

GOVERNMENT OF THE DISTRICT OF COLUMBIA
OFFICE OF PLANNING



Memorandum

TO: Board of Zoning Adjustment

FROM: Maxine Brown-Roberts, Development Review Specialist
Office of Planning *WBR*

DATE: July 12, 2006

SUBJECT: Supplemental Report - BZA Application #17309 (Bender Subdivision)
DDOT Urban Forestry Administration
Chain Bridge Road, N.W.

17309
BZA
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Please find attached an analysis by the District's Department of Transportation (DDOT) Urban Forestry Administration of the final submission for the proposed theoretical lot subdivision by Dorchester Associates, LLC. Specifically, the following report focuses primarily on the tree protection measures as proposed in the submission documents.

ATTACHMENT

Report for DDOT

/mbr

BOARD OF ZONING ADJUSTMENT
District of Columbia

CASE NO. 17309

EXHIBIT NO. 140

Board of Zoning Adjustment
District of Columbia
CASE NO. 17309
EXHIBIT NO. 140

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Preface

The following report has been prepared in response to the most recent, and presumably final, submission pursuant to the Board of Zoning Adjustment's case #17309. This application is for the proposed theoretical lot subdivision by Dorchester Associates, LLC, and subsequent construction of thirteen (13) single-family detached homes. As with my previous report, this review has as its primary focus the preservation of trees on this property in relation to the proposed development within their vicinity and the protections provided them as outlined in the *Chain Bridge/University Terrace Tree & Slope Overlay District [11 DCMR, Chapter 15]*. In particular, I will focus on those aspects of the project which are said to have been modified since previous submissions.

Stormwater Management Plan

As proposed, several elements of the stormwater management system will be situated within close proximity to many trees. In addition, some areas identified as protected critical root zones will be subject to the installation of stormwater management devices. The most common example of this is the proposed tunneling of drywell underdrains. In two sections of the property this takes place either directly under several trees, or in close proximity thereto. For instance, an underdrain, as proposed, will run directly under trees 32-34, 36, 37, D1 & A1-2. This is also to occur along the proposed main access road. This would have underdrain devices installed under the root zones of Beech trees 48-53. Tunneling under and adjacent to trees can be a successful method for installing necessary underground infrastructure. However, nowhere in this submission is the actual process to be employed described. In addition, much of the work would occur within areas which are to be off-limits, due to proposed tree protection fencing, during the construction phase. How will these trees be protected throughout a process which proposes to install drain tiles directly under them? Where will the equipment be staged that will perform this work? How will soil compaction be avoided? These are all

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unanswered questions which are centrally important to lending this proposal adequate credibility.

Tree Protection Plan

Mr. Bonifant's revised report, *Tree Preservation Plan for the Chain Bridge Road Project (June 26, 06)*, differs only slightly from his initial submission from August 15, 2005. Those changes made include the addition of individual tree condition ratings¹, the addition of at least one tree not previously included accurately (#54, previously thought to have fallen) and a short discussion on the proposed pre-construction pruning of the Beech allée along the existing driveway. While onsite recently I did observe some trees whose conditions diverge slightly, in my opinion, from the stated rating. However, overall I do not believe the ratings to be grossly inaccurate. Also while onsite, a new tree was 'discovered', and I am pleased to see this find reflected in the inventory of Mr. Bonifant's report. That said, three issues surrounding the proposed tree protection plan remain troublesome.

First, as discussed in a previous section, Mr. Bonifant's report nowhere describes how his tree protection plan will manage the threat posed by the installation of stormwater management devices next to, and directly under several 'protected' trees. This is alarming, as he has gone so far as to recommend design changes to several homes in an attempt to better protect many of the trees, yet he never even once discusses, much less even mentions, managing this other element of proposed infrastructure design and implementation. As a result, it is quite conceivable that any protection from *home* construction provided trees 32-34, 36 & 37 and 48-53 could be undone by a poorly planned or implemented tunneling operation. As stated in my previous submission, "...it would appear as though he... does not consider the installation of this system directly

¹ Ratings taken largely from initial tree inventory & survey performed by Lew Bloch, 7/20/02.

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under and/or adjacent to several trees a conflict worth protecting against...”² Hence, it is my opinion that the integration of the stormwater management system has not been thoroughly explored or satisfactorily explained.

Second, I believe the estimates regarding the extent of pre-construction pruning to occur to the stand of Beech trees to be quite conservative. The elevation of the lowest branches to accommodate driveway ramps and vehicular traffic, and the proximity of several homes will necessitate removing closer to 8-15% of the total foliage of trees 48-53. While this is still within the industry accepted limit of 25% referred to by Mr. Bonifant, it must be remembered that we are discussing old, mature Beech trees. This species is known for its general intolerance to disturbance and alteration, both to it and its surroundings. The importance of preserving these trees can not be overstated. As I noted in my previous submission, “To the surrounding community, as well as visitors to the area, these trees stand out as exceptional examples of the species and contribute mightily to the park-like character of the neighborhood. Preservation of these trees should be held as a non-negotiable element of any proposed development. The American Beech is a climax species, which possesses a slow rate of growth; *replacement should not be thought of as a suitable mitigation for poor construction plans or improper protection measures.*”³ As proposed, the Beech trees along both sides of the existing driveway would appear to suffer incursions both above and below ground. I remain unconvinced that the amount of disturbance proposed remains sufficiently below the threshold of protection outlined in the *Chain Bridge/University Terrace Tree & Slope Overlay District* regulations. Considering that the regulations were “...established to preserve and enhance the park-like setting of the Chain Bridge/University Terrace area”⁴ and

² DDOT/Urban Forestry Review, p.3, April, 2006

³ DDOT/Urban Forestry Review, p.3, April, 2006

⁴ 11 DCMR 1565.1

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recognizing that these trees, more than any other group on the property⁵, contribute so extensively to the park-like character of the area it is of the utmost importance that every protection and accommodation be made to ensure their long-term preservation. To date, I do not see evidence that this has or will occur.

Third, despite at least 4 years of planning no effort has been made to prepare the site and trees for the extensive development which is proposed. For instance, not a single *pre*-construction preservation technique has been employed, much less even proposed, by any of the arborists involved with the project, with the exception of the unfulfilled statement in Mr. Bonifant's report that "Supplemental watering or other necessary steps will be taken to maintain tree health if dry weather or a drought occurs immediately preceding or during the construction."⁶ Prior to the recent torrential rains, our region had been 7" below our average annual year-to-date precipitation levels, which qualifies at least as a period of 'dry weather', if not an actual drought. Yet, no additional water was provided to any of the trees on the property. In addition, Mr. Bonifant's report calls for post-construction aeration and watering, in an effort to ameliorate the effects of any soil compaction. While I applaud this recommendation, it should be noted that where proper tree preservation is not implemented as an after thought and where adequate lead time allows, several steps are frequently recommended. Among these are the very steps Mr. Bonifant proposes as a follow up treatment. There is no doubt that almost any mature tree would benefit from soil aeration following nearby construction. However, that same tree would stand an even better chance of enduring the effects of construction if the soil was aerated well prior to construction, as well as after. In this case, the developer has had 4 years time in which to implement a proactive tree preservation program yet has done

⁵ Part of what makes these trees so valuable, not just to the actual property but to the surrounding neighborhood, is their prominence and visibility from *off*-site. These trees are readily viewed and enjoyed from several locations not actually on the property, and it is this fact that necessitates strong protection measures be required.

⁶ *Tree Preservation Plan for the Chain Bridge Road Project*, Bonifant Tree Service (both submissions)

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nothing of the sort. Furthermore, the lack of such long range thinking detracts from the developer's credibility in terms of attempting to 'preserve and enhance the park-like setting...of the area' as required by the zoning regulations.

Conclusion

The Chain Bridge/University Terrace Overlay District was established not to prevent all development, but rather to control and regulate it in such a way that the natural topography and existing vegetation were not unnecessarily degraded or destroyed. As opposed to most land development throughout the region wherein the land is reworked and reconfigured to conform to the wishes of the developer, the developer in this district is expected to conform to and accommodate the existing environment. To the extent that the submitted plans are accurate, I do not feel as though the requirements described in 11DCMR 1565 have been credibly satisfied. The extent of construction that is proposed will almost assuredly not allow for the preservation of the most sensitive trees called for by the applicable regulations. To allow an exception for this plan as it is currently proposed would seriously undermine the regulatory authority of the Tree and Slope Overlay District of the Chain Bridge Road and University Terrace area. As such, it is the recommendation of the Urban Forestry Administration that the Board of Zoning Adjustment not grant a special exception to this proposal in its current state.

Report Prepared by:

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