# Exhibit B-2



# California Tree and Landscape Consulting, Inc.

## 2/18/2020

Glenn Rice Quantum Limit Vineyards 25 Quail Ridge Drive Napa, CA 94558

## ASSIGNMENT

Examine trees that are adjacent to proposed vineyard expansion areas to determine if they should be removed because of expected impacts to the trees, or if they can be retained. The consultant, Denice Britton, inspected the site on February 10, 2020 with Omar Reveles of Acme Engineering.

## **OBSERVATIONS AND BACKGROUND**

The trees are located along side proposed vineyards that will be planted on ground that has been scraped and leveled by graders when they were putting in fire breaks during the 2017 North Bay Fires. As a result, some roots and soil disturbance has already taken place under the canopies of the trees that grow over the newly graded areas.

Napa County Planning has requested further information to complete the Application for an agriculture



Erosion Control Plan. They requested the Species, DBH and outward extension of the dripline or crown canopy for all trees immediately adjacent to the proposed vineyard areas, which is shown on the map provided to me by Acme Engineering. The want the "development boundaries to be modified (as necessary) to exclude vineyard development and operations (including vineyard avenues and turnarounds) within tree canopies."

I was asked to evaluate on a tree by tree basis if a minor encroachment would impact the trees. I recommended removal on trees that would be significantly impacted and noted where slight pruning could be performed on those that would be minimally impacted.

**Photo 1.** Several of the trees had been impacted by the fire, which will result in new pockets of decay. The tree at left is Tree #1, which has already been pruned to remove damaged branches. It should be removed due to the impact.

I examined each tree from the perspective of whether the vineyard development would impact more than 20% of the critical root zone of the tree (defined as the extent of the dripline) or require the removal of more than 20% of the canopy. I examined 17 trees, of which I recommend that 9 be retained, and 8 be removed. Four (4) of those to be retained should have low branches removed over the vineyard, but they are far enough away from the vineyard development and the canopy disturbance is not severe enough for the tree to be significantly impacted.

**Photo 2.** Tree #15 is recommended to be removed since the vineyard development is well into the protected root zone, and pruning would require removal of more than 50% of the canopy. Tree #16 on the left in the photo is an Interior live oak that can be pruned and retained.





**Photo 3.** I recommended that the vineyard be moved back away from Tree #17, a Blue oak, so that it need not be removed.

## Assumptions and Limitations

I assume that information provided is accurate as to the proposed limits of construction.

I examined the tree(s) from

the ground for visual signs and symptoms of defects which may lead to structural failure. I assessed the health of the tree(s) based upon foliage color, density and twig growth. Not all trees on the site were included in this assessment.

Any recommendations for scheduling the monitoring of the tree(s) is the responsibility of the tree owner or manager, and not that of the Consultant, unless retained to do so, under a separate agreement.



## CONCLUSIONS

Below is a listed of the trees examined, with recommendations.

Tree

ID	DBH	Common Name	Condition	Recommend	Condition/Reason for Recommendations		
			_	_	Extensive decay and most low branches removed		
1	36	Blue Oak	Poor	Remove	due to fire.		
2	31	Blue Oak	Fair	Retain	Remove lowest 6" limb over the new vineyard. Little impact to tree.		
3	27	Blue Oak	Fair	Retain	No impact keep as is.		
4	15	Interior live oak	Poor	Remove	Extensive impact due to replacement of drainage. In poor condition, with decay at base.		
5	14	Interior live oak	Fair	Retain	Smaller multi-trunk tree should show little impact.		
6	34	Interior live oak	Poor	Remove	Drainage replacement will impact. Decay at base of tree.		
7	37	Interior live oak	Poor	Remove	Leans and grows heavily to west, could fail onto new vines.		
8	22	Interior live oak	Good	Retain	Upright, no impact from vineyard.		
9	23	Blue Oak	Fair	Retain	Remove soil from base of trunk. Prune lowest 10" limb growing east over the vineyard.		
10	26	Blue Oak	Good	Retain	Most of canopy away from the vineyard. Good structure.		
11	20	Blue Oak	Fair	Remove	More than 1/3 of the canopy would need to be removed. Significant impact.		
12	26	Blue Oak	Poor	Remove	Grows heavily over vineyard, likely to fail.		
13	19	Blue Oak	Fair	Retain	Could be retained, prune to reduce weight to the west.		
14	20	Blue Oak	Poor	Remove	Has dropped 2 limbs, extensive decay.		
15	26	Blue Oak	Fair	Remove	Extensive bark injury from fire, 60% of canopy over vineyard, major impact. Remove 8" low limb to west, grows 2' over		
16	31	Interior live oak	Fair	Retain	vineyard.		
17	26	Blue oak	Good	Retain	Move vineyard downhill to retain. Could not withstand impact as shown on the plans.		



## RECOMMENDATIONS

1. Each of the trees should be clearly shown on the site plans as to be removed or preserved.

2. The 8 trees to be removed should be cut down, and the stumps either left in place, or ground out. There is one exception: Tree #4 which will have the drain line next to it removed and replaced. This tree can have the stump removed with the backhoe used for the excavation. Tree #6, though, should be cut and left in place to result in as little impact to the adjacent tree #5 as possible.

3. The 9 trees to be preserved need to have the Tree Protection fencing shown on the site plan. This fencing need not surround the entire root zone but should be placed alongside the vineyard areas just outside the proposed edge of the excavation need for development.

4. Fencing needs to be in place prior to any excavation or ripping of the vineyard areas. It is best to cut a trench with a sharp trencher or root cutting machine along the edge of the protected zone, to prevent large roots from being damaged during ripping. A sharp root cutting router or chain trencher can be used for greatest efficiency.

5. Develop a Schedule to have the fences and protection measures verified prior to work starting on the vineyard development, and to monitor the trees throughout the development and for 1 year after it is completed. and

Please feel free to call should you have any questions or wish to further discuss my findings or recommendations.

Report Prepared by:

Denice Britton Registered Consulting Arborist #296

Attachments -

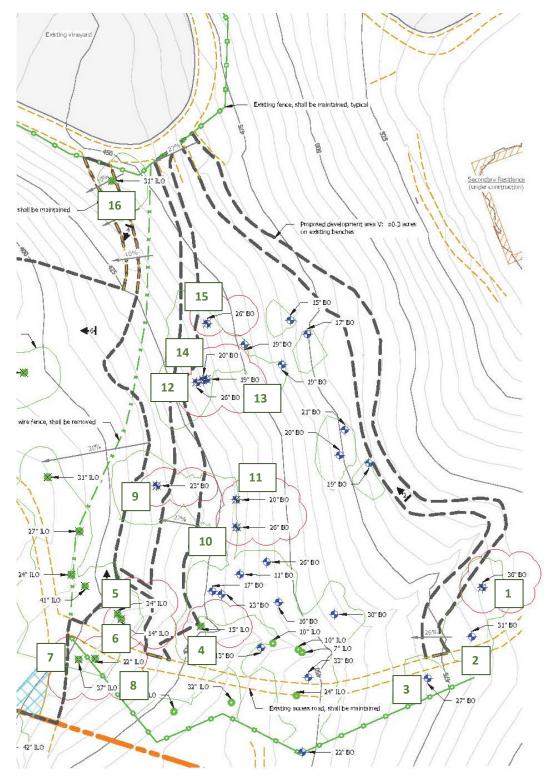
Map of the site with tree number Qualifications of the Consultant

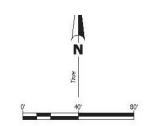
cc: Acme Engineering





## **MAPS OF TREE LOCATIONS**





 Notes:

 1.
 Topographic information provided by CMP Civil Engineering & Land Surveying from 9/17/2018.

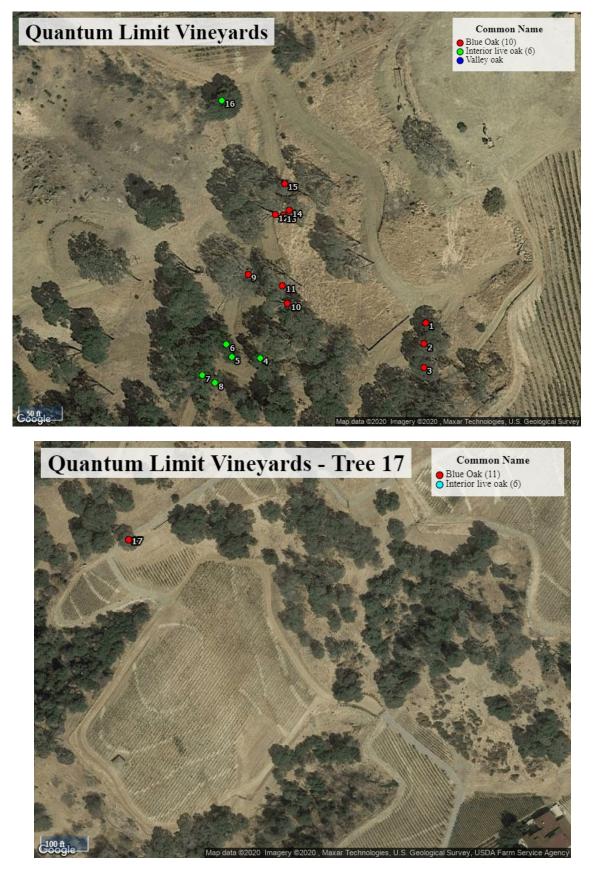
 2.
 Datum: North American Vertical Datum of 1985 (NAVD SS).

Soil Types on Site: 114 - Bressa-Dibble Complex

- Tree Protection Fencing: 1. Provide tree protection fencing along the outsid edge of the tree canopy adjacent to constructio activities to ensure they are not disturbed or impacted during construction activities. Refer to detail 1 of this sheet for tree protection
- 2. fencing installation information.
- All such fencing shall remain in place during construction to prevent any disturbance of the З. root zone.

	Tree Removal	Table	0
•	Blue Oak	BO	11
<u>A</u>	Valley Oak	vo	2
0	Interior Live Oak	ILO	24
	Coast Live Oak	ao	0
_	Total		37







## **DENICE BRITTON**

## EDUCATION AND QUALIFICATIONS

- 1979 Bachelor of Science, Biology of Natural Resources, with emphasis in Plant Pathology, University of California, Berkeley. *Summa cum Laude.*
- 1981 Master of Science, Wildland Resource Sciences, with emphasis in Urban Forestry, University of California, Berkeley. *Magna cum Laude*.
- 1984 California Community Colleges Instructor Credential for Ornamental Horticulture, Credential No. 15 2 Fro 001 (#304717).
- 1984 Certified as an Arborist, WE-0108A, by the International Society of Arboriculture (ISA).
- 2013 ISA Qualified Tree Risk Assessor #1842
- 1989 Registered Consulting Arborist #296, American Society of Consulting Arborists (ASCA).
- 1995 Graduate, ASCA Arboricultural Consulting Academy.
- 2018 ASCA Tree and Plant Appraisal Qualified and Instructor
- 2006 Certified as an Urban Forester by the California Urban Forests Council (CaUFC)

## PROFESSIONAL EXPERIENCE

July, 2016 – present -CALIFORNIA TREE AND LANDSCAPE CONSULTING, INC. *Vice President and Consulting Arborist.* Providing consultation to private and public clients in health and structure analysis, management planning for the care of trees, tree appraisal, and risk assessment.

## July, 2013-July 2016 -CONSULTING ARBORIST

Provide consultation to private and public clients in management planning for the care of trees, tree appraisal, risk assessment, and expert witness services regarding tree issues.

## 2006-2013 -CITY OF CHICO, CA. Urban Forest Manager.

Manage street and park trees for the continuation of Chico's urban forest, including species selection, planting, pruning and removal. Oversee contract(s) for maintenance of public landscapes. Assist in planning review of new development projects. Review plans for tree preservation and landscape designs

## 1984-2006 -BRITTON TREE SERVICES, INC. ST. HELENA, CA.

*Consulting Arborist.* Evaluate trees on client estates, and for public agencies, to develop maintenance programs. Consultation regarding the care of trees in the landscape, hazard evaluation, mitigating construction damage and improving cultural conditions around trees. 1985-2001: Co-owner and General Manager.

## 1981-84 - UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION, Berkeley.

## Urban Forestry Specialist.

Develop an Urban Forestry outreach program to assist municipal foresters and arborists in setting up tree management programs. Provide technical expertise to University and Extension personnel regarding tree problems.







## PROFESSIONAL AFFILIATIONS

1981-2018	- Member, International Society of Arboriculture					
	Certification Examination Committee, 1988-92					
2002	Honorary Life Membership – In recognition of material and substantial contribution to					
	the progress of arboriculture and having given unselfishly to support arboriculture.					
1981-2018	Western Chapter ISA, President, 1990-1991					
	Representative to the International Society of Arboriculture, 2015-present					
	Board of Directors, 1986-90					
	Chairman, Regional Meetings Committee, 1981-88					
	Chairman, Certification Committee, 1982-87					
	Member, Certification Committee, 1987-92					
1985 and 2018	Award of Merit. In recognition of outstanding meritorious service in advancing the					
	principles, ideals and practices of arboriculture.					
1983-2013	-Member, California Arborists Association					
	Secretary-Treasurer, Napa Valley Chapter, 1986-87, 1992-93					
1989-2018	- Member, American Society of Consulting Arborists					
	President, 1998					
	President-Elect, 1997					
	Vice President, 1996					
	Secretary-Treasurer, 1995					
	Board of Directors, two-year term, 1992-94 and 2017					
1985-2006	-Member, Tree Care Industry, previously National Arborists Association					
1986-93	-Trustee, St. Helena Beautification Foundation					
1991	-Member, California Urban Forest Advisory Council to the California					
	Department of Forestry regarding expenditure of funds allocated by the					
	America The Beautiful program to the US Forest Service.					
1981-2013	Member, California Urban Forests Council					
	Elected to Board of Directors, 2003					
	Treasurer, 2004-2006					

## **PUBLICATIONS AND LECTURES**

Ms. Britton has authored several publications on the care, appraisal and maintenance of trees. Her work has been published by the University of California Cooperative Extension Service, and in the *Journal of Arboriculture, Journal of Urban Ecology* and in the trade magazines *Arbor Age* and *California Oaks*. She wrote and published a quarterly newsletter, *Out on a Limb*, for clients and associates of Britton Tree Services, Inc., from 1991 to 2005.

Denice Britton presents at numerous professional association meetings on the successful care and maintenance of trees. Since 1995, she has taught a course on tree pruning for the University of California Extension at UC Davis, which has recently been presented nationally.

