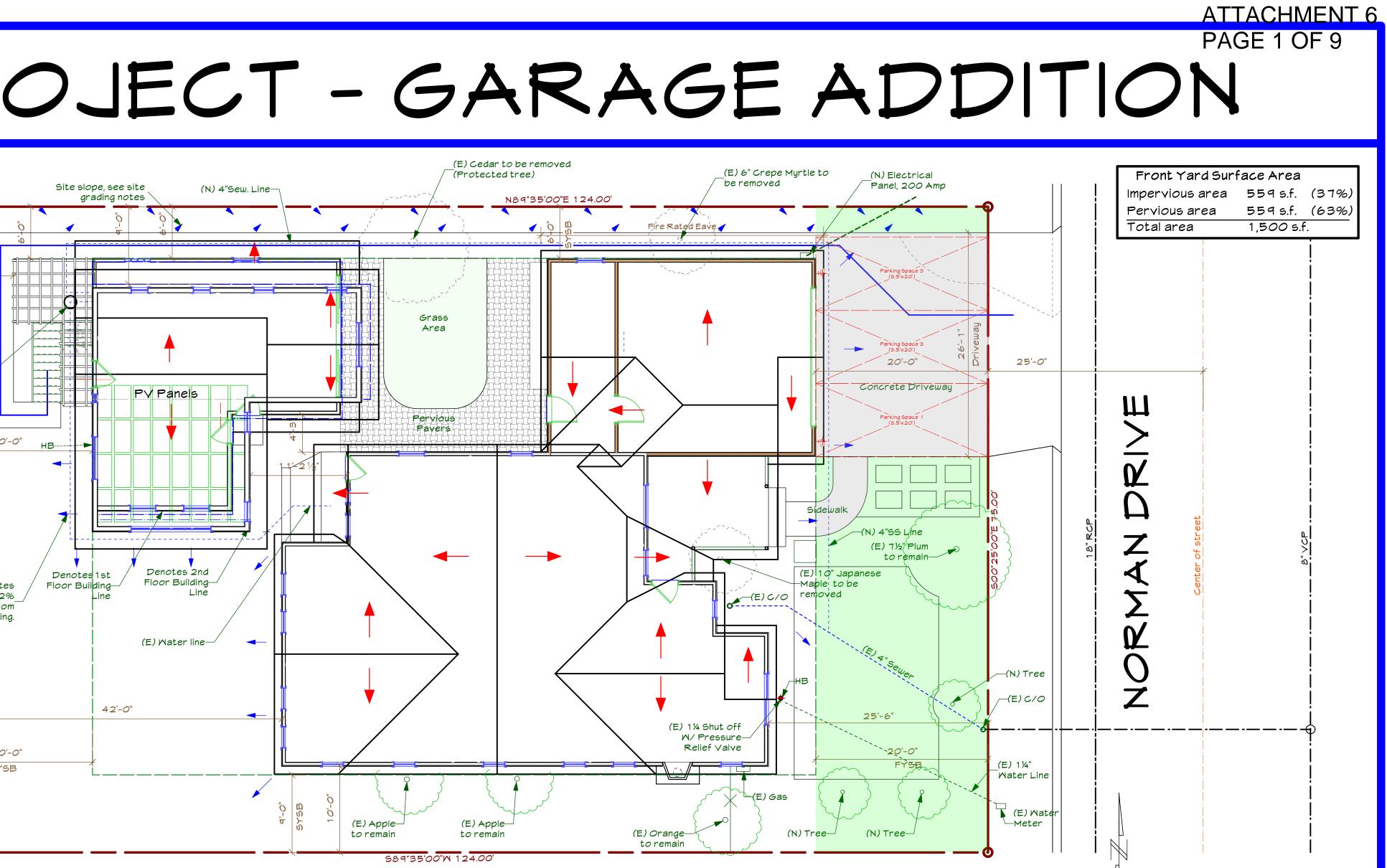
# HARRISON PROJECT - GARAGE ADDITION

#### SYMBOL LEGEND Site slope, see site grading notes Reference North – Detail Number 10'-7Q A1, Detail Reference Sheet where (E) Cherry detail is located to remain - Detail Number Path of Direction of view travel Detail Reference of detail cut Sewage -PV Panels Ejector A1, Sheet where detail is located 20'-0" HB - Section Letter A Section Reference A 1 Sheet where section can be found Benchmark Title Benchmark Elevation Elevation level Reference (In Denotes 1st elevation or section view) Floor Building-Arrows denotes drainage 2% - Elevation Number away from building. √iew Interior Elevation Reference $\wedge$ <sup>1</sup> Sheet where elevation can be found 42'-*0*" Revision Symbol (See title block for date and type of revision) 20'-0" RYSB VICINITY MAP Buckeye Dr Cassia Way PROPOSED SITE PLAN Scale: 1/8" = 1'-0" PROJECT INFORM, Warburton Ave M Jang Su Jang Designer & Paladin Design Engineer: Contact - Quar quang@paladin-DMV Office n Santa Clara 249520ths San Jose, CA (408)370-0 (408)370-3 Site: 1339 Norman Title 24: Contact - Jasc jason@paladin-Kintyre Way Contractor T.B.D. SCOPE OF WORK New 1. New 712 attached Garage addition to include 185 SF Utility Room \$ 527 SF Garage. 2. New 93 SF Front Porch addition. Alterations 1. Replace Door in Bedroom #2 with New Window. (See Window schedule). 2. Remodel 518 SF Detached Garage into 370 SF Office; 63 SF Utility Room; 75 SF Bath. 3. Remodel 190 SF Storage Room into Office 4. Replace Overhead Garage door with (N) Glass Sliding Door (See Door Schedule)

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gn & Engineering ang Phan I-design.net Street 95116	Client:	George & Sue Harrison 1339 Norman Dr. Sunnyvale, CA 94087 (408) 370-0730
0730 3799 Fax oon Mundy -design.net	Occupancy: TYPE: Stories	∨-B 1 Not Required
	Applicable Codes: Codes:	2013 CA Building Code 2013 CA Residential Code 2013 CA Mechanical Code 2013 CA Plumbing Code 2013 CA Electrical Code 2013 CA Energy Code 2013 CalGreen Code

AREA CALCULATIONS							
	Existing	Proposed	Proposed	Tabal			
Lot	Area	Demolition	New	Total			
				9,3 <i>00</i> SF			
Main House							
1st Floor	1,741 SF	0 SF	0 SF	1,741 SF			
Garage	0 SF	0 SF	712SF	712SF			
Porch	78 SF	0 SF	93 SF	171 SF			
Accessory St	ructure						
1st Floor	0 SF	0 SF	707 SF	707 SF			
2nd Floor	695 SF	0 SF	0 SF	695 SF			
Garage	707 SF	707 SF	0 SF	0 SF			
Balcony	101 SF	0 SF	0 SF	101 SF			
Total	3,322 SF	707 SF	1,512SF	4,127 SF			
Floor Area	3,244 SF	707 SF	1,419 SF	3,956 SF			
F.A.R.	34.88%	7.60%		42.54%			
Lot Cover	2,627 SF	707 SF	1,512 SF	3,432 SF			
%	28.25%	7.60%	16.26%	36.90%			

### Site Grading Note:

The finish grade around the structure shall slope away from the foundation a minimum of 5% for a minimum distance of 10 feet (CBC 1804.3).

On graded sites, the top of any exterior foundation shall extend above the elevation of the street gutter at a point of discharge (or the inlet of an approved drainage device), a minimum of 12 inches plus 2%.

DRAWING INDEX				
SHEET	DESCRIPTION	#		
A0.0	COVER SHEET& SITE PLAN	1		
A0.2	BLUEPRINT FOR A CLEAN BAY	2		
A0.3	PROJECT NOTES #T24 MANDATOR	З		
A0.5	GREEN BUILDINGMANDATORYMEA	4		
A 1.0	EXISTING/DEMO/ELEVATIONFLOOI	5		
A 1.1	EXISTING/DEMO/ELEVATION GARA	6		
A2.0	PROPOSED FLOOR PLAN	٦		
A3.0	PROPOSED ELEVATIONS	8		

Scale: Feet 0 2 4 6 8 10 12 14 16 18 20 22 24 Inches 0 .5 1 1.5 2 2.5 3

PALADIN GINEERIN DESIGN Paladin Design & Engineering 249 S. 20th. Street San Jose, CA 95116 408.370.0730 Voc 408.370.3799 Fax www.paladin-design.net



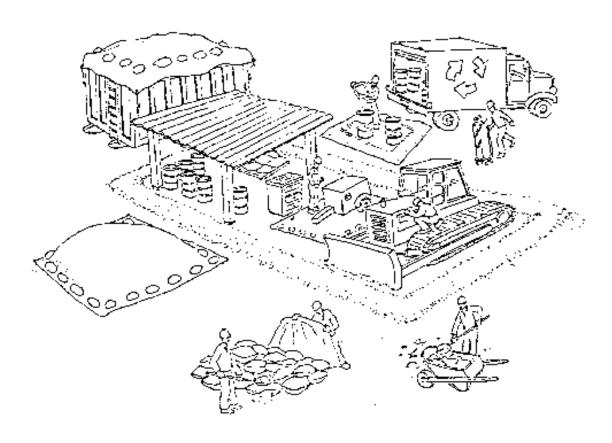
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PR	OJECT:	

HARRISON PROJECT George & Sue Harrison 1339 Norman Drive Sunnyvale, CA 94087

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HARRISON PROJECT

# Pollution Prevention — It's Part of the Plan



# Materials storage & spill cleanup

### Non-hazardous materials management

- ✓ Sand, dirt, and similar materials must be stored at least 10 feet from catch basins, and covered with a tarp during wet weather or when rain is forecast.
- ✓ Use (but don't overuse) reclaimed water for dust control as needed.
- ✓ Sweep streets and other paved areas daily. Do not wash down streets or work areas with water!
- ✓ Recycle all asphalt, concrete, and aggregate base material from demolition activities.
- ✓ Check dumpsters regularly for leaks and to make sure they don't overflow. Repair or replace leaking dumpsters promptly.

### Hazardous materials management

- ✓ Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, state, and federal regulations.
- ✓ Store hazardous materials and wastes in secondary containment and cover them during wet weather.
- ✓ Follow manufacturer's application instructions for hazardous materials and be careful not to use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.
- ✓ Be sure to arrange for appropriate disposal of all hazardous wastes.

### Spill prevention and control

- ✓ Keep a stockpile of spill cleanup materials (rags, absorbents, etc. ) available at the construction site at all times.
- ✓ When spills or leaks occur, contain them immediately and be particularly careful to prevent leaks and spills from reaching the gutter, street, or storm drain. Never wash spilled material into a gutter, street, storm drain, or creek!
- ✓ Report any hazardous materials spills immediately! Dial 911 or your local emergency response number.

# ВАЅМАА

Bay Area Stormwater Management ater Management Agencies Association (BASMAA) 1-888-BAYWISE

# Make sure your crews and subs do the job right!

Runoff from streets and other paved areas is a major source of pollution in San Francisco Bay. Construction activities can directly affect the health of the Bay unless contractors and crews plan ahead to keep dirt, debris, and other construction waste away from storm drains and local creeks. Following these guidelines will ensure your compliance with local ordinance requirements.

# Vehicle and equipment maintenance & cleaning

- ✓ Inspect vehicles and equipment for leaks frequently. Use drip pans to catch leaks until repairs are made; repair leaks promptly.
- ✓ Fuel and maintain vehicles on site only in a bermed area or over a drip pan that is big enough to prevent runoff.
- ✓ If you must clean vehicles or equipment on site, clean with water only in a bermed area that will not allow rinsewater to run into gutters, streets, storm drains, or creeks.
- ✓ Do not clean vehicles or equipment on-site using soaps, solvents, degreasers, steam cleaning equipment, etc.

# Earthwork & contaminated soils

- off the site.



- ✓ If you suspect contamination (from site history, discoloration, odor, texture, abandoned underground tanks or pipes, or buried debris), call your local fire department for help in determining what testing should be done.

✓ Keep excavated soil on the site where it is least likely to collect in the street. Transfer to dump trucks should take place on the site, not in the street.

✓ Use hav bales, silt fences, or other control measures to minimize the flow of silt

- ✓ Avoid scheduling earth moving activities during the rainy season if possible. If grading activities during wet weather are allowed in your permit, be sure to implement all control measures necessary to prevent erosion.
- Mature vegetation is the best form of erosion control. Minimize disturbance to existing vegetation whenever possible.
- ✓ If you disturb a slope during construction, prevent erosion by securing the soil with erosion control fabric, or seed with fastgrowing grasses as soon as possible. Place hay bales down-slope until soil is secure.

✓ Manage disposal of contaminated soil according to Fire Department instructions.

# Dewatering operations

✓ Reuse water for dust control, irrigation, or another on-site purpose to the greatest extent possible.



- ✓ Be sure to call your city's storm drain inspector before discharging water to a street, gutter, or storm drain. Filtration or diversion through a basin, tank, or sediment trap may be required.
- ✓ In areas of known contamination, testing is required prior to reuse or discharge of groundwater. Consult with the city inspector to determine what testing to do and to interpret results. Contaminated groundwater must be treated or hauled off-site for proper disposal.

# Saw cutting

- ✓ Always completely cover or barricade storm drain inlets when saw cutting. Use filter fabric, hay bales, sand bags, or fine gravel dams to keep slurry out of the storm drain system.
- ✓ Shovel, absorb, or vacuum saw-cut slurry and pick up all waste as soon as you are finished in one location or at the end of each work day (whichever is sooner!).
- ✓ If saw cut slurry enters a catch basin, clean it up immediately.

# Paving/asphalt work



- ✓ Do not pave during wet weather or when rain is forecast.
- ✓ Always cover storm drain inlets and manholes when paving or applying seal coat, tack coat, slurry seal, or fog seal.
- ✓ Place drip pans or absorbent material under paving equipment when not in use.
- ✓ Protect gutters, ditches, and drainage courses with hay bales, sand bags, or earthen berms.

✓ Do not sweep or wash down excess sand from sand sealing into gutters, storm drains, or creeks. Collect sand and return it to the stockpile, or dispose of it as trash.

✓ Do not use water to wash down fresh asphalt concrete pavement.

# Storm drain polluters may be liable for fines of up to \$10,000 per day!





## Concrete, grout, and mortar storage & waste disposal

- ✓ Be sure to store concrete, grout, and mortar under cover and away from drainage areas. These materials must never reach a storm drain.
- ✓ Wash out concrete equipment/trucks off-site or designate an on-site area for washing where water will flow onto dirt or into a temporary pit in a dirt area. Let the water seep into the soil and dispose of hardened concrete with trash.



✓ Divert water from washing exposed aggregate concrete to a dirt area where it will not run into a gutter, street, or storm drain.

PAGE 2 OF 9

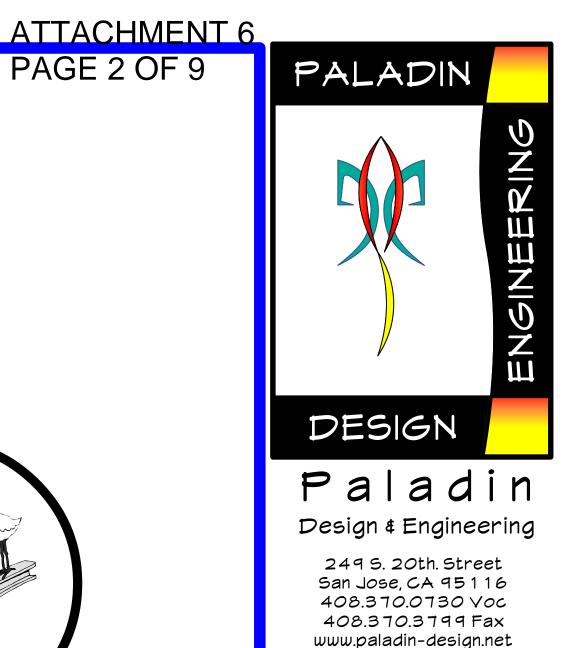
✓ If a suitable dirt area is not available, collect the wash water and remove it for appropriate disposal off site.

# Painting

- ✓ Never rinse paint brushes or materials in a gutter or street!
- ✓ Paint out excess water-based paint before rinsing brushes. rollers, or containers in a sink. If you can't use a sink, direct wash water to a dirt area and spade it in.



- ✓ Paint out excess oil-based paint before cleaning brushes in thinner.
- ✓ Filter paint thinners and solvents for reuse whenever possible. Dispose of oil-based paint sludge and unusable thinner as hazardous waste.



BY FEDERAL LAW VIOLATIONS ARE PUNISHABLE BY FINES UP TO \$100,000 PER OFFENSE CALL THE DESIGNER TO OBTAIN LEGAL COPIES OF THIS PLAN
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PROJECT: HARRISON PROJECT

George & Sue Harrison 1339 Norman Drive Sunnyvale, CA 94087

SCALE: AS NOTED FILE: 15-008					
DATE: May 27, 16	DRAWN: JM/QP/BC				
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Written dimensions on these drawings shall have precedence over scaled dimensions, written dimensions are approximate and must be verified, contractor to verify and be responsible for all existing conditions and dimensions prior to and during all phases of work. This office must be notified of any variation from the dimensions and conditions shown by these drawings.					
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A0.2

Sheet **2** of 8 Sheets HARRISON PROJECT

<u>ART</u> A.	ICLE 1 - FLOOR PLAN NOTES         At raised floor area, provide 18"x24" minimum under floor access(s) as indicated on plan	<u>AR</u> A.	<b>TICLE 8 – FIRE-RESISTIVE CONSTRUCTION</b> One-hour fire-resistive construction shall be provided at on the garage side of framing
В.	or in a central location as needed and approved by home owner. (R408.4) Provide rough frame 22"x30" minimum attic access(s) as indicated on plan or other readily accessible location to any attic area >= 30" high clr and approved by home owner. (R807.1)		<ul> <li>Firewall shall be constructed with 1/2" gypsom continuous to underside of roof sheathin or to ceiling if located under second floor at garage. 5/8" gypsum shall be used at the underside of second floor framing.</li> </ul>
	The min width of a hallway shall be not be $< 3$ feet from finish to finish.	C.	All openings thru firewall shall be sealed with approved method or fire caulking.
	Toilets shall be a located 15" from centerline of toilet to finish material at each side and there shall be a minimum 24" clearance in front of toilet. Exterior Landing at Door - (R311.3)	D. E.	Electrical panels may NOT be located in a firewall, but may be surface mounted. Door openings between garage and the dwelling unit shall be equipped with either solid wood doors or solid honeycomb core steel doors not less than 1 3/8 inches thick or 20-r fire-rated doors, equipped self-closing and self-latching devices. (CRC R302.5.1)
	<ol> <li>Provide landing at all exterior doors, if transition from top of threshold to exterior surface is &gt;7.75", provide the door does not swing over the landing.</li> <li>Landings at doors that swing over the landing shall not to be greater than 1½ inch below top of threshold.</li> </ol>	F. G.	HVAC air ducts passing thru firewall shall be a minimum 26 guage in thickness with no openings or an approved fire damper shall be provided. Provide 1/2" Gypsum at useable space under stairs, Typical
	<ol> <li>Minimum 36 inches length in the direction of travel of the landing</li> <li>Landing height shall be equal distance from top of threshold and exterior surface,</li> </ol>	۸D	TICLE 9 - PLUMBING NOTES
	unless noted otherwise. 5. Landing shall be sloped at 1/4" per foot away from wall with anti-slip suface. 6. Landings with more than one additional step shall be provided with handrail.	<u>А</u> Г.	Existing Water Heater:
	<ul><li>7. A landing is not required where a stairway of two or fewer risers is located on the exterior side of the door, provided the door does not swing over the stairway. (R311.3.2)</li><li>All habitable rooms are provided with net glazed area not less than 8% of the floor area of</li></ul>	В.	<ol> <li>Existing unit to remain</li> <li>Verify existing water heater is braced to side walls with approved seismic straps at upper &amp; lower 1/3 of heater body</li> <li>New Water Heater</li> </ol>
_	the room served , and minimum openable area to the outdoors of 4% of the floor area being ventilated (R303.1)	υ.	<ol> <li>New unit as per the Title 24 calculations.</li> <li>Provide water heater bracing. Bracing shall be to side walls with</li> </ol>
Э. Н.	Provide min.18"x18" access panel to motor Skylights installed on < 3:12 slope shall have 4-inch minimum curb (CRC R308.6.8)		approved seismic straps at upper & lower 1/3 of heater body. 3. Provide R-12 rated insulating blanket approved for W/H. 4. Pressure and temp relief valve line shall terminate outside the building.
<u>ART</u>	ICLE 2 - DIMENSION NOTES	C.	<ul> <li>Pressure and temp relief valve line shall terminate outside the building.</li> <li>Pilots, burners, or heating elements of the water shall be elevated 18" min above the flo level.</li> </ul>
N. 3.	Dimensions at hallways & water closets, represent minimum requirements All interior dimensions are from finished surface to finished surface	D.	Provide protection barrier (such as a bollard) in front of water heater located at garage i
). ).	All exterior dimensions are to the edge of wall sheathing. Centerline dimensions are approximate. Use locations of structures and new surface	E.	the normal path of vehicles. Water Lines: Type 'M' copper lines to be sized by plumbing contractor. Compression st
	finishes to maintain true centerline relationship.	F	shut-off valves or equal installed at all wall exit points. Provide insulation wrap on all pip exposed at exterior wall. Pressure test under working pressure (50 p.s.i. min.).
	<b>ICLE 3 – EXTERIOR NOTES</b> Roofing shall be a Class 'C' composition asphalt shingle - See elevations for texture and	F.	Insulate condensate return piping, hot water inlet and outlet piping (first five feet in unconditioned space w/ R-4 Insulation min. for distribution and return) and recirculating hot water piping in attics, crawl spaces, or unheated spaces other than between floors a
	color. Installed over 30# building under-lament staggered as per code over roof surfaces per plan. Roofing shall be fastened with corrosion resistant fastners in accordance with	G.	interior walls. Insulation is 3/4" R-4 flexible insulation for service hot water pipes. Kitchen: The hot water pipe from heating source to kitchen sink is required to be therma
	CRC R905.2.5 26 ga. G.I. gutter continuous at all eave overhangs where indicated. New gutters may be	Н.	insulated with minimum 1" thick pipe insulation. Shower controls shall be equipped with approved water pressure balance valve. Shower
	of aluminum, extruded. 3", 26ga. G.I. downspouts as needed. Provide splash blocks and ends that slope away	ı ı. I	heads shall have a water flow not to exceed 2.0 gallons per minute (CALGreen 4.303.1
	from building a minimum of 2% slope. Water resistive barrier - one layer of No. 15 aspalt felt minimum, free from holes or breaks,	ı. 1	Hose bib(s) shall be equipped with backflow prevention device at all new & existing hos bib(s). Waste Lines in-wall shall be 2" ABS increased to 4" A B S, at junction of main waste line
	complying with ASTM D226 for Type 1 felt, or other approved water-resistive barrier shall be applied over studs or sheathing of all exterior walls. Such felt or material shall be	J.	Waste Lines in-wall shall be 2" ABS increased to 4" A.B.S. at junction of main waste line with 1/4" per foot fall required for proper drainage.
	applied horizontally, with the upper layer lapped over the lower layer not less than 2 inches. Where joints occur, felt shall be lapped not less than 6 inches (R703.2)	K.	Vent Pipes shall be 1-1/2" to 2" ABS exiting points to be weather sealed using suitable boot style roof jacks. Coat pipe exposed to sunlight with latex paint. Color to match roc color.
	New 7/8" min. stucco (3-coat) o/ wire lath o/ two layers of Grade D paper under stucco where occurs over plywood sheathing. Finish texture to be selected by owner or to match existing. Provide 26 ga. galvanized weep screed at foundation plate line at least 4" above	L.	Color. Center of water closet shall be a minimum of 15 inches to vertical surface of sides. The clear space in front of a water closet shall not be less than 24 inches [CPC 408.6]
	grade (or 2 inches above concrete or paving). CRC R703.6	M.	Provide an approved backwater valve on drainage piping serving fixtures that have floor level rims less than 12 inches above the elevation of the next upstream manhole shall b
	3/4" siding installed over 1/2" CDX ply or OSB sheathing unless structural plan specifies otherwise.	N	installed per CPC 710.0.
	Wood trim shall be pre-primed or painted Redwood or equal. Cut end of trim shall be primed prior to installation.	N.	All building water supply systems in which quick-acting valves are installed shall be provided with devices to absorb the hammer caused by high pressures resulting from th quick closing of these valves. These devices shall be installed per CPC 609.10
	Exposed roof eave material shall material shall match existing or shall be 1x8 V-Rustic Pine or equal U.N.O.	Ο.	If a recirculating system is to be installed, provide hot water line from water heater to ea plumbing area with pump, check valves, expansion tank & insulation on copper lines.
	Dual glaze, low-E, windows to be installed with approved building flashing - use fortifiber flashing per federal spec. UU-B-790A, style 4, grade A.B.C. or equal.	P.	All under floor cleanouts shall be extended to exterior of building, if more than 20ft from nearest access
	Building address to be clearly visible from street as per city standards. Light fixtures exposed to exterior to be weather proofed using an approved sealant.	Q.	nearest access Under floor access at foundation stem shall not be used for Mechanical or Plumbing chase unless designed for this purpose.
	Fixture type and location as noted on electrical plan. Electrical outlets exposed to exterior to be installed in approved "Bubble" type weather		
	proofed box using a self closing cover. Outlet type and location as noted on electrical plan.		TICLE 10 – SHOMER STALL NOTES Rough Framing: Shall have min. finished interior of 1,024 sq. in. and also encompass a
5 T	All adhered masonry veneer shall be installed in accordance with the manufacturer's instructions. CRC R703.12	A.	in. circle. Area & dimensions are measured at the top of the threshold and maintained to 72 in. min. above the drain with no protrusions other than fixture valves, shower head as safety bars or rails. Provide building paper 6 ft. min. high on face of studs for all walls o
<u>1 ~ 1</u>	Insulation at walls, floors, and ceilings shall be fiberglass rolled or batts where exposed	В.	shower enclosure. Shower Valves:
	from construction. At vaulted ceilings Sprayable Polurethane Foam shall be install per manufacturers specs. if applicable. Attic insulation shall be installed so as to maintain 1-inch clearance between insulation and roof sheathing as per R806.3.		<ol> <li>Showers shall be provided with individual pressure balance or thermostatic mixing control valves.</li> <li>The maximum mixed water setting shall be 120(f) degrees.</li> </ol>
	and roof sheathing as per R806.3. EXCEPTION 1: Unvented attics EXCEPTION 2: Unvented roof assemblies per R806.5	-	<ol><li>Water heater thermostat shall not be considered as suitable for meeting this requirement.</li></ol>
	All exterior openings and openings between heated and unheated areas shall be weather stripped. Typical insulation provisions (Verify on T24 calculations):	C.	Shower Walls: Shall be a smooth, hard, nonabsorbent surface (e.g., ceramic tile or fiberglass) over a moisture resistant underlayment (e.g., cement, fiber cement, or glass mat gypsum backer) to a height of 72 inches above the drain inlet. Please note: Water-resistant gypsum backing board shall not be used over a vapor retarder in shower
	R-19 - Floors R-13 - Walls	D.	or bathtub compartments. CRC R307.2 Shower Doors & Panels: Enclosures shall be fully tempered, laminated safety glass or
	R-30 - Flat Ceilings R-30 - Vaulted Ceiling	D. E.	approved plastic per R308.1 Shower doors: Shall be outswinging and have a 22" minimum unobstructed opening for
	Provide continuos bead of caulking under sole plate See Title 24 calculations for additional information.	Ċ.	Shower doors: Shall be outswinging and have a 22" minimum unobstructed opening for egress (CPC 408.6)
RT	ICLE 5 - ENERGY NOTES	-	TICLE 11 - EQUIPMENT NOTES
	All plumbing fixtures are to be low flow energy saving low water usage products.	A.	Identification of equipment shall be provided when more than one heating, cooling, ventilating or refrigeration system is installed on a roof or within a building it shall be permanently identified as to the area or space served by the equipment.
	Contractor to size hot water heater and mechanical systems as required by Title 24 documentation	B.	Provide UL listing or ICC# for gas appliances (No wood burning appliances)
	Silicon caulking, sealant and weatherstripping to be used at all openings and penetrations through building envelope.	C.	All fuel burning equipment shall be provided with adequate combustion air supply as pe CMC Chap 7
RT	See Title 24 calculations for additional information.	ΔÞ.	TICLE 12 - GENERAL LIGHTING NOTES
<u>.                                    </u>	See Article 1 for Exterior Landing requirements	<u>AR</u> A.	If Lights are installed in a shower or bath compartments, they shall be listed for wet
	Required exit doorway shall not be less than 32 inch in width and 6 feet, 8 inches in height. (R311.2)	В.	location and equipped with gasketed cover, Typ. Switches to be grounded type, Typ.
	Swing of door is determined by viewing closed door from the hinge side of the door. Tempered glass shall be permantly identified by the manufacturer, see R308		
	All exterior doors shall have integrated weather stripping.		
<b>-</b>	Manufactured glazing in doors shall have a label attached certified by the National Fenestration Council (NFRC) and show energy standards. Label to remain affixed to glazing until project has passed the governing jurisdictions final inspection.		
	ICLE 7 - GLAZING NOTES           Egress compliance (R310.1): All escape or rescue windows from sleeping rooms shall		
	Lyrote compliance (referr) if a coccup of roccus and one for the brown of compliance of the brown of the b		
	<ol> <li>Net clear height 24 in (R310.1.2)</li> <li>Net clear width 20 in (R310.1.3)</li> <li>Bottom of clear opening 44 in Max (R310.1)</li> </ol>		
	<ul> <li>'X' Denotes operable panel, 'O' denotes fixed panel Operable/Fixed panel is determined by viewing window from exterior.</li> </ul>		
	Tempered glass shall be permantly identified by the manufacturer, see R308		
	All exterior windows shall have integrated weatherstripping Manufactured glazing in windows shall have a label attached certified by the National		
	Fenestration Council (NFRC) and show energy standards. Label to remain affixed to glazing until project has passed the governing jurisdictions final inspection. Contractor and/or homeowner to the verify that proposed windows meet the egress requirements prior to ordering and/or purchasing windows. If there is a discrepancy,		

### 3 - FIRE-RESISTIVE CONSTRUCTION

#### I - PLUMBING NOTES

- Vater Heater:
- ng unit to remain existing water heater is braced to side walls with ved seismic straps at upper & lower 1/3 of heater body
- nit as per the Title 24 calculations. e water heater bracing. Bracing shall be to side walls with
- ed seismic straps at upper & lower 1/3 of heater body.
- e R-12 rated insulating blanket approved for W/H. re and temp relief valve line shall terminate outside the building.
- ners, or heating elements of the water shall be elevated 18" min above the fle
- rotection barrier (such as a bollard) in front of water heater located at garage
- I path of vehicles.
- es: Type 'M' copper lines to be sized by plumbing contractor. Compression alves or equal installed at all wall exit points. Provide insulation wrap on all p at exterior wall. Pressure test under working pressure (50 p.s.i. min.).
- ondensate return piping, hot water inlet and outlet piping (first five feet in oned space w/ R-4 Insulation min. for distribution and return) and recirculating piping in attics, crawl spaces, or unheated spaces other than between floors Ils. Insulation is 3/4" R-4 flexible insulation for service hot water pipes. he hot water pipe from heating source to kitchen sink is required to be therm
- with minimum 1" thick pipe insulation. ontrols shall be equipped with approved water pressure balance valve. Show
- all have a water flow not to exceed 2.0 gallons per minute (CALGreen 4.303. s) shall be equipped with backflow prevention device at all new & existing ho
- es in-wall shall be 2" ABS increased to 4" A.B.S. at junction of main waste lir per foot fall required for proper drainage.
- s shall be 1-1/2" to 2" ABS exiting points to be weather sealed using suitable roof jacks. Coat pipe exposed to sunlight with latex paint. Color to match ro
- water closet shall be a minimum of 15 inches to vertical surface of sides. The ce in front of a water closet shall not be less than 24 inches [CPC 408.6] n approved backwater valve on drainage piping serving fixtures that have flo
- less than 12 inches above the elevation of the next upstream manhole shall er CPC 710.0. g water supply systems in which quick-acting valves are installed shall be with devices to absorb the hammer caused by high pressures resulting from
- ing of these valves. These devices shall be installed per CPC 609.10 ulating system is to be installed, provide hot water line from water heater to e
- area with pump, check valves, expansion tank & insulation on copper lines. floor cleanouts shall be extended to exterior of building, if more than 20ft fror
- r access at foundation stem shall not be used for Mechanical or Plumbing ess designed for this purpose

### 10 - SHOWER STALL NOTES

- ming: Shall have min. finished interior of 1,024 sq. in. and also encompass Area & dimensions are measured at the top of the threshold and maintained above the drain with no protrusions other than fixture valves, shower head s or rails. Provide building paper 6 ft. min. high on face of studs for all walls nclosure
- alves
- rs shall be provided with individual pressure balance or
- static mixing control valves. aximum mixed water setting shall be 120(f) degrees. heater thermostat shall not be considered as suitable eting this requirement.
- /alls: Shall be a smooth, hard, nonabsorbent surface (e.g., ceramic tile or ) over a moisture resistant underlayment (e.g., cement, fiber cement, or glas im backer) to a height of 72 inches above the drain inlet. Please note: istant gypsum backing board shall not be used over a vapor retarder in show compartments. CRC R307.2
- oors & Panels: Enclosures shall be fully tempered, laminated safety glass or plastic per R308.1
- pors: Shall be outswinging and have a 22" minimum unobstructed opening f

#### 1 - EQUIPMENT NOTES

- ion of equipment shall be provided when more than one heating, cooling, or refrigeration system is installed on a roof or within a building it shall be tly identified as to the area or space served by the equipment. \_ listing or ICC# for gas appliances (No wood burning appliances)
- ning equipment shall be provided with adequate combustion air supply as per

#### 12 - GENERAL LIGHTING NOTES

- e installed in a shower or bath compartments, they shall be listed for wet nd equipped with gasketed cover, Typ.
- to be grounded type, Typ.

prohibited.

	<u>AR1</u>	TICLE 13 - ELECTRICAL NOTES	AR	TICLE 16 - DRYER VENT NOTES
	A.	All electrical indicated is new and shall comply with the applicable code as noted on the cover sheet.	А.	Exhaust rough-in is required during new construction.
ng	В.	If electrical serivce is new, add circuit breakers as required. Label circuits with permanent ink. If subpanel to be installed, it shall not be located in the vicinity of easily ignitable	В. С.	Exhaust duct shall have a smooth metal interior Male ends of duct must face direction of airflow and shall have sealed joints with NO screws protruding into Airflow.
	C.	material(s) such as clothes closets, in bathrooms, or behind doors. Provide and/or verify that service panel has a grounding electrode, if not provide 8ft copper grounding rod near (E) Service panel. Provide conductor from panel to rod sized	D.	Exhaust duct shall terminate at exterior of structure and be equipped with a back-draft damper with NO screen.
id -min	D.	according to CEC and provide "Acorn" type connector rated for contact with soil. If electrical service is in area of new foundation, provide UFER grounding electrode and bonding of gas and water lines.	E. F.	Exhaust vent shall terminate not less than 3ft other building openings DRYER VENT LESS THAN 14' WITH TWO 90° BENDS MAX = Minimum diameter of 4". 14' maximum length includes two 90° bends, each additional bend shall decrease the
5	E.	All wiring to be NM type minimum.	-	allowed length by 2 feet.
	F. G.	Provide nail plates at all studs where wire penetration is within 1-1/2" of framing member surface. Staple wire 12" max. from metal boxes & 8" max. from plastic boxes & spaced 12" o.c.	G.	DRYER VENT GREATER THAN 14' & LESS THAN 25' Provide 5" rigid ducting. 25' maximum length includes of two 90° bends, each additional 45° bend shall decrease the allowed length by 2 feet and each additional 90° bend shall decrease the allowed length by 5 feet.
	О.	typical U.O.N.		by 3 leet.
	H.	Arc-Fault Circuit Interruption: (AFCI) CEC 210-12 Protection is required for all 120-volt, single phase, 15- and 20 ampere branch circuits installed in every habitable areas of the house. AFCIs will not be required in bathrooms, kitchens, laundry rooms, unfinished	<u>AR</u> A.	TICLE 17 - GENERAL FRAMING NOTES           All Simpson or equal fasteners and ties shall be installed as per manufacturers
	I.	basements, garages, attics or outdoors. Branch Circuits: [CEC - Article 210-11(c)(1)] Small- Appliance Branch Circuits. In addition to the nuimber of branch circuits required by other parts of this section, two or more	В.	specifications. If the specified fastener or tie is unavailable or unable to be installed as per manufacturers specifications, see engineer of record for acceptable alternatives. Any Lumber within 6" of soil or in contact with concrete shall be 2x Pressure Treated
		20-ampere small-appliances branch circuits shall be provided for all receptacle outlets specified by Section 210-52(b).	C.	Douglas Fir or Redwood Provide solid shim between trimmers and Headers as needed
	J.	Dwelling Unit Receptacle Outlets: [CEC - Article 210-52(b)] In the Kitchen, Pantry, Breakfast Room, Dining Room or similar area of a dwelling unit, the two or more	D.	Roof Ventilation shall be provided as per roof ventilation calculations
loor		20-ampere small-appliance branch circuits required by Section 210-11(c)(1) shall serve all receptacle outlets covered by Sections 210-52(a) and (c) and receptacle outlets for Refrigeration equipment.	E.	2x4 D.F. blocking shall be used where required by code for fire blocking, cabinet installation and gypsum board nailing. Contractor shall determine all blocking locations proir to installing gypsum board.
in	K.	Laundry Branch Circuit: [CEC - Article 210.11(C)(2) & 210.52(F)]. A dedicated 30-ampere branch circuit shall be provided to supply all laundry receptacle outlets.	F.	All cutting, notching and bored holes shall comply with R602.6
style	L.	Bathroom Outlets: [CEC - Article 210.8 & 210.11(C)(3) & 210.52] All bathroom receptacles	G.	Occupancy separation between living space and garage shall conform to the following requirements per R302
pipes		to be supplies by a dedicated 20Amp circuit with GFCI protection. The circuit cannot supply any other receptacles, lights, fans, etc. (Exception-where the circuit supplies a single bathroom, outlets for other equipment within the same bathroom shall be permitted to be supplied.)	H.	Protection of wood and wood based products against decay - Location required. Protection of wood and wood based products from decay shall be provided in the following locations by the use of a naturally durable wood or wood that is perservative-treated: 1. Wood joist or the bottom of a wood structural floor when closer than
and	M.	Kitchen:		18 inches or wood girders when closer than 12 inches to the exposed ground in crawl spaces or areas with in the foundation area.
er 1.2)		<ol> <li>Provide Min. of two (2) 20-Amp small appiance circuits supplying kitchen and dining room.</li> <li>Provide seperate circuit for dishwasher. Receptacle must be accessible and will not be located behind unit.</li> <li>Provide seperate circuit for disposal.</li> </ol>		<ol> <li>All wood framing members that rest on concrete or masonry exterior foundation walls and are less than 8 inches from the exposed ground.</li> <li>Sills sleepers on a concrete or masonry slab that is in direct contact with the ground unless separated from the slab by an impervious moisture barrier.</li> </ol>
se		<ol> <li>Provide seperate circuit for microwave. Receptacle must be accessible and will not be located behind unit.</li> <li>Provide seperate circuit for refrigerator.</li> </ol>		<ol> <li>The ends of wood girders entering exterior masonry or concrete walls have clearances less than ½ inch on tops, sides and ends.</li> <li>Wood siding, sheathing and wall framing on the exterior of a building</li> </ol>
ne	N.	Cooktop: Cooking unit shall be provided with four conductor wires with an insulated neutral and a four-pronged outlet. NEC 250-60		having a clearance of less than 6 inches from the ground or less than 2 inches measured vertically from concrete steps, porch slabs, and similiar horizontal surfaces exposed to the weather.
oof	Ο.	Install ground fault circuit interrupt outlets at bathrooms, garage and other locations as indicated. Test G.F.C.I. device for proper operation. Light at shower shall operate from G.F.C.I. outlet at bath vanity.		<ol> <li>Wood strustural members supporting moisture-permeable floors or roofs that are exposed to the weather, such as concrete or masonry slabs, unless separated from such floors or roofs by an impervious moisture barrier.</li> </ol>
	Ρ.	All lighting locations to be switched at walls where indicated. Install all light fixtures per manufacturers instructions.		<ol> <li>Wood furring strips or other wood framing members attached directly to the interior of exterior masonry walls or concrete walls below</li> </ol>
od be	Q.	Exhaust fan / Light combination units shall be, 70 CFM min. exhaust fan and light with Manufactures control switch as Manufactured by Broan or equal. Installed in bath where indicated and vented directly through roof. Entire unit to be wired through bath GFCI protected circuit. Exaust fans in bathrooms shall be capable of providing five air changes		grade except where an approved vapor retarder is appiled between the wall and the furring strips or framing members.
the	R.	per hour.	<u>AR</u>	TICLE 18 - INTERIOR WALL FRAMING NOTES
ach		All 125-volt, 15 and 20-ampere receptacle outlets shall be listed tamper-resistant receptacles per CEC 406.11	Α.	Interior walls shall be constructed from 2x4 D.F. studs @ 16" o.c. with double top plates and a single bottom plate.
n	S.	Smoke detectors shall be 110v interconnected w/battery backup and installed as per R314.5	В.	Walls shall be covered with 1/2" gypsum board on all faces. Wall surfaces in water splash area shall be covered 1/2" water resistant gypsum per R702
	Т.	Carbon Monoxide Alarm Note (R315) An approved Carbon Monoxide Alarm (CMA) shall be installed in area leading to bedrooms. CMA is required on every level of a dwelling unit,	C.	Walls shalled be framed with crown of all studs on same side of wall.
		including basements. If installed in new area, CMA shall receive power supply from building wiring. Where more than one CMA is required to be install in new area, units shall be interconnected. CMA combined with Smoke Alarm shall comply with R315	D.	Prior to installation of gypsum walls shall be examined and modified as necessary to eliminate excessive warping or transitions which will result in unlevel or warped finish surfaces.
a 30	7 7 7	TICLE 14 - MECHANICAL NOTES	E.	Provide 2x blocking as necessary for cabinetry, plumbing fixtures, etc
to	<u>AR I</u> A.	Mechanical system shall be designed and installed by Mechanical contractor as per	F. G.	Provide flat 2x blocking in walls at ceiling line if not located at double top plates. All openings from wall cavity to underfloor or attic area shall be sealed with expansive
of	В.	California Mechanical Code (CMC) Provide proper clearance to vents from fuel burning appliances from opening into building	Н.	foam. Fire blocking - Provide fire-blocking to cut off all concealed draft openings (vertical and horizontal) to form an effective fire barrier between stories, and between a top story and
	C.	as per CMC 806.6 All ducting supply or return air for heating, cooling shall be conducted through a duct		the roof space. (CRC R302.11)
	D.	system as per CMC 602.1 Enviromental ducts shall terminate a minimum of 3ft from property line and opening into	<u>AR</u> A.	TICLE 19 - EXTERIOR MALL FRAMING NOTES         2x D.F. studs @ 16" o.c. w/dbl top plates and single bottom plates. Wall interior covered
	E.	building Under floor access at foundation stem shall not be used for Mechanical chase unless		by 1/2" gypsum board - typical.
S	F.	designed for this purpose. Single-wall metal pipe shall not be used as a vent in dwellings and residential occupancies per CMC 802.7.3	В. С.	Wall exterior covered per siding specifications shown on elevations Provide continuous1/4" bead of sub-floor adheasive between sole plate and subfloor plywood.
ver			ART	ICLE 20 - FIRE DEPARTMENT NOTES
)r		A constraints and the second se		One- and two- family dwellings and garage as follows: in all new one- and two-family dwellings when additions are made that increase the building area to more than 3600 sf. Exception: a one-time addition to an existing building that does not total more than 1,000 sf of building area.

The owner(s), occupant(s) and any contractor(s) or subcontractor(s) are responsible for consulting with the water purveyor of record in order to determine if any modification or upgrade of the existing water service is required.

- Covered porches, patios, balconies and attic spaces may require fire sprinkler coverage. A state of California licensed (c-16) fire protection contractor shall submit plans, calculations, a completed permit application and appropriate fees to this department for review and approval prior to beginning their work.
- Potable water supplies shall be protected from contamination caused by fire protection water supplies. It is the responsibility of the applicant and any contractors and subcontractors to contact the water purveyor supplying the site of such project and to comply with the requirements of that purveyor. such requirements shall be incorporated into the design of any water-based fire protection systems, and/or fire suppression water supply systems or storage containers that may be physically connected in any manner to an appliance capable of causing contamination of the potable water supply of the purveyor of record. final approval of the system(s) under consideration will not be granted by this office until compliance with the requirements of the water purveyor of record are documented by that purveyor as having been met by the applicant(s).
- Premises identification: approved numbers or addresses shall be placed on all new and existing buildings in such a position as to be plainly visible and legible from the street or road fronting the property. Numbers shall contrast with their background.
- Construction site fire safety: construction site must comply with applicable provisions of the CFC Chapter 14 and Santa Clara County Fire Department Standard detail and specification S1-7.

### **ATTACHMENT 6** 2013 TITLE 24 MANDATORY MEASURES

#### NOTE: Low-rise residential buildings subject to the Standards must comply with all applicable mandatory measures listed, regardless of the compliance approach used. More stringent energy measures listed on the Certificate of Compliance (CF-1R, CF-1R-ADD, or CF-1R-ALT Form) shall supersede the items marked with an asterisk (\*) below. This Mandatory Measures shall be considered by all parties as minimum component performance specifications whether they are shown elsewhere in the documents or in this summary.

#### **Building Envelope Measures:**

§110.6(a)1: Doors and windows between conditioned and unconditioned spaces are manufactured to limit air leakage. \$110.6(a)4: Fenestration products (except field-fabricated windows) have a label listing the certified U-Factor, certified Solar Heat Gain Coefficient (SHGC), and infiltration that meets the requirements of §10-111(a). \$110.7: Exterior doors and windows are weather-stripped; all joints and penetrations are caulked and sealed.

110.8(a): Insulation specified or installed meets Standards for Insulating Material. Indicate type and include on CF-2R Form. §110.8(i): The thermal emittance and solar reflectance values of the cool roofing material meets the requirements of §110.8(i) when the installation of a Cool Roof is specified on the CF-1R Form.

\*\$150.0(a): Minimum R-30 (R-19 for Additions/Alterations) insulation in wood-frame ceiling or equivalent U-factor. §150.0(b): Loose fill insulation shall conform with manufacturer's installed design labeled R-Value.

\*\$150.0(c): Minimum R-13 insulation in 2x4 wood-frame wall (R-19 in 2x6) or equivalent U-factor \*§150.0(d): Minimum R-19 insulation in raised wood-frame floor or equivalent U-factor.

\$150.0(f): Air retarding wrap is tested, labeled, and installed according to ASTM E1677-95(2000) when specified on the CF-1R Form. §150.0(g): Mandatory Vapor barrier installed in Climate Zones 14 or 16.

\$150.0(I): Water absorption rate for slab edge insulation material alone without facings is no greater than 0.3%; water vapor permeance rate is no greater than 2.0 perm/inch and shall be protected from physical damage and UV light deterioration \$150.0(q) Fenestration Products. Fenestration separating conditioned space from unconditioned space or outdoors shall meet the requirements of either Item 1

2 below 1. Fenestration, including skylight products, must have a maximum U-factor of 0.58.

2. The weighted average U-factor of all fenestration, including skylight products, shall not exceed 0.58. EXCEPTION to Section 150.0(q)1: Up to 10 square feet of fenestration area or 0.5 percent of the Conditioned Floor Area, whichever is greater, is exempt from the maximum U-factor requirement \$150.0(r) Solar Ready Buildings. Shall meet the requirements of Section 110.10 applicable to the building project.

### Fireplaces, Decorative Gas Appliances and Gas Log Measures:

§150.0(e)1A: Masonry or factory-built fireplaces have a closable metal or glass door covering the entire opening of the firebox \$150.0(e)1B: Masonry or factory-built fireplaces have a combustion outside air intake, which is at least six square inches in area and is equipped with a with a readily accessible, operable, and tight-fitting damper and or a combustion-air control device. \$150.0(e)2: 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

#### Space Conditioning, Water Heating and Plumbing System Measures:

§110.0-§110.3: HVAC equipment, water heaters, showerheads, faucets and all other regulated appliances are certified by the Energy Commission. \$110.3(c)5: Water heating recirculation loops serving multiple dwelling units and High-Rise residential occupancies meet the air release valve, backflow

prevention, pump isolation valve, and recirculation loop connection requirements of §110.3(c)5. §110.5: Continuously burning pilot lights are prohibited for natural gas: fan-type central furnaces, household cooking appliances (appliances with an electrical supply voltage connection with pilot lights that consume less than 150 Btu/hr are exempt), and pool and spa heaters. §150.0(h): Heating and/or cooling loads are calculated in accordance with ASHRAE, SMACNA or ACCA.

§150.0(i): Heating systems are equipped with thermostats that meet the setback requirements of Section 110.2(c)

§150.0(j)1A: Storage gas water heaters rated with an Energy Factor no greater than the federal minimal standard are externally wrapped with insulation having an installed thermal resistance of R-12 or greater. §150.0(j)1B: Unfired storage tanks, such as storage tanks or backup tanks for solar water-heating system, or other indirect hot water tanks have 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: All domestic hot water system piping conditions listed below, whether buried or unburied, must be insulated per TABLE 120.3-A. i. The first 5 feet (1.5 meters) of hot and cold water pipes from the storage tank. ii. All piping with a nominal diameter of 3/4 inch (19 millimeter) or

iii. All piping associated with a domestic hot water recirculation system regardless of the pipe diameter. iv. Piping from the heating source to storage tank or between tanks.

v. Piping buried below grade vi. All hot water pipes from the heating source to the kitchen fixtures.

\$150.0(j)2: Pipe insulation for steam hydronic heating systems or hot water systems >15 psi, meets the requirements of Standards Table 120.3-A. §150.0(j)3A: Insulation is protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind.

§150.0(j)4: Solar water-heating systems and/or collectors are certified by the Solar Rating and Certification Corporation. §150.0(m)1: All air-distribution system ducts and plenums installed, are sealed and insulated to meet the requirements of CMC Sections 601, 602, 603, 604, 605 and Standard 6-5; supply-air and return-air ducts and plenums are insulated to a minimum installed level of R-6 or enclosed entirely in conditioned space. Openings shall 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 1/4 inch, the combination of mastic and either mesh or tape shall be used

\$150.0(m)1: Building cavities, support platforms for air handlers, and plenums defined or constructed with materials other than sealed sheet metal, duct board or flexible duct shall not be used for conveying conditioned air. Building cavities and support platforms may contain ducts. Ducts installed in cavities and support platforms shall not be compressed to cause reductions in the cross-sectional area of the ducts. \$150.0(m)2D: Joints and seams of duct systems and their components shall not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands. §150.0(m)7: Exhaust fan systems have back draft or automatic dampers.

§150.0(m)8: Gravity ventilating systems serving conditioned space have either automatic or readily accessible, manually operated dampers. §150.0(m)9: Insulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Cellular foam insulation shall be protected as above or painted with a coating that is water retardant and provides shielding from solar radiation that can cause degradation of the

§150.0(m)10: Flexible ducts cannot have porous inner cores.

\$150.0(n)1: Systems using gas or propane water heaters, whether tank or on-demand, to serve individual dwelling units shall include all the following A. A 120V electrical receptacle that is within 3 feet from the water heater and accessible to the water heater with no obstructions;

B. A Category III or IV vent, or a Type B vent with straight pipe between the outside termination and the space where the water heater is installed

C. A condensate drain that is no more than 2 inches higher than the base of the installed water heater, and allows natural draining without pump assist,

#### D. A gas supply line with a capacity of at least 200,000 Btu/hr.

\$150.0(o): All dwelling units shall meet the requirements of ANSI/ASHRAE Standard 62.2 Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings. Window operation is not a permissible method of providing the Whole Building Ventilation required in Section 4 of that Standard.

#### Pool and Spa Heating Systems and Equipment Measures:

§110.4(a): Any pool or spa heating system shall be certified to have: a thermal efficiency that complies with the Appliance Efficiency Regulations; an on-off switch mounted outside of the heater; a permanent weatherproof plate or card with operating instructions; and shall not use electric resistance heating or a pilot \$110.4(b)1: Any pool or spa heating equipment shall be installed with at least 36" of pipe between filter and heater, or dedicated suction and return lines, or

built-up connections for future solar heating. §110.4(b)2: Outdoor pools or spas that have a heat pump or gas heater shall have a cover.

§110.4(b)3: Pools shall have directional inlets that adequately mix the pool water, and a time switch that will allow all pumps to be set or programmed to run only during off-peak electric demand periods. §150.0(p): Residential pool systems or equipment meet the pump sizing, flow rate, piping, filters, and valve requirements of §150.0(p).

#### **Residential Lighting Measures:**

§150.0(k)1A: Installed luminaires shall be classified as high-efficacy or low-efficacy for compliance with Section 150.0(k) in accordance with TABLE 150.0-A or TABLE 150.0-B, as applicable.

§150.0(k)1C: The wattage of permanently installed luminaires shall be determined as specified by §130.0(c). \$150.0(k)1D: Ballasts for fluorescent lamps rated 13 Watts or greater shall be electronic and shall have an output frequency <= 20 kHz.

§150.0(k)1E: Permanently installed night lights and night lights integral to installed luminaires or exhaust fans shall be rated to consume no more than five watts of power per luminaire or exhaust fan as determined in accordance with Section 130.0(c). Night lights shall not be required to be controlled by vacancy §150.0(k)1F: Lighting integral to exhaust fans, in rooms other than kitchens, shall meet the applicable requirements of §150.0(k).

§150.0(k)2: All switching devices and controls shall meet the requirements of §150.0(k)2.

§150.0(k)3: A minimum of 50 percent of the total rated wattage of permanently installed lighting in kitchens shall be high efficacy. EXCEPTION: Up to 50 watts for dwelling units less than or equal to 2,500 ft<sup>2</sup> or 100 watts for dwelling units larger than 2,500 ft<sup>2</sup> may be exempt from the 50 percent high efficacy requirement when all lighting in the kitchen is controlled in accordance with the applicable provisions in Section 150.0(k)2, and is also controlled by vacancy sensors or dimmers. \$150.0(k)4: Permanently installed lighting that is internal to cabinets shall use no more than 20 watts of power per linear foot of illuminated cabinet.

\$150.0(k)5: Lighting installed in bathrooms shall meet the following requirements A. A minimum of one high efficacy luminaire shall be installed in each bathroom: and

B. All other lighting installed in each bathroom shall be high efficacy or controlled by vacancy sensors

§150.0(k)6: Lighting installed in attached and detached garages, laundry rooms, and utility rooms shall be high efficacy luminaires and controlled by vacancy sensors \$150.0(k)7: Lighting installed in rooms or areas other than in kitchens, bathrooms, garages, laundry rooms, and utility rooms shall be high efficacy, or shall be controlled by either dimmers or vacancy sensors

EXCEPTION 1: Luminaires in closets less than 70 square feet EXCEPTION 2: Lighting in detached storage building less than 1000 square feet located on a residential site.

\$150.0(k)8: Luminaires recessed into insulated ceilings shall be listed for zero clearance insulation contact (IC) by Underwriters Laboratories or other nationally recognized testing/rating laboratory; and have a label that certifies the luminaire is airtight with air leakage less than 2.0 CFM at 75 Pascals when tested in accordance with ASTM E283; and be sealed with a gasket or caulk between the luminaire housing and ceiling. §150.0(k)9A: For single-family residential buildings, outdoor lighting permanently mounted to a residential building or other buildings on the same lot shall be high

efficacy, or may be low efficacy if it meets all of the following requirements:

i. Controlled by a manual ON and OFF switch that does not override to ON the automatic actions of items ii or iii below; and ii. Controlled by a motion sensor not having an override or bypass switch that disables the motion sensor, or controlled by a motion sensor having a temporary override switch which temporarily bypasses the motion sensing function and automatically reactivates the motion sensor within 6 hours iii Controlled by one of the following methods:

a. Photocontrol not having an override or bypass switch that disables the photocontrol; or b. Astronomical time clock not having an override or bypass switch that disables the astronomical time clock, and which is programmed to automatically turn the outdoor lighting OFF during daylight hours; or

c. Energy management control system which meets all of the following requirements: At a minimum provides the functionality of an astronomical time clock in accordance with Section 110.9; meets the Installation Certification requirements in Section 130.4; meets the requirements for an EMCS in Section 130.5; does not have an override or bypass switch that allows the luminaire to be always ON; and, is programmed to automatically turn the outdoor lighting OFF during daylight hours §150.0(k)9A: For low-rise multi-family residential buildings, outdoor lighting for private patios, entrances, balconies, and porches; and outdoor lighting for

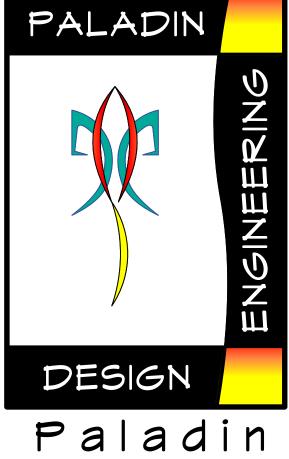
residential parking lots and residential carports with less than eight vehicles per site shall comply with one of the following requirements: i. Shall comply with Section 150.0(k)9A; or ii. Shall comply with the applicable requirements in Sections 110.9, 130.0, 130.2, 130.4, 140.7, and 141.0.

\$150.0(k)9: For low-rise residential buildings with four or more dwelling units, outdoor lighting not regulated by Section 150.0(k)9B or Section 150.0(k)9D shall comply with the applicable requirements in Sections 110.9, 130.0, 130.2, 130.4, 140.7, and 141.0. \$150.0(k)9D: Outdoor lighting for residential parking lots and residential carports with a total of eight or more vehicles per site shall comply with the applicable requirements in Sections 110.9, 130.0, 130.2, 130.4, 140.7, and 141.0, §150.0(k)10: Internally illuminated address signs shall comply with Section 140.8; OR not contain a screw-base socket, and consume no more than five watts of

power as determined according to §130.0(d). §150.0(k)11: Lighting for residential parking garages for eight or more vehicles shall comply with the applicable requirements for nonresidential garages in Sections 110.9, 130.0, 130.1, 130.4, 140.6, and 141.0.

\$150.0(k)12A. In a low-rise multi-family residential building where the total interior common area in a single building equals 20 percent or less of the floor area, permanently installed lighting for the interior common areas in that building shall be high efficacy luminaires or controlled by an occupant sensor. \$150.0(k)12B. In a low-rise multi-family residential building where the total interior common area in a single building equals more than 20 percent of the floor area, permanently installed lighting in that building shall i. Comply with the applicable requirements in Sections 110.9, 130.0, 130.1, 140.6, and 141.0; and

ii. Lighting installed in corridors and stairwells shall be controlled by occupant sensors that reduce the lighting power in each space by at least 50 percent. The occupant sensors shall be capable of turning the light fully On and Off from all designed paths of ingress and egress.



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PROJECT:

HARRISON PROJECT George & Sue Harrison 1339 Norman Drive Sunnyvale, CA 94087

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DATE: May 27, 16 DRAWN: JM/QP/BC SCALE: AS NOTED FILE: 15-008

PROJECT NOTES & T24 MANDATORY MEASURES



Sheet **3** of 8 Sheets HARRISON PROJECT

# 2013 CALIFORNIA GREEN BUILDING RESIDENTIAL MANDATORY MEASUR

<section-header><ul> <li>RESIDENTIAL MANDATORY MEASURES</li> <li>DIVISION 4.1 Planning and Design</li> <li>And the problem of the problem of</li></ul></section-header>	<ul> <li>4.406 ENHANCED DURABILITY</li> <li>4.406.1 Rodent proofing. Annul openings in sole/bottom plates at by closing such openings with certo the enforcing agency.</li> <li>4.408 CONSTRUCTION WASTER</li> <li>4.408.1 Construction waste margercent of the nonhazardous con 4.408.2, 4.408.3 or 4.408.4, or management ordinance.</li> <li>Exceptions: <ol> <li>Exceptions:</li> <li>Excavated soil and land-of 2. Alternate waste reduction or recycle facilities capable reasonably close to the jo</li> <li>The enforcing agency marginal isolated jobsites are located.</li> </ol> </li> <li>4.408.2 Construction waste margin conformance with Items 1 through agency.</li> </ul>
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<ul> <li>development which in total disturbs one acre or more, shall manage storm water drainage during construction. In order to manage storm water drainage during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent property, prevent erosion and retain soil runoff on the site.</li> <li>1. Retention basins of sufficient size shall be utilized to retain storm water on the site.</li> <li>2. Where storm water is conveyed to a public drainage system, collection point, gutter or similar disposal method, water shall be filtered by use of a barrier system, wattle or other method approved by the enforcing agency.</li> <li>3. Compliance with a lawfully enacted storm water management ordinance.</li> <li>4.106.3 Grading and paving. Construction plans shall indicate how the site grading or drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include, but are not limited to, the following:</li> <li>1. Swales</li> <li>2. Water collection and disposal systems</li> <li>3. French drains</li> <li>4. Water retention gardens</li> <li>5. Other water measures which keep surface water away from buildings and aid in groundwater recharge.</li> <li>Exception: Additions and alterations not altering the drainage path.</li> </ul>	<ul> <li>4.408.1 Construction waste mapercent of the nonhazardous con 4.408.2, 4.408.3 or 4.408.4, or management ordinance.</li> <li>Exceptions: <ol> <li>Exceptions:</li> <li>Excavated soil and land-or</li> <li>Alternate waste reduction or recycle facilities capable reasonably close to the jo</li> <li>The enforcing agency maisolated jobsites are located in conformance with Items 1 throughdated as necessary and shall be a second seco</li></ol></li></ul>
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DIVISION 4.3 Water Efficiency and Conservation	1. Identify the construction a
4 303 INDOOR WATER USE	recycling, reuse on the pr 2. Specify if construction and
<b>4.303.1 Water conserving plumbing fixtures and fittings.</b> Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply	<ul><li>(source-separated) or bul</li><li>3. Identify diversion facilities taken.</li><li>4. Identify construction meth</li></ul>
with the following: <b>4.303.1.1 Water closets.</b> The effective flush volume of all water closets shall not exceed 1.28	waste generated. 5. Specify that the amount o calculated by weight or vo
<ul> <li>gallons per flush. Tank-typewater closets shall be certified to the performance criteria of the U.S.</li> <li>EPA WaterSense Specification for Tank-type Toilets.</li> <li>Note: The effective flush volume of dual flush toilets is defined as the composite, average flush volume of two reduced flushes and one full flush.</li> </ul>	<b>4.408.3 Waste management co</b> enforcing agency, which can prov and demolition waste material div
<b>4.303.1.2 Urinals.</b> The effective flush volume of urinals shall not exceed 0.5 gallons per flush.	landfill complies with Section 4.40 <b>Note:</b> The owner or contra and demolition waste mat
4.303.1.3 Showerheads. 4.303.1.3.1 Single showerhead. Showerheads shall have a maximum flow rate of not	company. 4.408.4 Waste stream reduction
more than 2.0 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPAWaterSense Specification for Showerheads.	weight of construction and demol lbs./sq. ft. of the building area sha requirement in Section 4.408.1.
<b>4.303.1.3.2 Multiple showerheads serving one shower.</b> When a shower is served by more than one showerhead, the combined flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 2.0 gallons per minute at 80 psi, or the shower shall be designed to allowonly one shower outlet to be in operation at a time.	<b>4.408.4.1 Waste stream red</b> weight of construction and de two (2) pounds per square for construction waste reduction
<b>Note:</b> A hand-held shower shall be considered a showerhead. <b>4.303.1.4 Faucets.</b>	<b>4.408.5 Documentation.</b> Docum demonstrates compliance with Se
<b>4.303.1.4.1 Residential lavatory faucets.</b> The maximum flow rate of residential lavatory faucets shall not exceed 1.5 gallons per minute at 60 psi. The minimum flow rate of residential lavatory faucets shall not be less than 0.8 gallons per minute at 20 psi.	4.408.4. <b>Notes:</b> 1. Sample forms found in
<b>4.303.1.4.2 Lavatory faucets in common and public use areas.</b> The maximum flow rate or lavatory faucets installed in common and public use areas (outside of dwellings or sleeping units) in residential buildings shall not exceed 0.5 gallons per minute at 60 psi.	(Residential)" located documenting complian 2. Mixed construction an California Department
<b>4.303.1.4.3 Metering faucets.</b> Metering faucets when installed in residential buildings shall not deliver more than 0.25 gallons per cycle.	4.410 BUILDING MAINTENANC 4.410.1 Operation and mainten
<b>4.303.1.4.4 Kitchen faucets.</b> The maximum flow rate of kitchen faucets shall not exceed 1.8 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a	disc, web-based reference or oth of the following shall be placed in 1. Directions to the owner or
maximum flow rate of 1.8 gallons per minute at 60 psi. <b>Note:</b> Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.	<ul> <li>the life cycle of the structure</li> <li>2. Operation and maintenan</li> <li>a. Equipment and applia</li> <li>systems, water-heating systems</li> </ul>
<b>4.303.2 Standards for plumbing fixtures and fittings.</b> Plumbing fixtures and fittings shall be installed in accordance with the <i>California Plumbing Code</i> , and shall meet the applicable standards referenced in Table 1401.1 of the <i>California Plumbing Code</i> .	b. Roof and yard drainag c. Space conditioning sy d. Landscape irrigation s e. Water reuse systems.
<b>4.304 OUTDOOR WATER USE</b> <b>4.304.1 Irrigation controllers.</b> Automatic irrigation system controllers for landscaping provided	<ol> <li>Information from local utili reduce resource consumption</li> </ol>
<ul> <li>by the builder and installed at the time of final inspection shall comply with the following:</li> <li>1. Controllers shall be weather- or soil moisture-based controllers that automatically adjust</li> </ul>	<ol> <li>Public transportation and/</li> <li>Educational material on the 30—60 percent and what level in that range.</li> </ol>
<ul><li>irrigation in response to changes in plants' needs as weather conditions change.</li><li>Weather-based controllers without integral rain sensors or communication systems that account for local rainfall shall have a separate wired or wireless rain sensor which</li></ul>	<ul><li>level in that range.</li><li>6. Information about water-c conserve water.</li></ul>
connects or communicates with the controller(s). Soil moisture-based controllers are not required to have rain sensor input. Note: More information regarding irrigation controller function and specifications is	<ol> <li>Instructions for maintainin least 5 feet away from the</li> <li>Information on required re</li> </ol>
available from the Irrigation Association.	caulking, painting, grading 9. Information about state so 10. A copy of all special inspe
	DIVISION 4.5 ENVIRO
	<b>4.503 FIREPLACES</b> <b>4.503.1 General.</b> Any installed gainstalled woodstove or pellet stow applicable. Woodstoves, pellet stordinances.
	<b>4.503 FIREPLACES</b> <b>4.503.1 General.</b> Any in installed woodstove or p applicable. Woodstoves

IAL CONSERVATION AND RESOURCE	INSPECTOR SIGNOFF	4.504 POLLUTANT	CONTROL			INSPECTOR SIGNOFF
ENY				protection of mechanical equi	pment during	
Y AND REDUCED MAINTENANCE		<b>construction.</b> At th final startup of the h distribution compon	e time of rough installat eating, cooling and ven ent openings shall be c	ion, during storage on the const tilating equipment, all duct and overed with tape, plastic, sheetr	ruction site and until other related air netal or other methods	
t exterior walls shall be protected against the passage of rodents		acceptable to the er enter the system.	nforcing agency to redu	ce the amount ofwater, dust and	d debris, which may	
ement mortar, concrete masonry or a similar method acceptable			arial nallutant control	Finish materials shall somely u	ith this section	
			-	Finish materials shall comply w		
E REDUCTION. DISPOSAL AND RECYCLING anagement. Recycle and/or salvage for reuse aminimum of 50		project shall me	et the requirements of t	ulks. Adhesives, sealants and on the following standards unless magement district rules apply:		
nstruction and demolition waste in accordance with either Section neet a more stringent local construction and demolition waste		and caul managei shown ir	ks shall comply with loc ment district rules where Table 4.504.1 or 4.504	imers, adhesive primers, sealar al or regional air pollution contro a applicable or SCAQMD Rule 1 I.2, as applicable. Such products ibition on the use of certain toxic	ol or air quality 168 VOC limits, as s also shall	
clearing debris. In methods developed by working with local agencies if diversion ole of compliance with this item do not exist or are not located obsite. ay make exceptions to the requirements of this section when		(chlorofo trichloroe 2. Aerosol compour	rm, ethylene dichloride ethylene), except for ae adhesives, and smaller nds (in units of product,	methylene chloride, perchloroet, rosol products, as specified in S unit sizes of adhesives, and sea less packaging, which do not w	thylene and ubsection 2 below. alant or caulking eigh more than 1	
ted in areas beyond the haul boundaries of the diversio facility.		pound and do not consist ofmore than 16 fluid ounces) shall comply with statewid VOC standards and other requirements, including prohibitions on use of certain to compounds, of <i>California Code of Regulations</i> , Title 17, commencing with Section				
anagement plan. Submit a construction waste management plan bugh 5. The construction waste management plan shall be be available during construction for examination by the enforcing				ectural paints and coatings shall al Suggested Control Measure, a		
and demolition waste materials to be diverted from disposal by roject or salvage for future use or sale. Ind demolition waste materials will be sorted on-site Ilk mixed (single stream). Is where the construction and demolition waste material will be		4.504.3, unless not meet the de determined by c on its gloss, as o Resources Boar	more stringent local lim finitions for the specialty lassifying the coating a defined in subsections 4	its apply. The VOC content limit y coatings categories listed in Ta s a Flat, Nonflat or Nonflat-high 4.21, 4.36, and 4.37 of the 2007 Measure, and the corresponding	for coatings that do able 4.504.3 shall be Gloss coating, based California Air	
hods employed to reduce the amount of construction and demolition		4.504.2.3 Aeros	ol paints and coating	<b>s.</b> Aerosol paints and coatings s	shall meet the	
of construction and demolition waste materials diverted shall be olume, but not by both.		<ul> <li>Product-weighted MIR Limits for ROC in Section 94522(a)(3) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections 94522(c)(2) and (d)(2) of <i>California Code of Regulations</i>, Title 17, commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air Quality Management District additionally comply with the percent VOC by weight of product limits of Regulation 8, Rule 49.</li> <li>4.504.2.4 Verification. Verification of compliance with this section shall be provided at the</li> </ul>				
<b>Ompany.</b> Utilize a waste management company, approved by the vide verifiable documentation that the percentage of construction verted from the 08.1.						
ractor may make the determination if the construction terials will be diverted by a waste management		request of the e following: 1. Manufac		nentation may include, but is no ation.		
on alternative [LR]. Projects that generate a total combined olition waste disposed of in landfills, which do not exceed four (4) nall meet the minimum 50 percent construction waste reduction		product requiremen 1. Carpet and I	ts of one of the followin Rug Institute''s Green L	•	-	
<b>luction alternative.</b> Projects that generate a total combined emolition waste disposed of in landfills, which do not exceed bot of the building area, shall meet the minimum 50-percent requirement in Section 4.408.1.		of Volatile O Chambers," 3. NSF/ANSI 1	rganic Chemical Emiss	ions from Indoor Sources Using 2010 (also known as Specificatio	Environmental	
nentation shall be provided to the enforcing agency which Section 4.408.2, Items 1 through 5, Section 4.408.3 or Section						-
in "A Guide to the California Green Building Standards Code at www.hcd.ca.gov/CALGreen.html may be used to assist in ance with this section.		TABLE 4.504. ADHESIVE VOC LI Iter and Less Exempt Compo	MIT <sup>1, 2</sup> bunds in Grams per Liter	TABLE 4.50 VOC CONTENT LIMITS FOR ARCH Grams of VOC per Lit Less Water and Less Exe	HITECTURAL COATINGS <sup>2, 3</sup> er of Coating,	
nd demolition debris (C&D) processors can be located at the	Indoor carp	HITECTURAL APPLICATIONS bet adhesives	50	COATING CATEGORY	EFFECTIVE EFFECTIVE 1/1/2010 1/1/2012	
nt of Resources Recycling and Recovery (CalRecycle).	Carpet pad Outdoor ca	adhesives rpet adhesives	50 150	Flat coatings Nonflat coatings	50 100	
CE AND OPERATION		ing adhesive or adhesives	<u>100</u> 60	Nonflat-high gloss coatings	150	
nance manual. At the time of final inspection, a manual, compact	Subfloor ac	lhesives	50	SPECIALTY COA Aluminum roof coatings	400	
ner media acceptable to the enforcing agency which includes all n the building:		e adhesives sphalt tile adhesives	65 50	Basement specialty coatings	400	
5		d panel adhesives	50	Bituminous roof coatings Bituminous roof primers	<u> </u>	1
or occupant that the manual shall remain with the building throughou	Cove base Multipurpo	adhesives se construction adhesives	50 70	Bond breakers	350	1
ure.		glazing adhesives	100	Concrete curing compounds	350	1
nce instructions for the following: ances, including water-saving devices and systems, HVAC		roof membrane adhesives	250	Concrete/masonry sealers	50	1
systems and other major appliances and equipment.		sives not specifically listed	50	Driveway sealers Dry fog coatings	50	1
ge, including gutters and downspouts.	S PVC weldi		510	Faux finishing coatings	350	1
ystems, including condensers and air filters.	CPVC weld		490	Fire resistive coatings	350	1
systems.	ABS weldi	-0	325	Floor coatings	100	1
		ent welding	250	Form-release compounds	250	1
lity water and waste recovery providers on methods to further	Adhesive n	rimer for plastic	550	Graphic arts coatings (sign paints)	500	1

lity, water and waste recovery providers on methods to further nption, including recycle programs and locations. d/or carpool options available in the area.

the positive impacts of an interior relative humidity between t methods an occupant may use to maintain the relative humidity

-conserving landscape and irrigation design and controllers which

ing gutters and downspouts and the importance of diverting water a e foundation. routine maintenance measures, including, but not limited to,

ng around the building, etc.

solar energy and incentive programs available.

pection verifications required by the enforcing agency or this code.

### DMENTAL QUALITY

gas fireplace shall be a direct-vent sealed-combustion type. Any ove shall comply with U.S. EPA Phase II emission limits where stoves and fireplaces shall also comply with applicable local

VCT and asphalt tile adhesives	50
Drywall and panel adhesives	50
Cove base adhesives	50
Multipurpose construction adhesives	70
Structural glazing adhesives	100
Single-ply roof membrane adhesives	250
Other adhesives not specifically listed	50
SPECIALTY APPLICATIONS	
PVC welding	510
CPVC welding	490
ABS welding	325
Plastic cement welding	250
Adhesive primer for plastic	550
Contact adhesive	80
Special purpose contact adhesive	250
Structural wood member adhesive	140
Top and trim adhesive	250
SUBSTRATE SPECIFIC APPLICATIONS	
Metal to metal	30
Plastic foams	50
Porous material (except wood)	50
Wood	30
T11 1	20

Fiberglass

1. If an adhesive is used to bond dissimilar substrates together, the adhesive

with the highest VOC content shall be allowed. 2. For additional information regarding methods to measure the VOC content specified in this table, see South Coast Air Quality Management District Rule 1168.

#### TABLE 4.504.2 SEALANT VOC LIMIT Less Water and Less Exempt Compounds in Grams per Liter SEALANTS CURRENT VOC LIMIT Architectural

Architectural	230
Marine deck	760
Nonmembrane roof	300
Roadway	250
Single-ply roof membrane	450
Other	420
SEALANT PRIMERS	
Architectural	
Nonporous	250
Porous	775
Modified bituminous	500
Marine deck	760
Other	750

Nonflat-high gloss coatings	150	
SPECIALTY COA	TINGS	
Aluminum roof coatings	400	
Basement specialty coatings	400	
Bituminous roof coatings	50	
Bituminous roof primers	350	
Bond breakers	350	
Concrete curing compounds	350	
Concrete/masonry sealers	100	
Driveway sealers	50	
Dry fog coatings	150	
Faux finishing coatings	350	
Fire resistive coatings	350	
Floor coatings	100	
Form-release compounds	250	
Graphic arts coatings (sign paints)	500	
High temperature coatings	420	
Industrial maintenance coatings	250	
Low solids coatings <sup>1</sup>	120	
Magnesite cement coatings	450	
Mastic texture coatings	100	
Metallic pigmented coatings	500	
Multicolor coatings	250	
Pretreatment wash primers	420	
Primers, sealers, and undercoaters	100	
Reactive penetrating sealers	350	
Recycled coatings	250	
Roof coatings	50	
Rust preventative coatings	400	250
Shellacs		
Clear	730	
Opaque	550	100
Specialty primers, sealers and undercoaters	350	100
Stains Store concelidents	250	
Stone consolidants	450	
Swimming pool coatings	340	
Traffic marking coatings	100	
Tub and tile refinish coatings	420	
Waterproofing membranes	250	
Wood coatings	275	
•		
Zinc-rich primers	340	
Wood preservatives Zinc-rich primers 1. Grams of VOC per liter of coating, include	350 340 ding water and in	cluding exemp

1. Grams of VOC per liter of coating, including water and including exempt compounds. 2. The specified limits remain in effect unless revised limits are listed in subse-

quent columns in the table. 3. Values in this table are derived from those specified by the California Air Resources Board, Architectural Coatings Suggested Control Measure, February 1, 2008. More information is available from the Air Resources

	ATT	ACHMENT 6			
RES	PAC	GE 4 OF 9	PA	ALADIN	
					2ING
<b>4.504.3.1 Carpet cushion.</b> All carpet cushi requirements of the Carpet and Rug Institu		nterior shall meet the			
4.504.3.2 Carpet adhesive. All carpet adhe	esive shall meet the requirer	ments of Table 4.504.1.			
<ul> <li>4.504.4 Resilient flooring systems. When floor area receiving resilient flooring shall c</li> <li>1. VOC emission limits defined in the of High Performance Products Databa</li> <li>2. Products compliant with CHPS criter program.</li> <li>3. Certification under the Resilient Flooring Department of Flooring Performance Products of Flooring Performance Performance Performance Products of Flooring Performance Pe</li></ul>	omply with one or more of th Collaborative for High Perfor se. ria certified under the Greer or Covering Institute (RFCI)	ne following: mance Schools (CHPS) nguard Children & Schools FloorScore program.			ENGINEERING
<ol> <li>Meet the California Department of F Evaluation of Volatile Organic Chen Environmental Chambers," Versior 01350).</li> </ol>	nical Emissions from Indoor	Sources Using		PESIGN	•
<b>4.504.5 Composite wood products.</b> Hard fiberboard composite wood products used requirements for formaldehyde as specified	on the interior or exterior of t	he building shall meet the		alad sign ∉ Engine	
Wood (17 CCR 93120 et seq.), by or before Table 4.504.5.			2	249 S. 20th. Str	eet
FORMAL Maximum Formaldehyd	BLE 4.504.5 DEHYDE LIMITS <sup>1</sup> e Emissions in Parts per Million	7	4 4	an Jose, CA 95 08.370.0730 08.370.37991	√oc Fax
PRODUCT Hardwood plywood veneer core	CURRENT LIMIT 0.05	-		vw.paladin-desig	n.net
Hardwood plywood composite c Particleboard	ore 0.05 0.09	-			
Medium density fiberboard Thin medium density fiberboard	0.11 2 0.13	-			
1. Values in this table are derived Resources Board, Air Toxics tested in accordance with AST <i>California Code of Regulations</i>	I from those specified by the California Ai Control Measure for Composite Wood a CM E 1333. For additional information, se , Title 17, Sections 93120 through 93120.12 has a maximum thickness of ${}^{5}/_{16}$ inch (8 mm).	s e			
<ul> <li>4.504.5.1 Documentation. Verification of concepted by the enforcing agency. Documentation and specifications and specifications.</li> <li>Chain of custody certifications.</li> <li>Product labeled and invoiced as mentioned as the product labeled and invoiced as mentioned as the set of the concepted products marked as wood Association, the Australian A</li> <li>Other methods acceptable to the endoted as the product of the conceptable and the product of the endoted as the product of the endoted as a set of the conceptable and the endoted as the product of the endo</li></ul>	entation shall include at leas ions. eting the CompositeWood F <i>et seq</i> .). meeting the PS-1 or PS-2 st S/NZS 2269 or European 63	st one of the following: Products regulation andards of the Engineered			
<b>4.505 INTERIOR MOISTURE CONTROL</b> <b>4.505.1 General.</b> Buildings shall meet or ex Standards Code.	cceed the provisions of the (	California Building			
<b>4.505.2 Concrete slab foundations.</b> Concretered retarder by the California Building Code, Cl have a vapor retarder by the California Resourced, Chapter 5, shall also comply with thi	napter 19 or concrete slab-o idential	•			
<ul> <li>4.505.2.1 Capillary break. A capillary one of the following:</li> <li>1. 4-inch-thick (101.6 mm) base of be provided with a vapor retarded design, which will address bleed additional information, see Ame</li> <li>2. Other equivalent methods approximation of the design of t</li></ul>	f 1/2 inch (12.7 mm) or large er in direct contact with conc ling, shrinkage, and curling, rican Concrete Institute, AC oved by the enforcing agenc	er clean aggregate shall rete and a concrete mix shall be used. For I 302.2R-06.		STAMP IS NO	l. L.
<ol> <li>A slab design specified by a lice</li> <li>4.505.3 Moisture content of building mathematical damage shall not be installed. Wall and floor members exceed 19-percent moisture controls with the following:         <ol> <li>Moisture content shall be determined meter. Equivalent moisture verificate agency and shall satisfy requirement 2. Moisture readings shall be taken at</li> </ol> </li> </ol>	<b>terials.</b> Building materials with r framing shall not be enclose ent. Moisture content shall be ad with either a probe-type of ion methods may be approven its found in Section 101.8 of a point 2 feet (610 mm) to 4	sed when the framing be verified in compliance r contact-type moisture ed by the enforcing this code.	- Milling Ser	REPRODUCTION OF THESE PLANS BY ANY MEANS IS PROHIBITED BY FEDERAL LAW VIOLATIONS ARE PUNISHABLE BY FINES UP TO \$100,000 PER OFFENSE CALL THE DESIGNER TO OBTAIN LEGAL COPIES OF THIS PLAN	FRED SNATON
grade stamped end of each piece to 3 At least three random moisture read		wall and floor framing with		EVISIONS	DAT

3. At least three random moisture readings shall be performed on wall and floor framing with documentation acceptable to the enforcing agency provided at the time of approval to enclose the wall and floor framing.

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

### 4.506 INDOOR AIR QUALITY AND EXHAUST

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

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

Notes:

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

#### 4.507 ENVIOREMENTAL COMFORT

4.507.2 Heating and air-conditioning system design. Heating and air-conditioning systems shall be sized, designed and

have their equipment selected using the following methods:

- 1. The heat loss and heat gain is established according to ANSI/ACCA 2 Manual J—2004 (Residential Load Calculation), ASHRAE handbooks or other equivalent design software or methods.
- 2. Duct systems are sized according to ANSI/ACCA 1 Manual D—2009 (Residential Duct Systems), ASHRAE handbooks or other equivalent design software or methods.
- 3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S—2004 (Residential Equipment Selection) or other equivalent design software or methods.

**Exception:** Use of alternate design temperatures necessary to ensure the systems function are acceptable.

George & Sue Harrison 1339 Norman Drive Sunnyvale, CA 94087
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HARRISON PROJECT

PROJECT:

DATE

ENGINEER

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written dimensions on these drawings shall have precedence ver scaled dimensions, written dimensions are approximate nd must be verified, contractor to verify and be responsible or all existing conditions and dimensions prior to and during all hases of work. This office must be notified of any variation on the dimensions and conditions shown by these drawings.
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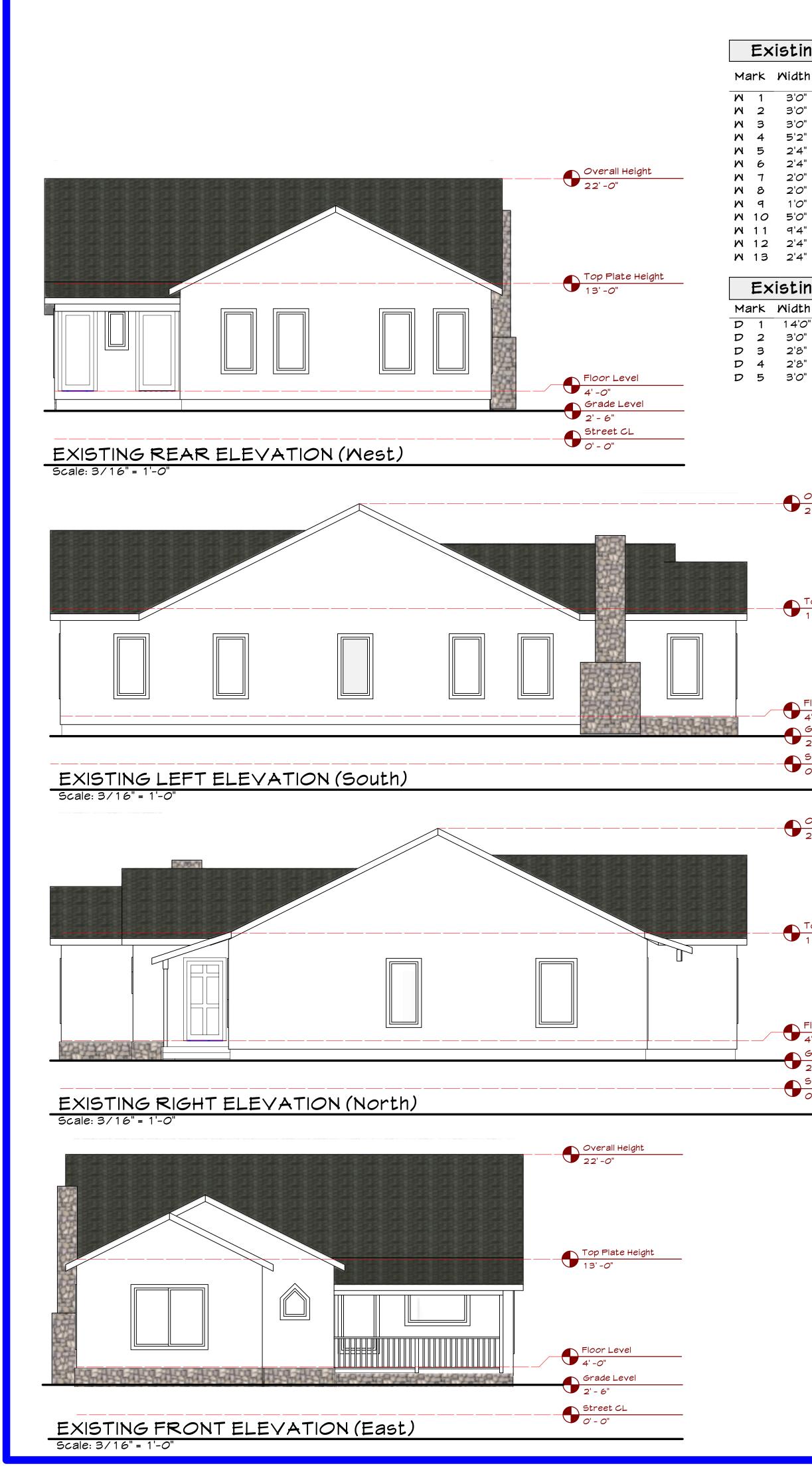
DATE: May 27, 16	DRAWN: JM/QP/BC
SCALE: AS NOTED	FILE: 15-008

GREEN BUILDING MANDATORY MEASURES

A0.5

Sheet 4 of 8 Sheets HARRISON PROJECT





### Existing Window Schedule - Garage

Swing Simple

Swing Simple

Swing Simple

DЗ

D 5 3'*0*"

2'8"

6'8"

6'8"

6'8"

Overall Height 22'-0"

Top Plate Height

Floor Level 4'-0"

Street CL 0' - 0"

2'-6"

r Grade Level

Overall Height 22'-0"

Top Plate Height

Floor Level 4'-0"

n Grade Level

Street CL 0' - 0"

**J** 2' - 6"

MarkWidthHeightSash OperationLocationGlazingW13'0"3'0"CasementGarageInsulatedW23'0"4'0"CasementStorageInsulatedW33'0"4'0"CasementStorageInsulatedW45'2"3'6"3i-parting CasemenBedroomInsulatedW52'4"2'0"CasementBedroomInsulatedW62'4"2'0"CasementBedroomInsulatedW62'4"2'0"CasementBedroomInsulatedW72'0"2'0"Fixed GlassBathroomInsulatedW82'0"2'0"Fixed GlassBathroomInsulatedW91'0"2'0"Fixed GlassLiving RoomInsulatedW105'0"3'6"CustomLiving RoomInsulatedW122'4"2'0"CasementLiving RoomInsulatedW132'4"2'0"CasementLiving RoomInsulatedW132'4"2'0"CasementLiving RoomInsulatedH132'4"2'0"CasementLiving RoomInsulatedH132'4"2'0"CasementLiving RoomInsulatedH132'4"2'0"CasementLiving RoomInsulatedH132'4"2'0"Casement	
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W 10       5'0"       3'6"       Custom       Living Room       Insulated         W 11       9'4"       3'6"       Custom       Living Room       Insulated         W 12       2'4"       2'0"       Casement       Living Room       Insulated         W 13       2'4"       2'0"       Casement       Living Room       Insulated         Existing Door Schedule - Garage       Insulated       Insulated	
M       11       9'4"       3'6"       Custom       Living Room       Insulated         M       12       2'4"       2'0"       Casement       Living Room       Insulated         M       13       2'4"       2'0"       Casement       Living Room       Insulated         Existing Door Schedule - Garage       Insulated       Insulated       Insulated	
W       12       2'4"       2'0"       Casement       Living Room       Insulated         W       13       2'4"       2'0"       Casement       Living Room       Insulated         Existing Door Schedule - Garage	
W 13 2'4" 2'0" Casement Living Room Insulated         Existing Door Schedule - Garage	2.
Existing Door Schedule - Garage	
	З.
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Mark Width Height Operation Location Glazing	Comments
D 1 14'0" 7'0" Overhead Garage	
D 2 3'0" 6'8" Swing Simple Garage	

Garage

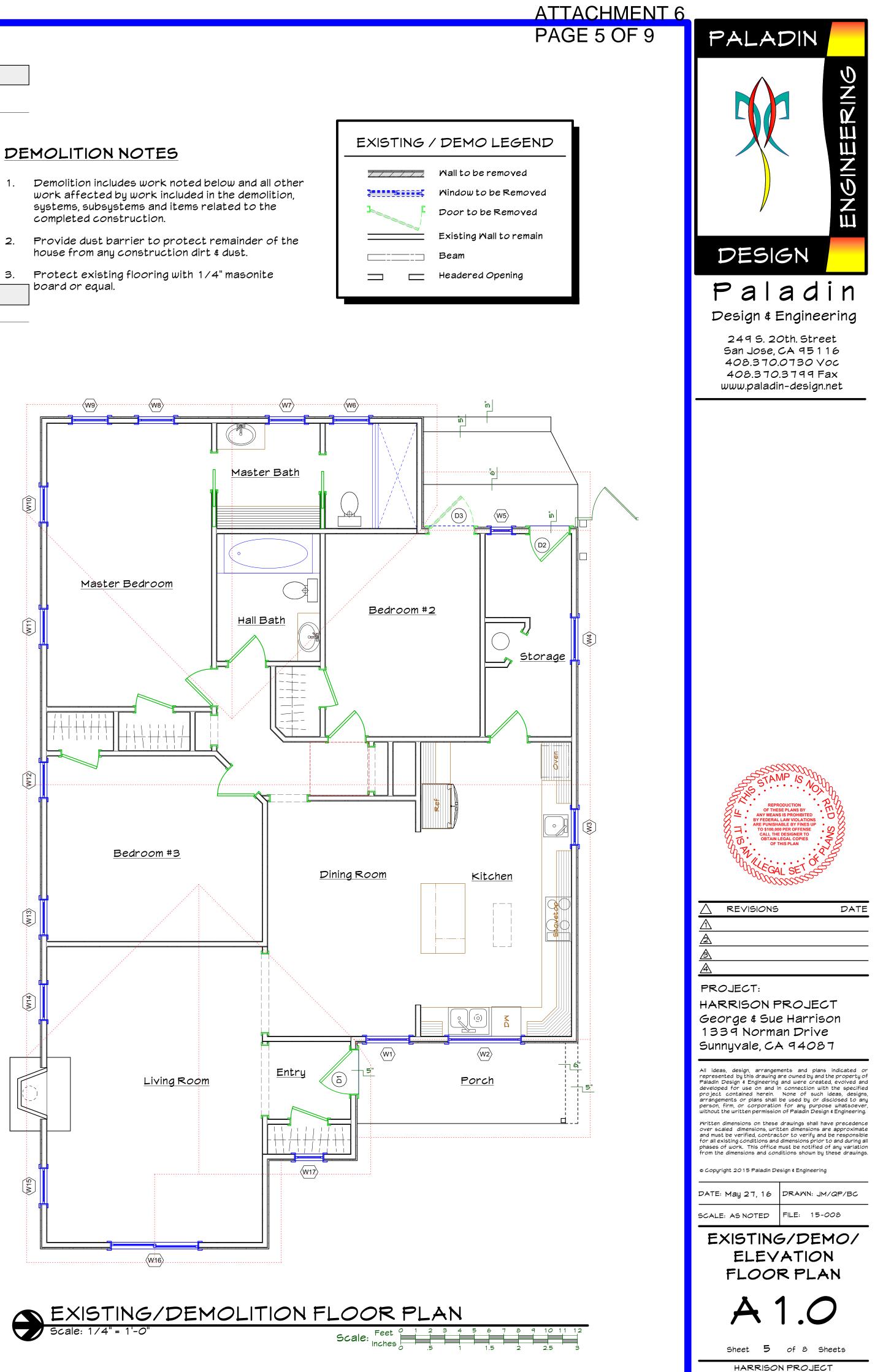
Storage

Entry

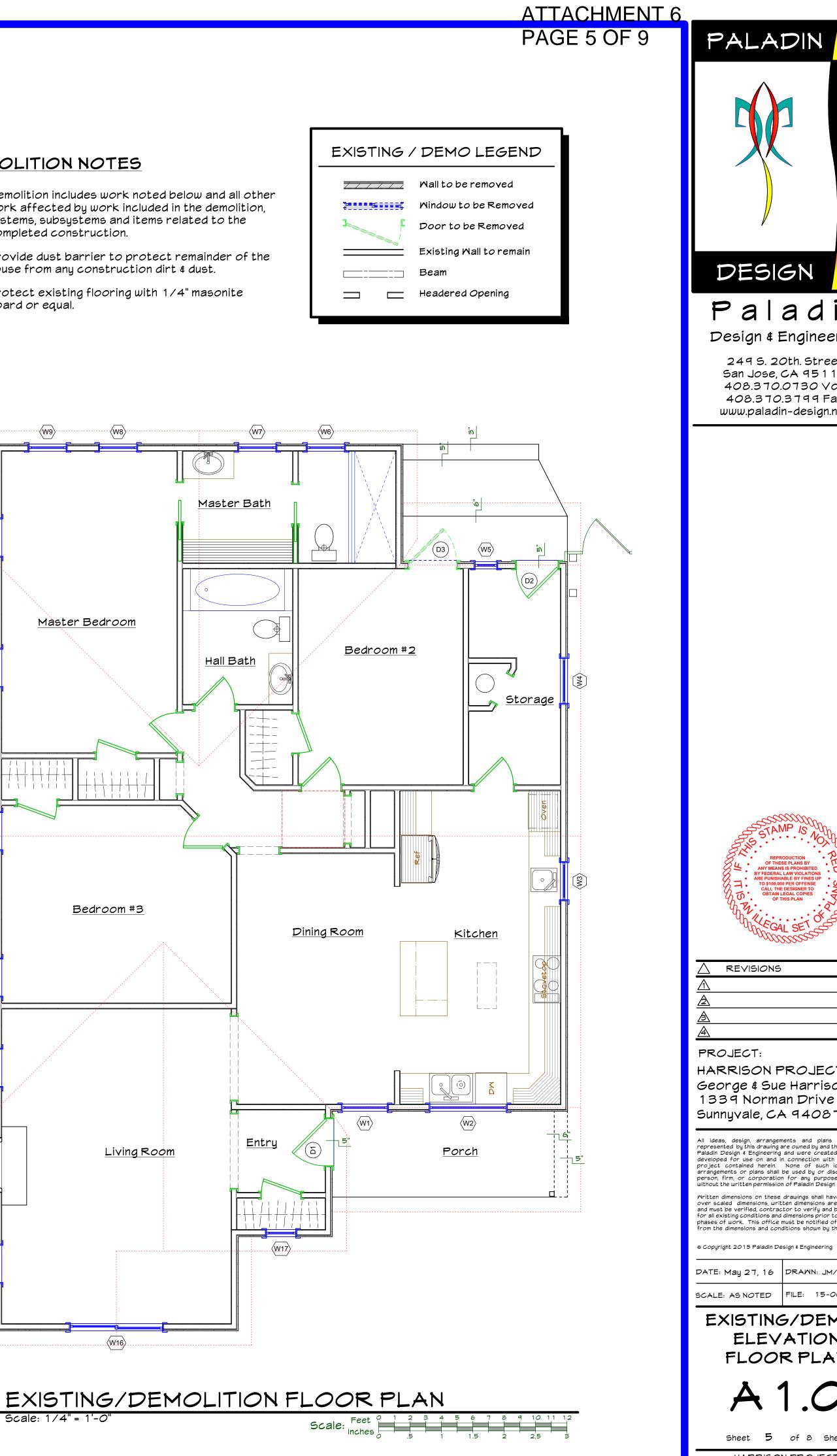
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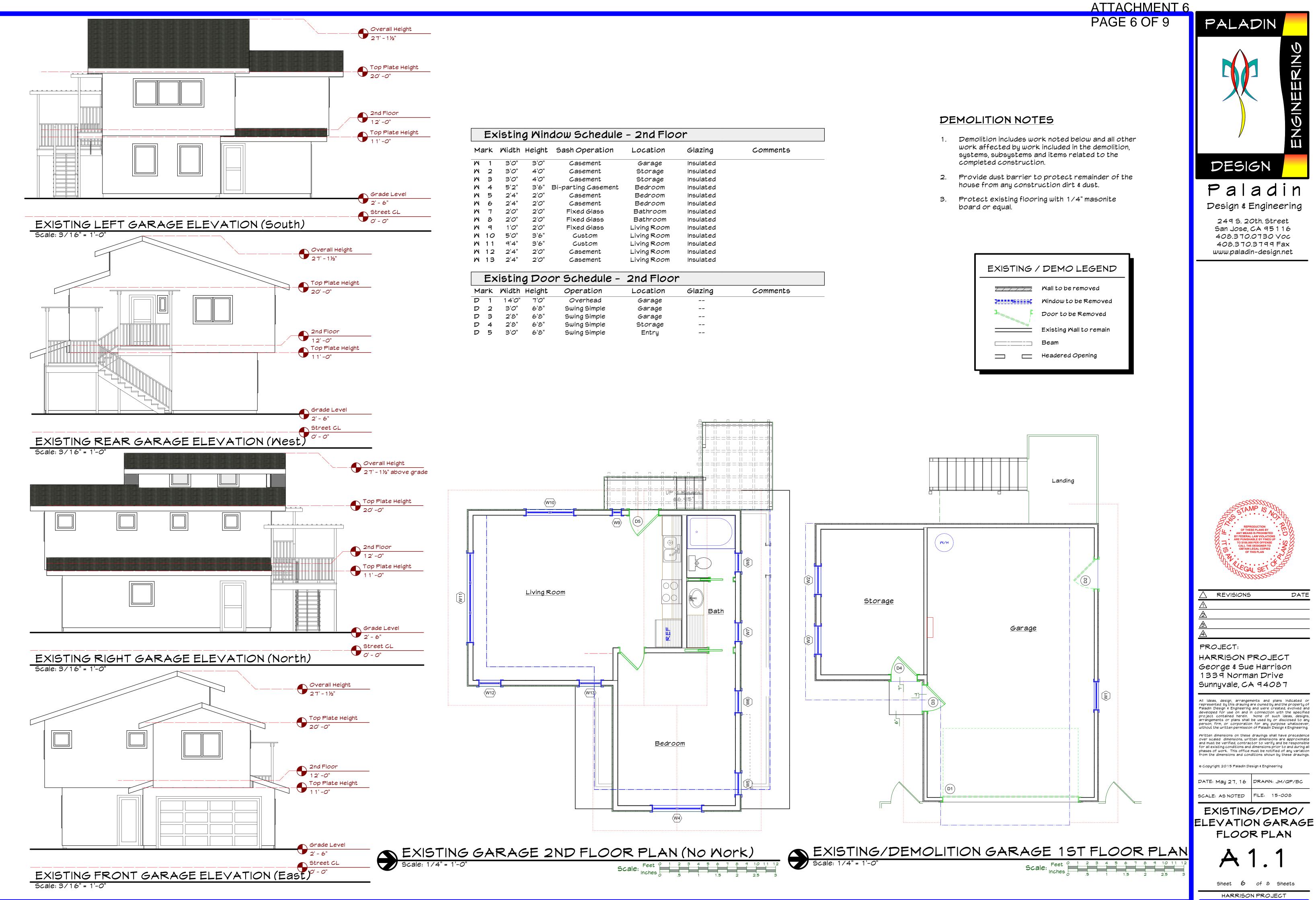
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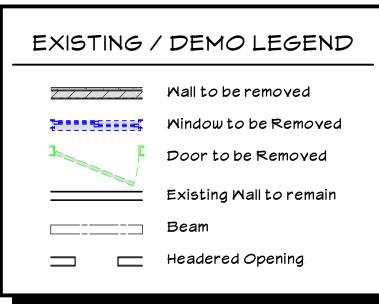


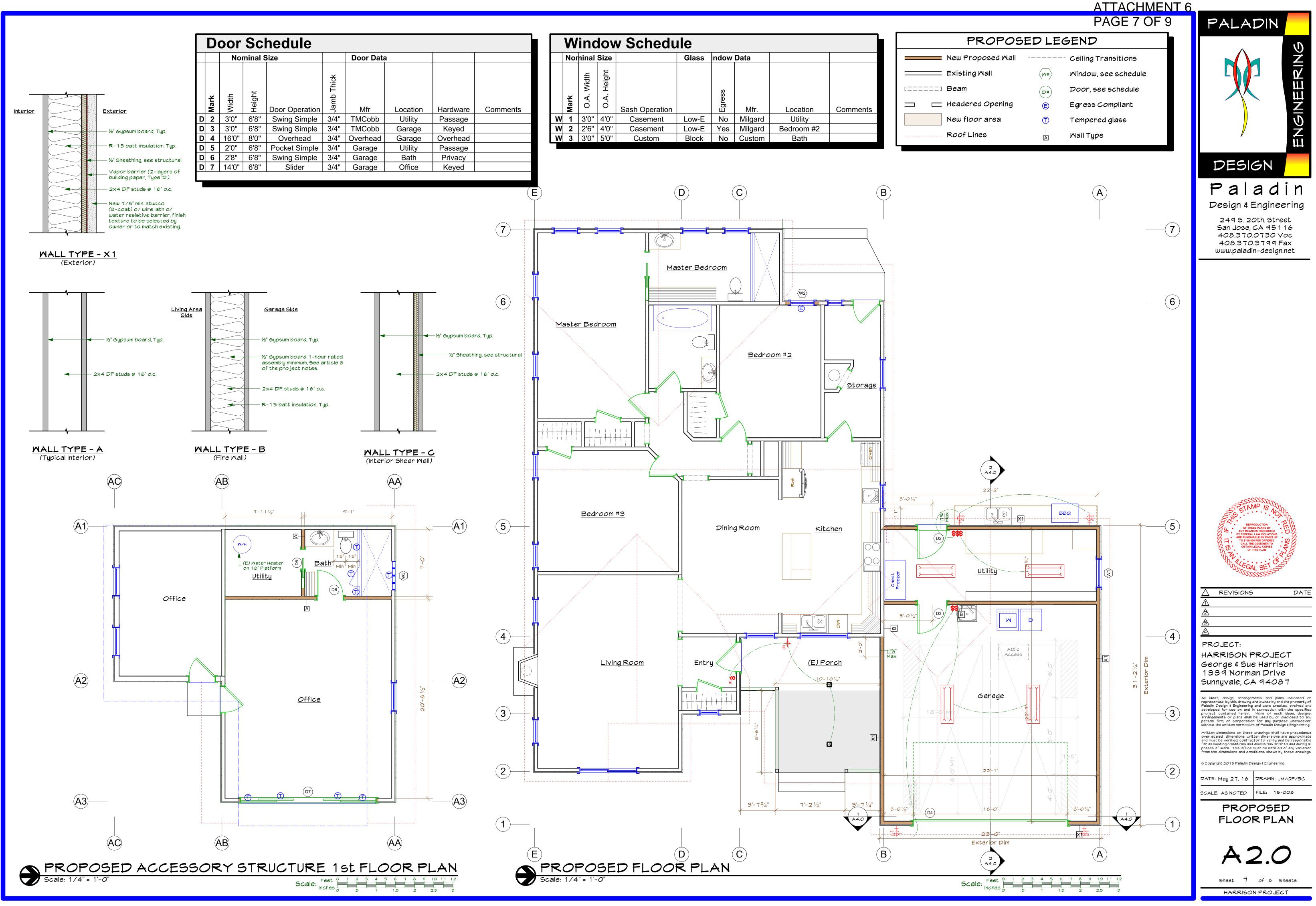






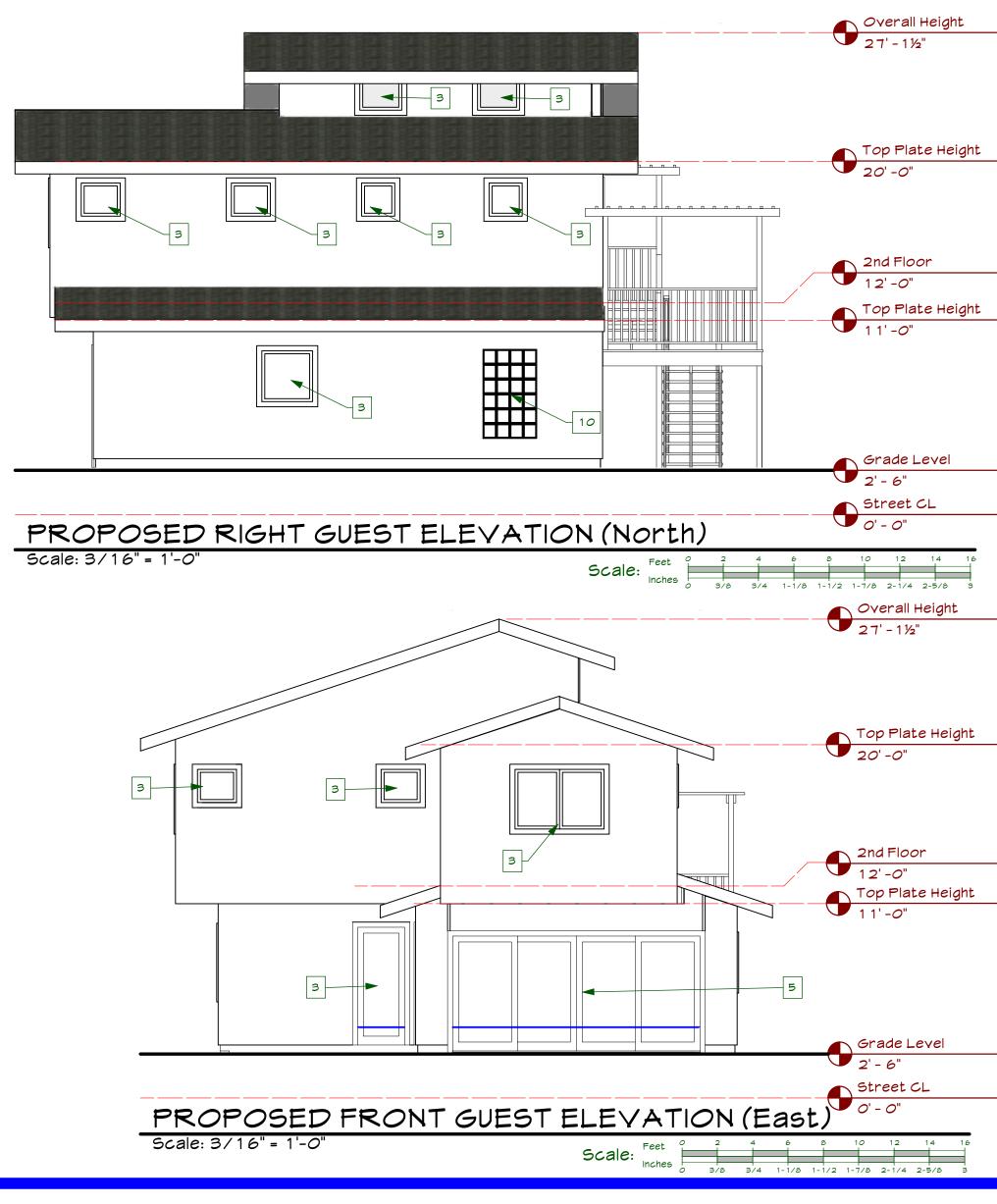
Ma	ark	Midth	Height	Sash Operation	Location	Glazing	Comments
Μ	1	3' <i>0</i> "	3' <i>0</i> "	Casement	Garage	Insulated	
Μ	2	3' <i>0</i> "	4'0"	Casement	Storage	Insulated	
Μ	З	3' <i>0</i> "	4'0"	Casement	Storage	Insulated	
Μ	4	5'2"	3'6"	Bi-parting Casement	Bedroom	Insulated	
Μ	5	2'4"	2'0"	Casement	Bedroom	Insulated	
Μ	6	2'4"	2'0"	Casement	Bedroom	Insulated	
Μ	7	2'0"	2'0"	Fixed Glass	Bathroom	Insulated	
Ν	8	2'0"	2'0"	Fixed Glass	Bathroom	Insulated	
Μ	9	1 <i>'O</i> "	2'0"	Fixed Glass	Living Room	Insulated	
Μ	10	5' <i>0</i> "	3'6"	Custom	Living Room	Insulated	
Μ	11	9'4"	3'6"	Custom	Living Room	Insulated	
Μ	12	2'4"	2'0"	Casement	Living Room	Insulated	
Μ	13	2'4"	2'0"	Casement	Living Room	Insulated	
	Ex	istin	g Do	or Schedule -	2nd Floor		
Ma	ark	Midth	Height	Operation	Location	Glazing	Comments
D	1	14'0"	"0"	Overhead	Garage		
D	2	3' <i>0</i> "	6'8"	Swing Simple	Garage		
D	З	2'8"	6'8"	Swing Simple	Garage		
$\boldsymbol{\nu}$	-						





### EXTERIOR ELEVATION KEYNOTES

- 1. 7/8" Min. 3-Coat Stucco, See Project Notes For Additional Information
- 2. Cricket, for drainage
- Existing Window/Door З. Guard rail, 42" High, Typ. 4.
- New door, see door schedule 5.
- Roof Slope, Typ U.O.N. 6.
- Class 'C' Roofing, See Project Notes For Additional 7. Information
- 8. Fire protected eave projection if < 5'-0" to property line, See Detail A
- 9. New Electrical Panel, See E 1.0 10. New Window, See Window Schedule
- 11. New Fascia & Gutters, Typ



<u>с</u> п

