



ITEM FOR ENVIRONMENTAL BOARD AGENDA

BOARD MEETING
DATE REQUESTED: September 15, 2010

ADDRESS
OF PROPERTY: 4709 Highland Terrace

NAME OF APPLICANT: Jim Einhaus, 784-7277
David Weekley Homes

PDR/CITY ARBORIST
STAFF: Keith Mars, 974-2755
keith.mars@ci.austin.tx.us

ORDINANCE: Comprehensive Watershed Ordinance (current Code)

REQUEST: Retroactive variance request from Land Development Code 25-8-641 to remove/impact a Heritage Tree

STAFF RECOMMENDATION: No recommendation

REASONS FOR
RECOMMENDATION: Variance is being requested retroactively



MEMORANDUM

TO: Dr. Mary Gay Maxwell, Chairperson
Members of the Environmental Board

FROM: Keith Mars, City Arborist Program
Planning and Development Review

DATE: September 15, 2010

SUBJECT: 4709 Highland Terrace

REQUEST: Retroactive variance from LDC 25-8-641 – Impacts to three Heritage Trees.

Area Description

4709 Highland Terrace is a residential lot located near 45th street and Mopac. A single-family residence, driveway, and access pathway is currently being constructed.

Account of Events

On November 13, 2009, a Tree Ordinance Review Application (TORA) was approved with conditions for 4709 Highland Terrace (Exhibit 1). The tree permit contained the following conditions: (1) the driveway near the neighboring 36" and 26" diameter at breast height (dbh) Live Oaks (*Quercus fusiformis*) was to be established above grade and in the location of the existing driveway; (2) water and wastewater lines were to be established at the center point of the lot to avoid critical root zones; (3) ten inches of trees to be planted on site; (4) an 8" mulch layer over the root zone was to be applied and tree fencing was to be established and maintained; (5) provide a receipt for remedial tree care from a certified arborist; and (6) no impacts are permitted within the ½ critical root zone of all trees.

On August 3, 2010, City Arborist staff performed a site assessment after being contacted by the residential tree inspector regarding impacts to protected trees at 4709 Highland Terrace. Upon assessment of the site, staff observed impacts to four trees on site and two on the neighboring property at 4711 Highland Terrace. As a result of excavation and forming up a sidewalk, non-code compliant impacts to a 40" Live Oak (Tree #1) resulted in extensive damage to root structure and removal of root mass (Exhibit 2). Additional damage to root structure and loss of root mass resulted from preliminary grading work done for the driveway. The driveway was not being installed in the location dictated by

the TORA and, thus, was closer to the 40" Live Oak (Tree #1) than what had been approved (Exhibit 3). The noncompliant shifting of the driveway also resulted in further encroachment into the critical root zones of the neighboring 26" (Tree #2) and 36" (Tree #3) Live Oak trees at 4711 Highland Terrace (Exhibit 4). Further violation occurred with temporary fill material, debris, and a temporary bathroom facility were all located within the ½ critical root zones of two 19" Cedar Elms (Trees # 4 and 5) (*Ulmus crassifolia*) and a two stem 30"x19" Live Oak (Tree #6). An additional violation was the absence of tree protection fencing for the 40" (Tree #1) Live Oak. Of the six trees impacted by construction activities, the 40" Live Oak (Tree #1) on the subject site and the 26" (Tree #2) and 36" (Tree #3) on the neighboring property were impacted beyond what code allows. The 40" Live Oak (Tree #1) sustained extensive root damage and removal of root mass while the 26" (Tree #2) and 36" Live Oaks (Tree #3) sustained minimal impact from approximately 2.5" of cut into the critical root in preparation for forming the driveway.

Staff contacted the representative for David Weekly Homes to inform them of the violations and communicated that a certified arborist was needed immediately to (1) assess the impact to the trees, (2) develop and implement a remediation plan for the four trees onsite that were impacted and the two trees on 4711 Highland Terrace, and (3) remove the fill material, debris, and other objects from the critical root zone of all trees. By August 6, 2010, the fill material and sidewalk forms had been removed from the site, albeit using machinery rather than by hand. On August 8, 2010, the certified arborist sent an invoice detailing the remediation work that had been performed, including root pruning, subsurface injections for root fertilization, and soil treatment via soil aeration and adding organic material to the upper soil layer (Exhibit 5). The sidewalk has been abandoned and the applicant has filled in the sidewalk area with a topsoil and compost mixture (Exhibits 6 and 7).

Since this time City Arborist staff informed the applicant that a retroactive variance must be requested and have worked with the applicant to bring the driveway location and sidewalk excavation into compliance. The driveway location has been shifted to avoid the ½ critical root zone (20' from cross-sectional center point of 40" Live Oak (Tree #1)) (Exhibit 8). The applicant is also proposing to use decomposed granite as the driveway material for the surface area that occurs within the ½ critical root zone of the neighboring 26" (Tree #2) and 36" (Tree #3) Live Oaks. Decomposed granite will assist with porosity over the root zone allowing for additional water uptake. The current proposal locates the driveway approximately 10' further away from the 40" Live Oak (Tree #1) than the driveway location permitted on November 13, 2009. The current proposed driveway encroaches no further into the critical root zones of the neighboring 26" (Tree #2) and 36" Live Oaks (Tree #3) than what was permitted in November 13, 2009, regarding reuse of the existing driveway footprint.

Tree Evaluation

40" Live Oak (*Quercus fusiformis*) (Tree #1)-

The initial site assessment after the impacts occurred revealed extensive damage to root structure and reduction of root mass (Exhibit 9). Cutting and forming-up the sidewalk

had resulted in encroachments within three feet of the subject tree. Further, approximately 2.5' of fill material had been placed around the root collar of the subject tree. It was also apparent that machinery had severed 3-6" diameter anchoring roots (Exhibit 10). The severed roots had also been ripped rather than cut resulting in further subsurface damage. Additional damage and removal to root structure resulted from shifting the driveway closer to the subject tree in violation of the approved tree permit that stated that only the existing driveway location could be reused. Regarding the aerial parts of the subject tree, there appeared to be no bark or vascular tissue damage and the crown appeared to have not been impacted. Extensive root damage has occurred to the subject tree resulting in a high degree of uncertainty if the subject tree can recover.

26" and 36" Live Oaks (*Quercus fusiformis*) (Trees #2 and 3, respectively) on neighboring property-

The subject trees sustained ½ critical root zone impacts from the shifting of the driveway location to the property line (Exhibits 11 and 12). It appears the existing turf grass had been scraped approximately 2.5" in preparation for shifting the driveway to a location that was in violation of the November 13, 2009, tree permit. Root damage to the subject trees was minimal. Only small diameter (0.125"-0.250") roots were disturbed. Regarding the aerial parts of the subject tree, there appeared to be no bark or vascular tissue damage and the crown appeared to have not been impacted. Minimal root impacts occurred to the subject trees. Thus, there is a high degree of certainty the trees can recover from the impacts.

Variance Request

The applicant is requesting a retroactive variance for encroachments that occurred in the ½ critical root zones of three Heritage Trees (LDC 25-8- 641). The variance is being brought forward as means of enforcing the Heritage Tree Ordinance.

Recommendations

No recommendation is provided by staff. The reasons are two-fold. One, since the impacts have already occurred findings of fact cannot be met for staff to recommend approval for the variance request. Second and conversely, staff does not wish to recommend denial of the variance since doing so would not resolve the variance if it is denied. If the variance was denied by the Environmental Board and Land Use Commission staff would take the case to municipal court to seek restitution, though this is outside of staff control and is at the discretion of the judge. Given the impacts have already occurred and the variance is being brought forward as means of enforcement, staff has prepared the following list of conditions for the Environmental Board and/or Zoning and Platting Commission to consider if the variance request is granted. The applicant has agreed to all of the conditions.

1. For the 40" Live Oak (Tree #1), 100% diameter (i.e., 40") of mitigation is required at the time of permitting in the form of payment into the Urban Forest Replenishment Fund for a total of \$3,000. 200% mitigation (i.e., 80") of mitigation is required to be held in a bond plus 15% administrative costs for a

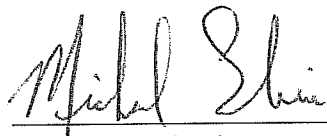
total of \$6,000 for the bond and \$900 for administrative costs. The bond will be returned after five years if the tree has sustained the impacts as determined by the City Arborist.

2. A five-year tree maintenance plan prepared and implemented by a certified arborist for the 40" Live Oak (Tree #1) prepaid by the builder and transferred to the owner. The plan is to be administered semi-annually and reported to the City Arborist.
3. A three-year maintenance plan prepared and implemented by a certified arborist for the 26" and 36" Live Oaks (Trees #2 and 3, respectively) prepaid by the builder and transferred to the owner. The plan is to be administered semi-annually and reported to the City Arborist.

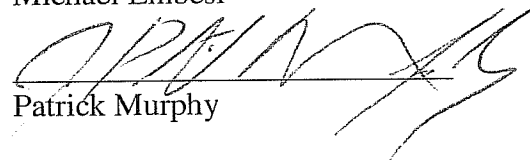
If you need further details, please feel free to contact me at 974-2755.

Keith Mars, City Arborist Program
Planning and Development Review

City Arborist:


Michael Embesi

Environmental Officer:


Patrick Murphy



**Planning and Development Review Department
Staff Recommendations Concerning Heritage Tree Variances**

Application Address	<i>4709 Highland Terrace</i>
Size and Species of Tree(s):	<i>40" Live Oak, 26" Live Oak, and a 36" Live Oak (<i>Quercus fusiformis</i>)</i>
Reason for Request:	<i>Retroactive variance request for non-code compliant impacts to three Heritage Trees</i>

Land Use Commission variance determinations for a requirement of Section 25-8, Subchapter B, Article 1 of the City Code relating to tree and natural area protection.

Section 1 – Approval Criteria

1) The requirement for which a variance is requested prevents a reasonable access to the property.

No.

2) The requirement for which a variance is requested prevents a reasonable use of the property.

No.

3) The tree presents an imminent hazard to life or property and the hazard cannot be reasonably mitigated without removing the tree.

No.

4) Is the tree dead?

No.

5) Is the tree diseased? If so, is restoration to a sound condition practicable or can the disease be transmitted?

No.

6) For a tree located on public property or a public street or easement, the requirement for which a variance is requested prevents:

- a) the opening of necessary vehicular traffic lanes in a street or ally, or
- b) the construction of utility or drainage facilities that may not feasibly be rerouted.

NA.

7) The applicant has applied for and been denied a variance, waiver, exemption, modification, or alternative compliance from another City Code provision which would eliminate the need to remove the heritage tree, as required in Section 25-8-646 (*Variance Prerequisite*).

No.

- 8) Removal of the heritage tree is not based on a condition caused by the method chosen by the applicant to develop the property, unless removal of the heritage tree will result in a design that will allow for the maximum provision of ecological service and historic and cultural value from the trees preserved on the site.

No.

Do any of these criteria apply? Yes/No [state which # applies]

No. The variance request is a means of enforcement for non-code compliant impacts that have already occurred to three Heritage Trees. Therefore, findings of fact cannot be met since the impacts have already occurred.

Reviewer Name: **Keith Mars, City Arborist Program**

Reviewer Signature: Keith Mars

Date: 09/02/2010

**Findings of Fact:
4709 Highland Terrace
Tree Permit #2009-112903 TP**

- 10/1/09 David Weekley Homes applied for Building Permit through City of Austin prior to submittal of Tree Permit application. Property Owner, Zahi Kaskas and/or their real estate agent, Dana Twombly, communicated to David Weekley Homes that they were in the process of making application for Tree Permit application on their own.
- 10/6/09 Original Tree Permit Application made by property owner and real estate agent.
- 10/7/09 Tree Permit application marked as "Statutory Denial" with comments, ***"Provide plan of proposed development, showing surveyed location of all 8 protected size trees, with respect to development."*** Also, requested at bottom of form that a tree survey with meets and bounds be provided.
- 10/14/09 Building Permit approved / issued
- 11/13/09 Tree Permit requirements re-submitted with site plan showing driveway being moved to overlay on original driveway that was left after tear down. Tree Permit was approved by Jim Gobel with comments, ***"New driveway near 36" & 28" on adj property to be established above grade & in old driveway locations. Water & W/W lines to be established center of lot. Additional requirements below."*** (see Tree Permit approval for requirements checked)
- 11/16/09 New/Revised site plan approved by the City of Austin (Building Permit Dept.)*
- 11/20/09 Start Construction
- 7/16/10 Driveway pre-inspection failed
- 7/26/10 Jim Gobel called Mike Huus with David Weekley Homes and told him we had violated conditions of Tree Permit
- 7/27/10 Keith Mars contacts Jim Einhaus with David Weekley Homes about addressing what treatments need to happen to protected trees by certified arborist on the property.
- 8/6/10 All treatment work completed by Certified Arbor Care on specified trees as follows:
1. Deep root fertilize all trees on site

2. Root rejuvenation treatment for 40" Live Oak (including root prune and seal)
3. Dead wood prune Elm near the house
4. Follow up Deep Root Fertilization on 40" Live Oak completed on 8/10/10

8/10/10 David Weekley Homes paid Certified Arbor Care for work completed

8/18/10 Mike Huus and Jim Einhaus with David Weekley Homes meet Keith Mars, Jim Gobel, Michael Embesi, and Joe Almazan at City of Austin to discuss resolution and options.

*David Weekley Homes applied for the Building Permit for 4709 Highland Terrace independtly of the property owner applying for the Tree Permit. As a result, the **site plan that was originally submitted with the Building Permit application** was approved before the Tree Permit was approved. Because the Tree Permit approval required a revision to the site plan before it could be approved, there was a **second approved site plan** that was stamped by the City of Austin. **When construction began, the Builder was unknowingly working off of the original approved site plan as opposed to the second approved site plan which showed a different driveway location thus causing the issue at hand.**

In preparing for the new driveway, contractors removed existing driveway, and prepared for the sidewalk and new driveway/turn around area by scraping off existing grass, approximately 2-3" in depth. As a result, per Certified Arbor Care, the following observations were made:

Overall Observations:

- 40" Live Oak on left side of driveway: sever root cuts, exposed roots, and excessive fill present.
- 28" and 36" Live Oaks in neighbor's yard: have minimal impact from construction.
- 18" Elm near home: Root damage from house construction.
- 18" Elm and 30" Live Oak: minimum damage.
- Most trees on site have excessive fill

Once the arborist's report was received and reviewed by the City of Austin, David Weekley Homes had all the recommended treatments completed as expeditiously as possible. Additionally, as recommended by the City of Austin, David Weekley Homes backfilled with compost mulch and topsoil the areas that had been scraped for the proposed sidewalk and driveway.

In summary, we are not asking for a variance to remove any trees. David Weekley Homes agrees to pay into the sidewalk fund in order to avoid building a sidewalk in the ½ critical root zone of the 40" Heritage Live Oak at the front left corner of the lot. Additionally, upon meeting with Jim Gobel at the lot last Thursday, 8/26/10, we have come up with a plan to keep the driveway out of the

1/2 critical root zone of the 40" Live Oak as well. The plan is to move the driveway approach to the south approximately 9-10 ft. This way we keep the entire approach and driveway out of the 1/2 critical root zone of the Live Oak. Lastly, we propose using decomposed granite in the part of the driveway that encroaches the neighbor's (North side) 26" Heritage tree's 1/2 critical root zone. The granite will be supported with steel trim on the outside edge of the 1/2 critical root zone of the 26" Heritage tree.



Highland

Mo-Pac

Perry

Horseshoe

Mo-Pac

Perry to Mo-Pac

N

11

3102

3100

3103

3101

4717

4732

4715

4710

4713

4708

4711

4706

4709

4704

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4702

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5015

4910

4908

4945

4906

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4900

4812

4840


4808








4806


4911

4804

4802

 505 Barton Springs Rd, Austin, TX 78704

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- | | |
|---|---------------------------|
| 1. Head west on Barton Springs Rd toward S 1st St | go 197 ft
total 197 ft |
|  2. Turn right at S 1st St
About 2 mins | go 0.4 mi
total 0.5 mi |
|  3. Sharp left at W 1st St/W Cesar Chavez St
About 4 mins | go 1.3 mi
total 1.8 mi |
|  4. Take the ramp onto TX-1 Loop N
About 3 mins | go 3.3 mi
total 5.1 mi |
|  5. Take the 45th St exit | go 0.1 mi
total 5.3 mi |
|  6. Turn left at W 45th St
About 1 min | go 0.2 mi
total 5.5 mi |
| 7. Continue onto Highland Terrace | go 0.2 mi
total 5.6 mi |
|  8. Turn right at Perry Ln | go 85 ft
total 5.7 mi |
|  9. Turn left at Highland Terrace | go 0.1 mi
total 5.8 mi |

 4709 Highland Terrace, Austin, TX 78731

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

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