

GOVERNMENT OF THE DISTRICT OF COLUMBIA
OFFICE OF PLANNING



Memorandum

TO: Board of Zoning Adjustment
FROM: Ellen McCarthy, Interim Director
Office of Planning
DATE: April 19, 2005
SUBJECT: BZA Application #17309 (Bender Subdivision)
Chain Bridge Road, N.W.

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APPLICATION

Dorchester Associates LLC (applicant) requests, pursuant to 11 DCMR 3104.1, approval of a special exception, Section 2516 - Exceptions to Building Lot Control, to allow thirteen single-family detached dwellings on a single subdivided lot. In conjunction with the subdivision the applicant is requesting the approval of two sixteen-foot driveways instead of the twenty-five foot required by Section 2516.6(b). The subject property is in the Chain Bridge Road University Terrace (CB/UT) Overlay District and the R-1-B District.

RECOMMENDATION IN BRIEF

OP has identified areas where we believe the proposal can be improved. However, at the time OP is unable to make a recommendation because the analysis and comments from DDOT, DOH, NPS are important factors to be taken into consideration as to whether the proposal meets the requirements of Section 2516 and Section 1565.

The applicant must also submit the following information:

- Grading Plan.
- Stormwater Management Plan approved by Department of Health.
- Location of Trees having a circumference of 12-38 inches.
- Location of fire hydrants to serve all the lots.

SITE AND AREA DESCRIPTION

The subject property is located along Chain Bridge Road, NW (Square 1425, Lot 827, and Parcels 12/63, 12/294) and is currently undeveloped. The site is approximately 3.28 acres in size and is divided into two portions; the upper portion (Parcels, 12/63 and 12/293) is flat but fairly steep around the eastern and southern perimeter and slopes down towards the lower portion of the site. The lower portion of the site (Parcel 12/294 and Lot 827) is very steep on the southwestern area and slopes towards adjacent properties. The reminder of the parcel varies from flat, to gently undulating, to steep. The portion of the site was formerly developed with a single family detached house which was demolished a few years ago.

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EXHIBIT NO. 54

BZA
Case No. 17309
Exhibit No. 54

Development surrounding the site consists of predominantly single-family detached homes. To the east of the site is Battery Kimble Park and to the north is Chain Bridge Road School, designated historic building now used as a residence (Attachment 1).

ZONING

The underlying zone district on the subject property is R-1-A that permits single-family detached residential. The site is also governed by the CB/UT Overlay District that was created *“to preserve and enhance the park-like setting of the Chain Bridge Road University Terrace area by regulating alteration or disturbance of terrain, destruction of trees, and ground coverage of permitted buildings and other impervious surfaces, and by providing for widely spaced residences.”* See Attachment 2 for the Lot Occupancy and Impervious Surface for each lot.

ANALYSIS

The proposal is to subdivide the property into 13 lots (Attachment 3). Three lots will be accessed off an extended driveway that currently serves the historic building from Chain Bridge Road. The existing driveway varies in width with the widest portion at 32-feet. Under the proposal the driveway will be extended and narrowed to 16 feet. The second driveway that formerly served a single house will be extended to serve nine lots. The width of the driveway currently varies between 13 and 16 feet wide and will be redone to a total width of 16-feet. The internal driveways have been laid out to reflect, to some extent, the existing topography. The applicant submitted that they are utilizing the existing driveways to limit additional driveway cuts onto Chain Bridge Road.

The new lots vary in size from approximately 9,500 square feet to almost 12,200 square feet and each lot will be developed with a house specifically designed for that lot permitting a variety of house size, architecture, form, materials, and landscaping. Each lot provides a conforming building envelope, and the applicant will construct the house on each lot sold consistent with the design approved for each lot. A homeowners association will be created to handle among other things the maintenance of the stormwater management systems for individual lots and the rights-of-way, trash collection, and landscaping.

Historic Preservation

The landmark Chain Bridge Road School is adjacent to the subject property and is served by a curvilinear driveway that runs from Chain Bridge Road, around and in front of the building. The existing driveway will be extended to serve Lots 1, 2, and 3 in the proposed development. The Historic Preservation Review Board (HPRB) will review the extension and repaving of the roadway at its April 28, 2005 meeting.

Tree Preservation

The CB/UT Overlay District (Section 1568) outlines limitations on the removal of trees on properties within the overlay and is addresses in a latter portion of this report.

The applicant submitted an inventory and an assessment of the condition of trees with a circumference of over 38 inches on the site (Attachment 4). The Urban Forestry Administration of the District Department of Transportation (DDOT) stated that the inventory should be accepted (Attachment 4).

The applicant also submitted a Tree and Slope Protection Plan that addresses protection during construction. The Plan submitted (Attachment 6) was reviewed by the Urban Forestry Administration who stated that the applicant should provide details of the "*additional measures to be taken*" (Item 5 of Plan).

DDOT regulates the Urban Forestry Preservation Act of 2002 that restricts the removal of healthy trees with a circumference of 55 feet and greater. DDOT noted that all trees that have a circumference greater than 55-feet are required by the Urban Forestry Preservation Act of 2002 will be required to get a permit prior to removal. A remediation for the removal of these trees will be replace either on- or off-site. The applicant should provide information as to what type of remediation will be provided for the trees removed.

The "Trees to be Removed" plan shows that a total of nine trees, of which two are classified as fallen or dead, four are unhealthy, and three are healthy. OP has some concern about trees #12 on Lot 1, #56 on Lot G, and #60 on Lot E. The applicant should provide specific information as to how these trees will be preserved, as they seem to be within areas where construction will take place. Generally, OP is concerned about preserving the trees during construction and that their later viability might not be assured.

The applicant submitted a plan that identifies trees with a circumference of 12 to 38 inches highlighting those that will be removed and those that will be retained. The plan did not identify the condition of those trees that will be removed.

Impervious Surface

The CB/UT Overlay limits the impervious surface area on a lot to 50%. The submission shows impervious surface on the lots ranging from a low of 34% to a high of 49%. In conversations with the applicant OP expressed our concerns with the high percentage of impervious surface especially associated with individual house driveways. The applicant made revisions to Lots 3, A, B and E by making portions of the driveway permeable. However, three lots have an impervious surface area of 49% that is close to the 50% permitted. OP encourages the applicant to investigate using appropriate pervious materials on the driveways that are environmentally sensitive and lower the impact on this sensitive area.

Stormwater Management

The applicant submitted a concept Stormwater Management Plan to the Watershed Protection Branch, Department of Health (DOH) for review. DOH and OP will continue to work with the applicant to develop a system that will contain all stormwater runoff on the site or channel it into a public stormwater system. Secondly, the applicant has stated that a Grading Plan is not necessary because they are not grading the site but are building onto the natural topography. DOH has stated that with regards to stormwater runoff this is impossible as some grading will be necessary to crate swales in order to channel runoff away from the houses and adjacent properties. DOH and OP will continue to work with the applicant to design an acceptable system prior to the public hearing.

Traffic

The subject site is off Chain Bridge Road, a winding 30-foot roadway with limited sight distances in some areas. The applicant has submitted a Traffic Analysis that has determined that the morning and afternoon peak hour trips will not be significantly increased and the levels of

service should remain unchanged. The applicant's consultant has made the following recommendations to the applicant (Traffic Impact Assessment, page 19 of 19) to help mitigate the limited sight distances:

1. Design the site entrances serving multiple dwellings to provide for curbed radii of six feet minimum, in accordance with DDOT's standards.
2. Work with DDOT to prohibit parking for a minimum distance of 40-feet along the west side of Chain Bridge Road on both approaches for the driveways serving multiple dwelling units.
3. Work with DDOT and arrange for the provision of sight distance mirrors to be positioned at two (2) driveways serving multiple dwelling units.
4. Provide stop signs for the driveways serving multiple units.

DDOT is conducting an evaluation of the applicant's submission and recommendations. DDOT will make a recommendation on the request by the applicant to reduce the width of both ingress/egress roadway off Chain Bridge Road. To date OP has not received any comments from DDOT and their recommendation will be submitted under separate cover.

All units will have two internal parking spaces per unit with additional parking, service and loading possible on the driveways.

SPECIAL EXCEPTION - NUMBER OF PRINCIPAL BUILDINGS PER LOT (THEORETICAL LOT SUBDIVISION)

The applicant is proposing a theoretical lot subdivision to create 13 lots with all but one fronting on a private drive. As these lots do not have frontage on a public road, §2516.1 of the Zoning Regulations provides that *"If approved by the Board of Zoning Adjustment as a special exception under § 3104, two (2) or more principal buildings or structures may be erected on a single subdivided lot, subject to the provisions of this section."*

2516.2 This section applies to construction on a lot that is located in, or within twenty-five feet (25 ft.) of a Residence District.

The subject property is within the R-1-B district.

2516.3 In addition to other filing requirements, the applicant shall submit to the Board, with the new application, four (4) site plans for all new rights-of-way and easements, and existing and preliminary landscaping and grading plans with approximate building footprints; provided:

- (a) The applicant shall also submit, either with the original application or at a later time, final landscaping and grading plans and two (2) sets of typical floor plans and elevations; and***
- (b) If the applicant elects to submit the plans referenced in paragraph (a) of this subsection at a later date, the Board's original approval shall be conditional, subject to a later public hearing and final decision on the project as a whole.***

The applicant has provided plans showing the proposed rights-of-way, landscaping on each lot, floor plans, and the elevations for each house. The applicant has not provided a Grading Plan, as they do not believe it is required. Both DOH and OP has informed the applicant that a grading

plan should be provided, as there will be disturbance to the topography to install the stormwater management system.

2516.4 The number of principal buildings permitted by this section shall not be limited; provided, that the applicant for a permit to build submits satisfactory evidence that all the requirements of this chapter (such as use, height, bulk, open spaces around each building, and limitations on structures on alley lots pursuant to § 2507), and §§ 3202.2 and 3202.3 are met.

Each of the theoretical lot provides the required site area and widths, as well as a building envelope within the required setbacks. The single family detached units are permitted by-right. The proposed structures also meet the restrictions of the CB/UT overlay regarding impervious surface and lot occupancy. The driveways also do not conform to the 25-foot width. The applicant is requesting a variance to this requirement.

2516.5 If a principal building has no street frontage, as determined by dividing the subdivided lot into theoretical building sites for each principal building, the following provisions shall apply

- (a) The front of the building shall be the side upon which the principal entrance is located;***
- (b) Open space in front of the entrance shall be required that is equivalent either to the required rear yard in the zone district in which the building is located or to the distance between the building restriction line recorded on the records of the Surveyor of the District of Columbia for the subdivided lot and the public space upon which the subdivided lot fronts, whichever is greater;***
- (c) A rear yard shall be required; and***
- (d) If any part of the boundary of a theoretical lot is located in common with the rear lot line of the subdivided lot of which it is a part, the rear yard of the theoretical lot shall be along the boundary of the subdivided lot.***

Each building will front on a private drives except for Lot A that will front on Chain Bridge Road. The required 25-foot minimum rear yard setback and front yards of 25-foot minimum are provided on all lots. The rear boundaries of theoretical Lots B and 3 are along the rear boundary of the subdivided lot and therefore a rear yard is not required.

2516.6 In providing for net density pursuant to § 2516.11, the Board shall require at least the following:

- (a) The area of land that forms a covenanted means of ingress or egress shall not be included in the area of any theoretical lot, or in any yard that is required by this title***

The proposed lots conform to the area requirements and do not include any portions of the right-of-way.

- (b) Notwithstanding any other provision of this title, each means of vehicular ingress or egress to any principal building shall be twenty-five feet (25 ft.) in width, but need not be paved for its entire width;***

The applicant has requested to reduce the required rights-of-way to 16-feet each. The applicant states that the reduction of the driveway that serves Lots 1, 2, and 3 is necessary because a wider driveway could impact the historic building. Making the second driveway wider would mean the loss of several existing large trees. Having driveways of 25-feet would also increase the amount of impervious surface on the site. The applicant proposes to pave both driveways for their entire width and length.

- (c) *If there are not at least two (2) entrances or exits from the means of ingress or egress, a turning area shall be provided with a diameter of not less than sixty feet (60 ft.); and*

Both roadways within the proposed development terminate at a cul-de-sac that has a diameter of 60-feet.

- (d) *The requirements of paragraphs (b) and (c) of this subsection may be modified if the Board finds that a lesser width or diameter will be compatible with, and will not be likely to have an adverse effect on, the present character and future development of the neighborhood; provided, that the Board shall give specific consideration to the spacing of buildings and the availability of resident, guest, and service parking*

The applicant has requested a reduction in the width of the roadways. The applicant stated that the driveways provided on each lot will accommodate resident, guest, and service parking. The applicant has not requested a reduction in the circumference of the cul-de-sac. OP's recommendation will be dependent on DDOT's recommendation.

2516.7 *Where not in conflict with the Act to Regulate the Height of Buildings in the District of Columbia approved June 1, 1910 (36 Stat. 452, as amended; D.C. Official Code §§ 6-601.01 to 6-601.09 (2001) (formerly codified at D.C. Code §§ 5-401 to 5-409 (1994 Repl. & 1999 Supp.))), the height of a building governed by the provisions of this section, in all zone districts shall be measured from the finished grade at the middle of the front of the building.*

The height limit in this zone district is 40-feet. The plan elevations submitted by the applicant shows all the units meeting this requirement.

2516.8 *The provisions of this section shall also apply to buildings erected under the terms and conditions of § 410, relating to a group of one-family dwellings, flats, or apartment houses, or a combination of such buildings.*

This section is not applicable as § 410 applies to developments in the R-4 and R-5 districts.

2516.9 *The proposed development shall comply with the substantive provisions of this title and shall not likely have an adverse effect on the present character and future development of the neighborhood.*

The applicant has tried to minimize the impact of the development on the character of the neighborhood by limiting the removal of trees and grading of the site. It is not envisioned that development of the property will have an adverse affect and limit the future development of the neighborhood. OP will continue to work with the applicant to minimize visual or any other impacts on the community.

2516.10 Before taking final action on an application under this section, the Board shall refer the application to the D.C. Office of Planning for coordination, review, and report, including

(b) The relationship of the proposed development to the overall purpose and intent of the Zoning Regulations, and other planning considerations for the area and the District of Columbia as a whole, including the plans, programs, and policies of other departments and agencies of the District government; provided, that the planning considerations that are addressed shall include, but not be limited to:

OP believes that the application generally meets and conforms to the requirements of the Zoning Regulations. The applicant has tried to minimize the removal of trees and be consistent with the CB/UT Overlay. The only zoning relief that the applicant is requesting is to reduce the width of the right-of-ways which is principally to minimize the removal of trees and the area of impervious surface. OP has requested DDOT to provide comments and recommendation on the right-of-way width and traffic impact.

(1) Public safety relating to police and fire concerns.

To date, OP has not received any comments in response to our referral to the Metropolitan Police Department (MPD). The Fire and Emergency Medical Services Department (FEMS) objected to the subdivision because the site plans did not show the locations of fire hydrants and Lot G is outside of the required distance to a fire hydrant. A concern regarding the access width was also expressed (Attachment 7). The applicant should address and clarify these issues with FEMS.

(2) The environment, relating to water supply, water pollution, soil erosion, and solid waste management;

Both water and sewer lines that run along Chain Bridge Road have the capacity to accommodate the proposed development. The soil erosion plan submitted by the applicant has been reviewed and deemed preliminary in nature by DOH. DOH further states that more detailed plans will have to be submitted for review prior to the issuance of a building permit.

(3) Public education

OP did not receive comments from DC Public Schools but it is believed that the 13 houses will not have a significant impact on the public school system.

(4) Recreation;

No public recreation spaces are proposed on the site.

(5) Parking, loading, and traffic;

Each unit has two internal parking spaces and driveways that can accommodate additional parking, service vehicles, and loading. Therefore, it is not anticipated that there will be any on street parking. DDOT will provide a traffic analysis under separate cover.

(6) Urban design; and

The proposed single-family, detached homes are on large lots consistent with the characteristics of the homes and lots in the neighborhood. The houses have been sited on the lots to minimize the removal of trees or any major redesign of the topography. OP strongly discourages any future "gating" of the community. OP is concerned that the rear of the buildings on Lots 3, 4, and B will front on Chain Bridge Road. Chain Bridge Road is a narrow, two-lane, 30-foot right-of-way and because the topography of the site the buildings will be on top of the hill above Chain Bridge Road. The houses are located close to or along the property line and could be perceived as visual barriers (walls).

There are other homes along Chain Bridge Road that are located close to the property line but their impact is less because they are much smaller and their entrances face Chain Bridge Road. The Landscape Plans for Lot 3 and Lot B do not show buffering along Chain Bridge Road that could help to reduce the visual impact. The applicant should provide elevations with landscaping to show how the visual impact on Chain Bridge Road could be minimized.

The applicant has proposed a number of retaining walls along driveways and has identified their locations and their heights. However, OP is concerned about a wall that extends to a height of 19-feet on Lot 4. OP has asked the applicant to provide elevations of these walls.

(7) As appropriate, historic preservation and visual impacts on adjacent parkland;

The subject property is not within a historic district. However, as stated above, the impact on the historic Chain Bridge Road School building will be assessed by HPRB at its April 28, 2005 meeting. The Battery Kimble Park is located directly east of the subject property. National Park Service, will provide their comments prior to or at the public hearing.

(b) Considerations of site planning; the size, location, and bearing capacity of driveways; deliveries to be made to the site; side and rear yards; density and open space; and the location, design, and screening of structures;

The applicant states that driveways, although not built to the DDOT's standards, will be designed to accommodate the level of traffic. It is anticipated that deliveries will be minimal and can be accommodated by the driveways proposed. The average lot area is greater than the minimum required and the houses will meet all the required setbacks. Most of the homes will be screened by the existing trees and enhanced vegetation. However, OP recommends that additional screening be provided along those units that abut Chain Bridge Road.

(c) Considerations of traffic to be generated and parking spaces to be provided, and their impacts;

The applicant's traffic study recommends measures to mitigate any potential traffic problems and DDOT will comment on these recommendations. A greater than required number of parking spaces will be provided.

(d) The impact of the proposed development on neighboring properties; and

At this time OP is unaware of any impacts the development of the site may have on the historic Chain Bridge Road School and the Battery Kimble Park. A recommendation will be forthcoming after review by HPRB and the National Park Service and DOH will address any impacts relating to run-off from the site.

(e) The findings, considerations, and recommendations of other District government agencies.

OP will endeavor to have all relevant District agencies comments prior to the public hearing.

2516.11 The Board may impose conditions with respect to the size and location of driveways; net density; height, design, screening, and location of structures; and any other matter that the Board determines to be required to protect the overall purpose and intent of the Zoning Regulations.

The Board may want to consider conditions related to:

1. Prohibiting a “gated” community.
2. Buffering the rear of houses along Chain Bridge Road.
3. Plans approved for each house will be the unit built with some flexibility for minor changes when more detailed plans are finalized.

With regards to the Special Exception test of §3104:

Will the special exception be in harmony with the general purpose and intent of the Zoning regulations and Maps?

The proposed theoretical lot subdivision meets the requirements of the zoning regulations, as each of the lots created would provide greater than the minimum lot area and width required in this zone, and the single-family homes are consistent with the zoning. However, the intent of the CB/UT overlay may not be realized on all the lots as the lot occupancies and impervious surfaces are maximized and not minimized as recommended by the overlay.

Will the special exception adversely affect the use of neighboring property in accordance with the Zoning Regulations and Maps?

OP is unable to make a determination on the affects on neighborhood properties because we are awaiting comments from DDOT, DOH and National Park Service.

THE CHAIN BRIDGE ROAD UNIVERSITY TERRACE (CB/UT) OVERLAY DISTRICT

The CB/UT Overlay District was established to preserve and enhance the park-like setting of the Chain Bridge Road University Terrace area by regulating alteration or disturbance of terrain, destruction of trees, and ground coverage of permitted buildings and other impervious surfaces, and by providing for widely spaced residences. To achieve this goal, the overlay specifies lot occupancy and ground coverage restrictions that work in conjunction with the requirements of the R-1-A zone and the limitations on the theoretical lots.

The purposes of the CB/UT Overlay District as outlined in Section 1565.2 are outlined below:

(a) Preserve the natural topography and mature trees to the maximum extent feasible in a residential neighborhood;

The applicant has provided an inventory of trees and of those identified with circumferences greater than 38 inches only three healthy trees will be removed. The homes are designed and sited to reduce grading or any other changes in order to preserve the natural topography of the site to the maximum extent possible. The applicant has requested relief to build only 16-foot driveways for the purpose of saving the existing row of mature trees along the drive. However, the applicant has not provided a grading plan.

(b) Prevent significant adverse impact on adjacent open space, parkland, stream beds, or other environmentally sensitive natural areas;

The greatest significant impact that the applicant has to overcome is providing a stormwater management system that will contain all runoff on-site or connect to a public system if available to avoid runoff on adjacent properties or on Chain Bridge Road. DOH is working with the applicant to provide a stormwater management plan that will address this issue. The property is adjacent to Battery Kimble Park and the NPS will comment on any effects for the proposed development. OP has advised the applicant that a

(c) Limit permitted ground coverage of new and expanded buildings and other construction, so as to encourage a general compatibility between the siting of new buildings or construction and the existing neighborhood; and

The CB/UT Overlay permits maximum lot occupancy of 30 percent. Based on the information provided by the applicant nine of the lots have lot occupancy below 30 percent, two lots are at 30 percent. Lot 3 and Lot B have lot occupancies of 32 percent and 31 percent respectively which is above the maximum permitted. OP has found errors in the applicant's calculations and has requested that they be corrected in order to do an accurate analysis.

The CB/UT Overlay permits a maximum of 50 percent impervious surface on each lot. From the applicant submission the impervious surface on the lots from a low of approximately 35 percent to a high of approximately 50 percent. Lots 3, B, and D have the largest amount of impervious surface at approximately 50 percent on all three lots.

In summary, it seems that generally the applicant has limited the permitted ground coverage and lot occupancy to the permitted maximum by the CB/UT Overlay.

(d) Limit the minimum size of lots so as to prevent significant adverse impact on existing infrastructure, especially on traffic and pedestrian safety and to achieve the other purposes listed in this subsection.

All the lots provided exceed 9,500 square feet and three lots exceed 10,000 square feet. The large lot sizes allow for less units that helps to minimize impact on water and sewer services, traffic, the preservation of trees and the natural topography. DDOT will provide a separate report on the traffic issues.

Section 1568 outlines limitation on the removal of trees:

1568.1 *Except as provided in § 1568.2, constructing a building, accessory building, or an addition to a building, creating any impervious surface area, subdividing any unimproved lot, or subdividing any improved lot so as to increase the number of principal structures thereupon, shall only be permitted as a matter of right subject to the following tree removal limitations:*

(a) *No tree that has a circumference of seventy-five inches (75 in.) or more at a height of four and one-half feet (4½ft.) above ground may be removed, cut down, or fatally damaged;*

The applicant has not proposed the removal of any healthy trees with a circumference of over 75 inches.

(b) *No more than three (3) trees that have a circumference of more than thirty-eight inches (38 in.) at a height of four and a half feet (4½ft.) above ground may be removed, cut down, or fatally damaged and none of these may be located within twenty-five feet (25 ft.) of any building restriction line or lot line abutting a public street;*

The tree healthy trees that the applicant has identified for removal have circumferences of 37-, 67-, and 48-inches. None of these trees are within 25-feet of a lot line abutting Chain Bridge Road.

(c) *The total circumference inches of all trees removed or cut down on a lot may not exceed twenty-five percent (25%) of the total circumference inches of all trees on the lot having a circumference greater than twelve inches (12 in.); provided, that this section does not abrogate the right to remove or cut down up to three (3) trees as provided in paragraph (b) of this subsection; or any tree having a circumference of twelve inches (12 in.) or less at a height of four and one-half feet (4½ ft.) above ground.*

The applicant provided a map showing the location of trees having a circumference of 12-38 inches. However, information required to do the above calculation was not provided.

1568.2 *The prohibitions of § 1568.1 do not apply to the removal or cutting down of any dead or unhealthy tree or a tree that creates an unsafe condition. The need for removal of any tree shall be certified by a tree care professional certified by the International Society of Arboriculture.*

The removal of the trees will require a permit and will be monitored by DDOT.

COMMUNITY COMMENTS

ANC-3D reviewed the application at its April 6, 2005 meeting and recommend denial of the application because of the following:

- The project was designed to maximize development on each lot in a Tree and Slope Overlay District where minimum density is indicated.
- Plans provide lot coverage on a very steeply sloped piece of property at 85 percent and impervious surface coverage at 90 percent of what is allowed;
- The placement of houses, especially on Lot 3 which is four feet off of Chain Bridge Road, is not in keeping with the purpose of the overlay district and will likely cause impacts to neighboring properties;
- Several trees listed on the tree inventory could not be located on any of the plans;
- A geotechnical report and a grading plan showing the implementation and placement of retaining walls and how the steeply sloped edges of the property will be stabilized has not been presented;
- A phasing plan for the project
- The traffic study omitted the speed at which cars travel along Chain Bridge Road past the hidden driveway entrance;
- A plan for stabilization, storage of equipment, and parking of workers' vehicles has not been presented.

The Chain Bridge Road Preservation Committee and the Palisades Advisory Neighborhood Commission have also reviewed the application and recommended denial based on factors similar to those of the ANC.

SUMMARY AND RECOMMENDATION

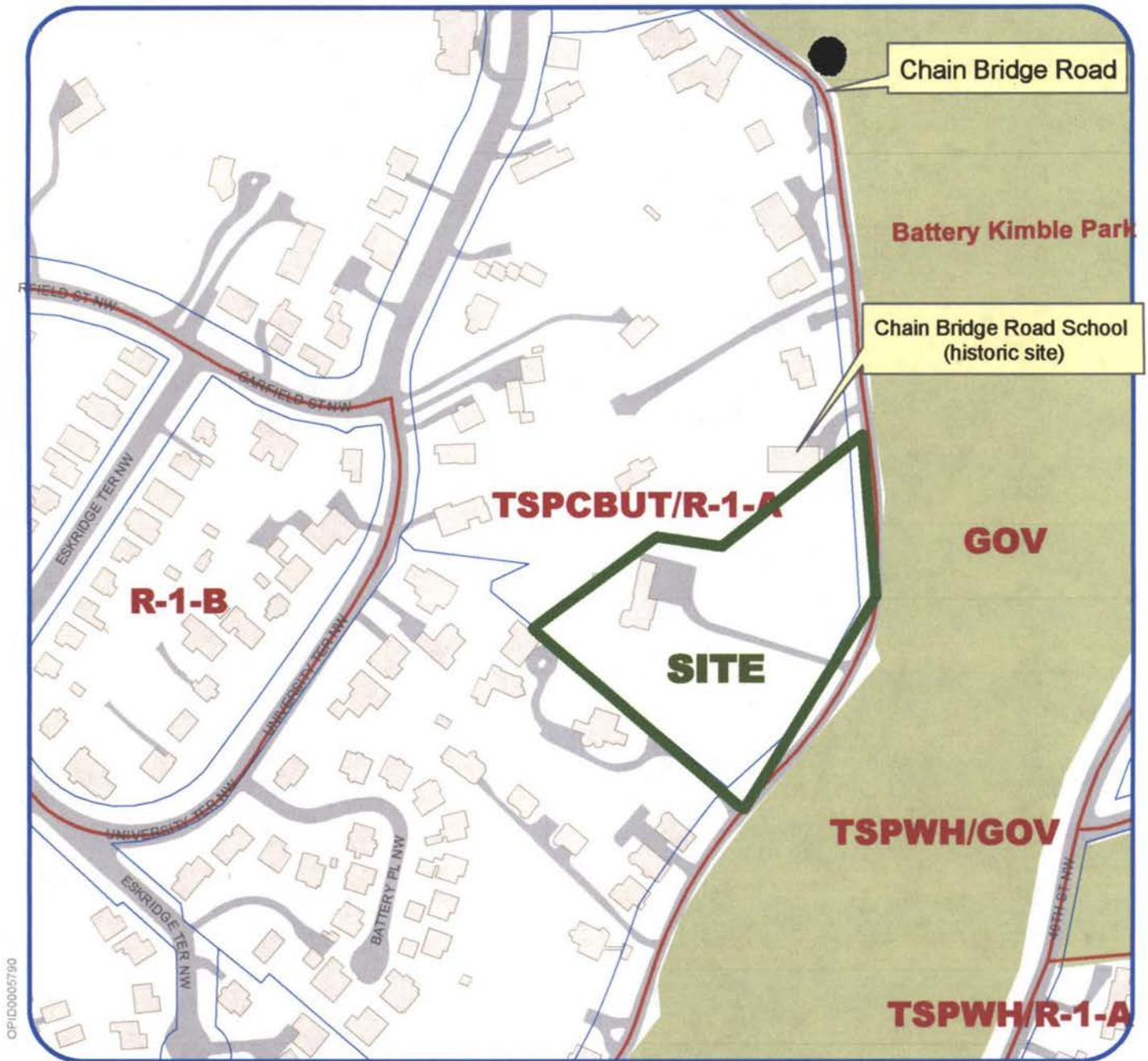
Although the applicant has submitted Plans showing tree preservation, OP is concerned about the viability of some trees that are very close to construction areas and that not enough details have been provided regarding preservation during construction and what remediation measures will be in place for trees that may be damaged during construction but the damage is not manifested until after construction.

OP has identified areas where we believe the proposal can be improved. However, at the time OP is unable to make a recommendation because the analysis and comments from DDOT, DOH, NPS are important factors to be taken into consideration as to whether the proposal meets the requirements of Section 2516 and Section 1565.

ATTACHMENTS

1. Location Plan
2. Lot Occupancy and Impervious Surface Calculations
3. Subdivision Lots
4. Memo on Tree Assessment
5. Memorandum from Urban Forestry Administration, DDOT
6. Tree and Slope Protection Plan
7. Fire and Emergency Services Report

EM/mbr



BZA #17309 - Theoretical Lot Subdivision **Chain Bridge Road, NW** **Location Plan**

Legend	
	Zoning Districts
	Zoning Label
	Property Squares
	National Parks (NPS)
	Buildings
	Roads



★ ★ ★ Government of the
District of Columbia
Anthony A. Williams, Mayor

Office of Planning ~ March 21, 2005

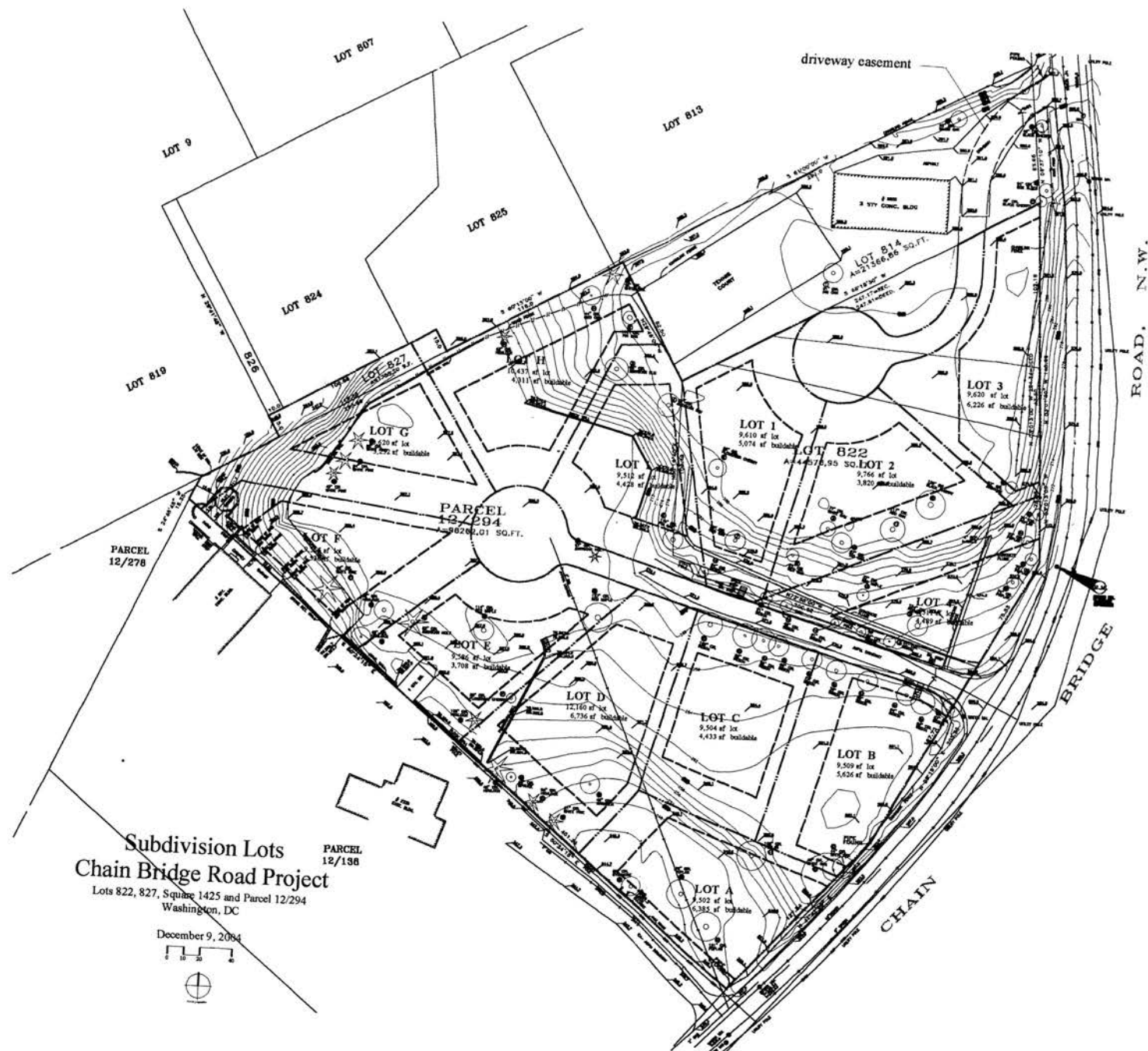
This map was created for planning purposes from a variety of sources. It is neither a survey nor a legal document. Information provided by other agencies should be verified with them where appropriate.

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Attachment I

Lot Occupancy and Impervious Service Calculations

Lot	1	2	3	4	A	B	C	D	E	F	G	H	I
Lot Size (sq ft)													
Provided	9,610	9,766	9,620	9,511	9,502	9,509	9,504	12,160	9,586	9,565	10,620	10,437	9,512
Lot Occupancy (Maximum 30%)													
Square footage	2,746	2,165	3,130	2,870	2,484	2,910	2,219	3,638	2,688	2,460	2,501	2,964	2,542
% Provided	29%	22%	32%	30%	26%	31%	23%	30%	28%	26%	24%	28%	27%
Impervious Surface (Maximum 50%)													
Squire footage	3,902	3,408	4,677	3,649	3,492	4,642	4,305	5,965	3,488	4,277	3,658	4,041	3,288
% Provided	41%	34%	49.0%	38%	37%	49.0%	45%	49.0%	36%	42%	34%	39%	35%





Lew Bloch
Bloch Consulting Group

7/22/02

Jim
see me
over this
MWB

(1)

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✓

Morton Bender

July 20, 2002

Mr. Morton Bender
Morton-Bender, Inc.
1025 Connecticut Ave. NW
Suite 606
Washington, D.C. 20036

Researcher Associates LLC

RE: Chain Bridge Road Project

As you requested, I made a site inspection of the above-mentioned project at 2762 Chain Bridge Road NW with Mr. Jim Johnson of your company. The purpose of this inspection was to inventory and assess the health AND structural stability of all of the trees larger than 38 inches in circumference measured at 4.5 high.

I awarded each tree a percentage factor for its health and structure. This was based on the condition rating system as described in the condition chapter of *The Guide for Plant Appraisal* (9th edition, 2000) written by the Council of Tree and Landscape appraisers. With this process, the appraiser rates the roots, the trunk and the scaffold branches for both health and structure, and rates the small branches and foliage/buds for health. A tree can be healthy, that is have plenty of nice green foliage, and appear to be safe, but it may have severe structural weaknesses. This can result in tree failure later or even a sudden failure soon.

With this rating system, it is my opinion that any tree rated less than 50% should be removed. A 50% rated tree is marginal and MAY be retained if there is no new construction close by the tree. With a 51 to 60% rated tree, I suggest the tree needs monitoring annually for any changes in condition. Although there can be no guarantees, any tree rated 61% or higher should be viable. Of course this also depends on the construction contractor properly protecting and maintaining them.

The tree number in the following key is based upon the plan that we used in making this tree inventory in the field.

<u>Tree #</u>	<u>Species</u>	<u>Circ. (inches)</u>	<u>Rating</u>
1	Pin oak	91	85%
2	White pine	62	60%
3	Pin oak	110	60%
4	American elm	99	70%
5	Flowering cherry	68	50%
6	Pin oak	114	70%
7	Red oak	87	50%
8	Red oak	51	60%
9	White oak	77	70%
10	Red oak	87	70%
11	Red oak	117	65%
12	Poplar	124	70%
13	Beech	41	75%
14	Beech	41	45%
15	Beech	56	60%
16	Beech	48	65%
17	Beech	61	45%
18	Red maple	37	60%
19	Beech	54	65%
20	Black cherry	126	50%
21	Black cherry	49	45%
22	Box elder	64	45%
23	Poplar	74	75%
24	Poplar	73	75%
25	Poplar	70	70%
26	Poplar	74	75%
27	Red oak	37	75%
28	American holly	67	80%
29	Red maple	127	50%
30	Red maple	112	45%
31	Flowering cherry	55	45%
32	Hemlock	102	40%
33	Hemlock	48	45%
34	Spruce	48	45%
35	Magnolia	48	65%
36	White pine	61	45%
37	Hemlock	56	45%
38	Sycamore	89	60%
39	Poplar	96	30%
40	Poplar	121	75%
41	Poplar	102	40%
42	White oak	42	65%
43	White oak	44	50%

44	Beech	87	75%
45	Beech	53	50%
46	Beech	84	50%
47	Beech	65	60%
48	Beech	78	50%
49	Beech	77	50%
50	Beech	66	50%
51	Beech	62	60%
52	Beech	52	60%
53	Beech	102	65%
54	Hemlock	43	45%
55	White pine	50	40%
56	White pine	54	40%
57	White pine	42	40%
58	Hemlock	92	40%
59	Hemlock	48	40%
60	American holly	83	50%
61	White pine	40	45%
62	Willow oak	62	75%
63	Red oak	64	60%
64	Red oak	44	50%

As an arborist, I am a tree specialist and use my knowledge, education, training and experience to examine trees, recommend measures to enhance their beauty and health, and attempt to reduce the risk of living near trees. As the client, you may choose to accept or disregard these recommendations, or seek additional advice.

An arborist cannot detect every condition that could possibly lead to a tree or limb failure. Trees are living organisms that may fail in many ways we do not fully understand. Conditions are often hidden within the trees and below the ground. As arborists, we cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Sometimes trees may appear "healthy," but may be structurally unsound. Likewise, remedial treatment, like any medicine, cannot be guaranteed.

Furthermore, certain trees are borderline cases as to whether they should remain or be removed. Also conditions change, and a tree may need further monitoring in the future to determine its health and structure. Of course the only really safe option is removal.

Trees can be managed, but they cannot be controlled, and to live near a tree is to accept some degree of risk. The only way to eliminate all risks is to remove all trees.

I certify that the statements made in this report to be true and correct to the best of my knowledge. The opinions expressed are my personal, unbiased professional opinions and conclusions, and I have no present or prospective interest in the vegetation that is the

subject of this report. I have no personal interest or biases with respect to the parties involved, and have based my appraisal on the situation as I have seen it.

My compensation is not contingent on the reporting or a predetermined condition that favors the cause of the client, the attainment of a stipulated result, or the occurrence of a subsequent event.

My opinions and conclusions were developed, and this report prepared in conformity with standard arboricultural practices, and my expertise and experience as a plant appraiser.

I further certify that I made a personal inspection of the property, and no one provided any significant professional assistance to this report.

Thank you for the opportunity to be of service and if you have any questions, do not hesitate to call.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Lew Bloch', with a long horizontal line extending to the right.

Lew Bloch, Registered Consulting Arborist

d.

**DISRICT DEPARTMENT OF TRANSPORTATION
URBAN FORESTRY ADMINISTRATION**
2217 14TH Street NW
Washington, DC 20009

MEMORANDUM

SENT VIA FAX
202-535-2497

TO: Maxine Brown Roberts
Development Review Division
Office of Planning

FROM: Ainsley Caldwell, Associate Director
Urban Forestry Administration, DDOT

DATE: April 6, 2005



SUBJECT: Request for comments/recommendations regarding BZA # 17309 –
Application by Dorchester Associates LLC. Theoretical Lot Subdivision –
Square 1425, Lot 827 and Parcels 12/63, 12/293, and 12/294 Chain Bridge
Road, NW

This review is based on documentation provided to the Office of Planning by Mr. Lew Bloch, Registered Consulting Arborist. Under the provision of the Urban Forest Preservation Act of 2002 (Section Title 24 DCMR Public Space and Safety Chapter 37, Special Trees Section 37, 01.5 and 37, 01.7); as Mr. Bloch at the time of submission of his report was an ISA Certified Arborist, we will accept his statements as correct and representative of his best professional judgment. UFA did not conduct a site review.

1. **Comment:** The Guide for Plant Appraisal, 9th Edition used for assessment of the trees' health and structure and the documentation provided is standard within the industry.

Recommendation: Mr. Bloch's assessment and recommendation should be accepted.

2. **Comment:** A number of trees (Nos 5, 28, 30, and 39) are all trees with circumferences greater than 55 inches and under the Urban Forest

Attachments

Preservation Act of 2002 are considered Special Tree and require a permit for removal.

Recommendation: The property owner must submit a Special Tree Removal Permit Application, (a copy is attached) for each of the 5 Special Trees that were proposed for removal. The property owner has the option to have their arborist or a UFA arborist complete the Arborist Report section of the application.

3. **Comment:** Item 5 of Attachment # 4 referring to Tree and Slope Protection seems vague as to what "additional protection measures" will be installed for trees.

Recommendation: The applicant should submit specific additional measures with his application.

Cc: Dan Tangherlini
File

September 1, 2004

Chain Bridge Road Project

Tree & Slope Protection

The existing healthy mature trees on the site are an invaluable asset that we are dedicated to preserve to the greatest extent possible. We have made every effort to disturb as few trees as possible and to maintain the existing topography with minimal disturbance.

Trees shall be protected by these measures:

- 1) 48" orange plastic mesh fence shall be used for tree protection. Fence shall be placed at the drip line of all trees to be protected. Fence posts to be #5 rebar at 4'-0" oc driven 1'-6" below finished grade. Orange fence shall be attached to rebars with metal tie wire.
- 2) Nothing shall be stored or stockpiled or parked under the drip line of any tree.
- 3) Foot traffic over the tree roots shall be restricted to the greatest extent possible.
- 4) If any work occurs within the drip line the tree fencing shall be reinstated as soon as possible after each stage of the work is completed.
- 5) As required, additional protection measures will be instituted on an individual basis for those trees that will have work done within their drip line.
- 6) The Owner's arborist will be available throughout the construction process to advise on additional measures that may be taken to preserve the health of the existing trees.

Attachment 6

GOVERNMENT OF THE DISTRICT OF COLUMBIA
FIRE AND EMERGENCY MEDICAL SERVICES DEPARTMENT
WASHINGTON, D.C. 20001



MEMORANDUM

TO: Maxine Brown-Roberts
Development Review Division

FROM: Richard Fleming *RF*
Acting Fire Marshal

DATE: April 14, 2005

SUBJECT: BZA No. 17309

The D.C. Fire and EMS Department has reviewed the above BZA proposal to subdivide Square 1425, Lot 827 and Parcels 12/63, 12/293 and 12/294 into 13 lots to accommodate custom, single-family detached houses.

Based upon the site plans submitted to this office and an on-site visit, we object to this proposal based on the following:

1. **Lack of hydrants.** The nearest hydrants to the property are located 303' South and 420' north of the entrance to proposed B through I. The access roadway is approximately 360' in length to proposed lot G placing this lot 663' from the nearest hydrant. Hydrants shall be placed in accordance with the 2000 International Fire Code, Appendix B – Fire-Flow Requirements for Buildings, and Appendix C – Fire Hydrant Locations and Distribution. Copy attached.
2. **Apparatus access:** The notice of a zoning hearing for this property, posted on the gate, stated that the developer would like to have two 16-foot roadways instead of one 25-foot roadway. The site plans submitted to this office does not show a configuration of two 16-foot roadways, rather a single lane of approximately 25' in width. Roadways should be placed in accordance with the 2000 International Fire Code, Appendix D – Fire Apparatus Access Roads. Copy attached.

Attachment

Maxine Brown-Roberts

Page 2

Once the above problems have been satisfactorily addressed, the D.C. Fire and EMS Department would remove its objections to BZA No. 17309.

If you have any questions concerning this review, I may be reached at 727-3659.

Attachments: 2

Appendix C

FIRE HYDRANT LOCATIONS AND DISTRIBUTION

SECTION C101
GENERAL

C101.1 Scope. Fire hydrants shall be provided in accordance with this appendix for the protection of buildings, or portions of buildings, hereafter constructed.

SECTION C102
LOCATION

C102.1 Fire hydrant locations. Fire hydrants shall be provided along required fire apparatus access roads and adjacent public streets.

SECTION C103
NUMBER OF FIRE HYDRANTS

C103.1 Fire hydrants available. The minimum number of fire hydrants available to a building shall not be less than that listed in Table C105.1. The number of fire hydrants available to a complex or subdivision shall not be less than that determined by spacing requirements listed in Table C105.1 when applied to fire apparatus access roads and perimeter public streets from which fire operations could be conducted.

SECTION C104
CONSIDERATION OF EXISTING FIRE HYDRANTS

C104.1 Existing fire hydrants. Existing fire hydrants on public streets are allowed to be considered as available. Existing fire hydrants on adjacent properties shall not be considered available unless fire apparatus access roads extend between properties and easements are established to prevent obstruction of such roads.

SECTION C105
DISTRIBUTION OF FIRE HYDRANTS

C105.1 Hydrant spacing. The average spacing between fire hydrants shall not exceed that listed in Table C105.1.

Exception: The fire chief is authorized to accept a deficiency of up to 10 percent where existing fire hydrants provide all or a portion of the required fire hydrant service.

Regardless of the average spacing, fire hydrants shall be located such that all points on streets and access roads adjacent to a building are within the distances listed in Table C105.1.

TABLE C105.1
NUMBER AND DISTRIBUTION OF FIRE HYDRANTS

FIRE-FLOW REQUIREMENT (gpm)	MINIMUM NUMBER OF HYDRANTS	AVERAGE SPACING BETWEEN HYDRANTS ^{a, b, c} (feet)	MAXIMUM DISTANCE FROM ANY POINT ON STREET OR ROAD FRONTAGE TO A HYDRANT ^d
1,750 or less	1	500	250
2,000-2,250	2	450	225
2,500	3	450	225
3,000	3	400	225
3,500-4,000	4	350	210
4,500-5,000	5	300	180
5,500	6	300	180
6,000	6	250	150
6,500-7,000	7	250	150
7,500 or more	8 or more ^e	200	120

For SI: 1 foot = 304.8 mm, 1 gallon per minute = 3.785 L/m.

a. Reduce by 100 feet for dead-end streets or roads.

b. Where streets are provided with median dividers which can be crossed by fire fighters pulling hose lines, or where arterial streets are provided with four or more traffic lanes and have a traffic count of more than 30,000 vehicles per day, hydrant spacing shall average 500 feet on each side of the street and be arranged on an alternating basis up to a fire-flow requirement of 7,000 gallons per minute and 400 feet for higher fire-flow requirements.

c. Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, fire hydrants shall be provided at spacing not to exceed 1,000 feet to provide for transportation hazards.

d. Reduce by 50 feet for dead-end streets or roads.

e. One hydrant for each 1,000 gallons per minute or fraction thereof.

Appendix D

FIRE APPARATUS ACCESS ROADS

SECTION D101
GENERAL

D101.1 Scope. Fire apparatus access roads shall be in accordance with this appendix and all other applicable requirements of the *International Fire Code*.

SECTION D102
REQUIRED ACCESS

D102.1 Access and loading. Facilities, buildings or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an approved fire apparatus access road with an asphalt, concrete or other approved driving surface capable of supporting the imposed load of fire apparatus weighing at least 75,000 pounds (34 050 kg).

SECTION D103
MINIMUM SPECIFICATIONS

D103.1 Access road width with a hydrant. Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet (7925 mm). See Figure D103.1.

D103.2 Grade. Fire apparatus access roads shall not exceed 10 percent in grade.

Exception: Grades steeper than 10 percent as approved by the fire chief.

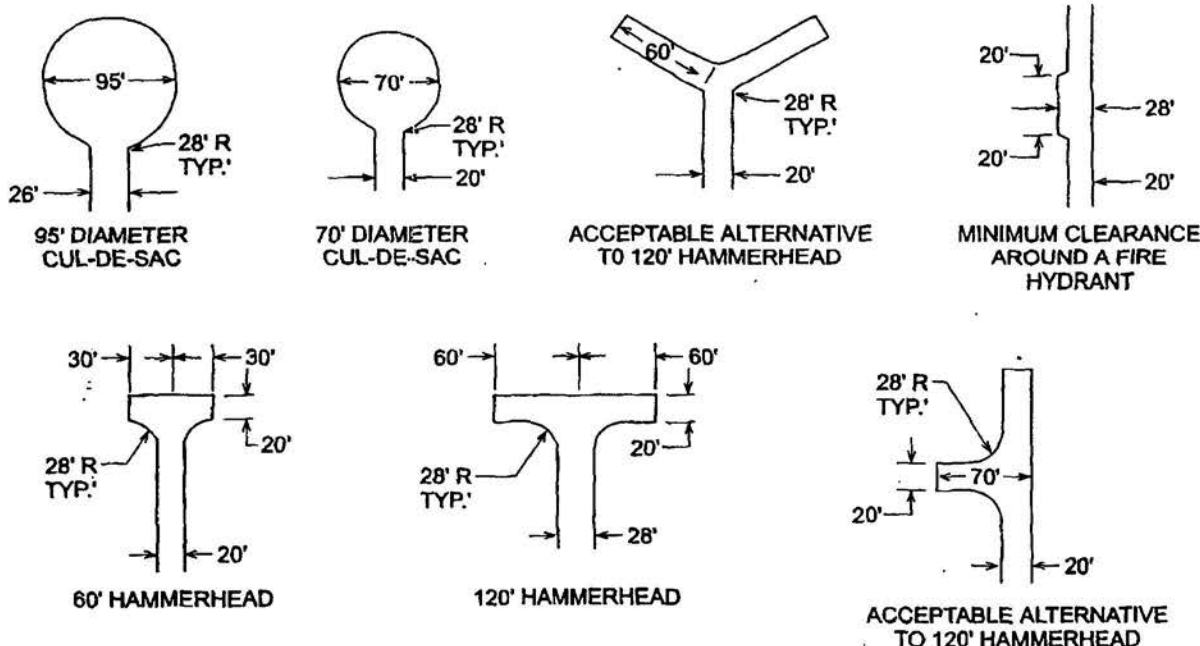
D103.3 Turning radius. The minimum turning radii shall be determined by the code official.

D103.4 Dead ends. Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) shall be provided with width and turnaround provisions in accordance with Table D103.4.

TABLE D103.4
REQUIREMENTS FOR DEAD-END FIRE
APPARATUS ACCESS ROADS

LENGTH (feet)	WIDTH (feet)	TURNAROUNDS REQUIRED
0-150	20	None required
151-500	20	120 feet "Hammerhead," 60 feet "Y" or 96 feet diameter cul-de-sac in accordance with Figure D103.1
501-750	26	120 feet Hammerhead, 60 feet "Y" or 96 feet Diameter cul-de-sac in accordance with Figure D103.1
Over 750		Special approval required

For SI: 1 foot = 304.8 mm.



For SI: 1 foot = 304.8 mm.

FIGURE D103.1
DEAD-END FIRE APPARATUS ACCESS ROAD TURNAROUND

APPENDIX D

FIRE APPARATUS ACCESS ROADS

D103.5 Fire apparatus access road gates. Gates securing the fire apparatus access roads shall comply with all of the following criteria:

1. The minimum gate width shall be 20 feet (6096 mm).
2. Gates shall be of the swinging or sliding type.
3. Construction of gates shall be of materials that allow manual operation by one person.
4. Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.
5. Electric gates shall be equipped with a means of opening the gate by fire department personnel for emergency access. Emergency opening devices shall be approved by the code official.
6. Manual opening gates shall not be locked with a padlock or chain and padlock unless they are capable of being opened by means of forcible entry tools and
7. Locking device specifications shall be submitted for approval by the code official.

D103.6 Signs. Where required by the code official, fire apparatus access roads shall be marked with permanent NO PARKING—FIRE LANE signs complying with Figure D103.6. Signs shall have a minimum dimension of 12 inches (305 mm) wide by 18 inches (457 mm) high and have red letters on a white reflective background. Signs shall be posted on one or both sides of the fire apparatus road as required by Section D103.6.1 or D103.6.2.

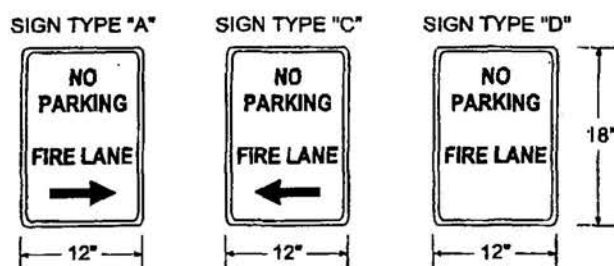


FIGURE D103.6
FIRE LANE SIGNS

D103.6.1 Roads 20 to 26 feet in width. Fire apparatus access roads 20 to 26 feet wide (6096 to 7925 mm) shall be posted on both sides as a fire lane.

D103.6.2 Roads more than 26 feet in width. Fire apparatus access roads more than 26 feet wide (7925 mm) to 32 feet wide (9754 mm) shall be posted on one side of the road as a fire lane.

SECTION D104

COMMERCIAL AND INDUSTRIAL DEVELOPMENTS

D104.1 Buildings exceeding three stories or 30 feet in height. Buildings or facilities exceeding 30 feet (9144 mm) or

three stories in height shall have at least three means of fire apparatus access for each structure.

D104.2 Buildings exceeding 62,000 square feet in area. Buildings or facilities having a gross building area of more than 62,000 square feet (5760 m²) shall be provided with two separate and approved fire apparatus access roads.

Exception: Projects having a gross building area of up to 124,000 square feet (11 520 m²) having a single approved fire apparatus access road when all buildings are equipped throughout with approved automatic sprinkler systems.

D104.3 Remoteness. Where two access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses.

SECTION D105

AERIAL FIRE APPARATUS ACCESS ROADS

D105.1 Where required. Buildings or portions of buildings or facilities exceeding 30 feet (9144 mm) in height above the lowest level of fire department vehicle access shall be provided with approved fire apparatus access roads capable of accommodating fire department aerial apparatus. Overhead utility and power lines shall not be located within the aerial fire apparatus access roadway.

D105.2 Width. Fire apparatus access roads shall have a minimum unobstructed width of 26 feet (7925 mm) in the immediate vicinity of any building or portion of building more than 30 feet (9144 mm) in height.

D105.3 Proximity to building. At least one of the required access routes meeting this condition shall be located within a minimum of 15 feet (4572 mm) and a maximum of 30 feet (9144 mm) from the building, and shall be positioned parallel to one entire side of the building.

SECTION D106

MULTIPLE-FAMILY RESIDENTIAL DEVELOPMENTS

D106.1 Projects having more than 100 dwelling units. Multiple-family residential projects having more than 100 dwelling units shall be equipped throughout with two separate and approved fire apparatus access roads.

Exception: Projects having up to 200 dwelling units may have a single approved fire apparatus access road when all buildings, including nonresidential occupancies, are equipped throughout with approved automatic sprinkler systems installed in accordance with Section 903.3.1.1 or 903.3.1.2 of the *International Fire Code*.

D106.2 Projects having more than 200 dwelling units. Multiple-family residential projects having more than 200 dwelling units shall be provided with two separate and approved fire apparatus access roads regardless of whether they are equipped with an approved automatic sprinkler system.

FIRE APPARATUS ACCESS ROADS

APPENDIX D

**SECTION D107
ONE- OR TWO-FAMILY RESIDENTIAL
DEVELOPMENTS**

D107.1 One- or two-family dwelling residential developments. Developments of one- or two-family dwellings where the number of dwelling units exceeds 30 shall be provided with separate and approved fire apparatus access roads, and shall meet the requirements of Section D104.3.

Exceptions:

1. Where there are 30 or fewer dwelling units on a single public or private access way and all dwelling units are protected by approved residential sprinkler systems, access from two directions shall not be required.
2. The number of dwelling units on a single fire apparatus access road shall not be increased unless fire apparatus access roads will connect with future development, as determined by the code official.