# APPENDIX B OAK SITE ASSESSMENT REPORT

	DIXON RANCH OAK SITE ASSESSMENT
OW	NER/APPLICANT: DIXON RANCH VENTURES, L
PAR	CEL NUMBER: 126-020-01 THRU 04 AND 126-150
	DATE OF REPORT: April 25, 2014
CERTIFICATIO	ON:
	tify that the statements furnished in the attached report and exhibits present th
information	required for this biological survey (or Arborist Report), and the facts, stater presented herein are true and correct to the best of my knowledge and belief.
information	required for this biological survey (or Arborist Report), and the facts, staten presented herein are true and correct to the best of my knowledge and belief.  Date: April 25, 2014

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#### Section 1 - Introduction

This report provides a summary of the Dixon Ranch project's compliance with the El Dorado County oak canopy retention standards as required by the Interim Interpretive Guidelines for El Dorado County General Plan Policy 7.4.4.4 (Option A) adopted November 9, 2006 and amended October 12, 2007 (Interim Guidelines). Included in this report are answers to the Site Assessment Form questionnaire, a summary of the Biological Resources Study, and a summary of the Important Habitat Mitigation Program requirements.

#### **Project Description**

The Dixon Ranch Residential project proposes to subdivide 280+/- acres into 444 single family detached residential units, 160 age-restricted single family detached units (age restricted to older adults), and includes retention of one existing single family residence for a total of 604 new units and one existing unit. The project includes preservation or creation of 84.1 +/- acres (30%) of open space including parks, trails, landscaped lots, and native open spaces. The project includes on-site and off-site infrastructure to serve the development. Build-out will likely occur over many years, but ultimately will be dictated by market demands.

Required project approvals would include a General Plan Amendment (File No. A11-0006), Zone Change (file No. Z11-0008), Planned Development (File No. PD11-0006), Tentative Map (File No. TM11-1505), annexation into the El Dorado Irrigation District, annexation into the El Dorado Hills Community Service District, and annexation into the El Dorado Hills County Water District (El Dorado Hills Fire Department).

The project oak tree impacts will be fully analyzed in the EIR, but mitigation for Phase 2 will be assessed at a later date as described in this report. See Dixon Ranch Tree Preservation Plan —Phase 1, dated April 2014 for the location of each phase. The proposed Phase 1 oak canopy removal and replacement meets the 1:1 oak canopy replacement removing less than 10% of the existing canopy as allowed under the Interim Interpretive Guidelines for El Dorado County General Plan Policy 7.4.4.4 (Option A).

#### **General Plan Amendment Description**

The project is currently located entirely within the General Plan Community Region (urban limit line) of El Dorado Hills and is designated as Low Density Residential (LDR) land use, with the exception of 1.5+/-acres at the southeast corner of the property that is designated as Open Space (OS) and associated with the existing SMUD power transmission corridor. LDR allows for a maximum density of 1 dwelling per 5 acres. The proposed project is applying for a change in the land use designations on the site to High Density Residential (HDR) allowing for a density range of 1 to 5 units per acre, Medium Density Residential (MDR) allowing for a maximum of 1 dwelling unit per acre, and open space (OS). The proposed project is retaining the existing Low Density residential (LDR) land use designation for the existing residence to remain.

#### Section 2 – Oak/Canopy Site Assessment Form

Below are responses to Items a-j of the Oak/Canopy Site Assessment Forms, see Appendix C for completed Site Assessment Forms. We note there is no Item b included in the County's Form. The responses to the items in the Oak/Canopy Site Assessment Form are based on the overall project with the exception of Item h. The project will be developed in two separate phases because the overall project's oak tree canopy removal exceeds the allowable canopy removal amounts under General Plan Policy 7.4.4.4 (Option A).

The responses to Items a-j are based on the following overall question:

Would the project, directly or indirectly, have the potential to cause any impact, conflict with, or disturbance to:

a) Individual landmark or heritage trees (of any species) subject to review under General Plan Policy 7.4.5.2?

The definitions found in the Interim Interpretive Guidelines for Landmark and Heritage trees follow:

<u>Heritage trees</u>: Trees planted by a group or individuals or by the City or the County in commemoration of an event or in memory of a person figuring significantly in history (General Plan 2004).

<u>Landmark Tree</u>: Trees whose size, visual impact or association with a historically significant structure or event has led the government to designate them as landmarks (General Plan 2004).

No trees of any species on the project site are known to have been designated Heritage or Landmark trees as delineated from the above definitions. The project does not have the potential to cause any direct or indirect impact, conflict with, or disturbance to Landmark or Heritage trees of any species subject to review under General Plan Policy 7.4.5.2.

c) Oak woodland corridor continuity (General Plan Policy 7.4.4.5)?

According to the Interim Interpretive Guidelines, this analysis should assess whether the proposed removal of oak canopy cover would impact oak corridor continuity between all portions of existing stands of oak woodland habitat with connecting corridors at a tree density that is equal to the density of the stand. The definition found in the Interim Guidelines for Woodland Habitats follows:

<u>Woodland Habitats:</u> Biological communities that range in structure from open savannah to dense forest. In El Dorado County, major woodland habitats include blue oak-foothill pine, blue oak woodland, montane hardwood, montane hardwood-conifer, and montane riparian.

General Plan Policy 7.4.4.5 states, "Where existing individual or a group of oak trees are lost within a stand, a corridor of oak trees shall be retained that maintains continuity between all portions of the stand. The retained corridor shall have a tree density that is equal to the density of the stand."

The Interim Interpretive Guidelines state the following regarding Reasonable Use Related to Oak Corridor Retention: "In order to ensure that reasonable use of the property is provided, an applicant may request the Planning Commission to provide relief from the strict application of this corridor retention requirement (Policy 7.4.4.5) in the same manner as described above. In addition, for discretionary projects, any effects on biological resources will be analyzed in the environmental document and appropriate mitigation proposed as required by the

California Environmental Quality Act, California Oak Woodlands Conservation Law and other applicable statutes."

Planning Commission Relief is addressed in the Interim Interpretive Guidelines as follows: "Where the Director cannot grant relief, the Commission may grant relief when the following findings can be made.

- i. The applicant demonstrates that the project is designed to maximize use of parcel area unconstrained by oak trees, unless precluded by other significant constraints such as steep slopes, streams, creeks, wetlands, or other sensitive environmental resources.
- ii. The proposed project is limited to development and site disturbance that is typical and prevalent for the general area surrounding the project site.
- iii. Soil disturbance and tree removal is minimized through the incorporation of some or all of the following measures into the project design:
  - a. Stepped foundations are used on sloping areas rather than graded pads;
  - Depth of excavation and/or fill outside of the building footprint is limited to no more than five feet measured vertically from the natural ground surface, except for grading necessary to install retaining walls designed to reduce the total area of tree canopy that will be removed and/or damaged;
  - c. Structures and the configuration of the area of disturbance are designed to parallel the natural topographic contours to the greatest extent feasible;
  - d. Patio decks are included in the design of dwellings to minimize the need for graded yard areas;
  - e. Design techniques such as clustering of buildings are proposed to take advantage of the portions of the property which are least constrained by oaks;
  - f. The project is designed to maximize consistency with all applicable policies of the El Dorado County General Plan. It is recognized that more than one policy may have to be considered in the determination of reasonable use of a particular parcel.
- iv. If the project site is within or directly adjacent to an Important Biological Corridor Overlay or Ecological Preserve a Biological Resources Study and Important Habitat Mitigation Program have been prepared by a qualified professional and approved by the County and will be fully implemented by the applicant. The Study shall be prepared in accordance with the Biological Resources Study and Important Habitat Mitigation Program Interim Guidelines, adopted November 9, 2006.

Replacement of any oak tree canopy area allowed to be removed by the Planning Commission in excess of the retention standards in the General Plan shall be required. At a minimum, the replacement shall be completed in accordance with the tree replacement formula. Refer to the 1:1 Woodland Replacement definition. A 2:1 ratio or as otherwise specified by a qualified professional approved by the County, pursuant to the options and methods specified in these Guidelines, may be applied at the discretion of the Planning Commission. Further, for discretionary projects, any effects on biological resources will be analyzed in the environmental document and appropriate additional mitigation proposed as required by the California

Environmental Quality Act, California Oak Woodlands Conservation Law and other applicable statutes."

Some groupings and continuous canopy of oak trees are proposed to be removed in the project. The proposed tree retention in the project focuses on the perimeter areas and existing watershed locations where contiguous portions of oak canopy exist and where interaction with offsite oak woodland corridor continuity exists. The project was designed with open space around three sides of the perimeter, and a fourth side of the perimeter is along a utility corridor. There is continuous open space across the existing watershed locations, and oak canopy is retained along the rear setbacks of many of the larger acreage parcels. The project design includes the mitigation planting areas on the perimeter on 5 sides, and within the watershed areas in the project. The design considered the retention of the oak corridors where possible in the areas of continuous canopy.

The project does have the potential to cause a direct and indirect impact, conflict with, or disturbance to oak woodland corridor continuity subject to review under the strict application of General Plan Policy 7.4.4.5. The project has maximized the use of parcel areas unconstrained by oak trees as recommended under Item i above. The project has limited development and site disturbance to that typical and prevalent as identified under item ii above as it relates to other Community Region lands in the general area. The project has minimized soil disturbance and tree removal through designing parallel to natural contours, clustering structures in areas of the site least constrained by oaks, and by maximizing consistency with all applicable policies of the General Plan as recommended under item iii above. The project site is not within or directly adjacent to an Important Biological Corridor Overlay or Ecological Preserve.

Based on the above, the project meets the requirements for Reasonable Use Related to Oak Corridor Retention.

# d) Sensitive or important oak woodland habitat as defined in the Guidelines (General Plan Policy 7.4.5.2.A)?

The definitions found in the Interim Interpretive Guidelines for Sensitive Habitat, Important Habitat and Woodland Habitat follow:

<u>Sensitive Habitat</u>: In El Dorado County, this includes the following habitat types: montane riparian, valley-foothill riparian, aspen, valley oak woodland, wet meadow, and vernal pools (General Plan EIR).

Important Habitat: Defined as habitats that support important flora and fauna, including deer winter, summer, and fawning ranges and migration routes; stream, river, and lakeshore habitat; fish spawning areas; seeps, springs, and wetlands; oak woodlands; large expanses of native vegetation; and other unique plant, fish, and wildlife habitats generally located within or adjacent to designated Ecological Preserves, the Important Biological Resource Corridor Overlay, or in other locations otherwise recognized as being important habitat by Federal, State or County agencies.

<u>Woodland Habitat</u>: Biological communities that range in structure from open savannah to dense forest. In El Dorado County, major woodland habitats include blue oak-foothill pine, blue oak woodland, montane hardwood, montane hardwood-conifer, and montane riparian.

The project site does fit within the definition of Important Oak Woodland Habitat. The oak woodland composition on and adjacent to the site does not fit the above definition of Sensitive Habitat in El Dorado County. The percent of valley oak trees is small. The majority of oak canopy consist of blue oak and interior live oak. The project design retains the majority of oak canopy in the proposed open space and the existing watershed areas. The project is not located within or adjacent to designated Ecological Preserves, the Important Biological Resource Corridor Overlay, or other locations recognized as being important habitat by Federal, State, or County agencies.

Based on design of the project preserving a majority of oak canopy, and the analysis of oak woodland habitat on the project site, Phase 1 of the project does not have the potential to cause any direct or indirect impact, conflict with, or disturbance to sensitive or important oak woodland habitat as defined in the Interim Interpretive Guidelines.

#### e) Movement of Wildlife and/or Any Wildlife Migration Corridor?

The "yes" or "no" box for this item has not been checked as this is outside of Mann Made Resources' area of expertise. The project retains approximately 84 acres of open space with continuous corridors along the watershed and perimeter of the project. Please refer to the Biological Resources section of the Dixon Ranch Environmental Impact Report for an analysis of this issue.

f) Any Candidate Listed or Special Status Plant or Animal Species observed or expected to occur on or adjacent to the project site?

The "yes" or "no" box for this item has not been checked as this is outside of Mann Made Resources' area of expertise. For this analysis, please refer to the Biological Resources section of the Dixon Ranch Environmental Impact Report, as well as the following reports prepared by Gibson & Skordal Wetland Consultants as referenced in the EIR: 1) Jurisdictional Delineation and Special-Status Species Evaluation, May 2012 prepared by Gibson & Skordal, and 2) Special-Status Plant Surveys, August 2011 prepared by Gibson Skordal.

g) Is the affected area of oak canopy within or directly adjacent to an Important Biological Corridor or Ecological Preserve overlay?

A review of the El Dorado County General Plan land use map show the parcels proposed for development are not adjacent to any parcels listed as Important Biological Corridor or Ecological Preserve overlay.

h) Does the removal of oak canopy comply with the retention requirements of Policy 7.4.4.4?

Phase 1 of the proposed project does comply with the retention requirements of Policy 7.4.4.4. The Interim Interpretive Guidelines allow for the removal of 4.48 acres of oak canopy on the project site. The project proposes the removal of 4.45 acres of oak canopy.

The total project does not comply with the retention requirements of the Interim Interpretive Guidelines. The total project proposes the removal of 19.76 acres, or 15.28 acres over the allowed amount. Suitable mitigation will need to be determined and approved to move forward with Phase 2 of the project, subject to completion of the Oak Woodland Management Plan and related fee studies and implementing ordinances (Option B).

i) Was the project subject to prior County approval?

Based on discussions with County staff, the project has not been subject to prior County approvals.

j) For Discretionary Projects, would the project have the potential to cause a significant environmental impact on biological resources?

The project does have the potential to have a significant environmental impact on biological resources. The oak canopy resource is discussed below. The Biological Resources section of the Dixon Ranch Environmental Impact Report provides an analysis of other biological resources.

The majority of the current site environment is not a natural native oak woodland. The site use has been used as a range for cattle and horses. This is a different non-native oak woodland use than the proposed development. Although the space is currently "open" without buildings and paved roads, the presence of cattle grazing has had an impact on the oak trees, and oak tree regeneration. The soil is compacted by cattle movement, the oak regeneration is almost eliminated, the grasses may be mowed and occasionally irrigated, and there is occasional vehicle movement over the dirt roads and other parts of the site. There is a fencing pattern to control the cattle movement that was not designed to protect the existing oak trees.

The new development will have grading, impervious roads, and buildings outside the driplines of the oak trees to be retained in a manner consistent with the tree conservation promoted in the Interim Interpretive Guidelines. There will be tree protection installed prior to construction work on the site. The developed site will have different fencing patterns, and new landscape with irrigation in the developed areas, and open space and tree mitigation planting areas.

One potential environmental impact to biological resources (specifically the oak canopy) could be the change to storm water runoff patterns and management over the site. A majority of the existing project site is open soil and the precipitation runs freely with the topography. Storm water surface flow will change with site grading, addition of impervious pavement and buildings, and planned storm water management. There are approximately 84 acres of open space retained in the proposed project. The soil and existing grades under the oak tree canopy is consistent with the requirements listed in the Interim Interpretive Guidelines. Preserving the existing grades and soil under the tree canopy will retain water infiltration to the roots of the existing trees. Managing the new landscape irrigation to avoid irrigation runoff flow to the base of the native oak trees will minimize the impact of summer watering and new plant establishment. The project design incorporates proven best practices to manage storm water and irrigation runoff. The soil areas

under the drip line of trees are being left open. The drainage is being directed away from the base of the native oak trees. The 84 acres of open space are intended to retain the existing storm water flow in the drainage basins. Based on the project design, the impact of changes to the storm water flow patterns on oak canopy will be less than significant.

#### Section 3 - Tree Survey, Preservation, and Replacement Plan

Mann Made Resources prepared an updated Arborist Report for the Dixon Ranch project dated April 5, 2014 addressing the Tree Survey, Preservation, and Replacement Plan requirements outlined in El Dorado County Biological Resources Study and Important Habitat Mitigation Program Interim Guidelines adopted November 9, 2006. Refer to Appendix A of this document for a copy of the Arborist Report and discussion of oak tree canopy mitigation plan.

#### Section 4 - Biological Resources Study

Refer to Gibson & Skordal Wetland Consultants 1) Jurisdictional Delineation and Special-Status Species Evaluation, May 2012 prepared by Gibson & Skordal, and 2) Special-Status Plant Surveys, August 2011 prepared by Gibson Skordal. Reference Environmental Impact Report (EIR) Biological Resources Section for Dixon Ranch to be prepared by LSA Associates, Inc., Berkeley, CA for further discussion of Biological Resources as required.

#### Section 5 - Important Habitat Mitigation Program

The proposed project design implements measures to avoid or minimize impacts to oak woodland habitat including avoidance, open space preservation and corridors, vegetated buffers between the project and surrounding existing land uses, and construction best management practices. Construction protection is the primary management practice for this project to meet the oak canopy retention intent. Construction protection will be put in place before any work is initiated on the site, and be adjusted to protect the trees during the different project phases from clearing and grading, to construction, to landscape installation. Individual home construction will have tree protection delineated for those trees to remain on the site being developed. Specifications for the protection will be included in the development documents and on the project plans and individual home construction plans. Additional mitigation measures addressing oak woodland habitat impacts may be identified in the Dixon Ranch Environmental Impact Report Biological Resources Section.

The 280-acre project site has a total of 44.83 acres of oak canopy. The total proposed project requires the removal of 19.76 acres of oak canopy, or 44.1% of the existing oak canopy. This is not allowed under the current policy, the Interim Interpretive Guidelines for El Dorado County Policy 7.4.4.4 (Option A). The allowable oak canopy removal is based on the existing total oak canopy. The existing total oak canopy on the project site is 15.9% of the land area, and the guidelines allow for up to 10% of total canopy removal. The 44.1% removal required to complete the whole project exceeds the allowable 10% removal in the tree canopy retention standards matrix. The overall project oak impacts will be fully analyzed by the Dixon Ranch Environmental Impact Report, but mitigation for Phase 2 will be assessed during a review of Phase 2 following completion of the Oak Woodland Management Plan and related fee studies and implementing ordinances (Option B).

Phase 1 of the proposed project includes the removal of 4.45 acres or 9.9% of the existing oak canopy, and this is allowed under the Interim Interpretive Guidelines for El Dorado County Policy 7.4.4.4 (Option A). This proposed oak canopy mitigation program covers Phase 1.

Under Option A, the project applicant shall replace the allowable woodland habitat canopy removed at a 1:1 canopy cover acreage ratio. Woodland replacement shall be based on the formula developed by El Dorado County that accounts for the number of trees and acreage affected per El Dorado County's "General Plan Policies Related To Oak Woodlands" document, see Appendix B. Using the formula of 200 seedlings or one gallon trees per acre, as required by the Interim Interpretive Guidelines definition of 1:1 Woodland Replacement, it has been determined that 890 trees will need to be planted for Phase 1 project mitigation. The mitigation plan is to install 890 oak trees with the following species mix: 600 blue oaks, Quercus Douglasii, and 290 interior live oaks, Quercus wislizenii. The trees will be at least Deepot cells GP352, 2-1/2 inch diameter by 10 inches deep, grown from local acorn sources within 40 miles of El Dorado Hills, California. There is also an option to plant acorns instead of trees. The acorns will be from a local source within 40 miles of El Dorado Hills, California, and three (3) acorns are to be planted per tree, for a minimum total of 600 acorns per acre. The total number of acorns required for the mitigation on this site will be 2,670, and 1,800 will be Blue Oak, and 870 will be Interior Live Oak. The monitoring period may be extended from 10 to 15 years. Survival will be a minimum of 90% of the 200 trees per acre.

The mitigation plan allows for the substitution of #5 or #15 size nursery container stock trees in the replanting area(s) where larger initial tree size will improve the project appearance, or enhanced screening is desired. If this increase in nursery stock container size is preferred by the developer, any number of trees up to 890 trees may be increased to accomplish enhanced appearance or screening of selected areas of the site.

The available planting locations of these new trees are shown on the attached site map titled, Dixon Ranch Tree Preservation Map—Phase 1, dated April 2014, included in Appendix F. There are 30.24 total acres available for onsite mitigation (refer to Dixon Ranch Tree Preservation Map, March 2013, Revised March 2014, See Appendix G) , 23.90 acres of the Phase 1 area are available for onsite mitigation with Phase 1. The exact site locations of the Phase 1 mitigation planting will be determined based on County approval of the project and available on-site water locations.

The mitigation planting is required to be 90% survival of the 200 trees per acre after 10 years. This amounts to a minimum of 801 trees growing after the 10-year site evaluation. The proposed Phase 1 mitigation plan may be performed in multiple planting phases to achieve the mitigation as the site is developed. The second phase oak mitigation recommendations will be evaluated by the County at a later date as the proposed removal exceeds the allowable percentage of canopy removal under the current Interim Interpretive Guidelines for El Dorado General Plan Policy 7.4.4.4 (Option A). The proposed mitigation tree planting for Phase 1 will replace the 4.45 acres of proposed Phase 1 removals.

The proposed tree planting will be performed to the project tree planting specifications and details summarized in this report. The strategy will be to increase the number of trees or acorns planted per acre by 10% to allow for some tree loss over time and still achieve the desired 180 trees per acre after 10 or 15 years monitoring. Therefore, the tree planting will install 220 trees per acre, irrigated by a temporary irrigation system connected to on-site water or by approved alternate methods. If acorns are used, the planting will install 660 acorns per acre. The site will be prepared to clear space for the trees or acorns, perform planting in tubes for Deepot stock or acorns, install temporary irrigation, and add mulch.

The site will be monitored quarterly for the first year to assure irrigation is functioning and appropriate, assess site conditions, and track survival. During years two and three, monitoring will be performed semi-annually. During years 4 through 10, or 15 if required, monitoring will occur annually. Annual reports confirming survival rate will be completed. If site circumstances require, more frequent monitoring will be performed. If the survival rate is less than 180 trees per acre during any annual monitoring process, trees will be replaced to meet the minimum 180 trees per acre establishment goal for oak tree canopy. If where more than 180 trees per acre are planted, trees are found to be growing too dense during a monitoring period, thinning may be performed to select the best candidate trees for survival, with the requirement to achieve the minimum 180 trees per acre survival goal.

To ensure monitoring, maintenance and replacement of failed plantings occurs during the 10 year (or 15 years for acorns) required monitoring period, the project proponent shall post performance bonds or other funding mechanisms approved by El Dorado County to guarantee success of mitigation planting program. The following information identifies the responsible party for ensuring the mitigation funding:

Dixon Ranch Ventures, LLC Aidan Barry, President of Development 12647 Alcosta Boulevard, Suite 470 San Ramon, CA 94583 (925) 824-4300 abarry@thetruelifecompanies.com

#### **Section 6 - Findings and Recommendation**

Phase 1 of the proposed project complies with the retention requirements of Policy 7.4.4.4. The Interim Interpretive Guidelines allow for the removal of 4.48 acres of oak canopy on the project site. The project proposes the removal of 4.45 acres of oak canopy. The proposed mitigation planting plan will be performed to meet the 90% retention of 180 trees per acre. Phase 1 can be allowed to proceed based on compliance with the Oak Retention Requirements of the Interim Interpretive Guidelines for El Dorado County Policy 7.4.4.4 (Option A).

The total project does not comply with the current retention requirements of Interim Interpretive Guidelines for El Dorado County Policy 7.4.4.4 (Option A). The total project proposes the removal of 19.76 acres, or 15.28 acres over the allowed amount. Suitable mitigation will need to be determined and approved to move forward with Phase 2 of the project, subject to completion of the Oak Woodland Management Plan and related fee studies and implementing ordinances (Option B). At that time a mitigation planting plan may be developed to meet the requirements and approval of El Dorado County.

Although the total project proposes more acreage of oak canopy removal than allowed under the current Interim Interpretive Guidelines for El Dorado County Policy 7.4.4.4 (Option A), the poor natural oak regeneration occurring in the oak canopy on the Dixon Ranch project site, combined with the declining state of many of the trees, will not provide sustainable oak woodlands over many years. The trees are predominantly declining in condition and have been growing without maintenance. Branches and whole trees have failed on the site, reducing the natural canopy cover. This will continue over time. The mitigation planting with the density goal of 180 trees per

acre can support a more sustainable long term oak woodland canopy on the site, blending in with the existing oak canopy. While the short term result of canopy removal and replanting will be a reduction in canopy, the long term oak canopy will meet or exceed the existing canopy as new trees grow and older trees senesce.

#### Section 7 - Certification

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this Arborist Report, and that the facts, statements, and information presented herein are true and correct to the best of my knowledge and belief.

SIGNED:

DATED: April 25, 2014

#### **Section 8 - Report Authors**

 Gordon Mann – Consulting Arborist and Urban Forester, See Appendix D for Professional Credentials & Consulting Resume.

#### **Section 9 - References**

- 1. El Dorado County General Plan Policies Related To Oak Woodlands, attached in Appendix B
- 2. El Dorado County Biological Resources Study and Important Habitat Mitigation Program Interim Guidelines, November 6, 2006
- 3. Interim Interpretive Guidelines for El Dorado County General Plan Policy 7.4.4.4 (Option A), Adopted November 9, 2006, Amended October 12, 2007

# **APPENDIX A** MANN MADE RESOURCES ARBORIST REPORT FOR DIXON RANCH OAK TREE CANOPY MITIGATION PLAN DATED APRIL 5, 2014



#### Mann Made Resources

April 5, 2014

Mr. Joel Korotkin 949 Tuscan Lane Sacramento, CA 95864

# SUBJECT: ARBORIST REPORT FOR DIXON RANCH OAK TREE CANOPY MITIGATION PLAN

Dear Mr. Korotkin,

Thank you for the opportunity to provide Arborist Consulting Services. This report includes the observations and analysis of the Oak tree canopy for the Dixon Ranch project. The site was visited on April 10, 23, and 27, 2012. The site was re-visited on March 4, 18, and 20, 2014, and adjustments were made to the study area limits and canopy cover.

Assignment: Brian Allen from CTA Engineering and Surveying contacted my office on your behalf on Tuesday, March 27, 2012, requesting assistance with an arborist site review and evaluation of the tree canopy maps to prepare for compliance with the El Dorado County General Plan policy 7.4.4.4. Calculations and a draft report were prepared. I was contacted on March 21, 2013 and asked to revise the report based on a new lot layout. On February 24, 2014, I was contacted by Mr. Kevin Wipf and asked to verify the canopy in an additional area, inclusive of the approximately 5 acre existing residence lot (to remain) as well as the 'A' Drive and 'C' Drive entry roadways. According to Mr. Wipf, these areas have been identified by County staff as appropriate to include in the total project acreage for purposes of assessing compliance with policy 7.4.4.4. I also re-verified canopy in specific locations identified during the design process as appropriate to revisit and reverify.

All site information, plans, and history were provided by Mr. Brian Allen and Mr. Kevin Wipf of CTA Engineering and Surveying. Plan sheets were provided for review and use. The assignment required the following activities:

Step 1: Visit the site, verify the canopy cover as shown on the Dixon Ranch Tree Preservation Map dated March 2012, identify and separate the Interior Live Oaks, identify trees that I found to be in poor enough condition to list for tree removal and exclude from the tree canopy calculations, and complete the report. Once the final canopy cover was calculated, the arborist met with the engineer in the office to verify the canopy cover calculations.

12661 Torrey Pines Drive, Auburn, CA 95602 (650) 740-3461 • FAX (530) 268-0926 www.mannandtrees.com Step 2: The Dixon Ranch Tree Preservation Map March 2013 was compared to the Dixon Ranch Tree Preservation Map March 2012 map to identify the changes to lots and canopy based on the new lot and road layout, and the tree list was updated.

Step 3: The Dixon Ranch Tree Preservation Map March 2013, Revised March 2014 was used for the final canopy cover analysis and calculations. This effort included focused site visits and inspection of specific trees.

Observations: The site area, for purposes of policy 7.4.4.4 calculations, is approximately 12,306,347 SF, or 282.51 acres, as shown on the Tree Canopy map dated March 2013, revised March 2014. Initially, the site was visited on Tuesday, April 10, 2012 at about 9:30 am through 5:30 pm, Monday, April 23, 2012 from 1:30 pm to 6:30 pm, and Friday, April 27, 2012 from 11:00 am to 3:00 pm. The CAD image of the Tree Preservation Map dated April 2012 was made available for use in enlarged 11" X 17" sheets. I visited the entire site and compared the canopy to the canopy image on the map sheets, and distinguished the Interior Live Oak tree canopy. The site was revisited on March 4, 18 and 20, 2014, to expand the review area as recommended by County staff and to make the final confirmations of the canopy cover image and calculations.

The oak trees were separated in canopy cover by Blue, Valley, and Black Oaks from Interior Live Oaks. Trees that were observed to be dead, severely declining, or needed the removal of a portion of their crown to stabilize the tree structure were noted. I visually observed the trees on the plan from the ground to confirm the canopy image as relatively accurate. The trees that were to be removed from the canopy cover calculation were sketched on the field plan. The diameter at 4.5' was estimated for reference for the listed trees. The trees were inspected for the following conditions:

- o Tree crown amount and location of live foliage
- Tree structure location and amount of decay in trunk, root crown, and crotches; broken branches and the absence of branch or trunk attachment strength;
- Trunk flare and root crown trunk flare grade, absence of roots, decay at base

Dead or diseased and dying oak trees, as shown on the Tree Preservation Map March 2013, Revised March 2014 were determined to require removal or significant pruning for structural integrity based on a variety of factors including, but not limited, to crown decline, broken crowns, broken tops, broken branches, trunk decay, crotch and branch decay, crown dieback, extensive mistletoe, hollow trunks, basal decay, included bark, fallen leaders, or fallen trees as further described later in this report.

The remaining trees observed on the property were found to be consistent with native grown Oak trees and would not present significant risk when cared for with routine maintenance pruning to remove dead and broken branches with limited reduction to the foliar crown. The canopy of these trees was not altered in their appearance on the Tree Preservation Map.

On March 21, 2013, I visited the office of CTA Engineering and Surveying and inspected the Dixon Ranch Tree Preservation Map March 2013, and reviewed the calculations of

canopy cover. Sample map changes were performed to verify and confirm the canopy cover calculations were functional.

On March 4, 18, and 20, 2014, I visited the site with Kevin Wipf of CTA Engineering and Surveying to review the additional area and to reconfirm portions of the canopy cover. I evaluated the sites where grade cuts and fill were proposed to confirm the impact would not impact the subject trees.

Other testing or examination: A trench to examine the root system of tree number 8025 was excavated on March 4, 2014 to look for roots in the area proposed for excavation approximately 16 feet from the trunk and within the dripline. The proposed dripline encroachment is less than 20%. The trench was ten feet long, wide enough for a shovel to carefully remove soil, and two feet deep. Two roots were found in the trench. A 0.9 inch diameter root was found at 11 inches below grade, and a 2.1 inch diameter root was found at 14 inches below grade. No other roots were observed.

This excavation confirmed the expectation that few roots will be found in the shallow soil as the distance moves outward towards the dripline farther from the trunk. During the summer months, there is little moisture, and roots will not easily survive in the shallow soil away from the trunk. This supports the ability to cut soil grades at the edge or near the dripline with rare root conflicts.



Ten foot long, two-foot deep trench excavated 16 feet from trunk. Two roots were observed. The impact to tree from root pruning of these two roots at this point from the trunk is considered low.

**Discussion:** I observed the trees to determine which trees were in fair or better health, structurally sound, moderate risk relative to the proposed site use, and in a condition to continue to have a reasonable useful life on the site. Risk can be managed differently based on site use. In the areas to be developed, there is a higher risk associated with trees on the site where people and improvements will be present. Trees on the sites to be developed need to be in a structurally sound and healthy enough condition to manage for future risk.

Trees in natural areas where people are not invited or not reasonably expected to have structures or activities can accommodate trees with poorer condition. These trees in open Page 3 of 8

space can fail and continue to provide habitat, canopy, and other ecological site benefits with acceptable risk.

I based my assessment of tree condition on a combination of structure and health and listed trees to be removed when I found any of the following criteria:

- o The tree crown dieback was greater than 50% dead
- Decay in trunks, main crotches, and branches exceeded 50% of the diameter or > than 33% of the circumference was decayed
- o The base of the tree was decayed greater than 50%
- Tree roots were missing from greater than 33% of the circumference of the trunk flare.
- Heavy mistletoe infestation is causing structural or leaf competition concerns in greater than 33% of the crown.
- o Combinations of the above

The above criteria would either require necessary pruning to reduce risk of failure of dead or weak branches, or the stability concerns present cannot be corrected by typical pruning or cabling mitigation. Trees that could be pruned and still retain a typical foliar crown and moderate or less structural risk were listed for pruning and the crown size reduced on the site plan by the percent canopy reduction. Trees that cannot be reasonably mitigated were listed for removal. The crown size from pruned or removed trees was subtracted from the canopy image calculations on the Tree Preservation Map.

The field data and canopy adjustments were updated on the Dixon Ranch Tree Preservation Map dated March, 2013, Revised: March, 2014:

- The total project site area is 12,306,347 square feet, or 282.51 acres.
- Trees listed for removal or reduction pruning based on being dead or in poor condition and this canopy were not included in the canopy calculations.
- The total existing Oak Canopy Cover for Blue, Valley, and Black oaks is 1,753,636 square feet, or 40.26 acres.
- The total existing Oak Canopy Cover for Interior Live oaks is 199,299 square feet, or 4.57 acres.
- The total existing oak canopy cover including Blue, Valley, and Black plus Interior
  Live oaks is 1,952,935 square feet or 44.83 acres, and amounts to 15.9% existing
  Oak canopy cover.
- The proposed oak canopy removal of Valley, Blue, and Black oak for the onsite project is 744,500 square feet or 17.09 acres.
- The proposed oak canopy removal of Interior Live Oak for the onsite project is 116,430 square feet or 2.67 acres.
- The total proposed oak canopy removal for the onsite project is 860,930 square feet or 19.76 acres, or 44.1%.
- The available area for mitigation onsite is 1,317,154 square feet, or 30.24 acres.

The allowable canopy removal in the Interim Interpretive Guidelines for El Dorado County General Plan Policy 7.4.4.4 (Option A) is 10%, or 4.48 acres. The proposed onsite

canopy removal exceeds the allowable canopy removal amounts. The allowable 10% oak canopy cover cannot exceed 195,294 square feet or 4.48 acres.

The proposed oak canopy removal mitigation recommendations for the project are divided into two phases corresponding to a Phase 1 area being analyzed with this report and a Phase 2 area, for which mitigation recommendations are deferred at this time, See Dixon Ranch – Phase 1 Tree Preservation Map, April 2014 for phase locations. The project Environmental Impact Report (EIR) will evaluate the proposed oak removals and impacts for the overall project, but only mitigation recommendations associated with Phase 1 removals will be prepared with Phase 1. Phase 2 mitigation recommendations are deferred to a future process as further described later in this report and in the EIR. The Phase 1 cover removal is shown on the Dixon Ranch – Phase 1 Tree Preservation Map, April 2014:

- The total project site area is 12,306,347 square feet, or 282.51 acres.
- Trees listed for removal or reduction pruning based on being dead or in poor condition and this canopy were not included in the canopy calculations.
- The total existing Oak Canopy Cover for Blue, Valley, and Black oaks is 1,753,636 square feet, or 40.26 acres.
- The total existing Oak Canopy Cover for Interior Live oaks is 199,299 square feet, or 4.57 acres.
- The total existing oak canopy cover including Blue, Valley, and Black plus Interior Live oaks is 1,952,935 square feet or 44.83 acres, and amounts to 15.9% existing Oak canopy cover.
- The proposed oak canopy removal of Valley, Blue, and Black oak for the Phase 1 project area is 176,903 square feet or 4.06 acres.
- The proposed oak canopy removal of Interior Live Oak for the Phase 1 project area is 16,759 square feet or 0.38 acres.
- The total proposed oak canopy removal for the Phase 1 project area is 193,662 square feet or 4.45 acres, or 9.9%.
- The available area for mitigation within Phase 1 is 509,560 square feet, or 23.90 acres.

The allowable canopy removal in the Interim Interpretive Guidelines for El Dorado County General Plan Policy 7.4.4.4 (Option A) is 10%. The proposed Phase 1 removals are within the allowed guidelines. Adequate space is available for onsite mitigation.

To preserve the existing oak canopy, tree protection will be in place prior to construction activities, installed before clearing and grading, and be appropriately adjusted through landscaping work. There are construction sites where soil cutting and fill are proposed. The cut and fill areas are either outside of the dripline or near the outer edge. The cut areas are not expected to contact significant shallow roots. This was confirmed with a test excavation site. The construction protection will be in place prior to site work protecting the remaining soil under the tree canopy. Mitigation for the fill locations will be to place aeration tubes over the soil before covering with fill soil. The practice for the cut sites is to excavate carefully, and prune any small roots encountered at the edge of the excavation before removing the roots. Sharp tools and clean cuts will be made on all roots. If roots are larger than three inches diameter, or the density of shallow roots is

found to be greater than three per ten feet, a qualified arborist will be contacted to assess if the roots can be pruned without significant impact to the tree. If significant impact is expected, a mitigation plan will be developed and implemented.

#### **Biological Resources Study and Important Habitat Mitigation Program:**

The relevant calculations used for tree mitigation are based on the canopy cover area, see Table 1-1.

	Table 1-1		
Dixon Ranch Oak Ca	anopy Coverage Proposed	Canopy <u>R</u> emoval	
	Oak Canopy Coverage (%)		
Oak Woodland Species	Pre-Project	Post Project	
Blue, Valley, & Black Oak	14.25%	8.20%	
Interior Live Oak	1.62%	0.67%	
Total Oak Canopy Coverage			
	15.9%	8.9%	
Oak Canopy Cover Option A	Allowable 10% or 4.48 acres	Proposed 19.76 acres or 44.1%	

		The second secon
	Table 1-1	
PHASE 1 Dixon Ranch O	ak Canopy Coverage Propo	osed Canopy Removal
	Oak Canopy Coverage (9	%)
Oak Woodland Species	Pre-Project	Post Project
Blue, Valley, & Black Oak	14.25%	12.81%
Interior Live Oak	1.62%	1.48%
Total Oak Canopy Coverage	15.9%	14.3%
Oak Canopy Cover Option A	Allowable 10% or 4.48 acres	Proposed 4.45 acres or 9.9%

#### Mitigation Plan

The project proposal cannot comply with the Interim Interpretive Guidelines for EI Dorado County General Plan Policy 7.4.4.4 (Option A). Phase 1 will comply with the Interim Interpretive Guidelines for EI Dorado County General Plan Policy 7.4.4.4 (Option A). The mitigation for Phase 1 will comply with the County mitigation 1:1 canopy cover requirements. The existing total oak canopy cover on the site is approximately 15.9% and falls within in the 10 – 19 percent range. The required retention of canopy cover in this percent range is 90%. The total existing oak canopy area is 1,952,935 square feet or 44.83 acres. The allowable 10% canopy reduction area would be 195,293 square feet or 4.48 acres. The proposed canopy removal for Phase 1 is 193,662 square feet, or 4.45 acres, and amounts to 9.9%.

The mitigation under Option A would be to plant a 1:1 ratio for the proposed 4.45 acres. All mitigation tree planting will comply with the county's target density of 200 trees per acre. The mitigation actions that will be performed for this project will be dependent upon the allowable mitigation measures to be conditioned for this project.

The total oak tree canopy removal is proposed to be 19.76 acres. After the allowable 4.48 acres, there is an additional 15.28 acres of oak canopy that needs to be mitigated. The total mitigation acreage can be planted on site, or may be proposed off site. The final proposal will be based on what conditions the County approves for this project, either on site or an equivalent off-site mitigation such as planting or conservation easement acreage.

Oak tree mitigation in El Dorado County is regulated by El Dorado County General Plan policy 7.4.4.4 and the Interim Interpretive Guidelines for El Dorado County General Plan Policy 7.4.4.4 (Option A) adopted November 9, 2006 and Amended October 12, 2007.

On September 24, 2012, the Board of Supervisors directed the Development Services Department to prepare a resolution of intention to amend the General Plan Policies 7.4.2.8, 7.4.2.9, 7.4.4.4, 7.4.4.5, 7.4.5.1, and 7.4.5.2 and their related implementation measures to clarify and refine the County's policies regarding oak tree protection and habitat preservation. The Board further directed staff to prepare a Request for Proposal to hire a consultant to assist the County to prepare the policies and Environmental Impact Report (EIR).

The project is submitted based on the expectation that the County of El Dorado Board of Supervisors may amend the General Plan policies based on an Environmental Impact Report. Those amendments and environmental documents are not yet in place to develop the total mitigation plan for this project. Oak canopy removal in excess of the allowed Option A 10% and acceptable mitigation will need to be assessed during Phase 2 project review. The additional oak canopy removal above Option A will need to be revisited with an appropriate level of environmental analysis at a future date, as the County Board of Supervisors takes action to put mitigation alternatives into place. Once the conditions for mitigation are in place, a final mitigation plan will be submitted for approval.

I reviewed the canopy calculation images, and map, and compared with conditions on the site during in-person visits. I am confident they are accurate as presented. The calculations are valid based on my field surveys and map reviews.

Assumptions and Limitations: This report provides information about the subject trees at the times of the inspection. Trees and conditions may change over time. This report is only valid for the trees with the conditions present at the times of the inspections. All observations were made while standing on the ground. The inspection consisted of visual observations, using probe to gain additional information about decay and hollow portions of the tree, and light excavation was performed to observe shallow depth areas below grade at the base of the tree. No further examinations were requested or performed. The time of year the assignment was performed limits some of the observations of health and dieback as most of the leaves were emerging and buds were showing activity.

The site lacked many clear topographic and structural landmarks. Sincere attempts were made to accurately locate the trees and show the trees on the Tree Preservation Map. All tree canopies were attempted to be shown as observed in the field. The relative canopy

changes are realistically and accurately reflected on the Tree Preservation Map to the best of my ability.

Arborists are tree specialists who use their education, knowledge, training and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of the arborist, or seek additional advice.

Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that can fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments, like any medicine, cannot be guaranteed.

Treatments, pruning, and removal of trees may involve considerations beyond the scope of the arborist's services such as property boundaries, property ownership, site lines, disputes between neighbors, landlord-tenant matters, etc. Arborists cannot take such issues into account unless complete and accurate information is given to the arborist. The person hiring the arborist accepts full responsibility for authorizing the recommended treatment or remedial measures.

Trees can be managed, but they cannot be controlled. To live near a tree is to accept some degree of risk. The only way to eliminate all risks is to eliminate all trees. Our company goal is to help clients enjoy life with trees.

Please contact me at 650-740-3461, or gordon@mannandtrees.com, if you have any questions about this report or desire any other services for this project.

I certify that all the statements in this report are true, complete, and correct to the best of my knowledge, and that all statements were made in good faith.

Sincerely,

Gordon Mann

Consulting Arborist and Urban Forester

Registered Consulting Arborist #480

ISA Certified Arborist and Municipal Specialist #WE-0151AM

CaUFC Certified Urban Forester #127

Certified Tree Risk Assessor #1005

Nevada County Fire Safe Council Defensible Space Advisory Training

Mann Made Resources

Auburn, CA

650-740-3461

Fax 530-268-0926

gordon@mannandtrees.com

www.mannandtrees.com

	APPENDIX B
	EL DORADO COUNTY GENERAL PLAN POLICIES RELATED TO OAK WOODLANDS
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**EI DORADO COUNTY** 

GENERAL PLAN POLICIES RELATED TO OAK WOODLANDS

#### Policy 7.4.4.4

For all new development projects (not including agricultural cultivation and actions pursuant to an approved Fire Safe Plan necessary to protect existing structures, both of which are exempt from this policy) that would result in soil disturbance on parcels that (1) are over an acre and have at least 1 percent total canopy cover or (2) are less than an acre and have at least 10 percent total canopy cover by woodlands habitats as defined in this General Plan and determined from base line aerial photography or by site survey performed by a qualified biologist or licensed arborist, the County shall require one of two mitigation options: (1) the project applicant shall adhere to the tree canopy retention and replacement standards described below; or (2) the project applicant shall contribute to the County's Integrated Natural Resources Management Plan (INRMP) conservation fund described in Policy 7.4.2.8.

**Option A**The County shall apply the following tree canopy retention standards:

<b>Percent Existing Canopy Cover</b>	Canopy Cover to be Retained
80–100	60% of existing canopy
60–79	70% of existing canopy
40–59	80% of existing canopy
20–39	85% of existing canopy
10-19	90% of existing canopy
1-9 for parcels > 1 acre	90% of existing canopy

Under Option A, the project applicant shall also replace woodland habitat removed at 1:1 ratio. Impacts on woodland habitat and mitigation requirements shall be addressed in a Biological Resources Study and Important Habitat Mitigation Plan as described in Policy 7.4.2.8. Woodland replacement shall be based on a formula, developed by the County, that accounts for the number of trees and acreage affected.

#### Option B

The project applicant shall provide sufficient funding to the County's INRMP conservation fund, described in Policy 7.4.2.8, to fully compensate for the impact to oak woodland habitat. To compensate for fragmentation as well as habitat loss, the preservation mitigation ratio shall be 2:1 and based on the total woodland acreage onsite directly impacted by habitat loss and indirectly impacted by habitat fragmentation. The costs associated with acquisition, restoration, and management of the habitat protected shall be included in the mitigation fee. Impacts on woodland habitat and mitigation requirements shall be

addressed in a Biological Resources Study and Important Habitat Mitigation Plan as described in Policy 7.4.2.8.

Policy 7.4.4.5 Where existing individual or a group of oak trees are lost within a stand, a corridor of oak trees shall be retained that maintains continuity between all portions of the stand. The retained corridor shall have a tree density that is equal to the density of the stand.

#### **OBJECTIVE 7.4.5: NATIVE VEGETATION AND LANDMARK TREES**

#### Protect and maintain native trees including oaks and landmark and heritage trees.

- Policy 7.4.5.1 A tree survey, preservation, and replacement plan shall be required to be filed with the County prior to issuance of a grading permit for discretionary permits on all high-density residential, multifamily residential, commercial, and industrial projects. To ensure that proposed replacement trees survive, a mitigation monitoring plan should be incorporated into discretionary projects when applicable and shall include provisions for necessary replacement of trees.
- Policy 7.4.5.2 It shall be the policy of the County to preserve native oaks wherever feasible, through the review of all proposed development activities where such trees are present on either public or private property, while at the same time recognizing individual rights to develop private property in a reasonable manner. To ensure that oak tree loss is reduced to reasonable acceptable levels, the County shall develop and implement an Oak Tree Preservation Ordinance that includes the following components:

A. Oak Tree Removal Permit Process. Except under special exemptions, a tree removal permit shall be required by the County for removal of any native oak tree with a single main trunk of at least 6 inches diameter at breast height (dbh), or a multiple trunk with an aggregate of at least 10 inches dbh. Special exemptions when a tree removal permit is not needed shall include removal of trees less than 36 inches dbh on 1) lands in Williamson Act Contracts, Farmland Security Zone Programs, Timber Production Zones, Agricultural Districts, designated Agricultural Land (AL), and actions pursuant to a Fire Safe plan; 2) all single family residential lots of one acre or less that cannot be further subdivided; 3) when a native oak tree is cut down on the owner's property for the owner's personal use; and 4) when written approval has been received from the County Planning Department. In passing judgment upon tree removal permit applications, the County may impose such reasonable conditions of approval as are necessary to protect the health of existing oak trees, the public and

the surrounding property, or sensitive habitats. The County Planning Department may condition any removal of native oaks upon the replacement of trees in kind. The replacement requirement shall be calculated based upon an inch for inch replacement of removed oaks. The total of replacement trees shall have a combined diameter of the tree(s) removed. Replacement trees may be planted onsite or in other areas to the satisfaction of the County Planning Department. The County may also condition any tree removal permit that would affect sensitive habitat (e.g., valley oak woodland), on preparation of a Biological Resources Study and an Important Habitat Mitigation Program as described in Policy 7.4.1.6. If an application is denied, the County shall provide written notification, including the reasons for denial, to the applicant.

- B. Tree Removal Associated with Discretionary Project. Any person desiring to remove a native oak shall provide the County with the following as part of the project application:
  - A written statement by the applicant or an arborist stating the justification for the development activity, identifying how trees in the vicinity of the project or construction site will be protected and stating that all construction activity will follow approved preservation methods;
  - A site map plan that identifies all native oaks on the project site; and
  - A report by a certified arborist that provides specific information for all native oak trees on the project site.
- C. Commercial Firewood Cutting. Fuel wood production is considered commercial when a party cuts firewood for sale or profit. An oak tree removal permit shall be required for commercial firewood cutting of any native oak tree. In reviewing a permit application, the Planning Department shall consider the following:
  - Whether the trees to be removed would have a significant negative environmental impact;
  - Whether the proposed removal would not result in clearcutting, but will result in thinning or stand improvement;
  - Whether replanting would be necessary to ensure adequate regeneration;
  - Whether the removal would create the potential for soil erosion;

- Whether any other limitations or conditions should be imposed in accordance with sound tree management practices; and
- What the extent of the resulting canopy cover would be.

D. Penalties. Fines will be issued to any person, firm, or corporation that is not exempt from the ordinance who damages or destroys an oak tree without first obtaining an oak tree removal permit. Fines may be as high as three times the current market value of replacement trees as well as the cost of replacement, and/or replacement of up to three times the number of trees required by the ordinance. If oak trees are removed without a tree removal permit, the County Planning Department may choose to deny or defer approval of any application for development of that property for a period of up to 5 years. All monies received for replacement of illegally removed or damaged trees shall be deposited in the County's Integrated Natural Resources Management Plan (INRMP) conservation fund.

#### **MEASURE CO-P**

Develop and adopt an Oak Resources Management Plan. The plan shall address the following:

- Mitigation standards outlined in Policy 7.4.4.4;
- Thresholds of significance for the loss of oak woodlands;
- Requirements for tree surveys and mitigation plans for discretionary projects;
- Replanting and replacement standards;
- · Heritage/landmark tree protection standards; and
- An Oak Tree Preservation Ordinance as outlined in Policy 7.4.5.1.

[Policies 7.4.4.4 and 7.4.5.1]

Responsibility:	Planning Department
Time Frame:	Within two years of General Plan adoption.

	APPENDIX C
	EL DORADO COUNTY OAK/CANOPY SITE ASSESSMENT FORM (2) PHASE 1 AND WHOLE PROJECT

#### **El Dorado County**

#### **OAK/CANOPY SITE ASSESSMENT FORM**

Qualified Professional & Contact Information: (attach qualifications)	Gordon Mann, Consulti 12661 Torrey Pines Dri		2; 650-740-3461
Property Owner's Name/APN(s):	Faye Louie Living Trus	t et al, 126-020-01, 02	2, 03, 04; 126-150-23
Address:	South side of Green Va Malcolm Dixon Road, E	illey Road, 100 feet e Il Dorado Hills, CA	ast of intersection with
General Plan Designation:	LDR, OS		
Zoning:	RE-5, AE		
Project Description: (attach site photos)	unincorporated commu	280 acres and is local nity of El Dorado Hills	ated north of US 50 in the in western El Dorado Co
Would the project, directly or indirectly, he cause any impact, conflict with, or disturb	ance to:	YES	NO
a) Individual landmark or heritage trees (of ar review under General Plan Policy 7.4.5.2?			<b>✓</b>
c) Oak woodland corridor continuity (General		<b>√</b>	
d) Sensitive or important oak woodland habite Guidelines?			$\checkmark$
e) Movement of Wildlife and/or Any Wildlife N			
f) Any Candidate, Listed or Special Status Pla observed or expected to occur on or adjacent	ant or Animal Species to the project site?		
a) to the offerstades of the terminal			
g) Is the affected area of oak canopy within or directly adjacent to an Important Biological Corridor or Ecological Preserve overlay?		$\checkmark$	
h) Does the removal of oak canopy comply with the retention requirements of Policy 7.4.4.4?		<b>4</b>	
i) Was project subject to prior County approval? (If yes, provide Tentative Map # and environmental documents if available)			<b>V</b>
j) For Discretionary Projects, would the project have the potential to cause a significant environmental impact on biological resources?		<b>√</b>	
I affirm that all of the information contained in this document is true and correct to the best of my knowledge and I acknowledge and agree that any material misinformation in this document can result in the denial or revocation of any permits or County approvals for this project.			
Qualified Professional: Date: 4/18/14			
Applicant/Owner:Date:			
Required Attachments: 1) Qualified Profes	ssignal Qualifications: 2)	Sito Photos: 2\ Donula	-170

Required Attachments: 1) Qualified Professional Qualifications; 2) Site Photos; 3) Required Tree Survey, Preservation, and Replacement Plan <u>or</u> Biological Resources Study and Important Habitat Mitigation Program (see Interim Interpretive Guidelines for El Dorado County Policy 7.4.4.4 Option A)

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#### **El Dorado County**

#### **OAK/CANOPY SITE ASSESSMENT FORM**

Qualified Professional & Contact Information: (attach qualifications)	Gordon Mann, Consu 12661 Torrey Pines D	llting Arborist Orive, Auburn, CA 9560	2; 650-740-3461
Property Owner's Name/APN(s):		ıst et al, 126-020-01, 0	
Address:	South side of Green \ Malcolm Dixon Road,	/alley Road, 100 feet e El Dorado Hills, CA	ast of intersection with
General Plan Designation:	LDR, OS		
Zoning:	RE-5, AE		
Project Description: (attach site photos)	unincorporated comm	280 acres and is locate unity of El Dorado Hills	ed north of US 50 in the in western El Dorado Co
Would the project, directly or indirectly, cause any impact, conflict with, or distu	rbance to:	YES	NO
a) Individual landmark or heritage trees (of review under General Plan Policy 7.4.5.2?			<b>/</b>
c) Oak woodland corridor continuity (Gene		<b>V</b>	
d) Sensitive or important oak woodland hat Guidelines?	pitat as defined in the		<b>✓</b>
e) Movement of Wildlife and/or Any Wildlife			
f) Any Candidate, Listed or Special Status Plant or Animal Species observed or expected to occur on or adjacent to the project site?			
g) Is the affected area of oak canopy within	or directly adjacent to an		
Important Biological Corridor or Ecological Preserve overlay?			$\checkmark$
h) Does the removal of oak canopy comply with the retention requirements of Policy 7.4.4.4?			$\checkmark$
Was project subject to prior County approval? (If yes, provide Tentative Map # and environmental documents if available)			<b>√</b>
j) For Discretionary Projects, would the project have the potential to cause a significant environmental impact on biological resources?		V	
I affirm that all of the information contained is acknowledge and agree that any material misin permits or County approvals for this project.	n this document is true and aformation in this documen	correct to the best of my t can result in the denial	knowledge and I or revocation of any
Qualified Professional:		Date: 4/18/14	
Applicant/Owner:		Date:	
Required Attachments: 1) Qualified Pro	Siological Resources Stud	Site Photos; 3) Require	ed Tree Survey,

etive Guidelines for El Dorado County Policy 7.4.4.4 Option A)

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APPENDIX D
GORDON MANN PROFESSIONAL CREDENTIALS & CONSULTING RESUME
PROFESSIONAL CREDENTIALS & CONSULTING RESONIE

### Gordon Mann Professional Credentials - Consulting Resume

#### Education:

B.S. Forestry, University of Illinois

Horticulture courses, College of San Mateo

Continuing Education sessions to maintain Certifications and ASCA membership

Awards, Certifications, and Professional Memberships:

Received 2102 Award of Achievement and 2011 Author's Citation from the Society of Municipal Arborists

Received the 2011 True Professional of Arboriculture award from ISA

Member American Society of Consulting Arborists (ASCA), Registered Consulting Arborist #480

Member International Society of Arboriculture (ISA), ISA Certified Arborist and Municipal

Specialist #WE-0151 AM; Qualified Tree Risk Assessor

Member California Urban Forest Council (CaUFC), Certified Urban Forester #127

Member Western Chapter International Society of Arboriculture (WCISA)

Member Society of Municipal Arborists (SMA)

Member California Arborist Association (CAA)

#### Employment:

Owner Mann Made Resources, consulting and marketing tree conservation products, since 1986

Over 36 years in municipal tree and risk management, and public administration

- Part-time and full-time consultant and product sales with Mann Made Resources
- 1 year with Fallen Leaf Tree Service as Municipal Manager/Trainer
- 1.5 years with the Sacramento Tree Foundation as Urban Forest Services Director including six months acting Deputy Director; Led regional ordinance committee
- 22.5 years with the City of Redwood City, CA as Arborist, City Arborist and Public Works Superintendent – overseeing Streets, Sidewalk, Traffic Signals and Street Lights, Parking Meters, Signs and Markings, & Trees
- 2.5 years with the City of San Mateo, CA as Tree Maintenance Supervisor
- 5 years with the Village of Brookfield, IL as Village Forester

#### Professional Leadership:

Immediate Past President & Board Member, American Society of Consulting Arborists (ASCA)

Current Board Member California Urban Forests Council (CaUFC)

Current WCISA member and serve on Student Committee and Certification Committee

Current member California Urban Forest Advisory Council (CUFAC) supporting CalFire

Current Co-Chair Sacramento Tree Foundation Technical Advisory Committee

Past representative for SMA on American National Standards Institute (ANSI) A300 Tree Maintenance Standards Committee

Past 2012 WCISA Annual Conference Chair, Asilomar, CA, April 29-May 2, 2012

Past President, Western Chapter International Society of Arboriculture

Past President, California Arborists Association

Past Board Member, Society of Municipal Arborists

Past chairperson (3 years) of the International Tree Climbing Competition

Past chairperson (13 years) of the Northern California Tree Climbing Competition

Past President, San Mateo Arboretum Society

Past President, CityTalk Toastmasters

#### Professional outreach:

- Developed and led training programs with the California Arborists Association
- Provided urban forestry and municipal arboriculture instruction in Sydney and Melbourne, Australia
- Presented urban forestry related sessions at regional and annual meetings with ASCA, ISA, SMA, ISA Chapters, ASCA, ANSI A300, CAA, CaUFC, PAPA, TCIA, CAPCA, Sacramento Tree Foundation, APWA, Arbor Day Foundation, Maintenance Superintendents Association, Oregon Department of Forestry, San Mateo County Stormwater Pollution Prevention Program, CO Pro-Green Expo, Idaho Hort Expo, and BC CanWest Hort Show
- Authored articles in newsletters and magazines including: Western Arborist, Arborist News,
   City Trees, and Utility Arborists Association
- Presented sessions on urban tree management topics at 2012 Colorado Pro-Green Conference, 2012 Idaho Hort Expo, 2012 WCISA Annual Conference, 2012 Association of Environmental Professionals, and 2012 WCISA Regional Meetings

#### Other Key Associations:

Served as representative on the Bay Cities Joint Powers Insurance Authority (BCJPIA)
Safety and Loss Prevention Committee for Police and Public Works representing public works 2003
– 2007

Served as the Public Works Services representative on Redwood City's Emergency Operations Center steering Committee – 1998 to 2007

#### **Key Projects:**

Performed risk assessment and tree risk management plan for Nevada Joint Union High School District, Grass Valley, CA; reference - Paul Palmer (530) 477-6852

Performed Urban Forest Program analysis Oakdale, CA; reference - Robert Swift (209) 595-5013 Performed Campus Urban Forest Management Plan San Francisco State University, San Francisco, CA; reference – Phil Evans (415) 338-1845

Performed Arborists canopy coverage compliance report for Dixon Ranch, Ridgeview Village, Treviso II, and Migianella projects, El Dorado County, CTA Engineering and Survey; reference -Brian Allen and Olga Sciorelli (916) 638-0919

Performed Arborists reports for projects in Rocklin, Loomis, Granite Bay, Sacramento, and Roseville; Reference Nick Feitser (916) 307-3500

Performed Rocklin City Hall Oak Tree Preservation Demonstration Project, Rocklin, CA; reference - Dara Dungworth, (916) 625-5160

Performed sidewalk and tree conflicts analysis, and provided recommendations with the City of San Ramon; reference - John Lichter, 530-231-5586

Performed sidewalk and tree conflicts analysis, and provided recommendations with the Verrado Homeowners Association, Phoenix, AZ; Tim Johnson, 602-843-8733

Performed risk assessment and tree risk management plan for Grass Valley School District, Grass Valley, CA; reference – Steve Spann (530) 362-2571

Performed Sacramento county parks tree inventory; Analisa Stewart (916) 718-1395

#### Other relevant service:

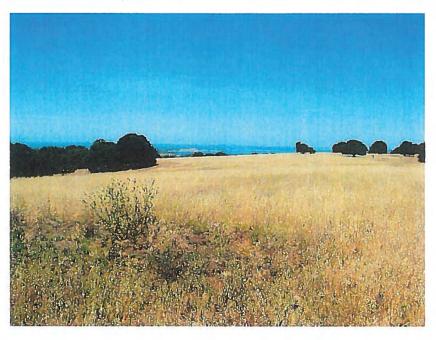
Public Works representative on the Bay Cities Joint Powers Insurance Authority (BCJPIA) Safety and Loss Prevention Committee for the from 2003 to 2007

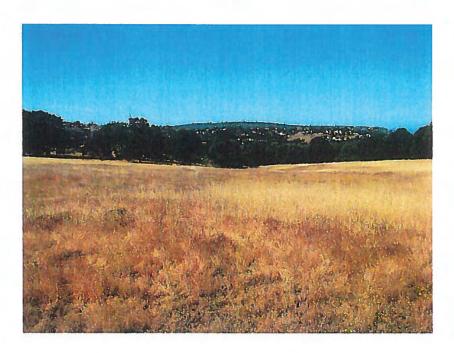
Redwood City Emergency Operations Center Steering Committee from 1996 to 2007 Current Chair of Lake of the Pines Community Firewise Committee

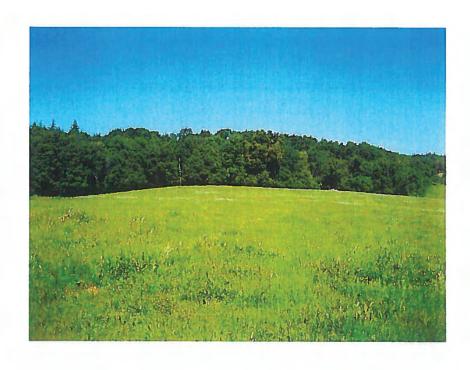
**APPENDIX E SITE PHOTOS** 

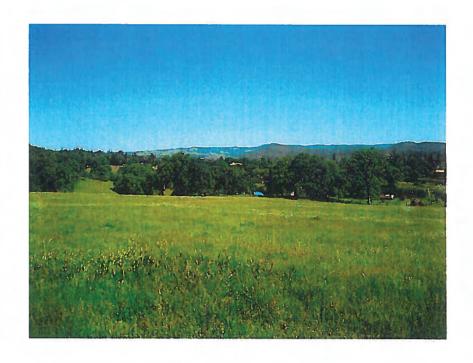
## **Site Photos**

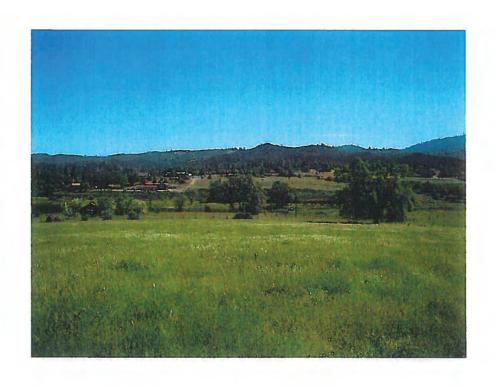
The photos are taken from different locations and perspectives on the property and show the different site uses, and tree canopy densities.



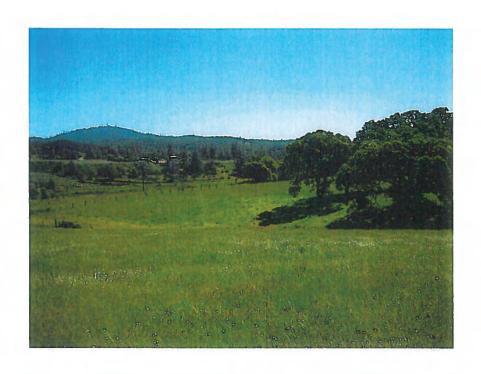


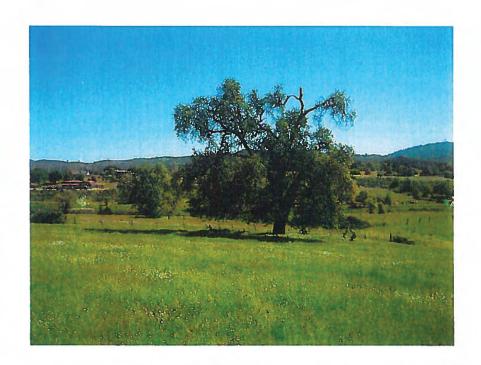


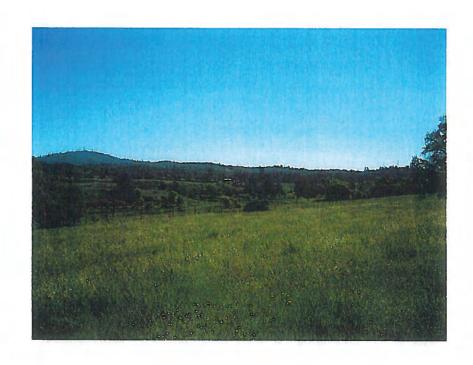


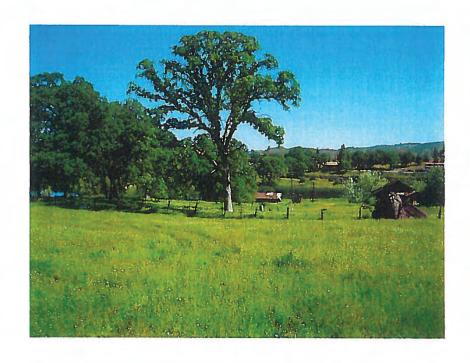


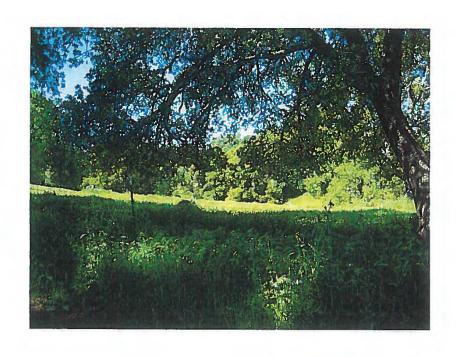




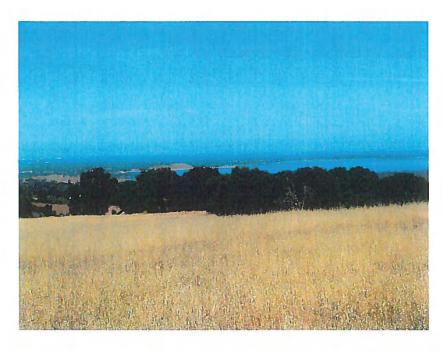




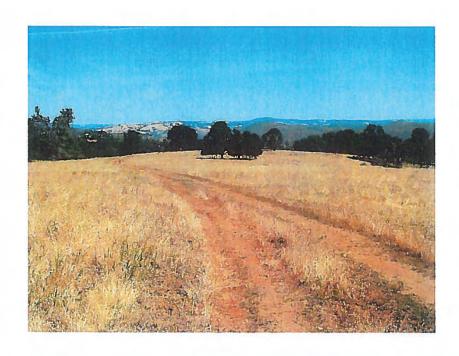


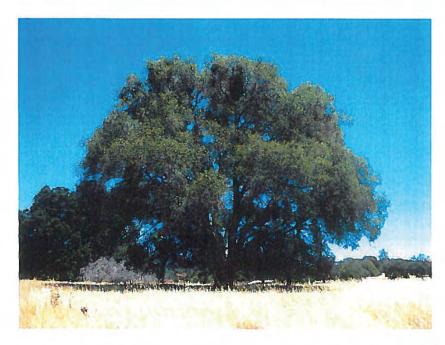




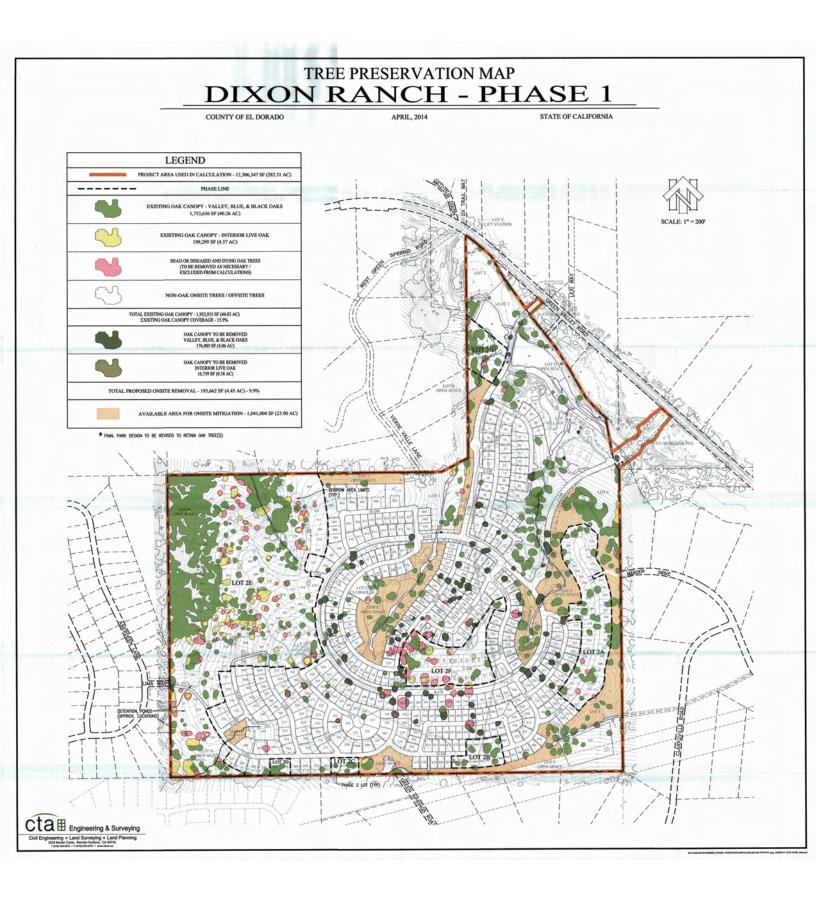








APPENDIX F
DIXON RANCH TREE PRESERVATION MAP – PHASE 1 DATED APRIL 2014



APPENDIX G
DIXON RANCH TREE PRESERVATION MAP, MARCH 2013 REVISED MARCH 2014

