

# PONDEROSA HOMES

**PUD-111**  
**P15-0248, P15-0249**  
**P15-0250 & P15-0390**

**EXHIBIT B**

RECEIVED

JUL 21 2015

CITY OF PLEASANTON  
PLANNING DIVISION

June 25, 2015

Ms. Jenny Soo  
Associate Planner  
City of Pleasanton  
Post Office Box 520  
Pleasanton, CA 94566

Re: Centerpointe Presbyterian Church/Ponderosa Homes Development Application  
3410 Cornerstone Court - REVISED

Dear Ms. Soo:

I am pleased to submit on behalf the of Church the enclosed development application requesting a General Plan Amendment (GPA) Rezoning (RZ), Planned Unit Development (PUD) CUP Amendments or Modifications and CEQA Initial Study for the 6.22 gross acre site bounded by Valley Avenue/Busch Road and Cornerstone Court. Twenty-seven new homes are proposed and the existing preschool will be retained. The approved private school will be constructed in the future by the operators of the preschool, however all other church structures, including the temporary stressed membrane structure (SMS) will be removed.

#### Background

In 2002, a GPA and RZ to the P&I land use designation was approved for this site as part of PUD-18 (authorizing the Busch/Ironwood community) along with the specific activities and hours of operation for an approximately 76,000 square foot church campus. A Design Review approval was later granted in 2004 for four buildings, including a pre-school, and a multi-level 900 seat worship sanctuary, fellowship hall and activity center. Other adjustments to the building sizes and heights were later authorized by the City bringing the campus to an overall total of approximately 90,000 square feet and on-site parking for roughly 380 vehicles.

Phase One of the master plan has been partially constructed and is now operating with a pre-school and a stressed membrane "tent" structure for worship services. The tent is permitted by a Conditional Use Permit (CUP) for a 10 year period, or through 2017. All of the on-site parking has been installed, including trees, bio-retention areas, and walkways between the buildings.

The Church has not been able to raise the funding necessary to construct the subsequent phases of the campus; therefore, the congregation has decided to sell the property with the objective of acquiring another smaller facility within the community to continue its ministry services. Ponderosa Homes and Centerpointe have had a long and established relationship built on trust and cooperation and as such, we have entered into an agreement to purchase and develop the property as presented.

Centerpointe/Ponderosa

June 22, 2015

Page 1 of 4

### Land Use Designation/Application Request

A GPA and RZ from PUD-P&I to the PUD-MDR classification is proposed for the approximate 4.28 acre portion. The approximate 1.94 acre private school site (Lot F & G) will retain the PUD-P&I however this application will also seek modification to the approved CUP to allow the private school as a stand alone use and eliminate the church campus.

The Project proposed a residential density of 6.3 units/gross acre ( 27 homes / 4.28 acres). This exceeds the General Plan mid-point density of 5 units/gross acre. However, it is noted for general reference purposes that the entire gross site plan is 6.22 acres.

The Montessori West requests the removal of the "Right Turn Out Only" sign on Busch Road, and approval of a new monument sign at the corner of Valley Avenue/Busch Road (see the landscape plan). Also, the school asks that there be a reassignment to a Busch Road address rather than the existing Cornerstone Court identity.

### Site Planning

Our proposal consists of 27 new single-family homes on a minimum of a 3,633 square foot lot size (and an overall average of 4,251 square feet in lot size) will essentially surround the pre-school facility which is to remain and be operated by Montessori West. The new homes and the pre-school will continue to be accessed from Cornerstone Court which is a private 20 foot wide (no parking) street. This street will be extended and widened to the west to a paved width of 28 feet to accommodate street parking on one side only. A second 24 foot wide private street (no parking) will be extended to the south of Cornerstone Court to serve six homes on Lot 22-27. Six stalls will be designated for these six residences at Lot G nearby, and a pedestrian connection is provided across the open space/bioretention area for resident access. An EVA is provided at the end of this private lane to allow emergency vehicles to exit onto Ironwood Drive if necessary. A driveway travel aisle which runs north-south across Lot F and Lot G connecting Cornerstone Court and Busch Road has been redesigned, thus allowing an efficient and convenient access for the school without impacting the new homes. And yet, pedestrians will be able to walk to the school from various points of access within the Ironwood Community (such as Madsen Court, Ironwood Drive, etc.) as well as from the Iron Horse Trail.

These are the same homes approved by the City at the Wagner Property ( aka "Ivy Lane") which are now under construction. The three, two-story floor plans will range in size from 2,211 - 2,262 - 2,685 square feet making the FAR a maximum of 0.69 (at five lots only). This maximum FAR Each floor plan will have two different elevation styles – a Cottage or Craftsman (Elevation 'A' and 'B' respectively) and a mix of six different exterior color schemes selected to provide variety across the 27 new homes. However, per Staff recommendations, a third elevation style – Spanish (Elevation C) was added for the Plan 3, thus providing more styles within the new neighborhood. Regarding FAR, the smallest lot of 3,633 square feet will have a maximum FAR of 0.62. The Site Plan shows a detailed break-down of the range of FAR and instances where pre-plotting of home and/or elevation style will occur. These lot sizes and corresponding FARs are not inconsistent with the Ivy Lane Community where FAR is a maximum of 0.71 on similarly sized lots. As well, the lots in Ironwood at the Villages and Classics have roughly 8 floor plans total ranging anywhere between 1,900 square feet to approximately 3,200 square feet. Thus, the Project presents yet another housing choice for buyers within Ironwood that is compatible with these surrounding neighborhoods.

The maximum height will be 30'-8" as indicated on the Plan 3, and the maximum permitted height is identified at 31 feet.

Two-car garages and driveways sufficient to accommodate another two vehicles are provided, and street parking will total 24 stalls for the 27 new homes. Due to a recent increase in the radius of the fire department cul-de-sac (96 feet curb-to-curb) additional street parking was limited at the bulb. This is consistent with the City's informal guideline to provide one street space per home.

#### Shared Access & Maintenance Agreement

A draft shared access and maintenance agreement was submitted to Staff to demonstrate areas of independent and shared responsibility for streets, open space/bioretenion, parking, and landscape/irrigation areas between PPC/Ponderosa, Montessori West, and Busch Gardens. This will also clearly identify the parking stalls designated for the school, Gardens, and future residents. We will continue to work with the Gardens, PCP and Montessori West, as well as the Ironwood HOA to refine the scope and budget costs. However, Ponderosa is committed to a shared responsibility with the Ironwood HOA for the existing landscape/irrigation maintenance (within the PSE) along Busch Road and Valley Avenue.

#### Pre-school / Future Private School Facility/Gardens Apartments

The single-story facility has been leased with an option to purchase by a private operator, Montessori West, which had its Grand Opening in October 2014. The 1.64 acre site designated for the pre-school has been determined in consultation with the new owner(s) based on their needs for outdoor playground, location of drop-off and pick up. The pre-school will operate in the same hours and in compliance with the governing PUD and CUP which authorizing the facility when it was operated by the Church. The total of 44 stalls distributed in Lot F and Lot G for the facility exceeds the City's standard of one space per employee, including teachers and administrators, and the otherwise required one space for each four students in grade 10 or above is not applicable in this instance. In summary, per the City code, 28 stalls is required and the project provides a minimum of 44 stalls. This provides 16 extra spaces for drop-off/pick-up of children which Montessori West feels is appropriate per their experience.

The Project will provide additional parking for the Gardens apartments. Our experience over the past 10 years has shown that the originally required and constructed ratio of 0.726 stalls/unit (or 125 spaces for 172 apartments) does not fully meet the need of our senior residents and their visitors particularly during holiday and special events. Therefore, the Church and The Gardens have an agreement by which 16 spaces (12 in Lot F and four spaces along the north side of Cornerstone Court) are for the apartment residents' use.

#### Other Project Amenities

A masonry boundary wall will be constructed along the Iron Horse Trail corridor and along Busch Road to match the existing wall treatment within the Ironwood Community. This includes decorative pilasters at various intervals and the preservation (or extension) of the existing split-rail fencing along Ironwood Drive and Busch Road. This will help buffer traffic noise and lights, present additional security, and result in an attractive well-landscaped streetscape. When combined with the ample setbacks from either Valley and Busch (130-140 feet and a minimum of 26 feet respectively), the new masonry walls will be screened by a number of landscaped layers. New trees will also be planted in the Iron Horse Trail corridor and at the Valley/Busch intersection as a community amenity. As always, landscape/irrigation will be drought-tolerant and wind-resistant native-type species. We propose no-turf front yard areas,

but retaining turf at the bio-retention areas if needed. Trees will provide shading in the parking lot where canopies can shield the pavement due to sun orientation unless a median is used for bio-retention and water quality treatment of the surfaces. As an amenity to enhancing the streetscape, the Project will plant additional trees within the Iron Horse Trail Corridor, and we will work with the Ironwood HOA to remove and replace the existing turf within the Valley Avenue street right-of-way with a drought-tolerant, water conserving approach, if desired by that association. We will also enhance the landscape at the Valley/Busch intersection.

We look forward to presenting the Project to the Planning Commission and City Council as well as the community at the soonest opportunity. I always welcome questions and an opportunity to respond, so do not hesitate to contact me at [p Hardy@ponderosahomes.com](mailto:p Hardy@ponderosahomes.com) to discuss the project design and/or request additional information.

Very truly yours,

PONDEROSA HOMES II, INC.



Pamela J. Hardy  
Senior Manager

CC: Jeff Schroeder, Senior VP  
Linda Morasch, CFO/ Gardens Managing Partner  
Mark Sweeney, Gardens Managing Partner  
Pastor Mike Barris, Cornerstone Presbyterian Church

ENC:

Project Plans - One (1) CD  
Acoustic Report, Jeff Pack Associates, Jun 2015  
Growth Management Application Fee, Check No. 3857

## **Master Plan for Preschool and Elementary School – Montessori West**

Existing Bldg.

**Existing Classroom Building**

6 classrooms (Rooms 1-6) – 20 children each, preschool program, 12 teachers.

**Existing Administration Office**

2 Administrators.

**Existing Classroom Building**

2 classrooms (Rooms 7-8) – 15 children each, elementary program, 2 teachers.

**New 2-Story Classroom Building**

6 classrooms – 24 students each, elementary program, 12 teachers.

28 Staff at full capacity.

294 Students at full capacity.

20 drop-off spaces including handicapped parking.

Currently the preschool is licensed to serve 150 students utilizing rooms 1-8. The current CUP permits up to 200 students. Current operational hours are Monday to Friday, 7:00 AM. - 6:00 PM. Drop-off times in the morning begin at 7:00 AM. and are normally done by 9:30 AM. Approximately Usually about half of the students are part time and will depart between 11:00 AM and 12:30 PM with another 50 arriving between 12:30 PM and 1:00 PM for the afternoon session. We encourage carpooling and find in our present location that many parents do share carpooling duties. In the evenings, we expect that parents would begin picking up their children beginning at 3 PM. and ending at 6:00 PM.

# PLANNED UNIT DEVELOPMENT

# THE VILLAS AT IRONWOOD

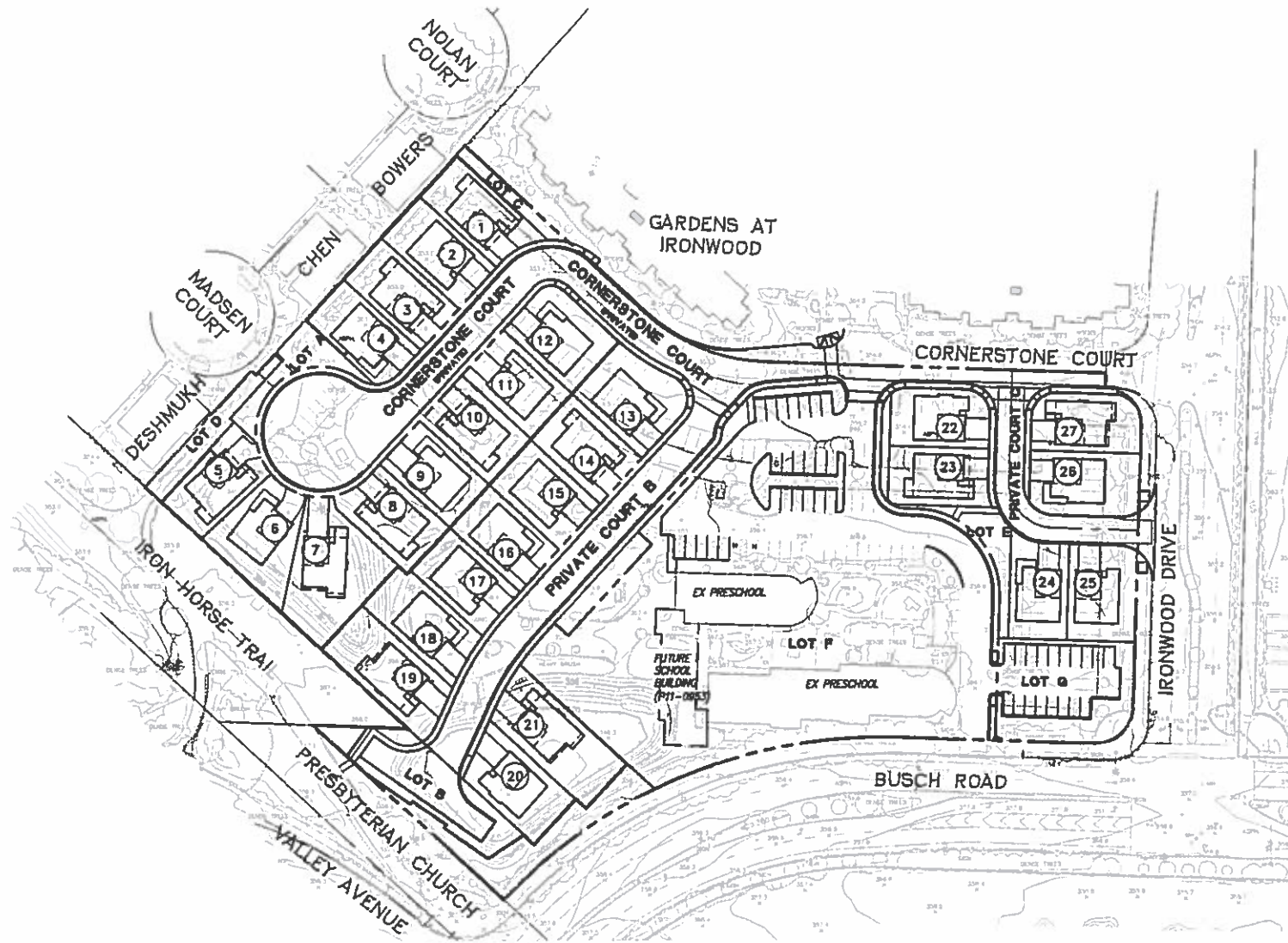
## CITY OF PLEASANTON, ALAMEDA COUNTY, CALIFORNIA

FOR: PONDEROSA HOMES

**PUD-111**  
**P15-0248, P15-0249**  
**P15-0250 & P15-0390**  
**RECEIVED July 21, 2015**  
**EXHIBIT B**



PROPOSED	DESCRIPTION	EXISTING
---	TRACT BOUNDARY	---
---	LOT LINE	---
---	RIGHT OF WAY	---
---	CENTER LINE	---
---	MATCH LINE	---
---	RETAINING WALL	---
---	EASEMENT LINE	---
---	STORM DRAIN	EX 12" SD
---	SANITARY SEWER	EX 12" SS
---	WATER	EX 8" W
---	CURB & GUTTER	EX FC
---	SIDEWALK	---
---	OVERHEAD UTILITIES	---
---	JOINT POLE	---
---	EARTH OR GRASS SWALE	---
---	CONCRETE DITCH	---
---	EXISTING UTILITY TO BE REMOVED/ABANDONED, AS NOTED	---
---	STORM WATER INLET	---
---	FIELD INLET	---
---	AREA DRAIN	---
---	MANHOLE	---
---	FIRE HYDRANT	---
---	BLOW OFF	---
---	SANITARY SEWER CLEAN OUT	---
---	WATER VALVE	---
---	STREET LIGHT	---
---	MONUMENT	---
---	TRAFFIC SIGN	---
---	STREET NAME SIGN	---
---	FENCE	---
---	BARRICADE	---
---	SLOPE	---
---	HANDICAP RAMP	---
---	CONTOUR ELEVATIONS	---
---	SPOT ELEVATION	---
---	ASPHALT PAVEMENT	---
---	BIORETENTION AREA	---



**LOCATION MAP**  
NOT TO SCALE

### SHEET INDEX

SHEET NO.	DESCRIPTION
<b>PLANNING, ENGINEERING</b>	
C-1	COVER SHEET
C-2	EXISTING EXISTING CONDITIONS
C-3	PRELIMINARY SITE DEVELOPMENT PLAN
C-4	GRADING AND UTILITY PLAN
C-5	STORMWATER TREATMENT PLAN
C-6	SLOPE CLASSIFICATION MAP
<b>PLANNING, ARCHITECTURE</b>	
SS-1	SINGLE FAMILY CONCEPTUAL STREETSCENE
A1-1	PLAN 1 FIRST & SECOND FLOOR PLANS
A1-2	PLAN 1 ROOF PLANS
A1-3	PLAN 1 FRONT ELEVATION
A1-4	PLAN 1 ELEVATION 'A' - COTTAGE
A1-5	PLAN 1 ELEVATION 'B' - CRAFTSMAN
A2-1	PLAN 2 FIRST & SECOND FLOOR PLANS
A2-2	PLAN 2 ROOF PLANS
A2-3	PLAN 2 FRONT ELEVATION
A2-4	PLAN 2 ELEVATION 'A' - COTTAGE
A2-5	PLAN 2 ELEVATION 'B' - CRAFTSMAN
A2-6	PLAN 2X PARTIAL FLOOR PLANS
A2-7	PLAN 2X PLAN 2X ELEVATION 'A' - COTTAGE
A3-1	PLAN 3 FIRST & SECOND FLOOR PLANS
A3-2	PLAN 3 ROOF PLANS
A3-3	PLAN 3 FRONT ELEVATIONS
A3-4	PLAN 3 ELEVATION 'A' - COTTAGE
A3-5	PLAN 3 ELEVATION 'B' - CRAFTSMAN
A3-6	PLAN 3 ELEVATION 'C' - SPANISH
A3-7	PLAN 3X PARTIAL FLOOR PLANS
A3-8	PLAN 3X ELEVATION 'B' - CRAFTSMAN
CM-1	COLOR & MATERIALS SCHEME 1
CM-2	COLOR & MATERIALS SCHEME 2
CM-3	COLOR & MATERIALS SCHEME 3
CM-4	COLOR & MATERIALS SCHEME 4
CM-5	COLOR & MATERIALS SCHEME 5
CM-6	COLOR & MATERIALS SCHEME 6
CM-7	COLOR & MATERIALS SCHEME 7

### PLANNING, LANDSCAPE ARCHITECTURE

L1	PRELIMINARY LANDSCAPE SITE PLAN
L2	PRELIMINARY FRONT YARD TYPICAL PRODUCTION LANDSCAPE
L3	PRELIMINARY LANDSCAPE DETAILS

### TREE ASSESSMENT PLAN

### ABBREVIATIONS

AB	AGGREGATE BASE	ME	MAINTENANCE EASEMENT
AC	ASPHALT CONCRETE	MH	MANHOLE
AD	AREA DRAIN	OH	OVERHEAD UTILITIES
BC	BEGINNING OF CURVE	PAE	PRIVATE ACCESS EASEMENT
BVC	BEGIN VERTICAL CURVE	PCC	POINT OF COMPOUND CURVE
BO	BLOW OFF	PL	PROPERTY LINE
BW	BOTTOM OF WALL	PRC	POINT OF REVERSE CURVE
CL	CENTER LINE	PSDE	PRIVATE STORM DRAIN EASEMENT
CMP	CORRUGATED METAL PIPE	PSE	PUBLIC SERVICE EASEMENT
CP	CENTER POINT	PVC	POLYVINYL CHLORIDE PIPE
DWY	DRIVEWAY	PVI	POINT OF VERTICAL INTERSECTION
DP	DUCTILE IRON PIPE	RCP	REINFORCED CONCRETE PIPE
EC	END OF CURVE	RET	CURB RETURN
ESMT	EASEMENT	RW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SDE	STORM DRAIN EASEMENT
EVAE	EMERGENCY VEHICLE ACCESS EASEMENT	SNS	STREET NAME SIGN
EX	EXISTING	SO	SIDE OPENING INVERT
FC	FACE OF CURB	SSCO	SANITARY SEWER CLEAN OUT
FG	FINISHED GRADE	SSE	SANITARY SEWER EASEMENT
FH	FIRE HYDRANT	STA	STATION
FI	FIELD INLET	SWI	STORM WATER INLET
FL	FLOW LINE	SWK	SIDEWALK
GB	GRADE BREAK	TC	TOP OF CURB
GR	GRATE	TW	TOP OF WALL
HP	HIGH POINT	WM	WATER METER
INV	INVERT ELEVATION	VC	VERTICAL CURVE
JP	JOINT POLE	VCP	VITRIFIED CLAY PIPE
LE	LANDSCAPE EASEMENT		
LP	LOW POINT		

### PROJECT TEAM

#### Civil Engineering & Planning

Ruggeri-Jensen-Azar  
 4690 Chabot Drive, Suite 200  
 Pleasanton, CA 94588  
 Contact: Kirk Myers  
 (925) 227-9100

#### Landscape Architecture

Ripley Design Group  
 1615 Bonanza Street, Suite 314  
 Walnut Creek, CA 94598  
 Contact: Annika Carpenter  
 (925) 938-7877

#### Architecture

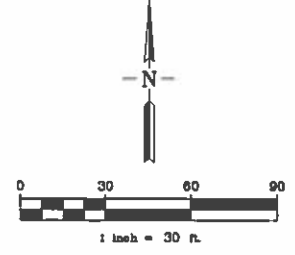
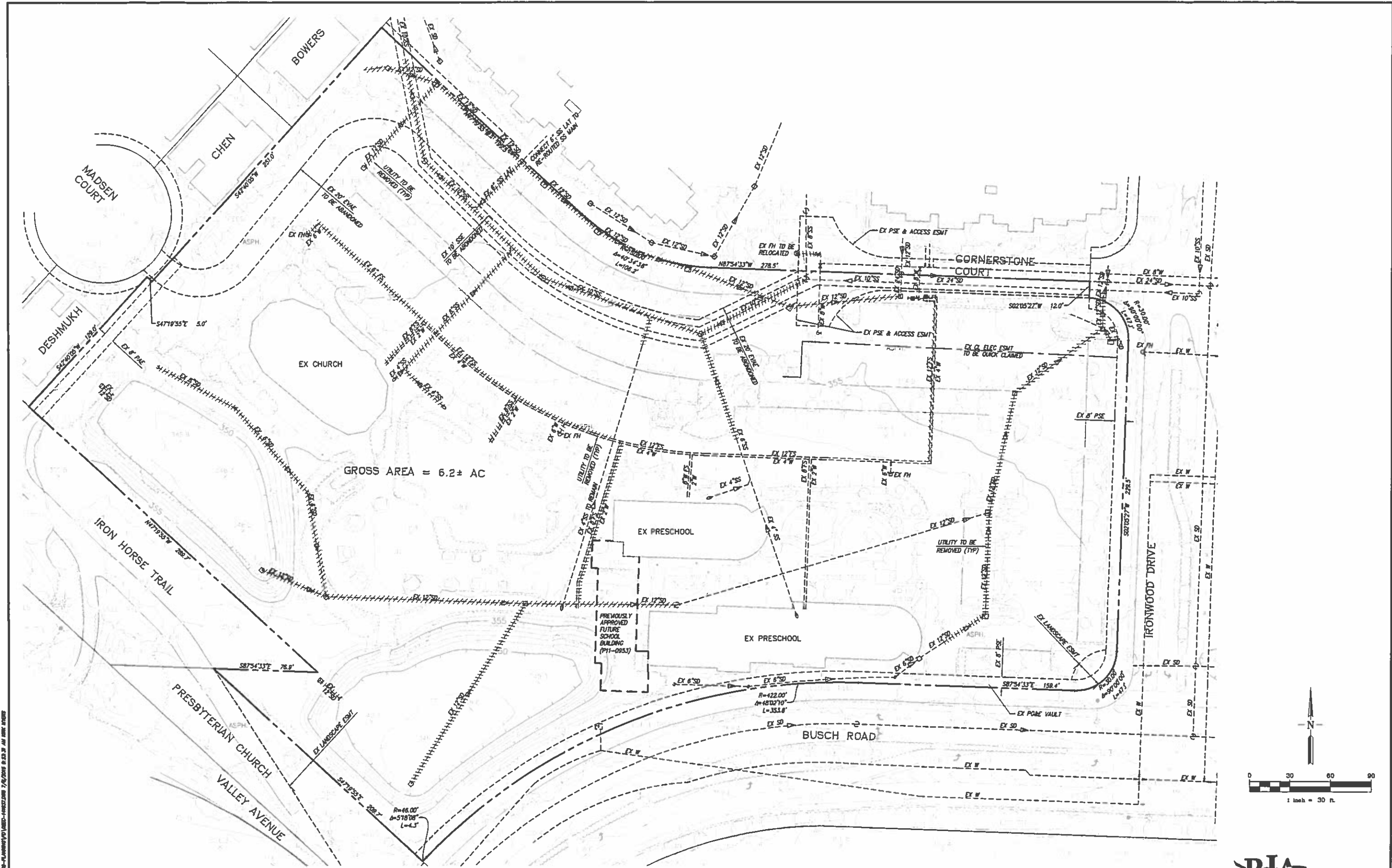
William Hezmalhalch Architects Inc.  
 2850 Redhill Avenue, Suite 200  
 Santa Ana, CA 92705  
 Contact: Robert Lee  
 (949) 250-0607

#### Applicant

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 Pleasanton, CA 94588  
 Contact: Jeff Schroeder  
 (925) 480-8910



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**EXISTING CONDITION PLAN**  
**THE VILLAS AT IRONWOOD**

CITY OF PLEASANTON, ALAMEDA COUNTY, CALIFORNIA

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**ON SITE PARKING SUMMARY**

GARAGE (2 PER DU)	54
DRIVEWAY (2 PER DU)	54
<b>RESIDENTIAL SUBTOTAL</b>	
LOT F	48
LOT G	18
ON STREET	24
<b>OFF LOT SUBTOTAL</b>	
<b>TOTAL ON-SITE</b>	<b>198</b>

LOT	LOT SIZE (SF)	HOUSE MODEL MAX HEIGHT (FT)	PLAN 1 FAR	PLAN 2 FAR	PLAN 3 FAR
1	4,075	31'	55%	56%	67%
2	3,867	31'	57%	58%	69%
3	3,868	31'	57%	58%	69%
4*	3,815	31'	58%	N/A	N/A
5	4,056	31'	55%	56%	66%
6	4,584	31'	44%	45%	54%
7**	6,627	31'	33%	n/a	n/a
8	4,028	31'	55%	56%	67%
9	3,628	31'	60%	62%	N/A
10	3,689	31'	57%	58%	69%
11	3,850	31'	57%	59%	N/A
12**	4,341	31'	51%	N/A	N/A
13*	4,728	31'	47%	N/A	N/A
14	3,889	31'	57%	58%	69%
15	3,850	31'	57%	59%	N/A
16	3,658	31'	60%	62%	N/A
17	3,633	31'	61%	62%	N/A
18	4,364	31'	51%	52%	62%
19**	5,209	31'	42%	43%	52%
20**	4,391	31'	50%	52%	61%
21**	5,729	31'	39%	39%	47%
22**	3,742	31'	59%	60%	N/A
23	3,866	31'	57%	59%	69%
24*	3,823	31'	58%	N/A	N/A
25	4,332	31'	51%	52%	62%
26*	4,557	31'	49%	n/a	n/a
27**	4,055	31'	55%	56%	66%
AVG	4,253				
LOT SIZE					

\* Lots are Plan 1 only  
\*\* Lots to have enhanced architecture

PLAN TYPE	LIVING AREA (SF)	BEDROOMS	GARAGE AREA (SF)
PLAN 1	2211	3 OPTION 4	443
PLAN 2	2262	3 OPTION 4	460
PLAN 3	2685	3 OPTION 4	465

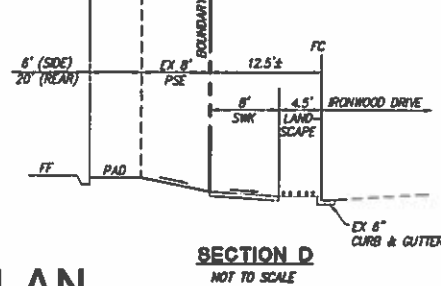
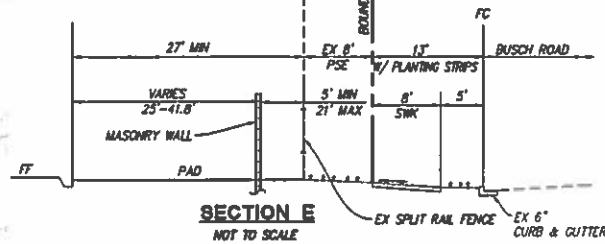
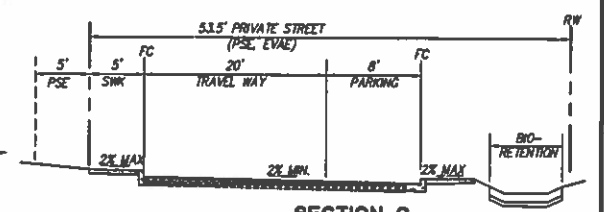
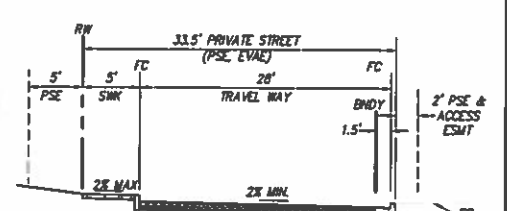
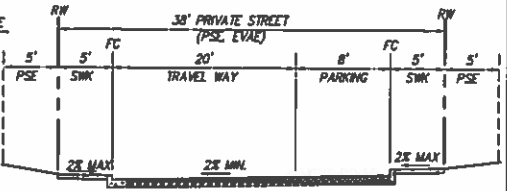
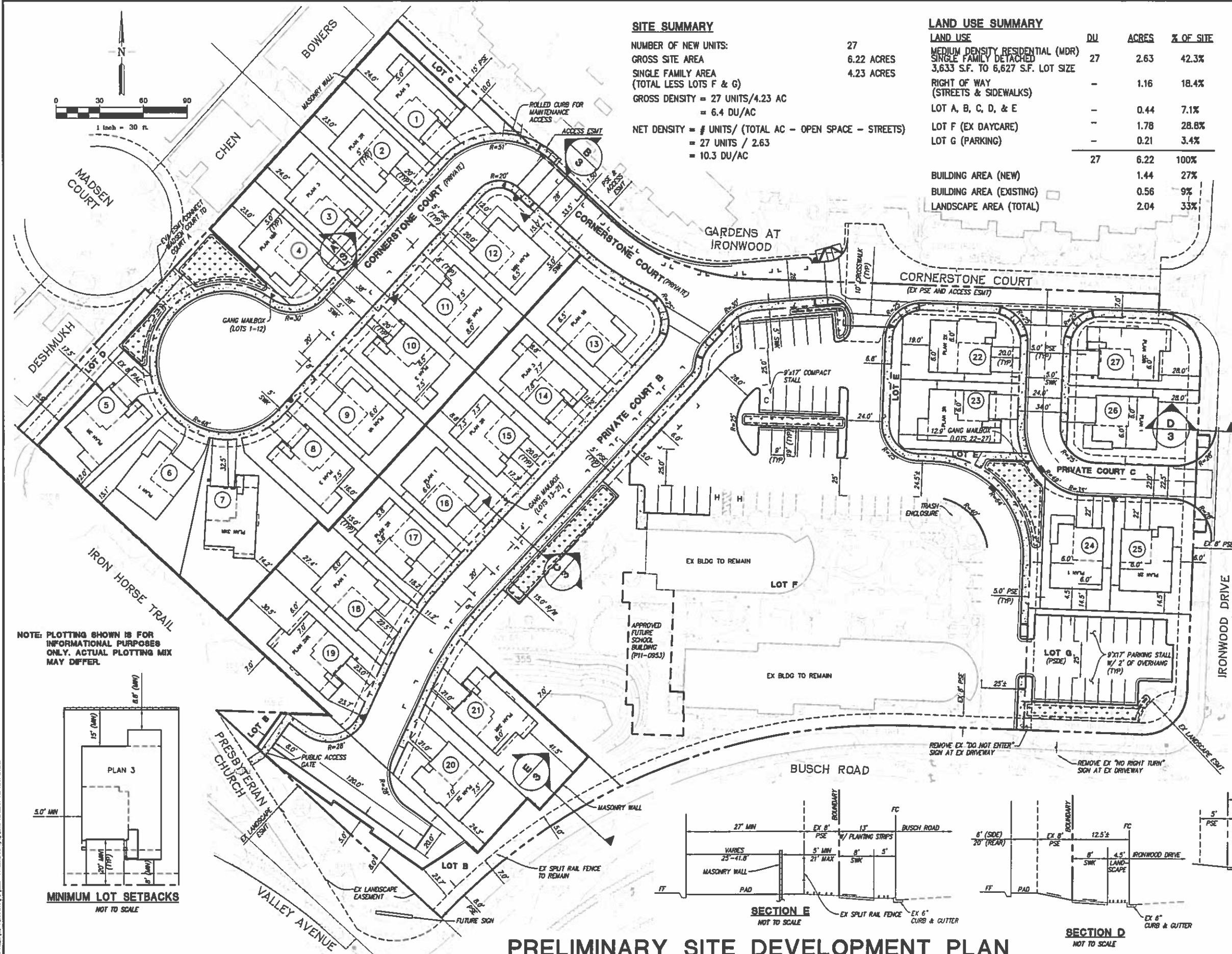
**SITE SUMMARY**

NUMBER OF NEW UNITS: 27  
 GROSS SITE AREA: 6.22 ACRES  
 SINGLE FAMILY AREA (TOTAL LESS LOTS F & G): 4.23 ACRES  
 GROSS DENSITY = 27 UNITS/4.23 AC = 6.4 DU/AC  
 NET DENSITY = # UNITS / (TOTAL AC - OPEN SPACE - STREETS) = 27 UNITS / 2.63 = 10.3 DU/AC

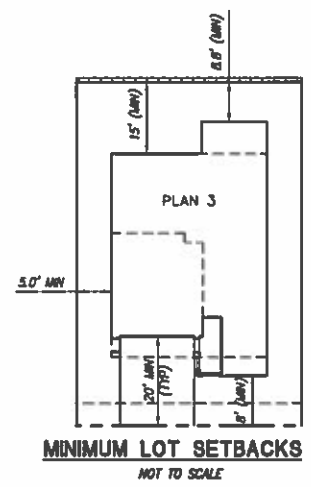
**LAND USE SUMMARY**

LAND USE	DU	ACRES	% OF SITE
MEDIUM DENSITY RESIDENTIAL (MDR) SINGLE FAMILY DETACHED	27	2.63	42.3%
RIGHT OF WAY (STREETS & SIDEWALKS)	-	1.16	18.4%
LOT A, B, C, D, & E	-	0.44	7.1%
LOT F (EX DAYCARE)	-	1.78	28.8%
LOT G (PARKING)	-	0.21	3.4%
<b>TOTAL</b>	<b>27</b>	<b>6.22</b>	<b>100%</b>

BUILDING AREA (NEW): 1.44 27%  
 BUILDING AREA (EXISTING): 0.56 9%  
 LANDSCAPE AREA (TOTAL): 2.04 33%



NOTE: PLOTTING SHOWN IS FOR INFORMATIONAL PURPOSES ONLY. ACTUAL PLOTTING MIX MAY DIFFER.



**PRELIMINARY SITE DEVELOPMENT PLAN**  
**THE VILLAS AT IRONWOOD**  
 CITY OF PLEASANTON, ALAMEDA COUNTY, CALIFORNIA

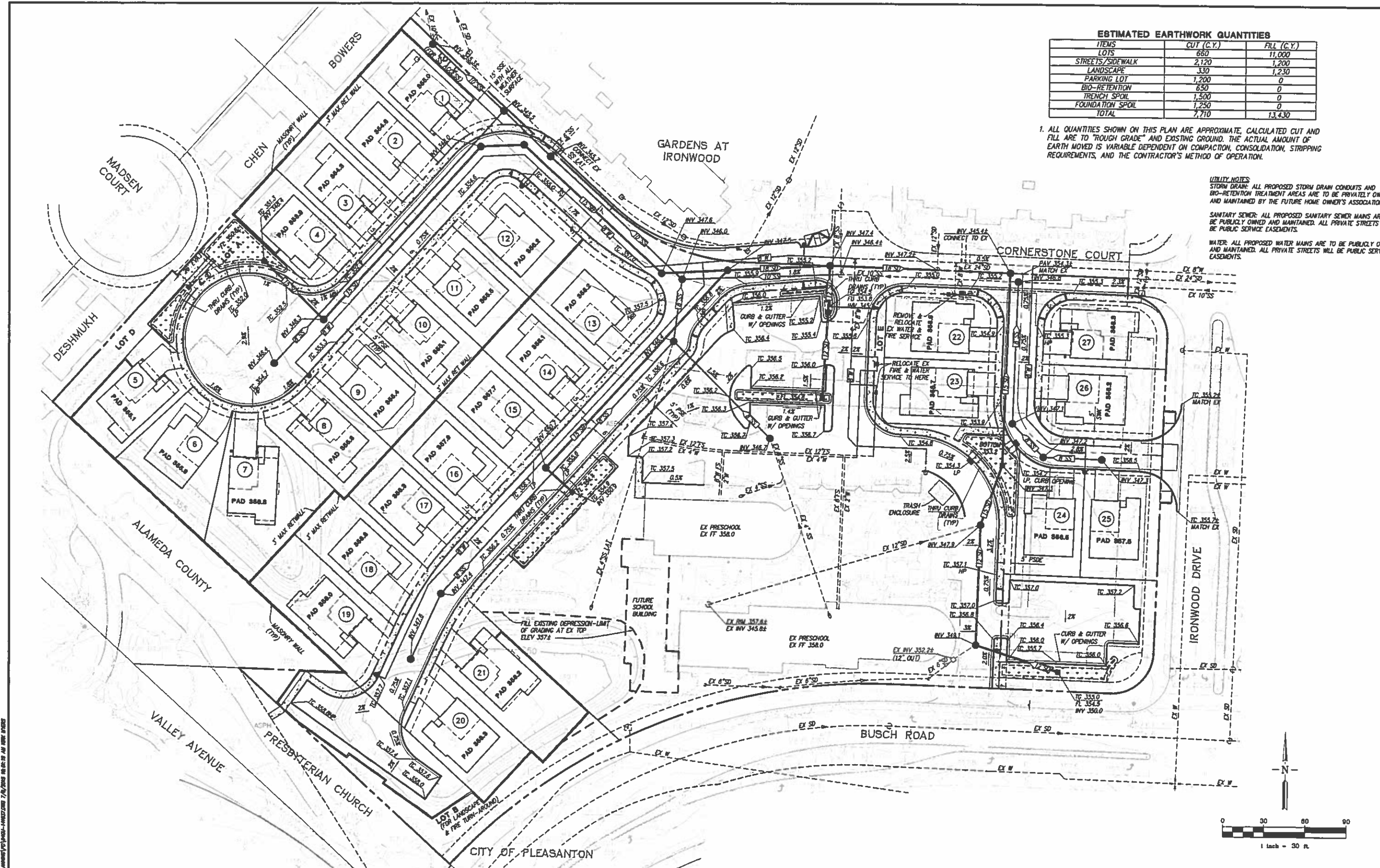
**RJA**  
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 PH: (925) 227-9100 FAX: (925) 227-9300



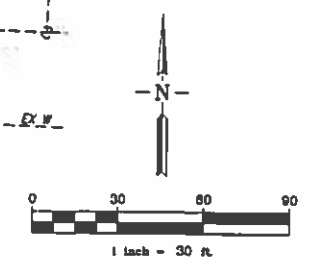
ESTIMATED EARTHWORK QUANTITIES		
ITEMS	CUT (C.Y.)	FILL (C.Y.)
LOTS	680	11,000
STREETS/SIDEWALK	2,120	1,200
LANDSCAPE	330	1,230
PARKING LOT	1,200	0
BIO-RETENTION	650	0
TRENCH SPOIL	1,500	0
FOUNDATION SPOIL	1,250	0
TOTAL	7,710	13,430

1. ALL QUANTITIES SHOWN ON THIS PLAN ARE APPROXIMATE, CALCULATED CUT AND FILL ARE TO "ROUGH GRADE" AND EXISTING GROUND. THE ACTUAL AMOUNT OF EARTH MOVED IS VARIABLE DEPENDENT ON COMPACTION, CONSOLIDATION, STRIPPING REQUIREMENTS, AND THE CONTRACTOR'S METHOD OF OPERATION.

**UTILITY NOTES**  
 STORM DRAIN: ALL PROPOSED STORM DRAIN CONDUITS AND BIO-RETENTION TREATMENT AREAS ARE TO BE PRIVATELY OWNED AND MAINTAINED BY THE FUTURE HOME OWNER'S ASSOCIATION.  
 SANITARY SEWER: ALL PROPOSED SANITARY SEWER MAINS ARE TO BE PUBLICLY OWNED AND MAINTAINED. ALL PRIVATE STREETS WILL BE PUBLIC SERVICE EASEMENTS.  
 WATER: ALL PROPOSED WATER MAINS ARE TO BE PUBLICLY OWNED AND MAINTAINED. ALL PRIVATE STREETS WILL BE PUBLIC SERVICE EASEMENTS.



**GRADING AND UTILITY PLAN**  
**THE VILLAS AT IRONWOOD**  
 CITY OF PLEASANTON, ALAMEDA COUNTY, CALIFORNIA



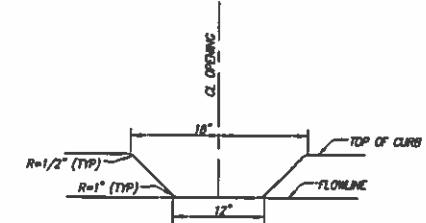
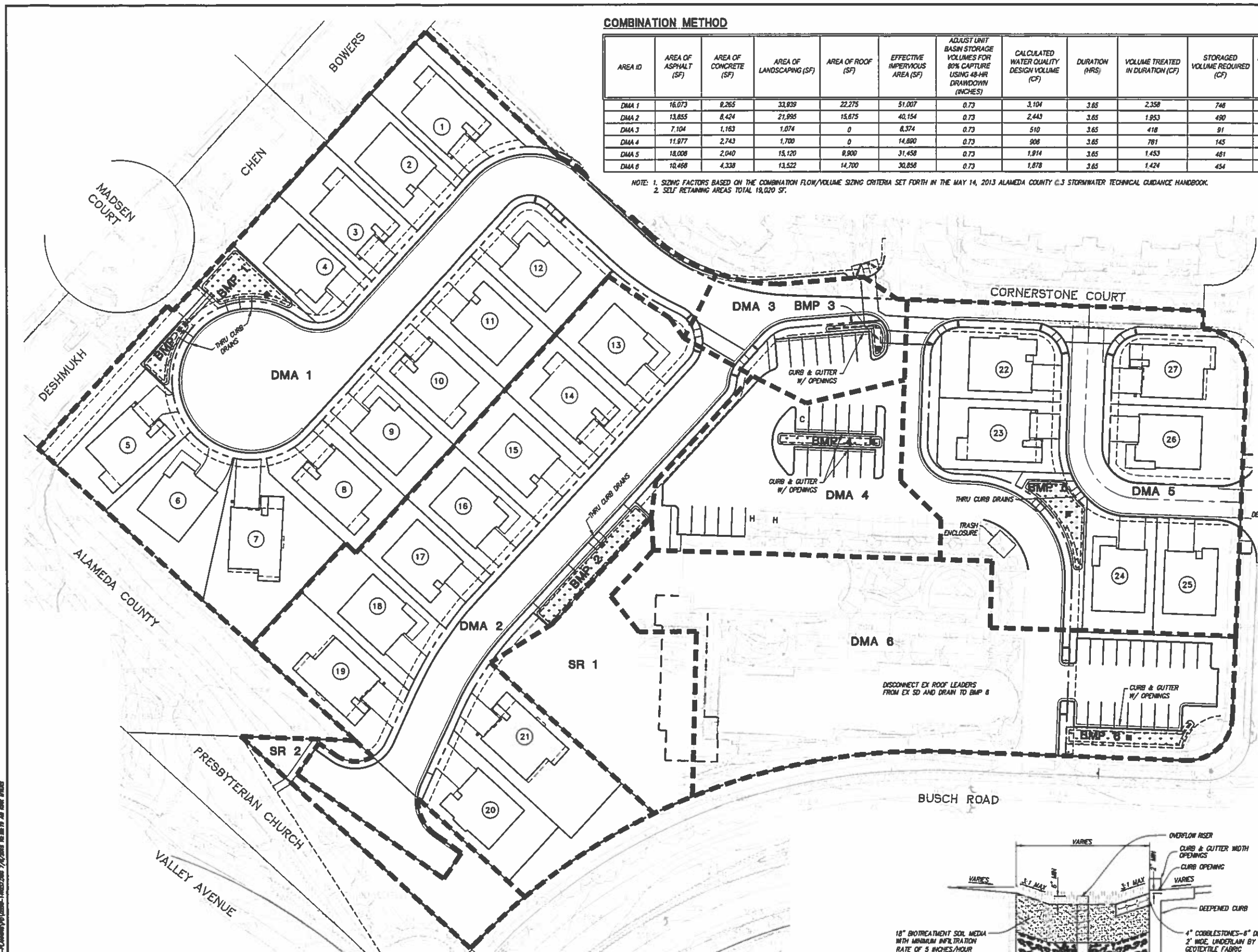
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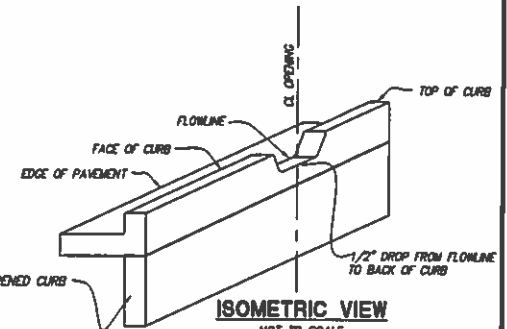
**COMBINATION METHOD**

AREA ID	AREA OF ASPHALT (SF)	AREA OF CONCRETE (SF)	AREA OF LANDSCAPING (SF)	AREA OF ROOF (SF)	EFFECTIVE IMPERVIOUS AREA (SF)	ADJUST UNIT BASIN STORAGE VOLUMES FOR 80% CAPTURE USING 48-HR DRAWDOWN (INCHES)	CALCULATED WATER QUALITY DESIGN VOLUME (CF)	DURATION (HRS)	VOLUME TREATED IN DURATION (CF)	STORAGED VOLUME REQUIRED (CF)	PONDING DEPTH IN BIORETENTION (INCHES)	3% MIN BIO-RETENTION AREA REQUIRED (SF)	BIORETENTION AREA PROVIDED	BIORETENTION AREA ID
DMA 1	16,073	8,265	33,939	22,275	51,007	0.73	3,104	3.65	2,358	746	5.8	1,530	1,530	BMP 1
DMA 2	13,855	8,424	21,895	15,675	40,154	0.73	2,443	3.65	1,853	490	4.9	1,205	1,204	BMP 2
DMA 3	7,104	1,163	1,074	0	8,374	0.73	510	3.65	418	91	4.4	275	275	BMP 3
DMA 4	11,977	2,743	1,700	0	14,800	0.73	906	3.65	781	145	3.9	447	500	BMP 4
DMA 5	18,008	2,040	15,120	8,900	31,458	0.73	1,914	3.65	1,453	461	5.9	944	955	BMP 5
DMA 6	10,468	4,338	13,522	14,700	30,858	0.73	1,878	3.65	1,424	454	5.8	928	950	BMP 6

NOTE: 1. SIZING FACTORS BASED ON THE COMBINATION FLOW/VOLUME SIZING CRITERIA SET FORTH IN THE MAY 14, 2013 ALAMEDA COUNTY C.S. STORMWATER TECHNICAL GUIDANCE HANDBOOK.  
2. SELF RETAINING AREAS TOTAL 19,020 SF.



**PROFILE**  
NOT TO SCALE

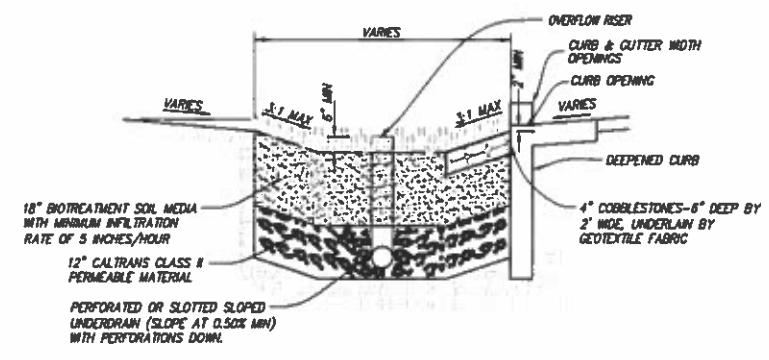


**ISOMETRIC VIEW**  
NOT TO SCALE

**CURB OPENING FOR BIO-RETENTION ADJACENT TO CURB**  
NOT TO SCALE

**LEGEND**

- DRAINAGE AREA BOUNDARY
- BIO-RETENTION AREA
- SR SELF RETAINING AREA

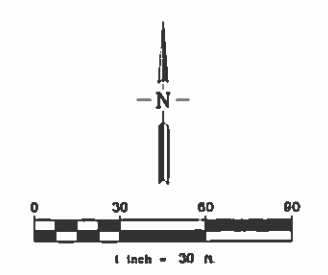
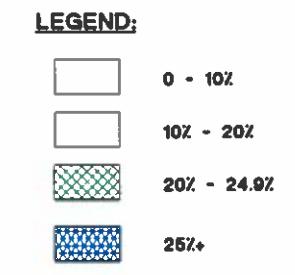


**BIO-RETENTION AREA**  
NOT TO SCALE

**STORMWATER TREATMENT PLAN**  
**THE VILLAS AT IRONWOOD**  
CITY OF PLEASANTON, ALAMEDA COUNTY, CALIFORNIA

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**SLOPE CLASSIFICATION MAP**  
**THE VILLAS AT IRONWOOD**  
 CITY OF PLEASANTON, ALAMEDA COUNTY, CALIFORNIA

PREPARED FOR:

# PONDEROSA HOMES

CONTACT:

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Pleasanton, CA 94588

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PREPARED BY:



WILLIAM HEZMALHALCH  
ARCHITECTS INC.

CONTACT:

ROBERT LEE  
ADAM GARDNER

WILLIAM HEZMALHALCH ARCHITECTS  
5000 Executive Pkwy, Suite 375  
San Ramon, CA 94583  
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Site Aerial

PROJECT DATA:

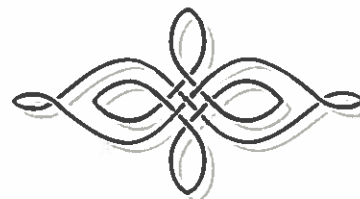
SITE AREA : 6.2 AC (Gross)

LOCATION : CITY OF PLEASANTON, CA

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Plan 3B - Craftsman

Plan 3C - Spanish

Plan 2AR - Cottage

Plan 1B - Craftsman

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## SINGLE FAMILY CONCEPTUAL STREETSCENE

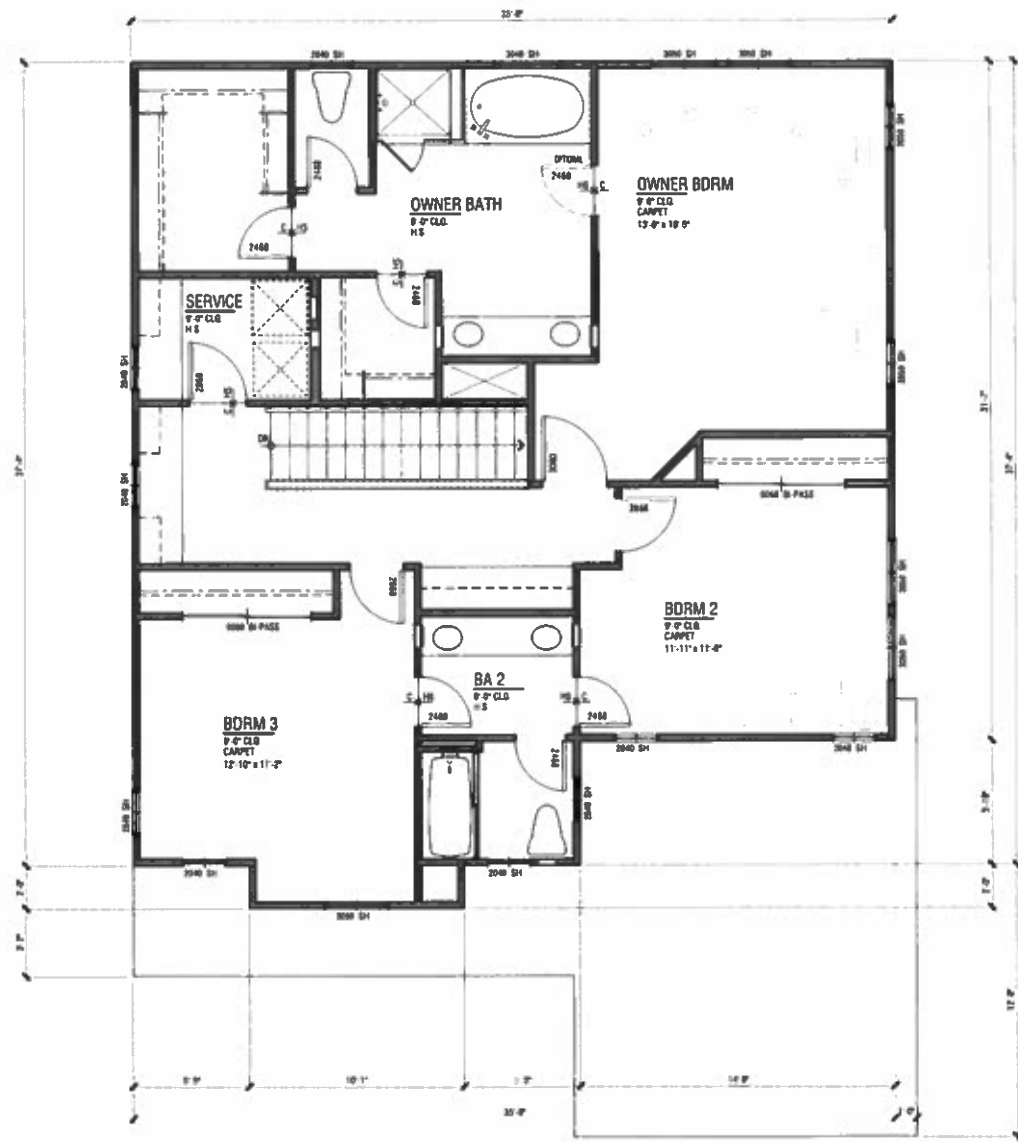
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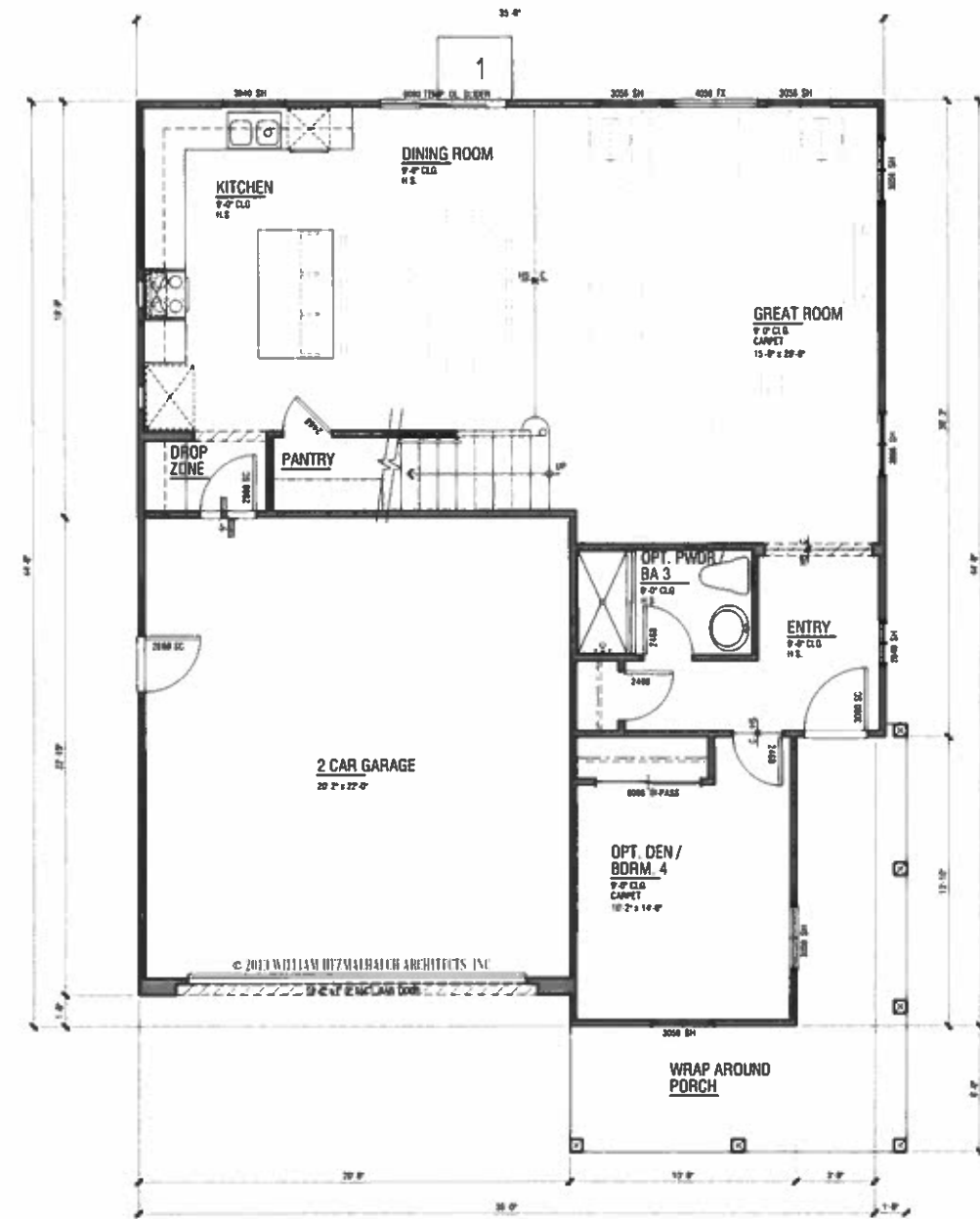
NOTE - Artist conception; colors, materials and application may vary.

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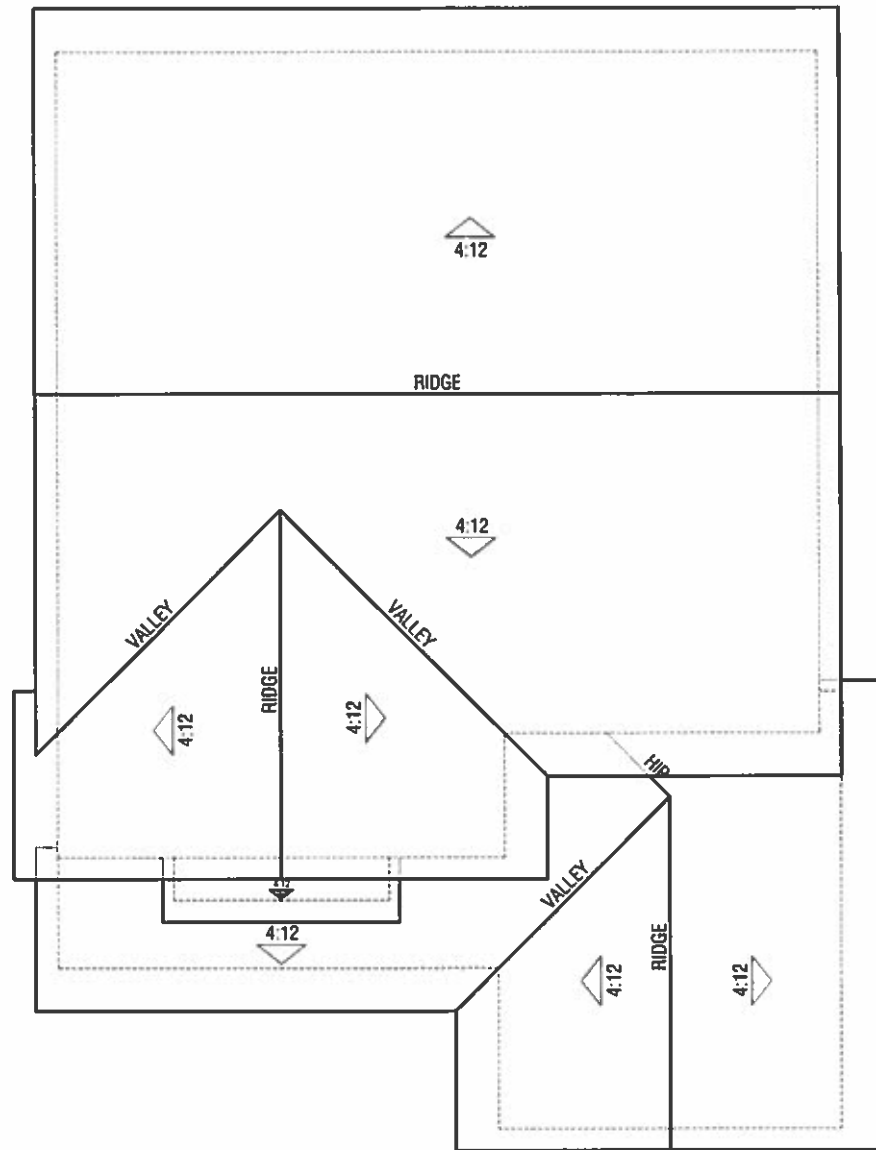
Upper Floor - 1,206 SF



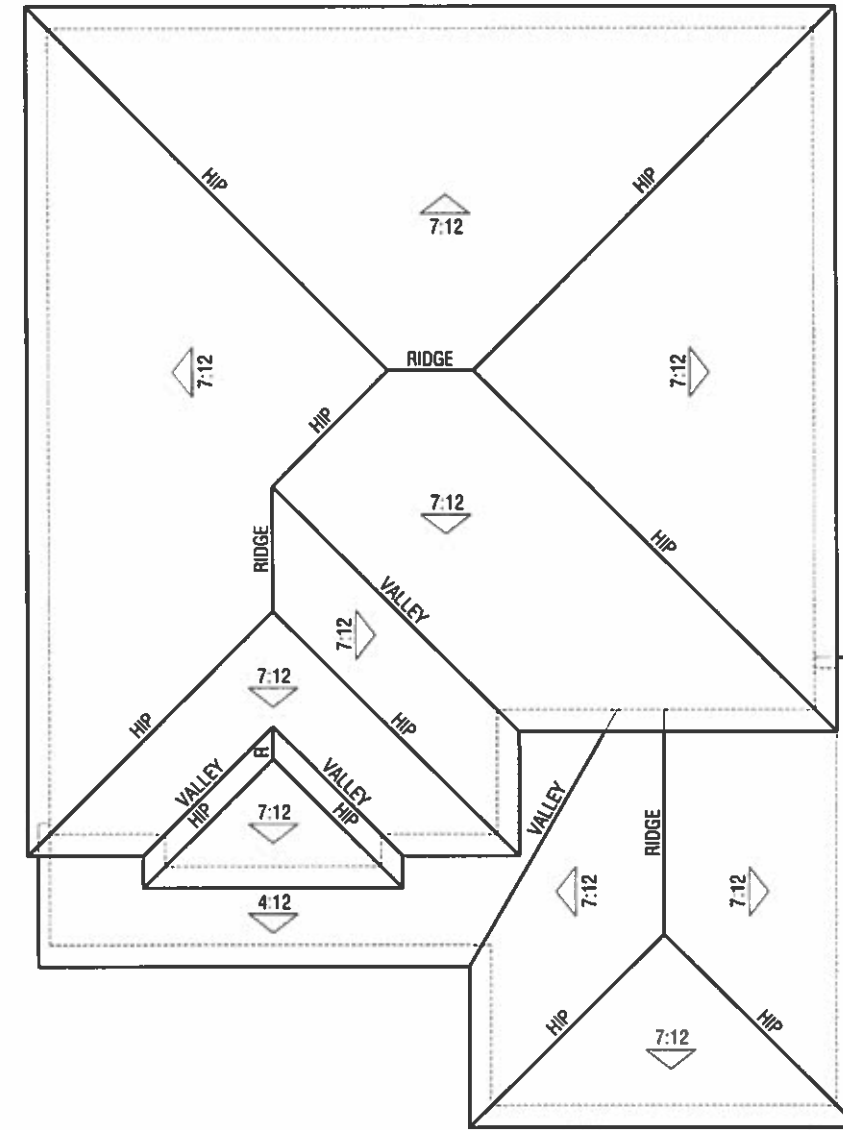
Lower Floor - 1,005 SF

Plan 1  
2,211 SF  
4 Bdrm/3 Ba  
2 Car Garage





Elevation 'B' - Craftsman



Elevation 'A' - Cottage



**Plan 1**  
 2,211 SF  
 4 Bdrm/3 Ba  
 2 Car Garage

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**A1-2**  
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NOTE - Artist conception, colors, materials and application may vary



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**Elevation 'B' - Craftsman: Color Scheme 5**

- ROOF: COMPOSITION SHINGLE ROOF
- FASCIA: 2 x 6 BARGE BOARD & WOOD OUTLOOKER
- GABLE: HORIZONTAL LAP SIDING
- WALL: STUCCO & HORIZONTAL LAP SIDING
- TRIM: STUCCO OVER FOAM TRIM PER ARCHITECTURAL STYLE
- WINDOW: VINYL WINDOW FRAMES WITH MULLION
- ACCENTS: WOOD COLUMN WITH MANUFACTURED STONE VENEER BASE  
PREFABRICATED SHUTTERS AND ENTRY DOOR ACCENT COLOR
- GARAGE DOOR: METAL SECTIONAL ROLL-UP GARAGE DOOR PER ARCHITECTURAL  
STYLE, WITH GLASS LITES

**Plan 1**  
2,211 SF  
4 Bdrm/3 Ba  
2 Car Garage

**Elevation 'A' - Cottage: Color Scheme 2**

- ROOF: COMPOSITION SHINGLE ROOF
- FASCIA: 2 x 6 BARGE BOARD
- WALL: STUCCO
- TRIM: STUCCO OVER FOAM TRIM PER ARCHITECTURAL STYLE
- WINDOW: VINYL WINDOW FRAMES WITH MULLION
- ACCENTS: WOOD COLUMN WITH SHAPED BRACE AND WOOD RAILING AT PORCH  
PREFABRICATED SHUTTERS AND ENTRY DOOR ACCENT COLOR  
DECORATIVE METAL POTSHELVES
- GARAGE DOOR: METAL SECTIONAL ROLL-UP GARAGE DOOR PER ARCHITECTURAL  
STYLE, WITH GLASS LITES



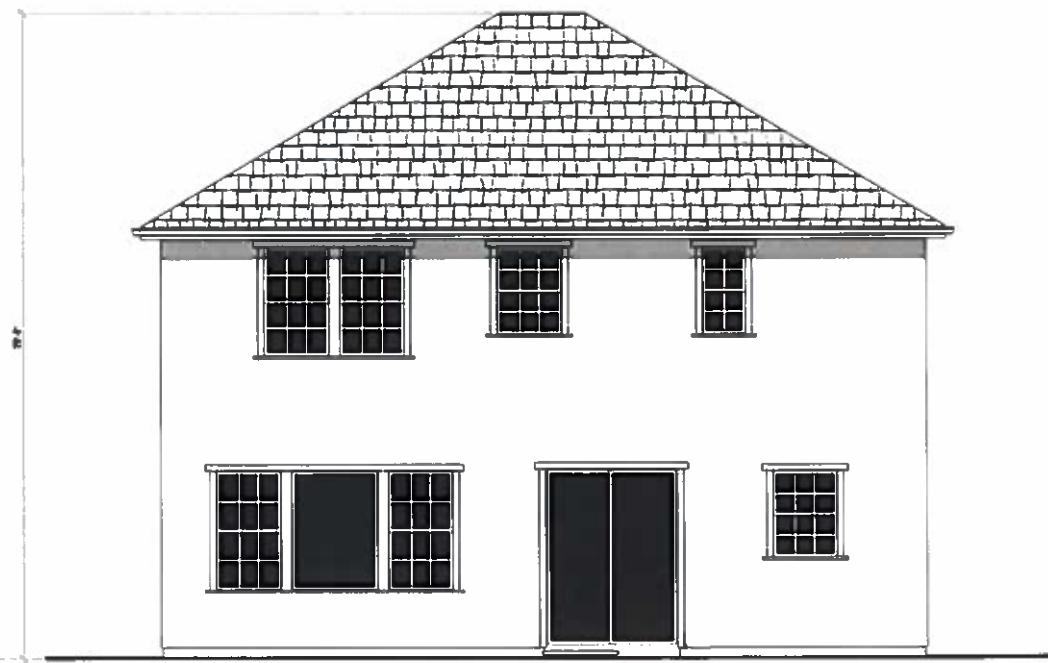
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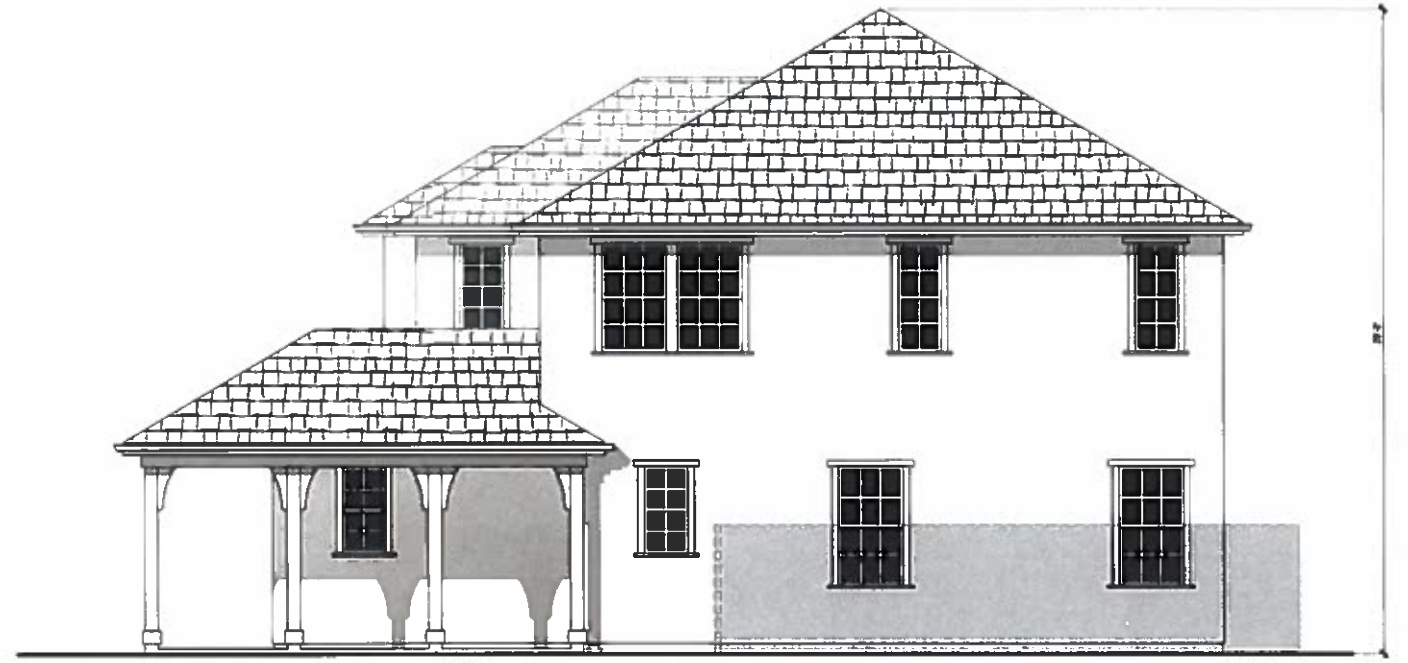
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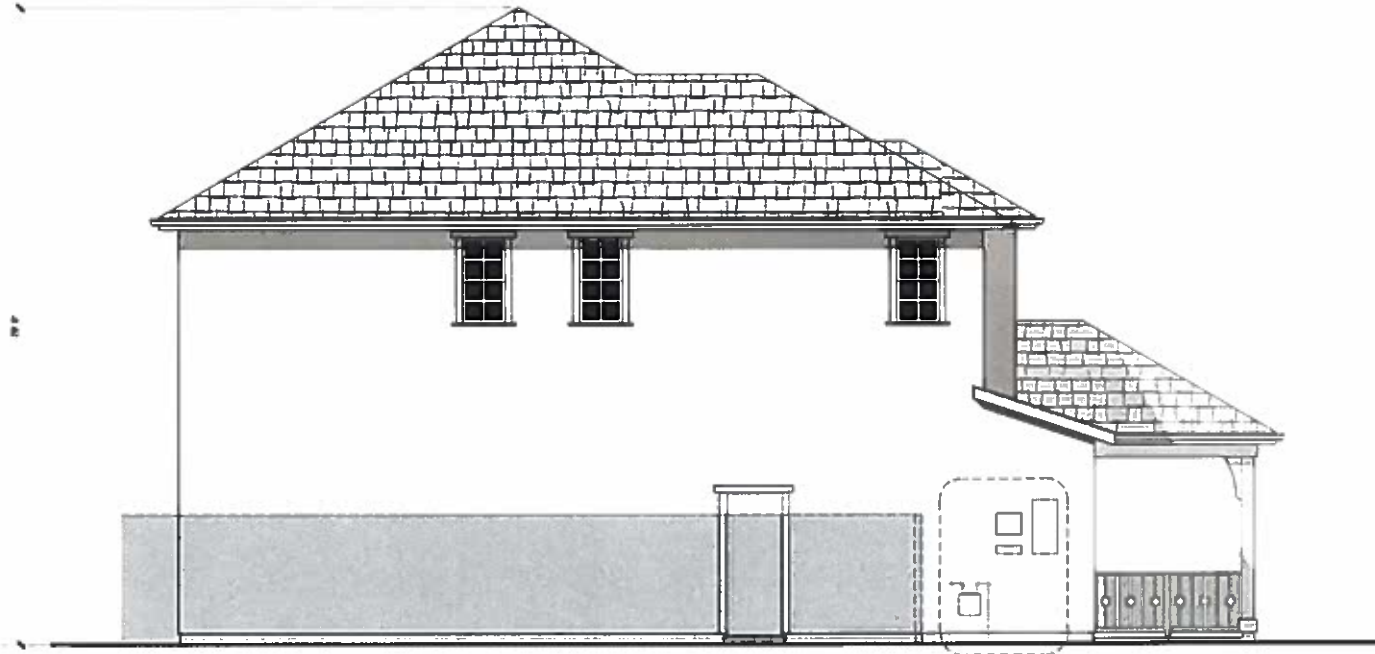




Rear Elevation



Right Elevation



Left Elevation



Front Elevation



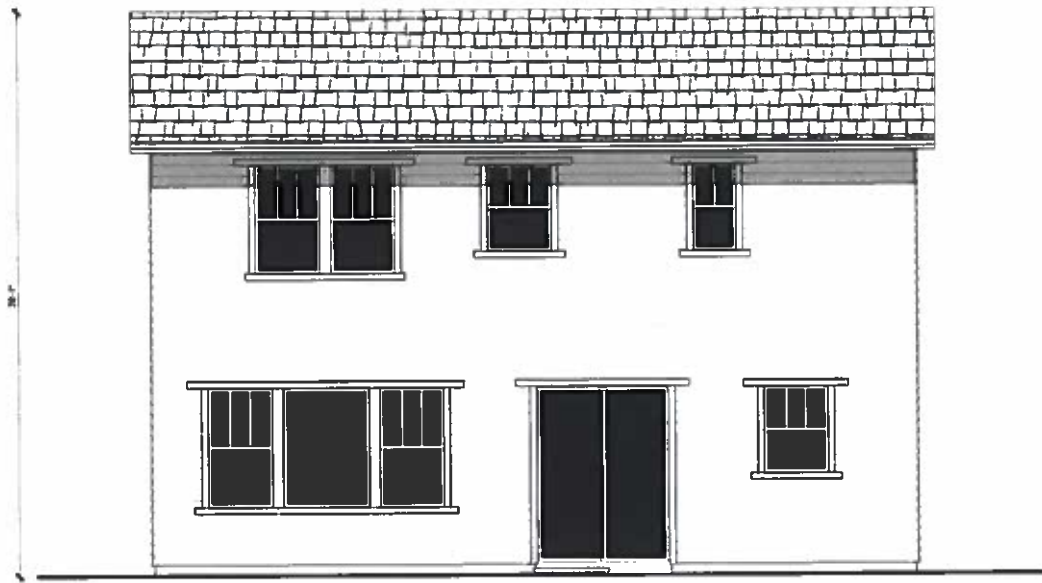
**Plan 1**  
Elevation 'A' - Cottage  
2,211 SF

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City of Pleasanton, CA



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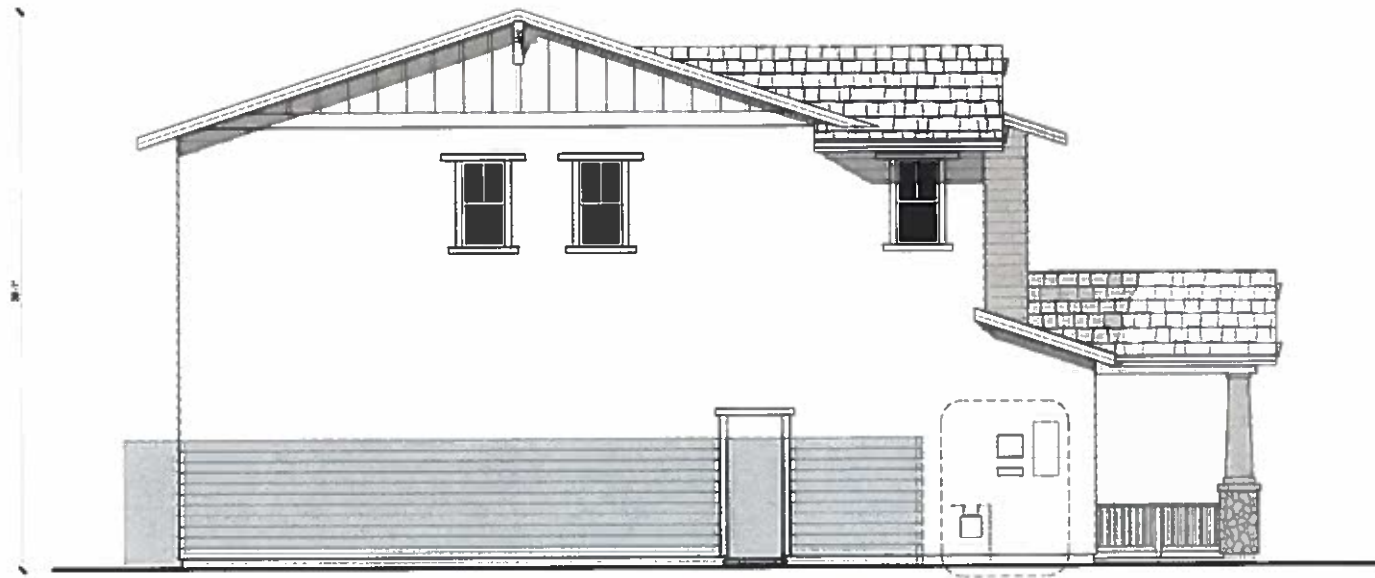
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2011036



Rear Elevation



Right Elevation



Left Elevation



Front Elevation

**Plan 1**  
Elevation 'B' - Craftsman  
2,211 SF

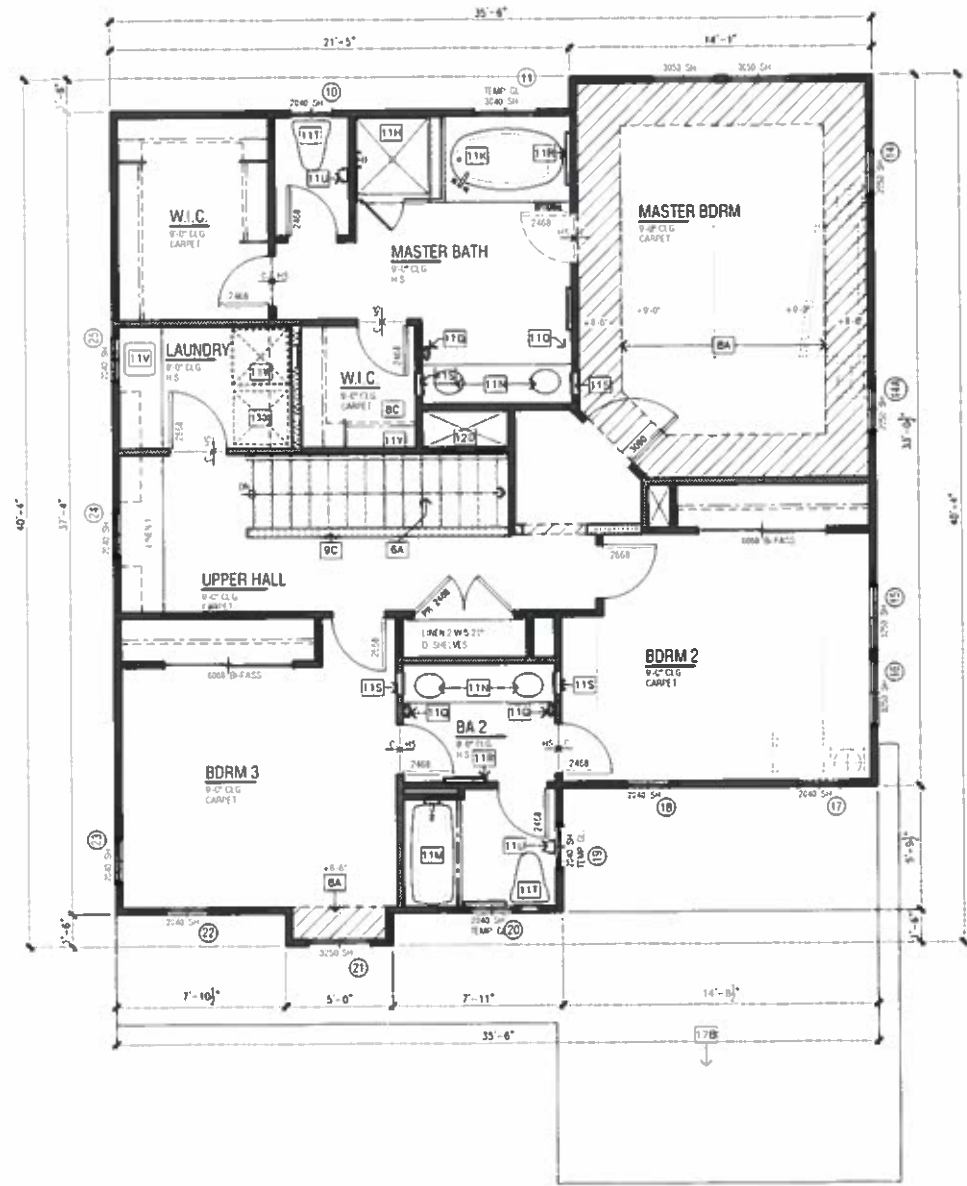


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City of Pleasanton, CA

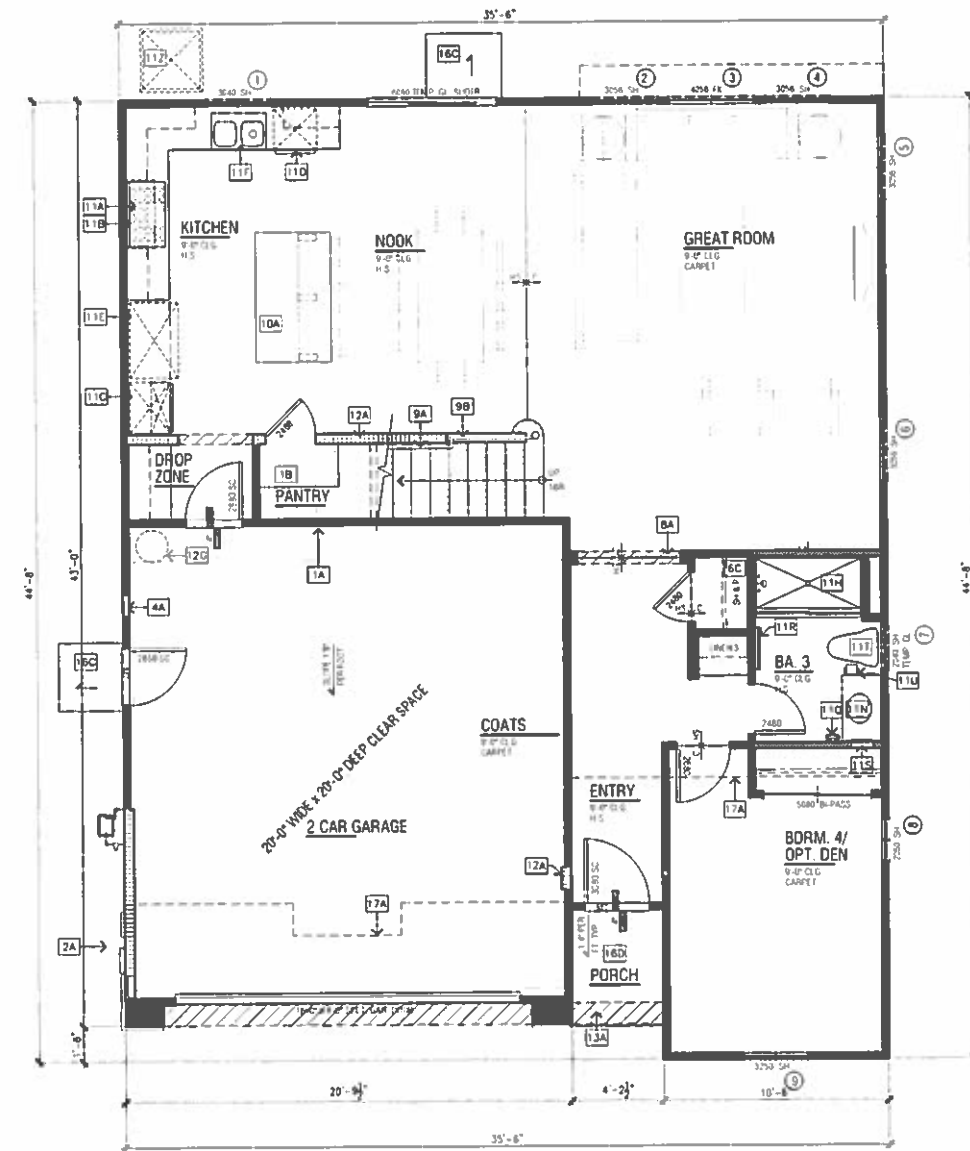


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Upper Floor - 1,198 SF

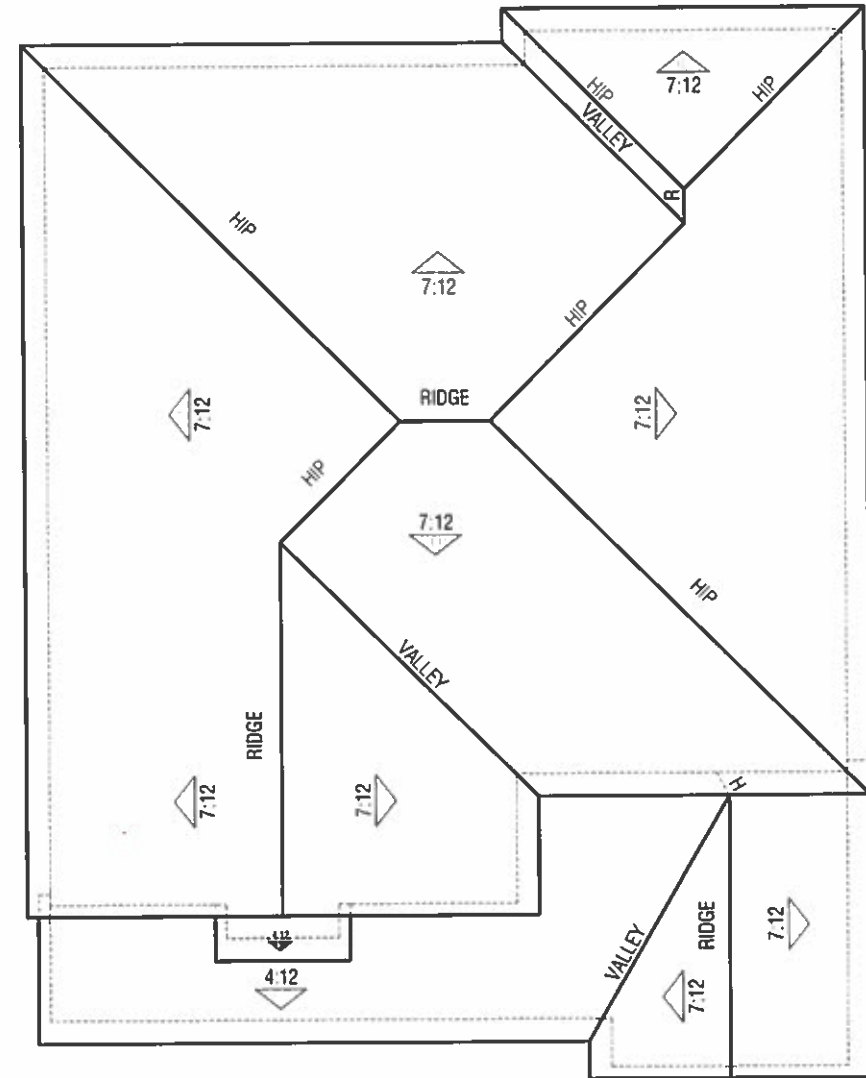
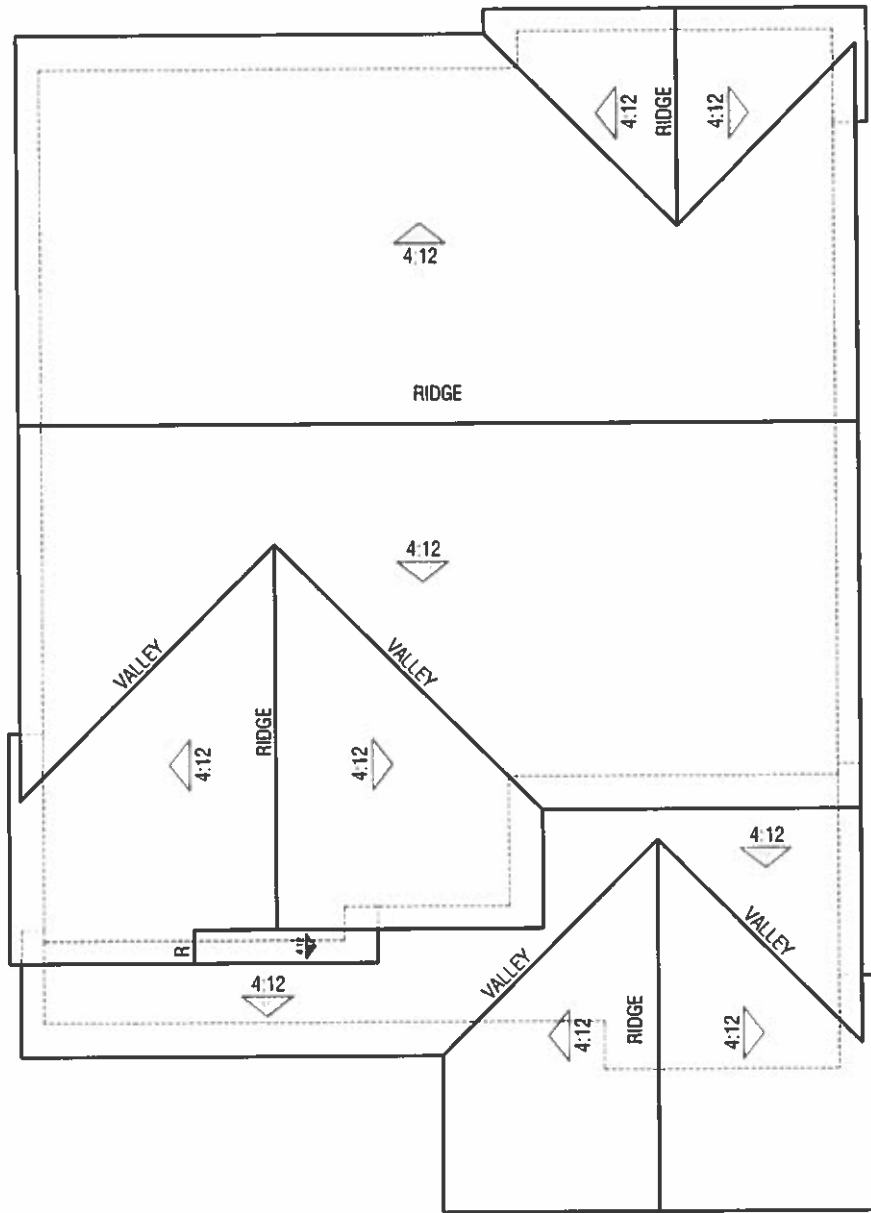


Lower Floor - 1,056 - 1,064 SF



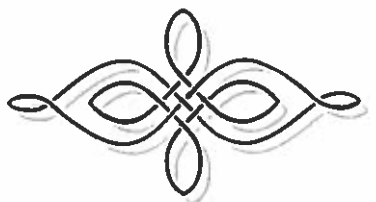
**Plan 2**  
2,233-2,241 SF  
4 Bdrm/3 Ba  
2 Car Garage





**Plan 2**  
 2,254-2,262 SF  
 4 Bdrm/3 Ba  
 2 Car Garage

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**A2-2**  
 2014036



**Elevation 'B' - Craftsman: Color Scheme 4**

**ROOF:** COMPOSITION SHINGLE ROOF  
**FASCIA:** 2 x 6 BARGE BOARD & WOOD OUTLOOKER  
**GABLE:** HORIZONTAL LAP SIDING  
**WALL:** STUCCO & HORIZONTAL LAP SIDING  
**TRIM:** STUCCO OVER FOAM TRIM PER ARCHITECTURAL STYLE  
**WINDOW:** VINYL WINDOW FRAMES WITH MULLION  
**ACCENTS:** WOOD COLUMN WITH MANUFACTURED STONE VENEER BASE  
**ENTRY DOOR:** ACCENT COLOR  
**GARAGE DOOR:** METAL SECTIONAL ROLL-UP GARAGE DOOR PER ARCHITECTURAL STYLE. WITH GLASS LITES



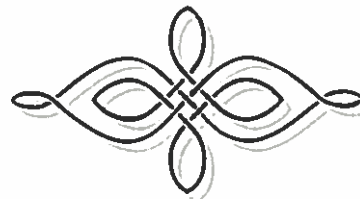
**Plan 2**

2,254-2,262 SF  
 4 Bdrm / 3 Ba  
 2 Car Garage



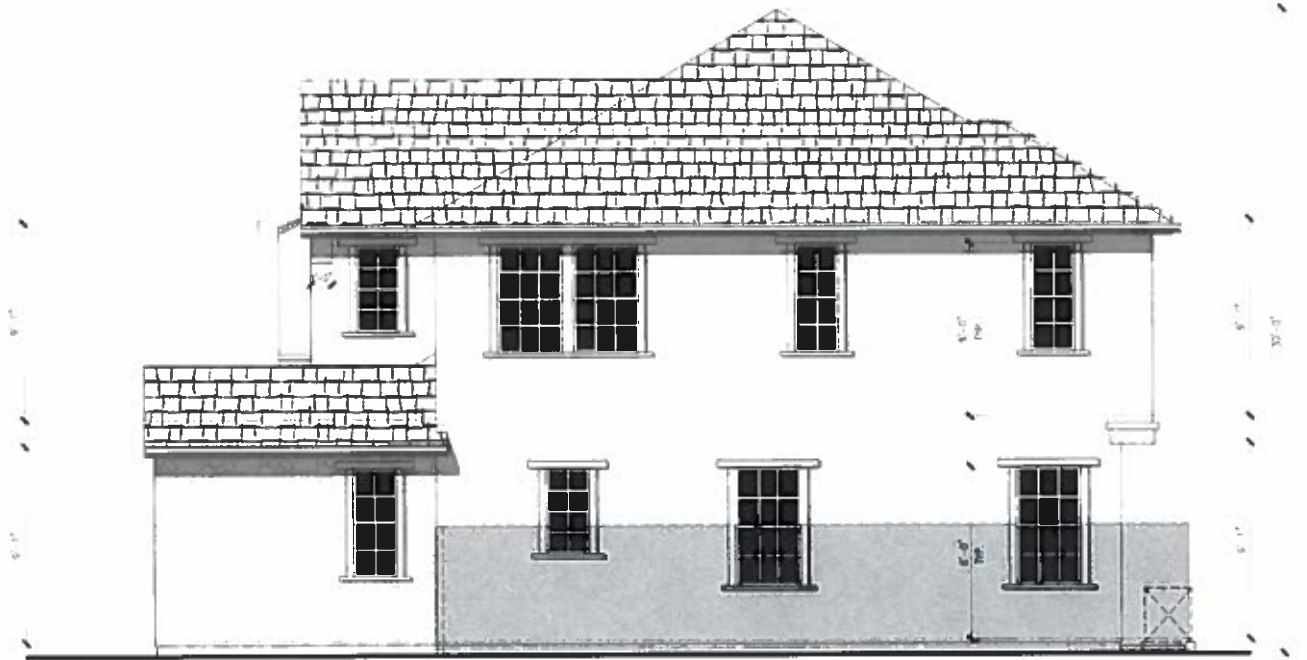
**Elevation 'A' - Cottage: Color Scheme 3**

**ROOF:** COMPOSITION SHINGLE ROOF  
**FASCIA:** 2 x 6 BARGE BOARD  
**GABLE:** LOUVERED VENT WITH TRIM  
**WALL:** STUCCO  
**TRIM:** STUCCO OVER FOAM TRIM PER ARCHITECTURAL STYLE  
**WINDOW:** VINYL WINDOW FRAMES WITH MULLION  
**ACCENTS:** WOOD COLUMN WITH SHAPED BRACE  
**ENTRY DOOR:** ACCENT COLOR  
**STONE:** MANUFACTURED STONE VENEER  
**GARAGE DOOR:** METAL SECTIONAL ROLL-UP GARAGE DOOR PER ARCHITECTURAL STYLE. WITH GLASS LITES

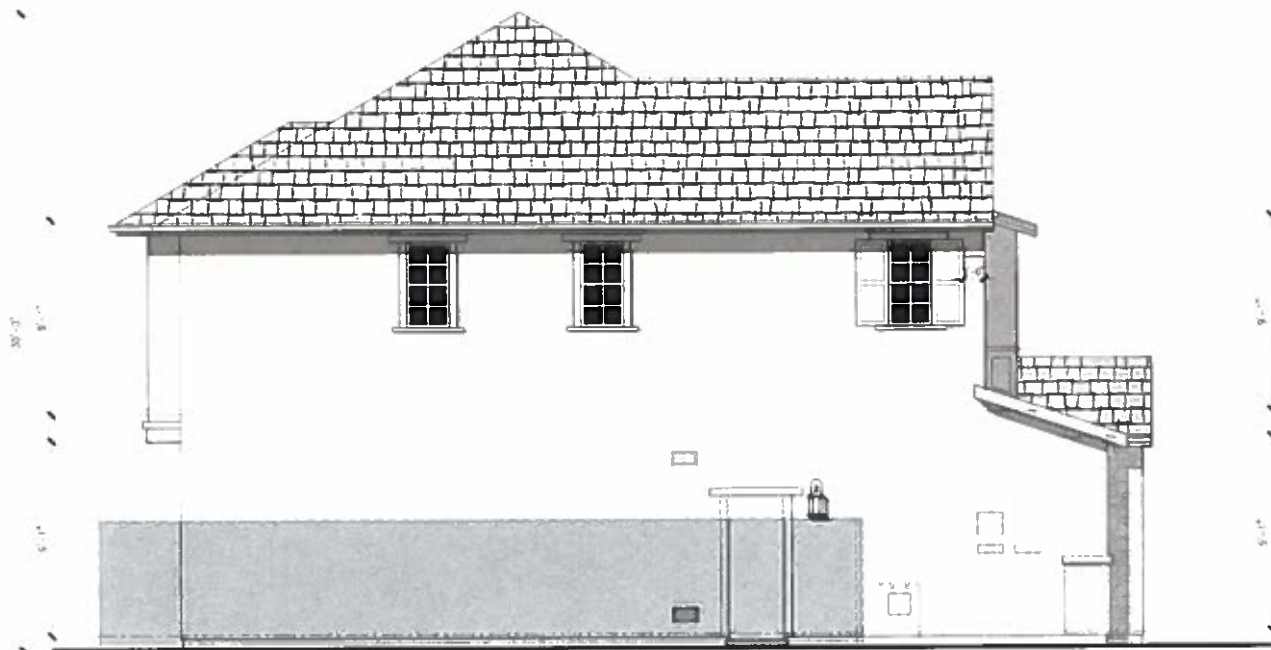




Rear Elevation



Right Elevation



Left Elevation



Front Elevation



Plan 2  
Elevation 'A' - Cottage  
2,262 SF

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City of Pleasanton, CA

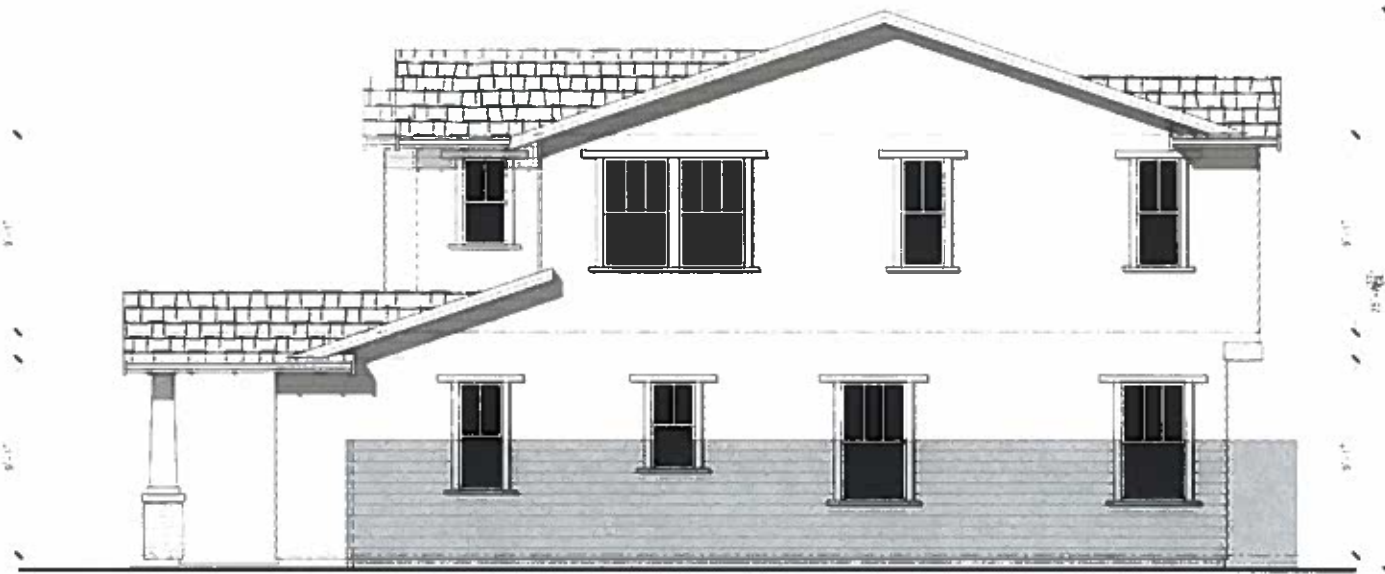


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Rear Elevation



Right Elevation



Left Elevation



Front Elevation



Plan 2  
Elevation 'B' - Craftsman  
2,254 SF

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949 250 0817 fax 949 250 1529

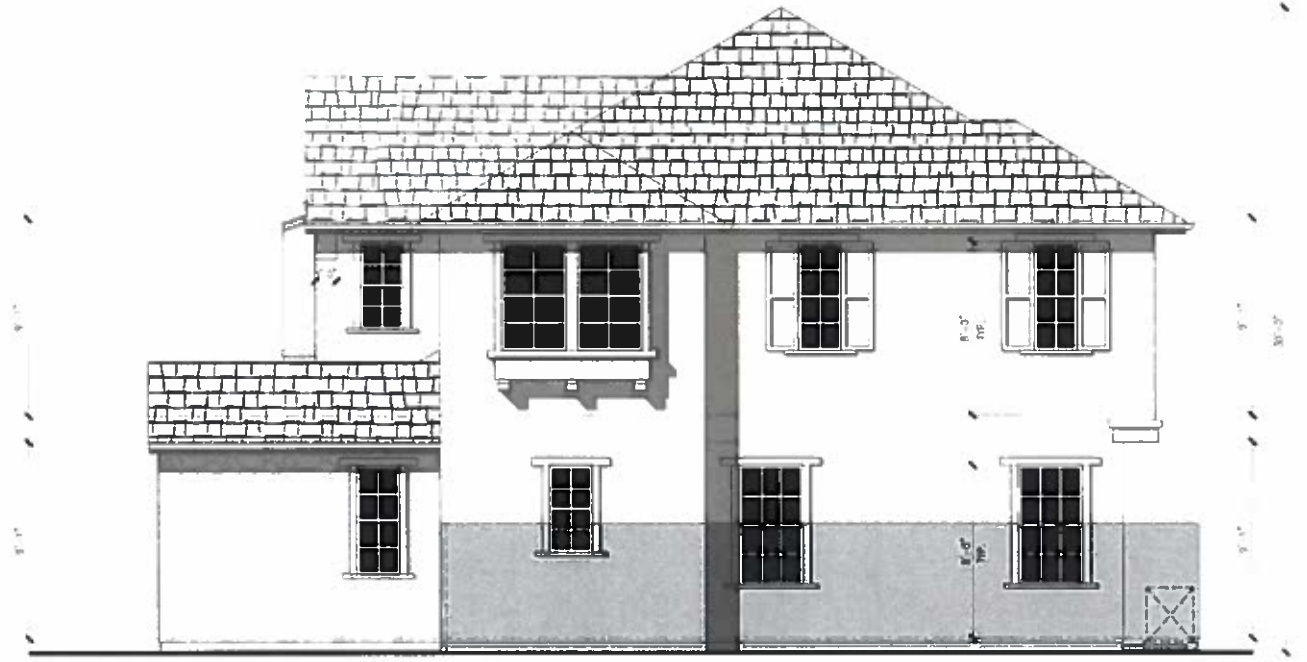
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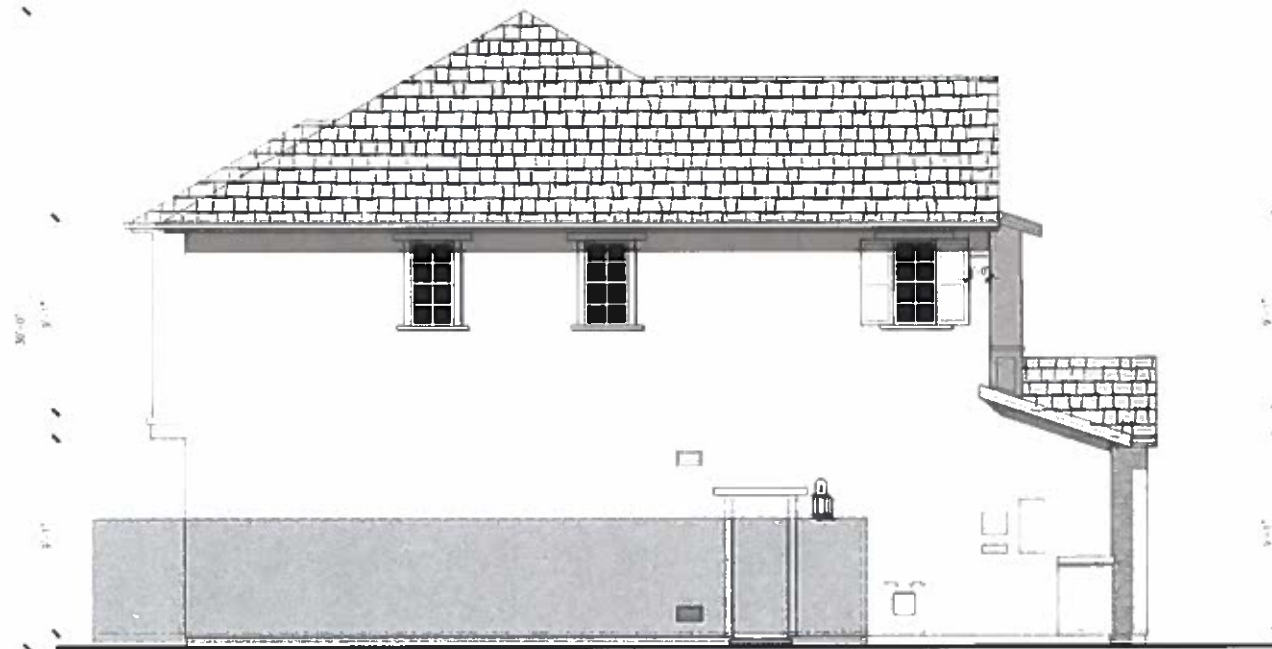




Rear Elevation



Right Elevation



Left Elevation



Front Elevation  
Color Scheme 3



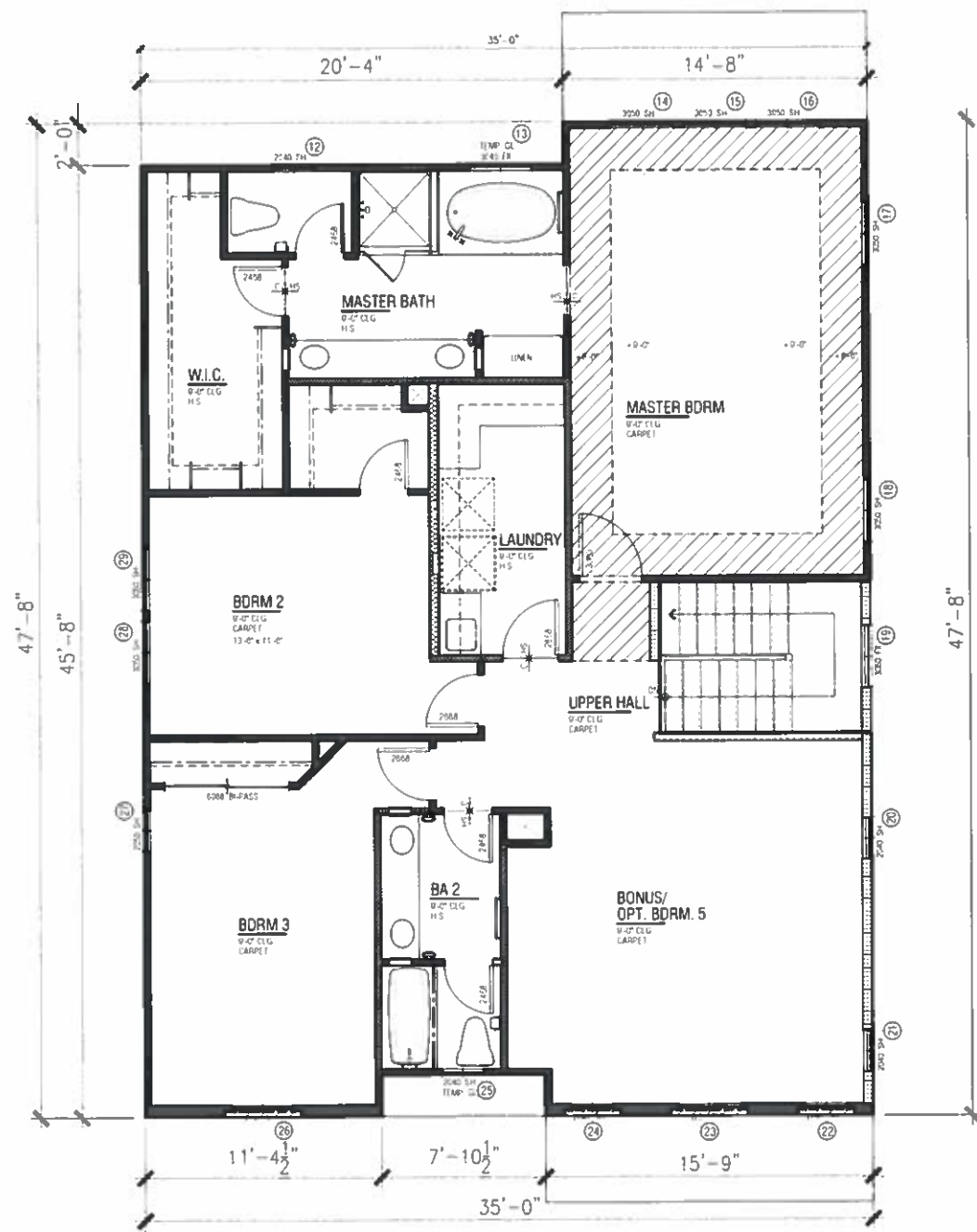
**Plan 2X**  
Elevation 'A' - Cottage  
2,311 SF

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City of Pleasanton, CA

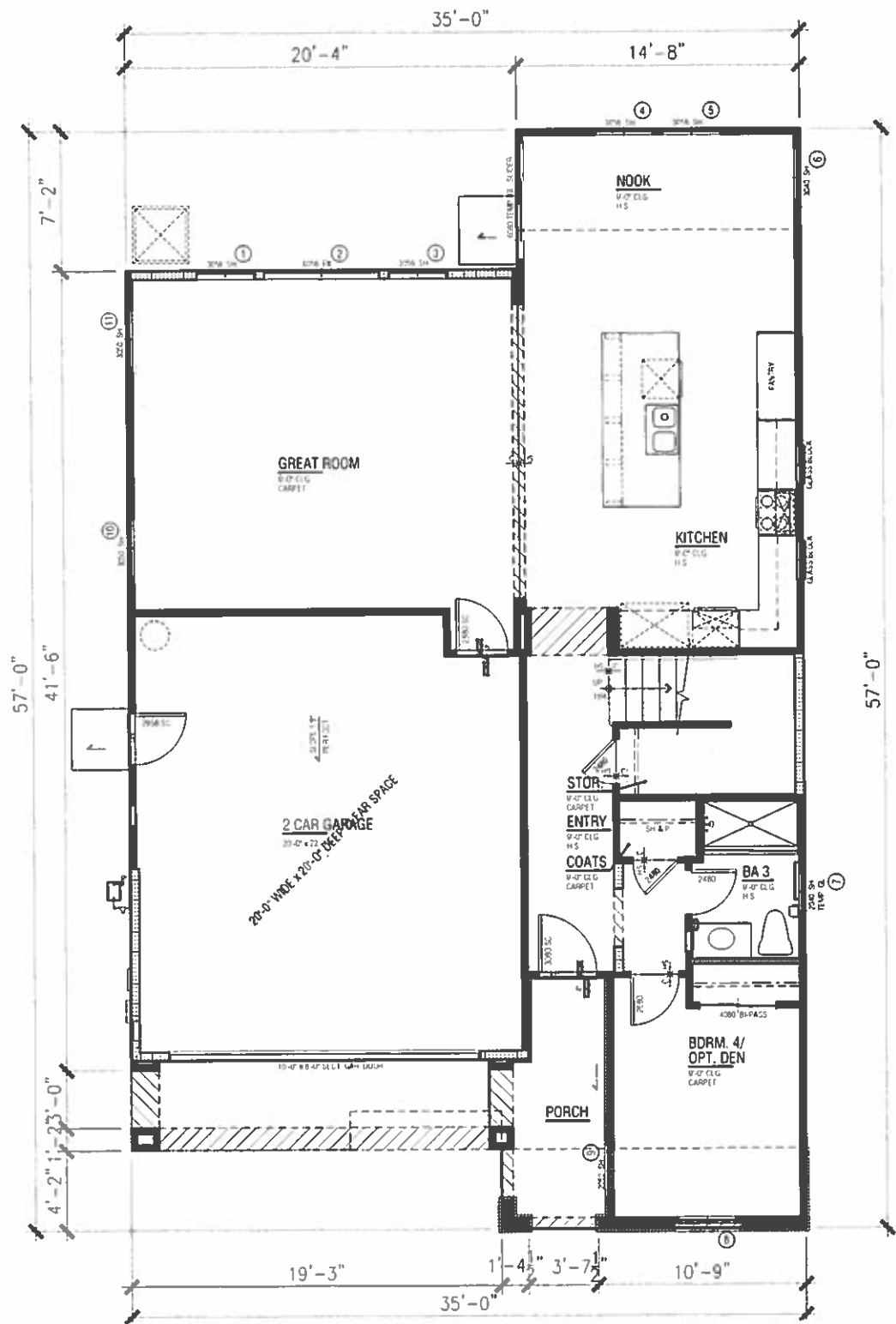


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**A2-7**  
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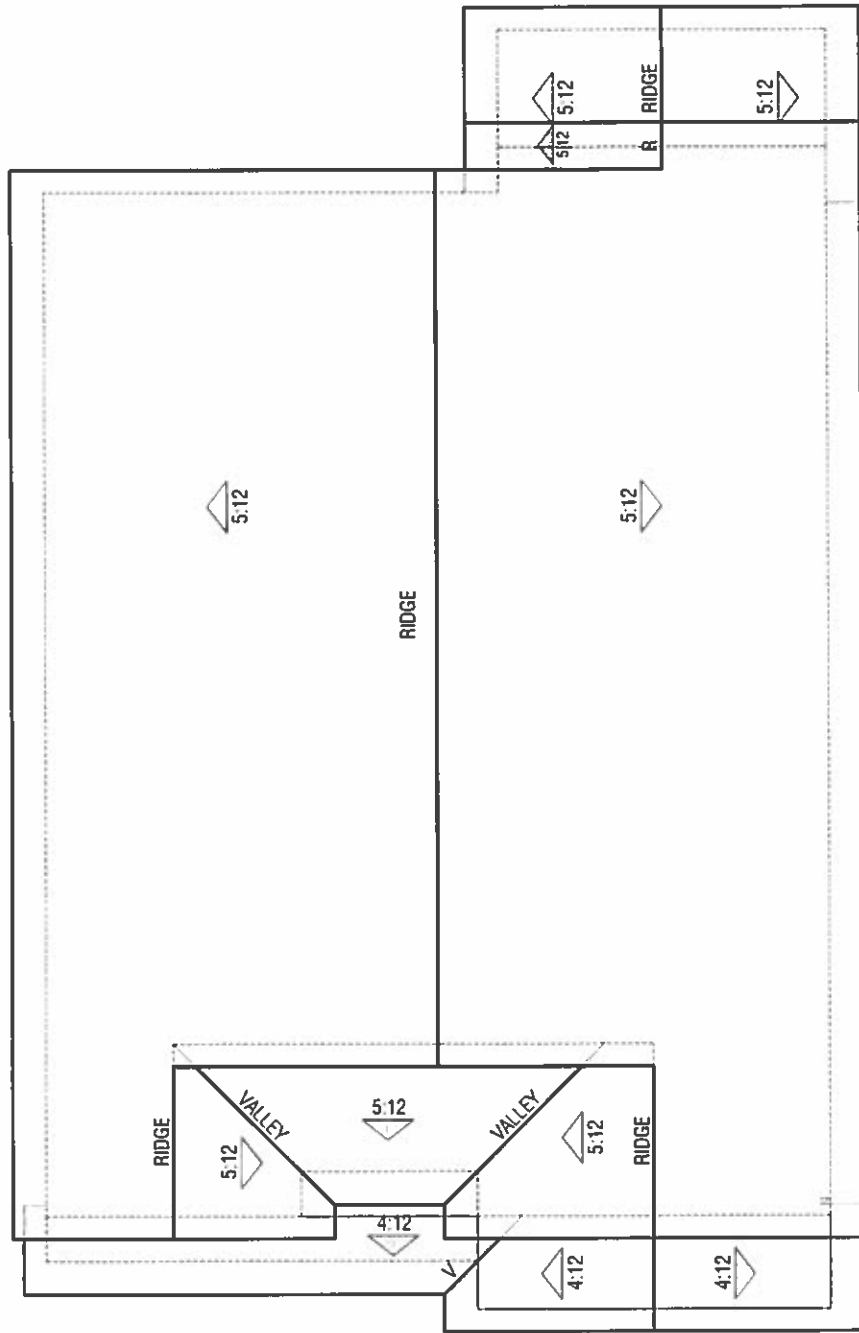
Upper Floor - 1,508 SF



Lower Floor - 1,177 SF

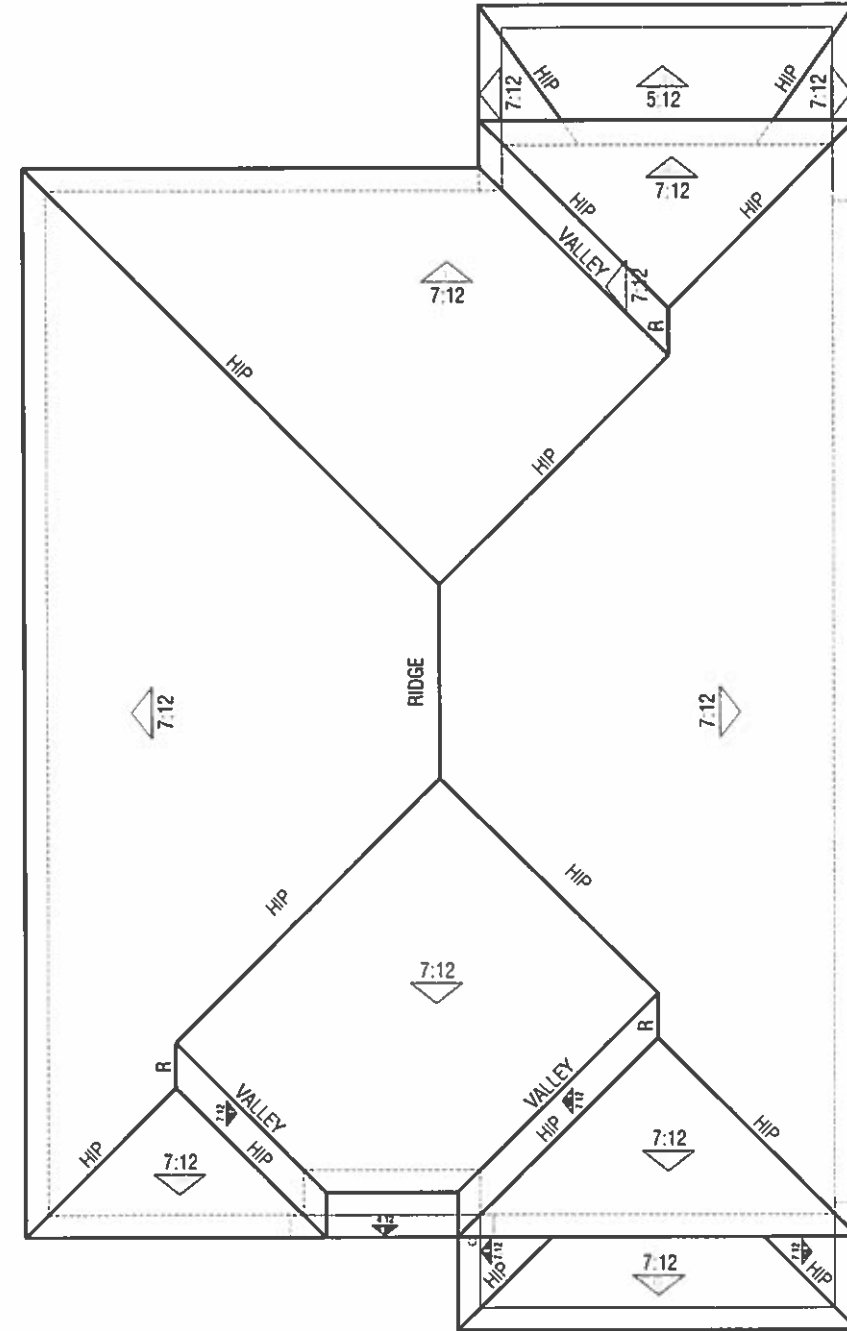
**Plan 3**  
 2,685 SF  
 4 Bdrm/3 Ba  
 2 Car Garage





Elevation 'B' - Craftsman

**Plan 3**  
 2,685 SF  
 4 Bdrm/3 Ba  
 2 Car Garage



Elevation 'A' - Cottage

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 City of Pleasanton, CA



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**A3-2**  
 2014836

### Elevation 'A' - Cottage

ROOF: COMPOSITION SHINGLE ROOF  
 FASCIA: 2 x 6 BARGE BOARD  
 WALL: STUCCO  
 TRIM: STUCCO OVER FOAM TRIM PER ARCHITECTURAL STYLE  
 WINDOW: VINYL WINDOW FRAMES WITH MULLION  
 ACCENTS: PREFABRICATED SHUTTERS AND ENTRY DOOR ACCENT COLOR  
 STONE: MANUFACTURED STONE VENEER  
 GARAGE DOOR: METAL SECTIONAL ROLL-UP GARAGE DOOR PER ARCHITECTURAL STYLE, WITH GLASS LITES

### Elevation 'C' - SPANISH

ROOF: TERRA COTTA 'S' TILE ROOF  
 FASCIA: 2 x 6 BARGE BOARD  
 WALL: STUCCO  
 TRIM: STUCCO OVER FOAM TRIM PER ARCHITECTURAL STYLE  
 WINDOW: VINYL WINDOW FRAMES WITH MULLION  
 ACCENTS: PREFABRICATED SHUTTERS AND ENTRY DOOR ACCENT COLOR  
 GARAGE DOOR: METAL SECTIONAL ROLL-UP GARAGE DOOR PER ARCHITECTURAL STYLE, WITH GLASS LITES



Elevation 'A' - Cottage  
 Color Scheme 1

### Elevation 'B' - CRAFTSMAN

ROOF: COMPOSITION SHINGLE ROOF  
 FASCIA: 2 x 6 BARGE BOARD, WOOD OUTLOOKER & RAFTER TAILS  
 GABLE: HORIZONTAL LAP SIDING  
 WALL: STUCCO  
 TRIM: STUCCO OVER FOAM TRIM PER ARCHITECTURAL STYLE  
 WINDOW: VINYL WINDOW FRAMES WITH MULLION  
 ACCENTS: WOOD COLUMNS WITH MANUFACTURED STONE VENEER BASE  
 WOOD PITSHELF WITH CORBEL  
 ENTRY DOOR ACCENT COLOR  
 GARAGE DOOR: METAL SECTIONAL ROLL-UP GARAGE DOOR PER ARCHITECTURAL STYLE, WITH GLASS LITES



Elevation 'C' - Spanish  
 Color Scheme 7



Elevation 'B' - Craftsman  
 Color Scheme 5



### Plan 3

2,685 SF  
 4 Bdrm/3 Ba  
 2 Car Garage

CENTERPOINTE PRESBYTERIAN CHURCH

City of Pleasanton, CA



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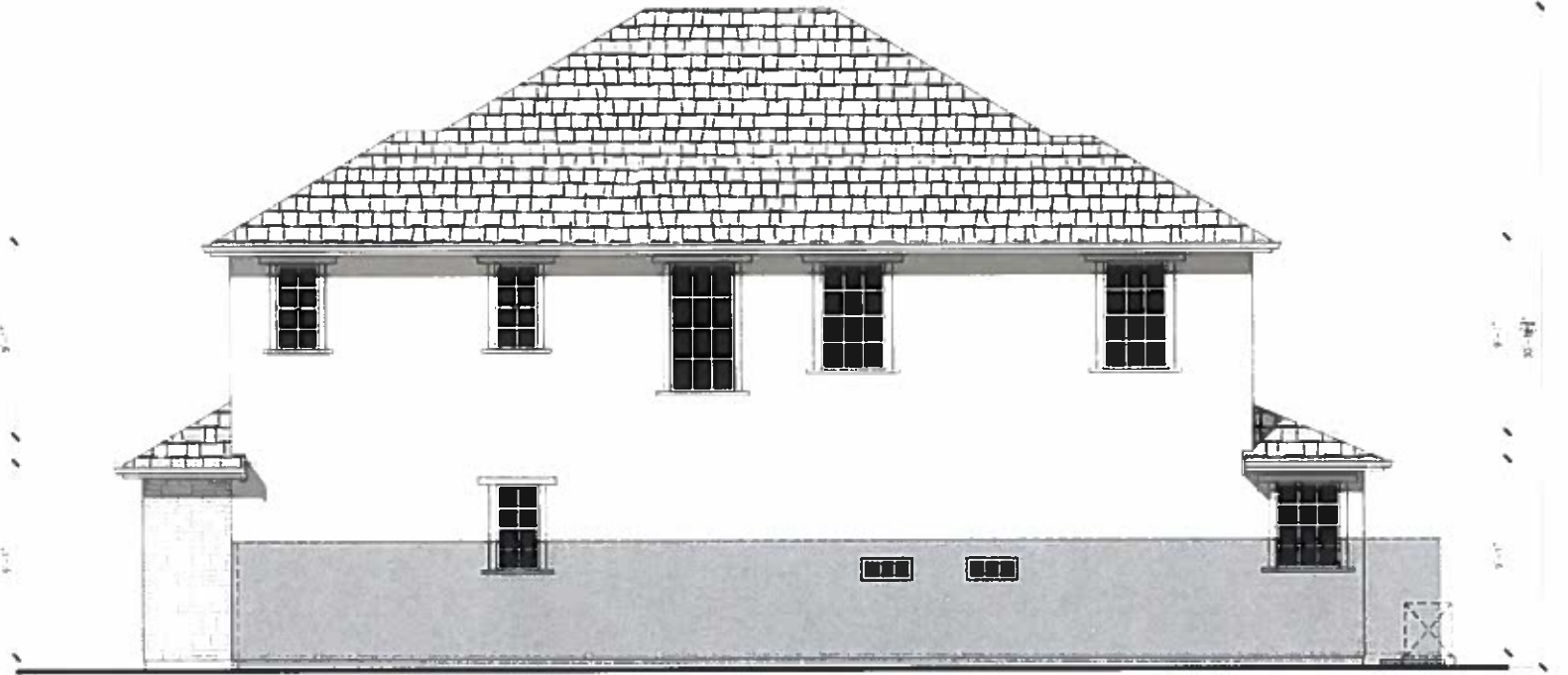
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A3-3

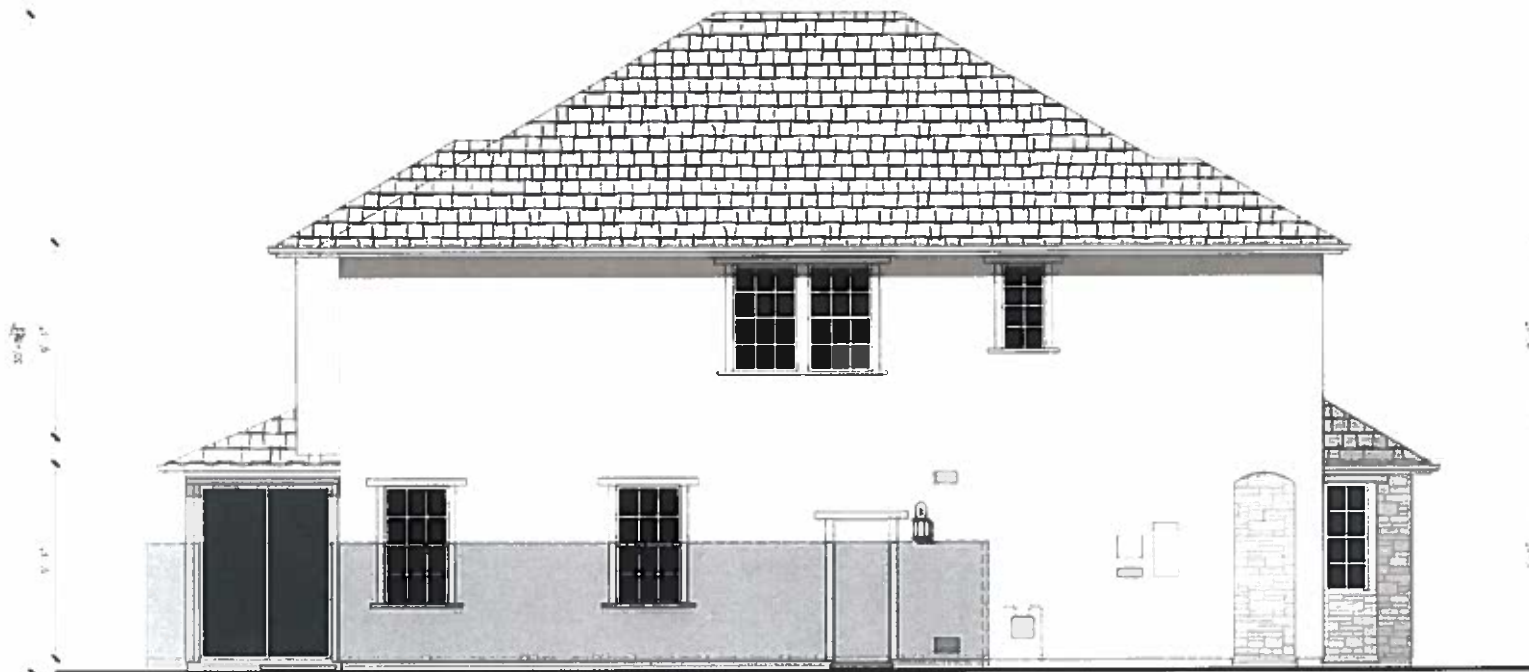
2014036



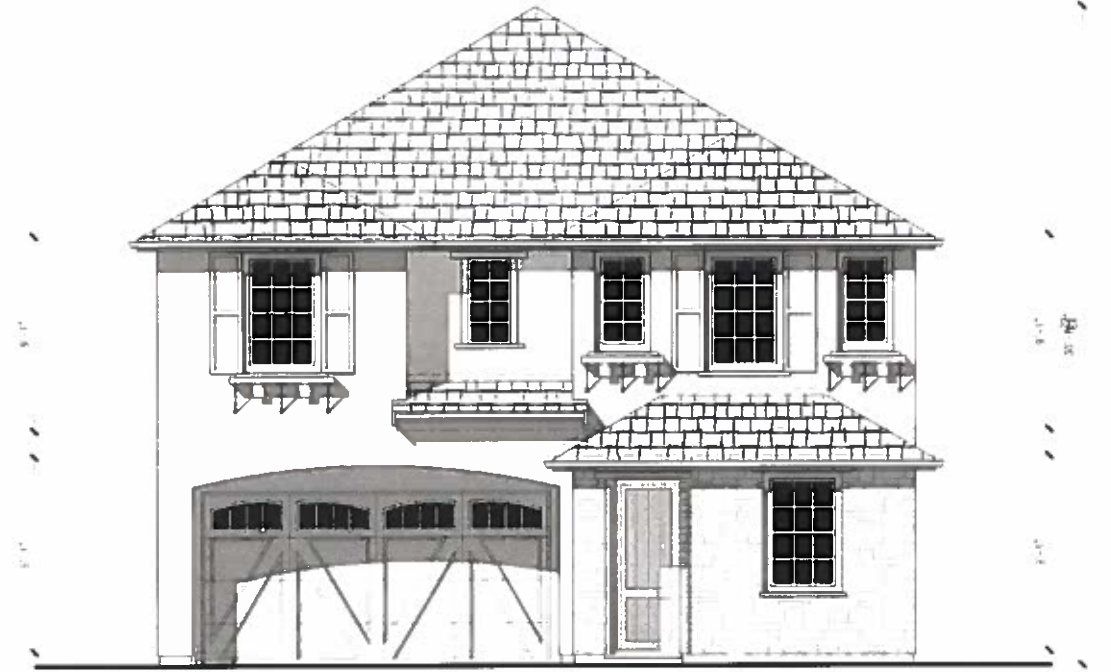
Rear Elevation



Right Elevation



Left Elevation



Front Elevation



**Plan 3**  
Elevation 'A' - Cottage  
2,685 SF

CENTERPOINTE PRESBYTERIAN CHURCH  
City of Pleasanton, CA

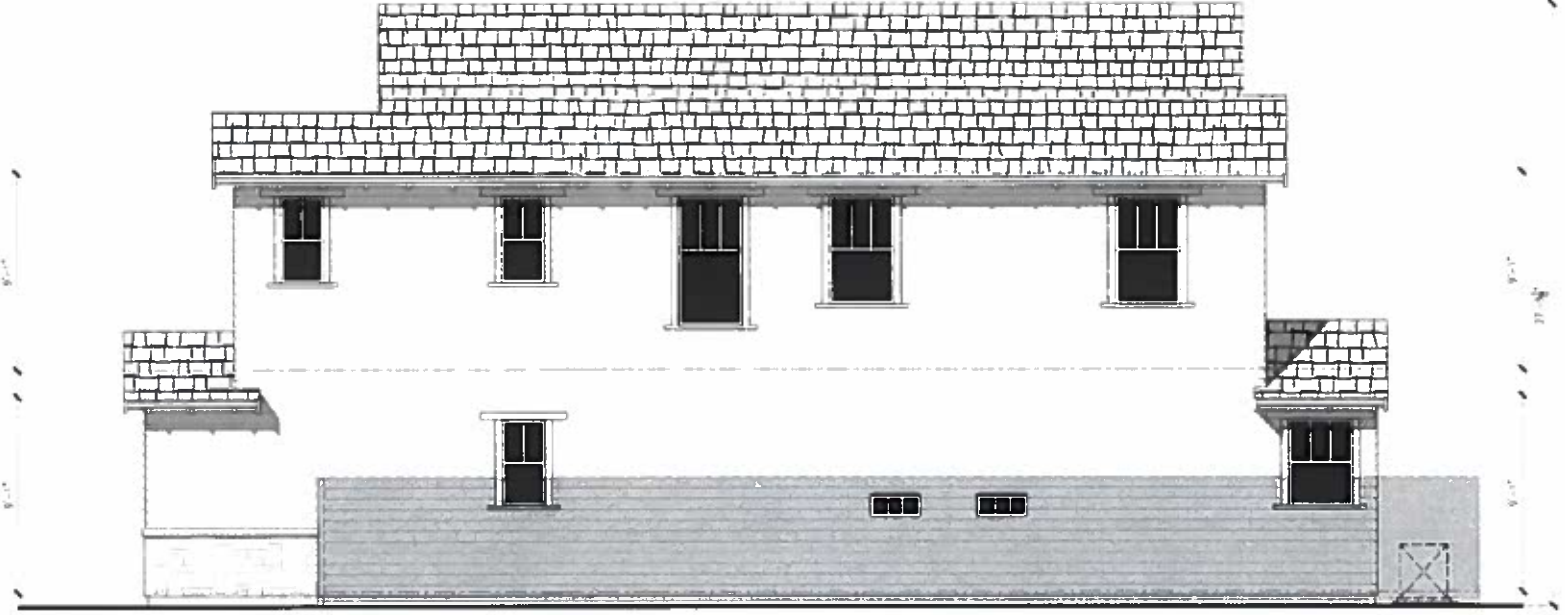


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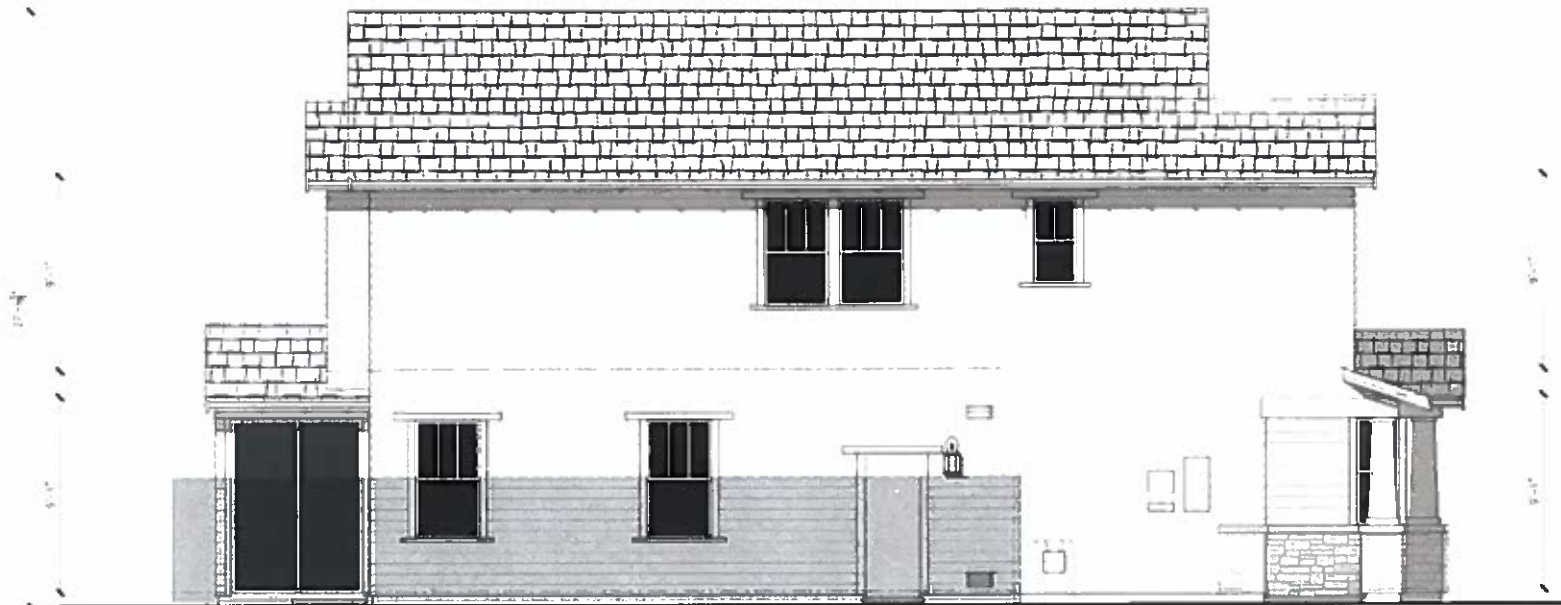
JUNE 19, 2015  
**A3-4**  
2014036



Rear Elevation



Right Elevation



Left Elevation



Front Elevation

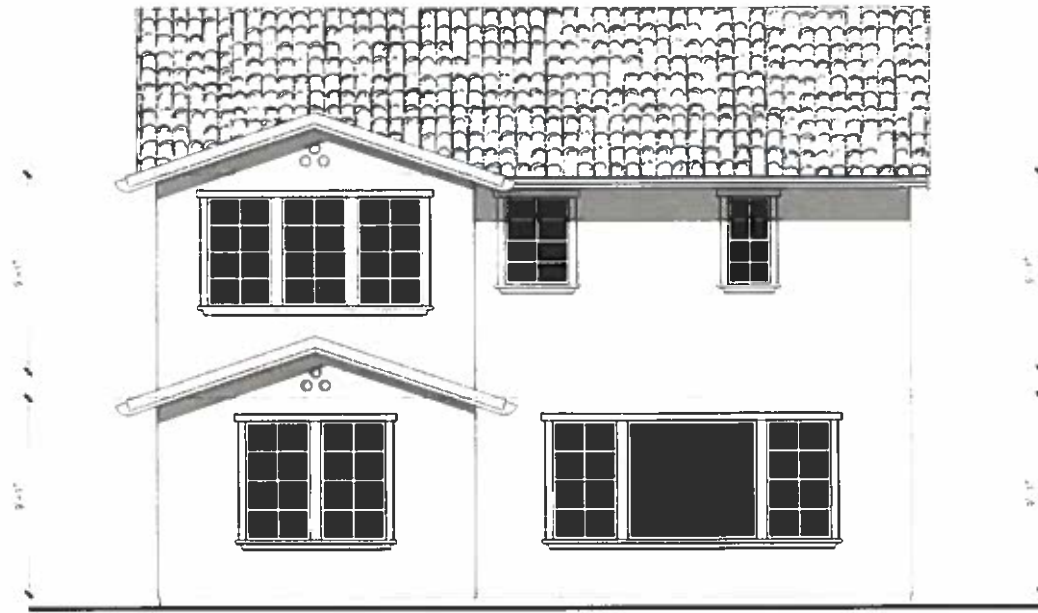
**Plan 3**  
Elevation 'B' - Craftsman  
2,685 SF

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City of Pleasanton, CA

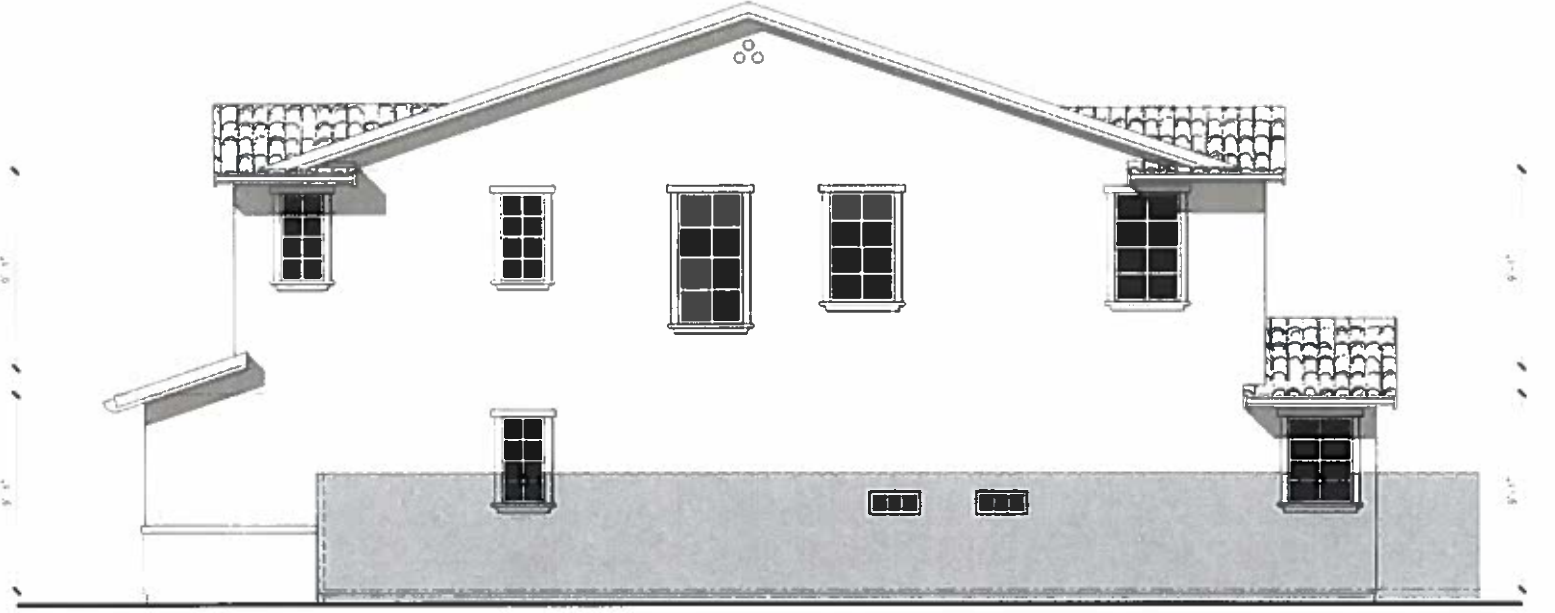


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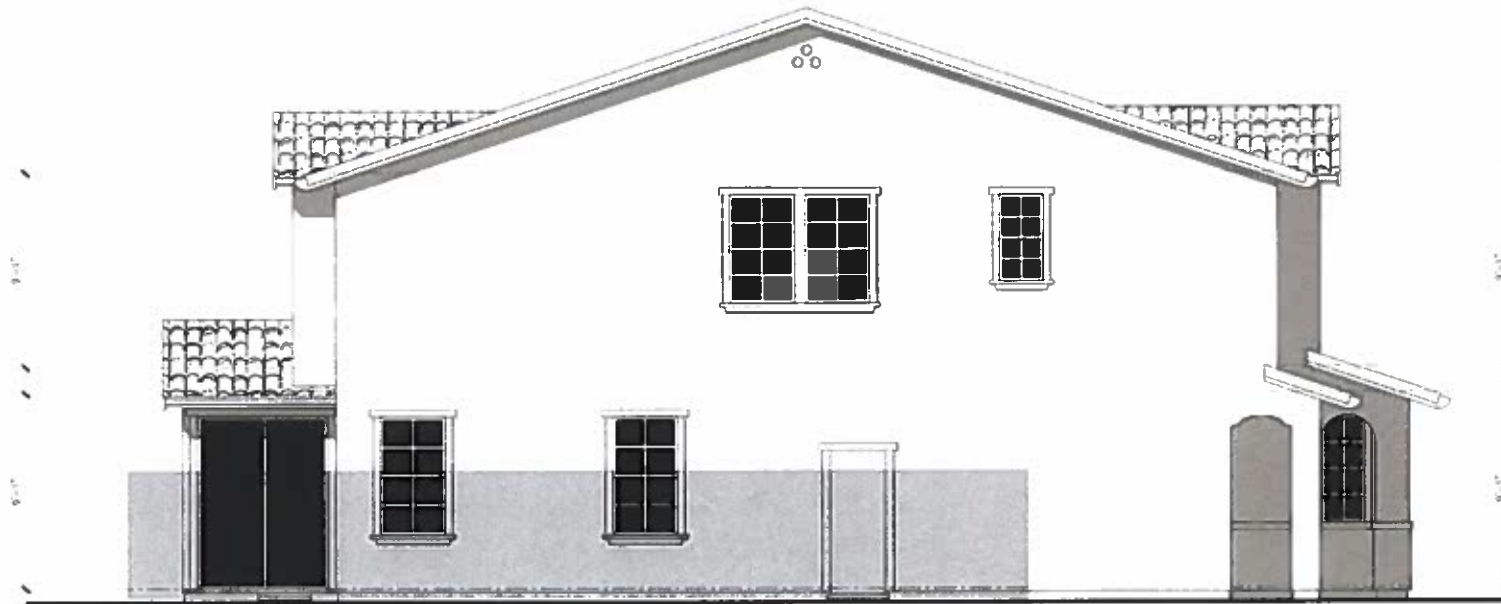
JUNE 19, 2015  
**A3-5**  
2014036



Rear Elevation



Right Elevation



Left Elevation



Front Elevation  
Color Scheme 7

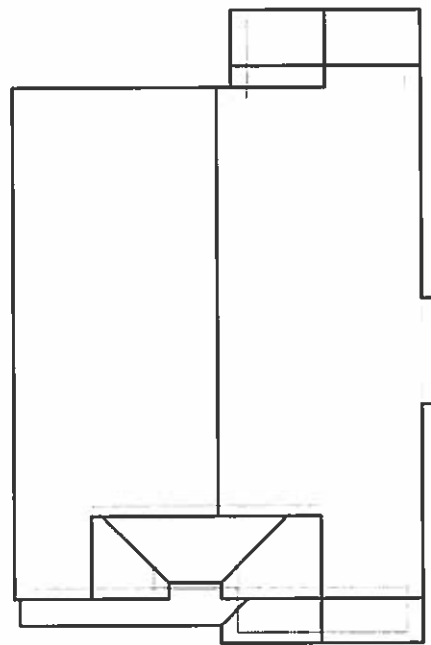
**Plan 3**  
Elevation 'C' - Spanish  
2,697 SF

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City of Pleasanton, CA

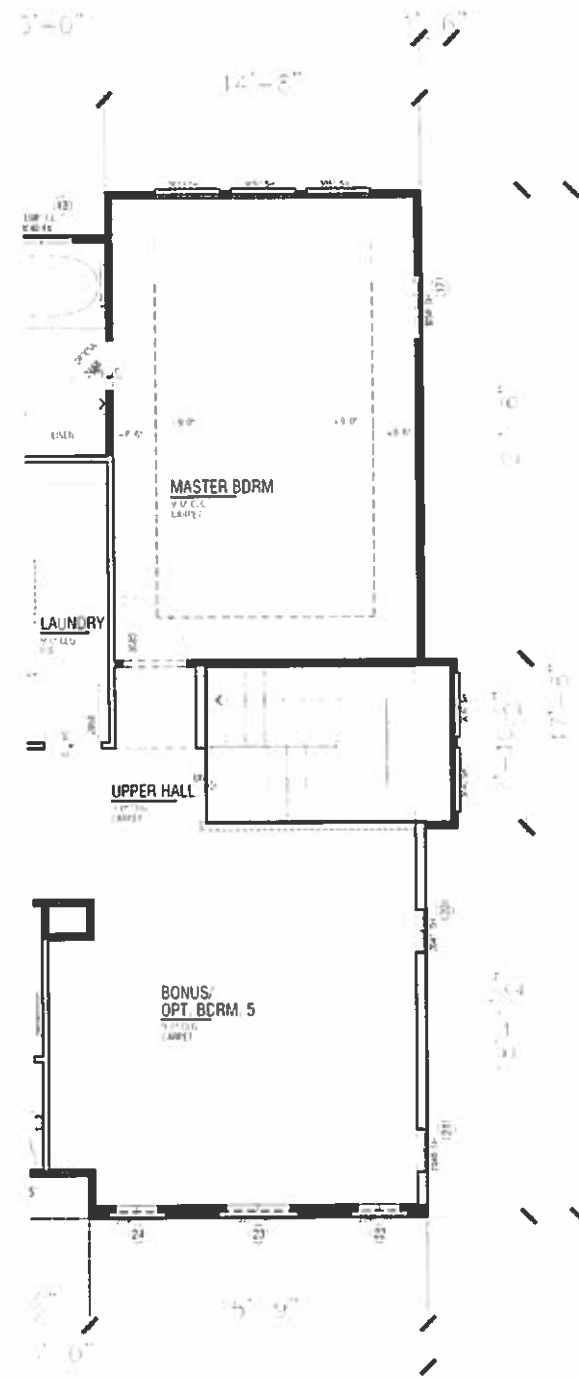


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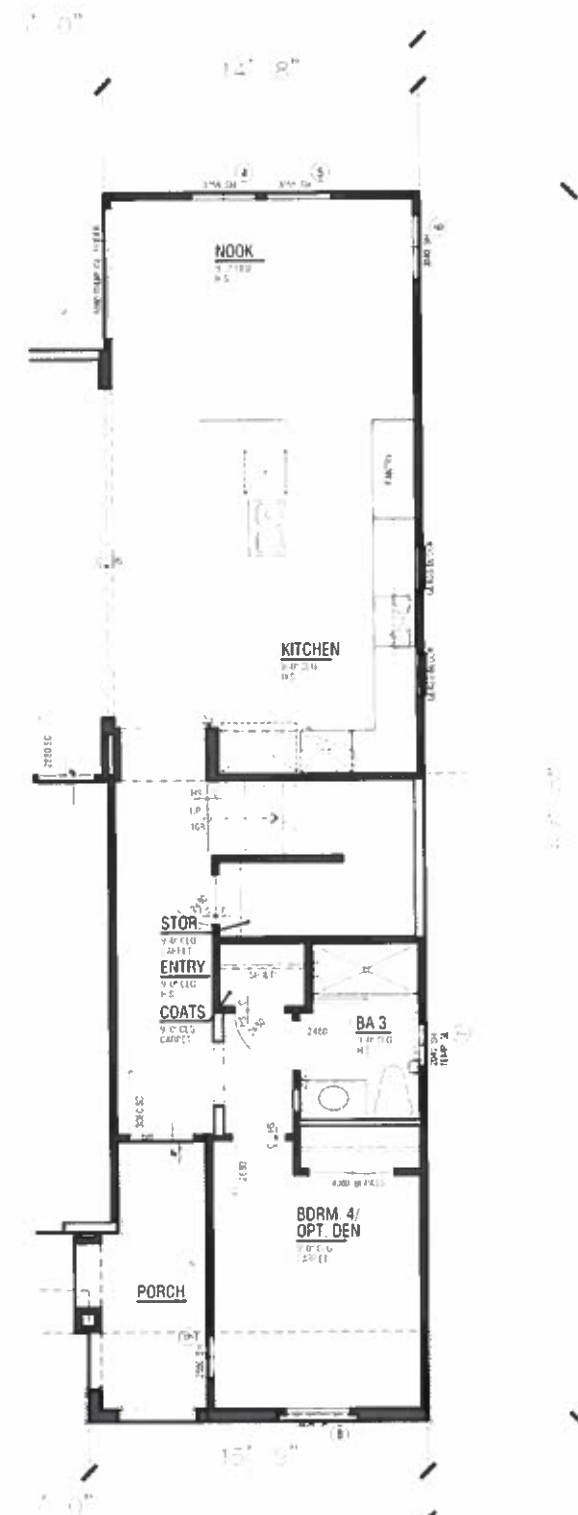
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**A3-6**  
2014036



Roof Plan



Upper Floor - +12SF



Lower Floor

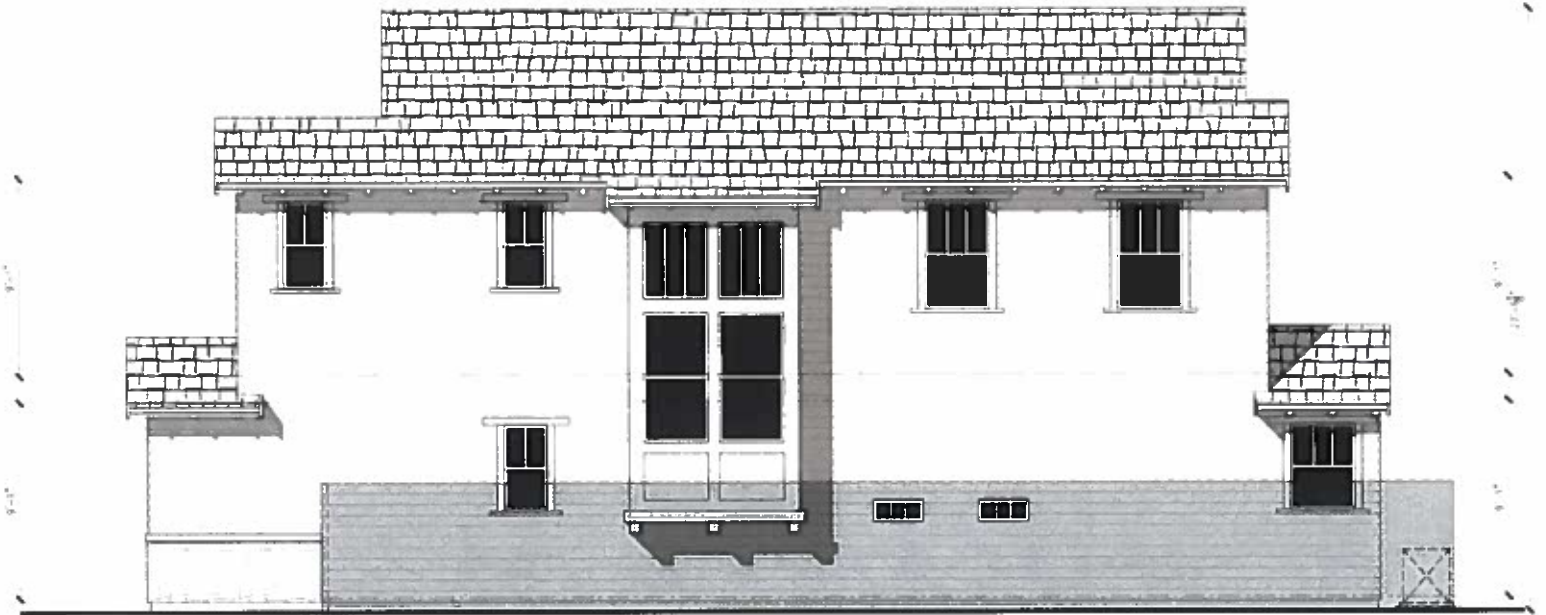
**Plan 3X**  
Partial Floor Plans



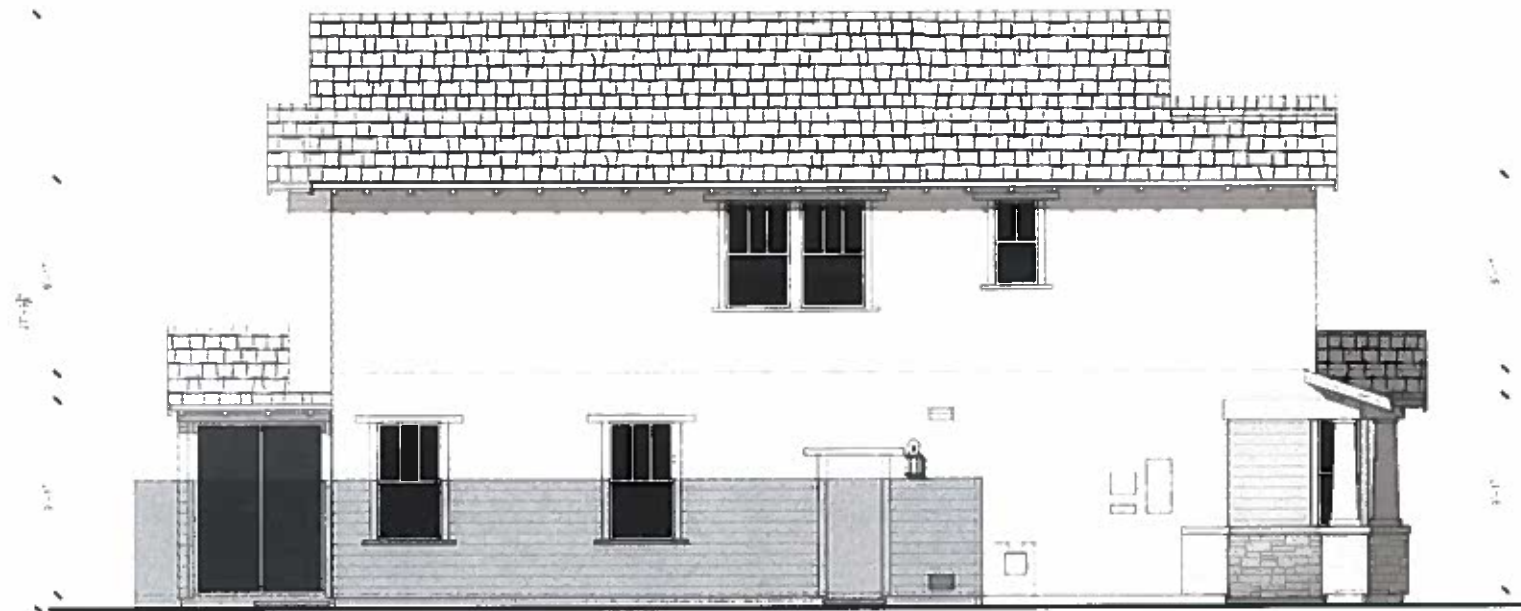




Rear Elevation



Right Elevation



Left Elevation



Front Elevation  
Color Scheme 5

**Plan 3X**  
Elevation 'B' - Craftsman  
2,697 SF

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City of Pleasanton, CA



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**A3-8**  
2014036

September 15, 2014

PONDEROSA HOMES  
**CENTERPOINTE PRESBYTERIAN CHURCH**  
 Pleasanton, California

Project #2014036

**EXTERIOR COLOR & MATERIALS**

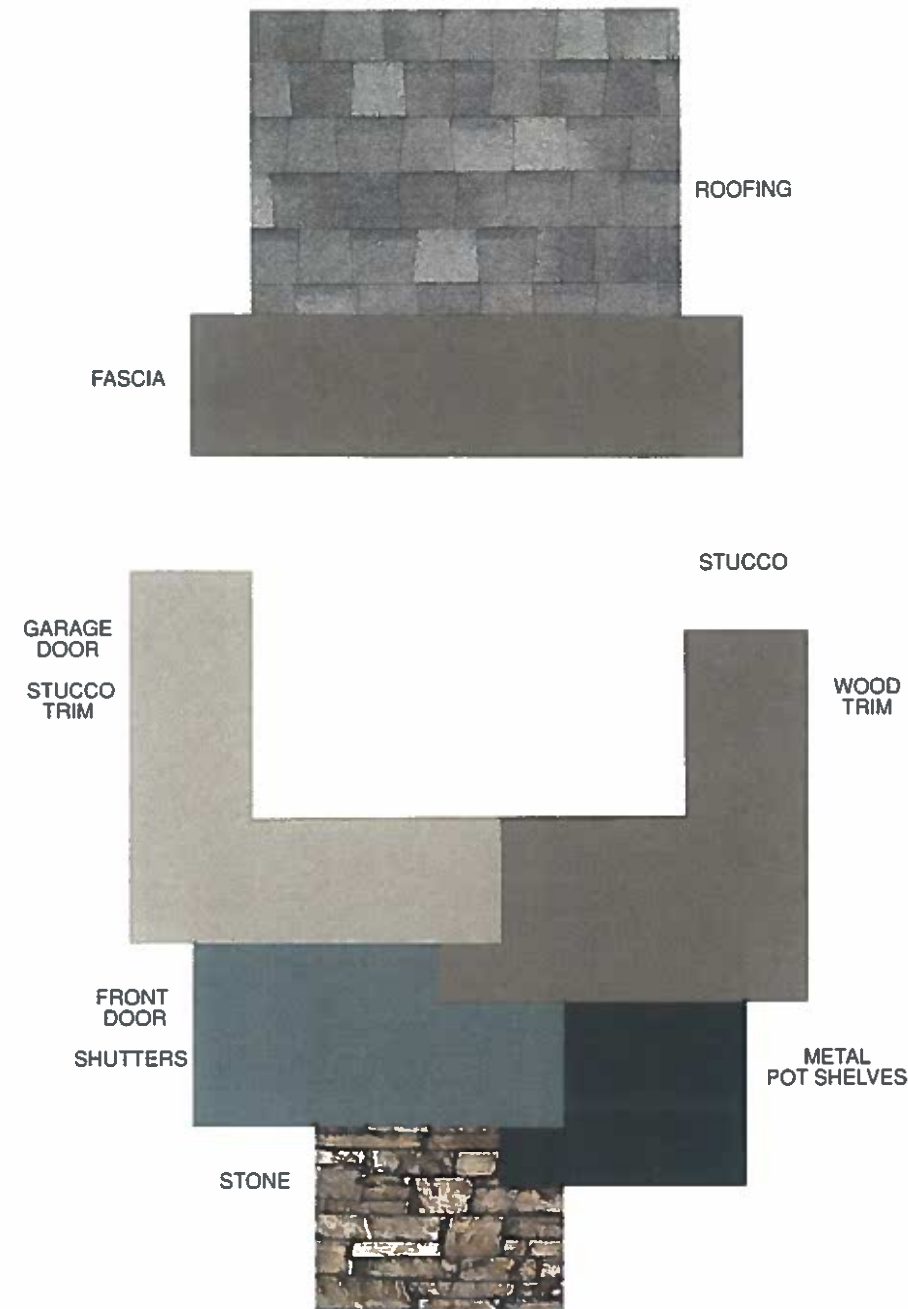
**SCHEME 1 of 7**

*Single Family 'A' Elevations Only, Cottage*

MATERIAL	COLOR	MANUFACTURER
<b>ROOFING:</b> Composition Shingles	GEORGETOWN GRAY LANDMARK	CERTAINTEED
<b>BRICK</b> (Standard Raked Joints)	ASPEN GROVE	H.C. MUDDOX
<b>MANUFACTURED STONE</b> (Standard Raked Joints)	MONTECITO CLIFFSTONE	ELDORADO
<b>MORTAR @ BRICK &amp; STONE</b>	KHAKI	ORCO
<b>GUTTERS &amp; DOWNSPOUTS</b>	Match Adjacent Color	KELLY-MOORE
<b>STUCCO COLOR</b>	KM 4641-1 BROWN MOUSE	KELLY-MOORE
<b>TRIM COLOR #1</b> (applied to): Garage Door Louvered Vents Secondary Doors Stucco Trim	KM 4601-2 DRIED GRASS	KELLY-MOORE
<b>TRIM COLOR #2</b> (applied to): Barge Boards Braces Eaves Fascia Wood Trim	KM 4581-3 BAT WING	KELLY-MOORE
<b>ACCENT COLOR</b> (applied to): Front Door Shutters	KM 5821-3 SANDPIPER COVE	KELLY-MOORE
<b>METAL COLOR</b> (applied to): Metal Pot Shelves	KMA 88-5 JAPANESE SABLE	KELLY-MOORE

Color Designer: Donna Aldrich

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SINGLE FAMILY 'A' ELEVATIONS ONLY - COTTAGE  
**CENTERPOINTE PRESBYTERIAN CHURCH**  
 PLEASANTON, CALIFORNIA

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*For exact color refer to manufacturers' actual samples*

**REVISIONS:**

REVISION NO.	DATE	DESCRIPTION
1	9/30/14	Brick added. Scheme 4 trim color #1 revised. Scheme 7 detail added.
2	3/12/15	Scheme 7 deleted.
3	6/15/15	New Scheme 7 added.

CENTERPOINTE PRESBYTERIAN CHURCH  
 City of Pleasanton, CA



September 15, 2014

PONDEROSA HOMES  
**CENTERPOINTE PRESBYTERIAN CHURCH**  
 Pleasanton, California

Project #2014036

**EXTERIOR COLOR & MATERIALS**

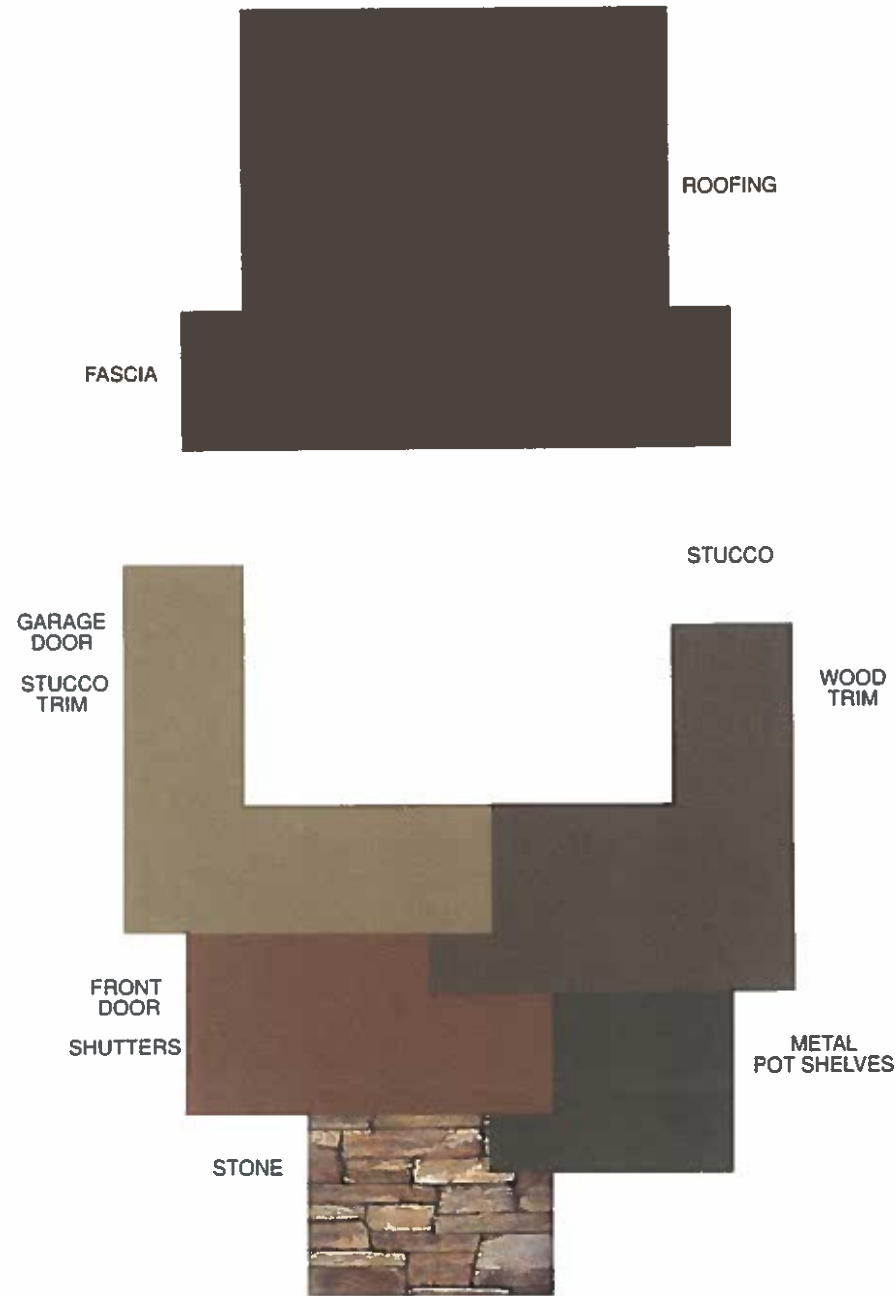
**SCHEME 2 of 7**

*Single Family 'A' Elevations Only, Cottage*

MATERIAL	COLOR	MANUFACTURER
ROOFING: Composition Shingles	BURNT SIENNA LANDMARK	CERTAINTEED
BRICK (Standard Raked Joints)	FOLSOM GOLD	H.C. MUDDOX
MANUFACTURED STONE (Standard Raked Joints)	CAMBRIA CLIFFSTONE	ELDORADO
MORTAR @ BRICK & STONE	CARAMEL	ORCO
GUTTERS & DOWNSPOUTS	Match Adjacent Color	KELLY-MOORE
STUCCO COLOR	KM 4689-1 GARDEN LATTICE	KELLY-MOORE
TRIM COLOR #1 (applied to): Garage Door Louvered Vents Secondary Doors Stucco Trim	KM 4630-3 HOWLING COYOTE	KELLY-MOORE
TRIM COLOR #2 (applied to): Barge Boards Braces Eaves Fascia Wood Trim	KM 4560-5 MEXICAN CHOCOLATE	KELLY-MOORE
ACCENT COLOR (applied to): Front Door Shutters	KM 4526-5 COFFEE BAR	KELLY-MOORE
METAL COLOR (applied to): Metal Pot Shelves	KM 4568-5 TEA CHEST	KELLY-MOORE

Color Designer: Donna Aldrich

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SINGLE FAMILY 'A' ELEVATIONS ONLY - COTTAGE

**CENTERPOINTE PRESBYTERIAN CHURCH**

PLEASANTON, CALIFORNIA

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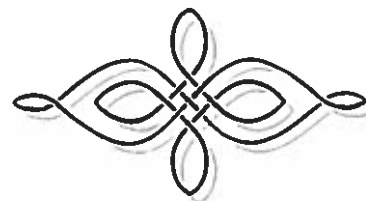
*For exact color refer to manufacturer's actual samples*

**REVISIONS:**

REVISION NO.	DATE	DESCRIPTION
1	9/30/14	Brick added. Scheme 4 trim color #1 revised. Scheme 7 detail added.
2	3/12/15	Scheme 7 deleted.
3	6/15/15	New Scheme 7 added.

CENTERPOINTE PRESBYTERIAN CHURCH

City of Pleasanton, CA



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September 15, 2014

PONDEROSA HOMES  
**CENTERPOINTE PRESBYTERIAN CHURCH**  
 Pleasanton, California

Project #2014036

**EXTERIOR COLOR & MATERIALS**

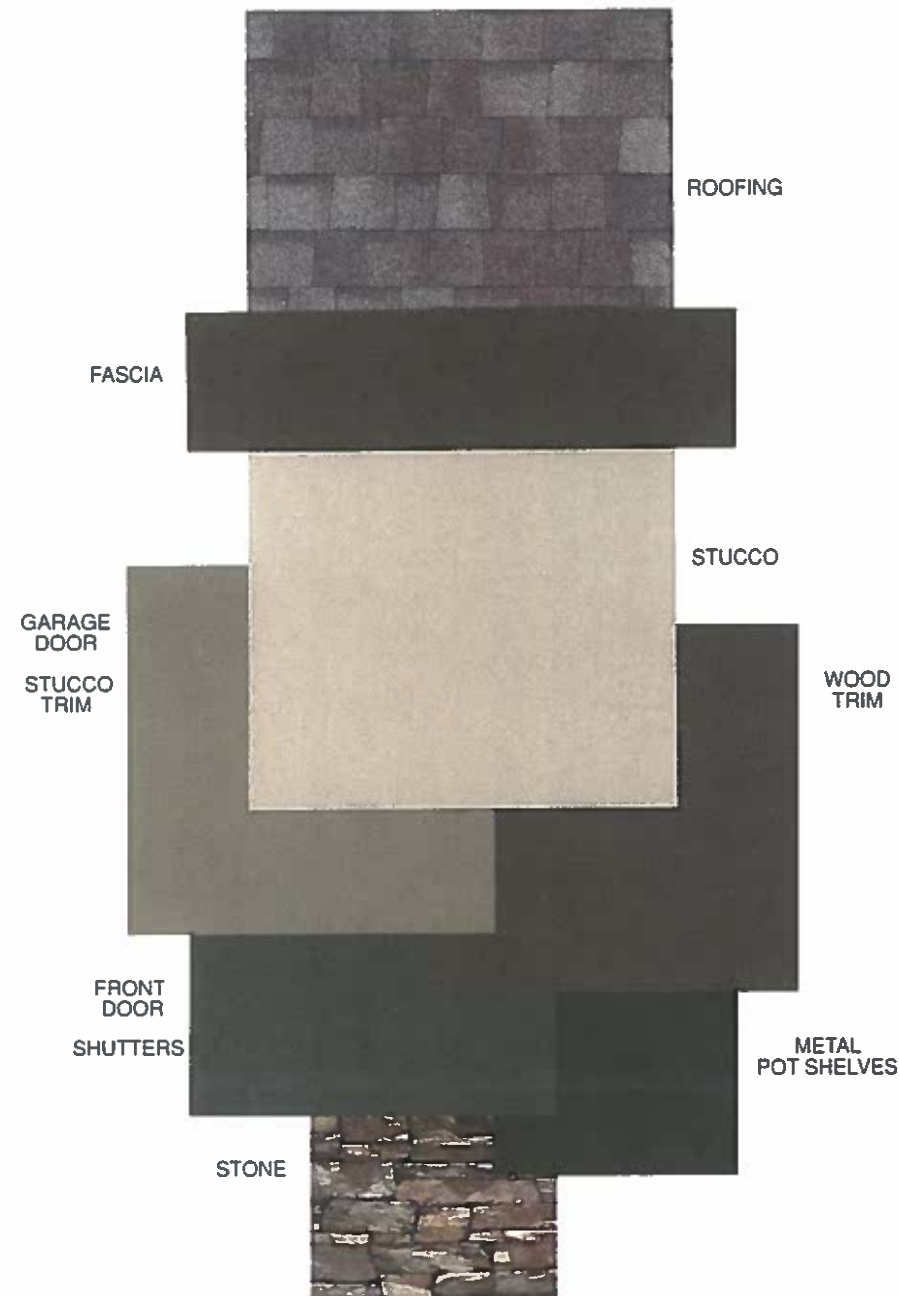
**SCHEME 3 of 7**

*Single Family 'A' Elevations Only, Cottage*

MATERIAL	COLOR	MANUFACTURER
<b>ROOFING:</b> Composition Shingles	WEATHERED WOOD LANDMARK	CERTAINTEED
<b>BRICK</b> (Standard Raked Joints)	MIDNIGHT SMOKE	H.C. MUDDOX
<b>MANUFACTURED STONE</b> (Standard Raked Joints)	MANZANITA CLIFFSTONE	ELDORADO
<b>MORTAR @ BRICK &amp; STONE</b>	BROWN	ORCO
<b>GUTTERS &amp; DOWNSPOUTS</b>	Match Adjacent Color	KELLY-MOORE
<b>STUCCO COLOR</b>	KM 4543-2 COFFEE DIVA	KELLY-MOORE
<b>TRIM COLOR #1</b> (applied to): Garage Door Louvered Vents Secondary Doors Stucco Trim	KM 5779-3 EAGLE'S MEADOW	KELLY-MOORE
<b>TRIM COLOR #2</b> (applied to): Barge Boards Braces Eaves Fascia Wood Trim	KM 4568-5 TEA CHEST	KELLY-MOORE
<b>ACCENT COLOR</b> (applied to): Front Door Shutters	KM 4792-5 FERN GULLY	KELLY-MOORE
<b>METAL COLOR</b> (applied to): Metal Pot Shelves	KM 4820-5 CANNON BALL	KELLY-MOORE

Color Designer: Donna Aldrich

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SINGLE FAMILY 'A' ELEVATIONS ONLY - COTTAGE

**CENTERPOINTE PRESBYTERIAN CHURCH**

PLEASANTON, CALIFORNIA

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*For exact color refer to manufacturers' actual samples.*

**REVISIONS:**

REVISION NO.	DATE	DESCRIPTION
1	9/30/14	Brick added. Scheme 4 trim color # 1 revised. Scheme 7 detail added.
2	3/12/15	Scheme 7 deleted.
3	6/15/15	New Scheme 7 added.



September 15, 2014

PONDEROSA HOMES  
**CENTERPOINTE PRESBYTERIAN CHURCH**  
 Pleasanton, California

Project #2014036

**EXTERIOR COLOR & MATERIALS**

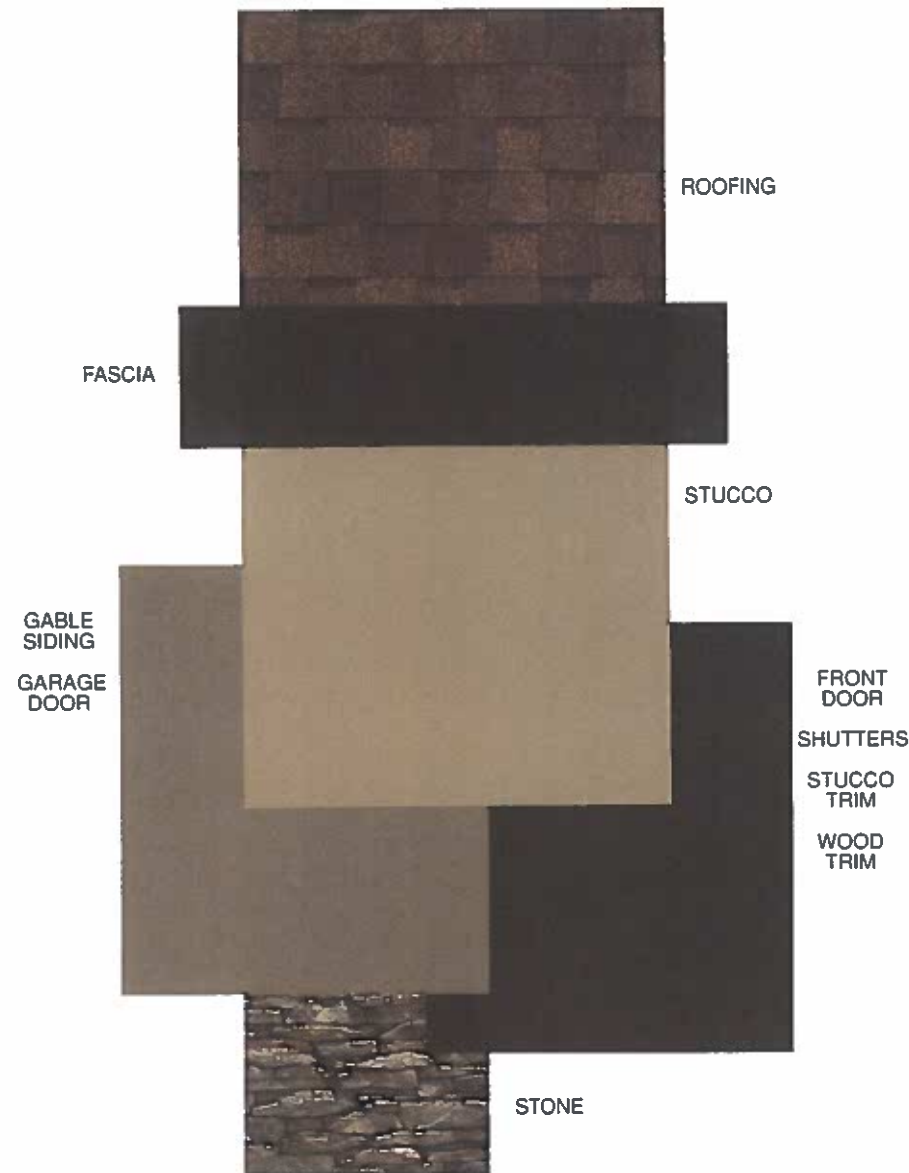
**SCHEME 4 of 7**

*Single Family 'B' Elevations Only, Craftsman*

MATERIAL	COLOR	MANUFACTURER
ROOFING: Composition Shingles	HEATHER BLEND LANDMARK	CERTAINTEED
BRICK (Standard Raked Joints)	FOLSOM GOLD	H.C. MUDDOX
MANUFACTURED STONE (Standard Raked Joints)	PRESCOTT BLUFFSTONE	ELDORADO
MORTAR @ BRICK & STONE	LATTE	ORCO
GUTTERS & DOWNSPOUTS	Match Adjacent Color	KELLY-MOORE
STUCCO COLOR	KM 4608-3 EARTHLY DELIGHT	KELLY-MOORE
TRIM COLOR #1 (applied to): Barge Boards Braces Columns Eaves Fascia Front Door Louvered Vents Outlookers Pot Shelves Railing Shutters Stucco Trim Wood Trim	417 OXFORD BROWN	KELLY-MOORE
TRIM COLOR #2 (applied to): Gable Siding Garage Door Secondary Doors	KM 5709-5 MILL CREEK	KELLY-MOORE

Color Designer: Donna Aldrich

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SINGLE FAMILY 'B' ELEVATIONS ONLY - CRAFTSMAN  
**CENTERPOINTE PRESBYTERIAN CHURCH**  
 PLEASANTON, CALIFORNIA

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*For exact color refer to manufacturers' actual samples.*

**REVISIONS:**

REVISION NO.	DATE	DESCRIPTION
1	9/30/14	Brick added. Scheme 4 trim color #1 revised. Scheme 7 detail added.
2	3/12/15	Scheme 7 deleted.
3	6/15/15	New Scheme 7 added.



September 15, 2014

PONDEROSA HOMES  
**CENTERPOINTE PRESBYTERIAN CHURCH**  
Pleasanton, California

Project #2014036

**EXTERIOR COLOR & MATERIALS**

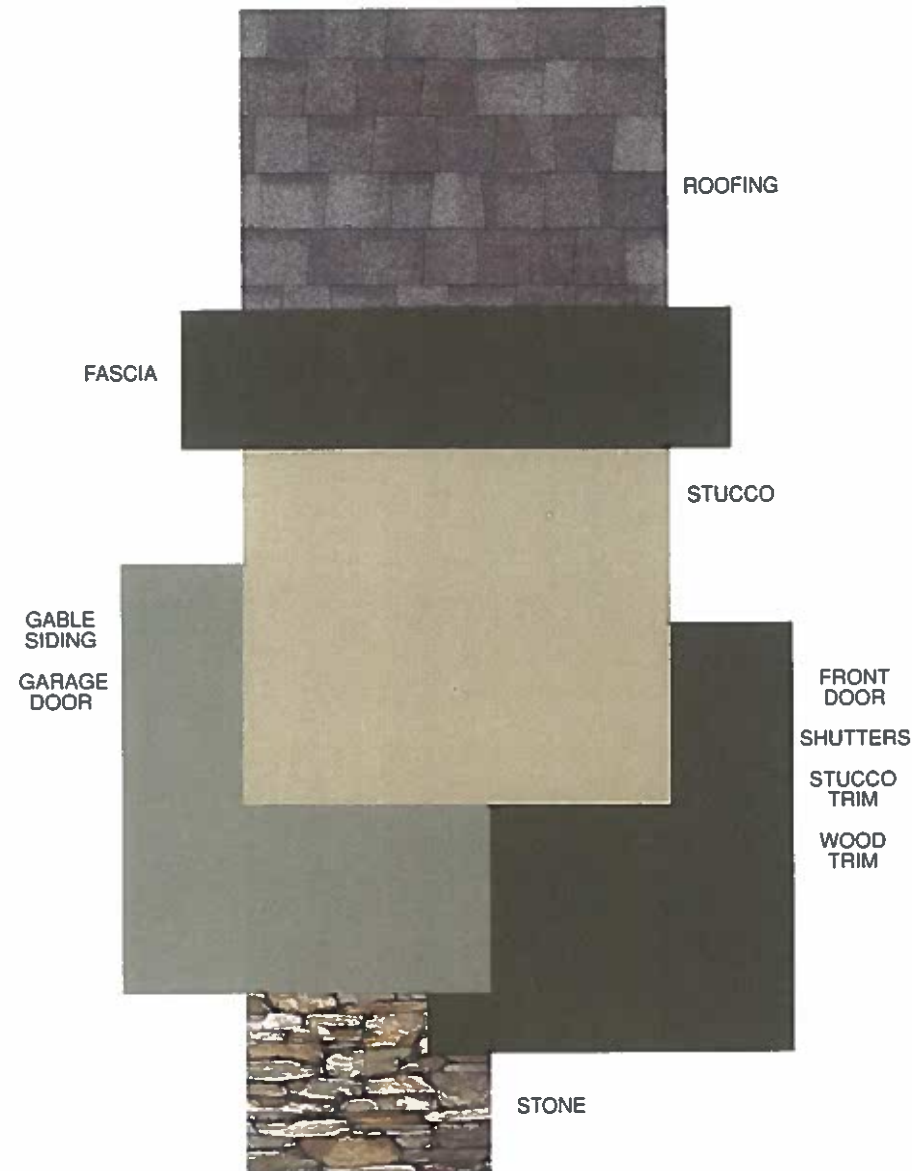
**SCHEME 5 of 7**

*Single Family 'B' Elevations Only, Craftsman*

MATERIAL	COLOR	MANUFACTURER
<b>ROOFING:</b> Composition Shingles	WEATHERED WOOD LANDMARK	CERTAINTEED
<b>BRICK</b> (Standard Raked Joints)	ASPEN GROVE	H.C. MUDDOX
<b>MANUFACTURED STONE</b> (Standard Raked Joints)	LA PLATA BLUFFSTONE	ELDORADO
<b>MORTAR @ BRICK &amp; STONE</b>	CARAMEL	ORCO
<b>GUTTERS &amp; DOWNSPOUTS</b>	Match Adjacent Color	KELLY-MOORE
<b>STUCCO COLOR</b>	KM 4678-3 HEMP ROPE	KELLY-MOORE
<b>TRIM COLOR #1</b> (applied to): Barge Boards Braces Columns Eaves Fascia Front Door Louvered Vents Outlookers Pot Shelves Railing Shutters Stucco Trim Wood Trim	KM 5762-5 HIKING BOOTS	KELLY-MOORE
<b>TRIM COLOR #2</b> (applied to): Gable Siding Garage Door Secondary Doors	KM 5768-3 SAGE ADVICE	KELLY-MOORE

Color Designer: Donna Aldrich

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SINGLE FAMILY 'B' ELEVATIONS ONLY - CRAFTSMAN  
**CENTERPOINTE PRESBYTERIAN CHURCH**

PLEASANTON, CALIFORNIA

9/15/14

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*For exact color refer to manufacturers' actual samples*

**REVISIONS:**

REVISION NO.	DATE	DESCRIPTION
1	9/30/14	Brick added. Scheme 4 trim color #1 revised. Scheme 7 detail added.
2	3/12/15	Scheme 7 deleted.
3	6/15/15	New Scheme 7 added.



September 15, 2014

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**CENTERPOINTE PRESBYTERIAN CHURCH**  
 Pleasanton, California

Project #2014036

**EXTERIOR COLOR & MATERIALS**

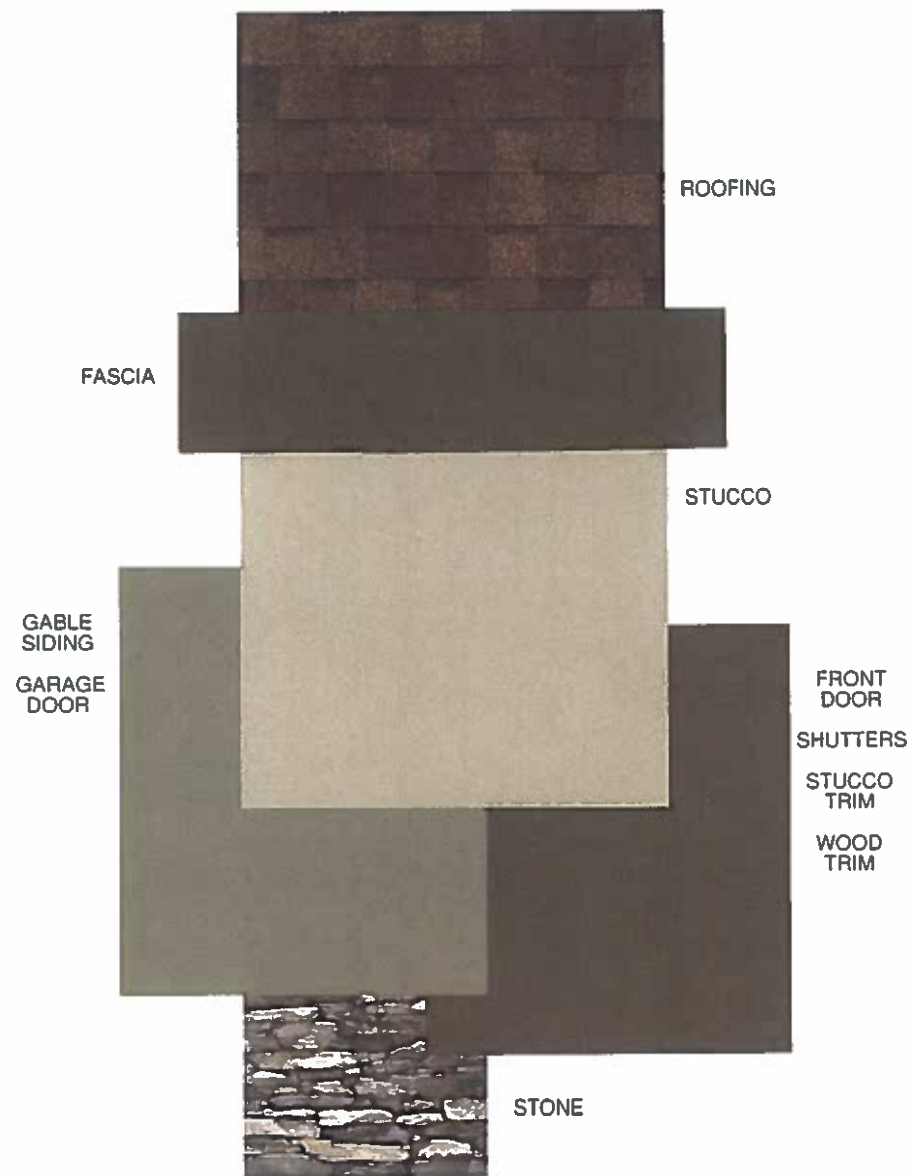
**SCHEME 6 of 7**

*Single Family 'B' Elevations Only, Craftsman*

MATERIAL	COLOR	MANUFACTURER
ROOFING: Composition Shingles	HEATHER BLEND LANDMARK	CERTAINTEED
BRICK (Standard Raked Joints)	MIDNIGHT SMOKE	H.C. MUDDOX
MANUFACTURED STONE (Standard Raked Joints)	MINERET BLUFFSTONE	ELDORADO
MORTAR @ BRICK & STONE	CARAMEL	ORCO
GUTTERS & DOWNSPOUTS	Match Adjacent Color	KELLY-MOORE
STUCCO COLOR	KM 4643-3 STICKS & STONES	KELLY-MOORE
TRIM COLOR #1 (applied to): Barge Boards Braces Columns Eaves Fascia Front Door Louvered Vents Outlookers Pot Shelves Railing Shutters Stucco Trim Wood Trim	KM 4554-5 BUFFALO DANCE	KELLY-MOORE
TRIM COLOR #2 (applied to): Gable Siding Garage Door Secondary Doors	KM 4707-3 HIDDEN COTTAGE	KELLY-MOORE

Color Designer: Donna Aldrich

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SINGLE FAMILY 'B' ELEVATIONS ONLY - CRAFTSMAN  
**CENTERPOINTE PRESBYTERIAN CHURCH**  
 PLEASANTON, CALIFORNIA

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*For exact color refer to manufacturers' actual samples*

**REVISIONS:**

REVISION NO.	DATE	DESCRIPTION
1	9/30/14	Brick added. Scheme 4 trim color #1 revised. Scheme 7 detail added.
2	3/12/15	Scheme 7 deleted.
3	6/15/15	New Scheme 7 added.



June 15, 2015

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 Pleasanton, California

Project #2014036

**EXTERIOR COLOR & MATERIALS**

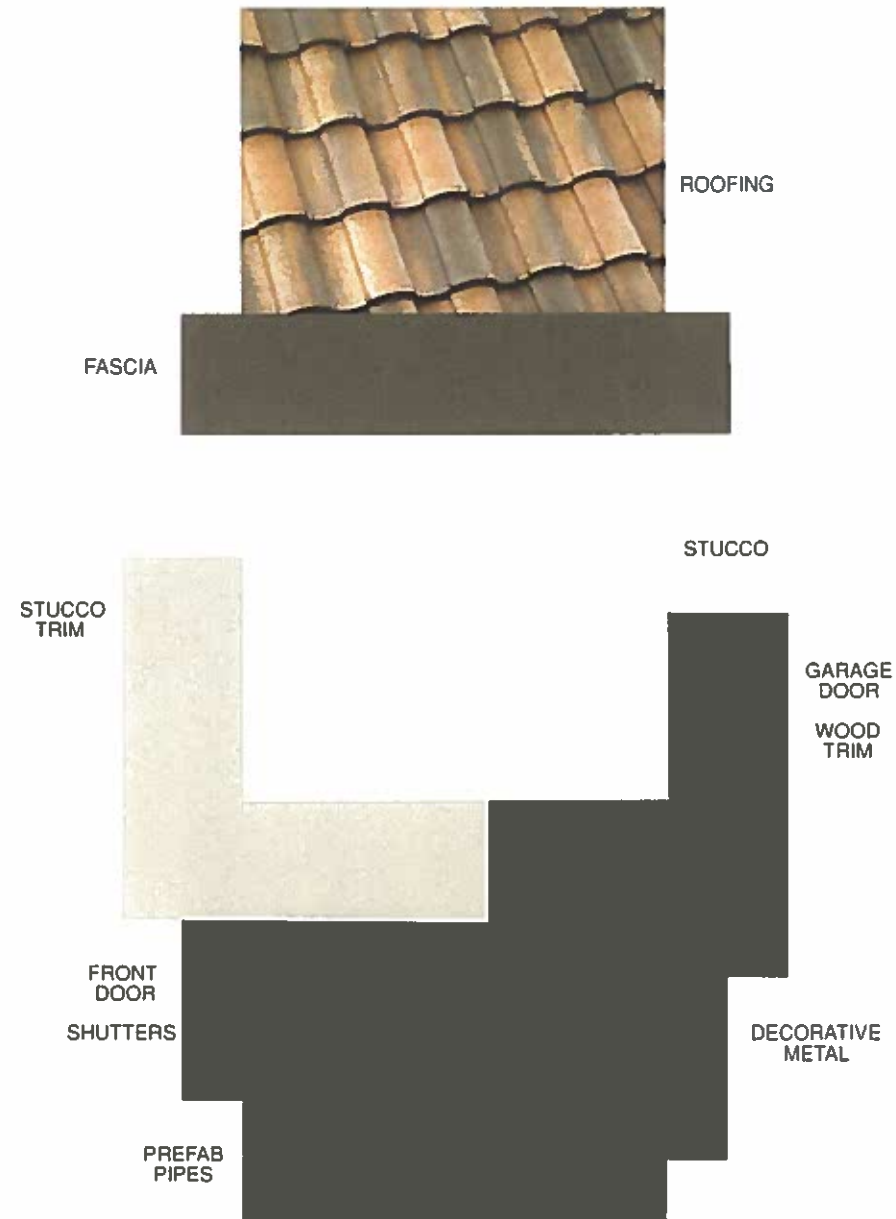
**SCHEME 7 of 7**

*Single Family 'C' Elevations Only, Spanish*

MATERIAL	COLOR	MANUFACTURER
<b>ROOFING:</b> Concrete 'S' Tile	3645 SUNRISE	EAGLE
<b>METAL BIRD STOP @ 'S' TILE</b> (Factory Finish)	TERRA COTTA	EAGLE
<b>GUTTERS &amp; DOWNSPOUTS</b>	Match Adjacent Color	KELLY-MOORE
<b>STUCCO COLOR</b>	14 FROST	KELLY-MOORE
<b>TRIM COLOR #1</b> (applied to): Secondary Doors Stucco Trim	230 GRAYSTONE	KELLY-MOORE
<b>TRIM COLOR #2</b> (applied to): Barge Boards Eaves Fascia Garage Door Rafter Tails Wood Trim	KM 5706-5 BONNIE'S BENCH	KELLY-MOORE
<b>ACCENT COLOR</b> (applied to): Front Door Shutters	KM 4841-5 THEATRE DRESS	KELLY-MOORE
<b>METAL COLOR</b> (applied to): Decorative Metal	407 CARBON	KELLY-MOORE
<b>PREFAB PIPES</b>	KM 5699-5 TAMARIND TART	KELLY-MOORE

Color Designer: Donna Aldrich

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SINGLE FAMILY 'C' ELEVATIONS ONLY - SPANISH

**CENTERPOINTE PRESBYTERIAN CHURCH**

PLEASANTON, CALIFORNIA

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**7**

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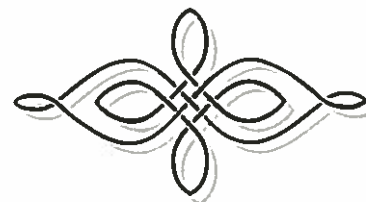
*For exact color refer to manufacturers actual samples*

**REVISIONS:**

REVISION NO.	DATE	DESCRIPTION
1	9/30/14	Brck added. Scheme 4 trim color #1 revised. Scheme 7 detail added.
2	3/12/15	Scheme 7 deleted.
3	6/15/15	New Scheme 7 added.

CENTERPOINTE PRESBYTERIAN CHURCH

City of Pleasanton, CA



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**PRELIMINARY TREE PALETTE**

BOTANICAL NAME	COMMON NAME	SIZE	WATER USE
<b>EXISTING TREES</b>			
<b>STREET TREES</b>			
ARBUTUS 'MARINA'	MARINA STRAWBERRY TREE	24" BOX	LOW
LAURUS N. 'SARATOGA'	SARATOGA LAUREL	24" BOX	LOW
PISTACHIA CHINENSIS	CHINESE PISTACHE	24" BOX	LOW
<b>ACCENT TREES</b>			
CERCIS OCCIDENTALIS	WESTERN REDBUD	15 GALLON	LOW
LAGERSTROEMIA INDICA	CRAPE MYRTLE	15 GALLON	LOW
OLEA EUROPAEA 'SAN GABRIEL'	FRUITLESS OLIVE	15 GALLON	LOW
PRUNUS CAROLINANA	CAROLINA CHERRY	15 GALLON	LOW
PRUNUS C. 'KRAUIER VESUVIUS'	PURPLE LEAF PLUM	15 GALLON	LOW
<b>OPEN SPACE TREES</b>			
QUERCUS AGRIFOLIA	COAST LIVE OAK	24" BOX	LOW

**BIO RETENTION AREA SHRUB PALETTE**

BOTANICAL NAME	COMMON NAME	SIZE	WATER USE
<b>SHRUBS - BIO-RETENTION AREAS</b>			
BUTTERFLY BUSH	BUTTERFLY BUSH	5 GALLON	LOW
BIRKBEY SEDGE	BIRKBEY SEDGE	1 GALLON	LOW
NO COMMON NAME	NO COMMON NAME	1 GALLON	LOW
PORTNIGHT LILY	PORTNIGHT LILY	1 GALLON	LOW
DWARF YALPOM	DWARF YALPOM	1 GALLON	LOW
CALIFORNIA RUSH	CALIFORNIA RUSH	1 GALLON	LOW
DWARF HEALVEYLY BAMBOO	DWARF HEALVEYLY BAMBOO	1 GALLON	LOW
CATMINT	CATMINT	1 GALLON	LOW
NEW ZEALAND FLAX	NEW ZEALAND FLAX	5 GALLON	LOW
CALIFORNIA WILD ROSE	CALIFORNIA WILD ROSE	5 GALLON	LOW
LAMBS EAR	LAMBS EAR	1 GALLON	LOW
WOOLY BLUE CURLS	WOOLY BLUE CURLS	1 GALLON	LOW
<b>GROUNDCOVER - BIO-RETENTION AREAS</b>			
ARCTOSTAPHYLOS D. 'EMERALD CARPET'	MANZANITA		LOW
MYOPORUM PARVIFOLIA	MYOPORUM		LOW

**GENERAL NOTES**

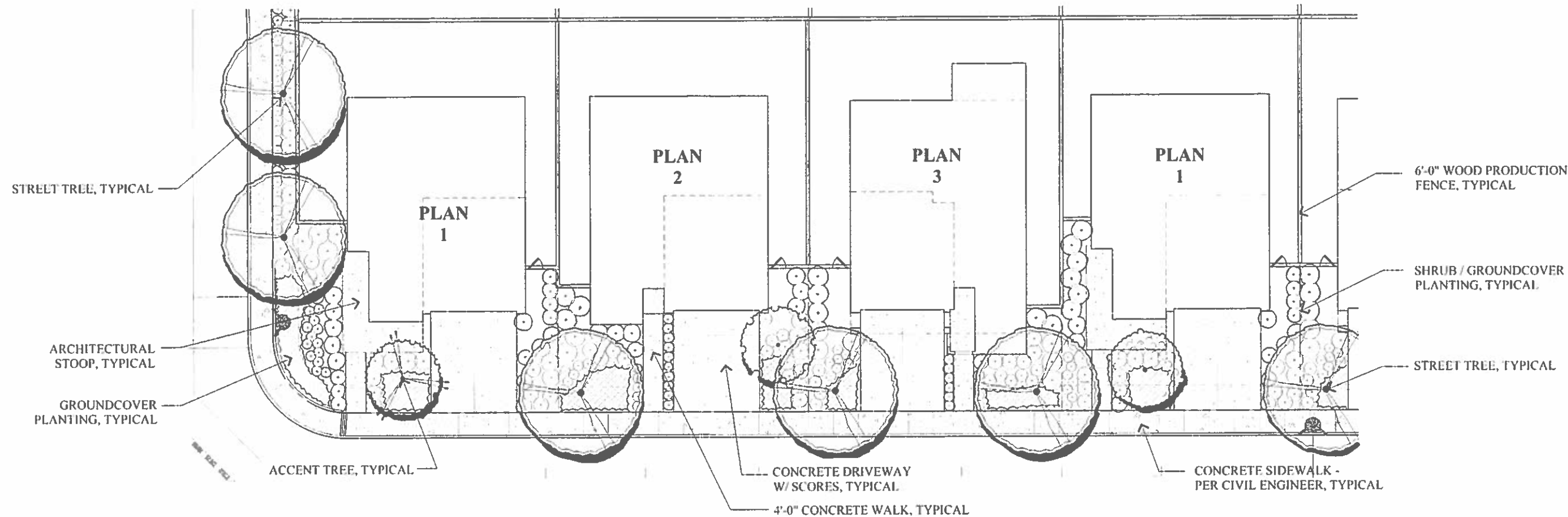
1. ALL STREET TREES TO BE PLANTED WITH ROOT BARRIERS PER CITY OF PLEASANTON STANDARD DETAILS
2. ALL TREES TO RECEIVE TREE STAKES PER CITY OF PLEASANTON STANDARD DETAILS
3. ALL PLANTING TO CONFORM TO CITY OF PLEASANTON WATER EFFICIENT LANDSCAPE ORDINANCE
4. SEE SHEET L2 FOR FULL PROPOSED PRELIMINARY PLANT PALETTE

**IRIPLEY DESIGN**  
 LANDSCAPE ARCHITECTURE  
 LAND PLANNING  
 1615 BONANZA STREET  
 SUITE 314  
 WALNUT CREEK, CA 94596  
 TEL: 925.938.7377  
 FAX: 925.938.7436

**PONDEROSA HOMES**  
**Preliminary Landscape Site Plan**

**The Villas at Ironwood**  
 Pleasanton, California

JULY 2015



**PRELIMINARY PROPOSED PLANT PALETTE**

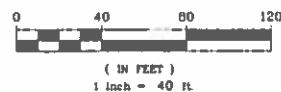
BOTANICAL NAME	COMMON NAME	SIZE	WATER USE	BOTANICAL NAME	COMMON NAME	SIZE	WATER USE	BOTANICAL NAME	COMMON NAME	SIZE	WATER USE
<b>TREES</b>				<b>SHRUBS - (CONT)</b>				<b>VINES</b>			
ARBUUS 'MARIA'	MARINA STRAWBERRY TREE	24" BOX	LOW	FESTUCA GLAUCA	BLUE FESCUE	1 GALLON	LOW	MACADYENA UNGUIS-CATI	YELLOW TRUMPET VINE	5 GALLON	LOW
LAURUS N. 'SARATOGA'	SARATOGA LAUREL	24" BOX	LOW	GREVILLEA 'NOELLE'	WOOLY GREVILLEA	5 GALLON	LOW	ROSA BANKSIAE	LADY BANKS ROSE	5 GALLON	LOW
PISTACHIA CHINENSIS	CHINESE PISTACHE	24" BOX	LOW	HELICTOTRICHON SEMPERVIRENS	BLUE OAT GRASS	1 GALLON	LOW	<b>GROUNDCOVERS</b>			
<b>ACCENT TREES</b>				HEX C. 'BURFORD'	BURFORD HOLLY	5 GALLON	LOW	ARCTOSTAPHYLOS D. 'EMERALD CARPET'	BEARDBERRY	1 GALLON @ 36" O.C.	LOW
CERDUS OCCIDENTALIS	WESTERN REDBUD	15 GALLON	LOW	HEX VOMITORIA 'NANA'	DWARF YAUPOH HOLLY	1 GALLON	LOW	MYOPORUM PARVIFOLIUM	MYOPORUM	1 GALLON @ 36" O.C.	LOW
LAGERSTROEMIA INDICA	GRAPE MYRTLE	15 GALLON	LOW	JUNIPERUS S. 'MEDORA'	COLUMNAR JUNIPER	5 GALLON	LOW	SCAEVOLA 'MAUVE CLUSTERS'	FAN FLOWER	1 GALLON @ 36" O.C.	LOW
OLEA EUOPAEA 'SAN GABRIEL'	FRUITLESS OLIVE	15 GALLON	LOW	LANTANA MONTEVIDENSIS	TRAILING LANTANA	1 GALLON	LOW	<b>SHRUBS - BIO-SWALE</b>			
PRUNUS CAROLINANA	CAROLINA CHERRY	15 GALLON	LOW	LAVATERA MARITIMA	TREE MALLOW	5 GALLON	LOW	BUDOLEJA DAVIDI	BUTTERFLY BUSH	5 GALLON	LOW
PRUNUS C. 'RAUTER VESUVIUS'	PURPLE-LEAF PLUM	5 GALLON	LOW	LOROPETALUM CHINENSE	CHINESE FRINGE FLOWER	5 GALLON	LOW	CAREX TUMICOLA	BERKELEY SEDGE	1 GALLON	LOW
<b>SHRUBS - FRONTYARD</b>				LOROPETALUM C. 'RAZZI EBERRY'	RED FRINGE FLOWER	5 GALLON	LOW	DIANELLA INTERMEDIA	NO COMMON NAME	1 GALLON	LOW
ARBUUS U. 'COMPACTA'	COMPACT STRAWBERRY TREE	5 GALLON	LOW	MUHLEBERGIA RIDGNS	DEER GRASS	5 GALLON	LOW	DIETES BICOLOR	FORNIGHT LILY	1 GALLON	LOW
ARCTOSTAPHYLOS 'HOWARD McMINN'	MANZANITA	5 GALLON	LOW	MYRTUS C. 'COMPACTA'	DWARF MYRTLE	5 GALLON	LOW	HEX VOMITORIA 'NANA'	DWARF YAUPOH	1 GALLON	LOW
BERBERIS 'CRIMSON PYGMY'	DWARF RED BARBERRY	1 GALLON	LOW	NANDINA DOMESTICA	HEAVENLY BAMBOO	5 GALLON	LOW	JUNCUS PATENS	CALIFORNIA RUSH	1 GALLON	LOW
BERBERIS 'AUREA'	DWARF GOLD BARBERRY	1 GALLON	LOW	NANDINA D. 'COMPACTA'	DWARF HEAVENLY BAMBOO	5 GALLON	LOW	NANDINA DOMESTICA 'GULF STREAM'	DWARF HEAVENLY BAMBOO	1 GALLON	LOW
BUDOLEJA DAVIDI	BUTTERFLY BUSH	5 GALLON	LOW	NANDINA D. 'GULF STREAM'	GULF STREAM BAMBOO	1 GALLON	LOW	NEPETA FAASSENII	CATMINT	1 GALLON	LOW
OSTIUS HYBRIDUS	ROCKROSE	5 GALLON	LOW	NEPETA FAASSENII	CAIMINT	1 GALLON	LOW	PHORMIUM T. 'MAORI MAIDEN'	NEW ZEALAND FLAX	5 GALLON	LOW
DIETES BICOLOR	FORNIGHT LILY	1 GALLON	LOW	OLEA E. 'LITTLE OLLIE'	DWARF OLIVE	5 GALLON	LOW	PHORMIUM 'YELLOW WAVE'	DWARF NEW ZEALAND FLAX	1 GALLON	LOW
DIETES IRIDIODES	FORNIGHT LILY	1 GALLON	LOW	OLEA E. 'LITTLE OLLIE'	DWARF OLIVE	5 GALLON	LOW	PHORMIUM 'YELLOW WAVE'	DWARF NEW ZEALAND FLAX	1 GALLON	LOW
EUDONYMUS J. 'MACROPHYLLUS'	BOXLEAF EUDONYMUS	5 GALLON	LOW	PENNISETUM 'HAMELY'	DWARF FOUNTAIN GRASS	1 GALLON	LOW	PRUNUS 'BRIGHT & TIGHT'	BRIGHT & TIGHT LAUREL	5 GALLON	LOW
EURYTOPS P. 'MUNCHKIN'	DWARF EURYTOPS	1 GALLON	LOW	PHORMIUM T. 'MAORI MAIDEN'	NEW ZEALAND FLAX	5 GALLON	LOW	PRACANTHA 'SANTA CRUZ'	PROSTRATE FIRETHORN	1 GALLON	LOW
FELICIA SELLOWIANA	PINEAPPLE GUAVA	5 GALLON	LOW	PHORMIUM 'SEA MIST'	DWARF NEW ZEALAND FLAX	1 GALLON	LOW	RHAPHIDOLEPIS I. 'BALLERINA'	INDIA HAWTHORN	5 GALLON	LOW
				PHORMIUM 'SEA MIST'	DWARF NEW ZEALAND FLAX	1 GALLON	LOW	RHAPHIDOLEPIS I. 'WHITE ENCHANTRESS'	INDIA HAWTHORN	5 GALLON	LOW
				PHORMIUM 'YELLOW WAVE'	DWARF NEW ZEALAND FLAX	1 GALLON	LOW	ROSA 'CECILE BRUNNER'	ROSEMARY	5 GALLON	LOW
				PRUNUS 'BRIGHT & TIGHT'	BRIGHT & TIGHT LAUREL	5 GALLON	LOW	ROSMARINUS 'TUSCAN BLUE'	ROSEMARY	5 GALLON	LOW
				PRACANTHA 'SANTA CRUZ'	PROSTRATE FIRETHORN	1 GALLON	LOW	ROSMARINUS 'TUSCAN BLUE'	ROSEMARY	5 GALLON	LOW
				RHAPHIDOLEPIS I. 'BALLERINA'	INDIA HAWTHORN	5 GALLON	LOW	STRANGIA VILGARS	COMMON LILAC	5 GALLON	LOW
				RHAPHIDOLEPIS I. 'WHITE ENCHANTRESS'	INDIA HAWTHORN	5 GALLON	LOW	XYLOSMA C. 'COMPACTA'	COMPACT XYLOSMA	5 GALLON	LOW
				ROSA 'CECILE BRUNNER'	ROSEMARY	5 GALLON	LOW				
				ROSMARINUS 'TUSCAN BLUE'	ROSEMARY	5 GALLON	LOW				
				ROSMARINUS 'TUSCAN BLUE'	ROSEMARY	5 GALLON	LOW				
				STRANGIA VILGARS	COMMON LILAC	5 GALLON	LOW				
				XYLOSMA C. 'COMPACTA'	COMPACT XYLOSMA	5 GALLON	LOW				
								ARCTOSTAPHYLOS D. 'EMERALD CARPET'	MANZANITA	1 GALLON @ 36" O.C.	LOW
								MYOPORUM PARVIFOLIUM	MYOPORUM	1 GALLON @ 36" O.C.	LOW

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- ALL TREES TO BE PLANTED WITH TREE STAKES PER CITY OF PLEASANTON STANDARD DETAILS.
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GRAPHIC SCALE



**LANDSCAPE ARCHITECTURE**  
**LAND PLANNING**  
 1615 BONANZA STREET  
 SUITE 314  
 WALNUT CREEK, CA 94596  
 TEL: 925 938 7377  
 FAX: 925 938 7436



PONDEROSA HOMES

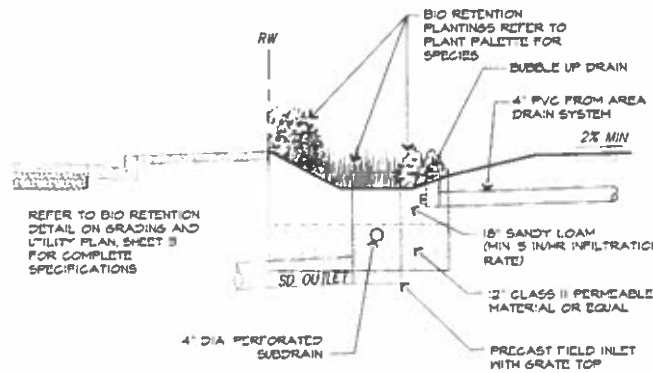


**Preliminary Front Yard Typical  
 Production Landscape**

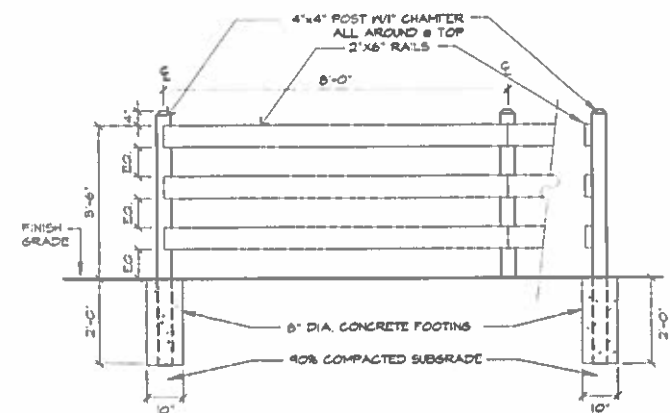
**The Villas at Ironwood**  
 Pleasanton, California

JULY 2015

L2

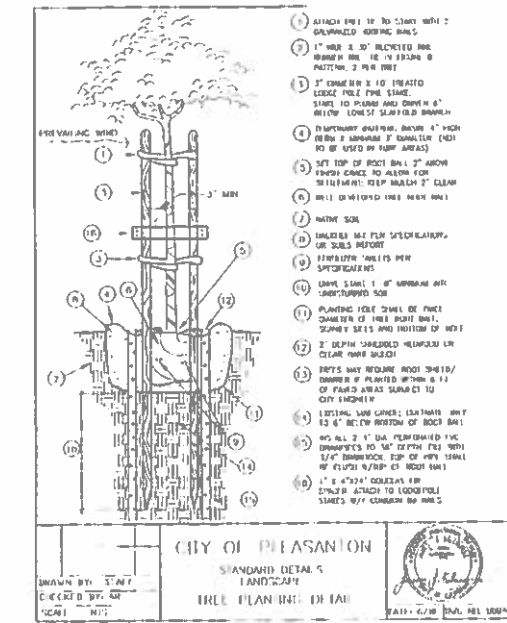


**A BIO-RETENTION PLANTING** SCALE: 3/8" = 1'-0"

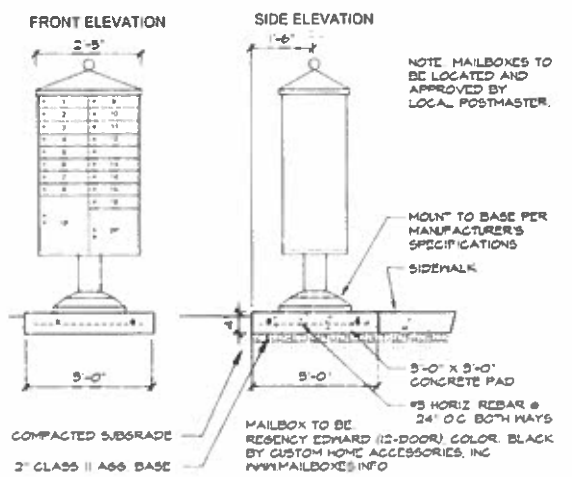


NOTE:  
 1. ALL HARDWARE TO BE GALVANIZED  
 2. ALL WOOD TO BE PRESSURE TREATED  
 3. FENCE TO BE STAINED "BEECHWOOD" BY SHERWIN-WILLIAMS

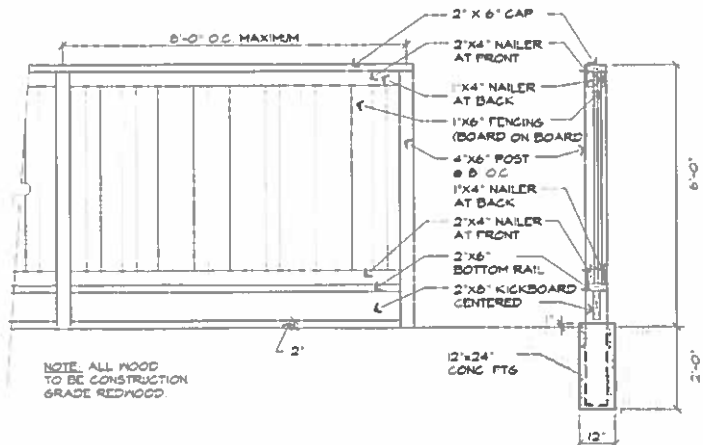
**B 3-RAIL FENCE** SCALE: 1/2" = 1'-0"



CITY OF PLEASANTON  
 STANDARD DETAIL 5  
 LANDSCAPE  
 TREE PLANTING DETAIL



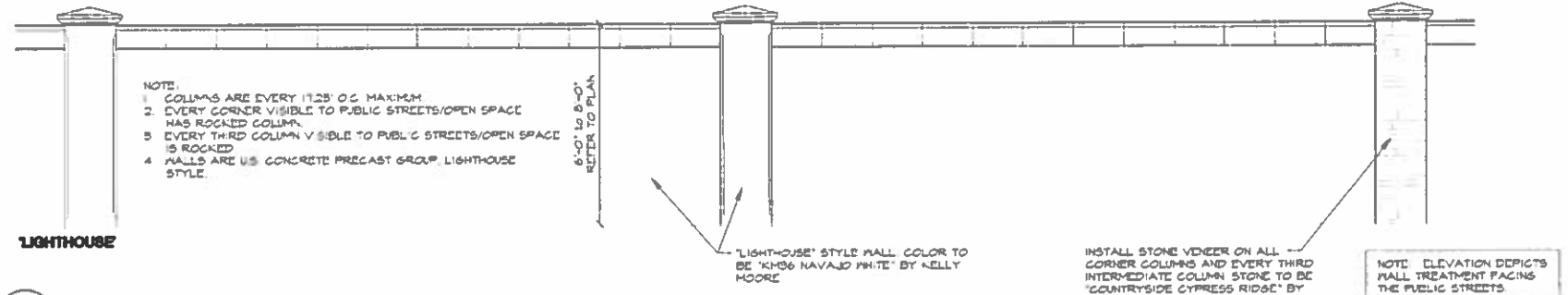
**C COMMUNITY MAILBOXES**



**D WOOD FENCE W/KICKBOARD** SCALE: 1/2" = 1'-0"



**F SCHOOL SIGN MONUMENT**



**E PRECAST WALL** SCALE: NTS



# NEW HOME RATING SYSTEM, VERSION 6.0

## SINGLE FAMILY CHECKLIST

**PUD-111**  
**P15-0248, P15-0249**  
**P15-0250 & P15-0390**  
**RECEIVED July 21, 2015**  
**EXHIBIT B**

The GreenPoint Rated checklist tracks green features incorporated into the home. GreenPoint Rated is administered by Build It Green, a non-profit whose mission is to promote healthy, energy and resource efficient buildings in California.

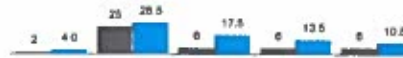
The minimum requirements of GreenPoint Rated are verification of 50 or more points. Earn the following minimum points per category: Community (2), Energy (25), Indoor Air Quality/Health (6), Resources (6), and Water (6), and meet the prerequisites CALGreen Mandatory, H0 1, J5 1, O1.

The criteria for the green building practices listed below are described in the GreenPoint Rated Single Family Rating Manual. For more information please visit [www.builditgreen.org/greenpointrated](http://www.builditgreen.org/greenpointrated). Build It Green is not a code enforcement agency.

Points Achieved: **74**

Certification Level: **Certified**

### POINTS REQUIRED



# Minimum Points  
 # Achieved Points

A home is only GreenPoint Rated if all features are verified by a Certified GreenPoint Rater through Build It Green.

Single Family New Home Version 6.0.2

Center Point Property 3410 CORNERSTONE CT, PLS CA 94566		Points Achieved	Community	Energy	IAQ/Health	Resources	Water	Notes
MEASURES		Possible Points						
CALGreen	Yes	CALGreen Res (REQUIRED)	4	1	1	1	1	
<b>A. SITE</b>								
TBD	A1	Construction Footprint				1		
Yes	A2	Job Site Construction Waste Diversion				2		
TBD	A2	1 65% C&D Waste Diversion (Including Alternative Daily Cover)				2		
TBD	A2	2 65% C&D Waste Diversion (Excluding Alternative Daily Cover)				1		
TBD	A2	3 Recycling Rates from Third-Party Verified Mixed-Use Waste Facility				1		
TBD	A3	Recycled Content Base Material				1		
TBD	A4	Heat Island Effect Reduction (Non-Roof)		1		1		
TBD	A5	Construction Environmental Quality Management Plan Including Flush-Out			1			
TBD	A6	Stormwater Control: Prescriptive Path						
TBD	A6	1 Permeable Paving Material					1	
Yes	A6	2 Filtration and/or Bio-Retention Features					1	
TBD	A6	3 Non-Leaching Roofing Materials					1	
TBD	A6	4 Smart Stormwater Street Design					1	
TBD	A7	Stormwater Control: Performance Path					3	
<b>B. FOUNDATION</b>								
Yes	B1	Fly Ash and/or Slag in Concrete	1			1		
TBD	B2	Redon-Resistant Construction			2			
TBD	B3	Foundation Drainage System			1	2		
TBD	B4	Moisture Controlled Crawlspace			1			
TBD	B5	Structural Pest Controls						
TBD	B5	1 Termite Shields and Separated Exterior Wood-to-Concrete Connections					1	
TBD	B5	2 Plant Trunks, Bases, or Stems at Least 36 Inches from the Foundation					1	
<b>C. LANDSCAPE</b>								
Enter the landscape area percentage								
Yes	C1	Plants Grouped by Water Needs (Hydrozoning)	1				1	
TBD	C2	Three Inches of Mulch in Planting Beds					1	
<b>C3. Resource Efficient Landscapes</b>								
Yes	C3	1 No Invasive Species Listed by Cal-IPC	1			1		
Yes	C3	2 Plants Chosen and Located to Grow to Natural Size	1			1		
Yes	C3	3 Drought Tolerant, California Native, Mediterranean Species, or Other Appropriate Species	3				3	
<b>C4. Minimal Turf in Landscape</b>								
Yes	C4	1 No Turf on Slopes Exceeding 10% and No Overhead Sprinklers Installed in Areas Less Than Eight Feet Wide	0				2	
≤10%	C4	2 Turf on a Small Percentage of Landscaped Area	0				2	
TBD	C5	Trees to Moderate Building Temperature		1	1		1	
Yes	C6	High-Efficiency Irrigation System					2	
Yes	C7	One Inch of Compost in the Top Six to Twelve Inches of Soil					2	
TBD	C8	Rainwater Harvesting System					3	
TBD	C9	Recycled Wastewater Irrigation System					1	
TBD	C10	Submeter or Dedicated Meter for Landscape Irrigation					2	
TBD	C11	Landscape Meets Water Budget					2	
<b>C12. Environmentally Preferable Materials for Site</b>								
TBD	C12	1 Environmentally Preferable Materials for 70% of Non-Plant Landscape Elements and Fencing				1		
TBD	C13	Reduced Light Pollution		1				
TBD	C14	Large Stature Tree(s)		1				
TBD	C15	Third Party Landscape Program Certification					1	
TBD	C16	Maintenance Contract with Certified Professional					1	

D. STRUCTURAL FRAME AND BUILDING ENVELOPE									
<b>D1. Optimal Value Engineering</b>									
TBD	D1.1 Joists, Rafters, and Studs at 24 Inches on Center								2
Yes	D1.2 Non-Load Bearing Door and Window Headers Sized for Load	1							1
TBD	D1.3 Advanced Framing Measures								2
TBD	<b>D2. Construction Material Efficiencies</b>								1
<b>D3. Engineered Lumber</b>									
Yes	D3.1 Engineered Beams and Headers	1							1
Yes	D3.2 Wood I-Joists or Web Trusses for Floors	1							1
TBD	D3.3 Engineered Lumber for Roof Rafters								1
TBD	D3.4 Engineered or Finger-Jointed Studs for Vertical Applications								1
Yes	D3.5 OSB for Subfloor	0.5							0.5
Yes	D3.6 OSB for Wall and Roof Sheathing	0.5							0.5
TBD	<b>D4. Insulated Headers</b>								
<b>D5. FSC-Certified Wood</b>									
TBD	D5.1 Dimensional Lumber, Studs, and Timber								6
TBD	D5.2 Panel Products								3
<b>D6. Solid Wall Systems</b>									
TBD	D6.1 At Least 80% of Floors								1
TBD	D6.2 At Least 90% of Exterior Walls			1					1
TBD	D6.3 At Least 80% of Roofs			1					1
TBD	<b>D7. Energy Heels on Roof Trusses</b>			1					1
TBD	<b>D8. Overhangs and Gutters</b>			1					1
<b>D9. Reduced Pollution Entering the Home from the Garage</b>									
TBD	D9.1 Detached Garage							2	
Yes	D9.2 Mitigation Strategies for Attached Garage	1						1	
<b>D10. Structural Pest and Rot Controls</b>									
TBD	D10.1 All Wood Located At Least 12 Inches Above the Soil								1
TBD	D10.2 Wood Framing Treated With Borates or Factory-Impregnated, or Wall Materials Other Than Wood								1
TBD	<b>D11. Moisture-Resistant Materials In Wet Areas (such as Kitchen, Bathrooms, Utility Rooms, and Basements)</b>							1	1
<b>E. EXTERIOR</b>									
TBD	E1 Environmentally Preferable Decking								1
TBD	E2 Flashing Installation Third-Party Verified								2
TBD	E3 Rain Screen Wall System								2
Yes	E4 Durable and Non-Combustible Cladding Materials	1							1
<b>E5. Durable Roofing Materials</b>									
TBD	E5.1 Durable and Fire Resistant Roofing Materials or Assembly								1
TBD	E6. Vegetated Roof		2	2					
<b>F. INSULATION</b>									
<b>F1. Insulation with 30% Post-Consumer or 60% Post-Industrial Recycled Content</b>									
Yes	F1.1 Walls and Floors	1							1
Yes	F1.2 Ceilings	1							1
<b>F2. Insulation that Meets the CDPH Standard Method-Residential for Low Emissions</b>									
TBD	F2.1 Walls and Floors							1	
TBD	F2.2 Ceilings							1	
<b>F3. Insulation That Does Not Contain Fire Retardants</b>									
Yes	F3.1 Cavity Walls and Floors	1						1	
Yes	F3.2 Ceilings	1						1	
Yes	F3.3 Interior and Exterior	1						1	
<b>G. PLUMBING</b>									
<b>G1. Efficient Distribution of Domestic Hot Water</b>									
TBD	G1.1 Insulated Hot Water Pipes			1					
TBD	G1.2 WaterSense Volume Limit for Hot Water Distribution								1
TBD	G1.3 Increased Efficiency in Hot Water Distribution								2
<b>G2. Install Water-Efficient Fixtures</b>									
Yes	G2.1 WaterSense Showerheads with Matching Compensation Valve	2							2
Yes	G2.2 WaterSense Bathroom Faucets	1							1
Yes	G2.3 WaterSense Toilets with a Maximum Performance (MaP) Threshold of No Less Than 500 Grams	1							1
TBD	G3. Pre-Plumbing for Graywater System								1
TBD	G4. Operational Graywater System								3
<b>H. HEATING, VENTILATION, AND AIR CONDITIONING</b>									
<b>H1. Sealed Combustion Units</b>									
Yes	H1.1 Sealed Combustion Furnace	1						1	
Yes	H1.2 Sealed Combustion Water Heater	2						2	
TBD	<b>H2. High Performing Zoned Hydronic Radiant Heating System</b>			1				1	
<b>H3. Effective Ductwork</b>									
Yes	H3.1 Duct Mastic on Duct Joints and Seams	1						1	
TBD	H3.2 Pressure Balance the Ductwork System							1	
Yes	<b>H4. ENERGY STAR® Bathroom Fans Per HVI Standards with Air Flow Verified</b>	1						1	
<b>H5. Advanced Practices for Cooling</b>									
TBD	H5.1 ENERGY STAR Ceiling Fans in Living Areas and Bedrooms							1	
<b>H6. Whole House Mechanical Ventilation Practices to Improve Indoor Air Quality</b>									
Yes	H6.1 Meet ASHRAE 62.2-2010 Ventilation Residential Standards	Y	R	R	R	R	R	R	R
TBD	H6.2 Advanced Ventilation Standards							1	
TBD	H6.3 Outdoor Air Ducted to Bedroom and Living Areas							2	
<b>H7. Effective Range Hood Design and Installation</b>									
Yes	H7.1 Effective Range Hood Ducting and Design	1						1	
TBD	H7.2 Automatic Range Hood Control							1	
Yes	<b>H8. No Fireplace or Sealed Gas Fireplace</b>	1						1	
Yes	<b>H9. Humidity Control Systems</b>	1						1	
TBD	H10. Register Design Per ACCA Manual T						1		
Yes	H11. High Efficiency HVAC Filter (MERV 8+)	1						1	
<b>I. RENEWABLE ENERGY</b>									
TBD	I1. Pre-Plumbing for Solar Water Heating							1	
TBD	I2. Preparation for Future Photovoltaic Installation							1	
	I3. Onsite Renewable Generation (Solar PV, Solar Thermal, and Wind)							25	
<b>I4. Net Zero Energy Home</b>									
TBD	I4.1 Near Zero Energy Home							2	
TBD	I4.2 Net Zero Electric							4	
<b>J. BUILDING PERFORMANCE AND TESTING</b>									
TBD	J1. Third-Party Verification of Quality of Insulation Installation								1
TBD	J2. Supply and Return Air Flow Testing							1	1
Yes	J3. Mechanical Ventilation Testing and Low Leakage	1						1	1
TBD	J4. Combustion Appliance Safety Testing								1
2013	J5. Building Performance Exceeds Title 24 Part 6								
10.00%	J5.1 Home Outperforms Title 24 Part 6	25							60
TBD	J6. Title 24 Prepared and Signed by a CABEC Certified Energy Analyst							1	
Yes	J7. Participation in Utility Program with Third-Party Plan Review	1						1	
TBD	J8. ENERGY STAR for Homes							1	
No	J9. EPA Indoor airPlus Certification	0							1
TBD	J10. Blower Door Testing								2

K. FINISHES									
TBD	K1 Entryways Designed to Reduce Tracked-In Contaminants								
TBD	K1.1 Individual Entryways							1	
TBD	K2 Zero-VOC Interior Wall and Ceiling Paints							2	
Yes	K3 Low-VOC Caulks and Adhesives	1						1	
TBD	K4 Environmentally Preferable Materials for Interior Finish								
TBD	K4.1 Cabinets							2	
TBD	K4.2 Interior Trim							2	
TBD	K4.3 Shelving							2	
TBD	K4.4 Doors							2	
TBD	K4.5 Countertops							2	
TBD	K5 Formaldehyde Emissions in Interior Finish Exceed CARB							1	
TBD	K5.1 Doors							1	
Yes	K5.2 Cabinets and Countertops	2						2	
TBD	K5.3 Interior Trim and Shelving							2	
TBD	K6 Products That Comply With the Health Product Declaration Open Standard							2	
TBD	K7 Indoor Air Formaldehyde Level Less Than 27 Parts Per Billion							2	
No	K8 Comprehensive Inclusion of Low Emitting Finishes	0						1	
L. FLOORING									
TBD	L1 Environmentally Preferable Flooring								
TBD	L2 Low-Emitting Flooring Meets CDPH 2010 Standard Method—Residential							3	3
TBD	L3 Durable Flooring								1
TBD	L4 Thermal Mass Flooring						1		
M. APPLIANCES AND LIGHTING									
TBD	M1 ENERGY STAR® Dishwasher								1
TBD	M2 CEE-Rated Clothes Washer								2
TBD	M3 Size-Efficient ENERGY STAR Refrigerator								
TBD	M4 Permanent Centers for Waste Reduction Strategies								
TBD	M4.1 Built-In Recycling Center								1
TBD	M4.2 Built-In Composting Center								1
TBD	M5 Lighting Efficiency								
TBD	M5.1 High-Efficacy Lighting							2	
TBD	M5.2 Lighting System Designed to IESNA Footcandle Standards or Designed by Lighting Consultant							2	
N. COMMUNITY									
TBD	N1 Smart Development								
TBD	N1.1 Infill Site							1	1
TBD	N1.2 Designated Brownfield Site							1	
TBD	N1.3 Conserve Resources by Increasing Density							2	2
TBD	N1.4 Cluster Homes for Land Preservation							1	1
TBD	N1.5 Home Size Efficiency								9
	Enter the area of the home, in square feet								
	Enter the number of bedrooms								
Yes	N2 Home(s)/Development Located Within 1/2 Mile of a Major Transit Stop	2	2						
	N3 Pedestrian and Bicycle Access								
0	N3.1 Pedestrian Access to Services Within 1/2 Mile of Community Services	0	2						
	Enter the number of Tier 1 services								
0	Enter the number of Tier 2 services								
Yes	N3.2 Connection to Pedestrian Pathways	1	1						
TBD	N3.3 Traffic Calming Strategies		2						
	N4 Outdoor Gathering Places								
TBD	N4.1 Public or Semi-Public Outdoor Gathering Places for Residents							1	
TBD	N4.2 Public Outdoor Gathering Places with Direct Access to Tier 1 Community Services							1	
	N5 Social Interaction								
TBD	N5.1 Residence Entries with Views to Callers							1	
TBD	N5.2 Entrances Visible from Street and/or Other Front Doors							1	
Yes	N5.3 Porches Oriented to Street and Public Space	1	1						
TBD	N5.4 Social Gathering Space							1	
	N6 Passive Solar Design								
TBD	N6.1 Heating Load							2	
TBD	N6.2 Cooling Load							2	
	N7 Adaptable Building								
TBD	N7.1 Universal Design Principles in Units							1	1
TBD	N7.2 Full-Function Independent Rental Unit							1	
O. OTHER									
Yes	O1 GreenPoint Rated Checklist in Blueprints	Y	R	R	R	R	R	R	R
TBD	O2 Pre-Construction Kickoff Meeting with Rater and Subcontractors				0.5			1	0.5
TBD	O3 Orientation and Training to Occupants—Conduct Educational Walkthroughs				0.5	0.5		0.5	0.5
Yes	O4 Builder's or Developer's Management Staff are Certified Green Building Professionals	2			0.5	0.5		0.5	0.5
TBD	O5 Home System Monitors				1				1
	O6 Green Building Education								
TBD	O6.1 Marketing Green Building				2				
TBD	O6.2 Green Building Signage					0.5			0.5
Yes	O7 Green Appraisal Addendum	Y	R	R	R	R	R	R	R
TBD	O8 Detailed Durability Plan and Third-Party Verification of Plan Implementation								1
Summary									
Total Available Points in Specific Categories			342	26	131	54	83	48	
Minimum Points Required in Specific Categories			50	2	25	6	6	6	
Total Points Achieved			74.0	4.0	28.5	17.5	13.5	10.5	

## **Arborist Report**

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**Centerpointe  
Pleasanton CA**

*Prepared for:*  
**Ponderosa Homes Inc.**  
**6130 Stoneridge Mall Road, Suite 185**  
**Pleasanton CA 94588**

*Prepared by:*  
**HortScience, Inc.**  
**325 Ray Street**  
**Pleasanton, CA 94566**

**March 2015**



**Arborist Report**  
Centerpointe, Pleasanton CA

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**Attachments**

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***Tree Assessment Form***

***Tree Assessment Map***



### ***Introduction and Overview***

Ponderosa Homes is proposing to redevelop a portion of the Centerpointe church site, located at the corners of Busch Rd. and Ironwood Dr., in Pleasanton CA. Current site use consists of the church, a preschool, parking lot and landscaping. Ponderosa Homes requested that HortScience, Inc. prepare an Arborist Report for the site. This report provides the following information:

This report provides the following information:

1. An evaluation of the health and structural condition of the trees within the proposed project area based on a visual inspection from the ground.
2. An assessment of the development impacts to the trees based on the drawings provided by Ponderosa Homes.
3. Guidelines for tree preservation during the design, construction and maintenance phases of development.
4. A ***Tree Assessment Form***, providing a description of each tree and a ***Tree Assessment Map*** showing the location of trees by tag number.

### ***Assessment Methods***

Trees were assessed on February 16, 2015. The assessment included all trees 6" and larger in diameter, within and adjacent to the proposed project. The assessment procedure consisted of the following steps:

1. Identifying the tree as to species;
2. Tagging each tree with a numerically coded metal tag and recording its location on a map;
3. Measuring the trunk diameter at a point 54" above grade;
4. Evaluating the health and structural condition using a scale of 1 ~ 5:
  - 5 - A healthy, vigorous tree, reasonably free of signs and symptoms of disease, with good structure and form typical of the species.
  - 4 - Tree with slight decline in vigor, small amount of twig dieback, minor structural defects that could be corrected.
  - 3 - Tree with moderate vigor, moderate twig and small branch dieback, thinning of crown, poor leaf color, moderate structural defects that might be mitigated with regular care.
  - 2 - Tree in decline, epicormic growth, extensive dieback of medium to large branches, significant structural defects that cannot be abated.
  - 1 - Tree in severe decline, dieback of scaffold branches and/or trunk; most of foliage from epicormics; extensive structural defects that cannot be abated.
5. Rating the suitability for preservation as "high", "moderate" or "low". Suitability for preservation considers the invasiveness of the species, health, age and structural condition of the tree, and its potential to remain an asset to the site.
  - High:** Trees with good health and structural stability that have the potential for longevity at the site.
  - Moderate:** Trees with somewhat declining health and/or structural defects than can be abated with treatment. The tree will require more intense management and monitoring, and may have shorter life span than those in 'high' category.
  - Low:** Trees in poor health or with significant structural defects that cannot be mitigated. The tree is expected to continue to decline, regardless of treatment. The species or individual may have characteristics that are undesirable for landscapes, and generally are unsuited for use areas.

### **Description of Trees**

Seventy-one (71) trees, representing 5 species, were assessed. Included in this group were four off-site trees with portions of their canopies extending into development areas (#312, 313, 317 and 318). Descriptions of each tree are found in the *Tree Assessment Form* and locations are shown on the *Tree Assessment Map* (see attachments).

Trees at the site were located either within the PSE, just behind the back of the sidewalks along Busch Rd. and Ironwood Dr., or in parking lot islands. The site had been redeveloped in the recent past, so many of the trees on the site were below the 6" diameter threshold for inclusion in the assessment.

London plane, with 35 trees, represented 49% of the population (Table 1, following page). These were the backbone of the landscaping and included the trees along Busch Rd. and Ironwood Drive. Thirty-four (34) were young, with diameters between 6" and 10", and #251 was semi-mature at 13". All 35 of the London planes were in good condition and most had full crowns and good form and structure (Photo 1). Where they had been planted in close proximity to one another, crowns tended to be narrow and upright. The good condition of the trees was a reflection of the age of the trees and quality of the maintenance practices.

**Photo 1:** Looking northeast at London planes #79 (background R) to 83 (foreground L). This double row of London planes was located along the northern property line and included many trees smaller than 6" in diameter.

London plane was the dominant species at the Centerpointe site. Most of the trees were young and had good form and structure. There was no evidence of topping or other poor pruning practices.



Seventeen (17) purple-leaf plums were located throughout the parking lot. All were young, with trunks measuring 6" or 7" in diameter. Tree form was characterized by multiple stems at 3-5' and narrow attachments. Three (3) had the rubber stake tie embedded between the attachments. Condition of the purple-leaf plums was also good, with 16 trees in that category and #303 in fair condition.

Thirteen (13) African sumac trees had been planted along the western property boundary. Trees were planted adjacent to the wall and had been pruned to reduce their crowns, producing trees with fair structure. Trunk diameters ranged from 6" to 10" and condition was fair (4 trees) to good (9 trees).

The remaining two species included the following trees:

- Four coast redwoods had been planted on the west side of the church building. They were young (6" to 8" in diameter) and in good condition. All had minor dieback and thinning of canopies, indicative of drought stress.
- Two coast live oaks were located just off-site along the northern edge of the Iron Horse trail (#312 and 313). These trees were also young (6" and 8" in diameter, respectively) and in good condition.

Average tree condition was good, with 66 trees in that category, or 93% of the population. Five (5) trees, or 7% were in good condition and no trees were in poor. With the exception of the reduction pruning of the African sumacs, trees on the site had been well maintained.

The City of Pleasanton defines a *Heritage* trees as having a trunk diameter of 18" or greater or a height of 35' or more. For trees with more than one stem, trunk diameter is determined by adding together the 2 largest stems. Using these criteria, none of the trees assessed at the Centerpointe site qualified as *Heritage*.

**Table 1. Condition ratings and frequency of occurrence of trees.  
Centerpointe, Pleasanton CA.**

Common name	Scientific name	Condition		No. of trees
		Fair (3)	Good (4-5)	
London plane	<i>Platanus x hispanica</i>	-	35	35
Purple-leaf plum	<i>Prunus cerasifera</i> 'Atropurpurea'	1	16	17
Coast live oak	<i>Quercus agrifolia</i>	-	2	2
African sumac	<i>Rhus lancea</i>	4	9	13
Coast redwood	<i>Sequoia sempervirens</i>	-	4	4
<b>Total</b>		<b>5</b>	<b>66</b>	<b>71</b>
		7%	93%	100%

#### ***Suitability for Preservation***

Trees that are preserved on development sites must be carefully selected to make sure that they may survive development impacts, adapt to a new environment and perform well in the landscape. Our goal is to identify trees that have the potential for long-term health, structural stability and longevity. Evaluation of suitability for preservation considers several factors:

- **Tree health**  
Healthy, vigorous trees are better able to tolerate impacts such as root injury, demolition of existing structures, changes in soil grade and moisture, and soil compaction than are non-vigorous trees.
- **Structural integrity**  
Trees with significant amounts of wood decay and other structural defects that cannot be corrected are likely to fail. Such trees should not be preserved in areas where damage to people or property is likely.

- **Species response**  
There is a wide variation in the response of individual species to construction impacts and changes in the environment. In our experience, for example, purple-leaf plum and African sumac are moderately sensitive to construction impacts; while London plane and coast live oak are tolerant of site disturbance.
- **Tree age and longevity**  
Old trees, while having significant emotional and aesthetic appeal, have limited physiological capacity to adjust to an altered environment. Young trees are better able to generate new tissue and respond to change.
- **Species Invasiveness**  
Species which spread across a site and displace desired vegetation are not always appropriate for retention. This is particularly true when indigenous species are displaced. The California Invasive Plant Inventory Database (<http://www.cal-ipc.org/ip/inventory/weedlist.php?#key>) lists species identified as having being invasive. Pleasanton is part of the Central West Floristic Province. Purple-leaf plum was the only species identified as invasive at the Centerpointe site.

Each tree was rated for suitability for preservation based upon its age, health, structural condition and ability to safely coexist within a development environment. Table 2 provides a summary of suitability ratings. Suitability ratings for individual trees are provided in the *Tree Assessment Forms* (see attachments).

**Table 2: Tree suitability for preservation.  
Centerpointe, Pleasanton CA.**

<b>High</b>	These are trees with good health and structural stability that have the potential for longevity at the site. Forty seven (47) trees were highly suitable for preservation, including 32 London planes, eight (8) purple-leaf plums, four (4) coast redwoods, two (2) coast live oaks, and one (1) African sumac.
<b>Moderate</b>	Trees in this category have fair health and/or structural defects that may be abated with treatment. These trees require more intense management and monitoring, and may have shorter life-spans than those in the "high" category. Twenty-four (24) trees were of moderate suitability for preservation, including 12 African sumacs, nine (9) purple-leaf plums and three (3) London planes.
<b>Low</b>	Trees in this category are in poor health or have significant defects in structure that cannot be abated with treatment. These trees can be expected to decline regardless of management. The species or individual tree may possess either characteristics that are undesirable in landscape settings or be unsuited for use areas. None of the trees at the Centerpointe site were of low suitability for preservation.

We consider trees with high suitability for preservation to be the best candidates for preservation. We do not recommend retention of trees with low suitability for preservation in areas where people or property will be present. Retention of trees with moderate suitability for preservation depends on the intensity of proposed site changes.

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***Evaluation of Impacts and Recommendations for Action***

Appropriate tree retention develops a practical match between the location and intensity of construction activities and the quality and health of trees. The tree assessment was the reference points for tree condition and quality. Impacts from the proposed project were assessed using the Site Plan prepared by RJA Associates (dated January 15, 2015).

The plan proposes to construct 29 new residential units on the site. The existing pre-school buildings and landscaping would remain but the church building, parking lots and landscaping would be demolished. A portion of Cornerstone Ct. would be realigned and two new cul-de-sacs constructed. Bioswales would be installed in the landscape across the site. An approximately 4' wide sewer easement is proposed to be relocated onto the existing apartment complex to the north.

Tree canopy outlines were included on the plan but trunks had not been located. Potential impacts from construction were estimated for each tree given the project information available to date. The most significant impacts to trees would be associated with demolition of existing buildings and parking lots. However, several trees are within the existing easements along Busch Rd. and Ironwood Dr., providing an opportunity for tree preservation in these areas.

Based on my evaluation of the plans, removal would be required for 54 of the trees. This would include 36 that fall within the lot grading, 16 within the new road alignment, and two (2) within the bioswales. None of the trees identified for removal qualified as *Heritage*. Table 3 (following page) provides the recommended action for each tree, reasons for removal, and their *Heritage* status.

Seventeen (17) trees can be preserved, provided the design recommendations listed in the *Tree Preservation Guidelines* (page 10) can be accommodated. Four (4) of the trees identified for preservation were off-site and the remaining 13 were within the Busch Rd. and Ironwood Dr. easements.

I was asked to comment specifically on a row of off-site trees located on the northern property line. These trees were in the landscape area between the existing curb and the apartments. None were large enough to include in the assessment, per the City of Pleasanton criteria (6" in diameter and larger, measured at 54" above grade). I measured the distances between the existing trees and the back of the curb (northern edge) to estimate impacts from the proposed utility work in this area. The trees varied from 5' to 11' north of the back of curb. Because of their young age, I believe these trees will tolerate any root loss associated with the utility work and can be preserved.

**Table 3. Recommended action for trees.  
Centerpointe, Pleasanton CA.**

<b>Tree No.</b>	<b>Species</b>	<b>Trunk Diameter (in.)</b>	<b>Heritage?</b>	<b>Recommended action</b>
248	London plane	8	No	<b>Preserve, within PSE</b>
249	London plane	10	No	<b>Preserve, within PSE</b>
250	London plane	10	No	<b>Preserve, within PSE</b>
251	London plane	13	No	<b>Preserve, within PSE</b>
252	London plane	8	No	<b>Preserve, within PSE</b>
253	London plane	9	No	<b>Preserve, within PSE</b>
254	London plane	8	No	<b>Preserve, within PSE</b>

(Continued, following page)

**Table 3. Recommended action for trees, continued.  
Centerpointe, Pleasanton CA.**

<b>Tree No.</b>	<b>Species</b>	<b>Trunk Diameter (in.)</b>	<b>Heritage?</b>	<b>Recommended action</b>
255	London plane	8	No	Preserve, within PSE
256	London plane	8	No	Preserve, within PSE
257	London plane	8	No	Preserve, within PSE
258	London plane	7	No	Remove, within lot grading
259	Purple-leaf plum	6	No	Remove, within lot grading
260	Purple-leaf plum	7	No	Remove, within lot grading
261	Purple-leaf plum	7	No	Remove, within lot grading
262	London plane	6	No	Remove, within lot grading
263	London plane	6	No	Remove, within lot grading
264	Purple-leaf plum	6,4,3	No	Remove, within lot grading
265	Purple-leaf plum	6	No	Remove, within lot grading
266	Purple-leaf plum	6	No	Remove, within lot grading
267	Purple-leaf plum	7	No	Remove, within lot grading
268	London plane	6	No	Remove, within lot grading
269	London plane	7	No	Remove, within lot grading
270	London plane	7	No	Remove, within lot grading
271	London plane	6	No	Remove, within road
272	London plane	8	No	Remove, within road
273	London plane	7	No	Remove, within road
274	London plane	6	No	Remove, within road
275	London plane	7	No	Remove, within road
276	London plane	7	No	Remove, within road
277	London plane	7	No	Remove, within road
278	London plane	6	No	Remove, within road
279	London plane	6	No	Remove, within road
280	London plane	7	No	Remove, within road
281	London plane	6	No	Remove, within road
282	London plane	7	No	Remove, within lot grading
283	London plane	7	No	Remove, within lot grading
284	London plane	6	No	Remove, within lot grading
285	London plane	6	No	Remove, within lot grading
286	London plane	6	No	Remove, within lot grading
287	Purple-leaf plum	6	No	Remove, within lot grading
288	Purple-leaf plum	7	No	Remove, within lot grading
289	Purple-leaf plum	6	No	Remove, within lot grading
290	African sumac	7	No	Remove, within lot grading
291	African sumac	6	No	Remove, within lot grading
292	African sumac	6	No	Remove, within lot grading
293	African sumac	7	No	Remove, within lot grading
294	African sumac	6	No	Remove, within lot grading
295	African sumac	6	No	Remove, within lot grading
296	African sumac	7	No	Remove, within lot grading
297	African sumac	6	No	Remove, within bioswale
298	African sumac	7	No	Remove, within bioswale

(Continued, following page)

**Table 3. Recommended action for trees, continued.  
Centerpointe, Pleasanton CA.**

<b>Tree No.</b>	<b>Species</b>	<b>Trunk Diameter (in.)</b>	<b>Heritage?</b>	<b>Recommended action</b>
299	Coast redwood	8	No	Remove, within road
300	Coast redwood	6	No	Remove, within road
301	Coast redwood	7	No	Remove, within road
302	Coast redwood	8	No	Remove, within road
303	Purple-leaf plum	7	No	Remove, within road
304	Purple-leaf plum	7	No	Remove, within lot grading
305	Purple-leaf plum	6	No	Remove, within lot grading
306	Purple-leaf plum	6	No	Remove, within lot grading
307	Purple-leaf plum	6	No	Remove, within lot grading
308	Purple-leaf plum	6	No	Remove, within lot grading
309	Purple-leaf plum	7	No	Remove, within lot grading
310	African sumac	8	No	Remove, within lot grading
311	African sumac	6	No	Remove, within lot grading
312	Coast live oak	8	No	Preserve, off-site
313	Coast live oak	6	No	Preserve, off-site
314	London plane	7	No	Preserve, within PSE
315	London plane	6	No	Preserve, within PSE
316	London plane	6	No	Preserve, within PSE
317	African sumac	10	No	Preserve, off-site
318	African sumac	7	No	Preserve, off-site

**Appraisal of Value**

The City of Pleasanton requires that the value of all trees be established. To establish the value of the surveyed trees, I employed the standard methods found in *Guide for Plant Appraisal*, 9th edition (published in 2000 by the International Society of Arboriculture, Savoy IL). In addition, I referred to *Species Classification and Group Assignment* (2004), a publication of the Western Chapter of the International Society of Arboriculture. These two documents outline the methods employed in tree appraisal.

The value of landscape trees is based upon four factors: size, species, condition and location. Size is measured as trunk diameter, normally 54" above grade. The species factor considers the adaptability and appropriateness of the plant in the East Bay area. The *Species Classification and Group Assignment* lists recommended species ratings and evaluations. Condition reflects the health and structural integrity of the individual. The location factor considers the site, placement and contribution of the tree in its surrounding landscape. In this case, trees were located in a well maintained residential part of Pleasanton.

The appraised value of the 17 trees recommended for preservation was \$18,900 (Table 4, following page).

The appraised value of the 54 trees recommended for removal was \$32,900 (Table 5, following page).

**Table 4. Appraised value of trees recommended for preservation  
Centerpointe, Pleasanton CA**

Tree No.	Common Name	Size (in.)	Appraised Value (\$)
248	London plane	8	1,000
249	London plane	10	1,550
250	London plane	10	1,550
251	London plane	13	2,600
252	London plane	8	1,000
253	London plane	9	1,300
254	London plane	8	800
255	London plane	8	1,000
256	London plane	8	1,000
257	London plane	8	1,000
312	Coast live oak	8	1,000
313	Coast live oak	6	600
314	London plane	7	600
315	London plane	6	450
316	London plane	6	450
317	African sumac	10	2,000
318	African sumac	7	1,000
<b>Total</b>			<b>18,900</b>

**Table 5. Appraised value of trees recommended for removal.  
Centerpointe, Pleasanton CA**

Tree No.	Common Name	Size (in.)	Appraised Value (\$)
258	London plane	7	700
259	Purple-leaf plum	6	400
260	Purple-leaf plum	7	500
261	Purple-leaf plum	7	500
262	London plane	6	550
263	London plane	6	550
264	Purple-leaf plum	6,4,3	1,750
265	Purple-leaf plum	6	400
266	Purple-leaf plum	6	400
267	Purple-leaf plum	7	500
268	London plane	6	550
269	London plane	7	700
270	London plane	7	550
271	London plane	6	450
272	London plane	8	800
273	London plane	7	800
274	London plane	6	450
275	London plane	7	800
276	London plane	7	600
277	London plane	7	600
278	London plane	6	600

(Continued, following page)



**Table 5. Appraised value of trees recommended for removal.  
Centerpointe, Pleasanton CA**

<b>Tree No.</b>	<b>Common Name</b>	<b>Size (in.)</b>	<b>Appraised Value (\$)</b>
279	London plane	6	600
280	London plane	7	600
281	London plane	6	600
282	London plane	7	800
283	London plane	7	800
284	London plane	6	450
285	London plane	6	450
286	London plane	6	450
287	Purple-leaf plum	6	400
288	Purple-leaf plum	7	500
289	Purple-leaf plum	6	400
290	African sumac	7	1,000
291	African sumac	6	550
292	African sumac	6	750
293	African sumac	7	700
294	African sumac	6	750
295	African sumac	6	550
296	African sumac	7	1,000
297	African sumac	6	750
298	African sumac	7	1,000
299	Coast redwood	8	600
300	Coast redwood	6	350
301	Coast redwood	7	450
302	Coast redwood	8	600
303	Purple-leaf plum	7	350
304	Purple-leaf plum	7	500
305	Purple-leaf plum	6	400
306	Purple-leaf plum	6	400
307	Purple-leaf plum	6	400
308	Purple-leaf plum	6	400
309	Purple-leaf plum	7	500
310	African sumac	8	950
311	African sumac	6	750
<b>Total</b>			<b>32,900</b>

**Tree Preservation Guidelines**

The goal of tree preservation is not merely tree survival during development but maintenance of tree health and beauty for many years. Impacts can be minimized by coordinating any construction activities inside the TREE PROTECTION ZONE.

The following recommendations will help reduce impacts to trees from development and maintain and improve their health and vitality through the clearing, grading and construction phases.

**Design recommendations**

1. Have the vertical and horizontal locations of all the trees identified for preservation established and plotted on all plans. Forward these plans to the Consulting Arborist for review and finalization of the assessment of impacts to trees.
2. Any plan affecting trees should be reviewed by the Consulting Arborist with regard to tree impacts. These include, but are not limited to, improvement plans, utility and drainage plans, grading plans, landscape and irrigation plans and demolition plans.
3. A TREE PROTECTION ZONE must be established for trees to be preserved, in which no disturbance is permitted. TREE PROTECTION ZONES for trees identified for preservation are identified in the following table. No grading, excavation, construction or storage of materials shall occur within that zone.

**Specific Tree Protection Zones**

Tree No.	TPZ
#248 and 249	5' N. DL in all other directions
#250-257	5' W., DL in all other directions
#314, 315 and 316	5' NW., DL in all other directions
#312 and 313	PL N. and DL in all other directions.
#317 and 318	7' S. (@ PL) and DL in all other directions.

4. Tree Preservation Notes, prepared by the Consulting Arborist, should be included on all plans.
5. Underground services including utilities, sub-drains, water or sewer shall be routed around the TREE PROTECTION ZONE. Where encroachment cannot be avoided, special construction techniques such as hand digging or tunneling under roots shall be employed where necessary to minimize root injury.
6. Irrigation systems must be designed so that no trenching will occur within the TREE PROTECTION ZONE.
7. Any herbicides placed under paving materials must be safe for use around trees and labeled for that use.

**Pre-construction treatments and recommendations**

1. The demolition contractor shall meet with the Consulting Arborist before beginning work to discuss work procedures and tree protection.
2. Cap and abandon all existing underground utilities within the TPZ in place. Removal of utility boxes by hand is acceptable but no trenching should be performed within the TPZ in an effort to remove utilities, irrigation lines, etc.
3. Fence trees to completely enclose the TREE PROTECTION ZONE prior to demolition, grubbing, or grading. Fences shall be 6 ft. chain link or equivalent as approved by the City of Mountain View. Fences are to remain until all construction is completed.
4. Trees to be preserved may require pruning to provide construction clearance. Pruning of off-site trees should be performed with the property owner's permission. All pruning shall be completed by a Certified Arborist or Tree Worker. Pruning shall adhere to the latest edition of the ANSI Z133 and A300 standards as well as the *Best Management Practices – Tree Pruning* published by the International Society of Arboriculture.
5. Structures and underground features to be removed within the TREE PROTECTION ZONE shall use the smallest equipment, and operate from outside the TREE PROTECTION ZONE. The consultant shall be on-site during all operations within the TREE PROTECTION ZONE to monitor demolition activity.

**Recommendations for tree protection during construction**

1. Prior to beginning work, the contractors working in the vicinity of trees to be preserved are required to meet with the Consulting Arborist at the site to review all work procedures, access routes, storage areas and tree protection measures.
2. Fences have been erected to protect trees to be preserved. Fences define a specific TREE PROTECTION ZONE for each tree or group of trees. Fences are to remain until all site work has been completed. Fences may not be relocated or removed without permission of the Consulting Arborist.
3. Any excavation within the dripline or other work that is expected to encounter tree roots should be approved and monitored by the Consulting Arborist. Roots shall be cut by manually digging a trench and cutting exposed roots with a sharp saw. The Consulting Arborist will identify where root pruning is required.
4. If injury should occur to any tree during construction, it should be evaluated as soon as possible by the Consulting Arborist so that appropriate treatments can be applied.
5. Prior to grading, pad preparation, excavation for foundations/footings/walls, trenching, trees may require root pruning outside the TREE PROTECTION ZONE by cutting all roots cleanly to the depth of the excavation. Roots shall be cut by manually digging a trench and cutting exposed roots with a sharp saw or other approved root pruning equipment. The Consulting Arborist will identify where root pruning is required.

6. All underground utilities, drain lines or irrigation lines shall be routed outside the **TREE PROTECTION ZONE**. If lines must traverse through the protection area, they shall be tunneled or bored under the tree as directed by the Consulting Arborist.
7. No materials, equipment, spoil, waste or wash-out water may be deposited, stored, or parked within the **TREE PROTECTION ZONE** (fenced area).
8. Any additional tree pruning needed for clearance during construction must be performed by a Certified Arborist and not by construction personnel.

**Maintenance of impacted trees**

Trees preserved at the Centerpointe site may experience a physical environment different from that pre-development. As a result, tree health and structural stability should be monitored. Occasional pruning, fertilization, mulch, pest management, replanting and irrigation may be required. In addition, provisions for monitoring both tree health and structural stability following construction must be made a priority. As trees age, the likelihood of branches or entire trees failing will increase. Therefore, annual inspection for hazard potential is recommended.

**HortScience, Inc.**



John Leffingwell  
Board Certified Master Arborist WE-3966B  
Registered Consulting Arborist #442

**Attached:**     ***Tree Assessment Form***  
  
                  ***Tree Assessment Maps***

# Tree Assessment

Centerpointe  
Pleasanton, California  
Februaru 2015



TREE No.	SPECIES	SIZE DIAMETER (in inches)	Heritage?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
248	London plane	8	No	5	High	Good form and structure; small stub S.
249	London plane	10	No	5	High	Good form and structure; small stub S.
250	London plane	10	No	5	High	Good form and structure; low branches N. & S.
251	London plane	13	No	5	High	Good form and structure; slight lean E.; lateral N.
252	London plane	8	No	5	High	Good form and structure; corrected lean E.
253	London plane	9	No	5	High	Good form and structure.
254	London plane	8	No	4	High	Codominant trunks at 15'; slight lean E.
255	London plane	8	No	5	High	Good form and structure.
256	London plane	8	No	5	High	Good form and structure; low branches N.
257	London plane	8	No	5	High	Good form and structure.
258	London plane	7	No	5	High	Good form and structure; low branch N.
259	Purple-leaf plum	6	No	4	Moderate	Multiple attachments at 3'; narrow attachments; embedded stake tie.
260	Purple-leaf plum	7	No	4	Moderate	Multiple attachments at 3'; narrow attachments; embedded stake tie.
261	Purple-leaf plum	7	No	4	High	Multiple attachments at 3'; narrow attachments.
262	London plane	6	No	5	High	Good form and structure; slight lean E.
263	London plane	6	No	5	High	Good form and structure.
264	Purple-leaf plum	6,4,3	No	4	High	Multiple attachments at 3'; narrow attachments.
265	Purple-leaf plum	6	No	4	High	Multiple attachments at 3'; narrow attachments.
266	Purple-leaf plum	6	No	4	Moderate	Multiple attachments at 5'; narrow attachments; embedded stake tie.
267	Purple-leaf plum	7	No	4	High	Multiple attachments at 3'; narrow attachments.
268	London plane	6	No	5	High	Good form and structure; slight lean E.
269	London plane	7	No	5	High	Good form and structure; slight lean E.
270	London plane	7	No	4	High	Good form; crown bowed E.

# Tree Assessment

Centerpointe  
Pleasanton, California  
February 2015



TREE No.	SPECIES	SIZE DIAMETER (in inches)	Heritage?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
271	London plane	6	No	4	Moderate	Fair structure; leans E.
272	London plane	8	No	4	High	Multiple attachments at 10'; good form.
273	London plane	7	No	5	High	Good form and structure.
274	London plane	6	No	4	High	Crown sweeps SE.
275	London plane	7	No	5	High	Good form and structure.
276	London plane	7	No	4	High	Crown sweeps SE.
277	London plane	7	No	4	High	Codominant trunks at 8'; good form.
278	London plane	6	No	5	High	Good form and structure.
279	London plane	6	No	5	High	Good form and structure; narrow form.
280	London plane	7	No	4	Moderate	Corrected lean E.; fair structure.
281	London plane	6	No	5	High	Good form and structure; surface roots.
282	London plane	7	No	5	High	Good form and structure.
283	London plane	7	No	5	High	Good form and structure; surface roots.
284	London plane	6	No	4	Moderate	Corrected lean SE.
285	London plane	6	No	4	High	Multiple attachments at 8'; good form.
286	London plane	6	No	4	High	Multiple attachments at 8'; upright form.
287	Purple-leaf plum	6	No	4	High	Multiple attachments at 4'; narrow attachments.
288	Purple-leaf plum	7	No	4	High	Multiple attachments at 5'; narrow attachments.
289	Purple-leaf plum	6	No	4	High	Multiple attachments at 5'; narrow attachments.
290	African sumac	7	No	4	Moderate	Multiple attachments at 6'; fair structure.
291	African sumac	6	No	3	Moderate	Multiple attachments at 6'; heavily reduced; fair structure.
292	African sumac	6	No	4	Moderate	Multiple attachments at 6'; fair structure.
293	African sumac	7	No	3	Moderate	Multiple attachments at 7'; crown bowed E.; reduced; fair structure.
294	African sumac	6	No	4	Moderate	Multiple attachments at 7'; reduced; fair structure.

# Tree Assessment

Centerpointe  
Pleasanton, California  
February 2015



TREE No.	SPECIES	SIZE DIAMETER (in inches)	Heritage?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
295	African sumac	6	No	3	Moderate	Multiple attachments at 7'; slight lean E.; reduced; fair structure.
296	African sumac	7	No	4	Moderate	Multiple attachments at 7'; fair structure.
297	African sumac	6	No	4	Moderate	Multiple attachments at 7'; fair structure.
298	African sumac	7	No	4	Moderate	Multiple attachments at 7'; fair structure.
299	Coast redwood	8	No	4	High	Good form and structure; drought stressed.
300	Coast redwood	6	No	4	High	Good form and structure; drought stressed.
301	Coast redwood	7	No	4	High	Good form and structure; drought stressed.
302	Coast redwood	8	No	4	High	Good form and structure; drought stressed.
303	Purple-leaf plum	7	No	3	Moderate	Multiple attachments at 3'; narrow attachments; trunk wound.
304	Purple-leaf plum	7	No	4	Moderate	Multiple attachments at 3'; narrow attachments.
305	Purple-leaf plum	6	No	4	High	Multiple attachments at 3'; good form.
306	Purple-leaf plum	6	No	4	Moderate	Multiple attachments at 3'; narrow attachments.
307	Purple-leaf plum	6	No	4	Moderate	Multiple attachments at 3'; narrow attachments.
308	Purple-leaf plum	6	No	4	Moderate	Multiple attachments at 3'; narrow attachments.
309	Purple-leaf plum	7	No	4	Moderate	Multiple attachments at 3'; narrow attachments.
310	African sumac	8	No	3	Moderate	Multiple attachments at 7'; fair structure; embedded stake tie.
311	African sumac	6	No	4	Moderate	Multiple attachments at 7'; fair structure.
312	Coast live oak	8	No	4	High	Off-site; multiple attachments at 8'; upright form.
313	Coast live oak	6	No	4	High	Off-site; multiple attachments good form.
314	London plane	7	No	4	High	Multiple attachments at 6'; good form.
315	London plane	6	No	4	High	Multiple attachments at 6'; slight bow E.
316	London plane	6	No	4	High	Multiple attachments at 6'; good form.
317	African sumac	10	No	4	High	Off-site; multiple attachments at 3'; good form.
318	African sumac	7	No	4	Moderate	Off-site; codominant trunks at 5'; good form.

# Tree Assessment Plan

Centerpointe  
Pleasanton, CA

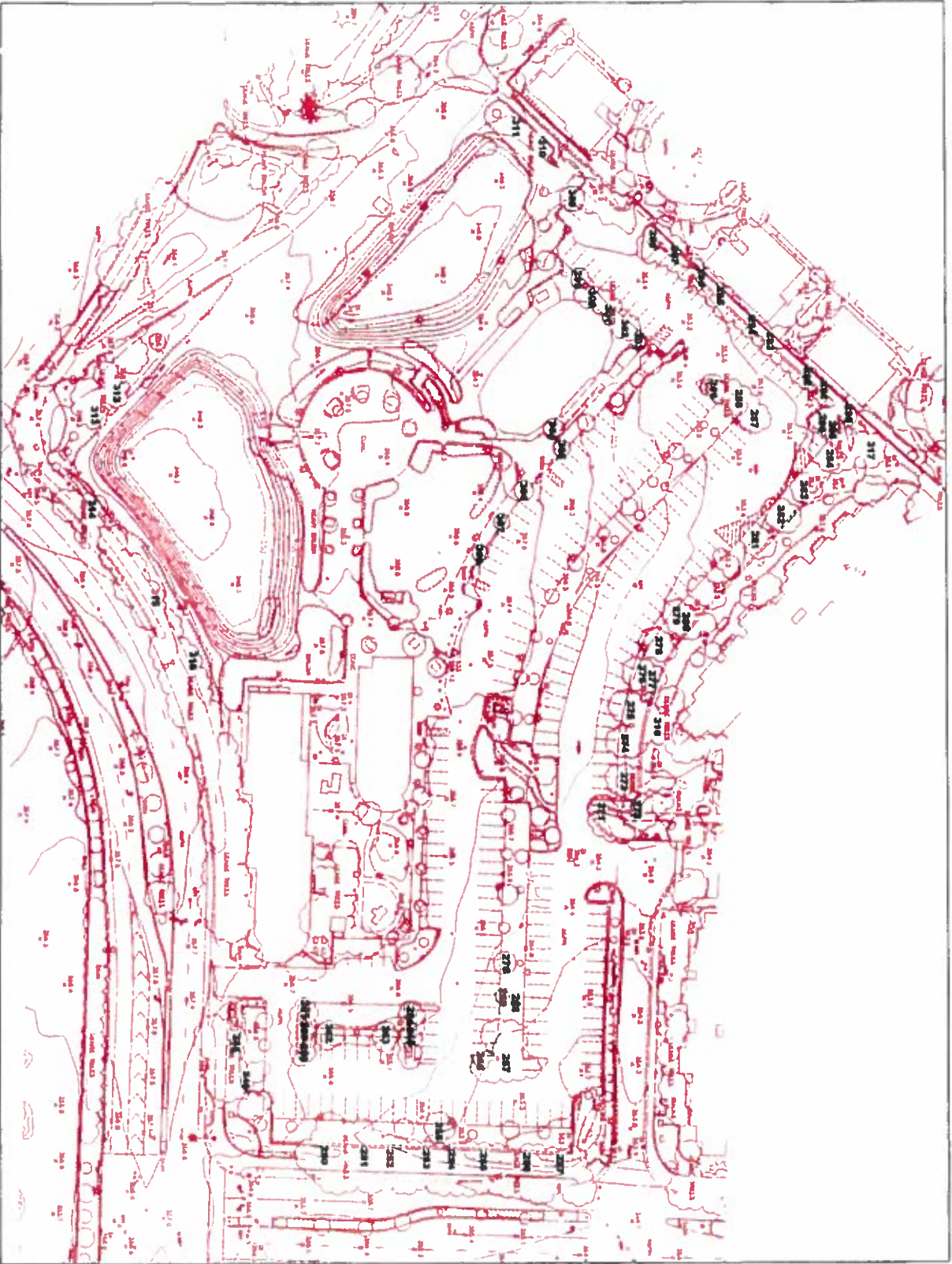
Prepared for:  
Ponderosa Homes, Inc.  
Pleasanton, CA

February 2015



No Scale

Notes:  
Site map provided by  
Rudger Johnson-Auer & Associates  
Pleasanton, CA  
Revised tree locations  
in green.



135 Bay Street  
Pleasanton, CA 94566  
Phone: 925-464-0211  
www.robyscience.com





## **EDWARD L. PACK ASSOCIATES, INC.**

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SUITE 26  
SAN JOSE, CA 95125

*Acoustical Consultants*

TEL: 408-371-1195  
FAX: 408-371-1196  
www.packassociates.com

June 25, 2015  
Project No. 47-049

Mr. Jeff Schroeder  
Ponderosa Homes  
6130 Stoneridge Mall Road  
Suite 185  
Pleasanton, CA 94588

Subject: Noise Assessment Study for the Planned "Centerpointe" Single-Family Development, Ironwood Drive, Pleasanton

Dear Mr. Schroeder:

This report presents the results of a noise assessment study for the planned "Centerpointe" single-family development along Ironwood Drive in Pleasanton, as shown on the Site Development Plan, Ref. (a). The noise exposures and noise levels at the site were evaluated against the standards of the City of Pleasanton General Plan Noise Element, Ref. (b). An analysis of the on-site noise measurements indicates that the noise environment is created primarily by traffic sources on Valley Avenue and Busch Road. Noise from Ironwood Drive or the City of Pleasanton Corporation Yard does not significantly impact the site. The results of the study reveal that the traffic noise exposures Valley Avenue traffic exceeds the limits of the standards. Traffic noise from Busch Avenue is within the limits of the standards. Noise mitigation measures for Valley Avenue traffic sources will be required.

Sections I and II of this report contain a summary of our findings and recommendations, respectively. Subsequent sections contain site, traffic and project descriptions, analyses and evaluations. Appendices A, B and C contain the list of references, descriptions of the standards, definitions of the terminology, descriptions of the instrumentation used for the field survey, general building shell controls and the on-site noise measurement data and calculation tables.

**I. Summary of the Findings**

The noise exposures presented herein were evaluated against the noise standards of the City of Pleasanton Noise Element, which utilizes the Day-Night Level (DNL) 24-hour descriptor to define acceptable noise levels for various land uses. The standards specify a limit of 60 dB DNL for single-family residential exterior areas and 45 dB DNL for residential interior living spaces

The noise exposures and noise levels shown below are without the application of mitigation measures, and represent the noise environment for the existing and project site conditions.

**A. Exterior Noise Exposures**

Table I, below, provides the exterior noise exposures at the most impacted side and rear yard, and at the most impacted planned building setback from Valley Avenue, Busch Road and Ironwood Drive/Corporation Yard.

<b>TABLE I</b>							
<b>Exterior Noise Exposures, dB DNL</b>							
		Valley Ave.		Busch Road		TOTAL	
Lot 20	Setback	Existing	Future	Existing	Future	Existing	Future
Side and Rear Yards	140 ft. to Valley Ave. CL, 80 ft. to Busch Rd. CL	64	64	55	57	65	65
Building Setback	145 ft. to Valley Ave. CL, 100 ft. to Busch Rd. CL	64	64	54	56	64	65
Lots 5,6,7, 19	250 ft. to 158 ft. to Valley Ave. CL	60-63	60-63	--	--	60-63	60-63
Lot 27	60 ft. to Ironwood Dr., 105 ft. to Corp. Yard.					53	53

Intermittent noise from activity at the Corporation Yard was noticeable at Location 2 (Lot 27). However, the instantaneous noise levels ranged from 48-54 dBA (backhoe operation) and were not significant. Noise from activity at the Corporation Yard are included in the Location 2 noise measurement data.

As shown above, the exterior noise exposures at lots along Valley Avenue will be up to 5 dB in excess of the 60 dB DNL standard of the City of Pleasanton Noise Element.

The future 60 dB DNL noise contour will be 250 ft. from the centerline of Valley Avenue.

**B. Interior Noise Exposures**

Table II, below, provides the interior noise exposures in the most impacted living spaces closest to Valley Avenue, Busch Road, Ironwood Drive and the City of Pleasanton Corporation Yard.

TABLE II							
Interior Noise Exposures, dB DNL							
		Valley Ave.		Busch Road		TOTAL	
Lot 20	Setback	Existing	Future	Existing	Future	Existing	Future
Living Spaces	145 ft. to Valley Ave. CL, 100 ft. to Busch Rd. CL	39	39	29	31	39	40
Lot 27 Living Spaces	80 ft. to Ironwood Dr., 125 ft. to Corp. Yard					26	26

As shown above, the interior noise exposures will be within the 45 dB DNL limit of the City of Pleasanton Noise Element standards.

The findings reveal that exterior noise exposure excesses will occur at the site and mitigation measures will be required. The mitigation measures necessary to achieve the City of Pleasanton Noise Element standards are described in Section II of this report.

## II. Noise Mitigation Measures

### A. Exterior Noise

To achieve compliance with the 60 dB DNL standard of the City of Pleasanton Noise Element for the exterior living areas impacted by Valley Avenue traffic, the following noise control barrier will be required:

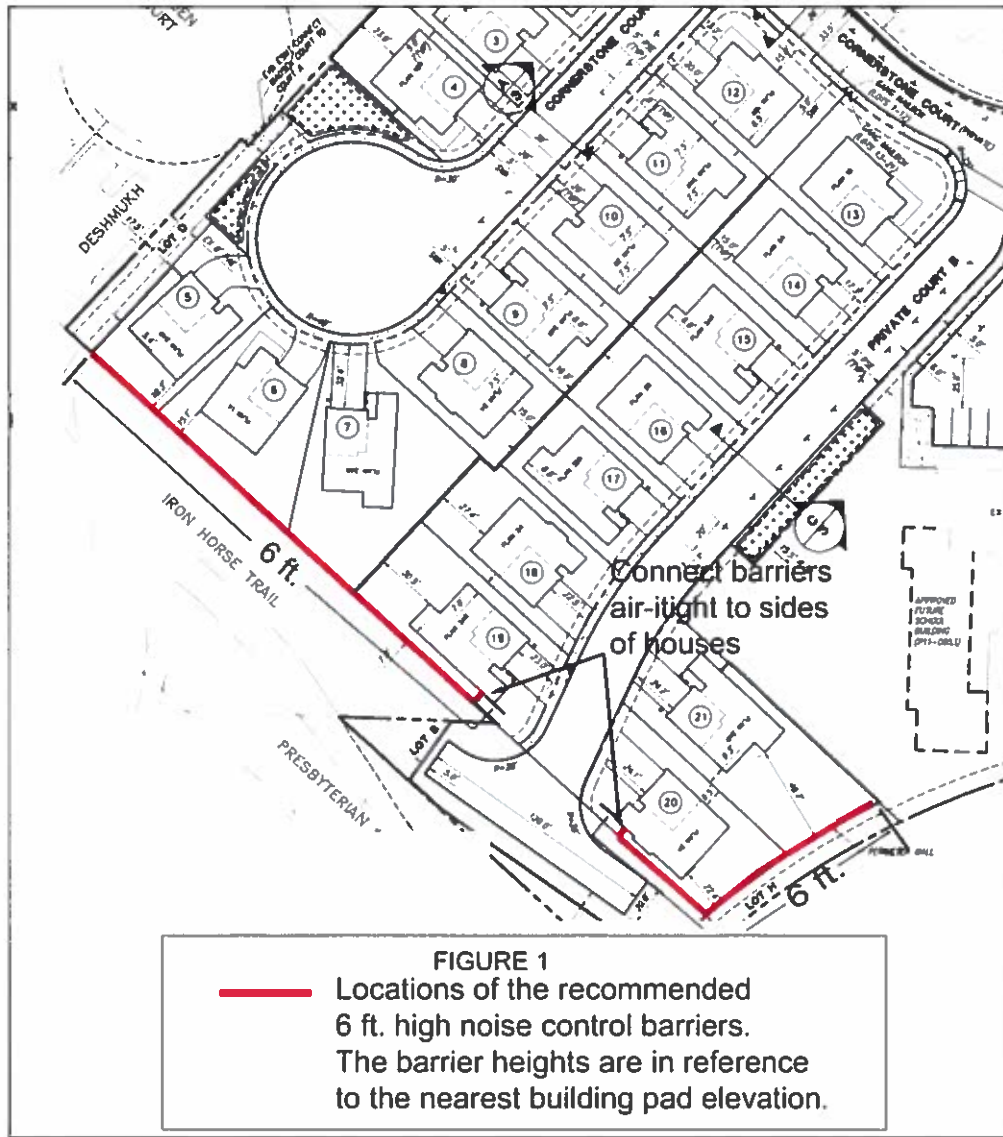
- Construct a 6 ft. high acoustically-effective barrier along the southwesterly lot lines of Lots 5, 6, 7 and 19. To control flanking noise turn the barrier along Lot 19 to connect air-tight to the side of the house.
- Construct a 6 ft. high acoustically-effective barrier along the southeasterly lot lines of Lots 20 and 21 contiguous with Busch Road. Continue the barrier along the southwesterly (side) lot line of Lot 20. To control flanking noise turn the barrier along Lot 20 to connect air-tight to the side of the house.

The barrier height is in reference to the nearest building pad elevation.

Please see Figure 1 for the locations of the recommended noise control barriers.

To achieve an acoustically-effective barrier, it must be made air-tight, i.e., without cracks, gaps, or other openings and must provide for long-term durability. The barriers can be constructed of wood, concrete, stucco, masonry, metal, earth berm or a combination thereof and must achieve a minimum surface weight of 2.5 lbs./sq. ft. If wood fencing is used, homogeneous sheet materials are preferable to conventional wood fencing as the latter has a tendency to warp and form openings with age. However, high quality, air-tight, tongue-and-groove, shiplap, or board and batten construction can be used, provided the minimum surface weight requirement is met and the construction is air-tight.

Gates may be incorporated into the barrier return segments at the sides of Lots 19 and 20. The gates must be of the same height as the main barrier and must fit tight to the main barrier when closed. The gaps at the hinge and closure jambs shall be covered with astragals/stops. The gaps below the gate shall be no more than 1" high. The noise control barriers must be constructed so that all joints, including connections with posts, pilasters or the building shell are sealed air-tight and no openings are permitted between the upper barrier components and the ground.



### **III. Site, Traffic and Project Descriptions**

The planned project site is located along Busch Road, Valley Avenue and Ironwood Drive in Pleasanton, and currently contains the Centerpointe Presbyterian Church. The site is relatively flat and at-grade with the surrounding roadways. Surrounding land uses include single-family and multi-family residential adjacent to the west and north, a City of Pleasanton corporation yard across Ironwood Drive to the east, vacant land across Busch Road to the south and Oldcastle Precast concrete company across Valley Avenue to the west. The Cornerstone Presbyterian Church will remain at the center of the site.

The primary source of noise at the site is traffic on Valley Avenue, which carries an existing Average Daily Traffic (ADT) of approximately 32,900 vehicles. Busch Road carries an ADT of approximately 11,950 vehicles. These traffic volumes were calculated as an interpolation of 2008 and 2025 traffic volumes provided in the City of Pleasanton Noise Element and the City of Pleasanton Circulation Element, Ref. (c). Ironwood Drive is a minor street that serves the residential area to the north of the project site.

The 2008 traffic volume for Busch Road was 3,900 vehicles ADT. The 2025 traffic volume is predicted to be 21,000 ADT. The change in traffic volume over those 17 years yields a growth rate of 10.4% per year. Applying this rate to 2008 to 2015 results in an existing traffic volume of 7,800 ADT. At a distance of 65 ft. from the centerline and at an average speed of 20 mph, the DNL was calculated to be 55 dB. Busch Road vehicle speeds are low near the intersection as Valley Avenue is the primary thoroughfare and the light at Busch Road is often red causing vehicles to come to a stop. There are few full speed passbys.

The 2008 traffic volume for Valley Avenue was 25,800 vehicles ADT. The 2025 traffic volume is predicted to be 35,000 ADT. The change in traffic volume over those 17 years yields a growth rate of 1.8% per year. Applying this rate to 2008 to 2015 results in an existing traffic volume of 29,252 ADT. At a distance of 140 ft. from the centerline and at an average speed of 40 mph, the DNL was calculated to be 64 dB.

The noise exposure from Busch Road (55 dB DNL) plus the noise exposure from Valley Avenue (64 dB DNL) equals 65 dB DNL. These noise levels correspond well with the measured traffic noise data.

The planned project includes the construction of 27 two-story single-family homes. Ingress and egress to the development will be by way of a project access street off of Valley Avenue. Six homes will be located on the east side of the church along Ironwood Drive and twenty-one homes will be located on the northwesterly side of the church.

#### **IV. Analysis of the Noise Levels**

##### **A. Existing Noise Levels**

To determine the existing noise environment at the site, continuous recordings of the sound levels were made at two locations. Location 1 was 65 ft. from the centerline of Busch Road and 140 ft. from the centerline of Valley Avenue corresponding to the most impacted planned lot line (rear yard of Lot 20). Location 2 was 60 ft. from the centerline of Ironwood Drive and 105 ft. from the Corporation Yard property line, near the lot line of Lot 27. The measurements were made on June 17-18, 2015 using Larson-Davis 812 Precision Integrating Sound Level Meters. The meters yield, by direct readout, a series of descriptors of the sound levels versus time. The measured descriptors included the  $L_1$ ,  $L_{10}$ ,  $L_{50}$ , and  $L_{90}$ , i.e., those levels that are exceeded 1%, 10%, 50%, and 90% of the time. Also measured were the maximum and minimum levels, and the continuous equivalent-energy levels ( $L_{eq}$ ), which are used to calculate the DNL. The measurements were made for a total period of 24 hours at each location and included recordings of the noise levels during representative hours of the daytime and nighttime periods of the DNL index. The results of the measurements are shown in the data table in Appendix C.

As shown in the tables, the  $L_{eq}$ 's at Location 1, 65 ft. from the centerline of Busch Road and 140 ft. from the centerline of Valley Avenue, ranged from 54.7 to 66.3 dBA during the daytime and from 46.6 to 63.2 dBA at night.

The  $L_{eq}$  noise levels at measurement Location 2, 60ft. from the centerline of Ironwood Drive ranged from 46.3 to 54.9 dBA during the daytime and from 38.9 to 50.2 dBA at night.

**B. Future Noise Levels**

The future (2025) traffic volume for Busch Road is reported in the Noise Element to be 21,000 ADT. This increase in traffic volume from the existing 7,800 ADT yields an increase of 4 dB in the Busch Road traffic noise levels. The future (2025) traffic volume from the existing 29,252 ADT for Valley Avenue is reported to be 35,000 ADT. This increase in traffic volume yields a 1 dB increase in the traffic noise levels.

**V. Evaluation of the Noise Exposures**

**A. Exterior Noise Exposures**

To evaluate the on-site noise exposures against the City of Pleasanton Noise Element standards, the DNL's for the survey locations were calculated by decibel averaging of the  $L_{eq}$ 's as they apply to the daily sub-periods of the DNL index. A 10 decibel nighttime weighting factor was applied to account for the increased human sensitivity to noise at night. Adjustments were made to the measured noise levels to account for the difference in distance between the measurement locations and the various building setbacks, using methods established by the Highway Research Board, Ref. (d). The DNL formula is shown in Appendix B. The results of the calculations are shown in Appendix C.

The calculations show that the existing noise exposure at measurement Location 1, 65 ft. from the centerline of Busch Road and 140 ft. from the centerline of Valley Avenue, was 65 dB DNL. Of this 65 dB, 55 dB is due to Busch Road traffic and 64 dB is due to Valley Avenue traffic.



At the most impacted lot line/rear yard at Lot 20, 80 ft. from the centerline of Busch Road and 140 ft. from the centerline of Valley Avenue, the noise exposures are 54 dB DNL from Busch Road and 64 dB DNL from Valley Avenue. The combined noise exposure is 64 dB DNL. Under future traffic conditions, the noise exposures were calculated to be 58 dB DNL from Busch Road traffic and 65 dB DNL from Valley Avenue traffic. The combined noise exposure is 66 dB DNL.

The noise exposures are combined using the formula:

$$66 \text{ dB} = 10\log_{10}(10^{58/10}) + (10^{65/10})$$

Thus, the noise exposures will be up to 6 dB in excess of the City of Pleasanton Noise Element standards.

At the planned minimum building setback of 100 ft. from the centerline of Busch Road and 145 ft. from the centerline of Valley Avenue, the traffic noise exposures reduce to 53 dB DNL from Busch Road and 64 dB DNL from Valley Avenue. The combined noise exposure is 64 dB DNL. Under future traffic conditions, the noise exposures are expected to increase to 57 dB DNL from Busch Road traffic and 65 dB DNL from Valley Avenue traffic. The combined noise exposure is 66 dB DNL.

The noise exposures at measurement Location 2, 60 ft. from the centerline of Ironwood Drive and 105 ft. from the City of Pleasanton Corporation Yard, is 53 dB DNL. As Ironwood Drive serves a built out residential area and traffic volume data are not available, we estimate that there will be no significant increase in the traffic noise levels. Thus, the noise exposures at the portion of the site along Ironwood Drive are within the limits of the City of Pleasanton Noise Element standards.

**B. Interior Noise Exposures**

To determine the interior noise exposures, a 25 dB reduction was applied to the exterior noise exposures at the minimum building setbacks to represent the attenuation provided by a typical building shell under a closed window condition. This condition assumes that residential dwellings have standard dual-pane, thermal insulating windows (nom. STC 28) that are kept closed all of the time, as adequate supplementary ventilation will be required by the Mechanical Code.

The interior noise exposures in living spaces of the home on Lot 20 (most impacted) closest to Busch Road and Valley Avenue will be up to 39 and 40 dB DNL under existing and future conditions, respectively. Thus, the interior noise exposures will be within the 45 dB DNL standard of the City of Pleasanton Noise Element standard.

As shown by the above evaluations, exterior noise exposure excesses will occur and mitigation measures will be required. The required noise mitigation measures are described in Section II of this report. The interior noise exposures will be within the limits of the standards. Noise mitigation measures for the interior living spaces will not be required.

The above report presents the results of a noise assessment study for the planned "Centerpointe" single-family development along Ironwood Drive in Pleasanton. The study findings for present conditions are based on field measurements and other data and are correct to the best of our knowledge. The future noise level predictions are based on information provided by the City of Pleasanton. Significant deviations in the predicted traffic volumes, future changes in motor vehicle technology, speed limits, noise regulations, or other changes beyond our control may produce long-range noise results different from our estimates.

If you need any additional information or would like an elaboration on this report, please call me.

Sincerely,

EDWARD L. PACK ASSOC., INC.

A handwritten signature in blue ink, reading "Jeffrey K. Pack", is written over a horizontal line.

Jeffrey K. Pack  
President

Attachment: Appendices A, B and C

## APPENDIX A

### References:

- (a) Site Development Plan, Centerpointe Presbyterian Church, by Ruggeri, Jensen, Azar, February 23, 2015
- (b) Noise Element of the General Plan 2005-2025, City of Pleasanton, July 21, 2009
- (c) Circulation Element of the General Plan 2005-2025, City of Pleasanton, July 21, 2009
- (d) Highway Research Board. "Highway Noise-A Design Guide for Highway Engineers". Report 117, 1971

## APPENDIX B

### Noise Standards, Terminology, Instrumentation and Building Shell Controls

#### **1. Noise Standards**

##### **A. City of Pleasanton Noise Element Standards**

The City of Pleasanton Noise Element, Chapter VIII, Adopted July 21, 2009 specifies exterior and interior noise exposure standards.

#### **Residential Exterior**

<u>Source</u>	<u>Standard</u>
Traffic	
Single-Family	60 dB DNL
Multi-Family (common areas)	65 dB DNL
Railroad	70 dB DNL
Aircraft	55 dB DNL

#### **Residential Interior**

	45 dB DNL
For railroad sources:	50 dBA $L_{max}$ Bedrooms
	55 dBA $L_{max}$ Other Interior Spaces
If more than 4 trains daytime or any trains nighttime	
Aircraft	50 dBA $L_{max}$ Bedrooms
	55 dBA $L_{max}$ Living Spaces

## 2. Terminology

### A. Statistical Noise Levels

Due to the fluctuating character of urban traffic noise, statistical procedures are needed to provide an adequate description of the environment. A series of statistical descriptors have been developed which represent the noise levels exceeded a given percentage of the time. These descriptors are obtained by direct readout of the Sound Level Meters. Some of the statistical levels used to describe community noise are defined as follows:

- $L_{10}$  - A noise level exceeded for 10% of the time, considered to be an "intrusive" level.
- $L_{50}$  - The noise level exceeded 50% of the time representing an "average" sound level.
- $L_{90}$  - The noise level exceeded 90 % of the time, designated as a "background" noise level.
- $L_{eq}$  - The continuous-equivalent level is that level of a steady noise having the same energy as a given time-varying noise. The  $L_{eq}$  thus represents the decibel level of the time-averaged value of sound energy or sound pressure squared. The  $L_{eq}$  is the noise descriptor used to calculate the DNL and CNEL descriptors.

**B. Day-Night Level (DNL)**

Noise levels utilized in the standards are described in terms of the Day-Night Level (DNL). The DNL rating is determined by the cumulative noise exposures occurring over a 24-hour day in terms of A-Weighted sound energy. The 24-hour day is divided into two sub-periods for the DNL index, i.e., the daytime period from 7:00 a.m. to 10:00 p.m., and the nighttime period from 10:00 p.m. to 7:00 a.m. A 10 dBA weighting factor is applied (added) to the noise levels occurring during the nighttime period to account for the greater sensitivity of people to noise during these hours. The DNL is calculated from the measured  $L_{eq}$  in accordance with the following mathematical formula:

$$DNL = \left[ \left[ (10 \log_{10}(10^{\sum L_{eq}(7-10)})) \times 15 \right] + \left[ (10 \log_{10}(10^{\sum L_{eq}(10-7)})) \times 9 \right] \right] / 24$$

**C. A-Weighted Sound Level**

The decibel measure of the sound level utilizing the "A" weighted network of a sound level meter is referred to as "dBA". The "A" weighting is the accepted standard weighting system used when noise is measured and recorded for the purpose of determining total noise levels and conducting statistical analyses of the environment so that the output correlates well with the response of the human ear.

### **3. Instrumentation**

The on-site field measurement data were acquired by the use of one or more of the sound analyzers listed below. The instrumentation provides a direct readout of the L exceedance statistical levels including the equivalent-energy level ( $L_{eq}$ ). Input to the meters were provided by microphones extended to a height of 5 ft. above the ground unless otherwise noted. The “A” weighting network and the “Fast” response setting of the meters were used in conformance with the applicable standards. The meters conform to the Type 1 performance standards of ANSI S1.4. All instrumentation was acoustically calibrated before and after field tests to assure accuracy.

Bruel & Kjaer 2231 Precision Integrating Sound Level Meter  
Larson Davis LDL 812 Precision Integrating Sound Level Meter  
Larson Davis 2900 Real Time Analyzer  
Tascam DR-40 Linear PCM Digital Audio Recorder

### **4. Building Shell Controls**

The following additional precautionary measures are required to assure the greatest potential for exterior-to-interior noise attenuation by the recommended mitigation measures. These measures apply at those units where closed windows are required:

- Unshielded entry doors having a direct or side orientation toward the primary noise source must be 1-5/8" or 1-3/4" thick, insulated metal or solid-core wood construction with effective weather seals around the full perimeter. Mail slots should not be used in these doors or in the wall of a living space, as a significant noise leakage can occur through them.
- If any penetrations in the building shell are required for vents, piping, conduit, etc., sound leakage around these penetrations can be controlled by sealing all cracks and clearance spaces with a non-hardening caulking compound.
- Ventilation openings shall not compromise the acoustical integrity of the building shell.



**APPENDIX C**

**On-Site Noise Measurement Data and Calculation Tables**

## DNL CALCULATIONS

CLIENT: PONDEROSA HOMES  
 FILE: 47-049  
 PROJECT: CENTERPOINTE  
 DATE: 6/17-18/2015  
 SOURCE: VALLEY AVE., BUSCH ST., CORP YARD

LOCATION 1			
Busch St, Valley Ave			
Dist to Source 65 ft., 131 ft.			
TIME	Leq	10 <sup>n</sup> Leq/10	
7:00 AM	65.1	3235936.6	
8:00 AM	66.3	4265795.2	
9:00 AM	64.2	2630268.0	
10:00 AM	63.9	2454708.9	
11:00 AM	63.4	2187761.6	
12:00 PM	63.0	1995262.3	
1:00 PM	62.5	1778279.4	
2:00 PM	62.5	1778279.4	
3:00 PM	62.7	1862087.1	
4:00 PM	59.6	912010.8	
5:00 PM	58.6	724436.0	
6:00 PM	58.1	645654.2	
7:00 PM	58.2	660693.4	
8:00 PM	56.8	478630.1	
9:00 PM	54.7	295120.9	SUM= 25904924
10:00 PM	53.8	239883.3	Ld= 62.4
11:00 PM	51.5	141253.8	
12:00 AM	49.5	89125.1	
1:00 AM	46.6	45708.8	
2:00 AM	47.5	56234.1	
3:00 AM	50.8	120226.4	
4:00 AM	59.7	933254.3	
5:00 AM	60.5	1122018.5	
6:00 AM	63.2	2089296.1	SUM= 4837000
		1.0 Ld=	57.3
			Daytime Level= 74.2
			Nighttime Level= 76.8
			<b>DNL= 65</b>
			24-Hour Leq= 61.1

LOCATION 2			
Ironwood Dr., Corp Yard			
TIME	Leq	10 <sup>n</sup> Leq/10	
7:00 AM	52.3	169824.4	
8:00 AM	53.4	218776.2	
9:00 AM	54.5	281838.3	
10:00 AM	54.9	309029.5	
11:00 AM	50.8	120226.4	
12:00 PM	50.9	123026.9	
1:00 PM	50.6	114815.4	
2:00 PM	52.0	158489.3	
3:00 PM	51.2	131825.7	
4:00 PM	48.7	74131.0	
5:00 PM	51.2	131825.7	
6:00 PM	50.4	109647.8	
7:00 PM	50.4	109647.8	
8:00 PM	48.6	72443.6	
9:00 PM	46.3	42658.0	SUM= 2168206
10:00 PM	44.4	27542.3	Ld= 51.6
11:00 PM	41.7	14791.1	
12:00 AM	40.0	10000.0	
1:00 AM	39.9	9772.4	
2:00 AM	38.9	7762.5	
3:00 AM	45.5	35481.3	
4:00 AM	44.1	25704.0	
5:00 AM	48.2	66069.3	
6:00 AM	50.2	104712.9	SUM= 301836
		Ld=	45.3
			Daytime Level= 63.4
			Nighttime Level= 64.8
			<b>DNL= 53</b>
			24-Hour Leq= 50.1

## MEMORANDUM

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**To:** Pamela Hardy, Ponderosa Homes  
**From:** David Deckman, Dudek  
**Subject:** Centerpointe Presbyterian Church Project – Health Risk Assessment  
**Date:** June 23, 2015  
**Attachments:** 1 Figures 1–3  
2 Roadway Screening Analysis Calculator  
**cc:** Jennifer Reed, Dudek  
Caitlin Munson, Dudek

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This memorandum evaluates the anticipated health impacts resulting from roadways and stationary sources in the vicinity of Ponderosa Homes' Centerpointe Presbyterian Church Project (proposed project) based on significance thresholds and methodologies in the Bay Area Air Quality Management District's (BAAQMD's) *California Environmental Quality Act (CEQA) Air Quality Guidelines* (BAAQMD Guidelines; BAAQMD 2011). The proposed project site is located on the northeast side of Valley Avenue and north of Busch Road in the City of Pleasanton, California.

### INTRODUCTION

Ponderosa Homes is proposing a development project consisting of 27 single-family dwelling units on a 6.22-acre site in the City of Pleasanton, California (Attachment 1, Figures 1–3). The proposed project involves the demolition of the existing Centerpointe Presbyterian Church buildings and construction of single-family homes located northwest of the Busch Road and Ironwood Drive intersection and northeast of Valley Avenue. The existing site includes the main Centerpointe Presbyterian Church building (stressed membrane structure) in the northwest corner, a courtyard in the center of the site, and two preschool/private school buildings in the eastern portion of the site. A parking lot stretches along the northern and eastern edges of the site. The existing daycare facilities would be retained and access to these buildings would be modified as part of the proposed project. The project would also include the extension of on-site roadways and related site improvements. The project would replace the approved church campus consisting of a 900-seat worship sanctuary at the corner of Valley Avenue and Busch Road, along with a fellowship hall, administrative buildings, and other ancillary structures.

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*Subject: Centerpointe Presbyterian Church Project – Health Risk Assessment*

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In the City's Community Development Department incompleteness letter for the proposed project (May 22, 2015), the City's Planning Division staff requested "an air quality analysis ... to ascertain whether the project would meet air-quality health risk standards issued by the Bay Area Air Quality Management District (BAAQMD)." Per Dudek's discussion with Adam Weinstein, Acting Planning Director at the City of Pleasanton (June 5, 2015), only a screening health risk assessment is requested in the form of a focused technical memorandum using the BAAQMD health risk guidance to meet the needs of the City's planning staff (Weinstein, pers. comm., 2015).

Consistent with the City's request and BAAQMD guidance, this memorandum evaluates exposure to residents of the proposed project to toxic air contaminants (TAC) from "major roadways" and stationary sources (e.g., gasoline dispensing facilities, manufacturing facilities, and emergency generators). A substance released into the air is considered a TAC if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic noncancer health effects. Examples include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources such as dry cleaners, gas stations, combustion sources, manufacturing facilities, and laboratories; mobile sources such as automobiles and trucks; and area sources such as landfills. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ systems and may be experienced either on short-term (acute) or long-term (chronic) exposure to a given TAC.

#### **BAY AREA AIR QUALITY MANAGEMENT DISTRICT THRESHOLDS**

The BAAQMD Guidelines provide guidance for Bay Area project proponents and the public for determining whether, based on substantial evidence, a project may have a significant effect on the environment under California Public Resources Code, Section 21082.2, or if a project may result in the exposure of sensitive receptors to substantial pollutant concentrations. In early 2012, the BAAQMD was ordered by the Alameda County Superior Court to set aside their air quality thresholds because the district board adopted the thresholds without undergoing CEQA review. The BAAQMD appealed this decision, and the Court of Appeal overturned the Superior Court decision. The appellate court decision, however, has been appealed to the California Supreme Court, which granted a limited review. The Supreme Court has limited review to the following issue: Under what circumstances, if any, does CEQA require an analysis of how existing environmental conditions will impact future residents or users (receptors) of a proposed project? With respect to the proposed project, this review would be related to the potential health impacts on its residents due to TAC emissions associated with major roadways and stationary sources in the vicinity of the project site. As of this date, a decision on this appeal is still pending. In light

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of these rulings, the BAAQMD is recommending that lead agencies determine their own appropriate air quality thresholds.<sup>1</sup> It is our understanding that the City of Pleasanton is choosing to use the BAAQMD thresholds contained in the 2011 version of the BAAQMD Guidelines to evaluate potential cancer risks on future residents associated with TACs.

Quantitative health-based thresholds prescribed in the BAAQMD Guidelines are shown in Table 1. Project-related air quality impacts estimated in this environmental analysis would be considered significant if any of the applicable significance thresholds presented in Table 1 are exceeded.

If health impacts would exceed these thresholds, the lead agency must implement feasible mitigation measures to reduce the associated impacts. The mitigated project's impacts are then compared again to the significance thresholds. If a project's impacts exceed the thresholds, the BAAQMD strongly encourages lead agencies to consider project alternatives that could lessen any identified significant impact, including a no project alternative in accordance with the CEQA Guidelines, Section 15126.6(e) (BAAQMD 2011).

**Table 1**  
**Bay Area Air Quality Management District Air Quality Significance**  
**Thresholds**  
**Risk and Hazards**

<b>Additional BAAQMD Requirements</b>	
<i>Pollutant</i>	<i>Operational-Related</i>
Risk and Hazards for new sources and receptors (Individual Project)	Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of > 10.0 in 1 million* Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute)* Ambient PM <sub>2.5</sub> increase: > 0.3 µg/m <sup>3</sup> annual average* <u>Zone of Influence:</u> 1,000-foot radius from property line of source or receptor
Risk and Hazards for new sources and receptors (Cumulative Threshold)	Compliance with Qualified Community Risk Reduction Plan OR Cancer: > 100 in 1 million (from all local sources)* Non-cancer: > 10.0 Hazard Index (from all local sources) (Chronic)* PM <sub>2.5</sub> : > 0.8 µg/m <sup>3</sup> annual average (from all local sources)* <u>Zone of Influence:</u> 1,000-foot radius from property line of source or receptor

Source: BAAQMD 2011.

\* Emphasis added.

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<sup>1</sup> <http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa>

## Local Community Risk and Hazard Impacts

Local community risk and hazard impacts are associated with TACs and particulate matter less than or equal to 2.5 microns in diameter (PM<sub>2.5</sub>) because emissions of these pollutants can have significant health impacts at the local level. These thresholds from the BAAQMD Guidelines are intended to apply to projects that would site new permitted or non-permitted sources in proximity to receptors and for projects that would site new sensitive receptors in proximity to permitted or non-permitted sources of TAC or PM<sub>2.5</sub> emissions. If impacts due to emissions of TACs or PM<sub>2.5</sub> would exceed any of the thresholds listed below, the proposed project would result in a significant impact:

- Non-compliance with a Community Risk Reduction Plan
- An excess cancer risk level of more than 10 in one million, or a non-cancer (i.e., chronic or acute) hazard index greater than 1.0 would be a significant cumulatively considerable contribution
- An incremental increase of greater than 0.3 micrograms per cubic meter (µg/m<sup>3</sup>) annual average PM<sub>2.5</sub> from a single source would be a significant cumulatively considerable contribution.

A project would result in a cumulatively considerable impact if the aggregate total of all past, present, and foreseeable future sources within a 1,000-foot radius from the fenceline of a source, or from the location of a receptor, plus the contribution from the project, would exceed any of the following thresholds:

- Non-compliance with a qualified Community Risk Reduction Plan
- An excess cancer risk levels of more than 100 in one million or a chronic non-cancer hazard index (from all local sources) greater than 10.0
- 0.8 µg/m<sup>3</sup> annual average PM<sub>2.5</sub>.

## ANALYSIS AND FINDINGS

The BAAQMD recommends that a lead agency identify all TAC and PM<sub>2.5</sub> sources located within a 1,000-foot radius of the proposed project site. A lead agency should enlarge the 1,000-foot radius on a case-by-case basis if an unusually large source or sources of risk or hazard emissions that may affect a proposed project is beyond the recommended radius. Permitted sources of TAC and PM<sub>2.5</sub> should be identified and located as should freeways and major (high-volume) roadways (BAAQMD 2011).

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Based on the BAAQMD guidance, major roadways with more than 10,000 annual average daily trips (AADT) were identified within the project vicinity. Valley Avenue was identified as the only roadway in the project vicinity with more than 10,000 AADT. Annual average daily traffic data were obtained for these roadways from the City's Traffic Counts Map, which includes major street traffic count data collected in 2014 (City of Pleasanton 2015). Busch Road was not included in this analysis because the reported AADT is only 3,900. The Roadway Screening Analysis Calculator provided by the BAAQMD was used to determine cancer risk based on the roadway's AADT, distance from the project site, and orientation (BAAQMD 2015). Values found in Table 2 were estimated by inputting the AADT<sup>2</sup> and distance from the closest residence on the project site to Valley Avenue into the Roadway Screening Analysis Calculator. The screening values for cancer risk and PM<sub>2.5</sub> for Valley Avenue are shown in Table 2 (see Attachment 2 for the calculator output). The Roadway Screening Analysis Calculator does not provide acute or chronic noncancer hazard indices. According to the BAAQMD's *Recommended Methods for Screening and Modeling Local Risks and Hazards*, which includes screening tables of cancer risk and PM<sub>2.5</sub> that have been replaced by the calculator, "... the maximum [acute and chronic] hazards estimated from the highest AADT were found to be extremely low" (BAAQMD 2012a).

The recently revised *Air Toxics Hot Spot Program Risk Assessment Guidelines – Guidance Manual for Preparation of Health Risk Assessments* (OEHHA 2015) prepared by the Office of Environmental Health Hazard Assessment (OEHHA) suggests an adjustment of cancer risk to reflect the fact that people are not home all the time:<sup>3</sup>

"[The fraction of time at home] can be used to adjust exposure duration and cancer risk from a specific facility's emissions, based on the assumption that exposure to the facility's emissions are not occurring away from home. From the third trimester to age <2 years, 85% of time is spent at home (Table 8.4). From age 2 through <16 years, 72% of time is spent at home. From age 16 years and greater, 73% of time is spent at home (OEHHA 2015, p. 8-5).

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<sup>2</sup> The City traffic count data show AADT at two locations on Valley Avenue in the vicinity of the proposed project: Valley Avenue at Kolln Street and Valley Avenue between Boulder Street and Stanley Boulevard. The higher AADT at the first location—28,700—was used in this analysis to provide a more conservative estimate of health impacts.

<sup>3</sup> The previous 2003 OEHHA *Air Toxics Hot Spot Program Risk Assessment Guidelines – Guidance Manual for Preparation of Health Risk Assessments* assumed that people would be at their home for 24 hours a day, 7 days per week for a lifetime. The revised 2015 OEHHA guidance reflects the fraction of time at home estimates based on the OEHHA *Technical Support Document for Exposure Assessment and Stochastic Analysis* published in August 2012.

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Over a 70-year lifetime, upon which the cancer risk estimate in the Roadway Screening Analysis Calculator is based, the age-weighted average fraction of time at home based on the above percentages is 73%. Applying this value to the cancer risk estimated using the Roadway Screening Analysis Calculator, the adjusted cancer risk is shown in Table 2.

**Table 2**  
**Screening Data for Existing Major Roadways**  
**(within 1,000 feet of the proposed project)**

Roadway Segment	Annual Average Daily Traffic	Distance to Project Site (feet)	City	Cancer Risk in 1 million	PM <sub>2.5</sub> Concentration (µg/m <sup>3</sup> )
Valley Avenue	28,700	125	Pleasanton	13.3	0.26
Fraction of Time at Home				0.73	9.7
BAAQMD Individual Screening Threshold				10	0.3
<i>Threshold Exceeded?</i>				No	No

Sources: City of Pleasanton 2015; BAAQMD 2015.

As indicated previously in Table 1, the BAAQMD risk and hazards screening analysis requires that each source's estimated cancer risk and PM<sub>2.5</sub> concentration be compared to the single-source thresholds (10 in 1 million for cancer risk and 0.3 µg/m<sup>3</sup> for PM<sub>2.5</sub> concentration). The major roadway would not result in individual impacts that would be above these thresholds, as shown in Table 2. Therefore, impacts related to cancer risk levels, acute and chronic hazard indices, and PM<sub>2.5</sub> concentrations from roadway sources would be less than significant.

Based on the BAAQMD guidance, existing permitted stationary sources were identified within 1,000 feet of the project vicinity. Stationary source and their screening values for health effects were obtained from the Stationary Source Screening Analysis Tool for Alameda County provided by BAAQMD (BAAQMD 2012b). The only stationary source identified using the stationary source tool is one gasoline dispensing facility (G8344).<sup>4</sup> The source of TACs is apparently a fuel dispensing facility at the City's park maintenance center. The BAAQMD tool reported "N/A" for cancer risk, hazard, and PM<sub>2.5</sub> for this source. It is assumed the fuel dispensing facility services city vehicles only and is not a commercial gasoline dispensing facility with a high gasoline throughput. Accordingly, it is anticipated that the facility would not exposure residents of the proposed project to substantial levels of TACs or PM<sub>2.5</sub>. The reported

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<sup>4</sup> Other stationary sources identified by the stationary source tool in the vicinity of the proposed project site were more than 1,000 feet away and were not considered to be unusually large sources of TACs or PM<sub>2.5</sub>. Using Google Earth, another potential stationary source is Utility Vault Company, Inc. (aka Oldcastle Precast, Inc.), which is located south of Valley Avenue from the project site. This source, however, is not identified by the stationary source tool as a permitted stationary source of TACs.



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screening values for cancer risk, chronic hazard index, and PM<sub>2.5</sub> for each of the identified stationary sources are shown in Table 3.

**Table 3**  
**Screening Data for Existing Permitted Stationary Sources**  
**(within 1,000 feet of the proposed project)**

Plant No.	Plant Name	Street Address	City	Cancer Risk in 1 million	PM <sub>2.5</sub> Concentration (µg/m <sup>3</sup> )	Chronic Hazard Index
G8344	City of Pleasanton Service Center	3333 Busch Road	Pleasanton	N/A	N/A	N/A
BAAQMD Individual Screening Threshold				10	0.3	1.0
<i>Threshold Exceeded?</i>				No	No	No

Sources: BAAQMD 2012b.

As indicated previously in Table 1, the BAAQMD risk and hazards screening analysis requires that each source's estimated cancer risk be compared to the single-source thresholds (10 in 1 million for cancer risk, 0.3 µg/m<sup>3</sup> for PM<sub>2.5</sub> concentration, and a chronic hazard index of 1.0). The existing permitted stationary sources would not result in individual impacts that would be above these thresholds, as shown in Table 3. Therefore, impacts related to cancer risk level, chronic hazard index, or PM<sub>2.5</sub> concentration from individual stationary sources would be less than significant, and no further analysis is required.

As recommended in the BAAQMD guidelines, all TAC sources that are located within 1,000 feet of a proposed project site should be examined and could include freeways, high volume roadways, truck distribution centers, ports, rail yards, refineries, chrome plating facilities, dry cleaners using perchloroethylene and gasoline dispensing facilities. As applicable, the risk levels from all TAC sources within the project vicinity should be combined to determine the cumulative risk to nearby sensitive receptors. The identified stationary source, however, had no reported cancer risk levels, chronic hazard index, or PM<sub>2.5</sub> concentrations. Thus, the cumulative levels were not estimated, and the potential health impacts to the residents of the proposed project reflect only those associated with Valley Avenue. As stated previously, impacts related to excess cancer risk levels, acute and chronic hazard indices, and PM<sub>2.5</sub> concentrations from roadway sources would be less than significant.

If you have any questions regarding this assessment, please feel free to contact me at 530.601.1613 or [ddeckman@dudek.com](mailto:ddeckman@dudek.com) or Jennifer Reed at 949.373.8333 or [jreed@dudek.com](mailto:jreed@dudek.com).

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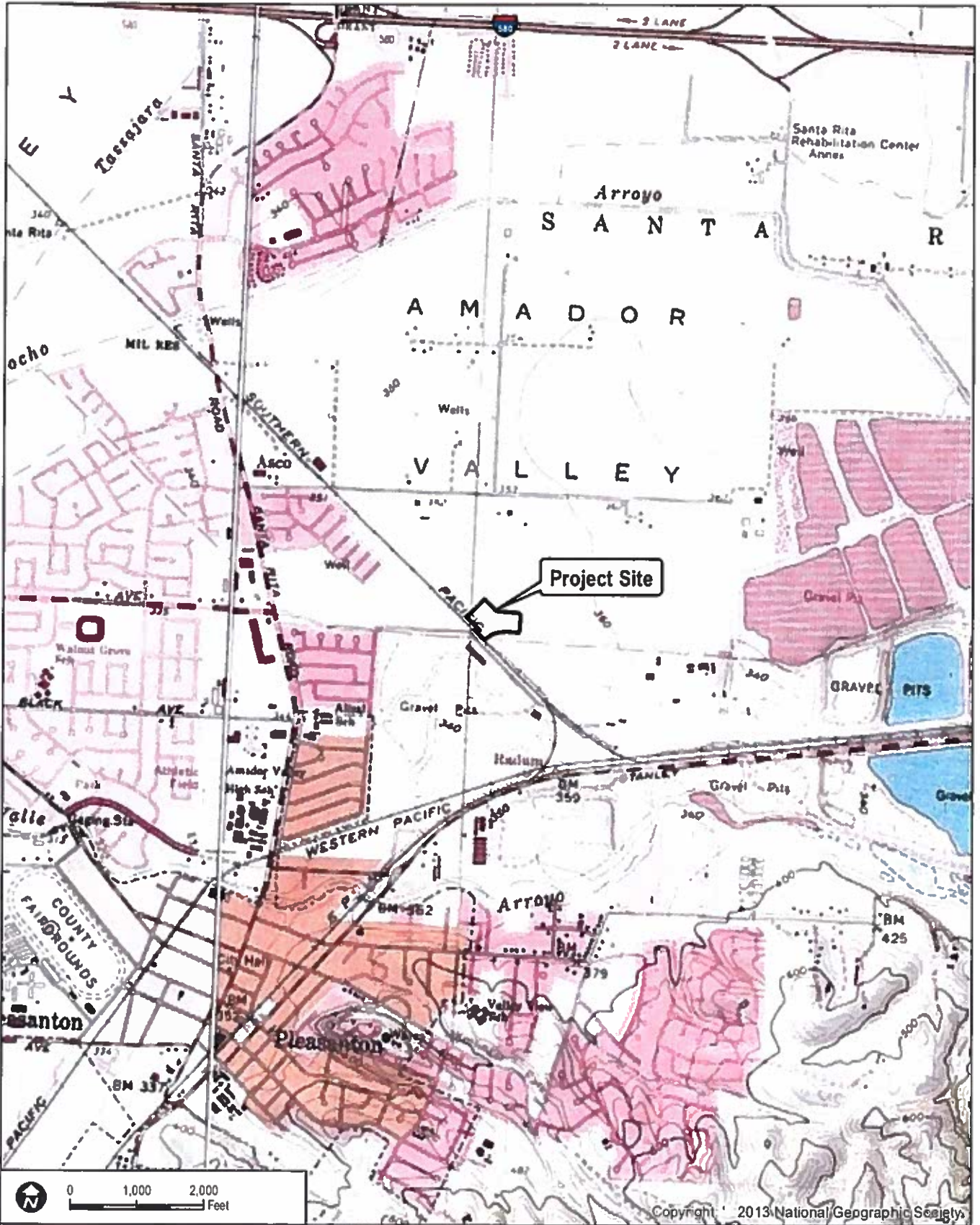
---

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**ATTACHMENT 1**  
*Figures*





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**DUDEK**

SOURCE: USGS 7.5-Minute Series Livermore Quadrangle

**FIGURE 2**  
**Vicinity Map**

Centerpointe Presbyterian Church Project - Health Risk Assessment



# **ATTACHMENT 2**

*Roadway Screening Analysis Calculator*

# Roadway Screening Analysis Calculator

County specific tables containing estimates of risk and hazard impacts from roadways in the Bay Area.

## INSTRUCTIONS:

Input the site-specific characteristics of your project by using the drop down menu in the "Search Parameter" box. We recommend that this analysis be used for roadways with 10,000 AADT and above.

- County: Select the County where the project is located. The calculator is only applicable for projects within the nine Bay Area counties.
- Roadway Direction: Select the orientation that best matches the roadway. If the roadway orientation is neither clearly north-south nor east-west, use the highest value predicted from either orientation.
- Side of the Roadway: Identify on which side of the roadway the project is located.
- Distance from Roadway: Enter the distance in feet from the nearest edge of the roadway to the project site. The calculator estimates values for distances greater than 10 feet and less than 1000 feet. For distances greater than 1000 feet, the user can choose to extrapolate values using a distribution curve or apply 1000 foot values for greater distances.
- Annual Average Daily Traffic (ADT): Enter the annual average daily traffic on the roadway. These data may be collected from the city or the county (if the area is unincorporated).

When the user has completed the data entries, the screening level PM2.5 annual average concentration and the cancer risk results will appear in the Results Box on the right. Please note that the roadway tool is not applicable for California State Highways and the District refers the user to the Highway Screening Analysis Tool at: <http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx>.

Notes and References listed below the Search Boxes

## Search Parameters

County:

Roadway Direction:

Side of the Roadway:

Distance from Roadway: 110 feet

Annual Average Daily Traffic (ADT): 28,700

## Results

### Alameda County

EAST-WEST DIRECTIONAL ROADWAY

PM2.5 annual average

0.256 (µg/m<sup>3</sup>)

Cancer Risk

13.31 (per million)

Data for Alameda County based on meteorological data collected from Pleasanton in 2005

## Notes and References:

1. Emissions were developed using EMFAC2011 for fleet mix in 2014 assuming 10,000 AADT and includes impacts from diesel and gasoline vehicle exhaust, brake and tire wear, and resuspended dust.
2. Roadways were modeled using CALINE4 air dispersion model assuming a source length of one kilometer. Meteorological data used to estimate the screening values are noted at the bottom of the "Results" box.
3. Cancer risks were estimated for 70 year lifetime exposure starting in 2014 that includes sensitivity values for early life exposures and QEHHA toxicity values adopted in 2013.