Exhibit B

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EXHIBIT B
DRAFT RESOLUTION

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

In the matter of the application of:
MESSIAH SAMIR & NIMRI SAWSAN AL (PLN250001)
RESOLUTION NO. 26-024
Resolution by the Monterey County Chief of Planning:

1) Consider an Addendum together with the Santa Lucia Environmental Impact Report (EIR 94-005, Resolution No. 96-059) pursuant to CEQA Guidelines Section 15164; and
2) Approving an Administrative Permit and Design Approval to allow construction of a 4,449 square foot single family dwelling with an attached 888 square foot three-car garage, and associated site improvements including the removal of three Coast Live Oak trees.

[PLN250001, Samir Messiah and Sawsan Nimri, 12 Arroyo Sequoia, Carmel, Greater Monterey Peninsula Area Plan (APN: 239-091-021-000)]

The MESSIAH application (PLN250001) came on for public hearing before the County of Monterey Chief of Planning on March 4, 2026. Having considered all the written and documentary evidence, the administrative record, the staff report, oral testimony, and other evidence presented, the HCD Chief of Planning 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 2010 Monterey County General Plan;
- Greater Monterey Peninsula Area Plan;
- Monterey County Zoning Ordinance (Title 21);

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) Project. The project includes construction of a 4,449 square foot single-family dwelling with an attached three-car garage, and associated site improvements, including the removal of three Coast Live Oak trees. The site plans included in this project illustrate an approximately 1,194 square foot Accessory Dwelling Unit (ADU). Pursuant to Title 21 section 21.64.030 and Government Code section 65852.2, construction

of an ADU shall be processed ministerially. Although a planning entitlement is not required and approval for the construction of ADU is not a part of this application, the ADU is dependent and accessory to a single-family dwelling. Therefore, the ADU remains in the plans.

c) Allowed Use. The property is located at 12 Arroyo Sequoia, Carmel (Assessor's Parcel Number 239-091-021-000), Greater Monterey Peninsula Area Plan. The parcel is zoned RC/40-D-S, or Resource Conservation, 40 acres per unit density, Design Control, Site Plan Review which allows for construction of a single-family dwelling and accessory structures, subject to the granting Administrative Permit and Design Approval, per Title 21 section 21.44 and 21.45. Additionally, the project includes removal of 3 Coast Live Oaks,. Title 21.64.290.D.2 states the Director of Planning may approve the removal of no more than protected trees per lot in a one-year period. This Administrative Permit includes the removal of the three protected trees. The property is within the Santa Lucia Preserve Subdivision and as discussed in Finding 5 requires an Addendum to the previously approved Environmental Impact Report (EIR No. 94-005), which previously allotted tree removal per parcel. Therefore, the project is an allowed land use for this site.

d) Lot Legality. The subject parcel (APN: 230-091-021-000) is shown in its current configuration as 3.94 acres in size as Lot 96 of Tract No. 1333, Santa Lucia Preserve, Phase B, Volume 20 of Cities and Towns, on Page 33, recorded on December 7, 1999. Therefore, the County recognizes the subject parcel as a legal lot of record.

e) The project planner conducted a site inspection on Google Earth to verify that the project on the subject parcel conforms to the plans listed above.

f) Development Standards. The project meets all required development standards for Resource Conservation zoning district which are identified in Title 21 section 21.36.060. Required setbacks are 30 feet (front), 20 feet (side), and 20 feet (rear), with a maximum allowable height of 30 feet as measured from average natural grade. As delineated on the project plans, the parcel contains a Homeland Boundary that was approved as part of the original subdivision (PC94067), and the proposed development is entirely within the boundary lines. The RC zoning district allows a maximum height of 30 feet for main structures, and the proposed single-family dwelling will have a height of 18 feet, and the ADU proposes a height of 13 feet, both as measured from average natural grade. The RC zoning district allows a maximum building site coverage of 25%. The proposed project will have a building site coverage of 6,520 square feet or 3.79%. Therefore, the project meets the required development standards.

g) Design and Visual Resources. Pursuant to Title 21 Chapter 21.44, 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 modern architectural style with rural finishes, and exterior colors and materials consisting of stone veneer siding and light-brown fiber cement vertical siding, a dark bronze

standing seam metal roof, and black aluminum framing for windows and doors. The residences within the vicinity are eclectic in architectural style, ranging from modern-style homes to craftsman-style homes. The proposed exterior finishes do not detract from the surrounding environment and are consistent with the surrounding residential neighborhood character. The property is surrounded by mature Coast live oaks and Monterey pines, and other native vegetation, along with nearby residences. The proposed development will blend in with the surrounding residential neighborhood and the natural colors and materials that exist in this community. A standard condition of approval has been applied to ensure that all exterior lighting is down-lit, unobtrusive, and harmonious with the areas, in accordance with General Plan Policy LU-1.13. Due to intervening vegetation and existing development, the proposed residence will not create any adverse visual impacts. Figure 14 of the Greater Monterey Peninsula Scenic Highway Corridors and Visual Sensitivity Map 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.

h) Tree Removal. The proposed project involves the removal of 3 Coast Live Oaks. 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. This property, Lot 96 was not previously allotted tree removal under the adopted EIR, therefore an Addendum has been prepared to consider the tree removal.

i) Cultural Resources. According to the Monterey County Geographic Information System (GIS), the subject property is within an area of high archaeological sensitivity. In accordance with General Plan Open Space Policy OS-6.3, any new development being proposed within moderate or high sensitivity zones, or within 150 feet of a known recorded archaeological and/or cultural site, shall complete a Phase One Archaeological survey. As part of the original approval of the Santa Lucia Preserve subdivision, an EIR was adopted and requires all development shall be in accordance with these prepared reports. 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.

j) Biological Resources. As part of the original approval of the Santa Lucia Preserve subdivision, an EIR was adopted and considered all potential impacts to nearby resources as a result of construction. The most recently prepared Biological Report (County of Monterey Library No. LIB250282) confirmed the findings of the adopted EIR still apply to Lot 96 and determined the project as designed and sited was appropriate. Staff included the Migratory Bird Nesting Condition (Condition No. 6) per the recommendation of the Biological Report,

therefore as proposed the development will not adversely impact biological resources.

k) Land Use Advisory Committee. The project was not referred to the Greater Monterey Peninsula Land Use Advisory Committee (LUAC) for review because it does not involve a Lot Line Adjustment, Variance, or Design Approval subject to review by the Zoning Administrator or Planning Commission.

l) 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 PLN250001.

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, Monterey County Regional Fire Protection District, 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 Biological Resources, Forest Resources, and Soil/Slope Stability. The following reports have been prepared:

- "Tree Impact Assessment" (County of Monterey Library No. LIB250281) prepared by Rob Thompson, Monterey, CA, 93940, February 14, 2024.
- "Biological Resources Report for Santa Lucia Preserve Homeland of Lot 96" (County of Monterey Library No. LIB250282) prepared by Jeffey B Froke, Pebble Beach, CA, 93953, June 8, 2024.
- "Soil Engineering Investigation" (County of Monterey Library No. LIB250283) prepared by Samir Messiah, San Francisco, CA, 94103, May 21, 2024.

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 Google Earth 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 PLN250001.

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, Monterey County Regional Fire Protection District, 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) Necessary public facilities are provided for both the single-family dwelling and ADU by the Santa Lucia Community Services District for domestic water and sewage.

c) Can and Will Serve letter was provided by Santa Lucia Community Services District, dated July 31, 2025, acknowledging the development and confirming service to the subject parcel for drinking water and sewage services.

d) Staff conducted a site inspection on Google Earth to verify that the site is suitable for this use.

e) 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 PLN250001.

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 Google Earth and researched County records to assess if any violation exists on the subject property.

c) There are no known violations on the subject parcel.

d) 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 PLN250001.

5. **FINDING:** **CEQA (Addendum): -** An Addendum to a previously adopted Environmental Impact Report (EIR) was prepared pursuant to Code of Regulations, Title 14, sections 15162 and 15164, to reflect changes or additions in the project that do not cause substantial changes or new information that would require major revisions to the adopted EIR.

EVIDENCE:

a) An Environmental Impact Report for the Santa Lucia Preserve Subdivision was prepared and certified by the Board of Supervisors February 6, 1996 (EIR 94-005, Resolution No. 96-059).

b) An Addendum to the EIR for the Santa Lucia Preserve Subdivision was prepared for this project pursuant to Code of Regulations, Title 14, Section 15164 of the CEQA Guidelines.

c) Pursuant to the California Environmental Quality Act (CEQA) Guidelines Section 15162, when an EIR has been certified, no subsequent EIR shall be prepared for the project unless the agency

determines that substantial changes are proposed which require major revisions or substantial changes occur with respect to the circumstances under which the project is undertaken due to new significant environmental effects. In this case, no new information has been presented to warrant further environmental review. The proposed structures are within a designated building envelope, and the proposed tree removal is within the overall tree removal analyzed for the subdivision.

d) The prepared Arborist Report (County of Monterey Library No. LIB250281) inventoried 37 Coast Live Oaks on Lot 96 and recommends removal of 3 oaks in preparation for construction of the residence and ADU. The Forest Management Plan prepared by Ralph Osterling for the EIR in 1994 for Phase B provided specific tree removal estimates for each lot created by the subdivision, and through previously approved EIR a total of 1,480 trees were allotted for removal. The current number for trees removed in the Preserve is 724. The addition of this project's three Coast Live Oaks will continue to be under the threshold of the previously considered tree removal allotment and therefore is still consistent with the original findings of the adopted EIR. The addendum was prepared to address impacts related to the removal of 3 protected trees for the Messiah project.

e) As detailed in Finding 1, evidence "b", the applicants propose a single-family dwelling and an ADU. However, under Title 21 section 21.64.030 and Government Code section 65852.2, the ADU is being processed ministerially. CEQA Guidelines section 15268(d) declares that "[w]here a project involves an approval that contains elements of both a ministerial action and a discretionary action, the project will be deemed to be discretionary and will be subject to the requirements of CEQA." In such cases, while the whole project becomes subject to CEQA, it is only those discretionary components of the project – those parts which the reviewing agency (here, the County) has authority to shape, influence, approve, or deny (CEQA Guidelines section 15040; Public Resources Code section 21004). Accordingly, while the Chief of Planning's discretionary authority is limited to consideration of the proposed residence, the proposed residence and the ADU are subject to CEQA. The project involves the construction of the first single-family dwelling, with an attached garage and a detached accessory dwelling unit on a residentially zoned property.

f) Staff conducted a site inspection on Google Earth to verify that the site and proposed project meet the criteria for an exemption.

g) 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 PLN250001.

6. **FINDING:** **SANTA LUCIA PRESERVE SUBDIVISION (PHASE A, B & C): TREE REMOVAL –** The project is consistent with all tree removal conditions pursuant to Use Permit PC94067 (Resolution No. 96-060) for the Santa Lucia Preserve Subdivision

EVIDENCE:

a) The project proposes the removal of 3 Coast Live Oaks. The Santa Lucia Preserve Forest Management Plan (FMP) by Ralph Osterling indicated 0 protected trees to be removed for Lot 96.

b) The project requires an addendum to the Santa Lucia Preserve EIR. Though the tree removal amount proposed exceeds what was approved for the lot, it is consistent with what was analyzed in the Santa Lucia Preserve EIR (EIR No. 94-005).

c) Title 21 section 21.64.260 allows the removal of three or less protected trees in any one-year period, subject to the review and approval of the Chief of Planning. This project proposes the removal of three Coast Live Oaks to allow construction of a single-family dwelling and accessory structures.

d) As outlined in Title 21, the required findings to grant the removal are that tree removal is the minimum required under the circumstances and that the removal will not involve a risk of adverse environmental impacts, or the subject tree is in poor health, dead, diseased, or creating a hazardous situation. In this case, the removal of three protected trees is the minimum necessary to construct the first single-family dwelling. The structures are entirely contained within the subject property's building envelope, and the remaining trees will be protected in place, as required in Condition No. 8.

e) Tree replacement will be at a ratio of 3:1 for non-landmark and 5:1 for landmark trees. The removal of 3 Coast Live Oaks will be replaced by 11Coast Live Oaks (Condition No. 24 in Use Permit PC94067 (Resolution No. 96-060)).

f) Tree protection and maintenance measures found in the Santa Lucia Forest Management Plan have been applied as conditions to the project (Condition No. 135 in Use Permit PC94067 (Resolution No. 96-060).

g) The project is consistent with Section 21.64.260 of the Monterey County Zoning Ordinance, Title 21, in that the project was sited to require the least amount of tree removal under the circumstance and avoids adverse environmental impacts. The three trees proposed for removal are within the building footprints and grading limits of the residence and ADU, and are recommended for removal due to construction related impacts.

h) 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 PLN250001.

7. **FINDING:** **APPEALABILITY -** The decision on this project may be appealed to the Planning Commission.

EVIDENCE:

a) Planning Commission. Section 21.80.040.A of the Monterey County Zoning Ordinance.

DECISION

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

1. Consider an Addendum to the Santa Lucia Environmental Impact Report (EIR 94-005, Resolution No. 96-059) pursuant to CEQA Guidelines Section 15164; and

2. Approving an Administrative Permit and Design Approval to allow construction of a 4,449 square foot single family dwelling with an attached 888 square foot three-car garage, and associated site improvements including the removal of three Coast Live Oak trees.

PASSED AND ADOPTED this 4th day of March, 2026:

_____

Melanie Beretti, AICP
Chief of Planning

COPY OF THIS DECISION MAILED TO APPLICANT ON _____.

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 _____.

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 Monterey County HCD-Planning and HCD-Building Services offices in Salinas.

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

County of Monterey HCD Planning

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

PLN250001

1. PD001 - SPECIFIC USES ONLY

Responsible Department: Planning

Condition/Mitigation Monitoring Measure: This Administrative Permit and Design Approval (PLN250001) allow for construction of a 4,449 square foot single family dwelling with an attached 888 square foot three-car garage and associated site improvements, including the removal of three Coast Live Oak trees. The property is located at 12 Sequoia Road, Carmel (Assessor's Parcel Number 239-091-021-000), Greater Monterey Peninsula Area 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.

2. PD002 - NOTICE PERMIT APPROVAL

Responsible Department: Planning

Condition/Mitigation Monitoring Measure: The applicant shall record a Permit Approval Notice. This notice shall state:
"An Administrative Permit and Design Approval (Resolution Number _____) was approved by Chief of Planning for Assessor's Parcel Number 239-091-021-000 on March 4, 2026. The permit was granted subject to 10 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: If, during the course of construction, cultural, archaeological, historical or 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 qualified archaeologist (i.e., an archaeologist registered with the Register of Professional Archaeologists) shall be immediately contacted by 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.

4. PW0006 - CARMEL VALLEY

Responsible Department: Public Works

Condition/Mitigation Monitoring Measure: The Applicant shall pay the Carmel Valley Master Plan Area Traffic Mitigation fee pursuant to the Board of
Supervisors Resolution NO. 95-140, adopted September 12, 1995 (Fees are updated annually based on CCI).
(Public Works)

Compliance or Monitoring Action to be Performed: Prior to Building Permits Issuance Owner/Applicant shall pay to PBI the required traffic mitigation fee.

5. PW0043 - REGIONAL DEVELOPMENT IMPACT FEE

Responsible Department: Public Works

Condition/Mitigation Monitoring Measure: Prior to issuance of building permits, applicant shall pay the Regional Development 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 HCD-Engineering Services.

6. 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.

7. 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.

8. PD011 - TREE AND ROOT PROTECTION

Responsible Department: Planning

Condition/Mitigation Monitoring Measure: Trees which are located close to construction site(s) shall be protected from inadvertent damage from construction equipment by fencing off the canopy driplines and/or critical root zones (whichever is greater) with protective materials, wrapping trunks with protective materials, avoiding fill of any type against the base of the trunks and avoiding an increase in soil depth at the feeding zone or drip-line of the retained trees. Said protection, approved by certified arborist, shall be demonstrated prior to issuance of building permits subject to the approval of HCD - Director of Planning. If there is any potential for damage, all work must stop in the area and a report, with mitigation measures, shall be submitted by certified arborist. Should any additional trees not included in this permit be harmed, during grading or construction activities, in such a way where removal is required, the owner/applicant shall obtain required permits. (HCD - Planning)

Compliance or Monitoring Action to be Performed: Prior to issuance of grading and/or building permits, the Owner/Applicant shall submit evidence of tree protection to HCD - Planning for review and approval.

During construction, the Owner/Applicant/Arborist shall submit on-going evidence that tree protection measures are in place through out grading and construction phases. If damage is possible, submit an interim report prepared by a certified arborist.

Prior to final inspection, the Owner/Applicant shall submit photos of the trees on the property to HCD-Planning after construction to document that tree protection has been successful or if follow-up remediation or additional permits are required.

9. PD048 - TREE REPLACEMENT/RELOCATION

Responsible Department: Planning

Condition/Mitigation Monitoring Measure: Prior to final inspection, the applicant shall replace and or relocate each tree approved for removal as follows:
- Replacement ratio:
- Replacement ratio recommended by arborist: Replant 11 five-gallon Coast Live Oaks
- Other:

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.

10. 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.

FINAL DESIGN REVIEW

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PLUMBING

SCOPE OF WORK AND PROJECT DATA

NEW SINGLE-FAMILY RESIDENCE WITH ATTACHED 3-CAR GARAGE, EXTERIOR PATIOS, ACCESSORY DWELLING UNIT (A D U), SITE RETAINING WALLS, AND DRIVEWAY.

GENERAL CONDITIONS

CALIFORNIA BUILDING CODE (CBC) DATED:	2022
CONSTRUCTION TYPE:	V-B
OCCUPANCY:	RESIDENTIAL (R-3)
FIRE SPRINKLERS:	PROPOSED FIRE SPRINKLER AND ALARM SYSTEM-DEFERRED SUB.
WATER:	SANTA LUCIA CSD
SEWER:	SANTA LUCIA CSD
WITHIN W.U.I. AREA:	YES, OUTSIDE OF INCORPORATED AREA

SITE DATA

PROPERTY ADDRESS:	12 ARROYO SEQUOIA ROAD CARMEL, MONTEREY, CALIFORNIA 93923
LOT:	LOT 96 - SANTA LUCIA PRESERVE
A.P.N.	239-091-021-000
ZONING:	SINGLE FAMILY RESIDENTIAL RC/40-D-S RESOURCE CONSERVATION
OWNER:	SAMIR MESSIAH
TREE REMOVAL:	3 TREES 1 @ 18" #427 1 @ 19" #426 1 @ 34" #421
PARKING:	3 COVERED SPACES
MAXIMUM BUILDING HEIGHT:	30'-0"
A D U MAXIMUM HEIGHT:	15'-0"
MAXIMUM FLOOR AREA, ADU:	1200 SQ FT

LOT SIZE:	4.152 ACRES	
FLOOR AREA, PROPOSED:		
MAIN HOUSE:	4449.00 SF	
ADU:	1193.50 SF	1115.42 SF INT.
ATTACHED GARAGE:	877.75 SF	
TOTAL, LIVING SPACE:	5,642.5 SF	
TOTAL, ADDITIONAL:	6,520.25 SF	

PROJECT PROFESSIONALS

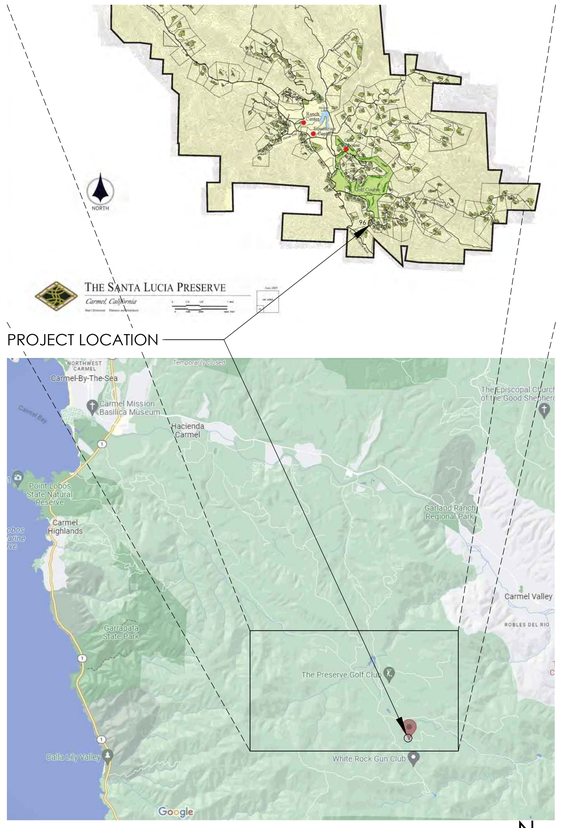
ARCHITECT OF RECORD: **ADAM JESELNICK ARCHITECT**
24398 PORTOLA AVENUE
CARMEL, CA 93923
PHONE: (831) 620.5164
CONTACT: ADAM JESELNICK AIA
EMAIL: aejarch@gmail.com

DESIGN ARCHITECT: **TOM MEANEY ARCHITECT**
629 STATE STREET SUITE 240
SANTA BARBARA CA 93101
TOM@TOMMEANEY.COM
TEL 805.966.7668 (SB) 831.624.4278 (CARMEL)

LANDSCAPE ARCHITECT: **BLISS LANDSCAPE ARCHITECTURE**
24000 ROBINSON CANYON ROAD
CARMEL CA 93923
831.298.0990
BLISSLANDARCH.COM

ARBORIST: **THOMPSON WILDLAND MANAGEMENT**
CONTACT: ROB THOMPSON
57 VIA DEL REY
MONTEREY, CA. 93940
(831) 277-1419; (831) 372-3796; FAX (831) 655-3585
ROB@WILDLANDMANAGEMENT.COM

BIOLOGIST: **JEFFREY B. FROKE, PH.D.**
PEBBLE BEACH, CA
(831) 224-8595
JBFROKE@MAC.COM



1 AREA MAP AND SITE LOCATION MAP
SCALE: NTS

N

SITE PHOTOS



SET PRINTING # 1	04/04/2024	PRELIMINARY DESIGN REVIEW
SET PRINTING # 2	10/03/2024	FINAL DESIGN REVIEW

ADAM JESELNICK ARCHITECT
ADAMJESELNICK.COM

TOM MEANEY ARCHITECT
620 STATE STREET SUITE 240 SANTA BARBARA CA 93101
TEL 805.966.7668(SB) 831.624.4278(CARMEL)
WWW.TOMMEANEY.COM

PRELIMINARY DESIGN REVIEW

ARROYO SEQUOIA RESIDENCE
12 Arroyo Sequoia Road - LOT 96
Carmel, California

LICENSED ARCHITECT ADAM JESELNICK No. C33090 Renew 3/31/ STATE OF CALIFORNIA

SHEET NAME:
PROJECT DATA AND SITE LOCATION

SHEET DATE:
06.17.2024

SHEET SCALE:
AS NOTED

A0

GENERAL NOTES

1. VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS AT THE SITE; CONFIRM ANY VARIATIONS OR CONFLICTING OR MISSING DIMENSIONS OR DATA PRIOR TO COMMENCING WORK. USE WRITTEN DIMENSIONS ONLY; DO NOT SCALE DRAWINGS FOR THE PURPOSE OF DETERMINING A DIMENSION DURING CONSTRUCTION.

2. CONSTRUCTION DETAILS NOT SPECIFICALLY SHOWN ON THE DRAWINGS SHALL BE BUILT TO CONFORM TO SIMILAR CONSTRUCTION, IN ACCORDANCE WITH THE BEST COMMON PRACTICE AND/OR MANUFACTURER'S SPECIFICATIONS FOR THE INSTALLATION OF THEIR MATERIALS OR ITEMS.

3. ALL CONSTRUCTION (MATERIALS, WORKMANSHIP & METHODS) SHALL COMPLY WITH TITLE 24 AND THE CALIFORNIA BUILDING CODE (CBC) AND APPENDICES H, I, AND J; CALIFORNIA EXISTING BUILDING CODE, CALIFORNIA PLUMBING CODE (CPC), CALIFORNIA MECHANICAL CODE (CMC), CALIFORNIA ELECTRICAL CODE (CEC), CALIFORNIA MECHANICAL CODE, CALIFORNIA ENERGY CODE, FIRE CODE (SEE CMC TITLE 8), AND CALIFORNIA GREEN BUILDING STANDARDS CODE [TO BE REFERRED TO COLLECTIVELY AS CBC OR CALIFORNIA BUILDING CODE], AND ALL LOCAL AMENDMENTS AS ADOPTED BY CITY ORDINANCE. DATE SET FORTH IN **GENERAL CONDITIONS**.

4. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SAFETY ON THE JOB SITE AND MUST ADHERE TO ALL FEDERAL, STATE LOCAL AND O.S.H.A. SAFETY REGULATIONS.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BRACING AND SHORING REQUIRED DURING CONSTRUCTION UNTIL ALL CONSTRUCTION IS COMPLETE.

6. DO NOT STORE CONSTRUCTION MATERIALS, OR OPERATE CONSTRUCTION EQUIPMENT IN SUCH A MANNER THAT DESIGN LIVE LOADS OF THE STRUCTURES ARE EXCEEDED. DO NOT STORE CONSTRUCTION MATERIALS ON OVERHANGING FRAMING.

7. NO POTABLE WATER MAY BE USED FOR COMPACTION OR DUST CONTROL PURPOSES IN CONSTRUCTION ACTIVITIES WHERE THERE IS A REASONABLE AVAILABLE SOURCE OF RECLAIMED WATER OR OTHER SUB-POTABLE WATER APPROVED BY THE MONTEREY COUNTY HEALTH DEPARTMENT & APPROPRIATE FOR SUCH USE.

8. ALL HOSES USED FOR ANY CONSTRUCTION ACTIVITIES SHALL BE EQUIPPED WITH A SHUT OFF WHEN AN AUTOMATIC SHUT OFF CAN NOT BE PURCHASED OR OTHERWISE OBTAINED FOR THE SIZE & TYPE OF HOSE IN USE, THE NOZZLE SHALL BE AN AUTOMATIC SHUT OFF NOZZLE.

9. INSTALL CERTIFIED INSULATION MATERIALS PER THE TITLE 24 MANDATORY MEASURES CHECKLIST, MF-1R & THE SPECIFICATIONS. INSULATION INSTALLED SHALL MEET FLAME SPREAD & SMOKE DENSITY REQUIREMENTS OF THE STATE OF CALIFORNIA TITLE 24, CALIFORNIA CODE OF REGULATIONS.

10. ROOF OVERHANGS SHALL CONFORM TO U.B.C. 1507.6 BUILT-UP ROOFS:& U.B.C. 1507.6 BUILT-UP ROOFING & SPECIFICATIONS.

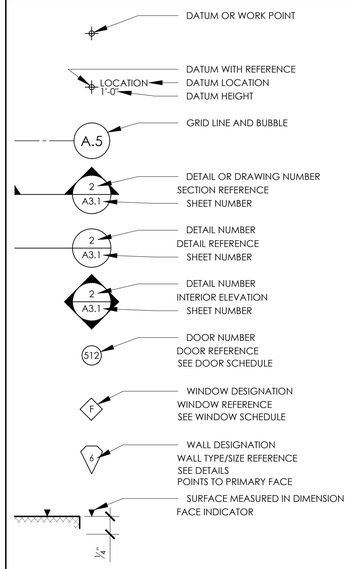
11. SHEET METAL & FLASHING: PROVIDE AND INSTALL SHEET METAL AND OR COPPER FLASHING AS DETAILED AND REQUIRED TO INSURE WATERTIGHT ASSEMBLY. ALL PIECES SHALL BE FABRICATED IN MAXIMUM PRACTICAL LENGTHS, FREE OF WARPS, BUCKLES AND DENTS AND OTHER DEFECTS. (U.B.C. 1402.2 FLASHING & COUNTERFLASHING: 1508.4 VALLEY FLASHING & 1509, OTHER FLASHING).

12. SEALANTS: PROVIDE AND INSTALL ACRYLIC LATEX URETHANE BASE SEALANTS AT ALL EXTERIOR JOINTS AND GAPS NECESSARY FOR A WEATHER TIGHT ASSEMBLY.

13. JOINTS AND OTHER OPENINGS IN THE BUILDING ENVELOPE THAT ARE POTENTIAL SOURCES OF AIR LEAKAGE SHALL BE CAULKED, GASKET, WEATHER-STRIPPED OR OTHERWISE SEALED TO LIMIT INFILTRATION AND EXFILTRATION. INCLUDING SILL PLATES.

14. ALL PLANS, SECTIONS, AND ELEVATIONS ARE SPECIFIC TO THEIR RESPECTIVE NAMED LOCATION, DO NOT USE DRAWING FOR CONSTRUCTION OF ANY OTHER LEVEL ELEVATION OR SECTION THEN THAT LISTED.

SYMBOL LEGEND



HOUSE PLATE HEIGHT LEGEND

ALL HEIGHTS ABOVE THEIR RESPECTIVE FINISHED FLOOR

- WALL AND HEADER BELOW
- WALL WITH 9'-0" PLATE HEIGHT
- WALL WITH 10'-0" PLATE HEIGHT HOUSE TYPICAL
- WALL WITH 11'-0" PLATE HEIGHT
- WALL WITH 13"-8" ± PLATE HEIGHT HEIGHT AND SLOPE SET AT 11' PLATE
- WALL WITH 10'-0" PLATE HEIGHT ABOVE GARAGE DOOR FLOOR
- WALL WITH 13'-0" PLATE HEIGHT
- ROOF ABOVE INTERIOR SPACE WHERE ALL OR SOME OF THE ROOF IS 18'-0" OR GREATER ABOVE GRADE

A D U PLATE HEIGHT LEGEND

ALL HEIGHTS ABOVE THEIR RESPECTIVE FINISHED FLOOR

- WALL AND HEADER BELOW
- WALL WITH 8'-0" PLATE HEIGHT
- WALL WITH 8'-6" PLATE HEIGHT A D U, TYPICAL

WALL LEGEND

- C — CONCRETE WALL
- 2 — 2x2 OR FLAT 2X4 WALL
- 4 — 2x4 WALL
- 6 — 2x6 WALL
- WALL WITH FINISH BOTH SIDES
- WALL WITH FINISH ONE SIDES

ABBEVIATIONS

Not intended to be exhaustive

(N)	NEW
N	NORTH
E	EAST
S	SOUTH
W	WEST
(E)	EXISTING
AD	AREA DRAIN
AFF	ABOVE FINISHED FLOOR
B&B	BOARD AND BATT
CB	CATCH BASIN
CL -	CENTERLINE
CONT	CONTINUOUS
DS	DOWNSPOUT
FF	FINISHED FACE/ FINISHED FLOOR
FD	FLOOR DRAIN
FOS	FASE OF STUD, FASE OF STRUCTURE
FV	FIELD VERIFY
GYP BD	GYPSUM BOARD
LAF	LIQUID APPLED FLASHING
MB	MODIFIED BITUMEN
NTS	NOT TO SCALE
OH	OPOSITE HAND
PT	PRESSURE TREATED
PW	PLYWOOD
REV	REVERSE READING
RO	ROUGH OPENING
SA	SELF ADHERING
SD	SLOT DRAIN
SIM	SIMILAR
T&G	TONGUE AND GRIOVE
T.O.P.	TOP OF PLATE
TOW	TOP OF WALL
TD	TRENCE DRAIN
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
UON	UNLESS OTHERWISE NOTED
W/	WITH
W/O	WITHOUT
WP	WATERPROOF(ING)
WRB	WATER-RESISTIVE BARRIER

SET PRINTING # 1	04/04/2024	PRELIMINARY DESIGN REVIEW
SET PRINTING # 2	10/03/2024	FINAL DESIGN REVIEW

ADAM JESELNICK ARCHITECT
ADAMJESELNICK.COM
TOM MEANEY | ARCHITECT
620 STATE STREET SUITE 240 SANTA BARBARA CA 93101
TEL 805.966.7668(SB) 831.624.4278(CARMEL)
WWW.TOMMEANEY.COM

PRELIMINARY DESIGN REVIEW

ARROYO SEQUOIA RESIDENCE
12 Arroyo Sequoia Road - LOT 96
Carmel, California

LICENSED ARCHITECT ADAM JESELNICK No. C33090 Renew 3/31/ STATE OF CALIFORNIA

SHEET NAME:
SYMBOLS, LEGENDS, ABBREVIATIONS, AND GENERAL NOTES

SHEET DATE:
06.17.2024

SHEET SCALE:
AS NOTED

A0.02

CONDITIONS OF APPROVAL

SET PRINTING # 1	04/04/2024	PRELIMINARY DESIGN REVIEW
SET PRINTING # 2	10/03/2024	FINAL DESIGN REVIEW

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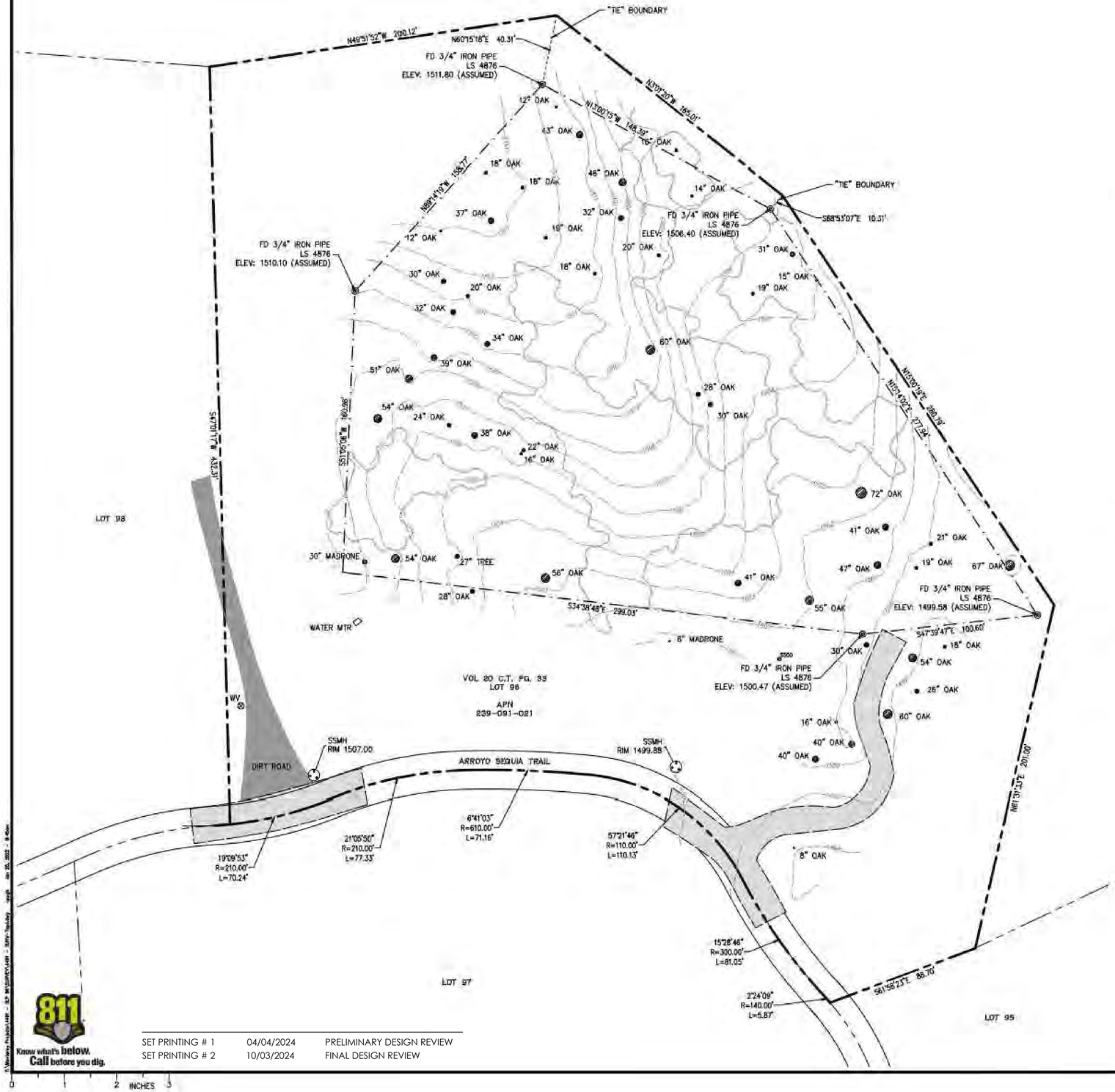
LICENSED ARCHITECT
ADAM JESELNICK
No. C33090
Renew 3/31/
STATE OF CALIFORNIA

SHEET NAME:
CONDITIONS OF APPROVAL

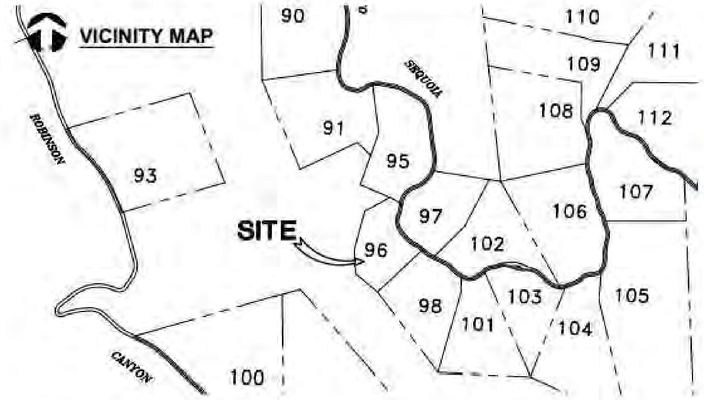
SHEET DATE:
06.17.2024

SHEET SCALE:
AS NOTED

A0.03



VICINITY MAP



TOPOGRAPHIC MAP NOTES:

1. THIS MAP REPRESENTS A TOPOGRAPHIC SURVEY PERFORMED BY WHITSON ENGINEERS ON JANUARY 7 & 12, 2022.
2. THIS MAP PORTRAYS THE SITE AT THE TIME OF THE SURVEY AND DOES NOT SHOW SOILS OR GEOLOGIC INFORMATION, UNDERGROUND CONDITIONS, EASEMENTS, ZONING OR REGULATORY INFORMATION OR ANY OTHER ITEMS NOT SPECIFICALLY REQUESTED BY THE CLIENT.
3. BOUNDARY LOCATIONS SHOWN HEREON WERE DETERMINED WITH THE BENEFIT OF A FIELD SURVEY SUPPLEMENTED BY RECORD DATA. ALL BOUNDARY SHOWN IS FROM RECORD DATA. THIS TOPOGRAPHIC MAP DOES NOT CONSTITUTE A BOUNDARY SURVEY. AS A TITLE REPORT WAS NOT PROVIDED, THERE MAY BE EASEMENTS OR OTHER RIGHTS, RECORDED OR UNRECORDED, AFFECTING THE SUBJECT PROPERTY, WHICH ARE NOT SHOWN HEREON.
4. DISTANCES AND DIMENSIONS SHOWN ARE EXPRESSED IN FEET AND DECIMALS THEREOF, UNLESS OTHERWISE NOTED.
5. BENCHMARK: FOUND 3/4" IRON PIPE NEXT TO SOUTHEAST SIDE OF DRIVEWAY. ELEVATION: 1500.47' (ASSUMED DATUM)
6. LOCATION OF UNDERGROUND UTILITIES WAS NOT WITHIN THE SCOPE OF THIS SURVEY. WITH THE EXCEPTION OF OBSERVED FACILITIES, UNDERGROUND UTILITIES ARE SHOWN WITH APPROXIMATE LOCATION BASED ON SURFACE FEATURES.
7. THE EXISTENCE, LOCATION AND DEPTH OF ALL UTILITIES MUST BE VERIFIED BY POSITIVE LOCATION (POTHOLING) BY THE CONSTRUCTION CONTRACTOR PRIOR TO EXCAVATION OR ANY CONSTRUCTION WHICH MAY BE AFFECTED BY THE LOCATION OR ELEVATION OF THE UTILITY.
8. DIAMETERS OF TREES ARE SHOWN IN INCHES MEASURED AT BREAST HEIGHT. TREES SMALLER THAN 6" WERE NOT NECESSARILY LOCATED AS PART OF THIS SURVEY.

ABBREVIATIONS

AC	ASPHALT CONCRETE
BM	BENCHMARK
ELEC	ELECTRIC
FD	FOUND
IP	IRON PIPE
SSCO	SANITARY SEWER CLEANOUT
SSMH	SANITARY SEWER MANHOLE
VLT	VAULT
WV	WATER VALVE

LEGEND

100	GROUND CONTOUR
	SUBJECT PROPERTY LINE
	HOMELAND BOUNDARY
	BOUNDARY TIE
▲200	CONTROL POINT
⊙ FD 3/4" IRON PIPE LS0000	FOUND 3/4" IRON PIPE, TAGGED LS 4876
● 12" OAK	TREE; SIZE AND TYPE AS NOTED
	TREE DRIP LINE
	ASPHALT CONCRETE PAVEMENT
	DIRT ROAD
SSMH RIM XXX.XX	SANITARY SEWER MANHOLE
⊖SSCO	SANITARY SEWER CLEANOUT
⊗WV	WATER VAULT

SCALE: 1" = 30'

SET PRINTING # 1	04/04/2024	PRELIMINARY DESIGN REVIEW
SET PRINTING # 2	10/03/2024	FINAL DESIGN REVIEW

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0 1 2 INCHES 3

Civil Engineering
Land Surveying
Whitson ENGINEERS

LICENSED LAND SURVEYOR RICHARD P. WEBER No. 8822 STATE OF CALIFORNIA

SUBMITTAL / REVISION

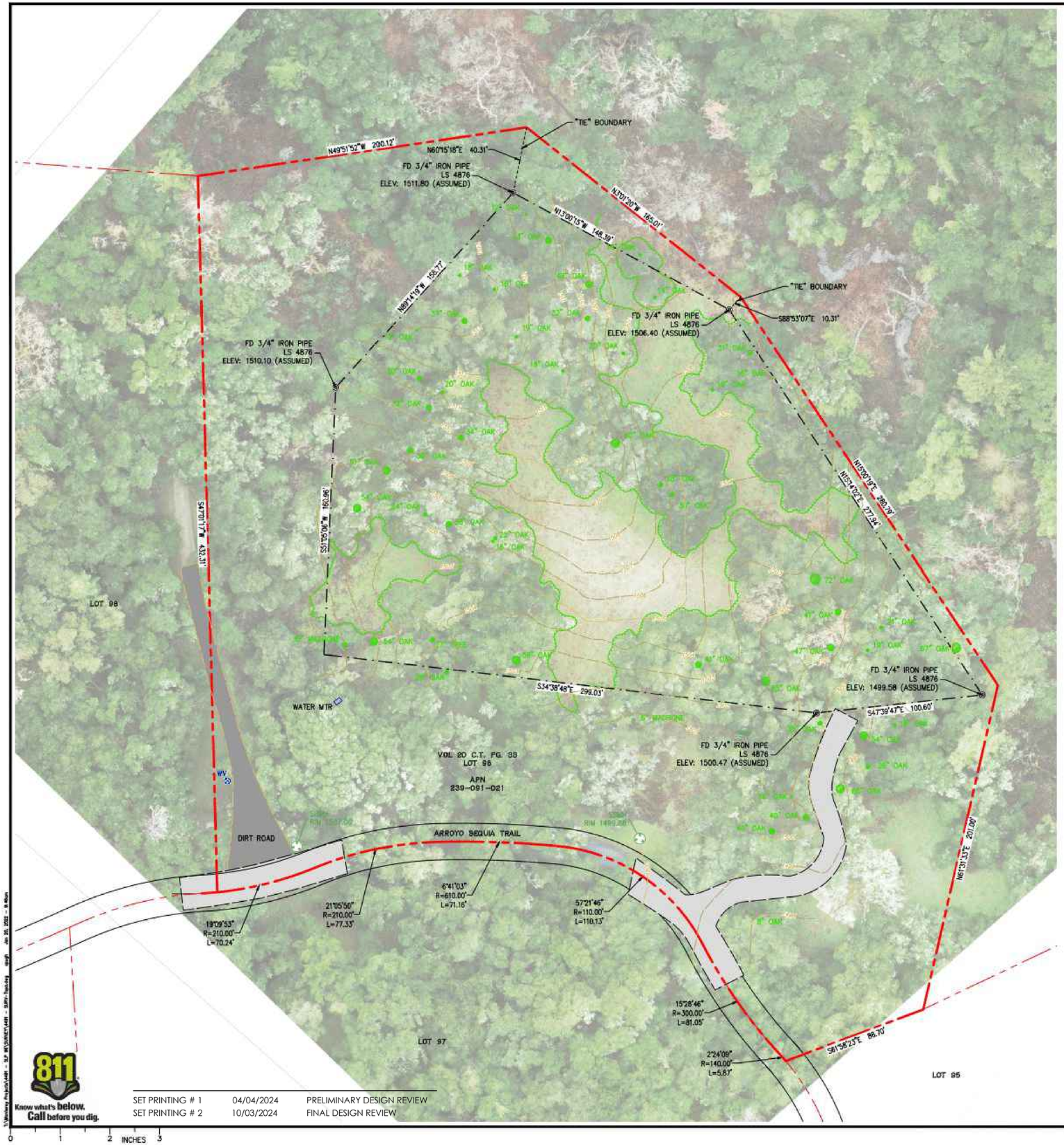
12 ARROYO SEQUIA
Monterey, California
APN 239-091-021

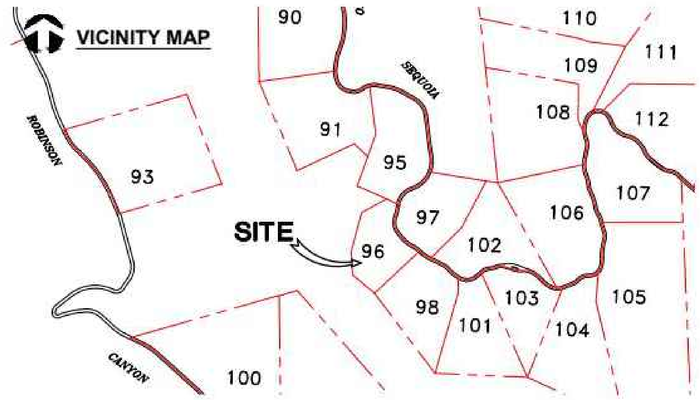
SANTA LUCIA PRESERVE - LOT 96

TOPOGRAPHIC MAP

SCALE: 1" = 30'
DRAWN: CNJ
JOB No.: 4491
SHEET 1 OF 2

NOT FOR CONSTRUCTION





TOPOGRAPHIC MAP NOTES:

1. THIS MAP REPRESENTS A TOPOGRAPHIC SURVEY PERFORMED BY WHITSON ENGINEERS ON JANUARY 7 & 12, 2022. ORTHORECTIFIED AERIAL IMAGERY WAS GATHERED ON JANUARY 12, 2022 USING AN UNMANNED AERIAL SYSTEM(UAS).
2. THIS MAP PORTRAYS THE SITE AT THE TIME OF THE SURVEY AND DOES NOT SHOW SOILS OR GEOLOGIC INFORMATION, UNDERGROUND CONDITIONS, EASEMENTS, ZONING OR REGULATORY INFORMATION OR ANY OTHER ITEMS NOT SPECIFICALLY REQUESTED BY THE CLIENT.
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5. BENCHMARK: FOUND 3/4" IRON PIPE NEXT TO SOUTHEAST SIDE OF DRIVEWAY. ELEVATION: 1500.47' (ASSUMED DATUM)
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8. DIAMETERS OF TREES ARE SHOWN IN INCHES MEASURED AT BREAST HEIGHT. TREES SMALLER THAN 6" WERE NOT NECESSARILY LOCATED AS PART OF THIS SURVEY.

ABBREVIATIONS

AC	ASPHALT CONCRETE
BM	BENCHMARK
ELEC	ELECTRIC
FD	FOUND
IP	IRON PIPE
SSCO	SANITARY SEWER CLEANOUT
SSMH	SANITARY SEWER MANHOLE
VLT	VAULT
WV	WATER VALVE

LEGEND

- 100 — GROUND CONTOUR
- SUBJECT PROPERTY LINE
- HOMELAND BOUNDARY
- BOUNDARY TIE
- 200 — CONTROL POINT
- F3P LS0000 — FOUND 3/4" IRON PIPE, TAGGED LS 4876
- 12" OAK — TREE; SIZE AND TYPE AS NOTED
- TREE DRIP LINE
- ASPHALT CONCRETE PAVEMENT
- DIRT ROAD
- SSMH RIM XXX.XX — SANITARY SEWER MANHOLE
- SSCO — SANITARY SEWER CLEANOUT
- WV — WATER VAULT

30 0 30 60
SCALE: 1" = 30'

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SET PRINTING # 2	10/03/2024	FINAL DESIGN REVIEW

0 1 2 INCHES 3

Civil Engineering
Land Surveying
4 Harris Court
Monterey, California
831.649.5225
whitsonengineers.com

Whitson ENGINEERS

LICENSED LAND SURVEYOR RICHARD P. WEBER No. 8002 STATE OF CALIFORNIA

SUBMITTAL / REVISION

SANTA LUCIA PRESERVE - LOT 96

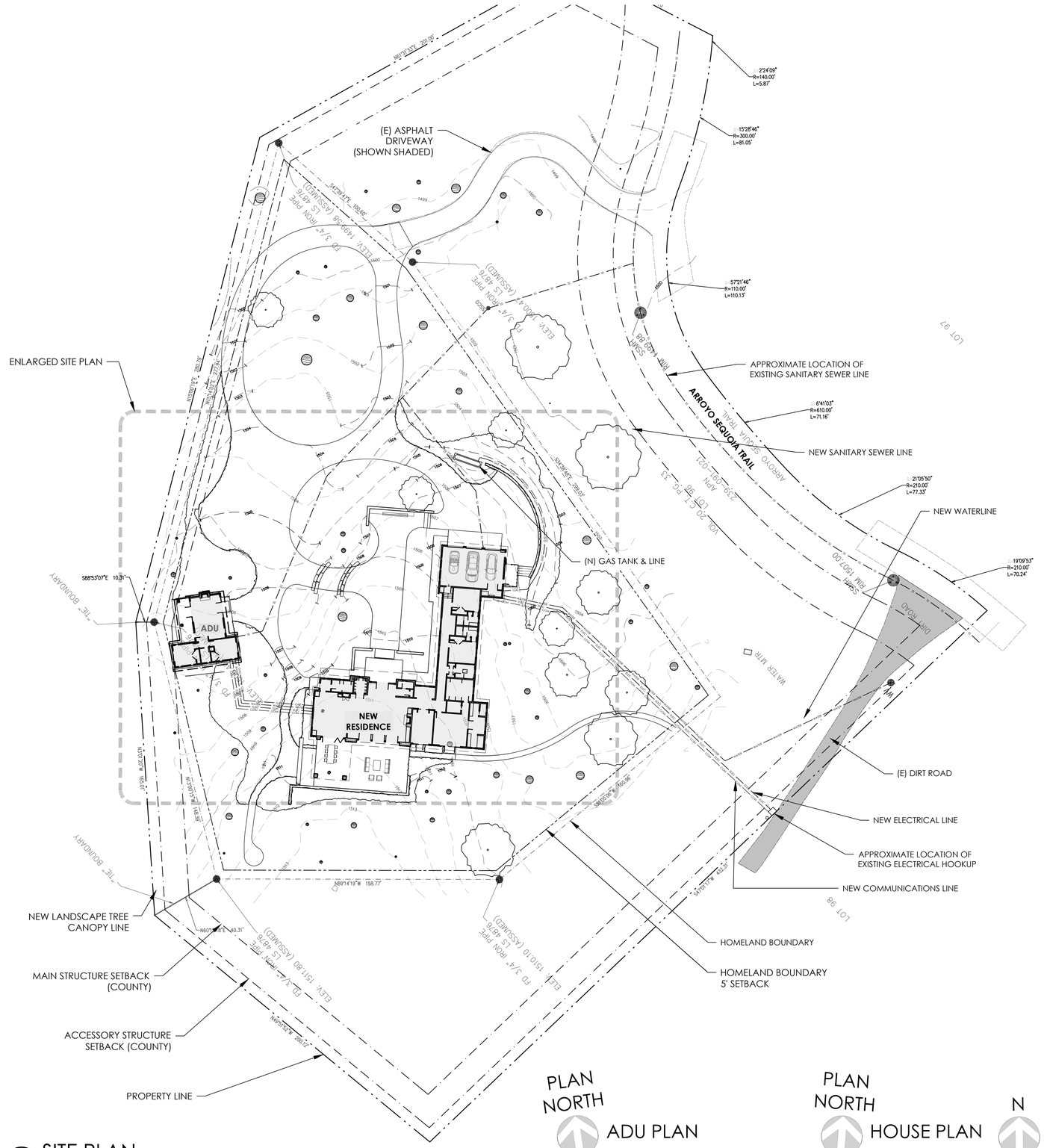
12 ARROYO SEQUIA
Monterey, California

APN 239-091-021

TOPOGRAPHIC MAP

NOT FOR CONSTRUCTION

SCALE:	1" = 30'
DRAWN:	CNJ
JOB No.:	4491
SHEET	2 OF 2



1 SITE PLAN
SCALE: 1" = 30'

SET PRINTING # 1	04/04/2024	PRELIMINARY DESIGN REVIEW
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PRELIMINARY DESIGN REVIEW

ADAM JESELNICK ARCHITECT
ADAMJESELNICK.COM

TOM MEANEY | ARCHITECT
620 STATE STREET, SUITE 240, SANTA BARBARA, CA 93101
TEL 805.966.7668 (SB) 831.624.4278 (CARMEL)
WWW.TOMMEANEY.COM

ARROYO SEQUOIA RESIDENCE
12 Arroyo Sequoia Road - LOT 96
Carmel, California

LICENSED ARCHITECT ADAM JESELNICK No. C33090 Renew 3/31/ STATE OF CALIFORNIA

SHEET NAME: OVERALL SITE PLAN

SHEET DATE: 06.17.2024

SHEET SCALE: 1"= 30'-0"

A1.01

MAIN STRUCTURE SETBACK (COUNTY)

HOMELAND BOUNDARY

ACCESSORY STRUCTURE SETBACK (COUNTY)

HOMELAND BOUNDARY 5' SETBACK

PROPERTY LINE

20'-0"

6'-0"

S34°38'48"E 299.03'

S88°53'07"E 10.31'

F.F. ELEV. = 1507.0

ADU

F.F. ELEV. = 1507.5' AT GARAGE DOOR

F.F. ELEV. = 1510.5'

NEW RESIDENCE

15" OAK

30" OAK

28" OAK

31" OAK

19" OAK

56" OAK

60" OAK

16" OAK

22" OAK

20" OAK

14" OAK

38" OAK

24" OAK

32" OAK

16" OAK

48" OAK

39" OAK

51" OAK

54" OAK

20" OAK

32" OAK

REMOVE 18" TREE #427

REMOVE 19" TREE #426

REMOVE 34" TREE #421

DRIP LINE FROM SURVEYOR SEE SITE SURVEY

NEW LANDSCAPE TREE CANOPY SEE LANDSCAPE DRAWINGS

N3°01'20"W 165.01'

N13°00'15"W

S51°05'06"W 160

PLAN NORTH

PLAN NORTH

1 SITE PLAN

SCALE: 3/32" = 1'-0"

SET PRINTING # 2 10/03/2024 FINAL DESIGN REVIEW

PRELIMINARY DESIGN REVIEW

ADAM JESELNICK ARCHITECT
ADAMJESELNICK.COM

TOM MEANEY | ARCHITECT
620 STATE STREET, SUITE 240, SANTA BARBARA, CA 93101
TEL 805.966.7668 (SB) 831.624.4278 (CARMEL)
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ARROYO SEQUOIA RESIDENCE

12 Arroyo Sequoia Road - LOT 96
Carmel, California

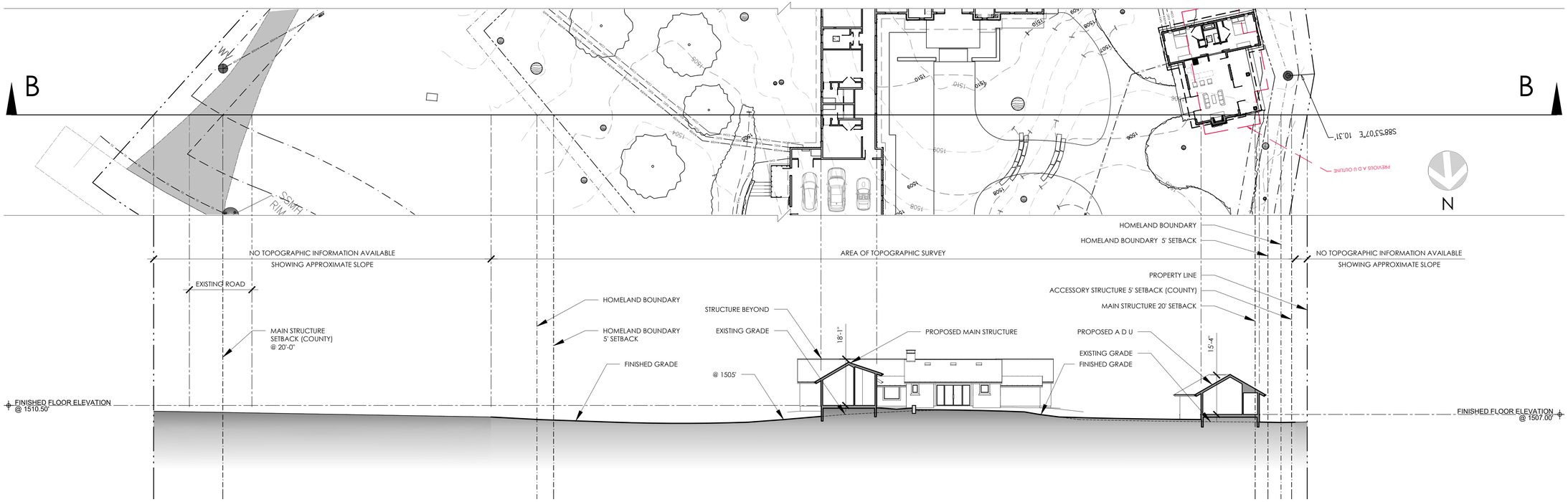
LICENSED ARCHITECT ADAM JESELNICK No. C33090 Renew 3/31/ STATE OF CALIFORNIA

SHEET NAME: ENLARGED SITE PLAN

SHEET DATE: 06.17.2024

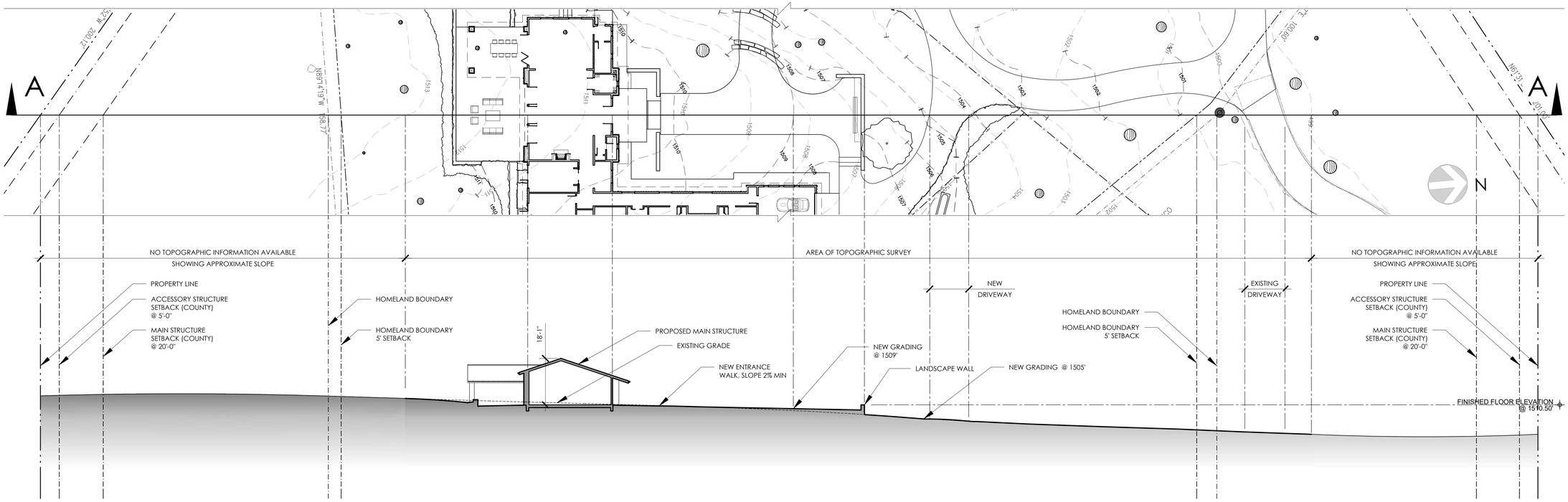
SHEET SCALE: 3/32" = 1'-0"

A1.02



2 SITE SECTION B-B LOOKING SOUTH

SCALE: 1" = 20'



1 SITE SECTION A-A LOOKING WEST

SCALE: 1" = 20'

SET PRINTING # 1	04/04/2024	PRELIMINARY DESIGN REVIEW
SET PRINTING # 2	10/03/2024	FINAL DESIGN REVIEW

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620 STATE STREET, SUITE 240, SANTA BARBARA, CA 93101
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WWW.TOMMEANEY.COM

PRELIMINARY DESIGN REVIEW

ARROYO SEQUOIA RESIDENCE

12 Arroyo Sequoia Road - LOT 96
Carmel, California

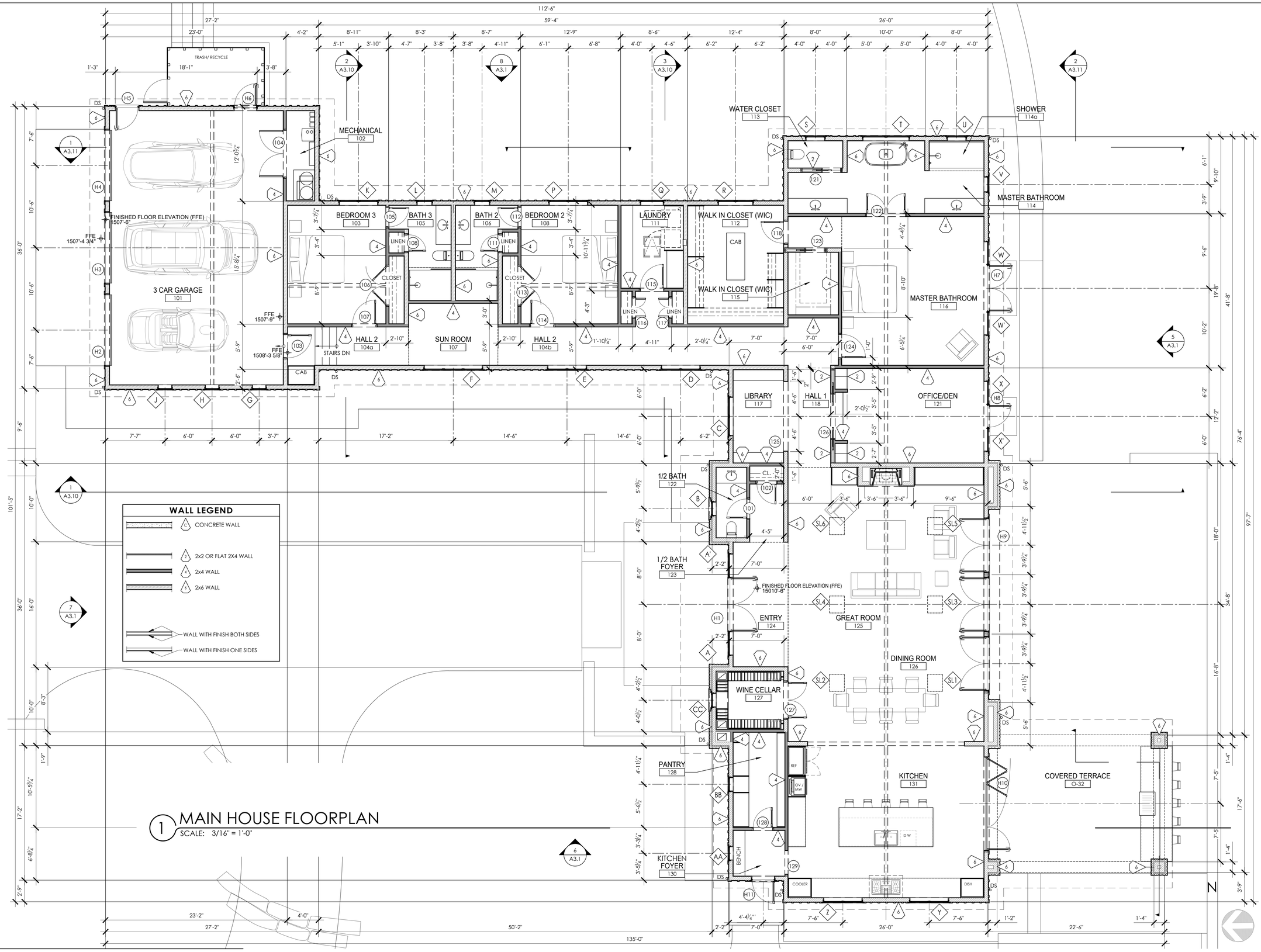
LICENSED ARCHITECT
ADAM JESELNICK
No. C33090
Renew 3/31/
STATE OF CALIFORNIA

SHEET NAME:
SITE
SECTIONS

SHEET DATE:
06.17.2024

SHEET SCALE:
1"=20'-0"

A1.03



1 MAIN HOUSE FLOORPLAN

SCALE: 3/16" = 1'-0"

SET PRINTING # 2 10/03/2024 FINAL DESIGN REVIEW

PRELIMINARY DESIGN REVIEW

ADAM JESELNICK ARCHITECT
ADAMJESELNICK.COM

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ARROYO SEQUOIA RESIDENCE

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Carmel, California

LICENSED ARCHITECT ADAM JESELNICK No. C33090 Renew 3/31/ STATE OF CALIFORNIA

SHEET NAME: MAIN HOUSE FLOOR PLAN

SHEET DATE: 06.17.2024

SHEET SCALE: 3/16" = 1'-0"

A2.01

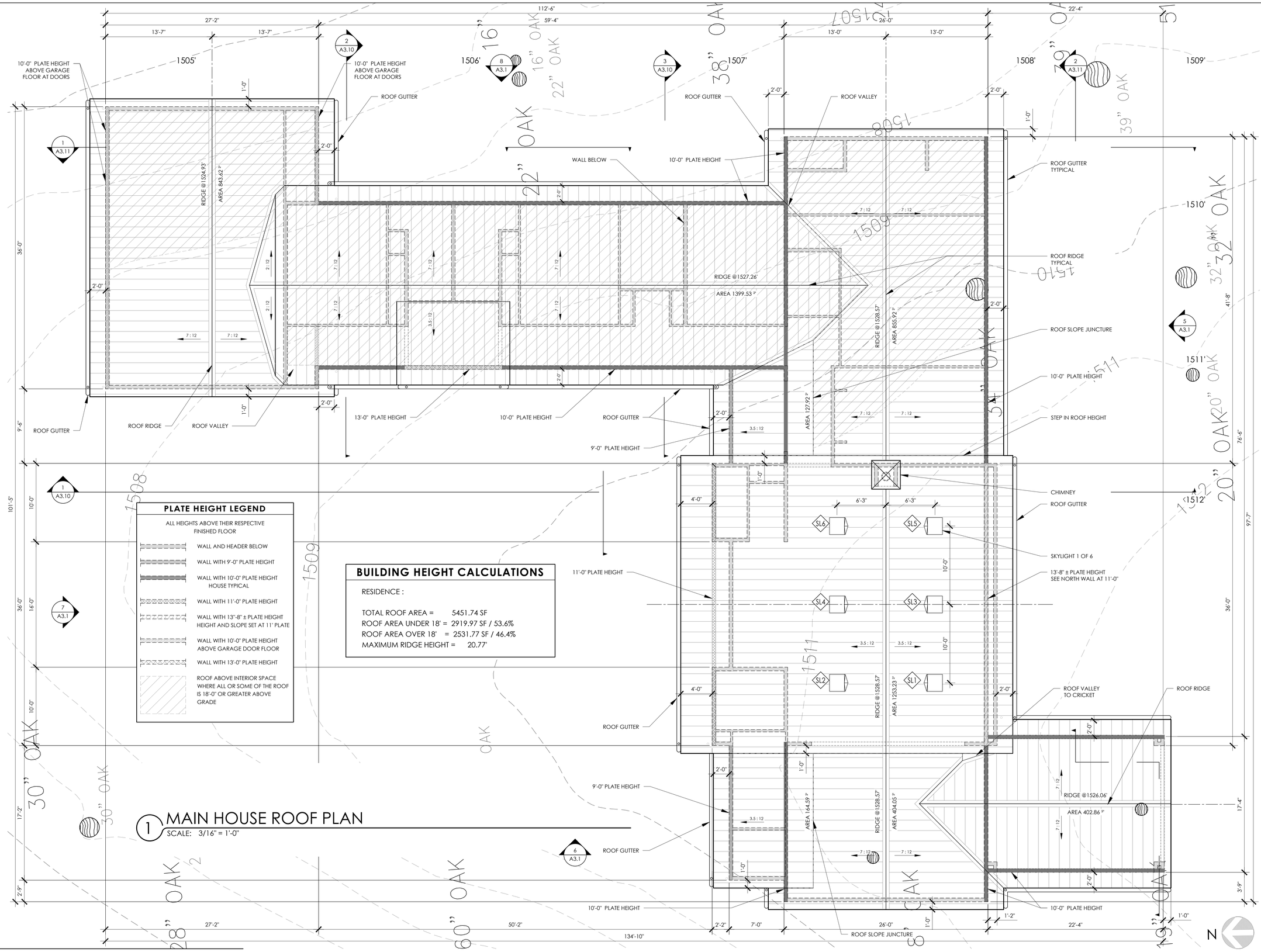


PLATE HEIGHT LEGEND

ALL HEIGHTS ABOVE THEIR RESPECTIVE FINISHED FLOOR

- WALL AND HEADER BELOW
- WALL WITH 9'-0" PLATE HEIGHT
- WALL WITH 10'-0" PLATE HEIGHT HOUSE TYPICAL
- WALL WITH 11'-0" PLATE HEIGHT
- WALL WITH 13'-8" ± PLATE HEIGHT HEIGHT AND SLOPE SET AT 11' PLATE
- WALL WITH 10'-0" PLATE HEIGHT ABOVE GARAGE DOOR FLOOR
- WALL WITH 13'-0" PLATE HEIGHT
- ROOF ABOVE INTERIOR SPACE WHERE ALL OR SOME OF THE ROOF IS 18'-0" OR GREATER ABOVE GRADE

BUILDING HEIGHT CALCULATIONS

RESIDENCE :

TOTAL ROOF AREA = 5451.74 SF
ROOF AREA UNDER 18' = 2919.97 SF / 53.6%
ROOF AREA OVER 18' = 2531.77 SF / 46.4%
MAXIMUM RIDGE HEIGHT = 20.77'

1 MAIN HOUSE ROOF PLAN

SCALE: 3/16" = 1'-0"

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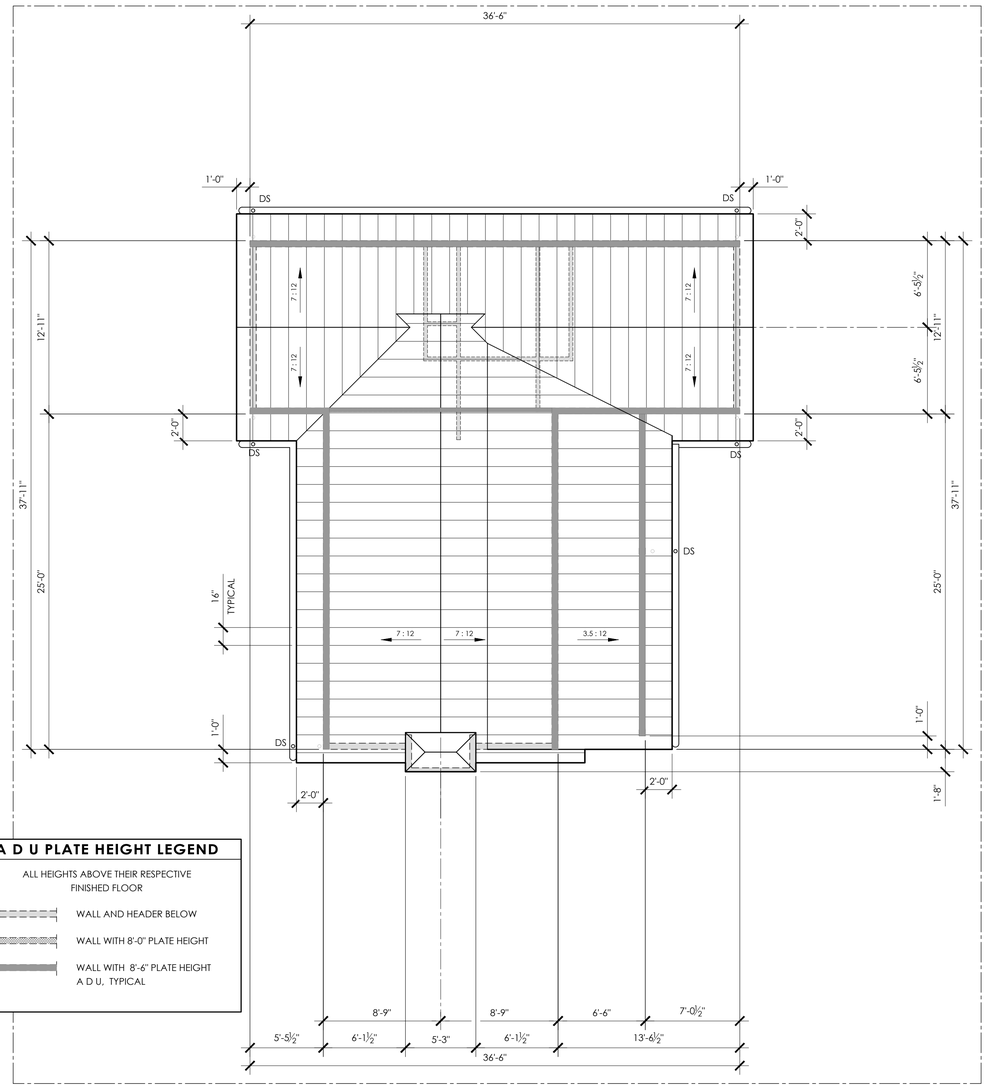
LICENSED ARCHITECT ADAM JESELNICK No. C33590 Renew 3/31/ STATE OF CALIFORNIA

SHEET NAME: MAIN HOUSE ROOF PLAN

SHEET DATE: 06.17.2024

SHEET SCALE: 3/16" = 1'-0"

A2.02



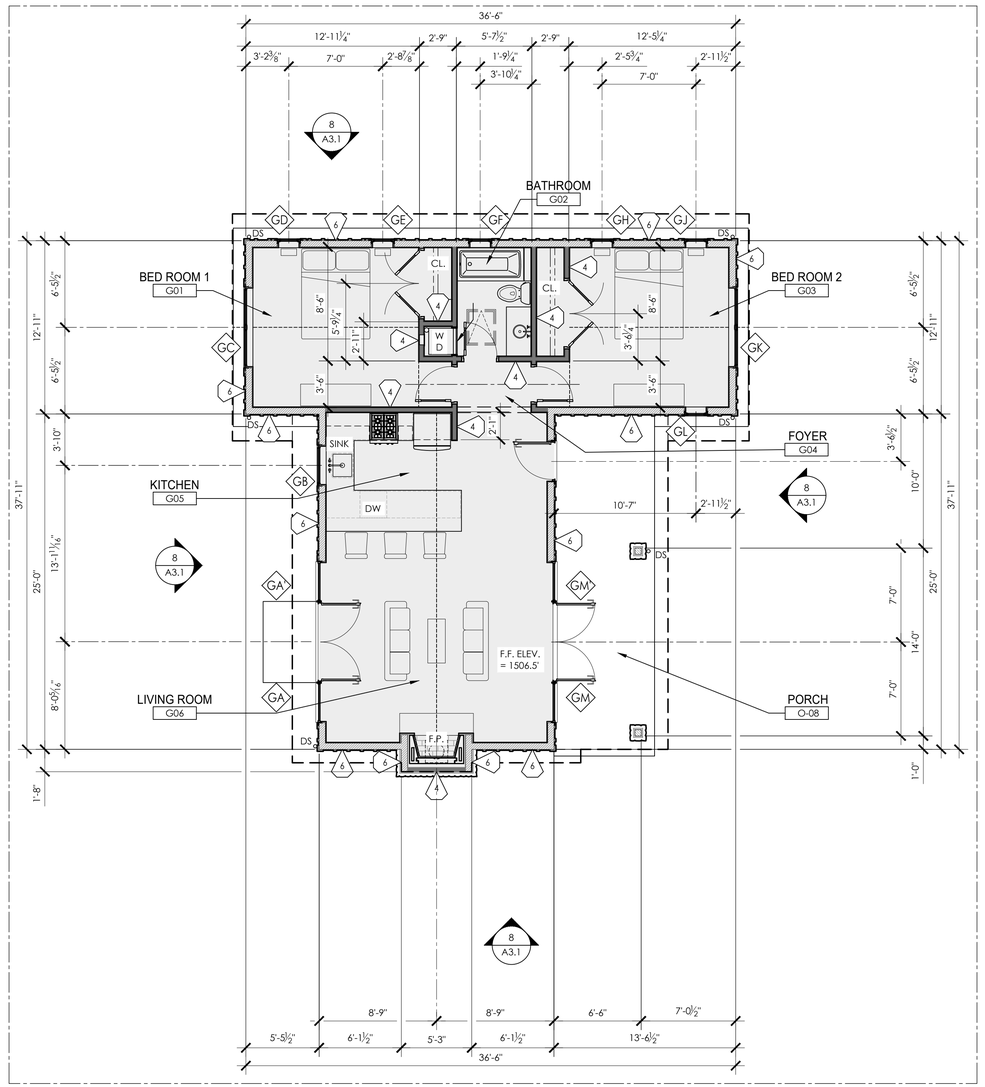
A D U PLATE HEIGHT LEGEND

ALL HEIGHTS ABOVE THEIR RESPECTIVE FINISHED FLOOR

- WALL AND HEADER BELOW
- WALL WITH 8'-0" PLATE HEIGHT
- WALL WITH 8'-6" PLATE HEIGHT A D U, TYPICAL

2 A D U ROOF PLAN

SCALE: 3/16" = 1'-0"



1 A D U FLOOR PLAN

SCALE: 3/16" = 1'-0"

N

SET PRINTING # 1	04/04/2024	PRELIMINARY DESIGN REVIEW
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ARROYO SEQUOIA RESIDENCE

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Carmel, California

LICENSED ARCHITECT ADAM JESELNICK No. C33090 Renew 3/31/ STATE OF CALIFORNIA

SHEET NAME:
A D U PLANS

SHEET DATE:
06.17.2024

SHEET SCALE:
3/16" = 1'-0"

A2.03

EXTERIOR FINISHES

1. CLASS 'A' [ICC-ES REPORT ESR-2048], NON-REFLECTIVE METAL STANDING SEAM ROOF W/ 12" O.C. SEAMS, SUPPL: WESTERN STATES METAL ROOFING (WESTERNSTATESMETALROOFING.COM) , COLOR: MATTE DARK BRONZE, ICC-ES REPORT TO BE AVAILABLE ON SITE
2. 5"Ø HALF ROUND METAL GUTTER W/ 4"Ø METAL DOWNSPOUT, HINGED GUTTER GUARD, LOCK ON STYLE, COMPATIBLE W/ 5" GUTTERS TO PREVENT THE ACCUMULATION OF LEAVES AND DEBRIS, CONNECT DRAINAGE TO STORM DRAIN SYSTEM. COLOR TO MATCH ROOF.
3. 4X6 APPLIED DOUGLAS FIR RAFTER TAILS PER DETAIL, 24" O.C. MAX., SMOOTH TEXTURE, PAINT TO MATCH SIDING - COLOR: VERIFY W/ ARCHITECT
4. 2X6 T&G KILN DRIED DOUGLAS FIR EAVES PER DETAIL, SMOOTH TEXTURE, PAINT TO MATCH SIDING - COLOR: VERIFY W/ ARCHITECT
5. 7/16"X11-1/2"X12'-0" BOARD & 3/4"X2-1/2"X12'-0" BATTEN SIDING, 5/16" THICK, OVER TYVEK AND EXTERIOR PLY, SUPPLIER: JAMES HARDIE (WWW.JAMESHARDIE.COM), TEXTURE: CEDARMILL
   FACTORY PRIMED & PAINT. COLOR KHAKI BROWN.
6. ALUMINUM EXTERIOR DOOR, DUAL GLAZED / LOW E - PER DOOR SCHEDULE, MFR: ARCADIA CUSTOM STEEL LOOK (ARCADIACUSTOM.COM), COLOR: BLACK
7. ALUMINUM EXTERIOR WINDOW, DUAL GLAZED / LOW E - PER WINDOW SCHEDULE, MFR: ARCADIA CUSTOM STEEL LOOK (ARCADIACUSTOM.COM), COLOR: BLACK
8. 2X6 DOOR & WINDOW CASING PER DETAIL, SUPPLY: JAMES HARDIE 'ARTISAN' (WWW.JAMESHARDIE.COM), TEXTURE: SMOOTH, FACTORY PRIMED AND PAINT. COLOR: KHAKI BROWN.
9. CEDAR PLANK GARAGE DOOR, WIRE BRUSHED W/ EASED EDGES, REFER TO DOOR SCHEDULE, COLOR/TEXTURE: PAINT TO MATCH SIDING
10. CHIMNEY PER PLAN & DETAIL W/ 'PICASSO CREAM - CHOPPED' STONE VENEER, W/ CLASS 'A' INSULATED DOUBLE WALL STAINLESS STEEL FLUE FOR ALL CHIMNEY LENGTHS & ASSOCIATED COMPONENTS PER MFR SPECS, REPORTS & LISTINGS (UL103), MFR: DURAVENT - DURATECH 12" (WWW.DURAVENT.COM), PROVIDE SHROUD AND SPARK ARRESTOR TO COMPLY PER (CRC SECTION R1003.9.1), CHIMNEY TO EXTEND 2' ABOVE ANY PORTION OF THE BUILDING AND ROOF WITHIN 10' OF THE CHIMNEY OUTLET AND 3' ABOVE THE HIGHEST POINT WHERE CHIMNEY PASSES THROUGH ROOF, NET FREE AREA UNDER CHIMNEY CAP TO BE 4 TIMES GREATER THAN THE AREA OF THE CHIMNEY FLUE OUTLET.
11. EXTERIOR WALL MOUNTED INDIRECT LIGHT FIXTURE PER PLAN, HIGH EFFICIENCY LED LAMP W/ SHIELDED GLASS, 25 WATT OR EQUIVALENT MAX., SUPPLY: VERIFY W/ ARCHITECT, COLOR: BLACK
12. STONE TERRACE & LANDING PAVERS, SLOPE 1/8" PER FT. TO DRAIN AWAY FROM STRUCTURES, STAIR LANDINGS 2% SLOPE MAX., PROVIDE 36" MIN. LANDING AT EACH GRADE LEVEL EXIT IN THE DIRECTION OF EGRESS, SUPPLY/COLOR: MULTI BLEND, VERIFY WITH ARCHITECT
13. WEEP SCREED, PROFILE TO ALLOW SIDING BELOW SCREED PER DETAIL, PROVIDE 26 GAUGE MIN. GALVANIZED WEEP SCREED AT FOUNDATION, 4" MIN. ABOVE GRADE OR 2" MIN. ABOVE CONCRETE/PAVING WHERE OCCURS
14. 1 1/2" THICK ADHERED LIMESTONE VENEER, HORIZONTAL LAY RECTANGULAR W/ OVERSIZED CORNERS, OVER SCRATCH COAT, METAL LATHE, GRADE D BUILDING PAPER (TWO LAYERS AT SHEAR WALLS), AND EXTERIOR PLY, GROUT TO MATCH PLASTER COLOR, SUPPLY: SBI MATERIALS (WWW.SBIMATERIALS.COM) - 'PICASSO CREAM - CHOPPED'.
15. 3X3 WOOD TRIM, COLOR: TO MATCH
16. VELUX FIXED LOW PROFILE SKYLIGHT WITH OPERABLE SHADES. SUPPLIER: HTTPS://WWW.VELUXUSA.COM/. DECK MOUNTED. ALUMINUM FRAME. STYLE: FS. COLOR: BLACK.

COLORS: ALL COLORS TO BE VERIFIED WITH ARCHITECT PRIOR TO ORDERING AND IN THE FIELD, ALL WOOD & HEAVY TIMBERS NON-TREATED, TO HAVE LIGHT SANDBLAST TEXTURE WITH EASED EDGES, U.N.O. PROVIDE SAMPLE TO ARCHITECT PRIOR TO ORDERING - TYPICAL

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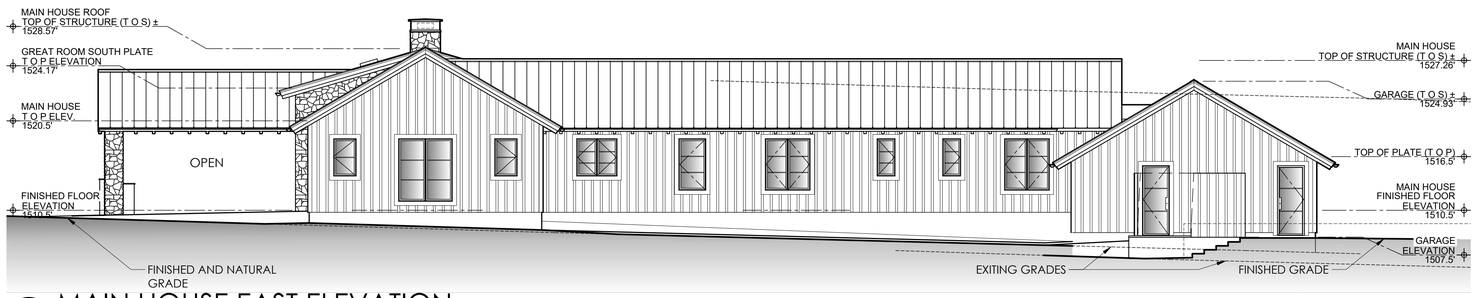
LICENSED ARCHITECT
ADAM JESELNICK
No. C33090
Renew 3/31/
STATE OF CALIFORNIA

SHEET NAME:
PROJECT ELEVATIONS (SMALL SCALE)

SHEET DATE:
09.18.2024

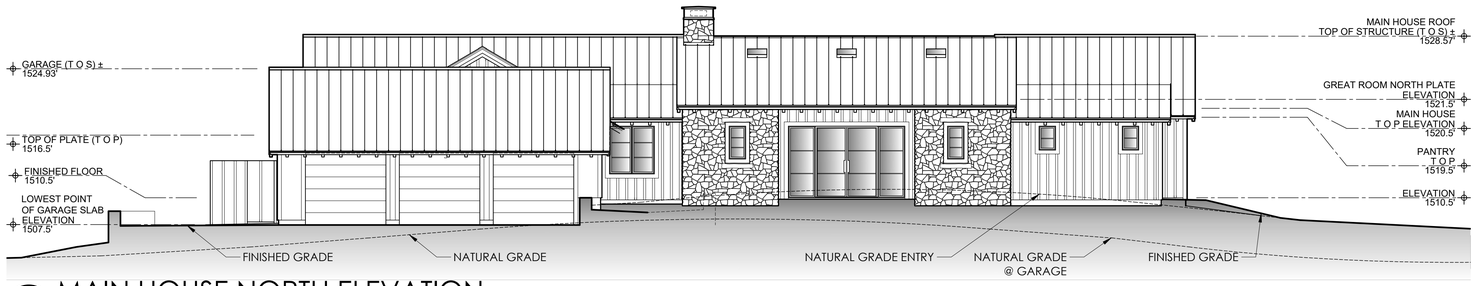
SHEET SCALE:
N/A

A3.00



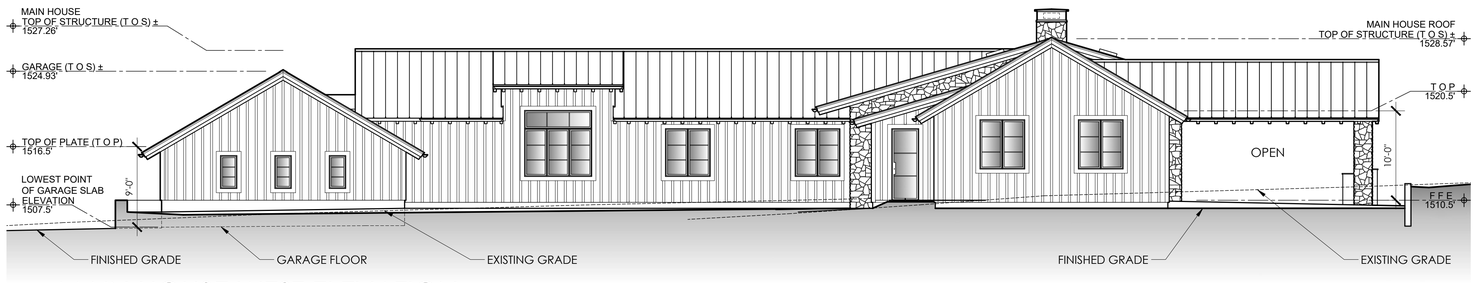
8 MAIN HOUSE EAST ELEVATION

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



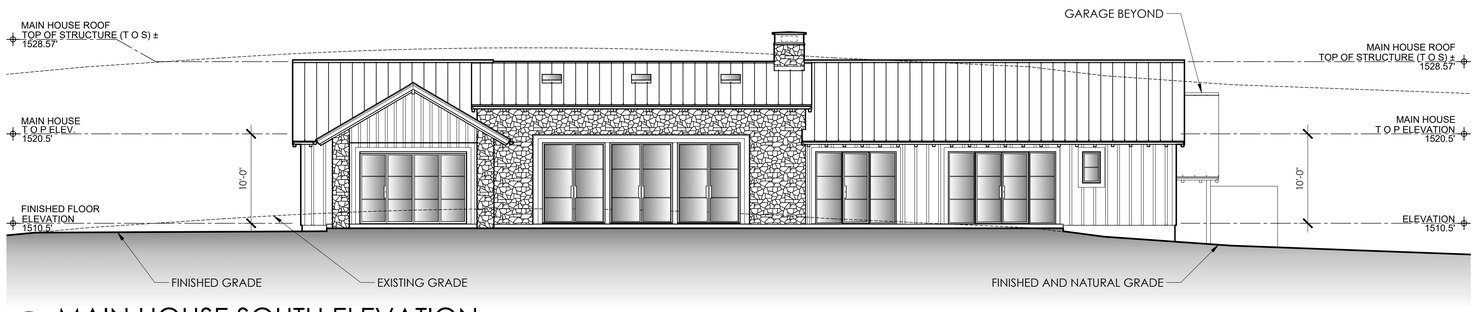
7 MAIN HOUSE NORTH ELEVATION

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



6 MAIN HOUSE WEST ELEVATION

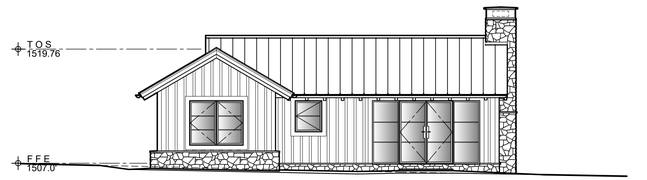
SCALE: 1/8" = 1'-0"



5 MAIN HOUSE SOUTH ELEVATION

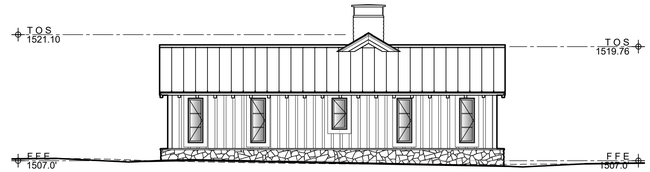
SCALE: 1/8" = 1'-0"

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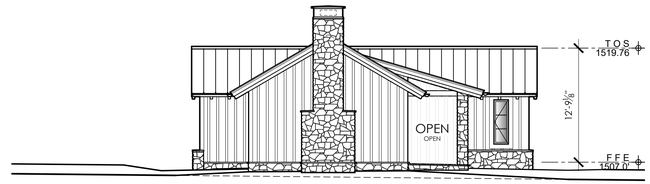
4 ADU SOUTH ELEVATION

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



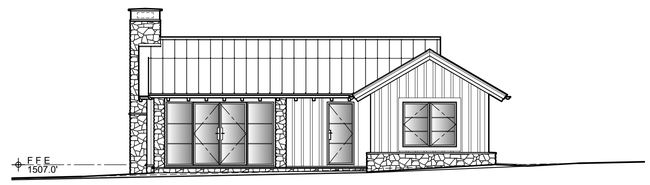
3 ADU WEST ELEVATION

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



2 ADU EAST ELEVATION

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



1 ADU NORTH ELEVATION

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

EXTERIOR FINISHES

SEE SHEET A3.00

PRELIMINARY DESIGN REVIEW

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ADAMJESELNICK.COM

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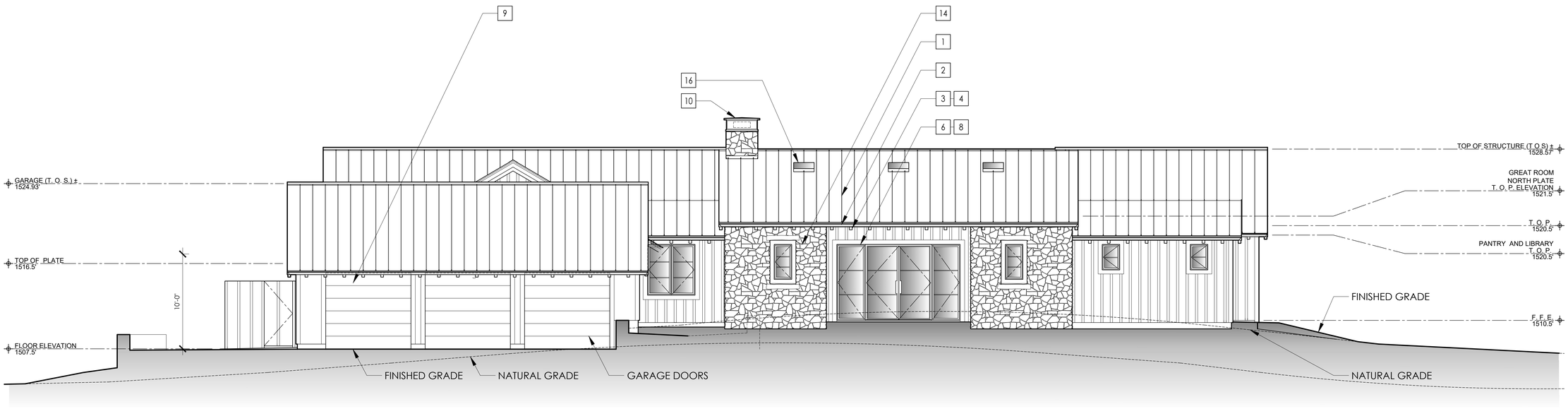
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ADAM JESELNICK
No. C33090
Renew 3/31/
STATE OF CALIFORNIA

SHEET NAME:
PROJECT ELEVATIONS (SMALL SCALE)

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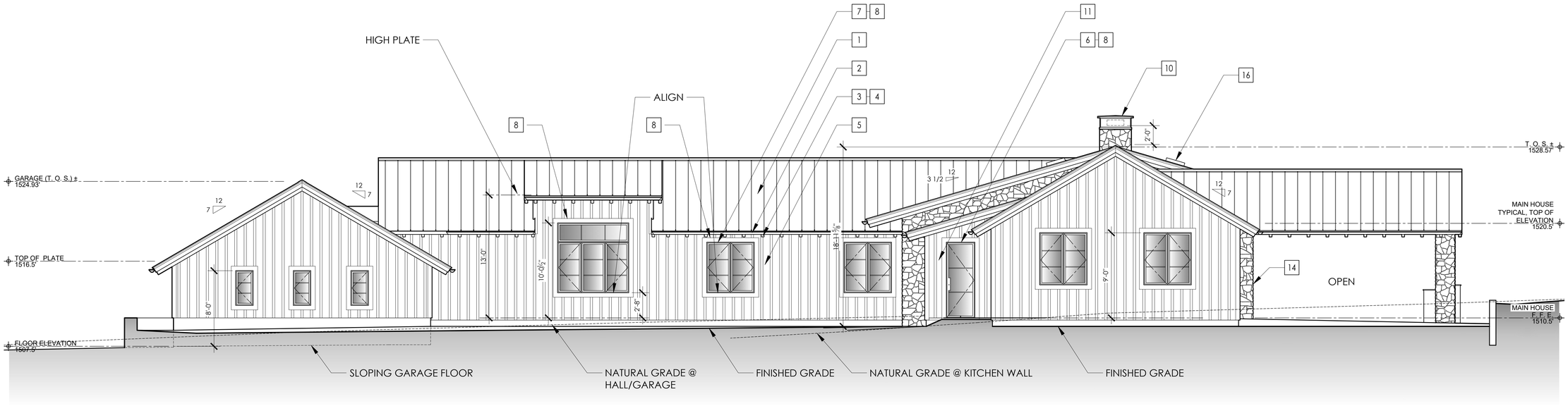
SHEET SCALE:
1/8" = 1'-0"

A3.01



2 NORTH ELEVATION, MAIN HOUSE

SCALE: 3/16" = 1'-0"



1 WEST ELEVATION, MAIN HOUSE

SCALE: 3/16" = 1'-0"

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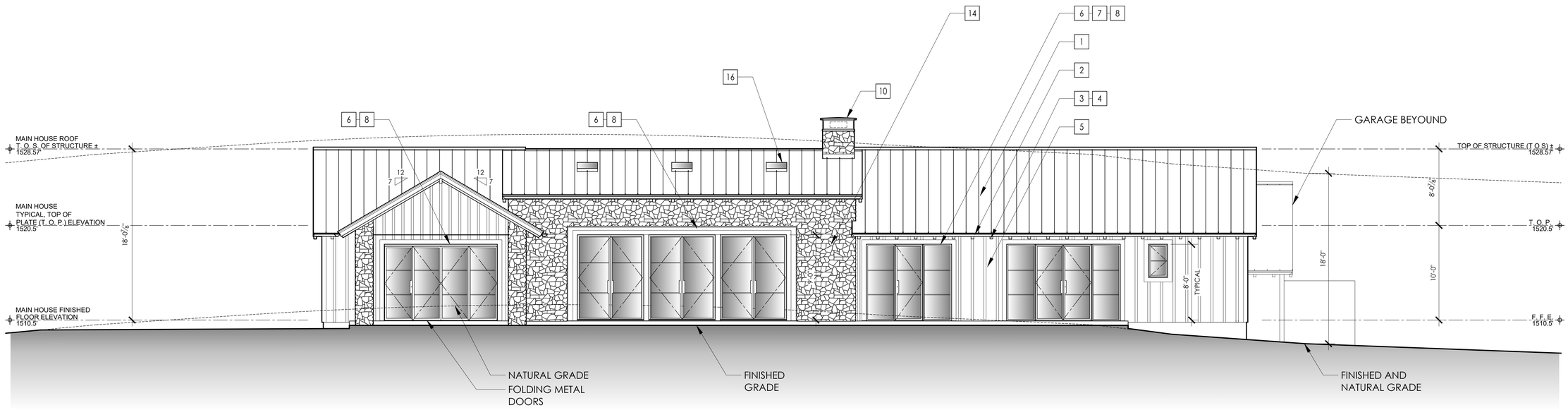
LICENSED ARCHITECT
ADAM JESELNICK
No. C33090
Renew 3/31/
STATE OF CALIFORNIA

SHEET NAME:
ELEVATION
MAIN HOUSE
I

SHEET DATE:
06.17.2024

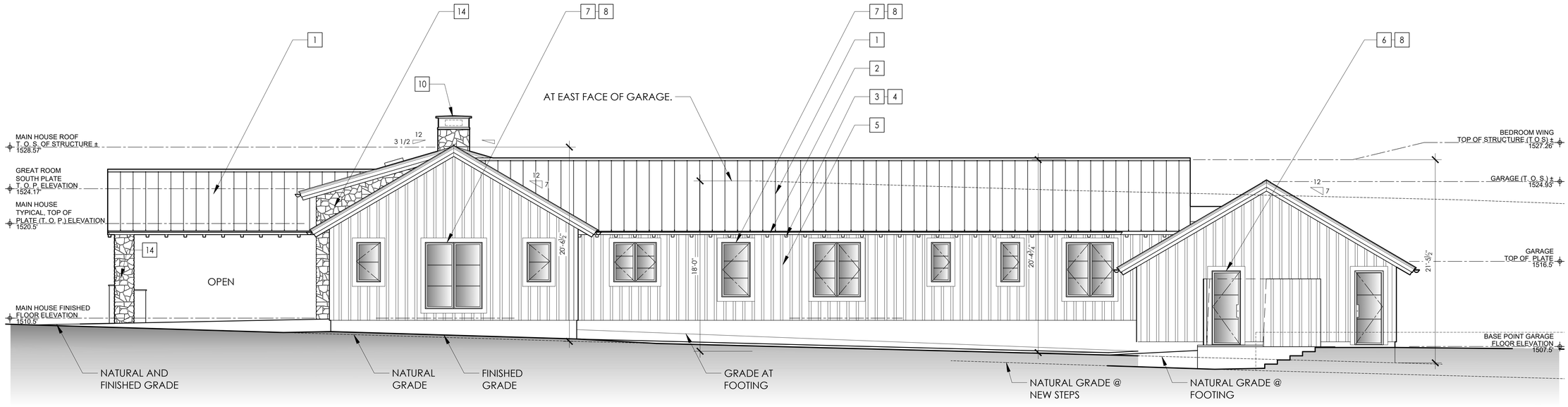
SHEET SCALE:
3/16" = 1'-0"

A3.02



2 SOUTH ELEVATION, MAIN HOUSE

SCALE: 3/16" = 1'-0"



1 EAST ELEVATION, MAIN HOUSE

SCALE: 3/16" = 1'-0"

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EXTERIOR FINISHES

SEE SHEET A3.00

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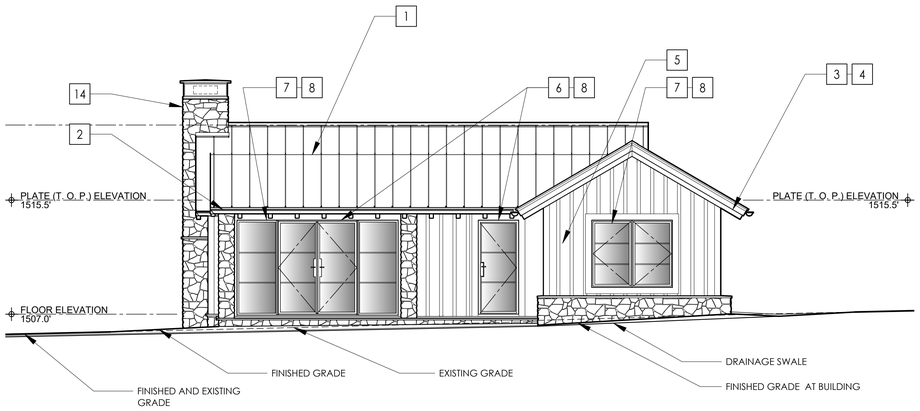
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STATE OF CALIFORNIA

SHEET NAME:
ELEVATION
MAIN HOUSE
II

SHEET DATE:
06.17.2024

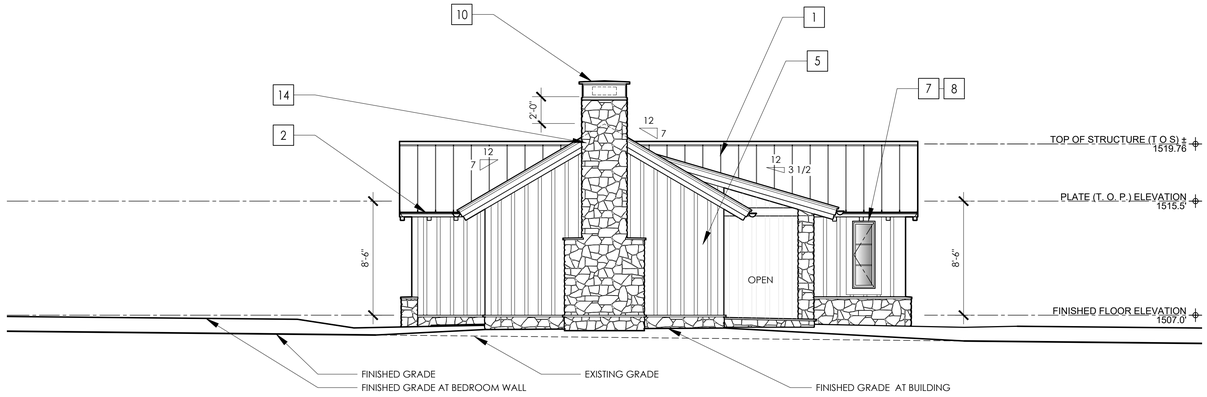
SHEET SCALE:
3/16" = 1'-0"

A3.03



4 ADU ELEVATION, NORTH

SCALE: 3/16" = 1'-0"



3 ADU ELEVATION, EAST

SCALE: 3/16" = 1'-0"

2 ADU ELEVATION, SOUTH

SCALE: 3/16" = 1'-0"

1 ADU ELEVATION, WEST

SCALE: 3/16" = 1'-0"

EXTERIOR FINISHES

1. CLASS 'A' [ICC-ES REPORT ESR-2048], NON-REFLECTIVE METAL STANDING SEAM ROOF W/ 12" O.C. SEAMS, SUPPL: WESTERN STATES METAL ROOFING (WESTERNSTATESMETALROOFING.COM) , COLOR: MATTE DARK BRONZE, ICC-ES REPORT TO BE AVAILABLE ON SITE
2. 5"Ø HALF ROUND METAL GUTTER W/ 4"Ø METAL DOWNSPOUT, HINGED GUTTER GUARD, LOCK ON STYLE, COMPATIBLE W/ 5" GUTTERS TO PREVENT THE ACCUMULATION OF LEAVES AND DEBRIS, CONNECT DRAINAGE TO STORM DRAIN SYSTEM. COLOR TO MATCH ROOF.
3. 4X6 APPLIED DOUGLAS FIR RAFTER TAILS PER DETAIL, 24" O.C. MAX., SMOOTH TEXTURE, PAINT TO MATCH SIDING - COLOR: VERIFY W/ ARCHITECT
4. 2X6 T&G KILN DRIED DOUGLAS FIR EAVES PER DETAIL, SMOOTH TEXTURE, PAINT TO MATCH SIDING - COLOR: VERIFY W/ ARCHITECT
5. 7/16"X11-1/2"X12'-0" BOARD & 3/4"X2-1/2"X12'-0" BATTEN SIDING, 5/16" THICK, OVER TYVEK AND EXTERIOR PLY, SUPPLIER: JAMES HARDIE (WWW.JAMESHARDIE.COM), TEXTURE: CEDARMILL
   FACTORY PRIMED & PAINT. COLOR KHAKI BROWN.
6. ALUMINUM EXTERIOR DOOR, DUAL GLAZED / LOW E - PER DOOR SCHEDULE, MFR: ARCADIA CUSTOM STEEL LOOK (ARCADIACUSTOM.COM), COLOR: BLACK
7. ALUMINUM EXTERIOR WINDOW, DUAL GLAZED / LOW E - PER WINDOW SCHEDULE, MFR: ARCADIA CUSTOM STEEL LOOK (ARCADIACUSTOM.COM), COLOR: BLACK
8. 2X6 DOOR & WINDOW CASING PER DETAIL, SUPPLY: JAMES HARDIE 'ARTISAN' (WWW.JAMESHARDIE.COM), TEXTURE: SMOOTH, FACTORY PRIMED AND PAINT. COLOR: KHAKI BROWN.
9. CEDAR PLANK GARAGE DOOR, WIRE BRUSHED W/ EASED EDGES, REFER TO DOOR SCHEDULE, COLOR/TEXTURE: PAINT TO MATCH SIDING
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11. EXTERIOR WALL MOUNTED INDIRECT LIGHT FIXTURE PER PLAN, HIGH EFFICIENCY LED LAMP W/ SHIELDED GLASS, 25 WATT OR EQUIVALENT MAX., SUPPLY: VERIFY W/ ARCHITECT, COLOR: BLACK
12. STONE TERRACE & LANDING PAVERS, SLOPE 1/8" PER FT. TO DRAIN AWAY FROM STRUCTURES, STAIR LANDINGS 2% SLOPE MAX., PROVIDE 36" MIN. LANDING AT EACH GRADE LEVEL EXIT IN THE DIRECTION OF EGRESS, SUPPLY/COLOR: MULTI BLEND, VERIFY WITH ARCHITECT
13. WEEP SCREED, PROFILE TO ALLOW SIDING BELOW SCREED PER DETAIL, PROVIDE 26 GAUGE MIN. GALVANIZED WEEP SCREED AT FOUNDATION, 4" MIN. ABOVE GRADE OR 2" MIN. ABOVE CONCRETE/PAVING WHERE OCCURS
14. 1 1/2" THICK ADHERED LIMESTONE VENEER, HORIZONTAL LAY RECTANGULAR W/ OVERSIZED CORNERS, OVER SCRATCH COAT, METAL LATHE, GRADE D BUILDING PAPER (TWO LAYERS AT SHEAR WALLS), AND EXTERIOR PLY, GROUT TO MATCH PLASTER COLOR, SUPPLY: SBI MATERIALS (WWW.SBIMATERIALS.COM) - 'PICASSO CREAM - CHOPPED'.
15. 3X3 WOOD TRIM, COLOR: TO MATCH
16. VELUX FIXED LOW PROFILE SKYLIGHT WITH OPERABLE SHADES. SUPPLIER: HTTPS://WWW.VELUXUSA.COM/. DECK MOUNTED. ALUMINUM FRAME. STYLE: FS. COLOR: BLACK.

COLORS: ALL COLORS TO BE VERIFIED WITH ARCHITECT PRIOR TO ORDERING AND IN THE FIELD. ALL WOOD & HEAVY TIMBERS NON-TREATED, TO HAVE LIGHT SANDBLAST TEXTURE WITH EASED EDGES, U.N.O. PROVIDE SAMPLE TO ARCHITECT PRIOR TO ORDERING - TYPICAL

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TOM MEANEY | ARCHITECT
620 STATE STREET, SUITE 240, SANTA BARBARA, CA 93101
TEL 805.966.7668 (SB) 831.624.4278 (CARMEL)
WWW.TOMMEANEY.COM

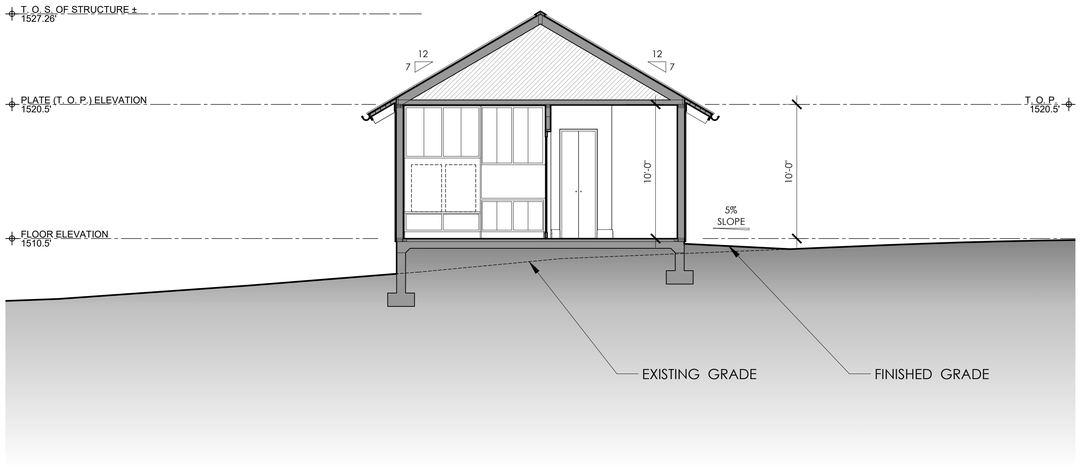
PRELIMINARY DESIGN REVIEW

ARROYO SEQUOIA RESIDENCE
12 Arroyo Sequoia Road - LOT 96
Carmel, California

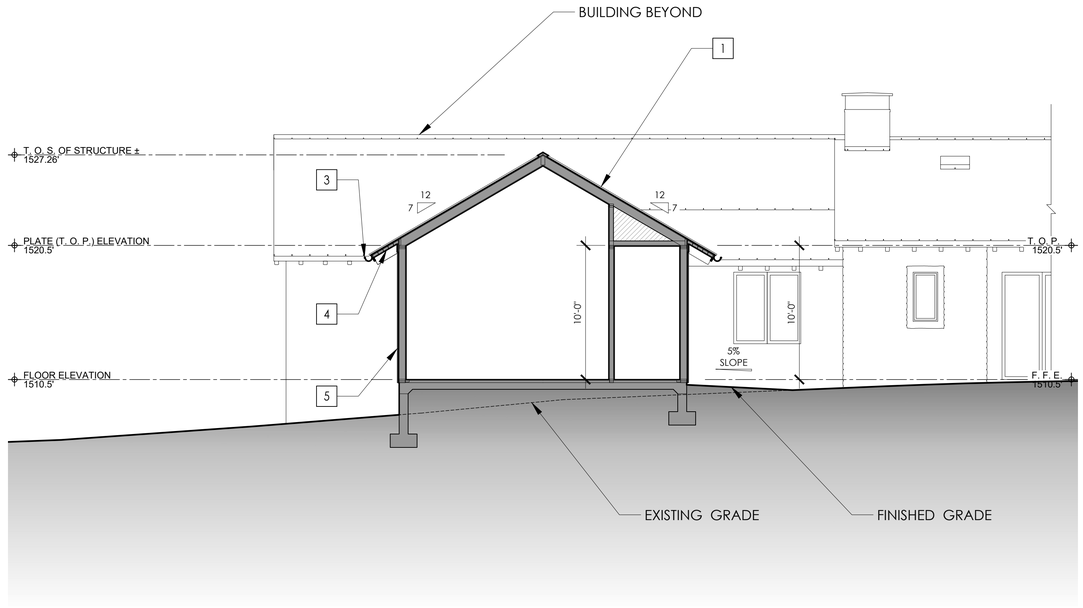
LICENSED ARCHITECT ADAM JESELNICK No. C33080 Renew 3/31/ STATE OF CALIFORNIA

SHEET NAME: A D U ELEVATIONS
SHEET DATE: 06.17.2024
SHEET SCALE: 3/16" = 1'-0"

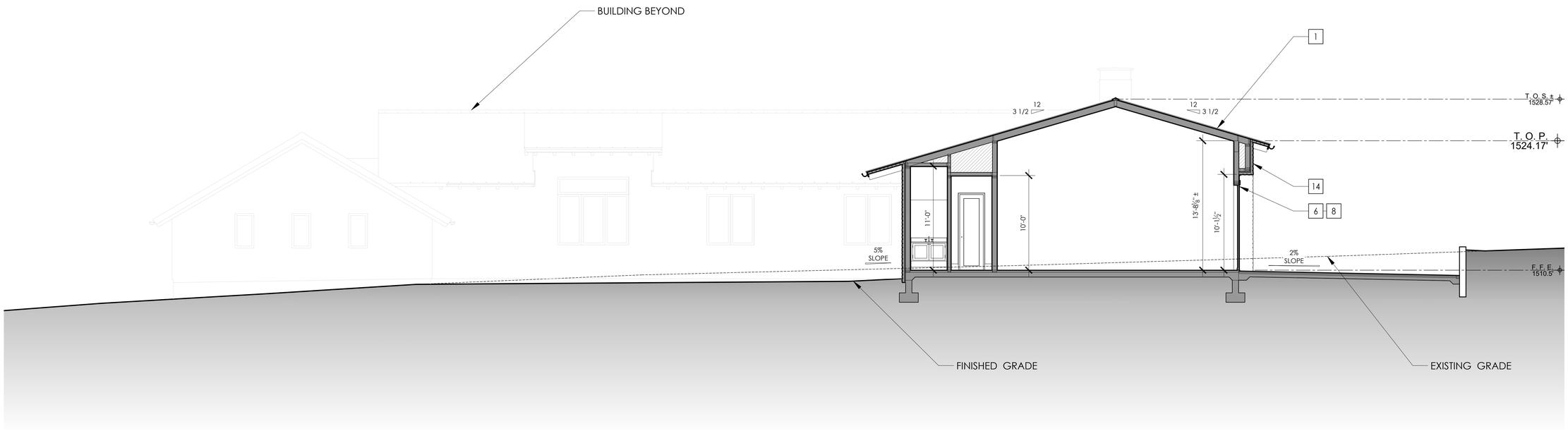
A3.04



3 NORTH SECTION, MAIN HOUSE THROUGH LAUNDRY AND HALL
SCALE: 3/16" = 1'-0"



2 NORTH SECTION, MAIN HOUSE THROUGH BED ROOMS AND HALL
SCALE: 3/16" = 1'-0"



1 WEST SECTION, MAIN HOUSE THROUGH GREAT ROOM
SCALE: 3/16" = 1'-0"

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EXTERIOR FINISHES
SEE SHEET A3.00

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ARROYO SEQUOIA RESIDENCE
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Carmel, California

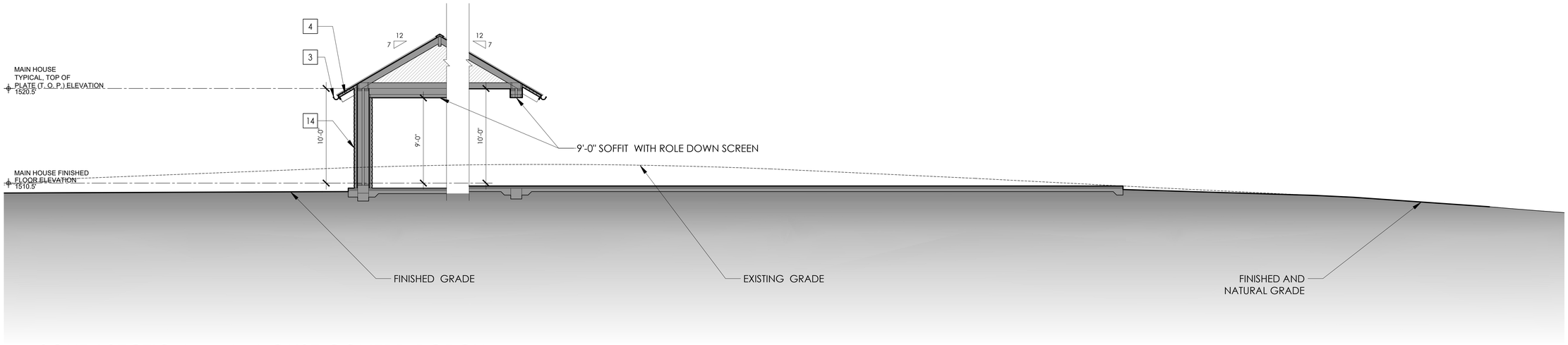
LICENSED ARCHITECT
ADAM JESELNICK
No. C33090
Renew 3/31/
STATE OF CALIFORNIA

SHEET NAME:
MAIN HOUSE SECTIONS
I

SHEET DATE:
06.17.2024

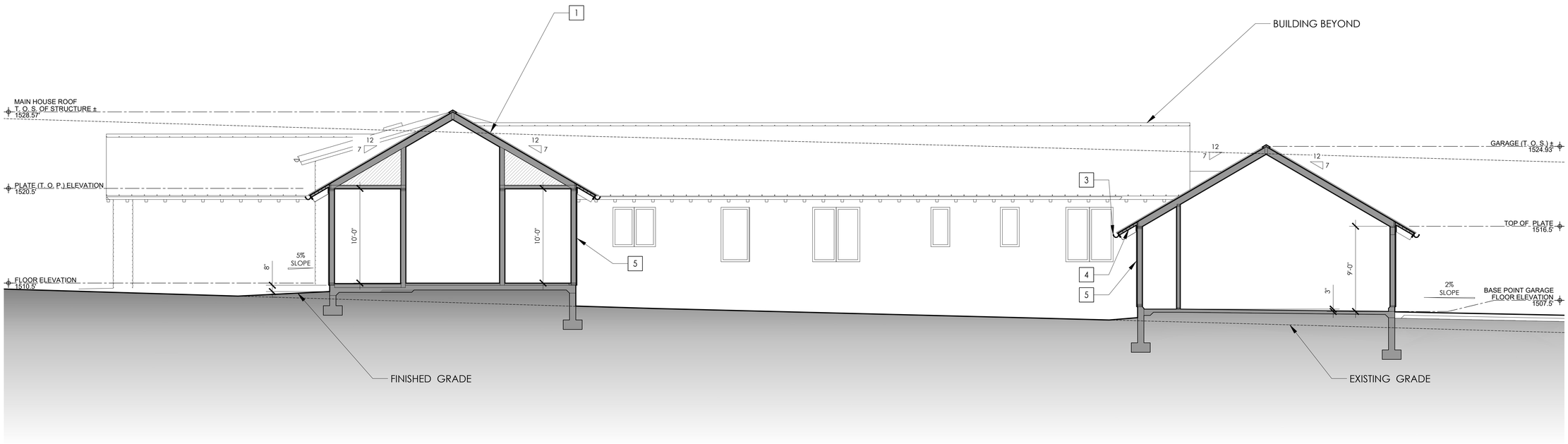
SHEET SCALE:
3/16" = 1'-0"

A3.10



2 SOUTH SECTION, MAIN HOUSE COVERD PORCH

SCALE: 3/16" = 1'-0"



1 EAST SECTON, MAIN HOUSE THOUGH MASTER BATH AND GARAGE

SCALE: 3/16" = 1'-0"

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EXTERIOR FINISHES

SEE SHEET A3.00

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ARROYO SEQUOIA RESIDENCE

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Carmel, California

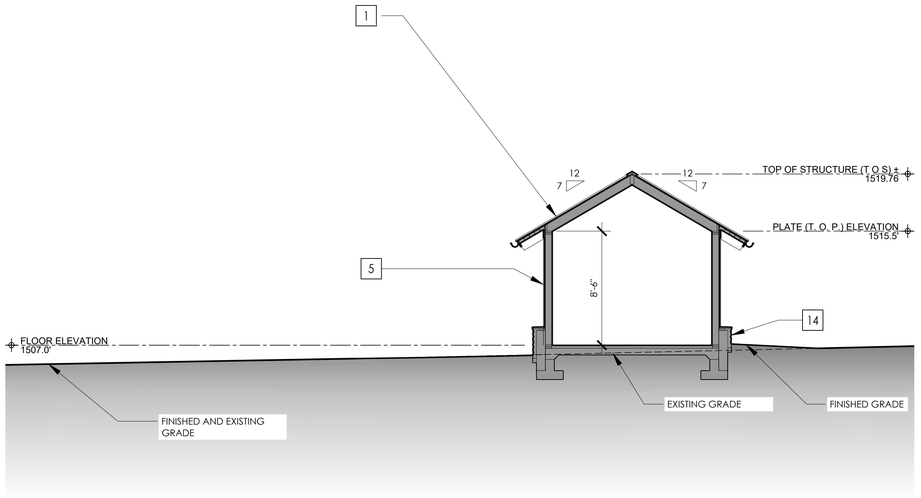
LICENSED ARCHITECT
ADAM JESELNICK
No. C33090
Renew 3/31/
STATE OF CALIFORNIA

SHEET NAME:
MAIN HOUSE SECTION II

SHEET DATE:
06.17.2024

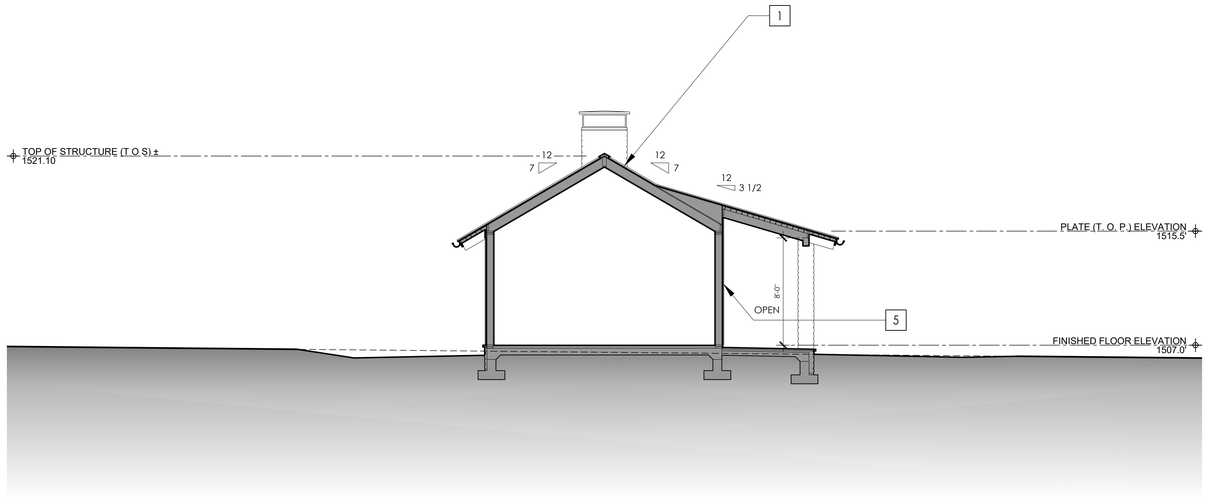
SHEET SCALE:
3/16" = 1'-0"

A3.11



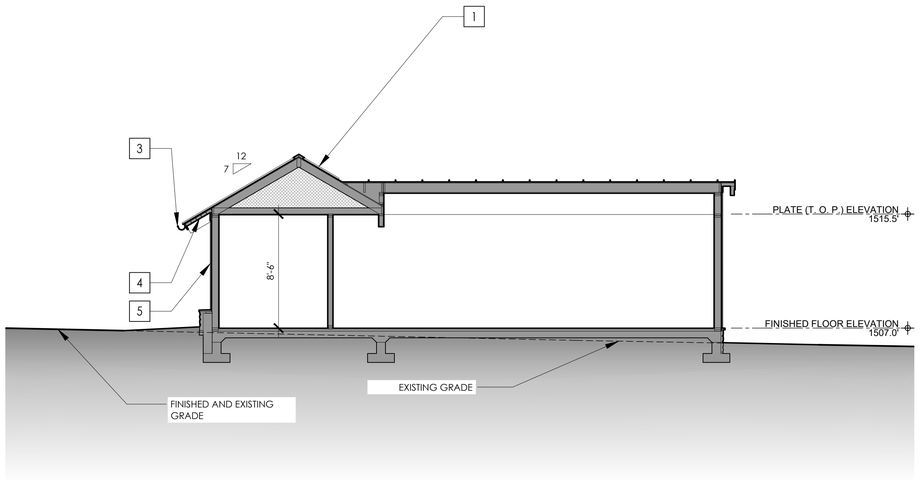
4 ADU SECTION, NORTH

SCALE: 3/16" = 1'-0"



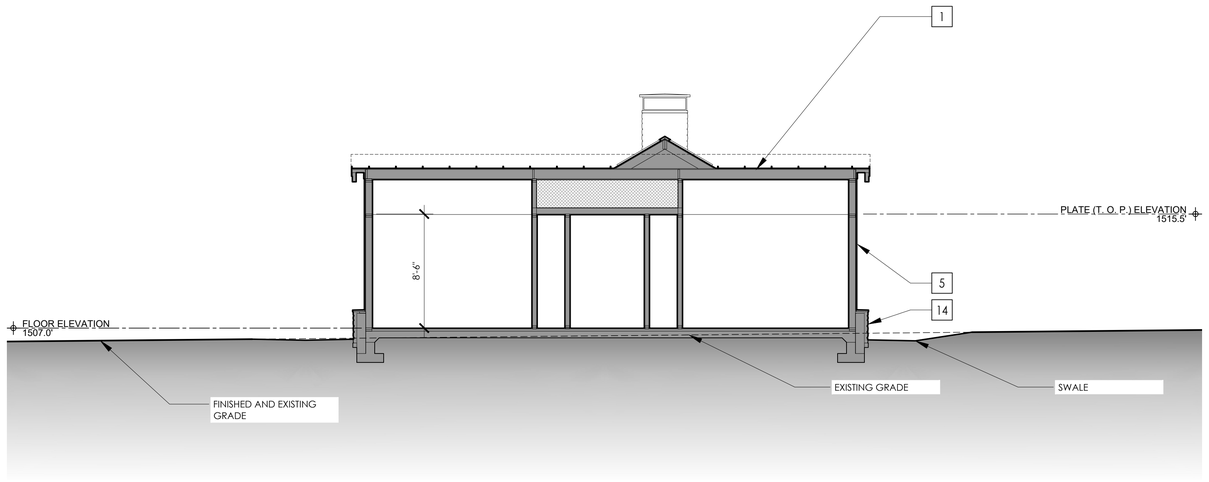
3 ADU SECTION, EAST

SCALE: 3/16" = 1'-0"



2 ADU SECTION, SOUTH

SCALE: 3/16" = 1'-0"



1 ADU SECTION, WEST

SCALE: 3/16" = 1'-0"

EXTERIOR FINISHES

SEE SHEET A3.04

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TOM MEANEY | ARCHITECT
620 STATE STREET SUITE 240 SANTA BARBARA CA 93101
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PRELIMINARY DESIGN REVIEW

ARROYO SEQUOIA RESIDENCE

12 Arroyo Sequoia Road - LOT 96

Carmel, California

LICENSED ARCHITECT ADAM JESELNICK No. C33090 Renew 3/31/ STATE OF CALIFORNIA

SHEET NAME:

A D U
SECTIONS

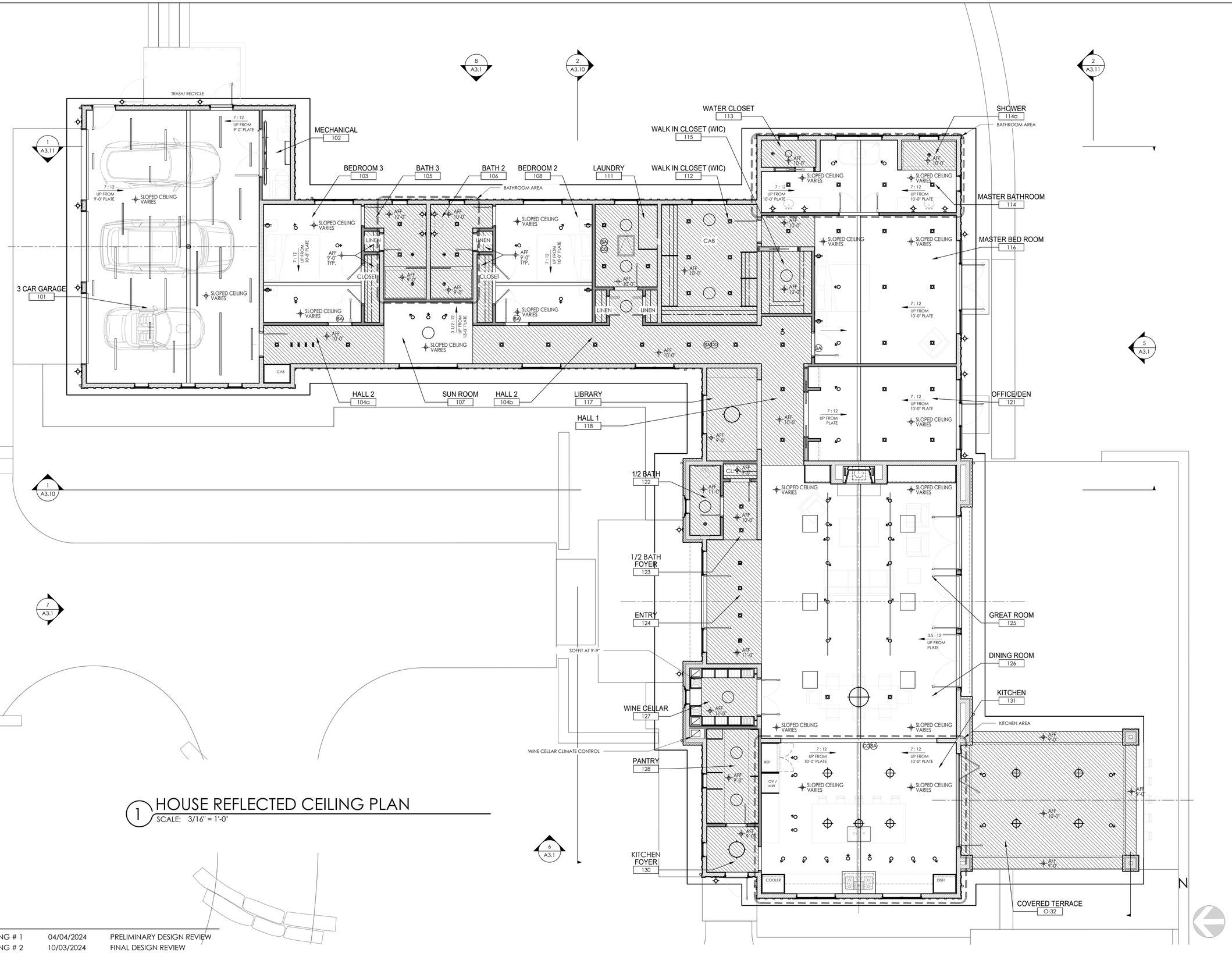
SHEET DATE:

06.17.2024

SHEET SCALE:

3/16" = 1'-0"

A3.12



1 HOUSE REFLECTED CEILING PLAN

SCALE: 3/16" = 1'-0"

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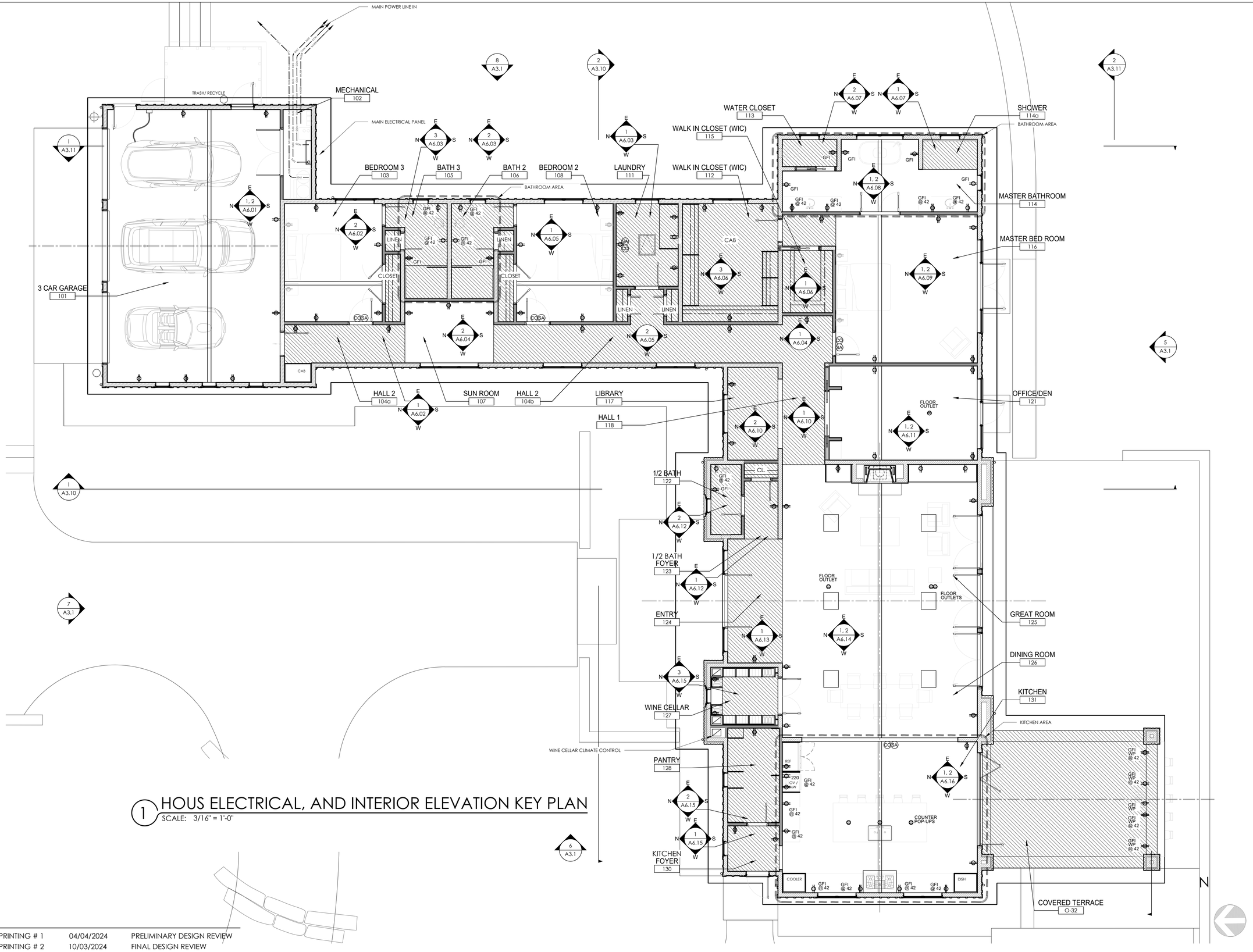
LICENSED ARCHITECT ADAM JESELNICK No. C33090 Renew 3/31/ STATE OF CALIFORNIA

SHEET NAME: HOUSE REFLECTED CEILING PLAN

SHEET DATE: 06.17.2024

SHEET SCALE: 3/16" = 1'-0"

A4.01



1 HOUS ELECTRICAL, AND INTERIOR ELEVATION KEY PLAN

SCALE: 3/16" = 1'-0"

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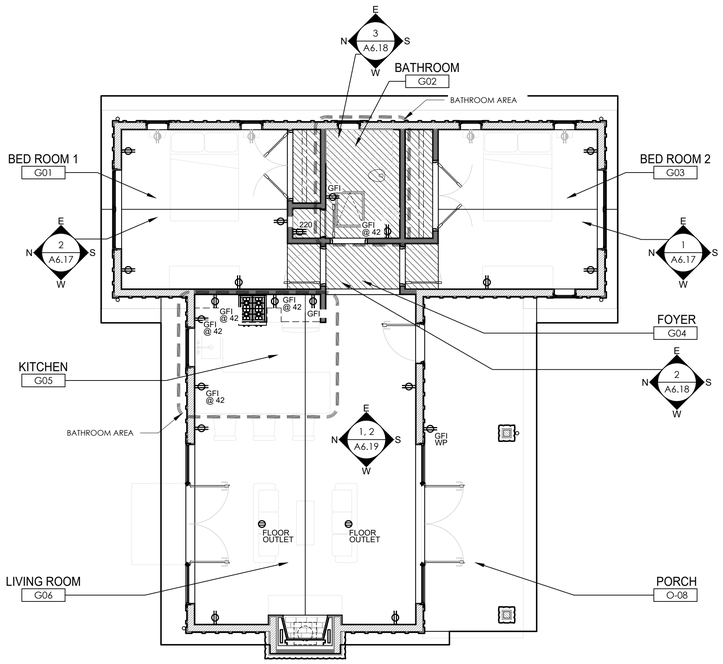
LICENSED ARCHITECT ADAM JESELNICK No. C33090 Renew 3/31/ STATE OF CALIFORNIA

SHEET NAME: HOUSE ELECTRICAL PLAN

SHEET DATE: 06.17.2024

SHEET SCALE: 3/16" = 1'-0"

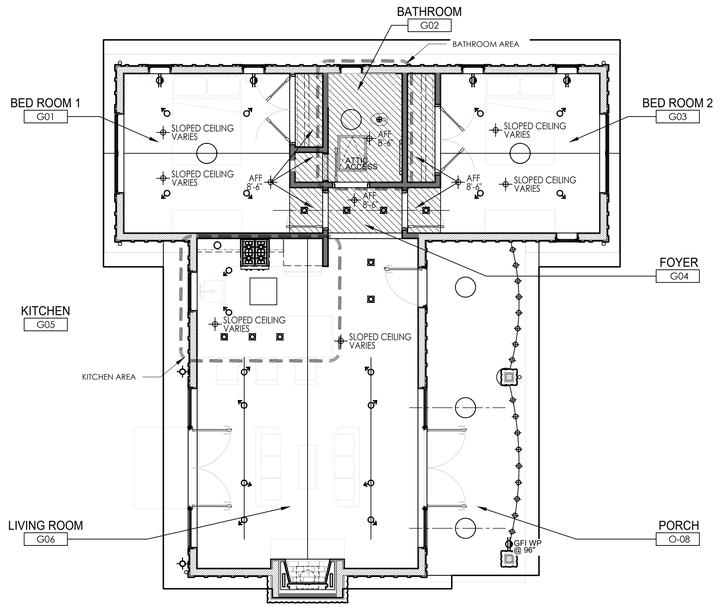
A4.02



2 A D U ELECTRICAL, AND INTERIOR ELEVATION KEY PLAN

SCALE: 3/16" = 1'-0"

N



1 A D U REFLECTED CEILING PLAN

SCALE: 3/16" = 1'-0"

N

ELECTRICAL NOTES

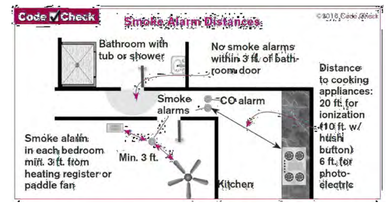
SEE SHEET A0.1, GENERAL CONDITIONS, AND A0.2 GENERAL NOTES FOR ADDITIONAL INFORMATION.
PLEASE NOTE, GENERAL NOTE 3.

KITCHENS
ELECTRICAL - LIGHTING:
- ALL INSTALLED LIGHTING SHALL BE HIGH EFFICACY. RECESSED LIGHTING SHALL NOT CONTAIN SCREW BASED BULBS.[CNC 150.0(K)1A]

ELECTRICAL – BRANCH CIRCUITS:
- A MINIMUM OF TWO 20-AMP SMALL APPLIANCE BRANCH CIRCUITS ARE REQUIRED TO SERVE COUNTERTOP AND WALL RECEPTACLES IN THE KITCHEN, PANTRY AND DINING ROOM [CEC 210.11(C)(1)]. NO BUILT-IN APPLIANCES ARE ALLOWED ON THESE CIRCUITS (EXCEPT AN ELECTRIC CLOCK OR THE IGNITION OF A GAS RANGE).
- INDIVIDUAL (DEDICATED) CIRCUITS ARE REQUIRED FOR GARBAGE DISPOSALS, MICROWAVES, COMPACTORS, AND DISHWASHERS. [CEC210.19A1B]
- AFCI (ARC-FAULT CIRCUIT-INTERRUPTER) PROTECTION IS REQUIRED FOR ALL 120V 15-& 20-AMP KITCHEN CIRCUITS. [CEC210.12A]

ELECTRICAL – RECEPTACLES:
- RECEPTACLES SHALL BE INSTALLED AT EACH COUNTERTOP SPACE ≥ 12 IN. IN WIDTH [CEC 210.52C1]. RECEPTACLES SHALL BE INSTALLED SO THAT NO POINT ALONG THE WALL LINE IS MORE THAN 24 INCHES HORIZONTALLY FROM AN OUTLET IN THAT SPACE [CEC 210.52C1]. THE MAXIMUM SPACING BETWEEN RECEPTACLES, MEASURED ON THE WALL-COUNTERTOP LINE, IS 48 INCHES.
- ALL RECEPTACLES SERVING KITCHEN COUNTERTOP SURFACES SHALL HAVE GFCI PROTECTION [210.8A6].
- COUNTERTOP RECEPTACLES SHALL NOT BE INSTALLED IN A FACE UP POSITION [CEC 406.5E]. LISTED "POP-UP" RECEPTACLES ARE ALLOWED [CEC 210.52C5]. RECEPTACLES OR STRIP OUTLETS CAN BE INSTALLED ON THE UNDERSIDE OF THE CABINET ABOVE THE COUNTERTOP IF WITHIN 20 INCHES OF THE COUNTERTOP.
- DISHWASHERS REQUIRE GFCI PROTECTION, INCLUDING 240-VOLT DISHWASHERS. (NEW IN 2019 CODES)
- ALL GFCI DEVICE CONTROLS MUST BE IN READILY ACCESSIBLE LOCATIONS. THE OUTLETS FOR BUILT IN DISHWASHERS SHALL BE LOCATED ADJACENT TO THE SPACE OCCUPIED BY THE DISHWASHER. (CEC422.16(B)(2)(5)
- ALL GENERAL PURPOSE AND COUNTERTOP RECEPTACLES MUST BE TAMPER-RESISTANT. [CEC 406.12]
- THE 24-INCH/48-INCH RULE DOES NOT APPLY TO ISLAND OR PENINSULAR COUNTERTOPS. THESE REQUIRE ONLY ONE RECEPTACLE PER COUNTERTOP SPACE, REGARDLESS OF LENGTH [CEC 210.52C2&3]. RECEPTACLES ON ISLANDS SHALL BE CALCULATED AS FOLLOWS. THE FIRST 9SQFT MUST HAVE 1 RECEPTACLE, FOR EVERY ADDITIONAL 18SQFT, OR FRACTION THERE OF, SHALL HAVE ADDITIONAL RECEPTACLES. PENINSULAS SHALL HAVE A RECEPTACLE WITHIN 2' OF THE END OF THE PENINSILA.
- ON ISLANDS AND PENINSULAS ONLY, RECEPTACLES ARE ALLOWED ON THE SIDE OF THE CABINET, NOT MORE THAN 12 INCHES BELOW THE COUNTERTOP AND WITH NO OVERHANGING COUNTERTOP GREATER THAN 6 INCHES [CEC 210.52C3)
- A RANGE HOOD / MICROWAVE COMBINATION CAN BE CORD-AND-PLUG CONNECTED IF THE CIRCUIT IS AN INDIVIDUAL (DEDICATED) BRANCH CIRCUIT. THE RECEPTACLE OUTLET SHALL BE A SINGLE TYPE, NOT A DUPLEX RECEPTACLE THAT WOULD ACCEPT TWO PLUGS [CEC 422.16B4]

SMOKE AND CARBON MONOXIDE ALARMS
- SMOKE ALARMS SHALL BE INSTALLED IN EACH SLEEPING ROOM, OUTSIDE EACH SLEEPING AREA (E.G., HALLWAYS), AND ON EACH STORY. [CRC 314.3]. SMOKE ALARMS MUST BE AT LEAST 3 FEET FROM THE DOOR OR OPENING OF A BATHROOM THAT CONTAINS A TUB OR SHOWER UNLESS THIS WOULD PREVENT PLACEMENT OF A REQUIRED SMOKE ALARM. DISTANCES TO COOKING APPLIANCES SHALL BE AS IN THE FIGURE ABOVE.
- CARBON MONOXIDE ALARMS SHALL BE INSTALLED IN DWELLINGS EQUIPPED WITH GAS APPLIANCES OR A FIREPLACE OR AN ATTACHED GARAGE. THEY MUST BE LOCATED OUTSIDE EACH SLEEPING AREA (E.G., HALLWAYS) AND ON EACH FLOOR LEVEL. IF A FUEL-BURNING APPLIANCE IS INSTALLED IN A BEDROOM, A CARBON MONOXIDE ALARM MUST ALSO BE INSTALLED IN THAT BEDROOM. [CRC 315.2.2 & 315.3]
- ALARMS REQUIRE A HARDWIRED POWER SOURCE WITH BATTERY BACKUP AND INTERCONNECTION SO THAT IF ONE ALARM ACTIVATES ALL ARE ACTIVATED. NEW HARDWIRED ALARMS MUST BE ON A CIRCUIT PROTECTED BY AN AFCI CIRCUIT BREAKER. HARD-WIRING AND INTERCONNECTION IS REQUIRED FOR REMODELING, ADDITIONS, OR ALTERATIONS THAT HAVE AN ACCESSIBLE ATTIC SPACE USABLE FOR ALARM WIRING OR THAT INCLUDE REMOVAL OF EXISTING WALL OR CEILING FINISHES THAT CAN BE USED FOR ALARM WIRING.



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LICENSED ARCHITECT ADAM JESELNICK No. C33090 Renew 3/31/ STATE OF CALIFORNIA

SHEET NAME:
A D U REFLECTED CEILING AND ELECTRICAL PLANS

SHEET DATE:
06.17.2024

SHEET SCALE:
3/16" = 1'-0"

A4.03

HOUSE WINDOW SCHEDULE

REVISION	TYPE / LETTER	WINDOW SIZE [WIDTH x HEIGHT] NOMINAL WINDOW SIZE (OVERALL NOMINAL SIZE) INCLUDES GANG OF WINDOWS AND DOOR	HEAD HEIGHT	MATERIAL	TYPE	NUMBERED NOTES / REMARKS
	HOUSE WINDOW					
	A	3'-0" x 8'-0" (12'-0" x 8'-0") - [A' + H1 + A]	8'-0" AFF	METAL	FIXED	1, 3, 8,
	A'	3'-0" x 8'-0" (12'-0" x 8'-0") - [A' + H1 + A]	8'-0" AFF	METAL	FIXED	1, 3, 8,
	B	1'-10" x 3'-8"	8'-0" AFF	METAL	CASEMENT	
	C	5'-0" x 5'-4"	8'-0" AFF	METAL	FRENCH CASEMENT	
	D	5'-0" x 5'-4"	8'-0" AFF	METAL	FRENCH CASEMENT	
	E	5'-0" x 5'-4"	8'-0" AFF	METAL	FRENCH CASEMENT	
	F	7'-6" x 7'-4 1/2"	10'-0 1/2" AFF	METAL	O / XOX	4, 6,
	G	2'-0" x 3'-8"	8'-0" AFF	METAL	CASEMENT	
	H	2'-0" x 3'-8"	8'-0" AFF	METAL	CASEMENT	
	J	2'-0" x 3'-8"	8'-0" AFF	METAL	CASEMENT	
	K	5'-0" x 5'-9"	8'-0" AFF	METAL	FRENCH CASEMENT	2,
	L	2'-0" x 4'-2"	8'-0" AFF	METAL	CASEMENT	
	M	2'-0" x 4'-2"	8'-0" AFF	METAL	CASEMENT	
	P	5'-0" x 5'-9"	8'-0" AFF	METAL	FRENCH CASEMENT	2,
	Q	3'-0" x 5'-9"	8'-0" AFF	METAL	CASEMENT	
	R	4'-6" x 4'-2"	8'-0" AFF	METAL	FRENCH CASEMENT	
	S	2'-6" x 4'-2"	8'-0" AFF	METAL	CASEMENT	
	T	6'-0" x 7'-0"	8'-0" AFF	METAL	FIXED (OO)	1, 11,
	U	2'-6" x 4'-2"	8'-0" AFF	METAL	CASEMENT	
	V	2'-0" x 3'-6"	8'-0" AFF	METAL	CASEMENT	
	W	3'-0" x 8'-0" (12'-0" x 8'-0") - [W + H7 + W']	8'-0" AFF	METAL	FIXED	1, 3, 8,
	W'	3'-0" x 8'-0" (12'-0" x 8'-0") - [W + H7 + W']	8'-0" AFF	METAL	FIXED	1, 3, 8,
	X	3'-0" x 8'-0" (9'-0" x 8'-0") - [X + H8 + X]	8'-0" AFF	METAL	FIXED	1, 3, 8,
	X'	3'-0" x 8'-0" (9'-0" x 8'-0") - [X + H8 + X]	8'-0" AFF	METAL	FIXED	1, 3, 8,
	Y	5'-0" x 5'-6"	9'-0" AFF	METAL	FRENCH CASEMENT	
	Z	5'-0" x 5'-6"	9'-0" AFF	METAL	FRENCH CASEMENT	
	AA	1'-10" x 3'-8"	8'-0" AFF	METAL	CASEMENT	
	BB	1'-10" x 3'-8"	8'-0" AFF	METAL	CASEMENT	
	CC	1'-10" x 3'-8"	8'-0" AFF	METAL	CASEMENT	
	HOUSE SKYLIGHTS		ROOF SLOPE			
	SL1	2'-2" x 2'-2"	3.5 / 12	ASL	FIXED	9, 10,
	SL2	2'-2" x 2'-2"	3.5 / 12	ASL	FIXED	9, 10,
	SL3	2'-2" x 2'-2"	3.5 / 12	ASL	FIXED	9, 10,
	SL4	2'-2" x 2'-2"	3.5 / 12	ASL	FIXED	9, 10,
	SL5	2'-2" x 2'-2"	3.5 / 12	ASL	FIXED	9, 10,
	SL6	2'-2" x 2'-2"	3.5 / 12	ASL	FIXED	9, 10,
	A D U WINDOWS		HEAD HEIGHT			
	GA	3'-0" x 7'-0" (12'-0" x 7'-0") - [GA + G01 + GA']	7'-0" AFF	METAL	FIXED	1, 3, 8,
	GA'	3'-0" x 7'-0" (12'-0" x 7'-0") - [GA + G01 + GA']	7'-0" AFF	METAL	FIXED	1, 3, 8,
	GB	3'-0" x 3'-6"	7'-0" AFF	METAL	CASEMENT	
	GC	6'-0" x 5'-0"	7'-0" AFF	METAL	FRENCH CASEMENT	2,
	GD	1'-8" x 5'-0"	7'-0" AFF	METAL	CASEMENT	
	GE	1'-8" x 5'-0"	7'-0" AFF	METAL	CASEMENT	
	GF	1'-8" x 3'-8"	7'-0" AFF	METAL	CASEMENT	1, 11,
	GH	1'-8" x 5'-0"	7'-0" AFF	METAL	CASEMENT	
	GJ	1'-8" x 5'-0"	7'-0" AFF	METAL	CASEMENT	
	GK	6'-0" x 5'-0"	7'-0" AFF	METAL	FRENCH CASEMENT	2,
	GL	1'-8" x 5'-0"	7'-0" AFF	METAL	CASEMENT	
	GM	3'-0" x 7'-0" (12'-0" x 7'-0") - [GA + G03 + GA']	7'-0" AFF	METAL	FIXED	1, 3, 8,
	GM'	3'-0" x 7'-0" (12'-0" x 7'-0") - [GA + G03 + GA']	7'-0" AFF	METAL	FIXED	1, 3, 8,

WINDOW NOTES

1. ALL GLASS TO BE TEMPERED (safety glass)
2. MANDATORY EGRESS THROUGH WINDOW
3. DOOR SIDELIGHTS
4. WINDOW WITH TRANSOM
5. NOT USED
6. WINDOW TYPE: XOX - CASEMENT, FIXED, CASEMENT
7. NOT USED
8. ADJACENT TO DOOR
9. ALUMINUM SKYLIGHT ON ROOF SHEATHING
10. SKYLIGHT DIMENSIONS GIVEN AS NOMINAL ALONG SLOPE OF ROOF
11. Windows near bathtup to be of tempered glass (safety glass)

Notes:

All window sizes are given in frame size.
All windows to have exterior window glass tempered unless noted otherwise.
All windows to be metal
All windows within 18" of the floor or walking surface shall have all tempered glass
All windows within stairwells shall have all tempered glass unless above 6'-8"
All Casement window are to be outswing casement U.N.O.
All skylights are given in nominal dimensions
AL - ALUMINUM
ASL - ALUMINUM SKYLIGHT, VELUX OR EQUAL
SEE ELEVATIONS FOR CASEMENT HANDING

DOOR SCHEDULE

REVISION	DOOR NUMBER	DOOR SIZE WxH, LEAF SIZE, [OPENING SIZE] GIVEN IN NOMINAL SIZE (ADD 1/2" TO WOOD POCKET DOORS)	DOOR TYPE	THICKNESS	HAND	H.W. TYPE	COMMENTS AND NOTES
	HOUSE DOORS - EXTERIOR						
	H1	Pr. 3'-6" x 8'-0", [7'-0" x 8'-0"]	TYPE 1	PM	LHA	TYPE B	1, 3, 10,
	H2	9'-0" x 8'-0"	TYPE 5	PM	NA	TYPE C	1, 4, 8,
	H3	9'-0" x 8'-0"	TYPE 5	PM	NA	TYPE C	1, 4, 8,
	H4	9'-0" x 8'-0"	TYPE 5	PM	NA	TYPE C	1, 4, 8,
	H5	3'-0" x 7'-8"	TYPE 6	PM	RH	TYPE A	1, 3,
	H6	3'-0" x 7'-8"	TYPE 7	PM	LHR	TYPE A	1, 3,
	H7	PR. 3'-0" x 8'-0", [6'-0" x 8'-0"]	TYPE 3	PM	LHR	TYPE B	1, 3, 10,
	H8	3'-0" x 8'-0"	TYPE 7	PM	RHR	TYPE A	1, 3, 10.
	H9	(3x) Pr. 3'-6" x 9'-0", [22'-1 1/4" x 9'-0"]	TYPE 8	PM	RHA	TYPE D	1, 3, Three sets of French Doors
	H10	4'-2" x 8'-0, [12'-0" x 8'-0"]	TYPE 9	PM	LHR	TYPE D	1, 3, 4 LEAF FOLDING DOORS
	H11	3'-0" x 8'-0"	TYPE 7	PM	RHR	TYPE A	1, 3, 8,
	HOUSE DOORS - INTERIOR						
	101	2'-6" x 8'-0"	TYPE 4	1 3/4"	LH	TYPE J	2, 5,
	102	2'-6" x 8'-0"	TYPE 4	1 3/4"	RHRA	TYPE F	2, 5,
	103	3'-0" x 8'-0"	TYPE 4	1 3/4"	LH	TYPE P	2, 5, 9,
	104	Pr. 3'-0" x 8'-0", [6'-0" x 8"-0"]	TYPE 4	1 3/4"	RHRA	TYPE F	2, 5,
	105	2'-6" x 8'-0"	TYPE 4	1 3/4"	LH	TYPE J	2, 5,
	106	Pr. 2'-6" x 8'-0", [5'-0" x 8'-0"]	TYPE 4	1 3/4"	RHRA	TYPE F	2, 5,
	107	3'-0" x 8'-0"	TYPE 4	1 3/4"	RH	TYPE G	2, 5,
	108	2'-2" x 8'-0"	TYPE 4	1 3/4"	LHR	TYPE F	2, 5,
	111	2'-2" x 8'-0"	TYPE 4	1 3/4"	RHR	TYPE F	2, 5,
	112	2'-6" x 8'-0"	TYPE 4	1 3/4"	RH	TYPE J	2, 5,
	113	Pr. 2'-6" x 8'-0", [5'-0" x 8'-0"]	TYPE 4	1 3/4"	LHRA	TYPE F	2, 5,
	114	3'-0" x 8'-0"	TYPE 4	1 3/4"	LH	TYPE G	2, 5,
	115	3'-0" x 8'-0"	TYPE 4	1 3/4"	RH	TYPE H	2, 5,
	116	Pr. 1'-3" x 8'-0", [2'-6" x 8'-0"]	TYPE 4	1 3/4"	RHRA	TYPE F	2, 12, LEVERED?
	117	Pr. 1'-3" x 8'-0", [2'-6" x 8'-0"]	TYPE 5	1 3/4"	LHRA	TYPE F	2, 12, LEVERED?
	118	2'-10" x 8'-0"	TYPE 4	1 3/4"	RH	TYPE H	2, 5,
	121	2'-4" x 8'-0"	TYPE 2	1 3/4"	LH P	TYPE K	2, 5, 6,
	122	Pr. 2'-6" x 8'-0", [5'-0" x 8"-0"]	TYPE 4	1 3/4"	RH	TYPE J	2, 5,
	123	2'-4" x 8'-0"	TYPE 2	1 3/4"	RH P	TYPE L	2, 5, 6,
	124	3'-0" x 8'-0"	TYPE 4	1 3/4"	RH	TYPE G	2, 5,
	125	8'-10 1/2" x 8'-0" CASING	N/A	N/A	N/A	N/A	WOOD CASING TO MATCH DOORS, NO ASTRAGAL
	126	Pr. 2'-10" x 8'-0", [5'-8" x 8"-0"]	TYPE 2	1 3/4"	RHA	TYPE M	2, 5, 6, 7, HARDWARE TO SYNCHRONIZE OPENING
	127	Pr. 2'-4" x 8'-0", [4'-8" x 8"-0"]	TYPE 4	1 3/4"	RHRA	TYPE O	2, 5,
	128	2'-6" x 8'-0"	TYPE 4	1 3/4"	RH	TYPE H	2, 5,
	129	3'-0" x 8'-0"	N/A	N/A	N/A	N/A	WOOD CASING TO MATCH DOORS, NO ASTRAGAL
	A D U DOORS - EXTERIOR						
	G01	3'-0" x 7'-0", [6'-0" x 7'-0"]	TYPE 1	PM	RHA	TYPE B	1, 3, 10,
	G02	3'-0" x 7'-0"	TYPE 6	PM	RH	TYPE A	1, 3,
	G03	3'-0" x 7'-0", [6'-0" x 7'-0"]	TYPE 3	PM	RHRA	TYPE B	1, 3, 10,
	A D U DOORS - INTERIOR						
	G11	2'-8" x 7'-0"	TYPE 4	1 3/4"	LH	TYPE G	2, 5,
	G12	Pr. 2'-6" x 7'-0", [5'-0" x 7'-0]	TYPE 4	1 3/4"	LHRA	TYPE F	2, 5,
	G13	2'-0" x 7'-0"+/-	TYPE 10	PM	N/A	TYPE R	2, 4,
	G14	2'-6" x 7'-0"	TYPE 4	1 3/4"	LH	TYPE J	2, 5,
	G15	Pr. 2'-6" x 7'-0", [5'-0" x 7'-0]	TYPE 4	1 3/4"	RHRA	TYPE F	2, 5,
	G16	2'-8" x 7'-0"	TYPE 4	1 3/4"	RH	TYPE G	2, 5,

DOOR TYPE LEGEND		HARDWARE TYPE LEGEND
TYPE 1	PAIR ENTRY DOOR, PAIR, IN SWING	TYPE A ENTRY DOOR - BY WINDOW MANUFACTURER
TYPE 2	INTERIOR WOOD POCKET DOOR	TYPE B PAIR, ENTRY DOOR - BY WINDOW MANUFACTURER
TYPE 3	PAIR FRENCH DOORS, OUT SWING	TYPE C AUTOMATED OVERHEAD GARAGE DOOR
TYPE 4	INTERIOR WOOD DOOR	TYPE D MULTIPLE DOOR, ENTRY DOOR - BY WINDOW MANUFACTURER
TYPE 5	GARAGE	TYPE F CLOSET(S) DOOR WITH ROLLER LATCH SET
TYPE 6	EXTERIOR IN SWING SINGLE LEAF DOOR	TYPE G BEDROOM SET
TYPE 7	EXTERIOR OUT SWING SINGLE LEAF DOOR	TYPE H TYPICAL INTERIOR SET
TYPE 8	EXTERIOR POCKET DOORS	TYPE J BATHROOM PRIVACY SET
TYPE 9	EXTERIOR FOLDING DOORS	TYPE K POCKET DOOR, BATHROOM PRIVACY SET
TYPE 10	INTERIOR ROLE-UP DOOR	TYPE L POCKET DOOR
		TYPE M PAIR SYNCHRONIZED POCKET DOOR W/ PRIVACY
		TYPE O TYPICAL INTERIOR LOCKING SET
		TYPE P LOCKING GARAGE ENTRY DOOR WITH CLOSER
		TYPE R INTERIOR ROLE-UP DOOR

NOTES:

1 EXTERIOR DOOR
2 INTERIOR DOOR
3 GLASS IN DOOR, FULLY TEMPERED
4 OVERHEAD DOOR
5 WOOD PANEL DOOR
6 POCKET DOOR, ADD 1/2" TO STILE AT POCKET END OF DOOR
7 SYNCHRONIZING HARDWARE
8 GARAGE DOOR SIZES GIVEN AS OPENING SIZE.
9 20 MINUTE MINIMUM FIRE RATED DOOR FROM HALL & UTILITY TO GARAGE.
10 WITH SIDE LIGHTS, SEE WINDOW SCHEDULE
11 OUTSWING Pr. CLOSET DOOR WITH ROLLER LATCH
12 WOOD SLAB? DOOR

SCHEDULE NOTES:

I. ALL EXTERIOR MAN DOORS TO BE THE SAME MANUFACTURER AS WINDOWS
II. ALL GLASS IN DOOR TO BE TEMPERED, GLASS TO MATCH WINDOWS
III. Pr. = PAIR OF DOORS
IV. PM = PER MANUFACTURER
V. PROVIDE AUTO LIGHT SWITCH AT ALL COSET ROLLER LATCH DOORS
VI. DOOR HEADS AND WINDOW HEAD TOO ALIGN
VII. N/A = NOT APPLICABLE

GENERAL NOTE:

ALL DOOR SIZES ARE GIVEN AS NOMINAL SIZE

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ADAM JESELNICK ARCHITECT
ADAMJESELNICK.COM
TOM MEANEY | ARCHITECT
620 STATE STREET SUITE 240 SANTA BARBARA CA 93101
TEL 805.966.7668 (SB) 831.624.4278 (CARMEL)
WWW.TOMMEANEY.COM

PRELIMINARY DESIGN REVIEW

ARROYO SEQUOIA RESIDENCE

12 Arroyo Sequoia Road - LOT 96
Carmel, California

LICENSED ARCHITECT ADAM JESELNICK No. C33090 Renew 3/31/ STATE OF CALIFORNIA

SHEET NAME: DOOR AND WINDOW SCHEDULE

SHEET DATE: 06.17.2024

SHEET SCALE: NTS

A5.01



1 PROPOSED EXTERIOR STONE
SBI BUILDING MATERIALS - PICASSO CREAM CHOPPED - RECTILINEAR PATTERN



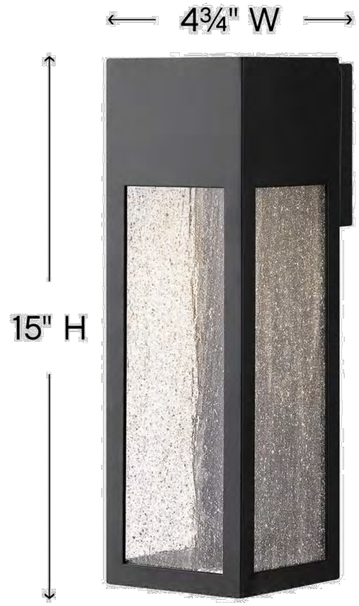
2 PROPOSED EXTERIOR FIBER CEMENT SIDING
JAMES HARDIE - STATEMENT COLLECTION - SELECT CEDARMILL - KHAKI BROWN



3 PROPOSED METAL ROOF
STANDING SEAM METAL ROOFING - WESTERN STATES - MATTE DARK BRONZE



4 PROPOSED DOORS AND WINDOWS
ARCADIA CUSTOM - ALUMINUM - BLACK



5 PROPOSED LIGHT FIXTURE
HINKLEY ROOK 1785SK-LL - LARGE WALL MOUNT LANTERN

FINAL DESIGN REVIEW

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TOM MEANEY | ARCHITECT
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TEL 805.966.7688 (SB) 831.624.4278 (CARMEL)
WWW.TOMMEANEY.COM

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Carmel, California

LICENSED ARCHITECT
ADAM JESELNICK
No. C33090
Renew 3/31/
STATE OF CALIFORNIA

SHEET NAME:
MATERIALS

SHEET DATE:
10. 03. 2024

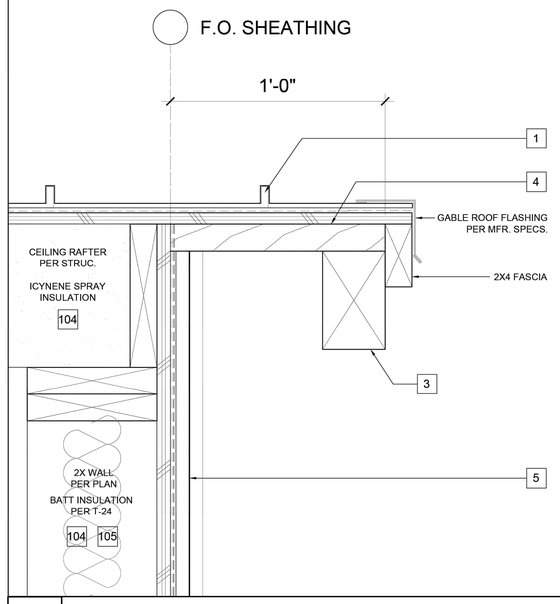
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N.T.S.

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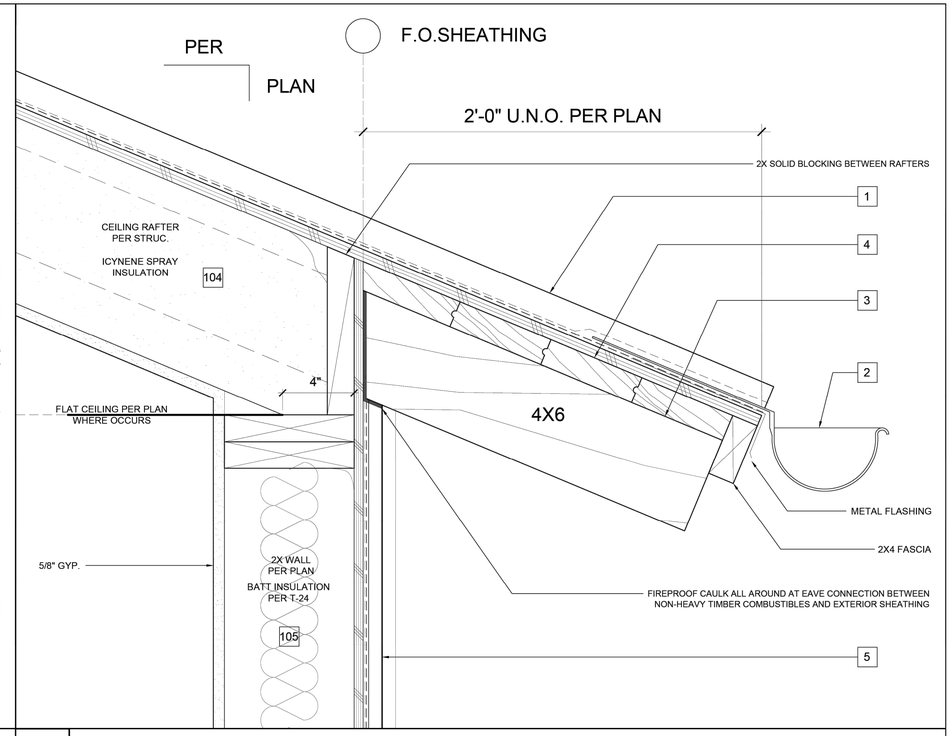
EXTERIOR FINISHES

1. CLASS 'A' [ICC-ES REPORT ESR-2048], NON-REFLECTIVE METAL STANDING SEAM ROOF W/ 12" O.C. SEAMS, SUPPL: WESTERN STATES METAL ROOFING (WESTERNSTATESMETALROOFING.COM) , COLOR: MATTE DARK BRONZE, ICC-ES REPORT TO BE AVAILABLE ON SITE
2. 5"Ø HALF ROUND METAL GUTTER W/ 4"Ø METAL DOWNSPOUT, HINGED GUTTER GUARD, LOCK ON STYLE, COMPATIBLE W/ 5" GUTTERS TO PREVENT THE ACCUMULATION OF LEAVES AND DEBRIS, CONNECT DRAINAGE TO STORM DRAIN SYSTEM. COLOR TO MATCH ROOF.
3. 4X6 APPLIED DOUGLAS FIR RAFTER TAILS PER DETAIL, 24" O.C. MAX., SMOOTH TEXTURE, PAINT TO MATCH SIDING - COLOR: VERIFY W/ ARCHITECT
4. 2X6 T&G KILN DRIED DOUGLAS FIR EAVES PER DETAIL, SMOOTH TEXTURE, PAINT TO MATCH SIDING - COLOR: VERIFY W/ ARCHITECT
5. 7/16"X11-1/2"X12'-0" BOARD & 3/4"X2-1/2"X12'-0" BATTEN SIDING, 5/16" THICK, OVER TYVEK AND EXTERIOR PLY, SUPPLIER: JAMES HARDIE (WWW.JAMESHARDIE.COM), TEXTURE: CEDARMILL
   FACTORY PRIMED & PAINT. COLOR KHAKI BROWN.
6. ALUMINUM EXTERIOR DOOR, DUAL GLAZED / LOW E - PER DOOR SCHEDULE, MFR: ARCADIA CUSTOM STEEL LOOK (ARCADIACUSTOM.COM), COLOR: BLACK
7. ALUMINUM EXTERIOR WINDOW, DUAL GLAZED / LOW E - PER WINDOW SCHEDULE, MFR: ARCADIA CUSTOM STEEL LOOK (ARCADIACUSTOM.COM), COLOR: BLACK
8. 2X6 DOOR & WINDOW CASING PER DETAIL, SUPPLY: JAMES HARDIE 'ARTISAN' (WWW.JAMESHARDIE.COM), TEXTURE: SMOOTH, FACTORY PRIMED AND PAINT. COLOR: KHAKI BROWN.
9. CEDAR PLANK GARAGE DOOR, WIRE BRUSHED W/ EASED EDGES, REFER TO DOOR SCHEDULE, COLOR/TEXTURE: PAINT TO MATCH SIDING
10. CHIMNEY PER PLAN & DETAIL W/ 'PICASSO CREAM - CHOPPED' STONE VENEER, W/ CLASS 'A' INSULATED DOUBLE WALL STAINLESS STEEL FLUE FOR ALL CHIMNEY LENGTHS & ASSOCIATED COMPONENTS PER MFR SPECS, REPORTS & LISTINGS (UL103), MFR: DURAVENT - DURATECH 12" (WWW.DURAVENT.COM), PROVIDE SHROUD AND SPARK ARRESTOR TO COMPLY PER (CRC SECTION R1003.9.1), CHIMNEY TO EXTEND 2' ABOVE ANY PORTION OF THE BUILDING AND ROOF WITHIN 10' OF THE CHIMNEY OUTLET AND 3' ABOVE THE HIGHEST POINT WHERE CHIMNEY PASSES THROUGH ROOF, NET FREE AREA UNDER CHIMNEY CAP TO BE 4 TIMES GREATER THAN THE AREA OF THE CHIMNEY FLUE OUTLET.
11. EXTERIOR WALL MOUNTED INDIRECT LIGHT FIXTURE PER PLAN, HIGH EFFICIENCY LED LAMP W/ SHIELDED GLASS, 25 WATT OR EQUIVALENT MAX., SUPPLY: VERIFY W/ ARCHITECT, COLOR: BLACK
12. STONE TERRACE & LANDING PAVERS, SLOPE 1/8" PER FT. TO DRAIN AWAY FROM STRUCTURES, STAIR LANDINGS 2% SLOPE MAX., PROVIDE 36" MIN. LANDING AT EACH GRADE LEVEL EXIT IN THE DIRECTION OF EGRESS, SUPPLY/COLOR: MULTI BLEND, VERIFY WITH ARCHITECT
13. WEEP SCREED, PROFILE TO ALLOW SIDING BELOW SCREED PER DETAIL, PROVIDE 26 GAUGE MIN. GALVANIZED WEEP SCREED AT FOUNDATION, 4" MIN. ABOVE GRADE OR 2" MIN. ABOVE CONCRETE/PAVING WHERE OCCURS
14. 1 1/2" THICK ADHERED LIMESTONE VENEER, HORIZONTAL LAY RECTANGULAR W/ OVERSIZED CORNERS, OVER SCRATCH COAT, METAL LATHE, GRADE D BUILDING PAPER (TWO LAYERS AT SHEAR WALLS), AND EXTERIOR PLY, GROUT TO MATCH PLASTER COLOR, SUPPLY: SBI MATERIALS (WWW.SBIMATERIALS.COM) - 'PICASSO CREAM - CHOPPED'.
15. 3X3 WOOD TRIM, COLOR: TO MATCH
16. VELUX FIXED LOW PROFILE SKYLIGHT WITH OPERABLE SHADES. SUPPLIER: HTTPS://WWW.VELUXUSA.COM/. DECK MOUNTED. ALUMINUM FRAME. STYLE: FS. COLOR: BLACK.

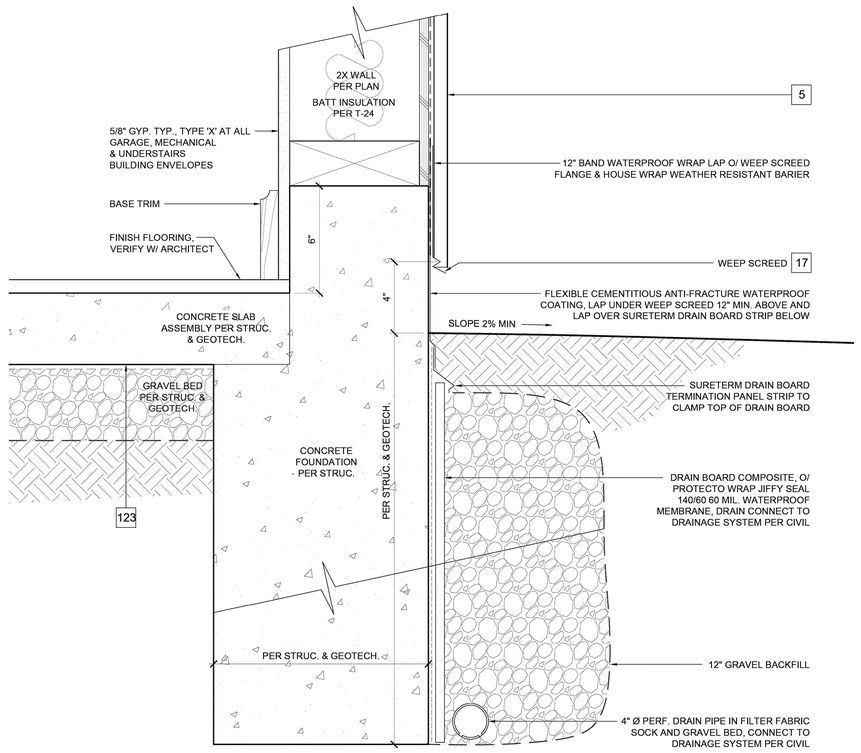
COLORS: ALL COLORS TO BE VERIFIED WITH ARCHITECT PRIOR TO ORDERING AND IN THE FIELD, ALL WOOD & HEAVY TIMBERS NON-TREATED, TO HAVE LIGHT SANDBLAST TEXTURE WITH EASED EDGES, U.N.O. PROVIDE SAMPLE TO ARCHITECT PRIOR TO ORDERING - TYPICAL



3 RAKE DETAIL SCALE: 3"=1'-0"



1 EAVE DETAIL SCALE: 3"=1'-0"



2 FOOTING @ GARAGE SCALE: 3"=1'-0"

SET PRINTING # 1	04/04/2024	PRELIMINARY DESIGN REVIEW
SET PRINTING # 2	10/03/2024	FINAL DESIGN REVIEW

ADAM JESELNICK ARCHITECT
ADAMJESELNICK.COM
TOM MEANEY ARCHITECT
620 STATE STREET SUITE 240 SANTA BARBARA CA 93101
TEL 805.966.7668 (SB) 831.624.4278 (CARMEL)
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PRELIMINARY DESIGN REVIEW

ARROYO SEQUOIA RESIDENCE
12 Arroyo Sequoia Road - LOT 96
Carmel, California

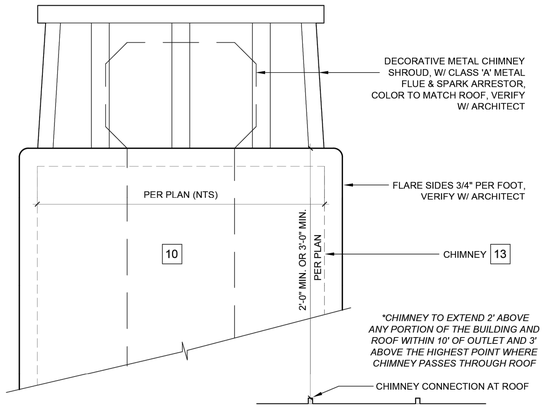
LICENSED ARCHITECT ADAM JESELNICK No. C33090 Renew 3/31/ STATE OF CALIFORNIA

SHEET NAME: DETAILS I

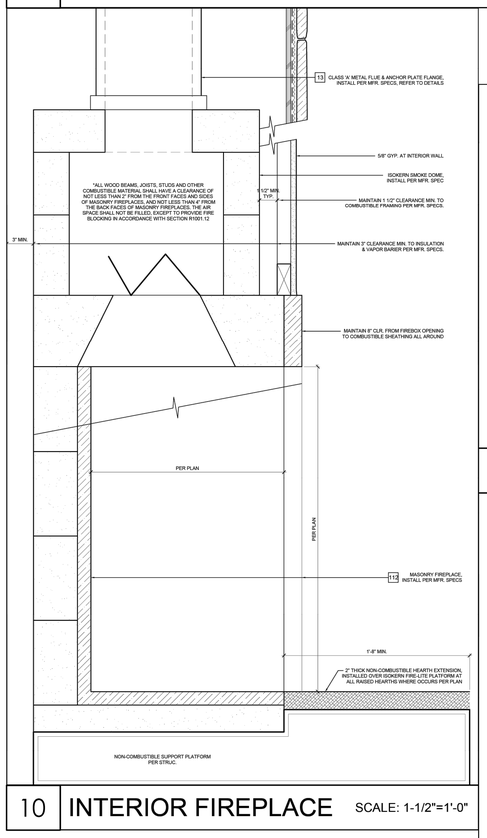
SHEET DATE: 04.04.2023

SHEET SCALE: as noted

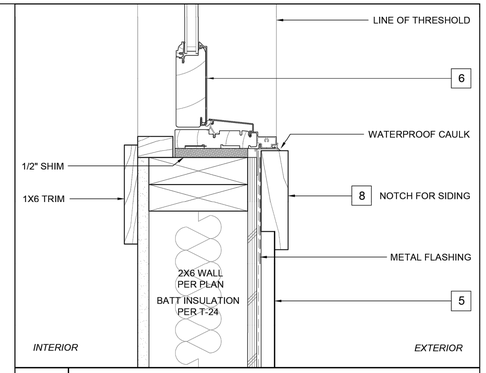
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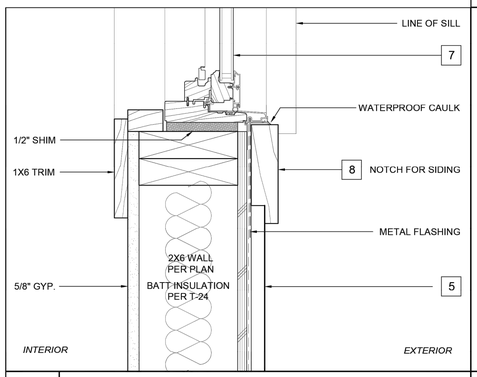
11 CHIMNEY CAP DETAIL SCALE: 1-1/2"=1'-0"



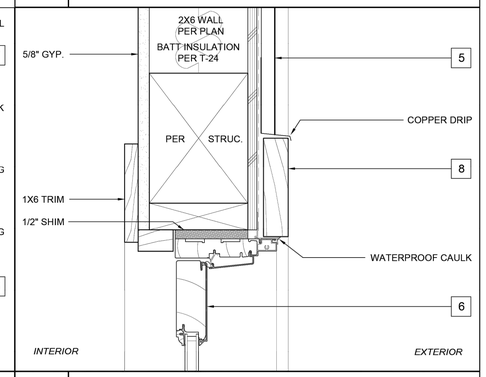
10 INTERIOR FIREPLACE SCALE: 1-1/2"=1'-0"



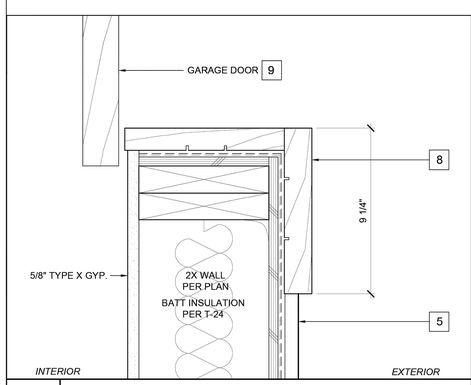
4 DOOR JAMB SCALE: 3"=1'-0"



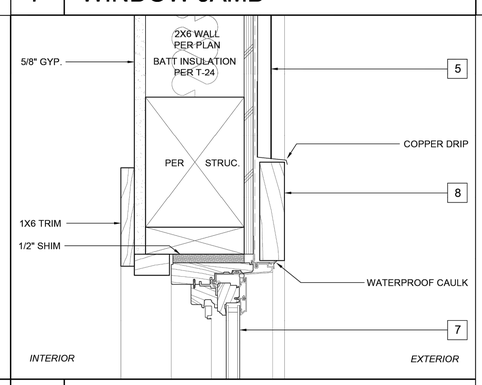
7 WINDOW JAMB SCALE: 3"=1'-0"



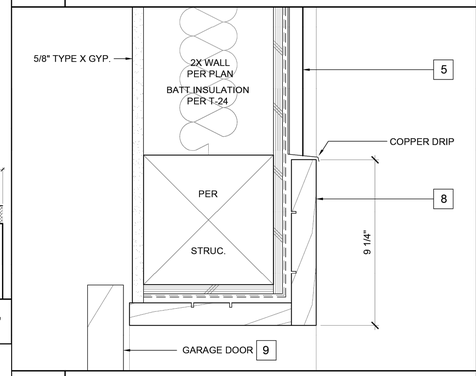
3 DOOR HEAD SCALE: 3"=1'-0"



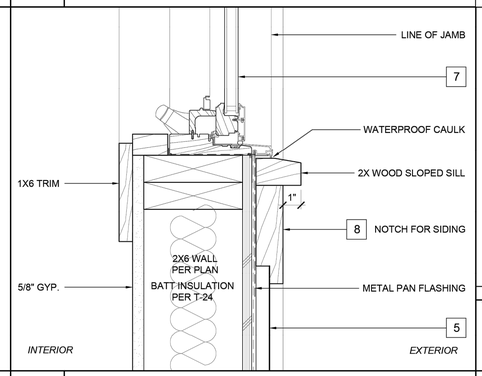
9 GARAGE DOOR JAMB SCALE: 3"=1'-0"



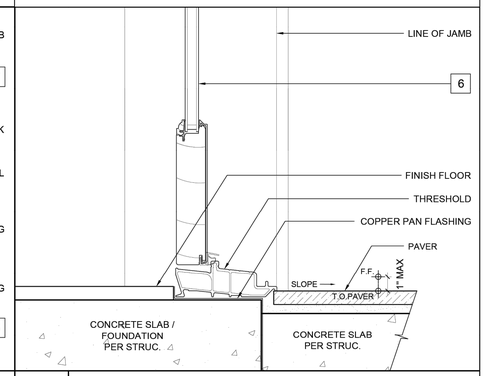
6 WINDOW HEAD SCALE: 3"=1'-0"



8 GARAGE DOOR HEAD SCALE: 3"=1'-0"



5 WINDOW SILL SCALE: 3"=1'-0"



1 DOOR THRESHOLD SCALE: 3"=1'-0"

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SET PRINTING # 2	10/03/2024	FINAL DESIGN REVIEW

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ADAMJESELNICK.COM
TOM MEANEY | ARCHITECT
620 STATE STREET SUITE 240 SANTA BARBARA CA 93101
TEL 805.966.7668 (SB) 831.624.4278 (CARMEL)
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PRELIMINARY DESIGN REVIEW

ARROYO SEQUOIA RESIDENCE
12 Arroyo Sequoia Road - LOT 96
Carmel, California

LICENSED ARCHITECT ADAM JESELNICK No. C33090 Renew 3/31/ STATE OF CALIFORNIA

SHEET NAME: DETAILS 11

SHEET DATE: 04.04.2023

SHEET SCALE: as noted

A8.02



ENTRY VIEW FROM GUEST PARKING AREA



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SET PRINTING # 2	10/03/2024	FINAL DESIGN REVIEW

PRELIMINARY DESIGN REVIEW

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ADAMJESELNICK.COM

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ARROYO SEQUOIA RESIDENCE

12 Arroyo Sequoia Road - LOT 96

Carmel, California

LICENSED ARCHITECT ADAM JESELNICK No. C33090 Renew 3/31/ STATE OF CALIFORNIA

SHEET NAME:
ARCHITECTURAL MODEL VIEWS

SHEET DATE:
08.17.2023

SHEET SCALE:
AS NOTED

A9.01



ENTRY VIEW FROM GARDEN



ENTRY VIEW FROM GARDEN

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ADAMJESELNICK.COM

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620 STATE STREET SUITE 240 SANTA BARBARA CA 93101
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12 Arroyo Sequoia Road - LOT 96

Carmel, California

LICENSED ARCHITECT
ADAM JESELNICK
No. C33590
Renew 3/31/
STATE OF CALIFORNIA

SHEET NAME:
ARCHITECTURAL MODEL VIEWS

SHEET DATE:
08.17.2023

SHEET SCALE:
AS NOTED

A9.02



VIEW FROM ENTRY DRIVE AND GARAGE



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PRELIMINARY DESIGN REVIEW

ADAM JESELNICK ARCHITECT
ADAMJESELNICK.COM

TOM MEANEY | ARCHITECT
620 STATE STREET SUITE 240 SANTA BARBARA CA 93101
TEL 805.966.7668 (SB) 831.624.4278 (CARMEL)
WWW.TOMMEANEY.COM

ARROYO SEQUOIA RESIDENCE
12 Arroyo Sequoia Road - LOT 96
Carmel, California

LICENSED ARCHITECT ADAM JESELNICK No. C33090 Renew 3/31/ STATE OF CALIFORNIA

SHEET NAME:
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08.17.2023

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AS NOTED

A9.03

SECTION 1: GENERAL REQUIREMENTS

1. COVERING CODE:
ALL WORK TO COMPLY WITH:
(a) THE "2022 CALIFORNIA BUILDING CODE" (CBC)" WITH THE STATE AND LOCAL AMENDMENTS;
(b) REFER TO CH35 OF CBC. WHERE OTHER STANDARDS ARE NOTED IN THE DRAWINGS, USE THE LATEST EDITION OF THE STANDARD UNLESS A SPECIFIC DATE IS INDICATED.
(c) ALL APPLICABLE LOCAL STATE AND FEDERAL CODES, ORDINANCES, LAWS REGULATIONS AND PROTECTIVE COVENANTS GOVERNING THE SITE OF WORK;
(d) STANDARD SPECIFICATIONS OF ASTM AS NOTED HEREIN AND AS REQUIRED BY THE BUILDING CODE.
(e) IN CASE OF CONFLICT, THE MORE STRINGENT REQUIREMENT SHALL GOVERN.

2. SITE COORDINATION
THE CONTRACTOR SHOULD HAVE EXPERIENCE AND BE FAMILIAR WITH THE TYPE OF PROJECT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PERFORM ONSITE VERIFICATION OF ALL DIMENSIONS AND CONDITIONS. NOTED DIMENSIONS TAKE PRECEDENCE OVER THE DRAWING'S SCALE. ADDITIONALLY, IT IS THE CONTRACTOR'S RESPONSIBILITY TO THOROUGHLY READ THE COMPLETE DESIGN PACKAGE BEFORE SUBMITTING A BID.

3. STRUCTURAL DRAWINING
THE BUILDER HAS CONTRACTED GMEP ENGINEERS FOR LIMITED STRUCTURAL ENGINEERING DRAWINGS, VITAL FOR OBTAINING A BUILDING PERMIT WHEN COMBINED WITH OTHER CONSULTANTS' DRAWINGS. THESE DRAWINGS WON'T COVER ALL ASPECTS OR MATERIALS. THE BUILDER WILL OVERSEE MATERIAL SELECTION, QUALITY CONTROL, INSTALLERS, CONSTRUCTION METHODS, AND SUPPLY ADDITIONAL INFORMATION TO ENSURE COMPLIANCE WITH INDUSTRY STANDARDS AND REGULATIONS.

4. STRUCTURAL DETAILS
THE STRUCTURAL DETAILS ARE INTENDED TO DEPICT THE GENERAL CHARACTER AND EXTENT OF THE PROJECT AND ARE NOT MEANT TO ILLUSTRATE EVERY WORK DETAIL. DETAILS, SECTIONS, AND NOTES PRESENTED IN THESE DRAWINGS ARE TYPICAL AND APPLY TO SIMILAR CONDITIONS ELSEWHERE UNLESS OTHERWISE INDICATED. ANY DEVIATIONS FROM THE DESIGN DETAILS REQUIRE WRITTEN APPROVAL FROM GMEP ENGINEERS. APPROVAL BY THE INSPECTOR DOES NOT GRANT AUTHORITY TO DEVIATE FROM THE PLANS OR SPECIFICATIONS.

5. CONSTRUCTIONS
THE DESIGN, ADEQUACY, AND SAFETY OF ERECTION BRACING, TEMPORARY SUPPORT, SHORING, ETC., ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND HAVE NOT BEEN CONSIDERED BY THE ARCHITECT AND THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THE STABILITY OF THE STRUCTURE BEFORE APPLYING ALL SHEAR WALLS, ROOF AND FLOOR DIAPHRAGMS, AND FINISH MATERIALS. NECESSARY BRACING SHALL BE PROVIDED BY THE CONTRACTOR TO ENSURE STABILITY BEFORE APPLYING THE AFOREMENTIONED MATERIALS. OBSERVATION VISITS TO THE SITE BY THE ARCHITECT OR STRUCTURAL ENGINEER SHALL NOT IMPLY ANY ASSUMPTION OF RESPONSIBILITY IN THIS REGARD.

6. DISCREPANCIES
IF THERE ARE DISCREPANCIES BETWEEN THE GENERAL NOTES, SPECIFICATIONS, PLANS/DETAILS, OR REFERENCE STANDARDS, THE CONTRACTOR MUST PROMPTLY NOTIFY THE ENGINEER OR ARCHITECT OF RECORD REGARDING ANY QUESTIONS OR DISCREPANCIES RELATED TO THE WORKING DRAWINGS AND SPECIFICATIONS.

7. STRUCTURAL ANALYSIS AND LOADING
STRUCTURAL ANALYSIS FOR THIS PROJECT COMPLIED WITH BUILDING CODES AND STANDARD CARE, DEMANDING EVEN LOAD DISTRIBUTION DURING CONSTRUCTION, PREVENTING LOADS FROM EXCEEDING DESIGN CRITERIA, AND REQUIRING CONTRACTOR NOTIFICATION TO THE STRUCTURAL ENGINEER OF RECORD (SER) OF ADDITIONAL LOADS FROM ARCHITECTURAL, MECHANICAL, ELECTRICAL, OR PLUMBING ELEMENTS..

8. PRE-CONSTRUCTION COORDINATION
UPON COMPLETION OF ABOVE BY THE ENGINEER & PRIOR TO START OF CONSTRUCTION, CONTRACTOR IS RESPONSIBLE TO CHECK ALL DIMENSIONS, COORDINATE ALL WORK OF OTHER CONSULTANTS & OTHER TRADES TO ENSURE COMPLIANCE WITH HIS/HER REQUIREMENTS.

9. WATERPROOFING AND MOISTURE LIABILITY
GMEP ENGINEERS SHALL HAVE NO LIABILITY FOR WATERPROOFING TO MOISTURE TRANSMISSION ISSUES, WHETHER RELATED TO CONCRETE SLABS, FOOTINGS, FOUNDATIONS, OR OTHERWISE. OWNER AND CONTRACTOR SHALL BE ENTIRELY RESPONSIBLE FOR SUCH ISSUES, AND WILL DEFEND AND INDEMNIFY GMEP ENGINEERS AGAINST ALL SUCH CLAIMS.

SECTION 3: STRUCTURAL WOOD

1. ALL STRUCTURAL WOOD SHALL BE DOUGLAS FIR LARCH SPECIES (19% MAXIMUM MOISTURE CONTENT AT THE TIME OF CONSTRUCTION U.N.O)

2. MACHINE BOLTS MUST ADHERE TO THE STANDARDS SET BY ASTM A307. DRILLING HOLES FOR BOLTS SHOULD BE 1/16" LARGER THAN BOLT DIAMETER.

3. USE SINKER NAILS FOR ALL NAILING, EXCEPT WHERE OTHERWISE INDICATED IN THE NAILING SCHEDULE.

4. FOR NON-SHEAR WALL APPLICATIONS, ALL BOLTS MUST USE ROUND WASHERS CONFORMING TO ANSI/ASME B 18.22.
USE MIN 1 3/8" DIAMETER X 1/64" THICK WASHER FOR 1/2" DIAMETER BOLT;
1 3/4" DIAMETER X 9/64" THICK WASHER FOR 5/8" DIAMETER BOLT;
2 1/2" DIAMETER X 11/64" THICK WASHER FOR 1" DIAMETER BOLT. U.N.O

5. FASTENERS SPECIFIED IN THE DRAWINGS MAY UTILIZE MANUFACTURER'S BRANDS. COMPLY WITH ALL CODES AND MANUFACTURER'S REQUIREMENTS/RECOMMENDATIONS FOR INSTALLATION

6. THE ADHESIVE USED TO ATTACH FLOOR SHEATHING TO FRAMING ELEMENTS MUST COMPLY WITH APA SPECIFICATION AFG-01.

7. ACCORDING BUILDING CODE 2308.5.1 STUD HEIGHTS:
• 2x4'S @ 16" o.c. MAXIMUM 14'-0" HEIGHT FOR NON-BEARING WALL.
• 2x6'S @ 16" o.c. MAXIMUM 20'-0" HEIGHT FOR NON-BEARING WALL.
• BEARING WALLS EXCEEDING 10'-0" MUST BE DESIGNED CASE BY CASE.

8. FOR STUD WALLS FRAMED PERPENDICULAR TO A CONCRETE OR MASONRY WALL, ENSURE SECURE ATTACHMENT BY USING 5/8" DIAMETER X 8" A307 BOLTS AT THE TOP, MIDDLE, AND BOTTOM.

9. THE SPECIFIED MANUFACTURED HARDWARE IN THE DRAWINGS SHOULD BE SIMPSON TIES (UNLESS EXPLICITLY APPROVED BY GMEP ENGINEERS). COMPLY WITH ALL INSTALLATION AND HANDLING REQUIREMENTS AND RECOMMENDATIONS PROVIDED BY THE MANUFACTURER.

10. TO ENSURE COMPLIANCE, THE FABRICATION AND HANDLING OF GLUE-LAMINATED BEAMS MUST ADHERE TO ANSI/AITC A 190.1 STANDARDS. STANDARD BEAMS SHOULD BEAR A LEGIBLE APA-ENS OR AITC GRADE STAMP. PRIOR TO INSTALLATION, PROVIDE THE FIELD INSPECTOR WITH A CERTIFICATE OF CONFORMANCE FOR GLUED-LAMINATED MEMBERS, EITHER APA-EWS OR AITC. GLUE-LAMINATED MEMBERS ARE TO BE 24F-V4, DF/DF WITH STANDARD CAMBER FOR ROOF BEAMS, EXCEPT FOR CANTILEVER BEAMS AND THOSE MARKED (U.N.O.). ALL CANTILEVER AND FLOOR BEAMS SHOULD HAVE ZERO CAMBER (U.N.O.). UTILIZE WATERPROOF GLUE FOR THE FABRICATION OF ALL BEAMS.

11. TIMBER FRAMING, BRACING, NAILING, NOTCHING, DRILLING, OR BORING MUST ADHERE TO THE 2022 CBC, UNLESS THE LOCAL JURISDICTION MANDATES STRICTER REQUIREMENTS OR PROVIDES SPECIFIC SPECIFICATIONS.

12. FASTENERS THAT MAKE CONTACT WITH LUMBER TREATED WITH PRESERVATIVES AND FIRE-RETARDANT WOOD MUST BE CONSTRUCTED FROM HOT-DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE, OR COPPER. HOWEVER, THERE IS AN EXCEPTION FOR PLAIN CARBON STEEL FASTENERS USED IN SBX/DOT AND ZINC BORATE PRESERVATIVE-TREATED WOOD WITHIN INTERIOR, DRY ENVIRONMENTS WHERE THEY ARE PERMITTED.

13. ADHERE TO THE NECESSARY REGULATIONS FROM CHAPTER 23 FOR CONVENTIONAL LIGHT FRAMED CONSTRUCTION

14. THE STRUCTURAL INFORMATION OUTLINED IN THE FRAMING PLANS PERTAINS TO THE CORE STRUCTURAL ELEMENTS. NON-STRUCTURAL COMPONENTS SHOULD BE CONSTRUCTED IN COMPLIANCE WITH THE APPROVED CODE REQUIREMENTS.

15. THE TOP PLATES FOR ALL WOOD STUD WALLS SHOULD CONSIST OF TWO 2X BOARDS MATCHING THE STUD WIDTH. THESE TOP PLATES NEED TO HAVE A MINIMUM 48-INCH OVERLAP AND BE SECURED WITH AT LEAST FIVE 16D NAILS, SPACED NO MORE THAN 12 INCHES APART.

SECTION 3: STRUCTURAL WOOD

16. ALL SHEAR PANELS MUST FEATURE UNINTERRUPTED SHEATHING MATERIAL RUNNING FROM END TO END AND BETWEEN PLATES, FOLLOWING THE SPECIFICATIONS OUTLINED IN THE DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT FRAMING IS COORDINATED TO MAINTAIN THE CONTINUITY OF SHEAR PANELS.

17. SHEAR TRANSFER NAILING MUST CONFORM TO THE GUIDELINES PRESENTED IN THE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE INSPECTION TEAM APPROPRIATELY TO REVIEW THESE NAILING SPECIFICATIONS.

18. EVERY JOIST HANGER SHOULD BE OF THE SIMPSON U TYPE, AND ALL BEAM HANGERS MUST BE OF THE SIMPSON HU VARIETY, AS INDICATED ON THE PLAN OR DETAIL. ADHERE TO THE INSTALLATION INSTRUCTIONS PROVIDED BY THE MANUFACTURER.

19. ALL LEDGERS SHALL BE SPLICED WITH ST22 STRAP, UNLESS SPECIFIED DIFFERENTLY.

20. INSTALL POST OR MULTIPLE STUDS BENEATH POST OR MULTIPLE STUDS ON THE FLOOR BELOW. EACH POST OR STUD SHOULD BE SECURED USING GYPSUM WALLBOARD AND 8D COOLER NAILS, SPACED AT 7 INCHES ON CENTER, AS INDICATED ON THE PLAN. ENSURE THE PROVISION OF A COMPRESSION BLOCK WITH FULL WIDTH AND DEPTH BETWEEN FLOORS AT THESE SPECIFIED LOCATIONS.

21. WHEN UTILIZING A DOUBLE SILL PLATE FOR LIGHTWEIGHT CONCRETE FLOORING, THE FRAMING CONTRACTOR MUST ENSURE SILL PLATE NAILING ON BOTH SILL PLATES, MAINTAINING A MAXIMUM SPACING OF 16 INCHES ON CENTER OR AS SPECIFIED IN THE SCHEDULE.

22. ACCORDING TO BUILDING CODE 2308.5.1, FOR BALLOON-FRAMED NON-BEARING WALLS, THE FOLLOWING

23. FOR CEILING FRAMING WITH DEAD LOAD - 6 PSF MAX. & LIVE LOAD = 10 PSF MAX:
• USE DF#2 2x6 CEILING JOIST @ 16" O.C. WITH 12'-0" SPAN MAX.
• USE DF#2 2x8 CEILING JOISTS @ 16" O.C. WITH 16'-0" SPAN MAX.

24. FOR STRUCTURES UP TO TWO STORIES, IT'S PERMISSIBLE TO USE APPROVED FINGER-JOINTED LUMBER IN PLACE OF SOLID-SAWN MEMBERS OF THE SAME SPECIES AND GRADE. HOWEVER, WHEN FINGER-JOINTED LUMBER IS LABELED AS "STUD USE ONLY" OR "VERT USE ONLY," IT MUST BE EXCLUSIVELY EMPLOYED FOR STUD APPLICATIONS. FURTHERMORE, ALL FINGER-JOINTED LUMBER MUST FEATURE A CERTIFIED GRADE STAMP DENOTING ITS SUITABILITY FOR USE.

25. THE MIN. GRADES SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE ON PLANS (ALL WOOD MUST BE GRADE MARKED:

• VERTICAL FRAMING MEMBERS (STUD AND POST)
6X 18X POST / BEAMS / HEADERS: DF#1
4X POST: DF#2
STUDS : D.F.L. STUD GRADE (UP TO 9'-0"), DFL #2 (TALLER THAN 9'-0")

• HORIZONTAL FRAMING MEMBERS (STUD AND POST)
2X JOIST/ RAFTERS : DFL#2
4X POST / BEAMS / HEADERS : DFL#2
4X 14 OR LAGRGER : DFL#1
6X OR LARGER: DFL#1

• MISC
TOP PLATES & MUD SILLS : DFL CONSTRUCTION GRADE OR BETTER
SILL PLATE (GROUND FLOOR): P.T. DFL#2
SOLE PLATE (UPPER FLOOR). DFL#2
2X4 & 2X6 OR 4X4 & 4X6 TOP PLATE: DFL#2
SHEAR BLOCKING: DFL#2

26. THE FOLLOWING ENGINEERING WOOD BEAMS/HEADERS/RIMS CAN BE FROM ANY MANUFACTURER WITH CURRENT APPROVED ICC ES - EVALUATION REPORT WITH THE FOLLOWING MECHANICAL PROPERTIES:

FOR "PSL" BEAMS:
Fb = 2900 psi (MIN), Fv = 290 psi (MIN), E = 2.0 x 10^6 psi (MIN).
FOR "LSL" BEAMS/HEADERS:
Fb = 2325 psi (MIN), Fv = 400 psi (MIN), E = 1.55 x 10^6 psi (MIN).
FOR MANUFACTURED RIM BOARD WITH MIN 1 1/4" THICK, CONTINUOUSLY SUPPORTED BY WALL AND MATCHES JOIST DEPTH:
Fc (PERPENDICULAR)..... = 680 psi (MIN)
Fc (PARALLEL)..... = 1400 psi (MIN)
Ft = 1075 psi (MIN), E = 1.3 x 10^6 psi (MIN)
GLU-LAM BEAM SHALL BE 24F-V4, DF/DF
Fb = 2400 psi @ BOTTOM, Fb = 1850 psi @ TOP
Fv = 265 psi (MIN), E = 1.8 x 10^6 psi (MIN).

27. SHEATHING
• TYPICAL ROOF SHEATHING
15/32" BLOCKED APA RATED EXP 1 WITH A MIN. PANEL INDEX OF 32/16. REFER TO NER 108 FOR INSTALLATION AND CONDITIONS OF USE.

B.N.: 8d COMMON NAILS AT 4"O.C.
E.N.: 8d COMMON NAILS AT 6"O.C.
F.N.: 8d COMMON NAILS AT 12"O.C.

*NOTE: A: A: ALL STRUCTURAL RATED PANELS MUST BE STAMPED BY ONE OF THE FOLLOWING APPROVED AGENCIES, APA, PFS/TECO OR PITTSBURG.

• TYPICAL FLOOR / ROOF DECK / DECK SHEATHING
23/32" APA RATED STURD-I-FLOOR T&G EXP 1 WITH MIN. SPAN RATING OF 24" O.C.. REFER TO NER 108 FOR INSTALLATION AND CONDITION OF USE.

B.N.: 10d COMMON NAILS AT 6" O.C.
E.N.: 10d COMMON NAILS AT 6" O.C.
F.N.: 10d COMMON NAILS AT 12" O.C.

USE RING OR SCREW SHANK NAILS AND GLUE SHEATHING TO FRAMING USING ADHESIVES MEETING APA SPECIFICATION AFG-01 OR ASTM D3498. APPLY GLUE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

STRUCTURAL NAILS

TYPE OF FASTENER	SIZE & DIAMETER	TYPE OF FASTENER	SIZE & DIAMETER
8d SINKER	2 ½ x .113	10d COMMON	3 x .148
8d COMMON	2 ½ x .131	12d COMMON (16d SINKER)	3 ¼ x .148
16d SHORT	3 ¼ x .131	16d COMMON	3 ½ x .162

SHEAR WALL SCHEDULE
*2019 CALIFORNIA BUILDING CODE IN 2020 LA CITY ORDINANCE (L.O.)

SHEAR WALL TYPE	SHEATHING (3)	EDGE NAILING (COMMON)	FIELD NAILING (COMMON)	ALLOWABLE SHEAR/PLF	SILL PLATE CONNECTION: HOLD DOWNS	SILL PLATE CONNECTION: ¼"Ø ANCH. BOLTS W/ 3"x3"x0.229" PLATE WASHER (4)	FRAMING CLIPS AT JOISTS OR RAFTERS (4)	NOTES
1	15/32" APA RATED	8d'S @ 6" O.C.	8d'S @ 12" O.C.	260	@6" O.C.	@16" O.C.	@14" O.C.	@16" O.C.	
2	15/32" APA RATED	8d'S @ 4" O.C.	8d'S @ 12" O.C.	380	@4" O.C.	@12" O.C.	@10" O.C.	@12" O.C.	(2)
3	15/32" APA RATED	8d'S @ 3" O.C.	8d'S @ 12" O.C.	440	@3" O.C.	@5" O.C.	@7" O.C.	@5" O.C.	(2)
4	15/32" APA RATED	8d'S @ 2" O.C.	8d'S @ 12" O.C.	640	@2" O.C.	@6" O.C.	@5" O.C.	@5" O.C.	(2)
5	15/32" APA RATED (STRUC. I)	10d'S @ 2" O.C.	10d'S @ 12" O.C.	870	2 ROWS STAGG. @5" O.C.	@5" O.C.	@4" O.C.	@6" O.C.	(2)

(1) SHEATHING PANEL JOINT AND SILL PLATE NAILING SHALL BE STAGGERED. NO EXCEPTION.
(2) PROVIDE 3" NOMINAL OR WIDER FRAMING AT ADJOINING PANEL EDGES WITH NAILS STAGGERED.
(3) STUDS ARE SPACED @16" O.C MAX UNLESS NOTED OTHERWISE ON PLAN.
(4) USE SPACING PER SCHEDULE IF NUMBER OF FRAMING CLIPS ARE NOT SPECIFIED ON FRAMING PLANS.
(5) SHEATHING CONFORMS TO EITHER DOC PS 1 OR PS 2 STANDARDS.

NAILING SCHEDULE
REFER TO TABLE 2304.10.1 OF THE LATEST CBC CODE

CONNECTION	NAILING
1. JOIST TO SILL OR GIRDER, TOENAIL	3-8d
2. BRIDGING THE JOIST, TOENAIL EACH END	2-8d
3. 1"X6" SUBFLOOR OR LESS TO EACH JOIST, FACE NAIL	2-8d
4. WIDER THAN 1"X6" SUBFLOOR TO EACH JOIST, FACE NAIL	3-8d
5. 2"SUBFLOOR TO JOIST OR GIRDER, BLIND AND FACE NAIL	2-16d
6.a SOLE PLATE TO JOIST OR BLOCKING, FACE NAIL	16d (BOX)@16"o.c
6.b SOLE PLATE TO JOIST AT BRACED WALL PANEL	(3)16d (BOX)PER 16"
7. TOP PLATE TO STUD, END NAIL	2-16d
8. STUD TO SOLE PLATE	4-8d, TOENAIL OR
	2X SOLE: 2-16d
	3X SOLE:2-20d(BOX)
9. DOUBLE STUDS, FACE NAIL	16d(BOX)@24"o.c
10.a DOUBLED TOP PLATES, FACE NAIL	16d(BOX)@16"o.c
10.b DOUBLED TOP PLATES, LAP SPLIC	8-16d
11. BLOCKING BETWEEN JOIST OR RAFTERS TO TOP PLATE, TOENAIL	3-8d
12. RIM JOIST TO TOP PLATE, TOENAIL	8d@6"o.c
13. TOP PLATES, LAPS AND INSPECTIONS, FACE NAIL	2-16d
14. CONTINUOUS HEADER, TWO PIECES	16d@16" o.c ALONG EACH EDGE
15. CEILING JOISTS TO PLATE, TOENAIL	3-8d
16. CONTINUOUS HEADER TO STUD, TOENAIL	4-8d
17. CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL	3-16d
18. CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL	3-16d
19. RAFTER TO PLATE, TOENAIL	3-8d
20. 1"BRACE TO EACH STUD AND PLATE, FACE NAIL	2-8d
21. 1"X8" SHEATHING OR LESS TO EACH BEARING, FACE NAIL	3-8d
22. WIDER THAN 1"X8" SHEATHING TO EACH BEARING, FACE NAIL	3-8d
23. BUILT-UP CORNER STUDS	16d@24"o.c
24. BUILT-UP GIRDER AND BEAMS	20d@32"o.c AT TOP AND BOTTOM AND STAGGERED 2-20d AT ENDS AND AT EACH SPLICE
25. 2" PLANKS	2-16d@ EACH BEARING

*COMMON NAILS SHALL BE USED (U.N.O); ** JOIST CAN BE EITHER SAWN LUMBER OR I-JOIST PER PLAN

SECTION 3: FOUNDATION

1. THE FOUNDATION DRAWINGS, AS PREPARED BY GMEP ENGINEERS, INDICATE THE STRUCTURAL SPECIFICATIONS, FOR DIMENSIONS, DEPRESSIONS, SLOPE, SHELVES, PATIOS, STOOPS, AND PORCHES NOT DEPICTED IN THE FOUNDATION DRAWINGS, REFERENCE SHOULD BE MADE TO THE ARCHITECTURAL PLANS. THE ARCHITECT AND CONTRACTOR MUST REVIEW THE ACCURACY OF THE DIMENSIONS AND ENSURE THE FINAL ALIGNMENT OF THE BUILDING BEFORE COMMENCING CONSTRUCTION.

2. THE BASE OF THE FOOTING EXCAVATIONS SHOULD BE LEVEL, FREE FROM DEBRIS OR WATER DURING CONCRETE PLACEMENT. ANY AREAS WITH EXCESS EXCAVATION SHOULD BE FILLED WITH COMPACTED MATERIAL. THE BACKFILLING CAN ONLY OCCUR ONCE THE SUPPORTING FOUNDATIONS, WALLS, AND SLAB HAVE DEVELOPED THE REQUIRED STRENGTH TO RESIST LATERAL SOIL PRESSURE.

3. PLACEMENT SHALL BE IN ONE CONTINUOUS OPERATION UNLESS OTHERWISE SPECIFIED. THE SLAB SURFACE SHOULD BE CURED USING 'HUNT'S' COMPOUND OR AN EQUIVALENT PRODUCT. ALTERNATIVELY, OTHER CURING METHODS MAY BE EMPLOYED, AS DETERMINED BY THE CONTRACTOR, IN ACCORDANCE WITH ESTABLISHED CONSTRUCTION STANDARDS. .

4. THE CONCRETE PLACEMENT SHOULD BE EXECUTED AS A MONOLITHIC PROCESS IN A SINGLE, CONTINUOUS OPERATION, ENSURING UNIFORM DISTRIBUTION AND THOROUGH VIBRATION AND CONSOLIDATION, UNLESS THE PLANS SPECIFY AN ALTERNATIVE APPROACH. A 'DUAL POUR,' AS DEFINED BY ACI, OCCURS WHEN THE FIRST AND SECOND POURS CANNOT BE VIBRATED SIMULTANEOUSLY.

5. GRADE SURROUNDING THE FOUNDATION'S PERIMETER MUST BE DESIGNED TO ENSURE PROPER DRAINAGE OF RAIN AND IRRIGATION WATER AWAY FROM THE FOUNDATION.

6. THE MINIMUM CONCRETE WIDTH FOR RECEIVING PA, HPA, AND STHD'S SHOULD BE 8 INCHES. ENSURE THE PRECISE PLACEMENT OF HOLDDOWNS AND ANCHOR BOLTS THROUGH COORDINATION WITH ROUGH FRAMING TO GUARANTEE ACCURATE INSTALLATION.

7. FOR ALL CONCRETE STOOPS AND PORCHES, INSTALL #3 REBAR DOWEL @ 24 INCHES O.C AT INTERVALS OF 24 INCHES, WITH 12 INCHES FROM THE CORNER.

8. IT IS NOT PERMISSIBLE TO USE ADMIXTURES IN CONCRETE MIXES THAT INCLUDE CALCIUM CHLORIDES.

9. CONCRETE MUST MEET THE STRENGTH AND SLUMP REQUIREMENTS OUTLINED IN THE STRUCTURAL DESIGN. AGGREGATES SHOULD ADHERE TO ASTM C-33 STANDARDS. THE WATER TO BE CLEAN AND POTABLE.

10. PIPES OR CONDUITS SHOULD NOT BE POSITIONED BENEATH ISOLATED COLUMN FOOTINGS OR CONTINUOUS WALL FOOTINGS UNLESS EXPLICITLY OUTLINED IN THE PLANS OR APPROVED BY THE ARCHITECT, STRUCTURAL ENGINEER, AND THE BUILDING OFFICIAL.

11. PROVIDE MIN. (1) #4 REINFORCING FOR ELECTRICAL GROUND, AND ENSURE THAT THE EXACT PLACEMENT IS CONFIRMED IN CONSULTATION WITH THE ELECTRICAL CONTRACTOR.

12. ALL GRADE BEAMS SHALL BE POURED MONOLITHICALLY FOR THEIR ENTIRE LENGTH.

SECTION 5: REINFORCING STEEL

1. BAR REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM A615. THE FOLLOWING GRADES SHALL BE USED:

GRADE 40 - #3 AND SMALLER
GRADE 60 - #4 AND LARGER

2. DETAILS OF REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF ACI 318-14 CH. 7 AND OTHER SECTIONS ACCORDING TO APPLIC

3. LAPS AT BAR SPLICES IN CONC. CONSTRUCTION SHALL BE AS FOLLOWS:

TYPE OF FASTENER	TOP BARS (CLASS B)		OTHER THAN TOP BARS (CLASS B)	
	f'c=2500	f'c=3000	f'c=2500	f'c=3000
#5	30	27	24	21
#6	35	33	28	25
#7	40	38	32	29
#8	45	43	36	33

4. LAPS AT BAR SPLICES IN MASONRY CONSTRUCTION SHALL BE 48 BAR DIAMETERS BUT NOT LESS THAN 2'-0".

5. VERTICAL REINFORCEMENT SHALL BE TIED OR OTHERWISE FIXED IN POSITION AT THE TOP AND BOTTOM AT INTERMEDIATE LOCATIONS, SPACED NOT GREATER THAN 48" O.C..

6. WELDED STEEL WIRE FABRIC REINFORCEMENT SHALL CONFORM TO ASTM A185. 12" LAPS OF WELDED STEEL WIRE FABRIC AT SPLICES ARE REQ'D.

7. WALLS, PILASTERS, AND COLUMNS SHALL BE DOWELED TO THE SUPPORTING FOOTINGS WITH REINFORCEMENT OF THE SAME SIZE, GRADE AND AT THE SAME SPACING AS THE VERTICAL REINFORCEMENT IN THE WALLS, PILASTERS, OR COLUMNS (U.N.O).

8. BAR SUPPORTS SHALL BE PROVIDED IN ACCORDANCE WITH THE PROVISIONS OF "BAR SUPPORT SPECIFICATIONS" AS CONTAINED IN THE LATEST EDITION OF THE "MANUAL OF STANDARD PRACTICE" BY THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI).

9. REINFORCING STEEL DETAILING, BENDING AND PLACING SHALL BE IN ACCORDANCE WITH THE CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE", LATEST EDITION.

10. ALL REINFORCEMENT SHALL BE SECURELY TIED IN PLACE BEFORE PLACING CONCRETE OR GROUT

11. WELDING OF REINFORCING BARS SHALL CONFORM TO "STRUCTURAL WELDING CODE-REINFORCING STEEL," ANSI/AWS D1.4 OF THE A.W.S.

12. WELDING OF ALL REINFORCING STEEL TO STRUCTURAL STEEL SHALL BE LIMITED TO THOSE AREAS SPECIFICALLY SHOWN ON THE PLANS. ANY OTHER WELDING SHALL REQUIRE THE APPROVAL OF THE GOVERNING AGENCY, FIELD INSPECTOR, AND STRUCTURAL ENGINEER.

13. WELDING OF CROSSING BARS AND TACK WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED

14. ALL WELDS SHALL, IN ADDITION, TO ALL THE SPECIFICATIONS LISTED ABOVE, COMPLY WITH THE REQUIREMENTS OF THE 14TH EDITION OF THE "STEEL CONSTRUCTION MANUAL" AS PUBLISHED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION.

SECTION 6: CONCRETE

1. CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF ACI 318-14 CHAPTER 5. THE MINIMUM 28-DAY CYLINDER STRENGTH SHALL BE AS FOLLOWS:

CONVENTIONAL FOUNDATIONS:	STRENGTH:
SLAB ON GRADE	2500 PSI
SLAB ON GRADE-GARAGE	2500 PSI
FOOTINGS	4000 PSI
GRADE BEAM	4000 PSI

2. WHERE CONCRETE STRENGTH IS GREATER THAN 2500 PSI, CYLINDER TESTS ARE REQUIRED PER ACI 318-14 5.6.3.3.

3. PORTLAND CEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM C150, TYPE V.

4. AGGREGATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM C33 FOR NORMAL WEIGHT CONCRETE AND ASTM C330 FOR LIGHTWEIGHT CONCRETE.

5. ADMIXTURES SHALL BE USED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND APPROVED BY THE ENGINEER OF RECORD.

6. READY-MIX CONCRETE SHALL BE MIXED AND DELIVERED IN ACCORDANCE WITH THE REQUIREMENTS OF "STANDARD SPECIFICATION FOR READY-MIXED CONCRETE" ASTM C94.

7. MINIMUM CONCRETE COVER (IN INCHES) FOR REINFORCING STEEL IN NON-PRESTRESSED CAST-IN-PLACE CONCRETE SHALL BE AS FOLLOWS, U.N.O:

LOCATION:	MIN. CVR. (INCHES)
A. CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3"
B. FORMED SURFACES EXPOSED TO EARTH OR WEATHER:	
#6 AND LARGER BAR	2"
#5 BARS, 5/8 INCH WIRE, AND SMALLER	1 1/2"

8. ALL SLEEVES THROUGH BEAMS, GIRDERS AND FOUNDATION WALLS SHALL BE INSTALLED AND SECURED IN POSITION PRIOR TO PLACING CONCRETE. EXCEPT AS SHOWN ON STRUCTURAL DRAWINGS, SLEEVING SHALL NOT BE PERMITTED UNLESS APPROVED BY THE DESIGNER AND STRUCTURAL ENGINEER.

9. SLEEVES, PIPES, OR CONDUITS SHALL NOT BE PLACED THROUGH CONTINUOUS OR SPREAD FOOTINGS GRADE BEAMS, PILE CAPS, OR TIE BEAMS, UNLESS SPECIFICALLY DETAILED BY THE ENGINEER.

10. CONDUIT SHALL NOT BE PLACED IN ANY CONCRETE SLAB LESS THAN 3-1/2 INCHES THICK. IF CONDUIT IS PLACED IN CONCRETE SLAB, ITS OUTSIDE DIAMETER SHALL NOT BE GREATER THAN 1/3 OF THE SLAB THICKNESS. THE MINIMUM CLEAR DISTANCE BETWEEN CONDUITS SHALL BE 3 INCHES.

11. ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4 INCH, U.N.O.

12. REFER TO ARCHITECTURAL DRAWINGS FOR MOLDS, GROOVES, ORNAMENTS, CLIPS, OR GROUNDS REQUIRED TO BE CAST IN THE CONCRETE AND FOR EXTENT OF DEPRESSIONS, CURBS, AND RAMPS.

13. ALL VERTICAL SURFACES OF CONCRETE ABOVE FINISHED GRADE SHALL BE FORMED.

14. REFERENCE ARCH. DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS DUE TO ARCHITECTURAL C.I.P. CONCRETE.

SECTION 6: DESIGN CRITERIA

SOILS
FOUNDATION ENGINEERING HAS BEEN PREDIGATED ON RECOMMENDATIONS IN SOILS REPORT BY C M PROS DBA CARMEL ENGINEERING.; PROJECT NUMBER: 2024-01. REPORT DATE: 05/21/2024.

THIS REPORT IS PART OF THE CALCULATIONS AND CONSTRUCTION DOCUMENTS, AND IS TO BE FOLLOWED WHERE APPLIES. VERIFY AND FOLLOW MINIMUM FOUNDATION REQUIREMENTS WITH SOILS REPORT IF THERE ARE ANY MORE RESTRICTIVE.

SOIL SITE CLASS: D
MAXIMUM ALLOWABLE BEARING CAPACITY = 2500 PSF (INCREASE 1/3 FOR WIND OR SEISMIC)
SOILS REPORT IS PART OF THE PLANS, SHALL BE KEPT AT THE JOB SITE AT ALL TIMES.

LATERAL LOADS
SEISMIC DESIGN CATEGORY: D — WIND SPEED: 95MPH
RISK CATEGORY: II — WIND EXPOSURE: C

SITE CLASS = D
S_s : 1.176 — S_{DS}: 0.819
S1 : 0.437 — S_{D1} : 0.5365

LATERAL LOAD RESISTING SYSTEM: LIGHT-FRAME WALLS SHEATHED W/ WOOD STRUCTURAL PANELS
R = 6.5; OMEGA = 2.5

DESIGN LOADS
ROOF LOAD
DEAD LOAD = 22 PSF (EXCLUDING RTU WEIGHT)
LIVE LOAD = 20 PSF
TOTAL = 42 PSF

EXTERIOR WALL
DEAD LOAD = 16 PSF

SPECIAL INSPECTION

1. IN ADDITION TO THE REGULAR INSPECTION THE FOLLOWING ITEMS WILL ALSO REQUIRE SPECIAL INSPECTION IN ACCORDANCE WITH SEC. 1704, UNLESS EXEMPTED BY THE EXCEPTIONS OF SEC. 1704.2, OF THE BUILDING CODE.
2. SOILS COMPLIANCE PRIOR TO THE FOUNDATION INSPECTION, POST-TENSIONED FOUNDATION, HIGH STRENGTH STEEL AND CONCRETE.
3. ALL INSPECTIONS AND TESTS SHALL BE PERFORMED BY A QUALIFIED TESTING AGENCY RETAINED BY THE OWNER.
4. THE SPECIAL INSPECTOR SHALL BE QUALIFIED AND APPROVED BY THE BUILDING DEPARTMENT AND ACCEPTABLE TO THE ARCHITECT.
5. THE SPECIAL INSPECTOR SHALL OBSERVE WORK ASSIGNED FOR CONFORMANCE TO THE APPROVED DESIGN DRAWINGS AND SPECIFICATIONS.
6. THE SPECIAL INSPECTOR SHALL FURNISH AN INSPECTION REPORT TO THE BUILDING DEPARTMENT, ENGINEER AND ARCHITECT OF RECORD. COPIES OF THE REPORT SHALL BE AVAILABLE AT THE JOB SITE AT ALL TIMES.
7. FINAL REPORTS FOR ALL INSPECTIONS AND TESTING MUST BE PROVIDED BY THE SPECIAL INSPECTOR. FINAL REPORTS SHALL DOCUMENT COMPLETION OF ALL INSPECTORS
8. THE DUTIES OF THE SPECIAL INSPECTOR SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS OF SECTION 1704 OF THE LATEST EDITION OF THE CBC.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXPENSES DUE TO ANY PREMATURE NOTIFICATION OF INSPECTION WHICH RESULTS IN ADDITIONAL SITE VISITS.
10. FAILURE OF NOTIFICATION BY THE CONTRACTOR FOR INSPECTION ON AN TIMELY BASIS MAY RESULTS IN COMPLETE REMOVAL AND REPLACEMENT OF ALL WORK PERFORMED AT CONTRACTORS EXPENSE.
11. SITE VISITS BY THE STRUCTURAL ENGINEER DO NOT CONSTITUTE AN INSPECTION.

SPECIAL INSPECTION BY A SPECIAL INSPECTOR FOR EXISTING SITE SOIL CONDITIONS, FILL PLACEMENT & LOAD BEARING REQUIREMENTS SHALL BE PERFORMED PER THE FOLLOWING TABLE.

EXCEPTION: SPECIAL INSPECTION FOR EXISTING SITE SOIL CONDITIONS PER TABLE BELOW IS NOT REQUIRED IF ALLOCABLE SOIL BEAR PRESSURE USED FOR DESIGN IS ≤ 1500 PSF, SOILS REPORT IS NOT REQUIRED BY BUILDING OFFICIAL, AND THERE IS NO CONTROLLED FILL PLACEMENT ON EXISTING BUILDING SITE.

SPECIAL INSPECTION TABLE FOR EXISTING SITE SOIL CONDITIONS

TYPE	NOT APPLICABLE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION
VERIFY MATERIALS BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY PER SOILS REPORT			X
VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH & HAVE REACHED PROPER MATERIAL PER SOILS REPORT			X
PERFORM CLASSIFICATION & TESTING OF COMPACTED FILL MATERIALS PER SOILS REPORT			X
VERIFY USE OF PROPER MATERIALS DENSITIES & LIFT THICKNESS DURING PLACEMENT & COMPACTION OF COMPACTED FILL PER SOILS REPORT. EXCEPTION: SPECIAL INSPECTION IS NOT REQUIRED DURING PLACEMENT OF CONTROLLED FILL HAVING A TOTAL DEPTH OF 12 INCHES OR LESS		X	
PRIOR TO PLACEMENT OF COMPACTED FILL INSPECT SUBGRADE & VERIFY THAT SITE HAS BEEN PREPARED PROPERLY PER SOILS REPORT			X

SPECIAL INSPECTION BY A SPECIAL INSPECTOR FOR THE CONSTRUCTION OF HORIZONTAL WOOD DIAPHRAGMS, WOOD SHEAR WALLS & MANUFACTURED SHEAR WALLS ARE REQUIRED & SPECIFIED IN THE FOLLOWING TABLE:

SPECIAL INSPECTION TABLE FOR WOOD SITE DIAPHRAGM & SHEAR WALLS

	INSPECTION TASK	FREQUENCY OF INSPECTION		REFERENCE FOR CRITERIA
		CONTINUOUS	PERIODICALLY	CBC/IBC SECTION
HORIZONTAL WOOD DIAPHRAGM WITH EDGE NAIL SPACING EQUAL TO OR CLOSER THAN 4" o.c.	SHEATHING TYPES, GRADE THICKNESS, SPAN RATING, AND NAIL TYPES, NAIL SIZED & SPACING		X	SEC. 1705.12.2
WOOD SHEAR WALLS WITH EDGE NAIL SPACING EQUALS TO OR CLOSER THAN 4" o.c.	SHEATHING TYPES, GRADE THICKNESS, WALL NAIL TYPES, NAIL SIZES & SPACING		X X	SEC. 1705.12.2
	SILL NAIL TYPES, SIZE AND SPACING		X	
	ANCHOR BOLT SIZES & SPACING			
	HOLDOWN TYPES & THEIR CONNECTIONS TO SHEAR WALLS & FOUNDATION/FRAMING		X	
	WALL AND POST SIZES		X	
	SHEAR TRANSFER CONNECTOR TYPES & SPACING. DRAG STRUT CONNECTION TO SHEAR WALLS.		X	
MANUFACTURED SHEAR WALLS, HARDY PANELS, SIMPSON STEEL & WOOD STRONG WALLS.			X	SEC. 1704 SEC. 1705.12.2 SEC. 1705.12.3

SPECIAL INSPECTION FOR ANCHOR BOLT

PERIODIC SPECIAL INSPECTION IS REQUIRED, IN ACCORDANCE WITH SECTION 1705.1.1 AND TABLE 1705.3 OF THE 2021, 2018 AND 2015 IBC AND 2012 IBC. THE SPECIAL INSPECTOR MUST BE ON THE SITE PERIODICALLY DURING ANCHOR INSTALLATION TO VERIFY ANCHOR TYPE,

FOR THE CONSTRUCTION OF STEEL ELEMENTS OF BUILDING & STRUCTURES, ITEMS OF SPECIAL INSPECTION & VERIFICATIONS BY A SPECIAL INSPECTOR ARE REQUIRED & SUMMARIZED IN THE FOLLOWING TABLE:

SPECIAL INSPECTION TABLE FOR STEEL STRUCTURES

VERIFICATION & INSPECTION	QUALITY ASSURANCE		REFERENCE STANDARD
	PERFORMED	OBSERVED	
TASKS PRIOR TO WELDING			
1. WELDER QUALIFICATION RECORDS AND CONTINUITY RECORDS.		✓	
2. WPS AVAILABLE.	✓		
3. MANUFACTURE CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE.	✓		
4. MATERIAL IDENTIFICATION (TYPE /GRADE).		✓	
5. WELDER IDENTIFICATION SYSTEM.		✓	
6. FIT-UP GROOVE WELDS (INCLUDING JOINT GEOMETRY). A. JOINT PREPARATIONS. B. DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL). C. CLEANLINESS (CONDITION OF STEEL SURFACES). D. TACKING (TACK WELD QUALITY AND LOCATION). E. BACKING TYPE AND FIT (IF APPLICABLE).		✓	AISC 360-16 TABLE N5.4-1
7. FIT-UP OF CJP GROOVE WELDS OF HSS T-, Y- AND K-JOINTS WITHOUT BACKING (INCLUDING JOINT GEOMETRY). A. JOINT PREPARATION. B. DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL). C. CLEANLINESS (CONDITION OF STEEL SURFACES). D. TACKING (TACK WELD QUALITY AND LOCATION).		✓	
8. CONFIGURATION AND FINISH OF ACCESS HOLES.		✓	
9. FIT-UP OF FILLET WELDS. A. DIMENSIONS (ALIGNMENT, GAPS AT ROOT). B. CLEANLINESS (CONDITION OF STEEL SURFACES). C. TACKING (TACK WELD QUALITY AND LOCATION).		✓	
10. CHECK WELDING EQUIPMENT.		—	
TASKS DURING WELDING			
1. CONTROL AND HANDLING OF WELDING CONSUMABLES. A. PACKAGING. B. EXPOSURE CONTROL.		✓	
2. NO WELDING OVER CRACKED TACK WELDS.		✓	
3. ENVIRONMENTAL CONDITIONS. A. WIND SPEED WITHIN LIMITS. B. PRECIPITATION AND TEMPERATURE.		✓	
4. WPS FOLLOWED: A. SETTINGS ON WELDING EQUIPMENT. B. TRAVEL SPEED. C. SELECTED WELDING MATERIALS. D. SHIELDING GAS TYPE/ FLOW RATE. E. PREHEAT APPLIED. F. INTERPASS TEMPERATURE MAINTAINED (MIN./ MAX.). G. PROPER POSITION (F, V, H, OH).		✓	AISC 360-16 TABLE N5.4-2
5. WELDING TECHNIQUES. A. INTERPASS AND FINAL CLEANING. B. EACH PASS WITHIN PROFILE LIMITATIONS. C. EACH PASS MEETS QUALITY REQUIREMENTS.		✓	
6. PLACEMENT AND INSTALLATION OF STEEL HEADED STUD ANCHORS.	✓		
TASKS AFTER WELDING			
1. WELDS CLEANED.		✓	AISC 360-16 TABLE N5.4-3
2. SIZE, LENGTH AND LOCATION OF WELDS.	✓		
3. WELDS MEET VISUAL ACCEPTANCE CRITERIA. A. CRACK PROHIBITION. B. WELD/ BASE-METAL FUSION. C. CRATER CROSS SECTION. D. WELD PROFILES. E. WELD SIZE. F. UNDERCUT. G. POROSITY.	✓		
4. ARC STRIKES.	✓		
5. K-AREA.	✓		
6. WELD ACCESS HOLES IN ROLLED SHAPES AND BUILT-UP HEAVY SHAPES.	✓		
7. BACKING REMOVED AND WELD TABS REMOVED (IF REQUIRED).	✓		
8. REPAIR ACTIVITIES.	✓		
9. DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER.	✓		
10. NO PROHIBITED WELDS HAVE BEEN ADDED WITHOUT THE APPROVAL OF THE EOR.		✓	

SPECIAL INSPECTIONS AND VERIFICATIONS BY A SPECIAL INSPECTOR ARE REQUIRED FOR CONCRETE CONSTRUCTION AND SPECIFIED IN THE FOLLOWING TABLE

EXCEPTION: CONCRETE FOOTINGS SUPPORTING WALLS OF LIGHT-FRAME WOOD BUILDING OF 3-STORIES OR LESS AND THE STRUCTURAL DESIGN OF FOOTINGS IS BASED ON A SPECIFIED COMPRESSIVE STRENGTH f'c NO GREATER THAN 2500 psi.

SPECIAL INSPECTION TABLE FOR CONCRETE CONSTRUCTION

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	Reference Standard	CBC/IBC Reference
1. INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT	—	✓ Ch	ACI 318: 20.2.2.2.5.3, 26.6.1-26.6.3	1908.4
2. REINFORCING BAR WELDING:	—			
A. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A 706;		✓	AWS D1.4 ACI 318: 26.6.4	—
B. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16"; AND		✓		
C. INSPECT ALL OTHER WELDS	✓			
3. INSPECT ANCHORS POST-INSTALLED IN CONCRETE.	—	✓	ACI 318: 17.8.2	—
4. INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS.				
A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS.	✓		ACI 318: 17.8.2.4	—
B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.A.		✓	ACI 318: 17.8.2	
5. VERIFY USE OF REQUIRED DESIGN MIX.	—	✓	ACI 318: Ch 19, 26.4.3, 26.4.4	1904.1,1904.2, 1908.2, 1908.3
6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	✓	—	ASTM C 172 ASTM C 31 ACI 318: 26.5, 26.12	1908.10
7. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	✓	—	ACI 318: 26.5	1908.6, 1908.7, 1908.8
8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	—	✓	ACI 318: 26.5.3-26.5.5	1908.9
9. INSPECT PRESTRESSED CONCRETE FOR:				
A. APPLICATION OF PRESTRESSING FORCES; AND	✓	—	ACI 318: 26.10	—
B. GROUTING OF BONDED PRESTRESSING TENDONS.	✓	—		
10. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS.	—	✓	ACI 318: 26.9	—
11. VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	—	✓	ACI 318: 26.11.2	—
12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	—	✓	ACI 318: 26.11.1.2(b)	—

SPECIAL INSPECTION BY A SPECIAL INSPECTOR FOR THE CONSTRUCTION OF CMU STRUCTURES ARE REQUIRED & SPECIFIED IN THE FOLLOWING TABLE:

SPECIAL INSPECTION TABLE FOR CMU STRUCTURES

INSPECTION TASK	INSPECTION FREQUENCY		CRITERIA REFERENCE	
	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED	ACI 530/ASCE 5/TMS 402	ACI 530.1/ASCE 6/TMS 602
1. VERIFY COMPLIANCE WITH THE APPROVED SUBMITTALS AND REQUIRED INSPECTION PROVISIONS FOR (MORTAR MIX DESIGN, GROUT MIX DESIGN, MATERIAL CERTIFICATES FOR MORTAR, GROUT, MASONRY UNITS, REINFORCEMENT, ANCHORS, TIES, AND FASTENERS).		✓		ART. 1.5
2. AS MASONRY CONSTRUCTION BEGINS,THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE.				
A. PROPORTIONS OF SITE PREPARED MORTAR.		✓		ART. 2.1, 2.6A
B. CONSTRUCTION OF MORTAR JOINTS.		✓		ART. 3.3B
C. GRADE AND SIZE OF PRESTRESSING TENDONS AND ANCHORAGES.		✓		ART. 2.4B, 2.4H,
D. LOCATION OF REINFORCEMENT, AND CONNECTORS.		✓		ART. 3.4, 3.6A
E. PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY.	✓	✓		ART. 2.1C
3. PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:				
A. GROUT SPACE.		✓		ART. 3.2D, 3.2F.
B. GRADE, TYPE, AND SIZE OF REINFORCEMENT AND ANCHOR BOLTS.		✓	SEC. 1.16	ART. 2.4, 3.4
C. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND PRESTRESSING TENDONS AND ANCHORAGES.		✓	SEC. 1.16	ART. 3.2E,3.4, 3.6A
D. PROPORTIONS OF SITE-PREPARED GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS.		✓		ART. 2.6B, 2.4G.1.B
E. CONSTRUCTION OF MORTAR JOINTS.		✓		ART. 3.3B
4. VERIFY DURING CONSTRUCTION.				
A. SIZE AND LOCATION OF STRUCTURAL ELEMENTS		✓		ART. 3.3F
B. TYPE, SIZE AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES OR OTHER CONSTRUCTION.		✓	SEC. 1.16.4.B, 1.17.1	
C. WELDING OF REINFORCEMENT.	✓		SEC. 2.1.7.1.2, 3.3.3.4(C), 3.3.3.4(B)	
D. PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMP. BELOW 40°f) OR HOT WEATHER (TEMP. ABOVE 90°f).		✓		ART. 1.8C, 1.8D
E. APPLICATION AND MEASUREMENT OF PRESSTRESSING FORCE	✓			ART. 3.6B
F. PLACEMENT OF GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS IS IN COMPLIANCE.	✓			ART. 3.5, 3.6C
G. OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS.	✓	✓		ART. 3.3B.8
5. OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS.		✓		ART. 1.4B.2.A.3 1.4B.2.B.3 1.4B.2.C.3 1.4B.3, 1.4B.4
6. VERIFICATION OF F'M PRIOR TO CONSTRUCTION.		✓		ART. 1.4B
7. VERIFICATION OF SLUMP FLOW AND VSI AS DELIVERED TO THE SELF-CONSOLIDATING GROUT.	✓			ART. 1.5B,1.B.3

FOR SI: °C = (°F-32) /1.8

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

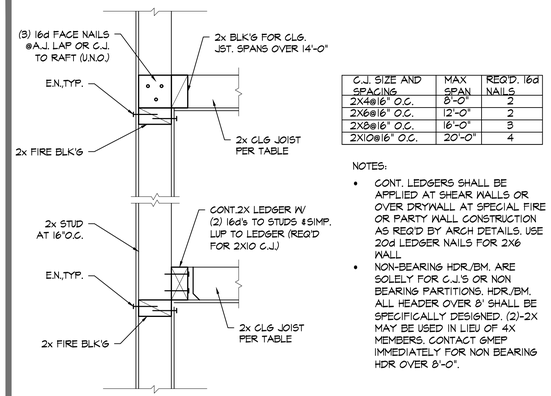
REGISTERED PROFESSIONAL ENGINEER ALLEN CHUN-TING WU No. C69385 Exp.06-30-2026 CIVIL STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel 949-267-9095

PROJECT NAME:
12 ARROYO
SEQUOIA ROAD
CARMEL, CA 93923

SHEET TITLE
STRUCTURAL
SPECIAL INSPECTION

DRAWN: GMEP
CHECKED: GMEP
DATE: 12/06/24
SCALE: AS NOTED
JOB NO.: 24-656
SHEET: SN-1B



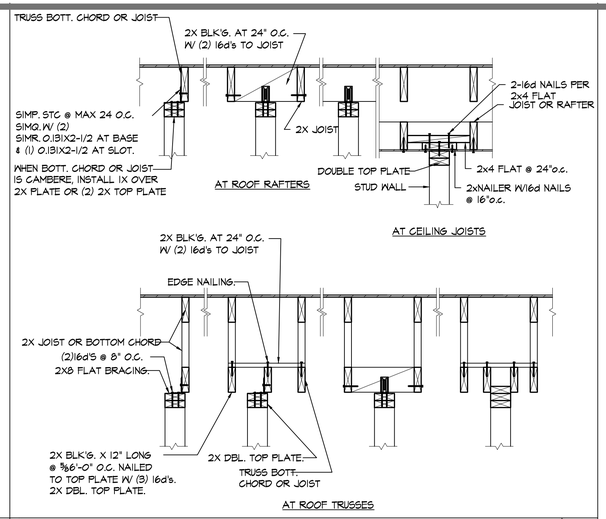
C.J. SIZE AND SPACING	MAX SPAN	REQ'D. 16d NAILS
2X4@16" O.C.	8'-0"	2
2X6@16" O.C.	12'-0"	2
2X8@16" O.C.	16'-0"	3
2X10@16" O.C.	20'-0"	4

NOTES:

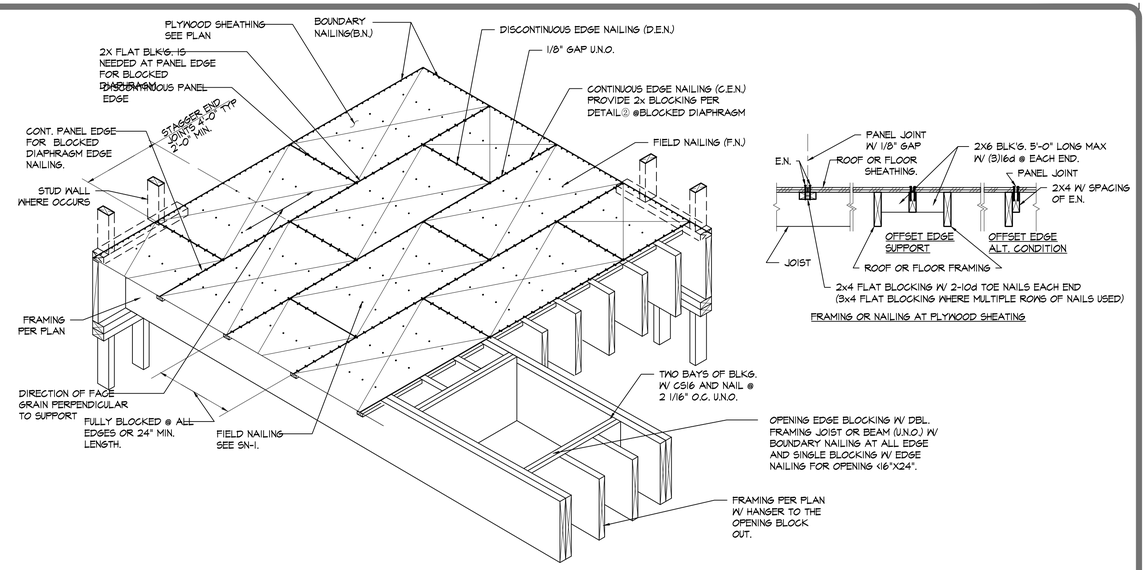
- CONT. LEDGERS SHALL BE APPLIED AT SHEAR WALLS OR OVER DRYWALL AT SPECIAL FIRE OR PARTY WALL CONSTRUCTION AS REQ'D BY ARCH DETAILS. USE 20d LEDGER NAILS FOR 2X6 WALL
- NON-BEARING HDR./BM. ARE SOLELY FOR C.J.I'S OR NON BEARING PARTITIONS. HDR./BM. ALL HEADER OVER 8' SHALL BE SPECIFICALLY DESIGNED. (2)-2X MAY BE USED IN LIEU OF 4X MEMBERS. CONTACT GMEP IMMEDIATELY FOR NON BEARING HDR OVER 8'-0".

CEILING JOISTS AT 16" OR 24" O.C.

C.J. TO BALLOON FRAME WALL | 10

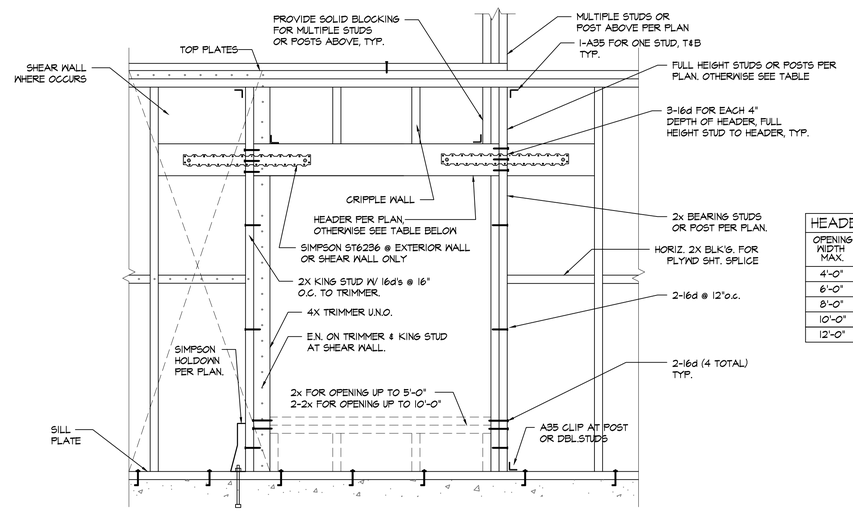


FRM'G. TO NON-BEARING WALLS | 7



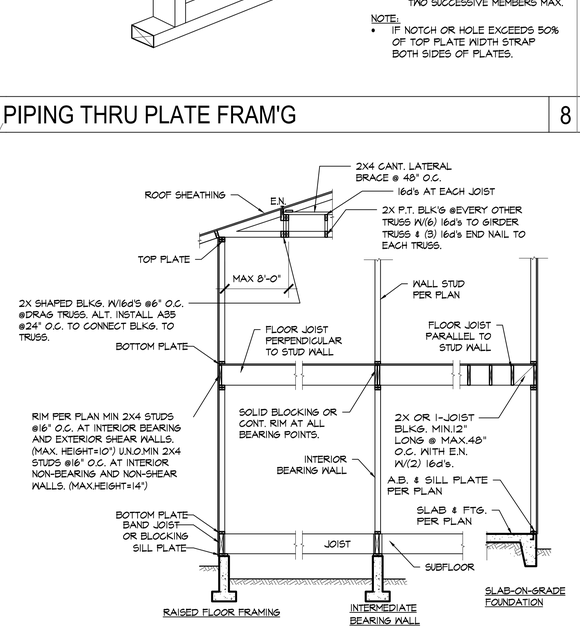
FRAMING OR NAILING AT PLYWOOD SHEATING

SHEATHING LAYOUT | 1



HEADER SCHEDULE	
OPENING WIDTH MAX.	HEADER SIZE (U.N.O.)
4'-0"	4X6 OR 6X6
6'-0"	4X8 OR 6X8
8'-0"	4X10 OR 6X10
10'-0"	4X12 OR 6X12
12'-0"	4X14 OR 6X14

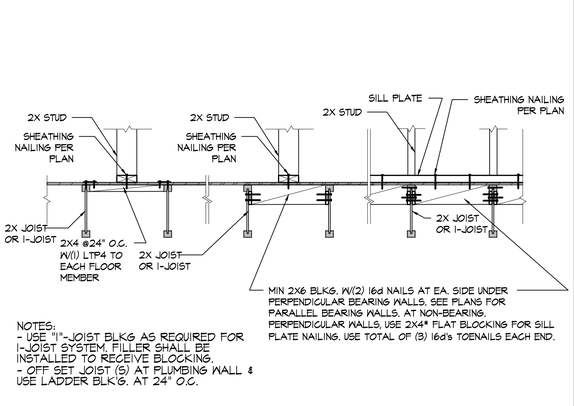
FRAMING DETAIL | 2



NOTE:

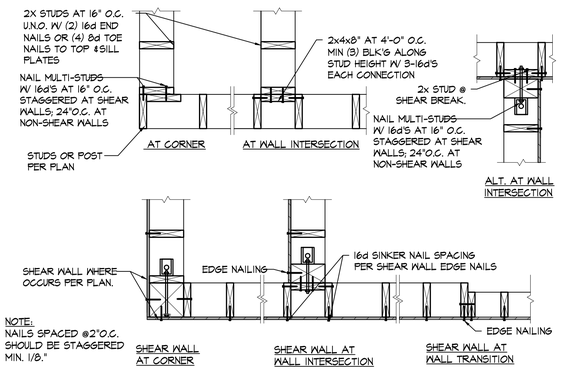
- IF NOTCH OR HOLE EXCEEDS 50% OF TOP PLATE WIDTH STRAP BOTH SIDES OF PLATES.

PIPING THRU PLATE FRAM'G | 8



NOTES:
- USE "I"-JOIST BLKG AS REQUIRED FOR I-JOIST SYSTEM. FILLER SHALL BE INSTALLED TO RECEIVE BLOCKING.
- OFF SET JOIST (S) AT PLUMBING WALL & USE LADDER BLK'G. AT 24" O.C.

BEARING & NON-BEARING WALL | 6



NOTE:
NAILS SPACED @2"O.C. SHOULD BE STAGGERED MIN. 1/8."

SHEAR WALL/WALL INTERSECTION | 3

TYP.FRAMING CROSS SECTION | 9

11

12

REVISIONS		
NO.	DATE	DESCRIPTION

SEAL:

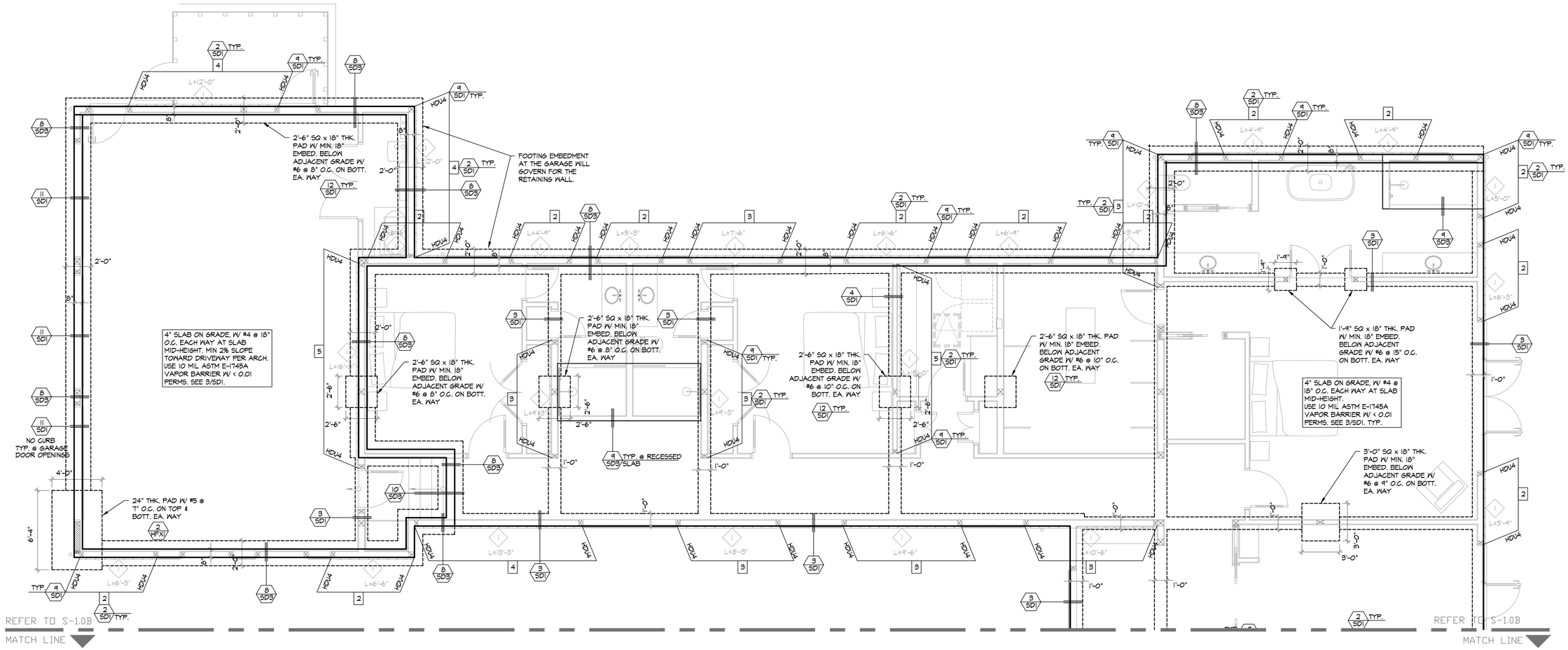
REGISTERED PROFESSIONAL ENGINEER ALLEN CHUN-TING WU No. C69385 Exp.06-30-2026 CIVIL STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel: 949-267-9095

PROJECT NAME:
12 ARROYO
SEQUOIA ROAD
CARMEL, CA 93923

SHEET TITLE
STRUCTURAL
GENERAL DETAILS

DRAWN	GMEP
CHECKED	GMEP
DATE	12/06/24
SCALE	AS NOTED
JOB NO.	24-656
SHEET	SN-2



FOUNDATION PLAN - MAIN HOUSE

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

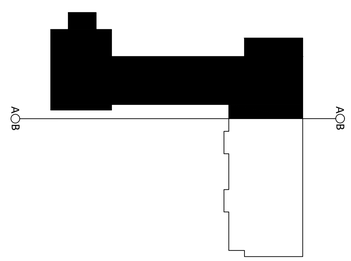
STRUCTURAL FOUNDATION NOTES

1. REFER TO SHEET SN SHEETS FOR GENERAL NOTES.
2. INSTALL 5/8" DIAMETER ANCHOR BOLTS @ 72" O.C., WITH MINIMUM 7" EMBEDMENT U.N.O.
3. FOUNDATION SHALL BE POURED MONOLITHICALLY U.N.O.
4. FASTENERS INSTALLED INTO PRESSURE TREATED WOOD SHALL USE HOT DIPPED ZINC COATED GALVANIZED OR STAINLESS STEEL.
5. ALL DIMENSIONS SHALL BE FIELD VERIFIED WITH ARCHITECTURAL DRAWINGS. ANY DISCREPANCIES SHALL BE RESOLVED WITH ARCHITECT.
6. PRIOR TO CALL FOR FOUNDATION INSPECTION, FINAL GRADING AND COMPACTION REPORTS SHALL BE SUBMITTED TO AND APPROVED BY THE BUILDING DEPARTMENT; AND ALL HOLDOWNS, ANCHOR BOLTS OR OTHER CAST-IN-PLACE FASTENERS SHALL BE SECURED IN PLACE.
7. ALL HARDWARE ARE BY SIMPSON STRONG-TIE U.N.O.; INSTALLATION SHALL FOLLOW MANUFACTURERS REQUIREMENTS WITH MAXIMUM FASTENER AMOUNT, U.N.O.; ALTERNATIVE IS ACCEPTABLE PROVIDED THAT CAPACITY IS PROVED TO BE NO LESS THAN SIMPSON STRONG-TIE PRODUCT BY CODE REPORTS.
8. USE CBSQ POST BASE AT ISOLATED POSTS OUTSIDE CONTINUOUS SILL PLATE U.N.O.
9. CONTINUOUS AND ISOLATED FOOTING SHALL BE EMBEDDED INTO COMPACTED GRADE MINIMUM 18".
10. ALL FILL MATERIAL IS TO BE COMPACTED TO 90% OF MAXIMUM DENSITY (OR MORE IF REQUIRED IN SOILS REPORT WHERE OCCURS).
11. SEE SN-1 FOR SHEAR WALL SCHEDULE.
12. SHEAR WALLS CANNOT BE USED AS PLUMBING WALLS UNLESS APPROVED BY STRUCTURAL ENGINEERS. PLYWOOD SHEAR WALL SHEATHING SHALL BE CONTINUOUSLY INSTALLED PRIOR TO FRAMING OF PERPENDICULAR WALLS.

LEGENDS

- CONCRETE FOOTING; SOLID LINES REPRESENT SLAB LINE ABOVE GRADE, DASH LINES REPRESENT FOOTING LINE BELOW GRADE
- POST OR TRIMMER
- L = X'-X" / X — SHEAR WALL SHEATHING PANEL, REFER TO PLAN FOR TYPE AND SN-1 FOR NAILING REQUIREMENTS
- X — 5/8" DIAMETER ANCHOR BOLTS EQUALLY DISTRIBUTED BETWEEN SHEAR WALL END POSTS, SEE 2/SD1 & 3/SD1
- X / SDX — STRUCTURAL DETAIL X ON DETAIL SHEET SD-X
- X — BEAM NUMBER, REFER TO CALCULATION BOOK

KEY PLAN



REVISIONS

NO.	DATE	DESCRIPTION

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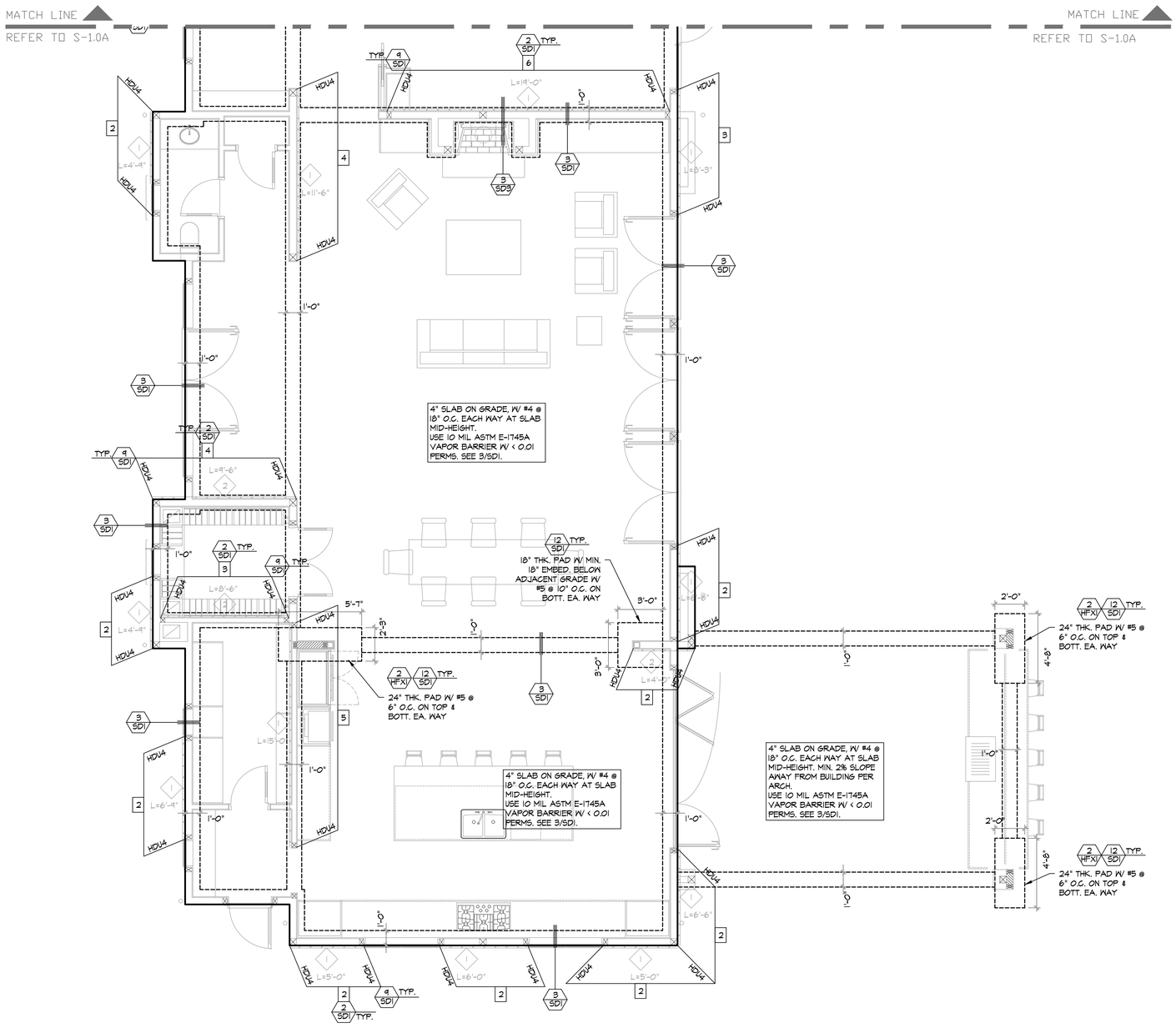
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CARMEL, CA 93923

SHEET TITLE
STRUCTURAL
FOUNDATION PLAN - MAIN HOUSE

DRAWN	GMEP
CHECKED	GMEP
DATE	12/06/24
SCALE	AS NOTED
JOB NO.	24-656
SHEET	S-1.0A



FOUNDATION PLAN - MAIN HOUSE

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

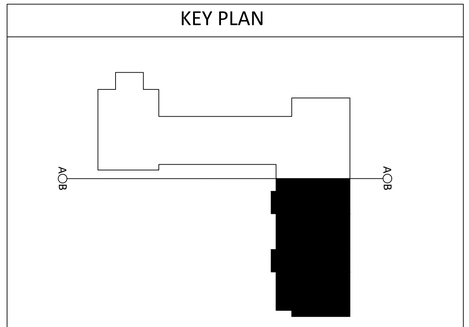
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- X — BEAM NUMBER, REFER TO CALCULATION BOOK

KEY PLAN



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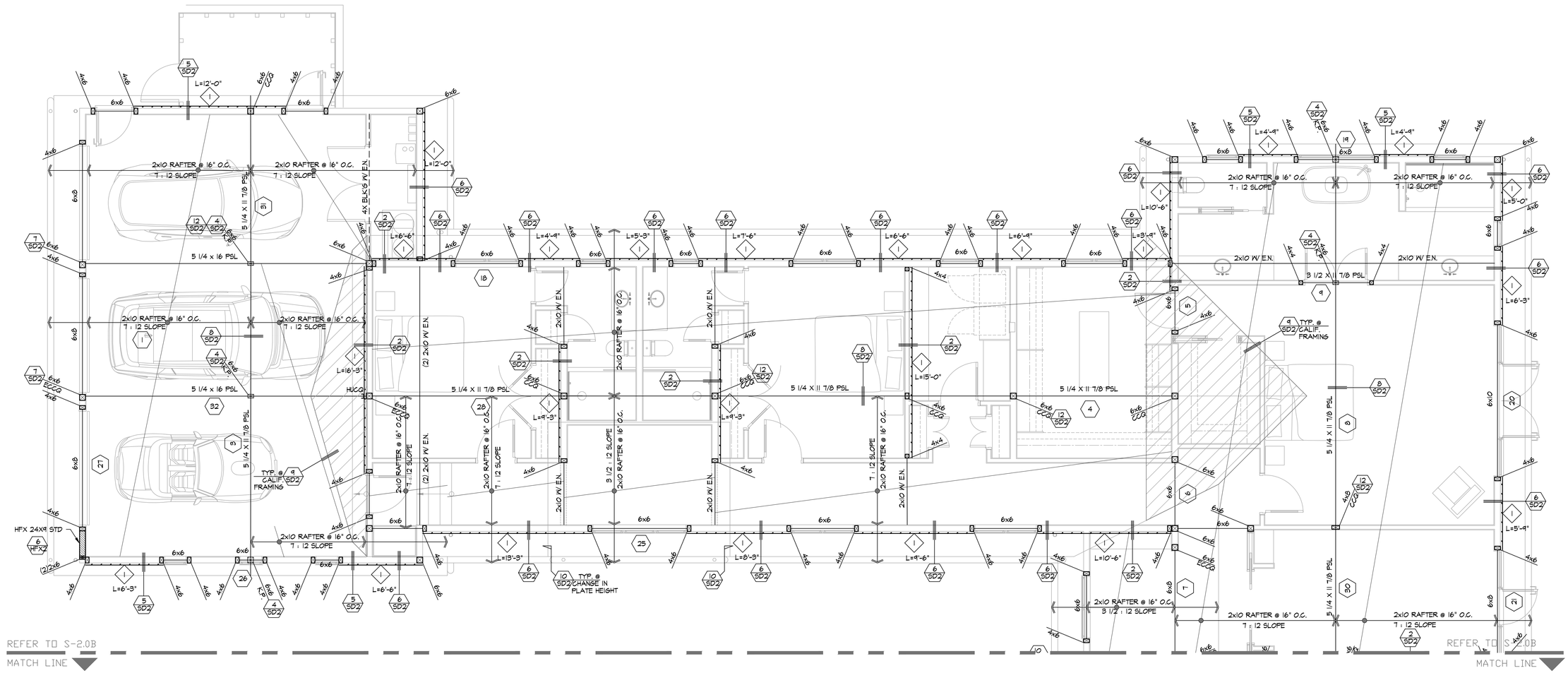


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SHEET TITLE
STRUCTURAL
FOUNDATION PLAN - MAIN HOUSE

DRAWN	GMEP
CHECKED	GMEP
DATE	12/06/24
SCALE	AS NOTED
JOB NO.	24-656
SHEET	S-1.0B



ROOF FRAMING PLAN - MAIN HOUSE

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

STRUCTURAL FRAMING NOTES

1. REFER TO SHEET SN SHEETS FOR GENERAL NOTES.
2. FASTENERS INSTALLED INTO PRESSURE TREATED WOOD SHALL USE HOT DIPPED ZINC COATED GALVANIZED OR STAINLESS STEEL.
3. ALL DIMENSIONS SHALL BE FIELD VERIFIED WITH ARCHITECTURAL DRAWINGS. ANY DISCREPANCIES SHALL BE RESOLVED WITH ARCHITECT.
4. ALL HARDWARE ARE BY SIMPSON STRONG-TIE U.N.O.; INSTALLATION SHALL FOLLOW MANUFACTURERS REQUIREMENTS WITH MAXIMUM FASTENER AMOUNT, U.N.O.; ALTERNATIVE IS ACCEPTABLE PROVIDED THAT CAPACITY IS PROVED TO BE NO LESS THAN SIMPSON STRONG-TIE PRODUCT BY CODE REPORTS.
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7. ALL BEAMS ARE DROP BEAMS U.N.O.
8. SPLICE ALL FLOOR LEVEL TOP PLATES W/ 1C/SD2 ALONG SHEAR WALL LINES; SPLICE ALL ROOF LEVEL TOP PLATES W/ 1B/SD2 ALONG SHEAR WALL LINES.
9. THE FOLLOWING BEAMS/HEADERS/RIMS CAN BE FROM ANY MANUFACTURER WITH CURRENT APPROVED ICC ES - EVALUATION REPORT WITH THE FOLLOWING MECHANICAL PROPERTIES:
   FOR "PSL" BEAMS:
   Fb = 2900 psi (MIN), Fv = 290 psi (MIN), E = 2.0 x 10^6 psi (MIN).
   FOR "LSL" BEAMS/HEADERS:
   Fb = 2325 psi (MIN), Fv = 400 psi (MIN), E = 1.55 x 10^6 psi (MIN).
   FOR MANUFACTURED RIM BOARD WITH MIN 1 1/4" THICK, CONTINUOUSLY SUPPORTED BY WALL, AND MATCHES JOIST DEPTH:
   Fc (PERPENDICULAR)..... = 680 psi (MIN)
   Fc (PARALLEL)..... = 1400 psi (MIN)
   Ft = 1075 psi (MIN), E = 1.3 x 10^6 psi (MIN)
   GLU-LAM BEAM SHALL BE 24F-V4, DF/DF
   Fb = 2400 psi @ BOTTOM, Fb = 1850 psi @ TOP
   Fv = 265 psi (MIN), E = 1.8 x 10^6 psi (MIN).
10. USE SIMPSON " IUS/ITS/U3I0 " HANGERS FOR CONNECTION OF I-JOISTS TO OTHER FRAMING MEMBERS (U.N.O.) AND " LUS " HANGERS FOR CONNECTION OF SOLID JOISTS.

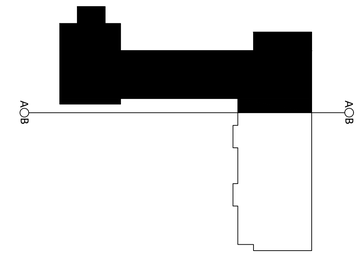
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- L = X'-X" / X — SHEAR WALL SHEATHING PANEL, REFER TO PLAN FOR TYPE AND SN-1 FOR NAILING REQUIREMENTS
- X / SDX — STRUCTURAL DETAIL X ON DETAIL SHEET SD-X
- X — BEAM NUMBER, REFER TO CALCULATION BOOK

FRAMING SCHEDULE

- RAFTER/DECK PER PLAN

KEY PLAN



REVISIONS		
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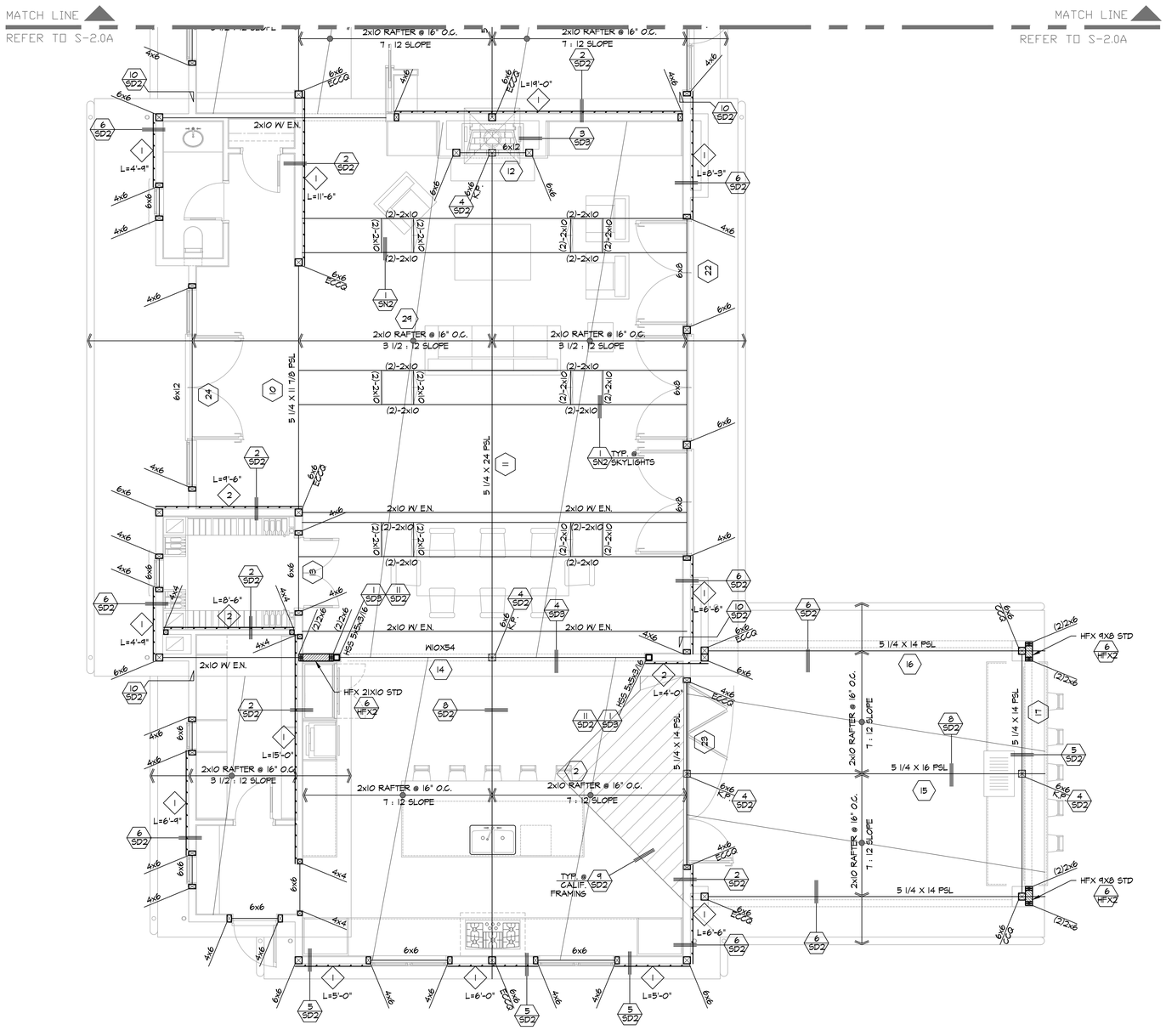
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CARMEL, CA 93923

SHEET TITLE
STRUCTURAL
ROOF FRAMING PLAN - MAIN HOUSE

DRAWN	GMEP
CHECKED	GMEP
DATE	12/06/24
SCALE	AS NOTED
JOB NO.	24-656
SHEET	S-2.0A



ROOF FRAMING PLAN - MAIN HOUSE

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

STRUCTURAL FRAMING NOTES

1. REFER TO SHEET SN SHEETS FOR GENERAL NOTES.
2. FASTENERS INSTALLED INTO PRESSURE TREATED WOOD SHALL USE HOT DIPPED ZINC COATED GALVANIZED OR STAINLESS STEEL.
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7. ALL BEAMS ARE DROP BEAMS U.N.O.
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   GLU-LAM BEAM SHALL BE 24F-V4, DF/DF
   Fb = 2400 psi @ BOTTOM, Fb = 1850 psi @ TOP
   Fv = 265 psi (MIN), E = 1.8 x 10^6 psi (MIN).
10. USE SIMPSON " IUS/ITS/U310 " HANGERS FOR CONNECTION OF I-JOISTS TO OTHER FRAMING MEMBERS (U.N.O.) AND " LUS " HANGERS FOR CONNECTION OF SOLID JOISTS

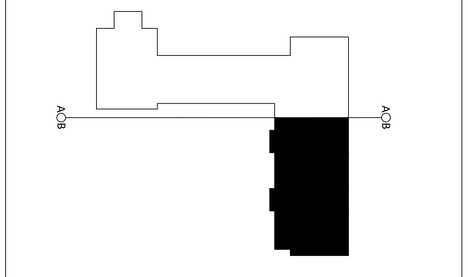
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X / SDX	STRUCTURAL DETAIL X ON DETAIL SHEET SD-X
X	BEAM NUMBER, REFER TO CALCULATION BOOK

FRAMING SCHEDULE

⟷	RAFTER/DECK PER PLAN

KEY PLAN



REVISIONS

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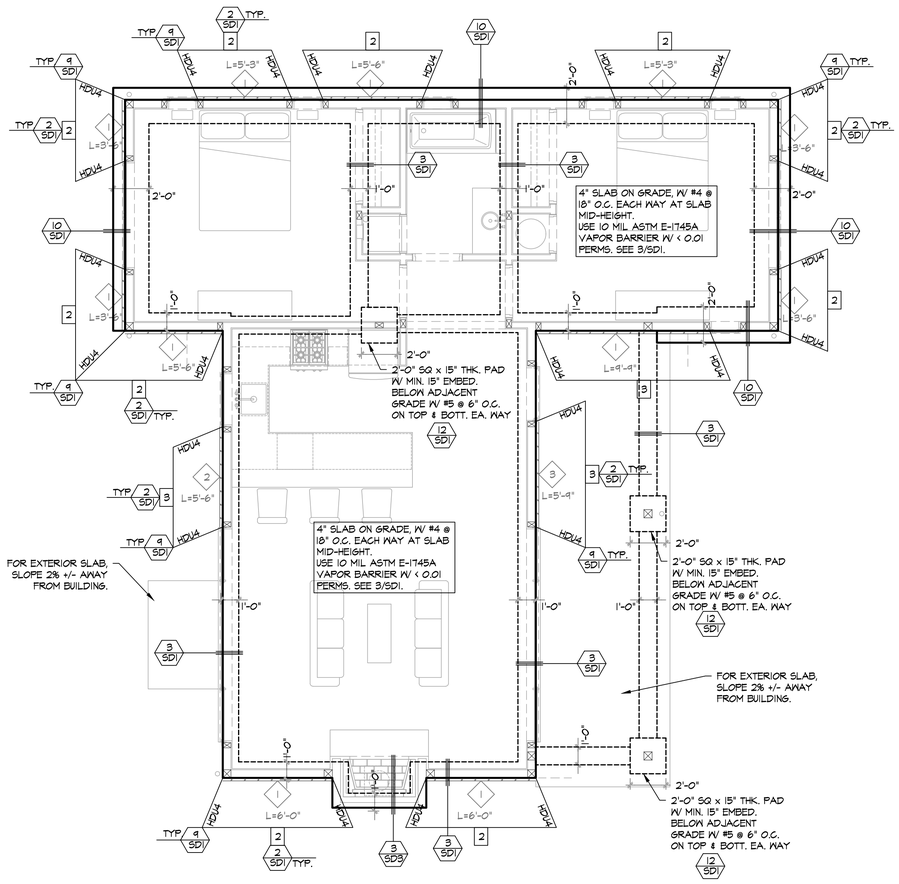
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SHEET TITLE
STRUCTURAL
ROOF FRAMING PLAN - MAIN HOUSE

DRAWN	GMEP
CHECKED	GMEP
DATE	12/06/24
SCALE	AS NOTED
JOB NO.	24-656
SHEET	S-2.0B



FOUNDATION PLAN - ADU

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

STRUCTURAL FOUNDATION NOTES

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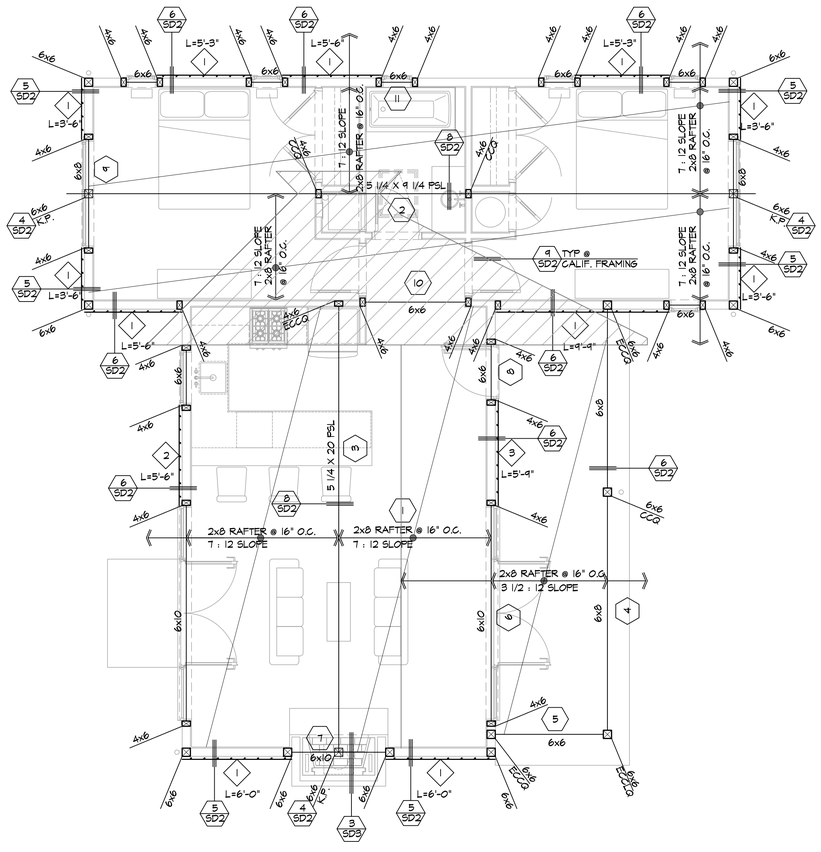
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STRUCTURAL
FOUNDATION PLAN - ADU

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DATE	12/06/24
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SHEET	S-3.0



ROOF FRAMING PLAN - ADU

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L = X'-X" / X	SHEAR WALL SHEATHING PANEL, REFER TO PLAN FOR TYPE AND SN-1 FOR NAILING REQUIREMENTS
X / SDX	STRUCTURAL DETAIL X ON DETAIL SHEET SD-X
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FRAMING SCHEDULE

⟷	RAFTER/DECK PER PLAN

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Lake Forest, CA 92630
Tel: 949-267-9095

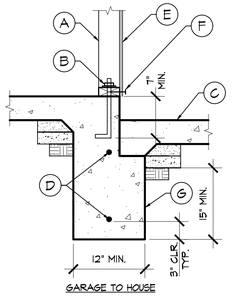
PROJECT NAME:
12 ARROYO
SEQUOIA ROAD
CARMEL, CA 93923

SHEET TITLE
STRUCTURAL
ROOF FRAMING PLAN - ADU

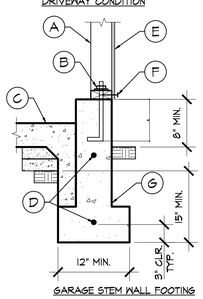
DRAWN	GMEP
CHECKED	GMEP
DATE	12/06/24
SCALE	AS NOTED
JOB NO.	24-656
SHEET	S-4.0

A. 2X WALL STUD @ 16" O.C.
B. 2X PTDF SILL PLATE W/ 5/8"ø X 12" ANCHOR BOLTS, MIN. 7" EMBED INTO CONCRETE. SEE DETAIL 2 FOR MORE INFORMATION.
C. 4" CONCRETE SLAB ON GRADE W/ #3 BAR @ 18" O.C. EACH WAY AT MID-HEIGHT OF SLAB. SEPARATE FROM CONTINUOUS FOOTING OR STEM WALL W/ EXPANSIVE MATERIAL.
D. CONTINUOUS REBAR U.N.O., MIN. (1) #4 ON TOP & BOTTOM.
E. PLYWOOD SHEAR PANEL WHERE OCCURS.
F. EAR WALL EDGE NAILING.
G. CONTINUOUS GARAGE FOOTING, MINIMUM DIMENSION AS SHOWN.
H. EXPANSIVE MATERIAL TO SEPARATE DRIVEWAY SLAB.

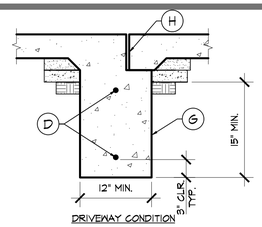
NOTE:
SEE 3/SD1 FOR MORE DETAIL.



GARAGE TO HOUSE

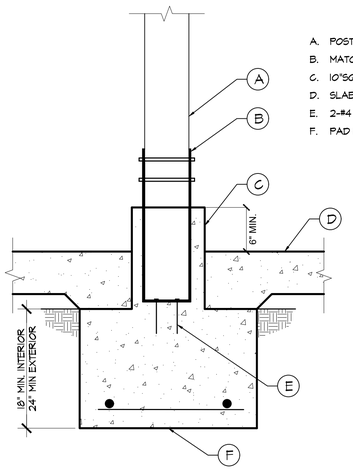


GARAGE STEM WALL FOOTING



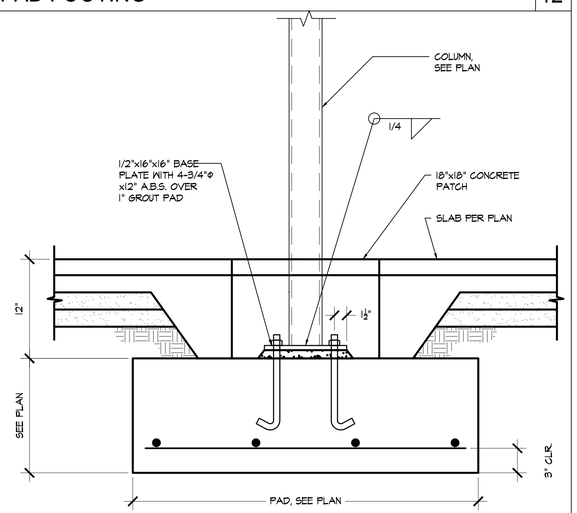
DRIVEWAY CONDITION

GARAGE FOUNDATION DETAIL | 11

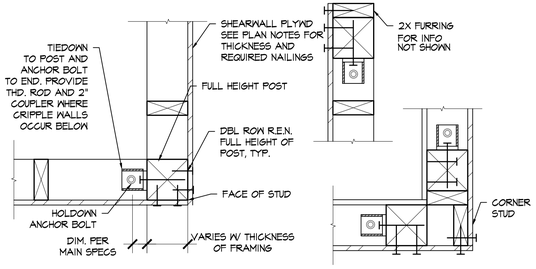


A. POST PER PLAN.
B. MATCHING CB BASE.
C. 10"SQ PIER.
D. SLAB PER PLAN.
E. 2-#4 PINS.
F. PAD PER PLAN.

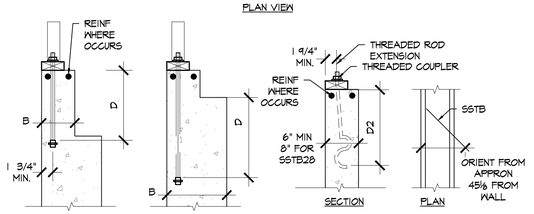
PAD FOOTING | 12



CONNECTION | 13



PLAN VIEW



A TYPICAL THD. ROD INSTALLATION

B TYPICAL SSTB INSTALLATION

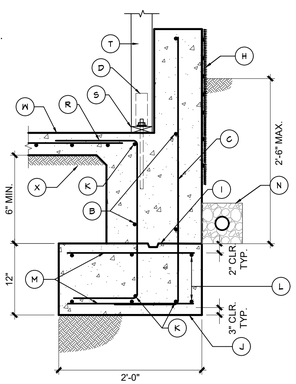
HOLDOWN SIZE	OPTION A. SIMPSON PAB ANCHOR ROD				OPTION B. SIMPSON SSTB ANCHOR BOLT			
	ANCHOR BOLT SIZE	MIN. B	MIN. D1	REMARKS	ANCHOR BOLT SIZE	MIN. D2	REMARKS
HDU4	PAB5	10"	6"	SEE (A) PROVIDE DBL AND STANDARD WASHER AT BOTTOM NUT	SSTB24	21"	SEE (B) FOR INSTALLATION REQUIREMENT REFER TO SIMPSON CATALOG FOR ADDL. REQUIREMENT
HDU5	PAB5	10"	6"		SSTB24	21"	
HDU8	PAB7	14"	9"		SSTB28	24"	
HDQ8	PAB7	14"	9"		SSTB28	24"	
HDU11	PAB8	32"	12"	SEE (A) PROVIDE DBL NUT AND PL (3/4X3X3) WASHER AT BOTTOM			
HHDQ11	PAB8	32"	12"				
HDU14	PAB8	32"	12"				
HHDQ14	PAB8	32"	12"				
HD12	PAB9	38"	12 1/2"				
HD19	PABI0	44"	14 1/2"				

* USE MIN. (2) #4 TOP & (2) #4 BOT. FOR HDU4 TO HDU8, AND MIN. (3) #4 TOP & (3) #4 BOT. FOR HDU11 - HD19 U.N.O. CONT. FOOTING REINFORCEMENT CAN BE COUNTED AS PART OF REBAR REQUIREMENT IF BAR SIZE ARE SAME AS THOSE REQUIRED.

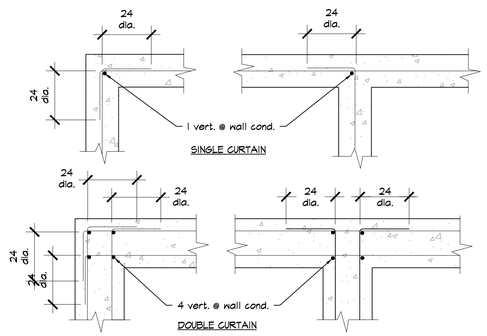
HOLDOWN ANCHOR BOLT SCHEDULE | 9

A. 8" CONC. WALL, f'c = 3000 PSI MIN.
B. #5 HORIZONTAL @ 16" O.C.
C. #5 VERTICAL @ 16" O.C. DOWEL INTO FOOTING AS SHOWN W/ STD HOOK
D. HOLDOWN PER PLAN. SEE DETAIL 4/SD1.
E. TOP OF NATURAL GRADE OR COMPACT FILL WHERE OCCURS
F. -
G. BACKFILL W/ BEDROCK OR GRAVEL PER SOILS REPORT, MIN 12" WIDE AND WITHIN 60° PLANE.
H. WATERPROOFING & DRAINAGE SYSTEM PER ARCH AND MANUFACTURER. STONE VENEER PER ARCH.
I. 2X6 CONT. SHEAR KEY.
J. CONC. FOOTING PER PLAN, MIN. 18" EMBEDMENT BELOW ADJACENT GRADE
K. ADD #5.
L. #5 @ 6" O.C. @ TOP & BOTT.
M. #5 @ 6" O.C. @ TOP & BOTT.
N. PER SOILS REPORT, A PERFORATED PIPE WITH HOLES DOWN SHALL BE PLACED 4" ABOVE THE BOTTOM OF THE WALL. PIPE SHALL BE CONNECTED BY A SOLID COLLECTOR PIPE TO AN APPROVED DRAINAGE FACILITY. SEE SHEET C4 FOR THE DRAINAGE PLAN.
O. -
P. CONC. FLATWORK PER PLAN WHERE OCCURS.
Q. EXPANSIVE MATERIAL. WHERE REQ'D
R. #4 DOWELS @ 18" O.C., MIN. 18" EA. END.
S. SILL PLATE WHERE OCCURS. SEE DETAIL 3/SD1 FOR CONNECTION TO FOOTING.
T. 2X STUD @16" O.C. TYP. WHERE OCCURS.
U. -
V. -
W. B.O.G. & REINFORCEMENT PER PLAN WHERE OCCURS. SEE DETAIL 3/SD1
X. SEE SOILS REPORT FOR UNDER-SLAB CONFIGURATION.

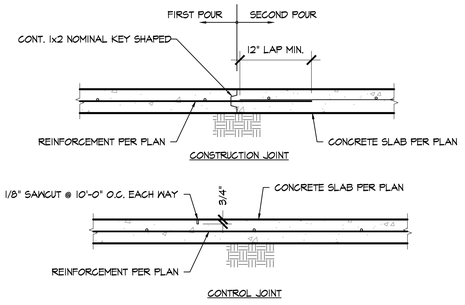
*NOTE:
- SPECIAL INSPECTION IS REQUIRED.
- WATERPROOFING, EXTENT OF BACKFILL, BACKFILL MATERIAL & DRAINAGE SYSTEM TO BE REVIEWED & APPROVED BY GEOTECHNICAL ENGINEER.
- EDGE DISTANCE TO REBAR INDICATED IS CLEAR DIMENSION.
- WOOD FRAMING SHALL BE ADDED AFTER BACKFILLING
- SEE SOILS REPORT FOR MORE SUB-GRADE PREPARATION AND DRAINAGE RECOMMENDATIONS.
-



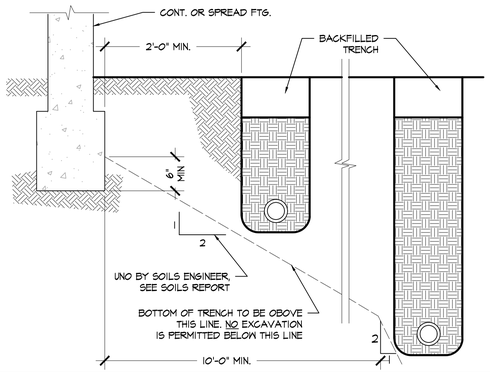
2'-6" PERIMETER RETAINING WALL DETAIL | 10



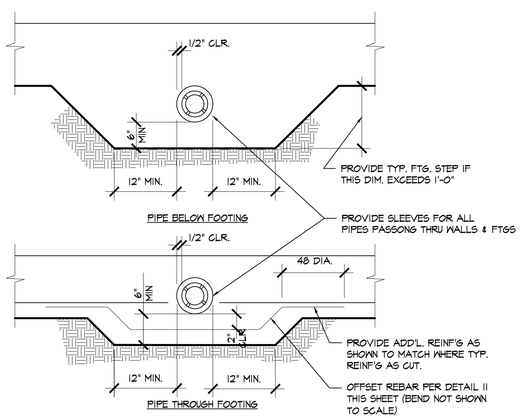
TYP. REINF'G. @ INTERSECTIONS OF FTGS & WALLS | 5



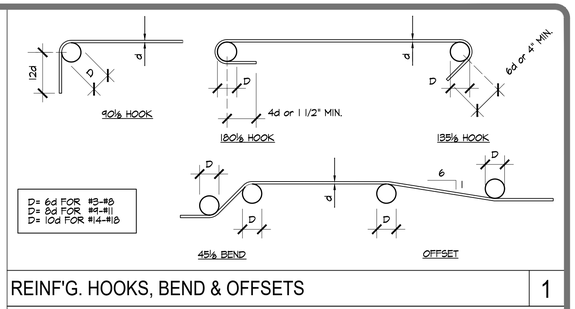
TYP. SLAB JOINT | 6



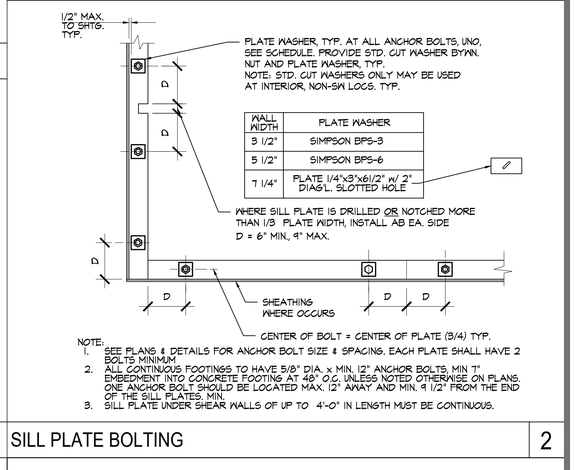
TYP. PIPE PARALLEL TO FOOTING | 7



TYP. PIPE PERPENDICULAR TO FOOTING | 8



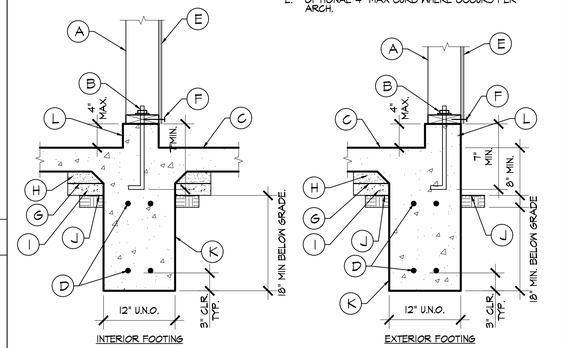
REINF'G. HOOKS, BEND & OFFSETS | 1



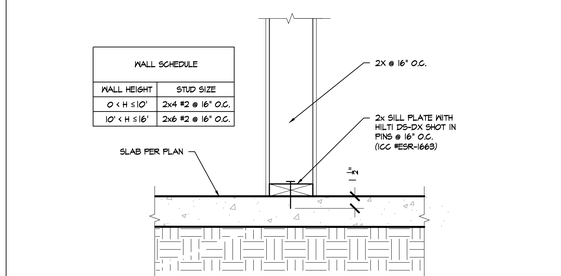
NOTE:
1. SEE PLANS & DETAILS FOR ANCHOR BOLT SIZE & SPACING. EACH PLATE SHALL HAVE 2 BOLTS MINIMUM
2. ALL CONTINUOUS FOOTINGS TO HAVE 5/8" DIA. x MIN. 12" ANCHOR BOLTS, MIN 7" EMBEDMENT INTO CONCRETE FOOTING AT 48" O.C. UNLESS NOTED OTHERWISE ON PLANS. ONE ANCHOR BOLT SHOULD BE LOCATED MAX. 12" AWAY AND MIN. 9 1/2" FROM THE END OF THE SILL PLATES, MIN
3. SILL PLATE UNDER SHEAR WALLS OF UP TO 4'-0" IN LENGTH MUST BE CONTINUOUS.

SILL PLATE BOLTING | 2

A. 2X WALL STUD @ 16" O.C.
B. 2X PTDF SILL PLATE W/ 5/8"ø x 12" ANCHOR BOLTS, MIN. 7" EMBED INTO CONCRETE. SEE DETAIL 2 FOR MORE INFORMATION.
C. 4" CONCRETE SLAB ON GRADE W/ #4 BAR @ 18" O.C. EACH WAY AT MID-HEIGHT OF SLAB.
D. CONTINUOUS REBAR U.N.O., MIN. (2) #4 ON TOP & BOTTOM.
E. PLYWOOD SHEAR PANEL WHERE OCCURS.
F. SHEAR WALL EDGE NAILING.
G. 10 MIL VAPER BARRIER.
H. OPTIONAL TO HAVE 2" LAYER OF CLEAN SAND.
I. 4" OF CLEAN GRAVEL BELOW VAPER BARRIER.
J. TOP OF NATURAL GRADE OR COMPACT FILL.
K. CONTINUOUS CONCRETE FOUNDATION POUR MONOLITHICALLY WITH SLAB ON GRADE.
L. OPTIONAL 4" MAX CURB WHERE OCCURS PER ARCH.



CONTINUOUS FOUNDATION DETAIL | 3



NON-BEARING WALL | 4

REVISIONS		
NO.	DATE	DESCRIPTION

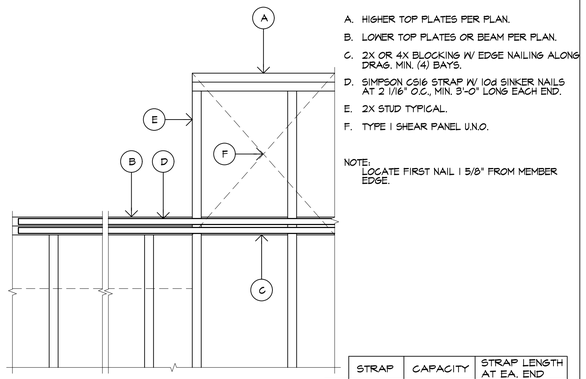
SEAL:
REGISTERED PROFESSIONAL ENGINEER
ALLEN CHUN-TING WU
No. C69385
Exp.06-30-2026
CIVIL
STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel 949-267-9095

PROJECT NAME:
12 ARROYO SEQUOIA ROAD
CARMEL, CA 93923

SHEET TITLE
STRUCTURAL FOUNDATION DETAILS

DRAWN	GMEP
CHECKED	GMEP
DATE	12/06/24
SCALE	AS NOTED
JOB NO.	24-656
SHEET	SD-1

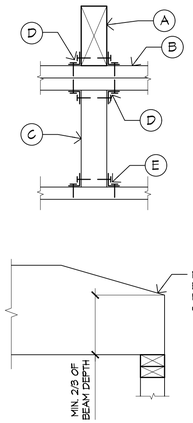


A. HIGHER TOP PLATES PER PLAN.
B. LOWER TOP PLATES OR BEAM PER PLAN.
C. 2X OR 4X BLOCKING W/ EDGE NAILING ALONG DRAG, MIN. (4) BAYS.
D. SIMPSON CS16 STRAP W/ 10d SINKER NAILS AT 2 1/16" O.C., MIN. 3'-0" LONG EACH END.
E. 2X STUD TYPICAL.
F. TYPE I SHEAR PANEL U.N.O.

NOTE:
LOCATE FIRST NAIL 1 5/8" FROM MEMBER EDGE.

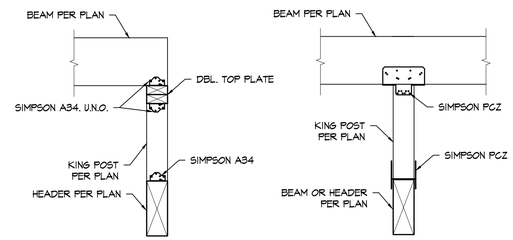
	STRAP	CAPACITY	STRAP LENGTH AT EA. END
A	(1) CS16	1700#	3'-0"
B	(2) CS16	3400#	6'-0"

DRAG DETAIL 10

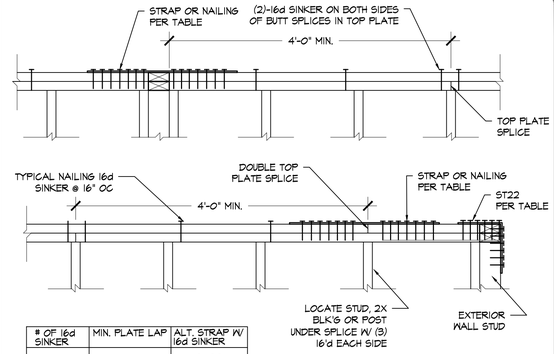


A. CEILING BEAM, SEE PLAN FOR SIZE.
B. DBL. TOP PLATE W/ SIMPSON ST6236. IF DBL. TOP PLATE IS CONT., ELIMINATE STRAP.
C. POST OR MULTI-STUDS PER PLAN.
D. SIMPSON A34.
E. SILL PLATE.

BEAM DETAIL 7



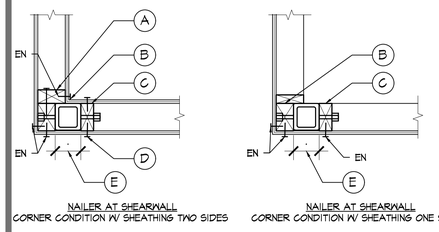
TYP. KING POST CONNECTION 4



# OF 16d SINKER	MIN. PLATE LAP	ALT. STRAP W/ 16d SINKER
10	4'-0"	ST22
16	4'-0"	ST6224
22	6'-0"	ST6236
24	6'-0"	MST37
32	8'-0"	MSTC52
36	8'-0"	MST60

NOTE,
- THE STRAPPING IS REQUIRED ALONG WALL ZONE AS SHOWN ON PLAN.
- FULLY NAIL STRAP W/ 16d SINKER OR 10d COMMON
- NAILS SHALL BE STAGGERED W/ MIN. 2 1/4" APART.

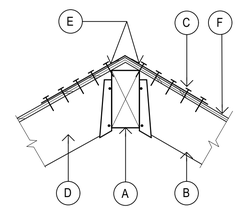
TOP PLATE SPLICE DETAIL 1



A. 3x STUD W/ 1/4" x 5" SDS SCREW. SPACE: 8" OC FOR WALL MARCKS A-C 6" OC FOR WALL MARCKS D-E 3" OC FOR WALL MARCKS F-S
B. 4x W/ 5/8"ø THREADED STUD BOLTS AT 16" OC. 1" MAX COUNTERSINK.
C. 3x MIN W/ 5/8"ø THREADED STUD BOLTS AT 16" OC.
D. EN EACH SIDE.
E. SHEATHING PANEL JOINT NOT ALLOWED HERE.
F. 2x ES W/ 5/8"ø THREADED STUD BOLTS AT 32" OC.
G. TUBE OR PIPE COL TYP, SEE PLAN.
H. 3x MIN ES W. 5/8"ø THREADED STUD BOLTS AT 16" OC.

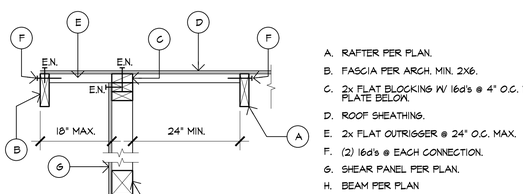
NOTE: LOCATE STUD BOLTS 6" MIN 9" MAX FROM ENDS OF WOOD NAILERS.

NAILER ON STEEL COLUMN 11



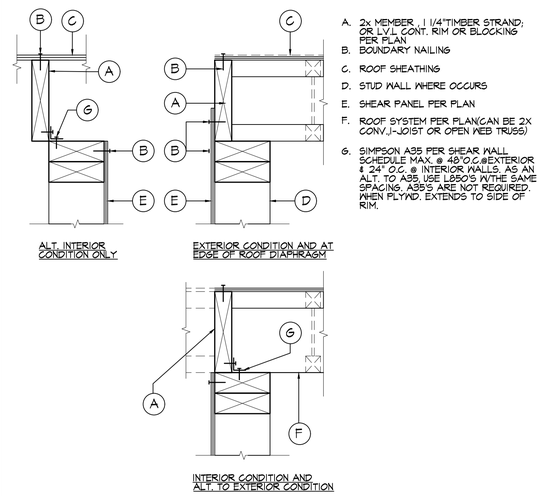
A. RIDGE PER PLAN
B. TYPICAL ROOF RAFTER PER PLAN
C. ST22 AT 48" O.C.
D. USE SLOPE HANGERS WHEN SPAN OF RAFTERS EXCEED 10'-0" OTHERWISE USE MIN. (5) 16d TOE NAILS @ EACH RAFTER TO RIDGE
E. EDGE NAILING
F. PLYWOOD SHEATHING

CONNECTION DETAIL 8



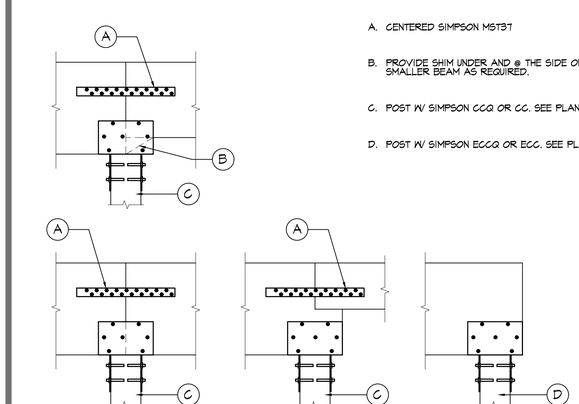
A. RAFTER PER PLAN.
B. FASCIA PER ARCH. MIN. 2X6.
C. 2x FLAT BLOCKING W/ 16d's @ 4" O.C. TO TOP PLATE BELOW.
D. ROOF SHEATHING.
E. 2x FLAT OUTRIGGER @ 24" O.C. MAX.
F. (2) 16d's @ EACH CONNECTION.
G. SHEAR PANEL PER PLAN.
H. BEAM PER PLAN

SHEAR TRANSFER TO BEAM 5



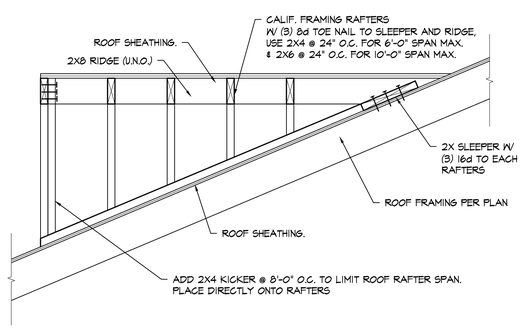
A. 2x MEMBER , 1 1/4"TIMBER STRAND; OR LVL CONT. RIM OR BLOCKING PER PLAN
B. BOUNDARY NAILING
C. ROOF SHEATHING
D. STUD WALL WHERE OCCURS
E. SHEAR PANEL PER PLAN
F. ROOF SYSTEM PER PLAN(CAN BE 2X CONV.J-JOIST OR OPEN WEB TRUSS)
G. SIMPSON A35 PER SHEAR WALL SCHEDULE MAX. @ 48"O.C.@EXTERIOR & 24" O.C. @ INTERIOR WALLS. AS AN ALT. TO A35, USE LSS0'S W/THE SAME SPACING, A35'S ARE NOT REQUIRED. WHEN PLYWD. EXTENDS TO SIDE OF RIM.

SHEAR TRANSFER @ ROOF 2

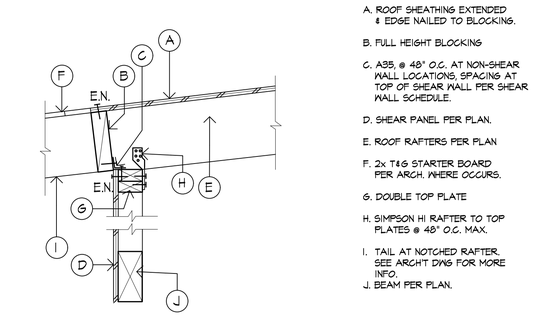


A. CENTERED SIMPSON MST37
B. PROVIDE SHIM UNDER AND @ THE SIDE OF THE SMALLER BEAM AS REQUIRED.
C. POST W/ SIMPSON CCQ OR CC. SEE PLAN
D. POST W/ SIMPSON ECCQ OR ECC. SEE PLAN

BEAM TO BEAM CONNECTION @ SPLICE DETAIL 12

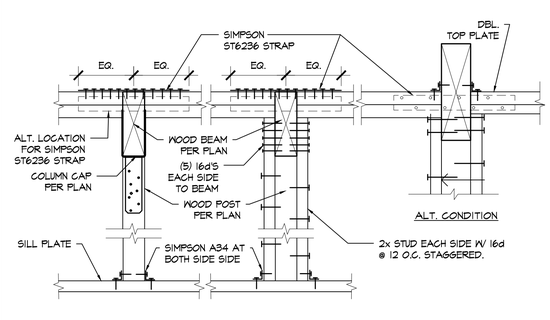


TYP. CALIF. FRM'G. CONN. 9



A. ROOF SHEATHING EXTENDED & EDGE NAILED TO BLOCKING.
B. FULL HEIGHT BLOCKING
C. A35, @ 48" O.C. AT NON-SHEAR WALL LOCATIONS, SPACING AT TOP OF SHEAR WALL PER SHEAR WALL SCHEDULE.
D. SHEAR PANEL PER PLAN.
E. ROOF RAFTERS PER PLAN
F. 2x T&G STARTER BOARD PER ARCH. WHERE OCCURS.
G. DOUBLE TOP PLATE
H. SIMPSON HI RAFTER TO TOP PLATES @ 48" O.C. MAX.
I. TAIL AT NOTCHED RAFTER. SEE ARCH'T DWG FOR MORE INFO.
J. BEAM PER PLAN.

SHEAR TRANSFER TO BEAM 6



TYP. BEAM IN STUD WALL 3

REVISIONS		
NO.	DATE	DESCRIPTION

SEAL:

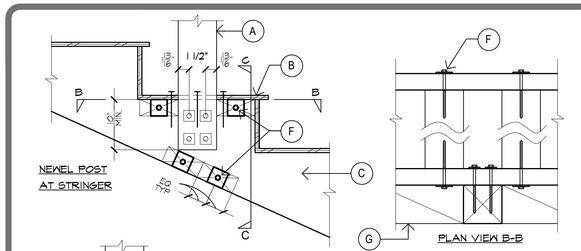
REGISTERED PROFESSIONAL ENGINEER
ALLEN CHUN-TING WU
No. C69385
Exp.06-30-2026
CIVIL
STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel: 949-267-9095

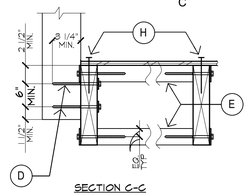
PROJECT NAME:
12 ARROYO
SEQUOIA ROAD
CARMEL, CA 93923

SHEET TITLE
STRUCTURAL DETAILS

DRAWN	GMEP
CHECKED	GMEP
DATE	12/06/24
SCALE	AS NOTED
JOB NO.	24-656
SHEET	SD-2



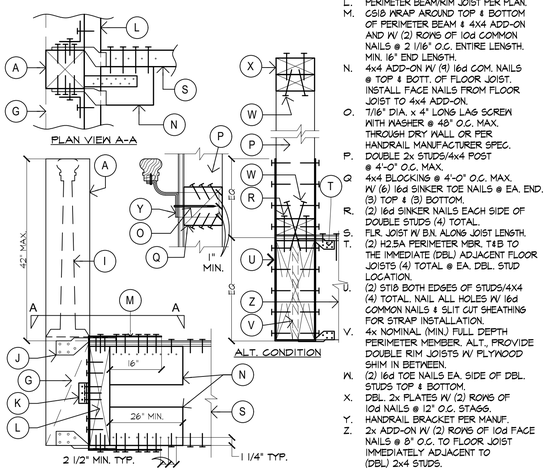
PLAN VIEW B-B



SECTION C-C

NOTE:
ALTERNATE TO 1/4"ϕ5/8"X5" LAG SCREWS SIMPSON 1/4"ϕ5/8"X6" SDS SCREWS CAN BE USED. A 3/4" THK FULL BEARING PLYWOOD SHIM IS REQUIRED BETWEEN PLATE WASHER & STRINGER FOR SDS SCREWS TO NEWEL POST.

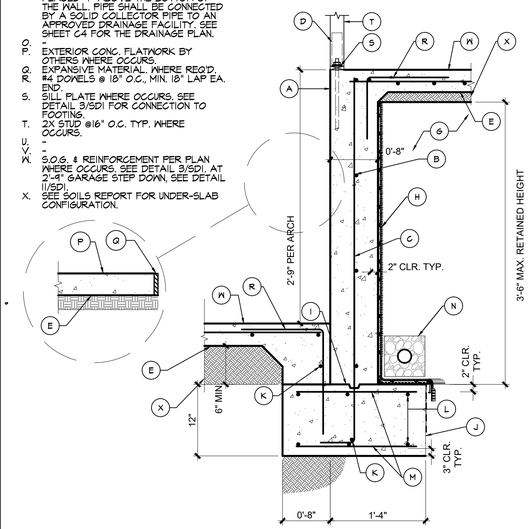
A. 4x4 MIN.(D.F.#2) NEWEL POST.
B. PLYWOOD TREADS.
C. STRINGER PER DET 10/SD3.
D. 1/4"ϕx5" LAG SCREWS FROM STRINGER TO NEWEL POST (4) TOTAL W/ PLATE WASHER 1 1/4" SQ. x 3/16" THK.
E. (2) 2x4 FLAT BLOCKING TOP & BOTTOM OF STRINGER (4) TOTAL.
F. 1/4"ϕx5" LAG SCREWS FROM STRINGERS' TOP & BOTTOM TO 2x4 FLAT BLOCKINGS (8) TOTAL WITH PLATE WASHER 1 1/4" SQ.x3/16" THK.
G. INFILL BLKG BETWEEN NEWEL POSTS.
H. (3) 10d NAILS EQUALLY SPACED EA. TREAD TO STRINGER (6) TOTAL.
I. BALUSTER PER ARCHITECT'S DETAIL.
J. (2) H2.5A T&B NEWEL POST TO PERIMETER BM. CONNECTIONS BY OTHERS (PER MANUF).
K. A35 BOTH FACES OF NEWEL POST TO PERIMETER BEAM.
L. PERIMETER BEAM/RIM JOIST PER PLAN.
M. CSI8 WRAP AROUND TOP & BOTTOM OF PERIMETER BEAM & 4X4 ADD-ON AND W/ (2) ROWS OF 10d COMMON NAILS @ 2 1/16" O.C. ENTIRE LENGTH. MIN. 16" END LENGTH.
N. 4x4 ADD-ON W/ (9) 16d COM. NAILS @ TOP & BOTT. OF FLOOR JOIST. INSTALL FACE NAILS FROM FLOOR JOIST TO 4x4 ADD-ON.
O. 7/16" DIA. x 4" LONG LAG SCREW WITH WASHER @ 48" O.C. MAX. THROUGH DRY WALL OR PER HANDRAIL MANUFACTURER SPEC.
P. DOUBLE 2x STUDS/4x4 POST @ 4'-0" O.C. MAX.
Q. 4x4 BLOCKING @ 4'-0" O.C. MAX. W/ (6) 16d SINKER TOE NAILS @ EA. END. (3) TOP & (3) BOTTOM.
R. (2) 16d SINKER NAILS EACH SIDE OF DOUBLE STUDS (4) TOTAL.
S. FLR. JOIST W/ BN. ALONG JOIST LENGTH.
T. (2) H2.5A PERIMETER MBR. T&B TO THE IMMEDIATE (DBL) ADJACENT FLOOR JOISTS (4) TOTAL @ EA. DBL. STUD LOCATION.
U. (2) ST18 BOTH EDGES OF STUDS/4X4 (4) TOTAL. NAIL ALL HOLES W/ 16d COMMON NAILS & SLIT CUT SHEATHING FOR STRAP INSTALLATION.
V. 4x NOMINAL (MIN.) FULL DEPTH PERIMETER MEMBER. ALT., PROVIDE DOUBLE RIM JOISTS W/ PLYWOOD SHIM IN BETWEEN.
W. (2) 16d TOE NAILS EA. SIDE OF DBL. STUDS TOP & BOTTOM.
X. DBL. 2x PLATES W/ (2) ROWS OF 10d NAILS @ 12" O.C. STAGG.
Y. HANDRAIL BRACKET PER MANUF.
Z. 2x ADD-ON W/ (2) ROWS OF 10d FACE NAILS @ 8" O.C. TO FLOOR JOIST IMMEDIATELY ADJACENT TO (DBL) 2x4 STUDS.



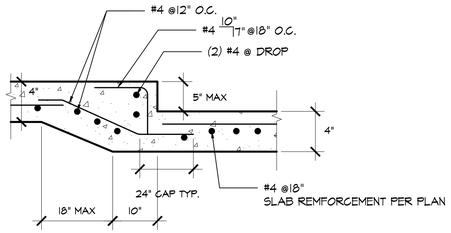
HANDRAIL/GUARD RAIL-ONE & TWO FAMILY | 11

A. 8" CONC. WALL. f'c = 3000 PSI MIN.
B. #5 HORIZONTAL @ 16" O.C.
C. #5 VERTICAL @ 16" O.C. DOWEL 9" MIN. INTO FOOTING AS SHOWN W/ STD HOOK
D. HOLDOWN PER PLAN. SEE DETAIL 9/SD1.
E. TOP OF NATURAL GRADE OR COMPACT FILL WHERE OCCURS
F. -
G. BACKFILL W/ BEDROCK OR GRAVEL PER SOILS REPORT, MIN. 12" WIDE AND WITHIN 60° PLANE.
H. HYDRODUCT WATERPROOFING & DRAINAGE SYSTEM PER ARCH AND MANUFACTURER.
I. 2X6 CONT. SHEAR KEY
J. MIN. 12" THICK CONC. FOOTING W/ MIN 18" EMBEDMENT BELOW ADJACENT GRADE.
K. ADD #5.
L. #5 @ 6" O.C. @ TOP & BOTT.
M. #5 @ 6" O.C. @ TOP & BOTT.
N. PER SOILS REPORT, A PERFORATED PIPE WITH HOLES DOWN SHALL BE PLACED 4" ABOVE THE BOTTOM OF THE WALL. PIPE SHALL BE CONNECTED BY A SOLID COLLECTOR PIPE TO AN APPROVED DRAINAGE FACILITY. SEE SHEET C4 FOR THE DRAINAGE PLAN.
O. -
P. EXTERIOR CONC. FLATWORK BY OTHERS WHERE OCCURS.
Q. EXPANSIVE MATERIAL. WHERE REQ'D
R. #4 DOWELS @ 18" O.C., MIN. 18" LAP EA. END
S. SILL PLATE WHERE OCCURS. SEE DETAIL 3/SD1 FOR CONNECTION TO FOOTING.
T. 2X STUD @16" O.C. TYP. WHERE OCCURS.
U. -
V. -
W. S.O.G. & REINFORCEMENT PER PLAN WHERE OCCURS. SEE DETAIL 3/SD1. AT 2'-8" GARAGE STEP DOWN, SEE DETAIL 11/SD1.
X. SEE SOILS REPORT FOR UNDER-SLAB CONFIGURATION.

*NOTE:
- SPECIAL INSPECTION IS REQUIRED.
- WATERPROOFING, EXTENT OF BACKFILL, BACKFILL MATERIAL & DRAINAGE SYSTEM TO BE REVIEWED & APPROVED BY GEOTECHNICAL ENGINEER.
- EDGE DISTANCE TO REBAR INDICATED IS CLEAR DIMENSION.
- WOOD FRAMING SHALL BE ADDED AFTER BACKFILLING
- SEE SOILS REPORT FOR MORE SUB-GRADE PREPARATION AND DRAINAGE RECOMMENDATIONS.

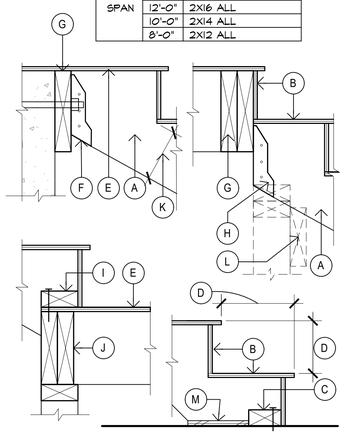


3'-6" RETAINING WALL DETAIL | 8



SHOWER DROP DETAIL | 9

STRINGERS @ 16" O.C.		
MAX. SPAN	18'-0"	(2)2X16 @ INTERIOR 2X16 @ EDGE
	12'-0"	2X16 ALL
	10'-0"	2X14 ALL
	8'-0"	2X12 ALL

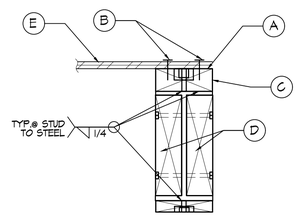


A. SEE TABLE. SPANS ARE HORIZONTAL PROJECTION LENGTH. (ALT. LSL STRINGERS OF THE SAME SIZES W/ Fb=1700psi (MIN), Fv=400psi (MIN), & E=1.3x10⁶ psi (MIN) CAN BE USED.
B. PLYWOOD TREADS & RISERS (MIN. 3/4").
C. 2X4 P.T. PLATE (SEE SN-1) ANCHORED WITH SIMP. PHNA-T2 SHOT PINS 0.145Ø W/ 3/4" MIN. EMBED INTO CONC @ 24" O.C. MAX. SECURE STRINGER TO 2X4 PLATE W/ (3) 16d TOE NAILS. PER ARCHITECTURAL.
D. PLYWOOD SUBFLOOR.
E. APPROVED METAL HANGERS OR (1)A35 EACH SIDE.
F. 2X PRESSURE TREATED LEDGER W/ 5/8" A.B. @ 24" O.C. W/ MIN 5" EMBEDMENT INTO CONCRETE.
G. SIMPSON THA218, ALT. (1) A35 EA. SIDE UP TO MAX. 12'-0" SPAN*. USE THA218/THA218-2 FOR 2x16/(2)2x16.
H. CONT. 2x PLATE W/ 16d'S @8"O.C.
I-J. DBL. JOIST OR BLOCKING 5 1/4" MIN. FOR 2x12, 7 1/4" MIN. FOR 2x14 & 9 1/4" FOR 2x16 @ NOTCH. NO OVERCUT.
L. 2x6 LEDGER W/ (4) 16d'S PER STUD @ WALL CONDITION.
M. PRESSURE TREATED PLYWOOD SHIM W/ MIN. (2)SIMP. PHNA-T2 SHOT PINS 0.145Ø W/ 3/4" MIN. EMBED INTO CONCRETE. 22GA SHEET METAL OR WATER PROOF MEMBRANT CAN BE USED AS AN ALTERNATE.

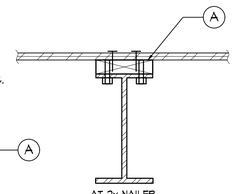
NOTE: WHERE HANDRAIL OR GUARDRAIL OCCURS, SEE DETAIL 11/SD3

STAIR DETAILS \ 1 & 2 FAMILY @ NON-COMMON AREA | 10

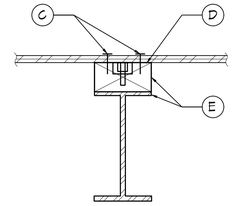
A. 3x NAILER OR SILL PLATE W/ 5/8" ϕ THREADED STUD BOLTS AT 24" OC, 3/4" MAX COUNTERSINK.
B. (2) ROWS 8N TYP. WHERE OCCURS
C. EDGE OF NAILER FLUSH W/ EDGE OF BEAM FLANGE.
D. WEB FILLER W/ 1/2"ϕ THRU BOLT @ 24" O.C. STAGG.
E. EXISTING ROOF SHEATHING.



AT 3x NAILER WHERE NOTED ON PLAN



AT 2x NAILER WHERE NOTED ON PLAN

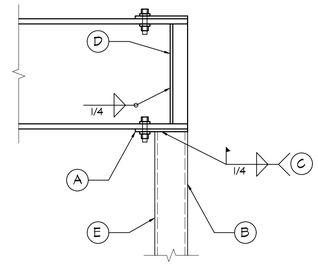


AT 4x NAILER, TYP UNO

NAILERS ON STEEL BEAMS | 4

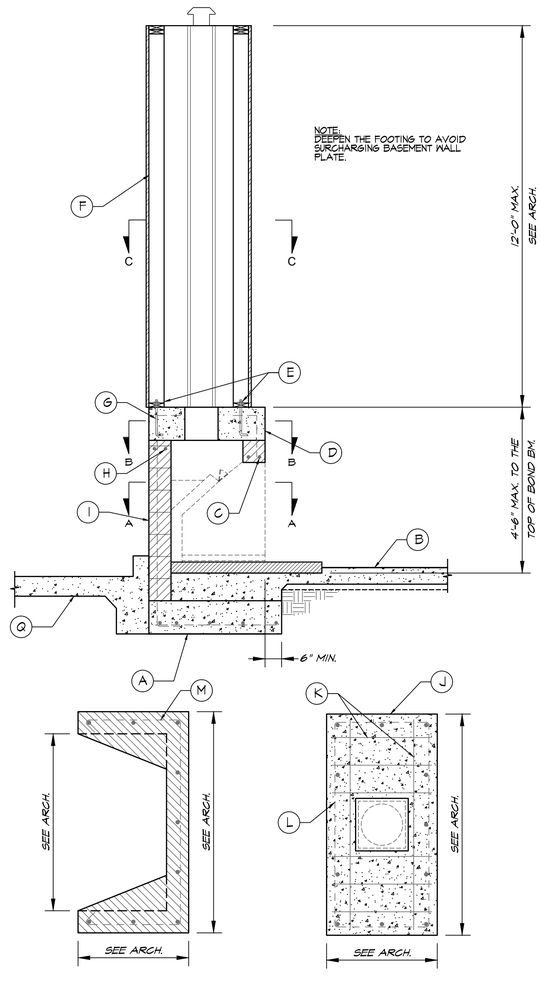
A. PL1/2 W/ (2) 7/8"ϕ HSB.
B. COLUMN BELOW AS OCCURS, SEE PLAN.
C. WHERE BEAM IS TO NARROW TO FIT BOLTS, EXTEND BASEPLATE 1" PAST BEAM FLANGES AND WELD.
D. PL3/8 EACH SIDE.
E. SEE PLAN FOR COL SIZE, SHAPE AND ORIENTATION.

NOTE:
PERP BEAM NOT SHOWN FOR CLARITY. INCREASE FULL HT STIFF PLATE THICKNESS AND WELD WHERE REQ'D BY SCHEDULE.



BEAM END

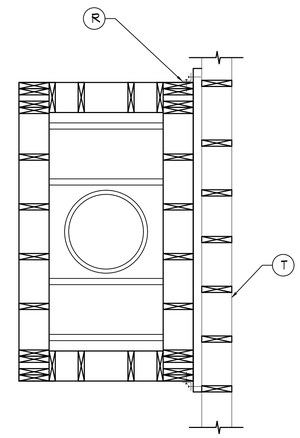
STEEL BEAM AT COLUMN | 1



SECT. A-A

SECT. B-B

A. FOOTING PER PLAN
B. CONCRETE SLAB PER PLAN
C. 2-#4 CONT
D. 12" THICK CONCRETE BOND BEAM W/ #5 AT 9" O.C. EACH WAY.
E. 5/8"ϕ AB AT 16" O.C. W/ SQ. WASHER AND SIMPSON PHD2 HOLDOWN AT EACH CORNER
F. WOOD FRAMED CHIMNEY W/ PANEL 1" PLYWOOD PER SHEAR PANEL SCHEDULE
G. EXTEND VERT BARS 8" MIN INTO CONCRETE BOND BEAM FROM CMU W/ 4" BEND
H. 2-#4 CONT AT TOP W/ #3 TIES AT 12" O.C.
I. 8" THICK CMU SOLID GROUT W/ #4 AT 16" O.C. (VERT) AND #4 AT 24"O.C. (HORIZ)
J. 12" THICK CONCRETE BOND BEAM.
K. #5 AT MID HEIGHT OF BOND BEAM
L. (1) #4 AT TOP AND BOT
M. #4 TIES @ 24" O.C.
N.
Q. FOUNDATION PER PLAN.
R. (2)-A35 @ EACH LEDGER
T. 2x12 LEDGER @ 4'-0" O.C. W/ (3)-1/2"ϕ LAG SCREW @ 4" O.C. x 4" PENETRATE TO EACH STUDS



SECT. C-C

FIREPLACE FRAMING DETAIL | 3

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

REGISTERED PROFESSIONAL ENGINEER
ALLEN CHUN-TING WU
No. C69385
Exp.06-30-2026
CIVIL
STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel: 949-267-9095

PROJECT NAME:
12 ARROYO
SEQUOIA ROAD
CARMEL, CA 93923

SHEET TITLE
STRUCTURAL DETAILS

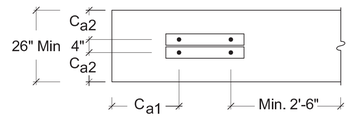
DRAWN	GMEP
CHECKED	GMEP
DATE	12/06/24
SCALE	AS NOTED
JOB NO.	24-656
SHEET	SD-3

BACK TO BACK REINFORCED ANCHORAGE (BB-RA)

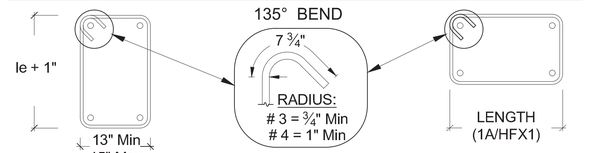
Model	Panel Width (in)	Anchorage [1]	Rod Dia (in)	Rod Grade [2,3]	BB-RA le [4] (in)	BB-RA Ca1 [5] (in)	BB-RA Ca2 [6] (in)	Stirrups [9] (in)	Shear [7] Ties
HFX-9x	9	1-1/8-STD-BB-RA	1-1/8	STD	15	19-3/4	11	8 - # 4	# 3 (min) @ 3-3/4" OC
HFX-12x	12	1-1/8-STD-BB-RA		STD	23			13 - # 4	# 3 (min) @ 4" OC
		1-1/8-HS-BB-RA		HS					
HFX-15x	15	1-1/8-STD-BB-RA		STD		20-5/8		14 - # 4	# 4 (min) @ 4" OC
		1-1/8-HS-BB-RA		HS					
HFX-18x	18	1-1/8-STD-BB-RA		STD				15 - # 4	
		1-1/8-HS-BB-RA		HS					
HFX-21x	21	1-1/8-STD-BB-RA		STD				16 - # 4	
		1-1/8-HS-BB-RA		HS					
HFX-24x	24	1-1/8-STD-BB-RA		STD				18 - # 4	
		1-1/8-HS-BB-RA		HS					

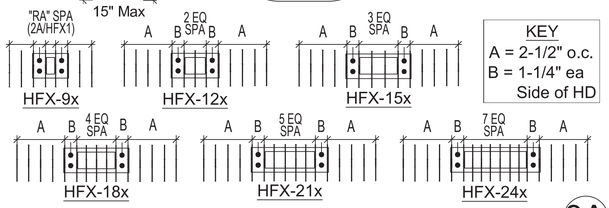
BACK TO BACK REINFORCED ANCHORAGE NOMENCLATURE

1-1/8 - STD - BB - RA
- REINFORCED ANCHORAGE "BACK TO BACK" INSTALLATION
- ROD GRADE
- ROD DIAMETER



3

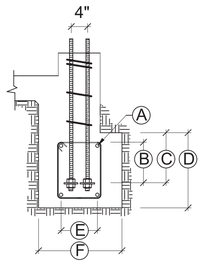




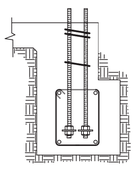
KEY
A = 2-1/2" o.c.
B = 1-1/4" ea Side of HD

BB-RA SHEAR TIES & STIRRUPS

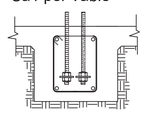
3A



CURB (12" MIN WIDTH)

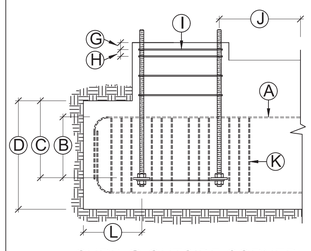


EXTERIOR SLAB

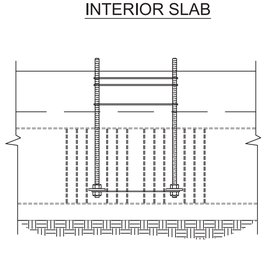


INTERIOR SLAB

A. #4 (Min) Longitudinal Rebar Top and Bottom by EOR
B. le - 3"
C. le per Table
D. le + 7"
E. CL = 10" Min, 12" Max
F. 2'-2" (Min)
G. ±1" From Top of Concrete to CL of Shear Tie
H. 1" CL @ Upper Two Ties
I. Shear Ties per Table
J. 2'-6" (Min) UNO by EOR
K. Stirrups per Table
L. Ca1 per Table



CURB @ OUTSIDE CORNER



CONTINUOUS FOOTING

BB-RA SECTIONS & ELEVATIONS

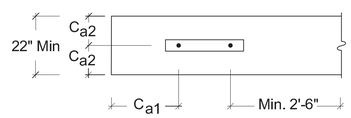
3B

REINFORCED ANCHORAGE (RA)

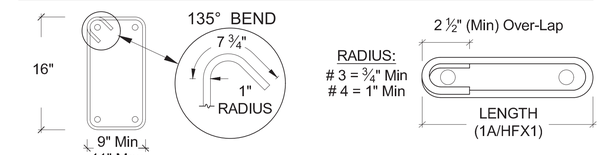
Model	Panel Width (in)	Anchorage [1]	Rod Dia (in)	Rod Grade [2,3]	RA le [4] (in)	RA Ca1 [5] (in)	RA Ca2 [6] (in)	Stirrups [9] (in)	Shear [7] Ties
HFX-9x	9	1-1/8-STD-RA	1-1/8	STD	15	19-3/4	11	8 - # 4	# 3 (min) @ 3-3/4" OC
HFX-12x	12	1-1/8-STD-RA		STD				9 - # 4	# 3 (min) @ 4" OC
		1-1/8-HS-RA		HS					
HFX-15x	15	1-1/8-STD-RA		STD		20-5/8		10 - # 4	
		1-1/8-HS-RA		HS					
HFX-18x	18	1-1/8-STD-RA		STD					
		1-1/8-HS-RA		HS					
HFX-21x	21	1-1/8-STD-RA		STD				11 - # 4	# 4 (min) @ 4" OC
		1-1/8-HS-RA		HS					
HFX-24x	24	1-1/8-STD-RA		STD				12 - # 4	
		1-1/8-HS-RA		HS					

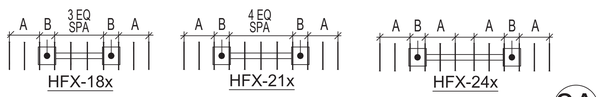
REINFORCED ANCHORAGE NOMENCLATURE

1-1/8 - STD - RA
- REINFORCED ANCHORAGE
- ROD GRADE
- ROD DIAMETER



2

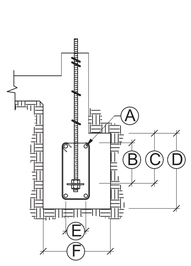




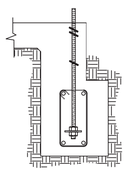
KEY
A = 3" o.c.
B = 1-1/2" ea Side of HD

RA SHEAR TIES & STIRRUPS

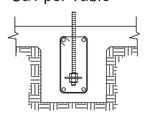
2A



CURB (6" MIN) WIDTH

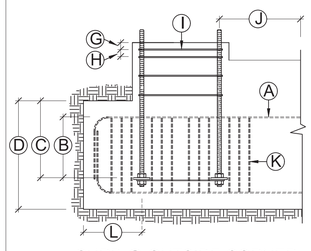


EXTERIOR SLAB

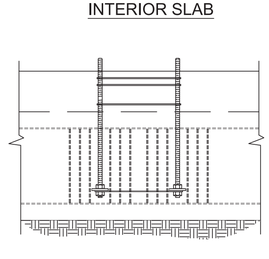


INTERIOR SLAB

A. #4 (Min) Longitudinal Rebar Top and Bottom by EOR
B. 12" Min
C. 15" Min
D. 22" Min
E. CL = 6" Min, 8" Max
F. 1'-10" (Min)
G. ±1" From Top of Concrete to CL of Shear Tie
H. 1" CL @ Upper Two Ties
I. Shear Ties per Table
J. 2'-6" Min UNO by EOR
K. Stirrups per Table
L. Ca1 per Table



CURB @ OUTSIDE CORNER



CONTINUOUS FOOTING

RA SECTIONS & ELEVATIONS

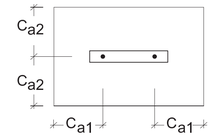
2B

UNREINFORCED ANCHORAGE (UA)

Model	Panel Height	Anchorage [1]	Rod Dia (in)	Rod Grade [2,3]	UA le [4] (in)	UA Ca1 [5] & Ca2 [6] (in)	Shear [7,8] Ties
HFX-9x	79.5" - 8'	1-1/8-STD-13-19	1-1/8	STD	13	19	1 - # 3
HFX-12x	78" - 10'	1-1/8-HS-20-30		HS	20	30	
HFX-15x, 18x	78" - 13'	1-1/8-STD-14-20		STD	14	20	
HFX-15x, 18x Balloon	14' - 20'	1-1/8-HS-20-30		HS	20	30	
HFX-21x, 24x	78" - 13'	1-1/8-STD-14-20		STD	14	20	
		1-1/8-HS-23-34			23	34	2 - # 3
HFX-21x, 24x Balloon	14' - 20'	1-1/8-HS-20-30		HS	20	30	

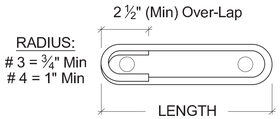
UNREINFORCED ANCHORAGE NOMENCLATURE

1-1/8 - STD - 14 - 20
- END & EDGE DISTANCE (C_{a1} & C_{a2})
- EMBEDMENT DEPTH (l_e)
- ROD GRADE
- ROD DIAMETER



1

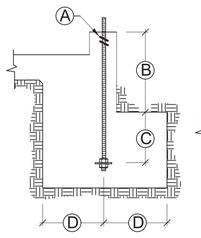




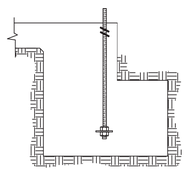
SHEAR TIES	NOT REQUIRED WHEN	
Model	End Distance ≥	Edge Distance ≥
HFX-9x	2-3/8"	2-3/8"
HFX-12x	6-1/4"	3-1/2"
HFX-15x	7-3/8"	4-1/4"
HFX-18x	8-3/8"	5"
HFX-21x	9-3/8"	5-1/2"
HFX-24x	10-3/8"	6"

UA SHEAR TIES

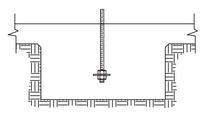
1A



CURB (6" MIN) WIDTH

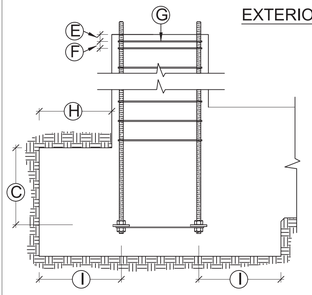


EXTERIOR SLAB

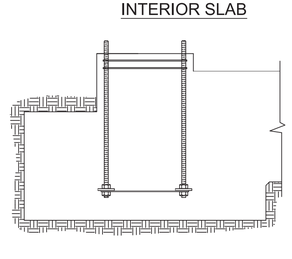


INTERIOR SLAB

A. Shear Ties per UA Table
B. 10" Max or per Plans
C. le per Table
D. Ca2 per Table
E. ±1" from Top of Concrete to CL of Shear Tie
F. 1" CL @ Upper Two Ties
G. Shear Ties per RA Table when Top of Concrete is ≥ 8" above Top of Slab
H. 12" Min
I. Ca1 per Table



STEM WALL @ OUTSIDE CORNER



CURB @ OUTSIDE CORNER

UA SECTIONS & ELEVATIONS

1B

1. DESIGNS ARE TO RESIST LOADING PER ACI 318-14, SEC 17.2.3.4.3.
2. STD INDICATES ANCHORS COMPLYING WITH ASTM F1554 GRADE 36 WITH A HARDY FRAME BOLT BRACE (HFXBB) INSTALLED WITH STD OR GRADE 8 DOUBLE NUTS ON THE EMBED END.
3. HS INDICATES ANCHORS COMPLYING WITH ASTM A193 GRADE B7 WITH A 1/2"x3"x3"(MIN) HFPW PLATE WASHER INSTALLED WITH DOUBLE NUTS ON THE EMBED END (HFXBB NOT REQUIRED).
4. LE = LENGTH OF EMBEDMENT FROM THE TOP OF FOOTING OR GRADE BEAM TO THE TOP OF THE HFXBB BOLT BRACE (TOP OF THE EMBEDDED HFPW PLATE WASHER @ HS ANCHORS)
5. CA1 = DISTANCE FROM HD CENTERLINE TO THE END OF THE FOOTING OR GRADE BEAM.
6. CA2 = DISTANCE FROM HD CENTERLINE TO BOTH THE FRONT AND THE BACK FACE OF THE FOOTING OR GRADE BEAM.
7. SHEAR TIES ARE GRADE 60 (MIN) REBAR AND REQUIRED FOR NEAR EDGE DISTANCE CONDITIONS PER ACI-318-14, F'C = 2,500 PSI. CURBS AND STEM WALLS MUST BE 6 INCH (MIN) WIDTH FOR UA AND RA, 12 INCH (MIN) WIDTH FOR BB-RA.
8. FOR UA APPLICATIONS, ADDITIONAL TIES MAY BE REQUIRED AT STEM WALLS. SHEAR TIES ARE NOT REQUIRED FOR INSTALLATION AWAY FROM EDGE (SEE DETAIL 1A), INSTALLATION ON WOOD FRAMING, OR FOR IRC BRACED WALL PANEL APPLICATIONS.
9. STIRRUPS ARE GRADE 60 (MIN) REBAR. SEE TABLE FOR SIZE AND SPACING. SEE "STIRRUP LAYOUT" DIAGRAMS AND "KEY" FOR LAYOUT PATTERNS.
10. CONCRETE EDGE DISTANCES MUST COMPLY WITH ACI 318-14, SECTION 17.7.2. COATED REINFORCEMENT MAY BE SPECIFIED BY THE EOR TO LIMIT EXPOSURE AND THEREFORE REDUCE MINIMUM CONCRETE COVER. COATED REINFORCEMENT MUST COMPLY WITH ACI 318-14, SECTION 20.6.2.



Model	Width	A	B
HFX-9x	9"	1-3/4"	5-1/2"
HFX-12x	12"		8-1/2"
HFX-15x	15"	2-5/8"	9-3/4"
HFX-18x	18"		12-3/4"
HFX-21x	21"		15-3/4"
HFX-24x	24"		18-3/4"

HFX ANCHOR CENTERLINES

A

IMPORTANT!

1. ANCHORAGE IS DESIGNED FOR TENSION AND SHEAR TRANSFER ONLY, FOUNDATION DESIGN PER EOR.
2. REINFORCEMENT SHOWN IS THE MINIMUM REQUIREMENT AND IS NOT INTENDED TO REPLACE REINFORCEMENT DESIGNED BY THE EOR.
3. FOR RA AND BB-RA INSTALLATIONS, THE HFXBB BOLT BRACE MAY BE PLACED ON TOP OF THE STIRRUPS WITH DOUBLE-NUTS INSTALLED AT EMBED END OF STANDARD GRADE ANCHOR RODS. (NOTE: ½" x 3" x 3" MIN. HFPW PLATE WASHERS ARE REQUIRED TO BE DOUBLE-NUTTED AT EMBED END OF HIGH STRENGTH ANCHOR RODS.)
4. HIGH STRENGTH ALL-THREAD RODS PROVIDED BY HARDY FRAMES ARE STAMPED ON BOTH ENDS. HF B7

IMPORTANT NOTES

B

REVISIONS	DATE

ANCHORAGE DETAILS - HFX PANELS

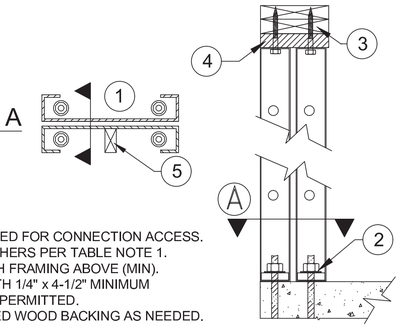
THIS DETAIL SHEET IS NOT PROPRIETARY AND IS NOT REQUIRED FOR PLAN SUBMITTAL WITH *HARDY FRAME* PRODUCTS

HARDY FRAME®
SHEAR WALL SYSTEM
1732 PALMA DRIVE, SUITE 200, VENTURA, CA 93003
TELEPHONE: 800 754-3030 / www.hardyframe.com

MiTek®

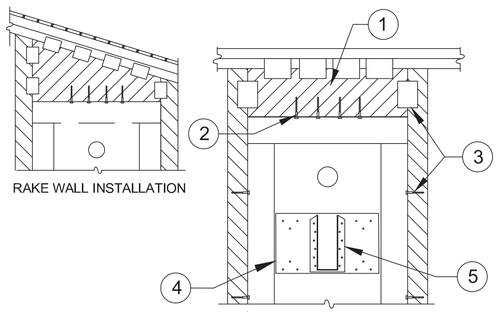
DATE: 1-1-2020

HFX1



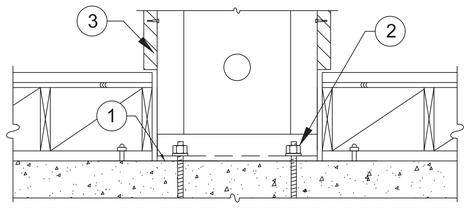
1. CAVITY ORIENTED FOR CONNECTION ACCESS.
2. NUTS AND WASHERS PER TABLE NOTE 1.
3. NOMINAL 8 INCH FRAMING ABOVE (MIN).
4. A 2x FILLER WITH 1/4" x 4-1/2" MINIMUM WS SCREWS IS PERMITTED.
5. FIELD INSTALLED WOOD BACKING AS NEEDED.

BACK TO BACK INSTALLATION 3



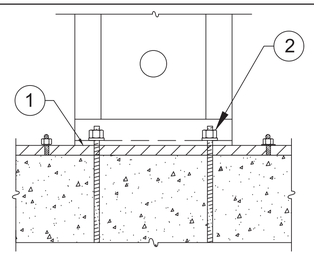
1. WOOD FILLER WITH USP MP4F CONNECTORS BOTH SIDES, QUANTITY BY BUILDING DESIGN PROFESSIONAL.
2. 1/4" x 3" (MINIMUM) WS SCREWS, QUANTITY PER TABLES
3. ADJACENT FRAMING WITH 1/4" DIAMETER SCREWS INSTALLED THROUGH PRE-PUNCHED HOLES IN PANEL EDGES REQUIRED WHEN INSTALLING A FILLER GREATER THAN 1-1/2" ABOVE TO BRACE OUT-OF-PLANE HINGE OR WHEN SPECIFIED BY THE DESIGN PROFESSIONAL.
4. PRE-DRILL 3/16" DIA. HOLES, EVENLY SPACED IN FACE OF PANEL NO LESS THAN 2-1/4" OC AND INSTALL 1/4" DIA. WOOD SCREWS INTO 2x (MIN.) WOOD "LEDGER" IN PANEL CAVITY.
5. CONNECTOR AND ATTACHMENT BY BUILDING DESIGN PROFESSIONAL.

FILLER GREATER THAN 1-1/2 IN. 6



1. 15# FELT OR EQUIVALENT MOISTURE BARRIER RECOMMENDED BETWEEN PANEL BASE AND CONCRETE.
2. NUTS AND WASHERS PER TABLE NOTE 1.
3. ADJACENT FRAMING WITH 1/4" DIAMETER SCREWS INSTALLED AT THE PANEL EDGES WHEN INSTALLING A FILLER GREATER THAN 1-1/2" ABOVE OR WHEN SPECIFIED BY DESIGN PROFESSIONAL.

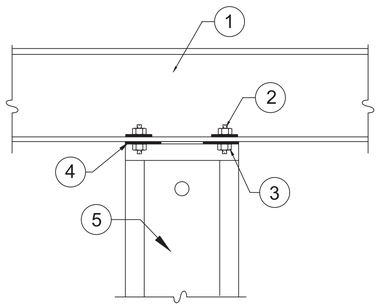
RAISED FLOOR HEAD-OUT 8



ALLOWABLE VALUES ON 2x PLATE ARE LESS THAN INSTALLATION ON CONCRETE

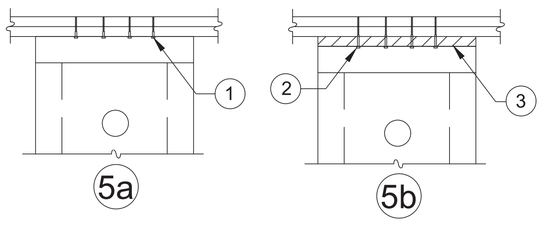
1. 15# FELT OR EQUIVALENT MOISTURE BARRIER RECOMMENDED BETWEEN PANEL BASE AND TREATED PLATE.
2. NUTS AND WASHERS PER TABLE NOTE 1.

INSTALLATION ON 2x PLATE 11



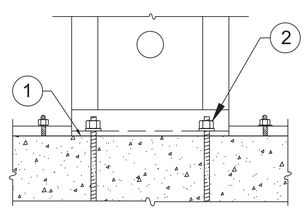
1. STEEL BEAM PER PLANS
2. ALL THREAD RODS THRU-BOLTED TO STEEL BEAM BY BUILDING DESIGN PROFESSIONAL.
3. NUTS AND WASHERS PER TABLE NOTE 1.
4. *HARDY FRAME*® STACKING WASHERS (HFSW) REQUIRED TO BE WELDED INSIDE TOP CHANNEL OF LOWER PANEL.
5. *HARDY FRAME*® "STK" PANEL WITH STACKING WASHERS WELDED INSIDE THE TOP CHANNEL BY MANUFACTURER.

STEEL BEAM ABOVE THRU-BOLT 2



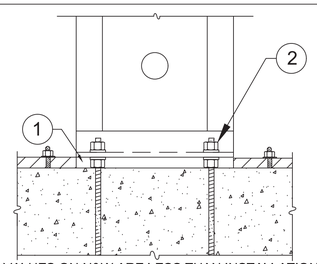
1. 1/4" x 3" (MINIMUM) WS SCREWS, QUANTITY PER TABLES
2. 1/4" x 4-1/2" (MINIMUM) WS SCREWS, QUANTITY PER TABLES
3. 2x WOOD FILLER.

TOP PLATE CONNECTIONS 5



1. 15# FELT OR EQUIVALENT MOISTURE BARRIER RECOMMENDED BETWEEN PANEL BASE AND CONCRETE.
2. NUTS AND WASHERS PER TABLE NOTE 1.

INSTALLATION ON CONCRETE 7

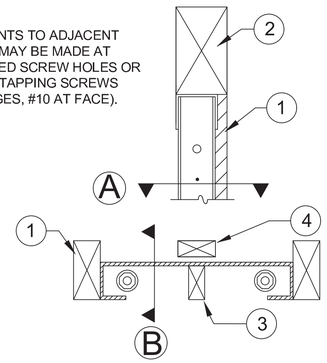


ALLOWABLE VALUES ON N&W ARE LESS THAN INSTALLATION ON CONCRETE

1. PLUS OR MINUS 1-1/2" GAP TO BE FILLED WITH 5,000 PSI NON-SHRINK GROUT (MINIMUM).
2. NUT AND WASHER GRADES PER TABLE NOTE 1.

INSTALLATION ON N&W WASHERS 10

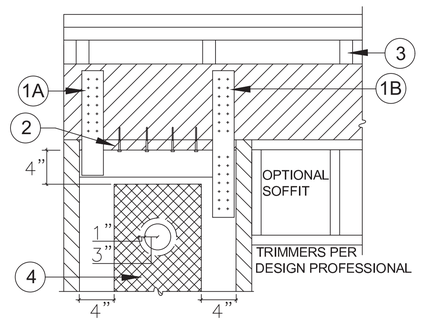
NOTE:
ATTACHMENTS TO ADJACENT TRIMMERS MAY BE MADE AT PREPUNCHED SCREW HOLES OR WITH SELF TAPPING SCREWS (#12 AT EDGES, #10 AT FACE).



1. TRIMMERS PROVIDE FULL BEARING FOR HEADER ABOVE, DESIGN AND CONNECTIONS BY BUILDING DESIGN PROFESSIONAL.
2. 6x HEADER.
3. WOOD MEMBERS FOR BACKING MAY BE INSERTED VERTICALLY OR HORIZONTALLY IN THE PANEL CAVITY AS NEEDED.
4. WOOD MEMBER FLUSH TO FACE OF WALL FOR BACKING AS NEEDED.

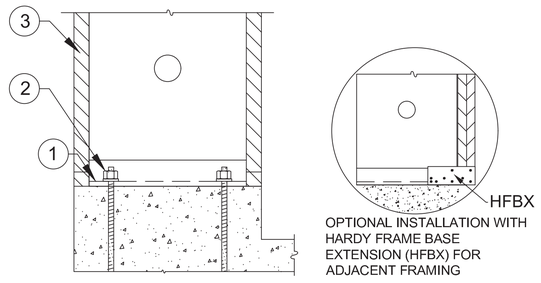
6x HEADER ABOVE-SECTIONS 1

NOTE:
TO PREVENT DRILLING ADDITIONAL HOLES ORIENT THE PANEL CAVITY TOWARD THE FIXTURE BEING INSTALLED.



1. (A) PRE-WELDED STRAPS ARE PROVIDED ON 78" AND 79-1/2" PANEL HEIGHTS. THEY ARE AVAILABLE FOR OTHER HEIGHTS UPON REQUEST.
   (B) FIELD INSTALLED STRAPS WITH SELF TAPPING SCREWS ARE PERMITTED. THE DESIGN AND CONNECTION IS BY THE DESIGN PROFESSIONAL.
2. A 2x WOOD FILLER WITH 1/4"x4-1/2" (MIN.) WS SCREWS IS PERMITTED.
3. WHEN CRIPPLE STUDS OCCUR, SHEAR TRANSFER DESIGN TO BE PER THE BUILDING DESIGN PROFESSIONAL.
4. A 1" DIA. HOLE MAY BE ADDED IN THE PANEL FACE WHEN IT IS LOCATED IN THE UPPER HALF OF THE PANEL HEIGHT AND IS 4" MINIMUM FROM ANY EDGE. FOR PANELS MORE THAN 12" WIDE, ADDITIONAL HOLES MUST BE OFFSET 1" MINIMUM FROM THE 3" DIA. PREPUNCHED HOLE. FOR HOLES LARGER THAN 1" DIAMETER OR TO ADD MORE THAN ONE HOLE CONTACT MITEK HARDY FRAME TECHNICAL SUPPORT AT (800) 754-3030.

TOP CONNECTION TO HEADER 4



1. 15# FELT OR EQUIVALENT MOISTURE BARRIER RECOMMENDED BETWEEN PANEL BASE AND CONCRETE.
2. NUTS AND WASHERS PER TABLE NOTE 1.
3. ADJACENT FRAMING OPTIONAL U.N.O. BY BUILDING DESIGN PROFESSIONAL.

INSTALLATION ON CURB 9

HFX PANELS 78 IN. THROUGH NOMINAL 13 FEET

Model Number	Net Height (in)	Depth (in)	Hold Down Diameter[1] (in)	Top Screw Qty[2] (ea)	Screw Qty Available at Edges (ea)[3]
HFX-12,15,18,21 & 24x78	78	3-1/2	1-1/8	9" Width = 5 12" Width = 6 15" Width = 8	4
HFX-9x79.5	79-1/2				
HFX-12,15,18,21 & 24x8	92-1/4				
HFX-9x8	93-3/4				
HFX-12,15,18,21 & 24x9	104-1/4				
HFX-12,15,18,21 & 24x10	116-1/4			18" Width = 10	5
HFX-15,18,21 & 24x11	128-1/4			21" Width = 12	
HFX-15,18,21 & 24x12	140-1/4			24" Width = 14	6
HFX-15,18,21 & 24x13	152-1/4				

BALLOON PANELS 14 FEET THROUGH 20 FEET

Model Number	Net Height (in)	Depth (in)	Hold Down Diameter[1] (in)	Top Screw Qty[2] (ea)	Screw Qty Available at Edges (ea)[3]
HFX-15,18,21 & 24x14	164-1/4	3-1/2	1-1/8	15" Width = 8 18" Width = 10 21" Width = 12 24" Width = 14	6 7 8
HFX-15,18,21 & 24x15	176-1/4				
HFX-15,18,21 & 24x16	188-1/4				
HFX-15,18,21 & 24x17	200-1/4				
HFX-15,18,21 & 24x18	212-1/4				
HFX-15,18,21 & 24x19	224-1/4				
HFX-15,18,21 & 24x20	236-1/4				

TABLE NOTES

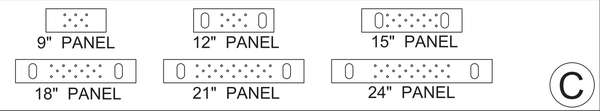
1. FOR STD OR HS GRADE HOLD DOWN ANCHOR BOLTS CONNECT TO THE PANEL BASE WITH HARDENED ROUND WASHERS BELOW GRADE 8 NUTS. ALTERNATE WASHERS ARE (2 EA) ROUND-FLAT OR (2 EA) SAE WASHERS ON EACH BOLT. ALTERNATE NUTS ARE 2H HEAVY HEX.
2. 1/4" DIAMETER MITEK®PRO SERIES™ WS SCREWS. LENGTH IS 3" (MINIMUM) WHEN ATTACHED DIRECTLY TO THE COLLECTOR AND 4-1/2" (MINIMUM) WHEN INSTALLING A 2x FILLER ABOVE THE PANEL.
3. ADJACENT FRAMING WITH 1/4" DIAMETER SCREWS IS REQUIRED AT THE PANEL EDGES WHEN INSTALLING A FILLER ABOVE THE TOP CHANNEL THAT IS GREATER THAN 1-1/2" OR WHEN SPECIFIED BY THE DESIGN PROFESSIONAL.

A

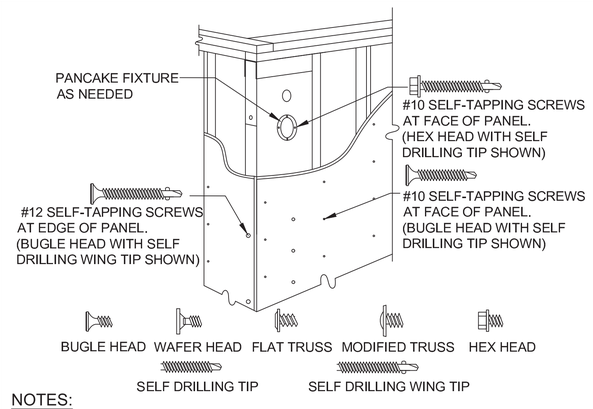
INSTALLATION INSTRUCTIONS

1. WHEN INSTALLING ON CONCRETE CONNECT WITH (1 EA) HARDENED ROUND WASHER BELOW (1 EA) GRADE 8 NUT, SECURE WITH A DEEP SOCKET (RECOMMENDED) UNTIL SNUG TIGHT. ALTERNATE WASHERS AND NUTS ARE PROVIDED IN TABLE NOTE 1.
2. INSTALLATION ON CONCRETE PROVIDES THE HIGHEST ALLOWABLE VALUES. CONFIRM WITH THE DESIGN PROFESSIONAL BEFORE INSTALLING ON OTHER SUPPORTING SURFACES.
3. USE 1/4"X4-1/2" MITEK PRO SERIES WS SCREWS AT TOP CONNECTIONS WITH A 2x FILLER. IF THE TOP OF PANEL IS IN DIRECT CONTACT WITH THE COLLECTOR ABOVE (TOP PLATES, HEADER, BEAM, ETC.) USE1/4 x 3" (MIN)
4. FOR INSTALLATIONS WITH A FILLER GREATER THAN 1-1/2" ABOVE, OR WHEN SPECIFIED BY THE DESIGN PROFESSIONAL, ADJACENT KING POSTS TO BRACE THE OUT-OF-PLANE HINGE CAN BE CONNECTED WITH 1/4" DIA. SCREWS THROUGH PRE-PUNCHED HOLES AT THE PANEL EDGES.

B



C



NOTES:

A. SURFACE FINISHES, CONNECTORS AND FIXTURES ARE ATTACHED TO THE PANEL FACE WITH # 10 SELF-TAPPING SCREWS SPACED NO LESS THAN 2-1/4" OC.
B. ATTACHMENTS TO THE PANEL EDGES ARE MADE WITH # 12 SELF-TAPPING SCREWS.
C. STRUCTURAL CONNECTIONS ARE TO BE DESIGNED BY THE DESIGN PROFESSIONAL.
D. STRUCTURAL HARDWARE USED TO TRANSFER LOADS SHOULD NOT EXCEED 12 GAUGE.

D

REVISIONS	DATE

FRAMING DETAILS - HFX PANELS

THIS DETAIL SHEET IS NOT PROPRIETARY AND IS NOT REQUIRED FOR PLAN SUBMITTAL WITH MITEK® *HARDY FRAME*® PRODUCTS

HARDY FRAME®
SHEAR WALL SYSTEM
1732 PALMA DRIVE, SUITE 200, VENTURA, CA 93003
TELEPHONE: 800 754-3030 / www.hardyframe.com

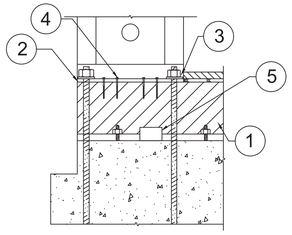
MiTek®

DATE:
1-1-2020

HFX2

NOTES:

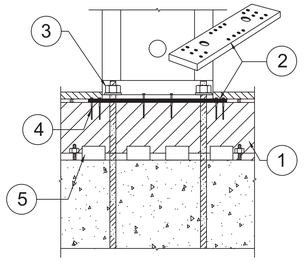
A. INSTALLATION WITHOUT *HARDY FRAME*® BEARING PLATE (HFXBP) MAY INCREASE DEFLECTION AND RESULT IN A DECREASE OF ALLOWABLE SHEAR VALUE, BUILDING DESIGN PROFESSIONAL MUST ANALYZE EFFECTS
B. COUPLERS MAY BE USED WHEN THREADED ROD IS SUBJECT TO TENSION LOADS ONLY.



1. 4x (MIN) RIM, ALLOWABLE VALUE TABLES ASSUME ENGINEERED WOOD PRODUCT.
2. NOTCH FLOOR SHEATHING THEN INSTALL *HARDY FRAME*® PANEL DIRECTLY ON RIM.
3. NUTS AND WASHERS PER TABLE NOTE 1.
4. 1/4" x 4-1/2" (MINIMUM) WS SCREWS THROUGH BOTTOM OF PANEL MINIMUM QUANTITY PER TABLE.
5. USP MP4F CONNECTORS, QUANTITY BY BUILDING DESIGN PROFESSIONAL.

RAISED-OS CORNER 4

NOTE:
COUPLERS MAY BE USED WHEN THREADED ROD IS SUBJECT TO TENSION LOADS ONLY.

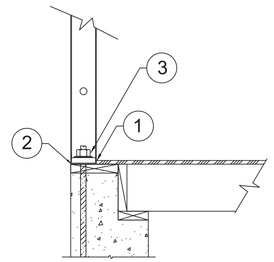


1. 4x (MIN) RIM, ALLOWABLE VALUE TABLES ASSUME ENGINEERED WOOD PRODUCT.
2. NOTCH FLOOR SHEATHING THEN INSTALL *HARDY FRAME*® BEARING PLATE (HFXBP) AND PANEL PER INSTALLATION NOTES 3-6, DETAIL B/HFX3.
3. NUTS AND WASHERS PER TABLE NOTE 1.
4. 1/4" x 4-1/2" (MIN) WS SCREWS, QUANTITY PER TABLE.
5. USP MP4F CONNECTORS, QUANTITY BY BUILDING DESIGN PROFESSIONAL.

RAISED BEARING PLATE 3

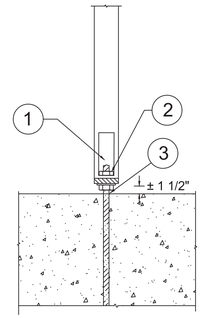
NOTES:

A. CHECK WALL HEIGHT, *HARDY FRAME*® BEARING PLATES BELOW THE PANEL BASE OR CUSTOM HEIGHT PANELS ARE AVAILABLE TO AVOID FILLERS GREATER THAN 1-1/2".
B. FOR MAXIMUM ALLOWABLE VALUES INSTALL PANEL ON CONCRETE



1. FLOOR SHEATHING NOTCHED, INSTALL PANEL ON WOOD PLATE.
2. 15# FELT OR EQUIVALENT RECOMMENDED BETWEEN PANEL BASE AND TREATED MUDSILL.
3. NUTS AND WASHERS PER TABLE NOTE 1.

RAISED STEM WALL 2



1. ACCESS HOLE LOCATED AT EDGE OF POST.
2. NUTS AND WASHERS PER TABLE NOTE 1.
3. PLUS OR MINUS 1-1/2" GAP TO BE FILLED WITH 5,000 PSI STRENGTH NON-SHRINK GROUT (MIN).

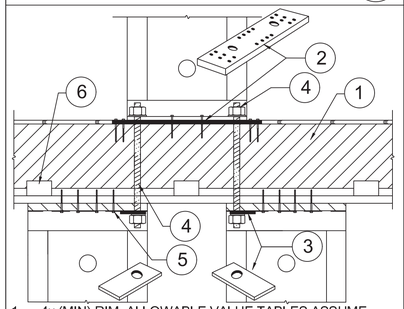
POST ON N&W 1

Model Number	Net Height (in)	Depth (in)	Hold Down Diameter[1] (in)	Screw Quantity			Screw Qty[4] Available at Edges (ea)
				Panel	Top[2] (ea)	Bott[3] (ea)	
HFX-12,15,18,21 & 24x8	92-1/4	3-1/2	1-1/8	12" Width	6	6	4
HFX-12,15,18,21 & 24x9	104-1/4			15" Width	8	8	
HFX-12,15,18,21 & 24x10	116-1/4			18" Width	10	10	5
HFX-15,18,21 & 24x11	128-1/4			21" Width	12	12	
HFX-15,18,21 & 24x12	140-1/4			24" Width	14	14	6
HFX-15,18,21 & 24x13	152-1/4						

NOTE: *HARDY FRAME*® STACKING WASHERS (HFSW) ARE REQUIRED IN THE TOP OF PANELS WHEN CONNECTING TO TENSION ANCHORS FROM ABOVE. *HARDY FRAME*® "STK PANELS" INCLUDE HFSW WASHERS PRE-WELDED IN THE TOP CHANNEL.

1. HOLD DOWN TENSION ANCHORS SPECIFIED AS STANDARD GRADE (STD) MUST COMPLY WITH ASTM F1554 GRADE 36 (OR EQUAL). HOLD DOWN TENSION ANCHORS SPECIFIED AS HIGH STRENGTH (HS) MUST COMPLY WITH ASTM A 193 GRADE B7 (OR EQUAL). TENSION ANCHORS (BOTH GRADES) CONNECT TO THE UPPER AND LOWER PANELS WITH HARDENED ROUND WASHERS AND GRADE 8 NUTS. A *HARDY FRAME*®"HFSW" STACKING WASHER IS REQUIRED IN THE TOP CHANNEL OF THE LOWER PANEL (AVAILABLE PRE-WELDED IN A *HARDY FRAME*®"STK" PANEL). ALTERNATE WASHERS ARE (2 EA) ROUND-FLAT OR (2 EA) SAE WASHERS AT EACH ANCHOR CONNECTION. ALTERNATE NUTS ARE 2H HEAVY HEX.
2. 1/4" DIAMETER MITEK®PRO SERIES™ WS SCREWS. LENGTH IS 3" (MINIMUM) WHEN ATTACHING DIRECTLY TO THE COLLECTOR AND 4-1/2" (MINIMUM) WHEN INSTALLING A 2x FILLER ABOVE THE PANEL.
3. 1/4" DIAMETER MITEK®PRO SERIES™ WS SCREWS. LENGTH IS 4-1/2" (MINIMUM) AT CONNECTIONS TO FLOOR SYSTEMS AND BEAMS BELOW.
4. 1/4" DIAMETER SCREWS ARE REQUIRED AT THE EDGES WHEN INSTALLING A FILLER GREATER THAN 1-1/2 INCH ABOVE OR WHEN SPECIFIED BY THE DESIGN PROFESSIONAL.

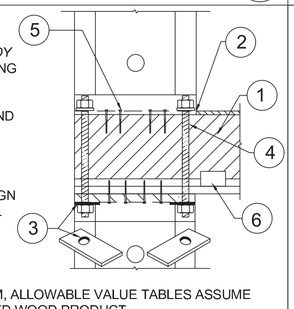
A



1. 4x (MIN) RIM, ALLOWABLE VALUE TABLES ASSUME ENGINEERED WOOD PRODUCT.
2. NOTCH FLOOR SHEATHING THEN INSTALL *HARDY FRAME*® BEARING PLATE (HFXBP) AND PANEL PER INSTALLATION NOTES 3-6, DETAIL B/HFX3.
3. *HARDY FRAME*® STACKING WASHER (HFSW) AT TOP OF PANEL REQUIRED WHEN CONNECTING TO TENSION ANCHOR FROM ABOVE.
4. 1-1/8 IN. DIA HOLD DOWN, HFSW AND N&W PER TABLE NOTE 1 ARE PROVIDED IN *HARDY FRAME*® HFTC KIT.
5. 1/4" x 4-1/2" (MIN) WS SCREWS, QUANTITY PER TABLE.
6. USP MP4F CONNECTORS, QUANTITY BY BUILDING DESIGN PROFESSIONAL.

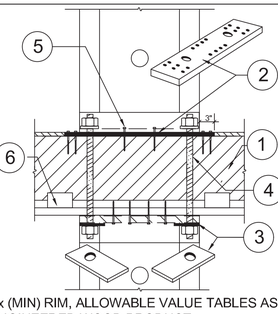
PYRAMID STACK 8

NOTE:
INSTALLATION WITHOUT *HARDY FRAME*® BEARING PLATE (HFXBP) MAY INCREASE DEFLECTION AND RESULT IN A DECREASE OF ALLOWABLE SHEAR VALUE, BUILDING DESIGN PROFESSIONAL MUST ANALYZE EFFECTS.



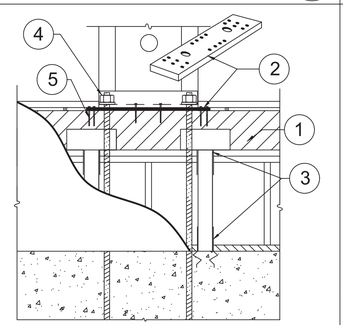
1. 4x (MIN) RIM, ALLOWABLE VALUE TABLES ASSUME ENGINEERED WOOD PRODUCT.
2. NOTCH FLOOR SHEATHING THEN INSTALL *HARDY FRAME*® PANEL DIRECTLY ON RIM.
3. *HARDY FRAME*® STACKING WASHER (HFSW) AT TOP OF PANEL REQUIRED WHEN CONNECTING TO TENSION ANCHOR FROM ABOVE.
4. 1-1/8" DIA. HOLD DOWN, HFSW AND N&W PER TABLE NOTE 1 ARE PROVIDED IN *HARDY FRAME*® HFTC KIT.
5. 1/4" x 4-1/2" (MIN) WS SCREWS, QUANTITY PER TABLE.
6. USP MP4F CONNECTORS, QUANTITY BY BUILDING DESIGN PROFESSIONAL.

STACK @ OS CORNER 7



1. 4x (MIN) RIM, ALLOWABLE VALUE TABLES ASSUME ENGINEERED WOOD PRODUCT.
2. NOTCH FLOOR SHEATHING THEN INSTALL *HARDY FRAME*® BEARING PLATE (HFXBP) AND PANEL PER INSTALLATION NOTES 3-6, DETAIL B/HFX3.
3. *HARDY FRAME*® STACKING WASHER (HFSW) AT TOP OF PANEL REQUIRED WHEN CONNECTING TO TENSION ANCHOR FROM ABOVE.
4. 1-1/8" DIA. HOLD DOWN, HFSW AND N&W PER TABLE NOTE 1 ARE PROVIDED IN *HARDY FRAME*® HFTC KIT.
5. 1/4" x 4-1/2" (MIN) WS SCREWS, QUANTITY PER TABLE.
6. USP MP4F CONNECTORS, QUANTITY BY BUILDING DESIGN PROFESSIONAL.

STRAIGHT STACK 6



1. 4x (MIN) RIM, ALLOWABLE VALUE TABLES ASSUME ENGINEERED WOOD PRODUCT.
2. NOTCH FLOOR SHEATHING THEN INSTALL *HARDY FRAME*® BEARING PLATE (HFXBP) AND PANEL PER INSTALLATION NOTES 3-6, DETAIL B/HFX3.
3. USP POST CAP AND POST BASE BY THE BUILDING DESIGN PROFESSIONAL.
4. NUTS AND WASHERS PER TABLE NOTE 1.
5. 1/4" x 4-1/2" (MIN) WS SCREWS, QUANTITY PER TABLE.

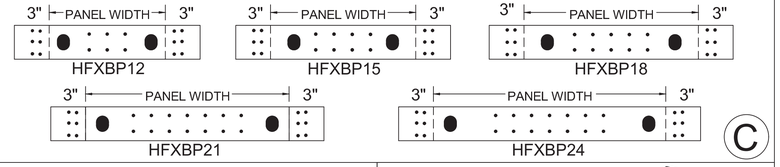
CRIPPLE WALL 5

INSTALLATION ON FLOOR SYSTEMS WITH *HARDY FRAME*® BEARING PLATE (HFXBP)

1. WITH HOLES PRE-DRILLED FOR 1-1/8" DIA.TENSION ANCHORS, INSTALL A SOLID 4x (MINIMUM) RIM IN FLOOR SYSTEM AT PANEL LOCATION. ALLOWABLE VALUE TABLES ASSUME THE RIM IS ENGINEERED WOOD PRODUCT (EWP).
2. NOTCH FLOOR SHEATHING THEN INSTALL HFXBP ON RIM WITH 6 EACH 1/4"X4-1/2" (MIN) "WS" SCREWS AT EACH END.
3. PLACE PANEL ON HFXBP.
4. WHEN STACKING PANELS, INSTALL "HFSW" STACKING WASHERS IN THE TOP CHANNEL OF THE LOWER PANEL. CONNECT LOWER TO UPPER PANELS WITH TENSION ANCHORS (GRADE PER PLANS) AND SECURE AT BOTH ENDS WITH HARDENED ROUND WASHERS AND GRADE 8 NUTS TO BE SNUG TIGHT. *HARDY FRAME* "STK" PANELS THAT INCLUDE "HFSW" STACKING WASHERS PRE-WELDED IN THE TOP CHANNEL ARE AVAILABLE,
5. WHEN MORE THAN 12 SCREWS ARE REQUIRED FOR THE BOTTOM CONNECTION OR JOINTS IN FRAMING MEMBERS OCCUR AT SCREW LOCATIONS, INSTALL ADDITIONAL 1/4"x4-1/2" WS SCREWS THROUGH THE BASE OF PANEL WHERE THEY ALIGN WITH HOLES IN THE HFXBP.
6. FOR STANDARD WALL HEIGHTS, INSTALL A 2x FILLER ABOVE PANEL (DTL 5/HFX2). FOR FILLERS GREATER THAN 1-1/2 IN. SEE DETAIL 6/HFX2.

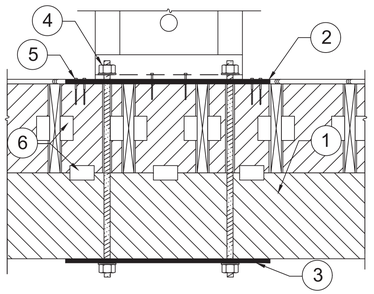
NOTE: INSTALLATIONS MAY VARY WITH JOB SPECIFIC CONDITIONS AND/OR SPECIFICATIONS BY THE BUILDING DESIGN PROFESSIONAL.

B



C

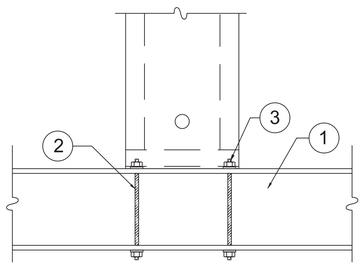
LOAD PATH FROM BEAM TO FOUNDATION AND CHECK THAT PANEL DRIFT IS WITHIN CODE LIMIT BY BUILDING DESIGN PROFESSIONAL.



1. DROP BEAM WITH FLOOR JOIST ABOVE PER PLAN.
2. NOTCH FLOOR SHEATHING THEN INSTALL *HARDY FRAME*® BEARING PLATE (HFXBP) AND PANEL PER INSTALLATION NOTES 3-6, DETAIL B/HFX3.
3. *HARDY FRAME*® BEARING PLATE (HFXBP) OR BEARING PLATE WASHER AT UNDERSIDE OF BEAM SIZED PER BUILDING DESIGN PROFESSIONAL TO LIMIT CRUSHING FROM TENSION ANCHOR FORCES.
4. NUTS AND WASHERS PER TABLE NOTE 1.
5. 1/4" x 4-1/2" (MIN) WS SCREWS, QUANTITY PER TABLE.
6. USP CONNECTORS BY DESIGN PROFESSIONAL

DROP BM - FL SYSTEM 14

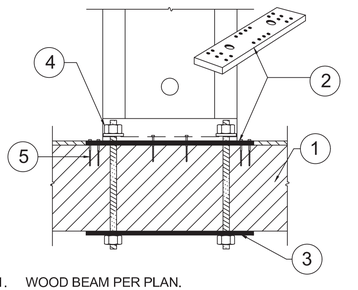
LOAD PATH FROM BEAM TO FOUNDATION AND CHECK THAT PANEL DRIFT IS WITHIN CODE LIMIT BY BUILDING DESIGN PROFESSIONAL.



1. STEEL BEAM PER PLANS
2. HOLD DOWN ALL THREAD RODS THRU-BOLTED TO BOTTOM FLANGE OF STEEL BEAM BY BUILDING DESIGN PROFESSIONAL.
3. NUTS AND WASHERS AT PANEL BASE PER TABLE NOTE 1

STEEL BM THRU-BOLT 13

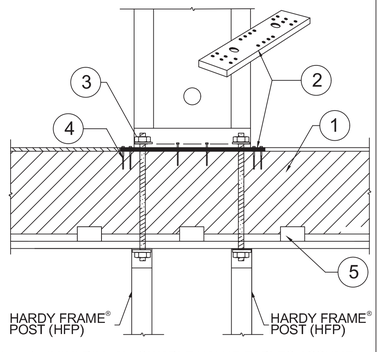
LOAD PATH FROM BEAM TO FOUNDATION AND CHECK THAT PANEL DRIFT IS WITHIN CODE LIMIT BY BUILDING DESIGN PROFESSIONAL.



1. WOOD BEAM PER PLAN.
2. NOTCH FLOOR SHEATHING THEN INSTALL *HARDY FRAME*® BEARING PLATE (HFXBP) AND PANEL PER INSTALLATION NOTES 3-6, DETAIL B/HFX3.
3. *HARDY FRAME*® BEARING PLATE (HFXBP) OR BEARING PLATE WASHER AT UNDERSIDE OF BEAM SIZED PER BUILDING DESIGN PROFESSIONAL TO LIMIT CRUSHING FROM TENSION ANCHOR FORCES.
4. 1-1/8" DIA. HOLD DOWN, HFSW AND N&W PER TABLE NOTE 1 ARE PROVIDED IN *HARDY FRAME*® HFTC KIT.
5. 1/4" x 4-1/2" (MIN) WS SCREWS, QUANTITY PER TABLE.

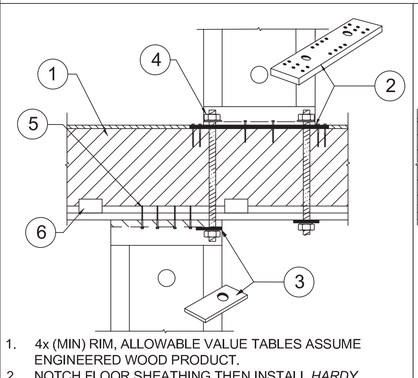
WOOD BM THRU-BOLT 12

LOAD PATH FROM BEAM TO FOUNDATION AND CHECK THAT PANEL DRIFT IS WITHIN CODE LIMIT BY BUILDING DESIGN PROFESSIONAL.



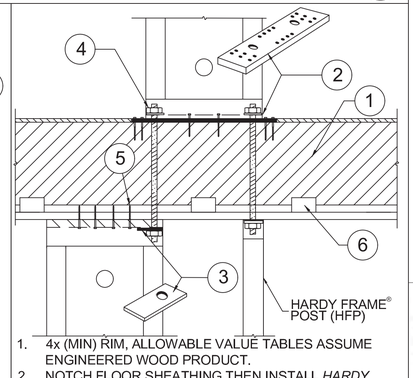
1. 4x (MIN) RIM, ALLOWABLE VALUE TABLES ASSUME ENGINEERED WOOD PRODUCT.
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3. 1-1/8" DIA. HOLD DOWN, HFSW AND N&W PER TABLE NOTE 1 ARE PROVIDED IN *HARDY FRAME*® HFTC KIT.
4. 1/4" x 4-1/2" (MIN) WS SCREWS, QUANTITY PER TABLE.
5. USP MP4F CONNECTORS, QUANTITY BY BUILDING DESIGN PROFESSIONAL.

HFP POSTS BELOW 11



1. 4x (MIN) RIM, ALLOWABLE VALUE TABLES ASSUME ENGINEERED WOOD PRODUCT.
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3. *HARDY FRAME*® STACKING WASHER (HFSW) AT TOP OF PANEL REQUIRED WHEN CONNECTING TO TENSION ANCHOR FROM ABOVE.
4. 1-1/8" DIA. HOLD DOWN, HFSW AND N&W PER TABLE NOTE 1 ARE PROVIDED IN *HARDY FRAME*® HFTC KIT.
5. 1/4" x 4-1/2" (MIN) WS SCREWS, QUANTITY PER TABLE.
6. USP MP4F CONNECTORS, QUANTITY BY BUILDING DESIGN PROFESSIONAL.

STAGGERED THRU-BOLT 10



1. 4x (MIN) RIM, ALLOWABLE VALUE TABLES ASSUME ENGINEERED WOOD PRODUCT.
2. NOTCH FLOOR SHEATHING THEN INSTALL *HARDY FRAME*® BEARING PLATE (HFXBP) AND PANEL PER INSTALLATION NOTES 3-6, DETAIL B/HFX3.
3. *HARDY FRAME*® STACKING WASHER (HFSW) AT TOP OF PANEL REQUIRED WHEN CONNECTING TO TENSION ANCHOR FROM ABOVE.
4. 1-1/8" DIA. HOLD DOWN, HFSW AND N&W PER TABLE NOTE 1 ARE PROVIDED IN *HARDY FRAME*® HFTC KIT.
5. 1/4" x 4-1/2" (MIN) WS SCREWS, QUANTITY PER TABLE.
6. USP MP4F CONNECTORS, QUANTITY BY BUILDING DESIGN PROFESSIONAL.

STAGGERED-HFP POST 9

REVISIONS	DATE

FLOOR SYSTEM DETAILS - HFX PANELS

THIS DETAIL SHEET IS NOT PROPRIETARY AND IS NOT REQUIRED FOR PLAN SUBMITTAL WITH MITEK®*HARDY FRAME*® PRODUCTS

HARDY FRAME®
SHEAR WALL SYSTEM
1732 PALMA DRIVE, SUITE 200, VENTURA, CA 93003
TELEPHONE: 800 754-3030 / www.hardyframe.com

MiTek®

DATE:
1-1-2020

HFX3

ABBREVIATIONS

AC	AIR CONDITIONING UNIT
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AP	ACCESS PANEL
ARCH	ARCHITECTURAL
BDD	BACK DRAFT DAMPER
BFF	BELOW FINISHED FLOOR
BLDG	BUILDING
BTUH	BRITISH THERMAL UNITS PER HOUR
CD	CONDENSATE DRAIN
CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
CP	CONDENSATE PUMP
CU	CONDENSING UNIT
DB	DRY BULB
DS	DUCT SILENCER
ELEC	ELECTRICAL
EF	EXHAUST FAN
(E)	EXISTING
ER	EXHAUST REGISTER
F	DEGREES FAHRENHEIT
FA	FREE AREA
FC	FAN COIL
FD	FIRE DAMPER
FLR	FLOOR
FP	FIRE PUMP
FPM	FEET PER MINUTE
FX	FLEXIBLE CONNECTION
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
HP	HEAT PUMP
HV	HEATING AND VENTILATING UNIT
HX	HEAT EXCHANGER
HZ	HERTZ
ID	INSIDE DIAMETER
LAT	LEAVING AIR TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
LD	LINEAR DIFFUSER
LF	LINEAR FEET
MBH	BTU PER HOUR (X1000)
MC	MECHANICAL CONTRACTOR
MECH	MECHANICAL
MIN	MINIMUM
MUA	MAKE-UP AIR UNIT
(N)	NEW
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NO.	NUMBER
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OAI	OUTSIDE AIR INTAKE
OD	OUTSIDE DIAMETER
PTAC	PACKAGED TERMINAL AIR CONDITIONER
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE INCH GAUGE
RA	RETURN AIR
RAG	RETURN AIR GRILLE
RCP	REFLECTED CEILING PLAN
RHC	REHEAT COIL
RF	RETURN FAN
REQ'D	REQUIRED
RFRG	REFRIGERATOR
RPM	REVOLUTIONS PER MINUTE
RTU	ROOF TOP UNIT
SA	SUPPLY AIR
SCG	SMOKE CONTROL GRILLE
SCH	SCHEDULE
SD	SMOKE DAMPER
SEF	SMOKE EXHAUST FAN
SF	SUPPLY FAN
SP	STATIC PRESSURE
SQ FT	SQUARE FEET
TEMP	TEMPERATURE
TG	TRANSFER GRILLE
THK	THICK
TYP	TYPICAL
U/G	UNDERGROUND
UH	UNIT HEATER
UNO	UNLESS NOTED OTHERWISE
VAV	VARIABLE AIR VOLUME UNIT
V/ø/HZ	VOLTS/PHASE/HERTZ
VD	VOLUME DAMPER
VEL	VELOCITY
VFD	VARIABLE FREQUENCY DRIVE
W	WITH
W/O	WITHOUT
WB	WET BULB
WH	WATER HEATER

MECHANICAL SYMBOLS

SYMBOL	DESCRIPTION
	SUPPLY CEILING DIFFUSER
	SIDE WALL SUPPLY DIFFUSER
	RETURN CEILING DIFFUSER
	SIDEWALL RETURN DIFFUSER
	EXHAUST GRILL OR FAN
	EXHAUST FAN DUCT UP THRU ROOF W/ CAP
	ROUND EXHAUST DUCT UP
T	THERMOSTAT
	FLEXIBLE DUCTWORK
	POINT OF CONNECTION
	HATCH DENOTES DROPPED CEILING
FSD/FD	FIRE SMOKE DAMPER OR FIRE DAMPER (FSD OR FD)

SYMBOL	DESCRIPTION
REGISTER TYPE / AIR QUANTITY (CFM)	SUPPLY CEILING DIFFUSER
	ATTIC ACCESS PANEL
FAN	AIR HANDLER UNIT
CU HP	OUTDOOR AIR COMPRESSOR
SD	SMOKE DETECTOR
	SUPPLY DUCT UP
	RETURN DUCT UP
	SUPPLY AND RETURN DUCT DOWN
	EXHAUST WALL CAP
	OUTSIDE AIR WALL CAP
	MOTORIZED ZONING DAMPER
	KEYED NOTES

GENERAL MECHANICAL NOTES

1. ALL MECHANICAL SYSTEMS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL CODES AND STANDARDS, INCLUDING 2022 CALIFORNIA MECHANICAL CODE, 2022 CALIFORNIA BUILDING CODE, 2022 CALIFORNIA RESIDENTIAL CODE, 2022 CALIFORNIA PLUMBING CODE, 2022 CALIFORNIA FIRE CODE, 2022 CALIFORNIA ELECTRICAL CODE, 2022 CALIFORNIA ENERGY CODE, 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE, TITLE 24 CALIFORNIA CODE OF REGULATIONS, AND VENTILATION REQUIREMENTS PER ASHRAE STD. 62.2-2022.
2. PRIOR TO SUBMITTING BID, CONTRACTOR SHALL SURVEY THE ENTIRE PROJECT SITE AND BECOME THOROUGHLY FAMILIAR WITH ACTUAL EXISTING CONDITIONS. THE INTENT OF WORK IS SHOWN ON THE DRAWINGS AND DESCRIBED HEREIN. BY THE ACT OF SUBMITTING A BID PROPOSAL FOR WORK, THE CONTRACTOR SHALL BE DEEMED TO HAVE MADE SUCH A STUDY AND EXAMINATION AND TO ACCEPT ALL CONDITIONS PRESENT AT SITE. NO REQUEST FOR ADDITIONAL PAYMENT SHALL BE CONSIDERED VALID, DUE TO CONTRACTOR FAILURE TO ALLOW IN COST ESTIMATE FOR CONDITIONS WHICH MAY EXIST.
3. CONTRACTOR BID SHALL NOT BE LIMITED TO THE WORK SHOWN ON THE PLANS AND SPECIFICATIONS. ALL PREMIUM OVERTIME COSTS, UTILITY CHARGES, COST FOR TEMPORARY UTILITY SERVICES, ALL ALTERATION, ALL DEMOLITION AND EXTENSION WORKS, PERMITS, INSPECTION FEES, MISCELLANEOUS CONTINGENCY COST, ETC., SHALL BE INCLUDED IN BID.
4. CONTRACTOR MUST VERIFY LOCATIONS OF ALL EQUIPMENT AND POINTS OF CONNECTIONS AND COORDINATE WITH CONSTRUCTION MANAGER, ARCHITECT, CIVIL ENGINEER, LANDSCAPE ARCHITECT AND UTILITY CONSULTANTS PRIOR TO START OF CONSTRUCTION. NO COMPENSATION WILL BE MADE FOR RELOCATION OF EQUIPMENT AND ASSOCIATED COST.
5. CONTRACT DRAWINGS ARE DIAGRAMMATIC. THE CONTRACTOR MUST FIELD VERIFY THE DRAWINGS PRIOR TO FABRICATION AND CONSTRUCTION. ALL DIMENSIONS SHOWN ON THESE PLANS ARE APPROXIMATE, AND MUST BE CONFIRMED ON SITE.
6. CONTRACTOR SHALL VERIFY ACTUAL EXISTING CONDITIONS AT SITE PRIOR TO SUBMITTING BID.
7. ANY WORK TO BE PERFORMED MUST BE PLANNED IN ADVANCE. SCHEDULING SHALL BE DONE IN COOPERATION WITH CONSTRUCTION MANAGER. INCLUDE ALL PREMIUM TIME CHARGES IN BID TO COVER AFTER-HOURS AND WEEKEND WORK.
8. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL TRADES. COORDINATE THE LOCATIONS OF ALL CEILING DIFFUSERS, REGISTERS AND GRILLES WITH THE ARCHITECTURAL CEILING PLAN, ELECTRICAL LIGHTING LAYOUT, STRUCTURAL FRAMING LAYOUT, AND ARCHITECTURAL ROOM ELEVATIONS. ALL WORK SHALL BE IN ACCORDANCE WITH BEST CONSTRUCTION PRACTICES.
9. THE CONTRACTOR SHALL FURNISH ALL MATERIAL, TOOLS, LABOR, ETC. TO INSTALL A COMPLETE AND FUNCTIONING SYSTEM AS INDICATED ON DRAWINGS.
10. THE CONTRACTOR SHALL REPORT TO THE CONSTRUCTION MANAGER IMMEDIATELY ANY INTERFERENCE BETWEEN TRADES OR WITH BUILDING OBSTRUCTIONS.
11. PROVIDE SHOP DRAWINGS FOR ALL EQUIPMENT, DUCTWORK, PIPING, DAMPERS, ETC. AND SUBMIT IT TO THE CONSTRUCTION MANAGER FOR APPROVAL.
12. ALL DUCTWORK SHALL BE CONSTRUCTED, ERECTED, AND SEALED IN ACCORDANCE WITH THE MOST RESTRICTIVE OF LOCAL REGULATIONS AND PROCEDURES DETAILED IN ASHRAE HANDBOOK OF FUNDAMENTALS OR THE APPLICABLE STANDARDS ADOPTED BY THE SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION AND THE UNIFORM MECHANICAL CODE.
13. FACTORY-MADE AIR DUCTS SHALL NOT BE USED FOR VERTICAL RISERS IN AIR-DUCT SYSTEMS SERVING MORE THAN TWO STORIES (UNLESS ALLOWED BY CHIEF BUILDING INSPECTOR AND THE FIELD INSPECTOR). SUCH DUCTS SHALL NOT PENETRATE CONSTRUCTION WHERE FIRE DAMPERS ARE REQUIRED (CMC SECTION 603.4.).
14. ALL DUCT SIZES ARE CLEAR INSIDE SIZES. OBTAIN APPROVAL FROM CONSTRUCTION MANAGER FOR SIZING OF ANY DUCTWORK, WHERE SIZES ARE NOT SHOWN ON DRAWINGS.
15. MANUAL VOLUME DAMPERS SHALL BE PROVIDED IN ALL DUCT BRANCHES TO INDIVIDUAL BOXES, DIFFUSERS, GRILLES AND REGISTERS AND SHALL BE LOCKED IN THE FINAL POSITION AFTER COMPLETION OF AIR BALANCE.
16. ALL DUCT SHALL BE INSTALLED WITH ACCORDANCE TO MANUFACTURERS GUIDELINES AND CHAPTER 6 OF CMC 2022.
17. TRANSVERSE AND LONGITUDINAL JOINTS FOR ALL SUPPLY AIR DUCTS SHALL BE SEALED WITH APPROVED MASTIC PER SMACNA.
18. COVER ALL WALLS, FLOOR, CEILING AND ROOF OPENINGS LEFT AS THE RESULT OF THE WORK. PROVISIONS SHALL BE MADE TO PROJECT PEOPLE FROM INJURY AND TO PROTECT EQUIPMENT FROM WEATHER.
19. CUTTING OR PENETRATION OF STRUCTURAL MEMBERS MUST BE APPROVED BY THE STRUCTURAL ENGINEER ON RECORD.
20. SEAL ALL PENETRATIONS THROUGH WALLS, CEILINGS, FLOOR, ETC. TO MAINTAIN THE FIRE RATING, AND BUILDING PRESSURIZATION.
21. PROVIDE ANCHORAGE FOR ALL PIPING, DUCTWORK AND EQUIPMENT IN ACCORDANCE WITH THE LATEST EDITION OF GUIDELINES FOR SEISMIC RESTRAINTS OF MECHANICAL SYSTEMS AND PLUMBING PIPING SYSTEMS PER SMACNA.
22. INSTALL ALL DUCT WORK AND PIPING HIGH AS POSSIBLE UNLESS NOTED ON THE PLANS.
23. ALL EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS. PROVIDE ALL NECESSARY ACCESSORIES FOR COMPLETE INSTALLATION.
24. CURBS, PLATFORMS, AND FLASHING FOR MECHANICAL EQUIPMENT SHALL BE AS INDICATED ON THE ARCHITECTURAL PLANS AND STRUCTURAL PLANS. COORDINATE EXACT SIZES OF REQUIRED OPENINGS AND SUPPORTS FOR FURNISHED EQUIPMENT.
25. ALL DUCT WORK MUST BE INSULATED OR LINED PER SPECIFICATIONS OR NOTED IN THE DRAWINGS. THE FLEXIBLE DUCT MUST BE INSTALLED PER MANUFACTURER GUIDELINES AND SHALL ELIMINATE RESTRICTION TO AIR FLOW.
26. PRE-INSULATED FLEXIBLE DUCT WORK SHALL BE SUPPORTED AND JOINED TO SHEET METAL PER SMACNA DUCT CONSTRUCTION STANDARDS AND SHALL BE USED WITH A 2" SHEET METAL SADDLE AT EACH SUPPORT HANGER.
27. WHEN FLEXIBLE DUCTWORK IS INSTALLED AS A BRANCH DUCTWORK TO A POINT OF TERMINATION, THE CONTRACTOR MUST UTILIZE ADJUSTABLE SHEET METAL ELBOWS WITH AN ALUMINIZED INSULATION MATCHING THE PRE-INSULATED FLEXIBLE DUCTWORK INSULATING VALUE.
28. METAL DUCTS SHALL COMPLY WITH CMC SECTION 602.6. THE METALS DUCTS SHALL BE SUPPORTED PER THE REQUIREMENTS PER CMC 603.3.
29. ALL HVAC EQUIPMENT SHALL BE U.L. LISTED AND BEAR A U.L. LABELS.
30. MECHANICAL EQUIPMENT, AIR DISTRIBUTION DEVICES, AIR DIFFUSERS, FANS, AND OTHER EQUIPMENT THAT MAY PROJECT SOUND SHALL BE INSTALLED PER MINIMUM REQUIREMENT, CONFORM TO INSTALLATION DETAILS AND RECOMMENDATION IN CHAPTER 52 OF ASHRAE HANDBOOK, "HVAC SYSTEMS AND APPLICATIONS."
31. GUARDS SHALL BE PROVIDED WHERE APPLIANCES, EQUIPMENT, FANS ROOF HATCH OPENINGS OR OTHER COMPONENTS THAT REQUIRE SERVICE ARE LOCATED WITHIN 10 FEET OF A ROOF EDGE OR OPEN SIDE OF WALKING SURFACE AND SUCH EDGE OR OPEN SIDE IS LOCATED MORE THAN 30" ABOVE THE FLOOR, ROOF OR GRADE BELOW. THE GUARD SHALL BE CONSTRUCTED SO AS TO PREVENT THE PASSAGE OF A SPHERE 21" IN DIAMETER. THE GUARD SHALL EXTEND NOT LESS THAN 30" BEYOND EACH END OF SUCH APPLIANCE, EQUIPMENT, FAN OR COMPONENT.
32. COORDINATE THE THERMOSTATS/SENSORS LOCATIONS WITH THE ARCHITECT. ALL THE THERMOSTATS/SENSORS SHALL BE MOUNTED AT 48" ABOVE FINISHED FLOOR TO MEET ADA REQUIREMENTS.
33. THE CONTRACTOR SHALL VERIFY THE INPUT VOLTAGE AND AMPERAGE (HORSEPOWER) RATING OF ALL EQUIPMENT PRIOR TO INSTALLATION.
34. CONTRACTOR SHALL PROVIDE ALL SAFETY MATERIALS AND EQUIPMENT NOT LIMITED TO BARRIERS, SIGNS, LIGHTS, ETC.
35. CONTRACTOR SHALL PROVIDE BARRICADE, SAFETY SIGNS AND OTHER DEVICES TO ISOLATE WORK AREA DURING CONSTRUCTION, UPON CONSTRUCTION MANAGER APPROVAL.
36. CONTRACTOR SHALL REPAIR/PATCH AND WEATHER PROOF ANY OPENING CAUSED BY EQUIPMENT/PIPING INSTALLATION, AND SHALL PAINT WHERE NECESSARY.
37. THE CONTRACTOR SHALL THOROUGHLY CLEAN THE UNITS, REMOVE ALL PACKING LABELS, STICKERS AND ANY CRATING DEBRIS, AND LEAVE ALL INSTALLATION FINISHED AND READY FOR OPERATION.
38. AFTER COMPLETION, THE COMPLETE SYSTEM SHALL BE TESTED AND BALANCED. ANY ADDITIONAL BALANCING DEVICES REQUIRED FOR PROPER BALANCING SHALL BE INSTALLED, PRIOR TO BALANCING ALL FILTERS SHALL BE REPLACED WITH NEW CLEAN FILTERS PLACED IN THE RETURN GRILLES.
39. UPON COMPLETION OF PROJECT AND PRIOR TO ACCEPTANCE OF THE WORK BY THE CONSTRUCTION MANAGER, CONTRACTOR SHALL FURNISH TO HIM FOUR (4) COPIES OF OPERATION AND MAINTENANCE MANUAL OF EQUIPMENT BOUND IN BOOK FORM AND INDEXED. MANUAL SHALL CONTAIN PARTS LIST, RECOMMENDED PERIODS OF INSPECTION, ETC., AND NAME, ADDRESS AND PHONE NUMBER OF ALL SUPPLIERS.
40. THE CONTRACTOR SHALL PREPARE ONE (1) SET OF "RECORD DRAWINGS" PLANS AND KEEP AT JOB SITE FOR REVIEW BY THE CONSTRUCTION MANAGER. ANY CHANGES FROM THE DESIGN DRAWINGS SHALL BE NOTED WITH RED INK. UPON COMPLETION OF PROJECT THE CONTRACTOR SHALL SUBMIT THE PLANS TO THE CONSTRUCTION MANAGER.
41. COMPLETE INSTALLATION SHALL BE GUARANTEED, AND CONTRACTOR SHALL PROVIDE 1 YEAR SERVICE, INCLUDING PARTS AND LABOR.
42. THE CONTRACTOR SHALL FURNISH A TRAINED AND COMPETENT SERVICE ENGINEER TO INSTRUCT THE OPERATORS IN THE OPERATION AND MAINTENANCE OF THE SYSTEM.
43. EACH SINGLE SYSTEM HEATING OR COOLING AIR IN EXCESS OF 2,000 CUBIC FEET PER MINUTE SHALL BE EQUIPPED WITH AN AUTOMATIC SHUTOFF ACTIVATED BY SMOKE DETECTORS PER 2022 CMC SECTION 608.
44. ALL DUCT SMOKE DETECTORS SHALL BE FURNISHED AND WIRED BY DIV. 16, INSTALLED BY DIV. 15. DETECTOR SAMPLING TUBES TO HAVE AN ACCESS DOOR MAKING SAMPLING TUBES READILY ACCESSIBLE.
45. PROVIDE CEILING ACCESS PANELS IN ALL NON-ACCESSIBLE CEILINGS FOR VALVES, CLEANOUTS, AND DAMPERS. REFER TO ARCHITECTURAL PLANS FOR LOCATIONS.
46. HVAC SYSTEM INSTALLERS SHALL BE TRAINED AND CERTIFIED IN THE PROPER INSTALLATION OF HVAC SYSTEMS AND EQUIPMENT BY A RECOGNIZED TRAINING OR CERTIFICATION PROGRAM
47. FIRE PLACES MUST BE DIRECT-VENT SEALED-COMBUSTION CHAMBER TYPE PER GBSC 4.503. NO WOOD BURNING FIREPLACE IS PERMITTED PER AQMD REGULATIONS.
48. ALL NEW WINDOWS AND DOORS SHALL HAVE A LABEL INDICATING THE U-FACTOR AND SHGC.
49. AT THE TIME OF ROUGH INSTALLATION, DURING STORAGE ON THE CONSTRUCTION SITE AND UNTIL FINAL STARTUP OF HEATING, COOLING AND VENTILATING EQUIPMENT, ALL DUCT AND OTHER RELATED AIR INTAKE AND DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED.
50. EACH BATHROOM SHALL BE MECHANICALLY VENTILATED AND SHALL COMPLY WITH THE FOLLOWING:
    - 50.1. FANS SHALL BE ENERGY STAR COMPLIANT AND BE DUCTED TO TERMINATE OUTSIDE THE BUILDING.
    - 50.2. UNLESS FUNCTIONING AS A COMPONENT OF A WHOLE HOUSE VENTILATION SYSTEM, FANS MUST BE CONTROLLED BY A HUMIDITY CONTROL.
      - 50.2.1. HUMIDITY CONTROLS SHALL BE CAPABLE OF MANUAL OR AUTOMATIC ADJUSTMENT BETWEEN A RELATIVE HUMIDITY RANGE OF LESS THAN 50% TO A MAXIMUM OF 80%.
      - 50.2.2. A HUMIDITY CONTROL MAY BE A SEPARATE COMPONENT TO THE EXHAUST FAN AND IS NOT REQUIRED TO BE INTEGRAL OR BUILT-IN
51. BUILDING CONTAINS A WHOLE HOUSE EXHAUST FAN. ITS COVERS OR LOUVERS SHALL HAVE A MINIMUM OF R-4.2 INSULATION.
52. AIR CONDITIONING AND HEATING FILTER SHALL BE RATED AT MERV 13 MINIMUM. THE DUCT SYSTEM MUST BE DESIGN ACCOUNTING FOR THE PRESSURE DROP ACROSS THE FILTER.
53. THE INSTALLING CONTRACTOR MUST PROVIDE SEISMIC BRACING OF ALL MECHANICAL EQUIPMENT, PIPING AND DUCT WORK IN ACCORDANCE WITH REQUIREMENTS OF THE 2022 CBC FOR " SEISMIC DESIGN CATEGORY."
54. WHERE ANCHORAGE DETAILS ARE NOT SHOWN ON THE PLANS, THE FIELD CONTRACTOR MUST VERIFY AND GET APPROVAL FOR THE INSTALLATION FROM THE MECHANICAL ENGINEER AND THE STRUCTURAL ENGINEER.

AIR SYSTEM DESIGN CRITERIA

CITY	CARMEL
COUNTY	MONTEREY
CLIMATE ZONE	03
SUMMER OUTDOOR DESIGN TEMP. (DRY-BULB)	78 DEG F
SUMMER COINCIDENT WET-BULB TEMP.	62 DEG F
SUMMER DAILY RANGE	20 DEG F
WINTER OUTDOOR DESIGN TEMP. (DRY BULB)	30 DEG F
SUMMER INDOOR DESIGN TEMP. (DRY BULB)	75 DEG F
WINTER INDOOR DESIGN TEMP. (DRY BULB)	68 DEG F

MECHANICAL SHEET INDEX

NO.	SHEET	DESCRIPTION
1	M-1.0	HVAC NOTES, SYMBOLS & SHEET INDEX
2	M-1.1	HVAC EQUIPMENT SCHEDULES
3	M-1.2.0	HVAC DETAILS
4	M-1.2.1	HVAC DETAILS
5	M-2.0	HVAC PLAN - MAIN HOUSE
6	M-2.1	HVAC PLAN - ADU

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

REGISTERED PROFESSIONAL ENGINEER GANGYI ZHOU No. M34279 Exp 12-31-2024 MECHANICAL STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel: 949-267-9095

PROJECT NAME:
12 ARROYO
SEQUOIA ROAD
CARMEL, CA 93923

SHEET TITLE
MECHANICAL
HVAC NOTES, SYMBOLS
& SHEET INDEX

DRAWN	GMEP
CHECKED	GMEP
DATE	12/06/24
SCALE	AS NOTED
JOB NO.	24-656
SHEET	M-1.0

RECTANGULAR DUCT SIZE ESTIMATE

DESIGN CFM	DUCT HEIGHT - NET INSIDE DIMENSION IN INCHES 4"	CFM	6"	CFM	8"	CFM	10"	CFM	12"
60	6X4	60	4X6	90	4X8	120	4X10	150	4X12
90	8X4	110	6X6	160	6X8	215	6X10	270	6X12
120	10X4	160	8X6	230	8X8	310	8X10	400	8X12
150	12X4	215	10X6	310	10X8	430	10X10	550	10X12
180	14X4	270	12X6	400	12X8	550	12X10	680	12X12
210	16X4	320	14X6	490	14X8	670	14X10	800	14X12
240	18X4	375	16X6	580	16X8	800	16X10	950	16X12
270	20X4	430	18X6	670	18X8	930	18X10	1100	18X12
300	22X4	490	20X6	750	20X8	1060	20X10	1250	20X12
330	24X4	540	22X6	840	22X8	1200	22X10	1400	22X12
		600	24X6	930	24X8	1320	24X10	1600	24X12
		650	26X6	1020	26X8	1430	26X10	1750	26X12
		710	28X6	1100	28X8	1550	28X10	1950	28X12
		775	30X6	1200	30X8	1670	30X10	2150	30X12
40	21/2X10			1300	32X8	1800	32X10	2300	32X12
70	21/2X14			1400	34X8	1930	34X10	2450	34X12
150	21/2X30			1500	36X8	2060	36X10	2600	36X12
		100	31/2X14			2200	38X10	2750	38X12
		220	31/2X30			2350	40X10	2900	40X12
								3050	42X12

RECTANGULAR SHEET METAL DUCT = .07" ON MOST METAL DUCT CALCULATORS

FLEXIBLE DUCT

DUCT SIZE	DESIGN SUPPLY AIRFLOW (CFM)	DESIGN RETURN AIRFLOW (CFM)
5"	60	54
6"	100	90
7"	150	135
8"	240	216
9"	300	270
10"	400	360
12"	650	585
14"	1000	900
16"	1400	1270
18"	2000	1800
20"	2500	2250

FLEX DUCT =.1" ON MOST METAL DUCT CALCULATOR

ROUND METAL PIPE

DUCT SIZE	DESIGN AIRFLOW (CFM)
5"	60
6"	100
7"	150
8"	240
9"	300
10"	400
12"	650
14"	1000
16"	1400
18"	2000
20"	2500

ROUND METAL PIPE =.1" ON METAL DUCT CALCULATORS

AIR DISTRIBUTION DEVICE SCHEDULE

TAG ON PLANS	MANUFACTURER & MODEL #	APPLICATION & TYPE	INLET	SLOTS	LENGTH
L1	TITUS FL-30 OR EQUAL	CEILING, WALL, OR TOEKICK MOUNTED	10"	1-SLOT	4 FT
L2	TITUS FL-20 OR EQUAL	CEILING, WALL, OR TOEKICK MOUNTED	12"	2-SLOT	4 FT
L3	TITUS FL-25 OR EQUAL	CEILING, WALL, OR TOEKICK MOUNTED	12"	1-SLOT	6 FT

NOTES:
1. RETURN DIFFUSERS SHALL HAVE MAXIMUM FACE VELOCITY OF 450 FPM WITH A " FILTER NOT LESS THAN MERV 13 W/ MAX. PRESSURE DROP OF 0.2" W.C. FOR FILTER AND GRILL
2. CONTRACTOR TO USE OR EQUAL REGISTERS. THE THROW PATTERNS SHALL BE MATCHED PER THE PLANS. BASE THE ALTERNATE SELECTION BASE ON MAXIMUM PRESSURE DROP OF 0.04" W.C. THE VELOCITY AT THE FACE SHALL NOT EXCEED 700 FPM.

AIR DISTRIBUTION DEVICE SCHEDULE

TAG ON PLANS	MANUFACTURER & MODEL #	APPLICATION & TYPE	BLOWPATTERN	NECK SIZE	REMARKS
CS-2	SHOEMAKER 950 OR EQUAL	CEILING OR SIDEWALL MOUNTED	2-WAY	SEE PLANS	CEILINGS OR SIDEWALL STAMPED DIFFUSER W/ LEVER OPERATED OPPOSED BLADE DAMPER
CS-3	SHOWMAKER 845 OR EQUAL	SEE DWGS	3-WAY	SEE PLANS	CEILING OR SIDE WALL STAMPED DIFFUSER W/ LEVER OPERATED OPPOSED BLADE DAMPER
CS-4	SHOEMAKER 150 OR EQUAL	SEE DWGS	4-WAY	SEE PLANS	CEILING STAMPED DIFFUSER W/ LEVER OPERATED OPPOSED BLADE DAMPER
CRG	SHOEMAKER FG OR EQUAL	SEE DWGS	------	SEE PLANS	CEILING STAMPED FACE FILTER GRILL MINIMUM MERV 13 FILTER

NOTES:
1. CRG SHALL HAVE MAXIMUM FACE VELOCITY OF 450 FPM WITH A 1" FILTER NOT LESS THAN MERV 13 W/ MAX. PRESSURE DROP OF 0.2" W.C. FOR FILTER AND GRILL.
B. CONTRACTOR TO USE OR EQUAL REGISTERS. THE THROW PATTERNS SHALL BE MATCHED PER THE PLANS. BASE THE ALTERNATE SELECTION BASE ON MAXIMUM PRESSURE DROP OF 0.04" W.C. THE VELOCITY AT THE FACE SHALL NOT EXCEED 700 FPM.

FAN SCHEDULE (EF)

EQUIPMENT NO.	SERVICE	LOCATION	CFM	STATIC PRESS. (IN W.G.)	MOTOR WATTS	MOTOR HP	MOTOR RPM	MOTOR VOLT.-PH.-CY.	MANUFACTURER & MODEL	SONES	OPTIONS-ACCESSORIES
EF R	RESTROOM	CEILING	63	0.25	27.6	--	--	120-1-60	AIRKING AK80 OR EQUAL	1.5	BACK DRAFT DAMPER CONTROLLED BY SWITCH OPER. WT. = 10.0 LBS
EF B	BATHROOM	CEILING	84	0.25	37.0	--	--	120-1-60	AIRKING EB0SH W/ BOOST	0.7	BACK DRAFT DAMPER CONTROLLED BY BUILT IN HUMIDITY SENSOR OPER. WT. = 17.0 LBS
EF MB	MASTER BATHROOM	CEILING	113	0.25	37.0	--	--	120-1-60	AIRKING EI30SH W/ BOOST	0.7	BACK DRAFT DAMPER CONTROLLED BY BUILT IN HUMIDITY SENSOR OPER. WT. = 17.0 LBS
EF L	LAUNDRY/ WHOLEHOUSE	CEILING	183	0.25	57.0	--	--	120-1-60	AIRKING AK200LS OR EQUAL	1.2	BACK DRAFT DAMPER CONTROLLED BY SWITCH (CONTINUOUS OPERATION WHILE HOUSE IS OCCUPIED) OPER. WT. = 17.0 LBS
EF BW	LAUNDRY/ WHOLEHOUSE	CEILING	60/90	0.25	7.3	--	--	120-1-60	AIRKING D4DH OR EQUAL	0.4	BACK DRAFT DAMPER LOW SPEED CONTROLLED BY SWITCH (CONTINUOUS OPERATION WHILE HOUSE IS OCCUPIED) HIGH SPEED CONTROLLED BY BUILT IN HUMIDITY SENSOR OPER. WT. = 17.0 LBS

NOTES:
VERIFY WITH ARCHITECT/OWNER FOR EXACT MODEL NUMBER BEFORE ROUGH-IN.
ALL EXHAUST FANS TO BE ENERGY STAR CERTIFIED.

SPLIT SYSTEM AIR HANDLER FAN COIL UNITS SCHEDULE (FC)

EQUIPMENT NO.	MANUFACTURER & MODEL NO.	SERVICE	SUPPLY AIR (CFM)	OUTSIDE AIR (CFM)	E.S.P. (IN W.G.)	ELECTRICAL V.-PH.-CY.	ELECTRICAL MCA	OPERATING WEIGHTS (LBS)	REMARKS
FC 30	CARRIER FMC4Z3000AL OR EQUAL	SEE PLAN	1000	--	0.35	230-1-60	2.6	135	1. 2. 3. 4. 5.
FC 48	CARRIER FJ4DNXC48L OR EQUAL	SEE PLAN	1600	--	0.48	230-1-60	7.6	182	1. 2. 3. 4. 5.
FC 60	CARRIER FJ4DNXD60L OR EQUAL	SEE PLAN	2000	--	0.26	230-1-60	7.6	210	1. 2. 3. 4. 5.

NOTES:
1. PROVIDE REQUIRED ACCESS TO INDOOR UNIT PER CMC.
2. PROVIDE PROGRAMMABLE ROOM THERMOSTAT FOR EACH FAU/FC UNIT.
3. PROVIDE CONTROL WIRING, CONDUIT, ETC. FOR A COMPLETE AND OPERABLE SYSTEM.
4. PROVIDE SECONDARY CONDENSATE DRAIN PAN FOR ALL DX COILS.
5. PROVIDE MERV 13 FILTER AT RETURN AIR PLENUM CONNECTION TO UNIT.

SPLIT SYSTEM OUTDOOR HEAT PUMP CONDENSING UNIT (HP)

EQUIPMENT NO.	MANUFACTURER & MODEL NO.	SERVICE	HEATING CAPACITY (BTU/HR)	HSPF2 OR COP	COOLING CAPACITY (B.T.U/HR)	SEER2/ EER2	ELECTRICAL V.-PH.-CY.	ELECTRICAL MCA	ELECTRICAL MOCP	OPERATING WEIGHTS (LBS)	REFRIGERANT TUBE LIQUID	REFRIGERANT TUBE VAPOR	REMARKS
HP 30	CARRIER GH5SAN43000A OR EQUAL	SEE PLAN	27,800	7.8 HSPF2	27,600	15.2/12.5	208/230-1-60	18.2	30	171	3/8"	3/4"	1.
HP 48	CARRIER GH5SAN44800A OR EQUAL	SEE PLAN	46,500	7.5 HSPF2	46,000	14.3/12.0	208/230-1-60	32.8	50	222	3/8"	7/8"	1.
HP 60	CARRIER GH5SAN46000A OR EQUAL	SEE PLAN	57,000	7.5 HSPF2	57,000	14.3/12.0	208/230-1-60	33.2	50	253	3/8"	7/8"	1.

NOTES:
1. PROVIDE ALL REQUIRED MATERIALS & INSULATED REFRIGERANT LINES FOR COMPLETE INSTALLATION, SIZE RS/RL PIPING PER MANUFACTURERS GUIDELINES.

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

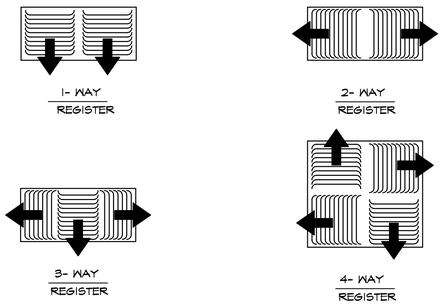
REGISTERED PROFESSIONAL ENGINEER
GANGYI ZHOU
No. M34279
Exp.12-31-2024
MECHANICAL
STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel: 949-267-9095

PROJECT NAME:
12 ARROYO
SEQUOIA ROAD
CARMEL, CA 93923

SHEET TITLE
MECHANICAL
HVAC EQUIPMENT SCHEDULS

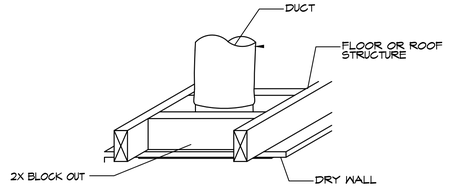
DRAWN: GMEP
CHECKED: GMEP
DATE: 12/06/24
SCALE: AS NOTED
JOB NO.: 24-656
SHEET: M-1.1



COMMOM TYPES OF DIRECTIONAL REGISTERS

SCALE: NONE

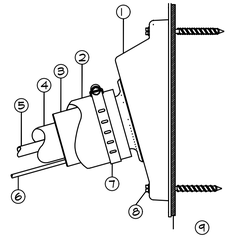
8



TYPICAL REGISTER BLOCK OUT

SCALE: NONE

7



1. EXTERIOR WALL OR PARAPET WALL SEAL PENETRATION OUTLET WITH ELASTOMERIC LINE-SET COMPRESSION SLEEVE TYPE "TITANGS30" BY AIREX MANUFACTURING INC.
2. INSULATION PROTECTIVE PVC COVER TYPE "E-FLEX GUARD" BY AIREX MANUFACTURING INC.
3. ELASTOMERIC LINE-SET COMPRESSION & ANTI-VIBRATION SLEEVE (COMPONENT OF REFERENCE 1 "TITAN GS30")
4. #/#" INSULATION FOR REFRIGERATION SUCTION LINE TYPE "_____"
5. #/#" REFRIGERATION SUCTION LINE TYPE "_____" COPPER
6. #/#" REFRIGERATION LIQUID LINE TYPE "_____" COPPER
7. MECHANICAL CONNECTION SECURED WITH STAINLESS STEEL CLAMP (COMPONENT OF REFERENCE 1 "TITAN GS30")
8. WALL FASTENERS SELF-TAPPING 3/8" HEX HEAD 1/4" DIAMETER ALL MATERIAL ANCHORS SCREWS WITH ELASTOMERIC WASHERS (COMPONENT OF REFERENCE 1 "TITAN GS30")
9. WALL SURFACE SEAL ELASTOMERIC GASKET (COMPONENT OF REFERENCE 1 "TITAN GS30")

PIPE PENETRATION DETAIL

SCALE: NONE

6

1. GRILL FINISH AT THE DROP CEILING
2. NON-RATED DROP CEILING
3. EXHAUST FAN
4. LAG SCREW TO FASTEN TO STRUCTURE
5. FLOOR JOIST
6. 26 GAGE EXHAUST DUCT
7. WALL CAP
8. EXTERIOR WALL
9. BACK DRAFT DAMPER
10. FLOOR ABOVE

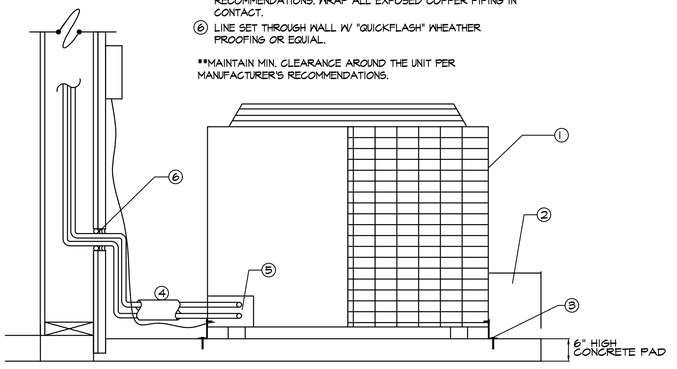
CEILING FAN INSTALLATION

SCALE: NONE

5

1. CONDENSING UNIT
2. EXTEND PAD A MIN. OF 4" FROM UNIT ON ALL SIDES. COORDINATE SIZE WITH CONDENSING UNIT USED.
3. STRAP A/C TO CONC SALB WITH ANCHOR BOLD/SCREW-PER A/C MANUFACTURER RECOMMENDATION AT ALL SIDES.
4. REFER TO "PIPE PENETRATION DETAIL"
5. LIQUID LINE AND INSULATED SUCTION LINE. SIZE PER RECOMMENDATIONS. WRAP ALL EXPOSED COPPER PIPING IN CONTACT.
6. LINE SET THROUGH WALL W/ "QUICKFLASH" WHEATHER PROOFING OR EQUAL.

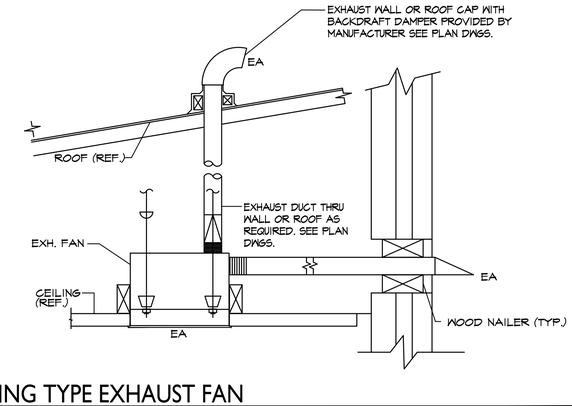
**MAINTAIN MIN. CLEARANCE AROUND THE UNIT PER MANUFACTURER'S RECOMMENDATIONS.



CONDENSING UNIT INSTALLATION ON GRADE

SCALE: NONE

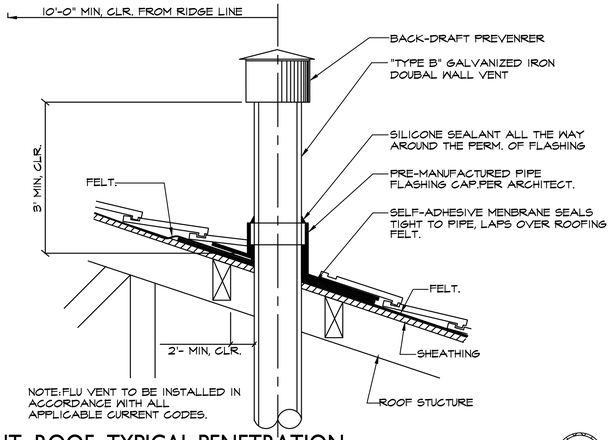
4



CEILING TYPE EXHAUST FAN

SCALE: NONE

3



FLUE VENT ROOF TYPICAL PENETRATION

SCALE: NONE

2

CFM = VELOCITY X AREA
CFM 4" = CFM 5"

V4" X A4" = V5" X A5"
V4" X (3.14 X D4")/4 = V5" X (3.14 X D5")/4
V4" = 5"/4" X V5" = 1.5625 V5"

FRICTION 4" = FRICTION 5" =
= (f X L4" X V4")/2g = (f X L5" X V5")/2g =
= (f X L4" X (1.5625 V5")")/2G= (f X L5" X V5")/2g

L5" = (1.5625)" X L4" = 2.44 X L4"
L4" = 14 ft
L5" = 2.44 X 14' = 34 ft

34 FEET OF 5" DUCTWORK IS EQUAL TO 14 FEET OF 4" DUCTWORK (WITH THE SAME AIRFLOW AND PRESSURE DROP).

SEE DRYER VENT SIZING TABLE BELOW

DRYER VENT SIZING

DRYER VENT SIZE	LT	REMARK
4"	14'-0"	1
5"	34'-0"	2

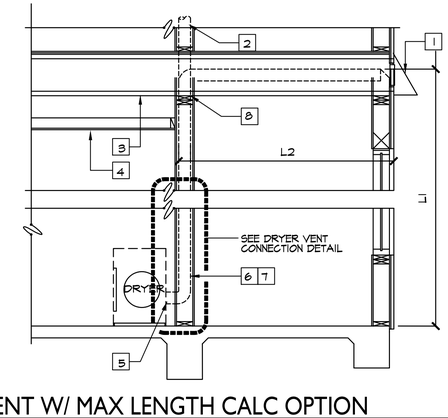
CLOTHES DRYER VENT SHALL NOT EXCEED A TOTAL COMBINED HORIZ. AND VERT. LENGTH OF 14' FOR 4" AND 34' FOR 5", INCLUDING TWO 90- DEGREE ELBOWS. TWO FEET SHALL BE DEDUCTED FOR EACH 90- DEGREE ELBOW IN EXCESS OF TWO. SECTION 504.4.2.1 OF THE CMC., FLEX DUCT PORTION CANNOT BE CONCEALED WITHIN BUILDING CONSTRUCTION AS PROPOSED

NOTES:

1. FOR A 4" GALVANIZED DRYER VENT DUCT
   IF: L1= 8'
   THEN: L2 = 14' - 8' = 6'
2. FOR AN EQUIVALENT 5" GALVANIZED DRYER VENT DUCT
   IF: L1= 8'
   THEN: L2 = 34' - 8' = 26'

LEGEND

1	EYEBROW W / BACKDRAFT DAMPER MAINTAIN MIN. 3' AWAY FROM OPENINGS INTO BUILDINGS. (CMC CHAPTER 5)
2	DRYER VENT TO ROOF WHERE SHOWN OR NOTED ON MECH. DWGS.
3	JOIST, SEE STRUCT. DWGS. (TYPICAL)
4	FLOOR - CEILING ASSEMBLY
5	APPROVED FLEXIBLE DUCT CONNECTORS NOT MORE THAN 6FT. IN LENGTH MAY BE USED (FLEXIBLE DUCT CONNECTORS SHALL NOT BE CONCEALED WITHIN BUILDING CONSTRUCTION)
6	DRYER DUCT SHALL NOT BE CONNECTED W / SHEET METAL SCREWS PR OTHER FASTENERS WHICH WILL OBSTRUCT THE AIR FLOW. (TYPICAL)
7	DRYER DUCT SHALL BE OF MIN. 26 GAUGE SHEET METAL AND SHALL HAVE SMOOTH INTERIOR SURFACES (TYPICAL)
8	FIRE CAULK AT PLATE PENETRATION (TYPICAL)



DRYER VENT W/ MAX LENGTH CALC OPTION

SCALE: NONE

1

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

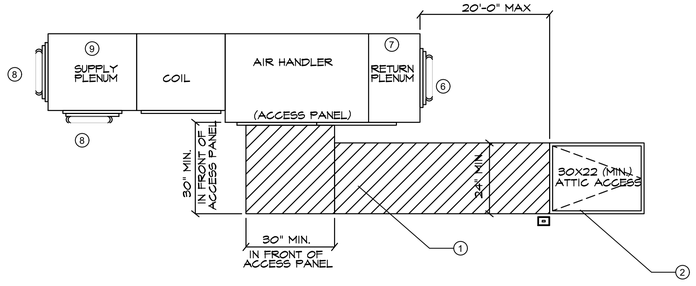
REGISTERED PROFESSIONAL ENGINEER
GANGYI ZHOU
No. M34279
Exp.12-31-2024
MECHANICAL
STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel: 949-267-9095

PROJECT NAME:
12 ARROYO
SEQUOIA ROAD
CARMEL, CA 93923

SHEET TITLE
MECHANICAL
HVAC DETAILS

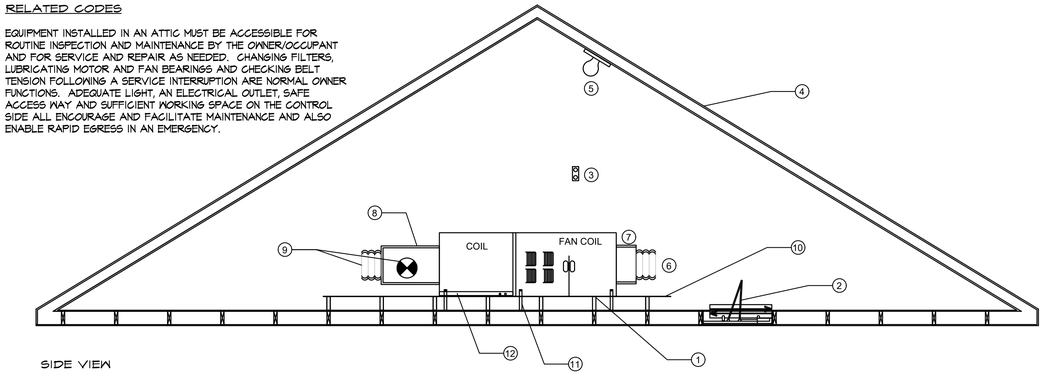
DRAWN	GMEP
CHECKED	GMEP
DATE	12/06/24
SCALE	AS NOTED
JOB NO.	24-656
SHEET	M-1.2.0



PLAN VIEW

RELATED CODES

EQUIPMENT INSTALLED IN AN ATTIC MUST BE ACCESSIBLE FOR ROUTINE INSPECTION AND MAINTENANCE BY THE OWNER/OCCUPANT AND FOR SERVICE AND REPAIR AS NEEDED. CHANGING FILTERS, LUBRICATING MOTOR AND FAN BEARINGS AND CHECKING BELT TENSION FOLLOWING A SERVICE INTERRUPTION ARE NORMAL OWNER FUNCTIONS. ADEQUATE LIGHT, AN ELECTRICAL OUTLET, SAFE ACCESS WAY AND SUFFICIENT WORKING SPACE ON THE CONTROL SIDE ALL ENCOURAGE AND FACILITATE MAINTENANCE AND ALSO ENABLE RAPID EGRESS IN AN EMERGENCY.



SIDE VIEW

1. 5/8" PLYWOOD PLAT FORM ON 2X6 @ 24" O.C TO COVER THE AIR HANDLER.
2. 22X30(MIN)ATTIC ACCESS
3. CONVENIENCE OUTLET WITHIN 25' OF EQUIPMENT
4. ROOFING PER ARCH. PLANS.
5. LIGHT FIXTURE INSTALLED NEAR THE APPLIANCE AREA & CONTROLLED BY A SWITCH LOCATED BY THE ATTIC ACCESS
6. RETURN FLEXIBLE DUCT
7. RETURN PLENUM
8. SUPPLY FLEXIBLE DUCT
9. SUPPLY PLENUM
10. 5/8" CDX x24" MIN. WIDE PLYWOOD PASSGEWAY - 20'0" MAX.
11. 2"STRAP, ATTACHED BY 3/4"-ZIP SCREW FROM F.A.U. TO TRUSS OR PLATFORM. 1/2"-ZIP SCREW TO SECURE TO F.A.U. TYP.
12. CONDENSATE DRAIN PAN

ATTIC MOUNTED FAN COIL INSTALLATION

SCALE: NONE

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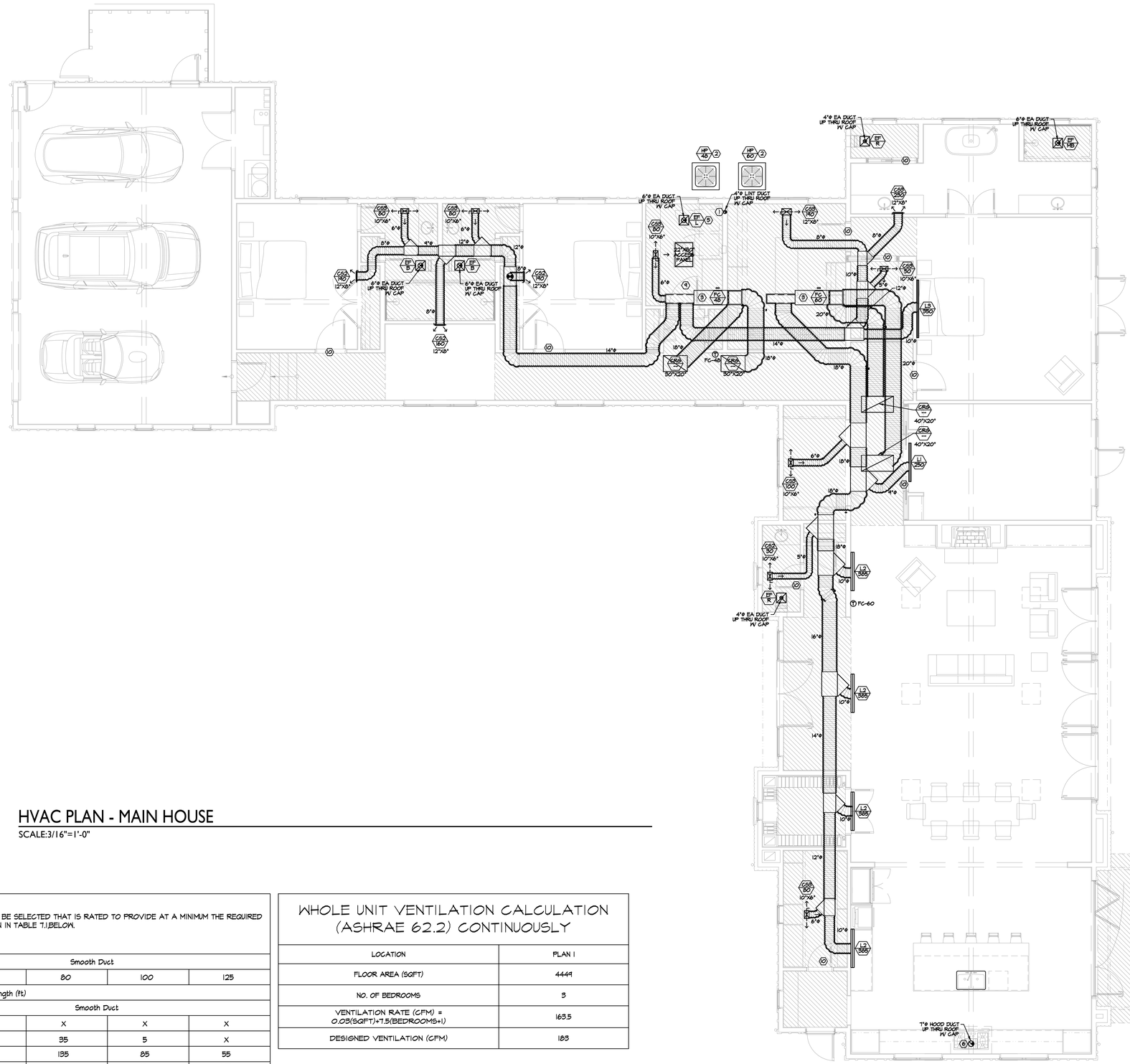
DRAWN	GMEP
CHECKED	GMEP
DATE	12/06/24
SCALE	AS NOTED
JOB NO.	24-656
SHEET	M-1.2.1

HVAC GENERAL NOTES

1. REFER TO SHEET M-1.0 FOR LEGENDS AND GENERAL NOTES.
2. REFER TO SHEET M-1.1 FOR EQUIPMENT SCHEDULES.
3. REFER TO DRAWING M-1.2 FOR TYPICAL MECHANICAL DETAILS.
4. THE DUCT ROUTING SHOWN ON PLANS ARE SCHEMATIC ONLY. VERIFY WITH STRUCTURAL AND ALL OTHER PARTIES REGARDING ANY DISCREPANCY AND REPORT TO THE MECHANICAL ENGINEER FOR APPROVAL.
5. REFER TO THE ARCHITECTURAL DRAWINGS FOR FINALIZED CEILING HEIGHTS.
6. FIRE SEAL ALL THE PENETRATIONS AS REQUIRED PER CMC AND CBC CODE REQUIREMENTS.
7. PROVIDE A MINIMUM OF 100 SQ. IN FREE AREA OPENING(S) INTO LAUNDRY ROOM FOR MAKE-UP AIR AS REQUIRED BY CODE (CMC 504.4.1).
8. ALL TERMINATION OF ENVIRONMENTAL AIR DUCTS MUST BE LOCATED 3 FEET AWAY FROM ANY OPENINGS INTO THE BUILDING.
9. OUTSIDE FRESH AIR INTAKES MUST BE 10 FEET FROM ANY PLUMBING VENTS AND EXHAUST VENTS.
10. IF HUMIDISTAT IS REQUIRED, LOCATE IT ADJACENT TO THERMOSTAT.
11. CONDENSATE PIPING FOR ALL INDOOR AIR HANDLERS SHALL FALL UNDER THE CONTRACTOR WORK SCOPE. COORDINATE WITH THE HVAC SUB ACCORDINGLY.
12. THE DEDICATED WHOLE HOUSE VENTILATION FAN MUST BE OPERATING 24/7 WHILE THE HOUSE IS OCCUPIED. THE FAN MUST BE INSTALLED PER MANUFACTURER GUIDELINES WITH ON-OFF SWITCH. PROVIDE A LABEL NEXT TO THE SWITCH WITH CLEARLY WRITTEN TEXT NO SMALLER THAN 12 POINT ARIAL TYPE, "THE FAN MUST BE ON 24/7 WHILE THE HOUSE IS OCCUPIED, UNLESS THERE IS SEVERE OUTDOOR AIR CONTAMINATION."
13. KITCHEN HOOD SHALL BE PROVIDED WITH MINIMUM 100 CFM OF EXHAUST AIR RATING AT 0.25" W.C.
14. "REGISTERED" COPY OF THE CF-2R FORMS SHALL BE SUBMITTED PRIOR TO FINAL INSPECTION, SIGNED BY HERS RATER, FOR FIELD VERIFICATION AND DIAGNOSTIC TESTING.
15. INSTALLING CONTRACTOR SHALL FILL OUT CF-3R FORMS AND SHALL HAVE IT READILY AVAILABLE TO THE INSPECTOR.
16. ALL INSTALLED FIRE PLACES MUST BE SEALED COMBUSTION TYPE AND MUST BE VENTED TO THE EXTERIOR.

HVAC KEYED NOTES

1. CAP SHOULD BE LISTED FOR CLOTH DRYER VENTING (DRYER JACK). DRYER DUCT TO VENT TO EXTERIOR WITH BACKDRAFT DAMPER. CONTRACTOR TO INSTALL DRYER EXHAUST DUCT PER MANUFACTURER INSTALLATION GUIDELINES.
2. PROVIDE RS/RL PIPING SIZE PER MANUFACTURER'S GUIDELINES. ROUTE FROM REMOTE CONDENSATE UNIT TO THE INDOOR AIR HANDLER. VERIFY CONDENSER LOCATIONS WITH ALL RELEVANT DESIGN PARTIES BEFORE INSTALLATION.
3. THE 3/4" PRIMARY CONDENSATE LINE TO THE LAVATORY TAILPIECE. SECONDARY CONDENSATE TO DRAIN TO THE EXTERIOR ABOVE A WINDOW OR PROVIDE A SENSOR TO SHUT-OFF UNIT UPON DETECTION OF WATER. COORDINATE WITH THE PLUMBER.
4. FURNACE FLUE DUCT RUN UP THRU ROOF WITH CAP. FURNACE VENT TO BE INSTALLED PER MANUFACTURER GUIDELINES. ROUTING AND TERMINATION OF FLUE FOR HEATING UNIT SHALL COMPLY WITH CH. 8, CMC 2022.
5. THIS FAN DENOTES THE WHOLE HOUSE VENTILATION FAN. THE FAN TO RUN CONTINUOUSLY WHILE THE HOUSE IS OCCUPIED. CLEARLY LABEL NEXT TO THE SWITCH.
6. CONNECT KITCHEN HOOD (MIN. 100 CFM) TO 7"ø KITCHEN HOOD EXHAUST AIR DUCT (MIN. 6"ø). THE HOOD MUST VENT TO THE EXTERIOR W/ BACKDRAFT DAMPER. VERIFY W/ ARCH OR OWNER BEFORE ROUGH IN.
7. EXHAUST OUTLET TERMINATES 3' AWAY FROM OPENINGS INTO THE BUILDING AND 3' AWAY FROM THE PROPERTY LINE. SEE CIVIL DRAWINGS AND ARCHITECTURAL DRAWINGS FOR PROPERTY LINE DETAILS.
8. PROVIDE CONCENTRIC KIT. CONNECT THE TWO 4" PVC PIPE FROM WATER HEATER. REFER TO INSTALLATION MANUAL FOR DETAILS.
9. PROVIDE 10"X18" TOP GRILL AND 10"X18" LOUVER OPENING ON THE DOOR 12" A.F.F. FOR COMBUSTION AIR FOR THE LAUNDRY ROOM.
10. PROVIDE 1/2" DOOR UNDER CUT, TOP GRILL OR JUMPER DUCT



HVAC PLAN - MAIN HOUSE

SCALE:3/16"=1'-0"

PRESCRIPTIVE DUCT SIZING REQUIREMENTS (FROM ASHRAE 62.2)
IN ORDER TO COMPLY WITH THE PRESCRIPTIVE DUCT SIZING REQUIREMENTS OF ASHRAE 62.2,A VENTILATION FAN MUST BE SELECTED THAT IS RATED TO PROVIDE AT A MINIMUM THE REQUIRED VENTILATION AIRFLOWAT 0.25 IN.W.G.AND THE DUCTS MUST BE SIZED IN ACCORDANCE WITH THE SPECIFICATIONS GIVEN IN TABLE 7.1,BELOW.

TABLE 7.1

Duct Type	Flex Duct				Smooth Duct			
Fan Rating (cfm @ 0.25"w.c.)	50	80	100	125	50	80	100	125
Maximum Allowable Duct Length (ft)								
Diameter,(in)	Flex Duct				Smooth Duct			
3	X	X	X	X	5	X	X	X
4	70	3	X	X	105	35	5	X
5	NL	70	35	20	NL	135	85	55
6	NL	NL	125	95	NL	NL	NL	145
7 and above	NL	NL	NL	NL	NL	NL	NL	NL

This table assumes no elbow. Deduct 15 ft of allowable duct length for each turn, elbow, or fitting. Interpolation and extrapolation in Table 7.1 is not allowed. For fan ratings not listed, use the next higher value. This table is not applicable for fan ratings > 125cfm.
NL = no limit on duct length of this size.
X = not allowed, any length of duct of this size with assumed turns and fittings will exceed the rated pressured drop (0.25 in w.g.)
Note: water gauge(w.g). is the same as water column(w.c.)

WHOLE UNIT VENTILATION CALCULATION (ASHRAE 62.2) CONTINUOUSLY

LOCATION	PLAN 1
FLOOR AREA (SQFT)	4449
NO. OF BEDROOMS	3
VENTILATION RATE (CFM) = 0.03(SQFT)+7.5(BEDROOMS+1)	163.5
DESIGNED VENTILATION (CFM)	183

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

REGISTERED PROFESSIONAL ENGINEER
GANGYI ZHOU
No. M34279
Exp.12-31-2024
MECHANICAL
STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel: 949-267-9095

PROJECT NAME:
12 ARROYO
SEQUOIA ROAD
CARMEL, CA 93923

SHEET TITLE
MECHANICAL
HVAC PLAN - MAIN HOUSE

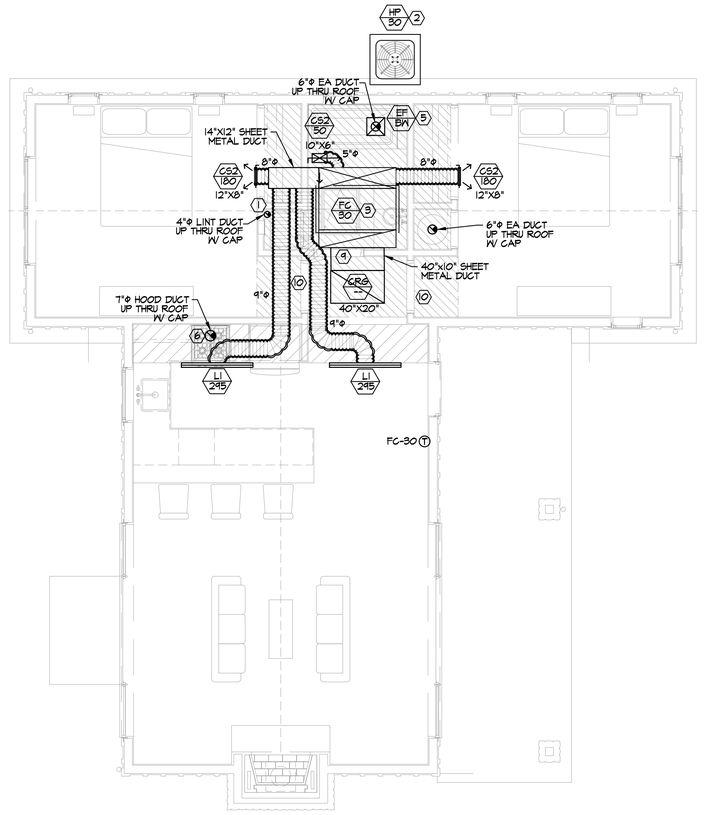
DRAWN	GMEP
CHECKED	GMEP
DATE	12/06/24
SCALE	AS NOTED
JOB NO.	24-656
SHEET	M-2.0

HVAC GENERAL NOTES

1. REFER TO SHEET M-1.0 FOR LEGENDS AND GENERAL NOTES.
2. REFER TO SHEET M-1.1 FOR EQUIPMENT SCHEDULES.
3. REFER TO DRAWING M-1.2 FOR TYPICAL MECHANICAL DETAILS.
4. THE DUCT ROUTING SHOWN ON PLANS ARE SCHEMATIC ONLY. VERIFY WITH STRUCTURAL AND ALL OTHER PARTIES REGARDING ANY DISCREPANCY AND REPORT TO THE MECHANICAL ENGINEER FOR APPROVAL.
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HVAC KEYED NOTES

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2. PROVIDE RS/RL PIPING SIZE PER MANUFACTURER'S GUIDELINES. ROUTE FROM REMOTE CONDENSATE UNIT TO THE INDOOR AIR HANDLER. VERIFY CONDENSER LOCATIONS WITH ALL RELEVANT DESIGN PARTIES BEFORE INSTALLATION.
3. THE 3/4" PRIMARY CONDENSATE LINE TO THE LAVATORY TAILPIECE. SECONDARY CONDENSATE TO DRAIN TO THE EXTERIOR ABOVE A WINDOW OR PROVIDE A SENSOR TO SHUT-OFF UNIT UPON DETECTION OF WATER. COORDINATE WITH THE PLUMBER.
4. FURNACE FLUE DUCT RUN UP THRU ROOF WITH CAP. FURNACE VENT TO BE INSTALLED PER MANUFACTURER GUIDELINES. ROUTING AND TERMINATION OF FLUE FOR HEATING UNIT SHALL COMPLY WITH CH. 8, CMC 2022.
5. THIS FAN DENOTES THE WHOLE HOUSE VENTILATION FAN. THE FAN TO RUN CONTINUOUSLY WHILE THE HOUSE IS OCCUPIED. CLEARLY LABEL NEXT TO THE SWITCH.
6. CONNECT KITCHEN HOOD (MIN. 100 CFM) TO 7"ø KITCHEN HOOD EXHAUST AIR DUCT (MIN. 6"ø). THE HOOD MUST VENT TO THE EXTERIOR W/ BACKDRAFT DAMPER. VERIFY W/ ARCH OR OWNER BEFORE ROUGH IN.
7. EXHAUST OUTLET TERMINATES 3' AWAY FROM OPENINGS INTO THE BUILDING AND 3' AWAY FROM THE PROPERTY LINE. SEE CIVIL DRAWINGS AND ARCHITECTURAL DRAWINGS FOR PROPERTY LINE DETAILS.
8. PROVIDE CONCENTRIC KIT. CONNECT THE TWO 4" PVC PIPE FROM WATER HEATER. REFER TO INSTALLATION MANUAL FOR DETAILS.
9. PROVIDE 10"X18" TOP GRILL AND 10"X18" LOUVER OPENING ON THE DOOR 12" A.F.F. FOR COMBUSTION AIR FOR THE LAUNDRY ROOM.
10. PROVIDE 1/2" DOOR UNDER CUT, TOP GRILL OR JUMPER DUCT



HVAC PLAN - ADU

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

PRESCRIPTIVE DUCT SIZING REQUIREMENTS (FROM ASHRAE 62.2)
IN ORDER TO COMPLY WITH THE PRESCRIPTIVE DUCT SIZING REQUIREMENTS OF ASHRAE 62.2,A VENTILATION FAN MUST BE SELECTED THAT IS RATED TO PROVIDE AT A MINIMUM THE REQUIRED VENTILATION AIRFLOWAT 0.25 IN.W.G.AND THE DUCTS MUST BE SIZED IN ACCORDANCE WITH THE SPECIFICATIONS GIVEN IN TABLE 7.1,BELOW.

TABLE 7.1

Duct Type	Flex Duct				Smooth Duct			
Fan Rating (cfm @ 0.25"w.c.)	50	80	100	125	50	80	100	125
Maximum Allowable Duct Length (ft)								
Diameter,(in)	Flex Duct				Smooth Duct			
3	X	X	X	X	5	X	X	X
4	70	3	X	X	105	35	5	X
5	NL	70	35	20	NL	135	85	55
6	NL	NL	125	95	NL	NL	NL	145
7 and above	NL	NL	NL	NL	NL	NL	NL	NL

This table assumes no elbow. Deduct 15 ft of allowable duct length for each turn, elbow, or fitting. Interpolation and extrapolation in Table 7.1 is not allowed. For fan ratings not listed, use the next higher value. This table is not applicable for fan ratings > 125cfm.
NL = no limit on duct length of this size.
X = not allowed, any length of duct of this size with assumed turns and fittings will exceed the rated pressured drop (0.25 in w.g.)
Note: water gauge(w.g). is the same as water column(w.c.)

WHOLE UNIT VENTILATION CALCULATION (ASHRAE 62.2) CONTINUOUSLY

LOCATION	ADU
FLOOR AREA (SQFT)	1193.5
NO. OF BEDROOMS	2
VENTILATION RATE (CFM) = 0.03(SQFT)+7.5(BEDROOMS+1)	58.3
DESIGNED VENTILATION (CFM)	60

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

REGISTERED PROFESSIONAL ENGINEER GANGYI ZHOU No. M34279 Exp 12-31-2024 MECHANICAL STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel: 949-267-9095

PROJECT NAME:
12 ARROYO
SEQUOIA ROAD
CARMEL, CA 93923

SHEET TITLE
MECHANICAL
HVAC PLAN - ADU

DRAWN: GMEP
CHECKED: GMEP
DATE: 12/06/24
SCALE: AS NOTED
JOB NO.: 24-656
SHEET:

M-2.1

ABBREVIATIONS

ABV	ABOVE
ADA	AMERICAN DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AP	ACCESS PANEL
ARCH	ARCHITECTURAL
BG	BELOW GRADE
BFF	BELOW FINISHED FLOOR
BLDG	BUILDING
BTUH	BRITISH THERMAL UNITS PER HOUR
CD	CONDENSATE DRAIN
CFH	CUBIC FEET PER HOUR
CLG	CEILING
CO	CLEANOUT
CONT	CONTINUATION
COTG	CLEAN OUT TO GROUND
CW	DOMESTIC COLD WATER
DD	DECK DRAIN
DF	DRINKING FOUNTAIN
DFU	DRAINAGE FIXTURE UNIT
DN	DOWN
ELEC	ELECTRICAL
EQ	EQUIPMENT
EXIST, (E)	EXISTING
ET	EXPANSION TANK
F	DEGREES FAHRENHEIT
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FF	FINISHED FLOOR
FL	FLOOR
FM	FORCED MAIN
FS	FLOOR SINK
GCO	GROUND CLEAN OUT
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GW	GREASE WASTE
GRW	GREY WATER WASTE
HBB	HOSE BIBB
HD	HUB DRAIN
HW	DOMESTIC HOT WATER
IE	INVERT ELEVATION
IN	INCH
KS	KITCHEN SINK
KW	KILOWATTS
KWH	KILOWATTS PER HOUR
LAV	LAVATORY
LBS	POUNDS
LGTH	LENGTH
MAX	MAXIMUM
MBH	BTU PER HOUR (X1000)
MECH	MECHANICAL
MIN	MINIMUM
MPG	MEDIUM PRESSURE GAS
MS	MOP SINK
(N)	NEW
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NO.	NUMBER
NTS	NOT TO SCALE
OD	OUTSIDE DIAMETER / OVERFLOW DRAIN
OF	OVERFLOW
ORD	OVERFLOW ROOF DRAIN
OSD	OVERFLOW STORM DRAIN
PD	PLANTER DRAIN
POC	POINT OF CONNECTION
PRESS	PRESSURE
PRV	PRESSURE REDUCING VALVE
PS	PIPE SUPPORT
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE INCH GAUGE
RD	ROOF DRAIN
REQD	REQUIRED
RFRG	REFRIGERATOR
RPBP	REDUCING PRESSURE BACKFLOW PREVENTER
RPM	REVOLUTIONS PER MINUTE
S	SINK
SCH	SCHEDULE
SD	STORM DRAIN
SECT	SECTION
SHWR	SHOWER
SOV	SHUT-OFF VALVE
SP	SUMP PUMP
SPEC	SPECIFICATION
SPRK	SPRINKLER
SQ FT	SQUARE FOOT / SQUARE FEET
SS	SERVICE SINK
SSD	SUB-SURFACE (FOUNDATION) DRAIN
STL	STEEL
STR	STRUCTURAL
TEMP	TEMPERATURE
THK	THICK
TP	TRAP PRIMER
TYP	TYPICAL
TWGCO	TWO WAY GROUND CLEAN OUT
U/G	UNDERGROUND
UD	UNDERDRAIN / SUBGRADE DRAIN
UNO	UNLESS NOTED OTHERWISE
UR	URINAL
UTIL	UTILITY
V	VENT
V/ø/HZ	VOLTS/PHASE/HERTZ
VA	VALVE
VAC	VACCUM
VEL	VELOCITY
VFD	VARIABLE FREQUENCY DRIVE
VTR	VENT THROUGH ROOF
W	SANITARY WASTE
W/	WITH
W/O	WITHOUT
WSH	WASHER
WC	WATER CLOSET
WC.	WATER COLUMN
WCO	WALL CLEANOUT
WH	WATER HEATER / WALL HYDRANT
WHA	WATER HAMMER ARRESTOR
WSFU	WATER SERVICE FIXTURE UNITS
WTR	WATER

PIPING SYMBOLS

SYMBOL	MEANING
—— – ———— – ——	DOMESTIC COLD WATER
———— – – ————	DOMESTIC HOT WATER
———— – – – ————	DOMESTIC H.W. CIRCULATING
——— – – – ———	RECYCLED WATER
— — — — — — —	SANITARY SEWER
– – – – – – – – – –	VENT PIPING
— — — — — — —	STORM DRAIN PIPING
—— ——— ——— ——	GREASE WASTE
G	GAS
CD	CONDENSATE DRAIN
— — — GRW — — —	GRAY WATER WASTE
W / --	WASTE & VENT RISER
CH / --	COLD & HOT WATER RISER
G / --	GAS RISER
FAU / 60	AC UNIT
	CHECK VALVE
	FLOOR SINK
	FLOOR CLEANOUT
	WALL CLEANOUT
	FLOOR DRAIN
	GAS COCK
TUB-1	PLUMBING FIXTURE
	CONNECT TO EXISTING
	SHUT-OFF VALVE
	RECIRCULATION PUMP
	PIPE CAP
	PIPE ELBOW DOWN
	PIPE ELBOW UP

GENERAL PLUMBING NOTES

1. THE ENTIRE PLUMBING SYSTEM SHALL BE IN ACCORDANCE WITH THE 2022 CALIFORNIA PLUMBING CODE AND ALL OTHER APPLICABLE LOCAL, STATE AND FEDERAL CODES.
2. PIPING INDICATED ON THESE PLANS ARE DIAGRAMMATIC, ALL WORK SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO INSTALLATION.
3. IT IS THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR TO REVIEW THESE PLANS AND SPECIFICATIONS, AS WELL AS THE RELATED HVAC, FIRE PROTECTION, ELECTRICAL, STRUCTURAL, ARCHITECTURAL, INTERIOR DECOR AND SITE ENGINEERING DRAWINGS TO BECOME FAMILIAR WITH THE FULL PROJECT SCOPE. IN ADDITION, THIS CONTRACTOR MUST COORDINATE WITH AN OWNER REPRESENTATIVE TO FULLY UNDERSTAND ALL REQUIREMENTS WHICH MAY NOT BE SPECIFIED HEREIN AND WHICH THE OWNER MAY CONSIDER PART OF THIS CONTRACT. DURING THE COURSE OF CONSTRUCTION COORDINATION AND ACTUAL CONSTRUCTION, IT IS THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR TO WORK CLOSELY WITH ALL ACCOMPANYING CONTRACTORS AND TRADESMEN IN ORDER TO ENSURE A SMOOTH RUNNING AND CAREFULLY COORDINATED INSTALLATION.
4. PIPING SHOWN ON DRAWINGS WITHOUT DIMENSIONAL LOCATION SHALL BE FIELD ROUTED BY CONTRACTOR. CONTRACTOR SHALL VERIFY PROPOSED PIPE ROUTINGS PRIOR TO INSTALLATION, INCLUDING INTERFERENCE WITH BUILDING STRUCTURES, EQUIPMENT AND WORK OF OTHER TRADES WHETHER NEW OR EXISTING. PROPOSED ROUTINGS SHALL BE REVIEWED WITH THE CONSTRUCTION MANAGER.
5. PIPE SLEEVES FOR PLUMBING LINES SHALL BE FURNISHED AND INSTALLED BY CONTRACTOR. COORDINATE WITH SLAB AND WALL CONTRACTORS FOR PROPER LOCATION AND SIZE.
6. CONTRACTOR SHALL SEAL PENETRATIONS THROUGH FIRE WALLS AND FLOORS WITH APPROVED FIRE SEALANT. REFER TO SPECIFICATION. INSTALL PER MANUFACTURERS INSTRUCTIONS FOR APPLICABLE PIPE MATERIAL AND SIZE.
7. SHOWERS AND TUB-SHOWER COMBINATIONS SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE, THERMOSTATIC, OR COMBINATION PRESSURE BALANCE/THERMOSTATIC MIXING VALVE TYPE THAT PROVIDE SCALD AND THERMAL SHOCK PROTECTION FOR THE RATED FLOW RATE OF THE INSTALLED SHOWERHEAD. THESE VALVES SHALL BE INSTALLED AT THE POINT OF USE AND COMPLY WITH ASSE 1016/ASME A112.1016/CSA B125.16 OR ASME A112.18.1/CSA B125.1.
8. THE MAXIMUM WATER TEMPERATURE DISCHARGING FROM AN INDIVIDUAL SHOWERHEAD SHALL BE LIMITED TO 120ºF (49ºC) BY ONE OF THE FOLLOWING METHODS:
   - 8.1. A SHOWER OR TUB/SHOWER COMBINATION VALVE CONFORMING TO ASSE 1016/ASME A112.1016/CSA B125.16 WHERE EITHER:
     THE VALVE IS FIELD-ADJUSTED TO THE REQUIRED MAXIMUM TEMPERATURE, OR THE HANDLE POSITION, STOP, OR TEMPERATURE LIMITING CONTROL IS SET IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS TO THE REQUIRED MAXIMUM TEMPERATURE
   - 8.2. A LIMITING DEVICE CONFORMING TO EITHER ASSE 1070/ASME A112.1070/CSA B125.70 OR CSA B125.3
9. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT FIXTURE LOCATIONS AND MOUNTING HEIGHTS OF ALL PLUMBING FIXTURES.
10. WASTE AND VENT PIPING SHALL BE SLOPED AT 2% UNLESS NOTED OTHERWISE.
11. WATER PIPE AND FITTING WITH A LEAD CONTENT WHICH EXCEEDS 0.25% SHALL BE PROHIBITED IN SYSTEMS CONVEYING POTABLE WATER.
12. CONTRACTOR SHALL VERIFY WATER PRESSURE CONDITIONS AT THE PROJECT SITE. CONTRACTOR SHALL PROVIDE INSTALL A PRESSURE REGULATOR WHERE THE SUPPLY PRESSURE EXCEEDS 80 PSI.
13. ALL PIPING SHALL BE SUPPORTED AT INTERVAL NOT TO EXCEED THOSE SHOWN IN CPC TABLE 313.3
14. ALL POTABLE WATER OUTLETS WITH HOSE ATTACHMENTS, SUCH AS HOSE BIBS, AND MOP SINKS ARE TO BE PROVIDED WITH A BACKFLOW/ANTI-SIPHON DEVICE.
15. NEW OR REPAIRED POTABLE WATER SYSTEMS SHALL BE DISINFECTED PRIOR TO USE WHERE REQUIRED BY THE AUTHORITY HAVING JURISDICTION. THE METHOD TO BE FOLLOWED SHALL BE THAT PRESCRIBED BY THE HEALTH AUTHORITY OR, IN CASE NO METHOD IS PRESCRIBE BY IT, THE METHOD PRESCRIBED IN SEC. 609.9 (CPC 2022) SHALL BE USED.
16. PLUMBING VENT THROUGH ROOF SHALL TERMINATE VERTICALLY NOT LESS THAN ONE FOOT FROM ANY VERTICAL SURFACE. EACH VENT SHALL TERMINATE NOT LESS THAN 10 FEET HORIZONTALLY OR AT LEAST 3 FEET ABOVE ANY WINDOW, DOOR, OPENING, AIR INTAKE OR SHAFT. EACH VENT PIPE SHALL EXTEND THROUGH ITS FLASHING AND SHALL TERMINATE VERTICALLY NOT LESS THAN 6 INCHES ABOVE THE ROOF. VENTS WITHIN 10 FEET OF A PART OF THE ROOF THAT IS USED FOR SUCH OTHER PURPOSES SHALL EXTEND NOT LESS THAN 7 FEET ABOVE SUCH ROOF AND SHALL BE SECURELY STAYED.
17. FIXTURES INSTALLED ON A FLOOR LEVEL THAT IS LOWER THAN THE NEXT UPSTREAM MANHOLE COVER OF THE PUBLIC OR PRIVATE SEWER SHALL BE PROTECTED FROM BACKFLOW OF SEWAGE BY INSTALLING AN APPROVED TYPE OF BACKWATER VALVE. FIXTURES ON SUCH FLOOR LEVEL THAT ARE NOT BELOW THE NEXT UPSTREAM MANHOLE COVER SHALL NOT BE REQUIRED TO BE PROTECTED BY A BACKWATER VALVE. FIXTURES ON FLOOR LEVELS ABOVE SUCH ELEVATION SHALL NOT DISCHARGE THROUGH THE BACKWATER VALVE.
18. ALL REQUIRED CLEANOUTS SHALL BE INSTALLED AS PER SEC. 707.0 & 719.0 OF THE CALIFORNIA PLUMBING CODE.
19. FLOOR DRAINS OR SIMILAR TRAPS DIRECTLY CONNECTED TO THE DRAINAGE SYSTEM AND SUBJECT TO INFREQUENT USE SHALL BE PROVIDED WITH AN APPROVED AUTOMATIC MEANS OF MAINTAINING THEIR WATER SEALS.

PEX PIPING NOTES

1. ALL INSTALLATIONS OF PEX PIPE WHERE IT IS THE INITIAL PLUMBING PIPING INSTALLED IN NEW CONSTRUCTION SHALL BE FLUSHED TWICE OVER A PERIOD OF AT LEAST ONE WEEK. THE PIPE SYSTEM SHALL BE FIRST FLUSHED FOR AT LEAST 10 MINUTES AND THEN FILLED AND ALLOWED TO STAND FOR NO LESS THAN 1 WEEK, AFTER WHICH ALL THE BRANCHES OF THE PIPE SYSTEM MUST BE FLUSHED LONG ENOUGH TO FULLY EMPTY THE CONTAINED VOLUME. THIS PROVISION SHALL NOT APPLY TO THE INSTALLATION OF PEX PIPE WHERE IT REPLACES AN EXISTING PIPE SYSTEM OF ANY MATERIAL.
2. AT THE TIME OF FILL, EACH FIXTURE SHALL HAVE A REMOVABLE TAG APPLIED STATING:
   (A) "THIS NEW PLUMBING SYSTEM WAS FIRST FILLED AND FLUSHED ON _____ (DATE) BY _____ (NAME). THE STATE OF CALIFORNIA REQUIRES THAT THE SYSTEM BE FLUSHED AFTER STANDING AT LEAST ONE WEEK AFTER THE FILL DATE SPECIFIED ABOVE. IF THIS SYSTEM IS USED EARLIER THAN ONE WEEK AFTER THE FILL DATE, THE WATER MUST BE ALLOWED TO RUN FOR AT LEAST TWO MINUTES PRIOR TO USE FOR HUMAN CONSUMPTION. THIS TAG MAY NOT BE REMOVED PRIOR TO THE COMPLETION OF THE REQUIRED SECOND FLUSHING, EXCEPT BY THE BUILDING OWNER OR OCCUPANT.
3. WHEN PEX TUBING IS PLACED IN SOIL AND IS USED IN POTABLE WATER SYSTEMS INTENDED TO SUPPLY DRINKING WATER TO FIXTURES OR APPLIANCES, THE TUBING OR PIPING SHALL BE SLEEVED WITH A MATERIAL APPROVED FOR POTABLE WATER USE IN SOIL OR OTHER MATERIAL THAT IS IMPERMEABLE TO SOLVENTS OR PETROLEUM PRODUCTS.

PIPE INSULATION NOTES

1. THE FOLLOWING PIPES ARE INSULATED, TO THE THICKNESSES REQUIRED BY CEC 150.0(J) AND CPC 609.11.
   - THE FIRST 5 FEET OF HOT AND COLD WATER PIPES FROM THE STORAGE TANK.
   - ALL HOT WATER PIPING
   - ALL PIPING ASSOCIATED WITH A DOMESTIC HOT WATER RECIRCULATION SYSTEM REGARDLESS OF THE PIPE DIAMETER, EXCEPT WHEN COLD WATER RETURN IS USED IN A DEMAND SYSTEM.

THE FOLLOWING SECTIONS OF PIPE DO NOT HAVE TO BE INSULATED:

- PIPING THAT PENETRATES FRAMING MEMBERS SHALL NOT BE REQUIRED TO HAVE PIPE INSULATION FOR THE DISTANCE OF THE FRAMING PENETRATION. METAL PIPING THAT PENETRATES METAL FRAMING SHALL USE GROMMETS, PLUGS, WRAPPING OR OTHER INSULATING MATERIAL TO ASSURE THAT NO CONTACT IS MADE WITH THE METAL FRAMING. INSULATION SHALL BUTT SECURELY AGAINST ALL FRAMING MEMBERS.
- HOT WATER PIPING BETWEEN THE FIXTURE CONTROL VALVE OR SUPPLY STOP AND THE FIXTURE OR APPLIANCE.
- PIPING INSTALLED IN INTERIOR OR EXTERIOR WALL SHALL NOT BE REQUIRED TO HAVE PIPE INSULATION IF ALL THE REQUIREMENTS ARE MET FOR COMPLIANCE WITH QUALITY INSULATION INSTALLATION (QII) AS SPECIFIED IN REFERENCE RESIDENTIAL APPENDIX RA3.5.
- PIPING SURROUNDED WITH A MINIMUM OF 1" OF WALL INSULATION, 2" OF CRAWL SPACE INSULATION OR 4 INCHES OF ATTIC INSULATION SHALL NOT BE REQUIRED TO HAVE PIPE INSULATION.

NOMINAL PIPE DIAMETER	INSULATION THICKNESS
1/2" TO 3/4"	1"
1" TO 1-1/2"	1-1/2"
2" & GREATER	2"

TITLE 24 ENERGY NOTES

1. IF A CIRCULATING HOT WATER SYSTEM IS INSTALLED, IT SHALL HAVE A CONTROL CAPABLE OF AUTOMATICALLY TURNING OFF THE CIRCULATING PUMP(S) WHEN HOT WATER IS NOT BEING USED.
2. WATER HEATING SYSTEMS USING GAS OR PROPANE WATER HEATERS TO SERVE INDIVIDUAL DWELLING UNITS SHALL INCLUDE THE FOLLOWING COMPONENTS:
   - A. A 120V ELECTRICAL RECEPTACLE THAT IS WITHIN 3 FEET FROM THE WATER HEATER AND ACCESSIBLE TO THE WATER HEATER WITH NO OBSTRUCTIONS.
   - B. A CATEGORY III OR IV VENT, OR A TYPE B VENT WITH STRAIGHT PIPE BETWEEN THE OUTSIDE TERMINATION AND THE SPACE WHERE THE WATER HEATER IS INSTALLED
   - C. A CONDENSATE DRAIN THAT IS NO MORE THAN 2 INCHES HIGHER THAN THE BASE OF THE INSTALLED WATER HEATER, AND ALLOWS NATURAL DRAINING WITHOUT PUMP ASSISTANCE
   - D. A GAS SUPPLY LINE WITH A CAPACITY OF AT LEAST 200,000 BTU/HR.

GAS PIPING NOTES

1. GAS PIPING SHALL BE INSTALLED IN ACCORDANCE WITH CHAPTER 12 OF THE CALIFORNIA PLUMBING CODE (2022 EDITION).
2. GAS PIPE IS TO BE SIZED PER THE SIZING TABLES LISTED IN CHAPTER 12 OF THE CALIFORNIA PLUMBING CODE.
3. WHERE GAS PIPING IS PASSING THROUGH AN EXTERIOR WALL, THE PIPING SHALL BE PROTECTED AGAINST CORROSION BY COATING OR WRAPPING WITH AN INERT MATERIAL APPROVED FOR SUCH APPLICATIONS. THE PIPING SHALL BE SEALED AROUND ITS CIRCUMFERENCE AT THE POINT OF THE EXTERIOR PENETRATION TO PREVENT THE ENTRY OF WATER, INSECTS, AND RODENTS. WHERE PIPING IS ENCASED IN A PROTECTIVE PIPE SLEEVE, THE ANNULAR SPACES BETWEEN THE GAS PIPING AND THE SLEEVE AND BETWEEN THE SLEEVE AND THE WALL OPENING SHALL BE SEALED.
4. UNDERGROUND GAS PIPING SYSTEMS SHALL BE INSTALLED WITH A COVER NOT LESS THAN 18". WHERE EXTERNAL DAMAGE TO THE PIPE IS NOT LIKELY TO RESULT, THE COVER SHALL BE NOT LESS THAN 12". WHERE A COVER NOT LESS THAN 12" CANNOT BE PROVIDED, THE PIPE SHALL BE INSTALLED IN CONDUIT OR BRIDGED (SHIELDED).
5. WHERE A GAS SEDIMENT TRAP IS NOT INCORPORATED AS PART OF THE APPLIANCE, A SEDIMENT TRAP SHALL BE INSTALLED DOWNSTREAM OF THE APPLIANCE SHUTOFF VALVE AS CLOSE TO THE INLET OF THE APPLIANCE AS PRACTICAL AT THE TIME OF APPLIANCE INSTALLATION. ILLUMINATING APPLIANCES, RANGES, CLOTHES DRYERS, DECORATIVE APPLIANCES FOR INSTALLATION IN VENTED FIREPLACES, GAS FIREPLACES, AND OUTDOOR GRILLS SHALL NOT REQUIRED TO BE SO EQUIPPED (CPC 1211.8).

CAL GREEN NOTES

1. PLUMBING FIXTURES AND FITTING SHALL COMPLY WITH ALL THE REQUIREMENTS IN SECTION 4.303 IN THE CALIFORNIA GREEN BUILDING CODE.
2. WHEN A SHOWER IS SERVED BY MORE THAN ONE SHOWERHEAD, THE COMBINED FLOW RATE OF ALL THE SHOWERHEADS AND/OR OTHER SHOWER OUTLETS CONTROLLED BY A SINGLE VALVE SHALL NOT EXCEED 1.8 GALLONS PER MINUTE AT 80 PSI. OR THE SHOWER SHALL BE DESIGNED TO ALLOW ONLY ONE SHOWER OUTLET TO BE IN OPERATION AT A TIME. A HAND-HELD SHOWER SHALL BE CONSIDERED A SHOWERHEAD.
3. THE MINIMUM FLOW RATE OF RESIDENTIAL LAVATORY FAUCETS SHALL NOT BE LESS THAN 0.8 GPM AT 20 PSI.
4. KITCHEN FAUCETS MAY TEMPORARILY INCREASE THE FLOW ABOVE THE MAXIMUM RATE, BUT NOT TO EXCEED 2.2 GPM AT 60 PSI, AND MUST DEFAULT TO A MAXIMUM FLOW RATE OF 1.8 GPM AT 60 PSI..
5. THE EFFECTIVE FLUSH VOLUME OF DUAL FLUSH TOILETS IS DEFINED AS THE COMPOSITE, AVERAGE FLUSH VOLUME OF TWO REDUCED FLUSHES AND ONE FULL FLUSH.
6. PLUMBING FIXTURES AND FITTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA PLUMBING CODE AND SHALL MEET THE APPLICABLE STANDARDS REFERENCED IN TABLE 1701.1 OF THE CALIFORNIA PLUMBING CODE.

FIXTURE FLOW RATES

FIXTURE TYPE	MAX FLOW RATE
SHOWERHEADS	1.8 GPM @80 PSI
LAVATORY FAUCETS, RESIDENTIAL	1.2 GPM @60 PSI
LAVATORY FAUCETS IN COMMON AND PUBLIC AREAS	0.5 GPM @60 PSI
KITCHEN FAUCETS	1.8 GPM @60 PSI
WATER CLOSETS	1.28 GALLONS/FLUSH
URINALS (WALL MOUNTED)	0.125 GALLON/FLUSH
URINALS (FLOOR MOUNTED)	0.5 GALLON/FLUSH
METERING FAUCETS	.25 GALLON/CYCLE

FLOW RATES ARE BASED ON SEC 4.303 OF THE GREEN BUILDING CODE

PIPING MATERIAL SCHEDULE

DOMESTIC COLD/HOT WATER	UPONOR AQUA PEX TUBING WITH PROPEX FITTINGS. INSTALLED IN COMPLIANCE WITH MANUFACTURES INSTRUCTIONS
PROPANE GAS PIPING - BELOW GRADE	SCHEDULE 40 BLACK STEEL (ASTM A53)
PROPANE GAS PIPING - ABOVE GRADE	SCHEDULE 40 BLACK STEEL (ASTM A53)
SEWER, WASTE AND VENT PIPING - INSIDE BUILDING - ABOVE GRADE	SCHEDULE 40 ABS (OR PVC)
SEWER, WASTE AND VENT PIPING - INSIDE BUILDING - BELOW GRADE	SCHEDULE 40 ABS (OR PVC)
INDIRECT WASTE AND CONDENSATE PIPING	PVC/CPVC

NOTES:
1. BUILDING DRAIN AND VENT PIPING MATERIALS SHALL COMPLY WITH SECTIONS 701.0 AND 903.0 OF THE CALIFORNIA PLUMBING CODE

2. ALL SANITARY SYSTEM MATERIALS SHALL BE LISTED BY AN APPROVED LISTING AGENCY.

PLUMBING SHEET INDEX

NO.	SHEET	DESCRIPTION
1	P-1.0	PLUMBING GENERAL NOTES, SYMBOLS & SHEET INDEX
2	P-1.1	PLUMBING SCHEDULES & CALCULATION
3	P-1.2	PLUMBING DETAILS
4	P-2.0	PLUMBING PLAN - MAIN HOUSE - COLD/HOT WATER & GAS
5	P-2.1	PLUMBING PLAN - ADU - COLD/HOT WATER & GAS
6	P-3.0	PLUMBING PLAN - MAIN HOUSE - WASTE & VENT
7	P-3.1	PLUMBING PLAN - ADU - WASTE & VENT

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

REGISTERED PROFESSIONAL ENGINEER GANGYI ZHOU No. M34279 Exp 12-31-2024 MECHANICAL STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel: 949-267-9095

PROJECT NAME:
12 ARROYO
SEQUOIA ROAD
CARMEL, CA 93923

SHEET TITLE
PLUMBING
GENERAL NOTES, SYMBOLS
& SHEET INDEX

DRAWN: GMEP
CHECKED: GMEP
DATE: 12/06/24
SCALE: AS NOTED
JOB NO.: 24-656
SHEET: P-1.0

FIXTURE UNIT CALCULATIONS FOR MAIN HOUSE

FIXTURE TYPE	QTY	DOMESTIC WATER							DRAINAGE	
		COLD WATER FIXTURE UNITS (CWFU)	HOT WATER FIXTURE UNITS (HWFU)	75% COLD WATER FIXTURE DEMAND	75% HOT WATER FIXTURE DEMAND	TOTAL COLD WATER DEMAND (CWFU)	75% TOTAL COLD WATER DEMAND (CWFU)	75% TOTAL HOT WATER DEMAND (HWFU)	DRAINAGE FIXTURE UNITS (DFU)	TOTAL (DFU)
WATER CLOSET, TANK TYPE	4	2.5	0.0	-	0.0	10.0	10.0	0.0	3	12
BATHTUB	1	4.0	4.0	3.0	3.0	4.0	3.0	3.0	2	2
LAVATORY	5	1.0	1.0	0.75	0.75	5.0	3.8	3.8	1	5
SHOWER	3	2.0	2.0	1.50	1.50	6.0	4.5	4.5	2	6
DISHWASHER	1	1.5	1.5	-	1.5	1.5	0.0	1.5	0	0
CLOTHES WASHER	1	4.0	4.0	3.0	3.0	4.0	3.0	3.0	3	3
KITCHEN SINK	1	1.5	1.5	1.125	1.125	1.5	1.125	1.125	2	2
HOSE BIBB	1	2.5	0.0	-	0.0	2.5	1.875	0.00	0	0
TOTAL FIXTURE UNITS						34.5	27.250	16.875		30
EQUIVALENT WATER DEMAND IN GPM						23	20	13		
REQUIRED MINIMUM PIPE SIZE						2"	1-1/2"	1-1/4"		4"

FIXTURE UNIT CALCULATIONS FOR ADU

FIXTURE TYPE	QTY	DOMESTIC WATER							DRAINAGE	
		COLD WATER FIXTURE UNITS (CWFU)	HOT WATER FIXTURE UNITS (HWFU)	75% COLD WATER FIXTURE DEMAND	75% HOT WATER FIXTURE DEMAND	TOTAL COLD WATER DEMAND (CWFU)	75% TOTAL COLD WATER DEMAND (CWFU)	75% TOTAL HOT WATER DEMAND (HWFU)	DRAINAGE FIXTURE UNITS (DFU)	TOTAL (DFU)
WATER CLOSET, TANK TYPE	1	2.5	0.0	-	0.0	2.5	2.5	0.0	3	3
BATHTUB	1	4.0	4.0	3.0	3.0	4.0	3.0	3.0	2	2
LAVATORY	1	1.0	1.0	0.75	0.75	1.0	0.8	0.8	1	1
DISHWASHER	1	1.5	1.5	-	1.5	1.5	0.0	1.5	0	0
CLOTHES WASHER	1	4.0	4.0	3.0	3.0	4.0	3.0	3.0	3	3
KITCHEN SINK	1	1.5	1.5	1.125	1.125	1.5	1.125	1.125	2	2
TOTAL FIXTURE UNITS						14.5	10.375	9.375		11
EQUIVALENT WATER DEMAND IN GPM						11	9	8		
REQUIRED MINIMUM PIPE SIZE						1-1/4"	1-1/4"	1"		3"

TYPICAL WATER CALCULATIONS

STREET PRESSURE*: 65 MIN. / 75 MAX.

METER SIZE: 3/4" FOR 28 GPM

	PRESSURE CALCULATION	UNIT	VALUE
1.	3/4" METER LOSS	PSI	8.0
2.	18 FT STATIC LOSS	PSI	5.6
3.	MIN. PRESSURE REQUIRED	PSI	20.0
4.	TOTAL LOSSES (ITEMS 1-3)	PSI	33.6
5.	MIN. STREET PRESSURE	PSI	65
6.	PRESSURE AVAILABLE FOR FRICTION	PSI	31.4
7.	ACTUAL LENGTH OF SYSTEM	FT	600
8.	DEVELOPED LENGTH (130% OF ITEM 7)	FT	780.0
9.	AVERAGE PRESSURE DROP	PSI/100FT	4.0

TOTAL FIXTURE UNIT CALCULATIONS FOR SITE

UNIT TYPE	QTY	DOMESTIC WATER		DRAINAGE	
		COLD WATER FIXTURE UNITS (CWFU)	TOTAL COLD WATER DEMAND (CWFU)	DRAINAGE FIXTURE UNITS (DFU)	TOTAL (DFU)
MAIN HOUSE	1	34.5	34.5	30	30
ADU	1	14.5	14.5	11	11
TOTAL FIXTURE UNITS			49.0		41
EQUIVALENT WATER DEMAND IN GPM			28		
REQUIRED MINIMUM PIPE SIZE			2"		4"

PEX PIPE SIZING CHART

FOR VELOCITY OF 10FPS (CW) AND 8FPS(HW); PRESSURE LOSS PER 100FT IN PSI=4.0

PIPE SIZE	COLD WATER		HOT WATER	
	TANK FU	GPM	FU	GPM
1/2"	-	1.4	1	1.6
3/4"	3	3.7	4	4.1
1"	8	7.4	10	8.1
1-1/4"	17	12.7	20	14.1
1-1/2"	30	20.0	33	21.9
2"	92	41.5	108	45.4

BASED ON UPONOR AQUAPEX PRESSURE LOSS TABLES IN CH 4 OF THE PLUMBING DESIGN ASSISTANCE MANUAL

PIPE SIZING CHART, CPVC SDR 11

FOR VELOCITY OF 8FPS (CW) AND 5FPS(HW); PRESSURE LOSS PER 100FT IN PSI=4.0

PIPE SIZE		COLD WATER		HOT WATER	
NOMINAL DIAMETER	INNER DIAMETER	TANK FU	GPM	FU	GPM
1/2"	0.496"	1	1.8	1	1.8
3/4"	0.695"	4	4.5	4	4.5
1"	0.901"	12	8.8	12	8.8
1-1/4"	1.105"	21	15.1	21	14.9
1-1/2"	1.309"	39	23.6	32	21.0
2"	1.716"	119	48.0	69	36.0

BASED ON THE HAZEN-WILLIAMS EAUATIONS

FIXTURE SCHEDULE

ITEM	DESCRIPTION	MAKE/MODEL	TRAP	WASTE	VENT	COLD WATER	HOT WATER	REMARKS
WC-1	WATER CLOSET, TANK TYPE	TBD	-	3"	2"	1/2"	-	1.28 GPF. VERIFY W/ OWNER OR ARCHITECT FOR EXACT FIXTURE SPECIFICATION BEFORE PURCHASING FIXTURE
L-1	LAVATORY	TBD	1-1/2"	2"	1-1/2"	1/2"	1/2"	1.2 GPM FAUCET. VERIFY SELECTION W/ ARCH & OWNER.
S-1	KITCHEN SINK	TBD	1-1/2"	2"	1-1/2"	1/2"	1/2"	1.8 GPM FAUCET. SELECTION TBD BY OWNER.
TUB-1	BATHTUB	TBD	1-1/2"	2"	1-1/2"	1/2"	1/2"	VERIFY W/ OWNER OR ARCHITECT FOR EXACT FIXTURE SPECIFICATION BEFORE PURCHASING FIXTURE
SH-1	SHOWER	TBD	2"	2"	1-1/2"	1/2"	1/2"	1.8 GPM SHOWER HEAD. PROVIDE A THERMOSTATIC OR PRESSURE BALANCE TYPE MIXING VALVE FOR THERMAL SHOCK AND SCALD PROTECTION.
CP-1	CIRCULATION PUMP	ARMSTRONG COMPASS OR EQUAL	-	-	-	3/4"	-	INSTALL PER MANUFACTURES RECOMMENDATIONS
WD-1	WASHER/DRYER	TBD	2"	2"	1-1/2"	1/2"	1/2"	SELECTION TBD BY OWNER.
DW-1	DISHWASHER	TBD	-	-	-	-	1/2"	SELECTION TBD BY OWNER.
IMB-1	ICE MAKE BOX	TBD	-	-	-	1/2"	-	SELECTION TBD BY OWNER.
GD-1	GARBAGE DISPOSAL	TBD	-	-	-	-	-	SELECTION TBD BY OWNER.
HBB-1	HOSE BIBB	TBD	-	-	-	3/4"	-	SELECTION TBD BY OWNER. PROVIDE ANTI-SIPHON DEVICE.
HD-1	HUB DRAIN	TBD	2"	2"	1-1/2"	-	-	DRAIN FOR WATER HEATER CONDENSATE.

*PLUMBING FIXTURES MUST COMPLY WITH GREEN BUILDING STANDARDS

HYBRID WATER HEATER SCHEDULE

ITEM NO.	MANUFACTURER	MAKE/MODEL	CAPACITY	ENERGY FACTOR (EFFICIENCY)	ELEC DATA	UEF 1ST HOUR RATING (GPH)	SET POINT TEMPERATURE	REMARKS
WH-1	RHEEM OR EQUAL	PROPH40 T2 RH375-50	36 GALLONS	3.83	208/240V 1PHASE 30AMP	60	120° F	REFER TO WATER HEATER DETAIL.

HYBRID WATER HEATER SCHEDULE

ITEM NO.	MANUFACTURER	MAKE/MODEL	CAPACITY	ENERGY FACTOR (EFFICIENCY)	ELEC DATA	UEF 1ST HOUR RATING (GPH)	SET POINT TEMPERATURE	REMARKS
WH-2	RHEEM OR EQUAL	PROPH50 T2 RH375-50	45 GALLONS	3.88	208/240V 1PHASE 30AMP	67	120° F	REFER TO WATER HEATER DETAIL.

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

REGISTERED PROFESSIONAL ENGINEER
GANGYI ZHOU
No. M34279
Exp.12-31-2024
MECHANICAL
STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel: 949-267-9095

PROJECT NAME:
12 ARROYO SEQUOIA ROAD
CARMEL, CA 93923

SHEET TITLE
PLUMBING SCHEDULES & CALCULATIONS

DRAWN: GMEP
CHECKED: GMEP
DATE: 12/06/24
SCALE: AS NOTED
JOB NO.: 24-656
SHEET: P-1.1

TYPICAL CONDENSATE PIPE DETAIL

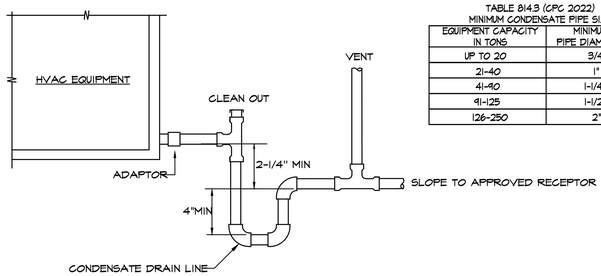


TABLE 814.3 (CPC 2022)
MINIMUM CONDENSATE PIPE SIZE

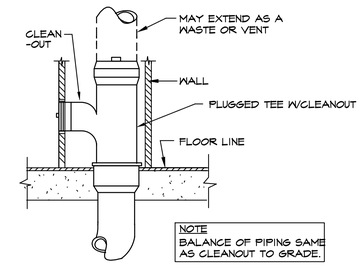
EQUIPMENT CAPACITY IN TONS	MINIMUM PIPE DIAMETER
UP TO 20	3/4"
21-40	1"
41-90	1-1/4"
91-125	1-1/2"
126-250	2"

NOTES:
1. ALL INTERIOR CONDENSATE DRAIN PIPING SHALL BE INSULATED
2. SLOPE ALL CONDENSATE DRAIN LINES AT 1%.
3. ROUTE CONDENSATE DRAIN TO TAILPIECE OF NEAREST LAVATORY OR OTHER APPROVED LOCATION
4. ROUTE SECONDARY CONDENSATE DRAIN TO EXTERIOR OR PROVIDE A SHUT-OFF FLOAT SWITCH

SCALE:NONE

1

TYPICAL WALL CLEANOUT

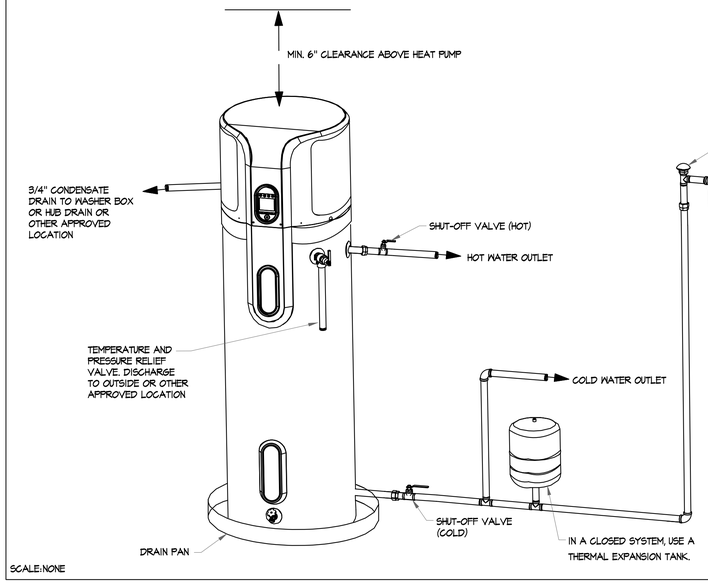


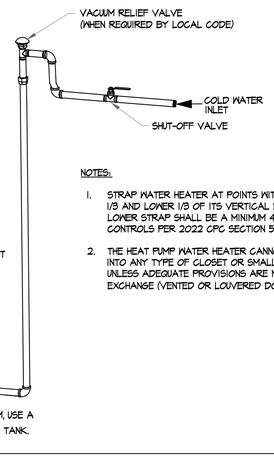
NOTE
BALANCE OF PIPING SAME AS CLEANOUT TO GRADE.

SCALE:NONE

2

HEAT PUMP WATER HEATER DETAIL



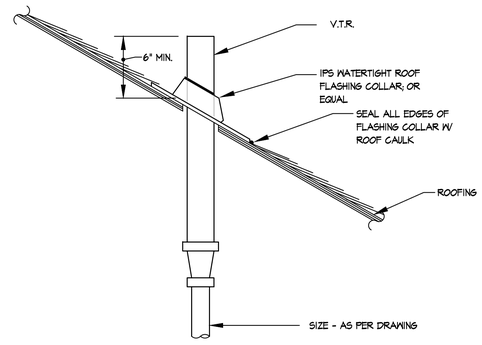


NOTES:
1. STRAP WATER HEATER AT POINTS WITHIN THE UPPER 1/3 AND LOWER 1/3 OF ITS VERTICAL DIMENSION. THE LOWER STRAP SHALL BE A MINIMUM 4" ABOVE CONTROLS PER 2022 CPC SECTION 507.2.
2. THE HEAT PUMP WATER HEATER CANNOT BE PLACED INTO ANY TYPE OF CLOSET OR SMALL ENCLOSURE, UNLESS ADEQUATE PROVISIONS ARE MADE FOR AIR EXCHANGE (VENTED OR LOUVERED DOORS, ETC.)

SCALE:NONE

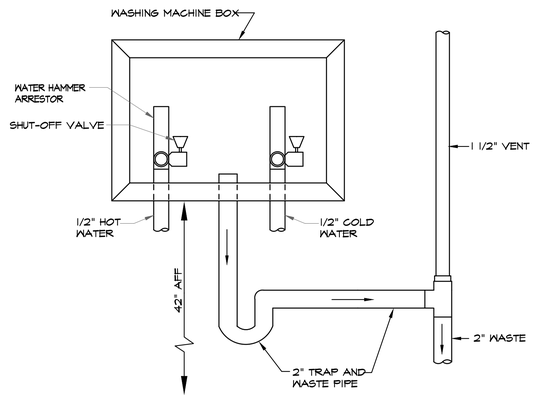
3

PLUMBING VENT THROUGH ROOF



4

TYPICAL WASHING MACHINE BOX



SCALE:NONE

5

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

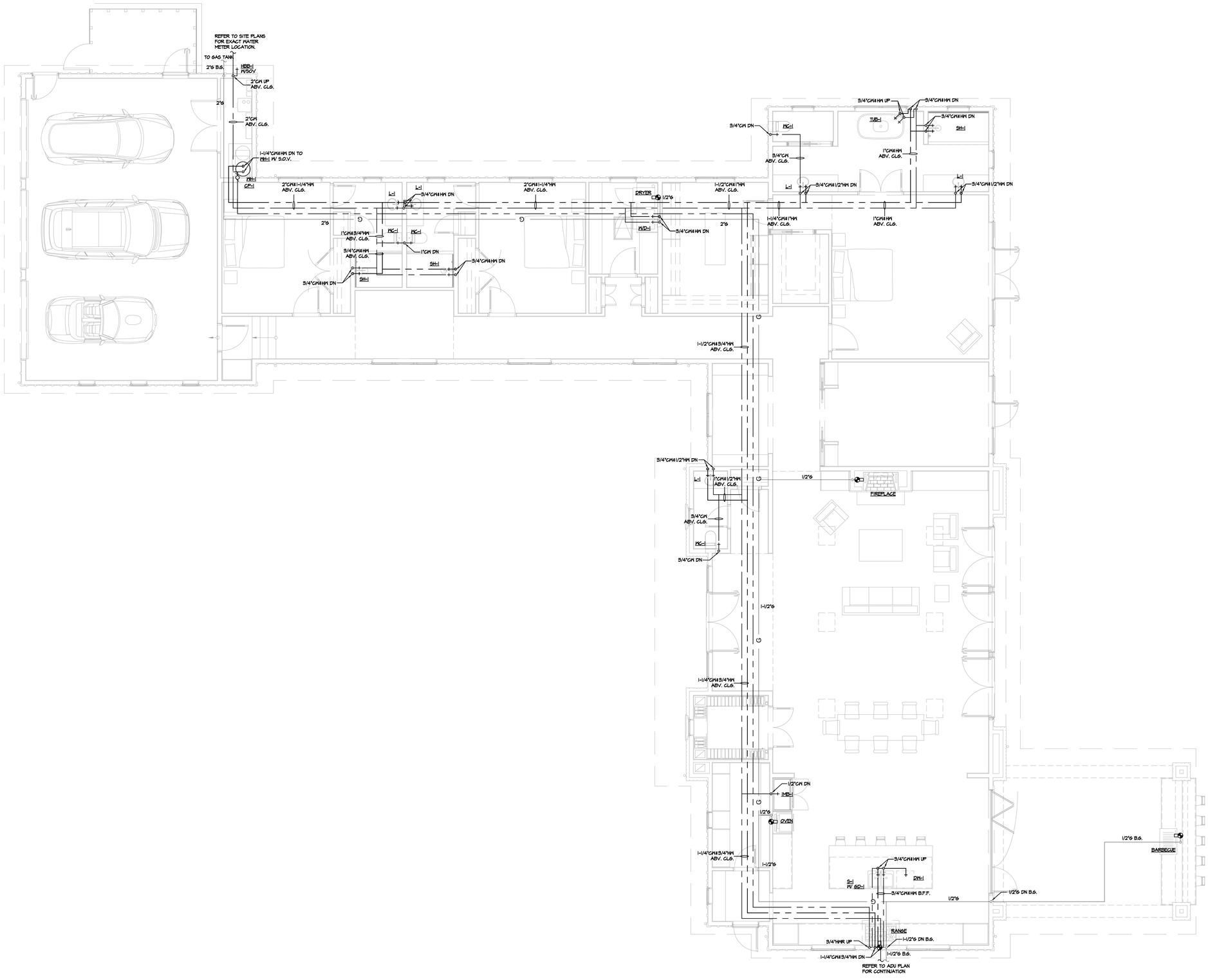
REGISTERED PROFESSIONAL ENGINEER
GANGYI ZHOU
No. M34279
Exp.12-31-2024
MECHANICAL
STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel: 949-267-9095

PROJECT NAME:
12 ARROYO
SEQUOIA ROAD
CARMEL, CA 93923

SHEET TITLE
PLUMBING DETAILS

DRAWN
GMEP
CHECKED
GMEP
DATE
12/06/24
SCALE
AS NOTED
JOB NO.
24-656
SHEET
P-1.2



PLUMBING PLAN - MAIN HOUSE - COLD/HOT WATER & GAS

SCALE:3/16"=1'-0"

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

REGISTERED PROFESSIONAL ENGINEER
GANGYI ZHOU
No. M34279
Exp.12-31-2024
MECHANICAL
STATE OF CALIFORNIA

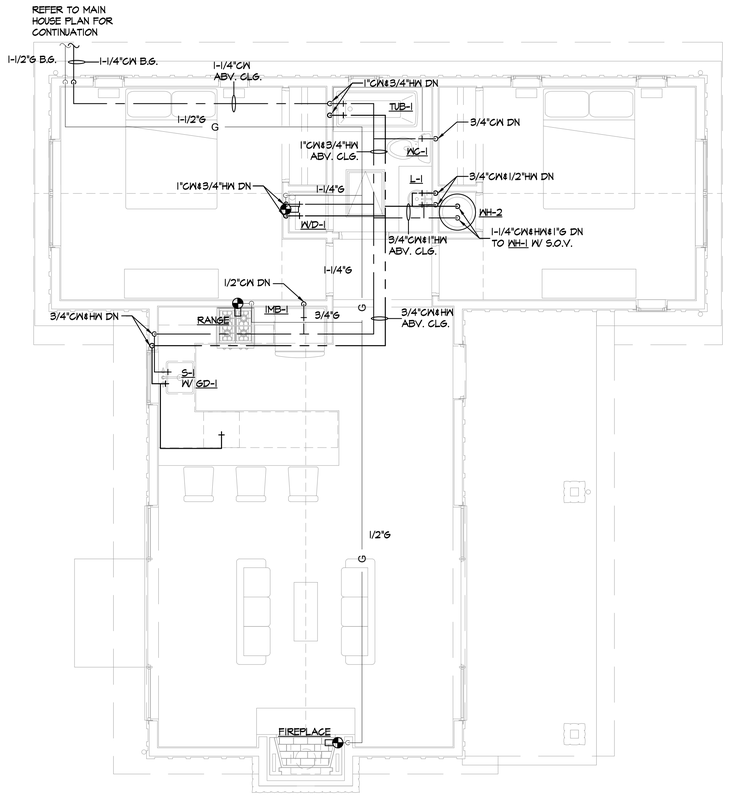
GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel: 949-267-9095

PROJECT NAME:
12 ARROYO
SEQUOIA ROAD
CARMEL, CA 93923

SHEET TITLE
PLUMBING PLAN
MAIN HOUSE
COLD/HOT WATER & GAS

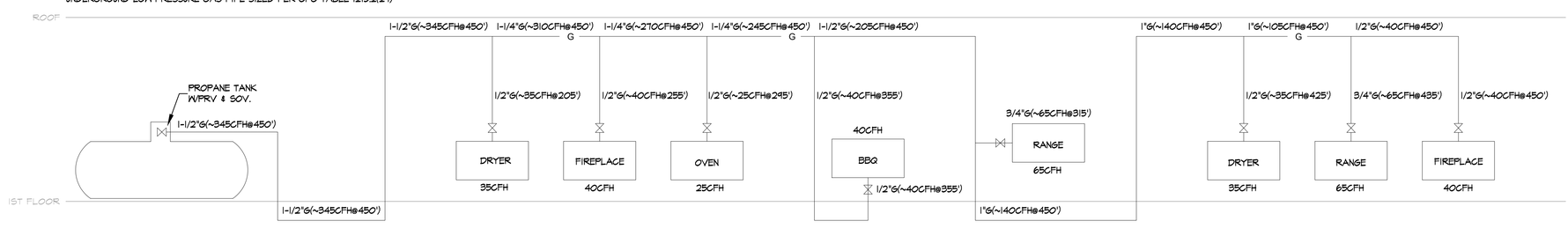
DRAWN GMEP
CHECKED GMEP
DATE 12/06/24
SCALE AS NOTED
JOB NO. 24-656
SHEET

P-2.0



PLUMBING PLAN - ADU - COLD/HOT WATER & GAS

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



PLUMBING - GAS DIAGRAM

SCALE: NONE

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

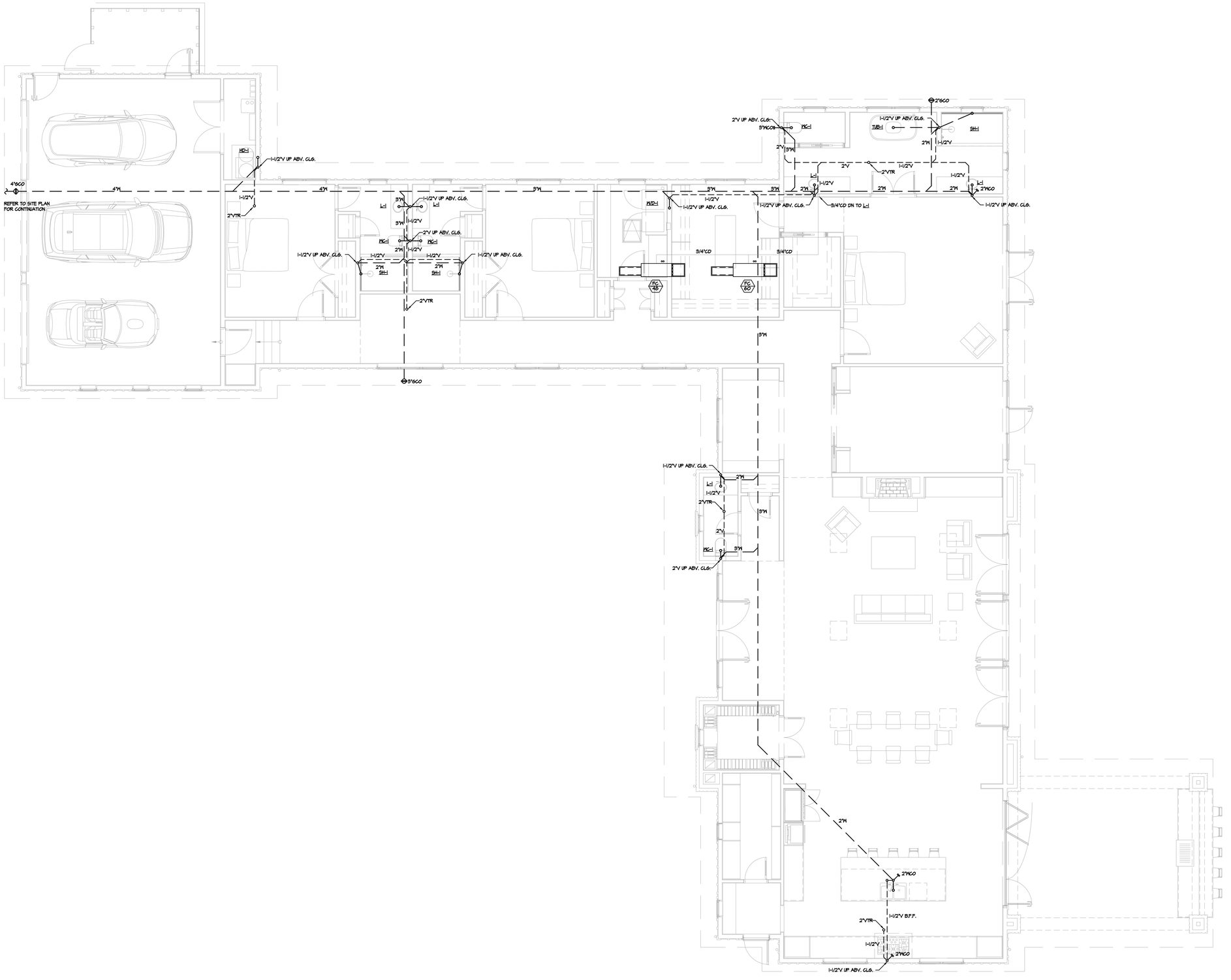
REGISTERED PROFESSIONAL ENGINEER
GANGYI ZHOU
No. M34279
Exp.12-31-2024
MECHANICAL
STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel: 949-267-9095

PROJECT NAME:
12 ARROYO
SEQUOIA ROAD
CARMEL, CA 93923

SHEET TITLE
PLUMBING PLAN
ADU
COLD/HOT WATER & GAS

DRAWN: GMEP
CHECKED: GMEP
DATE: 12/06/24
SCALE: AS NOTED
JOB NO.: 24-656
SHEET: P-2.1



PLUMBING PLAN - MAIN HOUSE - WASTE & VENT

SCALE:3/16"=1'-0"

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

REGISTERED PROFESSIONAL ENGINEER
GANGYI ZHOU
No. M34279
Exp.12-31-2024
MECHANICAL
STATE OF CALIFORNIA

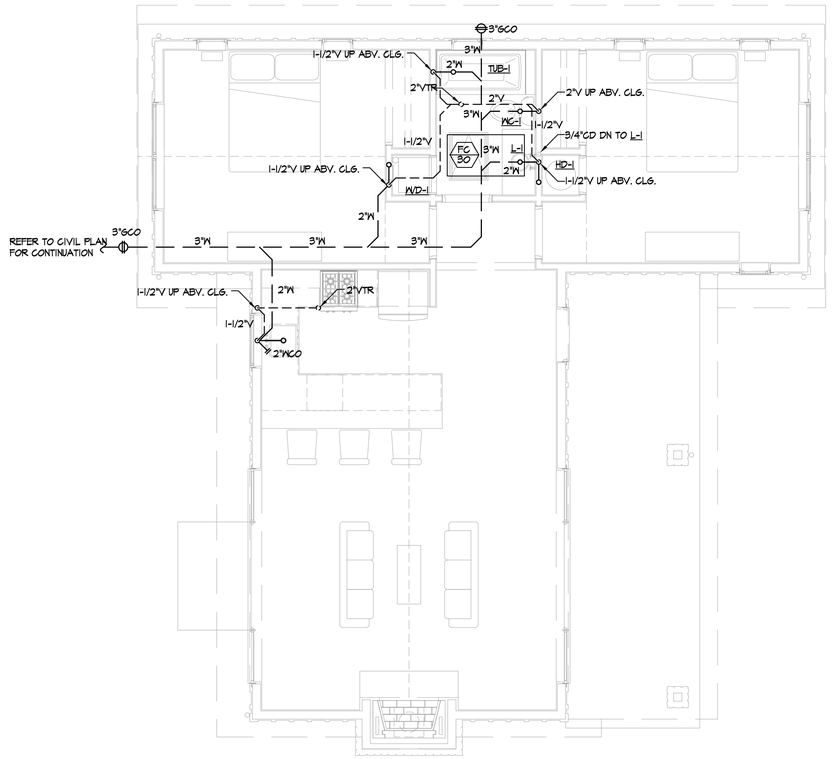
GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel: 949-267-9095

PROJECT NAME:
12 ARROYO
SEQUOIA ROAD
CARMEL, CA 93923

SHEET TITLE
PLUMBING PLAN
MAIN HOUSE
WASTE & VENT

DRAWN
GMEP
CHECKED
GMEP
DATE
12/06/24
SCALE
AS NOTED
JOB NO.
24-656
SHEET

P-3.0



PLUMBING PLAN - ADU - WASTE & VENT

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

REVISIONS		
NO.	DATE	DESCRIPTION

SEAL:

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PLUMBING PLAN
ADU
WASTE & VENT

DRAWN
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DATE
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JOB NO.
24-656
SHEET
P-3.1

2022 Single-Family Residential Mandatory Requirements Summary

§ 150.0(k)1G:	**Screw based luminaires.** Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. *
§ 150.0(k)1H:	**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)1i:	**Light Sources in Drawers, Cabinets, and Linen Closets.** Light sources internal to drawers, cabinetry or linen closets are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the drawer, cabinet or linen closet is closed.
§ 150.0(k)2A:	**Interior Switches and Controls.** All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A.
§ 150.0(k)2B:	**Interior Switches and Controls.** Exhaust fans must be controlled separately from lighting systems. *
§ 150.0(k)2A:	**Accessible Controls.** Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually turned on and off. *
§ 150.0(k)2B:	**Multiple Controls.** Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sensor is installed to comply with § 150.0(k).
§ 150.0(k)2C:	**Mandatory Requirements.** Lighting controls must comply with the applicable requirements of § 110.9.
§ 150.0(k)2D:	**Energy Management Control Systems.** An energy management control system (EMCS) may be used to comply with dimming, occupancy, and control requirements if it provides the functionality of the specified control per § 110.9 and the physical controls specified in § 150.0(k)2A.
§ 150.0(k)2E:	**Automatic Shutoff Controls.** In bathrooms, garages, laundry rooms, utility rooms and walk-in closets, at least one installed luminaire must be controlled by an occupancy or vacancy sensor providing automatic-off functionality. Lighting inside drawers and cabinets with opaque fronts or doors must have controls that turn the light off when the drawer or door is closed.
§ 150.0(k)2F:	**Dimmers.** Lighting in habitable spaces (e.g., living rooms, dining rooms, kitchens, and bedrooms) must have readily accessible wall-mounted dimming controls that allow the lighting to be manually adjusted up and down. Forward phase cut dimmers controlling LED 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.
§ 150.0(k)3A:	**Residential Outdoor Lighting.** For single-family residential buildings, outdoor lighting permanently mounted to a residential building, or to other buildings on the same lot, must have a manual on/off switch and 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.
§ 150.0(k)4:	**Internally illuminated address signs.** Internally illuminated address signs must either comply with § 140.8 or consume no more than 5 watts of power.
§ 150.0(k)5:	**Residential Garages for Eight or More Vehicles**. Lighting for residential parking garages for eight or more vehicles must comply with the applicable requirements for nonresidential garages in §§ 110.9, 130.0, 130.1, 130.4, 140.6, and 141.0.

Solar Readiness:

§ 110.10(a)1:	**Single-family Residences.** Single-family residences located in subdivisions with 10 or more single-family residences and where the 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).
§110.10(b)1A:	**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 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.
§ 110.10(b)3B:	**Shading.** Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at least twice the 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. *
§ 110.10(b)4:	**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.
§ 110.10(c):	**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.
§ 110.10(d):	**Documentation.** A copy of the construction documents or a comparable document indicating the information from § 110.10(b)-(c) must be provided to the occupant.
§ 110.10(e)1:	**Main Electrical Service Panel.** The main electrical service panel must have a minimum busbar rating of 200 amps.
§ 110.10(e)2:	**Main Electrical Service Panel.** The main electrical service panel must have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation. The reserved space must be permanently marked as "For Future Solar Electric."

Electric and Energy Storage Ready:

5/6/22

2022 Single-Family Residential Mandatory Requirements Summary

§ 150.0(m)13:	**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:

§ 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 andcontrolled 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–ii..
§ 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 must be 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.
§ 150.0(o)2:	**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:

§ 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 linen 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).

5/6/22

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 and 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:

§ 110.8(d)3:	**Ducts.** Insulation installed on an existing space-conditioning duct must comply with § 604.0 of the California Mechanical Code (CMC). If a contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement.
§ 150.0(m)1:	**CMC Compliance.** All air-distribution system ducts and plenums must 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 (RA3.1.4.3.6) 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. *
§ 150.0(m)2:	**Factory-Fabricated Duct Systems.** Factory-fabricated duct systems must comply with applicable requirements for duct construction, connections, and closures; joints and seams of duct systems and their components must not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.
§ 150.0(m)3:	**Field-Fabricated Duct Systems.** Field-fabricated duct systems must comply with applicable requirements for: pressure-sensitive tapes, mastics, sealants, and other requirements specified for duct construction.
§ 150.0(m)7:	**Backdraft Damper.** Fan systems that exchange air between the conditioned space and outdoors must have backdraft or automatic dampers.
§ 150.0(m)8:	**Gravity Ventilation Dampers**. Gravity ventilating systems serving conditioned space must have either automatic or readily accessible, manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.
§ 150.0(m)9:	**Protection of Insulation.** Insulation must be protected from damage 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.
§ 150.0(m)10:	**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 outer vapor barrier.
§ 150.0(m)11:	**Duct System Sealing and Leakage Test.** When space conditioning systems use forced air duct systems to supply conditioned air to an occupiable space, the ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with Reference Residential Appendix RA3.1.
§ 150.0(m)12:	**Air Filtration**. Space conditioning systems with ducts exceeding 10 feet and the supply side of ventilation systems must have MERV 13 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 filter. *

5/6/22

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 the respective section for more information.
(04/2022)

Building Envelope:

§ 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(g)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 vapor retarder, This requirement also applies to controlled ventilation crawl space for buildings complying with the exception to §150.0(d).
§ 150.0(g)2:	**Vapor Retarder.** In climate zones 14 and 16, a Class I or Class II vapor retarder must be installed on the conditioned space side of all insulation in all exterior walls, vented attics, and unvented attics with air-permeable insulation.
§ 150.0(q):	**Fenestration Products.** Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must have a maximum U-factor of 0.45; or area-weighted average U-factor of all fenestration must not exceed 0.45.

Fireplaces, Decorative Gas Appliances, and Gas Log:

§ 110.5(e)	**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. *

Space Conditioning, Water Heating, and Plumbing System:

§ 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. *
§ 110.3(c)3:	**Insulation.** Unfired service water heater storage tanks and solar water-heating backup tanks must have adequate insulation, or tank surface heat loss rating.
§ 110.3(c)6:	**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.

5/6/22

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, or 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 panelboard, with raceways installed between the panelboard and the switch location to allow the connection of backup power source.
§ 150.0(t)	**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..

5/6/22

TITLE 24 SHEET INDEX

NO.	SHEET	DESCRIPTION
1	EN-0	TITLE 24 FORMS - MANDATORY MEASURES SUMMARY & SHEET INDEX
2	EN-1	TITLE 24 FORMS - CFIR - MAIN HOUSE
3	EN-2	TITLE 24 FORMS - CFIR - MAIN HOUSE
4	EN-3	TITLE 24 FORMS - CFIR - ADU
5	EN-4	TITLE 24 FORMS - CFIR - ADU

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

REGISTERED PROFESSIONAL ENGINEER
GANGYI JOU
No. M34279
Exp.12-31-2024
MECHANICAL
STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel: 949-267-9095

PROJECT NAME:
12 ARROYO ROAD
SEQUOIA RD
CARMEL, CA 93923

SHEET TITLE
TITLE 24 FORMS - MANDATORY MEASURES SUMMARY & SHEET INDEX

DRAWN	GMEP
CHECKED	GMEP
DATE	12/06/24
SCALE	AS NOTED
JOB NO.	24-656
SHEET	EN-0

ENERGY USE SUMMARY

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)	Compliance Margin (EDR1)	Compliance Margin (EDR2)
Space Heating	8.05	54.1	2.99	22.2	5.06	31.9
Space Cooling	0	0	0	0	0	0
IAQ Ventilation	0.26	2.82	0.26	2.82	0	0
Water Heating	0.72	7.88	0.55	6.11	0.17	1.77
Self Utilization/Flexibility Credit			0	0	0	0
Efficiency Compliance Total	**9.03**	**64.8**	**3.8**	**31.13**	**5.23**	**33.67**
Photovoltaics	-0.61	-18.93	-0.61	-18.96		
Battery			0	0		
Flexibility			0			
Indoor Lighting	0.61	6.34	0.61	6.34		
Appl. & Cooking	1.45	11.79	1.45	11.81		
Plug Loads	1.22	13.01	1.22	13.01		
Outdoor Lighting	0.17	1.6	0.17	1.6		
TOTAL COMPLIANCE	**11.87**	**78.61**	**6.64**	**44.93**		

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ENERGY DESIGN RATINGS

	Energy Design Ratings			Compliance Margins		
	Source Energy (EDR1)	Efficiency[1] EDR (EDR2efficiency)	Total[2] EDR (EDR2total)	Source Energy (EDR1)	Efficiency[1] EDR (EDR2efficiency)	Total[2] EDR (EDR2total)
Standard Design	42.9	49.2	37.5			
Proposed Design	24	23.6	21.5	18.9	25.6	16

RESULT[3]: PASS

[1]Efficiency EDR includes improvements like a better building envelope and more efficient equipment
[2]Total EDR includes efficiency and demand response measures such as photovoltaic (PV) system and batteries
[3]Building complies when source energy, efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded

- Standard Design PV Capacity: 3.16 kWdc
- PV System resized to 3.16 kWdc (a factor of 3.157) to achieve 'Standard Design PV' PV scaling

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GENERAL INFORMATION

01	Project Name	24-656 12 Arroyo Sequoia Road			
02	Run Title	Title 24 Analysis			
03	Project Location	12 Arroyo Sequoia Road			
04	City	Carmel	05	Standards Version	2022
06	Zip code	93923	07	Software Version	EnergyPro 9.3
08	Climate Zone	3	09	Front Orientation (deg/ Cardinal)	0
10	Building Type	Single family	11	Number of Dwelling Units	1
12	Project Scope	Newly Constructed	13	Number of Bedrooms	3
14	Addition Cond. Floor Area (ft^2)	0	15	Number of Stories	1
16	Existing Cond. Floor Area (ft^2)	n/a	17	Fenestration Average U-factor	0.3
18	Total Cond. Floor Area (ft^2)	4449	19	Glazing Percentage (%)	19.92%
20	ADU Bedroom Count	n/a	21	ADU Conditioned Floor Area	n/a
22	Fuel Type	Propane	23	No Dwelling Unit:	No

COMPLIANCE RESULTS

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

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OPAQUE SURFACES - CATHEDRAL CEILINGS

01	02	03	04	05	06	07	08	09	10	11
Name	Zone	Construction	Azimuth	Orientation	Area (ft^2)	Skylight Area (ft^2)	Roof Rise (x in 12)	Roof Reflectance	Roof Emittance	Cool Roof
Roof	1st Floor Zone	R-30 Roof Cathedral	270	Right	1741	0	7	0.1	0.85	No
Roof 2	1st Floor Zone	R-30 Roof Cathedral	270	Right	964	28.14	3.5	0.1	0.85	No
Roof 3	__Garage__	R-30 Roof Cathedral	270	Right	877.75	0	7	0.1	0.85	No

ATTIC

01	02	03	04	05	06	07	08
Name	Construction	Type	Roof Rise (x in 12)	Roof Reflectance	Roof Emittance	Radiant Barrier	Cool Roof
Attic 1st Floor Zone	Attic Roof1st Floor Zone	Ventilated	5.49412	0.1	0.85	Yes	No

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft^2)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading
K	Window	Exterior Wall N	Left	90			1	28.75	0.3	NFRC	0.35	NFRC	Bug Screen
L	Window	Exterior Wall N	Left	90			1	8.33	0.3	NFRC	0.35	NFRC	Bug Screen
M	Window	Exterior Wall N	Left	90			1	8.33	0.3	NFRC	0.35	NFRC	Bug Screen
P	Window	Exterior Wall N	Left	90			1	28.75	0.3	NFRC	0.35	NFRC	Bug Screen
Q	Window	Exterior Wall N	Left	90			1	17.75	0.3	NFRC	0.35	NFRC	Bug Screen
R	Window	Exterior Wall N	Left	90			1	18.75	0.3	NFRC	0.35	NFRC	Bug Screen
S	Window	Exterior Wall N	Left	90			1	10.42	0.3	NFRC	0.35	NFRC	Bug Screen

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BUILDING - FEATURES INFORMATION

01	02	03	04	05	06	07
Project Name	Conditioned Floor Area (ft^2)	Number of Dwelling Units	Number of Bedrooms	Number of Zones	Number of Ventilation Cooling Systems	Number of Water Heating Systems
24-656 12 Arroyo Sequoia Road	4449	1	3	1	0	1

ZONE INFORMATION

01	02	03	04	05	06	07
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft^2)	Avg. Ceiling Height	Water Heating System 1	Status
1st Floor Zone	Conditioned	Split System1	4449	11.2	DHW Sys 1	New

OPAQUE SURFACES

01	02	03	04	05	06	07	08
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft^2)	Window and Door Area (ft2)	Tilt (deg)
Exterior Wall N	1st Floor Zone	R-21 Wall	90	Left	900	173.5	90
Exterior Wall E	1st Floor Zone	R-21 Wall	180	Back	1005	365.5	90
Exterior Wall S	1st Floor Zone	R-21 Wall	270	Right	938	187.71	90
Exterior Wall W	1st Floor Zone	R-21 Wall	0	Front	763	131.58	90
Interior Wall to Garage	1st Floor Zone>>__Garage__	R-21 Wall Interior	n/a	n/a	266	0	n/a
Roof 4	1st Floor Zone	R-30 Roof Attic	n/a	n/a	1744	n/a	n/a
Roof 5	1st Floor Zone	R-30 Roof Attic	n/a	n/a	1317	n/a	n/a
Exterior Wall N 2	__Garage__	R-0 Wall Garage	90	Left	275	46	90
Exterior Wall E 2	__Garage__	R-0 Wall Garage	180	Back	123	0	90
Exterior Wall S 2	__Garage__	R-0 Wall Garage	270	Right	233	21.99	90
Exterior Wall W 2	__Garage__	R-0 Wall Garage	0	Front	370	144	90

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ENERGY USE INTENSITY

	Standard Design (kBtu/ft^2 - yr)	Proposed Design (kBtu/ft^2 - yr)	Compliance Margin (kBtu/ft^2 - yr)	Margin Percentage
Gross EUI[1]	13.5	7.85	5.65	41.85
Net EUI[2]	9.76	4.11	5.65	57.89

Notes
1. Gross EUI is Energy Use Total (not including PV) / Total Building Area.
2. Net EUI is Energy Use Total (including PV) / Total Building Area.

REQUIRED PV SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12
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 (%)
3.16	NA	Standard (14-17%)	Fixed	none	true	150-270	n/a	n/a	<=7:12	96	98

REQUIRED SPECIAL FEATURES

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

- Northwest Energy Efficiency Alliance (NEEA) rated heat pump water heater; specific brand/model, or equivalent, must be installed

HERS FEATURE SUMMARY

The following is a summary of the features that must be field-verified by a certified HERS Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional detail is provided in the building tables below. Registered CF2Rs and CF3Rs are required to be completed in the HERS Registry

- Indoor air quality ventilation
- Kitchen range hood
- Minimum Airflow
- Verified EER/EER2
- Verified Refrigerant Charge
- Fan Efficacy Watts/CFM
- Verified heat pump rated heating capacity
- Duct leakage testing
- Low-leakage Air Handling Unit

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FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft^2)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading
SL3	Skylight	Roof 2	Right	270			1	4.69	0.3	NFRC	0.35	NFRC	
SL4	Skylight	Roof 2	Right	270			1	4.69	0.3	NFRC	0.35	NFRC	
SL5	Skylight	Roof 2	Right	270			1	4.69	0.3	NFRC	0.35	NFRC	
SL6	Skylight	Roof 2	Right	270			1	4.69	0.3	NFRC	0.35	NFRC	

OPAQUE DOORS

01	02	03	04
Name	Side of Building	Area (ft^2)	U-factor
H3	Exterior Wall W 2	72	1
H2	Exterior Wall W 2	72	1

SLAB FLOORS

01	02	03	04	05	06	07	08
Name	Zone	Area (ft^2)	Perimeter (ft)	Edge Insul. R-value and Depth	Edge Insul. R-value and Depth	Carpeted Fraction	Heated
Slab-on-Grade	1st Floor Zone	4449	360.6	none	0	80%	No
Slab-on-Grade 2	__Garage__	877.75	100.1	none	0	0%	No

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FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft^2)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading
F	Window	Exterior Wall S	Right	270			1	55.31	0.3	NFRC	0.35	NFRC	Bug Screen
AA	Window	Exterior Wall W	Front	0			1	6.72	0.3	NFRC	0.35	NFRC	Bug Screen
BB	Window	Exterior Wall W	Front	0			1	6.72	0.3	NFRC	0.35	NFRC	Bug Screen
CC	Window	Exterior Wall W	Front	0			1	6.72	0.3	NFRC	0.35	NFRC	Bug Screen
A	Window	Exterior Wall W	Front	0			1	24	0.3	NFRC	0.35	NFRC	Bug Screen
H1	Window	Exterior Wall W	Front	0			1	30	0.3	NFRC	0.35	NFRC	Bug Screen
A'	Window	Exterior Wall W	Front	0			1	24	0.3	NFRC	0.35	NFRC	Bug Screen
B	Window	Exterior Wall W	Front	0			1	6.72	0.3	NFRC	0.35	NFRC	Bug Screen
C	Window	Exterior Wall W	Front	0			1	26.7	0.3	NFRC	0.35	NFRC	Bug Screen
H5	Window	Exterior Wall N 2	Left	90			1	23	0.3	NFRC	0.35	NFRC	Bug Screen
H6	Window	Exterior Wall N 2	Left	90			1	23	0.3	NFRC	0.35	NFRC	Bug Screen
G	Window	Exterior Wall S 2	Right	270			1	7.33	0.3	NFRC	0.35	NFRC	Bug Screen
H	Window	Exterior Wall S 2	Right	270			1	7.33	0.3	NFRC	0.35	NFRC	Bug Screen
J	Window	Exterior Wall S 2	Right	270			1	7.33	0.3	NFRC	0.35	NFRC	Bug Screen
SL1	Skylight	Roof 2	Right	270			1	4.69	0.3	NFRC	0.35	NFRC	
SL2	Skylight	Roof 2	Right	270			1	4.69	0.3	NFRC	0.35	NFRC	

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FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft^2)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading
T	Window	Exterior Wall N	Left	90			1	42	0.3	NFRC	0.35	NFRC	Bug Screen
U	Window	Exterior Wall N	Left	90			1	10.42	0.3	NFRC	0.35	NFRC	Bug Screen
V	Window	Exterior Wall E	Back	180			1	7	0.3	NFRC	0.35	NFRC	Bug Screen
W	Window	Exterior Wall E	Back	180			1	24	0.3	NFRC	0.35	NFRC	Bug Screen
H7	Window	Exterior Wall E	Back	180			1	48	0.3	NFRC	0.35	NFRC	Bug Screen
W'	Window	Exterior Wall E	Back	180			1	24	0.3	NFRC	0.35	NFRC	Bug Screen
X	Window	Exterior Wall E	Back	180			1	24	0.3	NFRC	0.35	NFRC	Bug Screen
H8	Window	Exterior Wall E	Back	180			1	24	0.3	NFRC	0.35	NFRC	Bug Screen
X'	Window	Exterior Wall E	Back	180			1	24	0.3	NFRC	0.35	NFRC	Bug Screen
H9	Window	Exterior Wall E	Back	180			1	31.5	0.3	NFRC	0.35	NFRC	Bug Screen
H9 2	Window	Exterior Wall E	Back	180			1	31.5	0.3	NFRC	0.35	NFRC	Bug Screen
H9 3	Window	Exterior Wall E	Back	180			1	31.5	0.3	NFRC	0.35	NFRC	Bug Screen
H10	Window	Exterior Wall E	Back	180			1	96	0.3	NFRC	0.35	NFRC	Bug Screen
Y	Window	Exterior Wall S	Right	270			1	27.5	0.3	NFRC	0.35	NFRC	Bug Screen
Z	Window	Exterior Wall S	Right	270			1	27.5	0.3	NFRC	0.35	NFRC	Bug Screen
H11	Window	Exterior Wall S	Right	270			1	24	0.3	NFRC	0.35	NFRC	Bug Screen
D	Window	Exterior Wall S	Right	270			1	26.7	0.3	NFRC	0.35	NFRC	Bug Screen
E	Window	Exterior Wall S	Right	270			1	26.7	0.3	NFRC	0.35	NFRC	Bug Screen

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REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

REGISTERED PROFESSIONAL ENGINEER GANGYI ZHOU No. M34279 Exp.12-31-2024 MECHANICAL STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel: 949-267-9095

PROJECT NAME:
12 ARROYO SEQUOIA ROAD
CARMEL, CA 93923

SHEET TITLE
TITLE 24 FORMS - CF1R MAIN HOUSE

DRAWN: GMEP
CHECKED: GMEP
DATE: 12/06/24
SCALE: AS NOTED
JOB NO.: 24-656
SHEET: EN-1

SPACE CONDITIONING SYSTEMS

01	02	03	04	05	06	07	08	09
Name	System Type	Heating Unit Name	Heating Equipment Count	Cooling Unit Name	Cooling Equipment Count	Fan Name	Distribution Name	Required Thermostat Type
Split System1	Heat pump heating cooling	Heat Pump System 1	2	Heat Pump System 1	2	HVAC Fan 1	Air Distribution System 1	Setback

HVAC - HEAT PUMPS

01	02	03	04	05	06	07	08	09	10	11	12	13
			Heating				Cooling					
Name	System Type	Number of Units	Heating Efficiency Type	HSPF/HSPF2/COP	Cap 47	Cap 17	Cooling Efficiency Type	SEER/SEER2	EER/EER2/CEER	Zonally Controlled	Compressor Type	HERS Verification
Heat Pump System 1	Central split HP	2	HSPF2	7.5	46500	27900	EER2SEER2	14.3	12	Not Zonal	Single Speed	Heat Pump System 1-hers-htpump

HVAC HEAT PUMPS - HERS VERIFICATION

01	02	03	04	05	06	07	08	09
Name	Verified Airflow	Airflow Target	Verified EER/EER2	Verified SEER/SEER2	Verified Refrigerant Charge	Verified HSPF/HSPF2	Verified Heating Cap 47	Verified Heating Cap 17
Heat Pump System 1-hers-htpump	Required	350	Required	Not Required	Yes	No	Yes	Yes

HVAC - DISTRIBUTION SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12
			Duct Ins. R-value		Duct Location		Surface Area				
Name	Type	Design Type	Supply	Return	Supply	Return	Supply	Return	Bypass Duct	Duct Leakage	HERS Verification
Air Distribution System 1	Unconditioned attic	Non-Verified	R-6	R-6	Attic	Attic	n/a	n/a	No Bypass Duct		Air Distribution System 1-hers-dist

BUILDING ENVELOPE - HERS VERIFICATION

01	02	03	04	05
Quality Insulation Installation (QII)	High R-value Spray Foam Insulation	Building Envelope Air Leakage	CFM50	CFM50
Not Required	Not Required	N/A	n/a	n/a

WATER HEATING SYSTEMS

01	02	03	04	05	06	07	08	09
Name	System Type	Distribution Type	Water Heater Name	Number of Units	Solar Heating System	Compact Distribution	HERS Verification	Water Heater Name (#)
DHW Sys 1	Domestic Hot Water (DHW)	Standard	DHW Heater 1	2	n/a	None	n/a	DHW Heater 1 (2)

WATER HEATERS - NEEA HEAT PUMP

01	02	03	04	05	06	07	08
Name	# of Units	Tank Vol. (gal)	NEEA Heat Pump Brand	NEEA Heat Pump Model	Tank Location	Duct Inlet Air Source	Duct Outlet Air Source
DHW Heater 1	2	50	Rheem	PRDPH50 T2 RH37530 [50 gal, JA13]	TankZone	__Garage__	__Garage__

WATER HEATING - HERS VERIFICATION

01	02	03	04	05	06	07
Name	Pipe Insulation	Parallel Piping	Compact Distribution	Compact Distribution Type	Recirculation Control	Shower Drain Water Heat Recovery
DHW Sys 1 - 1/2	Not Required	Not Required	Not Required	None	Not Required	Not Required

OPAQUE SURFACE CONSTRUCTIONS

01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
R-0 Wall Garage	Exterior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R-0	None / None	0.347	Inside Finish: Gypsum Board Cavity / Frame: no insul. / 2x6 Exterior Finish: 3 Coat Stucco
R-21 Wall	Exterior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R-21	None / None	0.066	Inside Finish: Gypsum Board Cavity / Frame: R-21 / 2x6 Exterior Finish: Wood Siding/sheathing/decking
R-30 Roof Cathedral	Cathedral Ceilings	Wood Framed Ceiling	2x10 @ 16 in. O. C.	R-30	None / None	0.036	Roofing: Light Roof (Metal Tile) Tile Gap: present Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: R-30 / 2x10 Inside Finish: Gypsum Board
R-21 Wall Interior	Interior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R-21	None / None	0.064	Inside Finish: Gypsum Board Cavity / Frame: R-21 / 2x6 Other Side Finish: Gypsum Board
Attic Roof1st Floor Zone	Attic Roofs	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-0	None / 0	0.412	Roofing: Light Roof (Metal Tile) Tile Gap: present Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x4
R-30 Roof Attic	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-30	None / None	0.032	Over Ceiling Joists: R-20.9 insul. Cavity / Frame: R-9.1 / 2x4 Inside Finish: Gypsum Board

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Gary Zhou	Documentation Author Signature: Gary Zhou
Company: GMEP Engineers	Signature Date: 12/05/2024
Address: 26439 Rancho Parkway S., Suite 120	CEA/ HERS Certification Identification (If applicable):
City/State/Zip: Lake Forest, CA 92630	Phone: (949) 267-9095

RESPONSIBLE PERSON'S DECLARATION STATEMENT

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

1. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design identified on this Certificate of Compliance.
2. I certify that the energy features and performance specifications identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
3. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.

Responsible Designer Name: Adam Jeselnick	Responsible Designer Signature: Adam Jeselnick
Company: Adam Jeselnick Architect	Date Signed: 12/05/2024
Address: San Carlos Street 2 N/w 8th Avenue, Suite 200	License: C33090
City/State/Zip: Carmel-by-the-sea, CA 93921	Phone: 8316205164

Digitally signed by California Home Energy Efficiency Rating Services (CHEERS). This digital signature is provided in order to secure the content of this registered document, and in no way implies Registration Provider responsibility for the accuracy of the information.

HVAC DISTRIBUTION - HERS VERIFICATION

01	02	03	04	05	06	07	08	09
Name	Duct Leakage Verification	Duct Leakage Target (%)	Verified Duct Location	Verified Duct Design	Buried Ducts	Deeply Buried Ducts	Low-leakage Air Handler	Low Leakage Ducts Entirely in Conditioned Space
Air Distribution System 1-hers-dist	Yes	5.0	Not Required	Not Required	Not Required	Credit not taken	Required	No

HVAC - FAN SYSTEMS

01	02	03	04
Name	Type	Fan Power (Watts/CFM)	Name
HVAC Fan 1	HVAC Fan	0.5	HVAC Fan 1-hers-fan

HVAC FAN SYSTEMS - HERS VERIFICATION

01	02	03
Name	Verified Fan Watt Draw	Required Fan Efficacy (Watts/CFM)
HVAC Fan 1-hers-fan	Required	0.5

INDOOR AIR QUALITY (IAQ) FANS

01	02	03	04	05	06	07	08	09
Dwelling Unit	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
SFam IAQVentRpt	151	0.35	Exhaust	No	n/a / n/a	No	Yes	

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

REGISTERED PROFESSIONAL ENGINEER GANGYI ZHOU No. M34279 Exp.12-31-2024 MECHANICAL STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel: 949-267-9095

PROJECT NAME:
12 ARROYO SEQUOIA ROAD
CARMEL, CA 93923

SHEET TITLE
TITLE 24 FORMS - CF1R
MAIN HOUSE

DRAWN	GMEP
CHECKED	GMEP
DATE	12/06/24
SCALE	AS NOTED
JOB NO.	24-656
SHEET	EN-2

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

Project Name: 24-656 12 Arroyo Sequoia Road ADU **Calculation Date/Time:** 2024-12-04T17:09:49-08:00 **(Page 3 of 12)**

Calculation Description: Title 24 Analysis **Input File Name:** 24-656 12 Arroyo Sequoia Road ADU.ribd22x

ENERGY USE SUMMARY

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)	Compliance Margin (EDR1)	Compliance Margin (EDR2)
Space Heating	4.07	27.63	3.3	24.65	0.77	2.98
Space Cooling	0.01	0.93	0.03	2.62	-0.02	-1.69
IAQ Ventilation	0.36	3.88	0.36	3.88	0	0
Water Heating	2.24	24.4	1.23	14.22	1.01	10.18
Self Utilization/Flexibility Credit			0	0	0	0
Efficiency Compliance Total	**6.68**	**56.84**	**4.92**	**45.37**	**1.76**	**11.47**
Photovoltaics	-1.43	-44.8	-1.43	-44.75		
Battery			0	0		
Flexibility			0			
Indoor Lighting	0.81	8.35	0.81	8.35		
Appl. & Cooking	4.73	36.97	4.72	36.93		
Plug Loads	3.79	40.25	3.79	40.25		
Outdoor Lighting	0.2	1.87	0.2	1.87		
TOTAL COMPLIANCE	**14.78**	**99.48**	**13.01**	**88.02**		

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

Project Name: 24-656 12 Arroyo Sequoia Road ADU **Calculation Date/Time:** 2024-12-04T17:09:49-08:00 **(Page 2 of 12)**

Calculation Description: Title 24 Analysis **Input File Name:** 24-656 12 Arroyo Sequoia Road ADU.ribd22x

ENERGY DESIGN RATINGS

	Energy Design Ratings			Compliance Margins		
	Source Energy (EDR1)	Efficiency[1] EDR (EDR2efficiency)	Total[2] EDR (EDR2total)	Source Energy (EDR1)	Efficiency[1] EDR (EDR2efficiency)	Total[2] EDR (EDR2total)
Standard Design	35.6	31.8	31.5			
Proposed Design	31.3	25.4	27.9	4.3	6.4	3.6

RESULT[3]: PASS

[1]Efficiency EDR includes improvements like a better building envelope and more efficient equipment
[2]Total EDR includes efficiency and demand response measures such as photovoltaic (PV) system and batteries
[3]Building complies when source energy, efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded

- Standard Design PV Capacity: 1.99 kWdc
- PV System resized to 1.99 kWdc (a factor of 1.990) to achieve 'Standard Design PV' PV scaling

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

Project Name: 24-656 12 Arroyo Sequoia Road ADU **Calculation Date/Time:** 2024-12-04T17:09:49-08:00 **(Page 1 of 12)**

Calculation Description: Title 24 Analysis **Input File Name:** 24-656 12 Arroyo Sequoia Road ADU.ribd22x

GENERAL INFORMATION

01	Project Name	24-656 12 Arroyo Sequoia Road ADU			
02	Run Title	Title 24 Analysis			
03	Project Location	12 Arroyo Sequoia Road			
04	City	Carmel	05	Standards Version	2022
06	Zip code	93923	07	Software Version	EnergyPro 9.3
08	Climate Zone	3	09	Front Orientation (deg/ Cardinal)	270
10	Building Type	Single family	11	Number of Dwelling Units	1
12	Project Scope	Newly Constructed	13	Number of Bedrooms	2
14	Addition Cond. Floor Area (ft^2)	0	15	Number of Stories	1
16	Existing Cond. Floor Area (ft^2)	n/a	17	Fenestration Average U-factor	0.3
18	Total Cond. Floor Area (ft^2)	1193.5	19	Glazing Percentage (%)	25.74%
20	ADU Bedroom Count	n/a	21	ADU Conditioned Floor Area	n/a
22	Fuel Type	Propane	23	No Dwelling Unit:	No

COMPLIANCE RESULTS

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

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

Project Name: 24-656 12 Arroyo Sequoia Road ADU **Calculation Date/Time:** 2024-12-04T17:09:49-08:00 **(Page 6 of 12)**

Calculation Description: Title 24 Analysis **Input File Name:** 24-656 12 Arroyo Sequoia Road ADU.ribd22x

OPAQUE SURFACES

01 Name	02 Zone	03 Construction	04 Azimuth	05 Orientation	06 Gross Area (ft^2)	07 Window and Door Area (ft2)	08 Tilt (deg)
Exterior Wall S	ADU Zone	R-21 Wall	0	Left	365	8.33	90
Exterior Wall W	ADU Zone	R-21 Wall	90	Back	380	124.5	90
Roof 2	ADU Zone	R-30 Roof Attic	n/a	n/a	300	n/a	n/a

OPAQUE SURFACES - CATHEDRAL CEILINGS

01 Name	02 Zone	03 Construction	04 Azimuth	05 Orientation	06 Area (ft^2)	07 Skylight Area (ft^2)	08 Roof Rise (x in 12)	09 Roof Reflectance	10 Roof Emittance	11 Cool Roof
Roof	ADU Zone	R-30 Roof Cathedral	0	Left	893.5	0	7	0.1	0.85	No

ATTIC

01 Name	02 Construction	03 Type	04 Roof Rise (x in 12)	05 Roof Reflectance	06 Roof Emittance	07 Radiant Barrier	08 Cool Roof
Attic ADU Zone	Attic RoofADU Zone	Ventilated	7	0.1	0.85	Yes	No

FENESTRATION / GLAZING

01 Name	02 Type	03 Surface	04 Orientation	05 Azimuth	06 Width (ft)	07 Height (ft)	08 Mult.	09 Area (ft^2)	10 U-factor	11 U-factor Source	12 SHGC	13 SHGC Source	14 Exterior Shading
GD	Window	Exterior Wall N	Right	180			1	8.33	0.3	NFRC	0.35	NFRC	Bug Screen
GE	Window	Exterior Wall N	Right	180			1	8.33	0.3	NFRC	0.35	NFRC	Bug Screen
GF	Window	Exterior Wall N	Right	180			1	6.11	0.3	NFRC	0.35	NFRC	Bug Screen
GH	Window	Exterior Wall N	Right	180			1	8.33	0.3	NFRC	0.35	NFRC	Bug Screen
GJ	Window	Exterior Wall N	Right	180			1	8.33	0.3	NFRC	0.35	NFRC	Bug Screen

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

Project Name: 24-656 12 Arroyo Sequoia Road ADU **Calculation Date/Time:** 2024-12-04T17:09:49-08:00 **(Page 5 of 12)**

Calculation Description: Title 24 Analysis **Input File Name:** 24-656 12 Arroyo Sequoia Road ADU.ribd22x

HERS FEATURE SUMMARY

The following is a summary of the features that must be field-verified by a certified HERS Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional detail is provided in the building tables below. Registered CF2Rs and CF3Rs are required to be completed in the HERS Registry

- Indoor air quality ventilation
- Kitchen range hood
- Minimum Airflow
- Verified EER/EER2
- Verified SEER/SEER2
- Verified Refrigerant Charge
- Fan Efficacy Watts/CFM
- Verified HSPF2
- Verified heat pump rated heating capacity
- Duct leakage testing
- Low-leakage Air Handling Unit

BUILDING - FEATURES INFORMATION

01 Project Name	02 Conditioned Floor Area (ft^2)	03 Number of Dwelling Units	04 Number of Bedrooms	05 Number of Zones	06 Number of Ventilation Cooling Systems	07 Number of Water Heating Systems
24-656 12 Arroyo Sequoia Road ADU	1193.5	1	2	1	0	1

ZONE INFORMATION

01 Zone Name	02 Zone Type	03 HVAC System Name	04 Zone Floor Area (ft^2)	05 Avg. Ceiling Height	06 Water Heating System 1	07 Status
ADU Zone	Conditioned	Split System1	1193.5	11.2	DHW Sys 1	New

OPAQUE SURFACES

01 Name	02 Zone	03 Construction	04 Azimuth	05 Orientation	06 Gross Area (ft^2)	07 Window and Door Area (ft2)	08 Tilt (deg)
Exterior Wall N	ADU Zone	R-21 Wall	180	Right	365	39.43	90
Exterior Wall E	ADU Zone	R-21 Wall	270	Front	380	135	90

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

Project Name: 24-656 12 Arroyo Sequoia Road ADU **Calculation Date/Time:** 2024-12-04T17:09:49-08:00 **(Page 4 of 12)**

Calculation Description: Title 24 Analysis **Input File Name:** 24-656 12 Arroyo Sequoia Road ADU.ribd22x

ENERGY USE INTENSITY

	Standard Design (kBtu/ft^2 - yr)	Proposed Design (kBtu/ft^2 - yr)	Compliance Margin (kBtu/ft^2 - yr)	Margin Percentage
Gross EUI[1]	18.93	16.6	2.33	12.31
Net EUI[2]	10.15	7.81	2.34	23.05

Notes
1. Gross EUI is Energy Use Total (not including PV) / Total Building Area.
2. Net EUI is Energy Use Total (including PV) / Total Building Area.

REQUIRED PV SYSTEMS

01 DC System Size (kWdc)	02 Exception	03 Module Type	04 Array Type	05 Power Electronics	06 CFI	07 Azimuth (deg)	08 Tilt Input	09 Array Angle (deg)	10 Tilt: (x in 12)	11 Inverter Eff. (%)	12 Annual Solar Access (%)
1.99	NA	Standard (14-17%)	Fixed	none	true	150-270	n/a	n/a	<=7:12	96	98

REQUIRED SPECIAL FEATURES

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

- Northwest Energy Efficiency Alliance (NEEA) rated heat pump water heater; specific brand/model, or equivalent, must be installed

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

Project Name: 24-656 12 Arroyo Sequoia Road ADU **Calculation Date/Time:** 2024-12-04T17:09:49-08:00 **(Page 9 of 12)**

Calculation Description: Title 24 Analysis **Input File Name:** 24-656 12 Arroyo Sequoia Road ADU.ribd22x

WATER HEATING SYSTEMS

01 Name	02 System Type	03 Distribution Type	04 Water Heater Name	05 Number of Units	06 Solar Heating System	07 Compact Distribution	08 HERS Verification	09 Water Heater Name (#)
DHW Sys 1	Domestic Hot Water (DHW)	Standard	DHW Heater 1	1	n/a	None	n/a	DHW Heater 1 (1)

WATER HEATERS - NEEA HEAT PUMP

01 Name	02 # of Units	03 Tank Vol. (gal)	04 NEEA Heat Pump Brand	05 NEEA Heat Pump Model	06 Tank Location	07 Duct Inlet Air Source	08 Duct Outlet Air Source
DHW Heater 1	1	50	Rheem	PROPH50 T2 RH375J0 (50 gal, JA13)	TankZone	ADU Zone	ADU Zone

WATER HEATING - HERS VERIFICATION

01 Name	02 Pipe Insulation	03 Parallel Piping	04 Compact Distribution	05 Compact Distribution Type	06 Recirculation Control	07 Shower Drain Water Heat Recovery
DHW Sys 1 - 1/1	Not Required	Not Required	Not Required	None	Not Required	Not Required

SPACE CONDITIONING SYSTEMS

01 Name	02 System Type	03 Heating Unit Name	04 Heating Equipment Count	05 Cooling Unit Name	06 Cooling Equipment Count	07 Fan Name	08 Distribution Name	09 Required Thermostat Type
Split System1	Heat pump heating cooling	Heat Pump System 1	1	Heat Pump System 1	1	HVAC Fan 1	Air Distribution System 1	Setback

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

Project Name: 24-656 12 Arroyo Sequoia Road ADU **Calculation Date/Time:** 2024-12-04T17:09:49-08:00 **(Page 8 of 12)**

Calculation Description: Title 24 Analysis **Input File Name:** 24-656 12 Arroyo Sequoia Road ADU.ribd22x

OPAQUE SURFACE CONSTRUCTIONS

01 Construction Name	02 Surface Type	03 Construction Type	04 Framing	05 Total Cavity R-value	06 Interior / Exterior Continuous R-value	07 U-factor	08 Assembly Layers
R-21 Wall	Exterior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R-21	None / None	0.066	Inside Finish: Gypsum Board Cavity / Frame: R-21 / 2x6 Exterior Finish: Wood Siding/sheathing/decking
R-30 Roof Cathedral	Cathedral Ceilings	Wood Framed Ceiling	2x8 @ 16 in. O. C.	R-30	None / None	0.037	Roofing: Light Roof (Metal Tile) Tile Gap: present Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: R-30 / 2x8 Inside Finish: Gypsum Board
Attic RoofADU Zone	Attic Roofs	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-0	None / 0	0.412	Roofing: Light Roof (Metal Tile) Tile Gap: present Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: no Insul. / 2x4
R-30 Roof Attic	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-30	None / None	0.032	Over Ceiling Joists: R-20.9 insul. Cavity / Frame: R-9.1 / 2x4 Inside Finish: Gypsum Board

BUILDING ENVELOPE - HERS VERIFICATION

01 Quality Insulation Installation (QII)	02 High R-value Spray Foam Insulation	03 Building Envelope Air Leakage	04 CFM50	05 CFM50
Not Required	Not Required	N/A	n/a	n/a

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FENESTRATION / GLAZING

01 Name	02 Type	03 Surface	04 Orientation	05 Azimuth	06 Width (ft)	07 Height (ft)	08 Mult.	09 Area (ft^2)	10 U-factor	11 U-factor Source	12 SHGC	13 SHGC Source	14 Exterior Shading
GK	Window	Exterior Wall E	Front	270			1	30	0.3	NFRC	0.35	NFRC	Bug Screen
G02	Window	Exterior Wall E	Front	270			1	21	0.3	NFRC	0.35	NFRC	Bug Screen
GM	Window	Exterior Wall E	Front	270			1	21	0.3	NFRC	0.35	NFRC	Bug Screen
G03	Window	Exterior Wall E	Front	270			1	42	0.3	NFRC	0.35	NFRC	Bug Screen
GM 2	Window	Exterior Wall E	Front	270			1	21	0.3	NFRC	0.35	NFRC	Bug Screen
GL	Window	Exterior Wall S	Left	0			1	8.33	0.3	NFRC	0.35	NFRC	Bug Screen
GA	Window	Exterior Wall W	Back	90			1	21	0.3	NFRC	0.35	NFRC	Bug Screen
G01	Window	Exterior Wall W	Back	90			1	42	0.3	NFRC	0.35	NFRC	Bug Screen
GA 2	Window	Exterior Wall W	Back	90			1	21	0.3	NFRC	0.35	NFRC	Bug Screen
GB	Window	Exterior Wall W	Back	90			1	10.5	0.3	NFRC	0.35	NFRC	Bug Screen
GC	Window	Exterior Wall W	Back	90			1	30	0.3	NFRC	0.35	NFRC	Bug Screen

SLAB FLOORS

01 Name	02 Zone	03 Area (ft^2)	04 Perimeter (ft)	05 Edge Insul. R-value and Depth	06 Edge Insul. R-value and Depth	07 Carpeted Fraction	08 Heated
Slab-on-Grade	ADU Zone	1193.5	100.4	none	0	80%	No

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REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

REGISTERED PROFESSIONAL ENGINEER GANGYI ZHOU No. M34279 Exp.12-31-2024 MECHANICAL STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel: 949-267-9095

PROJECT NAME:
12 ARROYO SEQUOIA ROAD
CARMEL, CA 93923

SHEET TITLE
TITLE 24 FORMS - CF1R ADU

DRAWN GMEP
CHECKED GMEP
DATE 12/06/24
SCALE AS NOTED
JOB NO. 24-656
SHEET EN-3

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	
1. I certify that this Certificate of Compliance documentation is accurate and complete.	
Documentation Author Name: Gary Zhou	Documentation Author Signature: Gary Zhou
Company: GMEP Engineers	Signature Date: 12/05/2024
Address: 26439 Rancho Parkway S., Suite 120	CEA/ HERS Certification Identification (If applicable):
City/State/Zip: Lake Forest, CA 92630	Phone: (949) 267-9095

RESPONSIBLE PERSON'S DECLARATION STATEMENT	
I certify the following under penalty of perjury, under the laws of the State of California: 1. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design identified on this Certificate of Compliance. 2. I certify that the energy features and performance specifications identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations. 3. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.	
Responsible Designer Name: Adam Jeselnick	Responsible Designer Signature: Adam Jeselnick
Company: Adam Jeselnick Architect	Date Signed: 12/05/2024
Address: San Carlos Street 2 N/w 8th Avenue, Suite 200	License: C33090
City/State/Zip: Carmel-by-the-sea, CA 93921	Phone: 8316205164

Digitally signed by California Home Energy Efficiency Rating Services (CHEERS). This digital signature is provided in order to secure the content of this registered document, and in no way implies Registration Provider responsibility for the accuracy of the information.

HVAC DISTRIBUTION - HERS VERIFICATION

01	02	03	04	05	06	07	08	09
Name	Duct Leakage Verification	Duct Leakage Target (%)	Verified Duct Location	Verified Duct Design	Buried Ducts	Deeply Buried Ducts	Low-leakage Air Handler	Low Leakage Ducts Entirely in Conditioned Space
Air Distribution System 1-hers-dist	Yes	5.0	Not Required	Not Required	Not Required	Credit not taken	Required	No

HVAC - FAN SYSTEMS

01	02	03	04
Name	Type	Fan Power (Watts/CFM)	Name
HVAC Fan 1	HVAC Fan	0.5	HVAC Fan 1-hers-fan

HVAC FAN SYSTEMS - HERS VERIFICATION

01	02	03
Name	Verified Fan Watt Draw	Required Fan Efficacy (Watts/CFM)
HVAC Fan 1-hers-fan	Required	0.5

INDOOR AIR QUALITY (IAQ) FANS

01	02	03	04	05	06	07	08	09
Dwelling Unit	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
SFam IAQVentRpt	56	0.35	Exhaust	No	n/a / n/a	No	Yes	

HVAC - HEAT PUMPS

01	02	03	04	05	06	07	08	09	10	11	12	13
			Heating				Cooling					
Name	System Type	Number of Units	Heating Efficiency Type	HSPF/HSPF2/COP	Cap 47	Cap 17	Cooling Efficiency Type	SEER/SEER2	EER/EER2/CEER	Zonally Controlled	Compressor Type	HERS Verification
Heat Pump System 1	Central split HP	1	HSPF2	7.8	27800	16680	EER2SEER2	15.2	12.5	Not Zonal	Single Speed	Heat Pump System 1-hers-htpump

HVAC HEAT PUMPS - HERS VERIFICATION

01	02	03	04	05	06	07	08	09
Name	Verified Airflow	Airflow Target	Verified EER/EER2	Verified SEER/SEER2	Verified Refrigerant Charge	Verified HSPF/HSPF2	Verified Heating Cap 47	Verified Heating Cap 17
Heat Pump System 1-hers-htpump	Required	350	Required	Required	Yes	Yes	Yes	Yes

HVAC - DISTRIBUTION SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12
			Duct Ins. R-value		Duct Location		Surface Area				
Name	Type	Design Type	Supply	Return	Supply	Return	Supply	Return	Bypass Duct	Duct Leakage	HERS Verification
Air Distribution System 1	Unconditioned attic	Non-Verified	R-6	R-6	Attic	Attic	n/a	n/a	No Bypass Duct		Air Distribution System 1-hers-dist

REVISIONS

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EN-4

ABBREVIATIONS

ADA	AMERICAN DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AP	ACCESS PANEL
AFCI	ARC FAULT CIRCUIT INTERRUPTER
A/C (SYMMETRICAL)	AMPERES INTERRUPTING CAPACITY
AS/AF	AMP SWITCH, AMP FUSE
AMP, A	AMPERE
ARCH	ARCHITECTURAL
AWG	AMERICAN WIRE GAUGE
BLDG	BUILDING
BKR	BREAKER
CLG	CEILING
C	CONDUIT
CB	CIRCUIT BREAKER
CKT	CIRCUIT
Δ	DELTA CONNECTED
DIST	DISTRIBUTION
DEG	DEGREE
DWG	DRAWING
D/W	DISH WASHER
EF	EXHAUST FAN
EG	EQUIPMENT GROUND
ELEC	ELECTRICAL
ELEV	ELEVATOR
EQ	EQUIPMENT
EP	EXPLOSION PROOF
FACP	FIRE ALARM CONTROL PANEL
FDR	FEEDER
FLA	FULL LOAD AMPS
FLUOR	FLUORESCENT
G/GRD	GROUND
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
HP	HORSE POWER
HPS	HIGH PRESSURE SODIUM
HVAC	HEATING, VENTILATION, AND AIR CONDITIONING
INCAND	INCANDESCENT
JB/JBOX	JUNCTION BOX
KVA	KILOVOLT AMPERES
KW	KILOWATTS
KWH	KILOWATTS PER HOUR
KCMIL	THOUSAND CIRCULAR MILS
LCP	LIGHTING CONTROL PANEL
LPS	LOW PRESSURE SODIUM
LTG/LTS	LIGHTING
M	METER
MAX	MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MECH	MECHANICAL
MH	METAL HALIDE
MLO	MAIN LUGS ONLY
MIN	MINIMUM
MW	MICROWAVE
(N)	NEW
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NO	NORMALLY OPEN
P	POLE
PB	PULLBOX
PC	PHOTOCELL
PH OR ϕ	PHASE
PWR	POWER
RECPT, REC	RECEPTACLE
REF	REFRIGERATOR
REQD	REQUIRED
RPM	REVOLUTIONS PER MINUTE
ST	SHUNT TRIP
SP	SUMP PUMP
SPEC	SPECIFICATION
SYS	SYSTEMS
SYM	SYMMETRICAL
TELCOM	TELECOMMUNICATIONS
TV	TELEVISION
TYP	TYPICAL
U/G	UNDERGROUND
UTIL	UTILITY
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	VOLTS
VA	VOLT AMPERE
VD	VOLTAGE DROP
V/ϕ/HZ	VOLTS/PHASE/HERTZ
W	WIRE
WP	WEATHERPROOF
XFMR	TRANSFORMER
XFR	TRANSFER
Y	WYE CONNECTED

ELECTRICAL SYMBOLS

NOTE: 'NL' DENOTES 90 MINUTE BATTERY BACKUP

SYMBOL	MEANING
	SWITCH
	3-WAY SWITCH
	DIMMER SWITCH
	HIGH EFFICACY FIXTURE (CEILING)
	HIGH EFFICACY FIXTURE (WALL)
	HIGH EFFICACY FIXTURE (RECESS)
	PENDANT LIGHT FIXTURE (CEILING)
NL	1'X4' LED STRIP LIGHT
NL	2'X4' LED STRIP LIGHT
	EXHAUST FAN
	UL 2034/2075 CARBON MONOXIDE ALARM
	UL 2034/2075 SMOKE DETECTOR
	ELECTRICAL PANEL
	DUPLEX RECEPTACLE
	240V RECEPTACLE
	FLOOR RECEPTACLE RECEPTACLE
	JUNCTION BOX
NL	RECESSED DOWNLIGHT
HPC-2,4,6	HOMERUN: HPC=PANEL DESTINATION, 2,4,6=CIRCUITS
	CIRCUIT BREAKER
	FUSE
	EXHAUST FAN/LED LIGHT COMBO (RECESSED)
	DOOR BELL
	MANUAL MOTOR RATED SWITCH
	VACANCY SENSOR
	3 POLE DISCONNECT SWITCH
	GROUND

ELECTRICAL GENERAL NOTES

1. The entire installation shall comply with 2020 NEC, 2022 California Energy Code, 2022 California Electrical Code, and all applicable local codes and regulation.

2. All electrical prefabricated equipment shall be designed and constructed in such a manner that all portions, elements, sub-assemblies and/or parts of said equipment, and the equipment as a whole including its attachments, will resist a load which exceeds the force level used to restraint and anchor the equipment to the supporting structure.

3. All electrical materials and equipment shall be new and shall be listed by Underwriter's Laboratories (UL) and bear their label or listed or certified by a nationally recognized testing authority where UL does not have a listing. Custom made equipment shall have complete test data submitted by the manufacturer attesting to its safety. In addition, the materials, equipment, and installation shall comply with the requirements of the following:

American Society of Testing Materials (ASTM)
Insulated Power Cable Engineers Association (IPCEA)
American Standard Association (ASA)
National Fire Protection Association (NFPA)
American National Standard Institute (ANSI)
NEC National Electrical Code (NEC)
Institute of Electrical and Electronic Enginners(IEEE)
All local codes having jurisdiction

Where the codes have different levels of requirements, the most stringent rule shall apply.

4. The contractor shall visit the site including all areas indicated on the drawings. He shall thoroughly familiarize himself with the existing conditions and by submitting a bid, accepts the conditions under which he shall be required to perform his work.

5. It shall be contractor's responsibility to obtain a complete set of contract documents, addenda, drawings and specifications. He shall check the drawings of the other trades and shall carefully read the entire specifications and determine his responsibilities. Failure to do so shall not release the contractor from doing the work in complete accordance with the drawings and specifications.

6. The contractor shall coordinate his work with other trades at the site. Any costs to install work to accomplish said coordination which differs from the work as shown on the drawings shall be incurred by the contractor. Any discrepancies, ambiguities or conflicts shall be brought to the attention of the engineer during bid time for clarification. Any such conflicts not clarified prior to bid shall be subject to the interpretation of the engineer at no additional cost to the owner.

7. The contractor shall provide and keep up-to-date a complete record set of drawings. These prints shall be corrected accordingly and show every change from the original drawings. This set of drawing shall be kept on the job site and shall be used only as a record set. This shall not be construed as authorization for the contractor to make changes in the layout without definite instruction in each case. Upon completion of the work, a set of reproducible contract drawings shall be obtained from the engineer, and all changes as noted on the record set of drawings shall be incorporated on reproducible bond with black ink in a neat, legible, understandable and professional manner per Client's request.

8. In some instance, it may be necessary to defer work in certain areas and locations until such time as existing facilities can be temporarily or permanently rearranged by the owner. Therefore, whenever it becomes necessary for the contractor to perform work under this contract in existing areas in which the owner's work is being performed, the contractor shall advise the owner relative to this requirement and shall follow closely the directive issued by the engineer insofar as time and procedure are concerned.

9. All interruption of electrical power shall be kept to a minimum. However, when an interruption is necessary, the shutdown must be coordinated with the owner 7 days prior to the outage. Any overtime pay and work required to be accomplished on weekends shall be included in the contractor's bid. Work in existing switchboards or panelboards shall be coordinated with the owner prior to removing access panels or doors.

10. It shall be responsibility of the contractor to review and to coordinate with the mechanical, fire protection and plumbing drawings for duct lines and equipment.

11. All equipment mounted on roof for connection of HVAC equipment shall be mounted on unistrut stands utilizing approved pitch pockets, flashing, etc..

12. After all requirements of the specifications and/or the drawings have been fully completed, representatives of the owner will inspect the work. The contractor shall provide competent personnel to demonstrate the operation of any item or system to the full satisfactory of each representative. Final acceptance of the work will be made by the owner after receipt of approval and recommendation of acceptance from each representative.

13. The contractor shall furnish a one year written guarantee of materials and workmanship from the date of substantial completion.

14. Coordinate with other trades as to the exact location and configuration of their respective equipment, supply power and make connection to motors and equipment requiring electrical connections as indicated on the single line diagram, electrical drawings and drawings of other trade. Review the drawings of other trades for control diagram, size and locations of equipment. Disconnect switches, starters, wiring, controls and conduit for mechanical and plumbing operations shall be provided. The contractor shall be responsible for obtaining manufacturer's shop drawings prior to roughing in all conduit to this equipment.

15. Exact method and location of conduit penetration and openings in concrete or masonry walls, gradebeams, floors or structural steel members shall be as directed by the structural engineer. Perform coring, sawcutting, patching, and refinished of walls and surfaces wherever it is necessary to penetrate openings shall be sealed in an approved method to meet the fire rating of the particular wall, floor or ceiling. Exact method and locations of conduit penetrations and openings in concrete walls or floors shall be for UL approved systems.

16. Connections to vibrating equipment, mechanical and plumbing equipment and seismic separations:

Liquid-tight conduit in all locations
Maximum length of flexible conduit runs shall be 6'-0" u.O.N.

17. Equipment outlets, lighting fixtures, conduit, wire and connection methods in HVAC air-plenums shall be approved for use in plenums and shall conform to 2022 CEC.

18. Conduit shall not be installed in any floor slab. Conduit shall be installed concealed in the ceiling space, concealed in walls, or below slab on grade. Unless otherwise noted.

19. Whenever a discrepancy in quantity or size of conduit, wire, equipment devices, circuit breakers, ground fault protection system, etc., (all materials), arises on the drawings or specifications, the contractor shall be responsible for providing and installing all materials and services required by the strictest conditions noted on the drawings or in the specifications to ensure complete and operable systems as required by the owner and engineer.

20. It shall be contractor's responsibility to verify type of ceiling systems and to furnish approved lighting fixtures of the type required for mounting in subject ceiling. Where fixtures are recessed in plaster or drywall ceilings, they shall be complete with necessary mounting hardware and plaster frames.

21. All recessed lighting fixtures, speakers, receptacles, switches, etc., mounted in the fire rated ceilings or walls shall be enclosed with an approved enclosure carrying the same fire rating as the ceiling or wall by this contractor.

22. Utility penetrations of any kind in fire and smoke partitions and ceiling assemblies, shall be firestopped and sealed with an approved material securely installed.

Utility and electrical outlets or boxes shall be securely fastened to the stud of framing of the wall, partition or ceiling assembly. The opening in the gypsum board facing shall be cut so that the clearance between the box and the gypsum board does not exceed 1/8 inch. In smoke walls or partitions, the 1/8 inch clearance shall be filled with an approved fire-rated sealant.

23. Architectural reflected ceiling plans indicating the location of lighting fixtures shall take precedence over the locations of same shown on the electrical drawings. Install the lighting fixtures in any given area to agree with the reflected ceiling plans. Discrepancies shall be brought to the attention of the architect.

24. The exact locations and mounting heights of lighting fixtures located in mechanical equipment spaces and storage shall be coordinated in the field before installation to avoid interferences with ducts, piping and other mechanical equipment and all mounting hardware shall be included in base bid. When locations and mounting heights are determined, obtain approval from the engineer prior to installation.

25. Maximum number of conductors in outlet or junction boxes shall conform to 2022 CEC.

26. The exact locations of all electrical devices and equipment shall be coordinated with the architectural elevations, details or sections prior to installation. All electrical devices and equipment shall be recessed in walls, unless otherwise noted. Outlets not indicated on architectural elevations shall be coordinated with the architect prior to rough-in, unless otherwise noted.

27. Review architectural elevations of casework. Outlets mounted above or below, or adjacent to casework shall be coordinated with the architectural drawings, prior to final rough-in. Electrical drawings shall govern number and type of outlets. However, locations shall be as indicated on architectural elevations. Provide conduit, wires and outlets for work required in casework installations. Reference architectural details for method of routing conduit within casework construction. Provide box extensions through all casework. Finish flush with face of splash, cabinets, etc. Mounting heights of all devices and equipment are from finished floor to center of devices and equipment, unless otherwise noted. Boxes installed in locations not approved by the architect shall be relocated as directed by the architect at no additional cost to the owner.

28. Drawings are diagrammatic only and do not show special conduit routing or lengths required for a complete installation. Routing of raceways shall be at the option of the contractor but shall be in strict compliance with structural requirements and specifications, unless otherwise noted and shall be coordinated with other trades. Do not scale the electrical drawings for locations of any electrical architectural, structural, civil, or mechanical items or features. Refer to architectural and structural dimensional drawings.

29. The equipment grounding conductor runs shall be installed and run continuous from panel to last outlets. This wire shall be pigtailed in each outlet for connection to box and device so that if device is removed, ground will not be interrupted. All equipment grounding conductors shall be insulated green or bare conductors. Alternate methods of identification shall be used.

30. For small ac motors not having built-in thermal overload protection, provide manual motor starters with overload heater elements sized to the nameplate current rating of the motor. Small ac motors with built-in thermal overload protection, provide a horse power rated toggle type disconnect switch.

31. Boxes shall be sized for the number and sizes of conductors and conduit entering the box and equipped with plaster extension rings where required.

32. Lamps: all fixtures shall be high efficacy per CEnC 2022 Table 150.0-A.

33. Where lighting fixtures require the use of acrylic plastic lenses, they shall be 100 percent virgin acrylic thermoplastic, not less than 0.125" thick with an unpenetrated depth of not less than 0.045" equal to ksh-k12, unless otherwise noted.

34. Provide sound insulation at all conduit penetrations at sound barrier rated walls. Typical unless otherwise noted.

35. Where outlets occur at tackable wall panels or other wall finishes, provide extension rings as required so that no space will exist between device plate and backbox, per NEC 370.20, typical. See architectural elevations for wall finishes and locations.

36. All conductors for branch circuits shall be THHN/THWN copper AWG or KCML per NEC table 310.16. Grounding shall be "Green wire" or bare copper wire sizes per NEC table 250.122.

37. Grounding System:
The grounding system shall be derived per NEC 250.50:
A) 10' of meter underground water pipe
B) Meter frame of building or structure where effectively grounded
C) An electrode encased by at least 2" of concrete located within or near the bottom of a concrete foundation that is in direct contact with the earth. 20' zinc galvanized or other electrically conductive steel reinforcing bar or rod of not less than 1/2" in diameter or bare copper conductor not smaller than #4AWG.

38. Listed or labeled equipment shall be installed and used in accordance with any instructions included in the listing or labeling. Section 110.3(b)

39. Contractor must verify locations of all equipment and points of connection and coordinate with construction manager, architect, civil engineer, landscape architect, and utility consultants prior to start of construction. No compensation will be made for relocation of equipment and associated cost.

40. This document is not for bid or construction until the plan has been reviewed and approved by all authorities having jurisdiction and the permit is obtained. No compensation will be made for additional work due to the violation of this requirement.

ELECTRICAL SHEET INDEX

NO.	SHEET	DESCRIPTION
1	E-1.0	ELECTRICAL GENERAL NOTES, SYMBOLS, & SHEET INDEX
2	E-1.1	ELECTRICAL SINGLE LINE DIAGRAM, LOAD CALCULATIONS, PANEL SCHEDULE
3	E-1.2	ELECTRICAL PANEL SCHEDULE
4	E-2.0	ELECTRICAL HOUSE LIGHTING PLAN
5	E-2.1	ELECTRICAL HOUSE POWER PLAN
6	E-2.2	ELECTRICAL GUEST HOUSE PLANS
7	E-3.0	ELECTRICAL SITE PLAN

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

REGISTERED PROFESSIONAL ENGINEER
GANGYI ZHOU
No. 018959
Exp 12-31-2025
ELECTRICAL
STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel: 949-267-9095

PROJECT NAME:
12 ARROYO ROAD
SEQUOIA RD
CARMEL, CA 93923

SHEET TITLE
ELECTRICAL GENERAL NOTES, SYMBOLS, & SHEET INDEX

DRAWN	GMEP
CHECKED	GMEP
DATE	12/06/24
SCALE	AS NOTED
JOB NO.	24-656
SHEET	E-1.0

SERVICE LOAD CALCULATION-HOUSE

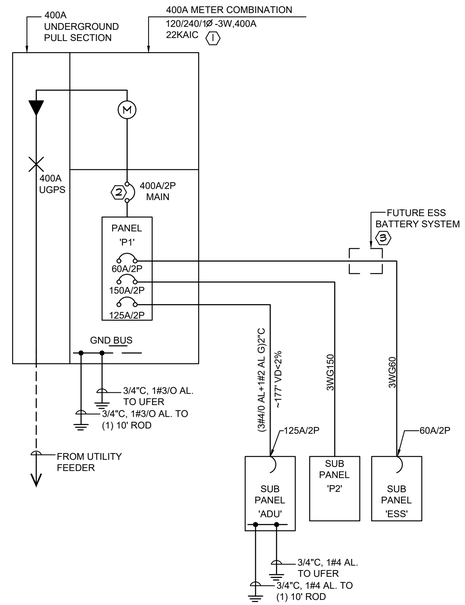
Dwelling Information:	
Floor Area:	4449SFT
Heater Type:	Electricity
Dryer:	Electricity
Oven:	Electricity
Cooktop:	NA
General Load:	
General Lighting (Floor Area X 3VA/SFT):	13347VA
Small Appliance (3-20ACK By CEC 210.11):	3000VA
Laundry(1-20ACKT By CEC210.11):	1500VA
Bathroom(1-20ACKT By CEC210.11):	0VA
Dishwasher:	1200VA
Microwave Oven:	1500VA
Garbage Disposal:	1200VA
Bathroom Fans:	1000VA
Garage Door Opener:	3600VA
Dryer:	5000VA
Oven:	8000VA
Refrigerator:	2000VA
Cooktop:	8000VA
Water Heater:	5000VA
Wine Cellar:	0VA
Total General Load:	54347VA
First 10 KVA at 100%:	10000VA
Remainder at 40% (44347VA X 0.4):	17739VA
Subtotal General Load:	27739VA
Air Conditioning KVA Calculation:	
Outdoor Condensing Unit:	15840VA
Indoor Fan Coil Unit:	3648VA
Total AC Load:	19488VA
Car Charger:	7680VA
Calculated Load For Service: (27739VA+19488VA+7680VA)/240V=229A(Service Rating)	
Provided Service Rating:	400A

SERVICE LOAD CALCULATION-COMBINED

Dwelling Information:	
Floor Area:	5326SFT
Heater Type:	Electricity
Dryer:	Electricity
Oven:	Electricity
Cooktop:	NA
General Load:	
General Lighting (Floor Area X 3VA/SFT):	15978VA
Small Appliance (3-20ACK By CEC 210.11):	6000VA
Laundry(1-20ACKT By CEC210.11):	3000VA
Bathroom(1-20ACKT By CEC210.11):	0VA
Dishwasher:	2400VA
Microwave Oven:	3000VA
Garbage Disposal:	2400VA
Bathroom Fans:	1200VA
Garage Door Opener:	3600VA
Dryer:	10000VA
Oven:	16000VA
Refrigerator:	3000VA
Cooktop:	8000VA
Water Heater:	10000VA
Wine Cellar:	0VA
Total General Load:	84578VA
First 10 KVA at 100%:	10000VA
Remainder at 40% (74578VA X 0.4):	29832VA
Subtotal General Load:	39832VA
Air Conditioning KVA Calculation:	
Outdoor Condensing Unit:	20208VA
Indoor Fan Coil Unit:	4272VA
Total AC Load:	24480VA
Car Charger:	7680VA
Calculated Load For Service: (39832VA+24480VA+7680VA)/240V=300A(Service Rating)	
Provided Service Rating:	400A

SERVICE LOAD CALCULATION-ADU

Dwelling Information:	
Floor Area:	877SFT
Heater Type:	Electricity
Dryer:	Electricity
Oven:	Electricity
Cooktop:	NA
General Load:	
General Lighting (Floor Area X 3VA/SFT):	2631VA
Small Appliance (3-20ACK By CEC 210.11):	3000VA
Laundry(1-20ACKT By CEC210.11):	1500VA
Bathroom(1-20ACKT By CEC210.11):	0VA
Dishwasher:	1200VA
Microwave Oven:	1500VA
Garbage Disposal:	1200VA
Bathroom Fans:	200VA
Garage Door Opener:	0VA
Dryer:	5000VA
Oven:	8000VA
Refrigerator:	1000VA
Cooktop:	0VA
Water Heater:	5000VA
Total General Load:	30231VA
First 10 KVA at 100%:	10000VA
Remainder at 40% (20231VA X 0.4):	8093VA
Subtotal General Load:	18093VA
Air Conditioning KVA Calculation:	
Outdoor Condensing Unit:	4368VA
Indoor Fan Coil Unit:	624VA
Total AC Load:	4992VA
Calculated Load For Service: (18093VA+4992VA+0VA)/240V=97A(Service Rating)	
Provided Service Rating:	125A



SINGLE LINE DIAGRAM

SCALE: NONE

SINGLE-LINE DIAGRAM KEY NOTES

(1) VERIFY WITH SERVICE PLANNER FOR AIC RATING AND ELECTRICAL INFORMATION BEFORE ISSUING ANY BID. NOTIFY ENGINEER IMMEDIATELY IF ANY MAJOR DISCREPANCIES OCCUR.

(2) PROVIDE SURGE PROTECTIVE DEVICE.

(3) THE FUTURE ESS SYSTEM IS COMPOSED OF AN 3KW INVERTER AND BATTERY, WHICH MUST SUPPORT 90 MINUTES AT MINIMUM.

SINGLE-LINE DIAGRAM GENERAL NOTES

a) NOT USED.

b) ALL NEW CIRCUIT BREAKERS, FUSIBLE SWITCHES IN MAINSWITCHBOARD OR PANEL BOARDS SHALL BE SERIES RATED TO MATCH EXISTING AIC RATING OR APPROVED EQUAL OR 65KAIC, UNLESS NOTED OTHERWISE.

c) MOTOR CIRCUIT PROTECTORS SHALL NOT BE A PART OF A SERIES COMBINATION INTERRUPTING RATING.

d) SERIES COMBINATION AIC RATING SHALL NOT BE USED WHEN THE SECONDARY EQUIPMENT IN THE SERIES IS SUBJECTED TO A TOTAL CONNECTED FULL LOAD MOTOR CURRENT OF MORE THAN 1% OF ITS AIC RATING.

e) EQUIPMENT ENCLOSURES SHALL BE CLEARLY MARKED "CAUTION-SERIES RATED SYSTEM – ___KAMPS AVAILABLE, IDENTIFIED REPLACEMENT COMPONENTS REQUIRED", IN COMPLIANCE WITH 2022 CEC (2020 NEC) SECTION 110-22. END USE EQUIPMENT SHALL ALSO BE MARKED WITH THE HIGHER SERIES COMBINATION INTERRUPTING RATING AS PER 2022 CEC SECTION 240-83(C). NO EXCEPTION.

f) FUSES SHALL BE PROVIDED WITH REJECTION TYPE FUSE HOLDERS.

g) ELECTRICAL EQUIPMENT SHALL BE LISTED BY THE CITY, WHERE THE PROJECT IS LOCATED, RECOGNIZED ELECTRICAL TESTING LABORATORY OR APPROVED BY THE DEPARTMENT.

h) NO PIPING, DUCTS OR EQUIPMENT FOREIGN TO ELECTRICAL EQUIPMENT SHALL BE PERMITTED TO BE LOCATED WITHIN THE DEDICATED SPACE ABOVE THE ELECTRICAL EQUIPMENT.

ENERGY STORAGE SYSTEM (ESS) READY NOTES

ALL SINGLE-FAMILY RESIDENCES THAT INCLUDE ONE OR TWO DWELLING UNITS SHALL MEET THE FOLLOWING. ALL ELECTRICAL COMPONENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA ELECTRICAL CODE:

1. AT LEAST ONE OF THE FOLLOWING SHALL BE PROVIDED:

   A. ESS READY INTERCONNECTION EQUIPMENT WITH A MINIMUM BACKED-UP CAPACITY OF 60 AMPS AND A MINIMUM OF FOUR ESS-SUPPLIED BRANCH CIRCUITS, OR

   B. A DEDICATED RACEWAY FROM THE MAIN SERVICE TO A PANELBOARD (SUBPANEL) THAT SUPPLIES THE BRANCH CIRCUITS IN SECTION 150.0(S)(2). ALL BRANCH CIRCUITS ARE PERMITTED TO BE SUPPLIED BY THE MAIN SERVICE PANEL PRIOR TO THE INSTALLATION OF AN ESS. THE TRADE SIZE OF THE RACEWAY SHALL BE NOT LESS THAN 1 INCH. THE PANELBOARD THAT SUPPLIES THE BRANCH CIRCUITS (SUBPANEL) MUST BE LABELED "SUBPANEL SHALL INCLUDE ALL BACKEDUP LOAD CIRCUITS."

2. A MINIMUM OF FOUR BRANCH CIRCUITS SHALL BE IDENTIFIED AND HAVE THEIR SOURCE OF SUPPLY COLLOCATED AT A SINGLE PANELBOARD SUITABLE TO BE SUPPLIED BY THE ESS. AT LEAST ONE CIRCUIT SHALL SUPPLY THE REFRIGERATOR, ONE LIGHTING CIRCUIT SHALL BE LOCATED NEAR THE PRIMARY EGRESS AND AT LEAST ONE CIRCUIT SHALL SUPPLY A SLEEPING ROOM RECEPTACLE OUTLET. (CEC 150.0(S)(2))

3. THE MAIN PANELBOARD SHALL HAVE A MINIMUM BUSBAR RATING OF 225 AMPS.

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

ELECTRICAL FEEDER SCHEDULE-AL

OVERCURRENT DEVICE SETTINGS	THREE WIRE + GROUND: FEEDER IDENTIFIER	THREE WIRE + GROUND: ALUMINUM INSULATION PER SPECIFICATIONS
20	3WG20	(3#10 + 1#10G) 3/4"C.
30	3WG30	(3#8 + 1#8G) 3/4"C.
40	3WG40	(3#6 + 1#8G) 3/4"C.
50	3WG50	(3#4 + 1#8G) 1"C.
65	3WG65	(3#3 + 1#6G) 1-1/4"C.
75	3WG75	(3#2 + 1#6G) 1-1/4"C.
90	3WG90	(3#2 + 1#6G) 1-1/4"C.
100	3WG100	(3#1/0 + 1#6G) 1-1/2"C.
120	3WG120	(3#1/0 + 1#4G) 1-1/2"C.
125	3WG125	(3#2/0 + 1#4G) 2"C.
150	3WG150	(3#3/0 + 1#4G) 2"C.
175	3WG175	(3#4/0 + 1#4G) 2"C.
200	3WG200	(3#250KCMIL + 1#2G) 2-1/2"C.
250	3WG250	(3#350KCMIL + 1#2G) 3"C.
300	3WG300	(3#500KCMIL + 1#1G) 3"C.
350	3WG350	2[(3#4/0 + 1#1G) 2"C.]
400	3WG400	2[(3#250KCMIL + 1#1/0G) 2-1/2"C.]

IMPORTANT SERVICE UTILITY NOTE

ELECTRICAL CONTRACTOR SHALL OBTAIN APPROVED CONSTRUCTION DRAWINGS FROM THE RESPECTIVE UTILITY COMPANY AND INCLUDE ALL MATERIALS AND WORK AS INDICATED THEREIN IN THE BID PRICE.

IF UTILITY DOCUMENTS ARE NOT READILY AVAILABLE DURING THE BIDDING PROCESS, THEN SO INDICATE TO BE AS NON-PART OF THE BID. OTHERWISE INCLUDE AN ESTIMATED AMOUNT WITH THE ALLOWANCE TO COVER CHANGES UPON AVAILABILITY OF ACTUAL UTILITY DOCUMENTS.

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

REGISTERED PROFESSIONAL ENGINEER GANGYI ZHOU No. 018959 Exp 12-31-2025 ELECTRICAL STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel: 949-267-9095

PROJECT NAME:
12 ARROYO ROAD
SEQUOIA RD
CARMEL, CA 93923

SHEET TITLE
ELECTRICAL SINGLE LINE DIAGRAM & LOAD CALCULATIONS

DRAWN	GMEP
CHECKED	GMEP
DATE	12/06/24
SCALE	AS NOTED
JOB NO.	24-656
SHEET	E-1.1

PANEL 'P1'

LOCATION: EXTERIOR(NEMA-3R) | MAIN (AMP): 400A | BUS RATING: 400 AMPS | 120/240V 1 Ø 3 W | MOUNTING: SURFACE

DESCRIPTION	VOLTAMPS ØA	VOLTAMPS ØB	LTG	REC	MIS	CKT NO	BKR	BUS ØA	BUS ØB	BKR	CKT NO	MIS	REC	LTG	VOLTAMPS ØA	VOLTAMPS ØB	DESCRIPTION
OVEN	4000					1	50			15	2				912		FC-60
----		4000				3	2			2	4					912	----
COOKTOP	4000					5	50			15	6				912		FC-48
----		4000				7	2			2	8					912	----
DRYER	2500					9	30			20-1	10				1200		GARAGE DOOR 1
----		2500				11	2			20-1	12					1200	GARAGE DOOR 2
WATER HEATER 1	2500					13	30			20-1	14				1200		GARAGE DOOR 3
----		2500				15	2			60	16					2000	SUBPANEL 'ESS'
CAR CHARGER	3840					17	40			2	18				2000		----
----		3840				19	2			125	20					18431	SUBPANEL 'ADU'
HP-60	3984					21	50			2	22				19431		----
----		3984				23	2			150	24					9735	SUBPANEL 'P2
HP-48	3936					25	50			2	26				12835		----
----		3936				27	2				28						SOLAR
LAUNDRY	1500					29	20-1				30						----
SUB-TOTAL	ØA= 64574 VA														ØB= 57974 VA		

TOTAL CONNECTED VA	②= 71992
LCL @ 125 %	= 0
TOTAL OTHER LOAD	= 0
PANEL LOAD	②= 72.0KVA
FEEDER AMPS	②= 300A

NOTES:
- ① REFER TO MECHANICAL DRAWINGS FOR DETAILED EQUIPMENT INFORMATION BEFORE BID AND ROUGH IN.
- ② REFER TO SERVICE LOAD CALCULATION ON SHEET E-1.1
- ③ REFER TO SINGLE LINE FOR AIC RATING
- ④ BACKFEED TYPE BREAKER RESERVED FOR FUTURE SOLAR PANEL.

PANEL 'ADU'

LOCATION: EXTERIOR (NEMA-3R) | MAIN (AMP): 125A | BUS RATING: 125 AMPS | 120/240V 1 Ø 3 W | MOUNTING: SURFACE

DESCRIPTION	VOLTAMPS ØA	VOLTAMPS ØB	LTG	REC	MIS	CKT NO	BKR	BUS ØA	BUS ØB	BKR	CKT NO	MIS	REC	LTG	VOLTAMPS ØA	VOLTAMPS ØB	DESCRIPTION
GENERAL LTG 9	1000					1	20-1			20-1	2				1200		D.W.
GENERAL LTG 10		1000				3	20-1			20-1	4					1200	G.D.
GENERAL LTG 11	1000					5	20-1			20-1	6				1500		MICROWAVE
BATHROOM REC 2		1000				7	20-1			20-1	8					535	LIVING REC 1
SMALL APPS 3	1500					9	20-1			20-1	10				535		LIVING REC 2
SMALL APPS 4		1500				11	20-1			15-1	12					100	SMOKE & CO
IGNITERS	100					13	20-1			50	14				4000		OVEN 2
EXT LTG 3		100				15	15-1			2	16					4000	----
EXT REC 3	100					17	15-1			30	18				2500		DRYER 2
LAUNDRY 2		1500				19	20-1			2	20					2500	----
REFRIGERATOR 2	1000					21	20-1			30	22				2500		WATER HEATER 2
SPACE						23				2	24					2500	----
SPACE						25				30	26				2184		HP-30
SPACE						27				2	28					2184	----
SPACE						29				15	30				312		FC-30
SPACE						31				2	32					312	----
SUB-TOTAL	ØA= 19431 VA														ØB= 18431 VA		

TOTAL CONNECTED VA	③= 23085
LCL @ 125 %	= 0
TOTAL OTHER LOAD	= 0
PANEL LOAD	③= 23.1KVA
FEEDER AMPS	③= 97A

NOTES:
- ① REFER TO SINGLE LINE FOR AIC RATING
- ② REFER TO MECHANICAL EQUIPMENT INFORMATION BEFORE BID AND ROUGH IN.
- ③ REFER TO SERVICE LOAD CALCULATION ON SHEET E-1.1

PANEL 'ESS'

LOCATION: GARAGE | MAIN (AMP): 60A | BUS RATING: 100 AMPS | 120/240V 1 Ø 3 W | MOUNTING: REC

DESCRIPTION	VOLTAMPS ØA	VOLTAMPS ØB	LTG	REC	MIS	CKT NO	BKR	BUS ØA	BUS ØB	BKR	CKT NO	MIS	REC	LTG	VOLTAMPS ØA	VOLTAMPS ØB	DESCRIPTION
GENERAL LTG 1	1000					1	20-1			20-1	2				1000		GENERAL LTG 2
COOLER		1000				3	20-1			20-1	4					1000	REFRIGERATOR
SPACE						5					6						SPACE
SPACE						7					8						SPACE
SPACE						9					10						SPACE
SPACE						11					12						SPACE
SUB-TOTAL	ØA=2000 VA														ØB= 2000 VA		

TOTAL CONNECTED VA	= 4000
LCL @ 125 %	= 0
TOTAL OTHER LOAD	= 0
PANEL LOAD	= 4KVA
FEEDER AMPS	= 17A

NOTES:
- ① REFER TO SINGLE LINE FOR AIC RATING

PANEL 'P2'

LOCATION: MECH ROOM | MAIN (AMP): M.L.O. | BUS RATING: 150 AMPS | 120/240V 1 Ø 3 W | MOUNTING: REC

DESCRIPTION	VOLTAMPS ØA	VOLTAMPS ØB	LTG	REC	MIS	CKT NO	BKR	BUS ØA	BUS ØB	BKR	CKT NO	MIS	REC	LTG	VOLTAMPS ØA	VOLTAMPS ØB	DESCRIPTION
GENERAL LTG 3	1000					1	20-1			20-1	2				1200		D.W. 1
GENERAL LTG 4		1000				3	20-1			20-1	4					1200	G.D.
GENERAL LTG 5	1000					5	20-1			20-1	6				1500		MICROWAVE
GENERAL LTG 6		1000				7	20-1			20-1	8					535	LIVING REC 1
GENERAL LTG 7	1000					9	20-1			20-1	10				535		LIVING REC 2
GENERAL LTG 8		1000				11	20-1			15-1	12					100	SMOKE & CO
GARAGE LTG & REC	1000					13	20-1			20-1	14				0		BATHROOM REC
EXT LTG 1		200				15	15-1			20-1	16					0	IGNITERS
EXT REC 1	200					17	15-1				18						SPACE
SMALL APPS 1		1500				19	20-1				20						SPACE
SMALL APPS 2	1500					21	20-1				22						SPACE
HOOD		500				23	15-1				24						SPACE
EXT REC 2	200					25	15-1				26						SPACE
EXT LTG 2		200				27	15-1				28						SPACE
SPACE						29					30						SPACE
SPACE						31					32						SPACE
SUB-TOTAL	ØA= 9135 VA														ØB= 7235 VA		

TOTAL CONNECTED VA	= 16370
LCL @ 125 %	= 0
TOTAL OTHER LOAD	= 0
PANEL LOAD	= 22.6KVA
FEEDER AMPS	= 77A

NOTES:
- ① REFER TO SINGLE LINE FOR AIC RATING

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

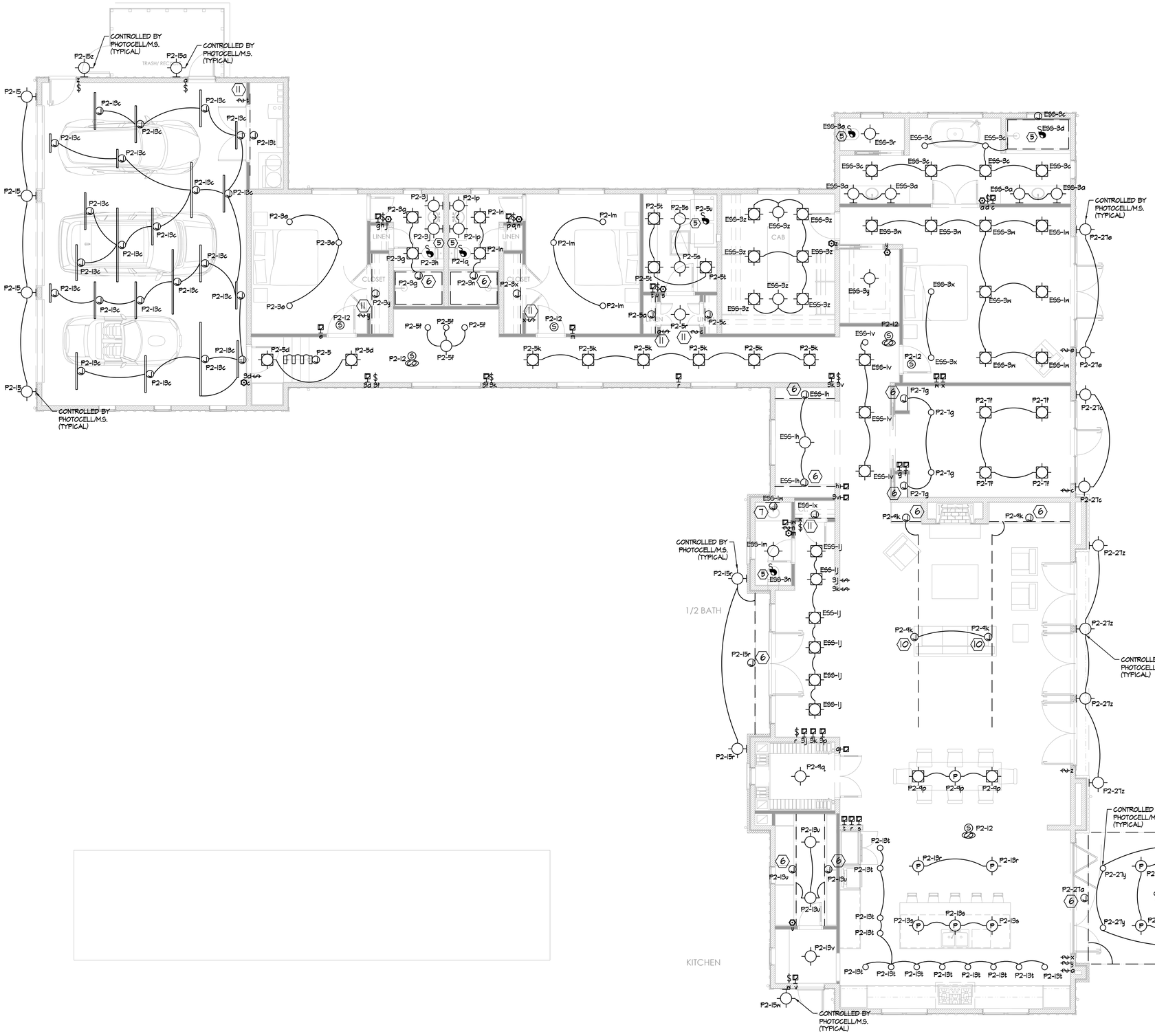


GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel: 949-267-9095

PROJECT NAME:
12 ARROYO
SEQUOIA ROAD
CARMEL, CA 93923

SHEET TITLE:
ELECTRICAL
PANEL SCHEDULE

DRAWN: GMEP
CHECKED: GMEP
DATE: 12/06/24
SCALE: AS NOTED
JOB NO.: 24-656
SHEET: E-1.2



ELECTRICAL GENERAL NOTES

1. ALL FIXTURES TO BE HIGH EFFICACY PER TABLE 150.0-A. ALL OUTDOOR FIXTURES TO BE CONTROLLED BY TIME CLOCK/PHOTOCELL, MOTION SENSOR/PHOTOCELL OR ASTRONOMICAL TIME CLOCK IN ADDITION TO MANUAL ON/OFF SWITCH. MANUAL ON/OFF SWITCH SHALL NOT OVERRIDE AUTOMATIC TIME CLOCK/PHOTOCELL, TIME CLOCK/MOTION SENSOR OR ASTRONOMICAL TIME CLOCK CONTROL.
2. ALL INDOOR LIGHT FIXTURES TO BE CONTROLLED BY DIMMER SWITCH. (EXCEPTIONS: HALLWAYS AND CLOSETS LESS THAN 70SF).
3. THIS DRAWING IS FOR REFERENCE ONLY. WIRE CKT 12 ON THE PLAN TO ALL DETECTORS FOR A COMPLETE AND OPERATIONAL SYSTEM. VERIFY W/LOCAL JURISDICTION FOR ALARM DETECTOR REQUIREMENT BEFORE ROUGH-IN.
4. IN DWELLING AREA SPECIFIED IN CEC 2022 SECTION 210.52, ALL 125-VOLT, 15- AND 20- AMPERE RECEPTACLES SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES.
5. OUTLETS INSTALLED IN FAMILY ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, KITCHENS, LAUNDRY ROOMS OR SIMILAR ROOMS OR AREAS WILL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER, COMBINATION-TYPE, INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT.
6. ALL NEW SMOKE ALARMS & CARBON MONOXIDE ALARM ARE 120V HARD-WIRED WITH BATTERY BACKUP AND ARE AUDIBLE IN ALL SLEEPING ROOMS.
7. ELECTRICAL CONTRACTOR MUST VERIFY MECHANICAL EQUIPMENT INFORMATION FOR MECHANICAL DRAWINGS BEFORE ISSUING ANY BID. NOTIFY ENGINEER IMMEDIATELY IF ANY DISCREPANCY OCCUR.
8. LIGHT FIXTURES ABOVE THE BATH TUB AND ON THE EXTERIOR OF THE BUILDING SHALL BE WET OR DAMP LOCATION RATED PER 410.10(A) AND (D) OF THE CEC.

ELECTRICAL KEY NOTES

(1) PROVIDE 15A/1P MOTOR RATED SWITCH FOR CONNECTION TO THE FC. VERIFY EXACT LOCATION AND ADDITIONAL INFORMATION WITH MECHANICAL DRAWINGS.

(2) DENOTES HALF-HOT RECEPTACLE ON SWITCH LEG 'z' IN THIS AREA.

(3) PROVIDE 50A/2P(HP-48&HP60) 30A/2P(HP-30) FUSED DISCONNECT FOR CONNECTION TO THE HP. VERIFY EXACT LOCATION AND ADDITIONAL INFORMATION WITH MECHANICAL DRAWINGS.

(4) PROVIDE OUTLET (1)R66((1)CAT5. RUN CABLE TO THE CATV BOX AND RUN CAT5 CABLE TO THE APPROPRIATE DESTINATION. VERIFY WITH TV SERVICE PROVIDER AND IT CONSULTANT BEFORE ROUGH-IN.

(5) PROVIDE 15A/1P MOTOR RATED SWITCH FOR CONNECT TO THE EXHAUST FAN. REFER TO MECHANICAL PLAN FOR DETAIL.

(6) DENOTES APPROXIMATE LOCATION OF J-BOX FOR CONNECTION TO SOFFET LED LIGHTING. VERIFY EXACT LOCATION WITH ARCHITECT BEFORE ROUGH-IN.

(7) DENOTES APPROXIMATE LOCATION OF J-BOX FOR CONNECTION TO MIRROR AND SINK LIGHTING. VERIFY EXACT LOCATION WITH ARCHITECT BEFORE ROUGH-IN.

(8) DENOTES APPROXIMATE LOCATION OF J-BOX FOR CONNECTION TO LINEAR UNDER CABINET LIGHTING. VERIFY EXACT LOCATION WITH ARCHITECT BEFORE ROUGH-IN.

(9) DENOTES APPROXIMATE LOCATION OF J-BOX FOR CONNECTION TO DOWN LIGHT. VERIFY EXACT LOCATION WITH ARCHITECT BEFORE ROUGH-IN.

(10) DENOTES APPROXIMATE LOCATION OF J-BOX FOR CONNECTION TO TRACT LIGHT. VERIFY EXACT LOCATION WITH ARCHITECT BEFORE ROUGH-IN.

(11) DENOTES DOOR ACTIVATED LED LIGHTING.

ELECTRICAL - HOUSE LIGHTING PLAN

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

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

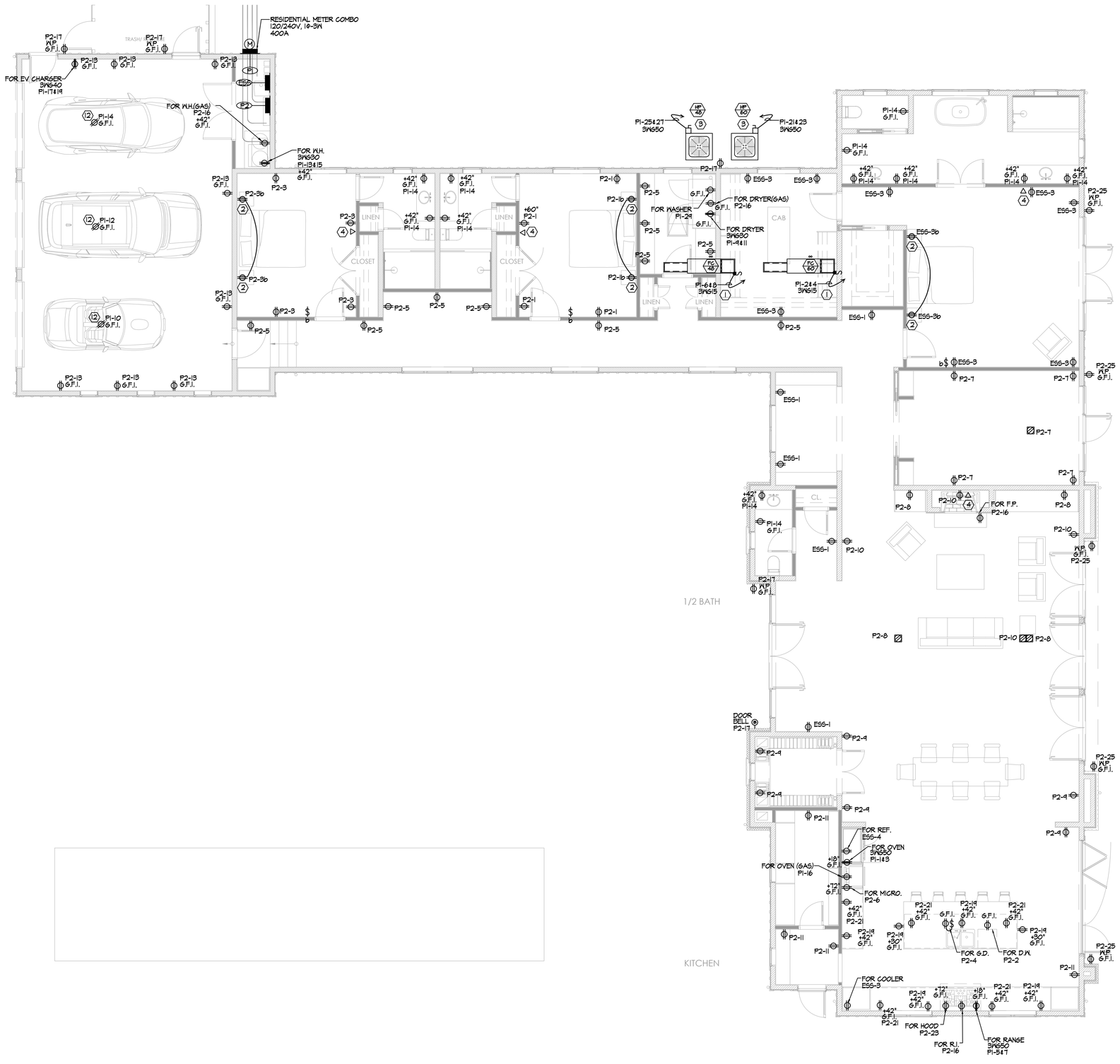
REGISTERED PROFESSIONAL ENGINEER
GANGYI ZHOU
No. 018959
Exp.12-31-2025
ELECTRICAL
STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel: 949-267-9095

PROJECT NAME:
12 ARROYO
SEQUOIA ROAD
CARMEL, CA 93923

SHEET TITLE
ELECTRICAL
HOUSE LIGHTING PLAN

DRAWN	GMEP
CHECKED	GMEP
DATE	12/06/24
SCALE	AS NOTED
JOB NO.	24-656
SHEET	E-2.0



ELECTRICAL GENERAL NOTES

1. ALL FIXTURES TO BE HIGH EFFICACY PER TABLE 150.0-A. ALL OUTDOOR FIXTURES TO BE CONTROLLED BY TIME CLOCK/PHOTOCELL, MOTION SENSOR/PHOTOCELL OR ASTRONOMICAL TIME CLOCK. IN ADDITION TO MANUAL ON/OFF SWITCH, MANUAL ON/OFF SWITCH SHALL NOT OVERRIDE AUTOMATIC TIME CLOCK/PHOTOCELL, TIME CLOCK/MOTION SENSOR OR ASTRONOMICAL TIME CLOCK CONTROL.
2. ALL INDOOR LIGHT FIXTURES TO BE CONTROLLED BY DIMMER SWITCH. (EXCEPTIONS: HALLWAYS AND CLOSETS LESS THAN 70SF).
3. THIS DRAWING IS FOR REFERENCE ONLY. WIRE CKT 12 ON THE PLAN TO ALL DETECTORS FOR A COMPLETE AND OPERATIONAL SYSTEM. VERIFY W/LOCAL JURISDICTION FOR ALARM DETECTOR REQUIREMENT BEFORE ROUGH-IN.
4. IN DWELLING AREA SPECIFIED IN CEC 2022 SECTION 210.52, ALL 125-VOLT, 15- AND 20- AMPERE RECEPTACLES SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES.
5. OUTLETS INSTALLED IN FAMILY ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, KITCHENS, LAUNDRY ROOMS OR SIMILAR ROOMS OR AREAS WILL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER, COMBINATION-TYPE, INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT.
6. ALL NEW SMOKE ALARMS & CARBON MONOXIDE ALARM ARE 120V HARD-WIRED WITH BATTERY BACKUP AND ARE AUDIBLE IN ALL SLEEPING ROOMS.
7. ELECTRICAL CONTRACTOR MUST VERIFY MECHANICAL EQUIPMENT INFORMATION FOR MECHANICAL DRAWING BEFORE ISSUING ANY BID. NOTIFY ENGINEER IMMEDIATELY IF ANY DISCREPANCY OCCUR.
8. LIGHT FIXTURES ABOVE THE BATH TUB AND ON THE EXTERIOR OF THE BUILDING SHALL BE WET OR DAMP LOCATION RATED PER 410.10(A) AND (D) OF THE CEC.

ELECTRICAL KEY NOTES

(1) PROVIDE 15A/1P MOTOR RATED SWITCH FOR CONNECTION TO THE FC. VERIFY EXACT LOCATION AND ADDITIONAL INFORMATION WITH MECHANICAL DRAWINGS.

(2) DENOTES HALF-HOT RECEPTACLE ON SWITCH LEG 'b' IN THIS AREA.

(3) PROVIDE 50A/2P(HP-4&1HP60) 30A/2P(HP-30) FUSED DISCONNECT FOR CONNECTION TO THE HP. VERIFY EXACT LOCATION AND ADDITIONAL INFORMATION WITH MECHANICAL DRAWINGS.

(4) PROVIDE OUTLET (1)R66(1)CAT5. RUN CABLE TO THE CATV BOX AND RUN CAT5 CABLE TO THE APPROPRIATE DESTINATION. VERIFY WITH TV SERVICE PROVIDER AND IT CONSULTANT BEFORE ROUGH-IN.

(5) PROVIDE 15A/1P MOTOR RATED SWITCH FOR CONNECT TO THE EXHAUST FAN. REFER TO MECHANICAL PLAN FOR DETAIL.

(6) DENOTES CEILING MOUNTED RECEPTACLES FOR GARAGE DOOR OPENER ON THE SWITCH LEG AS SHOWN. BACKUP BATTERY IS REQUIRED ON NEW GARAGE DOOR OPENERS PER CALIFORNIA SENATE BILL 969. (MODEL INCLUDED CHAMBERLAIN C2212T OR EQUAL TO THE MODEL.)

(7) DENOTES GARAGE DOOR OPENER SWITCH.

(8) DENOTES APPROXIMATE LOCATION OF J-BOX FOR CONNECTION TO LINEAR UNDER CABINET LIGHTING. VERIFY EXACT LOCATION WITH ARCHITECT BEFORE ROUGH-IN.

(9) DENOTES APPROXIMATE LOCATION OF J-BOX FOR CONNECTION TO DOWN LIGHT. VERIFY EXACT LOCATION WITH ARCHITECT BEFORE ROUGH-IN.

(10) DENOTES APPROXIMATE LOCATION OF J-BOX FOR CONNECTION TO TRACT LIGHT. VERIFY EXACT LOCATION WITH ARCHITECT BEFORE ROUGH-IN.

ELECTRICAL - HOUSE POWER PLAN

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

REVISIONS		
NO.	DATE	DESCRIPTION

SEAL:

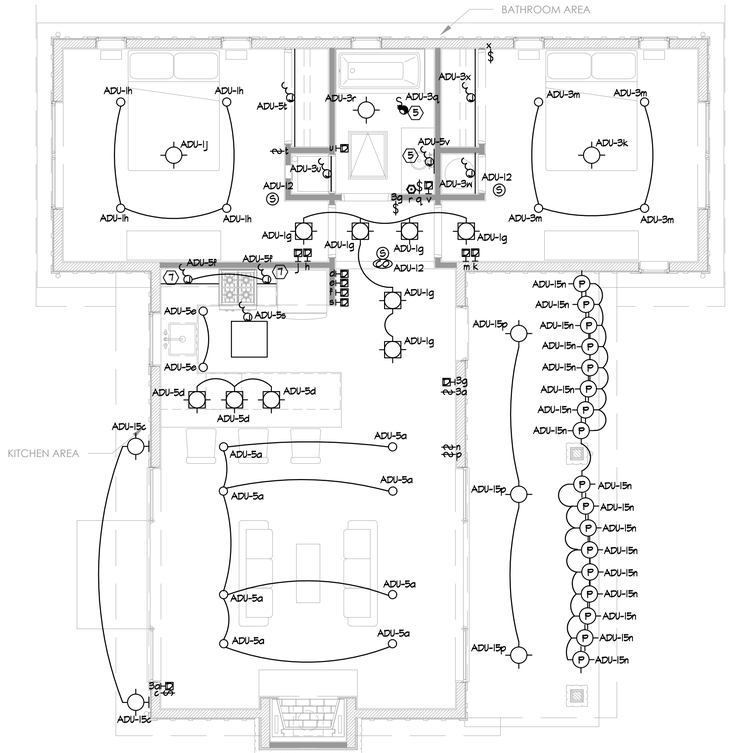
REGISTERED PROFESSIONAL ENGINEER
GANGYI ZHOU
No. 018959
Exp 12-31-2025
ELECTRICAL
STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel: 949-267-9095

PROJECT NAME:
12 ARROYO
SEQUOIA ROAD
CARMEL, CA 93923

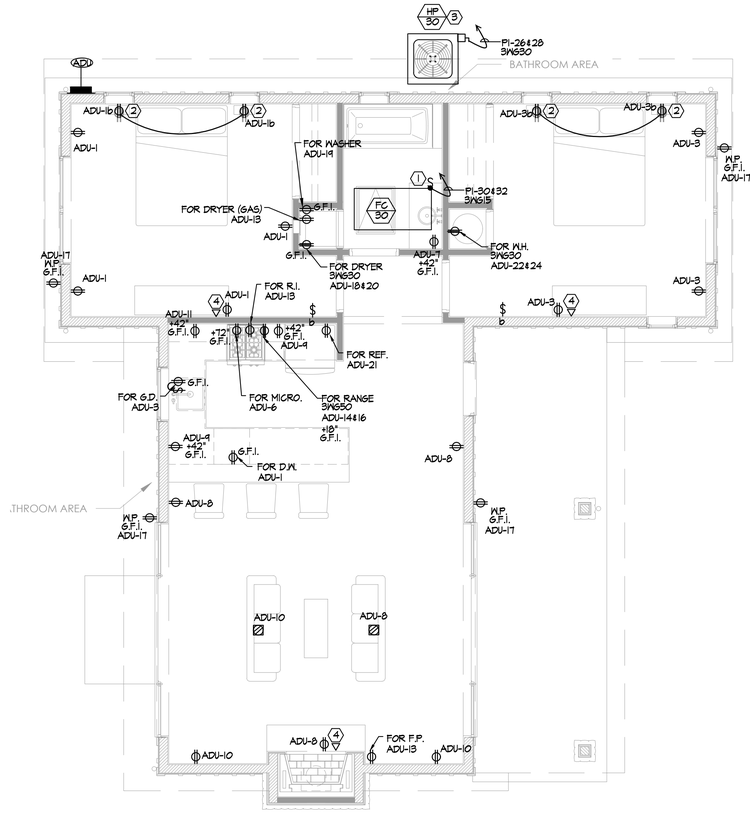
SHEET TITLE
ELECTRICAL
HOUSE POWER PLAN

DRAWN	GMEP
CHECKED	GMEP
DATE	12/06/24
SCALE	AS NOTED
JOB NO.	24-656
SHEET	E-2.1



ELECTRICAL - GUEST HOUSE LIGHTING PLAN

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



ELECTRICAL - GUEST HOUSE POWER PLAN

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

ELECTRICAL GENERAL NOTES

1. ALL FIXTURES TO BE HIGH EFFICACY PER TABLE 150.0-A. ALL OUTDOOR FIXTURES TO BE CONTROLLED BY TIME CLOCK/PHOTOCELL, MOTION SENSOR/PHOTOCELL OR ASTRONOMICAL TIME CLOCK. IN ADDITION TO MANUAL ON/OFF SWITCH. MANUAL ON/OFF SWITCH SHALL NOT OVERRIDE AUTOMATIC TIME CLOCK/PHOTOCELL, TIME CLOCK/MOTION SENSOR OR ASTRONOMICAL TIME CLOCK CONTROL.
2. ALL INDOOR LIGHT FIXTURES TO BE CONTROLLED BY DIMMER SWITCH. (EXCEPTIONS: HALLWAYS AND CLOSETS LESS THAN 70SF).
3. THIS DRAWING IS FOR REFERENCE ONLY. WIRE CKT 12 ON THE PLAN TO ALL DETECTORS FOR A COMPLETE AND OPERATIONAL SYSTEM. VERIFY W/LOCAL JURISDICTION FOR ALARM DETECTOR REQUIREMENT BEFORE ROUGH-IN.
4. IN DWELLING AREA SPECIFIED IN CEC 2022 SECTION 210.52, ALL 125-VOLT, 15- AND 20- AMPERE RECEPTACLES SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES.
5. OUTLETS INSTALLED IN FAMILY ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, KITCHENS, LAUNDRY ROOMS OR SIMILAR ROOMS OR AREAS WILL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER, COMBINATION-TYPE, INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT.
6. ALL NEW SMOKE ALARMS & CARBON MONOXIDE ALARM ARE 120V HARD-WIRED WITH BATTERY BACKUP AND ARE AUDIBLE IN ALL SLEEPING ROOMS.
7. ELECTRICAL CONTRACTOR MUST VERIFY MECHANICAL EQUIPMENT INFORMATION FOR MECHANICAL DRAWING BEFORE ISSUING ANY BID. NOTIFY ENGINEER IMMEDIATELY IF ANY DISCREPANCY OCCUR.
8. LIGHT FIXTURES ABOVE THE BATH TUB AND ON THE EXTERIOR OF THE BUILDING SHALL BE WET OR DAMP LOCATION RATED PER 410.10(A) AND (D) OF THE CEC.

ELECTRICAL KEY NOTES

1. PROVIDE 15A/1P MOTOR RATED SWITCH FOR CONNECTION TO THE FC. VERIFY EXACT LOCATION AND ADDITIONAL INFORMATION WITH MECHANICAL DRAWINGS.
2. DENOTES HALF-HOT RECEPTACLE ON SWITCH LEG 'b' IN THIS AREA.
3. PROVIDE 50A/2P(HP-48&HP60) 30A/2P(HP-30) FUSED DISCONNECT FOR CONNECTION TO THE HP. VERIFY EXACT LOCATION AND ADDITIONAL INFORMATION WITH MECHANICAL DRAWINGS.
4. PROVIDE OUTLET (1)RG6(1)CAT5. RUN CABLE TO THE CATV BOX AND RUN CAT5 CABLE TO THE APPROPRIATE DESTINATION. VERIFY WITH TV SERVICE PROVIDER AND IT CONSULTANT BEFORE ROUGH-IN.
5. PROVIDE 15A/1P MOTOR RATED SWITCH FOR CONNECT TO THE EXHAUST FAN. REFER TO MECHANICAL PLAN FOR DETAIL.
6. DENOTES APPROXIMATE LOCATION OF J-BOX FOR CONNECTION TO MIRROR AND SINK LIGHTING. VERIFY EXACT LOCATION WITH ARCHITECT BEFORE ROUGH-IN.
7. DENOTES APPROXIMATE LOCATION OF J-BOX FOR CONNECTION TO LINEAR UNDER CABINET LIGHTING. VERIFY EXACT LOCATION WITH ARCHITECT BEFORE ROUGH-IN.

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

REGISTERED PROFESSIONAL ENGINEER GANGYI ZHOU No. 018959 Exp.12-31-2025 ELECTRICAL STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel: 949-267-9095

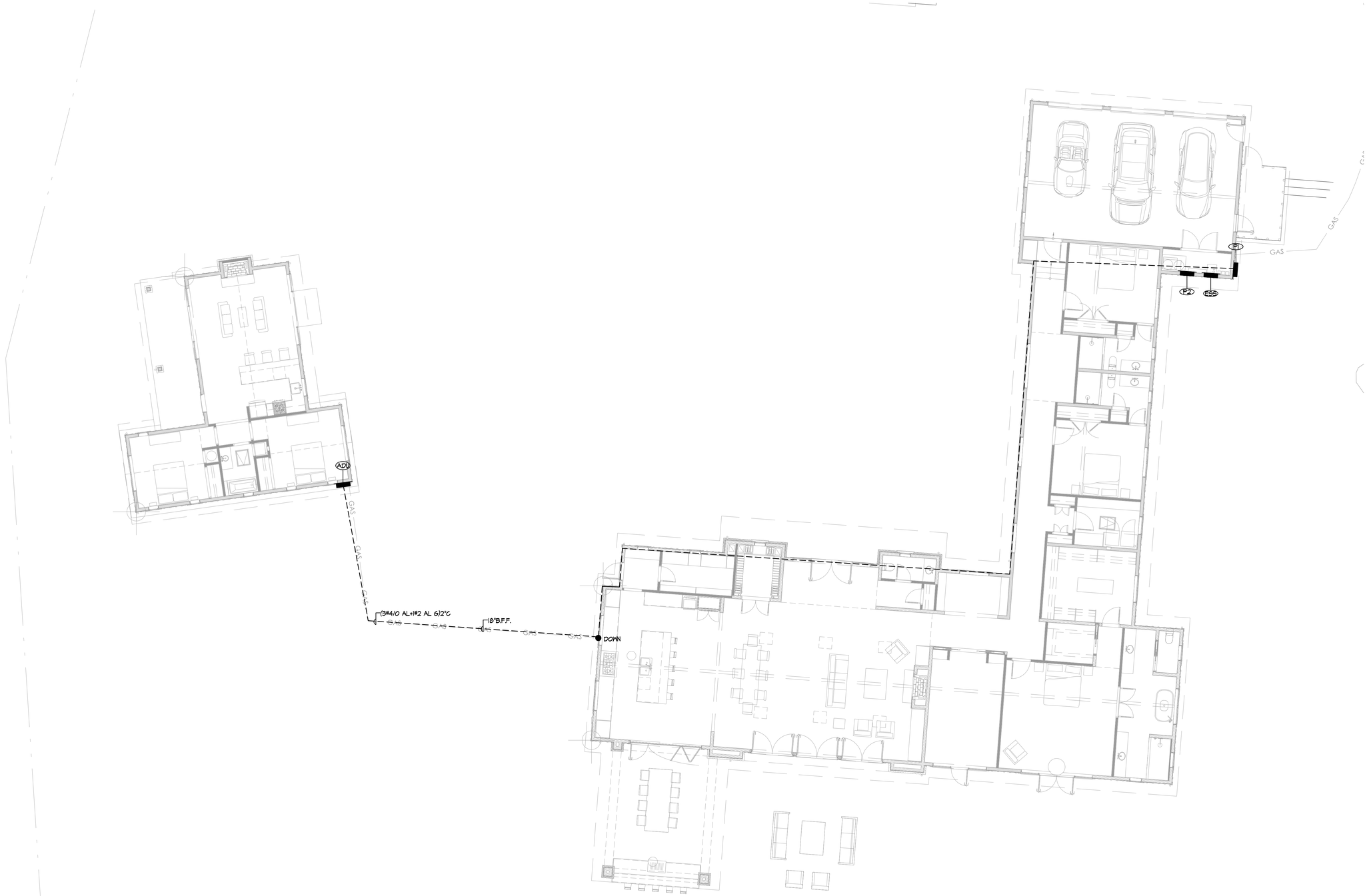
PROJECT NAME:

12 ARROYO
SEQUOIA ROAD
CARMEL, CA 93923

SHEET TITLE

ELECTRICAL
GUEST HOUSE PLANS

DRAWN	GMEP
CHECKED	GMEP
DATE	12/06/24
SCALE	AS NOTED
JOB NO.	24-656
SHEET	E-2.2



ELECTRICAL - SITE PLAN

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

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

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No. 018959
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PROJECT NAME:
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SHEET TITLE
ELECTRICAL
SITE PLAN

DRAWN
GMEP
CHECKED
GMEP
DATE
12/06/24
SCALE
AS NOTED
JOB NO.
24-656
SHEET
E-3.0



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ARROYO SEQUOIA

SANTA LUCIA PRESERVE
12 ARROYO SEQUOIA
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APN/ Lot Number
239-091-021/ LOT 96

Phase
DESIGN DEVELOPMENT

Revisions

No.	Date	Description

Issue
FINAL DESIGN REVIEW

Date
03 OCTOBER 2024

Drawn by
MT

Scale: 1"=20.0'

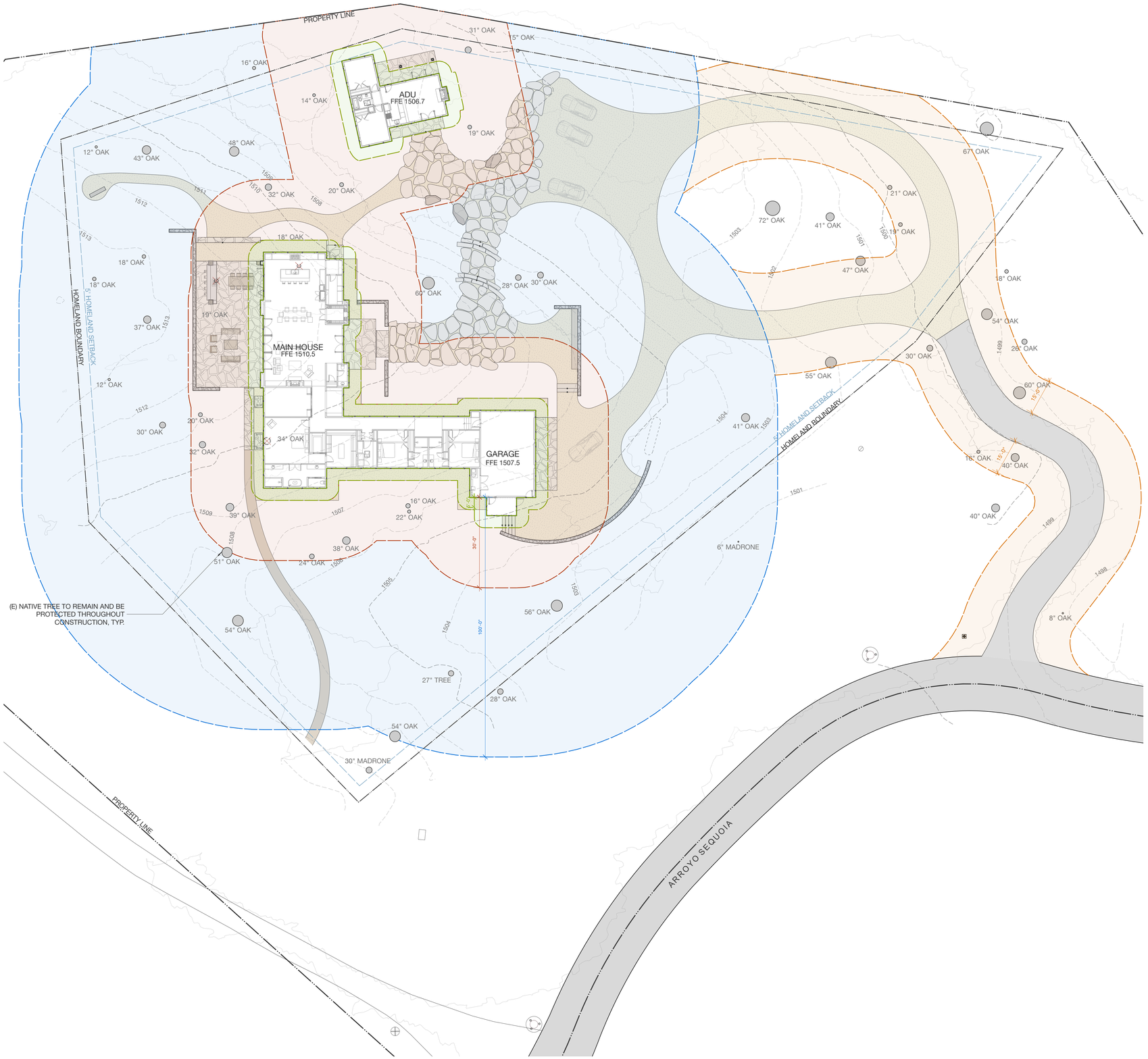
0' 10' 20'

North

Drawing Title

HOMELAND SURVEY

L0.1



FUEL MANAGEMENT NOTES:

In accordance with State guidelines for creating a defensible space around structures, a reduced fuel zone shall be created and managed for the proposed development shown in these drawings and as described and outlined in the lot specific Fuel Management Plan prepared by Benjamin Eichorn, (Fuel Management Specialist).

Management will include thinning and removal of existing combustible vegetation, live or dead. In addition, proposed plantings closest to the structures shall have some fire resistance, or be very low growing plants as to reduce the potential fire hazard.

Landscaping Zone – Entire landscaped area
Approved landscaping must be designed and maintained to minimize flammability. All landscaping occurs within the property boundary. Ornamental landscaping often results in large amounts of shrubby flammable vegetation being planted near structures. Many commonly used landscape plants, such as conifers, flammable woody shrubs, and tall ornamental grasses, shall be avoided because they may create a fire threat to a home that would otherwise be fire safe. All plant material that is removed from the landscaping must be composted or removed and disposed of properly. The horizontal and vertical spacing between landscaping plants and volume of landscaping biomass should be appropriate to reduce fire intensity and the rate of spread of fire.

Non-Combustible Zone: 0-5ft from structures
Hardscape surfaces (such as patios, gravel, and bare soil), and landscape materials (such as lawn and succulent herbaceous plants) are examples of non-combustible surfaces. Wood mulch is not considered non-combustible.

Green Zone: 0-30ft from structures
All flammable vegetation and any dead or dying plant shall be removed within 30 feeet surrounding any building on the property. Trees shall be well pruned and well spaced to avoid the spread of fire, including removal of all limbs 6 feet from the ground. All annual grasses shall be mowed in early summer to maintain a height of 4 inches during the summer.

Management Zone: 30-100 ft from structures
Mowing grass under and around trees reduces fire intensity and rate of spread of fire to an acceptable level, and diminishes the possibility fire can climb into tree canopy. Pruning the small lower tree branches, will reduce the possibility fire can spread into the tree crowns. Woody weed species such as French Broom, Poison Hemlock and Thistles must be completely removed annually. All grass growing under trees, out to 6 feet beyond the drip lines of trees, should be mowed in early summer to a height of four inches. Small diameter lower tree branches must be pruned, and removal of leaf litter depth should be kept to no greater than 4 inches.

PRESCRIPTIONS FOR TREE PRUNING:

a. All branches, living or dead, less than 3 inches diameter in width and less than either 8 feet from the ground or three times the height of any understory shrubs whichever is greater, shall be removed.
b. Living branches that are greater than 3 inches in diameter but lower than 8 feet in height can be retained, provided that the area within the drip-line of trees is maintained Oaks with live limbs resting on the ground need not be removed, but all ground debris around and beneath the limbs must be removed to reduce fire risk.
c. Dead limbs less than 8 feet in height shall be removed.
d. In landscaped areas, healthy tree branches less than 3 inches in diameter or 8 inches diameter if split or diseased, should be removed to provide vertical clearance of 3 times the height of the understory plants, or 8 feet above understory plants, whichever is greater.
e. For trees shorter than 24 inches in height, remove lower 1/3 of branches smaller than 3 inches in diameter, or alternatively, treat as a shrub grouping.
f. Once initial pruning is accomplished, tree pruning is likely to be needed infrequently, on an interval of about once every 3 to 5 years.
g. Do not thin or prune the tree canopy, as this will promote more understory shrub growth as well as lower parts of the tree, and will result in increased risk that fire will spread to the tree canopy.

LEGEND

- NON-COMBUSTIBLE ZONE: 0'-5' FROM STRUCTURES
- GREEN ZONE: 0'-30' FROM STRUCTURES
- MANAGEMENT ZONE: 30'-100' FROM STRUCTURES
- DRIVEWAY ZONE: 15' FROM DRIVEWAY

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ARROYO SEQUOIA

SANTA LUCIA PRESERVE
12 ARROYO SEQUOIA
CARMEL, CA 93923

APN/ Lot Number
239-091-021/ LOT 96

Phase
DESIGN DEVELOPMENT

Revisions

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Issue
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Date
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Drawn by
MT

Scale: 1"=20.0'

0' 10' 20'

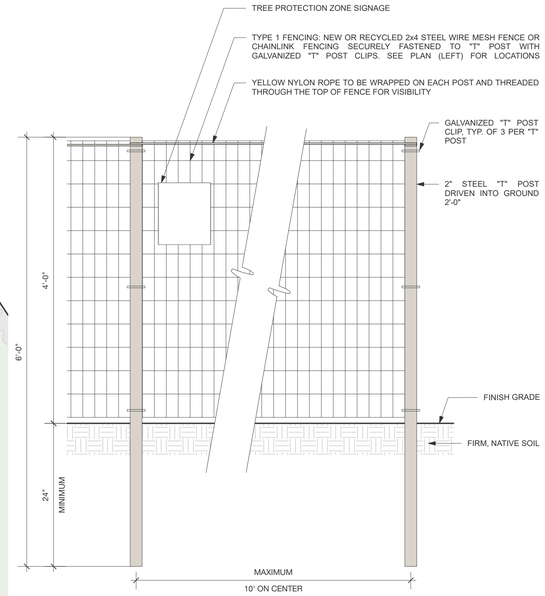
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Drawing Title

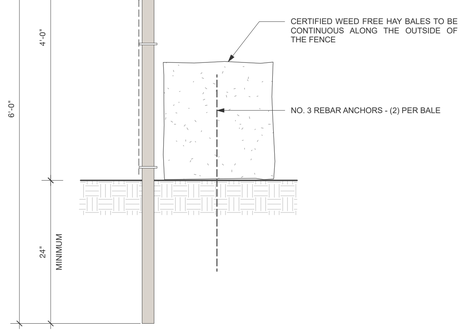
FUEL MANAGEMENT PLAN

L0.2





2 ELEVATION DETAIL: TREE PROTECTION FENCING
1" = 1'-0"



1 SECTION DETAIL: TREE PROTECTION FENCING
1" = 1'-0"

TREE REMOVAL + PROTECTION NOTES

1. Refer to the 12 Arroyo Sequoia Tree Impact Assessment Report, dated 02/14/24, as prepared by Rob Thompson, for all notes and information related to tree removal and protection.
2. All existing trees not shown for removal are to remain and be protected throughout construction.
3. Avoid pruning practices during the bird nesting season (February - August), refer to the Tree Impact Assesment Report.

Total trees to be removed: 3

TREE MITIGATION NOTES

1. Refer to the 12 Arroyo Sequoia Tree Impact Assessment Report dated 02/14/24, as prepared by Rob Thompson, for all notes and information related to tree mitigation.

Mitigation trees required: 11

TREE REMOVAL + PROTECTION LEGEND

- Tree to remain / be protected
- Tree to be removed
- Tree Protection Fencing
- Minimal Critical Root Zone

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MT

Scale: 1"=20.0'
0' 10' 20'

North

Drawing Title
TREE REMOVAL + PROTECTION PLAN

L0.3



LEGEND

1	CHIPSEAL PAVEMENT	8	WOODEN BENCH
2	GRAVEL PAVEMENT	9	GRAVEL SKIRT
3	STONE PAVEMENT W/ GRAVEL JOINT	10	MULCH PATH
4	STONE STEPS	11	ADDRESS MARKER
5	STONE WALL	12	UNDERGROUND PROPANE TANK
6	BOULDER	13	TRASH ENCLOSURE, S.A.D
7	STONE PAVEMENT W/ TIGHT JOINT	14	COVERED OUTDOOR DINING + BBQ, S.A.D

SITE WALL SCHEDULE

WALL	LENGTH	MAX HEIGHT
A	48'-4"	4'-0"
B	23'-8"	2'-6"
C	15'	2'-6"
D	86'-6"	2'-0"
E	79'	3'-10"

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MT

Scale: 1/16"=1'0"
0' 8' 16'

North

Drawing Title
HOMELAND SITE PLAN

L1.0

LANDSCAPE MATERIALS + FINISHES

NOTES

1 ALL ITEMS BELOW CORRESPOND TO NUMBERED ITEMS ON L1.0 PRELIMINARY HOMELAND SITE PLAN
2 FOR PHOTO REFERENCES, REFER TO THIS SHEET

DESIGNER/CONTRACTOR LEGEND

LA	Bliss Landscape Architecture		
ARCH	Tom Meany	GC	General Contractor
CE	CM Pros	LC	Landscape Contractor
SE	Structural Engineer		

	LANDSCAPE ITEM	SPECIFICATION	DESIGNER RESPONSIBLE	CONTRACTOR RESPONSIBLE
1	CHIPSEAL PAVEMENT	Apply first layer of hot liquid asphalt before the layer is setting firm, roll in one course of gravel. Apply second layer of hot liquid asphalt before the layer is setting firm, roll in one course of gravel. The second layer of gravel shall achieve an even depth of 3/4' thick. 3/8" washed "Sierra Tan" top dressing Base: compacted aggregate base per geotech report.	LA	LC
2	GRAVEL PAVEMENT	3/8" washed 'Sierra Tan' Gravel top dressing to 3/4" thick on 2" deep 50% 3/8" crushed rock + 50% granite fines mixed together Install 1/4" x 5" cold-rolled, unfinished steel edging where all gravel edges meet planted areas. Steel edge shall be set flush with gravel, corners to be cut and welded on site.	LA	LC
3	STONE PAVEMENT W/ GRAVEL JOINT	Dimensioned 1 1/2" - 2" thk irregular flagstone, sand setting bed, and compacted aggregate base. Stone shall be 'Multi-Blend' as supplied by SBI or approved equivalent. Stone shall have natural cleft finish, natural split edges, hand tight/ butt joints. Sweep with sand.	LA	LC
4	STONE PAVEMENT W/ TIGHT JOINT	Dimensioned 1 1/2" - 2" thk irregular flagstone, set on 2" mortar setting bed, reinforced concrete base per Geo-tech. Stone type: 'Multi-blend' stone shall have natural cleft finish, natural split edges, hand tight/ butt joints.	LA	LC
5	STONE STEPS	Monolithic natural stone steps set on 2" mortar setting bed, reinforced concrete base as per Geo-tech. Stone Type: 'Multi-Blend' Stone shall have natural cleft finish, natural split edges, hand tight/ butt joints.	LA	LC
6	STONE WALL	Stone Veneer: 1.5" stone with non shrink masonry mortar, stone type 'Picasso Cream - Chopped'. Provide adjustable non corrosive veneer ties as required. Review color of joint mortar with LA prior to installation. Rake mortar back from face of wall as determined with the approved mockup. Veneer face sizes shall be a mix of 4-6-8" rectilinear stone	LA	LC
7	BOULDER	Natural stone boulder, as supplied by Vineyard Rock Products or similar (.5 to 3 tons each). LA to select boulders at quarry and oversee placement on site.	LA	LC
8	BENCH	Timber slat bench, 2x6 'Thermory' Ash with powder coated steel supports, PIP reinforced concrete base.	LA	LC
9	GRAVEL SKIRT	3/8" washed 'Sierra Tan' gravel top dressing to 2" depth, evenly spread. Base: Compacted aggregate base per geotech to 3" depth with filter fabric. Install 1/4" x 5" cold-rolled, unfinished steel edging where all gravel edges meet planted areas. Steel edge shall be set flush with gravel, corners to be cut and welded on site.	LA	LC


1


1 2

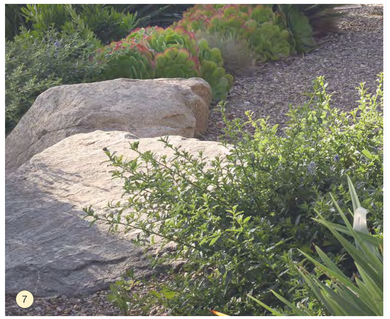

2


3


4


5


6


7


8


9

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MT

Scale: N/A

Drawing Title
MATERIALS + FINISHES

L1.1



PLANTING LEGEND

Symbol	Quantity	Botanical Name	Common Name	Container Size	Notes
TREES					
	1	Quercus agrifolia	Coast Live Oak	60" box	Mitigation Trees
	5	Quercus agrifolia		15 gal	Natural Form
	5	Quercus agrifolia		5 gal	

Symbol	Quantity	Botanical Name	Common Name	Container Size	Spacing
SHRUBS + GROUNDCOVERS					
	44	Achillea 'Sonoma Coast'	Sonoma Coast Yarrow	1 gal	1'6" o.c.
	9	Arctostaphylos 'Austin Griffiths'	Austin Griffiths Manzanita	15 gal	8'9" o.c.
	33	Artemisia douglasiana	Mugwort	1 gal	3'6" o.c.
	7	Ceanothus thyrsiflorus	Blueblossom	15 gal	6'0" o.c.
	18	Festuca californica	California fescue	1 gal	6'0" o.c.
	72	Juncus patens	California Grey Rush	1 gal	2'6" o.c.
	10	Muhlenbergia rigens	Deergrass	5 gal	4'6" o.c.
	52	Polystichum munitum	Western Sword Fern	1 gal	2'0" o.c.
	32	Salvia uliginosa	Bog Sage	1 gal	2'0" o.c.
	13	Woodwardia fimbriata	Giant Chain Fern	5 gal	3'2" o.c.

Symbol	Quantity	Botanical Name	Common Name	Container Size	Spacing
SHRUBS + GROUNDCOVERS					
	1330 SF	Carex praegracilis	Clustered Field Sedge	liners	6" o.c.
	3610 SF	Festuca californica	California Fescue	4" pots	24" o.c
	726 SF	Fragaria vesca	Wild Strawberry	4" pots	18" o.c.
	461 SF	Heuchera maxima	Island Alum Root	1 gal	18" o.c
	879 SF	Salvia spathacea	Hummingbird Sage	1 gal	24" o.c.

Symbol	Quantity	Coverage	Botanical Name	Common Name	Container Size	Spacing
NATIVE GRASSLAND RESTORATION						
	5589 SF	5%	Achillea millefolium	Common Yarrow	seed	6 lb/acre
		20%	Danthonia californica	California Oat Grass	seed	5 lb/acre
		15%	Festuca californica	California Fescue	seed	5 lb/acre
		30%	Festuca idahoensis	Idaho Fescue	seed	5 lb/acre
		25%	Koeleria macrantha	June Grass	seed	5 lb/acre
		5%	Lupinus nanus	Sky Lupin	seed	5 lb/acre

LANDSCAPE CERTIFICATION

Bliss Landscape Architecture certifies that this landscaping and irrigation plan complies with all Monterey County landscaping requirements including use of native, drought-tolerant, non-invasive, limited turf, and low-flow, water conserving irrigation fixtures.

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MT

Scale: 1"=20.0'

0' 10' 20'

North

Drawing Title

REFERENCE PLANTING PLAN

L3.0



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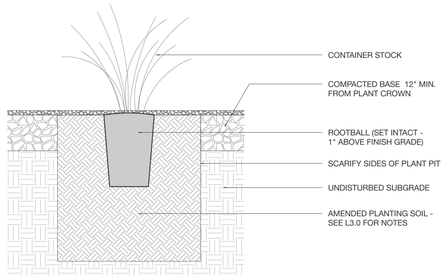
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North

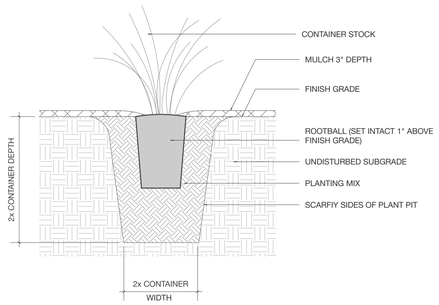
Drawing Title

PLANTING PLAN

L3.1



3 SECTION: CONTAINER STOCK PLANTING IN GRAVEL
1" = 1'-0"

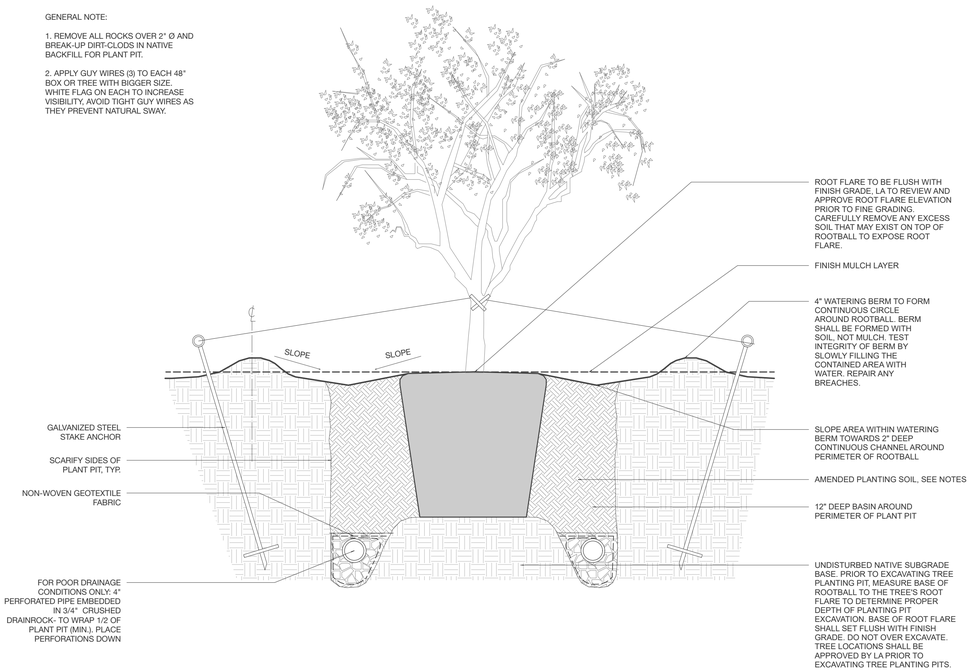


2 SECTION: CONTAINER STOCK PLANTING
1" = 1'-0"

GENERAL NOTE:

1. REMOVE ALL ROCKS OVER 2" Ø AND BREAK-UP DIRT-CLODS IN NATIVE BACKFILL FOR PLANT PIT.

2. APPLY GUY WIRES (3) TO EACH 48" BOX OR TREE WITH BIGGER SIZE. WHITE FLAG ON EACH TO INCREASE VISIBILITY. AVOID TIGHT GUY WIRES AS THEY PREVENT NATURAL SWAY.



1 ELEVATION: TREE PLANTING IN VEGETATION
1" = 1'-0"

PLANTING NOTES

1. All areas of the property shall be treated and managed to eliminate, as reasonably possible, any and all invasive plant materials. Review extent, methods, and scope of work with Landscape Architect prior to construction commencing.

2. Contractor shall be responsible for making themselves familiar with all underground utilities, pipes, and structures. Contractor shall take responsibility for any cost incurred due to damage of said utilities.

3. Contractor shall not willfully proceed with construction as designed when it is obvious that known or unknown obstructions and/or grade differences exist in planting areas. Such conditions shall be immediately brought to the attention of the Landscape Architect.

4. Contractor shall be responsible for all coordination with subcontractors as required to successfully accomplish all planting operations on budget and on schedule..

5. Contractor shall submit random soil samples from the site to a qualified soil testing lab for a horticultural suitability test and amendment recommendations. After amending topsoil to a depth of 8" (and in accordance with soil test recommendations), grade all areas smooth with no localized depressions or humps exceeding 1". Insufficient or unsuitable existing soil shall be augmented or replaced with topsoil as approved by the Landscape Architect.

6. All plant material shall be approved by Landscape Architect prior to installation.

7. Plant Quantity Discrepancies: Any discrepancies between the plant list and the plant quantities shown on the Drawings (including graphic symbols), the plant list quantities are to be used.

8. Contractor to complete all soil amendment, finish grading, and removal of any and all construction debris from the planting areas before laying out the approved plant material for Landscape Architect's review.

9. Contractor shall lay out all plants in their containers as per the drawings for Landscape Architect's on site review and approval prior to installation. Notify Landscape Architect 72 hours prior to requested review.

10. Contractor shall notify Construction Manager + Landscape Architect 72 hours prior to commencement of work to coordinate project inspection schedules.

11. Any plant substitutions or alternates must be approved by the Landscape Architect prior to plant purchase and delivery to the project or plant staging site.

12. All plants shall be healthy, pest and disease free, free of girdling roots, free of weeds, and well established in the container.

13. Mycorrhizal inoculate organic fertilizer shall be applied during planting as per manufacturer's recommendations. Use "Green Diamond Mykos Start Pro" (4-2-2 organic fertilizer) or approved equal.

14. Trees shall be located a minimum of 4 ft. from walls, overheads, walks, headers, and other trees within the project unless shown or directed by Landscape Architect otherwise.

15. No plant shall be planted in overly dry conditions or during extreme high or low temperatures (Above 95 F or below 35 F)

16. Water all plants by handheld hose with watering wand attachment immediately after planting (no water 'jetting'). No plant should be out of its container for more than twenty minutes before being planted and watered. Contractor shall be responsible for irrigating all new plantings, seeding, and lawns until the entire project has been fully completed and accepted by the Owner.

17. Contractor is responsible to apply sufficient but not excess irrigation to all new plantings to ensure healthy plant establishment.

18. Backfill mix shall consist of 1/3 imported organic compost and 2/3 amended site or topsoil.

19. Immediately after excavation of plant pits, test drainage of pits by filling with water. Give written notification of conditions permitting the retention of water in pits for more that (3) hours. Contractor shall submit to Owner and Landscape Architect, for approval, a written proposal and cost estimate for the correction of poor drainage conditions before proceeding with plant installation.

20. All newly planted container plants and trees shall receive watering basins (soil saucers) 3 times the size of the root ball upon planting, unless otherwise shown on Drawings.

21. Planting areas shall receive a 2" layer of partially decomposed, hardwood mulch, unless noted otherwise. Verify specification of mulch with Landscape Architect. Submit bagged samples as directed/ requested for Landscape Architect's approval.

22. Mulch shall be kept at a maximum depth of 2" deep near the plant crowns and trunks, and not extend higher than 1/8" onto the crown or trunk of any newly planted plant or tree.

23. All plant material shown on the Planting Plan is subject to the adverse effects of nature including, but not limited to, fire, earthquake, flooding, freeze, drought, erosion, and foraging predators. The Landscape Architect cannot, and does not, guarantee or imply warranty that specified plants will survive these acts of nature. All plants specified satisfy the general climatic conditions set forth by the U.S. Department of Agriculture and the Sunset Western Garden Book.

24. Plant and tree maintenance (new plants): Begin maintenance immediately after planting. Provide complete maintenance and service as required to promote and maintain healthy growth including, but not limited to, watering, fertilizing, weeding, mowing, trimming, rolling, fallen leaf removal, treating for insects and disease, resetting plants to proper grade and upright position, and other operations and maintenance work. Throughout the maintenance period, restore planting saucers and mulch, and keep mulch beds weed free. Tighten and adjust guy wires, stakes, and deadman to keep trees in vertical position. Restore and replace damaged trunk wrappings. Maintenance period shall be a minimum of 90 days from date of final acceptance.

25. Warranty: Provide written warranty agreeing to remove and replace work that exhibits defects in materials or workmanship for the specified periods. "Defects" is defined to include, but is not limited to, death, unsatisfactory growth, disease, insect infestation, abnormal foliage density, abnormal size, abnormal color, failure to thrive, and other unsatisfactory characteristics. Warranty on all plants shall be one year from date of the last day of the required maintenance period, unless approved by the Landscape Architect or the client otherwise.

NATIVE MEADOW RESTORATION NOTE

1. Areas of hydroseed restoration, as shown, are preliminary. All disturbed areas areas, not otherwise planted, shall be restored with native grasses. Contractor shall confirm limits of hydroseed areas on site with landscape architect.

2. Soil shall be cleared of debris, scarified to depth of 6" and tamped or graded smooth prior to applying hydroseed . Contractor shall confirm soil moisture level with landscape architect prior to applying hydroseed

NATIVE RESTORATION PLANTING AREA SOIL PREP

1. Contractor shall complete all grading activities and receive approval from Landscape Architect on finished grades prior to Native Restoration seed or plugs shall be planted.

2. Soil preparation for Native Restoration Seed of Plug planting shall include decompacting to a depth of 12" and incorporating 3 yards of organic compost (Cranford or equivalent) per 1,000 sq ft.

3. A 2" layer of organic compost (Cranford or equivalent) shall be applied as a capping layer prior to seed application or after plugs have been installed.

4. Microbial inoculations (Cranford granulated compost or equivalent) shall be applied once prior to planting and for three additional applications, once every 90 days after installation of plant material.

GRASSLAND RESTORATION NOTES

1. All disturbed and impacted construction areas, not otherwise landscaped, shall be restored with native grassland species, as described in the Plant Legend.

2. Exotic plant species shall be removed from grassland restoration areas seasonally and during construction.

3. The primary application method for grassland plantings shall include both plug plantings and hydroseeding, including integrally blended organic mulch using a plant-based tackifier to secure seed in place, ensure fast germination and prevent erosion.

4. Existing topsoil within the impacted construction area shall be stockpiled and stored separately from deeper excavated sub-soils. The native topsoil shall be dispersed as a final topping lift throughout the areas of grassland restoration prior to planting and seeding.

5. Long term habitat management strategies shall be incorporated to ensure the successful establishment of native grasses, and to control the re-emergence of exotic, invasive species.

6. See Civil Drawings for sediment barrier erosion control materials to be installed along the downslope perimeter of all disturbed soil areas.

TREE MITIGATION NOTES

1. A total of 3 trees over 6" caliber are proposed for removal due to construction activities for this project, and which require a permit per Monterey County Housing and Community Development Department - Planning Services. The proposed removals result in a total of 11, 5-15 gal mitigation trees, (11) Coast Live Oaks, per the Santua Lucia Guidelines and the County of Monterey. Please refer to Thompson Wildland Management's Pre-Construction Tree Assessment Report, dated 14 February 2024, for specific information on the arborists recommendations.

2. All mitigation trees are to be laid out in the field with the project Arborist, Santa Lucia Conservancy, and Landscape Architect after the Fuel Management Practices/ Fuel Reduction has occurred. Also refer to Thompson Wildland Management's Pre-Construction Tree Assessment Report, 14 February 2024 for more information.

3. All tree mitigation guidelines set forth by the Santa Lucia Preserve, the Santa Lucia Conservancy, and the Project Arborist are to be adhered to including the development of a mitigation/ monitoring plan to ensure mitigation tree survival for 5 years.

4. Mitigation monitoring reports are to be submitted to the Santa Lucia Conservancy and Monterey County as required.

NURSERY LIST

The following is a list of approved nurseries to source plants from. Any nursery to be used by the contractor for plant sourcing not listed here must be approved by the Landscape Architect.

1. Trees:
Jiminez Nursery (805) 684-7955
Western Tree Nursery (408) 842 4892
Pacific Nursery (650) 755-2330
Boething Treeland Farms (818) 316-2000
Devil Mountain Nursery (925) 829-6006
Frantz Wholesale Nursery (209) 874-4769
Sweet Lane Wholesale Nursery (707) 792-5008
Urban Tree Farm (707) 544-4446

2. Shrubs, Groundcovers and Grasses:
Native Sons Nursery (805) 481-8551
Berkeley Horticultural (510) 526-4704
Sloat Gardens (415) 454-0262
California Flora Nursery (707) 526-4704
Digging Dog Nursery (707) 528-8813
Soquel Nursery (831) 475-3533
Monterey Bay Nursery (831) 724-6361
Native Revival Nursery (831)688-1611
Rana Creek Nursery (831) 659-2830
Devil Mountain Nursery (925) 829-6006
El Paraiso Nursery (831) 840-0885
Blue Moon Nursery (831) 224-7472
Griggs Nursery (831) 626-0680
Flora Grub Gardens (415) 626-7256
Lakeside Nursery (831) 632-2100
Los Arroyos Nursery (831) 348-0124

LANDSCAPE CERTIFICATION

Bliss Landscape Architecture certifies that this landscaping and irrigation plan complies with all Monterey County landscaping requirements including use of native, drought-tolerant, non-invasive, limited turf, and low-flow, water conserving irrigation fixtures.

BLISS
LANDSCAPE ARCHITECTURE

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ARROYO SEQUOIA

SANTA LUCIA PRESERVE
12 ARROYO SEQUOIA
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APN/ Lot Number
239-091-021/ LOT 96

Phase
DESIGN DEVELOPMENT

Revisions

No.	Date	Description

Issue
FINAL DESIGN REVIEW

Date
03 OCTOBER 2024

Drawn by
MT

Scale: 1" = 1'0"

0' 1/2" 1'

Drawing Title
PLANTING NOTES + DETAILS

L3.2

PROJECT IRRIGATION NOTES:

1. LANDSCAPE CONTRACTOR WILL FOLLOW INDUSTRY STANDARDS FOR THE INSTALLATION OF THE IRRIGATION SYSTEM. ANY PROPOSED CHANGES TO THE IRRIGATION SYSTEM WILL BE SUBMITTED TO THE LANDSCAPE ARCHITECT FOR REVIEW PRIOR TO THE CHANGES BEING MADE. CONTRACTOR TO VERIFY IN FIELD THE CONDITIONS OF THE LANDSCAPE AREAS PRIOR TO INSTALLATION OF THE IRRIGATION SYSTEM .

2. MAINLINE PIPE SHALL BE NO LESS THAN CLASS 315 FOR PIPE SIZED 3" AND GREATER, AND SCHEDULE 40 FOR PIPE SIZED 2-1/2" AND SMALLER. MAINLINE PIPING SHALL BE INSTALLED AT A MINIMUM DEPTH TO ENSURE 18" OF COVER AND SHALL BE INSTALLED IN SUCH A MANNER AS TO NOT INTERFER WITH THE STORMWATER AND OTHER UTILITIES' SYSTEMS.

3. LATERAL PIPING SHALL BE CLASS 200 PIPE AND INSTALLED TO A MINIMUM DEPTH TO ENSURE 12" OF COVER.

4. THIS DESIGN IS DIAGRAMMATIC. ALL PIPING, VALVES, ETC. SHOWN WITHIN PAVED AREAS IS FOR DESIGN CLARIFICATION ONLY AND SHALL BE INSTALLED IN PLANTING AREAS WHERE POSSIBLE. AVOID ANY CONFLICTS BETWEEN THE SPRINKLER SYSTEM, PLANTING, TREE ROOT ZONES AND ARCHITECTURAL FEATURES.

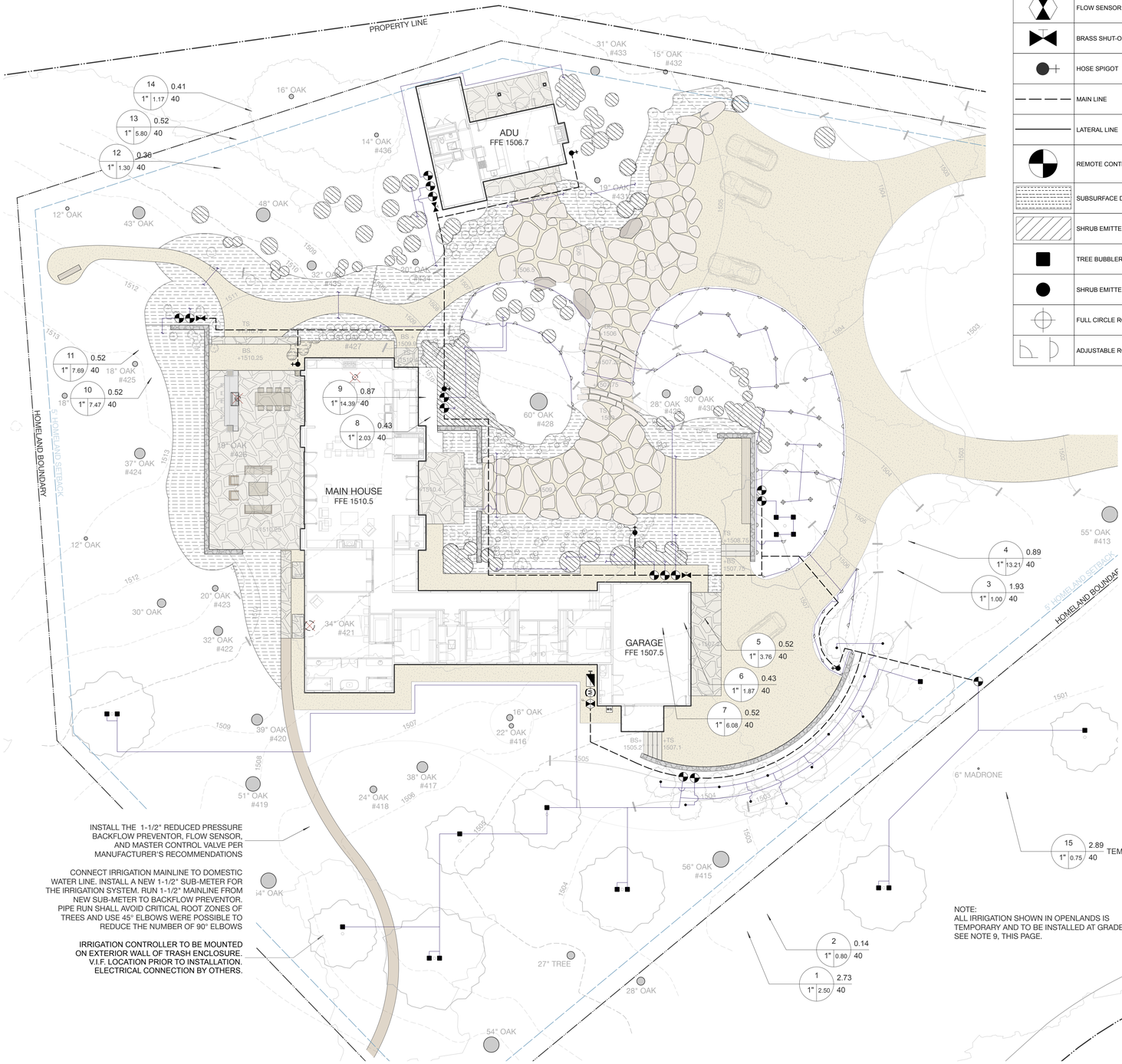
5. SYSTEM SHALL RECEIVE AN INTERIOR MOUNTED IRRIGATION CONTROLLER. CONTRACTOR TO VERIFY IN FIELD LOCATION PRIOR TO INSTALLATION. ELECTRICAL CONNECTION BY OTHERS.

6. LANDSCAPE IRRIGATION SYSTEMS SHALL BE INSTALLED TO PREVENT OVER-SPRAY ON STRUCTURES.

7. IRRIGATION DEMAND: 20 GPM AT 80 PSI. FIELD VERIFY EXACT PRESSURE PRIOR TO START OF WORK. IF PRESSURE VARIES FROM REQUIRED PRESSURE, NOTIFY LANDSCAPE ARCHITECT FOR FURTHER INSTRUCTION.

8. ALL SPRAY VALVES AND POP-UP SPRINKLER OUTLETS SHOWN ARE FOR THE ESTABLISHMENT PERIOD OF THE MEADOW RESTORATION AND SHALL BE REMOVED POST ESTABLISHMENT.

9. ANY VALVES, PIPING, AND SPRINKLER OUTLETS SHOWN OUTSIDE OF THE HOMELAND BOUNDARY ARE TO BE USED TEMPORARILY FOR THE ESTABLISHMENT PERIOD AND SHALL BE REMOVED POST ESTABLISHMENT, TO BE V.I.F. BY LANDSCAPE ARCHITECT.



IRRIGATION LEGEND

SYMBOL	DESCRIPTION	MANUFACTURER	PRODUCT	MODEL NUMBER	NOTES
M	POINT OF CONNECTION	ASSURED AUTOMATION	1-1/2" SUB-METER	WM150	PER MANUFACTURER'S RECOMMENDATIONS
C	CONTROLLER	HUNTER	8-STATION BASE HYDRAWISE COMPATIBLE CONTROLLER	HCC-800-M	ADD ICM-400 & ICM-800 MODULES AS NEEDED
WS	WEATHER SENSOR	HUNTER	SOLAR-SYNC ETO-RAIN-FREEZE SENSOR	WSS-SEN	WIRELESS SENSOR, LOCATE NO MORE THAN 800' FROM CONTROLLER
	BACKFLOW PREVENTOR	FEBCO	1-1/2" BACKFLOW PREVENTOR W/ PRESSURE REGULATOR, IN ENCLOSURE	825Y	PER MANUFACTURER'S RECOMMENDATIONS
M	MASTER VALVE	HUNTER	1-1/2" REMOTE CONTROL VALVE WITH FILTER SCREEN, NORMALLY OPEN	ICV-151G-FS	PER MANUFACTURER'S RECOMMENDATIONS
F	FLOW SENSOR	HUNTER	1-1/2" FLOW-SYNC SENSOR	HC-150-FLOW	PER MANUFACTURER'S RECOMMENDATIONS
	BRASS SHUT-OFF VALVE	NIBCO	LINE-SIZE BRASS GATE VALVE	TI-8	PER MANUFACTURER'S RECOMMENDATIONS
	HOSE SPIGOT	LASCO	3/4" INVERTED GARDEN VALVE	MODEL 06-1342	PER MANUFACTURER'S RECOMMENDATIONS
	MAIN LINE	-	PVC SCH 40 W/ SOLVENT WELD FITTINGS	-	SIZE: 1-1/2"
	LATERAL LINE	-	PVC CLASS 200 W/SOLVENT WELD FITTINGS	-	SIZE: 0 - 6 GPM = 3/4", 7 - 18 GPM = 1"
	REMOTE CONTROL VALVE	HUNTER	DRIP ZONE CONTROL KITS AND GLOBE VALVES	PCZ-101-LF-40 ICV-101G	USE DRIP ZONE KITS AT ALL SUBSURFACE DRIP, BUBBLERS, AND EMITTERS. ICV TO BE USED AT POP-UP SPRAYS
	SUBSURFACE DRIP ZONE	HUNTER	0.4 GPH DRIP LINE W/ CHECK VALVES	HDL-04-18-CV	12" ROW AND 12" EMITTER SPACING UNLESS OTHERWISE NOTED
	SHRUB EMITTERS ZONE	HUNTER	1/4" BARB, 2.0 GPH POINT SOURCE EMITTERS ON 1/2" DISTRIBUTION TUBING	HEB-20-CV	PLACE ONE (1) PER 1 & 2 GAL, TWO (2) PER 5 GAL, THREE (3) PER 15 GAL AND LARGER SHRUBS
	TREE BUBBLERS	HUNTER	18" ROOT ZONE WATERING SYSTEM	RZWS-18-25-CV	0.25 GPM BUBBLER
	SHRUB EMITTERS	HUNTER	1/2" FPT 2.0 GPH POINT SOURCE EMITTERS ON 1/2" FLEXIBLE PVC (IPS-050-250)	HEB-20-CV	PLACE TWO (2) PER 5 GAL, THREE (3) PER 15 GAL AND LARGER SHRUBS
	FULL CIRCLE ROTATOR	HUNTER	MP ROTATOR NOZZLE ON 12" POP-UP	MP1000-360 OR MP2000-360	PER MANUFACTURER'S RECOMMENDATIONS
	ADJUSTABLE ROTATOR	HUNTER	MP ROTATOR NOZZLE ON 12" PO-UP	MP1000-90 OR MP2000-90	V.I.F., USE MP-800 SERIES WHERE NECESSARY

1 — 1" 1.68 — 0.22 — 40
STATION NUMBER
PRECIPITATION RATE
PSI
GPM
VALVE SIZE

12 Arroyo Sequoia, Carmel, CA 93923

Regular Landscape Area	15,451	SF
Special Landscape Area	0	SF
Total Landscape Area	15,451	SF
Eto (CIMIS)	49.7	
Eppt (@ 25% Annual Rainfall)	5.275	

Maximum Applied Water Allowance

(Eto - Eppt)	X	Gal./SF	X	[(0.55 x LA)	+	(0.45 x SLA)]	MAWA	ACRE-FT.
44.43		0.62		8,498		0	**234,066**	**0.72**

Estimated Total Water Use (Post Establishment)

Plant Water Use	(ETo)(0.62)	X	(PF x HA) / IE	ETWU	ACRE-FT.
Low	30.8		3,867	119,164	
Med.	30.8		586	18,051	
High	30.8		0	0	
				ETWU	**137,215** **0.42**

Plant Type	Average PF	Planting SF	Gallons	% of Landscape
Low	0.2	14,502	119,164	93.9%
Med.	0.5	949	18,051	6.1%
High	0.85	0	0	0.0%
				100%

ETWU complies with MAWA

LANDSCAPE CERTIFICATION

Bliss Landscape Architecture certifies that this landscaping and irrigation plan complies with all Monterey County landscaping requirements including use of native, drought-tolerant, non-invasive, limited turf, and low-flow, water conserving irrigation fixtures.

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ARROYO SEQUOIA

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APN/ Lot Number
239-091-021/ LOT 96

Phase
DESIGN DEVELOPMENT

Revisions

No.	Date	Description

Issue
FINAL DESIGN REVIEW

Date
03 OCTOBER 2024

Drawn by
MT

Scale: 1/16" = 1'0" North
0' 8' 16'

Drawing Title
IRRIGATION PLAN

L4.0

GENERAL IRRIGATION NOTES

1. THE CONTRACTOR SHALL REVIEW RELATED DRAWINGS AND SHALL ENSURE COORDINATION WITH ALL APPLICABLE TRADES PRIOR TO SUBMITTING BID.

2. THE IRRIGATION SYSTEM SHALL BE INSTALLED IN CONFORMANCE WITH ALL APPLICABLE STATE AND LOCAL CODES AND ORDINANCES BY LICENSED CONTRACTORS AND EXPERIENCED WORKERS. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND FEES RELATING TO THEIR WORK.

3. THIS DESIGN IS DIAGRAMMATIC. ALL PIPING, VALVES, ETC. SHOWN WITHIN PAVED AREAS IS FOR DESIGN CLARIFICATION ONLY AND SHALL BE INSTALLED IN PLANTING AREAS WHERE POSSIBLE. AVOID ANY CONFLICTS BETWEEN THE SPRINKLER SYSTEM, PLANTING, TREE ROOT ZONES AND ARCHITECTURAL FEATURES.

4. PARALLEL PIPES MAY BE INSTALLED IN COMMON TRENCH. PIPES ARE NOT TO BE INSTALLED DIRECTLY ABOVE ONE ANOTHER. TRENCHES SHALL BE AMPLE SIZE TO PERMIT THE PIPES TO BE LAID AT THE ELEVATIONS INTENDED AND TO PERMIT SPACE FOR JOINING.

5. CONTRACTOR SHALL RESTORE SURFACES, EXISTING UNDERGROUND INSTALLATIONS, ETC., DAMAGED OR CUT AS A RESULT OF EXCAVATIONS, TO ORIGINAL CONDITIONS IN A MANNER APPROVED BY THE OWNER'S REPRESENTATIVE.

6. DO NOT WILLFULLY INSTALL THE SPRINKLER SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS, GRADE DIFFERENCES OR DIFFERENCES IN THE AREA DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. SUCH OBSTRUCTIONS OR DIFFERENCES SHOULD BE BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. IN THE EVENT THAT THIS NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY.

7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BECOME FAMILIAR WITH ALL GRADE DIFFERENCES, LOCATION OF WALLS, RETAINING WALLS, ETC. COORDINATE WORK WITH THE GENERAL CONTRACTOR AND OTHER SUBCONTRACTORS FOR THE LOCATION AND THE INSTALLATION OF PIPE SLEEVES THROUGH WALLS, UNDER ROADWAYS, PAVING, STRUCTURES, ETC. CONTRACTOR TO VERIFY THE LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES PRIOR TO THE EXCAVATION OF TRENCHES. CONTRACTOR IS TO REPAIR ANY DAMAGE CAUSED BY THEIR WORK AT NO ADDITIONAL COST TO THE OWNER.

8. DUE TO THE SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, SLEEVES, ETC., WHICH MAY BE REQUIRED. CAREFULLY INVESTIGATE THE STRUCTURAL AND FINISHED CONDITIONS AFFECTING ALL WORK AND PLAN WORK ACCORDINGLY, FURNISHING SUCH FITTINGS, ETC., AS MAY BE REQUIRED TO MEET SUCH CONDITIONS. DRAWINGS ARE GENERALLY DIAGRAMMATIC AND INDICATIVE OF THE WORK TO BE INSTALLED. THE WORK SHALL BE INSTALLED IN SUCH A MANNER AS TO AVOID CONFLICTS BETWEEN IRRIGATION SYSTEMS, PLANTING, AND ARCHITECTURAL FEATURES.

9. ELECTRICAL CONTRACTOR TO SUPPLY 120 VAC (2.5 AMP) SERVICE TO CONTROLLER LOCATION. IRRIGATION CONTRACTOR TO MAKE FINAL CONNECTION FROM ELECTRICAL STUB-OUT TO CONTROLLER. IRRIGATION CONTROL WIRE SHALL BE #14, U.L. APPROVED FOR DIRECT BURIAL. COMMON WIRE SHALL BE #12 U.L. APPROVED AND SHALL BE WHITE IN COLOR. WIRING TO INDIVIDUAL REMOTE CONTROL VALVES SHALL BE COLOR OTHER THAN WHITE.

10. EACH CONTROLLER SHALL HAVE ITS OWN INDEPENDENT GROUND WIRE.

11. REMOTE CONTROL VALVES SHALL BE WIRED TO CONTROLLER IN SEQUENCE AS SHOWN ON PLANS. RUN WIRE FROM EACH RCV TO THE CONTROLLER. SPLICING WIRES TOGETHER OUTSIDE OF VALVE BOXES WILL NOT BE PERMITTED. ATTACH A LABEL TO CONTROL WIRE AT THE CONTROLLER AND ATTACH AN ID TAG AT EACH REMOTE CONTROL VALVE INDICATING CONTROLLER AND STATION NUMBER.

12. SPLICING OF 24-VOLT WIRES WILL NOT BE PERMITTED EXCEPT IN VALVE BOXES. LEAVE A 36" COIL OF EXCESS WIRE AT EACH SPLICE AND 100 FEET ON CENTER ALONG WIRE RUN. TAPE WIRE IN BUNDLES 10 FEET ON CENTER. NO TAPING PERMITTED INSIDE SLEEVES.

13. WIRE CONNECTORS SHALL BE 3M-DBR/Y-6 DIRECT BURY UNLESS OTHERWISE NOTED.

14. INSTALL TWO (2) SPARE CONTROL WIRES ALONG THE ENTIRE MAIN LINE. SPARE WIRES SHALL BE THE SAME COLOR (ONE WITH A WHITE STRIPE) AND OF A DIFFERENT COLOR THAN OTHER CONTROL WIRES. LOOP 36" EXCESS WIRE INTO EACH SINGLE VALVE BOX AND INTO ONE VALVE BOX IN EACH GROUP OF VALVES.

15. VALVE LOCATIONS SHOWN ARE DIAGRAMMATIC. INSTALL IN GROUND COVER/SHRUB AREAS WHERE POSSIBLE.

16. INSTALL VALVE BOXES MINIMUM 12" FROM AND PERPENDICULAR TO WALK, CURB, BUILDING OR LANDSCAPE FEATURE. AT MULTIPLE VALVE BOX GROUPS, EACH BOX SHALL BE AN EQUAL DISTANCE FROM THE WALK, CURB, ETC. AND EACH BOX SHALL BE MINIMUM 12" APART. SHORT SIDE OF VALVE BOXES SHALL BE PARALLEL TO WALK, CURB, ETC.

17. THOROUGHLY FLUSH MAIN LINE BEFORE INSTALLING VALVES.

18. ALL MAIN LINES SHALL BE FLUSHED PRIOR TO THE INSTALLATION OF IRRIGATION HEADS, BUBBLERS AND DRIP TUBING. AT 30 DAYS AFTER INSTALLATION EACH SYSTEM SHALL BE FLUSHED TO ELIMINATE GLUE AND DIRT PARTICLES FROM THE LINES.

19. LOCATE BUBBLERS ON UPHILL SIDE OF TREES. TREE BUBBLERS ARE FOR ESTABLISHMENT AND DROUGHT CONDITIONS. THEY ARE TO BE TURNED OFF AFTER TREES ARE ESTABLISHED AND TURNED ON DURING DROUGHT CONDITIONS.

20. IN ADDITION TO THE SLEEVES AND CONDUITS SHOWN ON THE DRAWINGS, THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE INSTALLATION OF SLEEVES AND CONDUITS OF SUFFICIENT SIZE UNDER ALL PAVED AREAS.

21. ALL EXCAVATIONS ARE TO BE FILLED WITH COMPACTED BACKFILL. BACKFILL MATERIAL SHALL BE THE EARTH EXCAVATED FROM THE TRENCH AND FREE OF ROCKS AND OTHER FOREIGN COURSE MATERIAL. COMPACT BACKFULL TO A MINIMUM OF 90 PERCENT OF ORIGINAL SOIL DENSITY. REPAIR ALL SETTLED TRENCHES PROMPTLY, FOR A PERIOD OF 1 YEAR AFTER COMPLETION OF WORK.

22. CONTRACTOR SHALL WARRANT THAT THE IRRIGATION SYSTEM WILL BE FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF 1 YEAR AFTER FINAL ACCEPTANCE OF WORK.

23. ALL CONSTANT PRESSURE PIPES SHALL BE TESTED AT A MINIMUM OF 125 PSI FOR TWO HOURS. CENTER LOAD PIPING WITH A SMALL AMOUNT OF BACKFILL TO PREVENT ARCHING OR SLIPPING UNDER PRESSURE. NO FITTINGS SHALL BE COVERED. REPAIR FAULTY JOINTS WITH NEW MATERIALS. DO NOT USE CEMENT OR CAULKING TO REPAIR LEAKS.

24. WHERE IT IS NECESSARY TO EXCAVATE ADJACENT TO EXISTING TREES, USE ALL POSSIBLE CARE TO AVOID INJURY TO TREES, AND TREE ROOTS. EXCAVATION IN AREAS WHERE 2 INCH AND LARGER ROOTS OCCUR SHALL BE DONE BY HAND. ROOTS 2 INCHES AND LARGER IN DIAMETER SHALL BE WRAPPED IN A PLASTIC BAG AND SECURED WITH A RUBBER BAND. TRENCHES ADJACENT TO TREE SHOULD BE CLOSED WITHIN 24 HOURS; WHERE THIS IS NOT POSSIBLE, THE SIDE OF THE TRENCH ADJACENT TO THE TREE SHALL BE KEPT SHADED WITH BURLAP OR CANVAS.

25. THE SPRINKLER SYSTEM DESIGN IS BASED ON THE MINIMUM OPERATING PRESSURE SHOWN ON THE IRRIGATION DRAWINGS. VERIFY WATER PRESSURE PRIOR TO CONSTRUCTION. REPORT ANY DIFFERENCE BETWEEN THE WATER PRESSURE INDICATED ON THE DRAWINGS AND THE ACTUAL PRESSURE READING AT THE IRRIGATION POINT OF CONNECTION TO THE OWNER'S AUTHORIZED REPRESENTATIVE.

26. NOTIFY UNDERGROUND SERVICE ALERT AT 811 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION.

27. AT LEAST 10 DAYS PRIOR TO COMPLETION OF CONSTRUCTION, PROVIDE THE OWNER WITH A MAINTENANCE MANUAL. DATA SHALL BE ON 8 1/2" X 11" SHEETS, IN A 3-RING BINDER AND SHALL INCLUDE:
- INDEX SHEET WITH CONTRACTOR'S CONTACT INFORMATION AND LIST OF EQUIPMENT WITH LOCAL MANUFACTURER'S REPRESENTATIVES.
- CATALOG AND PARTS SHEET OF ALL MATERIAL AND EQUIPMENT.
- COMPLETE OPERATING AND MAINTENANCE INSTRUCTIONS FOR ALL EQUIPMENT.
- COMPLETE AND DATED MANUFACTURER'S WARRANTIES.

DRIPLINE NOTES

1. PLANS ARE DIAGRAMMATIC. INSTALL DRIPLINE AND COMPONENTS PER MANUFACTURERS INSTRUCTIONS AND INSTALLATION DETAILS.

2. INSTALL DRIPLINE A MAXIMUM OF 24" APART WITH EMITTERS TRIANGULARLY SPACED. INSTALL 2" FROM PERIMETER OF PLANTED AREA. THERE SHOULD BE A MINIMUM OF TWO DRIPLINE LATERALS IN EACH PLANTED AREA. DRIPLINE SHALL BE INSTALLED AT A CONSISTANT DEPTH THROUGHOUT THE CIRCUIT.

3. PLACE AIR/VACUUM RELIEF VALVES AT THE HIGHEST POINTS OF EACH ZONE AND JUST BELOW CHECK VALVES ON SLOPES. INSTALL ONE AIR/VACUUM RELIEF VALVE FOR EVERY 1125' OF TOTAL DRIPLINE PER ZONE.

4. PLACE FLUSH VALVES AT THE HYDRAULIC CENTER OF THE EXHAUST HEADER OR AT LOW POINT ON SLOPES.

5. INSTALL IN-LINE CHECK VALVES ON SLOPES GREATER THAN 3% AND WHERE LOW-LINE DRAINAGE COULD CAUSE WET AREAS IN THE LOWEST AREAS OF AN IRRIGATION ZONE. CHECK VALVES SHALL BE PLACED EVERY 4-5 FEET BETWEEN DRIPLINE LATERALS AND BEFORE THE FLUSH VALVE.

6. ON ALL SLOPES AND MOUNDS, PLACE THE DRIPLINE LATERALS PARALLEL TO THE SLOPE CONTOUR WHERE POSSIBLE. INCREASE THE LATERAL SPACING BY 25% ON THE LOWER ONE-THIRD OF THE SLOPE TO AVOID EXCESS DRAINAGE.

7. PVC SUPPLY AND FLUSH LINE SIZING GUIDE (ALL SUPPLY AND FLUSH LINES SHALL BE THE SAME SIZE FOR THE ENTIRE ZONE):
- 0-6 GPM – 3/4"
- 6.1-15 GPM – 1"

8. FITTINGS SHALL BE OF THE SAME MANUFACTURER AS DRIPLINE.

9. STAPLE DRIPLINE TO GROUND EVERY 2 FEET. USE ADDITIONAL STAPLES OVER EACH TEE, ELBOW OR CROSS. USE U-SHAPED STAPLES TO AVOID PINCHING THE DRIPLINE.

10. THOROUGHLY FLUSH EACH INSTALLATION SEGMENT TO ENSURE NO DEBRIS CONTAMINATION OCCURS.

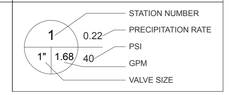
11. RUN THE DRIPLINE SYSTEM EVERY DAY OR EVERY OTHER DAY TO ESTABLISH PLANT MATERIAL. MAINTAIN A CONSISTENT MOISTURE BALANCE IN THE SOIL. IT IS IMPORTANT TO KEEP THE SOIL MOIST WITHOUT SATURATION.

12 Arroyo Sequoia, Santa Lucia Preserve Carmel, CA 93923

HYDROZONE TABLE COMPLETE FOR PERMANENT VALVES						
Valve Number	Irrigation Method	Plant type (High, Med, Low)	GPM	Precipitation Rate (in/hr)	Area (sq.ft.)	% of Landscape
N/A	N/A	Low	-	-	5542	35.9%
1	Bubblers	Low	2.50	2.73	88	0.6%
2	Emitters	Low	0.80	0.14	540	3.5%
3	Bubblers	Low	1.00	1.93	50	0.3%
4	MP Rotators	Low	13.21	0.89	1421	9.2%
5	Sub-surface Drip	Low	3.76	0.52	562	3.6%
6	Emitters	Low	1.87	0.43	422	2.7%
7	Sub-surface Drip	Med	6.08	0.52	949	6.1%
8	Emitters	Low	2.03	0.43	459	3.0%
9	MP Rotators	Low	14.39	0.87	1599	10.3%
10	Sub-surface Drip	Low	7.47	0.52	1144	7.4%
11	Sub-surface Drip	Low	7.69	0.52	1150	7.4%
12	Emitters	Low	1.30	0.36	345	2.2%
13	Sub-surface Drip	Low	5.80	0.52	882	5.7%
14	Emitters	Low	1.17	0.41	273	1.8%
TEMP.						
15	Bubblers	Low	0.75	2.89	25	0.2%
				TOTAL SF	**15451**	100%

IRRIGATION LEGEND

SYMBOL	DESCRIPTION	MANUFACTURER	PRODUCT	MODEL NUMBER	NOTES
M	POINT OF CONNECTION	ASSURED AUTOMATION	1-1/2" SUB-METER	WM150	PER MANUFACTURER'S RECOMMENDATIONS
C	CONTROLLER	HUNTER	8-STATION BASE HYDRAWISE COMPATIBLE CONTROLLER	HCC-800-M	ADD ICM-400 & ICM-800 MODULES AS NEEDED
WS	WEATHER SENSOR	HUNTER	SOLAR-SYNC ETO-RAIN-FREEZE SENSOR	WSS-SEN	WIRELESS SENSOR, LOCATE NO MORE THAN 800' FROM CONTROLLER
	BACKFLOW PREVENTOR	FEBCO	1-1/2" BACKFLOW PREVENTOR W/ PRESSURE REGULATOR, IN ENCLOSURE	825Y	PER MANUFACTURER'S RECOMMENDATIONS
M	MASTER VALVE	HUNTER	1-1/2" REMOTE CONTROL VALVE WITH FILTER SCREEN, NORMALLY OPEN	ICV-151G-FS	PER MANUFACTURER'S RECOMMENDATIONS
F	FLOW SENSOR	HUNTER	1-1/2" FLOW-SYNC SENSOR	HC-150-FLOW	PER MANUFACTURER'S RECOMMENDATIONS
	BRASS SHUT-OFF VALVE	NIBCO	LINE-SIZE BRASS GATE VALVE	TI-8	PER MANUFACTURER'S RECOMMENDATIONS
	HOSE SPIGOT	LASCO	3/4" INVERTED GARDEN VALVE	MODEL 06-1342	PER MANUFACTURER'S RECOMMENDATIONS
	MAIN LINE	-	PVC SCH 40 W/ SOLVENT WELD FITTINGS	-	SIZE: 1-1/2"
	LATERAL LINE	-	PVC CLASS 200 W/SOLVENT WELD FITTINGS	-	SIZE: 0 - 6 GPM = 3/4", 7 - 18 GPM = 1"
	REMOTE CONTROL VALVE	HUNTER	DRIP ZONE CONTROL KITS AND GLOBE VALVES	PCZ-101-LF-40 ICV-101G	USE DRIP ZONE KITS AT ALL SUBSURFACE DRIP, BUBBLERS, AND EMITTERS. ICV TO BE USED AT POP-UP SPRAYS
	SUBSURFACE DRIP ZONE	HUNTER	0.4 GPH DRIP LINE W/ CHECK VALVES	HDL-04-18-CV	12" ROW AND 12" EMITTER SPACING UNLESS OTHERWISE NOTED
	SHRUB EMITTERS ZONE	HUNTER	1/4" BARB, 2.0 GPH POINT SOURCE EMITTERS ON 1/2" DISTRIBUTION TUBING	HEB-20-CV	PLACE ONE (1) PER 1 & 2 GAL, TWO (2) PER 5 GAL, THREE (3) PER 15 GAL AND LARGER SHRUBS
	TREE BUBBLERS	HUNTER	18" ROOT ZONE WATERING SYSTEM	RZWS-18-25-CV	0.25 GPM BUBBLER
	SHRUB EMITTERS	HUNTER	1/2" FPT 2.0 GPH POINT SOURCE EMITTERS ON 1/2" FLEXIBLE PVC (IPS-050-250)	HEB-20-CV	PLACE TWO (2) PER 5 GAL, THREE (3) PER 15 GAL AND LARGER SHRUBS
	FULL CIRCLE ROTATOR	HUNTER	MP ROTATOR NOZZLE ON 12" POP-UP	MP1000-360 OR MP2000-360	PER MANUFACTURER'S RECOMMENDATIONS
	ADJUSTABLE ROTATOR	HUNTER	MP ROTATOR NOZZLE ON 12" PO-UP	MP1000-90 OR MP2000-90	V.I.F., USE MP-800 SERIES WHERE NECESSARY



12 Arroyo Sequoia, Carmel, CA 93923

Regular Landscape Area	15,451	SF
Special Landscape Area	0	SF
Total Landscape Area	15,451	SF
Eto (CIMIS)	49.7	
Eppt (@ 25% Annual Rainfall)	5.275	

Maximum Applied Water Allowance

(Eto - Eppt)	X	Gal./SF	X	[(0.55 x LA)	+	(0.45 x SLA)]	MAWA	ACRE-FT.
44.43		0.62		8,498		0	**234,066**	**0.72**

Estimated Total Water Use (Post Establishment)

Plant Water Use	(ETo)(0.62)	X	(PF x HA) / IE	ETWU	ACRE-FT.
Low	30.8		3,867	119,164	
Med.	30.8		586	18,051	
High	30.8		0	0	
				ETWU	**137,215**	**0.42**

Plant Type	Average PF	Planting SF	Gallons	% of Landscape
Low	0.2	14,502	119,164	93.9%
Med.	0.5	949	18,051	6.1%
High	0.85	0	0	0.0%
				100%

ETWU complies with MAWA

LANDSCAPE CERTIFICATION

Bliss Landscape Architecture certifies that this landscaping and irrigation plan complies with all Monterey County landscaping requirements including use of native, drought-tolerant, non-invasive, limited turf, and low-flow, water conserving irrigation fixtures.

BLISS
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ARCHITECTURE

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Carmel CA 93923
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blisslandarch.com

ARROYO SEQUOIA

SANTA LUCIA PRESERVE
12 ARROYO SEQUOIA
CARMEL, CA 93923

APN/ Lot Number
239-091-021/ LOT 96

Phase
DESIGN DEVELOPMENT

Revisions
No. Date Description

Issue
FINAL DESIGN REVIEW

Date
03 OCTOBER 2024

Drawn by
RT

Scale: N/A

Drawing Title
IRRIGATION NOTES + LEGEND

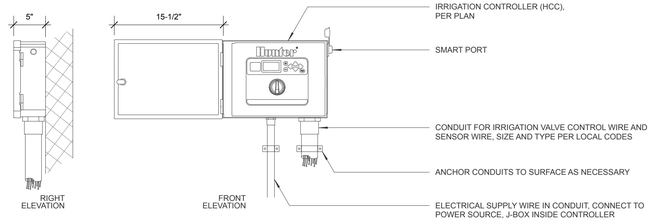
L4.1

CONTROLLER AND SENSOR NOTES:

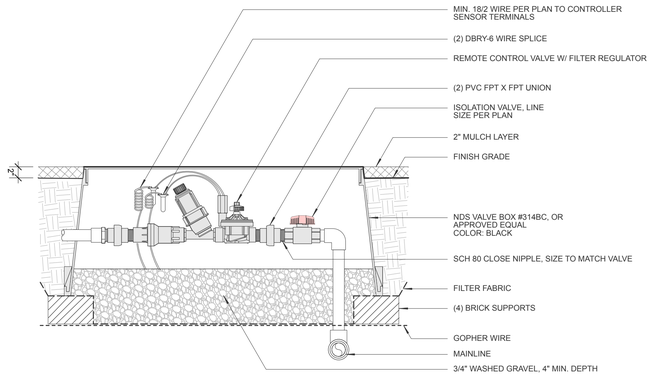
1. MOUNT CONTROLLER LCD SCREEN AT EYE LEVEL. CONTROLLER SHALL BE HARD-WIRED TO GROUNDED 110 VAC POWER SOURCE. PRIOR TO INSTALLATION, CONFIRM LOCATION OF CONTROLLER WITH OWNER

2. ALL SENSORS SHALL BE INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS

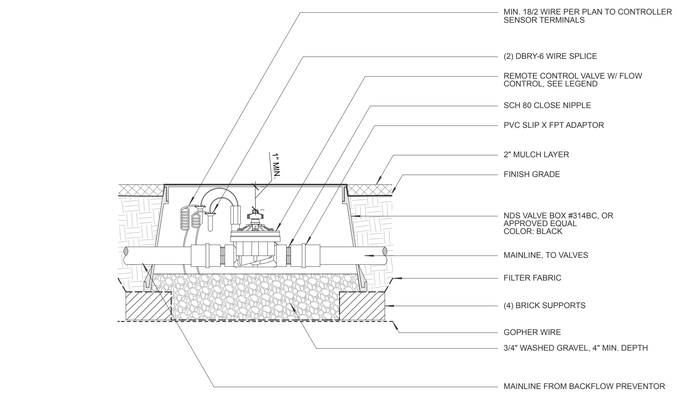
3. ALL ELECTRICAL WORK TO CONFORM WITH LOCAL CODES



9 CONTROLLER W/ FLOW & SOLAR SENSOR - EXTERIOR
N.T.S.



6 DRIP CONTROL ZONE KIT W/ UNIONS AND SHUT-OFF
N.T.S.



3 MASTER VALVE: IN-LINE
N.T.S.

8 MAINLINE AND LATERAL PIPE TRENCHING AND COVER
N.T.S.

5 GATE VALVE IN 10" ROUND BOX
N.T.S.

NOTES:

1. DISTANCE 'A' TO BE 10 X DIA. OF STRAIGHT PIPE FREE OF FITTINGS OR ELBOWS (EXAMPLE: 1-1/2" PIPE DIA X 10 = 15")

2. DISTANCE 'B' TO BE 5 X DIA. OF STRAIGHT PIPE FREE OF FITTINGS OR ELBOWS (EXAMPLE: 1-1/2" PIPE DIA X 5 = 7-1/2")

2 FLOW SENSOR
N.T.S.

7 REMOTE CONTROL VALVE W/ UNIONS AND SHUT-OFF
N.T.S.

4 BRASS HOSE BIB MOUNTED ON POST
N.T.S.

BACKFLOW PREVENTOR NOTES:

1. CONTRACTOR TO VERIFY PRESSURE AT THE POINT OF CONNECTION PRIOR TO INSTALLATION OF THE BACKFLOW PREVENTER AND PRESSURE REGULATOR

2. GALV. FITTINGS AND PIPE THAT ARE IN CONTACT WITH CONC. OR SOIL SHALL BE WRAPPED IN 3M™ SCOTCHRAP™ ALL-WEATHER CORROSION PROTECTION TAPE (1/2" OVERLAP MIN.)

3. DIELECTRIC FITTINGS SHALL BE USED WHERE DISSIMILAR METALS COME INTO CONTACT.

4.. CONTRACTOR SHALL INSTALL ALL BACKFLOW, PREVENTOR, ENCLOSURE, AND ALL COMPONENTS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS.

1 BACK FLOW PREVENTOR W/ WOODEN ENCLOSURE
N.T.S.

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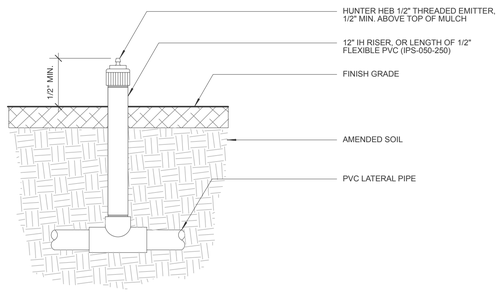
Date
03 OCTOBER 2024

Drawn by
MT

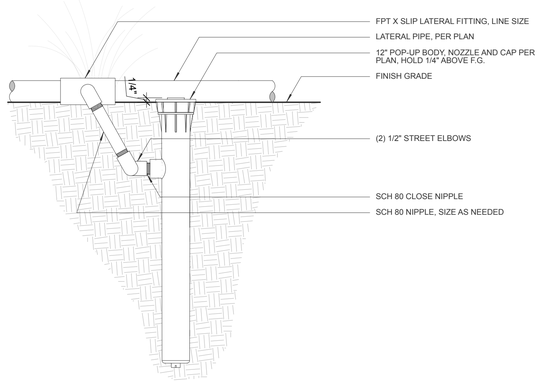
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Drawing Title
IRRIGATION DETAILS

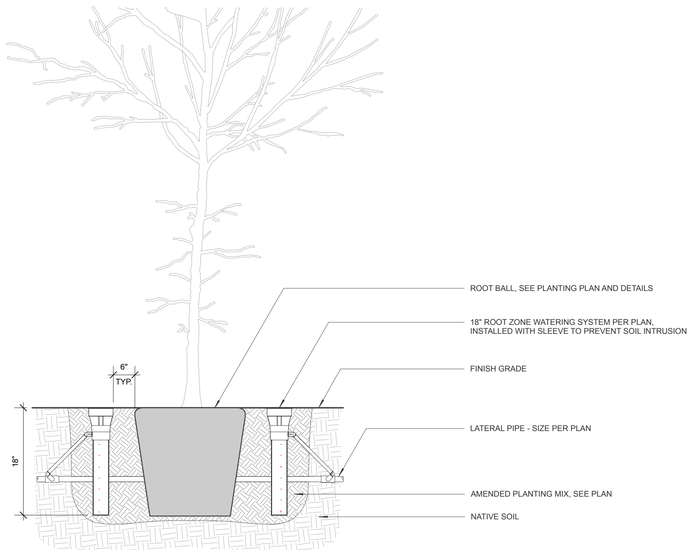
L4.2



7 1/2" THREADED EMITTER
N.T.S.



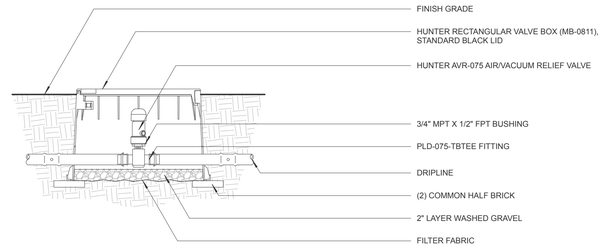
6 12" POP-UP BODY W/ FIELD BUILT SWING ARM AND AT-GRADE LATERAL PIPE
N.T.S.



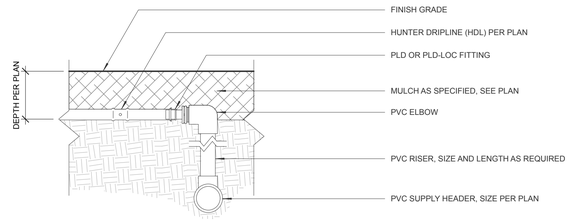
5 ROOT ZONE WATERING SYSTEM - 18"
N.T.S.



4 AUTOMATIC FLUSH VALVE
N.T.S.



3 AIR RELIEF VALVE - DRIPLINE
N.T.S.



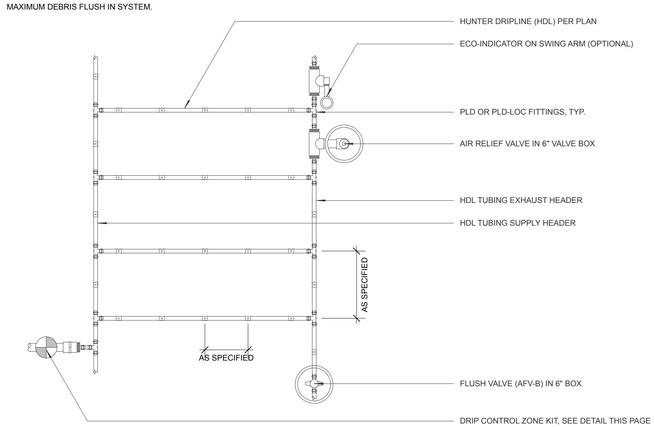
2 DRIPLINE CONNECTION W/ PVC RISER AND ELBOW
N.T.S.

DRIPLINE NOTES:

1. AIR RELIEF/VACUUM VALVE INSTALLED IN BOX AT OPTIMAL HIGHEST POINT FROM CONTROL ZONE KIT. MULTIPLE AIR RELIEF VALVES MAY BE NEEDED TO ACCOMODATE DIFFERENCES IN GRADE.

2. OPTIONAL ECO-INDICATOR TO BE INSTALLED AT OPTIMAL FURTHEST POINT FROM CONTROL ZONE KIT IN CLEAR VIEW WHEN ACTIVATED.

3. FLUSH VALVE TO BE INSTALLED AT OPTIMAL FURTHEST POINT FROM CONTROL ZONE KIT TO ALLOW FOR MAXIMUM DEBRIS FLUSH IN SYSTEM.



1 PLAN VIEW: DRIPLINE @ PLANTER BED TYPICAL LAYOUT
N.T.S.

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ARCHITECTURE

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12 ARROYO SEQUOIA
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MT

Scale: AS SHOWN

Drawing Title
IRRIGATION DETAILS

L4.3



EXTERIOR LIGHTING NOTES

1. The lighting plan is diagrammatic and intended to show general fixture location and type. Exact location of fixtures and transformers shall be verified on site with landscape architect.

2. Contractor shall coordinate with general contractor and electrical contractor for installation of conduit, sleeving, switching locations and junction boxes during other phases of work.

3. All fixtures shall be dimmable and installed per manufacturer's specifications.

4. All "flush" fixtures to be installed level with top of paving material, gravel or plant bed mulch, unless otherwise noted.

5. All exterior fixtures shall be LED modules with maximum wattage of 3.5.

6. Review lighting zones and switching with Client, Arch, and LA prior to construction.

L1



L2



L3



LIGHTING LEGEND & SPECIFICATIONS

SYMBOL	QUANTITY	FINISH	BRAND/MODEL	WATTAGE	LIGHT COLOR	FINISH
L1	12	PATH LIGHT	TIMBERLAB GUARDA	2.4W LED	2700K	ACCOYA
L2	15	RECESSED WALL LIGHT	LUCIFER IMPACT RECESSED WALL LIGHT	3.5W LED	2700K	BLACK
L3	6	TREE DOWNLIGHT	HUNZA TREE MOUNT LIGHT	2.5W LED	2700K	BLACK

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MT

Scale: 1"=20.0'

0' 10' 20'

North

Drawing Title

LANDSCAPE LIGHTING PLAN

L5.0

L3



HUNZA PURE OUTDOOR LIGHTING

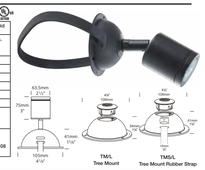
NPS Spot Light
with PURE LED

PROJECT:
TYPE:
SOURCE:
NOTES:

SPECIFICATIONS IP66

LED Chip	Cree XHP-50.2 Plug and Play field replaceable LED board
Luminaire Output*	600 Lumens @ 1050mA (6 watts), 430 Lumens @ 700mA (4 watts), 240 Lumens @ 350mA (2 watts)
Lumens Per Watt*	100 Lumens @ 6 watts minimum
LED Life Expectancy	50,000 hours L70
CRI (3000K)	90+
Colour Temperatures	2700K, 3000K, 4000K
Beam Angles	15, 25, 36, 60
Ingress Protection	IP66
Warranty	Electronics = 5 years Aluminium = 5 years Body Cap/ SS = 10 years
Standards	AS/NZS 61046 cULus, 1838, 2108 CSA C22.2 No. 250.7, No. 250.0-08 CE

*Delivered from the Luminaire with unobstructed beam



PRODUCT CONFIGURATION

Please fill in appropriate codes into boxes provided

Cat. No. TM/L or TMS/L

Luminaire	Power	Material/Finish	Beam	Colour	Accessories
TM/L TMS/L	S 1050mA Input, Series Wired 6W D9 12VAC Input, Parallel Wired 2W D7 12VAC Input, Parallel Wired 4W D10 12VAC Input, Parallel Wired 6W	BBK BLACK BBZ BRONZE BOGR OLIVE GREEN BWH WHITE BWB WHITE BIRCH BDG DARK GREY BSTAR SILVER STAR BCT CORTEN COP Copper SS Stainless Steel	15 15° 25 25° 36 36° 60 60°	2 2700K 3 3000K 4 4000K	CJK Cable Joint Kit LF Frosted Lens HCL Hex Cell Louvre GG Glare Guard SNT Snoot LKN Locking Knuckle

S - Series Driver
Power Supply: Constant current driver
Input Voltage: 120-277VAC
Wiring Method: Wired in series
Fixture input: Individual fixtures require 6VF @ 1050mA

D3 D7 D10 - 12VAC Input
Power Supply: Low/Extra to 12VAC
Transformer REQUIRED - NOT SUPPLIED
Input Voltage: 12VAC
Fixture load: 6-15WL
Fixture Output: D3 = 6VF @ 350mA 2W
D7 = 6VF @ 700mA 4W
D10 = 6VF @ 1050mA 6W
(1050mA limited to 700mA @ ambient temperature in stainless steel)

OTHER LAMP OPTIONS:
TM/N or TM/S/N - MR16 Halogen 12V Lamp
TM/SL or TMS/SL - MR16 LED Retrofit 12V Lamp (lamps vary by market - please refer to supplier for details)
TM/QUA or TMS/QUA - GU10 120/240V Halogen Lamp (body length 100mm)
TM/QUAL or TMS/QUAL - GU10 LED Retrofit 120/240V Lamp (lamps vary by market - please refer to supplier for details)

Additional Comments:

*Due to continued product enhancements, specifications may change without notification.

HUNZA LIGHTING
130 Felton Matthew Ave
Avondale 1072
New Zealand

Ph: +64 9 558 9471
Fax: +64 9 525 9471
sales@hunzalighting.com
www.hunzalighting.com

INTERNATIONAL CONTACTS:
www.hunzalighting.com/contact

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May 2022 V2

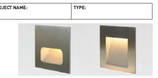
L2



PATHLIGHTS

STEALTH AND IMPACT®

PROJECT NAME:
TYPE:



Low glare path lights lead the way through the out of doors, as built-ins or from freestanding bollards.

Stock Ship Product: All length or components ship within 10 days in 6s quantities of 100.

ORDERING INFORMATION AND DRAWINGS - FIXTURE

FIXTURE	RATING	FLANGE FINISH				CRI / WATTAGE PACKAGE	CCT
SSL1 Stealth Step Light ISL1 Impact Step Light	T Dry Damp Non-Locking W Wet Locking*	POWDERCOATINGS WH White BK Black SN Satin Nickel AB Antique Brass CP Copper Finish* *Consultfactory	METAL FINISH IG Industrial Grey SB Brushed Stainless Steel SS Stainless Steel NB Natural Bronze	PLATED FINISH CH Chrome* *Consultfactory for availability and pricing PG Polished Gold* *Consultfactory for availability and pricing MB Matte Bronze* *Consultfactory for availability and pricing		STEALTH & IMPACT TS-LED 5.75Watts SSL1 Delivered Lumens - 2K ISL1 Delivered Lumens - 72L	2 2700 3 3000K 4 4000K 5 5000K Color Temp ____ K *Consultfactory for availability and pricing **Consultfactory for availability and pricing Please Specify in product

A LED
Regressed DC LED with slot aperture for glare-free, energy-efficient path and step lighting; suitable for dry / damp or wet applications. Dimming by power supply.

B MEDIA
Provided with sealed polycarbonate linear diffusion lens; optional lens for ease of availability of color gels, which may achieve custom color temperatures.

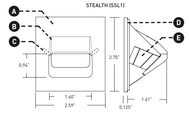
C LOCKING
Discreetly hidden tamper-resistant set screws. Included with IP65 Wet location luminaire.

D GASKET
Foam gasket provided. Required for IP65 wet location applications only.

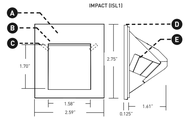
E RETENTION
Torsion spring clips secure fixture into back box, mounting plate, or appropriately sized cut-out.

- Available with Bollard mounting, please visit WEBSITE for additional information.
- Double Impact ISL2 pathlight available, please visit WEBSITE for additional information.

STEALTH (SSL1)



IMPACT (ISL1)



LUCIFER LIGHTING COMPANY
luciferlighting.com

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As part of its policy of continuous research and product development, the company reserves the right to change or withdraw specifications without prior notice.

[PH] +1-216-227-7329
[FAX] +1-216-227-4747

[DATE OF REV: 04/17/2024]

L1



SPECIFICATIES

- **Houtsoort:** Accoya
- **Dikte:** 135 x 190 mm
- **IP klasse:** IP54
- **Vermogen per ledmodule:** 2.4 Watt
- **Lumen output per ledmodule:** 2.200K = 209 lm
  2.700K = 121 lm
  4.000K = 153 lm
  amber = 47 lm
- **Stralingshoek:** De ledmodule heeft een stralingshoek van 155±65 graden.
- **Levensduur:** Accoya® blijft bovengronds 50 jaar en in grond-watercontact minimaal 25 jaar in toponditie. De ledmodule heeft een verwachte levensduur van 100.000 uur.
- **Lichtdata:** Lichtdata beschikbaar op aanvraag.

OPTIES

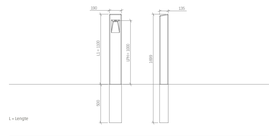
- **Spanning:** 230 VAC of 12-24 V AC/DC
- **Keurmerk:** ENEC
- **Lichtkleur:** Verkrijgbaar in 2.200, 2.700K, 4.000K en amber (595nm).
- **Aansluiting:** Mogelijk met kabel of zonder kabel (1 mtr 3x 1,5mm2).
- **Variaties :** Bij Timberlab wordt ieder armatuur zorgvuldig voor u geproduceerd. Naast de standaard opties denken wij graag mee in variaties voor uw toepassing. Denk hierbij aan een afwijkende hoogte.

LEDMODULES



	TM/L path light module 2.200K	TM/L path light module 2.700K	TM/L path light module 4.000K	TM/L path light module Amber 595nm
Spanning (optie)	230 VAC	230 VAC	230 VAC	230 VAC
	12-24 V AC/DC	12-24 V AC/DC	12-24 V AC/DC	12-24 V AC/DC
Vermogen	2.4 W*	2.4 W*	2.4 W*	2.2 W*
Power factor	0.368*	0.36*	0.36*	0.36*
Lumen output	209 lm*	121 lm*	153 lm*	47 lm*
Efficiëntie	87 lm/W*	50 lm/W*	63 lm/W*	21 lm/W*
Lichtkleur	2200K 2155K*	Warm Wit 2700K 2634K*	Natuurlijk Wit 4000K 3851K*	AMBER x=0.5977 y=0.3996 *
CRI	84*	84*	72*	n.v.t.
Dimbaar	op aanvraag	op aanvraag	op aanvraag	op aanvraag
Label	A+	A+	A+	B
Beschermingsklasse	IP 54	IP 54	IP 54	IP 54
Stralingshoek	154±64	154±64*	154±65*	151±58*
Aantal led-per module	1	1	1	1
Bedrijfstemperatuur	-25 ... +50°C	-25 ... +50°C	-25 ... +50°C	-25 ... +50°C
Verwachte levensduur	100.000 uur	100.000 uur	100.000 uur	100.000 uur

* Gemeten waarden



	gewicht	CO2 vering
Accoya	26 kg	42 kg

Alleen producten welke zijn aangegroeid met de FSC® claim zijn FSC gecertificeerd en worden geleverd met ons certificaat NC-COC-029611-KE. Alleen producten welke zijn aangegroeid met de PEFC® claim zijn 100% PEFC gecertificeerd en worden geleverd met ons certificaat NC-PEFCCOC-029611-FI.



BLISS
LANDSCAPE
ARCHITECTURE

24000 Robinson Canyon Road
Carmel CA 93923
831.298.0990
blisslandarch.com

ARROYO SEQUOIA

SANTA LUCIA PRESERVE
12 ARROYO SEQUOIA
CARMEL, CA 93923

APN/ Lot Number
239-091-021/ LOT 96

Phase
DESIGN DEVELOPMENT

Revisions
No. Date Description

Issue
FINAL DESIGN REVIEW

Date
03 OCTOBER 2024

Drawn by
MT

Scale: NTS

Drawing Title

LANDSCAPE LIGHTING SPECIFICATIONS

L5.1



1 PROPOSED EXTERIOR STONE
SBI BUILDING MATERIALS - PICASSO CREAM CHOPPED - RECTILINEAR PATTERN



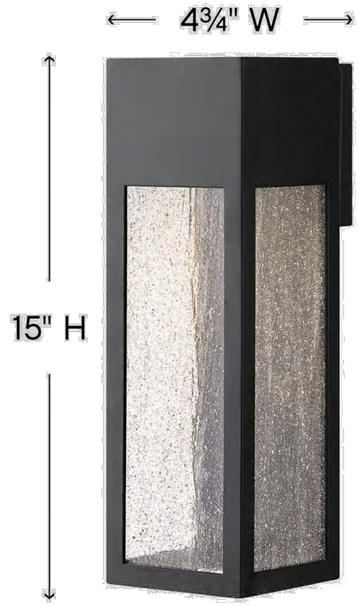
2 PROPOSED EXTERIOR FIBER CEMENT SIDING
JAMES HARDIE - STATEMENT COLLECTION - SELECT CEDARMILL - KHAKI BROWN



3 PROPOSED METAL ROOF
STANDING SEAM METAL ROOFING - WESTERN STATES - MATTE DARK BRONZE



4 PROPOSED DOORS AND WINDOWS
ARCADIA CUSTOM - ALUMINUM - BLACK



5 PROPOSED LIGHT FIXTURE
HINKLEY ROOK 1785SK-LL - LARGE WALL MOUNT LANTERN

FINAL DESIGN REVIEW

ADAM JESELNICK ARCHITECT
ADAMJESELNICK.COM

TOM MEANEY | ARCHITECT
620 STATE STREET SUITE 240 SANTA BARBARA CA 93101
TEL 805.966.7688 (SB) 831.624.4278 (CARMEL)
WWW.TOMMEANEY.COM

ARROYO SEQUOIA RESIDENCE
12 Arroyo Sequoia Road - LOT 96
Carmel, California

LICENSED ARCHITECT
ADAM JESELNICK
No. C33090
Renew 3/31/
STATE OF CALIFORNIA

SHEET NAME:
MATERIALS

SHEET DATE:
10. 03. 2024

SHEET SCALE:
N.T.S.

A7.01