



T H E P A C I F I C R E S O U R C E S G R O U P

March 28, 2019

Mr. Gus Fischer, AIA, Partner
Dreyfuss + Blackford Architecture
3540 Folsom Boulevard, Sacramento, CA 95816-6699

Subject: PGE Tualatin Phase 1 Tree Assessment

Dear Mr. Fischer,

As requested, I have completed my assessment of the Phase 1 portion of the PGE site. I assessed approximately 269 trees on the accompanying chart. The trees have all been tagged with metal tags, the numbers on the tags correspond to those on the survey and on the chart. My findings are as follows.

OBSERVATIONS

The first phase of this project, shown in green on the conceptual site plan dated 2/21/19 contains slightly more than one third of the trees that have been surveyed. Data the City requires and my additional observations are included in the accompanying chart. The trees on the Phase 1 part of the site are located in the west central and south end of the site. Most of the site is open pasture or was recently graded during the construction of SW 124 street on the west border. Soil depth is shallow in the south quarter of the site. Rocks protrude over much of this area and indicate poor growing conditions for many trees. The best illustration of this can be seen in the road cut along SW 124th Street south of Tualatin Sherwood Road where the shallow soil over fractured rock is exposed. The shallow soil and perched water tables in some areas are also noted in some of the soil test pits and bore holes performed by GRI.

Shallow soil results in challenging growing conditions for trees due to limited space for root systems and limited soil moisture retention during hot and dry summers. These conditions explain why the trees on the site are close in size. Young trees tend to grow rapidly as long as available rooting space, soil moisture and nutrients is not limited. Once the limited rooting space is used up, the insufficient amount of moisture and nutrients cause growth to stagnate and tree health to decline. Trees that were growing rapidly slow down and nearly stop growing. This is the issue for many of the young trees under 12" in diameter that I assessed. Much of the area in the wooded portion of the southwest quarter of the site was rocky and the trees were in fair to poor health. Many had dead tops, which

was most likely due to Douglas Fir Bark Beetle infestation. This insect attacks trees in poor or declining health.

The rocky and drought stricken area in the southwest quarter is not conducive for Douglas Fir, Bigleaf Maple or other species that prefer deeper moisture retaining soils, but is conducive for Oregon White Oak, Hawthorn and Pacific Madrone that favor dryer soils. Shallow soil also means that most of the roots of trees and other woody plants are concentrated in the top few inches. The shallow dense roots are noted in the upper most soil profile in the soil test pits TP-5, 6, 7 & 8. Soil depth increases towards the north and east of the southwest quarter of the site.

CONCLUSIONS AND RECOMMENDATIONS

Tree preservation is problematic in areas with shallow soils for several reasons. The existing conditions do not allow trees to achieve their expected sizes when their growth rate declines, stalls and they become highly vulnerable to insect attack and disease. In areas where trees are closely spaced, the competition for limited moisture and nutrients can accelerate declining health. Trees with shallow root systems are also highly vulnerable to damage from any disturbance during grading or excavation. Excavation related root loss can destabilize trees when such root loss is extensive and occurs less than 15' from the base of a tree. Destabilized trees can be hazards to pedestrians, vehicles or structures within their reach when they fall. Many trees in the southwest corner of the site are subject to inhospitable growing conditions and may have limited life spans.

Decisions on the retention or removal of such trees need to be made on a case by case basis. Any trees growing in shallow rocky soil that is in the area to be excavated or that will experience grading that disturbs the surface are likely to be candidates for removal. Those further to the north and east and in areas where soils are deeper and where the soil surface will be left undisturbed may be candidates for retention. Decisions on trees to be removed or retained that are outside buildings, paved and excavated areas will have to wait until more precise information becomes available as planning progresses.

Tree protection will be necessary for trees to remain. Once construction drawings are being prepared I can make more specific recommendations on the location of tree protection fencing. In areas outside construction limits that will remain undisturbed, erosion control fencing will provide adequate protection for trees. For trees planned to be retained within the construction limits and where construction activities will be underway, I recommend one of two fencing types. For any tree or group of trees that will remain undisturbed 15' or more from the tree for the duration of construction, chain link fencing provides the best protection. For any tree or groups of trees where some disturbance will occur near or within the drip line(s) I recommend 4' or taller orange plastic construction fencing on metal "T" stakes. If the fencing is required to be temporarily removed for access or construction activities, any work within the tree protection area should be observed by the Project Arborist and the fencing should be replaced at the end of the workday.

Once construction drawings are completed and trees to be retained have been identified, I can provide additional recommendations on tree protection and post construction tree care.

I hope I have addressed all the issues you asked about, but if I omitted any information or if you have any questions please do not hesitate to contact me. Thank you.

Sincerely yours,



Stephen F. Goetz, Principal
American Society of Consulting Arborists Reg #260
American Society of Landscape Architects, Oregon Lic. #80
Society of American Foresters

SG:mac

ARBORIST DISCLOSURE STATEMENT: Arborists are tree specialists who use their education, knowledge, training and experience to examine trees, recommend measures to enhance their health and beauty and to attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of the arborist or to seek additional advice. Trees and other plant life are living, changing organisms affected by innumerable factors beyond our control. Trees fail in ways and because of conditions we do not fully understand. Arborists cannot detect or anticipate every condition or event that could possibly lead to the structural failure of a tree. Conditions are often hidden within the trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, for any specific period or when a tree or its parts may fail. Further, remedial treatments, as with any treatment or therapy, cannot be guaranteed. Treatment, pruning, bracing and removal of trees may involve considerations beyond the scope of the arborists skills and usual services such as the boundaries of properties, property ownership, site lines, neighbor disputes and agreements and other issues. Therefore, arborists cannot consider such issues unless complete and accurate information is disclosed in a timely fashion. Then, the arborist can be expected, reasonably, to rely upon the completeness and accuracy of the information provided. Trees can be managed but not controlled. To live near trees, regardless of their condition, is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate all trees.

HAZARD/HAZARD POTENTIAL: For the purposes of this evaluation and/report, hazard/hazard potential refers to a tree or tree part that presents a threat to humans, livestock, vehicles, structures, landscape features or other entity of civilization from uprooting, falling, breaking or growth development (e.g., roots). While all large landscape trees in proximity to such targets present some degree of hazard regardless of their condition, such inherent hazard is not intended as within this definition and its usage in this evaluation and report.

INSPECTION LIMITATIONS: The inspection of these trees consisted solely of a visual inspection from the ground. While more thorough techniques are available for inspection and evaluation, they were neither requested nor considered necessary or appropriate at this time. As trees and other plant life are living, changing organisms effected by innumerable factors beyond our control, The Pacific Resources Group and it's personnel offer no guarantees, stated or implied, as to tree, plant or general landscape safety, health, condition or improvement, beyond that specifically stated in writing in accepted contracts.

PGE Tualatin Phase 1 269 Tree Assessment

Tag No	Dia. Inches	Species	Trunk Condition	Crown Devlmp	Structure	Comments	Health	Condition
10094	2,2,2,2,1.5, 1.5,1,1	Douglas Hawthorn	5	5	5	Small shrubby tree	Good	Moderate & non-correctable defects
10095	2,2,1.5,1.5, 1,1,1,1,1,1	Douglas Hawthorn	5	3	5	Small shrubby tree	Good	Moderate & non-correctable defects
10096	14"	Pacific Madrone	5	3	5	Full asyemtric crown	Excellent	Moderate & non-correctable defects
10098	9"	Pacific Dogwood	5	1	5	Partial crown due to crowding	Fair	Moderate & non-correctable defects
10099	14"	Pacific Madrone	5	3	5	Partial crown due to crowding	Good	Moderate & non-correctable defects
10100	5"	Douglas Fir	5	5	5	Full crown'	Excellent	Sound – No obvious defects
10207	14"	Pacific Madrone	1	1	1		Dead Dying	Major defects or problems
10208	10",11"	Pacific Dogwood	5	5	5	2 stems at 2', full crown	Good	Moderate & non-correctable defects
10265	14" & 16"	Pacific Madrone	5	3	5	Fine to medium deadwood in crown	Good	Moderate & non-correctable defects
10322	5" & 7"	Douglas Fir	5	5	5		Good	Moderate & non-correctable defects
10342	12" & 17"	Pacific Madrone	5	3	5		Good	Moderate & non-correctable defects
10343	22"	Pacific Madrone	5	5	3		Good	Few & minor or correctable defects
10980	7"	English Holly	5	3	5		Good	Few & minor or correctable defects
10985	19"	Pacific Madrone	5	5	5		Good	Moderate & non-correctable defects
11007	2-6"	Douglas Fir	5	5	5	2 stems at ground form single full crown	Good	Moderate & non-correctable defects
11030	13"	Douglas Fir	5	5	5		Good	Moderate & non-correctable defects
12129	12"	English Holly	5	5	5	Full crown	Excellent	Sound – No obvious defects
12134	8"	Holly	5	5	5	Full crown	Excellent	Sound – No obvious defects
12147	22"	Hawthorn species	5	5	5	4 stems at 4.5', full crown	Good	Few & minor or correctable defects
12149	16"	Apple	1	3	3	Full crown, extensive internal decay & hollow trunk. Potential Hazard.	Fair	Major defects or problems

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Tag No	Dia. Inches	Species	Trunk Condition	Crown Devlmp	Structure	Comments	Health	Condition
12150	8", 6"	English Holly	5	3	5	Partial crown due to crowding by building	Good	Moderate & non-correctable defects
12151	6,4,4,3,3,2"	Western Red Cedar	5	5	5	Shrubby tree with full dense crown due to shearing	Good	Moderate & non-correctable defects
12182	14"	Douglas Fir	5	5	5	Full crown	Good	Few & minor or correctable defects
14374	14"	Douglas Fir	5	3	5		Good	Few & minor or correctable defects
14376	17"	Douglas Fir	5	3	5		Good	Few & minor or correctable defects
14378	18"	Douglas Fir	5	3	1		Fair	Moderate & non-correctable defects
14379	11"	Douglas Fir	1	1	1		Poor	Major defects or problems
14380	20"	Pacific Madrone	5	5	5		Excellent	Few & minor or correctable defects
14382	9"	Douglas Fir	1	1	1	Dead	Dead Dying	Hazard Remove
14386	11"	Douglas Fir	1	1	1	Dead	Dead Dying	Hazard Remove
14389	6"	Douglas Fir	1	1	1		Dead Dying	Hazard Remove
14390	17"	Douglas Fir	5	5	5		Good	Moderate & non-correctable defects
14392	16"	Pacific Madrone	5	3	3		Good	Moderate & non-correctable defects
14393	6"	Douglas Fir	5	3	1		Poor	Major defects or problems
14394	12" & 13"	Pacific Madrone	5	1	5		Good	Moderate & non-correctable defects
14397	8"	English Holly	5	5	5		Good	Few & minor or correctable defects
14767	13"	Douglas Fir	5	5	5	Full crown	Good	Sound, no obvious defects
14777	14"	Bigleaf Maple	5	5	5	Full crown	Good	Few & minor or correctable defects
14778	11"	Douglas Fir	5	3	5	Partial crown due to crowding	Good	Moderate & non-correctable defects
14779	6"	Douglas Fir	5	3	3	Partial crown due to crowding	Fair	Moderate & non-correctable defects

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Tag No	Dia. Inches	Species	Trunk Condition	Crown Devlmp	Structure	Comments	Health	Condition
14780	12"	Douglas Fir	5	3	5	Partial crown due to crowding	Fair	Moderate & non-correctable defects
14781	8"	Douglas Fir	5	3	5	Partial crown due to crowding	Fair	Moderate & non-correctable defects
14783	12"	Douglas Fir	5	3	3	Partial crown due to crowding	Good	Moderate & non-correctable defects
14786	9"	Douglas Fir	5	3	3	Partial crown due to crowding	Good	Moderate & non-correctable defects
14787	11"	Douglas Fir	5	3	3	Partial crown due to crowding	Fair	Moderate & non-correctable defects
14788	9"	Douglas Fir	3	3	3	Partial crown due to crowding, cankers on trunk, Do Not Preserve	Fair	Major defects or problems
14789	12"	Douglas Fir	5	5	5	Partial crown due to crowding	Good	Moderate & non-correctable defects
14791	15"	Douglas Fir	5	5	3	Nearly full crown	Good	Few & minor or correctable defects
14796	13"	Douglas Fir	5	3	3	Partial crown due to crowding	Good	Few & minor or correctable defects
14797	15"	Douglas Fir	5	1	3	Partial crown due to crowding Topped at 35' and regrown	Good	Major defects or problems
14798	7"	Douglas Fir	5	3	3	Partial crown due to crowding	Good	Moderate & non-correctable defects
14799	6"	Douglas Fir	5	3	3	Partial crown due to crowding	Good	Moderate & non-correctable defects
14807	11"	Douglas Fir	5	5	3	Full crown	Excellent	Sound, no obvious defects
14858	13"	Douglas Fir	5	3	3	Full crown	Good	Few & minor or correctable defects
14861	11"	Pacific Madrone	5	1	1	Partial crown due to crowding	Good	Moderate & non-correctable defects
14862	11"	Pacific Madrone	5	1	1	Partial crown due to crowding	Good	Moderate & non-correctable defects
14875	9"	Douglas Fir	5	5	3	Full crown	Good	Sound, no obvious defects
14876	7"	Douglas Fir	5	3	3	Partial crown due to crowding	Good	Moderate & non-correctable defects
14878	6"	Douglas Fir	3	1	1	Partial crown due to crowding Top broken out at 15'. Poor specimen will not recover. Do Not Preserve.	Fair	Major defects or problems
14879	13"	Pacific Madrone	5	3	5	Nearly full crown	Good	Moderate & non-correctable defects

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Tag No	Dia. Inches	Species	Trunk Condition	Crown Devlmp	Structure	Comments	Health	Condition
14880	21"	Douglas Fir	5	5	5	Full crown	Excellent	Few & minor or correctable defects
14884	8"	Oregon White Oak	5	5	5	Full crown	Good	Few & minor or correctable defects
14892	13"	Pacific Madrone	5	5	5		Excellent	Sound, no obvious defects
14898	8"	Bigleaf Maple	5	5	5		Excellent	Sound, no obvious defects
14901	8" & 10"	Hooker Willow	1	3	3	Moderate amount of fine to medium deadwood in crown. Hollow cavity in lower trunk.	Fair	Moderate & non-correctable defects
14906	6" & 14"	Douglas Fir	5	1	1	Top 40% of tree is dead. Poor specimen, Do Not Preserve	Fair	Major defects or problems
14907	13"	Douglas Fir	5	3	5	Partial crown due to crowding	Good	Moderate & non-correctable defects
14908	6" & 11"	Douglas Fir	5	3	5	Partial crown due to crowding	Good	Moderate & non-correctable defects
14924	17"	Hooker Willow	5	5	3	Full crown, some medium deadwood and structural	Good	Moderate & non-correctable defects
14927	15"	Douglas Fir	5	5	5	Full crown	Excellent	Sound, no obvious defects
14928	11"	Douglas Fir	5	3	5	Partial crown due to crowding	Fair	Moderate & non-correctable defects
14929	18"	Douglas Fir	5	3	5	Partial crown due to crowding	Fair	Moderate & non-correctable defects
14930	17"	Douglas Fir	5	5	5	Full crown	Excellent	Sound, no obvious defects
14932	16"	Douglas Fir	5	3	5	Partial crown due to crowding	Excellent	Few & minor or correctable defects
14933	24"	Douglas Fir	5	3	5	Partial crown due to crowding	Fair	Few & minor or correctable defects
15000	11"	Pacific Madrone	5	3	3		Good	Moderate & non-correctable defects
15001	21"	Oregon White Oak	5	5	5		Good	Few & minor or correctable defects
15002	6"	Douglas Fir	5	5	1	Dead top	Dead Dying	Major defects or problems
15003	6"	Douglas Fir	1	1	1	Dead	Dead Dying	Major defects or problems
15004	6"	Douglas Fir	5	3	3		Dead Dying	Major defects or problems

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Tag No	Dia. Inches	Species	Trunk Condition	Crown Devlmp	Structure	Comments	Health	Condition
15005	23"	Douglas Fir	5	3	1	Dying from top down and from branch tips in	Dead Dying	Major defects or problems
15006	10"	Douglas Fir	5	1	1	Dying from top down and from branch tips in	Dead Dying	Major defects or problems
15007	7" & 16"	Pacific Madrone	5	3	5		Excellent	Few & minor or correctable defects
15008	6" & 16"	Pacific Madrone	5	3	5		Excellent	Moderate & non-correctable defects
15009	8"	Pacific Madrone	Dead				Dead Dying	Hazard
15010	6"	Douglas Fir	5	1	1	Dying from top down and from branch tips in	Dead Dying	Major defects or problems
15011	6"	Douglas Fir	Dead				Dead Dying	Hazard
15012	6"	Douglas Fir	5	3	1	Dying from top down and from branch tips in	Dead Dying	Major defects or problems
15013	13"	Douglas Fir	5	3	1	Topped at 20' and regrown, in severe decline	Poor	Major defects or problems
15014	8"	Douglas Fir	Dead			Dead stump	Dead Dying	Dead Stump
15015	6" & 7"	Common Hawthorn	5	3	1		Poor	Moderate & non-correctable defects
15016	6" & 13"	Pacific Madrone	5	3	3		Fair	Few & minor or correctable defects
15017	22"	Pacific Madrone	5	5	5		Excellent	Few & minor or correctable defects
15018	12"	Pacific Madrone	5	3	5		Good	Moderate & non-correctable defects
15019	16"	Pacific Madrone	5	3	5		Good	Moderate & non-correctable defects
15020	13"	Pacific Madrone	5	3	5		Good	Moderate & non-correctable defects
15021	9"	Douglas Fir	5	5	5	Partial crown due to crowding	Fair	Moderate & non-correctable defects
15022	9"	Douglas Fir	5	5	5	Partial crown due to crowding	Fair	Moderate & non-correctable defects
15023	8"	Douglas Fir	5	1	1	Topped at 4' and regrown. Poor specimen, Do Not Preserve	Poor	Major defects or problems
15024	6"	Douglas Fir	5	1	1	Dead top	Fair	Major defects or problems

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Tag No	Dia. Inches	Species	Trunk Condition	Crown Devlmp	Structure	Comments	Health	Condition
15025	8"	Douglas Fir	5	3	3		Fair	Moderate & non-correctable defects
15026	9"	Douglas Fir	5	1	1	Dying from top down and from branch tips in	Dead Dying	Major defects or problems
15027	14"	Douglas Fir	5	3	1	No annual twig growth, dying	Dead Dying	Major defects or problems
15028	7"	Douglas Fir	1	3	1	Dead top	Dead Dying	Major defects or problems
15029	15"	Douglas Fir	5	5	5	Partial crown due to crowding	Fair	Moderate & non-correctable defects
15030	6"	Douglas Fir	5	3	1	Dying from top down and from branch tips in	Dead Dying	Major defects or problems
15031	12"	Douglas Fir	5	3	3	Topped at 12' and regrown. Poor specimen, Do Not Preserve	Fair	Major defects or problems
15032	7"	Douglas Fir	Dead				Dead Dying	Hazard
15033	16"	Pacific Madrone	5	5	5	Swoop in trunk, some decay at base	Fair	Moderate & non-correctable defects
15034	18"	Pacific Madrone	5	3	5	Full narrow crown with some fine deadwood	Good	Few & minor or correctable defects
15035	6"	Douglas Hawthorn	5	5	5	Full crown with good annual twig growth	Good	Few & minor or correctable defects
15036	7"	Douglas Fir	5	1	1		Fair	Major defects or problems
15037	16"	Pacific Madrone	5	3	1	Dead top, moderate amount of deadwood in crown. Blight on foliage in parts of crown.	Fair	Moderate & non-correctable defects
15038	11"	Pacific Madrone	5	1	1	Dead top, moderate amount of deadwood in crown. Blight on foliage in parts of crown.	Fair	Moderate & non-correctable defects
15039	8"	Douglas Fir	5	1	1	Top dead, will not recover. Poor specimen, Do Not Preserve	Poor	Major defects or problems
15040	7"	Douglas Fir	5	1	1	Top dead, will not recover. Poor specimen, Do Not Preserve	Dead Dying	Major defects or problems
15041	7"	Douglas Fir	5	1	1	Top dead, will not recover. Poor specimen, Do Not Preserve	Poor	Major defects or problems
15042	7"	Douglas Fir	5	1	1	Dying from top down and from branch tips in, yellowing foliage	Poor	Major defects or problems
15338	14"	Pacific Madrone	5	5	5	Full crown, with swoop in trunk from 0' to 7'	Excellent	Moderate & non-correctable defects

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Tag No	Dia. Inches	Species	Trunk Condition	Crown Devlmp	Structure	Comments	Health	Condition
15341	13"	Douglas Fir	5	5	5	Full crown	Excellent	Sound – No obvious defects
15342	13"	Douglas Fir	5	5	5	Full crown	Excellent	Sound – No obvious defects
15346	11"	Douglas Fir	5	1	5	Topped at 18', poor specimen. Do Not Preserve	Good	Major defects or problems
15347	14"	Douglas Fir	5	1	5	Partial crown due to crowding. Topped at 30'.	Good	Major defects or problems
15348	11"	Douglas Fir	5	3	5	Partial crown due to crowding.	Good	Moderate & non-correctable defects
15352	10"	Douglas Fir	5	5	5	Full crown	Fair	Few & minor or correctable defects
16009	12"	Douglas Fir	5	3	5	Partial crown due to crowding.	Good	Moderate & non-correctable defects
16010	11"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16013	11"	Douglas Fir	5	3	5	Partial crown due to crowding.	Good	Moderate & non-correctable defects
16014	16"	Douglas Fir	5	3	5	Partial crown due to crowding.	Good	Moderate & non-correctable defects
16015	11"	Douglas Fir	5	3	5	Partial crown due to crowding.	Good	Moderate & non-correctable defects
16016	9" & 12"	Douglas Fir	3	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16017	15"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16018	15"	Douglas Fir	5	3	5	Partial crown due to crowding.	Good	Moderate & non-correctable defects
16019	10"	Douglas Fir	5	3	5	Partial crown due to crowding.	Good	Moderate & non-correctable defects
16021	16"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16022	11"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16023	10"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16024	15"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16026	11"	Douglas Fir	5	5	5	Full thin crown with below average annual twig growth	Poor	Few & minor or correctable defects

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Tag No	Dia. Inches	Species	Trunk Condition	Crown Devlmp	Structure	Comments	Health	Condition
16038	9"	Douglas Fir	5	5	5	Full crown	Good	Moderate & non-correctable defects
16051	10"	Douglas Fir	5	5	5	Full crown	Fair	Few & minor or correctable defects
16052	12"	Douglas Fir	5	3	5	Partial crown due to crowding.	Good	Moderate & non-correctable defects
16053	8"	Douglas Fir	5	3	5	Partial crown due to crowding.	Good	Moderate & non-correctable defects
16058	13"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16061	10"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16066	16"	Douglas Fir	5	5	5	Full crown	Good	Few & minor or correctable defects
16067	16"	Douglas Fir	5	5	5	Full crown	Good	Few & minor or correctable defects
16069	14"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16070	11"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16071	8"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16072	15"	Douglas Fir	5	3	5	Partial crown due to crowding.	Good	Moderate & non-correctable defects
16073	12"	Douglas Fir	5	3	5	Partial crown due to crowding.	Good	Moderate & non-correctable defects
16074	9"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16075	10"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16076	13"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16077	9"	Douglas Fir	5	3	5	Partial crown due to crowding. Codominant stems at 18', poor specimen. Do Not Preserve.	Fair	Moderate & non-correctable defects
16079	13"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects

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Tag No	Dia. Inches	Species	Trunk Condition	Crown Devlmp	Structure	Comments	Health	Condition
16080	13"	Douglas Fir	5	3	5	Partial crown due to crowding.	Good	Moderate & non-correctable defects
16081	14"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16082	14"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16084	7"	Douglas Fir	5	3	5	Small thin pfartial crown due to crowding.	Fair	Moderate & non-correctable defects
16085	11"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16086	13"	Douglas Fir	5	3	5	Partial crown due to crowding.	Good	Moderate & non-correctable defects
16089	15"	Douglas Fir	5	3	5	Partial crown due to crowding.	Good	Moderate & non-correctable defects
16090	8"	Hooker Willow	5	3	3	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16093	12"	Douglas Fir	5	5	5	Full crown with below average annual twig growth. All roots on south side were severed by road cut 6' from base. Tree is not stable. Remove.	Poor	Hazard
16094	11"	Douglas Fir	5	3	5	Very thin partial crown due to crowding. Poor annual twig growth. All roots were severed on south side by road cut 5' from base. Tree is not stable. Remove.	Poor	Hazard
16095	13"	Douglas Fir	5	5	5	Full crown	Good	Few & minor or correctable defects
16096	16"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16123	13"	Douglas Fir	5	5	5	Full crown	Good	Few & minor or correctable defects
16136	13"	Douglas Fir	5	3	5	Partial crown due to crowding.	Excellent	Moderate & non-correctable defects
16137	15"	Douglas Fir	5	3	5	Partial crown due to crowding.	Excellent	Moderate & non-correctable defects
16138	13"	Douglas Fir	5	1	5	Partial crown due to crowding.	Excellent	Moderate & non-correctable defects
16140	7"	Douglas Fir	5	1	5	Partial crown due to crowding.	Good	Moderate & non-correctable defects

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Tag No	Dia. Inches	Species	Trunk Condition	Crown Devlmp	Structure	Comments	Health	Condition
16141	14"	Douglas Fir	5	1	5	Partial crown due to crowding.	Excellent	Moderate & non-correctable defects
16148	12"	Douglas Fir	5	5	5	Nearly full crown	Excellent	Few & minor or correctable defects
16149	6"	Pacific Madrone	5	1	5	Subdominant partial crown. Swoop in trunk.	Good	Major defects or problems
16150	10"	Pacific Madrone	5	3	5	Partial crown due to crowding.	Good	Moderate & non-correctable defects
16151	11"	Douglas Fir	5	3	5	Nearly full crown	Good	Moderate & non-correctable defects
16152	12"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16154	14"	Douglas Fir	5	3	5	Partial crown due to crowding.	Good	Moderate & non-correctable defects
16156	12"	Douglas Fir	5	3	5	Partial crown due to crowding.	Excellent	Moderate & non-correctable defects
16159	7" & 7"	Pacific Madrone	5	5	5	Full crown, 2 stems at ground	Excellent	Few & minor or correctable defects
16164	9"	Douglas Fir	5	5	5	Full crown	Excellent	Sound – No obvious defects
16164 B	8,6,6	Pacific Madrone	5	3	5	Full asyemtric crown, 3 stems at 1'.	Good	Moderate & non-correctable defects
16178	8" & 8"	Pacific Madrone	5	3	5	Partial crown due to crowding.	Excellent	Moderate & non-correctable defects
16205	13"	Douglas Fir	5	5	5	Full crown	Good	Few & minor or correctable defects
16207	14"	Douglas Fir	5	5	5	Full crown	Good	Few & minor or correctable defects
16208	11"	Douglas Fir	5	5	5	Full crown	Fair	Few & minor or correctable defects
16209	13"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16213	12"	Douglas Fir	5	3	5	Very thin partial crown due to crowding.	Fair	Moderate & non-correctable defects
16215	15"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16216	13"	Douglas Fir	5	3	5	Very thin partial crown due to crowding.	Fair	Moderate & non-correctable defects

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Tag No	Dia. Inches	Species	Trunk Condition	Crown Devlmp	Structure	Comments	Health	Condition
16217	11"	Douglas Fir	5	3	5	Very thin partial crown due to crowding.	Fair	Moderate & non-correctable defects
16218	13"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16219	15"	Pacific Madrone	5	3	5	Partial asyemtric crown due to crowding.	Fair	Moderate & non-correctable defects
16242	13"	Douglas Fir	5	5	5	Full crown	Good	Few & minor or correctable defects
16243	18"	Douglas Fir	5	3	5	Partial crown due to crowding.	Good	Moderate & non-correctable defects
16245	14"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Major defects or problems
16246	11" & 9"	Hooker Willow	1	3	1	Partial crown due to crowding. Hollow trunk and moderate amount of medium to large deadwood in the crown.	Fair	Major defects or problems
16248	15"	Douglas Fir	5	3	5	Partial crown due to crowding.	Good	Moderate & non-correctable defects
16249	14"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16250	13"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16251	13"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16255	13"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16256	10"	Douglas Fir	5	3	1	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16257	14"	Douglas Fir	5	3	5	Partial crown due to crowding. Poor annual twig growth. All roots on south side were severed 3' off the base. This tree is not stable. Remove.	Poor	Hazard
16258	12"	Douglas Fir	5	3	5	Dead lower crown, poor annual twig growth.	Poor	Moderate & non-correctable defects
16259	6"	Douglas Fir	5	1	1	Subdominant tree with crown less than 5% of normal. Poor specimen, Do Not Preserve.	Poor	Major defects or problems
16260	8"	Douglas Fir	5	1	1	Tiny partial crown due to crowding.	Poor	Major defects or problems
16261	13"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16263	15"	Douglas Fir	5	3	5	Partial crown due to crowding.	Good	Moderate & non-correctable defects

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Tag No	Dia. Inches	Species	Trunk Condition	Crown Devlmp	Structure	Comments	Health	Condition
16264	12"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16267	12"	Douglas Fir	5	3	5	Partial crown due to crowding.	Fair	Moderate & non-correctable defects
16268	14"	Douglas Fir	5	3	5	Partial crown due to crowding.	Good	Moderate & non-correctable defects
16271	13"	Douglas Fir	5	1	1	Lower crown is dead, very poor annual twig growth. Poor specimen, Do Not Preserve.	Poor	Major defects or problems
16272	11"	Douglas Fir	5	1	1	Lower crown is dead, very poor annual twig growth. Poor specimen, Do Not Preserve.	Poor	Major defects or problems
	14", 7", 3"	Bird Cherry	5	5	5	Full crown. 6' of trunk is on ground where tree toppled over and side branch grew vertical forming main trunk.	Good	Major defects or problems
16273	11"	Douglas Fir	5	1	1	Lower crown is dead, very poor annual twig growth. Poor specimen, Do Not Preserve.	Poor	Major defects or problems
16274	11"	Douglas Fir	5	1	1	Lower crown is dead, very poor annual twig growth. Poor specimen, Do Not Preserve.	Poor	Major defects or problems
16277	18"	Pacific Madrone	5	5	5	Full crown	Good	Few & minor or correctable defects
16285	13"	Bird Cherry	1	1	1	Top broken out at 9'. Significant decay in trunk. Poor specimen. Do Not Preserve.	Fair	Major defects or problems
16289	16"	Douglas Fir	5	3	5	Partial crown due to crowding.	Good	Moderate & non-correctable defects
16291	14"	Douglas Fir	5	5	5	Full crown	Fair	Few & minor or correctable defects
16293	19"	Douglas Fir	5	3	5	Partial crown due to crowding.	Good	Moderate & non-correctable defects
16298	15"	Douglas Fir	5	3	5	Partial crown due to crowding.	Good	Moderate & non-correctable defects
16302	18"	Douglas Fir	5	5	5	Full crown	Good	Few & minor or correctable defects
16322	14"	Douglas Fir	5	3	5	Full crown. 2 codominant stems at 20'	Good	Moderate & non-correctable defects
16323	12"	Douglas Fir	5	3	5	Partial crown due to crowding	Good	Moderate & non-correctable defects
16324	13"	Douglas Fir	5	5	5	Full crown	Good	Few & minor or correctable defects

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Tag No	Dia. Inches	Species	Trunk Condition	Crown Devlmp	Structure	Comments	Health	Condition
16335	8"	Bird Cherry	3	5	5	Full crown. Wound on lower trunk has mostly calloused over.	Good	Moderate & non-correctable defects
16336	6", 6", 8" & 9"	Pacific Madrone	5	5	5	Full crown	Good	Few & minor or correctable defects
16341	12"	Douglas Fir	5	5	5	Full crown	Good	Few & minor or correctable defects
16354	12"	Douglas Fir	5	3	5	Partial crown due to crowding	Fair	Moderate & non-correctable defects
16355	12"	Douglas Fir	5	1	5	Partial crown due to crowding. Topped at 20', poor specimen. Do Not Preserve.	Fair	Major defects or problems
16356	12"	Douglas Fir	5	3	5	Partial crown due to crowding	Good	Moderate & non-correctable defects
16357	8"	Douglas Fir	5	3	5	Partial crown due to crowding	Good	Moderate & non-correctable defects
16358	8"	Douglas Fir	5	3	5	Partial crown due to crowding	Good	Moderate & non-correctable defects
16359	13"	Douglas Fir	5	3	5	Partial crown due to crowding	Good	Moderate & non-correctable defects
16360	12"	Douglas Fir	5	3	5	Partial crown due to crowding	Good	Moderate & non-correctable defects
16361	15"	Douglas Fir	5	3	5	Partial crown due to crowding	Good	Moderate & non-correctable defects
20048	13"	Douglas Fir	5	1	1	Full crown, with dead top at 20'. Poor specimen. Do Not Preserve.	Good	Major defects or problems
20049	17"	Douglas Fir	5	5	5	Full crown	Excellent	Sound – No obvious defects
20051	14"	Douglas Fir	5	5	5	Full thin crown with below average annual twig growth.	Fair	Few & minor or correctable defects
20053	12"	Douglas Fir	5	3	5	Partial crown due to crowding	Good	Few & minor or correctable defects
20055	14"	Douglas Fir	5	3	5	Partial crown due to crowding	Good	Few & minor or correctable defects
20059	10"	Douglas Fir	5	3	5	Partial crown due to crowding	Good	Moderate & non-correctable defects
20060	11"	Douglas Fir	5	3	5	Partial crown due to crowding	Good	Moderate & non-correctable defects
20061	10"	Douglas Fir	5	3	5	Partial crown due to crowding	Good	Moderate & non-correctable defects

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Tag No	Dia. Inches	Species	Trunk Condition	Crown Devlmp	Structure	Comments	Health	Condition
20268	21"	Douglas Fir	5	5	5	Full crown	Excellent	Sound – No obvious defects
21188	14" (DEAD)	Douglas Fir	Dead				Dead Dying	Hazard
21189	31"	Douglas Fir	1	1	1	Dying, girdled by wire wrapped around trunk	Dead Dying	Major defects or problems
21193	43"	Douglas Fir	5	1	5	Partial (1/2) crown. Thin crown with very poor annual twig growth.	Poor	Moderate & non-correctable defects
21196	42"	Douglas Fir	5	1	5	Partial (1/2) crown. Thin crown with very poor annual twig growth.	Poor	Moderate & non-correctable defects
22146	44"	Douglas Fir	5	5	5	Full crown with codominant stems at 14'		
22183	23"	Evergreen Magnolia	5	5	5	Full crown. Nice specimen.	Excellent	Sound – No obvious defects
22184	21"	Apple	1	5	5	Full crown, hollow trunk with large cavity on west side. Potential Hazard	Good	Major defects or problems
22197	5, 5, 5, 3, 3, 3, 3, 2.5, 2.5, 2.5, 2, 2, 2, 2, 2"	Witch Hazel	5	5	5	Shrubby tree with many stems	Fair	Moderate & non-correctable defects
22201	10, 9, 8, 8, 8, 4"	Black Walnut	5	3	5	partial crow, 6 stems at ground	Fair	Moderate & non-correctable defects
22204	25", 24", 21"	Black Walnut	3	1	1	Full crown, 1 of 2 major stems is dead and a hazard.	Fair	Major defects or problems
22236	9", 11", 13", 17", 17", 18"	Silver Maple	3	1	1	Partial crown due to crowding. 6 stems at ground and one of the largest stems is dead.	Fair	Major defects or problems
22237	47"	Northern Red Oak	5	5	5	Full crown	Good	Few & minor or correctable defects
22238	26"	Silver Maple	5	1	3	Partial crown due to crowding	Fair	Moderate & non-correctable defects
22239	24"	Silver Maple	5	1	5	Partial crown due to crowding	Fair	Moderate & non-correctable defects
22240	37"	Willow species	5	1	5	Partial crown due to crowding	Fair	Moderate & non-correctable defects
22241	24"	Silver Maple	1	1	5	Partial crown due to crowding	Fair	Moderate & non-correctable defects

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Tag No	Dia. Inches	Species	Trunk Condition	Crown Devlmp	Structure	Comments	Health	Condition
22242	6", 8", 9" & 13"	Linden species	1	1	1	Partial crown due to crowding and most of crown is dead	Dead Dying	Major defects or problems
22243	16"	European White Birch	5	1	5	Partial crown due to crowding	Fair	Moderate & non-correctable defects
DECIDUOUS TREES								
<i>FACTOR</i>		<i>VARIATION OF CONDITION FACTOR</i>						
Trunk Condition	Sound and Solid (5), Sections of Bark Missing (3), Extensive Decay and Hollow (1)							
Crown	Full and Balanced (5), Full but Unbalanced (3) Unbalanced and Lacking a Fulll Crown (1)							
Structure	Sound (5) One Major or Several Minor Limbs Dead (3) Two or More Limbs Dead (1)							
EVERGREEN/CONIFEROUS TREES								
<i>FACTOR</i>		<i>VARIATION OF CONDITION FACTOR</i>						
Trunk Condition	Sound and Solid (5), Sections of Bark Missing (3), Extensive Decay and Hollow (1)							
Crown	Full and Balanced (5), Full but Unbalanced (3) Unbalanced and Lacking a Fulll Crown (1)							
HEALTH- E excellent G good F fair P poor D dead or dying								
CONDITION- A= sound B= few & correctable defects C= moderate & noncorrectable defects D= major defects or problems E= hazard, dead, dying								