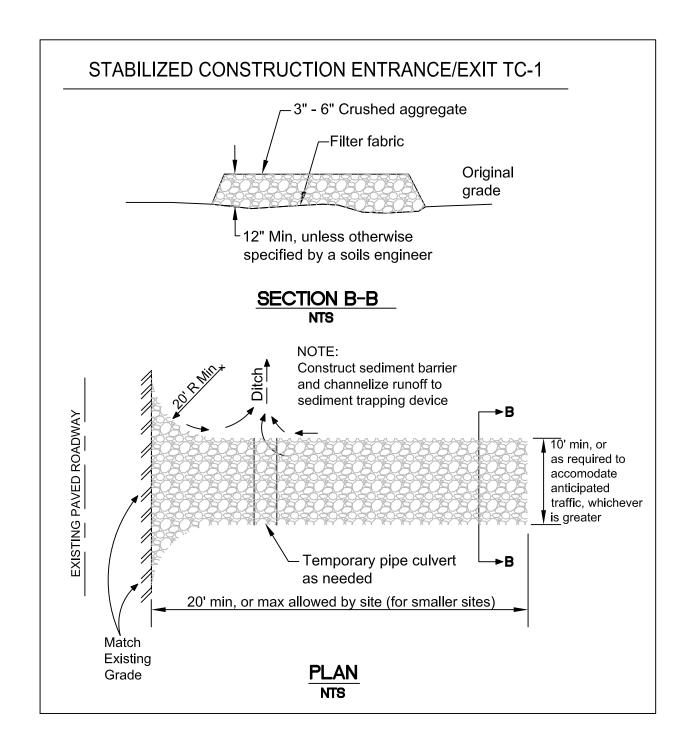


AND DRAINAGE PLAN GRADING

SHEET

C-1





STAPLE DETAIL

(must be completely covered by plastic lining)

1. ACTUAL LAYOUT DETERMINED IN FIFLD

| . / . | . . | . . | . .

PLAN
NOT TO SCALE
TYPE "ABOVE GRADE
WITH STRAW BALES

FIBER ROLLS

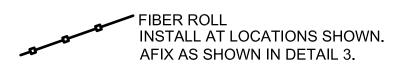
Vertical spacing measured along the face of the slope varies between 10' and 20'

SE-5

ENTRENCHMENT DETAIL N.T.S.

If more than one fiber roll is placed in a row, the rolls must be overlapped, not abutted.

# GENERAL EROSION AND SEDIMENT CONTROL NOTES



- There will be no stockpiling of soil. All excavated soil will be hauled off-site as it is excavated.
- · Perform clearing and earth-moving activities only during dry weather. Measures to ensure adequate erosion and sediment control shall be installed prior to earth-moving activities and construction.
- · Measures to ensure adequate erosion and sediment control are required year-round. Stabilize all denuded areas and maintain erosion control measures continuously between October 1 and April 30.
- · Store, handle, and dispose of construction materials and wastes properly, so as to prevent their contact with stormwater.
- · Control and prevent the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, wash water or sediments, and non-stormwater discharges to storm drains and watercourses.
- · Use sediment controls or filtration to remove sediment when dewatering site and obtain Regional Water Quality Control Board (RWQCB) permit(s) as necessary.
- · Avoid cleaning, fueling, or maintaining vehicles on-site, except in a designated area where wash water is contained and treated.
- · Limit and time applications of pesticides and fertilizers to prevent polluted runoff.
- · Limit construction access routes to stabilized, designated access points
- · Avoid tracking dirt or other materials off-site; clean off-site paved areas and sidewalks using dry sweeping methods.
- · Train and provide instruction to all employees and subcontractors regarding the Watershed Protection Maintenance Standards and construction Best Management Practices.
- · Placement of erosion materials is required on weekends and during rain events.
- The areas delineated onh the plans for parking, grubbing, storage etc., shall not be enlarged or "run over."
- Dust control is required year-round.
- Erosion control materials shall be stored on-site
- · Use of plastic sheeting between October 1st and April 30th is not acceptable, unless for use on stockpiles where the stockpile is also protected with fiber rolls containing the base of the stockpile.



# **EROSION CONTROL POINT OF CONTACT** THIS PERSON WILL BE RESPONSIBLE FOR EROSION CONTROL AT THE SITE AND WILL BE THE COUNTY'S MAIN POINT OF CONTACT IF CORRECTIONS ARE REQUIRED. NAME: ANTHONY TAFFERA E-MAIL: taffera@aol.com

**EROSION CONTROL** 

SHEET