Staff Report to the Zoning Administrator

Application Number: 221217

Applicant: Michael Helm
Owner: Alex Vecchiet
APN: 027-103-19
Site Address: 380 7th Avenue, Santa Cruz

Agenda Date: November 18, 2022
Agenda Item #:
Time: After 9:00 a.m.

Project Description: Proposal to construct a two-story addition of approximately 774 square feet of new floor area to an existing single-family dwelling on-site with an existing 418 square foot accessory dwelling unit (ADU). Requires a Coastal Development Permit, Minor Exception to exceed the 50 percent floor area ratio (FAR) requirement to 54.7 percent, and a Minor Exception to exceed the 40 percent lot coverage requirement to 49.7 percent.

Location: The property is located on the east side of 7th Avenue at its intersection with Dolores Street (380 7th Avenue) in Santa Cruz.

Permits Required: Coastal Development Permit & Minor Exceptions

Supervisorial District: First District (District Supervisor: Manu Koenig)

Staff Recommendation:

- Determine that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.
- Approval of Application 221217, based on the attached findings and conditions.

Setting & Project Description

The subject property is located on the east side of 7th Avenue at its intersection with Dolores Street, in the Harbor Area Special Community of the Live Oak Planning Area. The property is accessed via Dolores Street which runs along the northern property boundary. To the east, at the rear of the property, there is a "paper-alley" that extends mid-block from Dolores Street at the north to Carmel Street at the south. The alley exists legally in that it has never been formally abandoned and is shown on the Assessor's Parcel Map, but twelve of the twenty parcels on the subject block have split the alley for expanded rear yards and many structures, fences, and landscaping have been located in the alley over the years.

The Harbor Area Special Community is an area characterized by small parcels developed with a wide variety of one- and two-story homes, including older structures from the early part of the 20th Century. Where new homes or additions have been constructed or where older homes have

been remodeled and upgraded, most of this development conforms to some degree to the special design criteria for the Harbor Area Special Community as set out in the Local Coastal Program. The majority of buildings, including those on the subject parcel, exhibit characteristics of older dwellings in the area, are small in scale, have clean lines, pitched roofs, and are constructed to include wood siding or exterior materials that resemble wood.

The property is developed with an existing one-story 752 square foot single-family dwelling containing two bedrooms and one bathroom, a detached garage, and an existing 419 square foot Accessory Dwelling Unit (ADU) located over the garage.

The project includes constructing a two-story addition of approximately 774 square feet of new floor area to the single-family dwelling. On the first story, the addition would consist of a new entry, kitchen, and dining room of approximately 387.5 square feet. On the second story, the addition would consist of a new bedroom, bathroom, and walk-in closet of approximately 378.5 square feet. Though the completed residence would be larger than the existing home, the project would not result in a net increase in the number of bedrooms. At completion, the project would result in a two-story residence measuring approximately 1,526 square feet containing two bedrooms and three bathrooms.

The project would remove a large hedge wrapping along portions of the 7th Avenue and Dolores Street frontages, as well as a palm tree located near the corner of 7th Avenue and Dolores Street measuring approximately 14 inches diameter at breast height (d.b.h). The removed palm tree would be replaced with two crape myrtle trees to be planted along the Dolores Street frontage.

A Coastal Development Permit is required to construct an addition of more than 500 square feet in the Coastal Zone.

A Minor Exception is required to exceed the 50 percent floor area ratio (FAR) requirement to 54.7 percent, and a Minor Exception is required to exceed the 40 percent lot coverage requirement to 49.7 percent.

Project Background

The existing home was constructed on the parcel in 1933 and the detached garage was constructed in 1937 prior to zoning requirements and is nonconforming to setbacks.

Building Permit No. 0049056M-00136413 was finalized on January 12, 2004, recognizing the 419 square foot ADU located above the detached garage.

Zoning & General Plan Consistency

The subject property is a 3,000 square foot lot, located in the R-1-3.5 (Single Family Residential - 3,500 square feet) zone district, a designation which allows residential uses. The proposed addition to an existing single family dwelling is permitted within the zone district and the zoning is consistent with the site's R-UH (Urban High Density Residential) General Plan designation.

The site standards for the R-1-3.5 zone district for the subject lot are demonstrated in the chart below:

	R-1-3.5 Site Standards	**Existing**	**Proposed**
Front yard setback (7th Ave)	15'	About 11'3"	No Change
Front yard setback (alley)	15'	0'	No Change
Street side yard setback (Dolores St)	10'	0'	6'8"
Side yard setback (interior)	5'	About 7'	5'
Maximum height	28'	About 13'6" (SFD) About 21'4" (ADU)	About 22'8" (SFD) No Change (ADU)
Maximum lot coverage	40%	41.4%	49.7%
Maximum FAR	50%	28.9%	54.7%
Maximum number of stories	2	1 (SFD) 2 (ADU)	2 SFD No Change - ADU
Parking (2 Bedroom SFD, ADU)	3 spaces required, 0 existing ADU	1 space in garage	No Change
Minimum distance to garage entrance (from edge of R/W)	20'	About 4'7"	No Change

The lot fronts on three different rights-of-way, these are: 7th Avenue to the west, Dolores Street to the north, and a "paper" alleyway to the east; thus, the lot qualifies as a "double-frontage" lot with front yard setbacks of 15 feet as measured from both 7th Avenue as well as from the unnamed alley at the east. The frontage adjacent to Dolores Street qualifies as a 10-foot street side yard setback, and the interior five-foot setback is applied on the opposite side of the lot from Dolores Street.

The existing home is nonconforming in that the existing structure encroaches into required setbacks. The proposed addition would meet all setback requirements and would be fully contained within the buildable area of the lot. Additionally, an existing portion of the home (an existing laundry/utility room) that currently encroaches into the 10-foot street side yard setback fronting on Dolores Street, would be demolished up to the existing north wall of the residence, thus reducing the overall encroachment of the home into the street side yard setback. The project would then result in a more conforming home in regard to setbacks, and no increase in any nonconforming dimension of the existing dwelling is proposed.

Although the existing home meets other site and development standards, it does not conform to the required front setback or the street side yard setback. The dwelling is therefore a nonconforming structure. The existing ADU/garage accessory structure on the parcel is also a nonconforming structure in that it does not conform to minimum required distance to the garage entrance, the street side yard setback, or the front yard setback as measured from the alley at the rear of the lot.

As set out in County Code Section 13.10.262 – "Nonconforming Structures", structural alterations may be made to an existing nonconforming structure where such modifications do not constitute reconstruction, which is defined by County Code Section 13.10.260(B)(6) as modifications that alter 65 percent or more of the major structural components. Additionally, conforming additions that do not increase the nonconforming dimensions of the structure may be constructed, subject only to the issuance of a building permit. A Modifications Worksheet has been submitted by the Applicant indicating that neither the proposed remodel of the dwelling nor the accessory structure will result in a greater than 65 percent modification to these existing structures. In addition, the proposed addition will conform to all required site and development standards for the zone district other than lot coverage and floor area ratio requirements, for which findings for Minor Exceptions can be made.

The lot is also nonconforming in regard to parking, in that only one parking space exists on the parcel – located within the garage. For the reason that the proposed addition would not add any additional bedrooms, additional parking spaces are not required to be provided on the lot. It is noted however, that the project would construct a new four-foot-wide sidewalk with curb and gutter along Dolores Street, which will result in improved neighborhood walkability and on-street parking functionality.

Minor Exceptions – Lot Coverage and FAR

Pursuant to County Code Section 13.10.235, a Minor Exception may be granted for up to a 10 percent increase in the total allowable 40 percent lot coverage for lots 6,000 square feet or less, allowing up to 50 percent total lot coverage subject to findings required per County Code Section 13.10.230(C). The proposed increase of the lot coverage requirement to 49.7% is within the 10 percent allowance to qualify for a Minor Exception per County Code Section 13.10.235.

Similarly, a Minor Exception may be granted for up to a 7.5 percent increase in the total allowable 50 percent FAR for lots 4,000 square feet or less, allowing up to 57.5 percent total FAR subject to findings required per County Code Section 13.10.230(C). An increase of the lot coverage requirement to 54.7% is within the 7.5 percent allowance to qualify for a Minor Exception per County Code Section 13.10.235.

It is noted that the floor area, totaling 419 square feet, associated with the ADU is exempt from the calculation of lot area and FAR per County Code Section 13.10.681(D)(7)(c)(i).

Design Review & Harbor Area Special Community

The proposed addition to the single family dwelling complies with the requirements of the County Design Review Ordinance, in that the proposed project will incorporate site and architectural design features such as incorporating a pitched roof and concentrating the massing of the addition within the middle of the lot to reduce the visual impact of the proposed development on surrounding land uses and the natural landscape.

The subject property is located within the Harbor Area Special Community. Parcels within the Harbor Area Special Community shall incorporate the characteristics of older dwellings in the area and shall be of smaller scale with clean lines, pitched roofs, and wood-type siding materials. The proposed addition will be consistent with the architectural and design styles of residences

within the surrounding neighborhood and will include clean lines, a pitched roof, and wood-type (fiber cement) siding materials.

Local Coastal Program Consistency

The proposed addition to the existing single family dwelling is in conformance with the County's certified Local Coastal Program, in that the structure is sited and designed to be visually compatible, in scale with, and integrated with the character of the surrounding neighborhood. Developed parcels in the area contain single family dwellings. Size and architectural styles vary in the area, and the design submitted is consistent with the existing range of styles. The project site is not located between the shoreline and the first public road and is not identified as a priority acquisition site in the County's Local Coastal Program. Consequently, the proposed project will not interfere with public access to the beach, ocean, or other nearby body of water.

Conclusion

As proposed and conditioned, the project is consistent with all applicable codes and policies of the Zoning Ordinance and General Plan/LCP. Please see Exhibit "B" ("Findings") for a complete listing of findings and evidence related to the above discussion.

Staff Recommendation

- Determine that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.

- **APPROVAL** of Application Number **221217,** based on the attached findings and conditions.

Supplementary reports and information referred to in this report are on file and available for viewing at the Santa Cruz County Planning Department, and are hereby made a part of the administrative record for the proposed project.

The County Code and General Plan, as well as hearing agendas and additional information are available online at: www.sccoplanning.com

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Exhibits

A. Categorical Exemption (CEQA determination)
B. Findings
C. Conditions
D. Project plans
E. Assessor's, Location, Zoning and General Plan Maps
F. Parcel Information

CALIFORNIA ENVIRONMENTAL QUALITY ACT
NOTICE OF EXEMPTION

The Santa Cruz County Planning Department has reviewed the project described below and has determined that it is exempt from the provisions of CEQA as specified in Sections 15061 - 15332 of CEQA for the reason(s) which have been specified in this document.

Application Number: 221217
Assessor Parcel Number: 027-103-19
Project Location: 380 7th Avenue, Santa Cruz

Project Description: Proposal to construct a two-story addition of approximately 774 square feet of new floor area to an existing one-story single-family dwelling on-site with an existing 418 square foot ADU.

Person or Agency Proposing Project: Michael Helm

Contact Phone Number: 831-476-5386

A. _____ The proposed activity is not a project under CEQA Guidelines Section 15378.

B. _____ The proposed activity is not subject to CEQA as specified under CEQA Guidelines Section 15060 (c).

C. _____ **Ministerial Project** involving only the use of fixed standards or objective measurements without personal judgment.

D. _____ **Statutory Exemption** other than a Ministerial Project (CEQA Guidelines Section 15260 to 15285).

E. __X__ **Categorical Exemption**

Specify type: Class 1 - Existing Facilities (Section 15301)

F. Reasons why the project is exempt:

The Class 1 Exemption includes additions to residential structures located within a residential neighborhood.

In addition, none of the conditions described in Section 15300.2 apply to this project.

_____ Date:_____
Jonathan DiSalvo, Project Planner

EXHIBIT A

Coastal Development Permit Findings

1. That the project is a use allowed in one of the basic zone districts that are listed in LCP Section 13.10.170(D) as consistent with the LCP Land Use Plan designation of the site.

This finding can be made, in that the property is zoned R-1-3.5 (Single Family Residential - 3,500 square feet), a designation which allows residential uses. The proposed addition to an existing single family residential dwelling is permitted within the zone district, and the zoning is consistent with the site's R-UH (Urban High Density Residential) General Plan designation.

2. That the project does not conflict with any existing easement or development restrictions such as public access, utility, or open space easements.

This finding can be made, in that no such easements or restrictions are known to encumber the project site. Additionally, the project would not construct any new structures or propose any modifications to structures within the paper alley.

3. That the project is consistent with the design criteria and special use standards and conditions of this chapter pursuant to SCCC 13.20.130 and 13.20.140 et seq.

This finding can be made, in that the proposed addition to the existing dwelling will result in a small-scale home that will include characteristics of older dwellings in the surrounding neighborhood as well as other newer or remodeled homes. As required by the special design criteria for the Harbor Area Special Community, the remodeled and expanded dwelling will have clean lines, a pitched roof, and will be utilize siding materials that resemble wood. The dwelling will be integrated with the character of the surrounding neighborhood, and the design submitted for the proposed addition is consistent with the existing range of architectural styles. The site is surrounded by lots developed to an urban density; the colors will be complementary to the site and neighborhood; and the development site is not on a prominent ridge, beach, or bluff top. Although the proposed addition will result in an increased overall height of the home, the project will not have a significantly different visual impact than the existing home on the parcel or other two-story homes in the neighborhood.

4. That the project conforms with the public access, recreation, and visitor-serving policies, standards and maps of the LCP Land Use Plan, including Chapter 2: Section 2.5 and Chapter 7.

This finding can be made, in that the project site is not identified as a priority acquisition site in the County Local Coastal Program and public beach access is available at Twin Lakes State Beach.

5. That the project conforms to all other applicable standards of the certified LCP.

This finding can be made, in that the structure is sited and designed to be visually compatible and integrated with the character of the surrounding neighborhood. Additionally, residential uses are permitted in the R-1-3.5 (Single Family Residential - 3,500 square feet) zone district, as well as the General Plan and Local Coastal Program land use designation. Developed parcels in the area contain two-story single-family dwellings. Size and architectural styles vary in the area, and the

design submitted is consistent with the pattern of development within the surrounding neighborhood. Further, the addition will result in a small-scale single-family structure that will retain many of the characteristics of the original older dwellings in the neighborhood. As required by the special design criteria for the Harbor Area Special Community, the proposed addition will result in a home with clean lines, a pitched roof, and will utilize siding materials that resemble wood.

6. If the project is located between the nearest through public road and the sea or the shoreline of any body of water located within the Coastal Zone, that the project conforms to the public access and public recreation policies of Chapter 3 of the Coastal Act.

This finding can be made, in that the project site is not located between the shoreline and the first public road. Consequently, the addition to the existing single family dwelling will not interfere with public access to the beach, ocean, or any nearby body of water. Further, the project site is not identified as a priority acquisition site in the County Local Coastal Program.

Residential Development Permit Findings

1. That the proposed location of the project and the conditions under which it would be operated or maintained will not be detrimental to the health, safety, or welfare of persons residing or working in the neighborhood or the general public, and will not result in inefficient or wasteful use of energy, and will not be materially injurious to properties or improvements in the vicinity.

This finding can be made, in that the project is located in an area designated for residential uses. Construction will comply with prevailing building technology, the California Building Code, and the County Building ordinance to ensure the optimum in safety and the conservation of energy and resources.

2. That the proposed location of the project and the conditions under which it would be operated or maintained will be consistent with all pertinent County ordinances and the purpose of the zone district in which the site is located.

This finding can be made, in that the proposed location of the addition to the single-family dwelling and the conditions under which it would be operated or maintained will be consistent with all pertinent County ordinances and the purpose of the R-1-3.5 (Single Family Residential - 3,500 square feet) zone district as the primary use of the property will continue to be one single-family dwelling. The proposed addition will meet all current site standards for the zone district save for Minor Exceptions to lot coverage and FAR standards for which required findings have been made.

The subject property is located within the Harbor Area Special Community. New residential development within the Harbor Area Special Community (as specified in County Code Section 13.20.144(B)) shall incorporate the characteristics of older dwellings in the area (e.g., small scale, clean lines, pitched roofs, predominately wood construction, wood or wood-like (including cementitious) siding, or shingles that resemble wood). The proposed addition will be consistent with the design requirements of the Harbor Area Special Community.

3. That the proposed use is consistent with all elements of the County General Plan and with any specific plan which has been adopted for the area.

This finding can be made, in that the proposed residential use is consistent with the use and density requirements specified for the R-UH (Urban High Density Residential) land use designation in the County General Plan.

The proposed addition to the existing single family dwelling will not adversely impact the light, solar opportunities, air, and/or open space available to other structures or properties and meets all current site and development standards for the zone district as specified in Policy 8.1.3 (Residential Site and Development Standards Ordinance), in that the single family dwelling will not adversely shade adjacent properties The proposed addition will meet all current site standards for the zone district save for Minor Exceptions to lot coverage and FAR standards for which required findings have been made.

The proposed addition to the existing single family dwelling will be properly proportioned to the parcel size and the character of the neighborhood as specified in General Plan Policy 8.6.1 (Maintaining a Relationship Between Structure and Parcel Sizes), in that the proposed addition will comply with the site standards for the R-1-3.5 zone district (other than lot coverage and FAR for which findings for Minor Exceptions have been made) and will result in a structure consistent with a design that could be approved on any similarly sized lot in the vicinity.

A specific plan has not been adopted for this portion of the County. The proposed addition will be consistent with the design requirements of the Harbor Area Special Community.

4. That the proposed use will not overload utilities, and will not generate more than the acceptable level of traffic on the streets in the vicinity.

This finding can be made, in that the proposed addition to the existing single-family dwelling is to be constructed on an existing developed lot. The addition would not increase the existing level of traffic. The expected level of traffic generated by the existing single-family dwelling and ADU is estimated to remain at only two peak trips per day (one peak trip per dwelling unit). The addition is not anticipated to increase traffic thus the project would not adversely impact existing roads or intersections in the surrounding area. It is noted that the project would construct a new four-foot-wide sidewalk with curb and gutter along Dolores Street, which will result in improved neighborhood walkability and on-street parking functionality.

5. That the proposed project will complement and harmonize with the existing and proposed land uses in the vicinity and will be compatible with the physical design aspects, land use intensities, and dwelling unit densities of the neighborhood.

This finding can be made, in that the existing single-family dwelling is located in a mixed neighborhood containing a variety of architectural styles, and the proposed additon is consistent with the architecture of the main home and the land use intensity and density of the neighborhood. The proposed addition will also be consistent with the design requirements of the Harbor Area Special Community.

6. The proposed development project is consistent with the Design Standards and Guidelines (sections 13.11.070 through 13.11.076), and any other applicable requirements of this chapter.

This finding can be made, in that the proposed addition will be of an appropriate scale and type of design that will enhance the aesthetic qualities of the surrounding properties and will not reduce or visually impact available open space in the surrounding area. Additionally, the addition will meet the five-foot interior side yard setback on the south side of the lot. The neighboring one-story single-family residence to the south of the subject property at 370 7th Avenue is located approximately 10 feet south of the shared property line between the two properties; therefore, the neighboring home would be separated by approximately 15 feet from the proposed two-story addition on the subject lot. This separation would minimize any impacts to light, air, and privacy on the neighboring parcel.

Minor Exception Findings

1. That because of special circumstances applicable to the property, including size, shape, topography, location, and surrounding existing structures, the strict application of the Zoning Ordinance deprives such property of privileges enjoyed by other property in the vicinity and under identical zoning classification.

This finding can be made, in that the subject lot is constrained in regard to size. The subject parcel measures approximately 3,049 square feet in size (less than the 3,500 square foot minimum for the R-1-3.5 zone district), thus granting a Minor Exception for the proposed 9.7 percent increase in lot coverage to 49.7 percent, and 4.7 percent increase of FAR to 54.7 percent, would be allowable per County Code Section 13.10.235.

2. That the granting of the minor exceptions will be in harmony with the general intent and purpose of zoning objectives and will not be materially detrimental to public health, safety, or welfare or injurious to property or improvements in the vicinity.

This finding can be made, in that the proposed addition will not adversely impact the light, solar opportunities, air, and/or open space available to other structures or properties and would meet all current site and development standards for the zone district except for minor increases in lot coverage and FAR for which findings for Minor Exceptions can be made. The proposed addition is not expected to be materially detrimental to public health safety or welfare, or injurious to property or improvements in the vicinity. The addition would be located approximately 15 feet way from the nearest residence.

The project is located in an area designated for residential uses. Construction will comply with prevailing building technology, the California Building Code, and the County Building ordinance to insure the optimum in safety and the conservation of energy and resources.

3. That the granting of such minor exceptions shall not constitute a grant of special privileges inconsistent with the limitations upon other properties in the vicinity and zone in which such is situated.

This finding can be made, in that the proposed location of the addition and the conditions under which it would be operated or maintained will be consistent with all pertinent County ordinances and the purpose of the R-1-3.5 (Single-Family Residential – 3,500 square foot minimum) zone district. The granting of minor exceptions for lot coverage and FAR would allow a substandard, constrained lot to enjoy privileges shared by other properties in the same zone district. Due to the physical constraints of the subject lot, granting the minor exceptions will not constitute a grant of special privileges inconsistent with the limitations upon other properties in the same zone district.

4. That there is no increase in stormwater leaving the property as a result of additional impermeable area created by a minor increase in lot coverage. The project as approved incorporates measures or conditions that direct runoff to the landscape, use permeable paving material, reduce existing impermeable area, or incorporate other low impact drainage design practices to control any increase in stormwater runoff.

This finding can be made, in that the project has been reviewed by the Stormwater Management Division of the Community Development and Infrastructure Department, and as conditioned, will meet all applicable requirements pertaining to stormwater management. The design also utilizes permeable pavers along the Dolores Street frontage, and in the home's backyard. Additionally, the project would construct a new four-foot-wide sidewalk with curb and gutter along Dolores Street, which will result in improved off-site stormwater management along Dolores Street.

Conditions of Approval

Exhibit D: Project plans, prepared by Michael Helm, dated May 3, 2022.

I. This permit authorizes the construction of an addition to an existing single-family dwelling as indicated on the approved Exhibit "D" for this permit. This approval does not confer legal status on any existing structure(s) or existing use(s) on the subject property that are not specifically authorized by this permit. Prior to exercising any rights granted by this permit including, without limitation, any construction or site disturbance, the applicant/owner shall:

A. Sign, date, and return to the Planning Department one copy of the approval to indicate acceptance and agreement with the conditions thereof.

B. Obtain a Demolition Permit from the Santa Cruz County Building Official.

C. Obtain a Building Permit from the Santa Cruz County Building Official.

1. Any outstanding balance due to the Planning Department must be paid prior to making a Building Permit application. Applications for Building Permits will not be accepted or processed while there is an outstanding balance due.

D. Obtain an Encroachment Permit from the Department of Public Works for all off-site work performed in the County road right-of-way.

II. Prior to issuance of a Building Permit the applicant/owner shall:

A. Submit final architectural plans for review and approval by the Planning Department. The final plans shall be in substantial compliance with the plans marked Exhibit "D" on file with the Planning Department. Any changes from the approved Exhibit "D" for this development permit on the plans submitted for the Building Permit must be clearly called out and labeled by standard architectural methods to indicate such changes. Any changes that are not properly called out and labeled will not be authorized by any Building Permit that is issued for the proposed development. The final plans shall include the following additional information:

1. A copy of the text of these conditions of approval incorporated into the full-size sheets of the architectural plan set.

2. One elevation shall indicate materials and colors as they were approved by this Discretionary Application. If specific materials and colors have not been approved with this Discretionary Application, in addition to showing the materials and colors on the elevation, the applicant shall supply a color and material sheet in 8 1/2” x 11” format for Planning Department review and approval.

3. Grading, drainage, and erosion control plans.

4. The building plans must include detailed elevations and cross-sections which clearly depict the total height of the proposed structure. Maximum height is 28 feet.

5. Details showing compliance with fire department requirements. If the proposed structure(s) are located within the State Responsibility Area (SRA) the requirements of the Wildland-Urban Interface code (WUI), California Building Code Chapter 7A, shall apply.

B. Meet all requirements of the County Public Works Division, Stormwater Management Section, including the following:

1. This project proposal includes a sump pump for a subsurface drainage system due to high groundwater levels and space constraints on the subject property. In coordination with civil improvements plans for the right-of-way, the project civil engineer shall evaluate a safe discharge location and flow path for the groundwater sump pump. Please evaluate that the flow path will not adversely impact the pedestrian pathway.

2. The final geotechnical approval letter shall include health and safety justifications for why a sump pump is needed for this project.

3. Drainage fees will be assessed on the net increase in impervious area.

C. Meet all requirements of the County Public Works Division, Road Engineering Section, including the following:

1. Plans prepared by a civil engineer shall be submitted for improvements in the County right-of-way for review and approval by the Road Engineering Section.

2. The sidewalk driveway wraparound on Dolores Street may be 3 feet wide.

D. Meet all requirements of the Santa Cruz Water District.

E. Meet all requirements of the Santa Cruz County Sanitation District including the following:

1. Project shall satisfy all Santa Cruz County Sanitation District Code, County Design Criteria, and Santa Cruz County Code requirements and pay all sanitary sewer fees. Prior to building permit issuance, the private sanitary sewer lateral shall be video inspected and submitted to the District for review. District identified defects to the private sewer lateral shall be repaired and included as part of this applications scope of work. Plans shall show the approximate location of the existing private sewer lateral and how the proposed improvements are compliant with District code.

F. Meet all requirements of the Environmental Planning Section of the Planning Division, including the following:

1. A signed and stamped copy of the accepted soils report and update(s) shall be provided.

2. Building Permit plans shall reference the soils report and update(s), include contact information for the geotechnical engineer, and include a statement that the project shall conform to the recommendations of the geotechnical engineer.

3. Building Permit plans shall clearly represent all proposed grading, including any overexcavation and recompaction as recommended by the geotechnical engineer.

4. The applicant shall submit a stormwater pollution control plan that meets the requirements set forth in the County's Construction Site Stormwater Pollution Control BMP Manual, available here: http://www.sccoplanning.com/Portals/2/County/Planning/env/ConstructionStormwaterBMPManual-Oct%20312011version.pdf.

5. The applicant shall submit a drainage plan that complies with the requirements set forth in 2019 California Building Code (CBC) Section 1804.4 and the recommendations of the soils engineer.

6. The applicant shall submit a signed and stamped Soils (Geotechnical) Engineer Plan Review Form to Environmental Planning. The plan review form shall reference each reviewed sheet of the final plan set by its last revision date. Any updates to the soils report recommendations necessary to address conflicts between the report and plans must be provided via a separate addendum to the soils report. The author of the report shall sign and stamp the completed form. An electronic copy of this form may be found on our website: www.sccoplanning.com, under "Environmental", "Geology & Soils", "Assistance & Forms", "Soils Engineer Plan Review Form".

7. Replacement trees shall be planted on the site at a 2:1 ratio for each tree removed.

G. Meet all requirements and pay any applicable plan check fee of the Central Fire Protection District.

H. Submit 3 copies of plan review letters prepared and stamped by the project Geotechnical Engineer.

I. Pay the current fees Child Care mitigation. Currently, these fees are $0.74 per square foot for single family dwellings.

J. Pay the current fees for Parks mitigation. Currently, these fees are $4.51 per square foot for single family dwellings.

K. Pay the current Affordable Housing Impact Fee. The fees are based on unit size and the current fee for additions to a dwelling up to 2,000 square feet is $2 per square foot.

L. Provide required off-street parking for one car. Parking spaces must be 8.5 feet wide by 18 feet long and must be located entirely outside vehicular rights-of way. Parking must be clearly designated on the plot plan.

M. Submit a written statement signed by an authorized representative of the school district in which the project is located confirming payment in full of all applicable developer fees and other requirements lawfully imposed by the school district.

III. All construction shall be performed according to the approved plans for the Building Permit. Prior to final building inspection, the applicant/owner must meet the following conditions:

A. All site improvements shown on the final approved Building Permit plans shall be installed.

B. All inspections required by the building permit shall be completed to the satisfaction of the County Building Official.

C. The project must comply with all recommendations of the approved soils reports.

D. Pursuant to Sections 16.40.040 and 16.42.080 of the County Code, if at any time during site preparation, excavation, or other ground disturbance associated with this development, any artifact or other evidence of an historic archaeological resource or a Native American cultural site is discovered, the responsible persons shall immediately cease and desist from all further site excavation and notify the Sheriff-Coroner if the discovery contains human remains, or the Planning Director if the discovery contains no human remains. The procedures established in Sections 16.40.040 and 16.42.080, shall be observed.

IV. Operational Conditions

A. In the event that future County inspections of the subject property disclose noncompliance with any Conditions of this approval or any violation of the County Code, the owner shall pay to the County the full cost of such County inspections, including any follow-up inspections and/or necessary enforcement actions, up to and including permit revocation.

V. Indemnification

A. The applicant/owner shall indemnify, defend with counsel approved by the COUNTY, and hold harmless the COUNTY, its officers, employees, and agents from and against any claim (including reasonable attorney's fees, expert fees, and all other costs and fees of litigation), against the COUNTY, its officers, employees, and agents arising out of or in connection to this development approval or any subsequent amendment of this development approval which is requested by the applicant/owner, regardless of the COUNTY's passive negligence, but excepting such loss or damage which is caused by the sole active negligence or willful misconduct of the COUNTY. Should the COUNTY in its sole discretion find the applicant's/owner's legal counsel unacceptable, then the applicant/owner shall reimburse the COUNTY its costs of defense, including without limitation reasonable attorney's fees, expert fees, and all other costs and fees of litigation. The applicant/owner shall promptly pay any final judgment rendered against the COUNTY (and its officers, employees, and agents) covered by this indemnity obligation. It is expressly understood and agreed that the foregoing provisions are intended to be as broad and inclusive as is permitted by the law of the State of California and will survive termination of this development approval.

B. The COUNTY shall promptly notify the applicant/owner of any claim, action, or proceeding against which the COUNTY seeks to be defended, indemnified, or held harmless. The COUNTY shall cooperate fully in such defense.

C. Nothing contained herein shall prohibit the COUNTY from participating in the defense of any claim, action, or proceeding if both of the following occur:

1. COUNTY bears its own attorney's fees and costs; and

2. COUNTY defends the action in good faith.

D. Settlement. The applicant/owner shall not be required to pay or perform any settlement unless such applicant/owner has approved the settlement. When representing the COUNTY, the applicant/owner shall not enter into any stipulation or settlement modifying or affecting the interpretation or validity of any of the terms or conditions of the development approval without the prior written consent of the COUNTY.

E. Successors Bound. The "applicant/owner" shall include the applicant and/or the owner and the successor'(s) in interest, transferee(s), and assign(s) of the applicant and/or the owner.

Minor variations to this permit which do not affect the overall concept or density may be approved by the Planning Director at the request of the applicant or staff in accordance with Chapter 18.10 of the County Code.

Please note: This permit expires three years from the effective date listed below unless a building permit (or permits) is obtained for the primary structure described in the development permit (does not include demolition, temporary power pole or other site preparation permits, or accessory structures unless these are the primary subject of the development permit). Failure to exercise the building permit and to complete all of the construction under the building permit, resulting in the expiration of the building permit, will void the development permit, unless there are special circumstances as determined by the Planning Director.

Approval Date: _____

Effective Date: _____

Expiration Date: _____

_____
Steve Guiney
Deputy Zoning Administrator

Appeals: Any property owner, or other person aggrieved, or any other person whose interests are adversely affected by any act or determination of the Zoning Administrator, may appeal the act or determination to the Planning Commission in accordance with chapter 18.10 of the Santa Cruz County Code.

General Notes

Provide combustion air for all gas-fired appliances. (CMC Chapter 7)

Vent dryer to outside of building (not to under-floor area). Vent length shall be 14' maximum or vent size shall be increased. (CMC 504.3)

Provide Tempered glass at all hazardous locations per CBC 2406.4 & CRC 308.4

Safety glazing shall be required within 24" of a door edge or within 36" of a stairway, landing or ramp when the bottom edge of the glazing is less than 60" from the floor or walking surface.

Safety glazing is required in all fixed and operable panels of swinging, sliding and bi-fold doors.

Skylights shall comply with CRC R 308.6

Safety glazing is required in enclosures and walls facing hot tubs, saunas, steam rooms, showers and tubs where the bottom edge of the glazing is less than 60" from any standing or walking surface.

Fire blocking shall be provided in concealed spaces of stud walls and partitions, including furred spaces, and parallel rows of studs or staggered studs; vertically at floor and ceiling levels, horizontally at intervals not to exceed 10'. Openings around gas vents, ducts, chimneys and fireplaces at ceiling and floor levels shall have fire blocking per CBC 717.1 & CRC 302.11.

Provide minimum 22" x 30" access opening to attic. In attics in which an appliance is installed, an opening and passageway at least as large as the largest component of the appliance shall be required. (CMC 904.11)

Floor and ceiling assemblies shall be draft stopped so that the area of concealed space does not exceed 1000 SF. The draft stops shall divide the concealed space into approximately equal spaces per CBC 718.2 & CRC 302.12.

Provide ventilation for products of combustion to outside air. (CMC 801.1)

Attic ventilation: 1/150 of attic area. If a Class I or II vapor barrier is applied to warm-in winter side of ceiling, or, if 50% - 80% of the vents are at least 3' above the eaves and the remaining vents are in the eaves then the ratio may be reduced to 1/300. Enclosed rafter spaces shall have cross ventilation (min. 1" clear)

Under-floor space shall have a ventilation opening area of 1/150 square feet of underfloor area. If a Class I vapor retarder is used the ratio may be reduced to 1/1500. One opening shall be placed within 3 feet of each building corner. Openings shall be covered with a covering having openings no greater than 1/4".

Air infiltration, insulation, space heating& cooling, water heating, etc shall meet CA Energy Commission Standards.

Stairways shall comply with CBC 1009 & CRC R311.7

A nosing of not less than ¾ inch, but not more than 1 and ¼ inches, shall be provided on stairways with solid risers and treads less than 11 inches in depth per CRC R311.7.5.3

Required egress door shall be side hinged and have a minimum net clear width of 32" and a minimum height of 78".

There shall be a landing at each side of all doors. The landing shall be at least as wide as the door served and 36"min length measured in the direction of travel. There may one step down of no more than 7.75" provided the door does not swing over the landing.

Stairway rise shall be 4" min and 7.75" max. Run shall be 10" min. Headroom shall be 80" min. Width shall be 36" min. Handrails shall be 34" to 38" above tread nosing with openings less than 4-3⁄8" clear.

There shall be a floor or landing at the top and bottom of each stairway. Width and length of landings shall be not less than the width of the stairway and shall be at least 36" in the direction of travel. A floor or landing is not required at the top of an interior flight of stairs, including stairs in an enclosed garage, provided a door does not swing over the stairs. Guardrails shall comply with CBC 1013.4 & CRC R 312. Guards shall be located along open sided walking surfaces, including stairs, ramps, landings, and decks, that are more than 30" above the floor or grade. Required guards shall be not less than 42" above the adjacent walking surface. Except that handrails may be considered as guards at stairways. Openings in guards shall not exceed 4". Handrails shall comply with CBC 1012 & CRC R 311.7

Naturally durable wood or preservative treated wood shall be required in the following locations:

a. Wood joists and girders closer than 18" or 12" respectively, to the exposed ground.

b. Wood framing members that rest on concrete or masonry and are less than 8" from the exposed ground.

c. Sills and sleepers on a concrete or masonry slab that is in direct contact with the ground unless separated by an impervious moisture barrier.

d. Wood siding, sheathing and wall framing on the exterior of the building having a clearance of less than 6" from the ground or less than 2" from a horizontal concrete surface.

Appliances and receptacles installed in garages and carports generating a glow, spark, or flame shall be located 18" min. above the floor. Provide protective bollard or other impact barrier. (CMC 307.1)

Provide a minimum of one 20 Amp receptacle in laundry areas. (CEC 210.52(F))

Kitchens and dining areas must have a minimum of two 20 Amp circuits. Kitchen counter outlets must be installed in every counter space 12" or wider, not greater than 4' o.c. and within 24" of the end of any counter space. (CEC 210.52)

GFCI outlets are required for all kitchen receptacles that are designed to serve countertop surfaces, in bathroom, in under-floor spaces or below grade level, in exterior outlets, and in all garage outlets not dedicated to a single device or appliance. (CEC 210.8) All dwellings must have at least one exterior outlet at the front and the back of the dwelling. (CEC 210.52(E))

Receptacles must be installed at 12' o.c. maximum in walls. Walls longer than 2 feet and halls longer than 10' must have a receptacle. A receptacle must be provided within 3' of bathroom sinks. (CEC 210.52)

Bond all metal gas and water pipes to ground. All ground clamps must be accessible and of an approved type. (CEC 250.104)

Provide smoke detectors per CBC 907.2.10.2 & CRC R 314 & carbon monoxide detectors per CBC 420.6 & CRC R 315.

For new construction & work in an existing dwelling where the value of the work exceeds $1000 carbon monoxide alarms shall be installed in all dwelling units and in sleeping rooms within which fuel-burning appliances are installed and in dwelling units that have attached garages.

All 120-volt 15 & 20 amp branch circuits in dwelling units except those in kitchens, bathrooms, unfinished basements, garages and outdoors shall have AFCI protection. (CEC 210.12)

Receptacles on 120- volt 15 & 20 amp circuits shall be listed tamper resistant. (CEC 406.11) Except when located more than 5.5' above the floor; within cabinets or cupboards; or when part of a luminaire or appliance.

Kitchen lighting shall be high efficacy or up to 50% of lighting can be low efficacy. High efficacy & low efficacy must be switched separately.

Lighting in bathrooms, garages, laundry, utility rooms to be high efficacy or low efficacy with manual on occupancy sensor switches.

Lighting in all other interior rooms like living, dining, bedrooms, etc. (except closets of less than 70 sq. ft.) shall be high efficacy or low efficacy with manual on occupancy switches or dimmers.

Outdoor lighting attached to the building shall be high efficacy or low efficacy with motion sensor with photo control.

Water closet shall be located in a space not less than 30" in width with 24" minimum clearance in front. (CPC 407.5)

Provide 18" x 24" foundation access within 20' of plumbing cleanout. (CPC 707.9)

Provide anti-siphon valves on all hose bibs. (CPC 603.4.7) Strap water heater at points within upper and lower third of tank and 4" min. above controls.

Copper, galvanized or plastic piping shall not be installed under building slab. All solder joints to be lead free. Type M copper tubing shall not be used for water piping.

Provide low flow showerheads with max. 1.8 gpm at 80 psi (CGBSC 4.403.1.3 & CPC 408.2) and water closets consuming 1.28 gallons per flush or less. (CPC 402.2.2).

Showers shall be finished with a smooth, hard non-absorbent surface to a height of at least 72 in. above the drain outlet per CBC 1210.3 & CRC R 307.2. Provide curtain rod or approved enclosure material.

The contractor must install or verify the existence of smoke alarms and carbon monoxide alarms outside each bedroom as well as one on every level. An additional smoke alarm is required inside each bedroom. Alarms in existing areas where access to the area above the ceiling is not possible may be powered by a D/C battery source. In areas of new construction or existing rooms where the area above the ceiling is accessible, alarms must be powered by an A/C power source with a battery backup and be interconnected per CRC 314, 315

Bathtub and shower floors and walls above bathtubs with installed shower heads and in shower compartments shall be finished with an non-absorbent surface extending not less than 6 feet above the floor per CRC R 307.2

Ceramic tile surfaces shall be installed in accordance with ANSI A108.1, A108.4 through A108.6, A108.11, A118.1, A118.3, A136.1, and A137.1 CRC R702.4.1

Fiber-cement fiber-reinforced cementitious backer units, glass mat gypsum backers or fiber-reinforced gypsum backers in compliance with ASTM C1288, C1325, C1178 or C1278 respectively and installed in accordance with manufacture's recommendations shall be used as backers for wall tile in tub and shower areas and wall panels in shower areas per CRC R702.4.2

Do not remove manufacture's labeling for all exterior doors and windows in order to demonstrate compliance with CRC R612.3. All new windows and glazing in doors shall have a maximum U-value of 0.30 per CA energy Code Table 150.1-A

Provide protection for the toilet exhaust per CRC R303.6

The shower valve shall be a pressure balance type, thermostatic mixing type or a combination pressure balance/thermostatic mixing type per CPC R408.3

The waste outlet and tailpiece for the shower shall be a minimum 2" diameter per CPC 408.4

The bathroom exhaust fan to be Energy Star per Cal Green Section 4.506.1 Bathroom Exhaust Fans

REMODEL / ADDITION PLANS FOR:
VECCHIET RESIDENCE
APN 027-103-19
380 – 7th AVENUE - SANTA CRUZ, CALIFORNIA

FIRE DEPARTMENT NOTES

These plans are in compliance with the California Building and Fire Codes (2019 edition) and Santa Cruz County Central Fire Protection District Amendments.

Occupancy Classification	R-3 / U
Building Construction	V-B
Fire Rating	Sprinklered
	LRA

1 The FIRE SPRINKLER SYSTEM drawings must be prepared and submitted for approval by a California State Licensed Contractor (Class A, or C-16) meeting the requirements of NFPA 13, "Standard for the Installation of Fire Sprinkler Systems". Designer/installer shall submit two (2) sets of plans and calculations to the Santa Cruz County Central Fire Protection District for approval.

2 An UNDERGROUND FIRE PROTECTION SYSTEM WORKING DRAWING must be prepared and submitted for approval by a California State Licensed Contractor (Class A, C-16 or C-34). The plans shall comply with NFPA 24, "Standard for the Installation of Private Fire Service Mains and Their Appurtenances". Designer/installer shall submit two (2) sets of plans and calculations to the Santa Cruz County Central Fire Protection District for approval.

3 Automatic fire sprinkler systems shall be supervised by an approved Central, Proprietary, or Remote Station or an approved local alarm which will give an audible signal at a constantly (24 hour) attended location.

4 The building shall be protected by an approved fire alarm system complying with the currently adopted edition of NFPA 72, and adopted standards of the Central Fire Protection District.

5 Building numbers shall be provided. Numbers shall be a minimum of six (6) inches in height on a contrasting background and visible from the street. Where numbers are not visible from the street, additional numbers shall be installed on a directional sign at the property driveway and the street.

6 Roof coverings shall be no less than Class "B" fire rated roof.

7 Install smoke detectors per CBC sections 907.2.10.1.1 & CRC R 314. Install carbon-monoxide detectors per CBC 420 & CRC R 315.2

8 The job copies of the building and fire system plans and permits must be on-site during inspections.

9 As a condition of submittal of these plans, the submitter, designer and installer certify that these plans and details comply with applicable Specifications, Standards, Codes and Ordinances agree that they are solely responsible for compliance with applicable Specifications, Standards, Codes and Ordinances, and further agree to correct any deficiencies noted by this review, subsequent review, inspection or other source and, to hold harmless and without prejudice, the reviewer and reviewing agency.

GREEN BUILDING NOTES

1 Conduct Pre-construction Green Building Conference.

2 Provide Construction Waste Management Plan for 65% Recycling Job Site Construction & Demolition Waste.

3 Donate Unused materials.

4 Protect annular spaces around openings in plates at exterior wall per Cal Green sec. 4.505.2.

5 Substitution of solid sawn lumber with engineered lumber for Structural Beams and Headers including non-structural Headers is acceptable. Acquire final approval by Architect & Structural Engineer where applicable.

6 Substitution of Plywood with OSB for sheathing is acceptable. Acquire final approval by Architect & Structural Engineer where applicable.

7 Install Energy Star Appliances (Dishwasher, Refrigerator) in Kitchen.

8 Install built-in recycling center in Kitchen cabinetry.

9 Install Insulation after building is Weather-Tight and outside of the rainy season.

10 Cover duct openings/ air distribution openings during construction. Clean ducts before occupancy. Use Duct Mastic on all duct joints.

11 Check moisture content materials for walls & floor before enclosure.

12 Install Low VOC carpet systems (where applicable).

13 Develop Homeowner Manual including Green Measures & Benefits.

ARCHEOLOGICAL NOTES

Any person exercising a development permit or building permit who, at any time in the preparation for or process of excavating or otherwise disturbing earth, discovers any human remains of any age or any artifact or any other object which reasonably appears to be evidence of an archaeological/cultural resource or paleontological resource, shall:

a. Immediately cease all further excavation, disturbance, and work on the project site;
b. Cause staking to be placed completely around the area of discovery by visible stakes not more than ten feet apart forming a circle having a radius of not less than one hundred feet from the point of discovery; provided, that such staking need not take place on adjoining property unless the owner of the adjoining property authorizes such staking;
c. Notify the Santa Cruz County sheriff-coroner and the city of Santa Cruz planning director of the discovery unless no human remains have been discovered, in which case the property owner shall notify only the planning director;
d. Grant permission to all duly authorized representatives of the sheriff-coroner and the planning director to enter onto the property and to take all actions consistent with this section.

DEFERRED SUBMITTAL

SUBMITTAL DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE ARCHITECT OR ENGINEER OF RECORD, WHO SHALL REVIEW THEM AND FORWARD THEM TO THE BUILDING OFFICIAL WITH A NOTATION INDICATING THAT THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN REVIEWED AND THAT THEY HAVE BEEN FOUND TO BE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL. THE FOLLOWING ITEMS WILL BE SUBMITTED SEPARATELY FOR THIS PROJECT:

1 PROVIDE COMPLETE DESIGN CALCULATIONS, DRAWINGS AND SPECIFICATIONS FOR FIRE SPRINKLER SYSTEM FOR APPROVAL PRIOR TO INSTALLATION

2 PROVIDE DESIGN AND DOCUMENTATION FOR A COMPLETE HEATING SYSTEM. PLANS AND SPECIFICATIONS TO INCLUDE APPLIANCE MODELS, SPECIFICATIONS, BTU VALUES, DUCT LAYOUT, MATERIALS AND SIZES, ETC. HEATING AND/OR AIR-CONDITIONING SYSTEMS SHALL BE SIZED, DESIGNED AND HAVE THE EQUIPMENT SELECTED USING THE FOLLOWING METHODS:

A) THE HEAT LOSS AND HEAT GAIN IS ESTABLISHED ACCORDING TO ANSI/ACCA 2 MANUAL J-2011, ASHRAE HANDBOOKS OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS.

B) DUCT SYSTEMS ARE SIZED ACCORDING TO ANSI/ACCA 1 MANUAL D-2014, ASHRAE HANDBOOKS OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS.

C) SELECT HEATING AND COOLING EQUIPMENT ACCORDING TO ANSI/ACCA 3 MANUAL S-2014 OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS.

HERS NOTE

HERS registered forms are required by installing mechanical contractor for the central furnace. Installing contractor to register project with HERS provider and submit CF2Rs & CF3Rs to jurisdiction before beginning work; HERS duct testing is required and must pass with ducts having less than 5% leakage. HERS certification is required for indoor air quality ventilation.

HERS inspection and certification is required for installation of Kitchen cooktop exhaust hood.

HERS registered forms are required by installing mechanical contractor for the heat pump system. Installing contractor to register project with HERS provider and submit CF2Rs & CF3Rs to jurisdiction before beginning work; HERS certification is required for indoor air quality ventilation. HERS inspection and certification is required for cooling system; verified SEER, Verified Refrigerant Charge, Airflow in Habitable rooms (SCS.1.4.1.7). HERS inspection and certification is required for Heating System; verified HSPF, verified heat pump rated heating capacity, wall-mounted thermostat in zones greater than 150 ft2 (SC3.4.5), ductless indoor units located entirely in conditioned space (SC3.1.4.1.8).

PROJECT CONSULTANTS

ARCHITECT	Michael Helm, Architect Michael Helm & Associates 200 Seventh Ave., #110 Santa Cruz, CA 95062 831-476-5386
STRUCTURAL	George Reynolds, S. E. 111 Youngfove Ave. Santa Cruz, CA 95060 831-426-3637
CIVIL	Civil Consultants Group, Inc. 4444 Scotts Valley Drive, Suite 6 Scotts Vally, CA 95066 831-438-4420
ENERGY	Monterey Energy Group 26465 Carmel Rancho Blvd., #8 Carmel, CA 93923 831-372-8328
SOILS	CMAG Engineering, Inc. P.O. Box 640 Aptos, CA 95001 831-475-1411

SOILS REPORT

ALL SOILS WORK AND FOUNDATION PLACEMENT SHALL CONFORM TO THE RECOMMENDATIONS IN THE GEOTECHNICAL INVESTIGATION, PROJECT NO. 22-116-SC, DATED May 26, 2022, BY CMAG ENGINEERING INC.

APPLICABLE CODES

ALL WORK INDICATED ON THE PLANS SHALL COMPLY WITH THE FOLLOWING GOVERNING CODES:

2019 CALIFORNIA BUILDING CODE
2019 CALIFORNIA RESIDENTIAL CODE
2019 CALIFORNIA ELECTRICAL CODE
2019 CALIFORNIA PLUMBING CODE
2019 CALIFORNIA MECHANICAL CODE
2019 CALIFORNIA ENERGY CODE
2019 CALIFORNIA GREEN BUILDING STANDARDS CODE
2019 CALIFORNIA FIRE CODE

COUNTY OF SANTA CRUZ MUNICIPAL CODE, ENVIRONMENTAL HEALTH & FIRE STANDARDS

SHEET INDEX

STORMWATER MAINTENANCE AGREEMENT NOTES

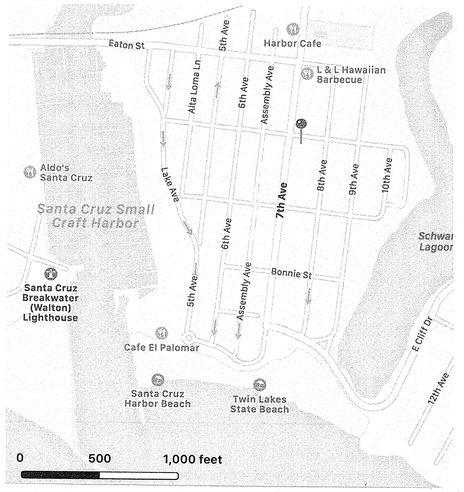
OWNER CONSENTS AND AGREES TO INSPECT AND MAINTAIN ANNUALLY 'PRIOR TO THE RAINY SEASON' THE ON-SITE DRAINAGE SYSTEMS AND STORMWATER MANAGEMENT FACILITIES ON THE SUBJECT PROPERTY.

MAINTENANCE SCHEDULE FOR ON-SITE DRAINAGE SYSTEMS AND STORMWATER MANAGEMENT FACILITIES

1 ROOF GUTTERS AND DOWNSPOUTS – SHALL BE CLEANED AS REQUIRED PRIOR TO RAINY SEASON ANNUALLY.

2 PERCOLATION TRENCHES – INSPECT VIA CLEAN-OUTS / INSPECTION PORTS. DRAIN PIPES AND OVERFLOW RISERS PRIOR TO THE RAINY SEASON ANNUALLY TO ASSURE DRAINAGE PERCOLATION SYSTEMS FUNCTIONS PROPERLY

THERE ARE NO EXISTING STORMWATER (DRAINAGE) ISSUES ON OR NEAR THE SITE AND THERE ARE NO STORMWATER (DRAINAGE) ISSUES ANTICIPATED RESULTING FROM THE PROPOSED IMPROVEMENTS



VICINITY MAP
NTS

PROJECT DATA

OWNER	ALEX VECCHIET 380 – 7TH AVENUE SANTA CRUZ, CA 95062 831-818-2004
APN	027-103-19
ZONING	R-1-3.5
OCCUPANCY CL.	R-3 / U
CONST. TYPE	V-B
FIRE RATING	SPRINKLERED LRA
LOT AREA	3,000 SF

LOT COVERAGE 50% MAX. ALLOWED = 1500 SF **WITH MINOR EXCEPTION**

	EXISTING	PROPOSED
HOUSE	751.5	1030
GARAGE	343	343
BATH / UTILITY	117	117
COVERED PORCHES	32	7.75
TOTAL	1243.5 SF = 41.4%	1497.75 SF = 49.7%

FAR 50% MAX. ALLOWED = 1500 SF **VARIANCE REQUIRED**

HOUSE + GARAGE	EXISTING	PROPOSED
LOWER FLR	751.5	1147
UPPER FLR	0	378.5
GARAGE (343 - 225 CREDIT)	118	118
TOTAL HOUSE + GARAGE	869.5 SF = 28.9%	1643.5 SF = 54.7%

BUILDING AREA

HEATED AREA	EXISTING	PROPOSED
LOWER FLR	751.5	1030
UPPER FLR	0	378.5
TOTAL HOUSE	751.5 SF	1408.5 SF
ADU	419	419
UN-HEATED AREA		
BATH / UTILITY	117	117
GARAGE	343	343
TOTAL HOUSE + GAR + ADU	1630.5 SF	2287.5 SF

No Grading is required for this project. Areas disrupted during Construction shall be restored to be consistent with native vegetation species and patterns.

PARCEL INFORMATION

Parcel Size:	3,000 square feet
Existing Land Use – Parcel:	Residential
Existing Land Use – Surrounding:	Residential
Project Access:	7TH Avenue / Dolores Street
Planning Area:	Live Oak
Land Use Designation:	R-UH (Urban High Residential)
Zone District:	R-1-3.5 (Single-family residential, 3,500 Square foot minimum parcel size)
Coastal Zone:	Inside

ENVIRONMENTAL INFORMATION

Geologic Hazards:	Not mapped/ no physical evidence on site
Soils:	Soils Report – REQUIRED
Fire Hazard:	Not a mapped constraint
Slopes:	0-2%
Env. Sen. Habitat:	Not mapped/ no physical evidence on site
Grading:	No Grading required
Tree Removal:	(1) 14" Palm
Scenic:	Not a mapped resource
Drainage:	Existing drainage adequate
Archeology:	Not mapped/ no physical evidence on site

SERVICES INFORMATION

Urban/Rural Services Line:	Inside
Water Supply:	City of Santa Cruz
Sewage Disposal:	County of Santa Cruz
Fire District:	Central Fire Protection District
Drainage District:	Zone 5

PROJECT DESCRIPTION

The project consists of remodeling, alterations and additions to an existing one-story 751.5 SF 2 bedroom / 1 bathroom, single family residence with an existing detached 460 SF garage with bathroom and utility room.

Lower floor additions consist of a new entry, kitchen and dining room of approximately 387.5 SF. Upper floor additions consist of a new bedroom, bathroom & walk-in closet of approximately 378.5 SF.

The completed two-story main residence would consist of 2 bedrooms, 3 bathrooms, entry, living, dining, and utility room of approximately 1525.5 SF with an attached garage of approximately 343 SF.

The project also consists of recognizing the existing 419 SF studio ADU above the garage.

EXHIBIT D

ADD INFO 9.8.22 MSH

Michael Helm, AIA Architect & Associates
200 Seventh Avenue, #110 Santa Cruz, California 95062 (831) 476-5386

REMODEL / ADDITION PLANS FOR:
VECCHIET RESIDENCE
APN 027-103-19
380 – 7th AVENUE - SANTA CRUZ, CALIFORNIA

COVER SHEET

5-3-22
NTS
MSH
2204

1

DOLORES ST.

7TH AVE.

S 83°29' E 75.00'

HEADER BOARD.

14" PALM

DRAINAGE INLET. (TYPICAL)

GATE.

CONCRETE (TYPICAL)

CONCRETE CURB. (TYPICAL)

HOUSE.
F.F. EL. = 101.09'

GARAGE.
SLAB EL. = 99.55'

STAIRS.

380 7th Avenue
Santa Cruz, CA, 95062
A.P.N. 027-103-19
Deed Doc. No.1998-0052452
LOT 1

DECK.
F.S. EL. = 100.32'

STEP ON DECK. (TYPICAL)

SHED.

S 6°31' W 40.00'

SIGN.

BENCH.

10" TREE

GATE.

14" PALM

WOOD FENCE. (TYPICAL)

S 83°29' E 75.00'

HEDGE.

BUILDING.

24" PALM.

HOUSE.
370 7th Avenue, Santa Cruz, CA, 95062
A.P.N. 027-103-18
Deed Doc. No. 2010-0007477
LOT 2

15' WIDE ALLEY. (7-M-5)

7-M-5
Subdivision No-2
of
Twin Lake Park

360 7th Avenue, Santa Cruz, CA, 95062
A.P.N. 027-103-17
Deed Doc. No. 2017-0032302
LOT 3

Legend

- WM Water Meter
- SS Sanitary Sewer Manhole
- Utility Pole
- SSCO
- Fire Hydrant

Basis of Bearings

The basis of bearing for this map is S 6°31' E between found monuments on the western line of 9th Avenue per record map 116-M-39 filed in the Santa Cruz County Records.

Basis of Elevation

An assumed elevation of 100.00 feet was used on a set nail.

The contour interval is 1 foot.

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

NORTH

HANAGAN LAND SURVEYING
305-C SOQUEL AVE.,
SANTA CRUZ, CA 95062
PHONE (831) 469-3428

GRAPHIC SCALE
8' 0' 8' 16'
1 INCH = 8 FEET

EXHIBIT D

ADD INFO 9.8.22 MSH

Michael Helm, AIA Architect & Associates
200 Seventh Avenue, #110 Santa Cruz, California 95062 (831) 476-5386

REMODEL / ADDITION PLANS FOR:
VECCHIET RESIDENCE
APN 027-103-19
380 – 7th AVENUE - SANTA CRUZ, CALIFORNIA

TOPOGRAPHIC MAP

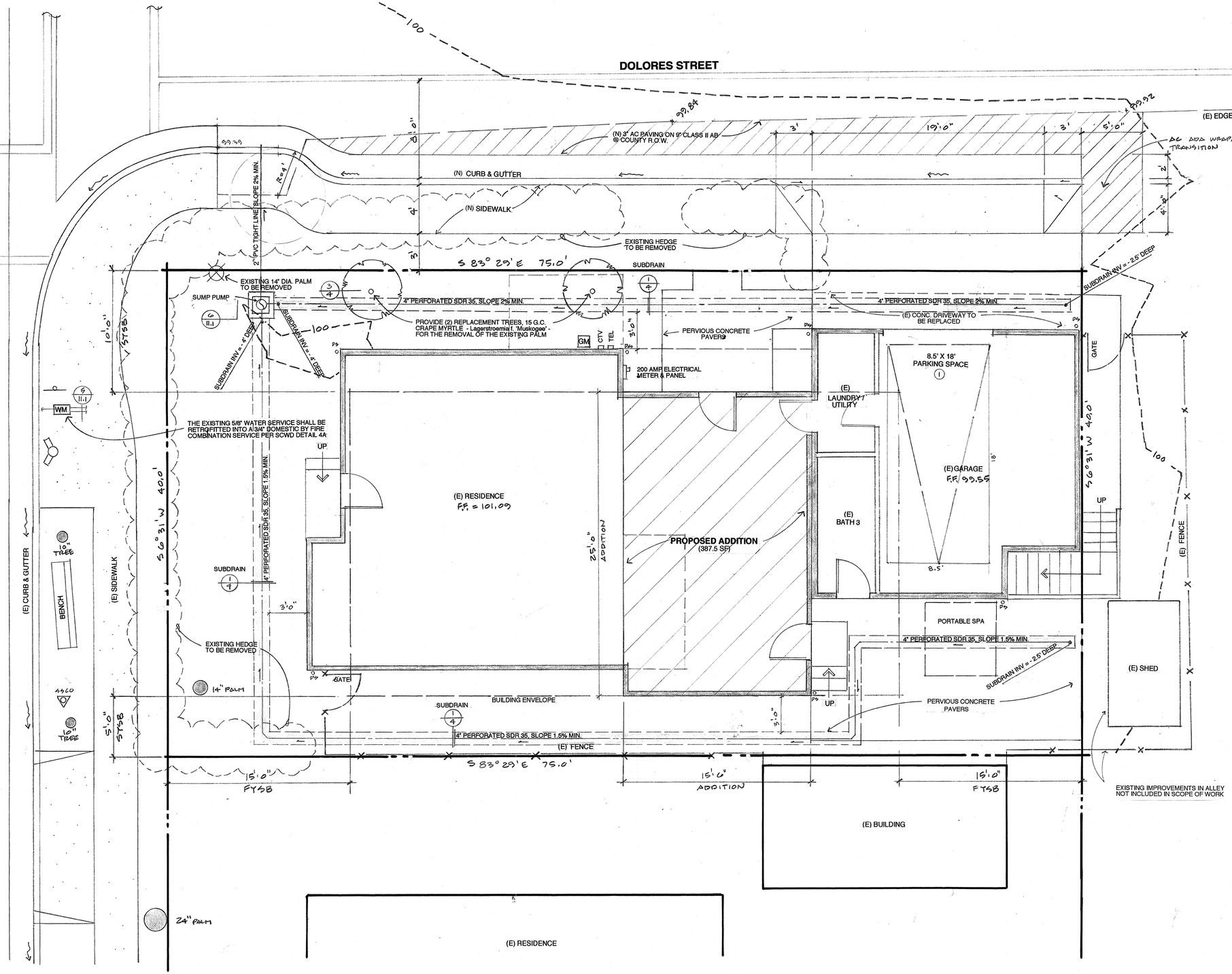
5-3-22

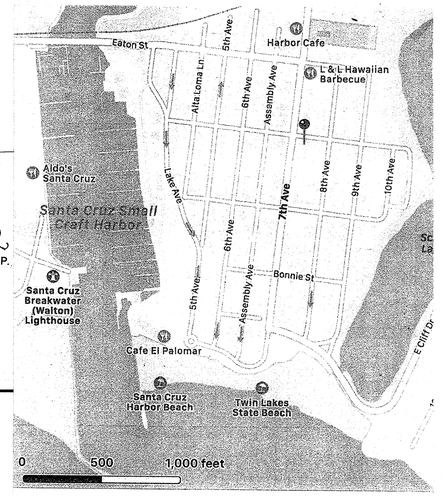
1/8"=1'-0"

MSH

2204

2





VICINITY MAP
NTS

PROJECT DATA

OWNER	ALEX VECCHIET 380 – 7TH AVENUE SANTA CRUZ, CA 95062 831-818-2004
APN	027-103-19
ZONING	R-1-3.5
OCCUPANCY CL.	R-3 / U
CONST. TYPE	V-B
FIRE RATING	SPRINKLERED LRA
LOT AREA	3,000 SF

LOT COVERAGE 50% MAX. ALLOWED = 1500 SF **WITH MINOR EXCEPTION**

	EXISTING	PROPOSED
HOUSE	751.5	1030
GARAGE	343	343
BATH / UTILITY	117	117
COVERED PORCHES	32	7.75
TOTAL	1243.5 SF = 41.4%	1497.75 SF = 49.7%

FAR 50% MAX. ALLOWED = 1500 SF **VARIANCE REQUIRED**

	EXISTING	PROPOSED
HOUSE + GARAGE		
LOWER FLR	751.5	1147
UPPER FLR	0	378.5
GARAGE (343 - 225 CREDIT)	118	118
TOTAL HOUSE + GARAGE	869.5 SF = 28.9%	1643.5 SF = 54.7%

BUILDING AREA

	EXISTING	PROPOSED
HEATED AREA		
LOWER FLR	751.5	1030
UPPER FLR	0	378.5
TOTAL HOUSE	751.5 SF	1408.5 SF
ADU	419	419
UN-HEATED AREA		
BATH / UTILITY	117	117
GARAGE	343	343
TOTAL HOUSE + GAR + ADU	1630.5 SF	2287.5 SF

No Grading is required for this project. Areas disrupted during Construction shall be restored to be consistent with native vegetation species and patterns.

PARCEL INFORMATION

Parcel Size:	3,000 square feet
Existing Land Use – Parcel:	Residential
Existing Land Use – Surrounding:	Residential
Project Access:	7TH Avenue / Dolores Street
Planning Area:	Live Oak
Land Use Designation:	R-UH (Urban High Residential)
Zone District:	R-1-3.5 (Single-family residential, 3,500 Square foot minimum parcel size)
Coastal Zone:	Inside

ENVIRONMENTAL INFORMATION

Geologic Hazards:	Not mapped/ no physical evidence on site
Soils:	Soils Report – REQUIRED
Fire Hazard:	Not a mapped constraint
Slopes:	0-2%
Env. Sen. Habitat:	Not mapped/ no physical evidence on site
Grading:	No Grading required
Tree Removal:	(1) 14" Palm
Scenic:	Not a mapped resource
Drainage:	Existing drainage adequate
Archeology:	Not mapped/ no physical evidence on site

SERVICES INFORMATION

Urban/Rural Services Line:	Inside
Water Supply:	City of Santa Cruz
Sewage Disposal:	County of Santa Cruz
Fire District:	Central Fire Protection District
Drainage District:	Zone 5

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

IMPERVIOUS AREA

LOCATION	EXISTING (SF)	PROPOSED (SF)
DRIVEWAY	66	106
HOUSE / GARAGE	1211.5	1490
COVERED PORCHES	32	7.75
WALKWAYS & PATIOS	177	(Pervious 328 X 50%) 276.25
TOTAL	1486.5	1767.75 (+281.25 SF)

PROJECT DESCRIPTION

The project consists of remodeling, alterations and additions to an existing one-story 751.5 SF 2 bedroom / 1 bathroom, single family residence with an existing detached 460 SF garage with bathroom and utility room.

Lower floor additions consist of a new entry, kitchen and dining room of approximately 387.5 SF. Upper floor additions consist of a new bedroom, bathroom & walk-in closet of approximately 378.5 SF.

The completed two-story main residence would consist of 2 bedrooms, 3 bathrooms, entry, living, dining, and utility room of approximately 1525.5 SF with an attached garage of approximately 343 SF.

The project also consists of recognizing the existing 419 SF studio ADU above the garage.

EXHIBIT D

ADD INFO 9.8.22 MSH

Michael Helm, AIA Architect & Associates
200 Seventh Avenue, #110 Santa Cruz, California 95062 (831) 476-5386

REMODEL / ADDITION PLANS FOR:
VECCHIET RESIDENCE
APN 027-103-19
380 – 7th AVENUE - SANTA CRUZ, CALIFORNIA

SITE PLAN

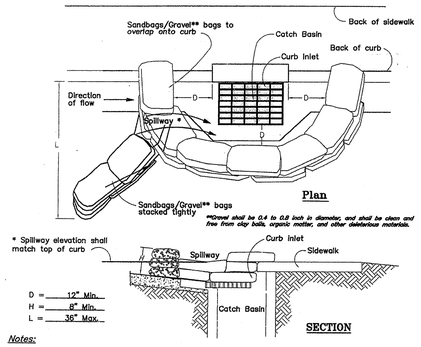
5.3.22

1/4"=1'-0"

MSH

2204

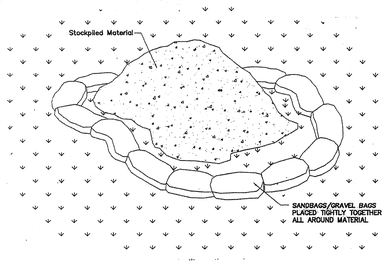
3



Notes:

1. *Catch Basin/Inlet protection shall be installed wherever there is a potential of stormwater or non-stormwater being discharged into it.*
2. *Inlet protection is required along with other pollution prevention measures such as; erosion control, soil stabilization, and measures to prevent tracking onto paved surfaces.*
3. *Modify inlet protection as needed to avoid creating traffic hazards.*
4. *Include inlet protection measures at hillside v-ditches and misc. drainage swales.*
5. *Inlet protection shall be inspected and accumulated sediments removed. Sediment shall be disposed of properly and in a manner that assures that the sediment does not enter the storm drain system*
6. *Damaged bags shall be replaced immediately.*
7. *Additional sandbag sediment traps shall be placed at intervals as indicated on site plan.*

(A) CATCH BASIN/INLET PROTECTION



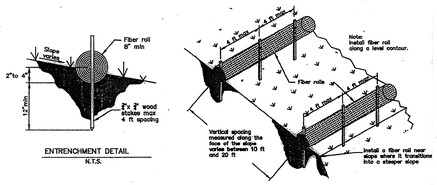
Notes:

Stockpile management procedures and practices are designed to reduce or eliminate air and storm water pollution from stockpiles of soil, and paving materials such as portland cement concrete (PCC) rubble, asphalt concrete (AC), asphalt concrete rubble, aggregate base, aggregate subbase or pre-mixed aggregate, asphalt binder (i.e. cold mix) and pressure treated wood.

Notes:

1. *Protection of stockpiles is a year-round requirement.*
2. *Locate stockpiles a minimum of 50 feet away from concentrated flows of storm water, drainage courses, and drain inlets.*
3. *Implement wind erosion/transport control practices as appropriate.*
4. *All stockpiles shall be covered, stabilized, or protected with a temporary linear barrier (i.e. sandbags, etc.) prior to the onset of precipitation.*

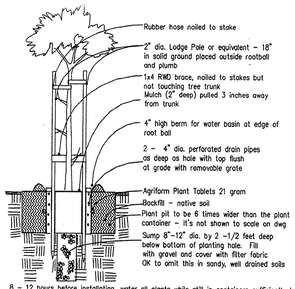
(E) MATERIAL STORAGE



Notes:

1. *Place along the toe, top, face, and at grade breaks of exposed and erodible slopes.*
2. *Place on the down-slope of exposed soil areas.*
3. *Place around temporary stockpiles.*
4. *Place along the perimeter of a project.*
5. *Slopes greater than 1:5 may require the use of 20 inch diameter fiber rolls at the top of slopes.*
6. *Fiber rolls shall be either prefabricated or rolled tubes of erosion control blankets with a minimum 8 inch diameter.*
7. *Slopes 1:4 to flatter require fiber rolls to be placed no more than 20 feet apart.*
8. *Slopes 1:4 to 1:2 require fiber rolls to be placed no more than 15 feet apart.*
9. *Slopes 1:2 or greater require fiber rolls to be placed no more than 10 feet apart.*
10. *Fiber rolls shall be placed in a 2 to 4 inch deep trench.*
11. *Wooden commercial grade stakes, ¾" X ¾", shall be used to secure the fiber roll to the ground surface. Stakes shall be a minimum length of 24 inches and driven a minimum of 12 inches.*
12. *A single-stake installation requires the stakes to be placed no more than 2 feet apart.*
13. *If more than one fiber roll is placed in a row, the rolls shall be overlapped, not abutted, a minimum of 1 foot.*

(I) FIBER ROLL

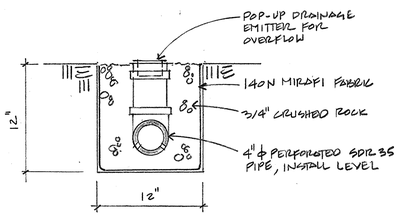


1) 8 - 12 hours before installation, water all plants while still in containers sufficiently to thoroughly wet root balls
2) Dig hole at least 3" deeper than the container and 6 times wider than the diameter of the container the plants were delivered in.
3) Gouge holes in the side of the plant pit - 2 holes per sq. ft. of wall surface
4) Remove rootball carefully from container with support from below. Sever any circling roots (3/16"dia. or greater) with sharp knife. Do not pull roots apart. The severing of large roots will encourage new roots at the cuts. Install enough backfill under root ball so top of rootball ends up 2" above grade of surrounding soil when it settles. Install some of fertilizer packets under root ball.
5) Fill around rootball with backfill mix to 1/2 its height and pack soil as you fill with shovel handle or feet being careful not to disturb root ball
6) Put Agriform Plant Tablet fertilizer at this level adjacent to rootball and at bottom of hole (5 tablets per 15 gal. or 5 tablets per 1 inch of caliper width. Fill the remainder of the hole with backfill and pack it.
7) Water tree thoroughly by filling the basin and allowing the water to percolate in, doing this 3 times or more until root ball and backfill is wet
8) Install stakes such that the stakes and the tree ties won't damage the tree and the stakes won't lean toward each other. Cut off tops of stakes if necessary to lower below branches that could be rubbed by stakes. Install stakes so they are straight up and don't lean in to each other

(3) Tree Planting

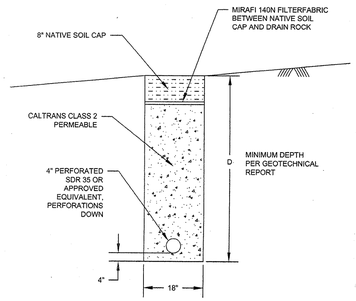
No Scale

Best backfill for palms is 100% washed plaster sand.



(2) LEVEL SPREADER

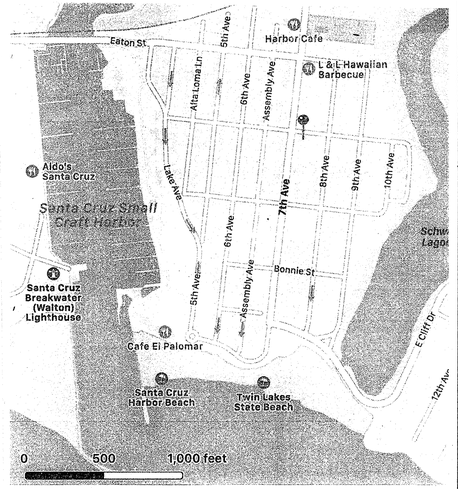
1½"=1'-0"



NOTES:

1. DRAWING IS NOT TO SCALE
2. 2± PERCENT TO PIPE AND TRENCH BOTTOM
3. PERFORATED SDR 35 PVC PIPE, OR APPROVED EQUIVALENT, CONNECTED TO CLOSED CONDUITS THAT DISCHARGE TO AN APPROVED LOCATION
4. INSTALL CLEAN OUTS AT APPROVED LOCATIONS

(1) PERIMETER SUBDRAIN



VICINITY MAP

NTS

PROJECT DATA

OWNER	ALEX VECCHIET 380 – 7TH AVENUE SANTA CRUZ, CA 95062 831-818-2004
APN	027-103-19
ZONING	R-1-3.5
OCCUPANCY CL.	R-3 / U
CONST. TYPE	V-B
FIRE RATING	SPRINKLERED
SRA	LRA
LOT AREA	3,000 SF

Construction Materials

- All loose stockpiled construction materials that are not actively being used (i.e. spoils, aggregate, fly-ash, stucco, hydrated lime, etc.) shall be covered and bermed.
- All chemicals shall be stored in watertight containers (with appropriate secondary containment to prevent any spillage or leakage) or in a storage shed (completely enclosed).
- Exposure of construction materials to precipitation shall be minimized. This does not include materials and equipment that are designed to be outdoors and exposed to environmental conditions (i.e. poles, equipment pads, cabinets, conductors, insulators, bricks, etc.).
- Best Management Practices to prevent the off-site tracking of loose construction and landscape materials shall be implemented.

Waste Management

- Disposal of any rinse or wash waters or materials on impervious or pervious site surfaces or into the storm drain system shall be prevented.
- Sanitation facilities shall be contained (e.g., portable toilets) to prevent discharges of pollutants to the storm water drainage system or receiving water, and shall be located a minimum of 20 feet away from an inlet, street or driveway, stream, riparian area or other drainage facility.
- Sanitation facilities shall be inspected regularly for leaks and spills and cleaned or replaced as necessary.
- Cover waste disposal containers at the end of every business day and during a rain event.
- Discharges from waste disposal containers to the storm water drainage system or receiving water shall be prevented.
- Stockpiled waste material shall be contained and securely protected from wind and rain at all times unless actively being used.
- Procedures that effectively address hazardous and non-hazardous spills shall be implemented.
- Equipment and materials for cleanup of spills shall be available on site and that spills and leaks shall be cleaned up immediately and disposed of properly; and
- Concrete washout areas and other washout areas that may contain additional pollutants shall be contained so there is no discharge into the underlying soil and onto the surrounding areas.

Vehicle Storage and Maintenance

- Measures shall be taken to prevent oil, grease, or fuel to leak in to the ground, storm drains or surface waters.
- All equipment or vehicles, which are to be fueled, maintained and stored onsite shall be in a designated area fitted with appropriate BMPs.
- Leaks shall be immediately cleaned and leaked materials shall be disposed of properly.

Landscape Materials

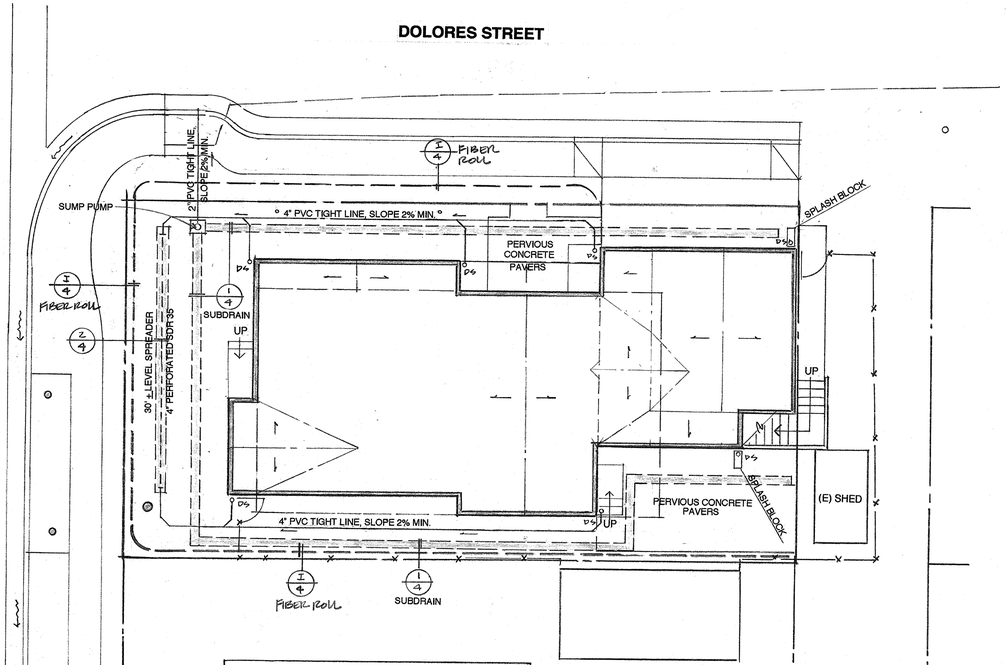
- Contain stockpiled materials such as mulches and topsoil when they are not actively being used.
- Contain fertilizers and other landscape materials when they are not actively being used.

EROSION CONTROL NOTES

1. Erosion control planting or permanent landscaping shall be completed by October 15.
2. Permanent landscape areas require auto-irrigation.
3. Hydro-mulching is the best effective seeding method for large areas. Best time for planting is September-October, unless there is a sprinkler system.
4. Broadcast is approved for small areas. In this case apply fertilizer before seeding, after seeding apply straw or hay mulch.
5. Apply erosion control material on all drainage swales, cuts and fill, also any location where any existing vegetation has been removed.
6. If mulching, seeding, or fertilizing manually, mulch with straw or hay at 4000 lbs/acre. Fertilize with Ammonium Phosphate with Sulphur (16-20-0) at 350 lbs/acre. If Hydro-mulching, use wood fiber mulch at 2000 lbs/acre.

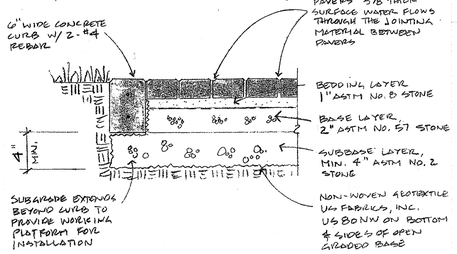
GRASS/LEGUME SEED MIX FOR EROSION CONTROL

Seed Mix	Rate of Application
Blando Brome	15 lbs/acre
Rose Clover	12 lbs/acre
Zorro Annual Feecue	5 lbs/acre
Creeping Red Feecue	5 lbs/acre
Apply seed mix as rate of	35 lbs/acre or 8 lbs/ 10,000 Sq. Ft. or 3/ lbs/ 1000 Sq. Ft.
Fertilizer (16-20-0)	350 lbs/acre or 8 lbs/1000 Sq. Ft.



STORMWATER POLLUTION PREVENTION PLAN

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



(4) PERMEABLE INTERLOCKING CONCRETE PAVERS

STORMWATER MAINTENANCE AGREEMENT NOTES

OWNER CONSENTS AND AGREES TO INSPECT AND MAINTAIN ANNUALLY 'PRIOR TO THE RAINY SEASON' THE ON-SITE DRAINAGE SYSTEMS AND STORMWATER MANAGEMENT FACILITIES ON THE SUBJECT PROPERTY.

MAINTENANCE SCHEDULE FOR ON-SITE DRAINAGE SYSTEMS AND STORMWATER MANAGEMENT FACILITIES

1 ROOF GUTTERS AND DOWNSPOUTS – SHALL BE CLEANED AS REQUIRED PRIOR TO RAINY SEASON ANNUALLY.

2 PERCOLATION TRENCHES – INSPECT VIA CLEAN-OUTS / INSPECTION PORTS, DRAIN PIPES AND OVERFLOW RISERS PRIOR TO THE RAINY SEASON ANNUALLY TO ASSURE DRAINAGE PERCOLATION SYSTEMS FUNCTIONS PROPERLY

THERE ARE NO EXISTING STORMWATER (DRAINAGE) ISSUES ON OR NEAR THE SITE AND THERE ARE NO STORMWATER (DRAINAGE) ISSUES ANTICIPATED RESULTING FROM THE PROPOSED IMPROVEMENTS

IMPERVIOUS AREA

LOCATION	EXISTING (SF)	PROPOSED (SF)
DRIVEWAY	66	106
HOUSE / GARAGE	1211.5	1490
COVERED PORCHES	32	7.75
WALKWAYS & PATIOS	177	(Pervious 328 X 50%) 276.25
TOTAL	1486.5	1767.75 (+281.25 SF)

ADD INFO	
9.8.22	MSH

Michael Helm, AIA Architect & Associates
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REMODEL / ADDITION PLANS FOR:
VECCHIET RESIDENCE
APN 027-103-19
380 – 7th AVENUE - SANTA CRUZ, CALIFORNIA

STORMWATER POLLUTION PREVENTION

5.3.22
1/8"=1'-0"
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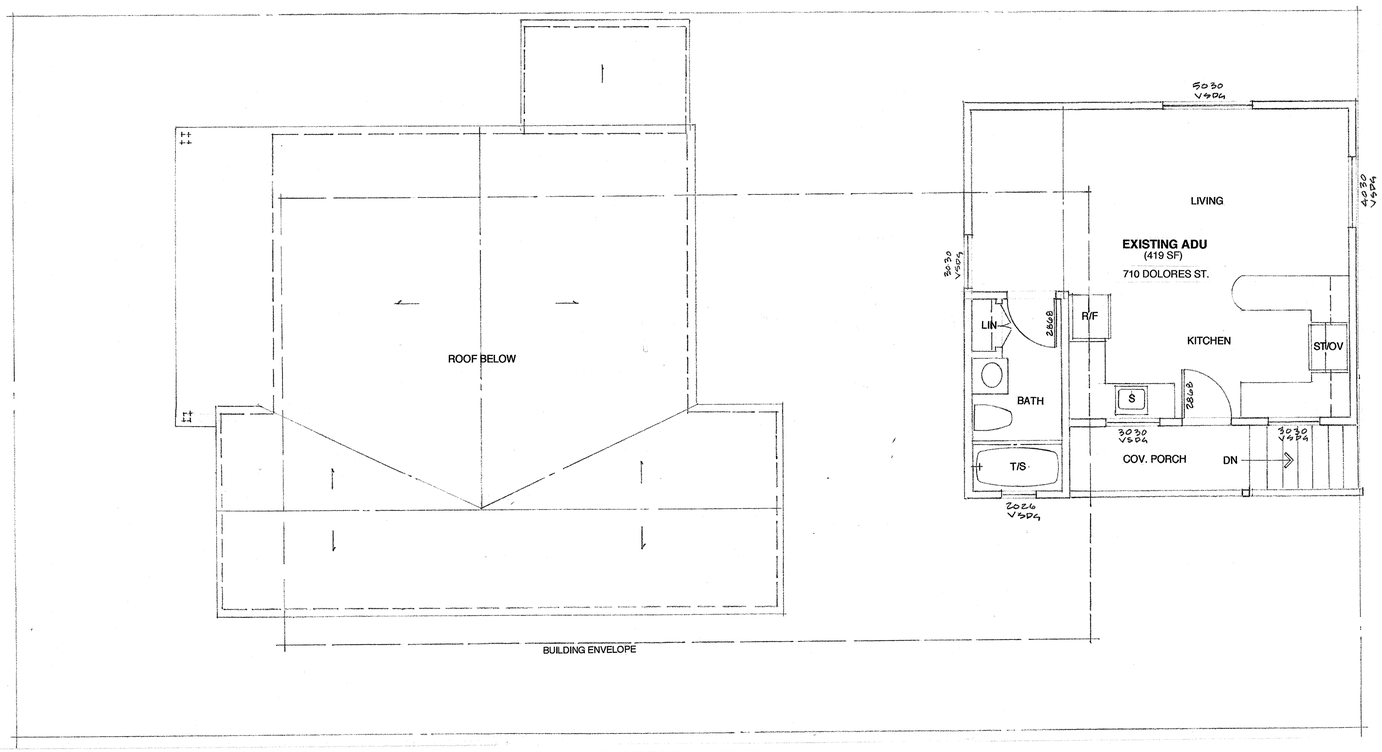
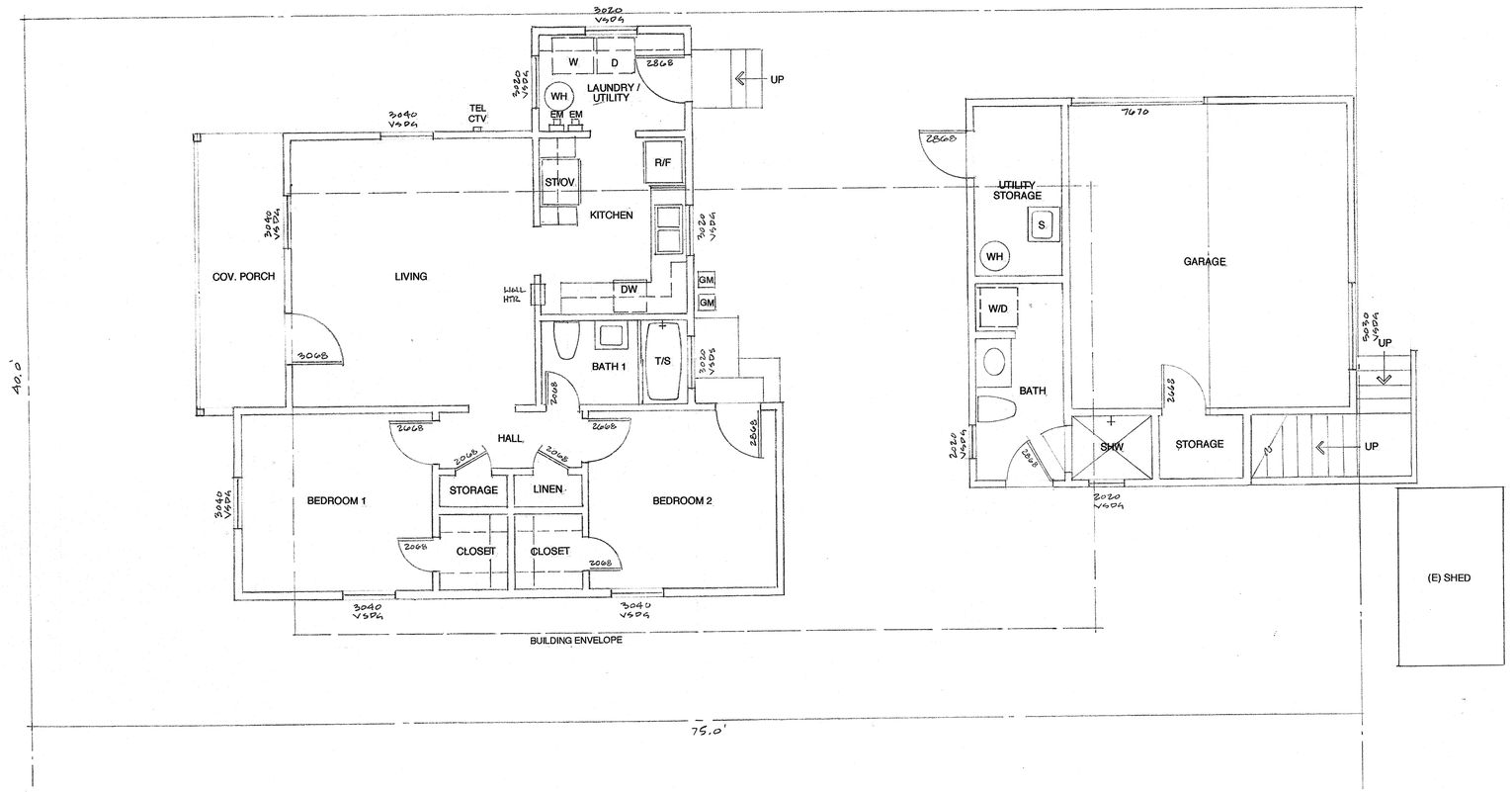
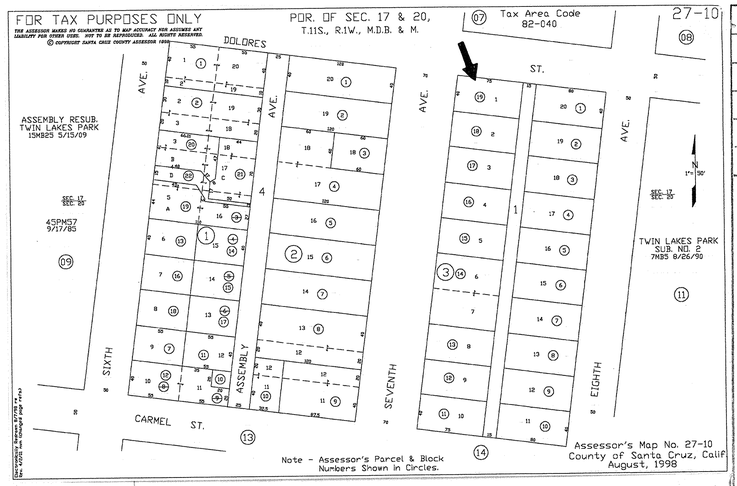
EXHIBIT D



EXISTING - UPPER FLOOR PLAN
SCALE: 1/4" = 1'- 0"



EXISTING - LOWER FLOOR PLAN
SCALE: 1/4" = 1'- 0"



PARCEL MAP

Santa Cruz County Assessor's Office

Parcel Info		
APN	**Situs Address**	**Class**
02710319	380 7TH AVE, SANTA CRUZ , 95062-4609	031-TWO SFRS/1 APN

Site Information

Parcel #	02710319	**General Plan**	R-UH URBAN HIGH RESIDENTIAL	**Zone**	R-1-3.5
View	NO VIEW	**Parcel Size (sqr-ft)**	3,049	**Water**	PUBLIC WATER
Topography	LEVEL	**Parcel Size (acres)**	0.0700	**Sanitation**	PUBLIC SEWER
Other Buildings	N/A				

Building 1

Year Built	1933	**Main Area**	740	**Deck**	0
Effective Year	1933	**Room Count**	5	**Porch**	0
# of Units	1	**Bedrooms**	2	**Pool**	N
Condition	N/A	**Bathrooms (F/H)**	1 / 0	**spa**	N
Concrete	0	**Roof**	N/A	**Garage**	0
Fireplaces	0	**Heat**	N/A	**Carport**	0

Building 2

Year Built	1937	**Main Area**	420	**Deck**	0
Effective Year	1937	**Room Count**	0	**Porch**	0
# of Units	1	**Bedrooms**	0	**Pool**	N
Condition	N/A	**Bathrooms (F/H)**	0 / 0	**spa**	N
Concrete	0	**Roof**	N/A	**Garage**	0
Fireplaces	0	**Heat**	N/A	**Carport**	0

Santa Cruz County Assessor's Office

Parcel Info		
APN	**Situs Address**	**Class**
02710319	380 7TH AVE, SANTA CRUZ , 95062-4609	031-TWO SFRS/1 APN

Parcel Addresses	
Situs	**Mailing**
380 7TH AVE, SANTA CRUZ , 95062-4609 **(Primary)**	710 DOLORES ST, SANTA CRUZ CA, 95062
710 DOLORES ST, SANTA CRUZ , 95062-4609	710 DOLORES ST, SANTA CRUZ CA, 95062

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REMODEL / ADDITION PLANS FOR:
VECCHIET RESIDENCE
APN 027-103-19
380 – 7th AVENUE - SANTA CRUZ, CALIFORNIA

EXISTING – FLOOR PLANS

5.3.22

1/4"=1'-0"

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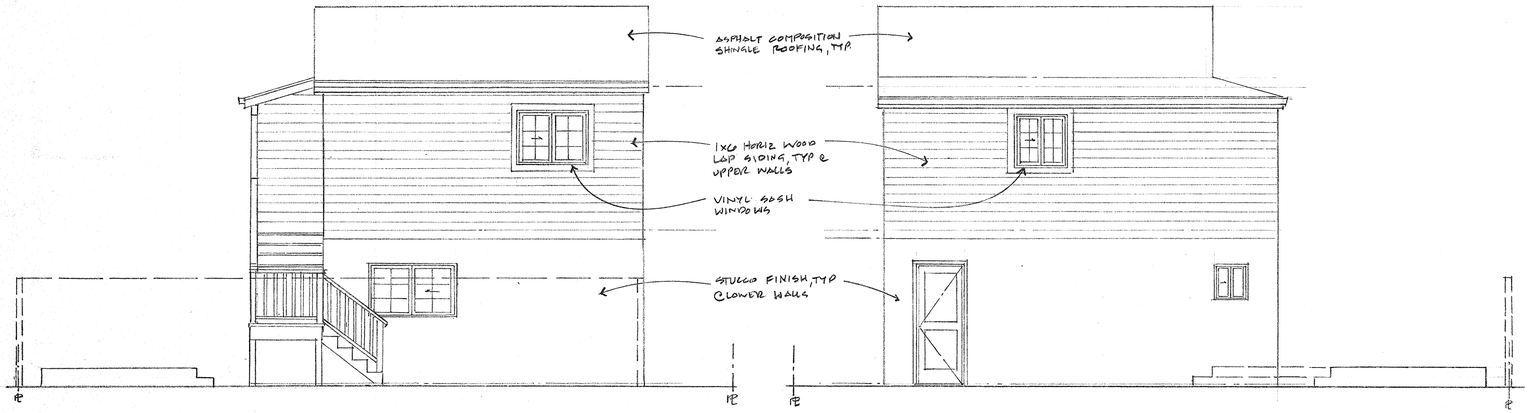
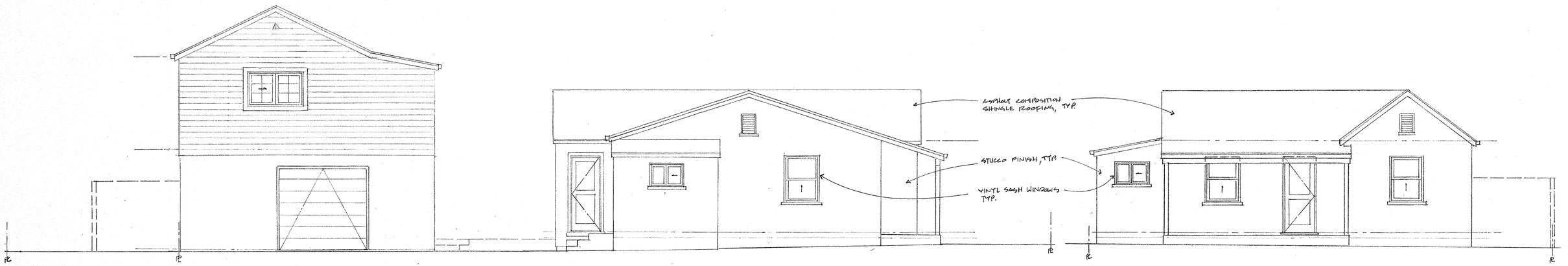
EXHIBIT D



EXISTING - EAST ELEVATION
SCALE: 1/4" = 1'- 0"

EXISTING - WEST ELEVATION
SCALE: 1/4" = 1'- 0"



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

EXISTING - WEST ELEVATION
SCALE: 1/4" = 1'- 0"

EXISTING - SOUTH ELEVATION
SCALE: 1/4" = 1'- 0"

EXISTING - EAST ELEVATION
SCALE: 1/4" = 1'- 0"

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REMODEL / ADDITION PLANS FOR:
VECCHIET RESIDENCE
APN 027-103-19
380 – 7th AVENUE - SANTA CRUZ, CALIFORNIA

EXISTING - EXTERIOR ELEVATIONS

5.3.22
1/4"=1'.0"
MSH
2204

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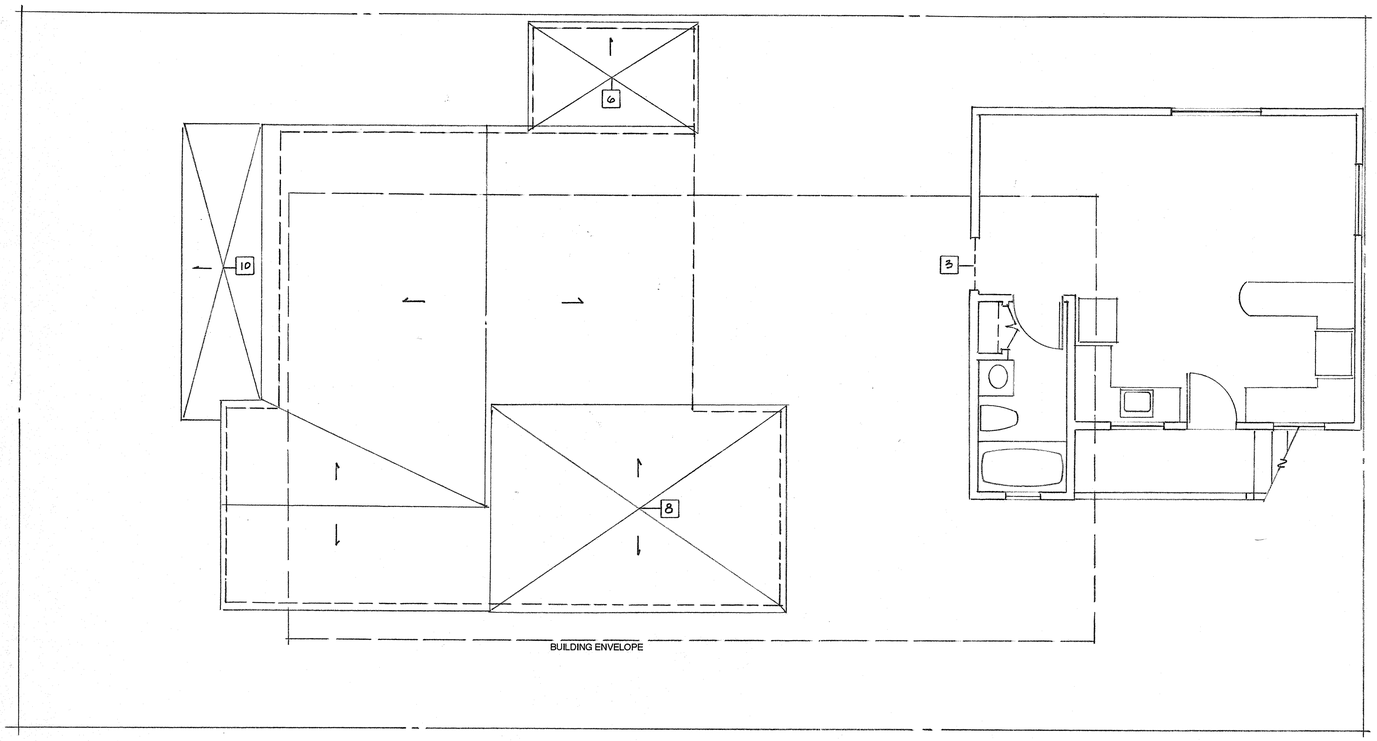
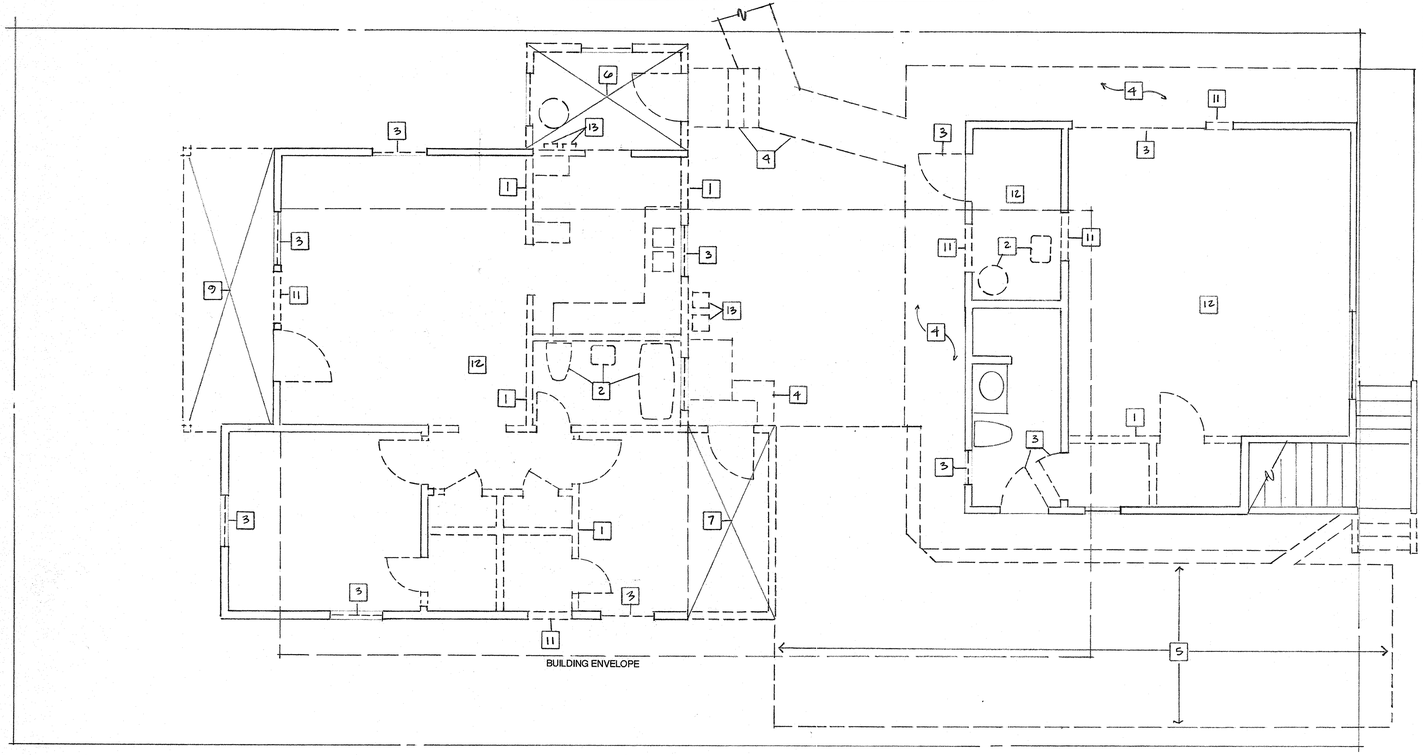
EXHIBIT D



UPPER FLOOR – DEMOLITION PLAN
SCALE: 1/4" = 1' - 0"



LOWER FLOOR – DEMOLITION PLAN
SCALE: 1/4" = 1' - 0"

Modification Worksheet

To be used in association with evaluating the extent of proposed modifications of the major structural components of a nonconforming structure or structure accomodating a nonconforming use, and for a determination whether a structure may be considered development per the Geologic Hazards Ordinance and thus may be required to prepare a geologic report or geologic assessment.

How to use this calculator:

For each building component (roof, exterior walls, floor framing or foundation), you may enter either an estimated percentage to be modified or you can enter the actual measurements and use the calculator to obtain the percent modification of that component. Enter values only in the green fields. The result is given in the blue box a the bottom of the spreadsheet.

For spreadsheet guidelines, click the index tab (below page margin at bottom of this page) called "User Guide".

Roof

Enter either	Do not enter words or symbols	
Estimated % of roof to be modified	22.6	
or		
Area of Existing Roof	1289	SF
Total Modified Area of Roof	292	SF
	22.6	

Calculation Tips

Roof Calculation Notes:
Measure as a flat plane, neglecting slope. Do not count deck roofs or eaves. Do count sealed decks that are part of the main roof system. On most one-story structures, the roof area will equal the floor area.

Exterior Walls

Enter either		
Estimated % of exterior walls to be modified	39.3	
or		
Total length of existing exterior walls	215	LF
Total length of modified exterior walls	84.5	LF
	39.3	

Exterior Walls Calculation Notes:
Modified segments wrap around corners and have no minimum separation. Attic walls and most cripple walls do not count. To assist with measuring modified segments in multiples of four feet, use the wall modification calculator.

Floors

Enter either		
Estimated % of floor area to be modified	9	
or		
Total area of existing floors	1211	SF
Total area of modified floors	109	SF
	9	

Floor Calculation Notes:
The modified area of each structural member extends halfway to each adjacent member. For cross pieces and diagonal members, the modified area extends 16 inches on either side. Exclude decks and additions. Do not use FAR guidelines.

Foundations

Enter either		
Estimated % of foundations to be modified	33.0	
or		
Perimeter Foundations		
Total length of existing perimeter foundation	127	LF
Total length of modified perimeter foundation	42	LF
Area of first floor supported by perimeter foundation	751	SF
Slab Foundations		
Total area of existing slab foundation	460	SF
Total area of modified slab foundation	0	SF
Area of first floor supported by slab foundation	460	SF
Pier and Grade Beam Foundation		
Total length of existing pier and grade beam foundation		LF
Total length of modified pier and grade beam foundation		LF
Area of first floor supported by pier and grade beam foundation		SF
	33.0	

Foundation Calculation Notes:
Modification of a perimeter and pier and grade beam foundations are measured as percentage of length;

Modification of a slab is measured as percentage of area.

Where piers are added or reinforced, multiply the number of modified piers by the average spacing. Where one pier or anchor is added, count as a modification of 4'.

Modification of an existing foundation to enable an addition is included, but not a separate addition foundation.

Summary		
Roof Modification (15%)	22.6 X .15	3.39
Exterior Wall Modification (65%)	39.3 X .65	25.5
Floor Framing Modification (10%)	9 X .1	.9
Foundation Modification (10%)	33 X .1	3.3
		33.09

For Planning Staff Only

If structural modifications exceed the level of modification indicated below, a discretionary application is required.

☐ 65% ☐ Other*
☐ 50% ☐ No Maximum*
*Explain: _____

APN: 027-103-19 Owner Name: ALEX VECCHIET Date: 4.26.22

I certify that this worksheet is accurate. I understand that when the worksheet is evaluated as part of the application review, if the proposed work exceeds the established threshold, additional permits, information, and fees may be required for my project.

Signature — MICHAEL HELM - ARCHITECT (Print Name)

DEMOLITION NOTES

1. EXISTING WALL TO BE DEMOLISHED. REMOVE ALL ELECTRICAL AND PLUMBING BACK TO NEAREST JUNCTION AND CAP. COORDINATE WITH REQUIREMENTS OF NEW CONSTRUCTION.
2. EXISTING PLUMBING FIXTURES AND FINISHES TO BE REMOVED. COORDINATE WITH REQUIREMENTS OF NEW CONSTRUCTION.
3. REMOVE EXISTING WINDOW / DOOR. COORDINATE WITH REQUIREMENTS OF NEW CONSTRUCTION.
4. DEMOLISH EXISTING CONCRETE SLAB, WALKWAY OR STEPS.
5. DEMOLISH EXISTING WOOD DECK.
6. DEMOLISH EXISTING NON-CONFORMING LAUNDRY / UTILITY ROOM WALLS, FLOOR, FOUNDATION AND ROOF (64 SF).
7. DEMOLISH PORTION OF EXISTING BEDROOM 2 WALLS, FLOOR, FOUNDATION & ROOF (55 SF).
8. REMOVE EXISTING ROOF FRAMING (176 SF). COORDINATE WITH REQUIREMENTS OF NEW CONSTRUCTION.
9. DEMOLISH EXISTING NON-CONFORMING PORCH CONCRETE SLAB (78 SF).
10. REMOVE EXISTING PORCH ROOF (62 SF). COORDINATE WITH REQUIREMENTS OF NEW CONSTRUCTION.
11. DEMOLISH EXISTING WALL AS REQUIRED FOR NEW OPENING. COORDINATE WITH REQUIREMENTS OF NEW CONSTRUCTION.
12. EXISTING FLOOR FINISHES TO BE REMOVED. CLEAN SUBFLOOR AND PREPARE FOR NE FINISHES, TYPICAL.
13. REMOVE EXISTING GAS AND ELECTRIC METERS. COORDINATE WITH REQUIREMENTS OF NEW CONSTRUCTION.

Michael Helm, AIA Architect & Associates
200 Seventh Avenue, #110 Santa Cruz, California 95062 (831) 476-5386

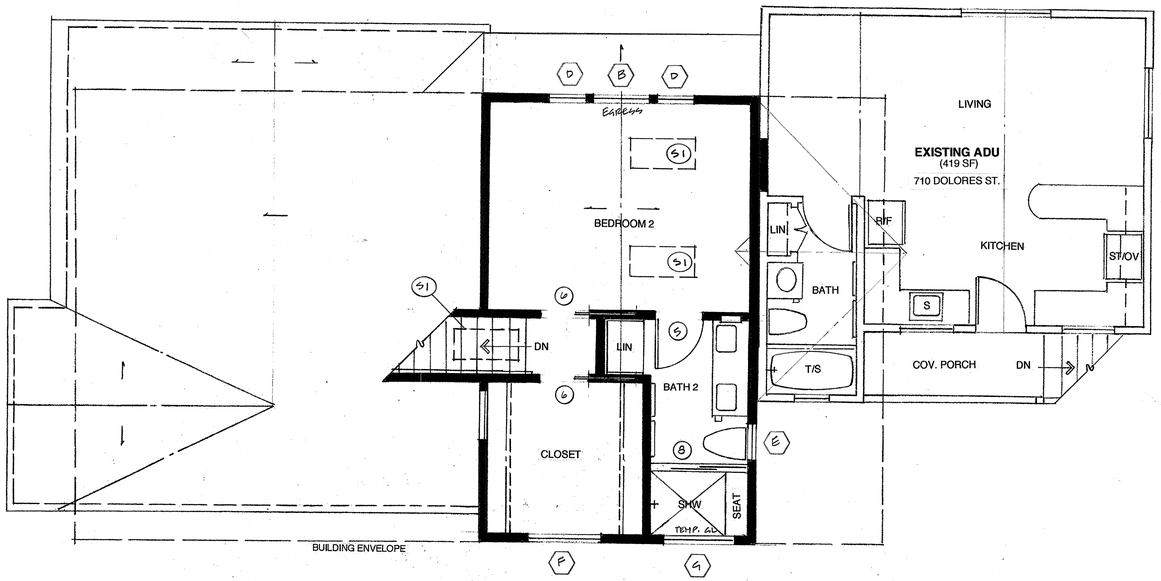
REMODEL / ADDITION PLANS FOR:
VECCHIET RESIDENCE
APN 027-103-19
380 – 7th AVENUE - SANTA CRUZ, CALIFORNIA

DEMOLITION PLAN
MODIFICATION WORKSHEET

5-3-22
1/4" = 1'-0"
MEH
2204

7

EXHIBIT D



PROPOSED - UPPER FLOOR PLAN
SCALE: 1/4" = 1'- 0"

FINISH SCHEDULE

ROOM NAME	FLOOR: HARDWOOD	FLOOR: CERAMIC TILE	FLOOR: VINYL	FLOOR: CARPET	FLOOR: CONCRETE	WALLS: PAINT, TYP.	WALLS: CERAMIC TILE	CEILING: PAINT, TYP.	CEILING: WOOD	BASE: WOOD	BASE: CERAMIC TILE	BASE: VINYL	BASE: NO BASE	NOTES
ENTRY		○				○		○		○				
LIVING	○					○		○		○				
DINING	○					○		○		○				
KITCHEN	○					○		○		○				
BDRM 1	○					○		○		○				
BATH 1		○				○		○			○			
BDRM 2				○		○		○		○				
CLOSET				○		○		○		○				
BATH 3		○				○		○			○			
LAUNDRY		○				○		○			○			
GARAGE					○	○		○					○	
ADU LIVING				○		○		○		○				
ADU BATH				○		○		○			○			

FINISH SCHEDULE NOTES:

1 VERIFY ALL FINISHES WITH OWNER

2 ALL CLOSET FLOORING AND BASEBOARDS SHALL MATCH THE ADJACENT ROOM

3 PROVIDE A SMOOTH, HARD, NON-ABSORBENT SURFACE OVER MOISTURE RESISTANT UNDERLAYMENT TO A HEIGHT OF 72" ABOVE THE DRAIN OUTLET IN ALL SHOWER AND TUB LOCATIONS.

4 UNDERLYING BASE FOR ALL TILE SHALL BE CEMENT, FIBER-CEMENT OR GLASS MAT GYPSUM BACKER BOARDS IN COMPLIANCE WITH ASTM C1178, C1288 OR C1325 AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER RECOMMENDATIONS. IT SHALL BE USED AS A BASE FOR WALL TILE IN TUB AND SHOWER AREAS AND AS CEILING PANELS IN SHOWER AREAS.

DOOR SCHEDULE

SYM	SIZE	TYPE	QUAN.	REMARKS
1	3680	Custom Exterior Entry Door	1	Solid Core, Stain Grade Wood To be Owner approved
2	3068	Ext., Single lite French Door	2	Clad/wood Sash, **Tempered**, Low E Dbl. Insulated glass
3	2868	Ext., Single lite French Door	1	Clad/wood **Tempered**, Low E Dbl. Insulated glass **Obscure rain glass**
4	2868	Interior, Garage Door	1	Paint Grade, Flat Flush, **20 min. labeled, solid core w/ self-closer & Weatherstrip**
5	2868	Interior, MDF 3-panel	6	Paint grade solid core by Sun Mountain, Inc.
6	2868	Interior, MDF 3-panel Pocket Door	2	Paint grade solid core by Sun Mountain, Inc. Use Heavy-Duty Track & Rollers
7	2860	Custom, Shower Door	1	3/8" Clr. 'Frameless' **Tempered** glass with chrome pull & hinges
8	5660	Custom, Bi-pass Shower Door	1	3/8" Clr. 'Frameless' **Tempered** glass with chrome pull
9	9070	Sectional Garage 'Carriage Style'	1	Paint grade w/ frosted glass lites To be Owner approved

SKYLIGHT SCHEDULE

SYM	MFG / SIZE	TYPE	QUAN.	REMARKS
S1	Velux, FSE-C06 21" X 45-3/4"	Deck mounted Electric 'Fresh Air'	5	Dbl. Insulated, tinted, Low-E w/ Laminated glass & blind

WINDOW SCHEDULE

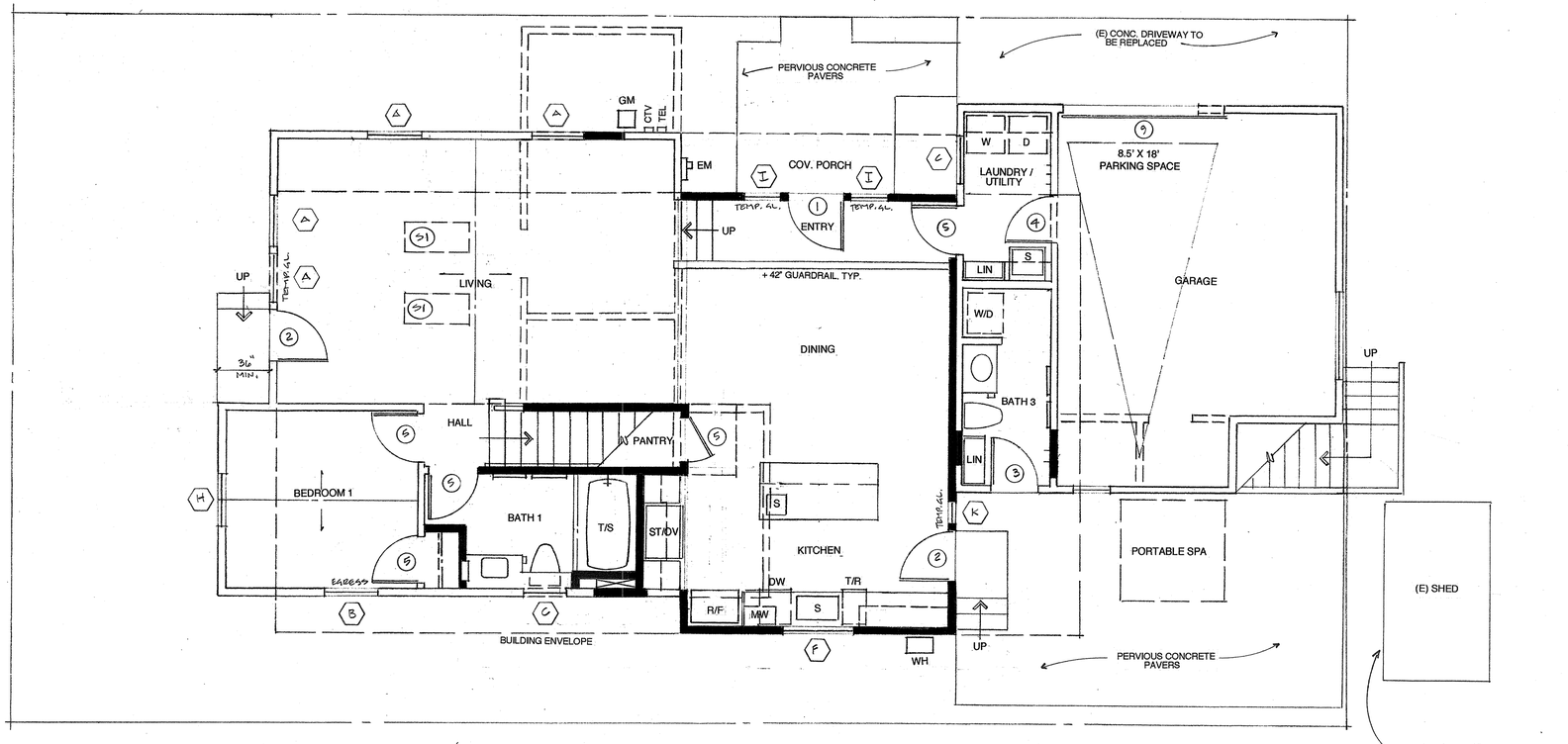
SYM	SIZE	TYPE	QUAN.	REMARKS
A	3046	Casement	4	Clad / wood Sash, Dbl. Insulated Low-E glass
B	3040	Casement	2	Clad / wood Sash, Dbl. Insulated Low-E glass
C	2636	Casement	2	Clad / wood Sash, Dbl. Insulated Low-E glass
D	2040	Casement	2	Clad / wood Sash, Dbl. Insulated Low-E glass
E	2036	Casement	1	Clad / wood Sash, Dbl. Insulated Low-E glass
F	4030	Dbl. Casement	1	Clad / wood Sash, Dbl. Insulated Low-E glass
G	4020	Slider OX	1	Clad / wood Sash, Dbl. Insulated Low-E glass
H	3030	Fixed 4-lite	1	Clad / wood Sash, Dbl. Insulated Low-E glass
I	2066	Dbl. Hung	1	Clad / wood Sash, Dbl. Insulated Low-E glass
K	1050	Fixed	1	Clad / wood Sash, Dbl. Insulated Low-E glass

Jeld – Wen clad/wood windows overall standards comply with ANSI/ AAMA/ NWWDA/ 101/1.S.2.
a. All units are Gold Label Certified with label attached to frame per AAMA requirements, installation per AAMA 2400.
b. All insulated glass units conform to ASTM E2188 / E2190, NFRC certified and labeled.

Note: The NFRC label which states the required U-value and SGHC for all fenestration products shall not be removed prior to inspection or the removal by a building inspector and shall reflect the values listed in the energy report.

CONSTRUCTION SCHEDULE

FOUNDATIONS	(N) 8" wide perimeter concrete stem wall with 8" X 16" Footing CONCRETE SLABS: 5" thick concrete slab w/ #4 bars @ 16" o.c. each way, on 15 mil vapor barrier on 6" crushed rock. CONCRETE MIX: Substitute Portland Cement with recycled flyash, 35% by volume, typical. Keep receipts for Inspector verification. TREATED LUMBER: Substitute ACQ pressure treatment for CCA products, typical. FORM BOARDS: Clean and re-use for scaffolding, forms, blocking, etc... FORM RELEASE AGENT: Use Non-toxic soy based 0-VOC form release agent by BIO-GUARD CO. or Architect approved equal.
FLOORS	2X DF #1 FJ's @ 16" o.c., with ¾" T&G plywood subfloor glued and nailed w/ 10d @ 6" o.c. edges & 10" o.c. field, U.N.O. with R-19 batt insulation.
LOWER WALLS	7/8" Stucco finish over two layers of grade 'D' paper over 1/2" CDX plywood sheathing, nailed 10d @ 6" o.c. edges and 12" o.c. field, U.N.O., on 2X6 studs @ 16" o.c. with R-21 Insulation, 1/2" gypsum board interior finish, typical. Use low/No VOC exterior/interior paints.
UPPER WALLS	5/16" James Hardie fiber cement lap siding over 'TYVEK' house wrap on 1/2" CDX plywood sheathing, nailed 10d @ 6" o.c. edges and 12" o.c. field, U.N.O., on 2X6 studs @ 16" o.c. with R-21 batt insulation, 1/2" gypsum board interior finish, typical. Use low/No VOC exterior/interior paints.
ROOF	Class B (min.) Asphalt Composition Shingle Roofing, install per mfg. specs over Dbl. layer 30 lb. felt over 5/8" CDX plywood sheathing nailed w/ nailed 10d @ 6" o.c. edges and 12" o.c. field, U.N.O., to 2X10 DF #1 rafters @ 24" o.c. with R-30 closed cell polyurethane foam insulation. Use plywood clips at all unsupported edges, 5/8" gypsum board interior finish, typical. Use low/No VOC exterior/interior paints,typical. Underlayment for asphalt shingles shall comply with ASTM D226 Type I; ASTM Type I, II, III or IV; ASTM D6757, and shall bear a label indicating compliance to the standard designation.
GUTTERS & DOWNSPOUTS	16 oz. copper half round gutters with 2" round downspouts. Downspouts are to deposit onto existing landscape areas to be absorbed on-site.
ROOF / WALL FLASHINGS	16 oz. copper where shown or required. Pan flash all ext. door sills with 16 oz. copper solder all joints, typical
WINDOWS & EXT. GLASS DRS.	Jeld - Wen – clad / wood sash with Dbl. insulated Low-E glass, Provide screens at all operable windows.
INSULATION	FLOORS (N) R-19 fiberglass batts EXT. WALLS (N) R-21 fiberglass batts INT. WALLS (N) 3-1/2" fiberglass sound batts ROOFS (N) R-30 closed cell polyurethane foam
ROOF JACKS	Provide neoprene gaskets and 16 oz. copper roof jack / rain cap, typical. All exhaust vents shall be located a min. of 4' from or 1' above all roof or wall openings per CMC. All plumbing vents shall be located a min. of 10' from or 3' above all roof or wall openings per CPC.
WALL PENETRATIONS	Use weatherproof wall jacks by QUICKFLASH or approved equal for plumbing, electrical and mechanical penetrations.
PAINTS, STAINS, ADHESIVES & SEALERS	Use Low / No VOC, water based products and solvent-free adhesives, typical.
HVAC	Install gas-fired furnace with >90% AFUE, provide High Efficiency Filter (Merv6+)
APPLIANCES	Provide ENERGY STAR rated, typical, provide cut sheets for inspector verification
PLUMBING	Install Low-flow toilets. Install Low-flow shower heads with chlorine filters.
CABINETS & TRIM	Use formaldehyde-free particle board and MDF by MEDITE or approved equal for all cabinets and trim applications.



Note: For all remodels, insulation meeting the Mandatory Feature Requirements in the California Energy Code shall be installed at ceilings, walls, floors and pipes, when these areas are exposed during remodeling.

PROPOSED - LOWER FLOOR PLAN
SCALE: 1/4" = 1'- 0"

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REMODEL / ADDITION PLANS FOR:
VECCHIET RESIDENCE
APN 027-103-19
380 – 7th AVENUE - SANTA CRUZ, CALIFORNIA

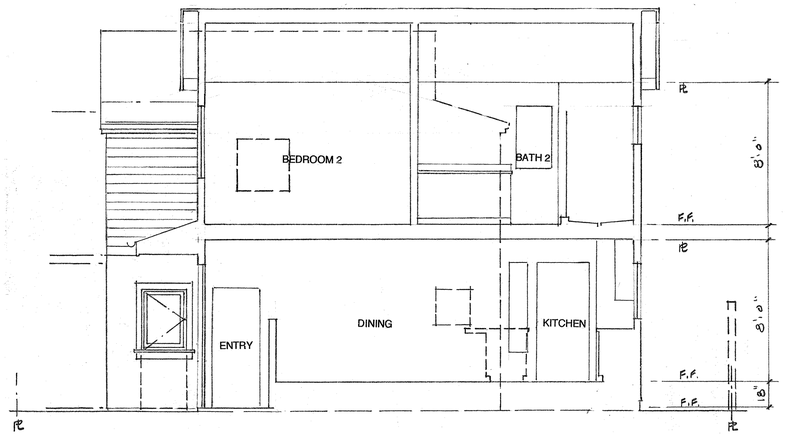
PROPOSED FLOOR PLANS

5-3-22
1/4"=1'-0"
MSH
2204

8

EXHIBIT D

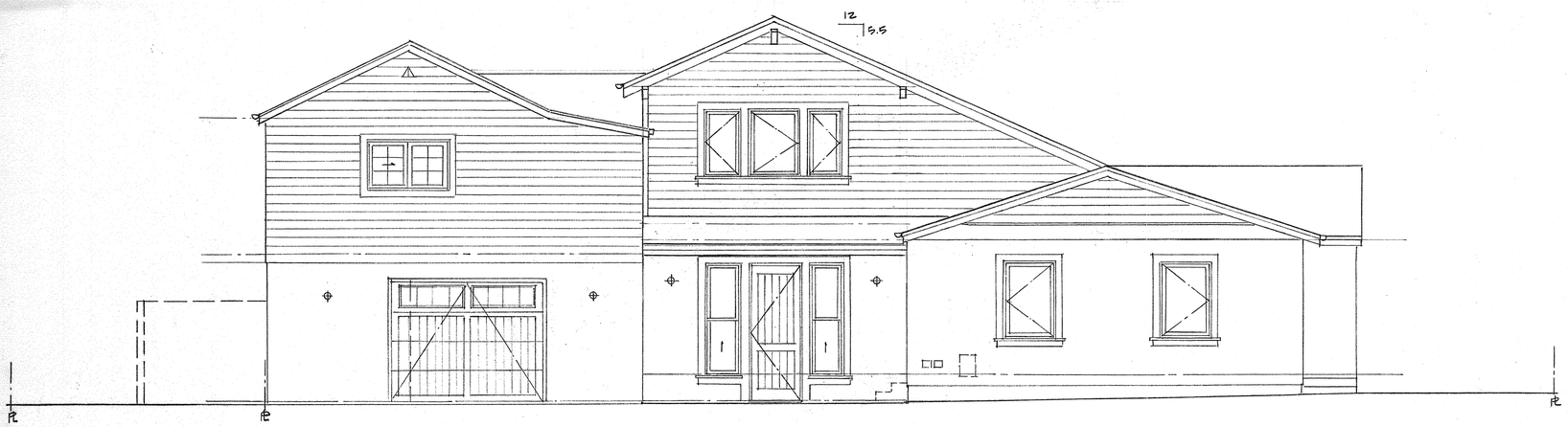
PROPOSED – EAST ELEVATION
SCALE: 1/4" = 1'- 0"



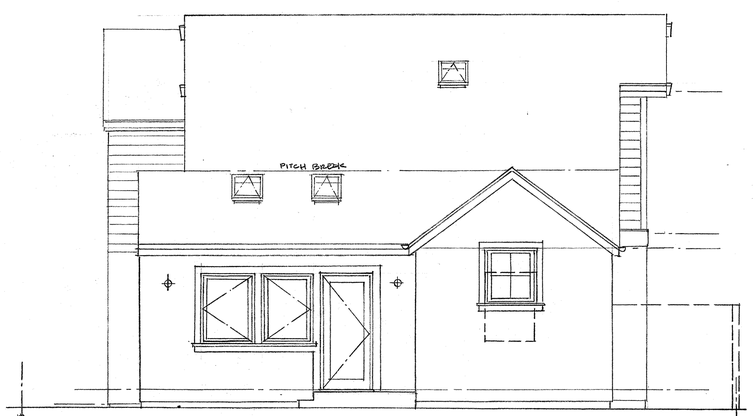
BUILDING SECTION
SCALE: 1/4" = 1'- 0"

CONSTRUCTION SCHEDULE

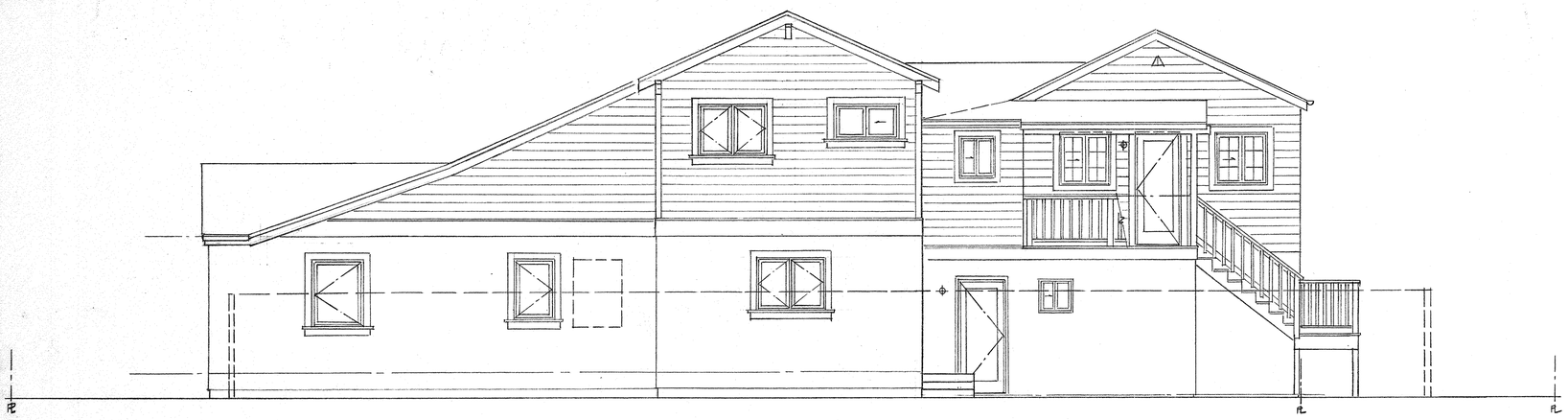
FOUNDATIONS	(N) 8" wide perimeter concrete stem wall with 8" X 16" Footing CONCRETE SLABS: 5" thick concrete slab w/ #4 bars @ 16" o.c. each way, on 15 mil vapor barrier on 6" crushed rock. CONCRETE MIX: Substitute Portland Cement with recycled flyash, 35% by volume, typical. Keep receipts for inspector verification. TREATED LUMBER: Substitute ACQ pressure treatment for CCA products, typical. FORM BOARDS: Clean and re-use for scaffolding, forms, blocking, etc… FORM RELEASE AGENT: Use Non-toxic soy based O-VOC form release agent by BIO-GUARD CO. or Architect approved equal.
FLOORS	2X DF #1 FJ's @ 16" o.c., with ¾" T&G plywood subfloor glued and nailed w/ 10d @ 6" o.c. edges & 10" o.c. field, U.N.O. with R-19 batt insulation.
LOWER WALLS	7/8" Stucco finish over two layers of grade 'D' paper over 1/2" CDX plywood sheathing, nailed 10d @ 6" o.c. edges and 12" o.c. field, U.N.O., on 2X6 studs @ 16" o.c. with R-21 Insulation, 1/2" gypsum board interior finish, typical. Use low/No VOC exterior/interior paints.
UPPER WALLS	5/16" James Hardie fiber cement lap siding over 'TYVEK' house wrap on 1/2" CDX plywood sheathing, nailed 10d @ 6" o.c. edges and 12" o.c. field, U.N.O., on 2X6 studs @ 16" o.c. with R-21 batt insulation, 1/2" gypsum board interior finish, typical. Use low/No VOC exterior/interior paints.
ROOF	Class B (min.) Asphalt Composition Shingle Roofing, install per mfg. specs over Dbl. layer 30 lb. felt over 5/8" CDX plywood sheathing nailed w/ nailed 10d @ 6" o.c. edges and 12" o.c. field, U.N.O., to 2X10 DF #1 rafters @ 24" o.c. with R-30 closed cell polyurethane foam insulation. Use plywood clips at all unsupported edges, 5/8" gypsum board interior finish, typical. Use low/No VOC exterior/interior paints typical. Underlayment for asphalt shingles shall comply with ASTM D226 Type I; ASTM Type I, II, III or IV; ASTM D6757, and shall bear a label indicating compliance to the standard designation.
GUTTERS & DOWNSPOUTS	16 oz. copper half round gutters with 2" round downspouts. Downspouts are to deposit onto existing landscape areas to be absorbed on-site.
ROOF / WALL FLASHINGS	16 oz. copper where shown or required. Pan flash all ext. door sills with 16 oz. copper solder all joints, typical
WINDOWS & EXT. GLASS DRS.	Jeld – Wen – clad / wood sash with Dbl. insulated Low-E glass, Provide screens at all operable windows.
INSULATION	FLOORS (N) R-19 fiberglass batts EXT. WALLS (N) R-21 fiberglass batts INT. WALLS (N) 3-1/2" fiberglass sound batts ROOFS (N) R-30 closed cell polyurethane foam
	Note: For all remodels, insulation meeting the Mandatory Feature Requirements in the California Energy Code shall be installed at ceilings, walls, floors and pipes, when these areas are exposed during remodeling.
ROOF JACKS	Provide neoprene gaskets and 16 oz. copper roof jack / rain cap, typical. All exhaust vents shall be located a min. of 4' from or 1' above all roof or wall openings per CMC. All plumbing vents shall be located a min. of 10' from or 3' above all roof or wall openings per CPC.
WALL PENETRATIONS	Use weatherproof wall jacks by QUICKFLASH or approved equal for plumbing, electrical and mechanical penetrations.
PAINTS, STAINS, ADHESIVES & SEALERS	Use Low / No VOC, water based products and solvent-free adhesives, typical.
HVAC	Install gas-fired furnace with >90% AFUE, provide High Efficiency Filter (Merv9+)
APPLIANCES	Provide ENERGY STAR rated, typical, provide cut sheets for inspector verification
PLUMBING	Install Low-flow toilets. Install Low-flow shower heads with chlorine filters.
CABINETS & TRIM	Use formaldehyde-free particle board and MDF by MEDITE or approved equal for all cabinets and trim applications.



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



PROPOSED – WEST ELEVATION
SCALE: 1/4" = 1'- 0"



PROPOSED – SOUTH ELEVATION
SCALE: 1/4" = 1'- 0"

MATERIALS / COLORS

ROOF:	ASPHALT COMPOSITION SHINGLE ROOFING COLOR: CHARCOAL
GUTTERS:	4" – 16 OZ. COPPER – HALF ROUND
FASCIA, & TRIM	2X FIBER CEMENT COLOR: WHITE
UPPER WALLS:	JAMES HARDIE HORIZONTAL FIBER CEMENT LAP SIDING, PAINTED COLOR: WHITE
LOWER WALLS:	7/8" STUCCO, PAINTED COLOR: LIGHT BEIGE
WINDOWS & DOORS	CLAD/WOOD SASH W/ DBL. INSUL GLASS COLOR: DARK BRONZE

STUCCO NOTE

3 coat, 7/8" Stucco finish over two layers of grade 'D' paper on 'TYVEK' house wrap on 7/16" CDX plywood or OSB sheathing, nailed w/10d @ 6" o.c. edges and 12" o.c. field, U.N.O., on 2 X 6 studs @ 16" o.c. with R-21 high density batt insulation. Provide a minimum 26 gauge galvanized corrosion resistant weep screed with a minimum vertical attachment of 3-1/2" provided at or below the foundation plate line at the exterior walls. The screed shall be placed a minimum of 4 inches above earth or 2 inches above paved areas.

CRAWL SPACE NOTE

PROVIDE 15 MIL VAPOR BARRIER ON THE EXISTING CRAWL SPACE SUB-GRADE. PROVIDE TAPE SEAL ON ALL SEAMS, AROUND ALL PIERS AND UP THE FOUNDATION STEM WALL TO CONTROL MOISTURE FROM MIGRATING UP INTO THE RESIDENCE.

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REMODEL / ADDITION PLANS FOR:
VECCHIET RESIDENCE
APN 027-103-19
380 – 7th AVENUE - SANTA CRUZ, CALIFORNIA

Proposed Exterior Elevations
Building Section
Construction Schedule

5-3-22
1/4"=1'-0"
MSH
2204

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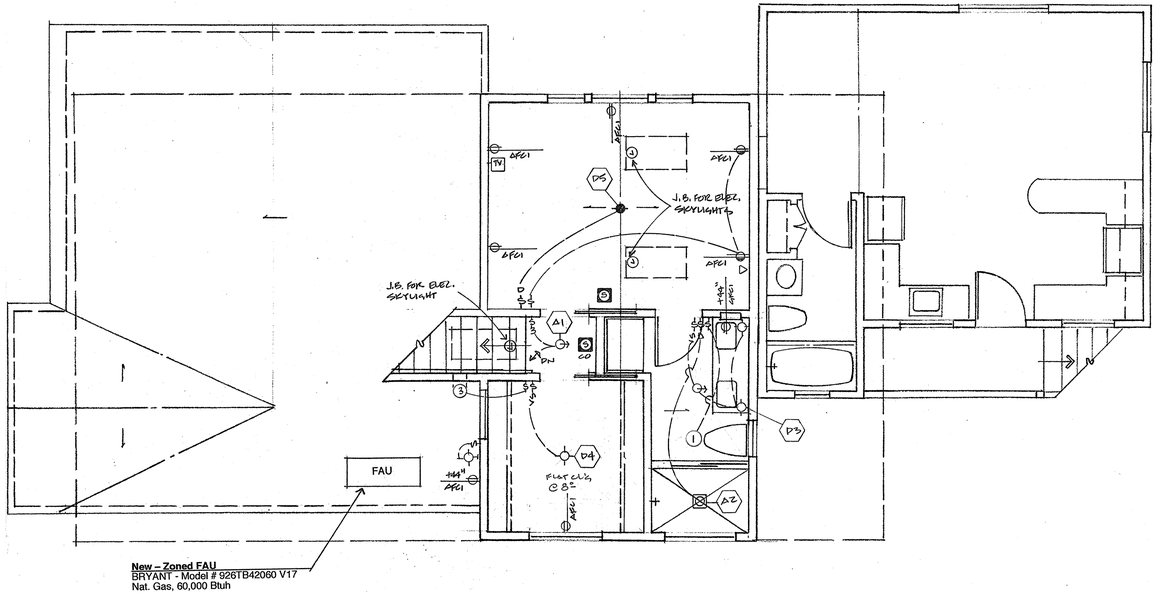
EXHIBIT D

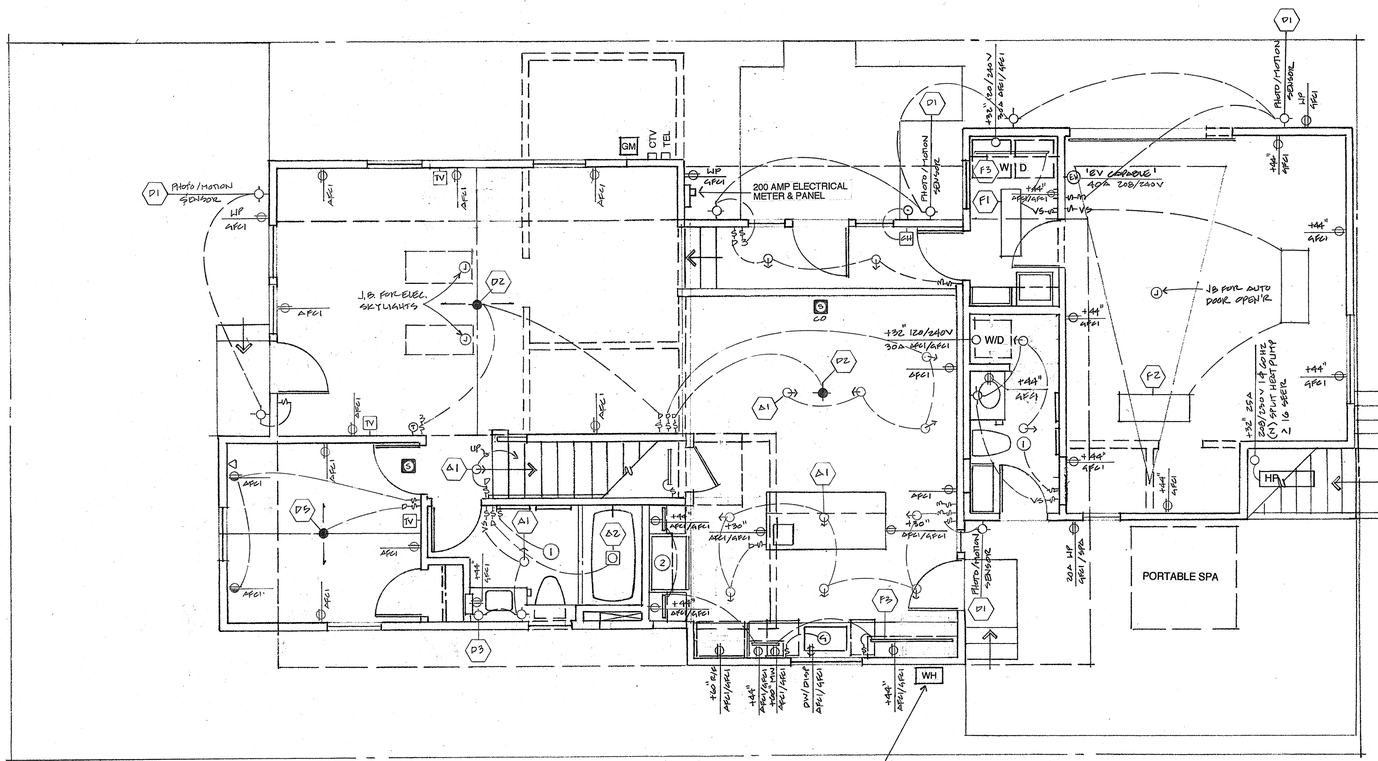
ELECTRICAL SYMBOL LEGEND

- DUPLEX OUTLET, +12" ABOVE FIN. FLR.,TAMPER RESISTANT, TYPICAL
- AFCI — DUPLEX OUTLET W/ ARC FAULT INTERRUPT CIRCUIT
- GFCI — DUPLEX OUTLET W/ GROUND FAULT INTERRUPT CIRCUIT
- AFCI / GFCI — DUPLEX OUTLET W/ GROUND FAULT & ARC FAULT INTERRUPT CIRCUIT
- WP — DUPLEX OUTLET W/ WATERPROOF COVER
- DUPLEX OUTLET W/ ½ SWITCHED
- SPECIAL PURPOSE 220 V. OUTLET
- LIGHT SWITCH, +42" ABOVE FIN. FLR. TYPICAL
- 3 — LIGHT SWITCH, 3 WAY
- D — LIGHT SWITCH W/ DIMMER
- VS — LIGHT SWITCH W/ VACANCY SENSOR
- LIGHT, CEILING SURFACE MOUNTED
- LIGHT, WALL SURFACE MOUNTED
- LIGHT, PENDANT
- LIGHT, RECESSED DOWNLIGHT
- LIGHT, RECESSED WALL WASHER
- LIGHT, RECESSED ADJUSTABLE
- LIGHT, RECESSED STEP
- LIGHT, LINEAR STRIP
- FL — FAN/ LIGHT COMBO
- F — EXHAUST FAN
- G — GARBAGE DISPOSER
- TELEPHONE OUTLET
- TV — TV OUTLET
- DATA OUTLET
- SD — SMOKE DETECTOR
- SCO — COMBO SMOKE/ CO DETECTOR
- T — THERMOSTAT @ +60" ABOVE FIN. FLR.



New – Zoned FAU
BRYANT - Model # 926TB42060 V17
Nat. Gas, 60,000 Btuh

UPPER FLOOR ELECTRICAL SCHEMATIC
SCALE: 1/4" = 1'- 0"



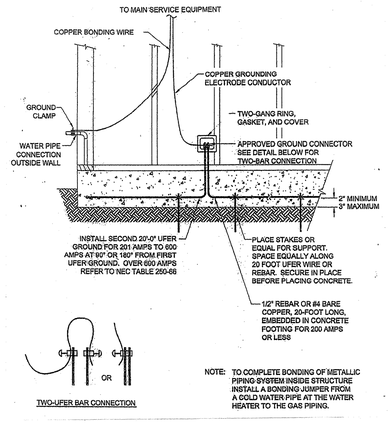
New – Water Heater #1
NAVIEN – Model # 240 A (G)
Nat. Gas, Tankless, On-demand
SN 7414C1682271267

LOWER FLOOR ELECTRICAL SCHEMATIC
SCALE: 1/4" = 1'- 0"

PORTABLE SPA NOTES

1. Installation shall conform all electrical requirements of CEC Article 680 Pools & Spas.
2. The disconnecting means for the power to the spa (100A sub-panel) shall not be less than 5 feet from the water's edge of the spa per CEC 680.12.
3. An emergency switch for spa pools shall be clearly labeled for control of both the recirculation system and aeration and/or jet system shall be installed adjacent to the spa pool per CEC 680.14 and 680.41.
4. The power for the spa whether plug-cord or direct connected 120V through 240V shall be provided with GFCI protection per CEC 680.21(c) and 680.42.
5. Not less than one 120V/15-20A receptacle outlet with GFCI protection shall be provided adjacent to the spa not closer than 6 feet nor further than 20 feet from the spa per CEC 680.22 (A)(1) & (4).

GROUNDING ELECTRODE (UFER)



NOTE: TO COMPLETE BONDING OF METALLIC PIPING SYSTEM INSIDE STRUCTURE INSTALL A BONDING JUMPER FROM A COLD WATER PIPE AT THE WATER HEATER TO THE GAS PIPING.

1 UFER GROUNDING DETAIL

VENTILATION NOTES

1. All **bathroom fans** are to be used for **Local Ventilation Exhaust**. Minimum 50 CFM fan tested at a static pressure of .25 wc and rated @ 3 sones or less required to be installed. Fan must be attached to a minimum 4" duct and no longer than 70' of **flex** duct. Subtract 15' of allowed length for each elbow.
2. All **kitchen range hoods** are to be used for **Local Ventilation Exhaust**. Minimum 100 CFM tested at a static pressure of .25 wc and rated @ 3 sones or less required to be installed. Fan must be attached to a minimum 5" **smooth** duct and no longer than 85'. Subtract 15' of allowed length for each elbow.
3. This fan is to be used for **Whole Building Ventilation**. Minimum 65 CFM fan tested at a static pressure of .25 wc and rated @ 1 sone or less required to be installed. Fan must be attached to a minimum 5" duct and no longer than 70'. Subtract 15' of allowed length for each elbow. Switch for fan must be labeled to indicate the fan's required function such as "Fan is to be left on to ensure indoor air quality".

LIGHTING FIXTURE SCHEDULE

Tag	Description
F1	Surface mounted 1' X 4' wrap around for (2) – F32 T8 lamps with electronic ballast. Manufacturer: Lithonia, Liteputfs 10640 Lamp & Mfg: GE F32 T8 / SPX 35 Ballast: Electronic
F2	Surface mounted 1.5' X 4' wrap around for (4) – F32 T8 lamps with electronic ballast. Manufacturer: Lithonia, Liteputfs 10642 Lamp & Mfg: GE F32 T8 / SPX 35 Ballast: Electronic
F3	Surface mounted under cabinet task LED light. Manufacturer: WAC Lighting, Line, 3000K Lamp & Mfg: 30" LN-LED30-30AL 24" LN-LED24-30-AL 12.25" LN-LED12-30-AL
A1	Recessed adjustable retractable LED downlight. Manufacturer: WAC Lighting, Precision Multiples, 3000K Housing: MT-4LD116N-S-30-BK Trim, MT-4LD116T-WT
A2	Recessed 4" LED shower light with opal lens. Manufacturer: Halo, **To be determined** Lamp & Mfg: 3500K Remarks: Order with bar hangers
D1	Wall mounted LED exterior light fixture. Manufacturer: **To be determined** Lamp & Mfg: Remarks: Provide photo/motion sensor on exterior circuits, Verify location of sensor prior to installation Owner approval required prior to ordering.
D2	Ceiling pendant mounted decorative light fixture. Manufacturer: Johnson Art Studio, Forged Tri-pod 122204 - 22" dia. Crystal sandblasted Disc shade, Black patina Lamp & Mfg: (3) Luminance L7510 LED Lamps Remarks: Owner approval required prior to ordering. Verify overall height prior to ordering
D3	Wall mounted LED decorative bath strip light. Manufacturer: WAC Lighting, Brink, WS-77618-AL Lamp & Mfg: 3000K Remarks: Mount vertically, Owner approval required prior to ordering.
D4	Ceiling mounted decorative light fixture. Manufacturer: Johnson Art Studio, Ceiling Mount Disc shade 081805 - 18" dia. Crystal sandblasted Disc shade, Black patina Lamp & Mfg: (3) Luminance L7510 LED Lamps Remarks: Owner approval required prior to ordering
D5	Ceiling pendant mounted decorative light fixture. Manufacturer: Johnson Art Studio, Forged Tri-pod 121804 - 18" dia. Crystal sandblasted Disc shade, Black patina Lamp & Mfg: (3) Luminance L7510 LED Lamps Remarks: Owner approval required prior to ordering. Verify overall height prior to ordering

Provide a listed raceway to accommodate a dedicated 208/240-volt branch circuit for electric vehicle charging not less than 1" nominal inside diameter. The raceway shall originate at the main service or subpanel and shall terminate in a listed cabinet, box or enclosure in close proximity to the proposed location of the EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The raceway termination location shall be permanently and visibly marked as "EV CAPABLE". The service panel and/or subpanel shall provide capacity to install a 40-amp, minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device. The service panel or subpanel shall identify the overcurrent protective device space(s) reserved for future EV charging as "EV CAPABLE". The charging circuit must be rated for continuous duty at 125% of load. All Electrical Vehicle Supply Equipment (EVSE) shall be installed in accordance with the California Electrical Code.

ELECTRICAL NOTES

General

1. All Electrical work to comply with the latest adopted edition of the California Electrical Code.
2. Electrical contractor to submit load calculations and panel diagrams to the Building Department prior to beginning work.
3. Do not install electrical panels larger than 16 square inches in rated fire walls. Maintain a clearance of 36" in front of the panels.
4. Bond all metal gas and water pipes to ground. All ground clamps must be accessible and of an approved type. (CEC 250.104)
5. All joints and penetrations to be caulked and sealed.

Circuits

1. Central heating equipment shall be supplied by an individual branch circuit. Verify electrical requirements for all mechanical equipment.
2. All exterior, garage, kitchen and bathroom circuits shall be on GFCI circuits. Combination AFCI/GFCI outlets are required at kitchen and laundry areas.
3. All 120-volt 15 & 20 amp branch circuits in dwelling units except those in kitchens, bathrooms, unfinished basements, garages and outdoors shall have AFCI protection. (CEC 210.12)
4. One 20A circuit shall be provided to supply the bathroom receptacle outlets. Such circuit shall have no other outlets CEC 210.11(C).
5. Provide two small appliance branch circuits for Kitchen refrigerator and counter outlets only, not to include outside plugs, range hood, disposal, dishwasher or microwave.
6. Provide a dedicated 20 amp circuit to serve the required bathroom outlets. This circuit cannot serve any other receptacles, lights, fans, etc... Exception: where the circuit supplies a single bathroom, outlets for other equipment within the bathroom shall be permitted.
7. Provide a dedicated 20 amp circuit to supply laundry receptacle outlets. Dryer and cooking units shall have a four-prong outlet with four conductor wires with an insulated neutral.

Switches

1. Wall switches to be 42" @ centerline above finish floor. All outlets to be 12" @ centerline above finish floor, unless noted otherwise.
2. Dimmers or vacancy sensors shall control all luminaires required to have light source compliant with Reference Joint Appendix JA8 per Table 150.0-A Exceptions are provided for closets smaller than 70 sq. ft. floor area and light fixtures in hallways per CA Energy 150.0(k)3. At least one luminaire in bathrooms, garages, laundry rooms, and utility rooms shall be controlled by a vacancy sensor. (CEnC 150.0(k)2J)
3. Exterior lighting attached to any building shall be high efficacy, controlled by a manual ON and OFF switch that does not override to ON, and controlled by a motion sensor with photo-control, or other methods allowed by CEnC 150.0(k)3

Receptacles

1. Receptacles on 125-volt 15 & 20 amp circuits shall be listed tamper resistant. (CEC 406.12) Except when located more than 5.5' above the floor; within cabinets or cupboards; or when part of a luminaire or appliance.
2. Receptacles must be installed at 12' o.c. maximum in walls. Walls longer than 2 feet and halls longer than 10' must have a receptacle. A receptacle must be provided within 3' of bathroom sinks. (CEC 210.52). Spacing of kitchen and dining room countertop receptacles shall meet minimum requirements of CEC 210.52(C), Parts 1-5.
3. Ground-Fault Circuit-Interrupter (GFCI) protected receptacles shall be installed in bathrooms, garages, outdoors, crawl spaces, kitchen, unfinished basements, and receptacles within 6 ft. of the outside edge of laundry, utility, and wet sinks. All dwellings must have at least one exterior outlet at the front and the back of the dwelling. (CEC 210.52(E)
4. GFCI outlets are required for all kitchen receptacles that are designed to serve countertop surfaces, in bathroom, in under-floor spaces or below grade level, in exterior outlets, and in all garage outlets not dedicated to a single device or appliance. (CEC 210.8)
5. Arc-Fault Circuit-Interrupter (AFCI) protected receptacles shall be installed in all rooms not requiring GFCI protection. The maximum length of the branch circuit to the AFCI is 50 feet for 14 AWG conductors or 70 feet for a 12 AWG conductor. Arc-fault circuit interrupter protection must be provided in accordance with CEC 210.12(A), (B) and (C). AFCI devices shall be installed in readily accessible locations. (A) Where Required. All 15A or 20A, 120V branch circuits in dwelling units supplying outlets or devices in kitchens, family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, laundry areas, or similar rooms or areas. Cabinetry or being dedicated to appliances does not exempt requirement.
6. Exterior Outlets @ Grade: At least one readily accessible outlet from grade and not more than 6-1/2 feet above grade level shall be installed at the front and back of dwelling, be GFCI protected, and have a weatherproof enclosure.
7. Exterior Outlets @ Balconies, Decks, and Porches: Each balcony, dock, and porch shall have at least one readily accessible outlet not more than 6-1/2 feet above the walking surface, be GFCI protected, and have a weatherproof enclosure.

Light Fixtures

1. Lighting in bathrooms, garages, laundry rooms & utility rooms must be controlled by a vacancy sensor per CA Energy Standard 150.0(k)2.K.
2. Lighting in all other interior rooms like living, dining, bedrooms, etc. (except closets of less than 70 sq. ft.) shall be high efficacy with manual on occupancy switches or dimmers.
3. All installed lighting shall be high efficacy in accordance with Table 150.0-A of the California Energy Code. Exterior lighting shall be high efficacy or controlled by a photo/motion sensor per CEnC 150.0(k)9A
4. All LED lighting shall be California Energy Commission certified to quality as high efficacy.
5. All recessed light fixtures shall be IC listed per CEnC 150.0(k)8
6. Fixtures installed in wet or damp locations shall be installed so that water cannot enter or accumulate in wiring compartments, lamp holders, or other electrical parts. Fixtures in wet or damp locations will be marked for such use. Lighting fixtures located within 3 feet horizontally and 8 feet vertically of the bathtub rim or shower stall threshold shall be listed for a damp location, or listed for wet locations where subject to shower spray per CEC 410.10

JA8 marking is required for the following:

7. All lighting must be high efficacy. High efficacy luminaires may require JA8-2016 or JA8- 20160-E labeling. Per CEnE 150.0(k)1A, 150.0(K)1G, 150.0(K)2K Table 150.0-A
8. Fixtures recessed into ceilings shall be listed for zero clearance insulation contact (IC) have a label that certifies that the fixture is airtight with air leakage less than 2.0CFMN at 75 Pascal's (AT), be sealed with a gasket or caulk to the ceiling, have an accessible ballasts/drivers if hardwired, and not contain a screw base socket. They shall contain light sources that comply with Reference Joint Appendix JA8, including the elevated temperature requirements, and that are marked "JA8-2106-E" Per CenC 150.0(K)1(IC).
9. Recessed Down-light Luminaires in Ceilings: Recessed downlight luminaires in ceilings must be installed per CEnC150.0(K)1C, be listed IC rated, labeled for air leakage less than 2.0 CFM, be sealed with a gasket or caulk to the ceiling, have accessible ballasts/drivers if hardwired, not contain a screw base sockets, comply with JA8, and marked JA8-2016-E as specified in Reference Appendix JA8.
10. Screw Based Luminaires: Screw based luminaires shall be high efficacy and controlled by dimmers or vacancy sensors. Installed lamps shall be marked with 'JA8-2026' or JA8-2016-E' as specified in Reference Joint appendix JA8. Light sources not marked 'JA8-2016-E' shall not be installed in enclosed luminaires.
11. A GU-24 lamp fitting is a 2-pin connector for compact fluorescent lamps (CFL) or LED lamps that use bayonet mount-like twist-lock 2-pin connector instead of an Edison screw fitting.
12. Any light source not otherwise listed above and certified to the Commission as complying with Joint Appendix 8.

Alarms

1. Contractor must install or verify the existence of smoke alarms and carbon monoxide alarms outside each bedroom as well as one on every level. An additional smoke alarm is required inside each bedroom. Alarms in existing areas where access to the area above the ceiling is not possible may be powered by a D/C battery source. In the areas of new construction or existing rooms where the area above the ceiling is accessible, alarms must be powered by an A/C power source with a battery back-up and be interconnected.(CRC 314, 315).
2. Smoke detector/ alarms are to be provided with battery back-up and audible in all sleeping areas and shall be hard-wired and inter-connected per CRC R314.5.
3. An approved carbon monoxide alarm shall be installed in dwellings within which fuel-burning appliances are installed, and in dwellings with an attached garage. Carbon monoxide detector/ alarms on all habitable levels and shall be hard-wired and inter-connected per CRC R315.1

HVAC

1. Provide exhaust fans in kitchen and each bathroom vented to outside and sized as follows. Kitchen: >/= 100 CFM intermittent, >/= 5 ACh continuous with a tested static pressure of .25 wc, rated @ =/<3 sones. Fans to be attached to a minimum 5" diameter smooth duct, <70 lin. ft., subtract 15' of allowed length for each elbow. Bathrooms: >/= 50 CFM intermittent, >/= 20 CFM continuous with a tested static pressure of .25 wc, rated @ =/<3 sones. Fans to be attached to a minimum 4" diameter smooth duct, <70 lin. ft., subtract 15' of allowed length for each elbow. Exhaust fan ratings to be </= 1 sone continuous, </= 3 sones intermittent. Bath fans to be Energy Star compliant and equipped with humidistat controls for adjustment of relative humidity from 50 to 80%, per CalGreen code 4.506.1.
2. Bathroom exhaust fans shall be switched separately from lighting system per CA Energy Code 150.0(k)2B.
3. Provide a whole-building mechanical exhaust system to outdoor air at the minimum rate of 70 CFM with a tested static pressure of .25 wc, rated @ =/<3 sones. Fans to be attached to a minimum 5" diameter smooth duct, <70 lin. ft., subtract 15' of allowed length for each elbow.

System to have an accessible off/on switch that is properly labeled. Covers and louvers for the whole house ventilation fan(s) shall be provided so that they close when the system is turned off. Covers or louvers shall have min. R 4.2 insulation value. Switch for fan must be labeled such as "Fan is to be left on to ensure indoor air quality".

WHOLE HOUSE VENTILATION CALCULATION per CEC 150 (O) & ASHRAE 62.2

0.03 X 1405 SF Htd. Area + 7.5 X (2 bedrms + 1) = 64.7 CFM req'

4. The thermal capacity of electric floor warming matt in bathrooms shall not exceed 3 kilowatts or 7,000 BTU/HR and shall be controlled by a time-limiting device not exceeding 120 minutes. Provide a dedicated circuit with GFCI protection.
5. Furnaces installed in attics and crawl spaces must have an access platform (catwalk in attics), light, light switch, and receptacle in the space.

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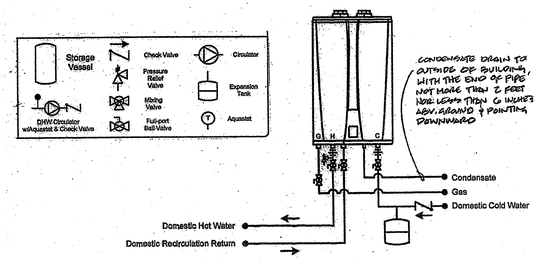
REMODEL / ADDITION PLANS FOR:
VECCHIET RESIDENCE
APN 027-103-19
380 – 7th AVENUE - SANTA CRUZ, CALIFORNIA

ELECTRICAL SCHEMATIC

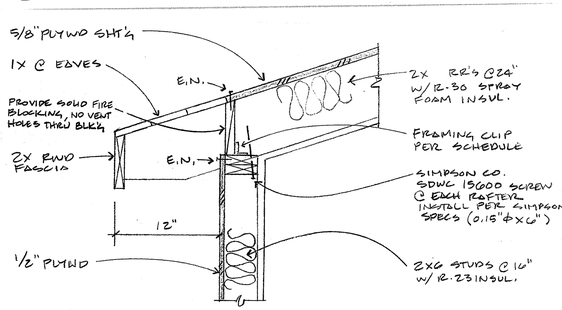
5-3-22
1/4"=1'-0"
MSH
2204

10

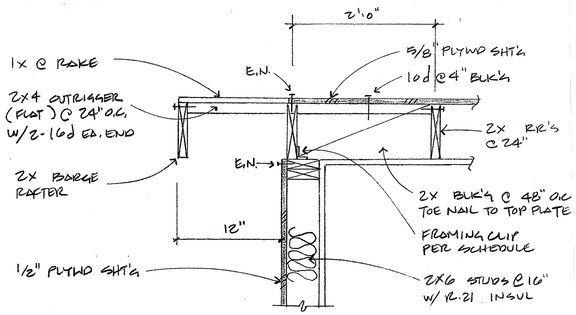
EXHIBIT D



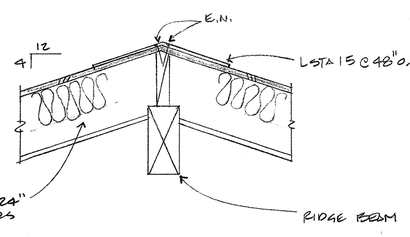
1 TANKLESS WATER HEATER - INSTALLATION SCHEMATIC
NTS



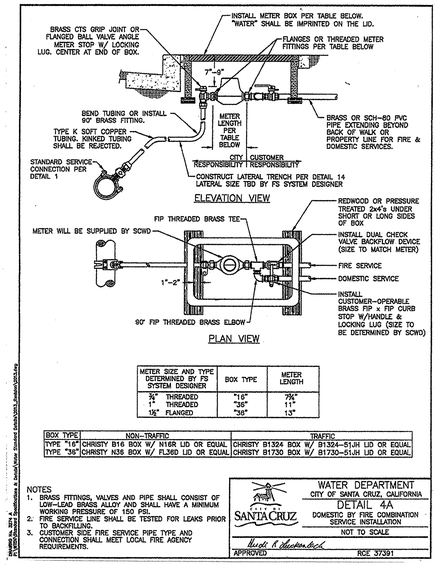
2 TYPICAL EAVE DETAIL
1"=1'-0"



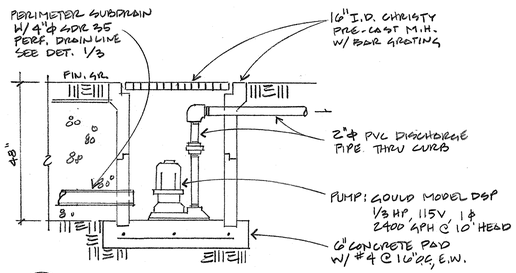
3 TYPICAL RAKE DETAIL
1"=1'-0"



4 TYPICAL RIDGE DETAIL
1"=1'-0"



5 WATER METER UPGRADE - SCWD 4A



6 SUMP PUMP DETAIL

GAS FIRED EQUIPMENT

MARK	HEAT KBH IN	HEAT KBH OUT	CFM TOTAL	CFM ESP	CFM OA	FAN RPM	MOTOR HP	MOTOR V/PH	WT LBS	AFUE	MANUFACTURER AND MODEL	COMMENTS
F-1	26 / 40	25 / 39	850	0.5	0	VAR	1/2	115/1	145	96	BRYANT 926TA36040V17	(1) (2) (3)

(1) PROVIDE DYNAMIC AIR FILTER IN STANDARD FILTER RACK, SEE WWW.DYNAMICAQS.COM. MERV 13 EQUIVALENT

(2) 2-STAGE EQUIPMENT. PROVIDE HONEYWELL PRESTIGE IAQ THERMOSTAT.

(3) EQUIPMENT SIZES APPROVED BY ACCA TO MEET ALL REQUIREMENTS OF MANUAL S 8TH EDITION

FANS

MARK	LOCATION	CFM	ESP	CFM CONT.	ESP	SONES OR TIP SPEED	MOTOR HP	MOTOR V/PH	FAN RPM	MAX AMPS	MAX WATTS	CFM/ WATTS	MANUFACTURER MODEL	COMMENTS
EF-1	BATH 1	80	0.25"	30	0.25"	0.4	NA	120/1	1131	0.27	16.1	10.2	PANASONIC FV-05-11VKS1	(1) (2) (4)

(1) CEC IAQ REQUIRED VENTILATION-DO NOT MODIFY. PROVIDE MULTI SPEED AND TIME DELAY MODULE

(2) PROVIDE OPTIONAL LUTRON OCCUPANCY SENSOR MODEL # MS-OPS5AM, OR EQUAL PER ARCH, AND LED NIGHT LIGHT & MOTION SENSOR MODULE

(3) PROVIDE CONDENSATION SENSOR MODULE TO SATISFY HUMIDISTAT CONTROL PER 2019 CAL GREEN CODE SECTION 4.506

(4) FAN SHALL BE ENERGY STAR RATED AND HAVE BUILT IN BACKDRAFT DAMPER

(5) WITH FACTORY LINT TRAP KIT. WIRE PER INSTALLATION GUIDELINES WITH DRYER CIRCUIT, PROVIDE ACCESS.

SHEET NOTES

1. CONTRACTOR SHALL LABEL WHOLE HOUSE VENTILATION SYSTEM AND PROVIDE INSTRUCTIONS ON ITS USE.
2. CONTRACTOR SHALL HAVE A COMPLETED FORM CF2R-MCH-27-H ON-SITE AT THE TIME OF INSPECTION.
3. ALL EXHAUST OUTLETS SHALL MAINTAIN A MIN. 3' CLEARANCE FROM ANY OPERABLE OPENING. EXHAUST DUCTS SHALL BE EQUIPPED WITH BACK-DRAFT DAMPER PER SEC. 504.1.1 CMC
4. ALL EXHAUST FANS SHALL BE EQUIPPED WITH FACTORY OR FIELD INSTALLED BACKDRAFT DAMPERS PER CMC 504.1. WHERE EXHAUST FAN DUCTS ARE COMBINED TO SERVE A SINGLE OUTLET, AN ADDITIONAL FIELD INSTALLED BACKDRAFT DAMPER SHALL BE USED TO PROVIDE GREATER PROTECTION
5. RANGE HOOD SHALL VENT TO THE OUTSIDE PER MANUFACTURER'S REQUIREMENTS. IF OPEN COMBUSTION APPLIANCE OR FIREPLACE IS PRESENT, MAKE UP AIR MAY BE REQUIRED. CONFIRM RANGE HOOD SPECIFICATION.
6. PROVIDE MIN (2) 90 TURNS FOR SOUND ATTENUATION

DUCT SYSTEM INSTALLATION

1. Duct installation shall be in conformance with chapter 6 of the 2019 CMC or as recommended by ACCA manuals D, J, S, SMACNA manuals, and/or the ASHRAE handbook if approved by officials having jurisdiction. Care shall be exercised to seal all joints and seams to prevent air leakage.
2. Where shown on the mechanical plan and if necessary for other locations, provide rectangular duct of equivalent cross sectional area to the round duct shown to clear obstructions. Provide smooth transitions when the duct shape changes.
3. Flexible vibration isolation connectors shall be installed in sheet metal ductwork at the unit in both the supply and air intake; these shall not exceed 10.0 inches in length. Ductwork shall be properly aligned at these connectors without any offset.
4. Metal ductwork shall be installed in a workman-like manner in accordance with acceptable practice given in the ASHRAE handbook or the SMACNA "low pressure duct construction standards" manual. Rigid sheet metal ducts shall be at least the minimum thickness required for their largest dimension and/or the static pressure to which they shall be subjected; they shall be provided with turning vanes or long radius bends both to reduce the pressure loss and to provide a more uniform velocity distribution downstream from the bend. All duct seams and joints shall be airtight and smooth fitting. These shall be sealed with products such as mastic and/or foil-backed tape recommended by the manufacturer for the location where they will be used.
5. Rigid ductwork exposed to view shall be installed in such a manner as to present a neat appearance. The ducts shall be parallel to adjacent architectural surfaces and have as few joints as possible.
6. All metal ducts shall be securely supported, hung, or suspended by metal hangers, straps, or brackets and the support material in contact with the duct, or external insulation, shall not be less than 0.75 inches wide. The hanger spacing for metal duct shall not be more than 10 feet for rectangular duct or 12 feet for round duct. Hangers exposed to view shall be plumb and neat in appearance. All rectangular metal ducts 24 inches or wider and all exterior ducts shall be cross broken or beaded to provide additional support. Ducts shall be insulated with fiberglass duct insulation to provide a minimum duct insulation value of r-6. Wye branches and diffuser boots shall be insulated on their exterior surfaces unless they are exposed to the weather, are exposed to view, or could be damaged during occupancy of the building. Any insulating material used shall meet the appropriate specifications required by ASTM e-84, c-553; NEPA 90b; and UL 181. Such insulation shall have 100% coverage and be installed in accordance with the manufacturer's instructions.
7. Flexible air duct shall be UL listed class 1 air duct made with a polyester interior, a moisture impervious sleeve and insulation having an overall r-value no less than 6. Foil covered duct shall be used in locations where high radiant heat loads may be expected. Performance and assembly shall be in strict accordance with details listed in the flexible ductwork manufacturer's applications manual or the SMACNA "flexible duct performance standards and flexible duct installation standards". Tight fitting mechanical clamps and mastic recommended for the location shall be used to seal all joints. Particular attention shall be taken to avoid kinks, sharp bends, or other such obstructions in the duct. Factory made flexible air ducts shall be installed according to their installation instructions and standards set by the code. Duct work shall use pressure-sensitive tapes, mastics, aerosol sealants or other closure systems meeting applicable UL 181A and B requirements. Drawbands used with flexible ducts shall be either stainless-steel, worm driven hose clamps or UV-resistant nylon duct ties. In addition, drawbands must have a minimum tensile strength rating of 150 pounds an dp tightened as recommended by the manufacturer.
8. Flexible air duct shall be supported at the manufacturer's recommended intervals but in no case shall the intervals between hangers exceed 4.0 ft. The hanger material shall be not less than 2.0 inch wide. The maximum permissible sag shall be 0.5 inch per foot of spacing between supports. Collars shall be used to attach flexible duct and shall be a minimum of 2.0 inches in length. Collars shall be inserted into the flexible duct a minimum of 1.0 inch before fastening.
9. Readily accessible balancing or volume control dampers with outside locking devices shall be provided as shown on the mechanical plans and/or as needed to regulate the air flow to each register.
10. Supply and return plenums shall be covered with insulation having a value of r-6 or greater on their internal surfaces. Any insulating material used shall meet the appropriated specifications required by ASTM e-84, c-553; NEPA 90b; and UL 181. Such insulation shall have 100% coverage and be installed in accordance with the manufacturer's instructions.
11. Ductwork shall be installed so that it will not contact the ground.
12. Return air grill may be substituted, as desired, based on equal face area.
13. Boot area shall match grill area in all cases. If necessary, boots should be lined with acoustical lining to reduce noise transmission.
14. Plenum shall be lined with acoustical lining.
15. Flat ducts for wall registers shall be 3-1/4"x14" unless shown on the plans.
16. Termination of all environmental air ducts including direct vent termination kits shall be a minimum of 3 feet from or any openings into the building (i.e., dryers, bath and utility fans, etc., .must be 3 feet away from doors, windows, opening skylights or attic vents).
17. Mechanical equipment and duct openings shall be protected during storage and rough installation per 2019 CAL Green section 4.504.1 to reduce the amount of dust or debris which may collect in the system.
18. Heating, ventilating and air conditioning systems (including hydronic systems) shall be balanced in accordance 2019 CMC Section 317.1 using the ACCA Manual B method.
19. Unless otherwise noted all accessible supply branches shall have manual volume control dampers for balancing, where inaccessible all supply grilles shall have factory OBD (opposed blade damper) for volume balancing.

Air for combustion

1. Air quantities shall be based on the 2019 California Mechanical Code. If located in a confined space, that space shall be provided with two permanent openings one within 12 inches of the top and one within 12 inches of the bottom of the enclosure. The openings shall communicate directly, or by ducts with the outdoors. When communication with the outdoors is through vertical ducts, each opening shall have a minimum free area of 1.0 square inch per 4000 btu per hour of total input rating of all equipment in the enclosure. When communication with the outdoors is through horizontal ducts, each opening shall have a minimum free area of 1.0 square inch per 2000 btu per hour of total input rating of all equipment in the enclosure. If approved by the administrative authority having jurisdiction, communication directly through an exterior wall may be considered as a vertical duct.
2. Duct openings shall be screened with metal mesh having openings of 1/4 inch. Provisions shall be made for the reduction in duct area due to the effects of screens, louvers, etc.

Gas lines

1. Piping shall be new, standard weight wrought iron or steel (exterior-only galvanized or black), with malleable iron fittings. Approved PE (poly-ethylene) pipe may be used in exterior buried piping systems.
2. Exterior piping shall be protected by approved, machine applied protective coating. Field wrapping shall be limited to sections at joints and shall provide equivalent protection to the machine applied coating.
3. Gas lines may not be installed on or under the ground under buildings; they must be at least 6 inches above the ground.
4. Gas lines shall be wrapped with insulation and sleeved where passing through concrete. Piping shall be protected where passing through framing using metal straps designed for the purpose.

MAJOR EQUIPMENT INSTALLATION

1. Installation shall meet all local and national codes pertaining to the installation and operation of plumbing equipment. Unless otherwise required by these standards, the equipment shall be installed in accordance with the equipment manufacturer's recommendations.
2. If "or equal" equipment is to be used, it must meet the performance specifications for the equipment listed, and shall receive prior approval from the mechanical engineer. All requests for substitution shall be furnished with sufficient engineering data to demonstrate that the proposed equipment full meets all the performance levels of the equipment originally specified. The contractor shall be responsible for all costs associated with the engineering for structural, electrical, duct sizing, etc. Caused by any substitution.
3. Units shall be installed to provide the clearance or clearances specified by the manufacturer or required by the authority having jurisdiction.
4. Units shall have suitable support to prevent transmission of objectionable noise or vibration generated by the equipment to the structure. Outdoor, ground mounted, units shall be located on a level, one piece, concrete pad.
5. Provide and install low voltage control wiring in conduit installed by the mechanical or plumbing contractor using methods contained in the electrical specifications. All wiring of line voltage controls to be accomplished by the electrical contractor.
6. Contractors shall co-ordinate with the electrical contractor to ensure that all electrical accessories such as motor starters, control relays, circuit breakers, etc. Required to make a fully functional systems are provided.

REGISTERS

MARK	TYPE	MANUFACTURER MODEL	COMMENTS
CR	CEILING RETURN	TITUS CT-480 3 26 N 00-000 0	(1)
CD	CEILING DIFFUSER	TITUS CT-480 3 26 N 00-000 0	(1)
HSR	HIGH SIDE RETURN	TITUS CT-480 3 26 N 00-000 0	(1)
HSS	HIGH SIDE SUPPLY	TITUS CT-480 3 26 N 00-000 0	(1)
TK	TOE KICK	TITUS CT-480 4 26 N 00-000 0	(1)
LSR	LOW SIDE RETURN	TITUS CT-480 3 26 N 00-000 0	(1)
FD	FLOOR DIFFUSER	TITUS CT-480 6 26 N 00-000 H	(1)

(1) PROVIDE MILL FINISH OR CUSTOM PAINT COLOR SPECIFIED BY ARCH.

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200 Seventh Avenue, #110 Santa Cruz, California 95062 (831) 476-5386

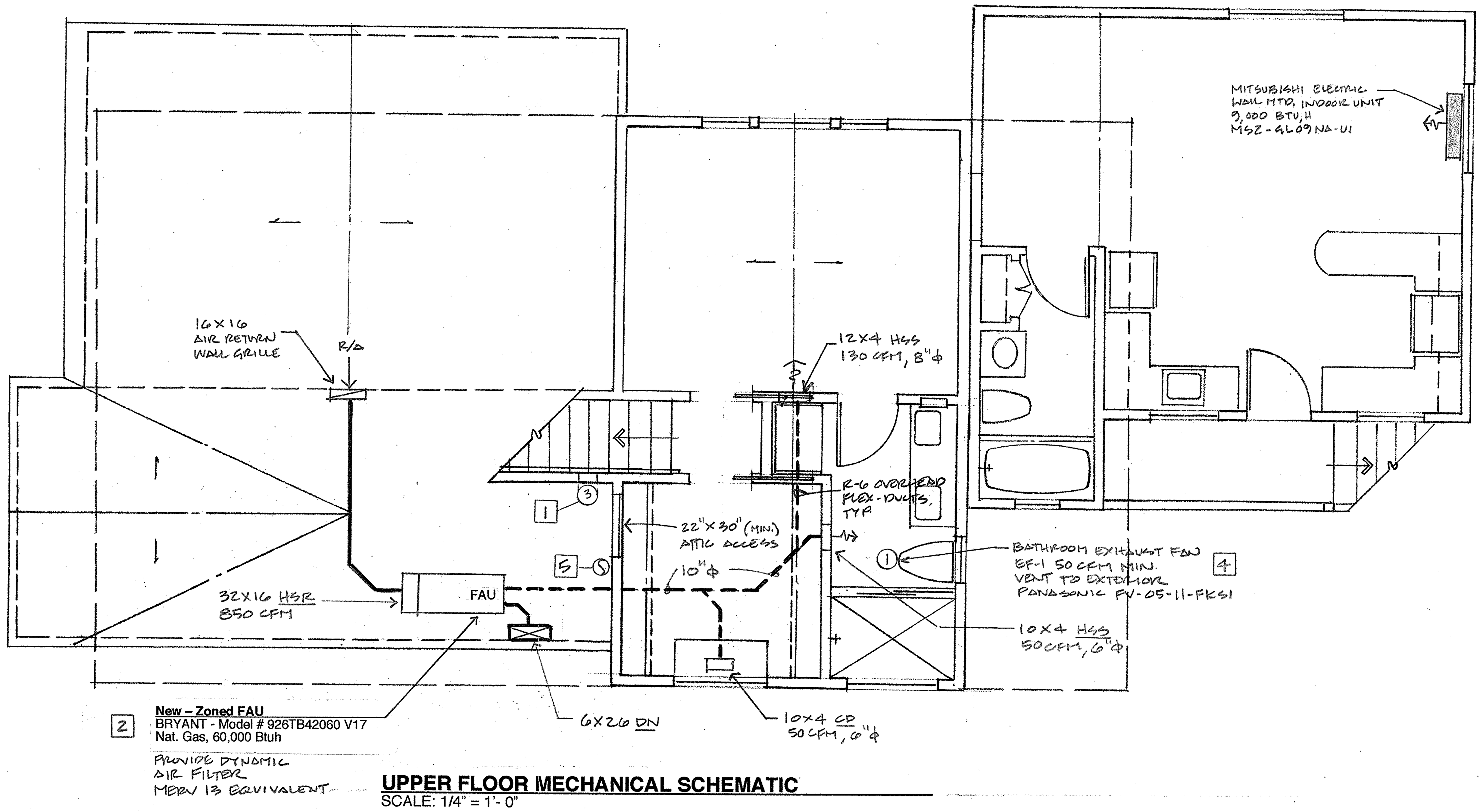
REMODEL / ADDITION PLANS FOR:
VECCHIET RESIDENCE
APN 027-103-19
380 – 7th AVENUE - SANTA CRUZ, CALIFORNIA

MECHANICAL NOTES & DETAILS

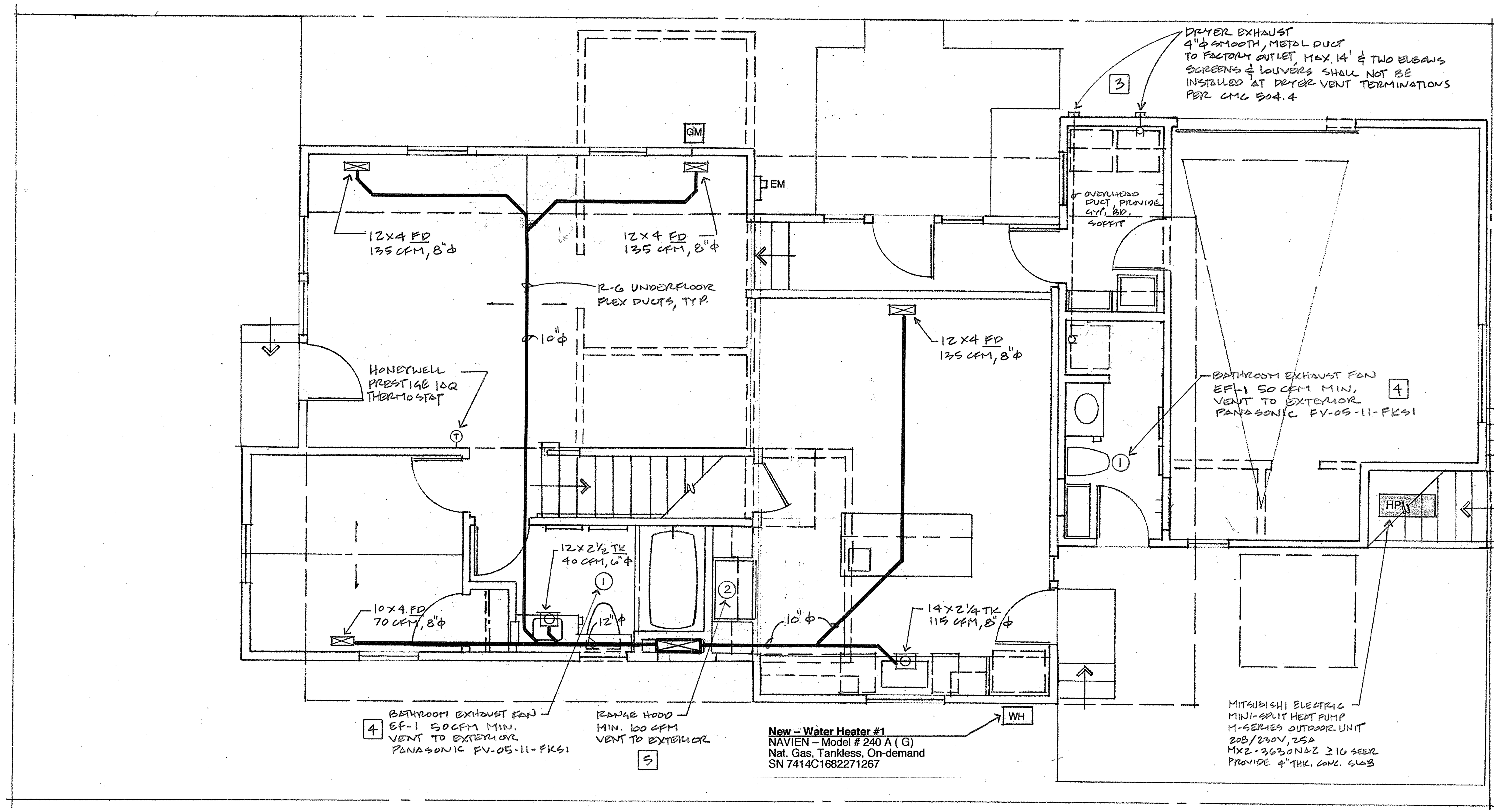
5.3.22
NTS
MSH
2204

11.1

EXHIBIT D



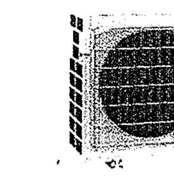
UPPER FLOOR MECHANICAL SCHEMATIC
SCALE: 1/4" = 1'- 0"



LOWER FLOOR MECHANICAL SCHEMATIC
SCALE: 1/4" = 1'- 0"

M-SERIES — SUBMITTAL DATA: MXZ-3C30NA2
MULTI-INDOOR INVERTER HEAT-PUMP SYSTEM — MITSUBISHI ELECTRIC

Job Name:
System Reference: Date:



Outdoor Unit: MXZ-3C24NA

ACCESSORIES
- 3/8" x 1/2" Port Adapter (MAC-A454JP-E)
- 1/2" x 3/8" Port Adapter (MAC-A455JP-E)
- 1/2" x 5/8" Port Adapter (MAC-A456JP-E)
- 1/4" x 3/8" Port Adapter (PAC-493PI)
- 3/8" x 5/8" Port Adapter (PAC-SG76RJ-E)
- M-NET Adapter (PAC-IF01MNT-E)
- Base Heater (PAC-645BH-E)

(For data on specific indoor units, see the MXZ-C Technical and Service Manual.)

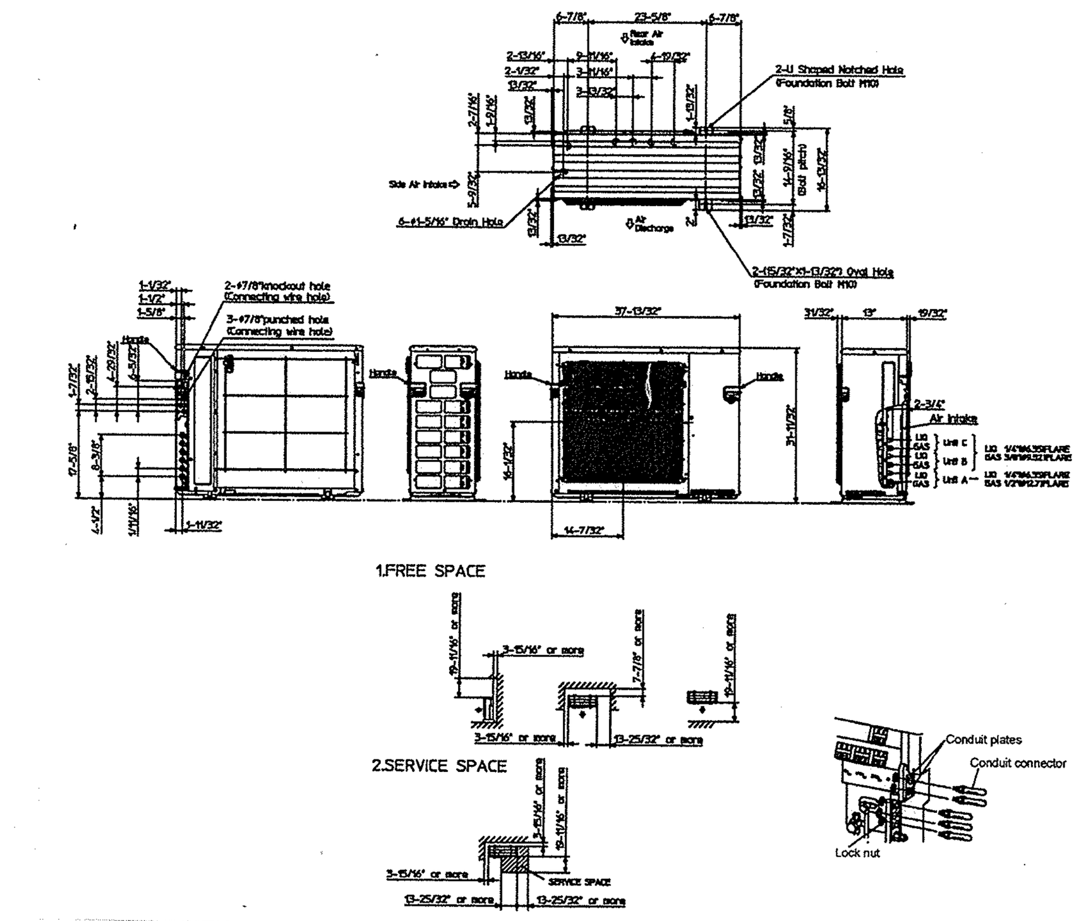
Specifications			Model Name
Unit Type			MXZ-3C30NA2
Cooling* (Non-ducted / Ducted)	Rated Capacity	Btu/h	28,400 / 27,400
	Capacity Range	Btu/h	12,600-28,400 / 12,600-27,400
	Rated Total Input	W	2,680 / 2,860
Heating at 47°F* (Non-ducted / Ducted)	Rated Capacity	Btu/h	28,600 / 27,600
	Capacity Range	Btu/h	11,400-36,000 / 11,400-35,000
	Rated Total Input	W	2,150 / 2,220
Heating at 17°F* (Non-ducted/Ducted)	Rated Capacity	Btu/h	16,000 / 15,100
	Rated Total Input	W	2,120 / 2,140
Electrical Requirements	Power Supply	Voltage, Phase, Hertz	208 / 230V, 1-Phase, 60 Hz
	Recommended Fuse/Breaker Size	A	25
	MCA	A	22.1
Voltage	Indoor - Outdoor S1-S2	V	AC 208 / 230
	Indoor - Outdoor S2-S3	V	DC ±24
Compressor			INVERTER-driven Scroll Hermetic
Fan Motor (ECM)		F.L.A.	2.43
Sound Pressure Level	Cooling	dB(A)	52
	Heating		56
External Dimensions (H x W x D)		In (mm)	31-11/32 x 37-13/32 x 13 (796 x 950 x 330)
Net Weight		Lbs (kg)	137 (62)
External Finish			Munsell 3.0Y 7.8/1.1
Refrigerant Pipe Size O.D. — Eight Ports	Liquid (High Pressure)	In (mm)	1/4 (12.7)
	Gas (Low Pressure)		A: 1/2 (6.35) ; B,C: 3/8 (9.52)
Max. Refrigerant Line Length		Ft (m)	230 (70)
Max. Piping Length for Each Indoor Unit		Ft (m)	82 (25)
Max. Refrigerant Pipe Height Difference	If IDU is Above ODU	Ft (m)	49 (15)
	If IDU is Below ODU		49 (15)
Connection Method			Flared/Flared
Refrigerant			R410A

OPERATING RANGE:

	Outdoor
Cooling	14 to 115° F (-10 to 46° C) DB
Heating	5 to 65° F (-15 to 18° C) WB

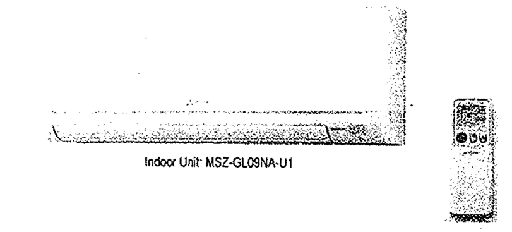
ENERGY EFFICIENCIES:

Indoor Unit Type	SEER	EER	HSPF	COP @ 47°F	COP @ 17°F
Non-ducted (06 + 06 + 09)	19.0	10.6	10.6	3.90	2.77
Ducted and Non-ducted	17.6	10.1	10.1	3.77	2.78
Ducted (09 + 09 + 09)	16.2	9.6	9.6	3.64	2.78



M-SERIES — SUBMITTAL DATA: MSZ-GL09NA-U1
9,000 BTU/H WALL-MOUNTED INDOOR UNIT FOR MXZ-C MULTI-ZONE HEAT-PUMP SYSTEMS — MITSUBISHI ELECTRIC

Job Name:
System Reference: Date:



Indoor Unit: MSZ-GL09NA-U1

Wireless Remote Controller

SPECIFICATIONS:

Rated Capacity		
Cooling[1]	Btu/h / W	9,000
Heating at 47° F[2]	Btu/h / W	10,900

Rating Conditions per AHRI Standard:
[1] Cooling | Indoor: 80° F(27° C)DB / 67° F(19° C)WB; Outdoor: 95° F(35° C)DB / 75° F(24° C)WB
[2] Heating at 47°F | Indoor: 70° F (21° C)DB / 60° F (16° C)WB; Outdoor: 47° F (8° C)DB / 43° F (6° C)WB

For data on specific indoor units (all ducted, all non-ducted, and both ducted and non-ducted) combinations, see the MXZ Technical and Service Manual.

Applications should be restricted to comfort cooling only; equipment cooling applications are not recommended for low ambient temperature conditions.

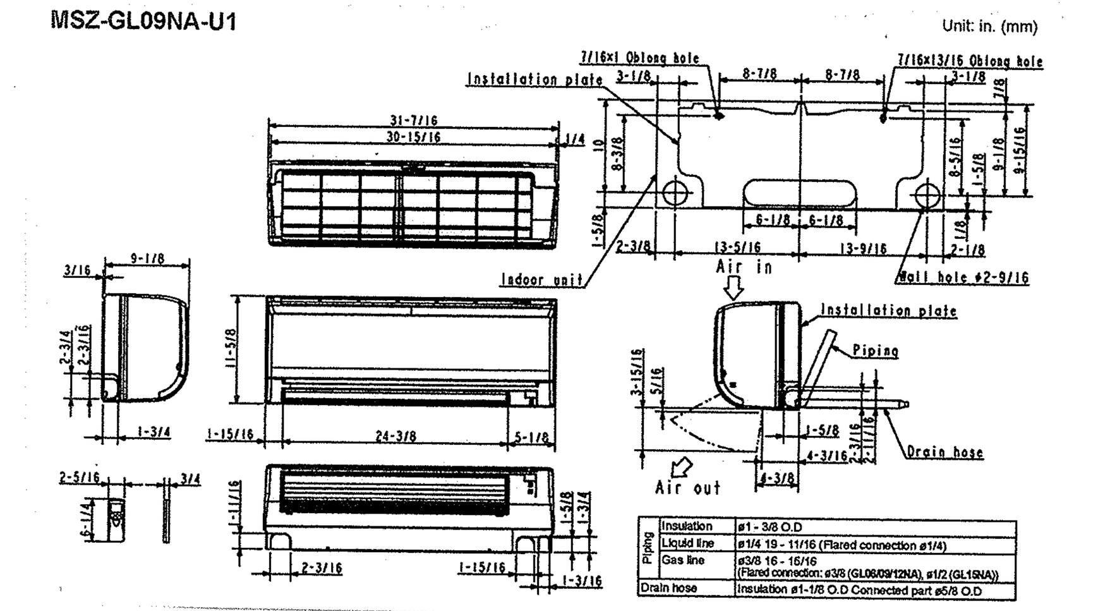
Electrical Power Requirements			208 / 230V, 1-Phase, 60 Hz
Minimum Circuit Ampacity (MCA)		A	1.0
Blower Motor (ECM)		F.L.A.	0.76
Blower Motor Output		W	30
Field Drainpipe Size O.D.		In.(mm)	5/8 (15)
Airflow Rate (Quiet - Lo - Med - Hi - Super Hi)			
Cooling	DRY	CFM	145-170-237-321-399
	WET		109-134-201-286-364
Heating	DRY		145-170-237-321-406
Sound Pressure Level (Quiet - Lo - Med - Hi - Super Hi)			
Cooling		dB(A)	19-22-30-37-43
Heating			19-22-30-37-43
External Dimensions (H x W x D)		In.(mm)	11-5/8 x 31-7/16 x 9-1/8 (295 x 798 x 232)
Net Weight		Lbs.(kg)	29 (12)
External Finish			Munsell 1.0Y 9.2 / 0.2
Refrigerant Piping (Flared)			
Liquid (High Pressure)		In.(mm)	1/4 (6.35)
Gas (Low Pressure)			3/8 (9.52)

ACCESSORIES:

Indoor Unit
- Condensate Pump (BlueDiamond X87-711/721; 115/230V)
- Condensate Pump (Sauermann SI30-115/230; 115/230V)
- Anti-Allergy Enzyme Filter (MAC-408FT-E)
- Platinum Catalyst Deodorizing Filter (MAC-308FT-E)
- Drain Pan Level Sensor (DPLS2)

Controls
- Wireless Controller (MHK1)
- Wired Remote Controller PAR-31MAA (Requires MAC-333IF-E)
- Wireless Interface for kumo cloud™ (PAC-WHS01WF-E)
- Thermostat Interface (PAC-US444CN-1)

MSZ-GL09NA-U1 Unit: in. (mm)



PLUMBING NOTES

1 The Plumbing System shall be installed in accordance with the latest edition of the Plumbing Code. Provide all equipment as shown on drawings and as needed for a complete and working system. Use Manufacturer as scheduled or Equal approved by the Architect. Install all equipment in accordance with the Manufacturer's instructions and within all applicable codes and standards.

2 Provide clean outs for every aggregate change in direction exceeding 135 degrees. If the water supply pressure exceeds 80 PSI, install an approved pressure regulator in an accessible location to reduce the service pressure to 60 PSI or less. Hose bibbs shall be protected by a backflow prevention device. Pressure relief valve shall extend to the outside of the building and terminate not more than two feet nor less than six inches above the ground and pointed downward.

3 Waste lines shall be ABS. Water supply piping shall be Type L copper below grade and Type L copper within the building. Gas piping shall be Schedule 40 black iron.

4 For the purpose of clarity and legibility, these drawings are essentially diagrammatic to the extent that many offsets, bends, special fittings and exact locations are not indicated. Contractor shall verify all conditions at the site before proceeding with installation. It is the responsibility of the Contractor to install the system such that the integrity of the building is maintained.

5 Provide pressure balance, thermostatic or combination pressure balance/thermostatic mixing valves at showers and tub-showers that provide scald and thermal shock protection (120 F max.). Verify at rough plumbing inspection per CPC sec. 408.3.

6 All building water supply systems in which quick acting valves (washing machines, dishwashers, etc., are installed, shall be provided with devices to absorb high pressures resulting from the quick closing of these valves.

7 Water lines shall be insulated per CA Energy Code as follows;
Install a minimum 1.5 inch thick insulation on all hot water pipes, all piping with a nominal diameter of 3/4 inch or larger, piping associated with recirculation systems regardless of pipe diameter, and cold water pipes for the first 5 feet from a storage tank, piping buried below grade, all hot water pipes from heating source to kitchen fixtures. Hot water pipes buried below grade must be installed in a waterproof and non-crushable casing or sleeve. Insulation outside conditioned space shall be protected per CEnC 150.0(j)2., Table 120.3-A, CPC 609.11

8 Provide "DSA Certified" earthquake actuated shut-off valve at gas meter or regulator.

9 No domestic dishwashing machine shall be directly connected to a drainage system or food waste disposer without the use of an approved dishwasher air gap fitting on the discharge side of the dishwashing machine. Listed air gaps shall be installed with the flood-level (FL) marking at or above the flood level of the sink or drainboard, whichever is higher. CPC 807.3

10 Control valves and shower heads shall be located on the sidewall of shower compartment or otherwise arranged so that the shower head does not discharge directly at the entrance to the compartment and the bather can adjust the valves prior to stepping into the shower spray per CPC 408.9

PLUMBING FIXTURE MAXIMUM FLOW RATES

TOILET	1.28 GPF
LAVATORY FAUCETS	1.2 GPM @ 60 PSI
TUB / SHOWER VALVES	1.8 GPM @ 80 PSI
KITCHEN FAUCETS	1.8 GPM @ 60 PSI

PLUMBING FIXTURE CONNECTION SCHEDULE

SYMBOL	TYPE	WASTE	VENT	HOT	COLD
LV	LAVATORY	1-1/2"	1-1/2"	1/2"	1/2"
WC	TOILET	3"	2"	-	1/2"
T/SH	TUB / SHOWER	2"	1-1/2"	1/2"	1/2"
KS	KITCHEN SINK	2"	1-1/2"	1/2"	1/2"
WS	WASHER	1-1/2"	1-1/2"	1/2"	1/2"
HB	HOSE BIBB				3/4"

MECHANICAL NOTES

1 The System shall be installed in accordance with the latest edition of the California Mechanical Code. Provide all equipment shown on drawings and as needed for a complete and working system. Use Manufacturer as scheduled or Equal approved by the Architect. Install all equipment in accordance with the Manufacturer's instructions and within all applicable codes and standards. Maintain Manufacturer's required clearances around equipment. Contractor shall provide and install all controls necessary to operate the system as required by the California Energy Efficiency Standards.

2 For the purpose of clarity and legibility, these drawings are essentially diagrammatic to the extent that many offsets, bends, special fittings and exact locations are not indicated. Contractor shall verify all conditions at the site before proceeding with installation. It is the responsibility of the Contractor to install the system such that the integrity of the building is maintained.

3 All exhaust fans and fan systems must have damper controls.

4 All joints and penetrations must be sealed.

5 Mechanical equipment and water heaters must be certified and labeled by the California Energy Commission.

6 Termination of all environmental air ducts shall be a minimum of 3 feet from any openings into the building (ie., dryers, bath & utility fans, etc., must be 3 feet away from doors, windows, opening skylights, or attic vents) CMC 504.5.

8 Duct connections to be wrapped with UL listed 181 tape in accordance with the following:
A) Attach the inner core to the collar with at least two wraps of approved duct tape and secure with an approved clamp.
B) Pull jacket and insulation back over the core and use two wraps of an approved tape or an approved clamp.

9 All equipment, materials and installation techniques shall meet or surpass local codes and Title 24 requirements.

10 Systems using gas or propane water heaters to serve newly constructed individual dwelling units shall include the following components [CEEC 150.0 (n)]:

- A 120V electrical receptacle that is within 3 feet from the water heater and accessible to the water heater with no obstructions; and
- A Category III or IV vent, or a B vent with straight pipe between the outside termination and the space where the water heater is installed; and
- A condensate drain that is no more than 2 inches higher than the base of the installed water heater, and allows natural draining without pump assistance; and
- A gas supply line with a capacity of at least 200,000 Btu/hr.

VENTILATION NOTES

(1) All **bathroom fans** are to be used for **Local Ventilation Exhaust**. Minimum 50 CFM fan tested at a static pressure of .25 wc and rated @ 3 sones or less required to be installed. Fan must be attached to a minimum 4" duct and no longer than 70' of **flex** duct. Subtract 15' of allowed length for each elbow.

(2) All **kitchen range hoods** are to be used for **Local Ventilation Exhaust**. Minimum 100 CFM tested at a static pressure of .25 wc and rated @ 3 sones or less required to be installed. Fan must be attached to a minimum 5" **smooth** duct and no longer than 85'. Subtract 15' of allowed length for each elbow.

(3) This fan is to be used for **Whole Building Ventilation**. Minimum 65 CFM fan tested at a static pressure of .25 wc and rated @ 1 sone or less required to be installed. Fan must be attached to a minimum 5" duct and no longer than 70'. Subtract 15' of allowed length for each elbow. Switch for fan must be labeled to indicate the fan's required function such as "Fan is to be left on to ensure indoor air quality".

DEFERRED SUBMITTAL

SUBMITTAL DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE ARCHITECT OR ENGINEER OF RECORD, WHO SHALL REVIEW THEM AND FORWARD THEM TO THE BUILDING OFFICIAL WITH A NOTATION INDICATING THAT THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN REVIEWED AND THAT THEY HAVE BEEN FOUND TO BE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL. THE FOLLOWING ITEMS WILL BE SUBMITTED SEPARATELY FOR THIS PROJECT:

1 PROVIDE COMPLETE DESIGN CALCULATIONS, DRAWINGS AND SPECIFICATIONS FOR FIRE SPRINKLER SYSTEM FOR APPROVAL PRIOR TO INSTALLATION

2 PROVIDE DESIGN AND DOCUMENTATION FOR A COMPLETE HEATING SYSTEM. PLANS AND SPECIFICATIONS TO INCLUDE APPLIANCE MODELS, SPECIFICATIONS, BTU VALUES, DUCT LAYOUT, MATERIALS AND SIZES, ETC. HEATING AND/OR AIR-CONDITIONING SYSTEMS SHALL BE SIZED, DESIGNED AND HAVE THE EQUIPMENT SELECTED USING THE FOLLOWING METHODS:

A) THE HEAT LOSS AND HEAT GAIN IS ESTABLISHED ACCORDING TO ANSI/ACCA 2 MANUAL J-2011, ASHRAE HANDBOOKS OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS.

B) DUCT SYSTEMS ARE SIZED ACCORDING TO ANSI/ACCA 1 MANUAL D-2014, ASHRAE HANDBOOKS OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS.

C) SELECT HEATING AND COOLING EQUIPMENT ACCORDING TO ANSI/ACCA 3 MANUAL S-2014 OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS.

HERS NOTE

HERS registered forms are required by installing mechanical contractor for the central furnace. Installing contractor to register project with HERS provider and submit CF2Rs & CF3Rs to jurisdiction before beginning work; HERS duct testing is required and must pass with ducts having less than 5% leakage. HERS certification is required for indoor air quality ventilation.

HERS inspection and certification is required for installation of Kitchen cooktop exhaust hood.

HERS registered forms are required by installing mechanical contractor for the heat pump system. Installing contractor to register project with HERS provider and submit CF2Rs & CF3Rs to jurisdiction before beginning work; HERS certification is required for indoor air quality ventilation. HERS inspection and certification is required for cooling system; verified SEER, Verified Refrigerant Charge, Airflow in Habitable rooms (SC3.1.4.1.7). HERS inspection and certification is required for Heating System; verified HSPF, verified heat pump rated heating capacity, wall-mounted thermostat in zones greater than 150 ft2 (SC3.4.5), ductless indoor units located entirely in conditioned space (SC3.1.4.1.8).

Michael Helm, AIA Architect & Associates
200 Seventh Avenue, #110 Santa Cruz, California 95062 (831) 476-5386

REMODEL / ADDITION PLANS FOR:
VECCHIET RESIDENCE
APN 027-103-19
380 – 7th AVENUE - SANTA CRUZ, CALIFORNIA

MECHANICAL SCHEMATIC
PLUMBING NOTES

5-3-22
1/4" = 1'-0"
MSH
2204

11.2

EXHIBIT D

ARCHITECTURAL SPECIFICATIONS

GENERAL REQUIREMENTS

The Work under this contract includes furnishing all labor, equipment's, appliances, and materials required for construction of this home in strict accordance with these specifications and the applicable drawings subject to the terms of the contract.

GENERAL CONDITIONS

1. Before commencing any work under this contract, the CONTRACTOR shall have in his possession the necessary and required insurance as governed by the State of California; policies as follows:

   a. Workmen's Compensation Insurance's: This policy shall cover the full liability of the contractor and his workmen. Each sub-contractor shall be required to provide the same for his workmen.

   b. Public Liability Insurance: This policy shall cover the full liability and claims for damages for personal injury including accidental death.

2. The Construction of this building shall comply with all applicable requirements and regulations set forth by the latest of the California Building Code; and all applicable requirements and regulations set forth by Labor Codes and local Ordinances.

3. The CONTRACTOR shall inspect the site and familiarize himself with all local conditions and take full responsibility for maintaining ingress to and egress from the site at all times.

4. Temporary water and electricity shall be provided by the CONTRACTOR and he shall pay all installation and meter charges.

5. Temporary toilet facilities shall be installed and maintained by the CONTRACTOR.

6. The CONTRACTOR shall provide, procure, and pay for all building permits required for the execution of the contract and the completion of the job.

7. During the execution of the work called for on the plans and in these specifications, the CONTRACTOR will be held responsible for any and all damage to existing adjacent property, structures, sidewalks, curbs, and gutters.

8. Upon the completion of the work, the building shall be broom cleaned and ready for occupancy. Finished surfaces scratched or damaged shall be refinished, resurfaced or replaced, as the case may be. The entire premises shall be clean and free from all debris and evidence of construction. Temporary facilities, construction and equipment shall be removed.

9. All concrete slabs, walls and driveways shall be adequately protected from damage from any source until acceptance of the work.

10. The CONTRACTOR shall check and verify drawings as to scale and dimensions; and if errors appear in the drawings or conflicts in these specifications, the CONTRACTOR shall bring them to the attention of the OWNER.

11. THE CONTRACTOR shall layout the building in accordance with the general location of the building as shown on the drawings. The CONTRACTOR shall furnish all engineering services necessary to the proper layout and construction of the building.

12. The CONTRACTOR shall make no deviations from the drawings unless such deviations are approved by the OWNER.

EXCAVATION, GRADING, AND PAVING

See plans for extent of work. In general, this consists of preparing the site, excavation of foundation trenches, all fills and backfills, removal of excess material to area designated, spreading same and finish grading and paving on areas designated. Slope finish grade to drain away from building. All filled areas are to be keyed into hillside and compacted as required.

CONCRETE WORK

1. MATERIALS

The quality of the materials used in the concrete and the quality of the concrete shall conform to the physical and chemical properties as specified in C.B.C.

a. Reinforcing wire Welded wire fabric 6" x 6" #10 (ASTM A185)
b. Design mix for 2,500 pounds per square inch concrete at 28 days. (unless noted otherwise)
c. Sill anchors to be 5/8" x 12" anchor bolts embedded 9" minimum, and located 3'-0" O.C. for two story structures and 4'-0" O.C. for single story structures. Place anchors within 12" of corners.
d. Reinforcing steel shall be deformed, intermediate grade, conforming to ASTM A615-40

FIREPLACE AND BLOCK WORK

See plans for extent of masonry work to be included in this building OWNER is to select type of rocks or bricks prior to construction. The Masonry Contractor will design the lintel and flue as required by code.

FRAMING MATERIALS

All framing lumber shall be graded in conformance with the West Coast Lumber Inspection Bureau Grading Rules No. 16 as amended to date. Grades to be as follows unless noted otherwise on the plans:

1. Mudsills-foundation grade redwood or equivalent treated materials.
2. Posts and Beams- 4" & thicker D.F. #1(Para. 130-b) F.O.H.C.
3. Joists and rafters- 2" to 4" thick, 6" & wider construction grade Douglas Fir #2 (Para. 123-c)
4. Girders- construction grade Douglas Fir #1
5. Studs- construction grade Douglas Fir #2 (Para 121-c)
6. Plywood Flooring - 3/4" Douglas Fir T & G exterior plywood CDX
7. Sub-flooring- Douglas Fir 2" x 6" T & G utility decking
8. Exposed beams- Douglas Fir #1 select F.O.H.C. (Para. 130-b)
9. Exposed ceiling -select Pine T & G decking
10. Exterior decking- select "A" grade Redwood
11. Sheathing Paper- #30 Bldg. paper Kraft type or equal

GENERAL FRAMING NOTES

1. Floors to be level within 3/16" ± all around.
2. Structural members shall not be cut for pipes, etc. unless specifically shown or noted.
3. Provide washers for all bolts.
4. Use aluminum or galvanized nails for all exterior siding or trim.
5. Use anchor hold type nails for all plywood flooring.
6. All plywood floors and exterior decking to be glued with P.L-400 or equal.
7. Use cement coated 16d sinker nails for framing.
8. Provide an 18" x 24" minimum access area to underside of home.
9. Provide access for bath tub trap; 20' maximum distance to all plumbing in crawl area.
10. All stairways to have a maximum rise of 8" and a minimum tread width of 10". Provide headroom clearance of 7'-0" min. Install handrails as required 34" to 38" above treads.
11. Unless indicated otherwise all headers are to be 4" x 12" D.F. #2.
12. Double floor joists under all parallel wall partitions.
13. All required handrails are to be 36" high and constructed to withstand a horizontal force of 20 pounds per lineal foot, applied at the top of the railing. Maximum spacing in handrails shall not exceed 6".
14. Provide an attic access of a t least 22" x 30".
15. Open flame for furnace and water heater shall be 18" above floor level if they are to be located in the garage.
16. Provide combustion air for furnace and water heaters required. Combustion air intakes to be located within 6" of floor and ceiling. Provide 6" clearance between furnace and combustibles.
17. If home has an underfloor crawl area, provide 2 square feet of vent space per each 25 linear feet of exterior wall.
18. Provide fire blocking at floor, ceiling, coves, and mid-height of walls over 10'-0" in height.
19. Provide 50 square inches of fixed vents per car to outside air within 6" of garage floor.

TRIM WORK

All external fascias shall be scarfed. No butt joints or spaced boards will be allowed. All trim connections should be tight and fit flush against the exterior.

All exterior redwood decking is to be installed in a craftsmanlike manner. Sand all mitered corners and exposed edges. Remove all sharp edges from handrails.

WOOD BASE: 1/2" x 5 1/4" MDO PAINT GRADE

CASING: 5/8" x 3" MDO PAINT GRADE

CLOSETS:

a. Shelves - 3/4" plywood or particle board with glued-on solid edge or plastic lid. Solid pine shelves may be used as a substitute.
b. Clothes Pole-Hardwood 1-3/8" diameter. Provide an intermediate support for spans longer than 4'-0".
c. Hook Strip - 1" x 4" acts also as shelf support.
d. Floor:

UNDERLAYMENT: Use 3/8" particle board under all resilient flooring except for slab areas. Nail 3" at edge 1/2" in and 6" in field each way.

DRYWALL:

Includes a complete gypsum board wall and ceiling installation as indicated on the drawings. Wall board shall be 5/8" recessed edge type board such as manufactured by U.S. Gypsum Co. or equal. Nails 5d-13 1/2 gauge, cement coated, flathead, 1 5/8" long. Taping, "Perfstape" joint reinforcing tape and cement as manufactured by U.S. Gypsum Co. Use 5/8", type"X" one hour fire-rated gypsum board between garage and home where indicated on the drawings, and under stairways.

All Exterior corners to have metal edges. The best workmanship and construction practices are required. In the event the Drywall Contractor finds crooked walls or bad joints occurring in the frame structure then these should not be covered but brought to the attention of the CONTRACTOR so they may be fixed prior to covering with drywall. Special care must be taken to protect and preserve the finish wood surfaces. All doors and window sills to be trimmed flush with openings. All scraps to be hauled away within 3 days of hanging. Do not break joints at plates in stairwells, header connections, or at plates on two story high walls. All recessed kitchen lights to have clean straight lines. Keep sheetrock within 3/16" of all rough in boxes.

THERMAL INSULATION:

Roof: R-30 CLOSED CELL POLYURETHANE FOAM

Ceiling: R-30 @ FLAT CLGS

Walls: R-21 @ 2X6 WALLS / R-15 @ 2X4 WALLS

Floor: R-19 @ RAISED FLOORS

Weather-stripping: At all windows and doors, typical.

Special Notes: Provide 3-1/2" sound insulation between floors and in walls around all bathrooms, all bedrooms and laundry room.

SHEET METAL:

All sheet metal shall be 16 Oz. Copper unless indicated otherwise on the drawings. Sheet metal work includes chimney saddles, gutters, downspouts, flashing, counter flashing and all other sheet metal not specifically a part of other trades. Fabrication and installation in accordance with the best workmanship standards is required. Soldered joints shall have continuous solder and be watertight. Free edges projecting from adjoining surfaces shall have metal bent on itself. Nails shall be copper.

Downspouts shall be of round design unless noted otherwise. Offsets shall be fully soldered. Connection to gutter shall be rigid and watertight. Fascia gutter to be straight with all intersection soldered. Do not use short pieces.

Provide vents to kitchen fans, bath fans, gas ranges, gas heaters, and any other areas indicated on the drawings.

SPECIAL NOTES:

ROOFING:

SPECIAL NOTES: ASPHALT COMPOSITION SHINGLE ROOFING

TO BE OWNER / ARCHITECT APPROVED

DOORS:

See drawings for size, location, and type of doors needed. Interior doors shall be 1 3/8 " solid core flush type unless indicated otherwise. Provide 1 3/8 " solid core door with self-closing hinge between home and garage. Sliding doors shall have tempered glass panels with operable screen panel. Sizes as indicated on drawings. Pocket door frames to be Nordal or equal.

SPECIAL NOTES:

WINDOWS:

JELD-WEN CLAD WOOD

See drawings for size and location of windows. Windows to be ' ^ ' or approved equal. Provide screens for all openings. Windows shall be straight, plumb, and true, and shall operate easily without binding.

SPECIAL NOTES:

FIXED GLASS:

See drawings for size and location of fixed glass. All glazing shall be guaranteed water tight and any glass which leaks shall be re-glazed. Size glass to meet minimum C. B. C. requirements.

SPECIAL NOTES:

SHOWER DOORS AND MIRRORS:

See drawings for size and location of shower doors and mirrors. Shower doors to have approved shatter-proof glass. Mirrors to be 1/4 " polished plate glass.

SPECIAL NOTES:

HARDWARE:

An allowance of $ 2500 is to be made for finish hardware. This is to include all door knobs, cabinet handles, door, pulls, towel bars, paper holders, etc.

SPECIAL NOTES:

PAINTING:

MATERIALS: Paint materials shall be as manufactured by the Kelly-Moore Co. or an approved equal, unless otherwise noted.

WORKMANSHIP: No painting or finishing shall be done under conditions which jeopardize the quality of the work. Surfaces to be finished shall be in proper condition to receive same. Each coat shall be applied at the proper consistency, free of runs, sags, brush marks, spattering, or any other evidence of poor workmanship. Surfaces shall be sanded smooth. Nail holes and imperfections in the wood shall be filled with material of the same color as the finish. All items having factory finish will not be painted. All other surfaces shall be painted or finished whether specifically mentioned herein or not.

EXTERIOR SURFACES: Wood siding, trim, fascia, decks, beams, railings, treat with a semi-transparent or heavy body penetrating stain unless noted otherwise. Exterior doors use two coats of exterior type spar varnish. Prime all galvanized metal and coat with exterior flat enamel.

INTERIOR SURFACES: Natural woods use semi-transparent stain and sealer. Cabinets and wood doors to be sanded, stained, sealed, and lacquered. Drywall in kitchen and bath areas to be sealed and stippled. Other drywall areas to have one coat of interior flat latex wall finish. Special care should be taken to preserve natural woodwork. Work shall be neat, clean and accurate so as not to damage finish of natural wood surfaces. All surfaces not intended to have paint shall be left in clean condition.

SPECIAL NOTES: COLOR / PAINT TYPE TO BE OWNER APPROVED

TILE:

Tile shall be installed in accordance with the best methods and construction practices. Tiles are to be soaked before applying and joints are to be kept neat, symmetrical and all lines true and straight. Joints and tile shall be thoroughly washed. Owner to select color.

SPECIAL NOTES: TO BE OWNER APPROVED

FLOORING MATERIALS:

An allowance of $ 80/SQ.YD. is to be made for floor coverings. This is to include all resilient flooring, carpets, and wood floors used in the project. Ceramic tile floors are not included in this allowance.

SPECIAL NOTES:

KITCHEN APPLIANCES:

Furnish and install the following: TO BE OWNER APPROVED

PLUMBING:

The Plumbing Contractor shall design and install a complete plumbing system as indicated on the drawings. Pipes shall be sized adequately to accommodate the fixtures served. The Plumbing Contractor shall make all necessary connections to utilities shown on plot plan and install all piping, etc. required. Stop valves should be at each fixture or appliance. Plumb system for future soft water system. Plumb for a least 4 exterior hose bibs or more if the size of the house indicates. Provide plumbing for automatic dishwasher. Provide a pressure relief valve at water heater. Provide a pressure reducer if water pressure exceeds 50 PSI.

SPECIAL NOTES: FITTINGS & FIXTURES TO BE OWNER APPROVED

ELECTRICAL:

The Electrical Contractor will design his system for a complete and operating system. The drawings show only the location and type of outlets, lighting, including control switches. No extra charges will be paid for furnishing items not specified in the plans but required by the local electrical codes. Provide doorbell as standard item. Provide all recessed, under counter, and soffit lighting if indicated on plans.

ELECTRICAL FIXTURES:

Provide an allowance of $ 100/PER for fixtures not specified on plans and normal installation.

HEATING SYSTEM:

This system to be designed and installed by the Contractor doing the installation. Type of system:

GAS-FIRED FAU @ MAIN RESIDENCE

ELEC, MINI-SPLIT HEAT PUMP @ ADU

GENERAL NOTES:

1. The CONTRACTOR and all sub-contractors shall guarantee and be responsible for and make good all defects due to faults of labor or materials in the work included in the contract for one year following the completion of the structure.

2. All sub-contractors will be responsible for damages caused by: poor workmanship, system failures, breakage, or their employees' irresponsibilities that cause additional time and expense to the general contractor. Sub-contractors will be charged for such items as they may occur for a period of one year after the home is completed.

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REMODEL / ADDITION PLANS FOR:
VECCHIET RESIDENCE
APN 027-103-19
380 - 7th AVENUE - SANTA CRUZ, CALIFORNIA

ARCHITECTURAL SPECIFICATIONS

5-3-22
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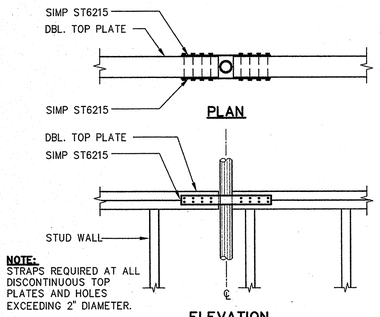
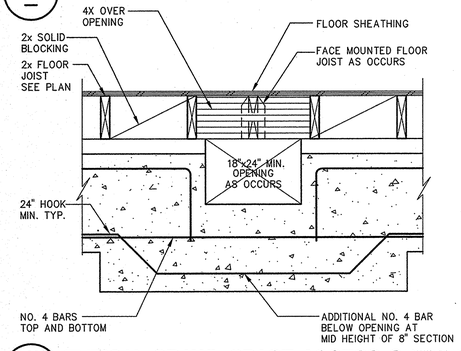
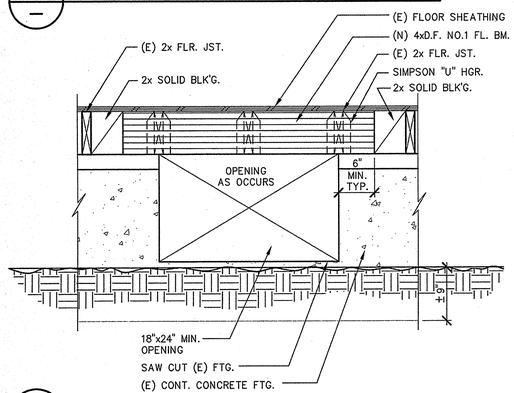
EXHIBIT D



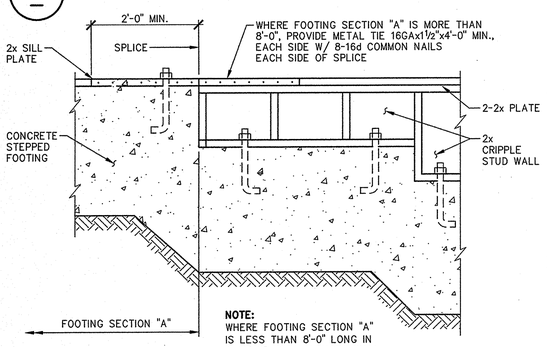
10 — TYPICAL TOP PLATE STRAPS



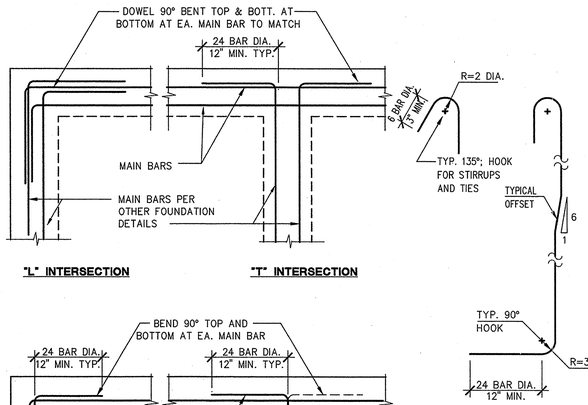
11 — TYPICAL CRAWL SPACE ACCESS OPENING



12 — TYPICAL CRAWL SPACE ACCESS OPENING

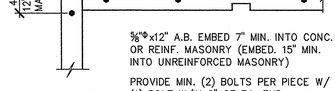


13 — STEPPED FOOTING CONNECTION



HORIZONTAL SPLICE SCHED.		
BAR SIZE	BAR DIA.	40 DIA.
#3	0.375"	1'-3"
#4	0.5"	1'-8"
#5	0.625"	2'-1"
#6	0.75"	2'-6"
#7	0.875"	2'-11"

7 — TYP. HORIZONTAL CONCRETE REINFORCEMENT



⅝"ø x12" A.B. EMBED 7" MIN. INTO CONC. OR REINF. MASONRY (EMBED. 15" MIN. INTO UNREINFORCED MASONRY)

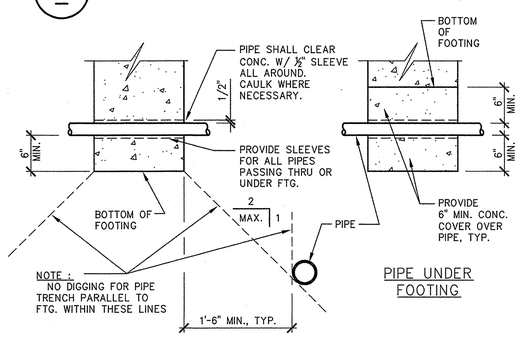
PROVIDE MIN. (2) BOLTS PER PIECE W/ (1) BOLT W/IN 9" OF EA. END.

SPACE A.B.'s AT 48" O.C. FOR ONE STORY AND 48" O.C. AT TWO STORY BUILDING AREAS.

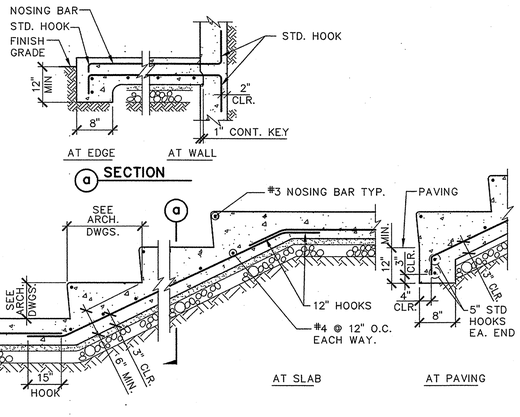
A NUT AND 3"x3"x¼" STL. PLATE WASHER ON EA. BOLT

MUDSILL SHALL BE 3x P.T.D.F. No. 1 (U.O.N.)

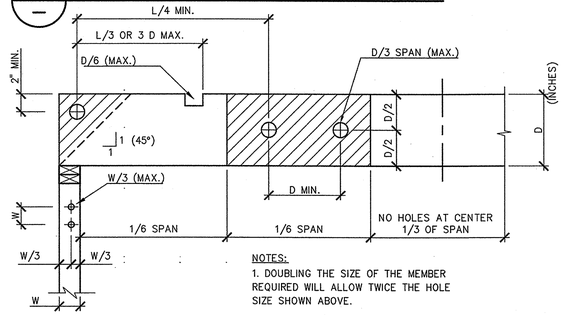
8 — SILL PLATE DETAIL



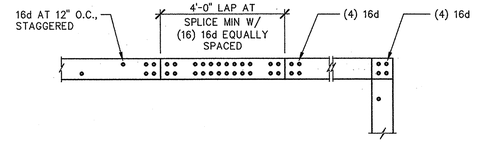
9 — PIPE THRU FTG. AND PARALLEL TO FTG.



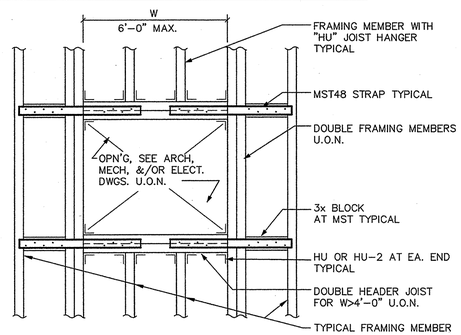
4 — SLAB ON GRADE



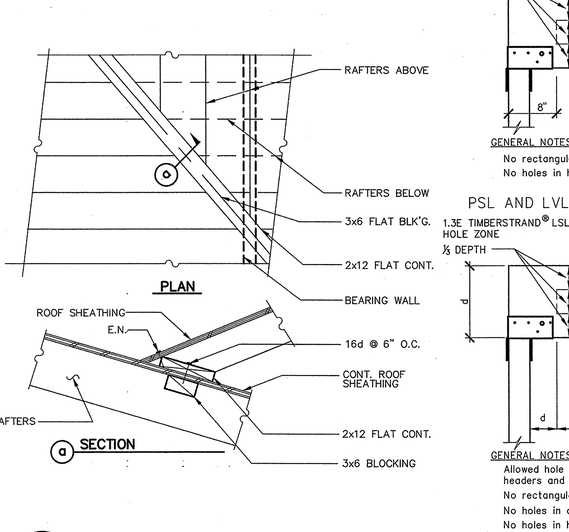
5 — HOLES & NOTCHES AT JOIST & STUD



1 — TYPICAL TOP PLATE SPLICE

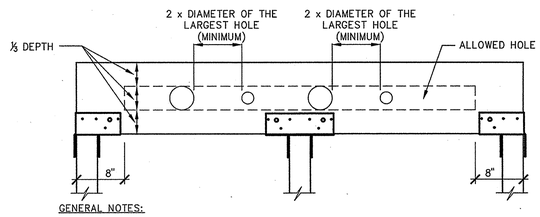


2 — OPENING IN FRAME AROUND HORIZ. DIAPHRAGM SEE PLAN FOR LOCATION



6 — TYPICAL CALIFORNIA FRAMING

1.55E TIMBERSTRAND® LSL HEADERS AND BEAMS

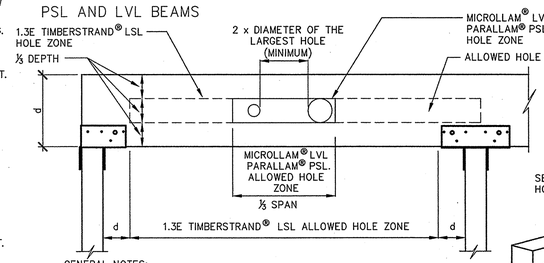


HEADER DEPTH	MAXIMUM ROUND HOLE SIZE
9¼"-9½"	3"
11¼"-11⅞"	3⅜"
14" TO 16"	4⅝"

GENERAL NOTES:
No rectangular holes
No holes in headers or beams in plank orientation

SEE ILLUSTRATION FOR ALLOWED HOLE ZONE

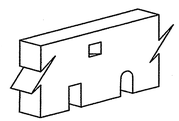
PSL AND LVL BEAMS



BEAM DEPTH	MAXIMUM ROUND HOLE SIZE
4⅜"	1"
5½"	1¾"
7¼" TO 20"	2"

SEE ILLUSTRATION FOR ALLOWED HOLE ZONE

GENERAL NOTES:
Allowed hole zone suitable for uniformly loaded headers and beams only.
No rectangular holes
No holes in cantilevers.
No holes in headers or beams in plank orientation



DO NOT cut, notch, or drill holes in headers except as indicaterd in the illustrations and tables above.

3 — ALLOWABLE HOLES

EXHIBIT D

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REMODEL / ADDITION PLANS FOR:
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380 – 7th AVENUE - SANTA CRUZ, CALIFORNIA

STANDARD CONSTRUCTION DETAILS

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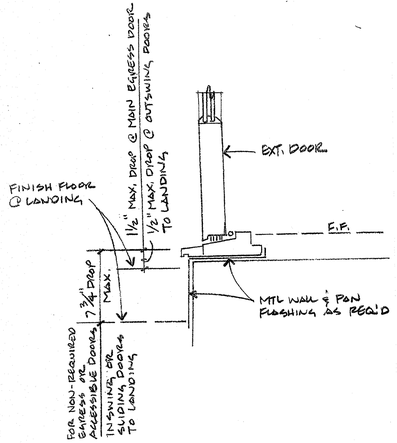
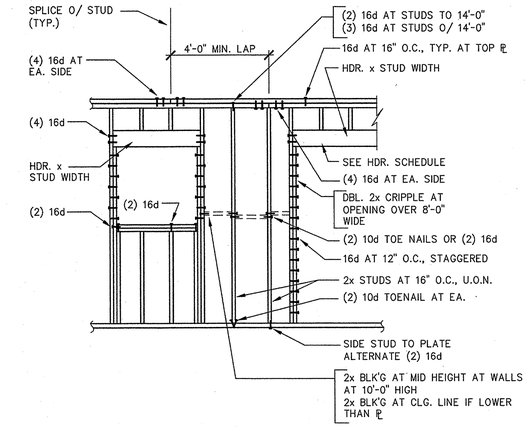
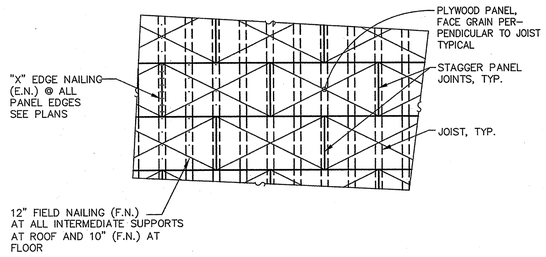


NOTE: EVERY LANDING SHALL HAVE A DIMENSION OF 36 INCHES MINIMUM IN THE DIRECTION OF TRAVEL. THE FINISHED SURFACE OF THE EXTERIOR LANDING AT THE MAIN EGRESS DOOR SHALL NOT BE GREATER THAN 1-1/2 INCHES BELOW THE TOP OF THE THRESHOLD. EXTERIOR LANDINGS AT DOORS THAT ARE NOT THE MAIN EGRESS SHALL NOT BE MORE THAN 7-3/4 INCHES BELOW THE TOP OF THE THRESHOLD, 1/2 INCH MAXIMUM DROP AT OUTSWING DOORS.

11 EXTERIOR THRESHOLD

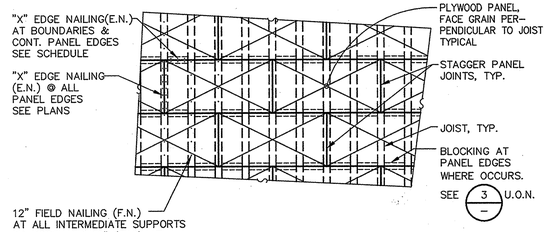


8 TYPICAL STUD WALL DETAIL



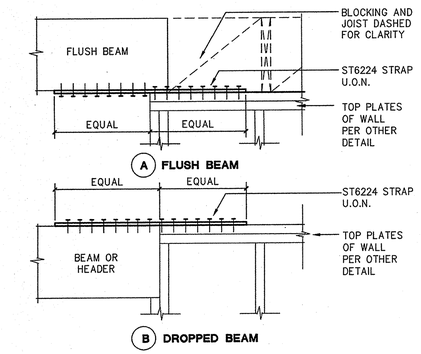
NOTES
1. USE 10d COMMON NAILS AT FLOORS; 8d COMMON NAILS AT ROOFS.
2. GLUE PLYWOOD TO FLOOR FRAMING MEMBERS PRIOR TO NAILING.
3. MINIMUM PLYWOOD WIDTH IS 24".
4. SEE GENERAL NOTES FOR PLYWOOD THICKNESS & GRADE.

1 PLYWOOD SHEATHING AT ROOF AND FLOORS UNBLOCKED



NOTES
1. USE 10d COMMON NAILS AT FLOORS; 8d COMMON NAILS AT ROOFS.
2. GLUE PLYWOOD TO FLOOR FRAMING MEMBERS PRIOR TO NAILING.
3. MINIMUM PLYWOOD WIDTH IS 24".
4. SEE GENERAL NOTES FOR PLYWOOD THICKNESS & GRADE.

2 PLYWOOD SHEATHING AT ROOF AND FLOORS REQUIRING SPECIAL BLOCKING AND EDGE NAIL SEE PLAN FOR LOCATION



12 TYPICAL TOP PLATE SPLICE AT BEAM CONNECTION

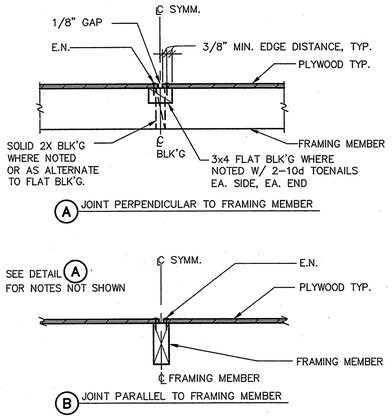
9 WOOD STAIR DETAIL
3/4"=1'-0"

6 INTERIOR HANDRAIL

13 TYPICAL SHEAR COLLECTOR STRAP

10 BEAM AND POST CONNECTION

7 SHEAR WALL FRAMING ELEVATION



3 PLYWOOD NAILING

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EXHIBIT D

2019 CALIFORNIA GREEN BUILDING STANDARDS CODE
RESIDENTIAL MANDATORY MEASURES, SHEET 1 (January 2020, Includes August 2019 Supplement)

AIA California

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

Y | N/A | RESPON. PARTY

CHAPTER 3
GREEN BUILDING
SECTION 301 GENERAL

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

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

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

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

SECTION 302 MIXED OCCUPANCY BUILDINGS

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

ABBREVIATION DEFINITIONS:

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

CHAPTER 4
RESIDENTIAL MANDATORY MEASURES
DIVISION 4.1 PLANNING AND DESIGN

SECTION 4.102 DEFINITIONS
4.102.1 DEFINITIONS
The following terms are defined in Chapter 2 *(and are included here for reference)*

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

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

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

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

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

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

(Website: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html)

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

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

Exception: Additions and alterations not altering the drainage path.

4.106.4 Electric vehicle (EV) charging for new construction. New construction shall comply with Sections 4.106.4.1, 4.106.4.2, or 4.106.4.3 to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the *California Electrical Code*, Article 625.

Exceptions:
1. On a case-by-case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions:
   - 1.1 Where there is no commercial power supply.
   - 1.2 Where there is evidence substantiating that meeting the requirements will alter the local utility infrastructure design requirements on the utility side of the meter so as to increase the utility side cost to the homeowner or the developer by more than $400.00 per dwelling unit.
2. Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities.

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

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

4.106.4.2 New multifamily dwellings. If residential parking is available, ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future EVSE. Calculations for the required number of EV spaces shall be rounded up to the nearest whole number.

Notes:
1. Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging.
2. There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.

4.106.4.2.1 Electric vehicle charging space (EV space) locations. Construction documents shall indicate the location of proposed EV spaces. Where common use parking is provided at least one EV space shall be located in the common use parking area and shall be available for use by all residents.

4.106.4.2.1.1 Electric Vehicle Charging Stations (EVCS) When EV chargers are installed, EV spaces required by Section 4.106.2.2, Item 3, shall comply with at least one of the following options:

1. The EV space shall be located adjacent to an accessible parking space meeting the requirements of the *California Building Code*, Chapter 11A, to allow use of the EV charger from the accessible parking space.
2. The EV space shall be located on an accessible route, as defined in the *California Building Code*, Chapter 2, to the building.

Exception: Electric vehicle charging stations designed and constructed in compliance with the *California Building Code*, Chapter 11B, are not required to comply with Section 4.106.4.2.1.1 and Section 4.106.4.2.2, Item 3.

Note: Electric Vehicle charging stations serving public housing are required to comply with the *California Building Code*, Chapter 11B.

4.106.4.2.2 Electric vehicle charging space (EV space) dimensions. The EV space shall be designed to comply with the following:

1. The minimum length of each EV space shall be 18 feet (5486 mm).
2. The minimum width of each EV space shall be 9 feet (2743 mm).
3. One in every 25 EV spaces, but not less than one EV space, shall have an 8-foot (2438 mm) wide minimum aisle. A 5-foot (1524 mm) wide minimum aisle shall be permitted provided the minimum width of the EV space is 12 feet (3658 mm).
   a. Surface slope for this EV space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction.

4.106.4.2.3 Single EV space required. Install a listed raceway capable of accommodating a 208/240-volt dedicated branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or enclosure in close proximity to the proposed location of the EV space. Construction documents shall identify the raceway termination point. The service panel and/or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

4.106.4.2.4 Multiple EV spaces required. Construction documents shall indicate the raceway termination point and proposed location of future EV spaces and EV chargers. Construction documents shall also provide information on amperage of future EVSE, raceway method(s), wiring schematics and electrical load calculations to verify that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at the full rated amperage of the EVSE. Plan design shall be based upon a 40-ampere minimum branch circuit. Required raceways and related components that are planned to be installed underground, enclosed, inaccessible or in concealed areas and spaces shall be installed at the time of original construction.

4.106.4.2.5 Identification. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the *California Electrical Code*.

4.106.4.3 New hotels and motels. All newly constructed hotels and motels shall provide EV spaces capable of supporting future installation of EVSE. The construction documents shall identify the location of the EV spaces.

Notes:
1. Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging.
2. There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.

4.106.4.3.1 Number of required EV spaces. The number of required EV spaces shall be based on the total number of parking spaces provided for all types of parking facilities in accordance with Table 4.106.4.3.1. Calculations for the required number of EV spaces shall be rounded up to the nearest whole number.

TABLE 4.106.4.3.1

TOTAL NUMBER OF PARKING SPACES	NUMBER OF REQUIRED EV SPACES
0-9	0
10-25	1
26-50	2
51-75	4
76-100	5
101-150	7
151-200	10
201 and over	6 percent of total

4.106.4.3.2 Electric vehicle charging space (EV space) dimensions. The EV spaces shall be designed to comply with the following:

1. The minimum length of each EV space shall be 18 feet (5486mm).
2. The minimum width of each EV space shall be 9 feet (2743mm)

4.106.4.3.3 Single EV space required. When a single EV space is required, the EV space shall be designed in accordance with Section 4.106.4.2.3.

4.106.4.3.4 Multiple EV spaces required. When multiple EV spaces are required, the EV spaces shall be designed in accordance with Section 4.106.4.2.4.

4.106.4.3.5 Identification. The service panels or sub-panels shall be identified in accordance with Section 4.106.4.2.5.

4.106.4.3.6 Accessible EV spaces. In addition to the requirements in Section 4.106.4.3, EV spaces for hotels/motels and all EVSE, when installed, shall comply with the accessibility provisions for the EV charging stations in the *California Building Code*, Chapter 11B.

DIVISION 4.2 ENERGY EFFICIENCY

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

DIVISION 4.3 WATER EFFICIENCY AND CONSERVATION

4.303 INDOOR WATER USE
4.303.1 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the sections 4.303.1.1, 4.303.1.2, 4.303.1.3, and 4.303.4.4.

Note: All noncompliant plumbing fixtures in any residential real property shall be replaced with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy, or final permit approval by the local building department. See Civil Code Section 1101.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and other important enactment dates.

4.303.1.1 Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Tank-type Toilets.

Note: The effective flush volume of dual flush toilets is defined as the composite, average flush volume of two reduced flushes and one full flush.

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

4.303.1.3 Showerheads.

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

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

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

4.303.1.4 Faucets.

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

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

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

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

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

4.303.2 STANDARDS FOR PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures and fittings shall be installed in accordance with the *California Plumbing Code*, and shall meet the applicable standards referenced in Table 1701.1 of the *California Plumbing Code*.

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

TABLE - MAXIMUM FIXTURE WATER USE

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

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

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

DIVISION 4.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY

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

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

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

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

1. Identify the construction and demolition waste materials to be diverted from disposal by recycling, reuse on the project or salvage for future use or sale.
2. Specify if construction and demolition waste materials will be sorted on-site (source separated) or bulk mixed (single stream).
3. Identify diversion facilities where the construction and demolition waste material collected will be taken.
4. Identify construction methods employed to reduce the amount of construction and demolition waste generated.
5. Specify that the amount of construction and demolition waste materials diverted shall be calculated by weight or volume, but not by both.

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

Note: The owner or contractor may make the determination if the construction and demolition waste materials will be diverted by a waste management company.

4.408.4 WASTE STREAM REDUCTION ALTERNATIVE [LR]. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 3.4 lbs./sq.ft. of the building area shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1

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

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

Notes:
1. Sample forms found in "A Guide to the California Green Building Standards Code (Residential)" located at www.hcd.ca.gov/CALGreen.html may be used to assist in documenting compliance with this section.
2. Mixed construction and demolition debris (C & D) processors can be located at the California Department of Resources Recycling and Recovery (CalRecycle).

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

1. Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure.
2. Operation and maintenance instructions for the following:
   a. Equipment and appliances, including water-saving devices and systems, HVAC systems, photovoltaic systems, electric vehicle chargers, water-heating systems and other major appliances and equipment.
   b. Roof and yard drainage, including gutters and downspouts.
   c. Space conditioning systems, including condensers and air filters.
   d. Landscape irrigation systems.
   e. Water reuse systems.
3. Information from local utility, water and waste recovery providers on methods to further reduce resource consumption, including recycle programs and locations.
4. Public transportation and/or carpool options available in the area.
5. Educational material on the positive impacts of an interior relative humidity between 30-60 percent and what methods an occupant may use to maintain the relative humidity level in that range.
6. Information about water-conserving landscape and irrigation design and controllers which conserve water.
7. Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from the foundation.
8. Information on required routine maintenance measures, including, but not limited to, caulking, painting, grading around the building, etc.
9. Information about state solar energy and incentive programs available.
10. A copy of all special inspections verifications required by the enforcing agency or this code.

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

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

DIVISION 4.5 ENVIRONMENTAL QUALITY

SECTION 4.501 GENERAL
4.501.1 Scope
The provisions of this chapter shall outline means of reducing the quality of air contaminants that are odorous, irritating and/or harmful to the comfort and well being of a building's installers, occupants and neighbors.

SECTION 4.502 DEFINITIONS
5.102.1 DEFINITIONS
The following terms are defined in Chapter 2 *(and are included here for reference)*

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

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

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

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REMODEL / ADDITION PLANS FOR:
VECCHIET RESIDENCE
APN 027-103-19
380 – 7th AVENUE - SANTA CRUZ, CALIFORNIA

GREEN BUILDING STANDARDS

5-3-22
NTS
MSH
2204

EXHIBIT D

GB 1

2019 CALIFORNIA GREEN BUILDING STANDARDS CODE

RESIDENTIAL MANDATORY MEASURES, SHEET 1 (January 2020, Includes August 2019 Supplement)

AIA California

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

MAXIMUM INCREMENTAL REACTIVITY (MIR). The maximum change in weight of ozone formed by adding a compound to the "Base Reactive Organic Gas (ROG) Mixture" per weight of compound added, expressed to hundredths of a gram (g O^3/g ROC).
Note: MIR values for individual compounds and hydrocarbon solvents are specified in CCR, Title 17, Sections 94700 and 94701.

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

PRODUCT-WEIGHTED MIR (PWMIR). The sum of all weighted-MIR for all ingredients in a product subject to this article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging).
Note: PWMIR is calculated according to equations found in CCR, Title 17, Section 94521 (a).

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

VOC. A volatile organic compound (VOC) broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain hydrogen and may contain oxygen, nitrogen and other elements. See CCR Title 17, Section 94508(a).

4.503 FIREPLACES

4.503.1 GENERAL. Any installed gas fireplace shall be a direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits. Woodstoves, pellet stoves and fireplaces shall also comply with applicable local ordinances.

4.504 POLLUTANT CONTROL

4.504.1 COVERING OF DUCT OPENINGS & PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION. At the time of rough installation, during storage on the construction site and until final startup of the heating, cooling and ventilating equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheet metal or other methods acceptable to the enforcing agency to reduce the amount of water, dust or debris which may enter the system.

4.504.2 FINISH MATERIAL POLLUTANT CONTROL. Finish materials shall comply with this section.

4.504.2.1 Adhesives, Sealants and Caulks. Adhesives, sealant and caulks used on the project shall meet the requirements of the following standards unless more stringent local or regional air pollution or air quality management district rules apply:

1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable or SCAQMD Rule 1168 VOC limits, as shown in Table 4.504.1 or 4.504.2, as applicable. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and trichloroethylene), except for aerosol products, as specified in Subsection 2 below.
2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than 1 pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of *California Code of Regulations*, Title 17, commencing with section 94507.

4.504.2.2 Paints and Coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Suggested Control Measure, as shown in Table 4.504.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 4.504.3 shall be determined by classifying the coating as a Flat, Nonflat or Nonflat-High Gloss coating, based on its gloss, as defined in subsections 4.21, 4.36, and 4.37 of the 2007 California Air Resources Board, Suggested Control Measure, and the corresponding Flat, Nonflat or Nonflat-High Gloss VOC limit in Table 4.504.3 shall apply.

4.504.2.3 Aerosol Paints and Coatings. Aerosol paints and coatings shall meet the Product-weighted MIR Limits for ROC in Section 94522(a)(2) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections 94522(e)(1) and (f)(1) of *California Code of Regulations*, Title 17, commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air Quality Management District additionally comply with the percent VOC by weight of product limits of Regulation 8, Rule 49.

4.504.2.4 Verification. Verification of compliance with this section shall be provided at the request of the enforcing agency. Documentation may include, but is not limited to, the following:

1. Manufacturer's product specification.
2. Field verification of on-site product containers.

TABLE 4.504.1 - ADHESIVE VOC LIMIT[1,2]

(Less Water and Less Exempt Compounds in Grams per Liter)	
ARCHITECTURAL APPLICATIONS	**VOC LIMIT**
INDOOR CARPET ADHESIVES	50
CARPET PAD ADHESIVES	50
OUTDOOR CARPET ADHESIVES	150
WOOD FLOORING ADHESIVES	100
RUBBER FLOOR ADHESIVES	60
SUBFLOOR ADHESIVES	50
CERAMIC TILE ADHESIVES	65
VCT & ASPHALT TILE ADHESIVES	50
DRYWALL & PANEL ADHESIVES	50
COVE BASE ADHESIVES	50
MULTIPURPOSE CONSTRUCTION ADHESIVE	70
STRUCTURAL GLAZING ADHESIVES	100
SINGLE-PLY ROOF MEMBRANE ADHESIVES	250
OTHER ADHESIVES NOT LISTED	50
SPECIALTY APPLICATIONS	
PVC WELDING	510
CPVC WELDING	490
ABS WELDING	325
PLASTIC CEMENT WELDING	250
ADHESIVE PRIMER FOR PLASTIC	550
CONTACT ADHESIVE	80
SPECIAL PURPOSE CONTACT ADHESIVE	250
STRUCTURAL WOOD MEMBER ADHESIVE	140
TOP & TRIM ADHESIVE	250
SUBSTRATE SPECIFIC APPLICATIONS	
METAL TO METAL	30
PLASTIC FOAMS	50
POROUS MATERIAL (EXCEPT WOOD)	50
WOOD	30
FIBERGLASS	80

1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED.
2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168.

TABLE 4.504.2 - SEALANT VOC LIMIT

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

TABLE 4.504.3 - VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS[2,3]

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

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

TABLE 4.504.5 - FORMALDEHYDE LIMITS[1]

MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION	
PRODUCT	**CURRENT LIMIT**
HARDWOOD PLYWOOD VENEER CORE	0.05
HARDWOOD PLYWOOD COMPOSITE CORE	0.05
PARTICLE BOARD	0.09
MEDIUM DENSITY FIBERBOARD	0.11
THIN MEDIUM DENSITY FIBERBOARD[2]	0.13

1. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIF. AIR RESOURCES BOARD, AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD AS TESTED IN ACCORDANCE WITH ASTM E 1333. FOR ADDITIONAL INFORMATION, SEE CALIF. CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 THROUGH 93120.12.
2. THIN MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM THICKNESS OF 5/16" (8 MM).

DIVISION 4.5 ENVIRONMENTAL QUALITY (continued)

4.504.3 CARPET SYSTEMS. All carpet installed in the building interior shall meet the testing and product requirements of at least one of the following:

1. Carpet and Rug Institute's Green Label Plus Program.
2. California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers" Version 1.1, February 2010 (also known as Specification 01350).
3. NSF/ANSI 140 at the Gold level.
4. Scientific Certifications Systems Indoor Advantage™ Gold.

4.504.3.1 Carpet cushion. All carpet cushion installed in the building interior shall meet the requirements of the Carpet and Rug Institute's Green Label program.

4.504.3.2 Carpet adhesive. All carpet adhesive shall meet the requirements of Table 4.504.1.

4.504.4 RESILIENT FLOORING SYSTEMS. Where resilient flooring is installed , at least 80% of floor area receiving resilient flooring shall comply with one or more of the following:

1. Products compliant with the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.1, February 2010 (also known as Specification 01350), certified as a CHPS Low-Emitting Material in the Collaborative for High Performance Schools (CHPS) High Performance Products Database.
2. Products certified under UL GREENGUARD Gold (formerly the Greenguard Children & Schools program).
3. Certification under the Resilient Floor Covering Institute (RFCI) FloorScore program.
4. Meet the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers", Version 1.1, February 2010 (also known as Specification 01350).

4.504.5 COMPOSITE WOOD PRODUCTS. Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the buildings shall meet the requirements for formaldehyde as specified in ARB's Air Toxics Control Measure for Composite Wood (17 CCR 93120 et seq.), by or before the dates specified in those sections, as shown in Table 4.504.5

4.504.5.1 Documentation. Verification of compliance with this section shall be provided as requested by the enforcing agency. Documentation shall include at least one of the following:

1. Product certifications and specifications.
2. Chain of custody certifications.
3. Product labeled and invoiced as meeting the Composite Wood Products regulation (see CCR, Title 17, Section 93120, et seq.).
4. Exterior grade products marked as meeting the PS-1 or PS-2 standards of the Engineered Wood Association, the Australian AS/NZS 2269, European 636 3S standards, and Canadian CSA 0121, CSA 0151, CSA 0153 and CSA 0325 standards.
5. Other methods acceptable to the enforcing agency.

4.505 INTERIOR MOISTURE CONTROL

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

4.505.2 CONCRETE SLAB FOUNDATIONS. Concrete slab foundations required to have a vapor retarder by California Building Code, Chapter 19, or concrete slab-on-ground floors required to have a vapor retarder by the California Residential Code, Chapter 5, shall also comply with this section.

4.505.2.1 Capillary break. A capillary break shall be installed in compliance with at least one of the following:

1. A 4-inch (101.6 mm) thick base of 1/2 inch (12.7mm) or larger clean aggregate shall be provided with a vapor barrier in direct contact with concrete and a concrete mix design, which will address bleeding, shrinkage, and curing, shall be used. For additional information, see American Concrete Institute, ACI 302.2R-06.
2. Other equivalent methods approved by the enforcing agency.
3. A slab design specified by a licensed design professional.

4.505.3 MOISTURE CONTENT OF BUILDING MATERIALS. Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed when the framing members exceed 19 percent moisture content. Moisture content shall be verified in compliance with the following:

1. Moisture content shall be determined with either a probe-type or contact-type moisture meter. Equivalent moisture verification methods may be approved by the enforcing agency and shall satisfy requirements found in Section 101.8 of this code.
2. Moisture readings shall be taken at a point 2 feet (610 mm) to 4 feet (1219 mm) from the grade stamped end of each piece verified.
3. At least three random moisture readings shall be performed on wall and floor framing with documentation acceptable to the enforcing agency provided at the time of approval to enclose the wall and floor framing.

Insulation products which are visibly wet or have a high moisture content shall be replaced or allowed to dry prior to enclosure in wall or floor cavities. Wet-applied insulation products shall follow the manufacturers' drying recommendations prior to enclosure.

4.506 INDOOR AIR QUALITY AND EXHAUST

4.506.1 Bathroom exhaust fans. Each bathroom shall be mechanically ventilated and shall comply with the following:

1. Fans shall be ENERGY STAR compliant and be ducted to terminate outside the building.
2. Unless functioning as a component of a whole house ventilation system, fans must be controlled by a humidity control.
   a. Humidity controls shall be capable of adjustment between a relative humidity range less than or equal to 50% to a maximum of 80%. A humidity control may utilize manual or automatic means of adjustment.
   b. A humidity control may be a separate component to the exhaust fan and is not required to be integral (i.e., built-in)

Notes:

1. For the purposes of this section, a bathroom is a room which contains a bathtub, shower or tub/shower combination.
2. Lighting integral to bathroom exhaust fans shall comply with the *California Energy Code*.

4.507 ENVIRONMENTAL COMFORT

4.507.2 HEATING AND AIR-CONDITIONING SYSTEM DESIGN. Heating and air conditioning systems shall be sized, designed and have their equipment selected using the following methods:

1. The heat loss and heat gain is established according to ANSI/ACCA 2 Manual J - 2011 (Residential Load Calculation), ASHRAE handbooks or other equivalent design software or methods.
2. Duct systems are sized according to ANSI/ACCA 1 Manual D - 2014 (Residential Duct Systems), ASHRAE handbooks or other equivalent design software or methods.
3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S - 2014 (Residential Equipment Selection), or other equivalent design software or methods.

Exception: Use of alternate design temperatures necessary to ensure the system functions are acceptable.

CHAPTER 7
INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS

702 QUALIFICATIONS

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

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

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

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

Notes:

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

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

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

703 VERIFICATIONS

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

EXHIBIT D

Michael Helm, AIA Architect & Associates
200 Seventh Avenue, #110 Santa Cruz, California 95062 (831) 476-5386

REMODEL / ADDITION PLANS FOR:
VECCHIET RESIDENCE
APN 027-103-19
380 – 7th AVENUE - SANTA CRUZ, CALIFORNIA

5-3-22
NTS
MSH
2204

GB 2

FOR TAX PURPOSES ONLY

POR. OF SEC. 17 & 20, T.11S., R.1W., M.D.B. & M.

07 Tax Area Code 82-040

27-10

08

ASSEMBLY RESUB. TWIN LAKES PARK 15MB25 5/15/09

45PM57 9/17/85

SEC. 17 / SEC. 20

09

DOLORES AVE.

ASSEMBLY AVE.

SIXTH AVE.

SEVENTH AVE.

EIGHTH AVE.

ST.

CARMEL ST.

TWIN LAKES PARK SUB. NO. 2 7MB5 8/26/90

11

13

14

N 1"= 50'

Electronically Redrawn 8/7/98 rw
Rev. 4/2/01 nvm (changed page refs.)

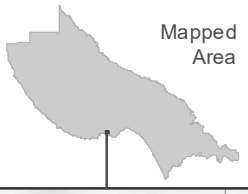
Note - Assessor's Parcel & Block Numbers Shown in Circles.

Assessor's Map No. 27-10
County of Santa Cruz, Calif.
August, 1998

EXHIBIT E

SANTA CRUZ COUNTY PLANNING DEPARTMENT

Parcel Location Map



Parcel: 02710319

Study Parcel

Assessor Parcel Boundary

N

0 10 20

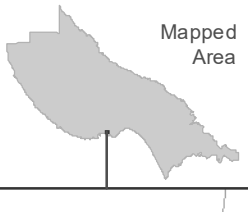
Feet

Map printed: 9 Nov. 2022

EXHIBIT E

SANTA CRUZ COUNTY PLANNING DEPARTMENT

Parcel General Plan Map



R-UH

027-103-19
(R-UH)

R-UH *Res. Urban High Density*

N

0 10 20
Feet

EXHIBIT E

SANTA CRUZ COUNTY PLANNING DEPARTMENT

Parcel Zoning Map

R-1-3.5

027-103-19
(R-1-3.5)

R-1-3.5-L

R-1 *Single-Family Residential*

N

0 10 20
Feet

EXHIBIT E

Parcel Information

Services Information

Urban/Rural Services Line:	_X_ Inside __ Outside
Water Supply:	City of Santa Cruz
Sewage Disposal:	Santa Cruz County Sanitation District
Fire District:	Central Fire Protection District
Drainage District:	Zone 5

Parcel Information

Parcel Size:	3,000 square feet
Existing Land Use - Parcel:	Residential
Existing Land Use - Surrounding:	Residential
Project Access:	Dolores Street
Planning Area:	Live Oak
Land Use Designation:	R-UH (Urban High Density Residential)
Zone District:	R-1-3.5 (Single family residential - 3,500 square feet)
Coastal Zone:	_X_ Inside __ Outside
Appealable to Calif. Coastal Comm.	__ Yes _X_ No

Technical Reviews: Soils Report Review (REV221177)

Environmental Information

Geologic Hazards:	Not mapped/no physical evidence on site
Fire Hazard:	Not a mapped constraint
Slopes:	0-2%
Env. Sen. Habitat:	Not mapped/no physical evidence on site
Grading:	No grading proposed
Tree Removal:	One 14-inch d.b.h. palm tree to be removed
Scenic:	Not a mapped resource
Archeology:	Not mapped/no physical evidence on site

EXHIBIT F