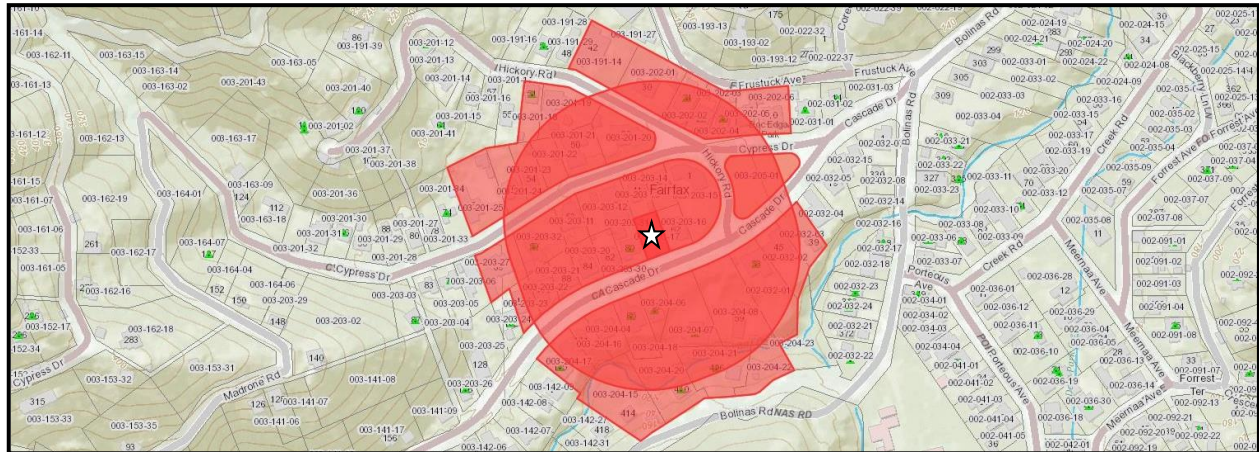


# TOWN OF FAIRFAX STAFF REPORT

## Department of Planning and Building Services

**TO:** Fairfax Planning Commission  
**DATE:** September 21, 2023  
**FROM:** Kara Spencer, Assistant Planner  
**LOCATION:** 66 Cascade Drive; APN 003-203-17  
**ZONING:** RS-6 Single-family Residential Zone  
**PROJECT:** Remodel and primary bedroom addition to a single-family residence  
**ACTION:** Conditional Use Permit and Variance, Application No. 23-26  
**APPLICANT:** Jaime Romero  
**OWNER:** Daniel McKenzie  
**CEQA STATUS:** Categorically exempt, § 15301(a) & (e)(1)



## 66 CASCADE DRIVE

### PROJECT DESCRIPTION

The project proposes an approximately 440 square-foot primary bedroom addition to an approximately 1,192 square foot, two bedroom, one bathroom single-story residence. The proposed house would be approximately 1,632 square feet with three bedrooms and two full bathrooms. A minor amount of remodeling to an existing bedroom would be required to create a new hallway that would connect to the proposed addition. The proposed addition would reach approximately 14'-9" in height. The existing approximately 78 square foot rear deck would be replaced with a new larger approximately 144 square foot deck that would be elevated three feet off the ground, which is the same height as the existing deck. The project also includes the legalization of an approximately 168 square foot deck at the front of the house. The deck did not require a building permit because it's below 30 inches in height; and, the property owner was unaware that it required Planning Commission approval. The project proposes two off-street parking spaces: one 9' by 19' space in the existing, legally, non-conforming detached garage and one 9' by 19' uncovered, tandem space in the driveway. Guest parking is available along the property frontage. Both off-street parking spaces would be

in the minimum and combined side-yard setbacks. Approximately six cubic yards (CY) of soil would be excavated for the new foundation and reused on site.

**EXISTING CONDITIONS**

The project site is flat. It’s developed with the single-story residence, the detached garage, two small storage structures, and a detached pergola. The detached garage is approximately 185 square feet. The storage structures are approximately 29 and 56 square feet (85 square feet total). The house was originally constructed in 1933. There are no records in the property file for the construction of the storage structures or pergola. The existing house meets the front setback, the rear setback, the combined front and rear setback, the minimum and combined side setbacks, the FAR, and the height requirement. The garage and larger storage structure are located within the minimum and combined side-yard setbacks. The smallest storage structure and detached pergola are located along the rear property boundary within the rear setback. As indicated in Table 1, the existing property meets the front setback, one of the individual side setbacks (western side), the FAR, lot coverage, and the building height requirement.

**Table 1: 66 Cascade Drive Compliance with RS-6 Regulations**

	Front Setback	Rear Setback	Combined Front/Rear Setback	Side Setbacks	Combined Side Setbacks	FAR	Lot Coverage	Height
<b>Required/ Permitted</b>	6 ft.	6 ft.	25 ft.	5 ft. & 5 ft.	15 ft.	.40	.35	28’-6” 2 stories
<b>Existing</b>	14’-6”	0 ft.	14’-6”	5’-4” & 2’-6”	7’-10”	.22	.27	17’-10” 1 story
<b>Proposed</b>	No change	No change	No change	No change	No change	.30	.35	No change

According to maps prepared by Marin County Parks in conjunction with the Marin Audubon Society, the project site is not within a quarter mile of a known Northern Spotted Owl nesting site.

**DISCUSSION**

**Required Discretionary Approvals**

Town Code § 17.080.050 specifies that improvements or modifications to any site zoned RS-6 that does not meet the minimum size and width requirements based on its slope require Planning Commission approval of either a Conditional Use Permit (CUP) or a Hill Area Residential Development (HRD) Permit. A property with a slope of ten percent or less is required to be a minimum of 6,000 square feet in area and 60 feet wide [Town Code § 17.080.050(A)]. At 5,500 square feet in area and 55 feet wide the project site does not meet the minimum size and width requirements and is considered legally, non-conforming. The project requires minimal excavation and would result in a minor amount of site disturbance. Therefore, the HRD permit is not applicable and the project requires Planning Commission approval of a CUP.

Town Code § 17.016.040(B)(2) prohibits a bedroom addition to a structure located on a non-conforming property unless, according to Town Code § 17.016.040(C)(2)(a), the

off-street parking requirements of the Town’s Zoning Ordinance are met or a Variance for a parking exception has been granted. Because the project proposes a primary bedroom addition, it is required to meet the off-street parking requirements of Town Code Chapter 17.052 (Off-Street Parking and Loading Requirements). Chapter 17.052 requires single-family residences with three or more bedrooms to have two 9’ by 19’ off-street parking spaces [§ 17.052.030(A)(1)(d)], one of which must be covered [§17.052.010(D)]. An additional off-street parking space for guests is also required when a legal on-street parking space is not available along the property street frontage [17.052.030(A)(2)]. Sections 17.052.010(A) and (B) of Chapter 17.052 prohibit parking within a side-yard setback unless a Variance is granted. Town Code § 17.052.040(E) prohibits tandem off-street parking for the principal residence.

The project proposes to continue the use of the parking space in the legal, non-conforming garage that is located within the minimum and combined side-yard setbacks. It also proposes a second off-street parking space in the existing driveway in tandem with the space in the garage. Therefore, the project requires Planning Commission approval of a Variance to allow tandem parking in a required side-yard. Guest off-street guest parking is not required, as it is available along the property frontage.

**Conditional Use Permit (Town Code Chapter 17.032)**

The primary bedroom addition is proposed at the rear of the structure. It would not be visible from the street, nor would it negatively impact the neighborhood or public use of Cascade Drive. Its design and location would be similar to other developed single family residential properties found throughout the Cascades Subdivision. It would require a minimal amount of excavation (approximately six CY) for the foundation. It would meet the zoning requirements of the RS-6 zone. It would comply with all required setbacks and the building height limitation. It would not cause the property to exceed the FAR or lot coverage requirements. It would provide additional living space to accommodate the changing needs of the residents.

Table 2 below provides a summary of lot and home sizes in the immediate area. The proposed house would be similar in size, mass, and number of bedrooms and bathrooms to other residences in the neighborhood. It would be in scale with the size of the 5,500 square-foot site.

**Table 2: 66 Cascade Drive Neighborhood Comparison**

APN #	ADDRESS	LOT SIZE	HOUSE SIZE	# BEDROOMS	# BATHS	Floor Area Ratio
003-203-16	62 Cascade Drive	5,500 SF	1,413 SF	2	2	0.26
003-203-15	1 Hickory Road	18,000 SF	1,556 SF	2	2	0.09
003-203-14	35 Cypress Drive	5,618 SF	1,340 SF	3	1	0.24
003-203-13	41 Cypress Drive	5,500 SF	2,126 SF	3	3.5	0.39
003-203-12	49 Cypress Drive	11,730 SF	2,194 SF	3	2	0.19
003-203-31	80 Cascade Drive	6,000 SF	1,302 SF	2	1	0.22
003-203-30	82 Cascade Drive	5,000 SF	1,984 SF	3	3	0.40
003-204-18	85 Cascade Drive	7,503 SF	1,801 SF	3	2.5	0.24
003-204-06	77 Cascade Drive	6,032 SF	1,098 SF	1	1	0.18
003-204-07	65 Cascade Drive	16,275 SF	2,474 SF	6	1	0.15

APN #	ADDRESS	LOT SIZE	HOUSE SIZE	# BEDROOMS	# BATHS	Floor Area Ratio
003-204-08	59 Cascade Drive	20,500 SF	2,621 SF	4	2	0.13
003-203-17	66 Cascade Drive	5,500 SF	1,632 SF	3	2	0.30

The new approximately 144 square foot deck at the back of the property would replace a smaller deck. The rear deck and the approximately 168 square foot deck at the front of the house would provide additional elevated outdoor living space. The rear deck would be tucked behind the house and would not be visible from the street. It would be approximately 17'-6" from the nearest neighbor. The front deck is approximately 15'-6" from the nearest neighbor. Both decks comply with the setback and height regulations and do not increase the lot coverage on the property due to their pervious nature. There are similar sized decks in the immediate area so the project would not result in development out of character with the surrounding neighborhood.

As proposed, the project is not contrary to the objectives or standards of the 2010-2030 Fairfax General Plan or Title 17 Zoning of the Fairfax Town Code. It would result in equal or better development of the site with minimal site disturbance, which is in the public interest.

**Variance to Allow Tandem Parking in a Required Side-yard (Town Code Chapter 17.052)**

The project site does not have any conforming parking spaces. As previously mentioned, there is one, covered, 9' by 19' off-street parking space in the existing garage that is located within the minimum and combined side-yard setbacks. There are approximately two, 9' by 19' uncovered parking spaces in the driveway that are in tandem with the garage space. These driveway spaces are also located within the minimum and combined side-yard setbacks. There are no records in the property file for the construction of the garage. Given that the house was constructed in 1933, prior to any setback requirements, it's possible that the garage construction predates any setback requirements as well.

Historically, parking was allowed in the side-yard setback, and parking and parking structures can be found in the side-yard setback throughout the Town. Many properties in the project vicinity have garages and/or tandem parking in the side yard setback, such as nearby 88 Cascade (6 bedroom/2 bath), 100 Cascade (3 bedroom/1.5 bath), 101 Cascade (2 bedroom/1bath), and 104 Cascade Drive (3 bedroom/2 bath). The property owners would like to keep the garage where it is and continue to use the covered parking space. They would also like to continue using the driveway for tandem parking. Allowing the garage to remain in the side yard and tandem parking to remain in the driveway would not change the character of the neighborhood nor would it have a significant negative impact on the neighbors or the neighborhood. Cascade Drive is fairly wide in the project vicinity and has adequate on-street parking.

Legalizing the use of tandem parking in the driveway would be the least disruptive option for creating a legal, second, off-street parking space for the residence. Creating a 9' by 19' uncovered off-street parking space in the front yard, parallel and adjacent to the driveway would require widening the driveway and result in the parking spot being

located approximately two feet from the front of the house. Creating a parking spot in the front yard, parallel to the road, would block the access to the front of the house. The siting of the existing house and the narrow width of the site make it difficult for the second off-street parking space to comply with the restriction on tandem parking.

Project implementation would result in the property maintaining similar setbacks from the property lines as other developed properties in the vicinity, many of which have structures, parking spaces, and tandem parking within the minimum and combined side-yard setbacks. The strict application of this title would deprive the property owner of privileges enjoyed by other property owners in the vicinity and under identical zone classification. Granting of the variance would not create a safety hazard or any other condition inconsistent with the objectives of the Zoning Ordinance.

### **OTHER AGENCY/DEPARTMENT COMMENTS/CONDITIONS**

#### **Ross Valley Fire Department (RVFD)**

Project specific conditions of approval from RVFD include deferred permits for a Vegetation Management Plan and fire sprinkler systems for both buildings. All other standard conditions of approval from RVFD apply and are listed in the attached Resolution No. 2023-24 and can be viewed in their entirety in that document.

#### **Marin Municipal Water District (MMWD)**

MMWD had no project specific comments or conditions of approval. All standard conditions of approval from MMWD are in the attached Resolution No. 2023-24 and can be viewed in their entirety in that document.

#### **Ross Valley Sanitary District (RSVD)**

According to RVSD the sewer lateral serving the main residence is compliant as of 8/10/18 and this lateral will not require testing as long as there are no sewer lateral additions or changes. Lateral exemption lasts for 20 years since the last passed lateral inspection date.

#### **Town of Fairfax Police, Building, Public Works Departments**

No comments or project specific conditions of approval were received on the project from the Fairfax Police, Building, or Public Works Departments.

### **RECOMMENDATION**

Move to approve Application No. 23-26 by adopting Resolution No. 2023-24 setting forth the findings and conditions for the project approval.

### **ATTACHMENTS**

Attachment A – Resolution No. 2023-24

Attachment B – Neighbor’s Letters of Support



## RESOLUTION NO. 2023-24

### **A Resolution of the Fairfax Planning Commission Approving Application No. 23-26 for a Conditional Use Permit and a Variance for a Remodel and an Approximately 440 Square Foot Primary Bedroom Addition at 66 Cascade Drive**

**WHEREAS**, the Town of Fairfax received an application on July 10, 2023, for a primary bedroom addition and remodel at 66 Cascade Drive; and,

**WHEREAS**, the Planning Commission held a duly noticed Public Hearing on September 21, 2023, at which time the Planning Commission determined that the project complies with the Town Code and that findings can be made to grant the requested Conditional Use Permit and Variance and has made the following findings:

The project is consistent with the 2010-2030 Fairfax General Plan as follows:

Policy LU-7.1.5: New and renewed residential development shall preserve and enhance the existing characteristics of the Town's neighborhoods in their diverse architectural style, size and mass.

Policy LU-7.2.1: New and renewed development shall be compatible with the general design and scale of structures in the vicinity.

#### **Conditional Use Permit Findings [Town Code Sections 17.032.060 (A) through (D)]**

- A. The approval of the Conditional Use Permit to allow the approximately 440 primary bedroom addition will not be a grant of special privilege and shall not contravene the doctrines of equity and equal treatment. The proposed primary bedroom addition complies with the RS-6 Residential Single-family Zone setback and height regulations. It would not cause the property to exceed the FAR or lot coverage requirements.
- B. The addition will not project closer to any of the property lines than the existing structure and will be below the height of the existing residence. The rear deck would be tucked behind the house and would not be visible from the street. It would be approximately 17'-6" from the nearest neighbor. The front deck is approximately 15'-6" from the nearest neighbor. Both decks comply with the setback and height regulations and do not increase the lot coverage on the property due to their pervious nature. Therefore, the development and use of the property, as approved under the Conditional Use Permit, shall not create a public nuisance, cause excessive or unreasonable detriment to adjoining properties or premises, or cause adverse physical or economic effects thereto, or create undue or excessive burdens in the use and enjoyment thereof, any or all of which effects are substantially beyond that which might occur without approval or issuance of the Conditional Use Permit.
- C. Approval of the Conditional Use Permit is not contrary to those objectives, goals, or standards pertinent to the particular case and contained or set forth in any

master plan, development plan or other plan or policy, officially adopted by the town; and

- D. Approval of the Conditional Use Permit to allow the proposed approximately 440 square foot primary bedroom addition will result in better development of the property than would otherwise be the case and is in the best interest of the public and for the protection and enhancement of the community.

**Variance to Allow Tandem Parking a Required Side-yard  
[Town Code § § 17.028.070(A)(1) through (4)]**

- 1. The siting of the existing structures on the property and the property's narrow width are the site features that warrant granting the requested Variance to Allow Parking and Tandem Parking in the Minimum and Combined Side-yard Setbacks.
- 2. Project implementation would result in the property maintaining similar setbacks from the property lines as other developed properties in the vicinity, many of which have structures, parking spaces, and tandem parking within the minimum and combined side-yard setbacks. Therefore, the granting of this variance will not be a grant of special privilege.
- 3. The strict application of the setback regulations would result in unreasonable hardship for the property owner because he would be required to locate parking elsewhere on his property, which would result in more disruption to the site.
- 4. The existing garage and driveway are entirely on the project property and would not be detrimental to the public using Cascade Drive or to the neighbors.

**WHEREAS**, the Planning Commission approved the project subject to the applicant's compliance with the following conditions:

- 1. The project is approved per the plans by Jaime Romero received by the Town on September 6, 2023.
- 2. The project is subject to the following conditions of approval:
  - a) Prior to issuance of any of the building permits for the project the applicant or his assigns shall submit a detailed construction management plan subject to approval of the Public Works Director. The plan shall include but is not limited to the following:
    - i. Construction delivery routes approved by the Department of Public Works;
    - ii. Construction schedule (deliveries, worker hours, etc.);
    - iii. Notification to area residents;
    - iv. Emergency access routes;
    - v. Construction worker staging area; and,



- vi. Contractor employee parking locations.
3. The applicant shall prepare and file with the Public Works Director a video of the roadway conditions on the public construction delivery routes (routes to be pre-approved by the Public Works Director).
  4. Submit a cash deposit, bond, or letter of credit to the Town in an amount that will cover the cost of grading, weatherization, and repair of possible damage to public roadways. The applicant shall submit contractor's estimates for any grading, site weatherization and improvement plan for approval by the Town Engineer. Upon approval of the contract costs, the applicant shall submit a cash deposit, bond or letter of credit equaling 100% of the estimated construction costs.
  5. The foundation elements shall be designed by a structural engineer certified as such in the state of California. Plans and calculations of the foundation elements shall be stamped and signed by the structural engineer and submitted to the satisfaction of the Town Structural Engineer.
  6. During the construction process the following shall be required:
    - a. Prior to the concrete form inspection by the building official, the project Structural Engineer shall field check the forms of the foundation and provide written certification to Town staff that the work to this point has been completed in conformance with their recommendations and the approved building plans.
    - b. The Building Official shall check the concrete forms prior to the foundation pour.
    - c. All construction-related vehicles including equipment delivery, cement trucks and construction materials shall always be situated off the travel lane of the adjacent public right(s) of way. This condition may be waived by the Building Official on a case-by-case basis with prior notification from the project sponsor.
    - d. Any proposed temporary closures of a public right of way shall require prior approval by the Fairfax Police Department and any necessary traffic control, signage or public notification shall be the responsibility of the applicant or his/her assigns. Any violation of this provision will result in a stop work order being placed on the property and issuance of a citation.
  7. Prior to issuance of an occupancy permit the Planning Department and Building Official shall field check the completed project to verify that any and all planning or commission conditions and required engineering improvements have been complied with.

8. Excavation shall not occur between October 1st and April 1st of any year. The Town Engineer has the authority to waive this condition depending upon the weather.
9. The roadways shall be kept free of dust, gravel, and other construction materials by sweeping them daily, if necessary.
10. Any changes, modifications, additions, or alterations made to the approved set of plans will require a modification of Application No. 23-26. Modifications that do not significantly change the project, the project design or the approved discretionary permits **may** be approved by the Planning Director or the Planning Commission. Any construction based on job plans that have been altered without the benefit of an approved modification of Application No. 23-26 will result in the job being immediately stopped and red tagged.
11. Any damage to the public portions of Cascade Drive, Bolinas Road, or other public roadway used to access the site resulting from construction-related activities shall be the responsibility of the property owner.
12. The applicant and its heirs, successors, and assigns shall, at its sole cost and expense, defend with counsel selected by the Town, indemnify, protect, release, and hold harmless the Town of Fairfax and any agency or instrumentality thereof, including its agents, officers, commissions, and employees (the "Indemnitees") from any and all claims, actions, or proceedings arising out of or in any way relating to the processing and/or approval of the project as described herein, the purpose of which is to attack, set aside, void, or annul the approval of the project, and/or any environmental determination that accompanies it, by the Planning Commission, Town Council, Planning Director, or any other department or agency of the Town. This indemnification shall include, but not be limited to, suits, damages, judgments, costs, expenses, liens, levies, attorney fees or expert witness fees that may be asserted or incurred by any person or entity, including the applicant, third parties and the Indemnitees, arising out of or in connection with the approval of this project, whether or not there is concurrent, passive, or active negligence on the part of the Indemnitees. Nothing herein shall prohibit the Town from participating in the defense of any claim, action, or proceeding. The parties shall use best efforts, acting in good faith, to select mutually agreeable defense counsel. If the parties cannot reach agreement, the Town may select its own legal counsel and the applicant agrees to pay directly, or timely reimburse on a monthly basis, the Town for all such court costs, attorney fees, and time referenced herein, provided, however, that the applicant's duty in this regard shall be subject to the Town's promptly notifying the applicant of any said claim, action, or proceeding.
13. The applicant shall comply with all applicable local, county, state and federal laws and regulations. Local ordinances which must be complied with include but are not limited to the following: the Noise Ordinance, Chapter 8.20, Polystyrene Foam, Degradable and Recyclable Food Packaging, Chapter 8.16, Garbage and

Rubbish Disposal, Chapter 8.08, Urban Runoff Pollution Prevention, Chapter 8.32, and the Americans with Disabilities Act.

14. In accordance with Town Code §8.20.060(C)(1) and (2), the operation of any tools or equipment used in construction or demolition work or in property maintenance work between the hours of 6:00 PM and 8:00 AM Monday through Friday, or on weekends and holidays between 4:00 PM and 9:00 AM is prohibited.
15. Conditions placed upon the project by outside agencies may be eliminated or amended with that agency's written notification to the Planning Department prior to issuance of the building permit.
16. All the exterior fixtures must be dark sky compliant (fully shielded and emit no light above the horizontal plane with no sag or drop lenses, side light panels or uplight panels) as well as compliance with color temperature to minimize blue rich lighting.

#### **Ross Valley Fire Department (RVFD) Conditions**

17. All vegetation and construction materials are to be maintained away from the residence during construction.
18. A deferred Vegetation Management Plan (VMP) permit from RVFD is required. The VMP shall meet the requirements of Ross Valley Fire Standard No. 220.
19. A class A roof assembly is required.
20. The project requires installation of a fire sprinkler system in both buildings that complies with the National Fire Protection Association regulation 13-D and local standards. Separate deferred permits shall be required for these systems from RVFD. Plans and specifications for the systems shall be submitted by an individual or firm licensed to design and/or design-build sprinkler systems.
21. All smoke detectors in the residence shall be provided with AC power and be interconnected for simultaneous alarm. Detectors shall be located in each sleeping room, outside of each sleeping room in a central location in the corridor, and over the center of all stairways with a minimum of one detector on each story of the occupied portion of the residence.
22. Carbon monoxide alarms shall be provided in existing dwellings when a permit is required for alterations, repairs, or addition and the cost of the permit exceeds \$1,000.00. Carbon monoxide alarms shall be located outside of each sleeping area in the immediate vicinity of the bedrooms and on every level of the dwelling, including basements.

- 23. Address numbers at least 4" tall visible from the street and internally illuminated or illuminated by and adjacent light controlled by a photocell and switched off only by a breaker so it will remain illuminated all night shall be installed.
- 24. Alternative materials or methods may be proposed for any of the above conditions in accordance with Section 104.9 of the Fire Code.
- 25. All approved alternatives requests, and their supporting documentation, shall be included in the plan sets submitted for final approval by the Fire Department.

**Marin Municipal Water District (MMWD) Conditions**

- 26. Ordinance 429, requiring installation of a grey water recycling system when practicable, must be incorporated into the project building permit plans or an exemption letter from the District must be provided to the Town.
- 27. All indoor and outdoor requirements or District Code Title 13, Water Conservation must be complied with.
- 28. Backflow prevention requirements must be met.
- 29. All the District's rules and regulations in effect at the time service is requested must be complied with.

**NOW, THEREFORE BE IT RESOLVED**, the Planning Commission of the Town of Fairfax hereby finds and determines as follows:

The approval of the Conditional Use Permit and Variance to Allow Parking and Tandem Parking in the Minimum and Combined Side-yard Setback are in compliance with the Fairfax Town Code and the Fairfax Zoning Ordinance, Town Code Title 17; and

Construction of the project can occur without causing significant impacts on neighboring residences and the environment.

The foregoing resolution was adopted at a regular meeting of the Planning Commission held in said Town, on the 21<sup>st</sup> day of September 2023 by the following vote:

- AYES:
- NOES:
- ABSTAIN:
- ABSENT:

---

Chair Cindy Swift

Attest:

---

Jeffrey Beiswenger, Director of Planning and Building Services

Attn:  
Linda Neal  
Principal Planner  
Town of Fairfax Planning Department

TOY...  
JUL 19 2023

Re: 66 CASCADE DR, Rear addition  
PA#: \_\_\_\_\_

To whom it may concern,

I, Jeff Piccinini, live at 80 Cascade dr., a residence adjacent to or across the street from the subject property. I am aware that the owners are requesting a rear addition to their home in order to provide for their growing family. I have reviewed the plans, support this project and agree that these additions will enhance the quality of life for my neighbors while maintaining the overall integrity and character of our neighborhood.

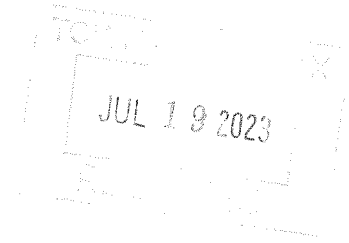
Thank you.

  
Signed

Date 7-17-23

Attn:  
Linda Neal  
Principal Planner  
Town of Fairfax Planning Department

Re: 66 CASCADE DR, Rear addition  
PA#: \_\_\_\_\_



To whom it may concern,

I, MICHAEL ROBINSON, live at 35 CYPRESS DR., a residence adjacent to or across the street from the subject property. I am aware that the owners are requesting a rear addition to their home in order to provide for their growing family. I have reviewed the plans, support this project and agree that these additions will enhance the quality of life for my neighbors while maintaining the overall integrity and character of our neighborhood.

Thank you.

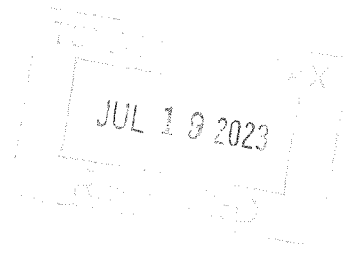
Michael Robinson

Signed

7-15-23

Date

Attn:  
Linda Neal  
Principal Planner  
Town of Fairfax Planning Department



Re: 66 CASCADE DR, Rear addition  
PA#: \_\_\_\_\_

To whom it may concern,

I, Tracey Bodok, live at 41 Cypress Dr., a residence adjacent to or across the street from the subject property. I am aware that the owners are requesting a rear addition to their home in order to provide for their growing family. I have reviewed the plans, support this project and agree that these additions will enhance the quality of life for my neighbors while maintaining the overall integrity and character of our neighborhood.

Thank you.

Tracey Bodok

Signed July 15, 2023

Date

Attn:  
Linda Neal  
Principal Planner  
Town of Fairfax Planning Department

JUL 19 2023

Re: 66 CASCADE DR, Rear addition  
PA#: \_\_\_\_\_

To whom it may concern,

I, Marlene Miller, live at 62 Cascade Dr Fairfax a residence adjacent to or across the street from the subject property. I am aware that the owners are requesting a rear addition to their home in order to provide for their growing family. I have reviewed the plans, support this project and agree that these additions will enhance the quality of life for my neighbors while maintaining the overall integrity and character of our neighborhood.

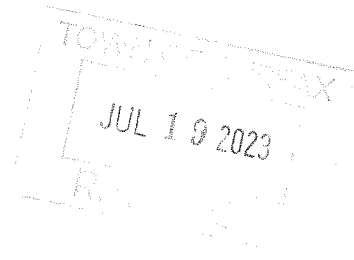
Thank you.

Marlene Miller  
\_\_\_\_\_  
Signed \_\_\_\_\_

Date



Attn:  
Linda Neal  
Principal Planner  
Town of Fairfax Planning Department



Re: 66 CASCADE DR, Rear addition  
PA#: \_\_\_\_\_

To whom it may concern,

I, Kathleen Thomas, live at 77 Cascade Dr, a residence adjacent to or across the street from the subject property. I am aware that the owners are requesting a rear addition to their home in order to provide for their growing family. I have reviewed the plans, support this project and agree that these additions will enhance the quality of life for my neighbors while maintaining the overall integrity and character of our neighborhood.

Thank you.

Kathleen Thomas  
\_\_\_\_\_  
7-17-23

Signed

Date

Attn:  
Linda Neal  
Principal Planner  
Town of Fairfax Planning Department

TO: [unclear]  
JUL 19 2023  
[unclear]

Re: 66 CASCADE DR, Rear addition  
PA#: \_\_\_\_\_

To whom it may concern,

I, \_\_\_\_\_, live at \_\_\_\_\_, a residence adjacent to or across the street from the subject property. I am aware that the owners are requesting a rear addition to their home in order to provide for their growing family. I have reviewed the plans, support this project and agree that these additions will enhance the quality of life for my neighbors while maintaining the overall integrity and character of our neighborhood.

Thank you.

\_\_\_\_\_  
Signed \_\_\_\_\_

Date

\* Just a note that I spoke with the owners of 49 Cypress Drive. They did not want to sign anything but said the project sounds fine and they have no problem with the plans.

- Daniel



**A- BUILDING CODE REQUIREMENTS**

1. PROVIDE A GRASS GRASS ACCESS OPENING NOT LESS THAN 18"x24" (30"x18" IF EQUIPMENT IS PRESENT) (CBC2022 - 120B.1 / CBC2022 R408.4)
2. FOUNDATION CRIPPLE WALLS SHALL BE FRAMED OF STUDS THAT ARE NOT LESS THAN THE SIZE OF STUDS ABOVE AND NOT LESS THAN 14" IN LENGTH, OR SHALL BE FRAMED OF SOLID BLOCKING, WHEN EXCEEDING 4 FEET IN HEIGHT, SUCH WALLS SHALL BE FRAMED WITH THE SIZE REQUIRED FOR AN ADDITIONAL STORY. (CBC2022 - 230B.9.5)
3. CEMENT, FIBER-CEMENT OR GLASS MAT GYPSUM BACKERS IN COMPLIANCE WITH ASTM C 1179, C 1288 OR C 1325 INSTALLED IN CONFORMANCE WITH THE FACTOR REQUESTED SHALL BE USED AS A BASE FOR WALL TILE IN TUB AND SHOWER AREAS, AND WALL AND CEILING PANELS IN SHOWER AREAS. (CBC2022 - 2504.2)
4. THE AREA OF EACH OPENING IN FIRE WALLS WITHIN 3FT TO 5FT FROM PROPERTY LINE TOTAL WIDTH OF THE OPENING IS LIMITED TO 25% OF THE WALL LENGTH IN THE STORY UNDER CONSIDERATION (CBC2022 - TABLE 105.9.6)
5. DOOR OPENINGS BETWEEN A PRIVATE GARAGE AND THE DWELLING UNIT SHALL BE EQUIPPED WITH EITHER SOLID WOOD DOORS OR SOLID OR HONEYCOMB CORE STEEL DOORS NOT LESS THAN 1-9/8" IN THICKNESS, OR DOORS IN COMPLIANCE WITH SECTION 2.2.1 WITH A FIRE PROTECTION RATING OF NOT LESS THAN 20 MINUTES, SELF-CLOSING AND SELF-LATCHING. (CBC2022 - 406.9.2.1)
6. ALL INSULATION MATERIALS SHALL HAVE A FLAME SPREAD RATING NOT TO EXCEED 25 AND A SMOKE DENSITY NOT TO EXCEED 450 (CBC2022 - 720.2)
7. FIREBLOCKING SHALL BE PROVIDED AT INTERSECTIONS BETWEEN BATHS, SHOWER, TUBS, HALLS OR PARTITION SPACES AND CONCEALED HORIZONTAL SPACES CREATED BY AN ASSEMBLY OF FLOOR, CEILING, WALL, AND BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILING, COVE CEILING AND SIMILAR LOCATIONS. (CBC2022 - 718.5.3)
8. PROVIDE EMERGENCY ESCAPE AND RESCUE FROM SLEEPING QUARTERS BELOW THE LEVEL OF THE FINISHED FLOOR. AREAS DIMENSIONS OF 24" HEIGHT, 20" CLEAR WIDTH, 5'10" FT. AREA SHALL HAVE A FINISHED SLIP HEIGHT OF NOT MORE THAN 44" ABOVE FINISH FLOOR. N/A TEMPORARY LABELING ON NEW WINDOWS SHALL NOT BE REMOVED UNTIL INSPECTED BY THE ENFORCEMENT AGENCY. (CBC2022 - 1050.2, 1050.2.1, 1050.3)
9. ALL NEW WINDOWS TO BE WOOD FRAME (U0.20) AND DUAL GLAZING WITH A MINIMUM U-FACTOR OF 0.30 AND A MAXIMUM SOLAR HEAT GAIN COEFFICIENT (SHGC) OF 0.25 (TITLE 24, PART 6)
10. PARAPETS SHALL HAVE THE SAME FIRE-RESISTANCE RATING AS THAT REQUIRED FOR THE SUPPORTING WALL, AND ON ANY SIDE ADJACENT TO A ROOF SURFACE, SHALL HAVE NONCOMBUSTIBLE FACES FOR THE UPWARD-FACING SIDES (S1) INCLUDING, BUT NOT LIMITED TO, CORNER FLASHING AND COPING MATERIALS. THE HEIGHT OF THE PARAPET SHALL BE NOT LESS THAN 30" ABOVE THE FINISHED ROOF SURFACE AND THE WALL INTERSECT, WHERE THE ROOF SLOPES TOWARD A PARAPET AT A SLOPE GREATER THAN TWO VERTICAL TO ONE HORIZONTAL. (16.8.1) PARAPETS SHALL EXTEND TO THE SAME HEIGHT AS ANY PORTION OF THE ROOF WITHIN A FIRE SEPARATION DISTANCE WHERE PROTECTION OF WALL OPENINGS IS REQUIRED, BUT THE HEIGHT SHALL BE NOT LESS THAN 30". (CBC2022 - 1051.1)
11. TEMPERED GLAZING AT BATHROOMS SHALL BE PERMANENTLY IDENTIFIED BY A MANUFACTURER MARKING THAT IS PERMANENTLY APPLIED AND CANNOT BE REMOVED WITHOUT BEING DESTROYED (E.G. SAND BLASTED, ACID ETCHED, CERAMIC, FIRED, LASER, ETC., OR EMBOSSED) AND SHALL BE INSTALLED IN THE LOCATIONS LISTED BELOW:
  - WITHIN A PORTION OF WALL ENCLOSED A TUB/SHOWER WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60" INCHES ABOVE THE STANDING SURFACE AND DRAIN INLET.
  - WITHIN A PORTION OF WALL WHERE THE GLAZING IS LESS THAN 60" INCHES ABOVE THE WALKING SURFACE. (CBC2022 - 2406.4 & 2409.1)
12. GLAZING IN ALL FIXED AND OPERABLE PANELS OF SKINNING, SLIDING AND BIFOLD DOORS SHALL BE CONSIDERED TO BE SAFETY GLAZING (CBC2022 - 2406.4.1)
13. INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR WHERE THE NEAREST VERTICAL EDGE OF THE GLAZING IS WITHIN A 24" ARC OF EITHER VERTICAL EDGE OF THE DOOR IN A CLOSED POSITION AND WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60" ABOVE THE WALKING SURFACE SHALL BE CONSIDERED TO BE SAFETY GLAZING. (CBC2022 - 2406.4.2)
14. INDIVIDUAL FIXED OR OPERABLE PANEL THAT MEETS ALL OF THE FOLLOWING CONDITIONS SHALL BE CONSIDERED TO BE SAFETY GLAZING:
  - THE EXPOSED AREA OF AN INDIVIDUAL PANE IS GREATER THAN 4 SQUARE FEET
  - THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 18" ABOVE THE FLOOR.
  - THE TOP EDGE OF THE GLAZING IS GREATER THAN 36" ABOVE THE FLOOR.
  - ONE OR MORE WALKING SURFACES ARE WITHIN 36" MEASURED HORIZONTALLY AND IN A STRAIGHT LINE, OF THE PLANE OF THE GLAZING. (CBC2022 - 2406.4.3)
15. GLAZING IN WALLS, ENCLOSURES OR FENCES CONTAINING OR FACING HOT TUBS, SPAS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS, SHOWERS AND INDOOR OR OUTDOOR SWIMMING POOLS WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60" MEASURED VERTICALLY ABOVE ANY STANDING OR WALKING SURFACE SHALL BE CONSIDERED TO BE SAFETY GLAZING. THIS SHALL APPLY TO SINGLE GLAZING AND ALL PANE IN MULTIPLE GLAZING. (CBC2022 - 2406.4.5)
16. WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60" ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE, STAIRS, HANDRAILS, LANDING, STAIRS AND STAIRS AND RAMPS SHALL BE CONSIDERED TO BE SAFETY GLAZING. (CBC2022 - 2406.4.6)
17. GLAZING ADJACENT TO THE LANDING AT THE BOTTOM OF A STAIRWAY WHERE THE GLAZING IS LESS THAN 60" ABOVE THE LANDING AND WITHIN A 60" HORIZONTAL ARC THAT IS LESS THAN 80 DEGREES FROM THE BOTTOM TREAD NOSING SHALL BE SAFETY GLAZING. (CBC2022 - 2406.4.7)

**A- BUILDING CODE REQUIREMENTS (Cont.)**

18. GROUP R-5 OCCUPANCY OR ACCESSORY TO INDIVIDUAL DWELLING UNITS IN GROUP R-2 OCCUPANCIES, THE MAXIMUM RISER HEIGHT SHALL BE 7-5/8" THE MINIMUM CLEAR DEPTH SHALL BE 12" THE MINIMUM RINDER TREAD DEPTH AT THE WALKING SHALL BE 10" AND THE MINIMUM RINDER TREAD DEPTH SHALL BE 6". A NOSING PROJECTING NOT MORE THAN 3/4" BUT NOT MORE THAN 1/4" SHALL BE PROVIDED ON STAIRWAYS/IV SOLID RISERS WHERE THE TREAD DEPTH IS LESS THAN 11" (CBC2022 - 1011.5.2, EXCEPTION 3)
19. STAIR TREADS AND RISERS SHALL BE OF UNIFORM SIZE AND SHAPE, THE TOLERANCE BETWEEN THE LARGEST AND SMALLEST STAIRS SHALL BE NOT MORE THAN 3/4" AND THE SMALLEST TREAD DEPTH SHALL NOT EXCEED 3/8" IN ANY FLIGHT OF STAIRS. (CBC2022 - 1011.5.4)
20. SPACES UNDER STAIRWAYS SERVING AND CONTAINED WITHIN A SINGLE RESIDENTIAL UNIT OR UNIT IN GROUP R-2 OR R-3 SHALL BE PERMITTED TO BE PROTECTED ON THE ENCLOSED SIDE WITH 1/2" GYPSUM BOARD (CBC2022, 1011.5, EXCEPTION)
21. STAIRWAYS SHALL HAVE A HEADROOM CLEARANCE OF NOT LESS THAN 80" MEASURED VERTICALLY FROM A LINE CONNECTING THE EDGES OF THE NOSINGS. SUCH HEADROOM SHALL BE CONTINUOUS ABOVE THE STAIRWAY TO THE POINT WHERE THE LINE INTERSECTS THE LANDING BELOW, ONE TREAD DEPTH BEYOND THE BOTTOM RISER, THE MINIMUM CLEARANCE SHALL BE MAINTAINED THE FULL WIDTH OF THE STAIRWAY AND LANDINGS. (CBC2022 - 1011.3)
22. A SPIRAL STAIRWAY SHALL HAVE A 6-3/4" MINIMUM CLEAR TREAD DEPTH AT A POINT 12" FROM THE NARROW EDGE, THE RISERS SHALL BE SUFFICIENT TO PROVIDE A HEADROOM OF 78" MINIMUM. RISER HEIGHT SHALL NOT BE GREATER THAN 10 1/2". THE MINIMUM STAIRWAY CLEAR WIDTH AT AND BELOW THE HANDRAIL SHALL BE 26". (CBC2022 - 1011.6)
23. IN GROUP R-2 OR R-3, THRESHOLD HEIGHTS FOR SINGLE RESIDENTIAL UNITS OR UNIT IN GROUP R-2 OR R-3 SHALL BE TO BE UP TO 7-5/4" IN HEIGHT IF ALL OF THE FOLLOWING APPLY:
  - THE DOOR IS NOT PART OF THE REQUIRED MEANS OF EGRESS.
  - THE DOOR IS NOT PART OF AN ACCESSIBLE ROUTE AS REQUIRED BY CHAPTER 11A OR 11B.
  - THE DOOR IS NOT PART OF AN ADAPTABLE OR ACCESSIBLE DWELLING UNIT. (CBC2022 - 1010.1.1) EXCEPTION
24. PRIVATE GARAGES AND GAROPITS SHALL BE CLASSIFIED AS GARAGES. PRIVATE GARAGES SHALL BE NOT GREATER THAN 1000 SQUARE FEET IN AREA. MULTIPLE PRIVATE GARAGES ARE PERMITTED IN A BUILDING WHERE EACH PRIVATE GARAGE IS SEPARATED FROM THE OTHER PRIVATE GARAGES BY 1-HOUR FIRE BARRIERS IN ACCORDANCE WITH SECTION 707, OR HOUR HORIZONTAL ASSEMBLIES IN ACCORDANCE WITH SECTION 707, OR BOTH. (CBC2022 - 406.9.3.1)
25. THE PRIVATE GARAGE SHALL BE SEPARATED FROM THE DWELLING UNIT AND ITS ATTIC AREA BY MEANS OF GYPSUM BOARD, NOT LESS THAN 1/2" IN THICKNESS, APPLIED TO THE GARAGE SIDE. GARAGES BENEATH HABITABLE ROOMS SHALL BE SEPARATED FROM ALL HABITABLE ROOMS ABOVE BY NOT LESS THAN A 5/8" TYPE X GYPSUM BOARD OR EQUIVALENT AND 1/2" GYPSUM BOARD APPLIED TO STRUCTURED SURFACES. THE SEPARATION FROM HABITABLE ROOMS ABOVE THE GARAGE. (CBC2022 - 406.9.3.2)
26. DUCTS IN A PRIVATE GARAGE AND DUCTS PENETRATING THE WALLS OR CEILING SEPARATING THE DWELLING UNIT FROM THE GARAGE, INCLUDING ITS ATTIC AREA, SHALL BE PROTECTED OF SHEET STEEL OF NOT LESS THAN 0.018" IN THICKNESS AND SHALL NOT HAVE OPENINGS INTO THE GARAGE. (CBC2022 - 406.9.3.2)
27. GAROPITS SHALL BE OPEN ON NOT FEWER THAN TWO SIDES. GAROPITS OPEN ON FEWER THAN TWO SIDES SHALL BE CONSIDERED TO BE A GARAGE AND SHALL COMPLY WITH THE REQUIREMENTS FOR PRIVATE GARAGES. (CBC2022 - 406.9.3)
28. A SEPARATION IS NOT REQUIRED BETWEEN A GROUP R-3 AND U GAROPIT, PROVIDED THAT THE GAROPIT IS ENTIRELY OPEN ON TWO OR MORE SIDES AND THERE ARE NOT ENCLOSED AREAS ABOVE. (CBC2022 - 406.9.3.1)

**B- MECHANICAL CODE REQUIREMENTS**

1. FURNACES SHALL HAVE PILOT LESS IGNITION.
2. FURNACE HEATING BOILNET CARBON SHALL BE SHOP DERATED TO THE CAPACITY INDICATED IN THE ENERGY CALCULATIONS.
3. USE FIRE RATED RADIANT, ARGON PIPES SETTINGS THROUGH FIRE RATED WALLS TO SEAL ANY GAP.
4. THE EXHAUST DUCT LAYOUT OF THE MECHANICAL VENTILATOR SYSTEM FROM THE BATHROOM SHALL BE DIRECTLY CONNECTED TO THE OUTSIDE OF BUILDING AND LOCATED AT LEAST 5 FEET FROM ANY OPENING OF THE BUILDING (CMC 504.1)
5. THE BOTTOM OF HEATING DUCT OR FURRING OF SUCH SHALL NOT BE LOWER THAN 7 FEET FROM FINISH FLOOR. (CG 3106.1)
6. THE EXHAUST DUCT TERMINATION FROM DOMESTIC CLOTHES DRYER SHALL TERMINATE OUTSIDE OF THE BUILDING. (CMC 504.5.1)
7. PROVIDE SMOOTH METAL DUCT FOR DRYER EXHAUST. CMC 504.5
8. DRYER DUCT SHALL HAVE A BACKDRIFT DAMPER PER CMC 504.1
9. DRYER DUCTS SHALL NOT EXCEED A TOTAL COMBINED HORIZONTAL AND VERTICAL LENGTH OF 14 FT, INCLUDING TWO 90 DEGREE ELBOWS, TWO FEET SHALL BE DEDUCTED FOR EACH 90 DEGREE ELBOW IN EXCESS OF TWO (CMC 504.2)
10. USE FIRE/SMOKE DAMPERS WHEN GOING THROUGH FIRE RATED WALLS
11. FIXED APPLIANCES ARE REQUIRED TO BE SECURELY FASTENED IN PLACE. CMC 504.4
12. ALL HARD SURFACES SHALL BE IN PLACE FOR FINAL INSPECTION.
13. WATER HEATER SHALL BE SECURELY FASTENED IN PLACE TO PREVENT HORIZONTAL DISPLACEMENT PER CFC SEC. 1310 AND CFC SEC. 504.
14. THE WATER HEATER TO BE 30 GALLONS OR LESS CAPACITY R-16, HIGH EFFICIENCY
15. PROVIDE A DISCONNECT FOR THE A/C UNIT AND A RECEPTACLE WITHIN 25' OF THE UNIT TO BE WEATHERPROOF PER CMC 304.1
16. REQUIREMENT FOR DUCT PERFORMANCE TESTING SPECIFIED IN SECTION 2.1 ENERGY CODE CALCULATIONS
17. CONCRETE PAD SUPPORTING MECHANICAL EQUIPMENT SHALL EXTEND NOT LESS THAN 8 INCHES ABOVE GRADE. (CMC 304.8)

**B- MECHANICAL CODE REQUIREMENTS**

18. WHEN TWO OR MORE APPLIANCES ARE CONNECTED TO ONE DUCT, THE DUCT SHALL BE NOT LESS THAN 18" IN DIAMETER AND SHALL NOT BE LESS THAN THE AREA OF THE LARGEST VENT CONNECTOR FLOW 50 PERCENT OF THE AREAS OR THE ADDITIONAL VENT CONNECTORS. (CMC 204)
19. FIREPLACES WITH GAS LOG LIGHTERS ARE REQUIRED TO HAVE THE FLUE DAMPER PERMANENTLY FIXED IN THE OPEN POSITION AND FIREPLACES WITH GAS LOG LIGHTERS ARE TO HAVE NO "TILT" OR "BUMP" CONFIGURATIONS.
20. DUCTS USED FOR KITCHEN RANGE VENTILATION SHALL BE OF METAL AND SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 2.2.1. VERIFY WITH MECHANICAL INSTALLER I/F DUCT SIZE AND SUPPLY AND RETURN GRILLES.
21. INSTALLING CONTRACTOR IS RESPONSIBLE FOR VERIFICATION THAT DUCTS FIT IN ALLOWABLE SPACE, CONTRACTOR TO CONVERT ROUND DUCT TO SQUARE DUCT OF EQUAL SQUARE INCHES WHERE SPACE IS LIMITED. CONTRACTOR NOT CUT ANY FRAMING WITHOUT PROPER CONSENT OF ENGINEER.
22. LAUNDRY ROOM AREA AND ALL BATHROOMS, BATHS, BATHUB, SHOWER, SPA AND SIMILAR BATHING FIXTURES SHALL BE MECHANICALLY VENTILATED IN ACCORDANCE WITH CMC-402.1 OR CMC-503.3.4 OF CALIFORNIA ENERGY CODE 4 AND ANS/ASHRAE STANDARD 62.2
23. KITCHEN SHALL HAVE AN EXHAUST FAN TO THE OUTSIDE OF THE BUILDING WITH MINIMUM SIZE OF 100 CFM. SECTION 150-0.1 OF CALIFORNIA ENERGY CODE 4 ANS/ASHRAE STANDARD 62.2.
24. HEATING & COOLING EQUIPMENT LOCATED IN A GARAGE AND THAT GENERATES A GLOW SPARK, OR FLAME CAPABLE OF IGNITING FLAMMABLE VAPOUR SHALL BE INSTALLED WITH LEAST BURNERS OR HEATING ELEMENTS AND SWITCHES AT 18" AND 18" INCH ABOVE FINISH FLOOR LEVEL.
25. APPLIANCES INSTALLED IN GARAGES, WAREHOUSES OR OTHER AREAS SHALL BE SUBJECT TO MECHANICAL INSULATION. MEANS OF PROTECTIVE BARRIERS OR BY BEING ELEVATED OR LOCATED OUT OF NORMAL REACH OF CHILDREN. (CBC-2022)
26. APPLIANCES LOCATED IN ATTIC SHALL BE DESIGNED TO COMPLY WITH CFC-504.4 & CMC-604.1.
27. LAMPING SHALL BE PROVIDED IN GARAGES. INSPECTION, SERVICE, REPAIR, AND REPLACEMENT WITHOUT REMOVING PERMANENT CONSTRUCTION. (CMC-504.0.4)
28. PLATFORM OR SLAB ON GRADE SHALL BE PROVIDED IN FRONT OF APPLIANCES WITH MINIMUM 30 INCHES IN DEPTH, WIDTH AND HEIGHT OF APPLIANCES.
29. ENVIRONMENTAL AIR DUCTS SHALL TERMINATE 3 FEET FROM THE BUILDING WITH MINIMUM 3 FEET FROM OTHER EXHAUST DUCTS PER CMC 504.5 AND PROVIDE WITH BACK-DRAFT DAMPERS PER CMC 504.1.
30. ALL GAS HOOD VENTS SHALL MEET THE REQUIREMENTS OF CMC 504.2 AND COMPLY WITH CMC TABLE 405.1.
31. UNDER CABINETS, ABOVE ISLANDS, AND ABOVE COOKING TOP PER CMC 486.2, PROVIDE THE COOKING APPLIANCES MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS PER CMC 406.11.
32. DIRECT VENT APPLIANCES PER CMC 802.2.4 (PER MANUFACTURER'S INSTALLATION INSTRUCTIONS) AND SFMC

**C- PLUMBING CODE REQUIREMENTS**

1. BATHUBS AND SHOWER FLOORS AND WALLS ABOVE BATHUBS WITH INSTALLED SHOWER HEADS AND IN SHOWER COMPARTMENTS SHALL BE FINISHED WITH A NONABSORBENT SURFACE, SUCH WALL SHALL BE FINISHED TO A HEIGHT OF NOT LESS THAN 6 FEET ABOVE THE FLOOR. (CBC-2022 R507.2)
2. SHOWER HEADS SHALL NOT EXCEED A WATER SUPPLY FLOW RATE OF 1.8 GALLONS PER MINUTE (CBC-2022, 406.2)
3. THE SHOWER AND TUB-SHOWER COMBINATION SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES, PRESSURE BALANCE OR THERMOSTATIC MIXING TYPE VALVE (CFC-2022, 406.3)
4. WHERE ANY 2" VENT RUNS HORIZONTALLY THROUGH WALL, STUD, OR FLOOR, A MINIMUM 2" SIZE 2x6 SHALL BE USED FOR THAT PLUMBING WALL.
5. WATER CLOSET EFFECTIVE FLUSH VOLUME SHALL NOT EXCEED 128 GALLONS (CFC-2022, 409.3.1)
6. PROVIDE A 24" MINIMUM CLEAR SPACE IN FRONT OF THE WATER CLOSET (OR 18" ABOVE THE WATER CLOSET).
7. PROVIDE A 30" MINIMUM CLEAR WIDTH WHERE THE WATER CLOSET IS LOCATED (CFC-2022, 402.5)
8. THE MAXIMUM FLOW RATE OF KITCHEN FAUCETS SHALL NOT EXCEED 1.8 GALLONS PER MINUTE AT 60 PSI. KITCHEN FAUCETS SHALL BE EQUIPPED WITH AERATORS AND MAY TEMPORARILY INCREASE THE FLOW ABOVE THE MAXIMUM RATE, BUT NOT TO EXCEED 2.2 GALLONS (CFC-2022, 409.6)
9. NO PLASTIC PIPE ALLOWED IN WATER SUPPLY OR SEWER LINES AND USE COPPER & CAST IRON PIPES RESPECTIVELY.
10. ALL SHOWER COMPARTMENTS, REGARDLESS OF SHAPE, SHALL HAVE A MINIMUM FINISHED INTERIOR OF ONE THOUSAND TWENTY-FOUR SQUARE INCHES AND SHALL ALSO BE CAPABLE OF ENCOMPASSING A THIRTY INCH CIRCUIT. (CFC-2022, 406.6)
11. HOT MOPPED SHOWER PAN SHALL BE INSPECTED UPON COMPLETION OF HOT MOPPING AND SHALL BE FILLED WITH WATER WITHIN 24 HOURS OF THE INSPECTION.
12. ANY NEW OR REPLACED MIXING VALVE IN A SHOWER (INCLUDING OVER A TUB) SHALL BE PRESSURE BALANCING SET AT A MAXIMUM 120" F. ANY NEW OR REPLACED WATER-FILLER VALVE IN BATH OR SHOWER SHALL HAVE A TEMPERATURE LIMITING DEVICE SET AT A MAXIMUM OF 120" F. THE WATER HEATER TEMPERATURE LIMITING DEVICE SHALL NOT BE USED TO MEET THESE PROVISIONS. (CFC-2022, 406.5, 409.4)
13. SHOWER STALLS SHALL BE A MINIMUM FINISHED INTERIOR OF 1024 SQUARE INCHES, BE CAPABLE OF ENCOMPASSING A 30 INCH DIAMETER BATTERY OR BATTERY BACKED-UP CARBON MONOXIDE ALARMS ARE REQUIRED THEY SHALL BE INTERCONNECTED IN SUCH A MANNER THAT ACTIVATION OF ONE SHALL CAUSE ACTIVATION OF ALL DETECTORS IN THE DWELLING UNIT. SMOKE ALARMS SHALL BE INSTALLED ON THE CEILING OR WALL (BETWEEN 4" AND 12" OF THE CEILING) NEWLY INSTALLED SMOKE ALARMS SHALL HAVE A 10-YEAR BATTERY. CARBON MONOXIDE ALARMS SHALL BE INSTALLED ON THE CEILING OR WALL (ABOVE THE DOOR HEADS) CARBON MONOXIDE ALARMS AND WHERE THE GARAGE IS DETACHED FROM THE HOUSE. (CFC 1071.2.1, CFC R914.3, CFC R915.1)
14. PROVIDE AT LEAST ONE GFCI ELECTRICAL OUTLET AT THE HALLWAY (CG 210-52.9)
15. PROVIDE LIGHTING OUTLET & STAIRWAY CONTROLLED BY A WALL SWITCH AT EACH LEVEL (CG 210.6 (a))
16. LIGHTING IN BATHROOMS AND KITCHEN SHALL BE HIGH EFFICACY PER TABLE 950-0.8 TITLE 24 REQUIREMENT
17. AT EACH BATHROOM PROVIDE 1 - 40 WATT FLUORESCENT FIXTURE TO MEET NEC REQUIREMENTS.
18. LIGHT FIXTURES IN CLOSETS SHALL CONFORM TO NEC ART.410-8.
19. ALL SMOKE ALARMS (I/OV) SHALL BE BATTERY BACKED-UP PER CFC SEC. 1210 (a, 3)
20. FIXTURES IN SHOWER/TUB AREA SHALL BE FOR DAMP LOCATIONS PER CFC 410-8.1
21. LIGHT FIXTURES IN TUB OR SHOWER AREAS SHALL BE LABELED "SUITABLE FOR DAMP LOCATIONS"
22. ALL CURRENT CARRYING CONDUCTORS SHALL BE COPPER
23. ALUMINUM CONDUCTORS ARE PERMITTED ONLY IF SIZE 1/0 OR LARGER, AND ONLY TO FEED MAIN OR SUB-PANELS, ALL OTHER CURRENT CARRYING CONDUCTORS SHALL BE COPPER.

**C- PLUMBING CODE REQUIREMENTS (Cont.)**

24. WATER EFFICIENT PLUMBING FIXTURES (CALIFORNIA CIVIL CODE 101.41(A)) THE CALIFORNIA CIVIL CODE REQUIREMENTS THAT ALL EXISTING NON-COMPLIANT PLUMBING FIXTURES (BASED ON WATER EFFICIENCY) THROUGHOUT THE HOUSE BE UPGRADED WHENEVER A BUILDING PERMIT IS ISSUED FOR REMODELING IMPROVEMENTS. REMODELING IMPROVEMENTS SHALL BE CONSTRUCTED AFTER JANUARY 1, 1984 ARE EXEMPT FROM THIS REQUIREMENT. THE FOLLOWING TABLE SHOWS THE FIXTURES THAT ARE CONSIDERED TO BE NON-COMPLIANT AND THE TYPE OF WATER-EFFICIENT PLUMBING FIXTURE THAT SHOULD BE INSTALLED.
- | TYPE OF FIXTURE        | REQUIRED WATER-CONSERVING PLUMBING FIXTURE (MAXIMUM FLOW-RATES) |
|------------------------|---|
| WATER CLOSET (TOILET)  | 128 GALLONS/FLUSH   |
| SHOWERHEAD             | 1.8 GALLONS/MINUTE AT 80 PSI                                    |
| FAUCET - BATHROOM SINK | 1.2 GALLONS/MINUTE AT 60 PSI                                    |
| FAUCET - KITCHEN SINK  | 1.8 GALLONS/MINUTE AT 60 PSI                                    |
25. ALL WATER HEATERS SHALL BE ANCHORED OR STRAPPED TO RESIST HORIZONTAL DISPLACEMENT DUE TO EARTHQUAKE MOTION. STRAPPING SHALL BE AT POINTS WITHIN THE UPPER ONE THIRD (1/3) AND LOWER ONE THIRD (1/3) OF VERTICAL DIMENSIONS, AT THE LOCKER POINT, A MINIMUM DISTANCES OF 4 INCHES SHALL BE MAINTAINED ABOVE THE CONTROLS WITH STRAPPING. (CFC-506.2)
  26. ALL WATER HEATERS SHALL BE ANCHORED OR STRAPPED TO RESIST HORIZONTAL DISPLACEMENT DUE TO EARTHQUAKE MOTION. STRAPPING SHALL BE AT POINTS WITHIN THE UPPER ONE THIRD (1/3) AND LOWER ONE THIRD (1/3) OF VERTICAL DIMENSIONS, AT THE LOCKER POINT, A MINIMUM DISTANCES OF 4 INCHES SHALL BE MAINTAINED ABOVE THE CONTROLS WITH STRAPPING. (CFC-506.2)
- D- ELECTRICAL CODE REQUIREMENTS**
1. ALL 125-VOLT, 15- AND 20- AMPERE RECEPTACLE OUTLETS SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES PER CFC 406.11.
  2. ELECTRICAL CONTRACTOR SHALL VERIFY CONNECTION POINTS FOR POWER, TELEPHONE AND CATV SYSTEMS PRIOR TO INSTALLATION. APPROXIMATE ONLY LOCATIONS INDICATED FOR TRANSFORMER, ETC.
  3. COMPLY WITH ALL UTILITY COMPANY REQUIREMENTS. PROVIDE ALL RELATED CONDUITS, FULL BOXES, RISERS.
  4. PROVIDE ELECTRICAL OUTLETS AT THE PROPOSED ROOM. ADDITIONAL ELECTRICAL OUTLETS SHALL BE SPACED SO THAT NO POINT ALONGS THE FLOOR LINE IN ANY KALL SPACE IS MORE THAN 6 FEET HORIZONTALLY FROM ANY OUTLET. (CFC 210-52.1)
  5. PROVIDE 2-20 AMP BRANCH CIRCUIT COUNTER TWO OUTLETS AT THE NEW KITCHEN, SUCH CIRCUITS, WHETHER TWO OR MORE ARE INSTALLED, SHALL HAVE ALL OTHERS CONNECTED TO THIS BRANCH CIRCUIT. (CFC 210-52.4)
  6. PROVIDE AT LEAST ONE RECEPTACLE OUTLET FOR EACH 12" HALL COUNTER SPACE FOR KITCHEN COUNTER MORE THAN 24" OF COUNTER SPACE. PROVIDE GFCI RECEPTACLE OUTLETS SPACED AT 24" ON CENTER. (CFC 210-52.4)
  7. PROVIDE AT LEAST ONE GFCI RECEPTACLE OUTLET AT THE PERIMETER COUNTER SPACE. (CFC 210-52.4)
  8. ALL BRANCH CIRCUITS THAT SUPPLY 125 VOLT, SINGLE PHASE, 125 AMP AND 20 AMP RECEPTACLE OUTLETS INSTALLED IN DWELLING UNIT BEARING SHALL BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTER.
  9. PROVIDE GFCI AT ALL ELECTRICAL OUTLETS INSTALLED IN BATHROOMS (CFC 210-8 (a) (1))
  10. BATHROOM OUTLETS SHALL BE GFCI ON DEDICATED 20 AMPERE BRANCH CIRCUIT. 15-AMPH CIRCUITS SHALL HAVE NO OTHER OUTLETS (CG210-52 (a))
  11. PROVIDE MINIMUM 50" WIDE X 36" DEEP WORKING CLEARANCE AT ELECTRICAL SWN PANEL.
  12. PROVIDE GFCI AT ALL ELECTRICAL OUTLETS INSTALLED IN THE HALLWAY (CG 210-52.9)
  13. IN NEW CONSTRUCTION AND ADDITIONS REQUIRED SMOKE ALARMS AND CARBON MONOXIDE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE PERMANENT BUILDING ELECTRICAL POWER SYSTEM (AND SHALL BE IN THE LIGHTING CIRCUIT CONNECTED WITHIN THE SAME ROOM AS THE SMOKE ALARM). IN DWELLINGS WHERE THERE ARE TWO SMOKE ALARMS OR CARBON MONOXIDE ALARMS ARE REQUIRED THEY SHALL BE INTERCONNECTED IN SUCH A MANNER THAT ACTIVATION OF ONE SHALL CAUSE ACTIVATION OF ALL DETECTORS IN THE DWELLING UNIT. SMOKE ALARMS SHALL BE INSTALLED ON THE CEILING OR WALL (BETWEEN 4" AND 12" OF THE CEILING) NEWLY INSTALLED SMOKE ALARMS SHALL HAVE A 10-YEAR BATTERY. CARBON MONOXIDE ALARMS SHALL BE INSTALLED ON THE CEILING OR WALL (ABOVE THE DOOR HEADS) CARBON MONOXIDE ALARMS AND WHERE THE GARAGE IS DETACHED FROM THE HOUSE. (CFC 1071.2.1, CFC R914.3, CFC R915.1)
  14. PROVIDE AT LEAST ONE GFCI ELECTRICAL OUTLET AT THE HALLWAY (CG 210-52.9)
  15. PROVIDE LIGHTING OUTLET & STAIRWAY CONTROLLED BY A WALL SWITCH AT EACH LEVEL (CG 210.6 (a))
  16. LIGHTING IN BATHROOMS AND KITCHEN SHALL BE HIGH EFFICACY PER TABLE 950-0.8 TITLE 24 REQUIREMENT
  17. AT EACH BATHROOM PROVIDE 1 - 40 WATT FLUORESCENT FIXTURE TO MEET NEC REQUIREMENTS.
  18. LIGHT FIXTURES IN CLOSETS SHALL CONFORM TO NEC ART.410-8.
  19. ALL SMOKE ALARMS (I/OV) SHALL BE BATTERY BACKED-UP PER CFC SEC. 1210 (a, 3)
  20. FIXTURES IN SHOWER/TUB AREA SHALL BE FOR DAMP LOCATIONS PER CFC 410-8.1
  21. LIGHT FIXTURES IN TUB OR SHOWER AREAS SHALL BE LABELED "SUITABLE FOR DAMP LOCATIONS"
  22. ALL CURRENT CARRYING CONDUCTORS SHALL BE COPPER
  23. ALUMINUM CONDUCTORS ARE PERMITTED ONLY IF SIZE 1/0 OR LARGER, AND ONLY TO FEED MAIN OR SUB-PANELS, ALL OTHER CURRENT CARRYING CONDUCTORS SHALL BE COPPER.
- E- SPIRAL STAIRS**
1. SPIRAL STAIRWAYS, (CBC2022-1001.12) ARE PERMITTED TO BE USED AS A COMPONENT IN THE MEANS OF EGRESS ONLY WITHIN A 60" DIAMETER CLEAR SPACE OF NOT MORE THAN 200 SQUARE FEET IN AREA AND SERVING NOT MORE THAN FIVE OCCUPANTS. OR FROM GALLERIES, CATALUNKS AND GRIDIRONS IN ACCORDANCE WITH SECTION 1011.5.2.
  2. A SPIRAL STAIRWAY SHALL HAVE A 7 1/2-INCH MINIMUM CLEAR TREAD DEPTH AT A POINT 12 INCHES FROM THE NARROW EDGE. THE RISERS SHALL BE SUFFICIENT TO PROVIDE A HEADROOM OF 78 INCHES MINIMUM, BUT NOT MORE THAN 80 INCHES. THE MINIMUM STAIRWAY CLEAR WIDTH AT AND BELOW THE HANDRAIL SHALL BE 26 INCHES.

**F- HANDRAILS**

1. 1012.2 HEIGHT, HANDRAIL HEIGHT, MEASURED ABOVE STAIR TREAD NOSING, OF FINISH SURFACE OF HANDRAILS SHALL BE UNIFORM, NOT LESS THAN 34 INCHES AND NOT MORE THAN 38 INCHES.
  2. 1012.3 HORIZONTAL GRASPABILITY, (1012.3) TYPE I, HANDRAILS WITH A CIRCULAR CROSS SECTION SHALL HAVE AN OUTSIDE DIAMETER OF NOT MORE THAN 2 INCHES AND NOT GREATER THAN 2 INCHES. IF THE HANDRAIL IS NOT CIRCULAR, IT SHALL HAVE A PERIMETER DIMENSION OF AT LEAST 4 INCHES AND NOT GREATER THAN 6 1/4 INCHES. MAXIMUM CIRCUMFERENCE OF HANDRAILS SHALL BE 4 INCHES. EDGES SHALL HAVE A MINIMUM RADIUS OF 0.01 INCH.
  3. 1012.4 CONTINUITY, HANDRAIL GRIPPING SURFACES SHALL BE CONTINUOUS, WITHOUT INTERRUPTIONS BY NEVEL POSTS OR OTHER OBSTRUCTIONS, EXCEPTION:
  - 5.1. HANDRAILS WITHIN DWELLING UNITS ARE PERMITTED TO BE INTERRUPTED BY A NEVEL POST AT A TURN OR LANDING.
  - 5.2. WITHIN A DWELLING UNIT, AT A VOLUME, TURNOUT, STARTING EASING OR STARTING NEVEL IS ALLOWED OVER THE LOWEST TREAD.
- G- GUARDS**
1. 1019.2 WHERE REQUIRED, GUARDS SHALL BE LOCATED ALONG OPENED WALKING SURFACES INCLUDING MEZZANINES, EQUIPMENT PLATFORMS, STAIRS, RAMPS AND LANDINGS THAT ARE LOCATED MORE THAN 30 INCHES MEASURED VERTICALLY TO THE FLOOR OR GRADE BELOW AT ANY POINT WITHIN 36 INCHES HORIZONTALLY TO THE EDGE OF THE OPEN SIDE. GUARDS SHALL BE ADEQUATE IN STRENGTH AND ATTACHMENT IN ACCORDANCE WITH SECTION 1607.6.
  2. 1019.3 HEIGHT, REQUIRED GUARDS SHALL NOT BE LESS THAN 42 INCHES HIGH, MEASURED VERTICALLY AS FOLLOWS:
    1. FROM THE ADJACENT WALKING SURFACES.
    2. ON STAIRS, FROM THE LINE CONNECTING THE LEADING EDGES OF TREAD NOSINGS, AND
  3. 1019.4 OPENING LIMITATIONS, REQUIRED GUARDS SHALL NOT HAVE OPENINGS WHICH ALLOW PASSAGE OF A SPHERE 4 INCHES IN DIAMETER FROM THE WALKING SURFACE TO THE GUARDED SURFACE. EXCEPTIONS TO THIS REQUIREMENT ARE:
    1. FROM HEIGHT OF 36 INCHES TO 42 INCHES, GUARDS SHALL NOT HAVE OPENINGS WHICH ALLOW PASSAGE OF A SPHERE 4 INCHES IN DIAMETER.
    2. THE TRIANGULAR OPENINGS AT THE OPEN SIDES OF A STAIRS, FORMED BY THE RISER TREAD AND BOTTOM RAIL SHALL NOT EXCEED 18 INCHES IN WIDTH.
  4. 1607.6.1 CONCENTRATED LOAD, HANDRAILS & GUARDS SHALL ALSO BE DESIGNED TO RESIST A CONCENTRATED LOAD OF 200 POUNDS IN ACCORDANCE WITH SECTION 4.5.1 OF ASCE 7.1.
  5. 1607.6.1.2 INTERMEDIATE RAILS (ALL THOSE EXCEPT THE HANDRAIL AND BOTTOM RAIL) SHALL BE DESIGNED TO RESIST A CONCENTRATED LOAD OF 50 POUNDS IN ACCORDANCE WITH SECTION 4.5.1 OF ASCE 7.1.
- H- FLASHING WORK**
- FLASHING WINDOWS AND DOOR OPENINGS, ROOF DECKS AND OTHER STRUCTURES WILL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND APPLICABLE CODES. ALSO IT HAS TO BE PER THE "SHEET METAL & AIR CONDITIONING CONTRACTORS' NATIONAL ASSOCIATION" (SMACNA) STANDARDS.
- J- FLOORS AND LANDINGS**
1. FLOORS AND LANDINGS AT EXTERIOR DOORS (CBC2022-R511.5), THERE SHALL BE A LANDING OR FLOOR ON EACH SIDE OF EACH EXTERIOR DOOR. THE WIDTH OF EACH LANDING SHALL NOT BE LESS THAN THE DOOR SERVED. EVERY LANDING SHALL HAVE A MINIMUM DIMENSION OF 36 INCHES MEASURED IN THE DIRECTION OF TRAVEL. EXTERIOR LANDINGS SHALL BE PERMITTED TO HAVE A SLOPE NOT TO EXCEED 1/4" UNIT VERTICAL, IN 12 UNITS HORIZONTAL (2-PERCENT).
  2. FLOOR ELEVATIONS AT REQUIRED EGRESS DOORS (CBC2022-R511.5), LANDINGS OR FLOORS AT THE REQUIRED EGRESS DOORS SHALL NOT BE MORE THAN 1/2 INCHES LOWER THAN THE TOP OF THE THRESHOLD. EXCEPTION: THE EXTERIOR LANDING OR FLOOR SHALL NOT BE MORE THAN 3/4 INCHES LOWER THE TOP OF THE THRESHOLD PROVIDED THE DOOR DOES NOT SWING OVER THE LANDING OR FLOOR.
  3. LANDINGS FOR STAIRWAYS (CBC2022-R511.6), THERE SHALL BE A FLOOR OR LANDING AT THE TOP AND BOTTOM OF EACH STAIRWAY. THE MINIMUM WIDTH PERPENDICULAR TO THE DIRECTION OF TRAVEL SHALL NOT BE LESS THAN THE WIDTH OF THE FLIGHT SERVED, WHERE THE STAIRWAY HAS A STRAIGHT RUN, THE MINIMUM DEPTH IN THE DIRECTION OF TRAVEL SHALL BE NOT LESS THAN 36 INCHES. EXCEPTION: 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.
- K- ATTIC VENTILATION AND ACCESS**
1. ENCLOSED ATTICS SHALL HAVE CROSS VENTILATION, IT IS RECOMMENDED THAT HIGH (EXHAUST) AND LOW (INTAKE) VENTILATION BE USED.
  2. WHERE HIGH AND LOW VENTILATION IS APPROXIMATELY EQUAL, ONE SQUARE FOOT OF VENTILATION FOR EACH THREE HUNDRED SQUARE FEET OF ATTIC AREA IS REQUIRED.
  3. WHERE HIGH AND LOW VENTILATION IS NOT USED ONE SQUARE FOOT PER ONE HUNDRED AND FIFTY SQUARE FEET IS REQUIRED.
  4. SCREEN VENTS MUST BE 1/2" MESH.
  5. PROVIDE AN ATTIC ACCESS OPENING NOT LESS THAN 20"x30" WITHIN 60" OF THE ATTIC ACCESS OPENING. PROVIDE A DOOR LOCATE WHERE ATTIC HAS A CLEAR HEIGHT OF 30" OR MORE. (CBC-2022, 120B.2)



RR DESIGN  
design - drafting

315 ALDEN AVENUE  
ROBINET PARK, CA 94928  
PHONE: 707.452.3453  
FAX: 707.452.3453  
EMAIL: RRDESIGN@RRDESIGN.COM  
WWW.RRDESIGN.COM

PROPOSED REMODEL & ADDITION:  
**McKENZIE'S PROPERTY**

PROJECT ADDRESS: 66 CASCADE DR., FAIRFAX, CA 94930

PROJECT: ZONING: RS-6

SHEET NAME: 003.203.17

APN: 003.203.17

**CODE REFERENCES**

REVISIONS	BY

CAD DRAWN BY: JR  
CHECKED BY: JR  
SCALE: AS INDICATED  
DATE: JUNE 29, 2023  
JOB NO.: 2022.0823

SHEET No.: CR.1

WUI REQUIREMENTS

THIS PROJECT IS LOCATED WITHIN THE N/PLD/LAN URBAN INTERFACE (NIU) AND SHALL COMPLY WITH THE REQUIREMENTS OF 2022 CRC R201.

R201.5.5 WEATHERING AND SURFACE TREATMENT PROTECTION

SECTION R201.5.5 ROOFINGS
GENERAL
ROOFS SHALL COMPLY WITH THE REQUIREMENTS OF SECTIONS R201 AND R202. ROOFS SHALL HAVE A ROOFING ASSEMBLY INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

R201.5.5.2 ROOF COVERS
WHERE THE ROOF PROFILE ALLOWS A SPACE BETWEEN THE ROOF COVERING AND ROOF DECKING, THE SPACES SHALL BE CONSTRUCTED TO RESIST THE INTRUSION OF FLAMES AND EMBERS, BE FIRESTOPPED WITH APPROVED MATERIALS OR HAVE ONE LAYER OF MINIMUM 1/2-POUND MINERAL-SURFACED NONPERFORATED GAP SHEET COMPLYING WITH ASTM D2904, OR AT LEAST 3/8-INCH-WIDE RUNNING THE FULL LENGTH OF THE VALLEY.

R201.5.5.3 ROOF VALLEYS
WHERE VALLEY FLASHINGS IS INSTALLED, THE FLASHING SHALL BE NOT LESS THAN 0.019-INCH NO. 26 GAGE GALVANIZED SHEET CORROSION-RESISTANT METAL. INSTALLED COVER NOT LESS THAN ONE LAYER OF MINIMUM 1/2-POUND MINERAL-SURFACED NONPERFORATED GAP SHEET COMPLYING WITH ASTM D2904, AT LEAST 3/8-INCH-WIDE RUNNING THE FULL LENGTH OF THE VALLEY.

R201.5.5.4 ROOF GUTTERS
ROOF GUTTERS SHALL BE PROVIDED WITH THE MEANS TO PREVENT THE ACCUMULATION OF LEAVES AND DEBRIS IN THE GUTTER.

SECTION R201.5.6 VENTS

R201.5.6.1 GENERAL
WHERE PROVIDED, VENTILATION OPENINGS FOR ENCLOSED ATTICS, ENCLOSED EAVE SOFFIT SPACES, ENCLOSED RAFTER SPACES FORMED WHERE CEILING IS APPLIED DIRECTLY TO THE UNDERSIDE OF ROOF RAFTERS, AND UNDERFLOOR VENTILATION SHALL BE IN ACCORDANCE WITH SECTION 1205 OF THE CALIFORNIA BUILDING CODE AND SECTIONS R201.6.1 THROUGH R201.6.5 OF THIS SECTION TO RESIST BUILDING IGNITION FROM THE INTRUSION OF BURNING EMBERS AND FLAME THROUGH THE VENTILATION OPENING.

R201.6.2 REQUIREMENTS
VENTILATION OPENINGS FOR ENCLOSED ATTICS, ENCLOSED EAVE SOFFIT SPACES, ENCLOSED RAFTER SPACES FORMED WHERE CEILING IS APPLIED DIRECTLY TO THE UNDERSIDE OF ROOF RAFTERS, AND UNDERFLOOR VENTILATION OPENINGS SHALL BE FULLY COVERED WITH METAL, FIRE MESH, VENTS, OTHER MATERIALS, OR OTHER DEVICES THAT MEET ONE OF THE FOLLOWING REQUIREMENTS.

VENTS SHALL BE LISTED TO ASTM E2086 AND COMPLY WITH ALL OF THE FOLLOWING:

- THERE SHALL BE NO FLAMING IGNITION OF THE COTTON MATERIAL DURING THE EMBER INTRUSION TEST.
• THERE SHALL BE NO FLAMING IGNITION DURING THE INTEGRITY TEST PORTION OF THE FLAME INTRUSION TEST.
• THE MAXIMUM TEMPERATURE OF THE UNEXPOSED SIDE OF THE VENT SHALL NOT EXCEED 662°F.

VENTS SHALL COMPLY WITH ALL OF THE FOLLOWING:
• THE DIMENSIONS OF THE OPENINGS THEREIN SHALL BE A MINIMUM OF 1/8-INCH AND SHALL NOT EXCEED 1/8 INCH.
• THE MATERIALS USED SHALL BE NONCOMBUSTIBLE.
• EXCEPTION: VENTS LOCATED UNDER THE ROOF COVERING, ALONG WITH THE EXPOSED SURFACE OF THE VENT COVERED BY NONCOMBUSTIBLE WIRE MESH, MAY BE OF COMBUSTIBLE MATERIALS.
• THE MATERIALS USED SHALL BE CORROSION RESISTANT.

R201.6.5 VENTILATION OPENINGS ON THE UNDERSIDE OF EAVES AND CORNICES
VENTS SHALL NOT BE INSTALLED ON THE UNDERSIDE OF EAVES AND CORNICES.

EXCEPTIONS:

- VENTS LISTED TO ASTM E2086 AND COMPLYING WITH ALL OF THE FOLLOWING:
• THERE SHALL BE NO FLAMING IGNITION OF THE COTTON MATERIAL DURING THE EMBER INTRUSION TEST.
• THERE SHALL BE NO FLAMING IGNITION DURING THE INTEGRITY TEST PORTION OF THE FLAME INTRUSION TEST.
• THE MAXIMUM TEMPERATURE OF THE UNEXPOSED SIDE OF THE VENT SHALL NOT EXCEED 662°F.

THE ENFORCING AGENCY SHALL BE PERMITTED TO ACCEPT OR APPROVE SPECIAL EAVE AND CORNICE VENTS THAT RESIST THE INTRUSION OF FLAME AND BURNING EMBERS.

VENTS COMPLYING WITH THE REQUIREMENTS OF SECTION R201.6.2 SHALL BE PERMITTED TO BE INSTALLED ON THE UNDERSIDE OF EAVES AND CORNICES IN ACCORDANCE WITH EITHER ONE OF THE FOLLOWING CONDITIONS:
• THE ATTIC SPACE BEING VENTILATED IS FULLY PROTECTED BY AN AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH SECTION 403.3.1.1 OF THE CALIFORNIA BUILDING CODE OR,
• THE EXTERIOR WALL COVERING AND EXPOSED UNDERSIDE OF THE EAVE ARE OF NONCOMBUSTIBLE MATERIAL OR

IGNITION-RESISTANT MATERIAL DETERMINED IN ACCORDANCE WITH SFM STANDARD 12-7A-3 IGNITION-RESISTANT MATERIAL. THE REQUIREMENTS OF SECTION R201.4.3, AND THE VENT IS LOCATED MORE THAN 12 FEET (3.66 M) FROM THE GROUND OR WALKING SURFACE OF A DECK, PORCH, PATIO, OR SIMILAR SURFACE.

SECTION R201.7 EXTERIOR COVERING

R201.7.1 SCOPE

THE PROVISIONS OF THIS SECTION SHALL GOVERN THE MATERIALS AND CONSTRUCTION METHODS USED TO RESIST BUILDING IGNITION AND SAFEGUARD AGAINST THE INTRUSION OF FLAMES RESULTING FROM SMALL EMBER AND SHORT-TERM DIRECT FLAME CONTACT EXPOSURE.

R201.7.2 GENERAL

THE FOLLOWING EXTERIOR COVERING MATERIALS AND/OR ASSEMBLIES SHALL COMPLY WITH THIS SECTION:

- 1. EXTERIOR WALL COVERING MATERIAL.
2. EXTERIOR WALL ASSEMBLY.
3. EXTERIOR EXPOSED UNDERSIDE OF ROOF EAVE OVERHANGS.
4. EXTERIOR EXPOSED UNDERSIDE OF ROOF EAVE SOFFITS.
5. EXPOSED UNDERSIDE OF EXTERIOR PORCH CEILING.
6. EXTERIOR EXPOSED UNDERSIDE OF FLOOR PROJECTIONS.
7. EXTERIOR UNDERFLOOR AREAS.

EXCEPTIONS:

- 1. EXTERIOR WALL ARCHITECTURAL TRIM, EMBELLISHMENTS, FASCIAS AND GUTTERS.
2. ROOF OR WALL TOP CORNICE PROJECTIONS AND SIMILAR ASSEMBLIES.
3. ROOF ASSEMBLY PROJECTIONS OVER GABLE END WALLS.
4. SOLID WOOD RAFTER TAILS AND SOLID WOOD BLOCKING INSTALLED BETWEEN RAFTERS HAVING MINIMUM DIMENSION 2 INCH NOMINAL.
5. DECK WALKING SURFACES SHALL COMPLY WITH SECTION R201.4 ONLY.

R201.7.3 EXTERIOR WALLS

THE EXTERIOR WALL COVERING OR WALL ASSEMBLY SHALL COMPLY WITH ONE OF THE FOLLOWING REQUIREMENTS:

- 1. NONCOMBUSTIBLE MATERIAL.
2. IGNITION-RESISTANT MATERIAL.
3. SAWN LUMBER OR GLUE-LAMINATED WOOD WITH THE SMALLEST MINIMUM NOMINAL DIMENSION OF 4 INCHES SAWN OR GLUE-LAMINATED PLANKS SPLINED, TONGUE-AND-GROVE, OR SET CLOSE TOGETHER AND WELL SPIKED.
4. WALL ASSEMBLIES THAT HAVE BEEN TESTED IN ACCORDANCE WITH THE TEST PROCEDURES FOR A 10-MINUTE DIRECT FLAME CONTACT EXPOSURE TEST SET FORTH IN ASTM E2107 WITH THE CONDITIONS OF ACCEPTANCE SHOWN IN SECTION R201.7.5.1.
5. WALL ASSEMBLIES THAT MEET THE PERFORMANCE CRITERIA IN ACCORDANCE WITH THE TEST PROCEDURES FOR A 10-MINUTE DIRECT FLAME CONTACT EXPOSURE TEST SET FORTH IN SFM STANDARD 12-7A-1.

EXCEPTION: ANY OF THE FOLLOWING SHALL BE DEEMED TO MEET THE ASSEMBLY PERFORMANCE CRITERIA AND INTENT OF THIS SECTION:

- 1. ONE LAYER OF 5/8-INCH TYPE X GYPSUM SHEATHING APPLIED BEHIND THE EXTERIOR COVERING OR CLADDING ON THE EXTERIOR SIDE OF THE WALL.
2. THE EXTERIOR PORTION OF A 1-HOUR FIRE RESISTIVE EXTERIOR WALL ASSEMBLY APPLIED TO THE UNDERSIDE OF THE ROOF INCLUDING ASSEMBLIES USING THE GYPSUM PANEL AND SHEATHING PRODUCTS LISTED IN THE GYPSUM ASSOCIATION FIRE RESISTANCE DESIGN MANUAL.

R201.7.3.1 CONDITIONS OF ACCEPTANCE WHEN TESTED IN ACCORDANCE WITH ASTM E2107

THE 10-MINUTE TEST SHALL BE CONDUCTED ON A MINIMUM OF THREE TEST SPECIMENS AND THE CONDITIONS OF ACCEPTANCE IN 1 AND 2 BELOW SHALL BE MET. IF ANY ONE OF THE THREE TESTS DOES NOT MEET THE CONDITIONS OF ACCEPTANCE, THREE ADDITIONAL TESTS SHALL BE RUN. ALL OF THE ADDITIONAL TESTS SHALL MEET THE CONDITIONS OF ACCEPTANCE.
1. ABSENCE OF FLAME PENETRATION THROUGH THE WALL ASSEMBLY AT ANY TIME.
2. ABSENCE OF EVIDENCE OF GLOWING COMBUSTION ON THE INTERIOR SURFACE OF THE ASSEMBLY AT THE END OF THE 10-MINUTE TEST.

R201.7.3.2 EXTENT OF EXTERIOR WALL COVERING

THE EXTERIOR WALL COVERING SHALL BE APPLIED TO THE TOP OF THE FOUNDATION TO THE ROOF, AND TERMINATE AT 2 INCH NOMINAL SOLID WOOD BLOCKING BETWEEN RAFTERS AT ALL ROOF OVERHANGS OR IN THE CASE OF ENCLOSED EAVES, TERMINATE AT THE ENCLOSURE.

R201.7.4 OPEN ROOF EAVES

THE EXPOSED ROOF DECK ON THE UNDERSIDE OF UNENCLOSED ROOF EAVES SHALL CONSIST OF ONE OF THE FOLLOWING:
1. NONCOMBUSTIBLE MATERIAL.
2. IGNITION-RESISTANT MATERIAL.

- 3. ONE LAYER OF 5/8-INCH TYPE X GYPSUM SHEATHING APPLIED BEHIND AN EXTERIOR COVERING ON THE UNDERSIDE OF THE EXTERIOR OF THE ROOF DECK.
4. THE EXTERIOR PORTION OF A 1-HOUR FIRE RESISTIVE EXTERIOR WALL ASSEMBLY APPLIED TO THE UNDERSIDE OF THE ROOF DECK DESIGNED FOR EXTERIOR FIRE EXPOSURE INCLUDING ASSEMBLIES USING THE GYPSUM PANEL AND SHEATHING PRODUCTS LISTED IN THE GYPSUM ASSOCIATION FIRE RESISTANCE DESIGN MANUAL.

EXCEPTIONS:

- THE FOLLOWING MATERIALS DO NOT REQUIRE PROTECTION:
1. SOLID WOOD RAFTER TAILS ON THE EXPOSED UNDERSIDE OF OPEN ROOF EAVES HAVING A MINIMUM NOMINAL DIMENSION OF 2 INCH.
2. SOLID WOOD BLOCKING INSTALLED BETWEEN RAFTER TAILS ON THE EXPOSED UNDERSIDE OF OPEN ROOF EAVES HAVING A MINIMUM NOMINAL DIMENSION OF 2 INCH (50.8 MM).
3. GABLE END OVERHANGS AND ROOF ASSEMBLY PROJECTIONS BEYOND AN EXTERIOR WALL OTHER THAN AT THE LOWER END OF THE RAFTER TAILS.
4. FASCIA AND OTHER ARCHITECTURAL TRIM BOARDS.

R201.7.5 ENCLOSED ROOF EAVES AND ROOF EAVE SOFFITS

THE EXPOSED UNDERSIDE OF ENCLOSED ROOF EAVES HAVING EITHER A BOXED-IN ROOF EAVE SOFFIT WITH A HORIZONTAL UNDERSIDE, OR SLOPING RAFTER TAILS WITH AN EXTERIOR COVERING APPLIED TO THE UNDERSIDE OF THE RAFTER TAILS, SHALL BE PROTECTED BY ONE OF THE FOLLOWING:

- 1. NONCOMBUSTIBLE MATERIAL.
2. IGNITION-RESISTANT MATERIAL.
3. ONE LAYER OF 5/8-INCH TYPE X GYPSUM SHEATHING APPLIED BEHIND AN EXTERIOR COVERING ON THE UNDERSIDE OF THE RAFTER TAILS OR SOFFIT.
4. THE EXTERIOR PORTION OF A 1-HOUR FIRE RESISTIVE EXTERIOR WALL ASSEMBLY APPLIED TO THE UNDERSIDE OF THE RAFTER TAILS OR SOFFIT INCLUDING ASSEMBLIES USING THE GYPSUM PANEL AND SHEATHING PRODUCTS LISTED IN THE GYPSUM ASSOCIATION FIRE RESISTANCE DESIGN MANUAL.

- 5. BOXED-IN ROOF EAVE SOFFIT ASSEMBLIES WITH A HORIZONTAL UNDERSIDE THAT MEET THE PERFORMANCE CRITERIA IN SECTION R201.7.10 WHEN TESTED IN ACCORDANCE WITH THE TEST PROCEDURES SET FORTH IN ASTM E2107.
6. BOXED-IN ROOF EAVE SOFFIT ASSEMBLIES WITH A HORIZONTAL UNDERSIDE THAT MEET THE PERFORMANCE CRITERIA IN ACCORDANCE WITH THE TEST PROCEDURES SET FORTH IN SFM STANDARD 12-7A-3.

EXCEPTIONS: THE FOLLOWING MATERIALS DO NOT REQUIRE PROTECTION

- 1. GABLE END OVERHANGS AND ROOF ASSEMBLY PROJECTIONS BEYOND AN EXTERIOR WALL OTHER THAN AT THE LOWER END OF THE RAFTER TAILS.
2. FASCIA AND OTHER ARCHITECTURAL TRIM BOARDS.

R201.7.6 EXTERIOR PORCH CEILING

THE EXPOSED UNDERSIDE OF EXTERIOR PORCH CEILING SHALL BE PROTECTED BY ONE OF THE FOLLOWING:

- 1. NONCOMBUSTIBLE MATERIAL.
2. IGNITION-RESISTANT MATERIAL.
3. ONE LAYER OF 5/8-INCH TYPE X GYPSUM SHEATHING APPLIED BEHIND THE EXTERIOR COVERING ON THE UNDERSIDE OF THE CEILING.
4. THE EXTERIOR PORTION OF A 1-HOUR FIRE RESISTIVE EXTERIOR WALL ASSEMBLY APPLIED TO THE UNDERSIDE OF THE CEILING INCLUDING ASSEMBLIES USING THE GYPSUM PANEL AND SHEATHING PRODUCTS LISTED IN THE GYPSUM ASSOCIATION FIRE RESISTANCE DESIGN MANUAL.

- 5. PORCH CEILING ASSEMBLIES WITH A HORIZONTAL UNDERSIDE THAT MEET THE PERFORMANCE CRITERIA IN SECTION R201.7.10 WHEN TESTED IN ACCORDANCE WITH THE TEST PROCEDURES SET FORTH IN ASTM E2107.
6. PORCH CEILING ASSEMBLIES WITH A HORIZONTAL UNDERSIDE THAT MEET THE PERFORMANCE CRITERIA IN ACCORDANCE WITH THE TEST PROCEDURES SET FORTH IN SFM STANDARD 12-7A-3.

EXCEPTION: ARCHITECTURAL TRIM BOARDS.

R201.7.7 FLOOR PROJECTIONS

THE EXPOSED UNDERSIDE OF A CANTILEVERED FLOOR PROJECTION WHERE A FLOOR ASSEMBLY EXTENDS OVER AN EXTERIOR WALL SHALL BE PROTECTED BY ONE OF THE FOLLOWING:

- 1. NONCOMBUSTIBLE MATERIAL.
2. IGNITION-RESISTANT MATERIAL.
3. ONE LAYER OF 5/8-INCH TYPE X GYPSUM SHEATHING APPLIED BEHIND AN EXTERIOR COVERING ON THE UNDERSIDE OF THE FLOOR PROJECTION.
4. THE EXTERIOR PORTION OF A 1-HOUR FIRE RESISTIVE EXTERIOR WALL ASSEMBLY APPLIED TO THE UNDERSIDE OF THE FLOOR PROJECTION INCLUDING ASSEMBLIES USING THE GYPSUM PANEL AND SHEATHING PRODUCTS LISTED IN THE GYPSUM ASSOCIATION FIRE RESISTANCE DESIGN MANUAL.

- 5. THE UNDERSIDE OF A FLOOR PROJECTION ASSEMBLY THAT MEET THE PERFORMANCE CRITERIA IN SECTION R201.7.10 WHEN TESTED IN ACCORDANCE WITH THE TEST PROCEDURES SET FORTH IN ASTM E2107.
6. THE UNDERSIDE OF A FLOOR PROJECTION ASSEMBLY THAT MEET THE PERFORMANCE CRITERIA IN SECTION R201.7.10 WHEN TESTED IN ACCORDANCE WITH THE TEST PROCEDURES SET FORTH IN SFM STANDARD 12-7A-3.

EXCEPTION: ARCHITECTURAL TRIM BOARDS.

R201.7.8 UNDERFLOOR PROTECTION

UNDERFLOOR AREA OF ELEVATED OR OVERHANGING BUILDINGS SHALL BE ENCLOSED TO GRADE IN ACCORDANCE WITH THE REQUIREMENTS OF THIS CHAPTER OR THE UNDERSIDE OF THE EXPOSED UNDERFLOOR SHALL CONSIST OF ONE OF THE FOLLOWING:

- 1. NONCOMBUSTIBLE MATERIAL.
2. IGNITION-RESISTANT MATERIAL.
3. ONE LAYER OF 5/8-INCH TYPE X GYPSUM SHEATHING APPLIED BEHIND AN EXTERIOR COVERING ON THE UNDERSIDE OF THE FLOOR PROJECTION.
4. THE EXTERIOR PORTION OF A 1-HOUR FIRE RESISTIVE EXTERIOR WALL ASSEMBLY APPLIED TO THE UNDERSIDE OF THE FLOOR INCLUDING ASSEMBLIES USING THE GYPSUM PANEL AND SHEATHING PRODUCTS LISTED IN THE GYPSUM ASSOCIATION FIRE RESISTANCE DESIGN MANUAL.

- 5. THE UNDERSIDE OF A FLOOR ASSEMBLY THAT MEETS THE PERFORMANCE CRITERIA IN SECTION R201.7.10 WHEN TESTED IN ACCORDANCE WITH THE TEST PROCEDURES SET FORTH IN EITHER OF THE FOLLOWING:
a. SFM STANDARD 12-7A-3, OR
b. ASTM E2497.

EXCEPTION: STRUCTURAL COLUMNS AND BEAMS DO NOT REQUIRE PROTECTION WHEN THEY ARE CONSTRUCTED WITH SAWN LUMBER OR GLUE LAMINATED WOOD WITH THE SMALLEST MINIMUM NOMINAL DIMENSION OF 4 INCHES (102 MM), SAWN OR GLUE-LAMINATED PLANKS SPLINED, TONGUE-AND-GROOVE, OR SET CLOSE TOGETHER AND WELL SPIKED.

R201.7.14 UNDERSIDE OF APPENDAGES

WHEN REQUIRED BY THE ENFORCING AGENCY THE UNDERSIDE OF OVERHANGING APPENDAGES SHALL BE ENCLOSED TO GRADE IN ACCORDANCE WITH THE REQUIREMENTS OF THIS CHAPTER OR THE UNDERSIDE OF THE EXPOSED UNDERFLOOR SHALL CONSIST OF ONE OF THE FOLLOWING:

- 1. NONCOMBUSTIBLE MATERIAL.
2. IGNITION-RESISTANT MATERIAL.
3. ONE LAYER OF 5/8-INCH TYPE X GYPSUM SHEATHING APPLIED BEHIND AN EXTERIOR COVERING ON THE UNDERSIDE OF THE FLOOR PROJECTION.
4. THE EXTERIOR PORTION OF A 1-HOUR FIRE RESISTIVE EXTERIOR WALL ASSEMBLY APPLIED TO THE UNDERSIDE OF THE FLOOR INCLUDING ASSEMBLIES USING THE GYPSUM PANEL AND SHEATHING PRODUCTS LISTED IN THE GYPSUM ASSOCIATION FIRE RESISTANCE DESIGN MANUAL.

- 5. THE UNDERSIDE OF A FLOOR ASSEMBLY THAT MEETS THE PERFORMANCE CRITERIA IN ACCORDANCE WITH THE TEST PROCEDURES SET FORTH IN EITHER OF THE FOLLOWING:
a. SFM STANDARD 12-7A-3, OR
b. ASTM E2497.

EXCEPTION: STRUCTURAL COLUMNS AND BEAMS DO NOT REQUIRE PROTECTION WHEN THEY ARE CONSTRUCTED WITH SAWN LUMBER OR GLUE LAMINATED WOOD WITH THE SMALLEST MINIMUM NOMINAL DIMENSION OF 4 INCHES, SAWN OR GLUE-LAMINATED PLANKS SPLINED TONGUE-AND-GROOVE, OR SET CLOSE TOGETHER AND WELL SPIKED.

R201.7.10 CONDITIONS OF ACCEPTANCE WHEN TESTED IN ACCORDANCE WITH ASTM E2107

THE TEST SHALL BE CONDUCTED ON A MINIMUM OF THREE TEST SPECIMENS AND THE CONDITIONS OF ACCEPTANCE IN 1 THROUGH 5 BELOW SHALL BE MET. IF ANY ONE OF THE THREE TESTS DOES NOT MEET THE CONDITIONS OF ACCEPTANCE, THREE ADDITIONAL TESTS SHALL BE RUN. ALL OF THE ADDITIONAL TESTS SHALL MEET THE CONDITIONS OF ACCEPTANCE.

- 1. ABSENCE OF FLAME PENETRATION OF THE EAVES OR HORIZONTAL PROJECTION ASSEMBLY AT ANY TIME.
2. ABSENCE OF EVIDENCE OF GLOWING COMBUSTION OF THE EAVES OR HORIZONTAL PROJECTION SUBASSEMBLY AT ANY TIME.
3. ABSENCE OF SUSTAINED COMBUSTION OF ANY KIND AT THE CONCLUSION OF THE 40-MINUTE TEST.

SECTION R201.8 EXTERIOR WINDOWS, SKYLIGHTS AND DOORS

R201.8.1 GENERAL REQUIREMENT
R201.8.2 EXTERIOR GLAZING
THE FOLLOWING EXTERIOR GLAZING MATERIALS AND/OR ASSEMBLIES SHALL COMPLY WITH THIS SECTION:

- 1. EXTERIOR WINDOWS.
2. EXTERIOR GLAZED DOORS.
3. GLAZED OPENINGS WITHIN EXTERIOR DOORS.
4. GLAZED OPENINGS WITHIN EXTERIOR GARAGE DOORS.
5. EXTERIOR STRUCTURAL GLASS VENEER.
6. SKYLIGHTS.
7. VENTS.

R201.8.2.1 EXTERIOR WINDOWS, SKYLIGHTS AND EXTERIOR GLAZED DOOR ASSEMBLY REQUIREMENTS
EXTERIOR WINDOWS AND EXTERIOR GLAZED DOOR ASSEMBLIES SHALL COMPLY WITH ONE OF THE FOLLOWING REQUIREMENTS:

- 1. BE CONSTRUCTED OF MULTIPANE GLAZING WITH A MINIMUM OF ONE TEMPERED PANE MEETING THE REQUIREMENTS OF SECTION R203 SAFETY GLAZING OR,
2. BE CONSTRUCTED OF GLASS BLOCK UNITS, OR
3. HAVE A FIRE-RESISTANCE RATING OF NOT LESS THAN 20 MINUTES WHEN TESTED ACCORDING TO NFPA 281, OR
4. BE TESTED TO MEET THE PERFORMANCE REQUIREMENTS OF SFM STANDARD 12-7A-2.

R201.8.2.2 OPERABLE SKYLIGHTS
OPERABLE SKYLIGHTS SHALL BE PROTECTED BY A NONCOMBUSTIBLE COVER WHERE THE DIMENSION OF THE OPENINGS IN THE SCREEN SHALL NOT EXCEED 1/8 INCH.

R201.8.2.3 STRUCTURAL GLASS VENEER

THE WALL ASSEMBLY BEHIND STRUCTURAL GLASS VENEER SHALL COMPLY WITH SECTION R201.7.5 EXTERIOR WALLS.

R201.8.3 EXTERIOR DOORS

EXTERIOR DOORS SHALL COMPLY WITH ONE OF THE FOLLOWING:

- 1. THE EXTERIOR SURFACE OR GLADDING SHALL BE OF NONCOMBUSTIBLE MATERIAL OR,
2. THE EXTERIOR SURFACE OR GLADDING SHALL BE OF IGNITION RESISTANT MATERIAL, OR,
3. THE EXTERIOR DOOR SHALL BE CONSTRUCTED OF SOLID CORE WOOD THAT COMPLIES WITH THE FOLLOWING REQUIREMENTS:
a. STILES AND RAILS SHALL NOT BE LESS THAN 1-3/8 INCHES THICK IN AREAS WHERE THE DIMENSION OF THE OPENINGS EXCEEDS ONE INCH FOR THE EXTERIOR PERIMETER OF THE PANEL, THAT SHALL BE PERMITTED TO TAPER TO A TONGUE NOT LESS THAN 5/8 INCH IN WIDTH.
4. THE EXTERIOR DOOR ASSEMBLY SHALL HAVE A FIRE-RESISTANCE RATING OF NOT LESS THAN 20 MINUTES WHEN TESTED ACCORDING TO NFPA 288.
5. THE EXTERIOR SURFACE OR GLADDING SHALL BE TESTED TO MEET THE PERFORMANCE REQUIREMENTS OF SECTION R201.7.5.1 WHEN TESTED IN ACCORDANCE WITH ASTM E2107.
6. THE EXTERIOR SURFACE OR GLADDING SHALL BE TESTED TO MEET THE PERFORMANCE REQUIREMENTS OF SFM STANDARD 12-7A-1.

R201.8.3.1 EXTERIOR DOOR GLAZING

GLAZING IN EXTERIOR DOORS SHALL COMPLY WITH SECTION R201.8.2.1.

R201.8.4 GARAGE DOOR PERIMETER GAP

EXTERIOR GARAGE DOORS SHALL RESIST THE INTRUSION OF EMBERS FROM ENTERING BY PREVENTING GAPS BETWEEN DOORS AND DOOR THRESHOLS AT THE BOTTOM SIDES AND TOPS OF DOORS FROM EXCEEDING 1/8-INCH. GAPS BETWEEN DOORS AND DOOR OPENINGS SHALL BE CONTROLLED BY ONE OF THE FOLLOWING METHODS:

- 1. WEATHER STRIPPING PRODUCTS MADE OF MATERIALS THAT (a) HAVE BEEN TESTED FOR TENSILE STRENGTH IN ACCORDANCE WITH SECTION 1205 OF THE CALIFORNIA BUILDING CODE FOR TENSILE PROPERTIES OF PLASTICS) AFTER EXPOSURE TO ASTM G155 (STANDARD PRACTICE FOR OPERATING XENON ARC LIGHT APPARATUS FOR EXPOSURE OF NON-METALLIC MATERIALS) FOR A PERIOD OF 2000 HOURS, WHERE THE MAXIMUM ALLOWABLE DIFFERENCE IN TENSILE STRENGTH VALUES BETWEEN EXPOSED AND NONEXPOSED SAMPLES DOES NOT EXCEED 10 PERCENT AND (b) EXHIBIT A V-2 OR BETTER FLAMMABILITY RATING WHEN TESTED TO UL 94, STANDARD FOR TESTS FOR FLAMMABILITY OF PLASTIC MATERIALS FOR PARTS IN DEVICES AND APPLIANCES.
2. DOOR OVERLAPS ONTO JAMBS AND HEADERS.
3. GARAGE DOOR JAMBS AND HEADERS COVERED WITH METAL FLASHING.

SECTION R201.9 DECKING

R201.9.1 GENERAL

THE WALKING SURFACE MATERIAL OF DECKS, PORCHES, BALCONIES AND STAIRS SHALL COMPLY WITH THE REQUIREMENTS OF THIS SECTION.

R201.9.2 WHERE REQUIRED
THE WALKING SURFACE MATERIAL OF DECKS, PORCHES, BALCONIES AND STAIRS SHALL COMPLY WITH THE REQUIREMENTS OF THIS SECTION WHEN ANY PORTION OF SUCH SURFACE IS WITHIN 10 FEET OF THE BUILDING.

R201.9.3 DECKING SURFACES

THE WALKING SURFACE MATERIAL OF DECKS, PORCHES, BALCONIES AND STAIRS SHALL BE CONSTRUCTED WITH ONE OF THE FOLLOWING MATERIALS:

- 1. MATERIAL THAT COMPLIES WITH THE PERFORMANCE REQUIREMENTS OF SECTION R201.7.14 IN ACCORDANCE WITH BOTH ASTM E2652 AND ASTM E2126.
2. IGNITION-RESISTANT MATERIAL THAT COMPLIES WITH THE PERFORMANCE REQUIREMENTS OF SECTION R201.7.3.9 WHEN TESTED IN ACCORDANCE WITH ASTM E24 OR UL 725.
3. MATERIAL THAT COMPLIES WITH THE PERFORMANCE REQUIREMENTS OF SFM STANDARD 12-7A-4 AND SFM STANDARD 12-7A-5.
4. EXTERIOR FIRE RETARDANT TREATED WOOD.
5. NONCOMBUSTIBLE MATERIAL.
6. ANY MATERIAL THAT COMPLIES WITH THE PERFORMANCE REQUIREMENTS OF SFM STANDARD 12-7A-4A WHEN ATTACHED TO EXTERIOR WALL COVERING IS ALSO COMPOSED OF NONCOMBUSTIBLE OR IGNITION-RESISTANT MATERIAL.

EXCEPTION: WALL MATERIAL MAY BE OF ANY MATERIAL THAT OTHERWISE COMPLIES WITH THIS CHAPTER WHEN THE DECKING SURFACE MATERIAL COMPLIES WITH THE PERFORMANCE REQUIREMENTS ASTM E24 WITH A CLASS B FLAME SPREAD RATING.

7. ANY MATERIAL THAT COMPLIES WITH THE PERFORMANCE REQUIREMENTS OF SECTION R201.7.5 WHEN TESTED IN ACCORDANCE WITH ASTM E242 AND WHEN ATTACHED EXTERIOR WALL COVERING IS ALSO COMPOSED OF ONLY NONCOMBUSTIBLE OR IGNITION-RESISTANT MATERIALS.

EXCEPTION: WALL MATERIAL SHALL BE PERMITTED TO BE OF ANY MATERIAL THAT OTHERWISE COMPLIES WITH THIS CHAPTER WHEN THE DECKING SURFACE MATERIAL COMPLIES WITH THE PERFORMANCE REQUIREMENTS ASTM E24 WITH A CLASS B FLAME SPREAD INDEX.

SECTION R201.10 ACCESSORY STRUCTURES

R201.10.1 GENERAL

ACCESSORY BUILDINGS AND MISCELLANEOUS STRUCTURES DEFINED IN THIS SECTION THAT HAVE THE POTENTIAL TO POSE A SIGNIFICANT EXTERIOR FIRE EXPOSURE HAZARD TO APPLICABLE BUILDINGS DURING WILDFIRES SHALL BE CONSTRUCTED TO CONFORM TO THE REQUIREMENTS OF THIS SECTION.

R201.10.2 APPLICABILITY
THE PROVISIONS OF THIS SECTION SHALL APPLY TO THE BUILDINGS COVERED BY SECTION R201.13 EXCEPTION 1. THIS SECTION SHALL ALSO APPLY TO SPECIFIED ATTACHED OR DETACHED MISCELLANEOUS STRUCTURES THAT REQUIRE A BUILDING PERMIT INCLUDING BUT NOT LIMITED TO: TRELLISES, ARBORS, PATIO COVERS, GAZEBOS AND SIMILAR STRUCTURES.

EXCEPTIONS:

- 1. DECKS SHALL COMPLY WITH THE REQUIREMENTS OF SECTION R201.9.
2. SWINGS AND CANOPIES SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 9105 OF THE CALIFORNIA BUILDING CODE.
3. EXTERIOR WALL ARCHITECTURAL TRIM, EMBELLISHMENTS AND TASKS.

R201.10.3 WHERE REQUIRED
NO REQUIREMENTS SHALL APPLY TO ACCESSORY BUILDINGS OR MISCELLANEOUS STRUCTURES WHEN LOCATED AT LEAST 50 FEET FROM AN APPLICABLE BUILDING. APPLICABLE ACCESSORY BUILDINGS AND ATTACHED MISCELLANEOUS STRUCTURES, OR DETACHED MISCELLANEOUS STRUCTURES THAT ARE INSTALLED AT A DISTANCE OF LESS THAN 5 FEET FROM AN APPLICABLE BUILDING, SHALL COMPLY WITH THIS SECTION, WHEN REQUIRED BY THE ENFORCING AGENCY. DETACHED MISCELLANEOUS STRUCTURES THAT ARE INSTALLED AT A DISTANCE OF MORE THAN 5 FEET BUT LESS THAN 50 FEET FROM AN APPLICABLE BUILDING SHALL COMPLY WITH THE REQUIREMENTS OF THIS SECTION.

R201.10.3.1 ACCESSORY BUILDING REQUIREMENTS
APPLICABLE ACCESSORY BUILDINGS THAT ARE LESS THAN 120 SQUARE FEET IN FLOOR AREA AND ARE LOCATED MORE THAN 50 FEET BUT LESS THAN 50 FEET FROM AN APPLICABLE BUILDING SHALL BE CONSTRUCTED OF NONCOMBUSTIBLE MATERIALS OR OF IGNITION-RESISTANT MATERIALS AS DESCRIBED IN SECTION R201.4.2.

R201.10.3.2 ATTACHED MISCELLANEOUS STRUCTURE REQUIREMENTS
APPLICABLE MISCELLANEOUS STRUCTURES THAT ARE ATTACHED TO, OR INSTALLED AT A DISTANCE OF LESS THAN 5 FEET FROM AN APPLICABLE BUILDING SHALL BE CONSTRUCTED OF NONCOMBUSTIBLE MATERIALS OR OF IGNITION-RESISTANT MATERIALS AS DESCRIBED IN SECTION R201.4.2.



PROPOSED REMODEL & ADDITION: MCKENZIE'S PROPERTY
PROJECT ADDRESS: 66 CASCADE DR., FAIRFAX, CA 94930

SHEET NAME: WUI REQUIREMENTS
ZONING: R-6
APN: 003.203.17

Table with columns for REVISIONS and BY, and rows for CAD DRAWN BY, CHECKED BY, SCALE, DATE, and JOB NO.

SHEET NO.:



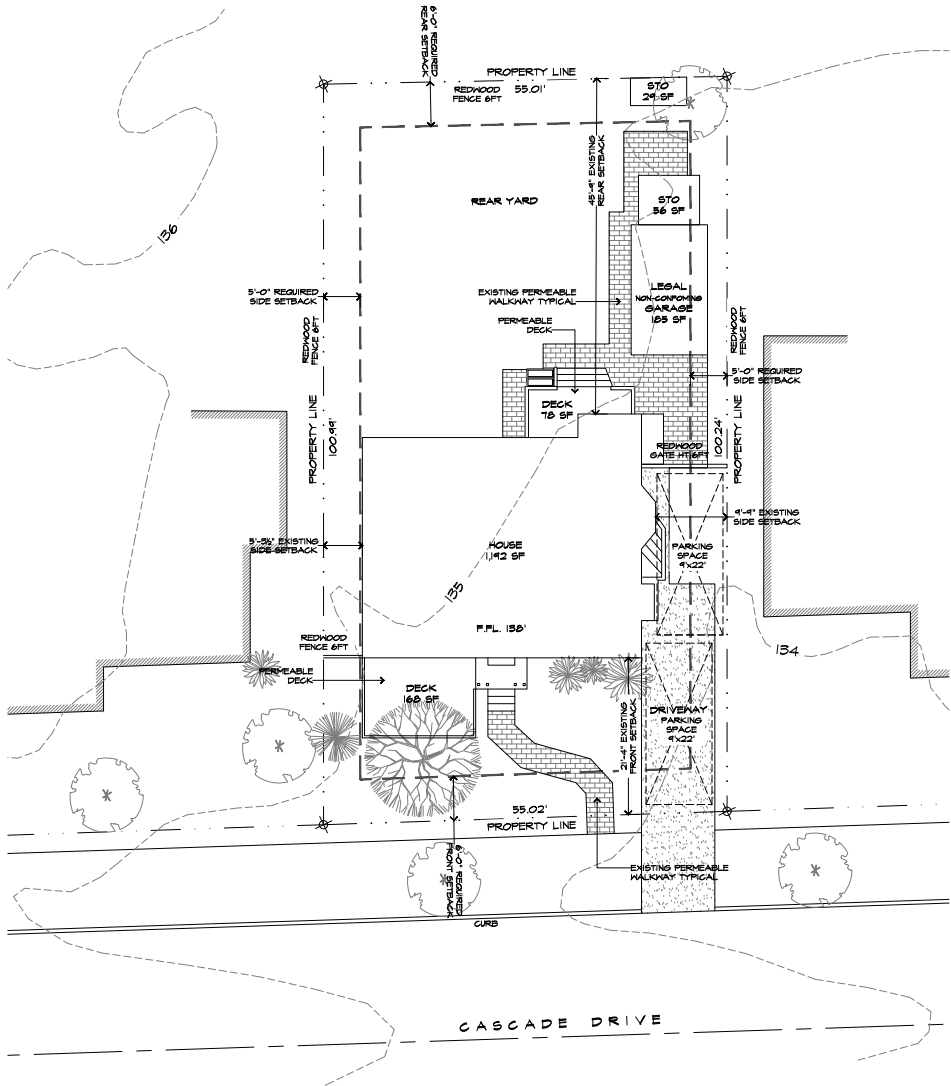


REVISIONS	BY

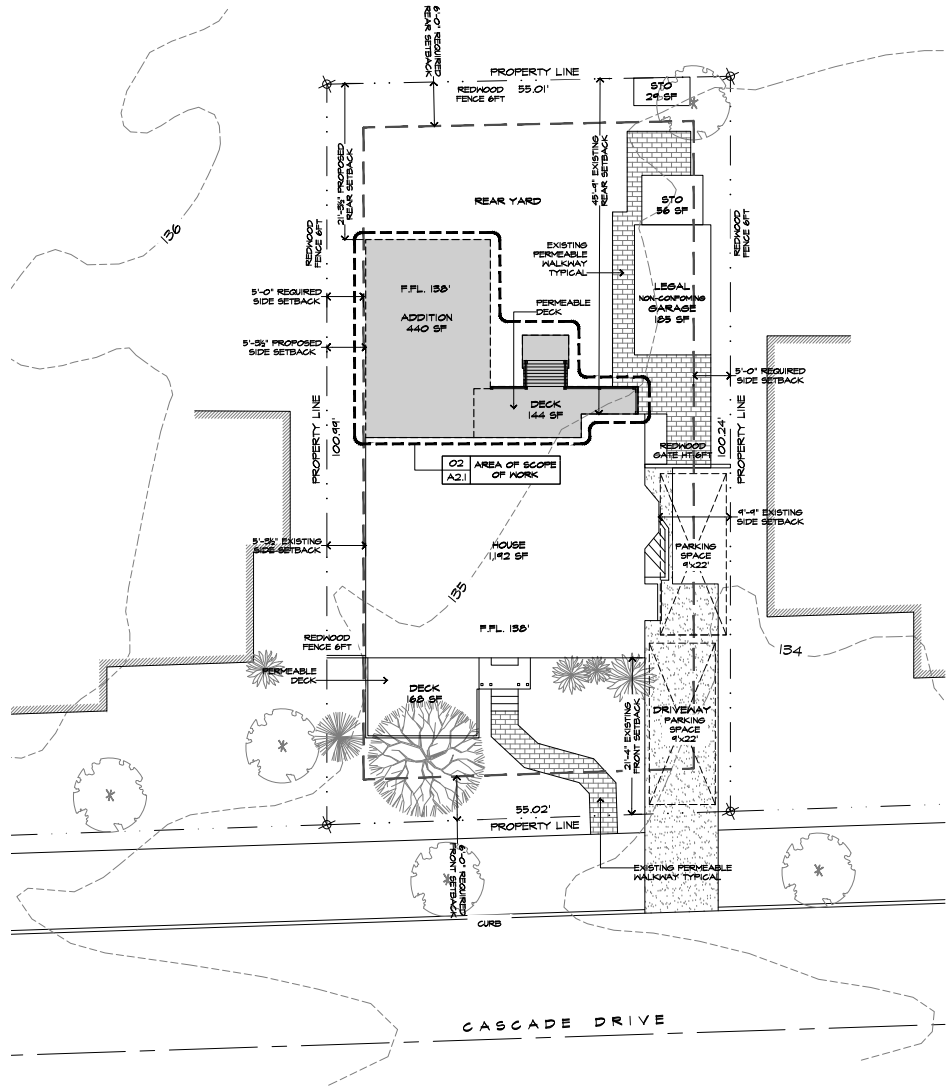
CAD DRAWN BY: JR  
CHECKED BY: JR  
SCALE: AS INDICATED  
DATE: JUNE 29, 2023  
JOB No.: 2K22.0823

SHEET No.:

**A1.1**



01 EXISTING SITE PLAN  
SCALE: 1/8" = 1'-0"  
TRUE PROJECT



02 PROPOSED SITE PLAN  
SCALE: 1/8" = 1'-0"  
TRUE PROJECT

WINDOWS SCHEDULE												
LEVEL	MARK	TYPE	QUANTITY	FRAME MATERIAL	FINISH	COLOR	MANUFACTURER	TRIM (EXT)	COLOR	SIZE (W/H)	GLAZING TYPE	REMARKS
EXISTING	W01	SINGLE HUNG	6	WOOD		WHITE				36"x54"	SINGLE PANE	EXISTING TO REMAIN
	W02	SINGLE HUNG	1	WOOD		WHITE				36"x54"	SINGLE PANE	EXISTING WINDOW TO BE REMOVED. SEE PROPOSED PLANS
	W03	SINGLE HUNG	3	WOOD		WHITE				30"x42"	SINGLE PANE	EXISTING TO REMAIN
	W04	SINGLE HUNG	2	WOOD		WHITE				24"x42"	SINGLE PANE	EXISTING TO REMAIN
	W05	SINGLE HUNG	3	WOOD		WHITE				24"x54"	SINGLE PANE	EXISTING TO REMAIN
NEW	W06	CASEMENT	2	VINYL	MANUFACTURER STANDARD	WHITE	TBC			30"x42"	DOUBLE PANE	NEW, CONFIRM WINDOW SIZE IN FIELD PRIOR TO ORDER, MUST COMPLY WUI AND EGRESS REQUIREMENTS
	W07	CASEMENT	2	VINYL	MANUFACTURER STANDARD	WHITE	TBC			30"x42"	DOUBLE PANE TEMPERED	NEW, CONFIRM WINDOW SIZE IN FIELD PRIOR TO ORDER, MUST COMPLY WUI REQUIREMENTS

DOOR SCHEDULE													
LEVEL	MARK	TYPE	QUANTITY	FRAME MATERIAL	FINISH	COLOR	MANUFACTURER	TRIM (EXT)	COLOR	SIZE (W/H)	GLAZING	HARDWARE	REMARKS
EXISTING	D01	SWING DOOR MAIN ENTRANCE	1	SOLID CORE / GLASS LITE						36"x80"	TEMPERED GLASS		EXISTING TO REMAIN
	D02	SWING DOOR REAR PATIO	1	WOOD / GLASS LITE						30"x80"	TEMPERED GLASS		EXISTING TO REMAIN
NEW	D03	SLIDING DOOR	1	VINYL	MANUFACTURER STANDARD	WHITE	TBC			60"x80"	TEMPERED GLASS	SLIDING TRACK SYSTEM	CONFIRM SIZE IN FIELD PRIOR TO ORDER, MUST COMPLY WITH WUI REQUIREMENTS
	D04	SWING DOOR	1	HOLLOW CORE	PAINTED	TBC	TBC			32"x80"			CONFIRM SIZE IN FIELD PRIOR TO ORDER
	D05	POCKET DOOR	1	SOLID CORE	PAINTED	TBC	TBC			28"x80"		POCKET DOORS TRACK SYSTEM WITH 30 SINGLE SOFT CLOSE/OPEN	CONFIRM SIZE IN FIELD PRIOR TO ORDER, HDPOCKET DOORS 3000-150 SERIES - 80" DOOR - 2x4 STUD WALL

DEMO KEYNOTES	
D01	EXISTING WINDOW TO BE REMOVED, RE-FRAME OPENING AS REQUIRED, INTERIOR TO MATCH EXISTING
D02	EXISTING SIDING AT PROPOSED EXTENSION AREA TO BE REMOVED AND INSTALL NEW 1/2" GYPSUM BOARD
D03	EXISTING WALL TO BE REMOVED TO ACCOMMODATE NEW DOOR, RE-FRAME AS REQUIRED
D04	EXISTING INTERIOR WALL TO BE REMOVED, RE-FRAME AS REQUIRED
D05	REMOVE EXISTING DECK AND STAIRCASE, RECYCLE MATERIALS IF POSSIBLE
D06	PREP EXISTING ROOF AS NECESSARY TO RECEIVE NEW CALIFORNIA ROOF, SEE NEW ROOF FRAMING AT STRUCTURAL PLANS
D07	PREP EXISTING ROOF TO INSTALL NEW SOLATUBE, FOLLOW MANUFACTURER'S SPECIFICATIONS

ARCHITECTURAL KEYNOTES		
A01	NEW CONCRETE LANDING SEE STRUCTURAL PLANS	A10 NEW FIBER GLASS ROOF SHINGLES CLASS "A" TO MATCH EXISTING ROOFING IN COLOR AND STYLE. PATCH/REPAIR EXISTING FIBER GLASS SHINGLES ROOF AS REQUIRED, PROVIDE (2) LAYERS OF 15# FELT PAPER UNDER ROOFING MATERIAL
A02	COMPOSITE DECK, MUST COMPLY WITH WUI REQUIREMENTS, OWNER TO SELECT	A11 NEW VELUX SUN-TUNNEL AT SLOPED ROOF, SEE DETAIL
A03	NEW METAL GUARDRAIL 42" IN HEIGHT AND HANDRAIL 34" TO 38" IN HEIGHT.	A12 ATTIC SPACE VENTILATION CALCULATIONS, SEE TABLE ON SHEET A2.3
A04	FIXTURES SHALL BE SET LEVEL AND IN PROPER ALIGNMENT WITH REFERENCE TO ADJACENT WALLS, NO WATER CLOSET SHALL BE SET CLOSER THAN 15 INCHES FROM ITS CENTER TO A SIDE WALL OR OBSTRUCTION, THE CLEAR SPACE IN FRONT OF A WATER CLOSET, LAVATORY SHALL BE NOT LESS THAN 24 INCHES, PER CPC2022-492.5	A13 PRIMARY ALUMINUM DOWNPIPE 2"x3", COLOR PAINT TO MATCH EXISTING
A05	DOUBLE VANITY, SELECTED BY OWNER	A14 COMPOSITE FASCIA WITH COMMERCIAL GUTTER (5"x5"), INSTALL GUTTER HANGERS AT 3FT MAXIMUM SEPARATION AND GUTTER GUARD LEAF PROTECTION PREMIUM COVER, PAINTED, COLOR TO MATCH EXISTING FASCIA
A06	SHOWER, ADDITIONAL INFORMATION SEE BUILDING & PLUMBING CODE REQUIREMENTS, "A.3, C.1, C.2, C.7 & C.8" ON SHEET "CR.1"	A15 14"x8" CRAWL SPACE VULCAN VENT - APPROVED FOR USE IN THE WUI AREA
A07	EMERGENCY ESCAPE EGRESS WINDOW, FOR ADDITIONAL INFORMATION PLEASE SEE BUILDING CODE REQUIREMENT "A.7 & A.8" AND DETAIL 09 SHEET A5.1	A16 SINGLE-ZONE DUCTLESS MINI-SPLIT AIR CONDITIONING AND HEATING SYSTEM - HEAT PUMP CONDENSER OUTDOOR UNIT
A08	FIBER-CEMENT HARDIEPLANK @ 10.75" EXPOSURE LAP SIDING SMOOTH (PRIMED), COLOR PAINT TO MATCH EXISTING	A17 EXTERIOR LIGHTING, WALL SCONCE, SEE SHEET EM.2 (LF1)
A09	SMOOTH BOARD AT ALL CORNERS, COLOR PAINT PER PROPOSED COLOR SCHEME	A18 2x2 CEDAR BOARD DECK SKIRT

WINDOW & DOOR NOTES	
WINDOWS NOTES	
1	WINDOWS ARE TO BE ALUMINUM CLAD (U.N.O.), MUST COMPLY WITH WUI REQUIREMENTS PER SECTION R337.8, CLAD EXTERIOR WITH INTEGRAL COLOR
2	WINDOW INSTALLATION SHALL BE IN STRICT COMPLIANCE WITH MANUFACTURERS RECENT INSTALLATION DETAILS AND SPECIFICATIONS
3	ALL ROUGH WINDOW SIZES SHALL BE PROVIDED BY THE WINDOW INSTALLER, THE FRAMING CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH THE INSTALLERS DIMENSIONS
4	MANUFACTURER SHALL PROVIDE REMOVABLE SCREENS FOR ALL OPERABLE SECTIONS OF WINDOWS U.N.O.
5	ALL WINDOWS SHALL COMPLY WITH ANSI 134.1 THROUGH 134.4 AND SHALL BE LABELED AND CERTIFIED AS SUCH, ALL WINDOWS TO BE LABELED WITH U-VALUE FROM MANUFACTURER
6	ALL GLAZING 38" OR LESS ABOVE FINISHED FLOOR AND OR WITHIN 24" OF DOOR SWING SHALL BE TEMPERED GLASS
7	ALL WINDOWS ARE TO ALIGN AT TOP, (CASING HEIGHTS) UNLESS NOTED OR INDICATED OTHERWISE

DOORS NOTES	
1	DOORS WITH GLAZING MUST BE TEMPERED AND MUST COMPLY WITH WUI REQUIREMENTS PER SECTION R337.8
2	DOOR INSTALLATION SHALL BE IN STRICT COMPLIANCE WITH MANUFACTURERS RECENT INSTALLATION DETAILS AND SPECIFICATIONS
3	ALL ROUGH DOORS SIZES SHALL BE PROVIDED BY THE DOOR INSTALLER, THE FRAMING CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH THE INSTALLERS DIMENSIONS
4	FOR EXTERIOR COLOR SEE FINISHES SCHEDULE AND/OR CONFIRM WITH OWNER
5	ALL EXTERIOR DOORS, INCLUDING SLIDING GLASS DOORS, SHALL HAVE THRESHOLDS BY DOOR MANUFACTURER
6	ALL DOORS ARE TO BE ALIGNED AT THE TOP WITH WINDOWS HEAD (SEE EXTERIOR ELEVATIONS) UNLESS NOTED OR INDICATED OTHERWISE
7	ALL DOORS BETWEEN GARAGE AND DWELLING SHALL BE MINIMUM 1-3/8" SOLID CORE WOOD, WITH SELF-CLOSING DEVICE, TIGHT FITTING, WITH A FIRE PROTECTION RATING OF NOT LESS THAN 20 MINUTES
8	SLIDING GLASS DOORS SHALL COMPLY WITH ANSI 134.2, NWM 15-3; THE AIR INFILTRATION RATE SHALL NOT EXCEED .5 FT <sup>3</sup> /MIN PER SQUARE FT. OF DOOR AREA.
9	AT MECHANICAL ROOM (WATER HEATER/FURNACE) PROVIDE MINIMUM OF 50 SQUARE INCHES OF VENTILATION WITHIN 12" OF THE TOP & BOTTOM

CAULKING AND SEALANTS, EXTERIOR JOINTS AROUND WINDOWS AND DOOR FRAMES, BETWEEN WALL CAVITIES AND WINDOW OR DOOR FRAMES, BETWEEN WALL AND FOUNDATION, BETWEEN WALL AND ROOF, BETWEEN WALL PANELS, AT PENETRATIONS OF UTILITIES SERVICES THROUGH WALLS, FLOORS AND ROOFS, AND ALL OTHER OPENINGS IN THE EXTERIOR ENVELOPE SHALL BE CAULKED, GASKETED, WEATHERSTRIPPED, OR OTHERWISE SEALED. CAULKING SHALL BE SILICONE RUBBER BASE OR BUTYL RUBBER BASE, CONFORMING TO FEDERAL SPECIFICATIONS TT-S-1543 AND TT-S-1657 RESPECTIVELY, OR MATERIALS DEMONSTRATING EQUIVALENT PERFORMANCE IN RESILIENCE AND DURABILITY.

IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND/OR HIS/HER SUBCONTRACTORS TO OBTAIN AND/OR VERIFY ALL DIMENSIONS & PREFERENCES PRIOR TO ORDER WINDOWS & DOORS.

WALL LEGEND	
	EXISTING WALL TO REMAIN: INTERIOR OR EXTERIOR, CONVENTIONAL FRAMING 2x, WOOD STUD WALL @ 16" O.C WITH TYPICAL
	NEW INTERIOR WALL: GYPSUM BOARD AT EACH SIDE OF 2x, WOOD STUD WALL @ 16" O.C. USE MINIMUM 2x6 WOOD STUD WALL AT BEARING WALLS
	NEW EXTERIOR WALL-1: FIBER-CEMENT SIDING, OVER BUILDING PAPER, OVER 1 LAYER OF STRUCTURAL PLYWOOD (WHERE IS REQ.), OVER 2x6 STUD WALL @ 16" C.C. WITH R-21 G. INSULATION WITH A 1/2" GYPSUM BOARD AT THE INTERIOR
	NEW EXTERIOR WALL-2: FIBER-CEMENT SIDING, OVER BUILDING PAPER, OVER 1 LAYER OF STRUCTURAL PLYWOOD (WHERE IS REQ.), OVER 2x6 STUD WALL @ 16" C.C. WITH R-38 CLOSED CELL SPRAY FOAM INSULATION WITH A 1/2" QUETRACK 530 BOARD
	--- INDICATES CONSTRUCTION LINE BELOW OR ABOVE

IMPORTANT NOTES	
A	DIMENSION TO FACE OF STUD (INTERIOR PARTITIONS, CONCRETE, CONCRETE BLOCK, EXTERIOR WALL SHEATHING) UNLESS NOTED OTHERWISE
B	NOTE WHEN REQUIRED MINIMUM CLEAR DIMENSIONS WILL BE IDENTIFIED ON PLANS
C	GENERAL CONTRACTOR MUST VERIFY ALL DIMENSIONS, ELEVATIONS, CLEARANCES PRIOR CONSTRUCTION, IF ANY ERRORS AND/OR DISCREPANCIES ARE FOUND ON THE PLANS, NEEDS TO REPORT THIS TO THE DESIGNER FOR CLARIFICATION
D	DO NOT SCALE DRAWINGS



PROJECT: PROPOSED REMODEL & ADDITION: **McKENZIE'S PROPERTY**

PROJECT ADDRESS: 66 CASCADE DR., FAIRFAX, CA 94930

SHEET NAME: **WINDOW SCHEDULE & IMPORTANT NOTES**

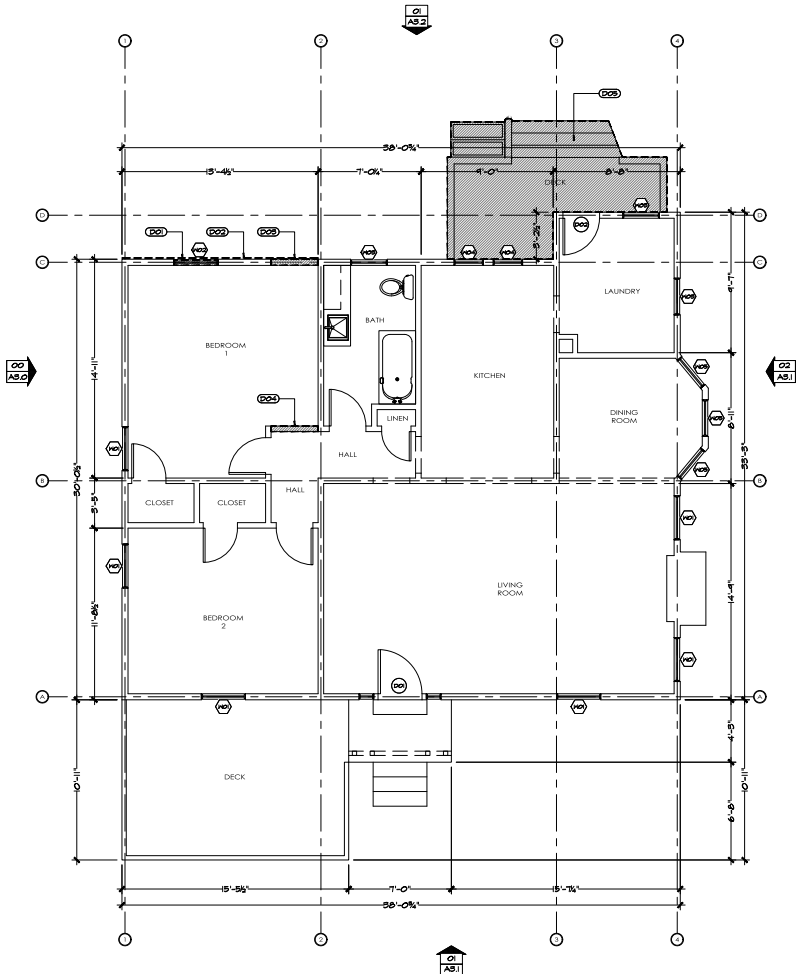
APN: 003.203.17 ZONING: RS-6

REVISIONS	BY

CAD DRAWN BY: JR  
 CHECKED BY: JR  
 SCALE: AS INDICATED  
 DATE: JUNE 29, 2023  
 JOB No.: 2K22.0823

SHEET No.: **A2.0**

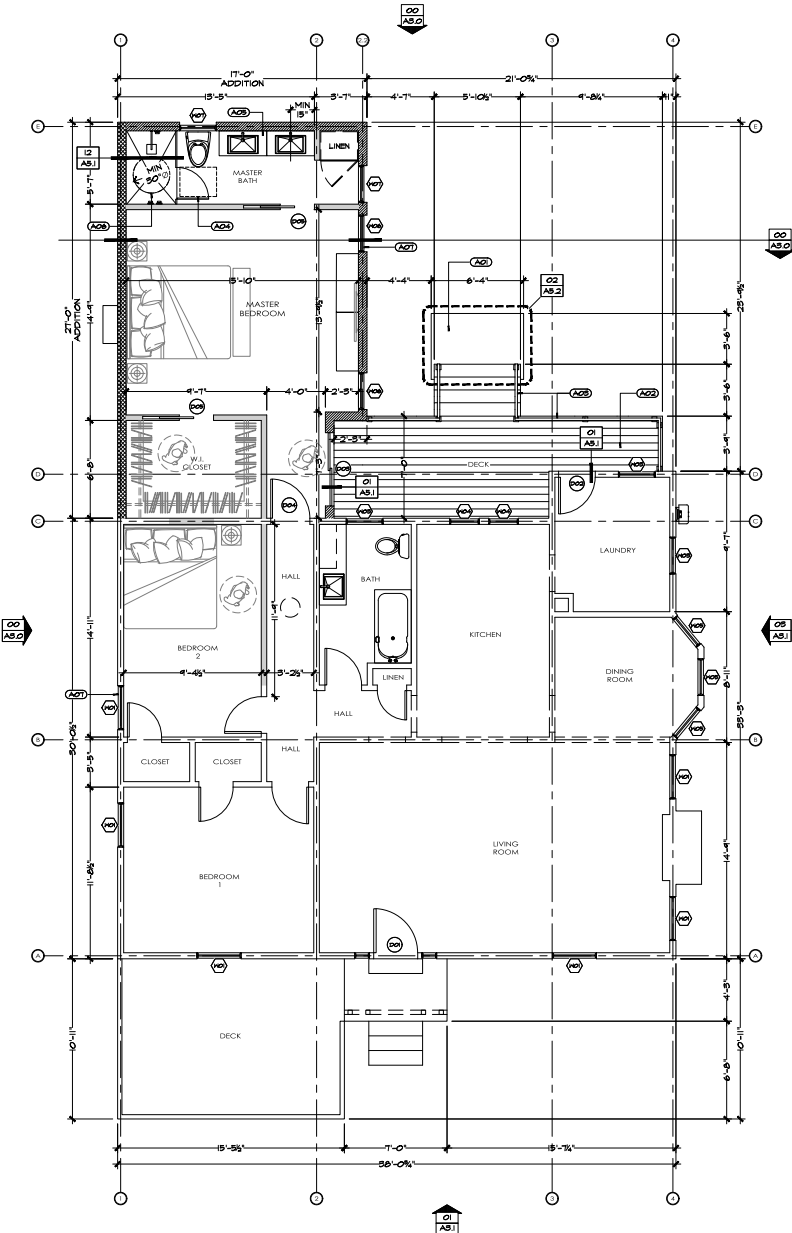




01 EXISTING FLOOR PLAN

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

- IMPORTANT NOTES:
- FOR KEYNOTES REFERENCES PLEASE SEE SHEET "A2.0"
  - FOR DOOR/WINDOW SCHEDULES PLEASE SEE SHEET "A2.0"



02 PROPOSED FLOOR PLAN

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

- IMPORTANT NOTES:
- FOR KEYNOTES REFERENCES PLEASE SEE SHEET "A2.0"
  - FOR DOOR/WINDOW SCHEDULES PLEASE SEE SHEET "A2.0"



315 ALDEN AVENUE  
ROHNERT PARK, CA 94978  
PHONE: 707.492.3453  
E-MAIL ADDRESS:  
RRENDERING@RRDESIGN.COM  
DESIGN BY: RR DESIGN

PROJECT: PROPOSED REMODEL  
& ADDITION:  
**McKENZIE'S PROPERTY**

PROJECT ADDRESS:  
66 CASCADE DR.  
FAIRFAX, CA 94930

SHEET NAME:  
**EXISTING & PROPOSED  
FLOOR PLAN**

APN: 003.203.17 ZONING: RS-6

REVISIONS	BY

CAD DRAWN BY: JR  
CHECKED BY: JR  
SCALE: AS INDICATED  
DATE: JUNE 29, 2023  
JOB No.: 2K22.0823

SHEET No.:

**A2.1**



315 ALDEN AVENUE  
 ROHNERT PARK, CA 94789  
 PHONE: 707.492.3453  
 E-MAIL: ADDRESS@RRDESIGN.COM  
 DESIGN BY: RR DESIGN

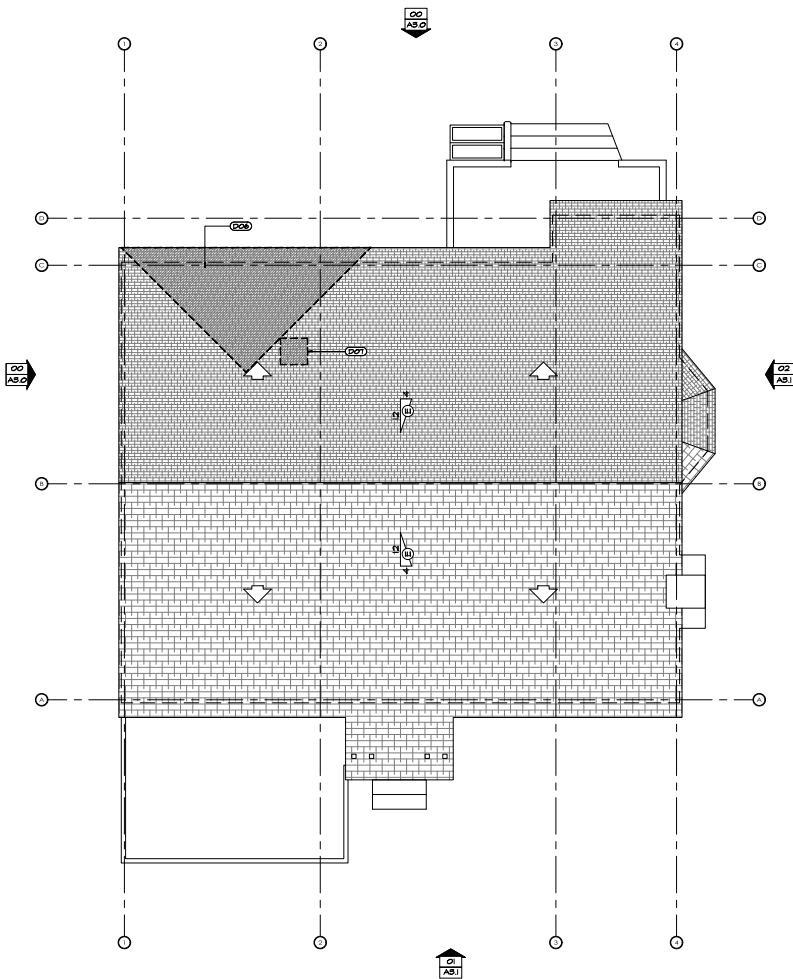
PROJECT: PROPOSED REMODEL  
 & ADDITION:  
**McKENZIE'S PROPERTY**  
 PROJECT ADDRESS: 66 CASCADE DR.  
 FAIRFAX, CA 94930

SHEET NAME:  
**EXISTING & PROPOSED  
 ROOF PLAN**  
 APN: 003.203.17 ZONING: RS-6

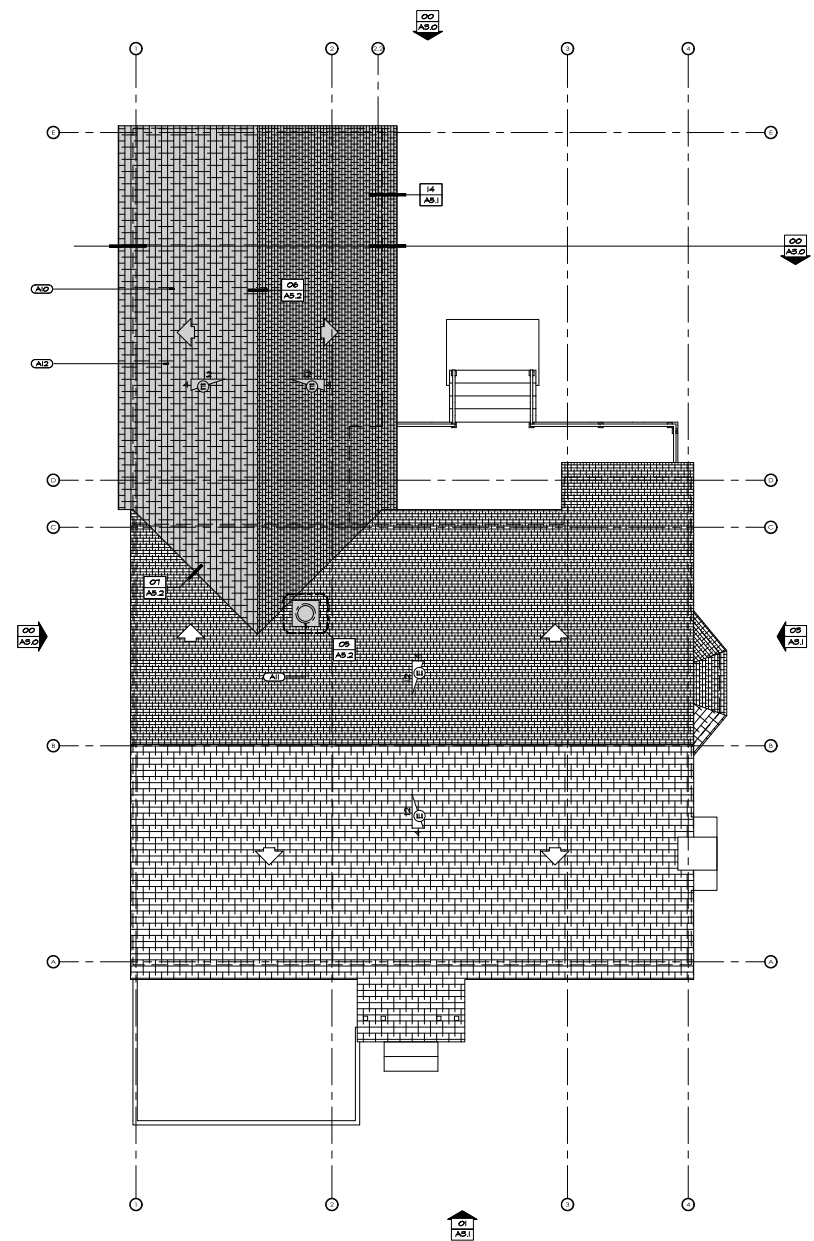
REVISIONS	BY

SHEET No.:

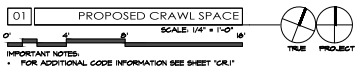
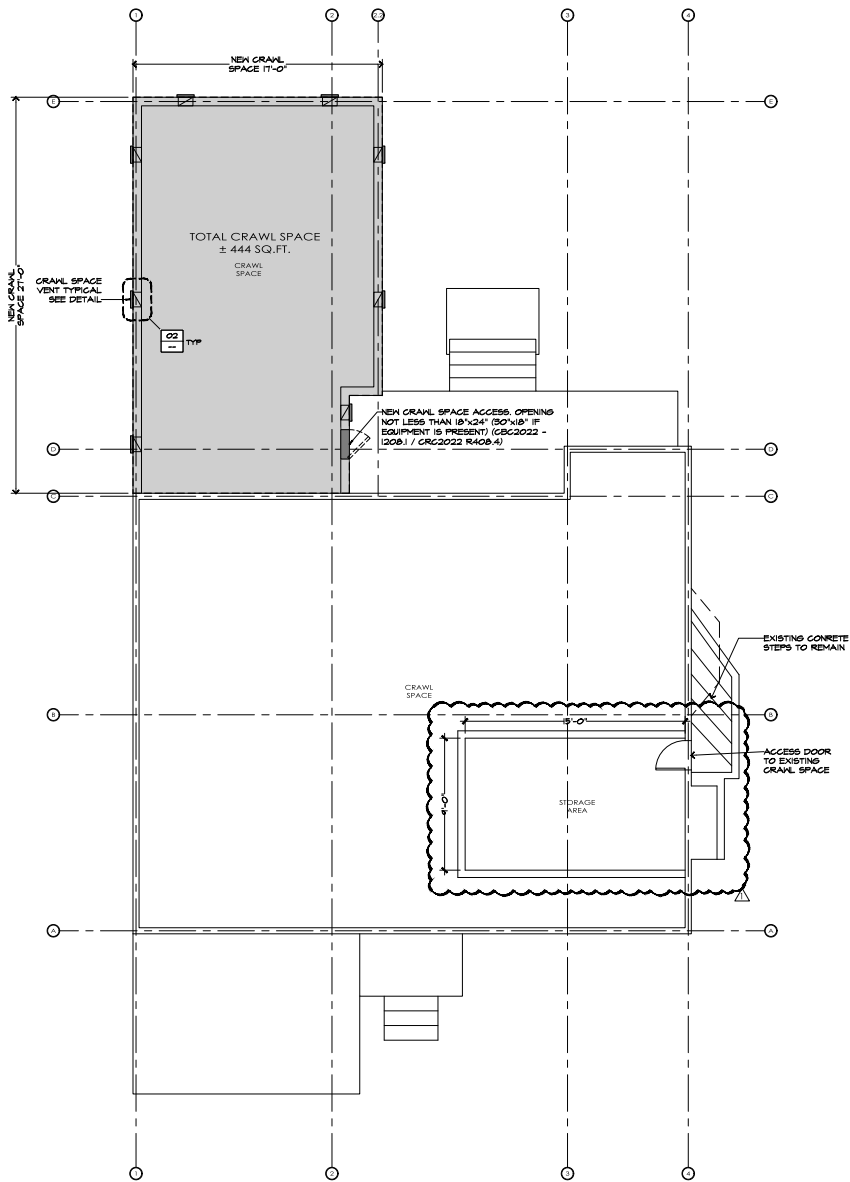
**A2.2**



**01** EXISTING ROOF PLAN  
 SCALE: 1/4" = 1'-0"  
 IMPORTANT NOTES:  
 • FOR KEYNOTES REFERENCES PLEASE SEE SHEET 'A2.0'  
 • FOR DOOR/WINDOW SCHEDULE PLEASE SEE SHEET 'A2.0'



**02** PROPOSED ROOF PLAN  
 SCALE: 1/4" = 1'-0"  
 IMPORTANT NOTES:  
 • FOR KEYNOTES REFERENCES PLEASE SEE SHEET 'A2.0'  
 • FOR DOOR/WINDOW SCHEDULE PLEASE SEE SHEET 'A2.0'



NEW CRAWL SPACE VENTILATION CALCULATION		
SPACE	CRAWL SPACE AREA (± 444 SQ.FT.) REQUIRED BY CODE (1/150)	PER DETAIL
VENTILATION REQUIRED	AREA TO BE VENTILATED 444 SQ.FT. /150= 2.96 SQ.FT. TOTAL REQUIRED = 426.24 SQ.IN.	
VENTILATION PROPOSED	* CRAWL SPACE 1468 VENT (NF.V.A. 62 SQ.IN.) / PROPOSED 3 UNITS EACH SIDE IN A CROSS VENTILATED SETTING.= 8x62 SQ.IN.= 496 SQ.IN. OK	02 / AS1

**VULCAN VENT**  
FIRE & EMBER SAFE VENTS

Approved for use in the Wildland Urban Interface (W.U.I.)  
Chapter 7A compliant: Tested and listed to ASTM E2896, ICC-ES, listing: 1300

Revision Date: October 13, 2021

WWW.VULCANVENTS.COM (916) 652-7424 info@newcalmetals.com P.O. Box 1126 Loomis, CA 95650

**VFSB14FB PRODUCT SPECIFICATION & DATA SHEET**

Model Description: Foundation/Soffit Vent Flange Type: Foam Back Intumescent Core Frame & Flange: 600 Galvanized Steel - 26GA  
 Model Number: VFSB14FB NFVA: 62 sq. in. Intumescent Core: Sealed Hexagonal Matrix - Aluminum with Intumescent coating  
 Model Size: 13-1/2" x 7-1/2" Ember Mesh: 14 Mesh - 304 Stainless Steel (Faces interior) Post Screen: Galvanized Steel Screen - 1/8" (Faces exterior)

Proudly Manufactured By: **NEW CAL**

02 CRAWL SPACE VENT DATA SHEET

NEW ROOF ATTIC VENTILATION CALCULATION [R806.2-CRC2022]		
SPACE	ATTIC AREA (± 444 SQ.FT.) REQUIRED BY CODE (1/150)	PER DETAIL
VENTILATION REQUIRED	AREA TO BE VENTILATED 444 SQ.FT. /150= 2.96 SQ.FT. TOTAL REQUIRED = 426.24 SQ.IN.	
TOP VENTILATION	* CORAVENT V-300 RIDGE-VENT (13.5 SQ.IN. NFVA PER LN. FT.) / NEW RIDGE VENT LN. FT. = 26x13.5 SQ.IN. = 351 SQ.IN.	01 / AS2
LOW VENTILATION	* CORAVENT RS-400 EAVE STRIP VENT (18.75 SQ.IN. NFVA PER BAY) / NEW EAVE BAYS = 26x18.75 SQ.IN. = 487.5 SQ.IN.	14 / AS1
TOTAL VENTILATION	351.00 SQ.IN. + 487.50 SQ.IN. = 838.50 SQ.IN.	



PROJECT: PROPOSED REMODEL & ADDITION: **McKENZIE'S PROPERTY**

PROJECT ADDRESS: 66 CASCADE DR., FAIRFAX, CA 94930

SHEET NAME: **CRAWL SPACE / ATTIC VENTILATION CALCULATIONS**

APN: 003.203.17 ZONING: RS-6

REVISIONS BY: 08/17/2023 TOWN OF FAIRFAX PLANNING COMMISSION

CAD DRAWN BY: JR  
 CHECKED BY: JR  
 SCALE: AS INDICATED  
 DATE: JUNE 29, 2023  
 JOB No.: 2K22.0823

SHEET No.: **A2.3**



315 ALDEN AVENUE  
 ROHNERT PARK, CA 94728  
 PHONE: 707-492-3653  
 E-MAIL ADDRESS:  
 RRDESIGN@GMAIL.COM

PROJECT: PROPOSED REMODEL & ADDITION:  
**McKENZIE'S PROPERTY**  
 PROJECT ADDRESS: 66 CASCADE DR., FAIRFAX, CA 94930

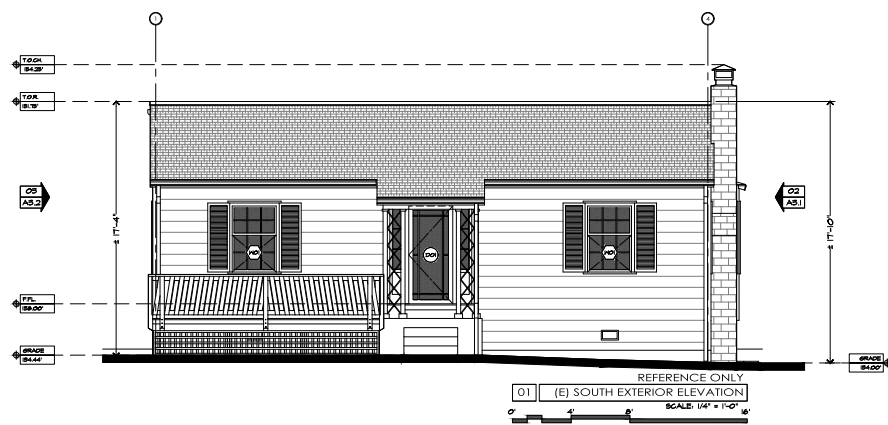
SHEET NAME:  
**EXISTING & PROPOSED EXTERIOR ELEVATIONS & KEYNOTES**  
 APN: 003.203.17 ZONING: RS-6

REVISIONS	BY

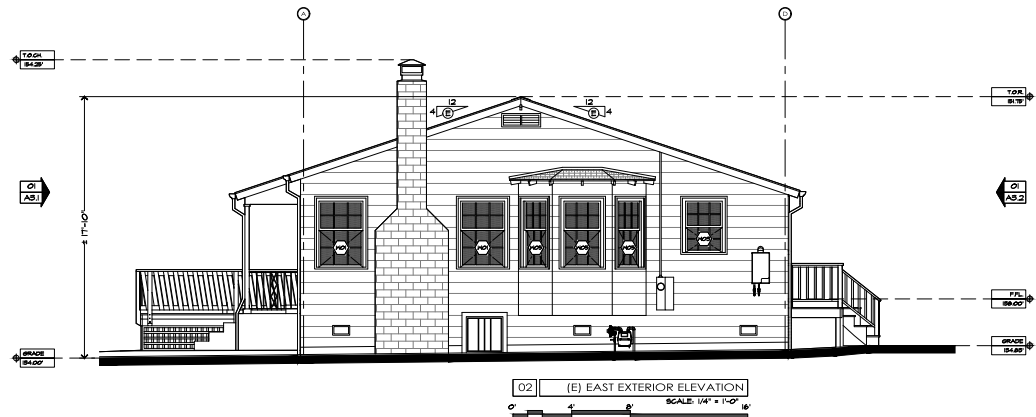
CAD DRAWN BY: JR  
 CHECKED BY: JR  
 SCALE: AS INDICATED  
 DATE: JUNE 29, 2023  
 JOB No.: 2K22.0823

SHEET No.:

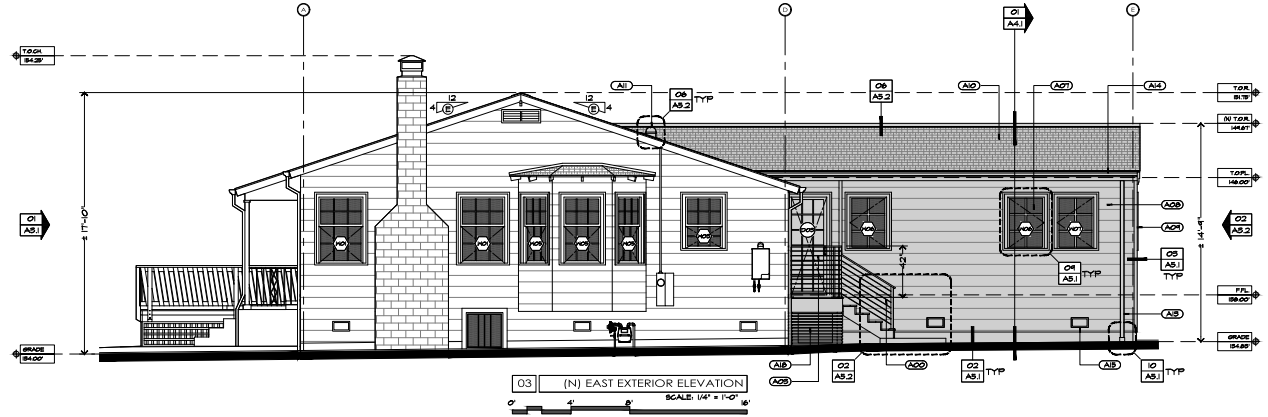
**A3.1**



01 (E) SOUTH EXTERIOR ELEVATION  
 SCALE: 1/4" = 1'-0"

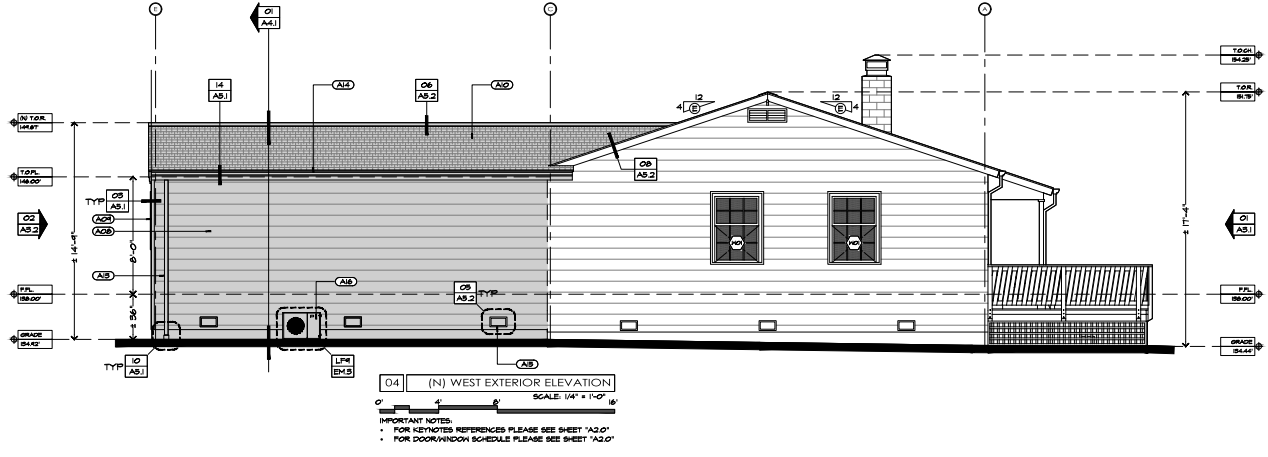
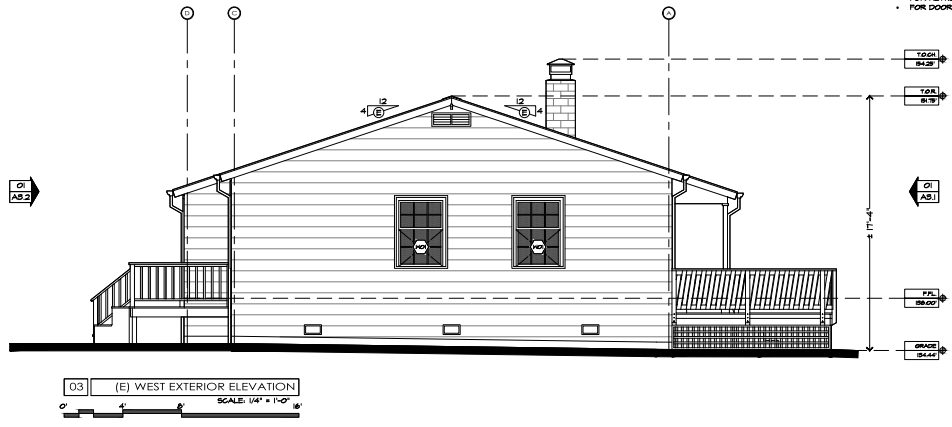
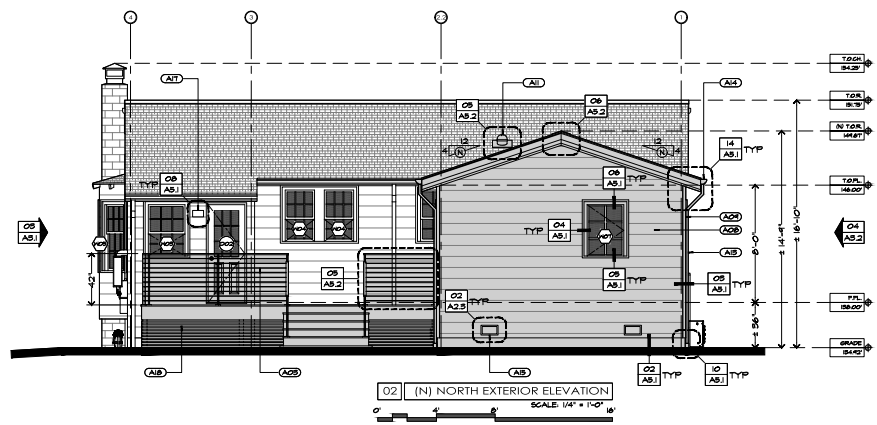
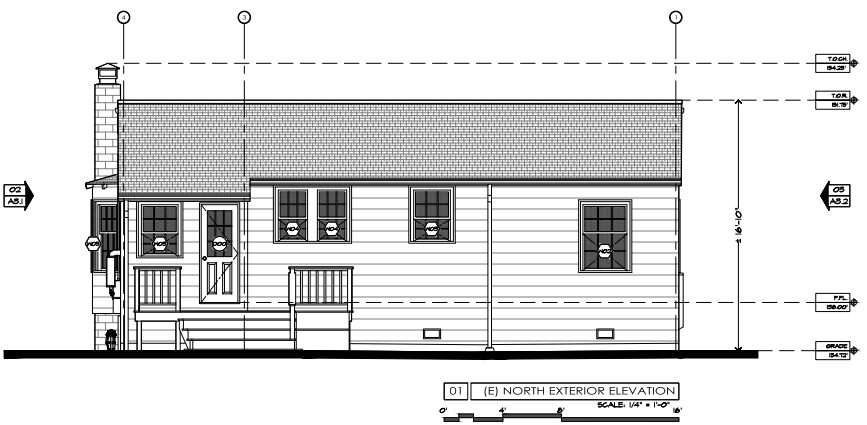


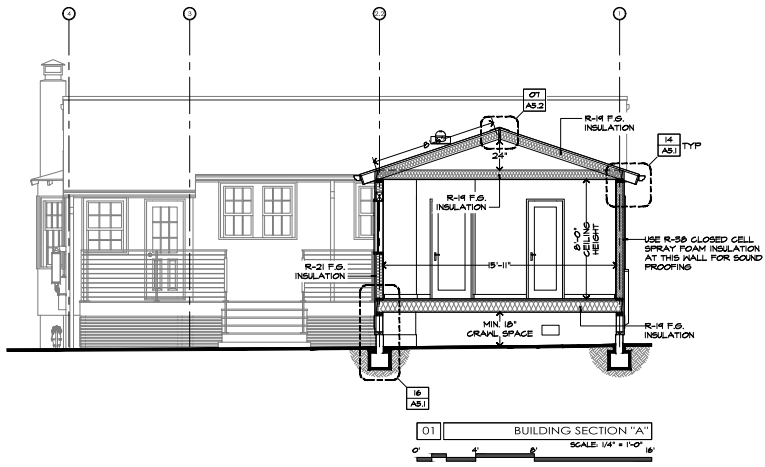
02 (E) EAST EXTERIOR ELEVATION  
 SCALE: 1/4" = 1'-0"



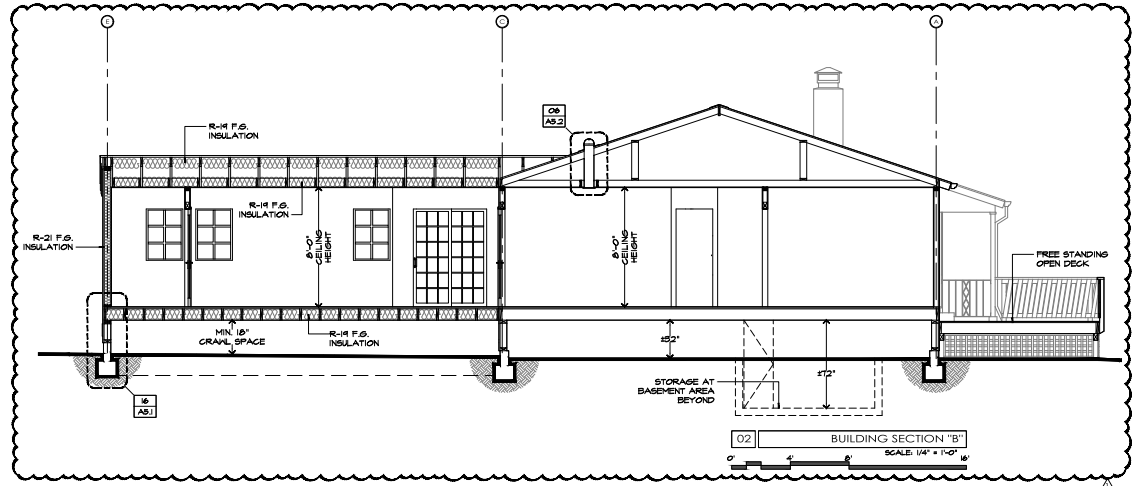
03 (N) EAST EXTERIOR ELEVATION  
 SCALE: 1/4" = 1'-0"

IMPORTANT NOTES:  
 • FOR KEYNOTES REFERENCES PLEASE SEE SHEET "A3.0"  
 • FOR DOOR/WINDOW SCHEDULE PLEASE SEE SHEET "A3.0"





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



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



PROJECT: PROPOSED REMODEL & ADDITION:  
**McKENZIE'S PROPERTY**

PROJECT ADDRESS: 66 CASCADE DR., FAIRFAX, CA 94930

SHEET NAME: **BUILDING SECTIONS**

APN: 003.203.17 ZONING: RS-6

REVISIONS	BY
△ 06.17.2023	TOWN OF FAIRFAX PLANNING COMMISSION

CAD DRAWN BY: JR  
CHECKED BY: JR  
SCALE: AS INDICATED  
DATE: JUNE 29, 2023  
JOB No.: 2K22.0823

SHEET No.:

**A4.1**



**GENERAL INFORMATION:**  
THE FOLLOWING GUIDELINES ARE DEVELOPED TO ESTABLISH A STANDARD OF ACCEPTABLE INSTALLATION POLICY BY THE MCCGAB FOR 3/8" INCH AND LARGER TEMPERED GLASS DOORS AND PANELS.

THESE GUIDELINES PRESENT THE MINIMUM METHOD OF ATTACHMENT OF THE PANELS ACTUAL TYPE OF BRACKET, CHANNEL, AND THEIR ATTACHMENT TO THE BUILDING FRAME MUST COMPLY WITH THE STRUCTURAL REQUIREMENTS OF THE CURRENT CALIFORNIA BUILDING CODE.

SILICONE CAULKING AND/OR SEALANT ARE NOT AN ACCEPTABLE MEANS OF SECURING GLASS TO THE BUILDING FRAMING UNLESS THE MANUFACTURER'S STRUCTURAL DATA IS SUBMITTED AND APPROVED. CONSEQUENTLY, THE SUPPORT METHOD MUST BE ADEQUATE WITHOUT ANY CAULKING/SEALANT IN PLACE. SILICONE IS REQUIRED ON THE EDGES ONLY TO PROVIDE A WATER-TIGHT ENCLOSURE.

**BRACKETS AND CHANNELS:**  
GLASS PANELS AND HINGED DOORS OF A TUB AND/OR SHOWER ENCLOSURE SHALL BE SUPPORTED BY BRACKETS AND/OR CHANNELS WITH AT LEAST 1/2" GRIFF FIRMLY AFFIXED TO THE BUILDING FRAMING AND THE EDGES OF THE GLASS. NOTCHED TILE 1/2" IN DEPTH SHALL BE ACCEPTABLE IN PLACE OF BRACKETS OR CHANNELS. THE GLASS SHALL BE FIRMLY SECURED ON AT LEAST TWO SIDES WITH BRACKETS AND/OR CHANNELS. THE SUPPORTS SHOULD BE ON OPPOSING EDGES OF THE GLASS WHERE POSSIBLE. INTERSECTIONS OF GLAZING MUST BE SECURED BY EITHER A BRACKET OR A CHANNEL.

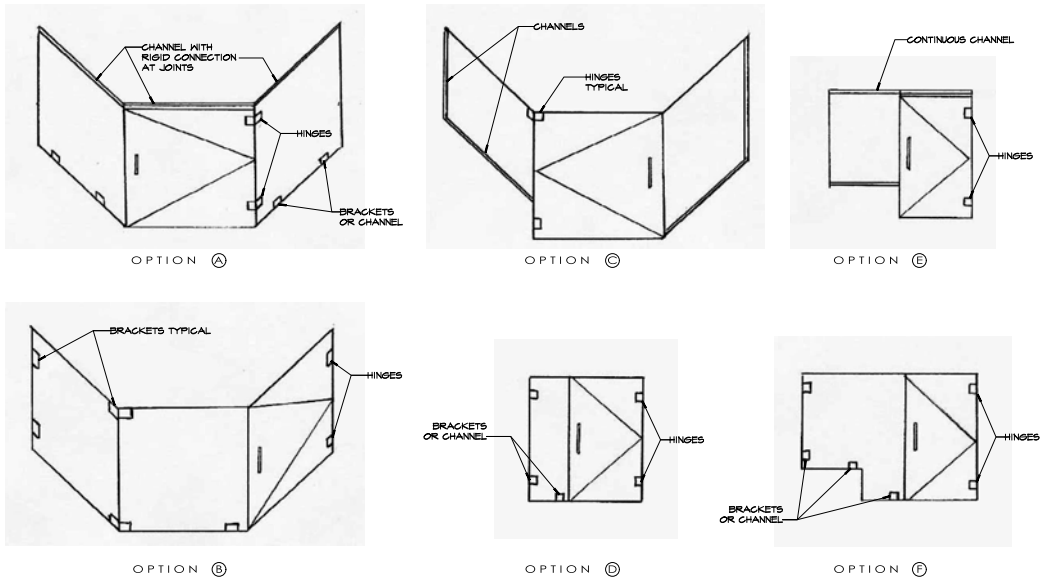
**BRACKETS:**  
A MINIMUM OF TWO BRACKETS SHALL BE INSTALLED ON EACH VERTICAL EDGE OF GLASS PANELS UP TO EIGHT FEET IN HEIGHT. PANELS OVER EIGHT FEET IN HEIGHT REQUIRE AT LEAST THREE BRACKETS. IF NO BRACKET IS INSTALLED ON THE OPPOSING VERTICAL EDGE, AT LEAST ONE BRACKET IS REQUIRED ON A HORIZONTAL EDGE.

**CHANNELS:**  
IF THE TOP EDGE OF THE GLASS IS SUPPORTED BY A CHANNEL, THE CHANNEL MUST BE STIFF ENOUGH TO RESTRAIN DEFLECTION. IF ATTACHED TO THE BUILDING FRAMING ONLY AT THE ENDS OF THE CHANNELS, THE TOP CHANNEL MUST BE ONE CONTINUOUS SECTION FROM ONE WALL TO ANOTHER OR HAVE RIGID SPLICES.

**DOOR ATTACHMENT:**  
**HINGES:**  
DOORS SHALL HAVE A MINIMUM OF TWO HINGES. NO DOOR SHALL HAVE MORE THAN THREE HINGES UNLESS THE HINGE MANUFACTURER RECOMMENDS IT.

**PANELS SUPPORTING DOORS:**  
NARROW GLASS PANELS SUPPORTING DOORS SHALL BE MECHANICALLY SUPPORTED AT THE VERTICAL, AND EITHER UPPER OR LOWER HORIZONTAL EDGES. WHEN THE PANEL IS OVER 6" IN WIDTH, A HEADER BRACKET OR CHANNEL AND A LOWER BRACKET OR CHANNEL IS REQUIRED.

MARIN COUNTY CODES ADVISORY BOARD

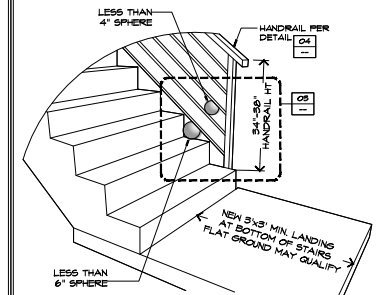


01 N.T.S.

INSTALLATION GUIDELINES FOR HEAVY GLASS TUB AND SHOWER ENCLOSURES

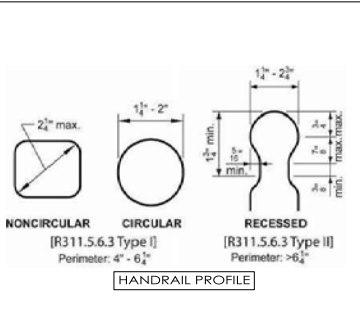
02 N.T.S.

OPEN HANDRAIL DETAIL



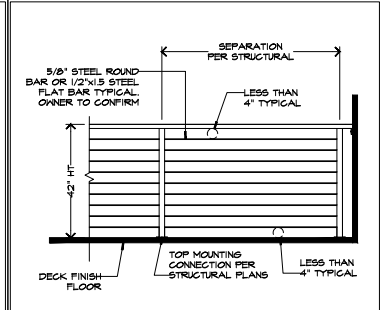
03 N.T.S.

STAIRCASE DETAIL



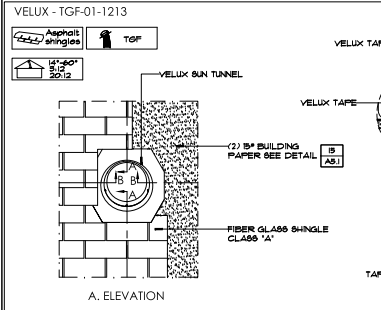
04 N.T.S.

HANDRAIL DETAIL



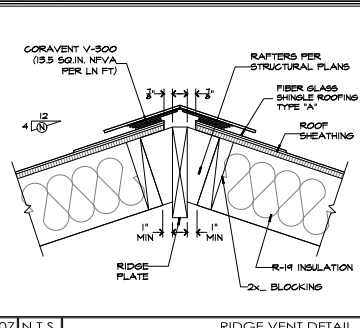
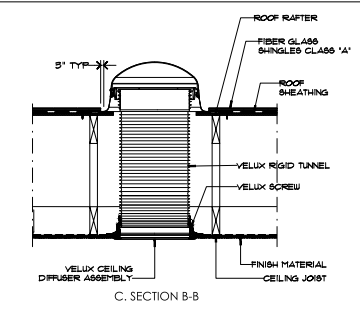
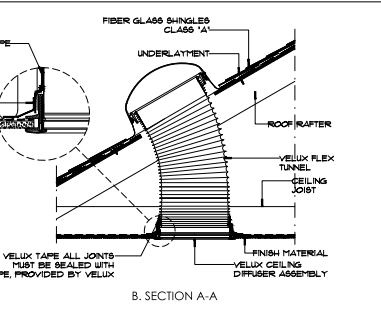
05 N.T.S.

DECK METAL GUARDRAIL DETAIL



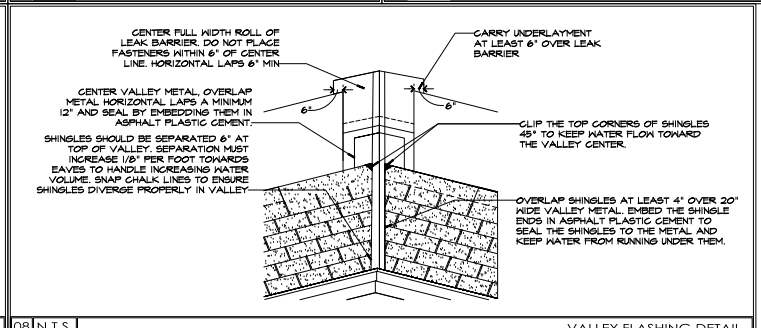
06 N.T.S.

TGF 014 - VELUX SUN TUNNEL FOR SLOPED ASPHALT SHINGLE ROOF & FLAT ROOF



07 N.T.S.

RIDGE VENT DETAIL



08 N.T.S.

VALLEY FLASHING DETAIL



PROJECT: PROPOSED REMODEL & ADDITION: **McKENZIE'S PROPERTY**

PROJECT ADDRESS: 66 CASCADE DR., FAIRFAX, CA 94930

SHEET NAME: **CONSTRUCTION DETAILS**

APN: 003.203.17 ZONING: RS-6

REVISIONS	BY

CAD DRAWN BY: JR  
CHECKED BY: JR  
SCALE: AS INDICATED  
DATE: JUNE 29, 2023  
JOB No.: 2K22.0823

SHEET No.: **A5.2**



**TITLE24 (Luminaire Requirements)**

**A. LUMINAIRE EFFICACY:**  
ALL INSTALLED LUMINAIRES SHALL BE HIGH-EFFICACY IN ACCORDANCE WITH TABLE 150.0-A.

**B. BLANK ELECTRICAL BOXES:**  
THE NUMBER OF ELECTRICAL BOXES THAT ARE MORE THAN 8 FEET ABOVE THE FINISHED FLOOR AND DO NOT CONTAIN A LUMINAIRE OR OTHER DEVICE SHALL BE NO GREATER THAN THE NUMBER OF RECESSED, THESE ELECTRICAL BOXES MUST BE SERVED BY A DIMMER, VACUANCY SENSOR CONTROL, OR FAN SPEED CONTROLS RECESSED INTO ALL OF THE FOLLOWING REQUIREMENTS:

**C. RECESSED DOWNLIGHT LUMINAIRES IN CEILING:**  
LUMINAIRES RECESSED INTO ALL OF THE FOLLOWING REQUIREMENTS:

- BE LISTED, AS DEFINED IN SECTION 100.0, FOR ZERO CLEARANCE INSULATION CONTACT (IC) BY UNDERWRITERS LABORATORIES OR OTHER NATIONALLY RECOGNIZED TESTING/RATING LABORATORY; AND
- IF A LABEL THE LIGHT SOURCE IS IDENTIFIED WITH AIR LEAKAGE LESS THAN 2.0 CFM AT 75 Pascals when tested in accordance with ASTM E285. AN EXHAUST FAN HOUSING SHALL NOT BE REQUIRED TO BE CERTIFIED AIRTIGHT; AND
- BE SEALED WITH A GASKET OR CALK BETWEEN THE LUMINAIRE HOUSING AND CEILING, AND SHALL HAVE ALL AIR LEAK PATHS BETWEEN CONDITIONED AND UNCONDITIONED SPACES SEALED WITH A GASKET OR CALK; AND
- FOR LUMINAIRES WITH HARDWIRED BALLASTS OR DRIVERS, ALLOW BALLAST OR DRIVER MAINTENANCE AND REPLACEMENT TO BE READILY ACCESSIBLE TO BUILDING OCCUPANTS FROM BELOW THE CEILING WITHOUT REQUIRING THE CUTTING OF HOLES IN THE CEILING; AND
- SHALL NOT CONTAIN SCREW BASED SOCKETS; AND
- SHALL CONTAIN LIGHT SOURCES THAT COMPLY WITH REFERENCE JOINT APPENDIX JAB, INCLUDING THE ELEVATED TEMPERATURE REQUIREMENTS THAT ARE MARKED "JAB-2016-E" AS SPEC. IN REFERENCE JOINT APPENDIX JAB.

**D. ELECTRONIC BALLASTS:**  
BALLASTS FOR FLUORESCENT LAMPS RATED 15 WATTS OR GREATER SHALL BE ELECTRONIC AND SHALL HAVE AN OUTPUT FREQUENCY NO LESS THAN 200 HZ.

**E. NIGHT LIGHTS:**  
PERMANENTLY INSTALLED NIGHT LIGHTS AND NIGHT LIGHTS INTEGRAL TO INSTALLED LUMINAIRES OR EXHAUST FANS SHALL BE RATED TO CONSUME NO MORE THAN FIVE WATTS OF POWER PER LUMINAIRE OR EXHAUST FAN AS DETERMINED IN ACCORDANCE WITH SECTION 150.0(C). NIGHT LIGHTS SHALL NOT BE REQUIRED TO BE CONTROLLED BY VACUANCY SENSORS.

**F. LIGHTING INTEGRAL TO EXHAUST FANS:**  
LIGHTING INTEGRAL TO EXHAUST FANS SHALL MEET THE APPLICABLE REQUIREMENTS OF SECTION 150.0(C). LIGHTING INTEGRAL TO EXHAUST FANS EXCEPT TO SECTION 150.0(C)(2), LIGHTING INSTALLED BY THE MANUFACTURER IN KITCHEN EXHAUST HOODS.

**G. SCREW BASED LUMINAIRES:**  
SCREW BASED LUMINAIRES SHALL MEET ALL OF THE FOLLOWING REQUIREMENTS:

- THE LUMINAIRES SHALL NOT BE RECESSED DOWNLIGHT LUMINAIRES IN CEILING; AND
- THE LUMINAIRES SHALL CONTAIN LAMPS THAT COMPLY WITH REFERENCE JOINT APPENDIX JAB; AND
- THE INSTALLED LAMPS SHALL BE MARKED WITH "JAB-2016-E" OR "JAB-2016-E" AS SPECIFIED IN REFERENCE JOINT APPENDIX JAB.

**H. EXCEPT TO SECTION 150.0(C), LUMINAIRES WITH HARDWIRED BALLASTS FOR HIGH INTENSITY DISCHARGE LAMPS:**

**I. ENCLOSED LUMINAIRES:**  
LIGHT SOURCES THAT ARE NOT MARKED "JAB-2016-E" SHALL NOT BE INSTALLED IN ENCLOSED LUMINAIRES.

**TITLE24 (Interior Lighting Switching Devices & Controls)**

**A. ALL FORWARD PHASE CUT DIMMERS USED WITH LED LIGHT SOURCES SHALL COMPLY WITH NEMA 561.1A.**

**B. DIMMERS SHALL BE SWITCHED SEPARATELY FROM LIGHTING SYSTEMS EXCEPT TO SECTION 150.0(C)(2). LIGHTING INTEGRAL TO AN EXHAUST FAN MAY BE ON THE SAME SWITCH AS THE FAN PROVIDED THE SWITCH CAN BE SWITCHED OFF IN ACCORDANCE WITH THE APPLICABLE PROVISIONS IN SECTION 150.0(C)(2) WHILE ALLOWING THE FAN TO CONTINUE TO OPERATE FOR AN EXTENDED PERIOD OF TIME.**

**C. LUMINAIRES SHALL BE SWITCHED WITH READILY ACCESSIBLE CONTROLS THAT PERMIT THE LUMINAIRE TO BE MANUALLY SWITCHED ON AND OFF.**

**D. LIGHTING CONTROLS AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.**

**E. NO CONTROLS SHALL BYPASS A DIMMER OR VACUANCY SENSOR FUNCTION WHERE THAT DIMMER OR VACUANCY SENSOR HAS BEEN INSTALLED TO COMPLY WITH SECTION 150.0(C).**

**F. LIGHTING CONTROLS SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF SECTION 100.0.**

**G. AN ENERGY MANAGEMENT CONTROL SYSTEM (EMCS) MAY BE USED TO COMPLY WITH DIMMER REQUIREMENTS IN SECTION 150.0(C) IF AT A MINIMUM IT PROVIDES THE FUNCTIONALITY OF A DIMMER IN ACCORDANCE WITH SECTION 100.4, MEETS THE INSTALLATION CERTIFICATE REQUIREMENTS IN SECTION 150.4, EMCS REQUIREMENTS IN SECTION 150.5(F), AND COMPLIES WITH ALL OTHER APPLICABLE REQUIREMENTS IN SECTION 150.0(C)(2).**

**H. AN ENERGY MANAGEMENT CONTROL SYSTEM (EMCS) MAY BE USED TO COMPLY WITH VACUANCY SENSOR REQUIREMENTS IN SECTION 150.0(C) IF AT A MINIMUM IT PROVIDES THE FUNCTIONALITY OF A VACUANCY SENSOR IN ACCORDANCE WITH SECTION 100.4, MEETS THE INSTALLATION CERTIFICATE REQUIREMENTS IN SECTION 150.4, THE EMCS REQUIREMENTS IN SECTION 150.5(F), AND COMPLIES WITH ALL OTHER APPLICABLE REQUIREMENTS IN SECTION 150.0(C)(2).**

**I. A MULTISTEP PROGRAMMABLE CONTROLLER MAY BE USED TO COMPLY WITH DIMMER REQUIREMENTS IN SECTION 150.0(C) IF AT A MINIMUM IT PROVIDES THE FUNCTIONALITY OF A DIMMER IN ACCORDANCE WITH SECTION 100.4, AND COMPLIES WITH ALL OTHER APPLICABLE REQUIREMENTS IN SECTION 150.0(C)(2).**

**J. IN BATHROOMS, GARAGES, LAUNDRY ROOMS, AND UTILITY ROOMS, AT LEAST ONE LUMINAIRE IN EACH OF THESE SPACES SHALL BE CONTROLLED BY A VACUANCY SENSOR.**

**K. DIMMERS OR VACUANCY SENSORS SHALL CONTROL ALL LUMINAIRES REQUIRED TO HAVE LIGHT SOURCES COMPLIANT WITH REFERENCE JOINT APPENDIX JAB.**

**L. EXCEPT TO SECTION 150.0(C)(2), LUMINAIRES IN CLOSETS LESS THAN 10 SQUARE FEET, EXCEPT TO SECTION 150.0(C)(2), LUMINAIRES IN HALLWAYS.**

**M. UNDERCABINET LIGHTING SHALL BE SWITCHED SEPARATELY FROM OTHER LIGHTING SYSTEMS.**

**TITLE24 (Residential Outdoor Lighting)**

**A. LUMINAIRES PROVIDING RESIDENTIAL OUTDOOR LIGHTING SHALL MEET THE FOLLOWING REQUIREMENTS, AS APPLICABLE:**

**B. FOR SINGLE-FAMILY RESIDENTIAL BUILDINGS, OUTDOOR LIGHTING PERMANENTLY MOUNTED TO A RESIDENTIAL BUILDING OR TO OTHER BUILDINGS ON THE SAME LOT SHALL MEET THE REQUIREMENT IN ITEM I AND THE REQUIREMENTS IN EITHER ITEM II OR III:**

- CONTROLLED BY A MANUAL ON AND OFF SWITCH THAT DOES NOT OVERRIDE TO ON THE AUTOMATIC ACTIONS OF ITEMS II OR III BELOW; AND
- CONTROLLED BY PHOTOCELL AND MOTION SENSOR CONTROLS THAT OVERRIDE TO ON SHALL NOT BE ALLOWED UNLESS THE OVERRIDE SHALL AUTOMATICALLY RETURN THE PHOTOCELLS AND AUTOMATIC THE SWITCH CONTROL TO ITS NORMAL OPERATION WITHIN 6 HOURS; OR
- ASTRONOMICAL, THE SWITCH CONTROL THAT OVERRIDE TO ON SHALL NOT BE ALLOWED UNLESS THE OVERRIDE SHALL AUTOMATICALLY RETURN THE ASTRONOMICAL CLOCK TO ITS NORMAL OPERATION WITHIN 6 HOURS AND WHICH IS PROGRAMMED TO AUTOMATICALLY TURN THE OUTDOOR LIGHTING OFF DURING DAYLIGHT HOURS; OR
- ENERGY MANAGEMENT CONTROL SYSTEM WHICH MEETS ALL OF THE FOLLOWING REQUIREMENTS:
  - AT A MINIMUM PROVIDES THE FUNCTIONALITY OF AN ASTRONOMICAL THE CLOCK IN ACCORDANCE WITH SECTION 100.4, MEETS THE INSTALLATION CERTIFICATION REQUIREMENTS IN SECTION 150.4, DOES NOT HAVE AN OVERRIDE OR BYPASS SWITCH THAT ALLOWS THE LUMINAIRE TO BE ALWAYS ON, IS PROGRAMMED TO AUTOMATICALLY TURN THE OUTDOOR LIGHTING OFF DURING DAYLIGHT HOURS.

**TITLE24 (Residential Outdoor Lighting) CONT....**

**B. FOR LOW-RISE MULTIFAMILY RESIDENTIAL BUILDINGS, OUTDOOR LIGHTING FOR PRIVATE PATIOS, ENTRANCES, BALCONIES, AND PORCHES, AND OUTDOOR LIGHTING FOR RESIDENTIAL PARKING LOTS AND RESIDENTIAL DRIVEWAYS WITH LESS THAN EIGHT VEHICLES PER SITE SHALL COMPLY WITH ONE OF THE FOLLOWING REQUIREMENTS:**

- SHALL COMPLY WITH SECTION 150.0(C)(A); OR
- SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS IN SECTIONS 100.4, 150.0, 150.2, 150.4, 140.1 AND 141.0.

**C. FOR MID-RISE RESIDENTIAL BUILDINGS WITH FOUR OR MORE DWELLING UNITS, OUTDOOR LIGHTING NOT REGULATED BY SECTION 150.0(C)(B) OR 150.0(C)(D) SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS IN SECTIONS 100.4, 150.0, 150.2, 150.4, 140.1 AND 141.0.**

**D. OUTDOOR LIGHTING FOR RESIDENTIAL PARKING LOTS AND RESIDENTIAL DRIVEWAYS WITH A TOTAL OF SEVEN OR FEWER VEHICLES PER SITE SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS IN SECTIONS 100.4, 150.0, 150.2, 150.4, 140.1 AND 141.0.**

**TYPICAL MOUNTING HEIGHTS**

	GENERAL	ABOVE KITCHEN LAUNDRY COUNTERTOPS	ABOVE BATH COUNTERTOP	EXTERIOR
SECURITY CONTROLS PAD	48"			48"
THERMOSTATS	60"			
SWITCHES	48"	MIN 42"	MIN 42"	42"
OUTLETS	18"	MIN 42"	MIN 42"	18"
TELEPHONE OUTLETS	18"			18"
T.V. OUTLET	60"			18"
DOOR BELL	42"			
JURISDICTION OUTLETS	18"			

ALL DIMENSIONS ARE FROM TOP OF FINISH FLOOR TO CENTER OF BOX MOUNTING HEIGHTS SHALL BE IN ACCORDANCE WITH THIS TABLE UNLESS OTHERWISE NOTED ON THE ELECTRICAL PLAN.

**HVAC SYMBOLS**

CEILING REGISTER GRILL	ELECTRICAL PANEL
THERMOSTAT	ELECTRIC HEAT PUMP WATER HEATER
FURNACE LOCATION, SIZE, TYPE AND SPECIFICATIONS PLEASE SEE TITLE-24 REPORT.	TITLE-24 SPECIFICATIONS PER TITLE-24
	TITLE-24 SPECIFICATIONS PER TITLE-24
	TITLE-24 SPECIFICATIONS PER TITLE-24

**ELECTRICAL SYMBOLS**

3", 4" OR 6" RECESSED CAN FIXTURE	PENDANT LIGHT
GARAGE LED TRIGGER LIGHT SURFACE MOUNTED (12"x24" UNO.)	HALL WALKER LIGHT FIXTURE
WHOLE HOUSE FAN LOCATION	SURFACE MOUNTED LIGHT FIXTURE
DUPLEX OUTLET	HALL BOUNCE
DUPLEX 220 VOLT OUTLET	EXTERIOR LIGHT MUST BE HIGH EFFICACY UNLESS OPERATED WITH PHOTOCELL SENSOR
DUPLEX OUTLET AT GROUND FAULT CIRCUIT INTERRUPTER	EMERGENCY EXIT LIGHTING PER CODE
DUPLEX OUTLET W/ ARC FAULT CIRCUIT INTERRUPTER	CHANDLER LIGHT FIXTURE
DUPLEX OUTLET - WATERPROOF	LOW VOLTAGE TRACK LIGHTING
CABLE TV (80" APPL.)	RECESSED STEPPED LIGHT
TEL/DATA JACK - MIN. (2) CAT 6 (PHONE + ETHERNET) / (2) COAX	RECESSED LIGHTWELL LAMP/ EXHAUST FAN, DISCHARGE OUTSIDE 5 AIR VOLUME CHANGES PER HR
SWITCH	SMOKE DETECTOR (20 V. MUST BE HARDWIRED WITH BATTERY BACKUP. SHALL BE INTERCONNECTED)
3-WAY SWITCH	CARBON MONOXIDE DETECTOR PER 2014 CBC(402)3 AND CROSS
DIMMER SWITCH	CERTIFIED VACUANCY SENSOR MUST NOT HAVE "ALWAYS-ON" OPTION
CERTIFIED VACUANCY SENSOR MUST NOT HAVE "ALWAYS-ON" OPTION	CEILING MOUNTED FAN
MOTION SENSOR	

**FIXTURE SCHEDULE**

NO.	TYPE	MANUFACTURER
LFI	OUTDOOR WALL SCENE LED	LIXEN ART
LF2	LED FLUSH MOUNT	KUZZO LIGHTING
LF3	24" WIDE VANITY LED LIGHT FIXTURE	LITHONIA LIGHTING
LF4	4" LED RECESSED LIGHT FIXTURE	LOTUS LED LIGHTS
LF5	3.5" SHOWER LED LIGHT FIXTURE	LIGHTLOQY
LF6	BATHROOM EXHAUST FAN/ WHOLE HOUSE FAN	BRIDAN
LF7	INDOOR WALL SCENE LED	LIGHTLOQY
LF8	LEDING STEP LIGHT	HAG LIGHTING PL-LED100-C
LF9	SINGLE-ZONE DUCTLESS MINI-SPLIT SYSTEM	LG

**ELECTRICAL KEYNOTES**

E01 PROVIDE AT LEAST ONE OUTSIDE WEATHERPROOF, GFI PROTECTED RECEPTACLE AT THE FRONT AND THE BACK OF THE DWELLING UNIT. (150.162 CAG)

E02 ONE OR MORE 120-VOLT, 20-AMPERE BRANCH CIRCUIT SHALL BE PROVIDED TO SUPPLY BATHROOM(S) RECEPTACLE OUTLET(S) REQUIRED BY 210.5(2)(D) AND ANY COUNTERTOP AND SIMILAR WORK SURFACE RECEPTACLE OUTLETS. SUCH CIRCUITS SHALL HAVE NO OTHER OUTLETS. (120.116(1)(9) CEC)

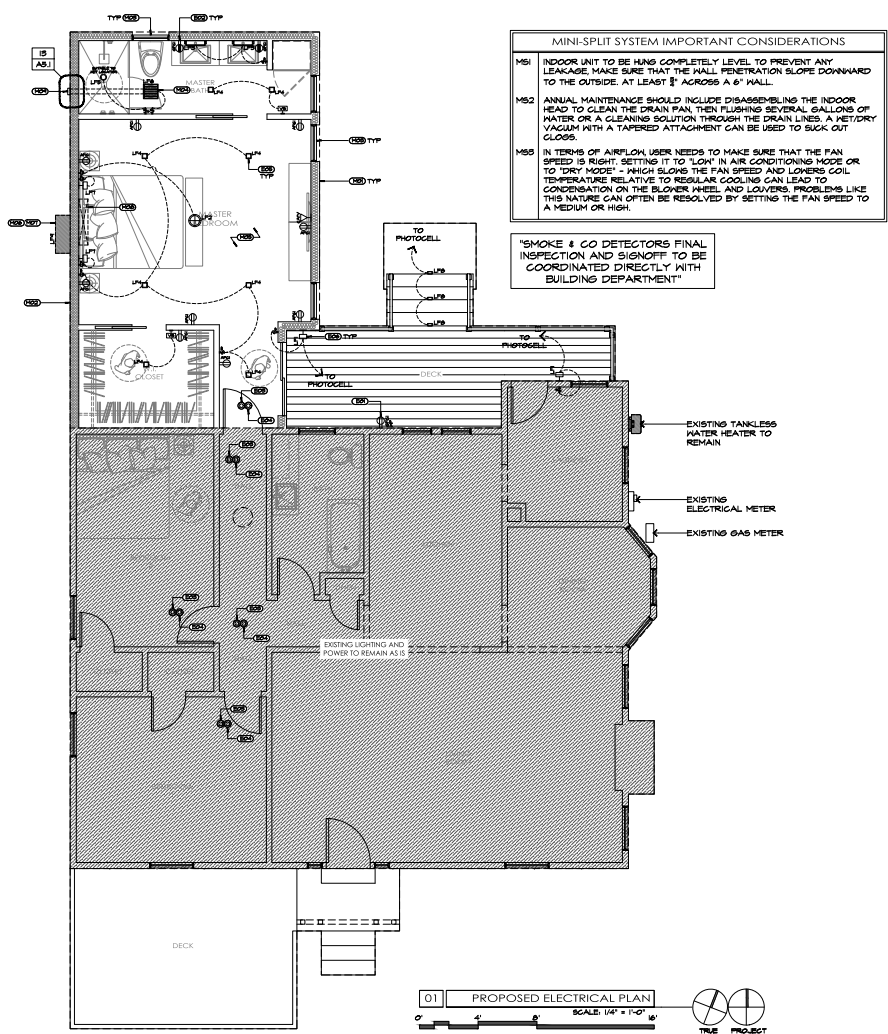
E03 EXISTING OR NEW SMOKE DETECTOR

E04 EXISTING OR NEW CARBON MONOXIDE DETECTOR

E05 LUMINAIRES RECESSED INTO CEILING MUST MEET ALL OF THE REQUIREMENTS FOR INSULATION CONTACT (IC) LABELING, AIR LEAKAGE, SEALING, MAINTENANCE, AND SOCKET AND LIGHT SOURCE AS DESCRIBED IN CEC 150.0(C). A JAB-2016-E LIGHT SOURCE, RATED FOR ELEVATED TEMPERATURE, MUST BE INSTALLED BY FINAL INSPECTION IN ALL RECESSED CEILING DOWNLIGHT LUMINAIRES.

E06 PROPOSED EXTERIOR LIGHTING FIXTURES SHALL BE ADEQUATELY SHIELDED TO A POINT BELOW THE LIGHT BULB AND REFLECTOR TO PREVENT UNNECESSARY GLARE ON ADJACENT PROPERTIES.

FOR MORE COMPLETE CODE REFERENCES PLEASE SEE SHEET "GR1"



**MECHANICAL KEYNOTES**

M01 INSTALL MINIMUM R-21 F.O. INSULATION @ NEAR EXTERIOR WALL.

M02 INSTALL R-38 CLOSED CELL SPRAY FOAM INSULATION + 1/2\" GYIETROCK 510 BOARD AT INTERIOR SIDE FOR SOUNDPROOFING PURPOSES.

M03 FOR ALL NEW GLAZING, PLEASE CHECK TITLE-24 CALCULATIONS TO CONFIRM PENETRATION REQUIREMENTS.

M04 PROVIDE EXHAUST FAN MIN 50 CFM AT NEAR BATHROOM, VENTED TO THE OUTDOOR PER CEC 150.0. ANUBASHARE STANDARD 62.2. MUST TERMINATE OUTSIDE THE BUILDING. MUST BE MINIMUM 5'-0\" FROM ANY OPENING. MUST BE ENERGY STAR COMPLIANT AND SHALL BE CONTROLLED BY A HUMIDITY CONTROL CAPABLE OF ADJUSTMENT BETWEEN A RELATIVE HUMIDITY RANGE OF 50 PERCENT TO 80 PERCENT. [CGSBC 14.506.1]

M05 ALL INTERIOR SPACES INTENDED FOR HUMAN OCCUPANCY SHALL BE PROVIDED WITH SPACE HEATING PER CEC 1204.1.

M06 HVAC EQUIPMENT SUPPORTED BY THE GROUND/FLOOR SHALL BE INSTALLED ON A NON-COMBUSTIBLE FLOOR OR A CONCRETE SLAB A MINIMUM OF 5\" ABOVE THE ADJOINING GROUND/FLOOR. [904.3 CMC]

M07 SINGLE-ZONE DUCTLESS MINI-SPLIT AIR CONDITIONING AND HEATING SYSTEM - HEAT PUMP CONDENSER OUTDOOR UNIT

M08 SINGLE-ZONE DUCTLESS MINI-SPLIT AIR CONDITIONING AND HEATING SYSTEM - INDOOR WALL UNIT

M09 PROVIDE MIN. 4\" DRYER EXHAUST DUCT WITH BACK DRAFT DAMPER. INSTALL PER MANUFACTURER'S SPECIFICATIONS

FOR MORE COMPLETE CODE REFERENCES PLEASE SEE SHEET "GR1"

**RR DESIGN**  
design drafting  
315 ALDEN AVENUE  
ROHNERT PARK, CA 94978  
PHONE: 714.472.3633  
EMAIL: RRDESIGN@GMAIL.COM  
DESIGN: RICHARD R. ROYCE  
PROJECT ADDRESS: 66 CASCADE DR., FAIRFAX, CA 94930

PROPOSED REMODEL & ADDITION:  
**McKENZIE'S PROPERTY**

PROJECT ADDRESS: 66 CASCADE DR., FAIRFAX, CA 94930

SHEET NAME: **ELECTRICAL MECHANICAL PLAN & SCHEDULES**

PROJ: 003.203.17 ZONING: RS-6

REVISIONS: \_\_\_\_\_ BY: \_\_\_\_\_

CAD DRAWN BY: JR

CHECKED BY: JR

SCALE: AS INDICATED

DATE: JUNE 29, 2023

JOB No.: 2X22.0823

SHEET No.: **EM.1**

### Alume AWL.60 Wall Sconce

By Lumens



**Product Options**

Finish: Black, White  
Number of Lights: 2

**Details**

- Can be installed as either a 4" square electrical box with standard plaster ring or an integral electrical box (not included)
- Comes with 4" square brackets
- Material: Machined Aluminum
- Shade Material: Tempered Glass (Not Included)
- Decorative When Used With a 4" x 4" Dimmer (Not Included)
- ADA compliant
- 5% Lead Free
- Warranty: 1 Year
- Made in China

**Dimensions**

1 Light Option: 4" x 4" x 4" (H) x 4" x 4" (D) x 4" (D)  
2 Light Option: 4" x 4" x 4" (H) x 4" x 4" (D) x 4" (D)

**Lighting**

- 1 Light Option: 4" x 4" x 4" (H) x 4" x 4" (D) x 4" (D) Color Temp: 3000K
- 2 Light Option: 4" x 4" x 4" (H) x 4" x 4" (D) x 4" (D) Color Temp: 3000K

**Additional Details**

Product ID: LIMEY26911

Prepared by: [Name] Project: [Name] Approved: [Name]




### DALTON FM7920 FLUSH MOUNT

**PROJECT**

**DESCRIPTION**

An elegant or textured brass finish surrounds a concrete polymer diffuser, spreading even light from the LED source. Fully hand finished, the fabric shade contributes a soft sophistication to the modern interior. Applicable as a flush mount, pendant and in numerous sizes and fabric colors to suit your content.



**Specifications**

Finish: Brass, Bronze, Copper, Gold, Silver, White  
Material: Concrete Polymer, Fabric  
Color Temperature: 3000K, 4000K, 5000K  
Voltage: 120V  
Power: 10W  
Dimensions: 6" Dia, 2" H


**Lighting**

1 Light Option: 6" Dia, 2" H Color Temp: 3000K  
2 Light Option: 6" Dia, 2" H Color Temp: 3000K

**Additional Details**

Product ID: LIMEY26911

Prepared by: [Name] Project: [Name] Approved: [Name]




### LITHONIA LIGHTING

**FEATURES & SPECIFICATIONS**

**DESCRIPTION**

The Contemporary Square Vanity is a collection of an acrylic finish with lighting available in either a frosted white, bronze, or chrome look. The frosted vanity is made from a clear acrylic material that is hand finished with a soft, matte finish. The vanity is made from a clear acrylic material that is hand finished with a soft, matte finish. The vanity is made from a clear acrylic material that is hand finished with a soft, matte finish.

## Contemporary Square Vanity with Switchable White Color Temperature



**Specifications**

Specification	4"	6"	8"	10"
Length	14.9" (380)	21.7" (550)	28.5" (725)	35.3" (900)
Width	13.0" (330)	19.8" (500)	26.6" (675)	33.4" (850)
Height	2.0" (50)	2.0" (50)	2.0" (50)	2.0" (50)
Weight	1.5 lb	2.5 lb	3.5 lb	4.5 lb
Material	Acrylic	Acrylic	Acrylic	Acrylic
Color Temperature	3000K	3000K	3000K	3000K
LED Life	50,000	50,000	50,000	50,000
Warranty	5 Year	5 Year	5 Year	5 Year

**Additional Details**

Product ID: LIMEY26911

Prepared by: [Name] Project: [Name] Approved: [Name]

### Regressed Plenum 4 inch Square LED Trim

By Lotus LED Lights



**Product Options**

Finish: Black, White  
Color Temperature: 2700, 3000, 4000

**Details**

- No box needed (Direct mount connection box)
- No housing required
- Air Tight
- Material: Metal
- Trim: 24 contoured
- Energy Star Qualified
- UL Listed ETL
- Warranty: 5 Year on Residential, 3 Year on Commercial Applications
- Made in China

**Dimensions**

Trim: Width 5", Height 2", Depth 3", Height 2.5"

**Lighting**

- 2700K Option: 14.5 Watt (350 Lumens) 120 Volt Integrated LED, CR: 90, Color Temp: 2700K
- 3000K Option: 14.5 Watt (350 Lumens) 120 Volt Integrated LED, CR: 90, Color Temp: 3000K
- 4000K Option: 14.5 Watt (350 Lumens) 120 Volt Integrated LED, CR: 90, Color Temp: 4000K

**Additional Details**

Product ID: LOTT924709

Prepared by: [Name] Project: [Name] Approved: [Name]



### Tesla Pro 3.5IN Square Shower Trim

Lightology



**Description**

Tesla Pro LED 3.5 inch 60CR or 90CR Square Lensed Shower Trim with 30 degree beam angle is constructed of die cast aluminum with translucent glass lens and extruded aluminum heat sink. Two heavy gauge retention clips hold trim firmly to housing. 30 degree round cut off angle for glass control. Trim includes an electroplate brushed nickel or Copper Bronze finish, or powder coat white finish. Total power consumption of 21.5 watts with housing LED driver included with housing. Available with choice of 2700K color temperature/950 lumens or 3000K color temperature/1065 lumens, 90CRI. Field replaceable LED module available, sold separately. Dimensions: 3.5 inch square outside dimension, 3.5 inch aperture, includes 5 year warranty, ETL listed. Energy Star rated. Wall location listed. A complete fixture consists of a housing and trim, sold separately.

**Features**

- DC motor for efficiency well beyond ENERGY STAR requirements.
- Can be used to comply with ASHRAE 91.2, LEED, ENERGY STAR for Homes and GA Title 24.
- UltraSilent™ Sound Technology
- UL certified, level adjustable +0.3 Sone level provides nearly silent operation for a relaxing environment.
- State-of-the-art blower and duct outlet design smooths airflow.
- High tech DC motor designed for nearly silent operation.
- UltraSmart™ Control Technology
- Powerful operation maintained over a wide range of real world installations CFM ratings maintained through at least 0.25" static pressure.
- Rated for Continuous Operation.
- UltraQuick™ Installation Technology
- Unique telescoping mounting frame for through retrofit drywall opening to allow easy installation from the room side. No attic access needed!
- Capacitive sensor allows for easy new construction installation.
- Mounting frame positioning tabs provide easy vertical positioning for new construction.
- Easy to insert and remove snap-in housing, no screws required.
- Easy to insert and remove snap-in blower.
- Inside or outside duct connector and knockout plate mounting provides flexibility for new construction or retrofit.
- UL Listed for use over bathtubs and showers when connected to a GFCI protected branch circuit (padding mount only).
- 5 year warranty.

**Dimensions**

2 7/8" x 2 7/8" x 5 1/4"

**Technical Information**

Luminous Flux: 950 Lumens  
Lumen/Watt: 43.18  
Lamp Color: 2700K  
Color Rendering: 90 CRI  
Beam Angle: 30°  
Function: Shower/Lenset  
Ceiling Type: Drywall with trim  
Aperture Shape: Square  
Aperture Size: 3.500"

**Product Number: WAC362230**

Company: [Name] Fixture Type: [Name] Date: Aug 01, 2019  
Project: [Name] Approved By: [Name]

### BROAN MODEL XB110 VENTILATION FAN

**SPECIFICATION SHEET**

**FEATURES**

- UL Certified Energy Saving DC Motor
- DC motor for efficiency well beyond ENERGY STAR requirements.
- Can be used to comply with ASHRAE 91.2, LEED, ENERGY STAR for Homes and GA Title 24.
- UltraSilent™ Sound Technology
- UL certified, level adjustable +0.3 Sone level provides nearly silent operation for a relaxing environment.
- State-of-the-art blower and duct outlet design smooths airflow.
- High tech DC motor designed for nearly silent operation.
- UltraSmart™ Control Technology
- Powerful operation maintained over a wide range of real world installations CFM ratings maintained through at least 0.25" static pressure.
- Rated for Continuous Operation.
- UltraQuick™ Installation Technology
- Unique telescoping mounting frame for through retrofit drywall opening to allow easy installation from the room side. No attic access needed!
- Capacitive sensor allows for easy new construction installation.
- Mounting frame positioning tabs provide easy vertical positioning for new construction.
- Easy to insert and remove snap-in housing, no screws required.
- Easy to insert and remove snap-in blower.
- Inside or outside duct connector and knockout plate mounting provides flexibility for new construction or retrofit.
- UL Listed for use over bathtubs and showers when connected to a GFCI protected branch circuit (padding mount only).
- 5 year warranty.

**Dimensions**

SPANS 14 TO 24 ON CENTER FRAMING

**Electrical & Weight**

Volts	Hz	Amperes	Shipping Weight (lbs.)
120	60	0.2	12.3

**Performance Specifications**

Model	CFM (Sone)	Power (Watts)	Efficiency (CFM/Watt)	ACFM (CFM)
110	<0.3	7.7	14.2	110

**Graph: XB110 - 6" DUCT**

**Additional Details**

Product ID: LIMEY26911

Prepared by: [Name] Project: [Name] Approved: [Name]

### BROAN PERFORMANCE SPECIFICATIONS MODEL XB110 VENTILATION FAN

**HVI CERTIFIED**

**Electrical & Weight**

Volts	Hz	Amperes	Shipping Weight (lbs.)
120	60	0.2	12.3

**Graph: XB110 - 6" DUCT**


**Additional Details**

Product ID: LIMEY26911

Prepared by: [Name] Project: [Name] Approved: [Name]

### Atelier Grande Wall Sconce

Lightology



**DESCRIPTION**

The Atelier Grande Wall Sconce has a unique shaped shade that lends into a variety of styles. Features a Polished Aluminum, Matte Black, or Matte White shade with a matching canopy. Head tilts 180 degrees and rotates 330 degrees. Mounts to a 4 inch octagon box or can be used as a plug-in. No driver required. Includes 90.43 inches of black cord. Switch on backplate. ETL listed.

**Dimensions**

2 7/8" x 2 7/8" x 5 1/4"

**Technical Information**

Luminous Flux: 950 Lumens  
Lumen/Watt: 43.18  
Lamp Color: 2700K  
Color Rendering: 90 CRI  
Beam Angle: 30°  
Function: Shower/Lenset  
Ceiling Type: Drywall with trim  
Aperture Shape: Square  
Aperture Size: 3.500"

**Product Number: WAC362230**

Company: [Name] Fixture Type: [Name] Date: Aug 01, 2019  
Project: [Name] Approved By: [Name]

**RR DESIGN**  
design + drafting

315 ALDEN AVENUE  
ROHNERT PARK, CA 94958  
PHONE: 714.472.3653  
EMAIL: ADDRESS@RRDESIGN.COM

**PROPOSED REMODEL & ADDITION: MCKENZIE'S PROPERTY**

PROJECT ADDRESS: 66 CASCADE DR., FAIRFAX, CA 94930

PROJECT: [Name] ZONING: RS-6

**LIGHT FIXTURES CUTSHEET**

SHEET NAME: [Name]

REVISIONS: [Table]

CAD DRAWN BY: JR

CHECKED BY: JR

SCALE: AS INDICATED

DATE: JUNE 29, 2023

JOB No.: 2X22.0823

**SHEET No.: EM.2**

