18329

GLOBAL GREEN GROUP, LLC.

7826 EASTERN AVE, NW
SUITE 307B
WASHINGTON, DC 20012
T + (202) 545-0703
F + (202) 545-0116

9329 FRASER AVENUE
SILVER SPRING
MARYLAND 20910
T-301-562-1350
F-301-942-5874

GLOBAL GREEN GROUP LLC

5/17/2012

Lloyd Jordan, Esquire
Chairperson
Board of Zoning Adjustment
441 4th Street NW, Suite 210S
Washington DC 20001

Reference: 1415 Otis Street, NE

Dear Mr. Jordan,

In response to the request of the applicant in the variance case before the Board of Zoning Adjustment (BZA) I performed a civil site assessment and evaluation on the above referenced property. The evaluation was to determine the effect(s), if any, of a lateral addition to the existing site structures, site characteristics, and overall site function.

The subject building is one story and basement stucco structure. Based on visual observation on the site topography, there is an elevation difference of approximately 9+- feet between the front and rear of the property. The site grades increase towards the rear of the property. The subject site abuts private properties on the east and west.

It is my understanding that an addition is suggested along the western perimeter of the subject site. The task is to assess/evaluate how the proposed lateral addition will impact the existing structure, surrounding ground feature, including but not limited to below-grade walls, subsurface runoffs, drainage, et cetera

Erosion/Sediment Issues.

Building the proposed addition along the western perimeter of the property will result in potentially increased site water runoffs to the adjoining properties requiring erosion and sediment control plan and possibly storm water management in compliance with the applicable sections of the DC Water and Sanitation Regulations, DCMR, Title 21 including retaining wall, to divert the runoffs that will be generated due to the proposed lateral addition.

District Code 21DCMR, Section 526-535 states in pertinent sections that approved, Storm Water may be discharged from the roof, paved areas, court yards, et cetera on the same single lot of record. In such instance the Storm Water shall flow away from the subject building and not flow over property lines on to adjacent properties, unless it runs into **existing** natural water courses.

Below-Grade walls/slope

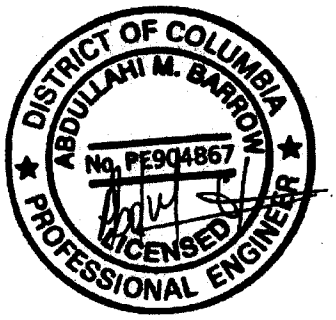
Based on the existing land topography of the subject site, the majority of the rear basement walls are imbedded into the ground. According to the District of Columbia General Soil Map the subject site sits on Urban Land Association Soils. These soil deposits are generally described as layers of silt and high plastic clay. These deposits are also known to be unstable due to their inherent low residual shearing strength and the presence of fissures in their blocky structure when disturbed.

These types of soils are also moisture and disturbance sensitive. It is my professional opinion that removing a large amount of the backfill soils along the eastern perimeter of the subject property site for an addition will create an unbalanced backfill on existing below-grade (basement) walls. As stated above, the subject site soils are moisture and disturbance sensitive, and these soils are also known to be expansive and prone to shrink and swell if disturbed.

My professional opinion is that the subject property site should not be disturbed and slopes should be aggressively protected from sloughing and erosion, to the extent practicable. Any backfill on below-grade walls shall not be disturbed, and shall be protected, in order to safeguard the stability of below-grade wall foundation and overall sacrificial stability and compound failure of the backfilled slope.

My understanding is that the application before you seeks to construct an addition above the existing building to mitigate the potential environmental impact of an addition as described above. It is my considered opinion that to the extent that granting the relief sought avoids the potential negative environmental impact of a lateral addition. To the extent possible, it is recommended that the pristine environmental/topographical condition be maintained.

Respectively,
GLOBAL GREEN GROUP, LLC



Abdullahi Barrow, P.E.
Principal