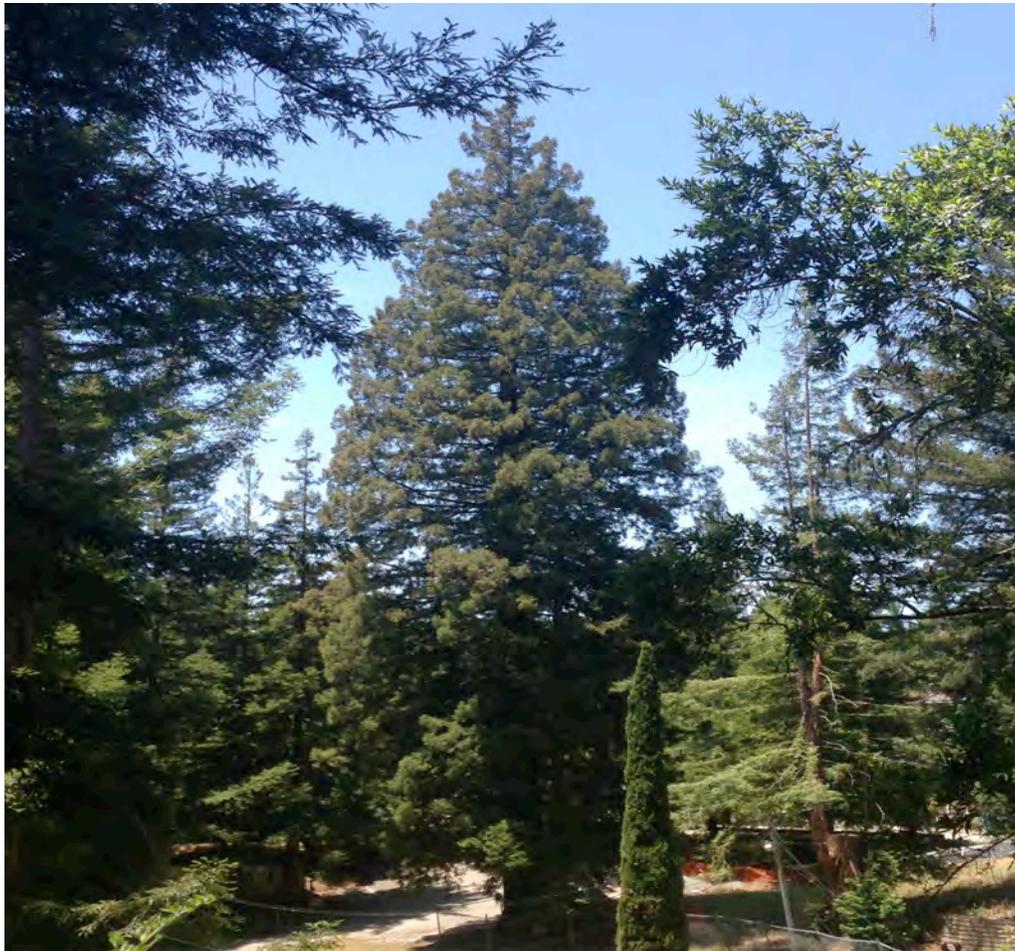


**1440 Center, Phase I
800 Bethany Drive, Scotts Valley CA**

**Tree Resource Analysis/
Construction Impact Assessment**

Tree Protection Plan



**Prepared for
Taylor Bateman
Scotts Valley Planning Department**

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Tree Appraisal Worksheet	
Tree Resource Inventory	
Tree Location Map File	
Construction Impact Assessment	File A, Sheets 1 through 6
Tree Protection Plan	File B, Sheets 1 through 6

ASSIGNMENT/SCOPE OF SERVICES

The 1440 Foundation proposes to develop a facility on the site of the former Bethany University Campus. Extensive tree resources on this site include native conifer, mixed hardwood and riparian trees species as well as non-native species planted as components of the original landscape many of which meet “protected” criteria. To ensure the protection of the tree resources and meet City requirements, Taylor Bateman of the Scotts Valley Planning Department has requested the following tasks be completed.

- Locate, catalog and map trees/tree groups greater than 6 inches in trunk diameter growing within 20 feet of the Limits of Grading
- Identify trees as to size, species and trunk diameter
- Rate individual tree health/structure and preservation suitability as “good, fair or poor”
- Map Critical Root Zones
- Review grading, utility, drainage, building and landscape construction plans to determine potential impacts to trees
- Identify trees with active disease organisms or structural weakness that present risk to the redefined use of the site
- Provide recommendations for remedial treatments and maintenance to improve tree condition and decrease risk in preparation for construction
- Create tree preservation specifications including a protection-fencing plan.
- Determine tree replacement requirements for “Protected” trees removed as outlined by the City of Scotts Valley Planning Department.
- Appraise the value of trees to be preserved
- Provide all findings in the form of a report accompanied by a Tree Location Map/Preservation Plan

SUMMARY

Plans for this project have been reviewed and the known impacts to five hundred eighteen trees/tree groups within twenty feet of proposed Phase I grading limits have been assessed. In order to construct this project extensive grading, slope retention systems and site stabilization procedures are necessary. Impacts from the required improvements will be dramatic, resulting in a high level of impacts to tree resources. To construct the improvements as currently defined the removal of 273 trees, 184 of which meet Protected criteria is necessary. Of the total number proposed for removal, 152 trees are required to be removed due to construction impacts. The remaining 121 trees that comprise this removal total are dead, diseased, have fallen or are structurally unsound and should be removed to eliminate the risk to the redefined use of the site (see Summary Table on page 11).

Tree removal quantities were calculated anticipating the most dramatic level of impacts and greatest number of trees to be removed. Tree removal quantities may decrease once grade stakes are in place and actual impacts are known. The Project Developer may decide to retain trees identified as being in unstable or in poor condition that have been recommended for removal.

City approved tree removal may require additional California Department of Forestry (CalFIRE) permits.

Trees/Tree Groups with excellent preservation suitability include significant California coast redwoods (*Sequoia sempervirens*), **Trees #29, 31, 32, 33, 189 and 193**. Grading, cut and fill treatments, retaining walls and hardscape elements are proposed adjacent to these trees. My initial review of concluded that Trees #29 and 189 would need to be removed to meet project objectives. Since these are large scale, significant trees, the Project Engineer and Architect are in process of revising plans to decrease known impacts in order to preserve and protect these trees. Once the design has been modified, Special Treatments will be defined and implemented to ensure the preservation of these trees.

When all plans are finalized and grade stakes are in place, an accurate determination of construction impacts will be defined within the Special Treatment Areas. Specific tree protection treatments will be identified at that time. All recommended treatments and procedures including the installation of protection fencing and straw bales are to be installed and inspected prior to demolition equipment being brought on-site.

Compensation for tree removal required in order to complete the project will include:

- Preservation and protection of retained trees/tree groups during construction
- Plan modifications to allow the preservation of Trees #29 and 189
- Implementation of Special Treatments
- Tree planting as a component of the planned landscape to be maintained in perpetuity
- Reforestation of the area surrounding the parking connector road
 - Replacement trees planted at a minimum 2:1 ratio, two trees replanted for each “Protected” tree removed per City code

The current landscape plan prepared by Heather Harwood, Landscape Architect identifies replacement tree species and planting locations. The exact quantity of replacement trees will be determined after tree removal is completed in order to meet City mitigation requirements. Nursery stock and planting specifications, a Maintenance and Monitoring Plan and defined Success Criteria have been designed and should be implemented to insure the successful restoration of the lost canopy.

The total appraised value of the trees to be preserved is \$866,305. A retention bond in this amount shall be posted by the developer and held in trust by the City of Scotts Valley, as required by Scotts Valley Municipal Code Section 17.44.080.

In the event project management fails to implement recommended procedures and/or otherwise damage trees, the cost of implementation of recommended tree preservation treatments or appraised value of damage to these protected trees, resulting from construction activities shall be determined by the Project Arborist, monetary costs/fines assessed and deducted from the retention funds.

Site inspections will be performed by the Project Arborist¹ at defined intervals. Monitoring reports will be submitted to the City of Scotts Valley Planning Department at regular intervals.

The implementation of the procedures as defined within this document, including the implementation of Special Treatments, tree maintenance and adherence to Tree Preservation Specifications, are required to safeguard trees proposed for retention.

¹ **Project Arborist:** The Consulting Arborist as an authorized representative of the owner and City, with the responsibility of periodic inspection of the project, contractor and subcontractors and contractor’s equipment to determine compliance with the project specifications, the City of Scotts Valley tree preservation requirements and the cited professional standards.

BACKGROUND

The proposed project is within the boundaries of the former Bethany University Campus that has not been in use for several years. This project will repurpose the former Campus by removing outdated buildings, re-aligning Bethany Drive, re-contouring land forms, constructing new buildings and parking lots improving infrastructure and creating a setting that supports the 1440 Foundation objectives.

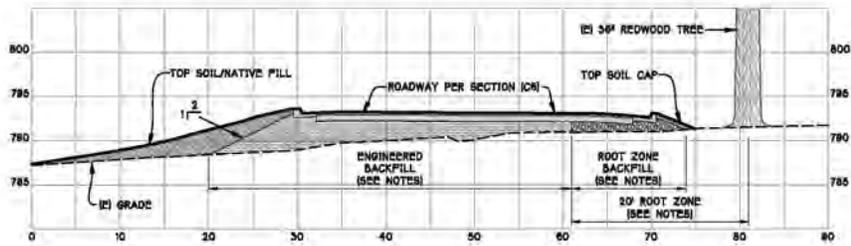
Since Bethany University did not have the financial resources to maintain trees and provide a Due Standard of Care, there are many trees on the property that are in poor condition with high failure potential. In the last 4 months, two large trees have fallen within the proposed project boundaries.

Active diseases on this site that affect tree stability include *Phytophthora ramorum* the causal agent of Sudden Oak Death (SOD). It is found on a number of native tree and shrub species including at least seven found on this property. This disease has killed many coast live oak trees on this site. Several of the coast live oaks still standing have active or dated SOD infections that compromise structural integrity. Canopies may be full and vibrant giving the tree a healthy appearance to an untrained eye but these trees will be prone to falling as the decay organisms advance.

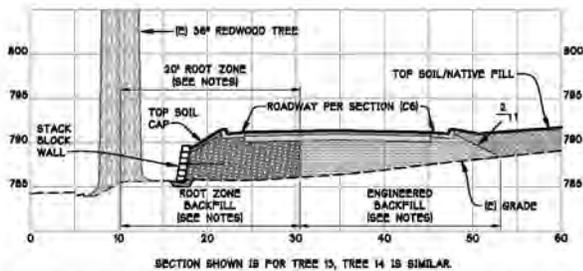
Many of the larger, mature California bays are infected by *Ganoderma*, a decay fungus developing in the buttress roots and lower trunk. When the decay becomes extensive, the ability of the roots to supply adequate water and nutrient elements to the crown is compromised, decay organisms advance and structural failure is likely. The majority of bay trees still standing on this site have one or more *Ganoderma* conks (the fruiting body of the fungus) on the root buttress. This condition has significance for retaining infected bays near public use areas where persons may be injured or property damaged. A large number of bay trees that stand near grading limits present high levels of risk and could fall at any time.

The perimeter of the proposed development area is comprised of forest/forest fragments; mixed conifer, hardwood and riparian species. The proposed parking connector road is within striking distance of a poorly structured forest fragment comprised of many Douglas fir trees. Tree form is dominated by tall forest members; some are leaning, poorly rooted and prone to failure. These senescent forest fragments grow from the adjacent slopes and loom over the area where the connector road is proposed and adjacent residences. Trees have fallen in this area as well as other sections of the property and will continue to do so, presenting a future risk.

In 2010 Bethany University began construction of a student union in the central portion of the campus where their former dining hall that had been destroyed by fire. This area is populated with many large stature, significant coast redwood trees. The access road to the Bethany student union is similar to the proposed re-aligned Bethany Drive; positioned near significant coast redwood Trees #31, 32 and 33 (Previously numbered 10, 13 and 14). This section of the roadbed was constructed using a tree friendly, engineered fill system developed by Ifland Engineers and depicted on the next page.



Roadway Cross Section @ Tree 10
F-10



Roadway Cross Section @ Trees - 13 & 14
F-10

Notes:

1. ROOT ZONE: ZONE WITHIN A 20' RADIUS OF (E) SUBSTANTIAL TREES.
2. REMOVAL OF MATERIALS WITHIN ROOT ZONE TO BE DONE WITH EXTRA CARE.
3. TOP SOIL SCRUBBING WITHIN ROOT ZONE TO BE DONE BY HAND.
4. NO GRADE CUTS ALLOWED WITHIN ROOT ZONE.
5. STRUCTURAL BACKFILL WITHIN ROOT ZONE TO BE ROOT FRIENDLY SELF-COMPACTING A BREATHABLE MATERIAL (CRUSHED DRAIN ROCK).
6. ENGINEERED BACKFILL OUTSIDE OF ROOT ZONE TO BE PER GEOTECHNICAL REPORT.



Cut and/or fill treatments required within the Critical Root Zone of trees to be preserved should follow the same low impact approach.

To complete the assessment, numerous site inspections were performed between February and June 2014. A topographic site map was provided by Ifland Engineers with tree location data for approximately 60% of the trees inventoried. The remaining trees I inventoried were “field located” by measuring or approximating distance from known features; existing buildings, hardscape elements, pathways etc. and plotting the approximate tree trunk location on the map file. Numbered metal tags have been attached to the each tree’s trunk at six feet above grade. The corresponding numbers and tree locations are documented on the attached *Tree Location Map* file “A”.

Tree health and structural integrity were evaluated visually from the root crown (where the trunk meets natural grade), to the foliar canopy while standing on the ground. While more thorough techniques are available for inspection and evaluation, they were neither requested nor considered necessary or appropriate at this time. Periodic inspections to varying degrees are to be implemented before, during and after during construction as detailed within this report.

Construction impacts were assessed by reviewing Phase I grading plans for this project prepared by Ifland Engineers. I received these plans via email on May 31, 2014. Landscape plans developed by Heather Harwood were received a few days before this report was due. Construction detail, utility and drainage plans as well as the soils report were not finalized and available for my review as of this date. These plans will be reviewed and commented on at a later date.

Based on this review, the impacts to the tree resources resulting from the proposed grading and construction have been assessed. Necessary tree removal was quantified at the most dramatic level, expecting the highest level of impacts and largest number of trees to be removed. It is anticipated the level of impacts will change when grade stakes are placed delineating actual grading limits. The exact locations of the proposed grading and other improvements will be reviewed and evaluated once the site staking is in place. There is a possibility that tree classification and recommended procedures will change once the exact positions of the proposed improvements are known. If additional tree removal is necessary or if tree removal requirements decrease, a confirming addendum will be prepared and submitted to the Scotts Valley City Planning Department.

OBSERVATIONS

Tree Descriptions

This site is populated with fragments of an indigenous mixed conifer/hardwood forest growing in the central portion of the former Bethany University campus. The proposed site improvements are adjacent to native forest fragments as well as non-native trees planted as components of the original Bethany Campus landscape. There are several tall, majestic coast redwood trees within the construction impact zone. Many trees are in poor condition due to structural deficiencies, disease or natural decline:

Native tree species present on this site include:

- Douglas fir (*Pseudotsuga menziesii*),
- coast redwood (*Sequoia sempervirens*)
- coast live oak (*Quercus agrifolia*)
- Monterey cypress (*Hesperocyparis macrocarpa*)
- California bay laurel (*Umbellularia californica*)
- tanbark oak (*Lithocarpus densiflorus*)
- Pacific madrone (*Arbutus menziesii*)

Non-native tree species on the site are comprised of:

- sweetgum (*Liquidambar styraciflua*)
- juniper (*Juniperus* sp.)
- Italian cypress (*Cupressus sempervirens*)
- privet (*Ligustrum* sp.)
- cherry (*Prunus* sp.)
- pistache (*Pistache chinensis*)

TREE INVENTORY METHODOLOGY

The appended inventory lists information on 518 trees/tree groups growing within the 20 feet of the known limits of grading including; species, trunk diameter, health, structure, suitability for preservation, Critical Root Zone (CRZ) radius, construction impacts, observations, required procedures and whether the tree meets “protected” criteria per the Scotts Valley Municipal Code Section 17.44.080. .

Diameter: is the width of the trunk measured at 4.5 feet above natural grade (ground level). This inventory comprises of individuals with diameters ≥ 6 inches and groups (sum of diameters) with diameters ≥ 10 inches at 4.5 feet above natural grade. For trees that were unable to be measured at 4.5 feet above natural grade, measurement heights were provided.

Health, Structure and Preservation Suitability Inventory ratings are based on the following criteria:

Tree health and structure are separate issues that are related since both are revealed by tree anatomy. A tree's vascular system is confined in a thin layer of tissue between the bark and wood layers. This thin layer is responsible for transport of nutrients and water between the root system and the foliar canopy. When this tissue layer is functioning properly a tree has the ability to produce foliage (leaves). As long as the tree maintains a connected vascular system it may appear to be in good health.

When conditions conducive to decay are present, fungi, bacteria or poor compartmentalization, wood strength is degraded. As decay advances, the tree's ability to continue standing is compromised. Thus, a tree can appear to be in good health, but have poor structure.

Tree Health: This rating is determined visually. Annual growth rates, leaf size and coloration are examined. Indications of insect activity, decay and dieback percentages are also used to define health ratings.

Trees in "**good**" health are full canopied, with dark green leaf coloration. Areas of foliar dieback or discoloration are less than 10% of the canopy. Dead material in the tree is limited to small twigs and branches less than one inch in diameter. There is no evidence of insects, disease or decay.

Trees with a "**fair**" health rating have from 10% to 30% foliar dieback, with faded coloration, dead wood larger than one inch, and/or visible insect activity, disease or decay.

Trees rated as having "**poor**" health have greater than 30% foliar dieback, dead wood greater than two inches, severe decay, disease or insect activity.

Tree Structure: This rating is determined by visually assessing the roots, root crown (where the trunk meets the ground), supporting trunk, and branch structure. The presence of decay can affect both health and structural ratings.

Trees that receive a "**good**" structural rating are well rooted, with visible taper in the lower trunk, leading to buttress root development. These qualities indicate that the tree is solidly rooted in the growing site. No structural defects such as codominant stems (two stems of equal size that emerge from the same point), poorly attached branches, cavities, or decay are present.

Trees that receive a "**fair**" structural rating may have defects such as poor taper in the trunk, inadequate root development or growing site limitations. They may have multiple trunks, included bark (where bark turns inward at an attachment point), or suppressed canopies. Decay or previous limb loss (less than 2 inches in diameter) may be present in these trees. Trees with fair structure may be improved through proper maintenance procedures.

Poorly structured trees display serious defects that may lead to limb, trunk or whole tree failure due to uprooting. Trees in this condition may have had root loss or severe decay that has weakened their support structure. Trees in this condition can present a risk to people and structures. Maintenance procedures may reduce, but not eliminate these defects.

Suitability for preservation: This rating evaluates tree health, structure, species characteristics, age and potential longevity.

Trees with a “**good**” rating have adequate health and structure with the ability to tolerate moderate impacts and thrive for their safe, useful life expectancy.

A “**fair**” rating indicates health or structural problems have the ability to be corrected. They will require more monitoring and intense management with an expectation that their lifespan will be shortened by construction impacts.

Trees with a “**poor**” rating possess health or structural defects that cannot be corrected through treatment. Trees with poor suitability can be expected to continue to decline regardless of remedies provided. Species characteristics may not be compatible with redefined use of the area. Species which are non-native and unusually aggressive are considered to have a poor suitability rating.

Critical Root Zone: Individual tree root systems provide anchorage, absorption of water/minerals, storage of food reserves and synthesis of certain organic materials necessary for tree health and stability. The Critical Root Zone (CRZ) is the species-specific amount of roots necessary to continue to supply these elements essential for each tree to stand upright and maintain vigor. This distance reflects the minimum footage measurement from the trunk required for the protection of the tree’s root zone. Construction activities proposed within these areas are subject to specific review and the implementation of recommended special treatments.

DESCRIPTION OF DEVELOPMENT IMPACTS

This section describes what procedures are proposed near the individual tree. The influences the proposed construction activities will have on the tree are classified as **None Known, Low, Moderate** or **High**. These classifications are defined as follows:

None Known, the tree is not near the impact area of the proposed construction.

Low, adverse affects from the proposed construction activities are minimal.

Moderate, this level of impacts will result in loss in tree vigor and/or stability. Recommended procedures must be implemented to decrease these impacts.

High, requiring tree removal or the understanding that premature tree mortality can be anticipated. Mitigation is required for trees subject to this level of impacts.

Site inspections and review of the plans as presented identified numerous construction impacts to individuals. The construction of this project as presented requires the following procedures:

- **Demolition of existing structures, hardscape and utility lines** entails the dismantling and disposal of all buildings, hardscape and utility lines. Large wrecking equipment, such as an excavator, is used for building demolition. There is a possibility that the surrounding trees will be damaged. The unearthing and removal of old utility lines as well as asphalt within defined Critical Root Zones often shatters woody roots. Mechanical damage to above ground tree parts and roots allow for the onset of decay, compromising tree health and structural stability.
- **Building clearance** is needed where branches of trees encroach upon parking areas, sidewalks or structures will need to be pruned to gain required clearance.
- **Grading for site stabilization, parking lot and building construction as well as trenching for foundation, drainage and utility line construction.** These procedures require alteration of natural grade in the form of cut and/or fill (described below) at the defined "Limits of Grading". Roots shattered during this process provide openings for opportunistic decay causing organisms degrading tree support systems and vigor.
- **Alteration of natural grade**
 - Cuts, lowering of natural grade, require the removal of soil until the desired elevation is reached. A cut within the trees Critical Root Zone can remove non-woody and woody roots. Non-woody (absorbing) roots are responsible for transporting moisture and nutrients necessary for maintaining tree health. More significant cuts remove woody roots that provide structural support, compromising the tree's ability to stand upright.
 - Fill, increasing natural grade, often requires an initial cut to "knit in" and stabilize the material. This material is applied in layers and compacted in the process. Compaction breaks down soil structure by removing air and adding moisture. Anaerobic conditions may develop, promoting decay. Absorbing roots can suffocate from lack of oxygen. Structural roots may be compromised as a result of the decay.
- **Parking lot construction** Require a "cut" to a depth of six to 18 inches below the existing grade. Soils are then stabilized and by applying base materials and compacted. Asphalt chip seal, decomposed granite or concrete are then applied to create the surface.
- **Drainage structures and Utility line placement.** Necessary drainage structures and utility lines are to be consciously placed to avoid the Critical Root Zone of the preserved trees or brought to the attention of the Project Arborist to allow for preconstruction root severance along placement lines.
- **Planned Landscape Installation** typically requires the import of topsoil, rototilling the top 8 inches of native soils, digging planting holes, trenching for irrigation lines and increased water supply for establishing new plantings. Increased disturbance in the Critical Root Zone and elevated water levels will stress mature trees. It is recommended that landscape features planned within Critical Root Zones avoid the above-described procedures.

REQUIRED PROCEDURES

The following are procedures recommended to increase current tree vigor while reducing demolition and construction related impacts.

Demolition of asphalt, concrete and buildings within Critical Root Zones will be done carefully without the use of mechanized equipment (by hand), or by a skilled, equipment operator cognizant of the need for tree protection. Special care must be taken to avoid or minimize damage to root systems. Workers and equipment operators must be willing and able to communicate with, and be directed by the Project Arborist.

Backhoe operation requirements:

1. Position and operate equipment with wheels on asphalt surfaces
2. Reach boom toward building, foundation or asphalt edge, gently lifting and pulling sections away from the tree trunk
3. Dig to only the minimum depth required to the strip materials from the soil surface.
4. Stack removed spoils on undisturbed sections of the asphalt parking area
5. Load spoils into a truck setting on undisturbed remaining asphalt surface.
6. Do not drive on bare soils after asphalt has been removed

Site Stabilization, Access Road Construction

1. Within Critical Root Zones topsoil will be scrubbed by hand to remove organic, deleterious materials.
2. The natural grade will be maintained within this Special Treatment Area.
3. Structural backfill will be comprised of self-compacting drain rock, or similar materials with adequate pore space to allow oxygen and moisture penetration.

The alternative construction method depicted in the cross section on page 4 will decrease impacts.

Low, stack block retaining walls shall be constructed to decrease the limits of grading in areas where slopes require retention; blocks will be placed on a bed of gravel, without a traditional concrete footing. The placement of these retaining walls will protect tree trunks from soils being placed and compacted on the major supporting root systems and lower trunks.

Preconstruction root exploration is necessary for trees adjacent to trenching, grade reduction or retaining wall systems that require exposure or removal of soil from designated Critical Root Zones. Roots should be located using non-invasive procedures. Exploration can be done either with a probe, by hand, using small tools or an AirSpade[®]. This tool uses compressed air to displace soil, exposing roots, without damage. Once exposed, roots can be examined and determinations can be made regarding the feasibility of removal or severance. If roots encountered are less than two inches in diameter, they can be pruned following the guidelines defined below and traditional footings may be used. If roots encountered are greater than two diameter inches are unearthed they must be preserved, protected and bridged.

Preconstruction root pruning is to be performed by skilled labor. Roots are to be pruned off cleanly. Bark should adhere to the wood without tearing. Wood fibers should remain intact without shattering. When completed, the pruned portions should be covered with untreated burlap or similar absorptive material and kept constantly moist. The following tools (only) may be used for pruning of roots:

- Hand-pruners
- Loppers
- Handsaw
- Reciprocating saw
- Chainsaw

Maintenance procedures are those, which are necessary to decrease risk of falling branches, provide re-enforcement for weak branch junctures and improve tree health/stability.

- **Cabling** has been recommended for **Trees # 27, 38, 40, 110, 112, 120, 132, 153, 160, 176, 208, 289, 290, 295 and 304**. Cables should be installed between the weakly attached stems using the following or comparable hardware:
 - 5/8 inch “eye” lag bolts
 - 1/4 inch Extra High Strength cable
 - Pre-formed grips with thimbles
- **Pruning** to remove dead branches has been recommended to reduce potential health and safety hazards that persisting dead branches pose, such as decay, attracting harmful insects and injury from falling branches.
 - Each tree to be preserved should have dead/broken branches greater than 1-inch diameter removed
- **Clearance pruning** may be required to allow vertical space for equipment access and building construction. A minimum number of branches are to be removed to provide this space. Individual trees requiring clearance pruning will be identified by the Project Arborist after the vertical elements are defined.
 - Pruning should not remove more foliage than absolutely necessary to accommodate proposed construction as determined by the Project Arborist.

Necessary Tree Removal is to be performed in a sectional manner in order to avoid damaging surrounding trees and landscape. Locations of trees to be removed are documented in the Inventory and on the Tree Location Map file “A”.

- **Removal due to Construction Impacts** is required for trees that are in direct conflict with the proposed building footprints where plans cannot be modified.
- **Removals due to Condition** recommendations are based upon the combination of health, structural stability, preservation suitability ratings, failure potential and general species characteristics. There are currently several trees at risk of failure and present extreme hazards to people and property.

**1440 Center Phase I
Tree Removal Summary Table 2014**

Number of trees/tree groups inventoried	Trees proposed for removal	Number of trees proposed for Removal due to Construction Impacts	Number of trees proposed for Removal due to Construction Impacts that meet "Protected" criteria	Number of Trees proposed for Removal due to poor condition, disease or instability	Trees/Tree Groups proposed for Removal due to Condition that meet "Protected" criteria	Trees/Tree Groups proposed that meet "Protected" criteria that require replacement at a 2:1 ratio
518	273	152	122	121, 33 are dead	62	184

Stump removal will be performed on each tree removed by "grinding" to a minimum depth of 18 inches or digging them out with the backhoe or an excavator when in conflict with proposed grading. If removed trees are outside of grading limits, stumps may be left in place.

City approved tree removal may require additional California Department of Forestry permits.

Tree Maintenance Contractors qualifications:

A qualified Certified Arborist, state licensed and insured for general liability and workers compensation should be contracted to perform the above-described work in compliance with the most current versions of the following industry standards:

- American National Standards Institute, *A300 for Tree Care Operations-Tree, Shrub and Other Woody Plant Maintenance-Standard Practices.*
 - (Part 1)-2001 Pruning
 - (Part 3)-2007 Support Systems, Cabling, Bracing and Guying
- American National Standards Institute *Z133.1-1994 for Tree Care Operations- Pruning, Trimming, Repairing, Maintaining, and Removing Trees and Cutting Brush-Safety Requirements*
- International Society of Arboriculture: *Best Management Practices* (Pruning & Cabling)

TREE REPLACEMENT

Compensation for tree removal required in order to complete the project will include:

- Preservation and protection of retained trees/tree groups during construction
- Plan modifications to allow the preservation of Trees #29 and 189
- Implementation of Special Treatments
- Tree planting as a component of the planned landscape to be maintained in perpetuity
- Reforestation of the area surrounding the parking connector road

A defined Success Criteria will be followed to insure appropriate growth rates of the newly planted trees and the restoration of the lost canopy.

Nursery stock selected shall be standard (single-trunk), with low branching intact. Planting stock shall be well formed and absent of co-dominant, weakly attached stems. Trees shall be disease free and absent of circling or girdling roots.

Replacement tree planting should be performed by qualified professionals to the following guidelines:

- Prepare the planting site by excavating the planting hole to 3 times the rootball width and 2 inches shallower depth of the rootball. Finished rootball grade at the trunk should be approximately 2” above the surrounding grade.
- Prune any visible matted or circling roots to remove or straighten them. Cut the root ball vertically on opposite sides at least half the distance to the trunk.
- Free exterior roots from the root by ball breaking away some soil to provide better contact between the root ball and the backfill soil.
- Backfill with native soil only.
- After backfilling, a four-inch layer of amended tree chip mulch should be applied to the soil layer. Maintain a 12-inch radius from the tree trunk that is free of tree chips.
- Stakes, for support, installed only where necessary for support, should be installed on opposite sides of the root ball and driven into the soil. The tree can be secured to the stakes using “Arbortape” or by using the “ReadyStake” system or flexible materials such as recycled bicycle tubing. Secure to both stakes at two vertical locations, with the highest being only as high as necessary to hold the top substantially upright. Some ability for trunk movement is mandatory.

Irrigation

Irrigation will be provided the new trees by means of a temporary “drip” emitter system for a period of two (2) years. This system shall be designed, installed and maintained by a qualified professional to ensure adequate, consistent soil moisture levels while avoiding saturation.

Success Criteria

To insure the survival and adequate growth of replacement trees, Success Criteria will be defined and implemented as follows.

- A qualified professional will monitor the newly planted tree at six (6) month intervals for a period of five years.
- Tree health and growth rates will be monitored and recorded
- Trees suffering poor growth rates or declining health will be identified.
- Invigoration treatments will be provided
- Dead trees or trees in an irreversible state of decline will be replaced with the same species and size.
- At the end of the five-year period, the status of the new plantings will be assessed to insure that the Success Criteria has been met and all mitigation trees planted are performing well.
- Implementation of these Success Criteria shall be a condition of final project approval.

TREE PRESERVATION AND PROTECTION

Tree Preservation Specifications included in this report, outline specifics for tree protection fencing and other procedures that will provide the best opportunity for their long-term survivability. The exact locations for these procedures are documented on the attached Tree Location map file “B”.

Tree Preservation Zone: This area is the protected area that allows the majority of the Critical Root Zone to be undisturbed while still facilitating necessary grading, the construction of buildings and associated construction related activities. Tree Preservation Zones are identified in the Tree Location Map file “B” attached to this report.

Inspections To ensure the successful implementation of the recommended procedures Site Inspections are recommended by the Project Arborist. Site inspections will take place at the following intervals throughout the course of the project:

- During all tree removal activities in proximity to trees to be preserved.
- During demolition
- Following on-site placement of grade stakes.
- During preconstruction root exploration and severance procedures.
- After Tree Preservation fencing locations have been staked.
- Following Tree Protection fencing installation and prior to the commencement of grading.
- As necessary during the grading activities, construction and landscape installation to ensure compliance with all conditions of project approval.

Site monitoring forms will be submitted to the City of Scotts Valley Planning Department at regular intervals.

APPRAISED VALUE OF PRESERVED TREES

Preserved trees that meet “Protected” criteria that grow adjacent to proposed impacts have been valued using Trunk Formula Method, as prescribed in the publication *Guide for Plant Appraisal, Ninth Edition*, authored by the Council of Tree and Landscape Appraisers, published in 2000 by the International Society of Arboriculture.

This method is based upon tree size (cross-section of trunk), and extrapolates a Basic Value from regionally developed costs. The Basic Value is depreciated by factors for Species, Condition, Location and extent of Damage to establish total value or the appraised value of the loss. Detailed appraisal calculations for individual trees are included on an attached spreadsheet.

The appraised value of 220 “protected” trees where the Critical Root Zone is within proximity to the Limits of Grading is **\$866,305**. A retention bond in this amount shall be posted by the developer and held in trust by the City of Scotts Valley. If project management fails to implement recommended procedures, the contract cost of implementation of necessary tree preservation treatments shall be deducted from the retention funds. If trees are damaged the appraised value of damage to these preserved trees, resulting from construction activities shall be determined by the Project Arborist, monetary costs/fines assessed and deducted from the retention funds and may include any of the following:

- Unauthorized pruning by contractor or sub contractor, branch size dependent per occurrence:
 - 1 inch diameter branch: \$1000
 - 1 to 2 diameter inch branch: \$2000
 - 2-3 inch diameter branch: \$4000
 - Branches greater than 3 diameter inches: \$5000

- Any further disturbance or cutting of structural roots beyond the currently established limit of excavation (final line of disturbance) and/or within a tree's Critical Root Zone: \$5000
- Unauthorized intrusion into the defined tree protection exclusionary zone.
 - \$1000 per occurrence

CONCLUSION

The construction of the proposed development project as presented will require the removal of two hundred seventy three trees and the protection of all retained trees.

The detrimental impacts to the remaining trees may be reduced using the methods described in this report. The tree preservation specifications designed for this site and contained in this report must be enforced to protect the remainder of the forest system.

The replanting program for this site will compensate for trees required to be removed to accommodate constructing the project. Planting locations shall allow appropriate space for growth. The defined Success Criteria for replacement trees will be a condition of project approval.

Please contact me at 831-426-6603 with any questions regarding this project

Respectfully submitted,

James P. Allen
Registered Consulting Arborist® No. 390

Tree Preservation Specifications

1440 Center Construction Project, Phase I

800 Bethany Drive, Scotts Valley

These guidelines should be printed on all pages of the development plans. Contractors and sub contractors should be aware of tree protection guidelines and restrictions. Contracts should incorporate tree protection language that includes “damage to trees will be appraised using the Guide to Plant Appraisal 9th Edition and result in mitigation costs and monetary fines assessed”.

1. **Pre construction meeting with the Project Arborist:** A meeting with the Project Arborist, Project Manager and all contractors involved with the project shall take place prior to demolition All tree preservation specifications will be reviewed and discussed.
2. **Field decisions:** The Project Arborist, Soils Engineer and Grading Contractor will work together to determine the most effective construction methods required to preserve and protect trees.
3. **Tree Preservation Zone (TPZ) establishment:** TPZ’s shall be established as indicated on the attached map. The TPZ’s shall be delineated by chain link fencing, no less than 72 inches in height with metal stakes embedded in the ground. Hay bales shall be placed circumventing the fence perimeters. Bales shall be stabilized by driving metal stakes or sections of #5 rebar through the bales 12 to 18 inches into the soil surface, one at each end of bale. The fencing will be installed prior to the onset of demolition under the supervision of the Project Arborist and shall not be moved.
4. **Restrictions within the Tree Preservation Zone (TPZ):** No storage of construction materials, debris or excess soil will be allowed within the TPZ. Parking of vehicles or construction equipment in this area is prohibited. Solvents, liquids or phytotoxic materials of any type shall never be stored or disposed of within the any TPZ, and shall only be disposed of as prescribed by law.
5. **Grade Alterations:** Maintain the natural grade around all trees to be preserved. If tree roots are encountered during the construction process, the Project Arborist will be notified immediately. Exposed roots will be immediately covered with moistened burlap (or similar material) until the Project Arborist makes a determination as to required mitigation methods and extent of damage.
6. **Trenching requirements:** Any areas of where trenching is proposed will be evaluated with the Project Arborist and the Contractor prior to excavation or construction.
7. **Tree canopy alterations:** Unauthorized pruning of any tree on this site will not be allowed. Tree canopy alterations will be performed to the specifications established by the Project Arborist.
8. **Supplemental irrigation:** Irrigation shall be provided using “soaker” hoses or similar method of slow delivery. Supplemental irrigation requirements shall be determined by the Project Arborist and will be required prior to and after completion of the grading.
9. **Mulch Layer:** A 4-6 inch layer of tree chip mulch shall be applied within the Tree Preservation Zones (TPZ). Maintain a 12-inch distance from tree trunks that is free of chips or organic material or excess soil accumulation





1440 Center Appraised Value of Preserved Trees

Dedicated to the Preservation of Trees

James P. Allen
& Associates

Trunk Formula Method

Tree #	Species	Diameter (inches)	Basic Tree Cost	Rating Percentages %					Nursery Group	Replacement Stock			Stock Price	Installation Cost	Installed Tree Cost	Appraised Trunk Area TAA (in ²)	Appraised Trunk Increase TAINCR	Appraised Value
				Species	Condition	Site	Contribution	Placement		Trunk Diameter (in)	Trunk Area (in ²)	Basic Price cost/trunk in ²						
1	coast live oak	16.2	\$9,538	90%	52%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	206.02	202.22	\$1,786
2	coast live oak	11	\$4,491	90%	52%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	94.99	91.19	\$841
3	coast redwood	23.6	\$16,070	90%	62%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	437.21	432.46	\$3,587
4	coast redwood	28.7	\$23,683	90%	62%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	646.60	641.85	\$5,286
5	coast redwood	30.2	\$26,205	90%	68%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	715.95	711.20	\$6,415
6	coast redwood	24	\$16,613	90%	52%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	452.16	447.41	\$3,110
7	coast redwood	10.2	\$3,142	90%	48%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	81.67	76.92	\$543
9	coast redwood	26.1	\$19,616	90%	72%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	534.75	530.00	\$5,084
10	coast redwood	24	\$16,613	90%	62%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	452.16	447.41	\$3,708
15	coast redwood	31.1	\$27,779	90%	76%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	759.26	754.51	\$7,600
16	coast redwood	31.6	\$28,674	90%	76%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	783.87	779.12	\$7,845
17	coast redwood	25.7	\$19,025	90%	76%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	518.48	513.73	\$5,205
18	coast redwood	33.5	\$32,205	90%	56%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	880.97	876.22	\$6,493
19	coast redwood	64.8	\$120,024	90%	56%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	3296.25	3291.50	\$24,197
20	coast redwood	40	\$45,841	90%	78%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	1256.00	1251.25	\$12,872
20a	coast redwood	60.5	\$104,646	90%	68%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	2873.30	2868.55	\$25,617
21	coast redwood	20.1	\$11,704	90%	62%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	317.15	312.40	\$2,612
22	coast redwood	53.5	\$81,869	90%	62%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	2246.87	2242.12	\$18,273



1440 Center Appraised Value of Preserved Trees

Dedicated to the Preservation of Trees

James P. Allen
Associates

Trunk Formula Method

Tree #	Species	Diameter (inches)	Basic Tree Cost	Rating Percentages %					Nursery Group	Replacement Stock			Stock Price	Installation Cost	Installed Tree Cost	Appraised Trunk Area TAA (in ²)	Appraised Trunk Increase TAINCR	Appraised Value
				Species	Condition	Site	Contribution	Placement		Trunk Diameter (in)	Trunk Area (in ²)	Basic Price cost/trunk in ²						
24	coast live oak	14.8	\$7,989	90%	42%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	171.95	168.15	\$1,208
26	coast live oak	16.2	\$9,538	90%	32%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	206.02	202.22	\$1,099
27	coast redwood	21.8	\$13,737	90%	56%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	373.06	368.31	\$2,769
28	coast redwood	25.3	\$18,443	90%	86%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	502.47	497.72	\$5,710
29	coast redwood	92.8	\$245,977	90%	72%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	6760.29	6755.54	\$63,757
31	coast redwood	65.5	\$122,628	90%	72%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	3367.85	3363.10	\$31,785
32	coast redwood	31.7	\$28,855	90%	78%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	788.84	784.09	\$8,102
33	coast redwood	38	\$41,388	90%	56%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	1133.54	1128.79	\$8,344
34	coast redwood	34	\$33,168	90%	56%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	907.46	902.71	\$6,687
36	coast redwood	37.2	\$39,671	90%	62%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	1086.31	1081.56	\$8,855
37	coast redwood	34.2	\$33,557	90%	62%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	918.17	913.42	\$7,490
38	coast redwood	36.5	\$38,199	90%	52%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	1045.82	1041.07	\$7,151
39	coast redwood	19.8	\$11,363	90%	48%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	307.75	303.00	\$1,964
40	coast redwood	32.2	\$29,767	90%	56%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	813.92	809.17	\$6,001
41	coast redwood	9.4	\$2,695	90%	52%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	69.36	64.61	\$505
42	coast redwood	10.7	\$3,441	90%	52%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	89.87	85.12	\$644
43	coast redwood	40.6	\$47,221	90%	62%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	1293.96	1289.21	\$10,540
44	coast redwood	22.6	\$14,751	90%	56%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	400.95	396.20	\$2,974



**1440 Center
Appraised Value of Preserved Trees**

Dedicated to the Preservation of Trees

**James P. Allen
& Associates**

Trunk Formula Method

Tree #	Species	Diameter (inches)	Basic Tree Cost	Rating Percentages %					Nursery Group	Replacement Stock			Stock Price	Installation Cost	Installed Tree Cost	Appraised Trunk Area TAA (in ²)	Appraised Trunk Increase TAINCR	Appraised Value
				Species	Condition	Site	Contribution	Placement		Trunk Diameter (in)	Trunk Area (in ²)	Basic Price cost/trunk in ²						
45	coast redwood	31.5	\$28,494	90%	62%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	778.92	774.17	\$6,360
46	coast live oak	27.1	\$26,381	90%	34%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	576.51	572.71	\$3,229
46g	coast redwood	55.9	\$89,363	90%	74%	20%	25%	25%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	2452.98	2448.23	\$13,887
46j	coast redwood	32.4	\$30,136	90%	68%	20%	25%	25%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	824.06	819.31	\$4,303
46k	coast redwood	27.7	\$22,073	90%	68%	20%	25%	25%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	602.32	597.57	\$3,152
46l	coast redwood	36.9	\$39,037	90%	68%	20%	25%	25%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	1068.86	1064.11	\$5,574
46m	coast redwood	21.2	\$13,001	90%	68%	20%	25%	25%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	352.81	348.06	\$1,857
46n	coast redwood	24.8	\$17,728	90%	68%	20%	25%	25%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	482.81	478.06	\$2,532
46o	coast redwood	40.1	\$46,070	90%	68%	20%	25%	25%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	1262.29	1257.54	\$6,579
46p	coast redwood	30.2	\$26,205	90%	68%	20%	25%	25%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	715.95	711.20	\$3,742
46q	coast redwood	19.8	\$11,363	90%	68%	20%	25%	25%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	307.75	303.00	\$1,623
46r	coast redwood	33.4	\$32,014	90%	68%	20%	25%	25%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	875.71	870.96	\$4,572
46s	coast redwood	14	\$5,767	90%	62%	20%	25%	25%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	153.86	149.11	\$751
46u	big leaf maple	9.6	\$3,462	30%	26%	20%	25%	25%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	72.35	68.55	\$63
46v	California bay	8	\$4,043	60%	26%	20%	25%	25%	2	1.69	2.24	\$77.04	\$172.73	\$172.73	\$345.46	50.24	48.00	\$147
46x	coast redwood	78.4	\$175,612	90%	68%	20%	25%	25%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	4825.05	4820.30	\$25,077
46y	coast redwood	10.3	\$345	90%	62%	20%	25%	20%	25%	25%	0	\$0.00	\$172.73	\$172.73	\$345.46	83.28	83.23	\$42
46z	big leaf maple	14	\$7,167	30%	42%	20%	25%	25%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	153.86	150.06	\$211



1440 Center Appraised Value of Preserved Trees

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**James P. Allen
& Associates**

Trunk Formula Method

Tree #	Species	Diameter (inches)	Basic Tree Cost	Rating Percentages %					Nursery Group	Replacement Stock			Stock Price	Installation Cost	Installed Tree Cost	Appraised Trunk Area TAA (in ²)	Appraised Trunk Increase TAINCR	Appraised Value
				Species	Condition	Site	Contribution	Placement		Trunk Diameter (in)	Trunk Area (in ²)	Basic Price cost/trunk in ²						
51	coast redwood	42.3	\$51,244	90%	68%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	1404.59	1399.84	\$12,545
56	coast redwood	19.6	\$11,138	90%	46%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	301.57	296.82	\$1,844
57	coast redwood	36.4	\$37,991	90%	68%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	1040.09	1035.34	\$9,300
58	coast redwood	21.5	\$13,367	90%	56%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	362.87	358.12	\$2,695
59	coast redwood	46	\$60,569	90%	62%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	1661.06	1656.31	\$13,519
60	coast redwood	40.4	\$46,759	90%	54%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	1281.25	1276.50	\$9,090
61	coast redwood	38.6	\$42,700	90%	74%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	1169.62	1164.87	\$11,375
62	coast redwood	22.3	\$14,367	90%	38%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	390.37	385.62	\$1,965
63	coast redwood	36.3	\$37,783	90%	68%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	1034.39	1029.64	\$9,249
96	coast live oak	8.2	\$2,572	90%	28%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	52.78	48.98	\$259
102	coast redwood	23.8	\$16,340	90%	62%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	444.66	439.90	\$3,647
103	coast redwood	16.2	\$7,663	90%	62%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	206.02	201.26	\$1,710
105	coast redwood	8.5	\$2,235	20%	28%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	56.72	51.97	\$50
106	coast redwood	26.6	\$20,368	90%	62%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	555.43	550.68	\$4,546
107	coast redwood	19.1	\$10,585	90%	62%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	286.38	281.63	\$2,363
108	coast redwood	20.8	\$12,521	90%	62%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	339.62	334.87	\$2,795
110	coast redwood	21.2	\$13,001	90%	52%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	352.81	348.06	\$2,434
111	coast redwood	22.7	\$14,880	90%	52%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	404.50	399.75	\$2,786



**1440 Center
Appraised Value of Preserved Trees**

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Trunk Formula Method

Tree #	Species	Diameter (inches)	Basic Tree Cost	Rating Percentages %					Nursery Group	Replacement Stock			Stock Price	Installation Cost	Installed Tree Cost	Appraised Trunk Area TAA (in ²)	Appraised Trunk Increase TAINCR	Appraised Value
				Species	Condition	Site	Contribution	Placement		Trunk Diameter (in)	Trunk Area (in ²)	Basic Price cost/trunk in ²						
112	coast redwood	27.3	\$21,445	90%	48%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	585.05	580.30	\$3,706
113	coast redwood	29.5	\$25,012	90%	72%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	683.15	678.40	\$6,483
118	Douglas fir	31.4	\$28,315	50%	42%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	773.98	769.23	\$2,378
119	coast redwood	23.2	\$15,536	90%	62%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	422.52	417.77	\$3,468
120	coast redwood	24.8	\$17,728	90%	42%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	482.81	478.06	\$2,680
125	coast redwood	10.5	\$3,320	90%	42%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	86.55	81.80	\$502
126	coast redwood	14.8	\$6,425	90%	48%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	171.95	167.20	\$1,110
131	Douglas fir	20.5	\$12,168	50%	54%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	329.90	325.15	\$1,314
132	coast redwood	15.8	\$7,298	90%	46%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	195.97	191.22	\$1,209
135	coast redwood	13.8	\$5,608	90%	42%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	149.50	144.74	\$848
136	coast redwood	12.4	\$4,561	90%	42%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	120.70	115.95	\$690
137	coast redwood	9.9	\$2,970	90%	42%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	76.94	72.19	\$449
138	tan bark oak	13.6	\$6,773	10%	42%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	145.19	141.39	\$114
139	California bay	11.2	\$7,759	60%	28%	30%	45%	45%	2	1.69	2.24	\$77.04	\$172.73	\$172.73	\$345.46	98.47	96.23	\$521
140	tan bark oak	12.1	\$5,398	10%	28%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	114.93	111.13	\$60
142	coast redwood	38.2	\$41,823	90%	76%	30%	30%	30%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	1145.50	1140.75	\$8,582
147	Douglas fir	54.75	\$85,731	50%	36%	30%	30%	30%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	2353.09	2348.34	\$4,629
150	coast redwood	32.5	\$30,321	90%	68%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	829.16	824.41	\$7,423



1440 Center Appraised Value of Preserved Trees

Dedicated to the Preservation of Trees

**James P. Allen
& Associates**

Trunk Formula Method

Tree #	Species	Diameter (inches)	Basic Tree Cost	Rating Percentages %					Nursery Group	Replacement Stock			Stock Price	Installation Cost	Installed Tree Cost	Appraised Trunk Area TAA (in ²)	Appraised Trunk Increase TAINCR	Appraised Value
				Species	Condition	Site	Contribution	Placement		Trunk Diameter (in)	Trunk Area (in ²)	Basic Price cost/trunk in ²						
151	coast redwood	57	\$92,908	90%	86%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	2550.47	2545.71	\$28,764
152	deodar cedar	16.5	\$9,888	70%	68%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	213.72	209.92	\$1,883
153	coast redwood	30.1	\$26,033	90%	56%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	711.22	706.47	\$5,248
154	coast redwood	55.7	\$88,726	90%	58%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	2435.45	2430.70	\$18,526
155	coast redwood	74.5	\$158,591	90%	78%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	4356.95	4352.20	\$44,532
156	coast redwood	50.3	\$72,388	90%	78%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	1986.12	1981.37	\$20,327
158	coast redwood	24.8	\$17,728	90%	62%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	482.81	478.06	\$3,957
159	coast redwood	21	\$12,760	90%	48%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	346.19	341.43	\$2,205
160	coast redwood	16.2	\$7,663	90%	48%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	206.02	201.26	\$1,324
163	Douglas fir	36.4	\$37,991	50%	36%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	1040.09	1035.34	\$2,735
164	coast redwood	27.7	\$22,073	90%	62%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	602.32	597.57	\$4,927
167	California bay	8.1	\$4,141	60%	12%	30%	45%	45%	2	1.69	2.24	\$77.04	\$172.73	\$172.73	\$345.46	51.50	49.26	\$119
168	Douglas fir	14.7	\$6,341	50%	12%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	169.63	164.88	\$152
169	Douglas fir	30.8	\$27,249	50%	32%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	744.68	739.93	\$1,744
170	Douglas fir	19	\$10,477	50%	38%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	283.39	278.63	\$796
171	Douglas fir	23.3	\$15,668	50%	46%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	426.17	421.42	\$1,441
173	Douglas fir	17	\$8,422	50%	38%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	226.87	222.11	\$640
175	Douglas fir	27.9	\$22,391	50%	46%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	611.05	606.30	\$2,060



1440 Center Appraised Value of Preserved Trees

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Trunk Formula Method

Tree #	Species	Diameter (inches)	Basic Tree Cost	Rating Percentages %					Nursery Group	Replacement Stock			Stock Price	Installation Cost	Installed Tree Cost	Appraised Trunk Area TAA (in ²)	Appraised Trunk Increase TAINCR	Appraised Value
				Species	Condition	Site	Contribution	Placement		Trunk Diameter (in)	Trunk Area (in ²)	Basic Price cost/trunk in ²						
176	coast live oak	13.7	\$6,871	90%	32%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	147.34	143.54	\$792
177	Douglas fir	35.5	\$36,144	50%	42%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	989.30	984.55	\$3,036
178	coast live oak	13.6	\$6,773	90%	32%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	145.19	141.39	\$780
179	coast live oak	8.6	\$2,812	90%	28%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	58.06	54.26	\$283
180	coast live oak	13.8	\$6,969	90%	36%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	149.50	145.70	\$903
181	coast live oak	12.1	\$5,398	90%	36%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	114.93	111.13	\$700
189	coast redwood	43	\$52,948	90%	92%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	1451.47	1446.71	\$17,536
193	coast redwood	38.5	\$42,480	90%	92%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	1163.57	1158.82	\$14,069
201	Douglas fir	22.7	\$14,880	50%	62%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	404.50	399.75	\$1,845
202	Douglas fir	18	\$9,421	50%	62%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	254.34	249.59	\$1,168
204	Douglas fir	18.4	\$9,836	50%	62%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	265.77	261.02	\$1,220
206	Douglas fir	20.7	\$12,403	50%	48%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	336.36	331.61	\$1,191
207	Douglas fir	23.5	\$15,935	50%	12%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	433.52	428.77	\$382
208	Douglas fir	19.5	\$11,026	50%	12%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	298.50	293.75	\$265
209	Douglas fir	33.7	\$32,588	50%	46%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	891.52	886.77	\$2,998
210	Monterey cypress	8.1	\$4,141	50%	12%	30%	45%	45%	2	1.69	2.24	\$77.04	\$172.73	\$172.73	\$345.46	51.50	49.26	\$99
211	coast live oak	38.2	\$52,247	90%	52%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	1145.50	1141.70	\$9,781
212	coast live oak	12.5	\$5,749	90%	32%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	122.66	118.86	\$662



1440 Center Appraised Value of Preserved Trees

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Associates

Trunk Formula Method

Tree #	Species	Diameter (inches)	Basic Tree Cost	Rating Percentages %					Nursery Group	Replacement Stock			Stock Price	Installation Cost	Installed Tree Cost	Appraised Trunk Area TAA (in ²)	Appraised Trunk Increase TAINCR	Appraised Value
				Species	Condition	Site	Contribution	Placement		Trunk Diameter (in)	Trunk Area (in ²)	Basic Price cost/trunk in ²						
215	coast live oak	24.5	\$21,593	90%	58%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	471.20	467.40	\$4,509
216	coast live oak	19.4	\$13,604	90%	42%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	295.44	291.64	\$2,057
218	madrone	15.5	\$14,702	50%	12%	30%	45%	45%	2	1.69	2.24	\$77.04	\$172.73	\$172.73	\$345.46	188.60	186.35	\$353
223	coast live oak	12.7	\$5,929	90%	28%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	126.61	122.81	\$598
227	coast live oak	21.3	\$16,363	90%	52%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	356.15	352.35	\$3,063
230	coast live oak	17.2	\$10,730	90%	32%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	232.23	228.44	\$1,236
231	coast redwood	49.2	\$69,264	90%	92%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	1900.20	1895.45	\$22,940
232	coast live oak	42	\$63,123	90%	42%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	1384.74	1380.94	\$9,544
234	coast live oak	12.6	\$5,838	90%	32%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	124.63	120.83	\$673
236	coast live oak	12.8	\$6,020	90%	24%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	128.61	124.82	\$520
236a.	coast live oak	24.2	\$21,072	90%	24%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	459.73	455.93	\$1,821
237	coast live oak	13	\$6,204	90%	24%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	132.67	128.87	\$536
238	coast live oak	19.5	\$13,742	90%	32%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	298.50	294.70	\$1,583
239	coast live oak	21.2	\$16,212	90%	46%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	352.81	349.01	\$2,685
241	coast live oak	11.8	\$5,142	90%	24%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	109.30	105.50	\$444
242	coast live oak	14.7	\$7,884	90%	24%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	169.63	165.83	\$681
243	coast live oak	17.3	\$10,853	90%	24%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	234.94	231.14	\$938
244	coast live oak	19.7	\$14,022	90%	24%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	304.65	300.85	\$1,212



**1440 Center
Appraised Value of Preserved Trees**

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& Associates**

Trunk Formula Method

Tree #	Species	Diameter (inches)	Basic Tree Cost	Rating Percentages %					Nursery Group	Replacement Stock			Stock Price	Installation Cost	Installed Tree Cost	Appraised Trunk Area TAA (in ²)	Appraised Trunk Increase TAINCR	Appraised Value
				Species	Condition	Site	Contribution	Placement		Trunk Diameter (in)	Trunk Area (in ²)	Basic Price cost/trunk in ²						
246	coast live oak	9.5	\$3,393	90%	12%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	70.85	67.05	\$147
247	Douglas fir	44.1	\$55,683	50%	42%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	1526.68	1521.93	\$4,677
250	coast live oak	8.5	\$2,751	90%	12%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	56.72	52.92	\$119
251	coast live oak	14.1	\$7,267	90%	12%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	156.07	152.27	\$314
252	coast live oak	28.5	\$29,159	90%	24%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	637.62	633.82	\$2,519
253	coast live oak	18.5	\$12,386	90%	32%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	268.67	264.87	\$1,427
255	California bay	21.3	\$27,610	60%	24%	30%	45%	45%	2	1.69	2.24	\$77.04	\$172.73	\$172.73	\$345.46	356.15	353.90	\$1,590
256	coast live oak	19.6	\$13,882	90%	24%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	301.57	297.77	\$1,199
257	coast live oak	28.3	\$28,753	90%	46%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	628.70	624.90	\$4,761
258	coast live oak	8	\$2,457	90%	12%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	50.24	46.44	\$106
259	coast live oak	13	\$6,204	90%	24%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	132.67	128.87	\$536
260	coast live oak	11.1	\$4,570	90%	32%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	96.72	92.92	\$526
261	coast live oak	13.8	\$6,969	90%	24%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	149.50	145.70	\$602
262	coast live oak	11.1	\$4,570	90%	12%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	96.72	92.92	\$197
263	maple	42.4	\$64,328	30%	28%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	1411.24	1407.44	\$2,161
264	Douglas fir	16.7	\$8,133	50%	42%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	218.93	214.18	\$683
265	Douglas fir	31.2	\$27,957	50%	48%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	764.15	759.40	\$2,684
266	coast live oak	9.3	\$3,259	90%	12%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	67.89	64.10	\$141



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Trunk Formula Method

Tree #	Species	Diameter (inches)	Basic Tree Cost	Rating Percentages %					Nursery Group	Replacement Stock			Stock Price	Installation Cost	Installed Tree Cost	Appraised Trunk Area TAA (in ²)	Appraised Trunk Increase TAINCR	Appraised Value
				Species	Condition	Site	Contribution	Placement		Trunk Diameter (in)	Trunk Area (in ²)	Basic Price cost/trunk in ²						
268	coast live oak	15.4	\$8,636	90%	24%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	186.17	182.37	\$746
269	California bay	17.8	\$19,334	60%	24%	30%	45%	45%	2	1.69	2.24	\$77.04	\$172.73	\$172.73	\$345.46	248.72	246.48	\$1,114
270	coast redwood	12.5	\$4,633	90%	42%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	122.66	117.91	\$701
271	coast redwood	13.1	\$5,071	90%	42%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	134.71	129.96	\$767
272	coast redwood	15.5	\$7,030	90%	42%	30%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	188.60	183.85	\$1,063
274	coast live oak	20	\$14,447	90%	24%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	314.00	310.20	\$1,248
275	coast live oak	16.3	\$9,654	90%	36%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	208.57	204.77	\$1,251
277	Tecate cypress	14.2	\$12,367	50%	12%	20%	45%	45%	2	1.69	2.24	\$77.04	\$172.73	\$172.73	\$345.46	158.29	156.05	\$272
282	coast live oak	11.5	\$4,892	90%	28%	20%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	103.82	100.02	\$452
283	coast live oak	11.7	\$5,058	90%	24%	20%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	107.46	103.66	\$401
284	coast live oak	10.8	\$4,335	90%	24%	20%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	91.56	87.76	\$343
289	coast live oak	17.4	\$10,977	90%	24%	20%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	237.67	233.87	\$869
290	coast live oak	19.7	\$14,022	90%	32%	20%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	304.65	300.85	\$1,481
292	coast live oak	9.5	\$3,393	90%	12%	20%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	70.85	67.05	\$134
294	California bay	15.5	\$14,702	60%	12%	20%	45%	45%	2	1.69	2.24	\$77.04	\$172.73	\$172.73	\$345.46	188.60	186.35	\$388
295	coast live oak	17.3	\$10,853	90%	42%	20%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	234.94	231.14	\$1,504
296	willow	12.3	\$4,491	50%	12%	20%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	118.76	114.01	\$99
297	California bay	12.8	\$10,081	60%	12%	20%	45%	45%	2	1.69	2.24	\$77.04	\$172.73	\$172.73	\$345.46	128.61	126.37	\$266



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& Associates

Trunk Formula Method

Tree #	Species	Diameter (inches)	Basic Tree Cost	Rating Percentages %					Nursery Group	Replacement Stock			Stock Price	Installation Cost	Installed Tree Cost	Appraised Trunk Area TAA (in ²)	Appraised Trunk Increase TAINCR	Appraised Value
				Species	Condition	Site	Contribution	Placement		Trunk Diameter (in)	Trunk Area (in ²)	Basic Price cost/trunk in ²						
298	coast live oak	11.3	\$4,729	90%	32%	20%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	100.24	96.44	\$499
303	coast live oak	45.6	\$74,377	90%	46%	20%	30%	30%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	1632.30	1628.50	\$8,211
304	Douglas fir	39.3	\$44,256	50%	32%	20%	30%	30%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	1212.42	1207.67	\$1,888
305	coast live oak	9.8	\$3,600	90%	12%	20%	30%	30%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	75.39	71.59	\$104
306	Douglas fir	12.1	\$4,352	50%	12%	20%	30%	30%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	114.93	110.18	\$70
307	Douglas fir	11	\$3,626	50%	12%	20%	30%	30%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	94.99	90.23	\$58
308	Douglas fir	29.4	\$24,844	50%	32%	20%	30%	30%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	678.52	673.77	\$1,060
311	coast live oak	12.8	\$6,020	90%	12%	20%	30%	30%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	128.61	124.82	\$173
312	coast live oak	15.6	\$8,857	90%	26%	20%	30%	30%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	191.04	187.24	\$553
313	Douglas fir	27.9	\$22,391	50%	32%	20%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	611.05	606.30	\$1,314
314	Douglas fir	9.5	\$2,749	50%	0%	20%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	70.85	66.10	\$0
315	coast live oak	25.3	\$23,015	90%	24%	20%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	502.47	498.67	\$1,823
316	coast live oak	9.8	\$3,600	90%	0%	20%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	75.39	71.59	\$0
320	Douglas fir	29.4	\$24,844	50%	32%	20%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	678.52	673.77	\$1,458
322	Douglas fir	18.9	\$10,368	50%	24%	20%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	280.41	275.66	\$456
326	Douglas fir	12.2	\$4,421	50%	32%	20%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	116.84	112.09	\$259
339	coast live oak	16.5	\$9,888	90%	44%	20%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	213.72	209.92	\$1,436
340	Douglas fir	22.1	\$14,113	50%	42%	20%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	383.40	378.65	\$1,087



1440 Center Appraised Value of Preserved Trees

Dedicated to the Preservation of Trees

James P. Allen
Associates

Trunk Formula Method

Tree #	Species	Diameter (inches)	Basic Tree Cost	Rating Percentages %					Nursery Group	Replacement Stock			Stock Price	Installation Cost	Installed Tree Cost	Appraised Trunk Area TAA (in ²)	Appraised Trunk Increase TAINCR	Appraised Value
				Species	Condition	Site	Contribution	Placement		Trunk Diameter (in)	Trunk Area (in ²)	Basic Price cost/trunk in ²						
348	Douglas fir	30.1	\$26,033	50%	32%	20%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	711.22	706.47	\$1,527
363	coast live oak	19.2	\$13,328	90%	28%	10%	10%	10%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	289.38	285.58	\$336
366	coast live oak	10.6	\$4,182	90%	32%	10%	10%	10%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	88.20	84.40	\$120
375	coast live oak	13.3	\$6,485	90%	24%	10%	10%	10%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	138.86	135.06	\$140
377	Douglas fir	15.8	\$7,298	50%	22%	10%	10%	10%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	195.97	191.22	\$80
379	Douglas fir	19.5	\$11,026	50%	24%	10%	10%	10%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	298.50	293.75	\$132
401	Douglas fir	17.6	\$9,014	50%	32%	20%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	243.16	238.41	\$529
402	Douglas fir	11.5	\$3,947	50%	28%	20%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	103.82	99.07	\$203
403	Douglas fir	11.5	\$3,947	50%	28%	20%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	103.82	99.07	\$203
404	Douglas fir	25	\$18,012	50%	32%	20%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	490.63	485.87	\$1,057
408	Douglas fir	12.6	\$4,704	50%	32%	20%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	124.63	119.88	\$276
409	coast live oak	20.2	\$14,734	90%	46%	20%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	320.31	316.51	\$2,237
410	Douglas fir	31.6	\$28,674	50%	32%	20%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	783.87	779.12	\$1,682
422	Douglas fir	26.7	\$20,520	50%	24%	20%	45%	45%	4	2.46	4.75	\$36.36	\$172.73	\$172.73	\$345.46	559.62	554.87	\$903
436	coast live oak	10.7	\$4,258	90%	24%	20%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	89.87	86.08	\$337
482	coast live oak	19.1	\$13,191	90%	36%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	286.38	282.58	\$1,710
484	coast live oak	9.4	\$3,326	90%	36%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	69.36	65.56	\$431
485	coast live oak	10.8	\$4,335	90%	36%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	91.56	87.76	\$562



**1440 Center
Appraised Value of Preserved Trees**

Dedicated to the Preservation of Trees

**James P. Allen
& Associates**

Trunk Formula Method

Tree #	Species	Diameter (inches)	Basic Tree Cost	Rating Percentages %					Nursery Group	Replacement Stock			Stock Price	Installation Cost	Installed Tree Cost	Appraised Trunk Area TAA (in ²)	Appraised Trunk Increase TAINCR	Appraised Value
				Species	Condition	Site	Contribution	Placement		Trunk Diameter (in)	Trunk Area (in ²)	Basic Price cost/trunk in ²						
486	coast live oak	10.2	\$3,886	90%	64%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	81.67	77.87	\$895
487	coast live oak	9.9	\$3,670	90%	64%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	76.94	73.14	\$846
488	coast live oak	10.7	\$4,258	90%	64%	30%	45%	45%	3	2.2	3.8	\$45.46	\$172.73	\$172.73	\$345.46	89.87	86.08	\$981

TOTAL VALUE
OF
PRESERVED
TREES \$866,305



1440 CENTER TREE RESOURCE INVENTORY CONSTRUCTION IMPACT ASSESSMENT

Dedicated to the Preservation of Trees

James P. Allen
Associates

TREE/ TREE GROUP #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY for PRESERVATION	Critical Root Zone	IMPACTS LEVEL/ Description	•OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "PROTECTED" CRITERIA Yes/No
1	coast live oak	Triple trunk 15.8, 16.2, 17.3	Fair	Poor	Poor	12	NONE KNOWN	<ul style="list-style-type: none"> • Poor trunk-stem attachment Decayed wound in lower trunk Trunks bow to North and West • Preserve and Protect • Yes
2	coast live oak	Double Trunk 10.2, 11	Fair	Poor	Poor	10	NONE KNOWN	<ul style="list-style-type: none"> • Poor trunk-stem attachment Decayed pruning wounds in basal area • Preserve and Protect • Yes
3	coast redwood	Double Trunk 23.6, 19.2	Fair	Fair	Good	14	NONE KNOWN	<ul style="list-style-type: none"> • Poor trunk-stem attachment Trunk girdled by power pole support cable Trunks bow to South and West Suppressed to East Dead branches • Preserve and Protect Remove dead branches • Yes
4	coast redwood	28.7	Fair	Poor	Fair	14	NONE KNOWN	<ul style="list-style-type: none"> • Trunk bows/leans slightly to North Suppressed to South • Preserve and Protect • Yes



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TREE/ TREE GROUP #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY for PRESERVATION	Critical Root Zone	IMPACTS LEVEL/ Description	•OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "PROTECTED" CRITERIA Yes/No
5	coast redwood	30.2	Fair	Fair	Fair	14	MODERATE/ Proximity to Proposed Grading and Demolition	<ul style="list-style-type: none"> • Suppressed to South Bows to East Dead branches • Preserve and Protect Special Treatment Area • Yes
6	coast redwood	Triple Trunk 11.2, 10.8, 24	Fair	Poor	Fair	12	MODERATE/ Proximity to Proposed Demolition	<ul style="list-style-type: none"> • Poor trunk-stem attachment Larger trunk leans to South • Preserve and Protect Special Treatment Area • Yes
7	coast redwood	10.2	Fair	Poor	Poor	8	MODERATE/ Proximity to Proposed Grading and Demolition	<ul style="list-style-type: none"> • Crooked trunk • Preserve and Protect Special Treatment Area • Yes
8	California bay	Triple Trunk 6.2, 4.2, 4.1	Poor	Poor	Poor	8	NONE KNOWN	<ul style="list-style-type: none"> • Poor trunk-stem attachment Decayed pruning wounds • Remove due to Condition • No
9	coast redwood	26.1	Fair	Fair	Fair	14	NONE KNOWN	<ul style="list-style-type: none"> • Electrical service drop attached at 13 ft above grade • Preserve and protect • Yes



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TREE/ TREE GROUP #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY for PRESERVATION	Critical Root Zone	IMPACTS LEVEL/ Description	•OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "PROTECTED" CRITERIA Yes/No
10	coast redwood	24	Fair	Fair	Fair	12	NONE KNOWN	<ul style="list-style-type: none"> • Suppressed to North and East Leans slightly to South towards residence hall • Preserve and Protect • Yes
11	California bay	Double Trunk 9.2, 4	Fair	Poor	Poor	8	NONE KNOWN	<ul style="list-style-type: none"> • Grows at top of steep bank Leans dramatically over music building • Remove due to Condition • Yes
12	California bay	8.1	Fair	Poor	Poor	8	NONE KNOWN	<ul style="list-style-type: none"> • Smaller suppressed tree with bowed trunk • Remove due to Condition • Yes
13	California bay	Triple Trunk 7.2, 10.8, 11.3	Fair	Poor	Poor	10	NONE KNOWN	<ul style="list-style-type: none"> • Poor trunk-stem attachment Two larger trunks lean towards residence hall • Remove due to condition • Yes
14	Douglas fir	22.4	Fair	Poor	Poor	16	NONE KNOWN	<ul style="list-style-type: none"> • Large diameter exposed surface roots 2 inch girdling root on East side Trunk bows to East Grows from steep slope above music building Large diameter dead branches • Remove due to Condition • Yes



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TREE/ TREE GROUP #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY for PRESERVATION	Critical Root Zone	IMPACTS LEVEL/ Description	•OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "PROTECTED" CRITERIA Yes/No
15	coast redwood	31.1	Good	Fair	Good	14	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Well-formed tree • Slight suppression on South side • Preserve and Protect Special Treatment Area • Yes
16	coast redwood	Double Trunk 13.2, 31.6	Good	Fair	Good	14	LOW/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Grows in narrow planting area between sidewalk and building • Smaller trunk leans to the East • Preserve and Protect Special Treatment Area • Yes
17	coast redwood	25.7	Good	Fair	Good	14	NONE KNOWN	<ul style="list-style-type: none"> • Well-formed tree • Slight suppression on South side • Preserve and Protect Special treatment area • Yes
18	coast redwood	33.5	Fair	Poor	Fair	12	NONE KNOWN	<ul style="list-style-type: none"> • Divides into two trunks near grade • Poor trunk-stem attachment • Preserve and Protect Special Treatment Area • Install one simple direct cable • Yes



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TREE/ TREE GROUP #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY for PRESERVATION	Critical Root Zone	IMPACTS LEVEL/ Description	•OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "PROTECTED" CRITERIA Yes/No
19	coast redwood	Quadruple Trunk 17, 16.8, 28.7, 64.8	Fair	Fair	Good	22	NONE KNOWN	<ul style="list-style-type: none"> • Largest trunk has old growth characteristics Probable decay at attachment points Poorly attached upright lateral at 80 ft. on larger trunk Poorly attached secondary trunk at 80 ft. on 2nd large Largest trunk apex removed at 100 ft, regrowth is poor • Preserve and Protect Special treatment area Define and implement stabilization plan • Yes
20	coast redwood	40	Good	Good	Good	18	NONE KNOWN	<ul style="list-style-type: none"> • Well-formed tree with stout trunk • Preserve and Protect • Yes
20a	coast redwood	Grove of 17 Trunks 14.4, 13.8, 33.2, 9.6, 13.9, 33.2, 60.5, 16.5, 12.3, 9.2, 7.8, 22.9, 15.8, 48.2, 36.3, 18.2, 7.2	Good	Fair	Good	20	MODERATE/ Proximity to Proposed Parking Lot Construction	<ul style="list-style-type: none"> • Fairy ring of seventeen trees Fire scar in basal area of larger trunks Cathedral-type formation Canopy extends 54 ft from wall • Preserve and Protect Remove dead branches • Yes
21	coast redwood	20.1	Fair	Fair	Good	12	NONE KNOWN	<ul style="list-style-type: none"> • Lower branching removed to height of 40 ft • Preserve and Protect • Yes



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TREE/ TREE GROUP #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY for PRESERVATION	Critical Root Zone	IMPACTS LEVEL/ Description	•OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "PROTECTED" CRITERIA Yes/No
22	coast redwood	Double Trunk 53.5, 33.2	Good	Fair	Good	18	NONE KNOWN	<ul style="list-style-type: none"> • Stately double trunk tree growing near stairway to the • Preserve and Protect • Yes
23	California bay	Triple Trunk 4, 5, 6	Fair	Poor	Poor	6	NONE KNOWN	<ul style="list-style-type: none"> • Sprout growth developing from decayed parent stump • Preserve and Protect • No
24	coast live oak	14.8	Fair	Poor	Poor	12	NONE KNOWN	<ul style="list-style-type: none"> • Decayed column in lower trunk • Trunk leans to West • Decayed pruning and mechanical wounds • Preserve and Protect • Monitor stability • Yes
25	Douglas fir	46.2	Poor	Poor	Poor	24	HIGH/ Within Grading Limits	<ul style="list-style-type: none"> • Leans to West • Large diameter dead and dying branches • Low vigor • Mortality spiral • HIGH FAILURE POTENTIAL • Remove due to Construction Impacts • Yes



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TREE/ TREE GROUP #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY for PRESERVATION	Critical Root Zone	IMPACTS LEVEL/ Description	•OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "PROTECTED" CRITERIA Yes/No
26	coast live oak	16.2	Fair	Poor	Poor	13	NONE KNOWN	<ul style="list-style-type: none"> • Trunk leans to North Decayed pruning wound sites • Preserve and Protect Monitor stability • Yes
27	coast redwood	Double Trunk 21.8, 19.2	Good	Poor	Poor	16	NONE KNOWN	<ul style="list-style-type: none"> • Two trunks develop from decayed parent stump Poor trunk attachments Codominant poorly attached stems at several positic Risk of trunk or stem failure • Preserve and Protect Simple direct cable to support weak attachments • Yes
28	coast redwood	25.3	Fair	Good	Good	16	NONE KNOWN	<ul style="list-style-type: none"> • Excellent form and structure Minor apical dieback • Preserve and Protect • Yes
29	coast redwood	Double Trunk 28.5, 92.8	Good	Fair	Good	26	HIGH/ Within Grading Limits	<ul style="list-style-type: none"> • Spectacular tree • Preserve and Protect Special Treatment Area Reduce Grading Limits • Yes



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TREE/ TREE GROUP #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY for PRESERVATION	Critical Root Zone	IMPACTS LEVEL/ Description	•OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "PROTECTED" CRITERIA Yes/No
30	coast redwood	55.7	Fair	Poor	Poor	28	HIGH/ Within Grading Limits	<ul style="list-style-type: none"> • Poorly attached sprout growth developing from previv topped trunk • Two trunks have failed recently • HIGH FAILURE POTENTIAL • Remove due to Construction Impacts • Yes
31	coast redwood	65.5	Good	Fair	Good	26	HIGH/ Proximity to Proposed Road and Stairway Construction	<ul style="list-style-type: none"> • Root-friendly, structured fill was applied for road cons • Leans slightly to North and West • Previous branch failure • Preserve and Protect • Decrease Grading Limits • Special Treatment Area • Yes
32	coast redwood	31.7	Good	Good	Good	22	MODERATE/ Proximity to Proposed Road Construction	<ul style="list-style-type: none"> • Excellent form and structure • Preserve and Protect • Special Treatment Area • Preconstruction root pruning • Yes



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TREE/ TREE GROUP #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY for PRESERVATION	Critical Root Zone	IMPACTS LEVEL/ Description	•OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "PROTECTED" CRITERIA Yes/No
33	coast redwood	Quadruple Trunk 26, 37, 36, 38	Poor	Fair	Fair	26	MODERATE/ Proximity to Proposed Road and Stairway Construction	<ul style="list-style-type: none"> • Fill over buttress Pavement drain, retaining wall and stairs surround tree • Large diameter dead branches • Preserve and Protect Special Treatment Area • Remove dead branches • Yes
34	coast redwood	5 Trunks 17, 27, 15, 34, 15	Fair	Fair	Fair	24	MODERATE/ Proximity to Proposed Road Construction	<ul style="list-style-type: none"> • Fill over buttress roots Pavement and assorted debris surround this tree • Large diameter dead branches • Preserve and Protect Special Treatment Area • Remove dead branches • Yes
35	Italian cypress	9.6 @ 3 ft above grade	Fair	Fair	Fair	8	HIGH/ Within Grading Limits	<ul style="list-style-type: none"> • Tall, narrow, column form • Remove due to Construction Impacts • Yes



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TREE/ TREE GROUP #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY for PRESERVATION	Critical Root Zone	IMPACTS LEVEL/ Description	•OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "PROTECTED" CRITERIA Yes/No
36	coast redwood	Triple Trunk 24.5, 18.5, 37.2	Good	Fair	Good	24	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Component of a small grove to the East of Redwood Auditorium entrance • Fire scar on South side of largest trunk • Large diameter dead branches • Preserve and Protect • Special Treatment Area • Remove dead branches • Yes
37	coast redwood	34.2	Good	Fair	Good	18	NONE KNOWN	<ul style="list-style-type: none"> • Component of a small grove to the East of Redwood Auditorium entrance • Suppressed to South • Large diameter dead branches • Preserve and Protect • Remove dead branches • Yes
38	coast redwood	36.5	Good	Poor	Good	18	NONE KNOWN	<ul style="list-style-type: none"> • Component of a small grove to the East of Redwood Auditorium entrance • Poor trunk-stem attachment • Divides into two trunks at 8 ft above grade • Suppressed to East and North • Preserve and Protect • One simple direct cable • Yes



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TREE/ TREE GROUP #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY for PRESERVATION	Critical Root Zone	IMPACTS LEVEL/ Description	•OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "PROTECTED" CRITERIA Yes/No
39	coast redwood	19.8	Fair	Poor	Fair	12	NONE KNOWN	<ul style="list-style-type: none"> • Component of a small grove to the East of Redwood Auditorium entrance • Smaller suppressed tree • Preserve and Protect • Yes
40	coast redwood	Double Trunk 29.8, 32.2	Fair	Poor	Fair	18	NONE KNOWN	<ul style="list-style-type: none"> • Component of a small grove to the East of Redwood Auditorium entrance • Poor trunk-stem attachment • Large diameter dead, dying and broken branches • Preserve and Protect • Remove dead branches • One simple direct cable • Yes
41	coast redwood	9.4	Fair	Fair	Fair	8	NONE KNOWN	<ul style="list-style-type: none"> • Component of a small grove to the East of Redwood Auditorium entrance • Mechanical wound on South side of lower trunk • Small suppressed tree • Preserve and Protect • Yes
42	coast redwood	10.7	Fair	Fair	Fair	8	NONE KNOWN	<ul style="list-style-type: none"> • Component of a small grove to the East of Redwood Auditorium entrance • Small suppressed tree • Preserve and Protect • Yes



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TREE/ TREE GROUP #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY for PRESERVATION	Critical Root Zone	IMPACTS LEVEL/ Description	•OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "PROTECTED" CRITERIA Yes/No
43	coast redwood	40.6	Fair	Fair	Fair	22	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Component of a small grove to the East of Redwood Auditorium entrance Suppressed to North Large diameter dead branches • Preserve and Protect Special Treatment Area Remove dead branches • Yes
44	coast redwood	22.6	Fair	Fair	Fair	12	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Component of a small grove to the East of Redwood Auditorium entrance Dead branches • Preserve and Protect Special Treatment Area Remove dead branches • Yes
45	coast redwood	31.5	Fair	Fair	Fair	18	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Component of a small grove to the East of Redwood Auditorium entrance Leans slightly to the North Large diameter dead branches • Preserve and Protect Special Treatment Area Remove dead branches • Yes



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TREE/ TREE GROUP #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY for PRESERVATION	Critical Root Zone	IMPACTS LEVEL/ Description	•OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "PROTECTED" CRITERIA Yes/No
46	coast live oak	27.1 @ 2 ft above grade	Fair	Poor	Poor	16	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Poor trunk-stem attachment • Divides into four secondary trunks at 6-8 ft above grade • Canopy swoops to West over gym • Preserve and Protect • Special Treatment Area • Monitor stability • Yes
46a	coast live oak	6.4	Fair	Poor	Poor	8	HIGH/ Proximity to Proposed Grading Limits/Building Footprint	<ul style="list-style-type: none"> • Tall suppressed young tree • Remove due to Construction Impacts • No
46b	big leaf maple	Four Trunks 23.2 @ 6 in above grade	Fair	Poor	Poor	14	HIGH/ Proximity to Proposed Grading Limits/Building Footprint	<ul style="list-style-type: none"> • Divides into four trunks at grade • Poor trunk-stem attachment • Two trunks are intertwined • Decayed wound sites • Dead and dying broken branches • Remove due to Construction Impacts • Yes
46c	big leaf maple	14.7	Fair	Poor	Poor	16	HIGH/ Proximity to Proposed Grading Limits/Building Footprint	<ul style="list-style-type: none"> • Divides at eight feet above grade • Poor trunk-stem attachment • Remove due to Construction Impacts • Yes



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46d	big leaf maple	6.7	Fair	Poor	Poor	12	HIGH/ Proximity to Proposed Grading Limits/Building Footprint	<ul style="list-style-type: none"> • One trunk has been removed, remaining trunk leans to West • Remove due to Construction Impacts • No
46e	big leaf maple	12.6	Fair	Poor	Poor	14	HIGH/ Proximity to Proposed Grading Limits/Building Footprint	<ul style="list-style-type: none"> • Divides at twelve feet above grade Large diameter dead branches Suppressed to East • Remove due to Construction Impacts • Yes
46f	big leaf maple	11.3	Fair	Poor	Poor	14	HIGH/ Proximity to Proposed Grading Limits/Building Footprint	<ul style="list-style-type: none"> • Asymmetrical canopy Low live crown ratio Canopy develops to West • Remove due to Construction Impacts • Yes
46g	coast redwood	Grove of 19 Trunks 46.9, 55.9, 26.4, 43.2, 61.4, 21.2, 35.4, 75.3, 6.4, 47.8, 20.4, 7.4, 50.8, 81.4, 45.3, 29.6, 7.9, 19.2, 9.2	Good	Good	Good	20	NONE KNOWN	<ul style="list-style-type: none"> • Fairy ring of nineteen trunks Cathedral-type formation Significant fire scars in lower basal area Large diameter dead branches • Preserve and Protect Remove dead branches • Yes



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46h	tan bark oak	10.4	Poor	Poor	Poor	12	HIGH/ Proximity to Proposed Grading Limits/Building Footprint	<ul style="list-style-type: none"> • Dated Sudden Oak Death infection in lower trunk Leans slightly to West • Remove due to Construction Impacts • Yes
46i	tan bark oak	12.9	Poor	Poor	Poor	12	HIGH/ Proximity to Proposed Grading Limits/Building Footprint	<ul style="list-style-type: none"> • Dated Sudden Oak Death infection Trunk leans to West Canopy suppressed to East • Remove due to Construction Impacts • Yes
46j	coast redwood	32.4	Good	Fair	Good	18	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Lower branching removed to height of forty feet • Preserve and Protect Special Treatment Area • Yes
46k	coast redwood	27.7	Good	Fair	Good	18	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Lower branching removed to height of forty feet • Preserve and Protect Special Treatment Area • Yes



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46l	coast redwood	36.9	Good	Fair	Good	18	NONE KNOWN	<ul style="list-style-type: none"> • Grows from edge of drainage corridor Trunk bows slightly to East Large diameter dead branches • Preserve and Protect Remove dead branches • Yes
46m	coast redwood	21.2	Good	Fair	Good	18	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Lower branching removed to height of forty feet • Preserve and Protect Special Treatment Area • Yes
46n	coast redwood	24.8	Good	Fair	Good	18	NONE KNOWN	<ul style="list-style-type: none"> • Lower branching removed to height of forty feet • Preserve and Protect • Yes
46o	coast redwood	40.1	Good	Fair	Good	18	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Grows from edge of drainage channel Slight lean to North Canopy suppressed to West Dead branches • Preserve and Protect Remove dead branches • Yes



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46p	coast redwood	30.2	Good	Fair	Good	18	NONE KNOWN	<ul style="list-style-type: none"> • Lower branching removed to height of forty feet • Preserve and Protect • Yes
46q	coast redwood	19.8	Good	Fair	Good	18	NONE KNOWN	<ul style="list-style-type: none"> • Lower branching removed to height of forty feet • Preserve and Protect • Yes
46r	coast redwood	33.4	Good	Fair	Good	18	NONE KNOWN	<ul style="list-style-type: none"> • Lower branching removed to height of forty feet • Preserve and Protect • Yes
46s	coast redwood	14	Fair	Fair	Good	10	NONE KNOWN	<ul style="list-style-type: none"> • Grows from edge of drainage channel Slightly bowed trunk Small diameter dead branches • Preserve and Protect Remove dead branches • Yes
46t	tan bark oak	Double Trunk 13.2, 13	Fair	Poor	Poor	18	NONE KNOWN	<ul style="list-style-type: none"> • Grows from edge of drainage channel Severely undermined supporting root structure Large cavity in basal area Decayed mechanical wound on Southwest side of lov Unstable, HIGH FAILURE POTENTIAL • Remove due to Condition • Yes



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46u	big leaf maple	9.6	Fair	Poor	Poor	12	NONE KNOWN	<ul style="list-style-type: none"> • Trunk leans to South and West Asymmetrical canopy • Preserve and Protect • Yes
46v	California bay	Double Trunk 8, 6	Fair	Poor	Poor	12	NONE KNOWN	<ul style="list-style-type: none"> • Tall suppressed tree One trunk bows to South • Preserve and Protect • Yes
46w	big leaf maple	Four Trunks 6.8, 5.5, 7.2, 7.5	Fair	Poor	Poor	12	NONE KNOWN	<ul style="list-style-type: none"> • Poor trunk-stem attachment • Preserve and Protect • No
46x	coast redwood	Grove of 6 Trunks 5.5, 37.2, 27, 11.7, 39.6, 78.4	Good	Fair	Good	20	NONE KNOWN	<ul style="list-style-type: none"> • Small fairy ring of six Significant fire scar on largest trunk • Preserve and Protect • Yes
46y	coast redwood	10.3	Fair	Fair	Good	8	NONE KNOWN	<ul style="list-style-type: none"> • Well-formed young tree Slightly suppressed to East • Preserve and Protect • Yes



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46z	big leaf maple	14	Fair	Poor	Fair	16	NONE KNOWN	<ul style="list-style-type: none"> • Grows from steep slope • Cankers on scaffold branches • Canopy swoop to West • Dead and broken branches • Preserve and Protect • Yes
47	tan bark oak	12.8	Poor	Poor	Poor	12	HIGH/ Proximity to Proposed Grading Limits/Building Footprint	<ul style="list-style-type: none"> • Trunk bows to South • Remove due to Construction Impacts • Yes
48	Douglas fir	26.8	Fair	Poor	Poor	22	HIGH/ Proximity to Proposed Grading Limits/Building Footprint	<ul style="list-style-type: none"> • Trunk leans to North and West • Large diameter dead branches • Remove due to Construction Impacts • Yes
49	coast redwood	30	Fair	Poor	Fair	18	HIGH/ Proximity to Proposed Grading Limits/Building Footprint	<ul style="list-style-type: none"> • Canopy damage on North and West side caused by tree No. 50 • Remove due to Construction Impacts • Yes
50	California bay	Double Trunk 14.2, 14.1	Fair	Poor	Poor	18	N/A	<ul style="list-style-type: none"> • Sever cavity in basal area • HIGH FAILURE POTENTIAL • Fell on 2/8/14, striking tree No. 49 • Remove due to Condition • Yes



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51	coast redwood	42.3	Good	Good	Good	20	MODERATE/ Proximity to Proposed Retaining Wall	<ul style="list-style-type: none"> • Spectacular tree • Preserve and Protect • Special Treatment Area • Yes
52	mayten	9	Fair	Poor	Poor	8	HIGH/ Proximity to Proposed Grading Limits/Building Footprint	<ul style="list-style-type: none"> • Poor trunk-stem attachment • Remove due to Construction Impacts • Yes
53	coast live oak	31.2	Fair	Fair	Fair	24	HIGH/ Proximity to Proposed Demolition/Grading Limits/Building Footprint	<ul style="list-style-type: none"> • Profuse ivy covering lower trunk and scaffolding bars • Structural integrity cannot be determined • A large scaffold branch failed since the initial inspection of this tree • Remove due to Construction Impacts • Yes
54	maple	Triple Trunk 5.2, 4.9, 1.8	Poor	Poor	Poor	8	HIGH/ Proximity to Proposed Demolition/Grading Limits/Building Footprint	<ul style="list-style-type: none"> • Suppressed tree • Leans to North • Remove due to Condition • No
55	California bay	Double Trunk 4.3, 2.8	Poor	Poor	Poor	8	HIGH/ Proximity to Proposed Demolition/Grading Limits/Building Footprint	<ul style="list-style-type: none"> • Suppressed tree • Leans to North • Remove due to Condition • No



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56	coast redwood	19.6	Fair	Poor	Good	12	MODERATE/ Proximity to Proposed Grading/Retaining Wall	<ul style="list-style-type: none"> • Component of a small grove to the West of existing li Suppressed to North and West • Preserve and Protect Special Treatment Area • Yes
57	coast redwood	Double Trunk 36.4, 34.7	Fair	Fair	Good	18	MODERATE/ Proximity to Proposed Grading/Retaining Wall	<ul style="list-style-type: none"> • Component of a small grove to the West of existing li One trunk suppressed by ivy growth Large diameter dead branches • Preserve and Protect Remove ivy Remove dead branches • Yes
58	coast redwood	21.5	Fair	Poor	Good	14	MODERATE/ Proximity to Proposed Grading/Retaining Wall	<ul style="list-style-type: none"> • Component of a small grove to the West of existing li Exposed surface roots Decayed buttress on North and West side Fire scar in basal area Suppressed to North • Preserve and Protect Special Treatment Area • Yes



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59	coast redwood	46	Fair	Fair	Good	20	MODERATE/ Proximity to Proposed Grading/Retaining Wall	<ul style="list-style-type: none"> • Component of a small grove to the West of existing li Large diameter dead branches • Preserve and Protect Remove dead branches • Yes
60	coast redwood	40.4	Fair	Fair	Good	20	HIGH/ Proximity to Proposed Grading/Retaining Wall	<ul style="list-style-type: none"> • Component of a small grove to the West of existing li Short, stout tree Suppressed to West Large diameter dead branches • Preserve and Protect Remove dead branches • Yes
61	coast redwood	38.6	Fair	Good	Good	20	HIGH/ Proximity to Proposed Grading/Retaining Wall	<ul style="list-style-type: none"> • Component of a small grove to the West of existing li Large diameter dead branches • Preserve and Protect Remove dead branches • Yes
62	coast redwood	22.3	Fair	Poor	Good	18	MODERATE/ Proximity to Proposed Grading/Retaining Wall	<ul style="list-style-type: none"> • Component of a small grove to the West of existing li Short tree suppressed to North Dead branches • Preserve and Protect Remove dead branches • Yes



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63	coast redwood	36.3	Fair	Fair	Good	20	HIGH/ Proximity to Proposed Grading/Retaining Wall	<ul style="list-style-type: none"> • Component of a small grove to the West of existing li Tall, stout with slightly bowed trunk • Preserve and Protect • Yes
64	California bay	15 @ 3 ft above grade	Fair	Poor	Poor	12	NONE KNOWN	<ul style="list-style-type: none"> • Divides at 4 ft above grade • Remove due to Condition • Yes
65	maple	10.6	Fair	Poor	Poor	14	NONE KNOWN	<ul style="list-style-type: none"> • Asymmetrical canopy with dead and broken branches • Remove due to Condition • Yes
66	coast live oak	16.6	Fair	Poor	Poor	16	NONE KNOWN	<ul style="list-style-type: none"> • Sycamore borer activity in lower trunk area Trunk bows to South Low live crown ratio Dead branches • Remove due to Condition • Yes
67	coast live oak	13.5	Fair	Poor	Poor	14	NONE KNOWN	<ul style="list-style-type: none"> • Sycamore borer activity in lower trunk area Trunk swoops to North Low live crown ratio Large diameter dead branch • Remove due to Condition • Yes



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68	maple	11.6	Fair	Poor	Poor	10	NONE KNOWN	<ul style="list-style-type: none"> • Exposed surface roots • Low live crown ratio • Large diameter dead branches • Remove due to Condition • Yes
69	maple	10.9	Fair	Poor	Poor	12	NONE KNOWN	<ul style="list-style-type: none"> • Suppressed to West • Unbalanced canopy • Remove due to Condition • Yes
70	maple	11.9	N/A	N/A	N/A	N/A	NONE KNOWN	<ul style="list-style-type: none"> • Tree is dead • Remove due to Condition • Yes
71	coast live oak	11.3	Fair	Poor	Poor	12	NONE KNOWN	<ul style="list-style-type: none"> • Codominant stems with included bark • Leans dramatically to West • HIGH FAILURE POTENTIAL • Remove due to Condition • Yes
72	maple	12.3	Fair	Poor	Poor	12	NONE KNOWN	<ul style="list-style-type: none"> • Trunk bows dramatically to the West and South • Remove due to Condition • Yes



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73	maple	12.8	Fair	Poor	Poor	12	NONE KNOWN	<ul style="list-style-type: none"> • Trunk bows dramatically to the West and South • Remove due to Condition • Yes
74	maple	19.2	Fair	Poor	Poor	16	NONE KNOWN	<ul style="list-style-type: none"> • Leans dramatically to South • Remove due to Condition • Yes
75	maple	14.3	Poor	Poor	Poor	12	NONE KNOWN	<ul style="list-style-type: none"> • Poor trunk-stem attachment • Dead and dying branches throughout canopy • Remove due to Condition • Yes
76	California bay	Double Trunk 12.2, 9.8 @ 3 ft above grade	Fair	Poor	Poor	14	NONE KNOWN	<ul style="list-style-type: none"> • Undermined root structure • Trunk bows to North • Remove due to Condition • Yes
77	tan bark oak	15.6	Fair	Poor	Poor	12	NONE KNOWN	<ul style="list-style-type: none"> • Tall suppressed tree • Ivy growing into upper canopy • Low live crown ratio • Remove due to Condition • Yes



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78	maple	17.3	Fair	Poor	Poor	16	NONE KNOWN	<ul style="list-style-type: none"> • Trunk bows dramatically to North and West • Remove due to Conditions • Yes
79	tan bark oak	15.8	Fair	Poor	Poor	14	NONE KNOWN	<ul style="list-style-type: none"> • Tall suppressed tree Decayed pruning wound at 6 ft above grade Low live crown ratio • Remove due to Condition • Yes
80	California bay	9.4	Fair	Poor	Poor	14	NONE KNOWN	<ul style="list-style-type: none"> • Growing from steep embankment Dramatic lean to North • Remove due to Condition • Yes
81	California bay	11.2	Fair	Poor	Poor	14	NONE KNOWN	<ul style="list-style-type: none"> • Growing from steep embankment Dramatic lean to North • Remove due to Condition • Yes
82	tan bark oak	19.4	Fair	Poor	Poor	18	NONE KNOWN	<ul style="list-style-type: none"> • Poorly rooted tree at bottom of steep embankment Mechanical wound in lower trunk area Leans to South Unstable • Remove due to Condition • Yes



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83	Douglas fir	13.9	Fair	Poor	Poor	18	HIGH/ Proximity to Proposed Grading/Building Demolition	<ul style="list-style-type: none"> • Tall suppressed tree • Remove due to Construction Impacts • Yes
84	coast redwood	27.6	Fair	Good	Good	18	HIGH/ Proximity to Proposed Grading/Building Demolition	<ul style="list-style-type: none"> • Good form and structure • Small diameter dead branches • Remove due to Construction Impacts • Yes
85	coast live oak	Double Trunk 10.9, 11.7	Fair	Poor	Poor	18	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Leans to North and West • Remove due to Construction Impacts • Yes
86	maple	Double Trunk 11.7, 12	Poor	Poor	Poor	18	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Decayed wound sites • Large diameter dead branches • Remove due to Construction Impacts • Yes
87	tan bark oak	11.9	Poor	Poor	Poor	12	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Tall suppressed tree • Remove due to Construction Impacts • Yes
88	maple	8.8	Fair	Poor	Poor	12	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Divides into two trunks at 10 ft above grade • Remove due to Construction Impacts • Yes



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89	coast redwood	28.8	Fair	Good	Good	18	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Well-formed tree • Remove due to Construction Impacts • Yes
90	maple	Triple Trunk 9.5, 11.8, 10.2	Fair	Fair	Fair	18	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Suppressed to West • Remove due to Construction Impacts • Yes
91	coast live oak	17.8	Fair	Fair	Fair	15	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Poor trunk-stem attachment Divides into three scaffolding branches at 12 ft above • Remove due to Construction Impacts • Yes
92	California bay	Triple Trunk 11.7, 6.4, 8	Fair	Poor	Poor	12	NONE KNOWN	<ul style="list-style-type: none"> • Tall suppressed tree • Remove due to Condition • Yes
93	tan bark oak	8.5	Poor	Poor	Poor	12	Low Proximity to Proposed Demolition	<ul style="list-style-type: none"> • Decay in lower trunk area Unstable • Remove due to Condition • Yes



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94	tan bark oak	9.2	Poor	Poor	Poor	12	Low Proximity to Proposed Demolition	<ul style="list-style-type: none"> Decay in lower trunk area Unstable Remove due to Condition Yes
95	California bay	Quadruple Trunk 14, 11.2, 7.6, 12.9	Fair	Poor	Poor	18	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> Trunk leans to the North Remove due to Condition Yes
96	coast live oak	8.2	Poor	Poor	Poor	8	Moderate Proximity to Proposed Demolition	<ul style="list-style-type: none"> Small tree with swooping trunk Preserve and Protect Yes
97	California bay	Quadruple Trunk 3.4, 6, 5.9, 5.5	Fair	Poor	Poor	8	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> Group of four trunks leaning to West Remove due to Construction Impacts No
98	California bay	13.8	Fair	Poor	Poor	12	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> Bowed trunk Remove due to Construction Impacts Yes
99	California bay	8.8	Fair	Poor	Poor	8	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> Decay in basal area Remove due to Construction Impacts Yes



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TREE/ TREE GROUP #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY for PRESERVATION	Critical Root Zone	IMPACTS LEVEL/ Description	•OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "PROTECTED" CRITERIA Yes/No
100	California bay	Double Trunk 17.4, 17.9	Fair	Poor	Poor	16	HIGH/ Proximity to Proposed Grading Limits	<ul style="list-style-type: none"> • Poor trunk-stem attachment Leans dramatically to North • Remove due to Construction Impacts • Yes
101	tan bark oak	Double Trunk 14.9, 12	Poor	Poor	Poor	16	NONE KNOWN	<ul style="list-style-type: none"> • One trunk is completely dead Dead and broken branches throughout canopy • Remove due to Condition • Yes
102	coast redwood	Double Trunk 23.8, 6.7	Fair	Fair	Good	14	NONE KNOWN	<ul style="list-style-type: none"> • Component of a small grove Large diameter dead branches • Preserve and Protect Remove dead branches • Yes
103	coast redwood	16.2	Fair	Fair	Fair	14	NONE KNOWN	<ul style="list-style-type: none"> • Component of a small grove Large diameter dead branches • Preserve and Protect Remove dead branches • Yes
104	coast live oak	14.6	Fair	Poor	Poor	12	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Severely bowed trunk • Remove due to Construction Impacts • Yes



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105	coast redwood	Double Trunk 7.1, 8.5	Fair	Poor	Poor	8	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Component of a small grove • Small diameter tree growing from parent stump • Preserve and Protect • Special Treatment Area • Yes
106	coast redwood	26.6	Fair	Fair	Fair	14	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Component of a small grove • Large diameter dead branches • Preserve and Protect • Remove dead branches • Yes
107	coast redwood	19.1	Fair	Fair	Fair	14	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Large diameter dead branches • Preserve and Protect • Special Treatment Area • Remove dead branches • Yes
108	coast redwood	20.8	Fair	Fair	Fair	14	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Large diameter dead branches • Preserve and Protect • Special Treatment Area • Remove dead branches • Yes



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109	Unknown	12.6	Fair	Poor	Fair	12	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Trunk leans to North • Small mechanical wound in lower trunk • Suppressed to South • Remove due to Construction Impacts • Yes
110	coast redwood	Double Trunk 21.2, 15.4	Fair	Poor	Good	14	NONE KNOWN	<ul style="list-style-type: none"> • Divides into two trunks at 1 foot above grade • Codominant stems with included bark • Dead branches • Preserve and Protect • Remove dead branches • One simple direct cable • Yes
111	coast redwood	22.7	Fair	Poor	Good	14	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Poorly attached secondary trunk at 30 ft above grade • Preserve and Protect • Special Treatment Area • Remove secondary trunk • Yes
112	coast redwood	27.3	Fair	Poor	Good	14	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Poorly attached secondary trunk at 15 ft above grade • included bark • Preserve and Protect • Special Treatment Area • Remove one poorly attached trunk or install one • simple direct cable • Yes



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113	coast redwood	29.5	Fair	Good	Good	18	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Small diameter dead branches • Preserve and Protect Special Treatment Area Remove dead branches • Yes
114	Douglas fir	17.4	Fair	Poor	Poor	18	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Tall suppressed tree with bowed trunk Canopy interferes with No. 113 • Remove due to Condition • Yes
115	plum	7.2	Fair	Poor	Poor	8	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Poor trunk-stem attachment Poorly pruned • Remove due to Construction Impacts • No
116	maple	8.5	Fair	Poor	Poor	10	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Poor trunk-stem attachment Has been pruned for utility line clearance • Remove due to Construction Impacts • Yes
117	coast redwood	7.5	Fair	Fair	Fair	8	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Grows on steep slope above unimproved access road • Small young tree Suppressed to East • Preserve and Protect • No



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TREE/ TREE GROUP #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY for PRESERVATION	Critical Root Zone	IMPACTS LEVEL/ Description	•OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "PROTECTED" CRITERIA Yes/No
118	Douglas fir	31.4	Fair	Poor	Poor	18	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Grows on steep slope above unimproved access road Trunk bows slightly to Southeast Dead branches • Preserve and Protect Special Treatment Area • Yes
119	coast redwood	23.2	Fair	Fair	Good	14	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Grows on steep slope above unimproved access road Small diameter dead branches • Preserve and Protect • Yes
120	coast redwood	24.8	Fair	Fair	Good	16	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Grows on steep slope above unimproved access road Poor trunk-stem attachment Poorly attached secondary stem at 30 ft above grade • Preserve and Protect Special Treatment Area Remove secondary stem or simple direct cable • Yes
121	Douglas fir	34	Fair	Poor	Poor	24	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Grows on steep slope above unimproved access road Guy wire attached to lower trunk Trunk bows in several directions • Remove due to Construction Impacts • Yes



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122	Douglas fir	20.9	Fair	Poor	Poor	18	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Grows on steep slope above unimproved access road • Tall suppressed tree • Dead branches • Remove due to Construction Impacts • Yes
123	Douglas fir	15.9	Fair	Poor	Poor	16	HIGH/ Proximity to Proposed Grading Limits	<ul style="list-style-type: none"> • Grows on steep slope above unimproved access road • Small suppressed tree • Dead branches • Remove due to Construction Impacts • Yes
124	coast redwood	30	Fair	Poor	Poor	14	NONE KNOWN	<ul style="list-style-type: none"> • Grows on steep slope above unimproved access road • Previous stem failure at 40' above grade • Remove due to Condition • Yes
125	coast redwood	10.5	Fair	Poor	Poor	10	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Grows on steep slope above unimproved access road • Tall suppressed young tree • Leans to South • Preserve and Protect Special Treatment Area • Yes



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126	coast redwood	14.8	Fair	Poor	Poor	14	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Grows on steep slope above unimproved access roa Tall suppressed tree • Preserve and Protect Special Treatment Area • Yes
127	coast redwood	6.7	Fair	Poor	Poor	6	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Grows on steep slope above unimproved access roa Small suppressed tree • Preserve and Protect Special Treatment Area • No
128	madrone	7.8	N/A	N/A	N/A	N/A	NONE KNOWN	<ul style="list-style-type: none"> • Grows on steep slope above unimproved access roa Dead • Remove due to Condition • No
129	Douglas fir	22.5	Fair	Poor	Poor	18	NONE KNOWN	<ul style="list-style-type: none"> • Grows on steep slope above unimproved access roa Exposed surface roots Poor root/soil adherence Trunk swoops to West HIGH FAILURE POTENTIAL • Remove due to Condition • Yes



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130	Douglas fir	25	Fair	Poor	Poor	18	NONE KNOWN	<ul style="list-style-type: none"> • Grows on steep slope above unimproved access road Suppressed to West • Remove due to Condition • Yes
131	Douglas fir	20.5	Fair	Poor	Poor	18	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Grows on steep slope above unimproved access road Tall suppressed tree • Preserve and Protect Special Treatment Area • Yes
132	coast redwood	Double Trunk 15.2, 15.8	Fair	Poor	Poor	16	HIGH/ Proximity to Proposed Grading Limits	<ul style="list-style-type: none"> • Grows on steep slope above unimproved access road Poor trunk-stem attachment • Preserve and Protect Simple Direct Cable Special Treatment Area • Yes
133	Douglas fir	29.7	Fair	Poor	Poor	24	NONE KNOWN	<ul style="list-style-type: none"> • Grows on steep slope above unimproved access road Excessive organic debris on West side of root crown Suppressed to East Significant lean to West HIGH FAILURE POTENTIAL • Remove due to Condition • Yes



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134	alder	17.8	Fair	Poor	Poor	15	NONE KNOWN	<ul style="list-style-type: none"> • Significant lean to North • Sap exidation wound in lower trunk • Decayed wound sites on lower trunk • Extensive sap sucker damage • Large diameter dead and broken branches • Remove due to Condition • Yes
135	coast redwood	13.8	Fair	Fair	Fair	8	NONE KNOWN	<ul style="list-style-type: none"> • One of 3 trunks growing from decayed parent stump • Small diameter dead and dying branches • Preserve and Protect • Yes
136	coast redwood	12.4	Fair	Fair	Fair	8	NONE KNOWN	<ul style="list-style-type: none"> • One of 3 trunks growing from decayed parent stump • Small diameter dead and dying branches • Preserve and Protect • Yes
137	coast redwood	9.9	Fair	Fair	Fair	8	NONE KNOWN	<ul style="list-style-type: none"> • One of 3 trunks growing from decayed parent stump • Small diameter dead and dying branches • Preserve and Protect • Yes



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138	tan bark oak	13.6	Fair	Fair	Poor	12	NONE KNOWN	<ul style="list-style-type: none"> • Fractured bark in lower trunk • Minor canopy dieback • Preserve and Protect • Yes
139	California bay	11.2	Poor	Poor	Poor	12	NONE KNOWN	<ul style="list-style-type: none"> • Trunk leans to South • Preserve and Protect • Yes
140	tan bark oak	12.1	Fair	Poor	Poor	12	NONE KNOWN	<ul style="list-style-type: none"> • Poor trunk-stem attachment • Trunk divides at 18 ft above grade • Minor canopy dieback • Preserve and Protect • Yes
141	tan bark oak	8.5	N/A	N/A	N/A	N/A	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Dead • Remove due to Condition • No
142	coast redwood	Double Trunk 38.2, 8.5	Good	Fair	Good	18	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Dead branches • Preserve and Protect • Remove dead branches • Yes



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143	tan bark oak	12.9	Poor	Poor	Poor	12	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Poor trunk-stem attachment • Dated sudden oak death infection in lower trunk • HIGH FAILURE POTENTIAL • Remove due to Condition • Yes
144	maple	7.1	Fair	Poor	Poor	8	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Trunk bows to West • Severe cankers on scaffold branches • Remove due to Condition • No
145	California bay	9.2	Fair	Poor	Poor	8	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Severe decay in lower trunk area • Dramatic lean to West • Remove due to Condition • Yes
146	California bay	Triple Trunk 7, 6.2, 6.6	Fair	Poor	Poor	10	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Poor trunk-stem attachment • Leans to West • Remove due to Condition • No
147	Douglas fir	54.75	Fair	Poor	Poor	24	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Large stature, mature individual growing on steep slope • Large diameter dead and broken branches • Preserve and Protect • Special Treatment Area • Yes



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148	California bay	17.8	Fair	Poor	Poor	18	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Fruiting body on North side of buttress • Canopy sweeps to West over house • Remove due to Condition • Yes
149	Douglas fir	28.7	Fair	Poor	Poor	20	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Exposed surface roots • Girdling roots on North side of trunk • Poor trunk-stem attachment • Bowed trunk at 20 ft • Codominant stems at 80 ft • Remove due to Construction Impacts • Yes
150	coast redwood	32.5	Good	Fair	Good	18	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Slightly suppressed to West • Preserve and Protect • Special Treatment Area • Yes
151	coast redwood	57	Good	Good	Good	20	NONE KNOWN	<ul style="list-style-type: none"> • Spectacular tree • Large diameter dead branches • Preserve and Protect • Remove dead branches • Yes



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152	deodar cedar	16.5	Fair	Fair	Good	14	NONE KNOWN	<ul style="list-style-type: none"> • Small diameter dead branches • Preserve and Protect • Yes
153	coast redwood	Double Trunk 30.1, 27.4	Fair	Poor	Good	18	NONE KNOWN	<ul style="list-style-type: none"> • Poor trunk attachment Codominant stems with included bark Large diameter dead branches • Preserve and Protect • Install two simple direct cables • Remove dead branches • Yes
154	coast redwood	55.7	Fair	Fair	Good	20	NONE KNOWN	<ul style="list-style-type: none"> • Strong, well-formed buttress roots Stout trunk with drooping lateral branches Previous branch failures • Preserve and Protect • Yes
155	coast redwood	74.5	Good	Good	Good	24	NONE KNOWN	<ul style="list-style-type: none"> • Excellent form and structure Spectacular tree Small diameter ivy grows up trunk to height of 60 ft • Preserve and Protect • Remove ivy growth • Yes



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156	coast redwood	50.3	Good	Good	Good	24	NONE KNOWN	<ul style="list-style-type: none"> • Good form and structure Branch length has been reduced on East side for utili clearance • Preserve and Protect • Yes
157	coast live oak	25.2	Fair	Poor	Poor	16	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Structural root damage from previous grading Leans dramatically to South and West Decayed wound sites HIGH FAILURE POTENTIAL • Remove due to Construction Impacts • Yes
158	coast redwood	24.8	Fair	Fair	Good	16	NONE KNOWN	<ul style="list-style-type: none"> • Good form and structure • Preserve and Protect • Yes
159	coast redwood	Double Trunk 21, 17.2	Fair	Poor	Good	16	NONE KNOWN	<ul style="list-style-type: none"> • Poor trunk attachment • Preserve and Protect Simple direct cable • Yes
160	coast redwood	Double Trunk 15.2, 16.2	Fair	Poor	Good	16	NONE KNOWN	<ul style="list-style-type: none"> • Poor trunk attachment • Preserve and Protect Simple direct cable • Yes



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161	Douglas fir	35	Good	Good	Poor	18	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Well-formed mature tree • Remove due to Construction Impacts • Yes
162	coast redwood	24.5	Good	Good	Good	16	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Excellent form and structure • Remove due to Construction Impacts • Yes
163	Douglas fir	36.4	Fair	Poor	Poor	20	NONE KNOWN	<ul style="list-style-type: none"> • Exposed surface roots Suppressed to North • Large diameter dead branches • Preserve and Protect • Yes
164	coast redwood	27.7	Fair	Fair	Good	14	NONE KNOWN	<ul style="list-style-type: none"> • Good form and structure • Small diameter dead branches • Preserve and Protect • Yes
165	California bay	7	Fair	Poor	Poor	8	NONE KNOWN	<ul style="list-style-type: none"> • Leans to West • Preserve and Protect • No



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166	California bay	7.3	Fair	Poor	Poor	8	NONE KNOWN	<ul style="list-style-type: none"> • Leans to West • Preserve and Protect • No
167	California bay	8.1	Fair	Poor	Poor	8	NONE KNOWN	<ul style="list-style-type: none"> • Leans to West • Preserve and Protect • Yes
168	Douglas fir	14.7	Fair	Poor	Poor	14	NONE KNOWN	<ul style="list-style-type: none"> • Trunk swoops to West and South • Preserve and Protect • Yes
169	Douglas fir	30.8	Fair	Poor	Poor	24	NONE KNOWN	<ul style="list-style-type: none"> • Exposed surface roots Leans to South and West over proposed construction • Preserve and Protect • Yes
170	Douglas fir	19	Fair	Poor	Poor	16	NONE KNOWN	<ul style="list-style-type: none"> • Large diameter dead branches • Preserve and Protect • Yes
171	Douglas fir	23.3	Fair	Poor	Poor	14	NONE KNOWN	<ul style="list-style-type: none"> • Large diameter dead branches • Preserve and Protect • Yes



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172	California bay	Five Small Trunks 3.6-4.4	Fair	Poor	Poor	6	NONE KNOWN	<ul style="list-style-type: none"> • Poor trunk-stem attachment • Preserve and Protect • No
173	Douglas fir	17	Fair	Poor	Poor	16	NONE KNOWN	<ul style="list-style-type: none"> • Possible woodrat nest at 30 ft above grade • Dead and dying branches • Preserve and Protect • Remove dead branches • Do not disturb woodrat nest • Yes
174	Douglas fir	31	Fair	Poor	Poor	18	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Divides at 12 ft above grade • Poor trunk-stem attachment • Remove due to Construction Impacts • Yes
175	Douglas fir	27.9	Fair	Poor	Poor	16	NONE KNOWN	<ul style="list-style-type: none"> • Vertical trunk with large diameter dead branches • Preserve and Protect • Yes
176	coast live oak	13.7	Fair	Poor	Poor	12	NONE KNOWN	<ul style="list-style-type: none"> • Poor trunk-stem attachment at 18 ft above grade • Trunk swoops to South • Preserve and Protect • Simple Direct Cable system • Yes



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177	Douglas fir	35.5	Fair	Fair	Poor	18	NONE KNOWN	<ul style="list-style-type: none"> • Large diameter dead branches • Preserve and Protect • Remove dead branches • Yes
178	coast live oak	13.6	Fair	Poor	Poor	12	NONE KNOWN	<ul style="list-style-type: none"> • Poor trunk-stem attachment at 8 ft above grade • Trunk swoops to South • Preserve and Protect • Yes
179	coast live oak	8.6	Fair	Poor	Fair	8	NONE KNOWN	<ul style="list-style-type: none"> • Small suppressed tree • Leans to South • Preserve and Protect • Yes
180	coast live oak	13.8	Fair	Poor	Fair	12	NONE KNOWN	<ul style="list-style-type: none"> • Severe damage to structure and supporting roots on side • Large diameter pruning wound on basal area • Leans slightly to West • Preserve and Protect • Yes
181	coast live oak	12.1	Fair	Poor	Fair	12	NONE KNOWN	<ul style="list-style-type: none"> • Moderate damage to supporting roots • Preserve and Protect • Yes



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182	Douglas fir	22.4	Fair	Fair	Poor	14	NONE KNOWN	<ul style="list-style-type: none"> • Grow in narrow planting strip to the North of residenc • Either existing or potential damage to adjacent retain • Remove due to Condition • Yes
183	Douglas fir	15.9	Fair	Fair	Poor	14	NONE KNOWN	<ul style="list-style-type: none"> • Grow in narrow planting strip to the North of residenc • Either existing or potential damage to adjacent retain • Remove due to Condition • Yes
184	Douglas fir	15	Fair	Fair	Poor	14	NONE KNOWN	<ul style="list-style-type: none"> • Grow in narrow planting strip to the North of residenc • Either existing or potential damage to adjacent retain • Remove due to Condition • Yes
185	coast live oak	Double Trunk 29.4, 30.5	Fair	Poor	Fair	20	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Poor trunk-stem attachment • Divides at 3 ft above grade into two codominant stem • One trunk leans dramatically to South • Remove due to Construction Impacts • Yes



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TREE/ TREE GROUP #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY for PRESERVATION	Critical Root Zone	IMPACTS LEVEL/ Description	•OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "PROTECTED" CRITERIA Yes/No
186	coast live oak	57	Fair	Poor	Poor	26	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Decayed wound sites and previous branch failings have created a large decay column extending downward to lower trunk • Stately mature tree with wide canopy spreading in all directions • Remove due to Construction Impacts • Yes
187	coast redwood	Double Trunk 22, 17.5	Fair	Poor	Good	14	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Poor trunk attachment • Remove due to Construction Impacts • Yes
188	coast redwood	24.6	Fair	Fair	Good	14	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Exposed surface roots • Poorly attached secondary trunk at 15 ft above grade • Remove due to Construction Impacts • Yes
189	coast redwood	43	Good	Good	Good	20	Moderate Proximity to Proposed Demolition and Grading	<ul style="list-style-type: none"> • Significant tree with excellent form and structure • Preserve and Protect • Reduce Grading Limits • Special Treatment Area • Yes



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190	mayten	10.6	Fair	Poor	Poor	10	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Exposed surface roots • Divides into two stems at 10 ft above grade • Apical decline • Remove due to Construction Impacts • No
191	mayten	5.8	Fair	Poor	Poor	6	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Lower trunk has been girdled • Poor trunk-stem attachment • Poor pruning • Remove due to Construction Impacts • No
192	mayten	8	Fair	Poor	Poor	8	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Poor trunk-stem attachment • Remove due to Construction Impacts • No
193	coast redwood	38.5	Good	Good	Good	18	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Excellent form and structure • Preserve and Protect • Yes
194	maple	7	Fair	Poor	Poor	6	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Poor trunk-stem attachment • Decayed wound sites • HIGH FAILURE POTENTIAL • Remove due to Construction Impacts • No



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195	privet	15.8 @ 6 in. above grade	Fair	Poor	Poor	8	NONE KNOWN	<ul style="list-style-type: none"> • Poorly pruned multi-stem shrub • Remove due to Condition • Yes
196	privet	Small Multi-trunk	Fair	Poor	Poor	6	NONE KNOWN	<ul style="list-style-type: none"> • Poor trunk-stem attachment • Remove due to Condition • No
197	pistache	4.6	Fair	Poor	Poor	4	NONE KNOWN	<ul style="list-style-type: none"> • Poorly pruned, smaller landscape tree • Remove due to Condition • No
198	cherry	10.5 @ 2 ft above grade	Fair	Poor	Poor	6	NONE KNOWN	<ul style="list-style-type: none"> • Poor trunk-stem attachment • Previous branch failure • Poorly pruned • Remove due to Condition • No
199	cherry	10 @ 18 in. above grade	Fair	Poor	Poor	6	NONE KNOWN	<ul style="list-style-type: none"> • Poor trunk-stem attachment • Previous branch failure • Poorly pruned • Remove due to Condition • No



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200	Douglas fir	9	Fair	Fair	Poor	8	HIGH/ Proximity to Proposed Demolition/Grading Limits	<ul style="list-style-type: none"> • Exidation in lower trunk area Well-formed young tree • Remove due to Construction Impacts • No
201	Douglas fir	22.7	Fair	Poor	Poor	18	NONE KNOWN	<ul style="list-style-type: none"> • One component of grove of trees growing in steep pl. strip to South of residence hall • Preserve and Protect • Yes
202	Douglas fir	Double Trunk 18, 17.2	Fair	Poor	Poor	18	NONE KNOWN	<ul style="list-style-type: none"> • One component of grove of trees growing in steep pl. strip to South of residence hall Small diameter dead branches • Preserve and Protect Remove dead branches • Yes
203	Douglas fir	17.8	Poor	Poor	Poor	N/A	NONE KNOWN	<ul style="list-style-type: none"> • One component of grove of trees growing in steep pl. strip to South of residence hall Sixty percent dead • Remove due to Condition • Yes



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204	Douglas fir	18.4	Fair	Poor	Poor	18	NONE KNOWN	<ul style="list-style-type: none"> • One component of grove of trees growing in steep pl. strip to South of residence hall • Preserve and Protect • Yes
205	Douglas fir	12.1	N/A	N/A	N/A	N/A	N/A	<ul style="list-style-type: none"> • One component of grove of trees growing in steep pl. strip to South of residence hall Dead • Remove due to Condition • No
206	Douglas fir	20.7	Fair	Poor	Poor	14	NONE KNOWN	<ul style="list-style-type: none"> • One component of grove of trees growing in steep pl. strip to South of residence hall Trunk bows to South Woodrat nest at 80 ft above grade • Preserve and Protect Remove dead branches • Yes
207	Douglas fir	23.5	Fair	Poor	Poor	16	NONE KNOWN	<ul style="list-style-type: none"> • One component of grove of trees growing in steep pl. strip to South of residence hall Trunk bows to South • Preserve and Protect • Yes



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208	Douglas fir	19.5	Fair	Poor	Poor	16	NONE KNOWN	<ul style="list-style-type: none"> • One component of grove of trees growing in steep pl. strip to South of residence hall Poor trunk-stem attachment at 20 ft • Preserve and Protect Simple Direct Cable system Remove dead branches • Yes
209	Douglas fir	33.7	Fair	Fair	Fair	14	NONE KNOWN	<ul style="list-style-type: none"> • One component of grove of trees growing in steep pl. strip to South of residence hall Vertical trunk with balanced canopy • Preserve and Protect • Yes
210	Monterey cypress	8.1	Fair	Poor	Poor	8	NONE KNOWN	<ul style="list-style-type: none"> • Small suppressed tree • Preserve and Protect • Yes
211	coast live oak	38.2 @ 6 in. above grade	Fair	Fair	Fair	20	MODERATE/ Proximity to Proposed Demolition	<ul style="list-style-type: none"> • Root crown buried on North side of tree Extensive fill on North side of root crown Three large scaffold branches bend and swoop to Ea and West • Preserve and Protect Perform root crown excavation Assess stability • Yes



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212	coast live oak	12.5	Fair	Poor	Poor	10	MODERATE/ Proximity to Proposed Demolition	<ul style="list-style-type: none"> • Trunk swoops to North and West • Preserve and Protect • Yes
213	Italian cypress	7.4	Fair	Poor	Poor	8	HIGH/ Proximity to Proposed Demolition	<ul style="list-style-type: none"> • Small suppressed tree • Remove due to Construction Impacts • No
214	Monterey cypress	9.8	Fair	Poor	Poor	8	HIGH/ Proximity to Proposed Demolition	<ul style="list-style-type: none"> • Small suppressed tree • Remove due to Construction Impacts • Yes
215	coast live oak	24.5	Fair	Fair	Fair	16	MODERATE/ Proximity to Proposed Demolition	<ul style="list-style-type: none"> • Fill North and West side of root crown • Decayed pruning wound site • Suppressed to South and West • Large diameter dead branches • Preserve and Protect • Perform root crown excavation • Determine stability • Remove dead branches • Yes
216	coast live oak	Double Trunk 19.2, 19.4	Fair	Fair	Fair	18	MODERATE/ Proximity to Proposed Demolition	<ul style="list-style-type: none"> • Western trunk is dead • Southern trunk leans dramatically over parking lot • Preserve and Protect • Yes



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217	coast live oak	34.3 @ 2 ft above grade	Poor	Poor	Poor	18	NONE KNOWN	<ul style="list-style-type: none"> • Wet wood infection Dated Sudden Oak Death infection Sycamore borer activity Weighted trunk leans over proposed parking lot Large diameter dead branches • Remove due to Condition • Yes
218	madrone	15.5	Fair	Poor	Poor	18	NONE KNOWN	<ul style="list-style-type: none"> • Trunk swoops dramatically to West • Preserve and Protect Reduce end weight • Yes
219	coast live oak	11.4	Poor	Poor	Poor	18	NONE KNOWN	<ul style="list-style-type: none"> • Wet wood infection Dated Sudden Oak Death infection Sycamore borer activity Weighted trunk leans over proposed building Large diameter dead branches • Remove due to Condition • Yes



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220	coast live oak	18.8	Poor	Poor	Poor	18	NONE KNOWN	<ul style="list-style-type: none"> • Wet wood infection • Dated Sudden Oak Death infection • Sycamore borer activity • Weighted trunk leans over proposed building • Large diameter dead branches • Remove due to Condition • Yes
221	coast live oak	29	Poor	Poor	Poor	18	NONE KNOWN	<ul style="list-style-type: none"> • Dated Sudden Oak Death infection • Severely decayed trunk • HIGH FAILURE POTENTIAL • Remove due to Condition • Yes
222	coast live oak	7.8	Fair	Fair	Fair	8	NONE KNOWN	<ul style="list-style-type: none"> • Tall suppressed tree • Preserve and Protect • No
223	coast live oak	12.7	Fair	Fair	Fair	8	NONE KNOWN	<ul style="list-style-type: none"> • Tall suppressed tree • Trunk swoops to West • Preserve and Protect • Yes



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224	coast live oak	13.7	Poor	Poor	Poor	14	NONE KNOWN	<ul style="list-style-type: none"> • Dated Sudden Oak Death infection in lower trunk Trunk bows dramatically to West • Remove due to Condition • Yes
225	California bay	Group of Four Stems 1.8-6.2	Fair	Poor	Poor	8	NONE KNOWN	<ul style="list-style-type: none"> • Trunk leans to West • Remove due to Condition • No
226	coast live oak	6.6	Poor	Poor	Poor	6	NONE KNOWN	<ul style="list-style-type: none"> • Asymmetrical canopy Previous branch failure • Preserve and Protect • No
227	coast live oak	21.3	Good	Fair	Poor	16	NONE KNOWN	<ul style="list-style-type: none"> • Root crown buried on North and East side Dead ivy encircles trunk Trunk leans dramatically to West • Preserve and Protect • Yes
228	California bay	Four Trunks 12, 6, 8, 14.2	Poor	Poor	Poor	N/A	HIGH/ Proximity to Proposed Demolition	<ul style="list-style-type: none"> • Severe decay in basal area HIGH FAILURE POTENTIAL • Remove due to Condition • Yes



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229	maple	22.5	Fair	Poor	Poor	18	HIGH/ Proximity to Proposed Demolition	<ul style="list-style-type: none"> • Exposed surface roots • Severely pruned for powerline clearance • Remove due to Construction Impacts • Yes
230	coast live oak	17.2	Fair	Poor	Fair	16	HIGH/ Proximity to Proposed Demolition	<ul style="list-style-type: none"> • Trunk leans dramatically to East • Preserve and Protect • Yes
231	coast redwood	49.2	Good	Good	Good	20	NONE KNOWN	<ul style="list-style-type: none"> • Magnificent tree • Ivy growing up trunk • Preserve and Protect • Yes
232	coast live oak	42	Fair	Fair	Fair	20	NONE KNOWN	<ul style="list-style-type: none"> • Decayed pruning wound in lower trunk area • Minor symptoms of Sudden Oak Death • Long, weighted scaffold branches • Preserve and Protect • Monitor stability • Yes
233	coast live oak	18.5	N/A	N/A	N/A	N/A	N/A	<ul style="list-style-type: none"> • Dead • Remove due to Condition • No



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234	coast live oak	12.6	Fair	Poor	Fair	12	MODERATE/ Proximity to Proposed Demolition	<ul style="list-style-type: none"> • Asymmetrical canopy Leans slightly to South and West Large diameter dead branches • Preserve and Protect Remove dead branches • Yes
235	madrone	8.1	N/A	N/A	N/A	N/A	N/A	<ul style="list-style-type: none"> • Dead • Remove due to Condition • No
236	coast live oak	12.8	Fair	Poor	Poor	12	NONE KNOWN	<ul style="list-style-type: none"> • Trunk bows severely to East Low live crown ratio • Preserve and Protect • Yes
236a.	coast live oak	24.2	Fair	Poor	Poor	18	NONE KNOWN	<ul style="list-style-type: none"> • Trunk bows severely to East Low live crown ratio • Preserve and Protect • Yes
237	coast live oak	13	Fair	Poor	Poor	18	NONE KNOWN	<ul style="list-style-type: none"> • Trunk develops horizontal to ground in easterly direc Low live crown ratio • Preserve and Protect • Yes



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238	coast live oak	19.5	Fair	Poor	Poor	18	None Known	<ul style="list-style-type: none"> • Trunk swoops to North and East Top removed for utility powerline clearance • Preserve and Protect • Yes
239	coast live oak	21.2	Fair	Poor	Fair	18	NONE KNOWN	<ul style="list-style-type: none"> • Trunk divides at 8 ft above grade Wet wood infection at 9 ft above grade Suppressed to North Canopy swoops to South and West • Preserve and Protect • Yes
240	coast live oak	7.5	Fair	Poor	Fair	8	NONE KNOWN	<ul style="list-style-type: none"> • Asymmetrical unbalanced canopy • Preserve and Protect • No
241	coast live oak	11.8	Fair	Poor	Poor	12	NONE KNOWN	<ul style="list-style-type: none"> • Tall suppressed tree • Preserve and Protect • Yes
242	coast live oak	14.7	Fair	Poor	Poor	18	NONE KNOWN	<ul style="list-style-type: none"> • Tall suppressed tree with canopy weighted in North direction • Preserve and Protect • Yes



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243	coast live oak	17.3	Fair	Poor	Poor	18	NONE KNOWN	<ul style="list-style-type: none"> • Tall suppressed tree with canopy weighted in South • Large diameter dead branch • Preserve and Protect • Remove dead branch • Yes
244	coast live oak	19.7	Fair	Poor	Poor	16	NONE KNOWN	<ul style="list-style-type: none"> • Tree leans dramatically to North and East • Preserve and Protect • Monitor stability • Yes
245	California bay	Triple Trunk 15, 4.5, 4	Fair	Poor	Poor	18	NONE KNOWN	<ul style="list-style-type: none"> • Tree leans dramatically to North and East • HIGH FAILURE POTENTIAL • Remove due to Condition • Yes
246	coast live oak	9.5	Fair	Poor	Poor	8	NONE KNOWN	<ul style="list-style-type: none"> • Smaller suppressed tree leans dramatically to North • Preserve and Protect • Monitor stability • Yes



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247	Douglas fir	44.1	Fair	Fair	Poor	22	MODERATE/ Proximity to Proposed Demolition	<ul style="list-style-type: none"> • Grows from steep slope • Exposed surface roots • Species prone to uprooting • Mature individual • Full, widespreading canopy • Large diameter dead branches • Preserve and Protect • Remove dead branches • Yes
248	coast live oak	7.8	Fair	Poor	Poor	8	NONE KNOWN	<ul style="list-style-type: none"> • Severely bowed trunk develops in Southwesterly dire • Preserve and Protect • No
249	California bay	7	Fair	Poor	Poor	8	MODERATE/ Proximity to Proposed Demolition	<ul style="list-style-type: none"> • Trunk bows in Southerly direction • Remove due to Condition • No
250	coast live oak	8.5	Fair	Poor	Poor	8	MODERATE/ Proximity to Proposed Demolition	<ul style="list-style-type: none"> • Tall suppressed young tree • Preserve and Protect • Yes



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251	coast live oak	14.1	Fair	Poor	Poor	10	NONE KNOWN	<ul style="list-style-type: none"> • Lower trunk has 1 inch deep chainsaw cut on North & side Trunk stubbed off at 16 ft above grade, possibly for u clearance • Preserve and Protect • Yes
252	coast live oak	28.5	Fair	Poor	Fair	18	NONE KNOWN	<ul style="list-style-type: none"> • Poor trunk-stem attachment Trunk leans dramatically to North and West • Preserve and Protect • Yes
253	coast live oak	Triple Trunk 16.1, 18.5, 11.7	Fair	Poor	Fair	18	NONE KNOWN	<ul style="list-style-type: none"> • Three trunks develop between natural grade and with natural grade Poor trunk-stem attachment • Preserve and Protect Consider cable installation if retained • Yes
254	California bay	Double Trunk 10, 14.7	Fair	Poor	Poor	16	NONE KNOWN	<ul style="list-style-type: none"> • Poor trunk-stem attachment Sudden Oak Death symptoms on foliage • Remove due to Condition • Yes



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254a.	coast live oak	7	Fair	Poor	Poor	8	NONE KNOWN	<ul style="list-style-type: none"> • Trunk swoops to East • Low live crown ratio • Dead and broken branches • Preserve and Protect • Remove dead and broken branches • No
255	California bay	21.3	Fair	Poor	Poor	16	NONE KNOWN	<ul style="list-style-type: none"> • Trunk divides at 12 ft above grade • Trunks lean over existing residence • Preserve and Protect • Yes
256	coast live oak	19.6	Fair	Poor	Poor	16	NONE KNOWN	<ul style="list-style-type: none"> • Trunk leans dramatically to North and East • Preserve and Protect • Yes
257	coast live oak	Double Trunk 15, 28.3	Fair	Poor	Poor	16	MODERATE/ Proximity to Proposed Demolition	<ul style="list-style-type: none"> • Lower trunk girdled by clothesline rope • Trunk leans dramatically to South over existing resid • Comingled with electrical power pole, electrical power utility powerline • Preserve and Protect • Yes
258	coast live oak	8	Fair	Poor	Poor	8	MODERATE/ Proximity to Proposed Demolition	<ul style="list-style-type: none"> • Poor trunk-stem attachment • Preserve and Protect • Yes



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259	coast live oak	13	Fair	Poor	Poor	12	NONE KNOWN	<ul style="list-style-type: none"> • Tree is severely girdled by large diameter poison oak • Preserve and Protect • Yes
260	coast live oak	11.1	Fair	Poor	Fair	8	MODERATE/ Proximity to Proposed Demolition	<ul style="list-style-type: none"> • Poor trunk-stem attachment • Dead and dying branches • Preserve and Protect • Remove dead branches • Yes
261	coast live oak	13.8	Fair	Poor	Fair	10	MODERATE/ Proximity to Proposed Demolition	<ul style="list-style-type: none"> • Poor trunk-stem attachment • Severe decay in lower trunk area • Preserve and Protect • Monitor stability • Yes
262	coast live oak	11.1	Fair	Poor	Poor	8	MODERATE/ Proximity to Proposed Demolition	<ul style="list-style-type: none"> • Lower trunk constricted by ivy • Trunk swoops and bends to North and East • Dead and dying branches • Woodrat nest in upper canopy • Preserve and Protect • Remove dead branches • Remove dead ivy • Yes



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263	maple	42.4 @ 30 in above grade	Fair	Poor	Fair	20	<p>MODERATE/ Proximity to Proposed Demolition</p>	<ul style="list-style-type: none"> • Mature individual with decayed pruning wound on Sc of lower trunk • Poor trunk-stem attachment • Codominant stems with included bark • Unbalanced canopy • Dead and dying branches • Preserve and protect • Install simple direct cables to support weak attachment points • Branch end-weight reduction • Yes
264	Douglas fir	16.7	Fair	Fair	Poor	18	<p>NONE KNOWN</p>	<ul style="list-style-type: none"> • Exposed surface roots • Vertical trunk with large diameter dead branches • Preserve and Protect • Remove dead branches • Yes
265	Douglas fir	31.2	Fair	Fair	Fair	26	<p>NONE KNOWN</p>	<ul style="list-style-type: none"> • Tall, well-formed, mature tree • Large diameter dead branches • Preserve and Protect • Remove dead branches • Yes
266	coast live oak	9.3	Fair	Poor	Poor	8	<p>NONE KNOWN</p>	<ul style="list-style-type: none"> • Small coast live oak growing from base of No. 265 • Preserve and Protect • Yes



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267	madrone	7.7	N/A	N/A	N/A	N/A	N/A	<ul style="list-style-type: none"> • Dead • Remove due to Condition • No
268	coast live oak	Double Trunk 15.4, 11.1	Fair	Poor	Fair	18	NONE KNOWN	<ul style="list-style-type: none"> • Poor trunk-stem attachment Decayed pruning wound in basal area Swooping, bending trunks develop in North and West directions Heavily weighted canopy • Preserve and Protect • Monitor stability • Yes
269	California bay	Triple Trunk 17.8, 15.1, 5.6	Fair	Poor	Poor	18	NONE KNOWN	<ul style="list-style-type: none"> • Thinning canopy with dead and dying branches • Remove dead branches • Preserve and Protect • Yes
270	coast redwood	12.5	Fair	Fair	Fair	10	MODERATE/ Proximity to Proposed Demolition	<ul style="list-style-type: none"> • One of three tall, suppressed, young trees • Preserve and Protect • Yes
271	coast redwood	13.1	Fair	Fair	Fair	10	MODERATE/ Proximity to Proposed Demolition	<ul style="list-style-type: none"> • One of three tall, suppressed, young trees • Preserve and Protect • Yes



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272	coast redwood	15.5	Fair	Fair	Fair	10	MODERATE/ Proximity to Proposed Demolition	<ul style="list-style-type: none"> • One of three tall, suppressed, young trees • Preserve and Protect • Yes
273	Douglas fir	41.8	Fair	Poor	Fair	24	MODERATE/ Proximity to Proposed Demolition	<ul style="list-style-type: none"> • Tall mature tree growing on steep slope • Evidence of previous failures due to uprooting • Leans slightly to North and East • Unstable • Remove due to Condition • Yes
274	coast live oak	20	Fair	Poor	Poor	14	MODERATE/ Proximity to Proposed Demolition	<ul style="list-style-type: none"> • Trunk bends dramatically to North and East • Preserve and Protect • Monitor stability • Yes
275	coast live oak	16.3	Fair	Poor	Poor	14	MODERATE/ Proximity to Proposed Demolition	<ul style="list-style-type: none"> • Tall suppressed tree • Low live crown ratio • Dead and dying branches • Pruned for utility line clearance • Preserve and Protect • Remove dead branches • Yes



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276	coast live oak	Triple Trunk 5.9, 6.9, 3.2	Fair	Poor	Poor	8	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Poor trunk-stem attachment • Preserve and Protect • Special Treatment Area • No
277	Tecate cypress	14.2	Fair	Poor	Poor	10	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Poor trunk-stem attachment • Previous stem failure • Preserve and Protect • Special Treatment Area • Yes
278	coast live oak	6.5	Fair	Poor	Poor	8	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Small suppressed tree • Swoops to East • Preserve and Protect • No
279	California bay	6	Fair	Poor	Poor	8	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Tall suppressed young tree • Preserve and Protect • Special Treatment Area • No
280	coast live oak	8.5	Fair	Poor	Poor	8	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Trunk swoops to South and West • Low live crown ratio • Remove due to Construction Impacts • Yes



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281	California bay	6.5	Fair	Poor	Poor	8	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Tall suppressed young tree • Preserve and Protect • Special Treatment Area • No
282	coast live oak	11.5	Fair	Poor	Poor	10	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Tall young tree • Suppressed to West • Preserve and Protect • Yes
283	coast live oak	11.7	Fair	Poor	Poor	10	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Poor trunk-stem attachment • Scaffold branch encircling trunk • Preserve and Protect • Yes
284	coast live oak	10.8	Fair	Poor	Poor	8	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Trunk bows dramatically to North and East • Preserve and Protect • Yes
285	coast live oak	8.7	Fair	Poor	Poor	8	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Divides into two stems at 2 ft above grade • Poor trunk-stem attachment • Tall suppressed young tree • Remove due to Construction Impacts • Yes



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286	coast live oak	6.8	Fair	Poor	Poor	8	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Tall suppressed young tree Canopy comingles with No. 287 • Preserve and Protect • No
287	Douglas fir	34	Fair	Fair	Fair	20	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Well-defined supporting roots Stout vertical trunk with widespreading canopy in all directions • Large diameter dead branches • Remove due to Construction Impacts • Yes
288	coast live oak	7.3	Fair	Poor	Poor	10	NONE KNOWN	<ul style="list-style-type: none"> • Small suppressed tree with asymmetrical canopy • Preserve and protect • No
289	coast live oak	17.4	Fair	Poor	Poor	14	NONE KNOWN	<ul style="list-style-type: none"> • Poor trunk-stem attachment Codominant stems with included bark Wet wood infection exuding from fractured attachment • Preserve and Protect Simple direct cable • Yes



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290	coast live oak	Triple Trunk 19.7, 5.3, 9.6	Fair	Poor	Poor	14	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Poor trunk-stem attachment in largest trunk • Large diameter dead branches • Preserve and Protect • Simple direct cable • Remove dead branches on largest trunk • Yes
291	coast live oak	32.3 @ 12 in above grade	Poor	Poor	Poor	24	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Poor trunk-stem attachment • Decay at basal area • Dated Sudden Oak Death infection • Remove due to Condition • Yes
292	coast live oak	9.5	Fair	Poor	Fair	10	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Small tree suppressed to West • Preserve and Protect • Yes
293	coast live oak	19.1	Fair	Poor	Fair	18	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Suppressed to East • Leans dramatically to North and West over athletic fic • Remove due to Construction Impacts • Yes
294	California bay	15.5	Fair	Poor	Fair	14	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Poor trunk-stem attachment • Preserve and Protect • Yes



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295	coast live oak	17.3	Fair	Poor	Fair	14	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Poor trunk-stem attachment • Large diameter dead branches • Preserve and Protect • Simple direct cable • Remove dead branches • Yes
296	willow	12.3	Fair	Poor	Poor	12	NONE KNOWN	<ul style="list-style-type: none"> • Previous branch failure • Decayed wound sites • Dead and dying branches • Preserve and Protect • Remove dead branches • Yes
297	California bay	12.8	Fair	Poor	Poor	10	NONE KNOWN	<ul style="list-style-type: none"> • Poor trunk-stem attachment • Preserve and Protect • Yes
298	coast live oak	Double Trunk 8.3, 11.3	Fair	Fair	Fair	12	NONE KNOWN	<ul style="list-style-type: none"> • Small diameter dead branches • Preserve and Protect • Remove dead branches • Yes
299	coast live oak	11.1	N/A	N/A	N/A	N/A	N/A	<ul style="list-style-type: none"> • Dead • Remove due to Condition • No



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300	coast live oak	10.6	Fair	Fair	Fair	12	NONE KNOWN	<ul style="list-style-type: none"> • Crooked trunk • Thinning canopy • Dead branches • Remove due to Construction Impacts • Yes
301	California bay	Double Trunk 10.3, 6.9	Fair	Poor	Poor	12	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Grows from top of slope • Remove due to Construction Impacts • Yes
302	Douglas fir	7.2	N/A	N/A	N/A	N/A	N/A	<ul style="list-style-type: none"> • Dead • Remove due to Condition • No
303	coast live oak	45.6 @ 2 ft above grade	Fair	Fair	Good	32	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Good trunk-stem attachments • Stately mature tree with arching scaffolding branches developing in South and West directions • Fire damage on lower trunk and lower canopy extent • Large diameter dead branches • Preserve and Protect • Special Treatment Area • Remove dead branches • Yes



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304	Douglas fir	39.3	Fair	Poor	Fair	24	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Grows from steep slope Exposed surface roots Mechanical damage from tree No. 303 at 20 ft above Poorly attached secondary trunk at 60 ft above grade Large diameter dead branches • Preserve and Protect Special Treatment Area Remove dead branches Simple direct cable • Yes
305	coast live oak	9.8	Fair	Poor	Poor	8	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Short trunk develops in Northwest direction One lateral branch develops from decayed wound sit • Preserve and Protect Special Treatment Area • Yes
306	Douglas fir	12.1	Fair	Poor	Poor	12	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Tall suppressed tree • Preserve and Protect • Yes
307	Douglas fir	11	Fair	Poor	Poor	12	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Tall suppressed tree • Preserve and Protect • Yes



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307a.	coast live oak	Triple Trunk 7, 5, 4.8	Fair	Poor	Poor	8	NONE KNOWN	<ul style="list-style-type: none"> • Group of three smaller coast live oaks Severe squirrel damage • Remove due to Construction Impacts • Yes
308	Douglas fir	29.4	Fair	Fair	Fair	20	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Tall stout tree with lateral branches beginning at grade Large diameter dead branches • Preserve and Protect Remove dead branches • Yes
309	coast live oak	9.8	Fair	Fair	Good	8	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Asymmetrical canopy • Remove due to Construction Impacts • Yes
310	Douglas fir	37.9	Fair	Fair	Fair	20	HIGH/ Within Proposed Grading	<ul style="list-style-type: none"> • Tall stout tree with lateral branches beginning at grade Large diameter dead branches • Remove due to Construction Impacts • Yes
311	coast live oak	Double Trunk 9.2, 12.8	Fair	Fair	Fair	14	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Asymmetrical canopy Large diameter dead branches • Preserve and Protect Special Treatment Area Remove dead branches • Yes



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312	coast live oak	15.6	Fair	Poor	Fair	16	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Bowed trunk leans to East • Preserve and protect • Yes
313	Douglas fir	27.9	Fair	Fair	Fair	20	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Tall stout tree with lateral branches beginning at grade • Suppressed to West • Large diameter dead branches • Preserve and Protect • Special Treatment Area • Remove dead branches • Yes
314	Douglas fir	9.5	Poor	Poor	Poor	10	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Tall suppressed tree • Canopy intertwined with tree No. 315 • Preserve and Protect • Special Treatment Area • Yes
315	coast live oak	25.3	Fair	Poor	Fair	18	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Poor trunk-stem attachment • Trunk bows in easterly direction • Long lateral scaffold branches arch dramatically • Preserve and Protect • Special Treatment Area • Yes



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316	coast live oak	9.8	Fair	Poor	Poor	14	NONE KNOWN	<ul style="list-style-type: none"> • Severely bowed trunk • Low live crown ratio • Preserve and Protect • Yes
317	Douglas fir	24.2	Fair	Poor	Poor	22	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Grows from steep slope • Exposed surface roots • Lower trunk bows slightly from North to East • Suppressed from South and West • Large diameter dead branches • Remove due to Construction Impacts • Yes
318	coast live oak	11.4	Fair	Poor	Poor	12	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Sudden Oak Death infection in lower trunk • Trunk divides into 2 scaffold branches at 18 ft above • Branches sweep to East • Remove due to Construction Impacts • Yes
319	coast live oak	17.3	Fair	Poor	Poor	18	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Trunk leans dramatically to East • Large diameter dead branches • Remove due to Construction Impacts • Yes



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320	Douglas fir	29.4	Fair	Poor	Poor	18	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Bowed trunk at 30 ft • Preserve and Protect • Special Treatment Area • Subject to further Arborist review once grade stak • Yes
321	coast live oak	26.7	N/A	N/A	N/A	N/A	N/A	<ul style="list-style-type: none"> • Dead • Remove due to Condition • No
322	Douglas fir	18.9	Poor	Poor	Poor	18	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Poor trunk-stem attachment at 60 ft above grade • Preserve and Protect • Yes
323	coast live oak	25.9	Fair	Poor	Poor	18	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Decayed pruning wound sites • Asymmetrical canopy suppressed to West • Dead and dying branches • Remove due to Construction Impacts • Yes
324	coast live oak	Double Trunk 17.2, 12.8	Fair	Poor	Poor	18	HIGH/ Within Proposed Grading Limits	<ul style="list-style-type: none"> • Asymmetrical canopies with bowed trunk configuratic • Suppressed to East • Remove due to Construction Impacts • Yes



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325	Douglas fir	Double Trunk 28.2, 39.8	Fair	Poor	Poor	32	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Large diameter trunks with poorly attached sccondary and scaffold branches Individual trunks heavily weighted to East and West HIGH FAILURE POTENTIAL • Remove due to Condition • Yes
326	Douglas fir	12.2	Fair	Fair	Fair	12	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Well-formed young tree Grows from steep slope bank • Preserve and Protect Special Treatment Area • Yes
327	Douglas fir	29.4	Fair	Poor	Poor	20	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Exposed surface roots Poorly attached scaffold branches begin near grade : extend to heights of 20 ft Previous branch failure HIGH FAILURE POTENTIAL • Remove due to Condition • Yes
328	California bay	Double Trunk 6, 11.2	Fair	Poor	Poor	8	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Poor trunk-stem attachment Suppressed to East • Remove due to Construction Impacts • Yes



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329	coast live oak	16.2	N/A	N/A	N/A	N/A	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Dead • Remove due to Condition • No
330	Douglas fir	11.7	Poor	Poor	Poor	12	HIGH/ Within Proposed Grading	<ul style="list-style-type: none"> • Tall suppressed tree Suppressed to Southeast • Remove due to Construction Impacts • Yes
331	Douglas fir	29.1	Fair	Poor	Poor	24	HIGH/ Within Proposed Grading	<ul style="list-style-type: none"> • Divides into two secondary trunks at 35 ft above grac • Poor trunk-stem attachment • Woodrat nest at 35 ft • Large diameter dead branches • HIGH FAILURE POTENTIAL • Remove due to Condition • Yes
332	Douglas fir	7.9	Poor	Poor	Poor	8	HIGH/ Within Proposed Grading	<ul style="list-style-type: none"> • Tall suppressed young tree • Dead and dying branches • Remove due to Construction Impacts • No
333	coast live oak	13.5	Fair	Poor	Poor	14	HIGH/ Within Proposed Grading	<ul style="list-style-type: none"> • Crooked trunk bows dramatically to West • Remove due to Construction Impacts • Yes



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334	coast live oak	Double Trunk 31.2, 35,1	Fair	Poor	Fair	18	HIGH/ Within Proposed Grading	<ul style="list-style-type: none"> • Stately, mature tree with dated Sudden Oak Death in Severe decay in lower trunk area of upright trunk • Canopy suppressed to East • Large diameter dead branches • Remove due to Construction Impacts • Yes
335	Douglas fir	11.5	Poor	Poor	Poor	12	HIGH/ Within proposed retaining wall	<ul style="list-style-type: none"> • Tall suppressed tree with bowed trunk at 20 ft above • Remove due to Construction Impacts • Yes
336	Douglas fir	21	Fair	Fair	Fair	18	HIGH/ Within Proposed Grading	<ul style="list-style-type: none"> • Exposed surface roots • Grows from steep slope • Remove due to Construction Impacts • Yes
337	Douglas fir	28.8	Fair	Fair	Fair	18	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Exposed surface roots • Grows from steep slope • Remove due to Construction Impacts • Yes
338	coast live oak	9	N/A	N/A	N/A	N/A	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Dead • Remove due to Condition • No



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339	coast live oak	16.5	Fair	Fair	Fair	14	NONE KNOWN	<ul style="list-style-type: none"> • Trunk leans dramatically to West • Canopy bows to South • Suppressed to North • Decayed wound sites • Preserve and Protect • Yes
340	Douglas fir	22.1	Fair	Fair	Fair	18	NONE KNOWN	<ul style="list-style-type: none"> • Exposed surface roots • Grows from steep slope • Preserve and Protect • Yes
341	coast live oak	24.1	N/A	N/A	N/A	N/A	NONE KNOWN	<ul style="list-style-type: none"> • Dead • Remove due to Condition • No
342	California bay	Double Trunk 7.7, 5.1	Poor	Poor	Poor	8	NONE KNOWN	<ul style="list-style-type: none"> • Profuse sprout growth on trunks • Declining canopy • Preserve and Protect • No
343	California bay	7 @ 1 ft above grade	Poor	Poor	Poor	8	NONE KNOWN	<ul style="list-style-type: none"> • Low vigor • Decline in upper canopy • Ivy growth comingled with canopy • Preserve and Protect • No



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344	coast live oak	23.5	Poor	Poor	Poor	15	None Known At This Time	<ul style="list-style-type: none"> • Severely decayed stub with small amount of sprout g • Remove due to Construction Impacts • Yes
345	Douglas fir	21.5	Poor	Poor	Poor	18	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Tall suppressed tree • Dead branches • Low vigor • Remove due to Construction Impacts • Yes
346	California bay	Double Trunk 8.7, 8.2	Poor	Poor	Poor	12	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Divides at 2 ft above grade • Dead and dying branches • Canopy swoops to South • Remove due to Construction Impacts • Yes
347	Douglas fir	29	Poor	Poor	Poor	18	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Severe decline • Remove due to Construction Impacts • Yes
348	Douglas fir	30.1	Fair	Fair	Fair	20	NONE KNOWN	<ul style="list-style-type: none"> • Vertical growth pattern • Stout trunk • Large diameter dead branches • Preserve and Protect • Yes



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TREE/ TREE GROUP #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY for PRESERVATION	Critical Root Zone	IMPACTS LEVEL/ Description	•OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "PROTECTED" CRITERIA Yes/No
349	coast live oak	14.5	Poor	Poor	Poor	14	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Partially uprooted • Severe decay in basal area • Trunk bows to West • Remove due to Construction Impacts • Yes
350	Douglas fir	15.5	Poor	Poor	Poor	14	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Tall suppressed tree • Suppressed to South and East • Remove due to Construction Impacts • Yes
351	coast live oak	11.5	Poor	Poor	Poor	22	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Severed decay in lower trunk • Trunk bows and swoops dramatically to South • Remove due to Construction Impacts • Yes
352	Douglas fir	7.8	Poor	Poor	Poor	12	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Tall suppressed tree • Remove due to Construction Impacts • No
353	Douglas fir	13.2	Poor	Poor	Poor	12	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Tall suppressed tree • Remove due to Construction Impacts • Yes



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TREE/ TREE GROUP #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY for PRESERVATION	Critical Root Zone	IMPACTS LEVEL/ Description	•OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "PROTECTED" CRITERIA Yes/No
354	California bay	6.5	Fair	Poor	Poor	8	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Grows from steep slope Leans slightly to South and West • Remove due to Construction Impacts • No
355	coast live oak	22.8	Fair	Poor	Poor	32	HIGH/ Within Proposed Grading	<ul style="list-style-type: none"> • Damaged, suppressed root structure on South side c Leans dramatically over existing trail HIGH POTENTIAL FOR UPROOTING • Remove due to Construction Impacts • Yes
356	interior live oak	21	Poor	Poor	Poor	32	HIGH/ Within Proposed Grading	<ul style="list-style-type: none"> • Severe decay in lower trunk from dated Sudden Oak infection Trunk leans dramatically to South and West Dead and dying branches HIGH FAILURE POTENTIAL • Remove due to Construction Impacts • Yes
357	Douglas fir	7.5	Poor	Poor	Poor	8	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Tall suppressed tree Small diameter dead branches • Remove due to Construction Impacts • No



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TREE/ TREE GROUP #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY for PRESERVATION	Critical Root Zone	IMPACTS LEVEL/ Description	•OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "PROTECTED" CRITERIA Yes/No
358	coast live oak	10.2	Poor	Poor	Poor	12	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Crooked trunk bows and swoops to South and West • Low vigor • Dead and dying branches • Remove due to Construction Impacts • Yes
359	Douglas fir	15.2	Fair	Poor	Poor	18	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Bowed trunk at 30 ft • Low live crown ratio • Remove due to Construction Impacts • Yes
360	California bay	Double Trunk 6.2, 2.3	Poor	Poor	Poor	12	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Low vigor • Dead and dying branches • Remove due to Construction Impacts • No
361	California bay	8	Fair	Poor	Poor	12	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Suppressed tree leans to West and North • Remove due to Condition • Yes
362	California bay	Double Trunk 5.1, 4.5	Fair	Poor	Poor	10	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Poor trunk-stem attachment • Remove due to Condition • No



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363	coast live oak	Four Trunks 11.8, 16.5, 15.5, 19.2	Fair	Poor	Poor	34	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Three trunks are dead • Live trunk divides at 16 ft above grade • Woodrat nest in upper canopy • Preserve and Protect • Yes
364	Douglas fir	16	N/A	N/A	N/A	N/A	N/A	<ul style="list-style-type: none"> • Dead stump • Remove due to Condition • No
365	madrone	19	N/A	N/A	N/A	N/A	N/A	<ul style="list-style-type: none"> • Dead • Remove due to Condition • No
366	coast live oak	10.6	Poor	Poor	Fair	12	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Trunk bows to South • Thinning canopy • Preserve and Protect • Yes
367	Douglas fir	27.5	Fair	Poor	Poor	28	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Exposed surface roots • Vertical growth from thinning canopy • Dead branches • Remove due to Construction Impacts • Yes



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368	madrone	18.3	N/A	N/A	N/A	N/A	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Dead • Remove due to Condition • No
369	Douglas fir	12.9	Poor	Poor	Poor	14	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Low vigor • Dead and dying branches • Remove due to Construction Impacts • Yes
370	Douglas fir	20	Poor	Poor	Poor	14	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Low vigor • Dead and dying branches • Remove due to Construction Impacts • Yes
371	Douglas fir	13.6	Poor	Poor	Poor	14	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Trunk bows to North • Thinning canopy • Dead branches • Remove due to Construction Impacts • Yes
372	Douglas fir	21.2	Poor	Poor	Poor	14	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Trunk bows to North • Thinning canopy • Dead branches • Remove due to Construction Impacts • Yes



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373	madrone	6.2	N/A	N/A	N/A	N/A	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Dead • Remove due to Condition • No
374	madrone	Triple Trunk 8.6, 8.4, 10.9	N/A	N/A	N/A	N/A	N/A	<ul style="list-style-type: none"> • Dead • Remove due to Condition • No
375	coast live oak	13.3	Fair	Poor	Poor	12	NONE KNOWN	<ul style="list-style-type: none"> • Trunk bends and swoops to West • Trunk girdled by 3 in diameter poison oak • Preserve and Protect • Yes
376	coast live oak	6.1	Poor	Poor	Poor	12	NONE KNOWN	<ul style="list-style-type: none"> • Trunk bows dramatically to North • Preserve and Protect • No
377	Douglas fir	15.8	Poor	Poor	Poor	18	NONE KNOWN	<ul style="list-style-type: none"> • Profuse sprout growth on lower trunk • Mortality Spiral • Preserve and Protect • Yes
378	California bay	Four Trunks 6, 1, 1, 3.3	Fair	Poor	Poor	8	NONE KNOWN	<ul style="list-style-type: none"> • Leaves display symptoms of Sudden Oak Death • Preserve and Protect • No



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379	Douglas fir	19.5	Poor	Poor	Poor	18	NONE KNOWN	<ul style="list-style-type: none"> • Symptoms of decline • Preserve and Protect • Yes
380	Douglas fir	12.5	N/A	N/A	N/A	N/A	N/A	<ul style="list-style-type: none"> • Dead stump • Remove due to Condition • No
381	California bay	Double Trunk 8, 10.4	Poor	Poor	Poor	14	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Divides at 18 ft above grade • Poor trunk-stem attachment • Thinning canopy • Remove due to Construction Impacts • Yes
382	California bay	6.9	Poor	Poor	Poor	12	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Thinning canopy • Remove due to Construction Impacts • No
383	Douglas fir	25.7	Fair	Fair	Poor	20	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Well-balanced canopy • Large diameter dead branches • Remove due to Construction Impacts • Yes



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384	coast live oak	14.3	Fair	Poor	Poor	16	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Trunk divides at 6 ft above grade Asymmetrical canopy Large diameter dead branches • Remove due to Construction Impacts • Yes
385	California bay	Double Trunk 9.1, 6.8	Poor	Poor	Poor	12	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Poor trunk-stem attachment Large diameter dead trunk Thinning canopy Profuse sprout growth Dead and broken branches • Remove due to Construction Impacts • Yes
386	California bay	7.4	Poor	Poor	Poor	12	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Broken branches Thinning canopy • Remove due to Construction Impacts • No
387	Douglas fir	6.2	Fair	Poor	Poor	8	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Tall suppressed tree • Remove due to Construction Impacts • No



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388	California bay	Double Trunk 9.4, 10.7	Fair	Poor	Poor	14	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Exposed surface roots • Profuse sprout growth on lower trunks • Thinning canopy • Remove due to Construction Impacts • Yes
389	Douglas fir	7.2	Fair	Poor	Poor	8	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Suppressed young tree • Remove due to Construction Impacts • No
390	Douglas fir	35.6	Fair	Fair	Poor	24	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Stout trunk with well-defined buttress roots • Large diameter dead branches • Remove due to Construction Impacts • Yes
391	Douglas fir	21.7	Fair	Fair	Poor	24	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Stout trunk with well-defined buttress roots • Large diameter dead branches • Remove due to Construction Impacts • Yes
392	Douglas fir	28.2	Fair	Poor	Poor	18	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Slightly bowed trunk • Conks/Fruiting Bodies on lower trunk • Dead and dying branches • Remove due to Condition • Yes



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393	coast live oak	19	N/A	N/A	N/A	N/A	N/A	<ul style="list-style-type: none"> • Dead/Fallen • Remove due to Condition • No
394	California bay	6.5	Fair	Poor	Poor	12	NONE KNOWN	<ul style="list-style-type: none"> • Bowed trunk • Thinning canopy • Preserve and Protect • No
395	Douglas fir	14.5	Fair	Poor	Poor	12	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Suppressed to North • Remove due to Construction Impacts • Yes
396	Douglas fir	15.6	N/A	N/A	N/A	N/A	N/A	<ul style="list-style-type: none"> • Dead stub • Remove due to Condition • No
397	Douglas fir	35.5	Fair	Poor	Poor	24	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Lower trunk leans to West • Divides at 25 ft into two codominant stems • Poor trunk-stem attachment • Large diameter dead branches • HIGH FAILURE POTENTIAL • Remove due to Construction Impacts • Yes



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398	coast live oak	7.5	Poor	Poor	Poor	8	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Bowed trunk swoops to South and West • Remove due to Construction Impacts • No
399	Douglas fir	27.5	N/A	N/A	N/A	N/A	N/A	<ul style="list-style-type: none"> • Dead • Remove due to Condition • No
400	Douglas fir	13.8	Poor	Poor	Poor	14	NONE KNOWN	<ul style="list-style-type: none"> • Tall suppressed tree • Low vigor • Dead and broken branches • Remove due to Construction Impacts • Yes
401	Douglas fir	17.6	Fair	Poor	Poor	16	NONE KNOWN	<ul style="list-style-type: none"> • Tall suppressed tree • Low live crown ratio • Preserve and Protect • Yes
402	Douglas fir	11.5	Fair	Poor	Poor	12	NONE KNOWN	<ul style="list-style-type: none"> • Lower trunk bows to North • Suppressed to East • Preserve and Protect • Yes



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403	Douglas fir	11.5	Fair	Poor	Poor	12	NONE KNOWN	<ul style="list-style-type: none"> • Trunk bows to East • Preserve and Protect • Yes
404	Douglas fir	25	Fair	Poor	Poor	18	NONE KNOWN	<ul style="list-style-type: none"> • Lower trunk bows to North and West • Large diameter dead branches • Preserve and Protect • Yes
405	Douglas fir	7.5	Fair	Fair	Fair	12	NONE KNOWN	<ul style="list-style-type: none"> • Lower trunk bows to West • Preserve and Protect • No
406	Douglas fir	25.3	N/A	N/A	N/A	N/A	N/A	<ul style="list-style-type: none"> • Dead • Preserve and Protect • No
407	Douglas fir	6.8	Fair	Poor	Poor	10	NONE KNOWN	<ul style="list-style-type: none"> • Trunk girdled by vines • Preserve and Protect • No
408	Douglas fir	12.6	Fair	Poor	Poor	12	NONE KNOWN	<ul style="list-style-type: none"> • Crooked trunk at 20 ft above grade • Preserve and Protect • Yes



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409	coast live oak	Double Trunk 20, 20.2	Fair	Fair	Fair	28	NONE KNOWN	<ul style="list-style-type: none"> • Lower trunks covered by dense moss growth Wet wood infection at 12 ft above grade Decayed wound sites Southern trunk develops over adjacent property • Preserve and Protect • Yes
410	Douglas fir	31.6	Fair	Poor	Poor	26	NONE KNOWN	<ul style="list-style-type: none"> • Shelf conks on lower trunk Lower trunk bows to South Potential for uprooting • Preserve and Protect • Yes
411	Douglas fir	19.2	Fair	Poor	Poor	16	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Heaved soil on North side of tree Significant lean to South towards adjacent property • Remove due to Construction Impacts • Yes
412	Douglas fir	24.7	Fair	Poor	Poor	24	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Bowed trunk Dead and dying branches • Remove due to Construction Impacts • Yes



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413	Douglas fir	15.1	Fair	Poor	Poor	16	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Lower trunk bows to South and West Dead and dying branches • Remove due to Construction Impacts • Yes
414	Douglas fir	10.9	Fair	Poor	Poor	12	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Suppressed tree with dead and dying branches • Remove due to Construction Impacts • Yes
415	Douglas fir	22.4	Fair	Poor	Poor	18	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Large diameter dead branches • Remove due to Construction Impacts • Yes
416	madrone	11.9	N/A	N/A	N/A	N/A	N/A	<ul style="list-style-type: none"> • Dead • Remove due to Condition • No
417	coast live oak	6.2	Poor	Poor	Poor	6	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Swooping trunk with vertical fractures Broken top at 12 ft above grade • Remove due to Construction Impacts • No



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418	Douglas fir	34.7	Fair	Fair	Poor	28	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Well-defined buttress roots • Lower trunk bows to South and West • Large diameter dead branches • Remove due to Construction Impacts • Yes
419	Douglas fir	8.4	Poor	Poor	Poor	12	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Trunk bows and swoops dramatically to South and E • Dead and dying branches • Remove due to Construction Impacts • Yes
420	California bay	10.8	Poor	Poor	Poor	12	NONE KNOWN	<ul style="list-style-type: none"> • Sprout growth develops to height of 8 ft • Remainder of tree is dead • Remove due to Condition • No
421	madrone	7.8	N/A	N/A	N/A	N/A	N/A	<ul style="list-style-type: none"> • Dead • Remove due to Condition • No
422	Douglas fir	26.7	Fair	Poor	Poor	22	NONE KNOWN	<ul style="list-style-type: none"> • Large diameter dead branches • Preserve and Protect • Yes



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423	madrone	17.3	N/A	N/A	N/A	N/A	N/A	<ul style="list-style-type: none"> • Dead • Remove due to Condition • No
424	coast live oak	7	Fair	Poor	Poor	14	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Severely bowed trunk develops parallel to slope • Low live crown ratio • Remove due to Construction Impacts • No
425	Douglas fir	11.6	Fair	Poor	Poor	14	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Suppressed to North and West • Remove due to Construction Impacts • Yes
426	coast live oak	7	Fair	Poor	Fair	8	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Decayed wound in lower trunk area • Poor trunk-stem attachment at 5 ft above grade • Suppressed to West • Remove due to Construction Impacts • No
427	California bay	Triple Trunk 7, 1.6, 3.1	Fair	Poor	Poor	8	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Larger trunk is bowed and leans to South and West • Remove due to Construction Impacts • No



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428	Douglas fir	16.8	Fair	Poor	Poor	14	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Dead and dying branches • Remove due to Construction Impacts • Yes
429	madrone	8.2	N/A	N/A	N/A	N/A	N/A	<ul style="list-style-type: none"> • Dead • Remove due to Condition • No
430	Douglas fir	41.5	Fair	Poor	Poor	28	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Exposed surface roots • Poison oak growth on lower trunk • Several shelf conks in lower trunk area • Pitch exudation between 20 and 45 ft above grade • Large diameter dead branches • Remove due to Construction Impacts • Yes
431	madrone	8.1	N/A	N/A	N/A	N/A	N/A	<ul style="list-style-type: none"> • Dead • Remove due to Condition • No
432	madrone	7.4	N/A	N/A	N/A	N/A	N/A	<ul style="list-style-type: none"> • Dead • Remove due to Condition • No



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433	California bay	6.1	Fair	Poor	Poor	8	NONE KNOWN	<ul style="list-style-type: none"> • Grows from steep slope • Remove due to Condition • No
434	coast live oak	12.2	N/A	N/A	N/A	N/A	N/A	<ul style="list-style-type: none"> • Dead • Remove due to Condition • No
435	Douglas fir	27.2	Fair	Poor	Poor	22	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Tall suppressed tree • Trunk bows slightly to South and East • Remove due to Construction Impacts • Yes
436	coast live oak	10.7	Fair	Poor	Poor	12	NONE KNOWN	<ul style="list-style-type: none"> • Bowed trunk divides at 12 ft above grade • Decayed wound sites • Large diameter dead branches • Preserve and Protect • Yes
437	madrone	7.4	N/A	N/A	N/A	N/A	N/A	<ul style="list-style-type: none"> • Dead • Remove due to Condition • No



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438	Douglas fir	20.2	Fair	Poor	Poor	18	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Low vigor • Thinning canopy • Dead and dying branches • Remove due to Construction Impacts • Yes
439	Douglas fir	20.2	Fair	Poor	Poor	18	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Partially uprooted • Dramatic lean to North and East • HIGH FAILURE POTENTIAL • Remove due to Construction Impacts • Yes
440	coast live oak	12.2	Poor	Poor	Poor	14	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Undermined root structure • Dated Sudden Oak Death Infection • Significant decay in lower trunk Remove due to Cons • Impacts • Canopy swoops to North and East • HIGH FAILURE POTENTIAL • Remove due to Construction Impacts • Yes
441	coast live oak	11.2	Poor	Poor	Poor	14	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Dated Sudden Oak Death Infection • Significant decay in lower trunk • Canopy swoops to North and East • HIGH FAILURE POTENTIAL • Remove due to Construction Impacts • Yes



1440 CENTER TREE RESOURCE INVENTORY CONSTRUCTION IMPACT ASSESSMENT

Dedicated to the Preservation of Trees

James P. Allen
Associates

TREE/ TREE GROUP #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY for PRESERVATION	Critical Root Zone	IMPACTS LEVEL/ Description	•OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "PROTECTED" CRITERIA Yes/No
442	coast live oak	12	Fair	Poor	Poor	18	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Trunk swoops dramatically to North and West • Low live crown ratio • Dead and dying branches • Remove due to Construction Impacts • Yes
443	Douglas fir	11.2	Fair	Poor	Poor	14	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Bowed trunk • Dead and dying branches • Remove due to Construction Impacts • Yes
444	Douglas fir	12	Poor	Poor	Poor	18	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Thinning canopy • Dead and dying branches • Suppressed to West • Remove due to Construction Impacts • Yes
445	coast live oak	6.5	Fair	Poor	Poor	8	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Severely bowed trunk with small percentage of live fc • Remove due to Construction Impacts • No
446	Douglas fir	10.8	Fair	Poor	Poor	14	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Bowed trunk • Dead and dying branches • Remove due to Construction Impacts • Yes



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1440 CENTER TREE RESOURCE INVENTORY CONSTRUCTION IMPACT ASSESSMENT

Dedicated to the Preservation of Trees

TREE/ TREE GROUP #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY for PRESERVATION	Critical Root Zone	IMPACTS LEVEL/ Description	•OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "PROTECTED" CRITERIA Yes/No
447	Douglas fir	10.3	Fair	Poor	Poor	14	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Bowed trunk • Dead and dying branches • Remove due to Construction Impacts • Yes
448	California bay	Double Trunk 11.4, 11.8	Fair	Poor	Poor	18	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Grows from steep slope • Suppressed to South • Remove due to Construction Impacts • Yes
449	Douglas fir	51	N/A	N/A	N/A	N/A	N/A	<ul style="list-style-type: none"> • Dead stub • Remove due to Condition • No
450	Douglas fir	11.5	Fair	Poor	Poor	14	Remove due to Condition	<ul style="list-style-type: none"> • Tall suppressed tree • Suppressed to West • Remove due to Construction Impacts • Yes
451	Douglas fir	36.4	Fair	Poor	Poor	28	MODERATE/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Leans dramatically to North and West • Woodrat nest at 35 ft above grade • HIGH FAILURE POTENTIAL • Remove due to Condition • Yes



1440 CENTER TREE RESOURCE INVENTORY CONSTRUCTION IMPACT ASSESSMENT

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TREE/ TREE GROUP #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY for PRESERVATION	Critical Root Zone	IMPACTS LEVEL/ Description	•OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "PROTECTED" CRITERIA Yes/No
452	madrone	11.4	N/A	N/A	N/A	N/A	N/A	<ul style="list-style-type: none"> • Dead • Remove due to Condition • No
453	California bay	Double Trunk 11.5, 9.9	Fair	Poor	Poor	14	NONE KNOWN	<ul style="list-style-type: none"> • Trunk leans to South and East • Decayed wound site in lower trunks • Remove due to Condition • Yes
454	California bay	17.7	Fair	Poor	Poor	18	HIGH/ Canopy Conflicts with Proposed Retaining Wall Construction	<ul style="list-style-type: none"> • Trunk swoops dramatically to South and East • Remove due to Construction Impacts • Yes
455	California bay	Multiple Trunks	Fair	Poor	Poor	18	NONE KNOWN	<ul style="list-style-type: none"> • Sprout growth developing from decayed parent stum • HIGH FAILURE POTENTIAL • Remove due to Condition • No
456	California bay	Double Trunk 3.2, 4.6	Fair	Poor	Poor	6	NONE KNOWN	<ul style="list-style-type: none"> • Small suppressed tree • Remove due to Condition • No



1440 CENTER TREE RESOURCE INVENTORY CONSTRUCTION IMPACT ASSESSMENT

Dedicated to the Preservation of Trees

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Associates

TREE/ TREE GROUP #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY for PRESERVATION	Critical Root Zone	IMPACTS LEVEL/ Description	•OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "PROTECTED" CRITERIA Yes/No
457	coast live oak	12.8	Fair	Poor	Poor	12	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Dated Sudden Oak Death infection Severe decay in lower trunk HIGH FAILURE POTENTIAL • Remove due to Condition • Yes
458	madrone	20.5	N/A	N/A	N/A	N/A	N/A	<ul style="list-style-type: none"> • Dead • Remove due to Condition • No
459	Douglas fir	15.5	Fair	Poor	Poor	16	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Damaged supporting roots Grows at edge of path Mechanical wound at 12 ft HIGH FAILURE POTENTIAL • Remove due to Condition • Yes
460	coast live oak	9.3	Fair	Poor	Poor	12	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Dated Sudden Oak Death infection in lower turnk Trunk leans dramatically to North and West • Remove due to condition • Yes
461	California bay	7.8	Fair	Poor	Poor	12	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Leans dramatically to North and East • Remove due to Construction Impacts • No



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1440 CENTER TREE RESOURCE INVENTORY CONSTRUCTION IMPACT ASSESSMENT

Dedicated to the Preservation of Trees

TREE/ TREE GROUP #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY for PRESERVATION	Critical Root Zone	IMPACTS LEVEL/ Description	•OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "PROTECTED" CRITERIA Yes/No
462	madrone	12.2	Poor	Poor	Poor	18	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Trunk bows severely to North and West • Large diameter dead branches • Remove due to Condition • Yes
463	California bay	Triple Trunk 6.4, 3.1, 2.7	Fair	Poor	Poor	8	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Asymmetrical canopy • Large diameter dead branches • Large diameter dead trunk • Remove due to Condition • No
464	coast live oak	8.2	Fair	Poor	Poor	12	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Severely decayed trunk • Remove due to Condition • Yes
465	coast live oak	11.1	Fair	Poor	Poor	8	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Severely decayed trunk • Remove due to Construction Impacts • Yes
466	coast live oak	Double Trunk 5.7, 6.3	Fair	Poor	Poor	12	None Known At This Time	<ul style="list-style-type: none"> • Trunk bows to North and East • Remove due to Condition • Yes



1440 CENTER TREE RESOURCE INVENTORY CONSTRUCTION IMPACT ASSESSMENT

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TREE/ TREE GROUP #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY for PRESERVATION	Critical Root Zone	IMPACTS LEVEL/ Description	•OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "PROTECTED" CRITERIA Yes/No
467	California bay	12.5	Fair	Poor	Poor	18	None Known At This Time	<ul style="list-style-type: none"> • Suppressed to South • Remove due to Condition • Yes
468	coast live oak	17.8	Fair	Poor	Poor	14	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Large diameter pruning wound at 8 ft above grade Remaining secondary trunk poorly attached Swoops to North and East • Remove due to Construction Impacts • Yes
469	coast live oak	21.1	Fair	Poor	Poor	18	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Exposed surface roots Poor trunk-stem attachment Trunk swoops to East • Remove due to Construction Impacts • Yes
470	Douglas fir	36.1	Fair	Poor	Poor	28	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Exposed surface roots Leans dramatically to North and East Suppressed to West • Remove due to Construction Impacts • Yes



1440 CENTER TREE RESOURCE INVENTORY CONSTRUCTION IMPACT ASSESSMENT

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TREE/ TREE GROUP #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY for PRESERVATION	Critical Root Zone	IMPACTS LEVEL/ Description	•OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "PROTECTED" CRITERIA Yes/No
471	coast live oak	16.9	Fair	Poor	Poor	16	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Dated Sudden Oak Death Infection Sycamore borer activity Asymmetrical canopy bows to East • Remove due to Construction Impacts • Yes
472	coast live oak	9.9	Fair	Poor	Poor	12	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Trunk bows to North and East Suppressed to West Possible woodrat nest at 25 ft above grade • Remove due to Construction Impacts • Yes
473	Douglas fir	17.2	Fair	Poor	Poor	18	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Poorly attached secondary trunk developing at 15 ft : • Remove due to Construction Impacts • Yes
474	coast live oak	16.2	Fair	Poor	Poor	14	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Fill on South and West side of lower trunk Trunk leans to North Canopy swoops to East • Remove due to Construction Impacts • Yes



1440 CENTER TREE RESOURCE INVENTORY CONSTRUCTION IMPACT ASSESSMENT

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TREE/ TREE GROUP #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY for PRESERVATION	Critical Root Zone	IMPACTS LEVEL/ Description	•OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "PROTECTED" CRITERIA Yes/No
475	coast live oak	Four Trunks 10.5, 9.3, 5.3, 13.3	Fair	Poor	Poor	18	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Severe decay in basal area • Poor trunk-stem attachment • Suppressed to West • Remove due to Condition • Yes
476	California bay	Double Trunk 9.4, 8.6	Fair	Poor	Poor	14	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Poor trunk-stem attachment • Suppressed to North and West • Remove due to Condition • Yes
477	Douglas fir	17.7	Fair	Poor	Poor	18	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Grows from steep slope • Trunk bows to North and West • Poor trunk-stem attachment • Remove due to Condition • Yes
478	coast live oak	15.4	Fair	Fair	Fair	18	HIGH/ Within Proposed Road	<ul style="list-style-type: none"> • Poor trunk-stem attachment • Suppressed to South • Remove due to Construction Impacts • Yes
479	California bay	8.2	Fair	Poor	Poor	8	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Trunk leans to West • Remove due to Construction Impacts • Yes



1440 CENTER TREE RESOURCE INVENTORY CONSTRUCTION IMPACT ASSESSMENT

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Associates

TREE/ TREE GROUP #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY for PRESERVATION	Critical Root Zone	IMPACTS LEVEL/ Description	•OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "PROTECTED" CRITERIA Yes/No
480	California bay	6.5	Fair	Poor	Poor	8	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Trunk leans to West • Remove due to Construction Impacts • No
481	California bay	Four Trunks 7.1, 3.5, 2.8, 2.2	Fair	Poor	Poor	12	HIGH/ Proximity to Proposed Grading	<ul style="list-style-type: none"> • Decayed wound site in larger trunk • Remove due to Condition • No
482	coast live oak	19.1	Fair	Poor	Fair	22	NONE KNOWN	<ul style="list-style-type: none"> • Swooping trunk develops in Easterly direction • Compensating reaction growth in lower trunk at scaff • Preserve and Protect • Yes
483	coast live oak	7.2	Fair	Poor	Fair	12	NONE KNOWN	<ul style="list-style-type: none"> • Tall suppressed young tree • Preserve and Protect • No
484	coast live oak	9.4	Fair	Poor	Fair	8	NONE KNOWN	<ul style="list-style-type: none"> • Trunk bends and swoops in North and East direction: • Suppressed to West • Preserve and Protect • Yes

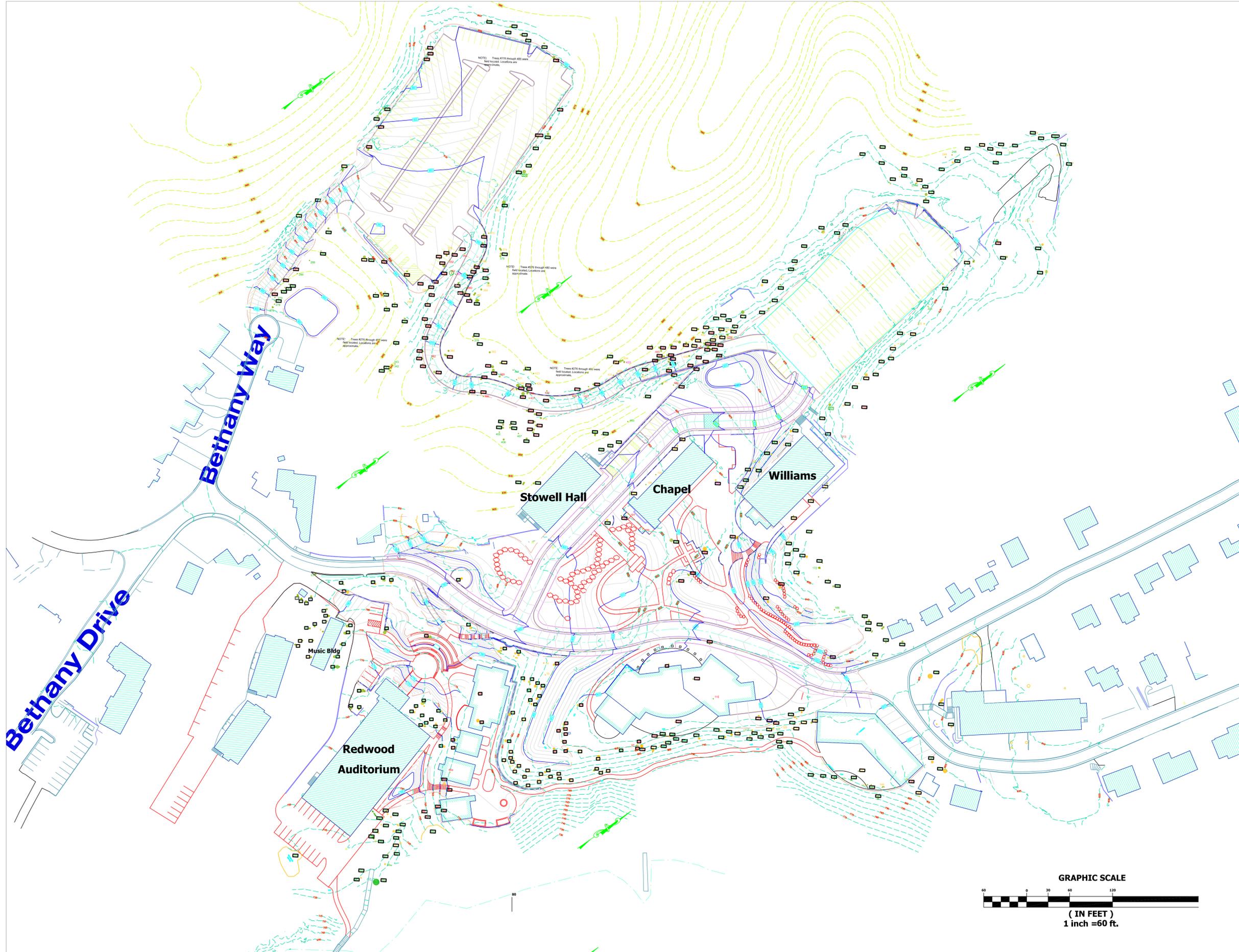


1440 CENTER TREE RESOURCE INVENTORY CONSTRUCTION IMPACT ASSESSMENT

Dedicated to the Preservation of Trees

James P. Allen
Associates

TREE/ TREE GROUP #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY for PRESERVATION	Critical Root Zone	IMPACTS LEVEL/ Description	•OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "PROTECTED" CRITERIA Yes/No
485	coast live oak	Five Trunks 9.2, 10.8, 6.4, 7, 8.3	Fair	Poor	Fair	14	NONE KNOWN	<ul style="list-style-type: none"> • Suppressed to West • Poor trunk-stem attachment • Preserve and Protect • Yes
486	coast live oak	10.2	Fair	Fair	Good	12	NONE KNOWN	<ul style="list-style-type: none"> • Thinning canopy with dead and dying branches • Suppressed to West • Preserve and Protect • Yes
487	coast live oak	9.9	Fair	Fair	Good	13	NONE KNOWN	<ul style="list-style-type: none"> • Thinning canopy with dead and dying branches • Suppressed to West • Preserve and Protect • Yes
488	coast live oak	10.7	Fair	Fair	Good	14	NONE KNOWN	<ul style="list-style-type: none"> • Thinning canopy with dead and dying branches • Suppressed to West • Preserve and Protect • Yes



Map Key / Legend

- Surveyed Tree Trunk Location
- Field Located Tree Trunk Location
- 2** Assigned Tree Number
- 2 Meets "Protected" Criteria
- 2 Remove due to Construction Impacts
- 2 Remove due to Condition
- 2 Preserve and Protect

**Tree Resource Analysis/
Construction Impact Assessment
Tree Location Map**

Entire Site at 60 Scale

1440 Center Project
800 Bethany Drive
Scotts Valley, CA

Tree Location Map

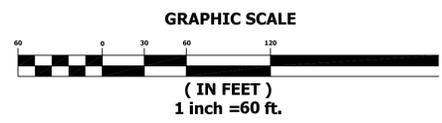


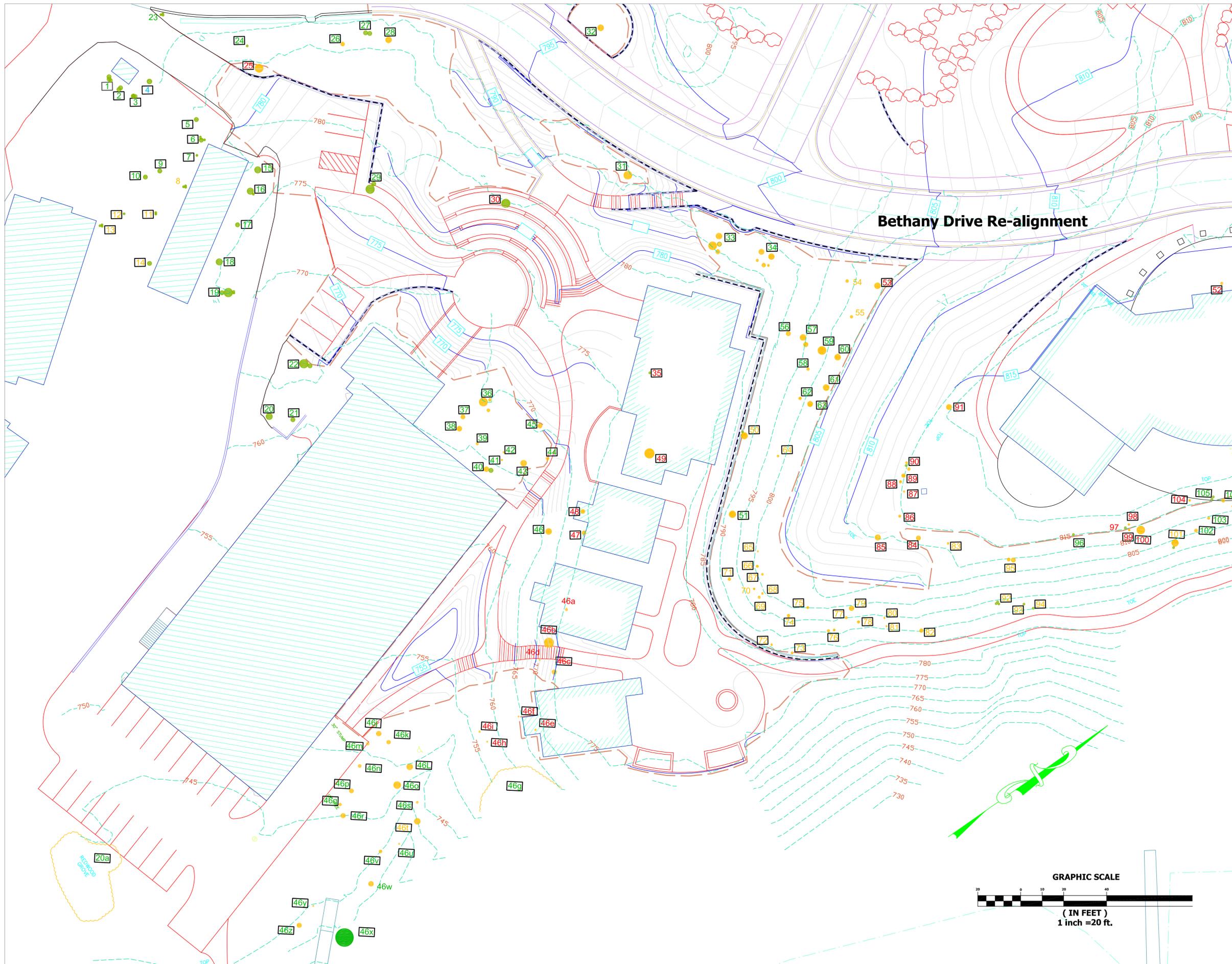
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Date: 06/11/14
Revision: XX/XX/XX
Revision: XX/XX/XX





Map Key / Legend

- Surveyed Tree Trunk Location
- Field Located Tree Trunk Location
- 2** Assigned Tree Number
- 2 Meets "Protected" Criteria
- 2 Remove due to Construction Impacts
- 2 Remove due to Condition
- 2 Preserve and Protect

Tree Resource Analysis/ Construction Impact Assessment Tree Location Map

Trees/Tree Groups #1 through 106

1440 Center Project

800 Bethany Drive
Scotts Valley, CA

Tree Location Map



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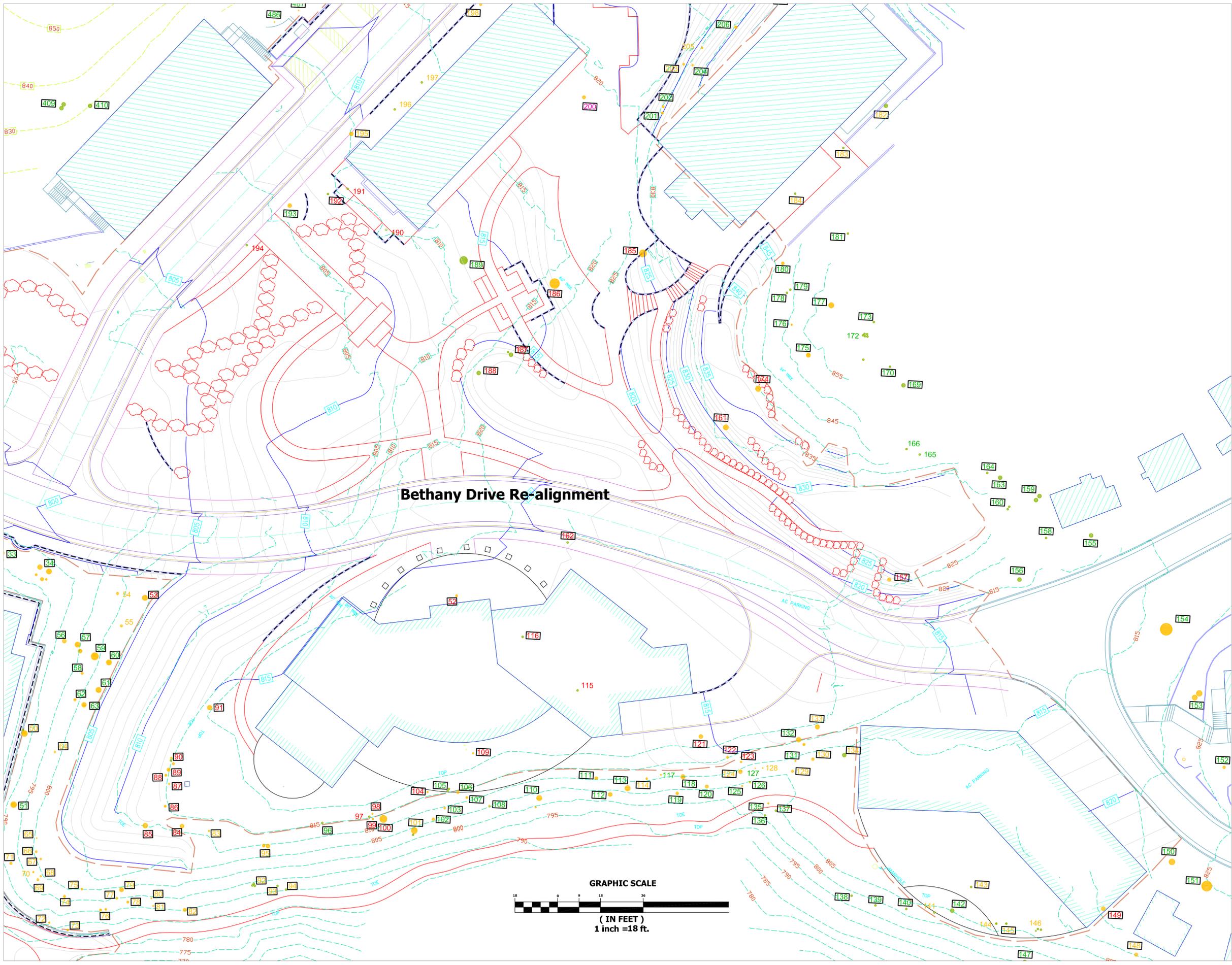


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Revision: XX/XX/XX

GRAPHIC SCALE



(IN FEET)
1 inch = 20 ft.



Map Key / Legend

- Surveyed Tree Trunk Location
- Field Located Tree Trunk Location
- 2** Assigned Tree Number
- 2 Meets "Protected" Criteria
- 2 Remove due to Construction Impacts
- 2 Remove due to Condition
- 2 Preserve and Protect

Tree Resource Analysis/ Construction Impact Assessment Tree Location Map

**Trees/Tree Groups
#50 through 208**

1440 Center Project
800 Bethany Drive
Scotts Valley, CA

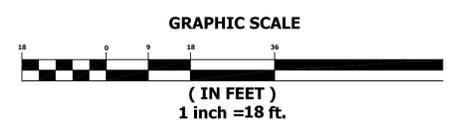
Tree Location Map

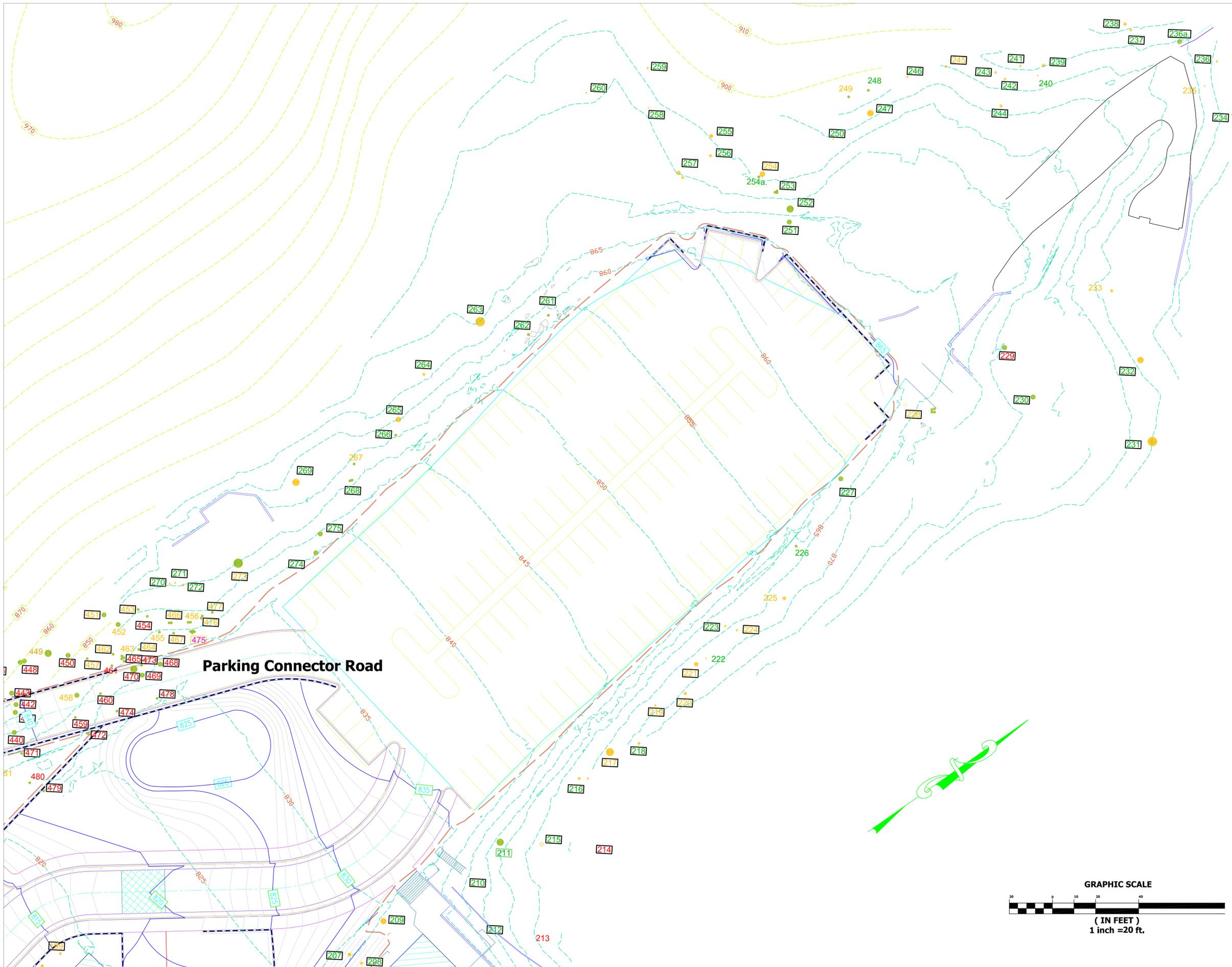


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Revision: XX/XX/XX





Map Key / Legend

- Surveyed Tree Trunk Location
- Field Located Tree Trunk Location
- 2** Assigned Tree Number
- 2 Meets "Protected" Criteria
- 2 Remove due to Construction Impacts
- 2 Remove due to Condition
- 2 Preserve and Protect

Tree Resource Analysis/ Construction Impact Assessment Tree Location Map

**Trees/Tree Groups
#207 through 275
#440 through 480**

1440 Center Project

800 Bethany Drive
Scotts Valley, CA

Tree Location Map



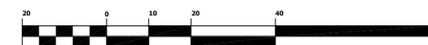
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GRAPHIC SCALE



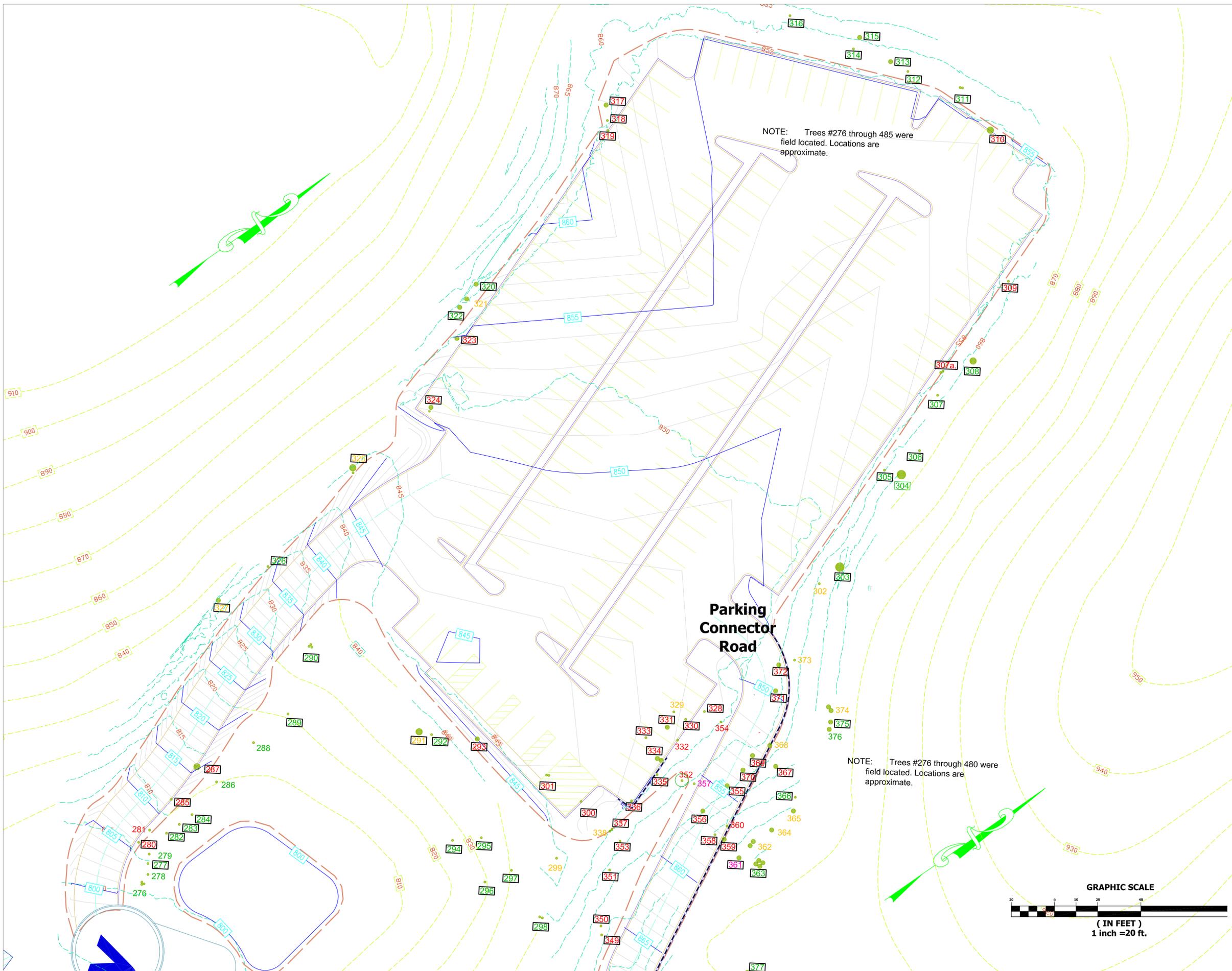
(IN FEET)
1 inch = 20 ft.

Map Key / Legend

- Surveyed Tree Trunk Location
- Field Located Tree Trunk Location
- 2** Assigned Tree Number
- 2 Meets "Protected" Criteria
- 2 Remove due to Construction Impacts
- 2 Remove due to Condition
- 2 Preserve and Protect

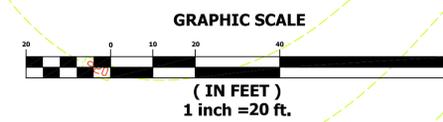
Tree Resource Analysis/ Construction Impact Assessment Tree Location Map

Trees/Tree Groups #278 through 363



NOTE: Trees #276 through 485 were field located. Locations are approximate.

NOTE: Trees #276 through 480 were field located. Locations are approximate.



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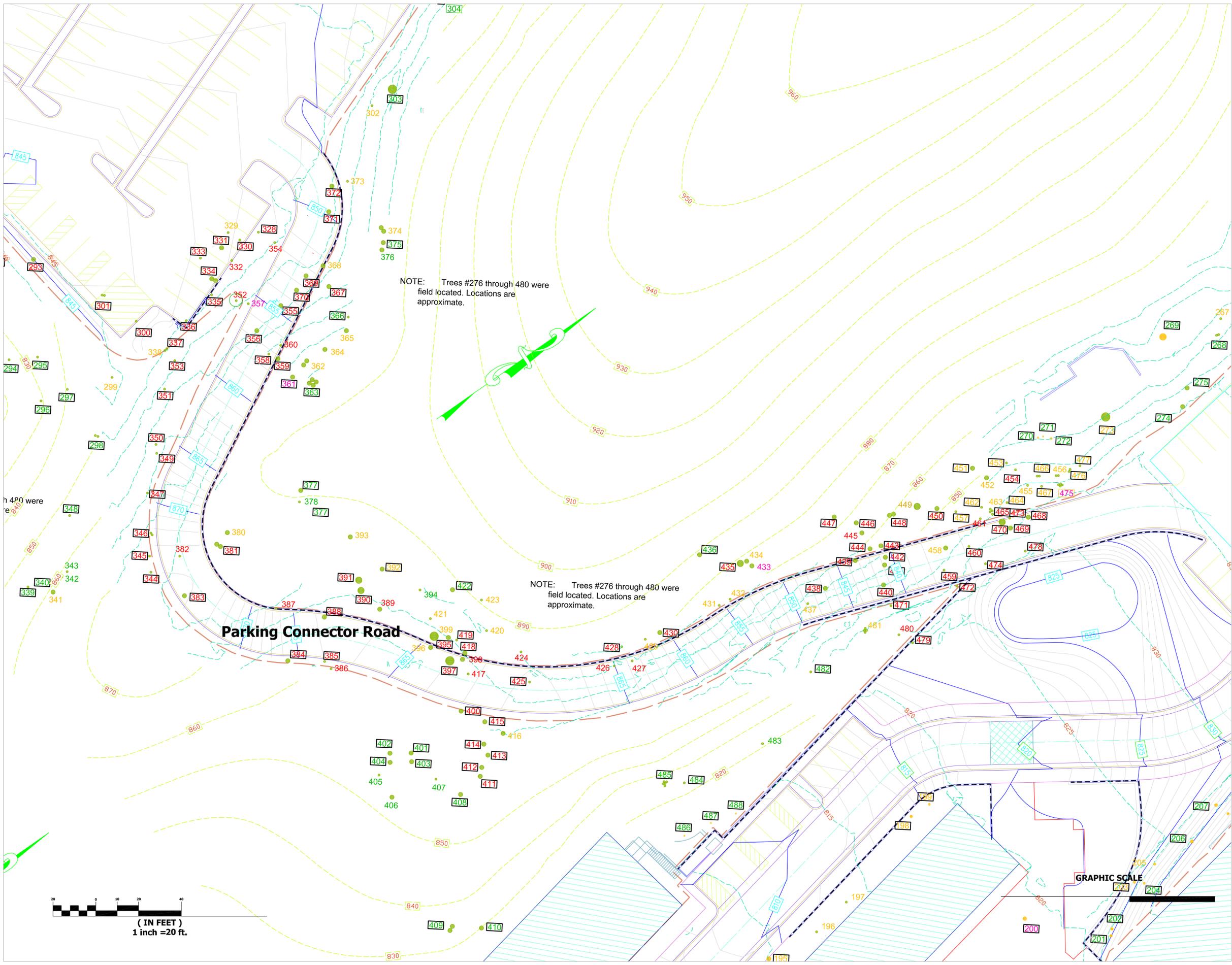
Tree Location Map



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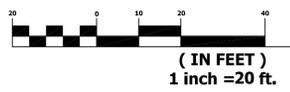


NOTE: Trees #276 through 480 were field located. Locations are approximate.

NOTE: Trees #276 through 480 were field located. Locations are approximate.

Parking Connector Road

GRAPHIC SCALE



Map Key / Legend

- Surveyed Tree Trunk Location
- Field Located Tree Trunk Location
- 2** Assigned Tree Number
- 2 Meets "Protected" Criteria
- 2 Remove due to Construction Impacts
- 2 Remove due to Condition
- 2 Preserve and Protect

Tree Resource Analysis/ Construction Impact Assessment Tree Location Map

**Trees/Tree Groups
#328 through 486**

1440 Center Project
800 Bethany Drive
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Tree Location Map



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Map Key / Legend

- **Surveyed Tree Trunk Location**
- **Field Located Tree Trunk Location**
- 2 **Assigned Tree Number**
- 2 **Meets "Protected" Criteria**
- Critical Root Zone**
- Tree Preservation Zone**
- Tree Preservation Fencing With Straw Bales**
- Special Treatment Area**
Treatments to be Determined by Project Arborist after grade stakes are set.
- Treatments may include:**
 - Decrease Grading Limits
 - Pre-Construction Root Pruning
 - Mulching
 - Supplemental Irrigation
 - Canopy Clearance Pruning
 - Stabilization Treatments
 - Alternative Construction Methods
- Stabilization Procedures Required**
- Dead Branch Removal Required**
- Monitor Stability**

TREE PROTECTION PLAN

Entire Site at 60 Scale

1440 Center Project

800 Bethany Drive
Scotts Valley, CA

Tree Location Map



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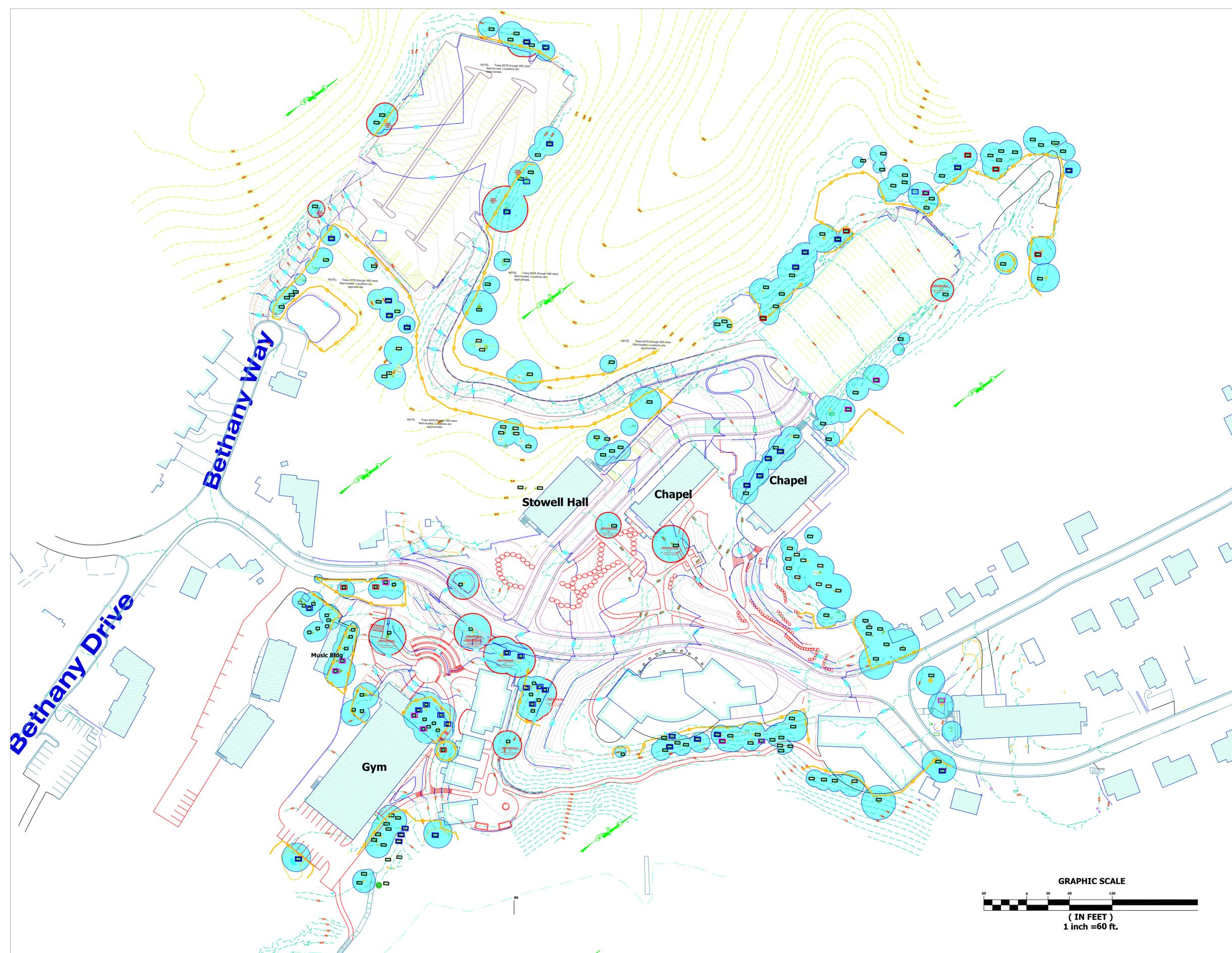
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Revision: XX/XX/XX

GRAPHIC SCALE



(IN FEET)
1 inch = 60 ft.



Map Key / Legend

- **Surveyed Tree Trunk Location**
- **Field Located Tree Trunk Location**
- 2 **Assigned Tree Number**
- 2 **Meets "Protected" Criteria**
- Critical Root Zone**
- Tree Preservation Zone**
- Tree Preservation Fencing With Straw Bales**
- Special Treatment Area**
Treatments to be Determined by Project Arborist after grade stakes are set.
- Treatments may include:
 - Decrease Grading Limits
 - Pre-Construction Root Pruning
 - Mulching
 - Supplemental Irrigation
 - Canopy Clearance Pruning
 - Stabilization Treatments
 - Alternative Construction Methods
- Stabilization Procedures Required**
- Dead Branch Removal Required**
- Monitor Stability**

TREE PROTECTION PLAN

**Trees/Tree Groups
#1 through 106**

1140 Center Project
800 Bethany Drive
Scotts Valley, CA

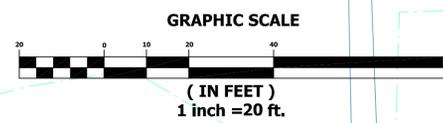
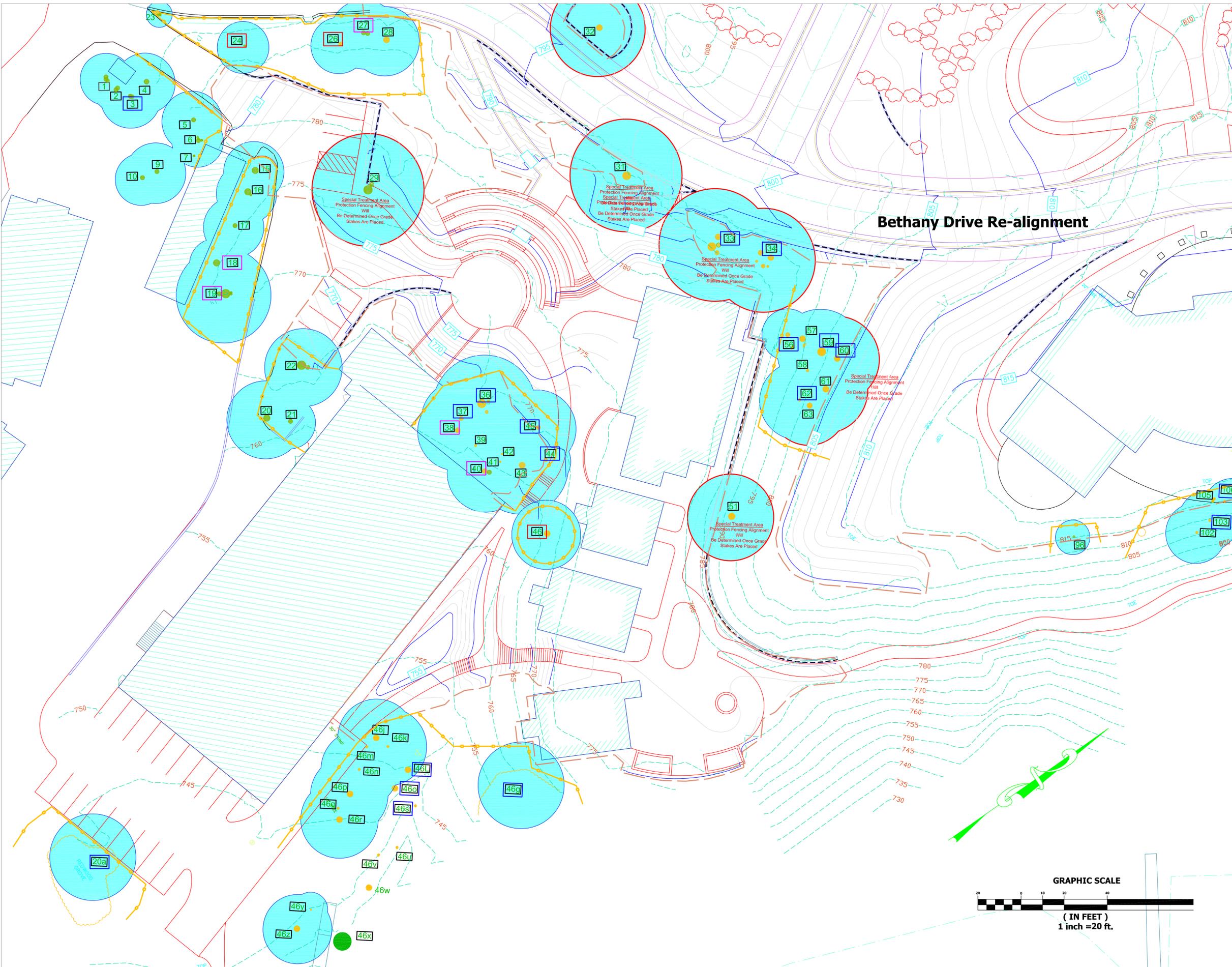
Tree Location Map



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Date: 06/11/14
Revision: XX/XX/XX
Revision: XX/XX/XX



Map Key / Legend

- **Surveyed Tree Trunk Location**
- **Field Located Tree Trunk Location**
- 2 **Assigned Tree Number**
- 2 **Meets "Protected" Criteria**
- Critical Root Zone**
- Tree Preservation Zone**
- Tree Preservation Fencing With Straw Bales**
- Special Treatment Area**
Treatments to be Determined by Project Arborist after grade stakes are set.
- Stabilization Procedures Required**
- Dead Branch Removal Required**
- Monitor Stability**

- Treatments may include:
- Decrease Grading Limits
 - Pre-Construction Root Pruning
 - Mulching
 - Supplemental Irrigation
 - Canopy Clearance Pruning
 - Stabilization Treatments
 - Alternative Construction Methods

TREE PROTECTION PLAN

Trees/Tree Groups #51 through 206

1440 Center Project
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Scotts Valley, CA

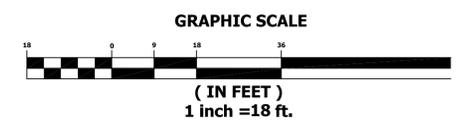
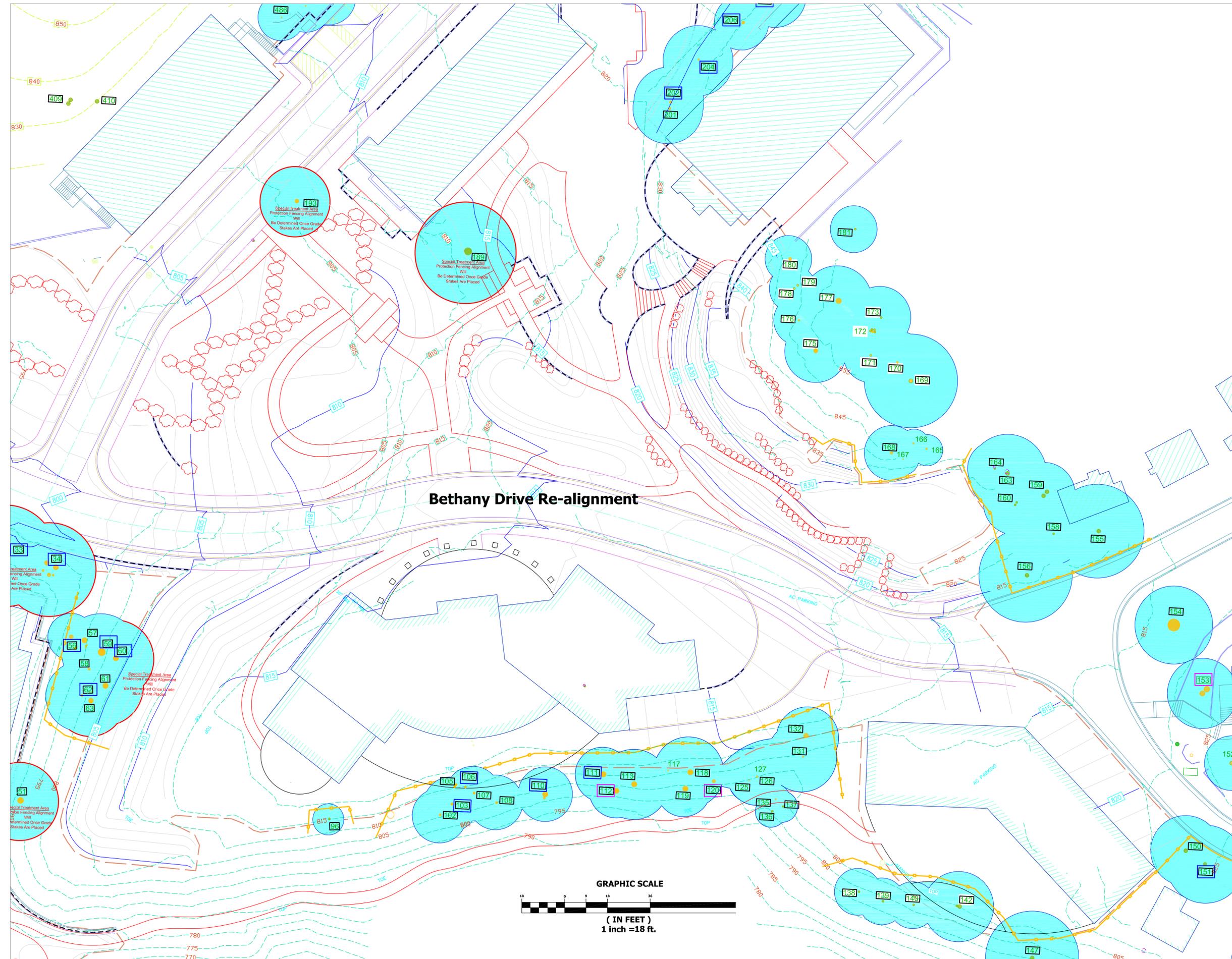
Tree Location Map



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Date: 06/11/14
Revision: XX/XX/XX
Revision: XX/XX/XX



Map Key / Legend

- **Surveyed Tree Trunk Location**
- **Field Located Tree Trunk Location**
- 2 **Assigned Tree Number**
- 2 **Meets "Protected" Criteria**
- Critical Root Zone**
- Tree Preservation Zone**
- Tree Preservation Fencing With Straw Bales**
- Special Treatment Area**
Treatments to be Determined by Project Arborist after grade stakes are set.
- **Treatments may include:**
 - Decrease Grading Limits
 - Pre-Construction Root Pruning
 - Mulching
 - Supplemental Irrigation
 - Canopy Clearance Pruning
 - Stabilization Treatments
 - Alternative Construction Methods
- Stabilization Procedures Required**
- Dead Branch Removal Required**
- Monitor Stability**

TREE PROTECTION PLAN

**Trees/Tree Groups
#207 through 275
#440 through 480**

1140 Center Project
800 Bethany Drive
Scotts Valley, CA

Tree Location Map

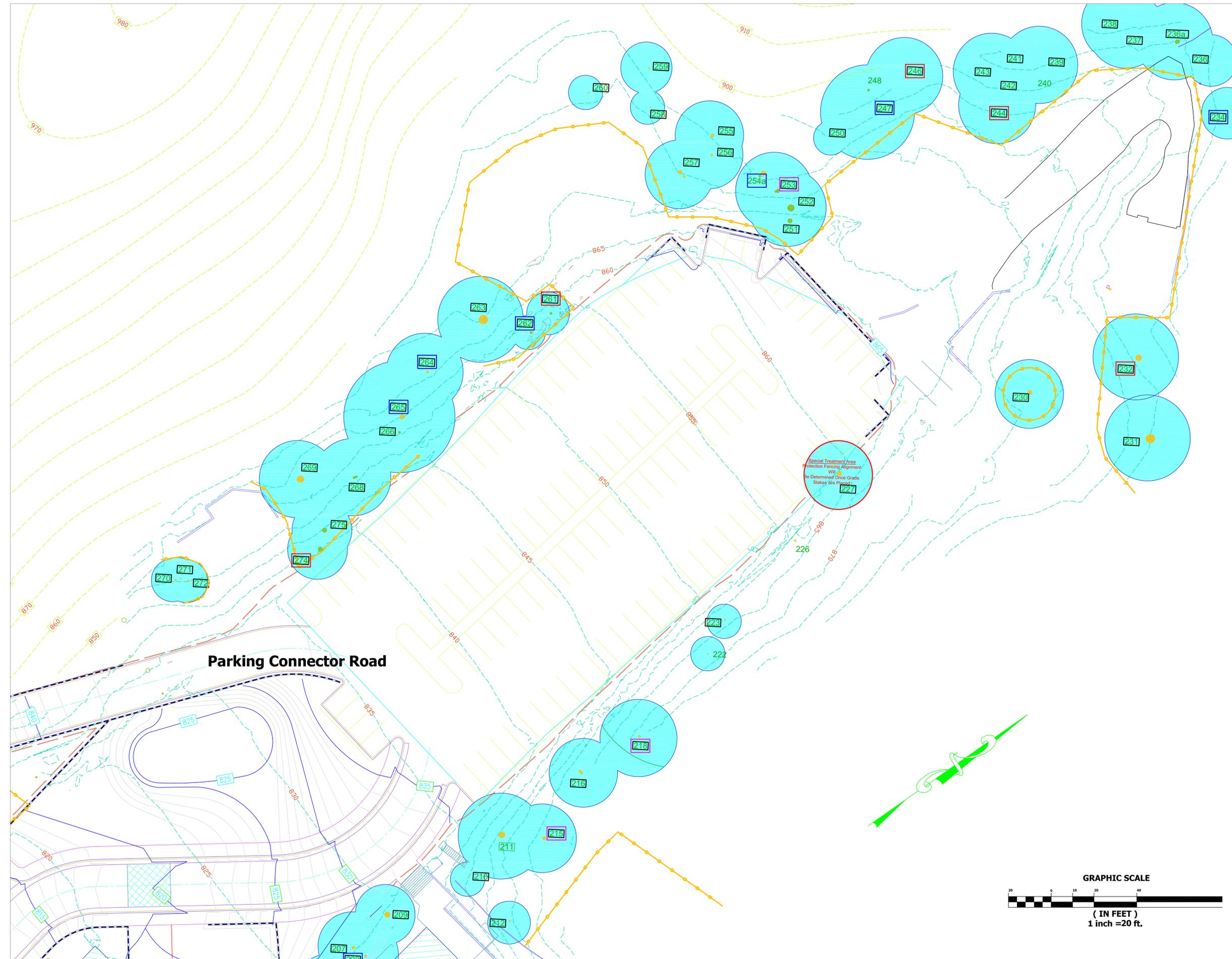
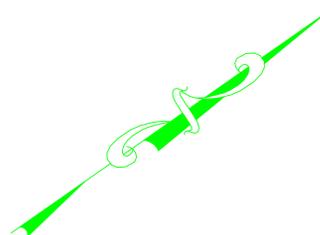
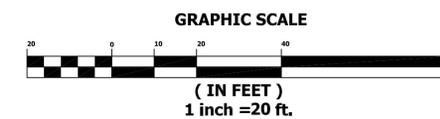


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Map Key / Legend

- **Surveyed Tree Trunk Location**
- **Field Located Tree Trunk Location**
- 2 **Assigned Tree Number**
- 2 **Meets "Protected" Criteria**
- Critical Root Zone**
- Tree Preservation Zone**
- Tree Preservation Fencing With Straw Bales**
- Special Treatment Area**
Treatments to be Determined by Project Arborist after grade stakes are set.
- Decrease Grading Limits
 - Pre-Construction Root Pruning
 - Mulching
 - Supplemental Irrigation
 - Canopy Clearance Pruning
 - Stabilization Treatments
 - Alternative Construction Methods
- Stabilization Procedures Required**
- Dead Branch Removal Required**
- Monitor Stability**

TREE PROTECTION PLAN

Trees/Tree Groups #276 through 363

1440 Center Project

800 Bethany Drive
Scotts Valley, CA

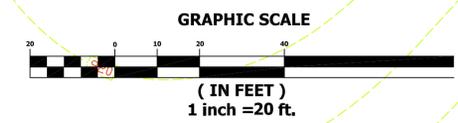
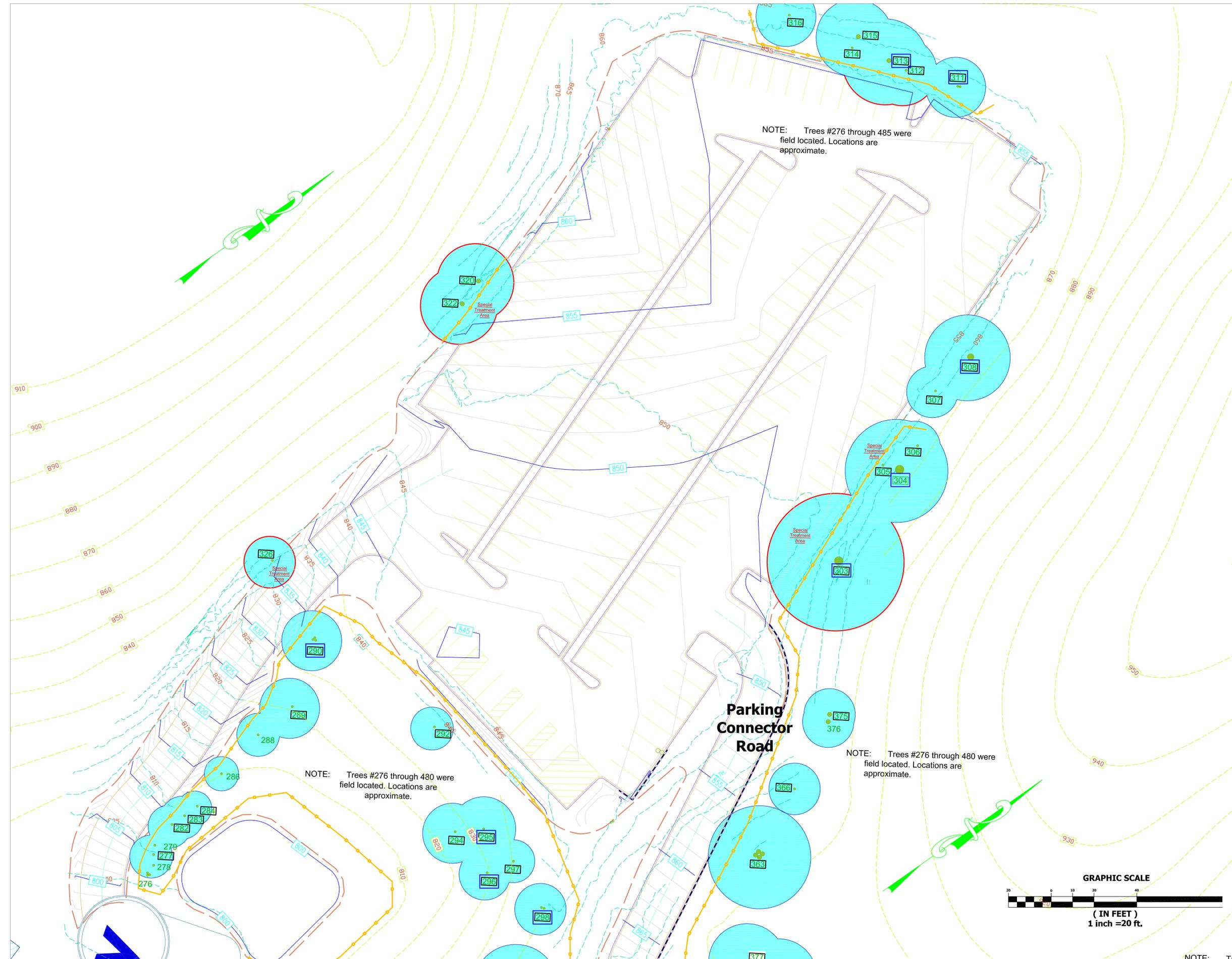
Tree Location Map



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NOTE: Tre

Map Key / Legend

-  **Surveyed Tree Trunk Location**
-  **Field Located Tree Trunk Location**
-  **Assigned Tree Number**
-  **Meets "Protected" Criteria**
-  **Critical Root Zone**
-  **Tree Preservation Zone**
-  **Tree Preservation Fencing With Straw Bales**
-  **Special Treatment Area**
Treatments to be Determined by Project Arborist after grade stakes are set.
- Treatments may include:**
 - Decrease Grading Limits
 - Pre-Construction Root Pruning
 - Mulching
 - Supplemental Irrigation
 - Canopy Clearance Pruning
 - Stabilization Treatments
 - Alternative Construction Methods
-  **Stabilization Procedures Required**
-  **Dead Branch Removal Required**
-  **Monitor Stability**

TREE PROTECTION PLAN

Trees/Tree Groups #328 through 486

1440 Center Project
800 Bethany Drive
Scotts Valley, CA

Tree Location Map



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