

A P P E N D I X C

L A N D S C A P E R E V I E W R E P O R T



May 21, 2014

Catarina S. Kidd, Planner
City of Lafayette
3675 Mt Diablo Blvd, Suite 210
Lafayette, California 94549

Re: DR13-14, GR04-14, TP18-14, TR 9377; LENNAR HOMES (APPLICANT), C-1 ZONING, Account #2349

Dear Catarina,

We have reviewed the submitted set of plans, with a Planning Submittal date of April 8, 2014, for the construction of three, 3-story mixed-use buildings at 3666-3682 Mt Diablo Boulevard. The proposed program includes 93,754 SF of residential and 5,500 SF of commercial space. The proposed development at the 2.0 acre site(s) includes removing approximately 50 'protected' trees.

Also reviewed was an arborist report prepared by Arborwell, dated April 4, 2014.

A site visit was made on May 12, 2014.

Site Observations and Recommendations

The project site, comprised of three separate parcels, is located at the northwest corner at the intersection of Mt Diablo Boulevard and Dolores Drive. An existing Celia's Mexican restaurant occupies the southeastern corner of the project site at the intersection. The adjacent parcel to the west is currently occupied by a one-story office building, a restaurant and an auto repair shop at the rear of the property. An existing EBMUD right-of-way runs north of, and adjacent to, the proposed development. The 'third' triangular isolated parcel (north of the EBMUD right-of-way) is currently fenced and used for vehicular storage. Highway 24 runs adjacent and parallel to the proposed development / EBMUD right-of-way.

The vast majority of the three parcels currently serves as surface parking and vehicular access. Existing trees, most of which are proposed to be removed, are located between the two parcels that are located along Mt Diablo Blvd and between the western parcel and the neighboring property at 3688 Mt Diablo Blvd. A stand of

existing trees is also located along the shared property line between the southwest parcel and the EBMUD right-of-way.

Potential view impacts that would result due to the proposed site improvements appear to be minimal based on the following:

- The existing topography is sloped up towards the rear of the property near Highway 24. The proposed building heights would be lower than the elevation of Highway 24. The topography and the existing trees along the EBMUD right-of-way and between the right-of-way and the highway would help nestle the proposed development into the hillside. Additional tree plantings throughout the EBMUD right-of-way would help mitigate view disruptions, especially given proposed tree removals in the right-of-way.
- The proposed buildings along Mt Diablo Blvd are stepped back to help soften the presence of the building mass for views along the public corridor.

More significant view impacts may be placed on the neighboring property at 3688 Mt Diablo Blvd due to proposed tree removals.

Arborist Report, Existing Trees and Recommended Mitigation Measures

The submitted arborist report is an extensive and thorough assessment of the existing trees on site. Based on recommendations made in the report, fifty (50) protected trees are slated for removal.

Per the city of Lafayette's Tree Protection Ordinance, a 'protected' tree qualifies as the following: *"a tree of any species within a commercial zoning district"*.

Based on an initial site visit, it appears some trees, located at the western end of the EBMUD right-of-way, are not identified in the report. See Item 4.

All replacement tree counts for protected trees removed from the property are calculated by the following formula stated in the city of *Lafayette's Tree Protection Ordinance*:

- *Replacement trees of two (2) 15 gallon species for each 6" of the diameter, or fraction thereof, of the tree to be removed. The diameter of a multi-trunked tree is the sum of the diameters of its component trunks.*

Tree Inventory and Assessment Table per Arborwell / *Additional Comments by City Landscape Consultant* / Mitigation Measures per the City of Lafayette's Tree Ordinance

#	Species	Dia.	Arborwell comments / <i>City Landscape Consultant comments (in italics)</i>	Save / Remove	Standard Replacement trees	Recommended Replacement Trees*
1	Aleppo pine, <i>Pinus halepensis</i>	5"	Remove per design plans.	Remove	2	--
2	Aleppo pine, <i>Pinus halepensis</i>	12"	Remove per design plans.	Remove	4	--
3	Aleppo pine, <i>Pinus halepensis</i>	5"	Remove per design plans.	Remove	2	--
4	Aleppo pine, <i>Pinus halepensis</i>	6"	Remove per design plans.	Remove	2	--
5	Aleppo pine, <i>Pinus halepensis</i>	5"	Remove per design plans.	Remove	2	--
6	Flowering plum	4"	Remove per design plans.	Remove	2	--
7	Aleppo pine, <i>Pinus halepensis</i>	8"	Remove per design plans.	Remove	4	--
8	Coast live oak, <i>Quercus agrifolia</i>	5"	Remove per design plans.	Remove	2	--
9	Coast live oak, <i>Quercus agrifolia</i>	4", 5"	Remove per design plans. <i>We suggest tree assessment be based on the Guide for Plant Appraisal, 9th edition rather than the Ordinance's 'sum of all trunks'. (Multi-trunk correlates to 6" diameter tree)</i>	Remove	4	2
10	Coast live oak, <i>Quercus agrifolia</i>	4", 5"	" " " " "	Remove	4	2
11	Valley oak, <i>Quercus lobata</i>	12"	Remove per design plans.	Remove	4	--
12	Coast live oak, <i>Quercus agrifolia</i>	4"	Remove per design plans.	Remove	2	--
13	Coast live oak, <i>Quercus agrifolia</i>	5"	Remove per design plans.	Remove	2	--

14	Coast live oak, <i>Quercus agrifolia</i>	7"	Remove per design plans. <i>Tree is located inside EBMUD right-of-way approximately 4 feet from a proposed retaining wall. Consider transplanting oak 10 feet north of current location (or outside propose construction zone in EBMUD right-of-way).</i>	TBD	(4)	0
15	Bailey acacia, <i>Acacia baileyana</i>	14"	Remove per design plans.	Remove	6	--
16	Bailey acacia, <i>Acacia baileyana</i>	8", 9", 9"	Remove per design plans. <i>We suggest tree assessment be based on the Guide for Plant Appraisal, 9th edition rather than the Ordinance's 'sum of all trunks'. (Multi-trunk correlates to 15" diameter tree)</i>	Remove	10	6
17	Bailey acacia, <i>Acacia baileyana</i>	6"	Remove per design plans.	Remove	6	--
18	Chinese elm, <i>Ulmus parvifolia</i>	~12"	Remove per design plans. <i>Tree is located within gated fence areas. Additional replacement trees may be warranted per measured diameter.</i>	Remove	4 to 6	--
19	Chinese elm, <i>Ulmus parvifolia</i>	~12"	" " " " "	Remove	4 to 6	--
20	Chinese elm, <i>Ulmus parvifolia</i>	~12"	" " " " "	Remove	4 to 6	--
21	Red river gum, <i>Eucalyptus camaldulensis</i>	19"	Remove per design plans.	Remove	8	--
22	Red river gum, <i>Eucalyptus camaldulensis</i>	14", 19"	Remove per design plans. <i>We suggest tree assessment be based on the Guide for Plant Appraisal, 9th edition rather than the Ordinance's 'sum of all trunks'. (Multi-trunk correlates to 23.5" diameter tree)</i>	Remove	12	8

23	Red river gum, <i>Eucalyptus camaldulensis</i>	26"	Remove per design plans.	Remove	10	--
24	Red river gum, <i>Eucalyptus camaldulensis</i>	10"	Remove per design plans.	Remove	4	--
25	Red river gum, <i>Eucalyptus camaldulensis</i>	8"	Remove per design plans.	Remove	4	--
26	Red river gum, <i>Eucalyptus camaldulensis</i>	5"	Remove per design plans.	Remove	2	--
27	Coast live oak, <i>Quercus agrifolia</i>	11"	Preserve. <i>Retain arborist to remove all understory plantings within 20 feet of oak. Apply 4 o 8 inches of mulch throughout dripline area.</i>	Save		
28	Valley oak, <i>Quercus lobata</i>	14"	Preserve. Included bark at weakly attached branches. <i>Project plans show removal due to realignment of EMBUD access road and proposed grading.</i> <i>Consider preservation. See Item 1.</i>	TBD	(6)	--
29	Aleppo pine, <i>Pinus halepensis</i>	5"	Overcrowded. Preserve. <i>Located a few feet from EBMUD access road. Road may adversely impact tree. Removal may benefit adjacent oak grove. Consider removal.</i>	TBD	(2)	--
30	Coast live oak, <i>Quercus agrifolia</i>	7"	Overcrowded; volunteer. Preserve. <i>Retain arborist to remove all understory plantings within 20 feet of oak. Apply 4 o 8 inches of mulch throughout dripline area.</i>	Save		--

31	Coast live oak, <i>Quercus agrifolia</i>	12"	Overcrowded; volunteer. Preserve. <i>Shown to remain, but proposed grading for EBMUD access road would likely require removal.</i> <i>See Item 1.</i>	TBD	(4)	--
32	Aleppo pine, <i>Pinus halepensis</i>	14"	Preserve. <i>Proposed grading for EBMUD access road would require removal. If proposed alignment is revised, we suggest that tree still be removed to proximity to tree #31, a 12" coast live oak.</i>	Remove	6	--
33	Raywood ash, <i>Fraxinus augustifolia</i>	6"	Remove per design plans.	Remove	2	--
34	Raywood ash, <i>Fraxinus augustifolia</i>	6"	Remove per design plans.	Remove	2	--
35	Evergreen pear, <i>Pyrus kawakamii</i>	9"	Remove per design plans.	Remove	4	--
36	Flowering ornamental pear, <i>Pyrus calleryana</i>	8", 9"	Remove per design plans. <i>We suggest tree assessment be based on the Guide for Plant Appraisal, 9th edition rather than the Ordinance's 'sum of all trunks'. (Multi-trunk correlates to 12" diameter tree)</i>	Remove	6	4
37	Flowering plum, <i>Prunus sp.</i>	9"	Remove per design plans.	Remove	4	--
38	Flowering plum, <i>Prunus sp.</i>	9"	Remove per design plans.	Remove	4	--
39	Flowering plum, <i>Prunus sp.</i>	12"	Remove per design plans.	Remove	4	--
40	London plane, <i>Platanus x hispanica</i>	18"	Remove per design plans; Candidate for transplantation. <i>If successfully transplanted, no mitigation measures will be assessed. See Item 2.</i>	TBD	(6)	6

42	Southern magnolia, <i>Magnolia grandiflora</i>	17"	Remove per design plans. <i>Proposed plans show tree transplanted. If successfully transplanted, no mitigation measures will be assessed.</i> <i>We recommend removal and replacement-in-kind. See Item 3.</i>	Remove	6	--
44	<i>Xylosma congesta</i>	8"	Remove per design plans.	Remove	4	--
45	Chinese elm, <i>Ulmus parvifolia</i>	~16"	Remove per design plans.	Remove	6	--
46	Chinese elm, <i>Ulmus parvifolia</i>	~12"	Remove per design plans. <i>Additional replacement trees may be warranted per measured diameter.</i>	Remove	4 to 6	--
47	Chinese elm, <i>Ulmus parvifolia</i>	~12"	Remove per design plans. <i>Additional replacement trees may be warranted per measured diameter.</i>		4 to 6	--
48	Camphor, <i>Cinnamomum camphora</i>	5"	Remove per design plans.	Remove	2	--
49	Camphor, <i>Cinnamomum camphora</i>	5"	Remove per design plans.	Remove	2	--
50	Sweetgum, <i>Liquidambar</i>	7"	Remove per design plans.	Remove	4	--
51	Deodar cedar, <i>Cedrus deodara</i>	8"	Remove per design plans.	Remove	4	--
52	Bailey acacia, <i>Acacia baileyana</i>	5"	Remove per design plans.	Remove	2	--
53	Coast live oak, <i>Quercus agrifolia</i>	4", 4"	Remove per design plans. <i>We suggest tree assessment be based on the Guide for Plant Appraisal, 9th edition rather than the Ordinance's 'sum of all trunks'. (Multi-trunk correlates to 5.5" diameter tree)</i>	Remove	4	2

54	Coast live oak, <i>Quercus agrifolia</i>	4	Remove per design plans.	Remove	2	--
55	Aleppo pine, <i>Pinus halepensis</i>	5"	Remove per design plans.	Remove	2	--
56-66	Varies		<i>Trees located along western portion of EBMUD right-of-way (not shown on plans). Arborist to execute structural pruning, and provide mulch throughout dripline areas. See Item 4.</i>	Save		
67	Chinese elm, <i>Ulmus parvifolia</i>	7", 6"	Remove per design plans. <i>We suggest tree assessment be based on the Guide for Plant Appraisal, 9th edition rather than the Ordinance's 'sum of all trunks'. (Multi-trunk correlates to 9" diameter tree)</i>	Remove	6	4
68	Chinese elm, <i>Ulmus parvifolia</i>	7", 6"	Remove per design plans.	Remove	6	4
69	Chinese elm, <i>Ulmus parvifolia</i>	4"	Remove per design plans.	Remove	2	--
70	Chinese elm, <i>Ulmus parvifolia</i>	12"	Remove per design plans.	Remove	4	--
71-76	Varies		Neighboring trees on adjacent property (not shown on plans) to remain. Please indicate location on all relevant plans showing approximate drip line locations.			
85-104	" " "		" " " " "			

*Reduced Multi-trunked calculation (based on the Council of Tree & Landscape Appraisers Guide for Plant Appraisal, 9th edition) subject to the review and approval of the Planning Commission and City Staff.

The preliminary total Tree Replacement (15 gallon) count may range between the following:

- Typical Tree Replacement Counts:
 - Two hundred six to two hundred thirty-eight (206 to 238) – depending on potential preservation/removal as noted; and additional measurements to made to verify diameters
- Suggested Tree Replacement Counts:
 - One hundred sixty-eight to two hundred (168-200) – depending on potential preservation/removal as noted; and additional measurements to made to verify diameters

Due to site constraints, the new development will likely not be able to accommodate the quantity of 15 gallon replacement trees. As an alternative, at the City's discretion, in-lieu of on-site replacement trees, the applicant may make payments set forth by the city council for each 15-gallon replacement tree. The in-lieu payment shall be used by the city for a tree education or a tree planting program. Recent values for each 15 gallon replacement tree have equaled \$263/tree.

Additionally, the applicant may utilize the following substitution chart to satisfy tree mitigations:

- Two (2) 15 gallon replacement trees in exchange for the planting of one (1) 24" box sized tree
- Four (4) 15 gallon replacement trees in exchange for the planting of one (1) 36" box sized tree
- Eight (8) 15 gallon replacement trees in exchange for the planting of one (1) 48" box sized tree
- Sixteen (16) 15 gallon replacement trees in exchange for the planting of one (1) 60" box sized tree
- Thirty-two (32) 15 gallon replacement trees in exchange for the planting of one (1) 72" box sized tree

All proposed mitigation species shall be subject to the review and approval of the Planning Department.

If trees greater than 24" box sized containers are planted on the subject property or adjacent property, we suggest that the city and/or project arborist inspect each prior to planting. We also highly recommend that the project arborist be on-site to properly prepare rootball and planting pit at the time of planting.

Additional Recommendations

1. The proposed realignment of the existing EBMUD access road north of the development shows grading at the root crowns at a number of trees. In an effort to preserve the trees, consider keeping the current alignment or modifying the layout of the access lane to avoid grade disturbance at the trees.
2. The arborist suggests that tree #40, an 18" London plane, be transplanted on site. While the species is noted as being relatively tolerant of root disturbance, transplanting a tree of this size would require considerable aftercare efforts (years) and costs (\$30k to 40k). If the developer elects to proceed with the transplant, the tree should be boxed and transplanted in the cool season. The uprooted/transplanted plane tree will require an intensive watering regime.
3. Plans show tree #42, an existing 17" magnolia street tree to be relocated to the vehicular entry at Mt Diablo Blvd. Given the species' noted "poor" rating relative to root disturbance (Clark, J., and N. Matheny. 1997. *Trees and Development*), we recommend removal (no transplantation). To 'balance' the entry feature, plant one (1) 36" box Magnolia grandiflora at the location of the relocated magnolia. The new magnolia will qualify as part of the mitigation.
4. A number of existing trees along the western portion of the EBMUD property are missing the numeric metallic tree tag. Please verify all trees surveyed are appropriately tagged in the field and shown on all relevant plans. Additionally, it appears some trees were tagged by an alternate tree service evidence by *blue* metallic tree tags. Please accommodate trees accordingly and include in subsequent reports/plans.
5. Given the number of trees proposed for removal and the twenty or more deemed to be preserved, consider providing a Tree Removal / Tree Preservation Plan as the project progresses. Pertinent tree protection notes, arborist contact info, and tree protection fencing and details can be located on this sheet.

Recommendations for Sheet L.4, *Preliminary Planting Plan*

The *Preliminary Planting Plan* shows proposed tree locations, a plant list and community amenities.

6. See Item 3.
7. Proposed coast live oaks are noted as “street trees in tree grates”. While a magnificent native, this species prefers ample root space and well-drained soil. Oaks without adequate soil volume tend to be short-lived and stunted (e.g. a number of existing coast live oaks planted years ago at the Safeway site east of the proposed project). If specified as a street tree, consider the following (as an alternative to the typical 4x4 tree well) to support and sustain the tree:
 - a. Linear trenching: to allow for adequate root space for support and development.
 - b. Structural/engineered soil under adjacent pavement. In addition to providing a compactable base for pavements, structural soil provides a soil component to the aggregate mix that facilitates root growth. Typical road bases do not have this tree-friendly component.
 - c. Permeable pavers / porous concrete: to allow for oxygen exchange and water infiltration.
 - d. Drainage out-flows: providing drainage outlets to minimize water retention that may lead to anaerobic conditions and root rot.
 - e. Suspended pavement/structural cell system: supports pavement, creating large subsurface areas of uncompacted soil for root growth,Whether coast live oaks are specified or not, adopting these urban tree planting BMPs is a worthy investment to maximize the health and life span of the street trees.
8. While a number of trees are deemed for removal within the adjacent EBMUD right-of-way, no significantly sized trees are proposed on the property. While this may be due to the noted water lines that run through the right-of-way, it appears there is sufficient room (up to a 30 foot clearance or more) to accommodate additional trees. Trees planted along the southern portion of the right-of-way would help nestle the proposed buildings into the landscape and may qualify as mitigation trees.
9. The plaza, roughly 40' x 60', at the intersection of Mt Diablo Blvd and Dolores Drive provides little shade. Considering incorporating a shade structure(s) or additional trees.
10. While unfamiliar to the proposed ‘reverse’ angled parking where vehicles will be required to back into the diagonal stall, the project may warrant temporary signs instructing drivers to safely back into stalls.

Please contact us if you have questions or need additional information.

Sincerely,

INSIDEOUT DESIGN, INC

A handwritten signature in blue ink, appearing to read 'Pennell Phillips', with a long horizontal stroke extending to the right.

Pennell Phillips

City Landscape Consultant
Landscape Architect, CLA 5602
Certified Arborist, WE-6608A