Before the Planning Commission in and for the County of Monterey, State of California

In the matter of the application of:

LIVE-BY-THE-SEA LLC (PLN250114) RESOLUTION NO. 25-038

Resolution by the County of Monterey Planning Commission:

- 1) Finding the project qualifies as a Class 3 Categorical Exemption pursuant to CEQA Guidelines section 15303, and there are no exceptions pursuant to Section 15300.2; and
- 2) Approving a Combined Development Permit consisting of:
 - a. Coastal Administrative Permit and Design Approval to allow construction a 2,812 square foot single-family dwelling, inclusive of a 592 square foot garage two-car garage and 307 square foot covered patio, and associated site improvements; and
 - b. A Coastal Development Permit to allow the removal of 24 protected trees.

[PLN250114, LIVE-BY-THE-SEA LLC, 3387 Ocean Avenue, Carmel-by-the-Sea, Carmel Land Use Plan, Coastal Zone (APN: (009-162-008-000)]

The LIVE BY THE SEA LLC application (PLN250114) came on for public hearing before the County of Monterey Planning Commission on November 12, 2025. Having considered all the written and documentary evidence, the administrative record, the staff report, oral testimony, and other evidence presented, the Planning Commission finds and decides as follows:

FINDINGS

1. **FINDING: CONSISTENCY** – The Project, as conditioned, is consistent with the

applicable plans and policies which designate this area as appropriate

for development.

EVIDENCE: a) During the course of review of this application, the project has been reviewed for consistency with the text, policies, and regulations in:

- the 1982 Monterey County General Plan;
- Carmel Area Land Use Plan;
- County of Monterey Coastal Implementation Plan (CIP) Part 4,
 Regulations for Development in the Carmel Area Land Use Plan Area; and
- Monterey County Zoning Ordinance (Title 20);

No conflicts were found to exist. No communications were received during the course of review of the project indicating any inconsistencies with the text, policies, and regulations in these documents.

- b) Allowed Use. The property is located at 3387 Ocean Avenue, Carmelby-the-Sea, Carmel Land Use Plan, Coastal Zone (Assessor's Parcel Number 009-162-008-000), Carmel Area Land Use Plan. The parcel is zoned Medium Density Residential with a density of 2 acres per unit and a Design Control, or "MDR/2-D". MDR zoning allows for the establishment of the first single-family dwelling as a principally allowed use. The Design Control overlay requires the granting of a Design Approval for all structures. The proposed project involves the construction of a 2,812 square foot single-family dwelling, inclusive of a 592 square foot garage two-car garage and 307 square foot covered patio, and associated site improvements. The project also involves the removal of 4 Monterey Pine trees and 20 Oak trees, which is an allowed use subject to the granting of a Coastal Development Permit. Therefore, the project is an allowed land use for this site.
- c) <u>Lot Legality.</u> The subject property is shown in its current configuration (12,132 square feet) as Lot 9 in Block 27 of Tract No.2 on a Final Map entitled "Map of Hatton Fields No. 2", recorded in April of 1926 (Volume 3, Cities & Towns, Page 32). Therefore, the County recognizes the subject properties as legal lots of record.
- development standards. The project meets all required development standards for Medium Density Residential zoning district, which is identified in Title 20 section 20.12.060 respectively. The required setbacks in the MDR zoning overlay are 20 feet (front), 5 feet (side), and 10 feet (rear). The proposed single-family dwelling will have setbacks of 30 feet (front), 8 feet 6 inches (north side), 9 feet 10 inches (side), and 30 feet 6 inches (rear). The MDR zoning district allows a maximum height of 30 feet for main structures, and the proposed single-family dwelling will have a height of 20 feet 3 inches. The MDR zoning district allows a maximum building site coverage of 35%, which in this case is 4,246 square feet. The proposed project will have a building site coverage of 3,819 square feet or 31%. Therefore, the project meets all required development standards.
- Design and Visual Resources. Pursuant to Title 20 Chapter 20.44, the project parcels and surrounding area are designated as a Design Control Zoning District ("D" zoning overlay), which regulates the location, size, configuration, materials, and colors of structures and fences to assure the protection of the public viewshed and neighborhood character. The single-family dwelling will have a contemporary modern architectural style with rural Tuscan finishes, and exterior colors and materials consisting of smooth alabaster white painted stucco, copper stone exterior, and Tricon black aluminum reveal trim and roofing. The residences within the vicinity vary in architectural style, ranging from modern-style homes to contemporary rural-style homes. The proposed exterior finishes do not detract from the surrounding environment and are consistent with the surrounding residential neighborhood character. CARLUP Policy 1.4 and Key Policy 2.2.2 state that the common goal of the Carmel area must be that future development should harmonize and blend with the natural scenic character, as demonstrated by the proposed project's design. The property is surrounded by mature Coast live oaks

and Monterey pines, and other native vegetation, along with nearby residences. Although 24 trees will be removed, all other trees and vegetation will remain, resulting in the proposed development blending in with the surrounding residential neighborhood. To ensure consistency with Carmel Area LUP Policy 2.2.4.10.D and CIP section 20.146.030.C.1.d, exterior lighting plan Condition No. 4 has been applied. This will require that the exterior lighting on the property be unobtrusive, down-lit, harmonious with the local area, and constructed or located so that only the intended area is illuminated and off-site glare is fully controlled. Due to intervening vegetation and existing development, the proposed residence and accessory structures will not create any adverse visual impacts. Map A of the Carmel Land Use Plan entitled "Local Coastal Program General Viewshed", indicates the subject property as not being in an area designated as sensitive or highly sensitive. The subject property is not along a scenic highway corridor or in the critical viewshed. Therefore, as proposed and conditioned, the project is not in conflict with the surrounding environment or with the surrounding residential neighborhood character and assures protection of the public viewshed and visual integrity.

- f) <u>Tree Removal.</u> The proposed project involves the removal of 24 protected trees. However, as detailed in Finding No. 6 and supporting evidence, the proposed tree removal is the minimum required under the circumstances, and the removal will not involve a risk of adverse environmental impacts. Therefore, the criteria necessary to grant a Coastal Development Permit have been met in this case.
- g) <u>Cultural Resources.</u> According to the Monterey County Geographic Information System (GIS), the subject property is within an area of moderate archaeological sensitivity. Therefore, an archaeological report is not required under the Carmel Area CIP section 20.146.090.B.1. The potential for inadvertent impacts to cultural resources is limited and will be controlled by use of the County's standard condition (Condition No. 3), which requires the contractor to stop work if previously unidentified resources are discovered during construction.
- h) <u>Land Use Advisory Committee.</u> Based on the LUAC Procedure guidelines adopted by the Monterey County Board of Supervisors, this application warranted referral to the LUAC because the project involves a Design Approval subject to review by the Planning Commission. Due to an ongoing lack of quorum issue with the Carmel Highlands LUAC, the project could not be reviewed by the committee prior to the Planning Commission's consideration of the project.
- i) The application, project plans, and related support materials submitted by the project applicant to County of Monterey HCD-Planning for the proposed development found in Project File PLN250114.
- 2. **FINDING: SITE SUITABILITY** The site is physically suitable for the proposed development and/or use.
 - **EVIDENCE:** a) The project has been reviewed for site suitability by the following departments and agencies: HCD- Planning, Cypress Fire Protection District (fire), HCD-Engineering Services, HCD-Environmental

Services, and Environmental Health Bureau. County staff reviewed the application materials and plans to verify that the project on the subject site conforms to the applicable plans and regulations, and there has been no indication from these departments/agencies that the site is not suitable for the development. Conditions recommended have been incorporated.

- b) Staff identified potential impacts to Geological Resources (soils), Forest Resources, Biological Resources, and Archaeological Resources. The following reports have been prepared:
 - "Geotechnical Investigation Design Phase" (County of Monterey Library No. LIB250245), prepared by Butano Geotechnical Engineering, Inc., Watsonville, CA, April 2025
 - "Tree Resource Assessment" (County of Monterey Library No. LIB250240), prepared by Frank Ono, Pacific Grove, CA, July 21st, 2025

The above-mentioned technical reports by outside consultants indicated that there are no physical or environmental constraints that would indicate that the site is not suitable for the use proposed. County staff has independently reviewed these reports and concurs with their conclusions.

- c) Staff conducted a site inspection on October 7th, 2025, to verify that the site is suitable for this use.
- d) The application, project plans, and related support materials submitted by the project applicant to the County of Monterey HCD Planning for the proposed development found in Project File PLN250114.

3. **FINDING:**

HEALTH AND SAFETY - The establishment, maintenance, or operation of the use or structure applied for, will not, under the circumstances of the particular case, be detrimental to the health, safety, peace, morals, comfort, and general welfare of persons residing or working in the neighborhood of such proposed use; or be detrimental or injurious to property and improvements in the neighborhood; or to the general welfare of the County.

EVIDENCE:

- a) The project was reviewed by HCD- Planning, Cypress Fire Protection District (fire), HCD-Engineering Services, HCD-Environmental Services, and Environmental Health Bureau. The respective agencies have recommended conditions, where appropriate, to ensure that the project will not have an adverse effect on the health, safety, and welfare of persons either residing or working in the neighborhood.
- b) All necessary public facilities will be provided to the proposed single-family dwelling. Potable water will be provided to the parcel by Cal American Water through the Monterey Peninsula Water Management District (MPWMD), and wastewater will be handled by the Carmel Area Wastewater District.
- c) Staff conducted a site inspection on October 7th, 2025, to verify that the site is suitable for this use.
- d) The application, project plans, and related support materials submitted by the project applicant to the County of Monterey HCD Planning for the proposed development found in Project File PLN250114.

4. **FINDING:**

NO VIOLATIONS - The subject property is in compliance with all rules and regulations pertaining to zoning uses, subdivision, and any other applicable provisions of the County's zoning ordinance. No violations exist on the property.

EVIDENCE:

- a) Staff reviewed County of Monterey HCD Planning and Building Services Department records and is not aware of any violations existing on subject property.
- b) Staff conducted a site inspection on October 7th, 2025, and researched County records to assess if any violation exists on the subject property.
- c) The application, plans and supporting materials submitted by the project applicant to County of Monterey HCD-Planning for the proposed development are found in Project File PLN250114.

5. **FINDING:**

CEQA (Exempt) - The project is categorically exempt from environmental review and no unusual circumstances were identified to exist for the proposed project.

EVIDENCE:

- a) California Environmental Quality Act (CEQA) Guidelines Section 15303 categorically exempts the construction and location of limited numbers of new, small facilities or structures including one singlefamily residence in a residential zone.
- b) The proposed project involves construction of a 2,812 square foot single-family dwelling, inclusive of a 592 square foot garage two-car garage and 307 square foot covered patio, and associated site improvements, as well as the removal of 24 protected trees. Therefore, the project is consistent with the categorical exemption requirements of CEOA Guidelines section 15303.
- c) No adverse environmental effects were identified during staff review of the development application during a site visit on October 7th, 2025.
- d) None of the exceptions under CEQA Guidelines Section 15300.2 apply to this project. The project does not involve a designated historical resource, a hazardous waste site, unusual circumstances that would result in a significant effect, or development that would result in a cumulative significant impact. The project site does not have an environmentally sensitive habitat, the property is not located on or along a scenic highway or corridor and has been designed and sited to minimize impacts to forest resources and remove only the trees necessary for construction. There is no substantial evidence that would support a fair argument that the project has a reasonable possibility of having a significant effect on the environment or that it would result in a cumulative significant impact.
- e) The application, project plans, and related support materials submitted by the project applicant to County of Monterey HCD-Planning for the proposed development found in Project File PLN250114.

6. **FINDING:**

TREE REMOVAL - The siting, location, size, and design has been established to minimize tree removal and has been limited to that required for the overall health and long-term maintenance of the property.

EVIDENCE:

- a) The project includes an application for the removal of 24 protected trees. The tree removal is consistent with Carmel Area Land Use Plan (LUP) policies protecting Forest Resources, and their implementing regulations in the County of Monterey Coastal Implementation Plan, Part 4, Regulations for Development in the Carmel Area Land Use Plan (CIP). In accordance with the applicable policies, a Coastal Development Permit is required, and the criteria to grant said permit have been met.
- b) Pursuant to Title 20 section 20.64.260.D.3.a, an Arborist report (County of Monterey Library No. LIB250240) was prepared to evaluate the health, structure, and preservation suitability for each tree within or adjacent to the proposed development. The Arborist report inventoried a total of 33 trees within the subject property and determined that most of these are in fair condition, while two are in poor condition. As proposed, 24 trees will be removed with the implementation of this project, including 20 Coast live oaks and four landmark Monterey pines. Nineteen of these trees are within the development footprint, and the other five trees are either within grading boundaries or are in declining health, with proposed impacts to their critical root zones. No landmark Oaks are proposed for removal.
- The proposed tree removal is the minimum required under the circumstances of this case. The lot is heavily forested and thus, avoiding tree removal entirely is unfeasible for any reasonable development consistent with the neighborhood. The single-family dwelling is consistent (slightly smaller) in size with other single-family dwellings within the surrounding neighborhood, which range from approximately 4,000 to 6,000 square feet (see Finding No. 1, Evidence "e"). Nineteen of the trees to be removed are within the development footprint. The remaining trees to be removed are either within grading limits, or are within close proximity to the development, where greater than 50% of their critical root zones will be impacted and are therefore recommended for removal. In addition to being impacted by grading activities, the removal of these trees within close proximity to the development also helps to reduce fuel loads near the proposed residential development. Removal of these trees is consistent with the recommendations of the prepared forest management plan and the State's fuel management requirements and guidelines.
- d) CIP section 20.146.060.D.1 prohibits the removal of landmark trees, unless the decision-making body finds that the trees are not visually or historically significant and there no alternatives whereby the tree removal can be avoided. All four of the Monterey pine proposed for removal are greater than 24 inches in diameter, thus classifying them as landmark trees. Two of the landmark Monterey Pine trees that were cataloged as #963 and #977 were identified as being in poor condition, with visible evidence of heart rot. The other two landmark Monterey pine trees, tagged as #976 and #981, are proposed for removal due to the impacts of grading associated with a retaining wall and garage that will cause the trees to suffer root loss and be unstable. The findings can also be met to allow the removal of the landmark trees, as none of them are

- known to be visually or historically significant, exemplary of their species, or more than 1000 years old. See subsequent Evidence "e" demonstrating no alternatives.
- CIP section 20.146.060.D.3 states that removal of native trees is limited to those necessary for the proposed development, and that development shall be required to be adjusted for siting, location, size, and design as necessary to minimize tree removal. In this case, the removal is the minimum under the circumstances, and alternatives such as re-siting, redesign, and reduction in development would not be successful in saving these trees or a greater number than proposed. There is no alternative that would retain the trees proposed for removal, including the landmark trees, with development of the subject lot with a reasonable sized singlefamily development. As delineated on the project plans, the trees sited for removal are within the proposed footprint of development or are within poor health on the proposed residence. The project will retain the property's remaining trees, which are contiguous with the surrounding forested area of Carmel-by-the -Sea and the unincorporated area of Monterey County. Trees to be retained will be protected with implementation of Condition No. 5.
- f) Title 20 requires a 1:1 replanting of removed protected trees, unless this requirement would be detrimental to the long-term health of the remaining habitat or the replanted trees. The Project Arborist concluded that the subject property is already overcrowded and does not have adequate space for the replanting of 24 trees after the construction of the single-family dwelling, while also managing onsite fuel loads. Therefore, the arborist recommends the replanting of five 5-gallon Monterey pines or Coast live oaks. Replanting only five trees also ensures the property's fuel loads can be adequately managed. If replanted on a 1:1 ratio, the replanted 5-gallon trees would be unlikely to survive due to the overcrowded condition and being outcompeted by surrounding mature trees. Accordingly, Condition No. 6 requires the applicant to replant five 5-gallon Monterey pine or Coast live oak trees.
- g) Measures for tree protection during construction have been incorporated as a condition of approval, and include tree protection zones, trunk protection, hand excavation, and bridging roots.
- h) No significant long-term effects on the forest ecosystem are anticipated. The project, as proposed, will not significantly reduce the availability of wildlife habitat over the long term. Condition No. 7 requires a raptor/bird nesting survey to be performed by a qualified biologist if tree removal is to be conducted between February 22 and August 1.
- i) Staff conducted a site inspection on October 7th, 2025, to verify that the tree removal is the minimum necessary for the project and to identify any potential adverse environmental impacts related to the proposed tree removal.
- j) The application, plans and supporting materials submitted by the project applicant to County of Monterey HCD-Planning for the proposed development are found in Project File PLN250114.

7. **FINDING: APPEALABILITY -** The decision on this project may be appealed to the Board of Supervisors and the California Coastal Commission.

EVIDENCE: a) Board of Supervisors. Section 20.80.040.D of the Monterey County Zoning Ordinance (Title 20) allows an appeal to be made to the Board of Supervisors by any public agency or person aggrieved by a decision of the Planning Commission.

b) <u>California Coastal Commission</u>. Pursuant to Title 20 section 20.86.080.A, the project is subject to appeal by/to the California Coastal Commission because it involves development between the sea and the first through public road paralleling the sea (i.e. Highway 1), and a conditionally allowed use (native tree removal).

DECISION

NOW, THEREFORE, based on the above findings and evidence, the Planning Commission does hereby:

- 1. Find that the project qualifies as a Class 3 Categorical Exemption pursuant to CEQA Guidelines section 15303, and there are no exceptions pursuant to section 15300.2; and
- 2. Approve a Combined development Permit consisting of: 1) a Coastal Administrative Permit and Design Approval to allow construction of a 2,812 square foot single-family dwelling, inclusive of a 592 square foot two-car garage and 307 square foot covered patio, and associated site improvements; and 2) a Coastal Development Permit to allow removal of 24 protected trees.

All of which are in general conformance with the attached sketch and subject to the attached 12 conditions, all being attached hereto and incorporated herein by reference.

PASSED AND ADOPTED this 12th day of November 2025 upon motion of Commissioner Diehl, seconded by Commissioner Hartzell, by the following vote:

AYES: Mendoza, Gomez, Hartzell, Gonzalez, Roberts, Work, Shaw, Monsalve, Diehl

NOES: None ABSENT: Getzelman ABSTAIN: None

Docusigned by:

Mulanie Beretti

EBC3ACD3D78644E

Melanie Beretti, AICP Planning Commission Secretary

COPY OF THIS DECISION MAILED TO APPLICANT ON NOVEMBER 18, 2025.

THIS APPLICATION IS APPEALABLE TO THE BOARD OF SUPERVISORS.

IF ANYONE WISHES TO APPEAL THIS DECISION, AN APPEAL FORM MUST BE COMPLETED AND SUBMITTED TO THE CLERK TO THE BOARD ALONG WITH THE APPROPRIATE FILING FEE ON OR BEFORE **DECEMBER 1, 2025**.

THIS PROJECT IS LOCATED IN THE COASTAL ZONE AND IS APPEALABLE TO THE COASTAL COMMISSION. UPON RECEIPT OF NOTIFICATION OF THE FINAL LOCAL ACTION NOTICE (FLAN) STATING THE DECISION BY THE FINAL DECISION MAKING BODY, THE COMMISSION ESTABLISHES A 10 WORKING DAY APPEAL PERIOD. AN APPEAL FORM MUST BE FILED WITH THE COASTAL COMMISSION. FOR FURTHER INFORMATION, CONTACT THE COASTAL COMMISSION AT (831) 427-4863 OR AT 725 FRONT STREET, SUITE 300, SANTA CRUZ, CA.

This decision, if this is the final administrative decision, is subject to judicial review pursuant to California Code of Civil Procedure Sections 1094.5 and 1094.6. Any Petition for Writ of Mandate must be filed with the Court no later than the 90th day following the date on which this decision becomes final.

NOTES

1. You will need a building permit and must comply with the Monterey County Building Ordinance in every respect.

Additionally, the Zoning Ordinance provides that no building permit shall be issued, nor any use conducted, otherwise than in accordance with the conditions and terms of the permit granted or until ten days after the mailing of notice of the granting of the permit by the appropriate authority, or after granting of the permit by the Board of Supervisors in the event of appeal.

Do not start any construction or occupy any building until you have obtained the necessary permits and use clearances from County of Monterey HCD-Planning and HCD-Building Services Department office in Salinas.

2. This permit expires 3 years after the above date of granting thereof unless construction or use is started within this period.

Form Rev. 5-14-2014

County of Monterey HCD Planning

Conditions of Approval/Implementation Plan/Mitigation Monitoring and Reporting Plan

PLN250114

1. PD001 - SPECIFIC USES ONLY

Responsible Department: Planning

Condition/Mitigation Monitoring Measure:

Combined This Development permit (PLN250114) allows Coastal for an: 1) Administrative Permit and Design Approval to construct a 2,812 square single-family dwelling, inclusive of a 592 square foot garage two-car garage and 307 square foot covered patio, and associated site improvements; and Development Permit to remove four (4) Monterey Pine trees and twenty (20) Oak trees. The property is located at 3387 Ocean Avenue, Carmel (Assessor's Parcel Number 009-162-008-000), Carmel Land Use Plan. This permit was approved in accordance with County ordinances and land use regulations subject to the terms and conditions described in the project file. Neither the uses nor the construction allowed by this permit shall commence unless and until all of the conditions of this permit are met to the satisfaction of the Director of HCD - Planning. Any use or construction not in substantial conformance with the terms and conditions of this permit is a violation of County regulations and may result in modification or revocation of this permit and subsequent legal action. No use or construction other than that specified by this permit is allowed unless additional permits are approved by the appropriate authorities. To the extent that the County has delegated any condition compliance or mitigation monitoring to the Monterey County Water Resources Agency, the Water Resources Agency shall provide all information requested by the County and the County shall bear ultimate responsibility to ensure that conditions and mitigation measures are properly fulfilled. (HCD - Planning)

Compliance or Monitoring Action to be Performed:

The Owner/Applicant shall adhere to conditions and uses specified in the permit on an on-going basis unless otherwise stated.

Print Date: 11/12/2025 6:17:41PM Page 1 of 7

2. PD002 - NOTICE PERMIT APPROVAL

Responsible Department:

Planning

Condition/Mitigation Monitoring Measure:

The applicant shall record a Permit Approval Notice. This notice shall state:

"A Combined Development Permit (Resolution Number 25-038) was approved by Planning Commission for Assessor's Parcel Number 009-162-008-000 on November 12th, 2025. The permit was granted subject to 12 conditions of approval which run with the land. A copy of the permit is on file with Monterey County HCD - Planning."

Proof of recordation of this notice shall be furnished to the Director of HCD - Planning prior to issuance of grading and building permits, Certificates of Compliance, or commencement of use, whichever occurs first and as applicable. (HCD - Planning)

Compliance or Monitoring Action to be Performed:

Prior to the issuance of grading and building permits, certificates of compliance, or commencement of use, whichever occurs first and as applicable, the Owner/Applicant shall provide proof of recordation of this notice to the HCD - Planning.

3. PD003(A) - CULTURAL RESOURCES NEGATIVE ARCHAEOLOGICAL REPORT

Responsible Department:

Planning

Condition/Mitigation Monitoring Measure:

archaeological, during the course of construction, cultural, historical paleontological resources are uncovered at the site (surface or subsurface resources) work shall be halted immediately within 50 meters (165 feet) of the find until a qualified professional archaeologist can evaluate it. Monterey County HCD - Planning and a archaeologist archaeologist registered qualified (i.e., an with the Register Professional Archaeologists) immediately contacted by shall be the responsible individual present on-site. When contacted, the project planner and the archaeologist shall immediately visit the site to determine the extent of the resources and to develop proper mitigation measures required for recovery.

(HCD - Planning)

Compliance or Monitoring Action to be Performed:

The Owner/Applicant shall adhere to this condition on an on-going basis.

Prior to the issuance of grading or building permits and/or prior to the recordation of the final/parcel map, whichever occurs first, the Owner/Applicant shall include requirements of this condition as a note on all grading and building plans. The note shall state "Stop work within 50 meters (165 feet) of uncovered resource and contact Monterey County HCD - Planning and a qualified archaeologist immediately if cultural, archaeological, historical or paleontological resources are uncovered."

When contacted, the project planner and the archaeologist shall immediately visit the site to determine the extent of the resources and to develop proper mitigation measures required for the discovery.

Print Date: 11/12/2025 6:17:41PM Page 2 of 7

4. PD014(A) - LIGHTING - EXTERIOR LIGHTING PLAN

Responsible Department:

Planning

Condition/Mitigation Monitoring Measure:

All exterior lighting shall be unobtrusive, down-lit, harmonious with the local area, and constructed or located so that only the intended area is illuminated and off-site glare is fully controlled. The lighting source shall be shielded and recessed into the fixture. The applicant shall submit three (3) copies of an exterior lighting plan which shall indicate the location, type, and wattage of all light fixtures and include catalog sheets for each fixture. The lighting shall comply with the requirements of the California Energy Code set forth in California Code of Regulations Title 24 Part 6. The exterior lighting plan shall be subject to approval by the Director of HCD - Planning, prior to the issuance of building permits.

(HCD - Planning)

Compliance or Monitoring Action to be Performed:

Prior to the issuance of building permits, the Owner/Applicant shall submit three copies of the lighting plans to HCD - Planning for review and approval. Approved lighting plans shall be incorporated into final building plans.

Prior to final/occupancy, the Owner/Applicant/Contractor shall submit written and photographic evidence demonstrating that the lighting has been installed according to the approved plan.

On an on-going basis, the Owner/Applicant shall ensure that the lighting is installed and maintained in accordance with the approved plan.

5. PD011(A) - TREE REMOVAL

Responsible Department:

Planning

Condition/Mitigation Monitoring Measure:

Tree removal shall not occur until a construction permit has been issued in conformance with the appropriate stage or phase of development in this permit. Only those trees approved for removal shall be removed. (HCD-Planning)

Compliance or Monitoring Action to be Performed: Prior to tree removal, the Owner/ Applicant/ Tree Removal Contractor shall demonstrate that a construction permit has been issued prior to commencement of tree removal.

6. PD049 - TREE AND ROOT PROTECTION

Responsible Department:

Planning

Condition/Mitigation Monitoring Measure:

Prior to beginning any tree removal, trees which are located close to trees approved for removal shall be protected from inadvertent damage from equipment or tree removal activity by fencing off the canopy drip-lines and/or critical root zones (whichever is greater) with protective materials. Any tree protection measures recommended by a County-approved tree consultant, in addition to the standard condition, shall be implemented. (HCD - Planning)

Compliance or Monitoring Action to be Performed:

Prior to construction or tree removal, the Owner/Applicant/Tree Removal Contractor submit evidence of tree protection to HCD -Planning for review and approval.

After construction or tree removal, the Owner/Applicant/Tree Removal Contractor shall submit photos of the trees on the property to HCD -Planning to document that the tree protection has been successful or if follow-up remediation measures or additional permits are required.

Page 3 of 7

Print Date: 11/12/2025 6:17:41PM

7. PD048 - TREE REPLACEMENT/RELOCATION

Responsible Department:

Planning

Condition/Mitigation Monitoring Measure:

Within 60 days of permit approval, the applicant shall replace and or relocate each tree approved for removal as follows:

- Replacement ratio recommended by arborist: five 5-gallon Pine or Cypress trees Replacement tree(s) shall be located within the same general location as the tree being removed. (HCD - Planning)

Compliance or Monitoring Action to be Performed:

The Owner/Applicant shall submit evidence of tree replacement to HCD -Planning for review and approval. Evidence shall be a receipt for the purchase of the replacement tree(s) and photos of the replacement tree(s) being planted.

Six months after the planting of the replacement tree(s), the Owner/Applicant shall submit evidence demonstrating that the replacement tree(s) are in a healthy, growing condition.

One year after the planting of the replacement tree(s), the Owner/Applicant shall submit a letter prepared by a County-approved tree consultant reporting on the health of the replacement tree(s) and whether or not the tree replacement was successful or if follow-up remediation measures or additional permits are required.

8. PD050 - RAPTOR/MIGRATORY BIRD NESTING

Responsible Department:

Planning

Condition/Mitigation Monitoring Measure:

Any tree removal activity that occurs during the typical bird nesting season (February 22-August 1), the County of Monterey shall require that the project applicant retain a County qualified biologist to perform a nest survey in order to determine if any active raptor or migratory bird nests occur within the project site or within 300 feet of proposed tree removal activity. During the typical nesting season, the survey shall be conducted no more than 30 days prior to ground disturbance or tree removal. If nesting birds are found on the project site, an appropriate buffer plan shall be established by the project biologist. (HCD - Planning)

Compliance or Monitoring Action to be Performed:

No more than 30 days prior to ground disturbance or tree removal, the Owner/Applicant/Tree Removal Contractor shall submit to HCD -Planning a nest survey prepare by a County qualified biologist to determine if any active raptor or migratory bird nests occur within the project site or immediate vicinity.

9. PW0005 - DRIVEWAY IMPROVEMENTS

Responsible Department:

Public Works

Condition/Mitigation Monitoring Measure:

Construct a Hot Mix Asphalt driveway connection to Ocean Ave. The design and construction is subject to the

approval of the HCD -PWFP. Encroachment Permits are required for all work within the public right-of-way.

Compliance or Monitoring Action to be Performed:

Owner/Applicant shall submit the desian for review and approval the **HCD HCD-Engineering** Services, obtain an encroachment permit from the -Engineering Services prior to issuance of building or grading permits, and construct and complete improvements prior to occupancy or commencement of use. Applicant is responsible to obtain all permits and environmental clearances.

Print Date: 11/12/2025 6:17:41PM Page 4 of 7

10. PW0043 - REGIONAL DEVELOPMENT IMPACT FEE

Responsible Department: Public Works

Impact Fee (RDIF) pursuant to

Monterey Code Chapter 12.90. The fee amount shall be determined based on the

parameters adopted in the current

fee schedule.

Compliance or Monitoring Action to be Performed: Prior to issuance of Building Permits Owner/Applicant shall pay Monterey County

Building Services Department the

traffic mitigation fee. Owner/Applicant shall submit proof of payment to the

Page 5 of 7

HCD-Engineering Services.

Print Date: 11/12/2025 6:17:41PM

11. PW0044 - CONSTRUCTION MANAGEMENT PLAN

Responsible Department:

Public Works

Condition/Mitigation Monitoring Measure:

The applicant shall submit a site-specific Construction Management Plan (CMP) to HCD-Planning and HCD-Engineering Services for review and approval that describes how the site will be managed during construction to protect onsite and nearby sensitive resources, avoid construction nuisance impacts to nearby properties, and reduce congesting/circulation impacts to the local transportation network. The applicant shall be required to adhere to the approved CMP. The Construction Management Plan shall include the following (As applicable):

Names and contact information (primary and secondary) of parties responsible for project during construction.

Summary table including:

Types of construction vehicles and number of truck and/or vehicle trips/day.

Quantity and extent (acreage) of grading per day (Air Quality Management District Standards).

Hours of operation.

Project scheduling (dates) and duration of construction.

Map illustrating:

Location of project (vicinity map).

Proposed route for hauling material.

Location of Sensitive Receptors (schools, hospitals, etc) along haul route.

Location of stockpiles and parking for construction vehicles.

Sensitive areas (tree protection zones, drainage, environmentally sensitive habitat, slopes, etc) where no parking, stockpiling, construction will occur.

The CMP shall:

Prescribe measures to reduce traffic impacts including but not limited to scheduling hauling and material deliveries off-peak hours and encouraging carpooling

Prohibit blocking of access roads or driveways.

Avoid impacting access to private properties by not parking on neighboring properties or impinging on the travel lane of access roads. Construction vehicles shall be encouraged to not park directly in-front of neighboring properties.

Ensure pedestrian paths of travel are not impeded or that alternative paths of travel are provided.

Provide adequate storage and staging areas. Staging and storage areas shall be on-site to maximum extent possible to reduce potential noise, dust, glare, and other impacts to neighboring property.

If on-site storage and staging areas cannot be accommodated, appropriate best management practices shall be implemented to ensure that off-site storage and staging do not adversely impact access or cause excessive noise, dust, or lighting for neighboring properties.

The Applicant/Owner may need to obtain separate authorization to utilize off-site storage and staging areas. The owner/applicant shall be responsible for securing this authorization prior to approval of the CMP.

Prior to the commencement of construction activities, the applicant shall post a publicly visible sign that outlines the specifics of the construction management plan, the telephone number of the on-site contractor, and the telephone number of the person to contact regarding complaints. This contact person shall respond to complaints and take corrective action within 24 hours.

Recommendations from the project biologist, arborist, archaeologist, and/or other qualified professionals relating to construction activities shall be included in the CMP.

Print Date: 11/12/2025 6:17:41PM Page 6 of 7

Compliance or Monitoring Action to be Performed:

- 1. Prior to issuance of a construction permit, the Owner/Applicant/Contractor shall prepare and submit a CMP meeting the requirements of this condition to HCD-Planning and HCD-Engineering Services for review and approval.
- 2. On-going through construction phases Owner/Applicant/Contractor shall implement the approved measures during the construction/grading phase of the project.

12. PW0045 - COUNTYWIDE TRAFFIC FEE

Responsible Department: Public Works

Condition/Mitigation Monitoring Measure:

Prior to issuance of building permits, the Owner/Applicant shall pay the Countywide Traffic Fee or the ad hoc fee

pursuant to General Plan Policy C-1.8. The fee amount shall be determined based on the parameters in the current fee

schedule.

Compliance or Monitoring Action to be Performed:

Prior to issuance of Building Permits, the Owner/Applicant shall pay Monterey County HCD-Building Services the traffic

mitigation fee. The Owner/Applicant shall submit proof of payment to HCD-Engineering Services.

Page 7 of 7

Print Date: 11/12/2025 6:17:41PM



3387 Ocean Avenue Carmel-By-The-Sea, California, 93923

Permit Set

Site Coverage

Floor Area Ratio

No. of Stories

Building Height

Setbacks Front:

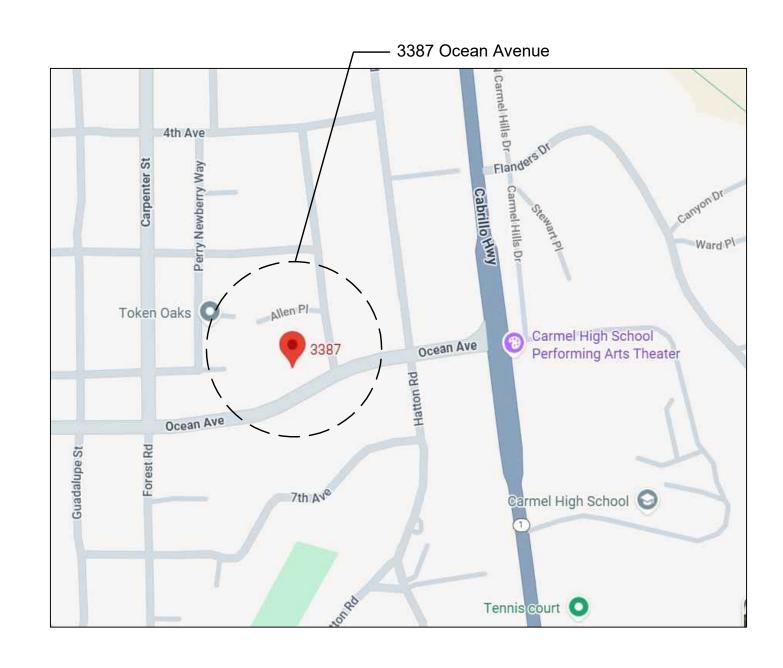
Rear:

Parking:

@ 35% of Lot Area:

@ 45% of Lot Area:

Location Map



Project Directory

Manjit Sandhu

Forester

(209) 535-0098

Owner.	Living By The Sea LLC 3223 Golf Links Road Ceres, CA 95307	msdinc23@gmail.com
Architect:	Christopher Halili 2409 Marshall Court Naperville, IL 60565	(847) 533-8358 architectcdh@gmail.com
General Contractor:	Manjit Sandhu Living By The Sea LLC 3223 Golf Links Road Ceres, CA 95307	(209) 535-0098 msdinc23@gmail.com
Civil Engineer:	Clark Civil Engineering 5500 Nicasio Valley Road Nicasio, CA 94946	(415) 295-4450 wclark@clarkcivil.com
Structural Engineer:	Pelton Wylie+Fahrney Engineering, Inc Structural Engineers 2813 Coffee Road, Suite D1 Modesto, CA 95355	(209) 575-9619 jamey@pwf-eng.com
Landscape Architect:	Brad Cole 371 W. San Ramon Ave. Fresno, CA 93704	(559) 284-4934 bradc559@gmail.com
Land Surveying:	Rasmussen Land Surveying, Inc. 2150 Garden Road, Suite A-3 Monterey, CA 93942	(831) 375-7240
Geotechnical:	Butano Geotechnical Engineering, Inc. 404 Westridge Drive Watsonville, CA 95076	(831) 724-2612 www.butanogeotech.com
and Arborist:	Frank Ono 1213 Miles Avenue Pacific Grove, CA 93950	jonoconsulting@gmail.com
Manufactured Trusses:	Advantage Truss Co. LLC 2025 San Juan Road Hollister, CA 95023	(831) 635-0377 sales@advantagetruss.com

Project Information

Project:	New SFR for Living B	y The Sea, LLC
Location:	3387 Ocean Avenue	
APN:	009-162-008	
Zoning:	MDR/2-D(CZ)	
Construction Type:	V-B Sprinklered	
	l	
	Project Data	
	Required/Permitted	Proposed
Zone:	MDR/2-D(CZ)	MDR/2-D(CZ)
Lot Area:	N/A	12,132 S.F.
Type of Construction:	N/A	V-B
Fire Sprinkler:	Yes	Yes
Occupancy Group: Residence Garage	R-3	R-3

N/A	12,132 S.F.
N/A	V-B
Yes	Yes
R-3 U	R-3 U
4,246 S.F.	3,773 S.F.
5,459 S.F.	2,812 S.F.
3	1
30'-0"	20'-3"
20'-0" 5'-0" 5'-0" 10'-0"	30'-0" 8'-6" 9'-10" 30'-6"
2 Spaces 1 Covered	2 Spaces 2 Covered

2022 California Residential Code (CRC) 2022 California Building Code (CRC) 2022 California Mechanical Code (CMC) 2022 California Electrical Code (CEC) 2022 California Plumbing Code (CPC) 2022 California Energy Code (CEC)

The project shall comply with Title 24 and the following:

Building Codes

Deferred Submittal(s)

Contractor will be responsible for coordinating the following:

- Fire sprinkler permit - Solar Panel Install Permit

Sheet Index

ı	<u>Architectural</u>
A0.0 A0.1 A0.2 A0.3	Cover Sheet and Project Data 2022 California Green Bldg Standards Code 2022 California Green Bldg Standards Code 2022 SFR Mandatory Requirements Summary Energy Calculations
	Survey
SU1	Topographic Survey
	Civil
C0.1 C0.2 C2.1 C3.1 C3.2 C4.1 C4.2 C4.3	Title Sheet Grading Specifications Grading & Drainage Plan Details Details Erosion Control Plan Erosion Control Details Construction BMP
	<u>Landscape</u>
L-1 L-2	Planting Plan Irrigation Plan
	<u>Architectural</u>
A1.0 A2.0 A3.0 A4.0 A5.0	Proposed Floor Plan Proposed Elevations Proposed Elevations & Cross-Sections Proposed Roof Plan Doors & Windows Schedules / Wall Section
	Structural
S1.1 S1.2 S2.1 S2.2 S3.1 S4.1 S4.2	Structural Notes Structural Details Foundation Plan Roof Framing Plan Structural Details Roof Framing Details Roof Framing Details
	Electrical
E1.0	Proposed Electrical Plan

Supplemental Documents

- Geotechnical Report
- Structural Calculations
- Truss Calculations
- Arborist Report

architect

These drawings are, and shall remain, the exclusive property of Christopher D. Halili - Architect and are released for construction purposes only. No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form, or by any means of electronic, photo copying or otherwise, without the prior written permission of Christopher D. Halili - Architect is strictly prohibited. Violators will be subject to compensatory damages

Copyright 2025

*/CHRISTOPHER

Exp: December 31, 2025

Project Data Location Plan

Legend Project No. 07.22.25

SHEET NUMBER

Notes

A0.0

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

RESIDENTIAL MANDATORY MEASURES, SHEET 1 (July 2024 Supplement)

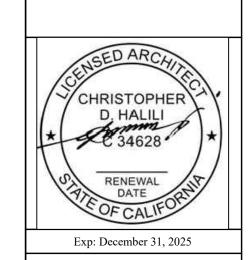
KESIDENTIA	AL IVIA	NDATORY MEASURES, SHE	LI (July 2024 Supplement)	N/A = NOT APPLICABLE. RESPON. PARTY = RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)
Y N/A RESPON. PARTY CHAPTER 3	Y N/A RESPO		17331	Y N/A RESPON. PARTY
GREEN BUILDING		4.106.4.2 New multifamily dwellings, hotels and motels and new residential parking facilities. When parking is provided, parking spaces for new multifamily dwellings, hotels and motels shall meet the	DIVISION 4.2 ENERGY EFFICIENCY	4.304 OUTDOOR WATER USE 4.304.1 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS. Residential developments shall comply with
SECTION 301 GENERAL		requirements of Section 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 an EV charging space shall count as at	4.201.1 SCOPE. For the purposes of mandatory energy efficiency standards in this code, the California Energy	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.
301.1 SCOPE. Buildings shall be designed to include the green building measures specified as mar the application checklists contained in this code. Voluntary green building measures are also included in the code.	datory in led in the	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.	Commission will continue to adopt mandatory standards.	NOTES:
application checklists and may be included in the design and construction of structures covered by but are not required unless adopted by a city, county, or city and county as specified in Section 101	his code,	4.106.4.2.1 Reserved.	DIVISION 4.3 WATER EFFICIENCY AND CONSERVATION	The Model Water Efficient Landscape Ordinance (MWELO) is located in the California Code Regulations,
301.1.1 Additions and alterations. [HCD] The mandatory provisions of Chapter 4 shall be	applied to	4.106.4.2.2 Multifamily dwellings, hotels and motels	4.303 INDOOR WATER USE 4.303.1 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures (water closets and	Title 23, Chapter 2.7, Division 2. MWELO and supporting documents, including water budget calculator, are available at: https://www.water.ca.gov/
additions or alterations of existing residential buildings where the addition or alteration increa building's conditioned area, volume, or size. The requirements shall apply only to and/or with	ses the n the	1. EV ready parking spaces with receptacles.	urinals) and fittings (faucets and showerheads) shall comply with the sections 4.303.1.1, 4.303.1.2, 4.303.1.3, and 4.303.4.4.	DIVISION 4.4 MATERIAL CONSERVATION AND RESOURCE
specific area of the addition or alteration.	a nadina	a. Hotels and motels. Forty (40) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles.	Note: All noncompliant plumbing fixtures in any residential real property shall be replaced with water-conserving	EFFICIENCY
The mandatory provision of Section 4.106.4.2 may apply to additions or alterations of existing facilities or the addition of new parking facilities serving existing multifamily buildings. See Se 4.106.4.3 for application.		b. Multifamily parking facilities. Forty (40) percent of the total number of parking spaces shall be	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 seg., for the definition of a noncompliant plumbing fixture, types of residential	4.406 ENHANCED DURABILITY AND REDUCED MAINTENANCE 4.406.1 RODENT PROOFING. Annular spaces around pipes, electric cables, conduits or other openings in
Note: Repairs including, but not limited to, resurfacing, restriping and repairing or maintaining	existing	equipped with low power Level 2 EV charging receptacles. EV charging receptacles required by this section shall be located in at least one assigned parking space per dwelling unit where	buildings affected and other important enactment dates.	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
lighting fixtures are not considered alterations for the purpose of this section.		assigned parking is provided but need not exceed forty (40) percent of the total number of assigned parking spaces provided on the site.	4.303.1.1 Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense	agency.
Note: On and after January 1, 2014, residential buildings undergoing permitted alterations, a improvements shall replace noncompliant plumbing fixtures with water-conserving plumbing fixtures.	ixtures.	Exception: Areas of parking facilities served by parking lifts, including but not limited to automated mechanical-access open parking garages as defined in the California Building	Specification for Tank-type Toilets.	4.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING 4.408.1 CONSTRUCTION WASTE MANAGEMENT. Recycle and/or salvage for reuse a minimum of 65
Plumbing fixture replacement is required prior to issuance of a certificate of final completion, of occupancy or final permit approval by the local building department. See Civil Code Section	n 1101.1,	Code; or parking facilities otherwise incapable of supporting electric vehicle charging.	Note: The effective flush volume of dual flush toilets is defined as the composite, average flush volume of two reduced flushes and one full flush.	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
et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affer other important enactment dates.	cted and	c. Receptacle power source. EV charging receptacles in multifamily parking facilities shall be provided with a dedicated branch circuit connected to the dwelling unit's electrical panel, unless	4.303.1.2 Urinals. The effective flush volume of wall mounted urinals shall not exceed 0.125 gallons per flush.	management ordinance.
301.2 LOW-RISE AND HIGH-RISE RESIDENTIAL BUILDINGS. [HCD] The provi	risions of	determined as infeasible by the project builder or designer and subject to concurrence of the local enforcing agency.	The effective flush volume of all other urinals shall not exceed 0.5 gallons per flush. 4.303.1.3 Showerheads.	Exceptions:
individual sections of CALGreen may apply to either low-rise residential buildings high-rise resident buildings, or both. Individual sections will be designated by banners to indicate where the section a	al oplies	Exception: Areas of parking facilities served by parking lifts, including but not limited to	4.303.1.3 Showerheads. 4.303.1.3 Single Showerhead. Showerheads shall have a maximum flow rate of not more than 1.8	 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
specifically to low-rise only (LR) or high-rise only (HR). When the section applies to both low-rise a high-rise buildings, no banner will be used.	nd	automated mechanical-access open parking garages as defined in the California Building Code; or parking facilities otherwise incapable of supporting electric vehicle charging.	gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Showerheads.	close to the jobsite. 3. The enforcing agency may make exceptions to the requirements of this section when isolated
		d. Receptacle configurations. 208/240V EV charging receptacles shall comply with one of the following configurations:	4.303.1.3.2 Multiple showerheads serving one shower. When a shower is served by more than one	jobsites are located in areas beyond the haul boundaries of the diversion facility.
SECTION 302 MIXED OCCUPANCY BUILDINGS	h = 2 Pr =	For 20-ampere receptacles, NEMA 6-20R	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	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
302.1 MIXED OCCUPANCY BUILDINGS. In mixed occupancy buildings, each portion of a shall comply with the specific green building measures applicable to each specific occupancy.	building	2. For 30-ampere receptacles, NEMA 14-30R 3. For 50-ampere receptacles, NEMA 14-50R	allow one shower outlet to be in operation at a time.	necessary and shall be available during construction for examination by the enforcing agency.
Exceptions: 1. [HCD] Accessory structures and accessory occupancies serving residential buildings comply with Chapter 4 and Appendix A4, as applicable.	shall	2. EV ready parking spaces with EV chargers.	Note: A hand-held shower shall be considered a showerhead. 4.303.1.4 Faucets.	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. Specify if construction and demolition waste materials will be sorted on-site (source separated) or
2. [HCD] For purposes of CALGreen, live/work units, complying with Section 419 of the Building Code, shall not be considered mixed occupancies. Live/Work units shall comp		a. Hotels and motels. Ten (10) percent of the total number of parking spaces shall be equipped	4.303.1.4 Faucets. 4.303.1.4 Faucets. 4.303.1.4 Faucets. The maximum flow rate of residential lavatory faucets shall	 Specify if construction and demolition waste materials will be sorted on-site (source separated) or bulk mixed (single stream). Identify diversion facilities where the construction and demolition waste material collected will be
Chapter 4 and Appendix A4, as applicable.		with Level 2 EV chargers. At least fifty (50) percent of the required EV chargers shall be equipped with J1772 connectors.	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.	taken. 4. Identify construction methods employed to reduce the amount of construction and demolition waste
DIVISION 4.1 PLANNING AND DESIGN ABBREVIATION DEFINITIONS:		b. Multifamily parking facilities. Ten (10) percent of the total number of parking spaces shall be equipped with Level 2 EV chargers. At least fifty (50) percent of the required EV chargers shall be	4.303.1.4.2 Lavatory Faucets in Common and Public Use Areas. The maximum flow rate of lavatory	generated. 5. Specify that the amount of construction and demolition waste materials diverted shall be calculated
HCD Department of Housing and Community Development BSC California Building Standards Commission		equipped with Level 2 EV chargers. At least inty (50) percent of the required EV chargers shall be equipped with J1772 connectors. Where common use parking or unassigned parking is provided, EV chargers shall be located in common use or unassigned parking areas and shall be available	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.	by weight or volume, but not by both.
DSA-SS Division of the State Architect, Structural Safety OSHPD Office of Statewide Health Planning and Development		for use by all residents or guests.	4.303.1.4.3 Metering Faucets. Metering faucets when installed in residential buildings shall not deliver	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
LR Low Rise HR High Rise		Where low power Level 2 EV charging receptacles or Level 2 EV chargers are installed beyond the minimum required, an automatic load management system (ALMS) may be used to reduce	more than 0.2 gallons per cycle. 4.303.1.4.4 Kitchen Faucets. The maximum flow rate of kitchen faucets shall not exceed 1.8 gallons	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
AA Additions and Alterations N New		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	per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per	materials will be diverted by a waste management company.
CHAPTER 4		simultaneously to each EV charging station (EVCS) served by the ALMS. The branch circuit shall have a minimum capacity of 40 amperes, and installed EV chargers shall have a capacity of not less than 30 amperes.	minute at 60 psi.	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
RESIDENTIAL MANDATORY MEASURES		4.106.4.2.2.1 Electric vehicle charging stations (EVCS).	Note: Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.	lbs./sq.ft. of the building area shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1
		Electric vehicle charging stations required by Section 4.106.4.2.2, Item 2, with EV chargers installed shall comply with Section 4.106.4.2.2.1.1.	4.303.1.4.5 Pre-rinse spray valves.	4.408.4.1 WASTE STREAM REDUCTION ALTERNATIVE. Projects that generate a total combined
SECTION 4.102 DEFINITIONS 4.102.1 DEFINITIONS		Exception: Electric vehicle charging stations serving public accommodations, public housing, motels and hotels	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	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
The following terms are defined in Chapter 2 (and are included here for reference)		shall not be required to comply with this section. See California Building Code, Chapter 11B, for applicable requirements.	(d)(7) and shall be equipped with an integral automatic shutoff. FOR REFERENCE ONLY: The following table and code section have been reprinted from the California	requirement in Section 4.408.1 4.408.5 DOCUMENTATION. Documentation shall be provided to the enforcing agency which demonstrates
FRENCH DRAIN. A trench, hole or other depressed area loosely filled with rock, gravel, fragments of brick pervious material used to collect or channel drainage or runoff water.	or similar	4.106.4.2.2.1.1 Electric vehicle charging stations (EVCS) spaces with EV chargers installed; dimensions	Code of Regulations, Title 20 (Appliance Efficiency Regulations), Section 1605.1 (h)(4) and Section 1605.3 (h)(4)(A).	compliance with Section 4.408.2, items 1 through 5, Section 4.408.3 or Section 4.408.4
WATTLES. Wattles are used to reduce sediment in runoff. Wattles are often constructed of natural plant material shaped in the form of tubes and placed on a downflow slope. Wattles	terials	and location. EVCS spaces shall be designed to comply with the following:		Notes:
used for perimeter and inlet controls.	are also	The minimum length of each EVCS space shall be 18 feet (5486 mm).	TABLE H-2	 Sample forms found in "A Guide to the California Green Building Standards Code (Residential)" located at www.hcd.ca.gov/CALGreen.html may be used to assist in
4.106 SITE DEVELOPMENT 4.106.1 GENERAL. Preservation and use of available natural resources shall be accomplished through ev	aluation	2. The minimum width of each EVCS space shall be 9 feet (2743 mm). 3. One in every 25 EVCS spaces, but not less than one, shall also have an 8-foot (2438 mm) wide minimum	STANDARDS FOR COMMERCIAL PRE-RINSE SPRAY	documenting compliance with this section. 2. Mixed construction and demolition debris (C & D) processors can be located at the California
and careful planning to minimize negative effects on the site and adjacent areas. Preservation of slop management of storm water drainage and erosion controls shall comply with this section.		aisle. A 5-foot (1524 mm) wide minimum aisle shall be permitted provided the minimum width of the EVCS space is 12 feet (3658 mm). Surface slope for this EVCS space and the aisle shall not exceed 1	VALUES MANUFACTURED ON OR AFTER JANUARY 28, 2019	Department of Resources Recycling and Recovery (CalRecycle). 4.410 BUILDING MAINTENANCE AND OPERATION
4.106.2 STORM WATER DRAINAGE AND RETENTION DURING CONSTRUCTION. Projects which distu		unit vertical in 48 units horizontal (2.083 percent slope) in any direction. These EVCS spaces shall also comply with at least one of the following:	PRODUCT CLASS [spray force in ounce force (ozf)] MAXIMUM FLOW RATE (gpm)	4.410 BOILDING 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
than one acre of soil and are not part of a larger common plan of development which in total disturbs or more, shall manage storm water drainage during construction. In order to manage storm water drainage during construction.	inage	a. The EVCS space shall be located adjacent to an accessible parking space meeting the requirements		following shall be placed in the building:
during construction, one or more of the following measures shall be implemented to prevent flooding property, prevent erosion and retain soil runoff on the site.	or adjacent	of the California Building Code, Chapter 11A, to allow use of the EV charger from the accessible parking space. b. The EVCS space shall be located on an accessible route, as defined in the California Building Code,	Product Class 1 (≤ 5.0 ozf) 1.00	 Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure.
 Retention basins of sufficient size shall be utilized to retain storm water on the site. Where storm water is conveyed to a public drainage system, collection point, gutter or simi 	ar	Chapter 2, to the building. Exception: Electric vehicle charging stations designed and constructed in compliance with the California	Product Class 2 (> 5.0 ozf and ≤ 8.0 ozf) 1.20 Product Class 3 (> 8.0 ozf) 1.28	 Operation and maintenance instructions for the following: a. Equipment and appliances, including water-saving devices and systems, HVAC systems,
disposal method, water shall be filtered by use of a barrier system, wattle or other method aby the enforcing agency.	approved	Building Code, Chapter 11B, are not required to comply with Section 4.106.4.2.2.1.1.	Title 20 Section 1605.3 (h)(4)(A): Commercial prerinse spray values manufactured on or after January	photovoltaic systems, electric vehicle chargers, water-heating systems and other major appliances and equipment.
Compliance with a lawfully enacted storm water management ordinance.		4.106.4.2.2.1.2 Accessible electric vehicle charging station spaces. In addition to the requirements in Section 4.106.4.2.2.1.1, all EV chargers, where installed, shall comply with the	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	 b. Roof and yard drainage, including gutters and downspouts. c. Space conditioning systems, including condensers and air filters.
Note: Refer to the State Water Resources Control Board for projects which disturb one acre or more are part of a larger common plan of development which in total disturbs one acre or more of soil.	of soil, or	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.	buildings. Submeters shall be installed to measure water usage of individual rental dwelling units in accordance with the	d. Landscape irrigation systems. e. Water reuse systems. 3. Information from local utility, water and waste recovery providers on methods to further reduce
(Website: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html)		4.106.4.2.3 Reserved.	California Plumbing Code.	resource consumption, including recycle programs and locations. 4. Public transportation and/or carpool options available in the area.
4.106.3 GRADING AND PAVING. Construction plans shall indicate how the site grading or drainage system manage all surface water flows to keep water from entering buildings. Examples of methods to manage		4.106.4.2.4 Reserved.	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	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.
water include, but are not limited to, the following:	3 3 3 3 1 1 1 1	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	1701.1 of the California Plumbing Code.	 Information about water-conserving landscape and irrigation design and controllers which conserve water.
Swales Water collection and disposal systems		Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s).	NOTE: THIS TABLE COMPILES THE DATA IN SECTION 4.303.1, AND IS INCLUDED AS A	7. Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from the foundation.
3. French drains 4. Water retention gardens		4.106.4.3 Electric vehicle charging for additions and alterations of parking facilities serving existing	CONVENIENCE FOR THE USER. TABLE - MAXIMUM FIXTURE WATER USE	 Information on required routine maintenance measures, including, but not limited to, caulking, painting, grading around the building, etc. Information about state solar energy and incentive programs available.
Other water measures which keep surface water away from buildings and aid in groundwat recharge.	er	multi-family buildings. Where new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or electrical systems or lighting of existing parking facilities are added or electrical systems or lighting of existing parking facilities are added or electrical systems or lighting or existing parking angelous added or electrical systems or lighting or existing parking facilities are added or electrical systems or lighting of existing parking facilities are added or	FIXTURE TYPE FLOW RATE	 Information about state solar energy and incentive programs available. A copy of all special inspections verifications required by the enforcing agency or this code. Information from the Department of Forestry and Fire Protection on maintenance of defensible
Exception: Additions and alterations not altering the drainage path.		altered and the work requires a building permit, ten (10) percent of the total number of parking spaces added or altered shall be EV capable spaces to support future Level 2 electric vehicle supply equipment. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for	SHOWER HEADS (RESIDENTIAL) 1.8 GMP @ 80 PSI	space around residential structures. 12. Information and/or drawings identifying the location of grab bar reinforcements.
4.106.4 Electric vehicle (EV) charging for new construction. New construction shall comply with Section or 4.106.4.2. Electric vehicle supply equipment (EVSE) shall comply with the California Electrical Code.	4.106.4.1	or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE."	MAY 4.2 CDM @ 20 DCL MIN. 0.9 CDM @ 20	4.410.2 RECYCLING BY OCCUPANTS. Where 5 or more multifamily dwelling units are constructed on a
Exceptions:		Notes:	PSI	depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper,
 On a case-by-case basis, where the local enforcing agency has determined EV charging infrastructure are not feasible based upon one or more of the following conditions: 		 Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging. 	LAVATORY FAUCETS IN COMMON & PUBLIC USE AREAS 0.5 GPM @ 60 PSI	corrugated cardboard, glass, plastics, organic waster, and metals, or meet a lawfully enacted local recycling ordinance, if more restrictive.
1.1 Where there is no local utility power supply or the local utility is unable to supply power.	.	2.There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.	KITCHEN FAUCETS 1.8 GPM @ 60 PSI	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
1.2 Where there is evidence suitable to the local enforcing agency substantiating that local utility infrastructure design requirements, directly related to the implementation of the project of the project.			METERING FAUCETS 0.2 GAL/CYCLE WATER CLOSET 1.28 GAL/FLUSH	42649.82 (a)(2)(A) et seq. are note required to comply with the organic waste portion of this section.
 4.106.4, may adversely impact the construction cost of the project. 2. Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) withou parking facilities. 	additional		URINALS 0.125 GAL/FLUSH	DIVIDION A PROPERTY CONTROL OF THE PROPERTY CONTROL OF
parany raomices.				DIVISION 4.5 ENVIRONMENTAL QUALITY
4.106.4.1 New one- and two-family dwellings and townhouses with attached private garages. I dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The ra	ceway			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 oderous
shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity	main to the			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.
proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40	-ampere			SECTION 4.502 DEFINITIONS 5.102.1 DEFINITIONS
208/240-volt minimum dedicated branch circuit and space(s) reserved to permit installation of a branch overcurrent protective device.	III CIICUIT			The following terms are defined in Chapter 2 (and are included here for reference)
Exemption: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circ installed in close proximity to the proposed location of an EV charger at the time of original constructions.				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.
accordance with the California Electrical Code.				COMPOSITE WOOD PRODUCTS. Composite wood products include hardwood plywood, particleboard and
4.106.4.1.1 Identification. The service panel or subpanel circuit directory shall identify the overprotective device space(s) reserved for future EV charging as "EV CAPABLE". The raceway te				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 kinists or finger-jointed lumber, all as specified in California Code of regulations (CCR), title 17. Section
location shall be permanently and visibly marked as "EV CAPABLE".				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.
DISCLAIMER: THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH	THE CALIFORNIA GREEN BU	UILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING DEPARTMENT JURISDICTIONS, THIS CHECKLIS	ST IS TO BE USED ON AN INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER TO MEET THOSE INDIVIDUAL NEEDS. THE END USEI	R ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE USE OF THIS DOCUMENT, INCLUDING VERIFICATION WITH THE FULL CODE.



These drawings are, and shall remain, the exclusive property of Christopher D. Halili - Architect and are released for construction purposes only. No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form, or by any means of electronic, photo copying or otherwise, without the prior written permission of Christopher D. Halili - Architect is strictly prohibited. Violators will be subject to compensatory damages

Copyright 2025

7 Ocean Avenue



2022 Calgreen Bldg Standards

Project No.	_
Date	07.22.25
Drawn	CDH

Δ () 1

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

RESIDENTIAL MANDATORY MEASURES, SHEET 2 (July 2024 Supplement)

TABLE 4.504.5 - FORMALDEHYDE LIMITS1 TABLE 4.504.2 - SEALANT VOC LIMIT **INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS** 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 (Less Water and Less Exempt Compounds in Grams per Liter) MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION hundredths of a gram (g O3/g ROC). 702 QUALIFICATIONS SEALANTS VOC LIMIT PRODUCT CURRENT LIMIT Note: MIR values for individual compounds and hydrocarbon solvents are specified in CCR, Title 17, Sections 94700 702.1 INSTALLER TRAINING. HVAC system installers shall be trained and certified in the proper 250 ARCHITECTURAL HARDWOOD PLYWOOD VENEER CORE 0.05 installation of HVAC systems including ducts and equipment by a nationally or regionally recognized training or MOISTURE CONTENT. The weight of the water in wood expressed in percentage of the weight of the oven-dry wood. certification program. Uncertified persons may perform HVAC installations when under the direct supervision and MARINE DECK HARDWOOD PLYWOOD COMPOSITE CORE responsibility of a person trained and certified to install HVAC systems or contractor licensed to install HVAC systems. PRODUCT-WEIGHTED MIR (PWMIR). The sum of all weighted-MIR for all ingredients in a product subject to this NONMEMBRANE ROOF 300 PARTICLE BOARD Examples of acceptable HVAC training and certification programs include but are not limited to the following: article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of 250 MEDIUM DENSITY FIBERBOARD 0.11 product (excluding container and packaging). State certified apprenticeship programs. Note: PWMIR is calculated according to equations found in CCR, Title 17, Section 94521 (a). Public utility training programs. SINGLE-PLY ROOF MEMBRANE THIN MEDIUM DENSITY FIBERBOARD2 0.13 Training programs sponsored by trade, labor or statewide energy consulting or verification organizations. REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute to Programs sponsored by manufacturing organizations. OTHER 420 1. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED Other programs acceptable to the enforcing agency. BY THE CALIF. AIR RESOURCES BOARD, AIR TOXICS CONTROL SEALANT PRIMERS MEASURE FOR COMPOSITE WOOD AS TESTED IN ACCORDANCE **702.2 SPECIAL INSPECTION [HCD].** When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or VOC. A volatile organic compound (VOC) broadly defined as a chemical compound based on carbon chains or rings WITH ASTM E 1333. FOR ADDITIONAL INFORMATION, SEE CALIF. ARCHITECTURAL with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 THROUGH hydrogen and may contain oxygen, nitrogen and other elements. See CCR Title 17, Section 94508(a). other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence NON-POROUS 250 to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition to 2. THIN MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM other certifications or qualifications acceptable to the enforcing agency, the following certifications or education may be 775 4.503.1 GENERAL. Any installed gas fireplace shall be a direct-vent sealed-combustion type. Any installed considered by the enforcing agency when evaluating the qualifications of a special inspector: THICKNESS OF 5/16" (8 MM). woodstove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as MODIFIED BITUMINOUS 500 applicable, and shall have a permanent label indicating they are certified to meet the emission limits. Woodstoves. Certification by a national or regional green building program or standard publisher. MARINE DECK 2. Certification by a statewide energy consulting or verification organization, such as HERS raters, building pellet stoves and fireplaces shall also comply with applicable local ordinances. DIVISION 4.5 ENVIRONMENTAL QUALITY (continued) performance contractors, and home energy auditors. OTHER 4.504.3 CARPET SYSTEMS. All carpet installed in the building interior shall meet the requirements of the California 4.504 POLLUTANT CONTROL
4.504.1 COVERING OF DUCT OPENINGS & PROTECTION OF MECHANICAL EQUIPMENT DURING 3. Successful completion of a third party apprentice training program in the appropriate trade. Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions Other programs acceptable to the enforcing agency. from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for 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 1. Special inspectors shall be independent entities with no financial interest in the materials or the openings shall be covered with tape, plastic, sheet metal or other methods acceptable to the enforcing agency to See California Department of Public Health's website for certification programs and testing labs. project they are inspecting for compliance with this code. reduce the amount of water, dust or debris which may enter the system. 2. HERS raters are special inspectors certified by the California Energy Commission (CEC) to rate https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx. 4.504.2 FINISH MATERIAL POLLUTANT CONTROL. Finish materials shall comply with this section. homes in California according to the Home Energy Rating System (HERS). TABLE 4.504.3 - VOC CONTENT LIMITS FOR 4.504.3.1 Carpet cushion. All carpet cushion installed in the building interior shall meet the requirements of the 4.504.2.1 Adhesives, Sealants and Caulks. Adhesives, sealant and caulks used on the project shall meet the [BSC] When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall ARCHITECTURAL COATINGS23 California Department of Public Health. "Standard Method for the Testing and Evaluation of Volatile Organic requirements of the following standards unless more stringent local or regional air pollution or air quality employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with Chemical Emissions from Indoor Sources Using Environmental Chambers." Version 1.2. January 2017 this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the management district rules apply: GRAMS OF VOC PER LITER OF COATING, LESS WATER & LESS EXEMPT (Emission testing method for California Specification 01350) particular type of inspection or task to be performed. In addition, the special inspector shall have a certification from a COMPOUNDS 1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks recognized state, national or international association, as determined by the local agency. The area of certification See California Department of Public Health's website for certification programs and testing labs. COATING CATEGORY shall be closely related to the primary job function, as determined by the local agency. 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. FLAT COATINGS 50 https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx. Note: Special inspectors shall be independent entities with no financial interest in the materials or the Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic project they are inspecting for compliance with this code. compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and NON-FLAT COATINGS 100 4.504.3.2 Carpet adhesive. All carpet adhesive shall meet the requirements of Table 4.504.1. tricloroethylene), except for aerosol products, as specified in Subsection 2 below. NONFLAT-HIGH GLOSS COATINGS 150 4.504.4 RESILIENT FLOORING SYSTEMS. Where resilient flooring is installed , at least 80% of floor area receiving 2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in 703 VERIFICATIONS resilient flooring shall meet the requirements of the California Department of Public Health, "Standard Method for the SPECIALTY COATINGS units of product, less packaging, which do not weigh more than 1 pound and do not consist of more Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," 703.1 DOCUMENTATION. Documentation used to show compliance with this code shall include but is not than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including ALUMINUM ROOF COATINGS 400 Version 1.2, January 2017 (Emission testing method for California Specification 01350) limited to, construction documents, plans, specifications, builder or installer certification, inspection reports, or other prohibitions on use of certain toxic compounds, of California Code of Regulations, Title 17, methods acceptable to the enforcing agency which demonstrate substantial conformance. When specific BASEMENT SPECIALTY COATINGS 400 See California Department of Public Health's website for certification programs and testing labs. documentation or special inspection is necessary to verify compliance, that method of compliance will be specified in the appropriate section or identified applicable checklist. 4.504.2.2 Paints and Coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of BITUMINOUS ROOF COATINGS hhtps://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx. the ARB Architectural Suggested Control Measure, as shown in Table 4.504.3, unless more stringent local limits BITUMINOUS ROOF PRIMERS 350 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 BOND BREAKERS 350 4.504.5 COMPOSITE WOOD PRODUCTS. Hardwood plywood, particleboard and medium density fiberboard coating, based on its gloss, as defined in subsections 4.21, 4.36, and 4.37 of the 2007 California Air Resources composite wood products used on the interior or exterior of the buildings shall meet the requirements for Board, Suggested Control Measure, and the corresponding Flat, Nonflat or Nonflat-High Gloss VOC limit in CONCRETE CURING COMPOUNDS 350 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 CONCRETE/MASONRY SEALERS 100 4.504.2.3 Aerosol Paints and Coatings. Aerosol paints and coatings shall meet the Product-weighted MIR 4.504.5.1 Documentation. Verification of compliance with this section shall be provided as requested DRIVEWAY SEALERS Limits for ROC in Section 94522(a)(2) and other requirements, including prohibitions on use of certain toxic by the enforcing agency. Documentation shall include at least one of the following: compounds and ozone depleting substances, in Sections 94522(e)(1) and (f)(1) of California Code of DRY FOG COATINGS 150 Regulations, Title 17, commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air Product certifications and specifications. Quality Management District additionally comply with the percent VOC by weight of product limits of Regulation **FAUX FINISHING COATINGS** 350 Chain of custody certifications. Product labeled and invoiced as meeting the Composite Wood Products regulation (see FIRE RESISTIVE COATINGS 350 CCR, Title 17, Section 93120, et seq.). 4.504.2.4 Verification. Verification of compliance with this section shall be provided at the request of the 4. Exterior grade products marked as meeting the PS-1 or PS-2 standards of the Engineered FLOOR COATINGS 100 enforcing agency. Documentation may include, but is not limited to, the following: Wood Association, the Australian AS/NZS 2269, European 636 3S standards, and Canadian CSA FORM-RELEASE COMPOUNDS 0121, CSA 0151, CSA 0153 and CSA 0325 standards. Manufacturer's product specification Other methods acceptable to the enforcing agency. GRAPHIC ARTS COATINGS (SIGN PAINTS) Field verification of on-site product containers. HIGH TEMPERATURE COATINGS 4.505 INTERIOR MOISTURE CONTROL INDUSTRIAL MAINTENANCE COATINGS 250 TABLE 4.504.1 - ADHESIVE VOC LIMIT_{1,2} eneral. Buildings shall meet or exceed the provisions of the California Building Standards Code. LOW SOLIDS COATINGS: 120 (Less Water and Less Exempt Compounds in Grams per Liter) 4.505.2 CONCRETE SLAB FOUNDATIONS. Concrete slab foundations required to have a vapor retarder by MAGNESITE CEMENT COATINGS 450 California Building Code, Chapter 19, or concrete slab-on-ground floors required to have a vapor retarder by the ARCHITECTURAL APPLICATIONS VOC LIMIT California Residential Code, Chapter 5, shall also comply with this section. MASTIC TEXTURE COATINGS 100 INDOOR CARPET ADHESIVES METALLIC PIGMENTED COATINGS 500 4.505.2.1 Capillary break. A capillary break shall be installed in compliance with at least one of the CARPET PAD ADHESIVES MULTICOLOR COATINGS 250 **OUTDOOR CARPET ADHESIVES** 150 1. A 4-inch (101.6 mm) thick base of 1/2 inch (12.7mm) or larger clean aggregate shall be provided with PRETREATMENT WASH PRIMERS 420 a vapor barrier in direct contact with concrete and a concrete mix design, which will address bleeding, WOOD FLOORING ADHESIVES PRIMERS SEALERS & UNDERCOATERS shrinkage, and curling, shall be used. For additional information, see American Concrete Institute, 100 RUBBER FLOOR ADHESIVES Other equivalent methods approved by the enforcing agency. REACTIVE PENETRATING SEALERS 350 SUBFLOOR ADHESIVES A slab design specified by a licensed design professional. RECYCLED COATINGS 250 CERAMIC TILE ADHESIVES 65 4.505.3 MOISTURE CONTENT OF BUILDING MATERIALS. Building materials with visible signs of water damage ROOF COATINGS shall not be installed. Wall and floor framing shall not be enclosed when the framing members exceed 19 percent VCT & ASPHALT TILE ADHESIVES moisture content. Moisture content shall be verified in compliance with the following: RUST PREVENTATIVE COATINGS 250 DRYWALL & PANEL ADHESIVES SHELLACS 1. Moisture content shall be determined with either a probe-type or contact-type moisture meter. Equivalent COVE BASE ADHESIVES moisture verification methods may be approved by the enforcing agency and shall satisfy requirements CLEAR 730 found in Section 101.8 of this code. MULTIPURPOSE CONSTRUCTION ADHESIVE 2. Moisture readings shall be taken at a point 2 feet (610 mm) to 4 feet (1219 mm) from the grade stamped end OPAQUE 550 of each piece verified. 100 STRUCTURAL GLAZING ADHESIVES SPECIALTY PRIMERS, SEALERS & 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. 250 SINGLE-PLY ROOF MEMBRANE ADHESIVES UNDERCOATERS OTHER ADHESIVES NOT LISTED STAINS 250 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 SPECIALTY APPLICATIONS STONE CONSOLIDANTS 450 recommendations prior to enclosure. PVC WELDING 510 SWIMMING POOL COATINGS 4.506 INDOOR AIR QUALITY AND EXHAUST 490 TRAFFIC MARKING COATINGS 4.506.1 Bathroom exhaust fans. Each bathroom shall be mechanically ventilated and shall comply with the CPVC WELDING 325 TUB & TILE REFINISH COATINGS 420 ABS WELDING 1. Fans shall be ENERGY STAR compliant and be ducted to terminate outside the building. WATERPROOFING MEMBRANES 250 250 PLASTIC CEMENT WELDING 2. Unless functioning as a component of a whole house ventilation system, fans must be controlled by a WOOD COATINGS humidity control. ADHESIVE PRIMER FOR PLASTIC 275 WOOD PRESERVATIVES 350 a. Humidity controls shall be capable of adjustment between a relative humidity range less than or CONTACT ADHESIVE equal to 50% to a maximum of 80%. A humidity control may utilize manual or automatic means of ZINC-RICH PRIMERS SPECIAL PURPOSE CONTACT ADHESIVE b. A humidity control may be a separate component to the exhaust fan and is not required to be 1. GRAMS OF VOC PER LITER OF COATING, INCLUDING WATER & STRUCTURAL WOOD MEMBER ADHESIVE 140 integral (i.e., built-in) EXEMPT COMPOUNDS 250 TOP & TRIM ADHESIVE 2. THE SPECIFIED LIMITS REMAIN IN EFFECT UNLESS REVISED LIMITS SUBSTRATE SPECIFIC APPLICATIONS ARE LISTED IN SUBSEQUENT COLUMNS IN THE TABLE. 1. For the purposes of this section, a bathroom is a room which contains a bathtub, shower or 3. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY METAL TO METAL THE CALIFORNIA AIR RESOURCES BOARD, ARCHITECTURAL COATINGS 2. Lighting integral to bathroom exhaust fans shall comply with the California Energy Code. PLASTIC FOAMS SUGGESTED CONTROL MEASURE, FEB. 1, 2008. MORE INFORMATION IS AVAILABLE FROM THE AIR RESOURCES BOARD. 1.507 ENVIRONMENTAL COMFORT POROUS MATERIAL (EXCEPT WOOD) 4.507.2 HEATING AND AIR-CONDITIONING SYSTEM DESIGN. Heating and air conditioning systems shall be WOOD sized, designed and have their equipment selected using the following methods: FIBERGLASS 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 handbooks or other equivalent design software or methods. 1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, 3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S - 2014 (Residential THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED. Equipment Selection), or other equivalent design software or methods. 2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE **Exception:** Use of alternate design temperatures necessary to ensure the system functions are THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168.

DISCLAIMER: THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDIVIDUAL NEEDS. THE END USER ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE CALIFORNIA GREEN BUILDING VERIFICATION WITH THE FULL CODE. DUE TO THE VARIABLES BETWEEN BUILDING VERIFICATION WITH THE CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES AND MAY BE MODIFIED BY THE END USER ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE CALIFORNIA GREEN BUILDING VERIFICATION WITH THE FULL CODE. THE END USER ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING STANDARD (CALGREEN) COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING STA

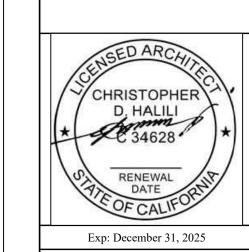


These drawings are, and shall remain, the exclusive property of Christopher D. Halili - Architect and are released for construction purposes only. No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form, or by any means of electronic, photo copying or otherwise, without the prior written permission of Christopher D. Halili - Architect is strictly prohibited. Violators will be subject to compensatory damages thru legal action.

Copyright 2025

Ocean Avenue
3y-The-Sea, California, 93923

~



Description

2022 Calgreen Bldg Standards Code

	Project No.	
	Date	07.22.25
	Drawn	CDH
Γ	SH	EET NUMBER

40.2



2022 Single-Family Residential Mandatory Requirements Summary

NOTE: Single-family residential buildings subject to the Energy Codes must comply with all applicable mandatory measures, regardless of the compliance approach

used. Review th (04/2022)	e respective section for more information.
Suilding Envelo	pe:
§ 110.6(a)1:	Air Leakage. Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 CFM per square foot or less when tested per NFRC-400, ASTM E283, or AAMA/WDMA/CSA 101/I.S.2/A440-2011.*
§ 110.6(a)5:	Labeling. Fenestration products and exterior doors must have a label meeting the requirements of § 10-111(a).
§ 110.6(b):	Field fabricated exterior doors and fenestration products must use U-factors and solar heat gain coefficient (SHGC) values from Tables 110.6-A, 110.6-B, or JA4.5 for exterior doors. They must be caulked and/or weather-stripped.
§ 110.7:	Air Leakage. All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulked, gasketed, or weather stripped.
§ 110.8(a):	Insulation Certification by Manufacturers. Insulation must be certified by the Department of Consumer Affairs, Bureau of Household Goods and Services (BHGS).
§ 110.8(g):	Insulation Requirements for Heated Slab Floors. Heated slab floors must be insulated per the requirements of § 110.8(g).
§ 110.8(i):	Roofing Products Solar Reflectance and Thermal Emittance. The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) and be labeled per §10-113 when the installation of a cool roof is specified on the CF1R.
§ 110.8(j):	Radiant Barrier. When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consumer Affairs.
§ 150.0(a):	Roof Deck, Ceiling and Rafter Roof Insulation. Roof decks in newly constructed attics in climate zones 4 and 8-16 area-weighted average U-factor not exceeding U-0.184. Ceiling and rafter roofs minimum R-22 insulation in wood-frame ceiling; or area-weighted average U-factor must not exceed 0.043. Rafter roof alterations minimum R-19 or area-weighted average U-factor of 0.054 or less. Attic access doors must have permanently attached insulation using adhesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage. Insulation must be installed in direct contact with a roof or ceiling which is sealed to limit infiltration and exfiltration as specified in § 110.7, including but not limited to placing insulation either above or below the roof deck or on top of a drywall ceiling.
§ 150.0(b):	Loose-fill Insulation. Loose fill insulation must meet the manufacturer's required density for the labeled R-value.
§ 150.0(c):	Wall Insulation. Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less, or R-20 in 2x6 inch wood framing or have a U-factor of 0.071 or less. Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102 Masonry walls must meet Tables 150.1-A or B. *
§ 150.0(d):	Raised-floor Insulation. Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor. *
§ 150.0(f):	Slab Edge Insulation. Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone without facings, no greater than 0.3 percent; have a water vapor permeance no greater than 2.0 perm per inch; be protected from physical damage and UV light deterioration; and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g).
\$ 150.0/a\1.	Vapor Retarder. In climate zones 1 through 16, the earth floor of unvented crawl space must be covered with a Class I or Class II

a maximum U-factor of 0.45; or area-weighted average U-factor of all fenestration must not exceed 0.45.

§ 110.5(e)	orative Gas Appliances, and Gas Log: Pilot Light. Continuously burning pilot lights are not allowed for indoor and outdoor fireplaces.
§ 150.0(e)1:	Closable Doors. Masonry or factory-built fireplaces must have a closable metal or glass door covering the entire opening of the firebox.
§ 150.0(e)2:	Combustion Intake. Masonry or factory-built fireplaces must have a combustion outside air intake, which is at least six square inches in area and is equipped with a readily accessible, operable, and tight-fitting damper or combustion-air control device. *
§ 150.0(e)3:	Flue Damper. Masonry or factory-built fireplaces must have a flue damper with a readily accessible control. *

all insulation in all exterior walls, vented attics, and unvented attics with air-permeable insulation.

vapor retarder. This requirement also applies to controlled ventilation crawl space for buildings complying with the exception to

Vapor Retarder. In climate zones 14 and 16, a Class I or Class II vapor retarder must be installed on the conditioned space side of

Fenestration Products. Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must have

Isolation Valves. Instantaneous water heaters with an input rating greater than 6.8 kBtu per hour (2 kW) must have isolation valves with

hose bibbs or other fittings on both cold and hot water lines to allow for flushing the water heater when the valves are closed.

paco conantionii	ig, water reating, and realismig eyetern
§ 110.0-§ 110.3:	Certification. Heating, ventilation, and air conditioning (HVAC) equipment, water heaters, showerheads, faucets, and all other regulated appliances must be certified by the manufacturer to the California Energy Commission. *
§ 110.2(a):	HVAC Efficiency. Equipment must meet the applicable efficiency requirements in Table 110.2-A through Table 110.2-N. *
§ 110.2(b):	Controls for Heat Pumps with Supplementary Electric Resistance Heaters. Heat pumps with supplementary electric resistance heaters must have controls that prevent supplementary heater operation when the heating load can be met by the heat pump alone; and in which the cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating.
§ 110.2(c):	Thermostats. All heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat. *
	Insulation. Unfired service water heater storage tanks and solar water-heating backup tanks must have adequate insulation, or tank

5/6/22

§ 110.3(c)3:

§ 150.0(g)1:



2022 Single-Family Residential Mandatory Requirements Summary

§ 110.5:	Pilot Lights. Continuously burning pilot lights are prohibited for natural gas: fan-type central furnaces; household cooking appliances (except appliances without an electrical supply voltage connection with pilot lights that consume less than 150 Btu per hour); and pool an spa heaters. *
§ 150.0(h)1:	Building Cooling and Heating Loads. Heating and/or cooling loads are calculated in accordance with the ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume; the SMACNA Residential Comfort System Installation Standards Manual; or the ACCA Manual J using design conditions specified in § 150.0(h)2.
§ 150.0(h)3A:	Clearances. Air conditioner and heat pump outdoor condensing units must have a clearance of at least five feet from the outlet of any dryer.
§ 150.0(h)3B:	Liquid Line Drier. Air conditioners and heat pump systems must be equipped with liquid line filter driers if required, as specified by the manufacturer's instructions.
§ 150.0(j)1:	Water Piping, Solar Water-heating System Piping, and Space Conditioning System Line Insulation. All domestic hot water piping must be insulated as specified in § 609.11 of the California Plumbing Code. *
§ 150.0(j)2:	Insulation Protection. Piping insulation must be protected from damage, including that due to sunlight, moisture, equipment` maintenance, and wind as required by §120.3(b). Insulation exposed to weather must be water retardant and protected from UV light (no adhesive tapes). Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must include, or be protected by, a Class I or Class II vapor retarder. Pipe insulation buried below grade must be installed in a waterproof and non-crushable casing or sleeve.
§ 150.0(n)1:	Gas or Propane Water Heating Systems. Systems using gas or propane water heaters to serve individual dwelling units must designate a space at least 2.5' x 2.5' x 7' suitable for the future installation of a heat pump water heater, and meet electrical and plumbing requirements, based on the distance between this designated space and the water heater location; and a condensate drain no more than 2" higher than the base of the water heater
§ 150.0(n)3:	Solar Water-heating Systems. Solar water-heating systems and collectors must be certified and rated by the Solar Rating and Certification Corporation (SRCC), the International Association of Plumbing and Mechanical Officials, Research and Testing (IAPMO

R&T), or by a listing agency that is approved by the executive director. **Ducts and Fans:** Ducts. Insulation installed on an existing space-conditioning duct must comply with § 604.0 of the California Mechanical Code (CMC). If a § 110.8(d)3: contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement. CMC Compliance. All air-distribution system ducts and plenums must meet CMC §§ 601.0-605.0 and ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible 3rd Edition. Portions of supply-air and return-air ducts and plenums must be insulated to R-6.0 or higher; ducts located entirely in conditioned space as confirmed through field verification and diagnostic testing (RA3.1.4.3.8) do not require insulation. Connections of metal ducts and inner core of flexible ducts must be mechanically fastened. Openings must be sealed with mastic, tape, or other duct-closure system that meets the applicable UL requirements, or aerosol sealant that meets UL 723. The combination of mastic and either mesh or tape must be used to seal openings greater than ¼", If mastic or tape is used. Building cavities, air handler support platforms, and plenums designed or constructed with materials other than sealed sheet metal, duct board or flexible duct must not be used to convey conditioned air. Building cavities and support platforms may contain ducts; ducts installed in

these spaces must not be compressed. Factory-Fabricated Duct Systems. Factory-fabricated duct systems must comply with applicable requirements for duct construction, connections, and closures; joints and seams of duct systems and their components must not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands. Field-Fabricated Duct Systems. Field-fabricated duct systems must comply with applicable requirements for: pressure-sensitive tapes mastics, sealants, and other requirements specified for duct construction.

Backdraft Damper. Fan systems that exchange air between the conditioned space and outdoors must have backdraft or automatic § 150.0(m)7: Gravity Ventilation Dampers. Gravity ventilating systems serving conditioned space must have either automatic or readily accessible, § 150.0(m)8: manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents. Protection of Insulation. Insulation must be protected from damage due tosunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather must be suitable for outdoor service (e.g., protected by aluminum, sheet metal, painted canvas, or plastic cover). Cellular foam insulation must be protected as above or painted with a water retardant and solar radiation-resistant coating. Porous Inner Core Flex Duct. Porous inner cores of flex ducts must have a non-porous layer or air barrier between the inner core and

Duct System Sealing and Leakage Test. When space conditioning systems use forced air duct systems to supply conditioned air to an occupiable space, the ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with Reference Residential Appendix RA3.1. Air Filtration. Space conditioning systems with ducts exceeding 10 feet and the supply side of ventilation systems must have MERV 13

2022 Single-Family Residential Mandatory Requirements Summary

Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant with the JA8

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

§ 150.0(k)1G: Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8.

§ 150.0(k)1H: elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.

or equivalent filters. Filters for space conditioning systems must have a two inch depth or can be one inch if sized per Equation 150.0-A. Clean-filter pressure drop and labeling must meet the requirements in §150.0(m)12. Filters must be accessible for regular service. Filter racks or grilles must use gaskets, sealing, or other means to close gaps around the inserted filters to and prevents air from bypassing the

5/6/22



2022 Single-Family Residential Mandatory Requirements Summary

Space Conditioning System Airflow Rate and Fan Efficacy. Space conditioning systems that use ducts to supply cooling must have a hole for the placement of a static pressure probe, or a permanently installed static pressure probe in the supply plenum. Airflow must be ≥ 350 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.45 watts per CFM for gas furnace air handlers and ≤ 0.58 watts per CFM for all others. Small duct high velocity systems must provide an airflow ≥ 250 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.62 watts per CFM. Field verification testing is required in accordance with Reference Residential Appendix RA3.3. *

Ventilation and Indoor Air Quality:

ventilation and in	door Air Quality:
§ 150.0(o)1:	Requirements for Ventilation and Indoor Air Quality. All dwelling units must meet the requirements of ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1. *
§ 150.0(o)1B:	Central Fan Integrated (CFI) Ventilation Systems. Continuous operation of CFI air handlers is not allowed to provide the whole-dwelling unit ventilation airflow required per §150.0(o)1C. A motorized damper(s) must be installed on the ventilation duct(s) that prevents all airflow through the space conditioning duct system when the damper(s) is closed and controlled per §150.0(o)1Biii&iv. CFI ventilation systems must have controls that track outdoor air ventilation run time, and either open or close the motorized damper(s) for compliance with §150.0(o)1C.
§ 150.0(o)1C:	Whole-Dwelling Unit Mechanical Ventilation for Single-Family Detached and townhouses. Single-family detached dwelling units, and attached dwelling units not sharing ceilings or floors with other dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilation airflow specified in § 150.0(o)1Ci-iii.
§ 150.0(o)1G:	Local Mechanical Exhaust. Kitchens and bathrooms must have local mechanical exhaust; nonenclosed kitchens must have demand-controlled exhaust system meeting requirements of §150.0(o)1Giii,enclosed kitchens and bathrooms can use demand-controlled or continuous exhaust meeting §150.0(o)1Giii-iv. Airflow must be measured by the installer per §150.0(o)1Gv, and rated for sound per §150.0(o)1Gvi. *
§ 150.0(o)1H&I:	Airflow Measurement and Sound Ratings of Whole-Dwelling Unit Ventilation Systems. The airflow required per § 150.0(o)1C mube measured by using a flow hood, flow grid, or other airflow measuring device at the fan's inlet or outlet terminals/grilles per Reference Residential Appendix RA3.7. Whole-Dwelling unit ventilation systems must be rated for sound per ASHRAE 62.2 §7.2 at no less than the minimum airflow rate required by §150.0(o)1C.
	minimum airnow rate required by § 150.0(0) rc.

Field Verification and Diagnostic Testing. Whole-Dwelling Unit ventilation airflow, vented range hood airflow and sound rating,

and HRV and ERV fan efficacy must be verified in accordance with Reference Residential Appendix RA3.7. Vented range hoods

must be verified per Reference Residential Appendix RA3.7.4.3 to confirm if it is rated by HVI or AHAM to comply with the airflow

rates and sound requirements per §150.0(o)1G Pool and Spa Systems and Equipment:

§ 150.0(o)2:

§ 110.4(a):	Certification by Manufacturers. Any pool or spa heating system or equipment must be certified to have all of the following: compliance with the Appliance Efficiency Regulations and listing in MAEDbS; an on-off switch mounted outside of the heater that allows shutting off the heater without adjusting the thermostat setting; a permanent weatherproof plate or card with operating instructions; and must not use electric resistance heating. *
§ 110.4(b)1:	Piping. Any pool or spa heating system or equipment must be installed with at least 36 inches of pipe between the filter and the heater, or dedicated suction and return lines, or built-in or built-up connections to allow for future solar heating.
§ 110.4(b)2:	Covers. Outdoor pools or spas that have a heat pump or gas heater must have a cover.
§ 110.4(b)3:	Directional Inlets and Time Switches for Pools. Pools must have directional inlets that adequately mix the pool water, and a time switch that will allow all pumps to be set or programmed to run only during off-peak electric demand periods.
§ 110.5:	Pilot Light. Natural gas pool and spa heaters must not have a continuously burning pilot light.
§ 150.0(p):	Pool Systems and Equipment Installation. Residential pool systems or equipment must meet the specified requirements for pump sizing, flow rate, piping, filters, and valves. *

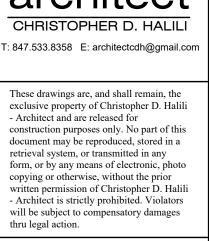
Lighting:	
§ 110.9:	Lighting Controls and Components. All lighting control devices and systems, ballasts, and luminaires must meet the applicable requirements of § 110.9.*
§ 150.0(k)1A:	Luminaire Efficacy. All installed luminaires must meet the requirements in Table 150.0-A, except lighting integral 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 line closets with an efficacy of at least 45 lumens per watt.
§ 150.0(k)1B:	Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. *
§ 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 § 410.116 must also be met.
§ 150.0(k)1D:	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 be installed in enclosed or recessed luminaires.
§ 150.0(k)1E:	Blank Electrical Boxes. The number of electrical boxes that are more than five feet above the finished floor and do not contain a luminaire or other device shall be no more than the number of bedrooms. These boxes must be served by a dimmer, vacancy sensor control, low voltage wiring, or fan speed control.
§ 150.0(k)1F:	Lighting Integral to Exhaust Fans. Lighting integral to exhaust fans (except when installed by the manufacturer in kitchen exhaust hoods) must meet the applicable requirements of § 150.0(k).



2022 Single-Family Residential Mandatory Requirements Summary

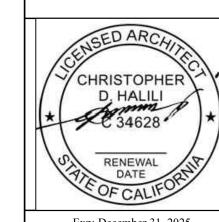
§ 150.0(s)	Energy Storage System (ESS) Ready. All single-family residences must meet all of the following: Either ESS-ready interconnection equipment with backed up capacity of 60 amps or more and four or more ESS supplied branch circuits, <u>or</u> a dedicated raceway from the main service to a subpanel that supplies the branch circuits in § 150.0(s); at least four branch circuits must be identified and have their source collocated at a single panelboard suitable to be supplied by the ESS, with one circuit supplying the refrigerator, one lighting circuit near the primary exit, and one circuit supplying a sleeping room receptacle outlet; main panelboard must have a minimum busbar rating of 225 amps; sufficient space must be reserved to allow future installation of a system isolation equipment/transfer switch within 3' of the main
§ 150.0(t)	panelboard, with raceways installed between the panelboard and the switch location to allow the connection of backup power source. Heat Pump Space Heater Ready. Systems using gas or propane furnaces to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit conductors rated at least 30 amps with the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."
§ 150.0(u)	Electric Cooktop Ready. Systems using gas or propane cooktop to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors rated at least 50 amps with the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."
§ 150.0(v)	Electric Clothes Dryer Ready. Clothes dryer locations with gas or propane plumbing to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer location with circuit conductors rated at least 30 amps with the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."

*Exceptions may apply.



Copyright 2025

3



Exp: December 31, 2025

Description

2022 SFR Mandatory Requirements Summary

Project No.	_
Date	07.22.25
Drawn	CDH

SHEET NUMBER

power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the drawer, cabinet or

150.0(k)2A: 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 separately from lighting systems. Accessible Controls. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually turned § 150.0(k)2A: Multiple Controls. Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sensor is installed § 150.0(k)2B: to comply with § 150.0(k). § 150.0(k)2C: Mandatory Requirements. Lighting controls must comply with the applicable requirements of § 110.9.

Energy Management Control Systems. An energy management control system (EMCS) may be used to comply with dimming, § 150.0(k)2D: occupancy, and control requirements if it provides the functionality of the specified control per § 110.9 and the physical controls specified Automatic Shutoff Controls. In bathrooms, garages, laundry rooms, utility rooms and walk-in closets, at least one installed luminaire § 150.0(k)2E: must be controlled by an occupancy or vacancy sensor providing automatic-off functionality. Lighting inside drawers and cabinets with 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-§ 150.0(k)2F: mounted dimming controls that allow the lighting to be manually adjusted up and down. Forward phase cut dimmers controlling LED light sources in these spaces must comply with NEMA SSL 7A. § 150.0(k)2K: Independent controls. Integrated lighting of exhaust fans shall be 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. Residential Outdoor Lighting. For single-family residential buildings, outdoor lighting permanently mounted to a residential building, or to

§ 150.0(k)3A: other buildings on the same lot, must have a manual on/off switch and 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. Internally illuminated address signs. Internally illuminated address signs must either comply with § 140.8 or consume no more than 5 § 150.0(k)4: Residential Garages for Eight or More Vehicles. Lighting for residential parking garages for eight or more vehicles must comply with the applicable requirements for nonresidential garages in §§ 110.9, 130.0, 130.1, 130.4, 140.6, and 141.0.

Single-family Residences. Single-family residences located in subdivisions with 10 or more single-family residences and where the § 110.10(a)1: application for a tentative subdivision map for the residences has been deemed complete and approved by the enforcement agency, which do not have a photovoltaic system installed, must comply with the requirements of § 110.10(b)-(e) Minimum Solar Zone Area. The solar zone must have a minimum total area as described below. The solar zone must comply with access, pathway, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other parts of Title 24 or in any requirements adopted by a local jurisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 \$110.10(b)1A: square feet each for buildings with roof areas greater than 10,000 square feet. For single-family residences, the solar zone must be located on the roof or overhang of the building and have a total area no less than 250 square feet. *

§ 110.10(b)2: Azimuth. All sections of the solar zone located on steep-sloped roofs must have an azimuth between 90-300° of true north. § 110.10(b)3A: Shading. The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and roof mounted equipment. *

Shading. Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at least twice the § 110.10(b)3B: horizontal distance of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in the vertical plane.* Structural Design Loads on Construction Documents. For areas of the roof designated as a solar zone, the structural design loads for

roof dead load and roof live load must be clearly indicated on the construction documents. Interconnection Pathways. The construction documents must indicate: a location reserved for inverters and metering equipment and a pathway reserved for routing of conduit from the solar zone to the point of interconnection with the electrical service; and for single-family residences and central water-heating systems, a pathway reserved for routing plumbing from the solar zone to the water-heating system. **Documentation.** A copy of the construction documents or a comparable document indicating the information from § 110.10(b)-(c) must be

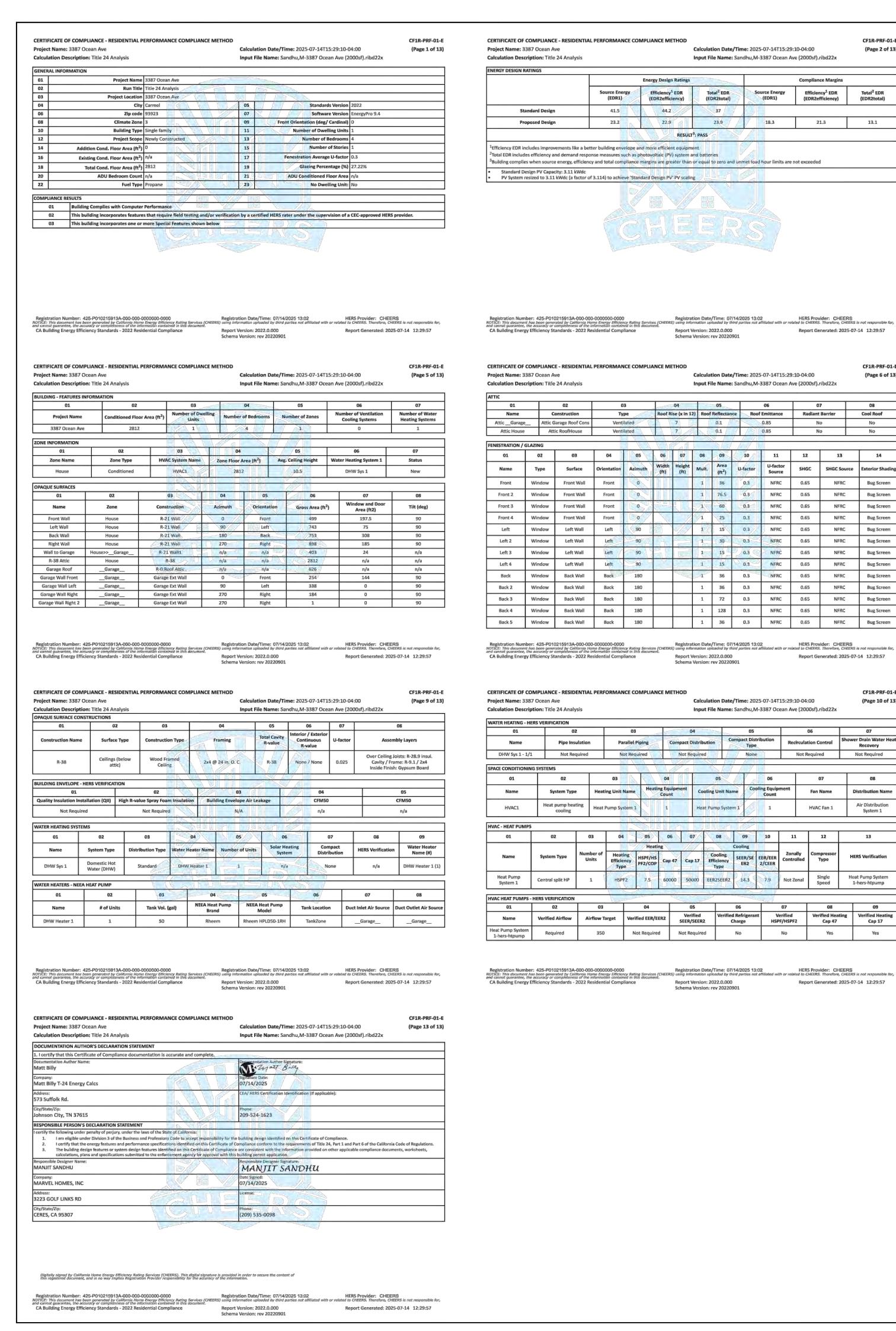
§ 110.10(d): provided to the occupant. § 110.10(e)1: Main Electrical Service Panel. The main electrical service panel must have a minimum busbar rating of 200 amps. Main Electrical Service Panel. The main electrical service panel must have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation. The reserved space must be permanently marked as "For Future Solar Electric."

Electric and Energy Storage Ready:

5/6/22

§ 150.0(k)5:

5/6/22



- RESIDENTIAL	. PERFORMANCE CO		-	ne: 2025-07-14T15:29: dhu,M-3387 Ocean Ai		CF1R-PRF-01-E (Page 2 of 13)	CERTIFICATE OF COMPL Project Name: 3387 Oce Calculation Description:	ean Ave	RMANCE COMPLIANCE METH	CE COMPLIANCE METHOD Calculation Date/Time: 2025-07-14T15:29:10-04:00 Input File Name: Sandhu,M-3387 Ocean Ave (2000sf).ribd22x									
					:		ENERGY USE SUMMARY												
-		Energy Design Ratings			Compliance Margins		Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft ² -yr)	Standard Design TDV Energy (EDR2) (kTDV/ft ² -yr)	Proposed Design Source Energy (EDR1) (kBtu/ft ² -yr)	Proposed Design TDV Energy (EDR2) (kTDV/ft ² -yr)	Margin (EDR1)							
	Source Energy (EDR1)	Efficiency ¹ EDR (EDR2efficiency)	Total ² EDR (EDR2total)	Source Energy (EDR1)	Efficiency ¹ EDR (EDR2efficiency)	Total ² EDR (EDR2total)	Space Heating	7.57	51.01	1.74	12.51	5.83							
	41.5	44.2	37				Space Cooling	0	0	0.12	9.82	-0.12							
	23.2	22.9	23.9	18.3	21.3	13.1	IAQ Ventilation	0.32	3.44	0.32	3.44	0							
		RESULT	3: PASS				Water Heating	1.27	14.51	0.85	9.96	0.42							
d demand respo	nse measures such as p	nd more efficient equipments obtained by the system at margins are greater than	nd batteries	not load hour limits are	not exceeded		Self Utilization/Flexibility Credit			0	0	o							
y: 3.11 kWdc		ndard Design PV' PV scalin	2 0	and minus are	ing exceeded		Efficiency Compliance Total	9.16	68.96	3.03	35.73	6.13							
-					:		Photovoltaics	-0.95	-29.66	-0.95	-29.58								
							Battery				o								
							Flexibility			0									
			ER				Indoor Lighting	0.7	7.24	0.7	7.24								
			IS IN				Appl. & Cooking	2.53	20.57	2.55	20.76								
							Plug Loads	2.27	24.08	2.27	24.08								
							Outdoor Lighting	0.18	1.75	0.18	1.75								
							TOTAL COMPLIANCE	13.89	92.94	7.78	59.98								

Project Name: 3387 Ocean Ave

HVAC - DISTRIBUTION SYSTEMS

Air Distribution

System 1

Air Distribution

HVAC - FAN SYSTEMS

System 1-hers-dist

Calculation Description: Title 24 Analysis

HVAC DISTRIBUTION - HERS VERIFICATION

CA Building Energy Efficiency Standards - 2022 Residential Compliance

Unconditioned

02

Verification

HVAC Fan 1

Name

Registration Number: 425-P010215913A-000-000-0000000-0000 OTICE: This document has been generated by California hance Energy Efficiency Rating Services (Canded cannot guarantee, the accuracy or completeness of the information contained in this document. CA Building Energy Efficiency Standards - 2022 Residential Compliance

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Non-Verified

03

Target (%)

Location

HVAC Fan

Report Generated: 2025-07-14 12:29:57

CF1R-PRF-01-E

(Page 6 of 13)

Cool Roof

Bug Screen

Bug Screen

Bug Screen

Bug Screen

Bug Screen

Bug Screen

Bug Screen

Bug Screen

Bug Screen

CF1R-PRF-01-E

(Page 10 of 13)

Shower Drain Water Hea

Recovery

Distribution Nam

Air Distribution

1-hers-htpump

SHGC Source Exterior Shadin

NFRC Bug Screen

NFRC

NFRC

NFRC

NFRC

Report Generated: 2025-07-14 12:29:57

Recirculation Control

07

Fan Name

HVAC Fan 1

Verified Heating Cap 47

Report Generated: 2025-07-14 12:29:57

NFRC Bug Screen

Report Version: 2022.0.000

Schema Version: rev 20220901

Calculation Date/Time: 2025-07-14T15:29:10-04:00

U-factor

1 76,5 0,3 NFRC 0.65

1 60 0.3 NFRC 0.65

1 30 0.3 NFRC

1 25 0.3 NFRC 0.65

1 15 0.3 NFRC 0.65

1 15 0.3 NFRC 0.65

1 128 0.3 NFRC 0.65

Input File Name: Sandhu, M-3387 Ocean Ave (2000sf).ribd22x

06

1 36 0.3 NFRC 0.65

1 36 0.3

1 15 0.3

1 36 0.3

Report Version: 2022.0.000

Compact Distribution

04

Heating

Verified EER/EER2

Not Required

05

Cooling Unit Name

Heat Pump System 1

03 04 05 06 07 08 09 10 11 12

Number of Units Heating HSPF/HS Efficiency Type Cap 47 Cap 17 Cap 17 Efficiency Type Controlled Compressor Type Controlled Contro

05

Verified SEER/SEER2

Not Required

Report Version: 2022.0.000

Schema Version: rev 20220901

7.5 60000 50000 EER2SEER2 14.3 7.9 Not Zonal

06

Charge

Verified HSPF/HSPF2

No

Schema Version: rev 20220901

36 0.3

72 0.3

Front 0

Left 90

90

Parallel Piping

03

Heating Unit Name

Heat Pump System 1

Airflow Target

Left

Input File Name: Sandhu, M-3387 Ocean Ave (2000sf).ribd22x

U-factor Source

NFRC

NFRC

NFRC

NFRC 0.65

NFRC 0.65

SHGC

Registration Number: 425-P010215913A-000-000-0000000-0000 NUMBER: 425-P010215913A-000-000-000000-0000 NUMBER: This document has been generated by California Home Energy Efficiency Rating Services (CHEE ADMINISTRATION CONTINUED IN THE ADMINISTRATION OF THE ADMINIST

Registration Number: 425-P010215913A-000-000-0000000-0000

Registration Date/Time: 07/14/2025 13:02

ROTICE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information uploaded by third parties not affiliand contained in this document.

Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft ² -yr)	Standard Design TDV Energy (EDR2) (kTDV/ft ² -yr)	Proposed Design Source Energy (EDR1) (kBtu/ft ² -yr)	Proposed Design TDV Energy (EDR2) (kTDV/ft ² -yr)	Margin (EDR1)	Margin (EDR
Space Heating	7.57	51.01	1.74	12.51	5.83	38.5
Space Cooling	0	9	0.12	9.82	-0.12	-9.82
IAQ Ventilation	0.32	3.44	0.32	3.44	0	0
Water Heating	1.27	14.51	0.85	9.96	0.42	4.55
Self Utilization/Flexibility Credit			0	0	0	0
Efficiency Compliance Total	9.16	68.96	3.03	35.73	6.13	33.23
Photovoltaics	-0.95	-29.66	-0.95	-29.58		
Battery				0		
Flexibility			0			
Indoor Lighting	0.7	7.24	0.7	7,24		
Appl. & Cooking	2.53	20.57	2.55	20.76		
Plug Loads	2.27	24.08	2.27	24.08		
Outdoor Lighting	0.18	1.75	0.18	1.75	_	
TOTAL COMPLIANCE	13.89	92.94	7.78	59.98		

Report Version: 2022.0.000

Report Version: 2022.0.000

03 04 05 06 07 08 09 10

Design

Not Required

Verified Fan Watt Draw

Schema Version: rev 20220901

Schema Version: rev 20220901

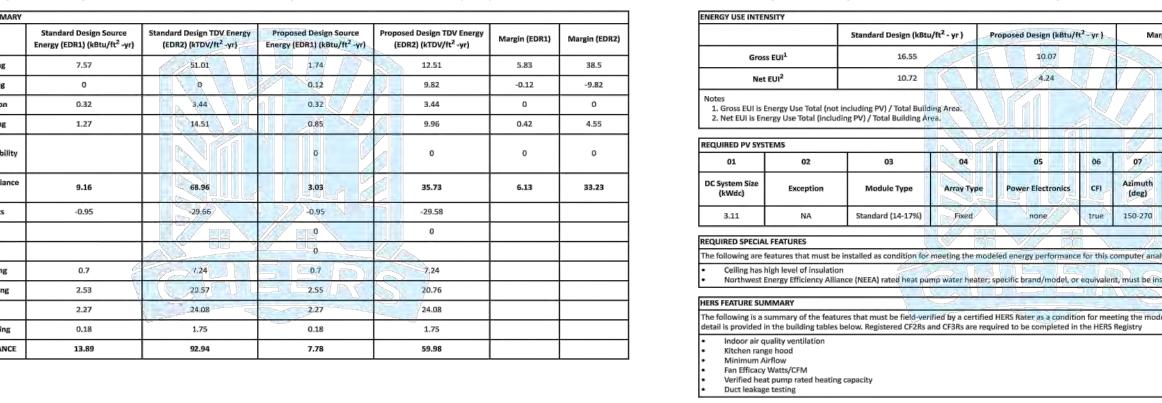
Ducts

Credit not taken

0.45

Schema Version: rev 20220901

Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft² -yr)	Standard Design TDV Energy (EDR2) (kTDV/ft²-yr)	Proposed Design Source Energy (EDR1) (kBtu/ft ² -yr)	Proposed Design TDV Energy (EDR2) (kTDV/ft ² -yr)	Margin (EDR1)	Margin (EDR2
Space Heating	7.57	51.01	1.74	12.51	5.83	38.5
Space Cooling	0	9	0.12	9.82	-0.12	-9.82
IAQ Ventilation	0.32	3.44	0.32	3.44	0	0
Water Heating	1.27	14.51	0.85	9.96	0.42	4.55
Self Utilization/Flexibility Credit			0	0	0	0
Efficiency Compliance Total	9.16	68.96	3.03	35.73	6.13	33.23
Photovoltaics	-0.95	-29.66	-0.95	-29.58		
Battery				0		
Flexibility			0			
Indoor Lighting	0.7	1.24	0.7	7.24		
Appl. & Cooking	2.53	20.57	2.55	20.76		
Plug Loads	2.27	24.08	2.27	24.08		
Outdoor Lighting	0.18	1.75	0.18	1.75		
TOTAL COMPLIANCE	13.89	92.94	7.78	59.98		



Report Generated: 2025-07-14 12:29:57

Report Generated: 2025-07-14 12:29:57

Handler

Required Fan Efficacy (Watts/CFM)

Report Generated: 2025-07-14 12:29:57

CF1R-PRF-01-E

Space

Name

HVAC Fan 1-hers-fan

Y USE SUMMARY							ENERGY USE INTEN	ISITY										
Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft² -yr)	Standard Design TDV Energy (EDR2) (kTDV/ft² -yr)	Proposed Design Source Energy (EDR1) (kBtu/ft ² -yr)	Proposed Design TDV Energy (EDR2) (kTDV/ft ² -yr)	Margin (EDR1)	Margin (EDR2)			Standard Design (kBtu	/ft²-yr) F	roposed Design (kBtu/f	t²-yr}	Mar	gin (kBtu,	/ft ² - yr)	N	Margin Percent	tage
pace Heating	7.57	51.01	1.74	12.51	5.83	38.5	Gross	EUI ¹	16.55		10.07		2	6.48	:		39.15	
pace Cooling	0	0	0.12	9.82	-0.12	-9.82	Net	EUI ²	10.72		4.24	11		6.48			60.45	
Q Ventilation	0.32	3.44	0.32	3.44	0	0	Notes 1. Gross EUI is Energy Use Total (not including PV) / Total Building Area.											
ater Heating	1.27	14.51	0.85	9.96	0.42	4.55	2. Net EUI is Ene	ergy Use Total (includ	ding PV) / Total Building Ar						-:			
Self ation/Flexibility					0	0	REQUIRED PV SYST	EMS			Á				-			
Credit					ľ	"	01	02	03	04	05	06	07	08	09	10	11	12
ency Compliance Total	9.16	68.96	3.03	35.73	6.13	33.23	DC System Size (kWdc)	Exception	Module Type	Array Type	Power Electronics	CFI	Azimuth (deg)	Tilt Input	Array Angle (deg)	Tilt: (x in 12)	Inverter Eff. (%)	Annual Solar Access (%)
hotovoltaics	-0.95	-29.66	-0.95	-29.58			3.11	NA	Standard (14-17%)	Fixed	none	true	150-270	n/a	n/a	<=7:12	96	98
Battery				0														
Flexibility				1/1/2			REQUIRED SPECIAL							7				
	/								installed as condition for	meeting the mode	eled energy performanc	e for this c	omputer anal	ysis.				
door Lighting	0.7	7.24	0.7	7.24				igh level of insulatio nergy Efficiency Allia	n ince (NEEA) rated heat pur	np water heater;	specific brand/model, or	equivalen	t, must be ins	talled				
pl. & Cooking	2.53	20.57	2.55	20.76				-					TAT	1				
Plug Loads	2.27	24.08	2.27	24.08			HERS FEATURE SUM											
tdoor Lighting	0.18	1.75	0.18	1.75					res that must be field-veri below. Registered CF2Rs a					eled ener	gy performanc	e for this comp	outer analysis.	Additional
L COMPLIANCE	13.89	92.94	7.78	59.98			Indoor air qu Kitchen rang	ality ventilation										
					<u> </u>	1	Minimum Ai Fan Efficacy	rflow Watts/CFM t pump rated heating	g capacity									

CF1R-PRF-01-E

(Page 3 of 13)

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Registration Number: 425-P010215913A-000-000-000000-00000 Registration Date/Time: 07/14/2025 13:02 ROTICE: This document has been generated by California Hame Energy Efficiency Rating Services (CHEERS) using information uploaded by third parties not affiliated cannot guarantee, the accuracy or completeness of the information contained in this document.

Report Version: 2022.0.000

Schema Version: rev 20220901

CA Building Energy Efficiency Standards - 2022 Residential Compliance

Registration Number: 425-P010215913A-000-000-0000000-0000

Project Name: 3387 Ocean Ave

Calculation Description: Title 24 Analysis

CERTIFICATE O			. PERFORMAI	NCE COMPL	ANCE M	IETHO		1	6				CF1R-PRF-01-E	CERTIFICATE OF COMPL		L PERFORMANCE COM						CF1R-PRF-01-E
Project Name:	3387 Ocean A	/e					Calc	ulation Da	te/Time: 20)25-07-14T15:29	9:10-04:00		(Page 7 of 13)	Project Name: 3387 Oc	ean Ave			Calculation Date/Tin	ne: 2025-07-14T1	.5:29:10-04	:00	(Page 8 of 13)
Calculation Des	scription: Title	24 Analysis					Inpu	it File Nar	ne: Sandhu,	M-3387 Ocean A	we (2000sf).rii	ibd22x	Calculation Description: Title 24 Analysis Input File Name: Sandhu,M-3387 Ocean Ave (2000sf).ribd22x								00sf).ribd22x	
FENESTRATION /	GLAZING													SLAB FLOORS								
01	02	03	04	05	06	0	7 08	3 09	10	11	12	13	14	01	02	03	04	05	06		07	08
Name	Туре	Surface	Orientation	Azimuth	Width (ft)	Hei (f		lt. Area	U-facto	U-factor Source	sнgc	SHGC Source	Exterior Shading	Name	Zone	Area (ft ²)	Perimeter (ft)	Edge Insul. R-value and Depth	Edge Insul. R-va and Depth	C	rpeted Fraction	Heated
Right	Window	Right Wall	Right	270			1	72	0.3	NFRC	0.65	NFRC	Bug Screen	Garage Slab	Garage	626	78	none	0		0%	No
Right 2	Window	Right Wall	Right	270	1	1/	1	15	0.3	NFRC	0.65	NFRC	Bug Screen									
	-			1		47			1 1				-	OPAQUE SURFACE CONST								
Right 3	Window	Right Wall	Right	270	3 /	1 1	1	15	0.3	NFRC	0.65	NFRC	Bug Screen	01	02	03	04	05	06	07		08
Right 4	Window	Right Wall	Right	270		7	1	30	0.3	NFRC	0.65	NFRC	Bug Screen	Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assem	bly Layers
Right 5	Window	Right Wall	Right	270			1.	15	0.3	NFRC	0.65	NFRC	Bug Screen		-				K-value	1		
Right 6	Window	Right Wall	Right	270			1	8	0.3	NFRC	0,65	NFRC	Bug Screen	Garage Ext Wall	Exterior Walls	Wood Framed Wall	2x4 @ 16 ln. O. C	. R-0	None / None	0.361	Cavity / Fram	: Gypsum Board e: no insul. / 2x4 h: 3 Coat Stucco
Right 7	Window	Right Wall	Right	270		100	1	15	0.3	NFRC	0.65	NFRC	Bug Screen							-		
Right 8	Window	Right Wall	Right	270		N	7/1	15	0,3	NFRC	0.65	NFRC	Bug Screen	R-21 Wall	Exterior Walls	Wood Framed Wall	2x6 @ 16 in. O. C	R-21	None / None	0.069	Cavity / Fra	: Gypsum Board me: R-21 / 2x6 h: 3 Coat Stucco
OPAQUE DOORS						7									<u> </u>					<u> </u>		
0175200015	01			02		1			03			04		R-21 Wall1	Interior Walls	Wood Framed Wall	2x6 @ 16 in. O. C	R-21	None / None	0.064	Cavity / Fra	: Gypsum Board me: R-21 / 2x6 sh: Gypsum Board
	Name		E Partie	Side of Build	ling				Area (ft ²)			U-factor				[] -]				-		
	To Garage Garage Door			Wall to Gara Garage Wall I					72	5) /-		0.5		Attic Garage Roof Cons	Attic Roofs	Wood Framed Ceiling	2x4 @ 24 in, O. C	LE INTO	None / 0	0.644	Roof D	oof (Asphalt Shingle) eck: Wood athing/decking
	Garage Door 2			Garage Wall I	ront	Circles .		in the same of the	- 72	j		0.7										e: no insul. / 2x4
SLAB FLOORS			المستحدثا	:						3						Wood Framed		a distribution of the second o				oof (Asphalt Shingle) eck: Wood
01		02	03		04	,		05		06	07	7	08	Attic RoofHouse	Attic Roofs	Ceiling	2x4 @ 24 in. Q. C	2. R-O	None/0	0.644	Siding/shea	athing/decking e: no insul. / 2x4
Name		Zone	Area (ft	·)	Perimete	er (ft)	Ed	ge Insul. R and Dept		ge Insul. R-value and Depth	Carpeted	Fraction	Heated	R-O Roof Attic	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C	. R-0	None / None	0.481		e: no insul. / 2x4 : Gypsum Board
Slab-on-Grad	de	Hause	2812	l l	289	9		none	- 1	0	809	%	No									

NOTICE: This document has been generated by California Home Energy Efficiency Rating Services (C and cannot guarantee, the accuracy or completeness of the information contained in this document.	HEERS) using information uploaded by third parties not affilials	ed with or related to CHEERS. Therefore, CHEER	S is not responsible for,
CA Building Energy Efficiency Standards - 2022 Residential Compliance	Report Version: 2022.0.000 Schema Version: rev 20220901	Report Generated: 2025-0	
CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE	E METHOD		CF1R-PRF-01-E
Project Name: 3387 Ocean Ave	Calculation Date/Time: 2025-07-	14T15:29:10-04:00	(Page 12 of 13)
Calculation Description: Title 24 Analysis	Input File Name: Sandhu, M-3383	Ocean Ave (2000sf).ribd22x	

Registration Date/Time: 07/14/2025 13:02

							5-07-14T15:29:10-04 3387 Ocean Ave (20		(Page 11 of 13)	Project Nam		on: Title 24 Analys	ie		Calculati Input File	(Page 12 of 13)			
				inpaction	e Italiie. 3	zanunu,ivi-	3307 Ocean Ave (20	ioosi jii ibuzzk		INDOOR AIR			13		mpacrii	e Hanne, Januara, Wi	5567 Ocean Ave (201	30313.11DUZZX	
Т	04	05	06	07	08	09	10	11	12	01		02	03	04	05	06	07	08	09
-	- N	R-value Return		ocation Return	120	ce Area Return	Bypass Duct	Duct Leakage	HERS Verification	Dwelling	Jnit	Airflow (CFM)	Fan Efficacy (W/CFM)	IAQ Fan Type	Includes Heat/Energy Recovery?	IAQ Recovery Effectiveness - SRE/ASRE	Includes Fault Indicator Display?	HERS Verification	Status
	R-6	R-6	Attic	Attic	n/a	n/a	No Bypass Duct	Sealed and Tested	Air Distribution System 1-hers-dist	SFam IAQVe	ntRpt	116	0.35	Exhaust	No	n/a / n/a	No	Yes	
i	A	1		200															
	0	4	NU.)5		06	07	08	09										
	Verifie	d Duct	Verifi	ed Duct	Burie	d Ducts	Deeply Buried	Low-leakage Air	Low Leakage Ducts Entirely in							1			

Registration Number: 425-P010215913A-000-000-000000-0000
NOTICE: This document has been generated by Colifornia Home Energy Efficiency Rating Services (C and cannot guarantee, the accuracy or completeness of the information contained in this document, CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Report Generated: 2025-07-14 12:29:57 Schema Version: rev 20220901

Sno ndpu a P Sa B Mani

CF1R-PRF-01-E

Report Generated: 2025-07-14 12:29:57

HERS Provider: CHEERS

(Page 4 of 13)

 \sim

3

 ∞

3

3

B

0

0

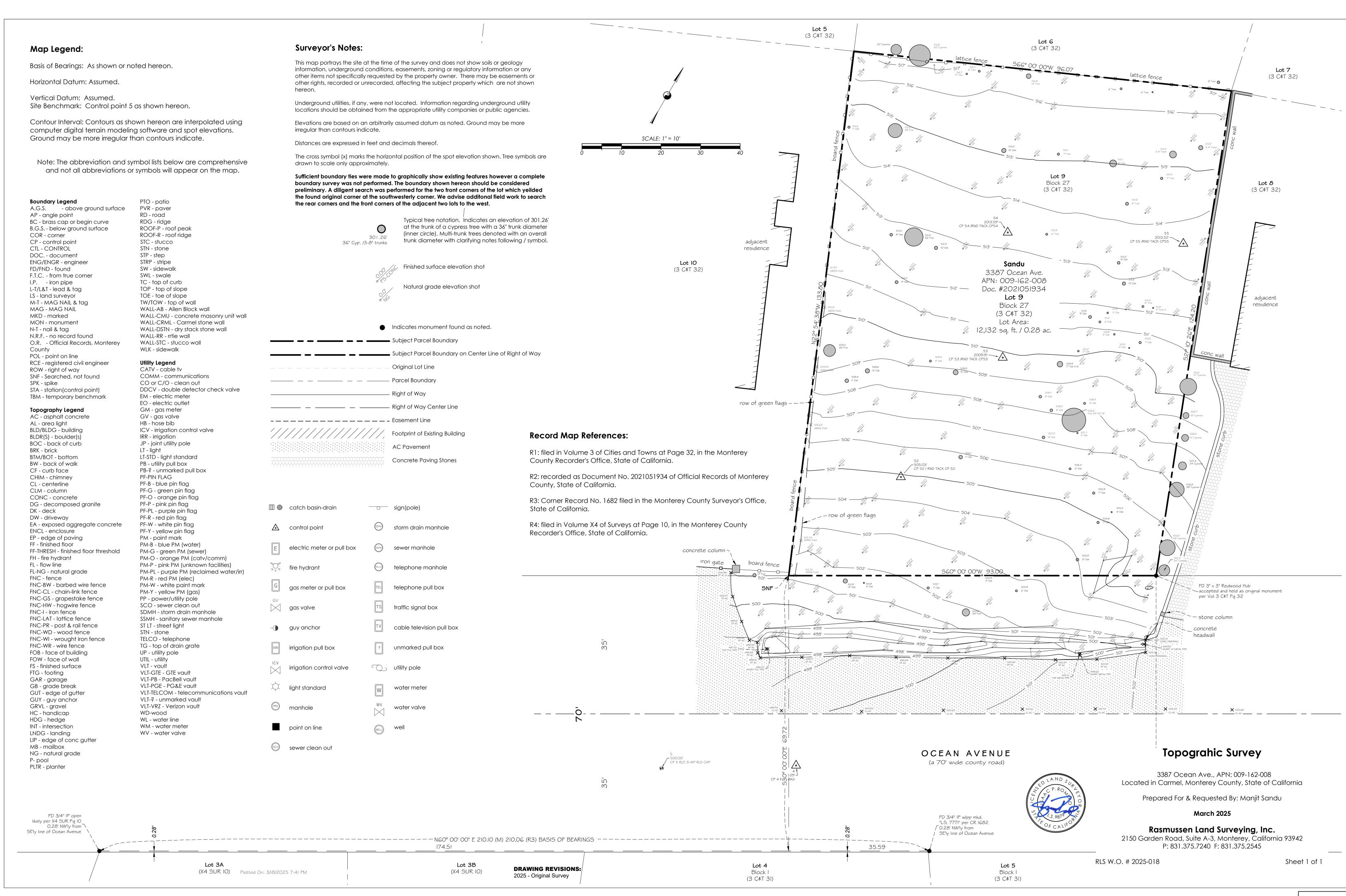
Calculation Date/Time: 2025-07-14T15:29:10-04:00

Input File Name: Sandhu, M-3387 Ocean Ave (2000sf).ribd22x

REVISIONS remarks no. date **AUTHOR:** MBDATE: 7/14/25 JOB NO: 25025 SHEET TITLE

ENERGY CALCULATIONS

SHEET

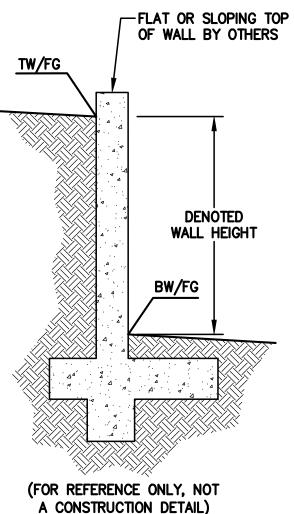


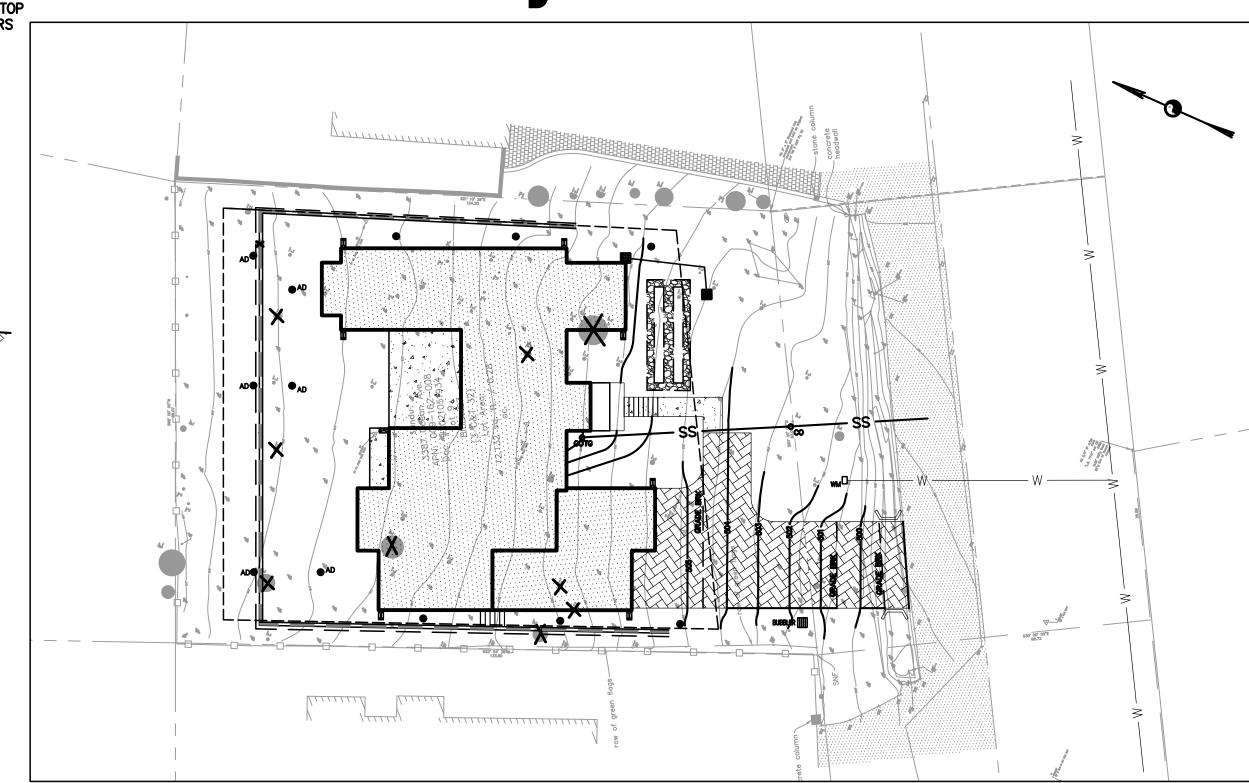
NEW RESIDENCE 3387 OCEAN AVENUE CARMEL, CALIFORNIA

RETAINING WALL NOTES

- 1. TW/FG REPRESENTS FINISHED EARTHEN GRADE OR PAVEMENT ELEVATION AT TOP OF WALL, NOT ACTUAL TOP OF WALL MATERIAL. BW/FG REPRESENTS FINISH EARTHEN GRADE OR PAVEMENT ELEVATION AT BOTTOM OF WALL NOT INCLUDING FILL FOUNDATION. GRADES INDICATED ON THESE PLANS REFER TO THE FINISHED GRADES ADJACENT TO THE RETAINING WALL, NOT INCLUDING FOOTING, FREEBOARD, ETC.
- 2. GRADES SHOWN ON PLAN AS TW X.XX & BW X.XX REPRESENT DENOTED WALL HEIGHT ONLY. THE ACTUAL WALL HEIGHT AND DEPTH MAY DIFFER DUE TO CONSTRUCTION REQUIREMENTS.
- 3. REFER TO SPECIFIC WALL CONSTRUCTION DETAIL FOR STRUCTURAL ELEMENTS, FREEBOARD, AND EMBEDMENT.
- 4. REFER TO ARCHITECTURAL, LANDSCAPE ARCHITECTURE, AND/OR STRUCTURAL PLANS FOR DETAILS, WALL ELEVATIONS, SUBDRAINAGE, WATERPROOFING, FINISHES, COLORS, STEEL REINFORCING, MATERIALS, ETC. PROVIDE CLIPS OR OTHER MEANS OF SECURING FINISH MATERIALS AS NECESSARY (WET SET INTO THE WALL).
- 5. ALL RETAINING WALLS SHOULD HAVE A BACK-OF-WALL SUB-SURFACE DRAINAGE SYSTEM INCLUDING WEEPHOLES TO PREVENT HYDROSTATIC PRESSURE.
- 6. SEE DETAIL SHEET FOR SPECIFIC INFORMATION.
- 7. PROVIDE GUARDRAIL (WHERE APPLICABLE AND DESIGNED BY OTHERS) AS REQUIRED FOR GRADE SEPARATION OF 30 INCHES OR MORE MEASURED 5' HORIZONTALLY FROM FACE OF WALL, PER CBC.

EXISTING





KEY MAP

BOUNDARY ______ PROPERTY LINE **RETAINING WALL** LANDSCAPE RETAINING WALL SUBDRAIN LINE TIGHTLINE STORM DRAIN LINE SANITARY SEWER LINE WATER LINE GAS LINE PRESSURE LINE JOINT TRENCH SET BACK LINE **~>· ~>· ~>** CONCRETE VALLEY GUTTER ~>· ~>· ~> ~>· ~>· ~> **~>· ~>· ~>** SWALE FLOW DIRECTION CATCH BASIN JUNCTION BOX AREA DRAIN SQUARE AREA DRAIN CURB INLET STORM DRAIN MANHOLE FIRE HYDRANT \bigcirc_{SSMH} SANITARY SEWER MANHOLE STREET SIGN SPOT ELEVATION FLOW DIRECTION **BENCHMARK** CONTOURS

LEGEND

<u>PROPOSED</u>

DESCRIPTION

TREE TO BE REMOVED

ABBREVIATIONS

4.5	1000E01TE D10E	. –	
AB	AGGREGATE BASE	LF	LINEAL FEET
AC	ASPHALT CONCRETE	MAX	MAXIMUM
ACC	ACCESSIBLE	MH	MANHOLE
AD	AREA DRAIN	MIN	MINIMUM
BC	BEGINNING OF CURVE	MON.	MONUMENT
B & D	BEARING & DISTANCE	(N)	NEW
BM	BENCHMARK		
		NO.	NUMBER
BW/FG	BOTTOM OF WALL/FINISH GRADE	NTS	NOT TO SCALE
CB	CATCH BASIN	O.C.	ON CENTER
C & G	CURB AND GUTTER	0/	OVER
©	CENTER LINE	(PA)	PLANTING AREA
CPP	CORRUGATED PLASTIC PIPE	ĎFĎ	PEDESTRIAN
•••	(SMOOTH INTERIOR)	PIV	POST INDICATOR VALVE
00	(SMOOTH INTERIOR)	PCC	
CO	(SMOOTH INTERIOR) CLEANOUT CONCRETE	PSS	PUBLIC SERVICES EASEMENT
CONC	~~··~·	`L	PROPERTY LINE
CONST	CONSTRUCT or -TION	PP	POWER POLE
CONC COR	CONCRETE CORNER	PUC	PUBLIC UTILITY EASEMENT
CY	CUBIC YARD	PVC	POLYVINYL CHLORIDE
D	CONCRETE CORNER CUBIC YARD DIAMETER	R	RADIUS
DI	DROP INLET DUCTILE IRON PIPE	RCP	REINFORCED CONCRETE PIPE
DIP	DIATIF IDON DIDE		
	EACH	RIM	RIM ELEVATION
EA		RW	RAINWATER
EC	END OF CURVE	R/W	RIGHT OF WAY
EG	EXISTING GRADE	S	SLOPE
EL	ELEVATIONS	S.A.D.	SEE ARCHITECTURAL DRAWINGS
EP	EDGE OF PAVEMENT	SAN	SANITARY
EQ	EQUIPMENT	SD	STORM DRAIN
ĒŴ		SDMH	STORM DRAIN MANHOLE
(E)	EACH WAY EXISTING FACE OF CURB		
	EAGE OF OURD	SHT	SHEET
FC	FACE OF CURB	S.L.D.	SEE LANDSCAPE DRAWINGS
FF	FINISHED FLOOR	SPEC	SPECIFICATION
FG	FINISHED GRADE	SS	SANITARY SEWER
FH	FIRE HYDRANT	SSMH	SANITARY SEWER MANHOLE
FL	FLOW LINE	ST.	STREET
FS	FINISHED SURFACE	STA	STATION
G	GAS	STD	STANDARD
ĞA	GAGE OR GAUGE	STRUCT	STRUCTURAL
GB	GRADE BREAK		
		<u>T</u>	TELEPHONE
HDPE	HIGH DENSITY CORRUGATED	TC	TOP OF CURB
POLYETHYLEN		TEMP	TEMPORARY
HORIZ	HORIZONTAL	ΤP	TOP OF PAVEMENT
HI PT	HIGH POINT	TW/FG	TOP OF WALL/FINISH GRADE
H&T	HUB & TACK	TYP	TYPICAL
ID	INSIDE DIAMETER	VC	VERTICAL CURVE
INV	INVERT ELEVATION	VCP	VITRIFIED CLAY PIPE
JB	JUNCTION BOX		
JT		VERT	VERTICAL
	JOINT TRENCH	W/	WITH
JP	JOINT UTILITY POLE	W, WL	WATER LINE
L	LENGTH	WM	WATER METER
LNDG	LANDING	WWF	WELDED WIRE FABRIC



VICINITY MAP

REFERENCES

THIS GRADING AND DRAINAGE PLAN IS SUPPLEMENTAL TO:

- 1. TOPOGRAPHIC SURVEY BY: RASMUSSEN LAND SURVEYING, INC. 2150 GARDEN ROAD STE A-3 MONTEREY, CA, 93942
- 2. ARCHITECTURAL PLAN BY CHRISTOPHER D. HALILI

THE CONTRACTOR SHALL REFER TO THE ABOVE NOTED SURVEY AND PLAN, AND SHALL VERIFY BOTH EXISTING AND PROPOSED ITEMS ACCORDING TO THEM.

ON-SITE IMPERVIOUS AREA

	EXISTING	PROPOSED
HOUSE A AND B	0 S.F.	3,438 S.F.
WALKWAY AND PATIO	0 S.F.	522 S.F.
NET INCREASE IN IMPERVIOUS SURFACE		3,960 S.F.

ESTIMATED EARTHWORK QUANTITIES

EXPORT 688 C.Y.

VERIFY QUANTITIES

NOTE: GRADING QUANTITIES REPRESENT BANK YARDAGE. IT DOES NOT INCLUDE ANY SWELLING OR SHRINKAGE FACTORS AND IS INTENDED TO REPRESENT IN-SITU CONDITIONS. QUANTITIES DO NOT INCLUDE OVER-EXCAVATION, TRENCHING, STRUCTURAL FOUNDATIONS OR PIERS, OR POOL EXCAVATION (IF ANY). NOTE ADDITIONAL EARTHWORKS, SUCH AS KEYWAYS OR BENCHING MÁY BE REQUIRED BY THE GEOTECHNICAL ENGINEER IN THE FIELD AT TIME OF CONSTRUCTION. CONTRACTOR TO

FILL 46 C.Y.

DISTURBED AREA

9,623 SF DISTURBED AREA TOTAL LOT AREA 12,132 SF



SHEET INDEX

TITLE SHEET C0.2 GRADING SPECIFICATIONS C2.1 GRADING & DRAINAGE PLAN

DETAILS C3.1 DETAILS

EROSION CONTROL PLAN C4.1 EROSION CONTROL DETAILS CONSTRUCTION BMP



 \Box OCEA ARME

 \mathcal{O}

8-4-25 9-19-25

REVISIONS JOB NO: 225042 7-14-25 AS NOTED

DATE: SCALE: DESIGN BY: WCC DRAWN BY: OD, MD

SHEET NO:

GENERAL SITE NOTES:

- 1. CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING ON THIS WORK AND CONSIDER THE EXISTING CONDITIONS AND SITE CONSTRAINTS IN THE BID. CONTRACTOR SHALL BE IN THE POSSESSION OF AND FAMILIAR WITH ALL APPLICABLE GOVERNING AGENCIES STANDARD DETAILS AND SPECIFICATIONS PRIOR TO SUBMITTING OF A BID.
- 2. ALL WORK IN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO ALL APPLICABLE GOVERNING AGENCIES STANDARD DETAILS & SPECIFICATIONS.
- 3. PRIOR TO BEGINNING WORK, AND AFTER INITIAL HORIZONTAL CONTROL STAKING, CONTRACTOR SHALL FIELD CHECK ALL ELEVATIONS MARKED WITH (E) AND REPORT ANY DISCREPANCIES GREATER THAN 0.05' TO OWNER'S PROJECT MANAGER AND CIVIL ENGINEER.
- 4. DAMAGE TO ANY EXISTING SITE IMPROVEMENTS, UTILITIES AND/OR SERVICES TO REMAIN SHALL BE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL REPAIR AND/OR REPLACE IN
- 5. CONTRACTOR SHALL REPLACE ALL STRUCTURES AND GRATE LIDS FOR VAULTS, CATCH BASINS, ETC..., WITH VEHICULAR-RATED STRUCTURES IN ALL TRAFFIC ACCESSIBLE AREAS WITHIN NEW CONSTRUCTION AREA UNLESS OTHERWISE NOTED.
- 6. THE CONTRACTOR SHALL ADJUST TO FINAL GRADE ALL EXISTING AND/OR NEW MANHOLES, CURB INLETS, CATCH BASIN, VALVES, MONUMENT COVERS, AND OTHER CASTINGS WITHIN THE CONSTRUCTION AREA TO FINAL GRADE IN PAVEMENT AND LANDSCAPE AREAS UNLESS OTHERWISE NOTED.
- 7. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT INCLUDING SAFETY OF ALL PERSONS AND PROPERTY THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT TO BE LIMITED TO NORMAL WORKING HOURS AND THAT THE CONTRACTOR SHALL DEFEND INDEMNIFY AND HOLD THE OWNER. THE CONSULTING ENGINEER AND THE CITY HARMLESS FROM ANY AND ALL LIABILITY. REAL OR ALLEGED. IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT. EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE CONSULTING ENGINEER.
- 8. EXISTING PEDESTRIAN WALKWAYS. BIKE PATHS AND ACCESSIBLE PATHWAYS SHALL BE MAINTAINED, WHERE FEASIBLE, DURING CONSTRUCTION.
- 9. IF A CONFLICT ARISES BETWEEN THE SPECIFICATIONS AND THE PLANS NOTES, THE MORE STRINGENT REQUIREMENT SHALL
- 10. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY REQUIRED PERMITS AND COSTS ASSOCIATED WITH SAID PERMITS

TREE/PLANT PROTECTION NOTES:

- 1. PRIOR TO BEGINNING CONSTRUCTION ON SITE, CONTRACTOR SHALL IDENTIFY, CONFIRM WITH OWNER AND PROTECT EXISTING TREES AND PLANTS DESIGNATED AS TO REMAIN.
- 2. PROVIDE 5 FOOT TALL TREE PROTECTION FENCE WITH DISTINCTIVE MARKING VISIBLE TO CONSTRUCTION EQUIPMENT. ENCLOSING DRIP LINES OF TREES DESIGNATED TO REMAIN.
- 3. WORK REQUIRED WITHIN FENCE LINE SHALL BE HELD TO A MINIMUM. AVOID UNNECESSARY MOVEMENT OF HEAVY EQUIPMENT WITHIN FENCED AREA AND DO NOT PARK ANY VEHICLES UNDER DRIP LINE OR TREES. DO NOT STORE EQUIPMENT OR MATERIALS WITHIN FENCE LINE.
- 4. PRIOR TO REMOVING ROOTS AND BRANCHES LARGER THAN 2" IN DIAMETER OF TREES OR PLANTS THAT ARE TO REMAIN. CONSULT WITH THE OWNER'S PROJECT MANAGER.
- 5. ANY GRADE CHANGES GREATER THAN 6" WITHIN THE DRIPLINE OF EXISTING TREES SHALL NOT BE MADE WITHOUT FIRST CONSULTING THE ARCHITECT / CIVIL ENGINEER.
- 6. PROTECT EXISTING TREES TO REMAIN FROM SPILLED CHEMICALS, FUEL OIL. MOTOR OIL. GASOLINE AND ALL OTHER CHEMICALLY INJURIOUS MATERIALS; AS WELL AS FROM PUDDLING OR CONTINUOUSLY RUNNING WATER. SHOULD A SPILL OCCUR, STOP WORK IN THAT AREA AND CONTACT THE INSPECTOR IMMEDIATELY. CONTRACTOR SHALL BE RESPONSIBLE TO MITIGATE DAMAGE FROM SPILLED MATERIAL AS WELL AS MATERIAL CLEAN UP.
- 7. PROVIDE TEMPORARY IRRIGATION TO ALL TREES AND PLANTS THAT ARE IN OR ADJACENT TO CONSTRUCTION AREAS WHERE EXISTING IRRIGATION SYSTEMS MAY BE AFFECTED BY THE CONSTRUCTION. ALSO PROVIDE TEMPORARY IRRIGATION TO RELOCATE TREES.
- 8. CONTRACTOR SHALL BE RESPONSIBLE FOR ONGOING MAINTENANCE OF ALL TREES AND PLANTS DESIGNATED TO REMAIN AND FOR MAINTENANCE OF RELOCATED TREES STOCKPILED DURING CONSTRUCTION. CONTRACTOR WILL BE REQUIRED TO REPLACE TREES OR PLANTS THAT DIE DUE TO LACK OF MAINTENANCE.
- 9. TREE PROTECTION ZONES NEED TO BE SET UP WITH FENCING AROUND TREES TO A MINIMUM DISTANCE OF 10 FEET FROM THE BUTTRESS FLAIR. NO EQUIPMENT. MATERIALS STORAGE. OR DIGGING IS ALLOWED WITHIN THE TREE PROTECTION ZONE WITHOUT WRITTEN AUTHORIZATION FROM THE PROJECT ARBOHIST, ARBOHIST SUPERVISOR OR AUTHORIZED DESIGNATE. ANY AUTHORIZED DIGGING WITHIN THE TREE PROTECTION ZONE MUST BE DONE BY HAND; I.E. PICK AND SHOVEL: CARE MUST BE TAKEN TO AVOID SEVERING ANY STRUCTURAL ROOTS. ANY ROOTS GREATER THAN 2" IN DIAMETER INCIDENTALLY SEVERED. WHETHER INSIDE OR OUTSIDE OF THE TREE PROTECTION ZONE. WILL NEED TO BE BROUGHT TO THE ATTENTION OF AND INSPECTED BY THE PROJECT ARBOHIST, ARBOHIST SUPERVISOR OR AUTHORIZED DESIGNATE: WHO WILL EVALUATE THE TREE IN QUESTION FOR IMPACTS TO BOTH LONG TERM HEALTH AND STABILITY. ANY ROOT SEVERANCE CONCLUDED TO COMPROMISE TREE STABILITY/SAFETY MAY RESULT IN TREE REMOVAL. ANY COSTS RESULTING FROM TREE REMOVALS WILL BE CHARGED TO THE PROJECT IN QUESTION. ANY COSTS FROM TREE REMOVALS RESULTING FROM VIOLATIONS OF THE COUNTY CODES WILL BE ABSORBED BY THE CONTRACTOR UP TO AND INCLUDING ANY FINES LEVIED BY THE COUNTY.

SITE MAINTENANCE:

- REMOVE ALL DIRT, GRAVEL, RUBBISH, REFUSE, AND GREEN WASTE FROM STREET PAVEMENT AND STORM DRAINS ADJOINING THE SITE. LIMIT CONSTRUCTION ACCESS ROUTES ONTO THE SITE AND PLACE GRAVEL PADS AT THESE LOCATIONS. DO NOT DRIVE VEHICLES AND EQUIPMENT OFF THE PAVED OR GRAVELED AREAS DURING WET WEATHER.
- SWEEP OR VACUUM THE STREET PAVEMENT AND SIDEWALKS ADJOINING THE PROJECT SITE AND THE ON-SITE PAVED AREAS ON A DAILY BASIS. SCRAPE CAKED-ON MUD AND DIRT FROM THESE AREAS BEFORE SWEEPING. CORNERS AND HARD TO REACH AREAS SHALL BE SWEPT MANUALLY.
- 3. CONTRACTOR SHALL: GATHER ALL CONSTRUCTION DEBRIS ON A REGULAR BASIS AND PLACE IT IN A DUMPSTER OR OTHER CONTAINER WHICH IS EMPTIED OR REMOVED ON A REGULAR BASIS. WHEN APPROPRIATE, USE TARPS ON THE GROUND TO COLLECT FALLEN DEBRIS OR SPLATTERS THAT COULD CONTRIBUTE TO STORM WATER RUNOFF POLLUTION.
- 4. IF THE STREET, SIDEWALKS AND/OR PARKING LOT ARE PRESSURE WASHED, DEBRIS MUST BE TRAPPED AND COLLECTED TO PREVENT ENTRY INTO THE STORM DRAIN SYSTEM. NO CLEANING AGENT MAY BE DISCHARGED INTO THE STORM DRAIN. IF ANY CLEANING AGENT OR DEGREASER IS USED. WASHED WATER MUST BE COLLECTED AND DISCHARGED TO THE SANITARY SEWER. SUBJECT TO THE APPROVAL OF THE OWNER'S PROJECT MANAGER. OR OTHERWISE DISPOSED OF THROUGH APPROVED DISPOSAL METHODS.
- 5. CREATE A CONTAINED AND COVERED AREA ON THE SITE FOR THE STORAGE OF BAGS, CEMENT, PAINTS, OILS, FERTILIZERS, PESTICIDES, OR OTHER MATERIAL USED ON THE SITE THAT HAVE THE POTENTIAL OF BEING WIND-BLOWN OR IN THE EVENT OF A MATERIAL SPILL.
- 6. NEVER CLEAN MACHINERY, EQUIPMENT OR TOOLS INTO A STREET, GUTTER OR STORM DRAIN.
- 7. ENSURE THAT CEMENT TRUCKS, PAINTERS, OR STUCCO/PLASTER FINISHING CONTRACTORS DO NOT DISCHARGE WASH WATER FROM EQUIPMENT. TOOLS OR RINSE CONTAINERS INTO GUTTERS OR DRAINS.
- 8. THE ON-SITE STORM DRAIN FACILITIES SHALL BE CLEANED A MINIMUM OF TWICE A YEAR AS FOLLOWS: IMMEDIATELY PRIOR TO OCTOBER 15TH AND ONCE IN JANUARY. ADDITIONAL CLEANING MAY BE REQUIRED IF FOUND NECESSARY BY THE INSPECTOR. CONTRACTOR SHALL BE RESPONSIBLE FOR COST ASSOCIATED WITH CLEANING.
- 9. PREVENT DUST FROM LEAVING THE SITE AND ACCUMULATING ON ADJACENT AREAS AS REQUIRED IN THE DUST CONTROL NOTES ON THIS
- 10. PREVENT SEDIMENT LADEN STORM RUN-OFF FROM LEAVING THE SITE OR ENTERING STORM DRAIN OR SANITARY SEWER SYSTEMS AS REQUIRED IN THE EROSION AND SEDIMENTATION CONTROL NOTES ON THIS SHEET.
- 11. MAINTAIN EXISTING TREES AND PLANTS THAT ARE TO REMAIN AS REQUIRED BY THE TREE AND PLANT PROTECTION NOTES ON THE SHEET.

STORMWATER POLLUTION PREVENTION NOTES:

- 1. STORE, HANDLE, AND DISPOSE OF CONSTRUCTION MATERIALS AND WASTES PROPERLY, SO AS TO PREVENT THEIR CONTACT WITH STORMWATER.
- 2. CONTROL AND PREVENT THE DISCHARGE OF ALL POTENTIAL POLLUTANTS. INCLUDING SOLID WASTES, PAINTS, CONCRETE, PETROLEUM PRODUCTS, CHEMICALS, WASHWATER OR SEDIMENT, AND NON-STORMWATER DISCHARGES TO STORM DRAINS AND WATER COURSES.
- 3. USE SEDIMENT CONTROL OR FILTRATION TO REMOVE SEDIMENT FROM DEWATERING EFFLUENT.
- 4. AVOID CLEANING, FUELING, OR MAINTAINING VEHICLES ON SITE, EXCEPT IN A DESIGNATED AREA IN WHICH RUNOFF IS CONTAINED AND TREATED.
- 5. DELINEATE CLEARING LIMITS, EASEMENTS, SETBACKS, SENSITIVE OR CRITICAL AREAS, BUFFER ZONES, TREES AND DISCHARGE COURSE WITH FIELD
- 6. PROTECT ADJACENT PROPERTIES AND UNDISTURBED AREAS FROM CONSTRUCTION IMPACTS USING VEGETATIVE BUFFER STRIPS. SEDIMENT BARRIERS OF FILTERS, DIKES, MULCHING, OR OTHER MEASURES AS APPROPRIATE.
- 7. PERFORM CLEARING AND EARTH MOVING ACTIVITIES DURING DRY WEATHER TO THE MAXIMUM EXTENT PRACTICAL.
- 8. LIMIT AND TIME APPLICATIONS OF PESTICIDES AND FERTILIZERS TO PREVENT POLLUTED RUNOFF.
- 9. LIMIT CONSTRUCTION ACCESS ROUTES AND STABILIZE DESIGNATED ACCESS
- 10. AVOID TRACKING DIRT OR MATERIALS OFF-SITE; CLEAN OFF-SITE PAVED AREAS AND SIDEWALKS USING DRY SWEEPING METHODS TO THE MAXIMUM EXTENT PRACTICAL.

SUPPLEMENTAL MEASURES

- A. THE PHRASE "NO DUMPING DRAINS TO BAY" OR EQUALLY EFFECTIVE PHRASE MUST BE LABELED ON STORM DRAIN INLETS (BY STENCILING, BRANDING, OR PLAQUES) TO ALERT THE PUBLIC TO THE DESTINATION OF STORM WATER AND TO PREVENT DIRECT DISCHARGE OF POLLUTANTS INTO THE STORM DRAIN.
- B. USING FILTRATION MATERIALS ON STORM DRAIN COVERS TO REMOVE SEDIMENT FROM DEWATERING EFFLUENT.
- C. STABILIZING ALL DENUDED AREAS AND MAINTAINING EROSION CONTROL MEASURES CONTINUOUSLY FROM OCTOBER 15 AND APRIL 15.
- D. REMOVING SPOILS PROMPTLY, AND AVOID STOCKPILING OF FILL MATERIALS, WHEN RAIN IS FORECAST. IF RAIN THREATENS. STOCKPILED SOILS AND OTHER MATERIALS SHALL BE COVERED WITH A TARP OR OTHER WATERPROOF MATERIAL.
- E. STORING. HANDLING. AND DISPOSING OF CONSTRUCTION MATERIALS AND WASTES SO AS TO AVOID THEIR ENTRY TO THE STORM DRAIN SYSTEMS OR WATER BODY.
- F. AVOIDING CLEANING, FUELING, OR MAINTAINING VEHICLES ON-SITE, EXCEPT IN AN AREA DESIGNATED TO CONTAIN AND TREAT RUNOFF.
- G. LIMITING AND TIMING APPLICATIONS OF PESTICIDES AND FERTILIZER TO AVOID POLLUTING RUNOFF.

WATER SYSTEM NOTES:

- WHERE WATER LINES HAVE TO CROSS SANITARY SEWER LINES, DO SO AT A 90 DEGREE ANGLE AND WATER LINES SHALL BE MINIMUM OF 12" ABOVE THE TOP OF THE SANITARY SEWER LINES.
- 2. WATER LINES ARE SHOWN SCHEMATICALLY; CONTRACTOR SHALL IDENTIFY EACH ANGLE AND / OR BEND THAT MAY BE REQUIRED TO ACCOMPLISH THE INTENDED DESIGN.
- 3. USE DETECTABLE METALIZED WARNING TAPE APPROXIMATELY 6" BELOW THE SURFACE, TAPE SHALL BE A BRIGHT COLOR AND IMPRINTED WITH "CAUTION-WATER LINE BELOW", CALPICO TYPE 2 OR EQUAL.
- 4. ALL WATER SERVICE CONNECTIONS SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OR APPLICABLE WATER DISTRICT STANDARDS.
- 5. PUBLIC AND PRIVATE WATER MAIN AND WATER SERVICE LINE 4-INCH THROUGH 12-INCH SHALL BE POLYVINYL CHLORIDE (PVC) AND SHALL MEET AWWA C900, RATED FOR 200 PSI CLASS PIPE WITH EPOXY COATED DUCTILE IRON FITTINGS AND FUSION EPOXY COATED GATE VALVES. ALL JOINTS SHALL FACTORY MANUFACTURED WITH BELL AND SPIGOT ENDS AND RUBBER GASKETS. NONMETALLIC WATER LINES HAVE TRACER WIRE INSTALLED.
- 6. CONNECTION TO THE EXISTING WATER MAIN SHALL BE APPROVED BY WATER COMPANY. THE DISTRICT SHALL PAY THE ACTUAL COSTS OF CONSTRUCTION. THE CONTRACTOR SHALL PERFORM ALL EXCAVATION PREPARE THE SITE. FURNISH ALL MATERIALS. INSTALL TAPPING TEE VALVE AND ALL THRUST BLOCKS. BACKFILL, RESTORE THE SURFACE, AND CLEANUP. ALL WET TAPS SHALL BE APPROVED BY THE CITY OR APPLICABLE WATER DISTRICT. NONMETALLIC WATER LINES SHALL HAVE TRACER WIRES INSTALLED.
- 7. ALL WATER LINES 3" OR SMALLER SHALL BE TYPE K COPPER WITH SILVER BRAZED JOINTS. POLYETHYLENE PIPE MAY BE SUBSTITUTED. CONTRACTOR SHOULD SEEK APPROVAL FROM DISTRICT BEFORE MAKING SUBSITUTION. CONTRACTOR TO VERIFY PRESSURES FROM EXISTING LINES ARE ADEQUATE TO SERVICE BUILDINGS AS SPECIFIED BY THE PLUMBING
- 8. ALL WATER LINES SHALL BE INSTALLED WITH 3' MINIMUM COVER.
- 9. ALL WATER VALVES SHALL BE PER CITY STANDARD.
- 10. ALL TEMPORARY AND/OR PERMANENT AIR-RELEASE AND BLOW-OFF VALVES SHALL BE PER CITY STANDARD AND AS DIRECTED BY THE CITY ENGINEER.
- 11. CONCRETE THRUST BLOCKS SHALL BE INSTALLED AT ALL TEES, CROSSINGS. BENDS (HORIZONTAL AND VERTICAL). AT SIZE CHANGES AND AT FIRE HYDRANTS PER CITY STANDARD. AWWA C600, SECTION 3.8 UNLESS NOTED OTHERWISE.
- 12. MECHANICALLY RESTRAINED JOINTS SHALL BE INSTALLED AT VERTICAL BENDS IN ACCORDANCE WITH CITY STANDARDS AND AS APPROVED BY THE CITY ENGINEER.
- 13. ALL WATER VALVES SHALL BE CLUSTERED, UNLESS OTHERWISE DIRECTED BY THE CITY ENGINEER.

STORM DRAIN NOTES:

- 1. ALL STORM DRAIN PIPE SHALL BE PVC PER SECTION 02630, SLOPED AT 2% UNLESS OTHERWISE SPECIFIED ON THE PLANS. PIPE SHALL BE SIZED AS SPECIFIED ON THE PLANS. ALL DIRECTION CHANGES SHALL BE MADE WITH A Y CONNECTION OR LONG SWEEP ELBOWS, REGULAR ELBOWS, AND TEE'S SHOULD BE AVOIDED.
- 2. USE DETECTABLE METALIZED WARNING TAPE APPROXIMATE 6" BELOW THE SURFACE. TAPE SHALL BE A BRIGHT COLOR AND IMPRINTED WITH "CAUTION- STORM DRAIN LINE BELOW", CALPICO TYPE 2 OR EQUAL.
- 3. PAINT THE TOP OF THE CURBS ADJACENT TO EACH CATCH BASIN INSTALLED UNDER THE WORK OR ADJACENT TO THIS SITE WITH THE WORDS "NO DUMPING". WORDING TO BE BLUE 4" HIGH LETTERS ON A PAINTED WHITE BACKGROUND. A "NO DUMPING"
- 4. ALL AREA DRAINS AND CATCH BASINS GRATES WITHIN PEDESTRIAN ACCESSIBLE AREAS SHALL MEET ADA REQUIREMENTS AND HAVE BOLT DOWN GRATES.
- 5. ALL TRENCHES SHALL BE BACKFILLED PER THE SPECIFICATIONS OF THE CIVIL ENGINEER TO VERIFY COMPACTION VALUES.
- 6. FOR GRAVITY FLOW SYSTEMS CONTRACTOR SHALL VERIFY (POTHOLE IF NECESSARY) SIZE, MATERIAL, LOCATION AND DEPTH OF ALL SYSTEMS THAT ARE TO BE CONNECTED TO OR CROSSED PRIOR TO TRENCH OR INSTALLATION OF ANY GRAVITY FLOW SYSTEM.
- 7. COMPLETE SYSTEMS: ALL UTILITY SYSTEMS ARE DELINEATED IN SCHEMATIC MANNER ON THESE PLANS. CONTRACTOR IS TO PROVIDE ALL FITTINGS. ACCESSORIES. AND WORK NECESSARY TO COMPLETE THE UTILITY SYSTEM SO THAT IT IS FULLY FUNCTIONING FOR THE PURPOSE INTENDED.

SANITARY SEWER NOTES:

- 1. INSTALL DETECTABLE METALIZED WARNING TAPE APPROXIMATELY 6"-12" BELOW THE SURFACE IN NON-PAVED AREAS, AND AT THE BOTTOM OF BASEROCK FOR PAVED AREAS. GREEN IMPRINTED WITH "CAUTION-SANITARY SEWER LINE BELOW", CALPICO TYPE 2 OR EQUAL.
- 2. ALL SEWER WORK SHALL BE IN CONFORMANCE WITH THE CITY OR APPROPRIATE SANITARY SEWER DISTRICT.
- 3. PUBLIC AND PRIVATE SANITARY SEWER MAIN AND SERVICE LINE 4-INCH THROUGH 8-INCH SHALL BE POLYVINYL CHLORIDE (PVC) SDR 26 GREEN SEWER PIPE AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION D 3034-08 WITH GLUED JOINTS.

DEMOLITION NOTES:

- 1. CONTRACTOR IS TO COMPLY WITH ALL GENERAL AND STATE REQUIREMENTS INVOLVING THE REMOVAL AND DISPOSAL OF HAZARDOUS MATERIAL(S).
- 2. THE CONTRACTOR SHALL LOCATE AND CLEARLY MARK (AND THEN PRESERVE THESE MARKERS) FOR THE DURATION OF CONSTRUCTION OF ALL TELÉPHONE, DATA, STREET LIGHT, SIGNAL LIGHT AND POWER FACILITIES THAT ARE IN OR NEAR THE AREA OF CONSTRUCTION.
- 3. CONTRACTOR'S BID IS TO INCLUDE ALL VISIBLE SURFACE AND ALL SUBSURFACE FEATURES IDENTIFIED TO BE REMOVED OR ABANDONED IN THESE DOCUMENTS.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR A SITE INSPECTION TO FULLY ACKNOWLEDGE THE EXTENT OF THE DEMOLITION WORK.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY AND ALL PERMITS NECESSARY FOR ENCROACHMENT. GRADING. DEMOLITION. AND STATE JURISDICTIONS. THE CONTRACTOR SHALL PAY ALL FEES ASSOCIATED CONTRACTOR SHALL PAY DISPOSAL
- 6. CONTRACTOR SHALL PAY DISPOSAL FEES.
- 7. BACKFILL ALL DEPRESSIONS AND TRENCHES FROM DEMOLITION OF FOUNDATIONS & UTILITIES.
- 8. WITHIN LIMITS OF WORK, REMOVE CURBS, GUTTERS, LANDSCAPING, SIGNAGE, TREES, SCRUBS, ASPHALT, UNDERGROUND PIPES, ETC. AS INDICATED ON THE PLANS AND SPECS.
- 9. REMOVAL OF LANDSCAPING SHALL INCLUDE ROOTS AND ORGANIC
- 10. PRIOR TO BEGINNING DEMOLITION WORK ACTIVITIES, CONTRACTOR SHALL INSTALL EROSION CONTROL MEASURES OUTLINED IN THE EROSION & SEDIMENTATION CONTROL PLAN & DETAILS.
- 11. CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSING ALL DEMOLITION MATERIALS, OR STORING SELECTED ITEMS BY OWNER'S REPRESENTATIVE AT DESIGNATED LOCATIONS.
- 12. THE CONTRACTOR SHALL MAINTAIN ALL SAFETY DEVICES, AND SHALL BE RESPONSIBLE FOR CONFORMANCE TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS LAWS AND REGULATIONS.
- 13. THE CONTRACTOR SHALL PROTECT FROM DAMAGE ALL EXISTING IMPROVEMENTS FACILITIES AND STRUCTURES WHICH ARE TO REMAIN. ANY ITEMS DAMAGED BY THE CONTRACTOR OR HIS AGENTS OF ANY ITEMS REMOVED FOR HIS USE SHALL BE REPLACED IN EQUAL OR BETTER CONDITION AS APPROVED BY THE ARCHITECT OR OWNER'S REPRESENTATIVE.
- 14. COORDINATE WITH ELECTRICAL, MECHANICAL, FIRE PROTECTION AND ARCHITECTURAL DRAWINGS FOR UTILITY SHUT-DOWN DISCONNECT LOCATIONS. CONTRACTOR IS TO SHUT OFF ALL UTILITIES AS NECESSARY PRIOR TO DEMOLITION. CONTRACTOR IS TO COORDINATE SERVICE INTERRUPTIONS WITH THE OWNER. DO NOT INTERRUPT SERVICES ADJACENT OFF-SITE OWNERS. ALSO SEE ARCHITECTURAL PLANS FOR ADDITIONAL SCOPE OF WORK.
- 15. DEMOLITION INCLUDES REMOVAL OF ALL ITEMS ASSOCIATED WITH THE UTILITIES AND SHALL INCLUDE PREPARING THE SITE FOR NEW UTILITIES, BUILDINGS, RETAINING WALLS, ETC.
- 16. ALL MATERIALS TO BE DEMOLISHED AND REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE LAWFULLY DISPOSED OF OFF-SITE.
- 17. THE PLAN IS NOT INTENDED TO BE A COMPLETE CATALOGUE OF ALL EXISTING STRUCTURES AND UTILITIES. THIS PLAN INTENDS TO DISCLOSE GENERAL INFORMATION KNOWN BY THE ENGINEER AND TO SHOW THE LIMITS OF THE AREA WHERE WORK WILL BE PERFORMED. THIS PLAN SHOWS THE EXISTING FEATURES TAKEN FROM A FIELD SURVEY, FIELD INVESTIGATIONS AND AVAILABLE INFORMATION. THIS PLAN MAY OR MAY NOT ACCURATELY REFLECT THE TYPE OR EXTENT OF THE ITEMS TO BE ENCOUNTERED AS THEY ACTUALLY EXIST. WHERE EXISTING FEATURES ARE NOT SHOWN. IT IS IMPLIED THAT THEY ARE NOT TO BE DEMOLISHED OR REMOVED. THE CONTRACTOR SHALL PERFORM A THOROUGH FIELD INVESTIGATION AND REVIEW OF THE SITE WITHIN THE LIMIT OF WORK SHOWN IN THIS PLAN SET TO DETERMINE THE TYPE, QUANTITY AND EXTENT OF ANY AND ALL ITEMS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR DETERMINING THE EXTENT OF EXISTING STRUCTURES AND UTILITIES AND QUANTITY OR WORK INVOLVED IN REMOVING THESE ITEMS FROM THE SITE.



CIVIL





E E Z S. P.

 \mathbf{H}

0 5 IN(CD RA] IFI

3-4-25 9-19-25 MD REVISIONS 225042 JOB NO: DATE: 7-14-25 AS NOTED SCALE:

CO.2

DESIGN BY: WCC

SHEET NO:

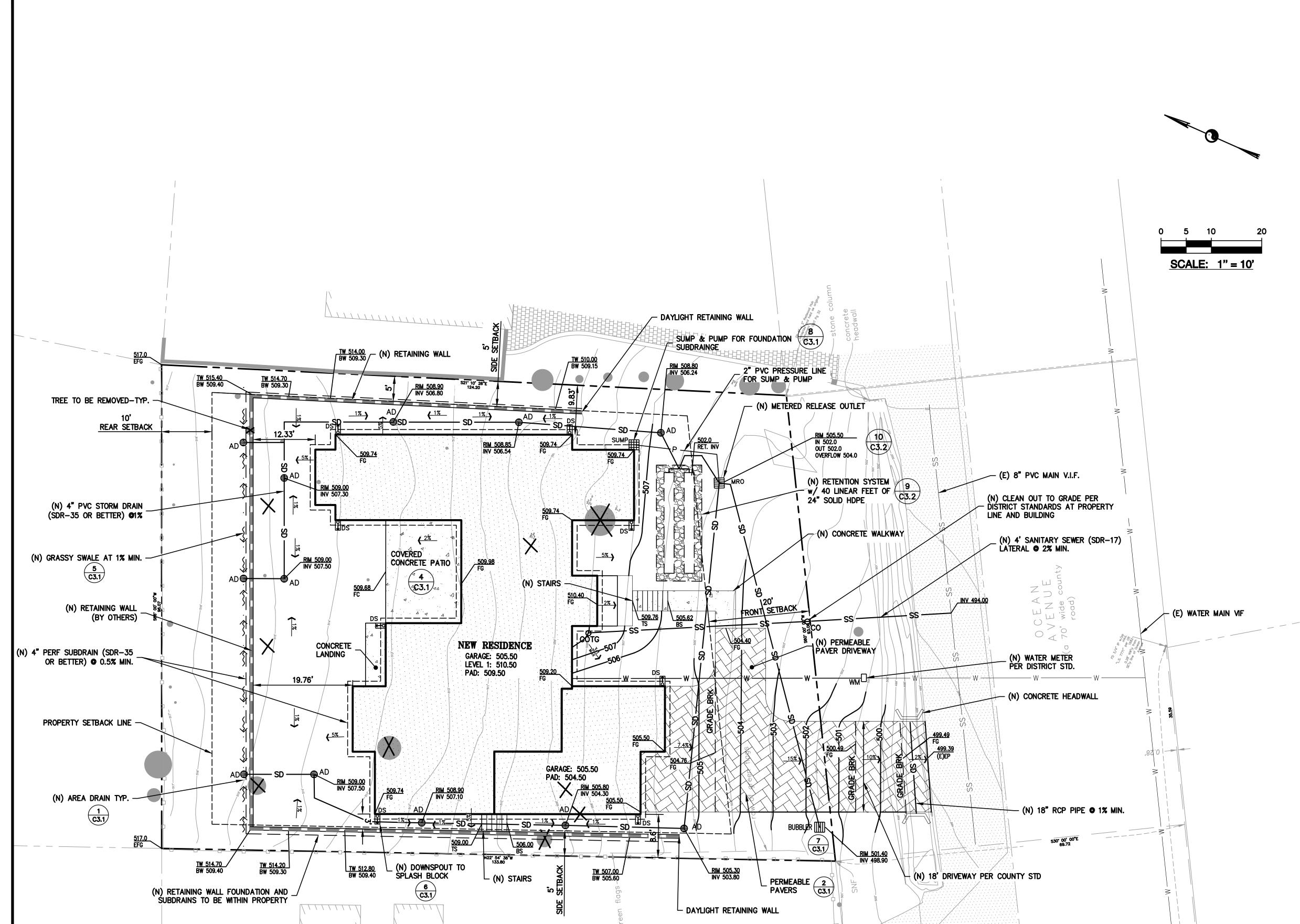
DRAWN BY: OD, MD

RAIN

3-4-25 9-19-25 JOB NO: 225042 DATE: 7-14-25

AS NOTED SCALE: DESIGN BY: WCC

DRAWN BY: OD, MD SHEET NO:



17777

GRADING NOTES:

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO IDENTIFY, LOCATE AND PROTECT ALL UNDERGROUND FACILITIES. UNDERGROUND FACILITIES DAMAGED DURING GRADING SHALL BE REPAIRED AND/OR REPLACED TO LIKE NEW CONDITION AT NO ADDITIONAL COST TO CONTRACT. REFER TO TOPOGRAPHIC SURVEY AND UTILITY SURVEY FOR ADDITIONAL INFORMATION.

THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS AND ALL OTHER PUBLIC RIGHT-OF-WAY IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE REMOVED FROM THE PUBLICLY OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC SHALL BE MAINTAINED IN A CLEAN, SAFE AND USABLE CONDITION.

ALL GRADING SHALL BE PERFORMED IN SUCH A MANNER AS TO COMPLY WITH THE STANDARDS ESTABLISHED BY THE AIR QUALITY MANAGEMENT DISTRICT FOR AIRBORNE PARTICULATES.

STANDARD TRUST ARCHAEOLOGICAL PROTOCOLS ISSUED THROUGH EXCAVATION CLEARANCE APPLICATION AND MONITORING WILL BE REQUIRED

CONTRACTOR VERIFY EXISTING UTILITY STUB LOCATIONS AND DEPTHS PRIOR TO COMMENCING CONSTRUCTION.

FINISHED GRADES SHALL BE SLOPED TOWARD INLETS OR POSITIVE RELEASE AT 0.5% MIN. FOR CONCRETE AND 1% MIN FOR ASPHALT AREAS.

REFER TO ARCHITECTURAL AND/OR LANDSCAPE PLANS FOR ADDITIONAL INFORMATION ON FLAT WORK, PAVING TYPE AND SCORING.

REFER TO ARCHITECTURAL PLANS FOR ACCESSIBLE PATH OF TRAVEL. GRADES SHALL BE DONE PER FEDERAL AND STATE ACCESSIBILITY REQUIREMENTS. IF CONTRACTOR BECOMES AWARE OF GRADES THAT ARE NOT CONFORMING TO ACCESSIBILITY REQUIREMENTS, HE SHALL BRING THIS TO THE ATTENTION OF THE ARCHITECT AND THE ENGINEER.

CUT AND FILL SLOPES AND GRADING TRANSITIONS AT THE OUTER EDGES OF THE PROPOSED IMPROVEMENTS ARE TO BE CONSTRUCTED AT THREE HORIZONTAL TO ONE VERTICAL (3:1) UNLESS OTHERWISE NOTED.

UTILITY NOTES:

STORM DRAIN PIPING SHALL BE PVC SDR-35 OR BETTER OR DOUBLE WALLED HDPE PIPING ADS N-12 OR APPROVED EQUAL. 6" MIN U.O.N.

CONTRACTOR SHALL VERIFY BUILDING CONNECTIONS AND ELEVATION. THIS INCLUDES RAIN WATER LEADER, SEWER CONNECTION AND WATER CONNECTION. NOTIFY ENGINEER OF ANY

DIMENSIONED & PIPE LENGTHS SHOWN ARE NOT MEANT TO PROVIDE BID QUANTITIES FOR CONTRACTOR, SHOWN FOR INFORMATIONAL PURPOSES ONLY.

PROPOSED GRADES SHALL MEET EXISTING GRADES WITH A SMOOTH AND CONTINUOUS TRANSITION SO AS TO AVOID TRAPPING WATER. CONTRACTOR SHALL NOTIFY PROJECT REPRESENTATIVE IF PUDDLING IS SUSPECTED AND REDIRECT WORK SO AS TO AVOID DELAY WHILE AWAITING RESPONSE.

ALL EXISTING DRAINAGE STRUCTURES, BOXES, UTILITY VAULTS ETC. SHALL BE BROUGHT TO

FINAL FINISH GRADE PRIOR TO FINAL SURFACE TREATMENT, UNLESS NOTED OTHERWISE.

COORDINATE ALL EXISTING AND PROPOSED DRAINAGE SLEEVES, AND UTILITY LOCATIONS AS SHOWN ON THE PLANS AND DETAILS CONTAINED WITHIN THESE CONTRACT DOCUMENTS.

THE CONTRACTOR IS TO ENSURE THAT ALL REMAINING ACTIVE AND NEW DRAINAGE AND UTILITY LINES ARE PROTECTED AND UNDAMAGED FROM TRENCHING AND FOOTING EXCAVATIONS FOR NEW FOOTINGS. PARTICULARLY FOR NEW FENCING AND WALLS.

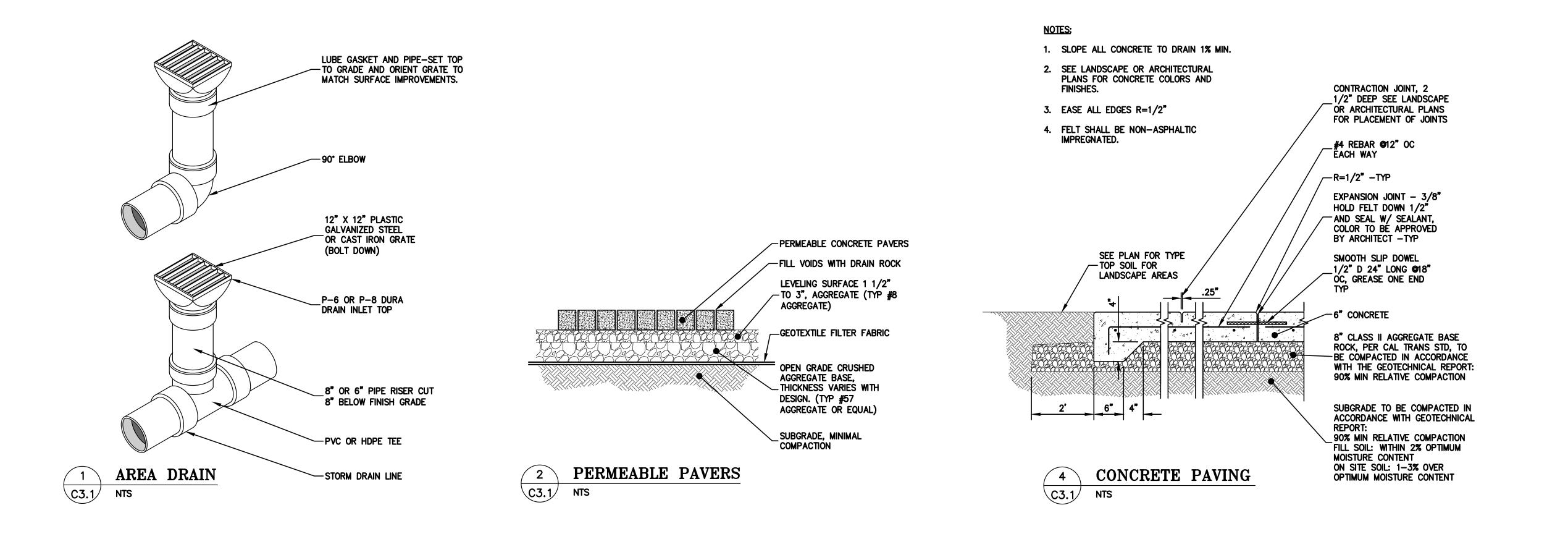
CONTRACTOR IS TO ENSURE THAT ALL AREAS ARE GRADED TO PROVIDE POSITIVE DRAINAGE TO IDENTIFIED EXISTING AND PROPOSED DRAIN INLETS.

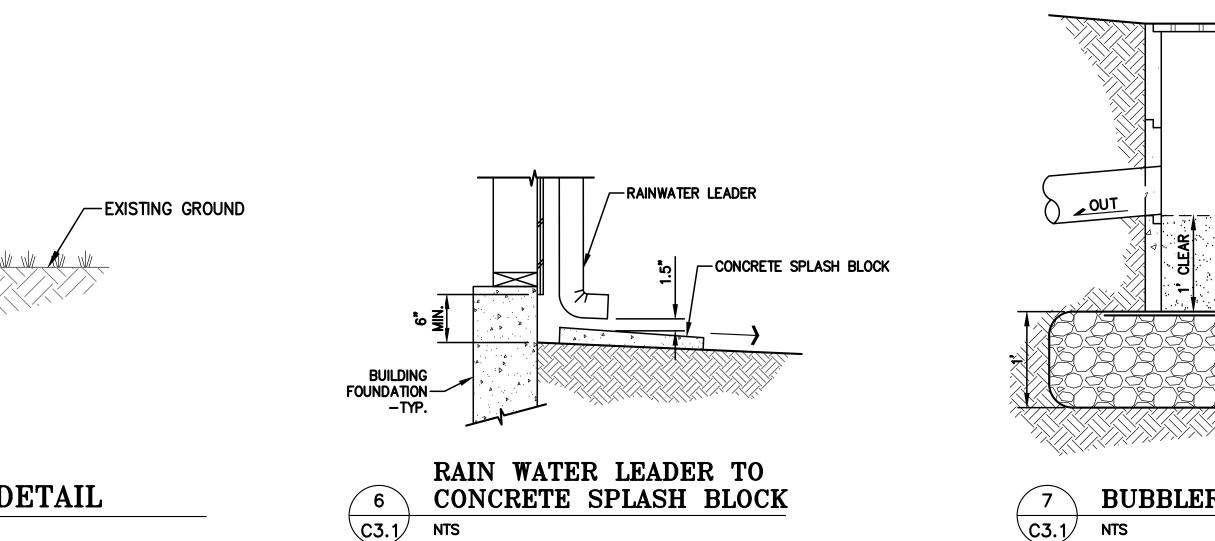
AREAS OF TRENCHING SHALL BE PATCHED TO MATCH EXISTING CONDITIONS TO LIKE NEW CONDITIONS, INCLUDING BUT NOT LIMITED TO SOD, CONCRETE AND ASPHALT

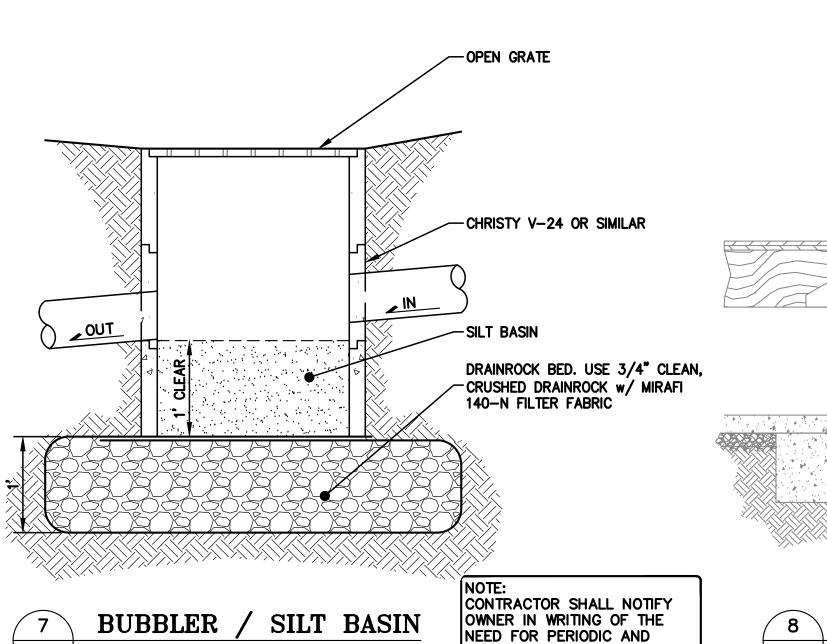
NOTE: CONTRACTOR SHALL TAKE CARE TO ESTABLISH GRADES AS SHOWN TO ALLOW FOR POSITIVE DRAINAGE FLOW OF RUNOFF.

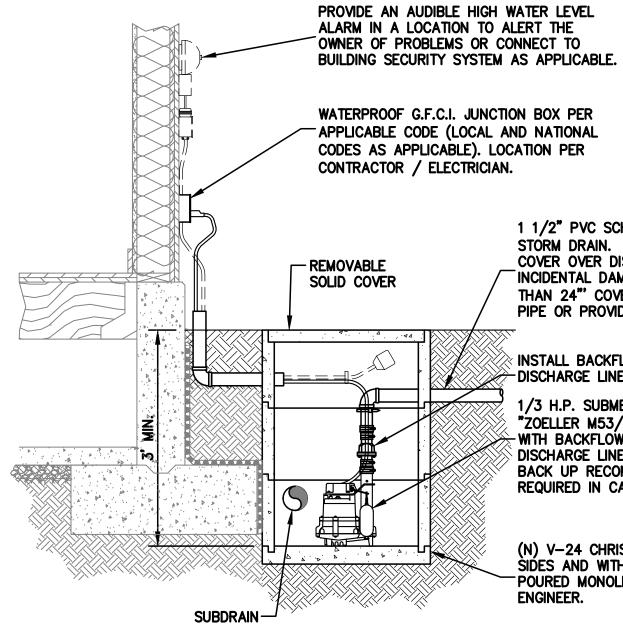
ANY UTILITIES, CURBS, GUTTERS, UTILITY BOXES & SIDEWALKS TO REMAIN THAT ARE DAMAGED DURING ANY PHASE OF DEMOLITION OR CONSTRUCTION SHALL BE REPAIRED AND/OR REPLACED TO LIKE NEW CONDITION AT THE CONTRACTORS EXPENSE.

NOTE: ANY WORK WITHIN PUBLIC RIGHT-OF-WAY SHALL REQUIRE ENCROACHMENT PERMIT FROM LOCAL JURISTICTION.









1 1/2" PVC SCH 40 DISCHARGE LINE TO STORM DRAIN. PROVIDE 24" MINIMUM COVER OVER DISCHARGE LINES TO AVOID INCIDENTAL DAMAGE. FOR LINE WITH LESS THAN 24" COVER USE GALVANIZED STEEL PIPE OR PROVIDE PROTECTIVE SLEEVE.

INSTALL BACKFLOW PREVENTION DEVICE AT DISCHARGE LINE - TYP.

1/3 H.P. SUBMERSIBLE SUMP PUMP
"ZOELLER M53/55" OR APPROVED EQUAL
WITH BACKFLOW PREVENTION DEVICE ON
DISCHARGE LINE. BATTERY OR GENERATOR
BACK UP RECOMMENDED BUT NOT
BEGUIDED IN CASE OF A BOWER FAILURE REQUIRED IN CASE OF A POWER FAILURE.

(N) V-24 CHRISTY BOX SEALED ON ALL SIDES AND WITH CONCRETE BOTTOM OR POURED MONOLITHICALLY PER STRUCTURAL

ENGINEER.

C3.1

DESIGN BY: WCC

DRAWN BY: OD, MD

REVISIONS

JOB NO: 225042

7-14-25

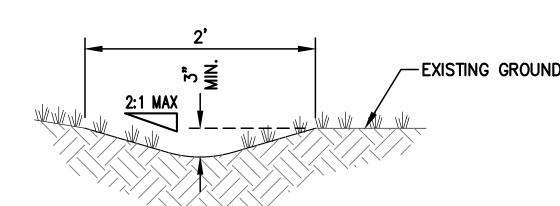
AS NOTED

CIVIL

VEN JA.

OCEA] ARME]

SUBDRAIN SUMP PUMP SHEET NO:



GRASSY SWALE DETAIL

C3.1/

C3.1

REGULAR INSPECTION AND CLEARING OF SILT BASINS FOR LONG TERM PERFORMANCE.

C3.1

8-4-25

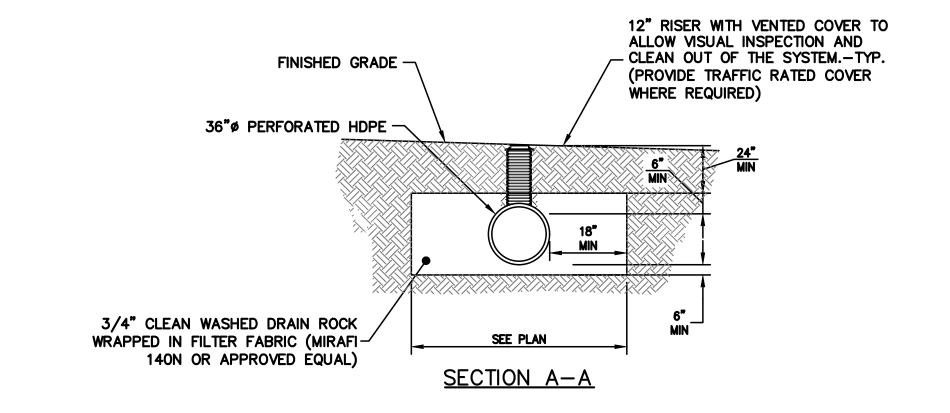
9-19-25

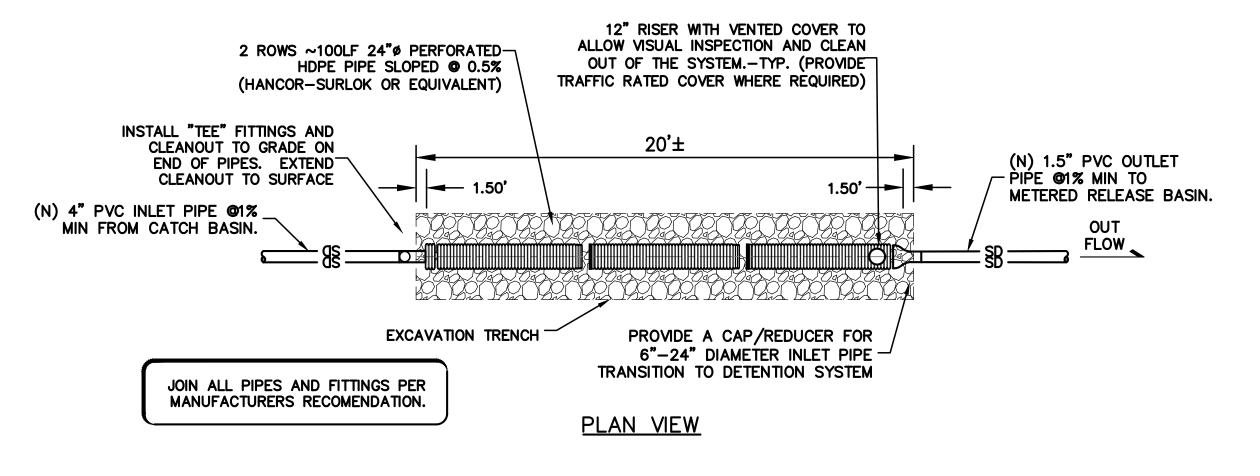
DATE:

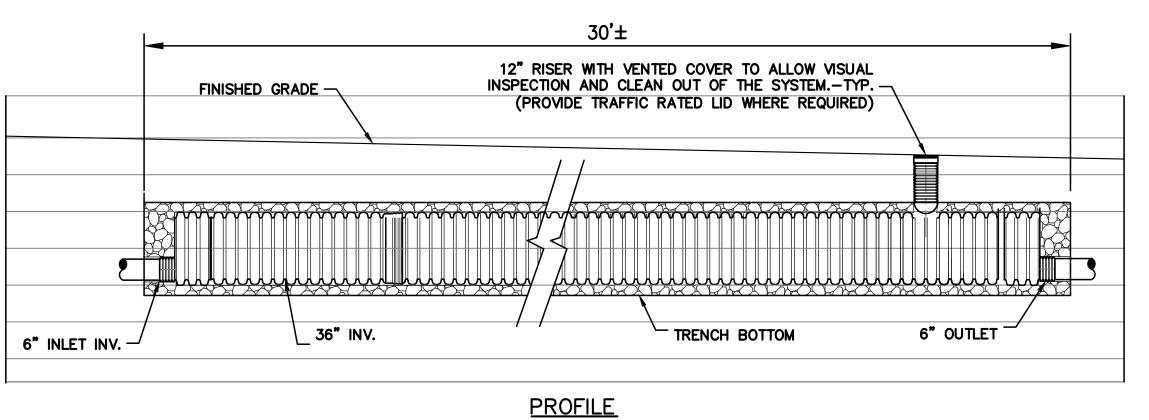
SCALE:

MD

METERED RELEASE OUTLET NTS







RETENTION SYSTEM C3.2 NTS





AVENI CA. OCEAN ARMEL,

8-4-25 9-19-25 REVISIONS

JOB NO: 225042 DATE: 7-14-25 SCALE: AS NOTED DESIGN BY: WCC DRAWN BY: OD, MD

SHEET NO: **C3.2**

EROSION CONTROL MEASURES:

- 1. THE FACILITIES SHOWN ON THIS PLAN ARE DESIGNED TO CONTROL EROSION AND SEDIMENT DURING THE RAINY SEASON, OCTOBER 1ST TO APRIL 30. EROSION CONTROL FACILITIES SHALL BE IN PLACE PRIOR TO OCTOBER 1ST OF ANY YEAR. GRADING OPERATIONS DURING THE RAINY SEASON WHICH LEAVE DENUDED SLOPES SHALL BE PROTECTED WITH EROSION CONTROL MEASURES IMMEDIATELY FOLLOWING GRADING ON THE SLOPES.
- 2. SITE CONDITIONS AT TIME OF PLACEMENT OF EROSION CONTROL MEASURES WILL VARY. APPROPRIATE ACTION INCLUDING TEMPORARY SWALES, INLETS, HYDROSEEDING, STRAW BALES, ROCK SACKS, ETC. SHALL BE TAKEN TO PREVENT EROSION AND SEDIMENTATION FROM LEAVING SITE. EROSION CONTROL MEASURES SHALL BE ADJUSTED AS THE CONDITIONS CHANGE AND THE NEED OF CONSTRUCTION SHIFT.
- 3. CONSTRUCTION ENTRANCES SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF GRADING. ALL CONSTRUCTION TRAFFIC ENTERING ONTO THE PAVED ROADS MUST CROSS THE STABILIZED CONSTRUCTION ENTRANCES. CONTRACTOR SHALL MAINTAIN STABILIZED ENTRANCE AT EACH VEHICLE ACCESS POINT TO EXISTING PAVED STREETS. ANY MUD OR DEBRIS TRACKED ONTO PUBLIC STREETS SHALL BE REMOVED DAILY AND AS REQUIRED BY THE GOVERNING AGENCY.
- 4. ALL EXPOSED SLOPES THAT ARE NOT VEGETATED SHALL BE HYDROSEEDED. IF HYDROSEEDING IS NOT USED OR IS NOT EFFECTIVE BY OCTOBER 15, THEN OTHER IMMEDIATE METHODS SHALL BE IMPLEMENTED, SUCH AS EROSION CONTROL BLANKETS, OR A THREE-STEP APPLICATION OF 1) SEED, MULCH, FERTILIZER 2) BLOWN STRAW 3) TACKIFIER AND MULCH. HYDROSEEDING SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF SECTION 20" EROSION CONTROL AND HIGHWAY PLANTING" OF THE STANDARD SPECIFICATION OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION, AS LAST REVISED. REFER TO THE EROSION CONTROL SECTION OF THE GRADING SPECIFICATIONS THAT ARE A PART OF THIS PLAN SET FOR FURTHER INFORMATION.
- 5. INLET PROTECTION SHALL BE INSTALLED AT OPEN INLETS TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAIN SYSTEM. INLETS NOT USED IN CONJUNCTION WITH EROSION CONTROL ARE TO BE BLOCKED TO PREVENT ENTRY OF SEDIMENT. MINIMUM INLET PROTECTION SHALL CONSIST OF A ROCK SACKS OR AS SHOWN ON THIS PLAN
- 6. THIS EROSION AND SEDIMENT CONTROL PLAN MAY NOT COVER ALL THE SITUATIONS THAT MAY ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. VARIATIONS AND ADDITIONS MAY BE MADE TO THIS PLAN IN THE FIELD. A REPRESENTATIVE OF CLARK CIVIL ENGINEERING SHALL PERFORM A FIELD REVIEW AND MAKE RECOMMENDATIONS AS NEEDED. CONTRACTOR IS RESPONSIBLE TO NOTIFY CLARK CIVIL ENGINEERING AND THE GOVERNING AGENCY OF ANY CHANGES.
- 7. THE EROSION CONTROL MEASURES SHALL CONFORM TO THE COUNTY STANDARDS AND THE APPROVAL OF THE COUNTY'S ENGINEERING DEPARTMENT.
- 8. STRAW ROLLS SHALL BE PLACED AT THE TOE OF SLOPES AND ALONG THE DOWNSLOPE PERIMETER OF THE PROJECT. THEY SHALL BE PLACED AT 25 FOOT INTERVALS ON GRADED SLOPES. PLACEMENT SHALL RUN WITH THE CONTOURS AND ROLLS SHALL BE TIGHTLY ENDBUTTED. CONTRACTOR SHALL REFER TO MANUFACTURES SPECIFICATIONS FOR PLACEMENT AND INSTALLATION INSTRUCTIONS.

REFERENCES:

- 1. CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD'S FIELD MANUAL FOR EROSION AND SEDIMENTATION CONTROL
- 2. CALIFORNIA STORM WATER QUALITY ASSOCIATION BEST MANAGEMENT PRACTICES HANDBOOK FOR CONSTRUCTION

PURPOSE:

THE PURPOSE OF THIS PLAN IS TO STABILIZE THE SITE TO PREVENT EROSION OF GRADED AREAS AND TO PREVENT SEDIMENTATION FROM LEAVING THE CONSTRUCTION AREA AND AFFECTING NEIGHBORING SITES, NATURAL AREAS, PUBLIC FACILITIES OR ANY OTHER AREA THAT MIGHT BE AFFECTED BY SEDIMENTATION. ALL MEASURES SHOWN ON THIS PLAN SHOULD BE CONSIDERED THE MINIMUM REQUIREMENTS NECESSARY. SHOULD FIELD CONDITIONS DICTATE ADDITIONAL MEASURES, SUCH MEASURES SHALL BE PER CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD'S FIELD MANUAL FOR EROSION AND SEDIMENTATION CONTROL AND THE CALIFORNIA STORM WATER QUALITY ASSOCIATION BEST MANAGEMENT PRACTICES HANDBOOK FOR CONSTRUCTION. CLARK CIVIL ENGINEERING SHOULD BE NOTIFIED IMMEDIATELY SHOULD CONDITIONS CHANGE.

EROSION CONTROL LEGEND

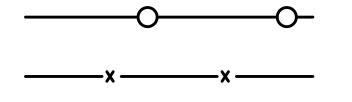
GRAVEL BAG



INLET PROTECTION



CONCRETE WASHOUT



STRAW ROLL

DESIGN BY: WCC

CIVIL

AVEN CA. Zj E OCE, ARMJ

NTR \bigcirc

8-4-25 9-19-25 REVISIONS

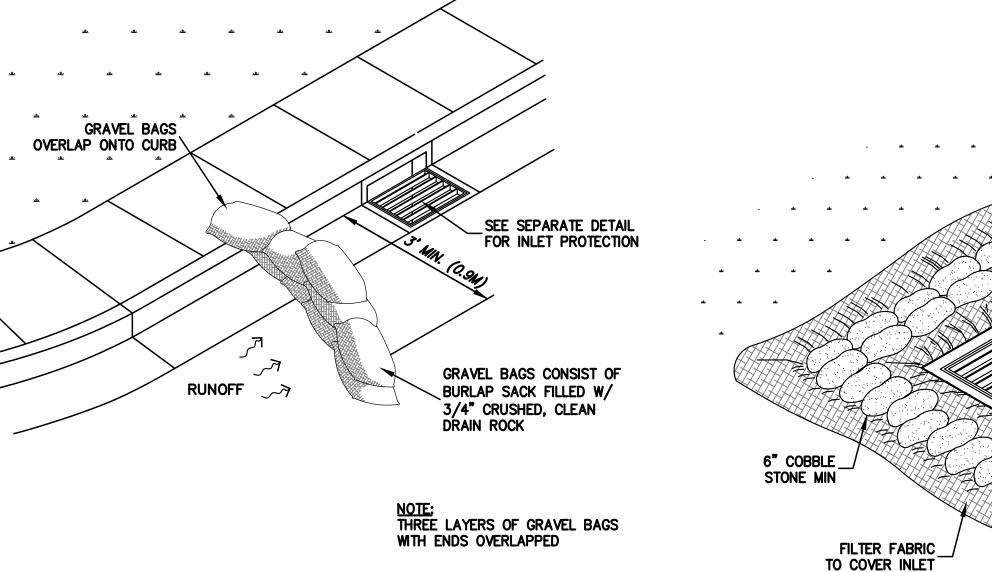
ER

JOB NO: 225042 7-14-25 SCALE: AS NOTE

DRAWN BY: OD, MD SHEET NO:

JOB NO: DATE: 7-14-25 SCALE: AS NOTE DESIGN BY: WCC DRAWN BY: OD, MD

SHEET NO:

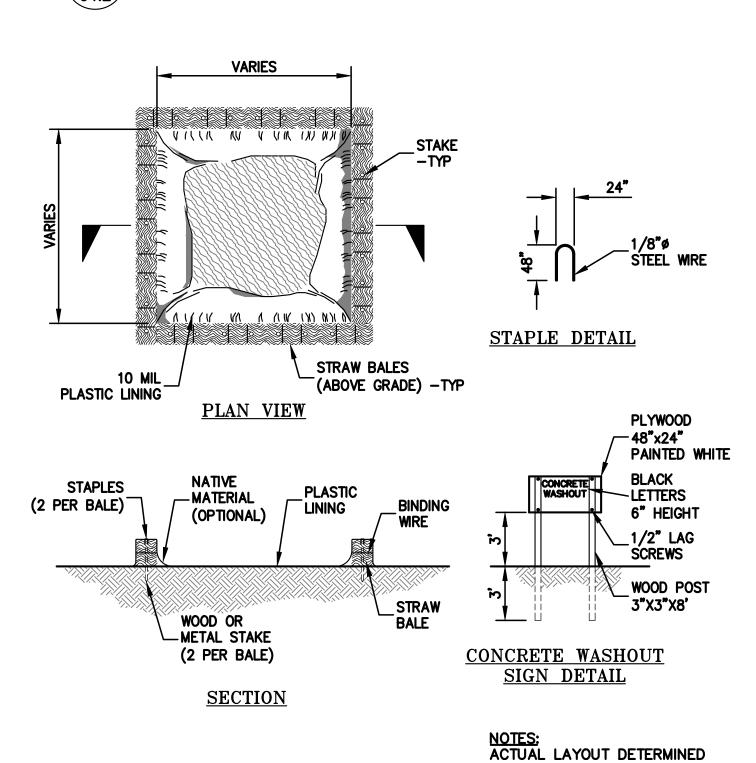


GRAVEL BAG INLET PROTECTION

GRAVEL BAGS

FLOW LINE

OVERLAP ON CURB



CONCRETE WASHOUT

C4.2

NTS

THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 10' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

GRAVEL BAG CONSISTS OF A

-BURLAP SACK FILLED WITH 3/4"

CRUSHED, CLEAN DRAIN ROCK

FILTER FABRIC

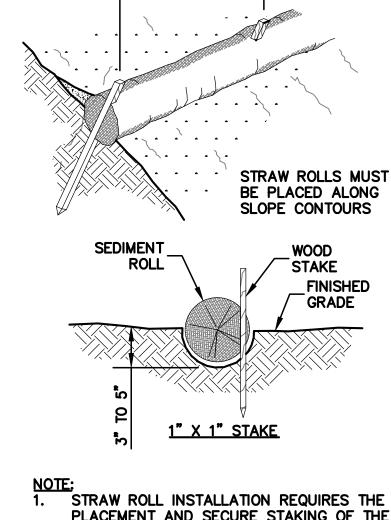
TO COVER INLET

GRAVEL BAGS SHALL

-OVERLAP EACH OTHER

TO ACT AS A FILTER

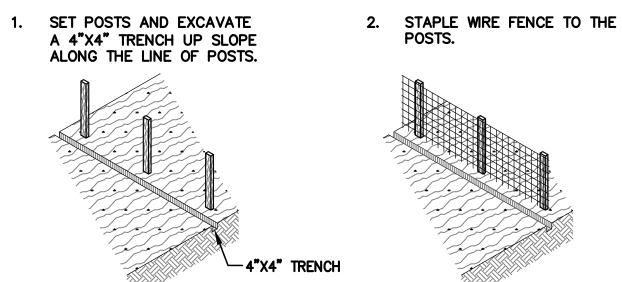
GRAVEL BAG DIKE

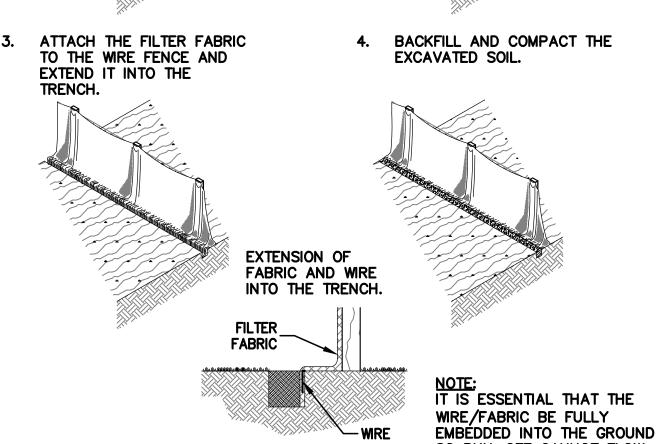


STRAW ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3" TO 5" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL. CONTRACTOR IS RESPONSIBLE FOR REGULAR MAINTENANCE AND INSPECTION. THE SILT SHALL BE CLEANED OUT WHEN IT REACHES HALF THE HEIGHT OF THE ROLL.

STRAW ROLLS **\ C4.2** ∕ NTS







SILT FENCE **\C4.2**/

PERIODIC MAINTENANCE:

1. MAINTENANCE IS TO BE PERFORMED AS FOLLOWS:

EROSION CONTROL NOTES:

FOR THIS PROJECT.

1. IT SHALL BE THE OWNER'S/CONTRACTOR'S RESPONSIBILITY TO MAINTAIN CONTROL OF THE ENTIRE CONSTRUCTION OPERATION AND TO KEEP THE

ENTIRE SITE IN COMPLIANCE WITH THIS EROSION CONTROL PLAN.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD'S FIELD

2. THE INTENTION OF THIS PLAN IS FOR INTERIM EROSION AND SEDIMENT CONTROL ONLY. ALL EROSION CONTROL MEASURES SHALL CONFORM TO

MANUAL FOR EROSION AND SEDIMENTATION CONTROL, THE CALIFORNIA STORM WATER QUALITY ASSOCIATION BEST MANAGEMENT PRACTICES HANDBOOK FOR CONSTRUCTION, AND THE LOCAL GOVERNING AGENCY

3. OWNER/CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO, DURING, AND AFTER STORM EVENTS. PERSON IN CHARGE OF MAINTAINING EROSION CONTROL

MEASURES SHOULD WATCH LOCAL WEATHER REPORTS AND ACT APPROPRIATELY TO MAKE SURE ALL NECESSARY MEASURES ARE IN

4. SANITARY FACILITIES SHALL BE MAINTAINED ON THE SITE AT ALL

6. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A

POLLUTION SHALL BE MAINTAINED AT ALL TIMES.

MEASURES SHALL BE IN PLACE BY OCTOBER 1ST.

APRIL 30, WHICHEVER IS LONGER.

PRIVATE DRAINAGE FACILITIES.

THRU APRIL 30, WHICHEVER IS GREATER.

15TH THRU APRIL 30

5. DURING THE RAINY SEASON, ALL PAVED AREAS SHALL BE KEPT CLEAR

MANNER THAT EROSION AND WATER POLLUTION WILL BE MINIMIZED. COMPLIANCE WITH FEDERAL, STATE AND LOCAL LAWS CONCERNING

7. CONTRACTOR SHALL PROVIDE DUST CONTROL AS REQUIRED BY THE APPROPRIATE FEDERAL, STATE AND LOCAL AGENCY REQUIREMENTS.

8. ALL MATERIALS NECESSARY FOR THE APPROVED EROSION CONTROL

9. EROSION CONTROL SYSTEMS SHALL BE INSTALLED AND MAINTAINED

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND

REPAIRING EROSION CONTROL SYSTEMS AFTER EACH STORM.

12. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BY COUNTY'S ENGINEERING DEPARTMENT OR BUILDING OFFICIALS.

OR IN ANY PUBLIC STORM DRAIN SYSTEMS. THE REMOVAL OF

14. EROSION CONTROL MEASURES SHALL BE ON-SITE FROM SEPTEMBER

ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AND

13. MEASURES SHALL BE TAKEN TO COLLECT OR CLEAN ANY

THROUGHOUT THE RAINY SEASON, OR FROM OCTOBER 1ST THROUGH

10. IN THE EVENT OF RAIN, ALL GRADING WORK IS TO CEASE IMMEDIATELY AND THE SITE IS TO BE SEALED IN ACCORDANCE WITH THE APPROVAL EROSION CONTROL MEASURES AND APPROVED EROSION CONTROL PLAN.

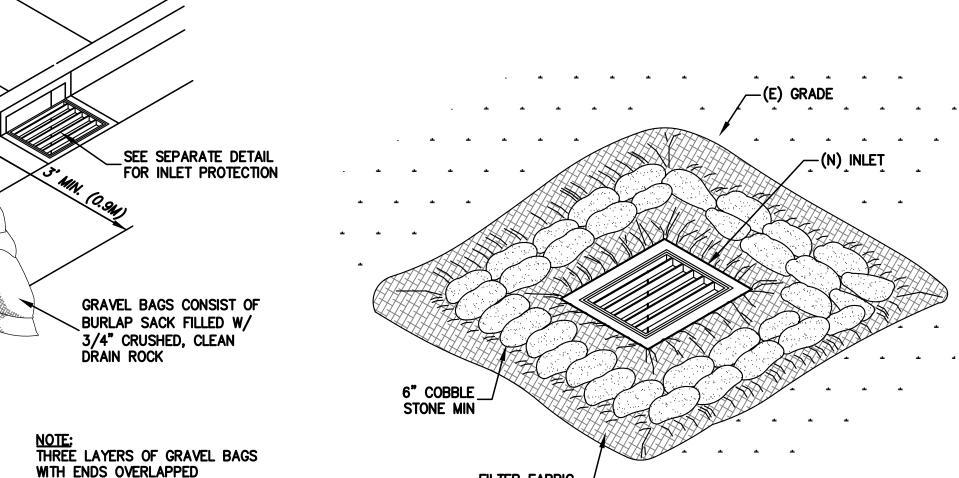
ACCUMULATION OR DEPOSIT OF DIRT, MUD, SAND, ROCKS, GRAVEL OR DEBRIS ON THE SURFACE OF ANY STREET, ALLEY OR PUBLIC PLACE

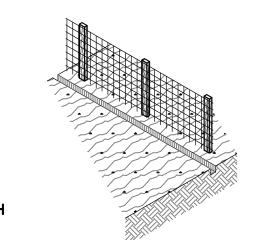
AFORESAID SHALL BE DONE BY STREET SWEEPING OR HAND SWEEPING. WATER SHALL NOT BE USED TO WASH SEDIMENTS INTO PUBLIC OR

MAINTAINED THROUGHOUT THE RAINY SEASON OR FROM OCTOBER 15

OF EARTH MATERIAL AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT-LADEN RUNOFF TO ANY STORM DRAINAGE SYSTEM, INCLUDING EXISTING DRAINAGE SWALES AND WATERCOURSES.

- A. DAMAGES CAUSED BY SOIL EROSION OR CONSTRUCTION SHALL BE REPAIRED AT THE END OF EACH WORKING DAY.
- B. SWALES SHALL BE INSPECTED PERIODICALLY AND MAINTAINED AS NEEDED.
- C. SEDIMENT TRAPS, BERMS, AND SWALES ARE TO BE INSPECTED AFTER EACH STORM AND REPAIRS MADE AS NEEDED.
- D. SEDIMENT SHALL BE REMOVED AND SEDIMENT TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO A DEPTH OF 1' FOOT.
- E. SEDIMENT REMOVED FROM TRAP SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
- F. RILLS AND GULLIES MUST BE REPAIRED.
- 2. GRAVEL BAG INLET PROTECTION SHALL BE CLEANED OUT WHENEVER SEDIMENT DEPTH IS ONE HALF THE HEIGHT OF ONE GRAVEL BAG.
- 3. STRAW ROLLS SHALL BE PERIODICALLY CHECKED TO ASSURE PROPER FUNCTION AND CLEANED OUT WHENEVER THE SEDIMENT DEPTH REACHED HALF THE HEIGHT OF THE ROLL.
- 4. SILT FENCE SHALL BE PERIODICALLY CHECKED TO ASSURE PROPER FUNCTION AND CLEANED OUT WHENEVER THE SEDIMENT DEPTH REACHES ONE FOOT IN HEIGHT.
- 5. CONSTRUCTION ENTRANCE SHALL BE REGRAVELED AS NECESSARY FOLLOWING SILT/SOIL BUILDUP.
- 6. ANY OTHER EROSION CONTROL MEASURES SHOULD BE CHECKED AT REGULAR INTERVALS TO ASSURE PROPER FUNCTION





FREELY UNDER FENCE.

SO RUN-OFF CANNOT FLOW

AVEN CA.

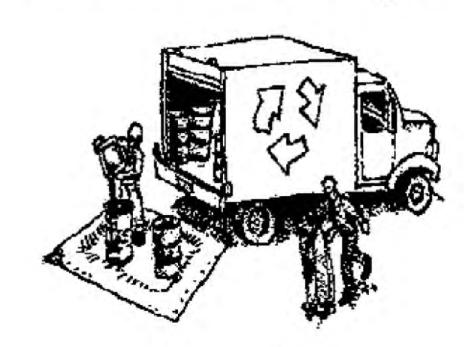
 \mathcal{C}

SIO ERO

9-19-25

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

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 Management

- ☐ 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



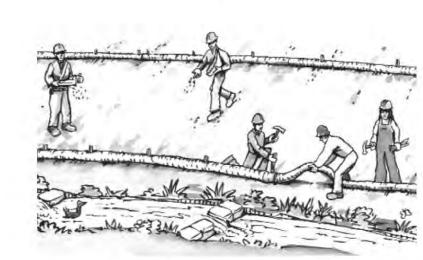
Maintenance and Parking

- ☐ 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 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, steam cleaning equipment, etc.

Spill Prevention and Control

- ☐ Keep spill cleanup materials (rags, absorbents, etc.) 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.
- 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).

Earthwork & Contaminated Soils



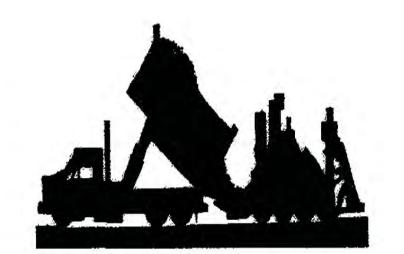
Erosion Control

- ☐ Schedule grading and excavation work for dry weather only.
- ☐ Stabilize all denuded areas, install and maintain temporary erosion controls (such as erosion control fabric or bonded fiber matrix) until vegetation is established.
- ☐ Seed or plant vegetation for erosion control on slopes or where construction is not immediately planned.

Sediment Control

- ☐ Protect storm drain inlets, gutters, ditches and drainage courses with appropriate BMPs, such as gravel bags, fiber rolls, berms, etc.
- ☐ Prevent sediment from migrating offsite by installing and maintaining sediment controls, such as fiber rolls, silt fences, or sediment basins.
- ☐ Keep excavated soil on the site where it will not collect into the street.
- ☐ Transfer excavated materials to dump trucks on the site, not in the street.
- ☐ 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 before fresh pavement will have time to cure.
- ☐ 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

- ☐ Completely cover or barricade 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



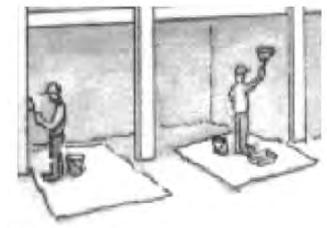
- ☐ Store concrete, grout and mortar under cover, on pallets and away from drainage areas. These materials must never reach a storm drain.
- ☐ Wash out concrete equipment/trucks offsite or in a contained area, so there is no discharge into the underlying soil or onto surrounding areas. Let concrete harden and dispose of as garbage.
- ☐ Collect the wash water from washing exposed aggregate concrete and remove it for appropriate disposal offsite.

Dewatering



- ☐ Effectively manage all run-on, all runoff within the site, and all runoff that discharges from the site. Divert run-on water from offsite away from all disturbed areas or otherwise ensure compliance.
- ☐ 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 contamination, testing is required prior to reuse or discharge of groundwater. Consult with the Engineer to determine whether testing is required and how to interpret results. Contaminated groundwater must be treated or hauled off-site for proper disposal.

Painting & Paint Removal



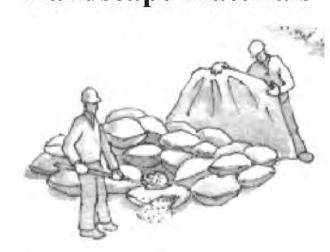
Painting cleanup

- Never clean brushes or rinse paint containers into a street, gutter, storm drain, or surface waters.
- ☐ For water-based paints, paint out brushes to the extent possible. Rinse to the sanitary sewer once you have gained permission from the local wastewater treatment authority. Never pour paint down a 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 residue and unusable thinner/solvents as hazardous waste.

Paint removal

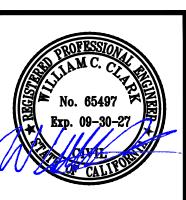
- ☐ Chemical paint stripping residue and chips and dust from marine paints or paints containing lead or tributyltin must be disposed of as hazardous waste.
- ☐ Paint chips and dust from non-hazardous dry stripping and sand blasting may be swept up or collected in plastic drop cloths and disposed of as trash.

Landscape Materials



- ☐ Contain stockpiled landscaping materials by storing them under tarps when they are not actively being used.
- ☐ Stack erodible landscape material on pallets. Cover or store these materials when they are not actively being used or applied.
- ☐ Discontinue application of any erodible landscape material within 2 days before a forecast rain event or during wet weather.

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



ARK CIVIL ENGINEERING SIGN • CONSULTING • SURVEY Nicasio Valley Rd., Nicasio, CA 94946

OCEAN AVENUE ARMEL, CA.

387

CONSTRUCTION BEST MANAGEMENT PRACTICES

8-4-25 MD
9-19-25 MD
- - - - REVISIONS BY

JOB NO: 225042

DATE: 7-14-25

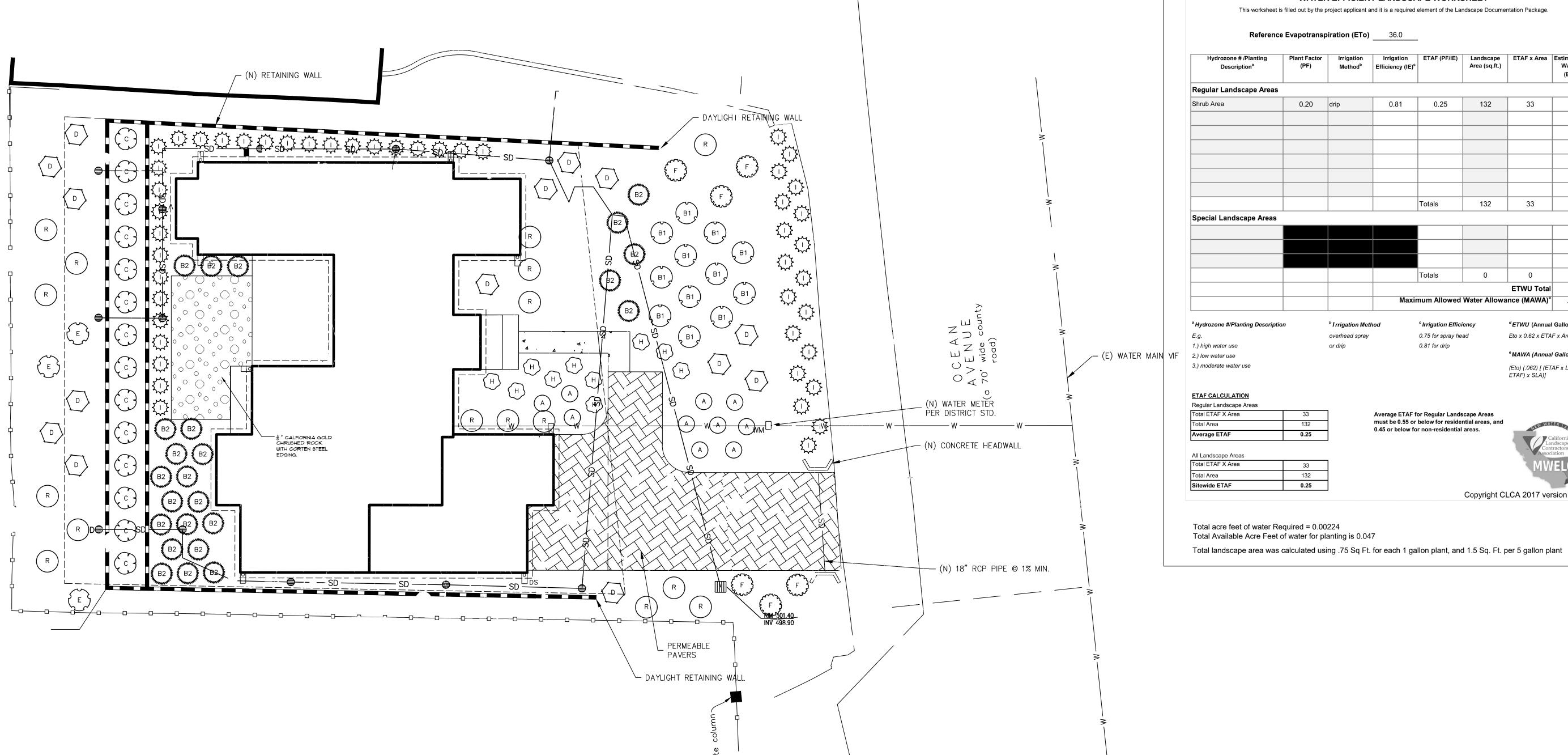
AS NOTE

DRAWN BY: OD, MD SHEET NO:

C4.3

DESIGN BY: WCC

SCALE:



WATER EFFICIENT LANDSCAPE WORKSHEET

This worksheet is filled out by the project applicant and it is a required element of the Landscape Documentation Package.

Reference Evapotranspiration (ETo) 36.0

Hydrozone # /Planting Description ^a	Plant Factor (PF)	Irrigation Method ^b	Irrigation Efficiency (IE) ^c	ETAF (PF/IE)	Landscape Area (sq.ft.)	ETAF x Area	Estimated Tota Water Use (ETWU) ^d
Regular Landscape Areas	;		'				
Shrub Area	0.20	drip	0.81	0.25	132	33	729
			-				
			-	Totals	132	33	700
Special Landscape Areas				rotais	132	33	729
Special Lanuscape Aleas							
			+				
				Totals	0	0	0
						ETWU Total	729
			Maxir	num Allowed	Water Allowa	ince (MAWA) ^e	1,624

0.75 for spray head 0.81 for drip or drip

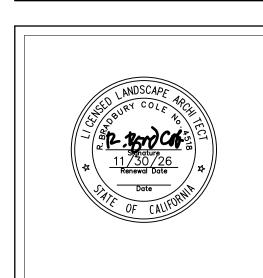
^dETWU (Annual Gallons Required) Eto x 0.62 x ETAF x Area

^eMAWA (Annual Gallons Allowed) (Eto) (.062) [(ETAF x LA) + ((1-ETAF) x SLA)]

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

Copyright CLCA 2017 version 1.1

Total acre feet of water Required = 0.00224 Total Available Acre Feet of water for planting is 0.047



BRAD COLE

Landscape Architect

CA #4518 371 W San Ramon Ave. Fresno, CA 93704

Ph. (559) 284-4934 bradc559@gmail.com

General Landscape Planting Specifications

A. General Requirements

All plants shall be quality nursery stock, labeled true to name and variety, well rooted and properly "hardened off". Soil in pots should be moist before removing plants for installation.

B. Installation

Soil Preparation - soil areas that are compacted during site preparation should be ripped to a minimum of twelve inches prior to beginning soil preparation. Planting areas shall be amended with well-rotted compost. Apply at a rate of six cubic yards per 1000 sq. ft. The soil preparation material should be broadcast uniformly over all areas to be planted and worked to a depth of six inches to obtain a uniform blend with the soil. Soil should be watered before adding plants.

Planting Pits - Plant at spacings and in areas indicated on the plan. Depth shall be the same depths as the root ball, less 1", to allow the crown to sit 1" above finished grade. Soil shall be firmly pressed around each plant and the excess soil removed from the crown. Each plant shall be immediately watered upon completion of planting.

Finish and Mulch - Soil areas adjacent to buildings shall slope away from the buildings at 1 % minimum. After planting, organic, seed-free mulch shall be applied to all planting areas to a minimum depth of 3" to assist with water conservation and weed suppression.

Gopher baskets recommended



CODE SHRUBS	BOTANICAL / COMMON NAME	CONT	WUCOLS	QTY UNIT
C	CEANOTHUS GRISEUS HORIZONTALIS / CARMEL CREEPER	1 GAL.	LOW	14 EA
E	DODONAEA VISCOSA PURPUREA / PURPLE LEAFED HOPSEED BUSH	5 GAL.	LOW	3 E A
1	FESTUCA OVINA GLAUCA DELIJAH BLUED / BLUE FESCUE	1 GAL.	LOW	47 EA
H	HEUCHERA X PLUM ROYALE / PLUM ROYALE CORAL BELLS	1 GAL.	LOW	10 EA
A	LOMANDRA LONGIFOLIA BREEZE / DWARF MAT RUSH	1 GAL.	LOW	10 EA
D	RHAMNUS CALIFORNICA SEAVIEW IMPROVED / CALIFORNIA COFFEE BERRY	1 GAL.	LOW	14 EA
R	RIBES SANGUINEUM GLUTINOSUM / RED FLOWERING CURRANT	5 GAL.	LOW	16 EA
B2	SATUREJA DOUGLASII / YERBA BUENA	1 GAL.	LOW	24 EA
BI	THYMUS PRAECOX PURPLE CARPET / MOTHER OF THYME	1 GAL.	LOW	12 EA
F	VITIS CALIFORNICA ROGER S RED / CALIFORNIA WILD GRAPE	1 GAL.	LOW	6 EA

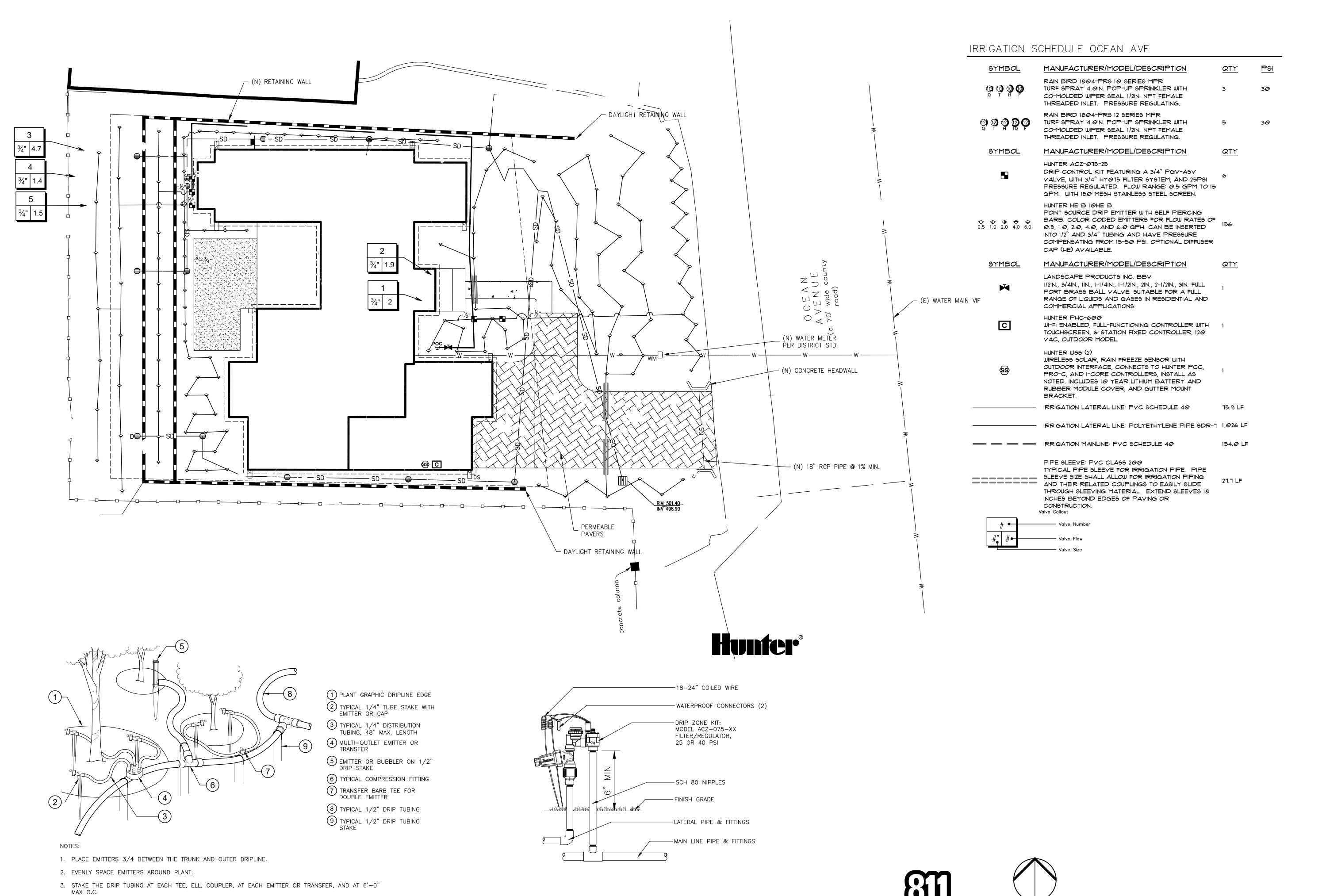




PLANTING PLAN

"I HAVE COMPLIED WITH THE CRITERIA OF THE WATER EFFICIENCY LANDSCAPE REQUIREMENTS ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLAN"

DateA	7/20/2025
ScaleA	as noted
Drawn By:	B. Cole
Job Number:	25-7-7
Sheeta	
	1



ACZ-075 VALVE WITH SCH 80 NIPPLES

FX-IR-HUNT-VALV-55

Know what's below.

Call before you dig.

TYPICAL DRIP TUBING

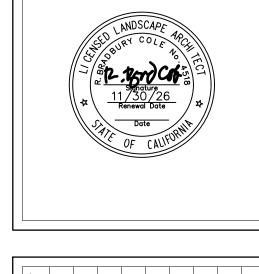
FX-IR-FX-DRIP-01

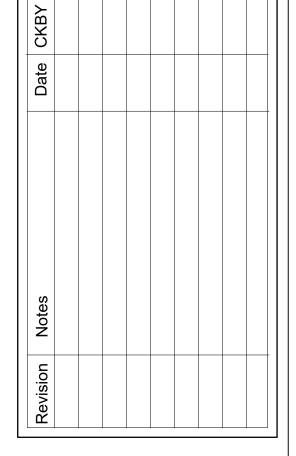
BRAD COLE

Landscape Architect CA #4518 371 W San Ramon Ave. Fresno, CA 93704

> Ph. (559) 284-4934 bradc559@gmail.com

NEW RESIDENCE
3387 Ocean Ave.
Carmel-by-the-Sea, CA 93921
M. SANDHU DEVELOPMENT INC.

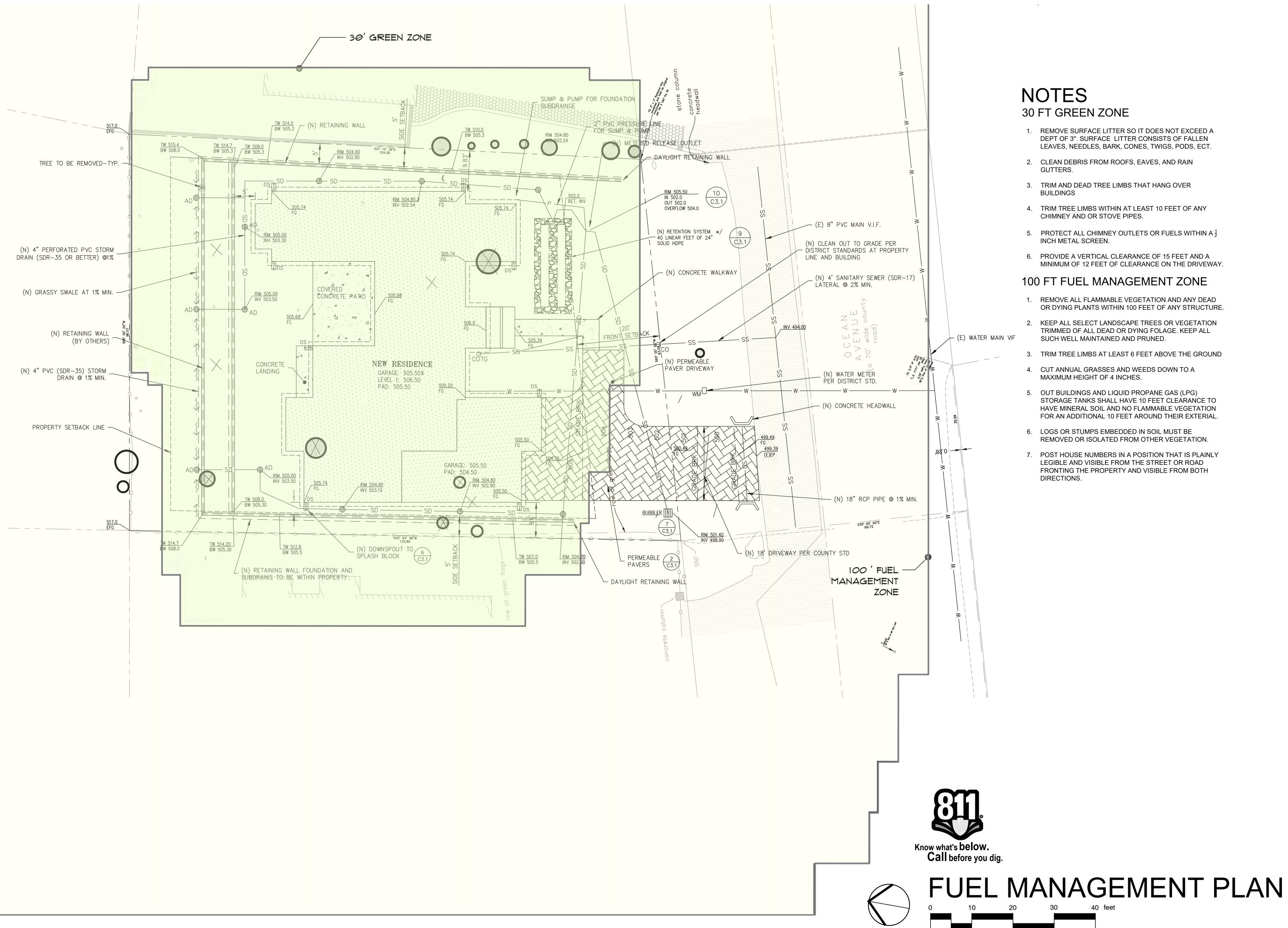




DateA	7/20/2025
Scalea	as noted
Drawn By:	B. Cole
Job Number:	25-7-7
Sheeta	

IRRIGATION PLAN

"I HAVE COMPLIED WITH THE CRITERIA OF THE WATER EFFICIENCY LANDSCAPE REQUIREMENTS ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLAN"



BRAD COLE

Landscape Architect CA #4518 371 W San Ramon Ave. Fresno, CA 93704

Ph. (559) 284-4934 bradc559@gmail.com

1. REMOVE SURFACE LITTER SO IT DOES NOT EXCEED A DEPT OF 3". SURFACE LITTER CONSISTS OF FALLEN LEAVES, NEEDLES, BARK, CONES, TWIGS, PODS, ECT.

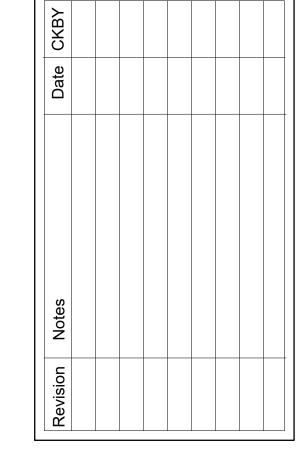
- 2. CLEAN DEBRIS FROM ROOFS, EAVES, AND RAIN
- 3. TRIM AND DEAD TREE LIMBS THAT HANG OVER
- 4. TRIM TREE LIMBS WITHIN AT LEAST 10 FEET OF ANY CHIMNEY AND OR STOVE PIPES.
- 5. PROTECT ALL CHIMNEY OUTLETS OR FUELS WITHIN A $\frac{1}{2}$ INCH METAL SCREEN.
- 6. PROVIDE A VERTICAL CLEARANCE OF 15 FEET AND A MINIMUM OF 12 FEET OF CLEARANCE ON THE DRIVEWAY.

100 FT FUEL MANAGEMENT ZONE

1. REMOVE ALL FLAMMABLE VEGETATION AND ANY DEAD OR DYING PLANTS WITHIN 100 FEET OF ANY STRUCTURE.

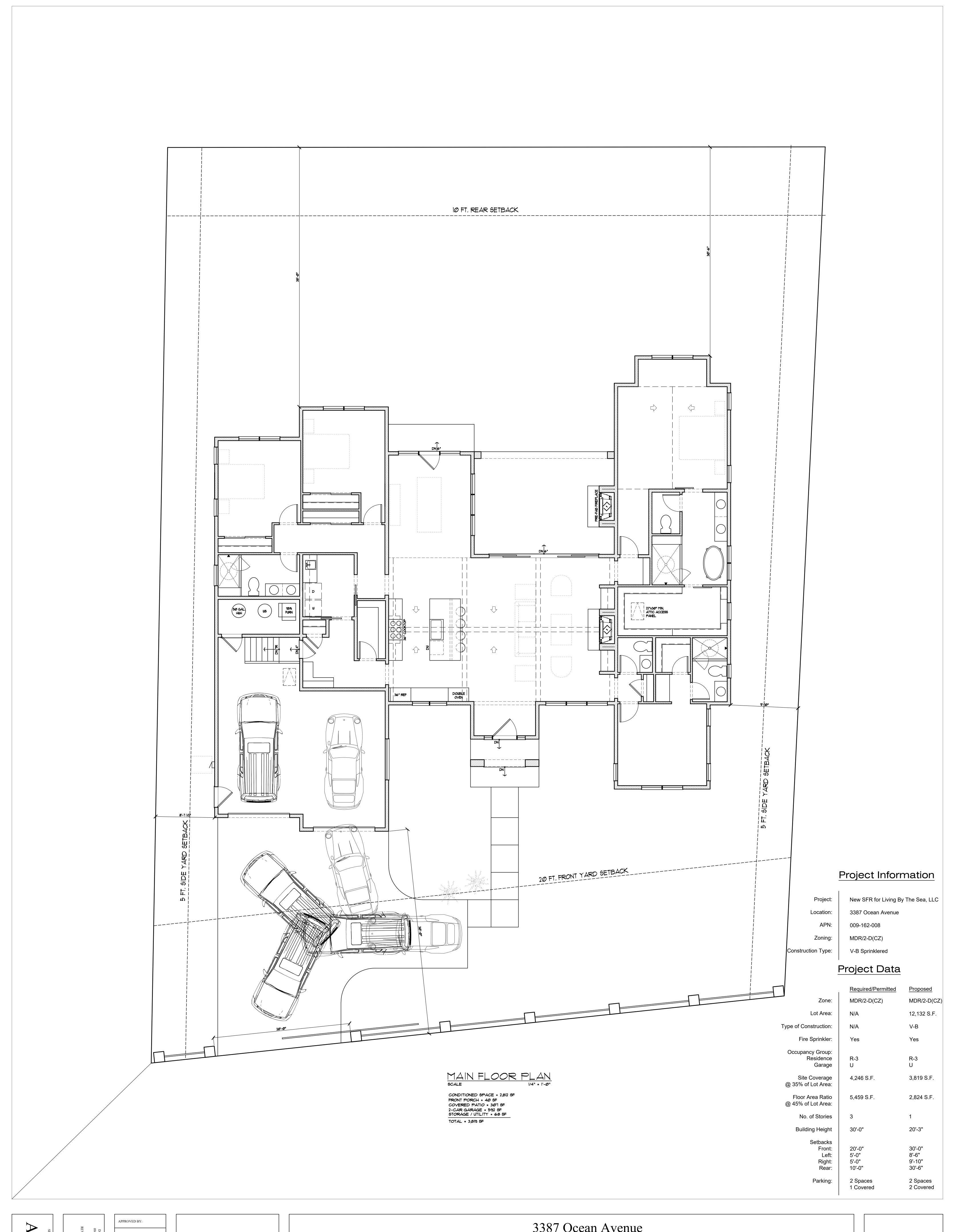
- 2. KEEP ALL SELECT LANDSCAPE TREES OR VEGETATION TRIMMED OF ALL DEAD OR DYING FOLAGE. KEEP ALL SUCH WELL MAINTAINED AND PRUNED.
- 3. TRIM TREE LIMBS AT LEAST 6 FEET ABOVE THE GROUND
- 4. CUT ANNUAL GRASSES AND WEEDS DOWN TO A MAXIMUM HEIGHT OF 4 INCHES.
- 5. OUT BUILDINGS AND LIQUID PROPANE GAS (LPG) STORAGE TANKS SHALL HAVE 10 FEET CLEARANCE TO HAVE MINERAL SOIL AND NO FLAMMABLE VEGETATION FOR AN ADDITIONAL 10 FEET AROUND THEIR EXTERIAL
- 6. LOGS OR STUMPS EMBEDDED IN SOIL MUST BE REMOVED OR ISOLATED FROM OTHER VEGETATION.
- 7. POST HOUSE NUMBERS IN A POSITION THAT IS PLAINLY LEGIBLE AND VISIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY AND VISIBLE FROM BOTH DIRECTIONS.

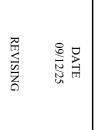


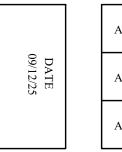


DateA	7/30/2025
ScaleA	as noted
Drawn By:	B. Cole
Job Number:	25-7-7
Sheeta	4

L4

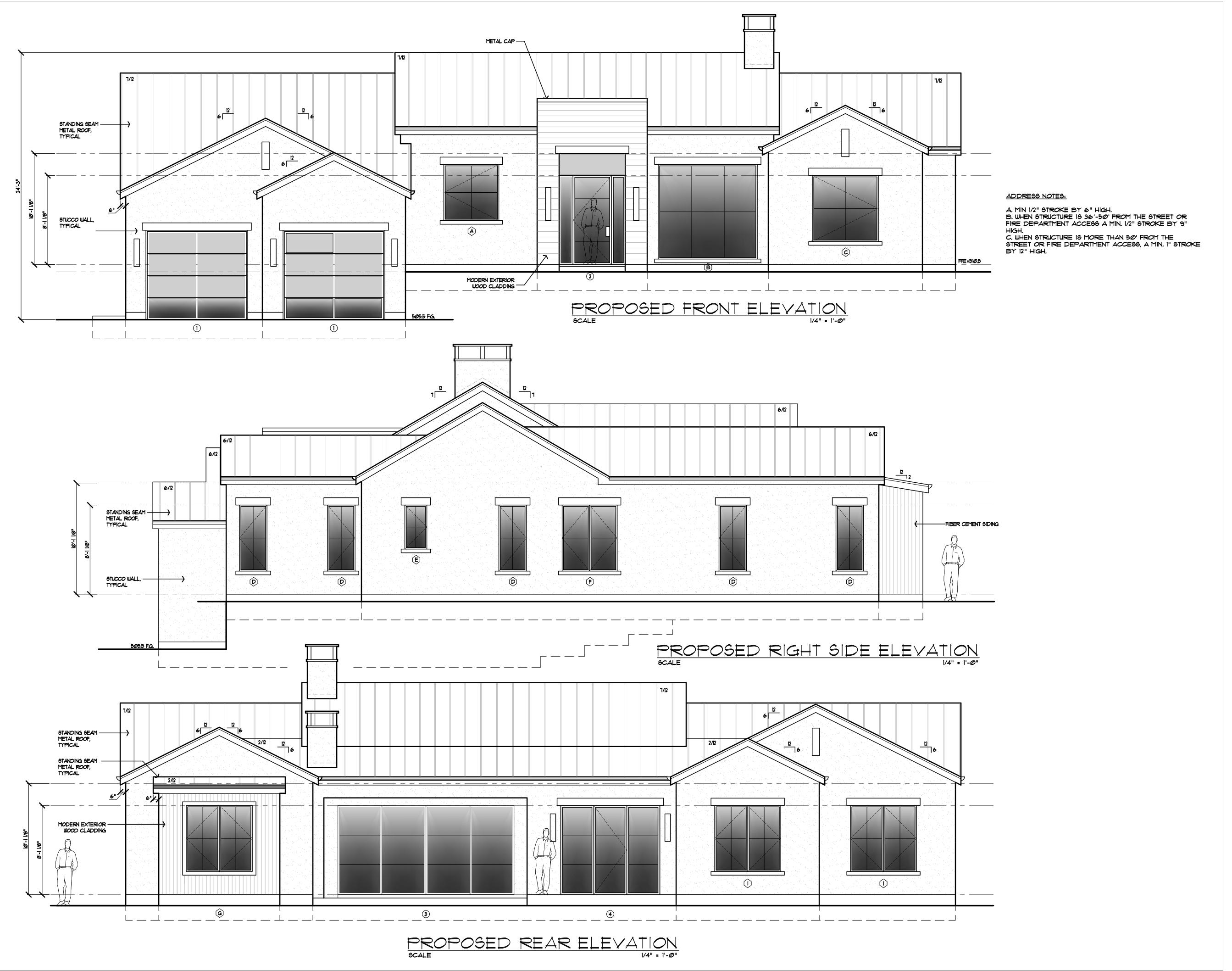






APPROVED BY: APPROVED BY:

3387 Ocean Avenue Monterey County, California





These drawings are, and shall remain, the exclusive property of Christopher D. Halili - Architect and are released for construction purposes only. No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form, or by any means of electronic, photo copying or otherwise, without the prior written permission of Christopher D. Halili - Architect is strictly prohibited. Violators will be subject to compensatory damages thru legal action.

Copyright 2025

Venue Ornia, 93923

3387 Ocean Aver Carmel-By-The-Sea, California, 9.

Exp: December 31, 2025

Description

Proposed Elevations

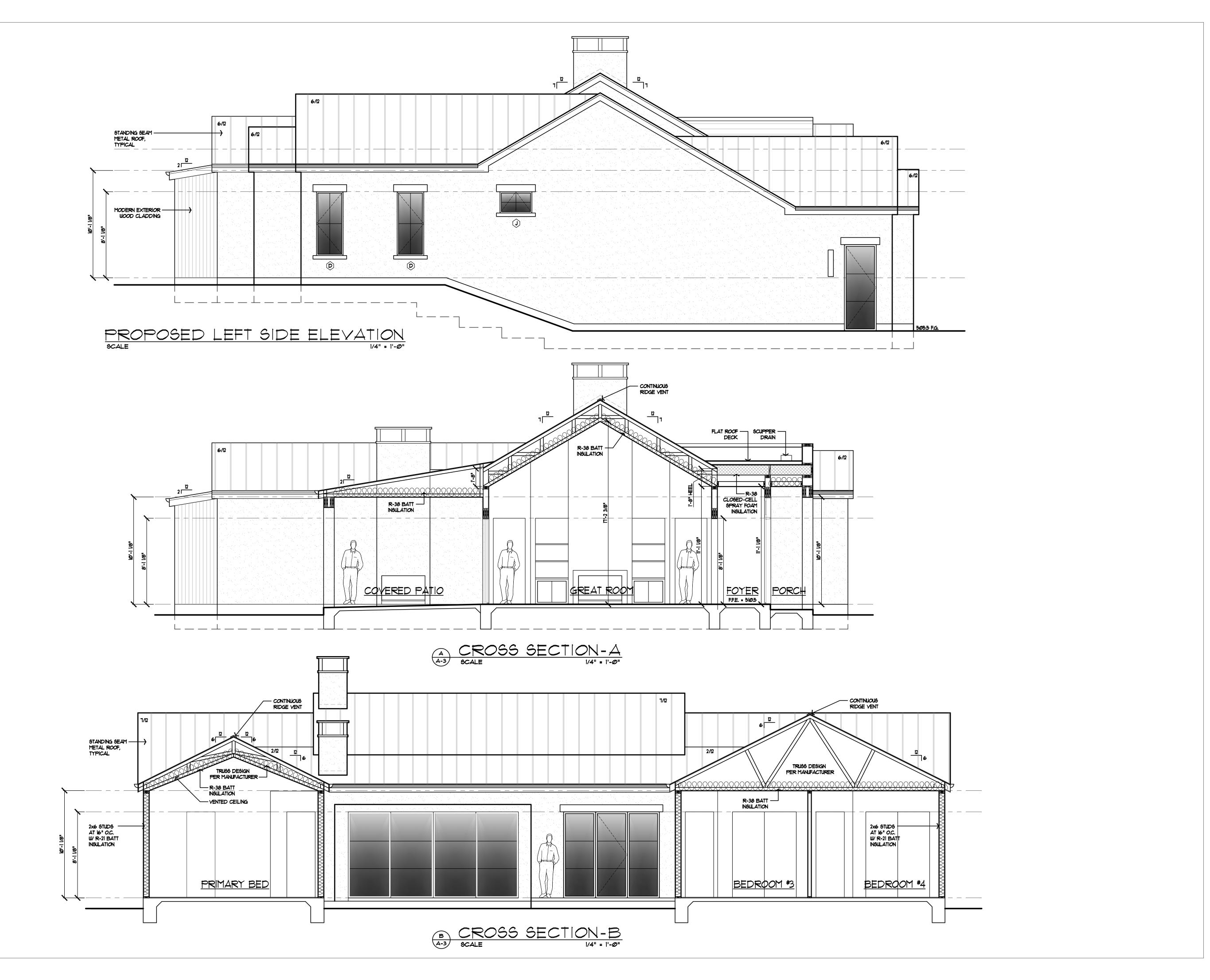
 Project No.
 _

 Date
 09.12.25

 Drawn
 CDH

SHEET NUMBER

A2.0





These drawings are, and shall remain, the exclusive property of Christopher D. Halili - Architect and are released for construction purposes only. No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form, or by any means of electronic, photo copying or otherwise, without the prior written permission of Christopher D. Halili - Architect is strictly prohibited. Violators will be subject to compensatory damages thru legal action.

Copyright 2025

cean Avenue

38,

m 2

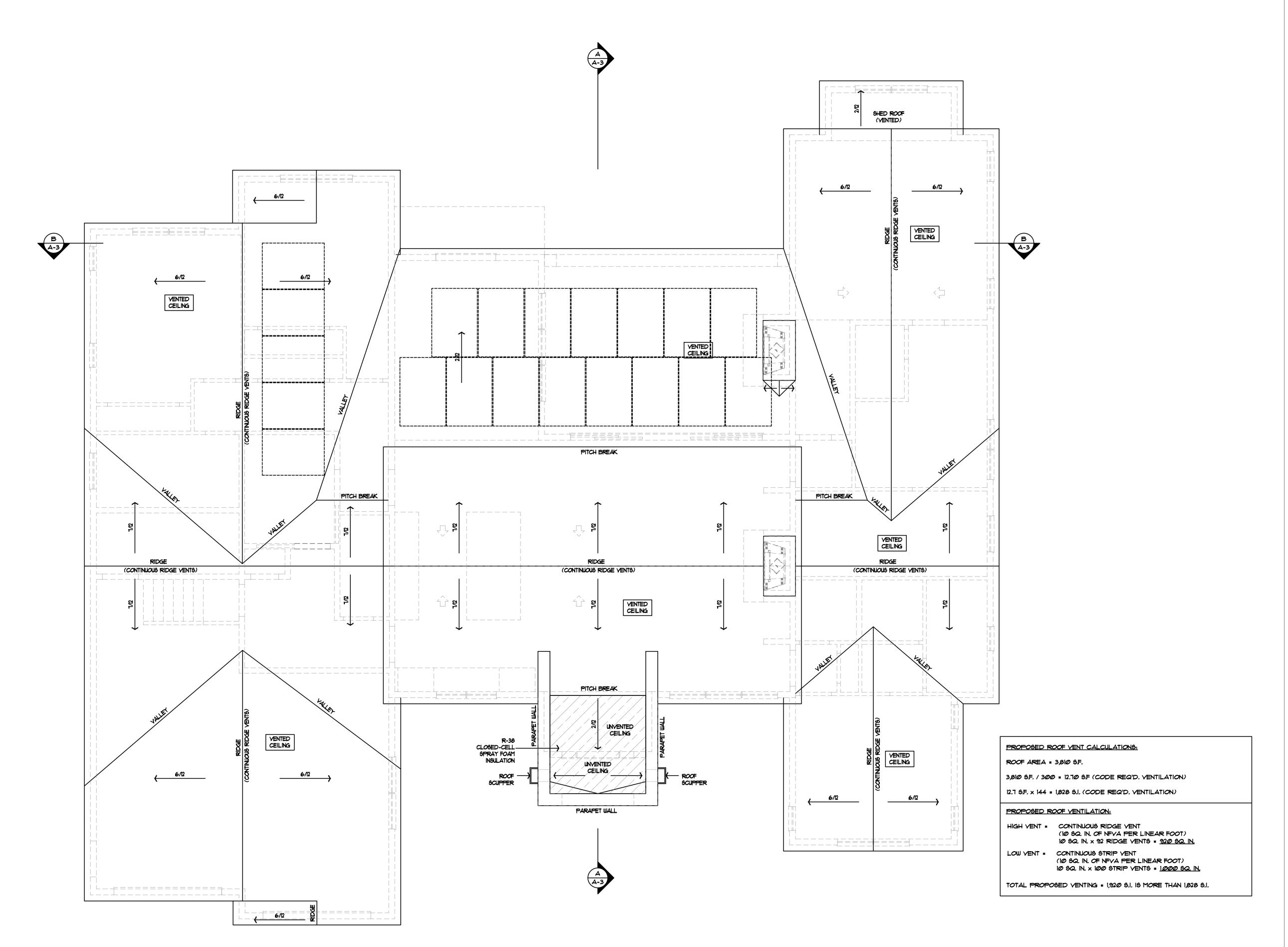
Exp: December 31, 2025

Description

Proposed Elevations Cross

Sections

A3.0



CHRISTOPHER D. HALILI
T: 847.533.8358 E: architectcdh@gmail.com

These drawings are, and shall remain, the exclusive property of Christopher D. Halili - Architect and are released for construction purposes only. No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form, or by any means of electronic, photo copying or otherwise, without the prior written permission of Christopher D. Halili - Architect is strictly prohibited. Violators will be subject to compensatory damages thru legal action.

Copyright 2025

 Jeean Avenue

 The-Sea, California, 93923

38

Exp: December 31, 2025

Description

nte Description

Proposed

Roof Plan

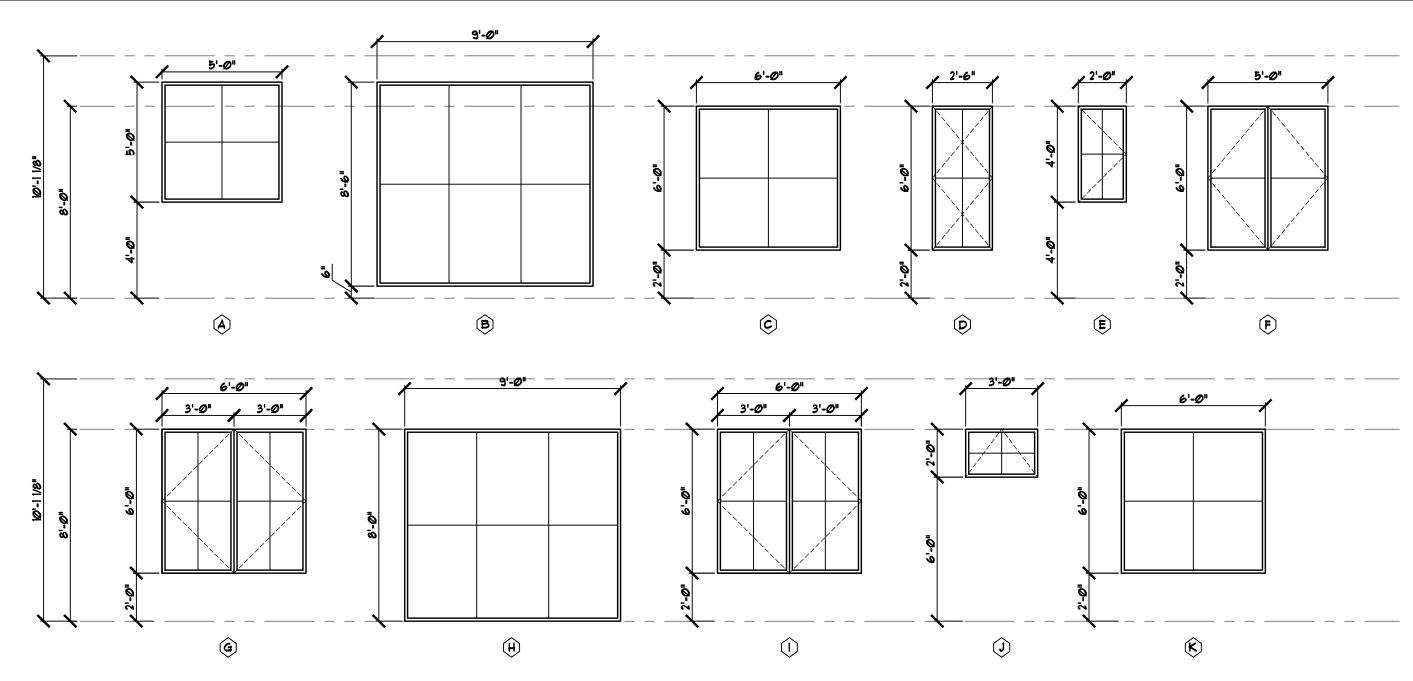
 Project No.
 _

 Date
 09.12.25

 Drawn
 CDH

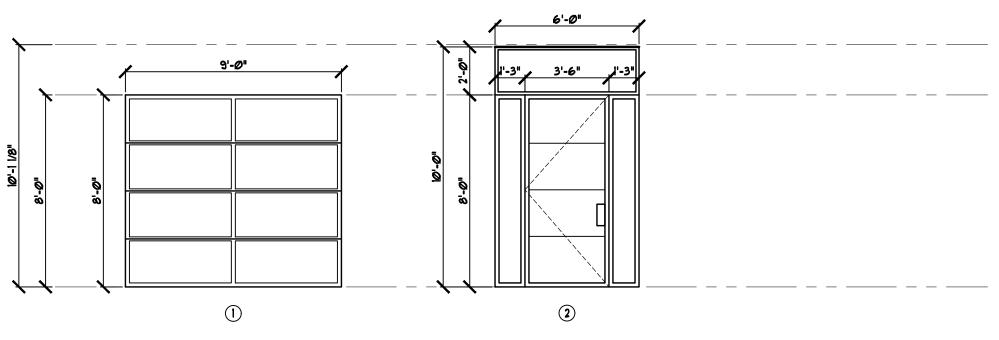
SHEET NUMBER

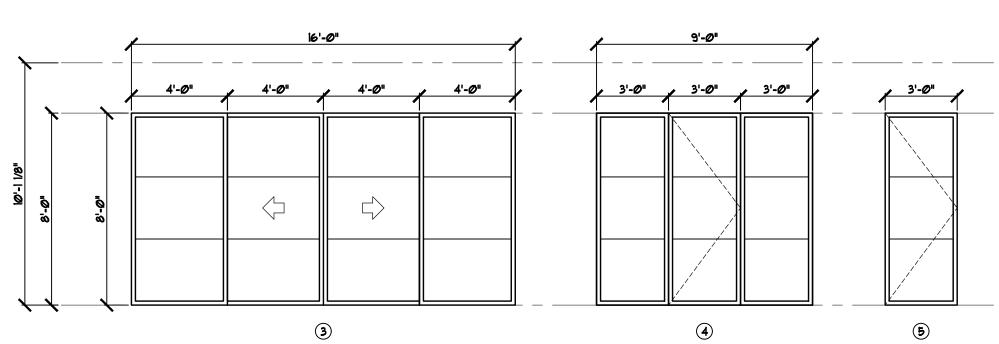
A4.0



WINDOW ELEVATIONS

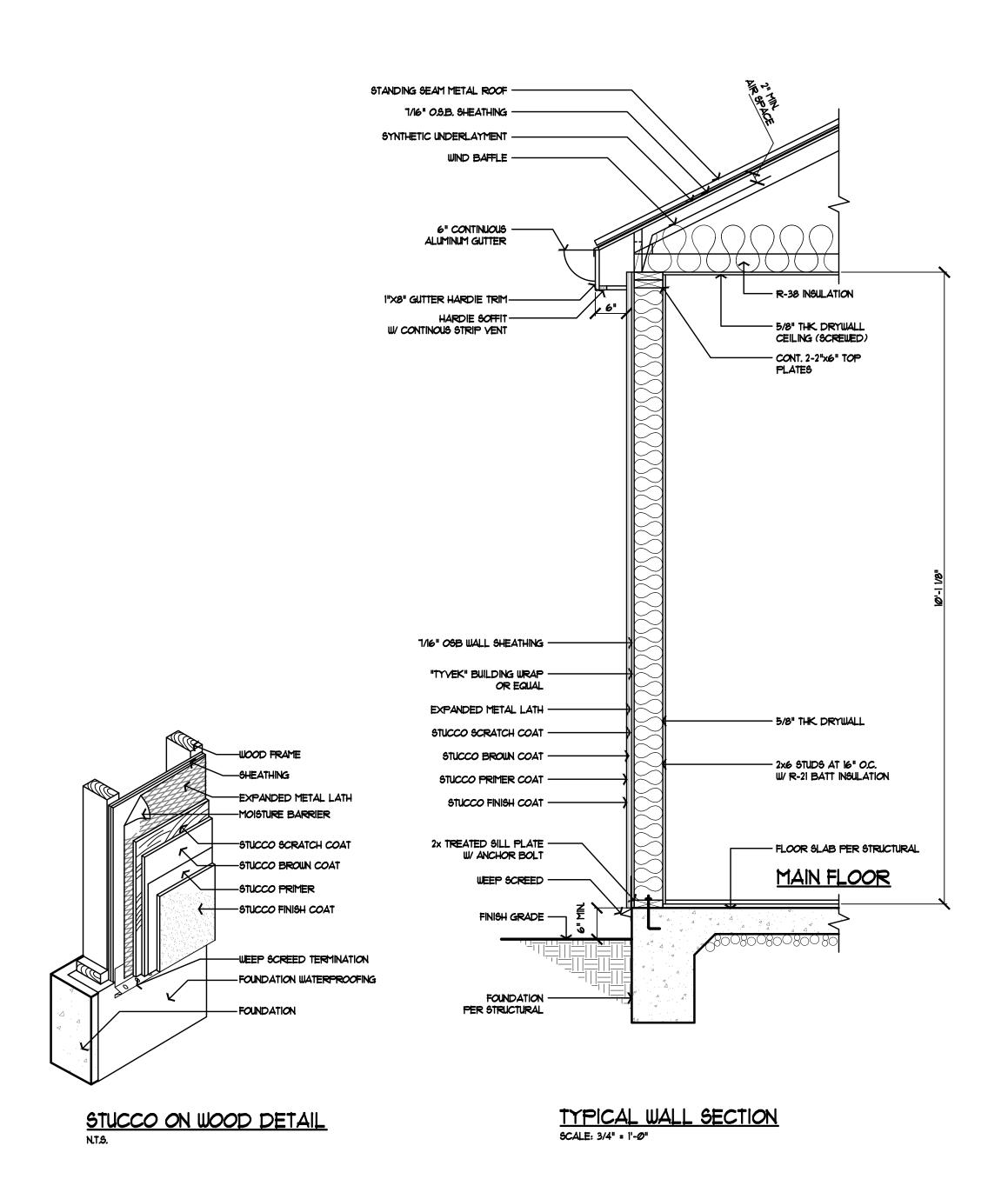
	SIZE	ROUGH OPENING	MATERIAL	COLOR	TYPE	GLASS	NOTES		
	60x60	PER MANUF.	TBD	TBD	FIXED	LOW E INSULATED GLASS			
(B)	108×102	PER MANUF.	TBD	TBD	FIXED	LOW E INSULATED GLASS	SAFETY GLASS		
$\langle \mathfrak{o} \rangle$	72×72	PER MANUF.	TBD	TBD	FIXED	LOW E INSULATED GLASS	SAFETY GLASS		
$\langle \Phi \rangle$	30×72	PER MANUF.	TBD	TBD	CASEMENT	LOW E INSULATED GLASS	EGRESS		
$\langle \mathbf{m} \rangle$	24×48	PER MANUF.	TBD	TBD	CASEMENT	LOW E INSULATED GLASS	SAFETY GLASS		
(1)	60x72	PER MANUF.	TBD	TBD	CASEMENT	LOW E INSULATED GLASS	SAFETY GLASS		
(72×72	PER MANUF.	TBD	TBD	CASEMENT	LOW E INSULATED GLASS	SAFETY GLASS		
$\langle \mathbf{t} \rangle$	108×96	PER MANUF.	TBD	TBD	FIXED	LOW E INSULATED GLASS	SAFETY GLASS		
\bigcirc	72×72	PER MANUF.	TBD	TBD	CASEMENT	LOW E INSULATED GLASS	EGRESS		
$\widehat{\mathfrak{D}}$	36×24	PER MANUF.	TBD	TBD	AUNING	LOW E INSULATED GLASS	SAFETY GLASS		
(X)	72×72	PER MANUF.	TBD	TBD	FIXED	LOW E INSULATED GLASS	SAFETY GLASS		





DOOR ELEVATIONS

	DOOR SCHEDULE								
	SIZE	ROUGH OPENING	MATERIAL	COLOR	TYPE	GLASS	NOTES		
1	9'-0"x8'-0"	PER MANUF.	ALUMINUM	TBD	OVERHEAD	LOW E INSULATED GLASS			
2	6'-0"x10'-0"	PER MANUF.	STEEL	TBD	FIXED/9WING/FIXED	LOW E INSULATED GLASS	SAFETY GLAZING W/ SIDE LITES		
3	16'-0"x8'-0"	PER MANUF.	STEEL	TBD	SLIDING	LOW E INSULATED GLASS	SAFETY GLAZING		
4	9'-0"x8'-0"	PER MANUF.	STEEL	TBD	FIXED/9WING/FIXED	LOW E INSULATED GLASS	SAFETY GLAZING W SIDE LITES		
(5)	3'-0"x8'-0"	PER MANUF.	STEEL	TBD	SWING	LOW E INSULATED GLASS	GARAGE MAN DOOR		



architect
CHRISTOPHER D. HALILI
T: 847.533.8358 E: architectcdh@gmail.com

These drawings are, and shall remain, the exclusive property of Christopher D. Halili - Architect and are released for construction purposes only. No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form, or by any means of electronic, photo copying or otherwise, without the prior written permission of Christopher D. Halili - Architect is strictly prohibited. Violators will be subject to compensatory damages thru legal action.

Copyright 2025

1ue 3923

387 Ocean Avenu armel-By-The-Sea, California, 9392

m 0

CHRISTOPHER
D. HALILI
* C 34628

*

RENEWAL DATE
OF CALIFORNIA

Exp: December 31, 2025

Description

Schedules Sections

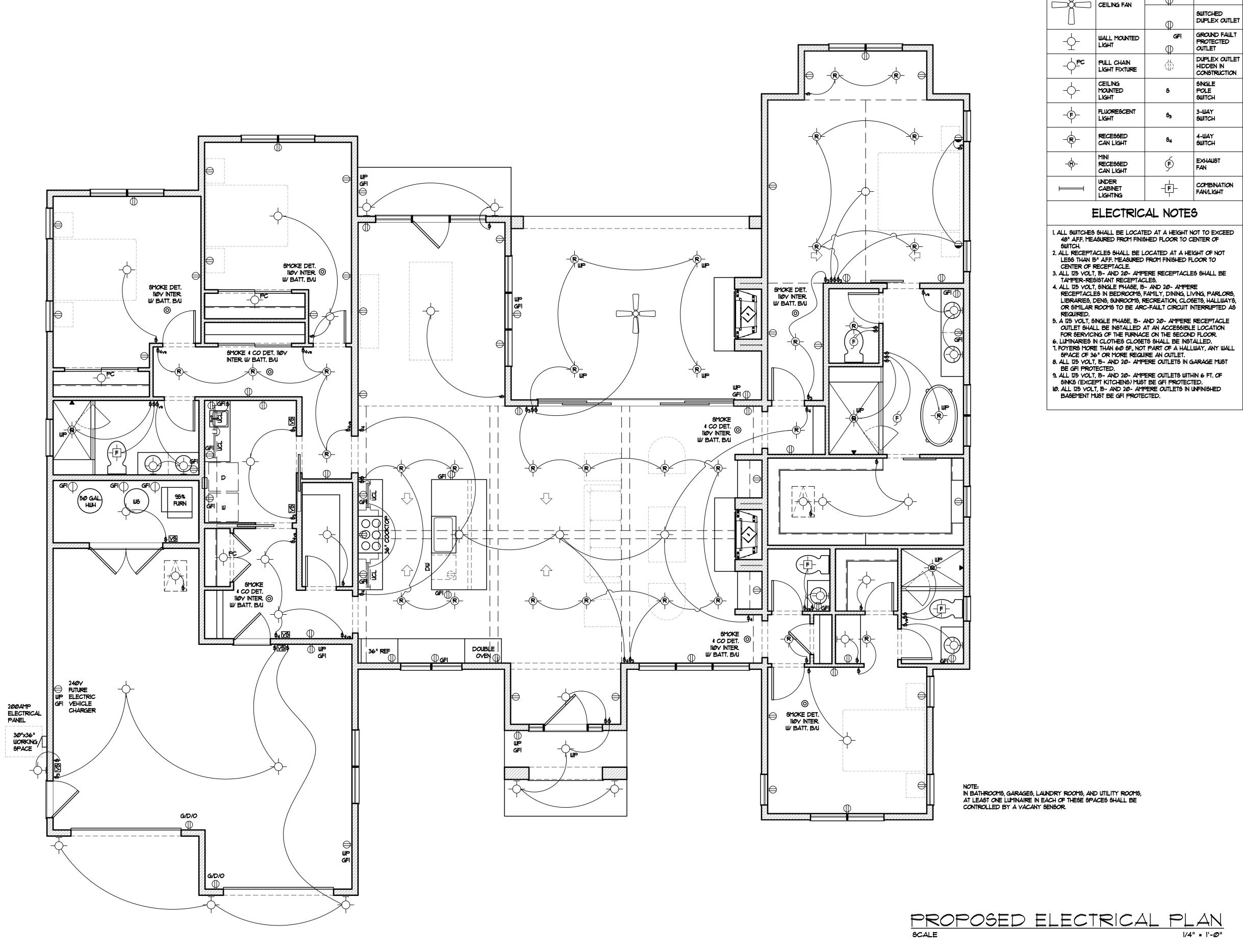
Project No. __

Date 07.22.25

Drawn CDH

SHEET NUMBER

A5.0



architect CHRISTOPHER D. HALILI

T: 847.533.8358 E: architectcdh@gmail.com

These drawings are, and shall remain, the exclusive property of Christopher D. Halili - Architect and are released for construction purposes only. No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form, or by any means of electronic, photo copying or otherwise, without the prior written permission of Christopher D. Halili
- Architect is strictly prohibited. Violators will be subject to compensatory damages thru legal action.

Copyright 2025

Res

ELECTRICAL LEGEND

DUPLEX OUTLET

 \mathcal{C}

m 0

Exp: December 31, 2025

Description

Electrical Plan

Project No. 07.22.25 CDH

SHEET NUMBER

E1.0