# Downtown Specific Plan Downtowncode Appendix A

# **Parking Lot Shading Requirements**

## Parking lot areas subject to the 50% shading requirement are as follows:

- 1. Parking stalls;
- 2. All vehicular back up areas.

## Parking areas not subject to the shading requirement include:

- 1. Truck loading areas in front of overhead doors;
- 2. Truck maneuvering and parking areas separate from other vehicle parking areas;
- 3. Driveways;
- 4. Surfaced areas not accessible for vehicle parking, driving or maneuvering;

## Shading requirements shall be calculated as follows:

- 1. Shade shall be calculated according to the percentage of shade coverage of the canopy, determined by the location of the tree within the parking lot. Refer to the parking lot shading diagram.
- 2. The shade percentage figures are based on the canopy spread of the tree 15 years from planting. The tree is assumed to be planted from 15 gallon containers.
- 3. Overlapping shade is not calculated twice. Therefore, spacing trees closer than their designated spread will not provide more shade value.

**Example of Shade Calculation** 

Tree	Interior Planter - 100%	South, East and West - 50%	Corner and North - 25%
Celtis sinensis	3 x (962) = 2,886	NA	NA
Lagerstroemia indica	NA	5 x (157) = 785	NA
Magnolia grandiflora	NA	2 x (481) = 962	2 x (240) = 480
Pyrus calleryana	NA	2 x (354) = 708	2 x (177) = 531
Calculated Total	2,886+	2,455 +	1,011 = 6,352

Required Total

Area of Paving: 12,422 square feet

Area required to be shaded:  $12,422 \times 50\% = 6211 \text{ square feet}$  6,352 > 6,211

Shade provided exceeds amount required. Thus, shading requirements are satisfied.

# Appendix $\mathbf{A}$

# Tree Sizes, Shade Percentages and Square Footabes for Calculating Shade Coverage

Tree	Interior Planter - 100%	South, East and West - 50%	Corner and North - 25%
Large Trees 30' - 35'	962 sq. ft.	481 sq. ft.	240 sq. ft.
Medium to Large Trees 25' - 30'	707 sq. ft.	354 sq. ft.	177 sq. ft.
Medium to Small Trees 20' - 25'	491 sq. ft.	246 sq. ft.	123 sq. ft.
Small Trees 15' - 20'	314 sq. ft.	157 sq. ft.	79 sq. ft.

# South Parimeter Trees (50% SHADE VALUE) North Parimeter Trees (25% SHADE VALUE) . INTERIOR TREES (100% SHADE VALUE) (100% SHADE VALUE) . Area not to be included in shade calculations. WALKWAY . . . Parking Lot Shade Diagram backup areas (24' for 2-way driveaisles) are included in calculations. All parking spaces (18') and West Parimeter Trees (50% SHADE VALUE) (25% SHADE VALUE) Corner Tree 3

shading calculation requirements.

۰

are not included in

Driveways: Driveaisles with no parking or backup

.

Corner Tree (25% SHADE VALUE)

East Perimeter Trees (50% SHADE VALUE)

Taaatt

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1. This diagram is indended to demonstrate the proper percentages allowed for various shade conditions. Note:

South Parimeter Trees

(50% SHADE VALUE)

(25% SHADE VALUE)

Corner Tree

Corner Tree (25% SHADE VALUE)

2. This diagram is not an example of the required 50% total shade coverage.

3. Shade overlap is not counted twice



# Downtown Specific Plan Downtowncode Appendix B



"Where Quality Trees Count"



145 Duncan Hill Road

Auburn, CA 95603

www.abacus-tree.com

(530) 889-0603 Phone & Fax

E-mail: ken@abacus-tree.com

# **Consulting Arborist Report**

Prepared at the request of:

Matt Brogan

of

Mark Thomas & Company, Inc.

for:

City of Roseville

Vacant Lot @ Lincoln Street & Washington Blvd.

APN # 011-101-111; 011-101-112; 011-063-004; 011-063-002; and 011-063-001

located in:

# Roseville, California

## Kenneth Menzer

International Society of Arboriculture, Certified Arborist #WE-2122A
International Society of Arboriculture (ISA),
Western Chapter of ISA
American Society of Consulting Arborists
California Native Plant Society
International Oak Society
California Oak Foundation

February 4, 2008

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Mark Thomas & Company, Inc. Arborist Report by:

**ABACUS** 

Kenneth Menzer © 2008

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# **Executive Summary:**

Matt Brogan of Mark Thomas & Company hired **ABACUS** to evaluate and inventory the trees for proposed development in the City of Roseville for the existing vacant lot at the Washington Boulevard and Lincoln Street junction, (also known as APN # 011-101-111, APN #011-101-112, APN #011-063-004, APN #011-063-002, and APN #011-063-001), and produce the end product, an Arborist Report.

**ABACUS** was on site on December 27th, 2007; providing on-site tagging, identifications, number of trunks, measurements of DBH and canopy, field condition notes, recommended actions, and ratings of all trees on property.

There are 24 trees on the property, and 13 protected trees pursuant to the Roseville Tree Ordinance.

- 3 trees are <u>noted for removal</u> due to their poor condition and are rated a 0 ("dead"), 1 ("dangerous") or 2 ("poor").
- 21 trees are rated 3 ("fair"), or 4 ("good").
- There were no trees in "excellent" condition with a rating of 5.

There are 2 Canary Island Palm, 1 Interior Live Oak, 1 Siberian Elm, 16 Valley Oak, 2 Western Cottonwood, 1 Coast Live Oak, and 1 Willow.

The protected trees are noted in GREEN BOLD on the enclosed table on pages 4, 5 and 6.

# **Assignment:**

Pursuant to your request, **ABACUS** completed an inventory of the trees on site, providing on-site tagging, identifications, number of trunks, measurements of DBH<sup>1</sup> and canopy, field condition notes, recommended actions, and ratings of all trees on property, and identification and measurements of DBH and canopy for trees off property.

# **Observations:**

Nicole Harrison, ISA Certified Arborist #WE-6500A, under the direction of Kenneth Menzer, Senior Consulting & ISA Certified Arborist #WE-2122A, evaluated and tagged all trees in the City of Roseville for the existing vacant lot at the Washington Boulevard and Lincoln Street junction. There are 13 protected trees on site per the City of Roseville Tree Preservation Plan. The fieldwork was completed on December 27th, 2007.



The trees (on-site) tagged by **ABACUS** have a numbered tag, placed on each one that is 1-1/8" x 1-3/8", green anodized aluminum, "acorn" shaped, and labeled: **ABACUS**, **Auburn**, **CA** with 1/8" pre-stamped tree number, our phone number 530-889-0603, attached with a natural colored aluminum 10d (3") nail, installed at 6 feet above ground level on the north side of the tree. The tag should last  $\sim 10-20$  years depending on the species, before it is enveloped by the trees' normal growth cycle.

<u>Chart B</u> in this report is an inventory on the protected trees. The following terms, and <u>Chart A</u> will further explain our findings on <u>Chart B</u> and the trees in question.

<u>Species</u> of trees is listed by our local and correct common name and botanical name by genus (capitalized) and species (lower case).

**<u># Stems</u>** refers to the quantity of trunks or stems of a tree that have a significant connection. If one stem or trunk were to be removed, it would cause decay or harm to an adjoining stem, making it one tree. All stems must be of the same species. (Also see "Tree SIZE Expressed by Trunk Diameter" at the end of this report)

**<u>DBH</u>** (diameter breast high) is normally measured at 4'6" (above the average ground height for "Urban Forestry"), but if that varies then the location where it is measured is noted here. A diameter tape<sup>2</sup> was used to measure the DBH for trees.

<u>Canopy</u> is the farthest extent of the crown composed of leaves and small twigs. This measurement further defines the Critical Root Zone (CRZ) or Protection Zone (PZ), which is a circular area around a tree with a radius equal to a tree's largest dripline plus 1'. Our canopy measurement is the longest dripline measurement from the center point of the tree and includes the 1' only on the Tree Site Map.

**Rating** is subjective to health and structure = condition. All of the trees were also rated for condition, per the recognized national standard as set up by the <u>Council of Tree and Landscape Appraisers</u> and the <u>International Society of Arboriculture</u> (ISA) on a numeric scale of 5 (being the highest) to zero (the worst condition, dead) as in *Chart A*. The rating was done in the field at the time of the measuring and inspection. The scale is as follows:

<sup>&</sup>lt;sup>1</sup> DBH or dbh, "Diameter Breast high" is the diameter of the tree's trunk in inches, measured 4' 6" off the ground (for more information see "Tree SIZE Expressed by Trunk Diameter" at the end of this report).

<sup>&</sup>lt;sup>2</sup>A Diameter Tape is used to figure the tree's diameter, by measuring the circumference, whereon the inches are pre-multiplied by 3.14 or  $\pi$  ( $\pi$  called pi) and shown to produce the diameter of the tree directly on the tape.

	Chart A	
No problem	5	excellent
No apparent problem(s)	4	good
Minor problem(s)	3	fa <u>i</u> r
Major problem(s)	2	poor
Extreme problem(s)	1	hazardous or dangerous
Dead	0	dead

There is a very important line drawn between a tree rated a 3 and a 2. A tree rated 3, 4, or 5 is a tree to be preserved, and a tree rated 0, 1, or 2 is recommended for removal. On the following tree list BLACK marks are <u>field notes and action items on trees that are to remain</u>, and RED are trees that are recommended for removal. Trees rated a 2 may be retained but <u>only</u> if the recommendations are followed, otherwise the tree should be removed.

Rating #0: This indicates a tree that has no significant sign of life.

Rating #1: The problems are extreme. This rating is assigned to a tree that has structural and/or health problems that no amount of work or effort can change. The issues may or may not be considered a dangerous situation.

Rating #2: The tree has major problems. If the option is taken to preserve the tree, its condition could be improved with correct arboricultural work including, but not limited to: pruning, cabling, bracing, bolting, guying, spraying, mistletoe removal, vertical mulching, fertilization, etc. If the recommended actions are completed correctly, the hazard can be reduced, and the rating can be elevated to a 3. If no action is taken the tree is considered a liability and should be removed.

Rating #3: The tree is in fair condition. There are some minor structural and/or health problems that pose no immediate danger. When the recommended actions in an arborist report are completed correctly the defect(s) can be minimized or eliminated.

Rating #4: The tree is in good condition and there are no apparent problems that a Certified Arborist can see from a visual ground inspection. If potential structural or health problems are tended to at this stage future hazard can be reduced and more serious health problems can be averted.

Rating #5: No problems found from a visual ground inspection. Structurally, these trees have properly spaced branches and near perfect characteristics for the species. Highly rated trees are not common in natural or developed landscapes. No tree is ever perfect especially with the unpredictability of nature, but with this highest rating, the condition should be considered excellent.

**Notes:** explain why the tree should be removed or preserved. If it is to remain and be preserved the tree may need some form of work to limit future liability from partial or total failure. Lower deadwood may not be an immediate problem, but the same size wood at a much higher location on the trees could be dangerous and might cause a minor injury to a fatal blow if the branch failed.

### Abbreviation key:

CDL: Co-Dominant Leader: Stems or trunks of the tree that are equal in size and relative importance.

**HVL:** High Voltage Lines

**IB**: Included Bark: A sharp "V" crotch, usually less than a 45° angle of attachment, between 2 branches where the bark is kept between two narrowly joined branches and the bark is continually turned inward, rather than being pushed out. It is a common point for potential massive structural failure and this hazard can be minimized with properly installed and maintained cabling, bolting or bracing.

NABA: Narrow Angle Branch Attachment: A sharp "V" crotch, usually less than a 45° angle of attachment. Included bark is explained above and is common in branches with narrow attachments. In addition, these branches may not be

ABACUS: Nicole Harrison, ISA Certified Arborist #WE-6500A

City of Roseville, Vacant lot @ Lincoln/Washington

Page #4 of 9

attached to the trunk as well as others with wider angles of attachment, and can fail more frequently depending on the size of the branch.

NCP: <u>Needs Corrective Pruning</u>: Corrective pruning is needed to change some or many defects. The Pruning Arborist will determine final work on-site.

**OPC**: Old Pruning Cut: Usually these pruning cuts are considered too large (over 3") and may have been necessary to perform at the time or not

**RDW**: Remove Dead Wood: All dead wood to be removed over 3" in diameter and if over 2" in diameter when above 25', as this is a potential hazard for people under these limbs and a future health problem for the tree.

**PS**: <u>Poor Structure</u>: These trees have grown with structural imperfections that cannot be corrected and therefore render them hazardous and more likely to fail in the future.

TBR: To Be Removed: Tree to be removed due to health and/or structural reasons. Removal should be done carefully as to not harm the surrounding trees, branches, and/or trunks above or roots below ground. Do NOT rip out or push over the tree stumps if they are near other trees that are to be preserved. Cut them off close to ground level and leave the stumps and roots to decay, unless they are located within a proposed foundation or area to be paved/concrete surfaced.

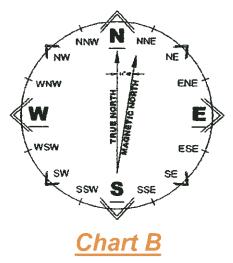
TMD: Too Much Decay

TMDW: Too Much Dead Wood

~: Tilde: This mark is used in the field in any empty box to indicate that there is no information to enter in that space.

UC: Unbalanced Canopy: Either the trunk is leaning and/or the canopy is phototropic and overly heavy on one side.

<u>Compass Points</u>: These are the standard 16 points of the compass as aligned with Geographic North or True North. In our area, True North (TN) is adjusted for declination 14°49' to the west of Magnetic North (MN).



#### Protected Trees are in GREEN BOLD

Tree #	Common Name	Botanical Name	Stems	DBH in inches	Canopy radius in feet		Action	Rating
2419	Vailey Oak	Quercus lobata	1	5	8	Steep Slope, fill @ base, trash in ditch street runoff	NCP - crossing limbs, prune while young for good structure	4
2420	Siberian Elm	Ulmus pumila	9	4,5,2,3,1,4,2,4,5		Poor pruning by vehicles on Washington, slime flux, PS	TBR	2
2421	Willow	Salix sp.	1	11 @1'	12	CDL @ 3', IB	Clean crotch, thin interior	3

ABACUS: Nicole Harrison, ISA Certified Arborist #IVE-6500A

City of	Koseville, Vaca	ant lot @ Lincoln/	washir	ngton			Page #5 of	9
					Canopy radius in			
Tree #	Common Name	Botanical Name	Stems	DBH in inches	feet	Notes	Action Thin interior, NCP for rubbing limbs,	Rating
2422	Vailey Oak	Quercus lobata	1	12 @ 2"	16	CDL @ 3", IB, on steep slope	prune for clearance, RDW	3
	Canary Island	Phoenix					Remove dead	
2423	Palm	Canariensis	1	24	16	~	fronds	3
2424	Valley Oak	Quercus lobata	1	5	7	Slight lean, CDL @ 4', dogleg @ base	NCP	3
2425	Valley Oak	Quercus lobata	1	4	7	Au	Prune for good structure	4
2426	Vailey Oak	Quercus lobata	2	5, 7 @ 1"	10	NABA, crossing limbs	Prune for good structure	3
		0			40		Prune for good	
2427	Valley Oak	Quercus lobata	2	2,6 @ 1'	12	Slight lean, suppressed	structure	3
2428	Western Cottonwood	Populus fremontii	1	3	7	~	Remove CDL @ 6'	4
2429	Valley Oak	Quercus lobata	1	6@1'	8	CDL @ 2', IB, suppressed by 2430, UC to W	Remove CDL, NCP for street clearance	3
2430	Valley Oak	Quercus lobata	1	19	~	TMD, hollow stem TMDW	TBR	1
2431	Valley Oak	Quercus lobata	1	8@ 1"	~	Diseased	TBR	1
2432	Canary Island Palm	Phoenix Canariensis	1	26	16	~	Remove dead fronds	4
2433	Western Cottonwood	Populus fremontii	8		5	NABA	Thin, remove smaller stems, remove dead stem to E	3
2434	Valley Oak	Quercus lobata	1	11	16	~	RDW	4
2435	Coast Live Oak	Quercus agrifolia	1	24 <b>@</b> base	20	CDL @ 1', some decay to S @ OPC, NABA tB	Clean crotch, thin interior	3
2436	Valley Oak	Quercus lobata	1	11	19	PS, suppressed by 2435, UC to W	RDW, NCP	3
						CDL @ 1' IB 1-4', NABA, many stems	NCP, RDW, cable	
2437	Valley Oak	Quercus lobata	1	17 @ 1'	21	writing Not tagged, CDL @ base, Homeless person living under tree, spray paint	RDW, prune off	3
2438	Oak	Quercus wislizenii	1	17 @ base	17	and trash strewn	ground	3
2439	Valley Oak	Quercus lobata	1	14	13	Under HVL	Directionally prune for HVL.	3
2440	Valley Oak	Quercus lobata	1	18	17	~~	Raise canopy for street clearance, RDW	4
							RDW, prune while young for good	
2441	Valley Oak	Quercus lobata	1	6 @ base	6	CDL @ base, IB	structure	3

2442	Valley Oak	Quercus lobata	1	19 @ 2		Many wounds wicallous almost closed, minor decay, protective fence is open	Repair protective fencing	3
Tree #	Common Name	Botanical Name	Stems	DBH in inches	Canopy radius in feet	Notes	Action	Rating

# **Analysis and Testing:**

No analysis or testing was performed, only observations from ground level.

# **Discussion:**

There are a few good reasons to prune. Removal of deadwood, directional pruning, end-weight reduction, removal of decayed or damaged wood, and structural training are the most common. Trees should be pruned more frequently when they are young to correct structural problems. Structural problems can become serious issues in mature trees and limb failures are common. Most limb failures can be prevented by proper pruning. Most of the trees growing on this site are within 10' of the street, making pruning imperative for the prevention of future hazards.

Since established trees give new construction a perspective of belonging in the landscape and provide cooling shade, visual screening, and beauty to the property...extreme caution should be used during the construction process to protect the trees that are to remain and be preserved. If all of the following recommendations are followed, these trees should remain an asset to the community for centuries.

# **Conclusion:**

There are 24 trees on the property, and 13 protected trees pursuant to the Roseville Tree Ordinance.

- 3 trees are <u>noted for removal</u> due to their poor condition and are rated a 0 ("dead"), 1 ("dangerous") or 2 ("poor").
- 21 trees are rated 3 ("fair"), or 4 ("good").
- There were no trees in "excellent" condition with a rating of 5.

There are 2 Canary Island Palm, 1 Interior Live Oak, 1 Siberian Elm, 16 Valley Oak, 2 Western Cottonwood, 1 Coast Live Oak, and 1 Willow.

# Recommendations

1) All trees to be saved should have their root zones and trunk(s) protected with a four (4') foot high orange or yellow plastic, high visibility exclusionary fence surrounding the trees' root zone. The fence should be staked 10'o.c. maximum spacing, with 5' steel "T" posts, 2" x 2" square or 2"+ Ø wood posts. The exclusionary area should be under the tree's branched canopy and extend out to the tree's longest dripline radius as a circle. Where new construction will be within the root protection zone, the fencing should be 4' away from the footings, and extend around the rest of the canopy of the tree from that point. The fencing should be maintained and not removed until the completion of construction. The fencing should completely surround the Critical Root Zone and not be "U" shaped or open at any point. Whenever possible, include as many trees that are to be saved into one fenced exclusionary Critical Root Zone.

- 2) Chip the branches of the trees to be removed or pruned and use them to mulch the area under the remaining trees' branched canopies. Other mulch may be used of arborist type woodchips (4 6" deep), but not redwood or cedar bark.
- 3) Soil compaction should be avoided by maintaining the exclusionary <u>Critical Root Zone</u> fencing, keeping material storage, people, <u>all</u> vehicles, and dogs out of this area.
- 4) Soil contamination should be avoided by eliminating chemical dumping on the property that may infiltrate into the <u>Critical Root Zone</u>. Limestone gravel should <u>not</u> be used as base material or for drain rock as it will change the pH to be more alkaline, and that may harm the trees.
- 5) Do not nail, tie, screw, or fasten any signs, braces, etc. to the trees that are to remain.
- 6) The cut and fill material excavated from or added to the lot can kill a tree by removing too many roots, drying or wetting the soil or by suffocating the roots with too much soil. Care must be taken with the added soil as well as with the actual excavation. Roots need air as much as they need water to survive and for the whole tree to live and to flourish. If fill material is needed, we can properly design aeration and ventilation systems made to protect the trees and allow for the fill material.
- 8) Extreme care of the tree trunks, canopies, and the protected "Critical Root Zone" should be taken. All tree work should be completed with a qualified ISA Certified Arborist on site. All tree work should conform to the most current standards of the American National Standards Institute (ANSI). The current ANSI Tree Care Standards are A300 (Parts 1-4) 2000 to 2002 (copies at: <a href="https://www.ansi.org">www.ansi.org</a>). The BMPs are "Best Management Practices", as companion publications to the ANSI Tree Care Standards, printed by the International Society of Arboriculture (copies at: <a href="https://www.isa-arbor.com">www.isa-arbor.com</a>). The BMP booklets explain the details of the ANSI Tree Care Standards and how to follow them correctly. Pruning of branches under 3" in diameter should be made with sharp hand tools: pruners, loppers, and/or handsaws, <a href="https://www.isa-arbor.com">not</a> chainsaws. Pruning branches over 3" must be made with the 3-cut system.

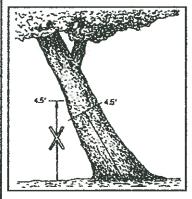
These important details will greatly increase the likelihood of survival for your trees.



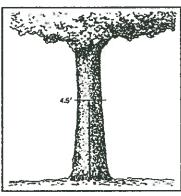
## Tree SIZE Expressed by Trunk Diameter

"The height at which the trunk diameter of a tree is measured depends upon its size. The American Standard for Nursery Stock (ANSI, 1990) state that measurements shall be taken 0 inches (13 cm) above the ground for trunk diameters up to and including 4 inches (10 cm). Larger trees (assumed, but not stated, to be of transplantable size) are to be measured at 12 inches (30 cm). Trees normally considered too large to transplant are to be measured 4.5 feet [4'-6" is also called diameter breast high or dbh] (1.4 m) above the ground. Trees, like conifers, which have branches below 4.5 feet should be measured at a height that most effectively represents the size of the tree." The diameter is calculated by first measuring the circumference divided by 3.14 (π called pi) or by using a "diameter tape" whereon the inches are multiplied by π and shown to produce the diameter directly.

This is the dbh standard for measurement as shown in figure 4-2.



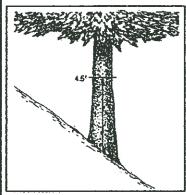
Figures 4-3 (top) and 4-4 (bottom). In each case, the trunk circumference should be measured at right angles to the trunk 4.5 feet (1.4 cm) along the center of the trunk axis so the beight is the average of the shortest and longest sides of the trunk.

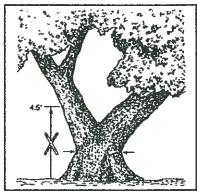


Figures 4-2. Trees with fairly straight, upright trunks with the lowest branch arising on the trunk higher than 6 feet (1.8 m) above the ground should be measured at 4.5 feet (1.4 m).

There are some exceptions to the dbh standard as shown in the figures 4-3, 4-4, 4-5 & 4-6.

Figure 4-6. In a multi-stem tree, measure the trunk circumference of each trunk at 4.5 feet (1.4 m) above the ground. The area of each trunk is determined and then added together to obtain a trunk area that is representative of the size of the tree and each of the stems contribute its proportionate share to the canopy.





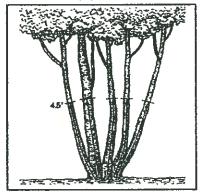


Figure 4-5. When low branches preclude measuring the trunk at 4-5 feet (1.4 m) measure the smallest circumference below the smallest branch. In this example, an alternative would be to determine the sum of the cross-sectional areas of the two stems measured about 12 Inches (30 cm) above the crotch; then average the sum of the two branch areas and the smallest cross-sectional area below the branches. This may give a better estimate of tree size. Record the height of measurement(s) and the reasons the height or those heights were chosen.

ABACUS

There Every Beton Commits"



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Tree SIZE Expressed by Trunk Diameter

Scale: NTS

Drawing: TSE



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# Disclosure, Assumptions and Disclaimer

- 1) I, Nicole Harrison, ISA Certified Arborist #WE-6500A, with "ABACUS", did personally inspect the site and investigated the tree(s) as mentioned in this report and I performed all aspects of this report unless noted otherwise in the report.
- 2) We have neither financial interest in the tree work that may or may not be done, nor financial interest in the property where the tree(s) is (are) located unless noted within the report.
- 3) All opinions and recommendations expressed herein this report are ours solely. We have used our specialized education, knowledge, training and experience to examine the tree(s) and to make our opinions and recommendations to enhance the beauty, health and longevity, with an attempt to reduce the risk of who and/or what is near these trees. We cannot guarantee or warranty that a tree will not be healthy or safe under all circumstances, nor for a specific period of time or that problems may not arise in the future.
- 4) This report with its opinions and recommendations are limited to the tree(s) inspected.
- 5) We attempt to be cognizant of the whole scope of a project, but many matters are beyond the scope of our professional consulting arborist services such as: exact property boundaries, property ownership, site lines, easements, codes, covenants & restrictions (CC&Rs), disputed between neighbors, and other issues.
- 6) We rely on the information disclosed to us and assume the information to be complete, true, and accurate.
- 7) The inspection is limited to visual examination of accessible items of the tree(s), from the ground unless otherwise noted, without excavation, probing, boring, or dissection, unless noted otherwise. Only information covered in this report was examined, and reflects the condition of those inspected items at that specific time.
- 8) Clients may choose to accept or disregard these opinions and recommendations of the arborist or to seek additional advice.
- **9)** This report is copyrighted. Any modification or partial use shall nullify the whole report. Do not copy without written permission. This report is for the client and the client's assignees.
- **10)** Sketches, diagrams, graphs, drawings, and photographs within this report are intended as visual aids and are not necessarily to scale, and should not be construed as engineering or architectural detail, reports or surveys.
- 11) We shall not attend or give a deposition and/or attend court by reason of this report unless fees are contracted for in advance, according to our standard fee schedule, adjusted yearly, for such services as described.

Signed: \_\_\_\_

# Downtown Specific Plan Downtowncode Appendix C

**EDAW Inc** 2022 J Street, Sacramento, California 95814 T 916.414.5800 F 916.414.5850 www.edaw.com

September 19, 2007

Kevin Payne
City of Roseville
Planning and Redevelopment
311 Vernon Street
Roseville, CA 95678

Subject: Roseville Downtown Land Use Plan, Cultural Resource Assessment, Placer County,

California

Dear Mr. Payne:

The City of Roseville (the City) is proposing the redevelopment of its downtown area (Plan Area). As part of this redevelopment, the City has been coordinating with the United States Postal Service (USPS) on a plan to better meet agency needs and public services. Under the current proposal, the federally owned property at 320 Vernon Street (also identified as 330 on building permits) would likely be demolished and a new post office distribution center would be constructed off-site on a parcel yet to be developed at 8051Washington Boulevard. A new retail postal space is anticipated to be constructed on-site as part of a larger development project that incorporates both the 320 and 316 Vernon Street sites. This property at 320 / 330 Vernon Street is in excess of 50 years in age, and therefore, in accordance with Section 106 of the National Historic Preservation Act, requires consideration of its potential historical significance by the USPS prior to the commencement of demolition activities.

To fulfill the requirements of Section 106, the City contracted with EDAW to conduct a historical resource assessment of the property in order to evaluate the potential for listing on the National Register of Historic Places (NRHP) in consideration of the eligibility criteria at Title 36 Code of Federal Regulations (CFR) Part 60.4. On July 10, 2007, EDAW architectural historian Angel Tomes visited the project site. Architectural features were noted, and the building was photographed and recorded on the appropriate Department of Parks and Recreation (DPR) forms. Research and field efforts conducted during this investigation led to the conclusion that the property at 320 Vernon Street appears ineligible for listing on the NRHP due to a loss of historic integrity.

The proposed site of the new post office, located at 8051 Washington Boulevard, was also assessed for the presence of historic properties on July 10, 2007. No historic structures, archaeological sites, or other cultural resources were observed during the pedestrian survey at this location.

#### INTRODUCTION

The Plan Area is situated within an established commercial area of Roseville, California (Exhibits 1 and 2, Appendix A). This area and immediate vicinity currently features a mix of pre-1956 and post-1956 buildings. The Area of Potential Effects (APE) encompasses the existing UPSP parcel at 320 Vernon Street, as well as the off-site parcel at 8051 Washington Boulevard. The APE includes all areas subject to construction-related impacts and is consistent with the definition of an APE provided in Title 36 CFR Part 800.2(c) (Exhibits 3 and 4).

#### **Project Personnel**

Research and evaluation for this project was conducted by professionally trained personnel meeting the Department of Interior's professional qualifications standards. The following individuals played key roles in the investigation:

**Angel Tomes, M.A.** received her graduate degree in Public History from California State University, Sacramento. She has eight years of cultural resource management experience, with extensive work conducted on historic urban neighborhoods and historic rural buildings. Ms. Tomes was the primary investigator and report author for this investigation.

**Steve Heipel, Principal** has over 28 years of cultural resource management experience. Mr. Heipel served in a review capacity for the project and associated technical report.

#### **Research Methods**

Preliminary background information was obtained from a review of historic and contemporary maps depicting the project area including: Sanborn Fire Insurance maps, 7.5 minute topographic quadrangles, and City of Roseville assessment maps. Subsequent research then focused on the building utilizing both primary and secondary documents including: building permits, DPR forms, and city histories. Thematic overviews were obtained from National Park Service Bulletin 13, *How to Apply the National Register Criteria to Post Offices*, and the USPS publication *Significant U.S. Post Offices in California* (USPS 1984). Oral history interviews were conducted with City of Roseville Building Department personnel in order to supplement, through narrative descriptions, the history of the property.

A records search was conducted at the North Central Information Center (NCIC) of the California Historical Resources Information System in July 2007. The records search was conducted in order to identify previously recorded sites and previously conducted studies within the project area. The records search included, but was not necessarily limited to, a review of the following sources:

- National Register of Historic Places (National Park Service 2007);
- California Inventory of Historic Resources (State of California 1976);
- California Historical Landmarks (State of California 1996);
- ► California Register of Historical Resources (State of California 1976 and updates);
- ► California Points of Historical Interest (State of California 1992 and updates);
- Caltrans Historic Bridge Inventory (State of California 1989 and updates); and
- ▶ Office of Historic Preservation (OHP) Property Directory (2007)

The records search indicated that several previous cultural resource studies have been conducted within a 1-mile radius of the project area. These studies are listed below in Table 1.

As part of the cultural resources research effort, and in accordance with the consultation provision of Section 106, the Native American Heritage Commission (NAHC) was contacted. EDAW requested a search of the NAHC's Sacred Lands Files and a list of local Native American individuals/organizations with cultural ties in or near the project area. The NAHC indicated that a search of their database failed to indicate the presence of Native American cultural resources in the immediate project area. The NAHC enclosed a list of Native American individuals/organizations that may have knowledge of cultural resources in the project area. EDAW sent letters and follow-up phone calls to the individuals listed by the NAHC. A single response was received from Rose Enos, who indicated that her only concern would be if the area was known to contain burials; otherwise she had no other concerns about the proposed project. Copies of project correspondence are provided in Appendix C.

Table 1 Summary of Record Search Results					
Title	Author	Date	NCIC#		
Cultural Resource Survey Report for the Roseville Civic Center	Jones and Stokes	1997	2564		
Historic Property Survey Report for the Vernon Streetscape Project	Bakic	2000	2554		
Negative ASR for the Vernon Streetscape Project	Dougherty	2000	2591		
Historic Architecture Survey Report for the Vernon Streetscape Project	Bakic	2000	2592		
Finding of No Effect Report for the Dry Creek Bikeway Project	Jones and Stokes	1997	2784		
Cultural Resource Inventory for the Dry Creek Bank Repair Project	McIvers and Brown	1993	3784		
Cultural Resources Report of Monitoring and Findings for the Qwest Network Construction Project	SWCA Environmental Consultants	2006	8619		
Cultural Resources Investigation for the Parking Lot at North Grant and Church Streets	PAR Environmental	1998	7732		
Cultural Resources Survey of the Proposed Sacramento to Roseville Pipeline	Theodoratus Cultural Research	1994	7745		

#### **HISTORIC SETTING**

To provide for a better understanding of the origin and development of the historic-era resource located within the Plan Area, a historic context was developed. The subsequent overview provides a general discussion of the historic themes that are represented in the vicinity of the project area. Unless otherwise noted, the following overview is primarily summarized from *A Brief History of Roseville*, by Leonard Davis (1993).

### Roseville, 1850-1900

The first Euro-Americans to settle in the area now known as Roseville were gold-seekers who left the placer fields to farm on the plains of southwestern Placer County. Many of these pioneering farmers formed the nucleus of what would become a bustling railroad town.

The first railroad to pass through this rich farming region was the California Central, an extension of the Sacramento Valley Railroad. The laying of rails through this area began in late August/early September of 1861. The route of this line was circuitous, passing through present-day Roseville Square Shopping Center, then crossing Dry Creek at Folsom where it proceeded northerly to Lincoln and Marysville. In 1864, track-laying crews from the Central Pacific Railroad pushed eastward from Sacramento across the Sierra Nevada and then the plains on their way to building what would become the western half of the nation's first transcontinental railroad. In Roseville, the rails of the Central Pacific intersected with those of the California Central. The location of this meeting of the rails was simply labeled as "Junction" on early railroad maps. A small freight and passenger center, soon to be known as Roseville, developed around this junction.

The favorable location of the junction in the heart of a rich agricultural area would make it an important shipping and trading center in years to come. One of the first individuals to capitalize on this was O.D. Lambard, who, in 1864, platted the town-site of a city to be called Roseville. The name Roseville is

purported to have been conferred because of the many wild roses growing profusely in and around the area.

For the next four decades, Roseville remained a small railroad shipping point, catering to the needs of area farmers and ranchers. The town centered on the railroad depot and a few small businesses which lined the two principal streets of Atlantic and Pacific.

### Roseville, 20th Century

By the turn of the century, Roseville's population was still largely made up of ranchers. This setting was abruptly changed in 1906 when the railroad roundhouse and repair facilities were moved to Roseville from nearby Rocklin, which had been the area's major railroad service center. Almost overnight, the quiet ranching town evolved into a bustling city of approximately 3,000 people.

New subdivisions were planned to accommodate the new residents. Business and commercial growth during this time was extensive, and caused the town to expand outward in all directions. Atlantic Street, which had been one of Roseville's two principal business thoroughfares, was moved back approximately 100 feet to accommodate the laying of new track for roundhouse and repair facilities. The business section, which had been limited to Atlantic and Pacific Streets, expanded along Lincoln, Main, Church, and later, Vernon Streets. A Chamber of Commerce was organized to provide needed municipal services such as water, electricity, police, and fire protection.

In 1909, the town was incorporated and steadily grew until it became Placer County's largest city. In one three year period (1911–1914), more than 110 new buildings were constructed. The population increased from 2,608 in 1910 to 4,477 in 1920, by which time Roseville was divided into two main sections — the North Side, centered along Lincoln Street and extending back to, and including, Church and Main Streets, and the rapidly expanding South Side, centered along Vernon Street.

The buildings within the project area during this time period consisted mostly of modest-sized dwellings, with the occasional commercial property to provide goods and services to residents. According to Sanborn Maps for the year 1925, a grocery store, a gas and oil shop, and a planing mill were situated within the project area. By 1944, the business presence along Riverside Avenue had grown to include more properties such as laundry shops and auto sales stores; however, the area was still primarily residential.

Roseville continued to serve as a major railroad center well into the post World War II years. However, by the 1950s interstate trucking and airlines provided stiff competition. The introduction of jet aircraft and the completion of Interstate 80 (I-80) through Roseville in 1956 saw the abrupt decline of the once booming passenger train service.

The town slowly expanded easterly with the completion of I-80. This led to the eventual decline of the Lincoln-Church-Main Street business center, and also to the Vernon Street area. The town's commercial center shifted from downtown to what became known as "East Roseville." By 1968, a significant portion of business activity centered in the Roseville Square-Harding Way and Sunrise Boulevard areas.

A revitalization movement was begun in 1977 to restore the physical and economic prominence of Roseville's downtown area to its heyday of the 1920s. Buildings were painted, facades reconstructed, and awnings and overhangs were installed. The revitalization effort provided renewed interest and tourism to this section of Roseville.

#### Historical Development of Postal Services and Post Office Construction

Unless otherwise stated, the following is summarized from the historic context provided within National Register Bulletin 13, *How to Apply the National Register Criteria to Post Offices* (National Park Service 1991).

Historically, governments have maintained control over postal systems. In America, the U.S. government incorporated democratic principles by constitutionally placing the power to establish post offices and post roads in the hands of Congress. The establishment of the postal service throughout the country provided an example of democracy at work: citizens petitioned Congress, which established post roads, and instructed the Postmaster General to provide postal service along the routes. By 1820, the number of post offices and miles of post roads were approximately quadruple that of 1800.

Throughout the 19th century, the postal system served as the principal, and for a long time, the only means of long distance communication. It provided both a physical and intellectual link between great distances as the nation expanded across the continent. In the process of providing and increasing its services, the Post Office Department also influenced the development of other aspects of the nation's history such as transportation. In fact, one of the greatest early factors in influencing the location of post offices was the proximity to rail lines (USPS 1985). Efforts to increase the speed and efficiency of mail delivery and competition for government contracts to carry mail encouraged the growth of roads, railroads, shipping lines, and eventually airlines.

Through the use of flat rates, stamps and envelopes, registered mail and money orders, and free delivery for larger cities, the basic form of modern postal service had taken shape by the Civil War. Important services instituted in the late 19th and early 20th centuries included rural free delivery, parcel post, and Postal Savings. Long advocated by farmers, rural free deliver, which began experimentally in 1896 and became permanent a few years later, greatly reduced the isolation of rural areas. Parcel post, inaugurated in 1913, provided another great convenience to rural areas, which were often unprofitable for private express companies.

The buildings constructed for use as post offices have reflected various government and architectural philosophies. From the establishment of the Office of the Supervising Architect of the Treasury in the 1850s until the 1890s, the style of Federal buildings' tended to follow the favorite style of the incumbent Supervising Architect. During the tenure of James Knox Taylor (1897–1912) as Supervising Architect of the Treasury, the Federal government promoted the concept that government buildings should be monumental and beautiful, and should represent the ideals of democracy and high standards of architectural sophistication in their communities.

After 1913, Federal construction policy changed in response to concerns over the cost of public building projects and controversy over whether all the buildings authorized by Congress were truly needed. The 1913 Public Buildings Act, which authorized the construction of a large number of public buildings, also prohibited the construction of new post office buildings in communities whose postal receipts totaled less than \$10,000. In the interest of economy and efficiency, the Department of the Treasury instituted a classification system under which a post office's structural and ornamental qualities were functions of the value of real estate and postal receipts in the city where it was to be located. First class post offices in large cities would still be monumental and elaborate, but for a small town, the standards specified an ordinary class of building.

The emphasis on economy and efficiency continued during the Depression, when the government rapidly expanded its public works program as a means of stimulating economic recovery and providing work for the unemployed, almost one third of who were in the building trade. The number of public buildings constructed in the 1930s increased dramatically. Approximately three times the number of

post offices were built during this period as had been built in the previous 50 years. Nearly a quarter of the post offices built during this period were authorized by the Public Works Administration (PWA), established in 1933 to oversee the planning and construction of Federal and non-Federal public works projects. Despite the desire to complete projects rapidly, the PWA also stressed the importance of high quality in order to ensure public works of an enduring character and lasting benefits.

After World War II, Federal architectural activities were well diffused throughout military and civilian agencies. A significant difference between pre- and post-war post offices was site design relative to automobile accessibility. After the war, post offices were located near major roadways or automobile traffic intersections, rather than along railroads or in town centers. The new pattern emerged as post-war development spread out from central cities. Site plan concerns included adequate parking, tailgate space, rail sidings, and drive-through service, aspects which continue to be planned for in post office construction to this day.

#### **REGULATORY CONSIDERATIONS**

#### Section 106

Section 106 of the National Historic Preservation Act of 1966 and its implementing regulations (36 CFR Part 800, as amended in 1999) requires federal agencies to consider the effects of their actions, or those they fund or permit, on properties that may be eligible for listing or are listed in the National Register of Historic Places (NRHP).

The NRHP is a register of districts, sites, buildings, structures, and objects of significance in American history, architecture, archaeology, engineering, and culture. Cultural resources can be eligible at the national, state, or local level. The regulations provided in 36 CFR Part 60.4 describe the criteria to evaluate cultural resources for inclusion in the NRHP. A resource may be eligible for inclusion in the NRHP if it:

- A. is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- B. is associated with the lives of persons important in our past;
- embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- D. has yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting one or more of the above criteria, historical resources eligible for listing in the NRHP must retain enough of their historic character or appearance to be able to convey the reasons for their significance. Such integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association.

### STUDY FINDINGS

#### Resource Description

#### 320 / 330 Vernon Street

This building features an overall utilitarian style. The flat roof is banded by a wide cornice. As depicted in Figure 1, the exterior features a smooth stucco finish, a center arched door opening with a mosaic tile

accent, and rounded awnings over sash windows. Simple square window trim is displayed beneath the sill of each window. The main section of this building is two-stories (Figure 2), and features louvered vents on the rear (north) façade of the second story elevation. A loading bay / dock addition is also extended perpendicularly from this façade. This part of the building displays concrete construction and the same flat roof present on the main building. The building was designed by supervising architect Louis A. Simon. A wood relief sculpture done by the artist Zygmund Savezich, titled "The Letter" was installed on the building in 1936. This building is further described on the associated DPR form (Appendix B).



Figure 1. 320 / 330 Vernon Street, Looking Northwest



Figure 2. 320 / 330 Vernon Street, Looking Southeast

#### **Resource Evaluation**

This building was constructed during a time of prolific civic improvement efforts in the town's early history. Although Roseville was incorporated in 1909, it wasn't until the 1920s that the City Council began funding such improvement projects. These projects tended to focus on health and safety issues, such as a bond issue for sewer construction in 1925, and the construction of bridges over Dry Creek and the railroad tracks in 1928. With the stock market crash of 1929, these civic improvements came to a halt, and didn't resume until the mid 1930s. An early project which signaled the resumption of the improvement and recovery of Roseville was the construction of the post office building on Vernon Street, along with the adjacent City Hall building. At the time of their construction, these buildings were optimistically viewed as a new start for Roseville's future (Lassell 1997).

On a national scale, the Roseville post office building was constructed during a time of prolific public building production. As previously mentioned, in the 1930s, approximately three times the number of post office buildings were built as had been built in the previous 50 years. The goal was to construct buildings of high quality and enduring character.

The post office building located at **320/330 Vernon Street**, was originally constructed in 1935. In 1965, a concrete addition was made to the building's northern elevation (Figure 3). This addition serves as a loading bay / docks for the post office. A general remodel was also made to the building at this time. The remodel and addition work was done by Wilco Construction, and completed at a cost of \$355,000 (City of Roseville Permit No. 18351). A ramp to meet the requirements of the Americans with Disabilities Act (ADA) ramp, wrought iron railing, and stone walls have been installed on the building's front (south) façade in recent years.

In 1984, the USPS undertook a historical evaluation of post offices constructed in California between the years 1900 and 1941. The nomination form (USPS 1985) primarily focused on the development of the post office as a building type. This thematic assessment of historical California post offices was reviewed and concurred with by SHPO in 1985. The Roseville post office building was determined ineligible for NRHP listing during the USPS evaluation. The SHPO was contacted during the current study by EDAW in order to ascertain the current status of the original 1984 evaluation. At that time, it was determined by SHPO that due to the age of the previous evaluation (23 years old), a new evaluation of the Roseville post office was warranted. To this end, the post office building at 320 / 330 Vernon Street was re-evaluated during this study.

The current investigation determined that, although the building was constructed during an important time of recovery and improvement in Roseville (NRHP Criterion A), and is associated with that theme, the subsequent modifications undertaken on this building (i.e., remodel and addition) have compromised its historic integrity to such an extent that it no longer retains a sense of place and time reflective of the original structure. The building, in its current configuration, does not appear to be a good representation of post office development in the 1930s. The overall building is in good condition; however the loss of historic integrity appears to override the potential significance of this resource.



Figure 3. 320/330 Vernon. View of Addition.

Research did not reveal this building to be significantly associated with a person considered important in history (NRHP Criterion B). Individuals involved in the building's overall design included: Louis Simon, the building's Supervising Architect, and Neal Melick, the Supervising Engineer. Louis Simon was Chief of the Architectural Division of the Office of the Supervising Architect from 1905 until 1934, at which time he became the Supervising Architect. The Supervising Architect of the Treasury Department is often considered one of the most prolific and longstanding offices in the annals of American architecture. This agency was charged with the design and supervising of construction of federal buildings throughout the nation over more than seven decades (Lee 2001). Although some of Simon's designs have been noted as good examples of the modern style, he is not generally considered to have been a notable figure in the office of Supervising Architect. The grand designs of public buildings completed under the tenure of James Knox as Supervising Architect (1897 – 1912), are considered by many as the zenith of such construction.

Neal Melick held the title of Supervising Engineer. Melick worked on many federal projects across the nation with Simon; some of which have received recognition as good examples of the modern movement influencing the designs of federal buildings during the mid-20th century. Although the original design and construction was influenced by these two individuals, the building, in its current configuration, has suffered a loss of integrity from the original design due to the addition on the northern façade and remodel. Because of this loss of integrity, this building does not appear to be a noteworthy example of their work, and does not appear to be eligible for listing on the NRHP under Criterion B. Likewise, due to the loss of historic integrity, this building does not appear to be eligible for NRHP listing under Criterion C. Although the property retains integrity of location, feeling and association, its integrity of materials, design, workmanship, and setting has been compromised.

While buildings and structures can sometimes provide significant insight into historic construction techniques and technologies (NRHP Criterion D), this type of building is well documented in both visual and written materials, and does not appear to be a source of important primary information. This building does not appear to meet the eligibility criteria for NRHP listing.

This resource was also evaluated in accordance with Section 15064.5(a)(1)(2)-(3) of the California Environmental Quality Act (CEQA) Guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code, and was determined to appear ineligible for listing on the California Register of Historical Resources (CRHR).

#### **CONCLUSIONS**

EDAW, under the auspices of the City, conducted an assessment of historical significance for the property at 320 / 330 Vernon Street, in conjunction with the redevelopment of downtown Roseville. This investigation led to the determination that this building appears ineligible for listing in the NRHP and the CRHR due to a loss of historic integrity.

The vacant parcel located at 8051 Washington Boulevard was also surveyed for cultural resources as part of this investigation. The parcel is surrounded by commercial land use, and covered with annual grassland and modern debris. No archaeological or historic resources were observed during the pedestrian survey. Although no archaeological resources were observed during survey efforts, subsurface material could be present. If buried cultural materials are encountered during construction, work in that area should halt until a qualified archaeologist can evaluate the nature and significance of the find.

Sincerely,

Angel Tomes, M.A. Architectural Historian

cc: 07110246.01/chron

Document3

Attachments:

Appendix A - Maps

Appendix B – Department of Parks and Recreation Forms

Appendix C – Project Correspondence

#### REFERENCES CITED

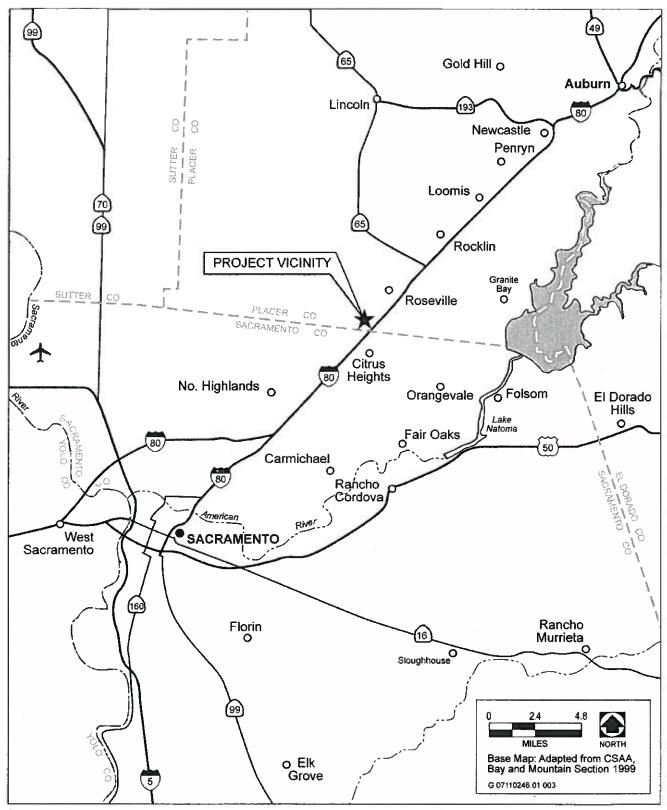
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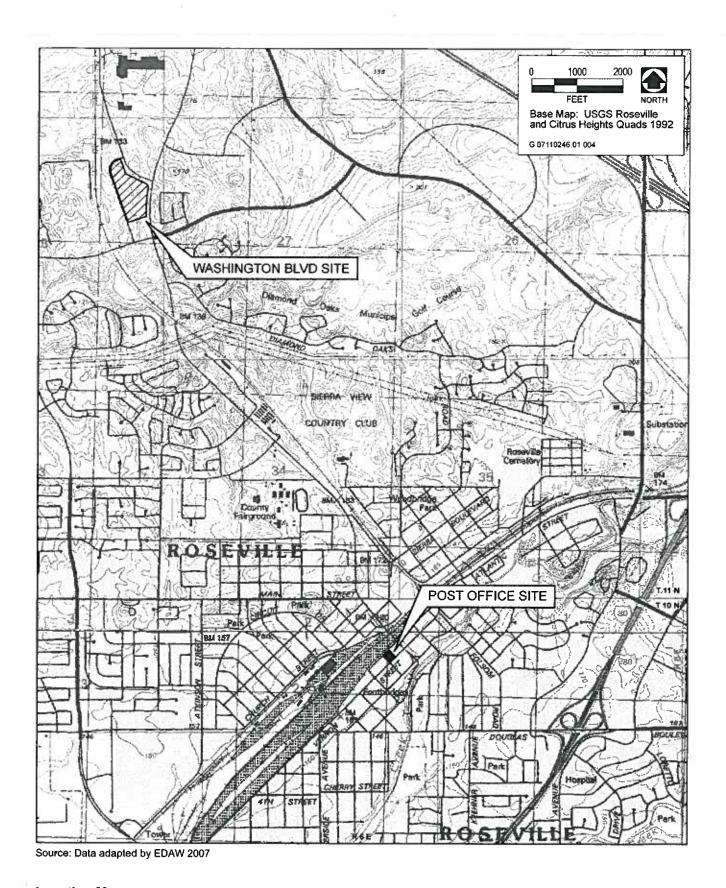
# APPENDIX A

Maps

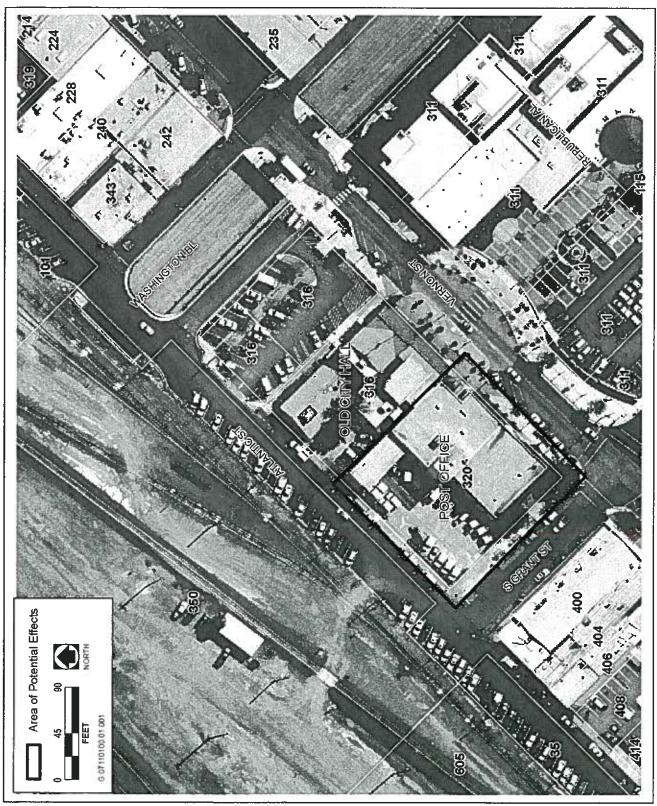
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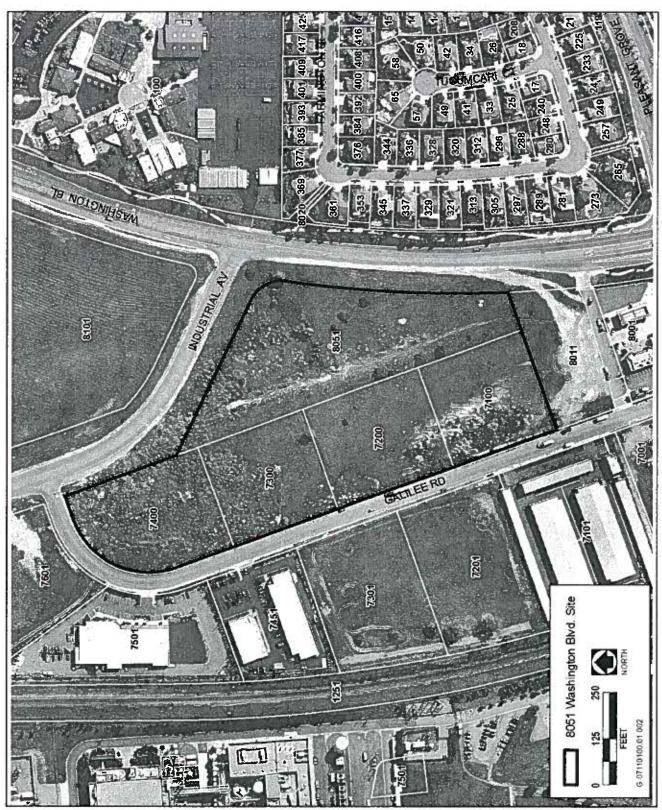
Source: Data adapted by EDAW 2007



**Location Map** 



Source: Data adapted by EDAW 2007



Source: Data adapted by EDAW 2007

# **APPENDIX B**

Department of Parks and Recreation Forms

DEPAI	of California — The ReRIMENT OF PARKS A			Primary # HRI # Trinomial		<del>13. 31.</del>
PKII	MARY RECORD	Other Lietings		NRHP Status Cod	е	
		Other Listings Review Code		Reviewer	Date	
Page 1	of 4	*Resource Name				
* <b>P2.</b> * <b>b.</b> c. d.	Other Identifier: Location: Not for Pu and (P2b and P2c or P2d USGS 7.5' Quad: Citrus Heights Address: 320/330 Vern UTM: Zone ; r Other Locational Data: (e. APN: 013-091-003-000	Attach a Location Ma Date: 1992 on Street nE/ mN g., parcel #, directions	T10N ; R6E	City: Roseville	1/4 of Sec	; Mount Diablo <b>B.M.</b> Zip: 95678
*P3a.	Description: (Describe re This building features a smooth stucco finish, a windows. Simple squa building is two-stories, loading bay / dock addi	n overall utilitarian s center arched door re window trim is dis and features louvere	tyle. The flat roopening with a r played beneath d vents on the r	of is banded by a w nosaic tile accent, a the sill of each wind ear (north) façade o	ide cornice. The main of the second	The exterior features a awnings over sash in section of this story elevation. A
*P3b.	Resource Attributes: (Li	st attributes and codes	)			
	HP 14 – Post Office	or attributed arra doubt	,			
*P4.	Resources Present: 🛛	uilding Structure [	_Object ☐Site	☐District ☐Elemer	nt of District	Other (Isolates, etc.)
		and Marie of Micephile of	OST OFFICE MEGNIA		*P6. Date Consources:  Prehist 1935  *P7. Owner an United St *P8. Recorded Tomes, A EDAW, I 2022 J S Sacrame  *P9. Date Recorded July 10, 2	structed/Age and SHistoric oric Both  ad Address: tates Of America I by: A. Inc. Street ento, CA 95814  orded:
				Figure 4	Reconna P11. Report C	aissance itation: Roseville I Use Plan Cultural
<u></u> □	ments: NONE Building, Structure/Object I Milling Station Record Other (List):	Record Archa	on Map eological Record Art Record	☐Sketch Ma ☐District Red ☐Artifact Red	cord	Continuation Sheet Linear Feature Record Photograph Record

DPR 523A (1/95) \*Required information

State of California — The Resources Agency **DEPARTMENT OF PARKS AND RECREATION** 

**BUILDING, STRUCTURE, AND OBJECT RECORD** 

Primary # HRI#

\*NRHP Status Code

Page 2 of 4

\*Resource Name or #: 320/330 Vernon Street

B1. Historic Name: Roseville Post Office

B2. Common Name: n/a

B3. Original Use: Post Office

B4. Present Use: Post Office

\*B5. Architectural Style:

Utilitarian

\*B6. Construction History: (Construction date, alterations, and date of alterations)

Built in 1935. Addition and remodel in 1965.

\*B7. Moved? ⊠No □Yes Unknown Date: Original Location:

\*B8. Related Features:

n/a

B9a. Architect: Louis Simon

B9b. Builder: Unknown

\*B10. Significance: Theme Post Office Construction

Area Roseville

Period of Significance n/a

**Property Type** Post Office

Applicable Criteria n/a

(Discuss importance in terms of historical or architectural context as defined by theme, period and geographic scope. Also address integrity.) This building was constructed during a time of prolific civic improvement efforts in the town's early history. Although Roseville was incorporated in 1909, it wasn't until the 1920s that the City Council began funding such improvement projects. These projects tended to focus on health and safety issues, such as a bond issue for sewer construction in 1925, and the construction of bridges over Dry Creek and the railroad tracks in 1928. With the stock market crash of 1929, these civic improvements came to a halt, and didn't resume until the mid 1930s. An early project which signaled the resumption of the improvement and recovery of Roseville was the construction of the post office building on Vernon Street, along with the adjacent City Hall building. At the time of their construction, these buildings were optimistically viewed as a new start for Roseville's future (Lassell 1997). (see Continuation Sheet).

B11. Additional Resource Attributes: (List attributes and codes)

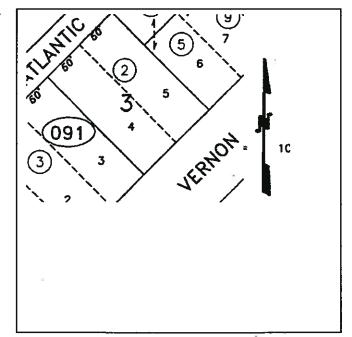
\*B12. References: Lassell, S. 1997. DPR form for 316 Vernon Street. B13. Remarks:

\*B14. Evaluator:

Tomes, A.

\*Date of Evaluation:

September 4, 2007.



State of California C The Resources Agency DEPARTMENT OF PARKS AND RECREATION	Primary #				
CONTINUATION SHEET	Trinomial				
Page 3 of 4 *Resource	ame or # 320 / 330 Vernon Street				
*Recorded by: Tomes, A.	*Date: 🛛 Continuation 🔲 Update				
Affiliation: EDAW, 2022 J Street, Sacramento, CA					

P3a (Description) continued:

This part of the building displays concrete construction, and the same flat roof present on the main building. This building was designed by supervising architect Louis A. Simon. A wood relief sculpture done by the artist Zygmund Savezich, titled "The Letter" was installed on the building in 1936.

B10 (Significance) continued:

On a national scale, the Roseville post office building was constructed during a time of prolific public building production. As previously mentioned, in the 1930s, approximately three times the number of post office buildings were built as had been built in the previous 50 years. The goal was to construct buildings of high quality and ensuring character.

The post office building located at 320/330 Vernon Street, was originally constructed in 1935. In 1965, a concrete addition was made to the building's northern elevation. This addition serves as a loading bay / docks for the post office. A general remodel was also made to the building at this time. The remodel and addition work was done by Wilco Construction, and completed at a cost of \$355,000 (City of Roseville Permit No. 18351). An ADA ramp, wrought iron railing, and stone walls have been installed on the building's front (south) façade in recent years.

In 1984, the United States Postal Service (USPS) undertook a historical evaluation of post offices constructed in California between the years 1900 and 1941. Their nomination primarily focused on the development of the post office as a building type. This thematic assessment of historical California post offices was reviewed and concurred with by SHPO in 1985. The Roseville post office building was determined ineligible for NRHP listing during the USPS evaluation. The SHPO was contacted during the current study by EDAW in order to ascertain the current status of the original 1984 evaluation. At that time, it was determined by SHPO that due to the age of the previous evaluation (23 years old), a new evaluation of the Roseville post office was warranted. To this end, the post office building at 320 Vernon Street was re-evaluated during this study.

The current investigation determined that, although the building was constructed during a time of recovery and improvement in Roseville (NRHP Criterion A), and is associated with that theme, the modifications undertaken on this building (i.e. remodel and addition) have compromised its historic integrity to such an extent that it no longer retains a sense of place and time. The building, in its current configuration, does not appear to be a good representation of post office development in the 1930s. The overall building is in good condition; however the loss of historic integrity appears to override the potential significance of this resource.

State of California C The Resources Agency	Primary #
DEPARTMENT OF PARKS AND RECREATION	HRI #
CONTINUATION SHEET	Trinomial

Primary #			
HRI #			
Trinomial			

Page 4 of 4

\*Resource Name or # 320/330 Vernon Street

Affiliation: EDAW, 2022 J Street, Sacramento, CA

B10 (Significance) continued:

Research did not reveal this building to be significantly associated with a person considered important in history (NRHP Criterion B). Individuals involved in the building's overall design included: Louis Simon, the building's Supervising Architect, and Neal Melick, the Supervising Engineer. Louis Simon was Chief of the Architectural Division of the Office of the Supervising Architect from 1905 until 1934, at which time he became the Supervising Architect. The Supervising Architect of the Treasury Department is often considered one of the most prolific and longstanding offices in the annals of American architecture. This agency was charged with the design and supervising of construction of federal buildings throughout the nation over more than seven decades (Lee 2001). Although some of Simon's designs have been noted as good examples of the modern style, he is not generally considered to have been a notable figure in the office of Supervising Architect. The grand designs of public buildings completed under the tenure of James Knox as Supervising Architect (1897 – 1912), are considered by many as the zenith of such construction.

Neal Melick held the title of Supervising Engineer. Melick worked on many federal projects across the nation with Simon; some of which have received recognition as good examples of the modern movement influencing the designs of federal buildings during the mid-twentieth century. Although the original design and construction was influenced by these two individuals, the building, in its current configuration, has suffered a loss of integrity from the original design due to the addition on the eastern façade and remodel. Because of this loss of integrity, this building does not appear to be a noteworthy example of their work, and does not appear to be eligible for listing on the NRHP under Criterion B. Likewise, due to the loss of historic integrity, this building does not appear to be eligible for NRHP listing under Criterion C. Although the property retains integrity of location, feeling and association, its integrity of materials, design, workmanship, and setting has been compromised.

While buildings and structures can sometimes provide significant insight into historic construction techniques and technologies (NRHP Criterion D), this type of building is well documented in both visual and written materials, and does not appear to be a source of important primary information. This building does not appear to meet the eligibility criteria for NRHP listing.

This resource was also evaluated in accordance with Section 15064.5(a)(1)(2)-(3) of the CEQA Guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code, and was determined to appear ineligible for listing on the CRHR.



320/330 Vernon Street, Rear Facade



320/330 Vernon Street, West Facade

# APPENDIX C

Project Correspondence

**EDAW Inc**2022 J Street, Sacramento, California 95814
T 916,414,5800 F 916,414,5850 www.edaw.com

July 30, 2007

United Auburn Indian Community of the Auburn Tribal Preservation Committee 575 Menlo Drive, Suite 2 Rocklin, CA 95765

RE: ROSEVILLE DOWNTOWN LAND USE PLAN, PLACER COUNTY, CALIFORNIA

To Whom It May Concern:

EDAW is conducting a cultural resource investigation for the above-referenced project located in Placer County, and depicted on the Citrus Heights and Roseville 7.5 minute topographic quadrangles (see attached maps).

We are pleased to bring this activity to your attention, and would appreciate any background information you can provide regarding prehistoric or ethnographic activity within or near the project area. We are also interested in a search of your Sacred Lands file.

At your earliest convenience, please send via mail or facsimile a list of local Native American individuals/organizations, so that they can be incorporated into the planning process. If you have any questions or comments, please feel free to contact me at my office.

Sincerely,

Angel Tomes, M.A.

EDAW Inc 2022 J Sireet, Sauramento, California 95814 T 916,414,5800 F 916,414,5850 www.edaw.com

July 30, 2007

Todd Valley Miwok-Maidu Cultural Foundation Christopher Suehead P.O. Box 1490 Foresthill, CA 95631

RE: ROSEVILLE DOWNTOWN LAND USE PLAN, PLACER COUNTY, CALIFORNIA

Dear Mr. Suehead:

EDAW is conducting a cultural resource investigation for the above-referenced project located in Placer County, and depicted on the Citrus Heights and Roseville 7.5 minute topographic quadrangles (see attached maps).

We are pleased to bring this activity to your attention, and would appreciate any background information you can provide regarding prehistoric or ethnographic activity within or near the project area.

If you have any questions or comments, please feel free to contact me at my office at (916) 414-5893. I look forward to hearing from you.

Sincerely,

Angel Tomes, M.A.

EDAW Inc. 2022 J Street, Sacramento, California 95814. T 916,414 5800. F 916,414 5850. www.edaw.com

July 30, 2007

United Auburn Indian Community of the Auburn Jessica Tavares 575 Menlo Drive, Suite 2 Rocklin, CA 95765

RE: ROSEVILLE DOWNTOWN LAND USE PLAN, PLACER COUNTY, CALIFORNIA

Dear Ms. Tavares:

EDAW is conducting a cultural resource investigation for the abovereferenced project located in Placer County, and depicted on the Citrus Heights and Roseville 7.5 minute topographic quadrangles (see attached maps).

We are pleased to bring this activity to your attention, and would appreciate any background information you can provide regarding prehistoric or ethnographic activity within or near the project area.

If you have any questions or comments, please feel free to contact me at my office at (916) 414-5893. I look forward to hearing from you.

Sincerely,

Angel Tomes, M.A.

EDAW Inc 2022 J Street, Sacramento, California 95814 T 916.414.5800 | F 916.414.5850 | www.edaw.com

July 30, 2007

Rose Enos 15310 Bancroft Road Auburn, CA 95603

# RE: ROSEVILLE DOWNTOWN LAND USE PLAN, PLACER COUNTY, CALIFORNIA

Dear Ms. Enos:

EDAW is conducting a cultural resource investigation for the abovereferenced project located in Placer County, and depicted on the Citrus Heights and Roseville 7.5 minute topographic quadrangles (see attached maps).

We are pleased to bring this activity to your attention, and would appreciate any background information you can provide regarding prehistoric or ethnographic activity within or near the project area.

If you have any questions or comments, please feel free to contact me at my office at (916) 414-5893. I look forward to hearing from you.

Sincerely,

Angel Tomes, M.A.

EDAW Inc 2022 J Street, Sacramento, California 95814 T 916.414.5860 F 916.414.5860 www.edaw.com

July 30, 2007

Shingle Springs Band of Miwok Indians Jeff Murray, Cultural Resources Manager P.O. Box 1340 Shingle Springs, CA 95682

RE: ROSEVILLE DOWNTOWN LAND USE PLAN, PLACER COUNTY, CALIFORNIA

Dear Mr. Murray:

EDAW is conducting a cultural resource investigation for the above-referenced project located in Placer County, and depicted on the Citrus Heights and Roseville 7.5 minute topographic quadrangles (see attached maps).

We are pleased to bring this activity to your attention, and would appreciate any background information you can provide regarding prehistoric or ethnographic activity within or near the project area.

If you have any questions or comments, please feel free to contact me at my office at (916) 414-5893. I look forward to hearing from you.

Sincerely,

Angel Tomes, M.A.

EDAW	2022 J Street, Sacran tel. 916.414.5800	nento, CA 95814 fax. 916.414.5850	edaw.com
DISTRIBUTION:			

### **CONTACT INFORMATION**

EDAW Contact: Angel Tomes

Date: August 9, 2007

Individual Contacted: Jeff Murray

Agency/Organization/Address: Shingle Springs Band of Miwok Indians, Shingle Springs, CA

Subject of Contact: Vernon Street Projects

### ITEMS DISCUSSED

Attempted to phone Mr. Murray, He was not in.

### **FOLLOW UP**

Another call was made on August 17, 2007. Mr. Suehead was not in.

EDAW	2022 J Street, Sacram tel. 916.414.5800	nento, CA 95814 fax. 916.414.5850	edaw.com
DISTRIBUTION:			

### CONTACT INFORMATION

EDAW Contact: Angel Tomes

Date: August 9, 2007

Individual Contacted: Rose Enos

Agency/Organization/Address: 15310 Bancroft Road, Auburn, CA

Subject of Contact: Vernon Street Projects

### ITEMS DISCUSSED

Ms. Enos was contacted. She indicated that her only concern would be if the area was known to contain burials; otherwise she had no concerns about the proposed project.

### FOLLOW UP

EDAW	2022 J Street, Sacram tel. 916.414.5800	ento, CA 95814 fax. 916.414.5850	edaw.com
DISTRIBUTION:		30.00 M	

### **CONTACT INFORMATION**

EDAW Contact: Angel Tomes

Date: August 9, 2007

Individual Contacted: United Auburn Indian Community of the Auburn

Agency/Organization/Address: 575 Menlo Drive, Rocklin, CA

Subject of Contact: Vernon Street Projects

### ITEMS DISCUSSED

A phone call was made to the United Auburn Indian Community of the Auburn. A message was left for the Tribal Preservation Committee.

### FOLLOW UP

Another call was made on August 17, 2007. Another message was left.

EDAW	2022 J Street, Sacram tel. 916.414.5800	ento, CA 95814 fax. 916.414.5850	edaw.com
DISTRIBUTION:			

### **CONTACT INFORMATION**

EDAW Contact: Angel Tomes

Date: August 9, 2007

Individual Contacted: Christopher Suehead, Todd Valley Miwok-Maidu Cultural Foundation

Agency/Organization/Address: Foresthill, CA
Subject of Contact: Vernon Street Projects

### ITEMS DISCUSSED

Mr. Suehead was not in. A message was left.

### FOLLOW UP

Another call was made on August 17, 2007. No answer was received.

# Downtown Specific Plan Downtowncode Appendix D





145 Duncan Hill Road

Auburn, CA 95603

www.abacus-tree.com

(530) 889-0603 Phone & Fax

E-mail: ken@abacus-tree.com

# **Consulting Arborist Report**

Prepared at the request of:

Matt Brogan

Mark Thomas & Company, Inc.

for:

City of Roseville Vernon Street City Block

located in:

Roseville, California

#### Kenneth Menzer

International Society of Arboriculture, Certified Arborist #WE-2122A
International Society of Arboriculture (ISA),
Western Chapter of ISA
American Society of Consulting Arborists
California Native Plant Society
International Oak Society
California Oak Foundation

January 31, 2008

Kenneth Menzer © 2008

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Mark Thomas & Company, Inc. Arborist Report by:

**ABACUS** 

Kenneth Menzer © 2008

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### **Executive Summary:**

Matt Brogan of Mark Thomas & Company hired ABACUS to evaluate and inventory the trees for proposed development at the City of Roseville Vernon Street block which includes the post office, old city hall and a parking lot, and produce the end product, an Arborist Report.

**ABACUS** was on site on December 27th, 2007; providing on-site tagging, identifications, number of trunks, measurements of DBH and canopy, field condition notes, recommended actions, and ratings of all trees on property.

There are 26 trees on the property, and 1 protected tree, the Coast Live Oak, per the Roseville Tree Ordinance.

- 1 tree is <u>noted for removal</u> due to its poor condition and is rated a 0 ("dead"), 1 ("dangerous") or 2 ("poor").
- 3 trees are rated a 2 ("poor").
- 22 trees are rated 3 ("fair"), or 4 ("good").
- There were no trees in "excellent" condition with a rating of 5.

There are 7 Ornamental Pear, 4 Chinese Pistache, 3 American Sweet Gum, 4 Coast Redwood, 2 Italian Cypress, 1 Coast Live Oak, 1 Colorado Blue Spruce, 3 evergreen oak species, and 1 Southern Magnolia.

There is 1 protected tree on site per the City of Roseville Tree Preservation Plan. Tree #1062, a Coast Live Oak, *Quercus agrifolia*, is the protected tree.

### **Assignment:**

Pursuant to your request, ABACUS completed an inventory of the trees on site, providing on-site tagging, identifications, number of trunks, measurements of DBH<sup>1</sup> and canopy, field condition notes, recommended actions, and ratings of all trees on property, and identification and measurements of DBH and canopy for trees off property.

### **Observations:**

Nicole Harrison, ISA Certified Arborist #WE-6500A, under the direction of Kenneth Menzer, Senior Consulting & ISA Certified Arborist #WE-2122A, evaluated and tagged all trees in the City of Roseville for the block between Vernon Street and Atlantic Street which contains the Post Office and the Old City Hall at 311 Vernon Street. There is one protected trees on site per the City of Roseville Tree Preservation Plan. The fieldwork was completed on December 27th, 2007.



Many of the trees were not tagged due to size and public access. The trees (on-site) tagged by **ABACUS** have a numbered tag, placed on each one that is 1-1/8" x 1-3/8", green anodized aluminum, "acorn" shaped, and labeled: **ABACUS**, **Aubum**, **CA** with 1/8" pre-stamped tree number, our phone number 530-889-0603, attached with a natural colored aluminum 10d (3") nail, installed at 6 feet above ground level on the north side of the tree. The tag should last  $\sim 10-20$  years depending on the species, before it is enveloped by the trees' normal growth cycle.

The trees, for purpose of discussion within this report, have been identified by number and are labeled on the "Site Plan" at the end of this report. The Mark Thomas and Company of Sacramento, California completed the survey work and the location of the trees on the "Site Plan". All of the other information within this report was by **ABACUS**.

<u>Chart B</u> in this report is an inventory on the protected trees. The following terms, and <u>Chart A</u> will further explain our findings on <u>Chart B</u> and the trees in question.

<u>Species</u> of trees is listed by our local and correct common name and botanical name by genus (capitalized) and species (lower case).

# Stems refers to the quantity of trunks or stems of a tree that have a significant connection. If one stem or trunk were to be removed, it would cause decay or harm to an adjoining stem, making it one tree. All stems must be of the same species. (Also see "Tree SIZE Expressed by Trunk Diameter" at the end of this report)

**DBH** (diameter breast high) is normally measured at 4'6" (above the average ground height for "Urban Forestry"), but if that varies then the location where it is measured is noted here. A diameter tape<sup>2</sup> was used to measure the DBH for trees.

Canopy is the farthest extent of the crown composed of leaves and small twigs. This measurement further defines the Critical Root Zone (CRZ) or Protection Zone (PZ), which is a circular area around a tree with a radius equal to a tree's largest dripline plus 1'. Our canopy measurement is the longest dripline measurement from the center point of the tree and includes the 1' only on the Tree Site Map.

**Rating** is subjective to health and structure = condition. All of the trees were also rated for condition, per the recognized national standard as set up by the <u>Council of Tree and Landscape Appraisers</u> and the <u>International Society of Arboriculture</u> (ISA) on a numeric scale of 5 (being the highest) to zero (the worst condition, dead) as in <u>Chart A</u>. The rating was done in the field at the time of the measuring and inspection. The scale is as follows:

<sup>&</sup>lt;sup>1</sup> DBH or dbh, "Diameter Breast high" is the diameter of the tree's trunk in inches, measured 4' 6" off the ground (for more information see "Tree SIZE Expressed by Trunk Diameter" at the end of this report).

<sup>&</sup>lt;sup>2</sup>A Diameter Tape is used to figure the tree's diameter, by measuring the circumference, whereon the inches are pre- multiplied by 3.14 or  $\pi$  ( $\pi$  called pi) and shown to produce the diameter of the tree directly on the tape.

	Chart A	
No problem	5	excellent
No apparent problem(s)	4	good
Minor problem(s)	3	fair
Major problem(s)	2	poor
Extreme problem(s)	1	hazardous or dangerous
Dead	0	dead

There is a very important line drawn between a tree rated a 3 and a 2. A tree rated 3, 4, or 5 is a tree to be preserved, and a tree rated 0, 1, or 2 is recommended for removal. On the following tree list BLACK marks are <u>field notes and action items on trees that are to remain</u>, and RED are trees <u>that are recommended for removal</u>. Trees rated a 2 may be retained but <u>only</u> if the recommendations are followed, otherwise the tree should be removed.

Rating #0: This indicates a tree that has no significant sign of life.

Rating #1: The problems are extreme. This rating is assigned to a tree that has structural and/or health problems that no amount of work or effort can change. The issues may or may not be considered a dangerous situation.

Rating #2: The tree has major problems. If the option is taken to preserve the tree, its condition could be improved with correct arboricultural work including, but not limited to: pruning, cabling, bracing, bolting, guying, spraying, mistletoe removal, vertical mulching, fertilization, etc. If the recommended actions are completed correctly, the hazard can be reduced, and the rating can be elevated to a 3. If no action is taken the tree is considered a liability and should be removed.

Rating #3: The tree is in fair condition. There are some minor structural and/or health problems that pose no immediate danger. When the recommended actions in an arborist report are completed correctly the defect(s) can be minimized or eliminated.

Rating #4: The tree is in good condition and there are no apparent problems that a Certified Arborist can see from a visual ground inspection. If potential structural or health problems are tended to at this stage future hazard can be reduced and more serious health problems can be averted.

**Rating #5:** No problems found from a visual ground inspection. Structurally, these trees have properly spaced branches and near perfect characteristics for the species. Highly rated trees are not common in natural or developed landscapes. No tree is ever perfect especially with the unpredictability of nature, but with this highest rating, the condition should be considered excellent.

**Notes:** explain why the tree should be removed or preserved. If it is to remain and be preserved the tree may need some form of work to limit future liability from partial or total failure. Lower deadwood may not be an immediate problem, but the same size wood at a much higher location on the trees could be dangerous and might cause a minor injury to a fatal blow if the branch failed.

### **Abbreviation key:**

CDL: Co-Dominant Leader: Stems or trunks of the tree that are equal in size and relative importance.

**EG**: Epicormic Growth: Shoots that arise from latent buds along the trees trunk or mature branches. This growth is usually a sign that the tree has undergone a stressful period.

**IB**: <u>Included Bark</u>: A sharp "V" crotch, usually less than a 45° angle of attachment, between 2 branches where the bark is kept between two narrowly joined branches and the bark is continually turned inward, rather than being pushed out. It is a common point for potential massive structural failure and this hazard can be minimized with properly installed and maintained cabling, bolting or bracing.

ABACUS: Nicole Harrison, ISA Certified Arborist #WE-6500A

**LA**: <u>Lines Attached</u>: Lines are attached directly to the trunk of the tree and may be causing injuries to the trunk tissue. Including but not limited to high voltage, power, cable, phone, and satellite lines.

NABA: Narrow Angle Branch Attachment: A sharp "V" crotch, usually less than a 45° angle of attachment. Included bark is explained above and is common in branches with narrow attachments. In addition, these branches may not be attached to the trunk as well as others with wider angles of attachment, and can fail more frequently depending on the size of the branch.

NCP: <u>Needs Corrective Pruning</u>: Corrective pruning is needed to change some or many defects. The Pruning Arborist will determine final work on-site.

**OPCs**: Old Pruning Cuts: Usually these pruning cuts are considered too large (over 3") and may have been necessary to perform at the time or not

**RDW**: Remove Dead Wood: All dead wood to be removed over 3" in diameter and if over 2" in diameter when above 25', as this is a potential hazard for people under these limbs and a future health problem for the tree.

PGS: <u>Poor Growing Space</u>: These trees do not have the necessary growing space for their species and growth form. They may be growing under the canopy of another tree, or growing in a planter or other restricted soil area. Insufficient growing space often results in poor structure and aesthetics. Trees with this designation should be considered for removal while they are small, and before they become hazardous.

**PS**: <u>Poor Structure</u>: These trees have grown with structural imperfections that cannot be corrected and therefore render them hazardous and more likely to fail in the future.

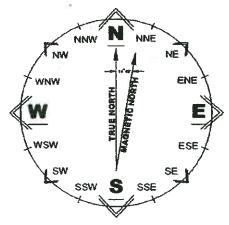
TBR: To Be Removed: Tree to be removed due to health and/or structural reasons. Removal should be done carefully as to not harm the surrounding trees, branches, and/or trunks above or roots below ground. Do NOT rip out or push over the tree stumps if they are near other trees that are to be preserved. Cut them off close to ground level and leave the stumps and roots to decay, unless they are located within a proposed foundation or area to be paved/concrete surfaced.

TMD: Too Much Decay

TMDW: Too Much Dead Wood

~: <u>Tilde</u>: This mark is used in the field in any empty box to indicate that there is no information to enter in that space.

<u>Compass Points</u>: These are the standard 16 points of the compass as aligned with Geographic North or True North. In our area, True North (TN) is adjusted for declination 14°49' to the west of Magnetic North (MN).



### Chart B

Tree #	Common Name	Sotanical Name	Stems	DBH in inches	Canopy radius in feet	Notes	Action	Rating
		Pistacia chinensis	1	7	13	PGS, lifting pavers, many stubs, EG	Remove stubs, remove crossing limbs, add mulch, requires more space	3
1046	Chinese Pistache	Pistacia chinensis	1	8	14	PGS, lifting pavers, CDL @ 6' into 4 stems	Add mulch, requires more space	4

City of	Koseville Vel	non Street Block		,	1		Page #5 of	13
				-		i		
	-				Canopy			
T	C	Data di at Nama	C4	DBH in	radius in		A -Ministra	Date
Tree #	Common Name	Botanical Name	Stems	inches	feet	Notes	Action	Ratin
					Ì		Add mulch, requires	
1047	Chinese Pistache	Pistacia chinensis	1	6	11	CDL @ 6' IB, PGS, female	more space	3
				_		Previously topped, PGS, CDL @ 6' into 3,	Add mulch, requires	
1048	Chinese Pistache	Pistacia chinensis	1	7	12	irrigation valve @ base	more space	3
	Colorado Blue							
1049	Spruce	Picea pungens	1	10	8	Not tagged, wires in tree, pipes	Replenish mulch	4
		Cupressus						
1050	Italian Cypress	sempervirens	- 1	13	4	2' from structure, bare soil	Add mulch	4
		Cupressus						
1051	Italian Cypress	sempervirens	1	13	4	Not tagged, not measured, sheared @ walkway, irrigation @ base	RDW	3
1001	панан бургово	Demper via eras	<u> </u>			makindy, inigetion & best		Ť
			İ			Sunburn, bare soil, LA, NABA, PGS, bare	Prune out poor	
1052	Omamental Pear	Pyrus calleryana	1_	2	3	soil	structure	4
1053	Omemental Pear	Pyrus calleryana	1 1	2	4	PGS, bare soil, LA lights	Remove stakes	4
1000	Omaniemen ear	y y as caneryana	<del></del>		-	OO, bare son, LA lights	Terrore stakes	-
						Crown exposed, PGS, bare soil, CDL @ 6'	Remove NABA, add	
1054	Omamental Pear	Pyrus calleryana	1	3	5	IB, NABA	mulch	3
			ļ					
4055	Omenantel Desa	Dames and laws		_		Dans and Assessed NCD	NCP, remove stakes,	2
1055	Omamental Pear	Pyrus calleryana	1	2	3	Bare soil, topped, NCP	add mulch	3
	1							
1056	Ornamental Pear	Pyrus calleryana	1	2	3	Root sprouts, bare soil	Add mulch	4
4055		n					001 001	
1057	Omamental Pear	Pyrus calleryana	1	1	1	Newly planted, PS	Remove CDL, RI2Y	2
		Seguoia				~		
1058	Coast Redwood	sempervirens	1	5	6		Replenish mulch	4
						~		
		Sequoia .		_	_		L	
1059	Coast Redwood	sempervirens	1	4	5		Replenish mulch	4
		Seguoia				~		
1060	Coast Redwood	sempervirens	1	3	5		Replenish mulch	4
						~		
		Sequoia		_	_			
1061	Coast Redwood	sempervirens	1	3	5		Replenish mulch	4
					İ	CDL @ 5', old stubs w/ decay, dead top,		
1062	Coast Live Oak	Quercus sp.	1	30	24	decay @ all wounds	RDW, RIEY	2
						Watersprouts, lower limb rips, split w/ decay		
	Southern					base to 3', lower canopy stubs & PS, weed		
1063	Magnolia	Magnolia grandiflora	1	15 @ 3'	22	cloth present	NCP, thin	3
	American Count	Liquidambar				CDI @ 421 ID mades IN // DOC Pairs had be	DDW NCD consists	
1064	American Sweet Gum	styraciflua	1	9	15	CDL @ 12' IB, under HVL, PGS, lifting brick @ base and cracking pavement	more growing space	3
		1			1	Commence of the second	3.011.13	1
	American Sweet	Liquidambar				Large OPC's CDL @ 12', IB, PGS, girdling	Add cable, NCP for	
1065	Gum	styraciflua	1	12	16	roots, EG	EG	3
		72						
ince		Liquidambar	4	14 (2) 21	10	DCC lifting outhor CDL @ 51 into 2	Add 3 way ooblo	2
1066	Gum	styraciflua	1	14 @ 3'	18	PGS, lifting curbs, CDL @ 5' into 3	Add 3 way cable	3
							Re-stake, prune for	
1007	Omamorial Dass	Danier gallamiana	4	4		Para coil broken limbs subbine states	good structure, add	
1067	Musmental Pear	Pyrus calleryana	1	1	3	Bare soil, broken limbs, rubbing stakes	mulch	3

City of Roseville, Vernon Street Block							Page #6 of 13	
Tree #	Common Name	Botanical Name	Stems	DBH in inches	Canopy radius in feet	Notes	Action	Rating
1068	Evergreen Oak Species	Quercus sp.	1	3	4	Dead top, EG, bare soil, PS, sunburn	RDW, NCP, add mulch	2
1069	Evergreen Oak Species	Quercus sp.	1	3	6	MD @ base, sunburn, borers, bare soil	RDW, add mulch	2
1070	Evergreen Oak Species	Quercus sp.	1	3	5	UC, branch tip dieback, sunburn	RDW, add mulch	3

### **Analysis and Testing:**

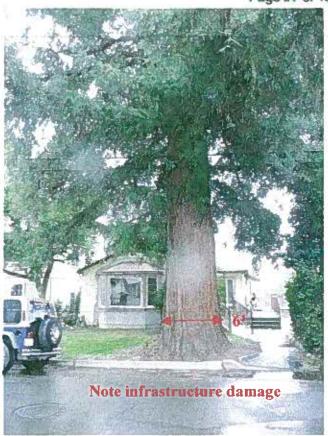
No analysis or testing was performed, only observations from ground level.

### **Discussion:**

City trees add a great deal of aesthetic value, but require more maintenance than trees growing in their native environment. First and foremost, care must be taken to choose appropriate species for the location.

Many of the trees growing in planters on this block do not have appropriate growing space. Coast Redwoods attain heights of 75' with a canopy spread of 30' in just 25 years. The root space allowed for the four Coast Redwoods planted in front of the post office is approximately 5% of what they will require in the next 20 years. Limited rooting space presents a serious challenge in the urban environment. Catastrophic failure is common in large trees without adequate root space. Another common event is failure from root pruning due to infrastructure damage. These trees are simply too large for their current location. Their roots will damage the infrastructure as they grow and it is likely they will fail due to lack of anchoring roots. I recommend they are removed and replaced with a more appropriate species.





Many of the planters have bare soil. Soil in urban environments easily becomes a non-sustainable environment for the roots due to compaction, suffocation, lack of moisture, or a combination of many or all of these factors. Compaction can cause poor drainage and lack of air to the roots, which, in turn, will cause suffocation and anaerobic decay of the roots. The compaction will not allow much space betweer soil particles, which results in lack of moisture that can be absorbed by the tree when needed. Decay of roots (or any organic matter) without oxygen (normally available in un-compacted soil) releases methangas (CH<sub>4</sub>) that is fatal to any living roots and other beneficial organisms in the soil (bacteria, fungus, micro and macro-biological life).



Mulch significantly helps create a healthy root environment. It supports microscopic life within the soil, acts as an insulator keeping soil warmer in winter and cooler in summer, and can help reduce the possibility of compaction. A 4-6" layer of hardwood chips should be placed under the trees covering the space from 8" from the trunk minimally to the edge of the planter. The chips should not be placed against the trunk of the tree. The chips should not be redwood or cedar. Redwood and cedar are known for their lasting power. They do not decompose very easily or quickly. Hardwood chips, on the other hand, decompose easily over a few years and increase the organic content of the soil, which supports Mycorrhizae a good fungus. This fungus has a symbiotic relationship with tree roots whereby soil nutrients are injected into the tree's roots and the excess sugars from the tree are used by the Mycorrhizae fungus. Mycorrhizae have been shown to help trees survive stress and have increased resistance to soil borne diseases.

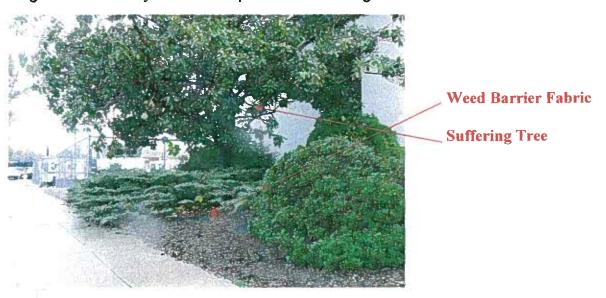
The evergreen oaks # 1068 – 1070 are planted in a small space with bare soil. Although they are in poor condition, they can be saved through good care which includes corrective pruning, soil repair, mulch, and sufficient irrigation in the hot summer months. Unfortunately, they will become very large trees planted in very small spaces. A thorough evaluation should be conducted to determine the feasibility of supporting these large trees. Trees without proper care and growing space are not assets, but hazards.

The young ornamental pears are suffering from poor care. Some of these trees are improperly staked, others are improperly pruned. When trees are young is the time for pruning to correct structural problems. Structural problems can become serious issues in mature trees and limb failures are a common result. Limb failures can be prevented with proper pruning when the tree is young.





The weed barrier fabric on site is detrimental to the trees and should be removed. The fabric kills the beneficial insects and other macroscopic life in the soil, which support the trees. It is particularly detrimental when a layer of soil is placed on top of the fabric (as in this case). The fabric with soil on top cuts off the oxygen and gas exchange occurring between the soil and the air. In particular, a good fungus known as *Mycorrhizae* requires this exchange to survive.



### **Conclusion:**

There are 26 trees on the property, and 1 protected tree, the Coast Live Oak, per the Roseville Tree Ordinance.

- 1tree is <u>noted for removal</u> due to it's poor condition and are rated a 0 ("dead"), 1 ("dangerous") or 2 ("poor").
- 3 trees are rated a 2 ("poor").
- 22 trees are rated 3 ("fair"), or 4 ("good").
- There were no trees in "excellent" condition with a rating of 5.

There are 7 Ornamental Pear, 4 Chinese Pistache, 3 American Sweet Gum, 4 Coast Redwood, 2 Italian Cypress, 1 Coast Live Oak, 1 Colorado Blue Spruce, 3 evergreen oak species, and 1 Southern Magnolia.

There is 1 protected tree on site per the City of Roseville Tree Preservation Plan. Tree #1062, a Coast Live Oak, *Quercus agrifolia*, is the protected tree.

### Recommendations

The following general recommendations apply to trees located in areas to be developed. I have included these recommendations for your information and planning purposes.

- 1) All trees to be saved should have their root zones and trunk(s) protected with a four (4') foot high orange or yellow plastic, high visibility exclusionary fence surrounding the trees' root zone. The fence should be staked 10'o.c. maximum spacing, with 5' steel "T" posts, 2" x 2" square or 2"+ Ø wood posts. The exclusionary area should be under the tree's branched canopy and extend out to the tree's longest dripline radius as a circle. Where new construction will be within the root protection zone, the fencing should be 4' away from the footings, and extend around the rest of the canopy of the tree from that point The fencing should be maintained and not removed until the completion of construction. The fencing should completely surround the Critical Root Zone and not be "U" shaped or open at any point. Whenever possible, include as many trees that are to be saved into one fenced exclusionary Critical Root Zone.
- 2) Chip the branches of the trees to be removed or pruned and use them to mulch the area under the remaining trees' branched canopies. Other mulch may be used of arborist type woodchips (4-6" deep), but <u>not</u> redwood or cedar bark.
- 3) Soil compaction should be avoided by maintaining the exclusionary <u>Critical Root Zone</u> fencing, keeping material storage, people, <u>all</u> vehicles, and dogs out of this area.
- 4) Soil contamination should be avoided by eliminating chemical dumping on the property that may infiltrate into the <u>Critical Root Zone</u>. Limestone gravel should <u>not</u> be used as base material or for drain rock as it will change the pH to be more alkaline, and that may harm the trees.
- 5) Do not nail, tie, screw, or fasten any signs, braces, etc. to the trees that are to remain.
- 6) The cut and fill material excavated from or added to the lot can kill a tree by removing too many roots drying or wetting the soil or by suffocating the roots with too much soil. Care must be taken with the added soil as well as with the actual excavation. Roots need air as much as they need water to survive and for the whole tree to live and to flourish. If fill material is needed, we can properly design aeration and ventilation systems made to protect the trees and allow for the fill material.
- 8) Extreme care of the tree trunks, canopies, and the protected "Critical Root Zone" should be taken. Al tree work should be completed with a qualified ISA Certified Arborist on site. All tree work should conform to the most current standards of the American National Standards Institute (ANSI). The curren

ANSI Tree Care Standards are A300 (Parts 1-4) 2000 to 2002 (copies at: <a href="www.ansi.org">www.ansi.org</a>). The BMPs are "Best Management Practices", as companion publications to the ANSI Tree Care Standards, printed by the International Society of Arboriculture (copies at: <a href="www.isa-arbor.com">www.isa-arbor.com</a>). The BMP booklets explain the details of the ANSI Tree Care Standards and how to follow them correctly. Pruning of branches under 3 in diameter should be made with sharp hand tools: pruners, loppers, and/or handsaws, <a href="mailto:not should be made">not should be made with sharp hand tools: pruners, loppers, and/or handsaws, <a href="mailto:not should be made">not should be made with sharp hand tools: pruners, loppers, and/or handsaws, <a href="mailto:not should be made">not should be made with sharp hand tools: pruners, loppers, and/or handsaws, <a href="mailto:not should be made">not should be made with sharp hand tools: pruners, loppers, and/or handsaws, <a href="mailto:not should be made">not should be made with sharp hand tools: pruners, loppers, and/or handsaws, <a href="mailto:not should be made">not should be made with sharp hand tools: pruners, loppers, and/or handsaws, <a href="mailto:not should be made">not should be made with sharp hand tools: pruners, loppers, and/or handsaws, <a href="mailto:not should be made">not should be made with should

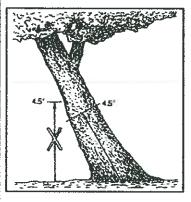
These important details will greatly increase the likelihood of survival for your trees.



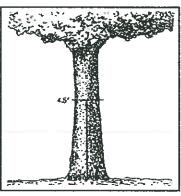
### **Tree SIZE Expressed by Trunk Diameter**

"The height at which the trunk diameter of a tree is measured depends upon its size. The American Standard for Nursery Stock (ANSI, 1900) state that measurements shall be taken 0 inches (15 cm) above the ground for trunk diameters up to and including 4 inches (10 cm). Larger trees (assumed, but not stated, to be of transplantable size) are to be measured at 12 inches (20 cm). Trees normally considered too large to transplant are to be measured 4.5 feet [4]-0" is also called diameter breast high or dbh] (1.4 m) above the ground. Trees, like conifers, which have branches below 4.5 feet should be measured at a height that most effectively represents the size of the tree. "The diameter is calculated by first measuring the circumference divided by 3.14 (a called pi) or by using a "diameter tape" whereon the inches are multiplied by a and shown to produce the diameter directly.

This is the dbh standard for measurement as shown in figure 4-2.



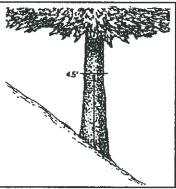
Figures 4-3 (top) and 4-4 (bottom). In each case, the trunk circumference should be measured at right angles to the trunk 4-5 feet (1.4 cm) along the center of the trunk axis so the height is the average of the shortest and longest sides of the trunk.

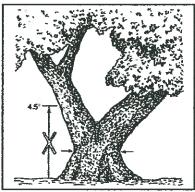


Figures 4-2. Trees with fairly straight upright trunks with the lowest branch arising on the trunk higher than 6 feet (1.8 m) above the ground should be measured at 4.5 feet (1.4 m).

There are some exceptions to the dbh standard as shown in the figures 4-3, 4-4, 4-5 & 4-6.

Figure 4-6. In a multi-stem tree, measure the trunk circumference of each trunk at 4.5 feet (1.4 m) above the ground. The area of each trunk is determined and then added together to obtain a trunk area that is representative of the size of the tree and each of the stems contribute its proportionate share to the canopy.





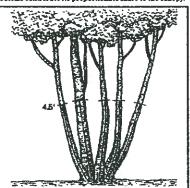


Figure 4.5. When low branches preclude measuring the trunk at 4.5 feet (1.4 m) measure the smallest circumference below the smallest branch. In this example, an alternative would be to determine the sum of the cross-sectional areas of the two stems measured about 12 inches (30 cm) above the crotch; then average the sum of the two branch areas and the smallest cross-sectional area below the branches. This may give a better estimate of tree size. Record the beight of measurement(s) and the reasons the height or those heights were chosen.



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Tree SIZE Expressed by Trunk Diameter

Scalet NTS

Drawing: TSE



"Where Every Detail Counts"



Kenneth Menzer, Consulting & ISA Certified Arborist #WE-2122A

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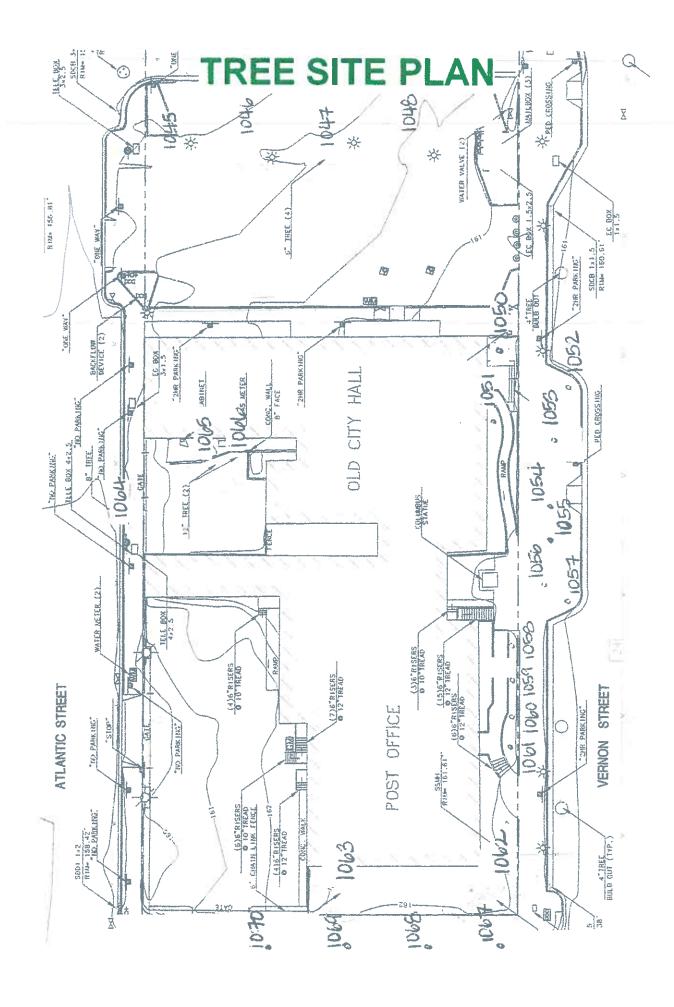
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### Disclosure, Assumptions and Disclaimer

- I, Nicole Harrison, with "ABACUS", did personally inspect the site and investigated the tree(s) as mentioned in this report and I performed all aspects of this report unless noted otherwise in the report. Technical Writing Review and Arboriculture Consultation by Kenneth Menzer, Senior Consulting & ISA Certified Arborist WE-2122A.
- 2) We have neither financial interest in the tree work that may or may not be done, nor financial interest in the property where the tree(s) is (are) located unless noted within the report.
- 3) All opinions and recommendations expressed herein this report are ours solely. We have used our specialized education, knowledge, training and experience to examine the tree(s) and to make our opinions and recommendations to enhance the beauty, health and longevity, with an attempt to reduce the risk of who and/or what is near these trees. We cannot guarantee or warranty that a tree will not be healthy or safe under all circumstances, nor for a specific period of time or that problems may not arise in the future.
- 4) This report with its opinions and recommendations are limited to the tree(s) inspected.
- 5) We attempt to be cognizant of the whole scope of a project, but many matters are beyond the scope of our professional consulting arborist services such as: exact property boundaries, property ownership, site lines, easements, codes, covenants & restrictions (CC&Rs), disputed between neighbors, and other issues.
- 6) We rely on the information disclosed to us and assume the information to be complete, true, and accurate.
- 7) The inspection is limited to visual examination of accessible items of the tree(s), from the ground unless otherwise noted, without excavation, probing, boring, or dissection, unless noted otherwise. Only information covered in this report was examined, and reflects the condition of those inspected items at that specific time.
- 8) Clients may choose to accept or disregard these opinions and recommendations of the arborist or to seek additional advice.
- 9) This report is copyrighted. Any modification or partial use shall nullify the whole report. Do not copy without written permission. This report is for the client and the client's assignees.
- 10) Sketches, diagrams, graphs, drawings, and photographs within this report are intended as visual aids and are not necessarily to scale, and should not be construed as engineering or architectural detail, reports or surveys.
- 11) We shall not attend or give a deposition and/or attend court by reason of this report unless fees are contracted for in advance, according to our standard fee schedule, adjusted yearly, for such services as described.

Signed:



# Downtown Specific Plan Downtowncode Appendix E



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# **Consulting Arborist Report**

Prepared at the request of:

Matt Brogan

Mark Thomas & Company, Inc.

for:

City of Roseville
Royer Park – West Bank of Dry Creek

located in:

Roseville, California

#### Kenneth Menzer

International Society of Arboriculture, Certified Arborist #WE-2122A
International Society of Arboriculture (ISA),
Western Chapter of ISA
American Society of Consulting Arborists
California Native Plant Society
International Oak Society
California Oak Foundation

January 15, 2008

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Mark Thomas & Company, Inc. Arborist Report by:

**ABACUS** 

Kenneth Menzer © 2008

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## **Executive Summary:**

Matt Brogan of Mark Thomas & Company hired ABACUS to evaluate and inventory the trees for proposed development in the City of Roseville for the West bank of Dry Creek across from Royer Park, and produce the end product, an Arborist Report.

ABACUS was on site on December 30th, 2007 – January 4, 2008; providing on-site tagging, identifications, number of trunks, measurements of DBH and canopy, field condition notes, recommended actions, and ratings of all trees on property.

There are 61 trees on the property, and 14 protected trees pursuant to the Roseville Tree Ordinance.

- 9 trees are <u>noted for removal</u> due to their poor condition and are rated a 0 ("dead"), 1 ("dangerous") or 2 ("poor").
- 52 trees are rated 3 ("fair"), or 4 ("good").
- There were no trees in "excellent" condition with a rating of 5.

There are 3 Coast Redwood, 1 Interior Live Oak, 1 California Black Walnut, 13 Valley Oak, 8 Oregon Ash, 2 Mulberry, 28 White Alder, 3 Tree of Heaven, and 2 Willow.

The protected trees are noted in GREEN BOLD on the enclosed table on pages 5 - 8.

## **Assignment:**

Pursuant to your request, **ABACUS** completed an inventory of the trees on site, providing on-site tagging, identifications, number of trunks, measurements of DBH<sup>1</sup> and canopy, field condition notes, recommended actions, and ratings of all trees on property, and identification and measurements of DBH and canopy for trees off property.

## **Observations:**

Nicole Harrison, ISA Certified Arborist #WE-6500A, and Susan Kaiser, ISA Certified Arborist #WE-6777A, under the direction of Kenneth Menzer, Senior Consulting & ISA Certified Arborist #WE-2122A, evaluated and tagged all trees in the City of Roseville for the West bank of Dry Creek across from Royer Park. There are 14 protected trees on site per the City of Roseville Tree Preservation Plan. The fieldwork was conducted December 30<sup>th</sup>, 2007 to January 2<sup>nd</sup>, 2008.



The trees (on-site) tagged by **ABACUS** have a numbered tag, placed on each one that is 1-1/8" x 1-3/8", green anodized aluminum, "acorn" shaped, and labeled: ABACUS, Auburn, CA with 1/8" pre-stamped tree number, our phone number 530-889-0603, attached with a natural colored aluminum 10d (3") nail, installed at 6 feet above ground level on the north to north west side of the tree. The tag should last  $\sim$ 10 - 20 years depending on the species, before it is enveloped by the trees' normal growth cycle.

<u>Chart B</u> in this report is an inventory on the protected trees. The following terms, and <u>Chart A</u> will further explain our findings on <u>Chart B</u> and the trees in question.

<u>Species</u> of trees is listed by our local and correct common name and botanical name by genus (capitalized) and species (lower case).

# Stems refers to the quantity of trunks or stems of a tree that have a significant connection. If one stem or trunk were to be removed, it would cause decay or harm to an adjoining stem, making it one tree. All stems must be of the same species. (Also see "Tree SIZE Expressed by Trunk Diameter" at the end of this report)

**DBH** (diameter breast high) is normally measured at 4'6" (above the average ground height for "Urban Forestry"), but if that varies then the location where it is measured is noted here. A diameter tape<sup>2</sup> was used to measure the DBH for trees.

<u>Canopy</u> is the farthest extent of the crown composed of leaves and small twigs. This measurement further defines the Critical Root Zone (CRZ) or Protection Zone (PZ), which is a circular area around a tree with a radius equal to a tree's largest dripline plus 1'. Our canopy measurement is the longest dripline measurement from the center point of the tree and includes the 1' only on the Tree Site Map.

**Rating** is subjective to health and structure = condition. All of the trees were also rated for condition, per the recognized national standard as set up by the <u>Council of Tree and Landscape Appraisers</u> and the <u>International Society of Arboriculture</u> (ISA) on a numeric scale of 5 (being the highest) to zero (the worst condition, dead) as in <u>Chart A</u>. The rating was done in the field at the time of the measuring and inspection. The scale is as follows:

<sup>&</sup>lt;sup>1</sup> DBH or dbh, "Diameter Breast high" is the diameter of the tree's trunk in inches, measured 4' 6" off the ground (for more information see "Tree SIZE Expressed by Trunk Diameter" at the end of this report).

<sup>&</sup>lt;sup>2</sup>A Diameter Tape is used to figure the tree's diameter, by measuring the circumference, whereon the inches are pre-multiplied by 3.14 or  $\pi$  ( $\pi$  called pi) and shown to produce the diameter of the tree directly on the tape.

	Chart A	
No problem	5	excellent
No apparent problem(s)	4	good
Minor problem(s)	3	fair
Major problem(s)	2	poor
Extreme problem(s)	1	hazardous or dangerous
Dead	0	dead

There is a very important line drawn between a tree rated a 3 and a 2. A tree rated 3, 4, or 5 is a tree to be preserved, and a tree rated 0, 1, or 2 is recommended for removal. On the following tree list BLACK marks are <u>field notes and action items on trees that are to remain</u>, and RED are trees that are recommended for removal. Trees rated a 2 may be retained but <u>only</u> if the recommendations are followed, otherwise the tree should be removed.

Rating #0: This indicates a tree that has no significant sign of life.

Rating #1: The problems are extreme. This rating is assigned to a tree that has structural and/or health problems that no amount of work or effort can change. The issues may or may not be considered a dangerous situation.

Rating #2: The tree has major problems. If the option is taken to preserve the tree, its condition could be improved with correct arboricultural work including, but not limited to: pruning, cabling, bracing, bolting, guying, spraying, mistletoe removal, vertical mulching, fertilization, etc. If the recommended actions are completed correctly, the hazard can be reduced, and the rating can be elevated to a 3. If no action is taken the tree is considered a liability and should be removed.

Rating #3: The tree is in fair condition. There are some minor structural and/or health problems that pose no immediate danger. When the recommended actions in an arborist report are completed correctly the defect(s) can be minimized or eliminated.

Rating #4: The tree is in good condition and there are no apparent problems that a Certified Arborist can see from a visual ground inspection. If potential structural or health problems are tended to at this stage future hazard can be reduced and more serious health problems can be averted.

Rating #5: No problems found from a visual ground inspection. Structurally, these trees have properly spaced branches and near perfect characteristics for the species. Highly rated trees are not common in natural or developed landscapes. No tree is ever perfect especially with the unpredictability of nature, but with this highest rating, the condition should be considered excellent.

Notes: explain why the tree should be removed or preserved. If it is to remain and be preserved the tree may need some form of work to limit future liability from partial or total failure. Lower deadwood may not be an immediate problem, but the same size wood at a much higher location on the trees could be dangerous and might cause a minor injury to a fatal blow if the branch failed.

## Abbreviation key:

CDL: Co-Dominant Leader: Stems or trunks of the tree that are equal in size and relative importance.

**EG:** Epicormic Growth: Shoots that arise from latent buds along the trees trunk or mature branches. This growth is usually a sign that the tree has undergone a stressful period.

HVL: High Voltage Lines

**IB**: <u>Included Bark</u>: A sharp "V" crotch, usually less than a 45° angle of attachment, between 2 branches where the bark is kept between two narrowly joined branches and the bark is continually turned inward, rather than being pushed out. It is a common point for potential massive structural failure and this hazard can be minimized with properly installed and maintained cabling, bolting or bracing.

ABACUS: Nicole Harrison, ISA Certified Arborist #WE-6500A

City of Roseville, West Bank of Dry Creek

ILO: Interior Live Oak:

MD: Mechanical Damage: Any damage to the tree caused by mechanical equipment.

**NABA**: <u>Narrow Angle Branch Attachment</u>: A sharp "V" crotch, usually less than a 45° angle of attachment. Included bark is explained above and is common in branches with narrow attachments. In addition, these branches may not be attached to the trunk as well as others with wider angles of attachment, and can fail more frequently depending on the size of the branch.

NCP: <u>Needs Corrective Pruning</u>: Corrective pruning is needed to change some or many defects. The Pruning Arborist will determine final work on-site.

**OPC**: Old Pruning Cut: Usually these pruning cuts are considered too large (over 3") and may have been necessary to perform at the time or not

**RDW**: Remove Dead Wood: All dead wood to be removed over 3" in diameter and if over 2" in diameter when above 25', as this is a potential hazard for people under these limbs and a future health problem for the tree.

**PS**: <u>Poor Structure</u>: These trees have grown with structural imperfections that cannot be corrected and therefore render them hazardous and more likely to fail in the future.

TBR: To Be Removed: Tree to be removed due to health and/or structural reasons. Removal should be done carefully as to not harm the surrounding trees, branches, and/or trunks above or roots below ground. Do NOT rip out or push over the tree stumps if they are near other trees that are to be preserved. Cut them off close to ground level and leave the stumps and roots to decay, unless they are located within a proposed foundation or area to be paved/concrete surfaced.

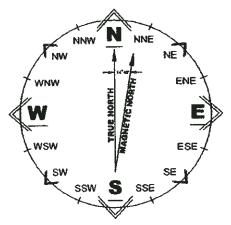
TMD: Too Much Decay

TMDW: Too Much Dead Wood

~: Tilde: This mark is used in the field in any empty box to indicate that there is no information to enter in that space.

UC: Unbalanced Canopy: Either the trunk is leaning and/or the canopy is phototropic and overly heavy on one side.

<u>Compass Points</u>: These are the standard 16 points of the compass as aligned with Geographic North or True North. In our area, True North (TN) is adjusted for declination 14°49' to the west of Magnetic North (MN).



## Chart B

### **Protected Trees are in GREEN BOLD**

		Pr	otect	ed Tree	s are i	n GREEN BOLD		
Tree #	Common Name	Botanical Name	Stems	DBH in inches	Canopy radius in feet	Notes	Action	Rating
4801		Fraxinus latifolia	1	8@1'	16		Remove small limb @ CDL, remove crossing limb, thin interior	3
4802	Interior Live Oak	Quercus wislizenii	1	6	25	PS, UC to W	NCP	3
4803	Mulberry	Morus alba	6	3, 4, 9, 7, 6, 16		PS, MD @ base of most stems, parking lot drainage to base of tree, decay present @ OPC, pleached to tree #4813 @ base, could be specimen tree, removal of cement pad @ base will probably destroy tree	Remove privet @ base, NCP, remove debris @ base	2
4804	Oregon Ash	Fraxinus latifolia	2	9, 4		Rocks @ base, UC over river, suppressed	Remove debris @ base, RDW, NCP for crossing limbs	3
4812	Oregon Ash	Fraxinus latifolia	4	5, 2, 6, 2		Rocks @ base, UC over river, suppressed	NCP, RDW, remove split limb @ base w/ decay	
4813	Tree of Heaven	Ailanthus altissima	2	8, 9	15	Pleached @ base with tree #4803	TBR Remove bamboo, RDW, prune ILO @	1
4814	Valley Oak	Quercus lobata	1	8	15	Bamboo @ base	base to allow space for growth, NCP crossing limbs	4
4815	Valley Oak	Quercus lobata	1	7	11	EG, slight lean	RDW, remove competition	4
4818	Tree of Heaven	Ailanthus altissima	1	7		Invasive species	TBR	ì
4819	White Alder	Alnus rhombifolia	1	22	20	Leans over water, exposed roots, CDL @ 12', IB, borer damage	Remove if there is public access	1
4821	Valley Oak	Quercus lobata	1	7 @ 4'	15	CDL @ 5' IB, slight lean, NABA IB	NCP	3
4822	Valley Oak	Quercus lobata	1	6	14	Leans over parking lot, UC to W, EG	NCP	3
4825	Valley Oak	Quercus lobata	1	11	22	NABA IB, EG - too much competition		3
4852	Valley Oak	Quercus lobata	1_	18	22	CDL @ 1', roots completely exposed @ base	NCP for balance, remove privet @ base	4
4853	California Black Walnut	Juglans californica	1_1_	18		Leans to W, many ripped limbs, PS, OPC w/ callous	TBR, poor upper canopy structure	2
2443	Valley Oak	Quercus lobata	1	26	26	OPC healed over, CDL @ 8' & 18', 6' to asphalt, sight lean E toward creek TMDW	RDW, remove small hangers, add one cable for IB @ 18'	3

City of I	Roseville, Wes	t Bank of Dry Cr	eek		55		Page #	6 of 1
ree #	Common Name	Botanical Name	Stems	DBH in inches	Canopy radius in feet	Notes	Action	Rating
				40 07 4 07		debris & irrigation hose collected @	RMT @ 16', RDW, NCP, broken limbs, remove debris	3
444	White Alder	Alnus rhombifolia	11	10-6", 1-9"	15	base from high water	Prune stubs &	
445	White Alder	Alnus rhombifolia	1	6	8	At bottom of cut bank, exposed roots @ creek bed, wound @ 8' w/decay, EG	epicormic branches near base	3_
2446	White Alder	Alnus rhombifolia	1	14	20	On cut bank with exposed roots in water, shares base with old decaying stump, CDL @ 25'	Remove stump sprouts, NCP broken stubs	3
			_			protein inviso, in invisor, in the same in	NCP broken limb,	3
2447	White Alder	Alnus rhombifolia	1	12	16	decay @ base	remove debris	3_
2448	Valley Oak	Quercus lobata	1	13	15	OPC healed over, galls, UC to N, EG	Remove limb overhanging parking lot	3
	Vallan Cala	Ou angua la kata	1	14	14	Trunk growing into support beam, CDL @ 6', EG, sounds hollow, galls	Future removal to protect infrastructure	2
2449	Valley Oak	Quercus lobata		14	549			
2450	Vailey Oak	Ouercus lobata	1	9	15	8' from culvert, galls, evidence of decay @ old wounds	RDW, remove broken limb	3
400	Yanay Can	Quercus tobulu	•			Root ball partially dislodged on cut bank exposed roots, multiple stump sprouts,	0	
2451	White Alder	Alnus rhombifolia	1	6	6	main leader leans to W,	NCP	3
2452	Valley Oak	Quercus lobata	2	6,4	10	CDL @ 3', on steep slope	Remove 4" stem to NW	4
2453	Valley Oak	Quercus lobata	1_	6	8	UC to W, many ripped limbs, PS, OPC w/callus	~	2
2454	White Alder	Alnus rhombifolia	7	6,6,6,6,6,6,6	12	Below rip rap, exposed roots, debris	Remove debris	3
2455	White Alder	Alnus rhombifolia	1_	8	13	Below rip rap, exposed roots, debris	Remove debris	3
2456	White Alder	Alnus rhombifolia	4	6,6,6,6	15	Below rip rap, exposed roots, debris	Remove debris	3
2457	White Alder	Alnus rhombifolia	3	9,9,7	16_	At gently sloping creek side below rip rap & retaining wall	~	3
2458	White Alder	Alnus rhombifolia	1_	8	10	At gently sloping creek side below rip rap & retaining wall	-	3
2459	White Alder	Alnus rhombifolia	3	8,8,5	12	At gently sloping creek side below rip rap & retaining wall	~	3
2460	Willow	Salix sp.	1	6	20	Exposed roots, leans toward creek	RDW	3
2461	White Alder	Alnus rhombifolia	1	10	16	CDL @ 25', exposed roots	RDW, remove broken limb	3
2462	White Alder	Alnus rhombifolia	1	7	12	Broken limbs and stubs	Remove broken limbs and stubs	3
2463		Sequoia dsempervirens	1	24	15	3' from retaining wall to NW, sparse canopy	~	_3

City of F	Roseville, Wes	t Bank of Dry Cre	eek		·-·-		Page #	7 of 11
Tree #	Common Name	Botanical Name	Stems	DBH in inches	Canopy radius in feet	Notes	Action	Rating
Hee W		Sequoia				nonce passes, evenily appropriate to the second	Add one cable for	3
2464	Coast Redwood	sempervirens	1	28	16	taper	CDL @ 25', RDW	3
2977	Coast Redwood	Sequoia sempervirens	2	12,8	10	Flagging, sparse new growth	RDW	3
						CDL @ 1.5', OPC near base, both stems		
2978	Oregon Ash	Fraxinus latifolia	2	7,7	11	sound hollow	TBR	2
2979	Oregon Ash	Fraxinus latifolia	1	13	11	Root flare inches from retaining wall @ site of drainage downspout, roots exposed	~	3
2980	Oregon Ash	Fraxinus latifolia	2	6,7	20	Leans to S, CDL @ 3', suppressed	~	3
2981	Oregon Ash	Fraxinus latifolia	2	7,7	18	Suppressed, leans, CDL @ 1', against retaining wall	Future removal to protect infrastructure	3
2982	White Alder	Alnus rhombifolia	4	7,7,6,3	10	At base of cut bank with active erosion to its base, debris @ trunk, diseased cones	Remove debris & small hangers	3_
								Ì
2983	White Alder	Alnus rhombifolia	1	7	9	At gentler slope	_~	4
2984	White Alder	Alnus rhombifolia	1	18	20_	At creek edge cut bank with exposed roots @ waters edge and on bank, leans 45° to S over creek, CDL A 8', no recent root ball movement apparent	RH & RDW	3
					12	Base of old cement blocks for bank stabilization w/exposed root flare, near creek	RDW & broken limbs	3
2985 2986	Willow	Salix sp. Morus alba	3	8,3,3	15	Base of steep embankment @ creek edge, old beaver damage of small stems & stripped bark		3
2900	ividiocity	1101 45 4104		-,,,,				
2987	Tree of heaven	Ailanthus altissima	2	7,2	10	Invasive species	TBR	1
2988	₩hite Alder	Alnus rhombifolia	2	12,9	15	Base of steep embankment @ creek edge, wood pecker damage, evidence of decay, NABA, tension cracks near base 8' below high voltage power lines, contacting cable line	of Prune limbs from cable line, prune for high voltage	3_
2989	White Alder	Alnus rhombifolia	1	11	16	At waters edge growing into 3' tall retaining wall of fenced river rock, woodpecker damage, evidence of heart rot, NABA	~	3
	White Alder	Alnus rhombifolia	1	10	12	At waters edge growing into 3' tall retaining wall of fenced river rock, woodpecker damage, evidence of hear rot. NABA	t RDW	3_
2990 2991	White Alder	Alnus rhombifolia	1	11	11	At waters edge growing into 3' tall retaining wall of fenced river rock, woodpecker damage, evidence of hear rot, NABA	t RDW	3
2992	White Alder	Alnus rhombifolia	1_1	8	13	At waters edge growing into 3' tall retaining wall of fenced river rock, woodpecker damage, evidence of hear rot, NABA	t ~	3

City of	Roseville, Wes	t Bank of Dry Cr	eek				Page #	18 of 1
Tree #	Common Name	Botanical Name	Stems	OBH in inches	Canopy radius in feet	Notes	Action	Rating
2993	White Alder	Alnus rhombifolia	1	14	18	At waters edge growing into 3' tall retaining wall of fenced river rock, woodpecker damage, evidence of heart rot, NABA	RDW	3_
2994	White Alder	Alnus rhombifolia	1	17	18	At waters edge growing into 3' tall retaining wall of fenced river rock, woodpecker damage, evidence of heart rot, NABA	RDW, RS	3
2995	White Alder	Alnus rhombifolia	1	13	16	At waters edge growing into 3' tall retaining wall of fenced river rock, woodpecker damage, evidence of heart rot, NABA	RDW	3
2996	White Alder	Alnus rhombifolia	4	6.6,4,4	14	At the base of eroding steep bank @ waters edge, old rip rap 4" stem is dead	RDW @ dead stem	3
2997	White Alder	Alnus rhombifolia	6	8,9,3,8,7,3	15	At the base of eroding steep bank @ waters edge, old rip rap	RDW	3_
2998	White Alder	Alnus rhombifolia	3	8,8,5	12	At the base of eroding steep bank @ waters edge, old rip rap	RDW	3
2999	Oregon Ash	Fraxinus latifolia	2	7,7	11	Steep slope, CDL @ 1' & CDL on both stems @ 6'	~	3
3000	Valley Oak	Quercus lobata	1	8	14	At top of bank near corner of parking lot, NABA @ 18', galls	Remove NABA	3

## **Analysis and Testing:**

No analysis or testing was performed, only observations from ground level.

## **Discussion:**

Many of the trees on the riverbank are not protected species but still have value and are currently providing stability to the bank.

The oaks located on this site are suppressed by the extensive competition for resources and poor growing space. Care should be given to removal of competition to provide more resources and proper space for growth of the valuable trees.

## **Conclusion:**

There are 61 trees on the property, and 14 protected trees pursuant to the Roseville Tree Ordinance.

- 9 trees are <u>noted for removal</u> due to their poor condition and are rated a 0 ("dead"), 1 ("dangerous") or 2 ("poor").
- 52 trees are rated 3 ("fair"), or 4 ("good").
- There were no trees in "excellent" condition with a rating of 5.

There are 3 Coast Redwood, 1 Interior Live Oak, 1 California Black Walnut, 13 Valley Oak, 8 Oregon Ash, 2 Mulberry, 28 White Alder, 3 Tree of Heaven, and 2 Willow.

ABACUS: Nicole Harrison, ISA Certified Arborist #WE-6500A

January 15, 2008

## Recommendations

- 1) All trees to be saved should have their root zones and trunk(s) protected with a four (4') foot high orange or yellow plastic, high visibility exclusionary fence surrounding the trees' root zone. The fence should be staked 10'o.c. maximum spacing, with 5' steel "T" posts, 2" x 2" square or 2"+ Ø wood posts. The exclusionary area should be under the tree's branched canopy and extend out to the tree's longest dripline radius as a circle. Where new construction will be within the root protection zone, the fencing should be 4' away from the footings, and extend around the rest of the canopy of the tree from that point. The fencing should be maintained and not removed until the completion of construction. The fencing should completely surround the Critical Root Zone and not be "U" shaped or open at any point. Whenever possible, include as many trees that are to be saved into one fenced exclusionary Critical Root Zone.
- 2) Chip the branches of the trees to be removed or pruned and use them to mulch the area under the remaining trees' branched canopies. Other mulch may be used of arborist type woodchips (4 6" deep), but not redwood or cedar bark.
- 3) Soil compaction should be avoided by maintaining the exclusionary <u>Critical Root Zone</u> fencing, keeping material storage, people, <u>all</u> vehicles, and dogs out of this area.
- 4) Soil contamination should be avoided by eliminating chemical dumping on the property that may infiltrate into the <u>Critical Root Zone</u>. Limestone gravel should <u>not</u> be used as base material or for drain rock as it will change the pH to be more alkaline, and that may harm the trees.
- 5) Do not nail, tie, screw, or fasten any signs, braces, etc. to the trees that are to remain.
- 6) The cut and fill material excavated from or added to the lot can kill a tree by removing too many roots, drying or wetting the soil or by suffocating the roots with too much soil. Care must be taken with the added soil as well as with the actual excavation. Roots need air as much as they need water to survive and for the whole tree to live and to flourish. If fill material is needed, we can properly design aeration and ventilation systems made to protect the trees and allow for the fill material.
- 8) Extreme care of the tree trunks, canopies, and the protected "Critical Root Zone" should be taken. All tree work should be completed with a qualified ISA Certified Arborist on site. All tree work should conform to the most current standards of the American National Standards Institute (ANSI). The current ANSI Tree Care Standards are A300 (Parts 1-4) 2000 to 2002 (copies at: <a href="https://www.ansi.org">www.ansi.org</a>). The BMPs are "Best Management Practices", as companion publications to the ANSI Tree Care Standards, printed by the International Society of Arboriculture (copies at: <a href="https://www.isa-arbor.com">www.isa-arbor.com</a>). The BMP booklets explain the details of the ANSI Tree Care Standards and how to follow them correctly. Pruning of branches under 3" in diameter should be made with sharp hand tools: pruners, loppers, and/or handsaws, <a href="https://www.not.not/">not/</a> chainsaws. Pruning branches over 3" must be made with the 3-cut system.

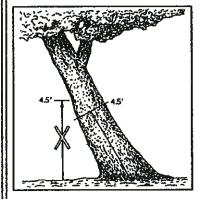
These important details will greatly increase the likelihood of survival for your trees.



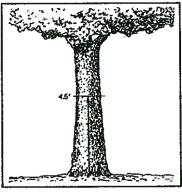
## Tree SIZE Expressed by Trunk Diameter

"The height at which the trunk diameter of a tree is measured depends upon its size. The American Standard for Nursery Stock (ANSI, 1990) state that measurements shall be taken 0 inches (13 cm) above the ground for trunk diameters up to and including 4 inches (10 cm). Larger trees (assumed, but not stated, to be of transplantable size) are to be measured at 12 inches (30 cm). Trees normally considered too large to transplant are to be measured 4.5 feet [4'-0" is also called diameter breast high or dbh] (1.4m) above the ground. Trees, like conifers, which have branches below 4.3 feet should be measured at a height that most effectively represents the size of the tree. "The diameter is calculated by first measuring the circumference divided by 3.14 ( $\alpha$  called pi) or by using a "diameter tape" whereon the inches are multiplied by  $\alpha$  and shown to produce the diameter directly.

This is the dbh standard for measurement as shown in figure 4-2.



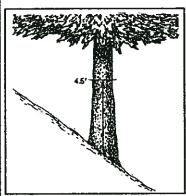
Figures 4-3 (top) and 4-4 (bottom). In each case, the trunk circumference should be measured at right angles to the trunk 4.5 feet (1.4 cm) along the center of the trunk axis so the height is the average of the shortest and longest sides of the trunk.

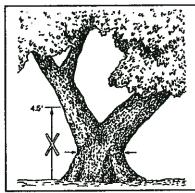


Figures 4-2. Trees with fairly straight, upright tracks with the lowest branch arising on the trunk higher than 6 feet (1.8 m) above the ground should be measured at 4.5 feet (1.4 m).

There are some exceptions to the dbh standard as shown in the figures 4-3, 4-4, 4-5 & 4-6.

Figure 4-6. In a multi-stem tree, measure the trunk circumference of each trunk at 4.5 feet (1.4 m) above the ground. The area of each trunk is determined and then added together to obtain a trunk area that is representative of the size of the tree and each of the stems contribute its proportionate share to the canopy.





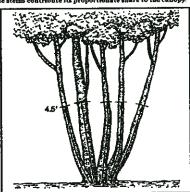


Figure 4-5. When low branches preclude measuring the trunk at 4-5 feet (1.4 m) measure the smallest circumference below the smallest branch. In this example, an alternative would be to determine the sum of the cross-sectional areas of the two stems measured about 12 inches (30 cm) above the crotch; then average the sum of the two branch areas and the smallest cross-sectional area below the branches. This may give a better estimate of tree size. Record the height of measurement(s) and the reasons the height or those heights were chosen.

ABACUS
"Where Every Detail Counts"

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This information is taken from: Ordin for Planting Appraisal, Liegish Edition, authored by the Council of Trook Landscape Appraisers, edited, yaklished & copyrighted by the International Society of Arborical tree, representing: American Association of Natureryman, American Society of Countling Arborist, Ameriated Landscape Contractors of America, International Society of Arborical ture and the National Arborist Association.

Tree SIZE Expressed by Trunk Diameter

Scales NTS

Drawing: TSE



"Where Every Detail Counts"



<u>Kenneth Menzer, Consulting &; ISA Certified Arborist #WE-2122A</u>

Member of the: American Society of Consulting Arborists & International Society of Arboriculture

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## Disclosure, Assumptions and Disclaimer

- I, Nicole Harrison, ISA Certified Arborist #WE-6500A, with "ABACUS", did personally inspect the site
  and investigated the tree(s) as mentioned in this report and I performed all aspects of this report
  unless noted otherwise in the report. Field Work by Susie Kaiser, ISA Certified Arborist #WE7666A.
- 2) We have neither financial interest in the tree work that may or may not be done, nor financial interest in the property where the tree(s) is (are) located unless noted within the report.
- 3) All opinions and recommendations expressed herein this report are ours solely. We have used our specialized education, knowledge, training and experience to examine the tree(s) and to make our opinions and recommendations to enhance the beauty, health and longevity, with an attempt to reduce the risk of who and/or what is near these trees. We cannot guarantee or warranty that a tree will not be healthy or safe under all circumstances, nor for a specific period of time or that problems may not arise in the future.
- 4) This report with its opinions and recommendations are limited to the tree(s) inspected.
- 5) We attempt to be cognizant of the whole scope of a project, but many matters are beyond the scope of our professional consulting arborist services such as: exact property boundaries, property ownership, site lines, easements, codes, covenants & restrictions (CC&Rs), disputed between neighbors, and other issues.
- 6) We rely on the information disclosed to us and assume the information to be complete, true, and accurate.
- 7) The inspection is limited to visual examination of accessible items of the tree(s), from the ground unless otherwise noted, without excavation, probing, boring, or dissection, unless noted otherwise. Only information covered in this report was examined, and reflects the condition of those inspected items at that specific time.
- 8) Clients may choose to accept or disregard these opinions and recommendations of the arborist or to seek additional advice.
- 9) This report is copyrighted. Any modification or partial use shall nullify the whole report. Do not copy without written permission. This report is for the client and the client's assignees.
- 10) Sketches, diagrams, graphs, drawings, and photographs within this report are intended as visual aids and are not necessarily to scale, and should not be construed as engineering or architectural detail, reports or surveys.

11) We shall not attend or give a deposition and/or attend court by reason of this report unless fees are contracted for in advance, according to our standard fee schedule, adjusted yearly, for such services as described.

Signed: \_/

# Downtown Specific Plan Downtowncode Appendix F



#### **MEMORANDUM**

Date: Dece

December 10, 2008

To:

Kevin Payne, City of Roseville

From:

Jason D. Pack, P.E. Kendra Breiland

Subject:

Downtown Roseville Catalyst Sites Access Evaluation

RS06-2325B

In 2006, Fehr & Peers began assisting in the development of the Downtown Specific Plan for the City of Roseville. As part of that effort, we completed operations and parking assessments to support the specific plan process. In 2007, we entered into an agreement with the City of Roseville to complete the transportation analysis for the EIR and complete various tasks to assist the City in completing the development code and CEQA processes.

Since completing the above referenced tasks, the City requested that we conduct a review of the proposed access points for the identified catalyst sites to verify that driveways were located at appropriate locations and recommend measures to improve access, if needed. The purpose of this memorandum is to summarize the results of our review and our recommendations.

#### SITE 1: WASHINGTON / LINCOLN SITE (725-845 LINCOLN STREET)

This site would have three access points: two driveways on Lincoln Street and one on Washington Boulevard.

#### Lincoln Street Driveways

- Lincoln Street has a posted speed limit of 25 miles per hour (mph), but vehicles were observed traveling much faster (35-40 mph).
- The northern driveway would be about 300 feet south of the Washington Street intersection. Even though the road is curved, sight distance to the Lincoln Street/Washington Boulevard intersection is adequate as corner sight distance exceeds the 280foot minimum specified in AASHTO's "A Policy of Geometric Design of Highways and Streets." Sight distance to the south is



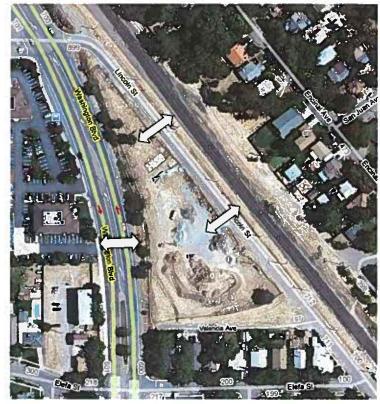


more that sufficient.

- The southern driveway would be about 275 feet south of the northern driveway. Sight distance north to the north and south is more than sufficient.
- Currently, this lot is vacant and there are no obstructions to sight distance. Additionally, opposite the proposed development is the railroad right-of-way; thus, no driveway alignment issues are likely to occur in the future.
- In order to maintain adequate sight distance as the site develops, consider restricting onstreet parking to westside of Lincoln Boulevard, specifying sufficient building setbacks, and maintaining landscaping to two feet high or less.
- Please note that Lincoln Avenue (adjacent to the project site) should be improved to meet the roadway design standards of the specific plan and/or the City of Roseville.

#### Washington Boulevard Driveway

- Washington Boulevard has a posted speed limit of 45 mph.
- Sight distance to both the north and south exceed the minimum 500 feet specified for corner sight distance. Drivers have eight seconds or more from the time they observe a vehicle coming to the time that it actually reaches the driveway, which fulfills the Caltrans Highway Design Manual requirements.
- Ideally, the driveway should be, aligned opposite the southern most driveway of the shopping center located of Washington Boulevard (as is specified in the site plan). However, with the planned center median on Washington Boulevard (which extends from Pleasant Street to Lincoln Street), the driveway alignment is not critical.





#### SITE 2: PACIFIC / CHURCH STREET SITE (120 PACIFIC STREET)

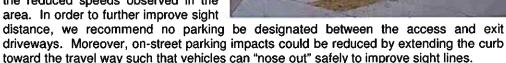
This site would have two entrances and one exit location, including one alley-way entrance on Lincoln Street and entrance/exit driveways along Pacific Street.

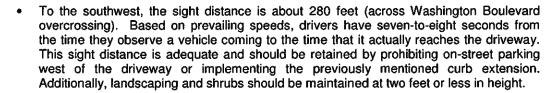
#### Lincoln Street Alley Entrance

- Lincoln Street has a posted speed limit of 25 mph, but observed speeds tend to be much lower (10-15 mph) at this location.
- The Lincoln Street alley entrance is located 160 feet south of the Church Street intersection and 150 feet north of the Pacific Street intersection. It is advisable that this access point be signed and striped as entrance only (as reflected in the plan) due to sight distance constraints posed by the on-street parking on Lincoln Street. Providing adequate sight distance for vehicles to exit from this point would require removal of onstreet parking stalls and the alleyway would require widening to support two-way traffic flow.

#### Pacific Street Exit Driveway

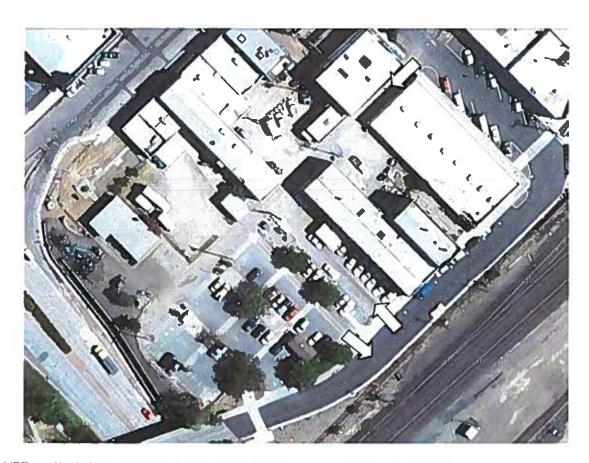
- Pacific Street has a posted speed limit of 25 mph, but prevailing speeds tend to be much lower (10-15 mph) at this location.
- The Pacific Street exit is located about 230 feet southwest of the Pacific Street / Lincoln Street intersection. On-street parking on the northside of Pacific Street obstructs exiting vehicles' views of on-coming traffic from the northeast. By removing the on-street parking, this would provide for sight distance of 230 feet. This is less than the minimum required corner sight distance for a 25 mph roadway, but exceeds the 155 foot minimum stopping sight distance and should function appropriately given the reduced speeds observed in the area. In order to further improve sight











#### SITE 3: CITY HALL ANNEX / POST OFFICE SITE (316/320 VERNON STREET)

This site would have one primary entrance and exit. The entrance would be on Grant Street just south of the Atlantic Street intersection. The exit would be on Atlantic Street on the northeast portion of the parcel.

#### **Grant Street Entrance**

- The Grant Street entrance is located less than 50 feet south of the Atlantic Street intersection and 140 feet north of the Vernon Street intersection.
- This should remain as an entrance-only driveway, as specified in the plan. If exits are to be permitted from this driveway, on-street parking on eastside of Grant Street should be eliminated and some trees would require removal.
- Left-in access should be prohibited due to proximity to Atlantic Street intersection.

#### Atlantic Street Exit

Atlantic Street has a posted speed limit of 25 mph.



- The Atlantic Street exist is located 290 feet east of the Grant Street intersection and 170 feet from the adjacent driveway intersection to the east.
- In order to provide adequate sight distance, the utility pole and plantings to the east, as well as the on-street parking and shrubs to the west would have to be relocated or modified.
- We recommend that the Atlantic Street access point provide for both ingress and egress movements to the site as Atlantic Street should be able to accommodate both types of movements.









#### SITE 4: DRY CREEK FRONTAGE (401 OAK STREET)

This site would have three entrance/exit points. One access would be on Lincoln Street, just south of the Lincoln Street / Oak Street intersection. A second access would be on Oak Street west of Grant Street. The third would be on Taylor Street south of Oak Street.

#### Lincoln Street Access

- The driveway is only 50 feet south of the Oak Street intersection. There is limited sight distance to the north for exiting vehicles. However, since the intersection is stop-controlled, the limited distance should be adequate to serve right-turn only vehicles.
- Left-turn egress should be restricted, especially since northbound queues may extend back past this driveway.



#### Oak Street Access

• The schematic is not very clear of whether this driveway would be located at the Grant Street intersection (utilizing the current fire station driveway) or west of the intersection at the current alleyway exit. However, given the high volume of traffic at the Grant Street intersection, we would recommend that the driveway not be located here to maximize vehicle capacity for the other three approaches. Please note that this is a preferable driveway location from a geometric perspective, but it will sacrifice operations of this intersection.





 We recommend the current alley access to Oak Street be reconfigured to provide for logical pedestrian crossing. It would also require removal of on-street parking and potentially trees to meet sight distance requirements.

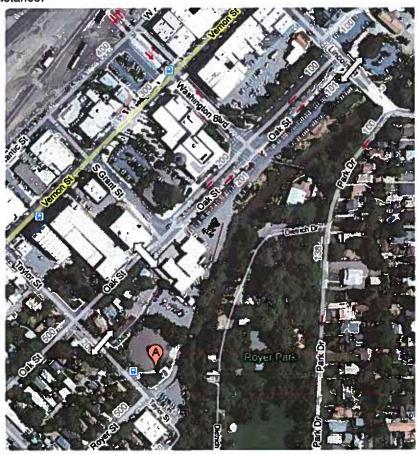
#### **Taylor Street Alley Access**

 This alley access is about 125 feet south of the Oak Street intersection and 230 feet north of



the library driveway/Royer Street intersection.

 Providing adequate sight distance would require prohibiting on-street parking on Taylor Street south of the driveway to Royer Street and/or provide bulb-outs to improve sight distance



#### SITE 5: RETAIL AND LOFTS PROJECT (401 VERNON STREET)

This site would have one access point onto Grant Street, which would be located about 140 feet south of Vernon Street and 200 feet north of Oak Street.

#### **Grant Street Access**

 This driveway's sight distance is impeded by the building setback and shrubbery.
 The driveway is also offset to the north from the driveway across the street. If possible, this offset should be corrected





with redevelopment of the civic center parcel.

 To improve sight distance, bulb-outs could be considered to allow egress vehicles to "nose out."



#### SITE 6: RETAIL AND OFFICE BUILDING (623 VERNON STREET)

This site would have three access points: one onto Bulen Street just south of Vernon Street, one onto Vernon Street 180 feet east of Bulen Street, and one onto Republican Alley, due south of the Vernon Street entrance.

#### **Bulen Street Access**

 This driveway would be located about 85 feet south of the Vernon Street intersection. Onstreet parking would need to be prohibited to provide for adequate sight distance. Parking impacts could be minimized by providing bulb-outs at the driveway. Traffic on Bulen Street should be minimal and left-turns into/out of the site should be served adequately.

#### Vernon Street Access

 In order to provide sufficient sight access, we recommend removal of the three parking stalls to the west and two to the east.



#### Republican Alley

- The site plan shows 90-degree parking directly from Republican Alley, which is not ideal.
- This alley-way access is potentially underutilized and should become more of a featured entrance for this development.



#### **CONCLUSIONS**

We hope this information is useful. In general, the proposed access points should be appropriate to serve traffic in this area. However, we did make recommendations to improve access; including bulb-outs or parking restrictions near driveways, driveway relocation, and/or turn restrictions at some access locations.

If you have any questions or concerns, please do not hesitate to contact Jason Pack at 951-274-4800 or Kendra Breiland at 916-773-1900.