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March 10, 2011

VIA E-MAIL

Zoning Commission for the District of Columbia 441 4th Street, N.W., Suite 210S Washington, DC 20001

Re: <u>Case No. 08-06-Subtitle J: Production, Distribution and Repair Zones - Post Hearing</u>
Submission

Dear Members of the Commission:

At the close of the February 24, 2011 Public Hearing on this matter, the Commission requested additional information from the undersigned. The questions asked, and the responses, are as follows:

1. Submit actual costs per square foot for additional cost for installation of a green roof on a typical warehouse building.

If the 0.2 GAR requirement was to be satisfied on the roof of a warehouse building, the majority of the roof would need to be devoted to a green roof. The adopted GAR regulations provide a multiplier of 0.3 for an extensive vegetative roof, and 0.4 for intensive vegetative roof. Accordingly, a 0.2 GAR requirement results in a need to cover two-thirds of the roof area with an extensive vegetative roof, or one-half of the roof area if an intensive vegetative roof is used. Given the extensive span of vertical supports in warehouse construction, this would require that the entire roof area be able to structurally support a green roof. Warehouse structures are typically built with a light construction, and the roof is typically flat. Industrial roofs must bear the structural load of the buildings and have excess live load capacity for snow that averages 30 psf. As a general rule of thumb, the saturated content of the lightest green roof system weighs about 7 psf per inch of thickness. Therefore, using this number, an extensive vegetative roof of up to four inches of growth medium requires the structure to handle up to an additional 28 psf of load on the roof. Use of an intensive vegetative roof system with four inches or more of growth medium would require

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additional structural support beyond that amount. This means that the live load capacity of a warehouse roof must be increased by approximately 100% or more, if a green roof is installed.

We have consulted with Forrester Construction, a local construction company that builds warehouses and other structures in the area. They indicate that the differential in roofing cost for the added structure and installing a tray system for a green roof is approximately \$15 to \$20 per square foot compared to a conventional roof on a conventional warehouse.

In order to provide an apples-to-apples comparison of the additional costs for a green roof on a 100,000 sq. ft, warehouse building vs. a 100,000 sq. ft. office building, a figure of \$20.00 per square foot was used as an example during the hearing. For purposes of this comparison, a 100,000 sq. ft. office building on a 10,000 sq. ft. site would have a roof area of 10,000 sq. ft. If the cost of the green roof was \$20.00 per sq. ft., this would translate to an additional \$200,000. This additional cost for the 10,000 sq. ft. roof, spread over the 100,000 sq. ft. building, would be \$2.00 per sq. ft. By comparison, a 100,000 sq. ft. 1-story warehouse building would have a roof area of 100,000 sq. ft. Assuming a \$20.00 per sq. ft. additional cost for that roof would be \$2,000,000. The cost for that 100,000 sq. ft. roof, spread over the 100,000 sq. ft. warehouse building, would be \$20.00 per sq. ft. of warehouse space.

Assuming an average office lease rate of \$50.00 per sq. ft., then if amortized over 10 years at a rate of 8%, the additional cost for the office building roof would add 30 cents per sq. ft. to the lease rate for office use. By contrast, assuming an average warehouse lease rate of \$7.00 per sq. ft., then if amortized over ten years at 8%, the additional cost for the roof would add \$3.00 per sq. ft. to that lease rate.

2. Compare the lost revenue from having the 0.2 GAR requirements satisfied with only ground-level green features versus the cost of installing a green roof on a warehouse building.

The example submitted in the drawing at the Public Hearing used a building on an industrially-zoned site of 13,878 square feet of land area. Applying a variety of different green requirements set forth in the proposed GAR regulations, the total area of the site occupied by those features on that site is 2,985 square feet. This accounts for 21.5% of the site, and therefore reduces the building footprint to 78.5% of the land area. This would result in a direct reduction in rental income of 21.5%.

Based on the information in paragraph no. 1 above, the additional cost of installing the added structure and tray system for a green roof on a warehouse building would be \$15.00 to \$20.00 per sq. ft., setting aside the installation and maintenance costs of the green roof itself. Assuming an average warehouse rent in the District of \$7.00 per sq. ft., then in order to remain economically competitive, the additional cost of the green roof structural support system cannot reasonably be passed on to the tenant, and thus must be borne by the owner. This cost represents 27.5% of the monthly rental income, amortized over ten years at 8%.

Accordingly whether the 0.2 GAR requirement is satisfied on the ground or on the roof of a warehouse, this represents a significant expense for a warehouse operation, and is disproportionate to the additional expense that would be incurred in a non-PDR situation, using the office building example in Paragraph No. 1 above.

3. Can the permissible building area for a warehouse that is lost by virtue of the required building setbacks in order to install ground level GAR green elements be made up by constructing an additional level on the warehouse?

Attached is a letter from Fred Farshey, President of Stanley Martin Commercial, Inc., one of the largest warehouse owners and operators in the District. Mr. Farshey states that multi-level warehouses are functionally obsolete in the District of Columbia, because industrial tenants look for efficient truck and freighter access that can be provided by single-story warehouses.

4. Should there be a lower GAR requirement for PDR uses than for non-PDR uses in the PDR zones?

Based upon the above information, we suggest that the GAR requirement for PDR uses be reduced from 0.2 to 0.05, and that 0.2 requirement be retained for non-PDR uses.

Thank you for your consideration

Respectfully submitted,
HOLLAND & KNIGHT LLP

Christopher H. Collins

CHC/ls

cc: Travis Parker, Office of Planning

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Stanley Martin Commercial, Inc.

March 8, 2011

Chris Collins Holland & Knight 2099 Pennsylvania Ave, N.W., Suite 100 Washington DC, 20006

Re: Green Area Ratio initiative relating to industrial properties

Dear Chris:

I understand that the Zoning Commission inquired about the development of multistory warehouse structures in connection with the Green Area Ratio initiative. I wanted to voice my opinion on the issue.

As an owner and manager of industrial buildings and warehouses in the District for the last 27 years, my experience leads me to believe that multi-story warehouses are functionally obsolete. Industrial tenants look for efficient truck and freighter access coupled with ceiling heights of 22 feet which a multi-story warehouse precludes.

The former Hecht's Warehouse on New York Avenue, N.E. is an example of a warehouse that has been rendered obsolete by its design. The multi-story warehouse has sat vacant going on four years now because an industrial tenant is looking for truck access and clear ceiling heights. This building cannot provide these critical functions to a tenant and consequently remains vacant.

Other multi-story warehouses in the District have been converted into office buildings because their structures left the buildings obsolete with little residual value absent a change in use. The former People's Drug warehouse on New York Avenue, N.E., the XM Satellite headquarters on Florida Avenue, N.E. and the former Woodward and Lorthrop distribution center on M Street, N.E. are all examples of multi-story industrial buildings that were converted to offices.

I therefore conclude that when designing a new warehouse project, the building must necessarily be a single story building.

Sincerely,

Fred Farshey
President