PROJECT DATA

A. SCOPE OF WORK:

ADDITION AREA, SEE AS-1= (AREA A+ AREA B + AREA D+ 2ND FLOOR FROM AS-1)= 1391.13 SFT

TWO STOREY ADDITION AND REMODEL OF AN EXISTING SINGLE STOREY SINGLE FAMILY RESIDENCE.

THIS PROJECT IS CLASSIFIED AS REBUILD.

ADDENDUM TO PERMIT# DEV18-70077 - HIGHLIGHTED REV 4- CONVERT 381.12 SFT GARAGE TO PART OF PROPOSED JADU. PROPOSED JADU AREA= 443.97 SFT. OWNER OCCUPANCY DEED RESTRICTION REQUIRED FOR JADU PURSUANT TO STATE LAW.

- B. NUMBER OF STORIES PER CRC CH 2= 2
- C. AUTOMATIC FIRE SPRINKLERS IN EXISTING BUILDING NO
- D. AUTOMATIC FIRE SPRINKLERS REQUIRED FOR PROJECT: YES FIRE SPRINKLERS REQUIRED IN JADU AS REQUIRED FOR THE MAIN DWELLING
- E. DEFERRED SUBMITTAL LIST:
 - -1. ROOF TRUSSES LAYOUT AND CALCULATIONS
- —2. FIRE SPRINKLERS PER CBC 107.3.4.1- THE SPRINKLER CONTRACTOR SHALL PROVIDE (3) COPIES OF THE WORKING DRAWINGS AND CALCULATIONS TO THE FIRE DISTRICT. MUST ISSUE A PERMIT PRIOR TO THE INSTALLATION OF THE FIRE SPRINKLER SYSTEM.
- 3. STAIRCASE HANDRAIL, GUARDRAIL, TERRACE PERIMETER GUARDRAIL- CONTRACTOR TO PROVIDE WET STAMPED CALCULATIONS BEFORE BUILD
- F. ASSESSOR'S PARCEL NUMBER: 326-12-044
- G. PROJECT ADDRESS: 22150 CLOVERLY CT, LOS ALTOS
- H. EXISTING USE: DETACHED SFR AND JADU
- I. ZONING: R1-10
- J. TYPE OF CONSTRUCTION: V/B
- K. TYPE-OF OCCUPANCY: R3 AND U (CBC 302)
- L. GROSS LOT AREA: 10296 SFT. PLÈASE REFER TO BT-1, BOUNDARY AND SITE TOPOGRAHIC SURVEY
- M. AGE OF ALL STRUCTURES: BUILT IN 1956
- N. (PROPOSEĎ FĽŎOR AREA RATÍO : 3346.658/10296 X100= 32.5%
- O. PROPOSED COVERAGE= 3309.538/10296 X 100= 32.14%
- P. ALLOWED BUILDING HEIGHT: 35

PROPOSED BUILDING HEIGHT: $\pm 20'$ - $5\frac{3}{4}$ " < 35' PROPOSED BUILDING HEIGHT FROM CURB: $\pm 20'$ - 11 3/4"

- Q. CONSTRUCTION WORK SHALL BE IN COMPLIANCE WITH:
 - CONSTRUCTION WORK SHALL BE IN COMPLIANCE
 - A. 2016 CALIFORNIA BUILDING CODE
 - B. 2016 CALIFORNIA MECHANICAL CODE
 - C. 2016 CALIFORNIA PLUMBING CODE
 - D. 2016 CALIFORNIA ELECTRIC CODE E. 2016 CALIFORNIA FIRE CODE
 - F. 2016 STATE OF CALIFORNIA TITLE 24 ENERGY REGULATIONS
 - G. 2016 CALIFORNIA GREEN BUILDING CODE (CALGREEN)
 - H. ANY OTHER APPLICABLE LOCAL AND STATE LAWS AND REGULATIONS
- R. BUILDING MEETS OR EXCEEDS THE REQUIREMENTS OF THE CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS- MANDATORY

	FLOOR AREA TABLE					
	FLOOR AREA	EXISTING		PROPOSED		
	JADU	-		443.97 SFT		
S.	1ST FLR LIVING	1523 SFT		(2456.698 + 388.12 SFT)= 2844.818 SFT (INCL JADU)		
	2ND FLR LIVING	-	$\overline{}$	501.84 SFT	\	
	GARAGE	441 SFT /		388.12 SFT -CONVERTED TO		
				JADU		
	PORCH	64 SFT	\	62.94 SFT		
	PATIO	163 SFT	\rightarrow	401.78 SFT		
	2ND FLOOR	-		131.84 SFT		
	BALCONY	\			_	
	TOTAL (WITHOUT	1964 SFT		(2844.818 SFT+501.84 SFT)	[\	
	PORCH AND			= 3346.658 SFT (INCL JADU)	/	
	PATIO)		<u> </u>		//	
				`	/	

		,		
	SETB/	ACK TABLE- S	EE AS1	
_	SETBACKS	REQUIRED (FT)	PROPOSED (FT)	1
Т.	FRONT	25'	VARIES: 37.03' TO	1 /
			38.59'	
	REAR	25'	22.05' AT EXISTING])
			(NO CHANGE),	/
			25.09' AT	
			ADDITION, 50.29'	
			AT END OF PATIO	
	LEFT SIDE	10'	VARIES: 9.83' TO 10.18'	
	RIGHT SIDE	10'	VARIES: 8.49' TO 14.03'	
NOTES				

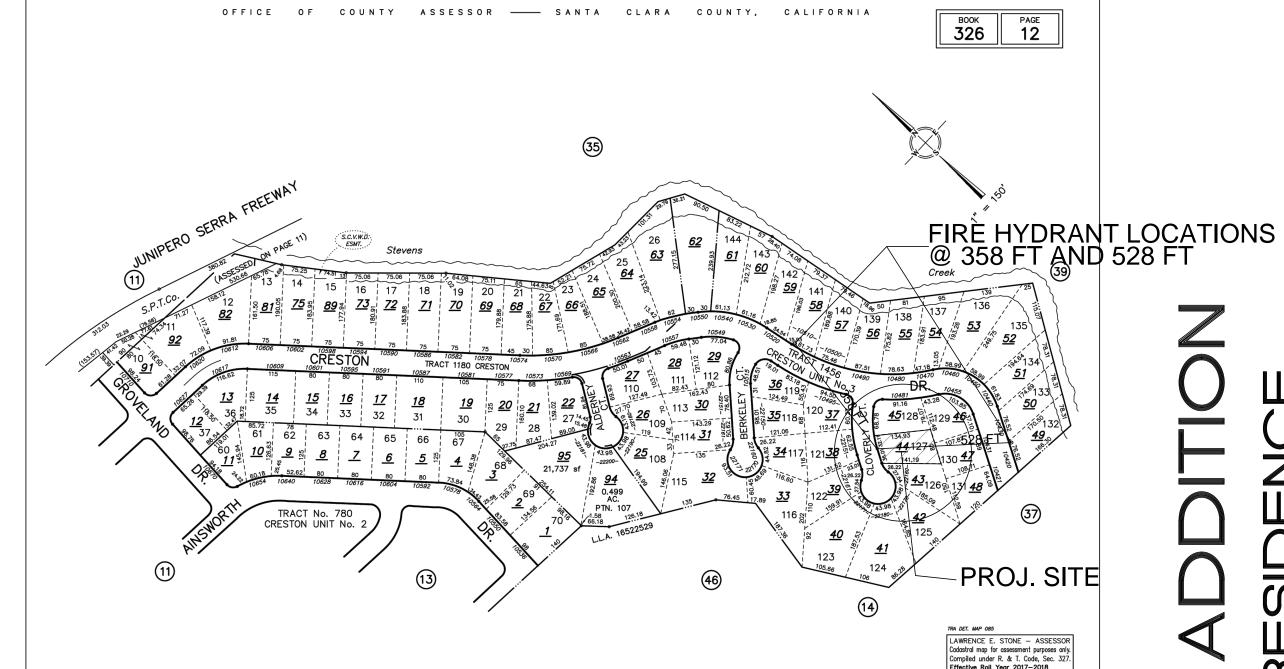
SEE A-2A FOR AREA CALCULATIONS

NOTES:
PLEASE VERIFY AND CONFIRM SITE SETBACKS WITH THE BOUNDARY AND TOPOGRAPHIC SITE SURVEY CONDUCTED BY OSUNA ENGINEERING INC.DA

OWNER:

UMA AND SATISH 22150 CLOVERLY CT LOS ALTOS CA 94024 (408) 508-4169

PROJECT LOCATION



DRAWING INDEX

ARCHITECT	ΓURAL	
SHEET 1	A-T1	TITLE SHEET
SHEET 2	A-T2	FORMS CW1, R&A CONSTRUCTION NOTES
SHEET 3	AS-1	SITE PLAN
SHEET 4	BT-1	BOUNDARY AND SITE TOPOGRAPHIC SURVEY
SHEET 5	AS-2	VICINITY- FIRE HYDRANT LOCATIONS W/ ADDRESSES
SHEET 6	BMP-1	BEST MANAGEMENT PRACTICES AND EROSION CONTROL- SHEET 1
SHEET 7	BMP-2	BEST MANAGEMENT PRACTICES AND EROSION CONTROL- SHEET 2
SHEET 8	A-1A	,
SHEET 9		EXISTING ELEVATIONS AND EXISTING ROOF PLAN
SHEET 10	A-2A	NEW 1ST FLOOR PLAN AND AREA DIAGRAMS SHOWING GARAGE CONVERSION TO JADU
SHEET 11	A-2B	NEW 2ND FLOOR PLAN AND AREA DIAGRAM
SHEET 12	A-2C	CODE NOTES, EGRESS WINDOW, ENTRY DOOR DETAIL, CRAWL SPACE VENT CALS
SHEET 13	A-3	FRONT AND REAR ELEVATIONS
SHEET 14	A-4	SIDE ELEVATIONS
SHEET 15	A-5	ROOF PLAN, VAULTED CEILING DETAIL, VENT CALS
SHEET 16	A-6A	1ST FLR- REFLECTED CEILING AND ELECTRICAL PLAN SHOWING GARAGE CONVERSION TO JADU
SHEET 17	A-6B	2ND FLR- REFLECTED CEILING AND ELECTRICAL PLAN
SHEET 18	A-7	ELECTRICAL CODE
SHEET 19	A-8	ELECTRICAL CODE
SHEET 20	A-9	BUILDING SECTIONS
SHEET 21	A-10A A-10B	WALL SECTIONS AND DETAILS II
SHEET 22	A-10D A-10C	
SHEET 23		WALL SECTIONS AND DEATILS-III WALL SECTIONS AND DETAILS-IV
SHEET 24	A-10E	
SHEET 25 SHEET 26	A-11	GENERAL CODE NOTES
SHEET 27	A-12	2016 CALGREEN CHECKLIST & CONSTRUCTION WASTE MANAGEMENT FORMS
SHEET 28	A-13	BEST MANAGEMENT PRACTICES
SHEET 29	T-24	TITLE-24
SHEET 30		TITLE 24
		TITLE 24
STRUCTURA	4L	
SHEET 1	S-1	STRUCTURAL SPECIFICATIONS, ABBREVIATIONS, NAILING SCHEDULE
SHEET 2	S-2	STANDARD DETAILS
SHEET 3	S-3	SHEAR WALL SCHEDULE AND STANDARD DETAILS
SHEET 4	S-4	FOUNDATION PLAN AND FIRST FLOOR FRAMING PLAN
SHEET 5	S-5	CEILING FRAMING PLAN
SHEET 6	S-6	UPPER ROOF CEILING FRAMING PLAN AND ROOF FRAMING PLAN
SHEET 7		UPPER ROOF FRAMING PLAN
SHEET 8	S-8	SECTIONS AND DETAILS- SHEET 1
SHEET 9	S-9	SECTIONS AND DETAILS- SHEET 2
SHEET 10	S-10	SECTIONS AND DETAILS- SHEET 3

PROJECT TEAM

DESIGNER:	VANI BAHL	1650 ZANKER RD,STE 120 SAN JOSE CA 95112	TEL (408) 621-2091 FAX (925) 232-6229
STRUCTURAL ENGINEER:	AURELIO ALEGRIA	448 BONNIE STREET DALY CITY, CA 94014	TEL (650) 868-6811 FAX (650) 755-7342
T-24 ENGINEER:	IGOR PICHKO	434 CAMILEE CIR SAN JOSE CA 95134	TEL (424) 247-7658



Bhooma Inc.

Bahl, Assoc. AIA, LEED AP BD+C
50 Zanker Rd. Ste 120, San Jose CA 95112
P: 408.621.2091 F: 925.232.6229
E Mail: vani.bahl®gmail.com

A SINGLE-FAMILY RE 22150 CLOVERL LOS ALTOS CA

Drawn	VB
Check	VB
Date	7/15/18
Scale	AS-NOTED
Job No.	2018-6

Revisions B

PER OWNER ADD JADU- 11.9.20



DISTRICT MANAGER-ENGINEER MARK THOMAS & COMPANY, INC BENJAMIN T. PORTER, P.E. DISTRICT COUNSEL

ATKINSON • FARASYN, LLP.

20863 STEVENS CREEK BOULEVARD, SUITE 100 CUPERTINO, CALIFORNIA 95014-2154 (408) 253-7071 PHONE • (408) 253-5173 FAX

Permit Form

BOARD OF DIRECTORS

ANGELA S. CHEN

JOHN M. GATTO

WILLIAM A. BOSWORTH

PATRICK S. KWOK

TAGHI S. SAADATI

		Submittal #	1
Date:	12/03/2019	Cupertino Sanitary Permit #	19-243
APN:	326-14-044	County Building Permit #	18-70077
Applicant Name:	Sathish Karunakaran		
Address:	22150 Cloverly Court,	, Los Altos, CA 94024	
Scope of Work:	Connect Existing Hon	ne to Sewer System & 977 SF Add	dition

The Cupertino Sanitary District has reviewed the plans for the subject project:

- Sanitary sewer is available and the existing building is NOT connected to our sanitary sewer
- system, see conditions/requirements listed below. District Records and facility inspection determined that the property is not connected to our sewer
- system. Customer has requested to abandon connection to existing septic tank on property and connect to CuSD Sewer System. There is a lateral provided for the property on Cloverly Court.
- Owner shall contact the Department of Environmental Health regarding procedures for septic Single Family Residence will be added to next fiscal year's sewer service charges.
- New Cupertino Sanitary District Permit Fees & Service Charges were approved on December 5th 2018 and were implemented on December 18th, 2018.

Conditions/Requirements for permit approval:

Completed	Conditions/Requirements				
-	Cupertino Sanitary District Lateral Plan Check Fee (\$300) (O.C. 7102.3.1)				
-	Cupertino Sanitary District Inspection Fee (\$400) – Lateral Connection to Existing lateral with New Cleanout and CCTV Inspection Included (O.C. 7102-4.1)				
-	Cupertino Sanitary District Sewer Development Fee - New Single-Family Residenc (\$11,034 per Residence) (O.C. 7201)				
-	Cupertino Sanitary District Treatment Plant Capacity Fee – Single Family Residence (\$2,712) is required for the subject improvements. (O.C. 7202)				
-	Cupertino Sanitary District Pump Zone Fee (\$2,500) is required for the subject improvements. (O.C. 7202)				
	Show the following on the New Site Plan on Sheet AS-1:				
-	 Sanitary sewer lateral Sanitary sewer lateral is located approximately 9.5' from the left/Northern property line New Property Line Cleanout (PLCO) 				

"New PLCO per District Standards. See Detail 7 on Sheet #"

Cupertino Sanitary Permit #: 19-243 **County Building Department #: 18-70077**

Cupertino Sanitary District Detail 7 (Standard Property Line Cleanout) shall be included on plans for District Approval. District details are available on our website at www.cupertinosanitarydistrict.org under Contractors (O.C. 5101) Cupertino Sanitary District Sewer Notes and Signature Block shall be included on mprovement plans for District Approval. District Notes shall be located on the same sheet as the City of Cupertino Approval signature block. District notes are available on

our website at www.cupertinosanitarydistrict.org under Contractors. (O.C. 5108)

Page 2

Conditions/Requirements to be met during construction:

notification upon completion of inspection. (O.C. 7102)

- Install new property line cleanout to District's standards. See attached detail. Property line cleanout must be within 5 feet of the property line. Cleanout shall be the same diameter as the street portion of the service lateral. Gravity lateral is 4" diameter. (O.C. 4101)
- Customer shall provide CCTV of District-owned portion of sanitary sewer lateral for District's

installation exposed. Do not backfill. Owner to contact District 48 hours prior to scheduling a

- Cupertino Sanitary District Initial (Visual) Inspection required. Contractor shall leave new pipe
- District Inspector for a visual inspection. (O.C. 5203) • Cupertino Sanitary District Final (CCTV) Inspection and Approval of the new property line cleanout, point of connection, and District lateral is required prior to clearance for County of Santa Clara Final Inspection. Owner must allow District at least 48 hours' notice to schedule a District Inspector for a video inspection. District to provide Building Department with written

Additional Comments:

- Storm water surface or roof drains and other general surface water runoff, shall not be discharged
- to the sanitary sewer. • The Cupertino Sanitary District recommends installing the required improvements near the
- beginning of the project in case any unforeseen issues arise with the installations. • The applicant may potentially be required to upgrade their sanitary sewer lower lateral if the
- District finds the structural conditions of the pipe to be unsatisfactory.
- Property will be placed on next fiscal year's Santa Clara County Property taxes for District's

Fees can be paid at the District office located at 20863 Stevens Creek Boulevard, Suite 100 in Cupertino, CA by cash or check (payable to "Cupertino Sanitary District").

PERMITS HAVE EXPIRATION DATE OF 1 YEAR FROM DATE OF APPROVAL. IF REFILING FOR PERMIT APPLICATION AFTER YEAR IS UP, NEW PERMIT FEES MUST BE PAID BY APPLICANT.

SUPPLYING SANITARY SEWERAGE SERVICES FOR: CITY OF CUPERTINO, PORTIONS OF THE CITIES OF SARATOGA, SUNNYVALE, LOS ALTOS AND SURROUNDING UNINCORPORATED AREAS

Cupertino Sanitary Permit #: 19-243

All conditions, requirements and recommendations are to be completed at the (owner/developer)'s expense. If you have any questions or need additional information, please call Esteban Delgadillo at 408-477-7323.

Page 2

Yours very truly,

County Building Department #: 18-70077

For: Benjamin T. Porter, P.E District Manager-Engineer MARK THOMAS

PERMITS HAVE EXPIRATION DATE OF 1 YEAR FROM DATE OF APPROVAL. IF REFILING FOR PERMIT APPLICATION AFTER YEAR IS UP, NEW PERMIT FEES MUST BE PAID BY APPLICANT

SUPPLYING SANITARY SEWERAGE SERVICES FOR: CITY OF CUPERTINO, PORTIONS OF THE CITIES OF SARATOGA, SUNNYVALE, LOS ALTOS AND SURROUNDING UNINCORPORATED AREAS

Construction Waste Management Plan (CWMP) - CW 1

Project Name: Remodel and Addition Single Family Residence Project Location: 22150 Cloverly Ct Los Altos CA Building Permit #: DEV18-70077 Project Sq. Ft.: 3390.158 SFT Contractors Name: T.B.D

This construction waste management plan is hereby submitted to comply with Section 4.408.2 of the 2010 California Green Building Standards Code.

Owners Name: Satish Karunakaran Telephone: (408) 508-4169

The purpose of this plan is to identify and outline the methods to be used as the minimum requirements for a construction waste management plan when the local jurisdiction does not have a construction and demolition waste management ordinance per Section 4.408.2.

- 2. Construction waste generated on this project for transport to a recycling facility will be: (Check appropriate box)
- □ Sorted on-site (Source-separated) □ Bulk mixed (Single stream)
- 3. The facility (or facilities) where the construction waste material will be taken is: Name of Facility: Mission Trail Waste Systems Transfer Station Address: 1313 Memorex Drive Santa Clara, CA 95050

Telephone: (408) 727-5365 (Attach separate sheet for additional facilities) 4. The following construction methods will be used to reduce the amount of waste generated:

- ☑ Efficient design (dimensions of building components are designed to available material
- Careful and accurate material ordering.
- Careful material handling and storage. Panelized or prefabricated construction.

Other____

5. Waste reduction and recycling strategies shall be discussed at periodic project meetings. Each new [Contractor]* that comes onto the site shall be provided with a copy of the CWMP, which shall also be posted in the project office. The [Project Manager]* shall also instruct all [Subcontractors]* as to the location and proper use of debris boxes for disposal of construction waste materials.

CW-1 Construction Waste Management Plan (Revised 7/1/12

6. Every effort shall be made to use recycling and/or reuse (diversion) measures to reduce the amount of construction waste and other materials sent to landfills. Whenever possible, sitesorted debris boxes shall be used to segregate construction waste materials to maximize the

- 7. The [Contractor]* shall provide debris boxes for materials sorted on-site (sourceseparated) and/or bulk mixed (single stream) waste for all construction related waste generated on this project. Mixed construction waste shall be taken to a recycling facility that has a diversion rate of at least 50 percent. In the event that a [Subcontractor] with a monthly report of the total Recycled and Reused (Diverted) and the total Non-Recycled (Disposed) materials to be included in the project's overall waste management/waste
- 9. Identified below are the construction waste materials that will be reused and/or recycled during the course of this project and how they will be diverted:

Material	Diversion Method: (Recycle/Reuse)
Concrete	Recycle
Wood Siding	Recycle
Carpet	Recycle
Asphalt Shingles	Recycle
Dirt	Resuse and Recycle what not used
Porcelain	Recycle
Untreated Wood	Reuse and Recycle what not used
Metal	Reuse and Recycle what not used
Brick	Recycle
Gypsum Drywall	Recycle
Plastic	Recycle

- (See Construction Waste Management Worksheets for examples of common materials.) 10. The [Waste Hauler]* shall track the total amount of construction waste leaving the
- detailed receipts from all loads of construction waste removed from the jobsite. 11. The [Contractor]* shall monitor the process of waste management, recycling, and reuse of construction waste materials to ensure compliance with the CWMP during the
- 12. The [Contractor]* shall ensure that all supporting documentation which demonstrates compliance with the waste management plan is provided to the local enforcement agency upon completion of the project.
- * Insert title of appropriate party or responsible person, which may include, but not be limited to: Contractor(s), Subcontractor(s), Project Manager(s), Superintendent(s), Supplier(s), or Waste Hauler(s).

CW-1 Construction Waste Management Plan (Revised 7/1/12

Roads & Airports Construction Notes For Property Owners Template

Erosion and Sediment Control Notes:

- 1. The Owner, Contractor, and/or any person performing construction activities shall install and maintain Road Right of Way throughout the duration of construction and until the establishment of permanent sewer waterways, and roadway infrastructure. BMPs shall include, but not be limited to, the following:
- material and equipment laydown/staging areas, b. Prevention of tracking of mud, dirt and construction materials onto public road right of way, and
- 2. The Owner, Contractor and/or any person performing construction activities shall ensure that all temporary construction facilities, including but not limited to construction materials, deliveries, hazardous and non-hazardous material storage, equipment, tools, portable toilets, concrete washout, gar

1. In accordance with the California Professional Land Surveyors' Act (Business and Professions Code) Chapter 15 Sections 8771 and 8725.1, California Penal Code 605, and California Government Code 27581, the Owner, Contractor, and/or any person performing construction activities that will or may disturb an existing roadway/ street monument, corner stake, or any other permanent surveyed monument and/or as shown on the plan sheet shall ensure that a Corner Record and/or Record of Survey are filed with the County Surveyor Office prior to disturbing said monuments. All disturbed or destroyed monuments shall be reset and filed in compliance with Section 8771.

1. No new replacement and/or utility upgrades are required/ anticipated. If during construction it is discovered that new, replacement and/or utility upgrades are required, then the Owner, Owner's Contractor and/or the Specific Utility Company shall apply and obtain a separate Encroachment Permit for said work within the limits of the ROW from Roads and Airports.

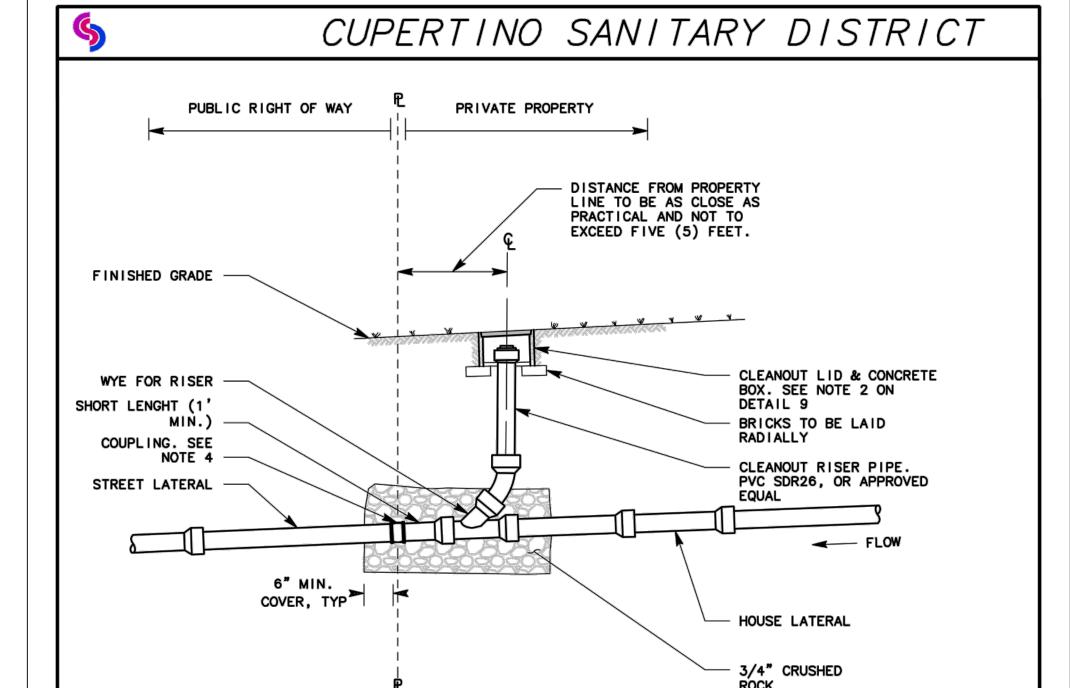
Improvement Plan Construction Notes:

- 1. All Work in the County Road Right of Way requires an encroachment permit from the Roads and Airports Department. Each individual activity requires a separate permit – i.e. retaining walls, driveway approaches, temporary construction entrances, fences, landscaping, tree removal, storm drainage improvements, all utility operations (relocations, replacements, abandonments, temporary facilities, and/or new facilities for cable, electric, gas, sewer, water), etc.
- 2. Roadways designated as Not County maintained roads as shown upon this plan, will not be eligible for County maintenance until the roadways are improved (at no cost to the County) to public maintenance road

- construction Best Management Practices (BMPs) on the project site and within the Santa Clara County stabilization and sediment control to prevent the discharge of pollutants including sediment, construction materials, excavated materials, waste materials into the Santa Clara County Road Right of Way, storm
- a. Prevention of pollutants in storm water discharges from the construction site and the contractor's
- c. Prevention of discharge of water runoff during dry and wet weather conditions onto public road
- laydown yards, secondary containment areas, etc. are located outside the Santa Clara County Road Right of

Permanent Monuments/ Monument Preservation:

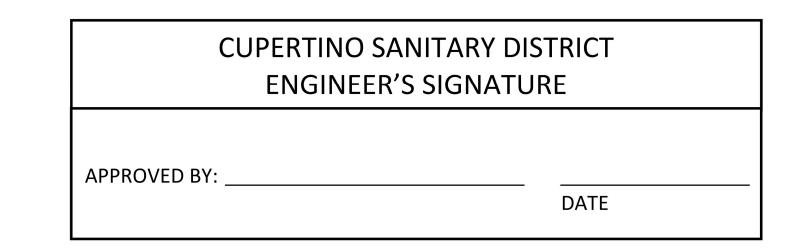
Utility Clarification Note:



NOTES:

- 1. DETAIL TO BE USED ON NEW SANITARY SEWER LATERAL INSTALLATIONS. FOR NEW CLEANOUT INSTALLATION ON EXISTING LATERALS, SEE DETAIL 9.
- 2. 2% MINIMUM PIPE SLOPE, TYP.
- 3. LATERAL SEWER CLEANOUT TO BE SAME SIZE AS SEWER LATERAL.
- 4. AT LEAST 6" CLEARANCE BETWEEN VALVE CAP AND INSIDE OF BOX. 5. CONNECT HOUSE/PRIVATE LATERAL TO EXISTING STREET LATERAL WITH MISSION CLAY "SHEAR RING", OR FERNCO "ARC SHIELDED" COUPLING, OR
- APPROVED EQUAL. INSPECTION INFORMATION
- 6.1. CONTACT DISTRICT OFFICE FOR LATERAL/CLEANOUT LOCATION AT (408)253-7071
- 6.2. NOTIFY DISTRICT INSPECTOR 48 HOURS PRIOR TO CONSTRUCTION
- 6.3. CONTACT DISTRICT INSPECTOR FOR VISUAL INSPECTION PRIOR TO
- BACKFILLING FOR FINAL APPROVAL
- 6.4. FINAL INSPECTION CONSISTS OF CLOSED CIRCUIT VIDEO INSPECTION OF POINT OF CONNECTION AND LOWER LATERAL TO CONFIRM DEBRIS HAS NOT ENTERED SEWER SYSTEM

LINE CLEANOUT ON NEW LATERAL CK. BY: DATE: DR. BY: DATE: DATE: 10/25/2017 08/30/2017 10/20/2017

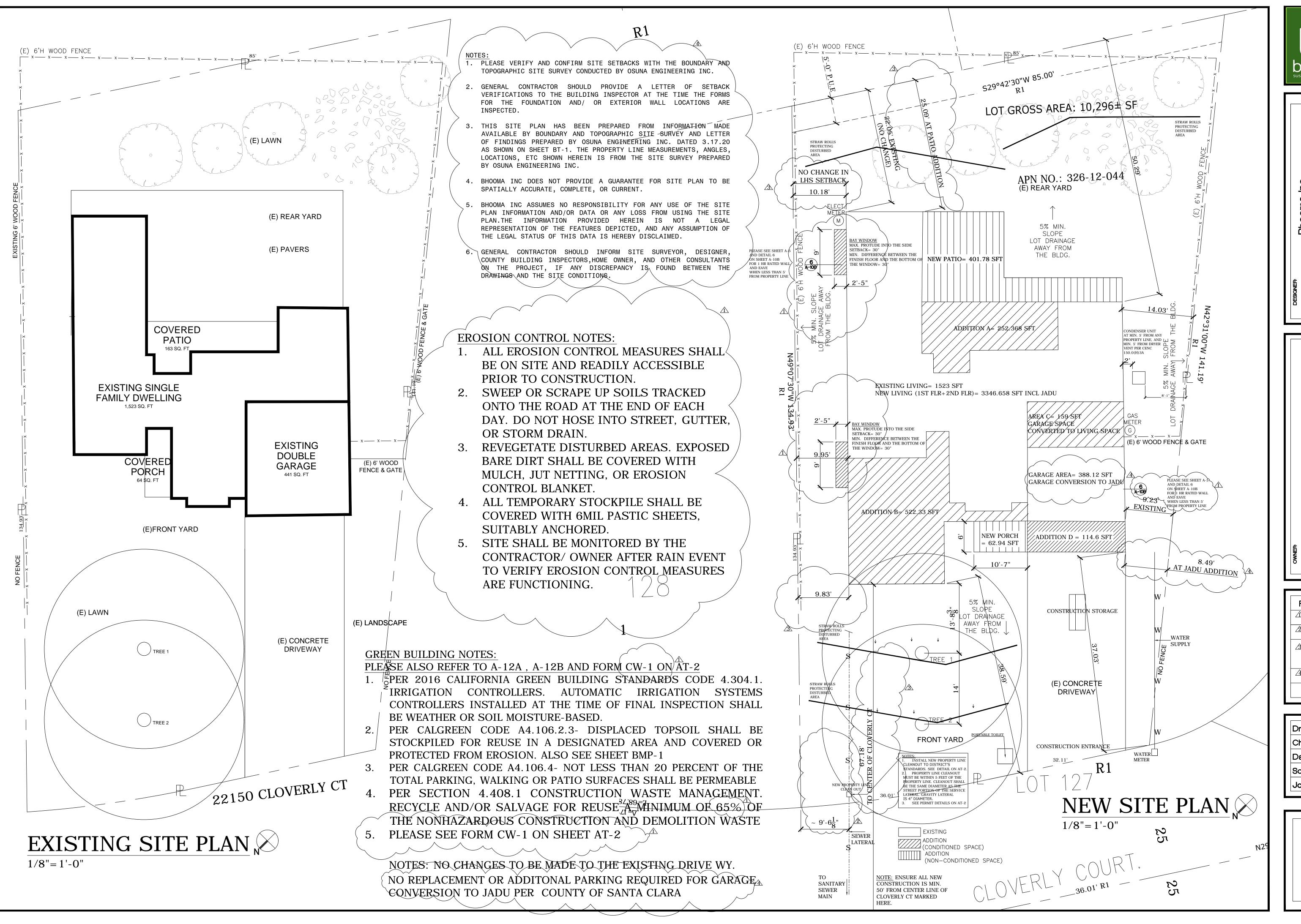




Revisions By CITY COMMENTS VB PER SANITARY VB 12.15.19

|Drawn | VB |Check | VB **Date** 7/15/18 Scale | AS-NOTED **Job No.** 2018-6

> Sheet AT-2





Bhooma Inc.

Vani Bahl, Assoc. AIA, LEED AP BD+
1650 Zanker Rd. Ste 120, San Jose CA 95112
P: 408.621.2091 F: 925.232.6229
E Mail: vani.bahl®gmail.com

ADDITION + REMODEL 22150 CLOVERLY CT LOS ALTOS CA 94024

Revisions By

CITY COMMENTS 3.7.2019

PER SANITARY SEWER DISTRICT 12.15.19

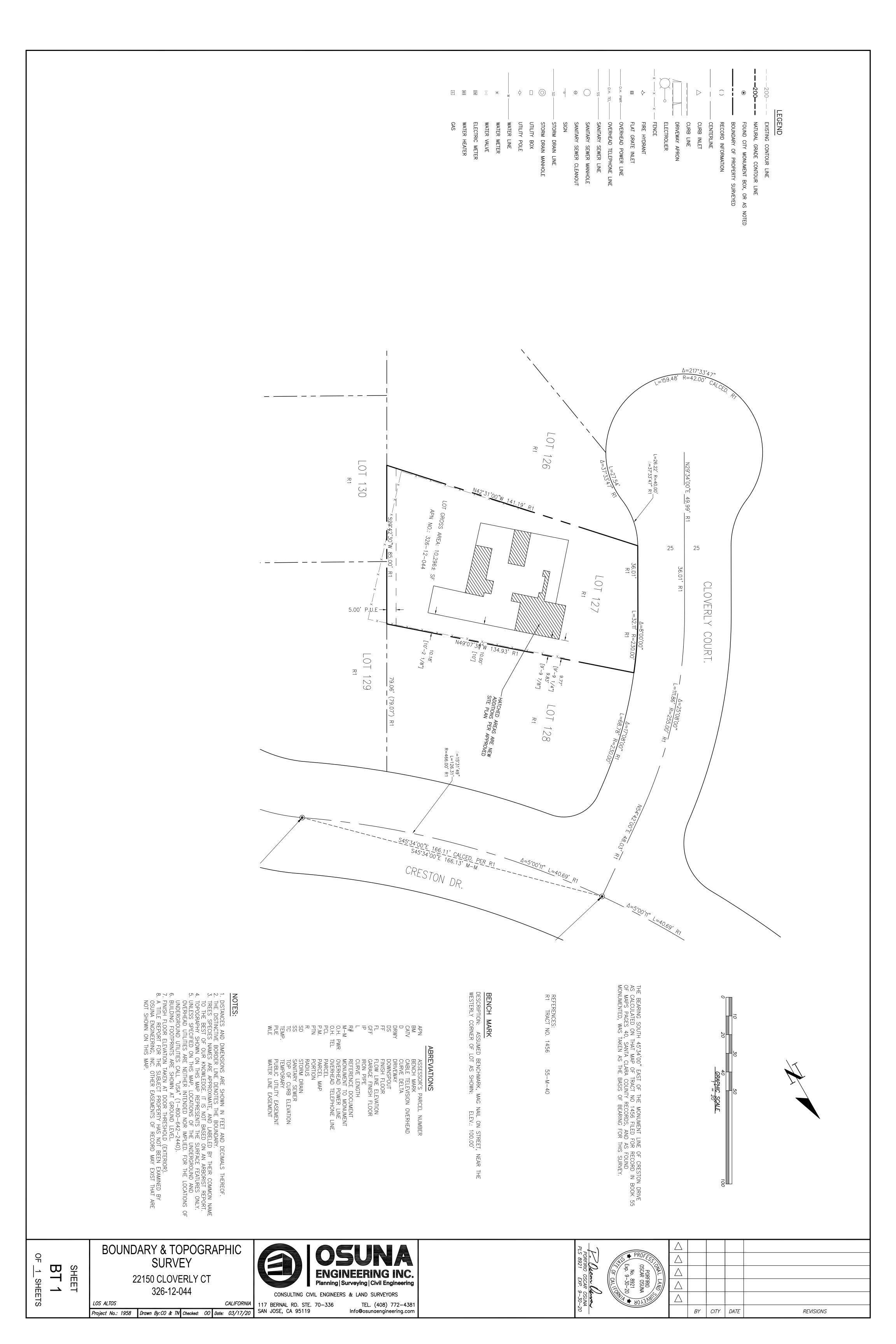
SETBACKS REVISED PER SITE SURVEY 8.25.20

PER OWNER-ADD JADU 11.9.20

VB

Drawn VB
Check VB
Date 7/15/18
Scale AS-NOTED
Job No. 2018-6

Sheet AS-1





Bhooma Inc.
/ani Bahl, Assoc. AIA, LEED AP BD+
1650 Zanker Rd. Ste 120, San Jose CA 95112
P: 408.621.2091 F: 925.232.6229
E Mail: vani.bahl®gmail.com
www.BhoomaDesign.com

ADDITION + REMODEL 22150 CLOVERLY CT LOS ALTOS CA 94024

Revisions By

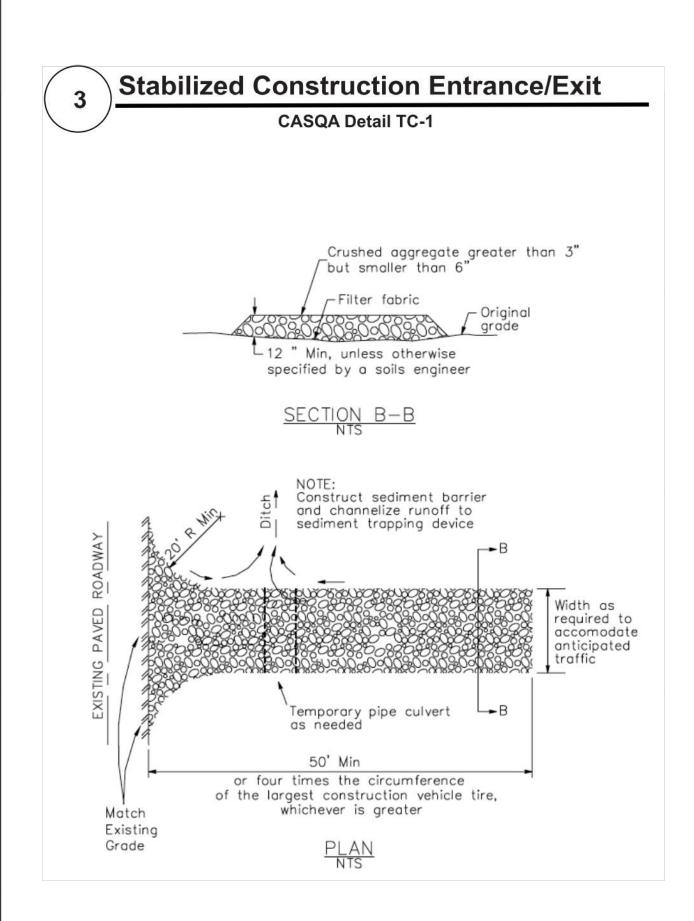
CITY COMMENTS 3.7.2019

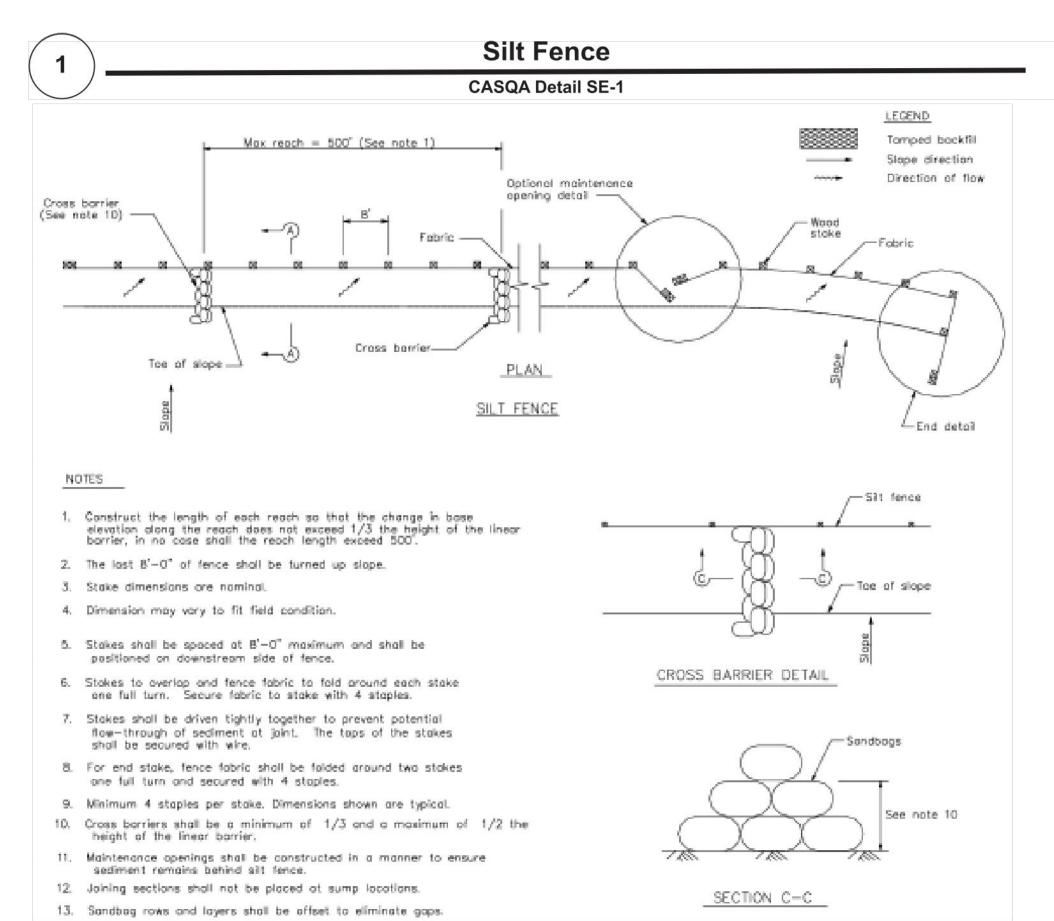
CITY COMMENTS 1.9.2020

VB

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Date	7/15/18
Scale	AS-NOTED
Job No.	2018-6

Sheet AS-2

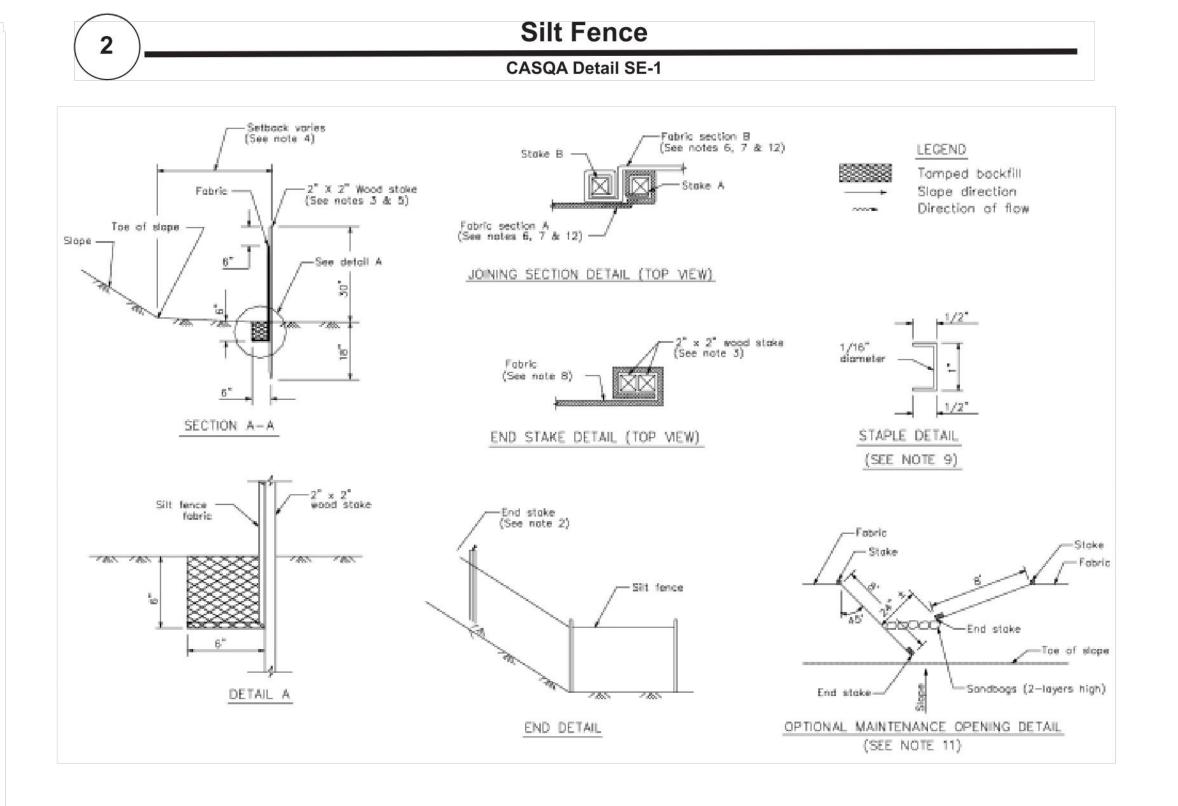




Velocity Dissipation Devices CASQA Detail EC-10 4do (min) Pipe outlet to well defined channel *Key in 6"-9" recommended for entire perimeter ### Length per ABAG Design Standards SECTION A—A *Length per ABAG Design Standards

Source for Graphics: California Stormwater BMP Handbook, California

Stormwater Quality Association, January 2003. Available from www.cabmphandbooks.com.



STANDARD BEST MANAGEMENT PRACTICE NOTES

- Solid and Demolition Waste Management: Provide designated waste collection areas and containers on site away from streets, gutters, storm drains, and waterways, and arrange for regular disposal. Waste containers must be watertight and covered at all times except when waste is deposited. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C3) or latest.
- Hazardous Waste Management: Provide proper handling and disposal of hazardous wastes by a licensed hazardous waste material hauler. Hazardous wastes shall be stored and properly labeled in sealed containers constructed of suitable materials. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-5 to C-6) or latest.
- 3. Spill Prevention and Control: Provide proper storage areas for liquid and solid materials, including chemicals and hazardous substances, away from streets, gutters, storm drains, and waterways. Spill control materials must be kept on site where readily accessible. Spills must be cleaned up immediately and contaminated soil disposed properly. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-7 to C-8, C-13 to C-14) or latest.
- 4. Vehicle and Construction Equipment Service and Storage:
 An area shall be designated for the maintenance, where onsite maintenance is required, and storage of equipment that is protected from stormwater run-on and runoff. Measures shall be provided to capture any waste oils, lubricants, or other potential pollutants and these wastes shall be properly disposed of off site. Fueling and major maintenance/repair, and washing shall be conducted off-site whenever feasible. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C9) or latest.
- 5. Material Delivery, Handling and Storage: In general, materials should not be stockpiled on site. Where temporary stockpiles are necessary and approved by the County, they shall be covered with secured plastic sheeting or tarp and located in designated areas near construction entrances and away from drainage paths and waterways. Barriers shall be provided around storage areas where materials are potentially in contact with runoff. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-11 to C-12) or latest.
- 6. Handling and Disposal of Concrete and Cement: When concrete trucks and equipment are washed on-site, concrete wastewater shall be contained in designated containers or in a temporary lined and watertight pit where wasted concrete can harden for later removal. If possible have concrete contractor remove concrete wash water from site. In no case shall fresh concrete be washed into the road right-of-way. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-15 to C-16) or latest.
- 7. Pavement Construction Management: Prevent or reduce the discharge of pollutants from paving operations, using measures to prevent run-on and runoff pollution and properly disposing of wastes. Avoid paving in the wet season and reschedule paving when rain is in the forecast. Residue from saw-cutting shall be vacuumed for proper disposal. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-17 to C-18) or latest.
- 8. Contaminated Soil and Water Management: Inspections to identify contaminated soils should occur prior to construction and at regular intervals during construction. Remediating contaminated soil should occur promptly after identification and be specific to the contaminant identified, which may include hazardous waste removal. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-19 to C-20) or latest.
- 9. Sanitary/Septic Water Management: Temporary sanitary facilities should be located away from drainage paths, waterways, and traffic areas. Only licensed sanitary and septic waste haulers should be used. Secondary containment should be provided for all sanitary facilities. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C-21) or latest.
- 10.<u>Inspection & Maintenance</u>: Areas of material and equipment storage sites and temporary sanitary facilities must be inspected weekly. Problem areas shall be identified and appropriate additional and/or alternative control measures implemented immediately, within 24 hours of the problem being identified.

STANDARD EROSION CONTROL NOTES

1. Sediment Control Management:

Tracking Prevention & Clean Up: Activities shall be organized and measures taken as needed to prevent or minimize tracking of soil onto the public street system. A gravel or proprietary device construction entrance/exit is required for all sites. Clean up of tracked material shall be provided by means of a street sweeper prior to an approaching rain event, or at least once at the end of each workday that material is tracked, or, more frequently as determined by the County Inspector. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages B-31 to B-33) or latest.

Storm Drain Inlet and Catch Basin Inlet Protection:
All inlets within the vicinity of the project and within the project limits shall be protected with gravel bags placed around inlets or other inlet protection. At locations where exposed soils are present, staked fiber roles or staked silt fences can be used. Inlet filters are not allowed due to clogging and subsequent flooding. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages B-49 to B-51) or latest.

Storm Water Runoff: No storm water runoff shall be allowed to drain in to the existing and/or proposed underground storm drain system or other above ground watercourses until appropriate erosion control measures are fully installed.

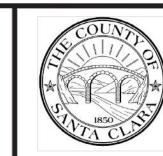
<u>Dust Control</u>: The contractor shall provide dust control in graded areas as required by providing wet suppression or chemical stabilization of exposed soils, providing for rapid clean up of sediments deposited on paved roads, furnishing construction road entrances and vehicle wash down areas, and limiting the amount of areas disturbed by clearing and earth moving operations by scheduling these activities in phases.

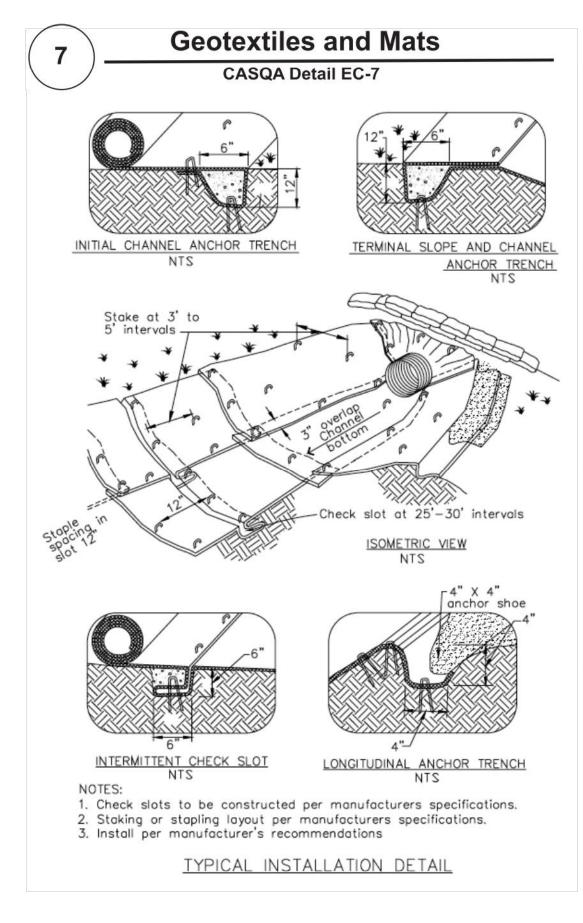
Stockpiling: Excavated soils shall not be placed in streets or on paved areas. Borrow and temporary stockpiles shall be protected with appropriate erosion control measures(tarps, straw bales, silt fences, ect.) to ensure silt does not leave the site or enter the storm drain system or neighboring watercourse.

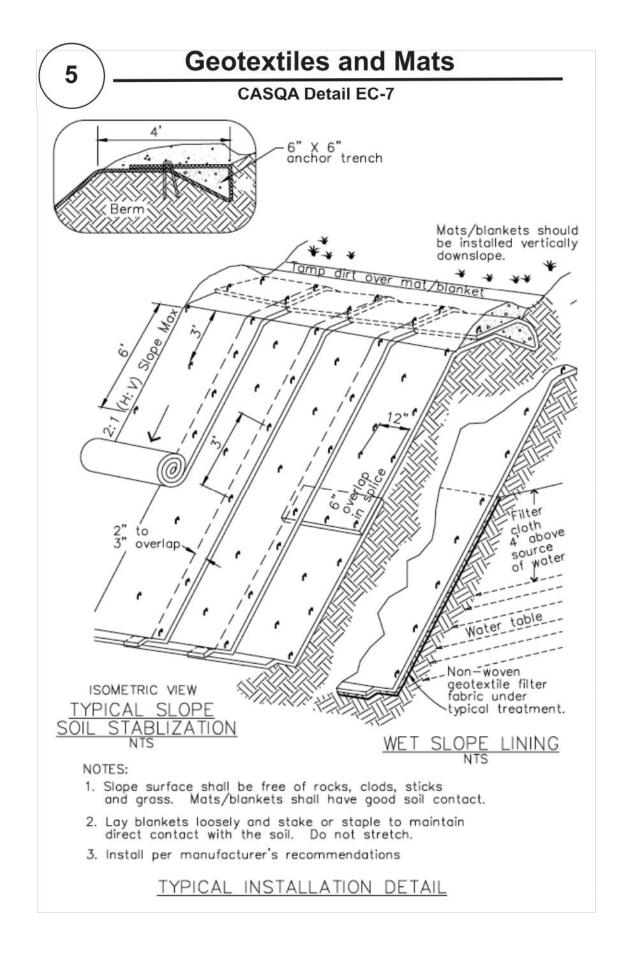
- 2. Erosion Control: During the rainy season, all disturbed areas must include an effective combination of erosion and sediment control. It is required that temporary erosion control measures are applied to all disturbed soil areas prior to a rain event. During the non-rainy season, erosion control measures must be applied sufficient to control wind erosion at the site.
- 3. <u>Inspection & Maintenance</u>: Disturbed areas of the Project's site, locations where vehicles enter or exit the site, and all erosion and sediment controls that are identified as part of the Erosion Control Plans must be inspected by the Contractor before, during, and after storm events, and at least weekly during seasonal wet periods. Problem areas shall be identified and appropriate additional and/ or alternative control measures implemented immediately, within 24 hours of the problem being identified.
- 4. <u>Project Completion</u>: Prior to project completion and signoff by the County Inspector, all disturbed areas shall be reseeded, planted, or landscaped to minimize the potential for erosion on the subject site.
- 5. It shall be the Owner's/Contractor's responsibility to maintain control of the entire construction operation and to keep the entire site in compliance with the erosion control plan.
- Erosion and sediment control best management practices shall be operable year round or until vegetation is fully established on landscaped surfaces.

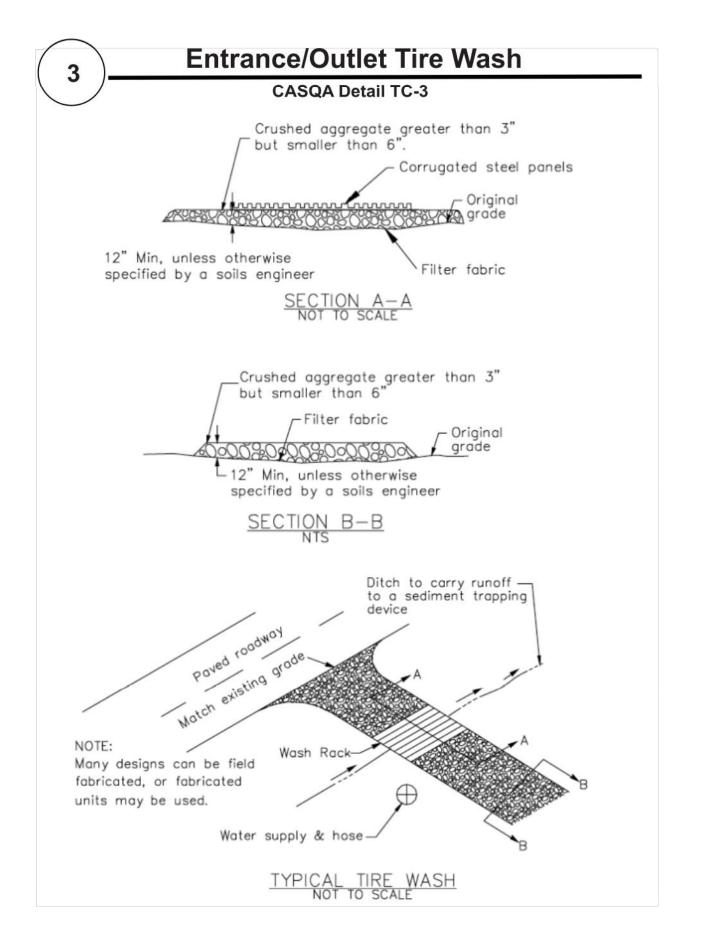
Project Information
ADDITION + REMODEL
22150 CLOVERLY CT
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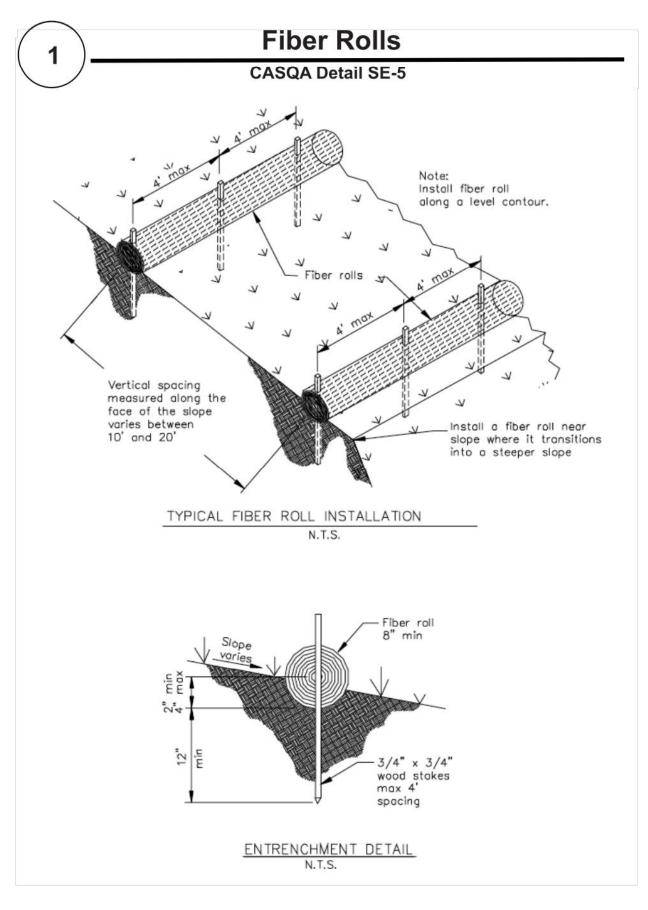
Best Management Practices and Erosion Control Details Sheet 1 County of Santa Clara

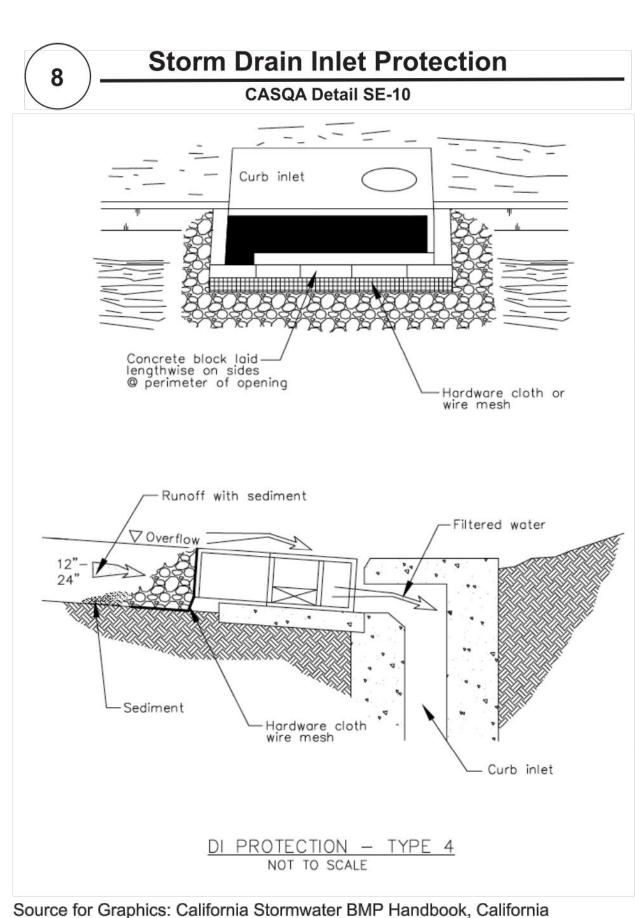




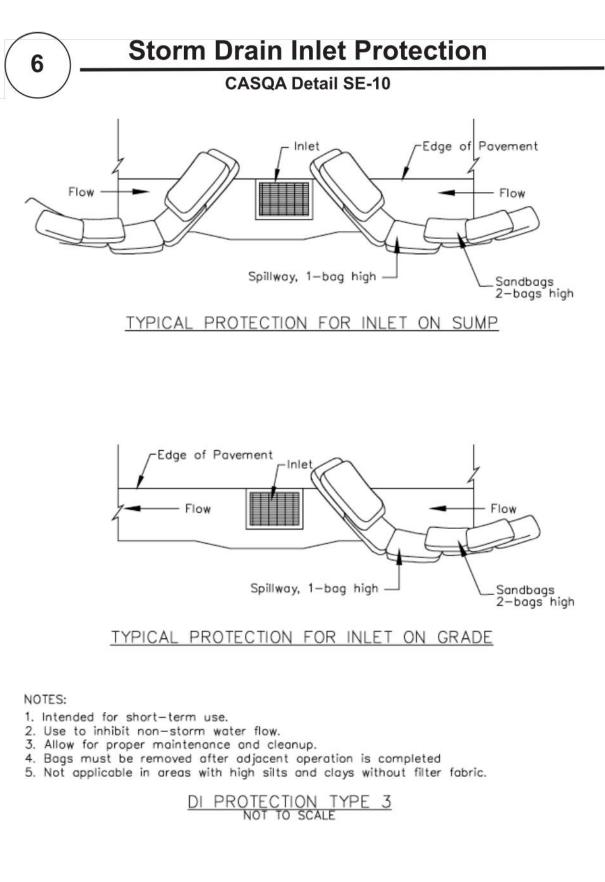


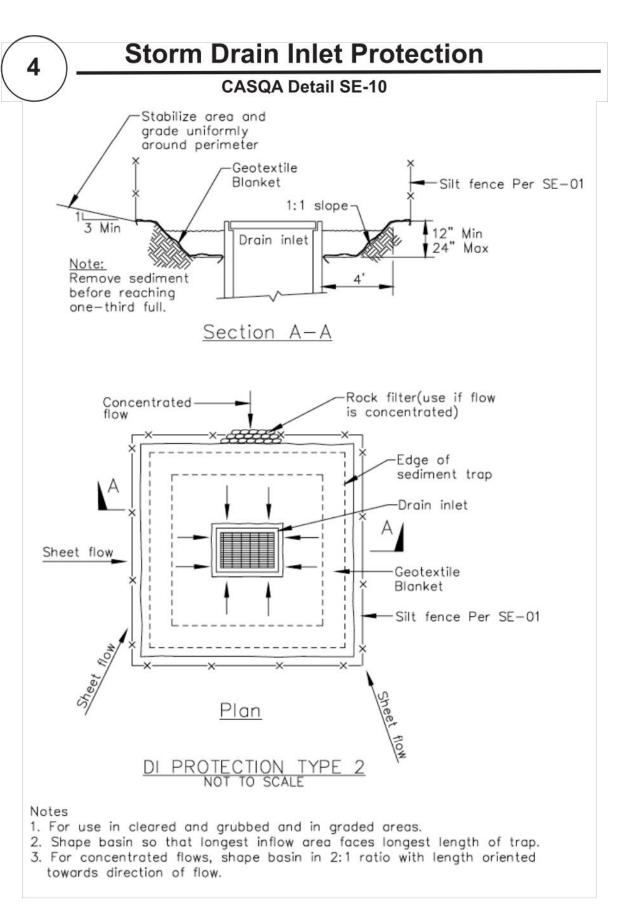


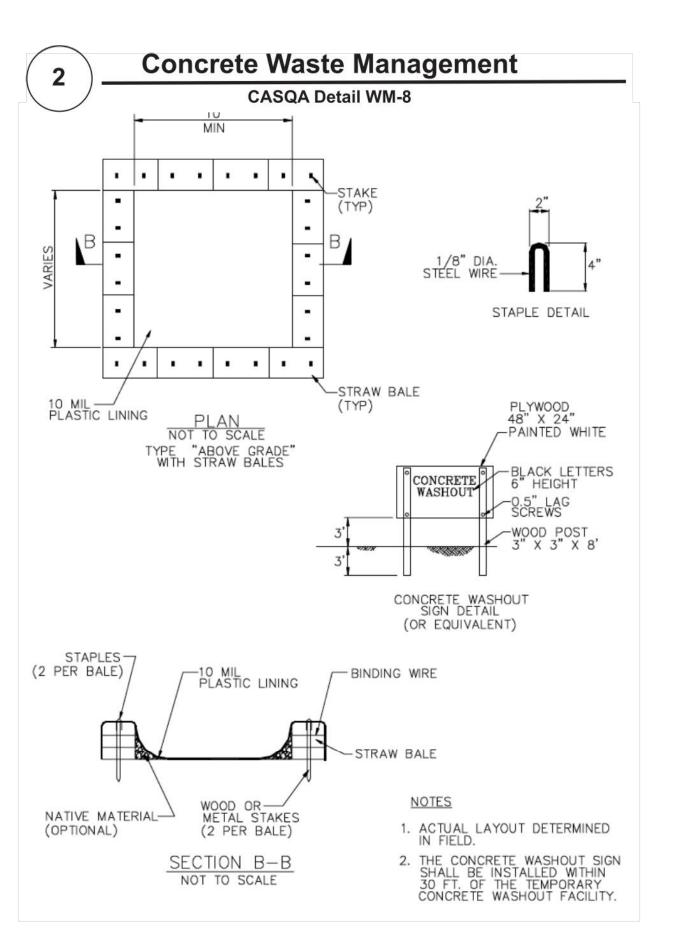




Stormwater Quality Association, January 2003. Available from www.cabmphandbooks.com.





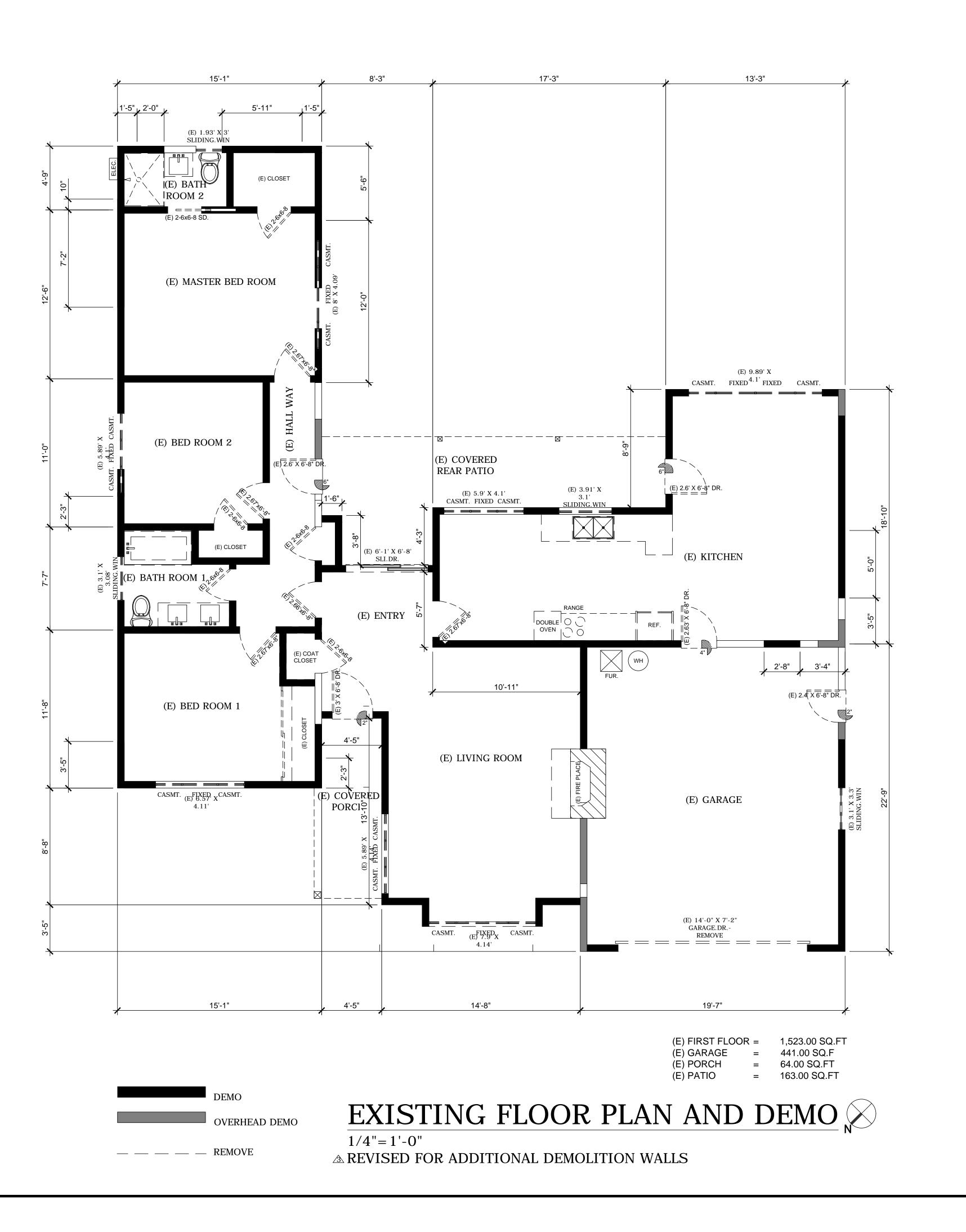


ADDITION + REMODEL

22150 CLOVERLY CT
OS AI TOS CA 94024

Best Management Practices and Erosion Control Details Sheet 2 County of Santa Clara







Mani Bahl, Assoc. AIA, LEED AP BD+1650 Zanker Rd. Ste 120, San Jose CA 95112 P: 408.621.2091 P: 925.232.6229
E Mail: vani.bahl@gmail.com

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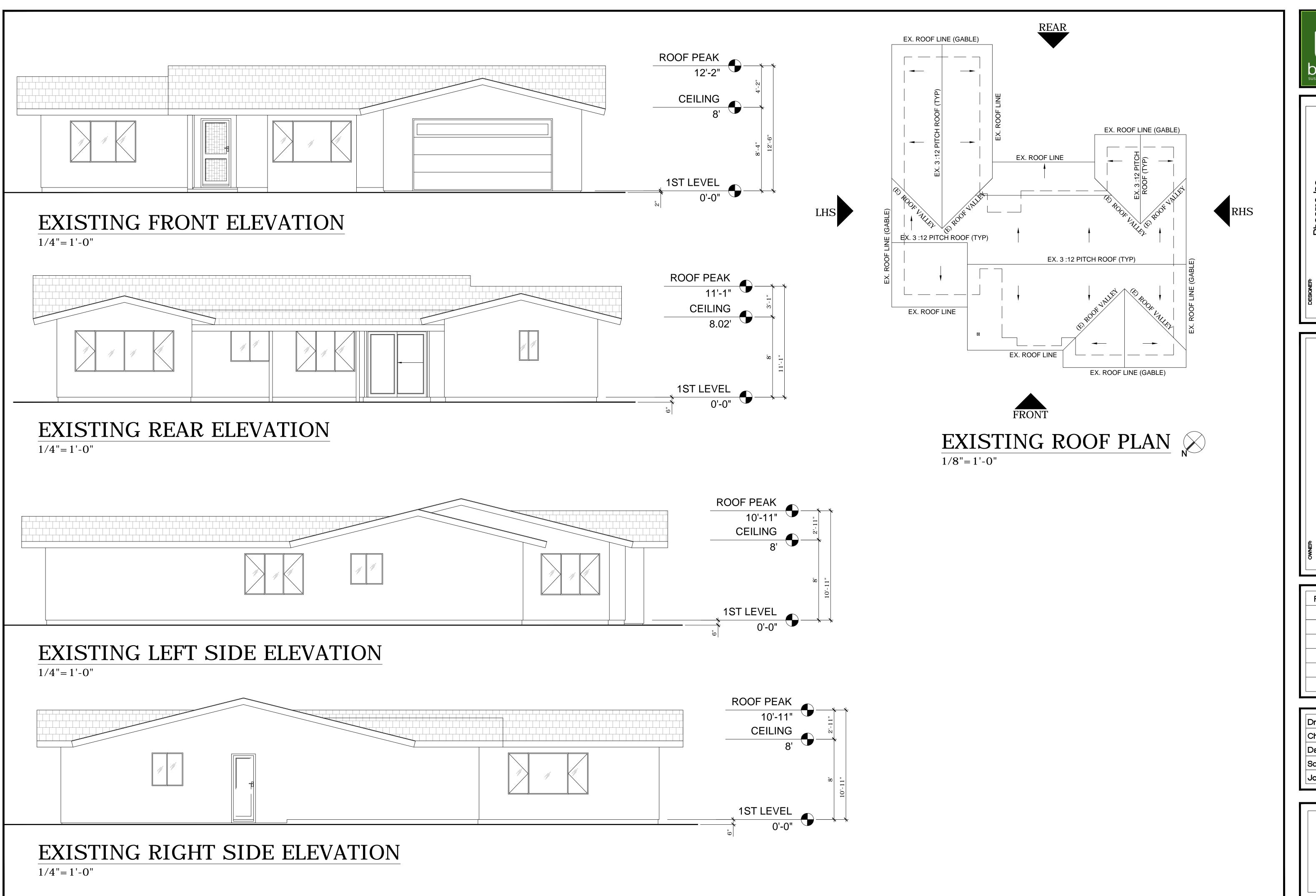
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PER OWNER
5.28.2020

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Job No.	2018-6

Sheet A-1A





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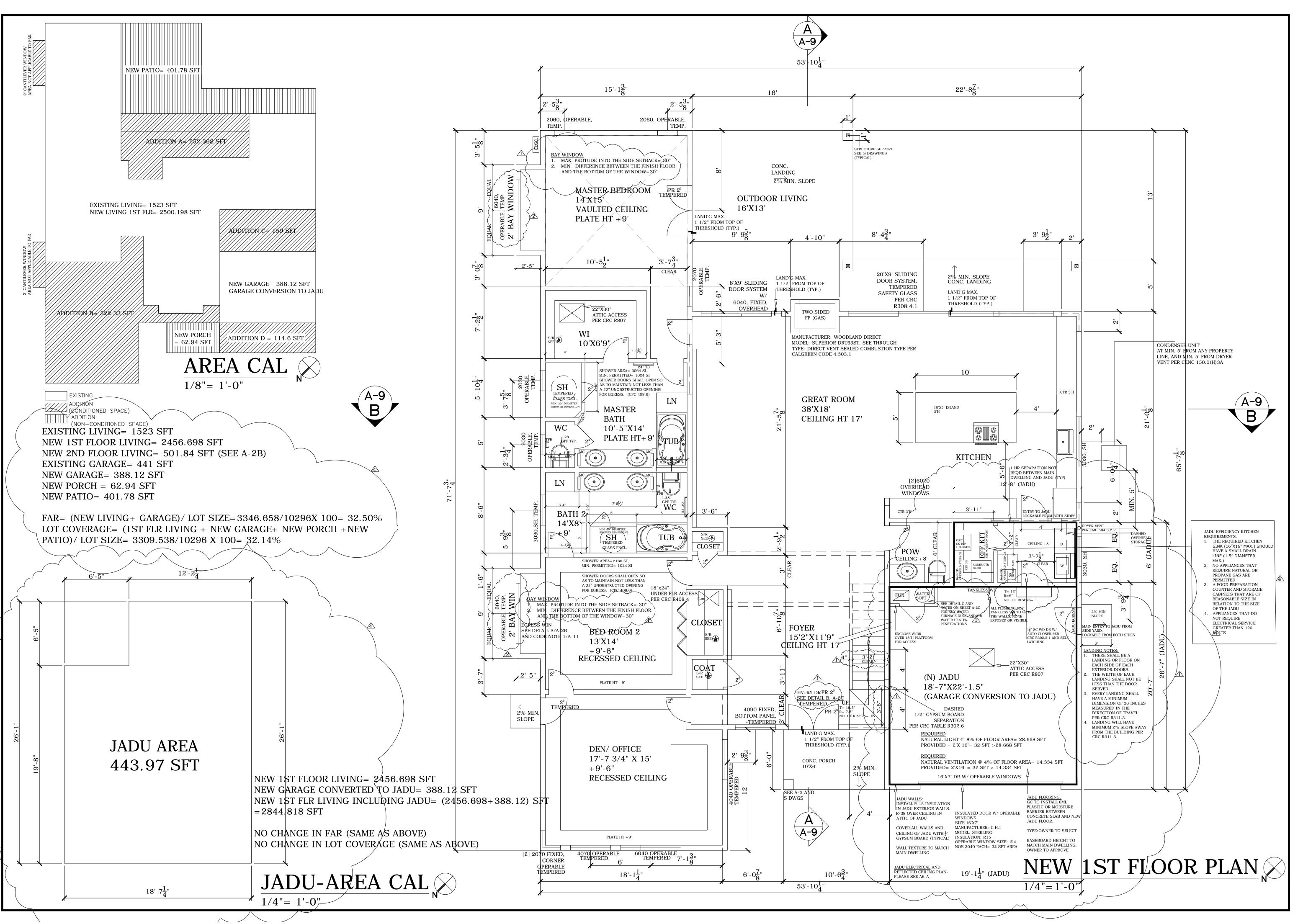
Vani Bahl, Assoc. AIA, LEED AP BD+C
1650 Zanker Rd. Ste 120, San Jose CA 95112
P: 408.621.2091 F: 925.232.6229
E Mail: vani.bahl®gmail.com
www.BhoomaDesign.com

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Sheet
A-1B





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Vani Bahl, Assoc. AIA, LEED AP BD+C
1650 Zanker Rd. Ste 120, San Jose CA 95112
P: 408.621.2091 F: 925.232.6229
E Mail: vani.bahl®gmail.com
www.BhoomaDesign.com

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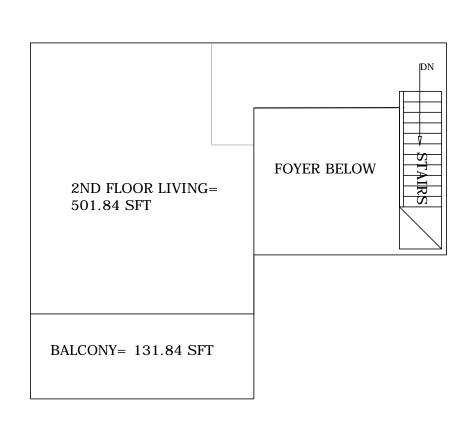
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Sheet A-2A



AREA CAL

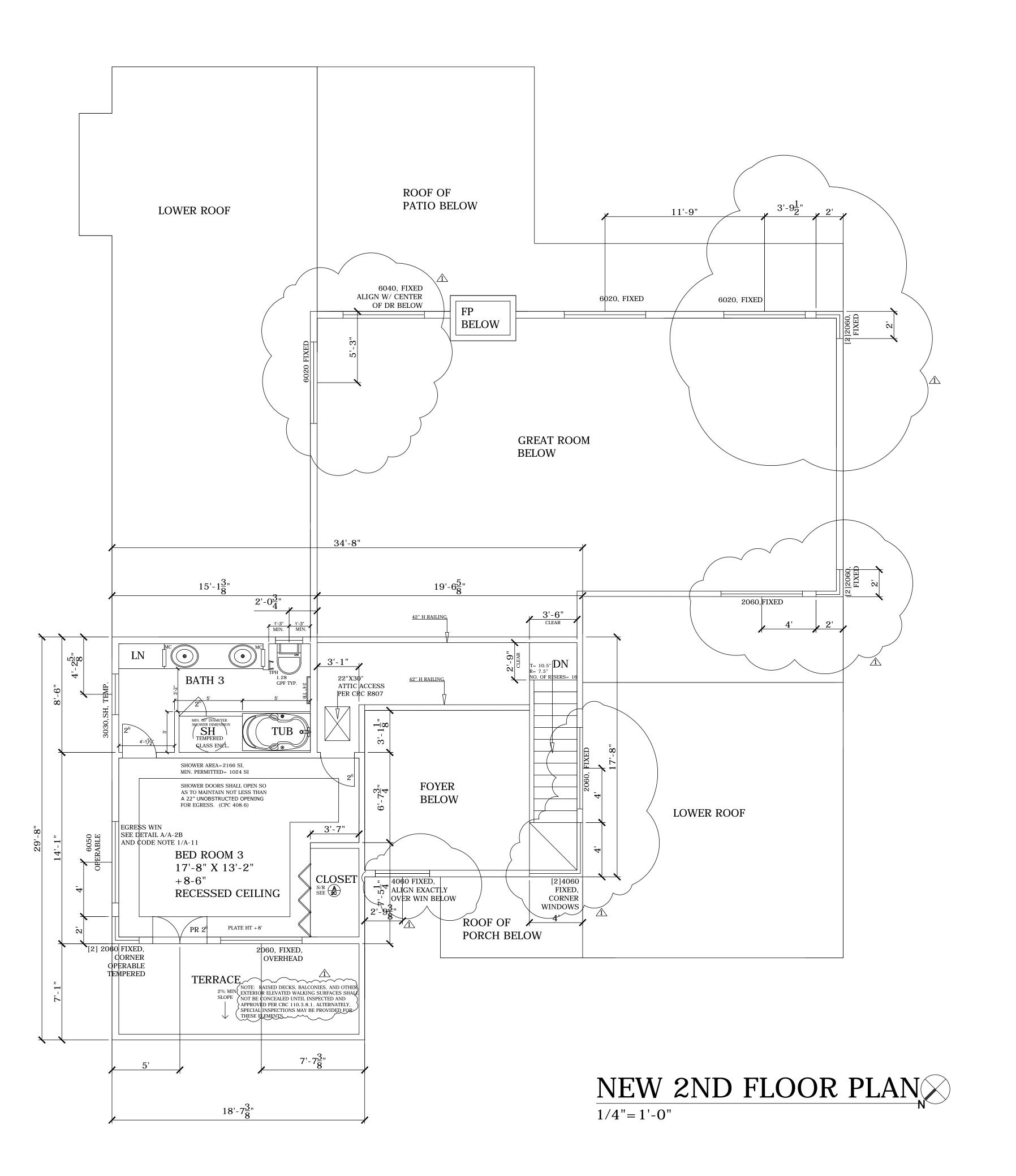
1/8"= 1'-0"

2ND FLOOR LIVING= 501.84 SFT

BALCONY= 131.84 SFT

NOTES:

- 1. RAISED DECKS, BALCONIES, AND OTHER EXTERIOR ELEVATED WALKING SURFACES SHALL NOT BE CONCEALED UNTIL INSPECTED AND APPROVED PER CBC 110.3.8.1. ALTERNATELY, SPECIAL INSPECTIONS MAY BE PROVIDED FOR THESE ELEMENTS.
- 2. EXTERIOR WALLS SHALL PROVIDE THE BUILDING WITH A WEATHER-RESISTANT EXTERIOR WALL ENVELOPE PER CRC R703. PLEASE REFER TO DETAILS 1,2,3,4 AND D ON SHEET A-10A, NOTES ON SHEET A-10B, AND DETAILS ON SHEET A-10D.
- 3. A. GUARDRAIL AT STAIRCASE AND TERRACE IS MINIMUM HEIGHT OF 42 INCHES WITH INTERMEDIATE RAILS SPACED SUCH THAT A SPHERE 4 INCHES IN DIAMETER CANNOT PASS THROUGH. CRC R312.1 AND R312.2. B. GUARD CONSTRUCTION SHALL BE CAPABLE OF RESISTING A 200 POUND LOAD APPLIED IN ANY DIRECTION AT ANY POINT ALONG THE TOP RAIL (SHOW MEMBER SIZES, CONNECTIONS, ETC.) PER CRC TABLE R301.5
 - C. CONTRACTOR TO PROVIDE SHOP DRAWINGS BEFORE BUILD TO INCLUDE SUPPORT'G STRUCT CAPABLE OF WITHSTANDING A LOAD OF AT LEAST 200 LBS.
 - D. PLEASE ALSO SEE DETAILS 7,8,9,10 ON SHEET A-10B AND SHEET A-10C.





Bhooma Inc.

Vani Bahl, Assoc. AIA, LEED AP BD-1650 Zanker Rd. Ste 120, San Jose CA 95112

P: 408.621.2091 F: 925.232.6229

E Mail: vani.bahl®gmail.com

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Sheet A-2B

♪ BATHTUB AND SHOWER FLOORS AND WALLS AND WALLS ARE A NONABSORBENT SURFACE (E.G., CERAMIC TILE OR FIBERGLASS) TO À HEIGHT OF MINIMUM 72 INCHES ABOVE THÈ\FLOOR PER CRC R307.

2. MATERIALS USED AS BACKERS FOR WALL TILE IN TUB AND SHOWER AREAS AND WALL PANELS IN SHOWER AREAS SHALL BE: GLASS MAT GYPSUM PANEL

FIBER-REINFORCED GYPSUM PANELS

NON-ASBESTOS FIBER-CEMENT BACKER BOARD

NON-ASBESTOS FIBER-CEMENT REINFORCED CEMENTITIOUS

UNITS INSTALLED IN ACCORDANCE WITH MANUFACTURERS'

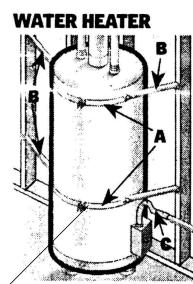
RECOMMENDATIONS PER CRC R702.4.2.

-EDGE BANDING —3/4" PLYWOOD -METAL ROD & FLANGES -APRON

1. LONGER SPANS REQUIRE STANDARD WOOD BRACKET AT MID SPAN

2. ROD SHOWN IS KNAPE & VOGT NO.770 $1\frac{1}{16}$ " O.D. FLANGES: NO.735 MAX SPAN: 6'-0"

S/R NT.S



Wrap a 11/2-inch-wide, 16-gauge-thick metal strap (A) around the top of the water heater and bolt the ends together. Do the same about 1/3 of the way up the side of the water heater. Take four lengths of EMT electrical conduit, each no longer than 30 inches. Flatten the ends. Bolt one end to the metal strap as shown (B). Screw the other end to a 2-by-4-inch stud in the wall using a 5/16-inch-by-3inch lag screw. Be sure a flexible pipe (C) is used to connect the gas supply to the heater.

LOWER STRAP IS THE CONTROLS

NOTE: (E) 18" H PLATFORM LOCATED MIN. 4" ABOVE CHECK EXISTING SEISMIC TIES THE WATER HEATER WILL BE SEISMICALLY ⁵. BRACED IN ACCORDANCE WITH CPC 507.2



NOTES:

- 1. SEE A3 FOR EXTERIOR FINISH SCHEDULE
- 2. * ESCAPE WINDOW SEE CODE NOTE 1 ON A-11
- 3. DIM'S NOTED TO BE FIN. TO FIN., U.O.N. MODEL NO. 1454 (MIRAGE) MANUFACTURED BY 'BROAN'
- 4. MEDICINE CAB(MC) TO BE MIRROR DR., SELECTED BY OWNER 5 . WATER SUPPLY SYS. NOTE: QUICK ACTIONG VALVES ARE INSTALLED SHALL BE

PROVIDED WITH DEVICES TO ABSORB THE HAMMER CAUSED BY HIGH PRESSURES RESULTING FROM THE QUICK CLOSING OF THESE VALVES. WATER PRESSURE-ABSORBING DEVICES SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO THESE VALVES. UPC SECTION 609.10.

6. SHOWER DOORS SHALL OPEN WITH A MINIMUM 22" UNOBSTRUCTED OPENING FOR EGRESS. CPC 408.6 7. INSTALLATION INSTRUCTIONS FOR ALL LISTED EQUIPMENT SHALL BE PROVIDED TO THE BUILDING INSPECTOR AT ROUGH INSPECTION. (2016 CMC 303.1 AND 2016 CPC 310.4)

GREEN BUILDING NOTES (NOTES 8 TO 11):

PLEASE REFER TO A-12 ALSO 8. 4.303.1 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS. PLUMBING FIXTURES (WATER CLOSETS AND URINALS) AND FITTINGS (FAUCETS AND SHOWERHEADS) INSTALLED IN RESIDENTIAL BUILDINGS SHALL COMPLY WITH THE PRESCRIPTIVE REQUIREMENTS OF 2016 CALIFORNIA

GREEN BUILDING STANDARDS CODE SECTIONS 4303.1.1

THROUGH 4303.1.4.4. 9. 4.303.2 STANDARDS FOR PLUMBING FIXTURES AND FITTINGS. PLUMBING FIXTURES AND FITTINGS REQUIRED IN 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE SECTION 4.303.1 SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA PLUMBING CODE, AND SHALL MEET

WATER CLOSET= 1.28GPM SHOWER= 1.8GPM

KITCHEN FAUCET= 1.5GPM AT 60PSI

THE APPLICABLE REFERENCED STANDARDS.

LAVATORY FAUCET= 1.2GPM

10. 4.406.1 RODENT PROOFING. ANNULAR SPACES AROUND PIPES, ELECTRIC CABLES, CONDUITS OR OTHER OPENINGS IN SOLE/BOPTOM PLATES AT EXTERIOR WALLS SHALL BE PROTECTED AGAINST THE PASSAGE OF RODENTS BY CLOSING SUCH OPENINGS WITH CEMENT MORTAR CONCRETE MASONRY OR A SIMILAR METHOD ACCEPTABLE TO THE ENFORCING AGENCY

11. (NOT APPLICABLE TO THE PROJECT) FIREPLACES. PER THE 2016 BUILDING ENERGY EFFICIENCY STANDARDS MASONRY FIREPLACES SHALL BE INSTALLED WITH ALL OF

A. CLOSEABLE METAL OR GLASS DOORS COVERING THE ENTIRE OPENING OF THE FIREBOX.

B. A COMBUSTION AIR INTAKE TO DRAW AIR FROM THE OUTSIDE OF THE BUILDING DIRECTLY INTO THE FIREBOX. WHICH IS AT LEAST SIX SQUARE INCHES IN AREA AND IS EQUIPPED WITH A READILY ACCESSIBLE, OPERABLE, AND TIGHT-FITTING DAMPER OR COMBUSTION-AIR CONTROL DEVICE.

C. A FLUE DAMPER WITH READILY ACCESSIBLE CONTROL CONTINUOUS BURNING PILOT LIGHTS AND THE USE OF INDOOR AIR FOR COOLING A FIREBOX JACKET, WHEN THE INDOOR AIR IS VENTED TO THE OUTSIDE OF THE BUILDING, ARE PROHIBITED.

12. LANDINGS AT REQUIRED EGRESS DOORS SHALL NOT BE MORE THAN 1-1/2" LOWER THAN THE TOP OF THE

EXCEPTION: A DOOR MAY OPEN AT A LANDING THAT IS NOT MORE THAN 7-3/4" LOWER THAN THE FLOOR LEVEL IF THE DOOR DOES NOT SWING OVER THE LANDING. (CRC R311.3.1 & R311.3.2)

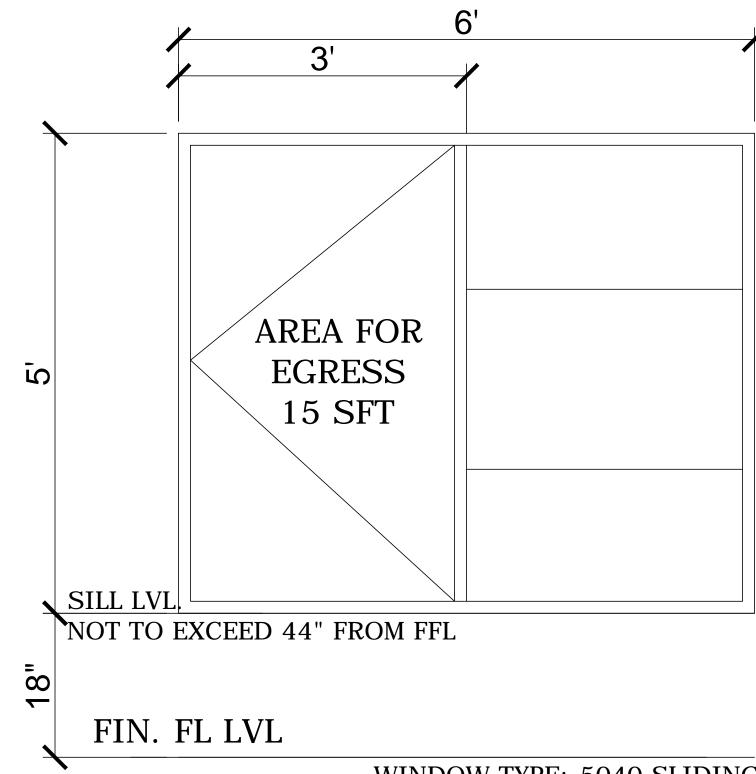
13. PROVIDE FIRE BLOCKING TO CUT OFF ALL CONCEALED DRAFT OPENINGS (VERTICAL AND HORIZONTAL) TO FORM AN EFFECTIVE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND THE ROOF SPACE, PER CRC R302.11

14. LANDINGS WILL BE IN CONFORMANCE WITH CRC R311.7. MAX RISE= 7 3/4" AND MINIMUM RUN= 10" FROM NOSING TO NOSING. A NOSING MEASURING 3/4" MIN. TO 1 1/4" MAX IS REQUIRED ON STEPS WHEN THE TREAD DEPTH IS LESS THAN 11".

NOTES ON PENETRATIONS:

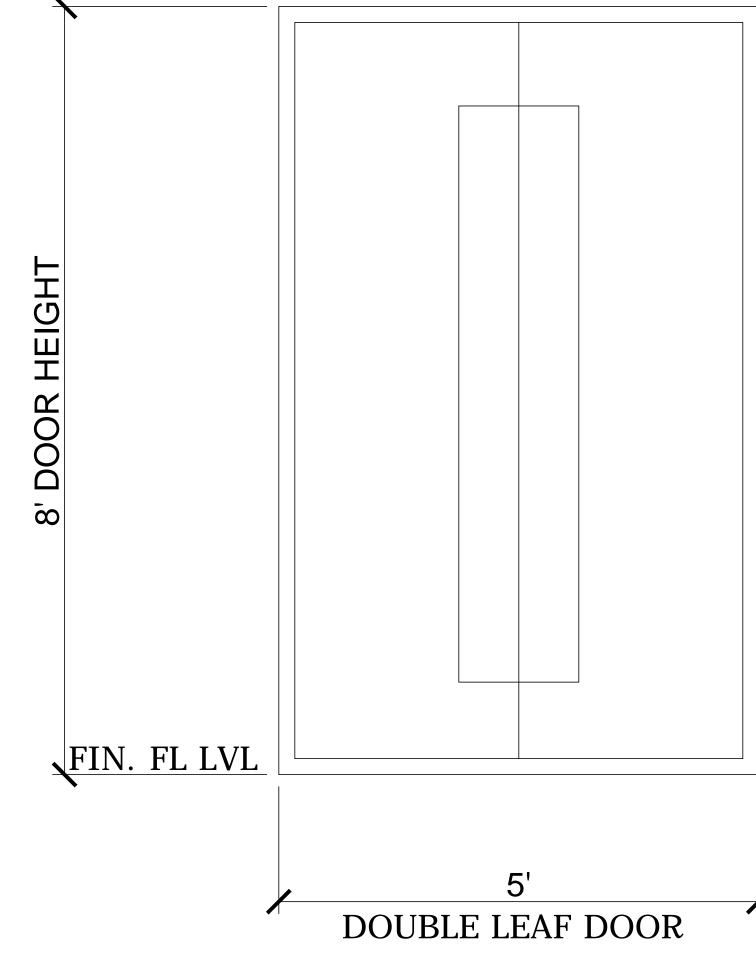
- 1. PENETRATIONS SHALL BE PROTECTED BY AN APPROVED PENETRATION FIRESTOP SYSTEM INSTALLED AS TESTED PER CRC R302.4.1.2.
- 2. DUCTS IN THE GARAGE AND DUCTS PENETRATING THE WALLS OR CEILINGS SEPARATING THE DWELLING FROM THE GARAGE SHALL BE CONSTRUCTED OF A MINIMUM 26 GAUGE SHEET STEEL OR OTHER APPROVED MATERIAL AND SHALL HAVE NO OPENINGS INTO THE GARAGE PER CRC R302.5.2.
- 3. PIPES, BOTH WATER AND GAS, MUST BE SEALED WITH AN APPROVED MATERIAL WHEN PENETRATING A RATED WALL ORCEILING ASSEMBLY
- 4. SINGLE WALL VENT CONNECTORS SHALL NOT PENETRATE AN INTERIOR WALL, CEILING OR OTHER ASSEMBLY. SINGLE WALL VENT CONNECTORS SHALL NOT ORIGINATE IN AN ATTIC OR CONCEALED SPACE AND SHALL NOT PASS
- THROUGH AN ATTIC CONCEALED SPACE OR FLOOR. 7. B TYPE VENTS SHALL USE AN APPROVED THIMBLE (BUCKET) WHEN PENETRATING A RATED ASSEMBLY.

CEILING



WINDOW TYPE: 5040 SLIDING MIN. CLEAR W AND H= 20" MIN EGRESS AREA= 5.7 SFT PROVIDED 15 SFT

EGRESS WINDOW DETAIL- BED ROOM 2 &3(A) 1/2"=1'-0"



ENTRY DOOR (B)

NOTES:

OWNER TO SELECT ENTRY DOOR

2. PER CRC R311.2, THE DOOR SHALL NOT BE LESS THAN 32" CLEAR WIDTH MEASURED WITH DOOR OPEN 90 DEGREES AND NOT LESS

1"=1'-0"

THAN 6'-6" CLEAR IN HEIGHT. LANDING SHALL NOT BE MORE THAN 1-1/2" LOWER THAN THE TOP OF THE THRESHOLD. A DOOR MAY OPEN AT THE LANDING THAT IS NOT MORE THAN 7-3/4" LOWER THAN THE FLOOR LEVEL IF THE DOOR SWINGS OVER THE LANDING. CRC R311.3.1 & R311.3.2

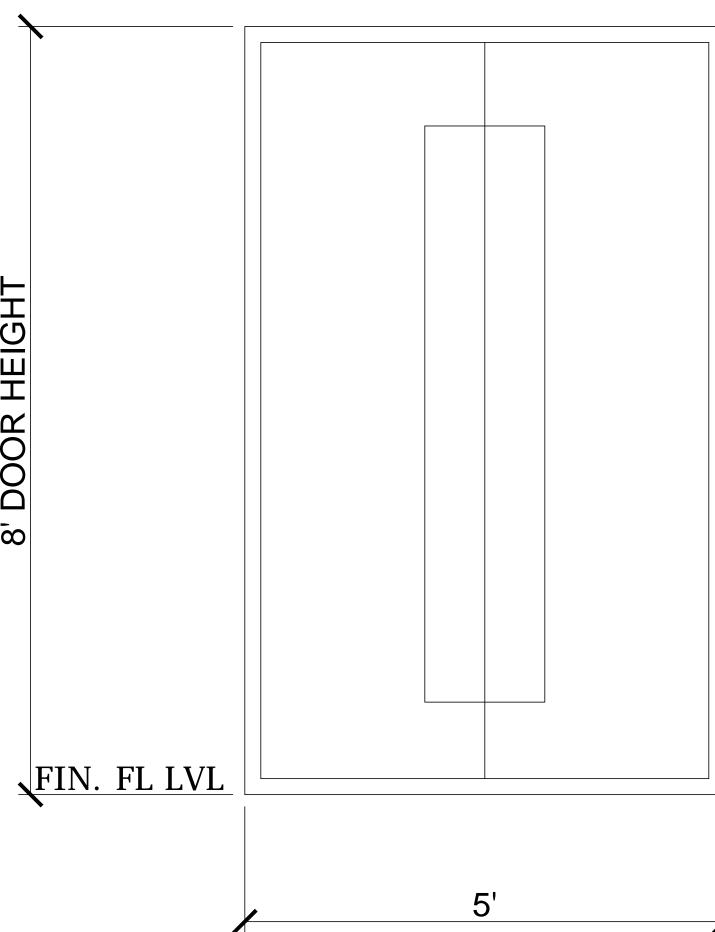
CRAWL SPACE CAL'S

REQD. VENT AREA = 2456.698/150 = 2358.43 SI PROVIDE VENT AREA

[29] 6"x14" TYP. VENT= 2436 SI > 2358.43 SI

NOTE:

- . EXISTING CRAWL SPACE VENTILATION TO REMAIN UNOBSTRUCTED BY NEW CONSTRUCTION.
- 2. ONE OPENING SHALL BE PLACED WITHIN 3 FEET OF EACH BUILDING CORNER. OPENINGS SHALL BE COVERED WITH A COVERING HAVING OPENINGS NO GREATER THAN ¼". (R408.2)
- 3. CROSS FLOW PROVIDED ON OPPOSITE SIDES, EQUALLY DISTRIBUTED, AND WITHIN 3' TO CORNERS TO REMOVE DEAD AIR (R408/CBC 1203.3)

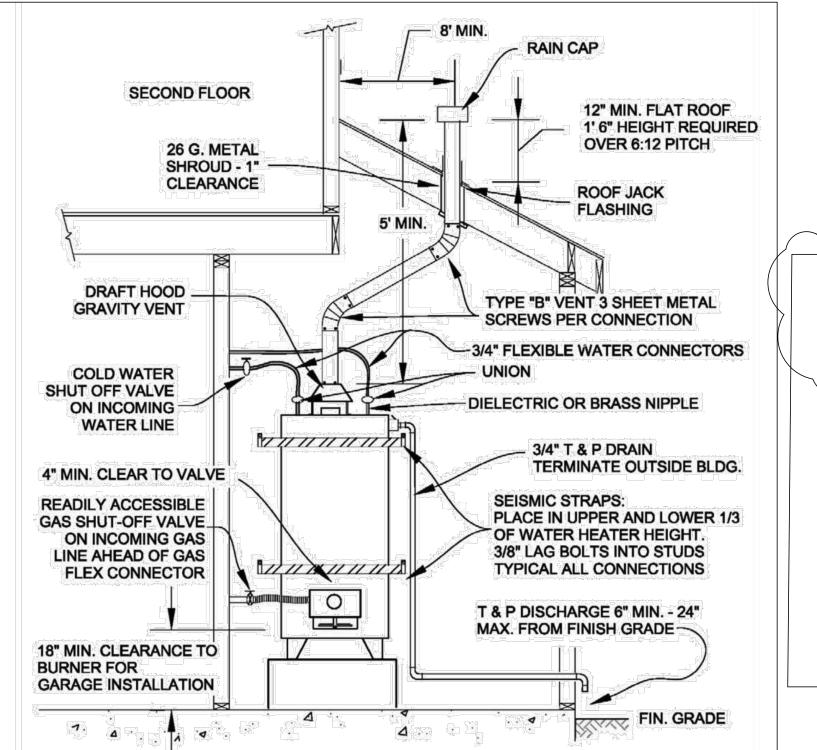


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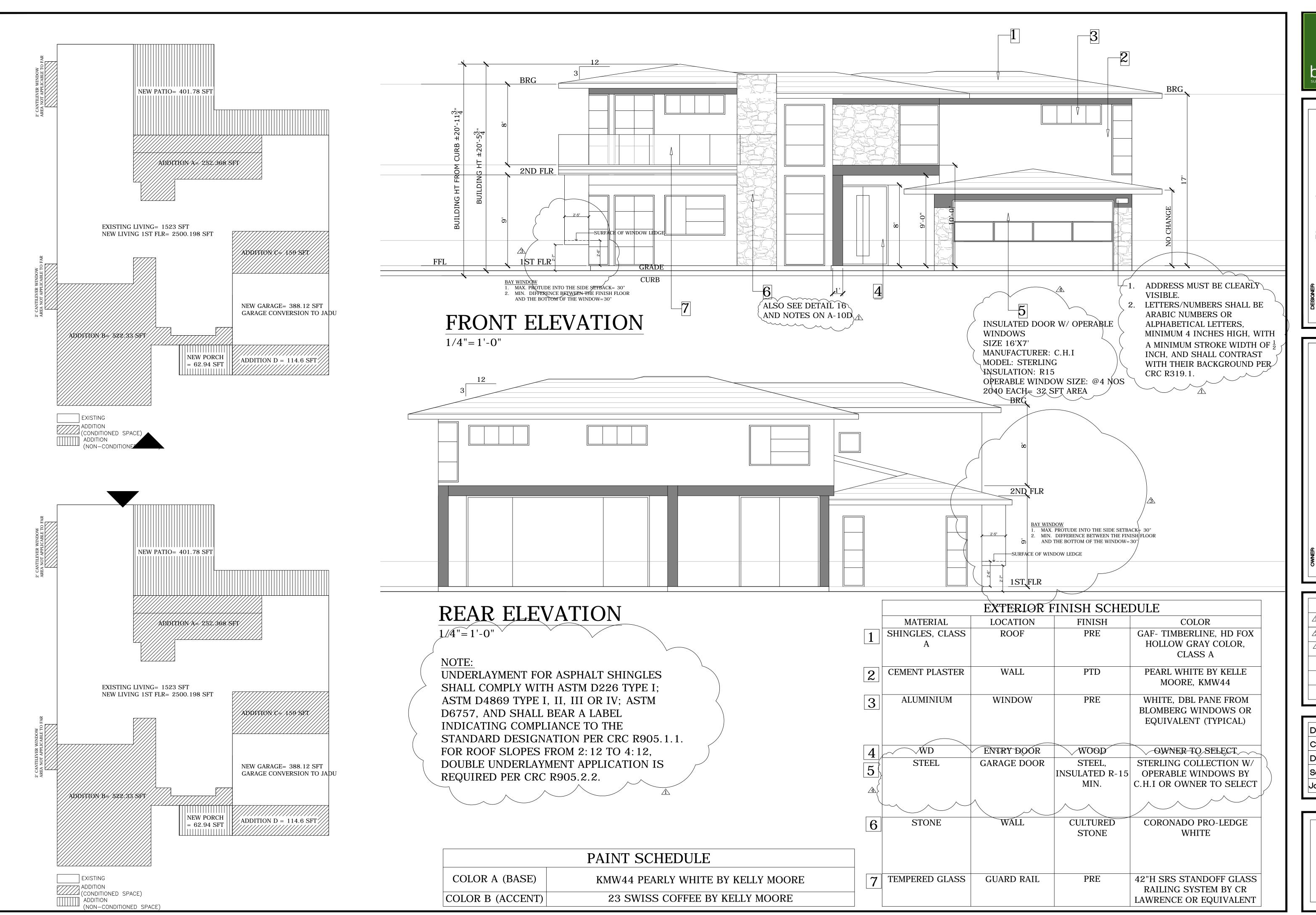
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Sheet



WATER HEATER INSTALLATION (C)

N.T.S





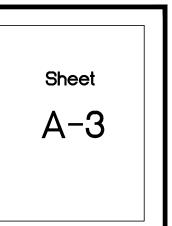
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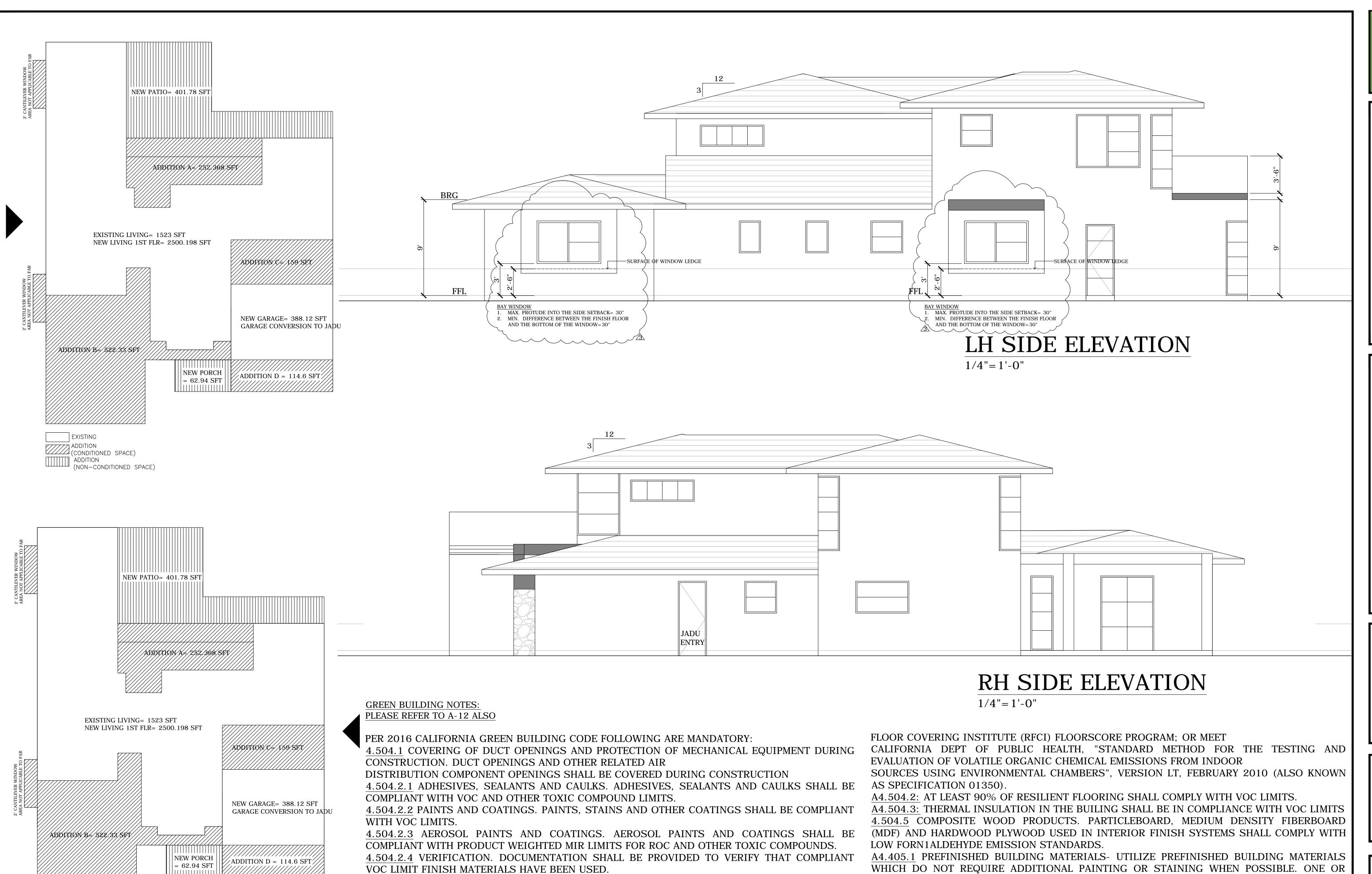
Vani Bahl, Assoc. AIA, LEED AP BD+C
1650 Zanker Rd. Ste 120, San Jose CA 95112
P: 408.621.2091 F: 925.232.6229
E Mail: vani.bahl®gmail.com
www.BhoomaDesign.com

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4.504.3 CARPET SYSTEMS. CARPET AND CARPET SYSTEMS SHALL BE COMPLIANT [8] 0 0 0 WITH

4.504.4 RESILIENT FLOORING SYSTEMS. 80% OF FLOOR AREA RECEIVING RESILIENT FLOORING

SHALL COMPLY WITH THE VOC-EMISSION LIMITS DEFINED IN THE COLLABORATIVE FOR HIGH

PERFORMANCE SCHOOLS (CHPS) HIGH PERFORMANCE PRODUCTS DATABASE OR BE CERTIFIED

VOC LIMITS.

UNDER THE RESILIENT

ADDITION
(CONDITIONED SPACE)

`ADDITION (NON-CONDITIONED SPACE)



Pesigner:

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Vani Bahl, Assoc. AIA, LEED AP BD+C
1650 Zanker Rd. Ste 120, San Jose CA 95112
P: 408.621.2091 F: 925.232.6229
E Mail: vani.bahl®gmail.com

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Sheet A-4

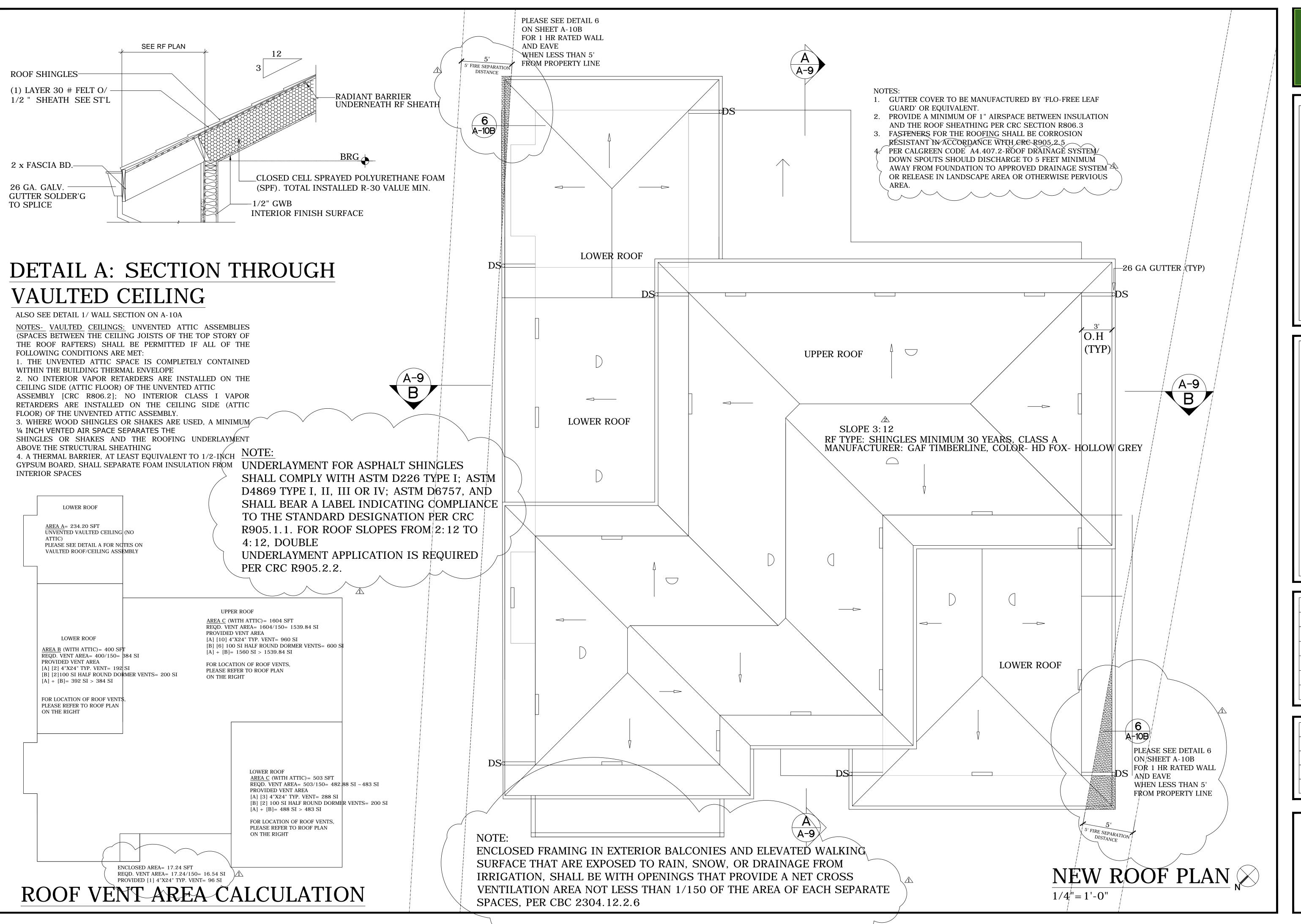
MORE OF THE FOLLOWING BUILDING MATERIALS THAT DO NOT REQUIRE ADDITIONAL

SIDING OR EXTERIOR WALL COVERINGS WHICH DO NOT REQUIRE PAINT OR STAIN.

RESOURCES FOR FINISHING ARE USED:

EXTERIOR TRIM NOT REQUIRING PAINT OR STAIN.

WINDOWS NOT REQUIRING PAINT OR STAIN.





Bhooma Inc.
Vani Bahl, Assoc. AIA, LEED AP BD+C
1650 Zanker Rd. Ste 120, San Jose CA 95112
P: 408.621.2091 F: 925.232.6229
E Mail: vani.bahl®gmail.com

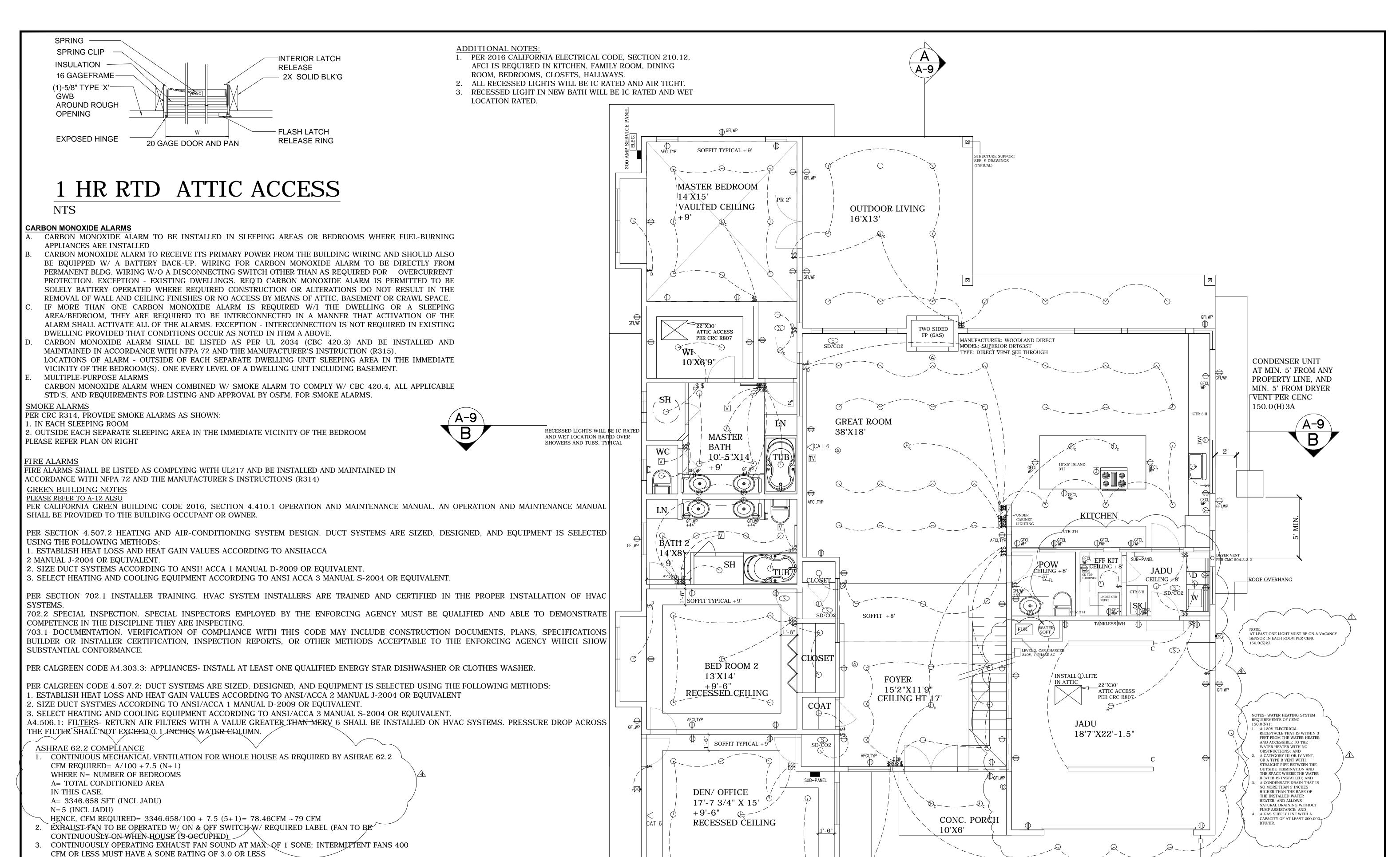
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Sheet A-5



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sustainable building design

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Vani Bahl, Assoc. AIA, LEED AP BD+(
1650 Zanker Rd. Ste 120, San Jose CA 95112
P: 408.621.2091 F: 925.232.6229
E Mail: vani.bahl®gmail.com

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Sheet
A-6A

1ST FLR-REFLECTED CEILING AND ELECTRICAL PLAN

OUTDOOR LIGHTING WILL BE HIGH EFFICACY. LIGHTING

CONTROLLED WITH A MANUAL ON/OFF SWITCH, PLUS AN

(PLEASE REFER TO SHEET A-7 FOR ELECTRICAL/MÉCHÁNICAL SYMBOLS.)

PERMANENTLY MOUNTED TO A BUILDING MUST BE

ASTRONOMICAL TIMECLOCK, OR PHOTOCELL AND MOTION SENSOR, OR PHOTOCELL AND TIME SWITCH

1/4"=1'-0"

OR INTERMITTENTLY. 6"DIA FLEX DUCT W/ MAX LENGTH OF 105 FT AS PER ASHRAE 62.2 TABLW

OPENINGS INTO BLDG

(MERV) 6 FILTERS OR BETTER

LOCAL EXHAUST VENTILATION

DRYER MUST BE VENTED TO THE EXTERIOR.

6. INDOOR AIR QUALITY & MECHANICAL EXHAUST (MANDATORY)

W/ MAX LENGTH OF 55 FT AS PER ASHRAE 62.2 TABLE 7.1

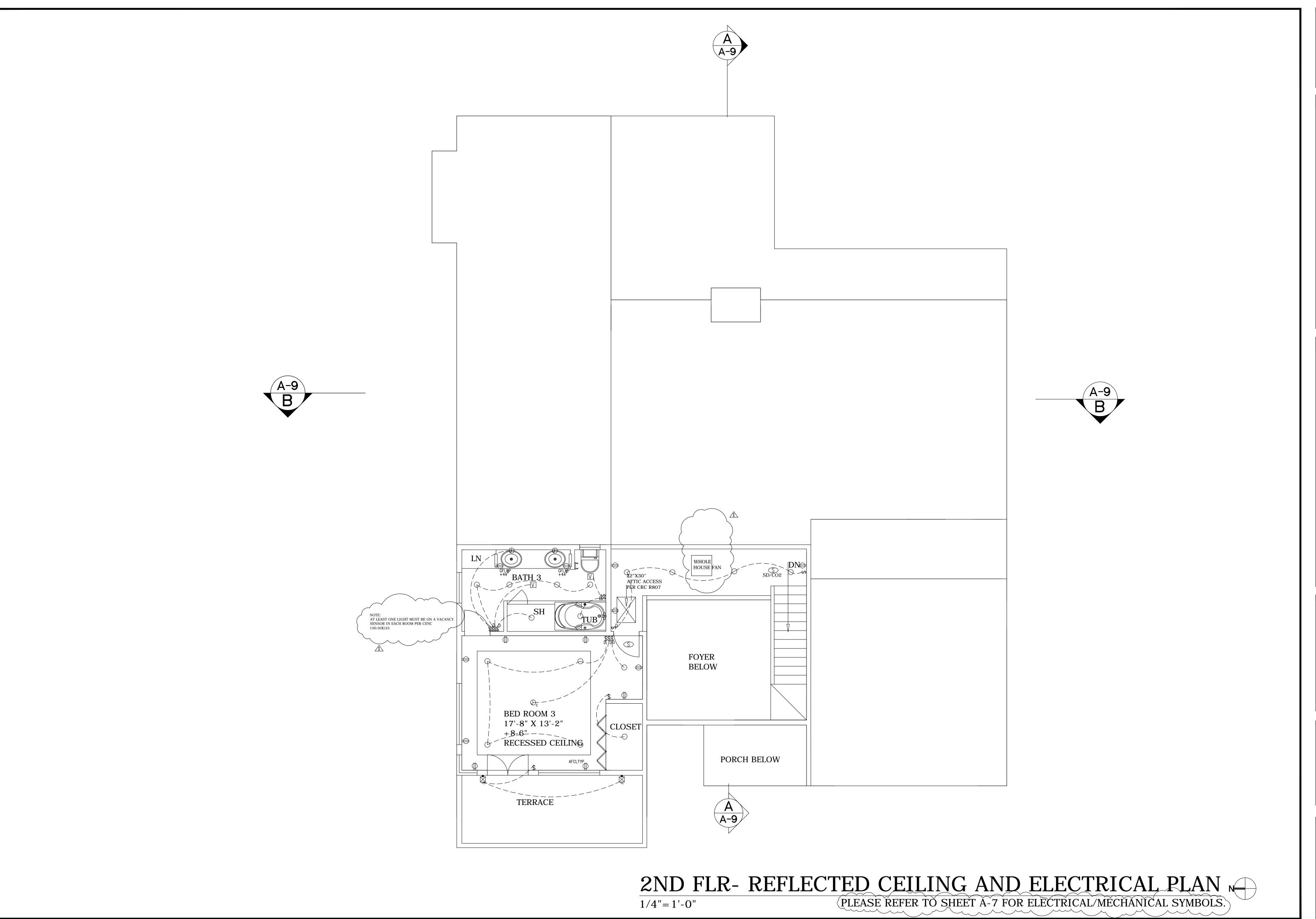
4. DUCT TO BE EQUIPPED W/ BACK DRAFT DAMPER; TERMINATED 3' FROM PL'S AND 3' FROM

MIN. EFFICIENCY REPORTING VALUE FOR VENTILATION OF HEAT'G & AIR CONDITION'G SYSTEMS,

BEDROOMS AND BATH TO HAVE MIN. 50 CFM @0.25 IN W.G. EXHAUST FAN. IT MUST VENT TO

KITCHEN MIN. 100 CFM @ 0.25 IN W.G. EXHAUST FAN TO BE INSTALLED IN RM OR AT RANGE HOOD OVER COOKTOP. IT MUST VENT TO OUTSIDE. EXHAUST FAN MAY OPERATE CONTINUOUSLY

OUTSIDE, EXHAUST FAN MAY OPERATE CONTINUOUSLY OR INTERMITTENTLY. 4"DIA. FLEX DUCT





Bhooma Inc.

Vani Bahl, Assoc. AIA, LEED AP BD+
1650 Zanker Rd. Ste 120, San Jose CA 95112
P: 408.621.2091 F: 925.232.6229
E Mail: vani.bahl@gmail.com

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Sheet
A-6B

LIGHTING & ELECTRICAL SYMBOLS

CAT 6 CABLE

ПР	SURFACE INCANDESCENT LIGHT FIXTURE (P MEANS PENDANT)
\bigcirc_{S}	RECESSED INCANDESCENT LIGHT FIXTURE (S-DENOTES LITE ON SLOPED CLG BY 'LYTECASTER' OF LIGHTOLIER OR EQ.)
	WALL BRACKET NON-HIGH EFFICACY LIGHT FIXTURE, MTD @ +7' UNLESS OTHERWISE NOTED
	WALL BRACKET HIGH EFFICACY LIGHT FIXTURE, MTD @ +7' UNLESS OTHERWISE NOTED
RF	RECESSED FLUORESCENT (HIGH EFFICACY) LIGHT FIXTURE
FS	SURFACE MOUNT FLUORESCENT ILGHT FIXTURE
	RECESSED ADJUSTABLE DOWN LIGHT
- ф-	RECESSED HEAT LAMP
· 	WALL MTD UP & DOWN LIGHT MTD @ +7' UON
$\vdash\Box$	WALL MTD ADDRESS LIGHT (PHOT CELL), 5 WATTS EA. MAX.
•	LANDSCAPE LIGHTING
\$ _{D, MSP,} vs	SINGLE POLE WALL SWITCH, MTD @+48", UON, (D MEANS DIMMER SWITCH; VS MEANS VACANCY SENSOR; MSP MEANS MOTION SENSOR W/ INTEGRAL PHOTO CONTROL AS PER CEC OUTDOOR LIGHTING REQUIREM'TS) VS: SHALL NOT HAVE CONTROL THAT ALLOWS THE LUMINARIES TO BE TRUNED ON AUTOMATICALLY OR THAT HAS AN OVERRIDE ALLOWING THE LUMINARIES TO BE ALWAYS ON.
\$ _{3,4D}	WALL SWITCH, MTD @+48", UON, (3 MEANS 3-WAY, 4 MEANS 4-WAY SWITCH; D MEANS DIMMER SWITCH)
\mapsto	DUPLEX RECEPTACLE, MTD @+12", UON.
\rightleftharpoons	SWITCH RECEPTACLE, MTD @+12", UON. SPLIT WIRE W/ HALF SWITCH CONTROLLED
FL, WH	VENT; FL= FLOURESCENT LIGHT; WH= WHOLE HOUSE
GFI,WP,AFCI	DUPLEX RECEPTACEL; GFI INDICATES GROUND FAULT INTERRUP, REQ'D @WET AREA; WP MEANS WEATHERPROOF; AFCI MEANS ARC-FAULT CIRCUIT-INTERRUPTER
\bowtie	RECEPTACLE 3-POLE, 4-WIRE, 250V, 30A, TWIST LOCK
\mathbb{O}_{c}	JUNCTION BOX, C MEANS CLG LEVEL OTHERWISE WALL LEVEL
B	PUSH BUTTON SWITCH FOR DOORBELL
\bigcirc	DOORBELL
S	SMOKE ALARM - PRIMARY POWER FROM HOUSE WIRING, WIRING SHALL BE PERMANENT & W/O A DISCONNECT'G SWITCH OTHER THAN THOSE REQ'D FOR OVERCURRENT PROTECTION, 120V (INTERNALLY CONNECTED BATTERY BACK UP)
\boxtimes	SMOKE ALARM W/ BUZZER (BATTERY OPERATED)
CM	CARBON MONOXIDE ALARM, CRC 315
\blacksquare	TELEPHONE JACK @ 12", UON.
TV	CABLE T.V. OUTLET
	THERMOSTAT
	SUPPLY AIR REGISTER (CLG MTD)
	RETURN AIR GRILLE (CLG MTD OR WALL MTD)
_	BRANCH CIRCUIT PANEL SURFACED OR RECESSED MTD. (120 /240 V, 1-PHASE, 3W)
41	TRACK LITE
F/MP	F- FLOOD LITE W/ MOTION SENSOR /PHOTOCONTROL W/ LED) TWIN HEAD
W, CLG.	SURFACE WALL/ CLG MTD FLOURESCENT FIXTURE (HIGH EFFICACY LUMINARIE)
	FLOURESCENT LIGHT TUBE (HIGH EFFICACY LUMINARIE)
	PENDENT, ROUND W/ 3-TT COMP, FLOUR, 39W (40772 WH BY LIGHTOLIER, OR EQ.)
> +	LOW VOLTAGE HALOGEN, 40 LUMENS/ WATT. INCLUD'G POWER JACK, STEM, SPOTLIGHT MFG'ED BY 'LIGHTOLIER', MODEL 'FOCAL JACK'
CAT 6	CAT 6 CARLE

RESIDENTIAL LIGHTING: GENERAL NOTES PER 2016 CENC

- 1. PLEASE NOTE THAT ALL LIGHTS THROUGHOUT THE RESIDENCE, INCLUDING THE GARAGE AND EXTERIOR, SHALL BE HIGH EFFICACY PER CENC 150.0(K) 1A.
- 2. AT LEAST ONE LIGHT FIXTURE IN BATHROOMS, GARAGES, LAUNDRY ROOMS, AND UTILITY ROOMS SHALL BE CONTROLLED BY A VACANCY SENSOR PER CENC 150.0(K)2J.
- 3. OUTDOOR LIGHTS MUST BE HIGH EFFICACY AND CONTROLLED BY AN ASTRONOMICAL TIME CLOCK, OR BY AN ENERGY MANAGEMENT CONTROL SYSTEM, OR BY BOTH A MOTION SENSOR AND PHOTOCELL PER CENC 150.0(K)(3).
- 4. ALL RECESSED LIGHTS COMPLY WITH JA8-2016-E PER CENC TABLE 150.0-A #8 AND MUST BE ON A DIMMER OR VACANCY SENSOR PER CENC 150.0. (K) 2.K. SCREW BASES ARE NOT ALLOWED FOR LUMINAIRES RECESSED IN CEILINGS PER CENC 150.0 (K) 1.G.I.
- 5. ALL JA8 LUMINAIRES REQUIRE DIMMERS OR VACANCY SENSORS PER
- CENC 150.0(K)2K.
- 6. INTERNALLY ILLUMINATED ADDRESS SIGNS
 - A. COMPLY WITH CEC SECTION 140.8; OR
 - B. SHALL CONSUME NO MORE THAN FIVE (5) WATTS OF POWER AS DETERMINED ACCORDING TO CEC SECTION 130.0(C).
- 7. RECEPTACLES SHALL BE INSTALLED SO THAT NO POINT ALONG THE FLOOR LINE IN ANY WALL SPACE IS MORE THAN 6 FT. FROM AN OUTLET, INCLUDING ANY WALL SPACE 2 FT. WIDE OR GREATER. NOTE: A FIXED PANEL OF A SLIDING GLASS DOOR IS CONSIDERED WALL SPACE.
- 8. IN KITCHENS, BREAKFAST ROOMS, PANTRIES AND DINING ROOMS A MINIMUM OF 2-20A CIRCUITS SHALL BE PROVIDED. COUNTER SPACE RECEPTACLES SHALL BE GFCI AND INSTALLED: AT EACH WALL COUNTER SPACE THAT IS 12 IN. OR GREATER; NO MORE THAN 48 IN. OC.; MAXIMUM 24 IN. FROM THE END OF THE COUNTER, MAXIMUM 20 IN. ABOVE COUNTER SURFACE, ON ISLAND COUNTER SPACES (ONE RECEPTACLE MIN.) NOT MORE THAN 12 IN. BELOW COUNTER SURFACE;
- 9. ON PENINSULAR COUNTER SPACES (ONE RECEPTACLE MIN.) NOT MORE THAN 12 IN. BELOW COUNTER SURFACE;
- 10. BATHROOMS SHALL HAVE A SEPARATE 20A CIRCUIT WITH AT LEAST ONE GFCI WALL RECEPTACLE WITHIN 36 IN. OF EACH BASIN.
- 11. LAUNDRY ROOMS SHALL HAVE A SEPARATE 20A CIRCUIT WITH AT LEAST ONE RECEPTACLE SHALL BE PROVIDED.
- 12. IN GARAGES, AT LEAST ONE GFCI RECEPTACLE SHALL BE PROVIDED. ALL OTHER GARAGE RECEPTACLES EXCEPT THOSE DEDICATED TO AN APPLIANCE SHALL BE GFCI.
- 13. IN HALLWAYS OF 10 FT. OR MORE IN LENGTH, AT LEAST ONE RECEPTACLE SHALL BE PROVIDED.
- 14. OUTDOOR OUTLETS SHALL BE GFCI. ONE OUTLET SHALL BE INSTALLED AT THE FRONT OF THE DWELLING AND ONE AT THE REAR OF THE DWELLING.
- 15. RECEPTACLES SHALL BE ACCESSIBLE AT GRADE LEVEL AND NOT MORE THAN 6-1/2 FT. ABOVE GRADE.
- 16. ALL RECEPTACLES WITHIN 6 FT. OF A WET BAR SHALL BE GFCI.
- 17. ALL RECEPTACLES ON 15A OR 20A BRANCH CIRCUITS THAT SUPPLY DWELLING UNIT BEDROOM RECEPTACLES SHALL BE PROTECTED BY ARC-FAULT CIRCUIT INTERRUPTERS, INCLUDING SWITCHED OUTLETS.
- 18. ALL RECEPTACLES SERVING APPLIANCES OR MOTORS WITH A RATING OF 1 HP OR 6 AMPS SHALL BE ON A SEPARATE CIRCUIT.
- 19. FOR HVAC EQUIPMENT, A SEPARATE 15A OR 20A CIRCUIT WITH AN ACCESSIBLE RECEPTACLE AT THE EQUIPMENT SHALL BE PROVIDED. IF LOCATED IN AN UNDER-FLOOR AREA, THE RECEPTACLE SHALL BE GFCI.
- 20. LIGHTING INSTALLED IN A CLOSET SHALL BE EITHER A SURFACE MOUNTED OR RECESSED FLUORESCENT FIXTURE OR A SURFACE MOUNTED INCANDESCENT FIXTURE WITH COMPLETELY ENCLOSED LAMPS. SURFACE INCANDESCENT LIGHTING SHALL BE INSTALLED A MINIMUM OF 12 IN. FROM THE NEAREST POINT OF A STORAGE SPACE. SURFACE FLUORESCENT LIGHTING AND RECESSED LIGHTING SHALL BE INSTALLED A MINIMUM OF 6 IN. FROM THE NEAREST POINT OF A STORAGE SPACE.



Hooma Inc.

i Bahl, Assoc. AIA, LEED AP BI
650 Zanker Rd. Ste 120, San Jose CA 95tl
P: 408.621.2091 F: 925.232.6229
E Mail: vani.bahl®gmail.com

ADDITION + REMODEL 22150 CLOVERLY CT OS ALTOS CA 94024

CWNEH;

Revisions	Ву
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Sheet A-7

Recommendations for Luminaire Specific	ations
Luminaire Type	Notes for luminaire schedule
Bath Bar	Bath bar, incandescent lamps, must be controlled by a manual-on occupant sensor per Section 150 (k)
Ceiling fixture (i.e., for a bathroom application)	fluorescent surface-mounted ceiling luminaire, with one F32-T8 fluorescent lamp and electronic ballast, meeting the requirements of Section 150 (k)
Fluorescent Recessed Can (i.e., for a Kitchen application)	fluorescent recessed can, with one 26 watt pin-based compact fluorescent lamp, meeting the electronic ballast, minimum efficacy, IC, and airtight requirements of Section 150 (k)
Incandescent Recessed Can (i.e., for a Kitchen application)	Incandescent recessed can with a maximum relamping wattage of 75 watts, meeting the labeling, IC, and Airtight requirements of Section 150 (k)
Incandescent Recessed Can (i.e., for a Dining Room application)	Incandescent recessed can, meeting the IC, and Airtight requirements of Section 150 (k), and controlled by a dimmer switch meeting the requirements of Section 150 (k)
Chandelier	Chandelier, controlled by a dimmer switch meeting the requirements of Section 150 (k)
Vacancy Sensor (Manual-on Occupant Sensor)	Vacancy sensor meeting the requirements of Sections 119 and 150 (k).

ELECTRICAL CODE

1. ELECTRICAL, LIGHTING & MECHANICAL DEVICES SHOWN ON DRAWINGS INDICATE ARCHITECTURAL DESIGN INTENT ONLY. ELECTRICAL / MECHANICAL SUBCONTRACTOR TO MEET WITH OWNER FOR FINAL APPROVAL AND/OR REVISIONS

2. ALL RESIDENTIAL OCCUPANCIES SHALL BE PROVIDED WITH CALIFORNIA STATE FIRE MARSHAL-LISTED SMOKE DETECTORS. DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE APPROVED MANUFACTURER'S INSTRUCTIONS. POWER SOURCE REQUIRED SMOKE DETECTORS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WHEN SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE AND SHALL BE EQUIPPED WITH A BATTERY BACKUP. THE DETECTOR SHALL EMIT A SIGNAL WHEN THE BATTERIES ARE LOW.

WHEN ACTUATED, THE DETECTOR SHALL SOUND AN ALARM AUDIBLE WITHIN THE SLEEPING AREA OF THE DWELLING UNIT, OR SLEEPING ROOM IN WHICH IT IS LOCATED, WORK TO BE IN ACCORDANCE W/ CBC 907.2.10.1.2, 907.2.10.2 & 907.2.10.3

3. GOUND-FAULT CIRCUIT-INTERRUPTER (CEC 210.8)

SIMILAR ROOMS OR AREAS SHALL BE ARC-FAULT CIRCUIT INTERRUPTER (AFCI) PROTECTED PER CEC 210.12(B)

INSTALL GFCI FOR ALL 125-VOLT, SINGLE-PHASE, 15-&20-AMPERE RECEPTACLES IN THE FOLLOWING LOCATIONS; A. BATHROOMS, B.GARAGES,

C.OUTDOORS, D.CRAWL SPACES, E.UNFINISHED BASEMENTS, F.KITCHENS,

G.LAUNDRY, UTILITY&WET BAR, SINKS WHERE RECEPTACLES ARE W/I 6'

4. ARC-FAULT CIRCUIT-INTERRUPTER AFCI (CEC 210.12)

ALL BRANCH CIRCUITS THAT SUPPLY 120-VOLT, SINGLE PHASE, 15-AND 20- AMPERE OUTLETS INSTALLED IN DWELLING UNIT FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, OR

5. RECEPTACLE OUTLETS (CEC 210.52) & (CEC 406.11)

ALL 125-VOLT, 15 AND 20 AMPERE RECEPTACLE OUTLETS SHALL BE LISTED TAMPER RESISTANT

THEY SHOULD BE INSTALLED IN KITCHEN, FAMILY RM, DINING RM, LIVING RM, PARLOR, LIBRARY, DEN, SUNRM, BEDRM,

RECREATION RM, OR SIMILAR RM OR AREA. THEY SHOULD BE INSTALLED AS PER THE REQUIRMENTS LISTED BELOW; -SAPCING - THEY SHALL BE INSTALLED SO THAT NO POINT MEASURED HORIZONTALLY ALONG THE FLOOR LINE IN ANY WALL SPACE IN MORE THAN 6' FROM AN OUTLET

-WALL SPACE - ANY SPACE 2' OR MORE IN WIDTH (INCLUDING SPACE MEASURED AROUND CORNERES) AND UNBROKEN ALONG THE FLOOR LINE BY DOORWAYS, FIREPLACES

AND SIMILAR OPENINGS

SPACE OCCUPIED BY FIXED PANELS IN EXTERIOR WALLS, EXCLUDING SLIDING PANELS

SPACE AFFORDED BY FIXED RM DIVERS SUCH AS FREESTANDING BAR-TYPE COUNTERS OR RAILINGS

-FLOOR RECEPTACLES - THEY SHALL NOT BE COUNTED AS PART OF THE REQ'D NUMBER OF OUTLETS UNLESS LOCATED W/I 18" OF WALL

TWO(2) OR MORE 20-AMPERE SMALL-APPLIANCE BRANCH CIRCUITS IN KITCHEN, PANTRY, BREAKFAST RM, DINING RM, OR SIMILAR

AREA SHALL SERVE ALL WALL & FLOOR OUTLETS, COUNTERTOP OUTLETS, AND REFRIGERATION OUTLETS

C. COUNTERTOPS i. WALL COUNTERTOP SPACES

OUTLET SHALL BE INSTALLED AT EACH WALL COUNTER SPACE THAT IS 12" OR WIDER. OUTLETS SHALL BE INSTALLED SO THAT

NO POINT ALONG THE WALL LINE IS MORE THAN 24" MEASURED HORIZONTALLY FROM AN OUTLET IN THAT SPACE ii. ISLAND COUNTERTOP SPACE

MIN. ONE(1) OUTLET SHALL BE INSTALLED AT EACH ISLAND COUNTERTOP W/ A LONG DIMENSION OF 24" OR GREATER AND A SHORT DIMENSION OF 12" OR WIDER. WHERE A RANGETOP OR SINK IS

INSTALLED IN AN ISLAND COUNTER AND THE WIDTH OF THE COUNTER BEHIND THE RANGETOP OR SINK IS LESS THEN 12", THE RANGETOP OR SINK IS CONSIDERED TO

DIVIDE THE ISLAND INTO TWO SEPARATE COUNTERTOP SPACES

iii. PENINSULAR COUNTERTOP SPACES

MIN. ONE(1) OUTLET SHALL BE INSTALLED AT EACH COUNTER WITH A LONG DIM. OF 24" OR GREATER AND A SHORT DIM. OF 12" OR GREATER. COUNTETOP IS MEASURED

FROM THE CONNECTING EDGE. iv. SEPARATE SPACE. COUNTERTOP SPACES SEPARATED BY RANGETOPS, REF'S, OR SINKS SHALL BE CONSIDERED AS SEPARATE COUNTERTOP SPACES.

v. OUTLET LOCATION

IT SHALL BE LOCATED ABOVE, BUT NOT MORE THEN 20" ABOVE THE COUNTERTOP

D. BATHROOMS

A DEDICATED 20-AMP CIRCUIT MUST BE INSTALLED. NO OTHER RECEPTCLES, LITES, FANS, ETC TO BE SERVED. EXCEPTION - WHERE THE CIRCUIT SUPPLIES A SINGLE BATHRM, OUTLETS FOR OTHER EQ. W/I THE SAME BATHRM SHALL BE PERMITTED TO BE SUPPLIED AS PER CEC210.11(C)(3) & 210.52(D)

OUTLET SHALL BE INSTALLED W/I 3' OF THE OUTSIDE EDGE OF EACH BASIN

E. OUTDOOR OUTLETS

MIN. ONE(1) ACCESSIBLE AT GRADE LEVEL AND NOT MORE THAN 6.5' ABOVE GRADE SHALL BE INSTALLED AT THE FRONT AND BACK OF THE DWELLING

F. LAUNDRY AREA

INSTALL ONE 20-AMP BRANCH CIRCUIT AS PER CEC 210.11(C)(2) & 210.52(F). THIS CIRCUIT SHALL HAVE NO OTHER OUTLETS.

G. BASEMENTS & GARAGES

MIN. ONE(1) OUTLET IN ADDITION TO PROVIDED FOR SPECIFIC EQ. SHALL BE INSTALLED.

H. HALLWAYS

10' OR MORE IN LENGTH SHALL HAVE AT LEAST ONE(1) OUTLET. HALL LENGTH SHALL BE CONSIDERED THE LENGTH ALONG THE

CENTERLINE OF THE HALL W/O

PASSING THRU. A DOORWAY

J. HEATING, AIR-CONDITIONING & REFRIGERATION EQ. OUTLET

A 125-VOLT, SINGLE-PHASSE, 15- OR 20- AMPERE-RATED OUTLET SHALL BE INSTALLED AT AN ACCESSIBLE LOCATION FOR THE SERVICING OF HEATING,

AIR-CONDITIONING, AND REFRIGERATION EQ. IT SHALL BE LOCATED ON THE SAME LEVEL AND W/I 25' OF THE EQ.

6. LUMINARIRES IN CLOTHES CLOSET (CEC 410.8) A. CLOSET SPACE DEFINITION REF TO FCG 410.8.

B. TYPES PERMITTED

SURFACE-MTD OR RECESSED INCANDESCENT LUMINAIRE W/ A COMPLETELY ENCLOSED LAMP

SURFACE-MTD OR RECESSED FLUORESCENT LUMINIARE

C. LOCATION

DIM'S LISTED BELOW SHALL BE MIN. BETWEEN LUMINAIRE AND THE NEAREST POINT OF A STORAGE SPACE

SURFACE-MTD INSANDESCENT 12"

SURFACE-MTD FLUORSCENT RECESSED INCANDESCENT

RECESSED FLUORSCENT

7. INDOOR SPA/ JACUZZI TYPE TUBS SHALL MEET THE FOLLOWING REQUIREMENTS: (CBC 680.40 & CEC 680.43)

A. ALL ELECTRIC SPA OR HOT TUB WATER HEATERS SHALL BE LISTED.

B. PROVIDE ACCESS TO HYDROMASSAGE TUB MOTOR AND JUNCTION BOX BY AN ACCESS PANEL

C. ALL RECEPTACLES LOCATED WITHIN 10 FEET OF THE INSIDE WALLS OF A SPA/HOT TUB SHALL BE PROTECTED BY A GROUND-FAULT CIRCUIT-INTERRUPTER.

D. ALL LIGHTING FIXTURES AND LIGHTING OUTLETS OVER THE SPA OR WITHIN 5 FEET OF THE

INSIDE WALLS SHALL BE A MINIMUM OF 8'-0" ABOVE THE MAXIMUM WATER LEVEL AND

SHALL BE PROTECTED BY A GROUND-FAULT CIRCUIT-INTERRUPTER.

E. HYDROMASSAGE TUB CONTROLS AND WALL SWITCHES SHALL BE LOCATED A MINIMUM OF 5 FEET FROM THE TUB.

F. RECEPTACLES THAT PROVIDE POWER FOR A SPA/JACUZZI TUB OR HOT TUB SHALL BE GROUND FAULT CIRCUIT-INTERRUPTER

8. LIGHTS OVER SHOWER&TUBS CONFORM TO CEC 410.4 (A) & (D) SUITABLE FOR DAMP LOCATIONS

9. INSTALL AIR TIGHT IC (INSULATED CEILING) RATED FRAME-IN KITS WHEN RECESSED LIGHT IS IN CONTACT W/ INSULATIONPER CEC STD 150

10. KIT HOOD/DUCT TO BE DESIGN / BUILD

11. INSTALL SEAT BOX FOR CLG AS REQ'D, SEAT BOX FB45 OR FB90 MFG'ED BY 'ARLINGTON INDUSTRIES' @ 800-233-4717

12. INSTALLATION OF ELECTRICAL BOXES TO COMPLY W/ CBC 712.3.2 (MEMBERANE PENETRATION) IF AT FIRE WALL.

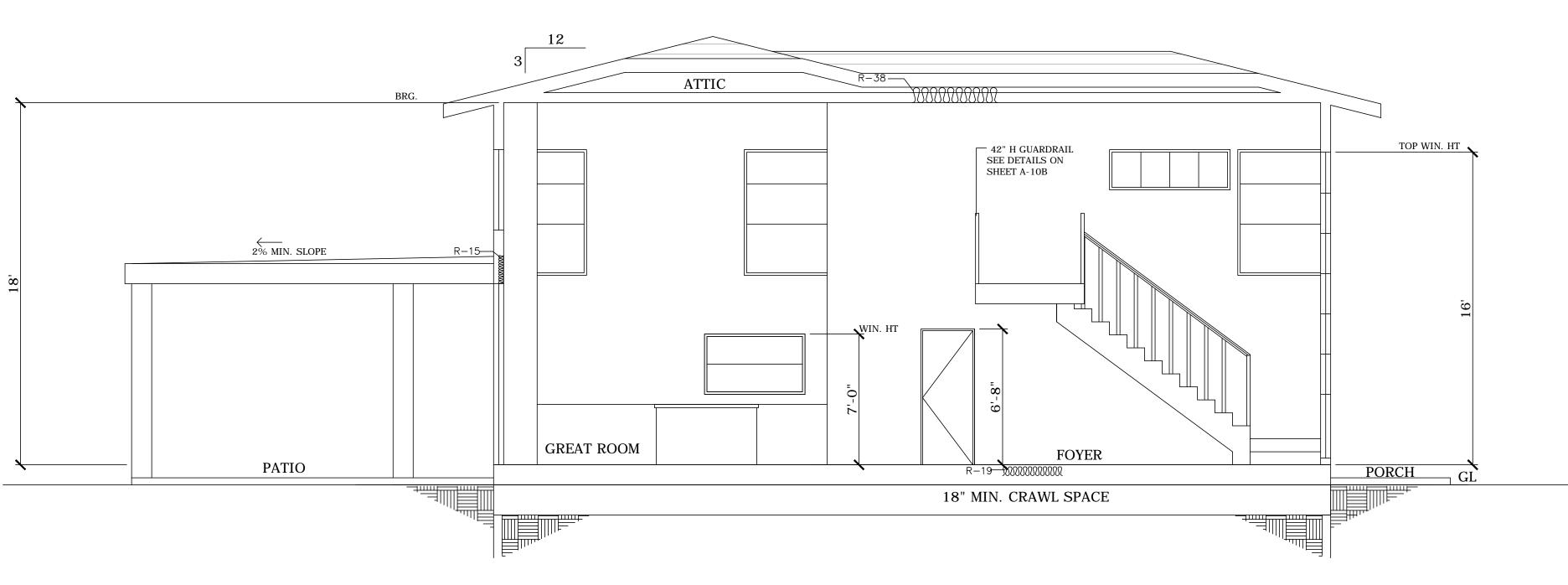


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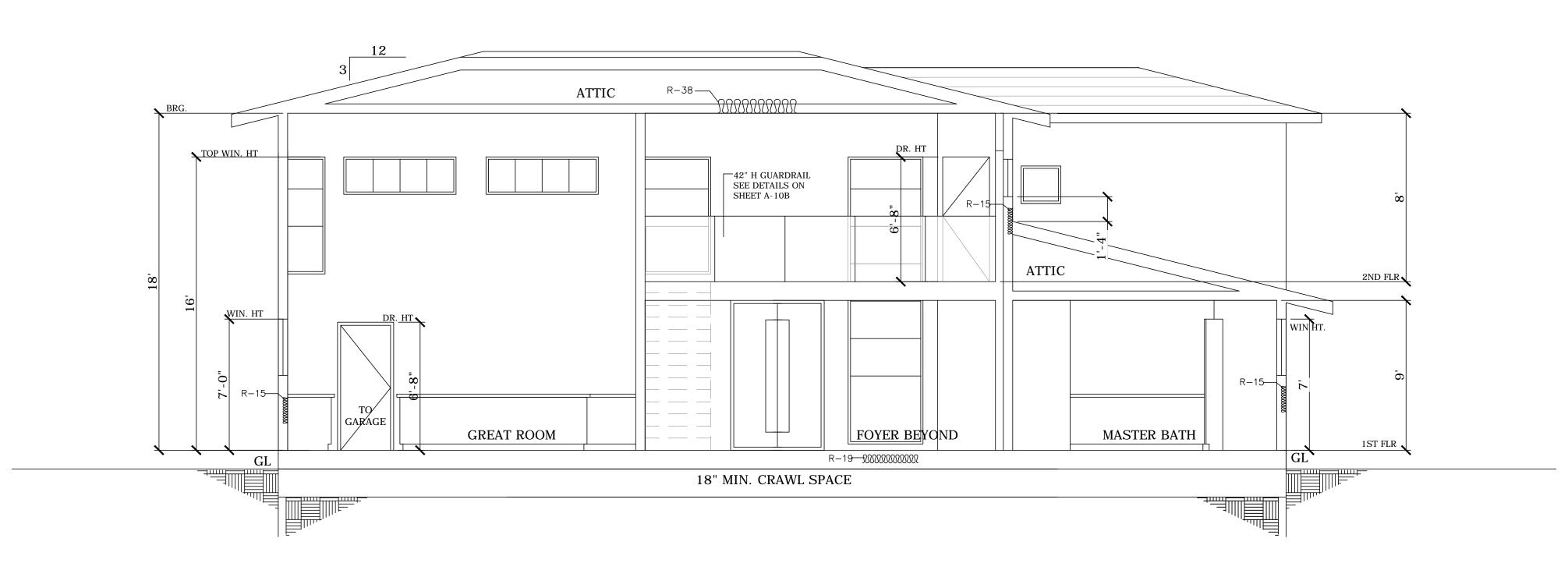
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SECTION AA

1/4"=1'-0"



SECTION BB

1/4"=1'-0"

Bhooma Inc.
Vani Bahl, Assoc. AIA, LEED AP BD
1650 Zanker Rd. Ste 120, San Jose CA 95112
P: 408.621.2091 F: 925.232.6229
E Mail: vani.bahl®gmail.com
www.BhoomaDesign.com

UMA AND SATISH
ADDITION + REMODEL
22150 CLOVERLY CT
LOS ALTOS CA 94024

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Sheet A-9

NOTE:

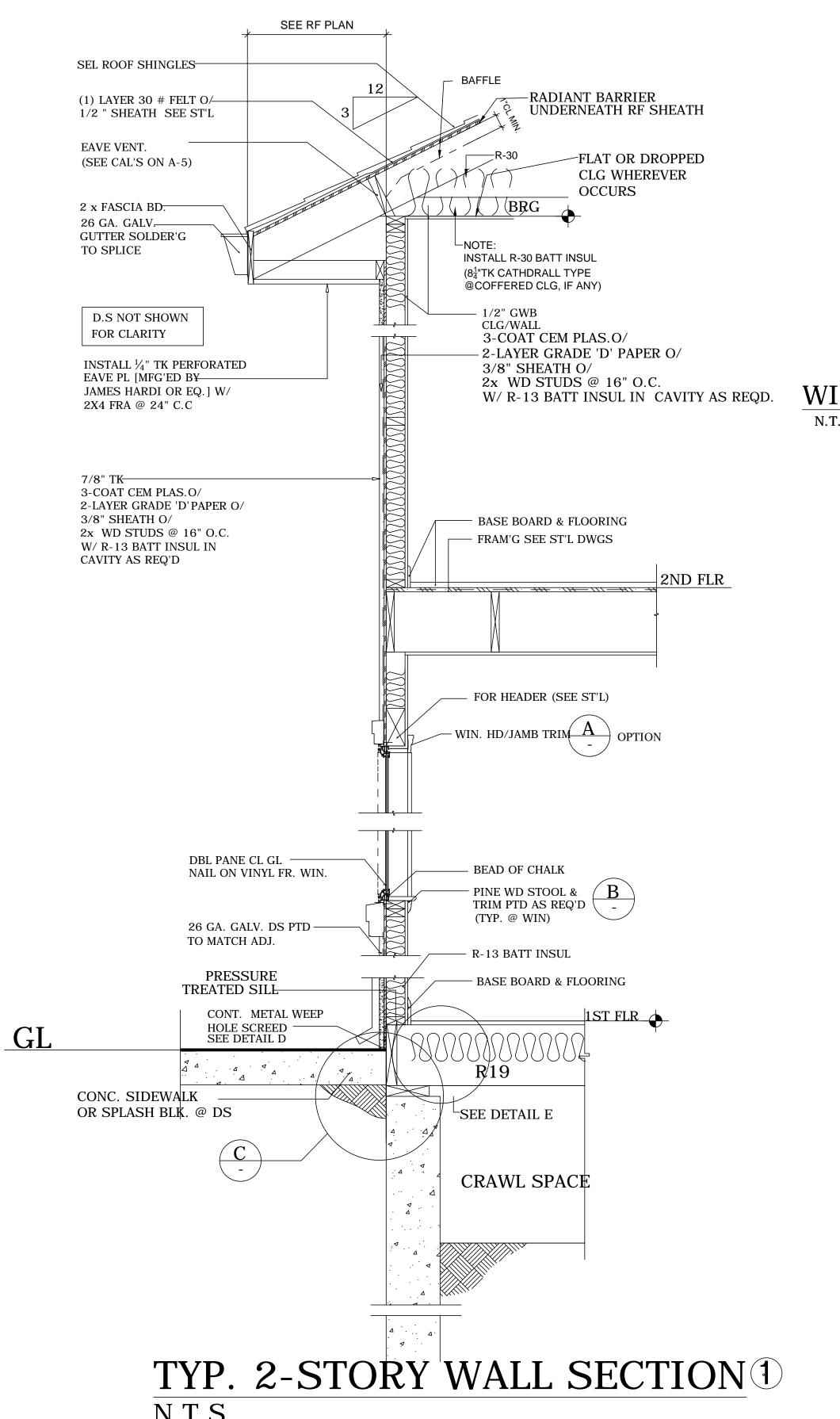
PROVIDE FIRE BLOCKING TO CUT OFF ALL CONCEALED DRAFT OPENINGS (VERTICAL AND HORIZONTAL) TO FORM AN EFFECTIVE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND THE ROOF SPACE, PER CRC R302.11

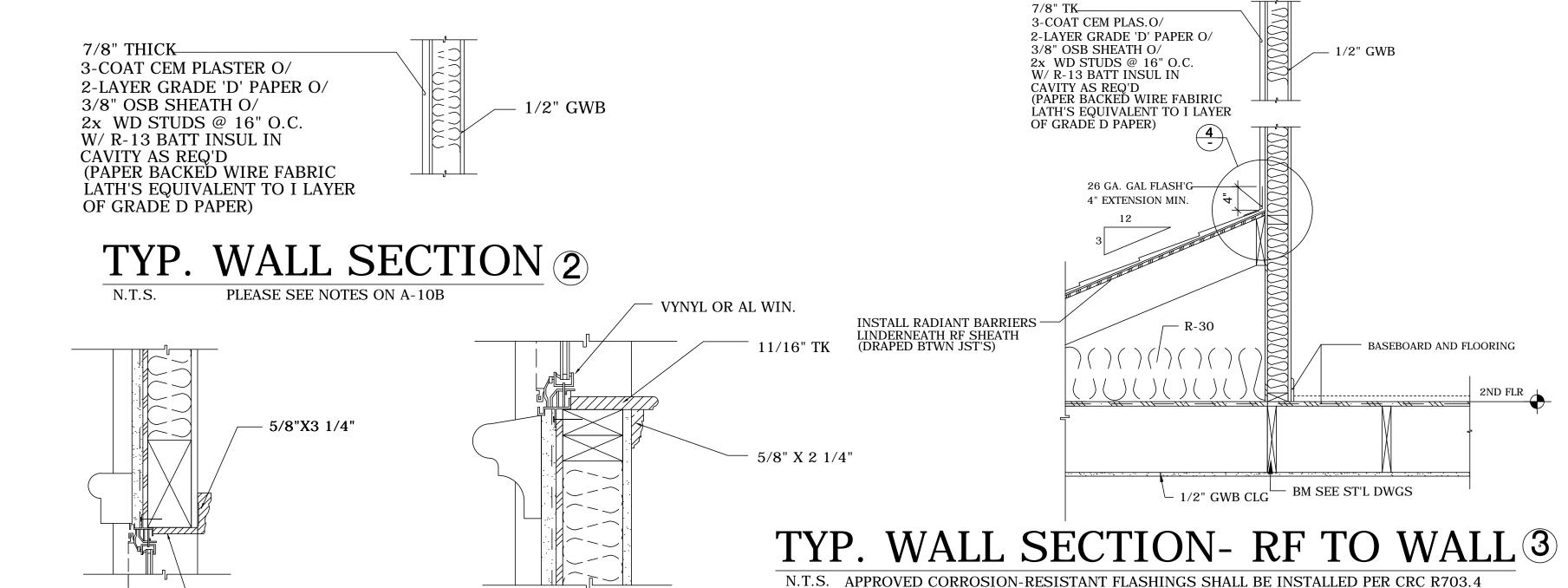
GREEN BUILDING NOTES: PLEASE REFER TO A-12 ALSO

TELNOL REPERTOR TE MESO

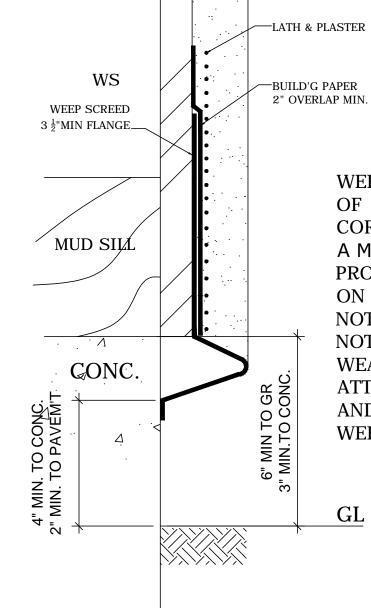
PER 2016 CALIFORNIA GREEN BUILDING CODE, SECTION 4.505.2 CONCRETE SLAB FOUNDATIONS. VAPOR RETARDER AND CAPILLARY BREAK IS INSTALLED AT SLAB-ON-GRADE FOUNDATIONS.

4.503.3 MOISTURE CONTENT OF BUILDING MATERIALS. MOISTURE CONTENT OF BUILDING MATERIALS USED IN WALL AND FLOOR FRAMING IS CHECKED BEFORE ENCLOSURE.





WIN HD/JAMB TRIM PROFLIE WIN SILL TRIM PROFILE N.T.S. (OPTION)



- 11/16" FLAT

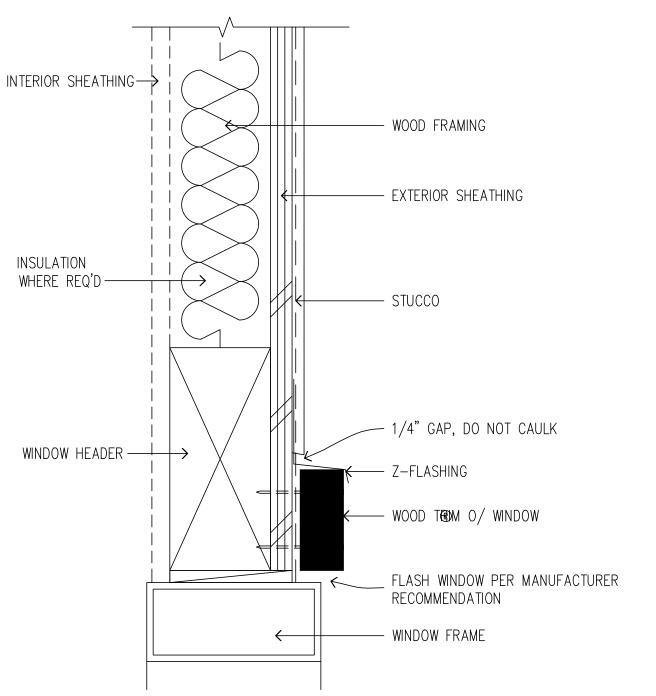
WEEP SCREEDS SHALL BE A MINIMUM OF 0.019" (NO. 26 GALVANIZED) AND CORROSION-RESISTANT OR PLASTIC. THEY SHALL HAVE A MINIMUM VERTICAL FLANGE OF 3-1/2" WHICH SHALL BE PROVIDED AT OR BELOW THE FOUNDATION PLATE LINE ON EXTERIOR STUD WALLS. THE WEEP SCREED SHALL NOT BE PLACED LESS THAN 4" ABOVE THE EARTH AND NOT LESS THAN 2" ABOVE PAVED AREAS. THE WEATHER-RESISTIVE BARRIER SHALL LAP THE ATTACHMENT FLANGE. THE EXTERIOR LATH SHALL COVER AND TERMINATE ON THE ATTACHMENT FLANGE OF THE WEEP SCREED (CRC R703.7.2.1, CBC 2512.1.2)

DETAIL (D) N.T.S. 1'-10\frac{1}{2}"

(3)3"DIA BORED HOLE

ATTIC VENT HOLE

RF VS. WALL4



DETAIL: FLASH'G O/ WIN WOD TRIM



Bhooma Inc.
Vani Bahl, Assoc. AIA, LEED AP BD+C
1650 Zanker Rd. Ste 120, San Jose CA 95112
P: 408.621.2091 F: 925.232.6229
E Mail: vani.bahl®gmail.com
www.BhoomaDesign.com

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LOS ALTOS CA 94024

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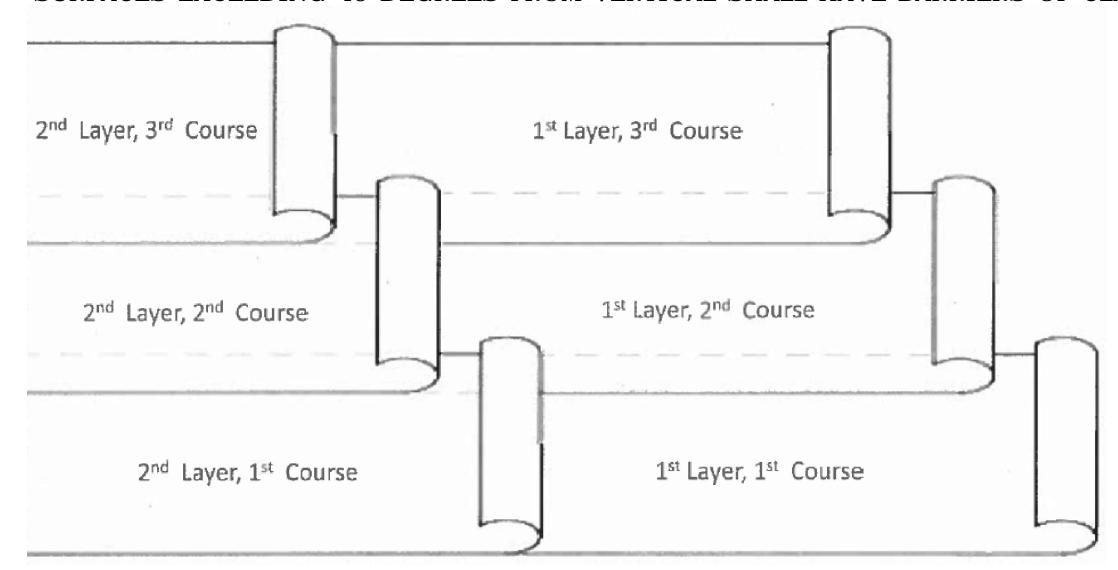
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Sheet
A-10A

NOTES: WEATHER RESISTANT EXTERIOR WALL TO COMPLY WITH CRC R703 ALSO SEE WINDOW FLASHING DETAIL 14 ON SHEET A-10D

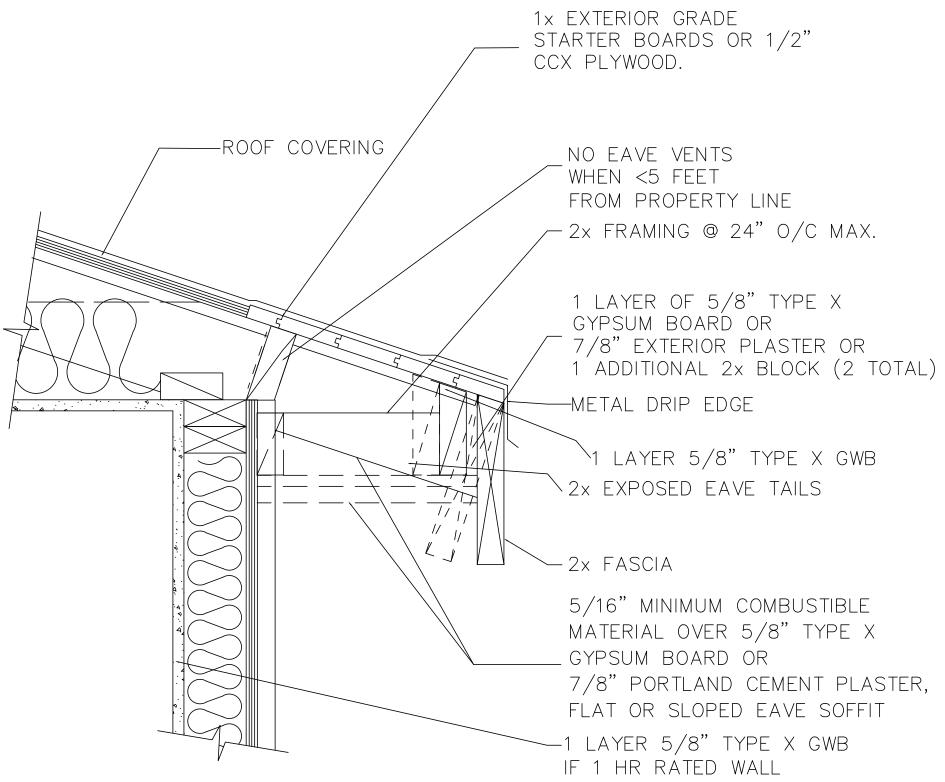
WEATHER PROTECTION

- 1. ALL PENETRATIONS MUST BE CAULKED OR WATERPROOFED AND ALL PAPER DAMAGED OR TORN SHALL BE REPLACED WITH NEW OR SEALED AS REQUIRED, INCLUDING BEING FREE FROM HOLES AND BREAKS (OTHER THAN THOSE CREATED BY FASTENERS). (CRC R703.2)
- 2. WATER-RESISTIVE BARRIERS SHALL BE APPLIED OVER STUDS OR SHEATHING AND PROVIDE SUFFICIENT RIGIDITY TO PERMIT PLASTER APPLICATIONS. (CRC R703.2, CBC 2510.5)
- 3. THE FELT OR MATERIAL SHALL BE APPLIED HORIZONTALLY, WITH THE UPPER LAPPED OVER THE LOWER LAYER NOT LESS THAN 2". WHERE JOINTS OCCUR, FELT SHALL BE LAPPED NOT LESS THAN 6". (CRC R703.2
- 4. WATER-RESISTIVE BARRIERS SHALL BE VAPOR-PERMEABLE BARRIERS WITH A PERFORMANCE OF AT LEAST TWO LAYERS OF GRADE D PAPER. THE INDIVIDUAL LAYERS SHALL BE INSTALLED INDEPENDENTLY SUCH THAT EACH LAYER PROVIDES A SEPARATE CONTINUOUS PLANE AND ANY FLASHING INTENDED TO DRAIN TO THE WATER-RESISTIVE BARRIER IS DIRECTED BETWEEN THE LAYERS (SEE FIGURE CPA 056). (CRC R703.7.3, CBC 2510.6) EXCEPTION: WHEN THE WATER-RESISTIVE BARRIER (E.G., GRADE D PAPER) IS SEPARATE FROM THE STUCCO BY AN INTERVENING, SUBSTANTIALLY NONWATER-ABSORBING LAYER (E.G. TYVEK) OR DESIGNED DRAINAGE SPACE.
- 5. SURFACES EXCEEDING 45 DEGREES FROM VERTICAL SHALL HAVE BARRIERS OF CLASS B OR



LATH:

- 1. LATH AND LATH ATTACHMENTS SHALL BE OF CORROSION-RESISTANT MATERIALS AND SHALL BE ATTACHED WITH 1-1/2" LONG, 11 GAGE NAILS HAVING A 7/16" HEAD. ALTERNATIVELY, 7/8", 16 GAGE STAPLES, SPACED NOT MORE THAN 6" (OR AS OTHERWISE APPROVED) CAN BE USED. (CRC R703.7.1, CBC 2510.4)
- 2. FASTENERS TO WOOD SHALL BE SPACED NO LESS THAN 6" VERTICALLY AND 16" HORIZONTALLY; STAPLES SHALL BE SPACED AT 8" ON CENTER WHEN USING SELF-FURRING LATH ONLY.
- 3. METAL LATH SHALL BE APPLIED WITH THE LONG DIMENSION OF THE SHEETS PERPENDICULAR TO SUPPORTS, AND SHALL NOT BE LAPPED LESS THAN 1/2" AT SIDES AND 1" AT ENDS. WIRE LATH SHALL NOT BE LAPPED LESS THAN ONE MESH AT SIDES AND ENDS, BUT NOT LESS THAN 1"; OVERLAP AROUND CORNERS 12".
- 4. METAL AND WIRE LATH SHALL BE FURRED OUT AWAY FROM VERTICAL SUPPORTS AT LEAST 1/4"; SELF-FURRING LATH SHALL MEET FURRING REQUIREMENTS.
- 5. ON OVERHANGS (E.G., PORCH), VERIFY THAT THERE IS PROPER VENTING.
- 6. WHERE NO EXTERNAL CORNER REINFORCEMENT IS USED, LATH SHALL BE FURRED OUT AND CARRIED AROUND CORNERS AT LEAST ONE SUPPORT ON FRAME CONSTRUCTION.
- 7. ALL FLASHINGS, INCLUDING FOUNDATION VENTS AT BUILDING PERIMETER, MUST BE IN PLACE, HAVING EXTERIOR LATH OVER VENT FLANGE RESULTING IN WEATHER-TIGHT CONSTRUCTION.
- 8. IF PLASTERING WITH PORTLAND CEMENT PLASTER, THE PLASTER SHALL NOT BE LESS THAN THREE COATS WHERE APPLIED OVER METAL LATH AND NOT LESS THAN TWO COATS WHERE APPLIED OVER: MASONRY, CONCRETE, PRESSURE-TREATED WOOD OR DECAY-RESISTANT WOOD, AND GYPSUM BOARD. (CRC R703.7.2, CBC 2512.1)

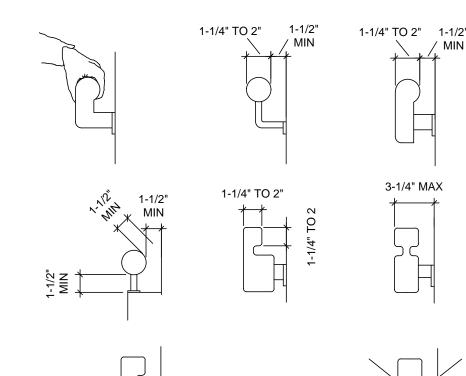


NOTE: ALL JOINTS MUST BE TIGHT FITTING AND CAULKED

NOTES: 1. GUARDRAIL AT STAIRCASE AND TERRAE IS MINIMUM HEIGHT OF 42 INCHES WITH INTERMEDIATE RAILS SPACED SUCH THAT A SPHERE 4 INCHES IN DIAMETER CANNOT PASS THROUGH. CRC R312.1 AND R312.2. 2. GUARD CONSTRUCTION SHALL BE CAPABLE OF RESISTING A 200 POUND LOAD APPLIED IN ANY DIRECTION AT ANY POINT ALONG THE TOP RAIL (SHOW MEMBER SIZES, CONNECTIONS, ETC.) PER CRC TABLE R301.5 3. CONTRACTOR TO PROVIDE SHOP DRAWINGS BEFORE BUILD TO INCLUDE SUPPORT'G STRUCT CAPABLE OF WITHSTANDING A LOAD OF AT LEAST 200 LBS. SEL. STOP RAIL SEE DET 8 AND 9 BELOW (SHEET A-10B) SEL. OPEN BALUSTER GAP IN-BTWN DIM SEE DETAIL 10 AND 11 BELOW (SHEET A-10B) RAIL FLOOR CONN. REF TO NOTES BELOW UPPER LEVEL

1 HR-FIRE RTD WALL & EAVE 6

USED ONLY WHEN < 5 FEET FROM PROPERTY LINE

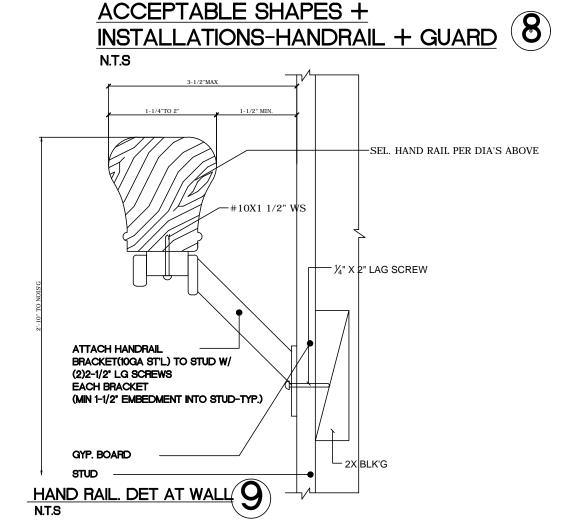


NOT ACCEPTABLE

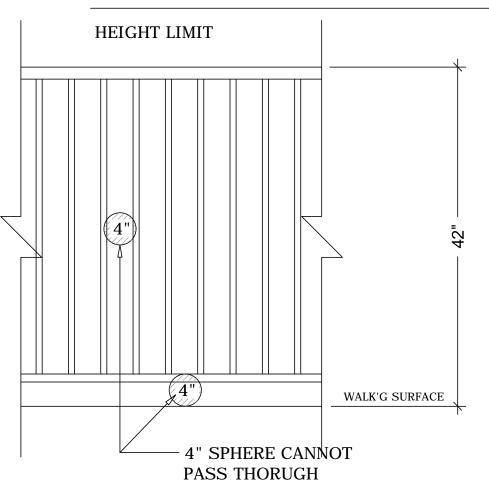
RACTOR SHALL SUBMIT SHOP DWG'S TO INCLUDE

ORT'G STRUCT CAPABLE OF WITHSTANDING A LOAD OF AST 200 LBS. APPLIED IN ABOVE ANY DIRECTION @

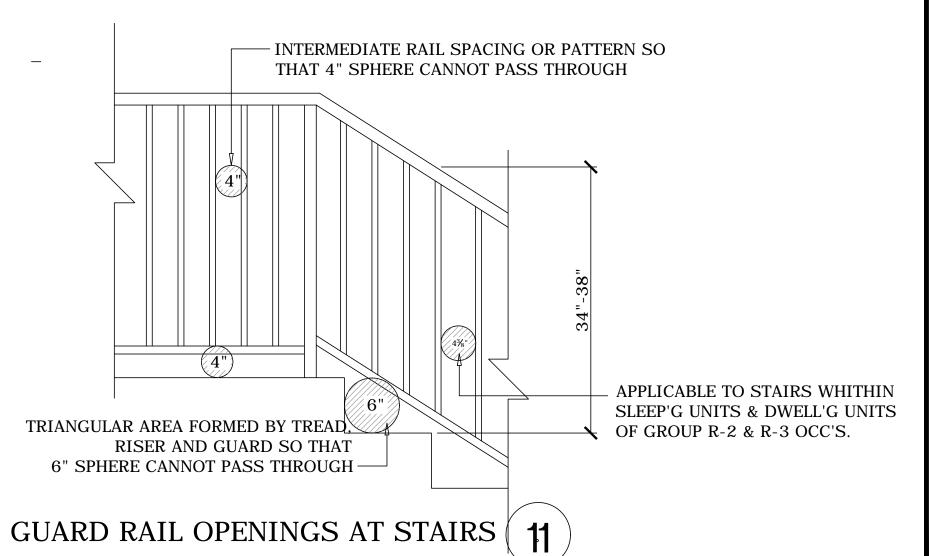
ANY PT ON HR OR GUARD AS PER CRC 301.5



INTERIOR GUARD RAIL 7



GUARD RAIL OPENING LIMITATIONS 10





DESIGNER:

Bhooma Inc.

Vani Bahl, Assoc. AIA, LEED AP BD+C
1650 Zanker Rd. Ste 120, San Jose CA 95112
P: 408.621.2091 F: 925.232.6229
E Mail: vani.bahl®gmail.com
www.BhoomaDesign.com

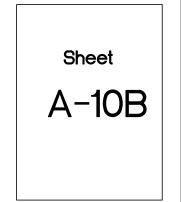
ADDITION + REMODEL
22150 CLOVERLY CT
LOS ALTOS CA 94024

Revisions By

CITY COMMENTS VB

3.7.2019

Drawn VB
Check VB
Date 7/15/18
Scale AS-NOTED
Job No. 2018-6





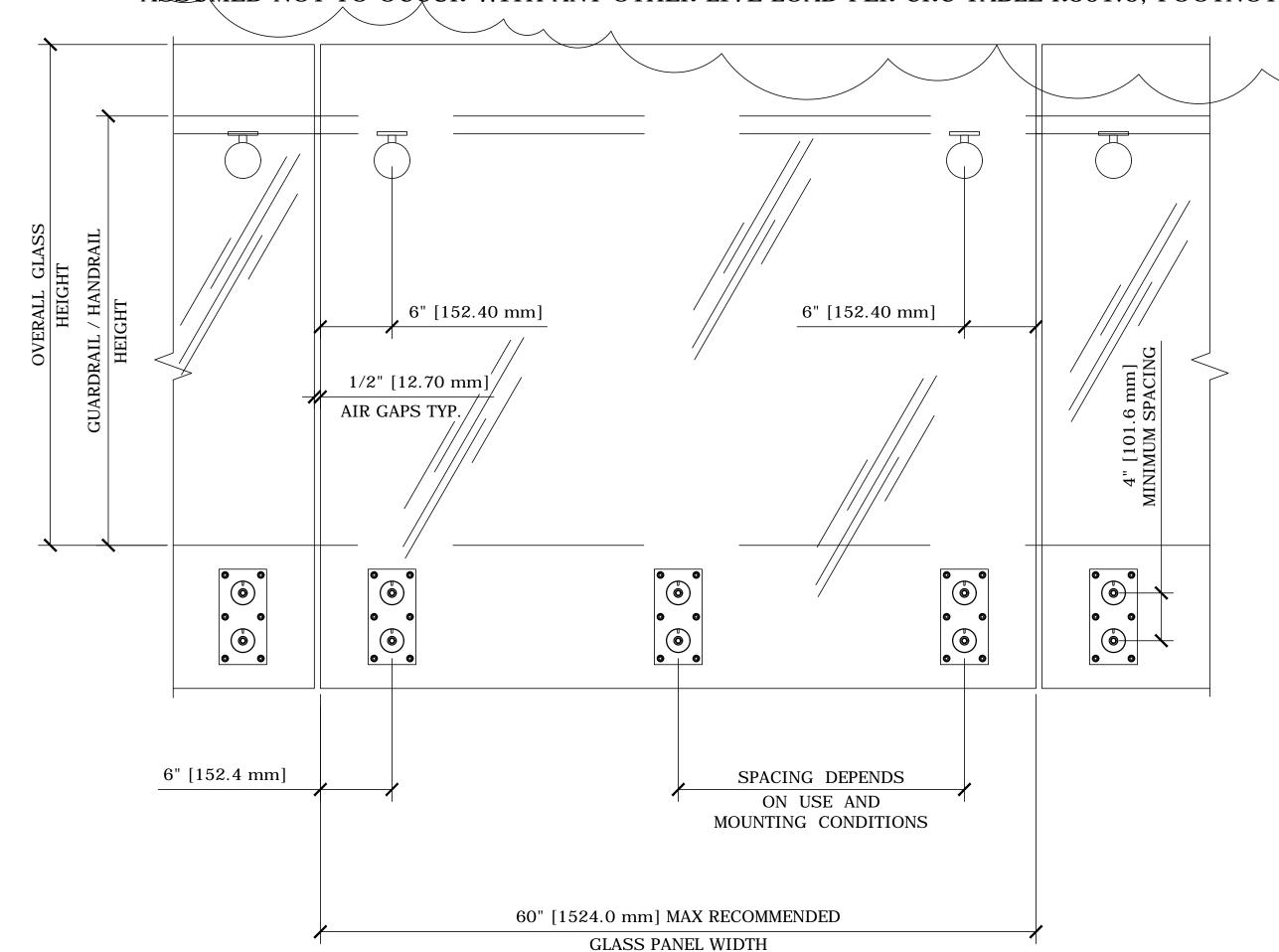
MANUFACTURER DETAILS: CRL SRS STANDOFF RAILING SYSTEM

CRL GLASS RAIL STANDOFF FITTINGS RS0B20 w/ RECTANGULAR BACK PLATE

CRL'S GLASS RAIL STANDOFF FITTINGS CAN BE USED FOR MOUNTING GLASS PANELS UP TO 3/4" (19 MM) IN THICKNESS. THE 4" X 8" (102 X 203 MM) STAINLESS STEEL BACK PLATE GIVES THE INSTALLER MORE ADJUSTMENT AND SIX ANCHOR POINTS DURING THE INSTALLATION FOR ALL KINDS OF MOUNTING CONDITIONS. THIS BACK PLATE CAN BE FASTENED DIRECTLY TO STEEL, WOOD, OR CONCRETE SUBSTRATES AND SHIMMED AS REQUIRED WITH BLOCKING. THIS VERSATILE STANDOFF FITTING FEATURES TWO 2" (51 MM) DIAMETER CAPS WITH THREADED 3/8" - 16 THREADED STAINLESS STEEL RODS TO SECURE THE GLASS PANEL. THE 2" (51 MM) DIAMETER STANDOFFS ARE MECHANICALLY FASTENED TO A 3/8" (9.5 MM) THICK 316 GRADE STAINLESS STEEL BACK PLATE THAT IS PRE-DRILLED FOR MOUNTING.

- * COMPLETE WITH MOUNTING PLATE
- * FOR USE WITH 1/2" AND 3/4" (12 AND 19 mm) TEMPERED MONOLITHIC GLASS APPLICATIONS OR 9/16" & 27/32" (13.52 & 21.52 MM) LAMINATED GLASS USING DU PONT SENTRYGLAS INTERLAYERS
- * BRUSHED OR POLISHED 316 GRADE STAINLESS FINISHES AVAILABLE
- * DESIGNED FOR STEEL, WOOD, OR CONCRETE MOUNTING ATTACHMENT

- GLAZING CONTRACTOR TO WORK WITH MANUFACTURER TO GET WET STAMPED CALCULATIONS FOR APPROVAL BEFORE BUILD.
- GLAZING IN GUARDS AND RAILINGS MUST ALWAYS BE PROTECTED WITH SAFETY GLASS (TEMPERED) PER CRC R308.4.4. GLAZING USED IN HANDRAIL ASSEMBLIES AND GUARDS SHALL BE DESIGNED WITH A SAFETY FACTOR OF
- THE SAFETY FACTOR SHALL BE APPLIED TO EACH OF THE CONCENTRATED LOADS APPLIED TO THE TOP OF THE RAIL, AND TO THE LOAD ON THE INFILL COMPONENTS. THESE LOADS SHALL BE DETERMINED INDEPENDENT OF ONE ANOTHER, AND LOADS ARE ASSUMED NOT TO OCCUR WITH ANY OTHER LIVE LOAD PER CRC TABLE R301.5, FOOTNOTE H.



TYPICAL STANDOFF GLASS RAIL ELEVATION

RS0B20 WITH RECTANGULAR BACK PLATE 1 1/2" = 1'-0" TYPICAL SECTION

1 1/2" = 1'-0"

DETAIL: EXTERIOR GUARD RAIL (2) ALSO SEE ELEVATION SPECS AT A-3

DETAIL: INTERIOR GUARD RAIL (OPTION 2) (3) ALSO SEE DETAILS 7-11 ON SHEET A-10B

SPACING DEPENDS

ON USE AND

1 1/2" = 1'-0"

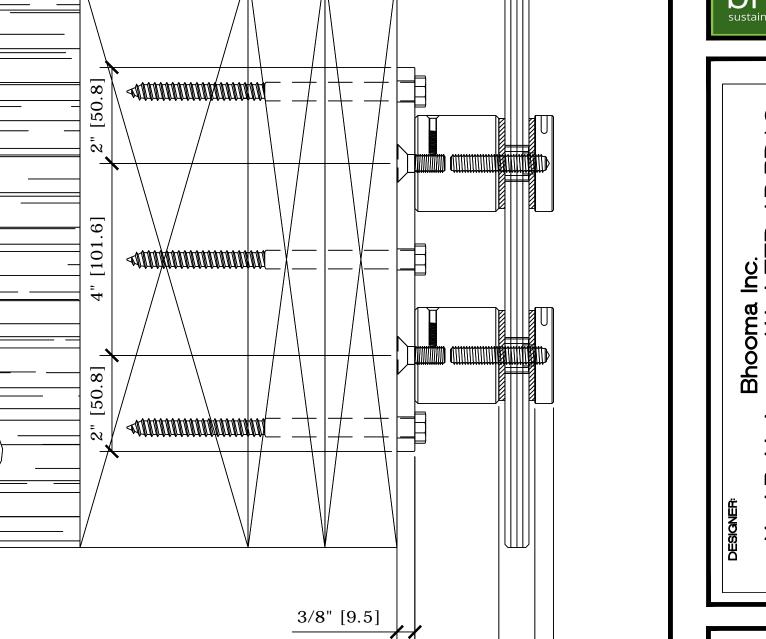
36" [914.4 mm] NDARD HANDRAIL HEIG

0

6" [152.4 mm]

AIR GAPS TYP

TYPICAL ELEVATION @ STAIRS



1 3/4" [44.5]

TYPICAL FASCIA MOUNT DETAIL

6" [152.4 mm]

0

6" [152.4 mm]

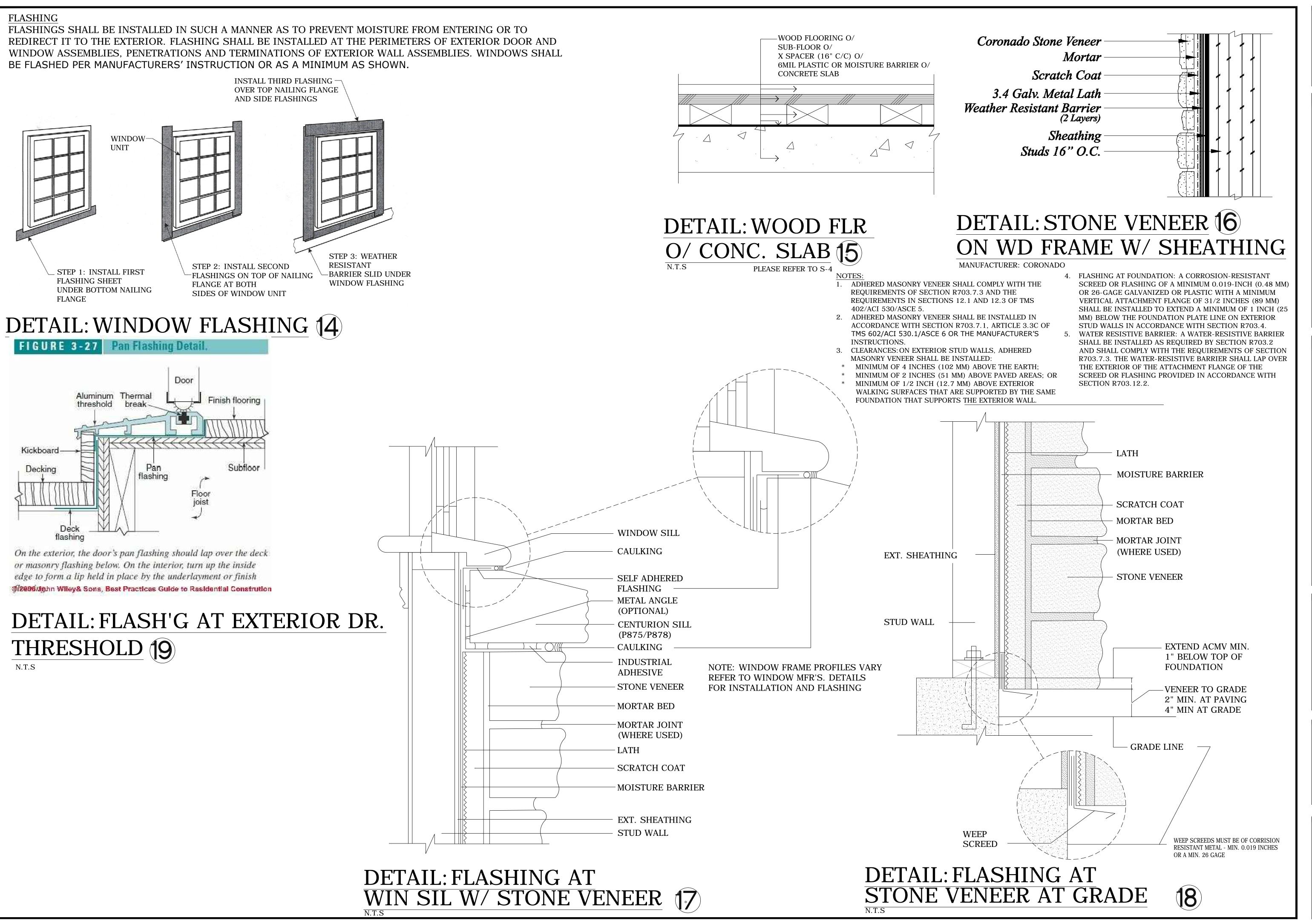
CRL RS0B20 ON WOOD SUBSTRATE 6'' = 1'-0''

3/8" [9.9]

|Drawn | VB |Check | VB 7/15/18 Scale | AS-NOTED **Job No.** 2018-6

A-10C

Revisions	Ву
CITY COMMENTS 3.7.2019	VB





Bhooma Inc.

Ini Bahl, Assoc. AIA, LEED AP BD+C

1650 Zanker Rd. Ste 120, San Jose CA 95112

P: 408.621.2091 F: 925.232.6229

E Mail: vani.bahl®gmail.com

ADDITION + REMODEL
22150 CLOVERLY CT

Revisions By

CITY COMMENTS VB

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Check VB
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Sheet A-10D

Bhooma Inc.
Vani Bahl, Assoc. AIA, LEED AP BD-1650 Zanker Rd. Ste 120, San Jose CA 95112 P: 408.621.2091 F: 925.232.6229
E Mail: vani.bahl®gmail.com www.BhoomaDesign.com

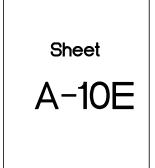
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ADDITION + REMODEL
22150 CLOVERLY CT
LOS ALTOS CA 94024

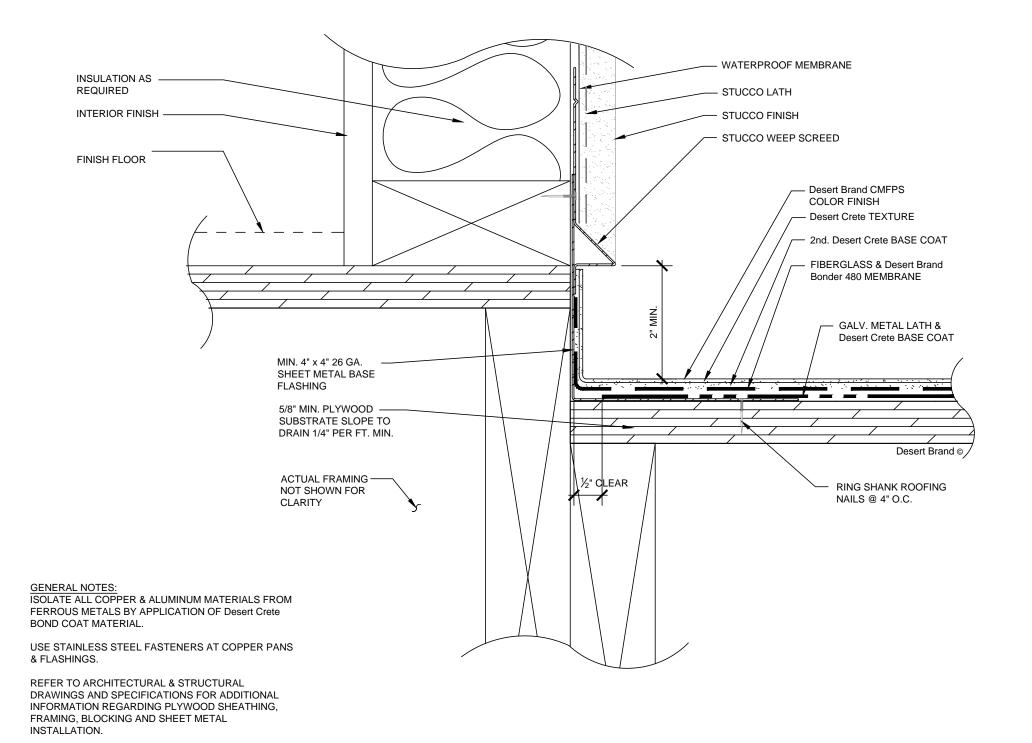
Revisions By

CITY COMMENTS VB

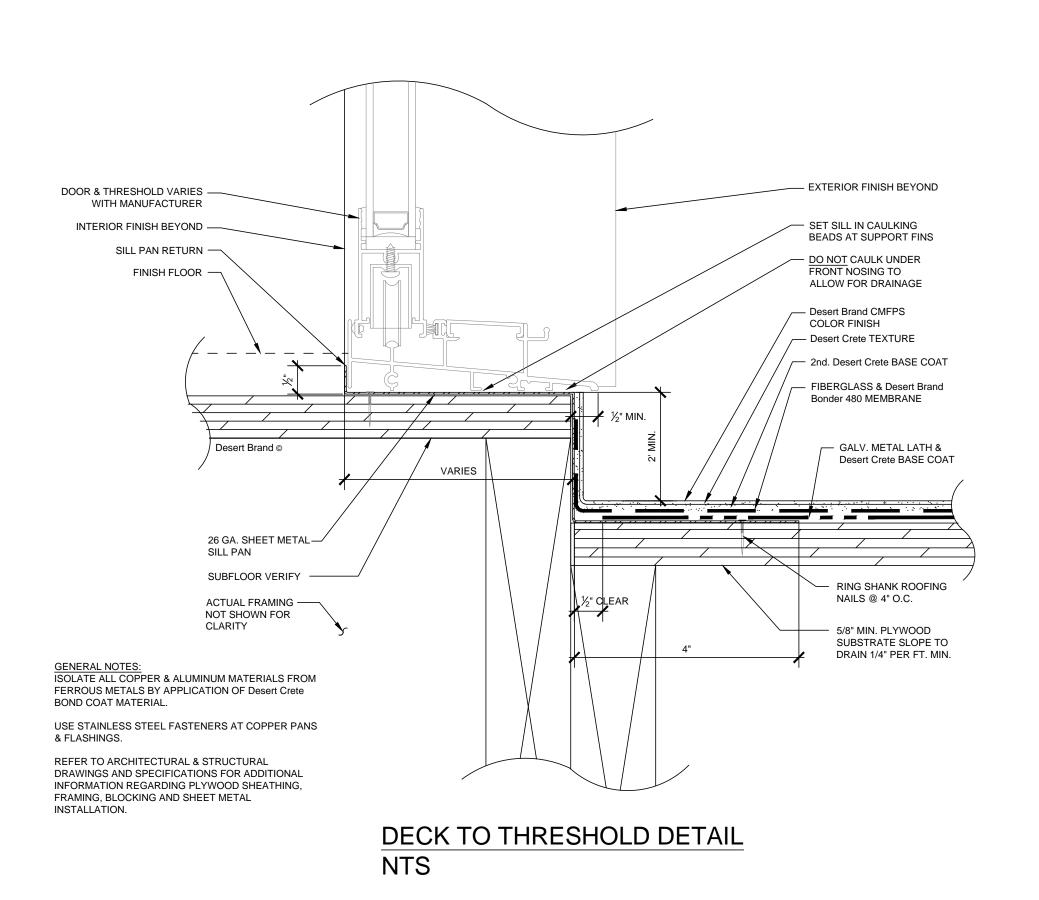
3.7.2019

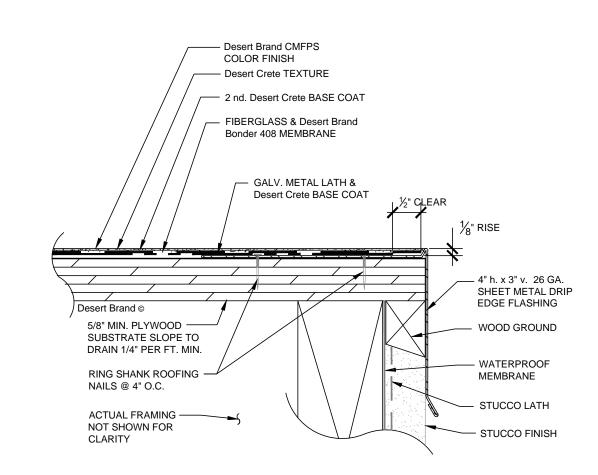
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Job No. 2018-6





DECK TO WALL DETAIL NTS



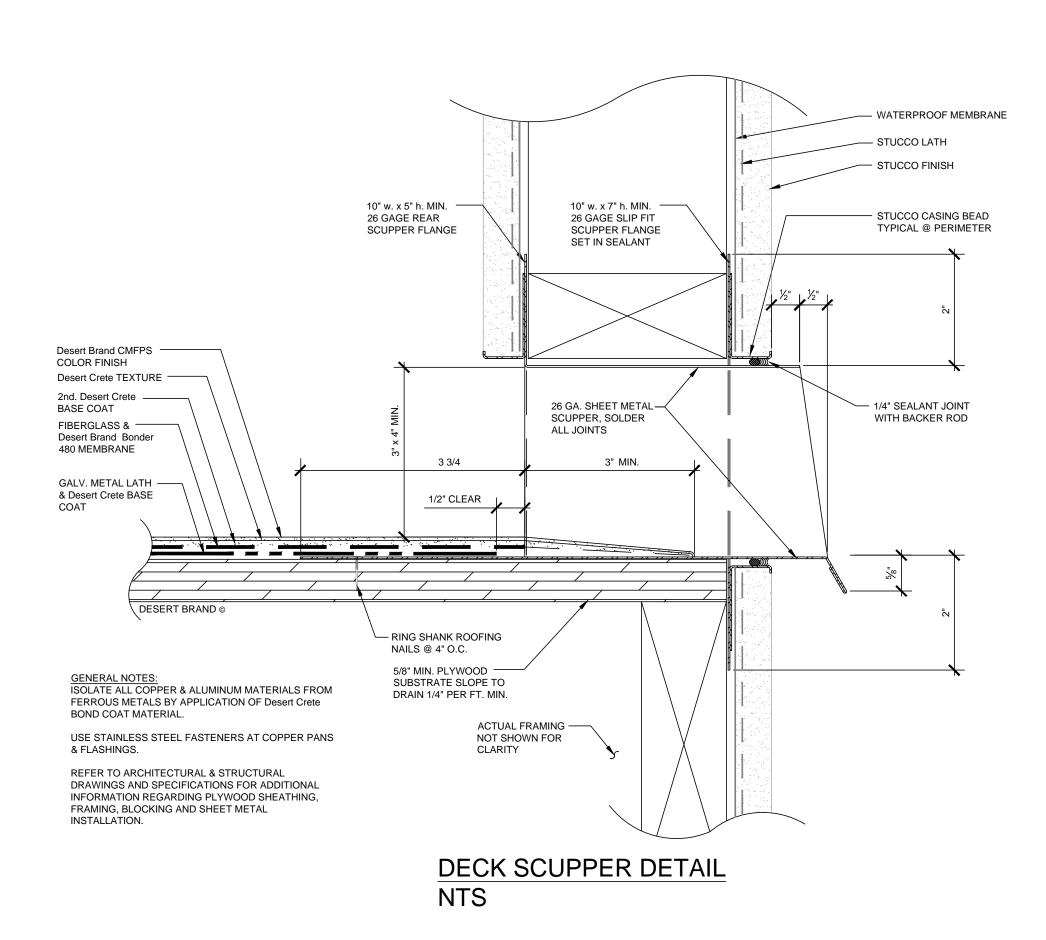


GENERAL NOTES:
ISOLATE ALL COPPER & ALUMINUM MATERIALS FROM FERROUS METALS BY APPLICATION OF Desert Crete BOND COAT MATERIAL.

USE STAINLESS STEEL FASTENERS AT COPPER PANS & FLASHINGS.

REFER TO ARCHITECTURAL & STRUCTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION REGARDING PLYWOOD SHEATHING, FRAMING, BLOCKING AND SHEET METAL INSTALLATION.

DECK EDGE DETAIL NTS



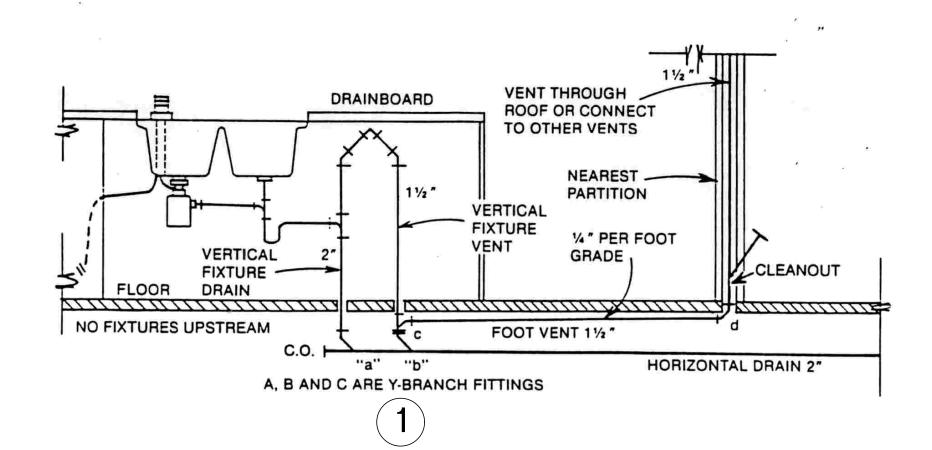
GENERAL NOTES

- 1. RF TO BE 3 DIMENSIONAL COMPOSITION, MIN 30 YEARS, CLASS 'A', SEL. BY OWNER
- 2. WINDOW TO BE ALUMINIUM BY BLOMBERG OR EQUIVALENT
- 3. WATER CLOSET TO BE 1.6 GPF, STD WHITE. (CA HEALTH & SAFETY CODE)
- 4. INTERIOR DOOR, HANDLE TO BE SCROLL LEVER, FIN TO BE US 3
- 5. PAINT TO BE 2-COAT SYSTEM AS REQ'D BY "KELLY-MOORE CO." OR EQ.
- 6. INTERIOR WALL OUTER CORNERS TO BE ROUNDED.
- 7. PLUMBING, LIGHTING FIXTURES & APPLIANCES TO BE PURCHASED BY OWNER & INSTALLED BY G.C.
- 8. U.O.N EXTERIOR TRIM TO BE FOAM W/ PROTECTIVE COAT'G AND FINISH COAT TO MATCH WALLS
- 9. LIGHT FIXTURES AND EXHAUST FANS @ SHOWER/BATH TO BE 'WET LOCATION' LISTED UNITS
- 10. MAN DOOR BETWEEN GARAGE & LIVING AREA TO BE EQUIPPED WITH SMOKE GASKET @ HEAD & JAMB
- 11. ELECT. MAIN PANEL SIZE OF 200AMP (EXISTING).
- 12. BUILT-IN VACUUM CLEAN'G. IF REQ'D AS SPECIFIED OR AS DIRECTED
- 13. SKYLIGHTS TO BE MFG'ED BY 'VELUX' W/ REQ'D. ACCESSORIES, IF INSTALLED
- 14. CABINET DOORS TO BE POLYESTER OR SEL BY OWNER.
- 15. SHELVINGS TO BE STD 1x PINE BD OR VENEERED PLYWD. WITH REQ'D FINISH
- 16. GLASS BLOCKS TO BE 7-3/4" SQ. x 3-1/8", MFG'ED BY 'SOLARIS' FLEMISH STYLE OR APPROVED EQ.
- 17. RESILIENT FLOOR, IF BECOMES OWNER'S SUBSTITUTION, TO BE NO WAX LINOLEUM SEL. FROM RESIDENTIAL LINES MFG'ED BY 'ARMSTRONG', 'CONGOLEUM', 'MANNINGTON' AND INSTALL SUB-FLOOR (NO PARTICLE BD) FOR RESILIENT FLOORING, INSTALL 3/8" LUAN P.W.
- 18. WOOD BASE TO BE PAINT GRADE MOLDING, CROWN MOLD'G. TO BE SEL. IF REQ'D
- 19. WINDOW STOOL & TRIM TO BE PAINT GRADE WOOD
- 20. CERAMIC TILE TO BE SEL. FROM DALE TILE, AMERICAN OLEAN, OR FLORIDA TILE, STANDARD SERIES
- 21. MARBLE TO BE 12"x12" TILE SEL. FROM 'AGGLOSIMPLEX' BY VERONA MARBLE CO. (415) 884-7700
- 22. LITE SWITCH TO BE SIDE ROCKED TYPE w/LED MFG'D. BY 'ALPEXWIDE' (415) 692-7788 OR EQ.
- 23. SET TOILETS, TUBS AND SHOWERS WITH MILDEW RESISTANT SILICONE CAULK.
- 24. PROTECT ADJACENT PROPERTY AND IMPROVEMENT, REPLACE DAMAGED ADJACENT
- PROPERTY/IMPROVEMENTS AS REQ'D.
- 25. ALL DIMENSIONS ARE FROM FIN.TO FIN. UNO, SETBACK DIM'S MEASURED TO FACE OF WALL FIN.
- 26. DO NOT SCALE DRAWINGS.

Special Venting for Island Fixtures

Traps for island sinks and similar equipment shall be roughed in above the floor and may be vented by extending the vent as high as possible, but not less than drain board height. The vent is then returned downward and connected to the horizontal sink drain immediately downstream from the vertical fixture drain.

The returned vent shall be connected to the horizontal drain through a wye branch fitting, (see "b" in Fig. and shall in addition be provided with a foot vent taken off the vertical fixture vent by means of a wye branch fitting immediately below the floor. This foot vent extends to the nearest partition and thence through the roof to the open air, or may be connected to other vents at a point not less than (6) inches (152.4 mm) above the flood level rim of the fixture served.



CODE NOTES

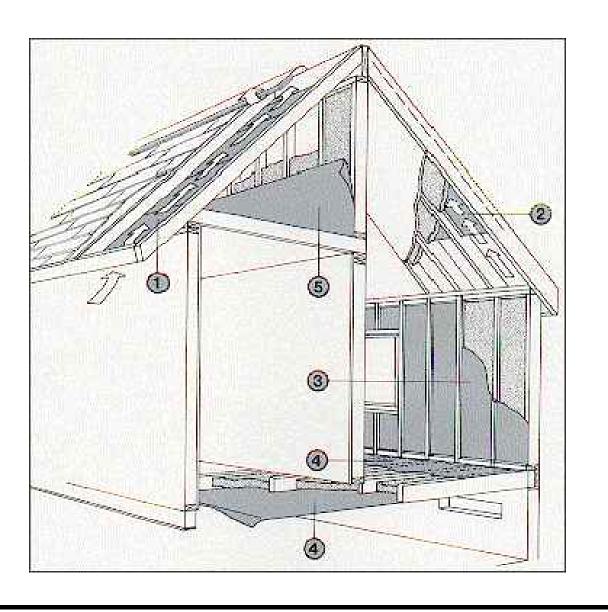
- 1. ESCAPE WINDOWS IN BED RM'S TO HAVE A MIN. NET CLEAR OPERABLE AREA OF 5.7 SF, MIN. HT. = 24", MIN. WIDTH = 20" & MAX. SILL HT. = 44"
- 2. SMOKE ALARMS SHOWN ON PLANS TO BE INSTALLED PER SECTION OF 310.9 OF CBC
- 3. ALL SD'S TO BE INTERCONNECTED, SO THAT WHEN ONE DETECTOR SENSES SMOKE, ALL DEVICES WILL SOUND. POWER TO THE DETECTORS SHALL BE PROVIDED FROM THE LIGHTING CIRCUITS IN THE AREAS WHICH THEY PROTECT
- 4. LIGHT & POWER
- A. INSTALLATION OF WALL OUTLETS & SWITCHED LIGHTS TO BE IN ACCORDANCE WITH NEC, LATEST ADOPTED EDITION
- B. IN FAMILY RM, DINING RM, LIVING RM, DEN, BEDRM, OR SIMILAR RM OR AREA, WALL OUTLETS SHALL BE INSTALLED SO THAT NO POINT ALONG THE FLOOR LINE IN ANY WALL SPACE IS MORE THAN 6 FT., MEASURED HORIZONTALLY, FROM AN OUTLET IN THAT SPACE, INCLUDING ANY WALL SPACE 2 FT. OR MORE IN WIDTH AND THE WALL SPACE OCCUPIED BY FIXED PANELS IN EXTERIOR WALLS, BUT EXCLUDING SLIDING PANELS IN EXTERIOR WALLS. OUTLETS SHALL BE SPACED EQUAL DISTANCES APART. OUTLETS IN FLOOR SHALL NOT BE COUNTED AS PART OF THE REQ,D. NUMBER OF OUTLETS UNLESS LOCATED CLOSE TO THE WALL. (NEC 210-52)
- 5. SPA/TUB
- 1. AT LEAST ONE WALL OUTLET BETWEEN 5' AND 10' FROM INSIDE OF TUB
- 2. 120V TO BE PROTECTED BY GFI
- 3. LIGHT WITHIN 5' OF TUB TO BE MTD. 7'-6" MIN. ABOVE WATER LEVEL, w/GFI
- 4. WALL SWITCH TO BE AT LEAST 5' FROM INSIDE WALL OF TUB
- 5. BONDING
- ALL METAL FITTINGS, PUMP, CONDUITS, AND PIPING W/I 5' OF TUB, ALL METAL SURFACES W/I 5' OF TUB BONDING & GROUNDING AS PER NEC.
- 6. HOUSE GROUNDING TO COMPLY WITH CITY'S REQUIREMENTS (I.E., GROUNDING PER 250 NEC W/ UFER TYPE)
- 7. CONTRACTOR TO PROVIDE FOUNDATION ACCESS WITHIN 20' OF PLUMBING CLEANOUT PER UPC SEC 707.10
- 8. WATER RESISTANT GYPSUM BOARD AT ALL WET WALL (SHOWER) LOCATIONS PER CBC SEC. 807.1.3 & 2512A.
- 9 TUB SHOWER ENCLOSURER TO HAVE TEMPERED, SAFETY GLASS.
- 10. INSTALL INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE OR THE THERMOSTATIC MIXING VALVE AT SHOWERS AND TUB-SHOWER AS PER UPC SEC. 420.0
- 11. CONTRACTOR TO PROVIDE 12"x12" ACCESS PANEL AT ALL FIXTURES HAVING SLIP JOINTS, PER 2016 CPC
- 12. ATTIC FURNACE (IF INSTALLED)
- A. ACCESS CAN BE IN A CLOSET
- THE LARGEST PIECE OF EQ. CAN BE REMOVED THRU OPEN'G BUT NOT LESS THAN 30"x22" ACCESS IS TO BE CLEAR FROM SHELVES & FIX'S IF IT'S LOCATED INSIDE CLOSET
- B. 24" WIDE X 20' LONG PASSAGE WY
- C. A PERMANENT ELECT. OUTLET & LIGHT'G FIXTURE CONTROLLED BY A SWITCH @ PASSAGE WY OPEN'G @ TO BE PROVIDED AT OR NEAR THE FURNACE.
- D. OTHER RELATED TO COMPLY WITH UMC SECT. 307
- 13. EXHAUST FANS INSTALLED TO BE MIN. 5 AIR CHANGES
 PER HOUR, POINT OF DISCHARGE TO BE MIN. 3' FROM ANY OPEN'G. AS STIPULATED
 IN CBC SECT. 1203.3. SELECTED FROM 'BROAN'
- 14. FURNACE DUCTS PENETRATING 1-HR WALL TO BE STEEL DUCTS HAVING THICKNESS NOT LESS THAN 0.019" (26 GAL. SHEET METAL) & HAVE NO OPENING INTO GARAGE, FIRE DAMPER IS NOT REQ'D. AS STIPULATED IN CBC SECT. 302.4
- 15. HOSE BIB SHOWN ON PLANS TO BE EQUIPPED WITH BACKFLOW PREVENTER PER UPC SECT. 603.4.7
- 16. INSTALLED FURNACE(S) TO HAVE ADEQUATE COMBUSTION AIR REQUIREMENTS AS PER UMC CH. 7
- 17. INSTALLED SPARK ARRESTORS @ CHIMNEY & ITS ACCESSORIES TO BE MANUFACTURER'S LISTED
- 18. INSTALL METAL SEISMIC STRAPS @ WATER HEATER & FURNACE AS PER UPC SECT. 510.5 & UMC 308.1
- 19. SEPARATE CIRCUIT FOR FURNACE(S)
- 20. IF SEAL DUCT IS REQ'D, IT MUST BE SEALTIGHT W/ A LEAKAGE OF NO MORE THAN 6% OF THE CFM. APPLY APPROVED TAPE/MASTIC TO SEAL DUCTS, CONNECTIONS AND ALL DIFFUSER & REGISTER BOXES.
- 21. INSTALLATIONS FOR ALL LISTED EQ. SHALL BE PROVIDED TO THE FIELD INSPECTOR AT TIME OF INSPECTION AS PER UMC 303.1
- 22. SMOOTH MET DUCT 4"DIA FOR DRYER EXHAUST EXTENDING TO OUTSIDE W/ BACKDRAFT DAMPER PER UMC 504.3 4"DIA & 908.1
- 23. INSTALL PRESSURE RELIEF VALVE W/ DRAIN TO OUTSIDE @ WH

RADIANT BARRIER SPECIFICATIONS

- THE EMITTANCE OF THE RADIANT BARRIER MUST BE LESS THAN OR EQUAL TO 0.05 AS TESTED IN ACCORDANCE WITH ASTM C-1372-98 OR ASTM E408-71(2002) e1.
- INSTALLATION mUST BE IN CONFORMANCE WITH ASTM C-1158-97(STANDARD PRACTICE FOR USE AND INSTLLATION OF RADIANT BARRIER SYSTEMS(RBS) IN BUILDING CONSTRUCTION.), ASTM C-727-90(2002) e1 (STANDARD PARACTICE FOR INSTALLATION AND USE OF REFLECTIVE INSULATION IN BUILDING CONSTRUCTIONS.), ASTM C1313-97 (STANDARD SPECIFICATION FOR SHEET RADIANT BARRIERS OFR BUILDING CONSTRUCTION APPLICATIONS), AND ASTM C-1224-9 (STANDARD SPECIFICATION FOR REFLECTIVE INSULATION FOR BUILDING APPLICATIONS) AND THE RADIANT BARRIER MUST BE SECURELY INSTALLED IN A PERMANENT MANNER WITH THE SHINY SIDE FACING DOWN TOWARD THE ATTIC FLOOR. MOREOVER, RADIANT BARRIERS MUST BE INSTALLED TO THE ROOF TRUSS/RAFTERS (TOP CHORDS) IN ANY OF THE FOLLOWING METHODS, WITH THE MATERIAL:
- 1. DRAPED OVER THE TRUSS/RAFTER (THE TOP CHORDS) BEFORE THE UPPER ROOF DECKING IS
- 2. SPANNING BETWEEN THE TRUSS/RAFTERS (TOP CHORDS) AND SECURED (STAPLED) TO EACH SIDE.

 3. SECURED (STAPLED) TO THE BOTTOM SURFACE OF THE TRUSS/RAFTER (TOP CHORD). A MINIMUM AIR SPACE MUST BE MAINTAINED BETWEEN THE TOP SURFACE OF THE RADIANT BARRIER AND ROOF DECKING OF NO LESS THAN 1.5 INCHES AT ATHE CENTER OF THE RUSS/RAFTER SPAN.
- 4. ATTACHED [LAMINATED] DIRECTLY TO THE UNDERSIDE OF THE ROOF DECKING. THE RADIANT BARRIER MUST BE LAMINATED AND PERFORATED BY THE MANUFACTURER TO ALLOW MOISTURE/VAPOR TRANSFER THROUGH THE ROOF DECK.
- IN ADDITION. THE RADIANT BARRIER MUST BE INSTALLED TO COVER ALL GABLE END WALLS AND OTHER VERTICAL SURFACES IN THE ATTIC.
- THE ATTIC MUST BE VENTILATED TO:
- 1. CONFORM TO MANUFACTURER'S INSTRUCTIONS.
- 2. PROVIDE A MINIMUM FREE VENTILATION AREA OF NOT LESS THAN ONE SQUARE FOOT OF VENT AREA FOR EACH 150 SQUARER FEET OF ATTIC FLOOR AREA.
- 3. PROVIDE NO LESS THAN 30 PERCENT UPPER VENTS.
- (RIDGE VENTS OR GABLE END VENTS ARE RECOMMENDED TO ACHIEVE THE BEST PERFORMANCE. THE MATERIAL SHOULD BE CUT TO ALLOW FOR FULL AIR FLOW TO THE VENTING.)
- THE RADIANT BARRIER (EXCEPT FOR RADIANT BARRIERS LAMINATED DIRECTLY TO THE ROOF DECK)

 MUST BE INSTALLED TO:
- 1. HAVE A MINIMUM GAP OF 3.5 INCHES BETWEEN THE BOTTOM OF THE RADIANT BARRIER AND THE TOP OF THE CEILING INSULATION TO ALLOW VENTILATION AIR TO FLOW BETWEEN THE ROOF DECKING AND THE TOP SURFACE OF THE RADIANT BARRIER.
- 2. HAVE A MINIMUM OF SIX(6) INCHES (MEASURED HORIZONTALLY) LEFT AT THE ROOF PEAK TO ALLOW HOT AIR TO ESCAPE FORM THE AIR SPACE BETWEEN THE ROOF DECKING AND THE TOP SURFACE OF THE RADIANT BARRIER.
- WHEN INSTALLED IN ENCLOSED RAFTER SPACES WHERE CEILINGS ARE APPLIED DIRECTLY TO THE UNDERSIDE OF ROOF RAFTERS, A MINIMUM AIR SPACE OF 1 INCH MUST BE PROVIDED BETWEENT HE RADIANT BARRIER AND THE TOP OF THE CEILING INSULATION, AND VENTILATION MUST BE PROVIDED FOR EVERY RAFTER SPACE. VENTS MUST BE PROVIDED AT BOTH UPPER AND LOWER ENDS OF THE ENCLOSED RAFTER SPACE.
- THE PRODUCT MUST MEET ALL REQUIREMENTS FOR CALIFORNIA CERTIFIED INSULATION MATERIALS [RADIANT BARRIERS] OF THE DEPARTMENT OF CONSUMER AFFAIRS, BUREAU OF HOME FURNISHINGS AND THERMAL INSULATION, AS SPECIFIED BY CCR, TITLE 24, PART 12. CHAPTER 12-13, STANDARDS FOR INSULATION MATERIAL.
- THE USE OF A RADIANT BARRIER MUST BE LISTED IN THE SPECIAL FEATURES AND MODELING ASSUMPTIONS LISTINGS OF THE CF-1R AND DESCRIPTION IN DETAIL IN THE ACM COMPLIANCE SUPPLEMENT.
- ONE SUCH BRAND NAME FOR RADIANT BARRIERIS "POLAR PLY" CONTACT 'ECT' @ (800) 426-6200





BNOOMA INC.

ASSOC. AIA, LEED AP BD+
ker Rd. Ste 120, San Jose CA 95112
408.621.2091 F: 925.232.6229
Mail: vani.bahl®gmail.com

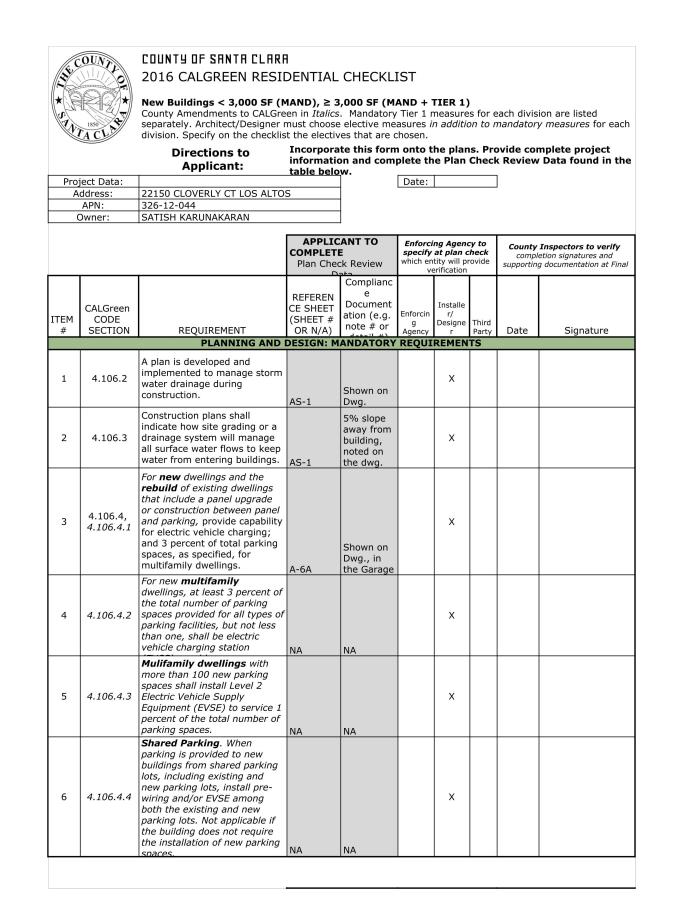
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CA 94024

Revisions	Ву

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Date	7/15/18
Scale	AS-NOTE
Job No.	2018-6

Sheet
A-11

2016 CALIFORNIA GREEN BUILDING CODE



			COMPLET Plan Chec	ANT TO E ck Review ata	specify which en	ing Agend at plan of tity will pre- erification	heck	compl	Inspectors to verify letion signatures and g documentation at Fir
ITEM #	CALGreen CODE SECTION	REQUIREMENT	REFEREN CE SHEET (SHEET # OR N/A)	Complianc e Document ation (e.g. note # or detail #)	Enforcin g Agency	Installe r/ Designe r	Third Party	Date	Signature
	<u> </u>	PLANNING AN	ND DESIGN	: TIER 1 RE	QUIRE	MENTS	1	1	I
7	A4.106.2.3	Displaced topsoil shall be stockpiled for reuse in a designated area and covered or protected from erosion.	AS-1	Noted on Sheet AS-1		х			
8	A4.106.4	Not less than 20 percent of the total parking, walking or patio surfaces shall be permeable.	AS-1	Noted on Sheet AS-1		х			
9	A4.106.5	Cool Roof for reduction of heat island effect. Roof covering shall meet or exceed the values contained in Table A4. 106.5.1(1) for low-rise residential or Table A4. 106.5.1.(3) for high-rise residential, hotels or motels.	NA			X			
10	A4.601.4.2 (1.5)	First Elective Measure from Division A4.1- A4.106.2.1 Soil analysis- Soil analysis is performed by a licensed design professional and the findings utilized in the structural design of the building.	Structure			X			
11	A4.601.4.2 (1.5)	Second Elective Measure from Division A4.1	NA			×			
		ENERGY EFFIC		NDATORY I	REQUIR	MENTS			
12	4.201.1	Building meets or exceeds the requirements of the California Building Energy Efficiency Standards	AT-1	NOTE# R		x			
	•	WATER EFFICIENCY & C	ONSERVAT	ION: MAND	ATORY	REQUI	REME	NTS	
13	4.303.1	Plumbing Fixtures (water closets and urinals) and fittings (faucets and showerheads) installed in residential buildings shall comply with the prescriptive requirements of Section 4.303.1.1 through	A-2C	Note #8		x			
14	4.303.2	Plumbing fixtures and fittings required in Section 4.303.1 shall be installed in accordance with the CPC and shall meet the applicable referenced standards.	A-2C	Note #9		Х			
15	4.304.1	Outdoor potable water use in landscape areas	NA	NA		x			
			COMPLETI Plan Ched	EANT TO E ck Review ata	specify which en	ing Agend at plan of tity will pre- erification	heck rovide	compl	Inspectors to verify letion signatures and g documentation at Fin

ITEM #	CALGreen CODE SECTION	REQUIREMENT	REFEREN CE SHEET (SHEET # OR N/A)	Complianc e Document ation (e.g.	Enforcin g Agency	Installe r/ Designe r	Third Party	Date	Signatur
,,	22311011	WATER EFFICIENCY 8						_	Signatur
16	A4.601.4.2 (3.1)	First Elective Measure from Division A4.3- A4.303.3 Appliances- Install at least one qualified ENERGY STAR dishwasher or clothes washer.	A-6A	NOTED UNDER GREEN BUILDING NOTES		×			
17	A4.601.4.2 (3.1)	Second Elective Measure from Division A4.3- A4.303.1 Kitchen faucets- The maximum flow rate of kitchen faucets shall not exceed 1.5 gallons per minute at 60 psi. Kitchen	A-2C	NOTE #9		×			
	M	ATERIAL CONSERVATION & R	ESOURCE	EFFICIENCY	: MANE	PATORY	REQ	UIREMEN	ITS
18	4.406.1	Annular spaces around pipes, electric cables, conduits or other openings in plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or similar method acceptable to the enforcing agency.	A-2C	NOTE#10		x			
19	4.408.1	Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste.	AS-1	NOTE #4		X			
20	4.410.1	An operation and maintenance manual shall be provided to the building occupant or	A-6A	NOTE UNDER GREEN		Х			
		MATERIAL CONSERVATION	& RESOUR	CE EFFICIE	ICY: TI	ER 1 RE	QUIR	EMENTS	
21	A4.403.2	Cement use in foundation mix design is reduced. Tier 1: Not less than 20 percent reduction in cement use.	NA			x			
22	A4.405.3	Postconsumer or preconsumer recycled content value (RCV) materials are used on the project. Tier 1: Not less than a 10-percent recycled content value.	NA			x			
23	A4.408.1	Reduce construction waste by at least 65%. Documentation shall be submitted to the enforcing agency demonstrating compliance.	AS-1	NOTED UNDER GREEN BUILDING NOTES		X			
24	A4.601.4.2 (4.4)	First Elective Measure from Division A4.4- A4.405.1 Prefinished building materials- Utilize prefinished building materials which do not require additional painting or staining	A-4	NOTED UNDER GREEN BUILDING NOTES		x			
25	A4.601.4.2 (4.4)	Second Elective Measure from Division A4.4- A4.407.2 Roof drainage- Install gutter and downspout systems to route	A-5	NOTE #5		x			
			COMPLET	CANT TO E ck Review	specify which en	ing Agend at plan c itity will pre-	heck	compl	Inspectors to vertion signatures and documentation

Less Water and Less Exempt C ARCHITECTURAL APPLICATION		CURRENT VOC LIMIT	Less Water and Less E	lter of Coating, cempt Compoun	ds
Indoor carpet adhesives		50	100100 Control of the second	EFFECTIVE	
Carpet pad adhesives		50	COATING CATEGORY	1/1/2010	1/
Outdoor carpet adhesives	1207Wa 140-17 240-17 2	150	Flat coatings	50	
Wood flooring adhesive		100	Nonflat coatings	100	-
Rubber floor adhesives		60	Nonflat-high gloss coatings	150	<u> </u>
Subfloor adhesives		50	SPECIALTY CO	T	_
Ceramic tile adhesives		65	Aluminum roof coatings	400	a Alberta de
VCT and asphalt tile adhesives		50	Basement specialty coatings	400	<u> </u>
Drywall and panel adhesives	195 m 21 million 3 million	50	Bituminous roof coatings	50	-
Cove base adhesives	i i	50	Bituminous roof primers	350	
Multipurpose construction adhesives		70	Bond breakers	350	
Structural glazing adhesives		100	Concrete curing compounds	350	
Single-ply roof membrane adhesives		250	Concrete/masonry sealers	100	<u> </u>
Other adhesives not specifically listed	E. L. Len J. R.	50	Driveway sealers	50	1
SPECIALTY APPLICATIONS		7 1 20 20 20 7 10 20 20 20 20 20 20 20 20 20 20 20 20 20	Dry fog coatings	150	1
PVC welding		510	Faux finishing coatings	350	
CPVC welding	V 11 V 10 M 12	490	Fire resistive coatings	350	
ABS welding		325	Floor coatings	100	
Plastic cement welding		250	Form-release compounds	250	
Adhesive primer for plastic		550	Graphic arts coatings (sign paints)	500	
Contact adhesive		80	High temperature coatings	420	
Special purpose contact adhesive		250	Industrial maintenance coatings	250	
Structural wood member adhesive		140	Low solids coatings	120	
Top and trim adhesive		250	Magnesite cement coatings	450	
SUBSTRATE SPECIFIC APPLICA	TIONS	79 - 20-10 - 70 - 20 - 31	Mastic texture coatings	100	
Metal to metal		30	Metallic pigmented coatings	500	
Plastic foams		50	Multicolor coatings	250	
Porous material (except wood)		50	Pretreatment wash primers	420	10.00
Wood		30	Primers, sealers, and undercoaters	100	
Fiberglass		80	Reactive penetrating sealers	350	
1. If an adhesive is used to bond dissi	milar substr	ates together, the adhesive	Recycled coatings	250	-
with the highest VOC content shall	be allowed.		Roof coatings	50	William I
2. For additional information regarding	methods to	measure the VOC content	Rust preventative coatings	400	
specified in this table, see South Co Rule 1168.	oast Air Qu	anty Management District	Shellacs	400	
TABLE	1 504 2		Clear	730	
SEALANT	VOC LIMIT	*	Opaque	550	ers o
Less Water and Less Exempt C			Specialty primers, sealers and undercoaters	350	
SEALANTS	CUF	RENT VOC LIMIT	Stains	250	000 00000
Architectural		250	Stone consolidants	450	
Marine deck		760	Swimming pool coatings	340	
Nonmembrane roof	4-4-1-120-01-01-01-01-01-01-01-01-01-01-01-01-01	300	Traffic marking coatings	100	
Roadway	AN WALLAND	250	Tub and tile refinish coatings	420	Lateral Co.
Single-ply roof membrane		450	Waterproofing membranes	250	1300000
Other		420	Wood coatings	275	
SEALANT PRIMERS	<u></u>		Wood preservatives	350	
Architectural		and a state of	Zinc-rich primers	340	
Nonporous		250	Statement of the control of the cont	**************************************	ian. 39
Porous		775	 Grams of VOC per liter of coating, incompounds. 	auding water and in	cludir
Modified bituminous		760	2. The specified limits remain in effect unl	ess revised limits ar	e listed
Marine deck Other		750	quent columns in the table.	State of the second sec	*******

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		ENVIRONMENTAL	QUALITY:	MANDATOR	Y REQU	IREME	NTS		
26	4.503.1	Any installed gas fireplace shall be a direct-vent sealed-combusion type. Any installed woodstove or pellet stove shall comply with US EPA Phase II emission limits where applicable. Woodstoves, pellet stoves and fireplaces shall also comply with applicable local ordinances.	A-2A	NOTED NEXT TO FIREPLACE		x			
27	4.504.1	Duct openings and other related air distribution component openings shall be covered during construction.	A-4	NOTED UNDER GREEN BUILDING NOTES		x			
28	4.504.2.1	Adhesives, sealants and caulks shall be compliant with VOC and other toxic compound	A-4	NOTED UNDER GREEN		х			
29	4.504.2.2	Paints, stains and other coatings shall be compliant with VOC limits.	A-4	NOTED UNDER GREEN BUILDING NOTES		X			
30	4.504.2.3	Aerosol paints and coatings shall be compliant with product weighted MIR limits for ROC and other toxic	A-4	NOTED UNDER GREEN BUILDING		Х			
31	4.504.2.4	Documentation shall be provided to verify that compliant VOC limit finish	A-4	NOTED UNDER GREEN		Х			
32	4.504.3	Carpet and carpet systems shall be compliant with VOC limits.	A-4	NOTED UNDER GREEN		Х			
33	4.504.4	80 percent of floor area receiving resilient flooring shall comply with the VOC-emission limits defined in the Collaborative for High Performance Schools (CHPS), High Performance Products Database or be certified under the Resilient Floor Covering Institute (FRCI) FloorScore program; or meet California Department of Public Health Specification 01350.	A-4	NOTED UNDER GREEN BUILDING NOTES		X			
34	4.505.2	Vapor retarder and capillary break is installed at slab-on- grade foundations.	A-10A	NOTED UNDER GREEN BUILDING NOTES		х			

35	4.505.3	floor framing shall not exceed 19% and shall be checked before enclosure.	NA			Х			
36	4.507.2	Duct systems are sized, designed, and equipment is selected using the following methods: 1. Establish heat loss and heat gain values according to ANSI/ACCA 2 Manual J-2004 or Equivalent 2. Size duct systmes according to ANSI/ACCA 1 Manual D-2009 or equivalent. 3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S-2004 or equivalent.	A-6A	NOTED UNDER GREEN BUILDING NOTES		X			
		ENVIROMENTA			EQUIRE	MENTS			
37	A4.504.2	At least 90% of resilient flooring shall comply with VOC limits.	A-4	NOTED UNDER GREEN BUILDING		х			
38	A4.504.3	Thermal insulation in the builing shall be in compliance with VOC limits.	A-4	NOTED UNDER GREEN BUILDING		Х			
39	A4.601.4.2 (5.3)	Elective measure from Division A4.5 A4.506.1 Filters-Return air filters with a value greater	A-6A	NOTED UNDER GREEN BUILDING		Х			
		INSTALLER AND	SPECIAL II	NSPECTOR (QUALIF	ICATIO	NS	1	
40	702.1	HVAC system installers are trained and certified in the proper installation of HVAC systems.	A-6A	NOTED UNDER GREEN BUILDING NOTES		х			
41	702.2	Special inspectors employed by the enforcing agency must be qualified and able to demonstrate competence in the discipline they are inspecting.	A-6A	NOTED UNDER GREEN BUILDING NOTES		x			
42	703.1	Verification of compliance with this code may include constuction documents, plans, specifications builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which show	A-6A	NOTED UNDER GREEN BUILDING NOTES		х			

	oject Name: Remodel and Addition Single Family Residence oject Location: 22150 Cloverly Ct Los Altos CA
	illding Permit #: DEV18-70077 Project Sq. Ft.: 3390.158 SFT
	vners Name: T.B.D Telephone:
Οv	vners Name: Satish Karunakaran Telephone: (408) 508-4169
	is construction waste management plan is hereby submitted to comply with ction 4.408.2 of the 2010 California Green Building Standards Code.
rec	e purpose of this plan is to identify and outline the methods to be used as the minimum quirements for a construction waste management plan when the local jurisdiction does not be construction and demolition waste management ordinance per Section 4.408.2.
1.	The method of waste tracking to be used on this project will be: (Check one box)
2.	Construction waste generated on this project for transport to a recycling facility will be: (Check appropriate box)
	□ Sorted on-site (Source-separated) □ Bulk mixed (Single stream)
3.	The facility (or facilities) where the construction waste material will be taken is:
	Name of Facility: Mission Trail Waste Systems Transfer Station
	Address: 1313 Memorex Drive Santa Clara, CA 95050
	Telephone: (408) 727-5365 (Attach separate sheet for additional facilities)
4.	
	Efficient design (dimensions of building components are designed to available materia sizes or standard sizes).
	☑ Careful and accurate material ordering.
	☑ Careful material handling and storage.
	Panelized or prefabricated construction.
	Other
	Other
5.	Waste reduction and recycling strategies shall be discussed at periodic project meetings. Each new [<u>Contractor</u>]* that comes onto the site shall be provided with a copy of the CWMP, which shall also be posted in the project office. The [<u>Project Manager</u> shall also instruct all [<u>Subcontractors</u>]* as to the location and proper use of deb

- 6. Every effort shall be made to use recycling and/or reuse (diversion) measures to reduce the amount of construction waste and other materials sent to landfills. Whenever possible, sitesorted debris boxes shall be used to segregate construction waste materials to maximize the
- 7. The [Contractor]* shall provide debris boxes for materials sorted on-site (source-separated) and/or bulk mixed (single stream) waste for all construction related waste generated on this project. Mixed construction waste shall be taken to a recycling facility that has a diversion rate of at least 50 percent. In the event that a [Subcontractor]* provides their own debris box, they shall be responsible for providing the [Contractor]* with a monthly report of the total Recycled and Reused (Diverted) and the total Non-Recycled (Disposed) materials to be included in the project's overall waste management/waste
- 8. Any [<u>Supplier</u>]* hauling away packaging or waste materials shall notify the [<u>Contractor</u>]* of the amount of these materials and how they will be disposed of (reused, recycled, salvaged, or taken to landfill).

reduction program.

Identified below are the construction waste materials that will be reused and/or recycled during the course of this project and how they will be diverted:

Material	Diversion Method: (Recycle/Reuse)
Concrete	Recycle
Wood Siding	Recycle
Carpet	Recycle
Asphalt Shingles	Recycle
Dirt	Resuse and Recycle what not used
Porcelain	Recycle
Untreated Wood	Reuse and Recycle what not used
Metal	Reuse and Recycle what not used
Brick	Recycle
Gypsum Drywall	Recycle
Plastic	Recycle

- (See Construction Waste Management Worksheets for examples of common materials.)
- 10. The [<u>Waste Hauler</u>]* shall track the total amount of construction waste leaving the project by weight or by volume and supply the [<u>Contractor</u>]* with copies of tickets or detailed receipts from all loads of construction waste removed from the jobsite.
- 11. The [<u>Contractor</u>]* shall monitor the process of waste management, recycling, and reuse of construction waste materials to ensure compliance with the CWMP during the course of the project.
- 12. The [<u>Contractor</u>]* shall ensure that all supporting documentation which demonstrates compliance with the waste management plan is provided to the local enforcement agency upon completion of the project.
- * Insert title of appropriate party or responsible person, which may include, but not be limited to: Contractor(s), Subcontractor(s), Project Manager(s), Superintendent(s), Supplier(s), or Waste Hauler(s).

CW-1 Construction Waste Management Plan (Revised 7/1/12

bhooma sustainable building design

Bhooma Inc.

ani Bahl, Assoc. AIA, LEED AP BE
1650 Zanker Rd. Ste 120, San Jose CA 9511
P: 408.621.2091 F: 925.232.6229
E Mail: vani.bahl®gmail.com
www.BhoomaDesign.com

ADDITION + REMODEL
22150 CLOVERLY CT
1 OS ALTOS CA 94024

Revisions	Ву
CITY COMMENTS 3.7.2019	VB

Drawn	VB
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Sheet A-12

⚠ ENTIRE SHEET



CLEAN BAY BLUEPRINT Stormwater Pollution Prevention

Stormwater pollution is a major source of water pollution in California. It can cause declines in fisheries, disrupt habitats, and limit water recreation activities. Even more importantly, stormwater pollution poses a serious threat to the overall health of the

Common sources of pollutants from construction sites include: sediments from soil erosion; construction materials, stockpiles and waste (e.g., paint, solvents, concrete, drywall); and spilled oil, fuel, and other fluids from construction vehicles and heavy

In San Jose, the storm drain system consists of gutters, storm drains, underground pipes, open channels, culverts and creeks. Storm drain systems are designed to drain directly to the Bay with no treatment.

San Jose and the other municipalities in the Bay Area are required by the Federal Clean Water Act to develop stormwater management programs that include requirements for construction activities. Your construction project will need to comply with local municipal requirements. If your construction activity will disturb one acre or more, you must also obtain insurance coverage under the General Construction Activity Permit issued by the State Water Resources Control Board.

This Clean Bay Blueprint is an introductory guide to stormwater quality control on construction sites. It contains several principles and techniques that you can use to help prevent stormwater pollution. The Bay Area Stormwater Management Agencies Association (BASMAA) and the City of San Jose have developed these guidelines as a resource for all general contractors, home builders, and subcontractors working on construction sites.

Employees should be trained and subcontractors informed about the stormwater requirements and their own responsibilities. The property owner and the contractor are responsible for all activities at your site, including activities by your subcontractors and employees.

Material Storage and Spill Clean Up

- Cover exposed piles of soil, construction materials and wastes with plastic sheeting or temporary roofs. Before it rains, sweep and remove materials from surfaces that drain to storm drains, creeks, or channels.
- ✓ Build berms around storage areas to prevent contact with runoff.
- ✓ Store containers of paints, chemicals, solvents, and other hazardous materials in accordance with secondary containment regulations and under cover during rainy periods.
- ✓ Cover open dumpsters with plastic sheeting or a tarp during rainy weather. Secure the sheeting or tarp around the outside of the dumpster. If your dumpster has a cover, close it.
- ✓ If a dumpster is leaking, contain and collect leaking material. Return the dumpster to the leasing company for repair or exchange.

- Sweep up spilled dry materials (for example cement, mortar, or fertilizer) immediately. Never attempt to "wash them away" with water, or bury them. Use only minimal water for dust con-
- Clean up liquid spills on paved or impermeable surfaces using "dry" cleanup methods (for example absorbent materials like cat litter, sand or rags). Have spill cleanup kits available.
- Clean up spills on dirt areas by digging up and properly disposing of the contaminated soil.

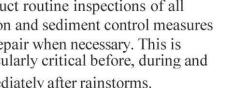
Report significant spills to the appropriate spill response agencies immediately.



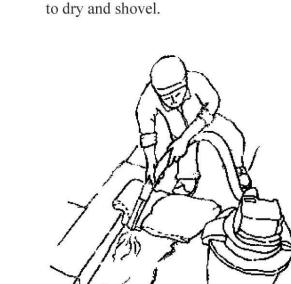
Earth-Moving Activities and Erosion Control

- ✓ Avoid contaminating clean runoff from areas adjacent to your site by using berms and/or temporary or permanent drainage ditches to divert water flow around the site. Reduce stormwater runoff velocities by constructing temporary check dams and/or berms, where appropriate.
- ✓ Construct diversion dikes and drainage swales to channel runoff around the
- ✓ Use berms and drainage ditches to divert runoff around exposed areas. Place diversion ditches across the top of cut
- ✓ Plant vegetation on exposed slopes. Where replanting is not feasible, cover with erosion control blankets (for example mulch netting or matting of jute, straw, glass fiber or excelsior).
- Cover stockpiled soil and landscaping materials with secured plastic sheeting and divert runoff around them. Keep exposed stockpiles off of paved roadways, sidewalks and driveways.
- ✓ Protect drainage courses, creeks, or catch basins with backup measures such as silt fences and/or temporary drainage swales.

- Conduct routine inspections of all erosion and sediment control measures and repair when necessary. This is particularly critical before, during and immediately after rainstorms.
- and excavated drop inlet sediment
- Dry-sweep, where possible, to clean sediments from streets, driveways and paved areas on construction sites. If water must be used to flush pavement, collect runoff to settle out sediments and protect storm drain inlets.



- Protect storm drain inlets from sediment-laden runoff. Storm drain inlet protection devices include barriers of burlap bags filled with drain rock, filter fabric fences, block and gravel filters,
- Limit on-site construction routes and stabilize construction entrances. Prevent construction vehicles from tracking soil onto adjacent streets.
- ✓ Prevent all debris, construction materials, soil, rock, etc. from being introduced into any storm drain or sanitary sewer structures.



Roadwork and Pavement Construction

- Apply concrete, asphalt, and seal coat during dry weather to prevent unset paving material from washing away with stormwater runoff.
- Cover storm drain inlets and manholes when paving or applying seal coat, slurry seal, fog seal, etc.
- ✓ Always park paving machines over drip pans or absorbent materials, since they tend to drip continuously. Do not spray diesel fuel to prevent asphalt build up on equipment. Use alternatives, such as citrus-based products.
- ✓ Use as little water as possible when making saw-cuts in pavement. Contain the slurry by placing rock bags, or temporary berms as close to the saw-cuts as possible. Vacuum "wet", or allow slurry



- Wash down exposed aggregate concrete only when the wash water can:
 - (1) Flow onto a dirt area;
 - (2) Drain onto a bermed surface from which it can be pumped and disposed of properly; or
 - (3) Be vacuumed from a catchment created by blocking a storm drain inlet. If necessary, divert runoff with temporary berms. Make sure runoff does not reach gutters or storm drains.
- ✓ Never wash sweepings from exposed aggregate concrete into a street or storm drain. Collect and return to aggregate base stockpile, or dispose with

Update pollution prevention measures as construction phases change or are completed.



Useful Phone Numbers

Spill Response Agencies Dial 911 for Hazardous Materials Spills

(408) 265-2600 Santa Clara Valley Water District **Environmental Compliance Division** Department of Fish & Wildlife (800) 852-7550

Office of Spill Prevention and Response (24 hours) City of San José Environmental Services Department (408) 945-3000

Environmental Enforcement Division Local Recyclers and Disposal Services

Santa Clara Countywide Recycling Hotline 1(800) 533-8414 Integrated Waste Management Division

Local Pollution Control Agencies (408) 918-3400 Santa Clara County Department of Environmental Health Santa Graral visi Materials Danifiance Division (408) 265-2600

City of San José

Departments of Public Works and Planning, Building and Code Enforcement

San José/Santa Clara Regional Wastewater Facility

(408) 535-3555

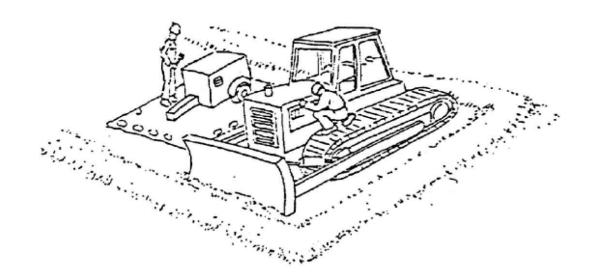
(408) 945-5300

Grading Permits and Inspections http://www.sanjoseca.gov

For more information on stormwater requirements, call the State Water Resources Control Board's Stormwater Information Line at (916) 341-5537, or San José's Environmental Services Watershed Protection Division at (408) 945-3000.

Vehicle and Equipment Maintenance

- ✓ Maintain all vehicles and heavy equipment. Inspect frequently and repair
- Use drip pans or drop cloths to catch drips and spills if you must drain and replace motor oil, radiator coolant, or other fluids on-site. Collect all spent fluids, store in labeled separate containers, and recycle whenever possible. Keep all fuels, oils and lubricants within secondary containment.
- Designate specific areas of the construction site, well away from creeks or storm drain inlets, for auto and equipment parking and routine vehicle and equipment maintenance.
- ✓ Perform major maintenance, repair jobs and vehicle and equipment washing off-site when feasible, or in designated and controlled areas on-site.
- ✓ Wash vehicles at an appropriate offsite facility. If equipment must be washed on-site, just use water and prevent water from entering the storm drain. Do not use soaps, solvents, degreasers, or steam cleaning equipment. Direct wash water to an area that will not flow to any storm drain inlets. The waste wash water can evaporate and/or infiltrate within this designated area.
- ✓ Refuel vehicles and heavy equipment in one designated location on the site and clean up spills immediately.
- ✓ Oil, antifreeze, batteries, and tires should also be recycled. Please contact the County Household Hazardous Waste Program at (408) 299-7300 for assistance on how you may dispose of your hazardous wastes.



Paints, Solvents and Adhesives

- ✓ Sweep up or collect non-hazardous paint chips and dust from dry stripping and sandblasting in plastic drop cloths and dispose of as trash. Dispose of chemical paint stripping residue and chips and dust from marine paints or paints containing lead or tributyl tin as hazardous waste.
- ✓ Never clean brushes or rinse paint containers into a street, gutter, storm drain, or creek.
- ✓ For water-based paints, paint out brushes to the maximum extent possible and rinse to a drain leading to the sanitary sewer (i.e., indoor plumbing). Dried latex paint may be disposed of in the trash.
- For oil-based paints, paint out brushes to the maximum extent possible, and filter and reuse thinners and solvents. Dispose of unusable thinners and residue as hazardous waste.
- ✓ Unwanted paint (that is not recycled), thinners, and sludges must be disposed of as hazardous waste.

Have spill cleanup kits available.



Concrete, Cement and Mortars

- ✓ Avoid mixing excess amounts of fresh concrete or cement mortar on-site.
- ✓ Wash out concrete transit mixers only in designated wash-out areas where the water will flow into settling ponds or onto dirt or stockpiles of aggregate base or sand. Whenever possible, recycle washout by pumping back into mixers for reuse. Never dispose of washout into the street, storm drains, drainage ditches, or creeks.
- ✓ Whenever possible, return contents of

mixer barrel to the yard for recycling. Dispose of small amounts of excess concrete, grout, and mortar in the

Call Environmental Enforcement at (408) 945-3000 before dewatering and/or pumping into storm or sanitary sewer systems.

Waste Disposal

- ✓ Keep pollutants off exposed surfaces. Place trash cans around the site to reduce litter. Dispose of non-hazardous construction wastes in covered dumpsters or recycling receptacles.
- ✓ Recycle leftover materials whenever possible. Materials such as concrete, asphalt, scrap metal, solvents, degreasers, cleared vegetation, paper, rock, and vehicle maintenance materials such as used oil, antifreeze, batteries, and tires are recyclable.
- ✔ Recycle leftover construction and demolition materials whenever possible. Materials such as concrete, rock, asphalt, cleared vegetation, scrap metal, wood, carpet, drywall can be recycled. For a list of facilities that will accept these materials: http://www.sjrecycles. org/BusinessDirectoryII.aspx?IngBusi nessCategoryID=39
- ✓ Dispose of all wastes properly. Materials that cannot be reused or recycled must be taken to an appropriate landfill or disposed of as hazardous waste.

Never throw or dispose of debris into channels, creeks or into wetland areas. Never store or leave debris in the street or near a creek where it may contact runoff.

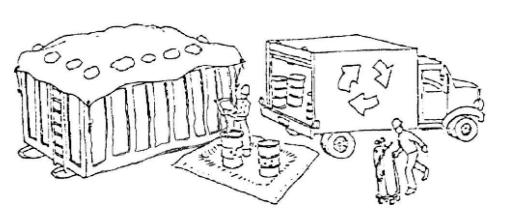
Illegal dumping is a violation subject

- to a fine and/or time in jail. Be sure that trailers carrying your materials are covered during transit. If not, the hauler may be cited and fined. ✓ Do not dispose of plant material in a
- creek or drainage facility or leave it in a roadway where it can clog storm drain inlets. ✓ Avoid disposal of plant material in trash dumpsters or mixing it with other

wastes. Compost plant material or take

it to a landfill or other facility that

- composts yard waste. ✓ Check with the Fire Department with questions on proper storage of hazardous materials.
- ✓ Protect all wastes from rainwater and runoff.



Revisions By

Drawn	VB
Check	VB
Date	7/15/18
Scale	AS-NOTED

Job No. 2018-6

Sheet A - 13

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD CF1R-PRF-01 Project Name: 22150 Cloverly Residence Calculation Date/Time: 08:56, Thu, Jan 16, 2020 Page 1 of 10 Calculation Description: Title 24 Analysis Input File Name: 22150_Cloverly_addition_v3_r3.ribd16

GENERAL INFORMATION
01 Project Name 22150 Cloverly Residence
Calculation Description Title 24 Analysis
Project Location 22150 Cloverly Ct Standards Version Compliance 2017 City Los Altos Zip Code 94024 Climate Zone CZ4 Compliance Manager Version BEMCmpMgr 2016.3.1 (1149)
Software Version CBECC-Res 2016.3.1 (1019) 07 10 12 14 16 Building Type Single Family
Project Scope Addition and/or Alteration Front Orientation (deg/Cardinal) 300 Number of Dwelling Units Total Cond. Floor Area (ft²) 3002 15 Number of Zones 2 Number of Stories 2 Slab A rea (ft²) 18 Addition Cond. Floor Area (ft²) 1479 Natural Gas Available Yes 20 Glazing Percentage (%) 30.8% Addition Slab Area (ft²)

COMPLIANCE RESULTS Building Complies with Computer Performance

This building incorporates features that require field testing and/or verification by a certified HERS rater under the supervision of a CEC-approved HERS provider.

This building incorporates one or more Special Features shown below

ENERGY USE SUMMARY								
04	05	06	07	08				
Energy Use (kTDV/ft²-yr)	Standard Design	Proposed Design	Compliance Margin	Percent Improvement				
Space Heating	62.33	63.72	-1.39	-2.2%				
Space Cooling	44.07	42.13	1.94	4.4%				
IAQ Ventilation	0.96	0.96	0.00	0.0%				
Water Heating	9.16	9.16	0.00	0.0%				
Photovoltaic Offset		0.00	0.00					
Compliance Energy Total	116.52	115.97	0.55	0.5%				

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

New ductwork added is less than 40 ft. in length

Registration Number: 218-P010244398E-000-000-0000000-0000 Registration Date/Time: 2020-01-18 11:11:30 CA Building Energy Efficiency Standards - 2016 Residential Compliance Report Version - CF1R-06232018-1149

HERS Provider: CalCERTS inc. Report Generated at: 2020-01-16 08:57:01

HERS Provider: CalCERTS inc.

Report Generated at: 2020-01-16 08:57:01

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD CF1R-PRF-01 Project Name: 22150 Cloverly Residence Calculation Date/Time: 08:56, Thu, Jan 16, 2020 Page 4 of 10 Calculation Description: Title 24 Analysis Input File Name: 22150_Cloverly_addition_v3_r3.ribd16

ATTIC									
01	02	03	04	05	06	07	08	09	10
Name	Construction	Type	Roof Rise	Roof Reflectance	Roof Emittance	Radiant Barrier	Cool Roof	Status	Verified Existing Condition
Attic	Asphalt Shingle	Ventilated	3	0.1	0.85	No	No	Existing	No



HERS Provider: CalCERTS inc. Registration Number: 218-P010244398E-000-000-00000 Registration Date/Time: 2020-01-18 11:11:30 CA Building Energy Efficiency Standards - 2016 Residential Compliance Report Version - CF1R-06232018-1149 Report Generated at: 2020-01-16 08:57:01

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD CF1R-PRF-01 Calculation Date/Time: 08:56, Thu, Jan 16, 2020 Project Name: 22150 Cloverly Residence Calculation Description: Title 24 Analysis Input File Name: 22150_Cloverly_addition_v3_r3.ribd16

01	02	03	04	05	06	07
Construction Name	Surface Type	C onstruction Type	Framing	Total Cavity R-value	Winter Design U-factor	Assembly Layers
Asphalt Shingle	Attic Roofs	Wood Framed Ceiling	2x4 Top Chord of Roof Truss @ 24 in. O.C.	none	0.644	Cavity / Frame: no insul. / 2x4 Top Chrd Roof Deck: Wood Siding/sheathing/decking Roofing: Light Roof (Asphalt Shingle)
Wall ex	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O.C.	none	0.387	Inside Finish: Gypsum Board Cavity / Frame: no insul. / 2x4
Wall new	Exterior Walls 🐰	Wood Framed Wall	2x4 @ 16 in. O.C.	R 15	0.087	Inside Finish: Gypsum Board Cavity / Frame: R-15 / 2x4 Sheathing / Insulation: Wood Siding/sheathing/decking Exterior Finish: 3 Coat Stucco
Wall Gar	Exterior Walls	. Wood Framed Wall	2x4 @ 16 in. O.C.	none	0.387	Inside Finish: Gypsum Board Cavity / Frame: no insul. / 2x4
Wall Int ex	Interior Walls	Wood Framed Wall		none	0.277	Inside Finish: Gypsum Board Cavity / Frame: no insul. / 2x4 Other Side Finish: Gypsum Board
Wall Int new	Interior Walls 📲	Wood Fra ried Wa ll	2×4 @ 16 in O C	R 13		Inside Finish: Gypsum Board Cavity / Frame: R-13 / 2x4 Other Side Finish: Gypsum Board The Finish: Gypsum Board The Finish: Gypsum Board
Floor Int new	Interior Floors	Wood Framed Floor	2x6@16 in. O.C.	none	0.199	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x6 Ceiling Below Finish: Gypsum Board
Floor crawl ex	Floors Over CrawIspace	Wood Framed Floor	2x6 @ 16 in. O.C.	none	0.220	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x6
Floor crawl new	Floors Over Crawlspace	Wood Framed Floor	2x6 @ 16 in. O.C.	R 19	0.049	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: R-19 / 2x6
Ceiling attic ex	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 16 in. O.C.	none	0.472	Inside Finish: Gypsum Board Cavity / Frame: no insul. / 2x4
Ceiling attic new	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O.C.	R 30	0.032	Inside Finish: Gypsum Board Cavity / Frame: R-9.1 / 2x4 Over Ceiling Joists: R-20.9 insul.
Ceiling cath new	Cathedral Ceilings	Wood Framed Ceiling	2x10 @ 24 in. O.C.	R 30	0.035	Inside Finish: Gypsum Board Cavity / Frame: R-30 / 2x10 Roof Deck: Wood Siding/sheathing/decking Roofing: Light Roof (Asphalt Shingle)

Registration Number: 218-P010244398E-000-000-00000 Registration Date/Time: 2020-01-18 11:11:30

CA Building Energy Efficiency Standards - 2016 Residential Compliance Report Version - CF1R-06232018-1149

Project Name: 22150 Clover	NCE - RESIDENTIAL PERFO	RMANCE COMPLIAN		Time: 08:56, Thu, Jan 1	16 2020	CF1R-PRF Page 2 of
Calculation Description: Title	·			22150_Cloverly_additio		rage 2 or
Г						
HERS FEATURE SUMMARY The following is a summary of the	e features that must be field-verifie	d by a certified HERS Ra	ter as a condition for mee	ting the modeled energy o	erformance for this computer	analysis Additional detai
provided in the building compone				99) -		
Building-level Verifications: IAQ mechanical vertilation Cooling System Verifications: Verified SEER Verified Refrigerant Charge HVAC Distribution System Verified Duct Sealing required if a du Domestic Hot Water System Ve - None	ct system component, plenum, :	or air handling unit is al	tered			
BUILDING - FEATURES INFORM		T		1		
01 Project Name	02 Conditioned Floor Area (ft ²)	03 Number of Dwelling Units	04 Number of Bedrooms	05 Number of Zones	06 Number of Ventilation Cooling Systems	07 Number of Water Heating Systems
22150 Cloverly Residence	S002	1	3	2	0	1
ZONE INFORMATION						
01	02		04		06	07
Zone Name	Zone Type	HVAC System Nar	Zone Floor <i>(</i> ne (ff ²)	Area Avg Ceiling Height	:	Water Heating System
House	Conditioned	HVAC alt	1523	10	DHW ex	n/a
Addition	Conditioned	HVAC alt	1479	10	DHW ex	n/a

	e 24 Analysis		ln	put File Nan	ne: 22150_	Cloverly_	addition_	v3_r3.ribd16		
FENESTRATION / GLAZING										
01	02	03	04	05	06	07	08	09	10	11
Name	Surface (Orientation-Azimuth)	Width (ft)	Height (ft)	Multiplier	Area (ft ²)	U-factor	SHGC	Exterior Shading	Status	Verified Existing Condition
Wind-n	Ex Wall F (Front-300)	6.0	2.0	1	12.0	D.30	0.24	Insect Screen (default)	New	n/a
Wind-n-2	Ex Wall F (Front-300)	6.0	2.0	1	12.0	D.30	0.24	Insect Screen (default)	New	n/a
Wind-n-3	Ex Wall F (Front-300)	2.0	6.0	1	12.0	D.30	0.24	Insect Screen (default)	New	n/a
Wind-alt	Ex Wall L (Left-30)	3.0	3.0	1	9.0	D.30	0.24	Insect Screen (default)	Altered	n/a
Wind-n-4	Ex Wall L (Left-30)	6.0	2.0	1	12.0	D.30	0.24	Insect Screen (default)	New	n/a
Wind-alt-2	Ex Wall L (Left-30)	2.0	3.0	1	6.0	D.30	0.24	Insect Screen (default)	Altered	n/a
Wind-alt-3	Ex Wall L (Left-30)	2.0	3.0	1	6.0	D.30	0.24	Insect Screen (default)	Altered	n/a
Wind-alt-4	Ex Wall B (Back-120)	2.0	6.0	1	12.0	D.30	0.24	Insect Screen (default)	Altered	n/a
Wind-alt-5	Ex Wall B (Back-120)	2.0	6.0	1	12.0	D.30	0.24	Insect Screen (default)	Altered	n/a
Wind-alt-6	Ex Wall B (Back-120)	.2.0.	6.0	1	12.0	D.30	0.24	Insect Screen (default)	Altered	n/a
GIDoor-n	Ex Wall R (Right-210)	5.0 _{.111}	6.7	11	33,5	.p.30	0.24	Insect Screen (default)	New	n/a
Wind-n-5	EX Wall R (Right-210)	·····2_0	6.0:		12.0	D.30	0.24	Insect Screen (default)	New	n/a
Wind-n-6	Ex.Wall R (Right-210)	2.0	6.0	1	120	D.30	1 0:24	, Insect Screen (default)	New	n/a
Wind-n-7	Ex Wall R (Right 210)	g::-6.0 g::-;	ي 2.0 سي	s ed	-12-0 j	₂ -0:30 ₂₀	0.24	Insect Screen (default)	New	n/a
Wind-alt-7	Ex Wall R (Right-210)	#::"2.0 ^{# "#}	*******7.0	7 % -1,	f4.0	**************************************	0.24	Insect Screen (default)	Altered	n/a
Wind-alt-8	Ex Wall R (Right-210)	5.0	3.0	1	15.0	D.30	0.24	Insect Screen (default)	Altered	n/a
Wind-n-8	Add Wall F (Front-300)	2.0	6.0	1	12.0	D.30	0.24	Insect Screen (default)	New	n/a
Wind-n-9	Add Wall F (Front-300)	4.0	7.0	1	28.0	D.30	0.24	Insect Screen (default)	New	n/a
GIDaor-n-2	Add Wall F (Front-300)	5.0	8.0	1	40.0	D.30	0.24	Insect Screen (default)	New	n/a
Wind-n-10	Add Wall F (Front-300)	6.0	4.0	1	24.0	D.30	0.24	Insect Screen (default)	New	n/a
Wind-n-11	Add Wall F (Front-300)	4.0	16.0	1	64.0	D.30	0.24	Insect Screen (default)	New	n/a
Wind-n-12	Add Wall F (Front-300)	4.0	6.0	1	24.0	D.30	0.24	Insect Screen (default)	New	n/a
Wind-n-13	Add Wall F (Front-300)	2.0	6.0	1	12.0	D.30	0.24	Insect Screen (default)	New	n/a
Wind-n-14	Add Wall F (Front-300)	6.0	2.0	1	12.0	D.30	0.24	Insect Screen (default)	New	n/a
GIDaor-n-3	Add Wall F (Front-300)	5.0	8.0	1	40.0	D.30	0.24	Insect Screen (default)	New	n/a
Wind-n-15	Add Wall L (Left-30)	2.0	6.0	1	12.0	D.30	0.24	Insect Screen (default)	New	n/a
Wind-n-16	Add Wall L (Left-30)	6.0	4.0	1	24.0	D.30	0.24	Insect Screen (default)	New	n/a
Wind-n-17	Add Wall L (Left-30)	6.0	4.0	1	24.0	0.30	0.24	Insect Screen (default)	New	n/a

CERTIFICATE OF Project Name: 221 Calculation Descri	150 Cloveri		AL PERF	ORMANC	C	METHOD Calculation D nput File Nan								CF1R-PRF-0 Page 8 of 1
BUILDING ENVELOR		VERIFICATION												
0	01		 	-1:4 - 14-11-	02	l			03	1	$-\!\!\!+$		04	
	Not Requin	stallation (QII)	— Qua	uity instalia	ation of Spray Foam Not Required	insulation	Not Required						CFMt n/a	
					Not Required				Required				11/4	
WATER HEATING SY	YSTEMS													
01		02			13	+	04			05 ımber of	S: Fra	olar ction	07	08 Verified Existing
Name		System Type			tion Type		ater Hea		Heaters 1			%)	Status	Condition
DHW ex		DHW		Stan	ndard		as Stora	ige		1	r	n/a	Existing	No
WATER HEATERS		<u></u>												
01	02	03	04	05	06	07		08	09	$-\!$	10		11	12
Name	Heater Element Type		Number of Units	Tank Volume (gal)	Uniform Energy Factor / Energy Factor / Efficiency	Input Rating Pilot / Thermal Efficiency	Ins R	Tank sulation R-value Int/Ext)	Standby Loss/ Recover Eff	Firs	st Hour ating / w Rate		Heat Pump d / Model	Tank Location or Ambient Condition
Gas Storage	Gas	Small Storage		ii 50 👊	. 106EF ∷	= 75 kBtL/l	nr.	0	n/a	4	n/a		n/a	n/a
SPACE CONDITION	ING SYSTE	MS												
01		02		E0	rm jag fa	04	11/	7 70/	5 ### # #	06	;	(07	08
SC Sys Name	-	System Type		Heating Un	nit Name C	· · · · · · · · · · · · · · · · · · ·					ribution lame S		atus	Verified Existin Condition
HVAC alt		Other Heating and Coo System	ling	Ex Furr	nace	New Cooling		Fan	ex	Ducts) ex	Altı	ered	No
HVAC - HEATING UN														
	01		$-\!\!\!\!\!+\!\!\!\!\!-$		02			$-\!\!+$	03				04	
	Name Ex Furna		\pm		System T CntrlFurn				Number of	Units			75 AFUE	
HVAC - COOLING U	NIT TYPES											-		
01		02			03	04	05		06		07	,		08
Name		System :	Туре	N	umber of Units	Efficiend EER	y SEER	Zonally	y Controlle	ed C	ompres	sor Type	HE	RS Verification
New Coolin	10	SplitAirC	ond		1	13	16	No	ot Zonal		Single 9	Speed	New	Cooling-hers-coo

Calculation Description:	Title 24 Analysis			Input F	ile Name: 22	2150_Cloverly_	_addition_v3_r3	3.ribd16			
OPAQUE SURFACES 01	02	03	<u> </u>	04	05	06	07	08	09	10	11
Name	Zone	Construct	ion A	zimuth	Orientation	Gross Area (ft ²)	Window & Do		Wall Exception	Status	Verified Existing Condition
Ex Wall F	House	Wall ex		300	Front	152	36	90	n/a	Existing	No
Ex Wall L	House	Wall ex		30	Left	579	33	90	n/a	Existing	No
Ex Wall B	House	Wall ex		120	Back	332	36	90	n/a	Existing	No
Ex Wall R	House	Wall ex		210	Right	467	98.5	90	n/a	Existing	No
Interior WallToAdd	House>>Addition	Wall Int e	ex			1748	0		n/a	New	n/a
Interior Wall To Gar-ex	House>>Garage	Wall Int e	ex			90	0		n/a	Existing	No
Ceiling ex	House 🕍	Ceiling attio	сех			1523			n/a	Existing	No
Floor Over Crawlspace ex	House	Floor craw	l ex			1523			n/a	Existing	No
Add Wall F	Addition	Wall new	v	300	Front	597	256	90	none	New	n/a
Add Wall L	Addition	Wall new	У	30	Left	470	97.75	90	Extension	New	n/a
Add Wall B	Addition		v 🔐	1.20	Back	. 533.	306	90	Extension	New	n/a
Add Wall R	Addition	Waltifien	V	210	Right	357: :::	61	90	Extension	New	n/a
Interior WallToGar-n	Addition>>Garage.	-Wall:Int ni	⊉w			180	18		n/a	New	n/a
Ceiling n	Addition	Ceiling attic	new.	#1	# 4"4 %	, ^{, , ,} 10,14.,	: 119		n/a	New	n/a
Floor Over Crawlspace n	 Addition	Floorcrawii	new "	1111	11 -11,,,,11 19	977" "	. + 1		n/a	New	n/a
Interior Floor to ex 1st fl	Addition>>House	Floor Int n	ew			166			n/a	New	n/a
Exterior GWall F	Garage	Wall Ga	r	300	Front	156	112	90	n/a	New	n/a
Exterior GWall L	Garage	Wall Ga	r	30	Left	47	0	90	n/a	New	n/a
Exterior GWall R	Garage	Wall Ga	r	210	Right	165	0	90	n/a	Existing	No
Ceiling gar	Garage	Ceiling attio	c ex			388			n/a	Existing	No
DPAQUE SURFACES - Cath	nedral Ceilings										
01	02	03	04	05	06	07	08	09	10	11	12
Name	Zone	Туре	Orientation	Area (ft²)	Skylight Area (ft2)	Roof Rise (x in 12)	Roof Reflectance	Roof Emittance	Cool Roof	Status	Verified Existing Condifion
Cathedral-n-F	Addition	Ceiling cath new	Front	132	0	0.25	0.1	0.85	No	New	n/a
	 			(ft²)	Area (ft2)	(x in 12)	Reflectance	Emittance	Roof		Existing Condifion

	y Residence			alculation [Page 6
Calculation Description: Titl	e 24 Analysis		Ir	put File Na	me : 22150_	_Cloverly_	addition_	_v3r3.ribd16			
Wind-n-18	Add Wall L (Left-30)	2.0	3.0	1	6.0	D.30	0.24	Insect Screen (default)	New	n/a
Wind-n-19	Add Wall L (Left-30)	2.0	3.0	1	6.0	D.30	0.24	Insect Screen (default)	New	n/a
Wind-n-20	Add Wall L (Left-30)	3.0	3.0	1	9.0	D.30	0.24	Insect Screen (default)	New	n/a
GIDaor-n-4	Add Wall L (Left-30)	2.5	6.7	1	16.8	D.30	0.24	Insect Screen (default)	New	n/a
Wind-n-21	Add Wall B (Back-120)	6.0	4.0	1	24.0	D.30	0.24	Insect Screen (default)	New	n/a
Wind-n-22	Add Wall B (Back-120)	6.0	2.0	1	12.0	D.30	0.24	Insect Screen (default)	New	n/a
Wind-n-23	Add Wall B (Back-120)	6.0	2.0	1	12.0	D.30	0.24	Insect Screen (default)	New	n/a
Wind-n-24	Add Wall B (Back-120)	2.0	3.0	1	6.0	D.30	0.24	Insect Screen (default)	New	n/a
GIDaor-n-5	Add Wall B (Back-120)	8.0	9.0	1	72.0	D.30	0.24	Insect Screen (default)	New	n/a
GIDaor-n-6	Add Wall B (Back-120)	20.0	9.0	1	180.0	D.30	0.24	Insect Screen (default)	New	n/a
Wind-n-25	Add Wall R (Right-210)	3.0	3.0	1	9.0	D.30	0.24	Insect Screen (default)	New	n/a
Wind-n-26	Add Wall:R (Right-210)	2.0	6.0	1	12.0	D.30	0.24	Insect Screen (default)	New	n/a
Wind-n-27	Add Wall R (Right-210)	4.0	6.0	1	24.0	D.30	0.24	Insect Screen (default)	New	n/a
Wind-n-28	Add Wall R (Right-210)	4.0	4.0	1	16.0	D.30	0.24	Insect Screen (default)	New	n/a
OPAQUE DOORS	***************************************		•		•	•	•	•			•
01	L	02			03	04		05		06	
Name	Side of	Building		Ape	a (ft²)	U-fac	tor	Status	Verifi	ied Existing	Conditio
Entry-n	Interior W	/all To Gar-n			8.0	0,5	0	⊪ New		No	
								l l			
Z.nay	THE	"	The second secon				· 中				

	RS VERIFICATION										
01		02		03		'	04	05		Varified	06 Refrigeran
Name		Verified Airflow		Airflow Target		Verifi	ed EER	Verified 9	SEER		harge
New Cooling-h	ers-cool	Not Required		n/a		Not R	equired!	Requir	red	Re	equired
HVAC - DISTRIBUTI	ON SYSTEMS										
01	02	03	04	05)6	07	08		09	10
Name	Туре	Duct Leakage	Insulati R-valu			n Duct ation	Bypass Duct	Status		d Existing ndition	HERS Verificat
Ducts ex	Ducts located in a (Ventilated and Unventilated)	d Existing (not)	8.0	Attic	At	ttic	None	Existing + Nev	′	No	n/a
HVAC - FAN SYSTE											
	01 Name			02 Type		Fa	03 ın Power (Watts	/CEM)		04 IERS Verifica	ation
	Fan ex			PSC Eurpace Fan			<u> </u>	.011111	• •		
IAQ (Indoor Air Qual								iiii			
01	• •			03			04	# # (05	Τ	06
Dwelling U		""""""""""""""""""""""""""""""""""""	mi m	IAQ Watts/CFM	1,,,,}	IA	Q Fan Type	IAQ R	ecovery eness(%)	HERS	Verificatio
SFam IAQVer	tRpt	60		0.25			Default		0	R	equired

N

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMA	NCE COMPLIANCE METHOD CF1R-PRF-0
Project Name: 22150 Cloverly Residence	Calculation Date/Time: 08:56, Thu, Jan 16, 2020 Page 10 of 1
Calculation Description: Title 24 Analysis	Input File Name: 22150_Cloverly_addition_v3_r3.ribd16
DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	
1. I certify that this Certificate of Compliance documentation is accurate a	and complete.
Documentation Author Name:	Documentation Author Signature:
Igor Pichko	Igor Pichko
Company:	Signature Date:
Energy Consult LLC	2020-01-17 11:00:41
Address:	CEA/HERS Certification Identification (If applicable
1252 w 22nd st #2	CEA #R16-14-20025 CERTIFIED ENERGY ANALYST
City/State/Zip:	Phone:
San Pedro, CA 90731	424-247-7658
RESPONSIBLE PERSON'S DECLARATION STATEMENT	•
I certify that the energy features and performance specifications in Regulations. The building design features or system design features identified.	of California: ode to accept responsibility for the building design identified on this Certificate of Compliance. identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, ne enforcement agency for approval with this building permit application.
Responsible Designer Name:	Responsible Designer Signature: Vani Bahl
Vani Bahl	Paner Dane
Company:	Date Signed:
Vani Bahl	2020-01-18 11:11:30
Address:	License:
PO Box 955	na
City/State/Zip:	Phone:
Mountain View, CA 94042	408-598-1240

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Registration Number: 218-P010244398E-000-000-0000000-0000 Registration Date/Time: 2020-01-18 11:11:30 CA Building Energy Efficiency Standards - 2016 Residential Compliance Report Version - CF1R-06232018-1149

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2016 Low-Rise Residential Mandatory Measures Summary

Building Envelo	pe Measures:
§ 110.6(a)1:	Air Leakage. Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 cfm/ft² or less when tested per NFRC-400 or ASTM E283 or AAMA/WDMA/CSA 101/I.S.2/A440-2011.*
§ 110.6(a)5:	Labeling. Fenestration products must have a label meeting the requirements of § 10-111(a).
§ 110.6(b):	Field fabricated exterior doors and fenestration products must use U-factors and solar heat gain coefficient (SHGC) values from TABLES 110.6-A and 110.6-B for compliance and must be caulked and/or weatherstripped.
§ 110.7:	Air Leakage. All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulked, gasketed, or weather stripped.
§ 110.8(a):	Insulation Certification by Manufacturers. Insulation specified or installed must meet Standards for Insulating Material.
§ 110.8(g):	Insulation Requirements for Heated Slab Floors. Heated slab floors must be insulated per the requirements of § 110.8(g).
§ 110.8(i):	Roofing Products Solar Reflectance and Thermal Emittance. The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) when the installation of a cool roof is specified on the CF1R.
§ 110.8(j):	Radiant Barrier. A radiant barrier must have an emittance of 0.05 or less and be certified to the Department of Consumer Affairs.
§ 150.0(a):	Ceiling and Rafter Roof Insulation. Minimum R-22 insulation in wood-frame ceiling; or the weighted average U-factor must not exceed 0.04 Minimum R-19 or weighted average U-factor of 0.054 or less in a rafter roof alteration. Attic access doors must have permanently attached insulation using adhesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage. Insulation must be installed in direct contact with a continuous roof or ceiling which is sealed to limit infiltration and exfiltration as specified in § 110.7, including but not limite to placing insulation either above or below the roof deck or on top of a drywall ceiling.*
§ 150.0(b):	Loose-fill Insulation. Loose fill insulation must meet the manufacturer's required density for the labeled R-value.
§ 150.0(c):	Above Grade Wall Insulation. Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less (R-19 in 2x6 or U-factor of 0.074 or less). Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102, equivalent to an installivalue of R-13 in a wood framed assembly.
§ 150.0(d):	Raised-floor Insulation. Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor.
§ 150.0(f):	Slab Edge Insulation. Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone without facings, no greater than 0.3%; have a water vapor permeance no greater than 2.0 perm/inch; be protected from physical damage and UV light deterioration; and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g).
§ 150.0(g)1:	Vapor Retarder. In Climate Zones 1-16, the earth floor of unvented crawl space must be covered with a Class I or Class II vapor retarder. Thi requirement also applies to controlled ventilation crawl space for buildings complying with the exception to § 150.0(d).
§ 150.0(g)2:	Vapor Retarder. In Climate Zones 14 and 16, a Class I or Class II vapor retarder must be installed on the conditioned space side of all insulation in all exterior walls, vented attics, and unvented attics with air-permeable insulation.
§ 150.0(q):	Fenestration Products. Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must have a maximum U-factor of 0.58; or the weighted average U-factor of all fenestration must not exceed 0.58.*
Fireplaces, Deco	rative Gas Appliances, and Gas Log Measures:
§ 150.0(e)1A:	Closable Doors. Masonry or factory-built fireplaces must have a closable metal or glass door covering the entire opening of the firebox.
§ 150.0(e)1B:	Combustion Intake. Masonry or factory-built fireplaces must have a combustion outside air intake, which is at least six square inches in area and is equipped with a readily accessible, operable, and tight-fitting damper or combustion-air control device.*
§ 150.0(e)1C:	Flue Damper. Masonry or factory-built fireplaces must have a flue damper with a readily accessible control."
§ 150.0(e)2:	Pilot Light. Continuous burning pilot lights and the use of indoor air for cooling a firebox jacket, when that indoor air is vented to the outside of the building, are prohibited.
Space Conditioni	ng, Water Heating, and Plumbing System Measures:
§ 110.0-§ 110.3:	Certification. Heating, ventilation and air conditioning (HVAC) equipment, water heaters, showerheads, faucets, and all other regulated appliances must be certified by the manufacturer to the Energy Commission.*
§ 110.2(a):	HVAC Efficiency. Equipment must meet the applicable efficiency requirements in TABLE 110.2-A through TABLE 110.2-K.
§ 110.2(b):	Controls for Heat Pumps with Supplementary Electric Resistance Heaters. Heat pumps with supplementary electric resistance heaters must have controls that prevent supplementary heater operation when the heating load can be met by the heat pump alone; and in which the cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating.
§ 110.2(c):	Thermostats. All unitary heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat.
§ 110.3(c)5:	Water Heating Recirculation Loops Serving Multiple Dwelling Units. Water heating recirculation loops serving multiple dwelling units must meet the air release valve, backflow prevention, pump priming, pump isolation valve, and recirculation loop connection requirements of § 110.3(c)5.
§ 110.3(c)7:	Isolation Valves. Instantaneous water heaters with an input rating greater than 6.8 kBTU/hr (2 kW) must have isolation valves with hose bibbs or other fittings on both cold water and hot water lines of water heating systems to allow for water tank flushing when the valves are closed.
§ 110.5:	Pilot Lights. Continuously burning pilot lights are prohibited for natural gas: fan-type central furnaces; household cooking appliances (appliances without an electrical supply voltage connection with pilot lights that consume less than 150 Btu/hr are exempt); and pool and spa heater
§ 150.0(h)1:	Building Cooling and Heating Loads. Heating and/or cooling loads are calculated in accordance with ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume; SMACNA Residential Comfort System Installation Standards Manual; or ACCA Manual J using design conditions specified in § 150.0(h)2.

§ 150.0(h)3A:	2016 Low-Rise Residential Mandatory Measures Summary Clearances. Installed air conditioner and heat pump outdoor condensing units must have a clearance of at least 5 feet from the outlet of ar dryer vent.
§ 150.0(h)3B:	Liquid Line Drier. Installed air conditioner and heat pump systems must be equipped with liquid line filter driers if required, as specified by manufacturer's instructions.
§ 150.0(j)1:	Storage Tank Insulation. Unfired hot water tanks, such as storage tanks and backup storage tanks for solar water-heating systems, must R-12 external insulation or R-16 internal insulation where the internal insulation R-value is indicated on the exterior of the tank.
§ 150.0(j)2A:	Water piping and cooling system line insulation. For domestic hot water system piping, whether buried or unburied, all of the following red insulated according to the requirements of TABLE 120.3-A: the first 5 feet of hot and cold water pipes from the storage tank; all piping we nominal diameter of 3/4 inch or larger; all piping associated with a domestic hot water recirculation system regardless of the pipe diameter; piping from the heating source to storage tank or between tanks; piping buried below grade; and all hot water pipes from the heating source kitchen fixtures.*
§ 150.0(j)2B:	Water piping and cooling system line insulation. All domestic hot water pipes that are buried below grade must be installed in a water pi and non-crushable casing or sleeve.*
§ 150.0(j)2C:	Water piping and cooling system line insulation. Pipe for cooling system lines must be insulated as specified in § 150.0(j)2A. Distribution piping for steam and hydronic heating systems or hot water systems must meet the requirements in TABLE 120.3-A.*
§ 150.0(j)3:	Insulation Protection. Insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wi
§ 150.0(j)3A:	Insulation Protection. Insulation exposed to weather must be installed with a cover suitable for outdoor service. For example, protected by aluminum, sheet metal, painted canvas, or plastic cover. The cover must be water retardant and provide shielding from solar radiation that cause degradation of the material.
§ 150.0(j)3B:	Insulation Protection. Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must ha Class I or Class II vapor retarder.
§ 150.0(n)1:	Gas or Propane Systems. Systems using gas or propane water heaters to serve individual dwelling units must include all of the following: a 120V electrical receptacle within 3 feet of the water heater; a Category III or IV vent, or a Type B vent with straight pipe between the outside termination and the space where the water heater is installed; a condensate drain that is no more than 2 inches higher than the base of the water heater, and allows natural draining without pump assistance; and a gas supply line with a capacity of at least 200,000 Btu/hr.
§ 150.0(n)2:	Recirculating Loops. Recirculating loops serving multiple dwelling units must meet the requirements of § 110.3(c)5.
§ 150.0(n)3:	Solar Water-heating Systems. Solar water-heating systems and collectors must be certified and rated by the Solar Rating and Certification Corporation (SRCC) or by a listing agency that is approved by the Executive Director.
Ducts and Fans	
§ 110.8(d)3:	Ducts. Insulation installed on an existing space-conditioning duct must comply with § 604.0 of the California Mechanical Code (CMC). If a contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement.
§ 150.0(m)1:	CMC Compliance. All air-distribution system ducts and plenums must be installed, sealed, and insulated to meet the requirements of CMC §§ 601.0, 602.0, 603.0, 604.0, 605.0 and ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible 3rd Edition. Port of supply-air and return-air ducts and plenums must be insulated to a minimum installed level of R-6.0 (or higher if required by CMC § 605.0 a minimum installed level of R-4.2 when entirely in conditioned space as confirmed through field verification and diagnostic testing (RA3.1.4.3.8). Connections of metal ducts and inner core of flexible ducts must be mechanically fastened. Openings must be sealed with mastic, tape, or other duct-closure system that meets the applicable requirements of UL 181, UL 181A, or UL 181B or aerosol sealant that meets the requirements of UL 723. If mastic or tape is used to seal openings greater than ½ inch, the combination of mastic and either mest tape must be used. Building cavities, support platforms for air handlers, and plenums designed or constructed with materials other than seal sheet metal, duct board or flexible duct must not be used for conveying conditioned air. Building cavities and support platforms may contain ducts. Ducts installed in cavities and support platforms must not be compressed to cause reductions in the cross-sectional area of the ducts
§ 150.0(m)2:	Factory-Fabricated Duct Systems. Factory-fabricated duct systems must comply with applicable requirements for duct construction, connections, and closures; joints and seams of duct systems and their components must not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands. Field-Fabricated Duct Systems. Field-fabricated duct systems must comply with applicable requirements for: pressure-sensitive tapes,
§ 150.0(m)3:	mastics, sealants, and other requirements specified for duct construction.
§ 150.0(m)7:	Backdraft Dampers. All fan systems that exchange air between the conditioned space and the outside of the building must have backdraft automatic dampers.
§ 150.0(m)8:	Gravity Ventilation Dampers. Gravity ventilating systems serving conditioned space must have either automatic or readily accessible, manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.
§ 150.0(m)9:	Protection of Insulation. Insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather must be suitable for outdoor service. For example, protected by aluminum, sheet metal, painted canvas plastic cover. Cellular foam insulation must be protected as above or painted with a coating that is water retardant and provides shielding from solar radiation.
§ 150.0(m)10:	Porous Inner Core Flex Duct. Porous inner core flex duct must have a non-porous layer between the inner core and outer vapor barrier.
§ 150.0(m)11:	Duct System Sealing and Leakage Test. When space conditioning systems use forced air duct systems to supply conditioned air to an occupiable space, the ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with § 150.0(m)11and Reference Residential Appendix RA3.
	Air Filtration. Mechanical systems that supply air to an occupiable space through ductwork exceeding 10 feet in length and through a therm

	2016 Low-Rise Residential Mandatory Measures Summary
§ 150.0(m)13:	Duct System Sizing and Air Filter Grille Sizing. Space conditioning systems that use forced air ducts to supply cooling to an occupiable space must have a hole for the placement of a static pressure probe (HSPP), or a permanently installed static pressure probe (PSPP) in the supply plenum. The space conditioning system must also demonstrate airflow ≥ 350 CFM per ton of nominal cooling capacity through the rigilles, and an air-handling unit fan efficacy ≤ 0.58 W/CFM as confirmed by field verification and diagnostic testing, in accordance with Reference Residential Appendix RA3.3. This applies to both single zone central forced air systems and every zone for zonally controlled conforced air systems.*
§150.0(o):	Ventilation for Indoor Air Quality. All dwelling units must meet the requirements of ASHRAE Standard 62.2. Neither window operation no continuous operation of central forced air system air handlers used in central fan integrated ventilation systems are permissible methods of providing whole-building ventilation.
§ 150.0(o)1A:	Field Verification and Diagnostic Testing. Whole-building ventilation airflow must be confirmed through field verification and diagnostic testing, in accordance with Reference Residential Appendix RA3.7.
Pool and Spa Sy	stems and Equipment Measures:
§ 110.4(a):	Certification by Manufacturers. Any pool or spa heating system or equipment must be certified to have all of the following: a thermal effic that complies with the Appliance Efficiency Regulations; an on-off switch mounted outside of the heater that allows shutting off the heater without adjusting the thermostat setting; a permanent weatherproof plate or card with operating instructions; and must not use electric resistance heating.*
§ 110.4(b)1:	Piping. Any pool or spa heating equipment must be installed with at least 36 inches of pipe between the filter and the heater, or dedicated suction and return lines, or built-in or built-up connections to allow for future solar heating.
§ 110.4(b)2:	Covers. Outdoor pools or spas that have a heat pump or gas heater must have a cover.
§ 110.4(b)3:	Directional inlets and time switches for pools. Pools must have directional inlets that adequately mix the pool water, and a time switch to will allow all pumps to be set or programmed to run only during off-peak electric demand periods.
§ 110.5:	Pilot Light. Natural gas pool and spa heaters must not have a continuously burning pilot light.
§ 150.0(p):	Pool Systems and Equipment Installation. Residential pool systems or equipment must meet the specified requirements for pump sizing rate, piping, filters, and valves.*
Lighting Measur	
§ 110.9:	Lighting Controls and Components. All lighting control devices and systems, ballasts, and luminaires must meet the applicable requirem of § 110.9.*
§ 110.9(e):	JA8 High Efficacy Light Sources. To qualify as a JA8 high efficacy light source for compliance with § 150.0(k), a residential light source no be certified to the Energy Commission according to Reference Joint Appendix JA8.
§ 150.0(k)1A:	Luminaire Efficacy. All installed luminaires must be high efficacy in accordance with TABLE 150.0-A.
§ 150.0(k)1B:	Blank Electrical Boxes. The number of electrical boxes that are more than 5 feet above the finished floor and do not contain a luminaire o other device must be no greater than the number of bedrooms. These electrical boxes must be served by a dimmer, vacancy sensor controf fan speed control.
§ 150.0(k)1C:	Recessed Downlight Luminaires in Ceilings. Luminaires recessed into ceilings must meet all of the requirements for: insulation contact (labeling; air leakage; sealing; maintenance; and socket and light source as described in § 150.0(k)1C. A JA8-2016-E light source rated for elevated temperature must be installed by final inspection in all recessed downlight luminaires in ceilings.
§ 150.0(k)1D:	Electronic Ballasts. Ballasts for fluorescent lamps rated 13 watts or greater must be electronic and must have an output frequency no less 20 kHz.
§ 150.0(k)1E:	Night Lights. Permanently installed night lights and night lights integral to installed luminaires or exhaust fans must be rated to consume nore than 5 watts of power per luminaire or exhaust fan as determined in accordance with § 130.0(c). Night lights do not need to be control by vacancy sensors.
§ 150.0(k)1F:	Lighting Integral to Exhaust Fans. Lighting integral to exhaust fans (except when installed by the manufacturer in kitchen exhaust hoods) must meet the applicable requirements of § 150.0(k).*
§ 150.0(k)1G:	Screw based luminaires. Screw based luminaires must not be recessed downlight luminaires in ceilings and must contain lamps that com with Reference Joint Appendix JA8. Installed lamps must be marked with "JA8-2016" or "JA8-2016-E" as specified in Reference Joint Appe JA8."
§ 150.0(k)1H:	Enclosed Luminaires. Light sources installed in enclosed luminaires must be JA8 compliant and must be marked with "JA8-2016-E."
§ 150.0(k)2A:	Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A.
§ 150.0(k)2B:	Interior Switches and Controls. Exhaust fans must be switched separately from lighting systems.
§ 150.0(k)2C:	Interior Switches and Controls. Luminaires must be switched with readily accessible controls that permit the luminaires to be manually switched ON and OFF.
§ 150.0(k)2D:	Interior Switches and Controls. Controls and equipment must be installed in accordance with manufacturer's instructions.
§ 150.0(k)2E:	Interior Switches and Controls. No control must bypass a dimmer or vacancy sensor function if the control is installed to comply with § 150.0(k).
§ 150.0(k)2F:	Interior Switches and Controls. Lighting controls must comply with the applicable requirements of § 110.9.
§ 150.0(k)2G:	Interior Switches and Controls. An energy management control system (EMCS) may be used to comply with dimmer requirements if it: functions as a dimmer according to § 110.9; meets the Installation Certificate requirements of § 130.4; meets the EMCS requirements of § 130.5(f); and meets all other requirements in § 150.0(k)2.
§ 150.0(k)2H:	Interior Switches and Controls. An EMCS may be used to comply with vacancy sensor requirements in § 150.0(k) if it meets all of the following: it functions as a vacancy sensor according to § 110.9; the Installation Certificate requirements of § 130.4; the EMCS requirement 130.5(f); and all other requirements in § 150.0(k)2.
§ 150.0(k)2I:	Interior Switches and Controls. A multiscene programmable controller may be used to comply with dimmer requirements in § 150.0(k) if it provides the functionality of a dimmer according to § 110.9, and complies with all other applicable requirements in § 150.0(k)2.



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§ 150.0(k)2J:	Interior Switches and Controls. In bathrooms, garages, laundry rooms, and utility rooms, at least one luminaire in each of these sp be controlled by a vacancy sensor.
§ 150.0(k)2K:	Interior Switches and Controls. Dimmers or vacancy sensors must control all luminaires required to have light sources compliant vacancy Seference Joint Appendix JA8, except luminaires in closets less than 70 square feet and luminaires in hallways.*
§ 150.0(k)2L:	Interior Switches and Controls. Undercabinet lighting must be switched separately from other lighting systems.
§ 150.0(k)3A:	Residential Outdoor Lighting. For single-family residential buildings, outdoor lighting permanently mounted to a residential buildings buildings on the same lot, must meet the requirement in item § 150.0(k)3Ai (ON and OFF switch) and the requirements in either item § 150.0(k)3Aii (photocell and motion sensor) or item § 150.0(k)3Aiii (photo control and automatic time switch control, astronomical time switch control, astronomical times).
§ 150.0(k)3B:	Residential Outdoor Lighting. For low-rise multifamily residential buildings, outdoor lighting for private patios, entrances, balconies and porches; and outdoor lighting for residential parking lots and residential carports with less than eight vehicles per site must come either § 150.0(k)3A or with the applicable requirements in §§ 110.9, 130.0, 130.2, 130.4, 140.7 and 141.0.
§ 150.0(k)3C:	Residential Outdoor Lighting. For low-rise residential buildings with four or more dwelling units, outdoor lighting not regulated by § 150.0(k)3B or § 150.0(k)3D must comply with the applicable requirements in §§ 110.9, 130.0, 130.2, 130.4, 140.7 and 141.0.
§ 150.0(k)3D:	Residential Outdoor Lighting. Outdoor lighting for residential parking lots and residential carports with a total of eight or more vehicles per site must comply with the applicable requirements in §§ 110.9, 130.0, 130.2, 130.4, 140.7, and 141.0.
§ 150.0(k)4:	Internally illuminated address signs. Internally illuminated address signs must comply with § 140.8; or must consume no more that power as determined according to § 130.0(c).
§ 150.0(k)5:	Residential Garages for Eight or More Vehicles. Lighting for residential parking garages for eight or more vehicles must comply wapplicable requirements for nonresidential garages in §§ 110.9, 130.0, 130.1, 130.4, 140.6, and 141.0.
§ 150.0(k)6A:	Interior Common Areas of Low-rise Multi-Family Residential Buildings. In a low-rise multifamily residential building where the to common area in a single building equals 20 percent or less of the floor area, permanently installed lighting for the interior common at building must be high efficacy luminaires and controlled by an occupant sensor.
§ 150.0(k)6B:	Interior Common Areas of Low-rise Multi-Family Residential Buildings. In a low-rise multifamily residential building where the to common area in a single building equals more than 20 percent of the floor area, permanently installed lighting in that building must: i. Comply with the applicable requirements in §§ 110.9, 130.0, 130.1, 140.6 and 141.0; and ii. Lighting installed in corridors and stairwells must be controlled by occupant sensors that reduce the lighting power in each space be 50 percent. The occupant sensors must be capable of turning the light fully on and off from all designed paths of ingress and egress.
Solar Ready Bui	
§ 110.10(a)1:	
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	application for a tentative subdivision map for the residences has been deemed complete by the enforcement agency must comply we requirements of § 110.10(b) through § 110.10(e). Low-rise Multi-family Buildings. Low-rise multi-family buildings must comply with the requirements of § 110.10(b) through § 110.10 Minimum Area. The solar zone must have a minimum total area as described below. The solar zone must comply with access, path ventilation, and spacing requirements as specified in Title 24, Part 9 or other Parts of Title 24 or in any requirements adopted by a logical jurisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 sceneral for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof greater than 10,000 square feet. For single family residences the solar zone must be located on the roof or overhang of the building and have a total area no less than square feet. For low-rise multi-family buildings the solar zone must be located on the roof or overhang of the building, or on the roof or the roof or overhang of the building, or on the roof or the roof or overhang of the building, or on the roof or the roof or overhang of the building.
§ 110.10(a)2: § 110.10(b)1:	application for a tentative subdivision map for the residences has been deemed complete by the enforcement agency must comply we requirements of § 110.10(b) through § 110.10(e). Low-rise Multi-family Buildings. Low-rise multi-family buildings must comply with the requirements of § 110.10(b) through § 110.10 Minimum Area. The solar zone must have a minimum total area as described below. The solar zone must comply with access, path ventilation, and spacing requirements as specified in Title 24, Part 9 or other Parts of Title 24 or in any requirements adopted by a logical jurisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 sceach for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof greater than 10,000 square feet. For single family residences the solar zone must be located on the roof or overhang of the building and have a total area no less than square feet. For low-rise multi-family buildings the solar zone must be located on the roof or overhang of the building, or on the roof of another structure located within 250 feet of the building, or on covered parking installed with the building project, and have a total than 15 percent of the total roof area of the building excluding any skylight area."
§ 110.10(a)2:	application for a tentative subdivision map for the residences has been deemed complete by the enforcement agency must comply we requirements of § 110.10(b) through § 110.10(e). Low-rise Multi-family Buildings. Low-rise multi-family buildings must comply with the requirements of § 110.10(b) through § 110.10 Minimum Area. The solar zone must have a minimum total area as described below. The solar zone must comply with access, path ventilation, and spacing requirements as specified in Title 24, Part 9 or other Parts of Title 24 or in any requirements adopted by a logical jurisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 scene for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof greater than 10,000 square feet. For single family residences the solar zone must be located on the roof or overhang of the building and have a total area no less than square feet. For low-rise multi-family buildings the solar zone must be located on the roof or overhang of the building, or on the roof of another structure located within 250 feet of the building, or on covered parking installed with the building project, and have a total than 15 percent of the total roof area of the building excluding any skylight area.* Orientation. All sections of the solar zone located on steep-sloped roofs must be oriented between 110 degrees and 270 degrees of Shading. The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and mounted equipment.*
§ 110.10(a)2: § 110.10(b)1: § 110.10(b)2:	application for a tentative subdivision map for the residences has been deemed complete by the enforcement agency must comply we requirements of § 110.10(b) through § 110.10(e). Low-rise Multi-family Buildings. Low-rise multi-family buildings must comply with the requirements of § 110.10(b) through § 110.10 Minimum Area. The solar zone must have a minimum total area as described below. The solar zone must comply with access, path ventilation, and spacing requirements as specified in Title 24, Part 9 or other Parts of Title 24 or in any requirements adopted by a logical jurisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 scene for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof greater than 10,000 square feet. For single family residences the solar zone must be located on the roof or overhang of the building and have a total area no less than square feet. For low-rise multi-family buildings the solar zone must be located on the roof or overhang of the building, or on the roof of another structure located within 250 feet of the building, or on covered parking installed with the building project, and have a total than 15 percent of the total roof area of the building excluding any skylight area. Orientation. All sections of the solar zone located on steep-sloped roofs must be oriented between 110 degrees and 270 degrees of Shading. The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and mounted equipment.* Shading. Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at lead distance, measured in the horizontal plane, of the height difference between the highest point of the obstruction and the horizontal plane.
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§ 110.10(a)2: § 110.10(b)1: § 110.10(b)2: § 110.10(b)3A: § 110.10(b)3B:	application for a tentative subdivision map for the residences has been deemed complete by the enforcement agency must comply wrequirements of § 110.10(b) through § 110.10(e). Low-rise Multi-family Buildings. Low-rise multi-family buildings must comply with the requirements of § 110.10(b) through § 110.10 Minimum Area. The solar zone must have a minimum total area as described below. The solar zone must comply with access, path ventilation, and spacing requirements as specified in Title 24, Part 9 or other Parts of Title 24 or in any requirements adopted by a logical purisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 see each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof greater than 10,000 square feet. For single family residences the solar zone must be located on the roof or overhang of the building and have a total area no less than square feet. For low-rise multi-family buildings the solar zone must be located on the roof or overhang of the building, or on the roof of another structure located within 250 feet of the building, or on covered parking installed with the building project, and have a total than 15 percent of the total roof area of the building excluding any skylight area. Orientation. All sections of the solar zone located on steep-sloped roofs must be oriented between 110 degrees and 270 degrees of Shading. The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and mounted equipment. Shading. Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at led distance, measured in the horizontal plane, of the height difference between the highest point of the obstruction and the horizontal plane. Structural Design Loads on Construction Documents. For areas of the roof designated as solar zone, the structu
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§ 110.10(a)2: § 110.10(b)1: § 110.10(b)2: § 110.10(b)3A: § 110.10(b)4: § 110.10(c):	application for a tentative subdivision map for the residences has been deemed complete by the enforcement agency must comply we requirements of § 110.10(b) through § 110.10(e). Low-rise Multi-family Buildings. Low-rise multi-family buildings must comply with the requirements of § 110.10(b) through § 110.10 Minimum Area. The solar zone must have a minimum total area as described below. The solar zone must comply with access, path ventilation, and spacing requirements as specified in Title 24, Part 9 or other Parts of Title 24 or in any requirements adopted by a log jurisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 se each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof or single family residences the solar zone must be located on the roof or overhang of the building and have a total area no less than square feet. For low-rise multi-family buildings the solar zone must be located on the roof or overhang of the building project, and have a total square feet. For low-rise multi-family buildings the solar zone of the building project, and have a total square feet. For low-rise multi-family buildings the solar zone must be located on steep-sloped roofs must be oriented between 110 degrees and 270 degrees of Shading. The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectur