

Revised Arborist Report
300 Montague Expressway
Milpitas, CA

Prepared for:
Trumark Companies
4185 Blackhawk Plaza Circle, Suite 200
Danville, CA 94506

Prepared by:
HortScience, Inc.
2150 Rheem Dr., Suite A
Pleasanton, CA 94588

October, 2011



**Revised Arborist Report
300 Montague Expressway
Milpitas**

Table of Contents

	Page
Introduction and Overview	1
Survey Methods	1
Description of Trees	2
Suitability for Preservation	4
Evaluation of Impacts	5
Tree Preservation Guidelines	7

List of Tables

Table 1. Tree condition and frequency of occurrence	3
Table 2. Suitability for Preservation	5
Table 3. Recommendations for preservation	6

Attachments

Tree Assessment Form

Tree Assessment Map

Introduction and Overview

Trumark Companies are proposing to redevelop the property located at 300 Montague Expressway, in Milpitas. The site is triangular, bordered by Montague Expressway to the west and Trade Zone Blvd. to the south. Currently, the site is an office complex, with a vegetated berm along the western and southern boundaries. The three buildings are centrally located with peripheral parking and landscaping throughout. The plan proposes to construct 92 attached town homes and 42 single-family homes, for a total of 134 homes. HortScience, Inc. was asked to prepare an **Arborist Report** for the site.

This report provides the following information:

1. An evaluation of the health and structural condition of all trees growing within and adjacent to the project area based on a visual inspection of external conditions.
2. An assessment of the impacts of constructing the proposed project on the trees.
3. Guidelines for tree preservation during the design, construction and maintenance phases of development.

Assessment Methods

Trees were surveyed on June 7, 2011. All trees with diameters of 4" or greater were included (per City of Milpitas Municipal Ordinance X-2-7.01-1). The survey procedure consisted of the following steps:

1. Identifying the tree as to species;
2. Tagging each tree with a metal tag and recording its location on a map;
3. Measuring the trunk diameter at a point 24" above grade;
4. Evaluating the health and structural condition using a scale of 0 – 5:
 - 5** - A healthy, vigorous tree, reasonably free of signs and symptoms of disease, with good structure and form typical of the species.
 - 4** - Tree with slight decline in vigor, small amount of twig dieback, minor structural defects that could be corrected.
 - 3** - Tree with moderate vigor, moderate twig and small branch dieback, thinning of crown, poor leaf color, moderate structural defects that might be mitigated with regular care.
 - 2** - Tree in decline, epicormic growth, extensive dieback of medium to large branches, significant structural defects that cannot be abated.
 - 1** - Tree in severe decline, dieback of scaffold branches and/or trunk; most of foliage from epicormics; extensive structural defects that cannot be abated.
 - 0** – Dead.
5. Rating the suitability for preservation as "good", "moderate" or "poor". Suitability for preservation considers the health, age and structural condition of the tree species, and its potential to remain an asset to the site for years to come.
 - Good:** Trees with good health and structural stability that have the potential for longevity at the site.
 - Moderate:** Trees with somewhat declining health and/or structural defects than can be abated with treatment. The tree will require more intense management and monitoring, and may have shorter life span than those in 'good' category.
 - Poor:** Trees in poor health or with significant structural defects that cannot be mitigated. Tree is expected to continue to decline, regardless of treatment. The species or individual tree may have characteristics that are undesirable for landscapes, and generally are unsuited for use areas.

Description of Trees

One hundred and ninety-three (193) trees, representing 12 species, were assessed. Descriptions of each tree are provided in the **Tree Assessment Forms** and locations are shown on the **Tree Assessment Map** (see **Attachments**).

Trees were in two distinct groups.

- Eighty-three (83) trees were concentrated on the periphery, with London plane and evergreen ash planted on the earthen berm along Trade Zone Blvd., and camphor and evergreen ash planted on the earthen berm along Montague Expressway.
- One-hundred ten (110) trees had been planted in the interior of the site around buildings and in the parking lots. These were a mix of mature coast redwoods and young white birch, white alder, Southern magnolia and flowering cherry.

The most frequently occurring species was coast redwood, with 37 trees or 19% of the population (Table 1, following page). Twenty-four (24) of these were mature, with diameters between 24" and 38". Twenty-six (26), or 70%, were in good condition, 11 in fair and none in poor. Twenty-one (21) of the coast redwoods were noted as having some amount of thinning in the canopy (Photo 1, following page). This condition is reversible and is typically associated with inadequate summertime irrigation.

Camphor, with 30 trees (15%), was the second most commonly surveyed tree. They had been planted exclusively on the berm along Montague Expressway and had not performed as well as other species at the site. Four (4) were in good condition, 18 in fair, and eight (8) in poor. Many had extensive dieback of twigs and branches and poor color. All but four (4) of the camphors were young, with diameters of 12" or less.

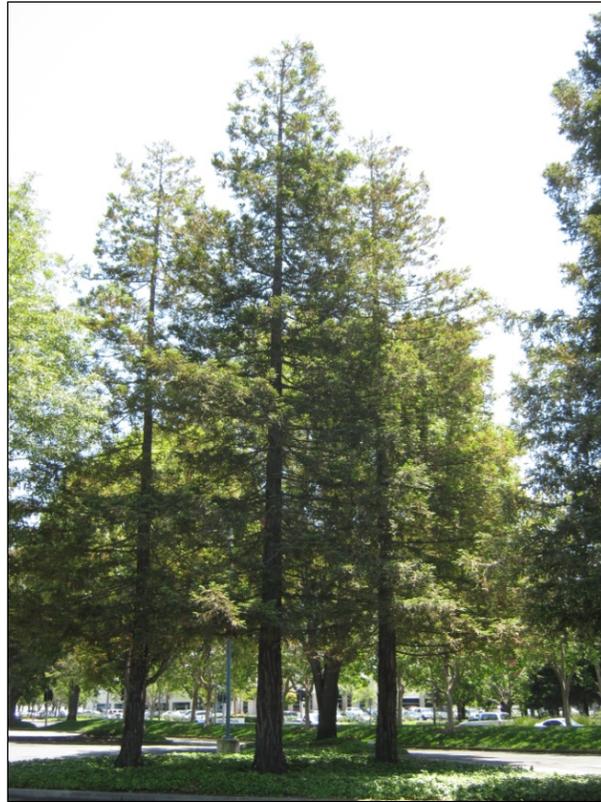
Three additional species were also well represented at the site:

- London plane, with 29 trees (15%), had been planted along the berm on Trade Zone Blvd. The species had performed very well, with 24 in good condition, five (5) in fair, and none in poor. Many of the trees leaned slightly to the south, presumably in response to the prevailing wind direction. Anthracnose, an annual fungal pathogen which often kills the first set of leaves, was common among the London planes at the site. The species tolerates the pathogen, pushing out a second set of leaves every year.
- Evergreen ash had been planted across the site, with 20 growing on the berms along Montague Expressway and Trade Zone Blvd., and the remaining eight (8) planted in small parking lot islands. Sixteen (16) were in good condition, six (6) fair and six (6) poor. Where the species had been planted in the parking lot islands, it had commonly displaced the adjacent hardscape.
- Twenty-seven (27) white birch had been planted exclusively on the interior of the site, adjacent to buildings. Thirteen (13) were in good condition, eight (8) fair, five (5) poor and one (1) was dead. The species is riparian and is typically associated with flowing water. Many of the trees had dieback varying from minor to extensive.

Tree size ranged from 4" to 38" in diameter for single-trunked trees. Only four (4) of the trees were multi-trunked. The majority of the trees (92 trees or 48%) were in good condition (Table 1, following page). Thirty-eight percent (73 trees) were in fair condition, 13% (26 trees) were rated in poor condition, and 1% (2 trees) were dead.

The City of Milpitas defines any tree with a circumference of 37" (diameter of 12") or greater on developed commercial or industrial property as "Protected" (Street Tree Ordinance X-2-7.01-1). One hundred and twenty-five (125) trees met the criteria for "Protected" status. "Protected" trees are identified in the **Tree Assessment Form** (see attachments).

Photo 1: Looking south at coast redwoods #60-62. All three were in fair condition, with 'very thin crowns'. Tinning crowns in coast redwood is often associated with a lack of adequate summertime irrigation, but is reversible. The condition is more often associated with mature trees, which require more water, or those located in hot inland locations, well away from the cool, foggy coast where the species is native.



**Table 1. Tree condition & frequency of occurrence.
 300 Montague Expressway, Milpitas**

Common Name	Scientific Name	Condition Rating				No. of trees
		Dead (0)	Poor (1-2)	Fair (3)	Good (4-5)	
White alder	<i>Alnus rhombifolia</i>	1	1	5	1	9
White birch	<i>Betula pendula</i>	1	5	8	13	27
Camphor	<i>Cinnamomum camphora</i>	-	8	18	4	30
Nichol's gum	<i>Eucalyptus nicholii</i>	-	-	2	1	3
Evergreen ash	<i>Fraxinus uhdei</i>	-	6	6	16	28
Sweetgum	<i>Liquidambar styraciflua</i>	-	1	2	2	5
Southern magnolia	<i>Magnolia grandiflora</i>	-	-	8	1	9
London plane	<i>Platanus x acerifolia</i>	-	-	5	24	29
African fern pine	<i>Podocarpus gracilior</i>	-	1	1	2	4
Flowering cherry	<i>Prunus serrulata</i>	-	3	6	2	11
Coast redwood	<i>Sequoia sempervirens</i>	-	-	11	26	37
Siberian elm	<i>Ulmus pumila</i>	-	-	1	-	1
Total		2	26	73	92	193
		1%	13%	38%	48%	100%

Suitability for Preservation

Before evaluating the impacts that will occur during development, it is important to consider the quality of the tree resource itself, and the potential for individual trees to function well over an extended length of time. Trees that are preserved on development sites must be carefully selected to make sure that they may survive development impacts, adapt to a new environment and perform well in the landscape.

For trees growing in open fields, away from areas where people and property are present, structural defects and/or poor health presents a low risk of damage or injury if they fail. However, we must be concerned about safety in use areas. Therefore, where development encroaches into existing plantings, we must consider their structural stability as well as their potential to grow and thrive in a new environment. Where development will not occur, the normal life cycles of decline, structural failure and death should be allowed to continue.

Evaluation of suitability for preservation considers several factors:

- **Tree health**
Healthy, vigorous trees are better able to tolerate impacts such as root injury, demolition of existing structures, changes in soil grade and moisture, and soil compaction than are non-vigorous trees.
- **Structural integrity**
Trees with significant amounts of wood decay and other structural defects that cannot be corrected are likely to fail. Such trees should not be preserved in areas where damage to people or property is likely.
- **Species response**
There is a wide variation in the response of individual species to construction impacts and changes in the environment. In our experience, for example camphor and mature trees in general are less tolerant of root loss. In contrast, London plane and evergreen ash have good tolerance to site disturbance.
- **Tree age and longevity**
Old trees, while having significant emotional and aesthetic appeal, have limited physiological capacity to adjust to an altered environment. Young trees are better able to generate new tissue and respond to change.
- **Species invasiveness**
Species which spread across a site and displace desired vegetation are not always appropriate for retention. This is particularly true when indigenous species are displaced. In this case, none of the species surveyed at the 300 Montague Expressway site would be considered invasive.

Each tree was rated for suitability for preservation based upon its age, health, structural condition and ability to safely coexist within a development environment (Table 2, following page).

**Table 2: Tree Suitability for Preservation
300 Montague Expressway, Milpitas**

Good These are trees with good health and structural stability that have the potential for longevity at the site. Thirty-nine (39) trees were of good suitability for preservation, including: 15 London plane, nine (9) coast redwoods, six (6) evergreen ash, four (4) white birch, three (3) camphor, and two (2) sweet gum.

Moderate Trees in this category have fair health and/or structural defects that may be abated with treatment. Trees in this category require more intense management and monitoring, and may have shorter life-spans than those in the “good” category. Eighty (80) trees were of moderate suitability for preservation, including: 22 coast redwoods, 13 London plane, 13 evergreen ash, 12 white birch, five (5) southern magnolia, four (4) camphor, three (3) flowering cherry, two (2) each of Nichol’s gum, white alder and African fern pine, one (1) Siberian elm, and one (1) sweet gum.

Poor Trees in this category are in poor health or have significant defects in structure that cannot be abated with treatment. These trees can be expected to decline regardless of management. The species or individual tree may possess either characteristics that are undesirable in landscape settings or be unsuited for use areas. Seventy-four (74) trees were of poor suitability for preservation, including: 23 camphor, 11 white birch, nine (9) evergreen ash, eight (8) flowering cherry, seven (7) white alder, six (6) coast redwood, four (4) southern magnolia, two (2) African fern pine, (1) London plane, and one (1) Nichol’s gum.

We consider trees with good suitability for preservation to be the best candidates for preservation. We do not recommend retention of trees with poor suitability for preservation in areas where people or property will be present. Retention of trees with moderate suitability for preservation depends upon the intensity of proposed site changes.

Evaluation of Impacts and Recommendations for Action

Appropriate tree retention develops a practical match between the location and intensity of construction activities and the quality and health of trees. The **Tree Survey** was the reference point for tree condition and quality. Potential impacts from construction were evaluated using the Architectural Site Plan, prepared by ktgy Architects, Inc. (dated June 13, 2011). The plan showed building and road configurations, and accurate trunk locations. No grading, drainage or utility information was included on the plan.

The plan proposes to construct 92 attached town homes and 42 single-family homes (a total of 134 homes), in 15 buildings across the site. The entry off of Trade Zone Blvd. will be retained, and new sidewalks installed. A new road would be constructed along the southern property line. The remainder of the site would be re-graded and new roads, infrastructure, and landscaping would be installed.

Potential impacts from construction were estimated for each tree. The most significant impacts to the trees would occur as the result of grading for the buildings and installation of new sidewalks on Montague Expressway and Trade Zone Blvd.

Based on our assessment, removal would be required for 177 trees, 117 of which met the City's criteria for Protected status. One hundred and sixty (160) of these would be directly impacted, including 78 that would fall within the building footprints, 36 within roads and 11 within graded portions of the site. Sixty-five (65) of the trees identified for removal were of poor suitability for preservation.

Nine (9) trees are identified for preservation and seven (7) for possible preservation (Table 3, following page). Four (4) of the trees to be preserved qualified as Protected, and three (3) of the trees identified for possible preservation qualified as Protected. All of these trees were located on the berms along Trade Zone Blvd. and Montague Expressway. Preservation of trees is predicated on following the **Tree Preservation Guidelines** provided (following page).

Trees identified for possible preservation would be located in close proximity to the proposed sidewalk construction. Rather than condemn them, the developer has worked to minimize grading in these areas and would like to make a final determination of if they can be preserved based on the number and size of roots exposed at the time of grading for the sidewalk.

In summary, 177 of the trees at the 300 Montague expressway site were identified for removal, including 117 Protected trees. Nine (9) trees were identified for preservation and seven (7) for possible preservation, including a total of seven (7) Protected trees.

**Table 3. Recommendations for preservation.
 300 Montague Expressway, Milpitas**

Tree #	Species	Diameter	Protected?	Recommendation
2	London plane	17	Yes	Preserve , sidewalk 7' S. and 7'W.
11	London plane	14	Yes	Possible preservation, sidewalk 4' N.
28	London plane	16	Yes	Possible preservation, sidewalk 5' N.
34	London plane	9	No	Possible preservation, sidewalk 4' N.
159	Camphor	8	No	Preserve , sidewalk 10' E.
161	Camphor	8	No	Preserve , sidewalk 10' E.
162	Camphor	17	Yes	Preserve , sidewalk 10' E.
166	Camphor	11	No	Preserve , sidewalk 10' E.
169	Camphor	12	Yes	Preserve , sidewalk 10' E.
171	Camphor	11	No	Preserve , sidewalk 8' E.
172	Evergreen ash	28	Yes	Preserve , retain ex. curb E.
186	Camphor	9	No	Possible preservation, sidewalk 7' E.
188	Camphor	12	Yes	Possible preservation, sidewalk 7' E.
190	Camphor	10	No	Possible preservation, sidewalk 7' E.
191	Camphor	16	Yes	Preserve , sidewalk 7' E.
192	Camphor	10	No	Possible preservation, sidewalk 7' E.

Tree Preservation Guidelines

The goal of tree preservation is not merely tree survival during development but maintenance of tree health and beauty for many years. Trees retained on sites that are subject to extensive injury during construction and are not adequately maintained become a liability rather than an asset.

Impacts can be minimized by coordinating demolition and construction activities within the **TREE PROTECTION ZONE**. The following recommendations will help maintain and improve the health and vitality of trees preserved at the Brookside Estates site.

Design recommendations

1. Any plan affecting trees should be reviewed by the Consulting Arborist with regard to tree impacts. These include, but are not limited to, improvement plans, utility and drainage plans, grading plans, landscape and irrigation plans and demolition plans.
2. Evaluate the possibility of providing as much room as possible around all trees identified in Table 3 for Possible Preservation. This could include narrowing the sidewalk, meandering the sidewalk around the trees.
3. ***Tree Preservation Guidelines*** should be included on all plans.
4. A **TREE PROTECTION ZONE** must be established for trees to be preserved, in which no soil disturbance is permitted. I recommend protecting all of the trees at the dripline until the time of the fine grading work for the sidewalk. Once fine grading is under way, fencing can be adjusted to the final **TREE PROTECTION ZONE**, as described in the following table.

Specific Tree Protection Zones

Tag #	Species	Diameter	Tree Protection Zone
2	London plane	17	7' S., 7' W and dripline in all other directions
11	London plane	14	7' N. and dripline in all other directions
28	London plane	16	5' N. and dripline in all other directions
34	London plane	9	4' N. and dripline in all other directions
159	Camphor	8	10' E. and dripline in all other directions
161	Camphor	8	10' E. and dripline in all other directions
162	Camphor	17	10' E. and dripline in all other directions
166	Camphor	11	10' E. and dripline in all other directions
169	Camphor	12	10' E. and dripline in all other directions
171	Camphor	11	8' E. and dripline in all other directions
172	Evergreen ash	28	Ex. curb E. and dripline in all other directions
186	Camphor	9	7' E. and dripline in all other directions
188	Camphor	12	7' E. and dripline in all other directions
190	Camphor	10	7' E. and dripline in all other directions
191	Camphor	16	7' E. and dripline in all other directions
192	Camphor	10	7' E. and dripline in all other directions

5. No underground services including utilities, sub-drains, water or sewer shall be placed in the **TREE PROTECTION ZONE**.
6. Irrigation systems must be designed so that no trenching will occur within the **TREE PROTECTION ZONE**.

7. Any herbicides placed under paving materials must be safe for use around trees and labeled for that use.

Pre-construction treatments and recommendations

1. The project supervisor, demolition contractor, and any other contractors who may work around trees identified for preservation or possible preservation shall meet with the Consulting Arborist before beginning work to discuss work procedures and tree protection.
2. I recommend staking the limit of the proposed sidewalk adjacent to trees identified for preservation or possible preservation as soon as possible. Once staked, have the Consulting Arborist present to monitor grading to expose roots. Once exposed, the Consulting Arborist can direct root pruning and/or make a final determination of if the trees can be preserved.
3. Tree(s) to be removed that have branches extending into the canopy of tree(s) to remain must be removed by a qualified Arborist and not by demolition or construction contractors. The qualified Arborist shall remove the tree in a manner that causes no damage to the tree(s) and understory to remain. Stumps shall be ground below grade.
4. Trees to be retained shall be fenced to completely enclose the **TREE PROTECTION ZONE**. Fences must be established prior to demolition and are to remain until all grading and construction is completed.
5. Structures and underground features to be removed within the **TREE PROTECTION ZONE** shall use the smallest equipment, and operate from outside the **TREE PROTECTION ZONE**. The consultant shall be on-site during all operations within the **TREE PROTECTION ZONE** to monitor demolition activity.
6. Prior to the start of grading, trees may require pruning to correct defects in structure, clean the crown and/or provide construction clearance. Pruning shall be completed by a Certified Arborist or Tree Worker, and adhere to the latest edition of the ANSI Z133 and A300 standards as well as the *Best Management Practices -- Tree Pruning* published by the International Society of Arboriculture.
7. Brush shall be chipped and spread beneath the trees within the **TREE PROTECTION ZONE**.

Recommendations for tree protection during construction

1. Prior to beginning work, the contractors working in the vicinity of trees to be preserved are required to meet with the Consulting Arborist at the site to review all work procedures, access routes, storage areas and tree protection measures.
2. If injury should occur to any tree during construction, it should be evaluated as soon as possible by the Consulting Arborist so that appropriate treatments can be applied.
3. Fences have been erected to protect trees to be preserved. Fences define a specific **TREE PROTECTION ZONE** for each tree or group of trees. Fences are to remain until all site work has been completed. Fences may not be relocated or removed without permission of the Consulting Arborist.
4. Construction trailers, traffic and storage areas must remain outside fenced areas at all times.

5. Any grading, construction, demolition or other work within the **TREE PROTECTION ZONE** should be monitored by the Consulting Arborist.
6. Any root pruning required for construction purposes shall receive the prior approval of, and be supervised by, the Consulting Arborist.
7. Root-injured trees have a limited capacity to absorb water. Therefore, it is important to ensure adequate soil moisture in the area of active roots. One to several irrigations may be needed for trees that are at risk. Irrigations should be specified by the Consulting Arborist.
8. No excess soil, chemicals, debris, equipment or other materials shall be dumped or stored within the **TREE PROTECTION ZONE**.
9. Any additional tree pruning needed for clearance during construction must be performed by a Certified Arborist and not by construction personnel.

Maintenance of impacted trees

Trees preserved at the 300 Montague Expressway site will experience a physical environment different from that pre-development. Following construction, new owners should develop a management plan that includes pruning, fertilization, mulch, pest management, replanting and irrigation. In addition, provisions for monitoring both tree health and structural stability following construction must be made a priority. As trees age, the likelihood of failure of branches or entire trees increases.

HortScience, Inc.



John Leffingwell
Board Certified Master Arborist WE-3966B
Registered Consulting Arborist #442

Tree Assessment

Brookwood Montague Technology Park
 300 Montague Expressway
 Milpitas CA
 June 2011



Tree No.	Species	Trunk Diameter (in.)	Protected?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
1	London plane	19	Yes	4	Good	Slight lean; good form and structure.
2	London plane	17	Yes	4	Good	Slight lean; good form and structure.
3	London plane	14	Yes	4	Moderate	Slight lean S.; one-sided; wide attachment.
4	London plane	21	Yes	4	Good	Slight lean; good form and structure.
5	London plane	14	Yes	4	Moderate	One-sided S.; good young tree.
6	London plane	14	Yes		Good	Good young tree; anthracnose.
7	London plane	13	Yes	4	Good	Good young tree; anthracnose.
8	London plane	13	Yes	4	Good	Good young tree; anthracnose.
9	London plane	13	Yes	4	Good	Good young tree; anthracnose.
10	London plane	15	Yes	4	Good	Slight lean S.; crossing branches.
11	London plane	14	Yes	4	Good	Slight lean S.; anthracnose.
12	London plane	14	Yes	4	Moderate	Multiple attachments at 6'; wide attachment; anthracnose.
13	London plane	14	Yes	4	Good	Codominant at 6'; good young tree.
14	London plane	15	Yes	4	Good	Slight lean S.; good young tree; anthracnose.
15	London plane	15	Yes	4	Good	Slight lean S.
16	London plane	15	Yes	4	Moderate	Crowded; narrow crown; anthracnose.
17	London plane	13	Yes	3	Moderate	Crowded; one-sided W.; anthracnose.
18	Evergreen ash	31	Yes	4	Good	Multiple attachments at 10'; narrow attachment.
19	Evergreen ash	17	Yes	3	Moderate	Multiple attachments at 12'; weak attachment; one-sided E.; in small island.
20	Evergreen ash	23	Yes	4	Moderate	Multiple attachments at 12'; one-sided E.; dead branch on W.
21	Evergreen ash	30	Yes	4	Moderate	Multiple attachments at 18'; one-sided W.; girdling roots.
22	London plane	13	Yes	3	Moderate	Suppressed; one-sided S.
23	London plane	12	Yes	3	Moderate	Crowded; narrow crown; significant anthracnose.
24	London plane	14	Yes	4	Moderate	Slight lean S.; anthracnose.
25	Siberian elm	29	Yes	3	Moderate	Trunk wounds; stem removed on W.; recommend aerial
26	London plane	13	Yes	4	Moderate	Slight lean S.; anthracnose.
27	London plane	13	Yes	4	Good	Good young tree; anthracnose.; upright form.
28	London plane	16	Yes	4	Good	Slight lean S.; good form and structure; anthracnose.

Tree Assessment

Brookwood Montague Technology Park
 300 Montague Expressway
 Milpitas CA
 June 2011



Tree No.	Species	Trunk Diameter (in.)	Protected?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
29	London plane	14	Yes	4	Good	Good form and structure.; anthracnose.
30	London plane	15	Yes	4	Moderate	Good form and structure.; anthracnose.
31	London plane	17	Yes	4	Moderate	Leans S.; significant anthracnose.
32	London plane	15	Yes	4	Moderate	Narrow crown; significant anthracnose.
33	London plane	10	No	3	Moderate	Significant anthracnose.; tdb.
34	London plane	9	No	3	Poor	Significant anthracnose.; dieback to 2".
35	Evergreen ash	29	Yes	4	Good	Multiple attachments at 12'; one-sided S.
36	Evergreen ash	26	Yes	4	Moderate	Multiple attachments at 8'; one-sided N.; in small island; lifting asphalt.
37	Evergreen ash	27	Yes	4	Moderate	One-sided S.
38	Evergreen ash	30	Yes	4	Moderate	Multiple attachments at 10'; narrow attachment; bark checking at base.
39	Coast redwood	17	Yes	4	Good	Thinning crown; in small island.
40	Coast redwood	25	Yes	3	Moderate	Thin crown; close to building.
41	White alder	16	Yes	3	Poor	Dieback throughout crown.
42	European white birch	10	No	3	Moderate	Dieback in upper crown.
43	European white birch	12	Yes	4	Moderate	Codominant at 7'; wide attachment.
44	European white birch	6	No	4	Moderate	Good young tree.
45	Flowering cherry	15	Yes	4	Moderate	In small cut-out; larger surface roots lifting pavement.
46	Flowering cherry	15	Yes	3	Moderate	Tipped back; root decay.
47	Coast redwood	38	Yes	4	4 Good	Good form and structure.; close to building.
48	Coast redwood	36	Yes	4	Good	Good form and structure.
49	Flowering cherry	9	No	2	Poor	In small cut-out; leans S.; tipped back.
50	White alder	14	Yes	3	Moderate	Thin upper crown.
51	Flowering cherry	8	No	2	Poor	Dead top; trunk wound.
52	Flowering cherry	8	No	3	Poor	Leans S.; bleeding at base; girdling roots.
53	Coast redwood	26	Yes	3	Moderate	Thin crown.
54	Evergreen ash	23	Yes	4	Moderate	Good form and structure.; in small island; lifting curb & asphalt.
55	Coast redwood	14	Yes	3	Poor	Very thin crown; crowded.

Tree Assessment

Brookwood Montague Technology Park

300 Montague Expressway
Milpitas CA
June 2011



Tree No.	Species	Trunk Diameter (in.)	Protected?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
56	Coast redwood	22	Yes	3	Poor	Very thin crown; close to building.
57	Evergreen ash	27	Yes	4	Moderate	Good form and structure.; in small island; lifting curb & asphalt.
58	Coast redwood	25	Yes	4	Moderate	Thinning crown; in small island.
59	Coast redwood	25	Yes	4	Moderate	Thinning crown.
60	Coast redwood	16	Yes	3	Poor	Very thin crown.
61	Coast redwood	22	Yes	3	Moderate	Very thin crown.
62	Coast redwood	18	Yes	3	Poor	Very thin crown; crowded and one-sided E.
63	Evergreen ash	23	Yes	4	Moderate	Multiple attachments at 10'; good form and structure; in small island; lifting curb & asphalt.
64	Coast redwood	22	Yes	4	Moderate	Thinning crown.
65	Coast redwood	22	Yes	4	Moderate	Thinning crown.
66	Coast redwood	28	Yes	4	Good	Crowded and one-sided S.
67	Coast redwood	36	Yes	4	Good	One-sided E.; good form and structure.
68	Evergreen ash	18	Yes	4	Good	Good form and structure.; in small island; lifting walkway.
69	Flowering cherry	11	No	3	Poor	In small island; lifting walkway; tipped back.
70	Flowering cherry	6	No	2	Poor	Extensive dieback.
71	Sweetgum	9	No	4	Good	Multiple attachments at 8'; one-sided N.;
72	White alder	15	Yes	2	Poor	Half of tree dead.
73	White alder	17	Yes	3	Poor	Extensive dieback.
74	Coast redwood	16	Yes	3	Poor	Leans N.; no buttress N.; thin crown.
75	Coast redwood	22	Yes	4	Moderate	Thin crown; close to building.
76	Flowering cherry	6	No	3	Poor	In small cut-out; small crown.
77	Southern magnolia	10	No	3	Poor	Tipped back; epicormic growth.
78	Southern magnolia	8	No	3	Poor	Tipped back; epicormic growth.
79	Southern magnolia	8	No	3	Poor	Tipped back; epicormic growth.
80	Southern magnolia	10	No	3	Moderate	Tipped back; recovering; epicormic growth.
81	European white birch	12	Yes	4	Moderate	Leans S.
82	European white birch	5	No	4	Moderate	One-sided S.; crowded.
83	Southern magnolia	9	No	3	Moderate	One-sided S.; crowded.

Tree Assessment

Brookwood Montague Technology Park
 300 Montague Expressway
 Milpitas CA
 June 2011



Tree No.	Species	Trunk Diameter (in.)	Protected?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
84	Sweetgum	6	No	3	Poor	Weak attachment; included bark; history of branch failure.
85	Sweetgum	8	No	2	Poor	Extensive dieback; root decay.
86	European white birch	12	Yes	4	Good	Leans S.
87	Southern magnolia	7	No	3	Poor	In small cut-out; crowded.
88	Southern magnolia	11	No	3	Moderate	Tipped back; recovering; epicormic growth.
89	Southern magnolia	11	No	3	Moderate	Tipped back.
90	Coast redwood	26	Yes	4	Good	Close to building; good form and structure.
91	Southern magnolia	28	Yes	4	Moderate	In 2' deep well; one-sided W.
92	Coast redwood	25	Yes	4	Good	Good form and structure.; a little thin.
93	European white birch	6	No	3	Poor	Twig and branch dieback throughout crown.
94	Flowering cherry	4	No	3	Poor	Small crown.
95	European white birch	9	No	2	Poor	Half of tree dead.
96	Coast redwood	36	Yes	4	Good	Good form and structure.; one-sided S.
97	Coast redwood	26	Yes	4	Moderate	Crowded; one-sided NE.
98	Coast redwood	12	Yes	3	Poor	Crowded; narrow crown.
99	Coast redwood	33	Yes	4	Moderate	Crowded; thinning crown.
100	Podocarpus	15	Yes	4	Moderate	Codominant at 6'; included bark.
101	Podocarpus	12	Yes	4	Moderate	Close to building.
102	European white birch	9,6	No	4	Moderate	Codominant at base; dieback in upper crown.
103	European white birch	7	No	3	Poor	Dieback in upper crown.
104	Coast redwood	23	Yes	4	Moderate	Good form and structure.; one-sided W.
105	Coast redwood	28	Yes	4	Moderate	Crowded; one-sided N.
106	Podocarpus	4,3	No	3	Poor	Suppressed.
107	Coast redwood	27	Yes	4	Moderate	Close to building; one-sided S.
108	Coast redwood	36	Yes	4	Good	Good form and structure.
109	Coast redwood	25	Yes	3	Moderate	Close to building; thin crown.
110	Coast redwood	24	Yes	4	Moderate	Crowded; one-sided W.
111	Coast redwood	27	Yes	4	Moderate	Crowded; thinning crown.
112	Coast redwood	25	Yes	4	Moderate	Close to building; crowded.

Tree Assessment

Brookwood Montague Technology Park
 300 Montague Expressway
 Milpitas CA
 June 2011



Tree No.	Species	Trunk Diameter (in.)	Protected?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
113	Coast redwood	22	Yes	3	Moderate	Crowded; one-sided E.; thin crown.
114	Coast redwood	28	Yes	4	Moderate	Crowded; one-sided S.
115	Coast redwood	27	Yes	4	Moderate	Crowded; one-sided N.
116	European white birch	5	No	0	Poor	Dead.
117	European white birch	12	Yes	2	Poor	Extensive dieback.
118	European white birch	6	No	3	Poor	Twig and branch dieback.
119	European white birch	10	No	2	Poor	Extensive dieback.
120	European white birch	8	No	1	Poor	All but dead.
121	Flowering cherry	9	No	3	Poor	In small cut-out; small crown.
122	European white birch	9,9,6	No	3	Moderate	Western stem dead; multiple attachments at base.
123	Coast redwood	30	Yes	4	Moderate	Close to building; thinning crown.
124	Coast redwood	31	Yes	4	Moderate	Close to building; thinning crown.
125	European white birch	13	Yes	4	Moderate	Leans S.
126	European white birch	14	Yes	4	Good	Codominant at 7'; wide attachment.
127	European white birch	13	Yes	5	Good	Good form and structure.
128	European white birch	10	No	3	Moderate	Thin crown; one-sided N.
129	White alder	16	Yes	4	Moderate	Good form and structure.; moderate dieback.
130	European white birch	9	No	4	Moderate	Leans S.; cod. high in crown.
131	European white birch	10	No	4	Moderate	Lost central leader; codominant at 6'.
132	European white birch	12	Yes	5	Good	Excellent form and structure.
133	European white birch	12	Yes	4	Moderate	Codominant at 5'.
134	European white birch	5	No	3	Poor	High crown; trunk bows E.
135	European white birch	5	No	3	Poor	Topped; twig dieback.
136	White alder	18	Yes	3	Poor	Multiple attachments at 15'; twig and branch dieback.
137	White alder	12	Yes	1	Poor	All but dead.
138	White alder	18	Yes	0	Poor	Dead.
139	Sweetgum	13	Yes	4	Good	Good form; low upright lateral @ 8'.
140	Flowering cherry	10	No	4	Moderate	Multiple attachments at 4'; good health.
141	Sweetgum	10	No	3	Moderate	Lost central leader; multiple attachments at 8'.

Tree Assessment

Brookwood Montague Technology Park
 300 Montague Expressway
 Milpitas CA
 June 2011



Tree No.	Species	Trunk Diameter (in.)	Protected?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
142	White alder	15	Yes	3	Poor	Dieback in upper crown.
143	Podocarpus	5	No	2	Poor	Poor color; topped.
144	Evergreen ash	22	Yes	4	Good	Multiple attachments at 9'; full crown; in small island; roots lifting asphalt.
145	Evergreen ash	22	Yes	2	Poor	Extensive dieback; declining.
146	Evergreen ash	12	Yes	2	Poor	Extensive dieback; declining; one-sided SW.
147	Evergreen ash	17	Yes	2	Poor	Extensive dieback; declining; multiple attachments at 8'.
148	Evergreen ash	30	Yes	4	Moderate	Multiple attachments at 8'; crown beginning to separate to S.; full crown.
149	Nichol's gum	15	Yes	4	Moderate	Slight lean N.; narrow form.
150	Nichol's gum	35	Yes	3	Poor	Multiple attachments at 12'; twig dieback on S.; crown extends over building to N.
151	Nichol's gum	33	Yes	3	Moderate	Multiple attachments at 20'; good form; kino bleeding on trunk.
152	Camphor	7	No	2	Poor	Poor color.
153	Camphor	8	No	2	Poor	Poor color; twig dieback.
154	Evergreen ash	11	No	2	Poor	Poor color; twig dieback.
155	Evergreen ash	16	Yes	3	Moderate	Codominant at 6'; full crown.
156	Evergreen ash	13	Yes	2	Poor	Extensive dieback; declining.
157	Evergreen ash	12	Yes	2	Poor	Multiple attachments at 6'; twig dieback.
158	Evergreen ash	29	Yes	4	Good	Multiple attachments at 8'; full crown; extensive surface roots.
159	Camphor	8	No	3	Poor	Deformed base; twig dieback.
160	Camphor	10	No	3	Poor	Deformed base; twig dieback.
161	Camphor	8	No	3	Poor	Deformed base; twig dieback.
162	Camphor	17	Yes	3	Moderate	Multiple attachments at 4'; wide crown.
163	Evergreen ash	29	Yes	3	Moderate	Crown to E.; multiple attachments at 8' & 15' with included bark.
164	Evergreen ash	31	Yes	4	Good	Multiple attachments at 8' with some narrow attachments; surface roots.
165	Camphor	8	No	2	Poor	Very suppressed to W.; deformed base.
166	Camphor	11	No	3	Poor	Suppressed to SW.

Tree Assessment

Brookwood Montague Technology Park
 300 Montague Expressway
 Milpitas CA
 June 2011



Tree No.	Species	Trunk Diameter (in.)	Protected?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
167	Camphor	11	No	2	Poor	Twig and branch dieback; small branch failures.
168	Camphor	11	No	3	Moderate	Minor dieback.
169	Camphor	12	Yes	4	Moderate	Crowded by #170; codominant at 5'.
170	Camphor	21	Yes	4	Good	Good form; minor dieback.
171	Camphor	11	No	3	Poor	Suppressed to S.; twig dieback.
172	Evergreen ash	28	Yes	4	Moderate	Base at edge of curb; codominant at 12'.
173	Evergreen ash	25	Yes	3	Poor	Girdling roots; multiple attachments at 9' with included bark.
174	Evergreen ash	17	Yes	3	Poor	Suppressed to SE.; multiple attachments at 7'; narrow crown.
175	Evergreen ash	23	Yes	3	Poor	Suppressed to SE.; codominant at 8'; minor dieback.
176	Camphor	11	No	3	Poor	Twig and branch dieback.
177	Camphor	6	No	2	Poor	Trunk wound from old failure.
178	Camphor	11	No	3	Moderate	Codominant at 5'; full crown; deformed base.
179	Camphor	11	No	3	Poor	Twig dieback.
180	Camphor	8	No	2	Poor	Scrawny tree; twig dieback.
181	Camphor	10	No	3	Poor	Deformed base; twig dieback; codominant at 4'.
182	Camphor	9	No	2	Poor	Thin crown; twig dieback.
183	Camphor	18	Yes	4	Good	Good form; multiple attachments at 6'; full crown.
184	Camphor	7	No	2	Poor	Thin crown; extensive dieback; poor form.
185	Camphor	9	No	3	Poor	Dieback.
186	Camphor	9	No	3	Poor	Twig and branch dieback.
187	Camphor	9	No	3	Poor	Codominant at 6'; poor form.
188	Camphor	12	Yes	3	Poor	Multiple attachments at 6'; twig dieback.
189	Camphor	11	No	3	Poor	Codominant at 5'; twig and branch dieback.
190	Camphor	10	No	3	Poor	Codominant at 6'; twig and branch dieback.
191	Camphor	16	Yes	4	Good	Multiple attachments at 7'; full crown.
192	Camphor	10	No	3	Poor	Codominant at 4'; twig dieback.
193	European white birch	9,9,4	No	2	Poor	Multiple attachments at base. Declining.

Tree Assessment Map

**Brookwood Montague
Technology Park**

300 Montague Expressway
Milpitas, CA

Prepared for:
Trumark Companies
Danville, CA

June 2011

No Scale

Notes:
Base map provided by:
HMH
San Jose, CA

Numbered tree locations
are approximate.



2150 Rheem Drive, Suite A
Pleasanton, CA 94588
Phone 925.484.0211
Fax 925.484.0596
www.hortscience.com

