CITY OF GOLETA

NOTICE OF FINAL APPROVAL
Intent to Issue a Land Use Permit

Planning and Environmental Services
130 Cremona Drive, Suite B, Goleta, CA 93117
Phone: (805) 961-7500 Fax: (805) 961-7551
www.cityofgoleta.org

Case No.: 15-098-LUP | Planner: Brian Hiefield | Initials
Project Address: 1040 Cambridge Drive
A.P.N.: 069-620-049 | Project Name: Harvest Hill Ranch, Lot 5
Zone District: 20-R-1 | General Plan Designation: Single Family Residential

Planning and Environmental Services grants final approval and intends to issue this Land Use Permit for the development described below, based upon the required findings and subject to the attached terms and conditions.

FINAL APPROVAL DATE: June 29, 2016

POSTING DATE/APPEAL PERIOD BEGINS: July 11, 2016

APPEAL PERIOD ENDS: July 21, 2016

DATE OF PERMIT ISSUANCE *(if no appeal is filed)*: July 22, 2016

NOTE: This final approval may be appealed to the Planning Commission by the applicant, owner, or any interested person adversely affected by such decision. The appeal must be filed in writing with an appeal application and any required fee within ten (10) calendar days, following the Posting Date identified above with Planning and Environmental Services located at 130 Cremona Drive, Suite B, Goleta, CA 93117 (Section 35-327). If you have questions regarding this project please contact the planner at (805) 961-7565.

PROJECT DESCRIPTION SUMMARY:
The property is a 25,106-square foot lot in the 20-R-1 zone district with an existing 759-square foot workshop/garage. The applicant will construct a 2,990-square foot single-family dwelling with an attached 606-square foot 2-car garage, and a 430-square foot covered entry patio porch. The existing workshop/garage will remain and provide an additional 2-car garage and workshop space. Exterior materials consist of wood siding, concrete block, and stone. The project was filed by Rich Ridgway, property owner.

ASSOCIATED CASE NUMBERS: 15-098-DRB

TERMS OF PERMIT ISSUANCE:

1. **Posting Notice.** A weather-proofed copy of this Notice/Permit, with Attachments, shall be posted by the Applicant in three (3) conspicuous places along the perimeter of the subject property. At least one notice shall be visible from the nearest street. Each copy of this Notice shall be posted on the identified Posting Date and shall remain posted for a minimum of ten (10) consecutive calendar days. (Section 35-338.3)
2. **Work Prohibited Prior to Permit Issuance.** No work, development, or use intended to be authorized pursuant to this approval shall commence prior to issuance of this Land Use Permit and/or any other required permit (e.g., building permit).

   WARNING! THIS IS NOT A BUILDING/GRADING PERMIT.
3. **Date of Permit Issuance.** This Permit shall be deemed effective and issued on the Date of Permit Issuance as identified above, provided:
   a. All terms and conditions including the requirement to post notice must be met and this Notice/Permit has been signed,
   b. The Affidavit of Posting was returned to the Planning and Environmental Services after the Appeal Period has closed. Failure to submit the affidavit by such date shall render the approval null and void, and
   c. No appeal has been filed.
4. **Conditions of approval.** This permit is issued subject to compliance with the attached Conditions of Approval. Failure to comply with the conditions of this permit may result in a civil fine pursuant to the City Code and/or permit revocation.

NOTE: This Notice of Final Approval/Intent to Issue a Land Use Permit serves as the Approval and the Land Use Permit once the permit is deemed effective and issued. Issuance of a permit for this project does not allow construction or use outside of the project description, or terms or conditions; nor shall it be construed to be an approval of a violation of any provision of any City policy, ordinance or other governmental regulation.

OWNER/APPLICANT ACKNOWLEDGMENT: Undersigned permittee acknowledges receipt of this approval and agrees to abide by all terms and conditions thereof.

RICH RIDGWAY | Richard Ridgway | 7-11-16
Print Name | Signature | Date

Planning and Environmental Services Issuance by:

Planner | Date

Attachment A

CONDITIONS OF APPROVAL
Land Use Permit 15-098-LUP

1. This Land Use Permit, Case No. 15-098-LUP, authorizes implementation of plans stamped "APPROVED", dated June 29, 2016, and attached/subject to these Conditions of Approval. All construction, improvements, implementation, and/or any other actions taken pursuant to this permit shall be in substantial conformance with the project. Any deviations from the project must be reviewed and approved by the City of Goleta (City). The City shall determine whether any deviation substantially conforms to the project. Any deviation determined to not be in substantial conformance with the project requires the permittee to seek additional approval, permits, or other action by the City. Any deviation from the project made without the above-described review and approval of the City is a violation of this permit.
2. This permit shall expire 24 months after the approval date, unless within such period substantial physical construction of the project has been completed, and/or the beginning of the authorized use has commenced, or a time extension has been applied for by the permittee.
3. This permit runs with the land and the rights and obligations thereof, including the responsibility to comply with these Conditions of Approval and shall be binding upon successors in interest unless or until this permit expires pursuant to Condition of Approval #2 or is expressly abandoned in writing by the permittee.
4. This permit is granted for the property/parcel(s) of record on which the project is located and shall not be transferred.
5. The permittee shall obtain from the City's Planning and Environmental Services Department a Land Use Permit prior to commencement of any uses and/or development authorized by this permit.
6. The permittee shall obtain from the City's Planning and Environmental Services Department all Building Permits required by Title 15 of the Goleta Municipal Code prior to the construction, erection, moving, alteration, enlarging, rebuilding of any building, structure, or improvement, or any other action(s) requiring a Building Permit pursuant to Title 15 of the Goleta Municipal Code.
7. These Conditions of Approval shall be printed in their entirety on all plans submitted for issuance of any LUP or Building Permit for the project.
8. Prior to Land Use Permit issuance, the permittee shall pay all applicable permit processing fees in full.
9. Permittee shall provide for dust control at all times during site preparation and project construction.

10. Site preparation and construction activity shall be limited to the hours between 8:00 am and 5:00 pm, Monday through Friday. No construction shall occur on State observed holidays. Maintenance of construction equipment shall be limited to the same hours. Construction activities that do not generate noise, such as interior painting, are not subject to these restrictions.
11. All exterior lighting shall be hooded and not directed towards any property zoned residential.
12. Violation of any of these Conditions of Approval is unlawful, prohibited and a violation of the Goleta Municipal Code. The City reserves the right to initiate civil, criminal and/or administrative enforcement, or after notice and a public hearing, to revoke this permit or modify these Conditions of Approval if it is found that there is a violation of these Conditions of Approval or the Goleta Municipal Code or that the project operates as or causes a public nuisance. This Condition of Approval is not intended to, nor does it limit in any manner whatsoever the ability of the City to take appropriate enforcement actions.
13. The permittee shall be responsible for the completeness and accuracy of all plans, forms and supporting materials submitted in connection with the project. Any error or discrepancies found therein are a violation of this permit.
14. Any new, expanded, or changed use on the project site shall be subject to City review and approval. The City shall determine whether the new, expanded, or changed use on the project site requires the permittee to seek additional approval, permits, or other action by the City. Failure of the permittee to obtain the above-described review and approval of the City is a violation of this permit.
15. The permittee shall, at permittee's expense, defend, indemnify and hold harmless the City and its agents, officers and employees from any claim, action, or proceeding against the City or its agents, officers, or employees to attack, review, set aside, void, or annul, in whole or in part, the City approval of this permit or any condition attached hereto or any proceedings, acts, or determinations taken, done, or made prior to the approval of this permit that were part of the approval process.
16. In the event that any Condition of Approval imposing a fee, exaction, dedication or other mitigation measure is challenged by the permittee in an action filed in a court of law or threatened to be filed therein which action is brought within the time period provided by law, this permit shall be suspended pending dismissal of such action, the expiration of the limitation period applicable to such action, or final resolution of such action. If any Condition of Approval is invalidated by a court of law, the project shall be reviewed by the City and substitute Conditions of Approval may be imposed.

- End of Conditions -

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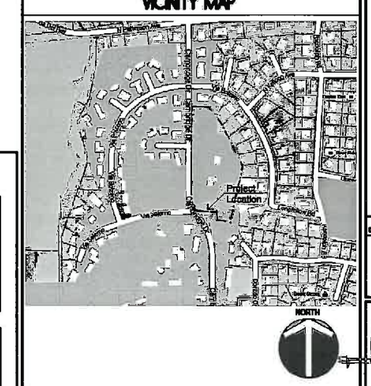
RECEIVED
JUN 21 2018
City of Goleta
Planning & Environmental Svcs.

CURRENT SET DATE:
6-18-18

BUILDING CODES:
2016 CALIFORNIA BUILDING CODE (CBC)
2016 CALIFORNIA MECHANICAL CODE (CMC)
2016 CALIFORNIA PLUMBING CODE (CPC)
2016 CALIFORNIA ELECTRICAL CODE (CEC)
2016 CALIFORNIA FIRE CODE (CFC)
2016 CALIFORNIA ENERGY CODE (T24)
2016 CALIFORNIA RESIDENTIAL CODE (CRC)
2016 CALIFORNIA GREEN BUILDING STANDARDS CODE
WITH ALL OTHER CODES AND ORDINANCES
ALL LIGHTING, HEATING, AND COOLING SHALL COMPLY WITH THE REQUIREMENTS OF THE 2016 RESIDENTIAL ENERGY STANDARDS.

VICINITY MAP



HARVEST HILL ESTATES lot 1

HARVEST HILL BUILDERS, LP - 200 E. CARRILLO STREET, SUITE 200, SANTA BARBARA, CA 93101 - 805-962-8989

PROJECT NOTES

1. PROVIDE COPIES OF ALL "CERTIFICATES" (INSTALLATION, ACCEPTANCE AND VERIFICATION) TO THE BUILDING INSPECTOR WHEN REQUIRED FOR ALL APPLICABLE INSPECTIONS.
2. AT BUILDING FINAL PROVIDE "COMPLIANCE INFORMATION", "OPERATING INFORMATION", "MAINTENANCE INFORMATION" AND "VENTILATION INFORMATION" TO THE BUILDING OWNER.
3. HERS RATER VERIFICATION IS REQUIRED FOR THIS PROJECT. SEE FORM CF1R FOR FEATURES REQUIRING HERS VERIFICATION.
4. CONTRACTOR TO COMPLETE AND SIGN FROM "CF2R-MCH-27 (INSTALLATION CERTIFICATE-NON-DUCT AIR QUALITY AND MECHANICAL VENTILATION)" AND POST THE CERTIFICATE IN THE FIELD FOR USE BY THE BUILDING INSPECTOR.

DEFERRED SUBMITTALS

- FIRE SPRINKLERS
- SITE RETAINING WALLS

CAL GREEN NOTES

1. AUTOMATIC IRRIGATION CONTROLLER(S) INSTALLED BY THE BUILDER SHALL BE IN PLACE FOR FINAL INSPECTION AND SHALL MEET THE FOLLOWING REQUIREMENTS:
   A) CONTROLLERS SHALL BE WEATHER-OR SOIL MOISTURE-BASED CONTROLLERS THAT AUTOMATICALLY ADJUST IRRIGATION IN RESPONSE TO CHANGES IN PLANTS' NEEDS AS WEATHER CONDITIONS CHANGE.
   B) WEATHER-BASED CONTROLLERS WITHOUT INTERNAL RAIN SENSORS OR COMMUNICATION SYSTEMS THAT ACCOUNT FOR LOCAL RAINFALL SHALL HAVE A SEPARATE WIRED OR WIRELESS RAIN SENSOR WHICH CONNECTS OR COMMUNICATES WITH THE CONTROLLER(S). SOIL MOISTURE-BASED CONTROLLERS ARE NOT REQUIRED TO HAVE RAIN SENSOR INPUT. (CALGREEN 4.304.1)
2. THAT A MINIMUM OF 50% OF CONSTRUCTION WASTE IS TO BE RECYCLED. CGC 4.408.1
3. THAT INTERIOR MOISTURE CONTROL AT SLAB ON GRADE FLOORS SHALL BE PROVIDED BY THE SOIL ENGINEER RESPONSIBLE FOR THE PROJECT SOIL REPORT PER CGC SECTION 4.505.2.1, ITEM 3.
4. THE VOC'S MUST COMPLY WITH LIMITATIONS LISTED IN SECTION 4.504.3 AND TABLE 4.504.1, 4.504.2, 4.504.3 AND 4.504.5 FOR: ADHESIVES, PAINTS AND COATINGS, CARPET AND CARPETING, WOOD PRODUCTS. CGC 4.504.2
5. THE MOISTURE CONTENT OF WOOD SHALL NOT EXCEED 19% BEFORE IT IS ENCLOSED IN CONSTRUCTION. THE MOISTURE CONTENT NEEDS TO BE CERTIFIED BY ONE OF 3 METHODS SPECIFIED. BUILDING MATERIALS WITH VISIBLE SIGNS OF WATER DAMAGE SHOULD NOT BE USED IN CONSTRUCTION. THE MOISTURE CONTENT MUST BE DETERMINED BY THE CONTRACTOR BY ONE OF THE METHODS LISTED IN CGC 4.505.3.
6. AT THE TIME OF FINAL INSPECTION, A MANUAL, COMPACT DISC, WEB-BASED REFERENCE OR OTHER MEDIA ACCEPTABLE TO THE AGENCY WHICH INCLUDES ALL OF THE FOLLOWING SHALL BE PLACED IN THE BUILDING:
   A) INSTRUCTIONS TO THE OWNER OR OCCUPANT THAT THE MANUAL SHALL REMAIN WITH THE BUILDING THROUGHOUT THE LIFE CYCLE OF THE STRUCTURE.
   B) OPERATION AND MAINTENANCE INSTRUCTIONS FOR THE FOLLOWING:
      I) EQUIPMENT AND APPLIANCES, INCLUDING WATER-SAVING DEVICES AND SYSTEMS, HVAC SYSTEMS, WATER-HEATER SYSTEMS AND OTHER MAJOR APPLIANCES AND EQUIPMENT.
      II) ROOF AND YARD DRAINAGE, INCLUDING GUTTERS AND DOWNSPOUTS.
      III) SPACE CONDITIONING SYSTEMS, INCLUDING CONDENSERS AND AIR FILTERS.
      IV) LANDSCAPE IRRIGATION SYSTEMS.
      V) WATER REUSE SYSTEMS.
   C) INFORMATION FROM LOCAL UTILITY, WATER AND WASTE RECOVERY PROVIDERS ON METHODS TO FURTHER REDUCE RESOURCE CONSUMPTION, INCLUDING RECYCLE PROGRAMS AND LOCATIONS.
   D) PUBLIC TRANSPORTATION AND/OR CARPOOL OPTIONS AVAILABLE IN THE AREA.
   E) EDUCATIONAL MATERIAL ON THE POSITIVE IMPACTS OF AN INDOOR HUMIDITY BETWEEN 30-50 PERCENT AND WHAT METHODS AN OCCUPANT MAY USE TO MAINTAIN THE RELATIVE HUMIDITY LEVEL IN THAT RANGE.
   F) INFORMATION ABOUT WATER-CONSERVING LANDSCAPE AND IRRIGATION DESIGN AND CONTROLLERS WHICH CONSERVE WATER.
   G) INSTRUCTIONS FOR MAINTAINING GUTTERS AND DOWNSPOUTS AND THE IMPORTANCE OF DIVERTING WATER AT LEAST 5 FEET AWAY FROM THE FOUNDATION.
   H) INFORMATION ON RECOMMENDED ROUTINE MAINTENANCE MEASURES, INCLUDING, BUT NOT LIMITED TO, CAULKING, PAINTING, GRADING AROUND THE BUILDING, ETC.
   I) INFORMATION ABOUT SOLAR ENERGY AND INCENTIVE PROGRAMS AVAILABLE.
   J) A COPY OF ALL SPECIAL INSPECTION VERIFICATION REQUIRED BY THE ENFORCING AGENCY OR THIS CODE.

PROJECT DATA

PROJECT ADDRESS:
1040 CAMBRIDGE DR
GOLETA, CA 93117
APN # 069-620-044/060

HOUSE AREA:
FLOOR PLAN: 3505 SQ FT
GARAGE: 987 SQ FT
COVERED ENTRY/PATIO/PORCH: 427 SQ FT

PROJECT DESCRIPTION:
NEW SINGLE FAMILY HOME W/ ATTACHED GARAGE.

LOT:
LOT AREA:

OCCUPANCY:
R-3 SINGLE FAMILY DWELLING
U PRIVATE GARAGE

NUMBER OF STORIES:
SINGLE STORY WITH BASEMENT

OCCUPANCY SEPARATION:
ONE-HOUR OCCUPANCY SEPARATION BETWEEN DWELLING AND GARAGE AT GARAGE SIDE ONLY.

CONSTRUCTION:
TYPE VB, NON-RATED (SPRINKLERED)

CONSULTANTS

SOILS ENGINEER
BRAUN & ASSOC INC
92 2ND STREET # F
BUELLTON, CA 93427
PH: (805) 688-5429

STRUCTURAL:
BSI / PME
1800 E. 16TH STREET
SANTA ANA, CA 92701
PH: (714) 835-2800
FAX: (714) 835-2819 FAX

OWNER
HARVEST HILL BUILDERS, LP
200 E. CARRILLO STREET
SANTA BARBARA, CA 93101
PH: (805) 962-8989

CIVIL ENGINEER
FLOWERS & ASSOCIATES, INC.
201 N. CALLE CESAR CHAVEZ
SUITE 100
SANTA BARBARA, CA 93108
PH: (805) 966-2224
PH: (805) 965-3372 FAX

ENERGY CONSULTANT
SOLARGY, INC.
22025 VENTURA BLVD.
WOODLAND HILLS, CA 91364
PH: (818) 347-6046
PH: (818) 347-4413 FAX

ARCHITECT
RICHARD T. THORNE - ARCHITECT
6924 SHADWOOD WOOD DRIVE
MOORPARK, CA 93021
805-499-9879 FAX/PHONE

RICHARD T. THORNE ARCHITECT architecture / planning
6924 SHADOW WOOD DRIVE, MOORPARK, CA. 93021 - 805-969-9879 fax/phone - richard@rttdia.com e-mail

residence for:
HARVEST HILL ESTATES
LOT 1

DATE 6-12-18
REVISIONS

LICENSED ARCHITECT RICHARD T. THORNE C 14023 STATE OF CALIFORNIA

SHEET
C

© 2018 Richard T. Thorne AIA. Contractor shall verify and assume all responsibility for dimensions and conditions on job prior to commencement of work. Contractor shall immediately notify the architect of any discrepancies found in the contract documents. Contractor shall not scale drawings. These drawings are not to be reproduced, changed or copied in any form or manner whatsoever, nor are they to be assigned to any third party, without obtaining the expressed written permission and consent of Richard T. Thorne AIA.

ATTACHMENT 1, EXHIBIT 4
HARVEST HILL RANCH PROJECT
CONDITIONS OF APPROVAL
CASE NO. 12-088-RZ-VTM

In addition to all applicable provisions of the Goleta Municipal Code (GMC), Harvest Hill, LLC (applicant) agrees to comply with the following provisions as conditions for the City of Goleta's approval of Case No. 12-088-VTM (project).

1. AUTHORIZATION: This rezone and vesting tentative map, Case No. 12-088-RZ-VTM, authorizes implementation of "City Council Attachment #__", subject to the Conditions of Approval (approval). All construction, improvements, implementation and/or any other actions taken pursuant to the approval must be in substantial conformance with this approval. Any deviations from this approval must be reviewed and approved by the City of Goleta (City). The City must determine whether any deviation substantially conforms to this approval. Any deviation determined to not be in substantial conformance with this approval requires the subdivider to seek additional approval, permits, or other action by the City. Any deviation from this approval made without the above-described review and approval of the City is a violation of this approval.

2. AUTHORIZED DEVELOPMENT: The approval includes, but is not limited to, the following:

   A Rezone of 880 Cambridge Drive from DR-1.0 (Design Residential, 1.0 units/ac) to 20-R-1 (Single Family Residential, 20,000 square-foot minimum lot size);

   A vesting tentative tract map to subdivide a 4.7 acre (net) property into seven (7) lots (9 net new) intended for development of one single family dwelling per lot as noted below:

   Lot 1 - 42,782 ft²
   Lot 2 – 22,689 ft² (existing house, attached secondary unit, pool, and pool house)
   Lot 3 – 28,483 ft² (existing barn and guest house)
   Lot 4 – 33,542 ft²
   Lot 5 – 25,060 ft² (existing tractor shed)
   Lot 6 – 20,027 ft²
   Lot 7 – 21,937 ft²

   The vesting tentative tract map includes architectural guidelines for the subdivision. The architectural guidelines describe the intended community character, architectural design, and landscaping for each of the seven (7) lots in the subdivision.

   The existing skilled barn on lot 3 will be retained which may be eventually moved and converted to a residential second unit in the future. The rezone would not include additional square footage to the barn however there could be architectural changes to enhance the exterior aesthetics of the barn. The existing tractor shed will be retained on lot 5.

CONDITIONS OF APPROVAL

FROM MITIGATED NEGATIVE DECLARATION 12-088-MND

Biological Resources

1. The permittee must retain a City-approved biologist to conduct a survey of nesting birds. The survey must be conducted prior to commencement of any demolition, grading, and/or construction activities, either for subdivision improvements or future residential construction. The survey must assess the breeding and nesting status of residence raptors throughout the subject property and designate a 300 foot buffer from any nest. The survey must include recommendations to minimize impacts to raptors during construction, including but not limited to, limiting activities, installing fence protection, and restricting the construction schedule. The survey must take into account expected biological and decreases in raptors over the construction period and must include a map showing known roosting and nesting sites. Construction within the 300 foot buffer must be avoided during the nesting season for raptors (e.g., March 1st through July 1st). In addition, construction must not occur until the City-approved biologist has notified the City that all young raptors have successfully fledged and the nests and no longer active. Plan Requirements and Timing: The 300 foot buffer(s) must be shown on all final grading, drainage, and subdivision improvement plans and residential construction plans where applicable. The survey must be conducted no more than 14 days prior to construction activities for grading/installation of subdivision improvements as well as for future residential construction on any of the seven lots. Survey conclusions must be reviewed and approved by the Planning and Environmental Review Director, or designee, prior to the issuance of Grading/Building permits. Monitoring: The Planning and Environmental Review Director, or designee, will review any biological reports in consultation with any resource/trustee agency as needed, as well as conduct periodic site inspections to verify compliance with survey recommendations in the reports.

2. In order to protect all existing native Coast Live Oak trees and all non-native specimen trees designated for retention per Figure 5 of the Watershed Environmental Inc.; *Biological Assessment, 880 Cambridge Drive, Goleta, CA*, dated August 6, 2013 as well as minimize adverse effects of grading and construction onsite, the permittee must implement a tree protection and replacement plan as outlined below. No ground disturbance including grading for buildings, driveways, easements, subsurface grading, and/or underground utility installation can occur within the critical root zone of any native tree unless specifically authorized by the approved tree protection and replacement plan. The tree protection and replacement plan must be incorporated into the project's Conditions, Covenants, and Restrictions (CC&Rs) and must include the following:

   Tree Protection Exhibit:
   a) The tree protection exhibit showing the location, diameter and critical root zone of all native and specimen trees located onsite.
   b) The tree protection exhibit as described in subsection a) must clearly identify any trees to be protected at the critical root zone (outer edge of the tree canopy plus 6 feet). Fencing must be at least three feet in height consisting of orange construction fencing or other comparable bright colored material acceptable to the Director of Planning and Environmental Review, or designee, and must be staked every 6 feet. The permittee must place signs stating "tree protection area" at 15 foot intervals on the fence. Fencing and signs must be installed prior to commencement of grading, and remain in place throughout all grading and construction activities.
   c) The tree protection exhibit as described in subsection a) must clearly identify any areas where landscaping, grading, and trenching or construction activities would encroach within the critical root zone of any native or specimen tree. All encroachments is subject to review and approval by the Director of Planning and Environmental Review, or designee.
   d) The tree protection exhibit as described in subsection a) must clearly identify construction equipment staging and storage areas. The locations must also be depicted on any project plans submitted for the Land Use Permit (LUP) for either subdivision improvements and/or future residential construction. No fill soil, rocks or construction materials, or construction equipment can be parked, stored or operated within any critical root zone.
   e) The tree protection exhibit as described in subsection a) must show all proposed utility locations and irrigation lines for the project. New utilities must be located within roadways, driveways or a designated utility corridor such that impacts to trees are minimized.
   f) The tree protection exhibit as described in subsection a) as well as grading and construction plans must show any proposed tree wells or retaining walls for the project. The tree wells or retaining walls must be located outside of the critical root zone of all protected trees unless specifically authorized.
   g) The tree protection exhibit as described in subsection a) must identify by tree number on Figure 5 of the Watershed Environmental Inc.; *Biological Assessment, 880 Cambridge Drive, Goleta, CA*, dated August 6, 2013 the trees designated for removal. Only trees designated for removal on the approved tree protection plan can be removed.

   Requirements:
   a) Any encroachment within the critical root zone of native trees must adhere to the following standards:
      i. Any paving must be of pervious material (gravel, brick without mortar or turf block).
      ii. Any trenching required within the critical root zone of a protected tree must be done by hand.
   iii. Any roots can inch in diameter or greater encountered during grading or trenching must be cleanly cut and sealed.
   b) All trees located within 30 feet of buildings must be protected from stucco and/or paint during construction.
   c) No permanent irrigation can occur within the critical root zone of any native or specimen tree designated for retention per Figure 5 of the Watershed Environmental Inc.; *Biological Assessment, 880 Cambridge Drive, Goleta, CA*, dated August 6, 2013. Drainage plans must be designed so that tree trunk areas are properly drained to avoid ponding.
   d) The tree protection plan must identify by tree number on Figure 5 of the Watershed Environmental Inc.; *Biological Assessment, 880 Cambridge Drive, Goleta, CA*, dated August 6, 2013 the trees designated for removal. Only trees designated for removal on the approved tree protection plan can be removed.
   e) Any Coast Live Oak trees which are removed, relocated and/or damaged (more than 20% encroachment into the critical root zone) must be replaced on a 10:1 basis with 1 gallon size saplings grown from seed obtained from the same watershed as the

project site. A drip irrigation system with a timer must be installed. Replacement Coast Live Oak trees must be planted before final inspection or the City issues a certificate of occupancy and be irrigated and maintained until they are established (five years). The plantings must be protected from predation by wild and domestic animals as well as from human interference by the use of staked, chain link fencing and proper fencing during the maintenance period.

Plan Requirements: A copy of the project's CC&Rs incorporating the tree protection and replacement plan must be submitted to the Planning and Environmental Review Director, or designee, for review and approval. The project's CC&Rs must be recorded before recordation of the final map, before issuance of any LUP for either construction of subdivision improvements or new structures, the permittee must submit grading plans, building plans and the tree protection and replacement plan to the Planning and Environmental Review Director, or designee, for review and approval. All aspects of the plan must be implemented as approved. Timing: Each mitigation measure must be met prior to the issuance of a LUP for either subdivision improvements and/or future residential construction. Monitoring: The Planning and Environmental Review Director, or designee, must conduct site inspections throughout all phases of development to ensure compliance with the required tree protection and replacement plan and evaluate all tree protection and replacement measures for their success.

3. The permittee must submit to the Planning and Environmental Review Director, or designee, evidence of posting a performance security to guarantee implementation of the approved tree protection and replacement plan. The performance security must be posted with the City Attorney's Office. The maintenance period for all replacement trees must be a minimum of five (5) years. Plan Requirements and Timing: The performance security must be provided and agreements signed before the City issues a LUP for either construction of subdivision improvements or new structures. Monitoring: Prior to final inspection or issuance of a certificate of occupancy, the Planning and Environmental Review Director, or designee, must site inspect to ensure installation of all replacement trees according to the approved tree protection and replacement plan. The Planning and Environmental Review Director, or designee, will check maintenance as needed. Release of any performance security requires appropriate documentation and Planning and Environmental Review Director, or designee, signature.

4. During construction, washing of concrete, paint, or equipment can occur only in areas where polluted water and materials can be contained for subsequent removal from the site. Washing is not allowed near native or specimen trees designated for retention per Figure 5 of the Watershed Environmental Inc.; *Biological Assessment, 880 Cambridge Drive, Goleta, CA*, dated August 6, 2013. An area designated for washing functions must be identified on all plans submitted for issuance of any LUP, grading, and/or building permits). Plan Requirements: The applicant must designate a wash off area, acceptable to the Planning and Environmental Review Director, or designee, on all plans submitted for issuance of any LUP, grading, or building permits). Timing: The wash off area must be designated on all plans submitted for issuance of any LUP, grading, and/or building permits). The wash off area must be in place throughout construction. Monitoring: The Planning and Environmental Review Director, or designee, must verify compliance prior to issuance of any LUP, grading, or building permits) and conduct periodic site inspections to ensure compliance throughout the construction period.

Noise

5. All noise-generating project construction activities must be limited to Monday thru Friday, 8:00 a.m. to 5:00 p.m. Construction will not be allowed on weekends and state and federal holidays. Exceptions to these restrictions may be made in extenuating circumstances (in the event of an emergency, for example) on a case by case basis at the discretion of the Director of Planning and Environmental Review, or designee. The permittee must post the allowed hours of operation near the entrance to the site, so that workers on site are aware of this limitation. Plan Requirements and Timing: Three (3) signs stating these restrictions must be provided by the permittee and posted on site. Each signs must be a minimum size of 24" x 48." All such signs must be in place prior to beginning commencement of any grading/demolition and maintained through to occupancy clearance. Violations may result in suspension of permits. Monitoring: The Planning and Environmental Review Director, or designee, will monitor compliance with restrictions on construction hours and promptly investigate and respond to all complaints.

6. Stationary construction equipment that generates noise which exceeds 65 dB(A) measured 50 feet from the source in an unobstructed condition must be shielded to reduce such noise levels to no more than 65 dB(A) at project boundaries. Plan Requirements and Timing: The permittee must submit a list of all stationary equipment to be used in project construction which includes manufacturer specifications on equipment noise levels as well as recommendations from the project acoustical engineer for shielding such stationary equipment so that it complies with the requirement for review and approval by the Planning and Environmental Review Director, or designee. This information must be reviewed and approved by the Planning and Environmental Review Director, or designee, prior to LUP issuance. All City approved noise attenuation measures for stationary equipment need to be in place at the start of construction activities and be implemented and maintained for the duration of the period when such equipment is onsite. Monitoring: The Planning and Environmental Review Director, or designee, will periodically inspect the site to ensure compliance with all video documentation requirements.

VESTING TENTATIVE TRACT MAP CONDITIONS

Prior to VTM Recordation

7. Pursuant to GMC/LUP Housing Element Policy HE 11.1, the project is subject to the affordability requirements set forth under Policies described in Policies HE 11.2, and 11.5. The project is required to provide 20% of the total number of units as affordable at the following levels: 5% very low, 5% low, 5% moderate, and 5% workforce (120% to 200% of median income). In addition, as a project with five or more for-sale units, Policy HE 11.2 requires the inclusionary requirements of Policies HE 11.5 to be met onsite unless the City, at its sole discretion, finds that such requirements are more appropriately satisfied by alternative means set forth in Policies HE 11.3 and 11.4 (e.g. payment of in-lieu-of fees).

8. Required affordable units shall remain affordable for 55 (fifty-five) years and the compliance term shall restart with each subsequent sale of an affordable unit unless preempted by state or federal programs. The applicant shall enter into and record an Agreement to Provide

Affordable Housing and shall record a Resale Restrictive Covenant and Preemptive Right. Both documents shall be subject to review and approval by the City of Goleta and City Attorney prior to recordation of the vesting tentative map. These documents shall specify affordability consistent with the terms described above and shall include provisions describing marketing and lottery requirements for the initial sale of units. Income eligibility of prospective purchasers/renters shall be determined by the City of Goleta or its designee and paid for by the developer. An interest to resale assessment shall be required for potential owners/renters of the affordable units.

9. Construction of the affordable units shall be concurrent with the construction of the market rate units. Occupancy clearance for no more than 50% of the market rate units shall be allowed prior to occupancy clearance for all of the affordable units. Implementation and Timing: Prior to land use permit approval, this requirement shall be included in the Agreement to Provide Affordable Housing and must be printed on all grading and building plans. Monitoring: The Planning and Environmental Review Director, or designee shall ensure compliance during construction.

10. Affordable housing requirements, including payment of in-lieu fees, must be completed prior to VTM recordation.

11. Prior to land use permit approval, developer shall submit a plan for marketing the affordable units and selecting and qualifying the buyers, subject to review and approval by the Planning and Environmental Services Department and the City Attorney.

12. Developer shall provide written notice to all purchasers of lots or homes within the subdivision of the location and zoning for the affordable housing. The disclosure shall explicitly note that the housing may be developed for moderate income residents. Wording is subject to review and approval by the City of Goleta as part of the required CC&Rs.

13. Plus copies of the final vesting tract map to implement the vesting tentative map and required review fees in effect at the time shall be submitted to Planning and Environmental Services for compliance review of conditions before Planning and Environmental Services will issue map clearance to the Surveyor. The map shall show statistics for net lot area (gross area less any public road right of way) and any open space.

14. Prior to recordation of the final vesting tract map, and subject to approval of the City of Goleta as to form and content, the applicant shall include all of the conditions, agreements, and/or plans associated with or required by this project approval on a separate informational sheet to be recorded with the final map.

15. Provisions shall be made for easements for common access, drainage, utilities and provisions for maintenance of any shared driveways. These provisions shall be subject to the review and approval of the Planning and Environmental Services Director and City Attorney prior to the recordation of the Final Map. Preservation of the easements for reciprocal access, drainage, utilities and maintenance for shared facilities for this subdivision shall be shown on the Final Map.

16. Prior to recordation of the final vesting tract map, the applicant shall submit a copy of

proposed CC&Rs for review and approval by the City of Goleta. The CC&Rs shall at minimum provide for the establishment of an association under the responsibility of the association of homeowners, including but not limited to, private roads, bikeways, fences, trails, retention basins, and landscaping. The CC&Rs shall also include reference the responsibility for all lots to maintain property in compliance with all conditions of approval for the project. The City of Goleta shall be made party to the CC&Rs for any changes related to conditions of approval that may be considered subsequent to the adoption of CC&Rs.

17. Prior to recordation of the final vesting tract map, public utility easements shall be provided at the locations and widths required by the serving utility companies. The subdivider shall submit to the City Surveyor a set of prints of the final map accompanied by a letter from each utility and water and sewer district serving the property stating that the easements shown thereon are acceptable.

18. Prior to recordation of the final vesting tract map, any obstruction within a utility easement which would interfere with the intended use of the easement, shall be removed at the subdivider's expense.

19. Prior to map recordation for the project, the owner shall sign and record an agreement to comply with the project conditions of approval.

PLANNING AND ENVIRONMENTAL REVIEW CONDITIONS

20. The permittee must provide Preliminary and Final approval from the Design Review Board for the *Architectural Guidelines* for the project prepared by the permittee. The Design Review Board (DRB) must specifically consider compatibility with the area and surroundings, architectural treatments, placement of mechanical equipment and utility infrastructure, colors, materials, finish floor elevations, night lighting, fence enclosures, and landscape palette during review of all project plans, including the lighting, utility landscape, and building plans. All future development within the subdivision must include a review and approval by the DRB that such future development is consistent with these guidelines. Plan Requirements and Timing: The permittee must process draft *Architectural Guidelines* for the subdivision that will be subject to DRB review and approval. The final review and approval prior to map recordation. The DRB approved *Architectural Guidelines* must be recorded with the final map. Preliminary and Final DRB approval of these guidelines must include, but not be limited to, the following items of concern:
   a) Compatibility of the architecture and design with surrounding development and its consistency with a rural agricultural theme;
   b) Size, bulk, and scale/massing in the visual context of the neighborhood;
   c) Quality of building materials;
   d) Appropriateness of landscaping for screening and blending the project with its surroundings; and
   e) Prevention of lighting/glare spillover.

   Monitoring: The Planning and Environmental Review Director, or designee, must verify compliance with this condition prior to issuance of the final map for recordation as well as ensuring that the DRB approved *Architectural Guidelines* are recorded with the map.

21. This permittee must ensure that construction debris is prevented from blowing off-site and is screened from public view during the construction phase. Construction staging areas must be screened from public view by temporary fencing and screened from view. Material stockpiles must be placed in areas where they will be screened from public view. The site must be left in a clean and fully-controlled at the end of any working day. The site must be fenced with temporary fencing during the construction phase. All graffiti must be removed from any surface within 24 hours of the appearance. These requirements must be noted on all plans before the City issues a Land Use Permit for grading. Monitoring: The Planning and Environmental Review Director, or designee, must periodically inspect throughout the grading and construction phase(s) of the project to verify compliance with this condition.

22. All new utility service connections and above-ground mounted equipment such as backflow devices, etc., must be placed on private property, screened from public view and/or painted in a not overly-tone color(s) (not to prominent) so as to blend in with the project. Screening may include a combination of landscaping and/or hardscape. Wherever possible, utility transformers must be placed in underground vaults, unless otherwise approved by the Planning and Environmental Review Director, or designee, and then must be completely screened from view. All gas and electrical meters must be concealed and/or painted to match the building. All transformers and vaults that must be located within the right-of-way must be installed below grade unless otherwise approved by the Public Works Director, or designee, and then must be completely screened from view. Plan Requirements and Timing: The plans submitted for City staff and DRB Preliminary/Final review must identify the type, location, size, and number of utility connections and above-ground mounted equipment as well as how such equipment would be screened from public view and the color(s) that it would be painted so as to blend in with the project and surrounding area. Monitoring: Before the City issues a certificate of occupancy, the Planning and Environmental Review Director, or designee, must verify that all above-ground utility connections and equipment is installed, screened, and painted per the approved final project plans.

23. The permittee must submit a composite Utility plan for DRB Preliminary/Final review. All ground mechanical equipment (e.g., any HVAC condensers, switch boxes) must be included on all building plans and be designed to be integrated into the structure and/or

screened in their entirety from public view. Plan Requirements and Timing: Detailed plans showing all screening and/or integration must be submitted for review and approval by the Planning and Environmental Review Director, or designee, and be screened prior to the City issuance of a LUP for the project. Monitoring: Before the City issues any certificate of occupancy, the Planning and Environmental Review Director, or designee, must verify installation of all external mechanical equipment per the approved plans.

24. Any exterior night lighting installed on the project site must be of low intensity, low glare design, and be hooded to direct light downward onto the subject parcel and prevent spill-over onto adjacent parcels. Exterior lighting fixtures must be kept to the minimum number and intensity needed to secure public safety. Upward directed exterior lighting is prohibited. All exterior lighting fixtures must be appropriate for the architectural style of the structure and surrounding area, and must be consistent with the DRB approved *Architectural Guidelines* for the project. Plan Requirements and Timing: The location of all exterior lighting fixtures, complete cut-sheets of all exterior lighting fixtures, and a photometric plan prepared by a registered professional engineer showing the type of light and any plans entitled by all exterior lighting fixtures must be reviewed and approved by the DRB, and the Planning and Environmental Review Director, or designee, before the City issues a LUP for development on any one of the seven lots created through this subdivision. Monitoring: Prior to occupancy clearance, the Planning and Environmental Review Director, or designee, must site inspect to ensure that exterior lighting fixtures have been installed consistent with approved plans.

25. Project landscaping must consist of approximately seventy-five percent (75%) drought-tolerant native and/or Mediterranean type species compatible with the Goleta climate, and which adequately complements the project design and integrates the site with surrounding land uses. Plan Requirements and Timing: The final landscape plan must identify the following:
   a) type of irrigation;
   b) all existing and new trees, shrubs, and groundcovers by species;
   c) size of all plantings;
   d) location of all plantings;
   e) drought tolerant native shrubs (Mediterranean type plant community); and
   f) statement of compatibility with the Goleta climate.

   The final landscape plan for each of the seven lots created by this subdivision must be reviewed and approved by the DRB and the Planning and Environmental Review Director, or designee, prior to LUP issuance for any development of these lots. Monitoring: Prior to occupancy clearance and/or final inspection for any lot, the Planning and Environmental Review Director, or designee, must site inspect to ensure that landscaping has been installed consistent with the approved final landscape plan.

26. The permittee must water lists on installation and maintenance agreement, in a form approved by the City Attorney, with the City. The Installation and maintenance agreement must specify installation procedures and maintenance standards for the life of the project

for required landscaping and water conserving irrigation systems as provided in the final landscape plan, roadway installation and maintenance, and stormwater system installation and maintenance. Plan Requirements and Timing: A draft maintenance agreement must be submitted to the City Attorney for review before the City issues any LUP for the project. The permittee must execute the landscape installation and maintenance agreement, including at least a 5-year maintenance period, before the City issues a certificate of occupancy. Performance securities for installation and maintenance must be reviewed and approved by the Planning and Environmental Review Director, or designee, before the City issues a certificate of occupancy. Monitoring: Before the City issues a certificate of occupancy, the Planning and Environmental Review Director, or designee, must inspect the site to ensure installation according to the approved plan. The Planning and Environmental Review Director, or designee, will check maintenance as needed. The Planning and Environmental Review Director, or designee, may release any performance security upon satisfaction of the terms of the agreement and with verification from a licensed landscape architect that the installed landscaping species conform to those shown on issued-LUP plan sets.

27. All utility lines within the project site shall be placed underground. Plan Requirements and Timing: Trenching/Construction plans for future improvements must be reviewed and approved by the Planning and Environmental Review Director, or designee, before the City issues a LUP for development on any one of the seven lots created through this subdivision. Improvements must be implemented prior to occupancy. Monitoring: The Planning and Environmental Review Director, or designee, must review the final development plans and all subsequent plans submitted for approval of any Land Use Permit, building, or grading permit(s) to verify compliance. The Planning and Environmental Services Director, or designee must verify utility installation per the approved plans before the City issues any certificate of occupancy.

28. Transport of all imported cut material from the project implementation must be taped from the project site to the point of storage. Plan Requirements and Timing: This requirement must be printed on all plans submitted when requesting any LUP, building, or grading permit(s) for the project. The permittee must designate one or more locations, as deemed appropriate by the Planning and Environmental Review Director, or designee, for posting of a notice(s) to all drivers of vehicles transporting soils. Such signs will be maintained in their approved location(s) during project construction. The location and information provided on the sign(s) must be reviewed and approved by the Planning and Environmental Review Director, or designee, before the City issues any LUP for the project. Monitoring: The Planning and Environmental Review Director, or designee, must ensure measures are printed on plans and shall periodically inspect the project site to verify compliance. SBAPCD inspectors will respond to nuisance complaints.

29. All grading and earthwork recommendations from the project geotechnical and soils reports, including any updates, must be incorporated into the final project design, including the Final Grading, Drainage and Erosion Control Plans, or other plans deemed necessary by the Planning and Environmental Review Director, or designee, and must ensure they meet the City's building code requirements set forth in the Goleta Municipal Code. All grading activities must be supervised by a Registered Civil Engineer or Certified

Engineering Geologist. Plan Requirements and Timing: Final grading, drainage, and erosion control plans must be submitted and approved by the Planning and Environmental Review Director, or designee, and Public Works Director, or designee, before the City issues a Land Use Permit for grading. Monitoring: The Planning and Environmental Review Director, or designee, and Public Works Director, or designee, must verify compliance during grading and construction activities.

30. In the event archaeological resources are encountered during grading, work shall be stopped immediately or redirected until the City-approved archaeologist and Native American representatives can evaluate the significance of the find pursuant to Phase 2 investigation standards set forth in the City's Archaeological Guidelines. The Phase 2 shall be funded by the permittee. If resources are found to be significant, they shall be subject to a Phase 3 mitigation program consistent with the City's Archaeological Guidelines. The Phase 3 shall be funded by the permittee. Plan Requirements and Timing: This requirement shall be printed on all plans submitted for any LUP, building, or grading permit(s). Monitoring: City staff shall conduct periodic field inspections to verify compliance during ground disturbing activities and shall ensure preparation of any necessary Phase 2 and/or Phase 3 archaeological investigation(s).

31. The proposed project must include, without limitation, the following list of potential design features. These features must be incorporated into the project design to ensure consistency with adopted statewide plans and programs. The project applicant must demonstrate the incorporation of the following project design features before issuance of building or occupancy permits as applicable.

   Energy Efficiency
   - Design buildings to be energy efficient. 15 percent above Title 24 requirements.

   Water Conservation and Efficiency
   - Include water-efficient irrigation systems in the landscape design.
   - Include low-flow faucets, toilets, and showers in the building design.

   Waste
   - Institute recycling and composting systems achieving a minimum 50% reduction in waste disposed (before issuance of Certificate of Occupancy).

   Timing: These requirements must be shown on plans before the City issues a Land Use Permit for any building. Monitoring: Planning and Environmental Review Director, or designee, must verify compliance with this mitigation measure before the City issues any building permit or certificate of occupancy, as applicable.

32. Compliance with the Santa Barbara County Fire Department Memorandum of June 8, 2012 is required, including, but not limited to, serviceable access, defensible space around structures, adequate fire hydrants, adequate building addressing, adequate interior fire

sprinkler system, and approved locking systems for any gated access ways. Plan Requirements and Timing: Fire Department sign-off is required before issuance of any Land Use Permit, permit for grading or construction of structures, and/or certificate of occupancy, as applicable. Monitoring: Before final map recordation, or issuance of any Land Use Permit, permit for grading or construction, and/or certificate of occupancy, the Planning and Environmental Services Director, or designee, must verify that the Fire Department review and approval has been obtained, as applicable.

33. A Connection Permit from the Goleta Sanitary District shall be obtained. Plan Requirements and Timing: The Connection Permit shall be provided to the City prior to LUP issuance. Monitoring: Before final map recordation, or issuance of any Land Use Permit, permit for grading or construction, and/or certificate of occupancy, the Planning and Environmental Services Director, or designee, must verify that the Connection Permit has been obtained.

34. A Can and Will Service (CAWS) letter from the Goleta Water District shall be obtained. Plan Requirements and Timing: The CAWS Letter shall be provided to the Planning and Environmental Review Director, or designee, prior to LUP issuance. Monitoring: Before final map recordation, or issuance of any Land Use Permit, permit for grading or construction, and/or certificate of occupancy, the Planning and Environmental Services Director, or designee, must verify that CAWS letter has been obtained.

35. Outdoor water use must be minimized. Plan Requirements: The following measures must be implemented in the final landscape plan:
   a. the final landscaping shall use approximately 75% drought-tolerant native and/or Mediterranean type species;
   b. drip irrigation or other water-conserving irrigation shall be installed;
   c. plant material shall be grouped by water needs;
   d. turf shall constitute less than 20% of the total landscaped area if properly irrigated under the final landscape plan;
   e. no turf shall be allowed on slopes of over 4%;
   f. extensive mulching (2" minimum) shall be used in all landscaped areas to improve the water holding capacity of the soil by reducing evaporation and soil compaction; and
   g. moisture sensing devices shall be installed to prevent unnecessary irrigation.

   Timing: The final landscape plan must include these requirements and be reviewed and approved by the Planning and Environmental Review Director, or designee, and the DRB. The applicant must implement all elements of the final landscape plan prior to final inspection. Monitoring: Prior to final inspection, The Planning and Environmental Review Director, or designee, must verify installation according to plan.

36. Reclamation-potable water, if available, shall be used for all dust suppression activities during grading and construction. Plan Requirements and Timing: This measure shall be included as a note on all plans submitted for any LUP, grading and/or building permit. Evidence of availability or lack thereof, shall be provided to the City. Monitoring: The Planning and Environmental Review Director, or designee must site inspect to ensure that reclaimed/non-potable water is being used for dust suppression.

37. Indoor water use efficiency measures must be implemented. The following measures must be implemented in project building plans:
   a) Insulation at hot water lines;
   b) Install re-circulating, point-of-use, or on-demand water heaters;
   c) Provide self-regenerating water softening in all structures; and
   d) Equip lavatories and drinking fountains with self-closing valves.

   Project building plans must include these requirements. Indoor water conserving measures must be implemented prior to occupancy clearance.

PUBLIC WORKS DEPARTMENT CONDITIONS

Prior to issuance of a Land Use Permit:

38. Payment of Development Impact Fees for Transportation (GTIP Fees).

Prior to grading permit:

39. A Waste Management and Recycling Plan (WMRP) must be submitted to the Public Works Department for review and approval. Said plan must indicate how a 50% diversion goal will be met during construction, including but not limited to the following:
   a) Demolition and/or excess construction materials must be separated onsite for reuse/recycling or proper disposal (e.g., concrete asphalt).
   b) During construction, provide receptacles for recycling of construction materials and trash must be provided onsite.
   c) At the end of the project, applicant must submit a Post-Construction Waste Reduction & Recycling Summary Report documenting the types and amounts of materials that were generated during the project and how much was reused, recycled, composted, salvaged, or landfilled.
   d) This requirement must be printed on the grading and construction plans.
   e) Materials must be recycled as necessary throughout construction. All materials must be recycled prior to occupancy clearance.
   f) The applicant/property owner must contract with a City approved hauler to facilitate the recycling of all construction recoverable/recyclable material. (Copy of Contract to be provided to the City). Recoverable construction material must include; but not be limited to: asphalt, lumber, concrete, glass, metals, and drywall.

40. The Owner shall develop an Operations and Maintenance Procedure Plan (describing replacement schedules for pollution absorbing pillows, etc.) for the operation and use of the storm drain surface pollutant interceptors if used within the project limits.

41. Identify on Building Plan(s) the following:
   a) Show all existing survey monuments to be preserved and/or tied out in coordination with the County of Santa Barbara's Surveyor's Office
   b) Trash/recycle area(s) shall provide for BMPs to ensure that negative and other materials are appropriately filtered prior to entering a public storm drain system or natural waterway.

   c) Trash and recycling containers shall contain multi-unit, equal volume (minimum 50% recyclables), and trash/recycling areas shall be easily accessed by the consumer and the trash hauler.
   d) Green waste by-root is part of the 50% recycle calculation. Provide adequate area for green waste within trash/recycle area(s) or provide statement if intent is to have a maintenance company haul off green waste.

42. In compliance with the Central Coast Regional Water Quality Control Board Post Construction Requirements and Project Class Water Technical Guide (Technical Guide), the applicant must submit a complete Stormwater Control Plan as described by the Technical Guide and detailed above in Condition No. 23. The Stormwater Control Plan must demonstrate adequate stormwater management features and facilities as well as an operation and maintenance plan that identifies the parties responsible for maintenance of the facilities. Plan Requirements: The Stormwater Control Plan must be prepared by a licensed civil engineer and must follow the Stormwater Control Plan Checklist in the Technical Guide. Timing: The Stormwater Control Plan must be submitted to the Planning and Environmental Review Director, or designee, for review and approval prior to LUP issuance. Monitoring: The Planning and Environmental Review Director, or designee must verify that the features contained in the Stormwater Control Plan have been constructed/installed per the approved final plan prior to final inspection.

43. The permittee must prepare a Storm Water Pollution Prevention Plan (SWPPP) covering all phases of grading operations. Plan Requirements: The SWPPP must be prepared by a licensed civil engineer and must incorporate Best Management Practices (BMPs) necessary to mitigate short-term construction impacts. The plan will include, but is not limited to, the following BMPs:
   a) Temporary berms and sedimentation traps (such as silt fencing, straw bales, and sand bags); the BMPs shall be placed at the base of all cut/fill slopes and soil stockpile areas where potential erosion may occur and shall be maintained to ensure effectiveness; the sedimentation basins and traps shall be cleaned periodically and the silt shall be removed and disposed of in a location approved by the City;
   b) Non-paved areas must be revegetated to stabilized (i.e. geotextile blanks or fabrics) immediately after grading and installation of utilities, to minimize erosion and to re-establish soil structure and fertility; revegetation shall include drought-resistant, fast-growing vegetation that would quickly stabilize exposed ground surfaces; alternative materials rather than reseeding (e.g., gravel) may be used, subject to review and approval by Planning and Environmental Services and Community Services;
   c) Runoff shall not be directed across exposed slopes; all surface runoff shall be conveyed in accordance with the approved drainage plans;
   d) Energy dissipaters or similar devices shall be installed at the end of drainpipe outlets to minimize erosion during storm events;
   e) Grading shall occur during the dry season (April 15th to November 1st) unless a City approved erosion control plan is in place and all erosion control measures are in effect; erosion control measures shall be identified on an erosion control plan and shall prevent runoff, erosion, and siltation; all exposed graded surfaces shall be reseeded with ground cover vegetation to minimize erosion; graded surfaces shall be resseeded within four (4) weeks of grading completion, with the

   f) Trash and recycling containers shall contain multi-unit, equal volume (minimum 50% recyclables), and trash/recycling areas shall be easily accessed by the consumer and the trash hauler.
   g) Green waste by-root is part of the 50% recycle calculation. Provide adequate area for green waste within trash/recycle area(s) or provide statement if intent is to have a maintenance company haul off green waste.

42. In compliance with the Central Coast Regional Water Quality Control Board Post Construction Requirements and Project Class Water Technical Guide (Technical Guide), the applicant must submit a complete Stormwater Control Plan as described by the Technical Guide and detailed above in Condition No. 23. The Stormwater Control Plan must demonstrate adequate stormwater management features and facilities as well as an operation and maintenance plan that identifies the parties responsible for maintenance of the facilities. Plan Requirements: The Stormwater Control Plan must be prepared by a licensed civil engineer and must follow the Stormwater Control Plan Checklist in the Technical Guide. Timing: The Stormwater Control Plan must be submitted to the Planning and Environmental Review Director, or designee, for review and approval prior to LUP issuance. Monitoring: The Planning and Environmental Review Director, or designee must verify that the features contained in the Stormwater Control Plan have been constructed/installed per the approved final plan prior to final inspection.

43. The permittee must prepare a Storm Water Pollution Prev

Director, or designee, is in place and all erosion control measures are in place; erosion control measures shall be identified on an erosion control plan and shall prevent runoff, erosion, and siltation; all exposed graded surfaces shall be reseeded with ground cover vegetation to minimize erosion; graded surfaces shall be reseeded within four (4) weeks of grading completion, with the exception of surfaces graded for the placement of structures; these surfaces shall also be reseeded if construction of structures does not commence within four (4) weeks of grading completion.

f. Site grading must be completed such that permanent drainage away from foundations and slabs is provided and so that water shall not pond near structures or pavements.

Timing: Final grading, drainage, and erosion control plans must be reviewed and approved by the Planning and Environmental Review Director, or designee, prior to LUP issuance. BMPs and erosion control measures must remain in place/must be implemented for the duration of grading and construction. Monitoring: The Planning and Environmental Review Director, or designee, must verify compliance during grading and construction activities.

47. In compliance with the Central Coast Regional Water Quality Control Board Post Construction Requirements and Project Clean Water Technical Guide (Technical Guide), the applicant must submit a complete Stormwater Control Plan as described by the Technical Guide. The Stormwater Control Plan must demonstrate adequate stormwater management features and facilities as well as an operation and maintenance plan that identifies the individuals responsible for maintenance of the facilities. Plan Requirements: The Stormwater Control Plan must be prepared by a licensed civil engineer and must follow the Stormwater Control Plan Checklist in the Technical Guide. The plan must include the following:

Exhibit

a. Existing natural hydrologic features (depressions, watercourses, relatively undisturbed areas) and significant natural resources
b. Proposed design features and surface treatments used to minimize imperviousness and reduce runoff
c. Existing and proposed site drainage network and connections to drainage off-site.
d. Entire site divided into separate Drainage Management Areas (DMAs). Each DMA has a unique identifier and is characterized as self-retaining (zero-discharge), self-treating, or drainage to a Low Impact Development (LID) facility.
e. Proposed locations and footprints of LID facilities.
f. Potential pollutant source areas, including refuse areas, and equipment washing areas

Report

a. Narrative analysis or description of site features and conditions, and opportunities and constraints for stormwater control.

b. Narrative description of site design characteristics that protect natural resources including endangered species habitat, protected vegetation, and archaeological resources, and preserve natural drainage features, minimize imperviousness, and disperse runoff from impervious areas.
c. Tabulation of proposed pervious and impervious DMAs, showing self-treating areas, self-retaining areas, areas draining to self-retaining areas, and areas tributary to each LID facility.
d. Proposed sizes, including supporting calculations, for each LID facility.
e. Narrative description of each DMA and explanation of how runoff is routed from each impervious DMA to a self-retaining DMA or LID facility.
f. Description of site activities and potential sources of pollutants.
g. Table of pollutant sources and the source control measures used to reduce pollutants to the maximum extent practicable.
h. Description of signage for bioretention facilities.
i. Control maintenance requirements for bioretention facilities and site features.
j. Means by which facility maintenance will be financed and implemented in perpetuity.
k. Statement accepting responsibility for interim operation and maintenance of facilities.
l. Stormwater Construction Checklist.
m. Certification by a professional civil engineer, architect, or landscape architect.

Timing: The Stormwater Control Plan must be submitted to the Planning and Environmental Review Director, or designee, for review and approval prior to LUP issuance. Monitoring: The Planning and Environmental Review Director, or designee must verify that the facilities described in the Stormwater Control Plan have been constructed/installed per the approved final plan prior to final inspection.

48. The applicant must prepare an operations and maintenance plan that addresses maintenance requirements for all improvements associated with the Erosion and Sediment Control Plan and the Stormwater Control Plan. Plan Requirements: At a minimum, the operations and maintenance plan shall include requirements that all inlet storm drain filters shall be inspected, repaired, and cleaned per manufacturer's specifications and at a minimum prior to September 30th of each year. Additional inspections, repairs, and maintenance shall be performed after storm events as needed throughout the rainy season (November 1st to April 15th) and/or per manufacturer specifications. Any necessary major repairs shall be completed prior to the next rainy season. Prior to September 30th of each year, the responsible party for operation and maintenance of the facilities must submit to the Planning and Environmental Review Director, or designee, for review and approval a report summarizing all inspections, repairs, and maintenance work done during the prior year. Timing: The applicant must submit the required maintenance agreement to the Planning and Environmental Review Director, or designee, for review, approval, and execution prior to map recordation and/or any LUP issuance. Monitoring: The Planning and Environmental Review Director, or designee, must annually verify compliance with the provisions of the operations and maintenance plan and will respond to instances of non-compliance with the agreement.

49. The applicant shall develop and implement a Solid Waste Management Program reviewed and approved by the Public Works Department. The program shall identify the projected amount of ongoing waste generated onsite at project completion. The program shall include the following measures, but is not limited to those measures: Provision of at least 50% of space and/or bins designated for storage of recyclable materials within the project site.

a) Provision of a recyclable materials storage area of at least 50 SF within the project site that is approved by Mariborg.
b) Implementation of a green waste source reduction program focusing on recycling of all green waste generated onsite.
c) Development of a Source Reduction Plan (SRP), describing the recommended program(s) and the estimated reduction of the solid waste disposed by the project. For example, the SRP may include a description of how fill will be used on the construction site, instead of sending excess fill material to a landfill, or a detailed set of office procedures such as use of duplex copy machines and purchase of office supplies with recycled content.
d) Implementation of a program to purchase materials that have recycled content for project construction and/or operation (i.e., plastic lumber, office supplies, etc.). The program could include requesting suppliers to know recycled materials content. To ensure compliance, the applicant shall develop an integrated solid waste management program, including recommended source reduction, recycling, composting programs, and/or a combination of such programs, subject to Community Services staff review and approval prior to issuance of any construction permits.

Timing: The applicant shall submit a Solid Waste Management Program to the Public Works Department for review and approval prior to LUP issuance. All program components must be implemented prior to occupancy clearance and shall be maintained in perpetuity. Monitoring: Prior to final inspection, the Planning and Environmental Review Director, or designee must ensure compliance with the Solid Waste Management Plan.

50. Any work in the public right of way requires a Public Works Encroachment Permit subject to the following standards:

a) City standard driveway that meets current ADA requirements.
b) New water, sewer or other utility services and their associated trenching and insets.
c) Replacement of any damaged sidewalk along the project frontage.

51. The proposed site distance improvements at the southerly driveway to Cambridge Drive must be completed prior to final grading inspection. In addition to grading the hillside north of the driveway to the elevation of the adjoining sidewalk along Cambridge Drive, the hillside must be landscaped with flat rock, pavers, or some other maintainable surface to ensure that no vegetation, including grass, grows in this area. Final grading plans showing these improvements must be approved by the Public Works department.

Prior to Certificate of Occupancy:

52. At the completion of all permitted construction, the owner shall provide the City's Solid Waste Coordinator with a Construction Phase - Final Waste Reduction and Recycling Report. Said report shall designate all materials landfilled and recycled, broken down into

material types. The final report shall be approved by the Public Works Department prior Certificate of Occupancy.

53. Payment of Parks and Recreation Fees in effect at the time of Certificate of Occupancy.

54. All existing survey monuments that were preserved under tract out must be reset in coordination with the County of Santa Barbara's Surveyor's Office.

55. Repair any damaged public facilities (curbs, gutters, sidewalks, pavement markings, etc.) caused by construction subject to the review and approval of the Public Works Department.

Ongoing Maintenance:

56. After installation of any drainage improvements or erosion control measures, the applicant or designated responsible party is responsible for on-going maintenance of all improvements in accordance with the manufacturer's specifications, the approved plans, and conditions of approval.

SANTA BARBARA COUNTY FIRE DEPARTMENT CONDITIONS

Prior to issuance of Building Permit:

57. The application must secure a Fire Protection Certificate(s) from Santa Barbara County Fire Department prior to issuance of building permits. Further, a set of approved plans, stamped and dated by the Fire Department must be kept at the job site and be available upon request.

58. The applicant must stop work immediately and contact the County Environmental Health, Hazardous Materials Unit (HMU) if visual contamination or chemical odors are detected while implementing the approved work at this site. If work has been stopped, then resumption of work cannot occur until clearance from HMU is received.

59. Prior to commencement of vertical construction, the applicant shall create a defensible space of 100 feet (or to the property line, whichever is closer) around the proposed structures and any existing structures on the property. Removal does not apply to single specimens of trees, native trees, ornamental shrubbery or similar plants that are used as ground cover if they do not form a means of rapidly transmitting fire from the native growth to any structure.

60. Access shall be shown on the plans. All access ways (public and private, road and driveways) shall be installed and made serviceable and maintained for the life of the project.

61. Access ways shall be unobstructed and extended to within 150 feet of all portions of the exterior walls of the first story of any building.

62. Dead-end access exceeding 150 feet shall terminate with a fire department approved turnaround.

63. A minimum of 13 foot, 6 inches of vertical clearance shall be provided and maintained for the life of the project for emergency apparatus access.

64. Any portion of the access exceeding 10 percent in slope shall be paved. Any portion of the access exceeding 15 percent in slope shall be engineered concrete

65. Temporary address posting is required during construction.

66. Access ways serving the seven lots must be red-striped and posted with signs indicating "Fire Lane – No Parking."

67. Signs indicating "Fire Lane – No parking" shall be placed every 150-feet or as required by the fire department. Refer to Appendix D of the 2007 California Fire Code Section D 103.6.

68. Three new fire hydrants shall be installed. Fire hydrants shall be located per fire department specifications and shall flow 750 gallons per minute at a 20 psi residual pressure. Plans shall be approved by the fire department prior to installation.

Prior to Certificate of Occupancy:

69. An interior fire sprinkler systems shall be installed. Plans shall be approved by the fire department prior to installation.

70. Recorded addressing is required. The fire department shall determine and assign all address numbers and shall issue such numbers to property owners and occupants.

71. Building address numbers shall be posted as required by fire department.

72. Access way entrance gates shall conform to fire department standards. Plans shall be approved by the fire department prior to installation.

73. When excess ways are gated, a fire department approved locking system shall be installed. Plans shall be approved by the fire department prior to installation.

74. Payment of development impact fees is required. The fees shall be computed on each new building, including non-habitable spaces. Fees will be calculated as follows:

a) Mitigation Fee at $.10 per square foot
b) Fire Facility Fee $917.00 / single family dwelling

GOLETA WATER DISTRICT CONDITION

75. Prior to issuance of building permits, the applicant must submit documentation that water service will be provided by Goleta Water District.

GOLETA SANITARY DISTRICT

76. The applicant shall comply with all applicable District provisions of its Standards and Ordinances of the Goleta Sanitary District (GSD).

77. Applicant/owner(s) must submit for the District review, approval and fees, a complete copy of the final building structure site, floor and plumbing plans to the City of Goleta Building

Safety Division. GSD will provide a copy of the plans from the City and contact the applicant after plans are reviewed. The City of Goleta Building and Safety Division may require that you apply for additional permits.

78. The site plans need to show the proposed 4 inch diameter building structure sewer connection, and the building floor and dirt elevation of the upstream manhole from the proposed connection to the structure.

79. Building structures on the lot, not directly connected to a public sewer, will have to be separately connected with the public sewer upon subsequent subdivision of the property.

80. Each lot must be separately connected to GSD facilities.

81. Abandoned connections must be capped at the right-of-way of the property line and inspected by GSD, and if required, prior to inspection of a demolition permit from the City Building and Safety Division.

82. New sewer connections must be constructed, and any necessary easements must be obtained, by and at the expense of the applicant. Upon completion of new sewer connections, the applicant must execute and deliver to GSD a Grant of Rights document in recordable form conveying to GSD any easements necessary to enable GSD to properly operate repair and maintain the sewer. The easement document must be executed, complete and ready for recordation.

83. Ensements must be a minimum 15 feet wide and vehicle access easements must be a minimum 12 feet wide. No trees or shrubbery may be planted within the GSD easement.

84. The applicant must provide GSD with verification that a private and/or public sewer easement has been created, conveyed and recorded, thus allowing the connection of the project to the GSD public sewer. The easement documentation shall include language expressly providing for "The construction, installation, repair, operation and maintenance of the building and lateral sewer," which connect the project to the GSD public sewer.

85. If there is an inability to achieve gravity flow from the building structure to GSD sewage collection facilities, an injector pump system design will need to be submitted to the City of Goleta Building and Safety Division for approval prior to connection of any portion of your force main sewer system. The design must include dual pump and alarm system.

86. A backflow preventer encased in a concrete vault with a metal lid, embossed with "Sewer" or "Clean-out", must be installed within the private property whenever the residential interior plumbing fixtures are lower than GSD upstream manhole rim elevation. This manhole is the next immediate manhole upstream from the structure sewer service connection to the main sewer line.

87. All GSD fees are required to be paid prior to final grading inspection or Certificate of Occupancy for each dwelling.

SANTA BARBARA AIR POLLUTION CONTROL DISTRICT CONDITIONS

88. The applicant must keep dust generated by construction and/or demolition activities to a minimum. The following dust control measures must be shown on all building and grading plans and the applicant must ensure that these measures are implemented by the contractor/builder:

a) During clearing, grading, earth moving, excavation, and/or transportation of cut or fill materials, water trucks or sprinkler systems are to be used to prevent dust from leaving the site and to minimize visual effect each day's activities.
b) During construction, water trucks or sprinkler systems must be used to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this would include wetting down dust areas in the late morning and after work is completed for the day. Increased watering frequency must occur whenever wind exceeds 15 miles per hour. If wind speeds increase to the point at which such measures cannot prevent dust from leaving the site, construction activities must be suspended.
c) Minimize amount of disturbed area and reduce onsite vehicle speeds to 15 miles per hour or less.
d) Gravel pads, knock-off plates, or similar BMPs, must be installed at all access points to the project site to prevent tracking of mud onto roadways.
e) Soil stockpiled for more than two days must be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting soil material in and from the site must be tarped from the point of origin.
f) All gravel, dirt, and construction material must be cleaned from the right-of-way at a minimum of once a day at the end of the work day.
g) After clearing, grading, earth moving, and/or excavation is complete the disturbed area must be treated by watering, or revegetating, or by spreading soil binders until the area is paved or otherwise developed in a manner that prevents dust generation.

89. The applicant must ensure that the contractor or builder designates a person or persons to monitor the dust control program and to order increased watering as necessary to prevent transport of dust offsite. Their duties must include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons must be provided to City staff and the APCD and must be posted in three locations along the project site's perimeter for the duration of grading and construction activities. All requirements must be noted on all clearance plans and must be reviewed and approved by City staff prior to LUP issuance. Requirements must be adhered to throughout all grading and construction periods.

90. Grading and construction contracts must specify that contractors adhere to requirements that reduce emissions of ozone precursors and particulate emissions from diesel exhaust. The following must apply:

a) All portable diesel-powered construction equipment must be registered with the state's portable equipment registration program OR must obtain an APCD permit.
b) Fleet owners of mobile construction equipment are subject to the California Air Resources Board (CARB) Regulation for In-use Off-road Diesel Vehicles (Title 13, California Code of Regulations, Chapter 9, Section 2449).
c) All commercial diesel vehicles are subject to limitations on idling time (Title 13, California Code of Regulations, Chapter 9, Section 2485). Idling of heavy- duty

diesel construction equipment and trucks during loading and unloading must be limited to five (5) minutes. Electric auxiliary power units must be used, unless (standards or protocol to ensure mitigation occurring without electric auxiliary power units).
d) Diesel construction equipment meeting the CARB Tier 1 emission standards for off-road heavy-duty diesel engines must be used. Equipment meeting CARB Tier 2 or higher emission standards must be used unless (standards or protocol to ensure mitigation occurring without equipment meeting CARB Tier 2).
e) Diesel powered equipment must be replaced by electric equipment, unless (standards or protocol to ensure mitigation occurring without electric equipment).
f) Diesel construction equipment must be equipped with selective catalytic reduction systems, diesel oxidation catalysts, and diesel particulate filters as certified and/or verified by CARB or the Environmental Protection Agency (EPA), unless (standards or protocol to ensure mitigation occurring without selective catalytic reduction systems, diesel oxidation catalysts, and diesel particulate filters).
g) Catalytic converters must be installed on gasoline-powered equipment, unless (standards or protocol to ensure mitigation occurring without catalytic converters).
h) All construction equipment must be maintained in tune per the manufacturer's specifications.
i) The engine size of construction equipment must be the minimum practical size.
j) The number of construction equipment operating simultaneously must be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.
k) Construction worker trips must be minimized by requiring carpooling and by providing lunch meals
l) Coatings (e.g. paints) must be labeled as "low-VOC" or "zero-VOC" in accordance with EPA rules for interior and exterior surfaces.

Timing: All requirements must be included on all grading and construction plans and be reviewed and approved by the Planning and Environmental Review Director, or designee, before the City issues any LUP. Requirements must be adhered to throughout all grading and construction periods. Monitoring: The Planning and Environmental Review Director, or designee must ensure measures are printed on plans and periodically inspect the site to verify compliance. SBAPCD Inspectors will respond to nuisance complaints.

91. If the construction site is graded and construction activity has not commenced in four weeks, the applicant must employ the following methods prior to the commencement of the fifth week to inhibit dust generation:

a) Seeding and watering to revegetate graded areas; and/or
b) Spreading of soil binders; and/or
c) Similar methods to inhibit dust that are deemed appropriate by City staff.

These requirements must be noted on all plans submitted for issuance of any LUP for the project.

92. Diesel fuel emissions must be limited. The following limitations on diesel-fueled vehicles in excess of 10,000 pounds must apply during all construction and subsequent operational activities:

a) Diesel-fueled vehicles in excess of 10,000 pounds must not idle in one location for more than five (5) minutes at a time.
b) Diesel-fueled vehicles in excess of 10,000 pounds must not use diesel-fueled auxiliary power units for more than five (5) minutes to power heater, air conditioner, or other auxiliary equipment on any such vehicle.
c) The applicant must designate one or more locations as deemed appropriate, for the permanent posting of a notice(s) to all drivers of diesel-fueled vehicles in excess of 10,000 pounds of these limitations on vehicle idling in all areas of the property that may be frequented by such vehicles. Signs must be maintained in their approved location(s) as long as diesel-fueled vehicles in excess of 10,000 pounds are being used.

Timing: All requirements must be included on all grading and construction plans and be reviewed and approved by the Planning and Environmental Review Director, or designee, before the City issues any LUP. The permittee must adhere to these requirements throughout all grading and construction periods. The location and information provided on the sign(s) must be reviewed and approved by the Planning and Environmental Review Director, or designee, before the City issues any LUP. Monitoring: The Planning and Environmental Review Director, or designee must ensure measures are printed on plans and shall periodically inspect the site to verify compliance. SBAPCD Inspectors will respond to nuisance complaints.

GENERAL CONDITIONS

93. Prior to the issuance of a grading permit or commencement of any work and/or development authorized by this permit, the applicant must obtain from the City's Planning and Environmental Review Department a Land Use Permit. Prior to issuance of a Land Use Permit, the applicant must pay all applicable processing fees in full.

94. The applicant must obtain from the City's Planning and Environmental Review Department all Building Permits required by Title 15 of the Goleta Municipal Code prior to the construction, erection, moving, alteration, enlarging, rebuilding of any building, structure, or improvement, or any other action(s) requiring a Building Permit pursuant to Title 15 of the Goleta Municipal Code.

95. The applicant must obtain a grading permit prior to the commencement of any grading activity related to any use and/or development authorized by this permit.

96. These Conditions of Approval must be printed in their entirety on or attached to all plans or attached submitted for issuance of any LUP or Building Permit for the project.

97. This permit runs with the land and the rights and obligations thereof, including the responsibility to comply with these Conditions of Approval and must be binding upon successors in interest unless or until this permit expires pursuant to Condition of Approval 99 or is expressly abandoned in writing by the applicant/owner.

98. This permit is granted for the property/parcel(s) of record as which the project is located and is not transferable.

99. Violation of any of these Conditions of Approval is unlawful, prohibited and a violation of the Goleta Municipal Code. The City reserves the right to initiate civil, criminal and/or administrative enforcement, or after notice and a public hearing, to revoke this permit or modify these Conditions of Approval if it is found that there is a violation of these Conditions of Approval or the Goleta Municipal Code or that the project operates as or creates a public nuisance. This Condition of Approval is not intended to, nor does it limit in any manner whatsoever the ability of the City to take appropriate enforcement actions

100. The applicant must be responsible for the completeness and accuracy of all plans, forms and supporting materials submitted in connection with the project. Any errors or discrepancies found therein are a violation of this permit.

101. Any new, expanded, or changed use on the project site must be subject to City review and approval. The City must determine whether the new, expanded, or changed use on the project site requires the applicant/owner to seek additional approval, permits, or other action by the City. Failure of the applicant/owner to obtain the above-described review and approval of the City is a violation of this permit.

102. The applicant/owner must, at applicant/owner's expense, defend, indemnify and hold harmless the City and its agents, officers and employees from any claim, action, or proceeding against the City or its agents, officers, or employees to attack, review, set aside, void, or annul, in whole or in part, the City approval of this permit or any condition attached hereto or any proceedings, acts, or determinations taken, done, or made prior to the approval of this permit that were part of the approval process.

103. In the event that any Condition of Approval imposing a fee, exaction, dedication or other mitigation measure is challenged by the applicant/owner in an action filed in a court of law or threatened to be filed therein which action is brought within the time period provided by law, this permit must be suspended pending dismissal of such action, the expiration of the limitation period applicable to such action, or final resolution of such action. If any Condition of Approval is invalidated by a court of law, the project must be reviewed by the City and substitute Conditions of Approval may be imposed.

104. This permit will expire five (5) years after approval, unless before the expiration date, substantial physical construction has been completed or a Time Extension has been applied for by the applicant. The decision maker with jurisdiction over the project may, upon good cause shown, grant a time extension for one year. If the applicant requests a Time Extension, the project may be revised to include updated language to standard conditions and/or may include revised/additional conditions which reflect changed circumstances or additional identified project impacts. Fees must be those in effect at the time of issuance of a Land Use Permit

105. Revised plans and building elevations incorporating all conditions of approval for this project must be coordinated and submitted to Planning and Environmental Review as one package in accordance with plan check requirements. All plans, including site, grading,

landscape, irrigation, mechanical, and street improvement plans must be reviewed for condition compliance before issuance of any permits such as grading, building, or encroachment permits. Any change to the size, colors, construction materials, design or location of any structure onsite, or other site or landscape improvements, except to the extent such changes are deemed in substantial conformity, must not be made without prior City approval.

106. All plans submitted for Land Use Permit issuance, building, and/or grading permit must include all applicable conditions of project approval.

107. Planning and Environmental Review Compliance Review is required. The applicant agrees to pay Compliance Review fees before Land Use Permit issuance to cover full costs of compliance monitoring. The decision of the Director must be final in the event of any dispute.

108. Before approval of the first Land Use Permit for grading and/or buildings for development, the applicant must pay all applicable City of Goleta permit processing fees in full. Before the start of any work onsite, the applicant must request and attend a pre-construction meeting that includes monitor(s), project superintendent, architect, subcontractors, as well as City representatives including staff from Planning and Environmental Review and Public Works.

109. The applicant must pay the statutory school fees in effect at the time of issuance of each building permit to the appropriate school districts and/or must mitigate school impacts by other measures consistent with state law. The applicant must submit final square footage calculations and a copy of the fee payment to the school districts before issuance of each building permit.

110. All work within the public right-of-way, including without limitation utilities and grading, must be explicitly noted on the building plans. The applicant must obtain all necessary encroachment permits from the City of Goleta Public Works Department before issuance of building permits for all work and construction that encroach within or over the public right-of-way, including, without limitation, water meters, backflow devices, signs, and curb/gutter/sidewalk improvements.

111. Any temporary building, trailer, commercial coach, etc. installed or used in connection with construction of this project must comply with the requirements of Section 35-281, Article III of the City's Municipal Code.

112. All trees planted or preserved in accordance with this approval must be maintained according to the latest adopted American National Standard Institute (ANSI) guidelines for tree care, referred to as ANSI A300 (various parts), and the companion publications "Best Management Practices" published by the International Society of Arboriculture (ISA). In addition, all trees onsite designated for retention are subject to the Tree Protection Plan as described in Condition # 2. Any pruning of trees, other than light pruning of no more than 25 percent (25%) of the foliage within any one growing season, requires review and approval of the City of Goleta before commencement of the work.

113. The applicant is responsible for informing all subcontractors, consultants, engineers, or other business entities providing services related to the project of their responsibilities to comply with all pertinent requirements herein in the City of Goleta Municipal Code, including the requirement that a business license be obtained by all entities doing business in the City as well as hours of operation requirements in the City.

114. When exhibits and/or written conditions of approval are in conflict, the written conditions must prevail.

115. The applicant must pay all applicable development impact fees under the City of Goleta Development Impact Fee program in full, including without limitation, Quimby/Park, Transportation, fire protection, fire facility, library, and public administration and sheriff fees. The applicant must pay required Santa Barbara County Fire Department fees as outlined in their letter of June 8, 2012. Payment amounts must be based on the fees in effect and applicable at time of Land Use Permit approval.

116. The applicant must be responsible for the completeness and accuracy of all forms and supporting materials submitted in connection with any application. Any errors or discrepancies found therein may constitute grounds for the revocation of any approvals.

END OF CONDITIONS

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DATE 6-12-18
REVISIONS

LICENSED ARCHITECT RICHARD T. THORNE No. C17853 Exp. 12-31-18 STATE OF CALIFORNIA

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STANDARD NOTES FOR R3 RESIDENTIAL CONSTRUCTION

STANDARD NOTES
FOR
R-3 RESIDENTIAL CONSTRUCTION

Revised March 24, 2017
2016 CRC, CPC, CMC, CEC, CalGreen & CBSC (effective January 1, 2017)

THE FOLLOWING STANDARD NOTES AND PRESCRIPTIVE CONSTRUCTION REQUIREMENTS ARE APPLICABLE TO MOST STANDARD (PRESCRIPTIVE) RESIDENTIAL CONSTRUCTION METHODS AND ARE NOT INTENDED TO REPLACE ANY MORE RESTRICTIVE MINIMUM LIST GIVEN ON THE STAMP PLANS. THESE REQUIREMENTS ARE IN ADDITION TO, (OR, AS ALL CODE SECTIONS).

THE FOLLOWING STANDARD NOTES ARE INTENDED TO BE APPLIED (TAPE) ON TOP OF THE FINAL APPROVED PLANS TO A SET OF PLANS TO ELIMINATE THE NEED TO MAKE THESE CORRECTIONS DURING THE PLAN CHECK PROCESS. THESE NOTES SUPPLEMENT THE PLAN CHECK PROCESS AND THE APPROPRIATE REQUIREMENTS ON THE PLANS. THESE NOTES ARE NOT INTENDED TO CREATE A CONFLICT WITH THE OTHER AND MINIMUM CODE REQUIREMENTS. WHERE A CONFLICT EXISTS BETWEEN THESE NOTES AND THE PLANS, THE SOMETIMES TAKE PRECEDENCE OVER(?) FOR MINIMUM CODE COMPLYING CONSTRUCTION PURPOSES.

BUILDING PLANNING (Ch 2):

FIRE RESISTANT CONSTRUCTION [R301]

1. Penetrations [R302.4.1, 2]:
   a. The annular space of through or membrane penetrations shall be filled (penetration Concept).
   b. Steel electrical boxes are limited to 16 sq. inches. The maximum annular space is 1/8 inch.
   c. Listed electrical boxes shall be installed in accordance with their listing.
2. Garage Opening Protection [R302.5]:
   a. Openings from a garage directly into a sleeping room are not permitted.
   b. Other openings shall be solid wood doors not less than 1-3/8 inch; solid or honeycomb core steel doors not less than 1-3/8 inch or 20-minute fire-rated equipped with self-closing and self-latching devices.
3. Duct Penetration [R302.5.2]:
   a. Ducts in the garage and ducts penetrating the walls or ceiling separating the dwelling from the garage shall be constructed of a minimum No. 26 gage sheet steel and have no opening into the garage.
4. Dwelling/Garage (or carport) Fire Separation [R302.6]:
   a. Separation walls (residential & attach - W? grp. board).
   b. Habitable rooms above - 5/8" grp. board.
5. Hardscaping [R302.11]:
   a. In combustible construction, fireblocking shall be installed to cut off concealed draft openings (both vertical and horizontal) and shall form an effective barrier between floors, between a top story and a roof or attic space in accordance with the following:
   b. In concealed spaces of stud walls and partitions, including furred spaces, and parallel rows of studs or staggered studs vertically at the ceiling and floor levels and horizontally at intervals not exceeding 10 feet.
   c. At overexcavation between concealed vertical stud wall or partition spaces and concealed horizontal spaces created by an assembly of floor joist or trusses and concealed spaces such as attic or soffits, cove ceilings, cove ceiling and similar locations.
   d. Concealed spaces between stair stringers at the top and bottom of the run.
   e. Openings around vents, pipes, ducts, chimneys and fireplace at ceiling and floor levels.

LIGHT, VENTILATION AND HEATING [R303]

6. All habitable rooms shall have an aggregate glazing area of not less than 8% of the floor area. Natural ventilation shall be through approved opening to the outdoor air. The minimum openable area to the outdoors shall be 4% of the floor area being ventilated. The following exceptions may be applicable [R303.1]:
   a. The glazed area need not be openable where the opening is not required for ventilation purposes and a whole-house mechanical ventilation system is installed in accordance with the CMC.
   b. The glazed area need not be installed in rooms where the above exception is satisfied and artificial light is provided capable of producing an average illumination of 6 foocandles over the area.
7. Bathrooms, containing a bathtub, shower or tub/shower combination shall be mechanically ventilated for purpose of humidity control. Window operation is not a permissible method of providing bathroom volumes for humidity control. [R303.3]
8. Interior and exterior stairways shall have artificial lighting. [R303.7, R311.7.8]
9. Where the interior hallway has six or more risers, there shall be a wall switch at each floor.
10. The illuminance of interior stairways shall be controlled from inside the dwelling unit.

ROOM AREAS [R304]

11. Every dwelling unit shall have at least one habitable room of not less than 120 sq. ft of gross floor area.
12. Rooms other than kitchen, and baths shall have a floor area of not less than 70 sq. ft.
13. Except for kitchens, habitable rooms shall not be less than 7 ft. in any horizontal dimension.

CEILING HEIGHT [R305]

14. Habitable space, hallways, bathrooms, toilet rooms, laundry rooms and portions of basements containing these spaces shall have a ceiling height of not less than 7 ft.

TOILET, BATH AND SHOWER SPACES [R307]

15. Bathtub and shower floors and walls above bathtubs with installed shower heads and in shower compartments shall be finished with nonabsorbent surface. Such wall surfaces shall extend to a height of not less than 6 ft.

SAFETY GLAZING [R308]

16. Permanently identified safety glazing shall be provided in the following locations:
   a. Glazing in all doors, except decorative or a 3" dia.
   b. Glazing within a 24 inch arc of a door.
   c. Enclosures for hot tubs, whirlpools, saunas, steam rooms, bathtubs and showers. Glazing in any portion of a building wall enclosing these compartments where the bottom exposed edge of the glazing is less than 60 inches above a standing surface.
   d. Panels over 9 sq. ft, having the bottom edge less than 18 inches above the floor and top edge greater than 36 inches above the floor and a walking surface within 36 inches.
   e. Glazing in guards and railing including structural baluster panels and all nonstructural in-fill panels.
   f. Glazing in walls and lesser enclosing indoor and outdoor swimming pools, hot tubs and spas.
   g. Glazing adjacent to stairways, landing and ramps within 36 inches horizontally of a walking surface.
   h. Glazing adjacent to the bottom stair landing and within 60" horizontally.

FOUNDATIONS AND ESCAPE AND RESCUE [R310]

17. Basements, habitable attics and every sleeping room shall have at least one operable emergency escape and rescue opening meeting the following conditions:
   a. Bottom of the clear opening not greater than 44 inches above the floor.
   b. The opening shall open directly into a public way or to a yard or court that opens to a public way.
   c. Openings above the first story shall have a minimum net clear opening of 5.7 sq. ft. Other escape openings shall have a minimum clear opening of 5 sq. ft.
   d. Minimum opening height shall be 24 inches.
   e. Minimum opening width shall be 20 inches.
   f. Opening shall be operational from the inside without the use of keys, tools or special knowledge.
18. Window wells shall:
   a. Have a minimum horizontal area of 9 sq. ft.
   b. Have a minimum horizontal projection and width of 36 inches.
   c. Allow the escape opening to be fully opened.
   d. Have proper drainage.
19. Window wells with a vertical depth greater than 44 inches shall:
   a. Be equipped with a permanently affixed ladder or steps
   b. Ladders or steps shall have an inside width of at least 12 inches.
   c. Project at least 3 inches from the wall.
   d. Spaced not more than 18 inches on center vertically.

DOORS AND GLAZINGS [R311.2-3]

20. The egress door from occupied dwelling units:
   a. Shall provide a minimum clear width of 32 inches
   b. Shall be readily openable from the inside without the use of a key or special knowledge or effort.
21. There shall be a floor or landing on each side of each exterior door:
   a. Width of each dimension of 36 inches in the direction of travel.
   b. Landing shall not be more than 1-1/2" lower than the top of the threshold.
   c. Or, the exterior landing shall not be more than 7-3/4 inches below the top of the threshold provided the door does not swing over the landing.
22. A landing is not required where a stairway of two or fewer risers is located on the exterior side of the door, provide the door does not swing over the stairway.

STAIRWAYS [R311.7]

23. Stairways shall not be less than 36 inches in clear width.
24. The maximum riser height shall be 7-3/4 inches and the minimum tread depth shall be 10 inches.
25. Dimensional uniformity: The greatest riser height within the excess or tread depth within any flight of stairs shall not exceed the smallest by more than 3/8 inch. [R311.7.4]
26. Open risers are restricted to permit a 4" sphere.
27. Enclosure Under Stairs [R311.7.7]:
   a. The enclosed accessible spaces under stairways shall be protected on the enclosed side with 1/2-inch gypsum board.
28. Handrails [R311.7.8]:
   a. Stairways with 4 or more risers require a handrail on one side.
   b. Handrail height above the stair tread nosing shall be uniform, not less than 34 inches and not more than 38 inches.
   c. Handrails shall be continuous, shall be returned or terminate in newel posts and have a space of not less than 1-1/2 inches between the wall and the handrail.
   d. Grip size [R311.7.7.3]:
      i. Handrails with a circular cross-section shall have an outside diameter of at least 1.25 inches and not greater than 2 inches.
      ii. If not circular, the handrail shall have a perimeter dimension of at least 4 inches and not greater than 6.25 inches with a maximum cross-section dimension of 2.25 inches.
      iii. Handrails with a perimeter greater than 6-1/4 inches shall have a graspable finger recess on both sides of the profile.

GUARDS (GUARDRAILS) [R312]

29. Where Required [R312.1]:
   a. Guards shall be placed along open-sided walking surfaces, stairways and landings located more than 30 inches above the adjacent floor or grade below.
30. Height [R312.2]:
   a. Guards shall form a protective barrier not less than 42 inches in height.
   b. Guards whose top rail also serves as a seat handrail shall have a height not less than 34 inches and not more than 38 inches.
31. Opening Limitations [R312.3]:
   a. Open guards shall have a balusters or ornamental pattern such that 4-inch diameter sphere cannot pass through any opening.
   b. The triangular openings formed by the riser, tread and bottom rail at the open side of a stairway shall be a maximum size such that a 6-inch sphere cannot pass.
   c. Opening for required guard on the sides of stair treads shall not allow a sphere of 4.75 inches to pass.
32. Window Fall Protection [R312.2]:
   a. Where openings of an operable windows are located more than 72 inches above the finished grade, the lowest pass of the clear opening shall be a minimum of 24 inches above the floor.

AUTOMATIC FIRE SPRINKLER SYSTEMS [R313]

33. New Construction Only: An automatic residential fire sprinkler system shall be installed in one and two family dwellings.

ROOF-CEILING CONSTRUCTION [R317]

34. Open chords are restricted to permit a 4" sphere.
35. Enclosure Under Stairs [R317.1]:
   a. The enclosed accessible spaces under stairways shall be protected on the enclosed side with 1/2-inch gypsum board.

SMOKE ALARMS [R314]

36. Smoke alarms shall be listed per UL 217, installed per NFPA 72 and shall be Calif. State Fire Marshal listed.
37. Smoke alarms in new construction shall be installed, maintained and connected to the following locations/manner [R314.3, .4, .5]:
   a. In each sleeping room.
   b. Outside each separate sleeping area in the immediate vicinity of the bedrooms.
   c. On each additional story of the dwelling, including basements and split levels.
   d. When more than one smoke alarm is installed, the alarm devices shall be interconnected such that the actuation of one alarm will activate all the alarms.
   e. Smoke alarms shall receive their primary power from the building wiring and shall be equipped with a battery backup.
38. In existing dwellings where a permit for alterations, repairs or additions exceed $1000 smoke alarms shall be installed, maintained and connected in the following locations/manner [R314.2.1, .4, .6]:
   a. The dwelling shall be equipped with smoke alarms located as required for new construction.
   b. Smoke alarms are permitted to be solely battery operated where no construction is taking place.

CARBON MONOXIDE (CO) ALARMS [R315]

39. For new dwelling unit construction within an attached garage or fuel-burning appliance, an approved carbon monoxide alarm shall be installed, maintained and connected in the following location/manner:
   a. Outside of each sleeping area in the immediate vicinity of the bedrooms.
   b. On every level of a dwelling unit including basements.
   c. Where more than one CO alarm is installed, the alarm shall be interconnected in a manner that activation of one alarm shall activate all of the alarms.
40. In existing dwellings where a permit for alterations, repairs or additions exceed $1000 CO alarms shall be installed, maintained and connected in the following location/manner [R314.3, .4, .6]:
   a. The dwelling shall be equipped with CO alarms located as required for new construction.
   b. CO alarms are permitted to be solely battery operated where no construction is taking place.

PROTECTION OF WOOD AGAINST DECAY [R317]

40. Protection against decay shall be provided by the use of naturally durable or preservative-treated wood for:
   a. Wood joists or the bottom of wood structural floor without joists are closer than 18 inches; wood girders closer than 12 inches to the earth.
   b. [2304.11.1.2].
   c. Wood framing members, including wood sheathing that rest on exterior foundation walls and are less than 8 inches from exposed earth. [2304.11.2.2].
   d. Sills and Sleepers on a concrete or masonry slab that is in direct contact with earth. [2304.11.2.4]
   e. The ends of wood girders entering exterior masonry or concrete walls shall be provided with a 0.1inch air space. [2304.11.2.5]
41. Clearance between wood siding and earth on the exterior of a building shall not be less than 6 inches. [2304.11.2.6]
42. Permanent wood construction in contact with ground or exposed and free-standing wood shall be less dipped non-coated galvanized steel, stainless steel, silicon bronze or copper. [R317.3.1]
43. Wood construction shall be protected from termites by:
   a. Preconstruction-or-post-construction soil treatment with a quality mark of an approved testing agency. Field-cut ends, notches and drilled holes shall be retreated.
   b. Naturally durable termite-resistant wood.

EXTERIOR WINDOWS AND DOORS [R319]

44. For projects in the State identified Very High Fire Hazard Severity Zones, see the separate VHFHSZ Standard Notes

FOUNDATIONS [R403]:

CONCRETE [R402.2]

45. Minimum Concrete compressive strength shall be 2500 psi

UNDERFLOOR VENTILATION AND ACCESS [R408]

46. The space between the bottom of the floor joists and the earth under any building shall be provided with ventilation openings through foundation or exterior walls. The minimum net area of ventilation openings shall not be less than 1 sq. foot for each 150 sq. feet of crawl-space area. [R406.1 & 2]
47. Ventilation openings shall be covered with perforations not exceeding ¼ inch.
   a. Access to all under-floor Spaces [R408.4]:
   b. Access shall be provided with a minimum of one access opening not less than 18 inches by 24 inches through the floor or 18 inches by 24 inches of located as a wall.

FLOORS [R5-3]:

50. Drilling and Notching [R502.8]:
   a. Notches in solid lumber joists, rafters and beams shall not extend one-sixth of the depth.
   b. Shall not be longer than one-third of the depth.
   c. Shall not be located in the middle one-third of the span.
   d. Holes shall not extend one-third the depth.
   e. Shall be no closer than 2 inches to the top or bottom.
   f. Shall not be closer than 2 inches to a notch.
   g. Cuts, notches and holes in trusses, composite or glue-laminated members or I-joists are prohibited except where permitted by the manufacturer.
51. Post and beam or girder construction shall be positively connected against uplift and displacement. [R403]
52. Wood trusses shall be designed by an engineer and shall be submitted for review prior to installation. [R502.11]

WALL CONSTRUCTION [R-8]:

53. Shall be continuous from support at the sole plate to a support at the top plate. [R602.3]
54. Top Plates [R602.3.2]:
   a. Wood stud walls shall be capped with a double top plate to provide overlapping at corners and intersections with bearing partitions.
   b. End joints shall be offset at least 24 inches.
55. Bottom/Sole Plates shall have full bearing on nominal 2X or larger plate/sills having a width at least equal to the stud. [R602.3.4]
56. Drilling and Notching Studs [R602.6]:
   a. Exterior wall or bearing walls may be cut or notched to a depth not exceeding 25% of its width.
   b. Any stud may be bored/drilled not more than 40% of the width.
57. Top plates cut, drilled or notched more than 50% of its width, shall have a galvanized metal tie not less than 0.054 inch thick and 1-1/2 inches wide. The plate shall extend a minimum of 6 inches past the opening. [R602.6.1]

EXTERIOR WINDOWS AND DOORS [R703]

58. Installation, Testing and Labeling. Exterior windows and sliding doors shall be tested and labeled and installed per manufacturer's recommendations. [R609.1, 2, 7]

WALL COVERINGS (Ch 7):

59. Water-resistant Gypsum Backing Board [R702.3.7]:
   a. May be used on ceiling where framing spacing does not exceed 12 inches on center for 16 inch and 16 inches on center for 24 inch.
   b. Shall not be installed over Class I or II vapor retarder in a shower or tub compartment.
   c. Cut or exposed edges, including those at wall intersections shall be sealed.
   d. Shall not be used where there will be direct exposure to water or continuous humidity.
60. Water-resistant: The wall system shall be placed a minimum of 6 inches above the earth or 2 inches above paved areas and shall allow integral weep holes. [R703.2.1]
61. Adhered Masonry Veneer [R703.7]:
   a. Adhered masonry veneer shall be installed in accordance with the manufacturer's instructions.
   b. On exterior and weather, adhered masonry veneer shall be installed a minimum of: 4 inches above earth; 2 inches above paving.
   c. Flashing at Penetration: A corrosion-resistant screed or flashing with a minimum vertical flange of 3-1/2 inches shall be installed to extend a minimum of 1 inches below the sheathing plane. [R703.8 & .12]

ROOF-CEILING CONSTRUCTION [R-6]

62. Roof Drainage: In areas where expansive or collapsible soils are known to exist, a controlled method of water disposal from roofs shall be provided that will collect and discharge roof drainage in the ground surface at a point at least 5 feet from the foundation. [R801.5]

ROOFS/FIRE VENTILATION [R806]

63. Enclosed Attic/Rafter Spaces:
   a. Enclosed attics and enclosed rafter spaces formed where ceiling are applied directly to the underside of roof framing members (cathedral ceilings) shall have cross ventilation for each separate space by ventilating openings.
   b. Exterior openings shall be covered with corrosion-resistant wire cloth not exceeding ¼ inch.
   c. Minimum Area [R806.2]:
      i. The net free ventilating area shall not be less than 1/150 of the area of the space ventilated.
      ii. As an alternative, the net free area may be reduced to 1/300 where 40-50% of the required ventilation areas are provided in the upper portion of the attic, located no more than 3 feet below the ridge.
64. Vent and insulation clearance. [R806.3]
   a. Where eave or cornice vents are installed, insulation shall not block the free flow of air. A minimum of a 1-inch space shall be provided between the insulation and the roof sheathing.
65. Unvented Attic Assemblies may be used if a design is submitted for review. [R806.4]

ATTIC ACCESS [R807]

66. An opening not less than 22 inches by 30 inches with a clear headroom of 30 inches, shall be provided in any combustible ceiling or roof construction attic area having a clear height of over 30 inches and a area exceeding 30 square feet.
67. The opening shall be located in a hallway or other readily accessible location.
68. If located in a wall, the opening shall be a minimum of 22 inches wide by 30 inches high.
69. See CPC Sec. 508.1, CMC 304.4 and CEC 210.70 and 210.127 for notes for access to mechanical equipment in the attic.

ROOF ASSEMBLIES [R-9]:

70. Roof Classification shall be a minimum of Class A, B or C and shall be installed in accordance with UL 790 or ASTM E 108 and identified and verified in the field prior to installation. [R902.1]

71. Weather Protection [R905]:
   a. Roof decks shall be covered with an approved roof covering secured to the structure.
   b. Flashing shall be installed in a manner to prevent moisture entering the wall and roof.
   c. Where flashing is of metal, the metal shall be corrosion resistant with a thickness of not less than 0.019 inch (No. 26 galvanized sheet).

REQUIREMENTS FOR ROOF COVERINGS [R905]

72. All roof materials shall be installed per the manufacturer's installation instructions.
73. Asphalt Shingles [R905.2]:
   a. Asphalt shingles shall be fastened to solidly sheathed decks.
   b. Deck slope shall be two in 12 or greater.
   c. Asphalt shingles shall be secured to the roof with not less than four fasteners per strip shingle or two fasteners per individual shingle.
   d. A Drip Edge shall be provided at eaves and gables.
74. Clay and Concrete Tile [R905.3]:
   a. Concrete and clay tile shall be installed only over wood sheathing or approved structural sheathing boards
   b. Deck Slope minimum 2-12 [12].
   c. All Roof slopes: Four fastener per tile.
75. Metal Roof Shingles [R905.4]:
   a. Metal roof shingles shall be applied to solid deck.
   b. Deck slope shall not be < 3-12.
76. Mineral-surfaced Roll Roofing [R905.5]:
   a. Shall be fastened to solidly sheathed decks.
   b. Deck slope shall be a minimum of 1-12.
77. Wood Shingles [R905.7]:
   a. Wood shingles shall be installed on solid or spaced sheathing.
   b. Deck slope shall 3-12 or greater.
78. Wood Shakes [R905.8]:
   a. Wood shakes shall be installed on solid or spaced sheathing.
   b. Deck slope shall be 3-12 or greater.
79. Built-up Roofs [R905.9]:
   a. Design Slope minimum: ¼-12 (2%).
80. Metal Roof Panels [R905.10]:
   a. Metal roof panel coverings shall be applied to solid or spaced sheathing.
   b. Slopes:
      i. Lapped, nonsoldered seams without sealant: 3-12.
      ii. Lapped, nonsoldered seams with sealant: ¼-12.
      iii. Standing seam: ¼-12.

CHIMNEYS AND FIREPLACES [R-10]:

CHIMNEY TERMINATION [R1006.1]

81. Chimneys shall extend at least 2 feet higher than any portion of a building within 10 feet, but shall not be less than 3 feet above the accessible roof.
82. All chimneys attached to any appliance or fireplace that burns solid fuel shall be equipped with an approved spark arrester meeting the following:
   a. The mesh free free area of the spark arrester shall not be less than four times the area of the outlet.
   b. The spark arrester screen shall have heat and corrosion resistance equivalent to 12 gage wire, 19 gage galvanized wire or 24 gage stainless steel.
   c. Opening shall not permit the passage of spheres having a diameter larger than ½ inch and shall not block the passage of spheres having a diameter of less than 3/8 inch.
   d. The Spark Arrester shall be accessible for cleaning and shall be removable to allow for cleaning of the flue.

FACTORY-BUILT FIREPLACES/CHIMNEYS [R1004/1005]

83. Decorative Shrouds shall not be installed except where the shrouds are listed and labeled for use the specific factory-built fireplace/chimney system and installed in accordance with the manufacturer's instructions.

PLUMBING SYSTEMS [R504-CPC]:

GENERAL REGULATIONS [Ch 3]

84. All pipe, pipe fittings, traps, fixtures, material and devices used in a plumbing system shall be listed or labeled by a listing agency and shall conform to approved applicable recognized standards. [301.1]
85. Piping subject to corrosion, erosion, or mechanical damage shall be protected in an approved manner. [312.5]
86. Plastic and copper piping penetrating a framing members in within one inch of the exposed framing shall be protected by steel wall plate/shoe/barrier not less than 0.0478 inches in thickness. The steel wall plate shall extend along the framing member a minimum of 4-1/2 inches beyond the outside diameter of the piping or tubing. [312.5/218.5.3]

PLUMBING FIXTURES AND FIXTURE FITTINGS [Ch 4]

87. Water closet or bidet shall [402.2]:
   a. Not be set closer than 15 inches from its center to any side wall or obstruction nor closer than 30 inches center to center to any fixture.
   b. Have a clear space in front of not less than 24 inches.
88. Water-Conserving Fixtures and Fittings [407.4?2]:
   a. Water closets (single & dual flush) shall have an average consumption of not more than 1.28 gallons of water per flush.
   b. Kitchen Faucets shall not exceed 1.8 gallons/2.2 (temporary) gpm.
   c. Lavatory Faucets shall not exceed 1.2 gpm.
   d. Shower Heads shall not exceed 2.0 gallons per minute. [408.2]
   e. More restrictive measure may be required by selected measures from the CalGreen Code , Sec. 4.303.
89. Shower compartments shall have a minimum finished interior of 1,024 square inches and shall also be capable of encompassing a 30-inch circle to a height of 70 inches above the drain. [408.4]
90. Shower control valves and showerheads shall be located on the sidewall of shower in other approved arrangements. [408.9]
91. Limitation of The Water in Bathtubs and Whirlpool Bathtubs. The maximum hot water temperature discharging from the bathtub and whirlpool bathtub filler shall be limited to 120 degrees F. The water heater thermostat shall not be considered a control for meeting this provision. [409.4]
92. Installation of Fixture Fittings [417.5]:
   a. Where two separate handles control the hot and cold water, the left-hand control shall control the hot water.
   b. Single handle mixing valves shall have the flow of hot water correspond to the marking on the fitting.
   c. Shower and tub-shower combinations shall be provided with individual control valves of the pressure balance, thermostatic, or combination pressure balance/thermostatic mixing valve that provide scald and thermal shock protection conforming to ASSE 1016 or ASME A112.18.1. Handle positions shall be adjusted to deliver a maximum mixed water setting of 120 degrees F. [408.3]

WATER HEATERS [Ch 5]

93. Water heaters shall be provided with approved overpressure and over temperature protection. [30-1.4 & .5]
94. A minimum of 18 inches of indoor Combustion Air shall be provided within 12 inches of the top and within 12 inches of the bottom. [306.2]
95. All new and replacement water heaters shall be anchored or strapped to resist horizontal displacement due to earthquake motion. Strapping shall be at points within the upper one-third and lower one-third. At the lower points, a minimum distance of 4 inches shall be maintained above the controls. [507.2]
96. A water heater supposed from the ground shall rest on level concrete or other approved materials not less than 2 inches above the adjoining ground level. [507.4]
97. When a water heater is located in an area where damage may result from a leaking water heater, a watertight pan of corrosion resistant materials shall be installed beneath the water heater with a minimum three-quarter inch drain to an approved location. [507.5]
98. Installation in Residential Garages [507.13]:
   a. Shall be installed on thin all burners and burner-ignition devices are located not less than 18 inches above the floor.
   b. Shall be protected so it is not subject to mechanical damage shall be guarded against such damage by being installed behind protective barriers, elevated or located out of the path of vehicles. Protection may require the installation of a 3 inch steel pipe, 4" curb or wheel stop.

WATER SUPPLY AND DISTRIBUTION [Ch 6]

99. Backflow Prevention [602.3 & 603]:
   a. Potable water outlets with hose attachments (other than water heater drains, boiler drains and clothes washer connections) shall be protected by a non-removable hose-bibb-type backflow preventer. [603.5.7]
100. Pressure Relief Valve Drains shall be terminated in an approved location. [608.5]

SANITARY DRAINAGE [Ch 7]

101. Horizontal drainage piping shall be run in practical alignment and a uniform slope of not less than ¼ inch per foot (2%). [708, 710.1]
102. Fixtures installed on a floor level that is lower than the next upstream manhole cover shall be protected from backflow of sewage by installing an approved type backwater valve. [710.1]
103. Drainage piping serving fixtures that are locate below the crown level of the main sewer shall discharge into an approved wastewater sump or receiving tank, where it shall be discharge by an approved system. [710.2]

VENTS (Ch 9)

104. Venting for Island Fixtures [909.1]:
   a. Traps for island sinks shall be roughed in above the floor and may be vented in the connecting wall, as much as possible, but not less than the drainboard height and then returning to downward and connection to the horizontal stub drain immediately downstream from the vertical fixture drain.

STORM DRAINAGE [Ch 11]

105. Stone Water shall drain away from buildings and away from adjoining property and shall not create a nuisance. [1101.2]
106. Where provided and required, Secondary Roof Drains shall be not less than two inches above the roof surface and shall have a separate piping system. [1101.12.2.2 & 1101.11.2.5.1]

FUEL GAS PIPING [Ch 12]

107. Underground piping systems shall be installed with a minimum of 18 inches of cover, or 12 inches if damage is not likely to occur. [1210.1.1]
108. Concealed Piping: A steel rather barrier are less than 0.0508 inches thick shall be installed between the tubing and the finished wall and extends at least 4 inches beyond concealed penetrations of plates, fire stops and studs. [1210.3.3]
109. An accessible gas shutoff valve shall be provided upstream of each gas pressure regulator. [1210.11]
110. Gas appliances shall have an accessible manual shutoff value within six feet of the appliance. [1210.5]

MECHANICAL SYSTEMS [2016 CMC]:

111. Location & Protection Against Damage [505]:
   a. Equipment generating a glow, sparks or flame shall be installed with pilots and burners or heating elements and ignitions at least 18 inches above the floor level. [505.1]
   b. Appliances installed in garages subject to mechanical damage shall be guarded against damage. Protection may consist of the installation of a 3-inch steel pipe, 4" curb or wheel stop or other means [505.1.1]
112. Electrical Connections [505.4]:
   a. Equipment shall have a positive means of disconnect adjacent to and in sight from the equipment served.
   b. A 120 V receptacle shall be located within 25 feet of the equipment for service and maintenance purposes.

EXHAUST SYSTEMS [Ch 5]

113. Clothes Dryers [504.4]:
   a. Moisture exhaust ducts shall terminate outside the building and shall be equipped with a backdraft damper.
   b. A minimum 4 inch metal duct with smooth interior surfaces shall be provided.
   c. When installed in a closet, a minimum opening of 100 square inches for makeup air shall be provided in the door or other location.
   d. Ducts shall not exceed a total combined horizontal and vertical length of 14 feet, including two 90-degree elbows unless permitted by the manufacturer.

COMBUSTION AIR [Ch 7]

114. The minimum indoor combustion air volume for gas utilization equipment shall be 50 cf per 1000 Btu/hour. [701.4.1]

CHIMNEYS AND VENTS [Ch 8]

115. Masonry, Metal and Factory-built Chimneys: [802.2]
   a. Factory-built Chimneys shall be installed per their listing and manufacturer's instructions.
   b. Masonry and Metal chimneys shall be built and installed in accordance with NFPA 211.
   c. A chimney shall extend at least 3 feet above the highest point where it passes through a roof and at least 2 feet higher than any portion of a building within 10 feet. [802.5.4]
   d. Decorative shrouds shall not be installed at the termination of factory-built chimneys except where such shrouds are listed and labeled for use with the specific factory-built chimney system and are installed in accordance with manufacturers' installation instructions. [802.5.4.3]
116. Type B & BW gas vents shall terminate: [802.6]:
   a. Above the roof surface with a listed cap or listed roof assembly.
   b. Gas vents 12" of smaller may terminate 1 ft. above the roof provided they are at least 8 ft from a vertical wall.
   c. Decorative shrouds shall not be installed at the termination of gas vents except where such shrouds are listed.

INSTALLATION OF SPECIFIC APPLIANCES [Ch 9]

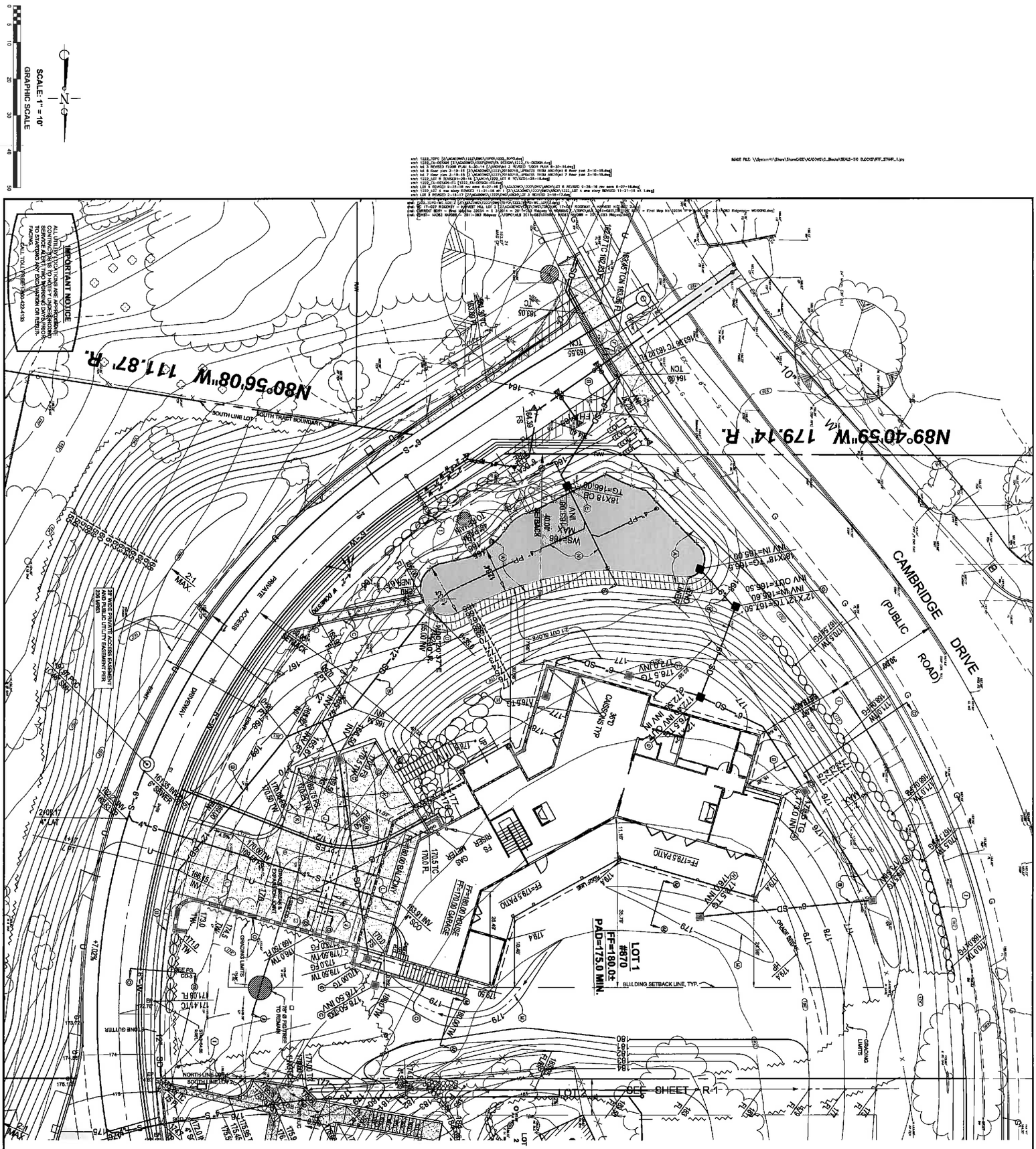
117. Decorative appliances or vented gas fireplaces shall not be installed in bathrooms or bedrooms unless the appliance is listed and the bedroom or bathroom has the required volume. [911, 912]
118. Household Cooking Appliances [931.3, 921.4]:
   a. Cooking appliances shall have a vertical clearance above the cooking top of not less than 30 inches to combustible material or metal cabinets.
   b. Horizontal clearances shall be the specified by the permanent marking on the appliance.
119. Wall Furnaces: [927]
   a. Listed wall furnaces shall be installed in accordance with their listing and the manufacturers' instructions.

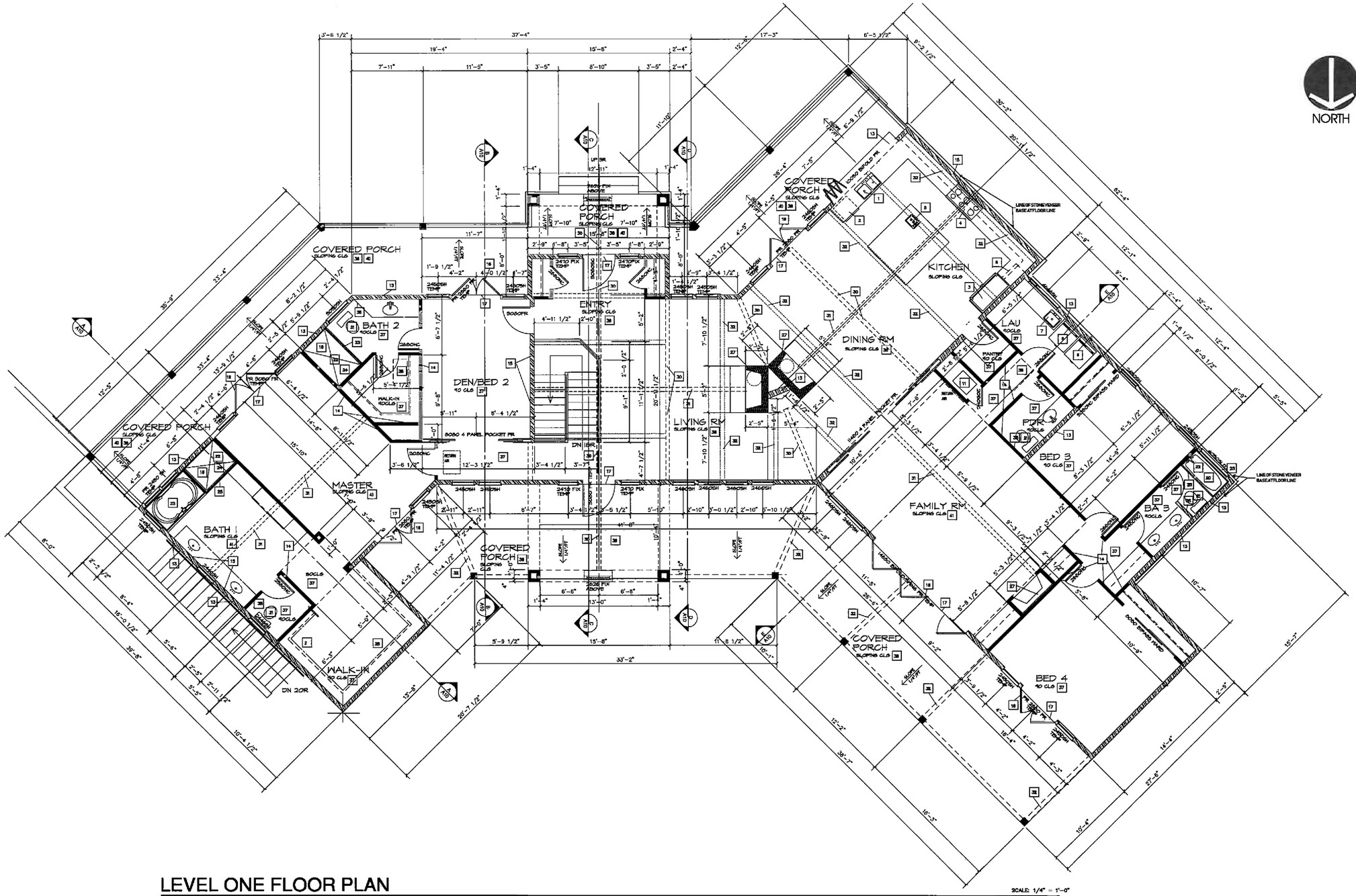
PLUMBING & MECHANICAL EQUIPMENT ON ROOFS OR IN ATTICS [CPC/CMC]

120. Equipment on Roofs, Installation [506.2.3/1501.8.4]
   a. Equipment shall be installed on a well-drained surface of the roof.
   b. At least 6 ft. of clearance shall be available between any part of the equipment and the roof edge or slightly flared rails, guard, parapets or other structure at least 42 inches in height.
121. All equipment requiring an unobstructed source of electrical power shall be provided with [930.2.2/304.8.2]:
   a. A readily-accessible electrical disconnecting means within sight of the equipment that will completely de-energize the equipment, and
   b. A 120-VAC receptacle outlet located on the roof adjacent to the equipment and on the supply side of the disconnect switch.
122. Access to Equipment on Roofs [508.3/304.3.1]:
   a. Equipment located on roofs/elevated locations shall be accessible.
   b. Buildings more than 15 feet in height shall have an inside means of access, unless other means acceptable are used.
123. Permanent Lighting shall be provided at the roof access and controlled by a switch inside the building near the access leading to the roof. [508.3.3]
124. Appliances in Attics shall [930.7/304.4]:
   a. Be listed for attic installation and installed per manufacturer's instructions.
   b. Be provided with access not less than 22 inches x 30 inches.
   c. Have a minimum distance in the appliance shall not exceed 20 feet.
   d. Have continuous solid flooring not less than 24 inches wide.
   e. Have a level working platform not less than 30 inches x 30 inches in front of the service side.
   f. Have a permanent 120-volt receptacle outlet and a lighting fixture with a switch located at the entrance to the passageway.

ELECTRICAL SYSTEMS [2013 CEC]:

125. Ground-Fault Circuit-Interrupter Protection (GFCI) [210.8]:
   a. All 125-volt, single-phase, 15- and 20-ampere receptacles installed in bathrooms, garages, accessory buildings, outdoors, crawl spaces (at or below grade), unfinished basements, kitchen countertop surfaces, laundry, utility and wet bar sinks where receptacles are installed within 6 feet of the sink edge shall have ground-fault circuit-interrupter protection.
126. Arc-Fault Circuit-Interrupter Protection (AFCI) [210.12]:
   a. All 120-volt, single-phase 15- and 20-ampere branch circuits supplying outlets installed in dwelling unit family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, or similar rooms or areas shall be protected by a listed arc-fault circuit interrupter, combination-type, installed to provide protection of the branch circuit.
127. Receptacle Outlets: Every kitchen, family room, dining room, living room, parlor, library, den, sunroom, bedrooms, recreation rooms, or similar room or areas shall have receptacle outlets installed in accordance with [210.52/CAC]:
   a. Receptacles shall be installed so that no point measured horizontally along the floor line in any wall space is more than 6 ft, from a receptacle outlet.
   b. Wall Spaces shall include: 1) Any space 2 ft. or more in width (including doors and pass-through openings) and unbroken along the floor line by doorways/similar openings, fireplaces and fixed cabinets. 2) The space occupied by fixed panels in exterior walls, excluding sliding panels. 3) The space affforded by fixed room dividers such as freestanding bar-type counters or railings.
   c. Receptacle outlet in: 1) Doors shall not be counted as part of the required number of receptacle outlets unless located within 18 in. of the wall. 2) Countertop Receptacles shall not be counted.
128. Receptacle outlets in kitchens and dining rooms countertop spaces shall be installed in accordance with [210.52(C)]:
   a. Wall counter space outlets shall be installed at each wall counter space that is 12 in. or wider and installed so that no point along the wall line is more than 24 in. from a receptacle outlet.
   b. At least one receptacle shall be installed at each island countertop space with a long dimension of 24 in. or greater and a short dimension of 12 in. or greater.
   c. At least one receptacle outlet shall be installed at each peninsular countertop space with along dimension of 24 in. or greater and a short dimension of 12 in. or greater.
   d. Counter outlets shall be located above, but not more than 20 in. above the countertop.
129. At least one outlet shall be installed in bathrooms within 3 ft. of the outside edge of each basin [210.52(D)].
130. At least one outlet accessible at grade level and not more than 6-1/2 ft. above grade shall be installed at the front and back of the dwelling [210.52(E), 210.8(A)(3)].
131. Balconies, decks and porches that are accessible from inside the dwelling shall have at least one receptacle outlet installed within the perimeter of the balcony, deck or porch. The receptacle shall not be located more than 6-1/2 feet above the surface [210.52(E)(3)].
132. At least one outlet shall be installed for the laundry [210.52(F)].
133. At least one receptacle outlet, shall be installed in each basement and additional portions and in each attached garage and in each detached garage or accessory building [210.52(G)].
134. Hallways 10 ft. or more in length shall have at least one receptacle outlet [210.52(H)].
135. Foyers not part of a hallway and that have an area that is greater than 60 s? shall have a receptacle located in each wall space [210.52(I)].
136. A 125-volt, 15- or 20-ampere-rated receptacle outlet shall be installed in an accessible location for the servicing of heating, air conditioning and refrigeration equipment. The outlet shall be installed at the same level and within 25 ft. of the equipment. [210.63].
137. Lighting Outlets shall be installed in and to accessories with [210.70]:
   a. At least one wall-switch-controlled lighting outlet shall be installed in every habitable room and bathroom.
   b. At least one wall-switch-controlled lighting outlet shall be installed in hallways, stairways, attics and basements.
   c. At least one wall-switch-controlled lighting outlet shall be installed in every attached or detached garage and outbuildings along the floor line by doorways/similar openings, fireplaces and fixed cabinets. 2) The space occupied by fixed panels in exterior walls, excluding sliding panels. 3) The space affforded by fixed room dividers such as freestanding bar-type counters or railings.
   d. Where one or more lighting outlet(s) are installed for interior stairways, there shall be a wall switch at each floor level and landing level that includes an entryway, to control the lighting outlet(s) where the stairway between floor levels has six risers or more.
   e. The outlet, underfloor spaces, utility rooms and basements, at least one lighting outlet containing a switch or controlled by a wall switch shall be installed where these spaces are used for storage or contain equipment requiring servicing. The lighting outlet shall be provided at or near the equipment requiring servicing.
138. Where NM Cable (Romex) is run across the top of accessible ceiling joists, protection within 6-ft. of the nearest edge of the ceiling hole or attic entrance is required [334.23, 320.23(A)].
139. Receptacles, Cord Connectors and Attachment Plugs [406]:
   a. Receptacle faceplates shall be installed so as to completely cover the opening and seat against the mounting surface [406.6].


SCALE: 1" = 10'
GRAPHIC SCALE
IMPORTANT NOTICE
ALL UNDERGROUND UTILITIES ARE APPROXIMATE. CONTRACTOR(S) TO NOTIFY UNDERGROUND SERVICE ALERT (1-800-422-4133) TO STAKE ANY EXCAVATION OR REPAIR FACING.
CALL TOLL FREE 1-800-422-4133
N80°56'08"W 141.87' R.
N89°40'59"W 179.14' R.
CAMBRIDGE DRIVE
(PUBLIC ROAD)
PRIVATE ACCESS DRIVEWAY
20' WIDE PRIVATE ACCESS EASEMENT AND PUBLIC UTILITY EASEMENT PER
LOT 1
#870
FF=180.0±
PAD=175.0 MIN.
BUILDING SETBACK LINE, TYP.
LOT 2
SEE SHEET R-1
NORTH LINE LOT 1
SOUTH LINE LOT 1
SOUTH TRACT BOUNDARY
SOUTH LINE LOT 1
GRADING LIMITS
DRAINAGE EASEMENT
TO DRAIN
TOP OF FIRE PIT
FF=178.5 PATIO
FF=180.0 HOUSE
FF=170.0 GARAGE
3RD CASCADING TYP.
GAS METER
FS
RISER
170.5 TC
170.0 FL
WS=166
400 GPM
FIRE BARRIER
18X18 OB
TG=166.0±
12X12 TG=167.50
INV IN=166.60
INV OUT=166.50
18X18 TG=166.5
INV IN=166.00
INV OUT=165.50
INV IN=165.50
INV OUT=165.40
INV IN=165.40
INV OUT=165.30
INV IN=165.30
INV OUT=165.20
INV IN=165.20
INV OUT=165.10
INV IN=165.10
INV OUT=165.00
INV IN=165.00
INV OUT=164.90
INV IN=164.90
INV OUT=164.80
INV IN=164.80
INV OUT=164.70
INV IN=164.70
INV OUT=164.60
INV IN=164.60
INV



LEVEL ONE FLOOR PLAN

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

PLAN NOTES

40 INDICATES FLOOR PLAN NOTES – SEE NUMBERS BELOW:

ALL MANUFACTURED EQUIPMENT SHALL BE INSTALLED AS PER MANUFACTURER'S SPECIFICATION AND DIMENSIONS VERIFIED WITH INSTALLATIONS REQUIREMENTS. VERIFY MANUFACTURER'S WITH BUILDER. VERIFY ALL EQUIPMENT AND PLUMBING SPECIFICATIONS WITH BUILDER

1 KITCHEN SINK WITH GARBAGE DISPOSAL/VERIFY WITH BUILDING
2 MULTI-AC DIMENSIONS/VERIFY DIMENSIONS WITH MANUFACTURER'S SPECIFICATIONS
3 PROVIDE 40" CLEAR REFRIGERATOR / FREEZER SPACE.
4 RANGE HOOD WITH UNDERSIDE LIGHT AND 40" BUILDER
5 PROVIDE WOOD LOUT AND MDL 100 CFM LOW NOISE (.3 SONES)RATED EXHAUST FAN ABOVE. VERIFY HOOD DESIGN WITH BUILDER.
6 VER.PREF.SINK
7 PROVIDE MICROWAVE SPACE – VERIFY WITH INTERIOR DESIGNER. (VERIFY DIMENSIONS WITH MANUFACTURER SPECIFICATIONS).
7 UTILITY SINK.
8 PROVIDE WASTE AND WATER FOR WASHING MACHINE IN RECESSED WALL BOX.
9 PROVIDE DRYER VENT TO OUTSIDE AIR.
10 TANKLESS GAS WATER HEATER – PROVIDE EXHAUST VENTING PER MANUFACTURES – SEE ENERGY COMPLIANCE CALC.
11 F.A.U. – FUEL GAS STUB–OUT, AND ELECTRICAL 120VLT. PROVIDE UNOBSTRUCTED PASSAGEWAY 24" WIDE OF CONTINUOUS FLOORING FROM ACCESS TO EQUIPMENT AND ITS CONTROLS. ALSO PROVIDE UNOBSTRUCTED WORK SPACE IN FRONT OF EQUIPMENT 30" DEPTH MIN.
12 GARAGE WALLS, AND SUPPORTING POSTS OR COLUMNS SHALL BE PROTECTED WITH 1 LAYER 5/8" TYPE "X" DRYWALL –2 LAYERS 5/8" TYPE "X" DRYWALL AT CEILING IF TRUSS LAYOUT IS 24" O.C. – SEE DETAILS FOR MORE INFORMATION.
13 2" PLUMBING WALL.
14 2" SOLID WALL SEE WALL LEGEND ABV.
15 DBL TILE BALCONIES PROVIDE AT TOP AND BOTTOM (DOWNCOR). DRAIN BELL IN BOTTOM–OUT TO SIDE OF BALCONY.
16 DBL TILE BALCONIES – OUT TO BE A MINIMUM OF 1/2" ABOVE OUTDOOR LANDING TRIP. AT ALL EXTERIOR SLIT SWING DOORS. TILE SHOWER PAN AND CURB WITH TILE WAINSCOT TO CEILING OVER 2–COATS PORTLAND CEMENT PLASTER AND FELT AT ADJACENT WALLS. PROVIDE SAFETY GLASS ENCLOSURE.
19 WOOD FRAMED, STONE SEAT AT 16" FROM FLOOR.
20 ACRYLIC TUB AND SHOWER WITH TILE WAINSCOT TO CEILING OVER 2–COATS PORTLAND CEMENT PLASTER AND FELT AT ADJACENT WALLS.
21 CENTER OF WATER CLOSET TO BE A MINIMUM 18" FROM VERTICAL SURFACE OF WALL. WATER CLOSET SHALL BE "ULTRA LOW FLUSH" TYPE WITH 1.6 GALLONS MIN.
22 14"X14" RECESSED SOAP DISH, BOTTOM 48" FROM FLOOR. SEE DETAIL 23/D1.
23 42"X72" FIBEL TUB WITH TILE PLATFORM.
24 SHOWER HEAD AT +80" – SUPPLY HAND HELD ADJACENT TO HEAD.
25 TEMPERED GLASS.
26 48" FIREBOCK SUMMITOND FIREPLACE. PROVIDE LARGE CROWN CAP AND SPARK ARRESTOR / RAIN CAP. U.L.C. 2561–2586. COMBUSTIBLE MATERIALS SHALL NOT BE PLACED WITHIN 6" (152mm) OF THE FIREPLACE OPENING. NO SUCH MATERIAL WITHIN 12" (305mm) OF THE FIREPLACE OPENING SHALL PROJECT MORE THEN 1/8" (3mm) FOR EACH 1" (25mm) CLEARANCE FROM SUCH OPENING. CBC SECTION 3001.2.2.2 – SEE DETAIL SHEET FOR MORE INFORMATION.
27 48" FIREBOCK SUMMITOND FIREPLACE. PROVIDE LARGE CROWN CAP AND SPARK ARRESTOR / RAIN CAP. U.L.C. 2561–2586. COMBUSTIBLE MATERIALS SHALL NOT BE PLACED WITHIN 6" (152mm) OF THE FIREPLACE OPENING. NO SUCH MATERIAL WITHIN 12" (305mm) OF THE FIREPLACE OPENING SHALL PROJECT MORE THEN 1/8" (3mm) FOR EACH 1" (25mm) CLEARANCE FROM SUCH OPENING. CBC SECTION 3001.2.2.2 PROVIDE COMBUSTION AIR INVAKE TO DRAW AIR FROM THE OUTSIDE WHICH IS AT LEAST 6 SQ IN IN AREA. PROVIDE READILY ACCESSIBLE OPERABLE AND TIGHT-FITTING DAMPER OR COMBUSTION CONTROL DEVICE. IF A GAS LOG, LOG LIGHTER OR DECORATIVE GAS APPLIANCE IS INSTALL IN A THE FIREPLACE THE FLUE DAMPER SHALL BE BLOCKED OPEN.
28 BUILT–IN CLOSET SYSTEM. VERIFY LAYOUT WITH BUILDER.
29 4"X8"X16" SLUMP BLOCK WINDER WITH SAG FINISH – SEE EXTERIOR ELEVATIONS.
30 6X EXPOSED WOOD TRUSS – VERIFY SIZE WITH ARCHITECT AND BUILDER.
31 EXPOSED RIDGE BEAM – VERIFY SIZE WITH ARCHITECT AND BUILDER.
32 MINIMUM 6X8 EXPOSED WOOD BEAM – VERIFY SIZE WITH ARCHITECT AND BUILDER.
33 EXPOSED WOOD BEAM – VERIFY SIZE WITH ARCHITECT AND BUILDER.
34 1 3/4" SOLID CORE DOOR WITH AUTOMATIC SELF–CLOSING AND LATCHING DEVICE AND WEATHER STRIPPING TO BE TIGHT FITTING (U.B.C. 405L1.4).
35 PROVIDE ALL NECESSARY BLOCKING FOR TOILET PAPER HOLDER AND TOWEL BARS.
36 1" TMG SUSPENDED CEILING.
37 DRYWALL FLAT CEILING.
38 PULL DOWN STAIR.
39 PROVIDE MIN. 1/2" GYPSUM BOARD ON WALLS, UNDERSIDE SURFACE, AND ANY SOFFITS WITHIN THE ENCLOSED ACCESSIBLE SPACE UNDER STAIR.
40 DURADEK WATERPROOF VINYL DECKING MEMBRANE ICC–ES REPORT #ESR–2181
41 DRYWALL SLOPED CLG.

VERIFY ALL AUDIO/VISUAL AND SECURITY SYSTEM REQUIREMENTS WITH OWNER.

TYPICAL NOTES:

1. ALL HORIZONTAL CEILING DRYWALL APPLIED TO TRUSSES SHALL BE 5/8" GYPSUM BOARD.
2. ALL EXTERIOR WINDOWS TO BE METAL. REFER TO PLAN FOR SIZE AND EXTERIOR ELEVATION FOR ALL BREAK–UPS.
3. EXCEPT FOR FIREPLACES THAT OPEN TO THE EXTERIOR OF THE BUILDING, THE HEARTH SLAB SHALL BE READILY DISTINGUISHABLE FROM THE SURROUNDING OR ADJACENT FLOOR.
4. ALL FOAM PLASTIC INSULATION SHALL HAVE A FLAME–SPREAD RATING OF NOT MORE THAN 75 AND A SMOKED–DEVELOPED RATING OF NOT MORE THAN 450.
5. ALL INTERIOR FIREPLACES HAS HAVE METAL OR GLASS DOORS, COMBUSTION AIR INTAKE, AND A FLUE DAMPER.
6. ALL EXTERIOR WALKING SURFACES OVER ENCLOSED CONSTRUCTION/ FLOOR/CEILING ASSEMBLIES SHALL BE ICC–ES LISTED (WEATHERPROOF WALKING SURFACES ASSEMBLY)

LIST OF ABBREVIATIONS:

S.H.	SINGLE HUNG
GL.	GLIDER OR GLIDING
F.G.	FIXED GLASS
OPT.	OPTIONAL
ELEV.	ELEVATION
CLG	CEILING
F.M.C.	FLOOR MATERIAL CHANGE
FR.DR.	FRENCH DOOR
W/	WITH
WARD.	WARDROBE
S & P	SHELF & POLE

SQUARE FOOTAGE

FLOOR PLAN:	LEVEL ONE	3585 SQ.FT
	BASEMENT	1002 SQ.FT
	TOTAL	4587 SQ.FT TOTAL
GARAGE:		878 SQ.FT
COVERED ENTRY,PORCH:		1140 SQ.FT

Wall Legend

- 4" WALLS
- 6" WALLS
- 6X4X16 SLUMP BLK WALLS WITH 8X8X16 CMU AT INTERIOR SURFACES

RICHARD T. THORNE ARCHITECT architecture / planning
6924 SHADOW WOOD DRIVE, MOORPARK, CA. 93021 - 805-969-9879 fax/phone - richard@rttaia.com e-mail

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residence for:
HARVEST HILL ESTATES
LOT 1

DATE 6-12-18
REVISIONS

REGISTERED ARCHITECT RICHARD T. THORNE C-11873 10-31-2018 STATE OF CALIFORNIA

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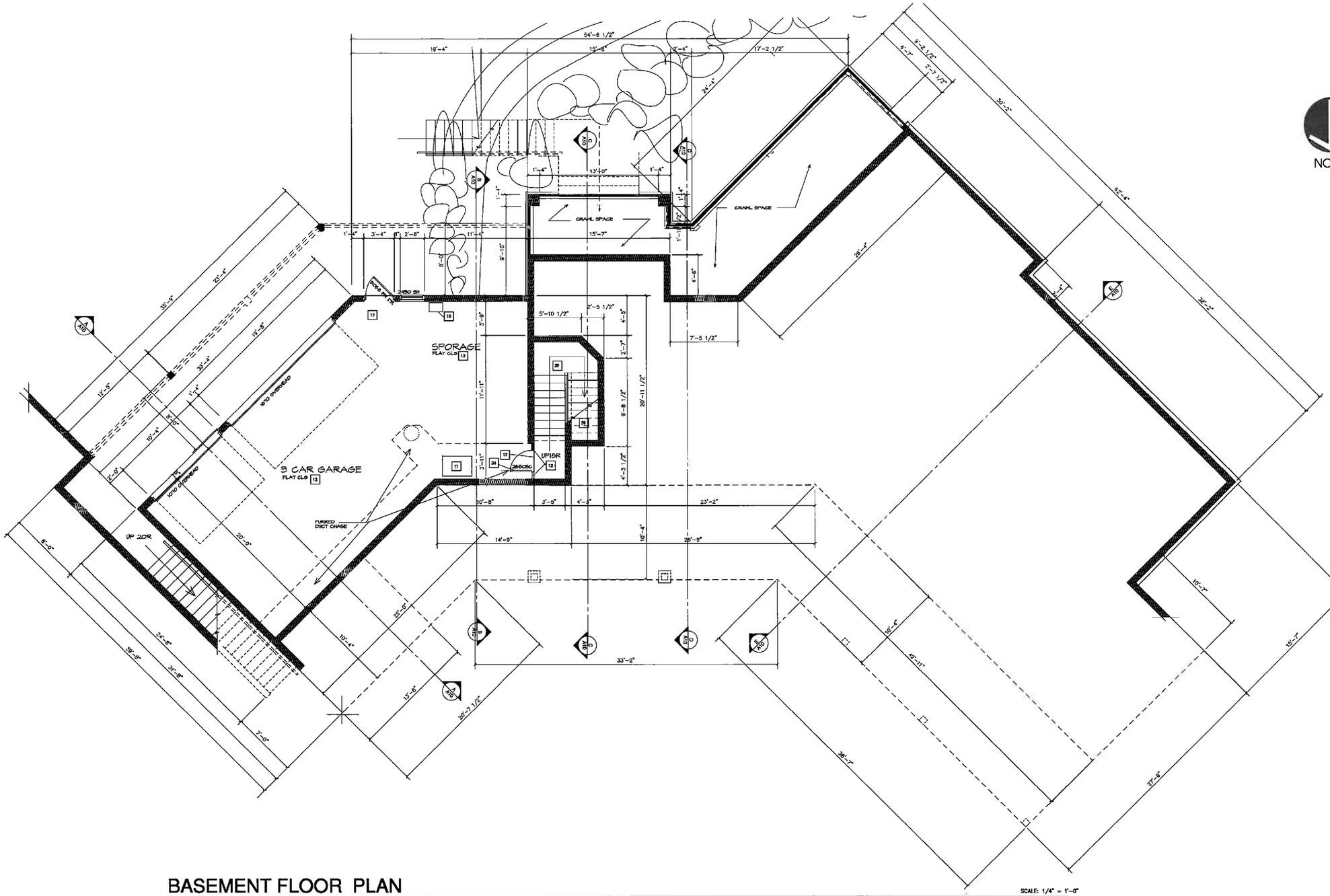

BASEMENT FLOOR PLAN

PLAN NOTES

33 INDICATES FLOOR PLAN NOTES – SEE NUMBERS BELOW:

ALL MANUFACTURED EQUIPMENT SHALL BE INSTALLED AS PER MANUFACTURER'S SPECIFICATION AND DIMENSIONS VERIFIED WITH INSTALLATIONS REQUIREMENTS. VERIFY MANUFACTURER WITH BUILDER. VERIFY ALL EQUIPMENT AND PLUMBING SPECIFICATIONS WITH BUILDER

1 KITCHEN SINK WITH GARBAGE DISPOSAL (VERIFY WITH BUILDING)
2 BUILT-IN DISHWASHER (VERIFY DIMENSIONS WITH MANUFACTURER SPECIFICATIONS)
3 PROVIDE 48" CLEAR REFRIGERATOR / FREEZER SPACE. PROVIDE ROUGH PLUMBING FOR ICE MAKER.
4 48" SLIDE-IN , WITH HOOD LIGHT AND MIN. 100 CFM LOW NOISE C.I. SCORESGRATED EXHAUST FAN ABOVE. VERIFY HOOD DESIGN WITH BUILDER.
5 VGL/PREP. SINK
6 PROVIDE MICROWAVE SPACE – VERIFY WITH INTERIOR DESIGNER. (VERIFY DIMENSIONS WITH MANUFACTURER SPECIFICATIONS).
7 UTILITY SINK
8 PROVIDE WASTE AND WATER FOR WASHING MACHINE IN RECESSED WALL BOX.
9 PROVIDE DRYER VENT TO OUTSIDE AIR.
10 TANKLESS GAS WATER HEATER – PROVIDE EXHAUST VENTING PER MANUFACTURER. BUILDER VERIFY CLEARANCES, ETC.
11 FAUX FIREPLACE – PROVIDE ELECTRICAL OUTLET. PROVIDE CONSTRUCTION PARAGRAPH:
3/4" MDF OF CONTINUOUS FLOORING FROM ADDERS TO EQUIPMENT AND ITS CONTROLS. ALSO PROVIDE UNOBSTRUCTED WORK SPACE IN FRONT OF EQUIPMENT 30" DEPTH MIN.
12 GARAGE WALLS, AND SUPPORTING POSTS OR COLUMNS SHALL BE PROTECTED WITH 1 LAYER 5/8" TYPE "X" DRYWALL –3 LAYERS 5/8" TYPE "X" DRYWALL AT CEILING IF TRUSS LAYOUT IS 24" O.C. – SEE DETAILS FOR MORE INFORMATION.
13 8" PLUMBING WALL.
14 6X STUD WALL. SEE WALL LEGEND.
15 2X6 STUD BALLOONED FRAMED WALL.
16 SOLID BUILT BASETIME DOOR AT TOP AND BOTTOM (OUTSIDE).
17 TOP OF DOOR THRESHOLD TO BE A MAXIMUM OF 1/2" ABOVE OUTSIDE LANDING (TYP. AT ALL EXTERIOR OUT SWING DOORS).
18 TILE SHOWER PAN AND CURB WITH TILE WAINSCOT TO CEILING (MIN 3–COAT) PORTLAND CEMENT PLASTER AND FELT AT ADJACENT WALLS.
19 WOOD FRAMED, STONE SEAT AT 18" FROM FLOOR.
20 ACRYLIC TUB AND SHOWER WITH TILE WAINSCOT TO CEILING (MIN 3–COAT) PORTLAND CEMENT PLASTER AND FELT AT ADJACENT WALLS.
21 CENTER OF WATER CLOSET TO BE A MINIMUM OF 15" TO VERTICAL SURFACE OF WALL. WATER CLOSET SHALL BE "ULTRA LOW FLUSH" TYPE WITH 1.6 GALLONS MIN.
22 METAL RECESSED SOAP DISH, BOTTOM 48" FROM FLOOR, SEE DETAIL
23 ACRYLIC SOAKER TUB WITH TILE PLATFORM.
24 SHOWER HEAD AT +60" – SUPPLY HAND HELD ADJACENT TO HEAD.
25 TEMPERED GLASS.
26 48" FIREBRICK (SUNROD) FIREPLACE. PROVIDE LARGE CROWN CAP AND SPARKS ARRESTOR / RAIN CAP. U.L.C. (SPR–2288). COMBUSTIBLE MATERIALS SHALL NOT BE PLACED WITHIN 4" (102mm) OF THE FIREPLACE OPENING. NO WOOD MATERIAL WITHIN 12" (305mm) OF THE FIREPLACE OPENING SHALL PROJECT MORE THEN 1/8" (3mm) FOR EACH 1" (25mm) CLEARANCE FROM SUCH OPENING. CBC SECTION 2908.1.8 – SEE DETAIL SHEET FOR MORE INFORMATION.
27 36" MASON–LITE INFOOR FIREPLACE. PROVIDE LARGE CROWN CAP AND SPARKS ARRESTOR / RAIN CAP. U.L.C. (SPR–2288). COMBUSTIBLE MATERIALS SHALL NOT BE PLACED WITHIN 4" (102mm) OF THE FIREPLACE OPENING. NO WOOD MATERIAL WITHIN 12" (305mm) OF THE FIREPLACE OPENING SHALL PROJECT MORE THEN 1/8" (3mm) FOR EACH 1" (25mm) CLEARANCE FROM SUCH OPENING. CBC SECTION 2908.1.8 – SEE DETAIL SHEET FOR MORE INFORMATION.
PROVIDE COMBUSTION AIR INTAKE TO DRAW AIR FROM THE OUTSIDE WITH ISAT LEAST 6 SQ IN IN AREA.
PROVIDE READILY ACCESSIBLE OPERABLE AND TIGHT-FITTING DAMPER OR COMBUSTION CONTROL DEVICE. IF A GAS LOG, LOG LIGHTER OR DECORATIVE GAS APPLIANCE IS INSTALL IN A THE FIREPLACE THE FLUE DAMPER SHALL BE BLOCKED OPEN.
28 BUILT–IN CLOSET SYSTEM. VERIFY LAYOUT WITH BUILDER.
29 4"x4"x16" SLUMP BLOCK VENEER WITH SAND FINISH – SEE EXTERIOR ELEVATIONS.
30 EXPOSED WOOD TRUSS – VERIFY SIZE WITH ARCHITECT AND BUILDER.
31 EXPOSED BEAM BEAM – VERIFY SIZE WITH ARCHITECT AND BUILDER.
32 MANUAL AND EXPOSED WOOD BEAM – VERIFY SIZE WITH ARCHITECT AND BUILDER.
33 EXPOSED WOOD BEAM – VERIFY SIZE WITH ARCHITECT AND BUILDER.
34 1 3/4" SOLID CORE DOOR WITH AUTOMATIC SELF–CLOSING AND LATCHING DEVICE AND WEATHER STRIPPING TO BE TIGHT FITTING (U.B.C. 404.1.4).
35 PROVIDE ALL NECESSARY BLOCKING FOR TOILET PAPER HOLDER AND TOWEL BARS.
36 1" TRAC SUSPENDED CEILING.
37 DRYWALL FLAT CEILING.
38 PULL DOWN STAIR
39 PROVIDE MIN.1/2" GYPSUM BOARD ON WALLS UNDERSIDE SURFACE, AND ANY ATTICS WHERE THE ENCLOSED ACCESSIBLE SPACE UNDER STAIRS.
40 DURADEK WATERPROOF VINYL DECKING MEMBRANE ICC–ES REPORT #599–2191
41 DRYWALL SLOPED CLG.

VERIFY ALL AUDIO/VISUAL AND SECURITY SYSTEM REQUIREMENTS WITH OWNER.

TYPICAL NOTES:

1. ALL HORIZONTAL CEILING DRYWALL APPLIED TO TRUSSES SHALL BE 5/8" GYPSUM BOARD.
2. ALL EXTERIOR WINDOWS TO BE METAL. REFER TO PLAN FOR SIZE AND EXTERIOR ELEVATION FOR ALL BREAK–UPS.
3. EXCEPT FOR FIREPLACES THAT OPEN TO THE EXTERIOR OF THE BUILDING, THE HEARTH SLAB SHALL BE READILY DISTINGUISHABLE FROM THE SURROUNDING OR ADJACENT FLOOR.
4. ALL FOAM PLASTIC INSULATION SHALL HAVE A FLAME–SPREAD RATING OF NOT MORE THAN 75 AND A SMOKE–DEVELOPED RATING OF NOT MORE THAN 450.
5. ALL INTERIOR FIREPLACES HAS HAVE METAL OR GLASS DOORS, COMBUSTION AIR INTAKE, AND A FLUE DAMPER.
6. ALL EXTERIOR WALKING SURFACES OVER ENCLOSED CONSTRUCTION / FLOOR/CEILING ASSEMBLIES SHALL BE ICC–ES LISTED (WEATHERPROOF WALKING SURFACES ASSEMBLY)

LIST OF ABBREVIATIONS:

S.H.	SINGLE HUNG
SL.	SLIDER OR SLIDING
F.G.	FIXED GLASS
OPT.	OPTIONAL
ELEV.	ELEVATION
CLG.	CEILING
F.M.C.	FLOOR MATERIAL CHANGE
FR.DR.	FRENCH DOOR
W/	WITH
WARD.	WARDROBE
S & P	SHELF & POLE

SQUARE FOOTAGE

FLOOR PLAN:	LEVEL ONE	3885 SQ FT
	BASEMENT	1002 SQ FT
	TOTAL	4887 SQ FT TOTAL
GARAGE:		878 SQ FT
COVERED ENTRY, PORCH:		1740 SQ FT

Wall Legend

4" WALLS

6" WALLs

8X4X16 SLUMPBLKWALLS WITH 8X8X16 CMU AT INTERIOR SURFACES

RICHARD T. THORNE ARCHITECT architecture / planning
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residence for:
HARVEST HILL ESTATES
LOT 1

DATE 6-12-18
REVISIONS

LICENSED ARCHITECT RICHARD T. THORNE C-21823 STATE OF CALIFORNIA

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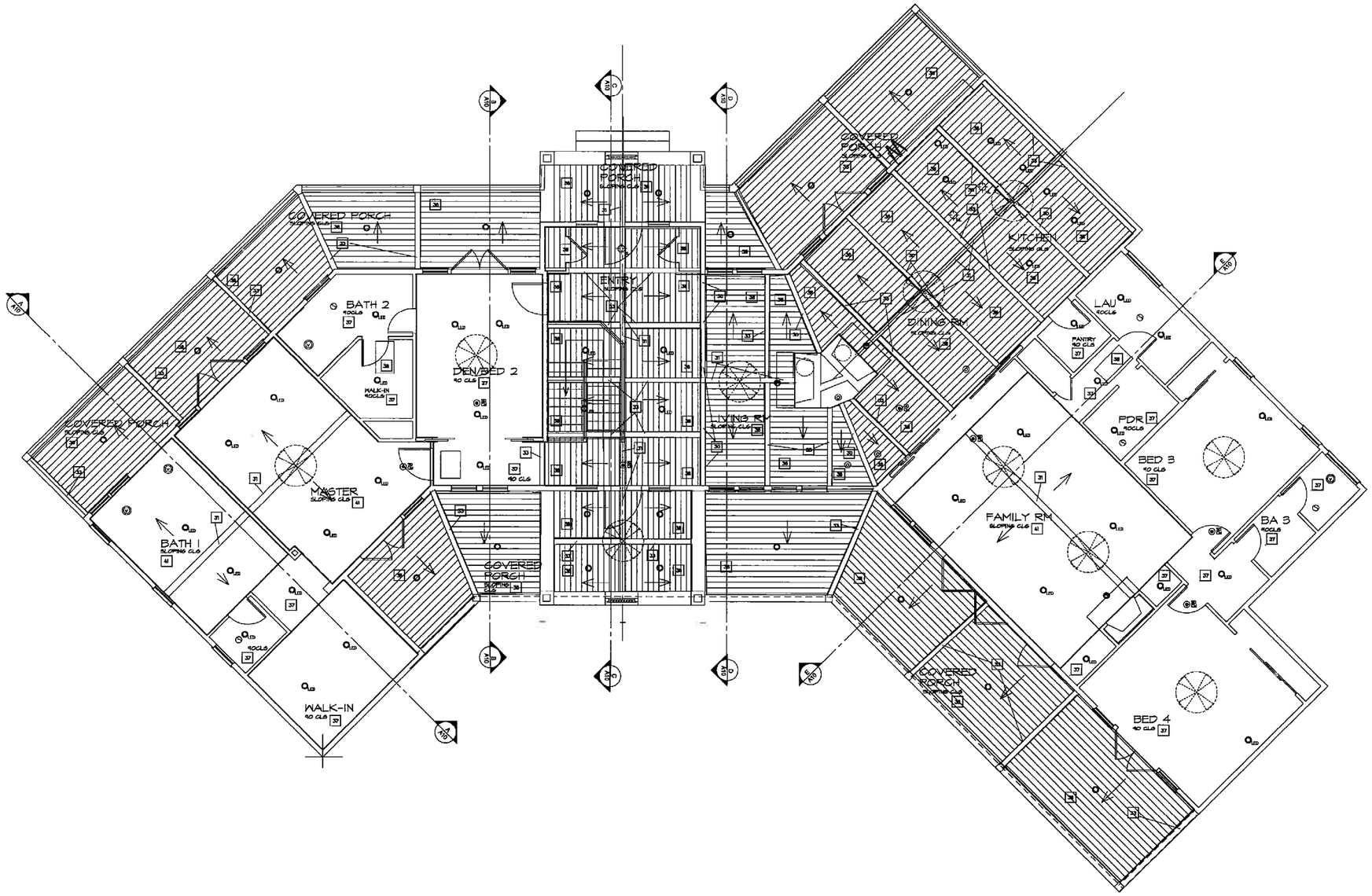

LEVEL ONE REFLECTED CEILING PLAN

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

PLAN NOTES

(30) INDICATES FLOOR PLAN NOTES – SEE NUMBERS BELOW.

ALL MANUFACTURED EQUIPMENT SHALL BE INSTALLED AS PER MANUFACTURER'S SPECIFICATION AND DIMENSIONS VERIFIED WITH INSTALLATIONS REQUIREMENTS. VERIFY MANUFACTURER WITH BUILDER. VERIFY ALL EQUIPMENT AND PLUMBING SPECIFICATIONS WITH BUILDER

1 KITCHEN SINK WITH GARBAGE DISPOSAL/VERIFY WITH BUILDING
2 BUILT-IN DISHWASHER/VERIFY DIMENSIONS WITH MANUFACTURER SPECIFICATIONS
3 PROVIDE 48" CLEAR REFRIGERATOR / FREEZER SPACE. PROVIDE ICEMAN PLUMBING FOR ICE MAKER.
4 48" CLOSE-IN - WITH HOOD LIGHT AND MIN. 100 CFM LOW NOISE (J) SCORDEDRATED EXHAUST FAN ABOVE. VERIFY HOOD DESIGN WITH BUILDER.
5 VCD PREP SINK
6 PROVIDE MICROWAVE SPACE – VERIFY WITH INTERIOR DESIGNER. (VERIFY DIMENSIONS WITH MANUFACTURER SPECIFICATIONS).
7 UTILITY SINK.
8 PROVIDE WASTE AND WATER FOR WASHING MACHINE IN RECESSED WALL BOX.
9 PROVIDE DRYER VENT TO OUTSIDE AIR.
10 TANKLESS GAS WATER HEATER – PROVIDE EXHAUST VENTING PER MANUFACTURERS – SEE ENERGY COMPLIANCE CALC.
11 F.A.U. – FUEL GAS STUB-OUT, AND ELECTRICAL OUTLET. PROVIDE UNOBSTRUCTED FUNCTIONALITY 24" WIDE OF CONTINUOUS FLOORING FROM ACCESS TO EQUIPMENT AND ITS CONTROLS. ALSO PROVIDE UNOBSTRUCTED WORK SPACE IN FRONT OF EQUIPMENT 30" DEPTH MIN.
12 INSULATION IN EXTERIOR WALLS, PORCH OR COLUMNS SHALL BE PROVIDED WITH 1 LAYER 5/8" GYPSUM BOARD, 2" INSTALL –6 LAYERS 5/8" TYPE "X" DRYWALL AT CEILING 8" TRUSS LAYOUT 16 24" O.C. – SEE DETAILS FOR MORE INFORMATION.
13 2" PLUMBING WALL.
14 2X STUD WALL. SEE WALL LEGEND.
15 2X6 STUD BALLOONED FRAMED WALL.
16 DEAD BOLT (NACTIVE DOOR AT TOP AND BOTTOM (EXTERIOR).
17 TOP OF DOOR THRESHOLD TO BE A MAXIMUM OF 1/2" ABOVE EXTERIOR LANDING. TYP. AT ALL EXTERIOR OUT SWING DOORS.
18 TILE SHOWER PAN AND CURB WITH TILE WAINSCOT TO CEILING OVER 3-COATS PORTLAND CEMENT PLASTER AND FELT AT ADJACENT WALLS. PROVIDE SAFETY GLASS ENCLOSURE.
19 WOOD FRAMED, STONE SEAT AT 18" FROM FLOOR.
20 ACRYLIC TUB AND SHOWER WITH TILE WAINSCOT TO CEILING OVER 3-COATS PORTLAND CEMENT PLASTER AND FELT AT ADJACENT WALLS.
21 CENTER OF WATER CLOSET TO BE A MINIMUM OF 18" TO VERTICAL SURFACE OF BRICK. WATER CLOSET SHALL BE "ULTRA LOW FLUSH" TYPE WITH 1.6 GALLONS MIN.
22 14"X14" RECESSED SOAP DISH. BOTTOM 48" FROM FLOOR. SEE DETAIL 23/21.
23 42"X72" STEEL TUB WITH TILE PLATFORM.
24 SHOWER HEAD AT 48" – SUPPLY HAND HELD ADJACENT TO HEAD.
25 TEMPERED GLASS.
26 PROVIDE 1" MINIMUM CLEARANCE BEHIND ALL PROVIDE LARGE CHROM CAP AND SPARK ARRESTOR / RAIN CAP. U.O.O. CHR-4SRR, COMBUSTIBLE MATERIALS SHALL NOT BE PLACED WITHIN 6" (152mm) OF THE FIREPLACE OPENING. NO SUCH MATERIAL WITHIN 12" (305mm) OF THE FIREPLACE OPENING. NO SUCH MATERIAL WITHIN 12" (305mm) OF THE FIREPLACE OPENING SHALL PROJECT MORE THEN 1/8" (3mm) FOR EACH 1" (25mm) CLEARANCE FROM SUCH OPENING. CBC SECTION 3108.7.4 – SEE DETAIL SHEET FOR MORE INFORMATION.
27 36" MARSH-LITE MF36 FIREPLACE. PROVIDE LARGE CHROM CAP AND SPARK ARRESTOR / RAIN CAP. U.O.O. CHR-4SRR, COMBUSTIBLE MATERIALS SHALL NOT BE PLACED WITHIN 6" (152mm) OF THE FIREPLACE OPENING. NO SUCH MATERIAL WITHIN 12" (305mm) OF THE FIREPLACE OPENING SHALL PROJECT MORE THEN 1/8" (3mm) FOR EACH 1" (25mm) CLEARANCE FROM SUCH OPENING. CBC SECTION 3108.7.4 – SEE DETAIL SHEET FOR MORE INFORMATION. PROVIDE OUTSIDE COMBUSTION AIR DUCTWORK TO DRAW AIR FROM THE OUTSIDE WHICH IS AT LEAST 4 SQ.IN IN AREA. PROVIDE READILY ACCESSABLE OPERABLE AND TIGHT-FITTING DAMPER OR COMBUSTION CONTROL DEVICE. IF A GAS LOG, LOG LIGHTER OR DECORATIVE GAS APPLIANCE IS INSTALL IN A THE FIREPLACE THE FLUE DAMPER SHALL BE BLOCKED OPEN.
28 BUILT-IN CLOSET SYSTEM. VERIFY LAYOUT WITH BUILDER.
29 4"X4"X1/8" SLEAKT FLOOR VENTER WITH BAR FINISH – SET EXTERIOR ELEVATIONS.
30 EX EXPOSED WOOD TRUSS – VERIFY SIZE WITH ARCHITECT AND BUILDER.
31 EXPOSED RIDGE BEAM – VERIFY SIZE WITH ARCHITECT AND BUILDER.
32 MINIMUM 8X8 EXPOSED WOOD BEAM – VERIFY SIZE WITH ARCHITECT AND BUILDER.
33 EXPOSED WOOD BEAM – VERIFY SIZE WITH ARCHITECT AND BUILDER.
34 1 3/4" SOLID CORE DOOR WITH AUTOMATIC SELF-CLOSING AND LATCHING DEVICE AND WEATHER STRIPPING TO BE TIGHT FITTING (C.B.C. 406.1.4).
35 PROVIDE ADEQUATE NECESSARY BLOCKING FOR TOILET PAPER HOLDER HORIZONTAL MOUNT.
36 1" TAG SLOPING CEILING.
37 DRYWALL FLAT CEILING.
38 PULL DOWN STAIR
39 PROVIDE MIN. 1/2" GYPSUM BOARD ON WALLS. UNDERSIDE SURFACE, AND ANY SOFFITS WITHIN THE ENCLOSED ACCESSIBLE SPACE UNDER STAIRS.
40 DURADEK WATERPROOF VINYL DECKING MEMBRANE ICC-ES REPORT #ESR-2151
41 DRYWALL SLOPED CLG.

VERIFY ALL AUDIO/VISUAL AND SECURITY SYSTEM REQUIREMENTS WITH OWNER.

TYPICAL NOTES:

1. ALL HORIZONTAL CEILING DRYWALL APPLIED TO TRUSSES SHALL BE 5/8" GYPSUM BOARD.
2. ALL EXTERIOR WINDOWS TO BE METAL REFER TO PLAN FOR SIZE AND EXTERIOR ELEVATION FOR ALL BREAK-UPS.
3. EXCEPT FOR FIREPLACES THAT OPEN TO THE EXTERIOR OF THE BUILDING, THE HEARTH SLAB SHALL BE READILY DISTINGUISHABLE FROM THE SURROUNDING OR ADJACENT FLOOR.
4. ALL FOAM PLASTIC INSULATION SHALL HAVE A FLAME-SPREAD RATING OF NOT MORE THAN 75 AND A SMOKE-DEVELOPED RATING OF NOT MORE THAN 450.
5. ALL INTERIOR FIREPLACES HAS HAVE METAL OR GLASS DOORS, COMBUSTION AIR INTAKE, AND A FLUE DAMPER.
6. ALL EXTERIOR WALKING SURFACES OVER ENCLOSED CONSTRUCTION/ FLOOR/CEILING ASSEMBLIES SHALL BE ICC-ES LISTED (WEATHERPROOF WALKING SURFACES ASSEMBLY)

LIST OF ABBREVIATIONS:

S.H.	SINGLE HUNG
SL.	SLIDER OR SLIDING
F.G.	FIXED GLASS
OPT.	OPTIONAL
ELEV.	ELEVATION
CLG.	CEILING
F.M.C.	FLOOR MATERIAL CHANGE
FR.DR.	FRENCH DOOR
W/	WITH
WARD.	WARDROBE
S & P	SHELF & POLE

SQUARE FOOTAGE

FLOOR PLAN:	LEVEL ONE:	3285 SQ.FT
	BASEMENT:	1612 SQ.FT
	TOTAL:	4897 SQ.FT TOTAL
GARAGE:		878 SQ.FT
COVERED ENTRY, PORCH:		1740 SQ.FT

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residence for:
HARVEST HILL ESTATES
LOT 1

DATE 6-12-18
REVISIONS

LICENSED ARCHITECT
RICHARD T. THORNE
No. C11623
10-31-18
STATE OF CALIFORNIA

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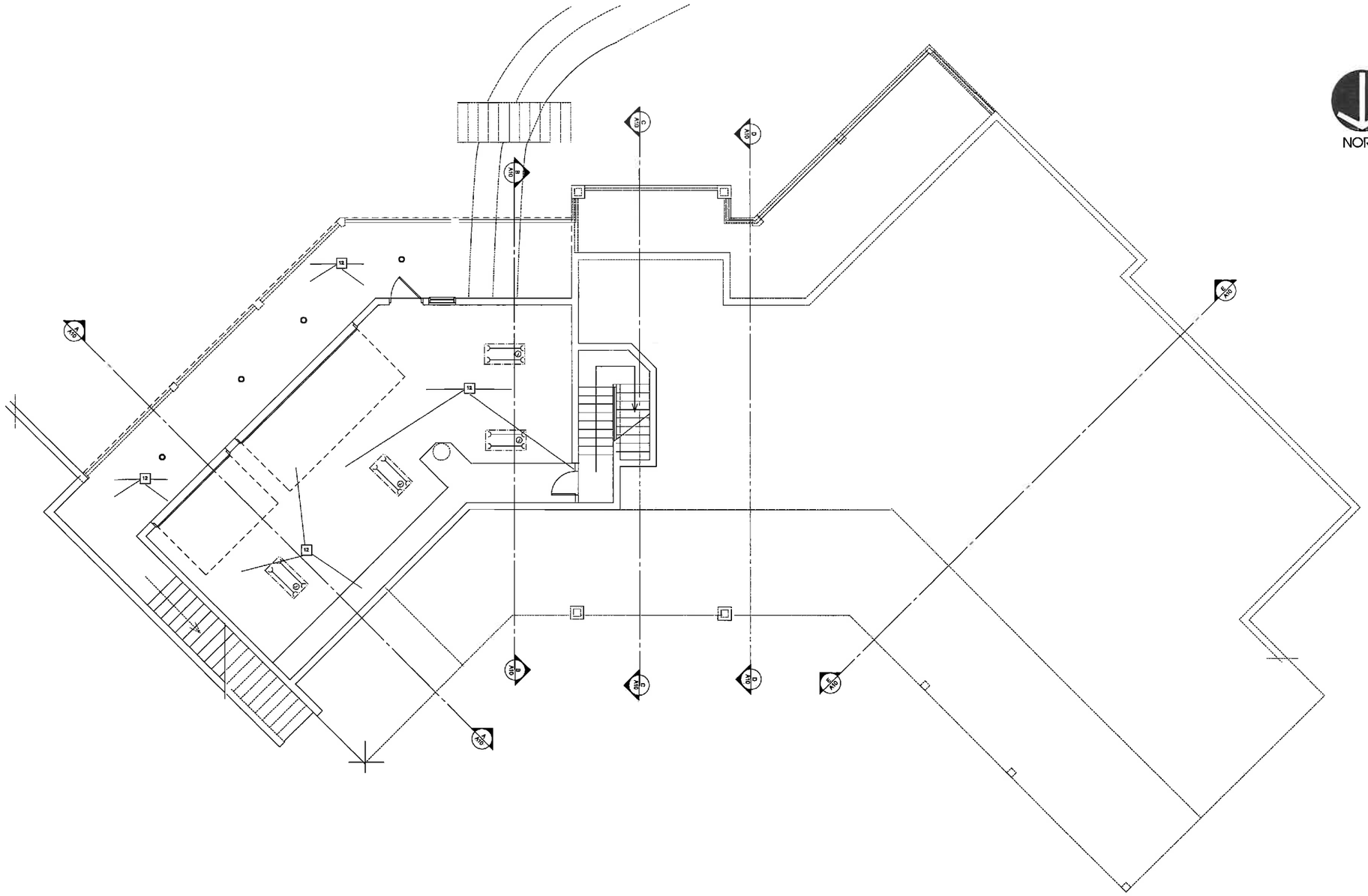

BASEMENT REFLECTED CEILING PLAN

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

PLAN NOTES

14 INDICATES FLOOR PLAN NOTES – SEE NUMBERS BELOW:
ALL MANUFACTURED EQUIPMENT SHALL BE INSTALLED AS PER MANUFACTURER'S SPECIFICATION AND DIMENSIONS NOTED WITH INSTALLATIONS REQUIREMENTS. VERIFY MANUFACTURER WITH BUILDER. VERIFY ALL EQUIPMENT AND PLUMBING SPECIFICATIONS WITH BUILDER

1 KITCHEN SINK WITH GARBAGE DISPOSAL(VERIFY WITH BUILDING)
2 BUILT-IN DISHWASHER(VERIFY DIMENSIONS WITH MANUFACTURER SPECIFICATIONS)
3 PROVIDE 48" CLEAR REFRIGERATOR / FREEZER SPACE.
4 PROVIDE ROUGH PLUMBING FOR ICE MAKER.
5 PROVIDE VENTILATION WITH WOOD LIGHT AND NEW 100 CFM LOW NOISE CS BONDERIZED EXHAUST FAN ABOVE. VERIFY HOOD DESIGN WITH BUILDER.
5 VEG.PREP.SINK
6 PROVIDE MICROWAVE SPACE – VERIFY WITH INTERIOR DESIGNER. (VERIFY DIMENSIONS WITH MANUFACTURER SPECIFICATIONS)
7 UTILITY SINK.
8 PROVIDE WASTE AND WATER FOR WASHING MACHINE IN RECESSED WALL BOX.
9 PROVIDE DRYER VENT TO OUTSIDE AIR.
10 TANKLESS GAS WATER HEATER – PROVIDE EXHAUST VENTING PER MANUFACTURER'S SPECS. ENERGY CONSERVANCE CALCS.
11 PROVIDE GAS STUB FOR FUTURE ELECTRICAL OUTLET. PROVIDE UNOBSTRUCTED PASSAGEWAY.
3'-0" WIDE OF CONTINUOUS FLOORING FROM ACCESS TO EQUIPMENT AND FOR CONTROLS. ALSO PROVIDE UNOBSTRUCTED WORK SPACE IN FRONT OF EQUIPMENT 30" DEPTH MIN.
12 GARAGE WALLS, AND SUPPORTING POSTS OR COLUMNS SHALL BE PROTECTED WITH 1 LAYER 5/8" TYPE "X" DRYWALL –2 LAYERS 5/8" TYPE "X" DRYWALL AT CEILING IF TRUSS LAYOUT IS 24" O.C. – SEE DETAILS FOR MORE INFORMATION.
13 4" PLUMBING WALL.
14 EX STUD WALL. SEE WALL LEGEND.
15 2X6 STUD BALLOONED FRAMED WALL.
16 DOUG BOLT INACTIVE DOOR AT TOP AND BOTTOM (EXTERIOR).
17 TOP OF DOOR THRESHOLD TO BE A MAXIMUM OF 1/2" ABOVE OUTSIDE LANDING. TYP. AT ALL EXTERIOR GLAZ SWING DOORS.
18 TIME SENSITIVE WALL – PROVIDE 1/2" GYPSUM BOARD CEILING TIME SENSITIVE WALL AND CEMENT PLASTER AND TILE AT ADJACENT WALLS. PROVIDE SAFETY GLASS ENCLOSURE.
18 WOOD FRAMED, STONE SEAT AT 18" FROM FLOOR.
20 ACRYLIC TUB AND SHOWER WITH TILE WAINSCOT TO CEILING OVER 2-CO4130 PORTLAND CEMENT PLASTER AND FELT AT ADJACENT WALLS.
21 CENTER OF WATER CLOSET TO BE A MINIMUM OF 15" TO VERTICAL SURFACE OF SIDES. WATER CLOSET SHALL BE "ULTRA LOW FLUSH" TYPE, 1.6 GALLONS MAX.
22 TILE TOP OF RECESSED SOAP DISH, BOTTOM 48" FROM FLOOR. SEE DETAIL 22/D1.
23 42"X24" STEEL TUB WITH TILE PLATFORM.
24 SHOWER HEAD AT +80" – SUPPLY HAND HELD ADJACENT TO HEAD.
25 TEMPERED GLASS.
26 48" FIREBRICK RUMFORD FIREPLACE. PROVIDE LARGE CROWN CAP AND SPARK ARRESTOR / RAIN CAP. U.C.C. 2385-2388. COMBUSTIBLE MATERIALS SHALL NOT BE PLACED WITHIN 6" (152mm) OF THE FIREPLACE OPENING. NO SUCH MATERIAL WITHIN 12" (305mm) OF THE FIREPLACE OPENING SHALL PROJECT MORE THEN 1/8" (3mm) FOR EACH 1" (25mm) CLEARANCE FROM SUCH OPENING. CBC SECTION 3102.7.8 – SEE DETAIL SHEET FOR MORE INFORMATION.
27 36" MASONRY-TYPE SPARK FIREPLACE. PROVIDE LARGE CROWN CAP AND SPARK ARRESTOR / RAIN CAP. U.C.C. 2385-2388. COMBUSTIBLE MATERIALS SHALL NOT BE PLACED WITHIN 6" (152mm) OF THE FIREPLACE OPENING. NO SUCH MATERIAL WITHIN 12" (305mm) OF THE FIREPLACE OPENING SHALL PROJECT MORE THEN 1/8" (3mm) FOR EACH 1" (25mm) CLEARANCE FROM SUCH OPENING. CBC SECTION 3102.7.8 – SEE DETAIL SHEET FOR MORE INFORMATION.
PROVIDE COMBUSTION AIR DUCT TO DRAW AIR FROM THE OUTSIDE WHICH IS AT LEAST 6 SQ IN IN AREA.
PROVIDE READILY ACCESSIBLE OPERABLE AND TIGHT-FITTING DAMPER OR COMBUSTION CONTROL DEVICE. IF A GAS LOG, LOG LIGHTER OR DECORATIVE GAS APPLIANCE IS INSTALL IN A THE FIREPLACE THE FLUE DAMPER SHALL BE BLOCKED OPEN.
28 BUILT-IN CLOSET SYSTEM. VERIFY LAYOUT WITH BUILDER.
29 4"X8"X16" SLUMP BLOCK VOIEEX WITH BAG FINISH – SEE EXTERIOR ELEVATIONS.
30 EX EXPOSED WOOD TRUSS – VERIFY SIZE WITH ARCHITECT AND BUILDER.
31 EXPOSED WOOD BEAM – VERIFY SIZE WITH ARCHITECT AND BUILDER.
32 MINIMUM 6X6 EXPOSED WOOD BEAM – VERIFY SIZE WITH ARCHITECT AND BUILDER.
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34 1 3/4" SOLID CORE DOOR WITH AUTOMATIC SELF-CLOSING AND LATCHING DEVICE AND WEATHER STRIPPING TO BE TIGHT FITTING (U.B.C. 406.1.4).
35 PROVIDE ALL NECESSARY BLOCKING FOR TOILET PAPER HOLDER AND TOWEL BARS.
36 1" TAG SLOPING CEILING.
37 DRYWALL FLAT CEILING.
38 PULL DOWN STAIR
39 PROVIDE MIN 1/2" GYPSUM BOARD ON WALLS UNDERSIDE SURFACE, AND ANY ROOFTOP WITHIN THE ENCLOSED ACCESSIBLE SPACE UNDER STAIRS.
40 DURAGARD WOODWROOF VINYL DECKING MEMBRANE ICC-ES REPORT #999-3181
41 DRYWALL SLOPED CLG.

VERIFY ALL AUDIO/VISUAL AND SECURITY SYSTEM REQUIREMENTS WITH OWNER.

TYPICAL NOTES:

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FR.DR.	FRENCH DOOR
W/	WITH
WARD.	WARDROBE
S & P	SHELF & POLE

SQUARE FOOTAGE

FLOOR PLAN:	LEVEL-ONE	3585 SQ.FT
	BASEMENT	1003 SQ.FT
	TOTAL	4587 SQ.FT TOTAL
GARAGE:		878 SQ.FT
COVERED ENTRY,PORCH:		1740 SQ.FT

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residence for:
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LOT 1

DATE 6-12-18
REVISIONS

LICENSED ARCHITECT RICHARD T. THORNE No. C-11623 REGISTERED PROFESSIONAL ARCHITECT STATE OF CALIFORNIA

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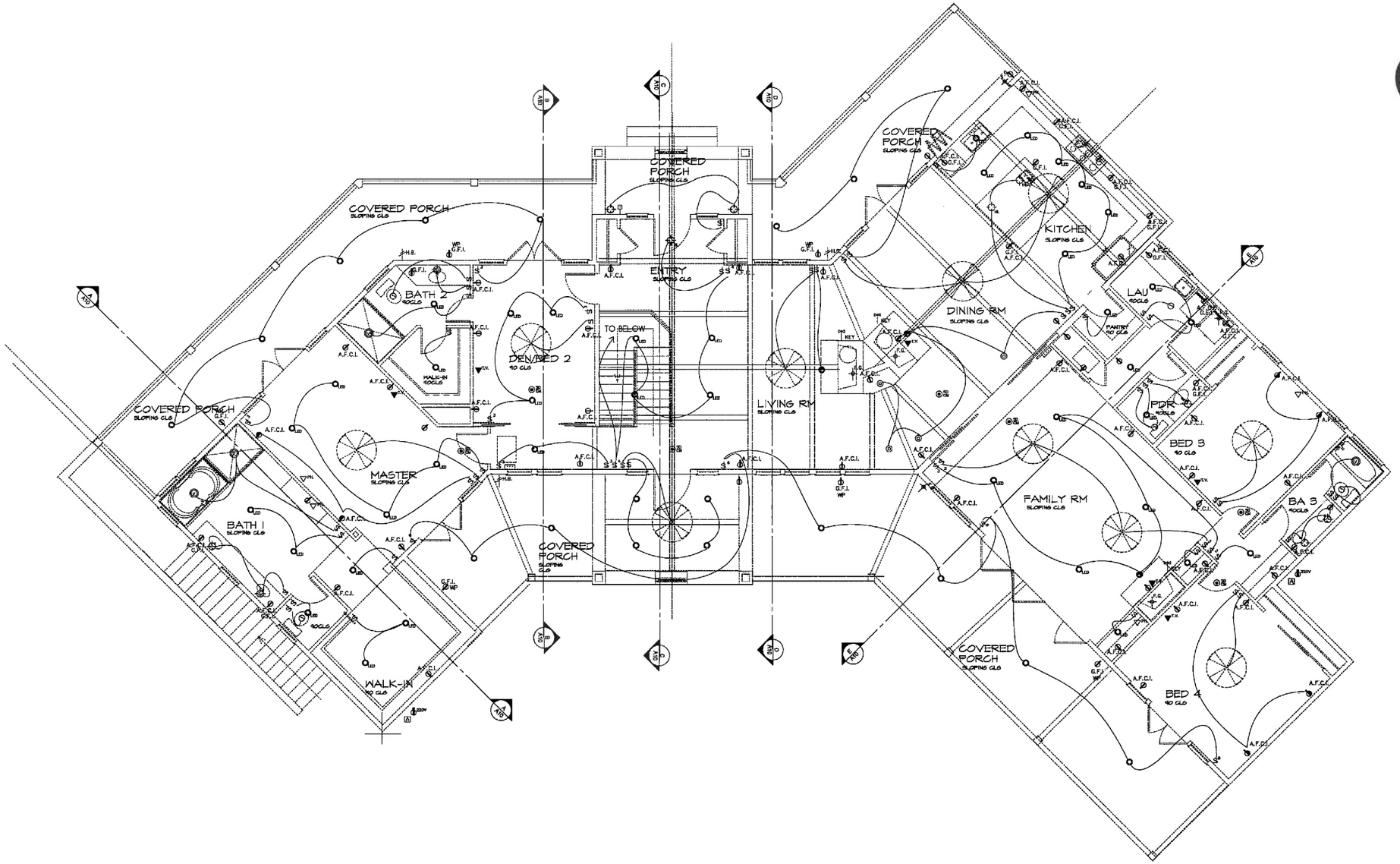

LEVEL ONE ELECTRICAL PLAN

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

ELECTRICAL NOTES

- 110V WALL OUTLET
- 110V WALL OUTLET UNDER CABINET
- 1/2 HOT 110V OUTLET
- 1/2 HOT 110V OUTLET UNDER CABINET
- 220V WALL OUTLET
- 110V OUTLET WIRE FOR AUTOMATIC GARAGE DOOR OPENER PER MANUFACTURER'S SPECIFICATIONS
- OUTLET FOR AUTOMATIC SPRINKLER SYSTEM AT +48"
- WATERPROOF OUTLET DIRECTLY UNDER EAVE FOR SEASONAL LIGHTING
- OUTLET FOR LANDSCAPE LOW VOLTAGE TIMER PROVIDE PROTECTIVE COVER
- 110V FLOOR OUTLET
- WP — WATER PROOF OUTLET
- G.F.I. — GROUND FAULT INTERRUPTER
- A.F.C.I. — ARC-FAULT CIRCUIT INTERRUPTER
- OC — OCCUPANCY SENSOR (MANUAL ON / AUTO-OFF).
- M/P — MOTION SENSOR / INTEGRAL PHOTOCELL
- SWITCH
- 3-WAY SWITCH
- DIMMER SWITCH
- BRACKET LIGHT
- PHOTO CELL – RECESSED CAN LIGHT
- PHOTO CELL – BRACKET LIGHT
- TIMER-CONTROLLED LIGHT FIXTURE
- 4" RECESSED ART LIGHT – MR16 LAMP (LOW VOLTAGE)
- 5" RECESSED CAN LIGHT
- 5" RECESSED LED CAN LIGHT
- 4" EYEBALL LIGHT – MR16 LAMP (LOW VOLTAGE)
- HANGING LIGHT
- TRACK LIGHT
- 48" DOUBLE TUBE FLOURESCENT FIXTURE
- UNDER CABINET FLUORESCENT LIGHT FIXTURE. CONNECT TO FIRST SWITCH AT ENTRY OF ROOM (40 LUMENS PER WATT EFFICACY MIN.).
- LED TAPE LIGHT.
- VAPOR PROOF LIGHT
- SURFACE MOUNTED FLUORESCENT LIGHT FIXTURE. CONNECT TO FIRST SWITCH AS ENTERING ROOM (40 LUMENS PER WATT EFFICACY MIN.)
- COMBINATION FLUORESCENT LIGHT/FAN FIXTURE. CONNECT TO FIRST SWITCH AS ENTERING ROOM (40 LUMENS PER WATT EFFICACY MIN.) VENT FAN TO OUTSIDE AIR, CAPABLE OF 5 AIR CHANGES PER HOUR. SWITCH LIGHT & FAN SEPARATE.
- COMBINATION LIGHT AND EXHAUST FAN VENT TO OUTSIDE AIR, CAPABLE OF 5 AIR CHANGES PER HOUR.
- 50 CFM EXHAUST FAN – VENT TO OUTSIDE AIR.
- T.V. JACK
- PHONE JACK
- SMOKE ALARM TO 120V W/ BATTERY BACK-UP PROVIDE INTERCONNECTION SO THAT THE ACTIVATION OF ANY SMOKE ALARM WILL ACTIVATE ALL SMOKE ALARMS IN THE DWELLING.
- SMOKE AND CARBON MONOXIDE ALARM TO 120V W/ BATTERY BACK-UP PROVIDE INTERCONNECTION SO THAT THE ACTIVATION OF ANY ALARM WILL ACTIVATE ALL ALARMS IN THE DWELLING.
- DOORBELL PUSHBUTTON
- CHIMES
- JUNCTION BOX
- AIR CONDITIONER FUSE – PROVIDE AN OUTLET WITHIN 25'-0" OF A.C. UNIT.
- AUTOMATICALLY ILLUMINATED ADDRESS NUMBERS NOT LESS THEN 4" HIGH, CLEARLY VISIBLE FROM THE STREET OR ACCESS ROAD.
- TIMER CONTROLLED RECESSED CAN LIGHT
- TIMER LOCATION
- UNDER TUE KICK FLORESCENT ROPE LIGHT
- FLUORESCENT ROPE LIGHT AT DOOR HEAD ACTIVATED WITH JAMB SWITCH
- PRE-WIRE FOR OPTIONAL CEILING FAN.
- XX — PLAN NOTE – SEE FLOOR PLAN SHEETS FOR INFORMATION.
- ELEC. HEAT — EXTERIOR GRADE ELECTRICAL HEATER. RECESSED IN CEILING.

MECHANICAL

- F.G. — FUEL GAS
- KEY — KEY FOR LOG LIGHTER
- PLUMBING FOR ICE MAKER
- H.B. — HOSE BIB
- H.B. S.O. W/ — HOSE BIB WITH SHUTOFF

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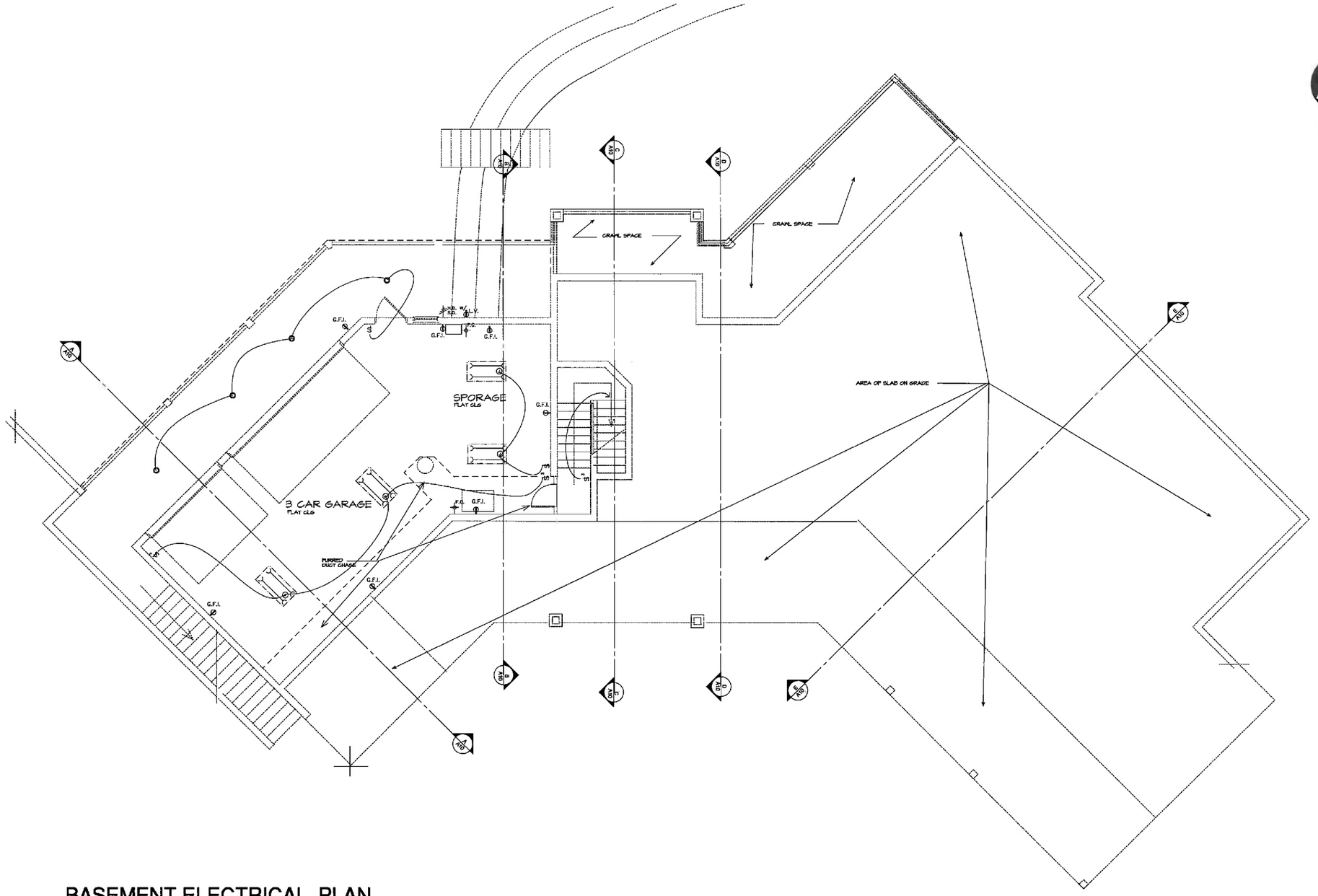

BASEMENT ELECTRICAL PLAN

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

ELECTRICAL NOTES

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- 110V WALL OUTLET UNDER CABINET
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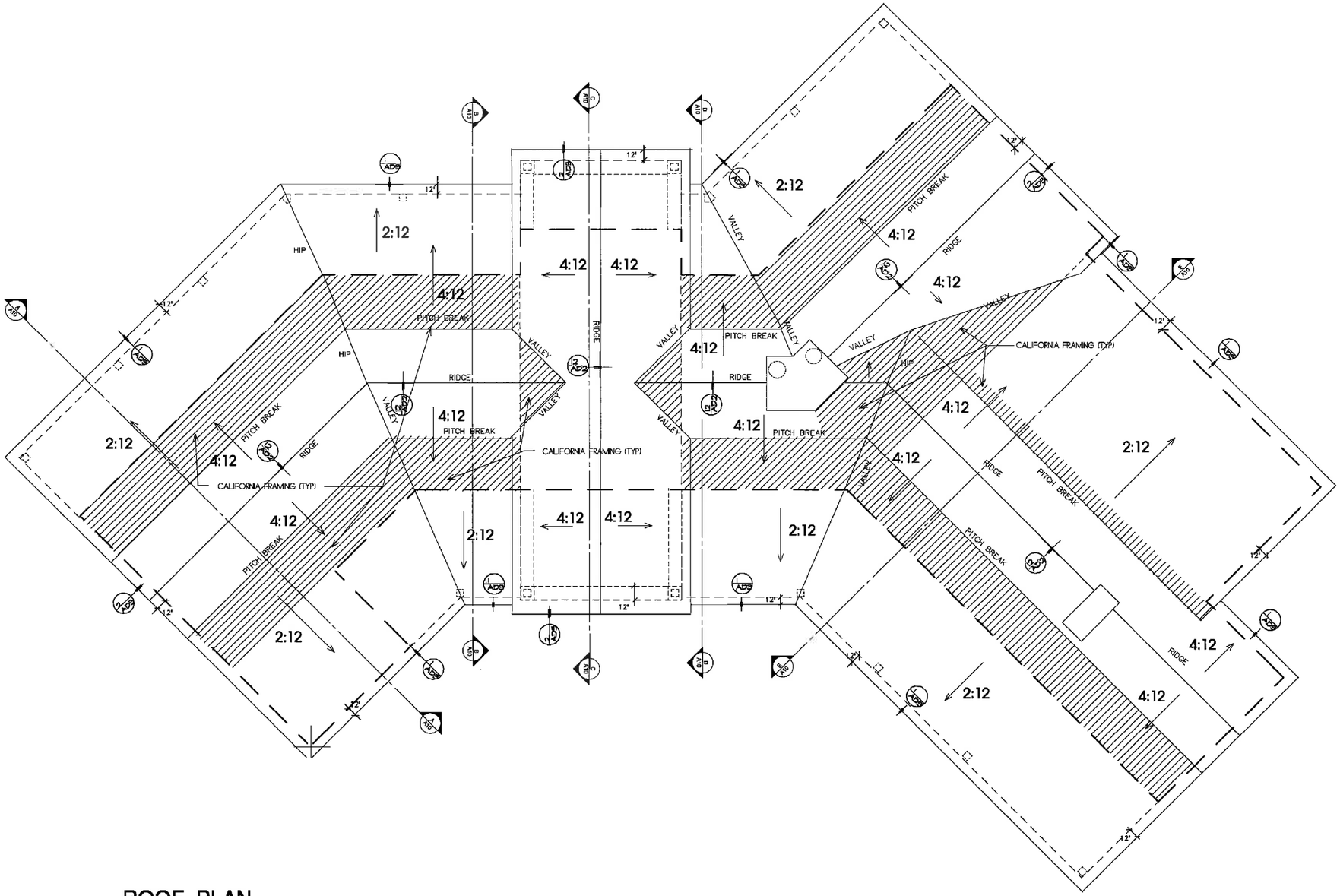

ROOF PLAN

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

ROOF NOTES

ROOF SLOPE
AS NOTED ON PLAN 2/ 12 OR 4/12.

ROOF COVERING ASSEMBLIES SHALL BE AN ICC-ES OR UL LISTED ROOF ASSEMBLY COMPLYING WITH ASTM E 108 OR UL 790 AND ROOF SHEATHING, UNDERLAYMENT AND ATTACHMENT SHALL BE ADQUATE FOR 85 MPH WIND LOADS.

ATTIC VENTILATION
AS NOTED ON PLAN AND DETAILS 8 AND 9/AD2, 1 AND 7/AD3.

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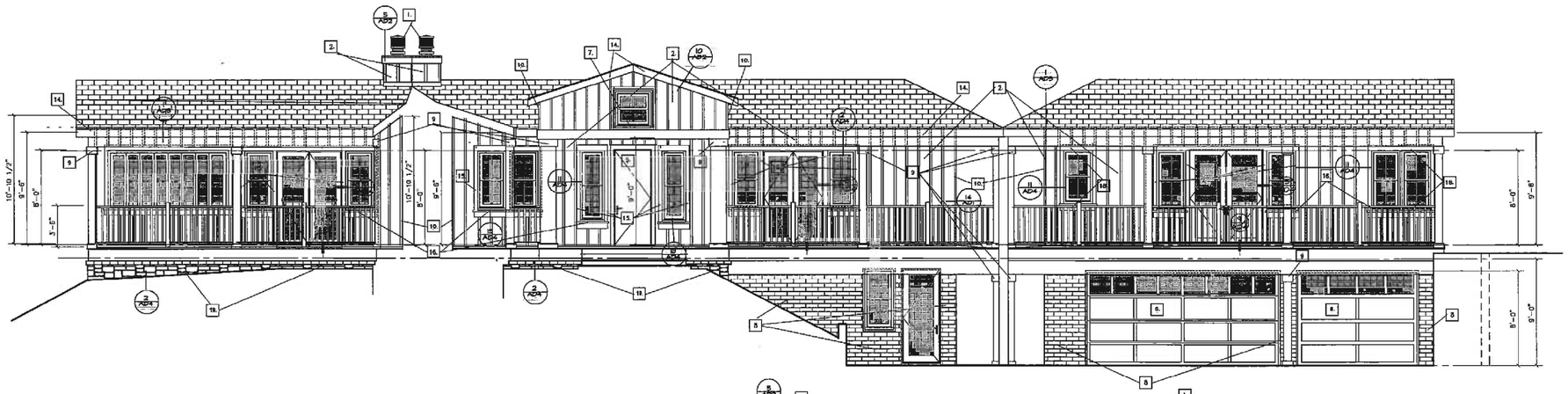
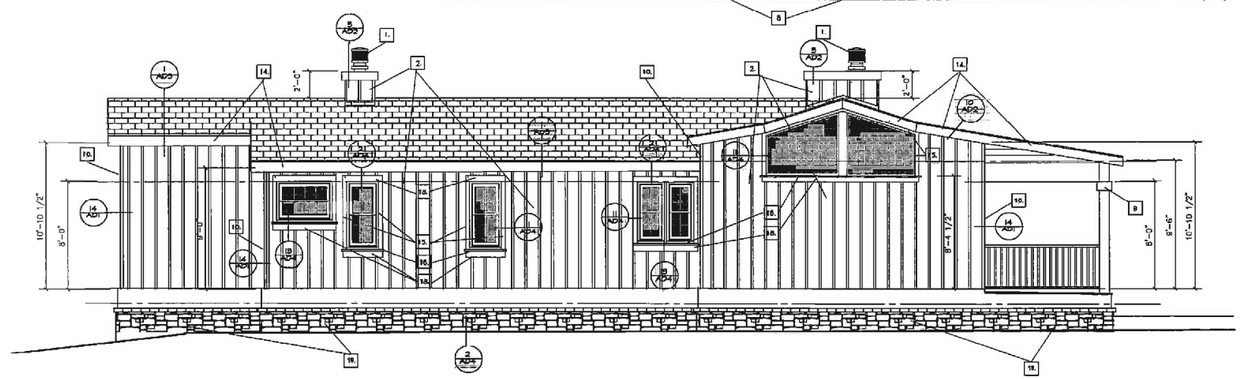
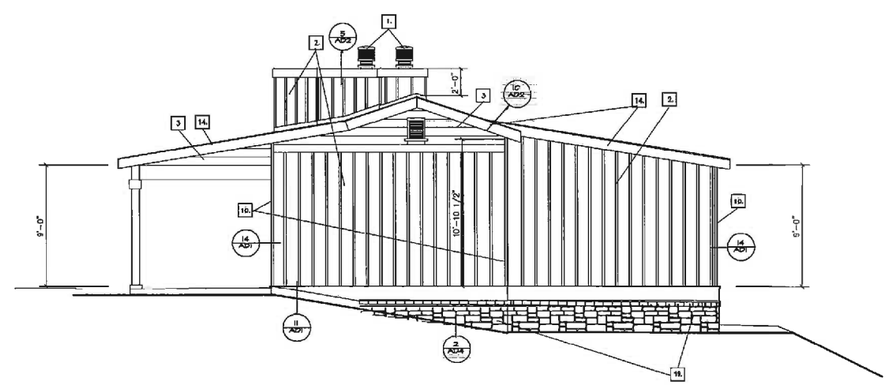


FRONT ELEVATION (SOUTH)

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





LEFT ELEVATIOIN (WEST)

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

ELEVATION NOTES

18. INDICATES ELEVATION NOTES , SEE NUMBER BELOW:

1. G.I. CHIMNEY CAP W/ ICBO APPROVED SPARK ARRESTOR. PROVIDED BY FIREPLACE MANUFACTURER.
2. 4X10 SHEET HARDIEPANEL SIDING -CEDARMILL W/ 1X3 BATT AT 16" O.C. (HARDIE - TEXTURED RUSTIC).
3. HARDIEPLANK LAP SIDING - CEDARMILL
4. 14"X14" G.I. SCREENED GARAGE VENT.
5. ENTRY DOOR - VERIFY DESIGN WITH BUILDER.
6. ROLL-UP SECTIONAL GARAGE DOOR. CARRIAGE DOOR DESIGN VERIFY W/ BUILDER & SUBMIT SHOP DRAWINGS TO ARCHITECT
7. PROVIDE "BRACE ISE as WATER SHELF" AT ALL HORIZONTAL SURFACES. SLOPE MIN. 1/4" PER FOOT TO DRAIN. LAP COVER SPECS MIN. 12"
8. 4X8X16 SLUMP BLOCK VENEER W/ BAG FINISH.
9. 7 1/4" HARDETRIM.
10. 3" HARDETRIM CORNER BOARD.
11. WOOD ATTIC VENT.
12. 8" SOLDIER COURSE
13. 4" SLUMP BLOCK SILL.
14. 2X FASCIA
15. 3 1/2" HARDETRIM.
16. "RUSTIC" HARDETRIM DRIP CAP SILL / 3 1/2" HARDETRIM BELOW.
17. STANDING SEAM METAL ROOF.
18. 3 1/2" HARDETRIM.
19. FIELD STONE -CULTURED STONE/ARBORED VENEER

NOTE: WEEP SCREED SHALL BE PLACED A MINIMUM OF 4 INCHES ABOVE THE EARTH OR 2 INCHES ABOVE PAVED AREAS

CHIMNEY NOTE:

DECORATIVE SHROUDS SHALL BE LISTED AND LABELED FOR USE WITH THE SPECIFIC FACTORY BUILT CHIMNEY SYSTEM PROVIDE REQUIRED INFORMATION TO THE BUILDING INSPECTOR FOR APPROVAL PRIOR TO INSTALLATION.

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LOT 1

DATE 6-12-18
REVISIONS

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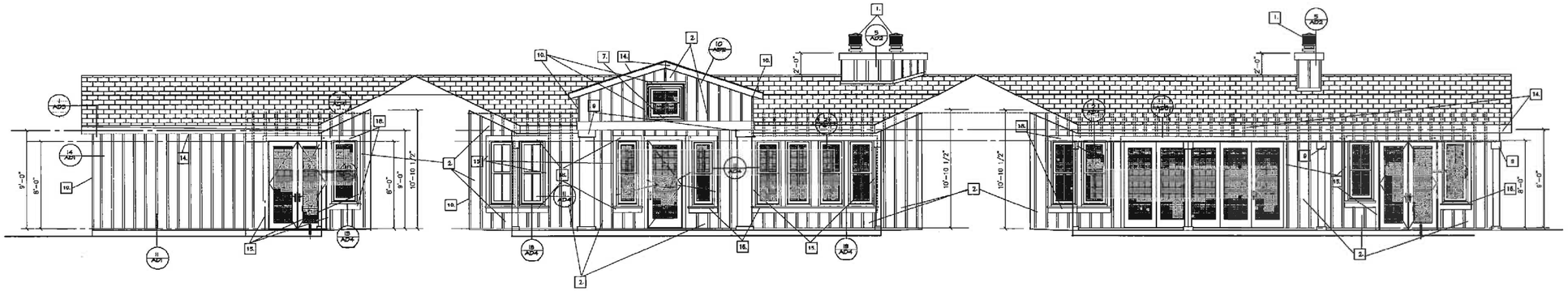
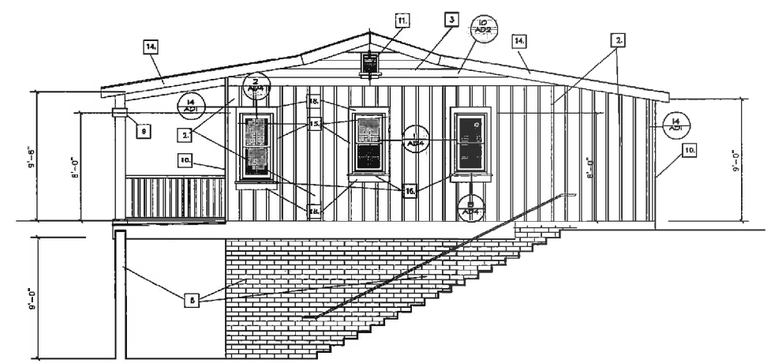


REAR ELEVATION (SOUTH)

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



RIGHT ELEVATION (EAST)

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

ELEVATION NOTES

18 INDICATES ELEVATION NOTES , SEE NUMBER BELOW.

1. C.I. CHIMNEY CAP W/ U.B.C. APPROVED SPARK ARRESTOR. PROVIDED BY FIREPLACE MANUFACTURER.
2. 4X10 SHEET HARDIEPANEL SIDING -CEDERMILL W/ 1X3 BATT AT 16" O.C. (HARDIE - TEXTURED RUSTIC).
3. HARDIEPLANK LAP SIDING - CEDMILL.
   14"X14" O.I. SCREENED GARAGE VENT.
5. ENTRY DOOR - "HUFF" DESIGN WITH BUILDER.
6. ROLL-UP SECTIONAL GARAGE DOOR. GARAGE DOOR DESIGN VERIFY W/ BUILDER & SUBMIT SHOP DRAWINGS TO ARCHITECT
7. PROVIDE "GRACE ICE & WATER SHIELD" AT ALL HORIZONTAL SURFACES SLOPE MIN. 1/4" PER FOOT TO DRAIN. LAP DOWN SIDES MIN. 12"
8. 4X8X16 SLUMP BLOCK VENEER W/ BAG FINISH.
9. 7 1/4" HARDIETRIM.
10. 5" HARDIETRIM CORNER BOARD.
11. WOOD ATTIC VENT.
12. 8" SOLDIER COURSE SLUMP BLOCK HEADER.
13. 4" SLUMP BLOCK SILL.
14. 2X FASCIA.
15. 3 1/2" HARDIETRIM.
16. "RUSTIC" HARDIETRIM DRIP CAP SILL / 3 1/2" HARDIETRIM BELOW.
17. STANDING SEAM METAL ROOF.
18. 3 1/2" HARDIETRIM.
19. FIELD STONE - CULTURED STONE AHEARED VENEER

NOTE: WEEP SCREED SHALL BE PLACED A MINIMUM OF 4 INCHES ABOVE THE EARTH OR 2 INCHES ABOVE PAVED AREAS

CHIMNEY NOTE:
DECORATIVE SHROUDS SHALL BE LISTED AND LABELED FOR USE WITH THE SPECIFIC FACTORY BUILT CHIMNEY SYSTEM PROVIDE REQUIRED INFORMATION TO THE BUILDING INSPECTOR FOR APPROVAL PRIOR TO INSTALLATION.

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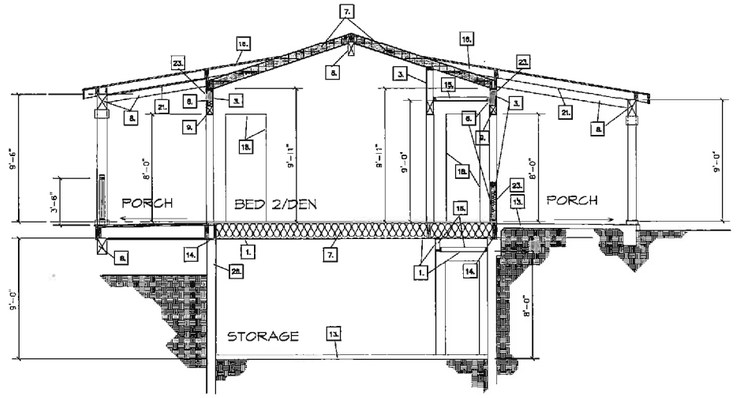
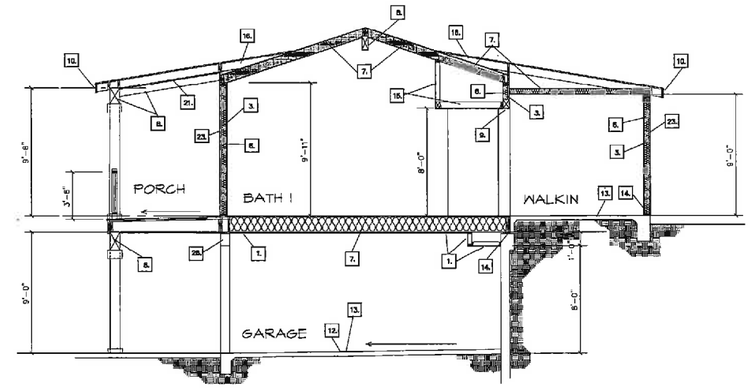
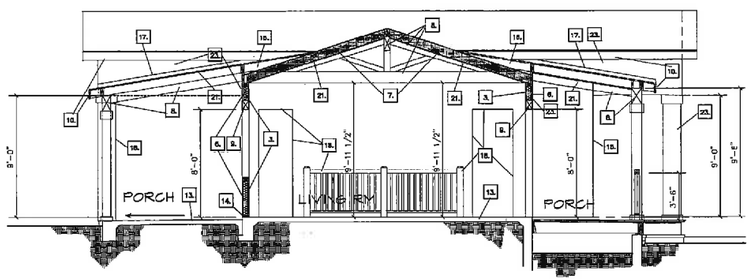


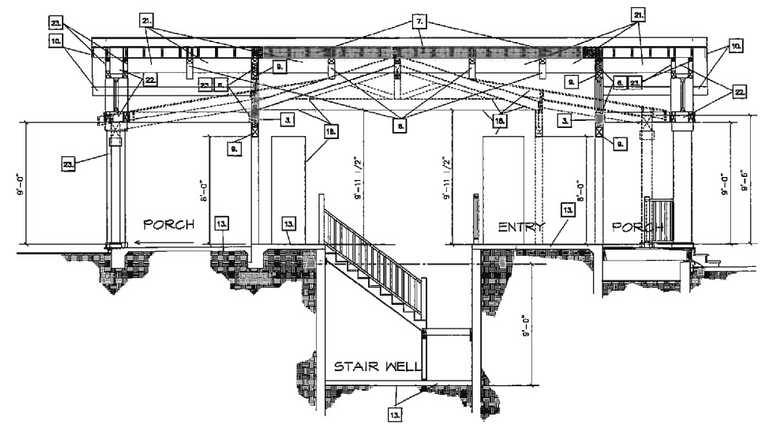
SECTION B-B 1/4"=1'-0"



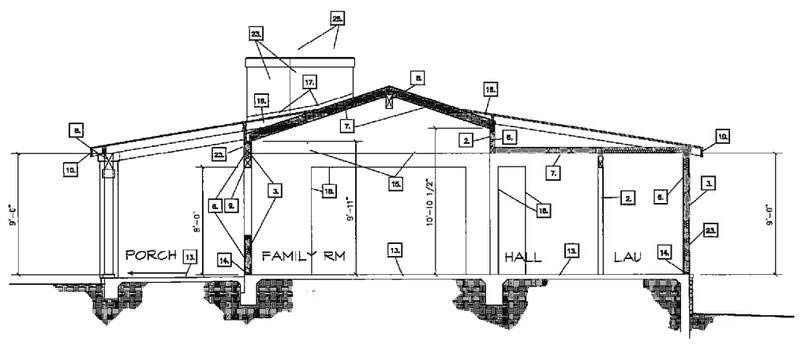
SECTION A-A 1/4"=1'-0"



SECTION D-D 1/4"=1'-0"



SECTION C-C 1/4"=1'-0"



SECTION E-E 1/4"=1'-0"

NOTES

25. INDICATES SECTION NOTES , SEE NUMBER BELOW:

1. 5/8" TYPE "X" TYP. AT GARAGE TO HOUSE
2. 2X4 STUDWALL AT 16" O.C.
3. 2X6 STUDWALL AT 16" O.C.
4. DESIGNED WOOD TRUSSES AT 24" O.C
5. GIRDER TRUSS
6. R-21 INSULATION, MUST BE WITH ENERGY CALCS.
7. R-38 INSULATION, MUST BE WITH ENERGY CALCS. FILL CAVITY W/ICENENE AT COMBO R.R.)
8. EXPOSED WOOD BEAM
9. 8X HDR
10. REFER TO EXTERIOR ELEVATIONS AND DETAILS FOR FASCIA AND BARGE.
11. PROVIDE 5/8" DECYMAL AT TRUSSES.
12. CONCRETE SLAB ,SLOPE MIN. 2" TO DRAIN.
13. CONCRETE SLAB
14. 2X P.T MUDSILL TYP.
15. 2X SOFFIT FRAMING AT 16" O.C.
16. CALIFORNIA FRAMING.
17. PROVIDE G.I. FLASHING AT ROOF TO WALL CONNECTION.
18. LINE OF WALL OR ELEVATION BEYOND.
19. STANDING SEAM METAL ROOF.
20. DRAG TRUSS.
21. WOOD CEILING
22. WOOD SOFFIT
23. HARDIE SIDING – SEE ELEVATION FOR DETAILS
24. PROVIDE DRAFT STOPS AS REQUIRED. SEE FIRE NOTES.
25. G.I. CHIMNEY CAP W/ 5250 APPROVED SPARK ARRESTOR. PROVIDED BY FIREPLACE MANUFACTURER.
26. 4X4X16 SLUMP BLOCK W/ BAG FINISH

A. PROVIDE WATER-RESISTANT GYPSUM BOARD BEHIND TUB AND SHOWER ENCLOSURE MATERIALS TO A HEIGHT OF 70" MINIMUM ABOVE THE DRAIN.
B. ALL FOAM PLASTIC INSULATION SHALL HAVE A FLAME-SPREAD RATING OF NOT MORE THAN 75 AND A SMOKE-DEVELOPED RATING OF NOT MORE THAN 450.
C. RADIANT BARRIER SHALL BE INSTALLED ON ALL VERTICAL SURFACES OF ALL ATTIC SPACES PER THE ENERGY REPORT (T-24) REQUIREMENTS.
D. PENETRATIONS THROUGH THE WALLS OR CEILINGS SEPARATING THE DWELLING FROM THE GARAGE SHALL BE PROTECTED (SUCH AS THOSE FOR VENTS, PIPES, DUCTS AND WIRES) WITH AN APPROVED MATERIAL TO RESIST THE FREE PASSAGE OF FLAME AND PRODUCTS OF COMBUSTION. (CRC R302.5)

NOTES:

THESE SECTIONS ARE FOR PROFILES OF CEILING HEIGHTS, PLATE HEIGHTS, AND GENERAL SHAPES OF TRUSSES ONLY. REFER TO STRUCTURAL PLANS BY:
KSL/PAE, INC.
1800 E. 16TH STREET
SANTA ANA, CA 92701
(714) 835-2800
AND TRUSS MANUFACTURER'S PLANS FOR ACTUAL SIZES, DETAILS, AND LAY-OUT OF ALL FRAMING.

FIRE NOTES:

FIRE BLOCKS AND DRAFT STOP:(CRC R302.11, R302.12)
FIRE BLOCKING SHALL BE PROVIDED IN THE FOLLOWING LOCATIONS:

1. IN CONCEALED SPACES OF STUD WALL AND PARTITIONS, INCLUDING FURRED SPACES, AT CEILING AND FLOOR LEVELS AND AT 10-FOOT INTERVALS BOTH VERTICAL AND HORIZONTAL. ALSO SEE SECTION 903.4.1
2. AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS AND COVE CEILINGS.
3. IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF RUN AND BETWEEN STUDS ALONG AND IN LINE WITH THE RUN OF STAIRS IF THE WALLS UNDER THE STAIRS ARE UNFINISHED.
4. IN OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS, FIREPLACES AND SIMILAR OPENINGS WHICH AFFORD A PASSAGE FOR FIRE AT CEILING AND FLOOR LEVELS, WITH NON COMBUSTIBLE MATERIALS.
5. AT OPENINGS BETWEEN ATTIC SPACES AND CHIMNEY CHASES FOR FACTORY-BUILT CHIMNEYS.
6. WHERE WOOD SLEEPERS ARE USED FOR LAYING WOOD FLOORING ON MASONRY OR CONCRETE FIRE-RESISTIVE FLOORS, THE SPACE BETWEEN THE FLOOR SLAB AND THE UNDERSIDE OF WOOD FLOORING SHALL BE FILLED WITH NONCOMBUSTIBLE MATERIAL OR FIRE BLOCKED IN SUCH A MANNER THAT THERE WILL BE NO OPEN UNDER THE FLOORING WHICH EXCEEDS 100 SQUARE FEET IN AREA AND SUCH SPACE SHALL BE FILLED SOLIDLY UNDER ALL POERMANENT PARTITIONS SO THAT THERE IS NO COMMUNICATION UNDER THE FLOORING BETWEEN ADJOINING ROOMS.
7. FIRE BLOCK CONSTRUCTION:
   FIREBLOCKING SHALL CONSIST OF 2 INCHES NOMINAL LUMBER OR TWO THICKNESSES OF 1 INCH NOMINAL LUMBER WITH BROKEN LAP JOINTS OR ONE THICKNESSES OF 23/32 INCH WOOD STRUCTURAL PANEL OR ONE ONE THICKNESS OF 3/4 INCH TYPE 2-M PARTICLEBOAD WITH JOINTS BACKED BY 3/4 INCH TYPE 2-M PARTICLE BOARD.
   FIRE BLOCKS MAY ALSO BE OF GYPSUM BOARD, CEMENT ASBESTOS BOARD, MINERA FIBER, GLASS FIBER OR OTHER APPROVED MATERIALS SECURELY FASTENED IN PLAC LOOSE-FILL INSULATION MATERIAL SHALL NOT BE USED AS A FIRE BLOCK UNLESS SPECIFICALLY FIRE TESTED.

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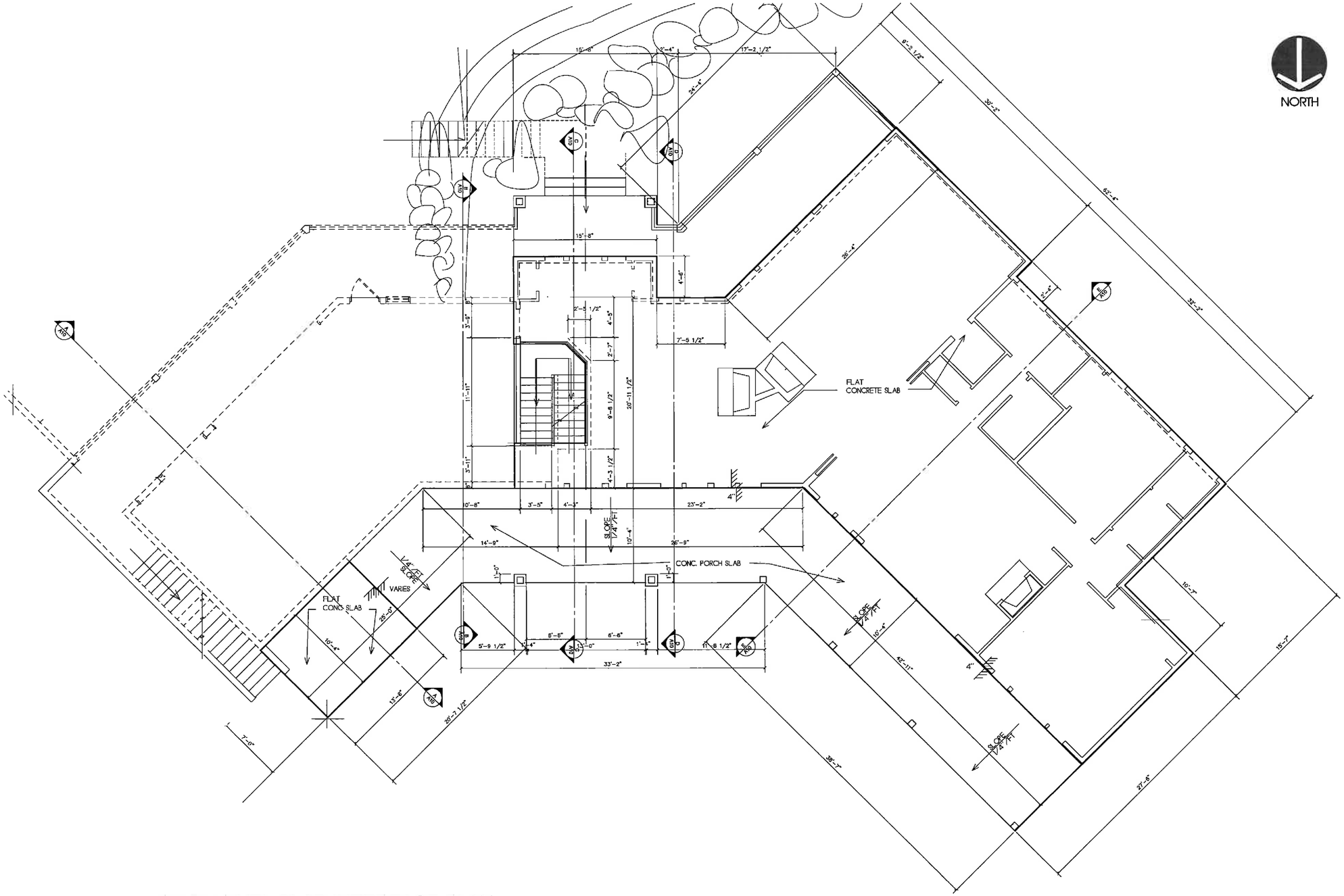

MAIN LEVEL SLAB INTERFACE PLAN

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

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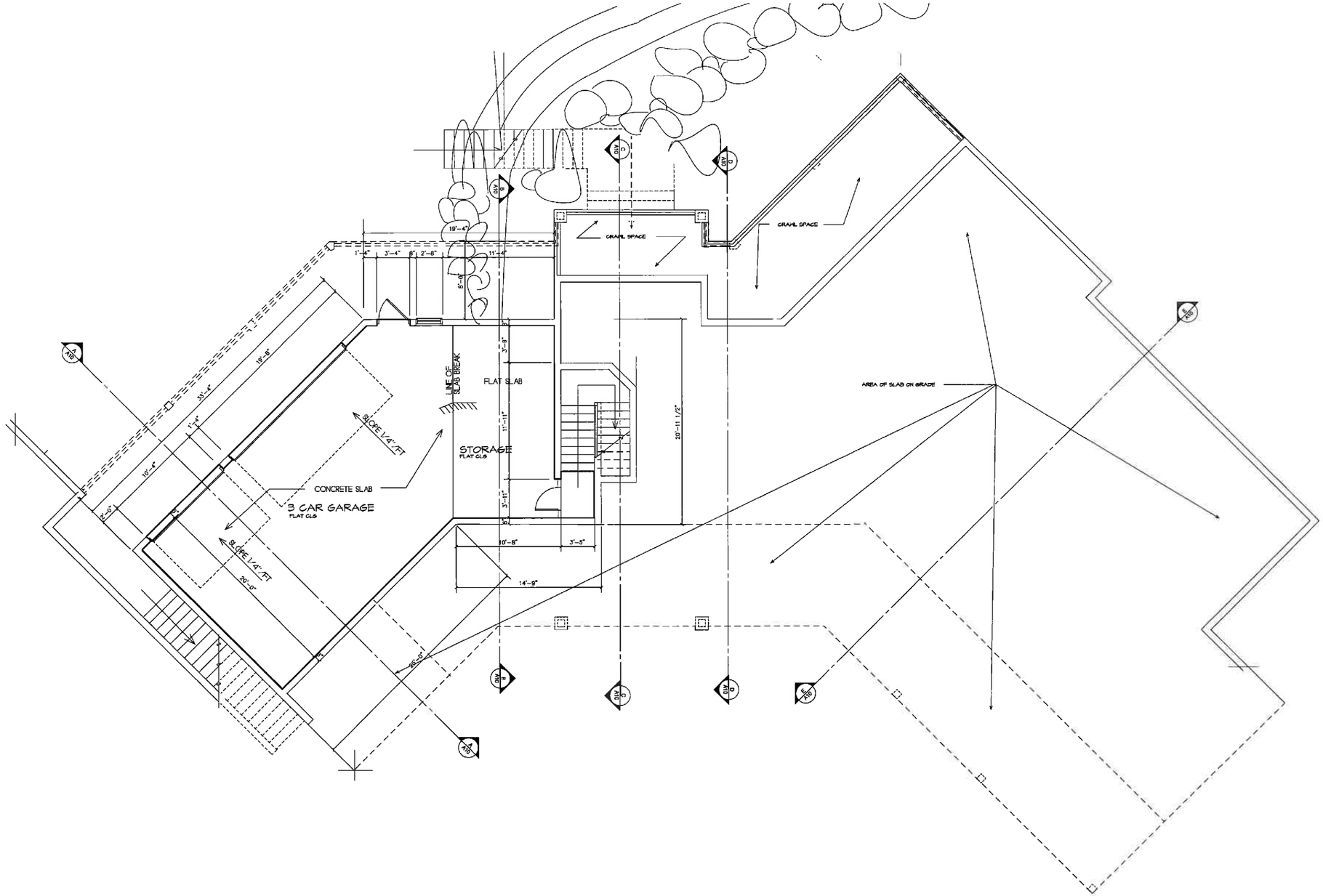

BASEMENT SLAB INTERFACE PLAN

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

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GENERAL CONDITIONS

1. THE SCOPE OF SCOPE OF SERVICES UNDER THIS CONTRACT IS LIMITED TO PROVIDING A "BUILDERS SET OF PLANS. THIS SET OF PLANS IS SUFFICIENT TO OBTAIN A BUILDING PERMIT. HOWEVER, ALL MATERIALS AND METHODS OF CONSTRUCTION NECESSARY TO COMPLETE THE PROJECT AND NOT NECESSARILY DESCRIBED IN THIS BUILDER'S SET, THE IMPLEMENTATION OF THE PLANS REQUIRES A CLIENT, GENERAL CONTRACTOR, AND SUBCONTRACTORS THOROUGHLY KNOWLEDGEABLE WITH THE APPLICABLE BUILDING CODES AND METHODS OF CONSTRUCTION THE PLANS AND DETAILS DELINEATE AND DESCRIBE ONLY LOCATIONS, DIMENSIONS, TYPES OF MATERIALS AND GENERAL METHODS OF ASSEMBLING OR FASTENING. THEY ARE NOT INTENDED TO SPECIFY PARTICULAR PRODUCTS OR OTHER METHODS OF ANY SPECIFIC MATERIAL, PRODUCT OR METHOD.

2 ALL WORK SHALL COMPLY WITH THE MOST STRINGENT REQUIREMENTS OF ALL APPLICABLE CITY, COUNTY, STATE AND GENERAL LAWS, RULES, CODES, ORDINANCES AND REGULATIONS. IF THE GENERAL CONTRACTOR OR ANY SUBCONTRACTOR PERFORMS ANY WORK IN CONFLICT WITH THE ABOVE-MENTIONED LAWS RULES, CODES, ORDINANCES AND REGULATIONS, THE CONTRACTOR IN VIOLATION SHALL BEAR ALL COSTS OF REPAIR ARISING OUT OF THE NON-CONFORMING WORK.

2015 CALIFORNIA BUILDING CODE (CBC)
2015 CALIFORNIA MECHANICAL CODE (CMC)
2015 CALIFORNIA PLUMBING CODE (CPC)
2015 CALIFORNIA ELECTRICAL CODE (CEC)
2015 CALIFORNIA FIRE CODE (CFC)
2015 CALIFORNIA ENERGY CODE (T24)
2015 CALIFORNIA RESIDENTIAL CODE
WITH LOCAL AMENDMENTS

3. THE GENERAL CONTRACTOR AND EVERY SUBCONTRACTOR PERFORMING WORK UPON OR PROVIDING SERVICES AND/OR MATERIALS FOR THIS WORK IS REQUIRED TO BECOME AND MAINTAIN IN FORCE "ALL RISK" BUILDERS RISK INSURANCE PRIOR TO COMMENCEMENT OF THE WORK AND/OR FURNISHING LABOR, SERVICES AND MATERIALS. EACH "ALL RISK" POLICY SHALL BE IN AN AMOUNT SUFFICIENT TO COVER THE REPLACE VALUE OF THE WORK BEING PERFORMED AND/OR THE LABOR SERVICES, AND MATERIALS BEING SUPPLIED BY THE GENERAL CONTRACTOR, SUBCONTRACTORS, ARCHITECT, AND ALL PROFESSIONAL CONSULTANTS.

4. THE GENERAL CONTRACTOR AN SUBCONTRACTOR SHALL FURNISH ALL LABOR, EQUIPMENT, AND MATERIALS INDICATED ON THE PLANS AND REQUIRED BY THE APPLICABLE CODES.

5. NO SUBSTITUTIONS SHALL BE MADE WITHOUT THE OWNER OR DEVELOPERS WRITTEN AUTHORIZATION, ANY SUBSTITUTION SHALL BE MADE IN ADVANCE TO AVOID ANY DELAY IN THE PROJECT SCHEDULE. THE GENERAL CONTRACTOR AND SUBCONTRACTOR SHALL NOT MAKE STRUCTURAL CHANGES WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER AND APPROVAL BY THE ARCHITECT.

6. ANY ADDITIONAL DELETION, OR CHANGE IN THE SCOPE OF THE WORK DESCRIBED BY THE PLANS AND GENERAL NOT INDICATED BY WRITTEN CHANGE ORDERS. THE GENERAL CONTRACTOR SHALL PROCURE THE BUILDING OFFICIAL'S APPROVAL FOR ANY CHANGE IN THE WORK.

7. THE INTENT OF THE PLANS AND GENERAL NOTES IS THAT ALL LABOR, MATERIALS, EQUIPMENT, AND TRANSPORTATION SHALL BE INCLUDED IN THE WORK FOR THE COMPLETE EXECUTION OF THE PROJECT. THE ARCHITECT IS NOT RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION.

8. IT IS THE CLIENT, GENERAL CONTRACTOR, AND ALL SUBCONTRACTORS RESPONSIBILITY PRIOR TO OR DURING CONSTRUCTION TO NOTIFY THE ARCHITECT IN WRITING OF ANY PROBLEMS, ERRORS OR OMISSIONS IN THE PLANS AND GENERAL NOTES OF WHICH A CONTRACTOR THOROUGHLY KNOWLEDGEABLE WITH THE BUILDING CODES AND METHODS OF CONSTRUCTION SHOULD REASONABLY BE AWARE. WRITTEN INSTRUCTIONS ADDRESSING SUCH PERCEIVED ERRORS OR OMISSIONS SHALL BE RECEIVED FROM THE ARCHITECT PRIOR TO THE CLIENT OR CLIENT'S SUBCONTRACTORS PROCEEDING WITH THE WORK. THE CLIENT WILL BE RESPONSIBLE FOR ANY DEFECTS IN CONSTRUCTION IF THESE PROCEDURES ARE NOT FOLLOWED.

9. ALL SHOP DRAWINGS REQUIRED BY THE CONSTRUCTION DOCUMENTS AND GENERAL NOTES SHALL BE SUBMITTED TO THE ARCHITECT OR ENGINEER PRIOR TO FABRICATION FOR REVIEW OF COMPLIANCE WITH THE DESIGN CONCEPT.

10. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK BETWEEN THE DIFFERENT SUBCONTRACTORS AND REQUIRING ALL SUBCONTRACTORS TO USE THE MOST CURRENT BUILDING DEPARTMENT APPROVED SET OF CONSTRUCTION DOCUMENTS. THE GENERAL CONTRACT SHALL ARRANGE A PRE-CONSTRUCTION MEETING TO REVIEW OMISSIONS AND DISCREPANCIES SUFFICIENTLY IN ADVANCE OF CONSTRUCTION TO ASSURE THE ORDERLY PROGRESS OF THE PROJECT PRIOR TO THE PERFORMANCE OF ANY WORK. ALL PARTIES USING THESE CONSTRUCTION DOCUMENTS ARE RESPONSIBLE FOR REVIEWING THE FULL CONTENT OF THESE DRAWINGS FOR OMISSIONS AND DISCREPANCIES PRIOR TO THE START OF CONSTRUCTION.

11. THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL BE FAMILIAR WITH THE FOLLOWING DOCUMENTS SOILS REPORT, ENERGY COMPLIANCE REPORT, STRUCTURAL CALCULATIONS AND DRAWINGS AND ACOUSTICAL REPORT . THE GENERAL CONTRACTOR SHALL KEEP A COPY OF THE ABOVE DOCUMENTS ON THE SITE AT ALL TIMES. REFER TO COVER SHEET FOR A LIST OF ALL CONSULTANTS AND THEIR REPORT NUMBERS.

12. THE GENERAL CONTRACTOR SHALL COMPARE THE EXISTING SITE GRADES TO THE GRADES SHOWN ON THE PLANS. ANY DISCREPANCY IN ELEVATION FROM THE FINISHED FLOOR TO THE FINISHED GRADE AT EXTERIOR STAIRWAYS AND WALKWAYS SHALL BE COMMUNICATED TO THE ARCHITECT FOR REVIEW BEFORE PROCEEDING WITH THE WORK.

13. ALL SUBCONTRACTORS SHALL PERFORM THEIR OWN CUTTING, FITTING, AND PATCHING OF MATERIALS IN A WORKMANLIKE MANNER.

14. ALL TRADES SHALL KEEP THE PREMISES CLEAN OF ANY UNNECESSARY WASTE MATERIALS AND RUBBISH CAUSED BY THEIR WORK. SUBCONTRACTORS SHALL REMOVE ALL RUBBISH TOOLS, SCAFFOLDING, AND SURPLUS MATERIALS AT THE COMPLETION OF THE WORK. ALL FIXTURES, EQUIPMENT, GLAZING, FLOORS, AND OTHER SURFACES SHALL BE LEFT CLEAN AND READY FOR OCCUPANCY UPON COMPLETION OF THE PROJECT.

15. THE GENERAL NOTES REFER TO VARIOUS PROFESSIONAL TRADE ASSOCIATION MANUALS AND PUBLICATIONS. THE GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL BE FAMILIAR WITH AND REFER TO THE TRADE PUBLICATIONS RELATING TO THEIR WORK.

16. THE GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL BE RESPONSIBLE FOR STORING THE MATERIALS ON THE SITE. THE MATERIALS SHALL BE KEPT CLEAN AND PROTECTED FROM MOISTURE, PESTS, AND ANIMALS. ANY LOSS ARISING OUT OF MATERIALS STORED AT THE SITE SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR OR SUBCONTRACTOR WHO STORED THE DAMAGED OR LOST MATERIALS.

ROUGH CARPENTRY

1.0 GENERAL

1.01 SCOPE

PROVIDE LABOR, MATERIAL, EQUIPMENT, AND SERVICES NECESSARY FOR INSTALLATION AND COMPLETION OF ALL ROUGH CARPENTRY AS SHOWN ON THE DRAWINGS AND AS NOTED HEREIN.

1.02 QUALITY ASSURANCE

A. CODES AND STANDARDS

1. CALIFORNIA BUILDING CODE (OR CURRENT APPLICABLE CODE).
2. WEST COAST LUMBER INSPECTION BUREAU.
3. AMERICAN PLYWOOD ASSOCIATION.

2.0 PRODUCTS/MATERIALS

2.01 LUMBER

1. ALL LUMBER SHALL BE MARKED AND CONFORM WITH THE STANDARD GRADING AND DRESSING RULES OF THE WEST COAST LUMBER INSPECTION BUREAU.

2. STUDS, JOIST, RAFTERS, FOUNDATION PLATES OR SILL PLANKING 2 INCHES OR MORE IN DEPTH, BEAMS, STRINGERS, POSTS STRUCTURAL SHEATHING AND SIMILAR LOAD-BEARING MEMBERS SHALL BE AT LEAST THE MINIMUM GRADES SET FORTH IN THE UNIFORM BUILDING CODE, APPLICABLE EDITION; THE CURRENT STRUCTURAL ENGINEERS CALCULATIONS AND PLANS.

3. ALL EXPOSED BEAMS 4X OR LARGER ARE TO BE FREE OF HEART CENTER (POHC).

4. SIZES NOTED AND REFERENCED ARE NOMINAL SIZES. SEE PLANS FOR NET SIZE WHERE SELECTED.

B. PLATES, SILLS AND SLEEPERS.

ALL FOUNDATION PLATES OR SILLS AND SLEEPERS ON A CONCRETE OR MASONRY SLAB, PRIGH IS IN DIRECT CONTACT WITH EARTH, AND SILLS HIGH REST ON CONCRETE OR MASONRY FOUNDATIONS, SHALL BE PRESSURE TREATED WOOD OR FOUNDATION REDWOOD, ALL MARKED OR BRANDED BY AN APPROVED AGENCY.

C. COLUMNS AND POSTS:

COLUMNS AND POSTS LOCATED ON CONCRETE OR MASONRY FLOORS OR DECKS EXPOSED TO THE WEATHER OR TO WATER SPLASH OR IN BASEMENTS AND WHICH SUPPORT PERMANENT STRUCTURES SHALL BE SUPPORTED BY CONCRETE OR METAL PEDESTALS PROJECTING ABOVE FLOORS UNLESS APPROVED WOOD OR NATURAL RESISTANCE TO DECAY OR TREATED WOOD IS USED. THE PEDESTALS SHALL PROJECT AS LEAST 6 INCHES ABOVE EXPOSED EARTH AND AT LEAST 1 INCH ABOVE SLAB FLOORS.

EXCEPTION: CONCRETE OR MASONRY PIERS SHALL PROJECT AT LEAST 8 INCHES ABOVE EXPOSED GROUND UNLESS THE COLUMNS OR POSTS PRIGH THEY SUPPORT ARE OF APPROVED WOOD OF NATURAL RESISTANCE TO DECAY OR TREATED WOOD IS USED.

D. ROOF SHEATHING:

1. 1 X 6 SHIPLAP STARTER BOARD AT ALL EXPOSED EAVES (REBANK FACE DOWN) SHALL BE STANDARD, 5 COMMON NO. 2, OR CONSTRUCTION COMMON GRADES.

2. ALL ROOF FLOOR SHEATHING SHALL CONFORM TO AMERICAN PLYWOOD ASSOCIATION SPEC. APA-01.

3. EACH SHEET OF PLYWOOD SHALL BE IDENTIFIED BY A REGISTERED STAMP OR BRAND OF THE AMERICAN PLYWOOD ASSOCIATION.

E. MANUFACTURED FLOOR AND ROOF TRUSSES

1. MANUFACTURER SHALL SUPPLY TO THE ARCHITECT, ENGINEER, AND THE BUILDING DEPARTMENT, CALCULATIONS AND SHOP DRAWINGS FOR APPROVAL OF DESIGN LOADS, CONFIGURATION (2 OR 3 POINT BEARING), AND SHEAR TRANSFER PRIOR TO FABRICATION. ALL CALCULATIONS AND SHOP DRAWINGS SHALL BE SIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS TO BE BUILT. IT SHALL BE THE RESPONSIBILITY OF THE MANUFACTURER TO OBTAIN BUILDING DEPARTMENT APPROVAL OF CALCULATIONS AND SHOP DRAWINGS PRIOR TO FABRICATION.

2. TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THE LATEST LOCAL BUILDING CODE FOR ALL LOADS IMPOSED, INCLUDING LATERAL LOADS AND MECHANICAL EQUIPMENT LOADS.

3. ALL CONNECTORS SHALL BE ICC APPROVED AND OF ADEQUATE STRENGTH TO RESIST STRESSES DUE TO THE LOADINGS INVOLVED.

4. DEAD LOAD DEFLECTIONS SHALL BE LIMITED TO L/240.

5. GABLE BRACINGS AND / OR DIAGRAMS SHALL BE PROVIDED AND DETAILED AS REQUIRED TO ADEQUATELY BRACE ALL TRUSSES

6. GLUED LAMINATED LUMBER:

1. ALL FABRICATION AND WORKMANSHIP SHALL CONFORM TO THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR STRUCTURAL GLUED LAMINATED DOUGLAS FIR (COAST REGION) LUMBER BY THE WEST COAST LUMBERMEN'S ASSOCIATION AND THE CURRENT EDITION OF TIMBER CONSTRUCTION.

2. ALL GLUED LAMINATED MEMBERS SHALL BE DOUGLAS FIR COMBINATION 24F WITH WATERPROOF RESORCINOL OR PHENOL RESORCINOL GLUE CONFORMING TO FEDERAL SPECIFICATION MILA-397A. CORE LAMINATIONS MAY BE NON FIR. USE COMBINATION 24F-V4 OR 24F-V8 FOR SIMPLY SUPPORT BEAMS AND COMBINATION 24F-V3 OR 24F-V10 FOR CANTILEVERED BEAMS.

3. FINISH OF THE MEMBERS SHALL BE INDUSTRIAL APPEARANCE GRADE IN CONFORMANCE WITH THE STANDARD APPEARANCE GRADES OF THE A.I.T.C.

4. A CERTIFICATE OF INSPECTION FOR EACH GLU-LAM BEAM FROM AN APPROVED TESTING AGENCY SHALL BE SUBMITTED TO AND APPROVED BY THE LOCAL BUILDING DEPARTMENT AND BY THE ENGINEER PRIOR TO ERECTION.

3.0 EXECUTION

3.01 GENERAL

A. PREVIOUS WORK BY OTHERS: CONTRACTOR SHALL INSPECT DETAILS AND PREVIOUS WORK BY OTHERS FOR APPROPRIATENESS TO COMPLETE FINISH CARPENTRY. REPORT DEFICIENCIES IMMEDIATELY IN WRITING TO THE CLIENT/GENERAL CONTRACTOR. FAILURE TO DO SO, OR COMMENCEMENT OF WORK WITHOUT SUCH NOTIFICATION, WILL CONSTITUTE AN ACCEPTANCE BY CONTRACTOR OF SUITABILITY OF PREVIOUS WORK BY OTHERS.

B. VERIFY ALL SIZES AND DIMENSIONS BY TAKING FIELD MEASUREMENTS PRIOR TO INSTALLATION.

C. FRAMING PRACTICES:

WORKMANSHIP, ALL MEMBERS SHALL BE FRAMED ANCHORED, TIED AND BRACED SO AS TO DEVELOPE THE STRENGTH AND RIGIDITY NECESSARY FOR THE PURPOSES FOR WHICH THEY ARE USED.

D. PROTECTION AGAINST DECAY AND TERMITES:

1. WOOD EMBEDDED IN THE GROUND OR IN DIRECT CONTACT WITH THE EARTH AND USED FOR THE SUPPORT OF PERMANENT STRUCTURES SHALL BE TREATED WOOD.

2. WOOD JOISTS OR THE BOTTOM OF WOOD FLOORS CLOSER THAN 18 INCHES, OR WOOD GIRDERS CLOSER THAN 12 INCHES TO THE GROUND UNDER-FLOOR AREAS AND THEIR SUPPORTS SHALL BE TREATED WOOD OR ALL HEART-WOOD OF APPROVED NATURALLY DURABLE SPECIES AS LISTED IN THE UNIFORM BUILDING CODE, APPLICABLE EDITION.

E. WOOD AND EARTH SEPARATION

NO UNTREATED WOOD, EXCEPT FOUNDATION REDWOOD, SHALL BE NEARER THAN 6 INCHES TO ANY EARTH UNLESS DEMARKED BY GRADE STAMPS. THE EARTH SHALL BE PROTECTED BY A PERVIOUS MEMBRANE INSTALLED BETWEEN THE EARTH AND CONCRETE.

F. FOUNDATION VENTILATION (ALSO SEE SECTION ON SHEET METAL):

UNDER-FLOOR AND ENCLOSED AREAS SHALL BE VENTILATED BY AN APPROVED MECHANICAL MEANS OR BY NATURAL EXTERIOR FOUNDATION WALLS. SUCH OPENINGS SHALL HAVE A NET AREA OF NOT LESS THAN 1 SQUARE FOOT FOR EACH 150 SQUARE FEET OF UNDER-FLOOR AREA. OPENINGS SHALL BE LOCATED AS CLOSE TO CORNERS AS PRACTICAL AND SHALL PROVIDE CROSS VENTILATION. THE REQUIRED AREA OF OPENINGS SHALL BE APPROXIMATELY EQUALLY DISTRIBUTED ALONG THE LENGTH OF AT LEAST TWO OPPOSITE SIDES. THEY SHALL BE COVERED WITH CORROSION-RESISTANT FINE MESH WITH MESH OPENINGS OF 1/4 INCH IN DIMENSION.

G. ATTIC VENTILATION (WHERE DETERMINED NECESSARY BY THE BUILDING OFFICIAL):

ENCLOSED ATTIC SPACES AND ENCLOSED ROOF RAFTERS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN AND SNOW. THE NET FREE VENTILATING AREA SHALL BE NOT LESS THAN 1/150 OF THE AREA OF THE SPACE VENTILATED, EXCEPT THAT THE AREA MAY BE 1/300 PROVIDED AT LEAST 50 PERCENT OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED AT LEAST 3 FEET ABOVE EAVE OR CORNICE VENTS, WITH THE BALANCE OF THE REQUIRED VENTILATION PROVIDED BY EAVE OR CORNICE VENTS. THE OPENINGS SHALL BE COVERED WITH CORROSION-RESISTANT METAL MESH WITH MESH OPENINGS OF 1/4 INCH IN DIMENSION. DO NOT BLOCK VENTS WITH INSULATION.

H. FIRE AND DRAFT STOPS

IN COMBUSTIBLE CONSTRUCTION, FIRESTOPPING AND DRAFTSTOPPING SHALL BE INSTALLED TO CUT OFF ALL CONCEALED DRAFT OPENINGS (BOTH VERTICAL AND HORIZONTAL) AND SHALL FORM AN EFFECTIVE BARRIER BETWEEN FLOORS, BETWEEN A TOP STORY AND ROOF OR ATTIC SPACE, AND SHALL SUBDIVIDE ATTIC SPACES, CONCEALED ROOF SPACES AND FLOOR-CEILING ASSEMBLIES. THE INTEGRITY OF ALL FIRE AND DRAFT STOPS SHALL BE MAINTAINED.

FIRESTOPS, WHERE REQUIRED SHALL BE PROVIDED IN THE FOLLOWING LOCATIONS:

1. IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES, AT THE CEILING AND FLOOR LEVELS AND AT 10-FOOT INTERVALS BOTH VERTICAL AND HORIZONTAL.

EXCEPTION: FIRE BLOCKS MAY BE OMITTED AT FLOOR AND CEILING LEVELS WHEN APPROVED SHORE-ACTUATED FIRE DAMPERS ARE INSTALLED AT THESE LEVELS.

2. AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS AND COVED CEILINGS.

3. IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN AND BETWEEN STUDS ALONG AND IN LINE WITH THE RUN OF STAIRS IF THE WALLS UNDER THE STAIRS ARE UNFINISHED.

4. IN OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS, FIREPLACES AND SIMILAR OPENINGS WHICH AFFORD A PASSAGE FOR FIRE AT CEILING AND FLOOR LEVELS, WITH NONCOMBUSTIBLE MATERIALS.

I. FIRE BLOCK CONSTRUCTION:

EXCEPT AS PROVIDED IN ITEM 4 ABOVE, FIRESTOPPING SHALL CONSIST OF 2 INCHES NOMINAL LUMBER OR TWO THICKNESSES OF NOMINAL 1 INCH LUMBER WITH BREAKS AT JOINTS ON ONE THICKNESS OF 23/32-INCH PLYWOOD WITH JOINTS BACKED BY 23/32-INCH PLYWOOD.

FIRE BLOCKS MAY ALSO BE OF GYPSUM BOARD, GLASS FIBER, MINERAL FIBER OR OTHER APPROVED MATERIALS SECURELY FASTENED IN PLACE. LOOSE FILL INSULATION CANNOT BE USED.

WALLS HAVING PARALLEL OR STAGGERED STUDS FOR SOUND TRANSMISSION CONTROL SHALL HAVE FIRE BLOCKS OF MINERAL FIBER OR GLASS FIBER OR OTHER APPROVED NONWISKED MATERIAL.

J. DRAFT STOPS, WHERE REQUIRED SHALL BE PROVIDED IN THE FOLLOWING LOCATIONS:

FLOOR-CEILING ASSEMBLIES.

1. SINGLE-FAMILY DWELLING, WHEN THERE IS USABLE SPACE BELOW AND BELOW THE CONCEALED SPACE OF A FLOOR-CEILING ASSEMBLY IN A SINGLE-FAMILY DWELLING, DRAFT STOPS SHALL BE INSTALLED SO THAT THE AREA OF THE CONCEALED SPACE DOES NOT EXCEED 1000 SQUARE FEET. DRAFTSTOPPING SHALL DIVIDE THE CONCEALED SPACE INTO APPROXIMATELY THE EQUAL AREAS.

2. TWO OR MORE DWELLING UNITS. DRAFT STOPS SHALL BE INSTALLED IN FLOOR-CEILING ASSEMBLIES OF BUILDINGS HAVING MORE THAN ONE DWELLING UNIT. SUCH DRAFT STOPS SHALL BE IN LINE WITH WALLS SEPARATING TENANTS FROM EACH OTHER AND SEPARATING TENANTS FROM OTHER AREAS.

K. DRAFT STOP CONSTRUCTION:

DRAFTSTOPPING MATERIALS SHALL BE NOT LESS THAN 1/2-INCH GYPSUM BOARD, 3/8-INCH PLYWOOD OR OTHER APPROVED MATERIALS ADEQUATELY SUPPORTED.

L. ALL STAIRWAYS, LANDINGS, GUARDRAILS AND HANDRAILS SHALL COMPLY FULLY WITH C.B.C. SECTION 1006. REQUIRED HANDRAILS ON STAIRWAYS SHALL BE CONTINUOUS THE FULL LENGTH OF THE STAIRS AND MAY BE INTERRUPTED ONLY AT A LANDING AS DEFINED IN C.B.C. 1006.4.

5.02 INSTALLATION

A. WALL FRAMING:

1. SIZE: STUDS IN EXTERIOR WALLS AND INTERIOR BEARING WALLS OF BUILDINGS NOT MORE THAN TWO STORIES IN HEIGHT SHALL BE NOT LESS THAN 2"X 4" IN SIZE. FOR THREE-STORY BUILDINGS SUCH STUDS SHALL NOT BE LESS THAN 3" X 4" OR 2" X 6". TO THE BOTTOM OF THE SECOND FLOOR JOISTS, AND 2" X 4" FOR THE TWO UPPER STORIES. INTERIOR NON-BEARING PARTITIONS MAY BE FRAMED WITH 2" X 4" STUDS.

2. HEIGHT: UNLESS SUPPORTED LATERALLY BY ADEQUATE FRAMING THE MAXIMUM ALLOWABLE HEIGHT FOR NON-BEARING STUDS SHALL BE 14 FEET FOR 2" X 4" STUDS, AND 20 FEET FOR 2" X 6" STUDS. DETERMINE ALLOWABLE LENGTH OF ANY "BALLOON FRAMED" BEARING WALLS MORE THAN 10'- 0" IN HEIGHT.

3. SPACING: STUDS SUPPORTING FLOORS AND CEILING OR RAFTERS SHALL BE SPACED NOT MORE THAN 16 INCHES.

4. GIRIPPLE WALLS: GIRIPPLE WALLS SHALL BE FRAMED OF STUDS NOT LESS IN SIZE THAN THE STUDDING ABOVE OR SHALL BE FRAMED OF SOLID BLOCKING. WHEN EXCEEDING 24 INCHES IN HEIGHT, SUCH WALLS SHALL BE FRAMED OF STUDS HAVING THE SIZE REQUIRED FOR AN ADDITIONAL STORY.

B. BEAMS AND GIRDERS:

1. THE ENDS OF BEAMS OR GIRDERS SUPPORTED ON MASONRY OR CONCRETE SHALL HAVE NOT LESS THAN 3 INCHES OF BEARING.

2. ALL BEAMS OR GIRDERS SUPPORTED ON WOOD SHALL HAVE FULL BEARING AND BEARING SHALL BE COMPRESSED OF ONE (1) PLATE SUPPORT OR A BUILT-UP SUPPORT CONSTRUCTED IN AN APPROVED MANNER UNLESS OTHERWISE SELECTED ON PLANS.

B. PROVIDE 2 X 4 TEMPORARY BRACING TO ALL BEAMS PROJECTING 3'-0" BEYOND BUILDING LINE TO PREVENT MARRAGE.

C. FLOOR JOISTS (TRUSSES)

1. BEARING: EXCEPT THERE JOISTS ARE SUPPORT ON A 1" X 4" BOTTOM STRIP AND NAILED TO THE ADJOINING STUD THE ENDS OF EACH JOIST SHALL HAVE NOT LESS THAN 1 1/2 INCHES OF BEARING ON WOOD OR METAL, NOT LESS THAN 3 INCHES ON MASONRY. PROVIDE FULL BEARING TRANSITION FOR TRANSFER OF SHEAR LOADS. SEE MANUFACTURERS DETAILS AND/OR STRUCTURAL ENGINEER OF RECORD RECOMMENDATIONS.

2. BLOCKING: JOISTS SHALL BE SUPPORTED LATERALLY AT THE ENDS AND AT EACH SUPPORT BY SOLID BLOCKING EXCEPT WHERE THE ENDS OF JOISTS ARE NAILED TO A HANGER, BAND OR RIM JOIST OR TO AN ADJOINING STUD OR BY OTHER APPROVED MEANS. SOLID BLOCKING SHALL BE NOT LESS THAN 2 INCHES NOMINAL IN THICKNESS AND THE FULL DEPTH OF JOIST. PROVIDE FULL BEARING TRANSITION FOR TRANSFER OF POINT LOADS. SEE MANUFACTURERS DETAILS AND/OR STRUCTURAL ENGINEER OF RECORD RECOMMENDATIONS.

3. NOTCHES AND HOLES: NOTCHES ON THE ENDS OF JOISTS SHALL NOT EXCEED 1/4 OF THE JOIST DEPTH. HOLES BORED IN JOISTS SHALL NOT BE WITHIN 2 INCHES OF THE TOP OR BOTTOM OF THE JOIST AND THE DIAMETER OF ANY SUCH HOLE SHALL NOT EXCEED 1/3 THE DEPTH OF THE JOIST. NOTCHES IN THE TOP OR BOTTOM OF JOISTS SHALL NOT EXCEED 1/6 THE DEPTH AND SHALL NOT BE LOCATED IN THE MIDDLE THIRD OF THE SPAN.

4. LAPS: JOISTS FRAMING FROM OPPOSITE SIDES OF A BEAM, GIRDER OR PARTITION SHALL BE LAPPED AT LEAST 4 INCHES THE OPPOSITE JOISTS SHALL BE TIED TOGETHER IN AN APPROVED MANNER.

5. FRAMING ANCHORS: JOISTS FRAMING INTO THE SIDE OF A WOOD GIRDER OR PARTITION SHALL BE SUPPORTED BY FRAMING ANCHORS OR ON LEDGER STRIPS NOT LESS THAN 2 X 4.

6. FRAMING ACROSS OPENINGS: TRIMMER AND HEADER JOISTS WHEN FRAMING ACROSS OPENINGS SHALL BE DOUBLED, OR OF LUMBER OF EQUIVALENT CROSS SECTION. WHEN THE OF THE OPENING EXCEEDS 4 FEET, THE ENDS OF HEADER JOISTS MORE THAN 6 FEET LONG SHALL BE SUPPORTED BY FRAMING ANCHORS OR JOIST HANGERS UNLESS BEARING ON A BEAM, PARTITION OR WALL. TAIL JOISTS OVER 12 FEET LONG SHALL BE SUPPORTED BY HEADER BY FRAMING ANCHORS OR ON LEDGER STRIPS NOT LESS THAN 2" X 4".

7. SUPPORTING BEARING PARTITIONS: BEARING PARTITIONS PERPENDICULAR TO JOISTS SHALL NOT BE OFFSET FROM THE SUPPORTING BEARING WALLS OR PARTITIONS MORE THAN THE DEPTH OF JOISTS. JOISTS UNDER AND PARALLEL TO BEARING PARTITIONS SHALL BE DOUBLED.

ROOF AND CEILING FRAMING:

1. FRAMING RAFTERS SHALL BE FRAMED DIRECTLY OPPOSITE EACH OTHER AT THE RIDGE. THERE SHALL BE A RIDGE BOARD AT LEAST 2 INCHES NOMINAL THICKNESS AT ALL RIDGES AND NOT LESS IN DEPTH THAN THE CUT END OF THE RAFTER. AT HIPS AND VALLEYS THERE SHALL BE A NOMINAL VALLEY OR HIP RAFTER NOT LESS THAN 2 INCHES NOMINAL THICKNESS AND NOT LESS IN DEPTH THAN THE CUT END OF THE RAFTER.

2. RAFTERS SHALL BE NAILED TO ADJACENT CEILING JOISTS TO FORM A RIGID UNIT. TIES BETWEEN EXTERIOR WALL MEMB SUCH JOISTS ARE PARALLEL TO THE RAFTERS. WHERE NOT PARALLEL, RAFTERS SHALL BE SUPPORTED BY BRACING FROM SIZE CROSS TIES. RAFTER TIES SHALL BE SPACED NOT MORE THAN 4 FEET ON CENTER.

3. PURLINS TO SUPPORT ROOF LOADS MAY BE INSTALLED TO REDUCE THE SPAN OF RAFTERS WITHIN ALLOWABLE LIMITS AND SHALL BE SUPPORTED BY STRUTS TO BEARING WALLS. THE MAXIMUM SPAN OF THE 2" X 6" PURLIN SHALL BE 4 FEET. THE MAXIMUM SPAN OF THE 2" X 8" PURLIN SHALL BE 6 FEET IN NO CASE SHALL THE PURLIN BE SMALLER THAN THE SUPPORTED RAFTERS. STRUTS SHALL NOT BE SMALLER THAN 2"X4" MEMBERS. THE UNBRACED LENGTH OF STRUTS SHALL NOT EXCEED 8 FEET AND THE MINIMAL SLOPE OF THE STRUTS SHALL BE NOT LESS 45 DEGREES FROM THE HORIZONTAL.

4. BLOCKING: RAFTERS MORE THAN 8 INCHES IN DEPTH SHALL BE BLOCKED LATERALLY AT THE ENDS AND AT EACH SUPPORT BY SOLID BLOCKING NOT LESS THAN 2 INCHES IN THICKNESS AND THE FULL DEPTH OF THE RAFTER UNLESS NAILED TO A HEADER, BAND OR RIM JOIST OR TO AN ADJOINING STUD AS REQUIRED BY CRC R802.

5. HEADERS: ALL OPENINGS 4 FEET MORE OR LESS IN BEARING WALLS SHALL BE PROVIDED WITH HEADERS CONSISTING OF EITHER TWO PIECES OF 2-INCH FRAMING LUMBER PLACED ON EDGE AND NAILED TOGETHER OR A 4-INCH LUMBER OF EQUIVALENT CROSS SECTION. ALL OPENINGS MORE THAN 4 FEET PER SPAN SHALL BE PROVIDED WITH HEADERS OR LINTELS. EACH END OF A LINTEL OR HEADER SHALL HAVE A LENGTH OF BEARING OF NOT LESS THAN 1 1/2 INCHES FOR EACH 100 POUNDS OF THE LINTEL. SEE FRAMING PLAN FOR SIZE.

6. PIPES IN WALLS: STUD PARTITIONS CONTAINING PLUMBING, HEATING, OR OTHER PIPES SHALL BE SO FRAMED AND THE PIPES INCORPORATED SO SPACED AS TO ALLOW PROPER CLEARANCE FOR THE PIPING. WHERE A PARTITION CONTAINING SUCH PIPING RUNS PARALLEL TO THE FLOOR JOISTS, THE JOISTS UNDERNEATH SUCH PARTITIONS SHALL BE DOUBLED OR SPACED TO PERMIT THE PASSAGE OF SUCH PIPES AND SHALL BE BRIDGED. WHERE PLUMBING, HEATING OR OTHER PIPES ARE PLACED IN OR PARTLY IN A PARTITION, NECESSITATING THE CUTTING OF THE SOLES OR PLATES, A NOTCH NOT NOT LESS THAN 1/3 INCH THICK AND 1 1/2 INCHES WIDE SHALL BE FASTENED TO THE PLATE ACROSS AND TO EACH SIDE OF THE OPENING WITH NOT LESS THAN FOUR 16D NAILS.

7. BRIDGING: ALL STUD PARTITIONS OR WALLS WITH STUDS HAVING A HEIGHT-TO-AT-LEAST THICKNESS RATIO EXCEEDING 50 SHALL HAVE BRIDGING NOT LESS THAN 2 INCHES IN THICKNESS AND ON THE SAME WIDTH AS THE STUDS FITTED SNUGLY AND NAILED THERETO TO PROVIDE ADEQUATE LATERAL SUPPORT.

8. CUTTING AND NOTCHING EXTERIOR WALLS AND BEARING PARTITIONS. ANY WOOD STUD MAY BE CUT OR NOTCHED TO A DEPTH NOT EXCEEDING 25 PERCENT OF ITS WIDTH. CUTTING OF STUDS TO A DEPTH NOT EXCEEDING NOT MORE 40 PERCENT OF THE WIDTH OF THE STUD IS PERMITTED IN NON-BEARING PARTITIONS SUPPORTING NO LOADS OTHER THAN THE WEIGHT OF THE PARTITION.

9. JOISTS, BEAMS, GIRDERS: USE LONGEST PRACTICABLE LENGTHS. PLACE WITH CROWN SIDE UP. WHERE MEMBERS CANTILEVER, PLACE CROWN SIDE DOWN.

10. BORED HOLES: A HOLE NOT EXCEEDING IN DIAMETER THAN 40 PERCENT OF THE STUD WIDTH MAY BE BORED IN ANY WOOD STUD. BORED HOLES NOT GREATER THAN 60 PERCENT OF THE WIDTH OF THE STUD ARE PERMITTED IN NON-BEARING PARTITIONS OR ANY WALL WHERE EACH STUD IS DOUBLED, PROVIDED NOT MORE THAN TWO SUCH CONSECUTIVE DOUBLE STUDS, AND SO BORED. IN NO CASE SHALL THE EDGE OF THE BORED HOLE BE NEARER TH

5.0 EXECUTION

5.01 GENERAL

A. PREVIOUS WORK BY OTHERS: CONTRACTOR SHALL REVIEW DETAILS AND PREVIOUS WORK BY OTHERS FOR APPROPRIATENESS TO COMPLETE ELASTOMERIC SHEET MEMBRANE WATERPROOFING (ABOVE GRADE). REPORT DEFICIENCIES IMMEDIATELY IN WRITING TO THE CLIENT/GENERAL CONTRACTOR WITH A COPY TO THE ARCHITECT. FAILURE TO DO SO, OR COMMENCEMENT OF WORK WITHOUT SUCH NOTIFICATION, WILL CONSTITUTE AN ACCEPTANCE BY CONTRACTOR OR SUITABILITY OF PREVIOUS WORK BY OTHERS.

5.02 INSTALLATION

INSTALL IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS AND BEST TRADE ASSOCIATION'S STANDARDS OF PRACTICE INCLUDING, BUT NOT LIMITED TO:

A. SUBSTRATE PREPARATION SHALL HAVE SURFACES STRUCTURALLY SOUND AND FREE OF VOIDS, SHARP PROTRUSIONS, DIRT, DUST CONTAMINANTS THAT MAY DETRIMENTALLY EFFECT FULL SYSTEM ADHESION. ALL NON-VERTICAL SUBSTRATES SHALL BE SLOPED A MINIMUM OF 1/4in PER FOOT FOR DRAINAGE AWAY FROM STRUCTURE UNLESS NOTED OTHERWISE. PROCEED WITH WATERPROOFING WORK ONLY AFTER SUBSTRATE AND PENETRATING WORK HAVE BEEN COMPLETED AND INSPECTED FOR COMPATIBILITY WITH WATERPROOFING TO BE APPLIED.

B. ALL INSIDE CORNERS SHALL BE PROVIDED WITH PRIME MATERIAL MANUFACTURER APPROVED CANT STRIPS OR SIMILAR ACCESSORIES EVEN IF NOT SHOWN. SPECIAL ATTENTION SHALL BE PAID TO ALL CORNERS, TERMINATIONS AND MATERIAL JOINTS TO PROVIDE PROPER REINFORCING, LAPPING AND ADHESION.

C. WATERPROOF SYSTEM SHALL BE APPLIED ONLY OVER PROPERLY PREPARED AND CURED SUBSTRATES AND WITH THE TEMPERATURE AND CLIMATE CONDITIONS SELECTED BY THE PRIME MATERIAL MANUFACTURER.

D. PROTECTION MATERIALS SHALL BE INSTALLED AS SOON AS POSSIBLE TO FULLY PROTECT INSTALLED WATERPROOFING SYSTEM.

ELASTOMERIC FLUID APPLIED MEMBRANE WATERPROOFING

1.0 GENERAL

1.01 SCOPE

A. PROVIDE LABOR, MATERIAL, EQUIPMENT, AND SERVICES NECESSARY FOR THE INSTALLATION OF A COMPLETE BELOW GRADE WATERPROOFING SYSTEM AS INDICATED ON DRAWINGS OR AS REQUIRED IN THIS SECTION TO ACHIEVE WATERTIGHT PERFORMANCE.

1.02 RELATED WORK

A. REFER TO CIVIL ENGINEER'S DRAWINGS FOR COMPLETE SUBSURFACE DRAINAGE SYSTEM INFORMATION.

1.03 QUALITY ASSURANCE

A. WORK AND MATERIALS SHALL CONFORM TO REQUIREMENTS APPLICABLE ASTM STANDARDS AND CURRENT ICC. TEST REPORTS FOR THIS SELECTED USE.

B. OBTAIN PRIMARY WATERPROOFING MATERIALS FROM A SINGLE MANUFACTURER. PROVIDE SECONDARY MATERIALS ONLY AS INSTRUCTED BY PRIMARY MANUFACTURER FOR FULL COMPATIBILITY OF ALL COMPONENTS.

C. MANUFACTURER SHALL SUBMIT EVIDENCE OF ABILITY TO MEET ALL REQUIREMENTS SELECTED AND SYSTEM SELECTED SHALL HAVE BEEN MARKETED FOR A MINIMUM OF 12 YEARS. A MANUFACTURER'S TECHNICALLY TRAINED REPRESENTATIVE SHALL PARTICIPATE IN A PRE-INSTALLATION CONFERENCE AND BE AVAILABLE ON PERIODIC ON-SITE INSPECTION OF INSTALLATION PROCEDURES.

D. INSTALLER SHALL HAVE AT LEAST FIVE YEARS SUCCESSFUL EXPERIENCE IN THIS SELECTED WATERPROOFING SYSTEM INSTALLATION AND SHALL BE APPROVED OR LICENSED BY THE PRIMARY MATERIALS MANUFACTURER. THE INSTALLER SHALL PARTICIPATE IN A PRE-INSTALLATION CONFERENCE TO ESTABLISH OPTIMUM INSTALLATION CONDITIONS PRIOR TO WORK COMMENCEMENT.

E. A WRITTEN WATERPROOFING MATERIALS WARRANTY SHALL BE PROVIDED FOR A MINIMUM OF TWO YEARS FROM DATE OF SUBSTANTIAL COMPLETION. A SPECIAL PROJECT WARRANTY SHALL INCLUDE COSTS TO REMOVE AND REPLACE ALL OTHER WORK WHICH CONCEALS WATERPROOFING AND SHALL COVER DEFECTIVE MATERIALS, WORKMANSHIP, LEAKAGE OF WATER, ABNORMAL DETERIORATION OF MATERIALS OR ANY OTHER FAILURE OF WATERPROOF MATERIALS PERFORM AS SELECTED AND SHALL BE SIGNED AND COUNTERSIGNED BY THE GENERAL CONTRACTOR, INSTALLER AND MANUFACTURER OF PRIMARY MATERIALS.

2.0 PRODUCTS

2.01 MATERIALS

PROVIDE CLIENT SELECTED COMPLETE POSITIVE SIDE APPLIED WATERPROOFING SYSTEM TESTED TO SHOW COMPLIANCE WITH INDICATED PERFORMANCES INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:

A. FLUID APPLIED, ADHESIVE BONDING, MONOLITHIC, SINGLE COMPONENT, ELASTOMERIC MEMBRANE OF UNIFORM THICKNESS (60 MIL MINIMUM) WITHOUT RUNS OR SAGS. APPLY NUMBER OF COATS IN THICKNESS AND CURING TIME AS INSTRUCTED BY PRIMARY MATERIALS MANUFACTURER. MEMBRANE SHALL BE CAPABLE OF FULL ADHESION TO A SUBSTRATE OF CONCRETE OR MASONRY, FLEXIBLE AND RESISTANT TO CHEMICALS, MOLDS, BACTERIA, FUNGUS, ROT, DETERIORATION, TEARS, PUNCTURES AND HYDROSTATIC PRESSURES CONSISTENT WITH LOCATION USED.

B. SURFACE TREATMENT, PRIMERS AND ACCESSORY PRODUCTS FULLY COMPATIBLE WITH WATERPROOFING SYSTEM.

C. NON-DETERIORATING, FABRIC FACED, COMPOSITE DRAINAGE/PROTECTION BOARD RESISTANT TO FUNGUS AND INSECTS WHICH PROVIDES CONTINUOUS VERTICAL DRAINAGE OF SEEPAGE WATER FULLY COMPATIBLE WITH WATERPROOFING SYSTEM AND FULLY PROTECTS WATERPROOFING MATERIALS FROM BACKFILL MATERIALS AND OPERATIONS.

3.0 EXECUTION

3.01 GENERAL

A. PREVIOUS WORK BY OTHERS: CONTRACTOR SHALL REVIEW DETAILS AND PREVIOUS WORK BY OTHERS FOR APPROPRIATENESS TO COMPLETE ELASTOMERIC FLUID APPLIED MEMBRANE WATERPROOFING. REPORT DEFICIENCIES IMMEDIATELY IN WRITING TO THE CLIENT GENERAL CONTRACTOR WITH A COPY TO THE ARCHITECT. FAILURE TO DO SO, OR COMMENCEMENT OF WORK WITHOUT SUCH NOTIFICATION, WILL CONSTITUTE AN ACCEPTANCE BY CONTRACTOR OF SUITABILITY OF PREVIOUS WORK BY OTHERS.

3.02 INSTALLATION

INSTALL IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS AND BEST TRADE ASSOCIATIONS STANDARDS OF PRACTICE INCLUDING, BUT NOT LIMITED TO:

A. SUBSTRATE PREPARATION SHALL HAVE SURFACES STRUCTURALLY SOUND AND FREE OF VOIDS, LOOSE AGGREGATE, SCALING, SHARP PROTRUSIONS, DIRT, DUST, SPALLING AND CONTAMINANTS THAT MAY DETRIMENTALLY EFFECT FULL SYSTEM ADHESION. MASONRY WALLS SHALL RECEIVE A FLUSH PARGE COAT TO PROVIDE A SMOOTH SURFACE. PROCEED WITH WATERPROOFING WORK ONLY AFTER SUBSTRATE AND PENETRATING WORK HAVE BEEN COMPLETED INSPECTED FOR COMPATIBILITY WITH WATERPROOFING TO BE APPLIED.

B. ALL INSIDE CORNERS SHALL BE PROVIDED WITH PRIME MATERIAL MANUFACTURER APPROVED CANT STRIPS OR SIMILAR ACCESSORIES EVEN IF NOT SHOWN. SPECIAL ATTENTION SHALL BE PAID TO ALL CORNERS, TERMINATIONS AND MATERIAL JOINTS TO PROVIDE PROPER REINFORCING, LAPPING AND ADHESION. PROVIDE EXPANSION JOINTS ONLY AS APPROVED BY PRIME MATERIAL MANUFACTURER.

C. WATERPROOF SYSTEM SHALL BE APPLIED ONLY OVER PROPERLY PREPARED AND CURED SUBSTRATES AND WITH THE TEMPERATURE AND CLIMATE CONDITIONS SELECTED BY THE PRIME MATERIAL MANUFACTURER.

D. DRAINAGE/PROTECTION BOARD SHALL BE INSTALLED AND BACKFILLING DONE AS SOON AS POSSIBLE TO FULLY PROTECT INSTALLED WATERPROOFING SYSTEM.

VAPOR BARRIERS (MOISTOP)

1.0 GENERAL

1.01 SCOPE

A. PROVIDE LABOR, MATERIAL, EQUIPMENT AND SERVICES NECESSARY FOR INSTALLATION OF A WEATHER RESISTIVE BARRIER/FLASHING AT DOOR AND SASH ASSEMBLIES WHERE SHOWN ON THE DRAWING AND NOTED HEREIN.

1.02 QUALITY ASSURANCE

A. CODES AND STANDARDS:

1. CALIFORNIA BUILDING CODE OR CURRENT APPLICABLE CC.
2. FEDERAL SPECIFICATION UU-B-790A
3. U.B.C.
4. ASTM STANDARDS

2.0 PRODUCTS

2.01 MATERIALS

REINFORCED HIGH WATER-VAPOR RESISTIVE KRAFT PAPER (GRADE A, STYLE 4) 12" WIDE WITH GLASS REINFORCING FIBERS AND A THERMOPLASTIC COATING ON BOTH SURFACES.

3.0 EXECUTION

3.01 GENERAL

A. PREVIOUS WORK BY OTHERS: CONTRACTOR SHALL REVIEW DETAILS AND PREVIOUS WORK BY OTHERS FOR APPROPRIATENESS TO COMPLETE VAPOR BARRIERS (MOISTOP). REPORT DEFICIENCIES IMMEDIATELY IN WRITING TO THE CLIENT/GENERAL CONTRACTOR WITH A COPY TO THE ARCHITECT. FAILURE TO DO SO, OR COMMENCEMENT OF WORK WITHOUT SUCH NOTIFICATION, WILL CONSTITUTE AN ACCEPTANCE BY CONTRACTOR OF SUITABILITY OF PREVIOUS WORK BY OTHERS.

3.02 INSTALLATION

INSTALL IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS, INCLUDING, BUT NOT LIMITED TO THE FOLLOWING.

A. APPLY THE FIRST STRIP HORIZONTALLY UNDERNEATH THE SILL. CUT IT SUFFICIENTLY LONG TO EXTEND PAST EACH SIDE OF THE OPENING, SO THAT IT PROJECTS BEYOND (2) MINIMUM THE VERTICAL FLASHING TO BE APPLIED. FASTEN THE TOP EDGE TO THE WALL. BUT DO NOT SEAL THE BODY AND LOWER EDGE, SO THE BUILDING PAPER APPLIED LATER MAY BE SLIPPED UP AND UNDERNEATH IN WEATHERSHEDDING FASHION. NEXT, APPLY THE TWO VERTICAL SIDE SECTIONS OF FLASHING. CUT THE SIDE SECTIONS SUFFICIENTLY LONG TO EXTEND THE WIDTH OF THE FLASHING ABOVE THE TOP OF THE OPENING AND TO PROJECT BEYOND THE HORIZONTAL SILL STRIP (2" MINIMUM). APPLY THE TOP HORIZONTAL SECTION OF FLASHING LAST, OVERLAPPING THE FULL WIDTH OF THE OUTER FACE OF THE TOP NAILING FLANGE. CUT THE TOP PIECE OF FLASHING SUFFICIENTLY LONG SO THAT IT WILL PROTECT BEYOND THE VERTICAL STRIPS OF SIDE FLASHING (2 MINIMUM).

B. INSTALL FLASHING WITH FASTENERS AS APPROPRIATE FOR SUPPORTING SUBSTRATE. AND OF A TYPE RECOMMENDED BY MANUFACTURER.

C. BEFORE COVERING OVER FLASHING WITH OTHER WORK, REPAIR PUNCTURES AND TEARS WITH ADHESIVELY APPLIED DAMPER MATERIAL OR TAPE WITH A WEATHER RESISTIVE RATING EQUAL TO THE FLASHING.

INSULATION

EXTERIOR INSULATION

1.0 GENERAL

1.01 SCOPE

A. PROVIDE LABOR, MATERIAL, EQUIPMENT AND SERVICES NECESSARY FOR THE INSTALLATION OF INSULATION AND FINISH SYSTEMS CONSISTING OF AN INNER LAYER OF INSULATION BOARD AND AN OUTER LAYER FORMING THE PROTECTIVE FINISH COATING.

B. SUPPORTING SUBSTRATE AS RECOMMENDED BY MANUFACTURER.

2.0 PRODUCTS

2.01 MATERIALS

A. EXPANDED POLYSTYRENE.

B. AN ADHESIVE FOR THE INSULATION BOARD AND TO EMBED THE MESH AND SERVE AS A BASE FOR THE FINISH.

3.0 EXECUTION

3.01 GENERAL

A. PREVIOUS WORK BY OTHERS: CONTRACTOR SHALL REVIEW DETAILS AND PREVIOUS WORK BY OTHERS FOR APPROPRIATENESS TO COMPLETE EXTERIOR INSULATION. REPORT DEFICIENCIES IMMEDIATELY IN WRITING TO THE CLIENT/GENERAL CONTRACTOR WITH A COPY TO THE ARCHITECT. FAILURE TO DO SO, OR COMMENCEMENT OF WORK WITHOUT SUCH NOTIFICATION, WILL CONSTITUTE AN ACCEPTANCE BY CONTRACTOR OF SUITABILITY OF PREVIOUS WORK BY OTHERS.

3.02 INSTALLATION

A. APPLY EXTERIOR INSULATION OVER SHEATHING IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS.

B. FINISH AND COLOR AS SELECTED BY CLIENT/GENERAL CONTRACTOR.

BUILDING INSULATION

1.0 GENERAL

1.01 SCOPE

PROVIDE LABOR, MATERIAL, EQUIPMENT, AND SERVICES NECESSARY FOR THE INSTALLATION OF THERMAL AND ACOUSTICAL INSULATION WHERE SHOWN ON THE DRAWINGS AND NOTED HEREIN.

1.02 QUALITY ASSURANCE

A. CODES AND STANDARDS:

1. CALIFORNIA BUILDING CODE (OR CURRENT APPLICABLE CODE)
2. ASTM

2.0 PRODUCTS

2.01 MATERIALS

A. GLASS FIBER BATT INSULATION.

B. R VALUES PER THE TITLE 24 ENERGY REPORT OF-R FORMS, ACOUSTICAL REPORT, AND RATED ASSEMBLY DETAILS.

3.0 EXECUTION

3.01 GENERAL

A. PREVIOUS WORK BY OTHERS: CONTRACTOR SHALL REVIEW DETAILS AND PREVIOUS WORK BY OTHERS FOR APPROPRIATENESS TO COMPLETE BUILDING INSULATION. REPORT DEFICIENCIES IMMEDIATELY IN WRITING TO THE CLIENT/GENERAL CONTRACTOR WITH A COPY TO THE ARCHITECT. FAILURE TO DO SO, OR COMMENCEMENT OF WORK WITHOUT SUCH NOTIFICATION, WILL CONSTITUTE AN ACCEPTANCE BY CONTRACTOR OF SUITABILITY OF PREVIOUS WORK BY OTHERS.

3.02 INSTALLATION

INSTALL IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS, INCLUDING, BUT NOT LIMITED TO THE FOLLOWING.

A. INSTALL THERMAL BATT INSULATION BETWEEN ROOF JOISTS (IN VAULTED AREAS), CEILING JOISTS AT ATTIC SPACES, FLOOR JOISTS OVER UNHEATED SPACES, AND BETWEEN STUDS AT WALLS SEPARATING LIVING SPACES FROM ATTIC, WALLS SEPARATING LIVING SPACES FROM THE GARAGE, AND ALL EXTERIOR WALLS.

B. THERMAL INSULATION SHALL BE SECURELY INSTALLED AND TIGHTLY FITTED.

C. ACOUSTICAL BATT INSULATION SHALL BE INSTALLED PER THE ACOUSTICAL REPORT.

D. ALL FOAM PLASTIC INSULATION SHALL HAVE A FLAME-SPREAD RATING OF NOT MORE THAN 75 AND A SMOKE-DEVELOPED RATING OF NOT MORE THAN 450. CRC REQUIREMENTS

ROOFING

CONCRETE ROOFING TILES

1.0 GENERAL

1.01 SCOPE

PROVIDE LABOR, MATERIAL, EQUIPMENT AND SERVICES NECESSARY FOR INSTALLATION OF COMPLETE ROOFING, INCLUDING BUT NOT NECESSARILY LIMITED TO, CANT STRIPS AND INCORPORATING FLASHING, SLEEVES AND JACKS WHERE SHOWN ON PLANS AND NOTED HEREIN.

1.02 QUALITY ASSURANCE

A. CODES AND STANDARDS:

1. CALIFORNIA BUILDING CODE (OR CURRENT APPLICABLE CODE)
2. A.S.T.M
3. U.B.C.
4. NATIONAL ROOFING CONTRACTORS ASSOCIATION (NRCA). THE "NRCA ROOFING AND WATERPROOFING MANUAL".

1.04 PRODUCT AND HANDLING

A. DELIVERY AND STORAGE.

1. DELIVER ALL PACKAGED MATERIALS TO THE JOB SITE IN THEIR ORIGINAL UNOPENED CONTAINERS WITH ALL LABELS INTACT AND LEGIBLE AT THE TIME OF INSTALLATION.
2. STORE ALL MATERIALS IN AN APPROVED MANNER, PROTECTING FROM CONTACT WITH SOIL AND FROM EXPOSURE TO THE ELEMENTS.

B. PROTECTION USE ALL MEANS NECESSARY TO PROTECT THE MATERIAL OF THIS SECTION BEFORE, DURING AND AFTER INSTALLATION AND TO PROTECT THE WORK AND MATERIAL OF ALL OTHER TRADES.

C. REPLACEMENT: IN THE EVENT OF DAMAGE, IMMEDIATELY MAKE ALL REPAIRS AND REPLACEMENTS NECESSARY TO THE APPROVAL OF THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.

2.0 PRODUCTS

2.01 MATERIALS

A. TWO-PIECE STRAIGHT BARREL TILE WITH BIRDSTOPS.

B. COLOR AS SELECTED BY ARCHITECT/OWNER.

C. ASPHALT FELT UNDERLAYMENT, SHALL BE TWO (2) LAYERS, 30-POUND ASPHALT SATURATED FELT.

D. FASTENERS: RING SHANK NAILS IN LENGTH SUFFICIENT FOR SLIGHT PENETRATION THROUGH UNDERSIDE OF DECK.

E. APPURTENANT MATERIALS: INCLUDING CEMENT, ASPHALT, AND SEALANTS AS REQUIRED TO COMPLETE THE WORK, PER MANUFACTURER'S RECOMMENDATIONS.

F. THE WEIGHT: 10.05 POUNDS PER SQUARE FOOT.

2.02 SPECIAL CONDITIONS

A. PROVIDE CRICKETS AND/OR OTHER SHEET METAL WORK AS INDICATED.

B. IN AREAS DESIGNATED BY THE BUILDING OFFICIAL AS BEING SUBJECT TO EXTREME WIND VELOCITIES, INSTALLATION SHALL BE IN ACCORDANCE WITH APPLICABLE BUILDING CODES, AND MANUFACTURER'S WRITTEN RECOMMENDATIONS.

3.0 EXECUTION

3.01 GENERAL

A. PREVIOUS WORK DONE BY OTHERS: ROOFING CONTRACTOR SHALL INSPECT SUBSURFACE, FLASHING INSTALLATION AND DETAILS FOR APPROPRIATENESS TO A WATERTIGHT ROOFING INSTALLATION. REPORT DEFICIENCIES IMMEDIATELY IN WRITING TO THE CLIENT/GENERAL CONTRACTOR WITH A COPY TO THE ARCHITECT. FAILURE TO DO SO, OR COMMENCEMENT OF WORK WITHOUT SUCH NOTIFICATION, WILL CONSTITUTE AN ACCEPTANCE BY THE ROOFING CONTRACTOR OF SUITABILITY OF PREVIOUS WORK BY OTHERS.

3.02 INSTALLATION

A. INSTALL ROOFING AND WALL FLASHING PER MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS, CAREFULLY INCORPORATING FLASHING, SCUPPERS, JACKS, SLEEVES, ROOF DRAINS, ETC., SUPPLIED BY OTHERS.

B. ROOF AND UNDERLAYMENT SHALL BE LAID IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND APPLICABLE BUILDING CODES, AS INDICATED ON DRAWINGS.

CLAY ROOFING TILES

1.0 GENERAL

1.01 SCOPE

PROVIDE LABOR, MATERIAL, EQUIPMENT AND SERVICES NECESSARY FOR INSTALLATION OF COMPLETE ROOFING, INCLUDING BUT NOT NECESSARILY LIMITED TO, CANT STRIPS AND INCORPORATING FLASHING, SLEEVES AND JACKS WHERE SHOWN ON PLANS AND NOTED HEREIN.

1.02 QUALITY ASSURANCE

A. CODES AND STANDARDS:

1. CALIFORNIA BUILDING CODE (OR CURRENT APPLICABLE CO
2. A.S.T.M
3. U.B.C.
4. NATIONAL ROOFING CONTRACTORS ASSOCIATION (NRCA). THE "NRCA ROOFING AND WATERPROOFING MANUAL".

1.04 PRODUCT AND HANDLING

A. DELIVERY AND STORAGE.

1. DELIVER ALL PACKAGED MATERIALS TO THE JOB SITE IN THEIR ORIGINAL UNOPENED CONTAINERS WITH ALL LABELS INTACT AND LEGIBLE AT THE TIME OF INSTALLATION.
2. STORE ALL MATERIALS IN AN APPROVED MANNER, PROTECTING FROM CONTACT WITH SOIL AND FROM EXPOSURE TO THE ELEMENTS.

B. PROTECTION USE ALL MEANS NECESSARY TO PROTECT THE MATERIAL OF THIS SECTION BEFORE, DURING AND AFTER INSTALLATION AND TO PROTECT THE WORK AND MATERIAL OF ALL OTHER TRADES.

C. REPLACEMENT: IN THE EVENT OF DAMAGE, IMMEDIATELY MAKE ALL REPAIRS AND REPLACEMENTS NECESSARY TO THE APPROVAL OF THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.

2.0 PRODUCTS

2.01 MATERIALS

A. SLATE: SHALL BE NON-ASBESTOS, FIBER-REINFORCED CEMENT SHEETS, 4MM (APPROXIMATELY 5/16") THICK FOR APPLICATION OVER PLYWOOD ROOF SHEATHING. SLATES SHALL FULLY COMPRESSED WITH A PIGMENT SEAL COATING APPLIED TO THE FACE AND UNDERSIDE SURFACE.

B. COLOR AS SELECTED BY ARCHITECT.

C. SHEATHING SHEATHING SHALL BE AMERICAN PLYWOOD AGGREGATE, MINIMUM THICKNESS OF 1/2" SHEATHING SHALL BE USED. REFER TO STRUCTURAL ENGINEERS SPECIFICATIONS FOR ROOF SHEATHING THICKNESS.

D. ASPHALT FELT UNDERLAYMENT SHALL BE TWO (2) LAYERS, 30-POUND ASPHALT SATURATED FELT.

E. FASTENERS: 304SC CORROSION-RESISTANT, 5/4" INTO SHEATHING.

F. APPURTENANT MATERIALS: INCLUDING ASPHALT AND SEALANTS SHALL BE AS NEEDED TO COMPLETE THE WORK AS SELECTED.

G. SLATE WEIGHT: 4.2 POUNDS PER SQUARE FOOT.

H. STORM ANCHORS: STORM ANCHORS SHALL BE COPPER, APPROXIMATELY 7/8" LONG WITH A FLAT BASE. (THE ANCHORS ARE POSITIONED IN PREWELLED HOMES TO PROVIDE QUICK AND ACCURATE ALIGNMENT.

2.02 SPECIAL CONDITIONS

A. PROVIDE CRICKETS AS INDICATED AND/OR OTHER SHEET METAL WORK ON PLANS AS INDICATED.

B. IN AREAS DESIGNATED BY THE BUILDING OFFICIAL AS BEING SUBJECT TO EXTREME WIND VELOCITIES, INSTALLATION SHALL BE IN ACCORDANCE WITH APPLICABLE BUILDING CODES AND MANUFACTURER'S WRITTEN RECOMMENDATIONS.

3.0 EXECUTION

3.01 GENERAL

A. PREVIOUS WORK BY OTHERS: ROOFING CONTRACTOR SHALL INSPECT SUBSURFACE, FLASHING INSTALLATION AND DETAILS FOR APPROPRIATENESS TO A WATERTIGHT ROOFING INSTALLATION. REPORT DEFICIENCIES IMMEDIATELY IN WRITING TO THE CLIENT/GENERAL CONTRACTOR WITH A COPY TO THE ARCHITECT. FAILURE TO DO SO, OR COMMENCEMENT OF WORK WITHOUT SUCH NOTIFICATION, WILL CONSTITUTE AN ACCEPTANCE BY THE ROOFING CONTRACTOR OF SUITABILITY OF PREVIOUS WORK BY OTHERS.

3.02 INSTALLATION

A. INSTALL ROOFING AND WALL FLASHING PER MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS, CAREFULLY INCORPORATING FLASHING, SCUPPERS, JACKS, SLEEVES, ROOF DRAINS, ETC., SUPPLIED BY OTHERS.

B. ROOF AND UNDERLAYMENT SHALL BE LAID IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND APPLICABLE BUILDING CODES, AS INDICATED ON DRAWINGS.

BUILT-UP ROOF

1.0 GENERAL

1.01 SCOPE

PROVIDE LABOR, MATERIAL, EQUIPMENT, AND SERVICES NECESSARY FOR THE INSTALLATION OF BUILT-UP ROOFING AND WATERPROOFING WHERE SHOWN ON THE DRAWINGS AND NOTED HEREIN.

1.02 QUALITY ASSURANCE

A. CODES AND STANDARDS:

1. CALIFORNIA BUILDING CODE (OR CURRENT APPLICABLE CODE).
2. ASTM
3. NATIONAL ROOFING CONTRACTORS ASSOCIATION (NRCA) THE "NRCA ROOFING AND WATERPROOFING MANUAL".
4. ASPHALT ROOFING MANUFACTURERS ASSOCIATION (ARMA)

1.04 PRODUCT AND HANDLING

A. DELIVERY AND STORAGE

1. DELIVER ALL PACKAGED MATERIALS TO THE JOB SITE IN THEIR ORIGINAL UNOPENED CONTAINERS WITH ALL LABELS INTACT AND LEGIBLE AT THE TIME OF INSTALLATION.
2. STORE ALL MATERIALS IN AN APPROVED MANNER, PROTECTING FROM CONTACT WITH SOIL AND FROM EXPOSURE TO ALL THE ELEMENTS.

B. PROTECTION USE ALL MEANS NECESSARY TO PROTECT THE MATERIALS OF THIS SECTION BEFORE, DURING AND AFTER INSTALLATION AND TO PROTECT THE WORK AND MATERIALS OF ALL OTHER TRADES.

C. REPLACEMENT: IN THE EVENT OF DAMAGE, IMMEDIATELY MAKE ALL REPAIRS AND REPLACEMENTS NECESSARY TO THE APPROVAL OF THE ARCHITECT AND AT NO ADDITIONAL COST TO THE OWNER.

2.0 PRODUCTS

2.01 MATERIALS

A. UNDERLAYMENT: PER C.B.C. SECTION 2506.

B. BUILT-UP ROOF OVER SPACES WITH FINISHED INTERIORS:
4 LAYERS OF 15 FELT HOT-MOPPED BETWEEN PLIES (500 LB.) CRUSHED ROCK TOPPING. (5-YEAR BONDABLE, COLORED ROCK AT ONE-STORY BUILDINGS, SELECTED BY ARCHITECT (FIRE-RETARDANT ROOF) 400 LBS. ROCK, 300 LBS) SLATE (ASTM - 1948)

C. MINERAL SURFACE CAP SHEET: COLOR AS SELECTED BY ARCHITECT WHERE VISIBLE FROM EXTERIOR, OR FROM INTERIOR OF BUILDING IN THIS PROJECT.

D. HIGH WIND AREAS CONFORM TO INSTALLATION REQUIREMENTS OF BUILDING AUTHORITY AND RECOMMENDATION OF MATERIALS MANUFACTURER.

E. GUARANTEE: SUPPLY DEVELOPERS WITH WRITTEN GUARANTEE CERTIFYING ALL ROOFING WORK AND MATERIALS TO BE IN CONFORMANCE WITH PLANS, GENERAL NOTES, AND MATERIALS MANUFACTURER'S RECOMMENDATIONS. GUARANTEE ROOFING AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP FOR TWO (2) YEARS FROM DATE OF DEVELOPER ACCEPTANCE.

2.02 SPECIAL CONDITIONS

A. PROVIDE CRICKETS AND/OR OTHER SHEET METAL WORK AS INDICATED.

B. IN AREAS DESIGNATED BY THE BUILDING OFFICIAL AS BEING SUBJECT TO EXTREME WIND VELOCITIES, INSTALLATION SHALL BE IN ACCORDANCE WITH APPLICABLE BUILDING CODES, AND MANUFACTURER'S WRITTEN RECOMMENDATIONS.

3.0 EXECUTION

3.01 GENERAL

A. PREVIOUS WORK BY OTHERS: ROOFING CONTRACTOR SHALL INSPECT SUBSURFACE, FLASHING INSTALLATION AND DETAILS FOR APPROPRIATENESS TO A WATERTIGHT ROOFING INSTALLATION. REPORT DEFICIENCIES IMMEDIATELY IN WRITING TO THE CLIENT/GENERAL CONTRACTOR WITH A COPY TO THE ARCHITECT. FAILURE TO DO SO, OR COMMENCEMENT OF WORK WITHOUT SUCH NOTIFICATION, WILL CONSTITUTE AN ACCEPTANCE BY THE ROOFING CONTRACTOR OF SUITABILITY OF PREVIOUS WORK BY OTHERS.

3.02 INSTALLATION

A. INSTALL ROOFING AND WALL FLASHING PER MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS, CAREFULLY INCORPORATING FLASHING, SCUPPERS, JACKS, SLEEVES, ROOF DRAINS, ETC., SUPPLIED BY OTHERS.

B. ROOF AND UNDERLAYMENT SHALL BE LAID IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND APPLICABLE BUILDING CODES, AS INDICATED ON DRAWINGS.

C. ROOF AND UNDERLAYMENT SHALL BE LAID IN ACCORDANCE WITH MANUFACTURER'S INSTALLED INSTRUCTIONS, AND APPLICABLE BUILDING CODES, AS INDICATED ON DRAWINGS.

D. ALL BUILT-UP ROOFING SHALL SLOPE PER MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS OR A MINIMUM STANDARD 1/4" PER FOOT.

FLASHING AND SHEET METAL

1.0 GENERAL

1.01 SCOPE

PROVIDE LABOR, MATERIAL, EQUIPMENT, AND SERVICES NECESSARY FOR THE INSTALLATION OF SHEET METAL AND/OR FLASHING WHERE SHOWN ON THE DRAWINGS AND NOTED HEREIN.

1.02 QUALITY ASSURANCE

A. CODES AND STANDARDS:

1. CALIFORNIA BUILDING CODE (OR CURRENT APPLICABLE CODE).
2. ASTM
3. SMACNA "ARCHITECTURAL SHEET METAL MANUAL"

2.0 PRODUCTS

2.01 MATERIALS

A. SHEET METAL SHALL CONFORM TO ASTM A261, PAINTABLE UNDER THE STANDARD METHODS, 24SWG SHALL BE AS INDICATED AND IN NO CASE LESS THAN 26-GAUGE.

B. GENERAL PROVIDE ALL FLASHINGS, LOUVERS, WALL VENTS, ROOF FLASHING, AND ANY OTHER MISCELLANEOUS SHEET METAL AS REQUIRED FOR COMPLETE JOB.

3.0 EXECUTION

3.01 GENERAL

A. PREVIOUS WORK BY OTHERS: CONTRACTOR SHALL INSPECT SUBSURFACE, AND FLASHING FOR APPROPRIATENESS TO A WATERPROOF INSTALLATION. REPORT DEFICIENCIES IMMEDIATELY IN WRITING TO THE CLIENT/GENERAL CONTRACTOR WITH A COPY TO THE ARCHITECT. FAILURE TO DO SO, OR COMMENCEMENT OF WORK WITHOUT SUCH NOTIFICATION, WILL CONSTITUTE AN ACCEPTANCE BY THE CONTRACTOR OF SUITABILITY OF PREVIOUS WORK BY OTHERS.

3.02 INSTALLATION

A. FLASHING AND SIMILAR ITEMS RELATED TO THE ROOF OR WATERPROOF MEMBRANES SHALL BE INSTALLED IN COOPERATION WITH THE ROOFING CONTRACTOR.

B. PROVIDE FLASHING AND COUNTERFLASHING TO EXTENT INDICATED ON THE DRAWINGS AND NECESSARY TO INSURE WATERPROOF CONDITIONS.

C. SHEET METAL FLASHING SHALL BE INSTALLED AT ALL LOCATIONS WHERE DIFFERENT MATERIALS INTERSECT, SUCH AS ROOF TO WALL, ROOF TO ROOF, DECK/BALCONY/LANDING TO WALL, PENETRATIONS INTO OTHER LOCATIONS RECOMMENDED IN THE "ARCHITECTURAL SHEET METAL MANUAL".

D. WORK SHALL BE ACCURATELY FABRICATED TO DETAIL AND FITTED TO JOB CONDITIONS.

E. LOCK SEAMS (IF REQUIRED) SHALL BE FLAT AND TRUE TO LINE, 1/2-INCH WIDE; SWEATED FULL WITH SOLDER.

F. ALL EXTERIOR OPENINGS EXPOSED TO THE WEATHER, SHALL BE FLASHED IN SUCH A MANNER AS TO MAKE THEM WATERPROOF.

G. S.L. FLASH AND CAULK ALL BEAMS AND OUTLOOKERS PROJECTING THROUGH EXTERIOR WALLS AND/OR ROOF SURFACES.

H. WHERE EXPOSED TO WEATHER, FLASH ALL HORIZONTAL WOOD TRIM BUTTING TO EXTERIOR FINISH.

I. ALL PARAPETS SHALL BE PROVIDED WITH COPING OF APPROVED MATERIALS. ALL FLASHING, CAP FLASHING, ASHLARS AND COPING, WITH OF METAL, SHALL BE OF NOT LESS THAN NO. 26 GAUGE CORROSION-RESISTANT METAL.

J. ROOF VALLEY FLASHING SHALL BE PROVIDED FOR ROOFING WITH ASPHALT SHINGLES.

K. ASPHALT SHINGLES THE ROOF VALLEY FLASHING SHALL BE THE SAME AS REQUIRED FOR WOOD SHINGLES OR SHALL BE LACED ASPHALT SHINGLES APPLIED IN AN APPROVED MANNER. WITH AN UNDERLAYMENT OF NOT LESS THAN TYPE 15 FELT EXTENDING 18 INCHES FROM THE CENTERLIN

2.0 PRODUCTS

2.01 DOOR SIZES

A. WIDTHS AND HEIGHTS: AS NOTED ON FLOOR PLAN AND/OR SCHEDULES.

B. UNDERCUTS: PROVIDE UNDERCUTS AS REQUIRED BY MOST CURRENT CMC AS MECHANICALLY VENTED BATHS, AND MECHANICALLY VENTED LAUNDRY ROOMS (VERIFY FINISH FLOOR MATERIAL).

2.02 DOOR TYPES

A. ENTRY DOORS: 1 3/4" THICK SOLID WOOD, EXTERIOR GRADE, AS DETAILED BY ARCHITECT; 1 3/4" THICK METAL DOOR WITH PANELS-SEE DRAWINGS OR AS SELECTED BY CLIENT.

B. EXTERIOR DOORS AS INDICATED ON DRAWINGS AND/OR SCHEDULES.

C. INTERIOR DOORS: 1 3/8" THICK, HARDBOARD, RAISED PANEL, 1 3/8" THICK, HARD BOARD, HOLLOW CORE- SLAB, AS SELECTED BY CLIENT.

D. BI-PASS HANDRADED: 1 1/8" THICK HARDBOARD, HOLLOW CORE, SLAB, VINYL CLAD HARDBOARD DOORS.

E. BI-FOLD DOORS: TO MATCH TYPICAL INTERIOR DOORS (LOUVERED)

F. FRENCH DOORS: 1 3/4" THICK (SOLID WOOD) (METAL) WITH DIVIDED LIGHTS AS INDICATED ON DRAWINGS. GLASS IN HAZARDOUS AREAS: PROVIDE TEMPERED GLASS PER I.B.C. REQUIREMENTS, AS INDICATED IN DRAWINGS AND AS NECESSARY.

G. GARAGE DOOR TO LIVING UNIT: 1 3/8" THICK, SOLID CORE, TIGHT FITTING DOOR WITH SELF CLOSER, 1-HOUR, ONE-HOUR FIRE RATED DOOR AND ASSEMBLY WITH SELF CLOSER, 1-HOUR.

H. GARAGE DOORS: ONE PIECE OVERHEAD DOOR OR SECTIONAL DOOR, SIZE AND DETAIL AS INDICATED ON DRAWINGS. APPLIED TRIM-MOLDING AS DETAILED OVER 5/8" EXTERIOR GRADE PLYWOOD OVER 2 X 8 FRAME (OVERHEAD DOOR)

I. ALL EXTERIOR DOORS TO BE IN CONFORMANCE WITH ACOUSTICAL REQUIREMENTS AS INDICATED IN ACOUSTICAL REPORT.

J. METAL UTILITY CABINET DOORS AS INDICATED ON DRAWINGS AND/OR SCHEDULES.

3.0 EXECUTION

3.01 EXAMINATION

A. VERIFICATION OF CONDITIONS: BEFORE INSTALLATION, VERIFY THAT OPENINGS ARE PLUMB AND SQUARE AND OF PROPER DIMENSION. REPORT FRAME DEFECTS OR UNSUITABLE CONDITIONS TO THE GENERAL CONTRACTOR BEFORE PROCEEDING.

B. ACCEPTANCE: BEGINNING OF INSTALLATION MEANS ACCEPTANCE OF EXISTING CONDITIONS.

3.02 INSTALLATION

INSTALL IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS, INCLUDING, BUT NOT LIMITED TO THE FOLLOWING TO ACHIEVE WEATHERTIGHT AND FREELY OPERATING INSTALLATION.

A. INSTALL SEALANT AND RELATED BACKING MATERIALS AT PERIMETER OF ASSEMBLY WHERE REQUIRED.

B. INSTALL ACCESSORY ITEMS AS REQUIRED.

SLIDING GLASS AND MIRRORED DOORS

1.0 GENERAL

1.01 SCOPE

PROVIDE LABOR, MATERIAL, EQUIPMENT, AND SERVICES NECESSARY FOR THE INSTALLATION OF ALL SLIDING GLASS AND MIRRORED DOORS WHERE SHOWN ON THE DRAWINGS AND AS NOTED HEREIN.

1.02 QUALITY ASSURANCE

A. CODES AND STANDARDS:

1. CALIFORNIA BUILDING CODE (OR CURRENT APPLICABLE CODE)
2. AMERICAN ARCHITECTURAL ALUMINUM MANUFACTURERS ASSOCIATION (AAMA), ANSI, AAMA 101-85 "VOLUNTARY SPECIFICATIONS FOR ALUMINUM FRAME WINDOWS AND SLIDING GLASS DOORS."
3. MODERAL SPECIFICATIONS.
4. ASTM.

2.0 PRODUCTS

2.01 MATERIALS

A. EXTERIOR SLIDING GLASS DOORS

1. FRAME FACTORY ASSEMBLED WITH NAIL ON FIN.
2. FINISH: AS SELECTED BY CLIENT/GENERAL CONTRACTOR.
3. SIZE AND OPERATION: AS INDICATED IN THE CONSTRUCTION DOCUMENTS.
4. HARDWARE: FACTORY INSTALLED. FINISH AS SELECTED BY CLIENT/GENERAL CONTRACTOR.
5. WEATHER-STRIPPING: ALL UNITS WEATHER-STRIPPED.
6. SCREENS: FACTORY INSTALLED ON ALL OPERATING UNITS. FINISH AS SELECTED BY CLIENT/GENERAL CONTRACTOR.
7. MUNTINS: DESIGN AS SHOWN IN THE CONSTRUCTION DOCUMENTS. FINISH TO MATCH FRAME.

B. MIRRORED SLIDING WARDROBE DOORS

1. FINISH: AS SELECTED BY CLIENT/GENERAL CONTRACTOR.
2. SIZE AND OPERATION: AS INDICATED ON CONSTRUCTION DOCUMENTS.

C. GLAZING

1. REFER TO - GLASS AND GLAZING.
2. AS SHOWN IN THE CONSTRUCTION DOCUMENTS, TITLE 24 ENERGY REPORT AND ACOUSTICAL REPORT.

3.0 EXECUTION

3.01 EXAMINATION

A. VERIFICATION OF CONDITIONS: BEFORE INSTALLATION, VERIFY THAT OPENINGS ARE PLUMB AND SQUARE AND OF PROPER DIMENSION. REPORT FRAME DEFECTS OR UNSUITABLE CONDITIONS TO THE GENERAL CONTRACTOR BEFORE PROCEEDING.

B. ACCEPTANCE: BEGINNING OF INSTALLATION MEANS ACCEPTANCE OF EXISTING CONDITIONS.

3.02 INSTALLATION

INSTALL IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS, INCLUDING, BUT NOT LIMITED TO THE FOLLOWING TO ACHIEVE WEATHERTIGHT AND FREELY OPERATING INSTALLATION.

A. INSTALL SEALANT AND RELATED BACKING MATERIALS AT PERIMETER OF ASSEMBLY WHERE REQUIRED.

B. INSTALL ACCESSORY ITEMS AS REQUIRED.

ALUMINUM WINDOWS

1.0 GENERAL

1.01 SCOPE

PROVIDE LABOR, MATERIAL, EQUIPMENT, AND SERVICES NECESSARY FOR THE INSTALLATION OF ALUMINUM WINDOWS COMPLETE WITH ALL FLASHING AND CAULKING WHERE SHOWN ON DRAWINGS AND AS NOTED HEREIN.

1.02 QUALITY ASSURANCE

A. CODES AND STANDARDS:

1. CALIFORNIA BUILDING CODE (OR CURRENT APPLICABLE CODE)
2. AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION (AAMA), ANSI/AAM 101-85, "VOLUNTARY SPECIFICATION FOR ALUMINUM FRAME WINDOWS AND SLIDING GLASS DOORS".

2.0 PRODUCTS

2.01 MATERIALS

A. ALUMINUM WINDOWS SHALL BE SELECTED BY DEVELOPER, FIXED, SINGLE HUNG, OR HORIZONTAL SLIDING WINDOWS CONFORMING TO SPECIFICATION 101-85. IN ANSI AS/AI AND AAMA 3022. FOR RESIDENTIAL WINDOWS, COMPLETE WITH SCREEN, SIZES AS INDICATED ON PLANS.

B. GLAZING: REFER TO SECTION 08800 - GLASS AND GLAZING AND RELATED ENERGY COMPLIANCE CALCULATION AND ACOUSTICAL REPORT.

C. VAPOR AND AIR RETARDERS: REF. VAPOR AND AIR RETARDERS: REFER TO SECTION 07460 ENERGY COMPLIANCE CALCULATIONS AND ACOUSTICAL REPORT.

D. SIZE AND OPERATION: AS INDICATED IN THE CONSTRUCTION DOCUMENTS. MANUFACTURER/SUPPLIER SHALL PROVIDE WINDOWS THAT MEET ALL EMERGENCY EXITING REQUIREMENTS OF THE I.B.C. AND NOTIFY ARCHITECT IF DRAWINGS ARE IN CONFLICT.

D. HARDWARE: FACTORY INSTALLED FINISH AS SELECTED BY CLIENT/GENERAL CONTRACTOR AND VERIFIED BY ARCHITECT.

E. WEATHER-STRIPPING: ALL UNITS WEATHER-STRIPPED.

F. SCREEN: FACTORY INSTALLED ON ALL OPERATING UNITS. FINISH AS SELECTED BY CLIENT/GENERAL CONTRACTOR AND VERIFIED BY ARCHITECT.

G. MUNTINS: DESIGN AS SHOWN IN THE CONSTRUCTION DOCUMENTS. FINISH TO MATCH SASH.

H. GLAZING METHOD AND TYPE: AS SHOWN IN THE CONSTRUCTION DOCUMENTS (TITLE 24 ENERGY REPORT ACOUSTICAL REPORT).

3.0 EXECUTION

A. PREVIOUS WORK BY OTHERS: CONTRACTOR SHALL REVIEW DETAILS AND PREVIOUS WORK BY OTHERS FOR APPROPRIATENESS TO COMPLETE WOOD WINDOWS. REPORT DEFICIENCIES IMMEDIATELY IN WRITING TO THE CLIENT/GENERAL CONTRACTOR WITH A COPY TO THE ARCHITECT. FAILURE TO DO SO, OR COMMENCEMENT OF WORK WITHOUT SUCH NOTIFICATION, WILL CONSTITUTE AN ACCEPTANCE BY CONTRACTOR OF SUITABILITY OF PREVIOUS WORK BY OTHERS.

3.02 INSTALLATION

INSTALL IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS, INCLUDING, BUT NOT LIMITED TO THE FOLLOWING TO ACHIEVE WEATHERTIGHT AND FREELY OPERATING INSTALLATION.

A. INSTALL SEALANT AND RELATED BACKING MATERIALS AT PERIMETER OF ASSEMBLY WHERE REQUIRED.

B. INSTALL ACCESSORY ITEMS AS REQUIRED.

FINISH HARDWARE

1.0 GENERAL

1.01 SCOPE

PROVIDE LABOR, MATERIAL, EQUIPMENT, AND SERVICES NECESSARY FOR THE INSTALLATION OF FINISH HARDWARE.

1.02 QUALITY ASSURANCE

A. LOCAL BUILDING CODE, APPLICABLE DISABLED ACCESSIBLE REQUIREMENTS AND LOCAL SECURITY REQUIREMENTS.

B. OBTAIN ALL INTERACTING TYPES OF HARDWARE FROM A MANUFACTURER.

C. AT FIRE-RATED ASSEMBLIES, PROVIDE HARDWARE COMPLYING WITH NFPA AND U.L. CURRENT TESTING STANDARDS APPROPRIATE FOR RATING REQUIRED. WHERE EMERGENCY EXIT DEVICES AL REQUIRED, PROVIDE PROPERLY "LABELED" HARDWARE.

D. PROVIDE HARDWARE TEMPLATES FOR PROPER INSTALLATION OF HARDWARE.

2.01 FINISHES

A. MATERIAL FOR EXTERIOR AND INTERIOR DOORS TO BE SELECTED BY DEVELOPER.

B. THRESHOLDS TO BE BRONZE ANODIZED ALUMINUM, OR AS SELECTED BY CLIENT.

2.02 KEYING

EACH UNIT LOCK TO BE INDIVIDUALLY KEYED. EACH LOCK TO HAVE TWO CHANGE KEYS.

2.03 HINGES

DOORS TO HAVE A MINIMUM OF THREE (PAIR) HINGES. DOORS GREATER THAN 1 5/8" THICK, 36" WIDE, OR 90" TALL SHALL HAVE A MINIMUM OF FOUR (PAIR) HINGES. EXTERIOR OUTSWINGING HINGES TO BE NONREMOVABLE, WITH NON-REMOVABLE HINGE PIN. INTERIOR HINGES TO HAVE NON-RUSTING PINS. NO LOW FREQUENCY USE HINGES ARE TO BE USED.

2.04 LOCK SETS AND LATCH SETS

STANDARD CLASS A RESIDENTIAL DUTY CYLINDRICAL LOCKS AND LATCHES WITH WROUGHT TRIM AS SELECTED BY DEVELOPER. LOCK SETS SHALL HAVE A 2 3/4" BACKSET WITH MINIMUM ONE-INCH THROW DEADBOLTS.

2.05 WEATHER-STRIPPING

A. EXTERIOR DOORS: COMPLETE ZINC MORTISE TYPE WEATHER-STRIPPING.

B. THRESHOLDS: BRONZE ANODIZED ALUMINUM.

3.0 EXECUTION

3.01

SHALL BE IN ACCORDANCE WITH LOCAL CODE AND SECURITY REQUIREMENTS, MANUFACTURER'S INSTRUCTIONS, AND AS INDICATED ON DRAWINGS FOR COMPLETE SMOOTH AND PROPER OPERATION.

GLASS AND GLAZING

1.0 GENERAL

1.01 SCOPE

A. PROVIDE LABOR, MATERIAL, EQUIPMENT, AND SERVICES NECESSARY FOR THE INSTALLATION OF GLASS AND GLAZING WHERE SHOWN ON THE DRAWINGS AND AS NOTED HEREIN.

1.02 QUALITY ASSURANCE

A. CODES AND STANDARDS:

1. CALIFORNIA BUILDING CODE (OR CURRENT APPLICABLE CODE)
2. FEDERAL SPECIFICATION DD-G-451 FOR STANDARD
3. FEDERAL SPECIFICATION DD-G-1403 FOR TEMPERATE
4. I.B.C. STANDARD NO. 24-1, GLASS STANDARD SPECIFICATION.
5. I.B.C. STANDARD NO. 24-2, SAFETY GLAZING.
6. CHAPTER 24 OF THE I.B.C.
7. FLAT GLASS MARKETING ASSOCIATION "GLAZING MANUAL".
8. "SAFETY STANDARDS FOR ARCHITECTURAL GLAZING MATERIAL" (16CFR 1201) ISSUED BY CONSUMER SAFETY COMMISSION EFFECTIVE JULY 6, 1977.
9. INSULATING GLASS CERTIFICATION COUNCIL.
10. CALIFORNIA TITLE 24 ENERGY REQUIREMENTS.

2.0 PRODUCTS

A. PROVIDE SAFETY GLAZING IN THE FOLLOWING LOCATIONS.

1. GLAZING IN INGRESS AND E EGRESS DOORS.
2. GLAZING IN FIXED AND SLIDING PANELS OR SLIDING DOOR ASSEMBLIES AND PANELS IN SWINGING DOORS OTHER THAN WARDROBE DOORS.
3. GLAZING IN DOORS AND ENCLOSURES FOR HOT TUBS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS AND SHOWER GLAZING IN ANY PORTION OF A BUILDING WALL ENCLOSING COMPARTMENTS WHERE TO THE BOTTOM EXPOSED EDGE GLAZING IS LESS THAN 60 INCHES ABOVE A STANDING SURFACE AND DRAIN INLET.
4. GLAZING IN FIXED OR OPERABLE PANELS ADJACENT TO WHERE THE NEAREST EXPOSED EDGE OF THE GLAZING IS A 24-INCH ARC OF EITHER VERTICAL EDGE OF THE DOOR CLOSED POSITION AND WHERE THE BOTTOM EXPOSED EDGE THE GLAZING IS LESS THAN 60 INCHES ABOVE THE WALK ON SURFACE.
5. GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL THAN THOSE LOCATIONS DESCRIBED IN ITEMS 3 AND 4 O THAT MEETS ALL OF THE FOLLOWING CONDITIONS

A. EXPOSED AREA OF AN INDIVIDUAL PANE GREATER SQUARE METER.
B. EXPOSED BOTTOM EDGE LESS THAN 18 INCHES ABOVE THE FLOOR.
C. EXPOSED TOP EDGE GREATER THAN 36 INCHES ABOVE THE FLOOR.
D. ONE OR MORE WALKING SURFACES WITHIN 36 INCHES HORIZONTALLY OF THE PLANE OF THE GLAZING.

6. GLAZING IN WARDROBE DOORS SHALL MEET THE IMPACT TEST REQUIREMENTS FOR SAFETY GLAZING AS SET FORTH . IN CRC R308. LAMINATED GLASS MUST ALSO MEET THE BDL TEST REQUIREMENTS OF CRC R308.

3.0 EXECUTION

3.01 GENERAL

A. PREVIOUS WORK BY OTHERS: CONTRACTOR SHALL REVIEW DETAILS AND PREVIOUS WORK BY OTHERS FOR APPROPRIATENESS TO COMPLETE GLASS AND GLAZING. REPORT DEFICIENCIES IMMEDIATELY IN WRITING TO THE CLIENT/GENERAL CONTRACTOR WITH A COPY TO THE ARCHITECT. FAILURE TO DO SO, OR COMMENCEMENT OF WORK WITHOUT SUCH NOTIFICATION, WILL CONSTITUTE AN ACCEPTANCE BY CONTRACTOR OF SUITABILITY OF PREVIOUS BY OTHERS.

3.02 INSTALLATION

SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF "CONSUMER PRODUCTS SAFETY COMMISSION RULINGS, (16CFR1201, "SAFETY" STANDARD FOR ARCHITECTURAL GLAZING MATERIALS" EFFECTIVE JULY 16, 1977 AND IN ACCORDANCE WITH FLAT GLASS MARKETING ASSOCIATION "GLAZING MANUAL", MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND AS INDICATED ON DRAWINGS. GLASS ON INSTALLATION SHALL HAVE NO TONG MARKING, OR OIL CANNING.

LATH & PLASTER

3-COAT STUCCO

1.0 GENERAL

1.01 SCOPE

PROVIDE LABOR, MATERIAL, EQUIPMENT, AND SERVICES NECESSARY FOR THE INSTALLATION OF A 3-COAT STUCCO SYSTEM WHERE SHOWN ON THE DRAWINGS AND AS NOTED HEREIN.

1.02 QUALITY ASSURANCE

A. CODES AND STANDARDS:

1. CALIFORNIA BUILDING CODE (OR CURRENT APPLICABLE CODE)
2. ASTM
3. STUCCO MANUFACTURERS ASSOCIATION (SMA). SMA SPECIFICATIONS AND STANDARDS FOR MANUFACTURED STUCCO FINISHES.
4. PLASTERING INFORMATION BUREAU - PLASTERING AND SYSTEMS MANUAL.

2.0 PRODUCTS

2.01 MATERIALS

PROVIDE CLIENT SELECTED COMPLETE 3-COAT STUCCO SYSTEM (CBC) TESTED AND APPROVED, TO SHOW COMPLIANCE WITH INDICATED PERFORMANCES INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING.

A. WALLS 3-COAT APPLICATION (SCRATCH BROWN FINISH STUCCO UNDERLAYMENT, PER CRC R703

B. FINISH COAT:

1. INTEGRAL COLOR STUCCO, FACTORY PREPARED MINERAL PIGMENTS.
2. COLOR AND TEXTURE AS SELECTED BY ARCHITECT.

C. ACCESSORIES:

1. ALL REINFORCING BEADS, BASE SCREEDS, CONTROL JOIN SHALL BE GALVANIZED.

3.0 EXECUTION

3.01 INSTALLATION

INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURERS PRINTED INSTALLATION INSTRUCTIONS AND BEST TRADE ASSOCIATE STANDARDS OF PRACTICE.

A. CONTROL JOINTS SHALL BE AS REQUIRED BY FINISH COAT MANUFACTURER WITH THE ARCHITECT TO BE NOTIFIED OF PROPOSED LOCATIONS PRIOR TO FIELD IMPLEMENTATION.

1-COAT STUCCO

1.0 GENERAL

1.01 SCOPE

PROVIDE LABOR, MATERIAL, EQUIPMENT, AND SERVICES NECESSARY FOR THE INSTALLATION OF A 1-COAT STUCCO SYSTEM WHERE SHOWN ON THE DRAWINGS AND AS NOTED HEREIN.

1.02 QUALITY ASSURANCE

A. CODES AND STANDARDS:

1. CALIFORNIA BUILDING CODE (OR APPLICABLE CODE)
2. ASTM
3. STUCCO MANUFACTURERS ASSOCIATION (SMA) SMA SPECIFICATIONS AND STANDARDS FOR MANUFACTURED STUCCO FINISHES.
4. PLASTERING INFORMATION BUREAU - PLASTERING AND SYSTEMS MANUAL.

2.0 PRODUCTS

2.01 MATERIALS

PROVIDE CLIENT SELECTED COMPLETE ONE-COAT STUCCO SYSTEM (CBC) TESTED AND APPROVED, TO SHOW COMPLIANCE WITH INDICATED PERFORMANCES INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING.

A. FOAM SUBSTRATE

1. ONE-INCH THICK EXTRUDED RIGID POLYSTYRENE FOAM T&G EDGE. FOAM SHALL BE RESISTANT TO INSECTS, FUNGUS CHEMICALS AND ALL FORMS OF WATER PENETRATION WITH CLASS I FLAME SPREAD RATING AND SMOKE-DEVELOPED NOT TO EXCEED 450.

B. REINFORCING

1. REINFORCING MESH OR INTEGRAL FIBERS TO PROVIDE STRENGTH IMPACT RESISTANCE AND RESISTANCE TO CRACK SELECTED BY THE FINISH COAT MANUFACTURER.

C. FINISH COAT

1. MINIMUM 1/4" TO 5/8" THICK, CEMENT BASED STUCCO WITH FACE AND STAIN RESISTANT FACTORY PREPARED INTEGRAL PIGMENT
2. COLOR AND TEXTURE: AS SELECTED BY ARCHITECT.

D. ACCESSORIES

1. ALL REINFORCING BEADS, BASE SCREEDS, CONTROL JOIN ETC., SHALL BE OF GALVANIZED METAL OR PLASTIC AS SELECTED BY FINISH COAT MANUFACTURER.

3.0 EXECUTION

3.01 GENERAL

A. PREVIOUS WORK BY OTHERS: CONTRACTOR SHALL REVIEW DETAILS AND PREVIOUS WORK BY OTHERS FOR APPROPRIATENESS TO COMPLETE LATH AND PLASTER (1-COAT STUCCO). REPORT DEFICIENCIES IMMEDIATELY IN WRITING TO THE CLIENT/GENERAL CONTRACTOR WITH A COPY TO THE ARCHITECT. FAILURE TO DO SO OR COMMENCEMENT OF WORK WITHOUT SUCH NOTIFICATION, CONSTITUTE AN ACCEPTANCE BY CONTRACTOR OF SUITABILITY PREVIOUS WORK BY OTHERS.

3.02 INSTALLATION

INSTALL IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS, INCLUDING, BUT NOT LIMITED TO THE FOLLOWING:

A. FOAM SHALL BE APPLIED OVER BUILDING PAPER (AT VARIOUS SURFACES) AND WATERPROOF BARRIER (AT HORIZONTAL SURFACE TO A STRUCTURALLY SOLID SUBSTRATE. T & G JOINTS SHALL RUN HORIZONTALLY WITH VERTICAL JOINTS BACKED BY SOLID FRAMING.

B. REINFORCING SHALL BE FULLY EMBEDDED AND CONCEALED WITHIN FINISH COAT.

C. CONTROL JOINTS SHALL BE SELECTED BY FINISH COAT MANUFACTURER WITH ARCHITECT TO BE NOTIFIED OF PROPOSE LOCATIONS PRIOR TO FIELD IMPLEMENTATION.

D. SURFACES SUBJECT TO HIGH VOLUME PEDESTRIAN TRAFFIC IMPACT SHALL INCORPORATE IMPACT RESISTANT ADDITIVES OR ADDITIONAL REINFORCING AS SELECTED BY FINISH COAT MANUFACTURER.

GYPSUM BOARD

1.0 GENERAL

1.01 SCOPE

PROVIDE LABOR, MATERIAL, EQUIPMENT, AND SERVICES NECESSARY FOR THE INSTALLATION OF GYPSUM BOARD COMPLETE WHERE ON DRAWINGS AND NOTED HEREIN.

1.02 QUALITY ASSURANCE

A. CODES AND STANDARDS

1. CALIFORNIA BUILDING CODE (OR CURRENT APPLICABLE CODE)
2. ASTM.
3. GYPSUM ASSOCIATION GA-216 "RECOMMENDED SPECIFICATIONS FOR APPLICATIONS AND FINISH OF GYPSUM BOARD.
4. AMERICAN STANDARD NOTES FOR APPLICATION AND FINISHING OF GYPSUM BOARDS, BY THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI).

2.0 PRODUCTS

2.01 GYPSUM BOARD

A. TYPE: REGULAR, 1/2" THICK, THROUGHOUT EXCEPT AS NOTED OTHERWISE. WHERE BOARD RATED ASSEMBLIES ARE REQUIRED PROVIDE NUMBER OF LAYERS, MATERIALS AND INSTALLATIONS WHICH ARE ESSENTIAL WITH THOSE OF APPLICABLE ASSEMBLIES TESTED BY ACOUSTICAL TESTING LABORATORIES ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION. PROVIDE 5/8" THICK GYPSUM BOARD AT ALL CEILINGS WHERE FRAMING SPACING EXCEEDS 16" O.C.

B. TYPE FIRE RATED, 5/8" THICK, TYPE "X" . WHERE GYPSUM BOARD ASSEMBLIES WITH FIRE-RESISTANT RATINGS ARE REQUIRED PROVIDE NUMBER OF LAYERS, MATERIALS AND INSTALLATIONS WHICH ARE IDENTICAL WITH THOSE OF APPLICABLE ASSEMBLIES TESTED BY FIRE TESTING LABORATORIES ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.

C. TYPE: MOISTURE RESISTANT, AT WET AREAS IN THICKNESS AND LOCATIONS RECOMMENDED BY GYPSUM BOARD MANUFACTURERS.

D. TYPE: EXTERIOR GRADE WEATHER RESISTANT GYPSUM BOARD OF THICKNESS AND RATING AS REQUIRED BY ASSEMBLY DETAILED AND AS RECOMMENDED BY GYPSUM BOARD MANUFACTURER.

2.02 METAL CORNER BEAD

EDGE TRIM AND ACCESSORIES

A. BULLNOSE (90 DEGREE RIGHT ANGLE) G.I. CORNER BEAD AT ALL EXTERNAL CORNERS.

B. G.I. L-TYPE EDGE TRIM AT ALL EXPOSED EDGES.

C. SEMI-RIGID FVC FLEXIBLE CORNER BEAD AT RADIUSED OPENINGS.

D. RESILIENT CHANNELS, PROVIDE MANUFACTURER SPECIAL SHAPED METAL FURRING CHANNEL IN GAGE AND SPACING AS REQUIRED FOR APPLICABLE FIRE OR SOUND RATED ASSEMBLIES.

2.03 TAPE AND COMPOUNDS

A. AS RECOMMENDED BY MANUFACTURER.

B. PROVIDE PERMANENTLY RESILIENT SEALANT AT SOUND CONTROL JOINTS AS RECOMMENDED BY MANUFACTURER.

2.04 NAILING

A. PER APPLICABLE CODE REQUIREMENTS. REFER TO DRAWINGS FOR SPECIAL NAILING AT SHEAR WALLS AND FIRE/SOUND RATED ASSEMBLIES. THE CONTRACTOR AT HIS OPTION MAY SUBSTITUTE NAILGUNS, SCREWS OR EQUIVALENT PROPORTIONS IN LIEU OF NAILS AS PERMITTED BY AUTHORITY HAVING JURISDICTION. FASTENERS AT MULTIPLE LAYER APPLICATIONS SHALL BE SIZED ACCORDINGLY.

3.0 EXECUTION

3.01 GENERAL

A. PREVIOUS WORK BY OTHERS: CONTRACTOR SHALL INSPECT DETAILS, FRAMING AND SURFACES FOR APPROPRIATENESS TO INSTALL GYPSUM BOARD. DEFICIENCIES ARE TO BE REPORTED IMMEDIATELY IN WRITING TO THE GENERAL CONTRACTOR. FAILURE TO NOTIFY PRIOR TO COMMENCEMENT OF WORK WILL CONSTITUTE ACCEPTANCE BY THE CONTRACTOR OF SUITABILITY OF PREVIOUS WORK BY OTHERS.

3.02 INSTALLATION

A. ALL GYPSUM BOARD SHALL BE OF TYPE, EDGE, CONFIGURATION ARRANGEMENT AND MAXIMUM LENGTHS AVAILABLE TO MINIMIZE END TO END BUTT JOINTS.

B. ALL JOINTS IN FINISHED SURFACES SHALL BE TAPED AND FINISHED WITH JOINT COMPOUND.

C. REINFORCE ALL CORNERS.

D. CONCEAL EXPOSED NAIL OR SCREW HEADS WITH JOINT COMPOUND.

E. METAL TRIM SHALL BE TIGHT TO GYPSUM BOARD EDGES, PLUMB, LEVEL, AND TRUE TO PLAN. SECURELY ATTACHED.

F. ALL GYPSUM WALL BOARD CONCEALING TUB NAILING FINISH SHALL BE ALIGNED WITH ADJACENT WALL PLANES SUCH THAT THE TRUE WALL PLANE IS MAINTAINED.

G. FINISHES SHALL BE PER FINISH SCHEDULE BY DEVELOPER OR ARCHITECT.

PREFABRICATED FIREPLACES

1.0 GENERAL

1.01 SCOPE

A. PROVIDE LABOR, MATERIAL, EQUIPMENT, AND SERVICES NECESSARY FOR THE INSTALLATION OF ALL PREFABRICATED FIREPLACES AS SHOWN ON THE DRAWINGS AND AS NOTED HEREIN.

1.02 QUALITY ASSURANCE

A. CODES AND STANDARDS:

1. CALIFORNIA BUILDING CODE (OR CURRENT APPLICABLE CODE).
2. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM).
3. INTERNATIONAL CODE CONFERENCE (ICC).

2.0 PRODUCTS/MATERIALS

2.01 PREFABRICATED METAL FIREPLACES

A. MANUFACTURER, SIZE AND/OR MODEL AS NOTED ON PLANS OR AS SPECIFIED BY DEVELOPER IN BID INSTRUCTIONS.

2.02 PREFABRICATED CONCRETE TILT-UP FIREPLACES

A. MANUFACTURER, SIZE AND/OR MODEL AS NOTED ON PLANS OR AS SELECTED BY DEVELOPER IN BID INSTRUCTIONS.

2.03 ACCESSORIES

A. ACCESSORIES SUCH AS, BUT NOT LIMITED TO, FLUES, CAPINETS, TERMINATION CAPS AND SPARK ARRESTORS SHALL BE FABRICATED BY THE FIREPLACE MANUFACTURER AND HAVE SAME APPROVAL RATINGS AND/OR APPROVED BY THE FIREPLACE MANUFACTURER.

3.0 EXECUTION

3.01 GENERAL

A. PREVIOUS WORK BY OTHERS CONTRACTOR SHALL INSPECT DETAILS AND PREVIOUS WORK BY OTHERS FOR APPROPRIATENESS TO INSTALLING PREFABRICATED FIREPLACES. REPORT DEFICIENCIES IMMEDIATELY IN WRITING TO THE CLIENT/GENERAL CONTRACTOR A COPY TO THE ARCHITECT. FAILURE TO DO SO, OR COMMENCEMENT OF WORK WITHOUT SUCH NOTIFICATION WILL CONSTITUTE AN ACCEPTANCE BY CONTRACTOR OF SUITABILITY OF PREVIOUS WORK BY OTHERS.

B. VERIFY ALL SIZES AND DIMENSIONS BY TAKING FIELD MEASUREMENTS PRIOR TO INSTALLATION.

3.02 INSTALLATION AND FABRICATION

A. FIREPLACES AND ACCESSORIES SHALL BE INSTALLED WITH STRICT ADHERENCE TO MANUFACTURER'S WRITTEN RECOMMENDATIONS AND ALL APPLICABLE BUILDING AND MECHANICAL CODES.

PLUMBING 2019 CPC

1.0 GENERAL

1.01 SCOPE

A. PROVIDE LABOR, MATERIAL, EQUIPMENT, AND SERVICES NECESSARY FOR THE INSTALLATION OF A COMPLETE PLUMBING SYSTEM WHERE SHOWN ON THE DRAWINGS AND AS NOTED HEREIN.

B. PLUMBING SYSTEM IS TO OPERATE ACCORDING TO THE BEST PRACTICES OF THE TRADE AND INCLUDING AND NOT LIMITED TO: FIXTURES, HOT AND COLD WATER PIPING, SOIL AND VENT PIPING WATER HEATERS, PIPE INSULATION, FORMS, TEES, METERS, LOCK DRAINS, ETC. (VERIFY ALL DRAINS AND OVERFLOW SYSTEMS TIE IN WITH UNDERGROUND DRAINAGE SYSTEM).

1.02 QUALITY ASSURANCE

A. CODES AND STANDARDS:

1. CALIFORNIA BUILDING CODE (OR CURRENT APPLICABLE CODE).
2. CALIFORNIA PLUMBING CODE (OR CURRENT APPLICABLE

1.03

A. REFER TO PLANS BY SUBCONTRACTOR OR LICENSED ENGINEER FOR ACTUAL LAYOUT AND GENERAL NOTES.

2.0 PRODUCTS

2.01 PLUMBING FIXTURES

A. AS SELECTED BY THE CLIENT / DEVELOPER.

3.0 EXECUTION

3.01 GENERAL

A. PREVIOUS WORK BY OTHERS: CONTRACTOR SHALL REVIEW DETAILS AND PREVIOUS WORK BY OTHERS FOR APPROPRIATENESS TO COMPLETE PLUMBING WORK. REPORT DEFICIENCIES IMMEDIATELY IN WRITING TO THE CLIENT/GENERAL CONTRACTOR A COPY TO THE ARCHITECT. FAILURE TO DO SO, OR COMMENCEMENT OF WORK WITHOUT SUCH NOTIFICATION, WILL CONSTITUTE AN ACCEPTANCE BY CONTRACTOR OF SUITABILITY OF PREVIOUS WORK BY OTHERS.

3.02 INSTALLATION

A. ROUGH-IN SHALL BE COMPLETED, TESTED AND APPROVED BEFORE CLOSING IN WITH OTHER WORK.

B. OPENINGS IN PIPES, DRAINS, AND FITTINGS SHALL BE KEPT COVERED DURING CONSTRUCTION.

C. PROVIDE SOLID BACKING FOR SECURING FIXTURES.

D. PROVIDE CLEAN-OUTS AT ENDS OF ALL LINES AND WHERE REQUIRED BY CODES.

E.

F. VERIFY ALL FIRE ASSEMBLY REQUIREMENTS WITH PLANS PRIOR TO INSTALLATION.

G. VERIFY ALL CLEARANCES FOR WATER CLOSETS, LAVS, ETC. WITH APPROPRIATE HANDICAPPED REQUIREMENTS.

3.03 ACOUSTIC NOTE

A. VERIFY ALL ACOUSTICAL REQUIREMENTS WITH ACOUSTICAL REPORT BEFORE INSTALLATION.

3.03 COMBUSTION AIR

A. COMBUSTION AIR TAKEN FROM OUTSIDE: PROVIDE 1-SQUARE INCH FOR EACH 1000 BTU/H, 50% AT CEILING AND 50% AT FLOOR. PROVIDE DUCT WORK AS REQUIRED.

HEATING AND AIR CONDITIONING 2019 CMC

1.0 GENERAL

1.01 SCOPE

A. PROVIDE LABOR, MATERIAL, EQUIPMENT, AND SERVICES NECESSARY FOR THE INSTALLATION OF ALL HEATING AND VENTILATING SYSTEMS WHERE SHOWN ON THE DRAWINGS AND AS NOTED HEREIN.

1.02 QUALITY ASSURANCE

A. CODES AND STANDARDS:

1. CALIFORNIA BUILDING CODE (OR CURRENT APPLICABLE CODE).
2. CALIFORNIA MECHANICAL CODE (OR CURRENT APPLICABLE CODE)

1.03

A. REFER TO PLANS BY SUBCONTRACTOR OR LICENSED ENGINEER FOR ACTUAL LAYOUT AND GENERAL NOTES.

2.0 PRODUCTS

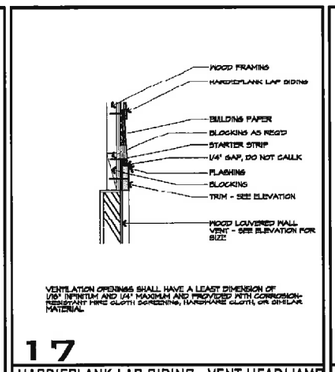
2.01 MATERIALS

A. EQUIPMENT TO COMPLY WITH ALL APPLICABLE ENERGY CONSERVATION STANDARDS (T-24).

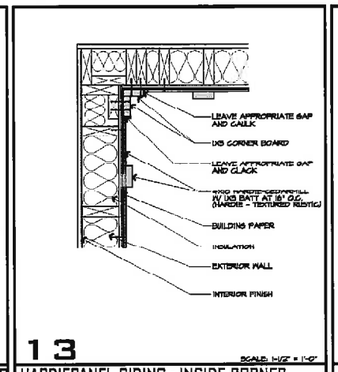
3.0 EXECUTION

3.01 GENERAL

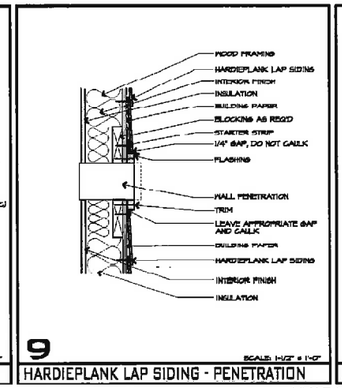
A. PREVIOUS WORK BY OTHERS: CONTRACTOR SHALL REVIEW DETAILS AND PREVIOUS WORK BY OTHERS FOR APPROPRIATENESS TO COMPLETE HEATING AND AIR CONDITIONING. REPORT DEFICIENCIES IMMEDIATELY IN WRITING TO THE CLI



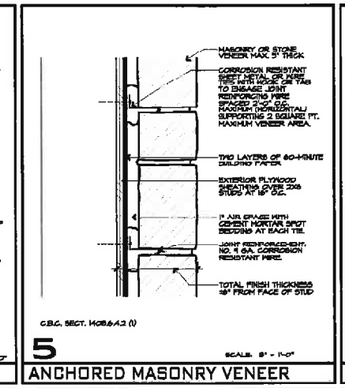
17
HARDIEPLANK LAP SIDING - VENT HEAD/JAMB



13
SCALE: 1-1/2" = 1'-0"
HARDIEPANEL SIDING - INSIDE CORNER



9
SCALE: 1-1/2" = 1'-0"
HARDIEPLANK LAP SIDING - PENETRATION



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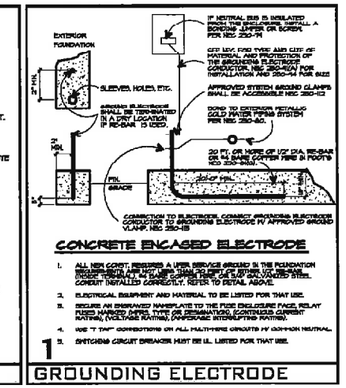
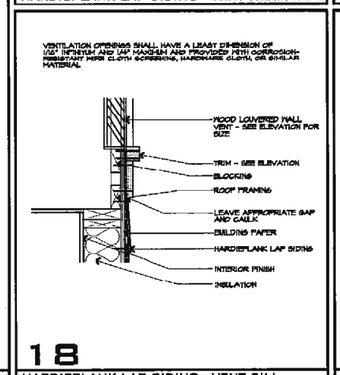
ANCHORED MASONRY VENEER



1
GROUNDING ELECTRODE

22



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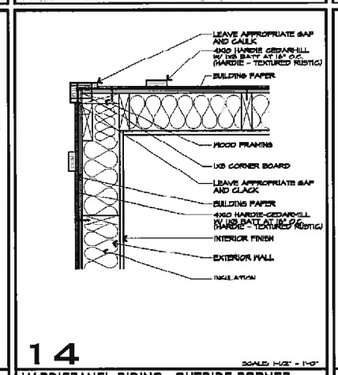
HARDIEPLANK LAP SIDING - VENT SILL



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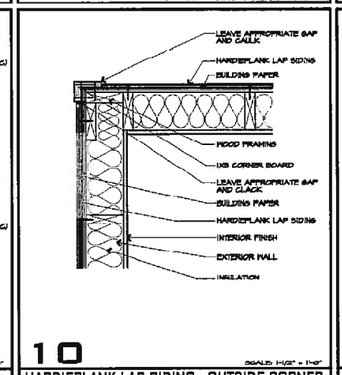
SCALE: 1-1/2" = 1'-0"
HARDIEPANEL SIDING - OUTSIDE CORNER



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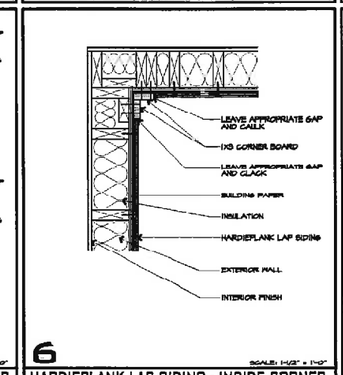
HARDIEPLANK LAP SIDING - OUTSIDE CORNER



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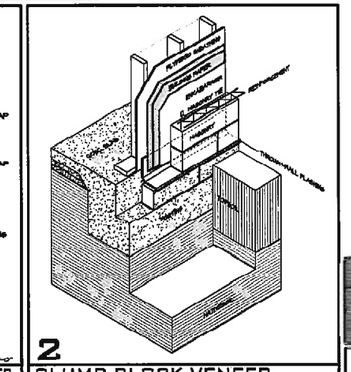
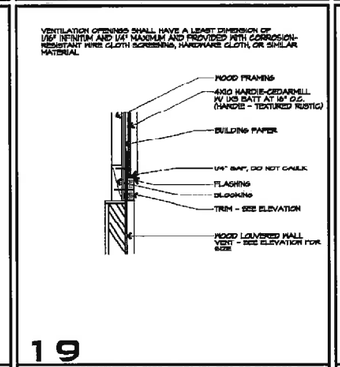
HARDIEPLANK LAP SIDING - INSIDE CORNER



2
SLUMP BLOCK VENEER

23



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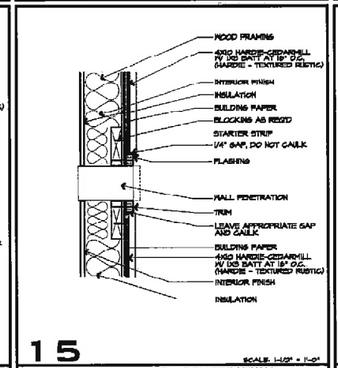
HARDIEPANEL SIDING - VENT HEAD/JAMB



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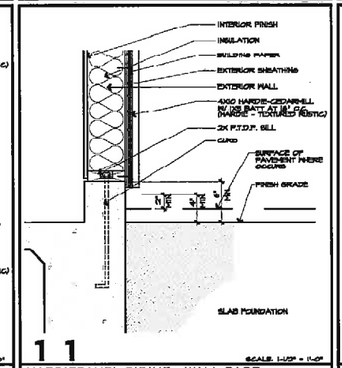
SCALE: 1-1/2" = 1'-0"
HARDIEPANEL SIDING - PENETRATION



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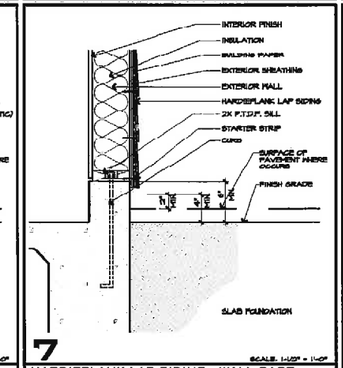
SCALE: 1-1/2" = 1'-0"
HARDIEPANEL SIDING - WALL BASE



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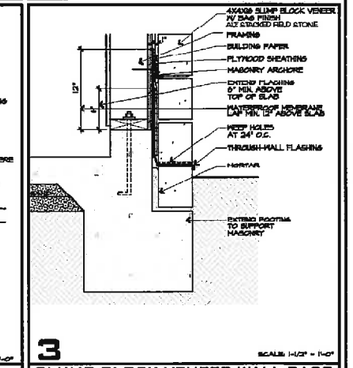
SCALE: 1-1/2" = 1'-0"
HARDIEPLANK LAP SIDING - WALL BASE



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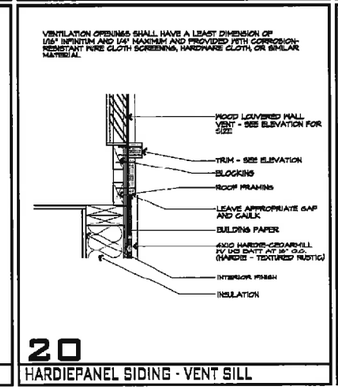
SCALE: 1-1/2" = 1'-0"
SLUMP BLOCK VENEER WALL BASE

24



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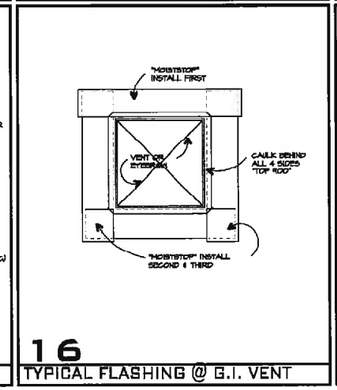
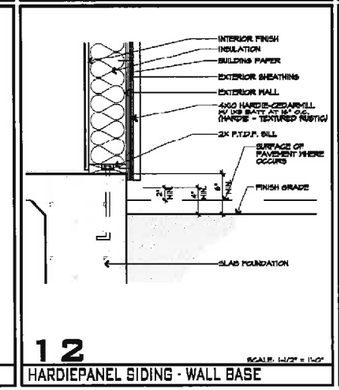
HARDIEPANEL SIDING - VENT SILL



16
TYPICAL FLASHING @ G.I. VENT



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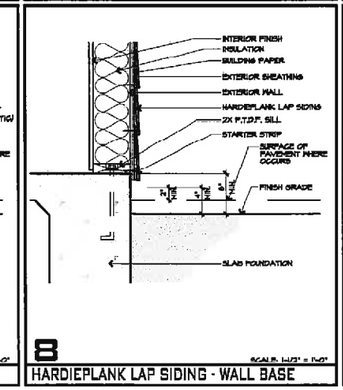
HARDIEPANEL SIDING - WALL BASE



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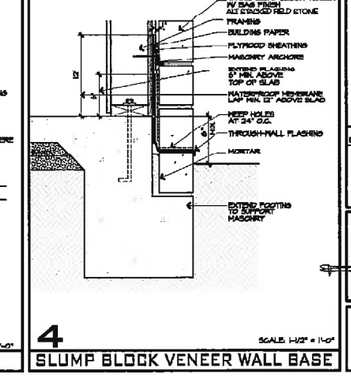
SCALE: 1-1/2" = 1'-0"
HARDIEPLANK LAP SIDING - WALL BASE



4
SCALE: 1-1/2" = 1'-0"
SLUMP BLOCK VENEER WALL BASE

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residence for:
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LOT 1

DATE 6-12-18
REVISIONS

LICENSED ARCHITECT RICHARD T. THORNE No. C31529 REGISTERED PROFESSIONAL ENGINEER STATE OF CALIFORNIA

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AD1

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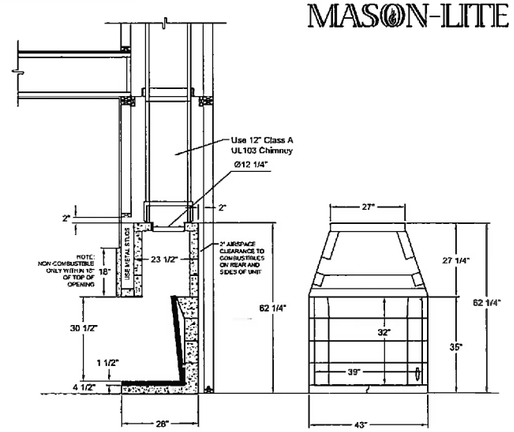
MASON-LITE



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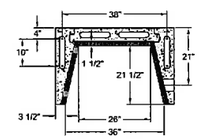


PLAN

OTHER DIMENSIONS	
Framing Width	47"
Framing Height	64 1/4"
Framing Depth	30"
Floor Area (37 x 28)	8.36 sf
Fireplace Weight	1,371 lbs
Mortar and Rebar	67 lbs
Ready Mix	200 lbs
Flue Size - Class A	Ø12"
Metal Chimney Weight per foot	10 lbs

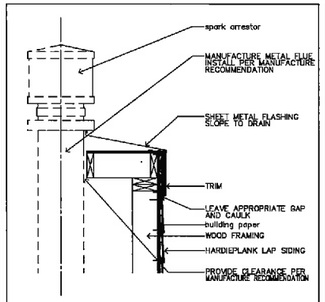
ACCESSORIES		
Herringbone Brick Liner	MFP39-SHBL	430 lbs
Full Running Bond Brick Liner	MFP39-FRBL	430 lbs
Structural Metal Base Kit - 6"	MFPB39	81 lbs
Anchor Plate w/Damper Ø12"	12ATGAPD	27 lbs
Ø4" Combustion Air Kit	MFP4-AK	14 lbs
Masonry Arch	MFP-ARC	20 lbs

TITLE: **MFP39**

DWG. NUMBER	RELEASE DATE	REV. DATE
S005	01/29/07	02/17/15

9

LIGHT WEIGHT PRE-CAST MODULAR FIREPLACE



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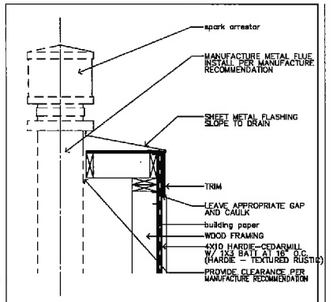
scale: 1" = 1'-0"

HARDIEPLANK LAP SIDING - CHIMNEY CAP



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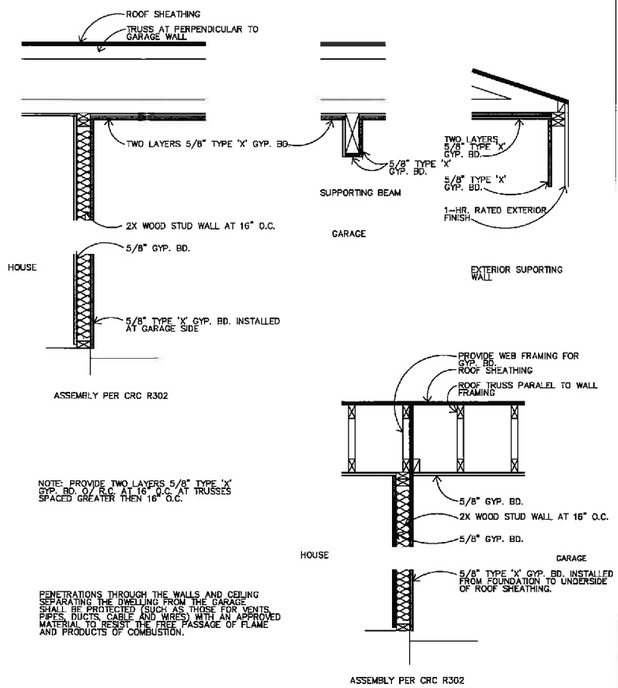
HARDIEPANEL SIDING - CHIMNEY CAP



NOTE: PROVIDE TWO LAYERS 5/8" TYPE 'X' GYP. BD. OV. 5/8" AT 16" O.C. AT TRUSSES SPACED GREATER THEN 16" O.C.

PENETRATIONS THROUGH THE WALLS AND CEILING SEPARATING THE DWELLING FROM THE GARAGE SHALL BE PROTECTED (SUCH AS THOSE FOR VENTS, PIPES, DUCTS, CABLE AND WIRES) WITH AN APPROVED MATERIAL TO RESIST THE FREE PASSAGE OF FLAME AND PRODUCTS OF COMBUSTION.

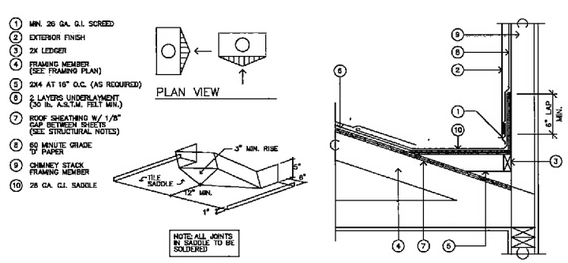
1

RATED WALL ASSEMBLY

12

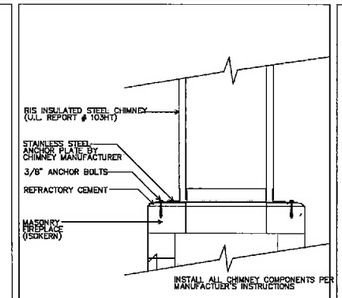
STANDING SEAM METAL ROOF - VALLEY

10



11

CHIMNEY SADDLE FLASHING



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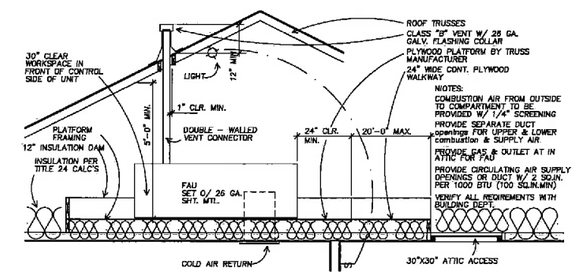
F.P. CHMNEY TRANSITION



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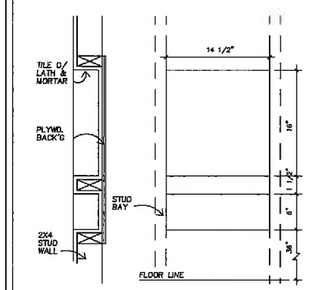
ATTIC-MOUNTED F.A.U.

8



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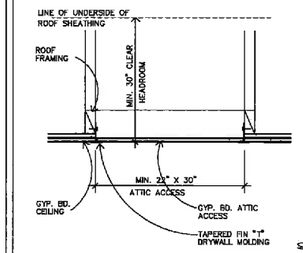
WALL RECESS



3

ATTIC ACCESS

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LOT 1

DATE 6-12-18
REVISIONS

LICENSED ARCHITECT RICHARD T. THORNE REG. C 15025 EXP. 10-31-19 STATE OF CALIFORNIA

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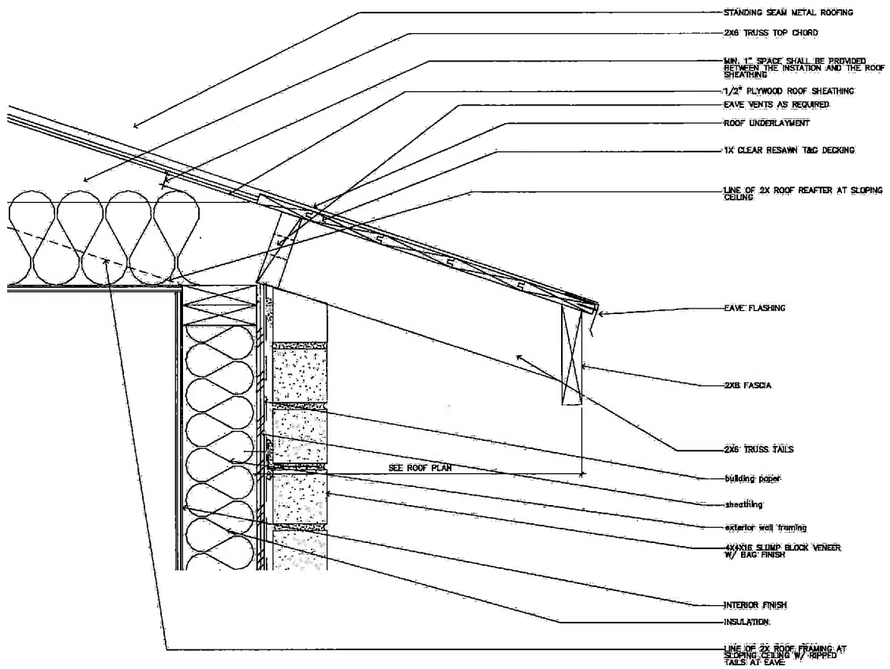
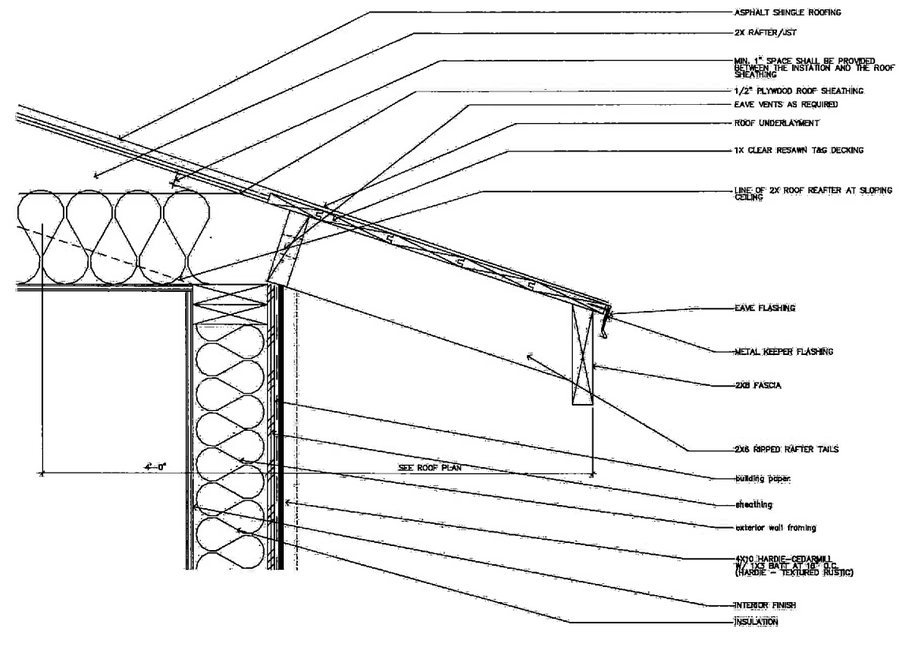


7

ASPHALT SHINGLE ROOF - EAVE

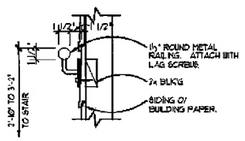


1

ASPHALT SHINGLE ROOF - EAVE

NOTE: HANDRAILS SHALL EXTEND 12" BEYOND TOP AND BOTTOM RISERS. HANDRAILS SHALL RETURN TO A WALL OR WALKING SURFACE. HANDRAILS SHALL COMPLY WITH CBC SEC. 1012.

HANDRAILS NOT ATTACHED TO WALL SHALL COMPLY WITH HEIGHT AND GRASP REQUIREMENTS.



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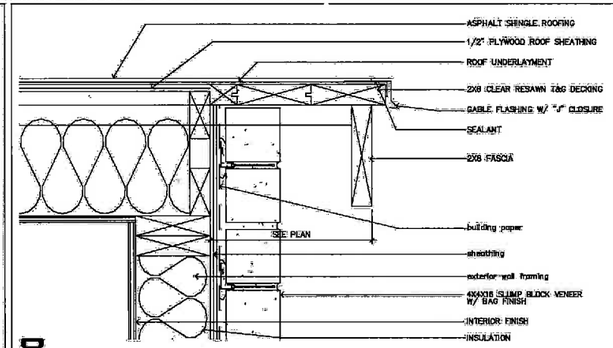
INTERIOR HANDRAIL



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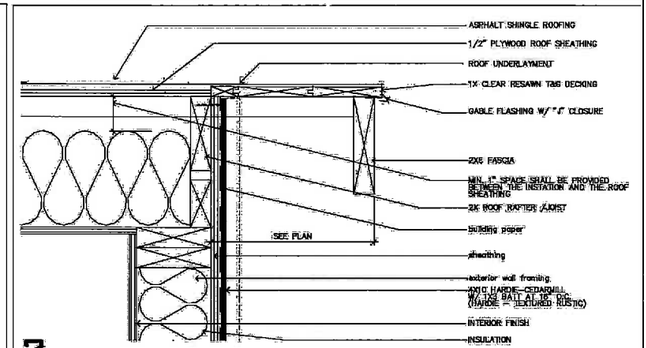
ASPHALT SHINGLE ROOF - RAKE

5



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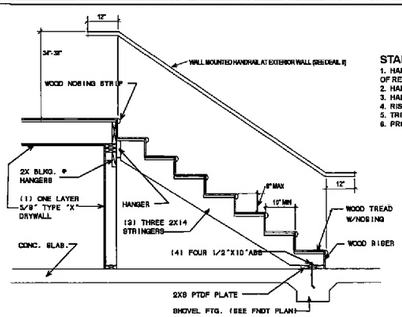
ASPHALT SHINGLE ROOF - RAKE



STAIR NOTES:

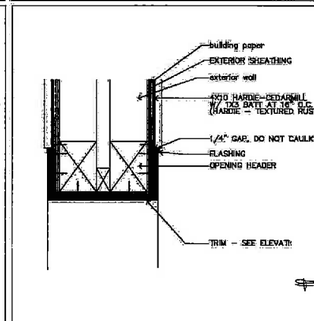
1. HANDRAILS SHALL BE BETWEEN 34" TO 38" ABOVE THE NOSE OF THE TREAD AND CAPABLE OF RESISTING A LOAD OF OF 200 LBS. AT ANY POINT.
2. HAND GRIP CROSS SECTIONAL DIMENTIONS (1 1/4" MIN. TO 2" MIN.)
3. HAND GRIP TO BE A MIN. 1 1/2" AWAY FROM WALL.
4. RISER HEIGHT TO BE 4" MIN. AND 8" MAX.
5. TREAD DEPTH TO BE 9" MIN.
6. PROVIDE 5/8" TYPE "X" GYPSUM BOARD UNDER ENCLOSED USABLE SPACE UNDER STAIRS.

10

STAIR SECTION

6

4



3

scale: 1-1/2" = 1'-0"

SOFFIT FRAMING AND TRIM

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LOT 1

DATE 6-12-19

REVISIONS

LICENSED ARCHITECT RICHARD T. THORNE No. C-11803 REGISTERED PROFESSIONAL ARCHITECT STATE OF CALIFORNIA 10-31-19

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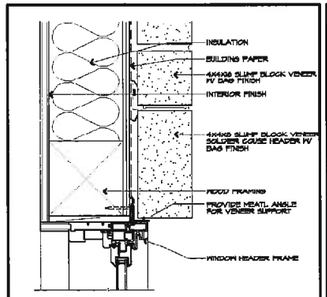
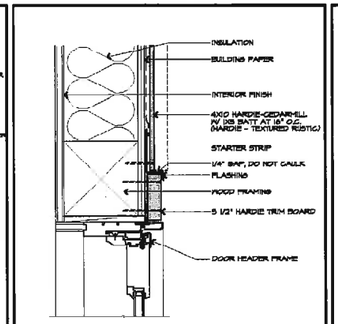
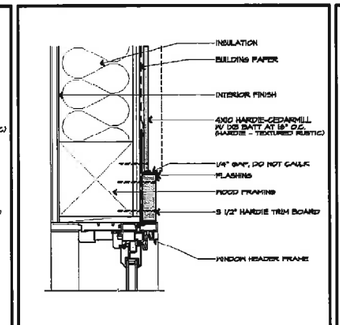


18 SCALE: 3" = 1'-0"
WINDOW HEAD



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



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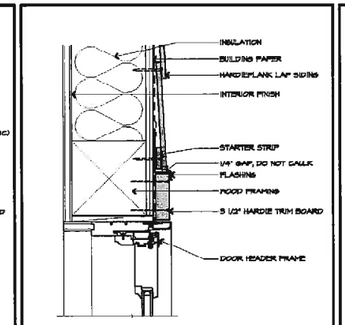
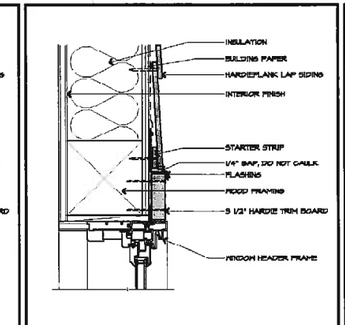
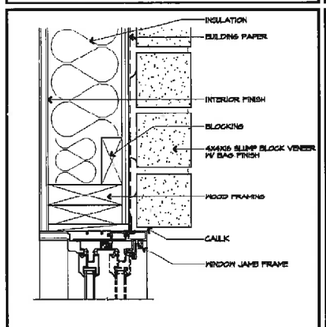
WINDOW HEAD



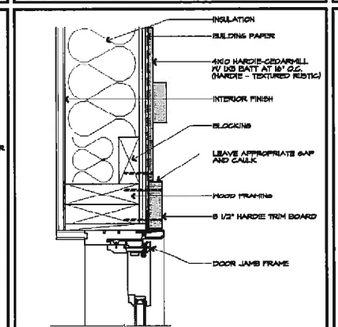
6 SCALE: 3" = 1'-0"
DOOR HEAD



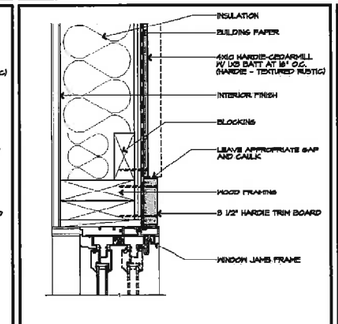
2 SCALE: 3" = 1'-0"
WINDOW HEAD



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



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



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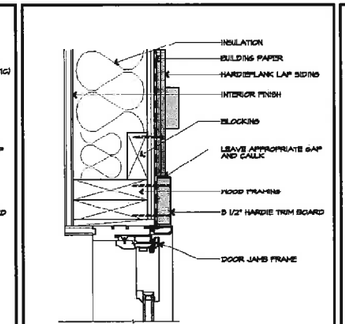

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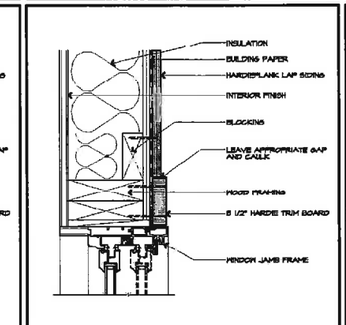

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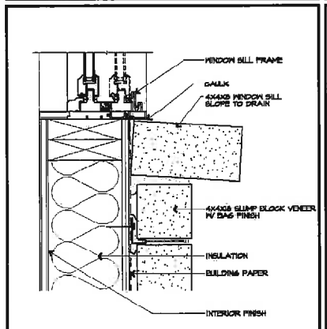

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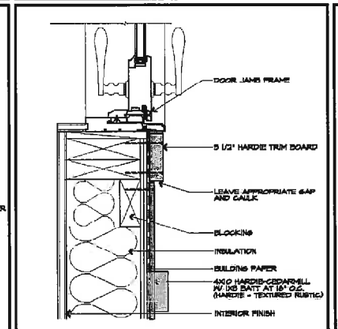
WINDOW SILL



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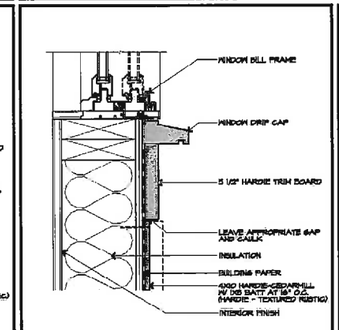

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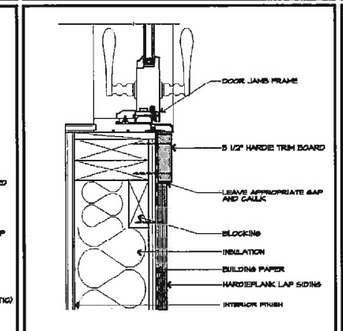
WINDOW SILL



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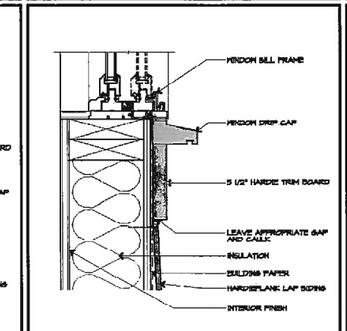
DOOR JAMB



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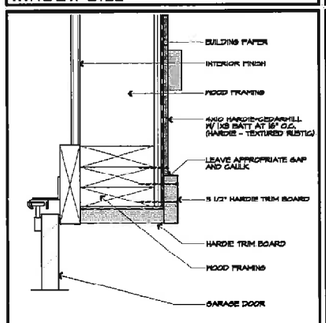
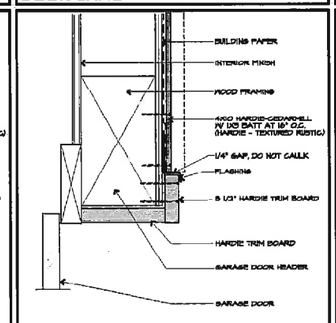
WINDOW SILL



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



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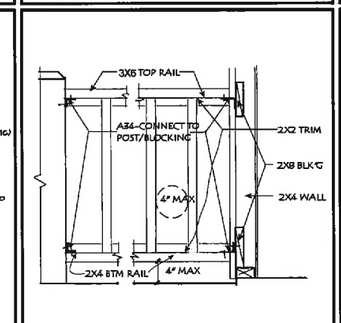
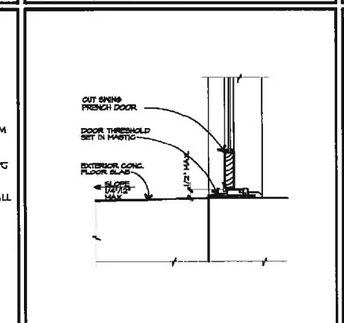
GARAGE DOOR HEADER



13
GUARDRAIL



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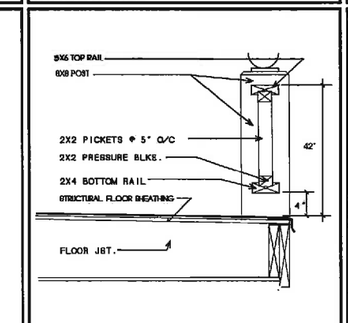
OUT SWING DOOR THRESHOLD



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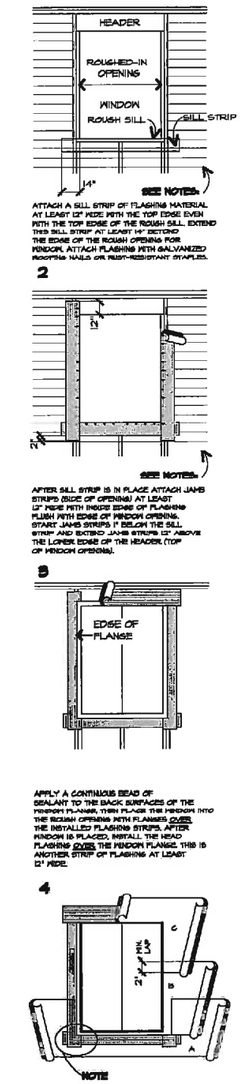
GUARDRAIL AT BALCONY



ATTACH A SILL STRIP OF FLASHING MATERIAL AT LEAST 12" WIDE WITH THE TOP EDGE EVEN WITH THE TOP EDGE OF THE ROUGH SILL. EXTEND THIS SILL STRIP AT LEAST 1/4" BEYOND THE EDGE OF THE ROUGH OPENING FOR WINDOW. ATTACH FLASHING WITH GALVANIZED ROOFING NAILS OR RUST-RESISTANT STAPLES.

AFTER SILL STRIP IS IN PLACE ATTACH JAMB STRIPS (SIDE OF OPENING) AT LEAST 12" WIDE WITH INSIDE EDGE OF FLASHING FLUSH WITH EDGE OF WINDOW OPENING. START JAMB STRIPS 1" BELOW THE SILL STRIP AND EXTEND JAMB STRIPS 12" ABOVE THE LOWER EDGE OF THE HEADER. (TOP OF WINDOW OPENING).

APPLY A CONTINUOUS BEAD OF SEALANT TO THE BACK SURFACES OF THE WINDOW FLANGE, THEN PLACE THE WINDOW INTO THE ROUGH OPENING WITH FLANGES OVER THE INSTALLED FLASHING STRIPS. AFTER WINDOW IS PLACED, INSTALL THE HEAD FLASHING OVER THE WINDOW FLANGE. THIS IS ANOTHER STRIP OF FLASHING AT LEAST 12" WIDE.

STARTING AT THE BOTTOM OF THE WALL (BOLE PLATE), LAY WATER-RESISTANT PAPER UNDER THE SILL STRIP. CUT ANY EXCESS WATER-RESISTANT PAPER THAT MAY EXTEND ABOVE THE SILL FLANGE ON EACH SIDE OF THE OPENING. SHOWN IN DIAGRAM AS SHORT DASH LINES. INSTALL SUCCEEDING COURSES OF WATER-RESISTANT PAPER (B, C, ETC.) OVER JAMB AND HEAD FLANGES IN SHINGLE-BOARD FASHION. PAPER SHOULD RUN CONTINUOUSLY OVER HEAD WITH NO SPLICES ABOVE WINDOW.

NOTE: SECTION R703.8, CALIFORNIA RESIDENTIAL CODE CALLS FOR FLASHING OF ALL EXTERIOR OPENINGS EXPOSED TO WEATHER TO MAKE THEM WEATHER PROOF. SINCE C.R.C. DOES NOT OUTLINE PROCEDURE FOR WINDOW FLASHING, THE METHODS SHOWN HERE ARE RECOMMENDED. USE "MOISTOP" FLASHING BY FORTIFIBER CORP., OR EQUAL. FASTENER POSSIBLE FOR FLASHING MATERIAL. CAULK BACK OF WINDOW FRAMES BEFORE SETTING. USE WINDOWS THAT ARE WATERTIGHT.

26 GA. G1. FLASHING REQUIRED AS SHOWN IN OTHER WINDOW DETAILS TO BE INSTALLED BY SHEET METAL CONTRACTOR.

LINE WIRE, WHEN USED AS BACKING TO SUPPORT WATER-RESISTANT BUILDING PAPER OR FELT BENEATH LATH FOR STUCCO SHOULD BE INSTALLED ACCORDING TO INDUSTRY STANDARDS AND PRACTICE. NO ATTACHMENT DEVICE NOR THE WIRE BACKING SHOULD COVER OR PENETRATE FLASHING MATERIAL. PERIMETER FLASHING AT ALL EDGES OF WALL OPENINGS MUST COVER WIRE BACKING.

GRACE ICE & WATER SHIELD CAN BE USED AS ALTERNATE TO MOISTOP.

NOT TO SCALE
1
WINDOW FLASHING INSTALLATION

RICHARD T. THORNE&ARCHITECT architecture / planning
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residence for:
HARVEST HILL ESTATES
LOT 1

DATE 6-12-18
REVISIONS

LICENSED ARCHITECT RICHARD T. THORNE No. 10312 STATE OF CALIFORNIA

SHEET
AD4

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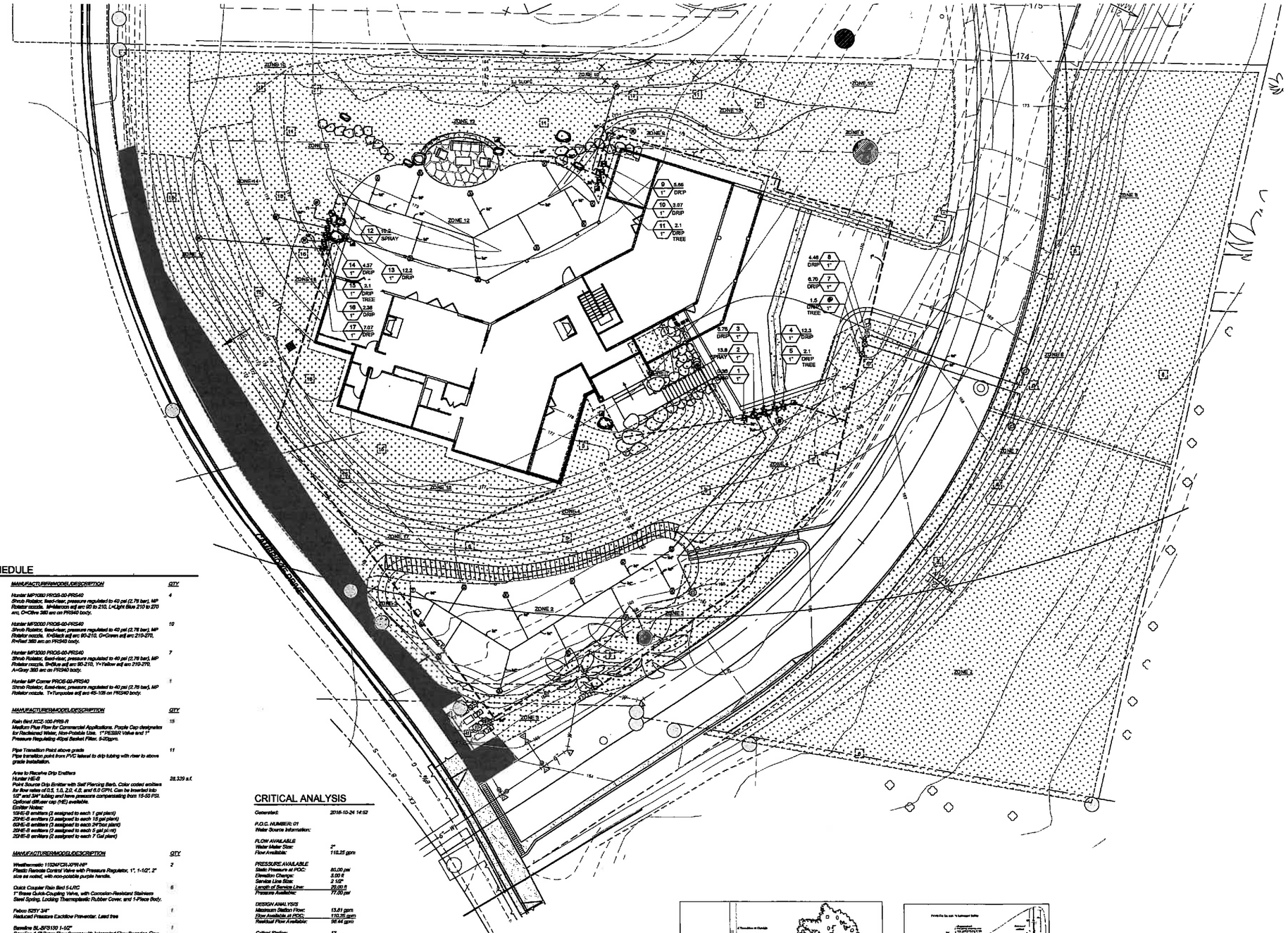


IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
M K Y	Hunter MP1000 PRS6-00-PRS40 Shrub Rotator, fixed-riser, pressure regulated to 40 psi (2.76 bar), MP Rotator nozzle. M=Maroon adj arc: 90 to 210, L=Light Blue 210 to 270 arc, O=Olive 360 arc on PRS40 body.	4
O O O	Hunter MP2000 PRS6-00-PRS40 Shrub Rotator, fixed-riser, pressure regulated to 40 psi (2.76 bar), MP Rotator nozzle. K=Black adj arc: 90-210, O=Green adj arc: 210-270, R=Red 360 arc on PRS40 body.	10
A A A	Hunter MP2000 PRS6-00-PRS40 Shrub Rotator, fixed-riser, pressure regulated to 40 psi (2.76 bar), MP Rotator nozzle. B=Blue adj arc: 90-210, Y=Yellow adj arc 210-270, A=Gray 360 arc on PRS40 body.	7
T	Hunter MP Corner PRS6-00-PRS40 Shrub Rotator, fixed-riser, pressure regulated to 40 psi (2.76 bar), MP Rotator nozzle. T=Turquoise adj arc 45-105 on PRS40 body.	1

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
R	Rain Bird XCZ-100-PRB-R Medium Plus Flow for Commercial Applications. Purple Cap designates for Reclaimed Water, Non-Potable Use. 1" PESB/R Valve and 1" Pressure Regulating 40psi Basket Filter. 5-30gpm.	15
P	Pipe Transition Point above grade Pipe transition point from PVC lateral to drip tubing with riser to above grade installation.	11
	Area to Receive Drip Emitters Hunter HE-B Point Source Drip Emitter with Self Piercing Barb. Color coded emitters for flow rates of 0.5, 1.0, 2.0, 4.0, and 6.0 GPH. Can be inserted into 1/2" and 3/4" tubing and have pressure compensating from 15-50 PSI. Optional diffuser cap (HE) available. Emitter Notes: 10HE-B emitters (2 assigned to each 1 gal plant) 20HE-B emitters (3 assigned to each 15 gal plant) 60HE-B emitters (3 assigned to each 24"box plant) 20HE-B emitters (2 assigned to each 5 gal pl nt) 20HE-B emitters (2 assigned to each 7 Gal plant)	28,339 s.f.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Weathermatic 11024FCR-XPR-NP Plastic Remote Control Valve with Pressure Regulator, 1", 1-1/2", 2" size as noted, with non-potable purple handle.	2
	Quick Coupler Rain Bird 5-LRC 1" Brass Quick-Coupling Valve, with Corrosion-Resistant Stainless Steel Spring, Locking Thermoplastic Rubber Cover, and 1-Piece Body.	6
BF	Febco 825Y 3/4" Reduced Pressure Backflow Preventor. Lead free	1
FS	Baseline BL-BFS100 1-1/2" Baseline 1.5" Brass Flow Sensor with Integrated Flow Decoder, Flow Sensor is two-wire ready with a Flow bCoder built into the tee insert.	1
M	Water Meter 2"	1
	Irrigation Lateral Line: PVC Schedule 40 PVC Schedule 40 Irrigation pipe. Only lateral transition pipe sizes 1" and above are indicated on the plan, with all others being 3/4" in size.	
	Irrigation Mainline: PVC Schedule 40 and Class 315 PVC Schedule 40 to 1-1/2", PVC Class 315 SDR 13.5 for pipes 2" and larger.	

Valve Detail
Valve Number
Valve Flow
Valve Size

Tree Drip zone. Number indicates valve number

CRITICAL ANALYSIS

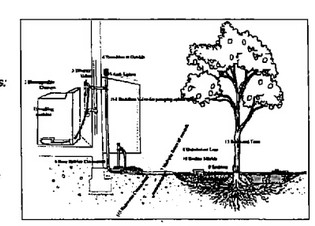
Generated:	2016-10-24 14:52
P.O.C. NUMBER: 01	
Water Source Information:	
FLOW AVAILABLE	
Water Meter Size:	2"
Flow Available:	110.25 gpm
PRESSURE AVAILABLE	
Static Pressure at POC:	80.00 psi
Elevation Change:	5.00 ft
Service Line Size:	2 1/2"
Length of Service Line:	20.00 ft
Pressure Available:	77.00 psi
DESIGN ANALYSIS	
Maximum Station Flow:	13.61 gpm
Flow Available at POC:	110.25 gpm
Residual Flow Available:	96.64 gpm
Critical Station:	12
Design Pressure:	40.00 psi
Elevation Loss:	0.00 psi
Friction Loss:	1.47 psi
Fittings Loss:	0.15 psi
Loss through Valves:	1.71 psi
Pressure Req. at Critical Station:	43.34 psi
Loss for Fittings:	0.30 psi
Loss for Main Line:	3.93 psi
Loss for POC to Valve Elevation:	0.00 psi
Loss for Backflow:	0.00 psi
Loss for Water Meter:	0.40 psi
Critical Station Pressure at POC:	48.06 psi
Pressure Available:	77.00 psi
Residual Pressure Available:	28.94 psi

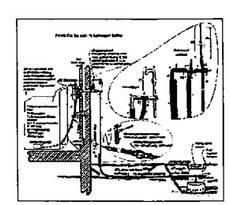
Graywater System Equipment Notes:

Equipment to be installed in residence:
-Diverter valve
-Vacuum breaker
-Transition to outside

Equipment to be installed directly outside residence:
-Anti-siphon valve and hose service connection

Equipment to be installed outside residence by homeowner:
-Distribution line
-Emitter shields
-Emitters





SEE SHEET LI-2 FOR IRRIGATION NOTES

N

0 5 10 20

Scale: 1" = 10'

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REGISTERED LANDSCAPE ARCHITECT
MARK A. FRYKMAN
No. 2811
EXP. 06/31/19
STATE OF CALIFORNIA

Revisions

HARVEST HILL RANCH

Cambridge Dr.
Goleta, CA 93111

IRRIGATION PLAN

ISSUED
4.20.18

Date 4.20.18	Job Number 16.071
Drawn By ACL	Checked by MG
Sheet -	of -

LI-1

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Drawing Name: J:\Arcadia\Projects\2016 Projects\15.063 Hovis LLC\Harvest Hill Ranch\15.063 Cad\15.063 Irrigation Plans.dwg Date: 2016-06-06, 10:29 PM

Irrigation Notes:

1. See irrigation legend for complete descriptions of all symbols shown on irrigation plan.
2. Point of connection is at the approximate location shown on plan.
3. Install all valves in locking plastic valve boxes in shrub and groundcover area where it can be screened by plantings. Install one valve per box. Identify locations and flag on site for Landscape Architect's approval BEFORE excavating for installation.
4. Install irrigation system in accordance with manufacturer's specifications, irrigation details, and local codes.
5. Indicated pipe locations are schematic. Do not place pipe under paving except where absolutely necessary. Coordinate pipe installation with other trades.
6. All piping installed under paving, through walls or footings must be placed inside Schedule 40 PVC sleeves of adequate size to allow free movement of the pipe in the sleeve. All pipe runs in sleeves must be straight, with no bends or angles. Sleeves for recycled-water irrigation lines shall be colored to match the pipe.
7. Locate irrigation controller at approximate location shown on plan. 110-v j-box by others. Obtain Landscape Architect's approval of location before installing.
8. Emitters shall be located on grade and stated a maximum of 6" (six inches) from the center of the plant, or at edge of rootball, whichever is greater.
9. Install flush end valves at the ends of all ¾" polyethylene drip tubing in round valve boxes with gravel fill.
10. Install irrigation lines at the following minimum depths:

Schedule 40 and class 315 PVC mainline:	18" minimum cover
Schedule 40 PVC lateral line:	12" minimum cover
¾" polyethylene drip tubing:	place on grade with galvanized stakes @ 3' O.C.
¼" polyethylene micro-tubing:	place on grade

**Install all rigid pipe as near to edges of planting areas, to avoid conflict with large plants.

11. Emitter layout:

4" pot or flatted groundcover:	1 - 1 GPH emitter per plant (Flatted groundcover can be watered with microspray emitters).
1 gallon:	2 - 1 GPH emitters per plant.
5 gallon shrubs:	2 - 2 GPH emitters per plant.
15 gallon shrubs/trees:	3 - 2 GPH emitters per plant.
24" box tree:	3 - Hunter HE-60-6 Point Source Emitters (Orange 6 GPH)
36" box tree:	4 - Hunter HE-60-6 Point Source Emitters (Orange 6 GPH).
48" box tree:	6 - Hunter HE-60-6 Point Source Emitters (Orange 6 GPH)
60" box tree or field grown tree:	10 - Hunter HE-60-6 Point Source Emitters (Orange 6 GPH)
Trees larger than 60" box:	Provide 14 - Hunter HE-60-6 Point Source Emitters (Orange 6 GPH) Confirm final number of emitters with Landscape Architect.

Punch emitter into polyethylene tubing. Attach recirculating to emitter. Attach bug cap to open end of recirculating. Bring recirculating to edge of rootball. Stake end of recirculating with plastic stake manufactured for that purpose.

12. In the event of discrepancies in irrigation equipment count, quantities indicated by symbols on the plan prevail.
13. Include in the contract price a sufficient amount to allow for supply and installation of additional irrigation equipment to as used. Include 50 linear feet of lateral line, 50 linear feet of mainline, 12 additional spray heads and bodies, and 12 additional bubbler heads and bodies. Provide the unit price for such irrigation equipment in the bid and credit the owner for each piece of equipment not installed.
14. In vicinity of existing trees, use discretion to route lateral lines and mainline as necessary to avoid root damage. Under canopies of existing trees, excavate using hand tools, and route pipe under roots with a minimum 4" clearance. Do not cut roots larger than 2" (two inches) in diameter, unless approved by the Landscape Architect.
15. Use variable arc nozzles and / or pressure compensating screens as necessary to prevent overspray in areas where standard nozzles would not be efficient.
16. Verify location of backflow preventer, master control valves, controller and point of connection with Landscape Architect prior to installation.
17. Install and adjust all spray and bubbler heads to prevent water contact with all built elements.
18. Adjust all spray and bubbler heads to minimize overspray onto paved areas.
19. Install sprinklers on a 12" pop-up body in shrub areas, on a 12" pop-up body in no-mow turf areas such as (Agrostis pallens, UC Verde Buffalo Grass, Carex species, and Festuca rubra) on a 6" pop up body in Meadow II (or other traditional turf) areas, and on a 4" pop-up body in planters directly adjacent to parking spaces.
20. Install check valves at the low end of all irrigation lines to prevent low head drainage.

Irrigation Pipe Sizing Guidelines:

Schedule 40 mainline up to 1-1/2"

0-4 gpm	1/2"
5-8 gpm	3/4"
9-12 gpm	1"
13-22 gpm	1-1/4"
23-30 gpm	1-1/2"

Class 315 mainline 2" and up

30-50 gpm	2"
51-70 gpm	2- 1/2"
71-100 gpm	3"

Schedule 40 lateral line

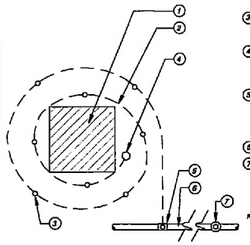
0-4 gpm	1/2"
5-10 gpm	3/4"
11-16 gpm	1"
17-25 gpm	1-1/4"
27-35 gpm	1-1/2"
36-55 gpm	2"
56-80 gpm	2-1/2"
81-120 gpm	3"

Weathermatic valves

0-20 gpm	1"
20-40 gpm	1-½"
40-60 gpm	2"

Rainbird XCZ drip valves

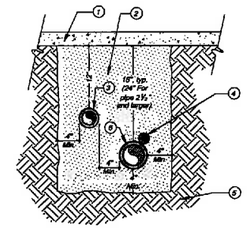
0-15 gpm	1"
15-40 gpm	1-½"



1. Tree rootball.
2. Polyethylene tubing in rows around tree, 2 required 4 - 6" below grade.
3. Xerbubblers or emitters spaced evenly around rootball of tree. See irrigation notes for schedule and quantities.
4. AGR products "SPIN-LOC" 1029 SETC flush cap SL X ¾" MHT with plastic cap installed within a round plastic pull box.
5. Connection between polyethylene tubing and PVC pipe. Use SXT PVC ell or tee (½") with spin loc x thread male adaptor AS products model #S12MA-SXT.
6. Lateral line.
7. YD-500-34 Air / vacuum relief valve installed with a FT-060 combination tee and a ¾" x ¾" radcover bushing, install air relief assembly inside a 6" planter, min. 1 air / vacuum relief valve per 500' of dripline.

Notes:
1. All drip tubing to be 4" min. below finish grade.
2. Box to be installed so to allow for proper operation of ball valve. Install at right angle to hardscape edge, install valve off-center in box.
3. Install valve box extensions as required to achieve proper valve installation at mainline depth.

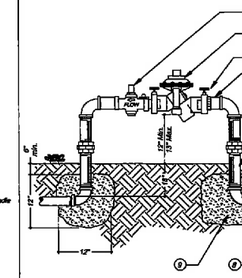
13 TREE DRIP RING LAYOUT
Scale: 1"=1'-0"



1. Paving.
2. Sand backfill compacted to the density of the existing soil.
3. Lateral line in Sch. 40 sleeve.
4. Control wires in Sch. 40 sleeve. Tape to mainline @ 4' O.C.
5. Undisturbed soil.
6. Mainline in Sch. 40 sleeve.

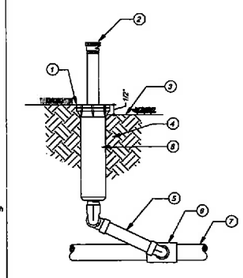
Note: PVC sleeves to be 2x the diameter of the pipe or wire bundle carried.

9 PIPE / WIRE SLEEVE INSTALLATION
Not to Scale



1. Pressure regulator with gauge.
2. Reduced pressure backflow preventer.
3. Shut off valve (part of back flow preventer).
4. Threaded nipple.
5. Brass Union.
6. Type "K" Copper nipples: Connect to brass fittings with dielectric bushings (not shown).
7. Brass elbow.
8. PVC Mainline: Connect brass elbows with PVC Male adapters (not shown).
9. 1 Cubic foot concrete supports both sides: pour in place.

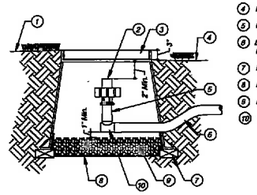
REDUCED PRESSURE BACKFLOW PREVENTER
Not to Scale



1. Installed sprinkler body flush with finish grade in turf areas.
2. Pop-up sprinkler head, spray or rotor.
3. Installed sprinkler head ½" above finish grade in shrub and ground cover areas.
4. Compact subgrade 6" around sprinkler body to 90% relative density.
5. Pre-assembled triple swing joint, PVC type, with o-ringed joints, MPT inlet and MPT outlet. Lay length to be 6" minimum size as per sprinkler outlet.
6. Sch. 40 PVC SxSxT tee fitting, lateral x sprinkler inlet size.
7. Lateral line.
8. Pop-up sprinkler body.

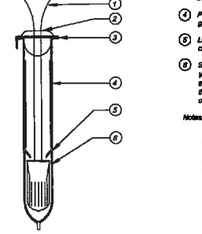
Notes:
1. Install sprinkler heads 6" from paving edge in ground cover areas. Install sprinkler heads 4" from paving edge in turf areas.
2. Install sprinkler heads plumb. Adjust sprays or nozzle stream to cover landscape area without overspray onto paving, fences, walls or buildings.
3. Use Teflon tape on all threaded fittings, typical.

1 POP-UP SPRINKLER HEAD
Not to Scale



1. Finish grade, turf areas.
2. Toro FCH-H with DL200 automatic flush valve with DL-75MA-9153 ¾" male adapter.
3. Plastic round valve box, 6" size. Heat brand "FV" onto lid.
4. Finish grade, shrub areas.
5. Drip tubing, length as required.
6. Drip tubing, sweep down to enter valve box.
7. Brick supports.
8. Filter fabric.
9. Pea gravel, 3" deep.
10. Toro barbed ell (DL-59018).

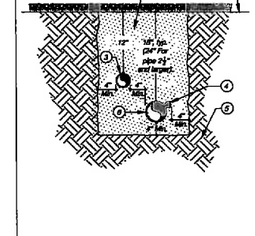
14 DRIP FLUSH VALVE
Scale: 1"=1'-0"



1. Low voltage wires, 3 maximum
2. Wires pass through grooves in tube lid to allow lid to close.
3. Close tube lid after wire is inserted into tube.
4. Poly tube pre-filled with waterproof gel.
5. Lock tabs prevent wire removal once connector is inserted.
6. Scotchlok Electrical Spring connector. Wires shall be pre-stripped of ½" of the insulation prior to insertion into the connector. Twist connector onto wires to seat firmly.

Notes:
1. Wire connector shall be a 3M DBY Direct Bury Splice Kit. Kit shall include a Scotchlok Spring Connector, a polypropylene tube and a waterproof sealing gel. Tube shall be supplied prefilled with gel.
2. Direct Bury Splice Kit shall be used to electrically connect (2-3) #14 or (2) #12 pre-stripped copper wires. Larger wires or greater quantities of wires shall require a larger approved wire connection.

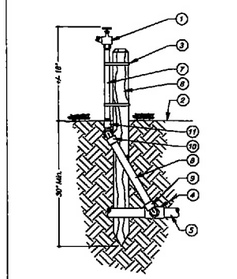
10 WIRE CONNECTION
Not to Scale



1. Finish grade in turf areas.
2. Rigid plastic rectangular valve box with bolt down cover. Use stainless bolt, nut and washer. Place box at right angle to edge of pavement. Heat brand "RCV" and control station # onto LID.
3. Finish grade in shrub areas.
4. Pressure regulator.
5. Wye filter.
6. Remote control valve. See legend for specification.
7. Non-woven filter fabric.
8. Pea gravel, 3" deep.
9. Brick supports.
10. Lateral line to drip system.
11. Mainline.

Notes:
1. Box to be installed so to allow for proper operation of ball valve. Install at right angle to hardscape edge, install valve off-center in box.
2. Install valve box extensions as required to achieve proper valve installation at mainline depth.
3. Use Teflon tape on all threaded fittings, typical.

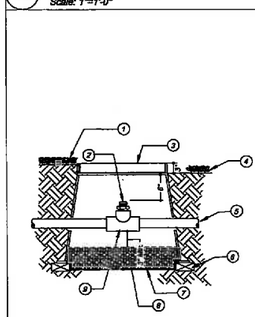
6 PIPE INSTALLATION
Not to Scale



1. Garden valve. See irrigation plan for specification.
2. Finish grade in shrub area.
3. Stainless steel clamp, 2 per post.
4. Sch. 80 PVC tee.
5. Mainline.
6. 4"x4" Pressure treated douglas fir or redwood post, chamfer top of post ½" on all sides.
7. ¾" Sch. 40 galvanized threaded riser.
8. Sch. 80 PVC nipple.
9. Sch. 40 street ell.
10. Sch. 40 PVC ell.
11. Galvanized ell.

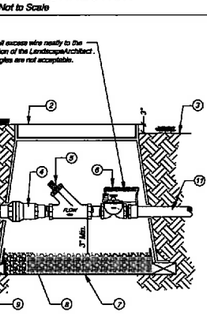
Note: Use Teflon tape on all threaded fittings, typical

2 GARDEN VALVE
Not to Scale



1. Finish grade in turf areas.
2. Rigid plastic rectangular valve box with bolt down cover. Use stainless bolt, nut and washer. Place box at right angle to edge of pavement. Heat brand "RCV" onto lid and valve number.
3. Sch. 80 SXT PVC ell.
4. Remote control valve.
5. Finish grade, shrub areas.
6. Water proof wire connectors.
7. Valve ID tags.
8. PVC Sch. 80 PVC male adapter.
9. Sch. 80 PVC Union.
10. Lateral line.
11. Brick supports.
12. Mainline.
13. Sch. 80 PVC nipple, typ. RCV size x 3" max.
14. Pea gravel, 3" deep.
15. Sch. 80 PVC nipple threaded or t.o.s. length as required.
16. Non-woven filter fabric.

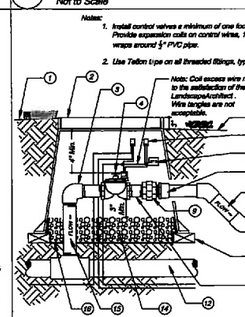
15 DRIP AIR RELIEF VALVE
Not to Scale



1. Finish grade in turf areas.
2. Plastic rectangular valve box with bolt down cover. Use stainless bolt, nut and washer. Box to be replaced at right angle to hardscape edge. Heat brand "RCV" and control station # onto LID.
3. Flow sensor.
4. Finish grade in shrub areas.
5. 24" Wire loop.
6. Mainline.
7. Brick supports.
8. Non-woven filter fabric.
9. Pea gravel, 3" deep.
10. Mainline from master valve.

Notes:
1. Install flow sensor as per the manufacturer's recommendations, wire to irrigation controller.
2. Use 45° ells to achieve mainline depth on the downstream side of the flow sensor.

7 FLOW SENSOR
Not to Scale

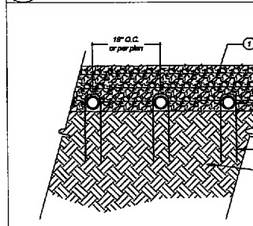


Notes:
1. Install control valves a minimum of one foot apart. Provide expansion coils on control wires, 15' wraps around ¾" PVC pipe.
2. Use Teflon tape on all threaded fittings, typ.

Note: Coil excess wire neatly to the satisfaction of the Landscape/Architect. Wire tangles are not acceptable.

1. Finish grade in turf areas.
2. Toro YD-500-34 air/vacuum relief valve.
3. Plastic round valve Box, 6" size heat brand "AVV" onto lid.
4. Grade in shrub areas.
5. DL2000.
6. Brick supports.
7. Filter fabric.
8. Pea gravel, 3" deep.
9. ¾" PVC tee (SxSxT) with toro CA710 comp. adapter.

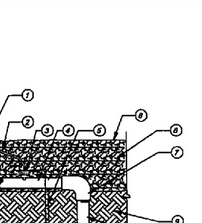
15 DRIP AIR RELIEF VALVE
Not to Scale



1. Mulch, see planting notes.
2. Dura-Pol polyethylene tubing.
3. Amended soil per planting notes and specifications. Bring soil level to 3" below finish grade of mulch prior to drip tubing installation.
4. Wire Stake. On center spacing per irrigation notes.

Notes:
1. To insure even parallel and level tubing rows it is recommended that the soil level in the planter area be brought to 3" below grade and properly compacted per the landscape drawings prior to the installation of tubing.
2. Install tubing as indicated on these drawings and secure to grade using wire hoop stakes at 5 feet on center spacing.
3. Backfill final 2" of mulch over the tubing after installation of the tubing.

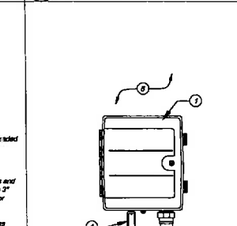
16 DRIPLINE STAKING AND LAYOUT
Not to Scale



1. Tubing stake.
2. ¼" Distribution tubing.
3. Drip emitter inserted into tube.
4. Dura-Pol polyethylene tubing.
5. 9" wire stake. Stake at 5' O.C.
6. Mulch, see planting notes.
7. Schedule 80 compression X thre sded ell.
8. Finish grade.
9. Amended soil per planting notes and specifications. Bring soil level to 3" below finish grade of mulch prior to drip tubing installation.
10. Schedule 80 PVC riser (length as required).
11. 6" Flexible riser.
12. Lateral line.

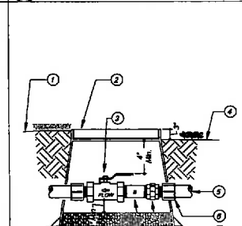
Note: Use Teflon tape on all threaded fittings, typical.

12 EMITTER TO DRIPLINE CONNECTION
Not to Scale



1. Wall mounted controller in closing plastic box.
2. 2" PVC conduit and fittings
3. Wires to remote control valves.
4. Junction box
5. 1" PVC conduit and fittings to power supply.
6. Interior wall, behind.

8 WALL MOUNTED CONTROLLER
Not to Scale



1. Finish grade in turf areas.
2. Rigid plastic rectangular valve box with bolt down cover. Use stainless bolt, nut and washer. Place box at right angle to edge of pavement. Heat brand "BV" onto lid.
3. Ball or gate valve.
4. Finish grade in shrub area.
5. Pressure supply line.
6. PVC male adapter.
7. Brick supports.
8. Brass union.
9. Brass nipple.
10. Non-woven filter fabric.
11. Pea gravel, 3" deep.

Notes:
1. Box to be installed so to allow for proper operation of ball valve. Install valve off-center in box.
2. Install valve box extensions as required to achieve proper valve installation at mainline depth.

4 BALL OR GATE VALVE
Not to Scale

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REGISTERED LANDSCAPE ARCHITECT MICHAEL G. MCCLURE No. 2911 EXP. 06/31/19 STATE OF CALIFORNIA

Revisions

HARVEST HILL RANCH
Cambridge Dr:
Goleta, CA 93111

IRRIGATION DETAILS

ISSUE
4.20.18

Date	Job Number
4.20.18	16.071
Drawn By	Checked by
ACL	MG
Sheet .	of .

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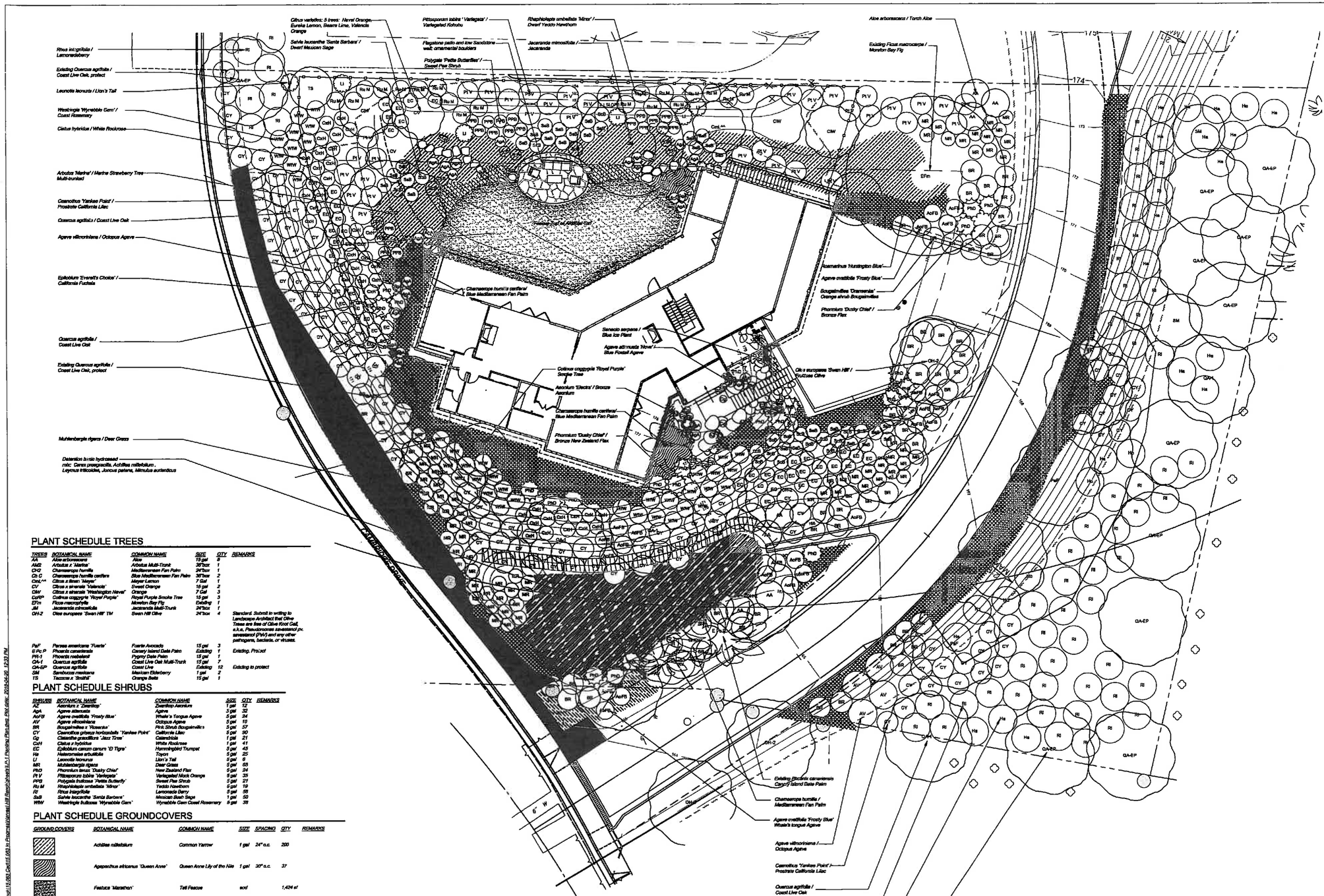
Drawing Name: /arcadia/Drawings/2015 Drafting/15.063 Harvest Hill Ranch/15.063 Cad/15.063 Irrigation Details.dwg, Z20 plot, 2018-04-20, 12:41 PM



PLANT SCHEDULE TREES

TREES	BOTANICAL NAME	COMMON NAME	SIZE	QTY	REMARKS
AA	Aloe arborescens	Aloe	15 gal	8	
AMS	Arbutus x 'Marina'	Arbutus Multi-Trunk	36"box	1	
CHC	Chamaerops humilis	Mediterranean Fan Palm	24"box	1	
Ch C	Chamaerops humilis cerifera	Blue Mediterranean Fan Palm	36"box	2	
CitsL^^	Citrus x limon 'Meyer'	Meyer Lemon	7 Gal	1	
CV	Citrus x sinensis 'Valencia'	Sweet Orange	15 gal	2	
CWV	Citrus x sinensis 'Washington Navel'	Orange	7 Gal	3	
CoHP	Cotinus coggygria 'Royal Purple'	Royal Purple Smoke Tree	15 gal	3	
EFm	Ficus macrophylla	Moreton Bay Fig	Existing	1	
JM	Jacaranda mimosifolia	Jacaranda Multi-Trunk	24"box	1	
OH-2	Olea europaea 'Swan Hill' TM	Swan Hill Olive	24"box	4	Standard. Submit in writing to Landscape Architect that Olive Trees are free of Olive Knot Gall, a.k.a. Pseudomonas savastanoi pv. savastanoi (Psv) and any other pathogens, bacteria, or viruses.
PaF	Persea americana 'Fuerte'	Fuerte Avocado	15 gal	3	
E Pc P	Phoenix canariensis	Canary Island Date Palm	Existing	1	Existing, Project
PR-1	Phoenix roebelenii	Pygmy Date Palm	15 gal	1	
QA-1	Quercus agrifolia	Coast Live Oak Multi-Trunk	15 gal	7	
QA-EP	Quercus agrifolia	Coast Live	Existing	12	Existing to protect
SM	Sambucus mexicana	Mexican Elderberry	1 gal	2	
TS	Tecoma x 'Smithii'	Orange Bells	15 gal	1	

PLANT SCHEDULE SHRUBS

SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE	QTY	REMARKS
AZ	Aeonium x 'Zwartkop'	Zwartkop Aeonium	1 gal	12	
AgA	Agave attenuata	Agave	5 gal	32	
AoFB	Agave ovatifolia 'Frosty Blue'	Whale's Tongue Agave	5 gal	34	
AV	Agave vilmoriniana	Octopus Agave	5 gal	10	
BR	Bougainvillea x 'Raspberry'	Pink Shrub Bougainvillea	5 gal	57	
CY	Ceanothus griseus horizontalis 'Yankee Point'	California Lilac	5 gal	90	
Cg	Calandrinia grandiflora 'Jazz Time'	Calandrinia	1 gal	21	
CoH	Cistus x hybridus	White Rockrose	1 gal	41	
EC	Epilobium canum canum 'El Tigre'	Hummingbird Trumpet	5 gal	43	
He	Heteromeles arbutifolia	Toyon	5 gal	25	
LI	Leonotis leonurus	Lion's Tail	5 gal	6	
MR	Muhlenbergia rigens	Deer Grass	5 gal	65	
PhD	Phormium tenax 'Duxby Chief'	New Zealand Flax	5 gal	34	
Pt V	Pittosporum tobira 'Variegata'	Variegated Mock Orange	5 gal	55	
PPB	Polygala fruticosa 'Petite Butterfly'	Sweet Pea Shrub	5 gal	21	
Ru M	Rhaphiolepis umbellata 'Minor'	Yeddo Hawthorn	5 gal	19	
Ri	Rhus integrifolia	Lemonade Berry	5 gal	56	
SaB	Salvia leucantha 'Santa Barbara'	Mexican Bush Sage	1 gal	50	
WW	Westringia fruticosa 'Wynabbie Gem'	Wynabbie Gem Coast Rosemary	5 gal	39	

PLANT SCHEDULE GROUNDCOVERS

GROUND COVERS	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QTY	REMARKS
	Achillea millefolium	Common Yarrow	1 gal	24" o.c.	200	
	Agapanthus africanus 'Queen Anne'	Queen Anne Lily of the Nile	1 gal	30" o.c.	37	
	Festuca 'Marathon'	Tall Fescue	sod		1,424 sf	
	Hemerocallis x 'Stella'	Yellow Daylily	1 gal	18" o.c.	74	
	Hydroseed Basin Bottom	Meadow Sedge	seed	12" o.c.	1,488	Carex praegracilis
	Rosmarinus officinalis 'Huntington Blue'	Rosemary	1 gal	24" o.c.	786	
	Senecio serpens	Blue Chalksticks	1 gal	12" o.c.	226	
	Trachelospermum jasminoides	Chinese Star Jasmine	1 gal	48" o.c.	1	

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REGISTERED LANDSCAPE ARCHITECT No. 2911 EXP. 06/31/19 STATE OF CALIFORNIA

Revisions

HARVEST HILL RANCH - LOT 1

Cambridge Dr.
Goleta, CA 93111
APN 069-620-004

PLANTING PLAN

ISSUE
4.20.18

Date	Job Number
4.20.18	18.071
Drawn By	Checked by
MD	LR
Sheet -	of -

LP-1

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Drawing Name: N:\projects\Goleta\18.071 Harvest Hill Ranch\18.071 Cat18.003 In Progress\Working\18.071 Planting Plans.dwg Plot date: 2018-04-20 12:23 PM

Planting Notes:

1. All plants are identified by typical symbols. Plant quantities are approximate and provided for the contractor's convenience. In the event of discrepancies in plant count, quantities indicated by plant symbols on the plan prevail.

2. At completion of rough grading, take representative soil samples (minimum of two per acre) from the project site and source of any imported topsoil. Locations and number of soil samples must be approved by the Landscape Architect. Send soil samples to Wallace Soil Testing Laboratory 310-615-0116 or an approved equal for testing of suitability for ornamental planting as specified on the drawings. Submit a copy of the results of this analysis to the Landscape Architect for approval and comment. Make adjustments to the rate and analysis of fertilizer & amendments as recommended to provide a suitable medium for planting. Follow all recommendations in agronomic soil report, including leaching if recommended. Notify the Landscape Architect of any potential problems which may result due to harmful substances found in the soil. Failure to act as specified may result in contractor assuming financial responsibility for any damage to plants.

3. Specification Section (02930 or 032 93 00, Landscape Planting, 02932 or 32 92 23, Sodding, and 02931 or 32 92 24, Hydroseeding, are integral to the intent of the planting plan. Do not bid planting plan without reference to applicable specification section.

4. Contractor is responsible for finish grades and for fine grading required for surface drainage and uniformity to the satisfaction of the Landscape Architect. Advise Landscape Architect of drainage problems and make recommendations for solution. Final grades to within a tenth of a foot must be established prior to commencing planting operations.

5. Grades and flow lines must be maintained during irrigation and planting operations. Contractor may not alter established grade and flow lines without the knowledge and permission of the Landscape Architect.

6. Install North American Green SC150BN Erosion Control Fabric (Pacific Soil Stabilization Santa Maria, CA 93454 PH (800) 473-1965) on all slopes of 5:1 or steeper, per manufacture's specification.

7. The Landscape Architect reserves the right to review all plant material at the nursery prior to delivery to job site. In lieu of nursery review the Landscape Architect may request photos and/or specifications of plant material to be provided prior to delivery.

8. Landscape Architect reserves the right to refuse plants delivered to site that are substandard. Replacement plants are to be supplied by contractor at no additional cost to owner.

9. Plant materials and installation to meet highest quality industry standard. Locate and secure all specified plants within two weeks of award of contract and show proof of to Landscape Architect in writing that plants have been secured. Notify Landscape Architect immediately of any plant sourcing difficulty.

11. Guaranty plant material 5 gallon or smaller except transplants for a period of 90 days from date of final review. Replace dead plants and plants not in vigorous condition, without cost to owner, as determined by Landscape Architect at the end of warranty period. Guaranty 15 gallon plants and larger, for 1 year from date of final review.

12. Notify Landscape Architect of intended planting schedule a minimum of two weeks prior to planting.

13. Set out all plant materials as shown on plan. Final locations must be approved by the Landscape Architect prior to planting.

14. Plant crown to be 2" above adjacent grade for 15 gallon and larger plants; 1" above adjacent grade or plants smaller than 15 gallon.

16. Contact Landscape Architect for decision regarding proposed plant substitutions 4 weeks prior to installation.

17. Any tree shown on plan to be installed in less than 8' (eight feet) clear distance from any curb, walkway, foundation, domestic water line, fire line, storm drain, or sewer line, or any underground utility is to be installed with root control barriers UB 24-2 by Deep Root Corp: 800-458-7658. Install a minimum of 10 linear feet of root barrier centered on the tree adjacent to any underground utility. Install as directed by detail. Install per manufacture's instructions. Palm trees do not require root control barriers. Landscape Architect may either or waive requirement.

20. Plant groundcovers adjacent to shrubs and/or trees 1.5 times the distance of their specified spacing away from the stems of the adjacent shrubs and trees. Groundcovers adjacent to curbs and pavement shall be spaced at specified spacing away from paved areas.

21. Plant backfill: See Specifications

18. Completely eradicate all bermuda, Mission grass, and other weed growth or other visible or alleged invasive weeds from areas within project limits prior to installing planting.

24. Provide and install bark mulch over all shrub and groundcover areas. Use walk-on bark mulch. Walk on Bark mulch shall be a virgin forest product consisting of stripped fir bark and bark nuggets. Source from Agromin (800) 247-6946 or as listed in the specifications. Spread mulch evenly over all shrub and groundcover areas to a depth of 3" (three inches). Keep mulch away from plant stems. Submit mulch samples to Landscape Architect for approval prior to purchase and delivery.

25. Preserve and protect all existing trees unless otherwise noted.

26. Any tree or plant containing pathogens, bacteria or viruses harmful to plant health shall be replaced at the Contractor's expense.

32. In areas with significant gopher populations that can not be controlled through traps or other conventional methods, all plant material is to be placed in an appropriately sized gopher basket. Turf sod is are to be installed over a single layer of protective wire. Overlap all seams by 6" and stake wire on 6'-0" centers throughout. Contractor to coordinate with Landscape Architect on what constitutes a "Significant" population. Contractor to include cost of baskets and wire in all bids and planting estimates.

Hydroseed Notes

1. All hydroseed and plants are identified by typical hatches. Plant quantities are approximate and provided for the contractor's convenience. In the event of discrepancies in plant count indicated in the legend, quantities indicated by hatches on the plan prevail.

2. Include in the contract price a sufficient amount to allow for supply and installation of additional hydroseed to be used at the direction of the Landscape Architect. Include 10% extra of the total amount of hydroseed in the bid price. Credit the Owner for any additional hydroseed not installed.

3. Loosen topsoil of seeded areas to minimum depth of 4". Remove stones over 1" in any dimension and sticks, roots, rubbish, and extraneous matter, and completely eradicate all non-native grasses and weed growth within project limits prior to installing hydroseed. Do not hydroseed over existing weeds and non-native grasses.

4. Submit seed vendor's certification to Landscape Architect for required hydroseed mixtures, indicating percentage by weight, and percentages of purity, germination, and weed seed for each plant species.

5. Replace and repair all hydroseed areas that have not successfully germinated by the middle of the maintenance period and at the end of the maintenance period.

6. Install North American Green C125 double net coconut blanket control fabric (Pacific Soil Stabilization Santa Maria, CA 93454 PH (800) 473-1965) on all slopes of 5:1 or greater, per manufacturer's specifications. Hydroseed installed with North American Green C125 double net coconut blanket shall be installed under blanket. Do not install hydroseed on top of blanket.

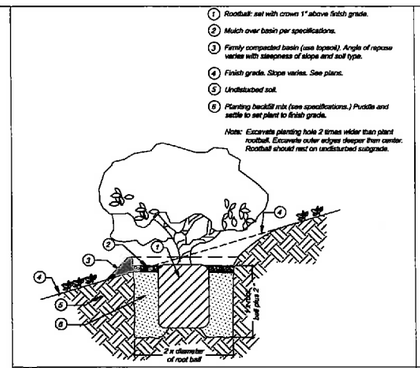
7. Deliver hydroseed and fertilizer materials in original unopened containers, showing weight, analysis, and name of manufacturer. Store in a manner to prevent wetting and deterioration.

8. Protect existing utilities, paving, and other facilities from damage caused by planting operations.

9. Restrict traffic from hydroseeded areas until plants are established. Erect signs and barriers as required.

10. Hydroseed indicated areas within Contract limits and areas adjoining Contract limits disturbed as a result of construction operations.

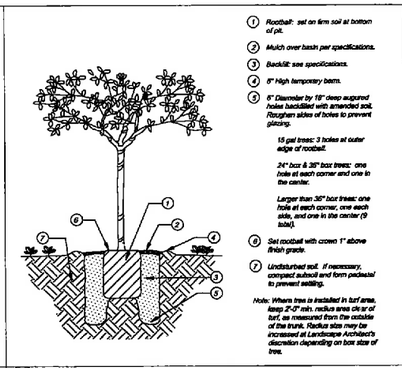
11. Use a hydromulcher (sprayer) and apply mixture at the rate specified. Mix in accordance with Manufacture's recommendations.



1. Rootball: set with crown 1" above finish grade.
2. Mulch over basin per specifications.
3. Firmly compacted basin (see topsoil). Angle of repose varies with steepness of slope and soil type.
4. Finish grade. Slope varies. See plans.
5. Undisturbed soil.
6. Planting backfill mix (see specifications.) Puddle and settle to set plant to finish grade.

Note: Excavate planting hole 2 times wider than plant rootball. Excavate outer edges deeper than center. Rootball should rest on undisturbed subgrade.

5 SHRUB PLANTING ON SLOPE
Not to Scale



1. Rootball: set on firm soil at bottom of pit.
2. Mulch over basin per specifications.
3. Backfill: see specifications.
4. 6" High temporary berm.
5. 6" Diameter by 18" deep augured holes backfilled with amended soil. Roughen sides of holes to prevent glazing.

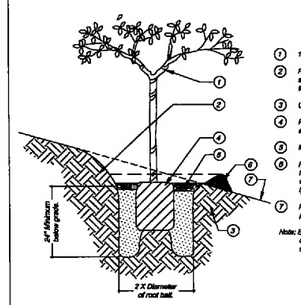
   15 gal trees: 3 holes at outer edge of rootball.

   24" box & 36" box trees: one hole at each corner and one in the center.

   Larger than 36" box trees: one hole at each corner, one each side, and one in the center (9 total).
6. Set rootball with crown 1" above finish grade.
7. Undisturbed soil. If necessary, compact subsoil and form pedestal to prevent settling.

Note: Where tree is installed in turf area, keep 2'-0" min. radius area clk or of turf, as measured from the outside of the trunk. Radius size may be increased at Landscape Architect's discretion depending on box size of tree.

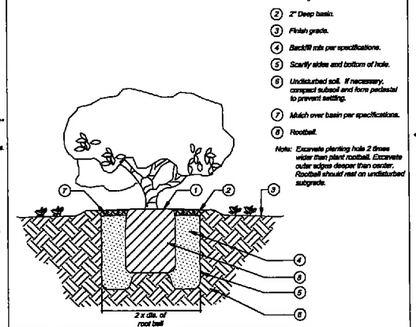
1 TREE PLANTING
Not to Scale



1. 1, 5, or 15 Gallon tree.
2. Planting backfill mix (see specifications.) Puddle and settle to set tree to finish grade.
3. Undisturbed soil.
4. Rootball. Set rootball with crown 1" above finish grade.
5. Mulch over basin per specifications.
6. Firmly compacted basin (use topsoil). Angle of repose varies with steepness of slope and soil type.
7. Finish grade. Slope varies. See plans.

Note: Excavate outer edges deeper than center. Rootball should rest on undisturbed subgrade

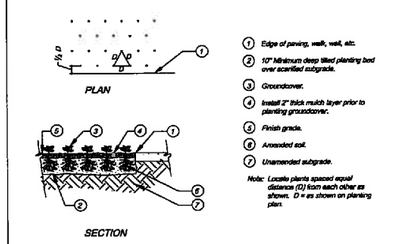
6 TREE PLANTING ON SLOPE
Scale: Not to Scale



1. Set rootball with crown 1" above finish grade.
2. 2" Deep basin.
3. Finish grade.
4. Backfill mix per specifications.
5. Scarify sides and bottom of hole.
6. Undisturbed soil. If necessary, compact subsoil and form pedestal to prevent settling.
7. Mulch over basin per specifications.
8. Rootball.

Note: Excavate planting hole 2 times wider than plant rootball. Excavate outer edges deeper than center. Rootball should rest on undisturbed subgrade.

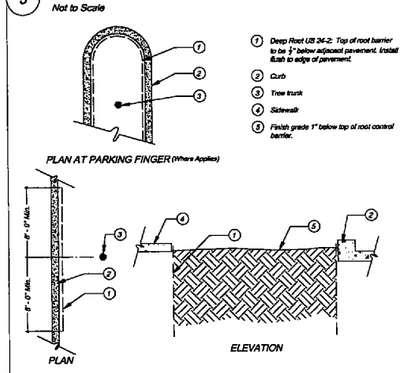
2 SHRUB PLANTING
Not to Scale



1. Edge of paving, walk, wall, etc.
2. 10" Minimum deep tilled planting bed over scarified subgrade.
3. Groundcover.
4. Install 2" thick mulch layer prior to planting groundcover.
5. Finish grade.
6. Amended soil.
7. Unamended subgrade.

Note: Locate plants spaced equal distance (D) from each other as shown. D = as shown on planting plan.

3 GROUNDCOVER PLANTING
Not to Scale



1. Deep Root UB 24-2: Top of root barrier to be ½" below adjacent pavement. Install flush to edge of pavement.
2. Curb
3. Tree trunk
4. Sidewalk
5. Finish grade 1" below top of root control barrier.

PLAN AT PARKING FINGER (Where Applies)

4 ROOT CONTROL BARRIER
Not to Scale

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REGISTERED LANDSCAPE ARCHITECT
LANCE A. MONROE
No. 2911
EXP. 06/31/19
STATE OF CALIFORNIA

Revisions

HARVEST HILL RANCH
Cambridge Dr.
Goleta, CA 93111

PLANTING DETAILS

Issue
4.20.18

Date 4.20.18	Job Number 16.071
Drawn By ACL	Checked by MG
Sheet -	of -

LP-2

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