BOHLER DC

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January 11, 2017
Via Electronic Mail

DOEE
1200 First Street, NE
Washington, DC 20002

Attn: Jay Wilson

RE: 15-27 KF Morse – Market Terminal
Square 3587, Lot 805, 814 and 817
300 Morse Street NE
Washington, DC
BDC #DC142264

Dear Mr. Wilson:

In regard to the above referenced project, we have reviewed your comments dated January 3, 2017 and have revised the plan set accordingly. Please find the following responses to your comments.

Stormwater Management

Comment 1: *The revised submission for Market Terminal, Lots 805, 814, and 817 in Record Lot 6 in Square 3587 presents several challenges with respect to the regulations. The renderings, GAR, and stormwater management plan are not consistent, especially in regards to the green roof areas. It is unclear how the GAR and stormwater requirements will be met. Additionally, the street will be required to meet the 1.2" storm event because it a new private street. There doesn't appear to be sufficient stormwater management practices in the right-of-way to meet the design requirements. As suggested to the applicant, there is immense opportunity to integrate the building and private street within a comprehensive stormwater plan. There is available space in the right-of-way that could be pervious and functional. DOEE has concerns that this project will not meet permit requirements as presently shown. Below are some recommendations to increase stormwater retention and manage runoff.*

Response 1: The renderings are for illustrative purposes and typically lag building design and engineering. However, the comment is noted and green roof areas will be refined on future renderings.

The plan has been prepared as a comprehensive stormwater plan that will meet the 1.2" stormwater retention requirement. Bohler and Kettler met with you, David Wooden and Alisha Goldstein on October 14th, 2016 regarding how the overall (total project) stormwater requirement will be met once full site buildout is completed. At that time, it was agreed that the stormwater requirement for overall development would be established with the PUD and the subsequent permit drawings would subtract retention value and storage provided from the overall requirement until the entire SWRv and storage requirements were complete. Stormwater retention measures including green roof, bioretention and a cistern are proposed on the PUD within the street, sidewalk, and buildings and are designed to collectively meet the overall Stormwater Management requirement for the site.

Comment 1A: *Reduce the amount of impervious area to create a scenic corridor along which people want to walk. Trees and vegetation provide shade and transpire water which can create a cooler corridor, attracting greater pedestrian traffic. Inspiration could be drawn from the park design leading to the plaza in which walkways are interspersed with pathways.*

Response 1A: In response to previous review comments, additional greenspace and trees were added along the edges of the plaza and between buildings B and A-1 providing additional shading and pervious area. A twenty foot wide obstruction free passageway is required through the plaza for fire truck access, therefore additional trees are not permissible in the fire truck access way. It is further anticipated that the paved area near the gantry will accommodate a multitude of uses including festivals and markets as well as serving as a space to interact with the water feature and gantry. This space will allow for alternate types of activity that the Florida Park area cannot accommodate because of the nature of the layout and materials of the two different spaces.

Comment 1B: *Large potential for integrated stormwater planning especially since the street is private. Stormwater captured from the rooftops is a resource that can be used for irrigation, water features, or even as treatment train with bioretention of engineered tree pits on the surface level.*

Response 1B: As noted above in the Response 1, the site is being developed as a comprehensive stormwater plan. Measures have been proposed on the buildings to account for the retention requirement that is unable to be treated fully by roadside bioretention. The plan currently proposes a cistern on building A-1 to reuse stormwater for on-site irrigation. The project will continue to look for opportunities to utilize rainwater reuse and/or treatment trains as the design further progresses.

Comment 1C: *Maximize stormwater management by capturing street runoff in tree boxes that can function as bioretention areas, which will help to meet stormwater regulations and provide attractive space.*

Response 1C: The proposed street tree boxes throughout the project are designed to be bioretention facilities. Curb cuts will be proposed to allow runoff from the street to enter the facilities for treatment. Drainage areas depicting this condition are not provided with the PUD due to the schematic nature of the plans; however, calculations are provided within the PUD for these bioretention areas.

Additionally, in response to previous review comments, the tree pit sizes have been increased along Third Street and Morse Street. Additional trees have also been added near the intersection of Third Street and Morse Street. The street tree pits currently are designed to serve as biofilters. Per OP and DDOT comments, the streetscape materials have been selected to meet the streetscape standards of the Union Market area, which will utilize scored concrete paving and sidewalks as a way of identifying the market as a unique part of DC.

Paving & Public Space Design

Comment 1: *DOEE recently released our Climate Ready DC Plan, which projects the impacts of climate change on the District. One of the most serious and severe impacts is that of urban heat. From a public health perspective, days over 95 degrees heat index are extremely dangerous. We currently see about 30 of those days per year. In the next 30 years, those dangerous days are expected to double and by the 2080s, we could see more than 100 days over 95 degree heat index. Using high albedo (or light color) materials and shading surfaces with trees and vertical greenery is one of the best ways to reduce the urban heat island effect. Buildings A-1 and B both use very dark cladding materials. Although the material is metal (which may reflect some heat), it will also absorb heat and radiate that heat close to the building, creating hot zones near the building. The dark paving, extensive areas of impervious area, and lack of trees will also negatively impact the environment around these buildings. Since the building materials have been previously suggested to the applicant and have not changed, DOEE would strongly recommend improving the pedestrian zone.*

Response 1: Buildings A1 and B both have 20 foot plus high storefront windows along almost their entire frontage at the plaza. As such, the metal panels are typically located well above the pedestrian zone. In addition, the buildings will have canopies and overhangs, which create shade at the building fronts, plus a good deal of landscaping along the terraces at A1 and B, providing further relief in these zones. The renderings on sheets 28, 29 & 30 show these conditions well.

With regards to dark paving materials, the plaza sheets in the PUD show a variety of paving and the final plaza paving color has not been selected as illustrated on sheet L1.07. The design team will continue to evaluate paving material/color based on low reflectivity and heat emission.

Comment 1A: *Alternative surfaces and additional landscaping and trees can improve the streetscape, give a sense of belonging, and provide stormwater management benefits. It appears that many of the grass areas where people congregate shown in the renderings are on adjacent properties. DOEE recommends a re-design of the plaza to include additional landscaped areas that can double as assembly spaces during events. Additional trees should be incorporated lining the street and in the plaza.*

Response 1A: Please see previous discussion under Stormwater Management Response #1A & #1C above regarding design constraints for the plaza and streetscape plus the desire to create two differing - a greener park space leading to a more urban hardscape plaza as pedestrians transition into the market.

Comment 1B: *The proposed spray area could include pervious paving so that the water can infiltrate and the surface won't have excessive ponding, which could result in a slippery surface. Permeable pavement could also be used in the proposed sidewalk café area and in parking areas to distinguish those spaces.*

Response 1B: The plaza paving near the water feature is designed to drain towards the landscaped areas to the west of the plaza. Paving materials will have a finish that is suitable for exterior, wet conditions and is ADA compliant (which is a challenge with pervious paving). Final grading will ensure no ponding will occur in the hardscaped areas of the plaza. Furthermore, the plaza water feature is contemplated to emit a mist or vapor in recognition of the rail infrastructure that previously occupied the property. The periodic production of water vapor will not create a significant volume of water.

LEED and Energy Efficiency

Comment 1: *We are glad that the applicant increased their commitment to LEED, and are now projecting certification at the LEED v2009 Gold level. It appears that the greatest opportunity for this increased commitment was in energy efficiency and they are showing about a 5% improvement over the current energy code. The 2009 LEED rating system is outdated and no longer accepting new projects. Although this project was previously registered under that platform, we would encourage the applicant to upgrade to the LEED v4 platform which uses the current building codes as the minimum benchmark for energy efficiency. Although this is a stronger platform and without additional improvements, it may mean that the project would only meet a LEED v4 Silver certification, it would also put the project on par with other new developments in the pipeline.*

Response 1: As noted, all first phase Buildings are already registered with USGBC under LEED 2009.

Comment 2: *Given that the District is continuously updating building codes, additional gains in energy efficiency are possible and encouraged. We would encourage that the project maximize all opportunities for increased energy efficiency. While some strategies could have minimal construction cost impacts, it would also decrease utility cost for residents and lessees of the commercial space. Many energy conservation measures including additional insulation, LED lighting and controls, high efficiency mechanical systems, and air sealing have a return on investment within five years and can be financed with no up-front cost through the DC PACE program (see below).*

Response 2: The applicant is also interested in designing energy efficient buildings. The systems referenced are typically not specified until later phases of design and will be evaluated as part of the MEP engineering design development. In responding to OP design comments on Building B, that building (as well as A1) is proposed as utilizing a VRF system for HVAC in an effort to gain energy efficiency and achieve LEED Gold certification.

Comment 3: *Given market conditions and the District's goal of net zero energy properties by 2032, it is strongly encouraged that the project team revisit their energy model, commitment to increased energy efficiency, and opportunities to incorporate next generation technology.*

Response 3: The project is currently designed at schematic level. The design team will revisit the energy model as design progresses to the point where systems are specified.

Renewable Energy

Comment 1: *Per the District's Sustainable DC Plan, one critical goal is to increase the use of renewable energy to make up 50% of the District's energy use. And this is a major priority of the administration, as the Mayor signed legislation this summer to increase the District's Renewable Portfolio Standard (RPS) to 50% with a local solar carve out of 5.0% by 2032. For the business and development community, the ramification of this legislation is that the District has the best financials for solar energy in the country. A power purchase agreement may be executed for leased solar panels with zero up front cost. Also, for owner financed solar panels, which can be financed by DC PACE, the typical return on investment is between two and five years. Through the District's community solar program, the energy generated can be "virtually" net-metered and the residents or commercial tenants can "subscribe" into the system providing mutual benefit for both the property owner and residents. It is strongly encouraged that the project incorporate solar panels that would generate a minimum of 1% of the buildings' total energy use.*

Response 1: The rooftop has a number of competing interests including green roof to meet stormwater management requirements. Building B roof is also heavily shaded. At this time rooftop solar panels do not appear practical based on space limitations. However, the design team will continue to evaluate as part of the LEED Gold design.

Finance

Comment 1: *Financial tools like the DC Property Assessed Clean Energy (DC PACE) program can pay for increases in construction cost for on-site generation, any strategies that increase efficiency above the baseline code requirements, or stormwater management strategies that garner return on investment through the District's Stormwater Retention Credit Trading program. This financing does not increase debt on the property and is repaid over time as a special assessment on the property tax. DOEE recommends that the applicant investigate opportunities to take advantage of financial tools that would allow increased commitment to sustainability.*

Response 1: Throughout the course of the project, the applicant will explore all resources available to take advantage of cost reductions.

Upon your review, should you have any questions or require additional information, please do not hesitate to contact this office at (202) 524-5700. Thank you.

Sincerely,

Bohler DC, LLC

M. Brian Werrell, P.E.
Project Manager