

August 6, 2013

Wizer Property
**Tree Inventory and
Preservation Plan**

Prepared for:

Kurt Lango
Lango Hansen Landscape Architects
1100 NW Glisan Street #3B
Portland, OR 97209

Prepared by:

Lyle J. Feilmeier
Consulting Arborist
Board Certified Master Arborist MW-0173B

Introduction

Background

The Wizer property is a grocery/retail property located at the intersection of A Avenue and Second Street in downtown Lake Oswego. Dirk R. Otis of Macadam Forbes and Kurt Lango of Lango Hansen Landscape Architects are re-developing the site. The City of Lake Oswego requires a tree inventory of all the existing trees.

Assignment

At the request of Kurt Lango, I, Lyle J. Feilmeier, a consulting arborist employed by Collier Arbor Care, a division of Bartlett Tree Experts Company, have been hired to provide:

1. A Tree Inventory of all trees 5 inches and larger, including all street trees, in an Excel Table.
2. Provide written report of the observations and recommendations.
3. Provide guidelines for the preservation of the Japanese maple and other street tree near the construction envelope.

Limits of the Assignment

I have based this report on my observations made from my site visit on Monday July 8, 2013 and site maps provided by you via e-mail and while on site.

Observations

Site Observations

The Wizer property is one square block located between the blocks A Avenue to the north, Evergreen Rd to the south, First Street to the east and Second Street to the west. The property is commercial with above and below parking and a grocery store and retail businesses.

Tree Observations

There are 26 trees located around the perimeter of the building directly impacted by the proposed construction (Appendix I- Site Map). These tree species consist of one magnolia (*Magnolia grandiflora*), three Norway maple (*Acer platanoides*) (Appendix III – Photos, Photo1), four flowering pear (*Pyrus calleryana* 'Chanticleer') (Appendix III- Photos, Photo 2), six Lavelle hawthorn (*Crataegus x lavalleyi*) (Appendix III- Photos, Photo 3), 10 zelkova (*Zelkova serrata* 'Musashino') (Appendix III- Photos, Photo 4) one flowering pear (*Pyrus calleryana* 'Chanticleer') and a specimen, mature Japanese maple (*Acer palmatum*). All the inventoried tree are within the construction site or envelope and are recommended removal other than the Japanese maple. (Appendix I – Photos – photo 2). There are 28 street trees indirectly affected by the construction and will require a preservation plan to protect during the construction phase. These trees consist of 10 flowering pear (*Pyrus calleryana* 'Chanticleer'), five green ash (*Fraxinus pennsylvanica*) along the east side of the property on First Street. Four flowering pear (*Pyrus calleryana* 'Chanticleer') on the north side of the property along A Avenue and 12 linden (*Tilia cordata*) along the south side of the property on Evergreen Rd.

Analysis and Testing

Tree Inventory

During my site visit on July 8, 2013, I located, measured, evaluated and rated each of the 55 trees and entered them into an inventory table (Appendix I- Tree Inventory).

The trees were rated for their current health by the following criteria:

- **Good condition:** Trunks and crowns – no significant problems, excellent space and soil for root growth, excellent annual growth rate and strong branch structure.
- **Fair condition:** Some trunk and crown problems observed such as deadwood or minor decay, average to less than average annual growth rate, some constraints for root growth such as compacted soil or limited space, close proximity to building or other structures.
- **Poor condition:** Significant trunk and crown problems (i.e. decay or large amount of deadwood), observed that limits life span and poor annual growth rates. Included bark or past topping cuts
- **Dead trees:** Standing dead tree void of life

The trees were then rated for the preservation potential by the following criteria

- **Good:** Minimal to zero impact from any part of the construction phase
- **Fair:** Tree borders, or is in proximity of, the construction site: Tree Protection fencing would be required to improve the preservation potential. Less than 10 percent of root zone would be impacted.
- **Poor:** Tree is within the construction envelope and Tree Protection Fencing would not improve preservation. Over 60 percent of the root zone would be impacted.

➤ Discussion

➤ Tree Preservation

➤ Grade Excavation Effects on Tree Health

- Most tree root systems are located within the top thirty-six inches of soil. When excavating around the trees being preserved along the west property line, damage can occur. Identifying the location of scaffolding and feeder roots can be done by hand digging or using an Air Spade® (a tool that uses a jet of supersonic air to blow away the soil from around the roots and leave the root crown exposed and undamaged) prior to excavating. This will help minimize unneeded damage to the preserved tree's root system.
- If the excavation is taking place outside of the drip line (the width of the distance of horizontal limbs from the trunk), the excavator can work toward the trunk by cutting into the drip line while actively searching for two inch and larger roots within the top thirty-six inches of soil. If many smaller half inch or less roots are exposed at that point, excavation can go further into the drip-line. Any roots exposed need to be cut by a sharp hand or chainsaw not grubbed out by the excavator.
- Damage from excavation can negatively affect the health and anchorage of trees' root systems. Cutting excessive roots can result in the loss of the trees ability to absorb water and nutrients. Substantial root loss decreases the potential for a trees' long-term survival and eventually may cause death.

➤ Tree Preservation Fencing

- Placement of protective fencing to establish a tree protection zone is one of the key ingredients for successful tree preservation. Most tree protection ordinances suggest that protective fencing be placed around the circumference of the tree at the drip line (tree protection zone).
- A tree protection zone is defined as the area around a tree, or group of trees, in which no grading or construction activity may occur (Trees and Development: A technical guide to Preservation of Trees During Land Development by Matheny and Clark 1998). For optimum protection, the space needed for tree preservation equals one foot of protection for every one inch of trunk d.b.h. For example: The remaining linden street trees along Evergreen Rd will need approximately 6 feet of preservation (3 feet radius) around each tree or the length of the block with the continuous 12 trees.
- Orange construction fencing is commonly used for the tree preservation fencing. An alternative is chain link fencing which may be a better choice for this site.
- Successful tree preservation depends on preventing root damage by construction during all phases of the project.

Conclusions

I have inventoried 55 trees located within the current property lines and within the construction envelope. Of the 26 trees with the property lines only the Japanese maple is recommended for preservation. Additional preservation is recommended for 29 the street trees near the construction but outside the construction envelope.

Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the arborist can neither guarantee nor be responsible for the accuracy of information provided by others. The information contained in this report reflects the condition of those items at the time of inspection. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the trees in question may not arise in the future.

Recommendations

My recommendations for the preservation of the street trees along First Street, A Avenue and Evergreen Rd and the Japanese maple on the northeast corner are to follow the Tree Preservation s prescribed within the discussion. Install fencing around each tree at a minimum distance of five feet around the circumference of the trunk. Special attention and more detail will be needed once the final drawings are made around the Japanese maple. This tree may require special attention.

Appendix II – Tree Inventory

Tree #	Common Name	Latin Name	D.B.H.	Health Rating	Preservation Potential	Action	Comments
1	Southern Magnolia	<i>Magnolia grandiflora</i>	21	Good	Poor	Remove/ Mitigate	Tree exists within proposed building footprint
2	Norway maple	<i>Acer platanoides</i>	14	Poor	Poor	Remove/ Mitigate	Tree exists within proposed building footprint
3	Norway maple	<i>Acer platanoides</i>	14	Poor	Poor	Remove/ Mitigate	Tree exists within proposed building footprint
4	Norway maple	<i>Acer platanoides</i>	14	Poor	Poor	Remove/ Mitigate	Tree exists within proposed building footprint
5	Flowering pear	<i>Pyrus calleryana</i> 'Chanticleer'	5	Good	Poor	Remove/ Mitigate	Tree exists within the building envelope
6	Flowering pear	<i>Pyrus calleryana</i> 'Chanticleer'	5	Good	Poor	Remove/ Mitigate	Tree exists within the building envelope
7	Flowering pear	<i>Pyrus calleryana</i> 'Chanticleer'	5	Good	Poor	Remove/ Mitigate	Tree exists within the building envelope
8	Flowering pear	<i>Pyrus calleryana</i> 'Chanticleer'	6	Good	Poor	Remove/ Mitigate	Tree exists within the building envelope
9	Lavelle hawthorn	<i>Crataegus x lavellei</i>	12	good	Poor	Remove/ Mitigate	Tree exists within proposed building footprint
10	Lavelle hawthorn	<i>Crataegus x lavellei</i>	14	good	Poor	Remove/ Mitigate	Tree exists within proposed building footprint
11	Lavelle hawthorn	<i>Crataegus x lavellei</i>	6	good	Poor	Remove/ Mitigate	Tree exists within proposed building footprint
12	Lavelle hawthorn	<i>Crataegus x lavellei</i>	18	good	Poor	Remove/ Mitigate	Tree exists within proposed building footprint
13	Lavelle hawthorn	<i>Crataegus x lavellei</i>	11	good	Poor	Remove/ Mitigate	Tree exists within proposed building footprint
14	Lavelle hawthorn	<i>Crataegus x lavellei</i>	13	good	Poor	Remove/ Mitigate	Tree exists within proposed building footprint
15	Zelkova	<i>Zelkova serrata</i> 'Musashino'	14	poor	Poor	Remove/ Mitigate	Tree exists within the building envelope
16	Zelkova	<i>Zelkova serrata</i> 'Musashino'	14	poor	Poor	Remove/ Mitigate	Tree exists within the building envelope
17	Zelkova	<i>Zelkova serrata</i> 'Musashino'	14	poor	Poor	Remove/ Mitigate	Tree exists within the building envelope
18	Zelkova	<i>Zelkova serrata</i> 'Musashino'	12	poor	Poor	Remove/ Mitigate	Tree exists within the building envelope
19	Zelkova	<i>Zelkova serrata</i> 'Musashino'	14	poor	Poor	Remove/ Mitigate	Tree exists within the building envelope

Appendix II – Tree Inventory (continued)

20	Zelkova	<i>Zelkova serrata</i> 'Musashino'	14	poor	Poor	Remove/ Mitigate	Tree exists within the building envelope
21	Zelkova	<i>Zelkova serrata</i> 'Musashino'	14	poor	Poor	Remove/ Mitigate	Tree exists within the building envelope
22	Zelkova	<i>Zelkova serrata</i> 'Musashino'	12	poor	Poor	Remove/ Mitigate	Tree exists within the building envelope
23	Zelkova	<i>Zelkova serrata</i> 'Musashino'	12	poor	Poor	Remove/ Mitigate	Tree exists within the building envelope
24	Zelkova	<i>Zelkova serrata</i> 'Musashino'	16	poor	Poor	Remove/ Mitigate	Tree exists within the building envelope
25	Flowering Pear	<i>Pyrus calleryana</i> 'Bradford'	16	poor	Poor	Remove/ Mitigate	Tree exists within the building envelope
26	Japanese maple	<i>Acer palmatum</i>	29	Good	Fair	Preserve	Specimen tree
27	Flowering Pear	<i>Pyrus calleryana</i> 'Chanticleer'	6	Good	Fair	Preserve	Street tree
28	Flowering Pear	<i>Pyrus calleryana</i> 'Chanticleer'	6	Good	Fair	Preserve	Street tree
29	Flowering Pear	<i>Pyrus calleryana</i> 'Chanticleer'	5	Good	Fair	Preserve	Street tree
30	Flowering Pear	<i>Pyrus calleryana</i> 'Chanticleer'	5	Good	Fair	Preserve	Street tree
31	Flowering Pear	<i>Pyrus calleryana</i> 'Chanticleer'	5	Good	Fair	Preserve	Street tree
32	Green Ash	<i>Tilia cordata</i>	5	Good	Fair	Preserve	Street tree
33	Green Ash	<i>Tilia cordata</i>	4	Good	Fair	Preserve	Street tree
34	Green Ash	<i>Tilia cordata</i>	4	Good	Fair	Preserve	Street tree
35	Green Ash	<i>Tilia cordata</i>	4	Good	Fair	Preserve	Street tree
36	Green Ash	<i>Tilia cordata</i>	6	Good	Fair	Preserve	Street tree
37	Green Ash	<i>Tilia cordata</i>	7	Good	Fair	Preserve	Street tree
38	Flowering Pear	<i>Pyrus calleryana</i> 'Chanticleer'	7	Good	Fair	Preserve	Street tree
39	Flowering Pear	<i>Pyrus calleryana</i> 'Chanticleer'	7	Good	Fair	Preserve	Street tree

Appendix II – Tree Inventory (continued)

40	Flowering Pear	<i>Pyrus calleryana</i> 'Chanticleer'	8	Good	Fair	Preserve	Street tree
41	Flowering Pear	<i>Pyrus calleryana</i> 'Chanticleer'	9	Good	Fair	Preserve	Street tree
42	Flowering Pear	<i>Pyrus calleryana</i> 'Chanticleer'	10	Good	Fair	Preserve	Street tree
43	Flowering Pear	<i>Pyrus calleryana</i> 'Chanticleer'	11	Good	Fair	Preserve	Street tree
44	Linden	<i>Tilia cordata</i>	9	Good	Fair	Preserve	Street tree
45	Linden	<i>Tilia cordata</i>	8	Good	Fair	Preserve	Street tree
46	Linden	<i>Tilia cordata</i>	9	Good	Fair	Preserve	Street tree
47	Linden	<i>Tilia cordata</i>	9	Good	Fair	Preserve	Street tree
48	Linden	<i>Tilia cordata</i>	10	Good	Fair	Preserve	Street tree
49	Linden	<i>Tilia cordata</i>	9	Good	Fair	Preserve	Street tree
50	Linden	<i>Tilia cordata</i>	9	Good	Fair	Preserve	Street tree
51	Linden	<i>Tilia cordata</i>	8	Good	Fair	Preserve	Street tree
52	Linden	<i>Tilia cordata</i>	7	Good	Fair	Preserve	Street tree
53	Linden	<i>Tilia cordata</i>	7	Good	Fair	Preserve	Street tree
54	Linden	<i>Tilia cordata</i>	9	Good	Fair	Preserve	Street tree
55	Linden	<i>Tilia cordata</i>	9	Good	Fair	Preserve	Street tree

Appendix III – Photos

Photo 1



Photo 1 – taken July 8, 2013 looking northwest near the southeast corner. The magnolia and three Norway maples.

Appendix III – Photos

Photo 2



Photo 2: taken July 8, 2013 looking northwest near the southeast corner. Two of the four flowering pears near the proposed ramp to the below ground parking.

Appendix III – Photos

Photo 3



Photo 3: taken July 8, 2013 looking southwest from the southeast corner. The four Lavelle hawthorn in planters on the south end.

Appendix III – Photos

Photo 4



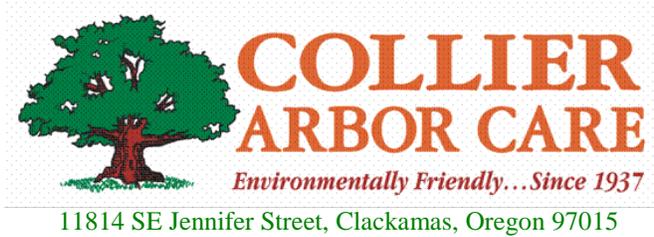
Photo 4 taken July 8, 2012 looking southwest at the northwest corner of the property with close up insert.
The row of zelkovas along First Street and insert of out grown planters.

Appendix III – Photos

Photo 5



Photo 5 taken July 8, 2013 looking north along the near the north east side.
Specimen Japanese maple.



June 12, 2013

Tree Health Assessment and Preservation Plan for Japanese Maple

Site:
Wizer shopping center
330 1st Street
Lake Oswego, Oregon 97034

Prepared for:
Lango Hansen Landscape Architects
Attn: Kurt Lango
1100 NW Glisan Street #303
Portland, OR 97209

Prepared by:
Terrill Collier
Consulting Arborist
ISA Board Certified Master Arborist PN-0101B

Introduction

Background

Kurt Lango of Lango Hansen Landscape Architects contacted Collier Arbor Care concerning tree health assessment and preservation at the Wizer shopping center renovation project in Lake Oswego. The shopping center is scheduled to be re-developed and there is potential health impact on an existing Japanese maple trees from construction activities. Collier Arbor Care was contacted to participate and provide consultation in assessing the health and the preservation of the Japanese maple on the site.

Assignment

On June 5th 2013, Kurt Lango of Lango Hansen Landscape Architects, hired myself, Terrill Collier, a Consulting Arborist employed by Collier Arbor Care to perform the following:

1. Provide a visual health assessment and tree preservation plan.
2. Make recommendations if the Japanese maple tree would be good candidates for preservation.
3. Provide tree preservation specifications to protect the trees during construction.
4. I have used the site plan dated 6/04/2013 by W & K Development LLC, to help locate the tree on the site and to help evaluate the potential impacts of construction on the tree.

Limits of the Assignment

- No other trees were evaluated on the property.
- Root location was not determined at this time.
- A health assessment was performed from the ground for visual conditions only.
- I have no knowledge of any prior care or history of the trees other than what I observed during my site visit.
- There is no guarantee for the preservation of the tree; however my recommendations within this report are made with the best interest in preservation of the tree.

Observations

Property Observations

I visited the site on June 10th 2013. The property is located at 330 1st street in Lake Oswego. The site is currently a shopping center with one main building, and parking lots.

Tree Observations

The subject Japanese maple (*Acer palmatum*) is growing in a planting area on the N.E. side of the property adjacent to a parking lot and next to the sidewalk along “A” Avenue (see Appendix #1, Photo #1). The tree is a 3 trunked specimen with the stems joined at the base of the tree. The tree is 32” in diameter as measured 18-inches above grade. The tree is approximately 30’ tall and has a spread of 50’. The tree extends over the sidewalk to the north and the parking lot to the south. The tree is growing in a long raised planter area between the sidewalk and parking lot.

The planter is approximately 50' long by 6' wide, with the planter expanding to 10' wide in a 15' long area where the trunk is planted (see Appendix #1, Photo #2).

The tree appears to be in good health condition. The tree has a full crown, no significant branch dieback. The tree has a strong branch structure. The incremental annual growth is normal and healthy. There is no visible sign of trunk or internal decay. I detected no sign of any significant insect or disease problems.

Testing and Analysis

Tree Health Rating

I rated the maple tree current health to be in Good condition based on the following criteria:

- **Good condition:** trunks and crowns – no significant problems, adequate space and soil for root growth, excellent annual growth rate and strong branch structure.

Preservation Potential

I rated the maple tree to have a “High” Preservation potential. The maple tree has the highest likelihood of long term survival following the construction process based on the combination of health condition, failure potential and tree species.

- **High:** Trees with the highest likelihood of long term survival following construction.

Discussion

Construction Impacts to Trees

It is virtually impossible to retain trees on construction sites without incurring some amount of injury or change in their soil environment. The goal is to hold those impacts to the minimum that the trees can tolerate. I have not seen any plans for redevelopment around the maple tree or to the planting area it is growing in and therefore cannot comment directly on how the redevelopment may affect the survivability of the maple.

Trees and their root systems can be impacted at various times during the construction process. Initially roots are damaged and the soil microclimate is changed by clearing. Further impacts occur during grading and installation of improvements, such as utilities, foundations, parking lots etc. Then further root damage may occur with final grading and installation of irrigation and landscaping and hardscaping.

Most tree root systems are located within the top thirty-six inches of soil. When excavating in proximity to the root zone, root damage may occur, affecting the health and anchorage of a tree's root system. Construction impacts to trees include; root injury, soil compaction, loss of rooting space, change in soil drainage, and changes in soil moisture. Cutting excessive amount of roots may result in the loss of the trees ability to absorb water and nutrients. Substantial root loss decreases the potential for a trees' long-term survival and eventually may cause death. Severe

impacts often result in acute decline symptoms but lesser impacts can also result in chronic health decline over a long period of time. (Arboriculture 4th Edition, Harris, Clark and Matheny).

Tree Preservation Zone (TPZ)

Placement of protective fencing to establish a tree protection zone is one of the key ingredients for successful tree preservation. Most tree protection ordinances suggest that protective fencing be placed around the circumference of the tree at the drip line (tree protection zone).

A tree protection zone (TPZ) is defined as the area around a tree or group of trees, in which no grading or construction activity may occur (Trees and Development: A technical guide to Preservation of Trees During Land Development by Matheny and Clark 1998). For optimum protection a common guideline for amount of root zone area needed for successful tree preservation equals one foot of protection for every one inch of trunk DBH. Although this general rule is a guide-line, it is not always possible on every site. Because of the existing site conditions around the maple these guidelines will not directly apply to this situation. The consulting arborist will determine where the TPZ zone will be established and this may change depending if roots have escaped outside the footprint of the long planting bed area. Then some root exploration may be necessary to determine where the TPZ is established. Successful tree preservation depends on preventing root damage by construction during all phases of the project.

Chain link fencing is recommended to be used for the TPZ for tree preservation for the Japanese maple. Place the chain link fencing, as directed by the consulting arborist, around the existing long planting bed area to preserve the planting area “as is”. If roots have escaped outside the footprint of the long planting bed area, then some root exploration may be necessary to determine where the TPZ is established.

I have not seen any plans for redevelopment around the tree and therefore cannot comment on how the development may affect the long term survivability of the maple tree. I am assuming if the long planting area can be preserved “as is” with no wall demolition, and no construction activities within the existing planting area, and no roots have escaped beyond the footprint, then the maple can be successfully retained.

However, it is likely that the retaining wall and curbing around the long planting area will need to be removed and modified for the new development. If that is the case then care will have to be taken in removing the curbing and walls to not disturb any existing roots. Not knowing how the planter is constructed, it is a possibility that some roots have grown under the walls and have extended out into the parking lot and and/or the sidewalk area. If roots have escaped outside the footprint of the long planting bed area, then some root exploration and identification will be necessary to determine where the TPZ is established beyond the existing footprint of the long planting area. It would be wise to assume there will be modification to the wall around the planting area and some roots have escaped beyond the planting area footprint. Therefore, I would strongly consider giving extra tree protection area in the planning process to accommodate this possibility.

Conclusions

I assessed the health of the Japanese maple tree and prepared a Tree Preservation Plan. In conclusion, it is my opinion that the Japanese maple is an excellent candidate for preservation during the construction phase of the project. The tree will need supervision from the Consulting Arborist during any construction activity and utility work within the TPZ. I am assuming if the long planting area can be preserved “as is” and there will be no construction activities within the existing planting area, and no roots have escaped beyond the footprint, then the Japanese maple can be successfully retained. If roots have escaped outside the footprint of the long planting bed area, then some root exploration will be necessary to determine where the TPZ is established beyond the existing footprint of the long planting area to help assure the long term survivability of the Japanese maple tree.

Recommendations

I recommend the following for the preservation of the Japanese maple tree:

1. The Consulting Arborist shall be on site during any construction activity within the TPZ, to guide and assist in an effort to prevent damage to the root system of the tree.
2. Establish a TPZ by installing a chain link fence around the Japanese maple as established by the consulting arborist. This TPZ area shall consist of the current long planting bed area if the area is to remain “as is”.
3. If roots have grown outside the footprint of the long planting bed area or if the planting bed wall and curbing are to be modified, then some root exploration and identification will be necessary for the consulting arborist to determine where the TPZ is established beyond the footprint of the planting area.
4. All demolition activity within the TPZ will need to be approved and supervised by the consulting arborist, to minimize root damage and soil compaction.
5. Follow the attached Preservation Plan Guidelines as outlined in Appendix IV – Preservation Plan Guide.

Appendix I – Photos

Photo 1



Photo 1 – Wizer Japanese maple located in N.E. corner of property.

Appendix I – Photos cont.

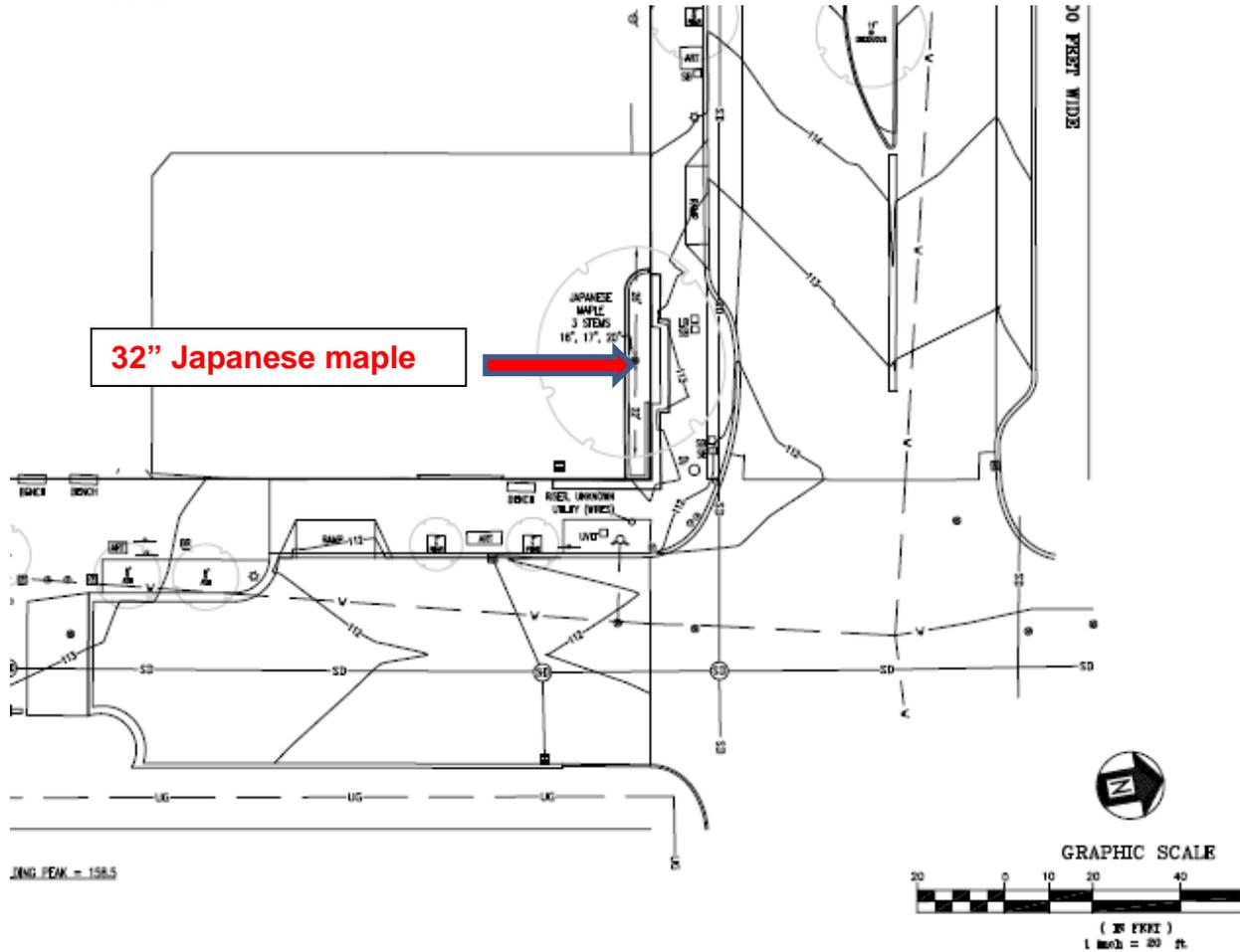
Photo 2



Photo 2 – Wizer Japanese maple in planter area.

Appendix I – Photos cont.

#3 Site Plan



3 Site Plan – Japanese maple in planter box adjacent to existing parking lot on the N.E. side of the property next to sidewalk along “A” street.

Appendix II – Preservation Plan Guidelines

Building Construction and Demolition

1. The building contractor and all sub-contractors involved with site work around the tree being preserved such as grading, utilities, building, demolition, landscaping, etc. are recommended to meet with the consulting arborist at the site prior to beginning work to review all work procedures, access and haul routes, and tree protection measures.
2. Construction activities within the Tree Protection Zone are prohibited except by permission and supervision of the consulting arborist. Contractor will contact the consulting arborist beforehand, for any construction within the Tree Protection Zone.
3. Protect the tree against cutting, skinning or breaking of branches, trunk and roots.
4. Stockpiling of materials, vehicle operation, and parking is prohibited within the Tree Protection Zone.
5. Maintain existing grade within the Tree Protection Zone. Raising or lowering grades are prohibited except as permitted by and under the supervision of the consulting arborist. Final grades may need to be adjusted from what is shown on the grading plan to further protect trees. The contractor shall contact the consulting arborist for recommendations where trees being saved are in conflict with grading.
6. Removal of branches or root pruning of trees to remain is to be performed by a qualified arborist under the supervision of the consulting arborist.
7. Cut branches and roots with sharp pruning instruments that do not chop or tear.
8. Demolition, excavation and trenching around tree roots within the Tree Protection Zone are prohibited except by permission and under the supervision of the consulting arborist.
9. When excavating is required within the Tree Protection Zone, locate roots by hand digging or the use of an Air-Spade[®]. Do not cut roots larger than 2 inches in diameter. Cut smaller roots only if they interfere with new work and only with a sharp instrument by permission and under the supervision of the consulting arborist.
10. Do not allow any exposed or cut roots to dry out before permanent backfill is placed. Provide a temporary earth cover or mulch to keep exposed roots moist until permanent backfill is placed.
11. Any damage to trees during construction activities is recommended to be reported to the consulting arborist within 6 hours so that remedial action may be taken. Timeliness is critical to tree health.
12. Water trees which are to remain, as necessary, to maintain their health during the course of construction.

Appendix III – Assumptions and Limiting Conditions

1. Any legal description provided to the consultant is assumed to be correct. Any titles and ownership to any property are assumed to be good and marketable. No responsibility is assumed for matters legal in character. Any and all property is evaluated as though free and clear, under responsible ownership and competent management.
2. Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the consultant can neither guarantee nor be responsible for the accuracy of information provided by others.
3. The consultant shall not be required to give testimony or attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services as described in the fee schedule and contract of engagement.
4. Loss or alteration of any part of this report invalidates the entire report.
5. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the persons to whom it is addressed, without the prior expressed written or verbal consent of the consultant.
6. Neither all nor any part of the contents of this report, nor copy thereof, shall be conveyed by anyone, including the client, to the public through advertising, public relations, news, sales or other media, without the prior expressed written or verbal consent of the consultant particularly as to value conclusions, identity of the consultant, or any reference to any professional society or institute or to any initialed designation conferred upon the consultant as stated in his qualification.
7. This report and values expressed herein represent the opinion of the consultant, and the consultant's fee is in no way contingent upon the reporting of a specified value, a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.
8. Illustrations, diagrams, graphs, and photographs in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys.
9. Unless expressed otherwise: (1) information contained in this report covers only those items that were examined and reflects the condition of those items at the time of inspection; and (2) the inspection is limited to visual examination of accessible items without dissection, excavation, probing or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plans or property in question may not arise in the future.

Appendix IV – Certificate of Performance

I, Terrill Collier, certify that:

- I have personally assessed the Japanese maple referred to in this report and have stated my findings accurately. The extent of the health assessment is stated in the attached report and the Terms of the Assignment.
- I have no current or prospective interest in the trees or construction project, the subject of this report and have no personal interest or bias with respect to the parties involved.
- The analysis, opinions and conclusions stated herein are my own and are based on current scientific procedures and facts.
- My analysis, opinions and conclusions were developed and this report has been prepared according to commonly accepted arboricultural practices.
- No one provided significant professional assistance to me, except as indicated within this report.
- My compensation is not contingent upon the reporting of a predetermined conclusion that factors the cause of the client or any other party or upon the results of the assessment, the attainment of stipulated results, or the occurrence of any subsequent events.

I further certify that I am an International Society of Arboriculture Board Certified Master Arborist PN-0101B. I am a member in good standing of the International Society of Arboriculture and the American Society of Consulting Arborists. I have been involved in the field of Arboriculture in a fulltime capacity for a period of thirty plus years.

Signed: _____

Date: June 12, 2013