



Tree Inventory

For

4904 Manzanita Ave., Carmichael, CA 95608

APN: 236-0254-009-0000

plnp2018-00070

Update: June 10, 2022

Prepared by Arbitect
ISA certification we-8770
Shingle Springs, CA 95682
Contact #530-556-0484

Introduction

Arbitect has been requested to provide a Tree Inventory for the purposes of a development proposal in the County of Sacramento. The subject property is 4904 Manzanita Avenue, Carmichael, CA –apn:236-0254-009-0000. Nick Parashchak represents MP brothers, LLC. The tree inventory is based on the requirements of the County of Sacramento Tree Ordinance 19.04 and the Sacramento County Tree Preservation Ordinance 19.12. This inventory includes data of the current tree species, site conditions, and general tree health. The inventory provides information necessary to assist with development approval by the County of Sacramento. It does not include specific tree evaluation/inspection or risk assessments.

Revision July 12, 2018

This revision was prepared prior to any development and in its natural condition. The revision provides additional information due the owner’s / representative’s request for additional review based on development intent and shall take precedence. The revision is based on unapproved development plans. “Trees to be Removed” and “Retained/Preserved Trees”, has been added due to the developer / development plans as needed to accommodate the development.

Update: June 6, 2022 (scope of services)

The update provides information due to the owner/representative’s request for updated information on trees identified to be removed. The trees included in this scope have been identified by the owner via other correspondence dated 5/28/22. The scope of services is limited solely to the trees identified trees to be removed. The tree conditions are limited to inventory purposes only. There are no additional site conditions, forest health, individual tree evaluations or risk assessment within this update. This update does not include tree inspection, canopy inspection, root inspection, tree evaluation, tree assessment or risk assessment. All previous site restrictions and requirements remain unless altered as part of this update. Any alterations within this update shall take precedence.

All trees identified in previous inventories, addendums, revisions, and on the property and this update’s scope shall be evaluated and assessed immediately to reduce risk. The owner/representative has the onus to consult the appropriate qualified professionals and respond, immediately. This update’s scope of services does not include any consideration of any trees included in previous inventories, addendums, and revisions. All previous inventories, addendums, and revisions information shall be considered by the owner/representative however, shall not be relied upon unless verified by a qualified professional with more recency.

Information provided herein is limited to verification of size and general condition for Oak Tree preservation compliance only. Condition of trees have declined since the previous revision. Trees with a “condition rating” of 3 or lower, a “structural rating” of 2 or lower, and a “vigor rating” of 2 or lower should be removed. Retention of trees is at the determination and risk of the owner / representative.

Site / Inventory Information and Conditions:

- Inspected: May, 2017
- Revision Inspection: July 4, July 10, July 11 – 2018
- Updated Inspection: June 5, 2022
- Purpose for Site Development Application
- Requested by Nick Parashchak
- Site is undisturbed, Site is in an urban/rural area
- Site is flat without any dwelling units
- Site and trees have been affected by various human activities

- Minimal conflicts within tree environs
- Diameter Breast Height (dbh) determined by circumference measurement conversion.
- Tree tags placed on all on-site trees in April, 2017. Tags range from #1 through #93.
- Survey data has been prepared by Wong and Associates at the same time period
- All number ratings based on a 1-4 scale with 4 being the highest
- The parcel is approximately 1.75 acres/76,230 sf
- Canopy inspection not provided – root excavation or inspection not provided
- Off-site trees were not inspected due to lack of improvement information.

General Site Observations:

- All trees exhibit dieback from drought stress over the last several years
- Most trees are affected negatively from human activities and thus the overall forest health and individuals are in below average condition.
- Trees have been pruned in the past evidenced by closure of wounds/pruned limbs
- Many trees may have substantial decay
- Most trees have dead limbs of size and excess
- Many trees have less than expected tree drip line expanse due to crowded condition of forest
- Many trees have irregular and unbalanced canopy, some significantly leveraged due to lower limb drop or previous limb removal.
- Creek embankment is a 5' vertical edge

Methodology

Update: June 6, 2022 – this section has been updated and shall be followed by the owner/representative.

This tree inventory identifies the tree location, tree type, tree size and general conditions are for purpose of retention based on tree protection regulation. The locations are based on surveys provided by the civil engineer or field review by the arborist. The tree type, tree size and general conditions are determined by field review from the ground plane. The size is measured by Diameter Breast Height (dbh), 4.5' above ground typically by circumference measurement conversions. In some case, dbh on a large multi-stemmed tree may be measured below 4.5' to provide an accurate reference point for the tree size. Comments may be provided to the general extent of pruning strategies to promote improved viability of trees and may be included to assist the owner/representative if he/she wishes to improve the conditions. The comments are solely specific for the purpose to determine retention value for the owner and/or the governing authority.

This inventory intends to satisfy the County of Sacramento policies related to human activity effects on tree species of interest. Any omitted information, informational errors, or additional information necessary shall be brought to the attention of Arbitrect for resolution, by the owner/representative.

Property bounds have been assumed by existing improvements on site such as; fences but not limited to. Canopy inspection, root inspection, root excavation, basal inspection, or risk assessment was not performed or requested. The trees were tagged with metal tags. Tag numbers may correspond with documents provided by the Civil Engineer's. The Civil Engineer may have located the trees via GPS technology.

Tree condition ratings range from 1-4 are described/shown later in this inventory. Any comment for individual trees (on-site only or perceived as on-site) is based on current conditions. Comments for off-site trees are limited as the authority to affect them is not the property owner/representative's authority. The comments are under the assumption of current site conditions; without development and as witnessed. Determination of removal to accommodate development is the owner/representative and the governing authority's onus, along with maintenance and preservation practices. This inventory does not include; specific remediation plan, replacement plan, protection plan, maintenance and monitoring plan, riparian vegetation protection plan, Oak canopy retention plan, Oak woodland conservation plans.

This inventory does provide some guideline for tree preservation when disturbance occurs within the dripline/tree protection zone. Any future encroachment of improvements or disturbance within a tree's dripline shall be evaluated a by a qualified professional. It shall be the responsibility of the owner/representative to identify and initiate assessment, evaluation, preservation, or mitigation when and if disturbance is known in accordance with state and local governance.

The owner/representative shall continue to monitor and consult with the appropriate professionals to reduce risk for all persons who are on site.

Tree removal, retention, maintenance, preservation practices, risk reduction shall be the responsibility of the owner/representative. The owner/representative shall be aware of the local jurisdiction and governing authority's regulation not stated within this document.

Condition Ratings:

1 – poor

Active and persistent tree failure, has substantial structural defects, advanced decline, no remedial options, no vigor, severe decay, poor maintenance practices

2 – fair

Failures observed or indications of potential large failure, has defects that will develop into substantial structural defects, evidence of decline, limited remedial options, fair vigor, decay indicators

3 – good

Minimal failures observed, structure is good with minimal remedial pruning, minimal substantial evidence of decline, good vigor, minimal decay or pests appears to affect tree viability or integrity

4 – excellent

No failure observed, excellent structure, no decline, vigor is excellent for size and age, no decay or pests observed, stability at ground plan.

Condition rating are represented in a quantitative manner however, these ratings are defined in a qualitative manner. These ratings are qualitative in manner and do not represent a quantitative analysis and should not be considered as such. Condition ratings are described in detail; however, rating is completed in general extent only, due to the limitations of the report scope and purpose.

Site Requirements and Recommendations:

Update: June 6, 2022 – this section has been updated and shall be followed by the owner/representative.

Site access shall be restricted by the owner/representative due to lack of specific tree evaluations or risk assessments. The restricted site area shall be any and all areas the owners/representatives have the authority or can acquire authority to restrict, including areas accessible to the public. The restricted site area shall be the “restriction zone”. A tree care company and/or qualified arborist shall be consulted and contracted to identify hazardous conditions and reduce risk within restriction zone and outside of the restriction zone, immediately. The owner/representative shall pursue tree removal or mitigation as recommended by a tree care company, immediately.

A risk assessment shall be performed for any and all trees that have a “target” (definition of “target”; Any person or object within reach of a falling tree or part of a tree, that may be injured or damaged). A risk assessment shall be performed for all trees within the restriction zone and all trees considered to be owned by the property owner. A risk assessment shall be performed for all trees outside the restriction zone. All restrictions and assessments shall commence immediately, it is representative/owner's responsibility to pursue and respond. The risk assessments shall be completed by a qualified professional and shall be responded to by the owner/representative. The site shall be inspected and evaluated annually or more than annually (shorter interval inspections and evaluations may be identified within this update and shall take precedence), during construction, and at the time of property sale in order to determine if conditions exist that warrant risk reduction or mitigation and is the onus of the property owner / representative.

The owner/representative shall have the responsibility to determine and act to reduce risk of property damage or human injury or death. The owner/representative shall consider removing all trees and/or tree parts to reduce risk to property or persons.

Trees with a “condition rating” of 3 or lower, a “structural rating” of 2 or lower, and a “vigor rating” of 2 or lower should be removed. Retention of trees is at the determination and risk of the owner / representative.

All large trees pose a greater risk and shall be assessed and evaluated by a qualified professional and is the onus of the owner / representative to pursue, immediately. All dead trees shall be removed immediately. All trees pose risk and the owner/representative shall be aware of their liability if retained.

On-Site Tree Information

Update: June 6, 2022 – this section has been updated and shall be followed by the owner/representative.

Identification and Inventory Extent

- Trees are identified from ground plane. Preparation of this inventory is limited for purposes of development application. Condition comments are for purposes of determining retention value, not potential failure. Trees that pose risk will not be identified due to the limitation of the inventory’s scope. The extent of this tree review is not adequate to ascertain with any certainty or uncertainty the potential failure of any tree, nor do all tree defects present themselves. This observation does not ensure tree stability or tree failure. The owner/representative has the onus to acquire and respond to additional evaluations and assessments. Acceptance of this inventory by the requestor, their representative, the developer, the owner, understands the purpose and indemnifies the arborist.
- **Exhibit A** “Tree Identification” – as indicated in Exhibit A
- **Exhibit B** “Tree Locations” – refer to civil engineering plans as proposed development.

Summary of Trees (within scope Update: June 6, 2022)

Update: June 6, 2022 – this section has been updated and shall be followed by the owner/representative.

All tree in Exhibit A have exhibit decline since the last revision date July 12, 2019. All trees are in a condition that pose risk and shall be evaluated/assessed. All trees shall be evaluated/assessed prior to any personal property or persons gaining access to the property.

All trees within this update have been identified by owner/representative to be removed in order to accommodate development plans.

Other trees throughout not included in this scope may need to be evaluated and assessed and is the owner / representative’s onus to identify and pursue an evaluation / assessment. Evaluation and assessments provided by qualified professionals shall be pursued by the owner, immediately.

Retained/Preserved Trees (canopy and stem):

The follow recommendations shall be considered by a tree care company and applied on a specific tree basis at the commencement of tree care activities.

The pruning strategies include but are not limited to; removal of defective parts, weight reduction, crown cleaning, thinning, raising canopy, crown reductions, restructure.

- The owner(s) or their assigns shall consult and contract with a Tree Care Company who provides pruning and removal services to evaluate and assess.

- All trees shall be pruned using strategies consistent with current standards for preservation of life and property, longevity of retained trees prior to commencement of any activities on site
- Defective trees parts shall be removed to mitigate potential hazards and to promote tree health
- Weight reductions and crown reductions shall occur as necessary to reduce leverage arms and to mitigate potential failures
- Crown cleaning and thinning to remove dead wood, hangers and to mitigate hazards and failures
- Dead wood and stubs shall be removed as soon as possible in a manner to promote tree wound health and closure
- All trees should be pruned for structural or canopy balance purposes
- All retained trees should be further evaluated for stem, basal, and root decay to identify other potential contributors to failure. The owner should respond based those recommendations immediately.
- Assessments shall be performed, prior to any activities on site, on a three-month basis or less, or as development impacts occur. The owner shall be responsible for pursuing assessments/inspections included in this inventory and as conditions require.

Note: If the recommendations above do not adequately mitigate, as determined by the tree care company, additional evaluations may conclude that mitigation or removal may be necessary and shall be pursued by the owner or their assigns. Retained and pruned trees do not guarantee nor imply as safe environs due to the nature of living organisms and the lack of surety to predict any or all consequences. Not all decline or tree conditions can be rectified to reverse or stabilize a tree's decline.

Retained/Preserved Trees (stem and roots):

- Practices for work in or around protected trees shall be followed under the section "Guidelines for Tree Preservation"
- Hardscape surfaces within drip lines of preserved trees shall be pervious materials and structurally engineered to minimize compaction and to provide for intended use
- Structures and below ground facilities placed within drip lines shall consider alternative construction techniques to minimize excavation and disturbances of roots and soil structure
- Excavation shall be minimal or may need to be hand dug, so there is minimal impact to root system, above grade construction and placement shall be considered where feasible
- Aeration systems shall be considered where more than 20% of a drip line area is covered by hardscape or structures
- Specific tree preservation plans where determined necessary shall be completed when and if development is approved by governing authority
- Any disturbances to roots greater than 1" shall be clean cut and shall be inspected by certified arborist

Note: Preserved trees that are subjected to disturbances may or may not respond. Their vitality/longevity is not predictable with any certainty. The development shall employ the procedures to best preserve the trees but there is little assurance how a living dynamic organism will respond. Disturbance tolerances are not predictable and vary greatly from tree to tree.

Assessment Requirements

- Assessment/evaluation of trees shall occur from this date forward and during construction on a regular basis to reduce risk at the owner/representative's onus. The assessment/evaluation shall occur immediately and every 3 months by a qualified professional. All recommendations and requirements shall be followed.
- Assessment/evaluation of trees shall occur during the course of construction on a basis determined by the construction activities which can affect the tree. Assessment/evaluation's intent is to identify any disturbances which occur to tree both below ground and above ground.
- Tree shall be evaluated at the end of construction
- Maintenance and monitoring requirements shall be determined based on removal and mitigation requirements per the governing authority.

Guidelines for Tree Preservations

NOTE: All tree protection zones to be established at time of commencement of any construction activities and not based on estimated drip lines in this inventory. Drip lines are rough estimation only due to irregular canopies of the trees on subject property.

- Identify trees to be preserved
- Prune trees prior to construction. The sooner the better to allow trees to stabilize and time for trees to minimize stress prior to development disturbance.
- Prune standards shall be based on current International Society of Arboriculture (ISA) standards.
- Protective fencing should be placed prior to construction outside the drip line of all trees to be preserved and shall remain in place until development is complete
- Natural soil grade shall not be altered unless approved
- If the future improvements include working within the drip line of a tree, specific construction recommendations and evaluations by a certified arborist shall be procured by the owner.
- Techniques such as aeration systems may be necessary if hardscapes are placed within drip lines, a 20% rule of thumb applies however, each specific case requires an arborist to be consulted.
- Any soil excavation, disturbance or trenching shall be hand dug to minimize root damage.
- Any exposed or damaged roots of significant size (1" or greater) shall be evaluated by a certified arborist at the time of exposure or damage. All roots shall be cut cleanly perpendicular to the root. Any roots damaged (1" or less) shall be cleanly cut. A clean cut implies no remaining tissue is cracked, split, ripped or damaged tissue remains.
- No materials, equipment, vehicles shall be stored or allowed within drip lines.
- Any compaction of soil shall not be allowed
- If any compaction is anticipated due to construction activities, an 8" layer of mulch shall be placed on grade
- Planting or landscape which requires irrigation shall not be allowed under protected mature trees.
- Owner shall consult, County and local organizations, and others to determine appropriate landscape under protected trees
- Tree stumps within 12' of trees to be preserved shall be flush cut at ground level, not pulled and if ground, shall be ground as to not damage other trees roots.
- If significant disturbance occurs to any tree to be preserved, the owner shall consult with a certified arborist to determine appropriate response.

Development Impacts

Tree protection, preservation, regulation is guided by the County of Sacramento Chapter 19.04, Chapter 19.12. Certain native plants and communities are protected and California Environmental Quality Act and may be by the County of Sacramento requirements. Impact to these protected plants and habitat due to development are regulated and may require protection, preservation, or restoration. The Department of Environmental Review or other agencies may use the base information contained in this inventory to evaluate those potentials. Other environmental studies may be required.

This tree inventory provides pre-development observations and recommendations which should be revisited as future development progresses. Adverse impacts, unintended or unanticipated impacts may occur during that development and construction process which cannot be predicted. Specific evaluation of all trees shall be performed once development impacts are known or as trees are affected by development. It the responsibility of the owner or their representatives pursue appropriate remedial, removal and preservation recommendations from professionals with expertise and experience if protected trees/plants, habitats, or trees of interest are affected. Consideration should be given to potential targets due to tree failure. Trees that measure greater than 12” diameter pose a more significant risk of catastrophic failure.

This inventory is intended for the purpose of development review which gives the basis for tree removal, retention or pruning strategies. Trees shall be protected, preserved, maintained per County, State, International Society Arboriculture (ISA) standards, Tree Care Industry Standards (TCIA), American National Institute (ANSI) standards as situational appropriate. In the event, trees are encroached upon, a supplemental Arborist Report/evaluation, Construction Impact Assessment, Preservation Measures, may be necessary and are the responsibility of the owner to pursue.

Additional evaluations and investigations shall be accomplished, immediately prior to the commencement of activities, during and at the completion of the development in order to provide safe environs. It shall be the owner’s responsibility to seek evaluations of trees at the appropriate time.

The owner should substantiate and document the dbh of any tree requiring mitigation at the time of removal.

Tree Removal and Maintenance Authority of Protected Species

The County of Sacramento Ordinance(s) regulates the removal of protected trees and encroachment within their drip lines. The owner and their representatives shall be aware of the ordinance and shall be responsible for the removal, pruning, or encroachment within drip line/tree protection zone of any protected trees. Any trees not indicated in this inventory which are affected shall be brought to the attention of the Arborist prior to disturbance or removal. Tree permits and approval may be required by the appropriate authority. The owner or their representatives shall follow all regulations as required by the local and state jurisdiction or as required by governing authority. Certification may be required at the completion of development and shall be the responsibility of the owner to procure. If any other submittals/forms/permits/documents are needed to perform for tree work/removal/disturb tree protection zone, the owner shall be responsible to determine appropriate actions or authority.

Limited Conditions, Assumptions and Indemnification

- Any legal description provided to Arbitect is assumed to be correct. Any titles and ownership to any property are assumed to be good and marketable. No responsibility is assumed for matters legal in character. Any and all property is appraised or evaluated as though free and clear, under responsible ownership and competent management.
- It is assumed that any property is not in violation of any applicable codes, ordinances, stature, or other governmental regulation.

- Care has been taken to obtain information for reliable sources. All data has been verified in so far as possible, however, Arbitect can neither guarantee nor be responsible for the accuracy of information provided by others.
- Arbitect shall not be required to give a deposition and/or attend court by reason of this inventory unless subsequent contractual arrangements are made for in advance, including payment of an additional fee for such services according to an agreed upon fee schedule.
- Loss or alteration of any part of this inventory invalidates the entire inventory. Ownership of any documents produced passes to the client only when all fees have been paid.
- Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the person to whom it is addressed, without the prior expressed written consent of the consultant.
- Neither all nor any part of the contents of this inventory, nor, copy thereof, shall be conveyed by anyone, including the client, to the public through advertising, public relation, news, sales, or other media, without the prior expressed written consent of the consultant, particularly as to value conclusions, identity of the consultant, or any reference to any professional society or institute
- This inventory and any values expressed herein represent the opinion of the Arbitect and the consultant's fee is in no way contingent upon the reporting of a specific value, a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.
- Sketches, diagrams, graphs, drawings and photos within this inventory are intended as visual aids and are not necessarily to scale and should not be construed as engineering or architectural reports or surveys. The reproduction of information generated by other consultants is for coordination and ease of reference. Inclusion of such information does not constitute a representation by consultant as to the sufficiency or accuracy of the information.
- Unless expressed otherwise: 1. Information contained in this inventory covers only those items that were examined and reflects the condition of those items at the time of inspection; and 2. The inspection is limited to visual examination of the accessible items without laboratory analysis, dissection, excavation, probing or coring, unless otherwise stated.
- There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plants or property in question may not arise in the future.
- This inventory is based on the observations and opinions of Arbitect and does not provide guarantees regarding the performance, health, vigor, structural stability or safety. Arbitect assume no responsibility for tree failure or their demise or any resultant damage.
- Final trees removal, retention, maintenance shall be determined by the owner since the project is in early stages of development.
- Further investigation of tree failure potential is the owner's responsibility
- Root system and canopy impacts cannot be definitively assessed until improvements are identified in detail. Additional inspection is the responsibility of the owner.
- Trees are living things and vary in their growth habits and responses to disturbance. The owners shall be responsible for the impacts regardless of the general observations contained within this inventory.
- No additional assumption of services is assumed by the inventory preparer
- It is the owner's responsibility to notify the arborist if conditions change
- Arborist's are professionals who use their experience and knowledge to inspect and minimize risks, only. Arborist's cannot detect with any certainty that trees will or will not fail.
- Any entity who develops or owns land should inform residents of tree risks
- Trees within this project will be subject to a change of environment due to development and thus should be monitored by the owner.
- Any changes or instability of trees shall be brought to the attention of a certified arborist or mitigated as necessary to preserve life or property damage. All emergency activities shall be documented and retained.
- Information Use Limitations: The inventory is for the exclusive use of the owner identified within this inventory. The purpose of this inventory is for development review of the subject property. Any use of this inventory and any support exhibits, appendixes, diagrams or portions thereof other than for project review shall be subject to and require written permission of Arbitect. Unauthorized modifications, distribution and / or use of this inventory, including the data or portion thereof contained is prohibited.

Exhibit A - Tree Identification

Tree #	Botanical Name	Common Name	dbh (") (1)	DL (r in ft) (2)	Structure Rating	Vigor Rating	Condition Rating (3)	Life Expectancy (4)	Protected	Heritage Tree (19dbh+)
14	Quercus douglasii (QD)	Blue Oak	26	30	2	2	2	0-30	X	X
16	Quercus douglasii (QD)	Blue Oak	33	30	1	2	1.5	0-10	X	X
24	Quercus douglasii (QD)	Blue Oak	12	15	1	2	1.5	0-20	X	
25	Quercus douglasii (QD)	Blue Oak	26	25	2	2	2	0-30	X	X
28	Quercus douglasii (QD)	Blue Oak	13	10	1	1	1	0-30	X	
29	Quercus douglasii (QD)	Blue Oak	20	20	2	2	2	0-30	X	
31	Quercus douglasii (QD)	Blue Oak	15	15	1	2	1.5	0-20	X	
32	Quercus douglasii (QD)	Blue Oak	11	10	2	2	2	0-20	X	
33	Quercus douglasii (QD)	Blue Oak	14/18	20	2	2	2	0-20	X	X
36	Quercus douglasii (QD)	Blue Oak	10	12	2	2	2	0-20	X	
40	Quercus douglasii (QD)	Blue Oak	8	10	2	2	2	0-30	X	
41	Quercus douglasii (QD)	Blue Oak	10	10	2	2	2	0-30	X	
44	Quercus douglasii (QD)	Blue Oak	15/8	10	1	2	1.5	0-30	X	

(1) dbh is estimated and rounded by circumference method.

(2) Dripline of most trees is irregular due to forest crowding and subordinate growth. DL is est. Subject property is densely covered and intermixed tree crowns and unbalanced, many trees are leveraged with high canopy

(3) Condition rating based partially on relative health of other site trees

(4) The life expectancy of a living organism (tree) disturbed or undisturbed is absolutely unpredictable even when all preservation techniques during construction are followed, however for purposes of submissions an estimation in years has been provided.

This page intentionally blank



Tree Inventory and Summary

For

4904 Manzanita Ave., Carmichael, CA 95608

APN: 236-0254-009-0000

plnp2018-00070

ADDENDUM 9-15-19

Prepared by Arbitect
ISA certification we-8770
Shingle Springs, CA 95682
Contact #530-556-0484

ADDENDUM – 9/15/19

Arbitect has been requested to identify previously unidentified trees shown on the survey map. The scope is limited to review of 4 trees as shown on tentative parcel map which are indicated as “untagged” trees by standard survey nomenclature. Identification was completed on 9/19/19. All other previous inventory information was not reviewed nor updated.

This addendum is supplemental to previous inventory for the subject property. This addendum in not complete or valid without inclusion of the previous inventory.

Wong and Associates requested the information under authority of Nick Parashchak. The tree inventory is based on the requirements of the County of Sacramento Tree Ordinance 19.04 and the Sacramento County Tree Preservation Ordinance 19.12. This inventory includes data of the current tree species and general tree condition. The inventory provides information necessary to assist with development approval by the County of Sacramento. It does not include in depth inspection or risk assessment.

The Addendum consists of;

ADDENDUM 9-15-19 to Exhibit B – Tree Identification and Conditions

Limited Conditions, Assumptions and Indemnification

- Any legal description provided to Arbitect is assumed to be correct. Any titles and ownership to any property are assumed to be good and marketable. No responsibility is assumed for matters legal in character. Any and all property is appraised or evaluated as though free and clear, under responsible ownership and competent management.
- It is assumed that any property is not in violation of any applicable codes, ordinances, stature, or other governmental regulation.
- Care has been taken to obtain information for reliable sources. All data has been verified in so far as possible, however, Arbitect can neither guarantee nor be responsible for the accuracy of information provided by others.
- Arbitect shall not be required to give a deposition and/or attend court by reason of this inventory unless subsequent contractual arrangements are made for in advance, including payment of an additional fee for such services according to an agreed upon fee schedule.
- Loss or alteration of any part of this inventory invalidates the entire inventory. Ownership of any documents produced passes to the client only when all fees have been paid.
- Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the person to whom it is addressed, without the prior expressed written consent of the consultant.
- Neither all nor any part of the contents of this inventory, nor, copy thereof, shall be conveyed by anyone, including the client, to the public through advertising, public relation, news, sales, or other media, without the prior expressed written consent of the consultant, particularly as to value conclusions, identity of the consultant, or any reference to any professional society or institute
- This inventory and any values expressed herein represent the opinion of the Arbitect and the consultant's fee is in no way contingent upon the reporting of a specific value, a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.
- Sketches, diagrams, graphs, drawings and photos within this inventory are intended as visual aids and are not necessarily to scale and should not be construed as engineering or architectural reports or surveys. The reproduction of information generated by other consultants is for coordination and ease of reference. Inclusion of such information does not constitute a representation by consultant as to the sufficiency or accuracy of the information.
- Unless expressed otherwise: 1. Information contained in this inventory covers only those items that were examined and reflects the condition of those items at the time of inspection; and 2. The inspection is limited to visual examination of the accessible items without laboratory analysis, dissection, excavation, probing or coring, unless otherwise stated.
- There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plants or property in question may not arise in the future.
- This inventory is based on the observations and opinions of Arbitect and does not provide guarantees regarding the performance, health, vigor, structural stability or safety. Arbitect assume no responsibility for tree failure or their demise or any resultant damage.
- Final trees removal, retention, maintenance shall be determined by the owner since the project is in early stages of development.
- Further investigation of tree failure potential is the owner's responsibility
- Root system and canopy impacts cannot be definitively assessed until improvements are identified in detail. Additional inspection is the responsibility of the owner.
- Trees are living things and vary in their growth habits and responses to disturbance. The owners shall be responsible for the impacts regardless of the general observations contained within this inventory.
- No additional assumption of services is assumed by the inventory preparer
- It is the owner's responsibility to notify the arborist if conditions change
- Arborist's are professionals who use their experience and knowledge to inspect and minimize risks, only. Arborist's cannot detect with any certainty that trees will or will not fail.
- Any entity who develops or owns land should inform residents of tree risks
- Trees within this project will be subject to a change of environment due to development and thus should be monitored by the owner.
- Any changes or instability of trees shall be brought to the attention of a certified arborist or mitigated as necessary to preserve life or property damage. All emergency activities shall be documented and retained.
- Information Use Limitations: The inventory is for the exclusive use of the owner identified within this inventory. The purpose of this inventory is for development review of the subject property. Any use of this inventory and any support exhibits, appendixes, diagrams or portions thereof other than for project review shall be subject to and require written permission of Arbitect. Unauthorized modifications, distribution and / or use of this inventory, including the data or portion thereof contained is prohibited.

ADDENDUM 9-15-19 to Exhibit B - Tree Identification and Conditions

Tree #	Botanical Name	Common Name	dbh (") (1)	DL (r in ft) (2)	Structure Rating	Vigor Rating	Condition Rating (3)	Life Expectancy (7)	Protected
896	Casuarina spp.	Australian Pine	12	10	2	2	2	30	NO
897	Pinus spp.	Pine	10	5	1	1	1	0-5	NO
898	Washingtonia filifera	Palm	12	3	2	2	2	0-10	NO

All Notes are shown on Exhibit B in previous report



Tree Inventory and Summary

For

4904 Manzanita Ave., Carmichael, CA 95608

APN: 236-0254-009-0000

plnp2018-00070

REVISION – July 12, 2018

Prepared by Arbitect
ISA certification we-8770
Shingle Springs, CA 95682
Contact #530-556-0484

Introduction

Arbitect has been requested to provide a Tree Inventory and Summary for the purposes of a development proposal in the County of Sacramento. The subject property is 4904 Manzanita Avenue, Carmichael, CA –apn:236-0254-009-0000. Nick Parashchak represents MP brothers, LLC. The tree inventory is based on the requirements of the County of Sacramento Tree Ordinance 19.04 and the Sacramento County Tree Preservation Ordinance 19.12. This inventory includes data of the current tree species, site conditions, and general tree health. The inventory provides information necessary to assist with development approval by the County of Sacramento. It does not include in depth inspection or risk assessment; however, hazardous conditions may be identified.

Revision July 12, 2018

This inventory was prepared prior to any development and in its natural condition. The revision provides additional information due the owner’s / representative’s request for additional review based on development intent and shall take precedence. The revision is based on unapproved development plans. A “Trees to be Removed”, “Retained/Preserved Trees”, has been added due to the developer / development plans as needed to accommodate the development.

Site / Inventory Information and Conditions:

- Inspected: May, 2017
- Revision Inspection: July 4, July 10, July 11 - 2018
- Purpose for Site Development Application
- Requested by Nick Parashchak
- Site is undisturbed, Site is in an urban/rural area
- Site is flat without any dwelling units
- Site and trees have been affected by various human activities
- Minimal conflicts within tree environs
- Diameter Breast Height (dbh) determined by circumference measurement conversion.
- Tree tags placed on all on-site trees in April, 2017. Tags range from #1 through #93.
- Survey data has been prepared by Wong and Associates at the same time period
- All number ratings based on a 1-4 scale with 4 being the highest
- The parcel is approximately 1.75 acres/76,230 sf
- Canopy inspection not provided – root excavation or inspection not provided
- Off-site trees were not inspected due to lack of improvement information.

General Site Observations:

- All trees exhibit dieback from drought stress over the last several years
- Most trees are affected negatively from human activities and thus the overall forest health and individuals are in below average condition.
- Trees have been pruned in the past evidenced by closure of wounds/pruned limbs
- Many trees may have decay due to previous limb removal and in many cases at the base or on the main stem
- Most trees have dead limbs of size and excess
- Many trees have less than expected tree drip line expanse due to crowded condition of forest
- Many trees have irregular and unbalanced canopy, some significantly leveraged due to lower limb drop or previous limb removal.
- Creek embankment is a 5’ vertical edge

Additional Site Vegetation:

A number of shrubs and junk trees exist throughout the property. There are other trees (Washingtonia, Pinus, Casuarina, Morus, Carya, Olea) that are not native. There are ornamental variety shrubs most likely from previous land use. There are Prunus ilicifolia on the southern and western edge of the property and some Vitus californica along the drainage creek.

There are volunteer native tree species (Quercus lobata, Q. douglasii, Q. wislenzii) that are native, not protected due to minimal size and could be retained. If retained, mitigation “consideration” should be granted due to the viability of natural establishment survivability rather than replanting of nursery grown mitigation stock. **If the approving authority grants this “consideration” the owner should document trees and include in any mitigation and monitoring requirements.**

Methodology

This tree inventory and summary refer to the location, tree type, size and general conditions. The locations are based on surveys provided by the civil engineer or field inspection by the arborist. The tree type, size and general conditions are determined by field inspection from the ground plane. The size is measured by Diameter Breast Height, 4.5’ above ground typically by circumference measurement conversions. Recommendations may be provided to the general extent for retention, removal, or possible pruning strategies to promote improved viability of trees.

This inventory intends to satisfy the County of Sacramento’s policies related to human activity effects on tree species of interest. Any omitted information, informational errors, or additional information necessary shall be brought to the attention of Arbitect for resolution, by the owner.

Property bounds have been assumed by existing improvements on site such as; fences but not limited to. No canopy or root excavation inspection was performed. The trees were tagged with metal tags. Tag numbers may correspond with documents provided by the Civil Engineer’s. The Civil Engineer may have located the trees via GPS technology.

Tree condition ratings range from 1-4 as described/shown later in this inventory. Comments for individual trees (on-site only or perceived as on-site) is based on current general conditions with limited information based on the scope of work limitations to inventory purposes for development approval processes. Trees conditions are identified for off-site trees in general extent only. Comments for off-site trees are not given as the authority to affect them is not the property owner’s authority. The comments are under the assumption of current site conditions; without development and as witnessed. **Removal recommendations for protected trees are on the basis of tree conditions that warrant removal or have no long-term viability or for the general benefit of other trees to be retained.** Determination of removal to accommodate development shall be determined by the owner and the governing authority along with preservation or mitigation requirements. This inventory does not include; specific remediation plan, replacement plan, protection plan, maintenance and monitoring plan, riparian vegetation protection plan, Oak canopy retention plan, Oak woodland conservation plans.

This inventory does provide some guideline for tree preservation when disturbance occurs within the dripline/tree protection zone. Any future encroachment of improvements or disturbance within a tree’s dripline shall be evaluated a by a qualified professional. It shall be the

responsibility of the owner to identify and initiate evaluation, preservation, or mitigation when and if disturbance is known in accordance with state and local governance.

Additional inspection is recommended if a tree presents any characteristics that warrant further investigation and as the development progresses. The owner shall continue to monitor and consult with the appropriate professionals to ensure the safety of all persons who are allowed on site and to protect property.

Tree removal, retention, maintenance, preservation practices shall be the responsibility on the owner.

Condition Ratings:

1 – poor

Active and persistent tree failure, has substantial structural defects, advanced decline, no remedial options, no vigor, severe decay, poor maintenance practices

2 – fair

Failures observed or indications of potential large failure, has defects that will develop into substantial structural defects, evidence of decline, limited remedial options, fair vigor, decay indicators

3 – good

Minimal failures observed, structure is good with minimal remedial pruning, minimal substantial evidence of decline, good vigor, minimal decay or pests appears to affect tree viability or integrity

4 – excellent

No failure observed, excellent structure, no decline, vigor is excellent for size and age, no decay or pests observed, stability at ground plan.

Condition rating are represented in a quantitative manner however, these ratings are defined in a qualitative manner. These ratings are qualitative in manner and do not represent a quantitative analysis and should not be considered as such.

Site Recommendations;

The urban forest in in poor condition with some exceptions. **Site access shall be restricted by the owner due to lack of specific tree evaluations or assessments.** A tree care company shall be consulted and contracted to determine and remove or mitigate hazardous conditions prior to the commencement of activities on site. The owner should pursue removal or mitigation as recommended by a tree care company. A risk assessment shall be performed for any tree that has a target outside of the private property restriction zone. A risk assessment shall be performed for all trees within the restriction to minimize risk of harm to life or property. A risk assessment shall be performed for all trees greater than 12” dbh. All restrictions and assessment shall commence immediately, it is owner’s responsibility to pursue and respond.

The owner shall determine if any trees shown in this report are considered County of Sacramento trees based on his knowledge and through professional services such as surveys.

The trees along Bourbon Way are large and can cause substantial damage to users and property along Bourbon Way. The owner shall pursue removal or mitigation, immediately.

On-Site Tree Information

Identification and Inventory Extent

- Trees identified from ground plane. Preparation of this inventory is limited for purposes of development application, identification. Condition ratings and comments are for purposes of determining retention value, not potential failure. Hazardous trees may be identified and shall be the owner's responsibility to mitigate. The extent of this tree inventory is not adequate to ascertain with any certainty or uncertainty of potential failure of any tree, nor do all tree defects present themselves. This inventory does not ensure tree stability or tree failure. Acceptance of this inventory by the requestor or their representative understands this inventory's purpose and indemnifies the arborist.

- **Exhibit A** – “Tree Removal Plan” has been prepared by Wong and Associates which shows location of trees as recorded via GPS technology. Exhibit A is specifically a “tree removal plan” based on the development plans per the developer. Exhibit A is provided under separate submittal by developer/civil engineer. Specific tree information can be reference to Exhibit B.

- **Exhibit B** – “Tree Identification and Condition” is a matrix that identifies the trees and conditions
 1. The matrix shows higher quality trees that should be considered in development plans for retention (see note 4).
 2. The matrix shows trees that should be removed due to minimal long-term viability, poor condition, or for the benefit of the forest or adjacent tree (see note 6). These trees should be removed at the discretion of the owner/tree with removal authority due to development plan or if they present themselves as hazards. Because they have minimal long-term viability or benefits the forest or adjacent tree, these trees should be considered acceptable removal under Title 19.12.090 which considers acceptable removal to include removal to “promote the health of other trees on-site” or related issues.
 3. The matrix shows trees that should be removed due to hazardous condition, significant decline, structural instability (see note 5). These trees should be removed to reduce potential hazards prior to any activities commence on-site.

Summary of Trees – Pre-Development Conditions

There are 84 trees on the site that are of protected status of which 27 are heritage size.

Category #1 – Trees of Reasonable Quality - Shown in Exhibit B – not shaded.

Trees in this category could be retained and may be viable in a developed condition.

This inventory identifies trees of higher quality, comparative to urban forest condition, totaling 20 (see note: 4 on “Exhibit B), not all are heritage size. Trees of quality on this site need corrective pruning due to urban conditions and poor forest health at this property. Twenty (20) trees are identified high quality, with (7) being of the highest quality, **#11, 29, 51, 78, 86, 89, 90**. A risk assessment for individual trees should be performed if retained and prior to any activities on the site.

Category #2 – Trees in Declining Condition - Shown in Exhibit B - medium shaded.

Trees in this category should be removed due to declining condition. Based on initial review without development plans, trees **#2, 6, 7, 8, 10, 15, 24, 31, 32, 33, 34, 36, 42, 54, 56, 59, 60, 74, 75, 79, 80, 81** could be removed under the guidelines of Title 19.12.090. A risk assessment should be performed if retained and prior to any activities on site.

Removals under Category #2 are recommended due to individual tree and forest conditions which are below average and declining and elevate failure potential, see below. There are significant urban conflicts, human activities, lack of adequate space to support the quantity of trees on the parcel.

Many trees are or have:

- Excessive wounds
- Branch dieback
- Subordinate to adjacent trees
- Imbalanced crowns
- Levered with a high canopy and not lower canopy
- Location with high target value if failure occurs

Site Conditions warrant removal of trees for:

- Benefit of the adjacent individual trees
- Urban forest health
- Poor life expectancy / no long term viability
- Future potential property damage

Category #3 – Hazard Trees – Shown in Exhibit B – dark shaded:

Trees #3, 4, 5, 16, 18, 20, 23, 26, 27, 46, 52, 62, 63, 64, 67, 77, 85 should be immediately removed due to hazardous conditions. The removal of these trees does not imply or guarantee safe environs on the subject property. Evaluation of all remaining trees and new forest conditions should be evaluated.

Parcel's Tree Capacity

Under title 19.12.090, removal of trees that are protected is guided by the parcel's ability to support trees both developed and undeveloped. Preservation of trees shall not unreasonably compromise the development of property. In its undeveloped state, the site can support approximately 39 trees of heritage size. **In its developed state, the site can support less than half due to structures and vehicular access needs.** The following data estimates tree quantity the site can accommodate.

Undeveloped Site Data:

Total area: 76,230 sf

Mature tree area needed: 1,950 sf (25' drip line radius)

Total trees the site can support: 39

Trees to be removed

Trees have been identified by the developer to accommodate development plans based on Exhibit A provided by the civil engineer.

Additional trees may need to be removed based on risk assessment as provided by the owner.

All Category #3 trees should be removed due to poor and hazardous condition. Some Category #3 trees are not shown on the "Tree Removal Plan" since their removal is not required to accommodate development. However, they should be removed to eliminate associated risk and shall be the owner's responsibility to remove.

All Category #2 trees should be removed due to declining conditions or for the benefit of other trees.

Retained/Preserved Trees (Above Ground):

The follow recommendations shall be considered by a tree care company and applied on a specific tree basis at the commencement of tree care activities. Exhibit B contains additional comments for specific trees.

The pruning strategies include but are not limited to; removal of defective parts, weight reduction, crown cleaning, thinning, raising canopy, crown reductions, restructure.

- The owner(s) or their assigns shall consult and contract with a Tree Care Company who provides pruning and removal services to re-evaluate and mitigate all potential hazards.
- All trees shall be pruned using strategies consistent with current standards for preservation of life and property, longevity of retained trees prior to commencement of any activities on site
- Defective trees parts shall be removed to mitigate potential hazards and to promote tree health
- Weight reductions and crown reductions shall occur as necessary to reduce leverage arms and to mitigate potential failures
- Crown cleaning and thinning to remove dead wood, hangers and to mitigate hazards and failures
- Dead wood and stubs shall be removed as soon as possible in a manner to promote tree wound health and closure
- All trees should be pruned for structural or canopy balance purposes
- All retained trees should be further evaluated for stem, basal, and root decay to identify other potential contributors to failure. The owner should respond based those recommendations immediately.
- Assessments shall be performed, prior to any activities on site, on a six-month basis or less, or as development impacts occur. The owner shall be responsible for pursuing assessments/inspections included in this inventory and as conditions require.

Note: If the recommendations above do not adequately mitigate, as determined by the tree care company, additional evaluations may conclude mitigation or removal may necessary and shall be pursued by the owner or their assigns. Retained and pruned trees do not guarantee nor imply as safe environs due to the nature of living organisms and the lack of surety to predict any or all consequences. Not all decline or tree conditions can be rectified to reverse or stabilize a tree's decline.

Urban Forest Recommendations

- Trees/forest should be evaluated after removals to determine consequences of the removal of the edge support or "edge wind exposure" of canopy continuity that existed prior to development activities
- Trees/forest should be evaluated after the removals to determine consequences of wind exposure for specific trees retained.
- Trees/forest shall be evaluated after the removals to determine if forest changes may create hazardous conditions

Retained/Preserved Trees (Below Ground):

- Practices for work in or around protected trees shall be followed under the section "Guidelines for Tree Preservation"
- Hardscape surfaces within drip lines of preserved trees shall be pervious materials and structurally engineered to minimize compaction and to provide for intended use
- Structures and below ground facilities placed within drip lines shall consider alternative construction techniques to minimize excavation and disturbances of roots and soil structure

- Excavation shall be minimal or may need to be hand dug, so there is minimal impact to root system, above grade construction and placement shall be considered where feasible
- Aeration systems shall be considered where more than 20% of a drip line area is covered by hardscape or structures
- Specific tree preservation plans where determined necessary shall be completed when and if development is approved by governing authority
- Any disturbances to roots greater than 1” shall be clean cut and shall be inspected by certified arborist

Note: Preserved trees that are subjected to disturbances may or may not respond. Their vitality/longevity is not predictable with any certainty. The development shall employ the procedures to best preserve the trees but there is little assurance how a living dynamic organism will respond. Disturbance tolerances are not predictable and vary greatly from tree to tree.

Inspection, Mitigation, Monitor

- Assessment of trees shall occur from this date forward and during construction on a regular basis, as determined by the owner, for the purpose to identify and mitigate potential hazards. The inspection shall occur as determined by the owner or no less than six months, on a continual basis.
- Assessment of trees shall occur during the course of construction when any disturbances occur to tree and within drip line of preserved trees
- Tree shall be evaluated at the end of construction
- Mitigated trees shall be shown on supplemental plans along with requirements per the County of Sacramento’s preservation requirements.
- Maintenance and monitoring requirements shall be determined based removal, mitigation requirements per the governing authority.

Guidelines for Tree Preservations

NOTE: All tree protection zones to be established at time of commencement of any construction activities and not based on estimated drip lines in this inventory. Drip lines are rough estimation only due to irregular canopies of the trees on subject property.

- Identify trees to be preserved
- Prune trees prior to construction. The sooner the better to allow trees to stabilize and time for trees to minimize stress prior to development disturbance.
- Prune standards shall be based on current International Society of Arboriculture (ISA) standards.
- Protective fencing should be placed prior to construction outside the drip line of all trees to be preserved and shall remain in place until development is complete
- Natural soil grade shall not be altered unless approved
- If the future improvements include working within the drip line of a tree, specific construction recommendations and evaluations by a certified arborist shall be procured by the owner.
- Techniques such as aeration systems may be necessary if hardscapes are placed within drip lines, a 20% rule of thumb applies however, each specific case requires an arborist to be consulted.
- Any soil excavation, disturbance or trenching shall be hand dug to minimize root damage.
- Any exposed or damaged roots of significant size (1” or greater) shall be evaluated by a certified arborist at the time of exposure or damage. All roots shall be cut cleanly perpendicular to the root. Any roots damaged (1” or less) shall be cleanly cut. A clean cut implies no remaining tissue is cracked, split, ripped or damaged tissue remains.

- No materials, equipment, vehicles shall be stored or allowed within drip lines.
- Any compaction of soil shall not be allowed
- If any compaction is anticipated due to construction activities, an 8” layer of mulch shall be placed on grade
- Planting or landscape which requires irrigation shall not be allowed under protected mature trees.
- Owner shall consult, County and local organizations, and others to determine appropriate landscape under protected trees
- Tree stumps within 12’ of trees to be preserved shall be flush cut at ground level, not pulled and if ground, shall be ground as to not damage other trees roots.
- If significant disturbance occurs to any tree to be preserved, the owner shall consult with a certified arborist to determine appropriate response.

Development Impacts

Tree protection, preservation, regulation is guided by the County of Sacramento Chapter 19.04, Chapter 19.12. Certain native plants and communities are protected and California Environmental Quality Act and may be by the County of Sacramento requirements. Impact to these protected plants and habitat due to development are regulated and may require protection, preservation, or restoration. The Department of Environmental Review or other agencies may use the base information contained in this inventory to evaluate those potentials. Other environmental studies may be required.

This tree inventory provides pre-development observations and recommendations which should be revisited as future development progresses. Adverse impacts, unintended or unanticipated impacts may occur during that development and construction process which cannot be predicted. Specific evaluation of all trees shall be performed once development impacts are known or as trees are affected by development. It the responsibility of the owner or their representatives pursue appropriate remedial, removal and preservation recommendations from professionals with expertise and experience if protected trees/plants, habitats, or trees of interest are affected. Consideration should be given to potential targets due to tree failure. Trees that measure greater than 12” diameter pose a more significant risk of catastrophic failure.

This inventory is intended for the purpose of development review which gives the basis for tree removal, retention or pruning strategies. Trees shall be protected, preserved, maintained per County, State, International Society Arboriculture (ISA) standards, Tree Care Industry Standards (TCIA), American National Institute (ANSI) standards as situational appropriate. In the event, trees are encroached upon, a supplemental Arborist Report/evaluation, Construction Impact Assessment, Preservation Measures, may be necessary and are the responsibility of the owner to pursue.

Additional evaluations and investigations shall be accomplished, immediately prior to the commencement of activities, during and at the completion of the development in order to provide safe environs. It shall be the owner’s responsibility to seek evaluations of trees at the appropriate time.

The owner should substantiate and document the dbh of any tree requiring mitigation at the time of removal.

Tree Removal and Maintenance Authority of Protected Species

The County of Sacramento Ordinance(s) regulates the removal of protected trees and encroachment within their drip lines. The owner and their representatives shall be aware of the ordinance and shall be responsible for the removal, pruning, or encroachment within drip line/tree protection zone of any protected trees. Any trees not indicated in this inventory which are affected shall be brought to the attention of the Arborist prior to disturbance or removal. Tree permits and approval may be required by the appropriate authority. The owner or their representatives shall follow all regulations as required by the

local and state jurisdiction or as required by governing authority. Certification may be required at the completion of development and shall be the responsibility of the owner to procure. If any other submittals/forms/permits/documents are needed to perform for tree work/removal/disturb tree protection zone, the owner shall be responsible to determine appropriate actions or authority.

Limited Conditions, Assumptions and Indemnification

- Any legal description provided to Arbitect is assumed to be correct. Any titles and ownership to any property are assumed to be good and marketable. No responsibility is assumed for matters legal in character. Any and all property is appraised or evaluated as though free and clear, under responsible ownership and competent management.
- It is assumed that any property is not in violation of any applicable codes, ordinances, stature, or other governmental regulation.
- Care has been taken to obtain information for reliable sources. All data has been verified in so far as possible, however, Arbitect can neither guarantee nor be responsible for the accuracy of information provided by others.
- Arbitect shall not be required to give a deposition and/or attend court by reason of this inventory unless subsequent contractual arrangements are made for in advance, including payment of an additional fee for such services according to an agreed upon fee schedule.
- Loss or alteration of any part of this inventory invalidates the entire inventory. Ownership of any documents produced passes to the client only when all fees have been paid.
- Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the person to whom it is addressed, without the prior expressed written consent of the consultant.
- Neither all nor any part of the contents of this inventory, nor, copy thereof, shall be conveyed by anyone, including the client, to the public through advertising, public relation, news, sales, or other media, without the prior expressed written consent of the consultant, particularly as to value conclusions, identity of the consultant, or any reference to any professional society or institute
- This inventory and any values expressed herein represent the opinion of the Arbitect and the consultant's fee is in no way contingent upon the reporting of a specific value, a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.
- Sketches, diagrams, graphs, drawings and photos within this inventory are intended as visual aids and are not necessarily to scale and should not be construed as engineering or architectural reports or surveys. The reproduction of information generated by other consultants is for coordination and ease of reference. Inclusion of such information does not constitute a representation by consultant as to the sufficiency or accuracy of the information.
- Unless expressed otherwise: 1. Information contained in this inventory covers only those items that were examined and reflects the condition of those items at the time of inspection; and 2. The inspection is limited to visual examination of the accessible items without laboratory analysis, dissection, excavation, probing or coring, unless otherwise stated.
- There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plants or property in question may not arise in the future.
- This inventory is based on the observations and opinions of Arbitect and does not provide guarantees regarding the performance, health, vigor, structural stability or safety. Arbitect assume no responsibility for tree failure or their demise or any resultant damage.
- Final trees removal, retention, maintenance shall be determined by the owner since the project is in early stages of development.
- Further investigation of tree failure potential is the owner's responsibility
- Root system and canopy impacts cannot be definitively assessed until improvements are identified in detail. Additional inspection is the responsibility of the owner.

- Trees are living things and vary in their growth habits and responses to disturbance. The owners shall be responsible for the impacts regardless of the general observations contained within this inventory.
- No additional assumption of services is assumed by the inventory preparer
- It is the owner's responsibility to notify the arborist if conditions change
- Arborist's are professionals who use their experience and knowledge to inspect and minimize risks, only. Arborist's cannot detect with any certainty that trees will or will not fail.
- Any entity who develops or owns land should inform residents of tree risks
- Trees within this project will be subject to a change of environment due to development and thus should be monitored by the owner.
- Any changes or instability of trees shall be brought to the attention of a certified arborist or mitigated as necessary to preserve life or property damage. All emergency activities shall be documented and retained.
- Information Use Limitations: The inventory is for the exclusive use of the owner identified within this inventory. The purpose of this inventory is for development review of the subject property. Any use of this inventory and any support exhibits, appendixes, diagrams or portions thereof other than for project review shall be subject to and require written permission of Architect. Unauthorized modifications, distribution and / or use of this inventory, including the data or portion thereof contained is prohibited.

Exhibit B - Tree Identification and Conditions

Tree #	Botanical Name	Common Name	dbh (") (1)	DL (r in ft) (2)	Structure Rating	Vigor Rating	Condition Rating (3)	Life Expectancy (7)	Protected	Heritage Tree (19dbh+)	
1	Quercus douglasii (QD)	Blue Oak	22	15	2	3	2.5		X	X	
2	Quercus wislenzii (QW)	Live Oak	23/25	20	2	2	2	0-20	X	X	
3	Quercus douglasii (QD)	Blue Oak	11	10	1	1	1	0-10	X		
4	Quercus wislenzii (QW)	Live Oak	20	20	1	2	1	0-10	X	X	
5	Quercus douglasii (QD)	Blue Oak	13	15	1	2	1	0-10	X		
6	Quercus douglasii (QD)	Blue Oak	15	15	1	2	1.5	0-20	X		
7	Quercus douglasii (QD)	Blue Oak	13	15	1	3	2	0-20	X		
8	Quercus douglasii (QD)	Blue Oak	15	15	2	2	2	0-20	X		
9	Quercus douglasii (QD)	Blue Oak	16	20	2	2	2		X		
10	Quercus douglasii (QD)	Blue Oak	14	15	2	2	2	0-20	X		
11	Quercus lobata (QL)	Valley Oak	23	20	2	3	2.5		X	X	
12	Quercus douglasii (QD)	Blue Oak	16/16	20	2	2	2		X	X	
13	Quercus douglasii (QD)	Blue Oak	18	20	3	2	2.5		X		
14	Quercus douglasii (QD)	Blue Oak	26	25	2	2	2		X	X	
15	Quercus douglasii (QD)	Blue Oak	32	25	1	3	2	0-20	X	X	
16	Quercus douglasii (QD)	Blue Oak	31	25	1	2	2	0-10	X	X	
17	Quercus douglasii (QD)	Blue Oak	8	10	2	2	2		X		
18	Quercus douglasii (QD)	Blue Oak	DEAD not shown on "Tree Removal Plan"						0-10		
19	Quercus douglasii (QD)	Blue Oak	22	20	2	2	2		X	X	

20	Morus spp. (M)	Mulberry	14	15	2	2	2	0-10		
21	Quercus douglasii (QD)	Blue Oak	14/11	15	3	3	3		X	X
22	Quercus douglasii (QD)	Blue Oak	17	20	3	3	3		X	
23	Quercus douglasii (QD)	Blue Oak	12	15	1	1	1	0-10	X	
24	Quercus douglasii (QD)	Blue Oak	10	10	1	2	1.5	0-20	X	
25	Quercus douglasii (QD)	Blue Oak	24	25	3	3	3		X	X
26	Quercus douglasii (QD)	Blue Oak	6/5	8	1	2	1	0-10	X	
27	Quercus douglasii (QD)	Blue Oak	30	25	1	1	1	0-10	X	X
28	Quercus douglasii (QD)	Blue Oak	11	10	2	2	2		X	
29	Quercus douglasii (QD)	Blue Oak	18	20	3	3	3		X	
30	Quercus wislizenii (QW)	Live Oak	5/7	20	3	3	3		X	
31	Quercus douglasii (QD)	Blue Oak	12	15	1	3	2	0-20	X	
32	Quercus douglasii (QD)	Blue Oak	10	10	2	2	2	0-20	X	
33	Quercus douglasii (QD)	Blue Oak	13/18	20	2	2	2	0-20	X	X
34	Quercus douglasii (QD)	Blue Oak	8	10	1	2	1.5	0-20	X	
35	Quercus douglasii (QD)	Blue Oak	13	15	3	3	2		X	
36	Quercus douglasii (QD)	Blue Oak	7	10	2	2	2	0-20	X	
37	Quercus douglasii (QD)	Blue Oak	3	5	3	3	3			
38	Quercus douglasii (QD)	Blue Oak	11/12	15	2	2	2		X	X
39	Quercus douglasii (QD)	Blue Oak	16	15	3	3	3		X	
40	Quercus douglasii (QD)	Blue Oak	7	10	2	2	2		X	
41	Quercus douglasii (QD)	Blue Oak	10	10	2	3	2		X	

42	Quercus douglasii (QD)	Blue Oak	7	10	2	2	2	0-20	X	
43	Quercus douglasii (QD)	Blue Oak	12	15	3	3	3		X	
44	Quercus douglasii (QD)	Blue Oak	13/7	10	2	2	2		X	
45	Quercus douglasii (QD)	Blue Oak	8	10	2	2	2		X	
46	Quercus douglasii (QD)	Blue Oak	5	5	2	2	2	0-10	X	
47	Quercus douglasii (QD)	Blue Oak	13	15	3	3	3		X	
48	Quercus douglasii (QD)	Blue Oak	14	15	2	3	2.5		X	
49	Quercus douglasii (QD)	Blue Oak	11	10	2	3	2.5		X	
50	Quercus douglasii (QD)	Blue Oak	11	10	2	3	2.5		X	
51	Quercus douglasii (QD)	Blue Oak	24	20	3	3	3		X	X
52	Quercus douglasii (QD)	Blue Oak	4/10	15	1	2	2	0-10	X	
53	Quercus douglasii (QD)	Blue Oak	14	15	2	2	2		X	
54	Quercus douglasii (QD)	Blue Oak	11	10	2	2	2	0-20	X	
55	Quercus douglasii (QD)	Blue Oak	13	15	2	2	2		X	
56	Quercus douglasii (QD)	Blue Oak	12/9	20	2	2	2	0-20	X	X
57	Quercus douglasii (QD)	Blue Oak	15/15	25	2	3	2.5		X	X
58	Quercus douglasii (QD)	Blue Oak	15	15	3	3	3		X	
59	Quercus douglasii (QD)	Blue Oak	13	15	1	2	1.5	0-20	X	
60	Quercus douglasii (QD)	Blue Oak	3	5	2	3	2.5	0-20		
61	Quercus douglasii (QD)	Blue Oak	23	20	3	3	3		X	X
62	Quercus douglasii (QD)	Blue Oak	4	4	1	2	1	0-10		
63	Quercus douglasii (QD)	Blue Oak	8	4	1	2	1	0-10	X	

64	Quercus douglasii (QD)	Blue Oak	7	4	1	1	1	0-10	X	
65	Quercus douglasii (QD)	Blue Oak	11	10	2	3	2.5		X	
66	Quercus douglasii (QD)	Blue Oak	13	15	2	3	2.5		X	
67	Quercus douglasii (QD)	Blue Oak	13/19	20	1	2	1.5	0-10	X	X
68	Quercus douglasii (QD)	Blue Oak	13	15	2	3	2.5		X	
69	Quercus douglasii (QD)	Blue Oak	11	10	3	2	2.5		X	
70	Quercus douglasii (QD)	Blue Oak	11/11	20	3	2	2.5		X	X
71	Quercus douglasii (QD)	Blue Oak	13	15	2	3	2.5		X	
72	Quercus douglasii (QD)	Blue Oak	13	15	2	2	2		X	
73	Quercus douglasii (QD)	Blue Oak	11	10	2	2	2		X	
74	Quercus douglasii (QD)	Blue Oak	8	10	1	2	1.5	0-20	X	
75	Quercus douglasii (QD)	Blue Oak	13	15	2	2	2	0-20	X	
76	Quercus douglasii (QD)	Blue Oak	19	20	2	2	2		X	X
77	Quercus douglasii (QD)	Blue Oak	9/6	15	2	2	2	0-10	X	
78	Quercus douglasii (QD)	Blue Oak	20/20	20	3	3	3		X	X
79	Quercus douglasii (QD)	Blue Oak	12/11	20	1	2	1.5	0-20	X	X
80	Quercus wislizenii (QW)	Live Oak	9/6	15	1	2	1.5	0-20	X	
81	Quercus douglasii (QD)	Blue Oak	16/16	20	1	2	1.5	0-20	X	X
82	Quercus wislizenii (QW)	Live Oak	6	8	2	2	2		X	
83	Quercus douglasii (QD)	Blue Oak	8	8	2	3	2.5		X	
84	Quercus douglasii (QD)	Blue Oak	14	15	2	3	2.5		X	
85	Sequoia sempervirens (SS)	Coast Redwood	25	12	1	1	1	0-10		

86	Quercus wislenzii (QW)	Live Oak	13/17	20	3	4	3.5		X	X
87	Sequoia sempervirens (SS)	Coast Redwood	15	8	3	2	2.5			
88	Carya illinoensis	Pecan	1/2	5	Not shown on "Tree Removal Plan" due to NOT protected nor dbh greater than 4"					
89	Quercus douglasii (QD)	Blue Oak	23	20	4	4	4		X	X
90	Quercus douglasii (QD)	Blue Oak	20	20	3	4	3.5		X	X
91	Quercus lobata (QL)	Valley Oak	6	8	3	2	2.5		X	
92	Quercus douglasii (QD)	Blue Oak	14	15	3	3	3		X	
93	Quercus Wislenzii (QW)	Live Oak	2.5/1/1	5	3	3	3			

- (1) dbh is estimated and rounded by circumference method.
- (2) Dripline of most trees is irregular due to forest crowding and subordinate growth. DL is est. Subject property is densely covered and intermixed tree crowns and unbalanced, many trees are leveraged with high canopy
- (3) Condition rating based partially on relative health of other site trees
- (4) Tree should be considered for retention due to size, health, vigor, condition and location - higher quality tree comments in inventory section "summary of trees"
- (5) Remove due to hazard, tree decline, poor structural conditions - see inventory section " summary of trees", "trees to be removed"
- (6) Minimal or NO long term viability, Potential hazard with high target value, Remove for to benefit of urban forest or adjacent trees, visible decay in stems, potential cavity in structural location of stem, structural defects, due to condition(s) there is NO long term viability- see inventory section "summary of trees", "trees to be removed"
- (7) The life expectancy of a living organism (tree) disturbed or undisturbed is absolutely unpredictable even when all preservation techniques during construction are followed, however for purposes of submissions an estimation in years has been provided.

Exhibit B - Tree Identification and Conditions

Tree #	Tree of Quality (4)	Remove (5)	Remove (6)	Comments
1				Unbalanced crown over street, high target value if fails, reevaluate if improvement affect DL
2			X	Evidence of Decay or Disease at the base/lower stem, epicormic growth along stem, inclusion In lower stem, unbalance with a high target value if fails (street), Remove to minimize risk if desired
3		X		Decay or Disease at the base/lower stem, no closure @ 3' ht., tree is decline, hazard
4		X		Decay or Disease at the base/lower stem, Fruiting bodies present, large limb dead, hazard
5		X		Unbalanced crown over street, large limb dead with minimal closure at 4', hazard
6			X	Unbalanced crown over street, consider removal - high target value
7			X	Unbalanced crown over street, consider removal - high target value
8			X	Thin canopy due to subordination to #9, wound closure at base, epicormic growth, large dead wood throughout
9				significant epicormic growth along stem, good taper at base
10			X	Server lean/growth pattern, unbalanced canopy, large dead wood throughout
11	X			Quality tree rating based on potential, narrow crown
12				unbalance crown, torn limb at 10' actively closing
13	X			limited canopy but good condition
14				Large dead limbs, recommend large limb removal to remain viable - may damage tree, recent large limb drop, in decline
15			X	Unbalanced crown, Subordinate to #14, Road clearance needed, Road Clearance may reduce canopy significantly (60%+) thus require removal, evaluate after road clearance OR remove
16		X		Large longitudinal crack in main stem at 15' - 10' in length, (longitudinal crack approx 10+ feet), Large and heavy canopy, Tree is a hazard
17	X			Extremely narrow canopy, dead wood
18		X		Tree is a hazard
19				Many dead limbs, remove dead wood

20		X		Remove, not protected, subordinate to #19
21	X			thin canopy , minimal dieback, good grouping with #22
22	X			thin canopy , minimal dieback, good grouping with #21
23		X		Unbalanced crown, Decay or Disease at the base/lower stem, damage roots, no canopy to support viability
24			X	Significant Unbalanced crown, cambium at base damaged-no decay evident
25				Possible longitudinal crack at base, response growth ribbing, numerous active and complete closures on stem from limb removal or drop, evaluate further if retained
26		X		Significant Decay or Disease at the base/lower stem, Longitudinal crack, subordinate to adjacent trees
27		X		Split at base, large dead limbs, tree is a hazard
28				narrow canopy
29	X			epicormic growth along stem,
30				slight lean, vigorous and healthy
31			X	Unbalanced crown, response growth (rib) evident @ lower stem-possible longitudinal crack, NO long term viability
32			X	Unbalanced crown, damaged cambium at base, NO long term viability
33			X	Balanced and thin canopy, probable decay at base, active closure, evaluate further if retained
34			X	Unbalanced crown, subordinate to off site tree, topped, remove if desired, NO long term viability
35				excavation at root zone, active closure of dead or removed limbs
36			X	wound damage along lower trunk, longitudinal crack on lower stem, NO long term viability
37				subordinate to adj. property trees
38				inclusion In lower stem, multiple small wounds on stem, injury along stem, balanced crown, evaluate further if retained,
39	X			active closure of small injuries along stem
40				Unbalanced crown, subordinate to #41, soil against trunk - remove soil, consider removal due to high value target (adj. prop dwelling)
41				Unbalanced crown, Subordinate to adj. property trees, soil against trunk - remove soil, consider removal due to high value target (adj. prop dwelling)

42			X	Unbalanced crown, subordinate to #43, NO long term viability
43	X			balanced crown with slight lean to west
44				balanced crown, prune to remove potential property damage (adj property dwelling), 6" dead stem
45				Unbalanced crown, subordinate to #47, consider removal - NO long term viability
46		X		narrow canopy, NO long term viability
47	X			thin canopy
48				Unbalanced crown,
49				Unbalanced crown, (May be conjoined with #47-excavate base to determine)
50				Significant unbalanced crown, small wound closures on stem, minimal canopy, leveraged
51	X			Possible stem decay due to multiple limb closure observed, active closures
52		X		Unbalanced crown, subordinate to #51, 4" stem in decline, NO long term viability
53				injury closures on lower stem active, narrow canopy, may have decay in base
54			X	balance narrow canopy, subordinate to #56, significant epicormic growth, possible decay in base, NO long term viability
55				Unbalanced crown, subordinate to #57, significant epicormic growth
56			X	Significant unbalanced crown, remove for benefit of #55
57				inclusion In lower stem, consider remedial alternative technique for long term preservation
58	X			
59			X	Evidence of Decay or Disease at the base/lower stem, no closure, NO long term viability, remove for benefit of #58
60			X	NO long term viability
61	X			
62		X		epicormic growth along stem, in decline, dead leader, subordinate to #61
63		X		epicormic growth along stem, in decline, dead leader, subordinate to #61

64		X		tree not viable and in decline
65				Crown clean, unbalanced crown
66				Crown clean, unbalanced crown
67		X		Unbalanced crown, low hanging canopy, significant large limb dieback at base, Corrective pruning of large limb at base will create Hazardous tree, NO long term viability
68				epicormic growth along stem, small wounds on lower stem, leveraged
69				slight unbalanced crown
70				Consider creek embankment protection due to significant exposed roots for tree preservation, epicormic growth
71				Slightly Unbalanced crown, small wounds on lower stem,
72				small wounds on lower stem, significant leverage/unbalanced crown
73				very narrow canopy, small wounds with active closure, significant leverage, dead wood
74			X	minimal canopy, small wounds on lower stem with active closure, consider removal-NO long term viability
75			X	minimal canopy, with 3' of creek embankment at base, poor vigor, NO long term viability
76				Unbalanced crown,
77		X		subordinate to adj tree, closure of 3rd stem active, poor vigor, NO long term viability, decayed basal area
78	X			closure of 3rd stem complete, good tree
79			X	Unbalanced crown, subordinate to #81, significant pruning needed for structural correction-may damage tree-consider removal due to NO long term viability
80			X	No closure at base, consider removal for benefit of #81,significant pruning needed for structural correction-may damage tree-consider removal due to NO long term viability
81			X	Unbalanced crown, wounds on stem, significant pruning needed for structural correction-may damage tree-consider removal due to NO long term viability
82	X			Retain for creek embankment protection, narrow canopy, 2' from creek embankment, leveraged
83	X			Retain for creek embankment protection, narrow canopy, 2' from creek embankment, leveraged
84	X			narrow canopy, 5' from creek embankment, leveraged
85		X		dead crown

86	X			Consider creek embankment protection due to exposed roots
87				healthy
88				Not shown on "Tree Removal Plan" due to NOT protected nor dbh greater than 4"
89	X			excellent tree
90	X			Slightly Unbalanced crown,
91				epicormic growth
92				Unbalanced crown over street, subordinate to adj. property trees
93	X			Retain if possible - potential for good tree in future

- (1) dbh is estimated and rounded by circumference method.
- (2) Dripline of most trees is irregular due to forest crowding and subordinate growth. DL is est. Subject property is densely covered and intermixed tree crowns and unbalanced, many trees are leveraged with high canopy
- (3) Condition rating based partially on relative health of other site trees
- (4) Tree should be considered for retention due to size, health, vigor, condition and location - higher quality tree comments in inventory section "summary of trees"
- (5) Remove due to hazard, tree decline, poor structural conditions - see inventory section " summary of trees", "trees to be removed"
- (6) Minimal or NO long term viability, Potential hazard with high target value, Remove for to benefit of urban forest or adjacent trees, visible decay in stems, potential cavity in structural location of stem, structural defects, due to condition(s) there is NO long term viability- see inventory section "summary of trees", "trees to be removed"
- (7) The life expectancy of a living organism (tree) disturbed or undisturbed is absolutely unpredictable even when all preservation techniques during construction are followed, however for purposes of submissions an estimation in years has been provided.